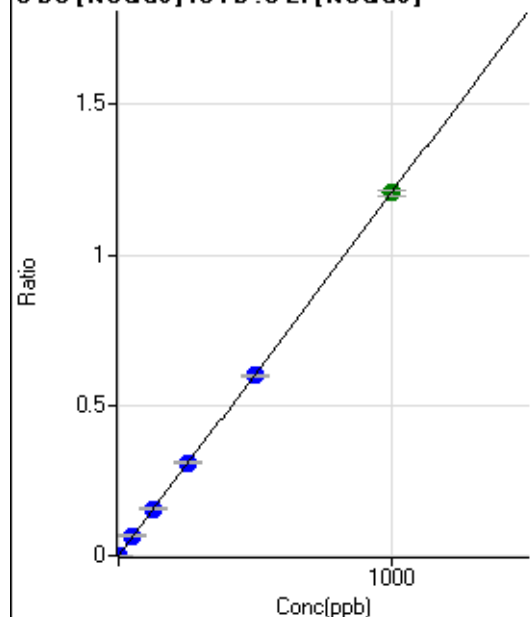


Batch Folder: D:\P8100317 MS .b\
Analysis File: P8100317 MS .batch.bin
DA Date-Time: 2017-10-04 00:02:22
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB P8100317 MS.D	S00	2017-10-03 11:38:38
2			
3	005CALS P8100317 MS.D	S02	2017-10-03 11:45:48
4	006CALS P8100317 MS.D	S03	2017-10-03 11:49:16
5	007CALS P8100317 MS.D	S04	2017-10-03 11:52:45
6	008CALS P8100317 MS.D	S05	2017-10-03 11:56:09
7	009CALS P8100317 MS.D	S06	2017-10-03 11:59:26
8	010CALS P8100317 MS.D	S07	2017-10-03 12:02:40
9	011CALS P8100317 MS.D	S08	2017-10-03 12:05:49

9 Be [NoGas] ISTD:6 Li [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	250.01	0.0002	P	21.6
2	☐	0.100					
3	☐	1.000	0.952	1461.23	0.0014	P	6.6
4	☐	50.000	54.696	68159.45	0.0662	P	6.3
5	☐	125.000	129.512	167812.38	0.1565	P	0.8
6	☐	250.000	255.474	332832.66	0.3085	P	1.5
7	☐	500.000	496.100	654581.16	0.5989	P	1.0
8	☐	1000.000	999.783	1324159.93	1.2068	A	1.5
9	☐			1029.70	0.0010	P	7.2

$$y = 0.0012 * x + 2.2809E-004$$

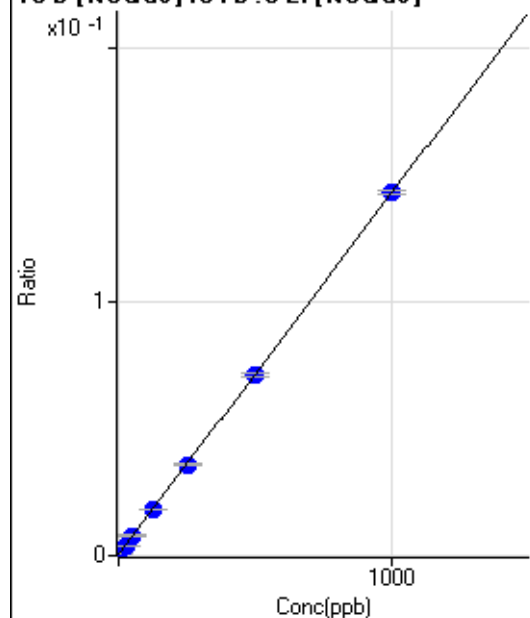
$$R = 1.0000$$

$$DL = 0.1225$$

$$BEC = 0.189$$

Weight: <None>

Min Conc: 0

10 B [NoGas] ISTD:6 Li [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	427.80	0.0004	P	6.0
2	☐	2.500					
3	☐	25.000	22.113	3756.20	0.0035	P	6.3
4	☐	50.000	52.479	8069.27	0.0079	P	12.7
5	☐	125.000	125.185	19527.84	0.0182	P	1.6
6	☐	250.000	249.041	38669.75	0.0358	P	3.2
7	☐	500.000	498.355	77976.24	0.0713	P	1.8
8	☐	1000.000	1000.987	156820.25	0.1429	P	0.9
9	☐			5278.97	0.0049	P	7.4

$$y = 1.4238E-004 * x + 3.9069E-004$$

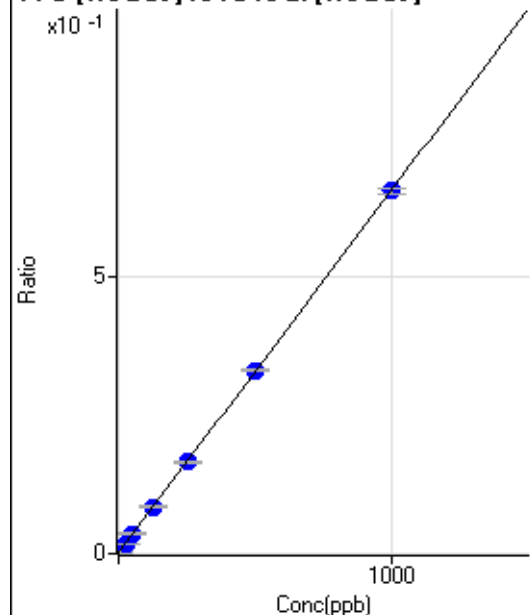
$$R = 1.0000$$

$$DL = 0.4942$$

$$BEC = 2.744$$

Weight: <None>

Min Conc: 0

11 B [NoGas] ISTD:6 Li [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1847.42	0.0017	P	7.9
2	☐	2.500					
3	☐	25.000	22.310	17258.31	0.0163	P	3.7
4	☐	50.000	52.780	37190.74	0.0361	P	6.4
5	☐	125.000	126.688	90481.83	0.0844	P	1.1
6	☐	250.000	251.631	179014.16	0.1660	P	2.2
7	☐	500.000	502.255	360187.67	0.3296	P	0.7
8	☐	1000.000	998.182	716870.49	0.6533	P	1.4
9	☐			24410.41	0.0228	P	5.1

$$y = 6.5279E-004 * x + 0.0017$$

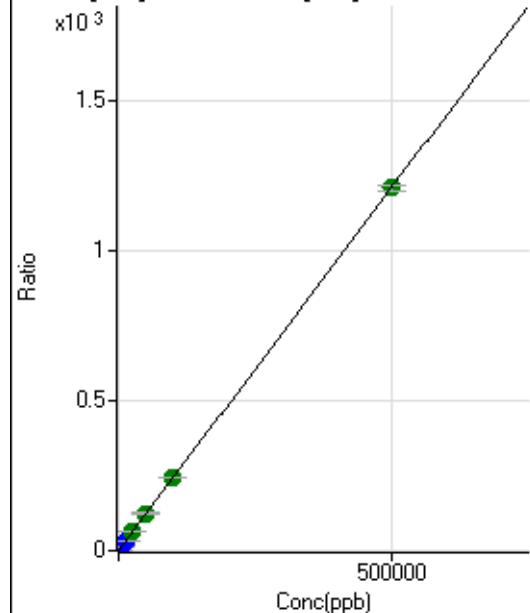
R = 1.0000

DL = 0.6136

BEC = 2.585

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	20891.08	0.6590	P	3.5
2	☐	50.000					
3	☐	500.000	433.024	55453.17	1.7041	P	2.7
4	☐	5000.000	5223.586	416714.38	13.2658	P	0.7
5	☐	12500.000	12758.062	996777.25	31.4499	P	0.5
6	☐	25000.000	25893.087	1976945.44	63.1505	A	1.0
7	☐	50000.000	51352.450	3625413.67	124.5952	A	0.6
8	☐	100000.00	100088.12	6878695.12	242.2160	A	1.0
9	☐	500000.00	499793.85	33993057.01	1,206.883	A	1.9

$$y = 0.0024 * x + 0.6590$$

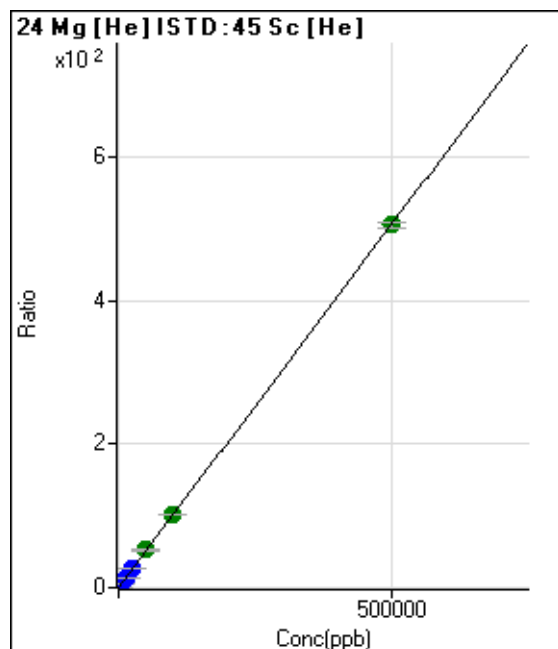
R = 1.0000

DL = 28.59

BEC = 273.1

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2008.56	0.0633	P	5.8
2	☐	50.000					
3	☐	500.000	454.390	17035.90	0.5235	P	2.7
4	☐	5000.000	5284.320	170085.75	5.4147	P	1.3
5	☐	12500.000	12700.598	409654.03	12.9251	P	0.4
6	☐	25000.000	25561.942	812373.71	25.9497	P	0.8
7	☐	50000.000	51624.502	1523067.57	52.3430	A	1.3
8	☐	100000.00	101423.56	2918721.57	102.7740	A	0.6
9	☐	500000.00	499516.92	14249826.19	505.9192	A	1.9

$$y = 0.0010 * x + 0.0633$$

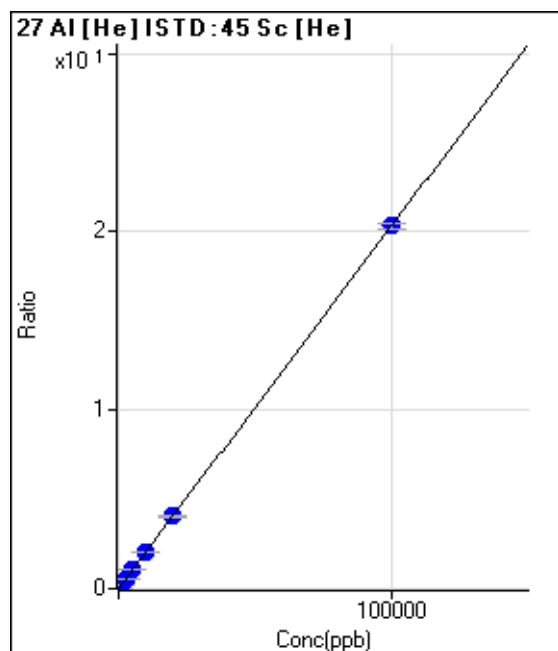
$$R = 1.0000$$

$$DL = 10.96$$

$$BEC = 62.53$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19.45	0.0006	P	27.8
2	☐	2.000					
3	☐	20.000	19.647	150.01	0.0046	P	9.8
4	☐	1000.000	1061.270	6796.37	0.2164	P	1.4
5	☐	2500.000	2517.910	16243.22	0.5125	P	1.4
6	☐	5000.000	5072.248	32298.85	1.0317	P	0.9
7	☐	10000.000	9971.926	59004.19	2.0278	P	2.0
8	☐	20000.000	19882.931	114802.68	4.0425	P	1.3
9	☐	100000.00	100021.54	572718.15	20.3336	P	1.9

$$y = 2.0329E-004 * x + 6.1616E-004$$

$$R = 1.0000$$

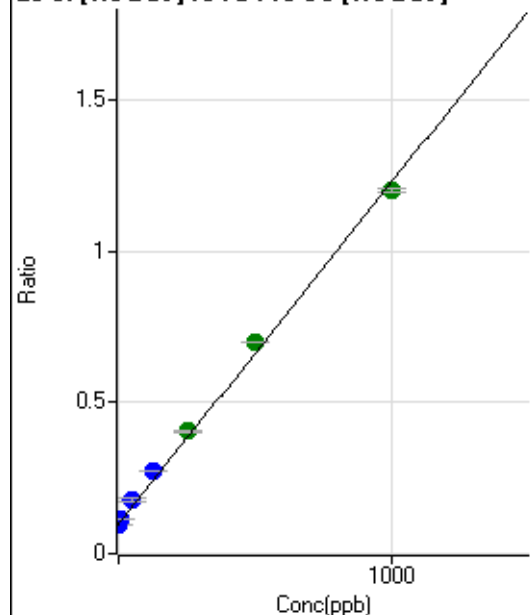
$$DL = 2.524$$

$$BEC = 3.031$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	369303.48	0.0978	P	0.9
2	☐	1.000					
3	☐	10.000	16.410	425503.83	0.1163	P	1.3
4	☐	50.000	69.295	619999.93	0.1761	P	6.6
5	☐	125.000	155.473	1005921.69	0.2733	P	0.9
6	☐	250.000	271.568	1481994.65	0.4044	A	1.8
7	☐	500.000	530.331	2546377.66	0.6966	A	0.3
8	☐	1000.000	974.605	4404571.19	1.1982	A	0.9
9	☐			360497.87	0.1013	P	0.4

$$y = 0.0011 * x + 0.0978$$

$$R = 0.9988$$

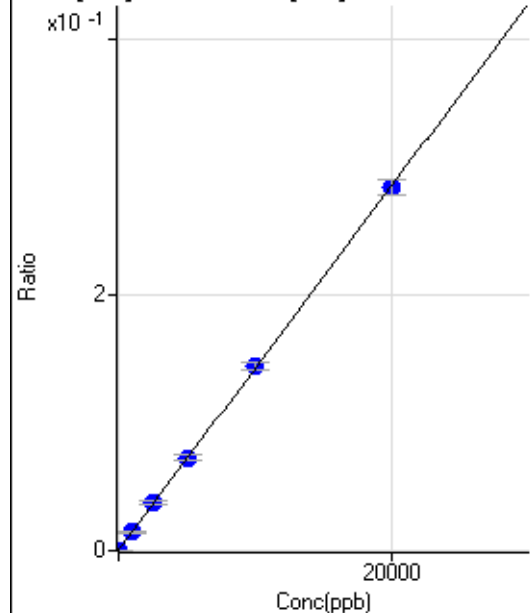
$$DL = 2.301$$

$$BEC = 86.64$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	12.203	16.67	0.0005	P	84.4
2	☐	0.000					
3	☐	0.000	-12.203	5.56	0.0002	P	173.
4	☐	1000.000	1030.359	472.25	0.0150	P	9.9
5	☐	2500.000	2620.268	1194.55	0.0377	P	7.6
6	☐	5000.000	5095.661	2283.63	0.0730	P	5.3
7	☐	10000.000	10128.850	4209.16	0.1447	P	4.6
8	☐	20000.000	19895.108	8061.01	0.2839	P	4.1
9	☐			5.56	0.0002	P	173.

