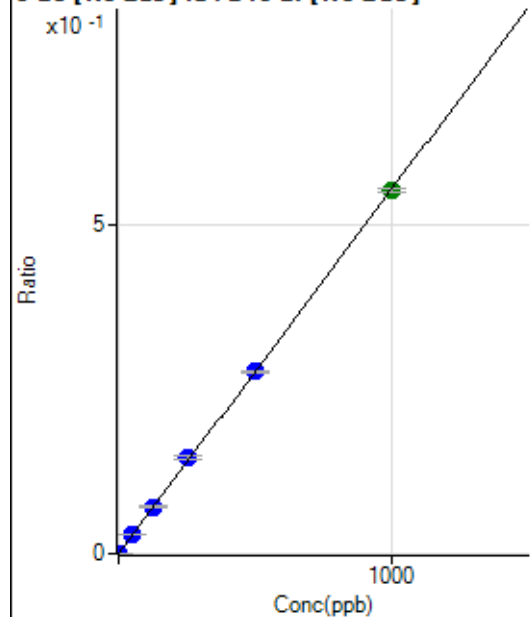


Calibration for 005CALS.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P8050323-MS.b\
 Analysis File: P8050323-MS.batch.bin
 DA Date-Time: 2023-05-03 15:15:00
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2023-05-03 11:46:01
2	005CALS.d	S02	2023-05-03 11:49:06
3	006CALS.d	S03	2023-05-03 11:52:13
4	007CALS.d	S04	2023-05-03 11:55:12
5	008CALS.d	S05	2023-05-03 11:58:13
6	009CALS.d	S06	2023-05-03 12:01:11
7	010CALS.d	S07	2023-05-03 12:04:12
8	011CALS.d	S08	2023-05-03 12:07:11

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	34.17	0.0000	P	31.3
2	☐	1.000	1.110	2073.65	0.0006	P	4.4
3	☐	50.000	52.413	99065.14	0.0290	P	3.3
4	☐	125.000	128.005	240826.32	0.0708	P	2.7
5	☐	250.000	262.807	474492.88	0.1453	P	3.0
6	☐	500.000	500.514	919899.56	0.2767	P	1.5
7	☐	1000.000	996.045	1791765.88	0.5506	A	1.1
8	☐			804.51	0.0003	P	1.8

$$y = 5.5279\text{E-}004 * x + 1.0119\text{E-}005$$

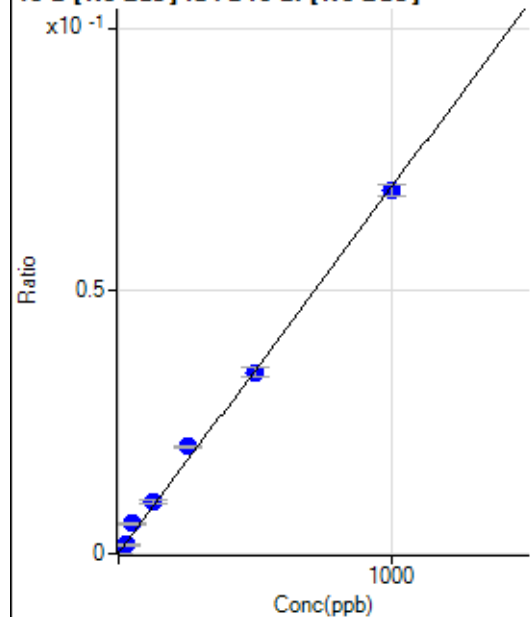
$$R = 0.9999$$

$$DL = 0.01716$$

$$BEC = 0.0183$$

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	334.61	0.0001	P	15.4
2	☐	25.000	22.266	5486.63	0.0017	P	7.6
3	☐	50.000	80.309	19453.70	0.0057	P	6.3
4	☐	125.000	138.658	33190.19	0.0098	P	8.3
5	☐	250.000	290.769	66554.10	0.0204	P	2.1
6	☐	500.000	493.922	114684.07	0.0345	P	5.6
7	☐	1000.000	989.693	224769.36	0.0691	P	3.2
8	☐			13897.86	0.0045	P	8.9

$$y = 6.9675\text{E-}005 * x + 9.9345\text{E-}005$$

$$R = 0.9988$$

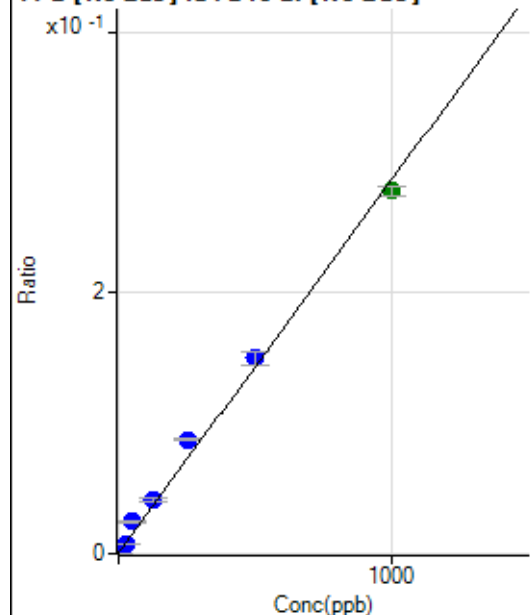
$$DL = 0.6593$$

$$BEC = 1.426$$

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	1404.46	0.0004	P	4.6
2	☐	25.000	23.532	23761.16	0.0071	P	4.1
3	☐	50.000	85.127	84570.69	0.0248	P	7.2
4	☐	125.000	144.530	142003.48	0.0417	P	6.6
5	☐	250.000	304.829	286308.29	0.0876	P	1.9
6	☐	500.000	521.899	497286.53	0.1497	P	6.1
7	☐	1000.000	971.182	905274.00	0.2781	A	2.5
8	☐			59889.25	0.0192	P	9.1

$$y = 2.8597E-004 * x + 4.1788E-004$$

$$R = 0.9976$$

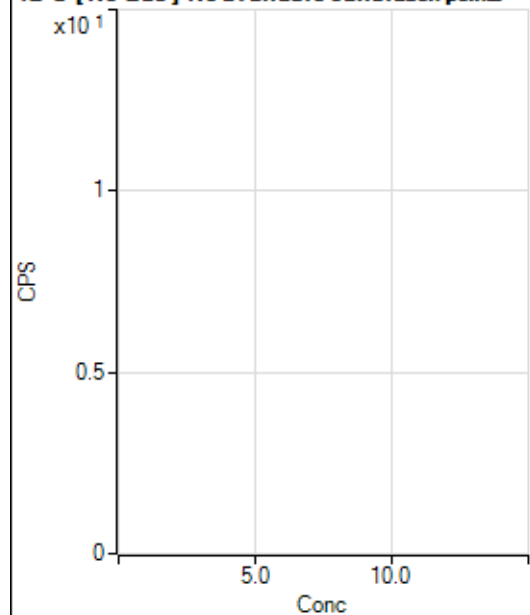
$$DL = 0.2007$$

$$BEC = 1.461$$

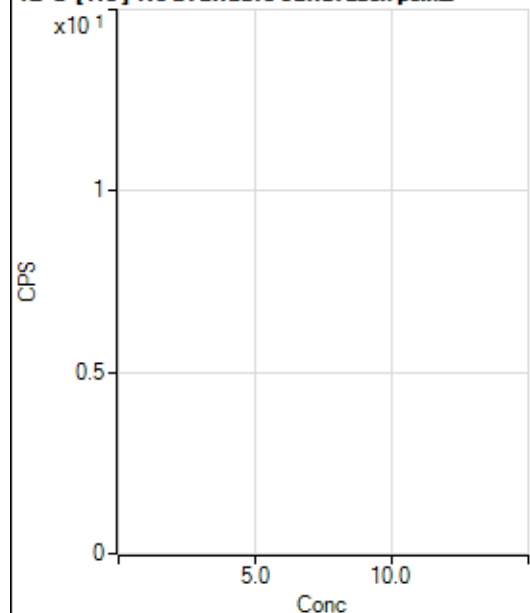
Weight: <None>

Min Conc: 0

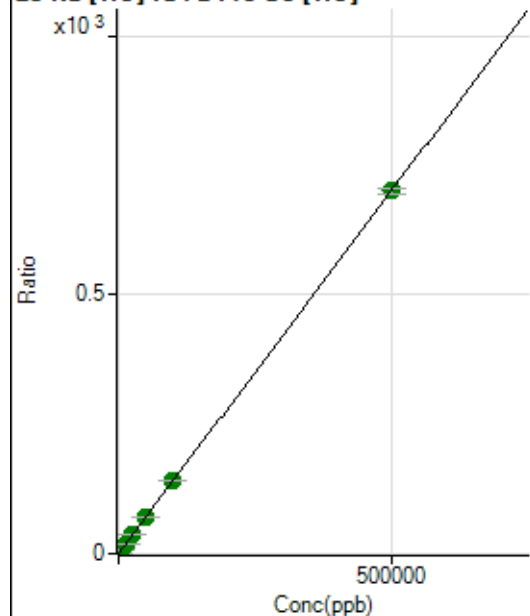
12 C [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			3318682.67		A	0.3
2	☐			3719678.21		A	0.7
3	☐			3858934.33		A	1.1
4	☐			3922153.91		A	2.2
5	☐			3993627.09		A	2.8
6	☐			4232492.93		A	2.8
7	☐			4437777.75		A	4.0
8	☐			4064490.28		A	4.3

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			40013.39		P	4.0
2	☐			46925.63		P	2.1
3	☐			49559.25		P	1.3
4	☐			48786.98		P	1.2
5	☐			52232.26		P	2.0
6	☐			56180.24		P	1.9
7	☐			59889.16		P	2.3
8	☐			57805.84		P	0.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	19354.99	0.1125	P	1.7
2	☐	500.000	524.163	145132.21	0.8479	P	1.4
3	☐	5000.000	5368.289	1331350.51	7.6449	A	2.1
4	☐	12500.000	12835.959	3172284.75	18.1230	A	0.5
5	☐	25000.000	25816.851	6301790.72	36.3370	A	1.0
6	☐	50000.000	51284.318	12428488.13	72.0712	A	0.1
7	☐	100000.00	100270.46	24675194.30	140.8054	A	0.5
8	☐	500000.00	499764.52	121532773.5	701.3490	A	1.4

$$y = 0.0014 * x + 0.1125$$

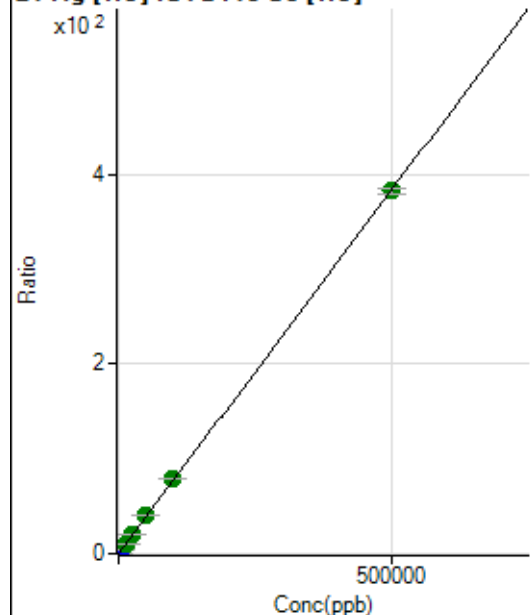
$$R = 1.0000$$

$$DL = 4.068$$

$$BEC = 80.16$$

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	450.02	0.0026	P	10.0
2	☐	500.000	527.753	69728.51	0.4074	P	2.1
3	☐	5000.000	5510.362	736487.57	4.2290	P	0.3
4	☐	12500.000	13209.124	1773816.45	10.1339	A	1.4
5	☐	25000.000	26513.202	3527437.75	20.3381	A	3.1
6	☐	50000.000	52352.569	6924609.44	40.1567	A	1.0
7	☐	100000.00	103274.49	13882207.77	79.2134	A	0.6
8	☐	500000.00	499011.32	66319405.65	382.7408	A	1.9

$$y = 7.6699\text{E-}004 * x + 0.0026$$

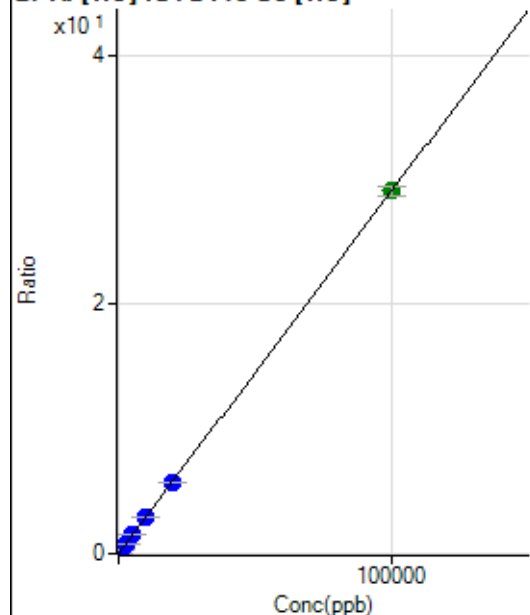
$$R = 1.0000$$

$$DL = 1.025$$

$$BEC = 3.41$$

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	68.74	0.0004	P	9.8
2	☐	20.000	20.790	1103.24	0.0064	P	3.4
3	☐	1000.000	1071.469	54332.89	0.3120	P	0.4
4	☐	2500.000	2501.969	127419.65	0.7280	P	1.4
5	☐	5000.000	5064.382	255475.98	1.4731	P	0.8
6	☐	10000.000	10021.750	502579.89	2.9147	P	2.0
7	☐	20000.000	19687.617	1003336.17	5.7256	P	1.2
8	☐	100000.00	100056.31	5041314.74	29.0967	A	2.7

$$y = 2.9080\text{E-}004 * x + 3.9948\text{E-}004$$

$$R = 1.0000$$

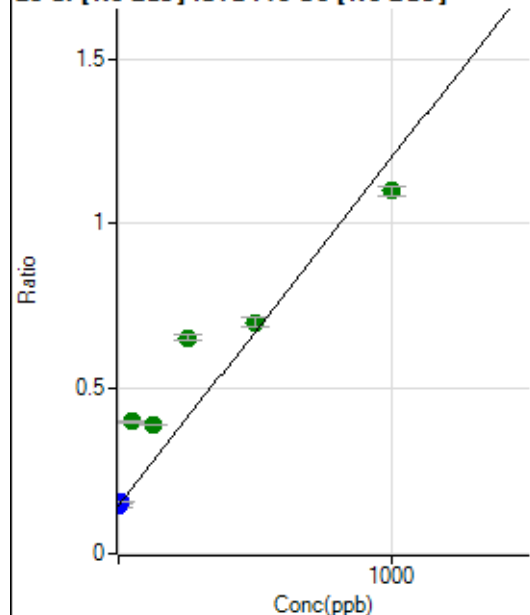
$$DL = 0.4056$$

$$BEC = 1.374$$

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	720477.79	0.1461	P	6.0
2	☐	10.000	9.731	767122.72	0.1564	P	0.8
3	☐	50.000	241.816	2008741.86	0.4009	A	0.8
4	☐	125.000	232.889	1935125.02	0.3915	A	0.8
5	☐	250.000	482.819	3219182.34	0.6548	A	2.8
6	☐	500.000	527.163	3487666.18	0.7015	A	4.1
7	☐	1000.000	905.140	5524249.00	1.0997	A	2.4
8	☐			2117289.76	0.4331	A	11.4

$$y = 0.0011 * x + 0.1461$$

$$R = 0.9497$$

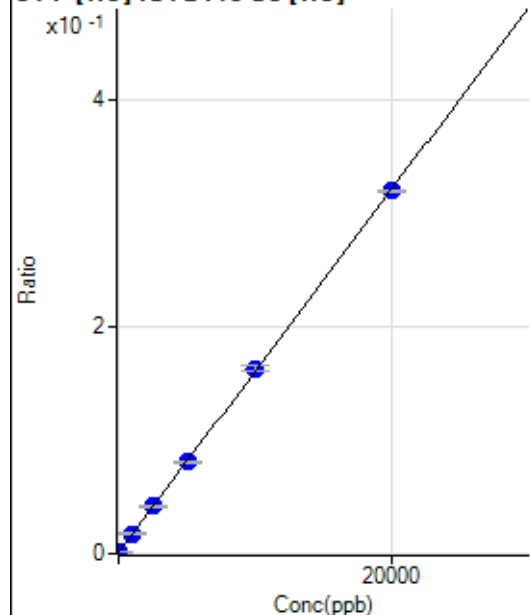
$$DL = 24.84$$

$$BEC = 138.7$$

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	-17.781	108.34	0.0006	P	48.9
2	☐	0.000	17.781	205.56	0.0012	P	34.3
3	☐	1000.000	1004.185	2958.72	0.0170	P	10.2
4	☐	2500.000	2541.745	7282.59	0.0416	P	2.6
5	☐	5000.000	4973.613	13965.44	0.0805	P	0.4
6	☐	10000.000	10158.704	28197.40	0.1635	P	2.6
7	☐	20000.000	19921.817	56042.35	0.3198	P	0.3
8	☐			155.56	0.0009	P	21.0

