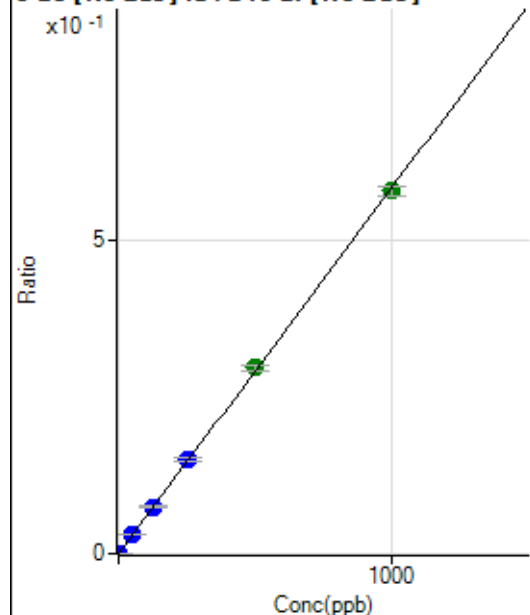


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8020423-MS.b\
Analysis File: P8020423-MS.batch.bin
DA Date-Time: 2023-02-04 17:50:00
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2023-02-04 11:01:29
2	005CALS.d	S02	2023-02-04 11:04:38
3	006CALS.d	S03	2023-02-04 11:07:50
4	009CALS.d	S04	2023-02-04 11:17:10
5	010CALS.d	S05	2023-02-04 11:20:19
6	011CALS.d	S06	2023-02-04 11:23:25
7	012CALS.d	S07	2023-02-04 11:26:34
8	013CALS.d	S08	2023-02-04 11:29:40

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	48.74	0.0000	P	21.9
2	☐	1.000	1.110	3018.27	0.0007	P	6.1
3	☐	50.000	51.915	143153.10	0.0302	P	2.0
4	☐	125.000	128.842	354074.41	0.0750	P	3.9
5	☐	250.000	260.034	695337.66	0.1514	P	3.7
6	☐	500.000	508.297	1361929.55	0.2959	A	3.3
7	☐	1000.000	992.767	2678642.70	0.5778	A	2.9
8	☐			1292.85	0.0003	P	38.3

$$y = 5.8204\text{E-}004 * x + 1.0472\text{E-}005$$

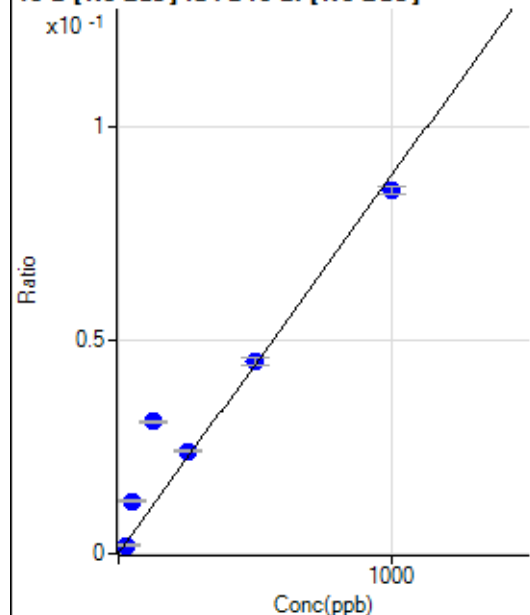
$$R = 0.9999$$

$$DL = 0.0118$$

$$BEC = 0.01799$$

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	269.95	0.0001	P	15.3
2	☐	25.000	22.106	9243.78	0.0020	P	8.0
3	☐	50.000	137.489	57853.20	0.0122	P	3.4
4	☐	125.000	348.186	145701.83	0.0308	P	1.5
5	☐	250.000	271.448	110609.63	0.0241	P	2.3
6	☐	500.000	505.756	206152.39	0.0448	P	4.0
7	☐	1000.000	959.560	393527.04	0.0849	P	2.2
8	☐			28283.01	0.0065	P	10.9

$$y = 8.8407\text{E-}005 * x + 5.8009\text{E-}005$$

$$R = 0.9708$$

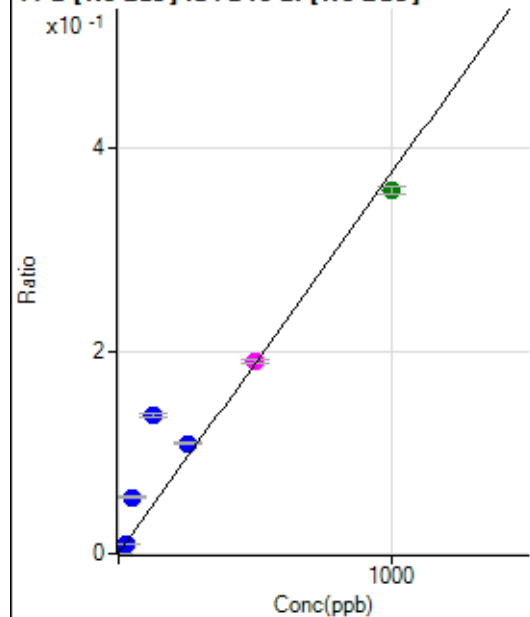
$$DL = 0.3016$$

$$BEC = 0.6562$$

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	1236.48	0.0003	P	4.8
2	☐	25.000	23.035	40896.10	0.0089	P	8.1
3	☐	50.000	146.978	262364.20	0.0554	P	3.1
4	☐	125.000	362.923	644037.26	0.1363	P	2.8
5	☐	250.000	289.466	500056.46	0.1088	P	2.2
6	☐	500.000	504.311	871887.93	0.1894	M	1.8
7	☐	1000.000	953.438	1658606.22	0.3578	A	2.0
8	☐			127636.21	0.0293	P	9.7

$$y = 3.7496E-004 * x + 2.6583E-004$$

$$R = 0.9664$$

$$DL = 0.1015$$

$$BEC = 0.709$$

Weight: <None>

Min Conc: 0

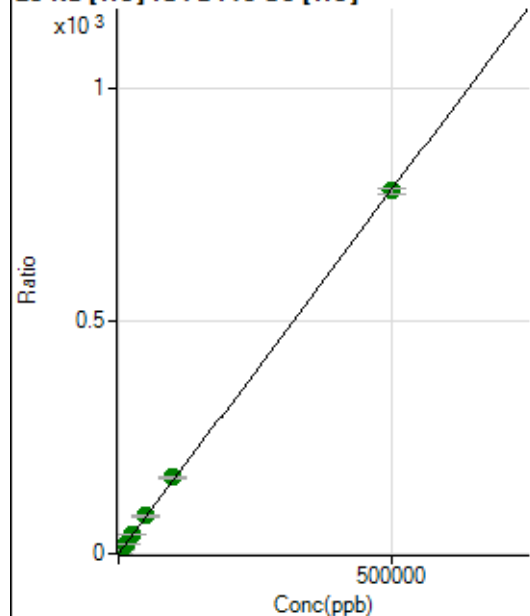
12 C [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			4555600.01		A	0.4
2	☐			4744494.29		A	0.7
3	☐			5471229.68		A	0.9
4	☐			5835089.58		A	1.1
5	☐			6212896.97		A	0.4
6	☐			7637805.64		A	2.2
7	☐			7425213.71		A	3.7
8	☐			6536784.95		A	1.2

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			48279.90		P	0.5
2	☐			50083.21		P	0.9
3	☐			55025.59		P	1.3
4	☐			62419.43		P	1.7
5	☐			66146.92		P	0.3
6	☐			82722.01		P	0.6
7	☐			83408.76		P	1.4
8	☐			74868.69		P	1.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	11699.37	0.0674	P	0.6
2	☐	500.000	488.157	145105.12	0.8317	P	1.6
3	☐	5000.000	5269.321	1459436.22	8.3179	A	3.2
4	☐	12500.000	13271.373	3532084.41	20.8473	A	4.1
5	☐	25000.000	26246.562	6963272.55	41.1636	A	1.3
6	☐	50000.000	52366.798	13790763.33	82.0619	A	4.4
7	☐	100000.00	105273.35	28619743.00	164.9016	A	3.1
8	☐	500000.00	498624.35	133171744.6	780.8003	A	1.9

$$y = 0.0016 * x + 0.0674$$

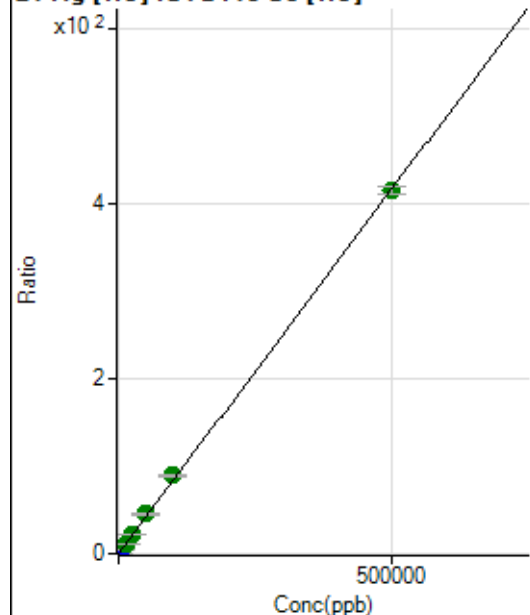
$$R = 0.9999$$

$$DL = 0.7252$$

$$BEC = 43.03$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	266.68	0.0015	P	10.5
2	☐	500.000	498.932	72855.49	0.4175	P	2.9
3	☐	5000.000	5330.396	780139.21	4.4459	P	0.3
4	☐	12500.000	13877.466	1960760.11	11.5722	A	2.1
5	☐	25000.000	27054.953	3816168.53	22.5593	A	0.4
6	☐	50000.000	54353.579	7615685.50	45.3203	A	4.0
7	☐	100000.00	107543.83	15562805.73	89.6691	A	2.3
8	☐	500000.00	497915.38	70806614.08	415.1519	A	2.0

$$y = 8.3378\text{E-}004 * x + 0.0015$$

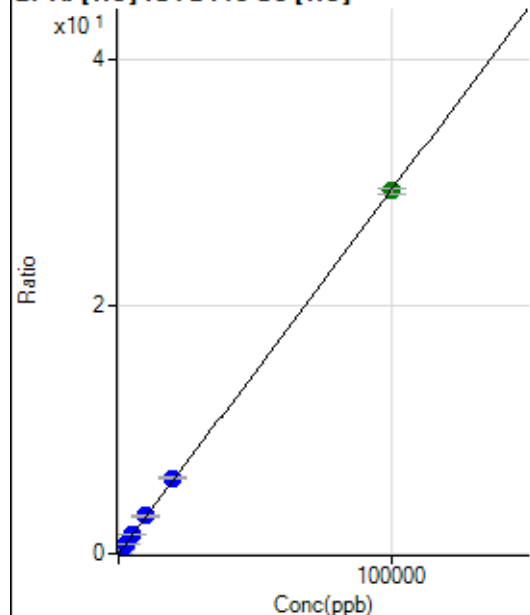
$$R = 0.9999$$

$$DL = 0.5799$$

$$BEC = 1.841$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	71.66	0.0004	P	3.2
2	☐	20.000	21.272	1163.24	0.0067	P	0.8
3	☐	1000.000	1071.498	55358.85	0.3155	P	0.7
4	☐	2500.000	2716.482	135406.32	0.7992	P	1.7
5	☐	5000.000	5273.137	262359.97	1.5510	P	2.1
6	☐	10000.000	10460.338	516968.63	3.0763	P	4.1
7	☐	20000.000	20758.814	1059477.94	6.1045	P	2.0
8	☐	100000.00	99782.419	5004671.04	29.3413	A	1.7

$$y = 2.9405\text{E-}004 * x + 4.1275\text{E-}004$$

$$R = 1.0000$$

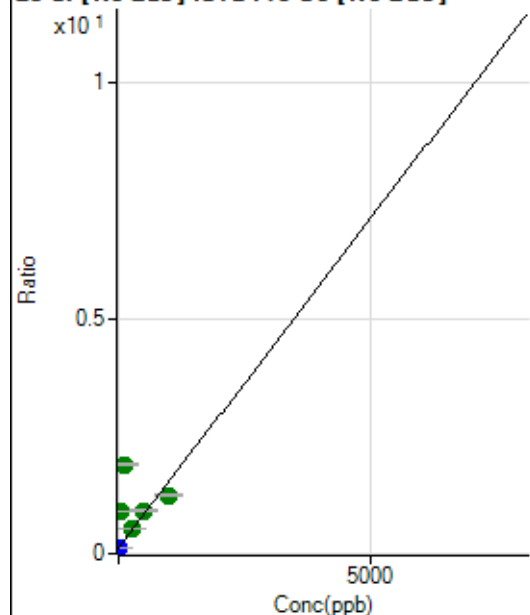
$$DL = 0.1367$$

$$BEC = 1.404$$

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	793010.46	0.1258	P	1.4
2	☐	10.000	9.169	862675.16	0.1386	P	6.3
3	☐	50.000	542.438	5679404.90	0.8869	A	0.6
4	☐	125.000	1264.369	11878491.50	1.9000	A	1.2
5	☐	250.000	289.786	3252645.45	0.5324	A	2.0
6	☐	500.000	562.533	5713497.18	0.9151	A	3.9
7	☐	1000.000	791.752	7891009.12	1.2368	A	2.3
8	☐			2892593.34	0.4686	A	0.7

$$y = 0.0014 * x + 0.1258$$

$$R = 0.3814$$

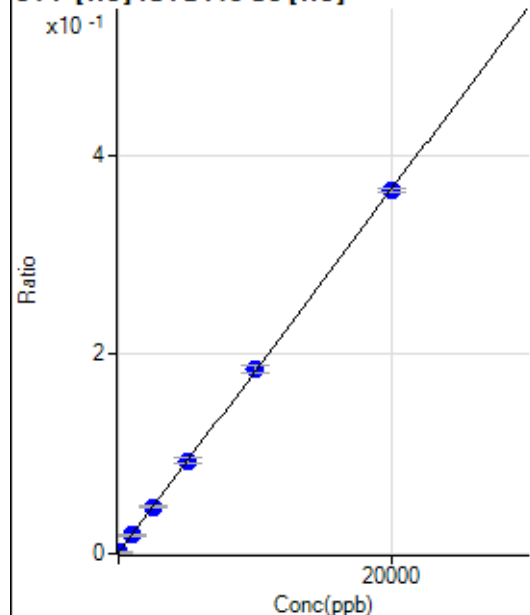
$$DL = 3.899$$

$$BEC = 89.64$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-7.733	125.00	0.0007	P	16.8
2	☐	0.000	7.733	175.00	0.0010	P	20.7
3	☐	1000.000	964.790	3242.13	0.0185	P	8.2
4	☐	2500.000	2543.196	8010.76	0.0473	P	3.7
5	☐	5000.000	5051.568	15745.08	0.0931	P	6.3
6	☐	10000.000	10141.099	31256.57	0.1860	P	3.8
7	☐	20000.000	19912.920	63246.84	0.3644	P	1.1
8	☐			177.78	0.0010	P	23.7

