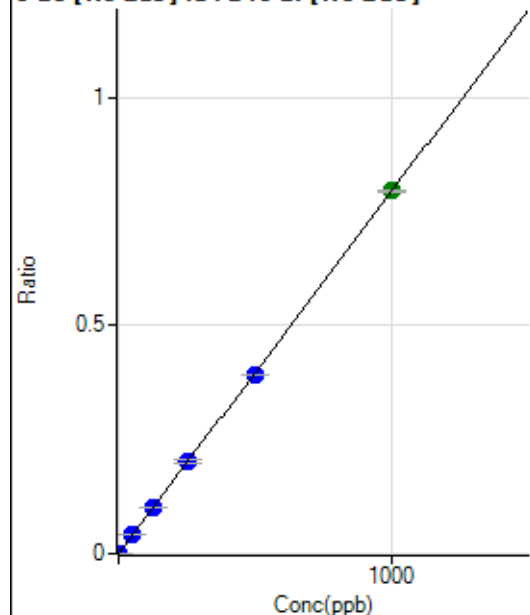


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8081020 MS.b\
Analysis File: P8081020 MS.batch.bin
DA Date-Time: 2020-08-10 22:20:57
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-08-10 14:17:56
2	004CALS.d	S01	2020-08-10 14:21:02
3	005CALS.d	S02	2020-08-10 14:24:06
4	006CALS.d	S03	2020-08-10 14:27:12
5	007CALS.d	S04	2020-08-10 14:30:15
6	008CALS.d	S05	2020-08-10 14:33:16
7	009CALS.d	S06	2020-08-10 14:36:14
8	010CALS.d	S07	2020-08-10 14:39:15
9	011CALS.d	S08	2020-08-10 14:42:13

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	35.32	0.0000	P	9.7
2	☐	0.100	0.083	121.98	0.0001	P	12.6
3	☐	1.000	0.915	1032.50	0.0008	P	5.1
4	☐	50.000	50.902	54242.90	0.0405	P	0.8
5	☐	125.000	127.473	138768.69	0.1013	P	0.8
6	☐	250.000	254.407	278466.95	0.2021	P	2.9
7	☐	500.000	493.911	549905.85	0.3923	P	0.8
8	☐	1000.000	1001.589	1063306.33	0.7955	A	0.8
9	☐			1389.80	0.0010	P	6.0

$$y = 7.9425E-004 * x + 2.5889E-005$$

$$R = 1.0000$$

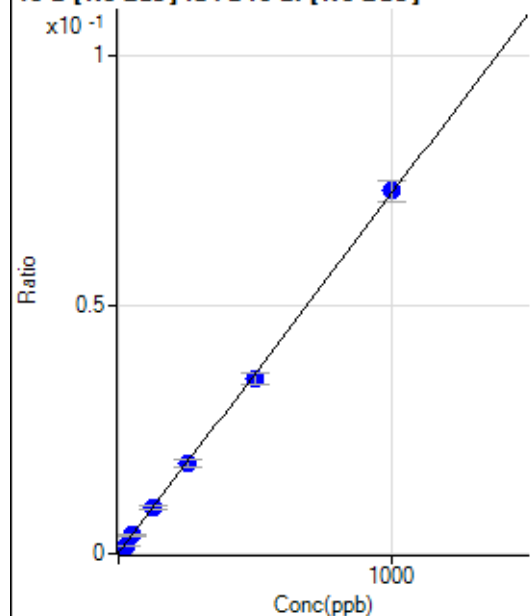
$$DL = 0.00952$$

$$BEC = 0.0326$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	175.30	0.0001	P	6.2
2	☐	2.500	2.216	382.60	0.0003	P	5.7
3	☐	25.000	20.922	2249.07	0.0016	P	7.4
4	☐	50.000	50.883	5098.56	0.0038	P	8.1
5	☐	125.000	126.492	12681.64	0.0093	P	7.7
6	☐	250.000	249.239	24948.86	0.0181	P	10.3
7	☐	500.000	485.184	49269.06	0.0351	P	7.6
8	☐	1000.000	1007.470	97435.42	0.0728	P	5.9
9	☐			11570.96	0.0083	P	8.7

$$y = 7.2180E-005 * x + 1.2843E-004$$

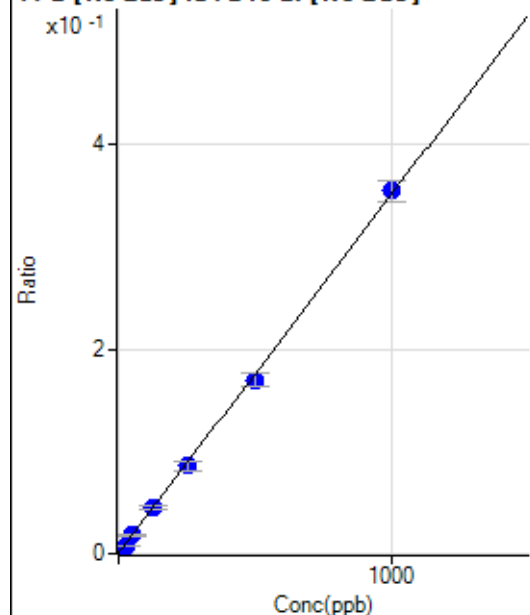
$$R = 0.9998$$

$$DL = 0.3298$$

$$BEC = 1.779$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	812.53	0.0006	P	1.2
2	☐	2.500	2.102	1767.10	0.0013	P	8.8
3	☐	25.000	21.364	11098.01	0.0081	P	9.2
4	☐	50.000	49.340	24000.15	0.0179	P	6.8
5	☐	125.000	125.484	61077.21	0.0446	P	7.1
6	☐	250.000	244.051	118650.53	0.0862	P	10.3
7	☐	500.000	483.494	238458.99	0.1701	P	7.4
8	☐	1000.000	1009.805	474342.64	0.3546	P	5.8
9	☐			55365.83	0.0397	P	7.7

$$y = 3.5062\text{E-}004 * x + 5.9500\text{E-}004$$

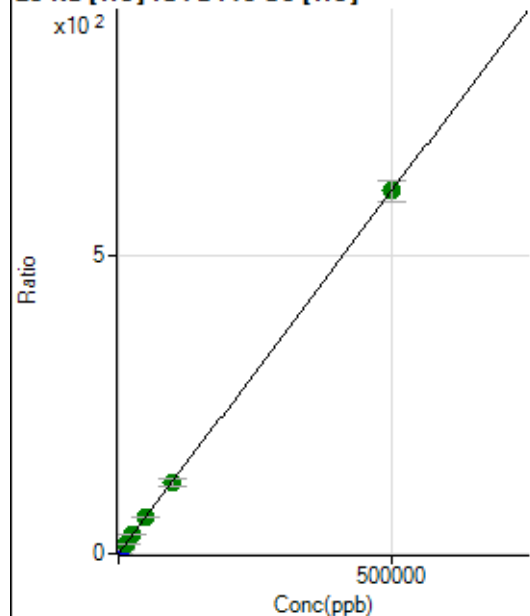
$$R = 0.9998$$

$$DL = 0.06202$$

$$BEC = 1.697$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	45814.22	0.3235	P	1.2
2	☐	50.000	50.199	54413.13	0.3846	P	1.9
3	☐	500.000	459.988	128528.86	0.8838	P	0.5
4	☐	5000.000	5517.569	980164.68	7.0442	P	4.6
5	☐	12500.000	13006.398	2387627.12	16.1661	A	2.2
6	☐	25000.000	26112.857	4591305.74	32.1306	A	1.6
7	☐	50000.000	50873.502	9013877.72	62.2907	A	1.5
8	☐	100000.00	97910.442	17603374.87	119.5848	A	9.5
9	☐	500000.00	500257.12	85227979.68	609.6692	A	5.9

$$y = 0.0012 * x + 0.3235$$

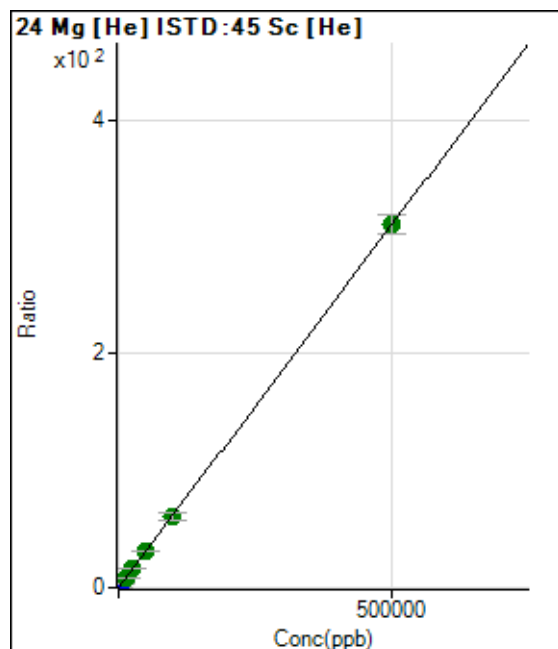
$$R = 1.0000$$

$$DL = 9.304$$

$$BEC = 265.6$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	380.57	0.0027	P	12.3
2	☐	50.000	47.025	4509.17	0.0319	P	2.7
3	☐	500.000	464.254	42284.35	0.2907	P	1.4
4	☐	5000.000	5431.367	469250.36	3.3725	P	4.8
5	☐	12500.000	12988.793	1190603.32	8.0615	A	2.3
6	☐	25000.000	26339.064	2335490.42	16.3446	A	1.9
7	☐	50000.000	50702.646	4552548.37	31.4608	A	1.5
8	☐	100000.00	97700.284	8918374.76	60.6202	A	10.4
9	☐	500000.00	500306.22	43401135.34	310.4143	A	5.4

$$y = 6.2044\text{E-}004 * x + 0.0027$$

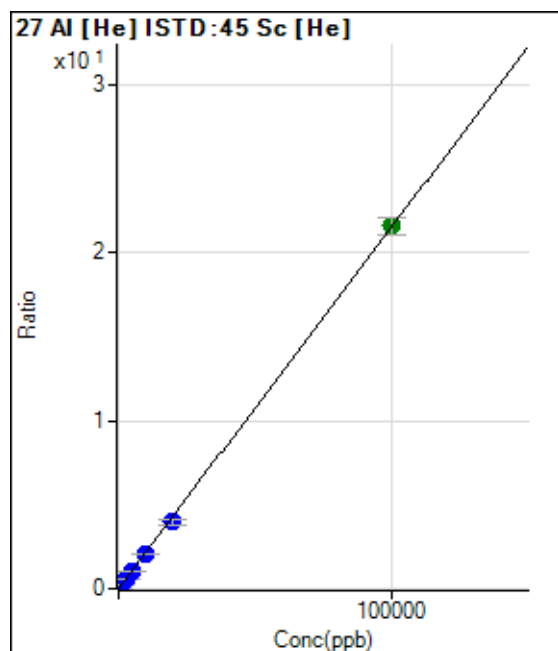
R = 1.0000

DL = 1.604

BEC = 4.332

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	715.88	0.0051	P	8.0
2	☒	2.000					
3	☐	20.000	18.897	1325.80	0.0091	P	2.6
4	☐	1000.000	1008.976	30895.13	0.2220	P	4.2
5	☐	2500.000	2430.877	77945.66	0.5277	P	1.6
6	☐	5000.000	4936.458	152394.96	1.0665	P	1.4
7	☐	10000.000	9652.862	301075.84	2.0806	P	1.0
8	☐	20000.000	18426.680	583947.02	3.9671	P	9.5
9	☐	100000.00	100354.19	3018554.36	21.5827	A	4.5

$$y = 2.1501\text{E-}004 * x + 0.0051$$

R = 0.9999

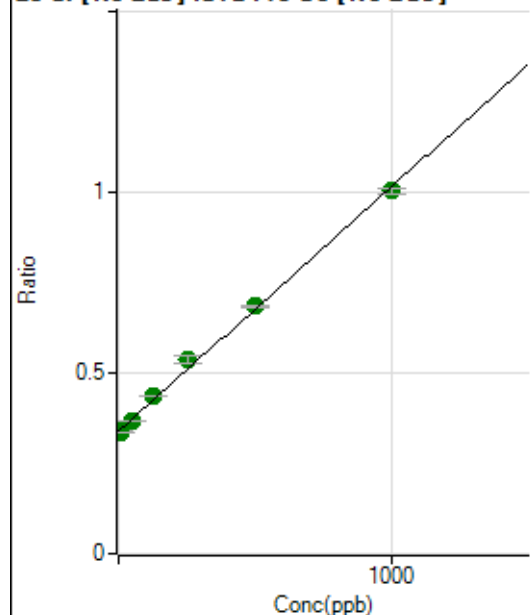
DL = 5.634

BEC = 23.5

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1084478.78	0.3395	A	0.7
2	☐	1.000	12.906	1087724.11	0.3482	A	1.0
3	☐	10.000	-6.015	1085998.95	0.3354	A	0.5
4	☐	50.000	43.118	1190809.06	0.3687	A	0.6
5	☐	125.000	145.524	1398510.69	0.4380	A	0.4
6	☐	250.000	293.329	1713531.79	0.5381	A	3.4
7	☐	500.000	509.436	2261013.83	0.6843	A	0.9
8	☐	1000.000	982.376	3230312.83	1.0045	A	1.4
9	☐			1138163.75	0.3380	A	3.1

$$y = 6.7693\text{E-}004 * x + 0.3395$$

$$R = 0.9984$$

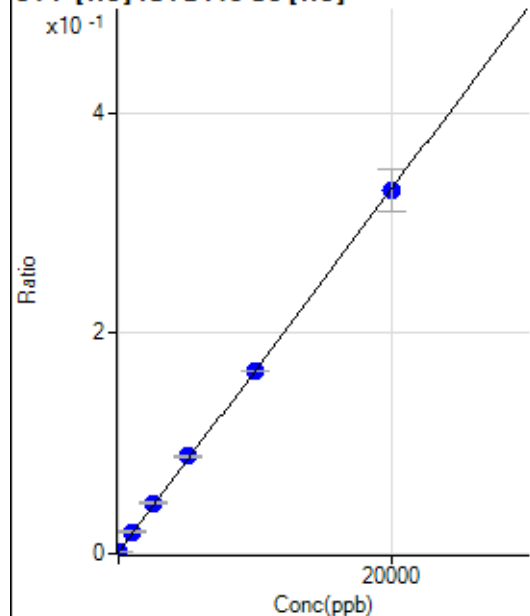
$$DL = 11.15$$

$$BEC = 501.5$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	14.095	233.34	0.0016	P	16.1
2	☐	0.000	-1.277	197.23	0.0014	P	6.2
3	☐	0.000	-12.818	175.01	0.0012	P	13.1
4	☐	1000.000	1098.354	2711.43	0.0195	P	6.8
5	☐	2500.000	2697.345	6768.40	0.0458	P	1.8
6	☐	5000.000	5303.758	12680.89	0.0887	P	2.4
7	☐	10000.000	10002.137	24037.02	0.1661	P	0.4
8	☐	20000.000	19893.406	48364.86	0.3290	P	11.5
9	☐			266.68	0.0019	P	18.7