$$y = 1.6007E-005 * x + 9.1597E-004$$

$$R = 0.9999$$

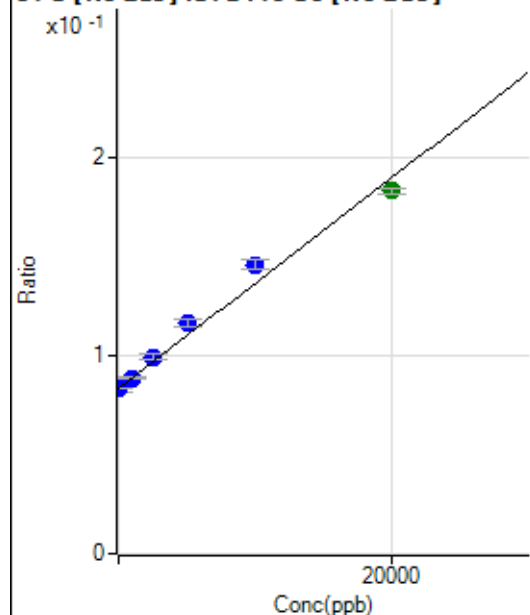
$$DL = 67.55$$

$$BEC = 57.22$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	-17.071	411306.95	0.0834	P	4.9
2	☐	0.000	17.071	409969.44	0.0836	P	0.7
3	☐	1000.000	923.764	442839.72	0.0884	P	1.0
4	☐	2500.000	2976.159	490643.58	0.0993	P	2.9
5	☐	5000.000	6226.201	572893.72	0.1166	P	3.9
6	☐	10000.000	11778.115	725439.18	0.1461	P	3.2
7	☐	20000.000	18748.684	919674.12	0.1831	A	1.9
8	☐			375312.85	0.0767	P	1.4

$$y = 5.3158E-006 * x + 0.0835$$

$$R = 0.9911$$

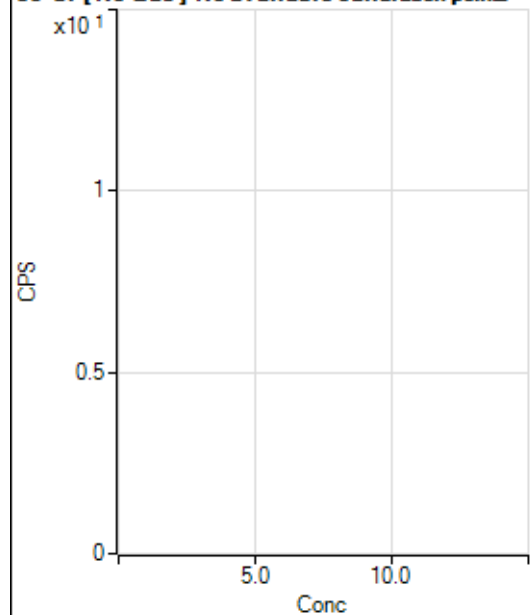
$$DL = 1322$$

$$BEC = 1.57E+04$$

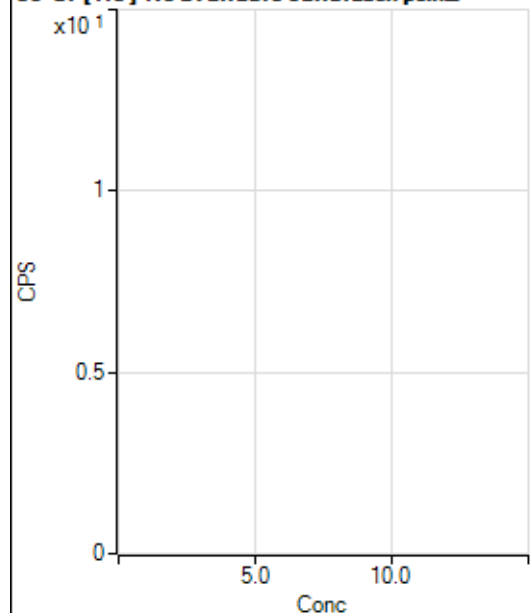
Weight: <None>

Min Conc: 0

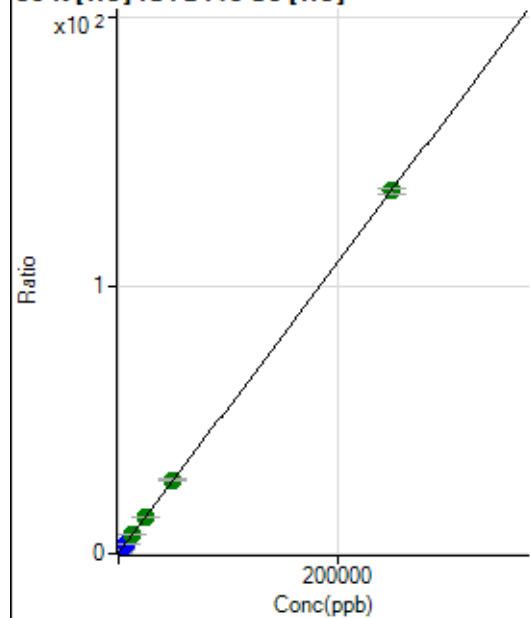
35 Cl [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			187026.36		P	1.1
2	☐			229900.15		P	1.1
3	☐			222810.80		P	0.8
4	☐			227050.35		P	0.7
5	☐			225229.15		P	0.2
6	☐			223596.67		P	1.2
7	☐			227386.99		P	0.7
8	☐			223468.94		P	1.0

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			1302.87		P	5.4
2	☐			1461.22		P	13.7
3	☐			1586.25		P	5.0
4	☐			1639.03		P	10.4
5	☐			1530.67		P	5.6
6	☐			1566.80		P	6.6
7	☐			1680.70		P	5.1
8	☐			1727.93		P	6.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	24994.42	0.1452	P	1.5
2	☐	500.000	501.093	71298.55	0.4166	P	0.6
3	☐	2500.000	2566.522	267303.79	1.5349	P	1.1
4	☐	6250.000	6199.664	612980.46	3.5020	P	0.9
5	☐	12500.000	12709.084	1218581.87	7.0265	A	0.5
6	☐	25000.000	25217.929	2379395.13	13.7993	A	1.9
7	☐	50000.000	50385.894	4806044.77	27.4264	A	1.8
8	☐	250000.00	249891.16	23470411.11	135.4472	A	1.5

$$y = 5.4144\text{E-}004 * x + 0.1452$$

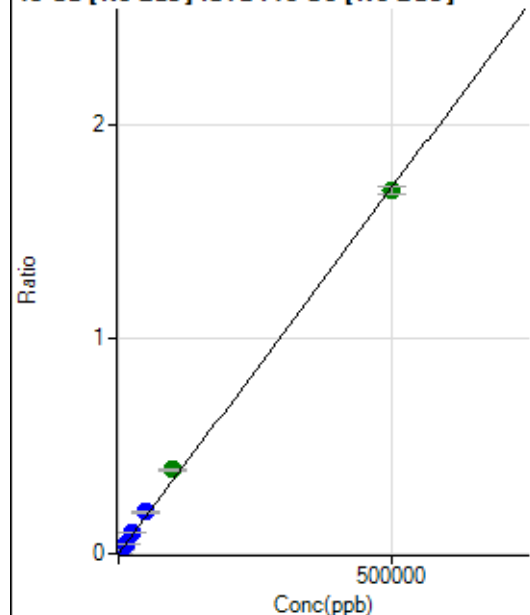
$$R = 1.0000$$

$$DL = 12.17$$

$$BEC = 268.3$$

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	149.98	0.0000	P	9.3
2	☐	500.000	515.532	8768.67	0.0018	P	1.6
3	☐	5000.000	5707.189	97611.17	0.0195	P	0.5
4	☐	12500.000	14250.648	240202.51	0.0486	P	1.2
5	☐	25000.000	28770.154	482100.48	0.0981	P	3.3
6	☐	50000.000	56676.073	959415.17	0.1932	P	2.9
7	☐	100000.00	115236.18	1972320.92	0.3928	A	2.2
8	☐	500000.00	496045.79	8268015.68	1.6906	A	2.2

$$y = 3.4080\text{E-}006 * x + 3.0367\text{E-}005$$

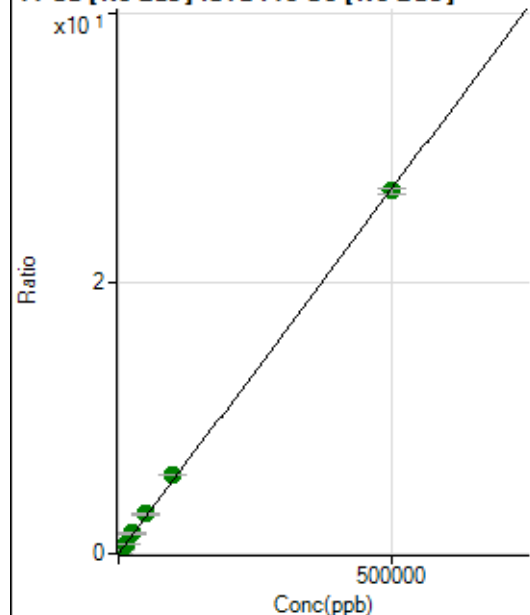
$$R = 0.9995$$

$$DL = 2.473$$

$$BEC = 8.91$$

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	10378.71	0.0021	P	4.7
2	☐	500.000	519.889	147774.80	0.0301	P	0.2
3	☐	5000.000	5746.074	1562049.40	0.3117	A	0.5
4	☐	12500.000	13774.678	3679006.23	0.7444	A	1.9
5	☐	25000.000	27726.169	7354162.57	1.4962	A	3.5
6	☐	50000.000	54894.606	14700314.99	2.9602	A	3.3
7	☐	100000.00	108162.47	29279651.13	5.8307	A	2.2
8	☐	500000.00	497702.38	131167209.3	26.8220	A	1.9

$$y = 5.3887\text{E-}005 * x + 0.0021$$

$$R = 0.9998$$

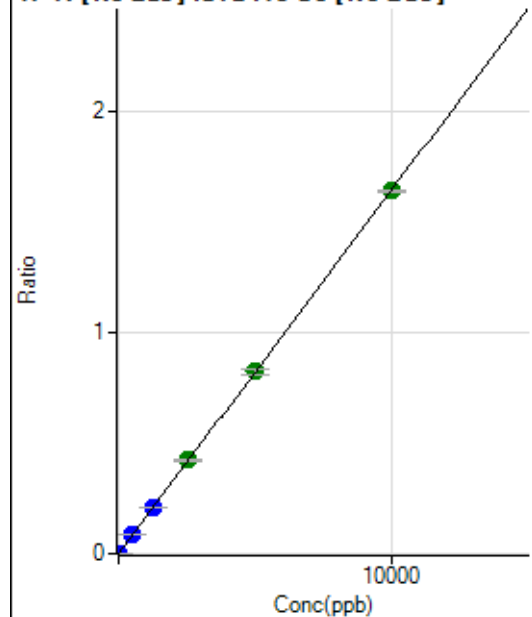
$$DL = 5.527$$

$$BEC = 39.04$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	113.89	0.0000	P	46.8
2	☐	5.000	5.070	4197.95	0.0009	P	2.7
3	☐	500.000	506.985	417040.24	0.0832	P	1.7
4	☐	1250.000	1277.954	1036674.11	0.2098	P	2.4
5	☐	2500.000	2565.790	2069854.62	0.4211	A	3.8
6	☐	5000.000	4998.981	4074493.62	0.8205	A	3.3
7	☐	10000.000	9980.219	8227202.35	1.6380	A	0.5
8	☐			1136.19	0.0002	P	17.1

$$y = 1.6413\text{E-}004 * x + 2.3404\text{E-}005$$

$$R = 1.0000$$

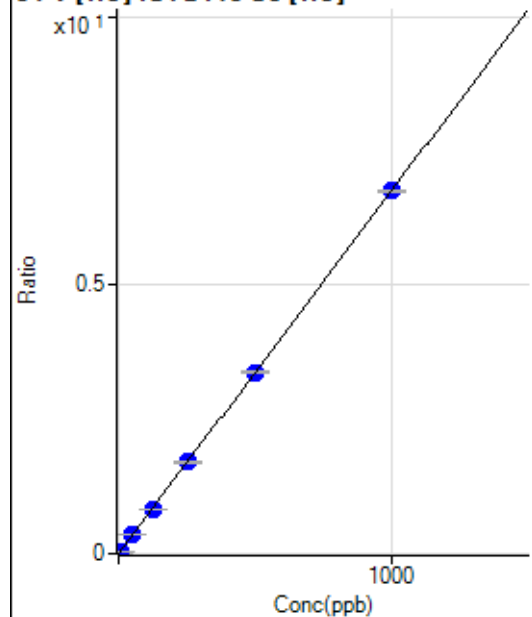
$$DL = 0.2004$$

$$BEC = 0.1426$$

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	14.45	0.0001	P	92.4
2	☐	5.000	4.991	5790.12	0.0338	P	2.4
3	☐	50.000	50.894	59943.68	0.3442	P	0.9
4	☐	125.000	123.618	146318.51	0.8359	P	1.1
5	☐	250.000	251.870	295366.25	1.7031	P	0.2
6	☐	500.000	499.330	582215.40	3.3764	P	1.0
7	☐	1000.000	999.996	1184949.72	6.7617	P	0.3
8	☐			402.23	0.0023	P	10.4

$$y = 0.0068 * x + 8.3515\text{E-}005$$

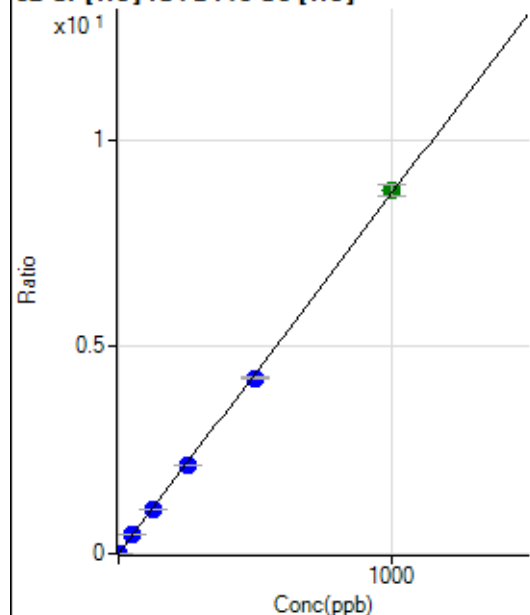
$$R = 1.0000$$

$$DL = 0.03425$$

$$BEC = 0.01235$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	665.58	0.0039	P	2.2
2	☐	2.000	1.981	3611.60	0.0211	P	0.8
3	☐	50.000	50.740	77538.97	0.4452	P	0.4
4	☐	125.000	121.356	185460.04	1.0595	P	0.6
5	☐	250.000	245.121	370470.71	2.1361	P	0.9
6	☐	500.000	487.771	732329.43	4.2469	P	0.9
7	☐	1000.000	1007.753	1536751.75	8.7702	A	3.1
8	☐			11789.40	0.0680	P	1.3

$$y = 0.0087 * x + 0.0039$$

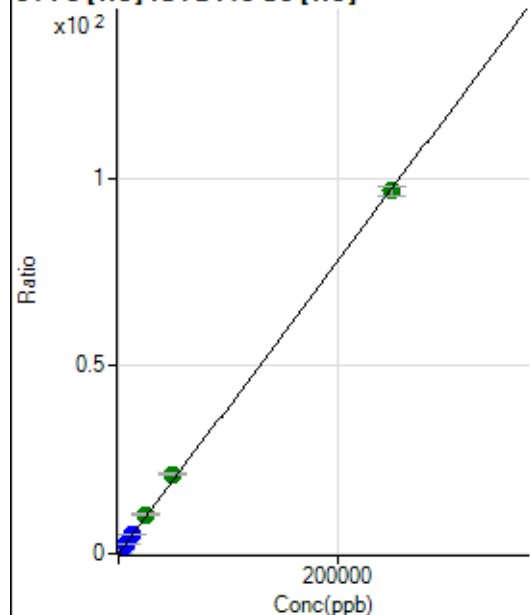
$$R = 0.9999$$

$$DL = 0.02951$$

$$BEC = 0.4446$$

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	683.36	0.0040	P	15.1
2	☐	50.000	52.991	4200.69	0.0245	P	4.2
3	☐	2500.000	2707.883	183782.56	1.0553	P	2.1
4	☐	6250.000	6450.370	439043.95	2.5083	P	0.7
5	☐	12500.000	13074.333	880998.37	5.0799	P	0.6
6	☐	25000.000	27006.548	1808699.65	10.4890	A	1.5
7	☐	50000.000	54394.635	3701308.04	21.1221	A	1.8
8	☐	250000.00	248884.61	16743445.28	96.6308	A	2.4

