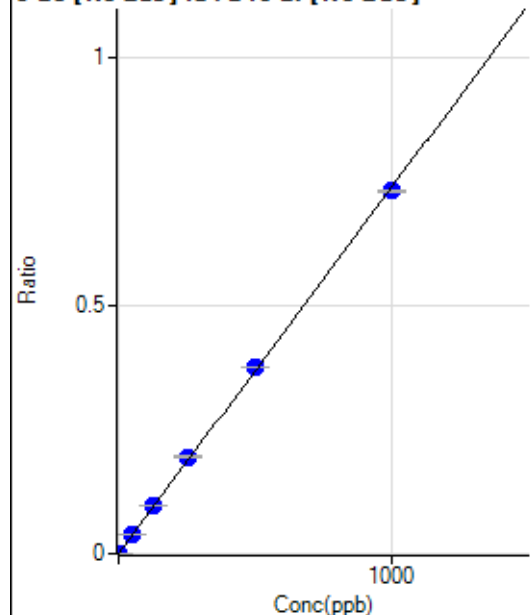


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8020120MS1.b\
Analysis File: P8020120MS1.batch.bin
DA Date-Time: 2020-02-02 21:31:04
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	005CALB.d	S00	2020-02-01 15:26:29
2	006CALS.d	S02	2020-02-01 15:29:36
3	007CALS.d	S03	2020-02-01 15:32:42
4	008CALS.d	S04	2020-02-01 15:35:49
5	009CALS.d	S05	2020-02-01 15:38:52
6	010CALS.d	S06	2020-02-01 15:41:52
7	011CALS.d	S07	2020-02-01 15:44:51
8	012CALS.d	S08	2020-02-01 15:47:52

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	28.66	0.0000	P	53.4
2	☐	1.000	0.910	538.57	0.0007	P	10.1
3	☐	50.000	52.161	30984.30	0.0386	P	0.4
4	☐	125.000	132.377	79183.12	0.0978	P	1.7
5	☐	250.000	264.599	158893.53	0.1955	P	0.9
6	☐	500.000	508.566	306433.57	0.3757	P	0.4
7	☐	1000.000	991.037	597201.70	0.7321	P	0.4
8	☐			187.97	0.0002	P	15.4

$$y = 7.3864\text{E-}004 * x + 3.8382\text{E-}005$$

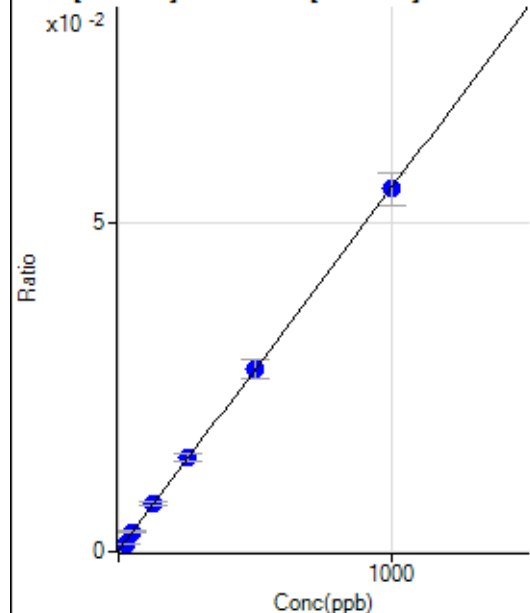
$$R = 0.9998$$

$$DL = 0.08325$$

$$BEC = 0.05196$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	108.65	0.0001	P	23.7
2	☐	25.000	20.137	951.85	0.0013	P	3.4
3	☐	50.000	52.844	2457.73	0.0031	P	7.8
4	☐	125.000	128.881	5871.36	0.0073	P	9.8
5	☐	250.000	257.224	11648.34	0.0143	P	9.5
6	☐	500.000	500.742	22630.95	0.0278	P	10.6
7	☐	1000.000	997.317	44983.04	0.0552	P	8.8
8	☐			8067.97	0.0103	P	7.9

$$y = 5.5159\text{E-}005 * x + 1.4479\text{E-}004$$

$$R = 0.9999$$

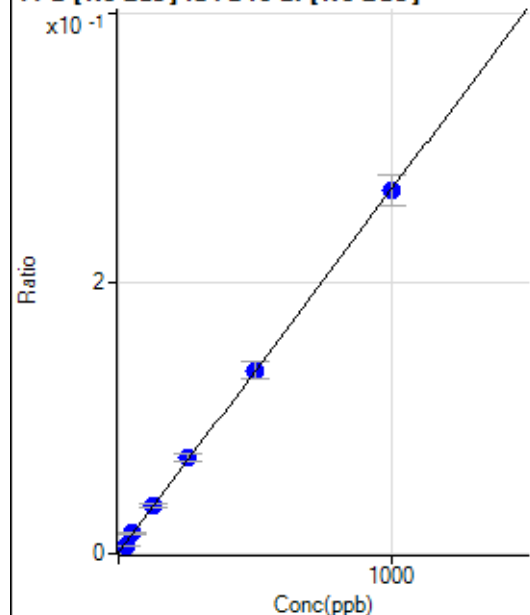
$$DL = 1.869$$

$$BEC = 2.625$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	500.58	0.0007	P	8.5
2	☐	25.000	20.332	4647.16	0.0061	P	4.9
3	☐	50.000	54.670	12333.43	0.0154	P	7.3
4	☐	125.000	129.404	28678.89	0.0354	P	7.8
5	☐	250.000	262.544	57862.60	0.0712	P	8.2
6	☐	500.000	501.212	110299.78	0.1353	P	9.3
7	☐	1000.000	995.590	218665.90	0.2681	P	8.5
8	☐			39077.35	0.0500	P	8.3

$$y = 2.6863E-004 * x + 6.6794E-004$$

$$R = 0.9999$$

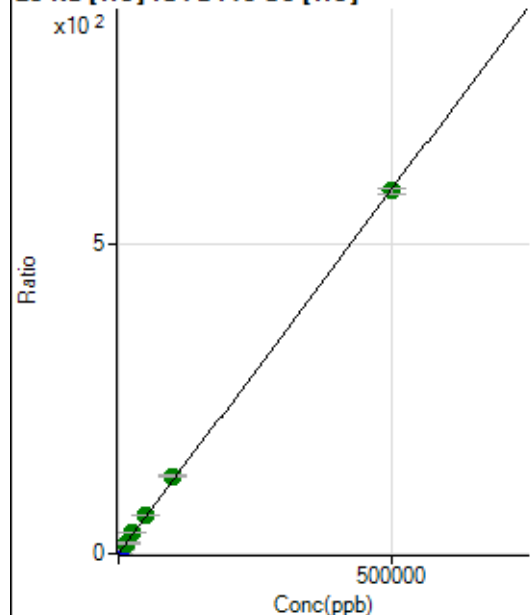
$$DL = 0.6333$$

$$BEC = 2.486$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	33731.05	0.3613	P	2.1
2	☐	500.000	540.558	92526.34	0.9964	P	3.0
3	☐	5000.000	5651.980	693776.34	7.0020	P	1.5
4	☐	12500.000	14159.083	1690277.68	16.9972	A	3.2
5	☐	25000.000	28041.188	3356467.65	33.3077	A	0.4
6	☐	50000.000	52759.887	6306998.45	62.3504	A	0.4
7	☐	100000.00	106643.99	13065740.48	125.6604	A	0.7
8	☐	500000.00	498195.11	57142096.42	585.7052	A	1.6

$$y = 0.0012 * x + 0.3613$$

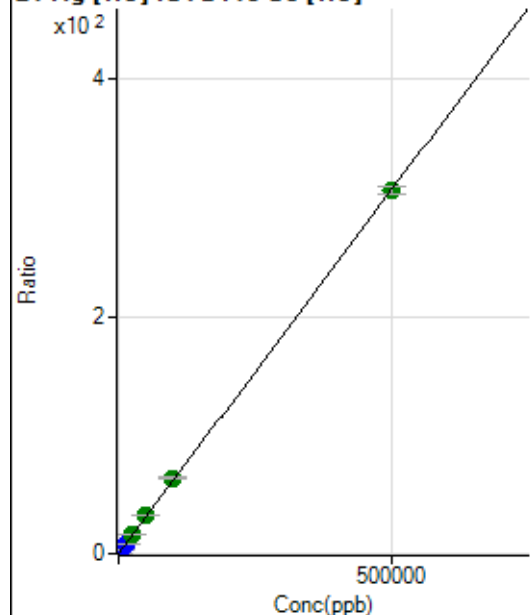
$$R = 0.9999$$

$$DL = 19.3$$

$$BEC = 307.5$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	202.78	0.0022	P	6.9
2	☐	500.000	537.354	30813.80	0.3318	P	2.2
3	☐	5000.000	5520.259	335707.06	3.3882	P	1.8
4	☐	12500.000	13948.514	851177.87	8.5579	P	1.5
5	☐	25000.000	27630.373	1708122.72	16.9501	A	0.2
6	☐	50000.000	52289.027	3244474.99	32.0753	A	2.0
7	☐	100000.00	104370.34	6656092.99	64.0210	A	2.1
8	☐	500000.00	498724.05	29843403.79	305.9102	A	2.0

$$y = 6.1338E-004 * x + 0.0022$$

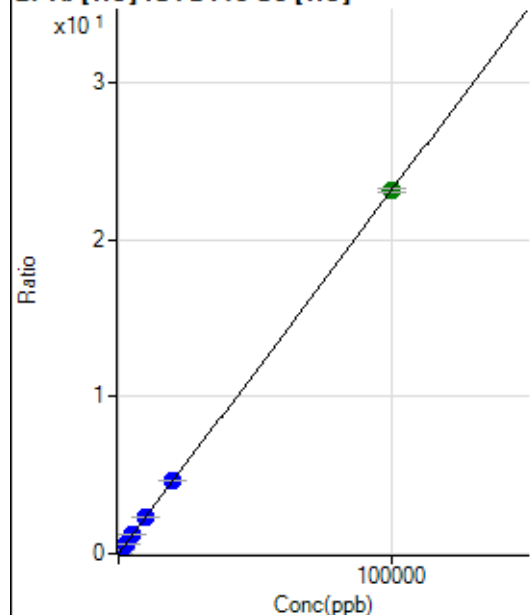
$$R = 1.0000$$

$$DL = 0.7329$$

$$BEC = 3.542$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	476.68	0.0051	P	13.5
2	☐	20.000	20.219	907.82	0.0098	P	5.4
3	☐	1000.000	1040.995	24338.26	0.2456	P	1.2
4	☐	2500.000	2679.319	62079.53	0.6242	P	1.6
5	☐	5000.000	5403.543	126313.24	1.2536	P	1.7
6	☐	10000.000	10229.726	239587.97	2.3687	P	1.2
7	☐	20000.000	20226.513	486442.80	4.6784	P	0.7
8	☐	100000.00	99906.655	2252581.34	23.0884	A	1.0

$$y = 2.3105E-004 * x + 0.0051$$

$$R = 1.0000$$

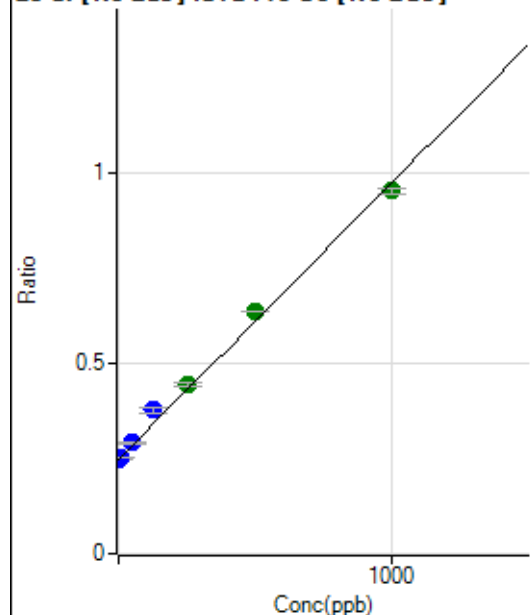
$$DL = 8.966$$

$$BEC = 22.1$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	564139.56	0.2476	P	1.5
2	☐	10.000	6.387	584534.01	0.2523	P	1.1
3	☐	50.000	58.242	709414.16	0.2898	P	1.0
4	☐	125.000	176.742	914913.75	0.3757	P	2.9
5	☐	250.000	269.182	1085160.82	0.4426	A	1.6
6	☐	500.000	535.650	1557832.42	0.6357	A	0.5
7	☐	1000.000	970.536	2366988.34	0.9507	A	1.7
8	☐			679694.04	0.2807	P	1.5

$$y = 7.2438\text{E-}004 * x + 0.2476$$

$$R = 0.9976$$

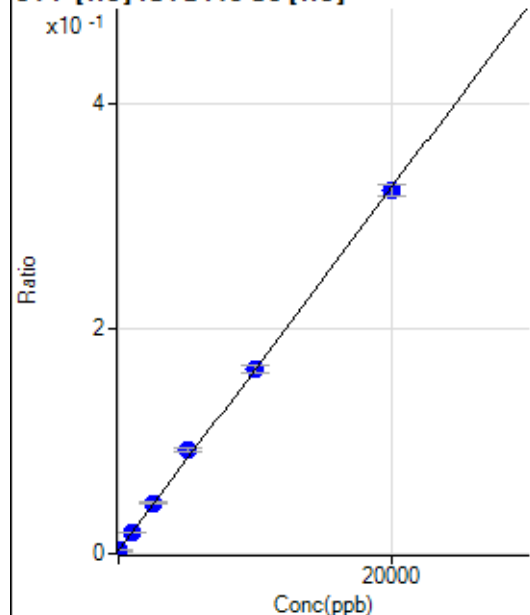
$$DL = 15.61$$

$$BEC = 341.9$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	-27.106	208.34	0.0022	P	28.7
2	☐	0.000	27.106	288.90	0.0031	P	5.0
3	☐	1000.000	1017.642	1891.84	0.0191	P	4.6
4	☐	2500.000	2635.790	4498.03	0.0452	P	1.7
5	☐	5000.000	5547.678	9292.09	0.0922	P	2.3
6	☐	10000.000	10051.113	16679.46	0.1649	P	4.1
7	☐	20000.000	19819.668	33533.75	0.3226	P	3.1
8	☐			211.12	0.0022	P	19.0

$$y = 1.6140\text{E-}005 * x + 0.0027$$

$$R = 0.9996$$

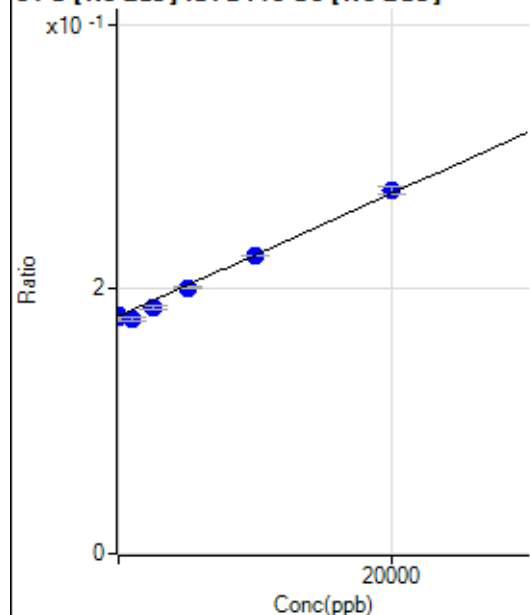
$$DL = 74.1$$

$$BEC = 165.6$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	224.326	411108.08	0.1805	P	2.1
2	☐	0.000	-224.326	413368.87	0.1784	P	1.1
3	☐	1000.000	-474.367	433814.06	0.1772	P	0.9
4	☐	2500.000	1459.557	453545.97	0.1862	P	1.5
5	☐	5000.000	4574.366	491939.51	0.2007	P	0.7
6	☐	10000.000	9830.331	551551.66	0.2251	P	0.4
7	☐	20000.000	20395.017	682360.58	0.2741	P	2.0
8	☐			391037.49	0.1615	P	1.1