$$y = 1.4251E-005 * x + 3.4502E-004$$

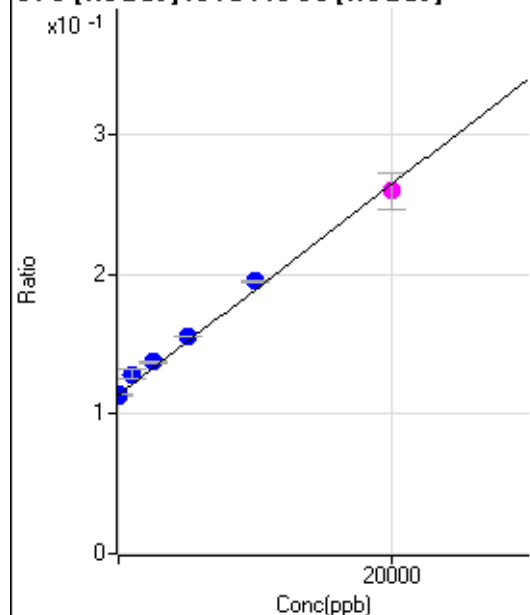
$$R = 0.9999$$

$$DL = 77.28$$

$$BEC = 24.21$$

Weight: <None>

Min Conc: 0

34 S [NoGas] ISTD:45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-75.367	426745.56	0.1130	P	0.4
2	☐	0.000					
3	☐	0.000	75.367	417539.46	0.1142	P	1.0
4	☐	1000.000	1965.985	452278.44	0.1284	P	6.1
5	☐	2500.000	3098.554	503919.57	0.1369	P	0.4
6	☐	5000.000	5548.071	569345.13	0.1554	P	0.8
7	☐	10000.000	10763.853	711571.52	0.1947	P	0.4
8	☐	20000.000	19357.937	953082.37	0.2594	M	10.0
9	☐			394079.12	0.1107	P	0.5

$$y = 7.5302\text{E-}006 * x + 0.1136$$

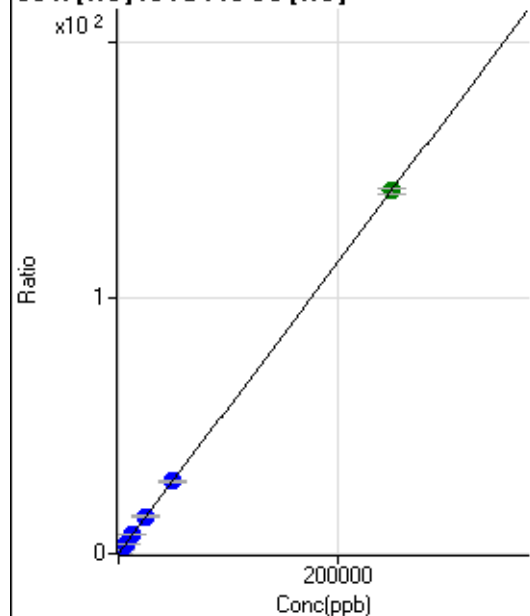
$$R = 0.9976$$

$$DL = 317.6$$

$$BEC = 1.509\text{E}+04$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2869.87	0.0905	P	3.8
2	☐	50.000					
3	☐	500.000	454.607	11338.36	0.3484	P	1.6
4	☐	2500.000	2660.166	50248.85	1.5997	P	1.9
5	☐	6250.000	6446.628	118792.57	3.7479	P	1.6
6	☐	12500.000	12907.081	232086.38	7.4132	P	0.2
7	☐	25000.000	25624.476	425648.68	14.6283	P	0.6
8	☐	50000.000	49883.944	806280.34	28.3916	P	1.5
9	☐	250000.00	249933.98	3996779.60	141.8877	A	1.5

$$y = 5.6734\text{E-}004 * x + 0.0905$$

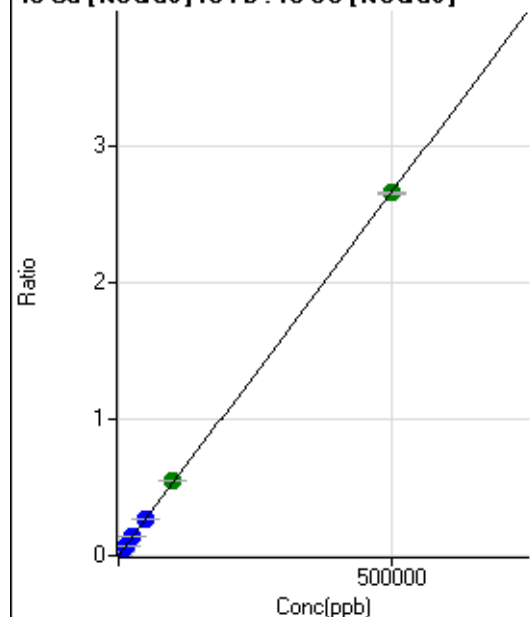
$$R = 1.0000$$

$$DL = 18.13$$

$$BEC = 159.5$$

Weight: <None>

Min Conc: 0

43 Ca [NoGas] ISTD:45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1636.29	0.0004	P	15.0
2	☐	50.000					
3	☐	500.000	446.636	10295.88	0.0028	P	1.2
4	☐	5000.000	5298.763	101020.58	0.0287	P	6.6
5	☐	12500.000	12668.778	250164.75	0.0680	P	1.5
6	☐	25000.000	25438.901	498602.37	0.1361	P	0.6
7	☐	50000.000	50669.596	989193.89	0.2706	P	0.4
8	☐	100000.00	102490.94	2010499.76	0.5469	A	0.8
9	☐	500000.00	499405.75	9479904.46	2.6632	A	0.3

$$y = 5.3319E-006 * x + 4.3344E-004$$

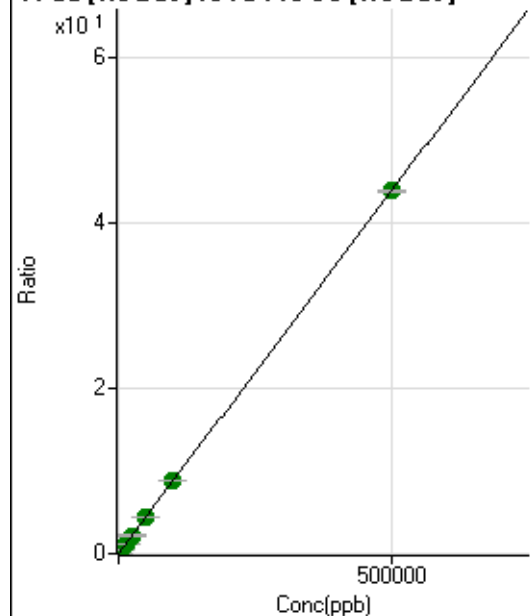
$$R = 1.0000$$

$$DL = 36.58$$

$$BEC = 81.29$$

Weight: <None>

Min Conc: 0

44 Ca [NoGas] ISTD:45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	30704.23	0.0081	P	2.1
2	☐	50.000					
3	☐	500.000	448.592	173758.52	0.0475	P	1.8
4	☐	5000.000	5333.067	1676953.22	0.4763	A	6.9
5	☐	12500.000	12498.434	4067311.29	1.1052	A	0.5
6	☐	25000.000	24985.638	8066171.88	2.2013	A	1.0
7	☐	50000.000	50021.395	16080589.42	4.3989	A	0.3
8	☐	100000.00	99926.789	32274102.80	8.7795	A	1.0
9	☐	500000.00	500009.98	156256336.8	43.8978	A	0.7

$$y = 8.7778E-005 * x + 0.0081$$

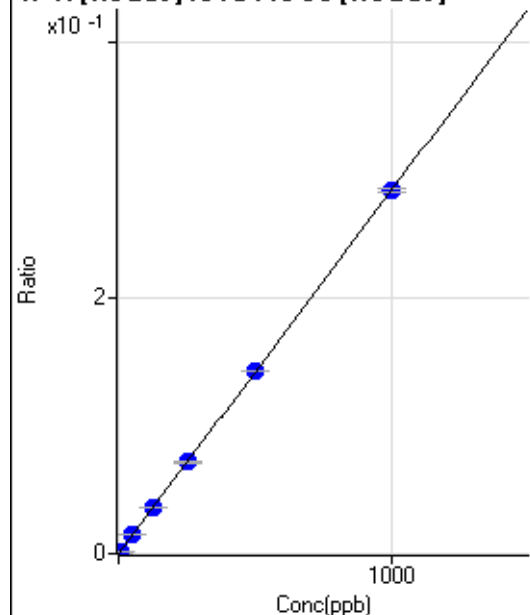
$$R = 1.0000$$

$$DL = 5.867$$

$$BEC = 92.65$$

Weight: <None>

Min Conc: 0

47 Ti [NoGas] ISTD : 45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	100.01	0.0000	P	0.1
2	☐	0.500					
3	☐	5.000	4.472	4734.34	0.0013	P	5.3
4	☐	50.000	52.582	52597.34	0.0149	P	7.3
5	☐	125.000	126.162	131784.96	0.0358	P	0.9
6	☐	250.000	251.803	261780.43	0.0714	P	0.6
7	☐	500.000	501.705	520264.16	0.1423	P	0.6
8	☐	1000.000	998.425	1041057.59	0.2832	P	0.9
9	☐			694.49	0.0002	P	14.0

$$y = 2.8362E-004 * x + 2.6489E-005$$

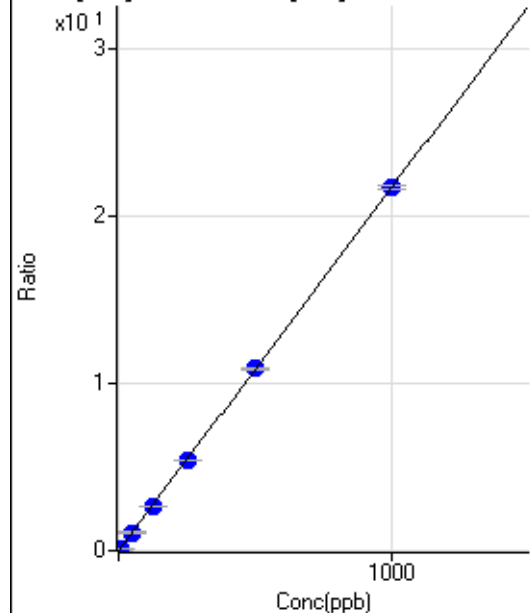
$$R = 1.0000$$

$$DL = 0.0002556$$

$$BEC = 0.0934$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	11.11	0.0004	P	62.8
2	☐	0.500					
3	☐	5.000	4.286	3035.93	0.0933	P	3.1
4	☐	50.000	50.094	34137.26	1.0868	P	1.0
5	☐	125.000	122.676	84333.17	2.6608	P	0.5
6	☐	250.000	248.184	168507.67	5.3828	P	1.1
7	☐	500.000	501.734	316619.37	10.8816	P	0.8
8	☐	1000.000	999.876	615827.92	21.6849	P	1.1
9	☐			71.11	0.0025	P	25.8