$$y = 3.8824E-004 * x + 0.0040$$

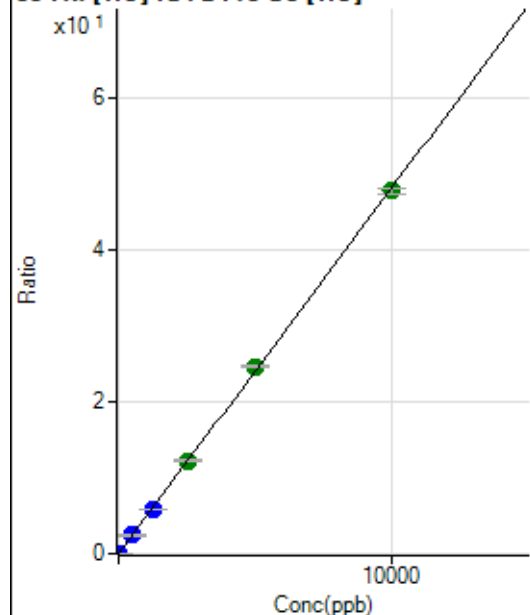
$$R = 0.9998$$

$$DL = 4.633$$

$$BEC = 10.23$$

Weight: <None>

Min Conc: 0

⁵⁵Mn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	71.11	0.0004	P	19.7
2	☐	1.000	1.084	963.38	0.0056	P	8.6
3	☐	500.000	502.736	421325.30	2.4193	P	1.5
4	☐	1250.000	1212.189	1020954.70	5.8329	P	1.2
5	☐	2500.000	2548.634	2126725.83	12.2632	A	1.1
6	☐	5000.000	5126.686	4253689.42	24.6675	A	0.9
7	☐	10000.000	9929.088	8371699.18	47.7742	A	1.7
8	☐			4101.74	0.0237	P	2.3

$$y = 0.0048 * x + 4.1337E-004$$

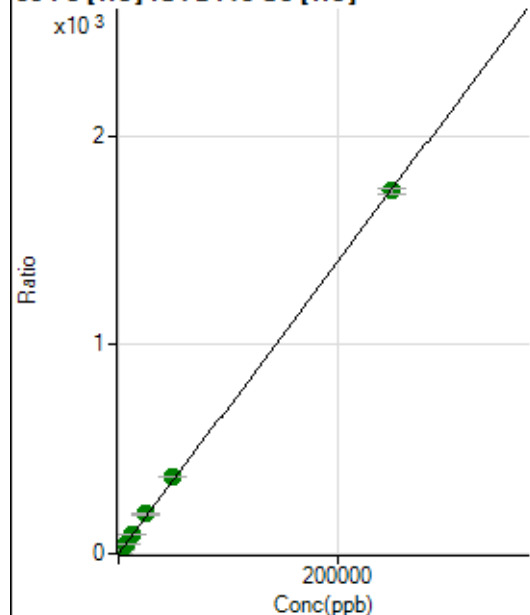
$$R = 0.9999$$

$$DL = 0.05086$$

$$BEC = 0.08591$$

Weight: <None>

Min Conc: 0

⁵⁶Fe [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	4789.78	0.0278	P	5.0
2	☐	50.000	52.719	67587.24	0.3949	P	1.1
3	☐	2500.000	2778.852	3373980.23	19.3748	A	1.4
4	☐	6250.000	6661.017	8122461.64	46.4033	A	0.9
5	☐	12500.000	13470.852	16269095.04	93.8149	A	2.0
6	☐	25000.000	27075.630	32513144.01	188.5344	A	0.6
7	☐	50000.000	52659.525	64253805.14	366.6551	A	0.5
8	☐	250000.00	249198.92	300653291.9	1,735.006	A	1.4

$$y = 0.0070 * x + 0.0278$$

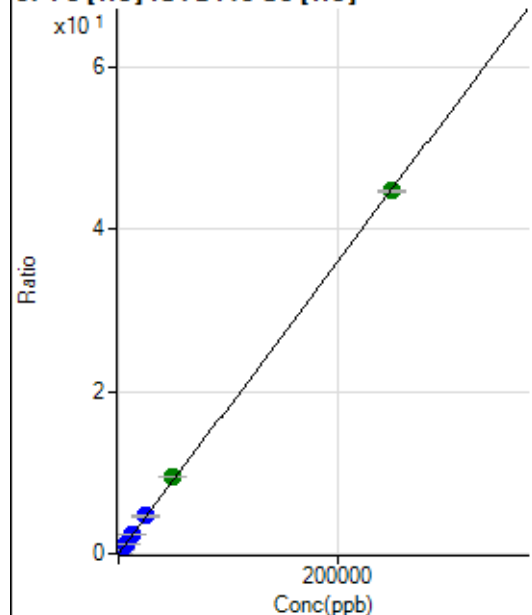
$$R = 0.9999$$

$$DL = 0.604$$

$$BEC = 3.999$$

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	201.86	0.0012	P	6.4
2	☐	50.000	52.582	1814.97	0.0106	P	5.6
3	☐	2500.000	2660.639	83310.59	0.4784	P	0.7
4	☐	6250.000	6355.874	199747.19	1.1412	P	1.1
5	☐	12500.000	12803.443	398455.83	2.2976	P	1.2
6	☐	25000.000	25772.239	797364.05	4.6237	P	0.4
7	☐	50000.000	53004.072	1666227.52	9.5081	A	1.3
8	☐	250000.00	249302.53	7749651.62	44.7167	A	0.3

$$y = 1.7936\text{E-}004 * x + 0.0012$$

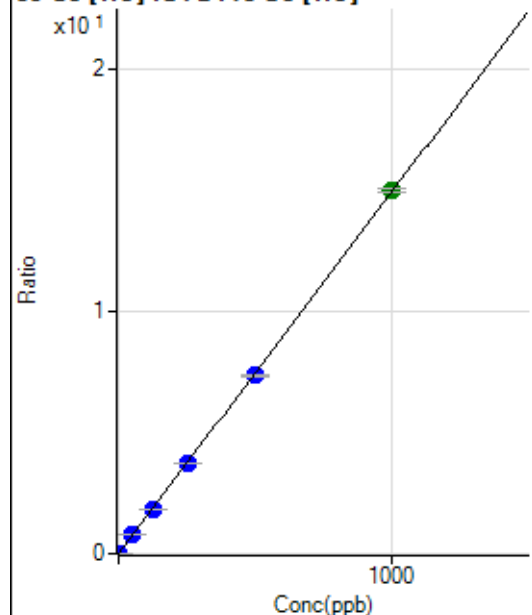
R = 0.9999

DL = 1.262

BEC = 6.541

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	80.00	0.0005	P	32.5
2	☐	1.000	1.051	2765.85	0.0162	P	2.1
3	☐	50.000	51.831	134925.27	0.7747	P	0.4
4	☐	125.000	124.055	324457.37	1.8537	P	1.0
5	☐	250.000	249.487	646438.80	3.7274	P	0.3
6	☐	500.000	492.780	1269482.09	7.3619	P	1.2
7	☐	1000.000	1003.765	2627884.46	14.9952	A	1.0
8	☐			2287.98	0.0132	P	1.5

$$y = 0.0149 * x + 4.6479\text{E-}004$$

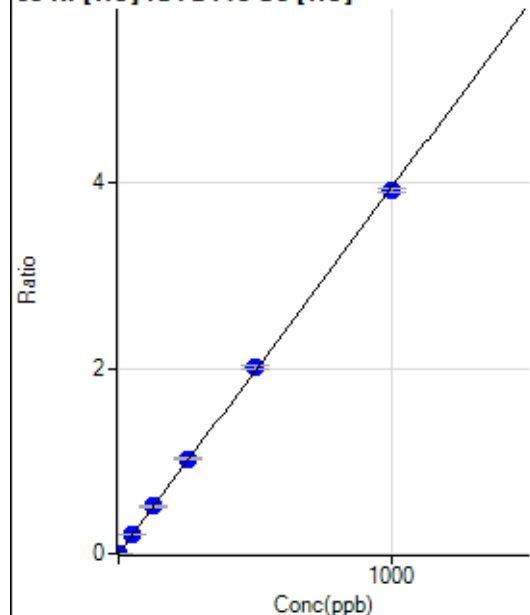
R = 1.0000

DL = 0.0303

BEC = 0.03111

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	112.22	0.0007	P	10.0
2	☐	1.000	1.139	880.04	0.0051	P	4.5
3	☐	50.000	53.929	37150.71	0.2133	P	1.3
4	☐	125.000	128.779	89005.16	0.5085	P	1.3
5	☐	250.000	259.872	177846.16	1.0255	P	0.7
6	☐	500.000	510.369	347164.44	2.0133	P	1.6
7	☐	1000.000	991.679	685438.50	3.9114	P	0.9
8	☐			2110.18	0.0122	P	5.3

$$y = 0.0039 * x + 6.5193E-004$$

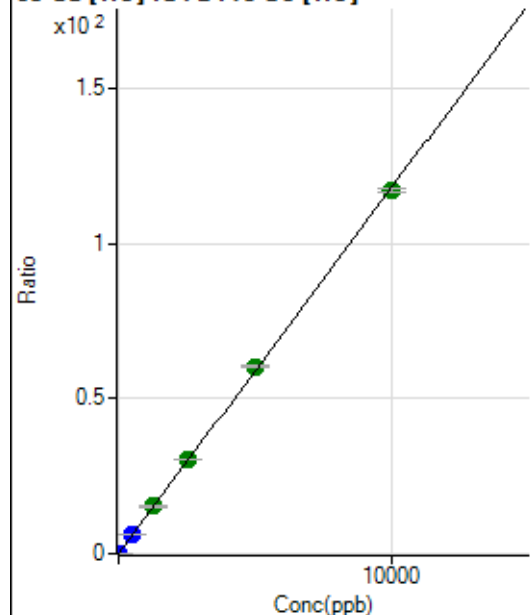
$$R = 0.9999$$

$$DL = 0.04961$$

$$BEC = 0.1653$$

Weight: <None>

Min Conc: 0

63 Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	627.80	0.0036	P	5.6
2	☐	2.000	2.095	4851.98	0.0283	P	2.5
3	☐	500.000	518.907	1065948.25	6.1207	P	0.2
4	☐	1250.000	1297.870	2678664.47	15.3035	A	1.8
5	☐	2500.000	2579.633	5274574.85	30.4135	A	0.7
6	☐	5000.000	5121.607	10411477.21	60.3794	A	1.8
7	☐	10000.000	9912.359	20477412.34	116.8548	A	1.2
8	☐			3781.66	0.0218	P	2.6

$$y = 0.0118 * x + 0.0036$$

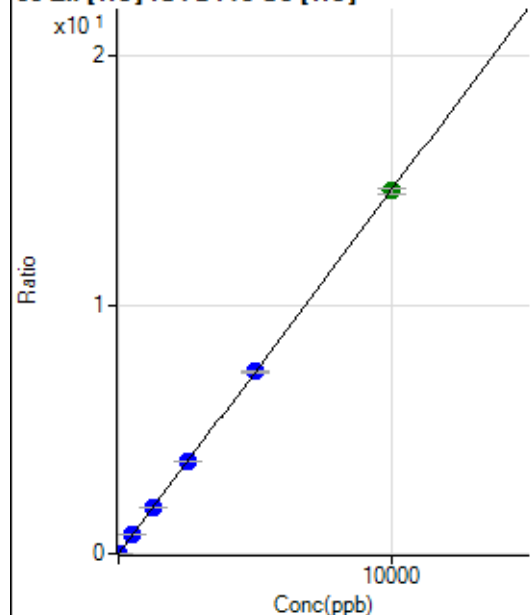
$$R = 0.9999$$

$$DL = 0.05175$$

$$BEC = 0.3095$$

Weight: <None>

Min Conc: 0

66 Zn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	147.78	0.0009	P	9.2
2	☐	2.000	2.570	790.03	0.0046	P	5.0
3	☐	500.000	533.126	135913.02	0.7804	P	0.7
4	☐	1250.000	1277.528	327117.50	1.8689	P	1.3
5	☐	2500.000	2539.586	644146.06	3.7143	P	0.4
6	☐	5000.000	5013.629	1264305.40	7.3319	P	1.1
7	☐	10000.000	9978.192	2556892.19	14.5912	A	1.6
8	☐			12214.23	0.0705	P	0.8

$$y = 0.0015 * x + 8.5821E-004$$

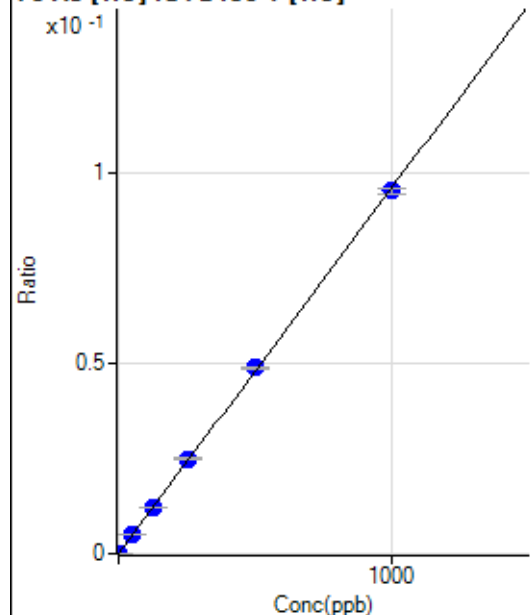
$$R = 1.0000$$

$$DL = 0.1624$$

$$BEC = 0.5869$$

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	3.67	0.0000	P	57.8
2	☐	1.000	1.094	152.35	0.0001	P	10.8
3	☐	50.000	51.332	7226.91	0.0049	P	2.2
4	☐	125.000	126.561	17688.82	0.0122	P	2.8
5	☐	250.000	259.866	36053.03	0.0250	P	2.8
6	☐	500.000	508.930	70960.80	0.0489	P	1.5
7	☐	1000.000	992.806	142251.54	0.0954	P	1.6
8	☐			27.00	0.0000	P	10.7

$$y = 9.6124E-005 * x + 2.6022E-006$$

$$R = 0.9999$$

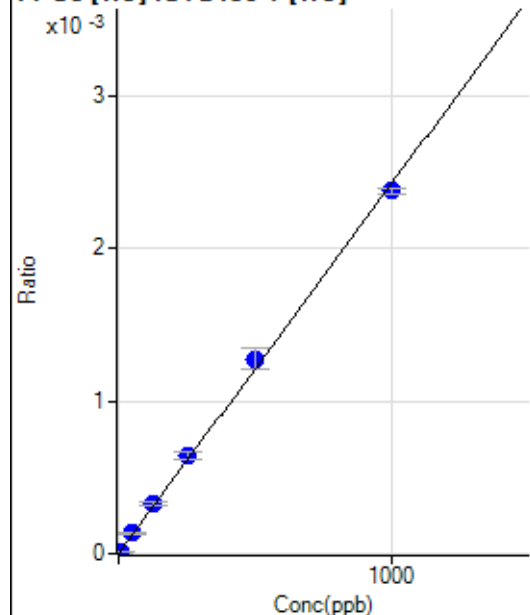
$$DL = 0.04694$$

$$BEC = 0.02707$$

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	1.11	0.0000	P	173.2
2	☐	5.000	4.557	16.67	0.0000	P	20.9
3	☐	50.000	54.501	194.45	0.0001	P	17.5
4	☐	125.000	135.410	477.79	0.0003	P	7.7
5	☐	250.000	265.272	927.82	0.0006	P	8.5
6	☐	500.000	527.259	1852.37	0.0013	P	10.8
7	☐	1000.000	981.028	3543.81	0.0024	P	1.9
8	☐			7.78	0.0000	P	25.3

$$y = 2.4225\text{E-}006 * x + 7.7545\text{E-}007$$

$$R = 0.9993$$

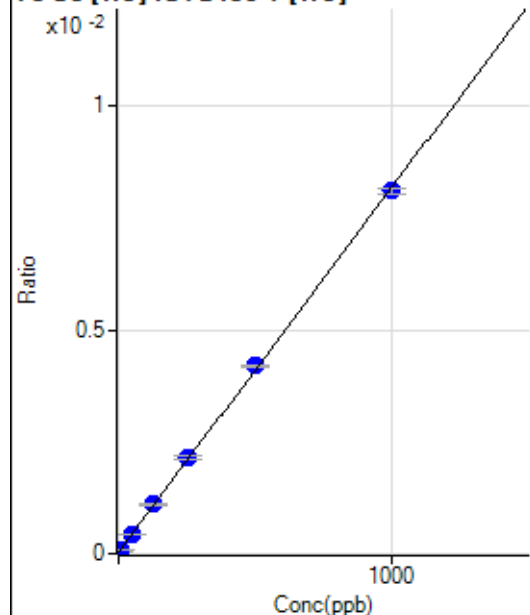
$$DL = 1.663$$

$$BEC = 0.3201$$

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	47.67	0.0000	P	13.9
2	☐	5.000	5.830	114.68	0.0001	P	12.4
3	☐	50.000	49.254	636.08	0.0004	P	3.8
4	☐	125.000	131.286	1602.59	0.0011	P	3.9
5	☐	250.000	258.304	3082.65	0.0021	P	3.7
6	☐	500.000	511.026	6082.93	0.0042	P	1.3
7	☐	1000.000	991.659	12082.73	0.0081	P	1.6
8	☐			57.34	0.0000	P	6.2

