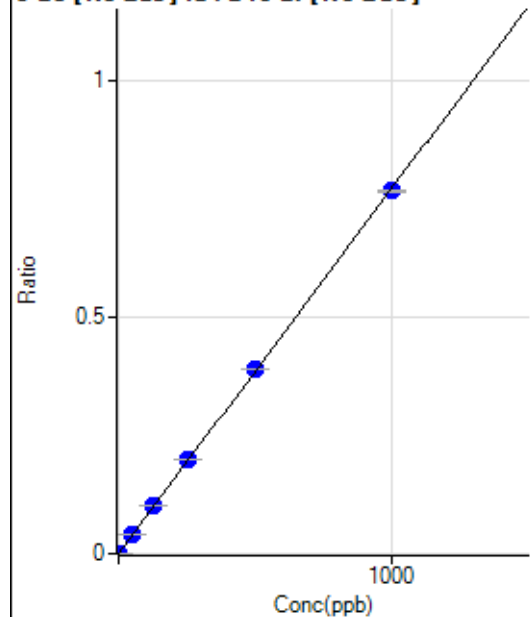


Batch Folder: D:\ICP-MS Data\P7112719-MS2.b\
Analysis File: P7112719-MS2.batch.bin
DA Date-Time: 2019-11-28 00:27:59
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2019-11-27 14:26:59
2	004CALS.d	S02	2019-11-27 14:30:33
3	005CALS.d	S03	2019-11-27 14:35:20
4	006CALS.d	S04	2019-11-27 14:39:26
5	007CALS.d	S05	2019-11-27 14:43:13
6	008CALS.d	S06	2019-11-27 14:46:57
7	009CALS.d	S07	2019-11-27 14:50:43
8	010CALS.d	S08	2019-11-27 14:54:28

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	111.11	0.0000	P	5.3
2	☐	1.000	1.044	3780.20	0.0008	P	0.7
3	☐	50.000	52.263	183851.32	0.0403	P	0.6
4	☐	125.000	130.040	445037.07	0.1003	P	0.9
5	☐	250.000	257.817	874283.06	0.1989	P	0.3
6	☐	500.000	506.108	1709023.88	0.3903	P	0.2
7	☐	1000.000	994.249	3316453.69	0.7668	P	0.2
8	☐			383.35	0.0001	P	8.0

$$y = 7.7122\text{E-}004 * x + 2.3346\text{E-}005$$

$$R = 0.9999$$

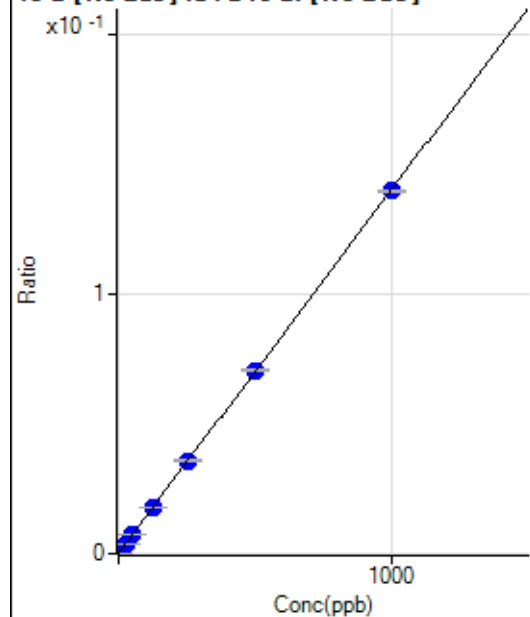
$$DL = 0.004853$$

$$BEC = 0.03027$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	872.28	0.0002	P	8.9
2	☐	25.000	24.917	16734.85	0.0037	P	2.4
3	☐	50.000	51.643	33769.27	0.0074	P	2.7
4	☐	125.000	127.843	80159.49	0.0181	P	0.6
5	☐	250.000	254.035	157047.83	0.0357	P	2.1
6	☐	500.000	503.650	309272.65	0.0706	P	1.3
7	☐	1000.000	996.731	603857.10	0.1396	P	0.5
8	☐			9217.05	0.0022	P	9.1

$$y = 1.3990\text{E-}004 * x + 1.8323\text{E-}004$$

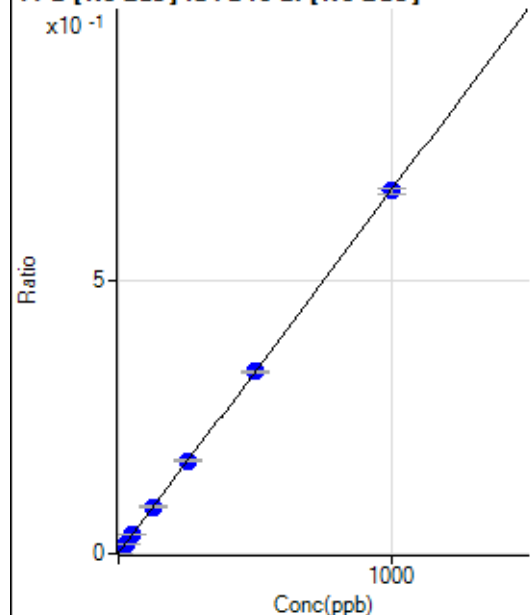
$$R = 1.0000$$

$$DL = 0.3509$$

$$BEC = 1.31$$

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	4214.65	0.0009	P	5.4
2	☐	25.000	24.377	78021.61	0.0171	P	0.6
3	☐	50.000	51.189	159298.07	0.0349	P	2.1
4	☐	125.000	127.936	381574.70	0.0860	P	1.4
5	☐	250.000	254.359	747950.76	0.1701	P	2.1
6	☐	500.000	501.463	1464648.30	0.3345	P	1.1
7	☐	1000.000	997.768	2875030.08	0.6648	P	1.4
8	☐			44503.19	0.0105	P	9.2

$$y = 6.6536E-004 * x + 8.8536E-004$$

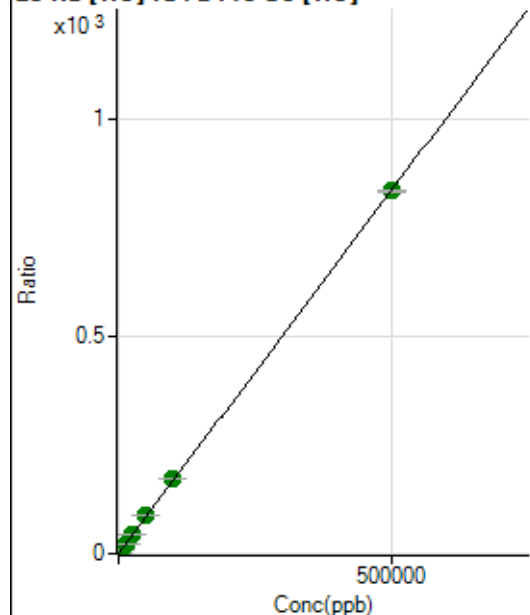
R = 1.0000

DL = 0.2155

BEC = 1.331

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	25575.37	0.0517	P	1.6
2	☐	500.000	504.877	438314.34	0.8952	P	1.5
3	☐	5000.000	5259.143	4175326.92	8.8378	A	0.7
4	☐	12500.000	13140.146	10092345.45	22.0041	A	0.5
5	☐	25000.000	26362.356	20354646.29	44.0936	A	0.5
6	☐	50000.000	52232.236	41327909.26	87.3128	A	0.5
7	☐	100000.00	102344.11	81533885.85	171.0315	A	0.7
8	☐	500000.00	499221.23	406474795.20	834.0686	A	0.7

$$y = 0.0017 * x + 0.0517$$

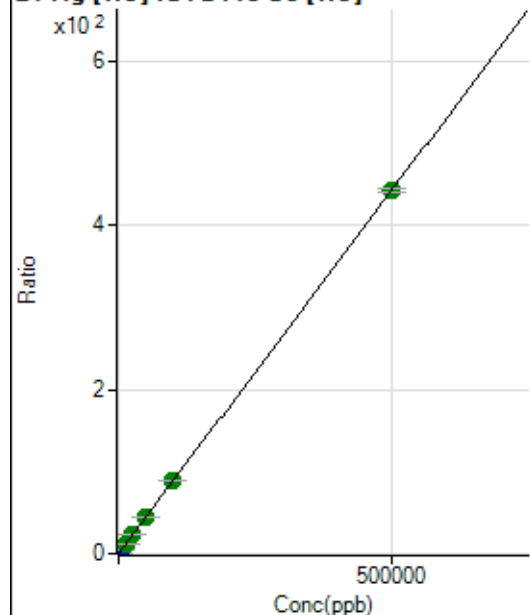
R = 1.0000

DL = 1.5

BEC = 30.96

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	233.34	0.0005	P	5.9
2	☐	500.000	524.896	227317.78	0.4643	P	1.4
3	☐	5000.000	5199.107	2170513.74	4.5943	P	0.5
4	☐	12500.000	13044.366	5286495.95	11.5262	A	0.7
5	☐	25000.000	26164.113	10672088.26	23.1185	A	0.3
6	☐	50000.000	51224.592	21423282.08	45.2613	A	0.7
7	☐	100000.00	100466.14	42317841.57	88.7699	A	0.8
8	☐	500000.00	499710.48	215171532.59	441.5327	A	1.0

$$y = 8.8358\text{E-}004 * x + 4.7177\text{E-}004$$

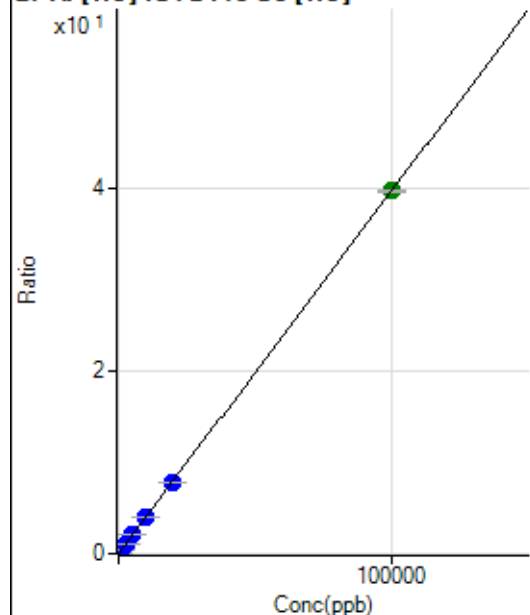
$$R = 1.0000$$

$$DL = 0.09474$$

$$BEC = 0.5339$$

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	55.56	0.0001	P	7.9
2	☐	20.000	19.489	3850.67	0.0079	P	3.3
3	☐	1000.000	1036.193	194768.93	0.4123	P	1.0
4	☐	2500.000	2583.149	471316.29	1.0276	P	0.8
5	☐	5000.000	5158.862	947299.16	2.0521	P	0.7
6	☐	10000.000	10080.474	1897870.66	4.0097	P	1.2
7	☐	20000.000	19705.371	3736517.40	7.8381	P	0.8
8	☐	100000.00	100040.49	19392267.79	39.7920	A	0.6

$$y = 3.9776\text{E-}004 * x + 1.1229\text{E-}004$$

$$R = 1.0000$$

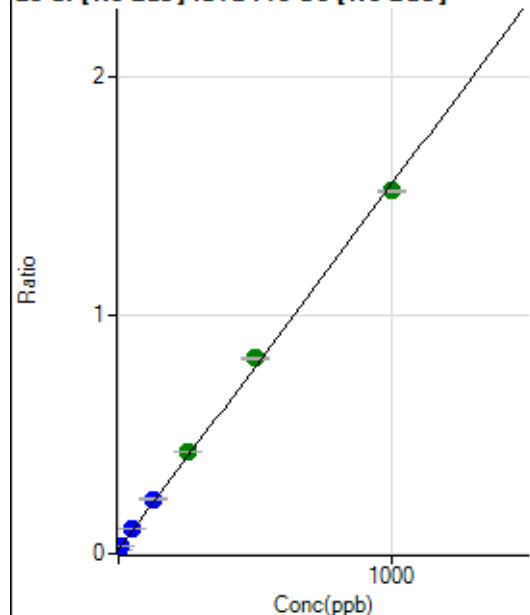
$$DL = 0.06712$$

$$BEC = 0.2823$$

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	218430.99	0.0186	P	0.4
2	☐	10.000	7.058	328169.14	0.0294	P	0.4
3	☐	50.000	55.968	1161937.14	0.1043	P	0.4
4	☐	125.000	138.042	2467442.94	0.2299	P	1.9
5	☐	250.000	265.972	4586686.00	0.4256	A	1.0
6	☐	500.000	523.907	8872646.12	0.8204	A	0.5
7	☐	1000.000	982.154	16661977.11	1.5216	A	0.4
8	☐			448231.68	0.0420	P	3.3

$$y = 0.0015 * x + 0.0186$$

$$R = 0.9993$$

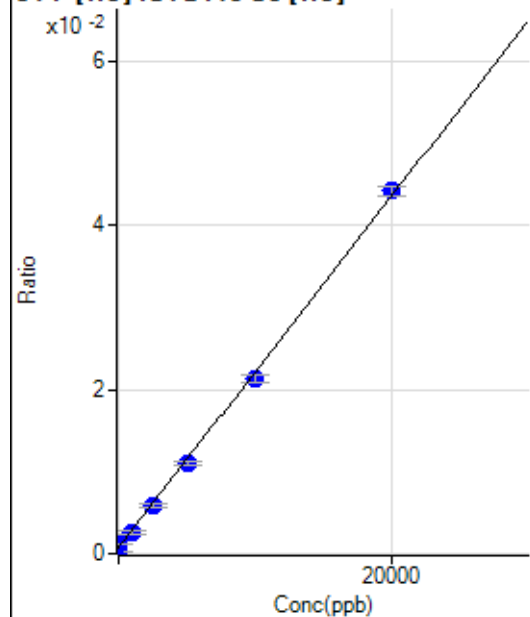
$$DL = 0.1319$$

$$BEC = 12.16$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-219.696	141.67	0.0003	P	12.4
2	☐	0.000	219.696	600.04	0.0012	P	6.2
3	☐	1000.000	843.262	1208.43	0.0026	P	15.5
4	☐	2500.000	2337.571	2636.47	0.0058	P	8.6
5	☐	5000.000	4759.305	5042.75	0.0109	P	4.7
6	☐	10000.000	9570.431	10037.15	0.0212	P	4.2
7	☐	20000.000	20303.099	21037.87	0.0441	P	2.5
8	☐			211.12	0.0004	P	13.6

$$y = 2.1366E-006 * x + 7.5600E-004$$

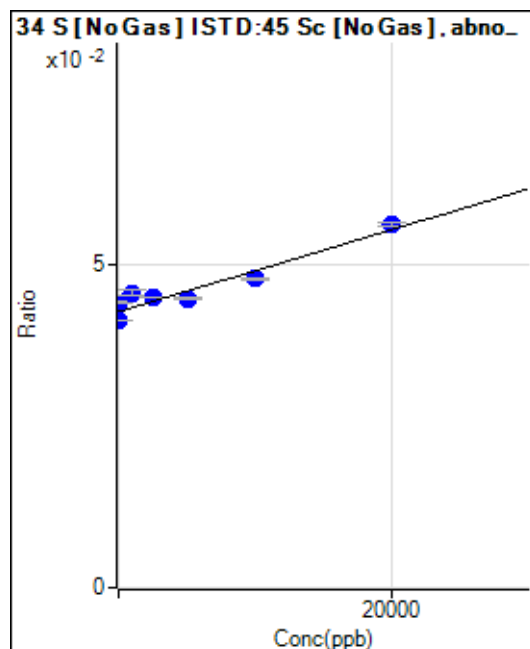
$$R = 0.9994$$

$$DL = 78.62$$

$$BEC = 353.8$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-2271.591	483291.93	0.0412	P	0.2
2	☐	0.000	2271.591	491460.82	0.0440	P	0.9
3	☐	1000.000	4566.590	506972.16	0.0455	P	1.8
4	☐	2500.000	3500.734	481148.58	0.0448	P	0.2
5	☐	5000.000	3106.400	480246.84	0.0446	P	0.7
6	☐	10000.000	8015.660	515646.18	0.0477	P	0.3
7	☐	20000.000	21162.149	613166.55	0.0560	P	0.9
8	☐			444946.51	0.0417	P	0.8

