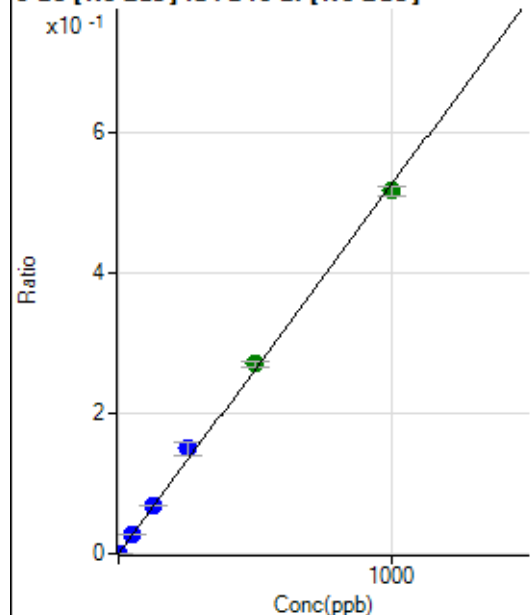


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8012723 MS.b\
Analysis File: P8012723 MS.batch.bin
DA Date-Time: 2023-01-27 18:48:27
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2023-01-27 11:37:01
2	005CALS.d	S02	2023-01-27 11:40:11
3	006CALS.d	S03	2023-01-27 11:43:22
4	007CALS.d	S04	2023-01-27 11:46:29
5	008CALS.d	S05	2023-01-27 11:49:37
6	009CALS.d	S06	2023-01-27 11:52:44
7	010CALS.d	S07	2023-01-27 11:55:52
8	011CALS.d	S08	2023-01-27 11:58:59

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	56.66	0.0000	P	10.4
2	☐	1.000	1.082	3084.12	0.0006	P	2.5
3	☐	50.000	53.057	146663.30	0.0278	P	4.7
4	☐	125.000	129.512	357638.40	0.0679	P	1.9
5	☐	250.000	284.491	714854.36	0.1492	P	13.6
6	☐	500.000	515.069	1409620.80	0.2702	A	3.0
7	☐	1000.000	983.126	2659756.39	0.5157	A	2.5
8	☐			766.18	0.0002	P	17.2

$$y = 5.2457\text{E-}004 * x + 1.0675\text{E-}005$$

$$R = 0.9991$$

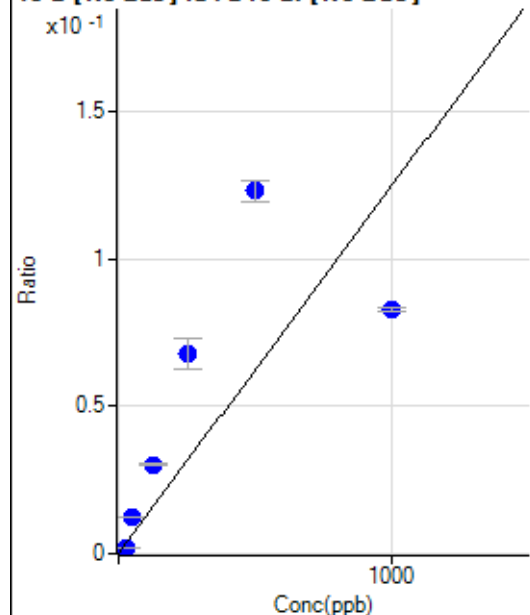
$$DL = 0.006364$$

$$BEC = 0.02035$$

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	397.26	0.0001	P	9.0
2	☐	25.000	13.188	9164.39	0.0017	P	2.8
3	☐	50.000	97.870	64729.83	0.0123	P	1.0
4	☐	125.000	242.717	159660.05	0.0303	P	2.2
5	☐	250.000	544.862	325367.92	0.0680	P	15.2
6	☐	500.000	987.198	642059.23	0.1231	P	5.6
7	☐	1000.000	665.873	428453.11	0.0831	P	1.7
8	☐			40918.81	0.0083	P	7.2

$$y = 1.2462\text{E-}004 * x + 7.4872\text{E-}005$$

$$R = 0.7566$$

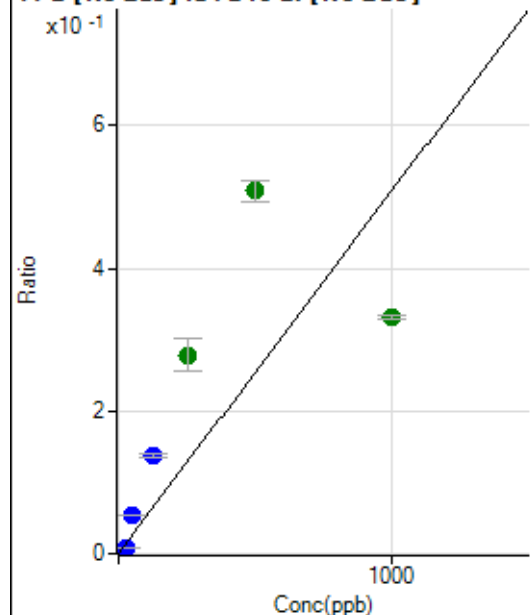
$$DL = 0.1623$$

$$BEC = 0.6008$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1651.77	0.0003	P	5.2
2	☐	25.000	14.627	41280.99	0.0077	P	2.6
3	☐	50.000	107.254	288903.36	0.0548	P	1.2
4	☐	125.000	270.985	726266.76	0.1379	P	3.2
5	☐	250.000	548.044	1332926.30	0.2786	A	15.8
6	☐	500.000	1000.859	2652642.84	0.5085	A	6.0
7	☐	1000.000	654.208	1715283.97	0.3325	A	1.5
8	☐			183810.92	0.0374	P	6.2

$$y = 5.0779\text{E-}004 * x + 3.1107\text{E-}004$$

$$R = 0.7419$$

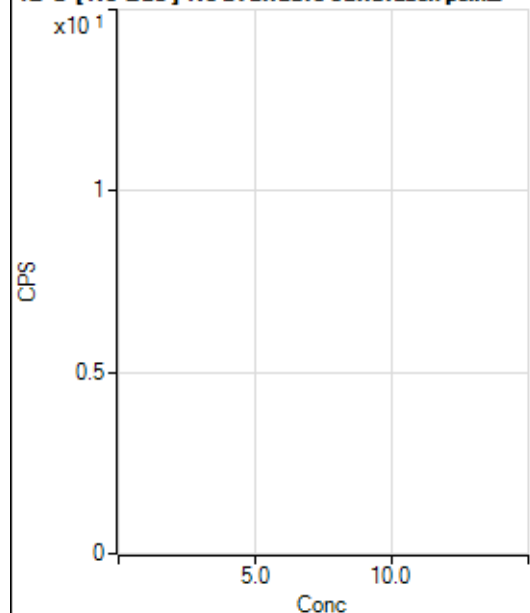
$$DL = 0.09488$$

$$BEC = 0.6126$$

Weight: <None>

Min Conc: 0

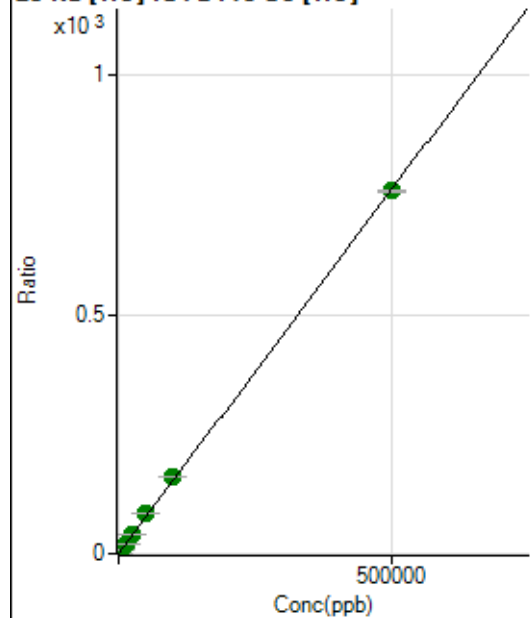
12 C [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			6900614.91		A	0.7
2	☐			6810302.76		A	2.8
3	☐			7182085.32		A	0.9
4	☐			7125161.62		A	1.9
5	☐			7440790.71		A	1.4
6	☐			8140552.96		A	1.5
7	☐			8679397.33		A	2.0
8	☐			7904626.30		A	1.3

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			65554.95		P	2.7
2	☐			68303.46		P	1.9
3	☐			71367.90		P	1.3
4	☐			76105.73		P	1.6
5	☐			76516.07		P	1.3
6	☐			87471.07		P	1.3
7	☐			89229.16		P	2.2
8	☐			84135.13		P	2.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	15269.45	0.0913	P	0.5
2	☐	500.000	511.970	146054.23	0.8709	P	2.2
3	☐	5000.000	5428.897	1410669.56	8.3578	A	2.2
4	☐	12500.000	13206.123	3228103.96	20.2001	A	4.1
5	☐	25000.000	26488.932	6538801.53	40.4257	A	1.6
6	☐	50000.000	55350.598	13560128.08	84.3729	A	2.2
7	☐	100000.00	105433.13	26160674.37	160.6329	A	0.9
8	☐	500000.00	498281.91	121590336.0	758.8184	A	0.6

$$y = 0.0015 * x + 0.0913$$

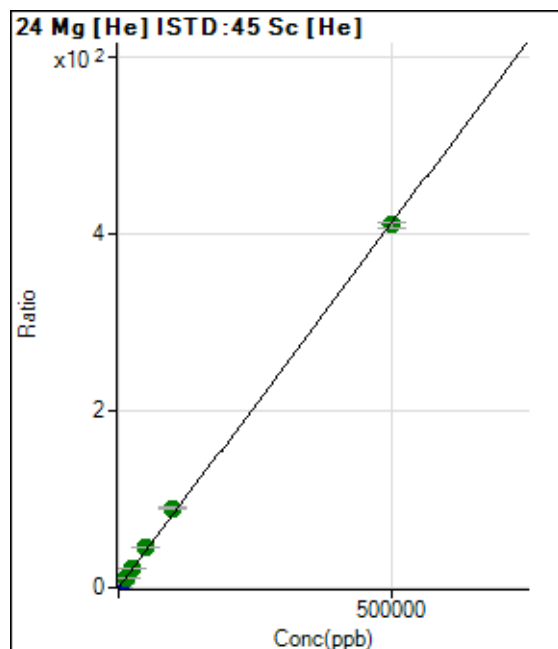
$$R = 0.9999$$

$$DL = 0.9335$$

$$BEC = 59.97$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	355.57	0.0021	P	27.9
2	☐	500.000	525.124	72924.90	0.4348	P	1.8
3	☐	5000.000	5390.301	750061.37	4.4437	P	2.7
4	☐	12500.000	13713.352	1805588.00	11.3018	A	5.2
5	☐	25000.000	27140.065	3617522.82	22.3654	A	0.5
6	☐	50000.000	54899.484	7269565.87	45.2390	A	2.3
7	☐	100000.00	108705.04	14588182.62	89.5744	A	1.5
8	☐	500000.00	497627.77	65704591.75	410.0444	A	1.9

$$y = 8.2399\text{E-}004 * x + 0.0021$$

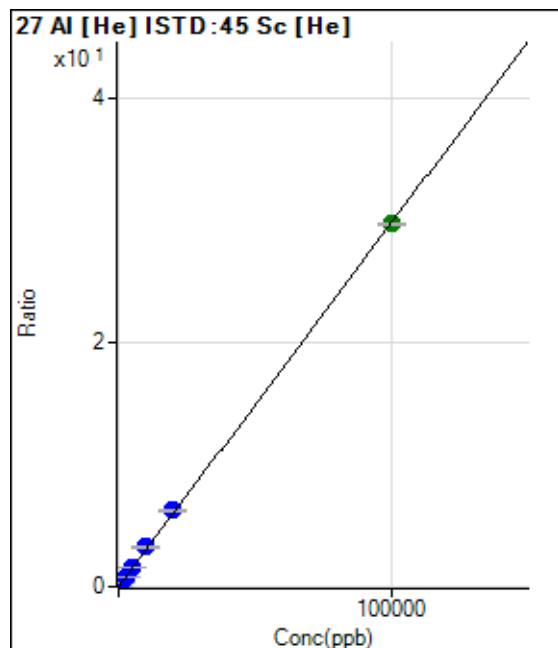
$$R = 0.9998$$

$$DL = 2.161$$

$$BEC = 2.583$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.41	0.0003	P	18.6
2	☐	20.000	27.159	1411.57	0.0084	P	5.2
3	☐	1000.000	1072.431	53948.68	0.3196	P	2.3
4	☐	2500.000	2673.266	127227.26	0.7963	P	4.6
5	☐	5000.000	5354.244	257919.99	1.5945	P	1.3
6	☐	10000.000	10871.909	520211.23	3.2373	P	1.9
7	☐	20000.000	20913.576	1014156.02	6.2271	P	1.8
8	☐	100000.00	99707.324	4757000.65	29.6871	A	0.2

$$y = 2.9774\text{E-}004 * x + 3.3123\text{E-}004$$

$$R = 0.9999$$

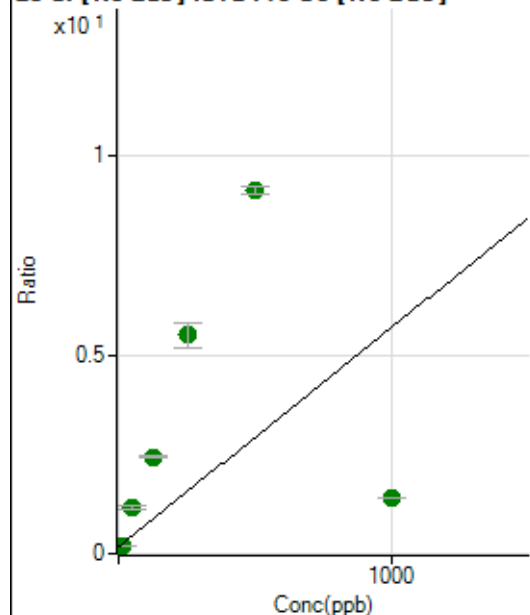
$$DL = 0.6215$$

$$BEC = 1.112$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1008403.61	0.1872	A	2.6
2	☐	10.000	1.659	1067357.16	0.1964	A	4.5
3	☐	50.000	175.125	6107554.91	1.1532	A	6.5
4	☐	125.000	408.711	13305262.10	2.4416	A	0.8
5	☐	250.000	964.295	26113550.76	5.5062	A	11.7
6	☐	500.000	1622.315	49562763.95	9.1357	A	2.3
7	☐	1000.000	218.632	7638855.73	1.3932	A	1.7
8	☐			1639838.78	0.3170	A	0.6