$$y = 4.6406\text{E-}006 * x + 0.1794$$

$$R = 0.9972$$

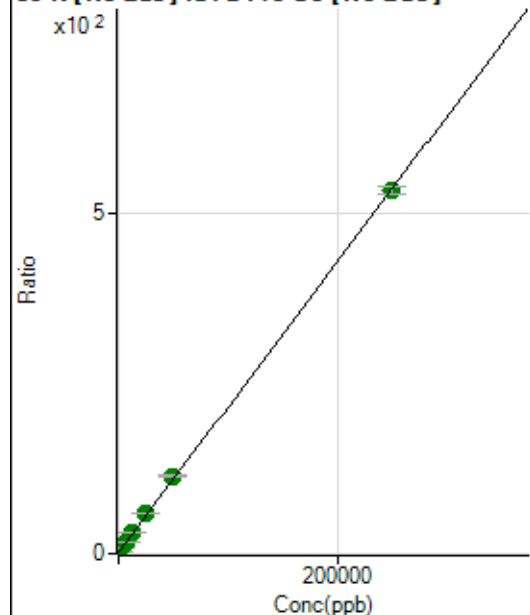
$$DL = 1856$$

$$BEC = 3.867\text{E}+04$$

Weight: <None>

Min Conc: 0

39 K [No Gas] ISTD:45 Sc [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	4447562.34	1.9526	A	2.6
2	☐	500.000	496.982	6981007.36	3.0129	A	1.9
3	☐	2500.000	2694.833	18852142.78	7.7022	A	1.5
4	☐	6250.000	7012.197	41206297.45	16.9136	A	1.7
5	☐	12500.000	14251.952	79333564.27	32.3600	A	0.7
6	☐	25000.000	27317.795	147625447.74	60.2369	A	1.1
7	☐	50000.000	52523.989	283875198.01	114.0159	A	1.6
8	☐	250000.00	249154.82	1291869151.1	533.5406	A	2.3

$$y = 0.0021 * x + 1.9526$$

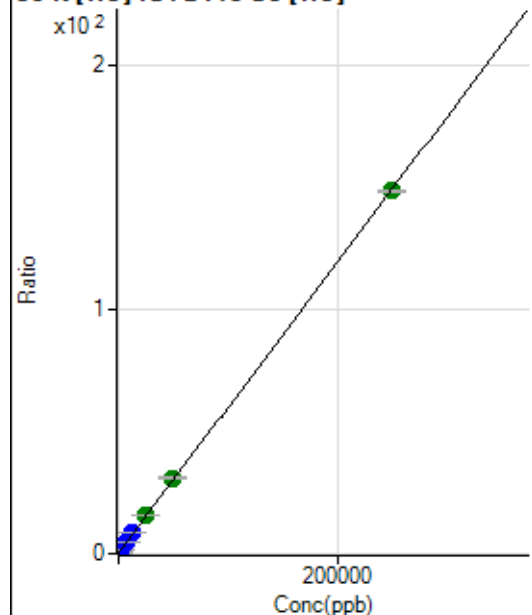
$$R = 0.9999$$

$$DL = 70.86$$

$$BEC = 915.2$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	28862.74	0.3091	P	2.3
2	☐	500.000	514.375	57143.95	0.6152	P	0.8
3	☐	2500.000	2733.067	191772.18	1.9355	P	2.3
4	☐	6250.000	6913.207	439931.70	4.4230	P	1.2
5	☐	12500.000	13912.945	865373.08	8.5883	P	1.5
6	☐	25000.000	26329.802	1616090.74	15.9772	A	1.0
7	☐	50000.000	51755.062	3234105.32	31.1070	A	2.0
8	☐	250000.00	249426.42	14511559.18	148.7352	A	0.8

$$y = 5.9507\text{E-}004 * x + 0.3091$$

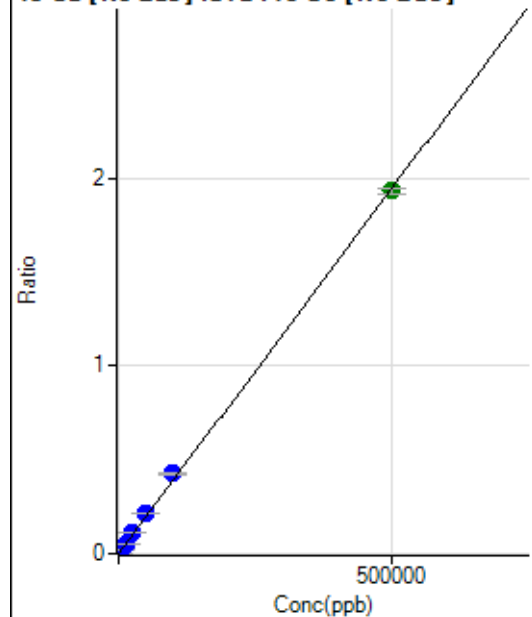
R = 1.0000

DL = 35.93

BEC = 519.5

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	519.47	0.0002	P	27.6
2	☐	500.000	513.805	5153.85	0.0022	P	2.4
3	☐	5000.000	5562.190	53424.85	0.0218	P	3.0
4	☐	12500.000	14196.161	134846.10	0.0554	P	1.1
5	☐	25000.000	28897.452	275690.73	0.1125	P	0.3
6	☐	50000.000	55224.148	526158.09	0.2147	P	1.3
7	☐	100000.00	109528.51	1059518.86	0.4256	P	2.2
8	☐	500000.00	497328.96	4677821.85	1.9316	A	1.5

$$y = 3.8835\text{E-}006 * x + 2.2864\text{E-}004$$

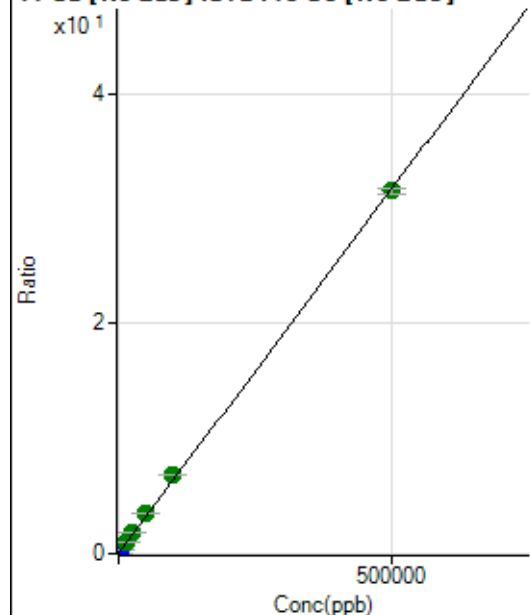
R = 0.9998

DL = 48.81

BEC = 58.87

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	62201.80	0.0273	P	2.4
2	☐	500.000	521.855	139836.06	0.0603	P	1.1
3	☐	5000.000	5602.304	935196.95	0.3821	P	1.5
4	☐	12500.000	14259.976	2266001.16	0.9303	A	1.4
5	☐	25000.000	28274.963	4456643.29	1.8178	A	1.0
6	☐	50000.000	54599.722	8540445.24	3.4848	A	0.6
7	☐	100000.00	107881.64	17078780.77	6.8589	A	0.7
8	☐	500000.00	497749.90	76388706.57	31.5472	A	1.9

$$y = 6.3325\text{E-}005 * x + 0.0273$$

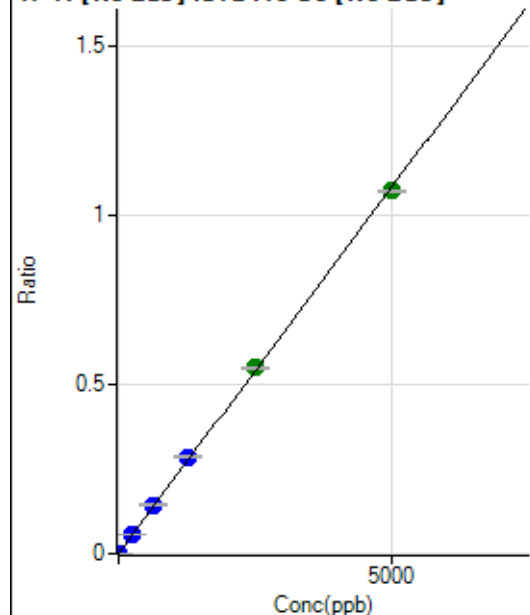
$$R = 0.9998$$

$$DL = 30.86$$

$$BEC = 431.1$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1091.75	0.0005	P	11.3
2	☐	10.000	4.781	3506.08	0.0015	P	6.9
3	☐	250.000	262.785	140326.26	0.0573	P	1.5
4	☐	625.000	667.577	352968.95	0.1449	P	1.2
5	☐	1250.000	1323.492	703161.05	0.2868	P	0.3
6	☐	2500.000	2541.869	1348950.70	0.5504	A	1.1
7	☐	5000.000	4954.742	2670609.89	1.0724	A	0.5
8	☐			1677.93	0.0007	P	13.0

$$y = 2.1635\text{E-}004 * x + 4.7922\text{E-}004$$

$$R = 0.9998$$

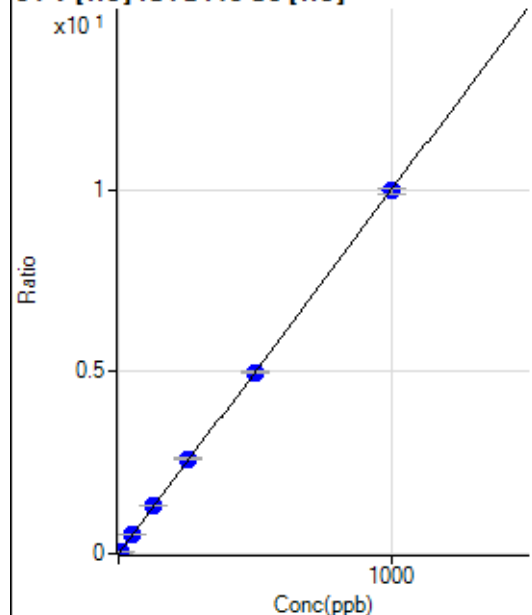
$$DL = 0.7542$$

$$BEC = 2.215$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	16.67	0.0002	P	19.6
2	☐	5.000	5.249	4892.00	0.0527	P	2.5
3	☐	50.000	51.860	51415.37	0.5189	P	1.3
4	☐	125.000	131.616	130952.82	1.3166	P	1.7
5	☐	250.000	260.553	262609.19	2.6063	P	1.9
6	☐	500.000	499.184	505062.33	4.9932	P	1.3
7	☐	1000.000	996.849	1036718.16	9.9710	P	1.3
8	☐			284.45	0.0029	P	5.1

$$y = 0.0100 * x + 1.7840E-004$$

$$R = 0.9999$$

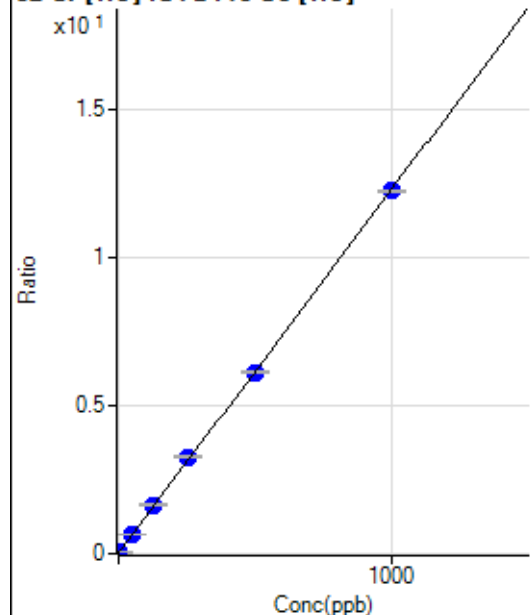
$$DL = 0.01046$$

$$BEC = 0.01784$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1706.79	0.0183	P	4.9
2	☐	2.000	1.931	3901.68	0.0420	P	2.0
3	☐	50.000	52.644	65929.14	0.6654	P	1.4
4	☐	125.000	131.909	163081.49	1.6397	P	2.2
5	☐	250.000	265.519	330710.26	3.2821	P	2.0
6	☐	500.000	497.878	620896.73	6.1382	P	0.5
7	☐	1000.000	996.185	1275095.20	12.2635	P	0.9
8	☐			22384.27	0.2295	P	2.6

$$y = 0.0123 * x + 0.0183$$

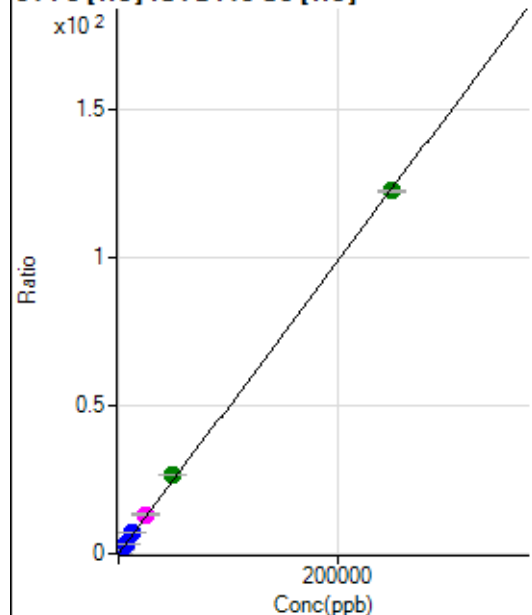
$$R = 0.9999$$

$$DL = 0.2171$$

$$BEC = 1.487$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	670.40	0.0072	P	15.1
2	☐	50.000	55.119	3191.15	0.0344	P	4.3
3	☐	2500.000	2812.858	138163.83	1.3943	P	1.3
4	☐	6250.000	7149.808	351372.22	3.5329	P	1.8
5	☐	12500.000	14308.876	711691.83	7.0632	P	1.6
6	☐	25000.000	26860.166	1340435.07	13.2525	M	2.0
7	☐	50000.000	54057.243	2772522.89	26.6640	A	1.0
8	☐	250000.00	248886.46	11975543.56	122.7384	A	0.8

$$y = 4.9312\text{E-}004 * x + 0.0072$$

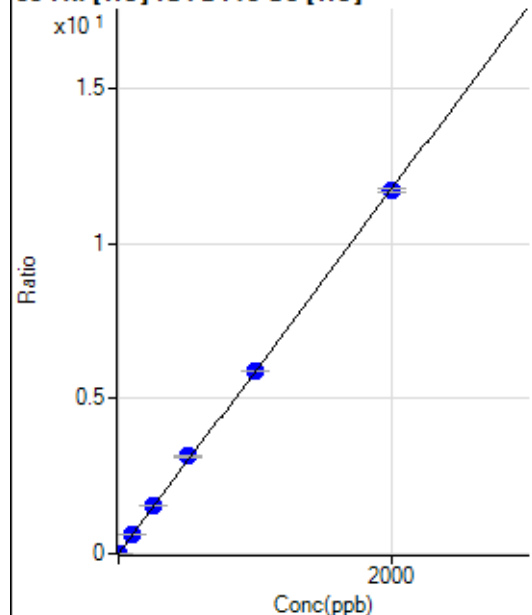
R = 0.9998

DL = 6.615

BEC = 14.57

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	148.89	0.0016	P	7.2
2	☐	1.000	0.999	693.36	0.0075	P	8.5
3	☐	100.000	103.769	60590.18	0.6115	P	1.5
4	☐	250.000	265.607	155432.45	1.5627	P	1.2
5	☐	500.000	533.064	315898.39	3.1346	P	0.8
6	☐	1000.000	998.995	594088.38	5.8731	P	0.1
7	☐	2000.000	1990.097	1216335.07	11.6982	P	1.0
8	☐			5411.07	0.0555	P	3.0