$$y = 6.3302\text{E-}007 * x + 0.0426$$

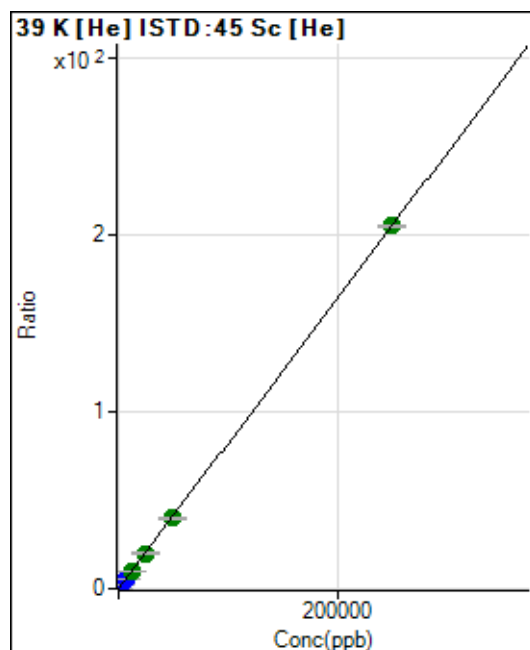
$$R = 0.9505$$

$$DL = 1108$$

$$BEC = 6.73\text{E}+04$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	26012.60	0.0526	P	2.0
2	☐	500.000	492.230	222806.77	0.4550	P	0.8
3	☐	2500.000	2446.582	969868.08	2.0529	P	0.3
4	☐	6250.000	6083.050	2305269.84	5.0260	P	0.0
5	☐	12500.000	12292.761	4663812.17	10.1030	A	0.1
6	☐	25000.000	24474.523	9496128.60	20.0626	A	0.7
7	☐	50000.000	48403.467	18890394.87	39.6266	A	0.9
8	☐	250000.00	250386.94	99789663.34	204.7653	A	0.7

$$y = 8.1759\text{E-}004 * x + 0.0526$$

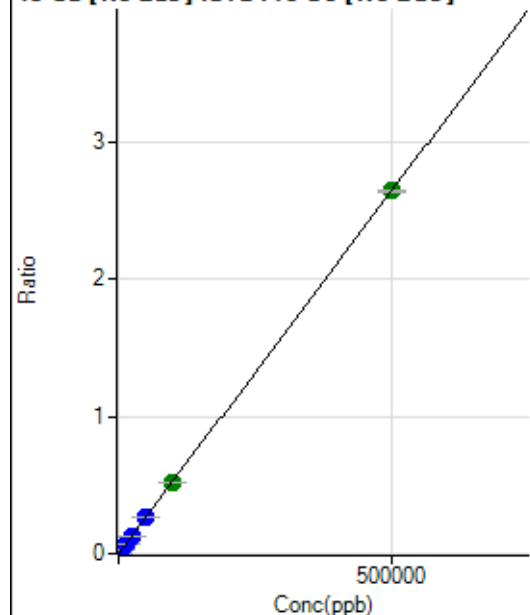
$$R = 1.0000$$

$$DL = 3.822$$

$$BEC = 64.34$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	469.48	0.0000	P	19.1
2	☐	500.000	493.088	29524.86	0.0026	P	2.4
3	☐	5000.000	5030.853	296737.89	0.0266	P	0.7
4	☐	12500.000	12577.876	713987.56	0.0665	P	0.5
5	☐	25000.000	25050.727	1426913.05	0.1324	P	0.6
6	☐	50000.000	49517.832	2830583.18	0.2617	P	0.5
7	☐	100000.00	98921.516	5724587.67	0.5228	A	0.1
8	☐	500000.00	500259.12	28193613.82	2.6437	A	0.6

$$y = 5.2846\text{E-}006 * x + 3.9987\text{E-}005$$

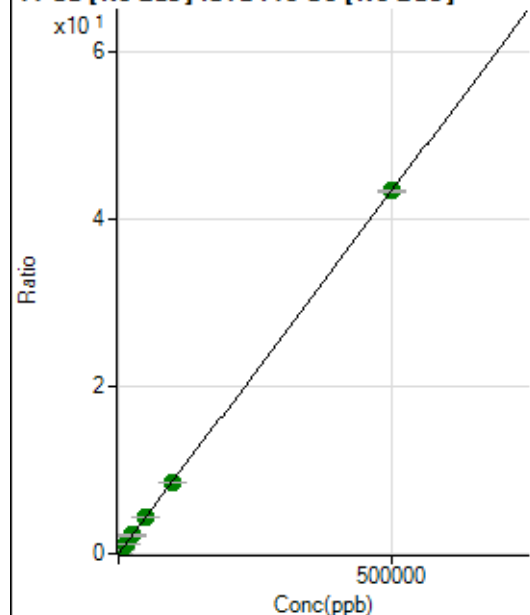
$$R = 1.0000$$

$$DL = 4.343$$

$$BEC = 7.567$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	17942.59	0.0015	P	3.1
2	☐	500.000	488.458	488905.21	0.0438	P	0.3
3	☐	5000.000	5027.697	4867298.59	0.4367	A	1.0
4	☐	12500.000	12572.957	11700238.98	1.0899	A	0.4
5	☐	25000.000	25189.028	23512173.96	2.1820	A	0.5
6	☐	50000.000	50318.170	47125254.87	4.3572	A	0.3
7	☐	100000.00	98932.906	93790657.65	8.5655	A	0.5
8	☐	500000.00	500170.06	461741610.32	43.2980	A	0.6

$$y = 8.6564\text{E-}005 * x + 0.0015$$

$$R = 1.0000$$

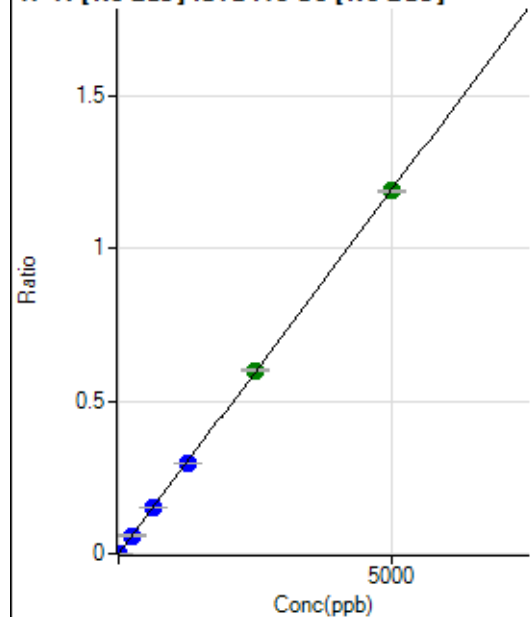
$$DL = 1.666$$

$$BEC = 17.65$$

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	133.34	0.0000	P	28.6
2	☐	5.000	5.291	14185.20	0.0013	P	1.9
3	☐	250.000	250.434	664646.78	0.0596	P	0.8
4	☐	625.000	625.527	1598999.88	0.1489	P	0.2
5	☐	1250.000	1244.108	3192039.40	0.2962	P	0.4
6	☐	2500.000	2524.578	6501026.79	0.6011	A	0.6
7	☐	5000.000	4989.096	13007131.45	1.1879	A	0.4
8	☐			2600.33	0.0002	P	2.3

$$y = 2.3809\text{E-}004 * x + 1.1356\text{E-}005$$

$$R = 1.0000$$

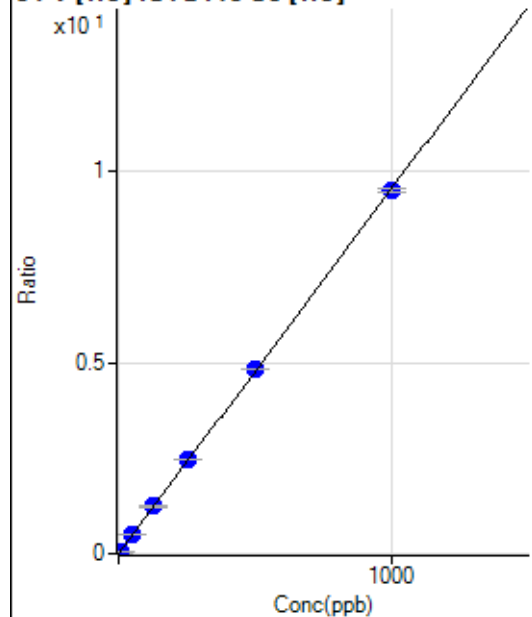
$$DL = 0.0409$$

$$BEC = 0.0477$$

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	7.78	0.0000	P	65.0
2	☐	5.000	5.348	25036.95	0.0511	P	1.3
3	☐	50.000	51.484	232483.91	0.4921	P	0.4
4	☐	125.000	129.395	567246.86	1.2368	P	0.5
5	☐	250.000	258.015	1138404.59	2.4661	P	0.5
6	☐	500.000	505.906	2288717.69	4.8354	P	0.4
7	☐	1000.000	994.418	4530918.89	9.5045	P	0.9
8	☐			1412.31	0.0029	P	5.6

$$y = 0.0096 * x + 1.5708\text{E-}005$$

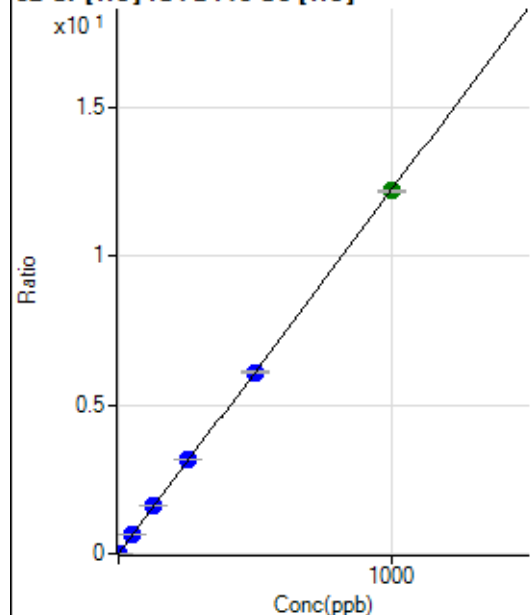
$$R = 0.9999$$

$$DL = 0.003205$$

$$BEC = 0.001643$$

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	1891.27	0.0038	P	1.5
2	☐	2.000	2.050	14142.54	0.0289	P	2.7
3	☐	50.000	51.889	301491.62	0.6382	P	1.0
4	☐	125.000	130.109	731266.32	1.5944	P	1.0
5	☐	250.000	258.170	1458701.63	3.1599	P	0.2
6	☐	500.000	499.079	2889654.16	6.1050	P	0.2
7	☐	1000.000	997.685	5816201.72	12.2004	A	0.6
8	☐			160052.80	0.3284	P	0.7

$$y = 0.0122 * x + 0.0038$$

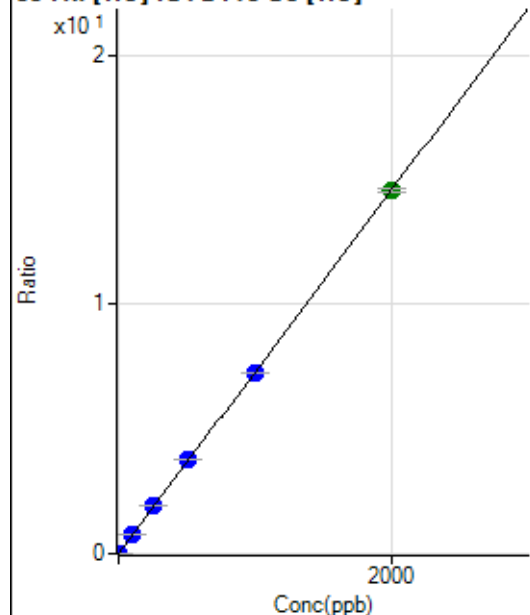
$$R = 1.0000$$

$$DL = 0.01363$$

$$BEC = 0.3128$$

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	77.78	0.0002	P	20.9
2	☐	1.000	1.064	3875.01	0.0079	P	0.5
3	☐	100.000	103.980	358127.32	0.7580	P	0.2
4	☐	250.000	260.173	869855.65	1.8965	P	0.3
5	☐	500.000	521.829	1755825.25	3.8036	P	0.6
6	☐	1000.000	994.737	3431815.71	7.2504	P	0.7
7	☐	2000.000	1995.704	6934400.31	14.5461	A	1.2
8	☐			24472.83	0.0502	P	1.2

$$y = 0.0073 * x + 1.5710E-004$$

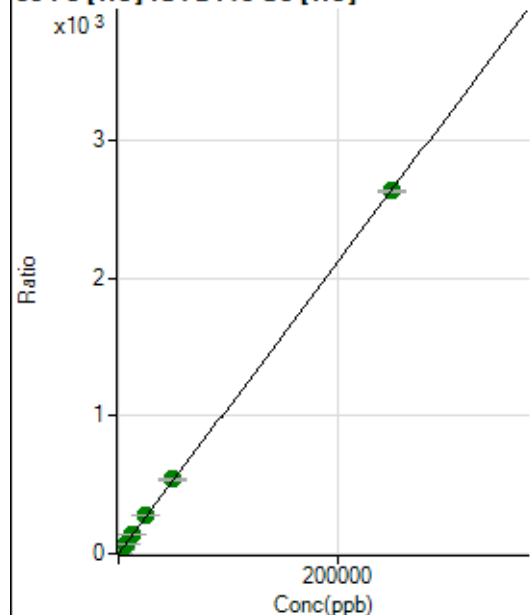
$$R = 0.9999$$

$$DL = 0.01351$$

$$BEC = 0.02155$$

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	6288.55	0.0127	P	4.2
2	☐	50.000	55.537	293169.86	0.5987	P	0.7
3	☐	2500.000	2673.861	13335908.40	28.2276	A	0.6
4	☐	6250.000	6733.293	32594455.59	71.0633	A	0.2
5	☐	12500.000	13425.801	65404804.24	141.6835	A	0.1
6	☐	25000.000	25911.575	129422604.75	273.4349	A	0.6
7	☐	50000.000	51131.543	257215698.34	539.5592	A	0.9
8	☐	250000.00	249622.42	1283639747.2	2,634.060	A	0.6