$$y = 1.6465\text{E-}005 * x + 0.0014$$

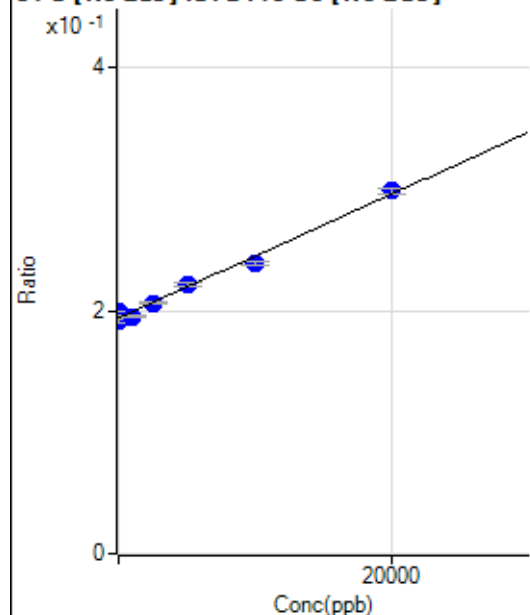
$$R = 0.9998$$

$$DL = 30.96$$

$$BEC = 85.94$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-419.306	613160.86	0.1920	P	0.9
2	☐	0.000	953.293	621471.33	0.1990	P	0.4
3	☐	0.000	-533.987	619542.05	0.1914	P	1.8
4	☐	1000.000	228.204	630681.36	0.1953	P	1.1
5	☐	2500.000	2373.842	658414.06	0.2062	P	0.4
6	☐	5000.000	5405.600	706226.86	0.2217	P	1.0
7	☐	10000.000	8912.949	791429.99	0.2396	P	1.4
8	☐	20000.000	20496.485	960424.66	0.2987	P	1.4
9	☐			572480.47	0.1701	P	5.5

$$y = 5.1010\text{E-}006 * x + 0.1941$$

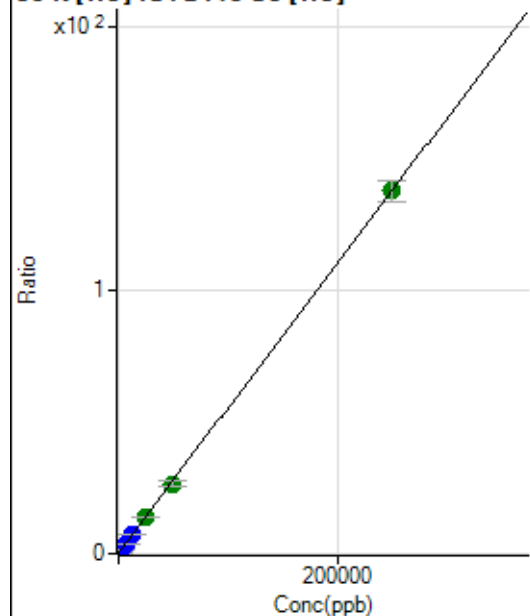
$$R = 0.9953$$

$$DL = 1154$$

$$BEC = 3.805\text{E}+04$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44014.98	0.3108	P	1.1
2	☐	50.000	60.749	48671.60	0.3440	P	2.0
3	☐	500.000	437.739	80077.83	0.5506	P	0.6
4	☐	2500.000	2740.557	252225.45	1.8123	P	3.9
5	☐	6250.000	6394.820	563410.48	3.8145	P	1.1
6	☐	12500.000	13073.508	1067998.15	7.4738	P	1.3
7	☐	25000.000	24869.597	2016805.14	13.9369	A	1.1
8	☐	50000.000	47926.822	3909555.77	26.5701	A	10.2
9	☐	250000.00	250393.09	19223070.05	137.5024	A	5.7

$$y = 5.4790\text{E-}004 * x + 0.3108$$

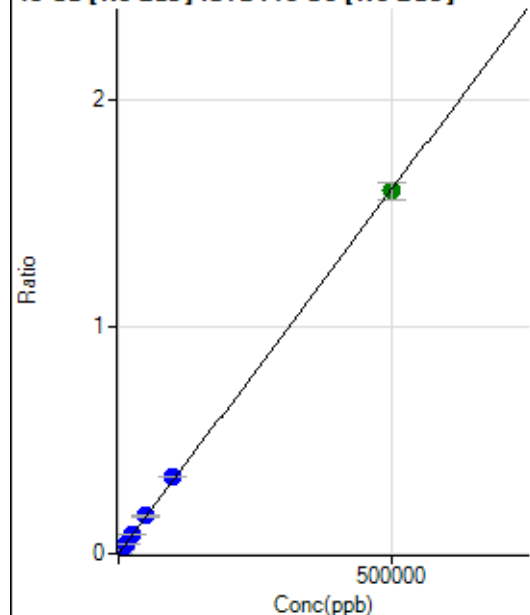
$$R = 1.0000$$

$$DL = 18.71$$

$$BEC = 567.2$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	594.48	0.0002	P	21.0
2	☐	50.000	57.045	1152.86	0.0004	P	2.1
3	☐	500.000	480.746	5592.92	0.0017	P	2.0
4	☐	5000.000	5305.428	55516.34	0.0172	P	2.2
5	☐	12500.000	13560.419	139358.32	0.0436	P	1.3
6	☐	25000.000	27012.292	276324.81	0.0868	P	3.2
7	☐	50000.000	52090.811	552081.07	0.1671	P	2.6
8	☐	100000.00	106353.85	1096842.26	0.3410	P	0.5
9	☐	500000.00	498389.98	5376307.41	1.5975	A	4.5

$$y = 3.2049\text{E-}006 * x + 1.8624\text{E-}004$$

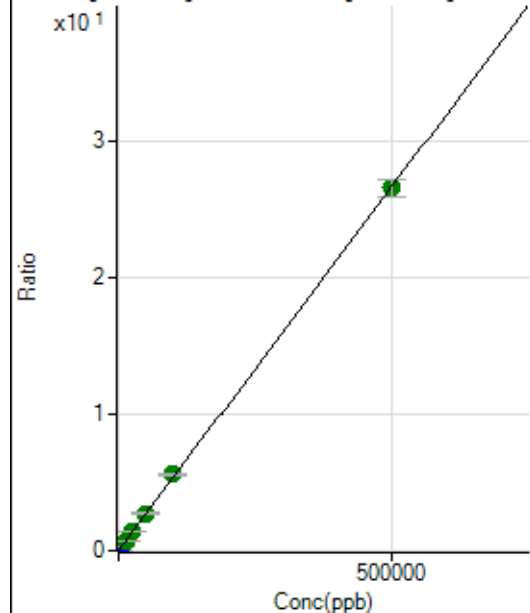
$$R = 0.9999$$

$$DL = 36.62$$

$$BEC = 58.11$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	53932.87	0.0169	P	1.7
2	☐	50.000	58.490	62445.03	0.0200	P	0.5
3	☐	500.000	474.233	136230.62	0.0421	P	1.7
4	☐	5000.000	5354.098	973374.64	0.3014	P	0.6
5	☐	12500.000	13224.335	2297311.66	0.7195	A	0.8
6	☐	25000.000	26325.883	4508285.12	1.4156	A	3.4
7	☐	50000.000	51163.227	9036485.36	2.7352	A	1.1
8	☐	100000.00	104272.10	17870508.73	5.5570	A	1.3
9	☐	500000.00	498941.33	89260533.94	26.5262	A	5.0

$$y = 5.3131\text{E-}005 * x + 0.0169$$

$$R = 1.0000$$

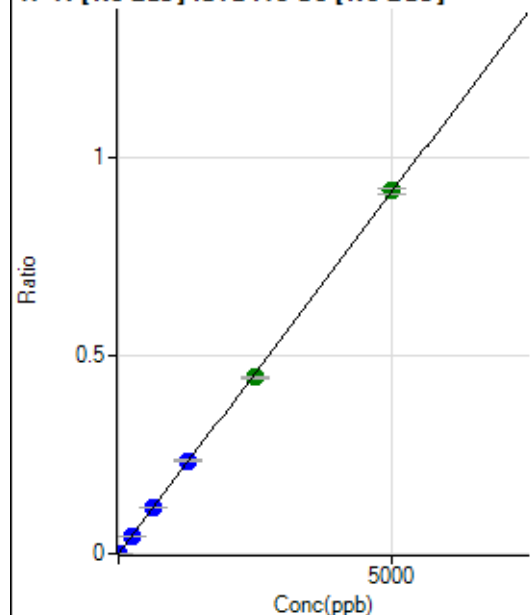
$$DL = 16.61$$

$$BEC = 317.8$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	661.14	0.0002	P	16.8
2	☐	0.500	0.435	894.50	0.0003	P	7.5
3	☐	5.000	4.714	3447.74	0.0011	P	2.8
4	☐	250.000	246.533	145597.78	0.0451	P	0.6
5	☐	625.000	642.344	373939.06	0.1171	P	0.9
6	☐	1250.000	1283.960	744915.03	0.2339	P	3.1
7	☐	2500.000	2437.636	1466443.91	0.4439	A	0.9
8	☐	5000.000	5020.698	2939153.52	0.9140	A	1.8
9	☐			4178.49	0.0012	P	5.3

$$y = 1.8200\text{E-}004 * x + 2.0717\text{E-}004$$

$$R = 0.9999$$

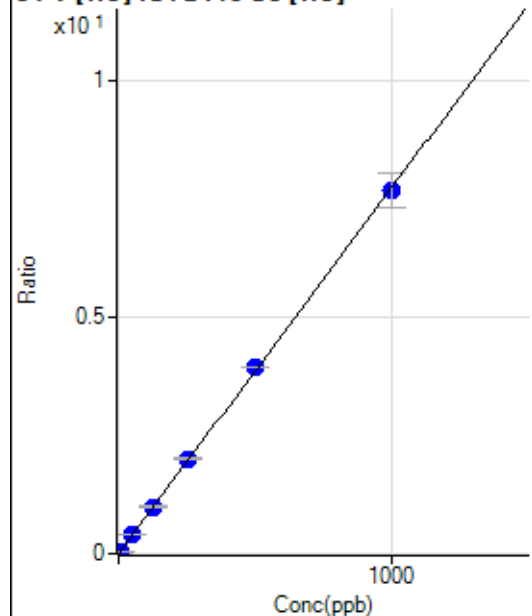
$$DL = 0.573$$

$$BEC = 1.138$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26.67	0.0002	P	25.2
2	☐	0.500	0.513	586.69	0.0041	P	11.9
3	☐	5.000	4.631	5224.34	0.0359	P	5.1
4	☐	50.000	53.307	57267.31	0.4116	P	4.7
5	☐	125.000	128.426	146422.02	0.9913	P	0.9
6	☐	250.000	259.636	286338.10	2.0039	P	1.9
7	☐	500.000	509.822	569389.02	3.9347	P	0.8
8	☐	1000.000	992.088	1127010.71	7.6565	P	9.6
9	☐			1453.42	0.0104	P	5.2

$$y = 0.0077 * x + 1.8833\text{E-}004$$

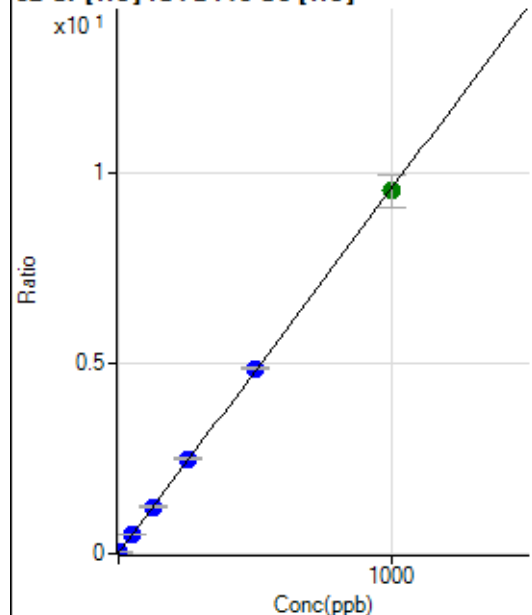
$$R = 0.9999$$

$$DL = 0.01844$$

$$BEC = 0.0244$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1255.63	0.0089	P	4.2
2	☐	0.200	0.198	1521.21	0.0108	P	10.8
3	☐	2.000	1.797	3790.54	0.0261	P	2.4
4	☐	50.000	53.156	72040.11	0.5175	P	3.6
5	☐	125.000	127.391	181368.33	1.2279	P	1.4
6	☐	250.000	259.646	356337.01	2.4936	P	1.1
7	☐	500.000	506.909	703262.49	4.8598	P	0.7
8	☐	1000.000	993.678	1401791.11	9.5179	A	8.7
9	☐			8289.15	0.0592	P	3.6

$$y = 0.0096 * x + 0.0089$$

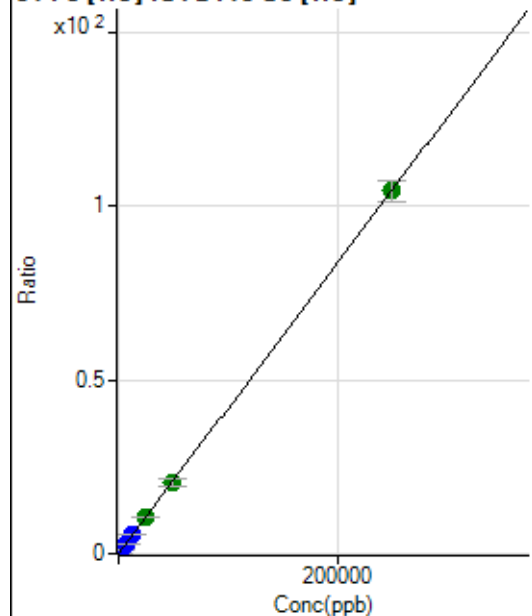
$$R = 0.9999$$

$$DL = 0.1155$$

$$BEC = 0.9265$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	579.65	0.0041	P	10.5
2	☐	5.000	4.089	820.41	0.0058	P	4.7
3	☐	50.000	48.136	3519.01	0.0242	P	3.9
4	☐	2500.000	2609.814	152287.07	1.0943	P	4.2
5	☐	6250.000	6327.872	391027.75	2.6474	P	1.1
6	☐	12500.000	12717.360	759735.06	5.3165	P	1.1
7	☐	25000.000	25520.467	1543264.58	10.6647	A	1.6
8	☐	50000.000	49296.778	3029782.71	20.5967	A	10.7
9	☐	250000.00	250074.68	14605129.15	104.4673	A	5.6

$$y = 4.1773E-004 * x + 0.0041$$

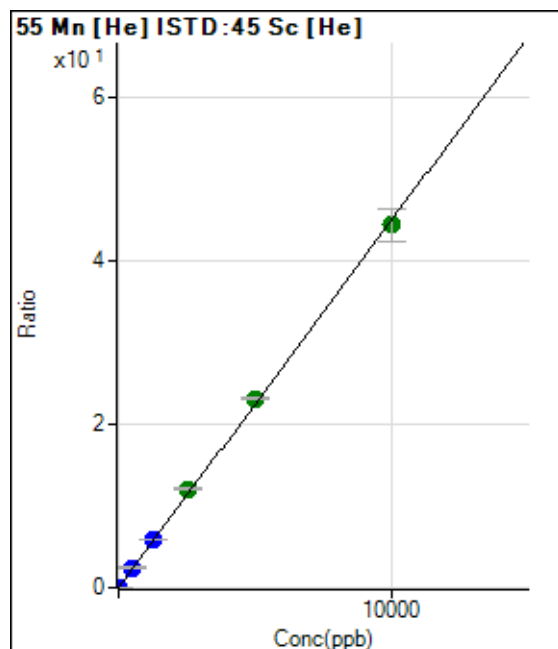
$$R = 1.0000$$

$$DL = 3.079$$

$$BEC = 9.796$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	141.11	0.0010	P	10.7
2	☐	0.100	0.073	187.78	0.0013	P	15.9
3	☐	1.000	0.939	758.92	0.0052	P	4.2
4	☐	500.000	542.952	339864.53	2.4426	P	4.7
5	☐	1250.000	1305.734	867376.41	5.8727	P	1.7
6	☐	2500.000	2685.663	1725834.89	12.0781	A	1.9
7	☐	5000.000	5136.561	3342792.87	23.0994	A	1.1
8	☐	10000.000	9876.189	6539465.25	44.4129	A	9.1
9	☐			12054.04	0.0862	P	6.0