$$y = 0.0217 * x + 3.5293E-004$$

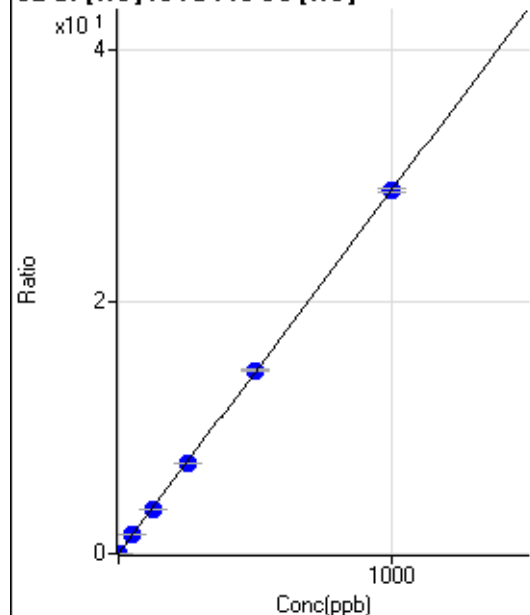
$$R = 1.0000$$

$$DL = 0.03064$$

$$BEC = 0.01627$$

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	581.13	0.0183	P	2.6
2	☐	0.200					
3	☐	2.000	1.983	2458.04	0.0755	P	1.1
4	☐	50.000	50.839	46653.16	1.4852	P	0.8
5	☐	125.000	122.952	113014.69	3.5659	P	1.0
6	☐	250.000	248.750	225250.36	7.1955	P	1.5
7	☐	500.000	503.757	423459.71	14.5533	P	0.6
8	☐	1000.000	998.648	818807.49	28.8324	P	1.1
9	☐			8250.35	0.2932	P	6.6

$$y = 0.0289 * x + 0.0183$$

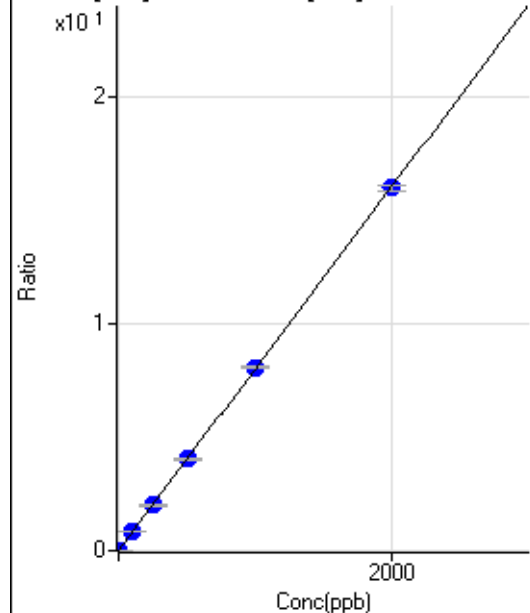
$$R = 1.0000$$

$$DL = 0.04994$$

$$BEC = 0.635$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	158.89	0.0050	P	9.5
2	☐	0.100					
3	☐	1.000	1.026	431.13	0.0132	P	7.4
4	☐	100.000	101.511	25751.70	0.8198	P	1.2
5	☐	250.000	248.093	63273.93	1.9963	P	1.0
6	☐	500.000	501.840	126257.62	4.0330	P	0.6
7	☐	1000.000	1009.193	235834.82	8.1053	P	1.1
8	☐	2000.000	1995.106	454905.26	16.0186	P	1.4
9	☐			1453.44	0.0515	P	6.4

$$y = 0.0080 * x + 0.0050$$

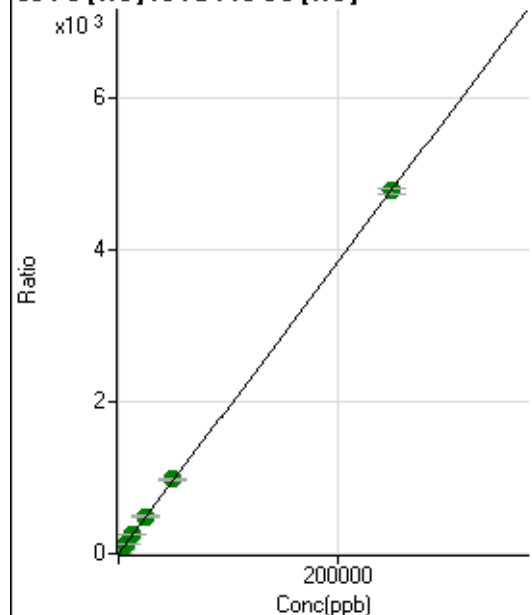
$$R = 1.0000$$

$$DL = 0.1773$$

$$BEC = 0.6249$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5069.60	0.1599	P	2.8
2	☐	5.000					
3	☐	50.000	44.625	32928.20	1.0118	P	1.1
4	☐	2500.000	2629.526	1581903.90	50.3610	A	1.6
5	☐	6250.000	6329.949	3835200.26	121.0070	A	0.6
6	☐	12500.000	12657.924	7570190.27	241.8163	A	1.1
7	☐	25000.000	25752.876	14310405.30	491.8162	A	0.6
8	☐	50000.000	51062.476	27688895.06	975.0099	A	1.4
9	☐	250000.00	249701.02	134275683.5	4,767.281	A	1.9

$$y = 0.0191 * x + 0.1599$$

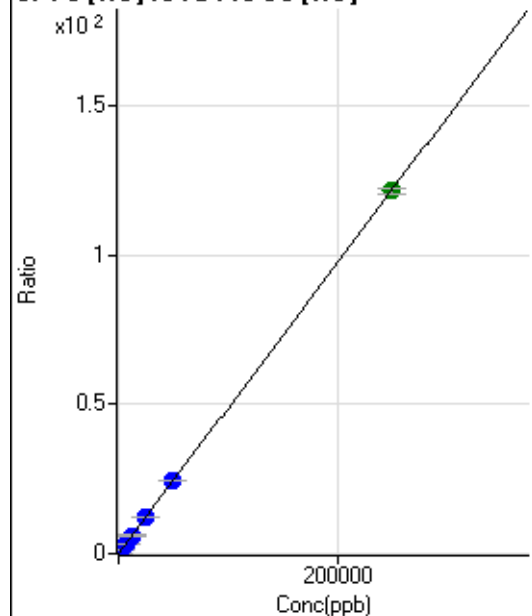
$$R = 1.0000$$

$$DL = 0.7098$$

$$BEC = 8.375$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	127.78	0.0040	P	6.7
2	☐	5.000					
3	☐	50.000	43.503	820.42	0.0252	P	4.5
4	☐	2500.000	2591.464	39751.72	1.2655	P	0.6
5	☐	6250.000	6198.017	95754.74	3.0210	P	1.2
6	☐	12500.000	12507.083	190710.08	6.0921	P	1.4
7	☐	25000.000	25354.542	359227.02	12.3458	P	0.5
8	☐	50000.000	50380.353	696560.30	24.5275	P	0.9
9	☐	250000.00	249888.50	3426155.55	121.6413	A	1.9

$$y = 4.8677E-004 * x + 0.0040$$

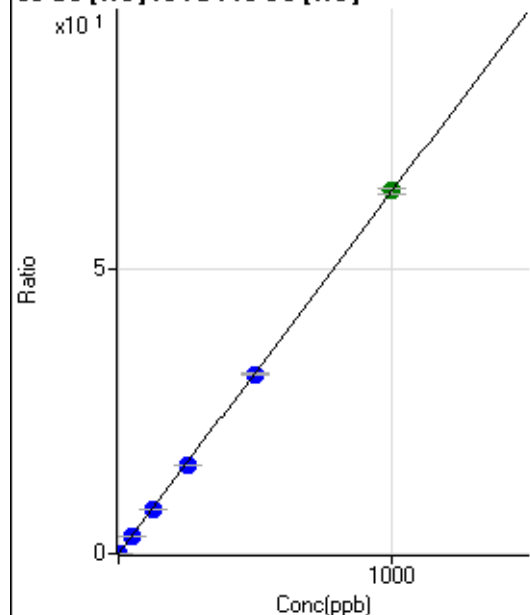
$$R = 1.0000$$

$$DL = 1.66$$

$$BEC = 8.285$$

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	121.11	0.0038	P	26.3
2	☐	0.100					
3	☐	1.000	0.863	1902.39	0.0585	P	1.7
4	☐	50.000	49.705	99021.86	3.1525	P	1.8
5	☐	125.000	121.742	244550.79	7.7158	P	0.2
6	☐	250.000	246.109	488180.79	15.5940	P	0.8
7	☐	500.000	496.506	915284.99	31.4559	P	0.4
8	☐	1000.000	1003.142	1804691.26	63.5497	A	1.8
9	☐			1786.82	0.0634	P	0.6

$$y = 0.0633 * x + 0.0038$$

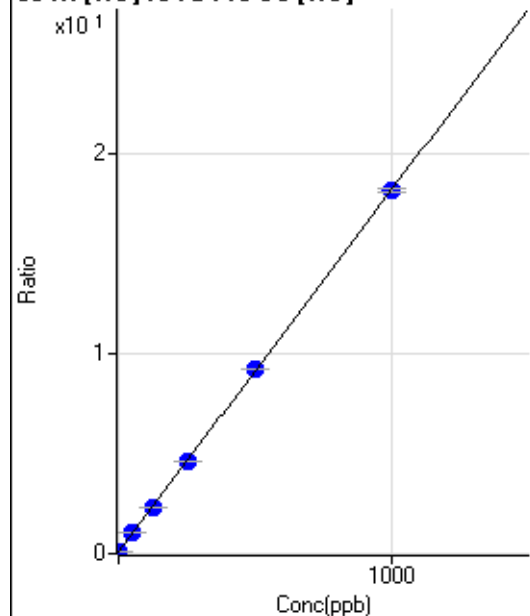
$$R = 1.0000$$

$$DL = 0.04724$$

$$BEC = 0.05997$$

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	2927.11	0.0923	P	3.3
2	☐	0.100					
3	☐	1.000	0.825	3489.53	0.1072	P	4.2
4	☐	50.000	51.099	31912.50	1.0159	P	0.7
5	☐	125.000	123.098	73447.01	2.3172	P	1.0
6	☐	250.000	248.958	143757.51	4.5921	P	0.9
7	☐	500.000	505.389	268478.63	9.2269	P	0.4
8	☐	1000.000	997.749	514761.18	18.1260	P	0.9
9	☐			4511.22	0.1601	P	0.7

$$y = 0.0181 * x + 0.0923$$

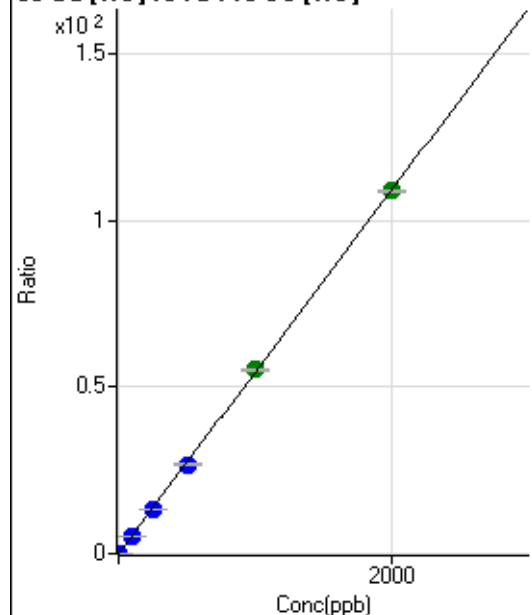
$$R = 1.0000$$

$$DL = 0.5008$$

$$BEC = 5.109$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	376.68	0.0119	P	14.1
2	☐	0.200					
3	☐	2.000	1.773	3534.96	0.1086	P	3.9
4	☐	100.000	99.733	171313.38	5.4537	P	0.7
5	☐	250.000	242.904	420453.90	13.2658	P	0.4
6	☐	500.000	491.792	840418.17	26.8462	P	1.1
7	☐	1000.000	1011.675	1606607.53	55.2132	A	0.6
8	☐	2000.000	1997.115	3095045.06	108.9832	A	0.7
9	☐			3449.37	0.1225	P	4.9

$$y = 0.0546 * x + 0.0119$$

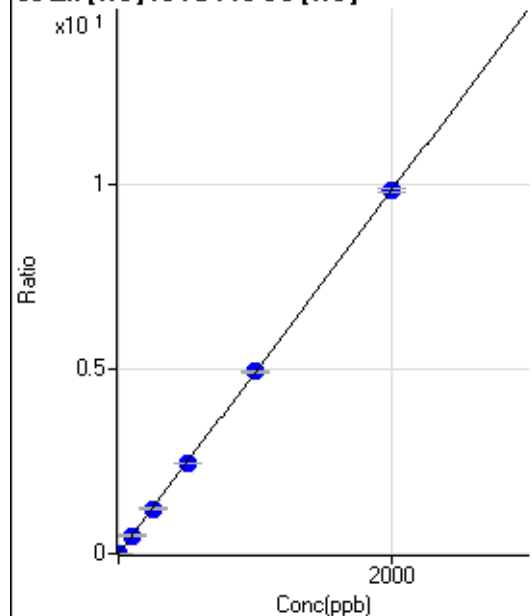
$$R = 1.0000$$

$$DL = 0.09188$$

$$BEC = 0.2175$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	46.67	0.0015	P	24.0
2	☐	0.200					
3	☐	2.000	1.722	323.34	0.0099	P	7.5
4	☐	100.000	100.095	15517.74	0.4940	P	1.0
5	☐	250.000	247.136	38585.92	1.2175	P	1.6
6	☐	500.000	494.675	76243.67	2.4355	P	0.8
7	☐	1000.000	1005.492	143995.37	4.9489	P	0.9
8	☐	2000.000	1998.939	279362.92	9.8371	P	0.9
9	☐			581.14	0.0206	P	3.8