$$y = 0.0055 * x + 0.1872$$

$$R = 0.2997$$

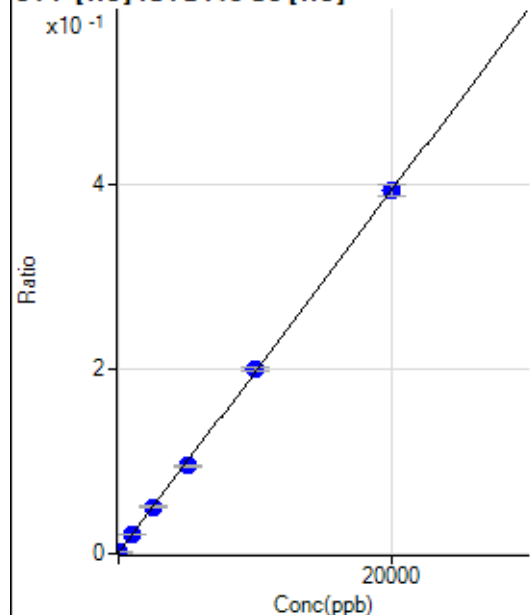
$$DL = 2.619$$

$$BEC = 33.95$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-15.962	169.45	0.0010	P	20.0
2	☐	0.000	15.962	275.01	0.0016	P	15.7
3	☐	1000.000	970.589	3439.38	0.0204	P	5.0
4	☐	2500.000	2496.673	8046.91	0.0504	P	5.1
5	☐	5000.000	4785.771	15422.49	0.0953	P	3.0
6	☐	10000.000	10148.931	32244.97	0.2007	P	2.3
7	☐	20000.000	19980.978	64137.28	0.3938	P	3.0
8	☐			219.45	0.0014	P	10.8

$$y = 1.9643E-005 * x + 0.0013$$

$$R = 0.9999$$

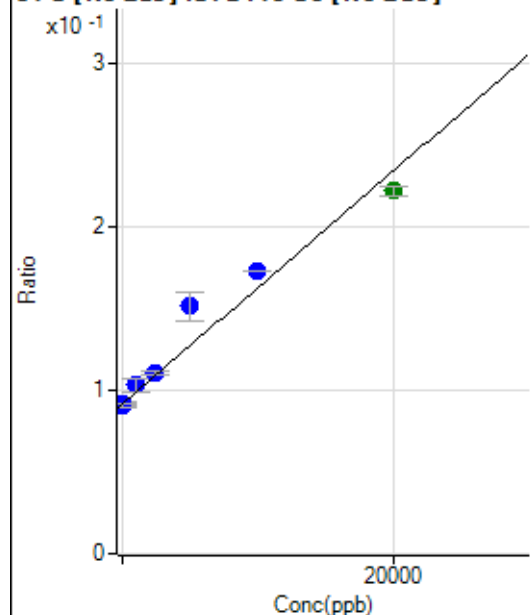
$$DL = 35.12$$

$$BEC = 67.51$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	59.146	494512.26	0.0918	P	3.1
2	☐	0.000	-59.146	494677.12	0.0910	P	2.0
3	☐	1000.000	1666.920	546897.91	0.1033	P	7.4
4	☐	2500.000	2750.842	605018.01	0.1110	P	1.7
5	☐	5000.000	8399.711	717811.05	0.1513	P	11.6
6	☐	10000.000	11513.169	941601.05	0.1736	P	0.1
7	☐	20000.000	18328.787	1217935.41	0.2222	A	2.8
8	☐			415171.48	0.0803	P	0.5

$$y = 7.1349\text{E-}006 * x + 0.0914$$

$$R = 0.9772$$

$$DL = 969.2$$

$$BEC = 1.281\text{E}+04$$

Weight: <None>

Min Conc: 0

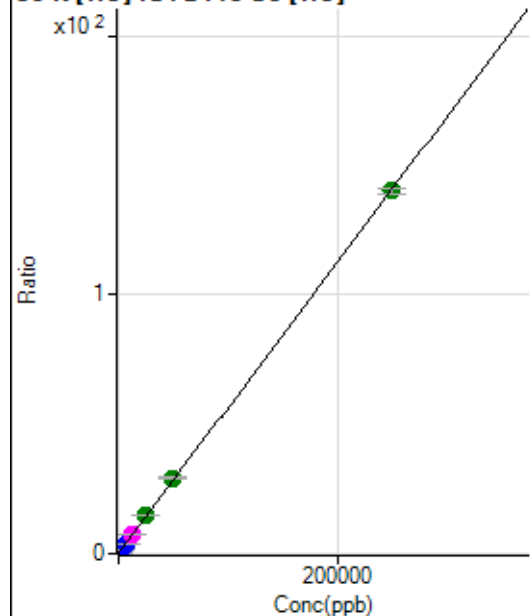
35 Cl [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			159980.36		P	0.6
2	☐			162466.05		P	0.4
3	☐			163920.08		P	0.7
4	☐			166710.92		P	0.4
5	☐			169666.94		P	1.5
6	☐			176856.52		P	0.7
7	☐			168517.63		P	0.7
8	☐			157508.42		P	1.0

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			969.50		P	2.6
2	☐			991.73		P	6.6
3	☐			1041.73		P	3.7
4	☐			1144.52		P	9.7
5	☐			994.51		P	12.7
6	☐			1077.84		P	6.8
7	☐			1111.18		P	11.3
8	☐			1047.29		P	11.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	23669.86	0.1416	P	1.8
2	☐	500.000	497.116	70531.40	0.4205	P	1.3
3	☐	2500.000	2595.406	269786.57	1.5981	P	1.2
4	☐	6250.000	6530.844	608225.66	3.8066	P	4.7
5	☐	12500.000	12939.994	1197459.53	7.4034	M	1.5
6	☐	25000.000	26527.730	2414871.49	15.0287	A	1.4
7	☐	50000.000	52003.230	4776055.31	29.3254	A	4.1
8	☐	250000.00	249416.61	22450905.36	140.1123	A	1.4

$$y = 5.6119\text{E-}004 * x + 0.1416$$

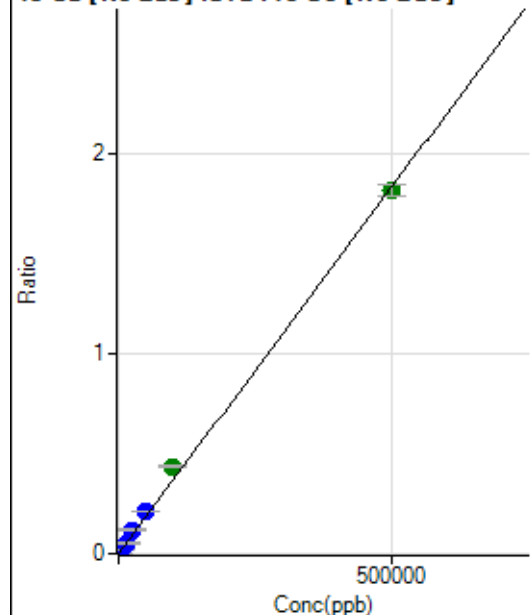
$$R = 1.0000$$

$$DL = 13.77$$

$$BEC = 252.2$$

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	182.90	0.0000	P	8.8
2	☐	500.000	523.816	10631.36	0.0020	P	3.0
3	☐	5000.000	6023.672	117173.04	0.0221	P	7.5
4	☐	12500.000	14355.631	287114.46	0.0527	P	3.3
5	☐	25000.000	32643.419	567898.30	0.1198	P	12.3
6	☐	50000.000	57303.708	1140769.80	0.2103	P	0.1
7	☐	100000.00	118538.66	2384163.26	0.4349	A	2.5
8	☐	500000.00	495123.07	9396363.28	1.8165	A	3.1

$$y = 3.6687E-006 * x + 3.3989E-005$$

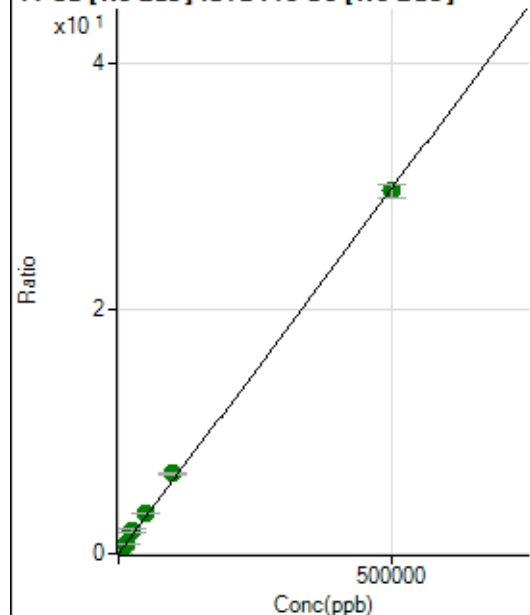
$$R = 0.9992$$

$$DL = 2.443$$

$$BEC = 9.265$$

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	15153.17	0.0028	P	1.6
2	☐	500.000	517.687	182809.21	0.0336	P	1.8
3	☐	5000.000	5896.832	1872036.00	0.3538	A	8.5
4	☐	12500.000	13721.142	4464273.64	0.8194	A	3.7
5	☐	25000.000	30875.472	8716871.87	1.8404	A	13.6
6	☐	50000.000	54942.831	17756869.80	3.2728	A	1.5
7	☐	100000.00	109474.58	35733993.72	6.5182	A	2.1
8	☐	500000.00	497277.51	153106328.6	29.5985	A	3.5

$$y = 5.9515E-005 * x + 0.0028$$

$$R = 0.9998$$

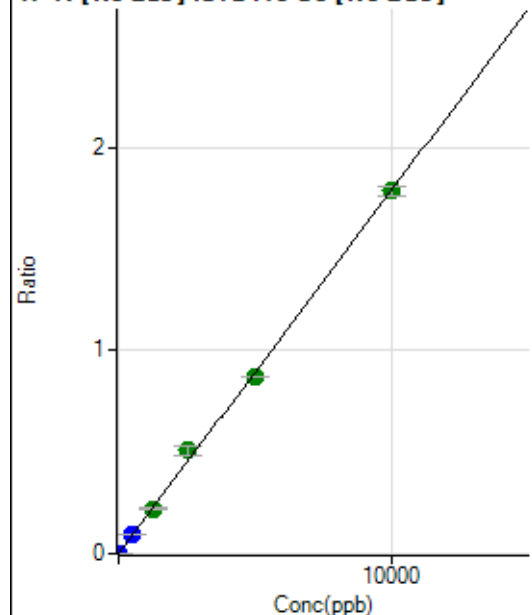
$$DL = 2.213$$

$$BEC = 47.27$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	272.23	0.0001	P	6.6
2	☐	5.000	5.028	5164.98	0.0010	P	4.1
3	☐	500.000	534.443	506826.39	0.0957	P	6.5
4	☐	1250.000	1233.181	1202559.13	0.2207	A	3.7
5	☐	2500.000	2832.419	2405618.48	0.5069	A	10.8
6	☐	5000.000	4863.040	4721775.85	0.8703	A	0.7
7	☐	10000.000	9985.755	9796657.77	1.7871	A	2.5
8	☐			8119.21	0.0016	P	5.4

$$y = 1.7896E-004 * x + 5.0483E-005$$

$$R = 0.9992$$

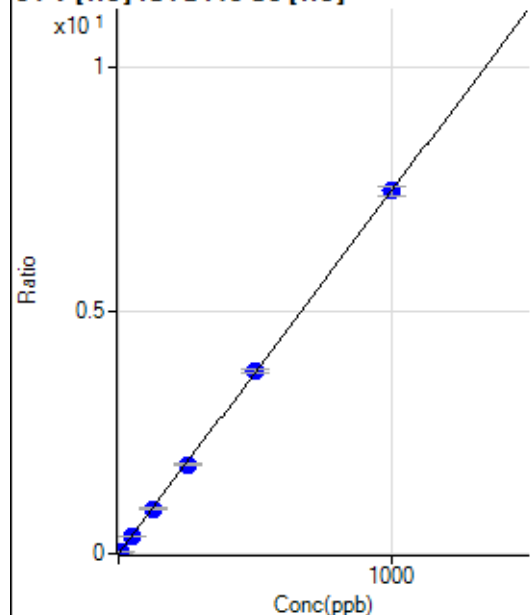
$$DL = 0.05627$$

$$BEC = 0.2821$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.11	0.0001	P	18.1
2	☐	5.000	4.731	5935.73	0.0354	P	3.9
3	☐	50.000	48.437	61057.63	0.3618	P	2.2
4	☐	125.000	123.338	147168.37	0.9211	P	4.6
5	☐	250.000	244.480	295293.21	1.8257	P	1.7
6	☐	500.000	503.026	603659.72	3.7563	P	1.4
7	☐	1000.000	1000.154	1216325.72	7.4685	P	2.7
8	☐			1844.58	0.0115	P	6.2

$$y = 0.0075 * x + 6.6496E-005$$

$$R = 1.0000$$

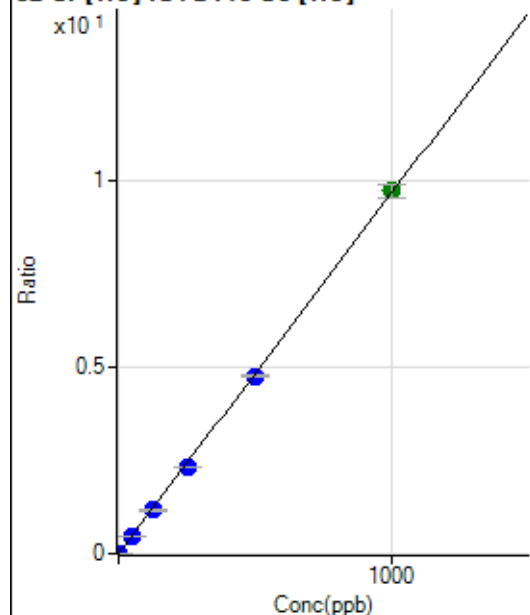
$$DL = 0.004829$$

$$BEC = 0.008905$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	507.79	0.0030	P	4.2
2	☐	2.000	1.876	3542.70	0.0211	P	5.8
3	☐	50.000	47.717	78155.74	0.4630	P	1.9
4	☐	125.000	121.187	187176.07	1.1713	P	4.1
5	☐	250.000	241.241	376642.15	2.3286	P	0.6
6	☐	500.000	492.182	763125.41	4.7476	P	1.0
7	☐	1000.000	1006.690	1580984.78	9.7075	A	3.8
8	☐			12492.23	0.0780	P	3.0

$$y = 0.0096 * x + 0.0030$$

$$R = 0.9999$$

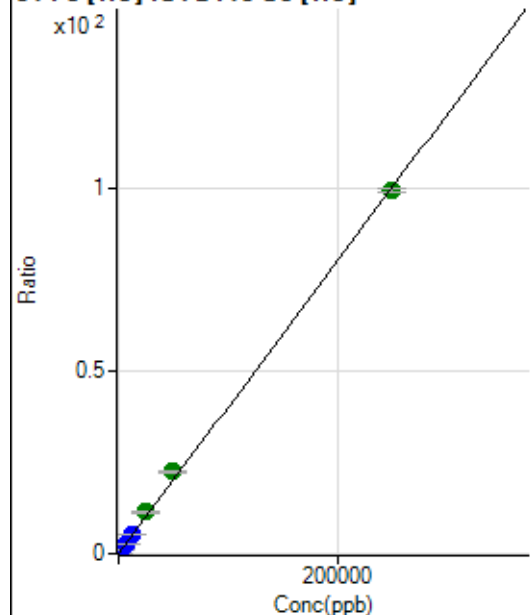
$$DL = 0.04009$$

$$BEC = 0.3151$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	651.88	0.0039	P	11.0
2	☐	50.000	51.504	4108.07	0.0245	P	2.3
3	☐	2500.000	2680.921	181508.61	1.0758	P	3.7
4	☐	6250.000	6805.099	435501.99	2.7248	P	3.6
5	☐	12500.000	13406.995	867709.22	5.3644	P	1.5
6	☐	25000.000	28443.299	1828268.95	11.3764	A	1.3
7	☐	50000.000	56469.417	3677750.14	22.5820	A	2.3
8	☐	250000.00	248300.75	15908466.44	99.2817	A	1.1