$$y = 1.8256E-005 * x + 8.6047E-004$$

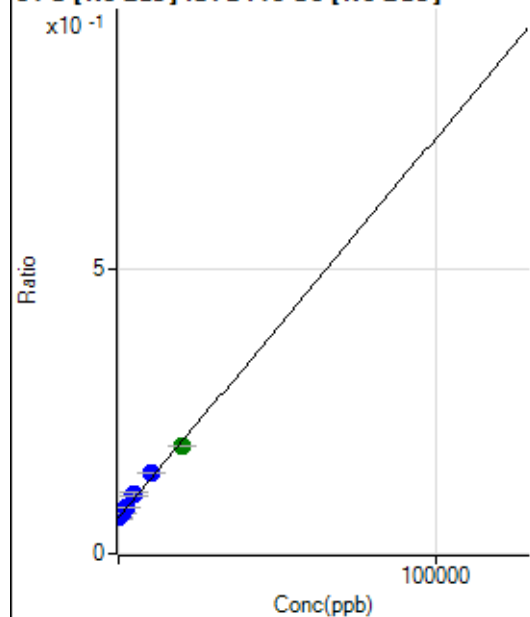
$$R = 1.0000$$

$$DL = 26.98$$

$$BEC = 47.13$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	-102.868	396135.50	0.0628	P	1.5
2	☐	0.000	102.868	399618.89	0.0642	P	5.6
3	☐	1000.000	1166.391	456738.04	0.0713	P	0.6
4	☐	2500.000	2770.699	513032.94	0.0821	P	0.9
5	☐	5000.000	6203.315	641309.68	0.1050	P	4.5
6	☐	10000.000	11839.795	891433.80	0.1428	P	1.4
7	☐	20000.000	18737.117	1205611.27	0.1890	A	0.5
8	☐			366121.46	0.0593	P	2.1

$$y = 6.6943\text{E-}006 * x + 0.0635$$

$$R = 0.9910$$

$$DL = 1018$$

$$BEC = 9489$$

Weight: <None>

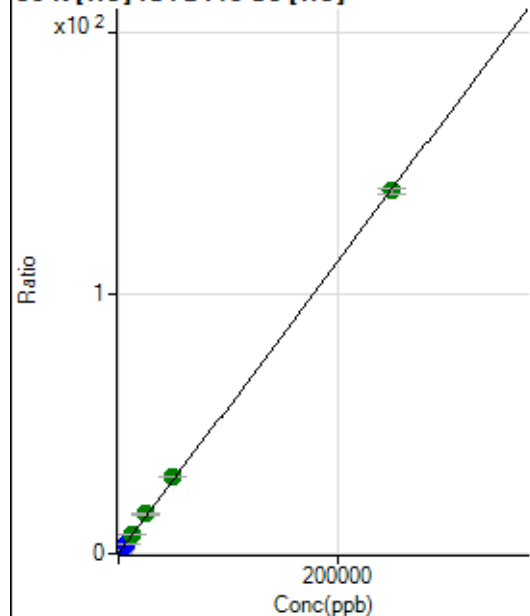
Min Conc: 0

35 Cl [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			104047.56		P	1.8
2	☐			104539.81		P	0.6
3	☐			106224.09		P	0.8
4	☐			108015.37		P	0.8
5	☐			108051.59		P	1.7
6	☐			117405.06		P	0.8
7	☐			129924.27		P	1.1
8	☐			121781.80		P	1.0

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			597.25		P	13.0
2	☐			555.58		P	10.2
3	☐			577.81		P	18.0
4	☐			558.36		P	6.5
5	☐			577.80		P	11.2
6	☐			644.47		P	13.0
7	☐			691.70		P	6.7
8	☐			725.04		P	15.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	17830.87	0.1027	P	2.0
2	☐	500.000	491.512	65839.32	0.3775	P	1.7
3	☐	2500.000	2591.384	272222.69	1.5513	P	0.8
4	☐	6250.000	6578.258	640497.24	3.7801	P	0.1
5	☐	12500.000	13202.379	1265826.93	7.4831	A	2.8
6	☐	25000.000	27016.817	2556341.72	15.2056	A	3.3
7	☐	50000.000	52731.282	5134229.50	29.5804	A	1.1
8	☐	250000.00	249207.84	23779864.42	139.4143	A	1.9

$$y = 5.5902E-004 * x + 0.1027$$

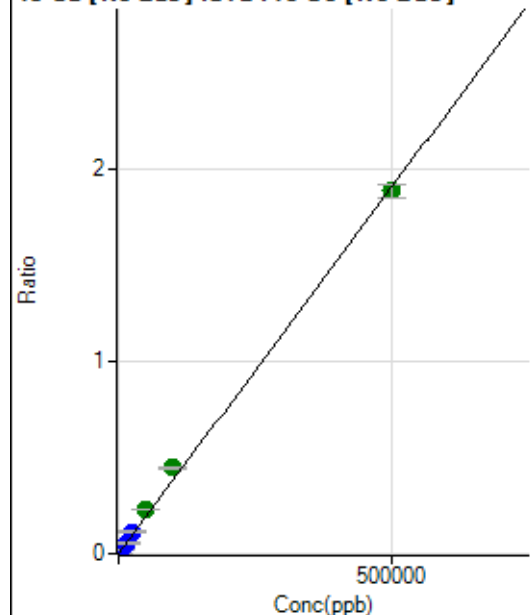
$$R = 0.9999$$

$$DL = 11.02$$

$$BEC = 183.7$$

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	169.56	0.0000	P	8.3
2	☐	500.000	514.419	12333.34	0.0020	P	6.5
3	☐	5000.000	5748.986	140099.06	0.0219	P	1.0
4	☐	12500.000	14390.956	342131.89	0.0547	P	0.7
5	☐	25000.000	29574.365	686345.77	0.1124	P	5.1
6	☐	50000.000	60542.009	1436899.88	0.2302	A	1.9
7	☐	100000.00	117161.38	2841662.46	0.4454	A	0.9
8	☐	500000.00	495230.02	11610413.09	1.8825	A	4.0

$$y = 3.8011\text{E-}006 * x + 2.6906\text{E-}005$$

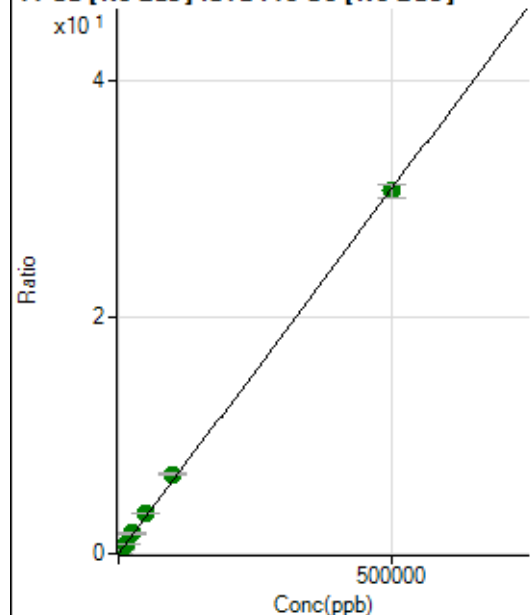
$$R = 0.9992$$

$$DL = 1.77$$

$$BEC = 7.078$$

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	11158.32	0.0018	P	1.0
2	☐	500.000	516.459	208865.83	0.0336	P	5.8
3	☐	5000.000	5607.854	2221642.35	0.3470	A	2.5
4	☐	12500.000	13958.673	5382544.38	0.8610	A	1.2
5	☐	25000.000	28432.176	10691230.49	1.7520	A	6.3
6	☐	50000.000	54933.049	21123138.81	3.3833	A	1.7
7	☐	100000.00	109316.27	42947397.06	6.7310	A	0.6
8	☐	500000.00	497429.26	188880140.2	30.6222	A	3.7

$$y = 6.1557\text{E-}005 * x + 0.0018$$

$$R = 0.9998$$

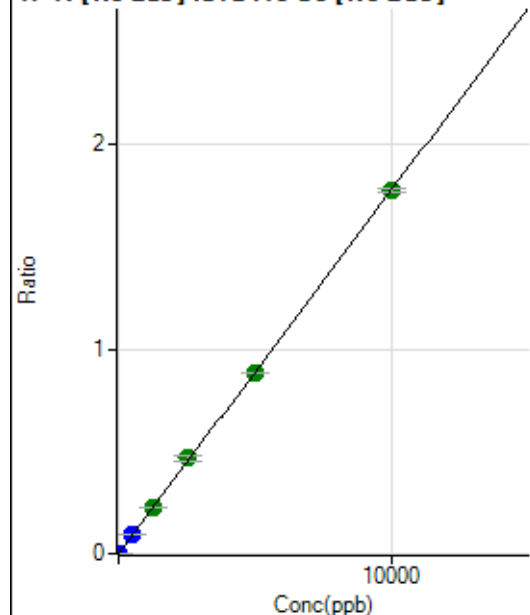
$$DL = 0.89$$

$$BEC = 28.75$$

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	311.12	0.0000	P	13.4
2	☐	5.000	4.823	5645.74	0.0009	P	6.3
3	☐	500.000	511.172	582507.35	0.0910	P	1.2
4	☐	1250.000	1283.888	1427844.58	0.2284	A	1.6
5	☐	2500.000	2639.539	2865431.18	0.4695	A	6.1
6	☐	5000.000	4968.919	5519209.37	0.8839	A	0.7
7	☐	10000.000	9975.861	11321980.55	1.7745	A	0.9
8	☐			12440.06	0.0020	P	16.9

$$y = 1.7787E-004 * x + 4.9381E-005$$

$$R = 0.9999$$

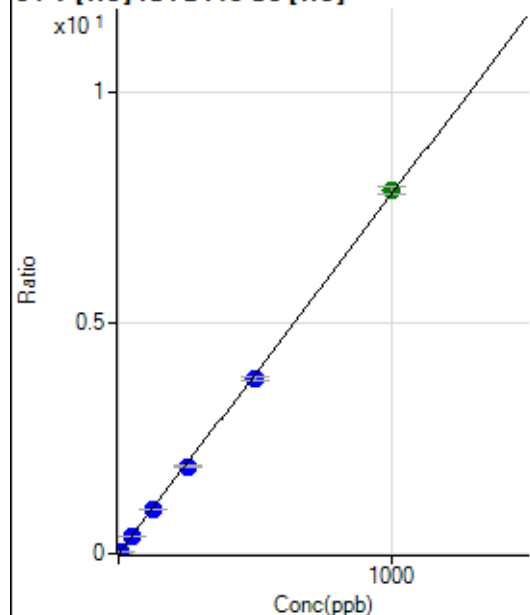
$$DL = 0.1119$$

$$BEC = 0.2776$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7.78	0.0000	P	25.1
2	☐	5.000	4.603	6250.31	0.0358	P	2.5
3	☐	50.000	48.804	66568.60	0.3794	P	0.6
4	☐	125.000	122.057	160735.85	0.9487	P	1.7
5	☐	250.000	242.066	318266.58	1.8815	P	1.4
6	☐	500.000	485.700	634615.93	3.7751	P	2.8
7	☐	1000.000	1009.563	1362012.95	7.8467	A	2.3
8	☐			2821.84	0.0165	P	38.6

$$y = 0.0078 * x + 4.4832E-005$$

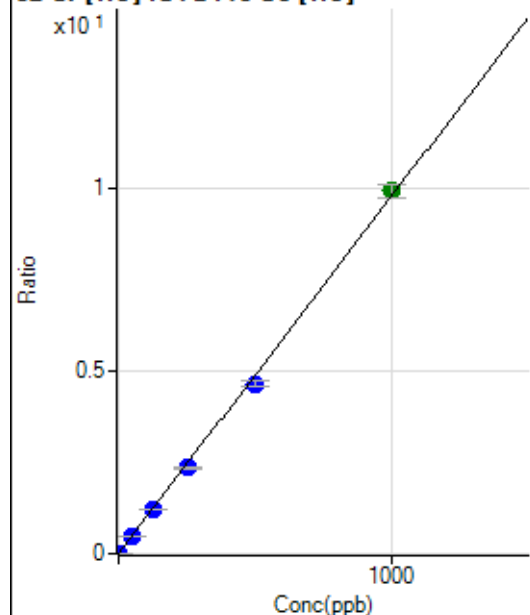
$$R = 0.9998$$

$$DL = 0.004337$$

$$BEC = 0.005768$$

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	540.02	0.0031	P	7.6
2	☐	2.000	1.945	3857.23	0.0221	P	3.4
3	☐	50.000	49.696	85734.27	0.4886	P	1.2
4	☐	125.000	124.257	206190.77	1.2170	P	2.5
5	☐	250.000	239.619	396511.53	2.3440	P	1.6
6	☐	500.000	475.377	780912.28	4.6472	P	4.1
7	☐	1000.000	1015.015	1721469.16	9.9191	A	3.8
8	☐			14457.96	0.0847	P	7.1

$$y = 0.0098 * x + 0.0031$$

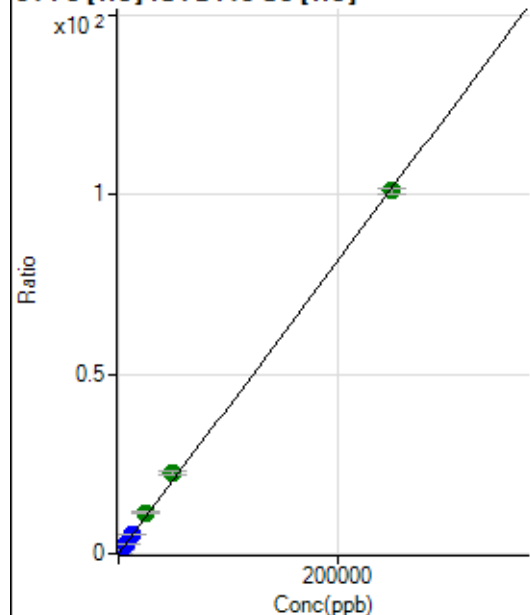
$$R = 0.9995$$

$$DL = 0.07244$$

$$BEC = 0.3182$$

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	559.28	0.0032	P	11.0
2	☐	50.000	51.519	4213.66	0.0242	P	2.4
3	☐	2500.000	2723.842	194758.33	1.1099	P	1.2
4	☐	6250.000	6806.643	469131.13	2.7688	P	1.6
5	☐	12500.000	13432.212	923730.10	5.4607	P	1.7
6	☐	25000.000	28082.490	1917890.55	11.4131	A	4.7
7	☐	50000.000	55449.473	3910586.34	22.5324	A	3.6
8	☐	250000.00	248539.09	17225173.07	100.9847	A	1.3