$$y = 0.0045 * x + 9.9641E-004$$

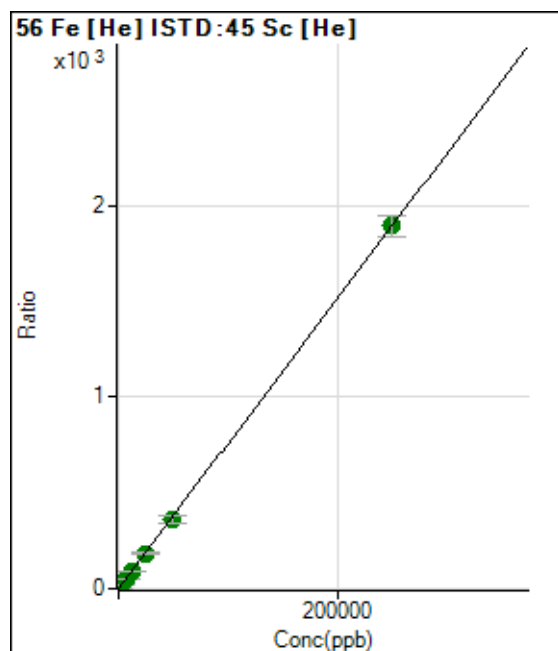
$$R = 0.9997$$

$$DL = 0.07142$$

$$BEC = 0.2216$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3604.22	0.0254	P	4.8
2	☐	5.000	4.636	8556.41	0.0605	P	1.5
3	☐	50.000	44.884	53013.20	0.3645	P	2.1
4	☐	2500.000	2607.996	2745281.43	19.7288	A	4.5
5	☐	6250.000	6126.215	6839573.19	46.3089	A	1.8
6	☐	12500.000	12465.416	13461927.73	94.2014	A	0.9
7	☐	25000.000	24499.198	26788437.17	185.1164	A	1.0
8	☐	50000.000	47797.421	53158354.89	361.1339	A	9.5
9	☐	250000.00	250494.34	264540939.2	1,892.504	A	6.1

$$y = 0.0076 * x + 0.0254$$

$$R = 1.0000$$

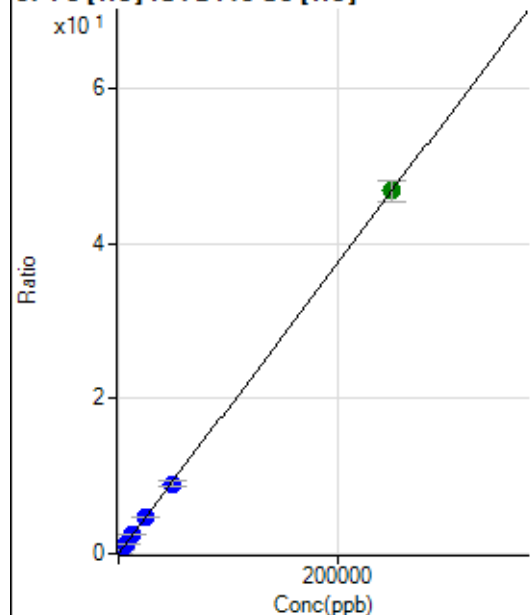
$$DL = 0.4862$$

$$BEC = 3.368$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	198.15	0.0014	P	27.9
2	☒	5.000					
3	☐	50.000	44.926	1424.17	0.0098	P	4.8
4	☐	2500.000	2611.561	68110.09	0.4894	P	3.7
5	☐	6250.000	6188.754	170999.95	1.1577	P	1.5
6	☐	12500.000	12689.699	339025.33	2.3724	P	1.1
7	☐	25000.000	24823.951	671369.57	4.6396	P	1.4
8	☐	50000.000	48216.503	1326003.21	9.0104	P	9.9
9	☐	250000.00	250365.23	6540326.54	46.7810	A	5.6

$$y = 1.8685E-004 * x + 0.0014$$

$$R = 1.0000$$

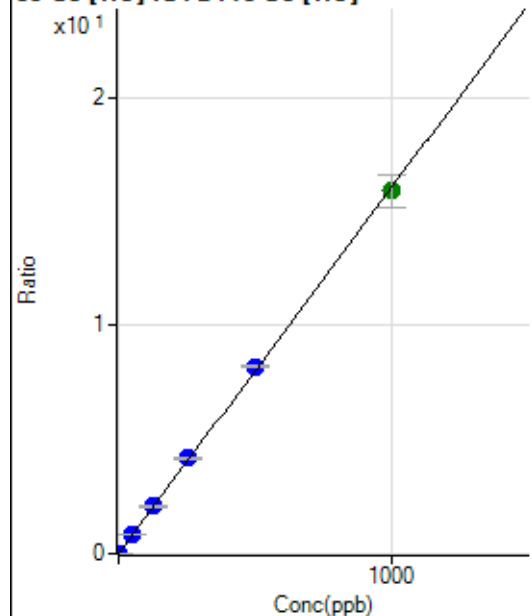
$$DL = 6.254$$

$$BEC = 7.485$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	60.00	0.0004	P	27.5
2	☐	0.100	0.082	246.67	0.0017	P	12.1
3	☐	1.000	0.926	2224.64	0.0153	P	4.3
4	☐	50.000	53.437	119516.50	0.8588	P	4.2
5	☐	125.000	128.950	306005.10	2.0718	P	1.7
6	☐	250.000	261.011	599188.70	4.1932	P	1.6
7	☐	500.000	511.000	1187919.04	8.2090	P	0.8
8	☐	1000.000	991.082	2344574.60	15.9209	A	8.9
9	☐			6801.69	0.0486	P	3.7

$$y = 0.0161 * x + 4.2341E-004$$

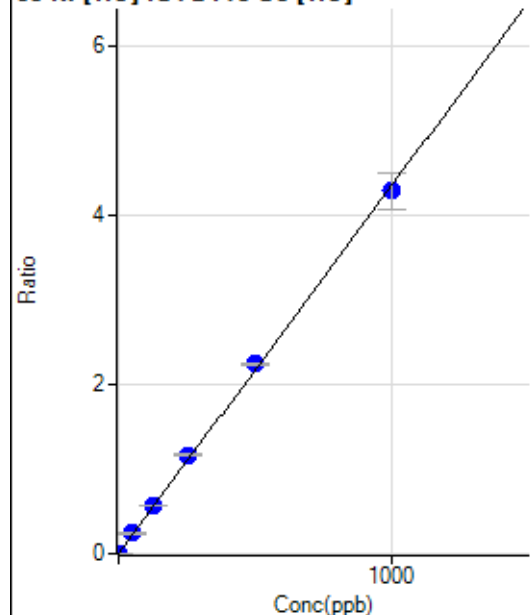
$$R = 0.9998$$

$$DL = 0.02176$$

$$BEC = 0.02636$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	94.44	0.0007	P	10.4
2	☐	0.100	0.101	156.67	0.0011	P	6.5
3	☐	1.000	0.880	653.36	0.0045	P	4.2
4	☐	50.000	54.919	33341.25	0.2395	P	3.2
5	☐	125.000	130.960	84217.16	0.5702	P	2.7
6	☐	250.000	266.796	165893.41	1.1610	P	1.8
7	☐	500.000	516.792	325332.66	2.2482	P	1.1
8	☐	1000.000	986.414	631422.86	4.2907	P	10.0
9	☐			2968.11	0.0212	P	5.5

$$y = 0.0043 * x + 6.6693E-004$$

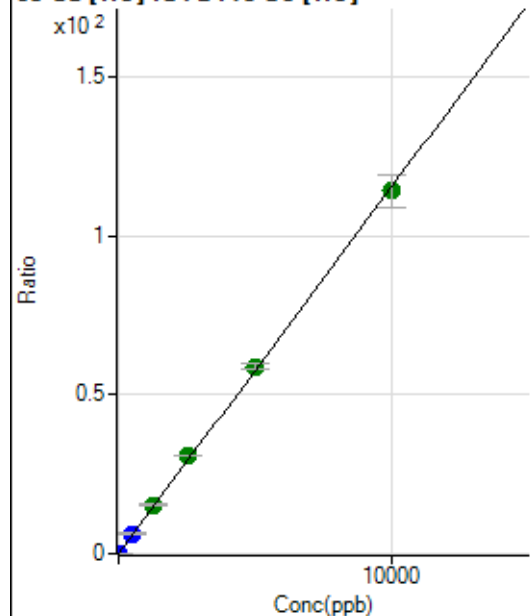
$$R = 0.9996$$

$$DL = 0.0479$$

$$BEC = 0.1533$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	832.26	0.0059	P	15.0
2	☒	0.200					
3	☐	2.000	2.009	4226.23	0.0291	P	2.7
4	☐	500.000	548.582	881442.59	6.3354	P	5.0
5	☐	1250.000	1324.146	2257359.51	15.2838	A	2.3
6	☐	2500.000	2664.232	4393617.12	30.7457	A	1.1
7	☐	5000.000	5105.235	8523721.61	58.9099	A	2.5
8	☐	10000.000	9894.627	16814362.94	114.1697	A	8.7
9	☐			24797.28	0.1773	P	4.4

$$y = 0.0115 * x + 0.0059$$

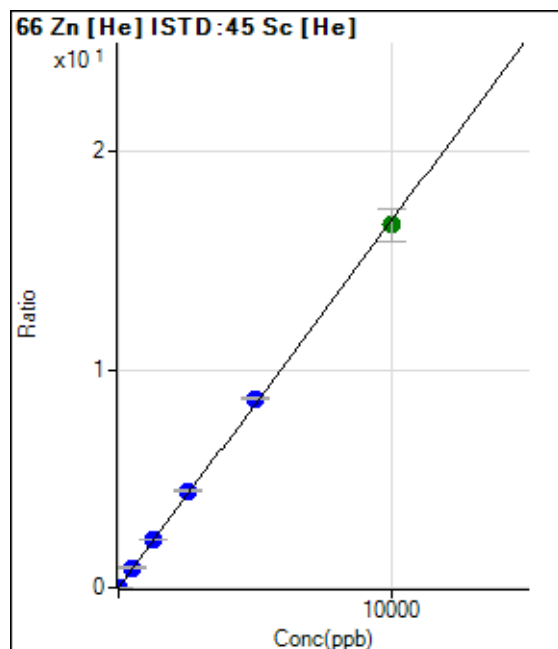
$$R = 0.9998$$

$$DL = 0.2287$$

$$BEC = 0.5094$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	351.03	0.0025	P	8.3
2	☐	0.200	0.160	388.41	0.0027	P	13.0
3	☐	2.000	1.693	774.43	0.0053	P	5.0
4	☐	500.000	546.083	128106.19	0.9206	P	4.4
5	☐	1250.000	1300.007	323194.56	2.1882	P	1.4
6	☐	2500.000	2641.948	635084.17	4.4444	P	1.6
7	☐	5000.000	5141.285	1251244.14	8.6466	P	0.9
8	☐	10000.000	9885.316	2447662.43	16.6229	A	9.0
9	☐			7645.07	0.0547	P	7.0

$$y = 0.0017 * x + 0.0025$$

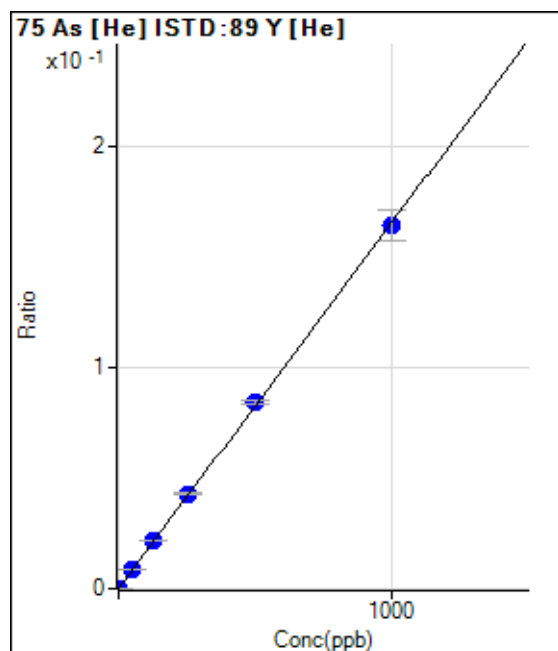
$$R = 0.9997$$

$$DL = 0.3653$$

$$BEC = 1.474$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19.33	0.0000	P	29.0
2	☐	0.100	0.101	39.00	0.0000	P	18.8
3	☐	1.000	0.801	179.35	0.0001	P	9.6
4	☐	50.000	53.493	10185.03	0.0089	P	4.9
5	☐	125.000	129.999	26059.18	0.0215	P	1.1
6	☐	250.000	259.668	51590.31	0.0429	P	2.5
7	☐	500.000	509.242	102295.36	0.0841	P	1.7
8	☐	1000.000	992.163	203448.04	0.1639	P	8.5
9	☐			315.04	0.0003	P	7.8

$$y = 1.6516E-004 * x + 1.6498E-005$$

$$R = 0.9999$$

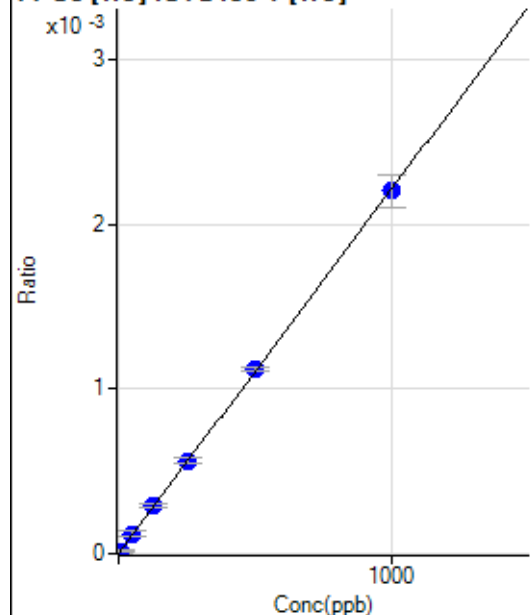
$$DL = 0.08682$$

$$BEC = 0.09989$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.
2	☐	0.500	0.860	3.33	0.0000	P	100.
3	☐	5.000	5.408	15.56	0.0000	P	89.1
4	☐	50.000	54.614	138.89	0.0001	P	31.9
5	☐	125.000	131.289	353.34	0.0003	P	9.8
6	☐	250.000	255.463	680.02	0.0006	P	7.5
7	☐	500.000	504.776	1358.97	0.0011	P	2.3
8	☐	1000.000	995.227	2732.51	0.0022	P	9.0
9	☐			4.44	0.0000	P	49.6