$$y = 8.1403\text{E-}006 * x + 3.3728\text{E-}005$$

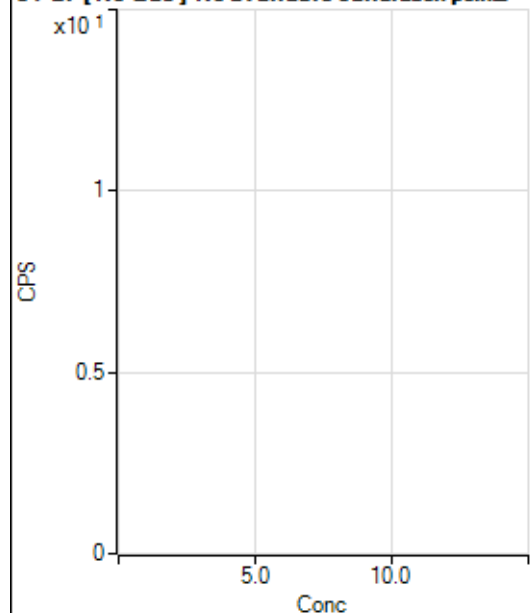
$$R = 0.9999$$

$$DL = 1.728$$

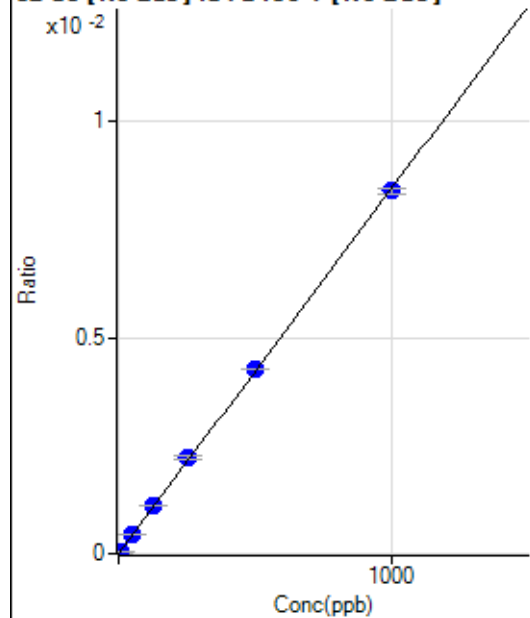
$$BEC = 4.143$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			31814.87		P	1.8
2	☐			31798.38		P	3.7
3	☐			32742.49		P	4.3
4	☐			32862.02		P	2.7
5	☐			33240.48		P	1.3
6	☐			33259.97		P	1.8
7	☐			34510.18		P	2.9
8	☐			33527.33		P	1.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1.25	0.0000	P	1796.
2	☐	5.000	5.421	541.62	0.0000	P	1.4
3	☐	50.000	51.600	5322.13	0.0004	P	1.6
4	☐	125.000	130.820	13311.58	0.0011	P	0.8
5	☐	250.000	263.858	26725.86	0.0022	P	3.2
6	☐	500.000	503.842	52535.53	0.0043	P	0.3
7	☐	1000.000	993.805	104726.89	0.0084	P	1.6
8	☐			131.65	0.0000	P	23.1

$$y = 8.4435E-006 * x + 6.3679E-008$$

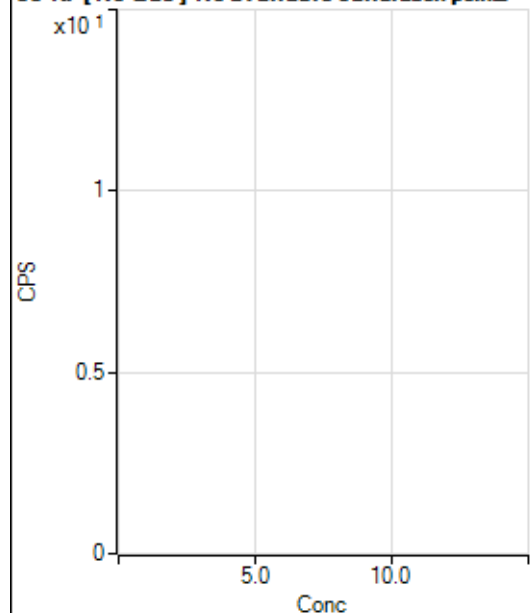
$$R = 0.9999$$

$$DL = 0.4065$$

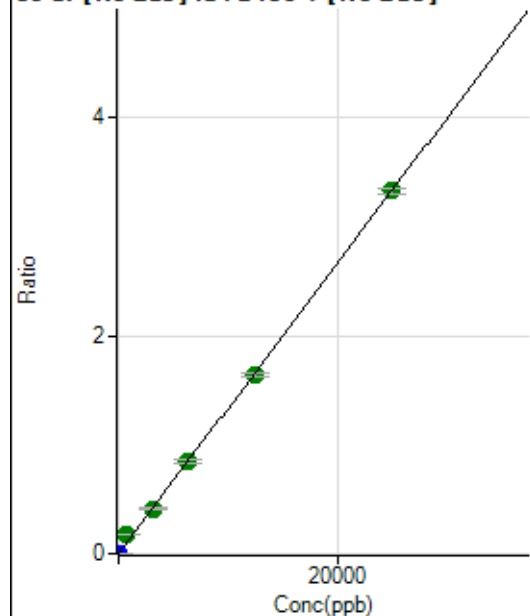
$$BEC = 0.007542$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			289.55		P	10.7
2	☐			273.72		P	2.0
3	☐			280.39		P	11.1
4	☐			273.72		P	9.4
5	☐			287.89		P	6.1
6	☐			283.72		P	9.1
7	☐			279.97		P	8.9
8	☐			271.64		P	5.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	516.69	0.0000	P	31.0
2	☐	1.000	0.925	1983.53	0.0002	P	6.7
3	☐	625.000	1277.193	2077173.14	0.1701	A	1.8
4	☐	3125.000	3112.646	4993837.44	0.4144	A	1.4
5	☐	6250.000	6384.499	10191389.64	0.8500	A	5.6
6	☐	12500.000	12362.751	20324279.28	1.6459	A	1.7
7	☐	25000.000	25020.239	41572229.75	3.3310	A	1.7
8	☐			10746.05	0.0009	P	6.7

$$y = 1.3313E-004 * x + 4.4716E-005$$

$$R = 0.9996$$

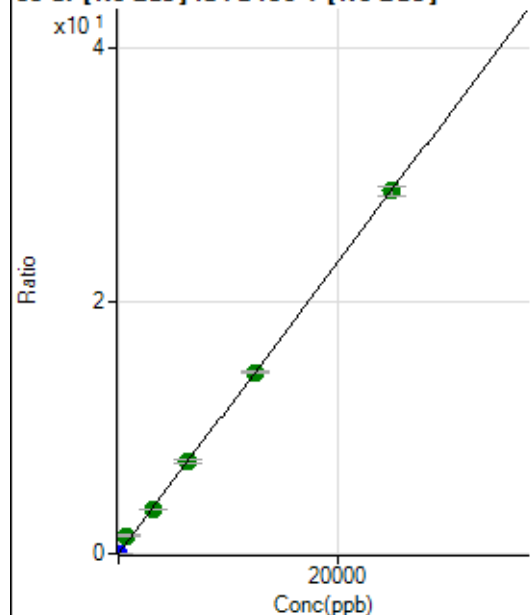
$$DL = 0.3128$$

$$BEC = 0.3359$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	186.12	0.0000	P	37.1
2	☐	1.000	0.969	13359.57	0.0011	P	4.2
3	☐	625.000	1256.570	17653654.22	1.4454	A	1.6
4	☐	3125.000	3107.992	43084395.41	3.5751	A	0.1
5	☐	6250.000	6357.405	87706425.57	7.3129	A	4.1
6	☐	12500.000	12452.422	176877281.7	14.3240	A	1.1
7	☐	25000.000	24983.274	358609041.3	28.7381	A	3.0
8	☐			89177.62	0.0075	P	3.1

$$y = 0.0012 * x + 1.6222E-005$$

$$R = 0.9997$$

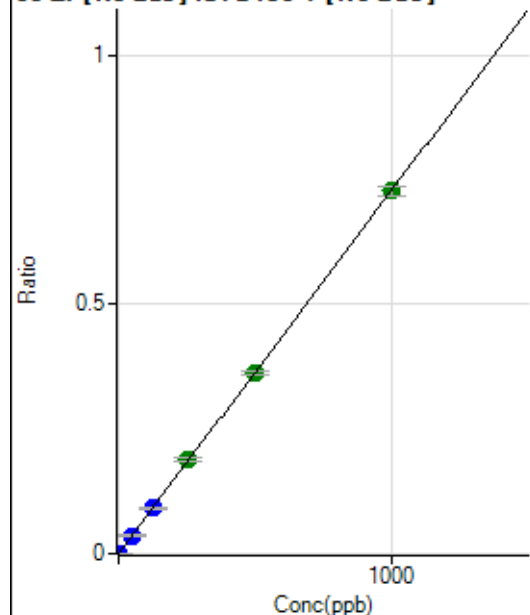
$$DL = 0.01569$$

$$BEC = 0.0141$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	444.46	0.0000	P	3.0
2	☐	1.000	0.968	8783.56	0.0007	P	4.5
3	☐	50.000	50.056	445662.59	0.0365	P	1.4
4	☐	125.000	124.849	1096062.87	0.0910	P	1.5
5	☐	250.000	259.163	2264344.08	0.1888	A	3.2
6	☐	500.000	496.768	4467375.97	0.3618	A	2.2
7	☐	1000.000	999.341	9082441.96	0.7278	A	2.5
8	☐			2000.22	0.0002	P	3.8

$$y = 7.2819E-004 * x + 3.8256E-005$$

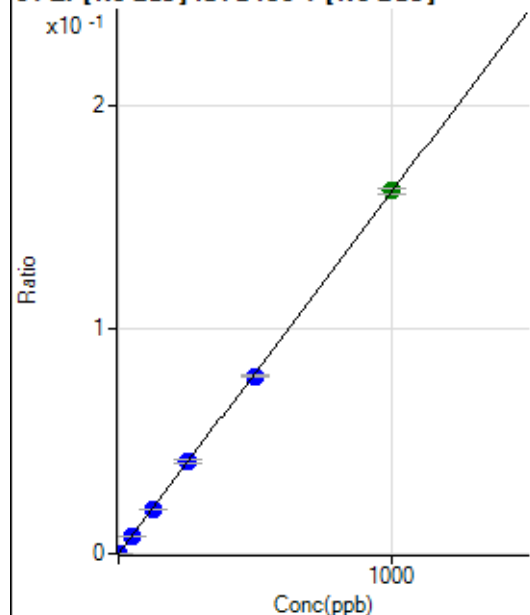
$$R = 0.9999$$

$$DL = 0.004681$$

$$BEC = 0.05254$$

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	44.45	0.0000	P	62.1
2	☐	1.000	0.972	1897.40	0.0002	P	4.4
3	☐	50.000	49.957	98492.50	0.0081	P	0.2
4	☐	125.000	124.035	241194.84	0.0200	P	0.4
5	☐	250.000	253.301	490148.08	0.0409	P	4.1
6	☐	500.000	491.861	979903.74	0.0794	P	1.3
7	☐	1000.000	1003.367	2020360.48	0.1619	A	1.7
8	☐			419.46	0.0000	P	24.0

$$y = 1.6133\text{E-}004 * x + 3.7961\text{E-}006$$

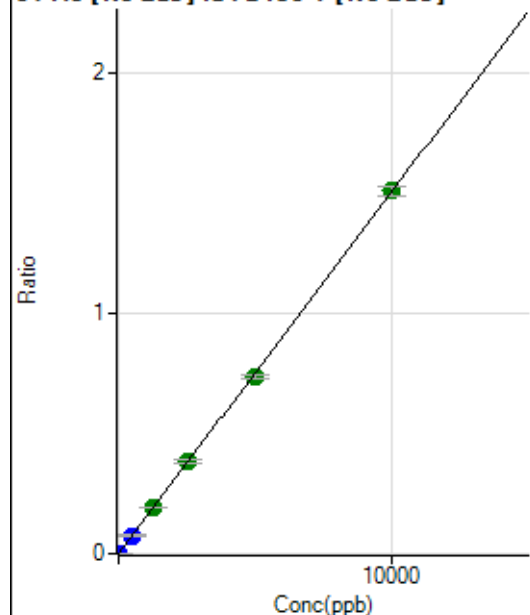
$$R = 0.9999$$

$$DL = 0.04385$$

$$BEC = 0.02353$$

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	136.11	0.0000	P	18.6
2	☐	5.000	5.722	10317.98	0.0009	P	6.1
3	☐	500.000	504.057	927155.04	0.0759	P	1.2
4	☐	1250.000	1276.693	2316728.63	0.1923	A	0.7
5	☐	2500.000	2569.683	4641268.46	0.3869	A	3.6
6	☐	5000.000	4889.854	9091648.99	0.7363	A	2.8
7	☐	10000.000	10034.112	18853816.74	1.5109	A	2.7
8	☐			3128.21	0.0003	P	7.1

$$y = 1.5058\text{E-}004 * x + 1.1725\text{E-}005$$

$$R = 0.9999$$

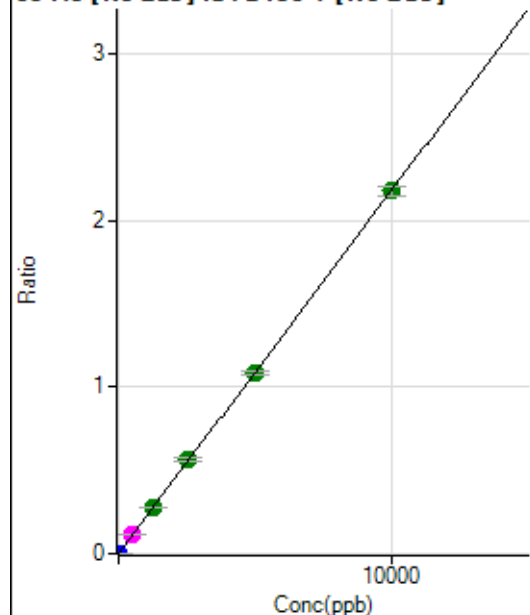
$$DL = 0.04348$$

$$BEC = 0.07786$$

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	19.44	0.0000	P	52.2
2	☐	5.000	4.827	12447.58	0.0011	P	2.4
3	☐	500.000	511.348	1361149.11	0.1114	M	0.9
4	☐	1250.000	1284.642	3373394.04	0.2800	A	1.7
5	☐	2500.000	2586.632	6762114.60	0.5637	A	3.4
6	☐	5000.000	4965.308	13361012.71	1.0821	A	2.0
7	☐	10000.000	9990.791	27169889.15	2.1772	A	2.3
8	☐			4253.55	0.0004	P	9.2

$$y = 2.1792E-004 * x + 1.7039E-006$$

$$R = 0.9999$$

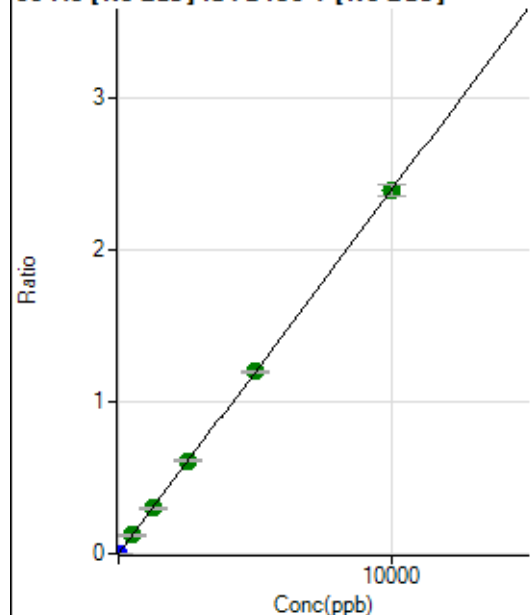
$$DL = 0.01224$$

$$BEC = 0.007819$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	83.34	0.0000	P	19.3
2	☐	5.000	4.963	14140.95	0.0012	P	2.6
3	☐	500.000	502.830	1471623.97	0.1205	A	2.8
4	☐	1250.000	1259.445	3636513.06	0.3018	A	3.0
5	☐	2500.000	2543.112	7312711.45	0.6094	A	2.1
6	☐	5000.000	5013.604	14835950.16	1.2014	A	1.0
7	☐	10000.000	9981.098	29844460.39	2.3918	A	3.2
8	☐			8769.68	0.0007	P	5.3

$$y = 2.3964E-004 * x + 7.2042E-006$$

$$R = 1.0000$$

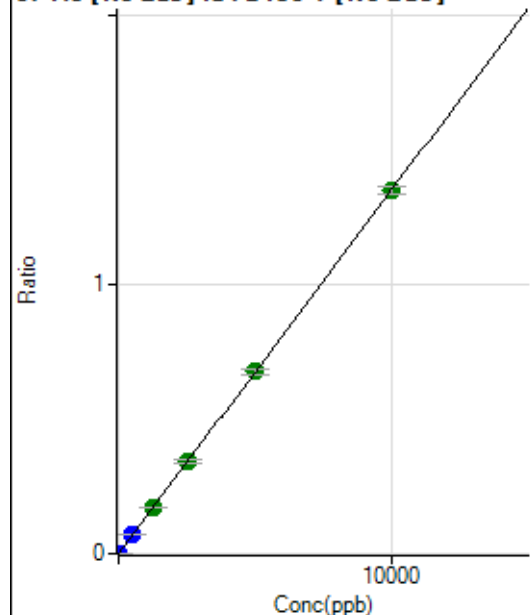
$$DL = 0.01737$$

$$BEC = 0.03006$$

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	75.1
2	☐	5.000	4.851	7766.28	0.0007	P	3.2
3	☐	500.000	510.125	842423.59	0.0690	P	2.7
4	☐	1250.000	1270.414	2070026.37	0.1718	A	1.6
5	☐	2500.000	2544.734	4128036.64	0.3441	A	2.9
6	☐	5000.000	5012.942	8369980.83	0.6779	A	3.0
7	☐	10000.000	9979.287	16840808.19	1.3494	A	2.0
8	☐			2594.77	0.0002	P	17.2