$$y = 3.9983E-004 * x + 0.0039$$

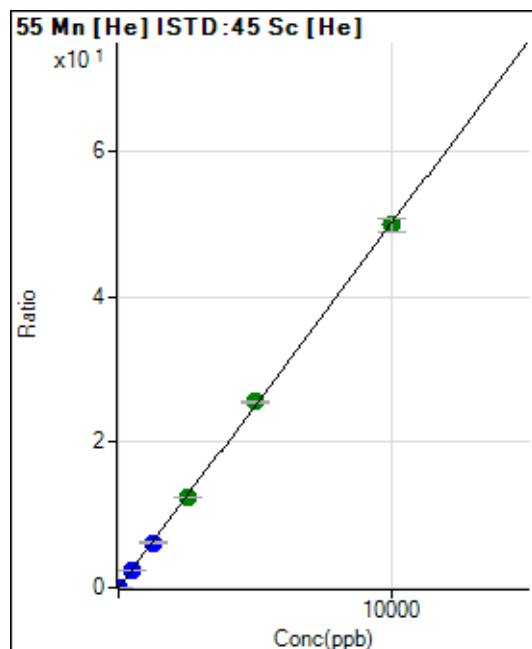
$$R = 0.9996$$

$$DL = 3.221$$

$$BEC = 9.753$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0002	P	9.9
2	☐	1.000	0.962	841.15	0.0050	P	3.8
3	☐	500.000	484.364	409218.25	2.4245	P	2.1
4	☐	1250.000	1239.400	991349.52	6.2036	P	4.3
5	☐	2500.000	2470.833	2000421.15	12.3672	A	0.6
6	☐	5000.000	5102.568	4104022.58	25.5395	A	1.1
7	☐	10000.000	9958.115	8117460.36	49.8424	A	3.5
8	☐			7819.99	0.0488	P	2.9

$$y = 0.0050 * x + 1.9934E-004$$

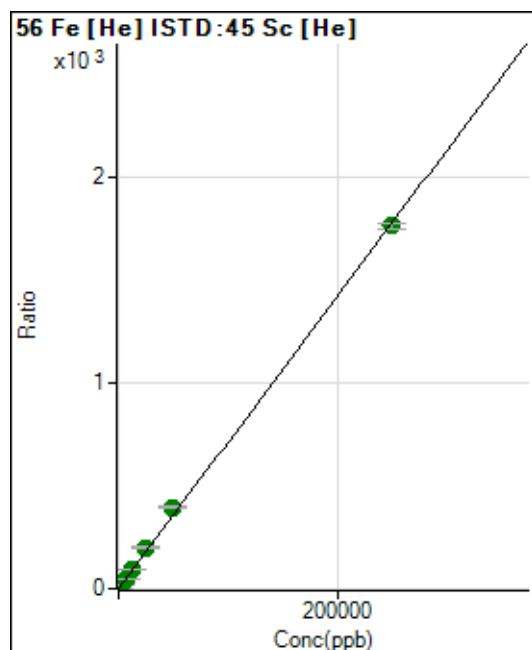
$$R = 0.9999$$

$$DL = 0.01187$$

$$BEC = 0.03983$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3226.35	0.0193	P	3.3
2	☐	50.000	52.938	66352.06	0.3956	P	0.9
3	☐	2500.000	2742.004	3293230.11	19.5116	A	2.1
4	☐	6250.000	6909.757	7855138.08	49.1392	A	3.5
5	☐	12500.000	13704.389	15761264.82	97.4407	A	1.5
6	☐	25000.000	28282.009	32313856.74	201.0697	A	0.4
7	☐	50000.000	55568.407	64337506.07	395.0426	A	3.2
8	☐	250000.00	248478.98	283040767.4	1.766400	A	1.8

$$y = 0.0071 * x + 0.0193$$

$$R = 0.9997$$

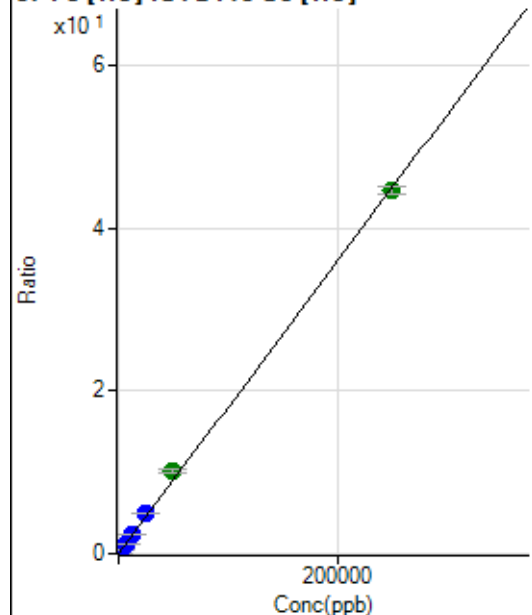
$$DL = 0.2698$$

$$BEC = 2.715$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	290.75	0.0017	P	5.1
2	☐	50.000	51.203	1833.48	0.0109	P	5.1
3	☐	2500.000	2623.985	79796.72	0.4728	P	2.9
4	☐	6250.000	6678.589	191926.31	1.2007	P	3.4
5	☐	12500.000	13177.617	382946.77	2.3674	P	1.8
6	☐	25000.000	27114.802	782638.70	4.8695	P	0.3
7	☐	50000.000	56709.044	1658329.77	10.1823	A	4.1
8	☐	250000.00	248400.87	7145950.10	44.5955	A	2.2

$$y = 1.7952\text{E-}004 * x + 0.0017$$

R = 0.9996

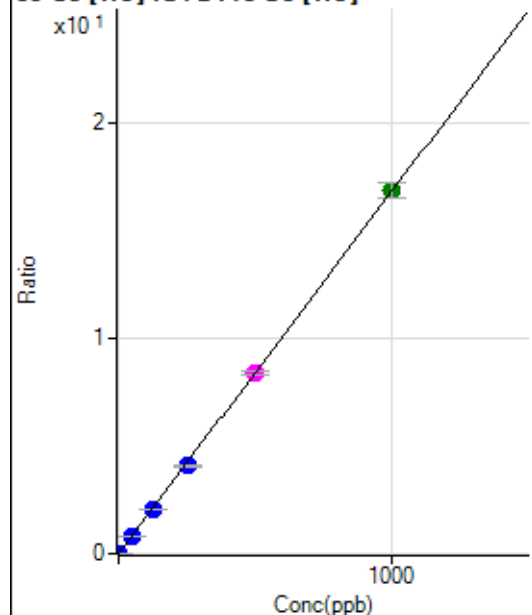
DL = 1.495

BEC = 9.687

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	94.45	0.0006	P	18.4
2	☐	1.000	0.929	2718.07	0.0162	P	1.4
3	☐	50.000	48.718	138533.57	0.8209	P	3.1
4	☐	125.000	122.142	328758.83	2.0572	P	4.1
5	☐	250.000	243.376	662909.41	4.0986	P	1.9
6	☐	500.000	499.080	1350647.98	8.4042	M	2.3
7	☐	1000.000	1002.537	2749410.01	16.8816	A	4.3
8	☐			2336.88	0.0146	P	3.6

$$y = 0.0168 * x + 5.6522\text{E-}004$$

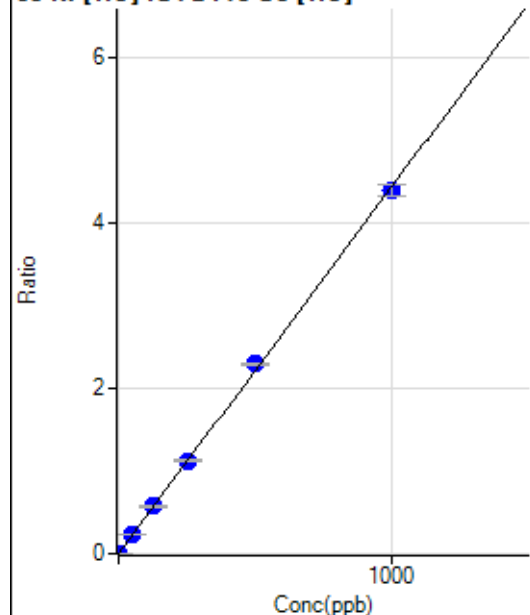
R = 1.0000

DL = 0.01851

BEC = 0.03357

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	54.44	0.0003	P	34.3
2	☐	1.000	0.971	776.69	0.0046	P	7.6
3	☐	50.000	50.633	37935.03	0.2247	P	2.2
4	☐	125.000	128.590	91139.12	0.5703	P	3.9
5	☐	250.000	253.945	182100.07	1.1259	P	1.7
6	☐	500.000	517.488	368635.45	2.2940	P	1.4
7	☐	1000.000	989.789	714523.96	4.3873	P	3.1
8	☐			2017.94	0.0126	P	2.3

$$y = 0.0044 * x + 3.2508E-004$$

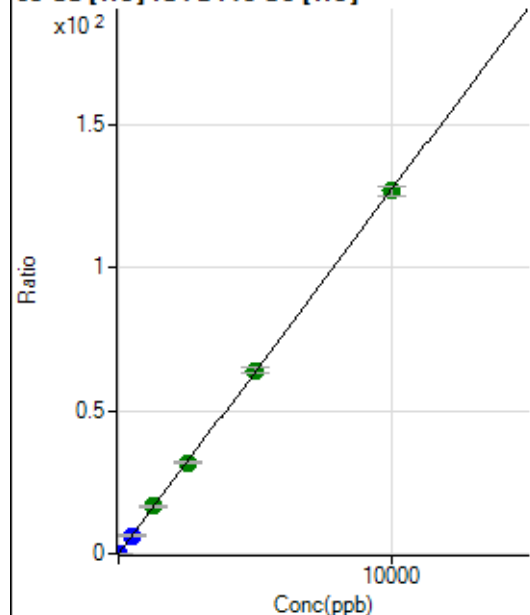
$$R = 0.9998$$

$$DL = 0.07553$$

$$BEC = 0.07334$$

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	1302.29	0.0078	P	6.1
2	☐	2.000	1.972	5510.01	0.0329	P	1.1
3	☐	500.000	498.990	1072225.00	6.3519	P	1.6
4	☐	1250.000	1304.497	2650649.23	16.5929	A	5.3
5	☐	2500.000	2502.916	5148885.83	31.8294	A	2.8
6	☐	5000.000	5041.127	10300395.19	64.0997	A	3.3
7	☐	10000.000	9971.946	20649210.81	126.7893	A	2.6
8	☐			7269.70	0.0454	P	1.2

$$y = 0.0127 * x + 0.0078$$

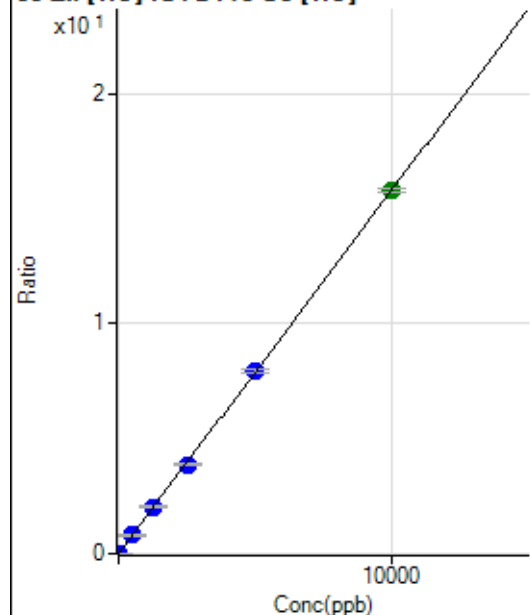
$$R = 1.0000$$

$$DL = 0.1123$$

$$BEC = 0.6125$$

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	128.89	0.0008	P	21.1
2	☐	2.000	2.502	792.25	0.0047	P	4.7
3	☐	500.000	509.541	135974.08	0.8058	P	3.1
4	☐	1250.000	1281.311	323550.16	2.0251	P	4.9
5	☐	2500.000	2458.418	628374.63	3.8848	P	0.6
6	☐	5000.000	5030.635	1277370.23	7.9487	P	2.2
7	☐	10000.000	9990.687	2570765.81	15.7851	A	0.9
8	☐			2235.75	0.0140	P	2.5

$$y = 0.0016 * x + 7.7029E-004$$

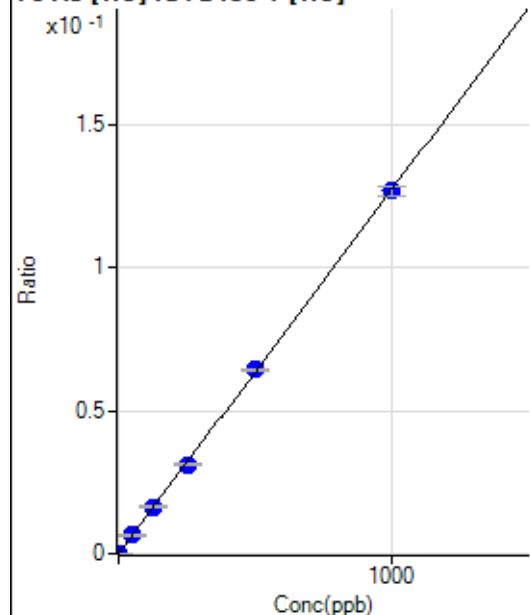
$$R = 1.0000$$

$$DL = 0.3086$$

$$BEC = 0.4876$$

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	5.33	0.0000	P	59.7
2	☐	1.000	1.104	176.02	0.0001	P	4.0
3	☐	50.000	50.816	7989.07	0.0065	P	3.0
4	☐	125.000	127.812	18806.70	0.0162	P	5.3
5	☐	250.000	245.815	37052.36	0.0312	P	1.1
6	☐	500.000	505.791	75794.09	0.0642	P	1.0
7	☐	1000.000	997.758	153213.92	0.1267	P	2.4
8	☐			135.35	0.0001	P	18.2