$$y = 2.2112\text{E-}006 * x + 9.4606\text{E-}007$$

$$R = 1.0000$$

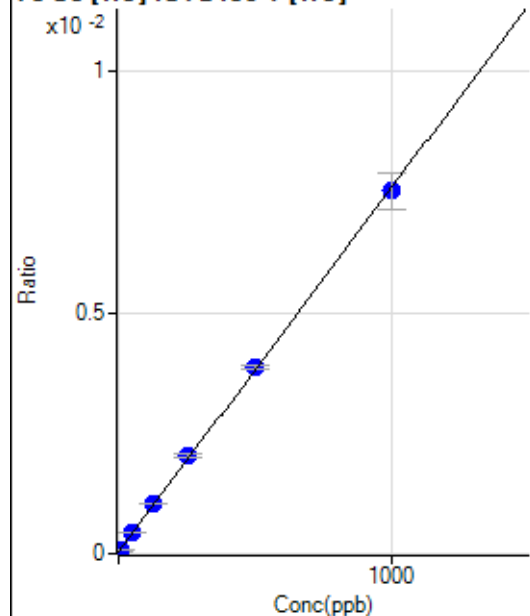
$$DL = 2.223$$

$$BEC = 0.4278$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	47.67	0.0000	P	19.4
2	☐	0.500	0.937	56.01	0.0000	P	12.5
3	☐	5.000	4.399	89.01	0.0001	P	14.9
4	☐	50.000	53.050	508.06	0.0004	P	1.0
5	☐	125.000	132.235	1259.19	0.0010	P	2.7
6	☐	250.000	265.055	2453.47	0.0020	P	2.8
7	☐	500.000	507.824	4707.93	0.0039	P	1.5
8	☐	1000.000	991.270	9325.02	0.0075	P	10.1
9	☐			64.34	0.0001	P	9.7

$$y = 7.5439\text{E-}006 * x + 4.0651\text{E-}005$$

$$R = 0.9998$$

$$DL = 3.131$$

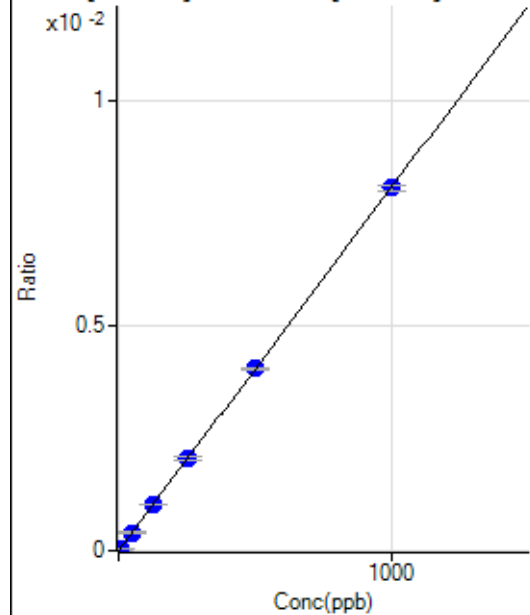
$$BEC = 5.389$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2265.85		P	5.6
2	☐			2255.84		P	7.6
3	☐			2125.68		P	13.5
4	☐			2335.94		P	2.8
5	☐			2352.62		P	8.9
6	☐			2299.23		P	5.1
7	☐			2459.42		P	9.4
8	☐			2439.40		P	4.9
9	☐			2813.20		P	5.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	-15.39	0.0000	P	-40.
2	☒	0.500					
3	☐	5.000	4.363	287.17	0.0000	P	8.9
4	☐	50.000	49.845	3497.21	0.0004	P	2.6
5	☐	125.000	128.058	9016.33	0.0010	P	1.9
6	☐	250.000	254.636	17846.94	0.0021	P	3.7
7	☐	500.000	500.109	35286.28	0.0040	P	1.3
8	☐	1000.000	998.415	69777.79	0.0081	P	1.3
9	☐			103.79	0.0000	P	34.4

$$y = 8.0898E-006 * x - 1.8099E-006$$

$$R = 1.0000$$

$$DL = 0.2737$$

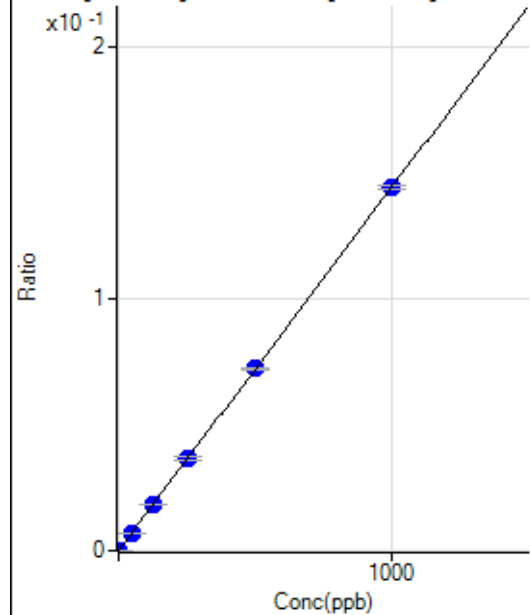
$$BEC = -0.2237$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			380.01		P	4.0
2	☐			427.79		P	5.2
3	☐			406.68		P	7.1
4	☐			381.12		P	6.4
5	☐			341.12		P	0.6
6	☐			423.35		P	6.3
7	☐			375.56		P	8.0
8	☐			414.45		P	9.0
9	☐			404.46		P	6.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	661.15	0.0001	P	11.2
2	☐	0.100	-0.002	658.37	0.0001	P	7.0
3	☐	1.000	0.844	1711.26	0.0002	P	5.3
4	☐	50.000	48.596	61675.43	0.0071	P	1.1
5	☐	125.000	126.049	159014.03	0.0182	P	0.3
6	☐	250.000	252.177	315698.15	0.0364	P	3.6
7	☐	500.000	500.349	629618.21	0.0722	P	1.5
8	☐	1000.000	999.221	1244568.01	0.1440	P	0.9
9	☐			9080.94	0.0010	P	7.0

$$y = 1.4406E-004 * x + 7.8043E-005$$

$$R = 1.0000$$

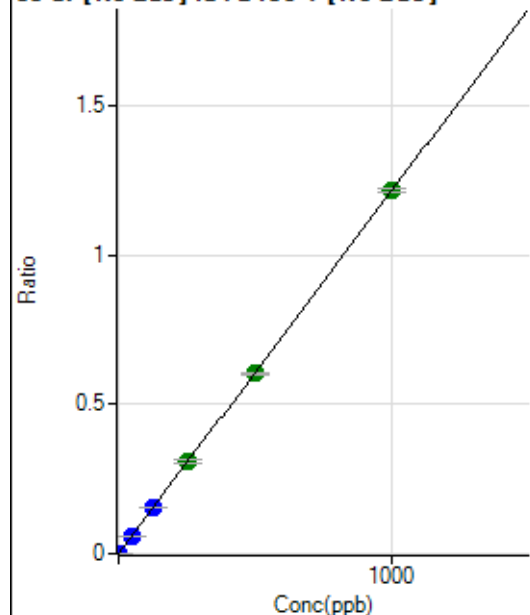
$$DL = 0.1826$$

$$BEC = 0.5417$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	41.67	0.0000	P	35.9
2	☐	0.100	0.095	1016.73	0.0001	P	2.7
3	☐	1.000	0.941	9862.06	0.0011	P	5.0
4	☐	50.000	50.109	531114.09	0.0610	P	1.0
5	☐	125.000	128.388	1361736.23	0.1562	P	0.6
6	☐	250.000	255.154	2690989.80	0.3104	A	4.4
7	☐	500.000	495.964	5264263.27	0.6033	A	0.5
8	☐	1000.000	1000.300	10514542.86	1.2168	A	1.2
9	☐			73501.72	0.0081	P	3.9

$$y = 0.0012 * x + 4.9274E-006$$

$$R = 1.0000$$

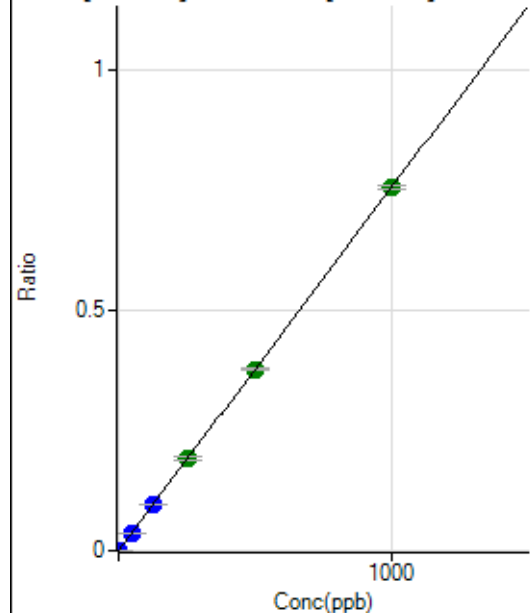
$$DL = 0.00436$$

$$BEC = 0.004051$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	269.46	0.0000	P	14.0
2	☐	0.100	0.102	919.50	0.0001	P	1.4
3	☐	1.000	0.905	6134.84	0.0007	P	4.1
4	☐	50.000	49.869	328517.77	0.0377	P	0.9
5	☐	125.000	127.853	842452.72	0.0966	P	0.4
6	☐	250.000	255.890	1676424.05	0.1933	A	4.1
7	☐	500.000	499.116	3290316.70	0.3771	A	1.1
8	☐	1000.000	998.619	6519265.73	0.7544	A	1.1
9	☐			9308.88	0.0010	P	5.0

$$y = 7.5544E-004 * x + 3.1814E-005$$

$$R = 1.0000$$

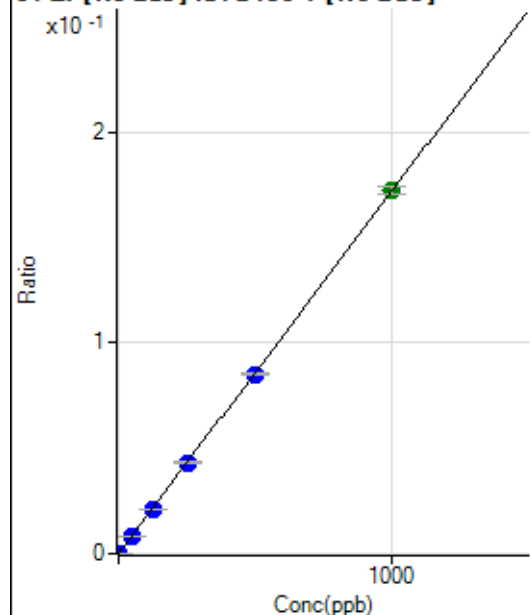
$$DL = 0.01768$$

$$BEC = 0.04211$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.89	0.0000	P	8.1
2	☐	0.100	0.109	222.23	0.0000	P	14.0
3	☐	1.000	0.906	1400.11	0.0002	P	7.3
4	☐	50.000	48.352	72494.34	0.0083	P	0.3
5	☐	125.000	124.280	186366.01	0.0214	P	0.4
6	☐	250.000	251.270	374687.31	0.0432	P	3.1
7	☐	500.000	495.888	743936.24	0.0853	P	1.0
8	☐	1000.000	1001.911	1488327.00	0.1723	A	2.0
9	☐			2066.88	0.0002	P	5.3

$$y = 1.7192\text{E-}004 * x + 7.5387\text{E-}006$$

$$R = 1.0000$$

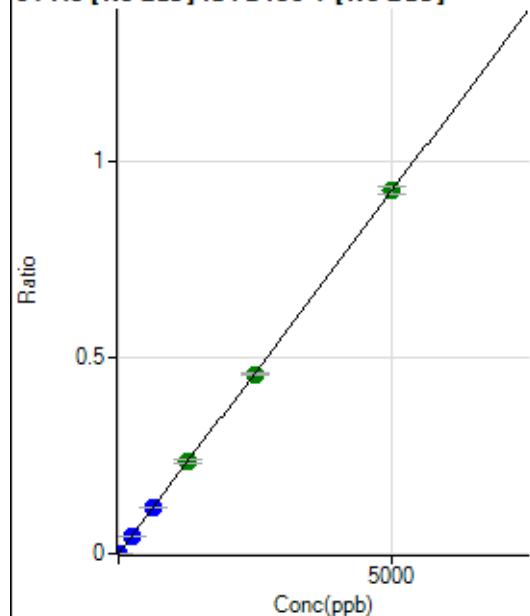
$$DL = 0.01071$$

$$BEC = 0.04385$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	225.01	0.0000	P	15.2
2	☐	0.500	0.431	900.05	0.0001	P	4.3
3	☐	5.000	4.338	7113.11	0.0008	P	1.7
4	☐	250.000	248.158	400508.64	0.0460	P	2.0
5	☐	625.000	632.824	1021787.34	0.1172	P	0.7
6	☐	1250.000	1267.992	2035880.67	0.2348	A	3.9
7	☐	2500.000	2474.713	3998096.62	0.4582	A	0.9
8	☐	5000.000	5007.261	8010005.99	0.9271	A	2.3
9	☐			11335.44	0.0013	P	6.4

$$y = 1.8514\text{E-}004 * x + 2.6511\text{E-}005$$

$$R = 1.0000$$

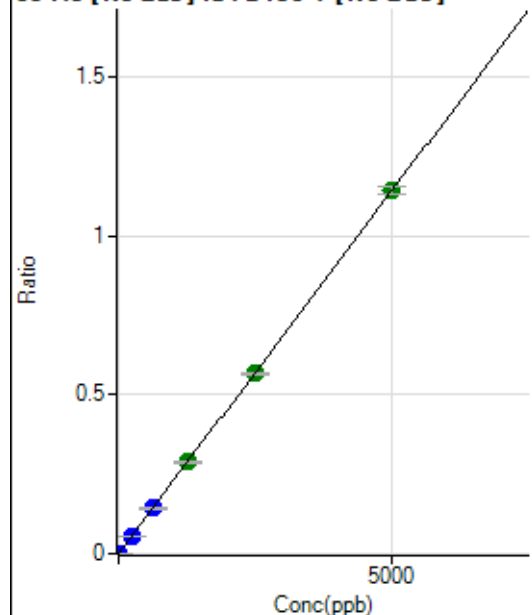
$$DL = 0.06522$$

$$BEC = 0.1432$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.56	0.0000	P	62.3
2	☐	0.500	0.424	875.06	0.0001	P	11.2
3	☐	5.000	4.259	8388.83	0.0010	P	6.6
4	☐	250.000	245.888	488916.41	0.0561	P	1.7
5	☐	625.000	626.254	1246063.96	0.1429	P	1.2
6	☐	1250.000	1263.706	2500887.81	0.2884	A	3.3
7	☐	2500.000	2481.128	4940294.51	0.5662	A	1.6
8	☐	5000.000	5006.059	9870295.45	1.1424	A	2.1
9	☐			14024.11	0.0016	P	3.3