$$y = 4.0630E-004 * x + 0.0032$$

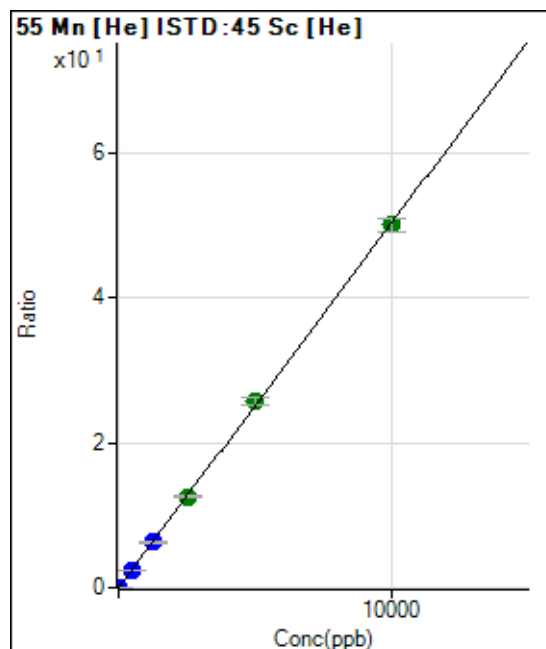
$$R = 0.9997$$

$$DL = 2.616$$

$$BEC = 7.93$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	42.22	0.0002	P	37.0
2	☐	1.000	0.984	905.59	0.0052	P	5.2
3	☐	500.000	497.595	439073.18	2.5022	P	0.8
4	☐	1250.000	1244.726	1060503.67	6.2589	P	1.9
5	☐	2500.000	2496.606	2123558.61	12.5536	A	1.3
6	☐	5000.000	5097.938	4307573.76	25.6335	A	4.1
7	☐	10000.000	9952.659	8684540.84	50.0439	A	3.8
8	☐			12267.77	0.0718	P	51.1

$$y = 0.0050 * x + 2.4345E-004$$

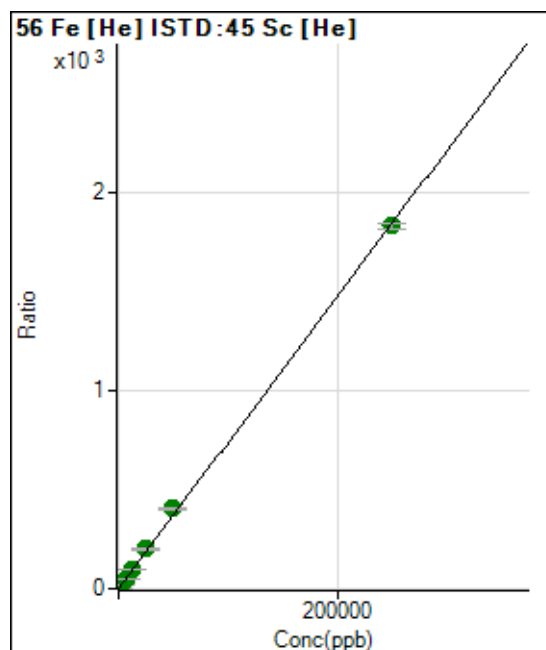
$$R = 0.9999$$

$$DL = 0.05376$$

$$BEC = 0.04842$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	2939.24	0.0169	P	3.4
2	☐	50.000	51.655	69316.14	0.3974	P	1.5
3	☐	2500.000	2776.032	3590283.15	20.4618	A	2.5
4	☐	6250.000	6937.674	8660643.88	51.1115	A	3.4
5	☐	12500.000	13527.949	16856232.90	99.6475	A	1.7
6	☐	25000.000	27541.938	34087447.29	202.8578	A	4.1
7	☐	50000.000	54784.803	70021955.27	403.4960	A	3.6
8	☐	250000.00	248717.49	312424892.1	1,831.771	A	1.9

$$y = 0.0074 * x + 0.0169$$

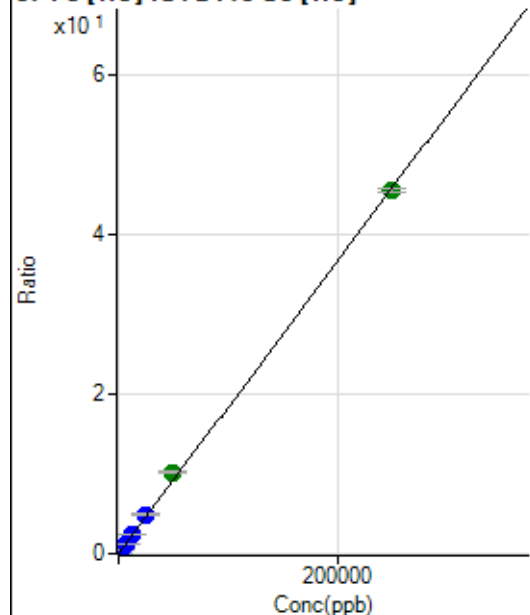
$$R = 0.9998$$

$$DL = 0.2352$$

$$BEC = 2.299$$

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	174.08	0.0010	P	13.0
2	☐	50.000	48.696	1729.77	0.0099	P	9.0
3	☐	2500.000	2707.538	87107.56	0.4964	P	1.6
4	☐	6250.000	6840.345	212233.52	1.2527	P	2.2
5	☐	12500.000	13477.710	417352.72	2.4672	P	0.8
6	☐	25000.000	26903.233	827538.46	4.9239	P	4.2
7	☐	50000.000	55893.667	1775048.03	10.2286	A	3.7
8	☐	250000.00	248565.22	7758483.45	45.4844	A	1.2

$$y = 1.8298E-004 * x + 0.0010$$

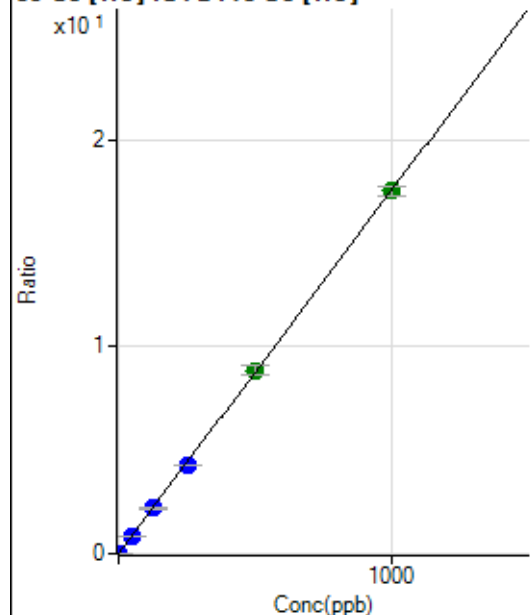
$$R = 0.9997$$

$$DL = 2.131$$

$$BEC = 5.479$$

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	97.78	0.0006	P	24.4
2	☐	1.000	0.965	3057.03	0.0175	P	4.6
3	☐	50.000	49.315	152093.92	0.8668	P	2.0
4	☐	125.000	125.463	373468.47	2.2043	P	1.9
5	☐	250.000	244.140	725504.76	4.2889	P	1.6
6	☐	500.000	504.916	1490553.21	8.8694	A	4.9
7	☐	1000.000	998.983	3045391.55	17.5477	A	2.7
8	☐			3877.03	0.0227	P	53.0

$$y = 0.0176 * x + 5.6284E-004$$

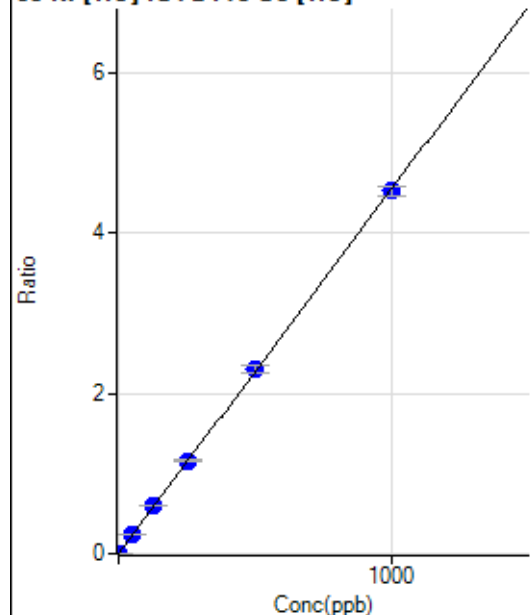
$$R = 1.0000$$

$$DL = 0.02342$$

$$BEC = 0.03204$$

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	53.33	0.0003	P	34.2
2	☐	1.000	0.924	786.70	0.0045	P	7.2
3	☐	50.000	53.407	42669.63	0.2432	P	0.7
4	☐	125.000	132.566	102191.10	0.6031	P	1.3
5	☐	250.000	254.761	196020.44	1.1588	P	1.7
6	☐	500.000	505.335	386309.83	2.2982	P	3.7
7	☐	1000.000	995.027	785313.68	4.5250	P	3.0
8	☐			2525.85	0.0148	P	19.3

$$y = 0.0045 * x + 3.0669E-004$$

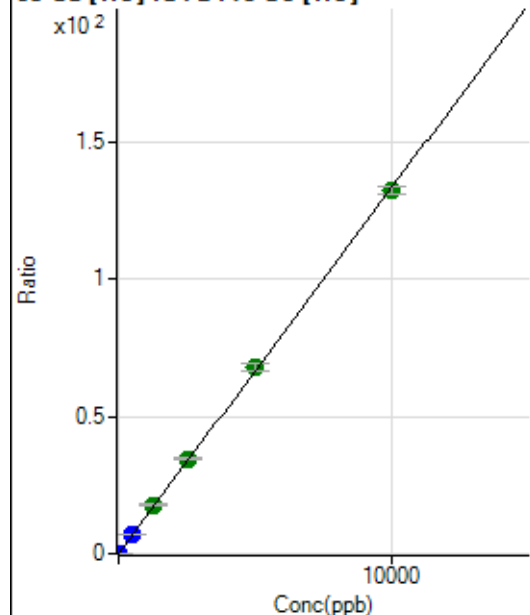
$$R = 0.9999$$

$$DL = 0.06914$$

$$BEC = 0.06744$$

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	766.69	0.0044	P	4.8
2	☐	2.000	2.051	5541.13	0.0318	P	2.8
3	☐	500.000	509.063	1191834.63	6.7919	P	1.4
4	☐	1250.000	1335.888	3018652.28	17.8162	A	1.4
5	☐	2500.000	2578.784	5817075.05	34.3881	A	2.0
6	☐	5000.000	5097.943	11426737.74	67.9768	A	3.8
7	☐	10000.000	9920.144	22958481.60	132.2726	A	2.0
8	☐			16701.32	0.0976	P	84.4

$$y = 0.0133 * x + 0.0044$$

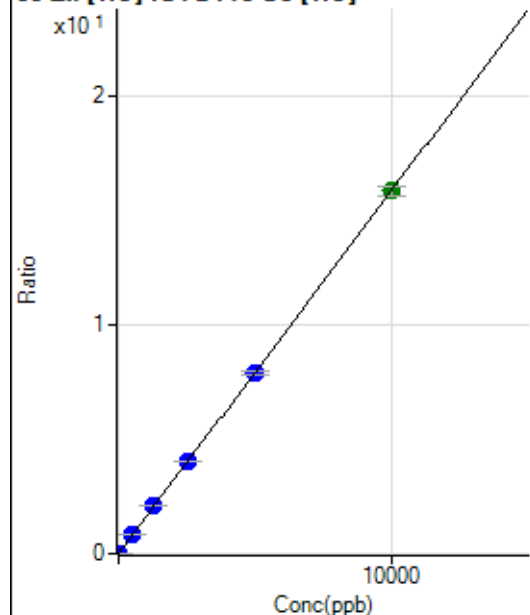
$$R = 0.9999$$

$$DL = 0.04776$$

$$BEC = 0.3312$$

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	281.12	0.0016	P	8.9
2	☐	2.000	2.420	952.26	0.0055	P	2.9
3	☐	500.000	527.319	147069.96	0.8381	P	2.3
4	☐	1250.000	1311.693	352834.58	2.0824	P	1.3
5	☐	2500.000	2529.137	678953.50	4.0137	P	0.7
6	☐	5000.000	4976.493	1327385.35	7.8960	P	2.8
7	☐	10000.000	9995.391	2752158.22	15.8576	A	2.7
8	☐			3456.41	0.0202	P	44.7

$$y = 0.0016 * x + 0.0016$$

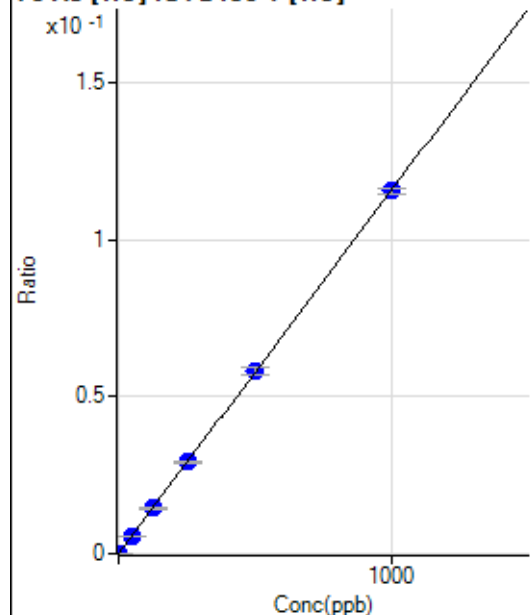
$$R = 1.0000$$

$$DL = 0.272$$

$$BEC = 1.021$$

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	5.00	0.0000	P	22.1
2	☐	1.000	1.000	174.02	0.0001	P	10.1
3	☐	50.000	48.652	8245.57	0.0056	P	1.5
4	☐	125.000	124.851	19949.72	0.0145	P	3.3
5	☐	250.000	251.664	39319.67	0.0292	P	1.0
6	☐	500.000	502.734	77630.78	0.0582	P	3.5
7	☐	1000.000	998.303	159192.73	0.1156	P	1.5
8	☐			194.03	0.0001	P	42.1

$$y = 1.1582E-004 * x + 3.5285E-006$$

$$R = 1.0000$$

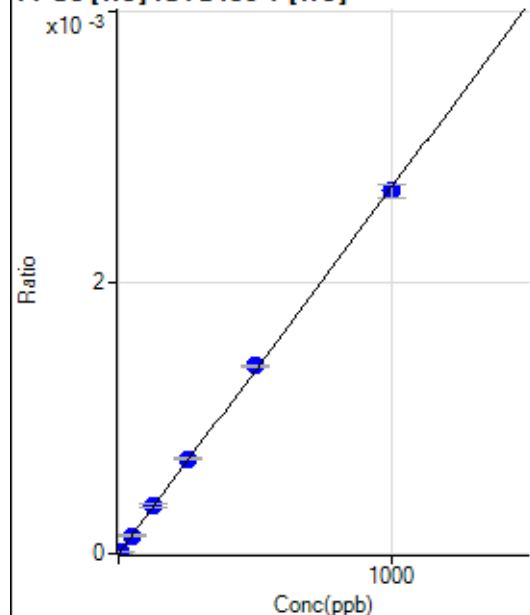
$$DL = 0.0202$$

$$BEC = 0.03047$$

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	☐	5.000	4.210	17.78	0.0000	P	21.0
3	☐	50.000	49.387	196.67	0.0001	P	17.4
4	☐	125.000	131.432	491.12	0.0004	P	9.9
5	☐	250.000	259.446	946.71	0.0007	P	2.3
6	☐	500.000	512.411	1847.92	0.0014	P	0.8
7	☐	1000.000	990.663	3687.19	0.0027	P	3.5
8	☐			8.89	0.0000	P	40.7

$$y = 2.7024\text{E-}006 * x + 8.0915\text{E-}007$$

$$R = 0.9998$$

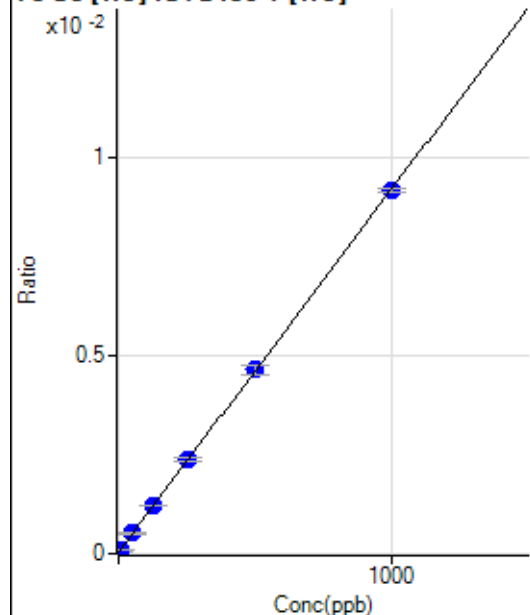
$$DL = 1.556$$

$$BEC = 0.2994$$

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	53.01	0.0000	P	7.1
2	☐	5.000	5.587	129.01	0.0001	P	2.0
3	☐	50.000	52.961	765.10	0.0005	P	7.5
4	☐	125.000	129.473	1691.61	0.0012	P	1.8
5	☐	250.000	257.372	3237.71	0.0024	P	3.6
6	☐	500.000	503.649	6213.01	0.0047	P	4.9
7	☐	1000.000	995.622	12635.26	0.0092	P	1.0
8	☐			83.68	0.0001	P	7.2

$$y = 9.1802\text{E-}006 * x + 3.7264\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.865$$