$$y = 1.2695E-004 * x + 4.3549E-006$$

$$R = 1.0000$$

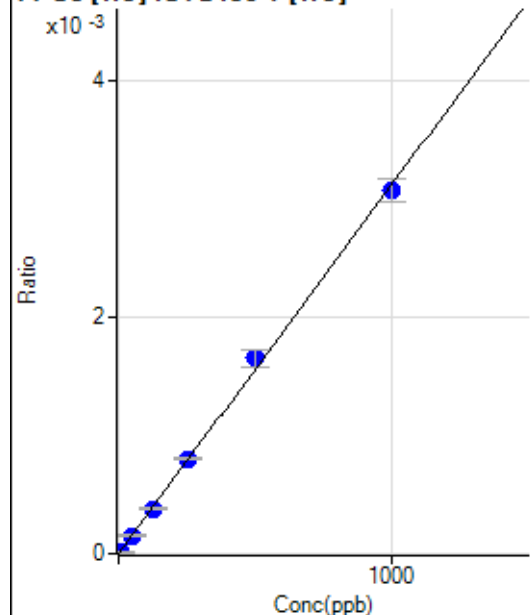
$$DL = 0.06146$$

$$BEC = 0.03431$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.
2	☐	5.000	2.923	12.22	0.0000	P	78.4
3	☐	50.000	48.986	190.00	0.0002	P	6.7
4	☐	125.000	122.045	443.35	0.0004	P	1.7
5	☐	250.000	256.510	951.16	0.0008	P	2.4
6	☐	500.000	529.623	1947.94	0.0017	P	8.4
7	☐	1000.000	983.991	3713.86	0.0031	P	6.2
8	☐			8.89	0.0000	P	21.5

$$y = 3.1191\text{E-}006 * x + 9.0291\text{E-}007$$

$$R = 0.9993$$

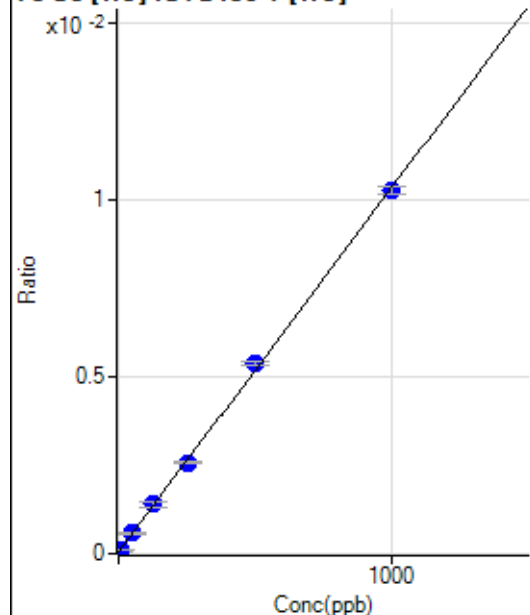
$$DL = 1.504$$

$$BEC = 0.2895$$

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	67.34	0.0001	P	7.9
2	☐	5.000	4.759	126.68	0.0001	P	4.2
3	☐	50.000	51.358	719.43	0.0006	P	9.3
4	☐	125.000	129.782	1606.59	0.0014	P	8.5
5	☐	250.000	245.360	3057.65	0.0026	P	1.2
6	☐	500.000	517.390	6337.07	0.0054	P	1.6
7	☐	1000.000	991.800	12388.36	0.0102	P	2.0
8	☐			65.01	0.0001	P	7.8

$$y = 1.0271\text{E-}005 * x + 5.5115\text{E-}005$$

$$R = 0.9998$$

$$DL = 1.273$$

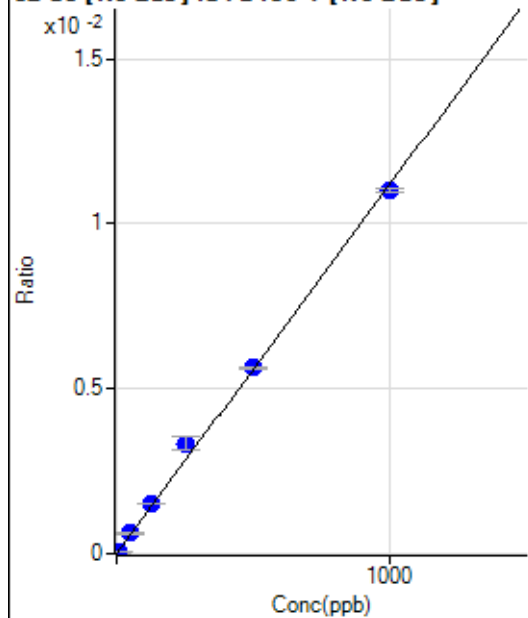
$$BEC = 5.366$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			40390.13		P	2.2
2	☐			41929.81		P	2.6
3	☐			41340.30		P	1.6
4	☐			40035.51		P	3.2
5	☐			39867.75		P	3.7
6	☐			38395.66		P	5.1
7	☐			38345.67		P	3.8
8	☐			37328.30		P	2.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	23.33	0.0000	P	266.
2	☐	5.000	5.344	689.12	0.0001	P	6.7
3	☐	50.000	56.237	6805.55	0.0006	P	8.9
4	☐	125.000	134.899	16490.90	0.0015	P	1.3
5	☐	250.000	299.391	33507.52	0.0033	P	13.1
6	☐	500.000	505.006	63596.26	0.0056	P	1.1
7	☐	1000.000	983.598	126094.83	0.0110	P	1.0
8	☐			349.55	0.0000	P	6.1

$$y = 1.1182\text{E-}005 * x + 2.1261\text{E-}006$$

$$R = 0.9986$$

$$DL = 1.522$$

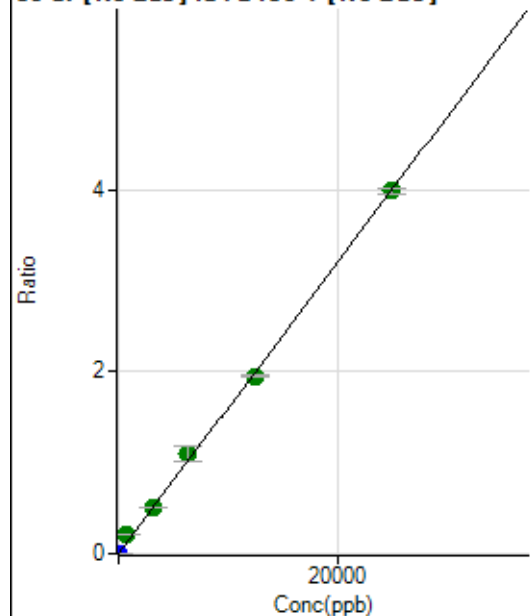
$$BEC = 0.1901$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			329.55		P	5.2
2	☐			327.46		P	7.5
3	☐			321.63		P	1.4
4	☐			327.46		P	2.3
5	☐			302.05		P	4.2
6	☐			369.54		P	2.4
7	☐			372.04		P	3.6
8	☐			363.29		P	2.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	505.58	0.0000	P	15.1
2	☐	1.000	0.981	2244.69	0.0002	P	3.1
3	☐	625.000	1318.810	2274154.39	0.2107	A	7.5
4	☐	3125.000	3130.115	5459135.11	0.5000	A	0.7
5	☐	6250.000	6907.861	11014078.63	1.1034	A	15.7
6	☐	12500.000	12201.086	21941164.90	1.9489	A	1.4
7	☐	25000.000	24967.007	45716406.93	3.9880	A	1.8
8	☐			15083.85	0.0014	P	12.0

$$y = 1.5973E-004 * x + 4.5107E-005$$

$$R = 0.9992$$

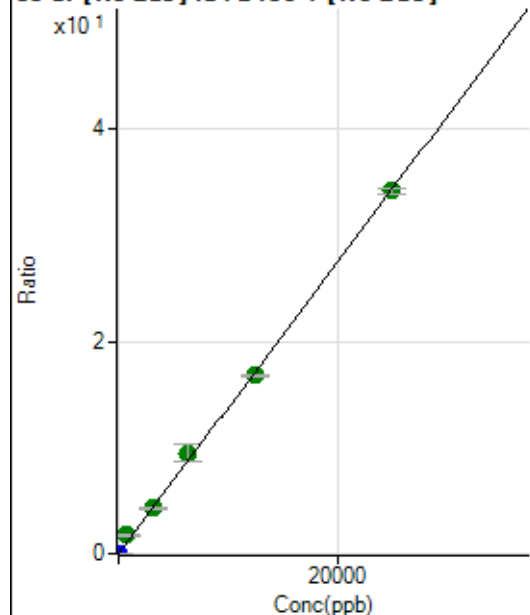
$$DL = 0.128$$

$$BEC = 0.2824$$

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	216.67	0.0000	P	65.2
2	☐	1.000	0.989	15269.93	0.0014	P	0.7
3	☐	625.000	1276.732	18861633.41	1.7481	A	8.0
4	☐	3125.000	3114.094	46538107.98	4.2637	A	4.2
5	☐	6250.000	6925.183	94629280.59	9.4816	A	15.9
6	☐	12500.000	12248.394	188828613.9	16.7699	A	1.8
7	☐	25000.000	24942.077	391451122.6	34.1495	A	1.8
8	☐			130044.51	0.0121	P	9.9

$$y = 0.0014 * x + 1.9245E-005$$

$$R = 0.9993$$

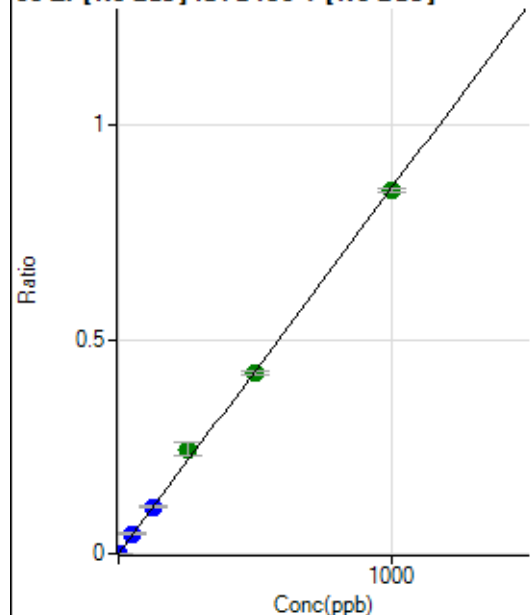
$$DL = 0.0275$$

$$BEC = 0.01406$$

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	455.58	0.0000	P	12.4
2	☐	1.000	0.974	9684.18	0.0009	P	4.7
3	☐	50.000	53.704	494978.09	0.0459	P	7.4
4	☐	125.000	127.064	1183903.73	0.1084	P	3.3
5	☐	250.000	285.472	2437289.53	0.2436	A	12.8
6	☐	500.000	496.173	4766910.39	0.4234	A	2.3
7	☐	1000.000	992.602	9707800.91	0.8469	A	0.9
8	☐			3086.54	0.0003	P	7.5

$$y = 8.5317E-004 * x + 4.0659E-005$$

$$R = 0.9993$$

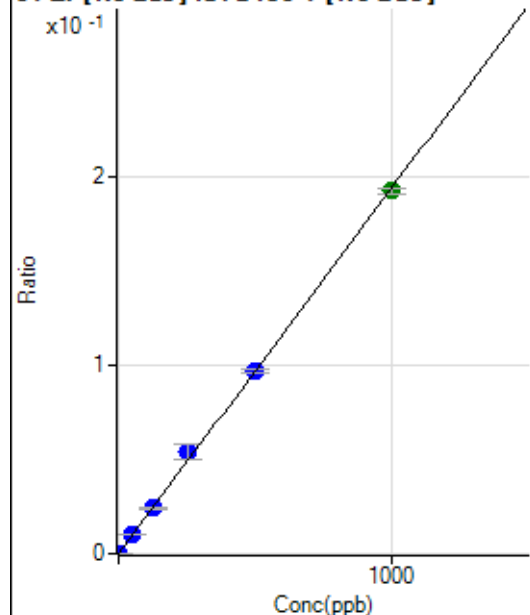
$$DL = 0.01773$$

$$BEC = 0.04766$$

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	86.12	0.0000	P	26.3
2	☐	1.000	1.007	2255.80	0.0002	P	2.0
3	☐	50.000	51.917	108697.04	0.0101	P	6.6
4	☐	125.000	125.400	265303.21	0.0243	P	3.2
5	☐	250.000	278.950	539999.06	0.0541	P	14.7
6	☐	500.000	499.308	1089214.61	0.0968	P	1.7
7	☐	1000.000	992.963	2205462.81	0.1924	A	1.7
8	☐			705.59	0.0001	P	17.1

$$y = 1.9376\text{E-}004 * x + 7.7240\text{E-}006$$

$$R = 0.9995$$

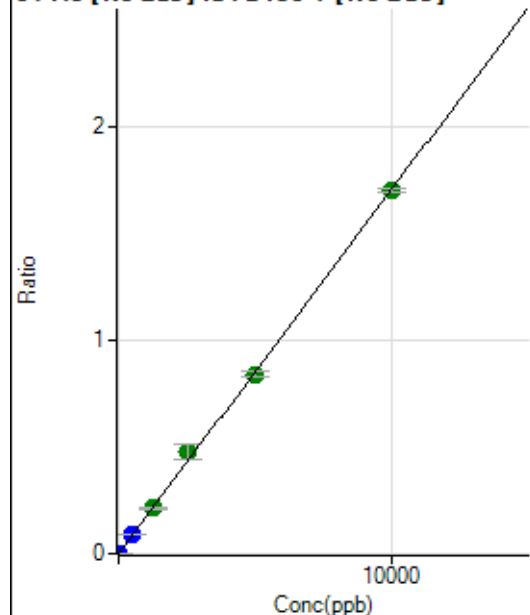
$$DL = 0.03149$$

$$BEC = 0.03986$$

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	152.78	0.0000	P	29.0
2	☐	5.000	5.847	11232.59	0.0010	P	2.8
3	☐	500.000	536.470	987895.86	0.0915	P	5.8
4	☐	1250.000	1249.805	2325665.98	0.2131	A	3.8
5	☐	2500.000	2792.807	4752271.07	0.4761	A	15.8
6	☐	5000.000	4916.965	9437135.54	0.8382	A	3.3
7	☐	10000.000	9966.516	19475222.13	1.6990	A	1.2
8	☐			7705.15	0.0007	P	6.8

$$y = 1.7047\text{E-}004 * x + 1.3708\text{E-}005$$

$$R = 0.9995$$

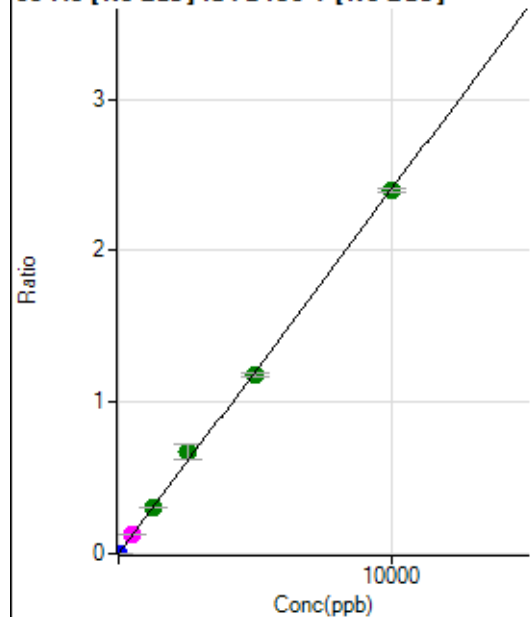
$$DL = 0.06993$$

$$BEC = 0.08041$$

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	41.66	0.0000	P	36.7
2	☐	5.000	4.997	13409.67	0.0012	P	1.5
3	☐	500.000	525.453	1364560.50	0.1264	M	7.1
4	☐	1250.000	1266.106	3324858.15	0.3046	A	2.7
5	☐	2500.000	2817.090	6769944.38	0.6777	A	14.8
6	☐	5000.000	4923.708	13334849.17	1.1845	A	2.5
7	☐	10000.000	9955.587	27452947.49	2.3950	A	1.0
8	☐			10801.82	0.0010	P	10.0