$$y = 0.0106 * x + 0.0127$$

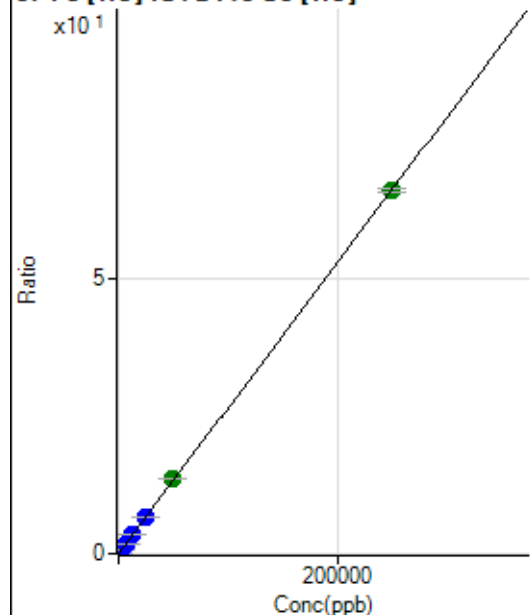
R = 1.0000

DL = 0.1509

BEC = 1.205

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	231.49	0.0005	P	12.2
2	☐	50.000	55.718	7426.16	0.0152	P	1.0
3	☐	2500.000	2661.528	331920.27	0.7026	P	0.5
4	☐	6250.000	6655.589	805479.46	1.7562	P	0.5
5	☐	12500.000	13260.885	1615056.34	3.4986	P	0.3
6	☐	25000.000	25518.509	3186436.33	6.7321	P	0.7
7	☐	50000.000	51199.578	6438858.24	13.5066	A	0.7
8	☐	250000.00	249658.43	32096029.42	65.8588	A	0.9

$$y = 2.6379E-004 * x + 4.6836E-004$$

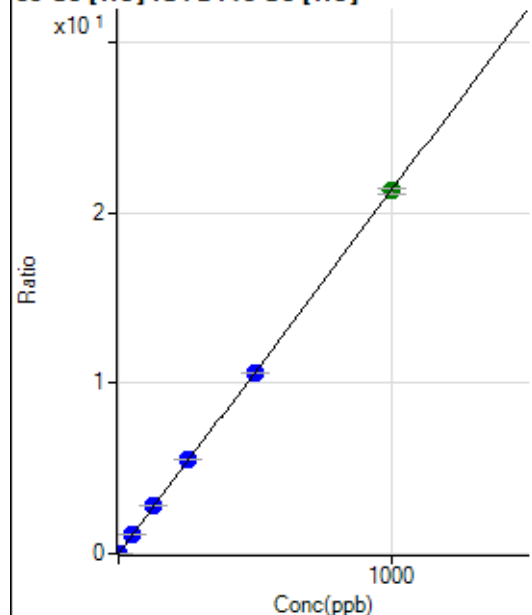
R = 1.0000

DL = 0.6481

BEC = 1.775

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	103.34	0.0002	P	20.5
2	☐	1.000	1.038	10950.91	0.0224	P	1.0
3	☐	50.000	52.654	531104.32	1.1242	P	0.4
4	☐	125.000	131.417	1286728.78	2.8055	P	0.9
5	☐	250.000	259.613	2558288.73	5.5420	P	0.9
6	☐	500.000	496.719	5018773.08	10.6033	P	0.7
7	☐	1000.000	998.302	10158652.91	21.3103	A	1.2
8	☐			18502.98	0.0380	P	1.2

$$y = 0.0213 * x + 2.0917E-004$$

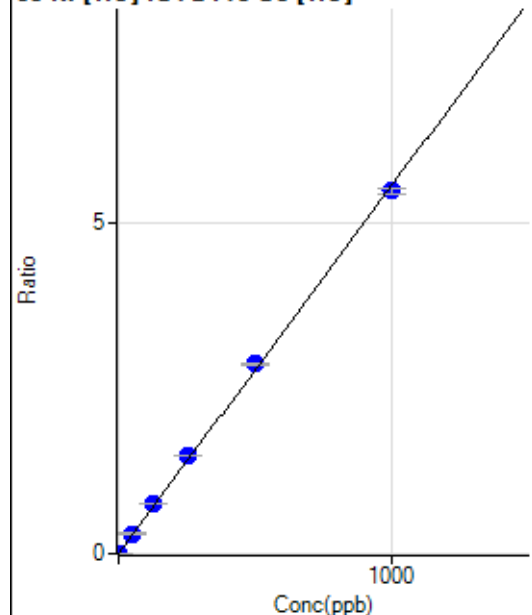
$$R = 0.9999$$

$$DL = 0.00602$$

$$BEC = 0.009799$$

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	65.56	0.0001	P	10.1
2	☐	1.000	1.073	2988.13	0.0061	P	2.9
3	☐	50.000	54.801	144059.76	0.3049	P	0.4
4	☐	125.000	135.997	346980.83	0.7565	P	1.1
5	☐	250.000	267.717	687428.33	1.4891	P	0.1
6	☐	500.000	515.164	1356275.74	2.8654	P	0.2
7	☐	1000.000	986.374	2615271.66	5.4862	P	1.4
8	☐			51528.13	0.1057	P	0.6

$$y = 0.0056 * x + 1.3251E-004$$

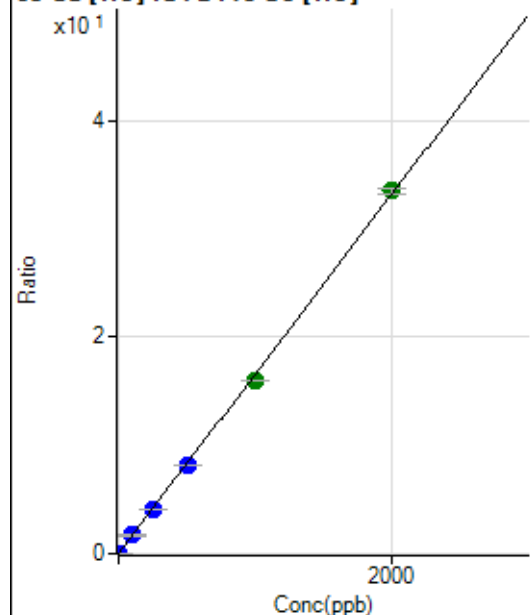
$$R = 0.9996$$

$$DL = 0.007252$$

$$BEC = 0.02383$$

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	994.49	0.0020	P	7.2
2	☐	2.000	2.052	17650.84	0.0360	P	2.1
3	☐	100.000	101.735	798179.46	1.6895	P	0.5
4	☐	250.000	250.483	1906578.20	4.1568	P	0.6
5	☐	500.000	489.790	3751241.51	8.1261	P	0.3
6	☐	1000.000	963.022	7561699.33	15.9756	A	0.2
7	☐	2000.000	2020.894	15980102.40	33.5225	A	1.4
8	☐			24319.31	0.0499	P	2.3

$$y = 0.0166 * x + 0.0020$$

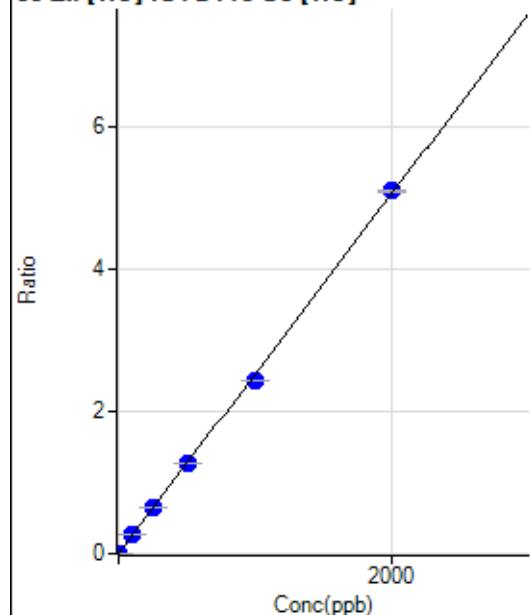
$$R = 0.9997$$

$$DL = 0.02607$$

$$BEC = 0.1212$$

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	816.71	0.0017	P	10.8
2	☐	2.000	2.234	3567.16	0.0073	P	2.9
3	☐	100.000	103.844	124505.09	0.2635	P	0.6
4	☐	250.000	255.829	296670.91	0.6468	P	0.7
5	☐	500.000	504.695	588309.84	1.2744	P	0.4
6	☐	1000.000	960.965	1147867.81	2.4251	P	0.4
7	☐	2000.000	2017.423	2426161.13	5.0893	P	0.8
8	☐			29642.50	0.0608	P	0.8

$$y = 0.0025 * x + 0.0017$$

$$R = 0.9997$$

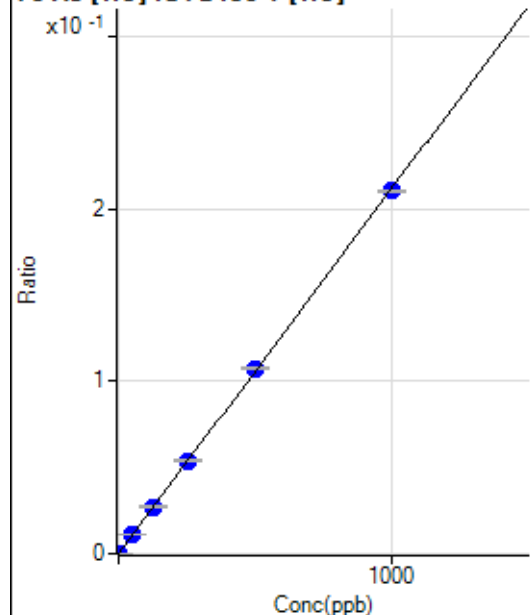
$$DL = 0.2116$$

$$BEC = 0.6549$$

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	30.86	0.0000	P	9.2
2	☐	1.000	1.085	762.99	0.0002	P	7.2
3	☐	50.000	52.267	34238.44	0.0111	P	0.2
4	☐	125.000	128.969	82576.54	0.0273	P	0.9
5	☐	250.000	254.717	165244.57	0.0540	P	0.9
6	☐	500.000	507.937	331383.75	0.1077	P	0.6
7	☐	1000.000	994.243	647808.58	0.2108	P	0.6
8	☐			261.73	0.0001	P	11.0

$$y = 2.1198\text{E-}004 * x + 9.5728\text{E-}006$$

$$R = 0.9999$$

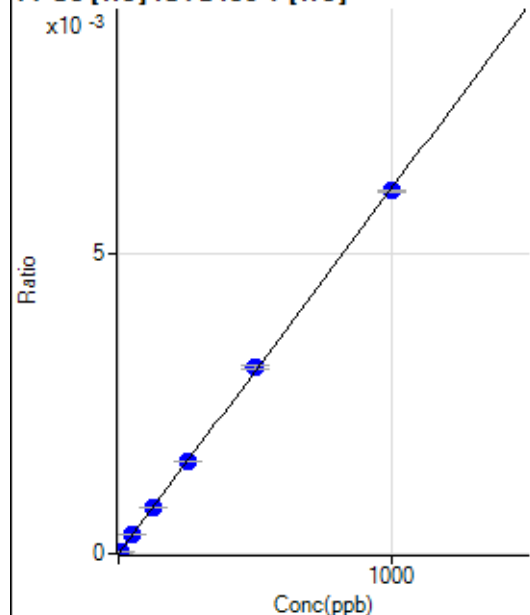
$$DL = 0.01243$$

$$BEC = 0.04516$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.2
2	☐	5.000	6.315	123.34	0.0000	P	9.8
3	☐	50.000	50.864	955.61	0.0003	P	3.0
4	☐	125.000	124.856	2292.44	0.0008	P	0.9
5	☐	250.000	253.089	4707.51	0.0015	P	1.7
6	☐	500.000	511.558	9568.86	0.0031	P	2.3
7	☐	1000.000	993.417	18558.76	0.0060	P	0.5
8	☐			7.78	0.0000	P	25.2

$$y = 6.0776\text{E-}006 * x + 3.4424\text{E-}007$$

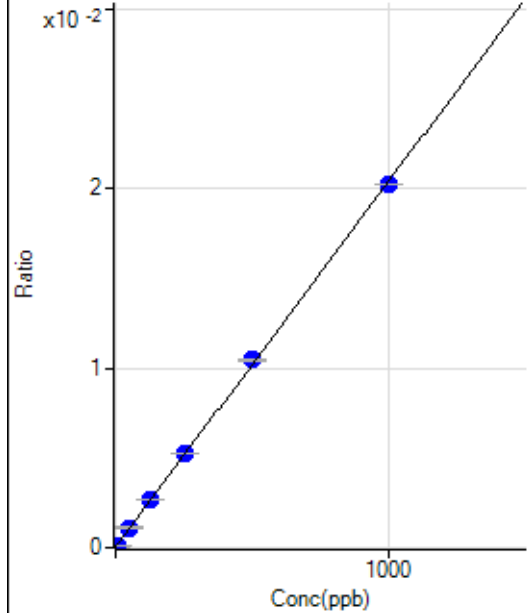
$$R = 0.9999$$

$$DL = 0.2943$$

$$BEC = 0.05664$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	79.63	0.0000	P	9.3
2	☐	5.000	5.852	458.04	0.0001	P	6.4
3	☐	50.000	53.684	3449.20	0.0011	P	3.8
4	☐	125.000	131.274	8140.61	0.0027	P	1.6
5	☐	250.000	257.273	16096.04	0.0053	P	0.6
6	☐	500.000	512.271	32157.28	0.0104	P	0.6
7	☐	1000.000	991.074	62064.73	0.0202	P	0.1
8	☐			119.75	0.0000	P	8.9

$$y = 2.0350\text{E-}005 * x + 2.4698\text{E-}005$$

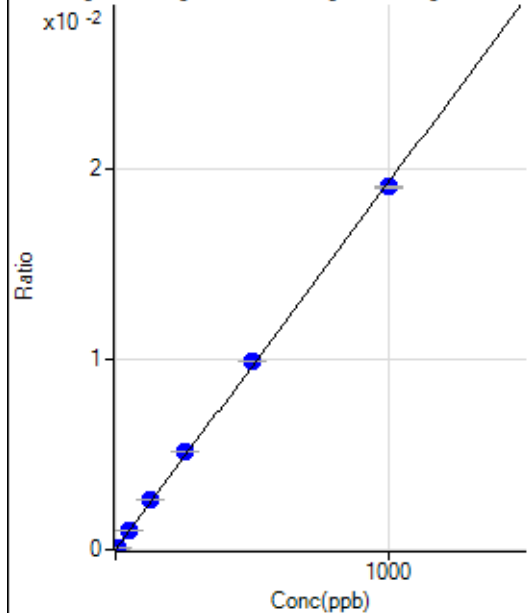
$$R = 0.9999$$

$$DL = 0.3388$$

$$BEC = 1.214$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	-22.37	0.0000	P	-105.
2	☐	5.000	5.913	2606.92	0.0001	P	4.0
3	☐	50.000	53.529	23747.21	0.0010	P	1.4
4	☐	125.000	134.318	57555.73	0.0026	P	0.3
5	☐	250.000	265.400	114691.40	0.0051	P	0.5
6	☐	500.000	513.673	223760.32	0.0099	P	0.7
7	☐	1000.000	987.968	432911.53	0.0190	P	0.3
8	☐			246.19	0.0000	P	43.0