$$y = 2.2819\text{E-}004 * x + 6.5612\text{E-}006$$

$$R = 1.0000$$

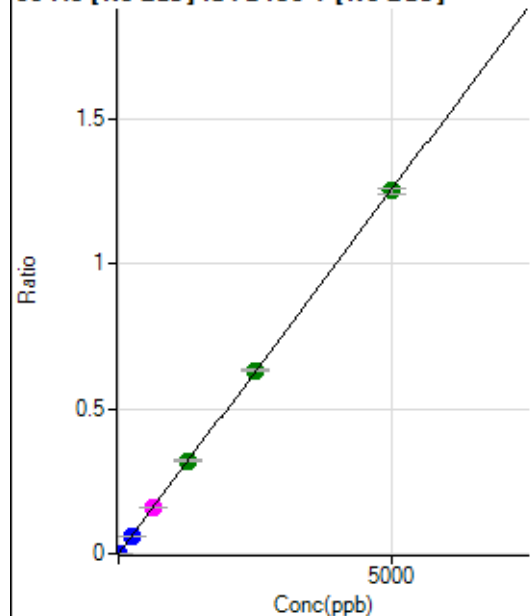
$$DL = 0.05377$$

$$BEC = 0.02875$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	88.89	0.0000	P	34.8
2	☐	0.500	0.399	936.17	0.0001	P	2.3
3	☐	5.000	4.568	9923.24	0.0012	P	1.6
4	☐	250.000	247.390	541242.47	0.0621	P	2.3
5	☐	625.000	637.270	1395187.33	0.1600	M	0.9
6	☐	1250.000	1273.591	2773805.77	0.3198	A	2.2
7	☐	2500.000	2517.935	5516433.98	0.6322	A	1.4
8	☐	5000.000	4983.732	10812338.70	1.2513	A	1.7
9	☐			15500.66	0.0017	P	6.3

$$y = 2.5108\text{E-}004 * x + 1.0468\text{E-}005$$

$$R = 1.0000$$

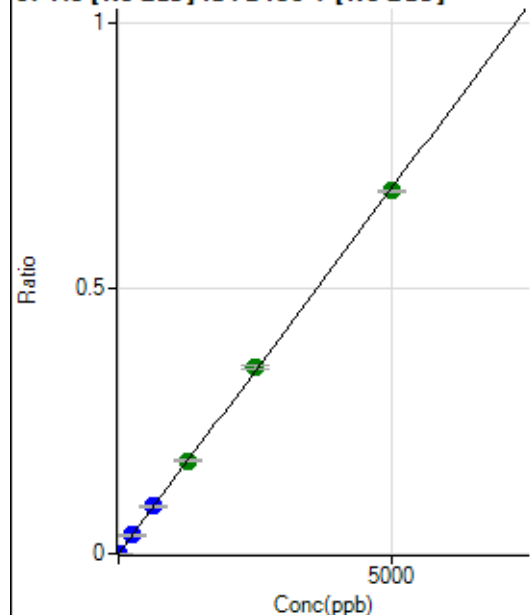
$$DL = 0.04352$$

$$BEC = 0.04169$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25.00	0.0000	P	67.6
2	☐	0.500	0.502	611.14	0.0001	P	8.5
3	☐	5.000	4.674	5551.27	0.0006	P	2.9
4	☐	250.000	251.318	301892.17	0.0347	P	1.4
5	☐	625.000	645.562	775987.27	0.0890	P	1.3
6	☐	1250.000	1268.314	1516530.65	0.1749	A	2.8
7	☐	2500.000	2554.130	3072436.07	0.3521	A	1.6
8	☐	5000.000	4965.721	5915873.01	0.6846	A	0.7
9	☐			8577.85	0.0010	P	7.9

$$y = 1.3786E-004 * x + 2.9617E-006$$

$$R = 0.9999$$

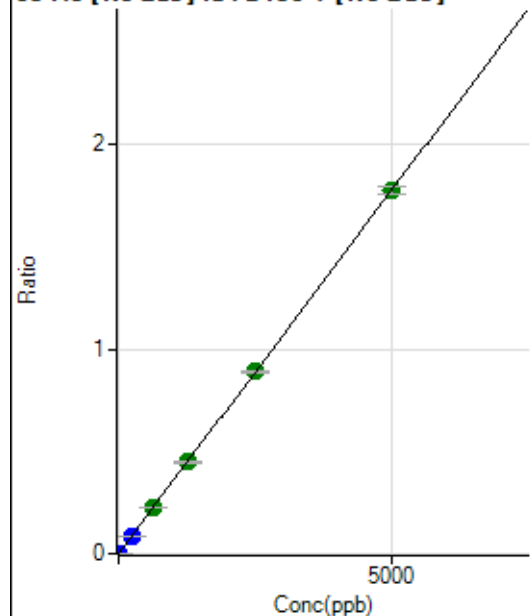
$$DL = 0.04354$$

$$BEC = 0.02148$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0000	P	92.1
2	☐	0.500	0.472	1447.34	0.0002	P	16.6
3	☐	5.000	4.533	13840.56	0.0016	P	4.0
4	☐	250.000	248.440	769179.11	0.0883	P	1.8
5	☐	625.000	631.893	1957910.55	0.2245	A	0.2
6	☐	1250.000	1258.482	3878414.02	0.4472	A	3.1
7	☐	2500.000	2505.360	7768197.48	0.8903	A	1.3
8	☐	5000.000	4994.416	15334856.25	1.7748	A	2.0
9	☐			21055.38	0.0023	P	4.1

$$y = 3.5535E-004 * x + 3.2936E-006$$

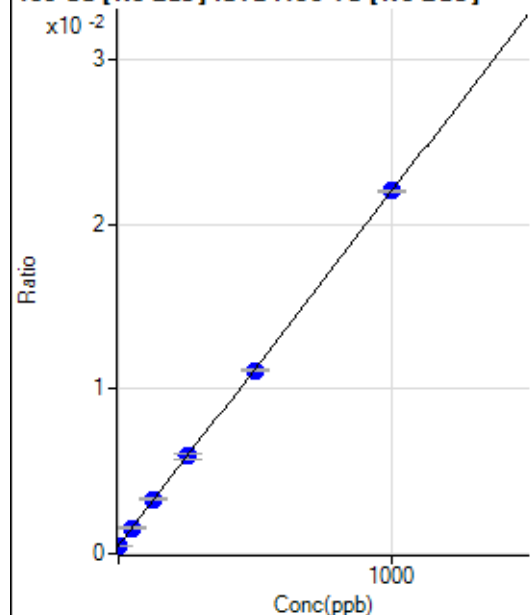
$$R = 1.0000$$

$$DL = 0.02561$$

$$BEC = 0.009269$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	2166.90	0.0005	P	12.4
2	☐	0.100	-1.557	2016.87	0.0005	P	5.8
3	☐	1.000	-0.215	2186.34	0.0005	P	2.0
4	☐	50.000	48.653	6915.80	0.0015	P	5.6
5	☐	125.000	130.714	14869.47	0.0033	P	5.0
6	☐	250.000	252.289	27107.82	0.0059	P	4.9
7	☐	500.000	495.130	51755.94	0.0111	P	1.8
8	☐	1000.000	1001.218	99874.59	0.0220	P	0.7
9	☐			2525.31	0.0005	P	4.8

$$y = 2.1518\text{E-}005 * x + 4.9232\text{E-}004$$

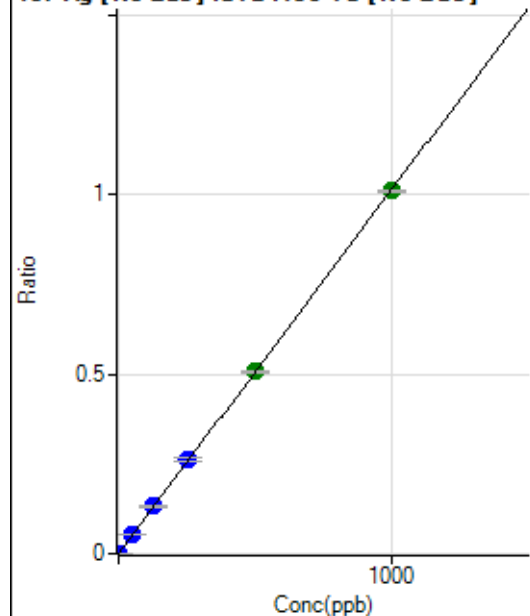
$$R = 1.0000$$

$$DL = 8.486$$

$$BEC = 22.88$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	50.00	0.0000	P	74.1
2	☐	0.100	0.103	508.36	0.0001	P	4.4
3	☐	1.000	0.940	4323.03	0.0010	P	6.8
4	☐	50.000	51.657	235247.45	0.0524	P	1.5
5	☐	125.000	130.445	594790.37	0.1322	P	2.1
6	☐	250.000	257.416	1194258.66	0.2608	P	4.0
7	☐	500.000	500.523	2354826.90	0.5071	A	0.9
8	☐	1000.000	997.121	4578754.70	1.0103	A	0.6
9	☐			7374.41	0.0015	P	6.4

$$y = 0.0010 * x + 1.1419\text{E-}005$$

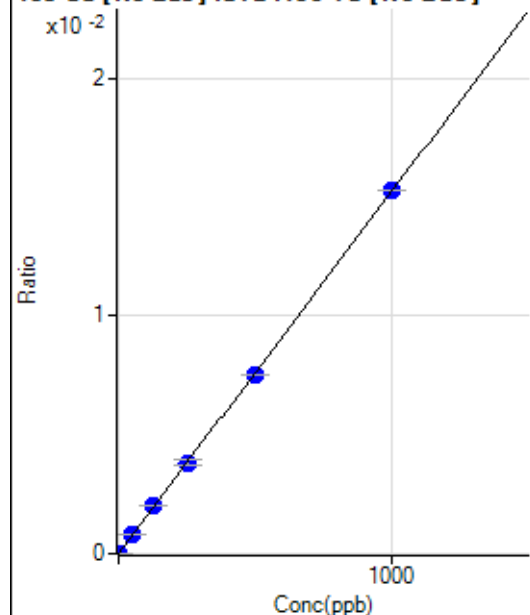
$$R = 1.0000$$

$$DL = 0.02506$$

$$BEC = 0.01127$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4.17	0.0000	P	1.9
2	☐	0.100	0.291	23.61	0.0000	P	37.1
3	☐	1.000	0.894	65.28	0.0000	P	23.5
4	☐	50.000	51.407	3518.55	0.0008	P	0.5
5	☐	125.000	131.676	9019.70	0.0020	P	2.3
6	☐	250.000	251.670	17530.70	0.0038	P	4.7
7	☐	500.000	492.980	34827.21	0.0075	P	0.6
8	☐	1000.000	1002.188	69094.08	0.0152	P	0.1
9	☐			136.12	0.0000	P	15.8

$$y = 1.5212\text{E-}005 * x + 9.4685\text{E-}007$$

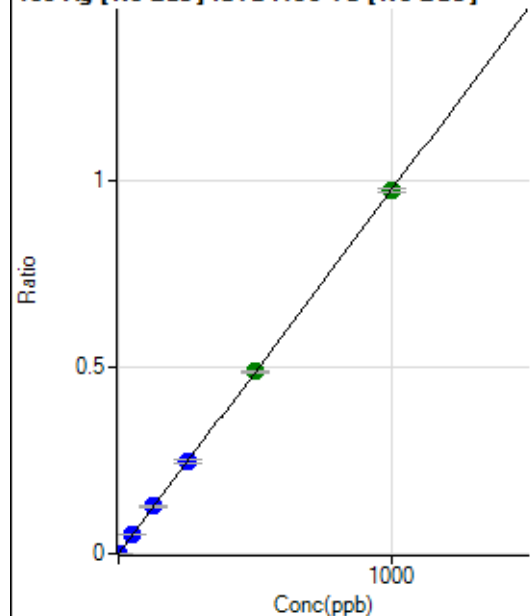
$$R = 0.9999$$

$$DL = 0.003566$$

$$BEC = 0.06224$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	27.78	0.0000	P	47.4
2	☐	0.100	0.090	413.91	0.0001	P	14.2
3	☐	1.000	0.919	4042.36	0.0009	P	6.1
4	☐	50.000	50.628	221686.92	0.0493	P	0.6
5	☐	125.000	130.280	571223.09	0.1269	P	1.1
6	☐	250.000	255.205	1138259.50	0.2486	P	4.8
7	☐	500.000	500.274	2263091.09	0.4874	A	1.4
8	☐	1000.000	997.871	4405601.49	0.9722	A	1.0
9	☐			6938.05	0.0014	P	8.4

$$y = 9.7423\text{E-}004 * x + 6.3409\text{E-}006$$

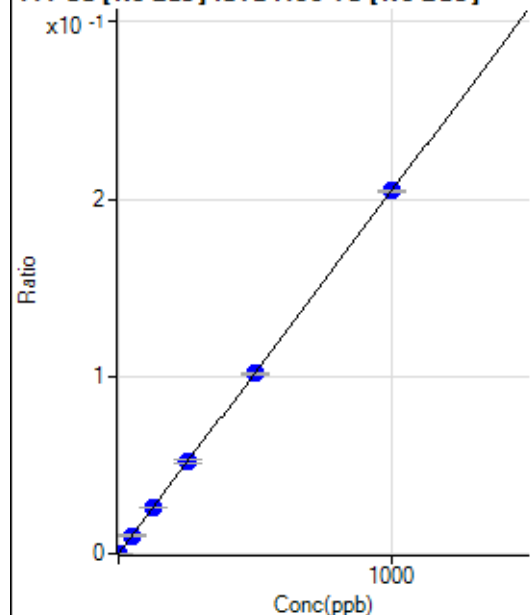
$$R = 1.0000$$

$$DL = 0.009247$$

$$BEC = 0.006509$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-23.69	0.0000	P	-35.
2	☐	0.100	0.082	49.73	0.0000	P	40.5
3	☐	1.000	1.033	923.48	0.0002	P	1.3
4	☐	50.000	50.073	45997.41	0.0102	P	3.3
5	☐	125.000	128.937	118661.49	0.0264	P	1.4
6	☐	250.000	252.907	236835.76	0.0517	P	4.1
7	☐	500.000	496.766	471797.20	0.1016	P	0.5
8	☐	1000.000	1000.395	927321.99	0.2046	P	0.5
9	☐			1421.68	0.0003	P	4.1

$$y = 2.0454\text{E-}004 * x - 5.4009\text{E-}006$$

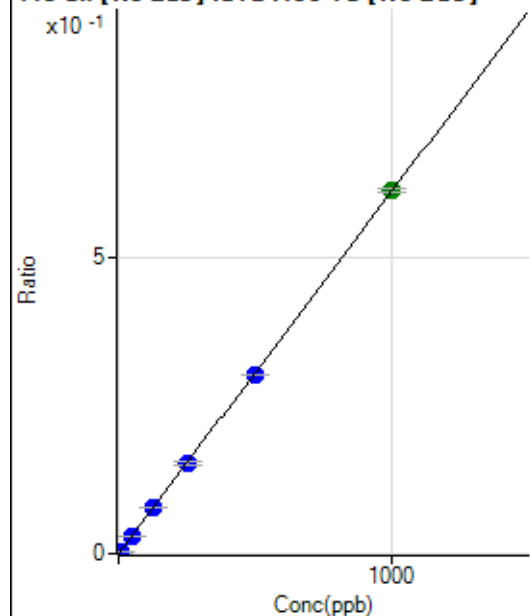
$$R = 1.0000$$

$$DL = 0.02783$$

$$BEC = -0.0264$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	169.45	0.0000	P	9.5
2	☐	0.500	0.541	1625.14	0.0004	P	4.0
3	☐	5.000	4.461	12422.65	0.0028	P	2.8
4	☐	50.000	49.797	137263.89	0.0305	P	1.3
5	☐	125.000	126.970	350230.44	0.0778	P	0.8
6	☐	250.000	250.287	702353.23	0.1534	P	3.2
7	☐	500.000	493.439	1403811.89	0.3023	P	0.7
8	☐	1000.000	1002.975	2784599.78	0.6145	A	1.2
9	☐			4573.11	0.0009	P	6.4