$$y = 0.0049 * x + 0.0015$$

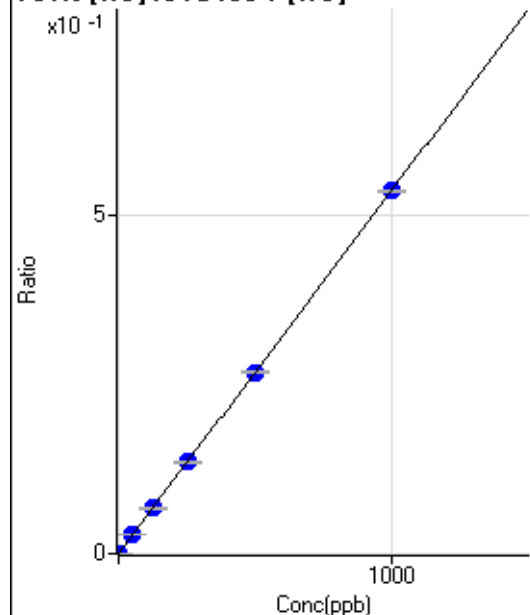
$$R = 1.0000$$

$$DL = 0.2143$$

$$BEC = 0.2979$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	5.56	0.0000	P	33.3
2	☐	0.100					
3	☐	1.000	0.836	100.62	0.0005	P	9.0
4	☐	50.000	50.810	5745.07	0.0272	P	1.5
5	☐	125.000	124.853	14033.75	0.0668	P	1.3
6	☐	250.000	251.885	28491.72	0.1347	P	1.3
7	☐	500.000	499.778	53808.48	0.2672	P	0.7
8	☐	1000.000	999.618	105467.43	0.5345	P	0.8
9	☐			43.83	0.0002	P	24.0

$$y = 5.3466\text{E-}004 * x + 2.6245\text{E-}005$$

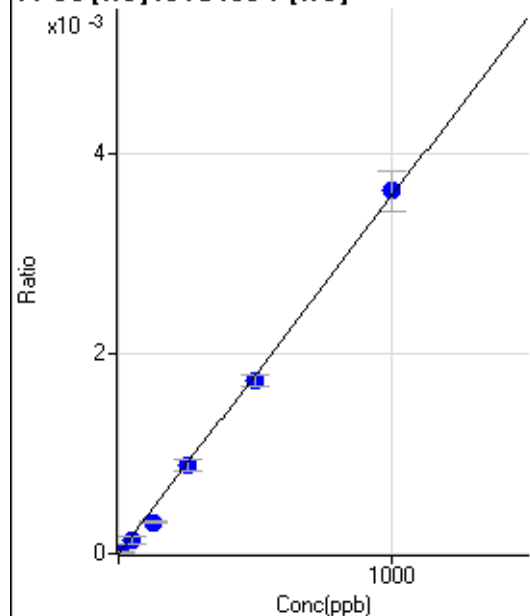
$$R = 1.0000$$

$$DL = 0.0491$$

$$BEC = 0.04909$$

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	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	2.933	2.22	0.0000	P	173.
4	☐	50.000	36.930	27.78	0.0001	P	49.1
5	☐	125.000	87.420	65.56	0.0003	P	7.8
6	☐	250.000	247.399	186.67	0.0009	P	15.0
7	☐	500.000	482.509	346.68	0.0017	P	7.0
8	☐	1000.000	1014.757	714.48	0.0036	P	11.0
9	☐			0.00	0.0000	P	

$$y = 3.5685\text{E-}006 * x + 0.0000\text{E+}000$$

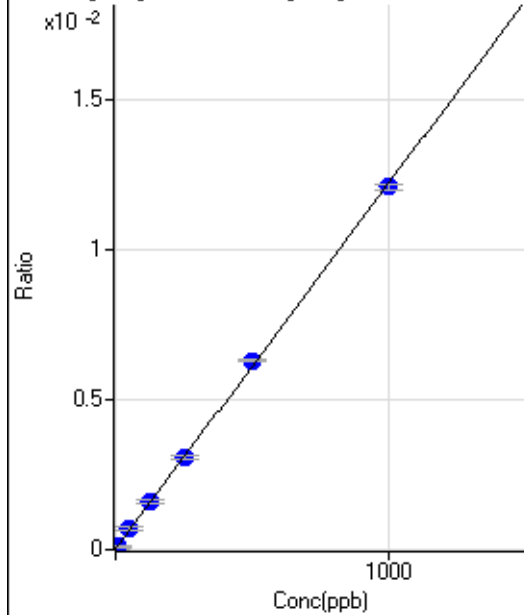
$$R = 0.9992$$

$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4.94	0.0000	P	47.2
2	☐	0.500					
3	☐	5.000	6.185	20.99	0.0001	P	27.0
4	☐	50.000	56.456	150.00	0.0007	P	10.8
5	☐	125.000	130.217	337.66	0.0016	P	6.7
6	☐	250.000	251.072	650.64	0.0031	P	3.0
7	☐	500.000	516.000	1267.97	0.0063	P	1.4
8	☐	1000.000	990.751	2381.71	0.0121	P	1.5
9	☐			1.85	0.0000	P	1.1

$$y = 1.2159\text{E-}005 * x + 2.3522\text{E-}005$$

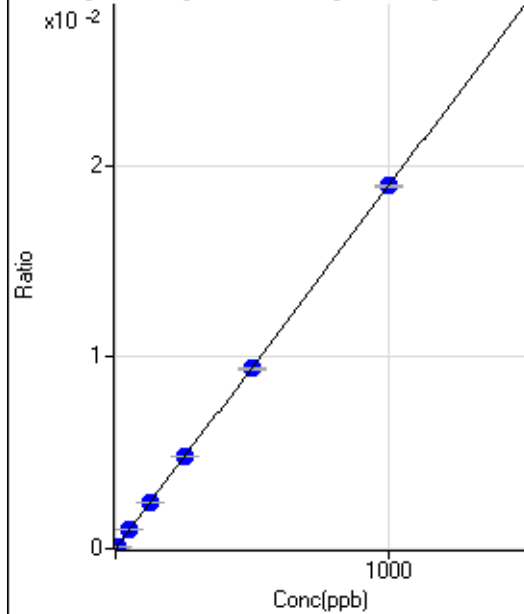
$$R = 0.9998$$

$$DL = 2.739$$

$$BEC = 1.935$$

Weight: <None>

Min Conc: 0

82 Se [NoGas] ISTD:89 Y [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	-17.91	0.0000	P	-95.
2	☐	0.500					
3	☐	5.000	4.394	511.88	0.0001	P	6.5
4	☐	50.000	53.054	6186.93	0.0010	P	5.0
5	☐	125.000	128.006	15558.44	0.0024	P	0.4
6	☐	250.000	253.613	31182.82	0.0048	P	0.2
7	☐	500.000	496.569	61931.42	0.0094	P	0.4
8	☐	1000.000	1000.287	127643.97	0.0189	P	0.8
9	☐			29.87	0.0000	P	196.

$$y = 1.8923\text{E-}005 * x - 2.7161\text{E-}006$$

$$R = 1.0000$$

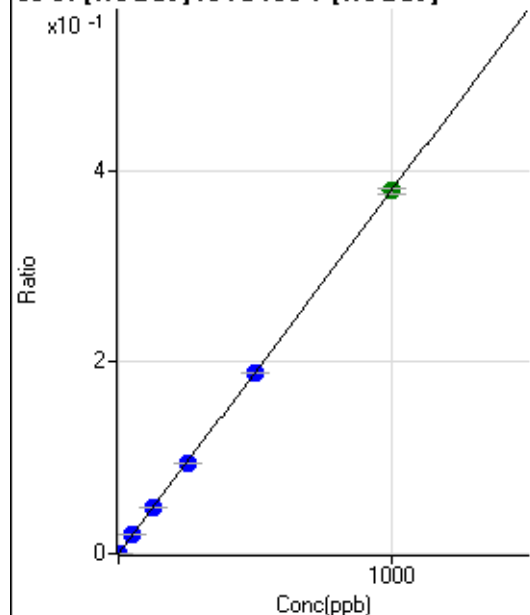
$$DL = 0.409$$

$$BEC = -0.1435$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	750.06	0.0001	P	13.5
2	☐	0.100					
3	☐	1.000	0.902	2900.45	0.0005	P	4.6
4	☐	50.000	52.431	123488.37	0.0200	P	5.9
5	☐	125.000	128.117	313046.76	0.0487	P	0.6
6	☐	250.000	250.664	618540.45	0.0951	P	0.2
7	☐	500.000	499.328	1248743.65	0.1894	P	0.1
8	☐	1000.000	999.659	2556670.04	0.3791	A	1.8
9	☐			82340.02	0.0125	P	2.2

$$y = 3.7909\text{E-}004 * x + 1.1374\text{E-}004$$

$$R = 1.0000$$

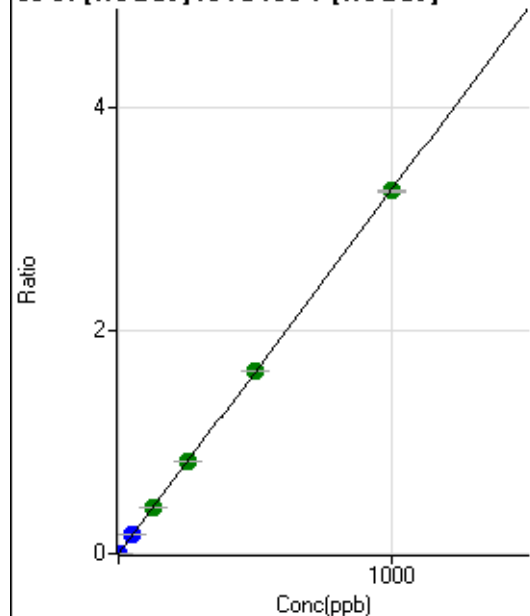
$$DL = 0.1217$$

$$BEC = 0.3$$

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	891.74	0.0001	P	11.8
2	☐	0.100					
3	☐	1.000	0.929	20132.27	0.0032	P	3.9
4	☐	50.000	53.463	1077580.74	0.1745	P	6.3
5	☐	125.000	128.968	2705133.55	0.4207	A	0.1
6	☐	250.000	253.393	5372745.04	0.8264	A	0.6
7	☐	500.000	501.694	10786269.25	1.6361	A	0.7
8	☐	1000.000	997.635	21941842.68	3.2532	A	0.8
9	☐			713792.68	0.1085	P	0.5

$$y = 0.0033 * x + 1.3532\text{E-}004$$

$$R = 1.0000$$

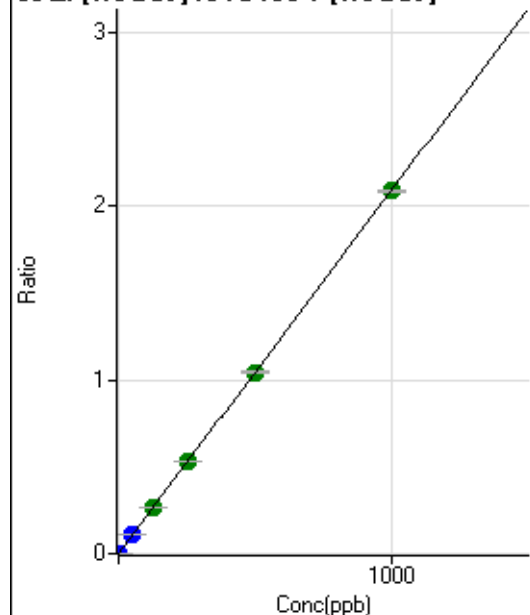
$$DL = 0.01468$$

$$BEC = 0.0415$$

Weight: <None>

Min Conc: 0

90 Zr [NoGas] ISTD:89 Y [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	369.47	0.0001	P	7.0
2	☐	0.100					
3	☐	1.000	0.901	12339.47	0.0019	P	1.1
4	☐	50.000	52.352	676445.03	0.1095	P	5.2
5	☐	125.000	128.437	1726591.33	0.2685	A	0.8
6	☐	250.000	254.095	3453157.89	0.5311	A	0.3
7	☐	500.000	499.930	6889400.15	1.0450	A	0.4
8	☐	1000.000	998.464	14075847.37	2.0870	A	0.6
9	☐			1680.74	0.0003	P	1.5

$$y = 0.0021 * x + 5.6041E-005$$

$$R = 1.0000$$

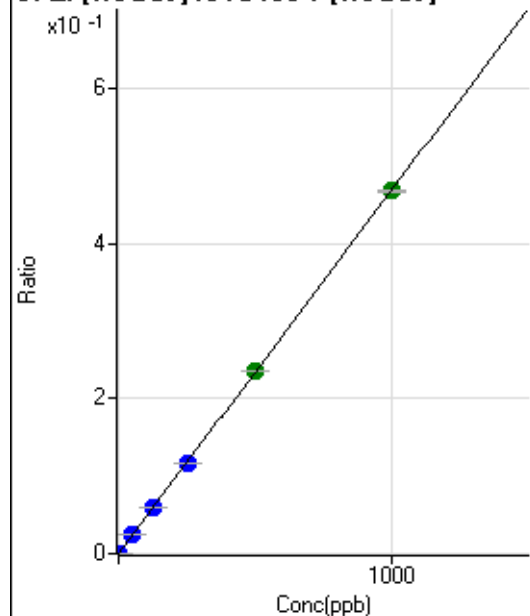
$$DL = 0.00563$$

$$BEC = 0.02681$$

Weight: <None>

Min Conc: 0

91 Zr [NoGas] ISTD:89 Y [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	100.01	0.0000	P	14.1
2	☐	0.100					
3	☐	1.000	0.916	2828.20	0.0004	P	2.1
4	☐	50.000	51.874	150251.69	0.0243	P	6.1
5	☐	125.000	125.751	379046.24	0.0589	P	0.3
6	☐	250.000	250.313	762752.10	0.1173	P	0.6
7	☐	500.000	502.421	1552421.20	0.2355	A	0.8
8	☐	1000.000	998.524	3156191.52	0.4680	A	0.5
9	☐			411.14	0.0001	P	26.6