$$y = 0.0059 * x + 0.0016$$

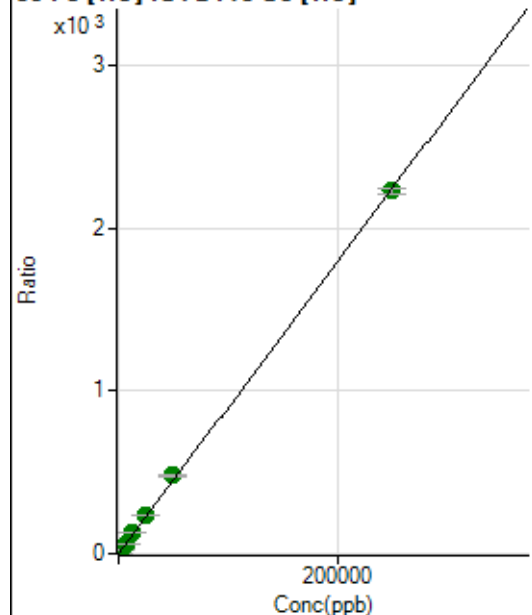
R = 0.9998

DL = 0.05887

BEC = 0.2713

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	4593.41	0.0492	P	6.1
2	☐	50.000	56.203	51359.23	0.5530	P	2.1
3	☐	2500.000	2805.299	2496448.23	25.1971	A	2.8
4	☐	6250.000	7061.462	6301041.17	63.3512	A	1.6
5	☐	12500.000	14205.324	12836546.82	127.3920	A	1.4
6	☐	25000.000	26555.694	24083653.78	238.1061	A	1.7
7	☐	50000.000	53458.713	49832953.89	479.2765	A	0.9
8	☐	250000.00	249044.08	217813165.98	2,232.589	A	1.4

$$y = 0.0090 * x + 0.0492$$

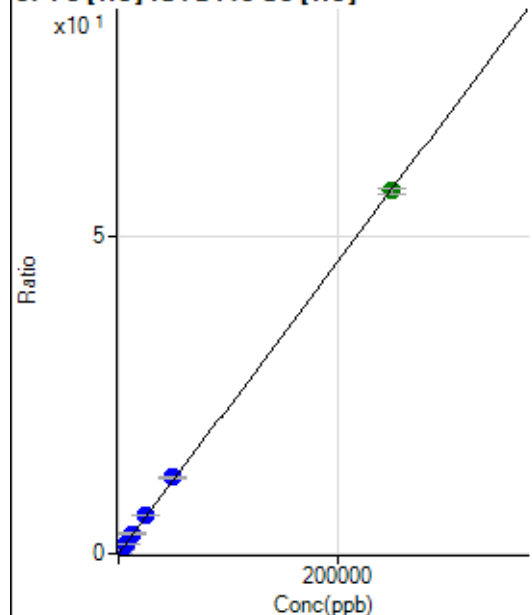
$$R = 0.9999$$

$$DL = 1.005$$

$$BEC = 5.49$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	146.30	0.0016	P	28.5
2	☐	50.000	57.026	1357.50	0.0146	P	6.0
3	☐	2500.000	2737.860	62198.40	0.6278	P	2.6
4	☐	6250.000	6933.160	157882.48	1.5873	P	1.1
5	☐	12500.000	13816.531	318582.54	3.1617	P	1.6
6	☐	25000.000	26006.188	601818.09	5.9497	P	1.0
7	☐	50000.000	52215.309	1241935.82	11.9443	P	0.7
8	☐	250000.00	249371.03	5564694.05	57.0381	A	1.4

$$y = 2.2872E-004 * x + 0.0016$$

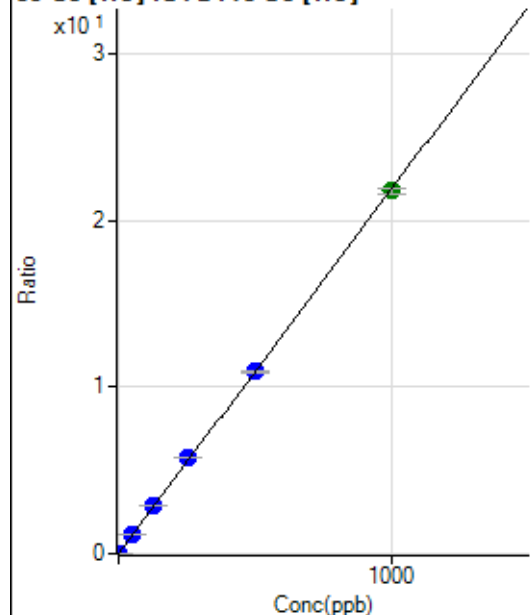
$$R = 1.0000$$

$$DL = 5.866$$

$$BEC = 6.85$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	78.89	0.0008	P	15.4
2	☐	1.000	0.984	2077.95	0.0224	P	3.6
3	☐	50.000	52.153	113158.06	1.1420	P	0.5
4	☐	125.000	133.574	290794.01	2.9235	P	0.9
5	☐	250.000	265.022	584436.11	5.7997	P	0.6
6	☐	500.000	499.714	1106069.70	10.9349	P	1.1
7	☐	1000.000	995.208	2264118.44	21.7766	A	1.7
8	☐			3627.17	0.0372	P	2.8

$$y = 0.0219 * x + 8.4544E-004$$

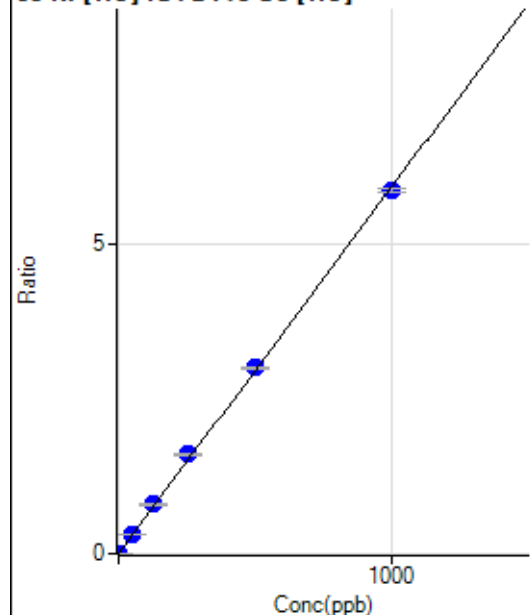
$$R = 0.9999$$

$$DL = 0.0178$$

$$BEC = 0.03864$$

Weight: <None>

Min Conc: 0

60 Ni [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	126.67	0.0014	P	13.6
2	☐	1.000	1.138	752.25	0.0081	P	6.0
3	☐	50.000	53.473	31510.52	0.3180	P	2.2
4	☐	125.000	133.714	78891.98	0.7932	P	1.7
5	☐	250.000	271.517	162159.85	1.6093	P	1.3
6	☐	500.000	506.624	303622.84	3.0016	P	0.6
7	☐	1000.000	990.046	609759.75	5.8644	P	0.9
8	☐			7076.28	0.0725	P	0.2

$$y = 0.0059 * x + 0.0014$$

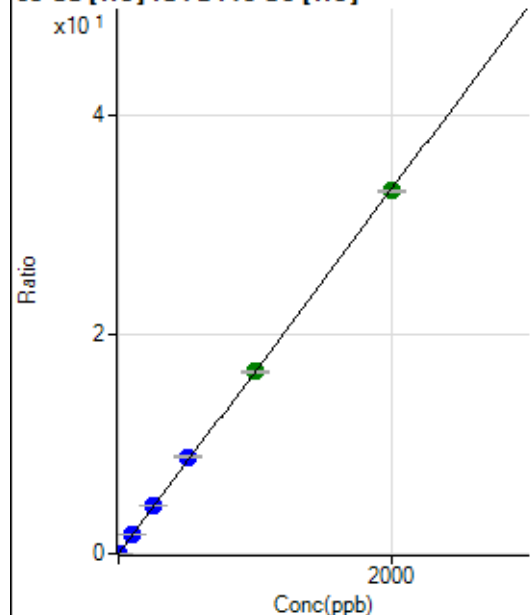
$$R = 0.9997$$

$$DL = 0.09335$$

$$BEC = 0.229$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	156.67	0.0017	P	7.0
2	☐	2.000	2.034	3289.31	0.0354	P	3.9
3	☐	100.000	105.214	173107.94	1.7470	P	1.1
4	☐	250.000	265.823	438734.68	4.4113	P	1.8
5	☐	500.000	531.685	888947.62	8.8216	P	0.6
6	☐	1000.000	997.892	1674579.94	16.5553	A	0.8
7	☐	2000.000	1990.894	3434297.90	33.0277	A	0.3
8	☐			8281.37	0.0849	P	1.8

$$y = 0.0166 * x + 0.0017$$

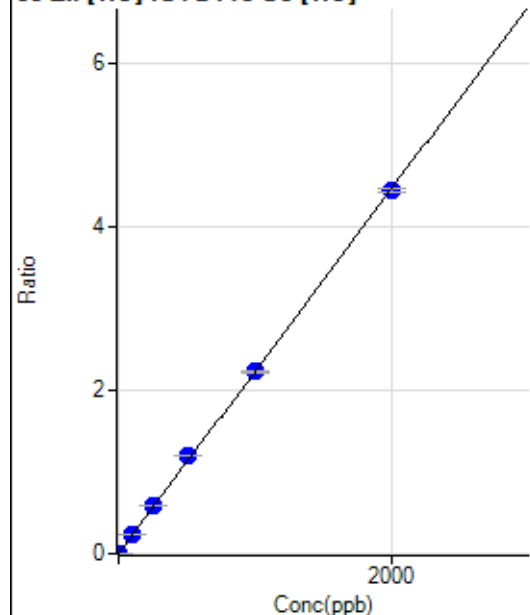
$$R = 0.9998$$

$$DL = 0.02132$$

$$BEC = 0.1012$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	78.89	0.0008	P	43.1
2	☐	5.000	2.157	524.46	0.0057	P	12.4
3	☐	100.000	106.249	23540.76	0.2376	P	1.3
4	☐	250.000	265.379	58900.62	0.5922	P	0.6
5	☐	500.000	536.599	120570.96	1.1965	P	0.3
6	☐	1000.000	999.019	225244.20	2.2268	P	0.8
7	☐	2000.000	1989.113	460903.41	4.4329	P	1.2
8	☐			6546.02	0.0671	P	2.3

$$y = 0.0022 * x + 8.4612E-004$$

$$R = 0.9998$$

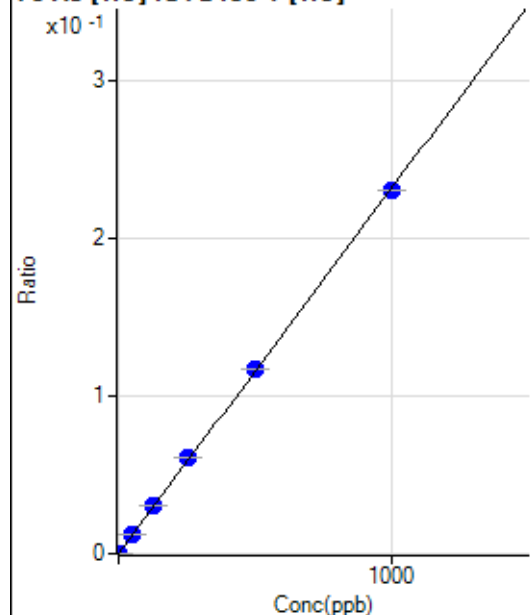
$$DL = 0.4905$$

$$BEC = 0.3797$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	5.67	0.0000	P	44.4
2	☐	1.000	0.940	153.35	0.0002	P	8.7
3	☐	50.000	50.777	8496.41	0.0118	P	1.7
4	☐	125.000	131.540	22026.30	0.0305	P	0.7
5	☐	250.000	264.676	44849.15	0.0613	P	0.8
6	☐	500.000	504.856	85618.58	0.1168	P	0.6
7	☐	1000.000	993.047	173824.59	0.2298	P	0.2
8	☐			80.68	0.0001	P	5.7

$$y = 2.3144\text{E-}004 * x + 8.3171\text{E-}006$$

$$R = 0.9998$$

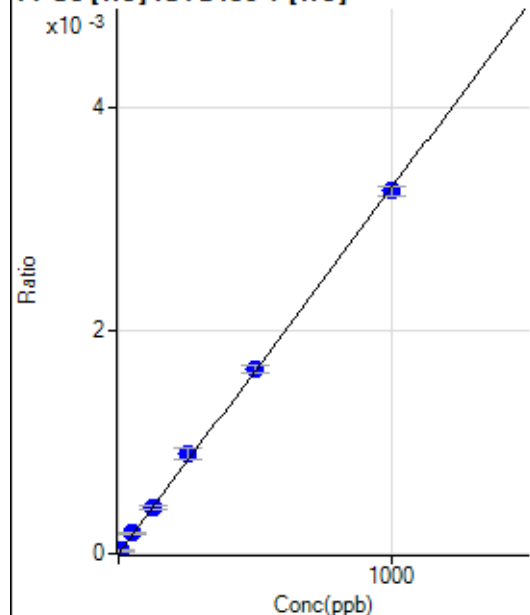
$$DL = 0.04789$$

$$BEC = 0.03594$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	8.012	17.78	0.0000	P	66.6
3	☐	50.000	55.424	131.11	0.0002	P	11.4
4	☐	125.000	125.324	296.67	0.0004	P	8.5
5	☐	250.000	273.691	655.58	0.0009	P	13.2
6	☐	500.000	503.901	1208.96	0.0016	P	4.0
7	☐	1000.000	991.800	2455.80	0.0032	P	2.3
8	☐			2.22	0.0000	P	173.2

$$y = 3.2739\text{E-}006 * x + 0.0000\text{E+}000$$

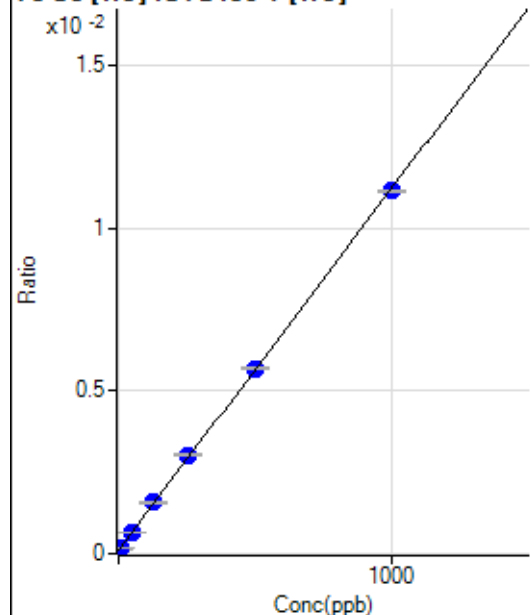
$$R = 0.9997$$

$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	72.34	0.0001	P	9.5
2	☐	5.000	5.192	111.34	0.0002	P	5.9
3	☐	50.000	48.910	469.39	0.0006	P	1.2
4	☐	125.000	132.607	1142.50	0.0016	P	3.3
5	☐	250.000	263.640	2222.07	0.0030	P	1.5
6	☐	500.000	503.292	4175.05	0.0057	P	1.0
7	☐	1000.000	994.046	8433.38	0.0112	P	0.3
8	☐			79.34	0.0001	P	23.7

$$y = 1.1111\text{E-}005 * x + 1.0624\text{E-}004$$

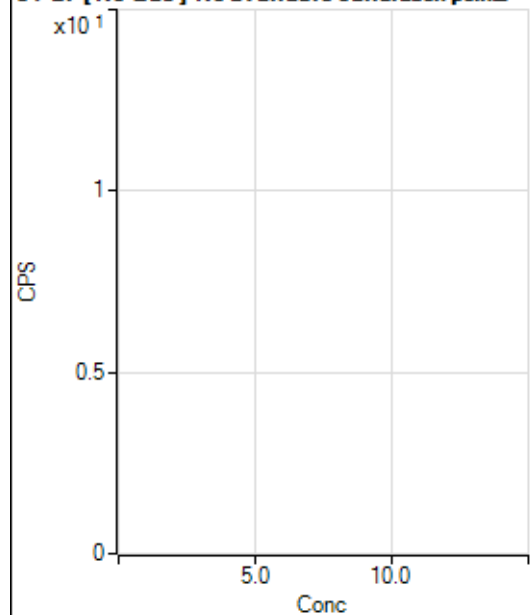
$$R = 0.9999$$

$$DL = 2.735$$

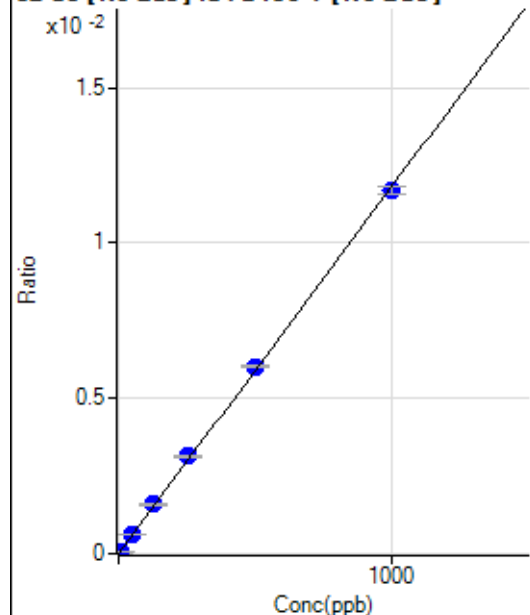
$$BEC = 9.562$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			3030.98		P	7.6
2	☐			3122.66		P	1.2
3	☐			2822.58		P	3.3
4	☐			2692.00		P	7.6
5	☐			2780.91		P	9.7
6	☐			2700.35		P	6.4
7	☐			2797.58		P	7.6
8	☐			3333.83		P	0.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	-49.80	0.0000	P	-130.
2	☐	5.000	5.066	213.80	0.0000	P	35.4
3	☐	50.000	51.208	2768.75	0.0006	P	3.2
4	☐	125.000	135.131	7316.65	0.0016	P	2.2
5	☐	250.000	266.201	14733.18	0.0031	P	2.8
6	☐	500.000	509.928	28272.07	0.0060	P	1.1
7	☐	1000.000	989.658	55796.03	0.0117	P	2.0
8	☐			-1.61	0.0000	P	-762.