$$y = 2.4057E-004 * x + 3.7413E-006$$

$$R = 0.9994$$

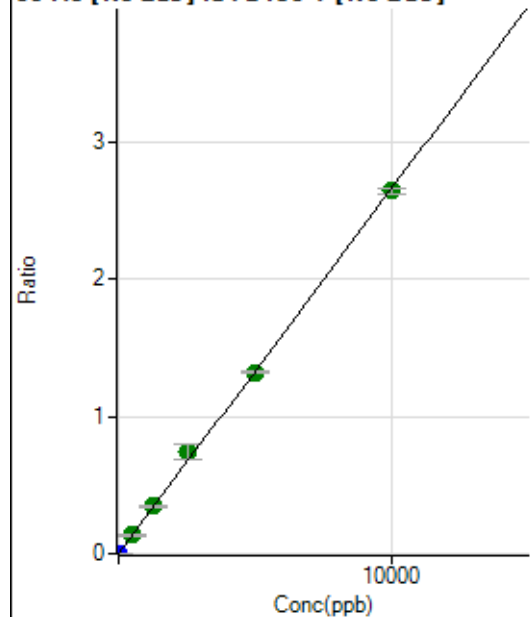
$$DL = 0.01713$$

$$BEC = 0.01555$$

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	163.89	0.0000	P	1.2
2	☐	5.000	5.080	15203.17	0.0014	P	3.7
3	☐	500.000	523.828	1504122.49	0.1396	A	10.5
4	☐	1250.000	1292.778	3759354.16	0.3444	A	2.7
5	☐	2500.000	2774.955	7379175.60	0.7392	A	15.6
6	☐	5000.000	4969.764	14903634.71	1.3239	A	1.1
7	☐	10000.000	9939.841	30350345.12	2.6478	A	1.8
8	☐			20488.08	0.0019	P	5.5

$$y = 2.6638E-004 * x + 1.4649E-005$$

$$R = 0.9996$$

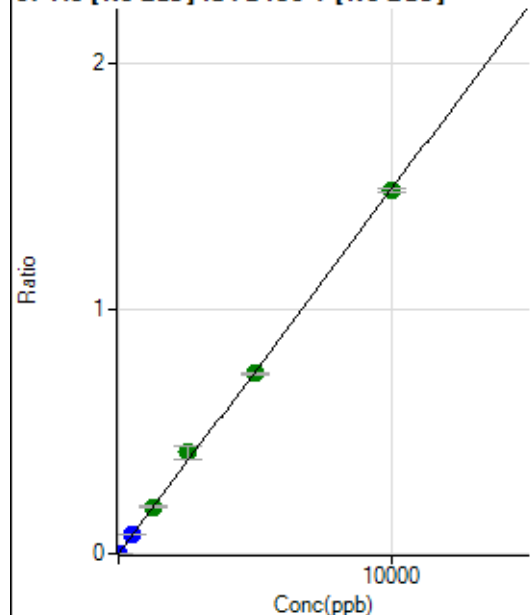
$$DL = 0.002037$$

$$BEC = 0.05499$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.33	0.0000	P	98.8
2	☐	5.000	5.162	8552.88	0.0008	P	1.5
3	☐	500.000	525.432	844139.97	0.0782	P	7.9
4	☐	1250.000	1276.929	2075183.90	0.1901	A	3.1
5	☐	2500.000	2787.455	4151004.78	0.4150	A	13.1
6	☐	5000.000	4943.072	8284611.47	0.7359	A	1.6
7	☐	10000.000	9951.962	16983845.86	1.4817	A	1.1
8	☐			6793.54	0.0006	P	7.5

$$y = 1.4888\text{E-}004 * x + 7.4237\text{E-}007$$

$$R = 0.9995$$

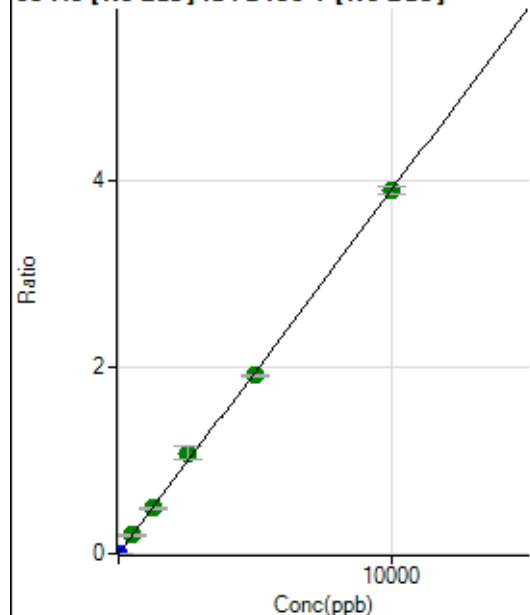
$$DL = 0.01478$$

$$BEC = 0.004986$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0000	P	64.6
2	☐	5.000	4.836	21038.76	0.0019	P	1.6
3	☐	500.000	509.286	2145613.18	0.1988	A	7.3
4	☐	1250.000	1257.350	5356887.23	0.4908	A	3.5
5	☐	2500.000	2753.819	10746598.59	1.0749	A	13.7
6	☐	5000.000	4910.586	21576772.88	1.9167	A	1.4
7	☐	10000.000	9979.869	44649919.75	3.8954	A	2.0
8	☐			16935.95	0.0016	P	7.7

$$y = 3.9032\text{E-}004 * x + 3.9419\text{E-}006$$

$$R = 0.9996$$

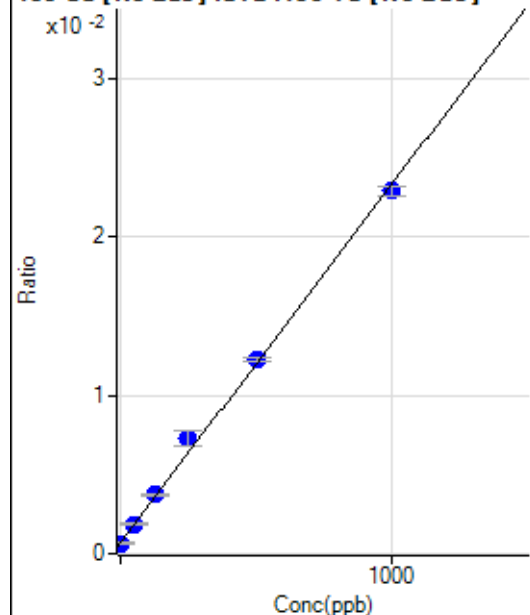
$$DL = 0.01956$$

$$BEC = 0.0101$$

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	4486.97	0.0007	P	2.5
2	☐	1.000	0.110	4364.71	0.0007	P	5.8
3	☐	50.000	54.136	12411.48	0.0019	P	1.4
4	☐	125.000	135.686	25098.51	0.0037	P	1.9
5	☐	250.000	291.541	45032.79	0.0073	P	12.5
6	☐	500.000	513.138	85080.52	0.0123	P	2.1
7	☐	1000.000	981.504	163823.08	0.0229	P	2.4
8	☐			3956.23	0.0006	P	8.4

$$y = 2.2641\text{E-}005 * x + 6.5308\text{E-}004$$

$$R = 0.9989$$

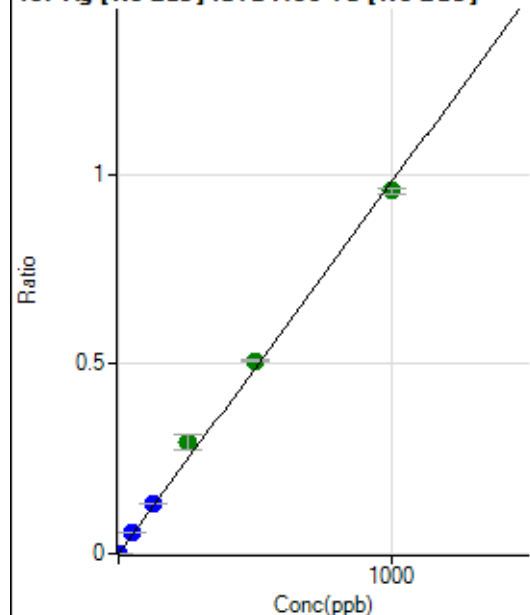
$$DL = 2.168$$

$$BEC = 28.84$$

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	269.46	0.0000	P	27.7
2	☐	1.000	1.099	7427.21	0.0011	P	3.8
3	☐	50.000	56.214	363768.07	0.0551	P	4.1
4	☐	125.000	134.708	889407.32	0.1320	P	0.9
5	☐	250.000	298.071	1811079.67	0.2920	A	13.8
6	☐	500.000	518.541	3522212.06	0.5080	A	1.2
7	☐	1000.000	977.187	6855029.32	0.9572	A	1.6
8	☐			8441.73	0.0012	P	3.1

$$y = 9.7952\text{E-}004 * x + 3.9369\text{E-}005$$

$$R = 0.9984$$

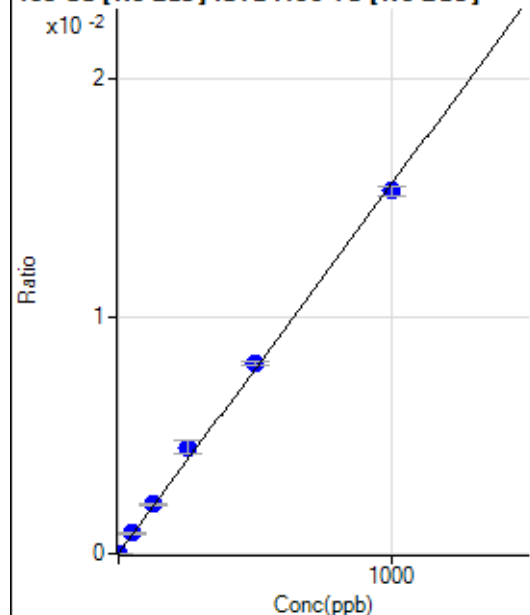
$$DL = 0.03337$$

$$BEC = 0.04019$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	26.39	0.0000	P	18.1
2	☐	1.000	1.181	148.61	0.0000	P	12.7
3	☐	50.000	55.343	5720.71	0.0009	P	4.8
4	☐	125.000	133.116	14003.10	0.0021	P	1.7
5	☐	250.000	287.921	27871.39	0.0045	P	12.7
6	☐	500.000	514.463	55609.33	0.0080	P	1.8
7	☐	1000.000	982.007	109599.15	0.0153	P	2.5
8	☐			87.50	0.0000	P	29.3

$$y = 1.5582\text{E-}005 * x + 3.8420\text{E-}006$$

$$R = 0.9990$$

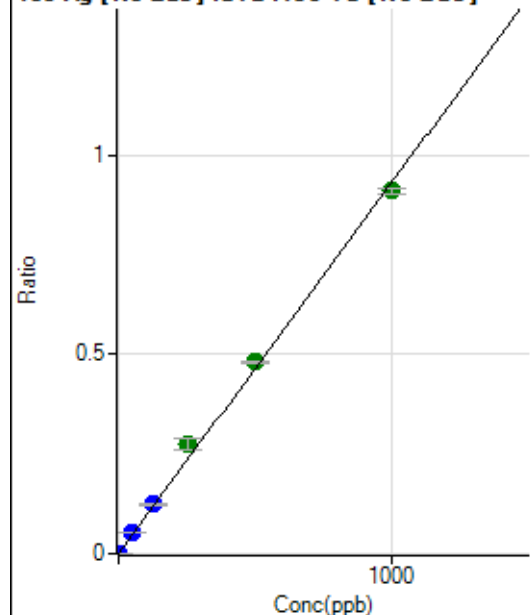
$$DL = 0.1337$$

$$BEC = 0.2466$$

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	233.34	0.0000	P	33.8
2	☐	1.000	1.090	6968.67	0.0010	P	8.7
3	☐	50.000	56.012	344007.58	0.0521	P	5.4
4	☐	125.000	132.789	832202.82	0.1235	P	2.1
5	☐	250.000	295.770	1708744.48	0.2751	A	11.7
6	☐	500.000	517.392	3336538.68	0.4812	A	1.0
7	☐	1000.000	978.587	6518919.29	0.9101	A	1.5
8	☐			8099.83	0.0012	P	4.1

$$y = 9.2995\text{E-}004 * x + 3.4091\text{E-}005$$

$$R = 0.9986$$

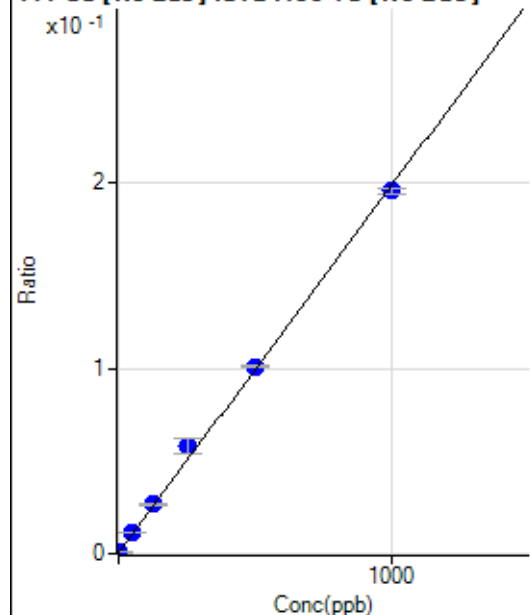
$$DL = 0.03715$$

$$BEC = 0.03666$$

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	3133.51	0.0005	P	2.6
2	☐	1.000	1.027	4394.42	0.0007	P	4.0
3	☐	50.000	56.368	76841.32	0.0116	P	3.5
4	☐	125.000	131.900	179365.63	0.0266	P	1.5
5	☐	250.000	291.054	361241.81	0.0582	P	12.6
6	☐	500.000	506.049	699213.22	0.1008	P	1.0
7	☐	1000.000	985.531	1403471.21	0.1960	P	1.3
8	☐			3231.74	0.0005	P	6.5

$$y = 1.9837\text{E-}004 * x + 4.5607\text{E-}004$$

$$R = 0.9990$$

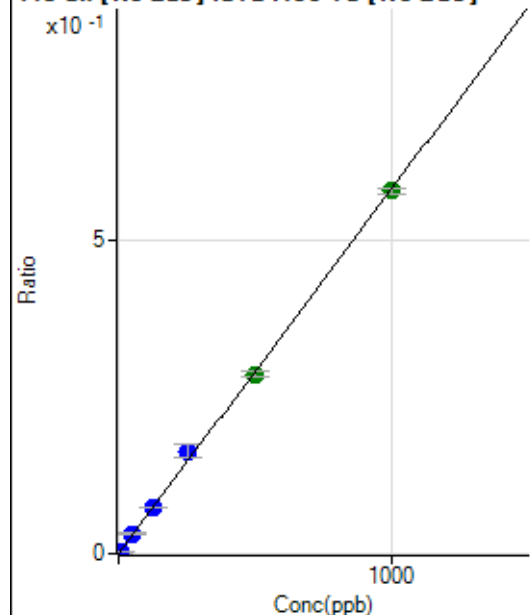
$$DL = 0.1826$$

$$BEC = 2.299$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	494.47	0.0001	P	13.5
2	☐	5.000	5.303	20991.70	0.0032	P	3.6
3	☐	50.000	54.399	209065.92	0.0317	P	5.3
4	☐	125.000	126.546	495885.19	0.0736	P	0.5
5	☐	250.000	281.991	1016815.53	0.1639	P	13.5
6	☐	500.000	492.798	1985781.79	0.2864	A	2.5
7	☐	1000.000	995.188	4141284.82	0.5783	A	1.7
8	☐			6232.15	0.0009	P	2.3