$$y = 1.3522\text{E-}004 * x + 1.2295\text{E-}006$$

$$R = 1.0000$$

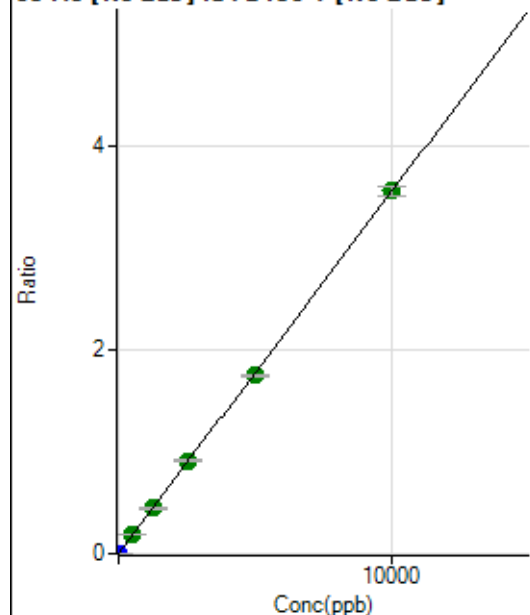
$$DL = 0.02049$$

$$BEC = 0.009093$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	30.56	0.0000	P	64.8
2	☐	5.000	4.752	19964.81	0.0017	P	1.9
3	☐	500.000	513.804	2227353.09	0.1824	A	3.5
4	☐	1250.000	1253.600	5362394.00	0.4450	A	2.0
5	☐	2500.000	2559.376	10901020.12	0.9085	A	2.2
6	☐	5000.000	4926.984	21597500.31	1.7490	A	1.4
7	☐	10000.000	10020.524	44389207.24	3.5571	A	2.6
8	☐			6337.71	0.0005	P	5.9

$$y = 3.5498\text{E-}004 * x + 2.6886\text{E-}006$$

$$R = 0.9999$$

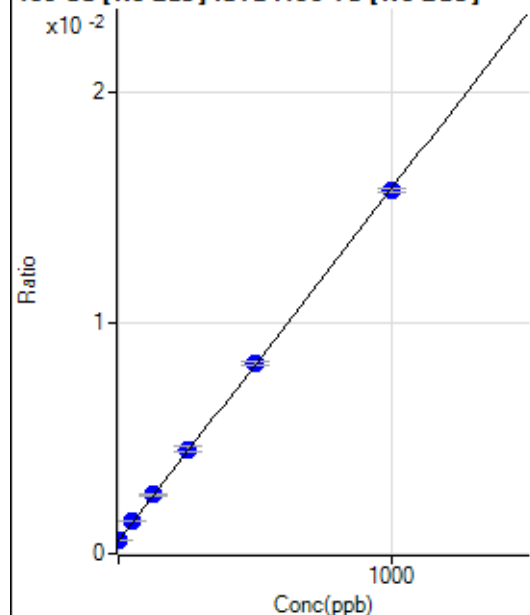
$$DL = 0.01473$$

$$BEC = 0.007574$$

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	4959.37	0.0006	P	4.3
2	☐	1.000	0.730	5095.52	0.0006	P	4.6
3	☐	50.000	56.349	12895.28	0.0014	P	4.4
4	☐	125.000	130.397	23359.24	0.0026	P	2.1
5	☐	250.000	259.778	41201.16	0.0045	P	5.4
6	☐	500.000	506.251	76155.96	0.0083	P	2.0
7	☐	1000.000	993.438	149648.65	0.0157	P	1.1
8	☐			5387.33	0.0006	P	6.7

$$y = 1.5290\text{E-}005 * x + 5.5871\text{E-}004$$

R = 0.9999

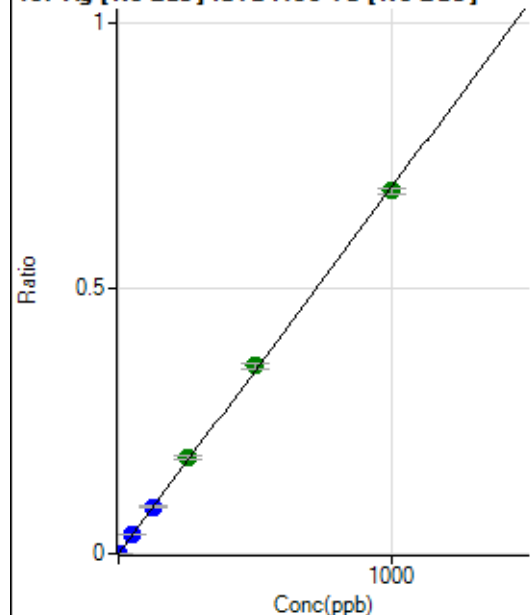
DL = 4.669

BEC = 36.54

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	66.67	0.0000	P	18.0
2	☐	1.000	1.016	6340.52	0.0007	P	1.4
3	☐	50.000	52.554	329661.51	0.0363	P	0.6
4	☐	125.000	127.440	805438.64	0.0880	P	2.0
5	☐	250.000	262.610	1648975.82	0.1814	A	5.5
6	☐	500.000	512.329	3246136.40	0.3538	A	2.8
7	☐	1000.000	990.250	6497973.15	0.6839	A	1.8
8	☐			2400.27	0.0003	P	5.0

$$y = 6.9059\text{E-}004 * x + 7.4740\text{E-}006$$

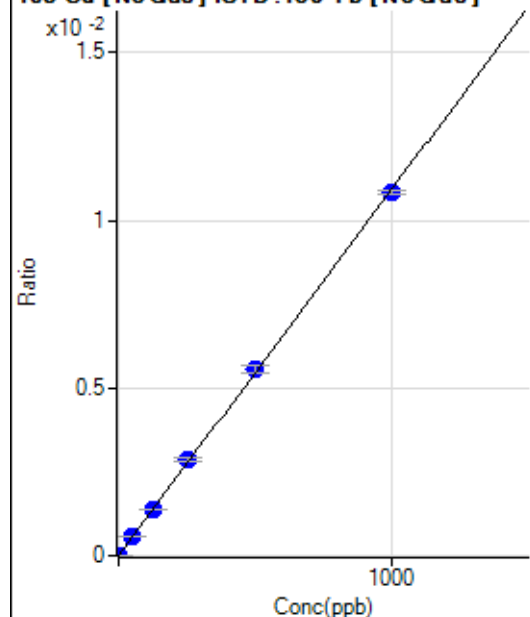
R = 0.9998

DL = 0.005843

BEC = 0.01082

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	30.56	0.0000	P	33.1
2	☐	1.000	0.796	108.34	0.0000	P	23.4
3	☐	50.000	52.983	5280.24	0.0006	P	1.9
4	☐	125.000	127.197	12730.99	0.0014	P	0.7
5	☐	250.000	263.249	26149.95	0.0029	P	4.8
6	☐	500.000	509.883	51063.88	0.0056	P	3.3
7	☐	1000.000	991.323	102802.28	0.0108	P	0.9
8	☐			79.17	0.0000	P	27.1

$$y = 1.0910\text{E-}005 * x + 3.4265\text{E-}006$$

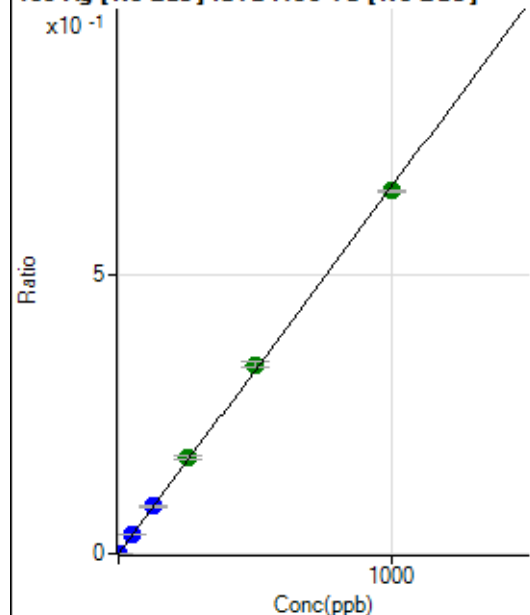
$$R = 0.9998$$

$$DL = 0.3121$$

$$BEC = 0.3141$$

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	19.45	0.0000	P	29.0
2	☐	1.000	1.014	5984.81	0.0007	P	4.2
3	☐	50.000	52.292	312301.93	0.0344	P	3.0
4	☐	125.000	128.514	773496.97	0.0845	P	2.0
5	☐	250.000	262.468	1571079.45	0.1726	A	2.8
6	☐	500.000	514.844	3106344.91	0.3386	A	3.4
7	☐	1000.000	988.907	6180225.10	0.6504	A	0.5
8	☐			2219.68	0.0002	P	6.1

$$y = 6.5770\text{E-}004 * x + 2.2049\text{E-}006$$

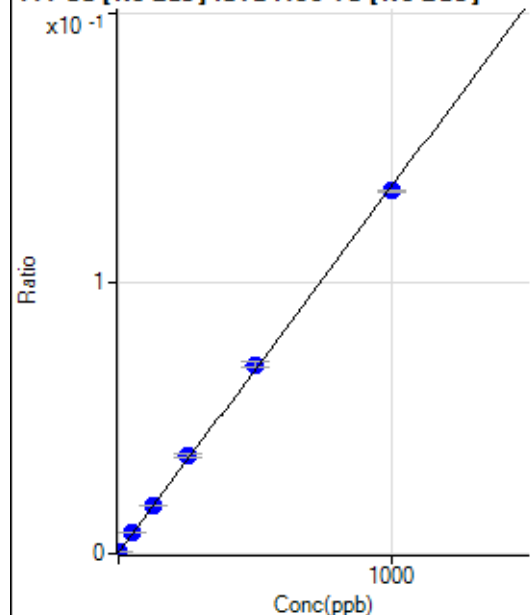
$$R = 0.9997$$

$$DL = 0.002915$$

$$BEC = 0.003352$$

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	3466.84	0.0004	P	4.3
2	☐	1.000	1.100	4823.06	0.0005	P	3.0
3	☐	50.000	54.059	69988.71	0.0077	P	0.3
4	☐	125.000	130.322	164982.55	0.0180	P	0.9
5	☐	250.000	264.802	329495.66	0.0362	P	4.5
6	☐	500.000	514.455	642348.73	0.0700	P	2.9
7	☐	1000.000	988.204	1274542.98	0.1341	P	0.8
8	☐			4094.90	0.0004	P	6.5

$$y = 1.3534\text{E-}004 * x + 3.9057\text{E-}004$$

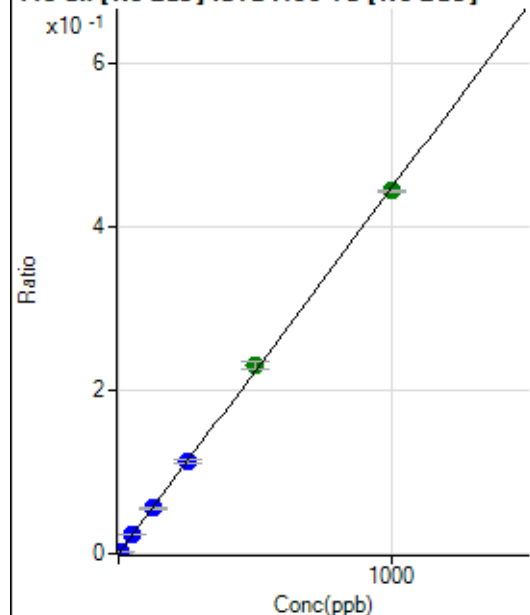
$$R = 0.9997$$

$$DL = 0.3761$$

$$BEC = 2.886$$

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	408.35	0.0000	P	3.8
2	☐	5.000	4.979	20293.37	0.0023	P	1.7
3	☐	50.000	50.827	206542.66	0.0227	P	1.8
4	☐	125.000	123.696	505973.46	0.0553	P	1.0
5	☐	250.000	251.636	1022563.00	0.1124	P	4.4
6	☐	500.000	514.263	2107002.72	0.2297	A	4.1
7	☐	1000.000	992.581	4212642.54	0.4433	A	0.5
8	☐			2522.53	0.0003	P	6.4

$$y = 4.4661\text{E-}004 * x + 4.5923\text{E-}005$$

$$R = 0.9998$$

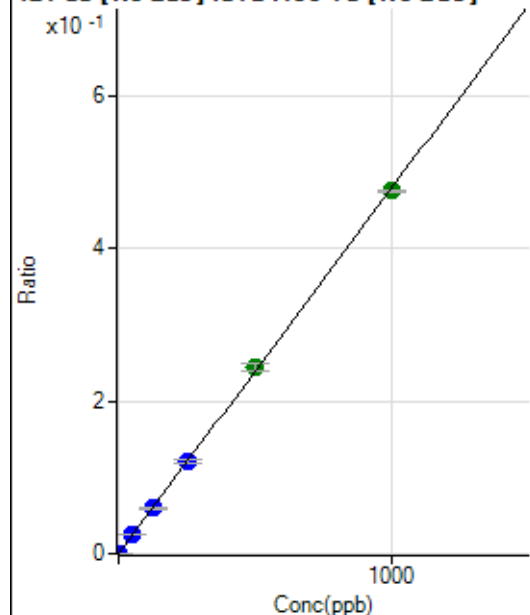
$$DL = 0.01185$$

$$BEC = 0.1028$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	22.22	0.0000	P	22.5
2	☐	2.000	2.013	8627.94	0.0010	P	3.1
3	☐	50.000	51.393	223192.59	0.0246	P	1.8
4	☐	125.000	124.048	542877.15	0.0593	P	1.2
5	☐	250.000	254.005	1104652.44	0.1215	P	4.8
6	☐	500.000	511.876	2245301.79	0.2448	A	3.8
7	☐	1000.000	993.110	4512607.22	0.4749	A	0.6
8	☐			2241.93	0.0002	P	9.7

$$y = 4.7820\text{E-}004 * x + 2.5053\text{E-}006$$

$$R = 0.9999$$

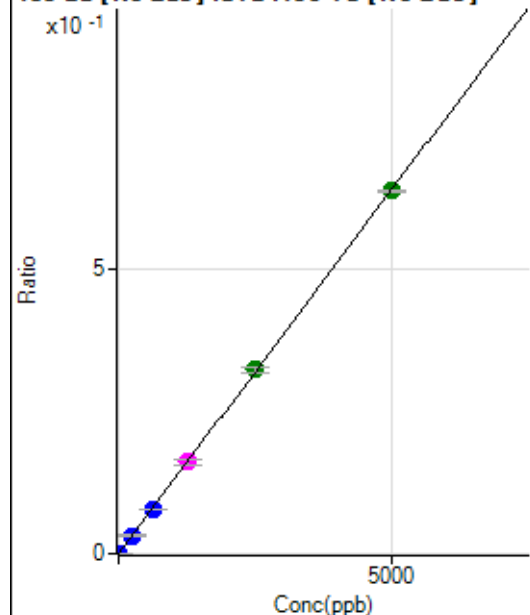
$$DL = 0.003535$$

$$BEC = 0.005239$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	11.11	0.0000	P	86.6
2	☐	10.000	9.694	11104.86	0.0012	P	6.9
3	☐	250.000	250.228	290752.12	0.0320	P	0.9
4	☐	625.000	609.703	713906.96	0.0780	P	0.8
5	☐	1250.000	1263.251	1469512.31	0.1616	M	5.8
6	☐	2500.000	2525.116	2964248.57	0.3231	A	2.9
7	☐	5000.000	4986.030	6061953.26	0.6380	A	0.8
8	☐			3522.77	0.0004	P	3.6

$$y = 1.2795\text{E-}004 * x + 1.2242\text{E-}006$$

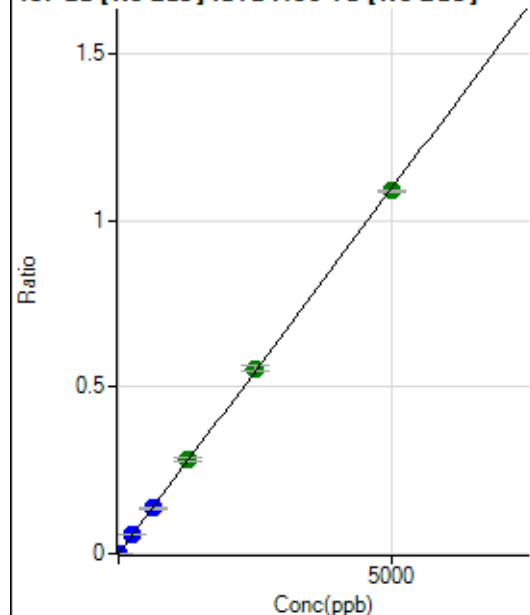
$$R = 1.0000$$

$$DL = 0.02487$$

$$BEC = 0.009568$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	27.78	0.0000	P	45.0
2	☐	10.000	9.953	19522.87	0.0022	P	3.4
3	☐	250.000	258.854	514946.84	0.0567	P	1.7
4	☐	625.000	622.071	1247072.97	0.1363	P	1.8
5	☐	1250.000	1292.238	2574983.72	0.2831	A	4.3
6	☐	2500.000	2540.862	5107242.39	0.5566	A	2.6
7	☐	5000.000	4968.933	10343196.41	1.0885	A	0.5
8	☐			6040.41	0.0007	P	3.6