$$y = 1.9278\text{E-}005 * x - 9.2292\text{E-}007$$

$$R = 0.9997$$

$$DL = 0.152$$

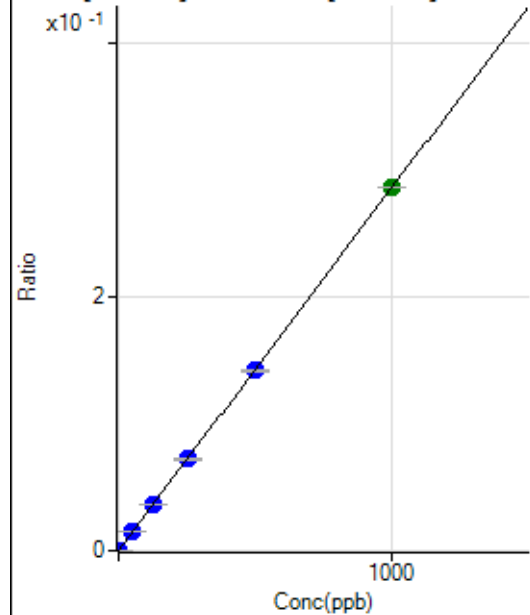
$$BEC = -0.04787$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1554.56		P	2.6
2	☐			1491.21		P	4.5
3	☐			1520.10		P	12.0
4	☐			1400.09		P	3.3
5	☐			1420.10		P	4.6
6	☐			1347.86		P	3.1
7	☐			1426.76		P	3.1
8	☐			1493.44		P	2.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	2530.89	0.0001	P	7.3
2	☐	1.000	1.049	9314.53	0.0004	P	3.1
3	☐	50.000	50.395	333814.15	0.0145	P	0.7
4	☐	125.000	126.842	807560.03	0.0363	P	0.1
5	☐	250.000	251.845	1614473.22	0.0720	P	0.9
6	☐	500.000	497.383	3211526.35	0.1421	P	0.8
7	☐	1000.000	1000.597	6496040.90	0.2858	A	0.1
8	☐			28635.04	0.0013	P	1.2

$$y = 2.8551E-004 * x + 1.0457E-004$$

$$R = 1.0000$$

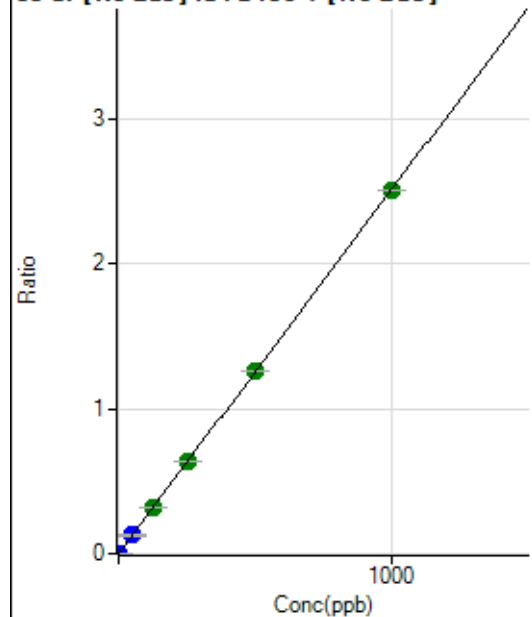
$$DL = 0.08055$$

$$BEC = 0.3662$$

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	211.12	0.0000	P	30.0
2	☐	1.000	1.026	59504.93	0.0026	P	1.1
3	☐	50.000	50.232	2901600.48	0.1260	P	0.4
4	☐	125.000	126.799	7070423.60	0.3180	A	0.4
5	☐	250.000	254.744	14323031.40	0.6388	A	0.2
6	☐	500.000	503.440	28529985.01	1.2625	A	0.3
7	☐	1000.000	996.857	56823015.16	2.4998	A	0.1
8	☐			232873.28	0.0106	P	0.7

$$y = 0.0025 * x + 8.7271E-006$$

$$R = 1.0000$$

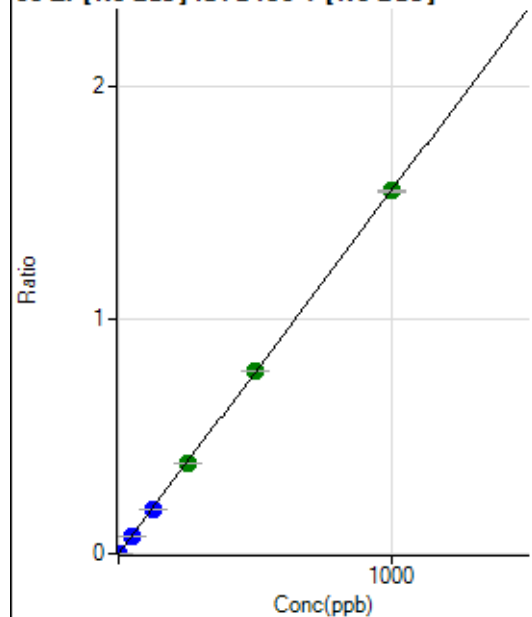
$$DL = 0.003137$$

$$BEC = 0.00348$$

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	1527.93	0.0001	P	1.6
2	☐	1.000	0.851	31905.99	0.0014	P	2.3
3	☐	50.000	49.252	1761767.49	0.0765	P	0.9
4	☐	125.000	123.984	4279278.35	0.1925	P	0.4
5	☐	250.000	250.162	8704693.42	0.3882	A	0.5
6	☐	500.000	502.060	17606836.85	0.7791	A	0.2
7	☐	1000.000	999.094	35241413.98	1.5504	A	0.4
8	☐			8841.95	0.0004	P	2.5

$$y = 0.0016 * x + 6.3113E-005$$

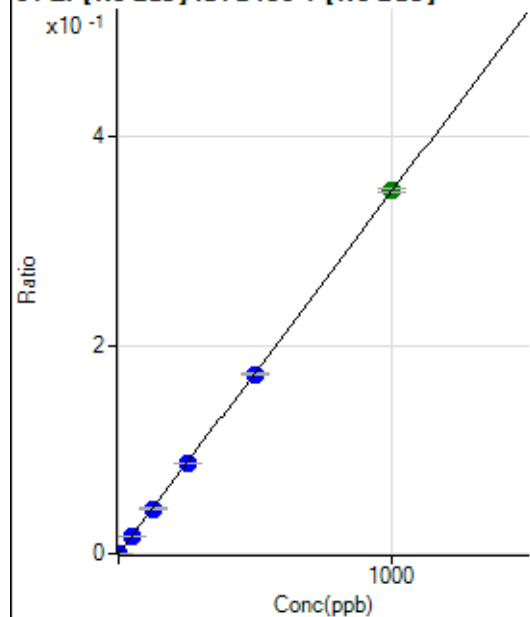
$$R = 1.0000$$

$$DL = 0.001977$$

$$BEC = 0.04067$$

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	250.01	0.0000	P	15.0
2	☐	1.000	0.850	7029.81	0.0003	P	6.0
3	☐	50.000	49.349	394351.50	0.0171	P	0.5
4	☐	125.000	124.731	961882.55	0.0433	P	0.9
5	☐	250.000	248.486	1931935.85	0.0862	P	0.6
6	☐	500.000	494.939	3878243.19	0.1716	P	1.0
7	☐	1000.000	1002.975	7905082.64	0.3478	A	0.9
8	☐			1789.08	0.0001	P	5.4

$$y = 3.4673\text{E-}004 * x + 1.0324\text{E-}005$$

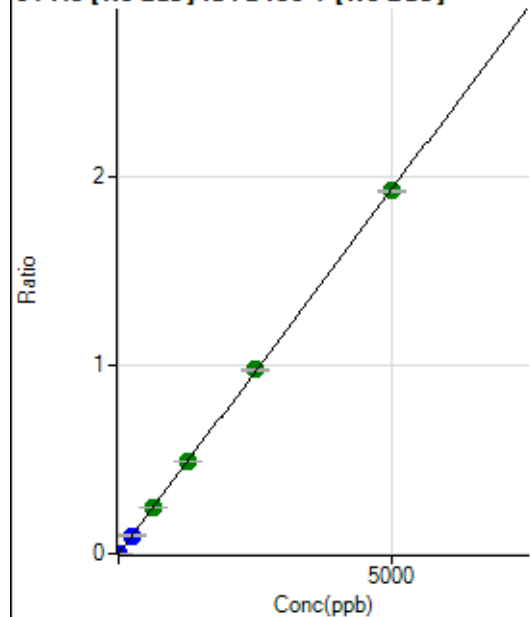
$$R = 1.0000$$

$$DL = 0.01342$$

$$BEC = 0.02978$$

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	663.93	0.0000	P	10.0
2	☐	5.000	4.759	43015.90	0.0019	P	3.0
3	☐	250.000	249.880	2223820.28	0.0966	P	1.0
4	☐	625.000	628.129	5395621.26	0.2427	A	0.3
5	☐	1250.000	1263.320	10941639.40	0.4880	A	0.6
6	☐	2500.000	2526.197	22051938.51	0.9758	A	0.5
7	☐	5000.000	4983.187	43754311.74	1.9249	A	0.7
8	☐			30956.88	0.0014	P	2.9

$$y = 3.8628\text{E-}004 * x + 2.7429\text{E-}005$$

$$R = 1.0000$$

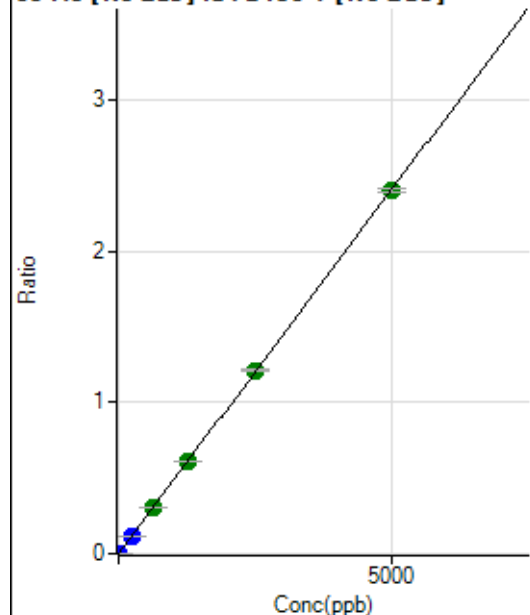
$$DL = 0.02134$$

$$BEC = 0.07101$$

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	408.36	0.0000	P	28.0
2	☐	5.000	4.960	55402.65	0.0024	P	1.2
3	☐	250.000	250.054	2771067.27	0.1203	P	0.7
4	☐	625.000	628.434	6722520.90	0.3023	A	0.2
5	☐	1250.000	1263.351	13626528.78	0.6078	A	0.8
6	☐	2500.000	2523.130	27429483.60	1.2138	A	0.6
7	☐	5000.000	4984.665	54507229.00	2.3980	A	1.1
8	☐			51064.49	0.0023	P	1.0

$$y = 4.8107\text{E-}004 * x + 1.6869\text{E-}005$$

$$R = 1.0000$$

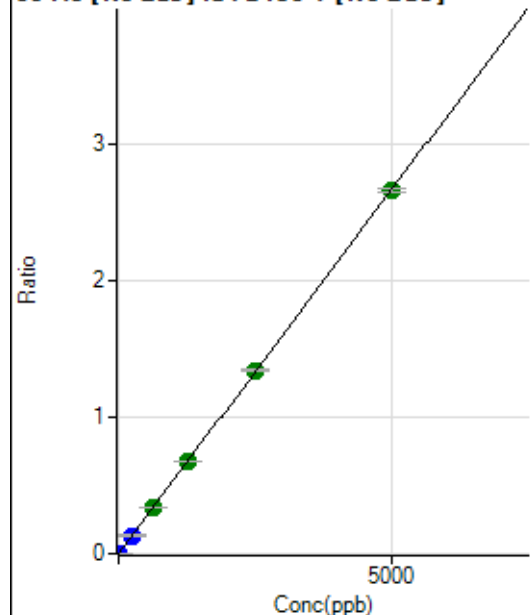
$$DL = 0.02949$$

$$BEC = 0.03507$$

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	525.03	0.0000	P	3.7
2	☐	5.000	5.047	62437.65	0.0027	P	2.0
3	☐	250.000	250.642	3073722.25	0.1334	P	0.5
4	☐	625.000	626.460	7415783.33	0.3335	A	0.5
5	☐	1250.000	1268.039	15134834.54	0.6751	A	0.8
6	☐	2500.000	2521.350	30331776.37	1.3422	A	0.7
7	☐	5000.000	4984.600	60316379.82	2.6535	A	0.9
8	☐			61059.37	0.0028	P	2.7

$$y = 5.3234\text{E-}004 * x + 2.1684\text{E-}005$$

$$R = 1.0000$$

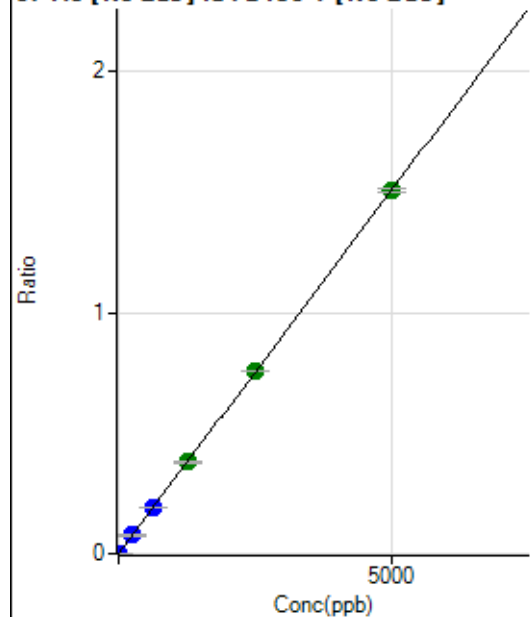
$$DL = 0.004519$$

$$BEC = 0.04073$$

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	288.90	0.0000	P	22.9
2	☐	5.000	4.983	34890.94	0.0015	P	3.8
3	☐	250.000	251.581	1746204.29	0.0758	P	0.9
4	☐	625.000	624.779	4186042.41	0.1883	P	0.5
5	☐	1250.000	1259.354	8507623.19	0.3795	A	0.8
6	☐	2500.000	2510.659	17094901.77	0.7565	A	0.5
7	☐	5000.000	4992.280	34191568.82	1.5042	A	1.0
8	☐			30661.62	0.0014	P	3.4

$$y = 3.0130E-004 * x + 1.1928E-005$$

$$R = 1.0000$$

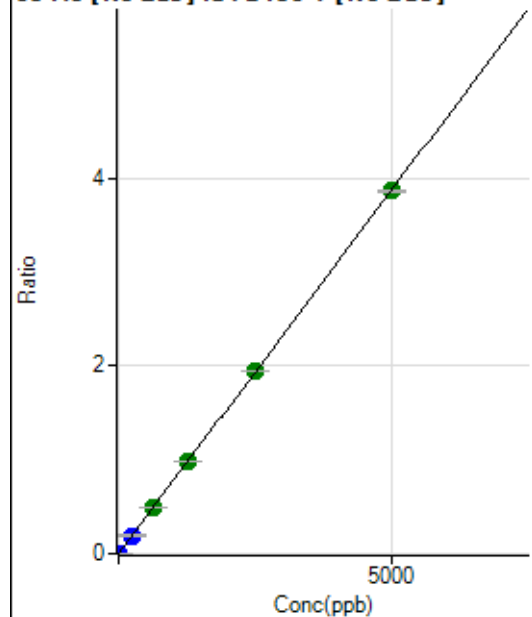
$$DL = 0.02715$$

$$BEC = 0.03959$$

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	666.71	0.0000	P	17.3
2	☐	5.000	5.036	90540.21	0.0039	P	0.7
3	☐	250.000	250.159	4462310.52	0.1937	P	1.1
4	☐	625.000	630.150	10850515.09	0.4880	A	0.6
5	☐	1250.000	1264.391	21952318.02	0.9791	A	0.3
6	☐	2500.000	2508.839	43902501.33	1.9428	A	0.3
7	☐	5000.000	4991.331	87855897.10	3.8651	A	0.4
8	☐			77343.37	0.0035	P	3.0