$$y = 6.1261\text{E-}004 * x + 3.8450\text{E-}005$$

$$R = 1.0000$$

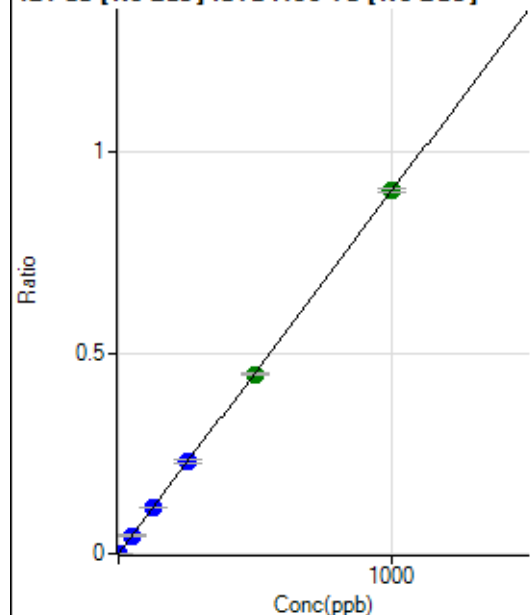
$$DL = 0.01789$$

$$BEC = 0.06276$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.11	0.0000	P	86.6
2	☐	0.200	0.183	736.16	0.0002	P	3.7
3	☐	2.000	1.784	7232.69	0.0016	P	1.6
4	☐	50.000	50.346	204308.27	0.0455	P	1.8
5	☐	125.000	128.442	521982.54	0.1160	P	1.7
6	☐	250.000	254.156	1050994.40	0.2295	P	3.5
7	☐	500.000	495.346	2077095.64	0.4473	A	0.3
8	☐	1000.000	1000.841	4095725.79	0.9038	A	1.2
9	☐			7102.03	0.0015	P	5.4

$$y = 9.0303\text{E-}004 * x + 2.5163\text{E-}006$$

$$R = 1.0000$$

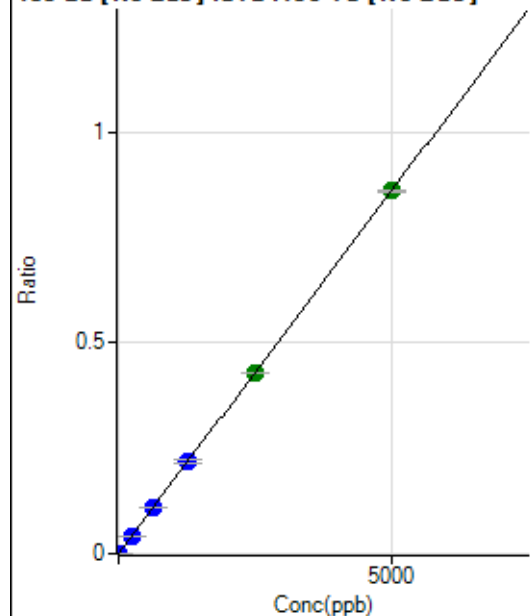
$$DL = 0.007243$$

$$BEC = 0.002787$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5.56	0.0000	P	173.
2	☐	1.000	0.951	725.04	0.0002	P	7.0
3	☐	10.000	8.637	6671.26	0.0015	P	6.2
4	☐	250.000	249.714	193128.58	0.0430	P	1.0
5	☐	625.000	643.042	498004.50	0.1107	P	1.7
6	☐	1250.000	1266.836	998267.23	0.2180	P	4.0
7	☐	2500.000	2487.842	1988142.14	0.4281	A	0.5
8	☐	5000.000	4999.632	3899156.60	0.8604	A	0.9
9	☐			11810.99	0.0024	P	4.7

$$y = 1.7209\text{E-}004 * x + 1.2688\text{E-}006$$

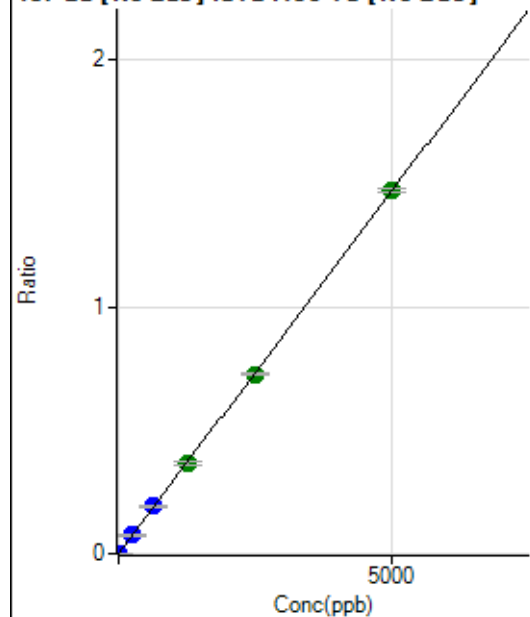
$$R = 1.0000$$

$$DL = 0.03831$$

$$BEC = 0.007373$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	19.44	0.0000	P	100.
2	☐	1.000	0.919	1205.64	0.0003	P	4.6
3	☐	10.000	9.388	12380.95	0.0028	P	0.9
4	☐	250.000	252.452	333143.50	0.0741	P	1.8
5	☐	625.000	652.337	862068.48	0.1916	P	1.4
6	☐	1250.000	1255.510	1687870.98	0.3687	A	4.8
7	☐	2500.000	2474.669	3374131.37	0.7267	A	1.3
8	☐	5000.000	5007.749	6663868.33	1.4705	A	1.1
9	☐			20285.15	0.0042	P	5.9

$$y = 2.9364\text{E-}004 * x + 4.4544\text{E-}006$$

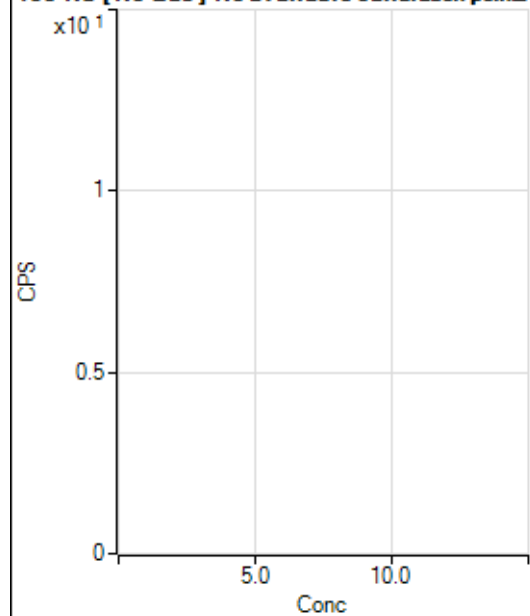
$$R = 1.0000$$

$$DL = 0.04562$$

$$BEC = 0.01517$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐			2.22		P	173.
3	☐			4.44		P	173.
4	☐			17.78		P	78.1
5	☐			20.00		P	33.4
6	☐			66.67		P	40.0
7	☐			75.56		P	28.4
8	☐			111.11		P	35.2
9	☐			11.11		P	69.3

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	43.4
2	☐			0.00		P	
3	☐			1.11		P	173.
4	☐			1.11		P	173.
5	☐			6.66		P	86.6
6	☐			7.78		P	107.
7	☐			11.11		P	45.8
8	☐			12.22		P	63.0
9	☐			14.44		P	35.3

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.89		P	34.7
2	☐			5.55		P	86.6
3	☐			16.67		P	50.0
4	☐			8.33		P	100.
5	☐			33.33		P	25.0
6	☐			47.22		P	66.8
7	☐			63.89		P	27.2
8	☐			86.11		P	27.9
9	☐			208.34		P	25.0

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	173.
2	☐			6.67		P	50.0
3	☐			3.33		P	173.
4	☐			3.33		P	100.
5	☐			7.78		P	65.5
6	☐			16.67		P	40.0
7	☐			18.89		P	27.0
8	☐			36.67		P	24.0
9	☐			145.56		P	7.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			36.11		P	58.1
2	☐			47.22		P	66.8
3	☐			50.00		P	28.9
4	☐			47.22		P	27.0
5	☐			58.33		P	42.9
6	☐			38.89		P	32.7
7	☐			83.34		P	30.0
8	☐			122.23		P	10.4
9	☐			327.79		P	28.1

160 Gd [He] No available calibration points

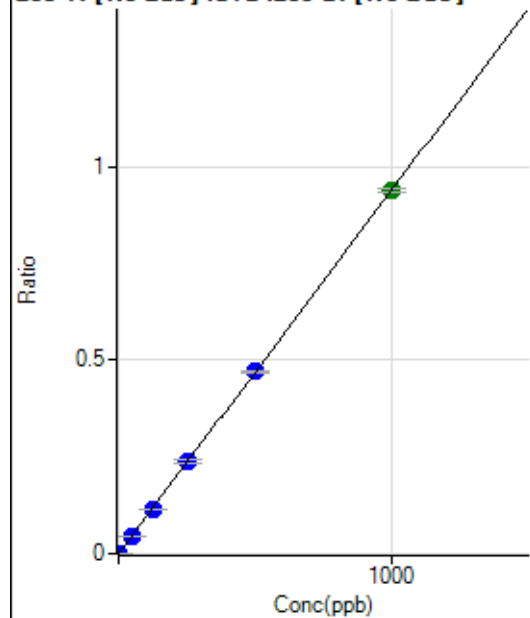
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			26.67		P	0.0
2	☐			22.22		P	48.2
3	☐			17.78		P	39.0
4	☐			20.00		P	33.4
5	☐			26.67		P	25.0
6	☐			27.78		P	30.2
7	☐			35.55		P	10.8
8	☐			50.00		P	35.3
9	☐			193.34		P	9.1

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	81.1
2	☐			11.11		P	114.
3	☐			30.56		P	78.7
4	☐			30.56		P	41.7
5	☐			27.78		P	45.8
6	☐			38.89		P	65.5
7	☐			30.56		P	56.8
8	☐			44.45		P	47.2
9	☐			52.78		P	55.5

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			15.56		P	61.9
2	☐			11.11		P	34.6
3	☐			8.89		P	78.1
4	☐			7.78		P	49.5
5	☐			10.00		P	57.8
6	☐			11.11		P	45.8
7	☐			22.22		P	67.6
8	☐			21.11		P	32.9
9	☐			33.33		P	17.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	22.22	0.0000	P	21.4
2	☐	0.100	0.090	211.12	0.0001	P	11.6
3	☐	1.000	0.893	1964.10	0.0008	P	8.2
4	☐	50.000	48.797	107272.17	0.0459	P	1.6
5	☐	125.000	123.496	271340.45	0.1160	P	1.4
6	☐	250.000	254.550	556486.56	0.2391	P	3.6
7	☐	500.000	501.222	1123219.55	0.4709	P	0.5
8	☐	1000.000	998.500	2207923.14	0.9380	A	1.1
9	☐			3770.12	0.0016	P	2.7

$$y = 9.3942\text{E-}004 * x + 9.6533\text{E-}006$$

$$R = 1.0000$$

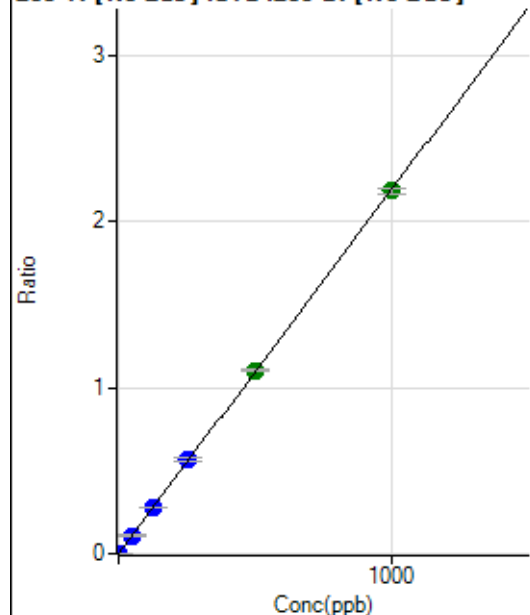
$$DL = 0.006588$$

$$BEC = 0.01028$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	36.11	0.0000	P	14.2
2	☐	0.100	0.094	497.25	0.0002	P	4.3
3	☐	1.000	0.884	4520.35	0.0020	P	2.7
4	☐	50.000	49.590	254016.99	0.1086	P	2.6
5	☐	125.000	126.414	647241.47	0.2768	P	1.5
6	☐	250.000	257.686	1312794.84	0.5642	P	3.8
7	☐	500.000	502.347	2623348.43	1.0998	A	0.9
8	☐	1000.000	996.749	5136065.00	2.1822	A	1.3
9	☐			9170.15	0.0039	P	5.8

$$y = 0.0022 * x + 1.5704E-005$$

$$R = 1.0000$$

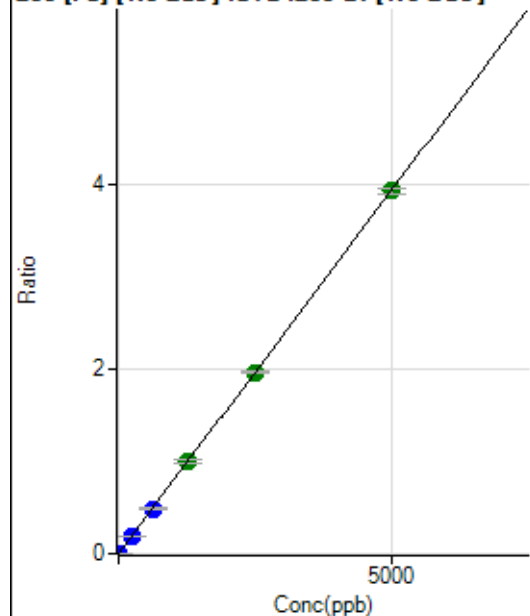
$$DL = 0.00305$$

$$BEC = 0.007173$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	414.83	0.0002	P	9.9
2	☐	0.100	0.102	587.06	0.0003	P	9.3
3	☐	1.000	0.849	1970.55	0.0009	P	3.4
4	☐	250.000	242.946	448937.66	0.1919	P	1.3
5	☐	625.000	619.441	1143515.94	0.4890	P	1.5
6	☐	1250.000	1278.944	2348588.28	1.0094	A	4.6
7	☐	2500.000	2500.716	4707666.60	1.9735	A	0.7
8	☐	5000.000	4993.454	9274282.84	3.9406	A	1.7
9	☐			14133.83	0.0059	P	4.0