$$y = 1.1816E-005 * x - 1.1394E-005$$

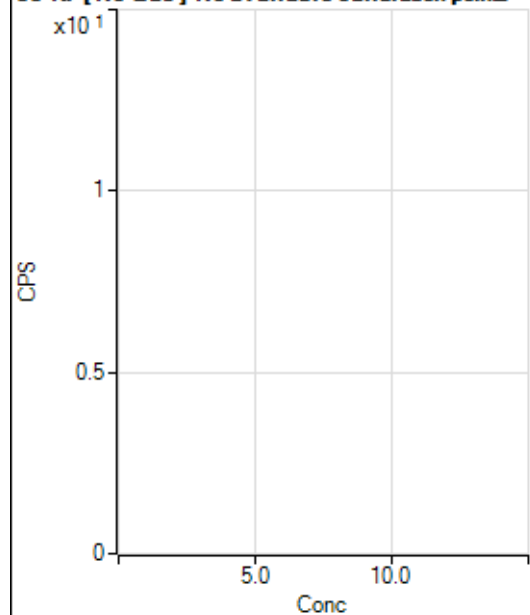
$$R = 0.9997$$

$$DL = 3.783$$

$$BEC = -0.9642$$

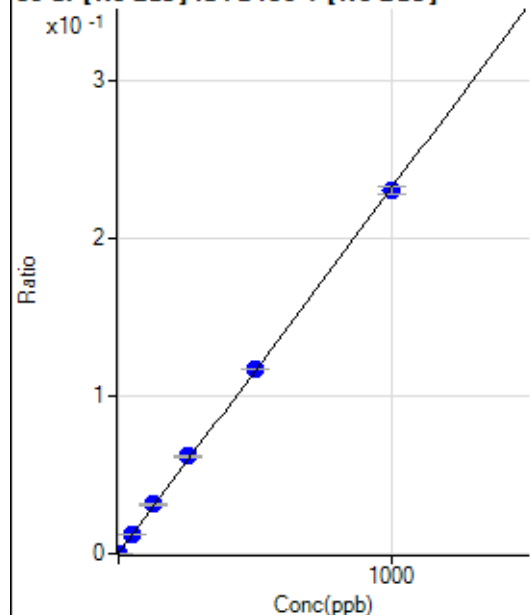
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			866.70		P	7.7
2	☐			883.37		P	8.8
3	☐			855.59		P	6.9
4	☐			784.48		P	5.9
5	☐			828.93		P	4.3
6	☐			874.48		P	2.2
7	☐			848.92		P	7.4
8	☐			863.36		P	2.5

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1341.77	0.0003	P	7.7
2	☐	1.000	0.769	2130.78	0.0005	P	3.2
3	☐	50.000	52.538	58107.93	0.0125	P	0.5
4	☐	125.000	134.379	144868.72	0.0314	P	2.8
5	☐	250.000	265.498	290147.85	0.0617	P	3.2
6	☐	500.000	504.468	550056.88	0.1170	P	0.7
7	☐	1000.000	992.593	1098115.68	0.2299	P	2.2
8	☐			3567.24	0.0008	P	14.3

$$y = 2.3134\text{E-}004 * x + 3.0462\text{E-}004$$

$$R = 0.9998$$

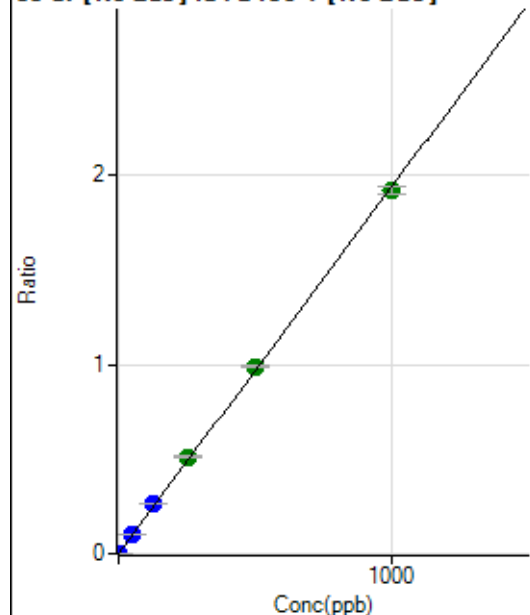
$$DL = 0.3054$$

$$BEC = 1.317$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	50.00	0.0000	P	29.4
2	☐	1.000	0.983	8466.69	0.0019	P	0.7
3	☐	50.000	52.615	475814.48	0.1020	P	0.9
4	☐	125.000	135.837	1215786.35	0.2634	P	0.7
5	☐	250.000	264.564	2411892.31	0.5129	A	0.7
6	☐	500.000	510.317	4651375.19	0.9894	A	0.5
7	☐	1000.000	989.715	9164852.29	1.9189	A	2.0
8	☐			19655.88	0.0042	P	3.4

$$y = 0.0019 * x + 1.1365\text{E-}005$$

$$R = 0.9998$$

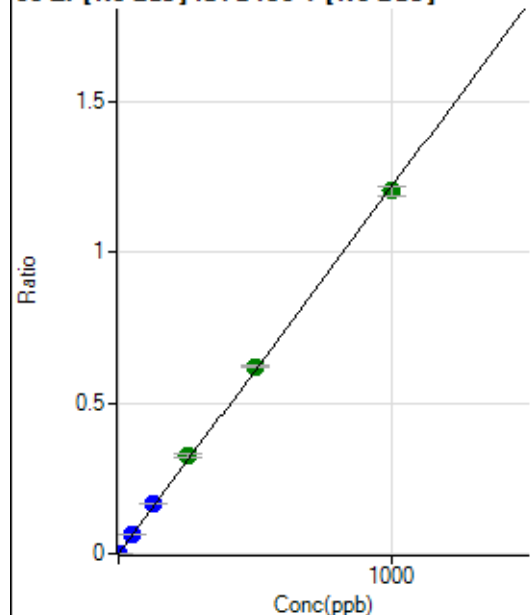
$$DL = 0.005174$$

$$BEC = 0.005862$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	186.12	0.0000	P	8.6
2	☐	1.000	0.934	5203.90	0.0012	P	5.0
3	☐	50.000	51.733	293841.10	0.0630	P	1.3
4	☐	125.000	135.533	761687.36	0.1650	P	0.9
5	☐	250.000	267.263	1529454.49	0.3253	A	2.2
6	☐	500.000	510.649	2921904.10	0.6215	A	0.9
7	☐	1000.000	988.956	5748663.97	1.2037	A	2.3
8	☐			2172.45	0.0005	P	15.2

$$y = 0.0012 * x + 4.2230E-005$$

$$R = 0.9997$$

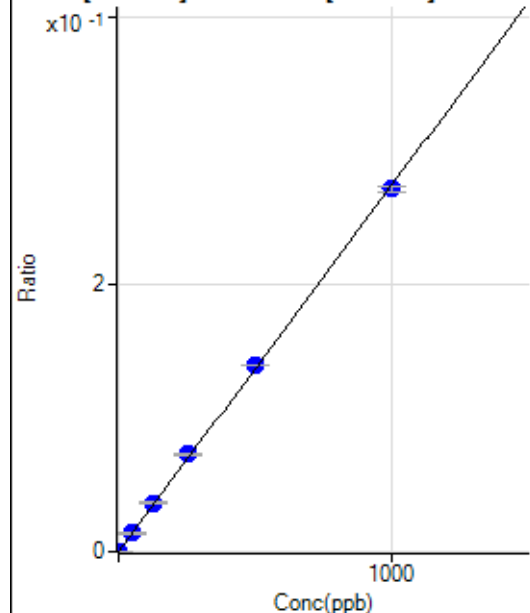
$$DL = 0.008992$$

$$BEC = 0.0347$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	58.33	0.0000	P	56.5
2	☐	1.000	0.982	1244.54	0.0003	P	7.7
3	☐	50.000	50.263	64179.18	0.0138	P	2.0
4	☐	125.000	133.277	168326.62	0.0365	P	1.9
5	☐	250.000	265.420	341404.64	0.0726	P	2.3
6	☐	500.000	508.589	654081.99	0.1391	P	0.7
7	☐	1000.000	990.803	1294550.11	0.2710	P	1.6
8	☐			488.91	0.0001	P	12.3

$$y = 2.7354E-004 * x + 1.3197E-005$$

$$R = 0.9998$$

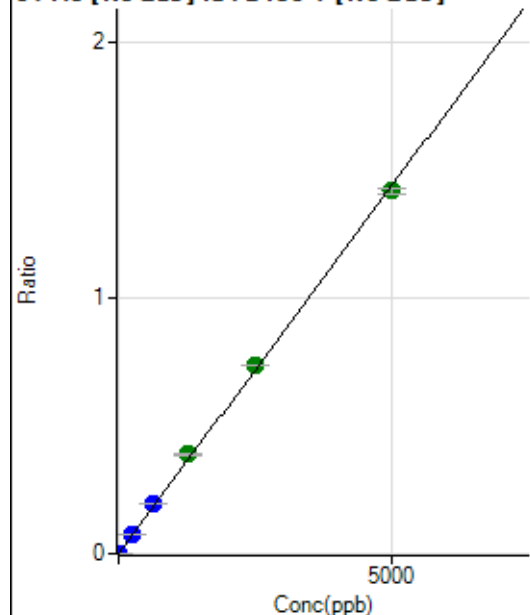
$$DL = 0.08178$$

$$BEC = 0.04825$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	136.12	0.0000	P	18.3
2	☐	10.000	4.945	6410.00	0.0015	P	3.4
3	☐	250.000	263.394	353085.33	0.0757	P	1.6
4	☐	625.000	680.900	903000.14	0.1957	P	2.3
5	☐	1250.000	1349.777	1823169.03	0.3878	A	3.1
6	☐	2500.000	2564.371	3463907.89	0.7368	A	0.6
7	☐	5000.000	4935.223	6772810.83	1.4180	A	1.5
8	☐			4184.08	0.0009	P	10.4

$$y = 2.8732\text{E-}004 * x + 3.0924\text{E-}005$$

$$R = 0.9996$$

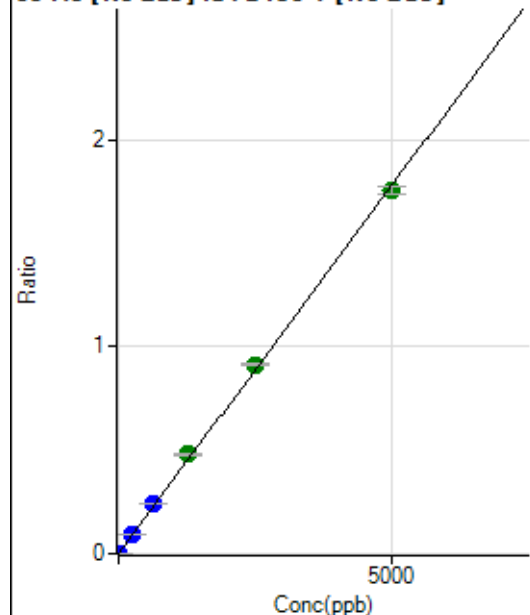
$$DL = 0.05906$$

$$BEC = 0.1076$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	88.89	0.0000	P	46.6
2	☐	10.000	5.371	8519.50	0.0019	P	5.1
3	☐	250.000	267.448	443533.05	0.0951	P	1.4
4	☐	625.000	683.301	1121238.50	0.2430	P	2.5
5	☐	1250.000	1354.087	2263469.32	0.4814	A	1.6
6	☐	2500.000	2568.277	4292537.16	0.9131	A	1.2
7	☐	5000.000	4931.689	8374489.25	1.7534	A	2.0
8	☐			5704.12	0.0012	P	4.0

$$y = 3.5553\text{E-}004 * x + 2.0154\text{E-}005$$

$$R = 0.9996$$

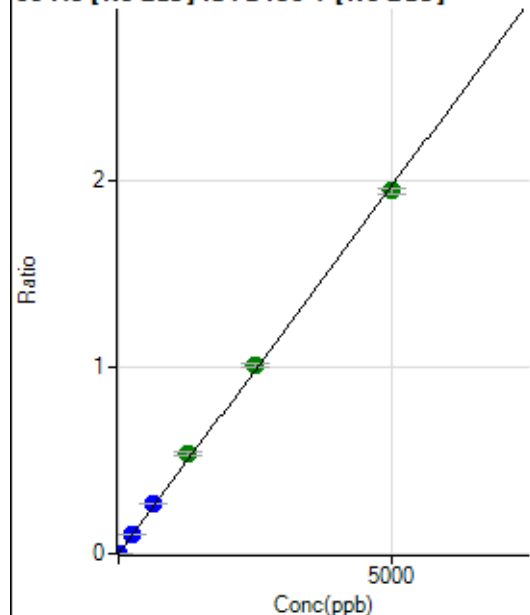
$$DL = 0.07926$$

$$BEC = 0.05669$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	116.67	0.0000	P	32.2
2	☐	10.000	5.027	8875.26	0.0020	P	1.7
3	☐	250.000	262.883	483845.01	0.1037	P	1.3
4	☐	625.000	677.538	1233968.74	0.2674	P	1.8
5	☐	1250.000	1360.533	2523830.03	0.5368	A	2.0
6	☐	2500.000	2553.641	4736454.10	1.0076	A	2.0
7	☐	5000.000	4938.345	9306737.45	1.9485	A	1.6
8	☐			6924.16	0.0015	P	8.4

$$y = 3.9456\text{E-}004 * x + 2.6443\text{E-}005$$

$$R = 0.9996$$

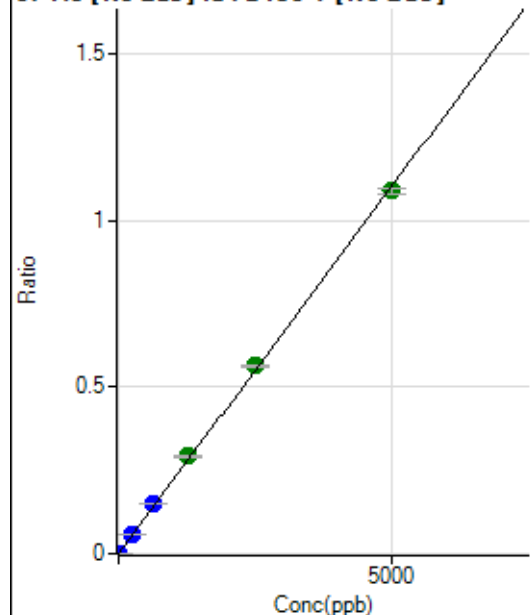
$$DL = 0.06484$$

$$BEC = 0.06702$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	13.89	0.0000	P	91.4
2	☐	10.000	4.922	4795.38	0.0011	P	0.7
3	☐	250.000	265.292	272188.01	0.0584	P	2.0
4	☐	625.000	678.502	688925.65	0.1493	P	2.3
5	☐	1250.000	1329.341	1375006.04	0.2925	A	1.8
6	☐	2500.000	2560.019	2647709.96	0.5632	A	0.8
7	☐	5000.000	4942.713	5193833.28	1.0874	A	1.5
8	☐			3703.39	0.0008	P	8.5