$$y = 2.1906E-004 * x + 3.1130E-006$$

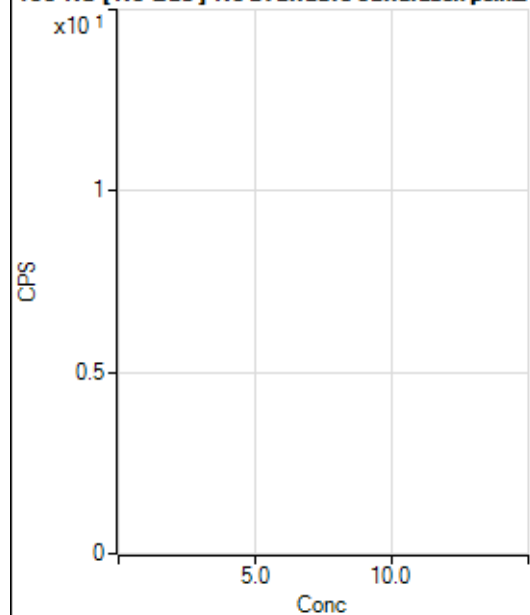
$$R = 0.9999$$

$$DL = 0.01918$$

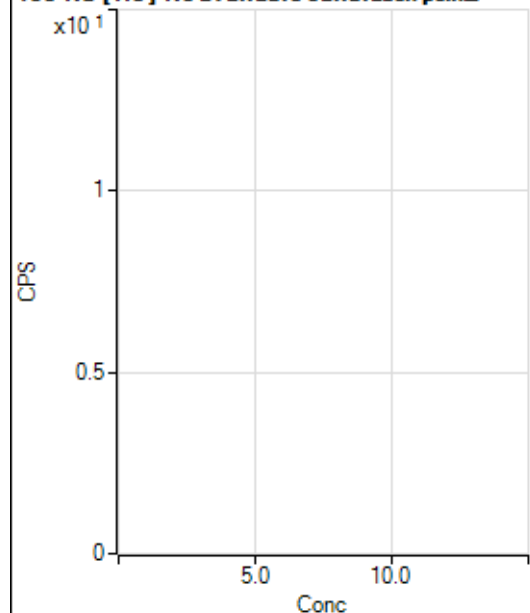
$$BEC = 0.01421$$

Weight: <None>

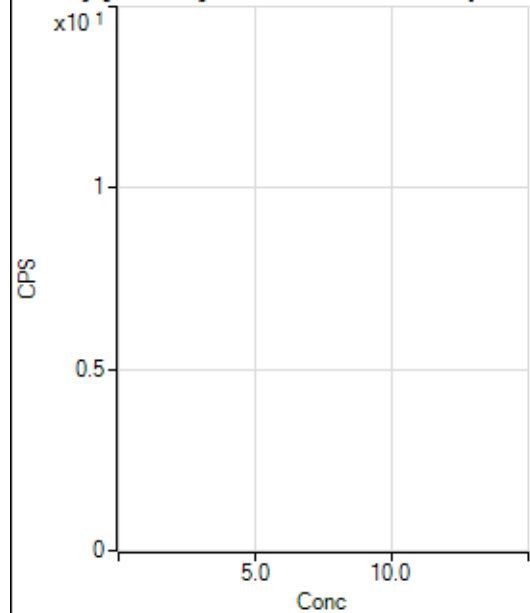
Min Conc: 0

150 Nd [No Gas] No available calibration points

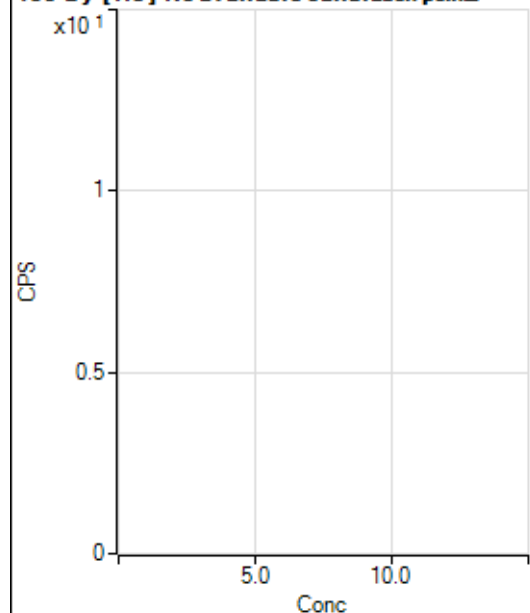
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			6.67		P	173.2
2	☐			8.89		P	86.6
3	☐			51.11		P	15.1
4	☐			151.12		P	25.5
5	☐			188.89		P	10.8
6	☐			384.46		P	14.5
7	☐			817.82		P	17.6
8	☐			33.33		P	20.0

150 Nd [He] No available calibration points

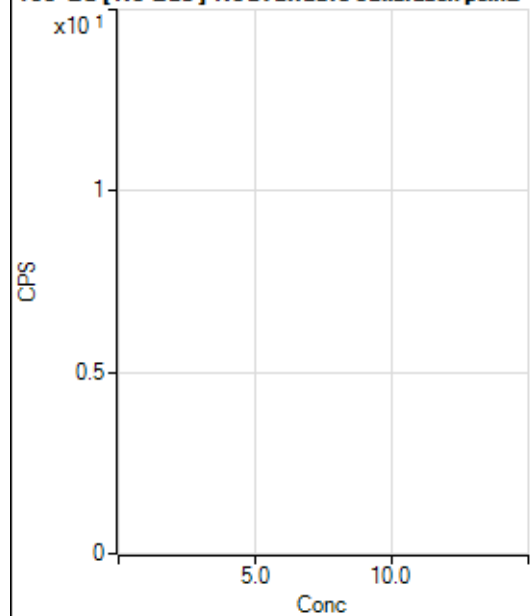
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			3.33		P	100.1
2	☐			2.22		P	173.2
3	☐			5.56		P	34.7
4	☐			8.89		P	108.3
5	☐			12.22		P	68.7
6	☐			25.55		P	15.1
7	☐			43.33		P	20.3
8	☐			16.67		P	20.0

156 Dy [No Gas] No available calibration points

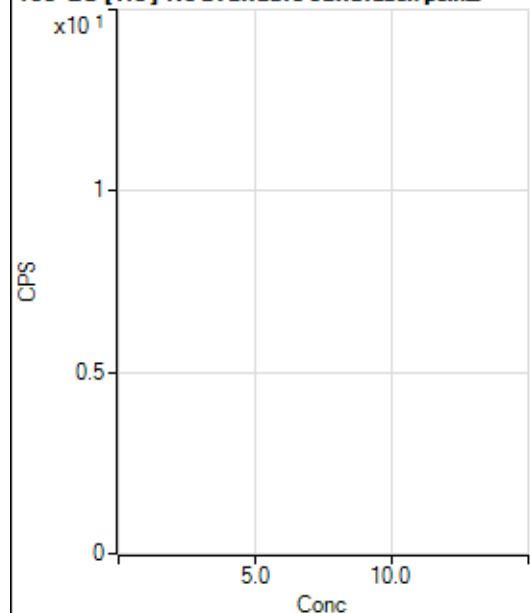
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			11.11		P	43.3
2	☐			8.33		P	0.0
3	☐			13.89		P	34.7
4	☐			52.78		P	59.8
5	☐			91.67		P	24.1
6	☐			202.78		P	18.5
7	☐			388.90		P	11.8
8	☐			1088.97		P	6.2

156 Dy [He] No available calibration points

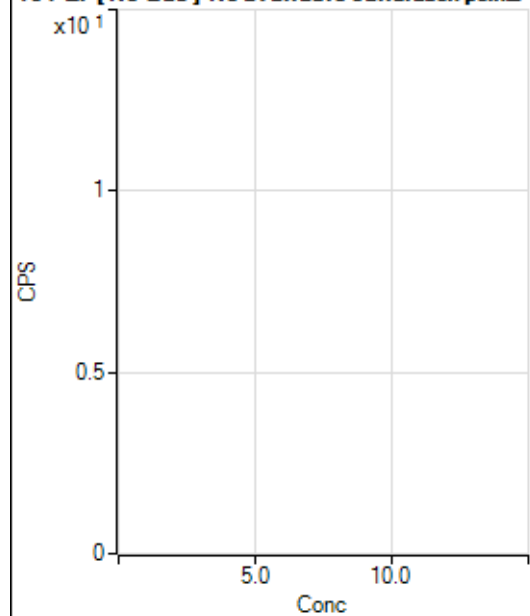
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			1.11		P	173.2
2	☐			10.00		P	57.8
3	☐			13.33		P	43.3
4	☐			24.44		P	51.6
5	☐			34.44		P	24.3
6	☐			90.00		P	28.9
7	☐			160.00		P	11.6
8	☐			508.91		P	4.6

160 Gd [No Gas] Noavailable calibration poin_

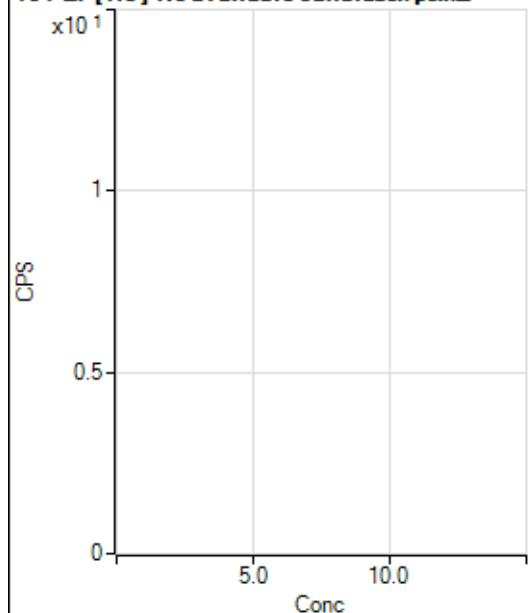
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			77.78		P	34.4
2	☐			47.22		P	36.7
3	☐			108.34		P	27.7
4	☐			127.78		P	24.7
5	☐			133.34		P	28.6
6	☐			241.67		P	11.9
7	☐			341.68		P	17.1
8	☐			1236.20		P	2.2

160 Gd [He] No available calibration points

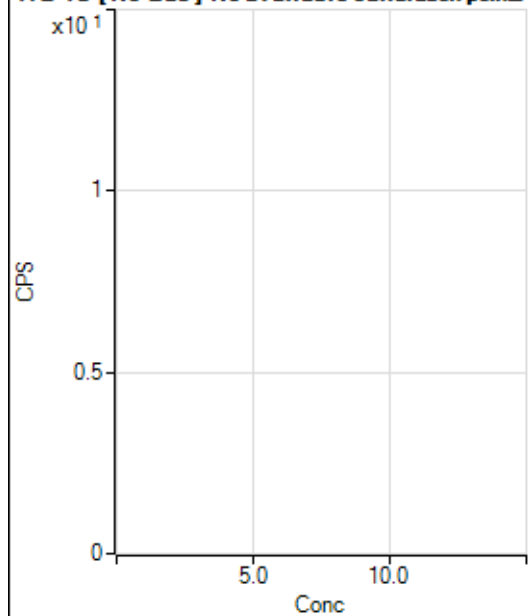
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			125.56		P	13.1
2	☐			122.23		P	20.5
3	☐			110.00		P	21.2
4	☐			153.34		P	9.5
5	☐			172.23		P	14.7
6	☐			182.23		P	15.6
7	☐			266.67		P	9.0
8	☐			701.14		P	10.7

164 Er [No Gas] No available calibration points

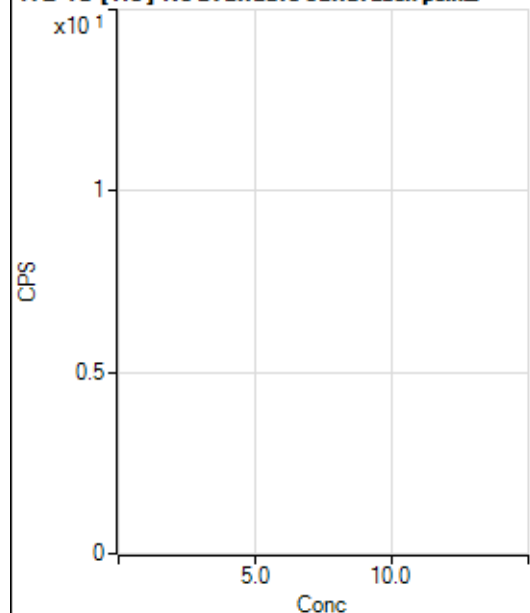
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			33.33		P	43.3
2	☐			75.00		P	22.2
3	☐			69.45		P	30.2
4	☐			72.22		P	6.7
5	☐			83.34		P	52.9
6	☐			66.67		P	45.1
7	☐			113.89		P	21.1
8	☐			100.01		P	28.9

164 Er [He] No available calibration points

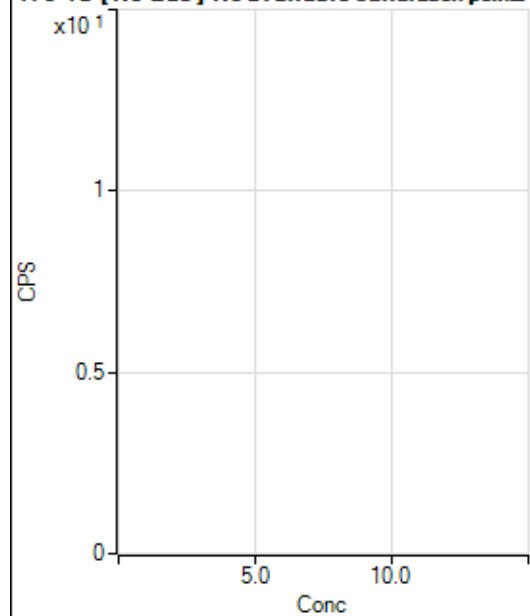
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			25.56		P	37.7
2	☐			26.67		P	12.5
3	☐			27.78		P	30.2
4	☐			28.89		P	43.7
5	☐			30.00		P	11.1
6	☐			36.67		P	18.2
7	☐			40.00		P	25.0
8	☐			52.22		P	22.4

172 Yb [No Gas] No available calibration points

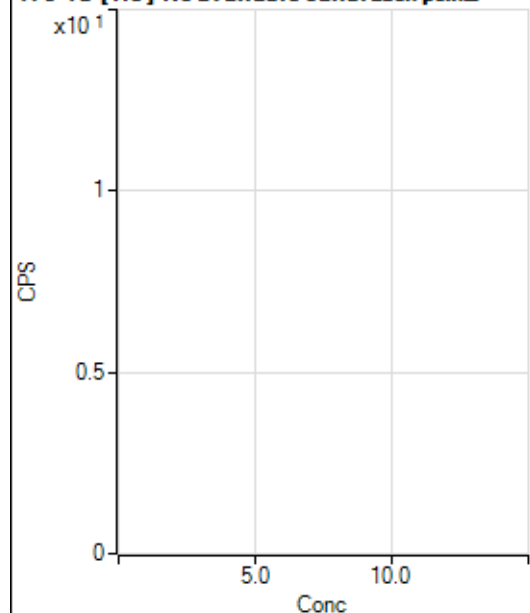
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			69.45		P	48.5
2	☐			61.11		P	7.9
3	☐			77.78		P	60.9
4	☐			52.78		P	9.1
5	☐			75.00		P	44.4
6	☐			113.89		P	36.8
7	☐			180.56		P	14.1
8	☐			463.91		P	20.4

172 Yb [He] No available calibration points

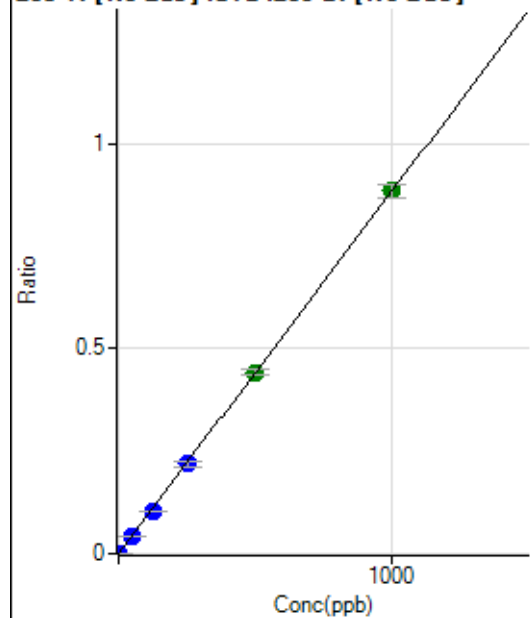
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			46.30		P	18.3
2	☐			20.37		P	56.8
3	☐			44.45		P	33.1
4	☐			29.63		P	47.2
5	☐			42.59		P	15.1
6	☐			55.56		P	36.1
7	☐			79.63		P	10.7
8	☐			264.82		P	19.0

176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			1700.17		P	9.8
2	☐			1852.96		P	2.7
3	☐			2803.15		P	2.8
4	☐			4170.22		P	7.1
5	☐			6807.48		P	5.7
6	☐			12125.33		P	1.2
7	☐			22909.39		P	1.9
8	☐			1930.75		P	4.4