$$y = 7.8912E-004 * x + 1.8025E-004$$

$$R = 1.0000$$

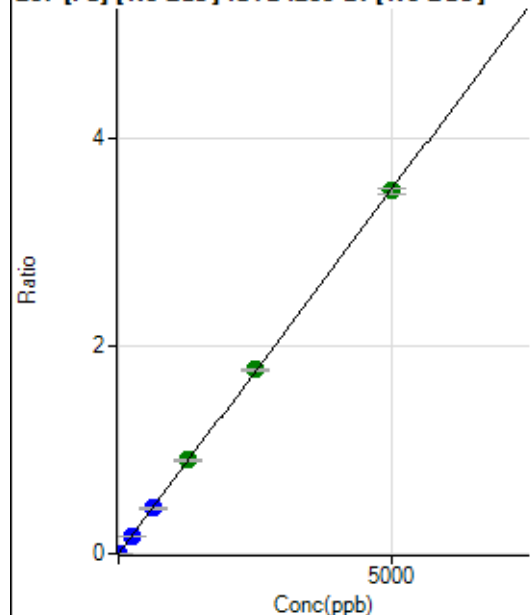
$$DL = 0.06787$$

$$BEC = 0.2284$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	342.60	0.0001	P	5.5
2	☐	0.100	0.111	511.13	0.0002	P	14.0
3	☐	1.000	0.806	1653.84	0.0007	P	2.1
4	☐	250.000	243.784	400281.03	0.1711	P	0.7
5	☐	625.000	622.585	1021184.85	0.4367	P	1.9
6	☐	1250.000	1285.299	2097792.97	0.9014	A	2.5
7	☐	2500.000	2523.613	4221438.06	1.7696	A	1.0
8	☐	5000.000	4979.981	8218357.59	3.4920	A	1.8
9	☐			12020.59	0.0051	P	7.0

$$y = 7.0117\text{E-}004 * x + 1.4893\text{E-}004$$

$$R = 1.0000$$

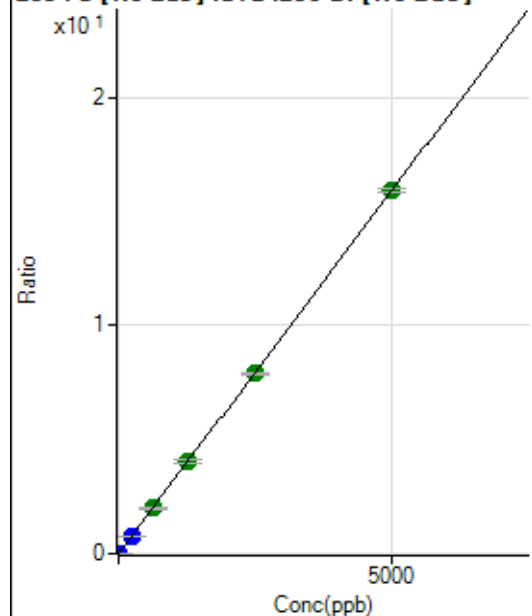
$$DL = 0.03525$$

$$BEC = 0.2124$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1659.33	0.0007	P	3.6
2	☐	0.100	0.080	2198.26	0.0010	P	6.9
3	☐	1.000	0.831	7793.67	0.0034	P	0.6
4	☐	250.000	241.688	1801305.54	0.7699	P	1.0
5	☐	625.000	625.138	4654476.48	1.9903	A	1.3
6	☐	1250.000	1279.304	9476352.77	4.0723	A	3.5
7	☐	2500.000	2484.659	18865041.80	7.9085	A	0.5
8	☐	5000.000	5000.743	37461229.08	15.9164	A	1.1
9	☐			55380.25	0.0233	P	5.8

$$y = 0.0032 * x + 7.2093\text{E-}004$$

$$R = 1.0000$$

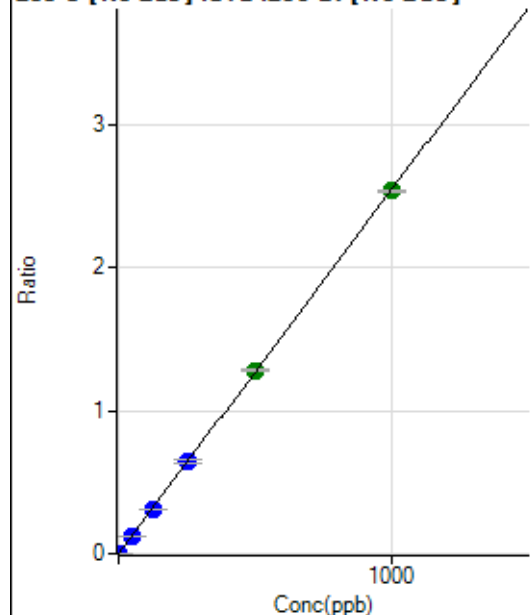
$$DL = 0.02478$$

$$BEC = 0.2265$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.89	0.0000	P	34.4
2	☐	0.100	0.084	497.25	0.0002	P	6.1
3	☐	1.000	0.881	5215.09	0.0023	P	2.9
4	☐	50.000	48.385	288370.16	0.1233	P	1.4
5	☐	125.000	123.458	735518.86	0.3145	P	1.0
6	☐	250.000	254.247	1507162.78	0.6477	P	3.6
7	☐	500.000	503.975	3062414.41	1.2838	A	0.5
8	☐	1000.000	997.224	5979526.78	2.5404	A	0.7
9	☐			7630.27	0.0032	P	3.7

$$y = 0.0025 * x + 6.0316E-006$$

$$R = 1.0000$$

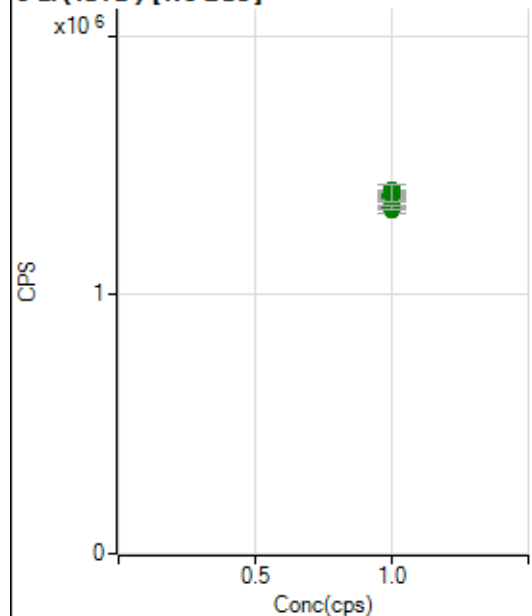
$$DL = 0.002446$$

$$BEC = 0.002368$$

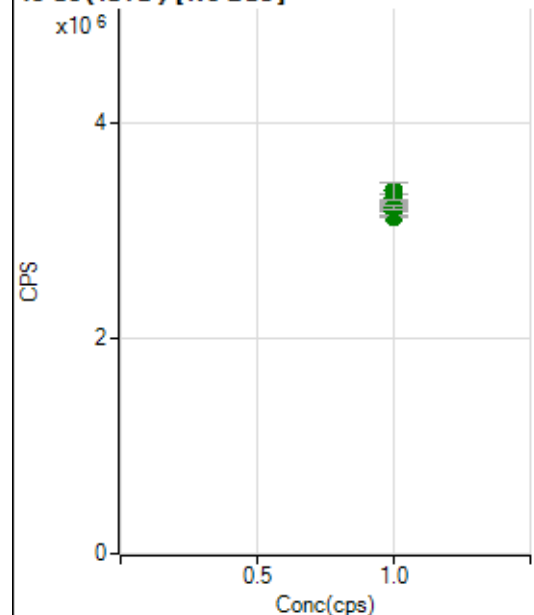
Weight: <None>

Min Conc: 0

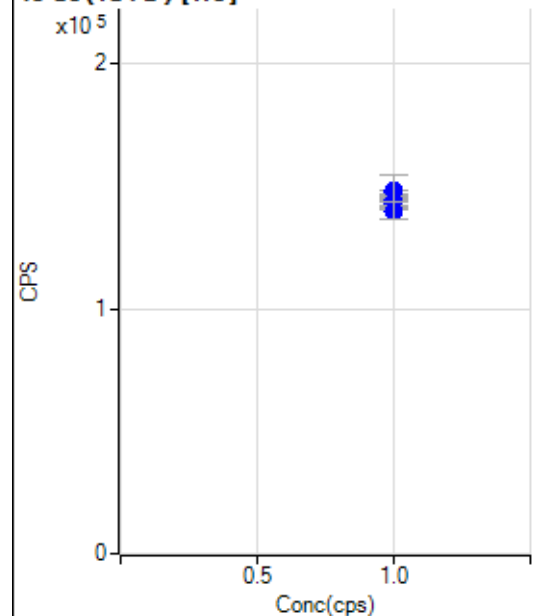
6 Li (ISTD) [No Gas]



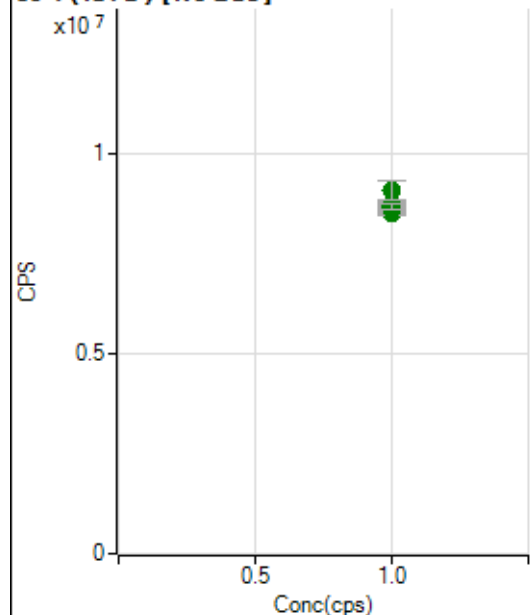
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1365466.92		A	1.3
2	☐	1.000		1326687.99		A	1.3
3	☐	1.000		1372972.23		A	1.4
4	☐	1.000		1340868.77		A	0.7
5	☐	1.000		1370349.74		A	1.3
6	☐	1.000		1378402.03		A	1.7
7	☐	1.000		1401649.94		A	0.5
8	☐	1.000		1336685.86		A	1.6
9	☐	1.000		1391881.09		A	4.5

45 Sc (ISTD) [No Gas]

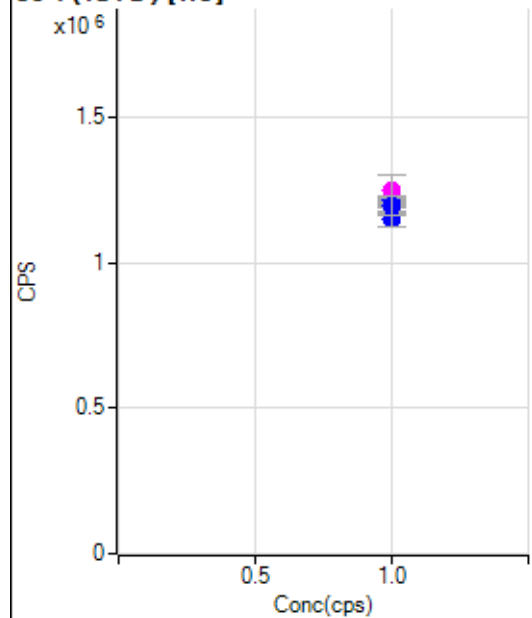
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3194305.37		A	1.0
2	☐	1.000		3123559.19		A	0.4
3	☐	1.000		3237972.04		A	1.8
4	☐	1.000		3230085.40		A	1.0
5	☐	1.000		3192938.39		A	0.4
6	☐	1.000		3186345.72		A	2.3
7	☐	1.000		3304128.04		A	1.7
8	☐	1.000		3216296.41		A	1.5
9	☐	1.000		3370069.08		A	4.5

45 Sc (ISTD) [He]

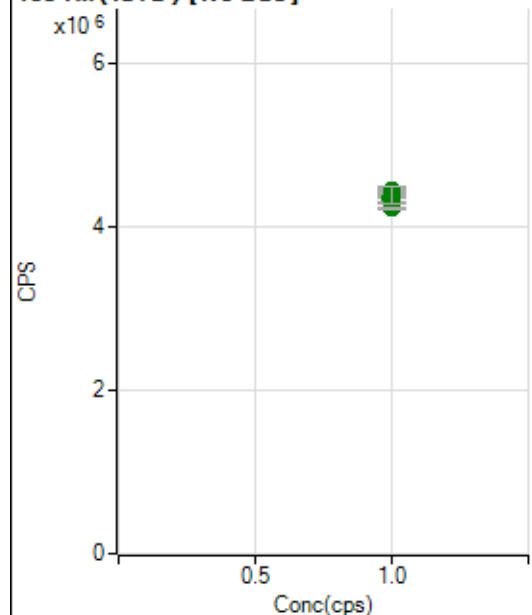
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		141632.84		P	0.3
2	☐	1.000		141487.52		P	1.0
3	☐	1.000		145435.00		P	0.6
4	☐	1.000		139331.85		P	4.4
5	☐	1.000		147712.47		P	1.0
6	☐	1.000		142918.00		P	1.6
7	☐	1.000		144719.12		P	1.2
8	☐	1.000		148073.12		P	9.3
9	☐	1.000		140066.69		P	5.0

89 Y (ISTD) [No Gas]

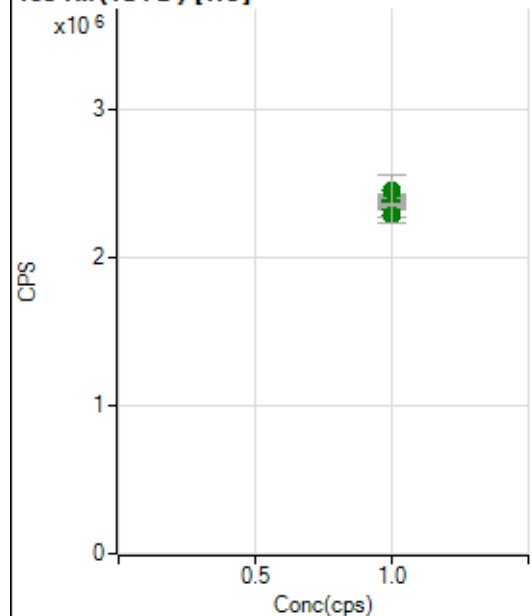
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8478019.94		A	1.1
2	☐	1.000		8468953.97		A	0.7
3	☐	1.000		8574373.41		A	0.8
4	☐	1.000		8713271.74		A	0.9
5	☐	1.000		8719568.83		A	1.0
6	☐	1.000		8677708.13		A	3.0
7	☐	1.000		8725844.45		A	0.3
8	☐	1.000		8642182.30		A	1.6
9	☐	1.000		9049046.25		A	5.3

89 Y (ISTD) [He]

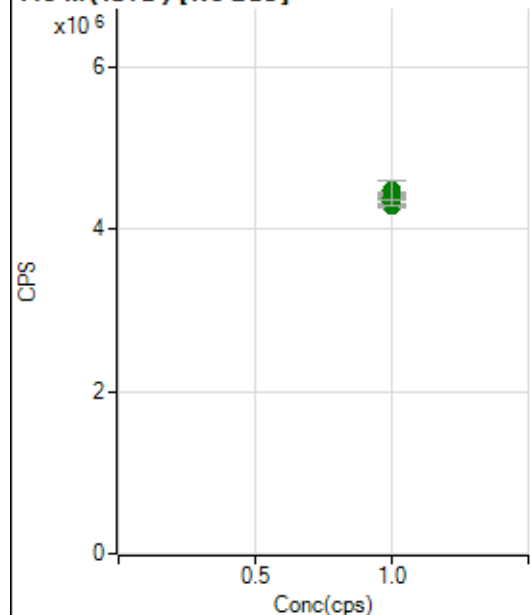
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1173247.70		P	0.7
2	☐	1.000		1173644.61		P	0.5
3	☐	1.000		1205739.07		P	0.5
4	☐	1.000		1152372.58		P	4.6
5	☐	1.000		1212829.64		P	0.9
6	☐	1.000		1202818.53		P	1.9
7	☐	1.000		1216215.75		P	1.6
8	☐	1.000		1247373.61		M	8.5
9	☐	1.000		1194983.91		P	5.4