$$y = 5.8100\text{E-}004 * x + 7.2122\text{E-}005$$

$$R = 0.9994$$

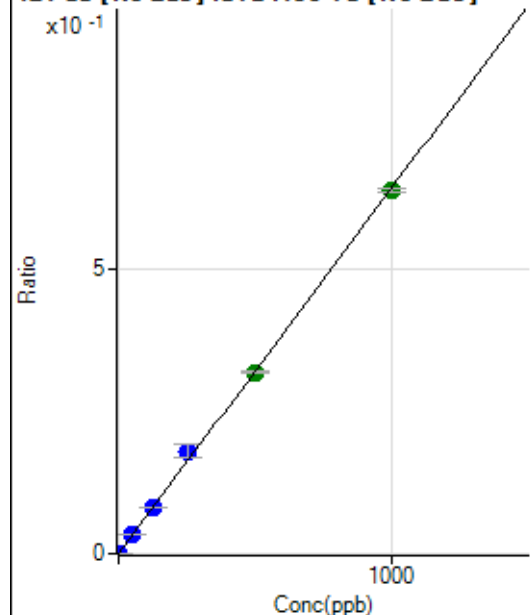
$$DL = 0.05011$$

$$BEC = 0.1241$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.56	0.0000	P	80.9
2	☐	2.000	1.988	8497.33	0.0013	P	2.9
3	☐	50.000	53.494	225973.48	0.0342	P	4.0
4	☐	125.000	127.763	550813.52	0.0817	P	0.6
5	☐	250.000	281.508	1116749.81	0.1801	P	14.2
6	☐	500.000	497.228	2205752.11	0.3181	A	1.6
7	☐	1000.000	992.989	4550461.99	0.6353	A	1.1
8	☐			20849.71	0.0031	P	2.1

$$y = 6.3979\text{E-}004 * x + 4.3986\text{E-}006$$

$$R = 0.9994$$

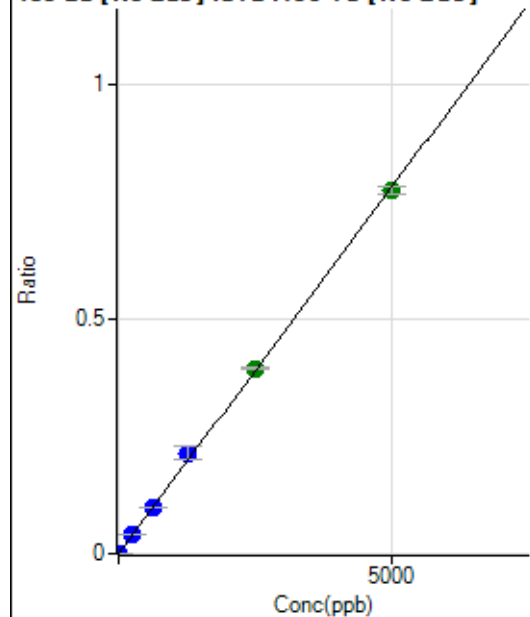
$$DL = 0.01669$$

$$BEC = 0.006875$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0000	P	78.4
2	☐	10.000	9.812	10212.43	0.0015	P	5.8
3	☐	250.000	259.368	267252.51	0.0405	P	4.6
4	☐	625.000	628.380	660888.44	0.0981	P	1.8
5	☐	1250.000	1375.145	1332325.95	0.2146	P	12.7
6	☐	2500.000	2529.201	2737354.86	0.3948	A	0.6
7	☐	5000.000	4953.223	5537327.08	0.7731	A	2.0
8	☐			6215.51	0.0009	P	2.8

$$y = 1.5608\text{E-}004 * x + 3.2561\text{E-}006$$

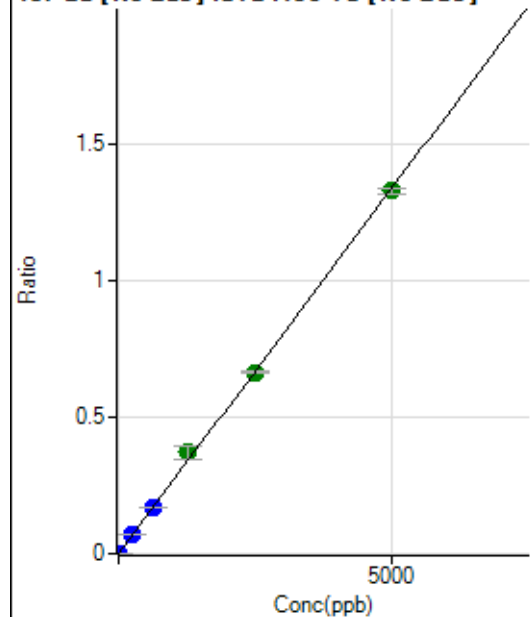
$$R = 0.9996$$

$$DL = 0.04904$$

$$BEC = 0.02086$$

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	91.2
2	☐	10.000	10.022	17815.10	0.0027	P	5.6
3	☐	250.000	264.962	466811.18	0.0707	P	5.3
4	☐	625.000	634.241	1140898.17	0.1693	P	1.2
5	☐	1250.000	1389.366	2300536.62	0.3709	A	13.6
6	☐	2500.000	2488.457	4606099.41	0.6643	A	0.3
7	☐	5000.000	4969.027	9499541.62	1.3265	A	1.5
8	☐			10665.63	0.0016	P	4.7

$$y = 2.6694E-004 * x + 2.0497E-006$$

$$R = 0.9996$$

$$DL = 0.02101$$

$$BEC = 0.007678$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	100.
2	☐			2.22		P	173.
3	☐			37.78		P	27.0
4	☐			64.45		P	31.6
5	☐			188.89		P	15.9
6	☐			340.01		P	9.8
7	☐			533.35		P	12.3
8	☐			37.78		P	36.7

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐			2.22		P	173.
3	☐			4.45		P	86.6
4	☐			8.89		P	21.6
5	☐			7.78		P	49.5
6	☐			27.78		P	48.5
7	☐			23.33		P	14.3
8	☐			15.56		P	32.7

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			16.67		P	50.0
2	☐			2.78		P	173.
3	☐			33.33		P	66.2
4	☐			61.11		P	31.5
5	☐			116.67		P	21.4
6	☐			180.56		P	25.4
7	☐			297.23		P	3.2
8	☐			938.95		P	10.0

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐			3.33		P	100.
3	☐			11.11		P	34.6
4	☐			21.11		P	39.7
5	☐			41.11		P	36.6
6	☐			102.23		P	9.4
7	☐			146.67		P	2.3
8	☐			387.79		P	7.2

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			63.89		P	39.8
2	☐			77.78		P	40.6
3	☐			80.56		P	6.0
4	☐			47.22		P	53.9
5	☐			133.34		P	12.5
6	☐			191.68		P	19.9
7	☐			222.23		P	10.8
8	☐			1025.07		P	17.6

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			107.78		P	9.9
2	☐			96.67		P	3.5
3	☐			103.33		P	19.6
4	☐			126.67		P	13.2
5	☐			124.45		P	18.8
6	☐			166.67		P	10.6
7	☐			171.12		P	14.1
8	☐			525.57		P	11.9

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			58.33		P	28.6
2	☐			41.67		P	52.9
3	☐			52.78		P	18.2
4	☐			75.00		P	29.4
5	☐			47.22		P	83.4
6	☐			86.11		P	31.1
7	☐			77.78		P	12.4
8	☐			111.11		P	11.5

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			15.55		P	24.8
2	☐			13.33		P	25.0
3	☐			27.78		P	25.0
4	☐			23.33		P	14.3
5	☐			36.66		P	31.5
6	☐			41.11		P	61.4
7	☐			23.34		P	24.7
8	☐			31.11		P	24.7

172 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			36.11		P	53.3
2	☐			36.11		P	13.3
3	☐			58.34		P	49.5
4	☐			44.44		P	28.6
5	☐			80.56		P	31.6
6	☐			102.78		P	28.5
7	☐			125.00		P	24.0
8	☐			383.35		P	8.7

172 Yb [He] No available calibration points

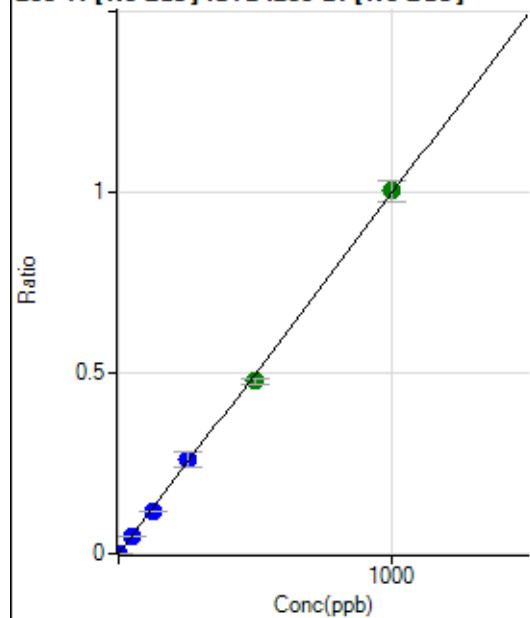
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			22.22		P	0.0
2	☐			12.96		P	107.
3	☐			22.22		P	25.0
4	☐			16.67		P	33.3
5	☐			46.30		P	18.3
6	☐			85.19		P	10.0
7	☐			53.70		P	43.1
8	☐			188.89		P	27.0

176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1202.87		P	4.6
2	☐			1280.65		P	10.5
3	☐			2002.99		P	8.8
4	☐			3192.14		P	3.5
5	☐			5509.65		P	0.8
6	☐			9884.54		P	0.9
7	☐			18029.47		P	5.1
8	☐			1433.45		P	14.8

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7328.10		P	3.5
2	☐			7239.15		P	5.1
3	☐			7774.67		P	6.6
4	☐			8148.98		P	3.6
5	☐			9333.08		P	1.6
6	☐			10989.96		P	3.7
7	☐			14860.56		P	2.1
8	☐			8024.80		P	2.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	50.00	0.0000	P	20.4
2	☐	1.000	0.925	3572.82	0.0009	P	6.4
3	☐	50.000	48.183	182748.21	0.0479	P	8.4
4	☐	125.000	117.934	450157.99	0.1173	P	2.2
5	☐	250.000	261.453	920843.14	0.2600	P	16.6
6	☐	500.000	480.004	1890323.96	0.4774	A	3.0
7	☐	1000.000	1008.109	3916573.09	1.0026	A	5.7
8	☐			1950.21	0.0006	P	7.9

$$y = 9.9451E-004 * x + 1.3050E-005$$

$$R = 0.9996$$

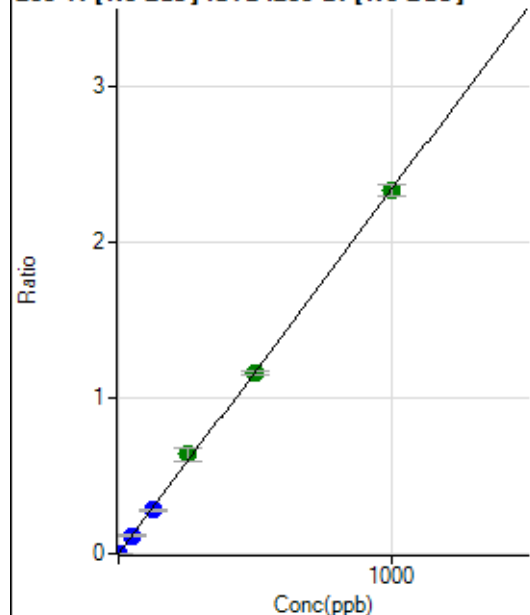
$$DL = 0.00803$$

$$BEC = 0.01312$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	175.01	0.0000	P	24.7
2	☐	1.000	0.960	8747.64	0.0023	P	4.3
3	☐	50.000	48.529	432004.96	0.1133	P	8.8
4	☐	125.000	119.981	1074831.69	0.2801	P	2.5
5	☐	250.000	273.693	2268072.62	0.6389	A	13.8
6	☐	500.000	496.549	4589760.35	1.1590	A	2.3
7	☐	1000.000	996.503	9090698.90	2.3259	A	3.0
8	☐			4928.87	0.0014	P	8.6

$$y = 0.0023 * x + 4.5667E-005$$

$$R = 0.9996$$

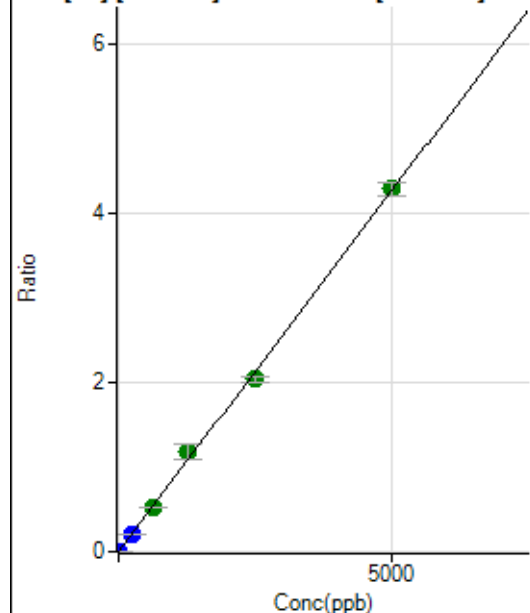
$$DL = 0.01452$$

$$BEC = 0.01957$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	379.64	0.0001	P	13.7
2	☐	1.000	0.914	3363.46	0.0009	P	4.9
3	☐	250.000	240.046	781428.77	0.2049	P	7.3
4	☐	625.000	612.173	2004279.24	0.5223	A	3.0
5	☐	1250.000	1375.891	4160773.24	1.1739	A	15.6
6	☐	2500.000	2388.591	8068728.48	2.0378	A	3.2
7	☐	5000.000	5026.333	16758208.48	4.2881	A	3.6
8	☐			4776.96	0.0014	P	15.1