$$y = 2.2000\text{E-}004 * x + 3.1620\text{E-}006$$

$$R = 0.9997$$

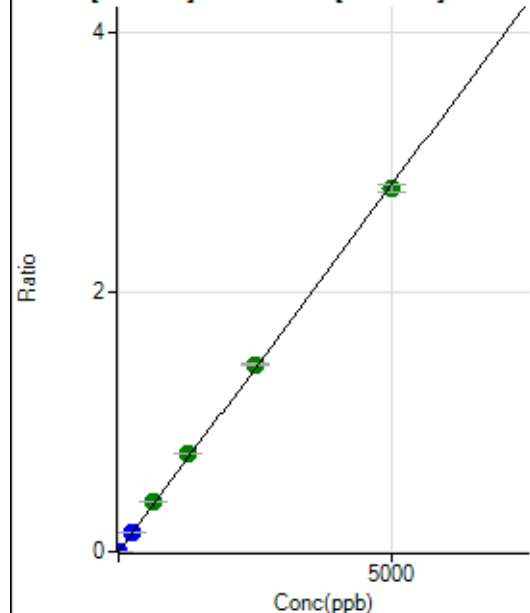
$$DL = 0.0394$$

$$BEC = 0.01437$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	38.89	0.0000	P	65.3
2	☐	10.000	5.234	13095.44	0.0030	P	1.6
3	☐	250.000	264.347	696511.84	0.1493	P	1.3
4	☐	625.000	679.085	1770732.10	0.3836	A	2.2
5	☐	1250.000	1337.991	3553863.71	0.7559	A	1.3
6	☐	2500.000	2549.192	6770173.55	1.4401	A	1.1
7	☐	5000.000	4945.938	13344768.18	2.7941	A	2.0
8	☐			9283.86	0.0020	P	5.7

$$y = 5.6492\text{E-}004 * x + 8.8337\text{E-}006$$

$$R = 0.9997$$

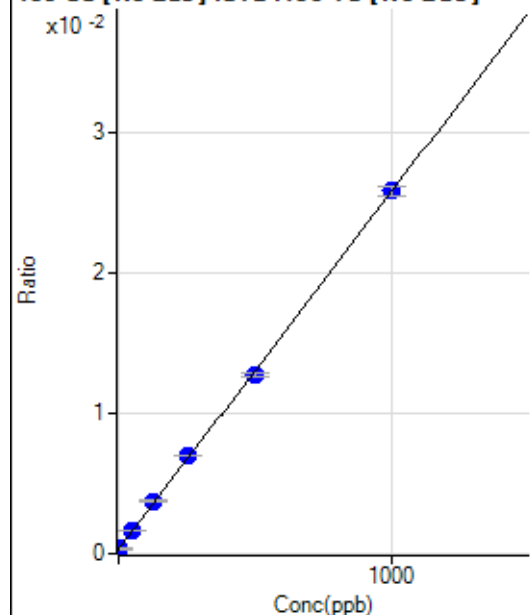
$$DL = 0.03064$$

$$BEC = 0.01564$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	922.28	0.0003	P	7.7
2	☐	1.000	2.002	1086.18	0.0004	P	12.6
3	☐	50.000	51.987	5167.79	0.0016	P	5.7
4	☐	125.000	133.147	11816.46	0.0037	P	3.5
5	☐	250.000	261.452	22474.39	0.0070	P	1.4
6	☐	500.000	488.050	41086.74	0.0128	P	2.0
7	☐	1000.000	1001.993	81348.03	0.0259	P	2.9
8	☐			1038.95	0.0003	P	5.6

$$y = 2.5516\text{E-}005 * x + 3.0898\text{E-}004$$

$$R = 0.9998$$

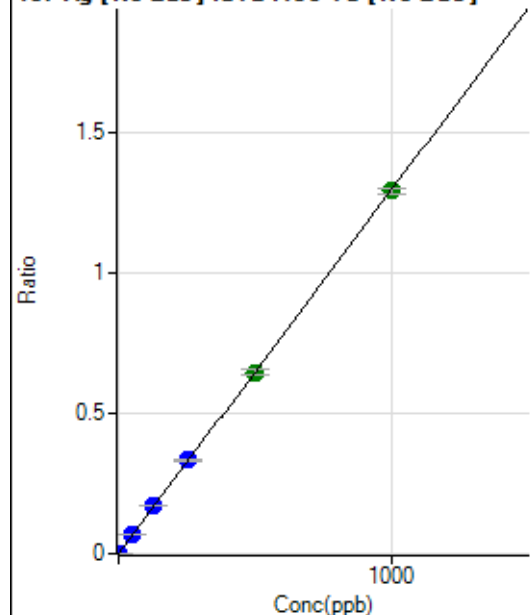
$$DL = 2.81$$

$$BEC = 12.11$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	30.56	0.0000	P	32.0
2	☐	1.000	1.125	4428.61	0.0015	P	1.7
3	☐	50.000	51.201	209810.58	0.0664	P	1.9
4	☐	125.000	131.322	542765.89	0.1703	P	1.3
5	☐	250.000	258.744	1080016.42	0.3355	P	2.2
6	☐	500.000	499.160	2083361.66	0.6472	A	3.0
7	☐	1000.000	997.383	4065460.34	1.2931	A	1.5
8	☐			1414.01	0.0005	P	4.9

$$y = 0.0013 * x + 1.0245E-005$$

$$R = 0.9999$$

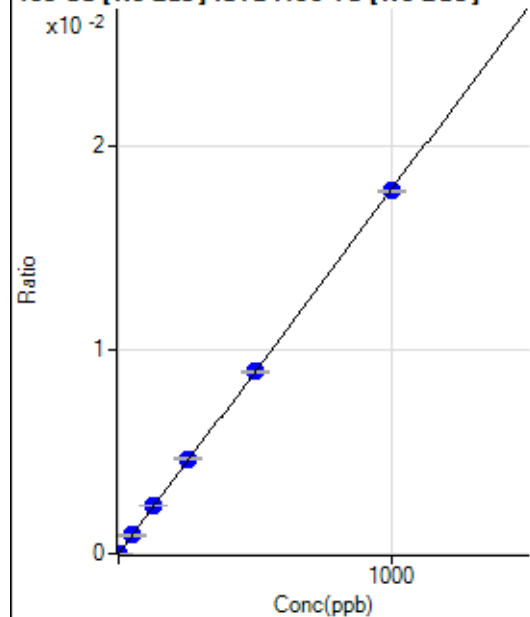
$$DL = 0.007575$$

$$BEC = 0.007902$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	8.33	0.0000	P	50.1
2	☐	1.000	0.848	54.17	0.0000	P	21.9
3	☐	50.000	50.218	2844.78	0.0009	P	4.7
4	☐	125.000	132.230	7538.27	0.0024	P	2.7
5	☐	250.000	260.689	15002.72	0.0047	P	1.1
6	☐	500.000	500.041	28767.62	0.0089	P	1.2
7	☐	1000.000	996.393	55969.75	0.0178	P	0.3
8	☐			27.78	0.0000	P	63.2

$$y = 1.7863E-005 * x + 2.7884E-006$$

$$R = 0.9999$$

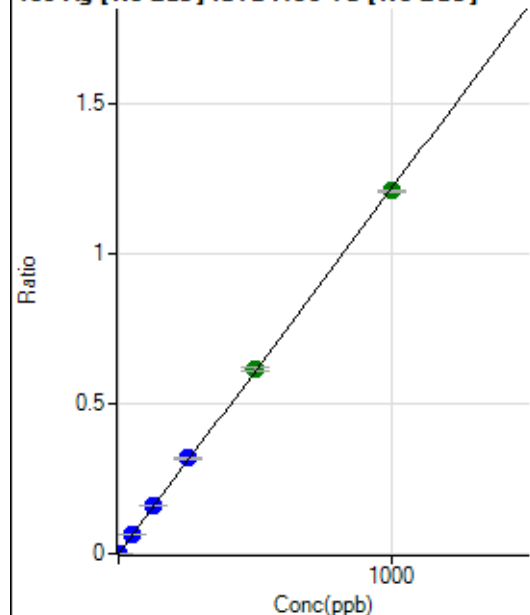
$$DL = 0.2346$$

$$BEC = 0.1561$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	16.67	0.0000	P	51.1
2	☐	1.000	1.165	4286.88	0.0014	P	4.0
3	☐	50.000	51.242	196931.69	0.0623	P	0.8
4	☐	125.000	132.183	512283.27	0.1607	P	2.5
5	☐	250.000	261.327	1022998.68	0.3177	P	1.5
6	☐	500.000	504.578	1975179.95	0.6135	A	1.6
7	☐	1000.000	993.919	3799570.44	1.2085	A	0.3
8	☐			1277.88	0.0004	P	5.0

$$y = 0.0012 * x + 5.6098E-006$$

$$R = 0.9999$$

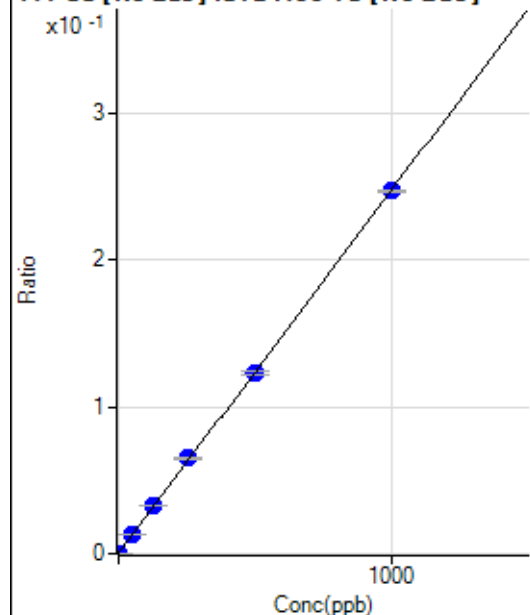
$$DL = 0.007069$$

$$BEC = 0.004614$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	650.87	0.0002	P	6.9
2	☐	1.000	1.038	1432.16	0.0005	P	5.2
3	☐	50.000	50.940	40480.88	0.0128	P	1.4
4	☐	125.000	130.872	103817.20	0.0326	P	0.8
5	☐	250.000	261.909	209143.76	0.0650	P	0.9
6	☐	500.000	496.455	395765.14	0.1229	P	2.0
7	☐	1000.000	998.014	776280.53	0.2469	P	0.7
8	☐			1030.06	0.0003	P	7.6

$$y = 2.4718E-004 * x + 2.1807E-004$$

$$R = 0.9999$$

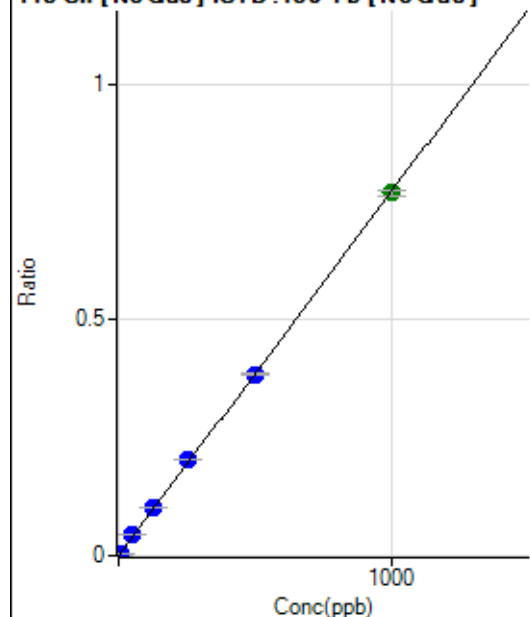
$$DL = 0.1829$$

$$BEC = 0.8822$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	205.56	0.0001	P	27.2
2	☐	5.000	4.798	11388.46	0.0038	P	1.2
3	☐	50.000	57.417	140455.08	0.0444	P	1.1
4	☐	125.000	133.005	327860.36	0.1029	P	1.9
5	☐	250.000	262.718	653926.95	0.2031	P	1.0
6	☐	500.000	498.559	1240700.43	0.3854	P	1.3
7	☐	1000.000	996.171	2420653.20	0.7699	A	1.9
8	☐			1380.66	0.0004	P	17.9

$$y = 7.7281E-004 * x + 6.8860E-005$$

$$R = 0.9999$$

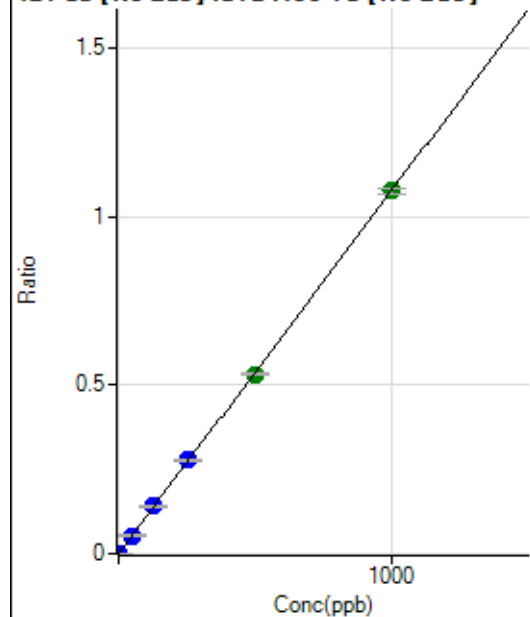
$$DL = 0.07258$$

$$BEC = 0.0891$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	11.11	0.0000	P	113.8
2	☐	2.000	1.905	6193.27	0.0021	P	3.5
3	☐	50.000	50.262	170979.26	0.0541	P	2.5
4	☐	125.000	130.088	446368.46	0.1400	P	1.7
5	☐	250.000	258.548	896055.84	0.2783	P	1.5
6	☐	500.000	495.279	1716692.66	0.5331	A	0.9
7	☐	1000.000	999.574	3382887.84	1.0760	A	1.3
8	☐			2275.24	0.0007	P	6.6

$$y = 0.0011 * x + 3.6805E-006$$

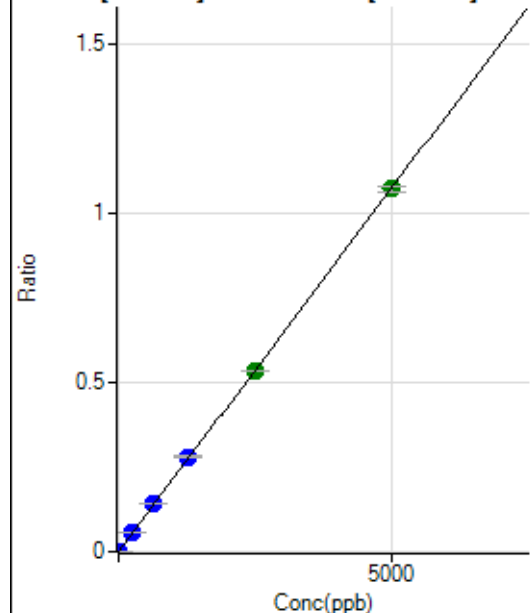
$$R = 0.9999$$

$$DL = 0.01167$$

$$BEC = 0.003419$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	13.89	0.0000	P	35.7
2	☐	10.000	9.645	6254.40	0.0021	P	0.8
3	☐	250.000	254.746	172746.57	0.0547	P	1.3
4	☐	625.000	657.205	449479.57	0.1410	P	1.5
5	☐	1250.000	1308.009	903578.09	0.2806	P	1.1
6	☐	2500.000	2479.318	1712749.80	0.5319	A	0.2
7	☐	5000.000	4991.577	3367122.80	1.0709	A	1.3
8	☐			6304.41	0.0020	P	3.4