$$y = 7.7435E-004 * x + 2.7553E-005$$

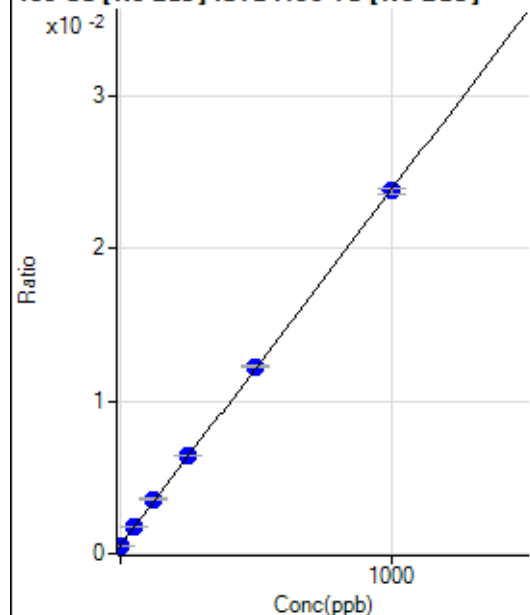
$$R = 1.0000$$

$$DL = 0.01847$$

$$BEC = 0.03558$$

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	14196.62	0.0005	P	1.9
2	☐	1.000	1.738	14627.67	0.0005	P	0.8
3	☐	50.000	53.902	50864.80	0.0017	P	1.5
4	☐	125.000	132.228	104293.96	0.0036	P	2.1
5	☐	250.000	256.331	192674.96	0.0065	P	0.8
6	☐	500.000	503.739	368861.05	0.0123	P	0.7
7	☐	1000.000	995.449	711991.17	0.0238	P	1.3
8	☐			13687.67	0.0005	P	2.1

$$y = 2.3414\text{E-}005 * x + 4.5707\text{E-}004$$

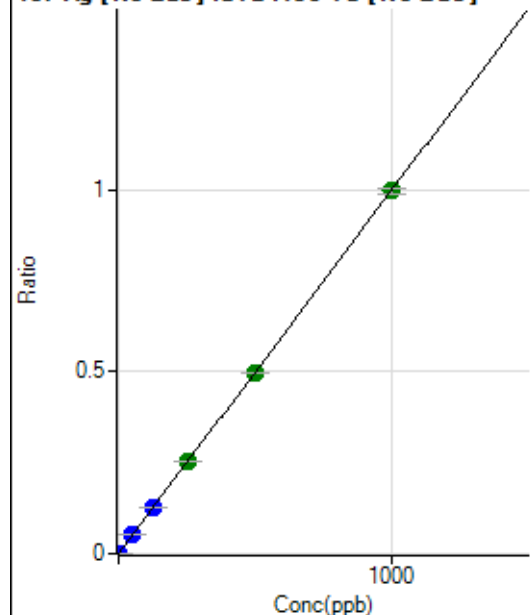
$$R = 1.0000$$

$$DL = 1.093$$

$$BEC = 19.52$$

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	236.13	0.0000	P	14.1
2	☐	1.000	0.870	25710.39	0.0009	P	0.5
3	☐	50.000	52.900	1560363.28	0.0527	P	0.4
4	☐	125.000	128.595	3763242.31	0.1282	P	0.5
5	☐	250.000	255.187	7588634.98	0.2544	A	0.7
6	☐	500.000	498.251	14953367.87	0.4967	A	0.4
7	☐	1000.000	998.984	29835067.68	0.9958	A	1.3
8	☐			3447.80	0.0001	P	6.6

$$y = 9.9680\text{E-}004 * x + 7.6015\text{E-}006$$

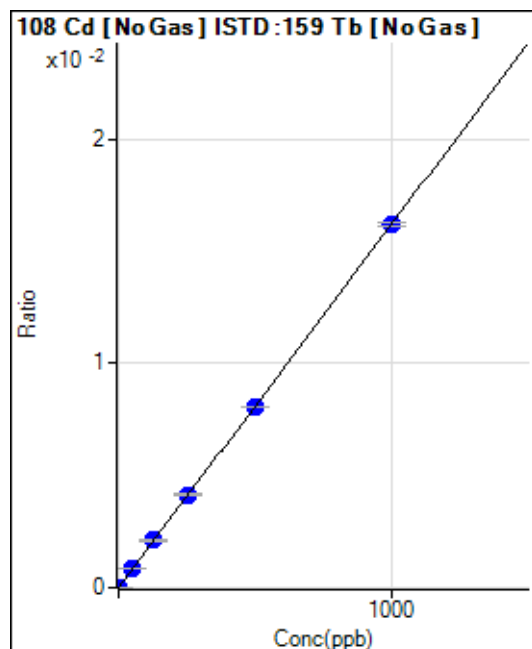
$$R = 1.0000$$

$$DL = 0.003231$$

$$BEC = 0.007626$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	41.67	0.0000	P	20.3
2	☐	1.000	1.152	587.52	0.0000	P	4.5
3	☐	50.000	52.641	25256.15	0.0009	P	0.3
4	☐	125.000	130.178	61909.95	0.0021	P	1.1
5	☐	250.000	255.620	123503.79	0.0041	P	0.8
6	☐	500.000	498.526	243048.96	0.0081	P	0.3
7	☐	1000.000	998.553	484442.92	0.0162	P	1.0
8	☐			170.84	0.0000	P	19.1

$$y = 1.6190\text{E-}005 * x + 1.3420\text{E-}006$$

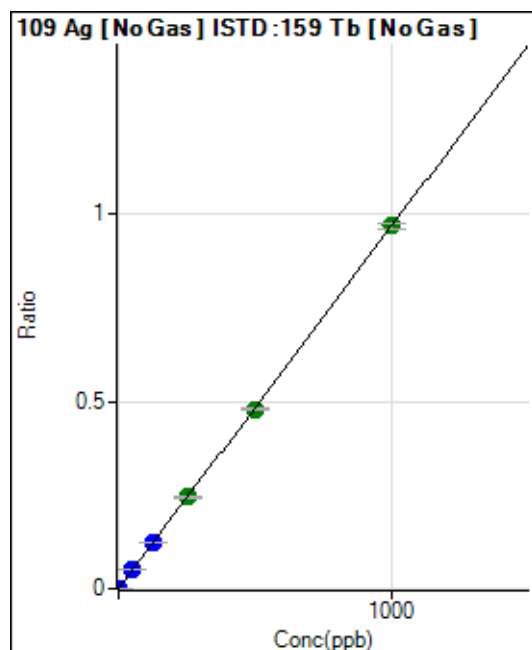
$$R = 1.0000$$

$$DL = 0.05037$$

$$BEC = 0.08289$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	119.45	0.0000	P	34.3
2	☐	1.000	0.860	24566.64	0.0008	P	1.1
3	☐	50.000	52.686	1508217.27	0.0510	P	0.3
4	☐	125.000	128.480	3649102.47	0.1243	P	0.9
5	☐	250.000	253.439	7314399.56	0.2452	A	1.5
6	☐	500.000	495.626	14436483.66	0.4795	A	0.9
7	☐	1000.000	1000.758	29007218.36	0.9682	A	1.5
8	☐			3406.16	0.0001	P	8.4

$$y = 9.6745\text{E-}004 * x + 3.8449\text{E-}006$$

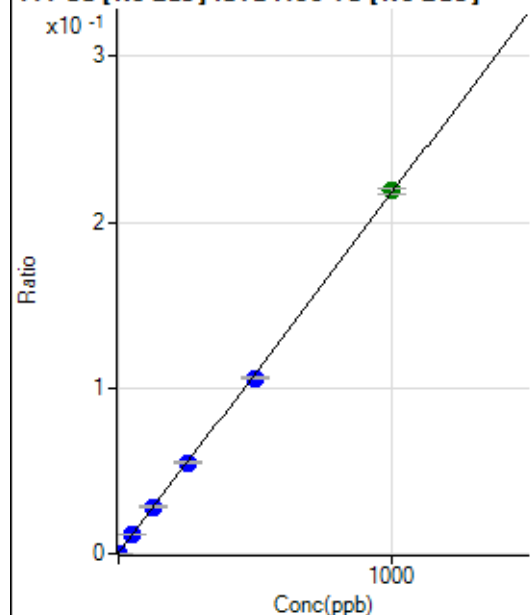
$$R = 1.0000$$

$$DL = 0.004086$$

$$BEC = 0.003974$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	9970.97	0.0003	P	1.7
2	☐	1.000	1.103	16475.62	0.0006	P	1.7
3	☐	50.000	52.765	348578.59	0.0118	P	0.7
4	☐	125.000	129.249	833514.67	0.0284	P	0.7
5	☐	250.000	251.701	1640386.01	0.0550	P	1.3
6	☐	500.000	485.874	3186868.44	0.1058	P	0.7
7	☐	1000.000	1005.968	6555561.52	0.2188	A	1.6
8	☐			10788.26	0.0004	P	2.0

$$y = 2.1719\text{E-}004 * x + 3.2102\text{E-}004$$

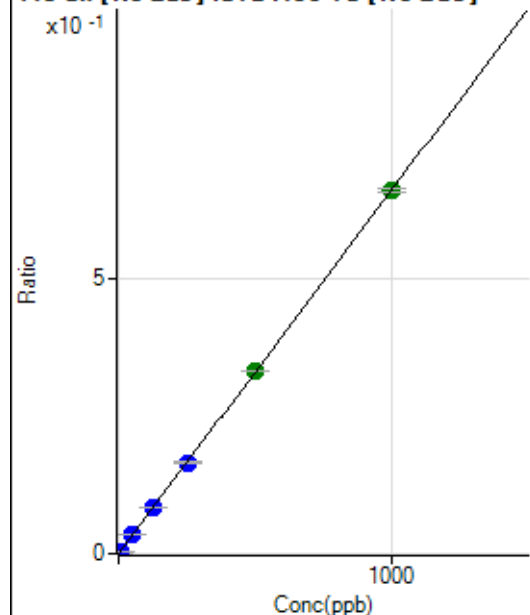
$$R = 0.9998$$

$$DL = 0.07594$$

$$BEC = 1.478$$

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	1652.95	0.0001	P	3.6
2	☐	5.000	5.202	102242.98	0.0035	P	1.8
3	☐	50.000	51.657	1008270.30	0.0341	P	0.3
4	☐	125.000	128.008	2476705.93	0.0844	P	0.9
5	☐	250.000	249.899	4911872.94	0.1647	P	1.2
6	☐	500.000	502.396	9964682.51	0.3310	A	0.5
7	☐	1000.000	998.367	19703924.40	0.6576	A	1.2
8	☐			10501.59	0.0004	P	5.1

$$y = 6.5867\text{E-}004 * x + 5.3215\text{E-}005$$

$$R = 1.0000$$

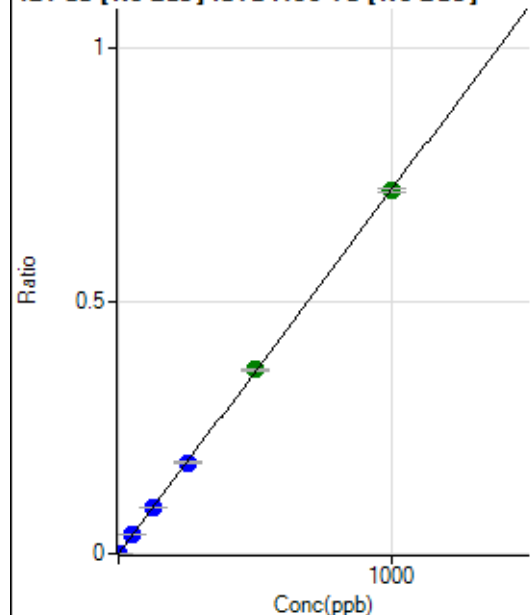
$$DL = 0.008706$$

$$BEC = 0.08079$$

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	277.79	0.0000	P	29.8
2	☐	2.000	2.041	43448.98	0.0015	P	1.0
3	☐	50.000	51.549	1098581.90	0.0371	P	0.6
4	☐	125.000	128.048	2707263.75	0.0922	P	0.4
5	☐	250.000	250.829	5388646.34	0.1806	P	1.3
6	☐	500.000	505.409	10958227.07	0.3640	A	0.7
7	☐	1000.000	996.630	21503444.41	0.7177	A	1.2
8	☐			17606.20	0.0006	P	5.2

$$y = 7.2013\text{E-}004 * x + 8.9391\text{E-}006$$

$$R = 1.0000$$

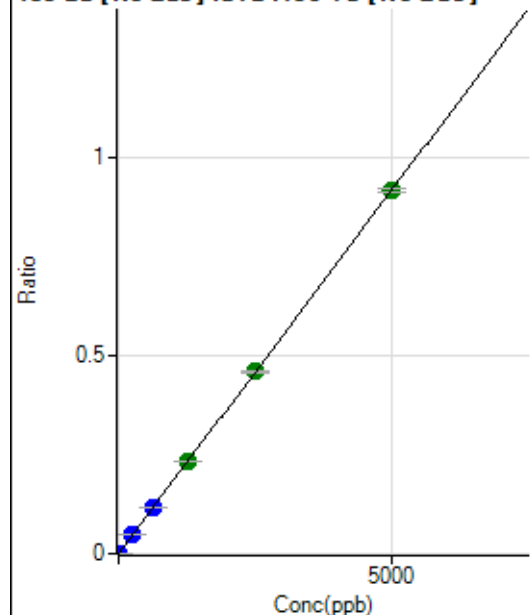
$$DL = 0.01111$$

$$BEC = 0.01241$$

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	80.56	0.0000	P	6.1
2	☐	10.000	10.338	55745.76	0.0019	P	1.1
3	☐	250.000	256.323	1389757.08	0.0470	P	0.6
4	☐	625.000	627.754	3376874.43	0.1150	P	1.2
5	☐	1250.000	1263.388	6906407.88	0.2315	A	0.8
6	☐	2500.000	2502.189	13804925.48	0.4585	A	0.8
7	☐	5000.000	4994.898	27423079.43	0.9153	A	1.2
8	☐			4503.70	0.0002	P	1.3

$$y = 1.8324\text{E-}004 * x + 2.5939\text{E-}006$$

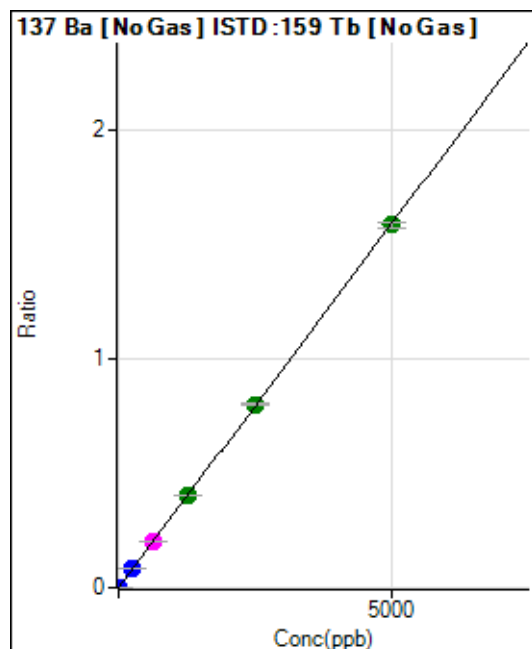
$$R = 1.0000$$

$$DL = 0.002596$$

$$BEC = 0.01416$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	97.23	0.0000	P	12.8
2	☐	10.000	10.489	98226.26	0.0033	P	1.0
3	☐	250.000	257.497	2425690.98	0.0820	P	0.8
4	☐	625.000	630.711	5894847.66	0.2008	M	1.1
5	☐	1250.000	1263.530	12000903.40	0.4023	A	0.9
6	☐	2500.000	2518.424	24141107.31	0.8018	A	0.6
7	☐	5000.000	4986.316	47565196.55	1.5876	A	1.3
8	☐			8388.98	0.0003	P	3.2