$$y = 8.5311E-004 * x + 9.8863E-005$$

$$R = 0.9993$$

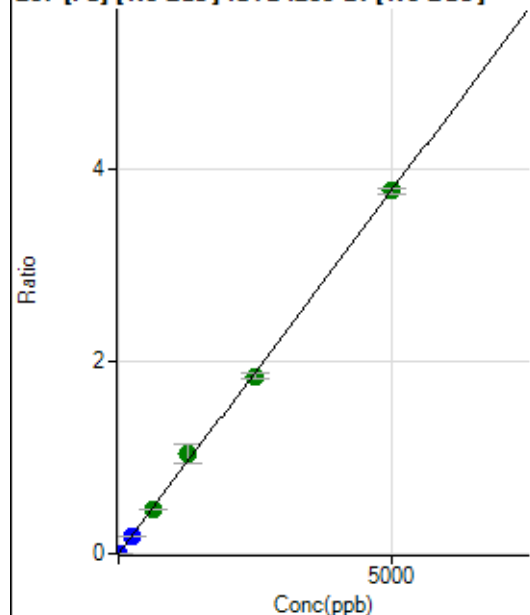
$$DL = 0.04758$$

$$BEC = 0.1159$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	359.27	0.0001	P	8.3
2	☐	1.000	0.886	2915.20	0.0008	P	0.8
3	☐	250.000	240.978	693490.92	0.1818	P	7.4
4	☐	625.000	613.820	1777130.09	0.4630	A	2.6
5	☐	1250.000	1377.082	3674954.08	1.0386	A	17.7
6	☐	2500.000	2443.913	7299327.36	1.8432	A	3.1
7	☐	5000.000	4998.122	14734632.74	3.7695	A	1.7
8	☐			4215.60	0.0012	P	10.8

$$y = 7.5417\text{E-}004 * x + 9.3119\text{E-}005$$

$$R = 0.9995$$

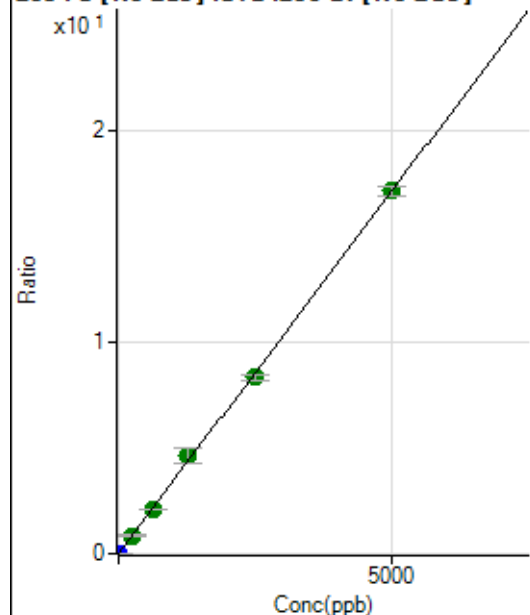
$$DL = 0.03082$$

$$BEC = 0.1235$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1579.70	0.0004	P	3.5
2	☐	1.000	0.888	13217.71	0.0035	P	4.5
3	☐	250.000	244.295	3193485.84	0.8372	A	6.9
4	☐	625.000	612.763	8057360.76	2.0993	A	1.3
5	☐	1250.000	1356.746	16456565.53	4.6477	A	16.8
6	☐	2500.000	2433.446	33013306.01	8.3357	A	2.6
7	☐	5000.000	5008.405	67052014.00	17.1556	A	2.6
8	☐			18883.60	0.0055	P	10.6

$$y = 0.0034 * x + 4.1031\text{E-}004$$

$$R = 0.9996$$

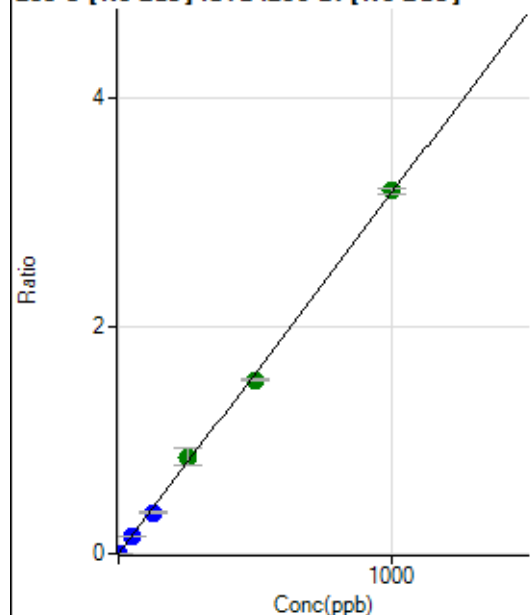
$$DL = 0.01253$$

$$BEC = 0.1198$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0000	P	66.8
2	☐	1.000	0.898	10927.19	0.0029	P	1.4
3	☐	50.000	46.388	561125.52	0.1470	P	4.4
4	☐	125.000	114.443	1391417.62	0.3625	P	2.6
5	☐	250.000	268.748	3015008.05	0.8514	A	16.7
6	☐	500.000	482.161	6050201.00	1.5274	A	0.3
7	☐	1000.000	1005.733	12456840.56	3.1860	A	1.5
8	☐			1533.49	0.0004	P	14.6

$$y = 0.0032 * x + 1.0307E-005$$

$$R = 0.9995$$

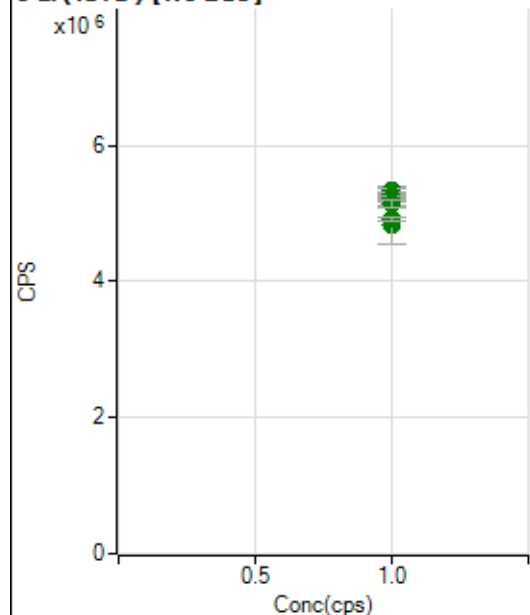
$$DL = 0.006522$$

$$BEC = 0.003254$$

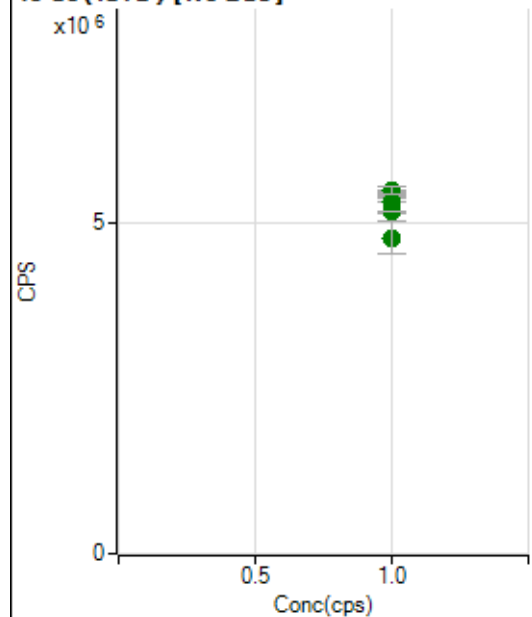
Weight: <None>

Min Conc: 0

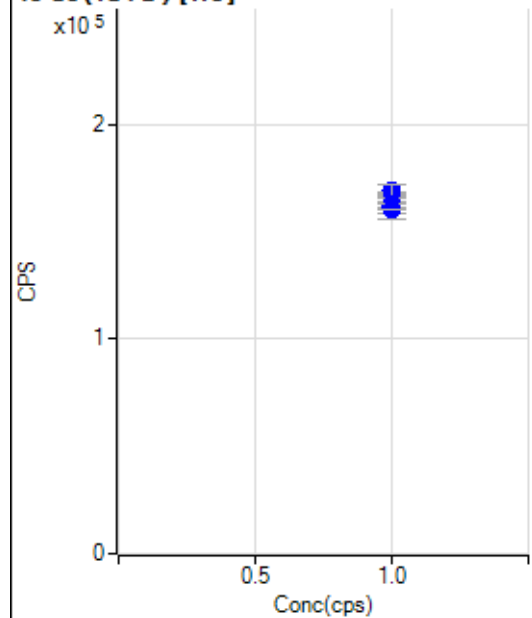
6 Li (ISTD) [No Gas]



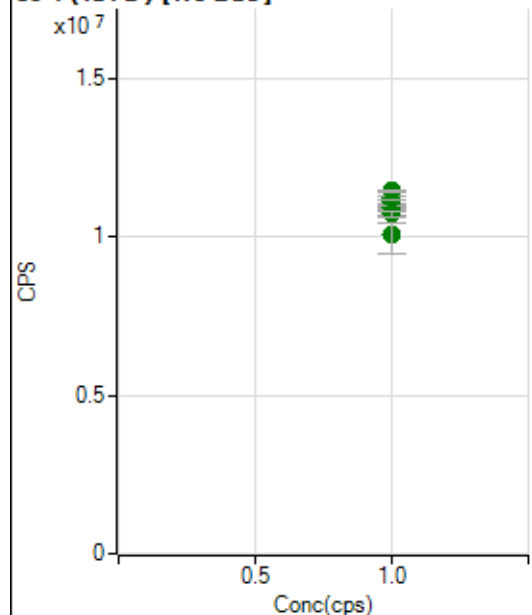
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5313734.13		A	2.9
2	☐	1.000		5333136.91		A	1.9
3	☐	1.000		5273492.28		A	3.6
4	☐	1.000		5264345.66		A	1.6
5	☐	1.000		4840260.55		A	11.5
6	☐	1.000		5218622.78		A	1.7
7	☐	1.000		5158526.08		A	2.2
8	☐	1.000		4917871.47		A	1.5

45 Sc (ISTD) [No Gas]

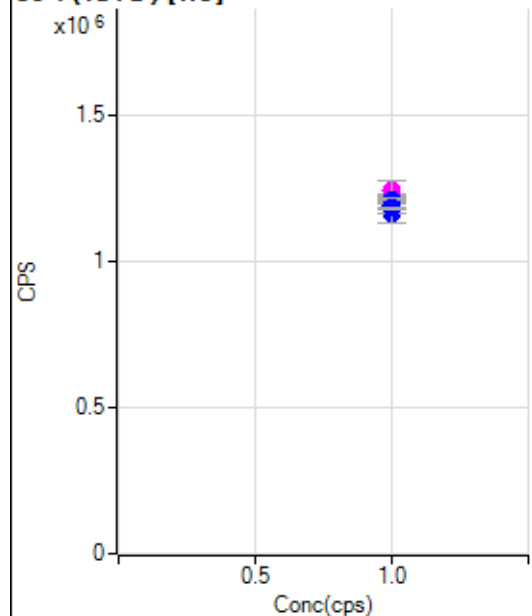
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5387897.38		A	2.6
2	☐	1.000		5438366.17		A	2.2
3	☐	1.000		5311183.63		A	6.5
4	☐	1.000		5449682.83		A	1.4
5	☐	1.000		4780769.89		A	10.2
6	☐	1.000		5425407.49		A	0.5
7	☐	1.000		5483637.49		A	2.0
8	☐	1.000		5173086.80		A	0.3

45 Sc (ISTD) [He]

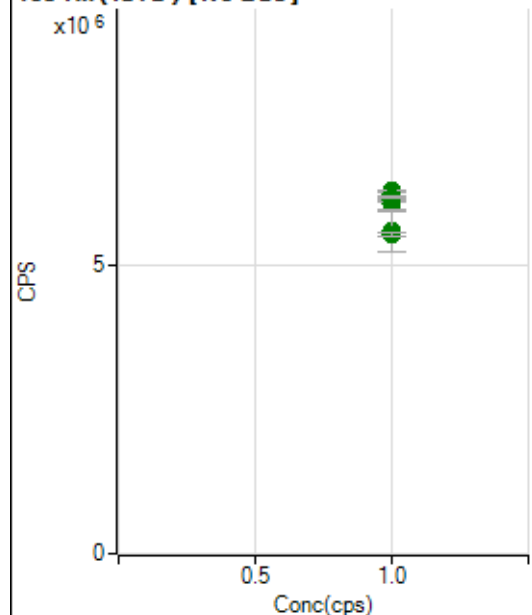
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		167221.76		P	0.7
2	☐	1.000		167719.46		P	0.5
3	☐	1.000		168869.34		P	3.6
4	☐	1.000		160027.16		P	5.1
5	☐	1.000		161747.06		P	0.9
6	☐	1.000		160721.18		P	2.5
7	☐	1.000		162859.18		P	0.1
8	☐	1.000		160238.48		P	0.3

89 Y (ISTD) [No Gas]

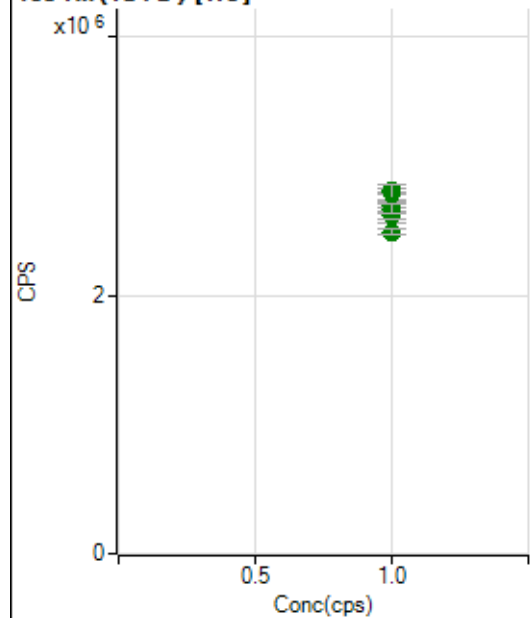
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11186964.28		A	1.9
2	☐	1.000		11121828.73		A	3.1
3	☐	1.000		10828298.66		A	6.6
4	☐	1.000		10918433.73		A	1.3
5	☐	1.000		10109070.68		A	12.1
6	☐	1.000		11258399.07		A	1.2
7	☐	1.000		11463087.88		A	0.6
8	☐	1.000		10749111.85		A	1.8

89 Y (ISTD) [He]

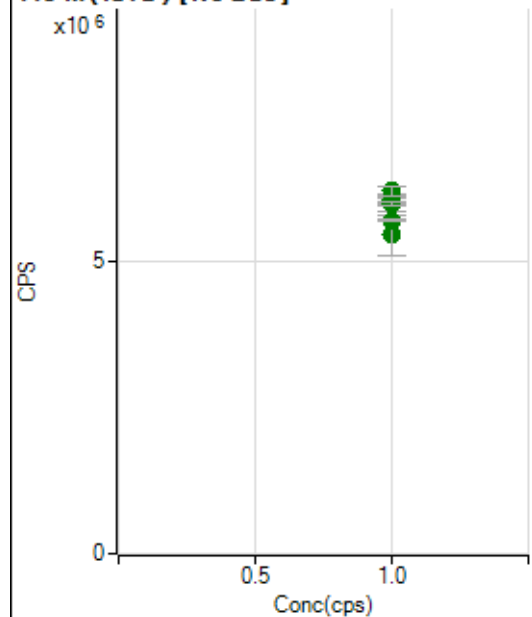
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1222079.88		P	0.5
2	☐	1.000		1218274.44		P	0.3
3	☐	1.000		1238830.35		M	5.2
4	☐	1.000		1161161.89		P	5.8
5	☐	1.000		1187282.76		P	1.1
6	☐	1.000		1180588.94		P	3.1
7	☐	1.000		1209578.14		P	0.5
8	☐	1.000		1179962.95		P	0.6