$$y = 4.6863E-004 * x + 1.5165E-005$$

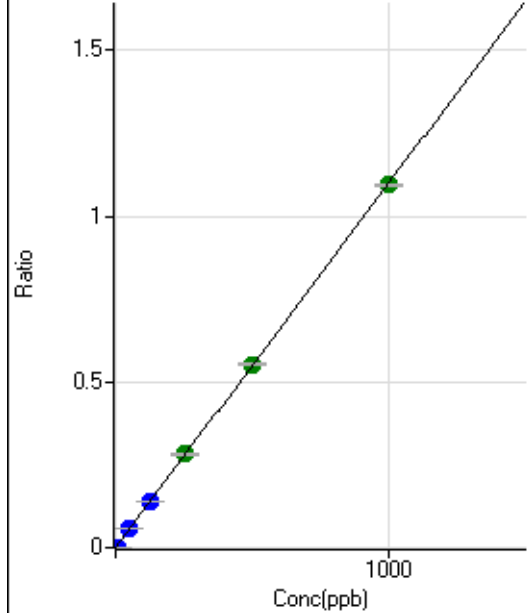
$$R = 1.0000$$

$$DL = 0.01366$$

$$BEC = 0.03236$$

Weight: <None>

Min Conc: 0

94 Mo [NoGas] ISTD : 89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	180.56	0.0000	P	18.8
2	☐	0.500					
3	☐	5.000	2.025	14316.50	0.0023	P	2.4
4	☐	50.000	52.105	353511.73	0.0572	P	6.7
5	☐	125.000	126.346	892374.31	0.1388	P	0.5
6	☐	250.000	256.164	1829091.75	0.2813	A	0.6
7	☐	500.000	503.816	3647802.25	0.5533	A	1.1
8	☐	1000.000	996.292	7379535.84	1.0941	A	0.4
9	☐			4095.25	0.0006	P	2.4

$$y = 0.0011 * x + 2.7398E-005$$

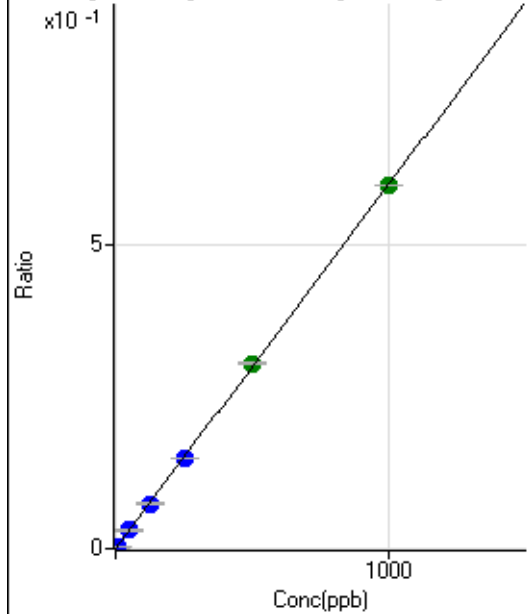
$$R = 1.0000$$

$$DL = 0.0141$$

$$BEC = 0.02495$$

Weight: <None>

Min Conc: 0

95 Mo [NoGas] ISTD : 89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	72.22	0.0000	P	52.4
2	☐	0.500					
3	☐	5.000	4.449	17052.97	0.0027	P	1.9
4	☐	50.000	51.437	190714.54	0.0309	P	6.5
5	☐	125.000	124.109	479032.37	0.0745	P	1.0
6	☐	250.000	247.060	964041.87	0.1483	P	0.1
7	☐	500.000	507.952	2009849.98	0.3049	A	1.0
8	☐	1000.000	996.801	4034978.47	0.5982	A	0.1
9	☐			5965.50	0.0009	P	2.0

$$y = 6.0015E-004 * x + 1.0969E-005$$

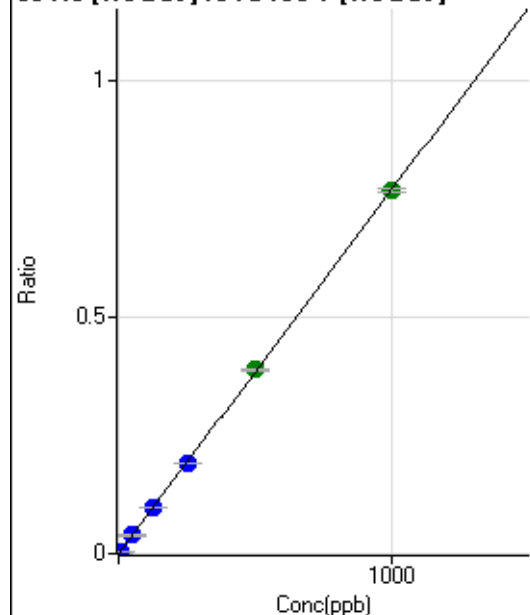
$$R = 0.9999$$

$$DL = 0.02871$$

$$BEC = 0.01828$$

Weight: <None>

Min Conc: 0

96 Mo [NoGas] ISTD : 89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	136.12	0.0000	P	33.8
2	☐	0.500					
3	☐	5.000	3.915	19247.80	0.0030	P	3.0
4	☐	50.000	51.611	244745.41	0.0396	P	6.2
5	☐	125.000	124.708	615491.48	0.0957	P	0.4
6	☐	250.000	247.418	1234459.43	0.1899	P	0.1
7	☐	500.000	505.655	2558277.31	0.3880	A	0.3
8	☐	1000.000	997.779	5164072.47	0.7657	A	0.9
9	☐			8002.71	0.0012	P	2.4

$$y = 7.6735E-004 * x + 2.0657E-005$$

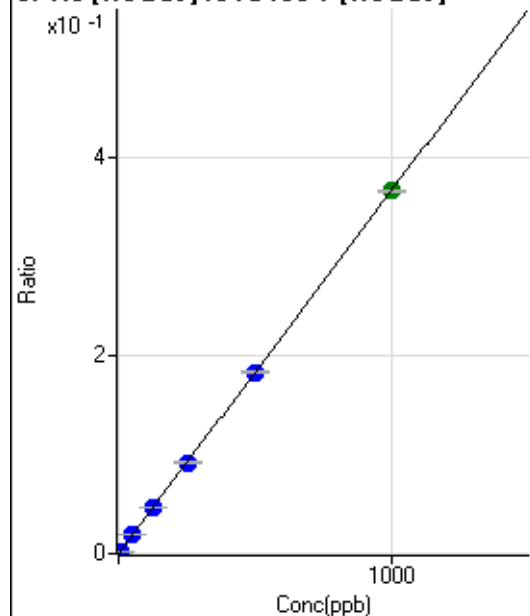
$$R = 1.0000$$

$$DL = 0.02732$$

$$BEC = 0.02692$$

Weight: <None>

Min Conc: 0

97 Mo [NoGas] ISTD : 89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	113.90	0.0000	P	11.5
2	☐	0.500					
3	☐	5.000	4.458	10496.18	0.0017	P	1.4
4	☐	50.000	52.585	119022.53	0.0193	P	7.3
5	☐	125.000	126.839	298856.85	0.0465	P	0.4
6	☐	250.000	250.672	597032.15	0.0918	P	0.8
7	☐	500.000	500.217	1208046.00	0.1832	P	0.4
8	☐	1000.000	999.367	2468973.99	0.3661	A	0.9
9	☐			3631.21	0.0006	P	2.3

$$y = 3.6627E-004 * x + 1.7282E-005$$

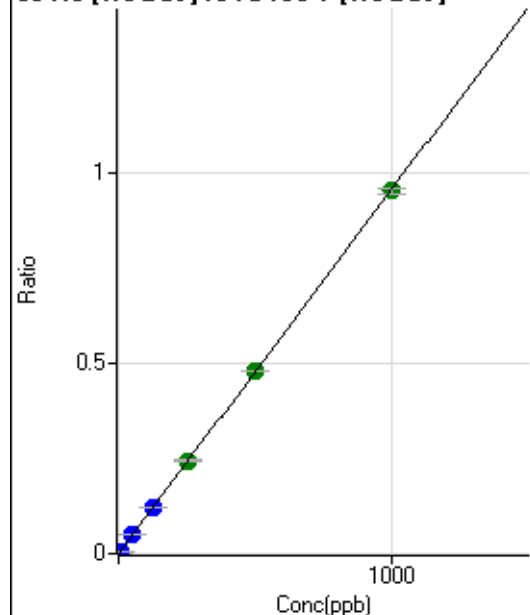
$$R = 1.0000$$

$$DL = 0.01625$$

$$BEC = 0.04718$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	161.12	0.0000	P	31.5
2	☐	0.500					
3	☐	5.000	4.511	27579.04	0.0043	P	1.4
4	☐	50.000	52.156	307843.91	0.0499	P	6.8
5	☐	125.000	125.280	769805.03	0.1197	P	0.2
6	☐	250.000	255.732	1588538.25	0.2443	A	1.1
7	☐	500.000	504.059	3175054.78	0.4816	A	0.1
8	☐	1000.000	996.397	6420487.38	0.9519	A	1.3
9	☐			9128.54	0.0014	P	3.2

$$y = 9.5537\text{E-}004 * x + 2.4438\text{E-}005$$

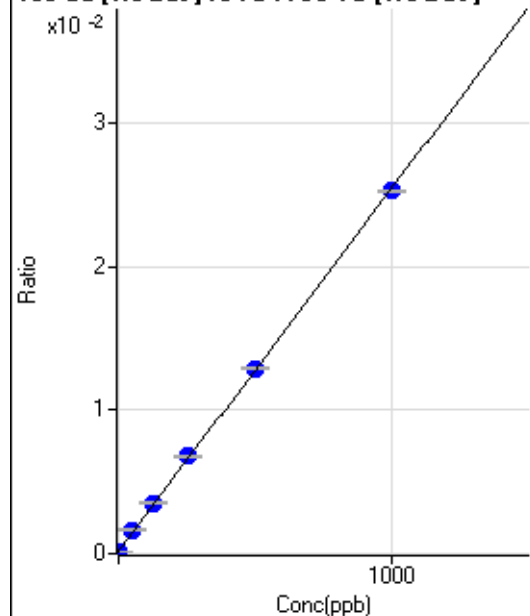
$$R = 1.0000$$

$$DL = 0.02415$$

$$BEC = 0.02558$$

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	1366.80	0.0002	P	7.5
2	☐	0.100					
3	☐	1.000	0.473	1405.69	0.0002	P	3.6
4	☐	50.000	57.325	11708.36	0.0016	P	6.5
5	☐	125.000	132.707	26810.98	0.0035	P	1.3
6	☐	250.000	261.438	52768.08	0.0068	P	1.2
7	☐	500.000	503.565	102977.59	0.0129	P	1.5
8	☐	1000.000	994.029	212553.59	0.0253	P	0.7
9	☐			1355.70	0.0002	P	6.8

$$y = 2.5267\text{E-}005 * x + 1.7691\text{E-}004$$

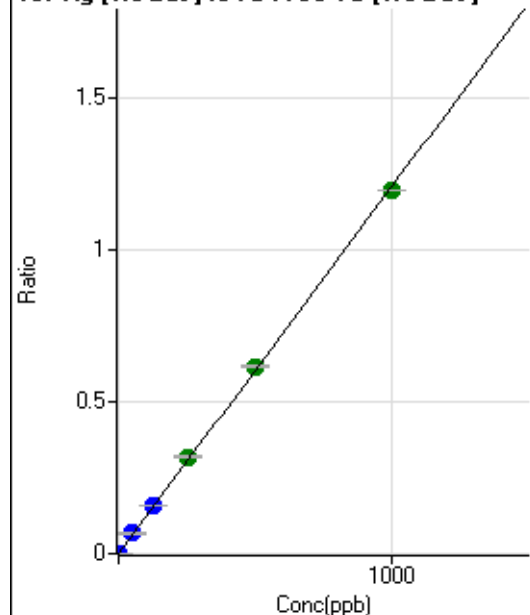
$$R = 0.9999$$

$$DL = 1.572$$

$$BEC = 7.002$$

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	77.78	0.0000	P	27.3
2	☐	0.100					
3	☐	1.000	0.974	8811.62	0.0012	P	2.5
4	☐	50.000	56.173	487869.71	0.0677	P	5.8
5	☐	125.000	132.782	1215473.80	0.1600	P	0.4
6	☐	250.000	264.767	2482439.33	0.3191	A	0.5
7	☐	500.000	511.123	4917156.80	0.6160	A	1.0
8	☐	1000.000	989.465	10020875.92	1.1925	A	0.1
9	☐			852.84	0.0001	P	5.7