$$y = 3.1838E-004 * x + 3.1296E-006$$

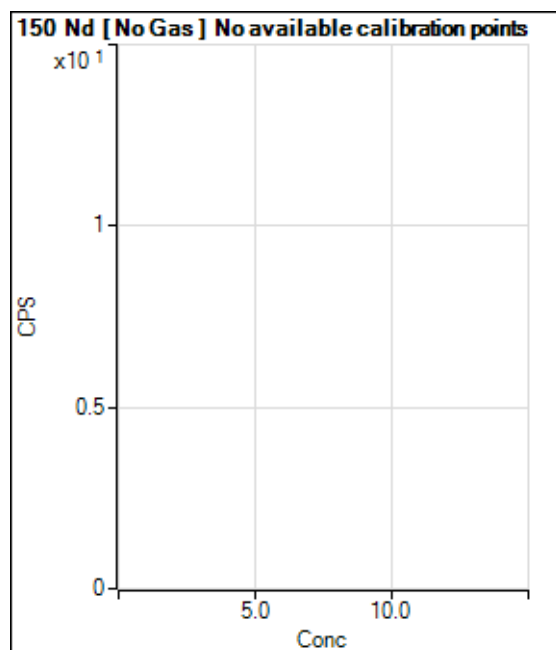
$$R = 1.0000$$

$$DL = 0.003788$$

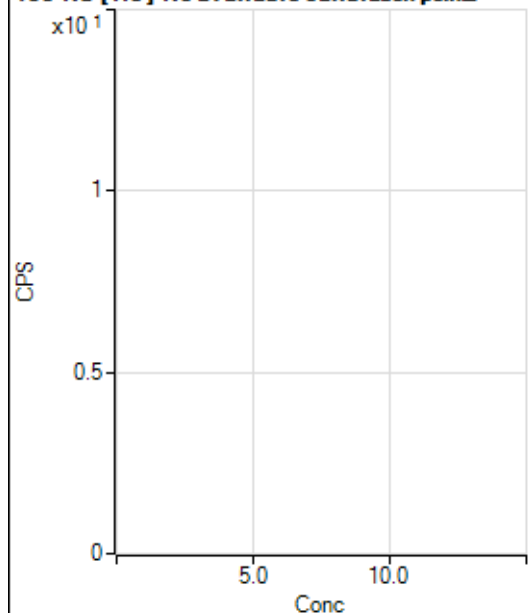
$$BEC = 0.00983$$

Weight: <None>

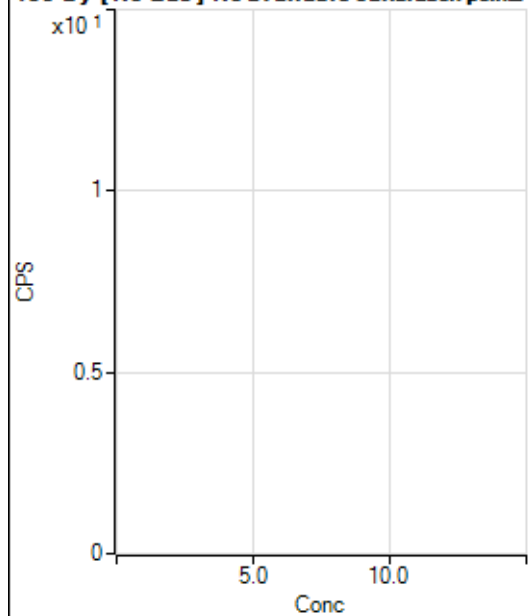
Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.33		P	50.0
2	☐			33.34		P	34.6
3	☐			131.12		P	25.1
4	☐			273.34		P	17.1
5	☐			615.60		P	9.8
6	☐			1011.19		P	9.9
7	☐			2004.66		P	4.8
8	☐			251.12		P	10.1

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	43.4
2	☐			13.33		P	25.0
3	☐			26.67		P	33.1
4	☐			38.89		P	17.8
5	☐			55.56		P	21.1
6	☐			121.11		P	26.2
7	☐			178.89		P	6.0
8	☐			107.78		P	9.9

156 Dy [No Gas] No available calibration points

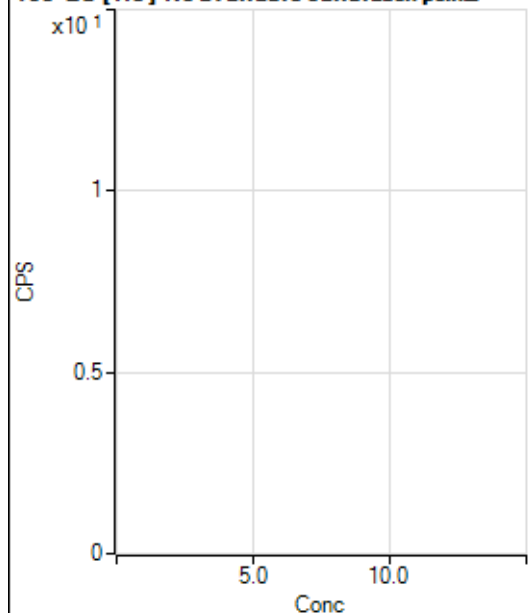
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			36.11		P	13.3
2	☐			58.33		P	24.7
3	☐			127.79		P	26.4
4	☐			105.56		P	9.1
5	☐			191.68		P	17.4
6	☐			286.13		P	9.4
7	☐			577.82		P	13.4
8	☐			113.89		P	34.6

156 Dy [He] No available calibration points

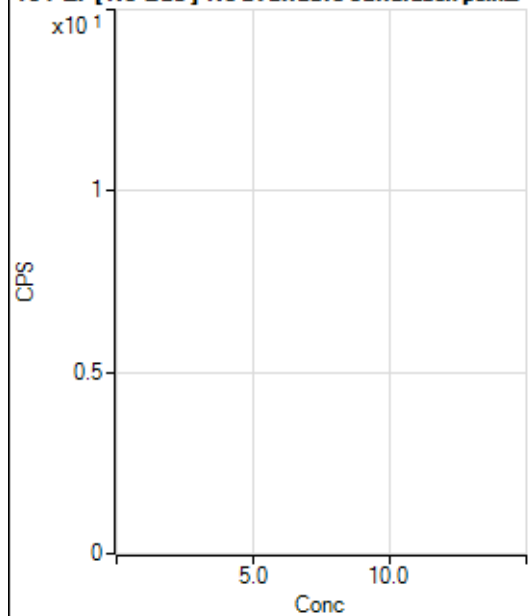
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.00		P	67.6
2	☐			40.00		P	8.3
3	☐			43.34		P	35.2
4	☐			126.67		P	16.0
5	☐			160.00		P	22.5
6	☐			267.79		P	8.3
7	☐			501.13		P	10.6
8	☐			76.67		P	26.4

160 Gd [No Gas] Noavailable calibration poin_

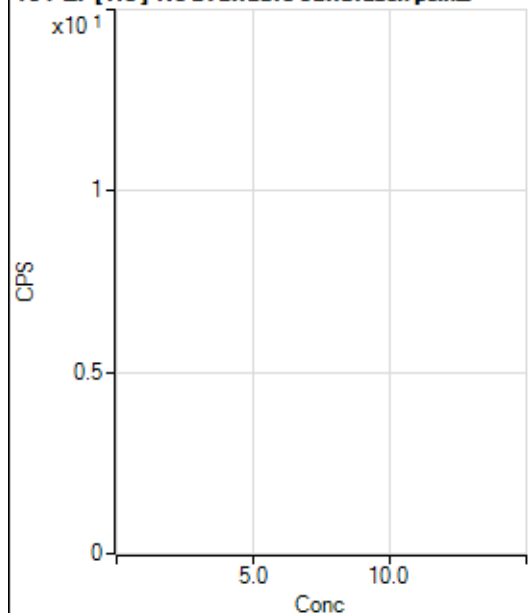
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			380.58		P	3.3
2	☐			400.03		P	5.5
3	☐			327.80		P	5.9
4	☐			388.91		P	16.1
5	☐			333.35		P	5.0
6	☐			438.92		P	4.4
7	☐			477.81		P	15.2
8	☐			341.69		P	23.3

160 Gd [He] No available calibration points

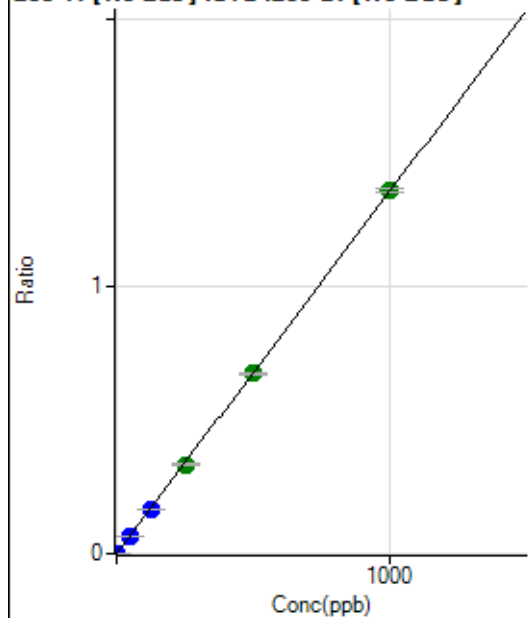
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			515.57		P	7.2
2	☐			531.13		P	4.5
3	☐			546.69		P	10.4
4	☐			505.57		P	8.4
5	☐			501.13		P	3.4
6	☐			604.47		P	5.0
7	☐			561.13		P	5.5
8	☐			500.02		P	13.6

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			172.23		P	15.6
2	☐			183.35		P	27.6
3	☐			188.90		P	11.1
4	☐			188.90		P	9.2
5	☐			197.23		P	17.1
6	☐			216.68		P	13.3
7	☐			230.57		P	14.6
8	☐			175.01		P	21.8

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			91.11		P	27.0
2	☐			106.67		P	33.1
3	☐			106.67		P	29.8
4	☐			98.89		P	24.8
5	☐			120.00		P	29.0
6	☐			135.56		P	14.0
7	☐			137.78		P	12.2
8	☐			111.12		P	12.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	969.52	0.0000	P	1.3
2	☐	1.000	0.950	26975.41	0.0013	P	1.1
3	☐	50.000	48.501	1332861.86	0.0656	P	0.7
4	☐	125.000	122.106	3308205.63	0.1651	P	0.4
5	☐	250.000	246.132	6708786.61	0.3328	A	1.3
6	☐	500.000	498.032	13352183.63	0.6734	A	0.6
7	☐	1000.000	1002.388	26148807.88	1.3552	A	0.9
8	☐			4773.30	0.0003	P	4.2

$$y = 0.0014 * x + 4.4960E-005$$

$$R = 1.0000$$

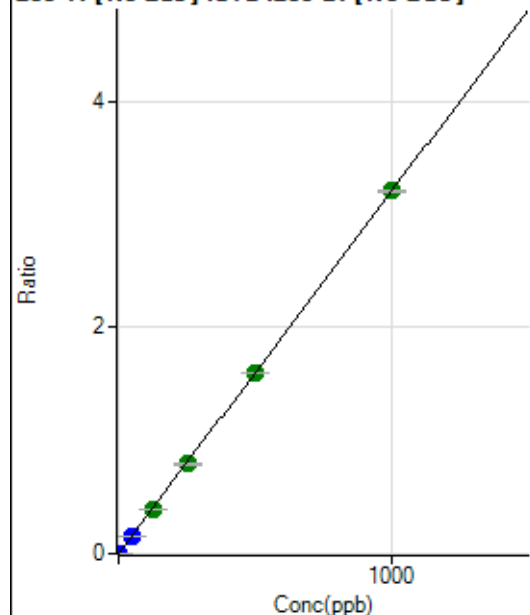
$$DL = 0.001318$$

$$BEC = 0.03326$$

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	1564.06	0.0001	P	6.1
2	☐	1.000	0.972	64565.46	0.0032	P	1.0
3	☐	50.000	48.900	3180796.18	0.1566	P	1.4
4	☐	125.000	122.677	7868196.18	0.3927	A	0.9
5	☐	250.000	247.791	15990011.82	0.7932	A	0.8
6	☐	500.000	498.859	31663279.18	1.5968	A	0.9
7	☐	1000.000	1001.468	61850252.08	3.2055	A	0.4
8	☐			10938.28	0.0007	P	6.9

$$y = 0.0032 * x + 7.2524E-005$$

$$R = 1.0000$$

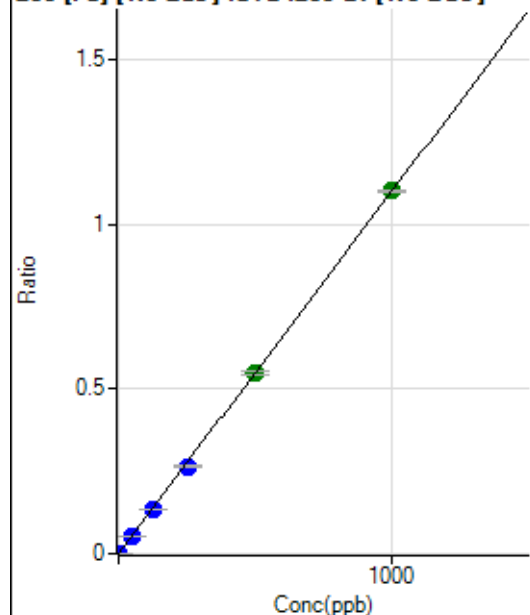
$$DL = 0.004156$$

$$BEC = 0.02266$$

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	1683.50	0.0001	P	8.2
2	☐	1.000	0.964	23081.66	0.0011	P	1.2
3	☐	50.000	48.900	1093542.49	0.0538	P	1.5
4	☐	125.000	121.614	2680054.31	0.1338	P	0.2
5	☐	250.000	241.684	5357612.10	0.2658	P	0.9
6	☐	500.000	499.587	10891750.59	0.5493	A	1.5
7	☐	1000.000	1002.764	21271228.49	1.1024	A	0.5
8	☐			71607.12	0.0044	P	1.3

$$y = 0.0011 * x + 7.8066E-005$$

$$R = 1.0000$$

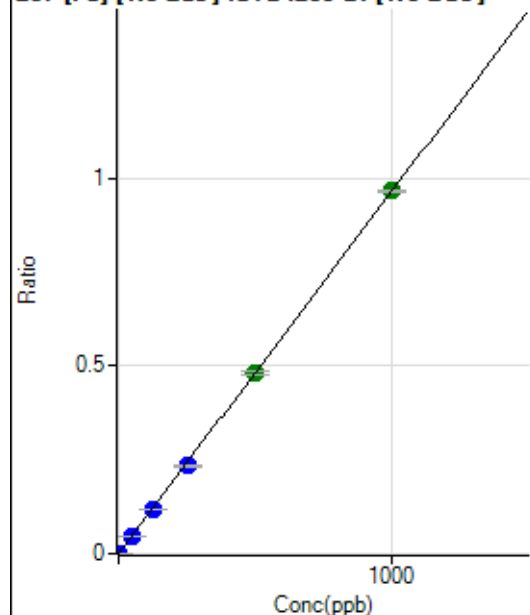
$$DL = 0.01744$$

$$BEC = 0.07101$$

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	1527.91	0.0001	P	9.8
2	☐	1.000	0.955	20085.94	0.0010	P	2.3
3	☐	50.000	48.924	958513.71	0.0472	P	1.2
4	☐	125.000	122.014	2355609.83	0.1176	P	0.5
5	☐	250.000	242.433	4708081.53	0.2335	P	1.2
6	☐	500.000	499.562	9541335.05	0.4812	A	1.1
7	☐	1000.000	1002.538	18630312.22	0.9656	A	0.7
8	☐			64480.25	0.0040	P	0.6