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			8413.93		P	3.7
2	☐			8697.47		P	4.7
3	☐			9162.59		P	1.6
4	☐			10063.27		P	1.9
5	☐			11447.78		P	4.8
6	☐			13562.72		P	0.6
7	☐			18650.44		P	2.0
8	☐			8990.25		P	5.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	144.45	0.0000	P	25.2
2	☐	1.000	0.913	5009.43	0.0008	P	5.8
3	☐	50.000	48.020	253807.30	0.0424	P	0.9
4	☐	125.000	114.796	616232.06	0.1014	P	0.6
5	☐	250.000	247.058	1266887.61	0.2182	P	4.4
6	☐	500.000	499.622	2626033.29	0.4413	A	3.2
7	☐	1000.000	1002.299	5264526.07	0.8852	A	3.6
8	☐			988.99	0.0002	P	4.4

$$y = 8.8319E-004 * x + 2.4654E-005$$

$$R = 1.0000$$

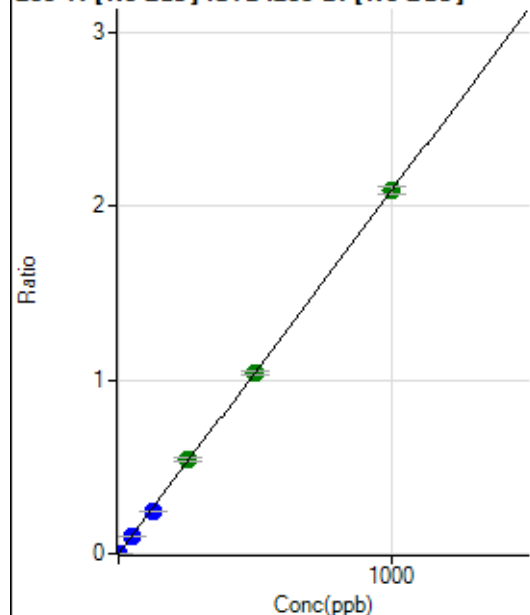
$$DL = 0.02114$$

$$BEC = 0.02791$$

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	291.68	0.0000	P	9.1
2	☐	1.000	0.933	12050.43	0.0020	P	4.0
3	☐	50.000	49.150	614796.68	0.1028	P	0.9
4	☐	125.000	118.232	1502151.62	0.2472	P	1.4
5	☐	250.000	260.258	3160470.36	0.5441	A	3.4
6	☐	500.000	497.090	6184310.55	1.0392	A	2.5
7	☐	1000.000	999.779	12430594.55	2.0900	A	2.2
8	☐			2125.23	0.0004	P	3.1

$$y = 0.0021 * x + 4.9524E-005$$

$$R = 0.9999$$

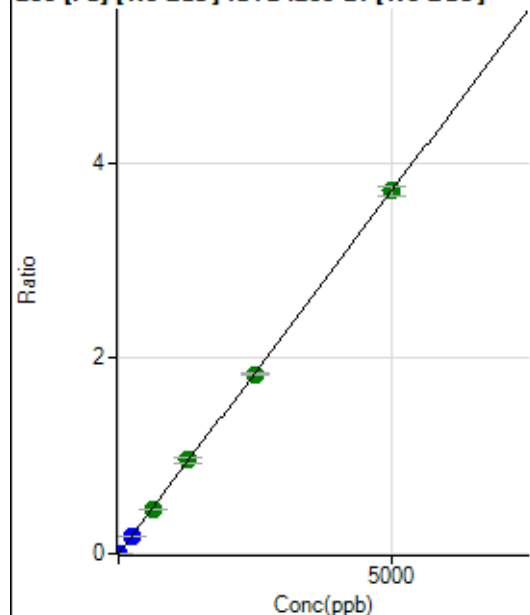
$$DL = 0.006462$$

$$BEC = 0.02369$$

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	529.65	0.0001	P	12.2
2	☐	1.000	0.870	4434.18	0.0007	P	2.8
3	☐	250.000	239.880	1065642.60	0.1782	P	1.6
4	☐	625.000	611.117	2757688.92	0.4538	A	0.7
5	☐	1250.000	1292.746	5571064.30	0.9598	A	5.1
6	☐	2500.000	2475.391	10937359.85	1.8379	A	1.6
7	☐	5000.000	5003.859	22095087.77	3.7150	A	2.3
8	☐			4065.56	0.0008	P	3.1

$$y = 7.4241E-004 * x + 9.0286E-005$$

$$R = 0.9999$$

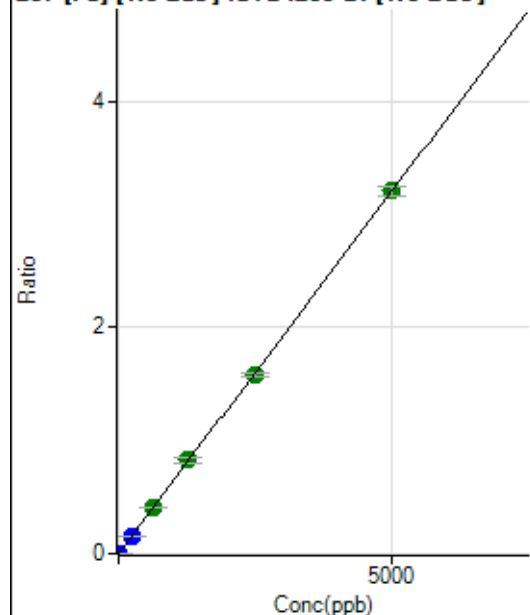
$$DL = 0.04438$$

$$BEC = 0.1216$$

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	464.83	0.0001	P	6.3
2	☐	1.000	0.911	3993.28	0.0007	P	4.9
3	☐	250.000	242.406	929080.21	0.1553	P	1.5
4	☐	625.000	628.109	2445106.36	0.4024	A	1.3
5	☐	1250.000	1288.126	4790699.42	0.8252	A	4.2
6	☐	2500.000	2459.963	9377936.32	1.5757	A	2.4
7	☐	5000.000	5010.478	19086615.93	3.2094	A	2.8
8	☐			3652.43	0.0007	P	1.7

$$y = 6.4052E-004 * x + 7.9069E-005$$

R = 0.9999

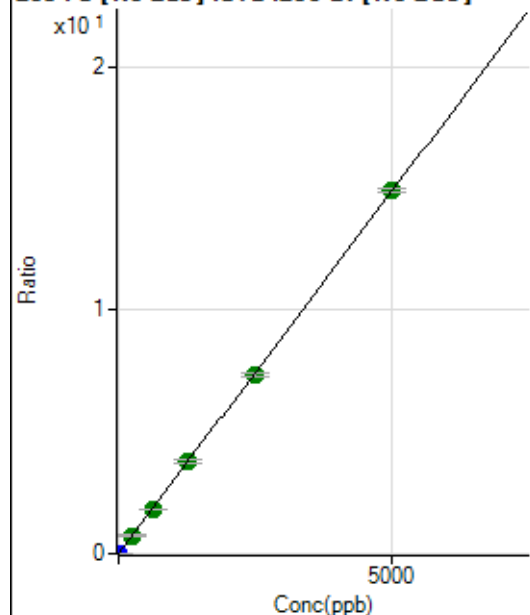
DL = 0.02349

BEC = 0.1234

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	2100.10	0.0004	P	4.9
2	☐	1.000	0.905	18357.38	0.0030	P	1.8
3	☐	250.000	250.831	4461824.71	0.7460	A	1.5
4	☐	625.000	615.145	11114940.55	1.8291	A	0.1
5	☐	1250.000	1270.829	21933024.63	3.7783	A	4.6
6	☐	2500.000	2468.001	43667891.60	7.3373	A	1.6
7	☐	5000.000	5011.983	88634756.15	14.9001	A	1.2
8	☐			16700.91	0.0031	P	3.5

$$y = 0.0030 * x + 3.5713E-004$$

R = 1.0000

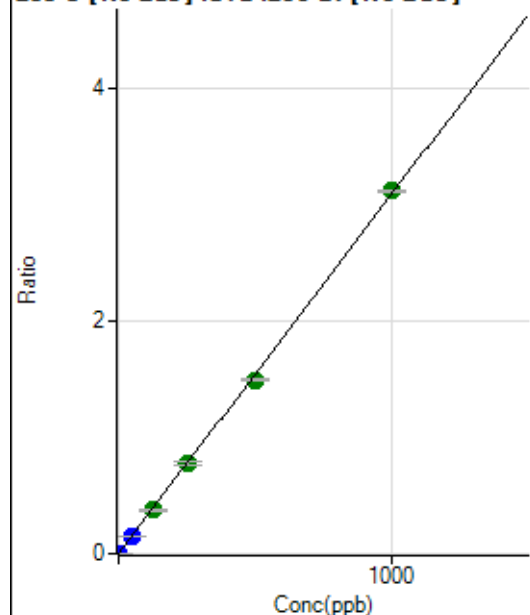
DL = 0.01758

BEC = 0.1201

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	50.00	0.0000	P	24.7
2	☐	1.000	0.936	17498.59	0.0029	P	3.1
3	☐	50.000	47.632	881635.65	0.1474	P	1.4
4	☐	125.000	120.582	2267355.50	0.3732	A	1.8
5	☐	250.000	250.091	4494276.79	0.7739	A	3.6
6	☐	500.000	482.017	8877252.72	1.4916	A	1.1
7	☐	1000.000	1009.640	18588280.10	3.1244	A	0.8
8	☐			972.29	0.0002	P	8.5

$$y = 0.0031 * x + 8.4414E-006$$

$$R = 0.9998$$

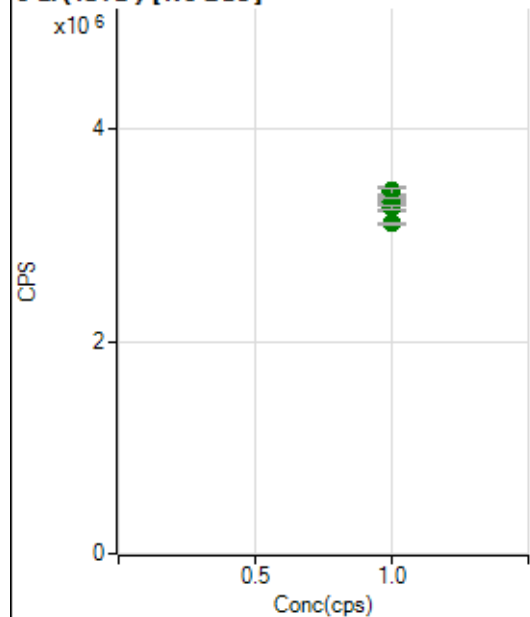
$$DL = 0.002025$$

$$BEC = 0.002728$$

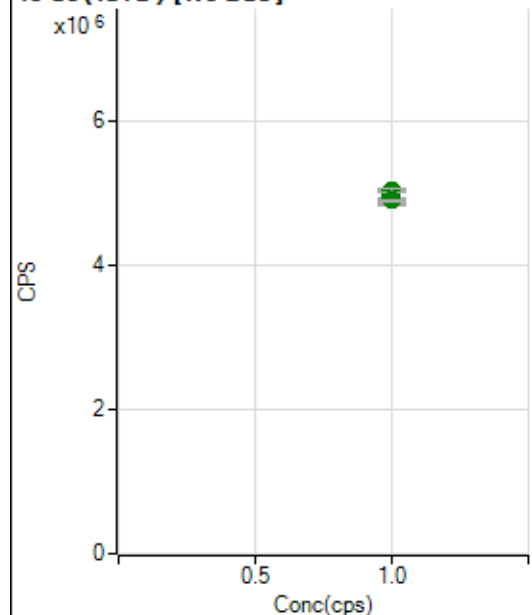
Weight: <None>

Min Conc: 0

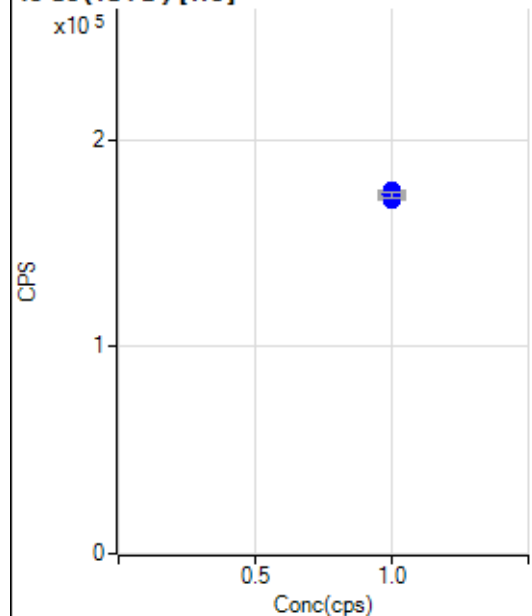
6 Li (ISTD) [No Gas]



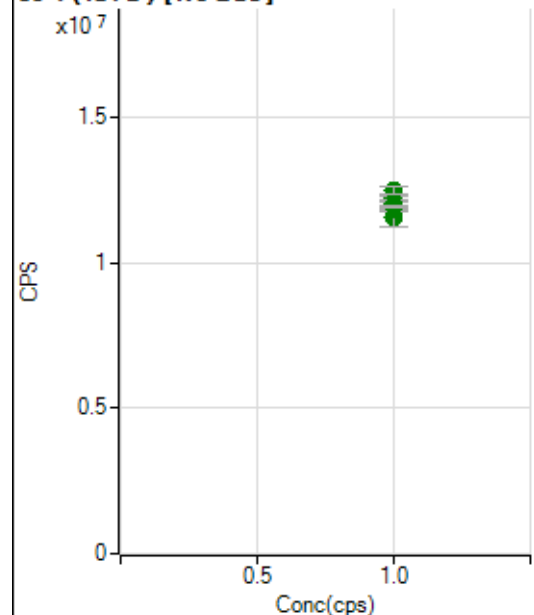
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		3362278.13		A	2.0
2	☐	1.000		3324411.69		A	2.5
3	☐	1.000		3420152.56		A	2.9
4	☐	1.000		3404321.55		A	2.2
5	☐	1.000		3267831.06		A	3.0
6	☐	1.000		3325277.68		A	1.9
7	☐	1.000		3254149.33		A	1.1
8	☐	1.000		3115843.50		A	0.6

45 Sc (ISTD) [No Gas]

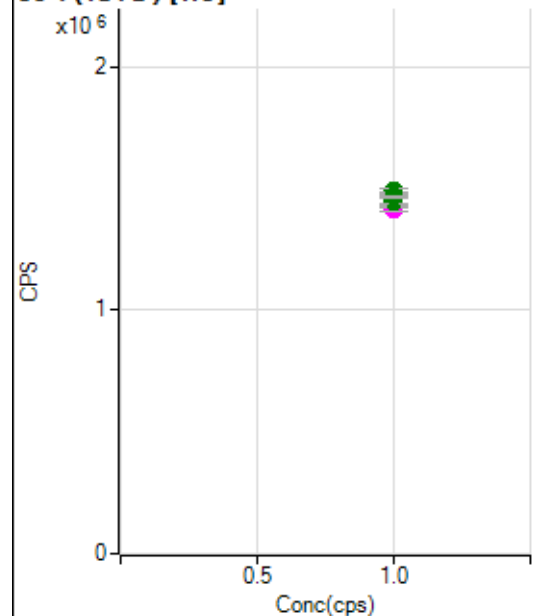
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		4940723.47		A	4.8
2	☐	1.000		4906333.74		A	0.6
3	☐	1.000		5010723.88		A	0.5
4	☐	1.000		4943670.76		A	2.3
5	☐	1.000		4918815.31		A	3.3
6	☐	1.000		4968965.93		A	2.8
7	☐	1.000		5022442.95		A	1.1
8	☐	1.000		4890549.41		A	0.8

45 Sc (ISTD) [He]

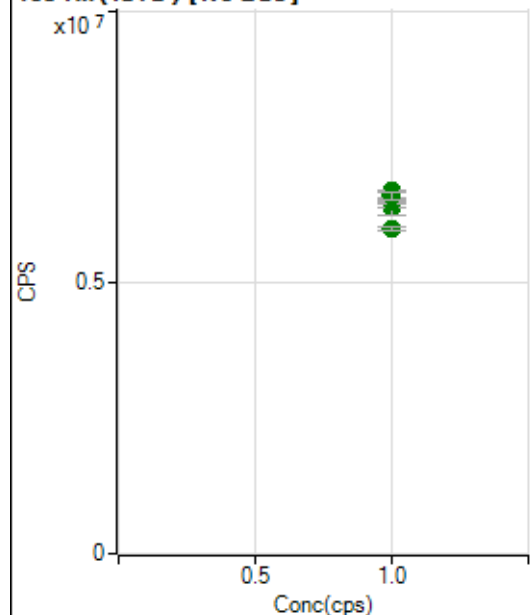
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		172098.62		P	0.9
2	☐	1.000		171161.21		P	0.2
3	☐	1.000		174151.93		P	0.6
4	☐	1.000		175042.73		P	0.6
5	☐	1.000		173425.57		P	0.4
6	☐	1.000		172446.66		P	0.8
7	☐	1.000		175246.66		P	0.6
8	☐	1.000		173307.49		P	1.5