$$y = 0.0012 * x + 1.0077E-005$$

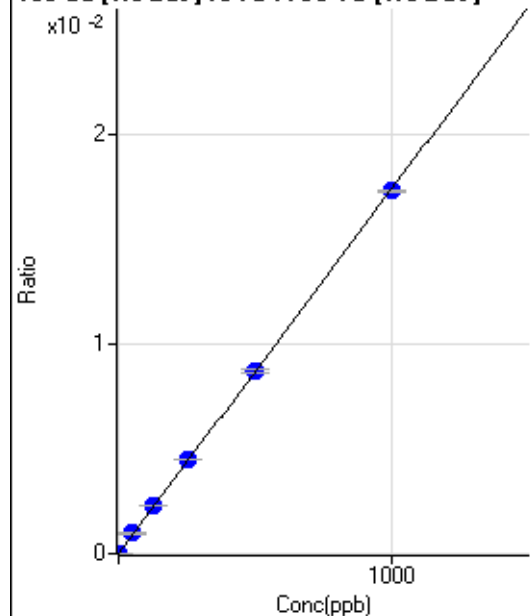
$$R = 0.9998$$

$$DL = 0.006838$$

$$BEC = 0.008362$$

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	6.94	0.0000	P	34.2
2	☐	0.100					
3	☐	1.000	0.808	111.12	0.0000	P	11.8
4	☐	50.000	55.485	6947.77	0.0010	P	7.1
5	☐	125.000	133.239	17585.34	0.0023	P	1.2
6	☐	250.000	258.389	34925.96	0.0045	P	0.5
7	☐	500.000	502.014	69617.48	0.0087	P	1.4
8	☐	1000.000	995.592	145342.53	0.0173	P	0.7
9	☐			26.39	0.0000	P	10.0

$$y = 1.7371E-005 * x + 8.9772E-007$$

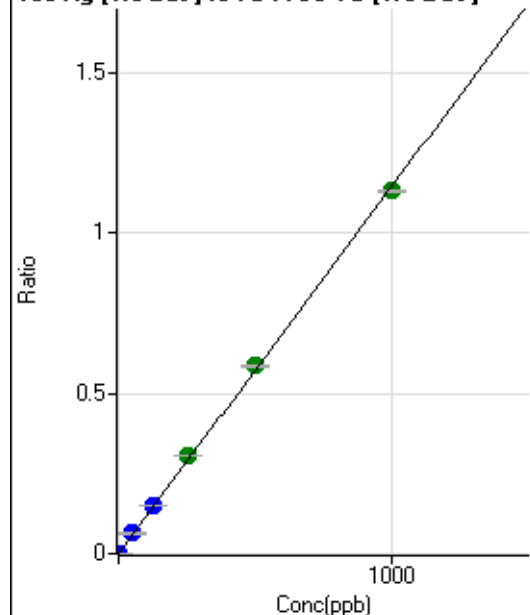
$$R = 0.9999$$

$$DL = 0.05297$$

$$BEC = 0.05168$$

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	50.00	0.0000	P	17.0
2	☐	0.100					
3	☐	1.000	0.988	8466.87	0.0011	P	2.8
4	☐	50.000	56.195	463217.56	0.0643	P	6.4
5	☐	125.000	133.125	1156896.27	0.1523	P	0.8
6	☐	250.000	265.165	2360320.30	0.3034	A	0.2
7	☐	500.000	511.989	4676309.82	0.5858	A	0.8
8	☐	1000.000	988.889	9508120.78	1.1314	A	0.7
9	☐			811.17	0.0001	P	11.1

$$y = 0.0011 * x + 6.4760E-006$$

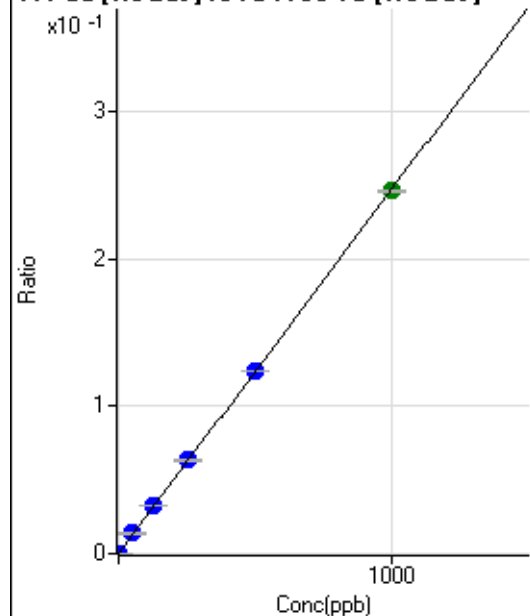
$$R = 0.9998$$

$$DL = 0.002892$$

$$BEC = 0.00566$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	974.12	0.0001	P	7.2
2	☐	0.100					
3	☐	1.000	0.880	2556.35	0.0003	P	4.3
4	☐	50.000	55.405	99507.82	0.0138	P	6.9
5	☐	125.000	132.003	248692.25	0.0327	P	0.3
6	☐	250.000	256.346	493763.59	0.0635	P	0.8
7	☐	500.000	501.880	990993.78	0.1241	P	0.5
8	☐	1000.000	996.328	2069907.49	0.2463	A	0.2
9	☐			1084.69	0.0001	P	7.5

$$y = 2.4709E-004 * x + 1.2608E-004$$

$$R = 1.0000$$

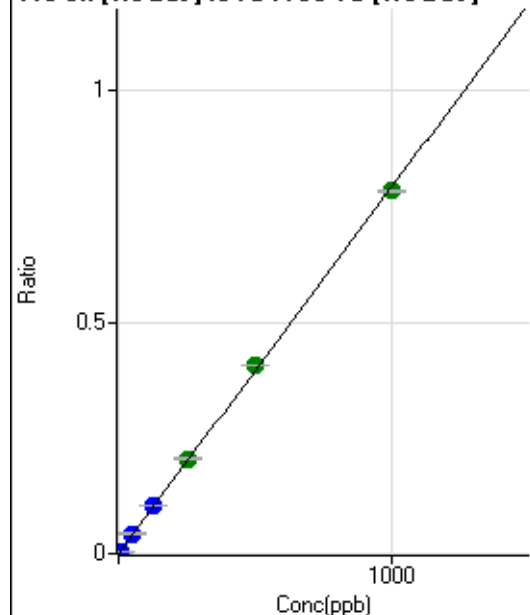
$$DL = 0.1102$$

$$BEC = 0.5103$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	733.39	0.0001	P	9.8
2	☐	0.500					
3	☐	5.000	4.623	27949.57	0.0038	P	0.8
4	☐	50.000	54.888	313724.34	0.0436	P	6.5
5	☐	125.000	129.370	778682.21	0.1025	P	0.4
6	☐	250.000	259.499	1599145.98	0.2056	A	0.7
7	☐	500.000	512.851	3242172.90	0.4061	A	0.4
8	☐	1000.000	990.411	6590479.53	0.7842	A	0.4
9	☐			3108.85	0.0004	P	3.7

$$y = 7.9175E-004 * x + 9.4995E-005$$

$$R = 0.9998$$

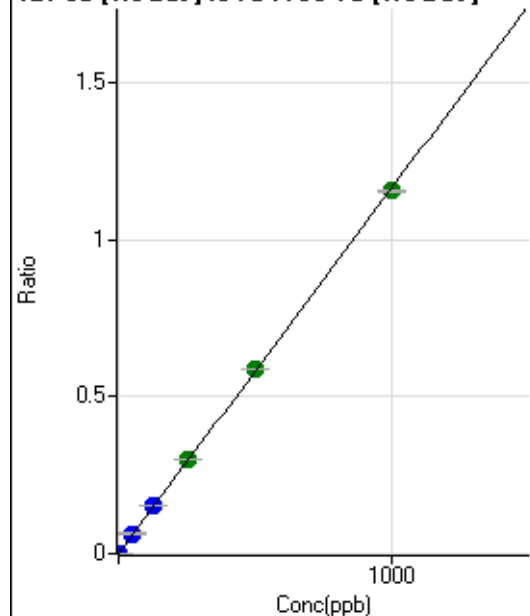
$$DL = 0.03538$$

$$BEC = 0.12$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	66.67	0.0000	P	50.2
2	☐	0.200					
3	☐	2.000	1.875	16299.57	0.0022	P	0.9
4	☐	50.000	54.697	458349.18	0.0636	P	6.6
5	☐	125.000	130.756	1155253.76	0.1521	P	0.4
6	☐	250.000	258.850	2342462.33	0.3011	A	0.7
7	☐	500.000	507.159	4709282.40	0.5899	A	0.2
8	☐	1000.000	993.254	9708928.60	1.1553	A	0.8
9	☐			11994.80	0.0015	P	1.6

$$y = 0.0012 * x + 8.6446E-006$$

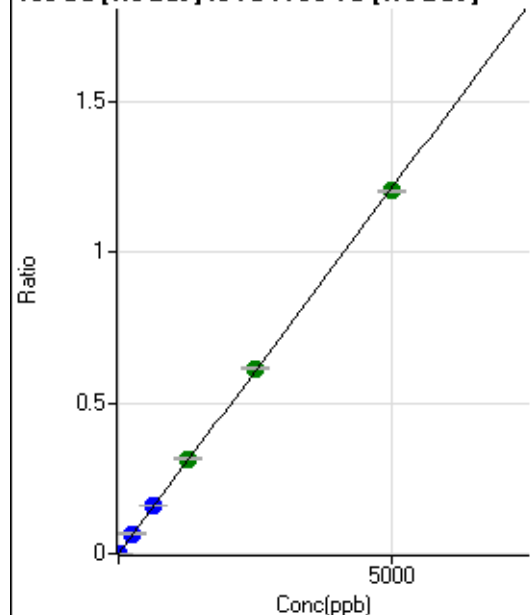
$$R = 0.9999$$

$$DL = 0.0112$$

$$BEC = 0.007432$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	52.78	0.0000	P	63.3
2	☐	1.000					
3	☐	10.000	9.345	16928.21	0.0023	P	0.4
4	☐	250.000	272.970	477130.94	0.0662	P	6.8
5	☐	625.000	648.107	1194509.18	0.1573	P	0.3
6	☐	1250.000	1297.886	2450175.92	0.3149	A	1.4
7	☐	2500.000	2537.123	4914644.03	0.6156	A	0.4
8	☐	5000.000	4965.432	10125214.29	1.2049	A	0.4
9	☐			2147.51	0.0003	P	3.7

$$y = 2.4265E-004 * x + 6.8128E-006$$

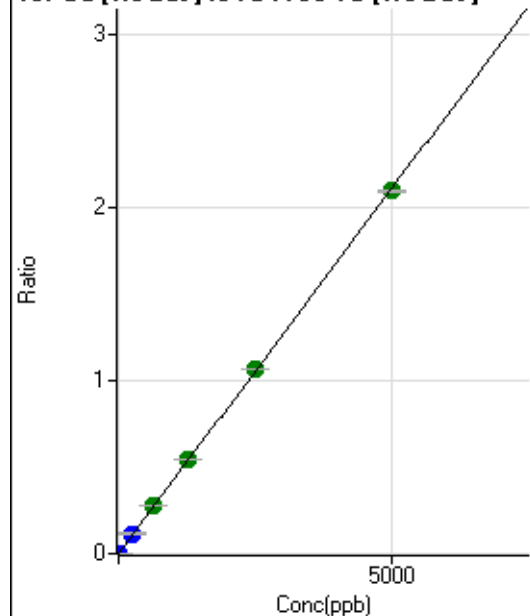
$$R = 0.9999$$

$$DL = 0.05334$$

$$BEC = 0.02808$$

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	88.89	0.0000	P	35.6
2	☐	1.000					
3	☐	10.000	9.523	30012.86	0.0040	P	1.5
4	☐	250.000	274.275	834223.33	0.1158	P	6.6
5	☐	625.000	657.313	2107935.74	0.2775	A	1.4
6	☐	1250.000	1289.643	4236312.46	0.5445	A	1.2
7	☐	2500.000	2524.109	8507847.24	1.0657	A	0.4
8	☐	5000.000	4972.783	17644316.71	2.0996	A	0.5
9	☐			4050.80	0.0005	P	5.0