103 Rh (ISTD) [No Gas]

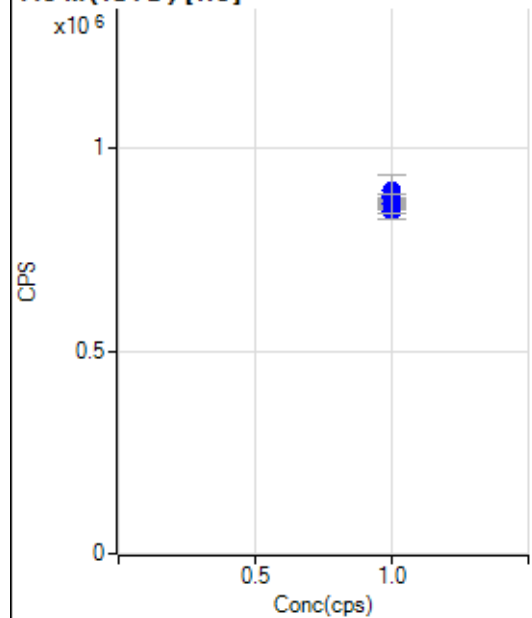
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4371955.00		A	0.5
2	☐	1.000		4327165.16		A	0.9
3	☐	1.000		4434277.49		A	1.1
4	☐	1.000		4413438.69		A	0.4
5	☐	1.000		4428307.69		A	0.4
6	☐	1.000		4340876.79		A	3.1
7	☐	1.000		4412242.55		A	0.4
8	☐	1.000		4218912.07		A	0.6
9	☐	1.000		4379237.25		A	5.1

103 Rh (ISTD) [He]

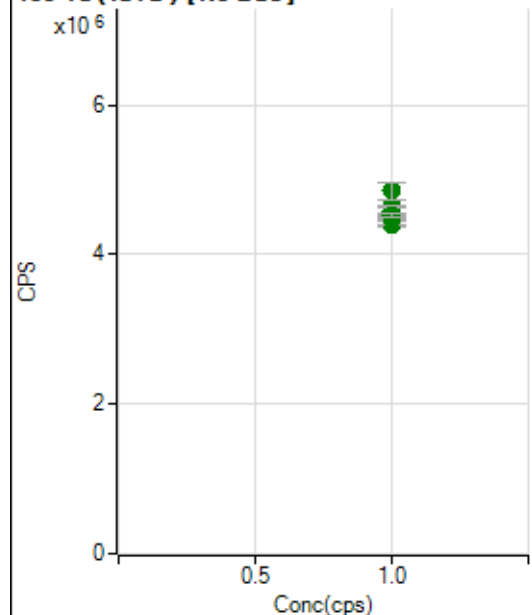
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2354745.28		A	0.9
2	☐	1.000		2334210.62		A	0.5
3	☐	1.000		2422525.42		A	1.0
4	☐	1.000		2321664.77		A	4.4
5	☐	1.000		2410076.77		A	0.8
6	☐	1.000		2378220.36		A	1.2
7	☐	1.000		2385887.20		A	1.7
8	☐	1.000		2452063.30		A	9.1
9	☐	1.000		2289718.94		A	5.3

115 In (ISTD) [No Gas]

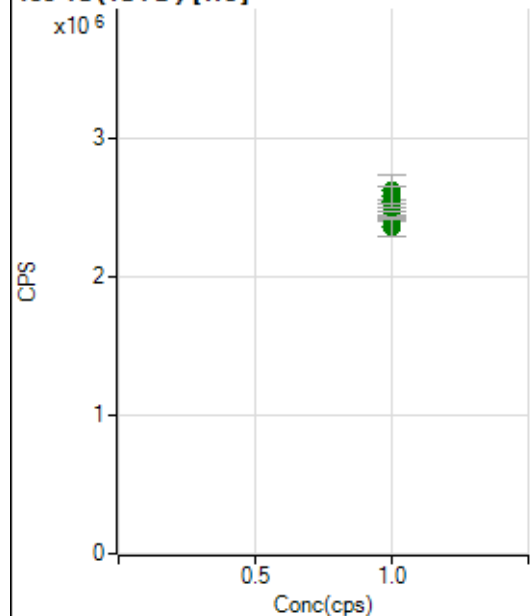
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4316469.01		A	0.5
2	☐	1.000		4286837.49		A	0.4
3	☐	1.000		4396185.25		A	1.0
4	☐	1.000		4386311.72		A	0.9
5	☐	1.000		4400284.97		A	0.2
6	☐	1.000		4381533.44		A	3.1
7	☐	1.000		4448117.22		A	0.5
8	☐	1.000		4329113.35		A	1.2
9	☐	1.000		4474926.86		A	5.2

115 In (ISTD) [He]

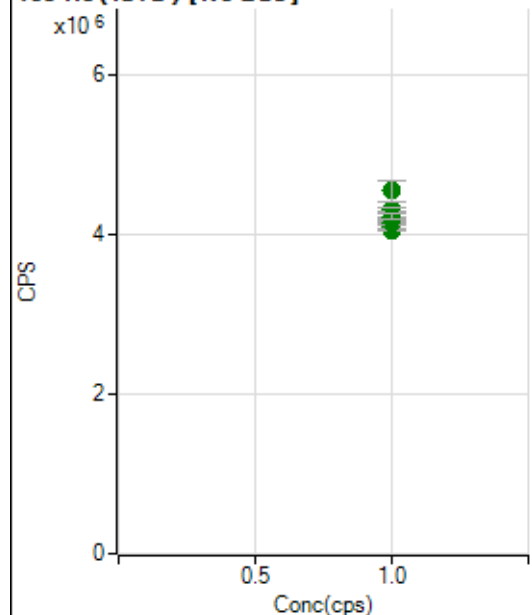
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		853350.63		P	0.6
2	☐	1.000		854987.41		P	0.8
3	☐	1.000		871044.31		P	1.0
4	☐	1.000		841955.51		P	4.3
5	☐	1.000		881822.21		P	0.6
6	☐	1.000		871553.69		P	1.8
7	☐	1.000		879345.57		P	1.6
8	☐	1.000		894821.12		P	9.4
9	☐	1.000		860911.47		P	5.5

159 Tb (ISTD) [No Gas]

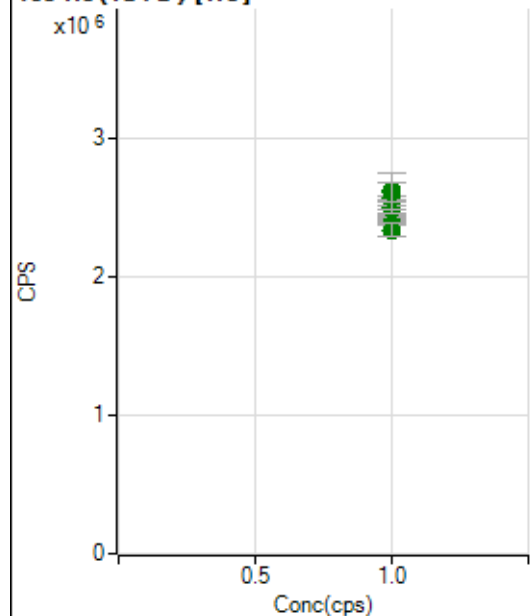
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4405179.06		A	1.9
2	☐	1.000		4395924.65		A	0.5
3	☐	1.000		4483658.86		A	1.1
4	☐	1.000		4494151.15		A	1.0
5	☐	1.000		4500735.31		A	1.3
6	☐	1.000		4582751.84		A	3.3
7	☐	1.000		4643553.99		A	0.8
8	☐	1.000		4531994.10		A	0.9
9	☐	1.000		4850894.13		A	4.8

159 Tb (ISTD) [He]

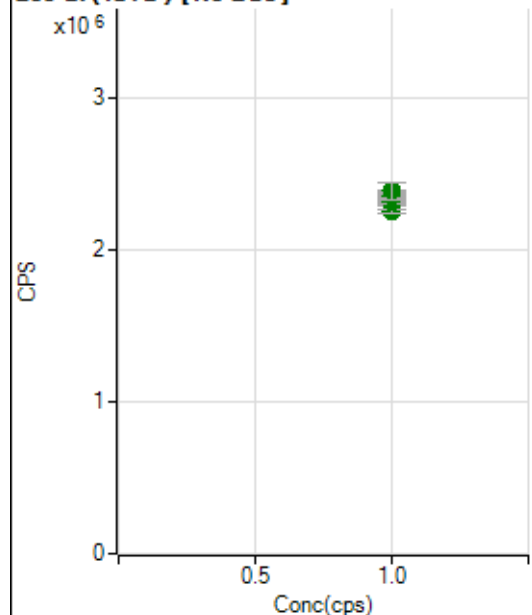
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2404011.30		A	0.4
2	☐	1.000		2411029.74		A	0.8
3	☐	1.000		2436704.86		A	0.4
4	☐	1.000		2358756.40		A	5.2
5	☐	1.000		2498510.03		A	2.0
6	☐	1.000		2503331.47		A	2.2
7	☐	1.000		2538900.02		A	1.2
8	☐	1.000		2620400.84		A	9.3
9	☐	1.000		2585577.43		A	4.9

165 Ho (ISTD) [No Gas]

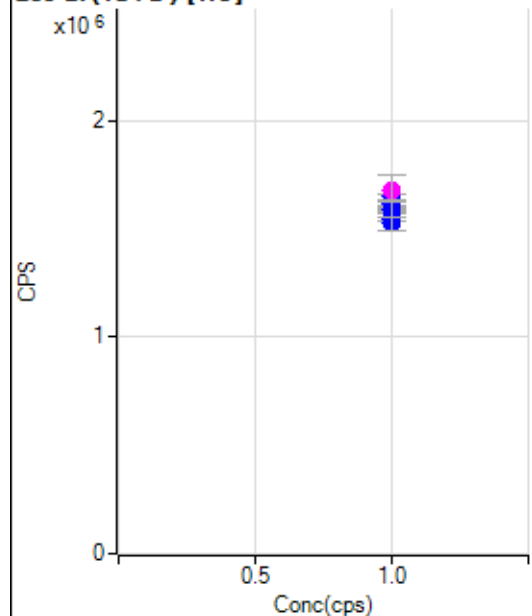
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4103658.56		A	1.6
2	☐	1.000		4054326.57		A	0.6
3	☐	1.000		4214653.87		A	0.3
4	☐	1.000		4141344.66		A	1.6
5	☐	1.000		4183579.00		A	1.0
6	☐	1.000		4219559.55		A	2.5
7	☐	1.000		4310287.64		A	1.2
8	☐	1.000		4221182.99		A	1.6
9	☐	1.000		4543144.68		A	5.6

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2424819.43		A	1.5
2	☐	1.000		2387669.18		A	1.1
3	☐	1.000		2431706.35		A	0.6
4	☐	1.000		2335364.76		A	3.8
5	☐	1.000		2492587.48		A	1.0
6	☐	1.000		2486007.20		A	2.2
7	☐	1.000		2564944.88		A	1.2
8	☐	1.000		2615750.79		A	9.7
9	☐	1.000		2603847.58		A	5.2

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2301144.57		A	1.2
2	☐	1.000		2251929.39		A	1.1
3	☐	1.000		2316636.80		A	1.1
4	☐	1.000		2339813.16		A	1.6
5	☐	1.000		2338837.83		A	1.4
6	☐	1.000		2328207.14		A	2.2
7	☐	1.000		2385396.53		A	0.8
8	☐	1.000		2353909.22		A	1.6
9	☐	1.000		2383992.08		A	5.1

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1576501.21		P	0.8
2	☐	1.000		1546176.31		P	1.1
3	☐	1.000		1591151.45		P	0.2
4	☐	1.000		1524644.49		P	4.4
5	☐	1.000		1617146.21		P	0.9
6	☐	1.000		1624283.71		P	1.8
7	☐	1.000		1650374.58		P	1.7
8	☐	1.000		1675751.40		M	9.1
9	☐	1.000		1590068.35		P	4.9

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P8081020 MS.b
Acq. Date-Time 2020-08-10 13:45:00
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		2771	27708.60			0.789	5.000
24		21834	218343.16			1.073	5.000
25		2871	28712.91			1.071	5.000
26		3364	33641.97			0.892	5.000
59		17921	179212.16			1.718	5.000
113		2526	25264.90			0.946	5.000
115		7684	76842.09			1.530	5.000
206		2410	24095.01			1.267	5.000
207		1996	19963.29			1.958	5.000
208		4952	49520.18			1.748	5.000
220		1	9.60			24.815	

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

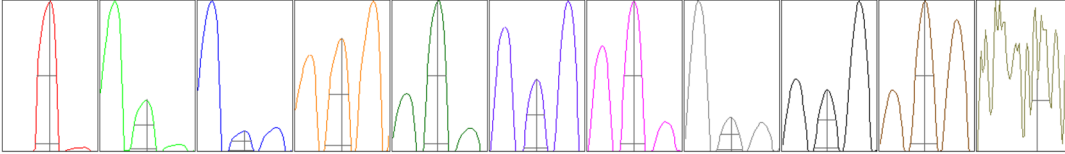
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	2739	2769	2777	2800	2769
24	21525	21673	21908	21950	22115
25	2822	2862	2886	2886	2900
26	3316	3356	3394	3379	3375
59	17415	17869	18073	18038	18211
113	2493	2513	2531	2551	2545
115	7795	7794	7704	7592	7536
206	2368	2389	2441	2432	2417
207	1940	1971	2025	2016	2030
208	4827	4897	4998	5015	5023

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	4893.31	9.00	8.90 - 9.10	
24	37138.33	24.00	23.90 - 24.10	
25	4909.06	25.00	24.90 - 25.10	
26	5723.15	26.00	25.90 - 26.10	
59	31545.83	58.95	58.90 - 59.10	
113	4861.81	113.00	112.90 - 113.10	
115	14483.42	115.00	114.90 - 115.10	
206	4350.48	206.00	205.90 - 206.10	
207	3699.32	206.95	206.90 - 207.10	
208	9064.54	207.95	207.90 - 208.10	
220	0.90	220.45	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.60	0.739	0.900	
24	0.63	0.812	0.900	
25	0.62	0.782	0.900	
26	0.63	0.826	0.900	
59	0.60	0.781	0.900	
113	0.55	0.738	0.900	
115	0.55	0.771	0.900	
206	0.58	0.815	0.900	
207	0.56	0.779	0.900	
208	0.57	0.839	0.900	
220	0.55			

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	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.7 V	Deflect	14.2 V
Extract 2	-250.0 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	170 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9994	QP Bias	-4.0 V
Mass Offset	124	Axis Offset	-0.03		

Hardware Settings

Torch

Torch H	0.2 mm	Torch V	-0.2 mm
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EM

Discriminator	3.9 mV	Analog HV	2184 V	Pulse HV	1276 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		4668	46684.20			2.227	
89		9076	90761.50			3.351	
205		7379	73785.12			2.977	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	4748	4711	4551	4770	4563
89	9345	9189	8783	9344	8719
205	7612	7465	7208	7517	7091

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	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.7 V	Deflect	4.2 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	-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	124	Axis Offset	-0.03		
Hardware Settings					
Torch					
Torch H	0.2 mm	Torch V	-0.2 mm		
EM					
Discriminator	3.9 mV	Analog HV	2184 V	Pulse HV	1276 V