89 Y (ISTD) [No Gas]

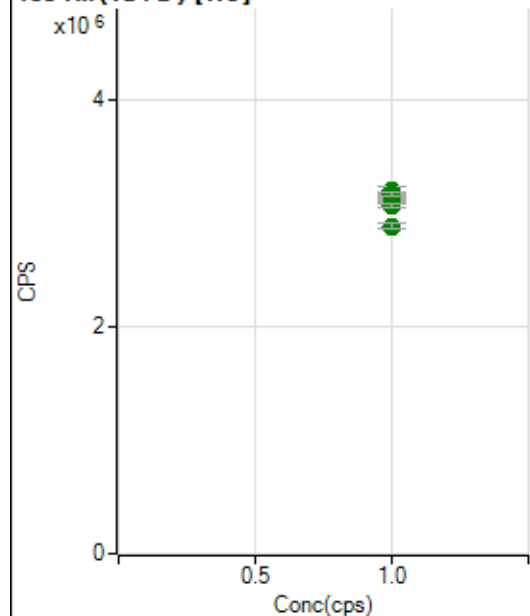
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		11607010.25		A	5.8
2	☐	1.000		11816402.46		A	0.6
3	☐	1.000		12215056.21		A	1.3
4	☐	1.000		12051062.88		A	1.0
5	☐	1.000		12004024.54		A	3.3
6	☐	1.000		12348945.79		A	0.7
7	☐	1.000		12483219.26		A	2.1
8	☐	1.000		11944042.32		A	0.4

89 Y (ISTD) [He]

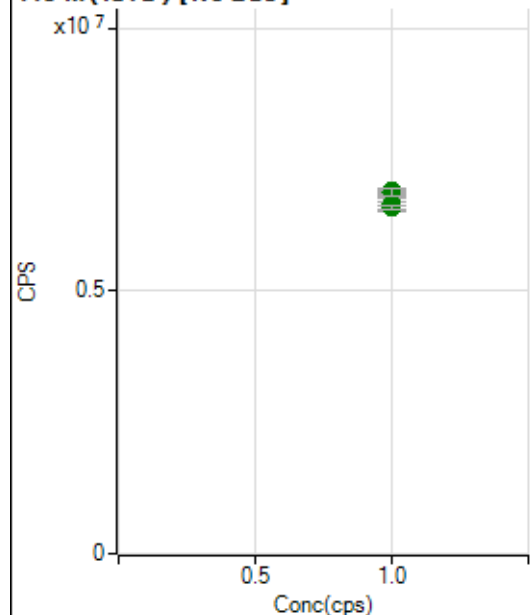
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		1414952.62		M	1.1
2	☐	1.000		1412335.83		M	0.9
3	☐	1.000		1464487.13		M	3.1
4	☐	1.000		1454142.46		A	1.7
5	☐	1.000		1443652.86		A	2.1
6	☐	1.000		1450693.29		A	1.7
7	☐	1.000		1490800.93		A	1.5
8	☐	1.000		1467506.63		A	0.6

103 Rh (ISTD) [No Gas]

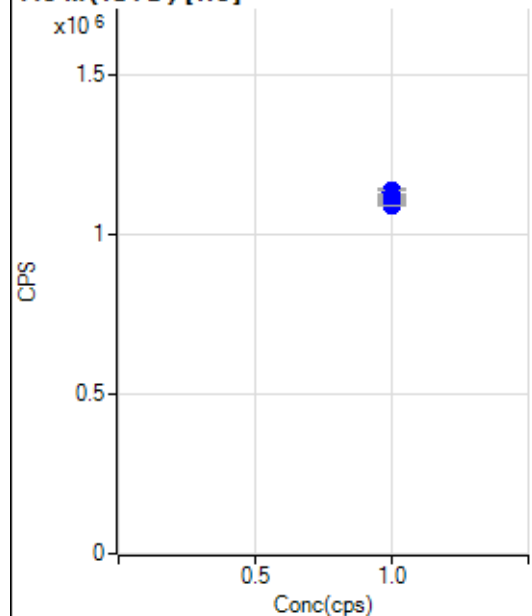
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		6402935.30		A	5.2
2	☐	1.000		6529797.15		A	1.3
3	☐	1.000		6700543.73		A	0.2
4	☐	1.000		6631179.36		A	1.7
5	☐	1.000		6542160.43		A	5.0
6	☐	1.000		6483407.74		A	0.8
7	☐	1.000		6620516.34		A	2.1
8	☐	1.000		5996316.63		A	1.2

103 Rh (ISTD) [He]

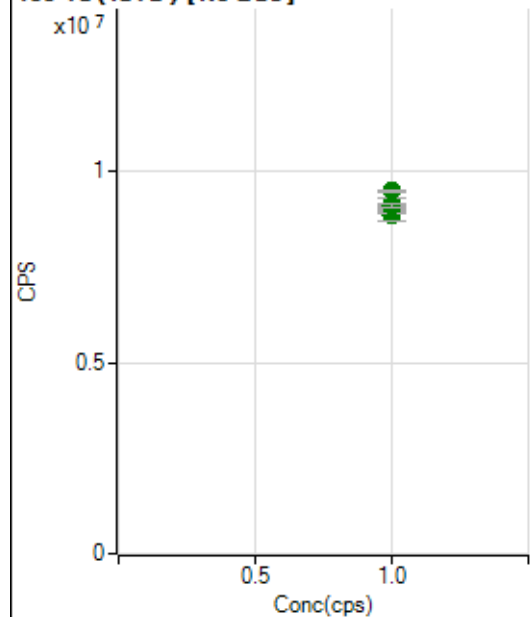
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		3128976.48		A	1.0
2	☐	1.000		3094758.50		A	0.7
3	☐	1.000		3193911.86		A	2.4
4	☐	1.000		3151899.33		A	1.4
5	☐	1.000		3162465.13		A	1.2
6	☐	1.000		3064344.40		A	0.9
7	☐	1.000		3159839.82		A	1.2
8	☐	1.000		2886241.73		A	1.5

115 In (ISTD) [No Gas]

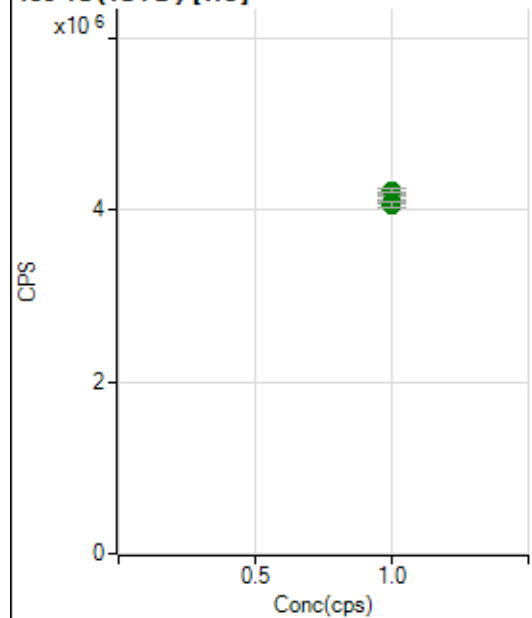
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		6672562.80		A	3.9
2	☐	1.000		6783146.28		A	2.2
3	☐	1.000		6910029.91		A	0.7
4	☐	1.000		6843841.21		A	1.0
5	☐	1.000		6634668.67		A	3.8
6	☐	1.000		6883790.09		A	1.5
7	☐	1.000		6891502.14		A	1.8
8	☐	1.000		6595997.59		A	1.2

115 In (ISTD) [He]

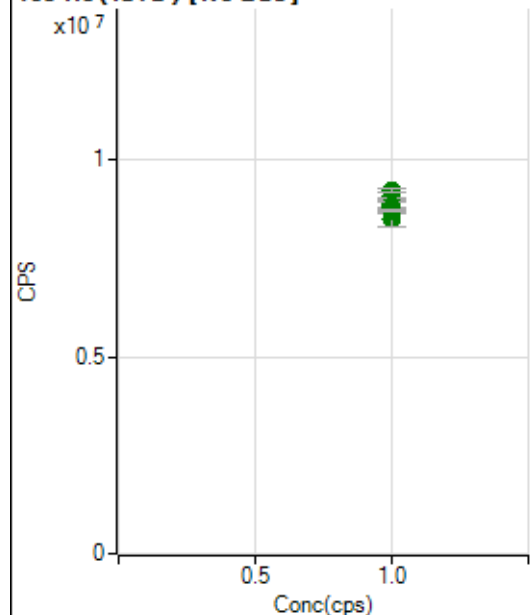
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		1115748.80		P	0.9
2	☐	1.000		1119633.42		P	0.5
3	☐	1.000		1138773.89		P	1.6
4	☐	1.000		1133669.85		P	0.8
5	☐	1.000		1121730.65		P	0.5
6	☐	1.000		1113237.10		P	0.1
7	☐	1.000		1103877.47		P	0.6
8	☐	1.000		1090978.21		P	0.1

159 Tb (ISTD) [No Gas]

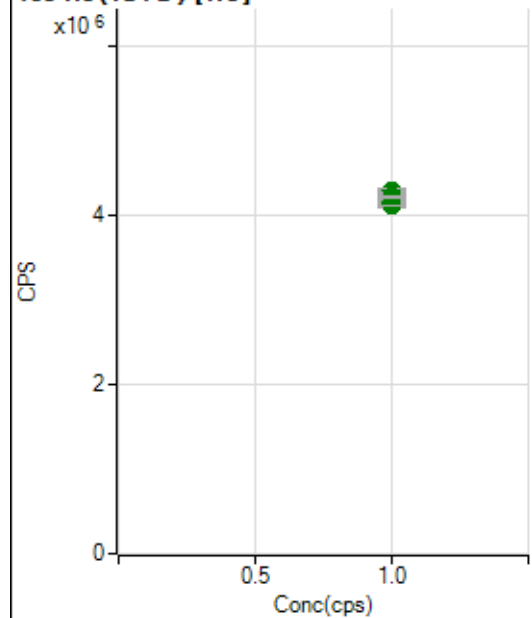
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		8886443.83		A	4.2
2	☐	1.000		8942449.03		A	0.7
3	☐	1.000		9081512.99		A	0.9
4	☐	1.000		9151431.74		A	0.4
5	☐	1.000		9107853.47		A	4.7
6	☐	1.000		9179609.66		A	3.0
7	☐	1.000		9502143.89		A	0.4
8	☐	1.000		9114876.74		A	0.8

159 Tb (ISTD) [He]

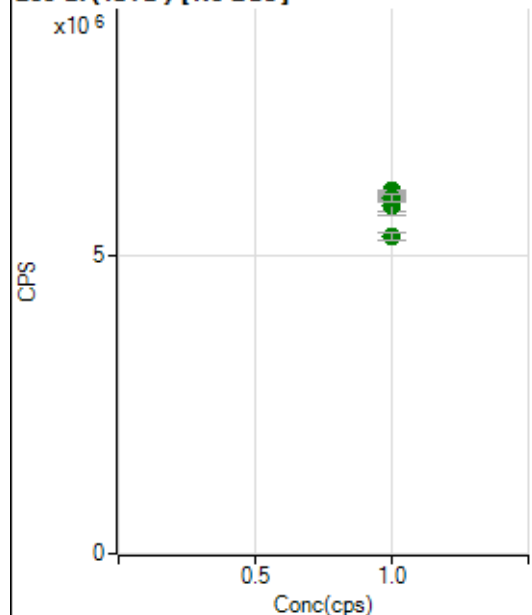
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		4050098.17		A	0.9
2	☐	1.000		4080621.99		A	0.2
3	☐	1.000		4099186.85		A	0.7
4	☐	1.000		4156244.04		A	1.7
5	☐	1.000		4110926.74		A	0.3
6	☐	1.000		4171420.74		A	0.7
7	☐	1.000		4222486.26		A	1.2
8	☐	1.000		4067762.82		A	1.5

165 Ho (ISTD) [No Gas]

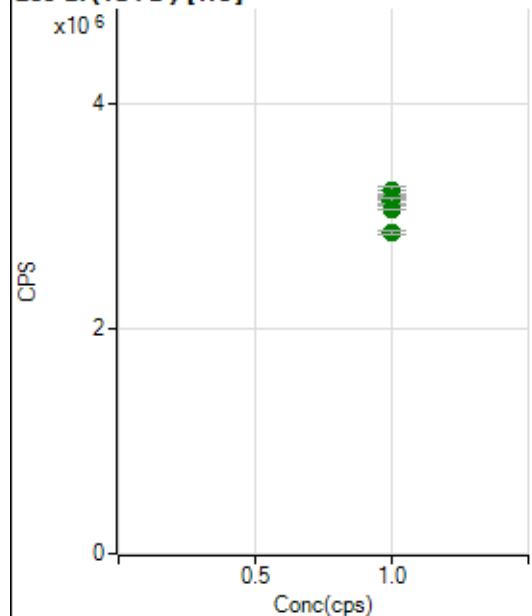
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		8511063.04		A	4.8
2	☐	1.000		8720459.65		A	1.5
3	☐	1.000		8856455.84		A	3.0
4	☐	1.000		8882176.59		A	2.1
5	☐	1.000		8814860.01		A	2.8
6	☐	1.000		9099996.21		A	1.8
7	☐	1.000		9217205.15		A	1.2
8	☐	1.000		8740133.10		A	0.7

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		4108270.49		A	0.7
2	☐	1.000		4147288.72		A	0.4
3	☐	1.000		4154449.49		A	2.3
4	☐	1.000		4140016.99		A	1.5
5	☐	1.000		4262379.14		A	1.4
6	☐	1.000		4247484.87		A	1.2
7	☐	1.000		4285973.48		A	1.8
8	☐	1.000		4222868.30		A	0.6

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		5890100.68		A	5.0
2	☐	1.000		6025473.17		A	0.9
3	☐	1.000		5981282.76		A	1.2
4	☐	1.000		6076758.17		A	0.8
5	☐	1.000		5814189.36		A	5.1
6	☐	1.000		5951763.87		A	1.0
7	☐	1.000		5949555.26		A	2.3
8	☐	1.000		5308166.34		A	2.3

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		3127868.71		A	1.7
2	☐	1.000		3191897.80		A	2.2
3	☐	1.000		3220242.80		A	2.4
4	☐	1.000		3117001.13		A	1.7
5	☐	1.000		3162074.50		A	1.9
6	☐	1.000		3138177.70		A	1.5
7	☐	1.000		3054805.16		A	0.4
8	☐	1.000		2853499.33		A	1.5

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP8050323-MS.b
Acq. Date-Time 2023-05-03 10:48:05
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		11468	114682.35			0.284	5.000
24		83066	830656.56			1.215	5.000
25		10933	109327.54			0.773	5.000
26		12786	127855.19			0.779	5.000
59		62726	627259.54			0.749	5.000
113		7095	70951.28			0.835	5.000
115		90230	902297.10			1.396	5.000
206		21928	219281.68			1.692	5.000
207		19933	199329.81			1.656	5.000
208		48168	481683.21			1.525	5.000
220		0	4.60			19.444	

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

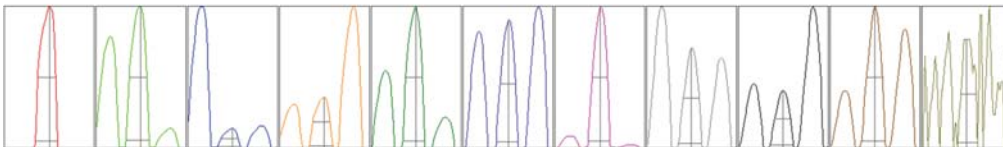
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	11472	11515	11479	11446	11430
24	81610	83058	84459	83012	83189
25	10929	10968	10829	10885	11053
26	12628	12898	12774	12795	12832
59	62017	62983	62619	63277	62734
113	7023	7180	7059	7104	7109
115	88050	90936	90924	90224	91014
206	21307	22004	22204	22216	21911
207	19399	20056	20264	20079	19868
208	46894	48363	48671	48654	48259

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	0	0

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	20459.81	9.05	8.90 - 9.10	
24	148120.96	24.00	23.90 - 24.10	
25	20085.62	25.00	24.90 - 25.10	
26	23164.38	26.00	25.90 - 26.10	
59	119890.39	59.00	58.90 - 59.10	
113	14411.90	113.05	112.90 - 113.10	
115	183121.01	115.05	114.90 - 115.10	
206	43251.12	206.00	205.90 - 206.10	
207	38975.55	207.00	206.90 - 207.10	
208	95368.76	208.00	207.90 - 208.10	
220	0.65	220.00	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.60	0.739	0.900	
24	0.59	0.780	0.900	
25	0.57	0.774	0.900	
26	0.59	0.780	0.900	
59	0.55	0.737	0.900	
113	0.51	0.727	0.900	
115	0.51	0.728	0.900	
206	0.52	0.775	0.900	
207	0.53	0.779	0.900	
208	0.52	0.796	0.900	
220	0.51	0.638		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.84 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	11.6 V	Deflect	15.6 V
Extract 2	-205.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-115 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	160 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9994	QP Bias	-4.0 V
Mass Offset	126	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	1.0 mm	Torch V	-0.9 mm
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EM

Discriminator	4.5 mV	Analog HV	2326 V	Pulse HV	1725 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		13787	137865.57			0.898	
89		11625	116252.06			1.230	
205		16857	168572.57			1.360	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	13969	13681	13662	13822	13799
89	11820	11487	11656	11482	11681
205	17135	16667	16645	16772	17068

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.84 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	11.6 V	Deflect	4.6 V
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US EPA Tune Check Report

Extract 2	-205.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-115 V	Cell Exit	-70 V		

Cell Parameters

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

QP Parameters

Mass Gain	123	Axis Gain	0.9994	QP Bias	-13.0 V
Mass Offset	126	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	1.0 mm	Torch V	-0.9 mm
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EM

Discriminator	4.5 mV	Analog HV	2326 V	Pulse HV	1725 V
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