$$y = 4.2222E-004 * x + 1.1509E-005$$

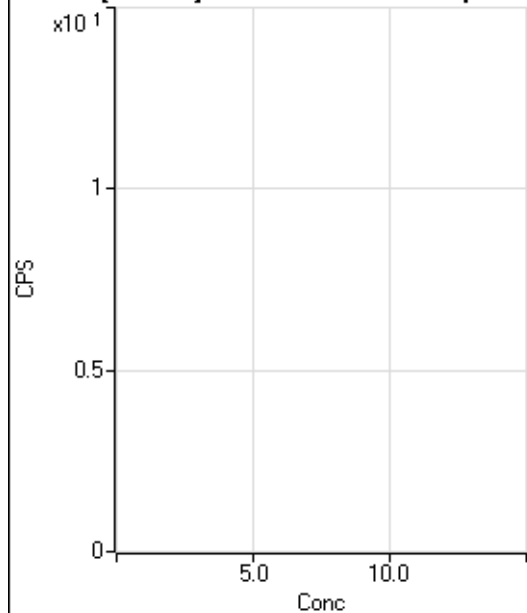
$$R = 0.9999$$

$$DL = 0.02908$$

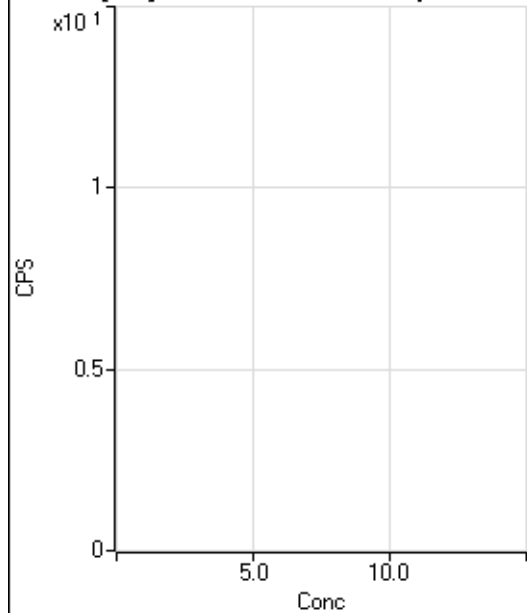
$$BEC = 0.02726$$

Weight: <None>

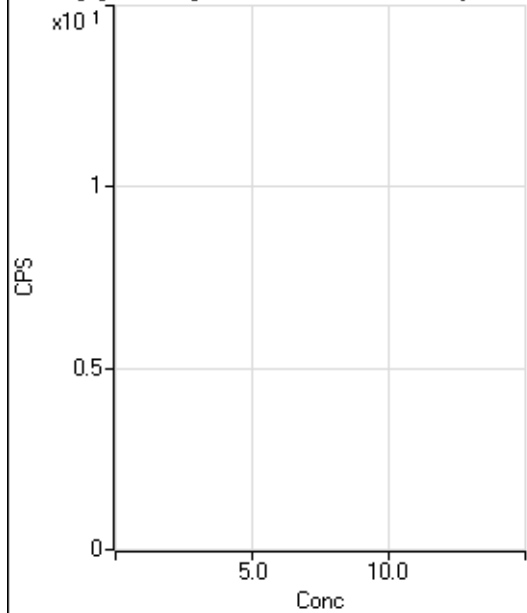
Min Conc: 0

150 Nd [No Gas] No available calibration points

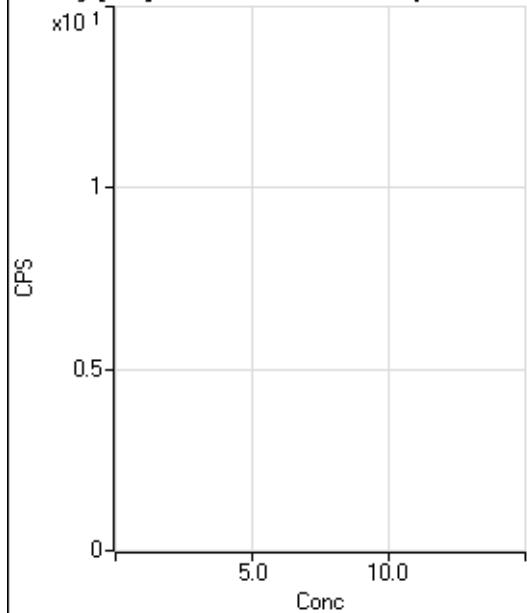
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐						
3	☐			13.33		P	100.
4	☐			26.67		P	66.2
5	☐			57.78		P	52.0
6	☐			80.00		P	22.1
7	☐			175.56		P	15.8
8	☐			337.80		P	8.9
9	☐			55.56		P	45.4

150 Nd [He] No available calibration points

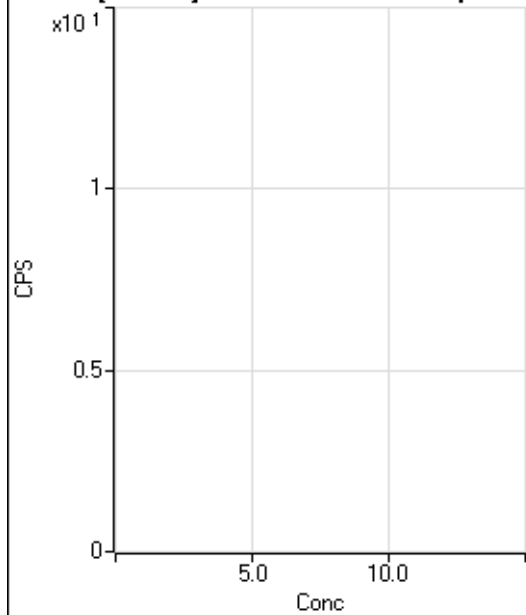
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			0.00		P	
5	☐			0.00		P	
6	☐			0.00		P	
7	☐			5.56		P	34.7
8	☐			11.11		P	45.8
9	☐			12.22		P	41.7

156 Dy [No Gas] No available calibration points

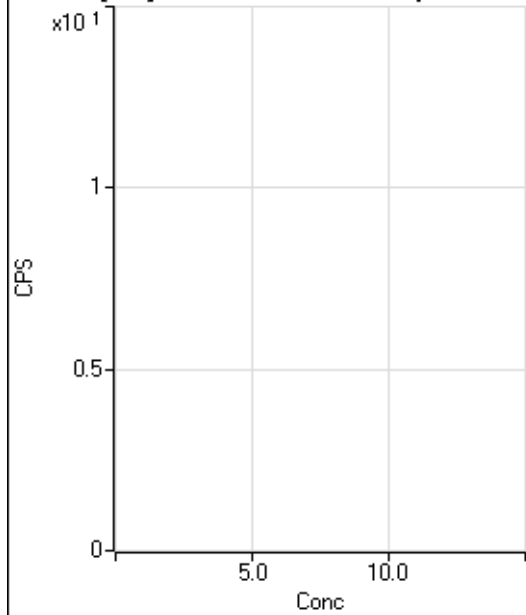
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			16.66		P	86.6
2	☐						
3	☐			13.89		P	91.6
4	☐			22.22		P	57.3
5	☐			44.44		P	60.3
6	☐			41.67		P	40.0
7	☐			105.56		P	43.5
8	☐			136.12		P	9.4
9	☐			69.45		P	59.2

156 Dy [He] No available calibration points

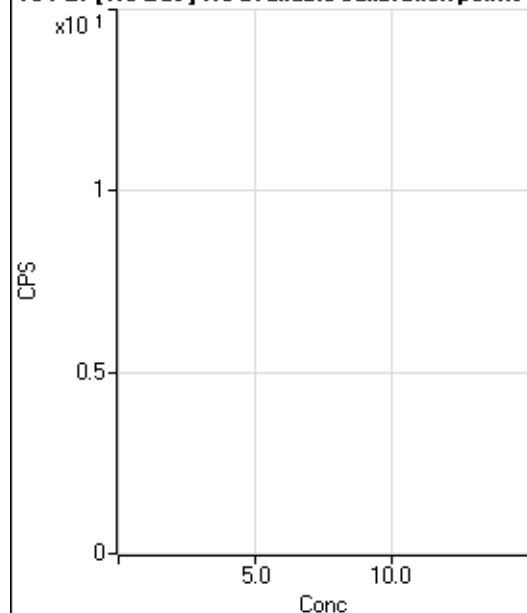
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐						
3	☐			2.22		P	86.6
4	☐			0.00		P	
5	☐			1.11		P	173.
6	☐			4.45		P	86.6
7	☐			14.45		P	26.7
8	☐			12.22		P	31.5
9	☐			15.55		P	24.8

160 Gd [No Gas] No available calibration poin_

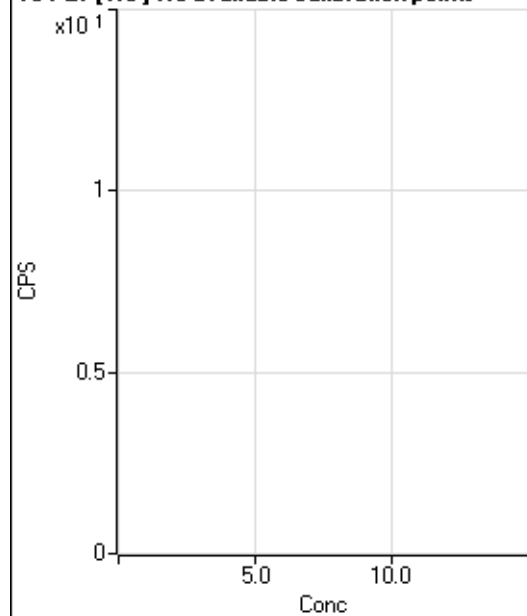
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			41.67		P	0.0
2	☐						
3	☐			38.89		P	32.7
4	☐			55.55		P	69.3
5	☐			77.78		P	43.3
6	☐			72.22		P	29.0
7	☐			77.78		P	22.3
8	☐			86.11		P	39.1
9	☐			111.12		P	4.3

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	43.4
2	☐						
3	☐			2.22		P	86.6
4	☐			8.89		P	21.6
5	☐			6.67		P	50.0
6	☐			14.45		P	48.0
7	☐			14.44		P	35.3
8	☐			16.67		P	60.0
9	☐			15.56		P	49.5

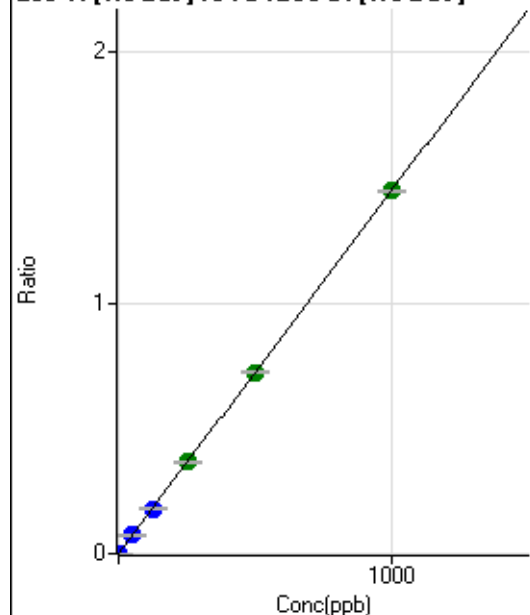
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	61.9
2	☐						
3	☐			38.89		P	68.9
4	☐			27.78		P	34.6
5	☐			30.56		P	15.7
6	☐			22.22		P	57.3
7	☐			47.22		P	53.9
8	☐			44.44		P	21.7
9	☐			69.45		P	30.2

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐						
3	☐			5.56		P	34.7
4	☐			11.11		P	62.5
5	☐			11.11		P	17.3
6	☐			4.44		P	114.
7	☐			3.33		P	0.0
8	☐			4.45		P	86.6
9	☐			11.11		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	291.69	0.0001	P	13.0
2	☐	0.100					
3	☐	1.000	0.931	6465.82	0.0014	P	4.8
4	☐	50.000	51.341	333548.80	0.0743	P	8.0
5	☐	125.000	123.770	843442.96	0.1791	P	1.3
6	☐	250.000	251.977	1742954.64	0.3646	A	0.9
7	☐	500.000	499.752	3566857.11	0.7230	A	1.6
8	☐	1000.000	999.716	7515453.99	1.4462	A	0.9
9	☐			2711.53	0.0006	P	3.2

$$y = 0.0014 * x + 6.0337E-005$$

$$R = 1.0000$$

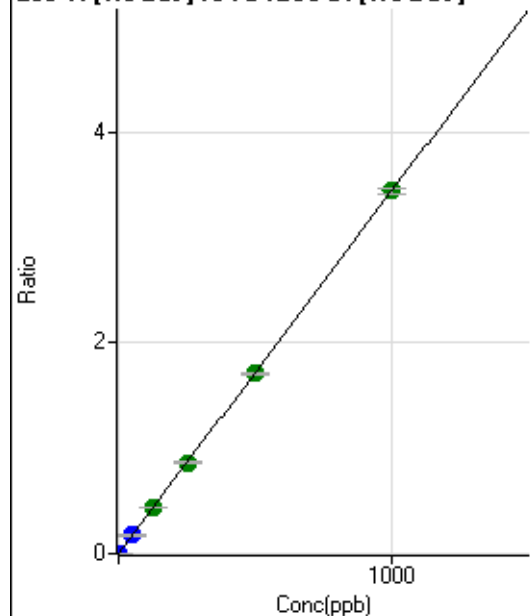
$$DL = 0.01623$$

$$BEC = 0.04171$$

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	638.94	0.0001	P	10.0
2	☐	0.100					
3	☐	1.000	0.907	14962.30	0.0033	P	2.9
4	☐	50.000	51.588	797553.00	0.1777	P	8.0
5	☐	125.000	126.754	2055487.70	0.4365	A	2.0
6	☐	250.000	251.246	4135724.57	0.8651	A	1.3
7	☐	500.000	497.150	8445038.21	1.7116	A	0.7
8	☐	1000.000	1000.815	17905127.66	3.4456	A	1.3
9	☐			6429.72	0.0013	P	2.1

$$y = 0.0034 * x + 1.3214E-004$$

$$R = 1.0000$$

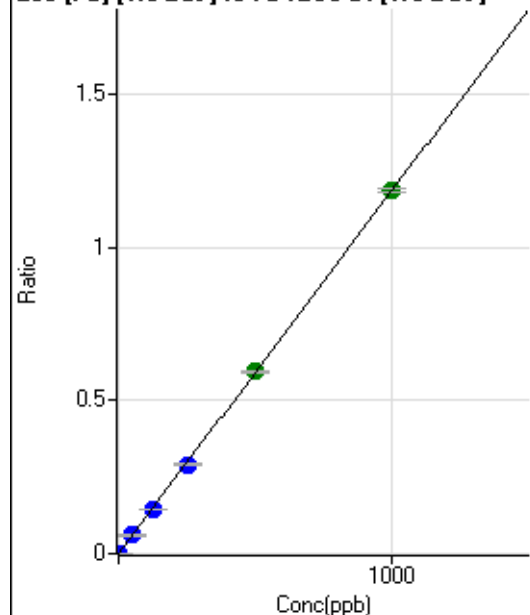
$$DL = 0.01152$$

$$BEC = 0.03838$$

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	437.06	0.0001	P	5.4
2	☐	0.100					
3	☐	1.000	0.916	5393.91	0.0012	P	3.0
4	☐	50.000	51.308	272631.79	0.0607	P	7.8
5	☐	125.000	123.094	685721.78	0.1456	P	1.5
6	☐	250.000	245.369	1387244.65	0.2902	P	1.4
7	☐	500.000	501.452	2925476.39	0.5929	A	0.2
8	☐	1000.000	1000.605	6147519.46	1.1830	A	0.9
9	☐			6953.97	0.0014	P	1.3