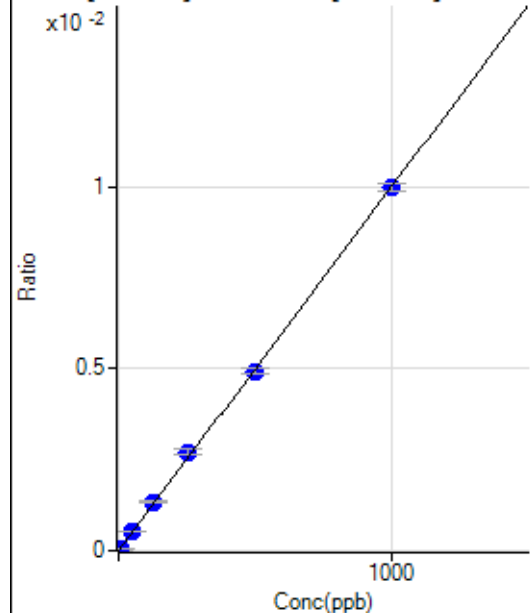
$$BEC = 4.059$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			42883.65		P	3.6
2	☐			42083.97		P	1.1
3	☐			42187.71		P	2.6
4	☐			39470.66		P	1.8
5	☐			39590.25		P	1.4
6	☐			39272.45		P	1.8
7	☐			39673.97		P	2.4
8	☐			40896.16		P	0.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	-22.92	0.0000	P	-20.
2	☐	5.000	5.643	782.87	0.0001	P	11.3
3	☐	50.000	53.465	8014.94	0.0005	P	1.3
4	☐	125.000	133.060	19465.87	0.0013	P	2.6
5	☐	250.000	270.198	38427.02	0.0027	P	5.5
6	☐	500.000	492.907	74073.11	0.0049	P	3.0
7	☐	1000.000	997.313	147815.98	0.0100	P	2.0
8	☐			450.38	0.0000	P	10.2

$$y = 9.9907E-006 * x - 1.5636E-006$$

$$R = 0.9997$$

$$DL = 0.09624$$

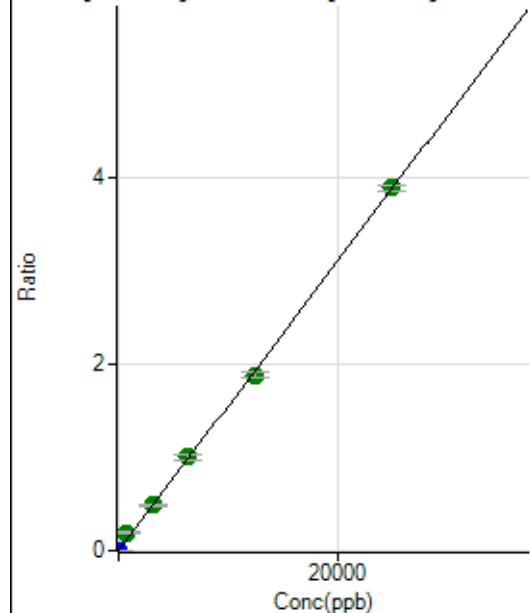
$$BEC = -0.1565$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			504.53		P	5.1
2	☐			484.95		P	0.7
3	☐			531.61		P	7.1
4	☐			461.20		P	5.2
5	☐			448.70		P	5.3
6	☐			443.29		P	8.4
7	☐			509.12		P	5.7
8	☐			498.70		P	1.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	755.60	0.0001	P	4.9
2	☐	1.000	1.055	3067.08	0.0002	P	10.7
3	☐	625.000	1261.380	2937845.81	0.1952	A	1.7
4	☐	3125.000	3133.426	7108640.09	0.4849	A	2.4
5	☐	6250.000	6465.826	14252080.18	1.0005	A	5.1
6	☐	12500.000	12132.053	28244431.54	1.8772	A	3.3
7	☐	25000.000	25113.054	57656071.43	3.8857	A	1.8
8	☐			32903.06	0.0023	P	34.2

$$y = 1.5473E-004 * x + 5.1480E-005$$

$$R = 0.9995$$

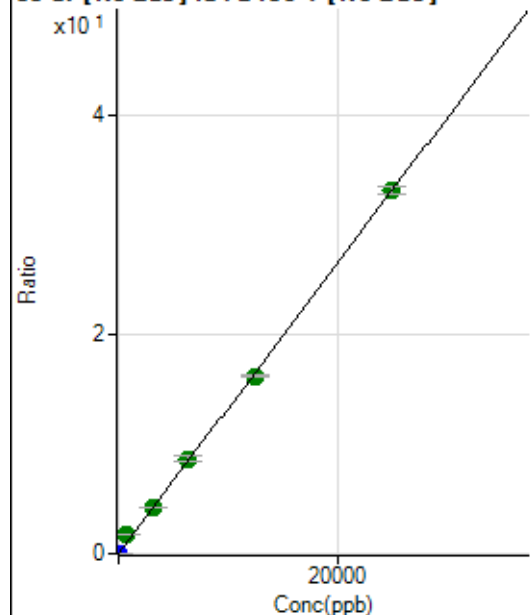
$$DL = 0.04902$$

$$BEC = 0.3327$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	161.12	0.0000	P	24.0
2	☐	1.000	1.025	19525.27	0.0014	P	8.5
3	☐	625.000	1286.768	25586214.81	1.7002	A	1.6
4	☐	3125.000	3203.159	62058810.42	4.2323	A	0.5
5	☐	6250.000	6553.657	123346823.5	8.6592	A	5.2
6	☐	12500.000	12248.263	243559111.0	16.1833	A	1.6
7	☐	25000.000	25023.640	490572838.7	33.0630	A	2.2
8	☐			277906.51	0.0194	P	33.8

$$y = 0.0013 * x + 1.0965E-005$$

$$R = 0.9996$$

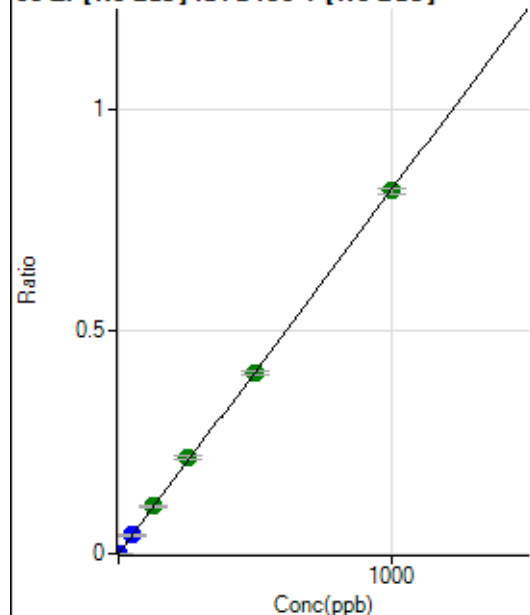
$$DL = 0.005964$$

$$BEC = 0.008298$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	475.02	0.0000	P	17.4
2	☐	1.000	0.998	12150.06	0.0008	P	4.9
3	☐	50.000	50.496	621608.20	0.0413	P	1.8
4	☐	125.000	129.966	1558028.15	0.1063	A	1.7
5	☐	250.000	264.463	3081363.29	0.2162	A	3.4
6	☐	500.000	496.717	6110447.01	0.4060	A	2.1
7	☐	1000.000	997.380	12097002.62	0.8153	A	1.7
8	☐			7172.21	0.0005	P	25.6

$$y = 8.1738E-004 * x + 3.2303E-005$$

$$R = 0.9999$$

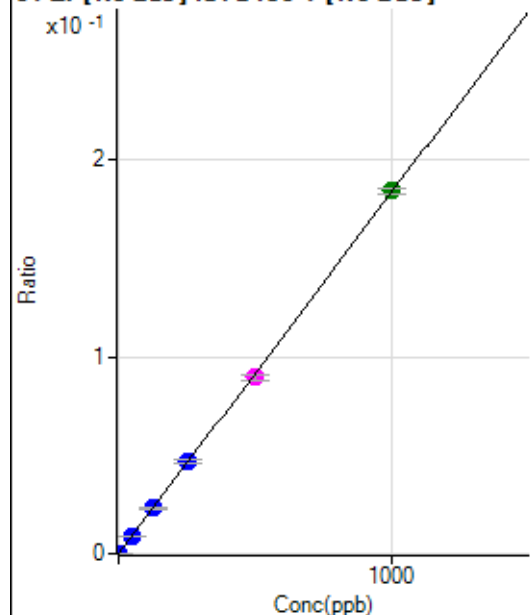
$$DL = 0.02067$$

$$BEC = 0.03952$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	100.00	0.0000	P	24.0
2	☐	1.000	0.950	2597.54	0.0002	P	3.8
3	☐	50.000	49.078	135618.71	0.0090	P	2.2
4	☐	125.000	126.242	339732.53	0.0232	P	1.9
5	☐	250.000	254.439	665369.97	0.0467	P	4.1
6	☐	500.000	487.948	1347220.44	0.0895	M	3.4
7	☐	1000.000	1004.807	2736026.21	0.1844	A	1.4
8	☐			1544.60	0.0001	P	17.0

$$y = 1.8349E-004 * x + 6.8009E-006$$

$$R = 0.9999$$

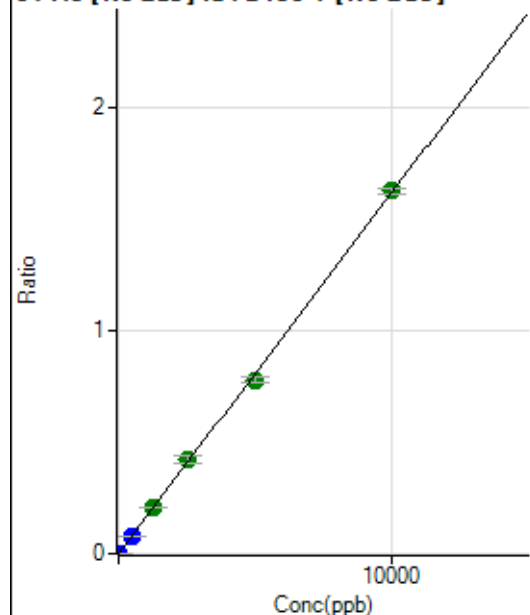
$$DL = 0.02672$$

$$BEC = 0.03706$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	205.56	0.0000	P	33.8
2	☐	5.000	6.096	14271.65	0.0010	P	9.5
3	☐	500.000	497.930	1210626.03	0.0804	P	2.2
4	☐	1250.000	1269.556	3007234.70	0.2051	A	0.8
5	☐	2500.000	2608.725	6000073.66	0.4214	A	6.7
6	☐	5000.000	4815.753	11704209.29	0.7779	A	3.5
7	☐	10000.000	10062.601	24119437.86	1.6255	A	1.3
8	☐			15501.46	0.0011	P	27.7

$$y = 1.6153E-004 * x + 1.3996E-005$$

$$R = 0.9997$$

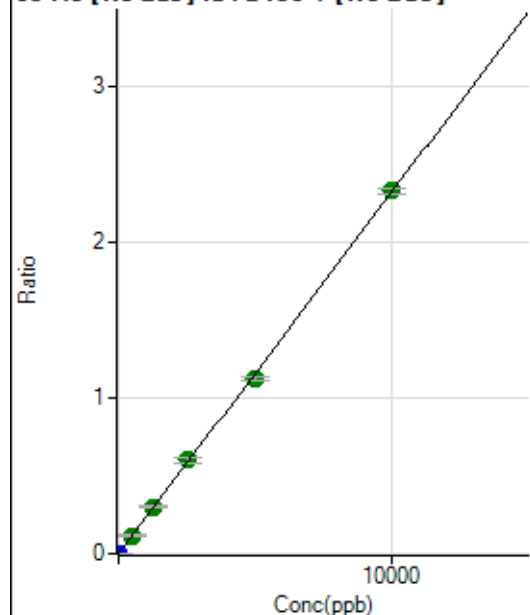
$$DL = 0.0879$$

$$BEC = 0.08665$$

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	97.23	0.0000	P	40.9
2	☐	5.000	5.189	17338.98	0.0012	P	6.8
3	☐	500.000	501.369	1752713.97	0.1165	A	2.7
4	☐	1250.000	1296.739	4416604.05	0.3012	A	2.1
5	☐	2500.000	2597.887	8595673.28	0.6035	A	5.4
6	☐	5000.000	4848.428	16945976.77	1.1262	A	3.1
7	☐	10000.000	10045.403	34624765.36	2.3335	A	1.4
8	☐			21954.56	0.0015	P	28.3