$$y = 2.1455\text{E-}004 * x + 4.6686\text{E-}006$$

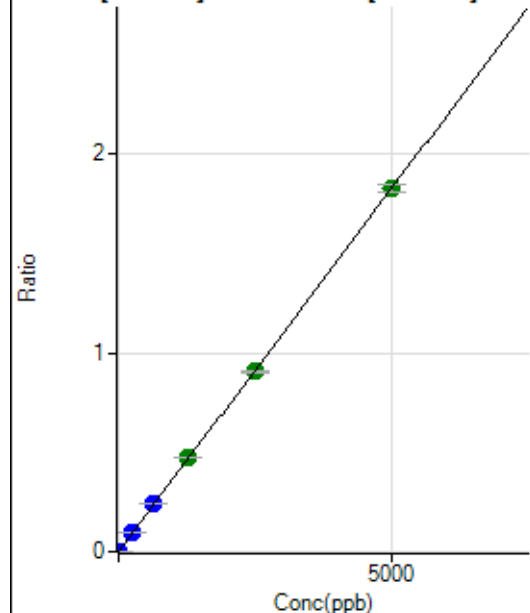
$$R = 0.9999$$

$$DL = 0.0233$$

$$BEC = 0.02176$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	36.11	0.0000	P	58.4
2	☐	10.000	9.915	10957.49	0.0036	P	3.2
3	☐	250.000	254.083	293276.80	0.0928	P	1.4
4	☐	625.000	654.521	761980.74	0.2390	P	1.3
5	☐	1250.000	1293.563	1521007.39	0.4724	A	1.4
6	☐	2500.000	2477.060	2912720.08	0.9046	A	0.4
7	☐	5000.000	4996.685	5736767.71	1.8248	A	2.0
8	☐			11221.60	0.0036	P	6.5

$$y = 3.6519\text{E-}004 * x + 1.2089\text{E-}005$$

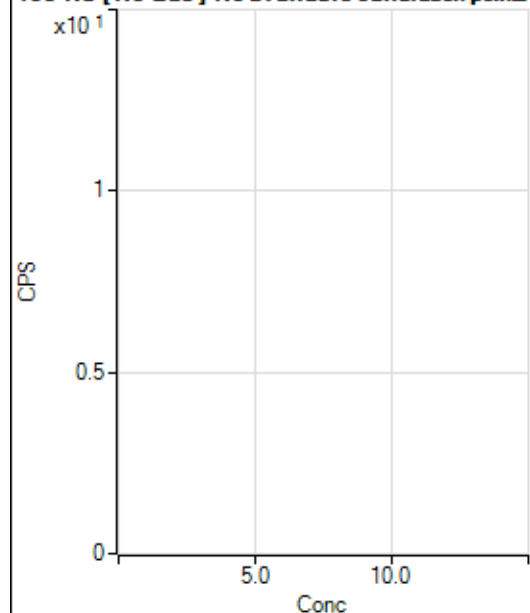
$$R = 0.9999$$

$$DL = 0.05796$$

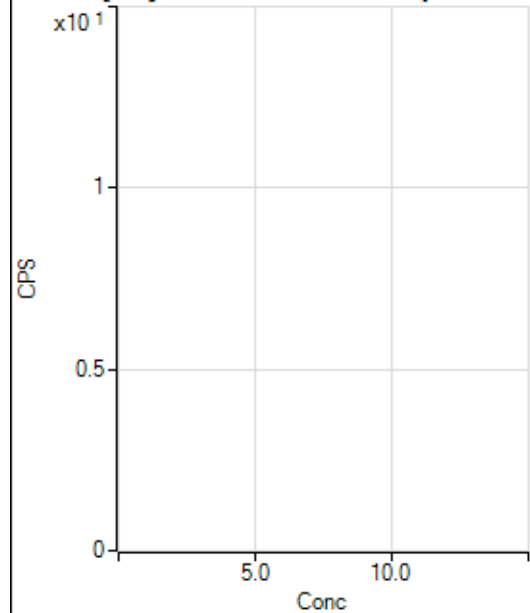
$$BEC = 0.0331$$

Weight: <None>

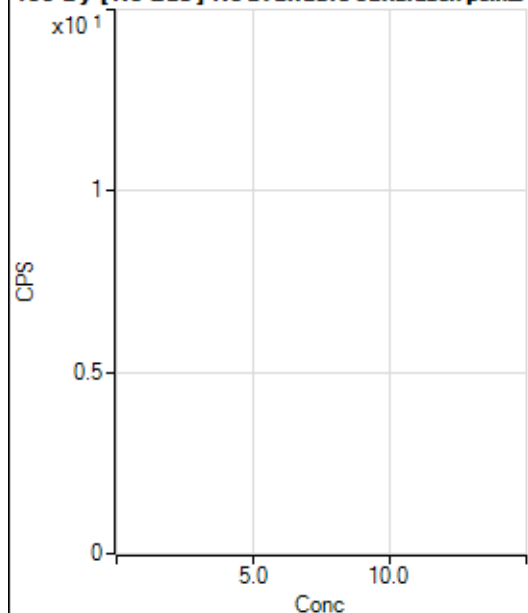
Min Conc: 0

150 Nd [No Gas] No available calibration points

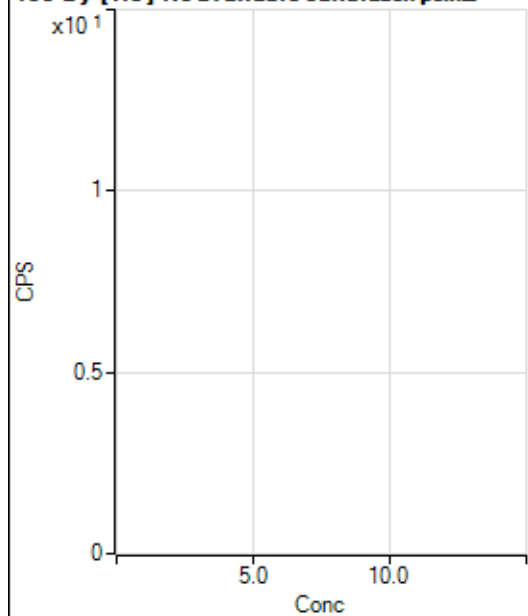
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			6.67		P	100.0
2	☐			4.44		P	173.2
3	☐			20.00		P	33.4
4	☐			17.78		P	21.7
5	☐			42.22		P	55.5
6	☐			62.22		P	55.0
7	☐			97.78		P	14.2
8	☐			33.33		P	20.0

150 Nd [He] No available calibration points

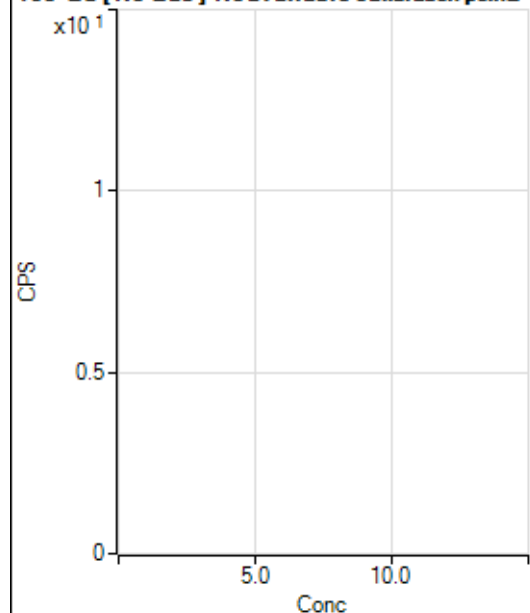
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			0.00		P	
2	☐			1.11		P	173.2
3	☐			2.22		P	173.2
4	☐			3.33		P	100.1
5	☐			8.89		P	57.3
6	☐			21.11		P	9.1
7	☐			16.67		P	34.6
8	☐			10.00		P	33.3

156 Dy [No Gas] No available calibration points

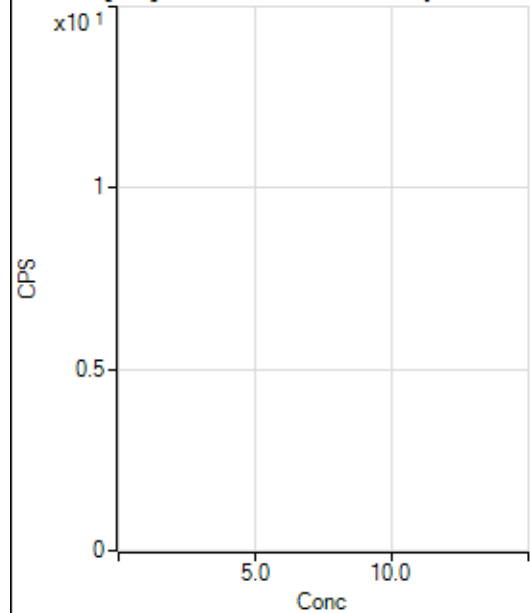
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			2.78		P	173.2
2	☐			11.11		P	43.3
3	☐			8.33		P	0.0
4	☐			19.44		P	65.5
5	☐			22.22		P	78.1
6	☐			38.89		P	24.7
7	☐			38.89		P	65.5
8	☐			150.00		P	14.7

156 Dy [He] No available calibration points

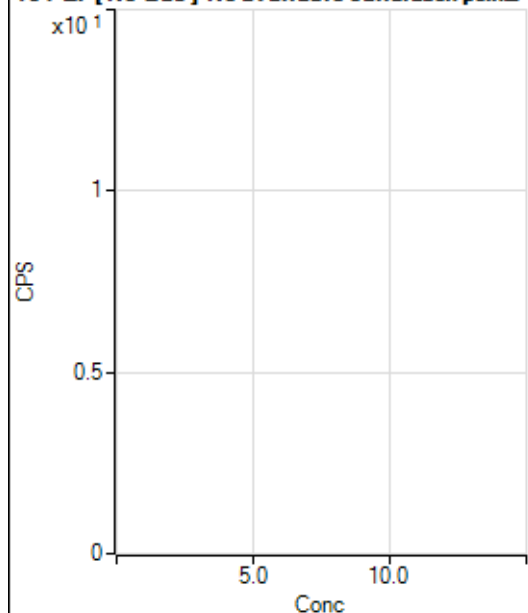
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			0.00		P	
2	☐			8.89		P	78.1
3	☐			4.44		P	114.6
4	☐			6.67		P	0.0
5	☐			13.33		P	50.0
6	☐			20.00		P	88.2
7	☐			23.33		P	28.6
8	☐			104.45		P	6.6

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

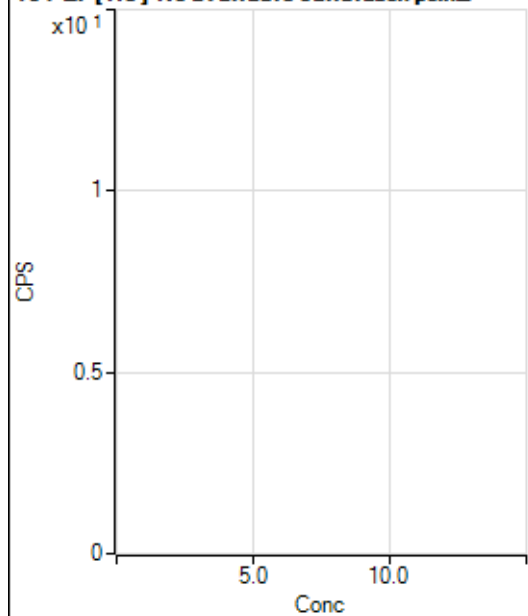
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			25.00		P	88.2
2	☐			30.56		P	56.8
3	☐			41.67		P	34.7
4	☐			52.78		P	9.1
5	☐			52.78		P	9.1
6	☐			44.44		P	28.6
7	☐			52.78		P	45.6
8	☐			180.56		P	27.0

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			4.44		P	114.6
2	☐			10.00		P	57.7
3	☐			16.67		P	52.9
4	☐			12.22		P	56.8
5	☐			14.44		P	53.3
6	☐			23.33		P	51.5
7	☐			36.67		P	39.6
8	☐			136.67		P	4.2

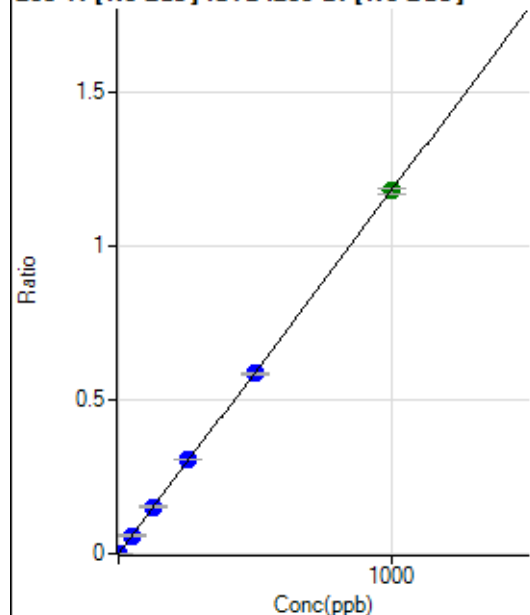
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			19.44		P	49.5
2	☐			19.44		P	99.0
3	☐			25.00		P	66.7
4	☐			33.33		P	43.3
5	☐			33.33		P	25.0
6	☐			33.33		P	66.1
7	☐			25.00		P	33.3
8	☐			50.00		P	16.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			10.00		P	33.3
2	☐			4.44		P	114.6
3	☐			14.45		P	74.2
4	☐			20.00		P	16.7
5	☐			14.45		P	26.7
6	☐			12.22		P	15.7
7	☐			8.89		P	21.6
8	☐			23.33		P	42.9

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	22.22	0.0000	P	78.5
2	☐	1.000	1.003	1727.94	0.0012	P	1.6
3	☐	50.000	50.107	89826.58	0.0592	P	0.9
4	☐	125.000	129.443	233038.87	0.1530	P	2.5
5	☐	250.000	259.086	469095.08	0.3061	P	1.6
6	☐	500.000	496.337	894028.04	0.5865	P	0.6
7	☐	1000.000	998.999	1764807.72	1.1804	A	1.5
8	☐			1080.64	0.0008	P	10.7

$$y = 0.0012 * x + 1.5560E-005$$

$$R = 0.9999$$

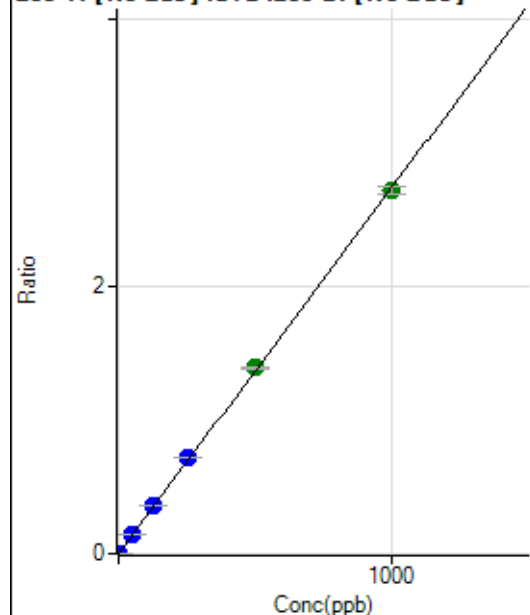
$$DL = 0.031$$

$$BEC = 0.01317$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	105.56	0.0001	P	50.0
2	☐	1.000	0.925	3747.88	0.0026	P	4.8
3	☐	50.000	51.205	212504.87	0.1401	P	1.1
4	☐	125.000	131.069	546251.43	0.3585	P	0.8
5	☐	250.000	262.750	1101123.85	0.7186	P	1.0
6	☐	500.000	507.506	2115806.90	1.3879	A	0.7
7	☐	1000.000	992.241	4056945.40	2.7134	A	2.1
8	☐			2533.65	0.0018	P	8.1