$$y = 9.6306\text{E-}004 * x + 7.0859\text{E-}005$$

$$R = 1.0000$$

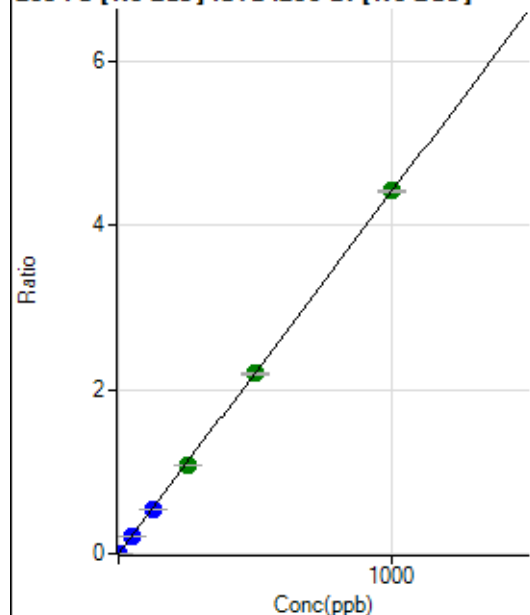
$$DL = 0.02169$$

$$BEC = 0.07358$$

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	6141.46	0.0003	P	6.3
2	☐	1.000	0.959	91455.87	0.0045	P	0.6
3	☐	50.000	48.818	4374871.23	0.2154	P	0.9
4	☐	125.000	121.726	10750414.10	0.5366	P	0.2
5	☐	250.000	244.463	21718747.71	1.0774	A	0.8
6	☐	500.000	498.482	43555524.58	2.1965	A	0.9
7	☐	1000.000	1002.612	85237732.93	4.4177	A	0.2
8	☐			287916.01	0.0178	P	1.0

$$y = 0.0044 * x + 2.8479\text{E-}004$$

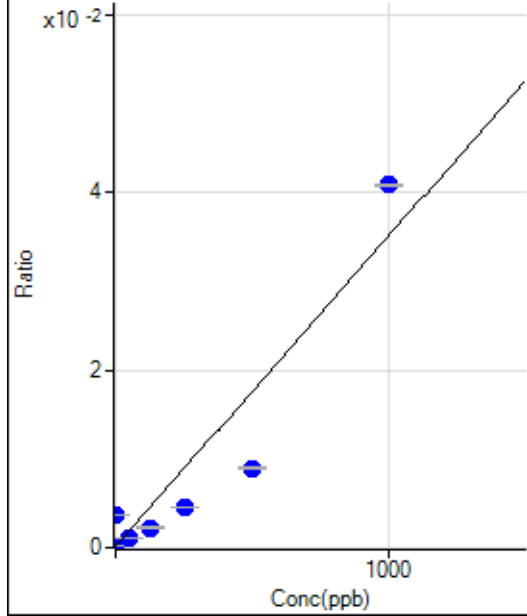
$$R = 1.0000$$

$$DL = 0.01231$$

$$BEC = 0.06464$$

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	2828.17	0.0001	P	2.1
2	☐	1.000	103.262	75964.29	0.0037	P	1.8
3	☐	50.000	25.965	21123.15	0.0010	P	1.4
4	☐	125.000	60.839	45286.13	0.0023	P	1.9
5	☐	250.000	123.514	89793.28	0.0045	P	0.5
6	☐	500.000	252.244	177660.66	0.0090	P	0.8
7	☐	1000.000	1164.619	788975.98	0.0409	P	0.3
8	☐			3213.46	0.0002	P	1.8

$$y = 3.4998\text{E-}005 * x + 1.3115\text{E-}004$$

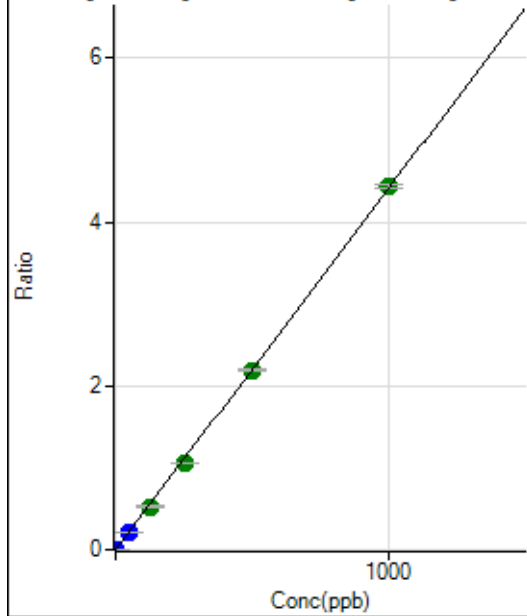
$$R = 0.9444$$

$$DL = 0.2332$$

$$BEC = 3.747$$

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	3689.59	0.0002	P	4.9
2	☐	1.000	0.936	87132.83	0.0043	P	0.8
3	☐	50.000	46.794	4190941.68	0.2063	P	0.3
4	☐	125.000	119.693	10567440.51	0.5275	A	0.3
5	☐	250.000	241.101	21414947.87	1.0623	A	0.9
6	☐	500.000	496.001	43331553.40	2.1852	A	1.0
7	☐	1000.000	1005.048	85432610.24	4.4278	A	0.9
8	☐			8492.04	0.0005	P	5.3

$$y = 0.0044 * x + 1.7110\text{E-}004$$

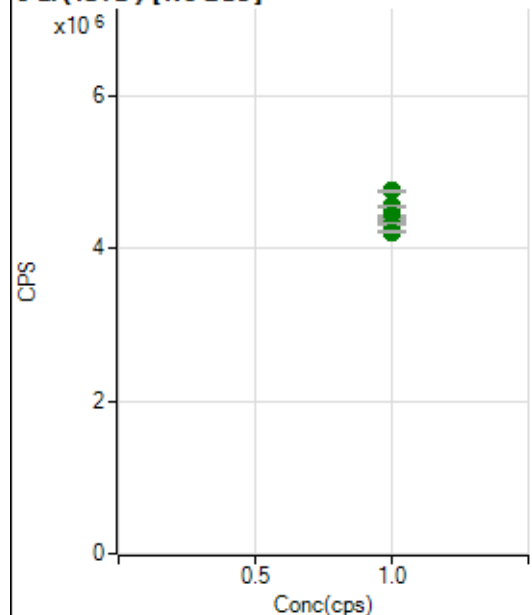
$$R = 0.9999$$

$$DL = 0.005752$$

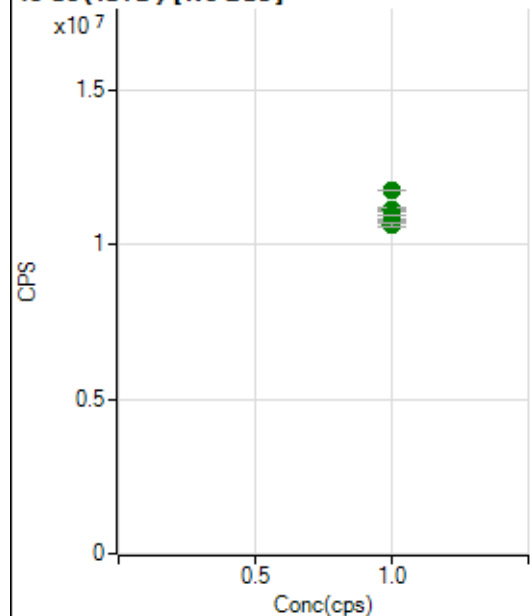
$$BEC = 0.03884$$

Weight: <None>

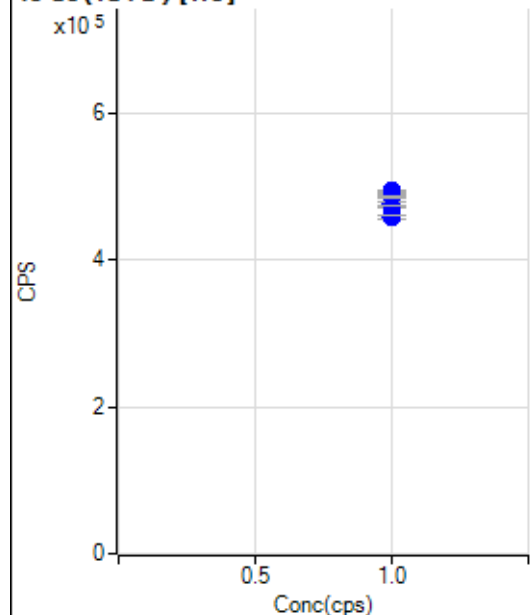
Min Conc: 0

6 Li (ISTD) [No Gas]

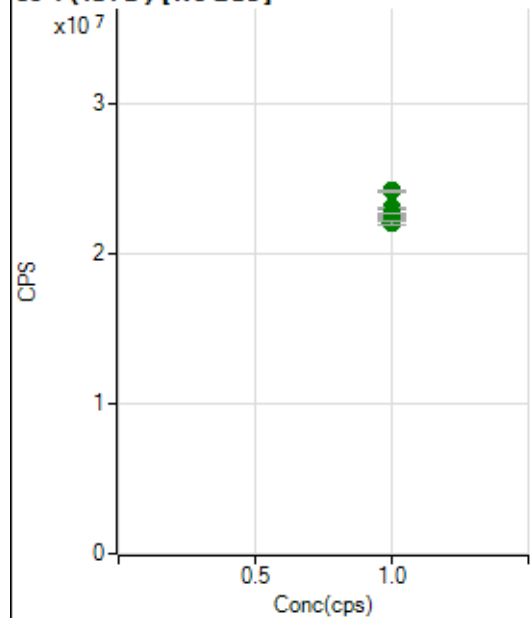
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4760037.29		A	0.5
2	☐	1.000		4561465.76		A	0.5
3	☐	1.000		4558724.13		A	0.3
4	☐	1.000		4436603.09		A	0.5
5	☐	1.000		4396500.01		A	0.2
6	☐	1.000		4378219.52		A	0.4
7	☐	1.000		4325012.85		A	0.3
8	☐	1.000		4221366.25		A	0.6

45 Sc (ISTD) [No Gas]

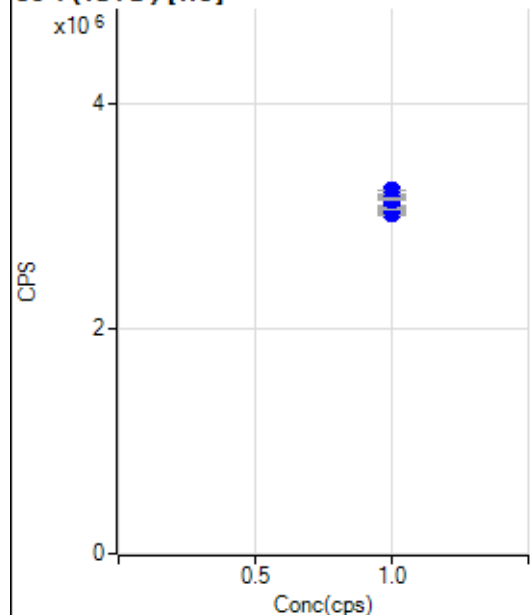
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11740509.46		A	0.1
2	☐	1.000		11159520.13		A	0.3
3	☐	1.000		11145296.60		A	1.1
4	☐	1.000		10735412.48		A	0.6
5	☐	1.000		10775700.85		A	0.7
6	☐	1.000		10815457.70		A	0.5
7	☐	1.000		10949950.16		A	0.5
8	☐	1.000		10664346.68		A	1.1

45 Sc (ISTD) [He]

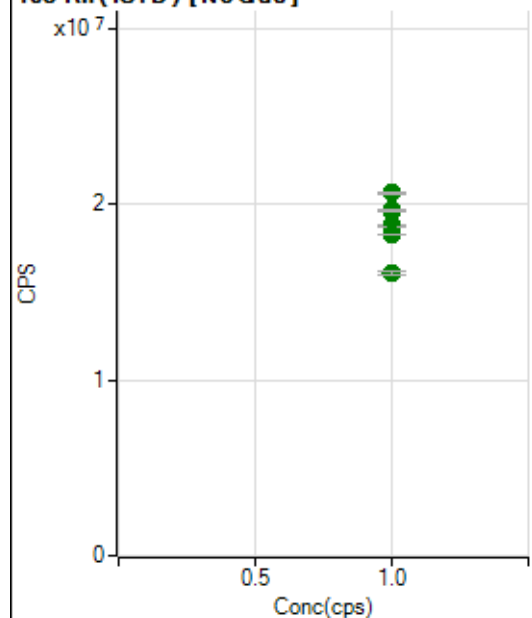
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		494569.78		P	0.8
2	☐	1.000		489639.38		P	0.2
3	☐	1.000		472441.99		P	0.2
4	☐	1.000		458666.65		P	0.7
5	☐	1.000		461626.60		P	0.2
6	☐	1.000		473328.85		P	0.4
7	☐	1.000		476737.60		P	0.9
8	☐	1.000		487331.03		P	0.5

89 Y (ISTD) [No Gas]

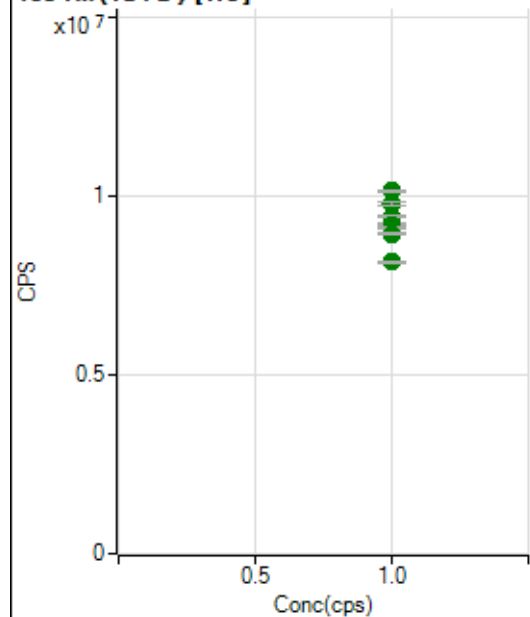
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		24209484.91		A	0.5
2	☐	1.000		23054657.99		A	0.1
3	☐	1.000		23033095.77		A	0.3
4	☐	1.000		22235264.11		A	0.3
5	☐	1.000		22420573.83		A	0.3
6	☐	1.000		22598248.83		A	0.5
7	☐	1.000		22730692.44		A	0.2
8	☐	1.000		22060818.01		A	1.1

89 Y(ISTD) [He]

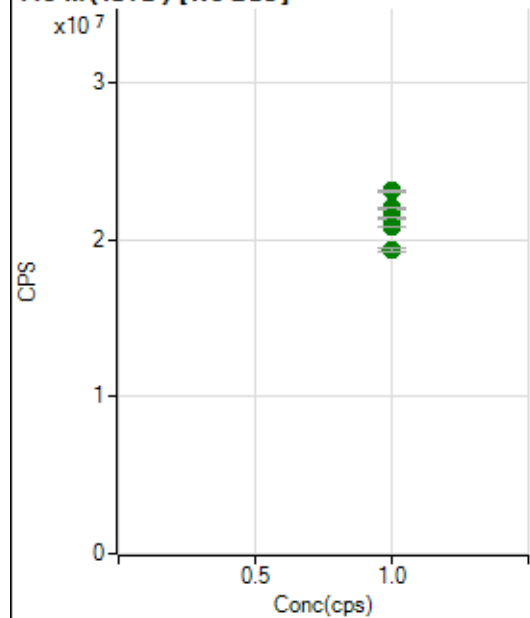
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3224094.36		P	0.0
2	☐	1.000		3184771.52		P	0.6
3	☐	1.000		3087643.95		P	0.3
4	☐	1.000		3019571.59		P	0.5
5	☐	1.000		3060002.94		P	0.7
6	☐	1.000		3077536.72		P	0.4
7	☐	1.000		3073637.63		P	0.4
8	☐	1.000		3147418.95		P	0.6