$$y = 2.3229E-004 * x + 6.6309E-006$$

$$R = 0.9998$$

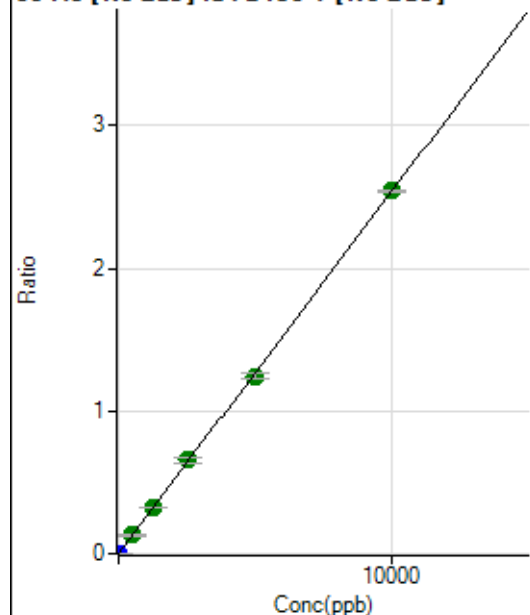
$$DL = 0.035$$

$$BEC = 0.02855$$

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	183.34	0.0000	P	28.6
2	☐	5.000	5.267	19311.19	0.0013	P	5.9
3	☐	500.000	506.724	1935257.59	0.1286	A	1.1
4	☐	1250.000	1284.890	4780212.78	0.3261	A	2.5
5	☐	2500.000	2580.040	9324366.53	0.6547	A	5.8
6	☐	5000.000	4903.970	18725586.53	1.2444	A	2.6
7	☐	10000.000	10023.308	37744813.69	2.5435	A	0.4
8	☐			36376.57	0.0025	P	17.6

$$y = 2.5376E-004 * x + 1.2516E-005$$

$$R = 0.9999$$

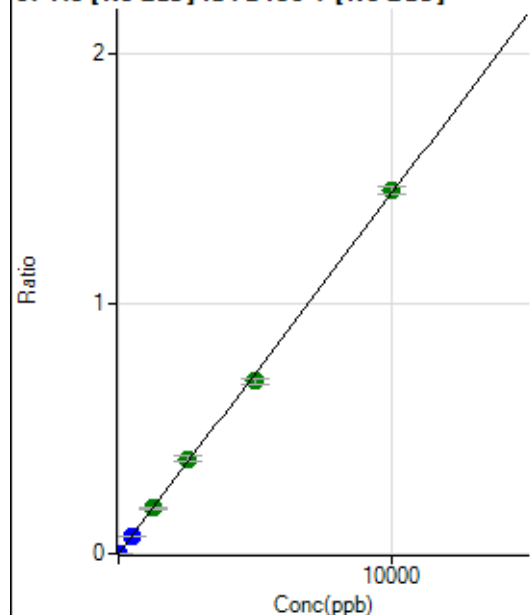
$$DL = 0.04238$$

$$BEC = 0.04932$$

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	41.67	0.0000	P	91.6
2	☐	5.000	5.027	10404.20	0.0007	P	9.4
3	☐	500.000	494.544	1073238.96	0.0713	P	1.8
4	☐	1250.000	1263.862	2672185.91	0.1823	A	2.2
5	☐	2500.000	2631.705	5404649.47	0.3795	A	6.0
6	☐	5000.000	4792.190	10397460.48	0.6911	A	3.5
7	☐	10000.000	10069.519	21545355.34	1.4521	A	2.1
8	☐			13799.21	0.0010	P	25.9

$$y = 1.4421\text{E-}004 * x + 2.8494\text{E-}006$$

$$R = 0.9996$$

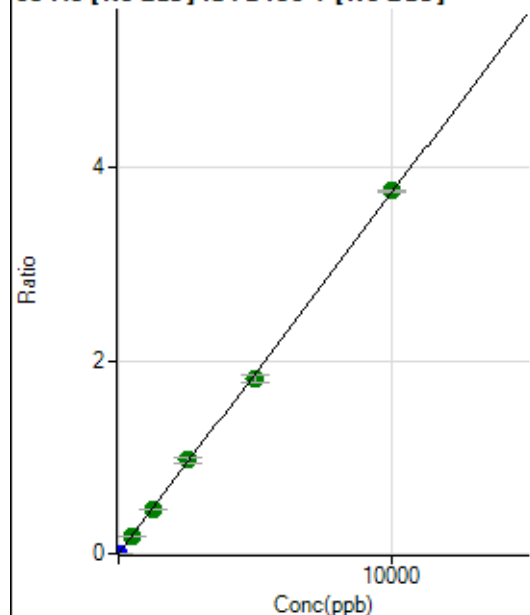
$$DL = 0.05428$$

$$BEC = 0.01976$$

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	119.45	0.0000	P	4.5
2	☐	5.000	5.142	27608.72	0.0019	P	9.5
3	☐	500.000	497.299	2800601.97	0.1861	A	2.4
4	☐	1250.000	1234.556	6774753.58	0.4620	A	1.5
5	☐	2500.000	2600.113	13857744.41	0.9731	A	6.0
6	☐	5000.000	4839.175	27243776.65	1.8110	A	4.5
7	☐	10000.000	10057.450	55853432.50	3.7639	A	0.8
8	☐			34672.00	0.0024	P	25.7

$$y = 3.7424\text{E-}004 * x + 8.1358\text{E-}006$$

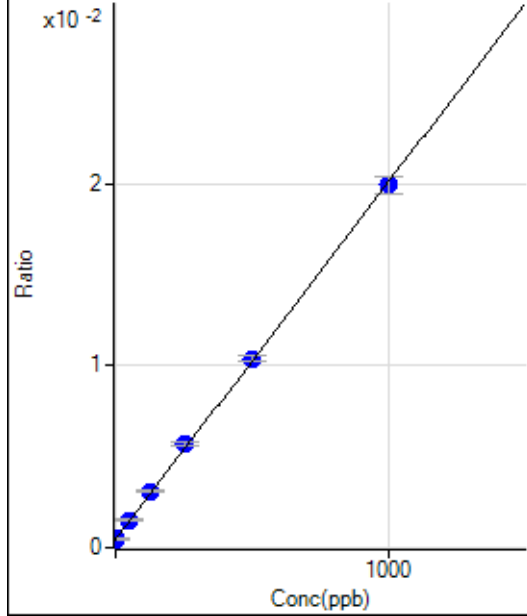
$$R = 0.9998$$

$$DL = 0.002905$$

$$BEC = 0.02174$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4525.86	0.0005	P	4.3
2	☐	1.000	0.677	4581.46	0.0005	P	6.9
3	☐	50.000	52.740	14388.49	0.0015	P	4.4
4	☐	125.000	132.872	30008.50	0.0031	P	3.7
5	☐	250.000	268.120	53945.35	0.0057	P	3.6
6	☐	500.000	505.432	101867.39	0.0104	P	3.2
7	☐	1000.000	991.633	200097.05	0.0199	P	4.5
8	☐			4300.80	0.0005	P	2.4

$$y = 1.9624\text{E-}005 * x + 4.7432\text{E-}004$$

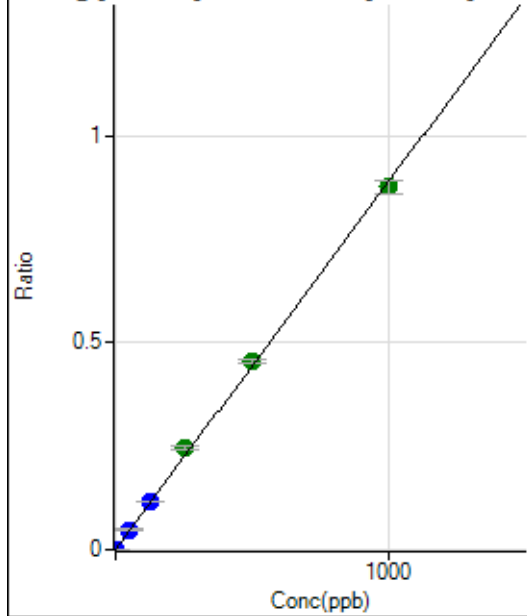
$$R = 0.9998$$

$$DL = 3.152$$

$$BEC = 24.17$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	350.02	0.0000	P	13.5
2	☐	1.000	1.106	9567.49	0.0010	P	7.0
3	☐	50.000	54.334	460754.42	0.0483	P	3.1
4	☐	125.000	130.456	1129203.60	0.1160	P	3.5
5	☐	250.000	276.903	2314876.57	0.2461	A	3.1
6	☐	500.000	511.954	4459681.30	0.4550	A	1.9
7	☐	1000.000	986.399	8801011.91	0.8766	A	3.8
8	☐			11552.39	0.0012	P	7.0

$$y = 8.8863\text{E-}004 * x + 3.6634\text{E-}005$$

$$R = 0.9995$$

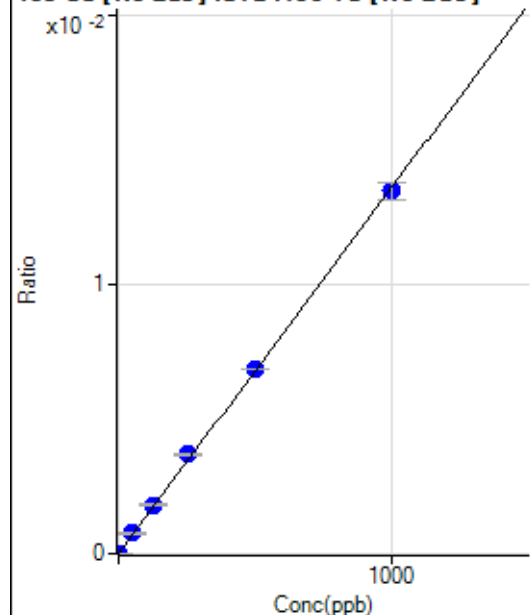
$$DL = 0.01666$$

$$BEC = 0.04123$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	25.00	0.0000	P	73.0
2	☐	1.000	1.266	186.12	0.0000	P	12.3
3	☐	50.000	55.228	7174.18	0.0008	P	5.5
4	☐	125.000	133.303	17655.85	0.0018	P	1.7
5	☐	250.000	270.796	34615.75	0.0037	P	0.2
6	☐	500.000	503.762	67072.10	0.0068	P	0.3
7	☐	1000.000	991.620	135160.42	0.0135	P	5.1
8	☐			101.39	0.0000	P	49.1

$$y = 1.3578\text{E-}005 * x + 2.6379\text{E-}006$$

$$R = 0.9997$$

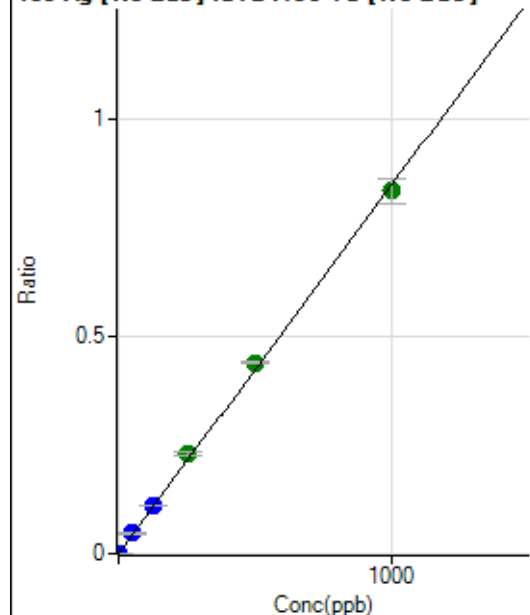
$$DL = 0.4257$$

$$BEC = 0.1943$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	313.90	0.0000	P	20.6
2	☐	1.000	1.095	8997.62	0.0010	P	11.2
3	☐	50.000	55.269	446718.37	0.0469	P	4.8
4	☐	125.000	130.370	1076145.75	0.1105	P	2.3
5	☐	250.000	271.566	2164511.68	0.2301	A	2.8
6	☐	500.000	518.568	4306999.75	0.4394	A	0.9
7	☐	1000.000	984.390	8366691.77	0.8341	A	7.1
8	☐			10793.45	0.0011	P	5.1

$$y = 8.4730\text{E-}004 * x + 3.2850\text{E-}005$$

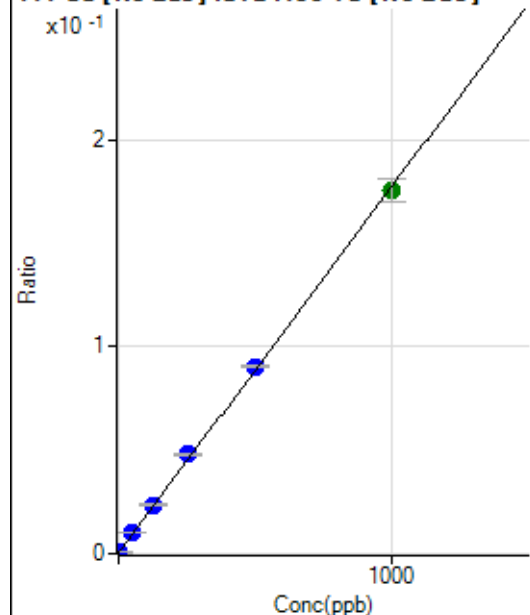
$$R = 0.9995$$

$$DL = 0.02394$$

$$BEC = 0.03877$$

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	3170.04	0.0003	P	4.4
2	☐	1.000	1.153	5036.62	0.0005	P	6.1
3	☐	50.000	55.466	96629.22	0.0101	P	3.9
4	☐	125.000	131.472	229529.73	0.0236	P	2.0
5	☐	250.000	269.957	451860.00	0.0480	P	2.6
6	☐	500.000	508.720	884477.89	0.0902	P	1.2
7	☐	1000.000	989.568	1757864.55	0.1752	A	6.4
8	☐			3986.87	0.0004	P	7.3

$$y = 1.7673\text{E-}004 * x + 3.3222\text{E-}004$$

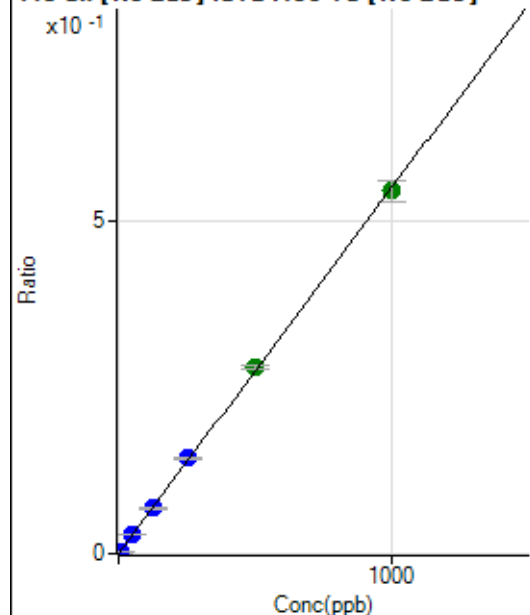
$$R = 0.9997$$

$$DL = 0.2503$$

$$BEC = 1.88$$

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	575.03	0.0001	P	20.4
2	☐	5.000	5.155	27144.27	0.0029	P	4.9
3	☐	50.000	51.782	271520.91	0.0285	P	3.7
4	☐	125.000	124.860	668022.01	0.0686	P	3.1
5	☐	250.000	261.514	1350684.65	0.1436	P	1.7
6	☐	500.000	509.973	2743696.78	0.2799	A	1.2
7	☐	1000.000	992.062	5463459.97	0.5445	A	6.1
8	☐			9184.02	0.0010	P	11.2