103 Rh (ISTD) [No Gas]

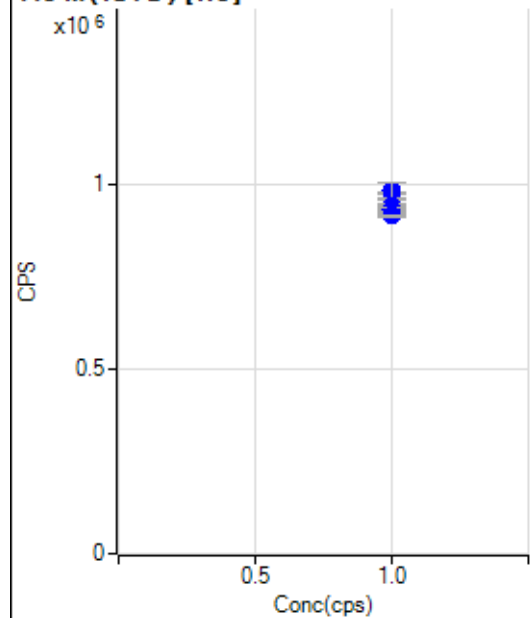
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6275925.01		A	0.8
2	☐	1.000		6193444.32		A	1.9
3	☐	1.000		6058133.04		A	3.7
4	☐	1.000		6214057.39		A	2.4
5	☐	1.000		5572645.05		A	12.8
6	☐	1.000		6123920.19		A	1.5
7	☐	1.000		6165842.41		A	0.9
8	☐	1.000		5521600.21		A	1.7

103 Rh (ISTD) [He]

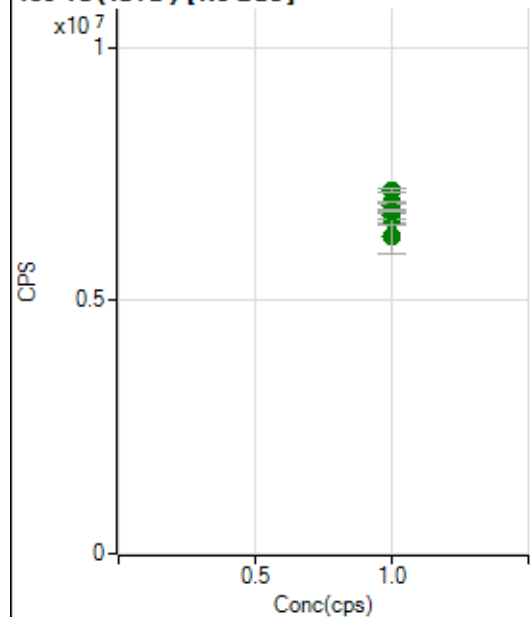
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2807210.72		A	0.9
2	☐	1.000		2798593.52		A	1.6
3	☐	1.000		2792525.86		A	4.3
4	☐	1.000		2646260.69		A	6.6
5	☐	1.000		2699591.77		A	1.9
6	☐	1.000		2623214.35		A	2.5
7	☐	1.000		2664119.42		A	2.8
8	☐	1.000		2489429.79		A	1.5

115 In (ISTD) [No Gas]

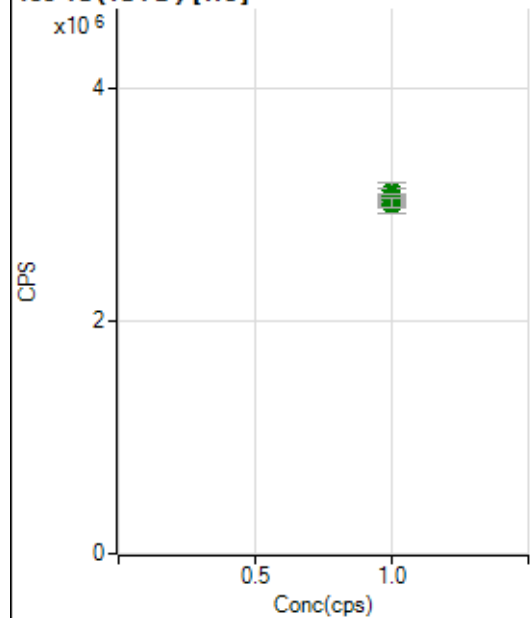
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6040464.97		A	3.1
2	☐	1.000		6116171.25		A	1.3
3	☐	1.000		6010612.31		A	5.1
4	☐	1.000		6044268.90		A	2.0
5	☐	1.000		5456524.25		A	12.7
6	☐	1.000		5992321.17		A	1.4
7	☐	1.000		6203603.26		A	2.4
8	☐	1.000		5697008.09		A	0.5

115 In (ISTD) [He]

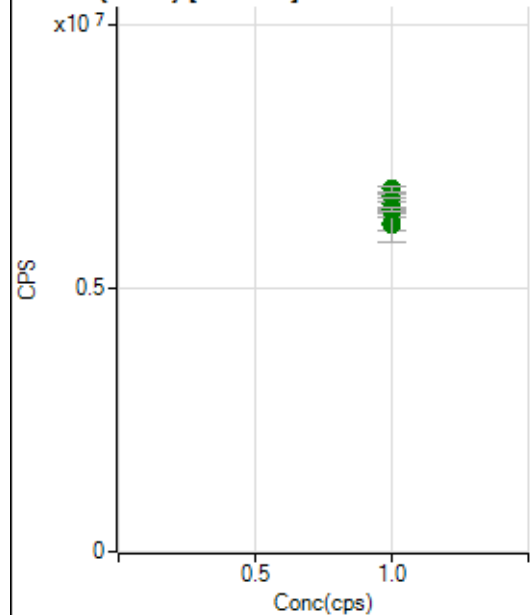
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		976528.67		P	0.5
2	☐	1.000		980821.91		P	0.4
3	☐	1.000		984623.34		P	4.4
4	☐	1.000		943070.68		P	4.6
5	☐	1.000		942100.20		P	1.6
6	☐	1.000		932564.98		P	2.9
7	☐	1.000		935343.79		P	1.2
8	☐	1.000		915960.22		P	1.1

159 Tb (ISTD) [No Gas]

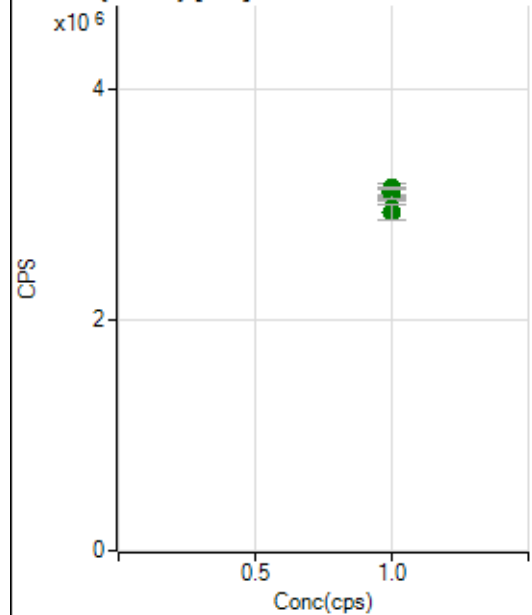
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6868185.52		A	2.8
2	☐	1.000		6663222.19		A	3.9
3	☐	1.000		6608389.55		A	3.7
4	☐	1.000		6738145.59		A	1.0
5	☐	1.000		6265389.76		A	11.0
6	☐	1.000		6933903.71		A	0.5
7	☐	1.000		7162221.63		A	1.2
8	☐	1.000		6763742.54		A	0.6

159 Tb (ISTD) [He]

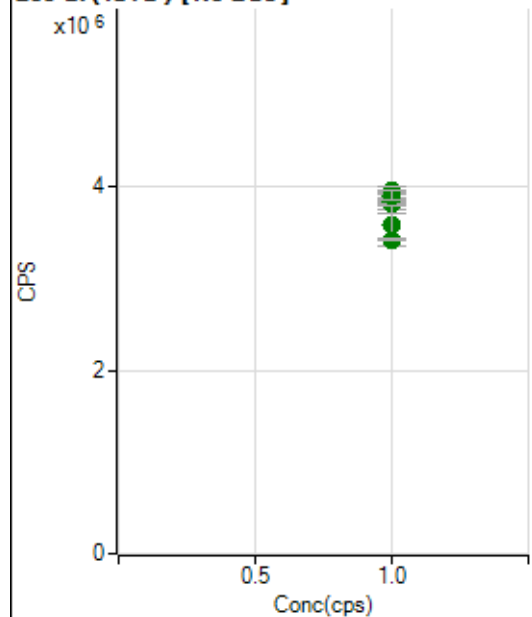
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3011919.19		A	1.0
2	☐	1.000		3016195.44		A	1.4
3	☐	1.000		3117183.01		A	4.3
4	☐	1.000		2994169.47		A	4.7
5	☐	1.000		3083921.97		A	3.8
6	☐	1.000		3046427.21		A	2.3
7	☐	1.000		3075722.28		A	1.1
8	☐	1.000		3013306.14		A	2.4

165 Ho (ISTD) [No Gas]

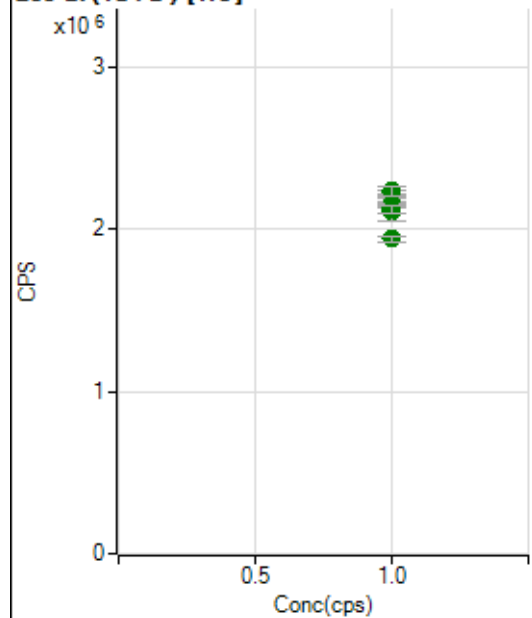
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6536446.80		A	3.4
2	☐	1.000		6587882.48		A	2.0
3	☐	1.000		6220265.80		A	4.5
4	☐	1.000		6466501.23		A	0.6
5	☐	1.000		6196142.63		A	10.2
6	☐	1.000		6748230.93		A	1.4
7	☐	1.000		6878047.11		A	1.7
8	☐	1.000		6490160.04		A	1.0

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3099240.34		A	1.9
2	☐	1.000		3060142.14		A	0.9
3	☐	1.000		3110686.66		A	4.9
4	☐	1.000		2929904.99		A	4.2
5	☐	1.000		3097257.77		A	2.1
6	☐	1.000		3092319.67		A	2.7
7	☐	1.000		3139594.67		A	0.8
8	☐	1.000		3141300.23		A	0.7

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3850457.65		A	5.0
2	☐	1.000		3828619.77		A	1.2
3	☐	1.000		3824469.84		A	5.6
4	☐	1.000		3838776.44		A	2.4
5	☐	1.000		3590924.77		A	12.5
6	☐	1.000		3961288.69		A	2.3
7	☐	1.000		3910153.41		A	2.8
8	☐	1.000		3432131.34		A	0.2

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2174441.60		A	1.7
2	☐	1.000		2226273.20		A	1.0
3	☐	1.000		2236072.14		A	2.8
4	☐	1.000		2109770.93		A	5.7
5	☐	1.000		2146651.95		A	0.7
6	☐	1.000		2128292.26		A	2.6
7	☐	1.000		2119315.42		A	2.5
8	☐	1.000		1939398.41		A	1.9

US EPA Tune Check Report

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP8012723 MS.b

Acq. Date-Time 2023-01-27 11:02:32

Report Comment ---

Instrument Name G8403A SG19224459

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		13846	138455.43			2.432	5.000
24		92287	922874.30			2.458	5.000
25		12129	121294.84			2.517	5.000
26		14084	140842.22			2.338	5.000
59		62486	624860.97			2.155	5.000
113		5602	56017.44			2.204	5.000
115		71272	712715.85			2.252	5.000
206		12786	127858.48			2.369	5.000
207		11521	115214.99			2.807	5.000
208		27728	277279.54			2.791	5.000
220		1	7.40			27.612	

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

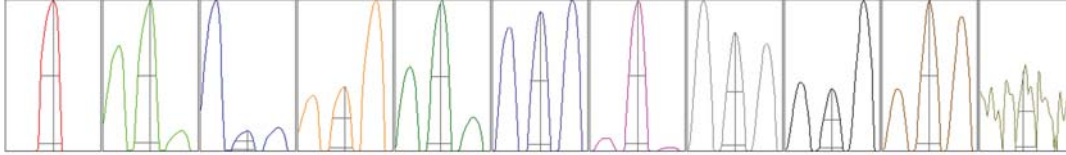
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	13309	13970	14220	13931	13798
24	88271	92855	93763	93264	93284
25	11771	12234	12538	12218	11886
26	13731	14247	14558	14037	13848
59	61112	62869	64610	62094	61745
113	5421	5630	5766	5610	5580
115	69262	71970	73494	71276	70356
206	12308	12766	13133	12916	12807
207	11056	11572	11967	11518	11494
208	26495	28124	28563	27625	27833

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	24522.01	9.05	8.90 - 9.10	
24	168269.84	24.00	23.90 - 24.10	
25	22171.80	25.00	24.90 - 25.10	
26	25533.20	26.00	25.90 - 26.10	
59	116387.94	58.95	58.90 - 59.10	
113	11482.92	113.05	112.90 - 113.10	
115	142874.71	115.05	114.90 - 115.10	
206	25414.89	206.05	205.90 - 206.10	
207	23048.00	207.00	206.90 - 207.10	
208	55657.24	208.00	207.90 - 208.10	
220	1.05	219.90	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.60	0.737	0.900	
24	0.58	0.783	0.900	
25	0.58	0.740	0.900	
26	0.59	0.743	0.900	
59	0.56	0.769	0.900	
113	0.51	0.720	0.900	
115	0.51	0.728	0.900	
206	0.52	0.762	0.900	
207	0.52	0.751	0.900	
208	0.52	0.768	0.900	
220	0.50	0.637		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.87 L/min Dilution Gas 0.40 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.0 V	Deflect	15.6 V
Extract 2	-155.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-80 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	140 V		

QP Parameters

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

Hardware Settings

Torch

Torch H	1.0 mm	Torch V	-0.8 mm
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EM

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

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		12665	126645.21			10.122	
89		13584	135836.37			10.464	
205		9324	93244.20			8.248	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	13281	13332	13730	10528	12452
89	14225	14249	14735	11155	13554
205	9763	9691	9816	7984	9368

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.87 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.0 V	Deflect	4.4 V
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US EPA Tune Check Report

Extract 2	-155.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-80 V	Cell Exit	-70 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

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

Hardware Settings

Torch

Torch H	1.0 mm	Torch V	-0.8 mm
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EM

Discriminator	4.4 mV	Analog HV	2306 V	Pulse HV	1648 V
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