103 Rh(ISTD) [No Gas]

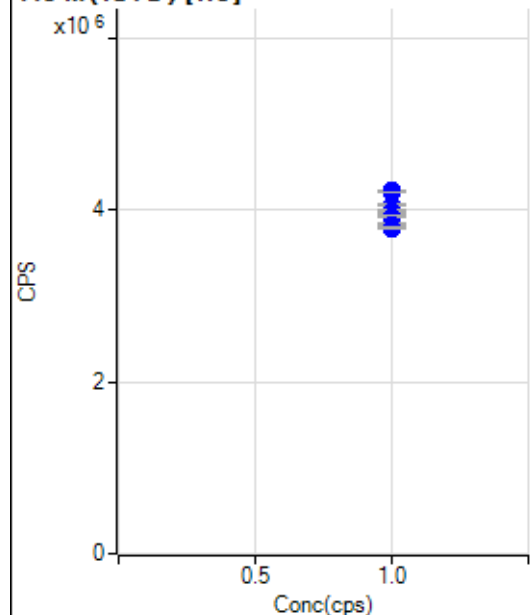
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		20633920.60		A	0.3
2	☐	1.000		19681264.16		A	0.6
3	☐	1.000		19583868.32		A	0.5
4	☐	1.000		18802358.06		A	0.5
5	☐	1.000		18722822.99		A	0.2
6	☐	1.000		18702640.70		A	0.2
7	☐	1.000		18246209.09		A	0.2
8	☐	1.000		16067276.92		A	1.1

103 Rh (ISTD) [He]

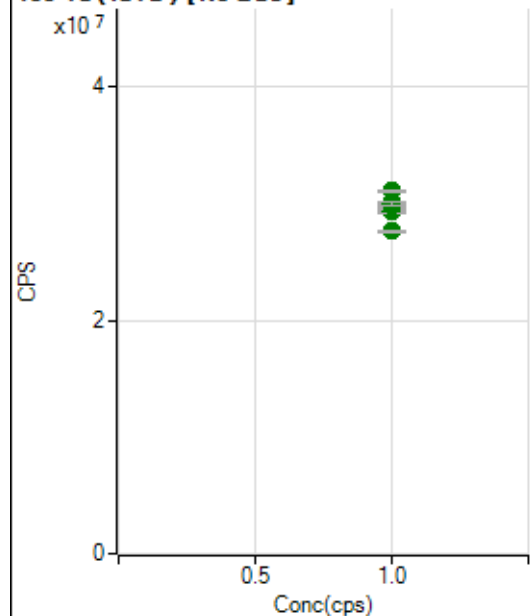
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		10131935.82		A	0.2
2	☐	1.000		9777236.10		A	0.7
3	☐	1.000		9418496.94		A	0.4
4	☐	1.000		9178436.04		A	0.0
5	☐	1.000		9205972.85		A	0.4
6	☐	1.000		9102916.19		A	0.7
7	☐	1.000		8939124.24		A	0.1
8	☐	1.000		8149645.50		A	0.6

115 In (ISTD) [No Gas]

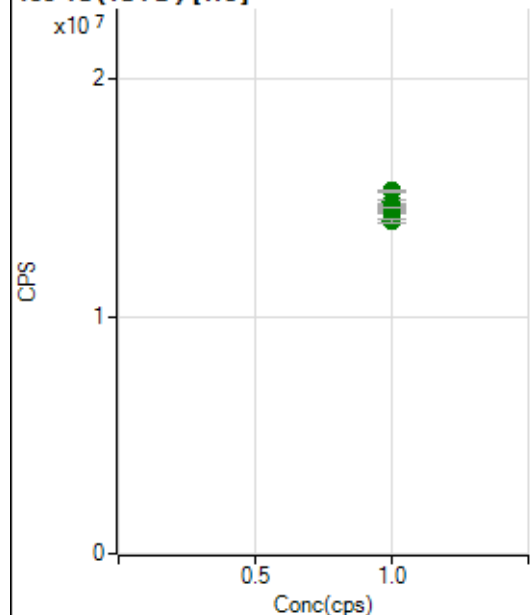
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		23111740.68		A	0.7
2	☐	1.000		22019138.13		A	0.5
3	☐	1.000		21947046.53		A	0.7
4	☐	1.000		21389116.54		A	0.3
5	☐	1.000		21394263.64		A	0.4
6	☐	1.000		21353066.86		A	0.3
7	☐	1.000		20825552.64		A	0.5
8	☐	1.000		19343575.02		A	1.0

115 In (ISTD) [He]

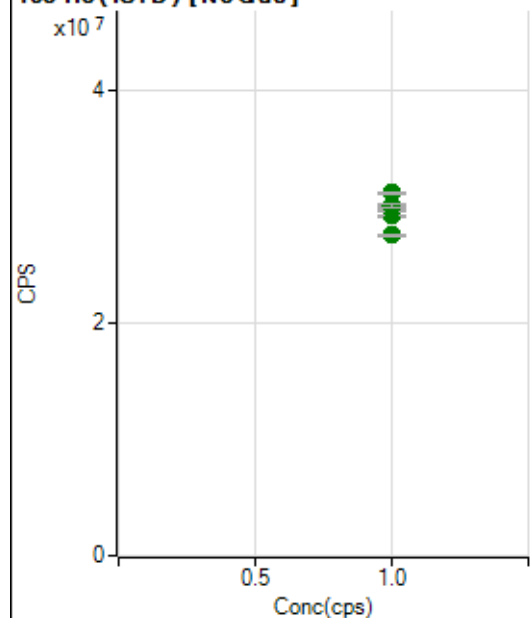
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4224201.81		P	0.4
2	☐	1.000		4210190.27		P	0.1
3	☐	1.000		4055387.44		P	0.5
4	☐	1.000		3950704.94		P	0.6
5	☐	1.000		3991358.03		P	0.3
6	☐	1.000		3925987.03		P	0.4
7	☐	1.000		3837872.29		P	0.1
8	☐	1.000		3791794.24		P	0.9

159 Tb (ISTD) [No Gas]

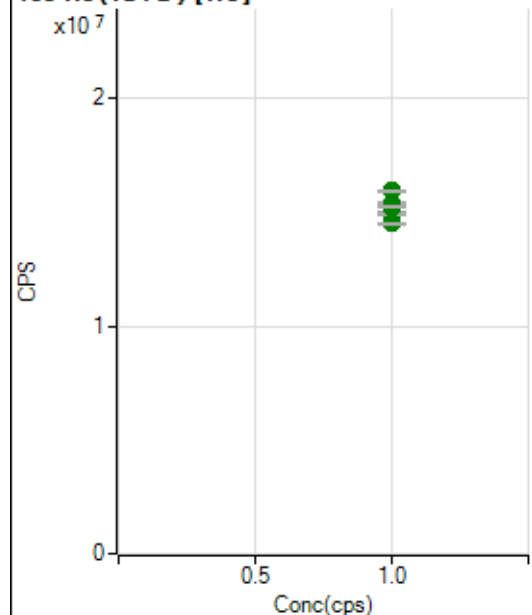
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		31059511.76		A	0.3
2	☐	1.000		29386214.56		A	0.7
3	☐	1.000		29587081.22		A	0.4
4	☐	1.000		29357554.01		A	1.1
5	☐	1.000		29832365.94		A	0.4
6	☐	1.000		30107685.94		A	0.1
7	☐	1.000		29964204.83		A	1.3
8	☐	1.000		27588385.42		A	0.3

159 Tb (ISTD) [He]

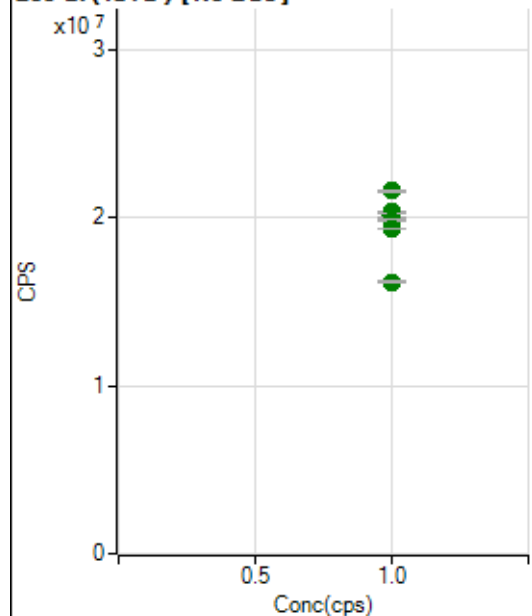
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		15288387.55		A	0.8
2	☐	1.000		14841578.67		A	1.0
3	☐	1.000		14466410.90		A	0.9
4	☐	1.000		14378788.81		A	0.8
5	☐	1.000		14510045.89		A	0.3
6	☐	1.000		14679218.95		A	0.2
7	☐	1.000		14603945.48		A	0.3
8	☐	1.000		14004464.65		A	0.8

165 Ho (ISTD) [No Gas]

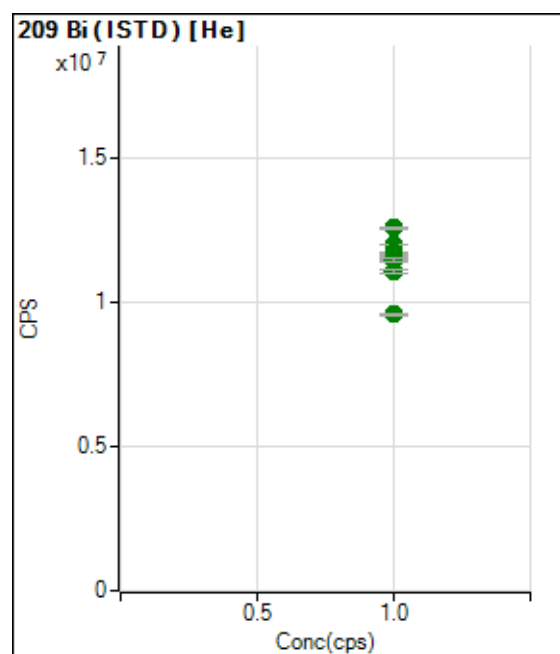
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		31216269.79		A	0.5
2	☐	1.000		29262478.78		A	0.5
3	☐	1.000		29767653.44		A	0.8
4	☐	1.000		29328465.59		A	0.1
5	☐	1.000		29746344.41		A	0.8
6	☐	1.000		30140926.37		A	0.6
7	☐	1.000		30111128.10		A	0.7
8	☐	1.000		27577452.70		A	0.7

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		15928642.54		A	0.2
2	☐	1.000		15340927.27		A	0.9
3	☐	1.000		14967953.95		A	0.6
4	☐	1.000		14906394.91		A	0.2
5	☐	1.000		15194317.13		A	0.4
6	☐	1.000		15288130.60		A	0.5
7	☐	1.000		15222033.52		A	0.3
8	☐	1.000		14501265.76		A	0.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		21563961.90		A	0.3
2	☐	1.000		20283691.78		A	0.7
3	☐	1.000		20313484.42		A	0.4
4	☐	1.000		20034496.79		A	0.1
5	☐	1.000		20160003.03		A	1.0
6	☐	1.000		19829504.15		A	0.3
7	☐	1.000		19294713.60		A	0.2
8	☐	1.000		16141359.90		A	0.6



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12604989.81		A	0.4
2	☐	1.000		12012530.65		A	0.3
3	☐	1.000		11730559.97		A	0.4
4	☐	1.000		11506742.19		A	0.3
5	☐	1.000		11597101.22		A	0.2
6	☐	1.000		11499765.11		A	0.9
7	☐	1.000		11097574.56		A	0.8
8	☐	1.000		9593643.26		A	0.8

US EPA Tune Check Sample Report

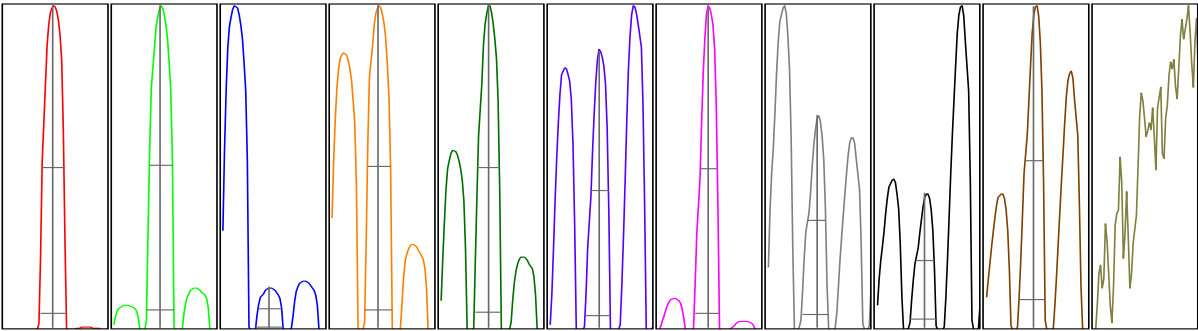
Batch Folder D:\ICP-MS Data\P7112719-MS2.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	17217	0.25	5.00	
24	1791702	0.46	5.00	
25	233059	0.34	5.00	
26	267566	0.76	5.00	
59	193259	0.29	5.00	
113	28107	0.64	5.00	
115	342842	0.54	5.00	
206	89622	0.20	5.00	
207	82340	0.61	5.00	
208	193802	0.33	5.00	
220	139	3.60		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	17232	17231	17271	17198	17154
24	1791913	1791935	1798202	1798335	1778124
25	233472	233947	232889	233169	231817
26	267046	269161	266371	270088	265163
59	193466	193799	193557	192363	193109
113	28064	28308	28156	28182	27825
115	344859	344656	342491	341240	340961
206	89375	89798	89704	89751	89483
207	82166	81860	82902	81925	82850
208	192878	193553	193906	194088	194586
220	131	138	141	144	142

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	28815	8.95	8.9 - 9.1		0.783	0.900	
24	2868714	23.90	23.9 - 24.1		0.788	0.900	
25	366905	24.90	24.9 - 25.1		0.789	0.900	
26	429260	25.90	25.9 - 26.1		0.786	0.900	
59	329095	58.95	58.9 - 59.1		0.782	0.900	
113	54644	113.00	112.9 - 113.1		0.727	0.900	
115	667753	115.00	114.9 - 115.1		0.726	0.900	
206	174215	206.00	205.9 - 206.1		0.773	0.900	
207	156148	206.95	206.9 - 207.1		0.738	0.900	
208	372538	207.95	207.9 - 208.1		0.747	0.900	
220			-				

X% = 5 Integration Time [sec] = 0.1 Acquisition Time [sec] = 268 Y Axis = Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.80	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		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	8.5	V	Deflect	13.2	V
Extract 2	-150.0	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	50748	0.74	
89	679947	0.64	
205	84948	0.77	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	50211	50655	50680	50989	51203
89	675681	678832	676619	682477	686128
205	84238	84479	84899	85216	85909

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.80	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		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	8.1	V	Deflect	2.0	V
Extract 2	-145.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-70	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	4.1	mL/min	OctP RF	200	V			