$$y = 5.4879\text{E-}004 * x + 6.0233\text{E-}005$$

$$R = 0.9998$$

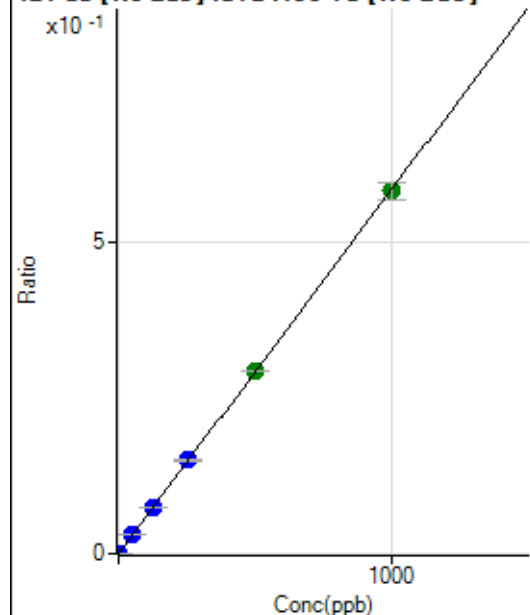
$$DL = 0.06724$$

$$BEC = 0.1098$$

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	58.33	0.0000	P	15.7
2	☐	2.000	2.009	11043.67	0.0012	P	11.0
3	☐	50.000	52.246	290980.50	0.0305	P	3.0
4	☐	125.000	128.257	729616.23	0.0749	P	1.2
5	☐	250.000	258.671	1420840.29	0.1511	P	2.1
6	☐	500.000	501.306	2869271.61	0.2927	A	0.2
7	☐	1000.000	996.660	5841122.66	0.5820	A	5.1
8	☐			27762.20	0.0030	P	2.9

$$y = 5.8393\text{E-}004 * x + 6.1205\text{E-}006$$

$$R = 1.0000$$

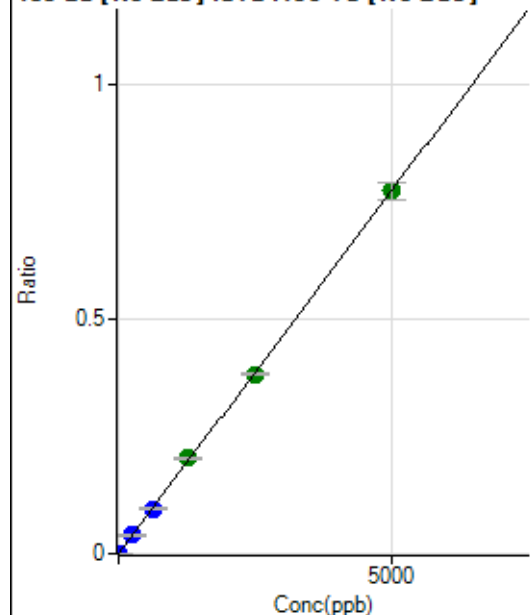
$$DL = 0.004927$$

$$BEC = 0.01048$$

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	16.67	0.0000	P	86.6
2	☐	10.000	9.907	14435.90	0.0015	P	5.3
3	☐	250.000	253.357	374291.54	0.0393	P	4.5
4	☐	625.000	621.875	938644.51	0.0964	P	1.8
5	☐	1250.000	1314.727	1916319.79	0.2037	A	2.4
6	☐	2500.000	2470.250	3752026.65	0.3828	A	1.1
7	☐	5000.000	4998.916	7775938.28	0.7746	A	4.6
8	☐			9926.46	0.0011	P	12.3

$$y = 1.5496\text{E-}004 * x + 1.7427\text{E-}006$$

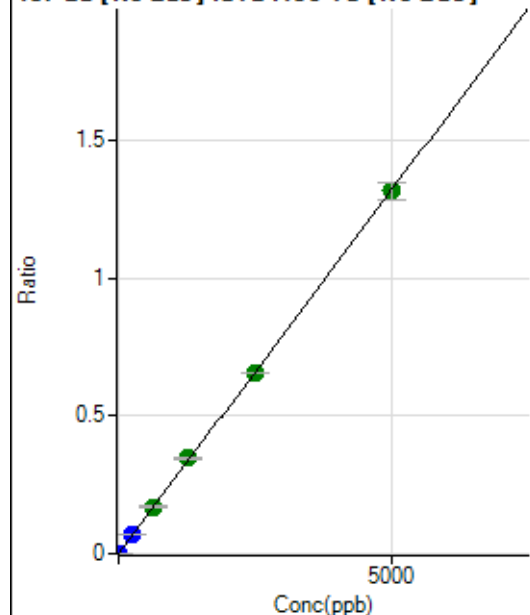
$$R = 0.9999$$

$$DL = 0.02923$$

$$BEC = 0.01125$$

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	52.78	0.0000	P	17.3
2	☐	10.000	9.996	24784.62	0.0026	P	8.2
3	☐	250.000	259.755	653313.62	0.0685	P	3.9
4	☐	625.000	643.103	1652251.94	0.1696	A	1.9
5	☐	1250.000	1316.675	3267051.18	0.3473	A	2.4
6	☐	2500.000	2482.095	6416907.39	0.6547	A	0.3
7	☐	5000.000	4989.533	13209651.60	1.3160	A	4.8
8	☐			17849.41	0.0019	P	14.5

$$y = 2.6376E-004 * x + 5.5232E-006$$

$$R = 0.9999$$

$$DL = 0.01089$$

$$BEC = 0.02094$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	124.
2	☐			15.56		P	173.
3	☐			42.22		P	24.1
4	☐			111.11		P	12.5
5	☐			177.78		P	37.0
6	☐			302.23		P	16.8
7	☐			613.36		P	5.0
8	☐			51.11		P	30.1

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐			0.00		P	
3	☐			4.44		P	43.4
4	☐			7.78		P	24.7
5	☐			11.11		P	34.6
6	☐			21.11		P	18.2
7	☐			31.11		P	22.3
8	☐			14.45		P	74.2

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	43.3
2	☐			19.44		P	65.5
3	☐			33.33		P	0.0
4	☐			66.67		P	12.5
5	☐			111.11		P	24.1
6	☐			152.78		P	6.3
7	☐			394.46		P	11.6
8	☐			1222.31		P	9.1

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	50.0
2	☐			1.11		P	173.
3	☐			6.67		P	50.0
4	☐			22.22		P	22.9
5	☐			40.00		P	22.0
6	☐			76.67		P	11.5
7	☐			175.56		P	15.5
8	☐			488.90		P	7.3

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			55.56		P	22.9
2	☐			58.33		P	86.9
3	☐			69.44		P	13.9
4	☐			105.56		P	16.4
5	☐			141.67		P	15.6
6	☐			180.56		P	18.7
7	☐			405.57		P	19.7
8	☐			1255.65		P	4.3

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			103.33		P	3.2
2	☐			75.56		P	15.5
3	☐			101.11		P	15.6
4	☐			102.22		P	19.9
5	☐			123.33		P	26.1
6	☐			173.34		P	5.1
7	☐			203.34		P	7.1
8	☐			718.92		P	8.6

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			47.22		P	53.9
2	☐			72.22		P	6.7
3	☐			91.67		P	15.7
4	☐			69.45		P	18.3
5	☐			86.11		P	14.8
6	☐			91.67		P	50.6
7	☐			83.34		P	26.5
8	☐			105.56		P	9.1

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			27.78		P	36.7
2	☐			25.56		P	49.4
3	☐			20.00		P	16.7
4	☐			20.00		P	0.0
5	☐			35.56		P	5.4
6	☐			31.11		P	12.4
7	☐			27.78		P	61.6
8	☐			48.89		P	3.9

172 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			58.34		P	37.8
2	☐			75.00		P	61.9
3	☐			66.67		P	33.1
4	☐			97.22		P	21.6
5	☐			80.56		P	46.6
6	☐			130.56		P	35.2
7	☐			213.90		P	26.5
8	☐			538.91		P	14.4

172 Yb [He] No available calibration points

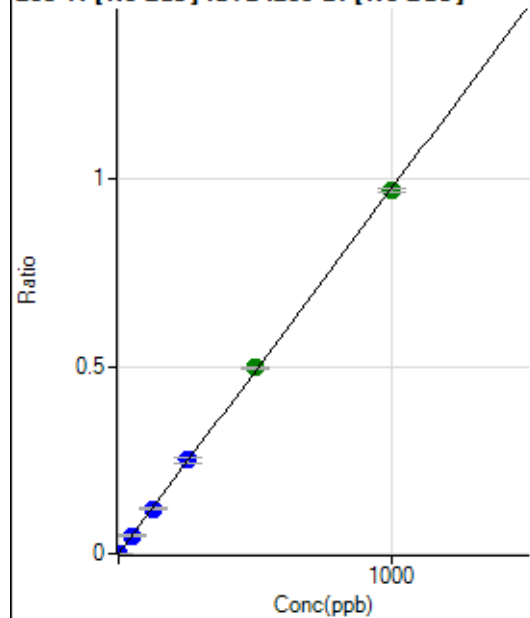
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			35.19		P	24.1
2	☐			20.37		P	41.7
3	☐			29.63		P	57.3
4	☐			25.93		P	65.5
5	☐			40.74		P	47.9
6	☐			48.15		P	37.1
7	☐			81.48		P	25.8
8	☐			198.15		P	25.1

176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1361.21		P	4.3
2	☐			1302.88		P	10.3
3	☐			2400.29		P	5.2
4	☐			4106.32		P	5.9
5	☐			6849.22		P	5.3
6	☐			13523.98		P	3.5
7	☐			25021.39		P	1.1
8	☐			1439.00		P	10.2

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7609.74		P	4.8
2	☐			7611.58		P	5.8
3	☐			8002.54		P	4.1
4	☐			8905.00		P	1.9
5	☐			9716.70		P	4.2
6	☐			12102.04		P	4.4
7	☐			17124.30		P	3.5
8	☐			7741.31		P	3.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	63.89	0.0000	P	41.6
2	☐	1.000	0.937	5009.43	0.0009	P	6.8
3	☐	50.000	49.784	263817.03	0.0486	P	2.2
4	☐	125.000	123.058	677252.19	0.1200	P	2.6
5	☐	250.000	257.919	1357882.87	0.2516	P	6.2
6	☐	500.000	509.057	2832449.17	0.4965	A	1.0
7	☐	1000.000	993.745	5451184.84	0.9693	A	1.0
8	☐			3878.59	0.0008	P	20.0

$$y = 9.7539\text{E-}004 * x + 1.1701\text{E-}005$$

$$R = 0.9999$$

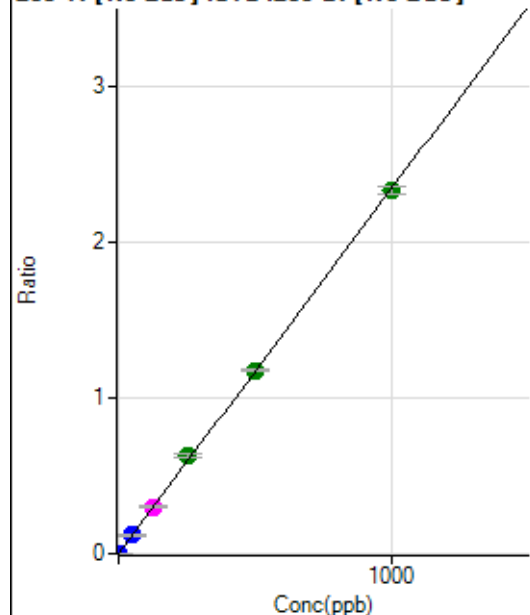
$$DL = 0.01498$$

$$BEC = 0.012$$

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	238.90	0.0000	P	8.1
2	☐	1.000	0.939	12122.66	0.0022	P	7.3
3	☐	50.000	50.133	637237.20	0.1173	P	2.2
4	☐	125.000	127.636	1685036.49	0.2987	M	4.6
5	☐	250.000	268.803	3394875.86	0.6289	A	5.7
6	☐	500.000	502.265	6703261.00	1.1751	A	1.6
7	☐	1000.000	993.831	13077131.98	2.3251	A	2.2
8	☐			8639.81	0.0018	P	23.0

$$y = 0.0023 * x + 4.3814E-005$$

$$R = 0.9998$$

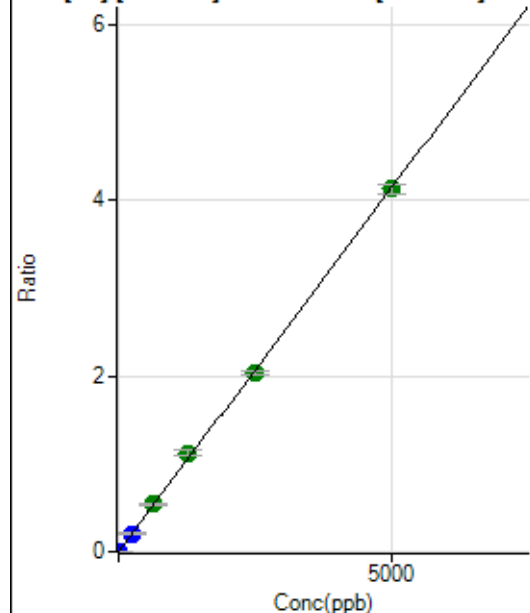
$$DL = 0.004571$$

$$BEC = 0.01873$$

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	601.88	0.0001	P	12.5
2	☐	1.000	0.927	4745.40	0.0009	P	6.4
3	☐	250.000	246.887	1108582.94	0.2042	P	5.2
4	☐	625.000	648.601	3026516.71	0.5364	A	1.6
5	☐	1250.000	1353.900	6044488.68	1.1195	A	5.5
6	☐	2500.000	2466.969	11635974.34	2.0398	A	2.3
7	☐	5000.000	4987.746	23184858.39	4.1240	A	2.9
8	☐			11374.40	0.0023	P	34.0