$$y = 0.0027 * x + 7.3655E-005$$

$$R = 0.9999$$

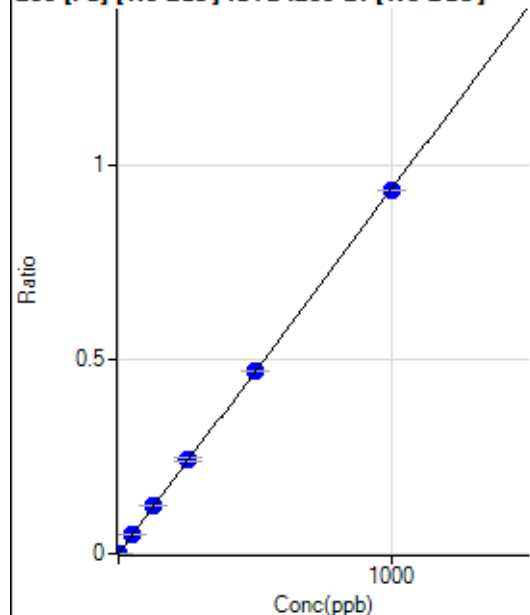
$$DL = 0.04042$$

$$BEC = 0.02694$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	90.74	0.0001	P	21.6
2	☐	1.000	0.954	1377.88	0.0010	P	5.7
3	☐	50.000	51.017	72576.32	0.0478	P	0.8
4	☐	125.000	129.549	184977.60	0.1214	P	0.3
5	☐	250.000	258.648	371275.95	0.2423	P	2.5
6	☐	500.000	503.042	718329.12	0.4712	P	0.1
7	☐	1000.000	995.697	1394392.51	0.9326	P	0.1
8	☐			6397.99	0.0046	P	4.4

$$y = 9.3657E-004 * x + 6.3453E-005$$

$$R = 0.9999$$

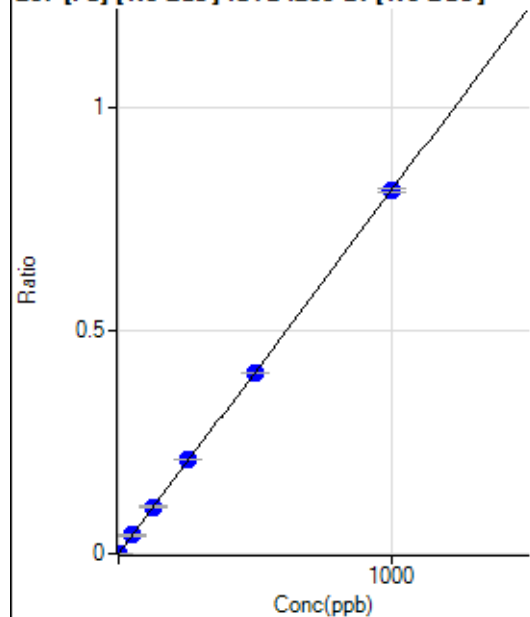
$$DL = 0.04389$$

$$BEC = 0.06775$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	68.52	0.0000	P	23.2
2	☐	1.000	0.941	1172.30	0.0008	P	14.5
3	☐	50.000	50.381	62234.11	0.0410	P	1.8
4	☐	125.000	129.200	160212.50	0.1051	P	1.2
5	☐	250.000	259.762	323877.67	0.2114	P	0.8
6	☐	500.000	497.438	616953.44	0.4047	P	0.2
7	☐	1000.000	998.296	1214248.52	0.8121	P	1.0
8	☐			5714.32	0.0041	P	1.0

$$y = 8.1347E-004 * x + 4.7894E-005$$

$$R = 0.9999$$

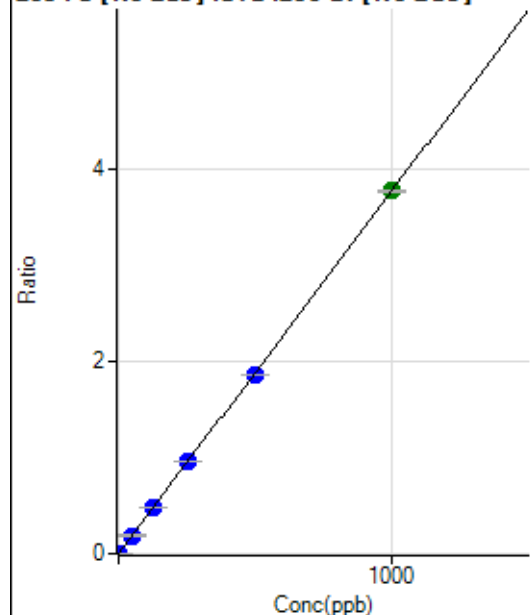
$$DL = 0.04094$$

$$BEC = 0.05888$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	396.30	0.0003	P	4.3
2	☐	1.000	0.920	5391.28	0.0037	P	3.5
3	☐	50.000	50.160	286971.66	0.1892	P	1.2
4	☐	125.000	127.685	733139.69	0.4812	P	0.8
5	☐	250.000	255.512	1474995.86	0.9626	P	0.6
6	☐	500.000	493.529	2833887.71	1.8589	P	0.5
7	☐	1000.000	1001.514	5639781.75	3.7721	A	0.9
8	☐			25330.37	0.0182	P	0.4

$$y = 0.0038 * x + 2.7707E-004$$

$$R = 1.0000$$

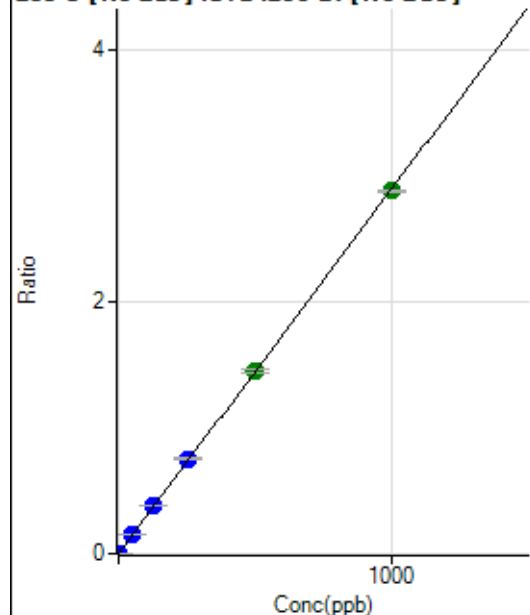
$$DL = 0.009487$$

$$BEC = 0.07357$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	22.22	0.0000	P	94.1
2	☐	1.000	0.889	3733.99	0.0026	P	3.3
3	☐	50.000	51.214	225189.80	0.1485	P	1.6
4	☐	125.000	130.385	575863.48	0.3779	P	1.3
5	☐	250.000	260.072	1155154.66	0.7538	P	1.1
6	☐	500.000	502.502	2220445.14	1.4565	A	1.6
7	☐	1000.000	995.497	4314314.72	2.8855	A	0.5
8	☐			972.29	0.0007	P	23.9

$$y = 0.0029 * x + 1.5485E-005$$

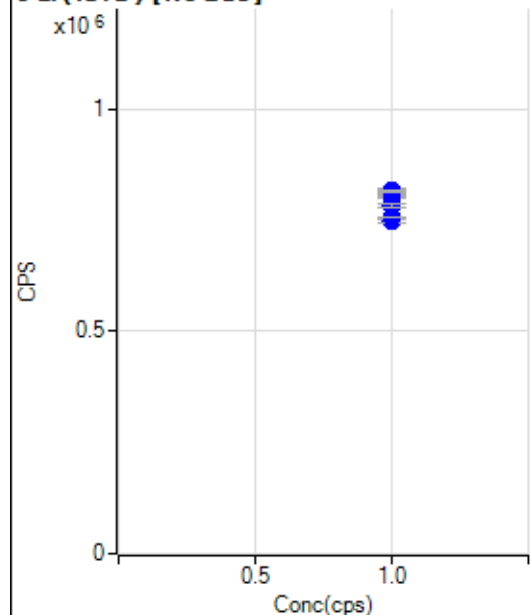
$$R = 0.9999$$

$$DL = 0.01508$$

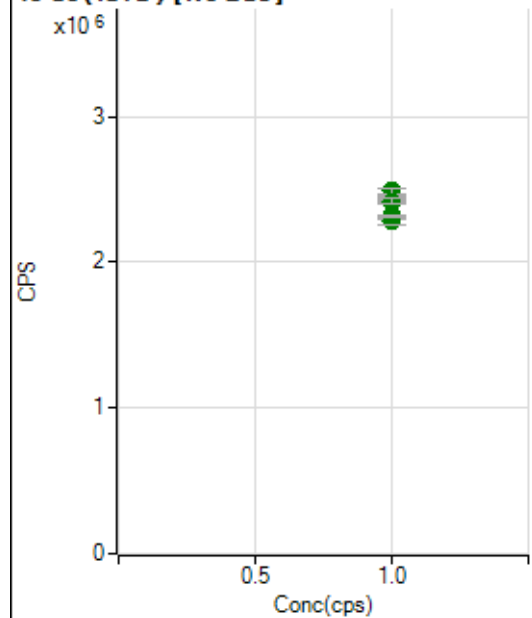
$$BEC = 0.005342$$

Weight: <None>

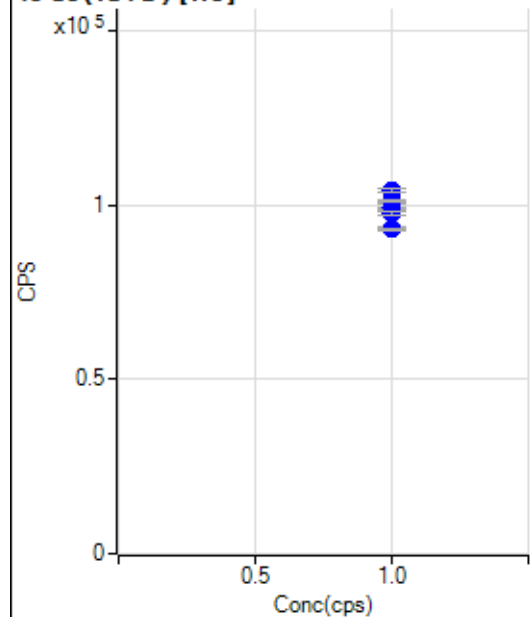
Min Conc: 0

6 Li (ISTD) [No Gas]

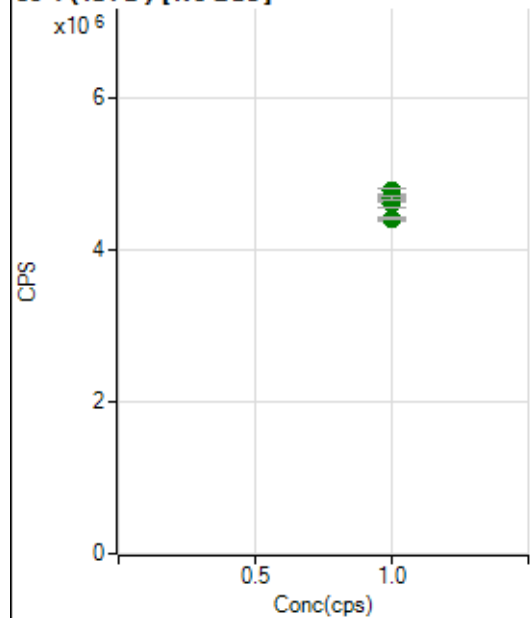
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		749292.84		P	0.9
2	☐	1.000		758121.04		P	0.2
3	☐	1.000		803404.09		P	0.4
4	☐	1.000		809546.81		P	0.6
5	☐	1.000		812851.06		P	0.4
6	☐	1.000		815689.35		M	1.1
7	☐	1.000		815796.13		P	0.5
8	☐	1.000		781947.61		P	1.0

45 Sc (ISTD) [No Gas]

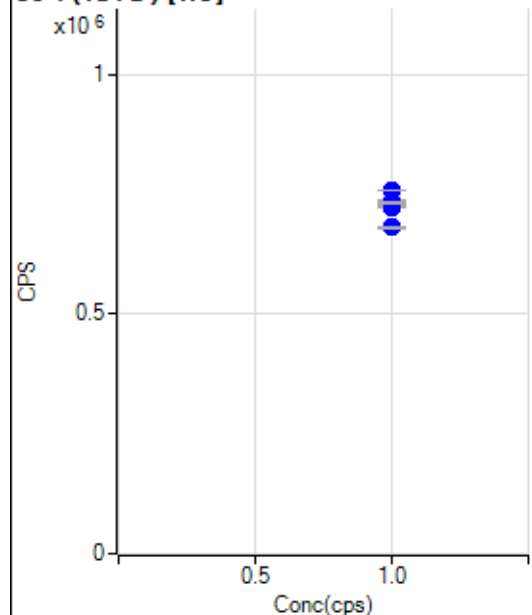
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		2278468.92		A	1.7
2	☐	1.000		2317288.19		A	0.9
3	☐	1.000		2447936.30		A	1.5
4	☐	1.000		2436032.17		A	1.3
5	☐	1.000		2451620.26		A	0.4
6	☐	1.000		2450786.09		A	0.3
7	☐	1.000		2490209.58		A	1.7
8	☐	1.000		2421950.10		A	1.8

45 Sc (ISTD) [He]

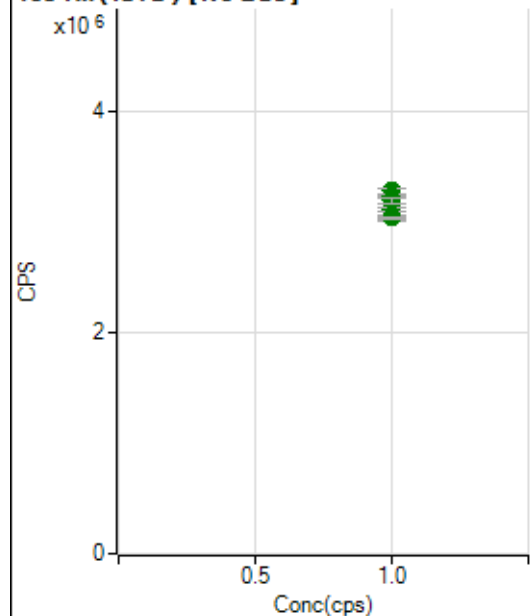
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		93359.54		P	0.7
2	☐	1.000		92880.39		P	1.1
3	☐	1.000		99090.35		P	0.8
4	☐	1.000		99473.62		P	1.4
5	☐	1.000		100774.77		P	1.3
6	☐	1.000		101153.97		P	0.6
7	☐	1.000		103981.67		P	1.1
8	☐	1.000		97570.91		P	1.1

89 Y (ISTD) [No Gas]

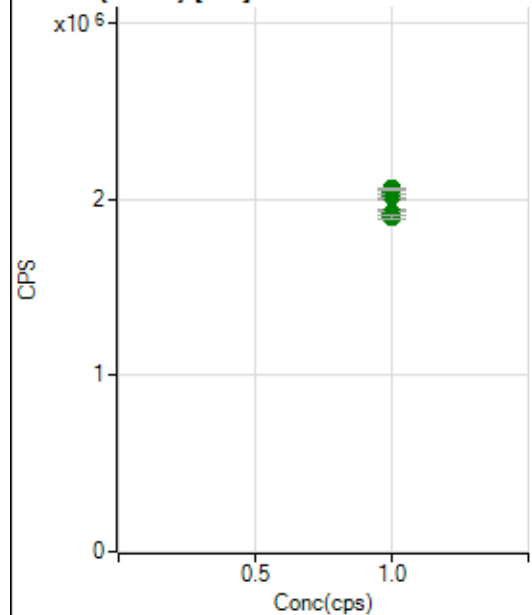
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		4405424.83		A	0.9
2	☐	1.000		4415761.88		A	0.6
3	☐	1.000		4664303.44		A	1.6
4	☐	1.000		4616717.23		A	2.3
5	☐	1.000		4702346.18		A	1.6
6	☐	1.000		4701168.99		A	0.6
7	☐	1.000		4777144.13		A	1.8
8	☐	1.000		4689822.95		A	1.2