$$y = 8.2681E-004 * x + 1.1037E-004$$

$$R = 0.9997$$

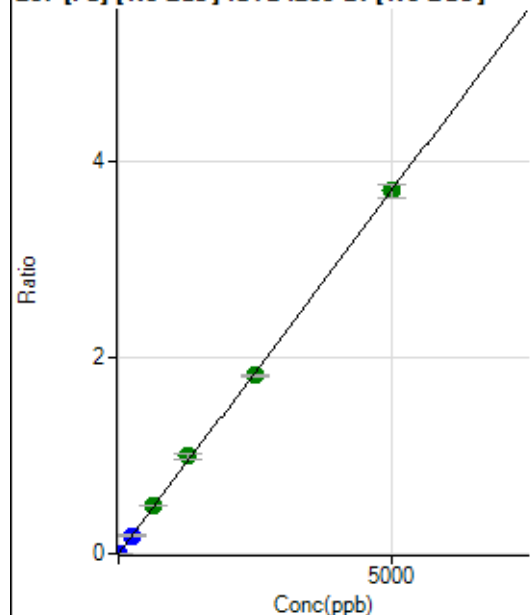
$$DL = 0.05005$$

$$BEC = 0.1335$$

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	475.95	0.0001	P	3.5
2	☐	1.000	0.954	4293.40	0.0008	P	7.3
3	☐	250.000	246.064	988697.94	0.1822	P	5.4
4	☐	625.000	651.582	2721593.90	0.4822	A	0.7
5	☐	1250.000	1342.214	5361392.54	0.9932	A	5.8
6	☐	2500.000	2451.154	10346503.82	1.8138	A	1.8
7	☐	5000.000	4998.244	20790017.36	3.6985	A	3.6
8	☐			10534.47	0.0022	P	37.6

$$y = 7.3994\text{E-}004 * x + 8.7271\text{E-}005$$

$$R = 0.9997$$

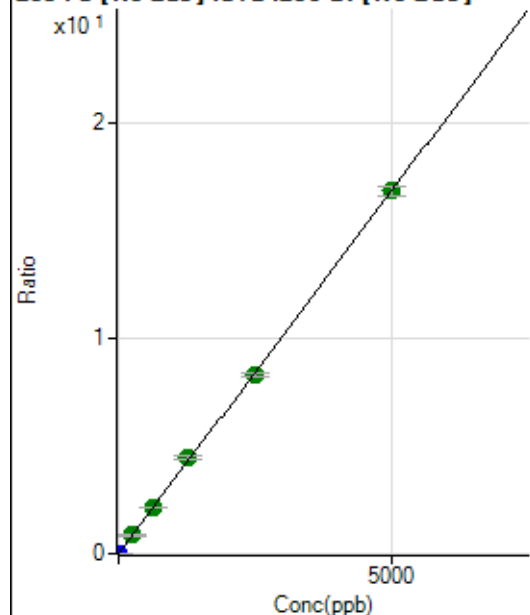
$$DL = 0.0124$$

$$BEC = 0.1179$$

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	2318.65	0.0004	P	1.2
2	☐	1.000	0.933	19289.37	0.0036	P	6.7
3	☐	250.000	251.674	4598732.35	0.8470	A	3.7
4	☐	625.000	642.363	12195693.62	2.1612	A	0.6
5	☐	1250.000	1320.965	23995563.67	4.4439	A	4.7
6	☐	2500.000	2459.146	47189043.77	8.2725	A	2.1
7	☐	5000.000	5000.431	94561824.57	16.8208	A	3.0
8	☐			46407.16	0.0095	P	36.8

$$y = 0.0034 * x + 4.2520\text{E-}004$$

$$R = 0.9998$$

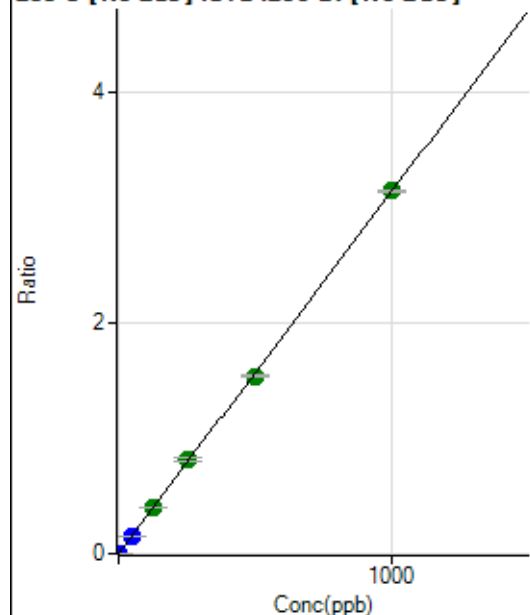
$$DL = 0.00458$$

$$BEC = 0.1264$$

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	80.56	0.0000	P	22.1
2	☐	1.000	0.909	15548.84	0.0029	P	7.2
3	☐	50.000	48.575	829273.13	0.1527	P	4.3
4	☐	125.000	125.048	2218910.40	0.3932	A	0.3
5	☐	250.000	261.182	4435835.86	0.8212	A	4.0
6	☐	500.000	490.260	8793420.25	1.5415	A	0.8
7	☐	1000.000	1002.140	17723121.40	3.1510	A	0.7
8	☐			5978.03	0.0012	P	47.3

$$y = 0.0031 * x + 1.4786E-005$$

$$R = 0.9999$$

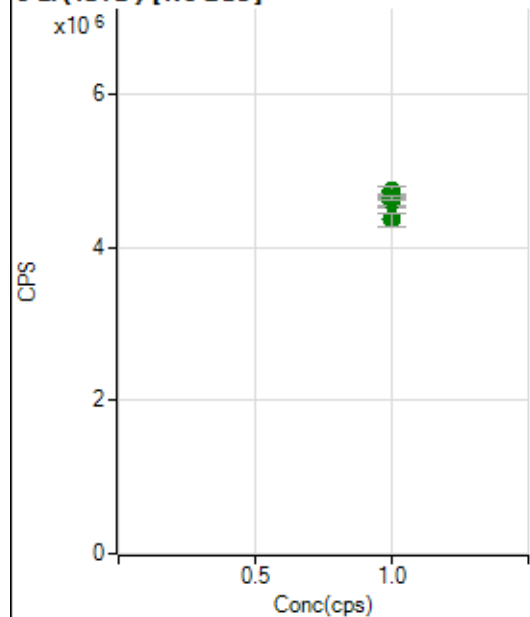
$$DL = 0.003125$$

$$BEC = 0.004703$$

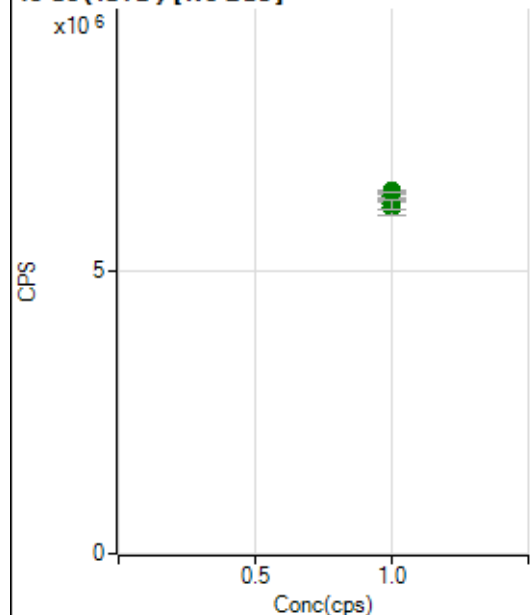
Weight: <None>

Min Conc: 0

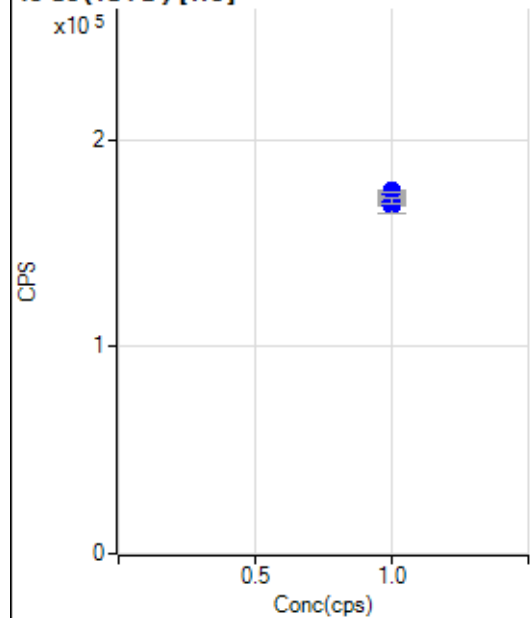
6 Li (ISTD) [No Gas]



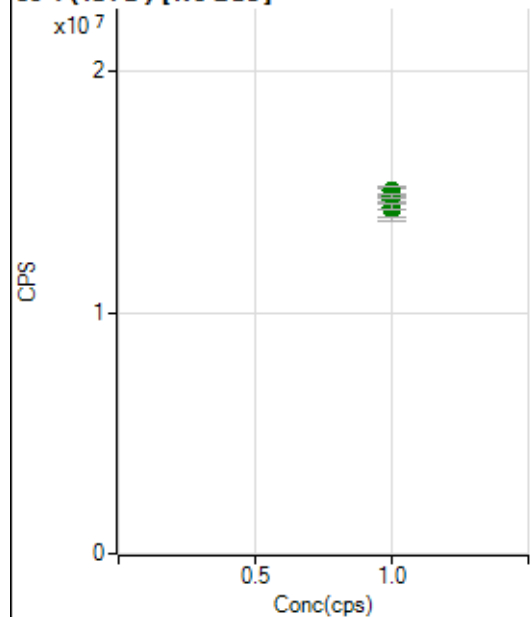
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4651745.26		A	0.4
2	☐	1.000		4602875.12		A	4.0
3	☐	1.000		4737351.80		A	2.5
4	☐	1.000		4725068.18		A	3.5
5	☐	1.000		4597171.40		A	2.9
6	☐	1.000		4605678.20		A	2.5
7	☐	1.000		4636418.58		A	1.0
8	☐	1.000		4364981.93		A	4.1

45 Sc (ISTD) [No Gas]

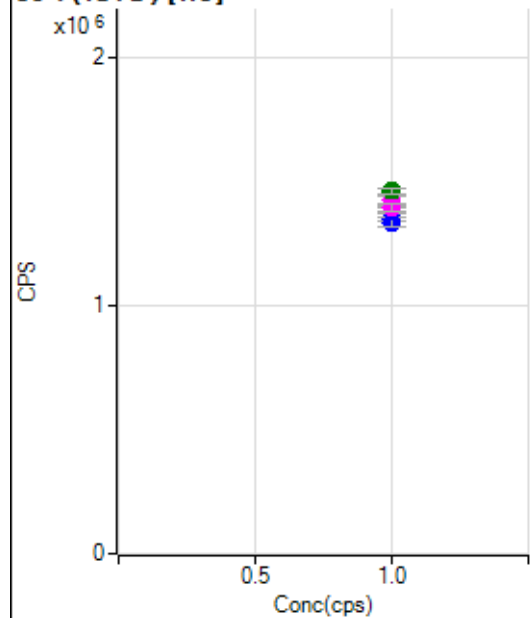
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6305327.75		A	1.0
2	☐	1.000		6236992.83		A	5.7
3	☐	1.000		6403439.70		A	0.6
4	☐	1.000		6251607.54		A	0.8
5	☐	1.000		6112645.33		A	4.2
6	☐	1.000		6244033.45		A	1.1
7	☐	1.000		6380539.84		A	0.3
8	☐	1.000		6172035.39		A	2.7

45 Sc (ISTD) [He]

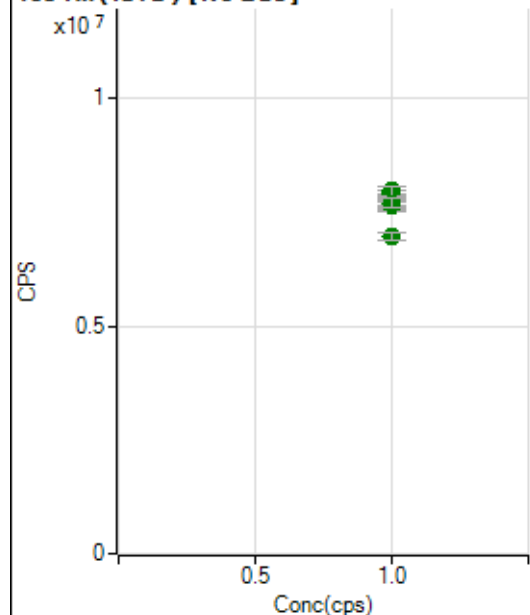
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		173632.01		P	0.8
2	☐	1.000		174452.55		P	1.2
3	☐	1.000		175473.99		P	0.5
4	☐	1.000		169441.06		P	1.0
5	☐	1.000		169161.69		P	0.2
6	☐	1.000		168211.69		P	4.0
7	☐	1.000		173579.06		P	1.0
8	☐	1.000		170583.65		P	1.2

89 Y (ISTD) [No Gas]

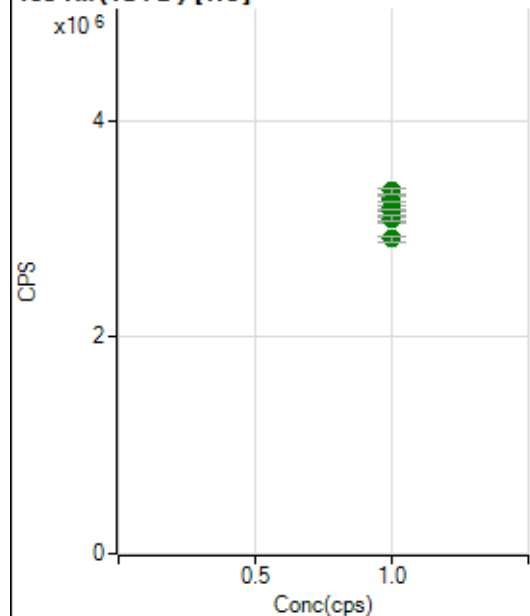
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14684340.20		A	1.4
2	☐	1.000		14355224.23		A	7.5
3	☐	1.000		15050351.86		A	1.2
4	☐	1.000		14664027.84		A	1.5
5	☐	1.000		14267287.70		A	4.6
6	☐	1.000		15053767.41		A	2.4
7	☐	1.000		14839956.03		A	1.2
8	☐	1.000		14371292.98		A	1.7

89 Y (ISTD) [He]

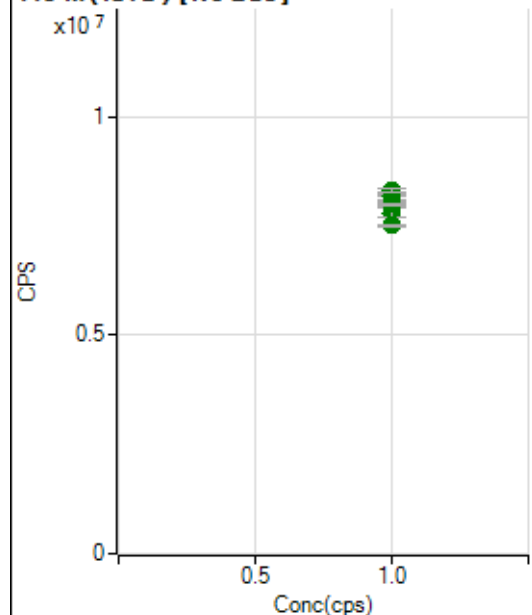
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1422917.05		M	3.9
2	☐	1.000		1457211.42		A	1.9
3	☐	1.000		1462533.40		A	1.3
4	☐	1.000		1380185.47		M	3.1
5	☐	1.000		1348709.82		P	1.2
6	☐	1.000		1333900.51		P	2.9
7	☐	1.000		1376782.16		P	0.4
8	☐	1.000		1393899.44		M	2.4