89 Y(ISTD) [He]

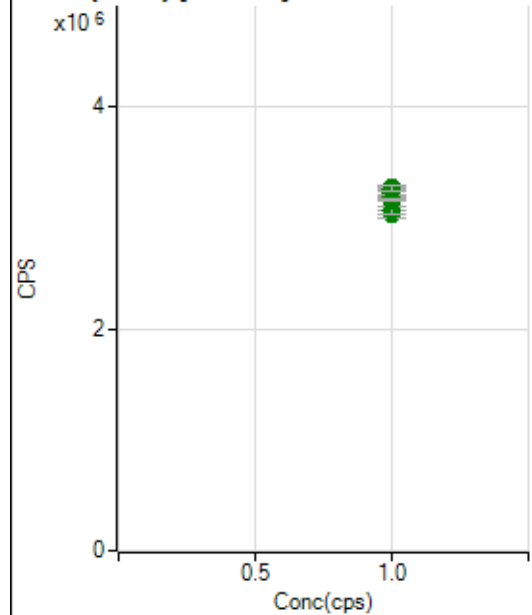
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		681085.86		P	0.5
2	☐	1.000		679488.37		P	1.1
3	☐	1.000		722525.39		P	0.5
4	☐	1.000		723362.25		P	1.0
5	☐	1.000		732088.54		P	0.7
6	☐	1.000		732753.80		P	1.1
7	☐	1.000		756305.19		P	0.2
8	☐	1.000		730786.62		P	0.4

103 Rh(ISTD) [No Gas]

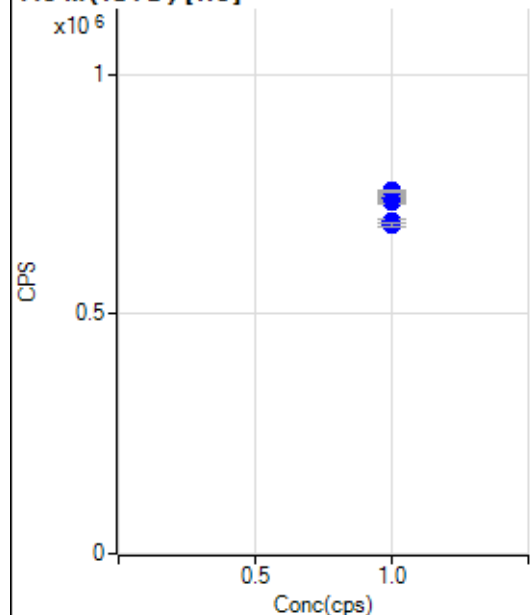
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		3035661.26		A	1.7
2	☐	1.000		3118433.30		A	1.0
3	☐	1.000		3245846.23		A	0.6
4	☐	1.000		3237598.95		A	1.0
5	☐	1.000		3280019.19		A	1.4
6	☐	1.000		3239292.87		A	1.1
7	☐	1.000		3193506.30		A	1.3
8	☐	1.000		3037756.99		A	0.4

103 Rh (ISTD) [He]

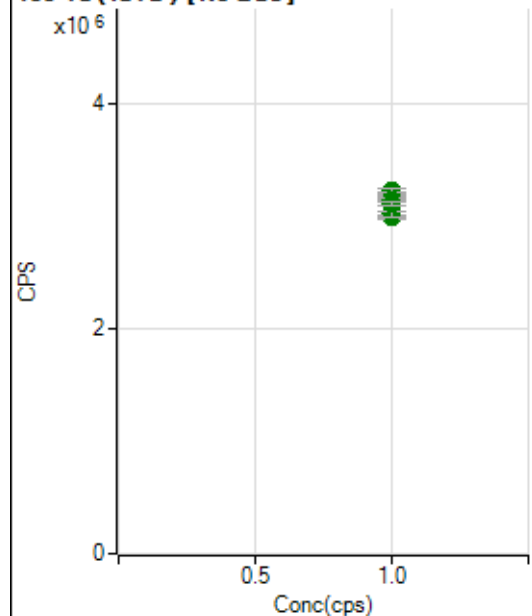
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		1927605.96		A	1.6
2	☐	1.000		1924311.34		A	0.8
3	☐	1.000		2050969.83		A	1.3
4	☐	1.000		2026784.64		A	2.3
5	☐	1.000		2017780.44		A	1.1
6	☐	1.000		2042869.50		A	1.2
7	☐	1.000		2061562.40		A	0.6
8	☐	1.000		1904057.23		A	1.3

115 In (ISTD) [No Gas]

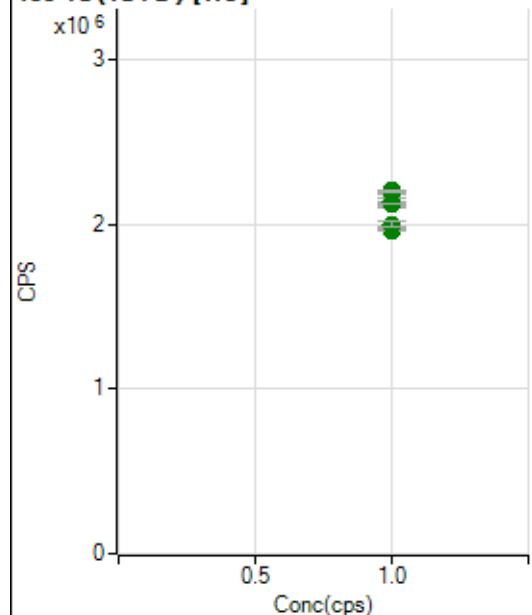
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		3033148.35		A	2.2
2	☐	1.000		3068813.10		A	2.1
3	☐	1.000		3225888.48		A	1.2
4	☐	1.000		3180936.90		A	0.5
5	☐	1.000		3268817.69		A	0.7
6	☐	1.000		3184404.86		A	1.7
7	☐	1.000		3158638.96		A	0.2
8	☐	1.000		3261615.30		A	1.4

115 In (ISTD) [He]

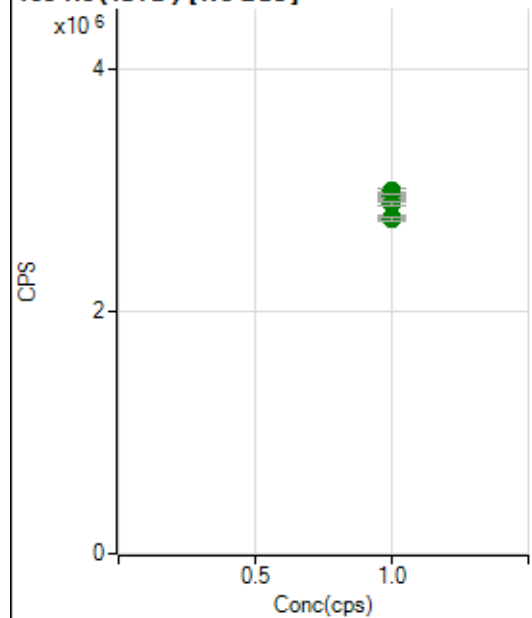
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		694427.73		P	1.2
2	☐	1.000		686955.92		P	1.1
3	☐	1.000		738010.36		P	0.9
4	☐	1.000		731993.53		P	0.2
5	☐	1.000		740613.32		P	0.5
6	☐	1.000		742537.09		P	1.0
7	☐	1.000		746178.01		P	0.5
8	☐	1.000		756519.16		P	0.6

159 Tb (ISTD) [No Gas]

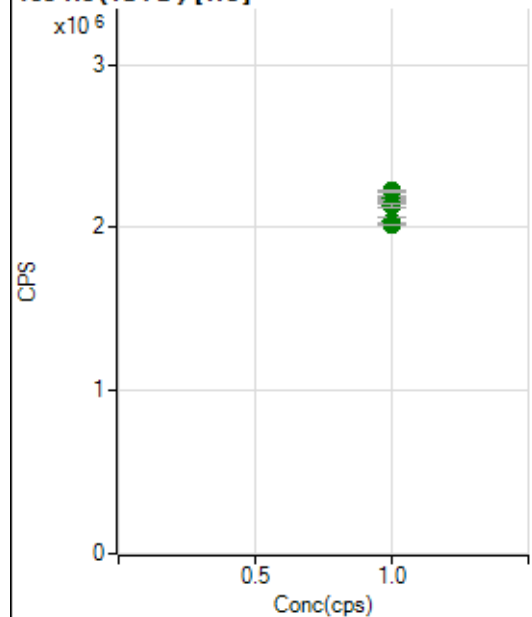
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		2985381.94		A	1.5
2	☐	1.000		3015767.14		A	1.4
3	☐	1.000		3160621.86		A	1.2
4	☐	1.000		3188004.08		A	1.1
5	☐	1.000		3220024.57		A	1.3
6	☐	1.000		3219884.92		A	1.2
7	☐	1.000		3144163.49		A	0.9
8	☐	1.000		3102412.31		A	1.4

159 Tb (ISTD) [He]

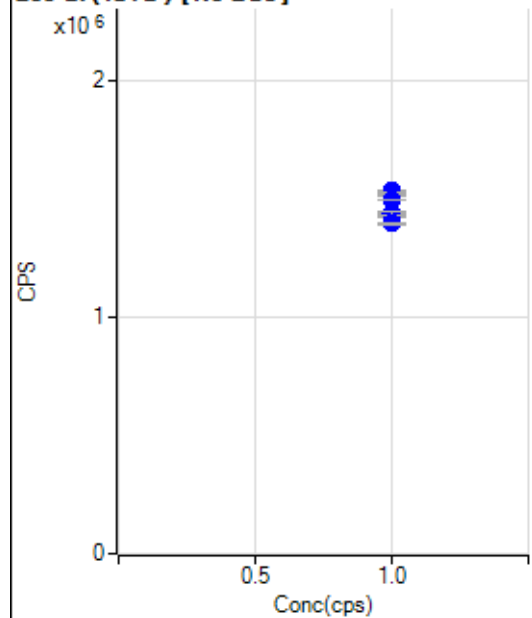
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		1966974.73		A	0.9
2	☐	1.000		2002276.22		A	2.2
3	☐	1.000		2123163.01		A	1.8
4	☐	1.000		2122813.01		A	0.8
5	☐	1.000		2155029.19		A	2.2
6	☐	1.000		2142245.37		A	2.1
7	☐	1.000		2203369.67		A	0.4
8	☐	1.000		2121328.81		A	0.1

165 Ho (ISTD) [No Gas]

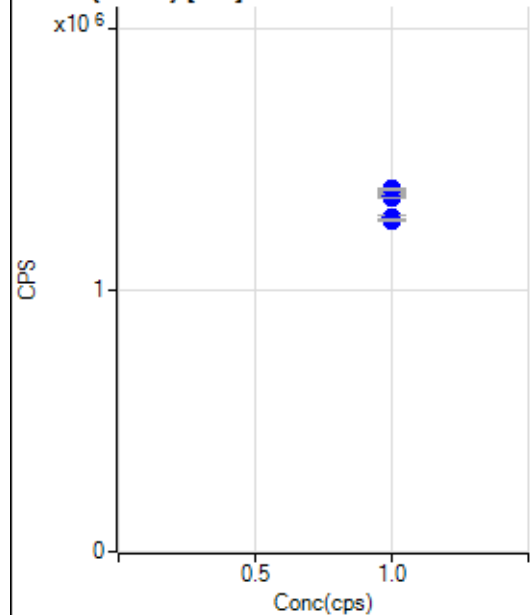
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		2774004.06		A	1.2
2	☐	1.000		2754854.60		A	1.3
3	☐	1.000		2926317.41		A	0.2
4	☐	1.000		2956365.43		A	0.8
5	☐	1.000		2990768.32		A	1.8
6	☐	1.000		2976502.04		A	0.7
7	☐	1.000		2953119.68		A	1.1
8	☐	1.000		2890486.11		A	1.0

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		2040518.44		A	1.8
2	☐	1.000		2011840.70		A	0.1
3	☐	1.000		2177418.04		A	1.1
4	☐	1.000		2137760.16		A	1.6
5	☐	1.000		2165023.63		A	1.0
6	☐	1.000		2183819.93		A	1.0
7	☐	1.000		2224002.66		A	0.6
8	☐	1.000		2130321.27		A	0.9

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		1430071.98		P	0.7
2	☐	1.000		1439828.35		P	1.0
3	☐	1.000		1516957.08		P	1.1
4	☐	1.000		1523795.25		P	0.9
5	☐	1.000		1532415.15		P	0.6
6	☐	1.000		1524479.30		P	0.4
7	☐	1.000		1495170.99		P	0.3
8	☐	1.000		1395056.82		P	0.6

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		1279341.11		P	0.9
2	☐	1.000		1275814.73		P	1.4
3	☐	1.000		1358512.59		P	0.4
4	☐	1.000		1349125.59		P	0.1
5	☐	1.000		1367075.03		P	0.9
6	☐	1.000		1357221.40		P	0.9
7	☐	1.000		1385418.81		P	0.3
8	☐	1.000		1265917.59		P	0.4

US EPA Tune Check Report

Operator Name ICPMS
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P8020120MS1.b
Acq. Date-Time 2020-02-01 14:53:46
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		2525	25250.06			3.492	5.000
24		7625	76253.68			3.111	5.000
25		1088	10882.49			2.910	5.000
26		1562	15618.40			2.818	5.000
59		30556	305555.38			3.272	5.000
113		2891	28905.02			3.558	5.000
115		35645	356452.55			3.348	5.000
206		5189	51886.06			3.829	5.000
207		4631	46312.31			4.110	5.000
208		10866	108662.33			4.121	5.000
220		1	6.90			38.821	

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

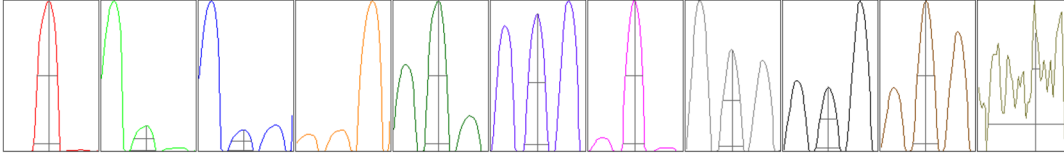
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	2468	2459	2456	2625	2617
24	7416	7493	7452	7907	7858
25	1069	1066	1061	1122	1124
26	1523	1526	1542	1613	1605
59	29763	29628	30130	31746	31510
113	2792	2800	2866	3020	2975
115	34524	34589	35295	36966	36852
206	4992	4975	5216	5380	5380
207	4419	4459	4646	4845	4787
208	10465	10378	10859	11349	11279

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	4200.25	8.95	8.90 - 9.10	
24	13176.53	23.95	23.90 - 24.10	
25	1806.84	24.95	24.90 - 25.10	
26			25.90 - 26.10	
59	53810.29	58.95	58.90 - 59.10	
113	5661.42	113.00	112.90 - 113.10	
115	69681.53	115.00	114.90 - 115.10	
206	9951.87	206.00	205.90 - 206.10	
207	9020.48	206.95	206.90 - 207.10	
208	21258.58	207.95	207.90 - 208.10	
220	1.10	220.35	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.64	0.822	0.900	
24	0.63	0.793	0.900	
25	0.63	0.786	0.900	
26			0.900	
59	0.59	0.782	0.900	
113	0.53	0.760	0.900	
115	0.54	0.692	0.900	
206	0.54	0.778	0.900	
207	0.53	0.754	0.900	
208	0.53	0.795	0.900	
220	0.26	2.384		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode HMI Nebulizer Gas 0.50 L/min Dilution Gas 0.45 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 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	11.4 V	Deflect	14.4 V
Extract 2	-250.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-120 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	0.9993	QP Bias	-4.0 V
Mass Offset	123	Axis Offset	-0.05		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.1 mm
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EM

Discriminator	3.8 mV	Analog HV	2167 V	Pulse HV	1097 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		8382	83820.01			0.625	
89		7202	72020.09			0.918	
205		6877	68774.27			0.950	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	8391	8421	8327	8442	8329
89	7175	7307	7203	7198	7126
205	6876	6945	6939	6831	6796

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	HMI	Nebulizer Gas	0.50 L/min	Dilution Gas	0.45 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 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	11.4 V	Deflect	4.4 V
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US EPA Tune Check Report

Extract 2	-250.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-120 V	Cell Exit	-70 V		
Cell Parameters					
Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		
QP Parameters					
Mass Gain	123	Axis Gain	0.9993	QP Bias	-13.0 V
Mass Offset	123	Axis Offset	-0.05		
Hardware Settings					
Torch					
Torch H	0.1 mm	Torch V	-0.1 mm		
EM					
Discriminator	3.8 mV	Analog HV	2167 V	Pulse HV	1097 V