103 Rh (ISTD) [No Gas]

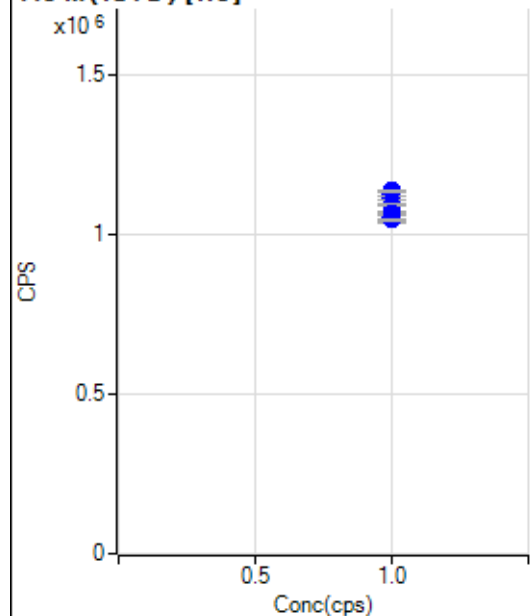
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7939534.99		A	1.4
2	☐	1.000		7815234.72		A	6.5
3	☐	1.000		7896597.31		A	2.1
4	☐	1.000		7971330.30		A	2.4
5	☐	1.000		7634327.08		A	3.5
6	☐	1.000		7698710.93		A	1.3
7	☐	1.000		7706738.11		A	2.4
8	☐	1.000		6958283.97		A	2.4

103 Rh (ISTD) [He]

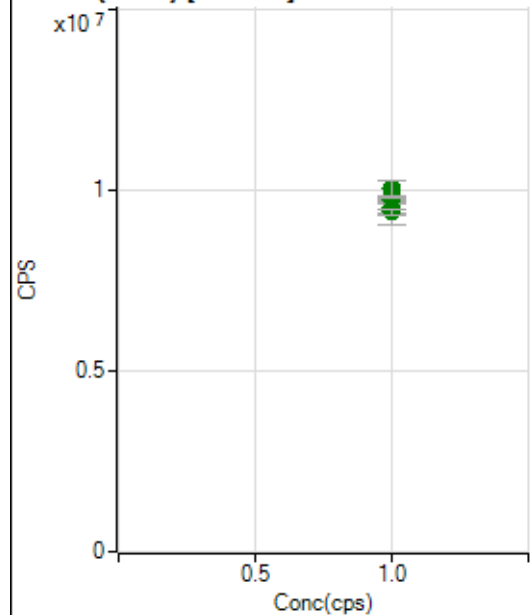
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3266787.66		A	2.8
2	☐	1.000		3280778.32		A	2.1
3	☐	1.000		3353449.88		A	1.3
4	☐	1.000		3207686.55		A	3.0
5	☐	1.000		3157325.23		A	1.9
6	☐	1.000		3085096.90		A	1.9
7	☐	1.000		3095394.43		A	1.7
8	☐	1.000		2908481.94		A	1.5

115 In (ISTD) [No Gas]

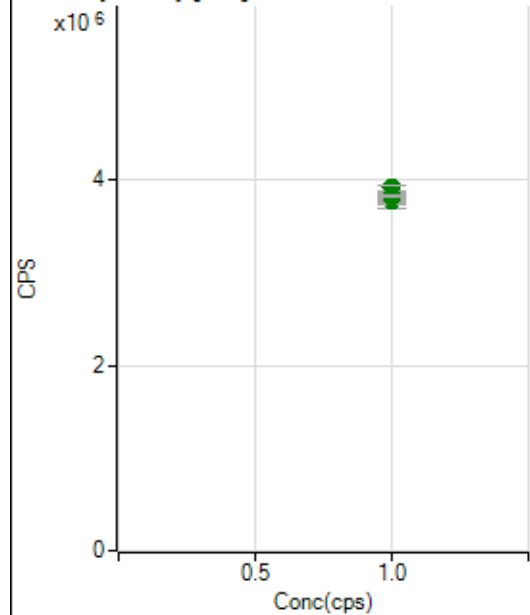
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8240269.62		A	0.5
2	☐	1.000		7955037.39		A	6.3
3	☐	1.000		8176424.81		A	2.2
4	☐	1.000		8305960.82		A	1.1
5	☐	1.000		7796729.52		A	2.8
6	☐	1.000		8061868.26		A	0.6
7	☐	1.000		7999352.16		A	0.8
8	☐	1.000		7519155.52		A	0.7

115 In (ISTD) [He]

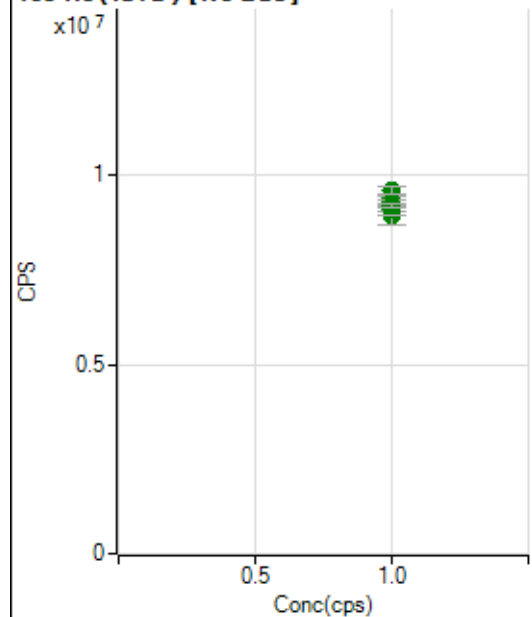
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1116449.57		P	1.0
2	☐	1.000		1128916.50		P	1.3
3	☐	1.000		1137849.67		P	0.6
4	☐	1.000		1092338.85		P	0.6
5	☐	1.000		1067366.70		P	0.5
6	☐	1.000		1055437.72		P	3.3
7	☐	1.000		1061317.50		P	0.5
8	☐	1.000		1047030.77		P	0.4

159 Tb (ISTD) [No Gas]

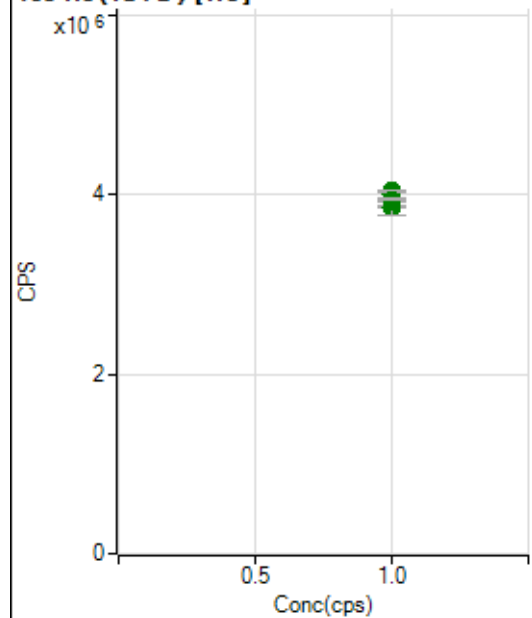
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9545196.38		A	1.5
2	☐	1.000		9417537.85		A	7.5
3	☐	1.000		9541557.78		A	3.0
4	☐	1.000		9742326.45		A	2.1
5	☐	1.000		9407510.55		A	1.1
6	☐	1.000		9801728.47		A	0.4
7	☐	1.000		10050560.41		A	4.2
8	☐	1.000		9407897.50		A	1.7

159 Tb (ISTD) [He]

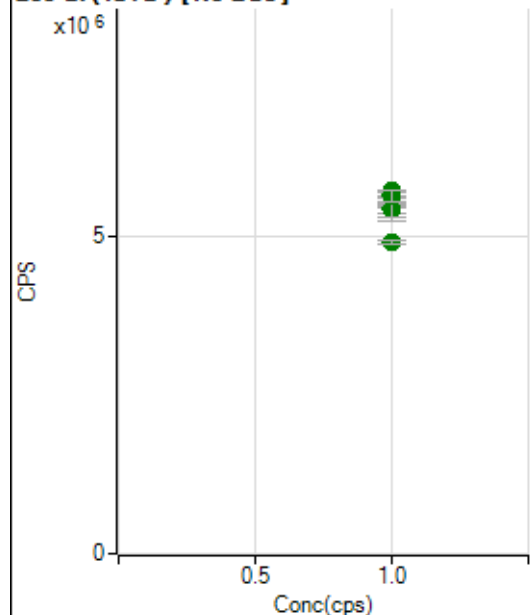
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3835349.11		A	1.5
2	☐	1.000		3776613.10		A	4.2
3	☐	1.000		3915198.80		A	1.5
4	☐	1.000		3819199.25		A	0.6
5	☐	1.000		3767671.30		A	0.8
6	☐	1.000		3842411.30		A	5.3
7	☐	1.000		3847095.18		A	1.4
8	☐	1.000		3824789.32		A	0.5

165 Ho (ISTD) [No Gas]

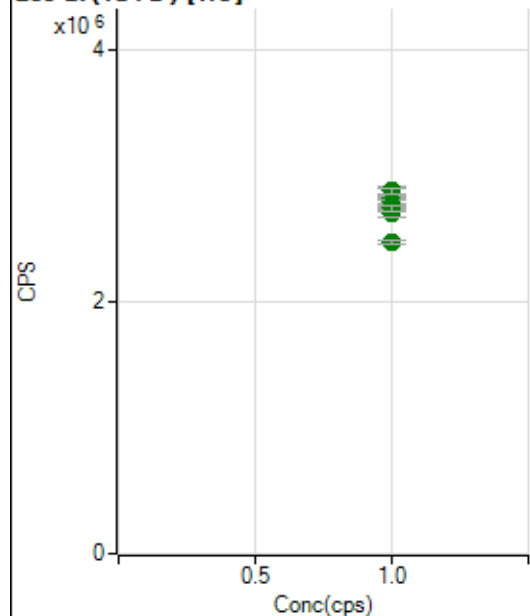
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9079581.02		A	1.3
2	☐	1.000		8938628.93		A	5.8
3	☐	1.000		9097162.62		A	3.6
4	☐	1.000		9285890.66		A	1.1
5	☐	1.000		9077350.20		A	2.6
6	☐	1.000		9412963.75		A	1.2
7	☐	1.000		9580504.99		A	2.2
8	☐	1.000		9200775.38		A	1.2

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3878415.91		A	1.8
2	☐	1.000		3917637.30		A	2.3
3	☐	1.000		3992976.85		A	1.4
4	☐	1.000		4037671.99		A	0.7
5	☐	1.000		3906498.97		A	2.5
6	☐	1.000		3854692.23		A	4.2
7	☐	1.000		3925413.83		A	0.6
8	☐	1.000		3940554.42		A	0.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5452874.57		A	0.6
2	☐	1.000		5430079.16		A	7.5
3	☐	1.000		5433173.70		A	2.8
4	☐	1.000		5643447.69		A	1.8
5	☐	1.000		5406573.46		A	4.2
6	☐	1.000		5704537.55		A	0.6
7	☐	1.000		5624880.27		A	2.8
8	☐	1.000		4897612.29		A	1.8

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2796717.35		A	1.6
2	☐	1.000		2819589.12		A	1.4
3	☐	1.000		2873716.62		A	2.4
4	☐	1.000		2875668.08		A	1.8
5	☐	1.000		2756230.24		A	1.1
6	☐	1.000		2694803.06		A	2.2
7	☐	1.000		2737543.78		A	2.0
8	☐	1.000		2465731.28		A	1.3

US EPA Tune Check Report

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP8020423-MS.b

Acq. Date-Time 2023-02-04 09:18:37

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		11070	110702.62			1.500	5.000
24		82765	827652.47			1.584	5.000
25		10962	109619.14			1.198	5.000
26		12278	122777.83			0.983	5.000
59		57894	578943.16			1.614	5.000
113		5603	56033.65			1.725	5.000
115		69881	698813.33			2.140	5.000
206		13643	136432.52			3.028	5.000
207		12371	123709.47			2.338	5.000
208		29754	297540.98			2.633	5.000
220		1	6.60			24.195	

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

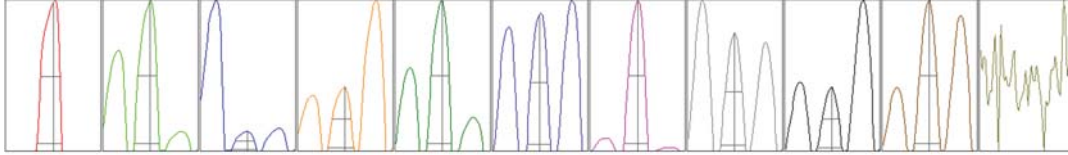
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	10889	10903	11223	11227	11110
24	81057	82240	82607	84590	83332
25	10855	10787	11054	11074	11040
26	12266	12107	12341	12432	12243
59	56868	56877	58657	58575	58494
113	5525	5493	5732	5651	5616
115	68300	68291	71438	70994	70383
206	13246	13140	13974	13927	13930
207	12163	11991	12580	12685	12436
208	29107	28728	30365	30438	30132

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	19100.41	9.05	8.90 - 9.10	
24	146004.91	24.00	23.90 - 24.10	
25	18803.50	25.00	24.90 - 25.10	
26	21667.98	26.00	25.90 - 26.10	
59	107729.89	59.00	58.90 - 59.10	
113	10899.11	113.00	112.90 - 113.10	
115	138662.78	115.05	114.90 - 115.10	
206	26361.23	206.00	205.90 - 206.10	
207	24237.84	207.00	206.90 - 207.10	
208	57172.66	208.00	207.90 - 208.10	
220			-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.61	0.779	0.900	
24	0.60	0.784	0.900	
25	0.61	0.788	0.900	
26	0.61	0.820	0.900	
59	0.56	0.775	0.900	
113	0.53	0.730	0.900	
115	0.52	0.758	0.900	
206	0.53	0.782	0.900	
207	0.52	0.774	0.900	
208	0.53	0.814	0.900	
220				

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	9.2 V	Deflect	15.4 V
Extract 2	-160.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-85 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	190 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9992	QP Bias	-4.0 V
Mass Offset	125	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	0.6 mm	Torch V	-1.0 mm
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EM

Discriminator	4.4 mV	Analog HV	2310 V	Pulse HV	1652 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		11374	113736.42			0.837	
89		12249	122491.75			1.549	
205		9280	92800.21			1.719	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	11470	11374	11451	11341	11233
89	12042	12302	12538	12234	12129
205	9123	9196	9500	9394	9187

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	9.2 V	Deflect	5.2 V
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Extract 2	-160.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-85 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	0.9992	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	0.6 mm	Torch V	-1.0 mm
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EM

Discriminator	4.4 mV	Analog HV	2310 V	Pulse HV	1652 V
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