$$y = 0.0012 * x + 9.0349E-005$$

$$R = 1.0000$$

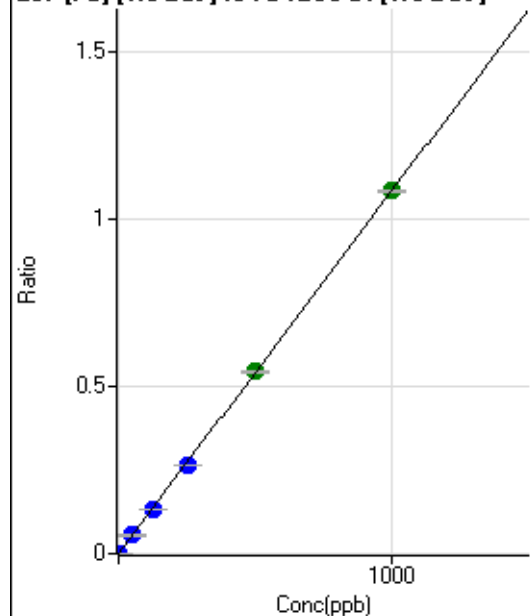
$$DL = 0.01228$$

$$BEC = 0.07642$$

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	422.24	0.0001	P	10.8
2	☐	0.100					
3	☐	1.000	0.909	4928.88	0.0011	P	2.9
4	☐	50.000	50.727	247159.01	0.0550	P	6.5
5	☐	125.000	122.234	623999.13	0.1325	P	1.0
6	☐	250.000	242.902	1258449.55	0.2632	P	0.9
7	☐	500.000	501.671	2681752.55	0.5435	A	0.6
8	☐	1000.000	1001.248	5636843.12	1.0847	A	0.8
9	☐			5714.41	0.0012	P	1.5

$$y = 0.0011 * x + 8.7282E-005$$

$$R = 1.0000$$

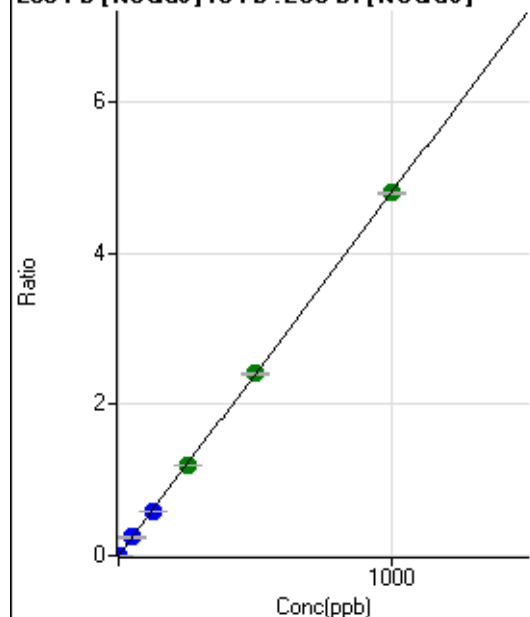
$$DL = 0.02618$$

$$BEC = 0.08057$$

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	1868.64	0.0004	P	2.3
2	☐	0.100					
3	☐	1.000	0.899	21635.57	0.0047	P	0.9
4	☐	50.000	51.363	1109754.84	0.2472	P	7.1
5	☐	125.000	123.833	2804051.62	0.5954	P	0.8
6	☐	250.000	250.021	5745597.77	1.2018	A	1.1
7	☐	500.000	501.391	11888909.58	2.4096	A	0.4
8	☐	1000.000	999.377	24956292.86	4.8025	A	0.7
9	☐			27063.94	0.0055	P	1.6

$$y = 0.0048 * x + 3.8641E-004$$

$$R = 1.0000$$

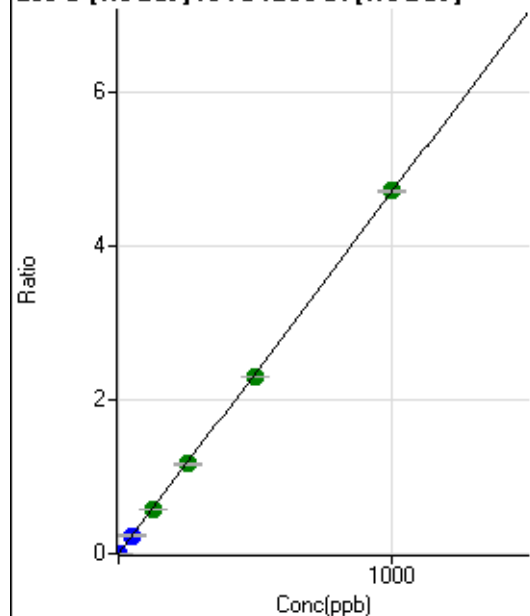
$$DL = 0.005585$$

$$BEC = 0.08042$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	80.56	0.0000	P	42.2
2	☐	0.100					
3	☐	1.000	0.862	18684.36	0.0041	P	2.4
4	☐	50.000	50.336	1061406.82	0.2364	P	7.2
5	☐	125.000	123.439	2730549.15	0.5798	A	0.3
6	☐	250.000	247.914	5567080.12	1.1644	A	1.3
7	☐	500.000	491.670	11393933.15	2.3093	A	0.2
8	☐	1000.000	1004.865	24526403.85	4.7196	A	0.4
9	☐			1577.95	0.0003	P	11.6

$$y = 0.0047 * x + 1.6668E-005$$

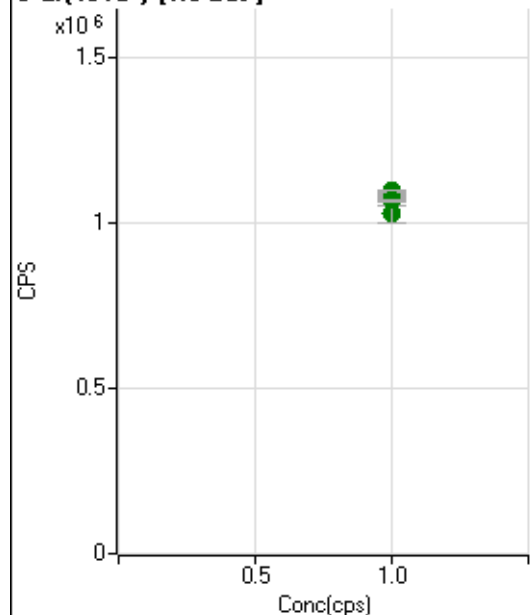
$$R = 0.9999$$

$$DL = 0.004491$$

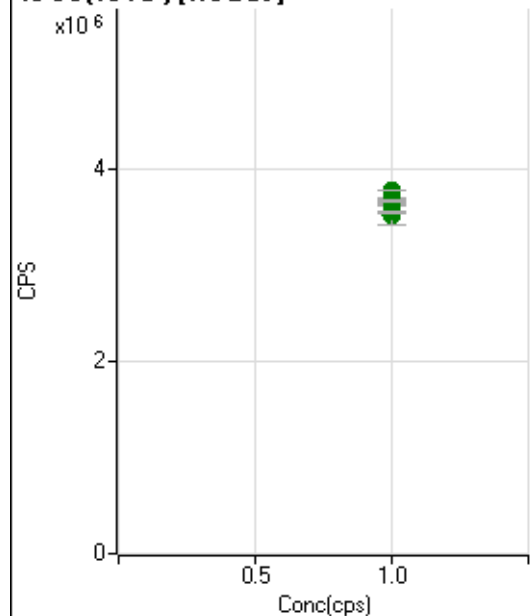
$$BEC = 0.003549$$

Weight: <None>

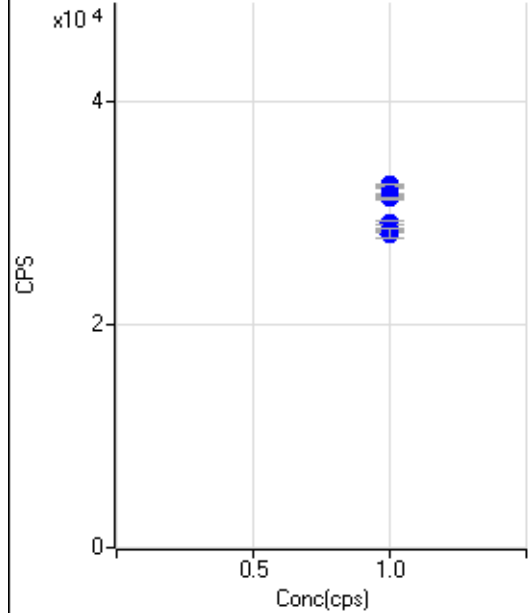
Min Conc: 0

6 Li(ISTD) [No Gas]

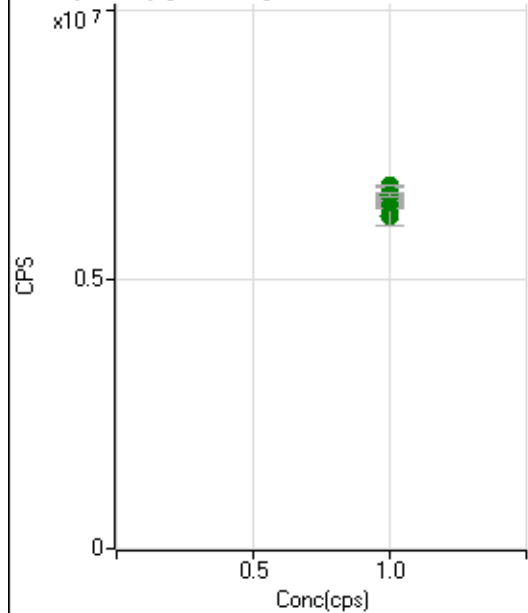
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1095040.72		A	0.7
2	☐	1.000					
3	☐	1.000		1061827.52		A	1.4
4	☐	1.000		1031755.75		A	6.3
5	☐	1.000		1072153.27		A	0.9
6	☐	1.000		1078789.82		A	0.4
7	☐	1.000		1092996.83		A	1.1
8	☐	1.000		1097331.73		A	0.6
9	☐	1.000		1069053.06		A	0.4

45 Sc(ISTD) [No Gas]

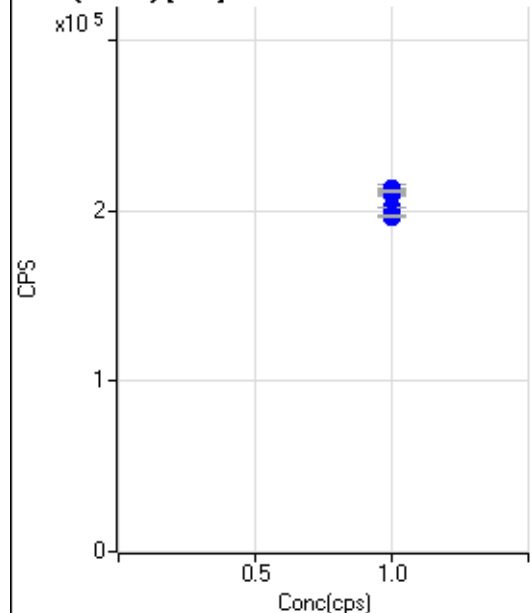
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3775452.95		A	0.1
2	☐	1.000					
3	☐	1.000		3657649.47		A	1.5
4	☐	1.000		3531347.59		A	6.3
5	☐	1.000		3680148.91		A	0.8
6	☐	1.000		3664264.75		A	0.5
7	☐	1.000		3655609.20		A	0.2
8	☐	1.000		3676252.08		A	0.7
9	☐	1.000		3559625.95		A	0.7

45 Sc(ISTD) [He]

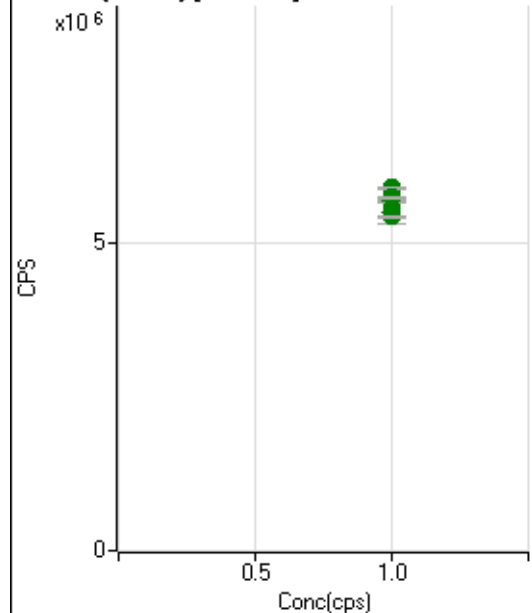
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		31721.52		P	2.9
2	☐	1.000					
3	☐	1.000		32542.26		P	0.4
4	☐	1.000		31413.12		P	0.6
5	☐	1.000		31694.79		P	0.6
6	☐	1.000		31307.29		P	1.0
7	☐	1.000		29098.10		P	1.0
8	☐	1.000		28400.03		P	0.6
9	☐	1.000		28176.27		P	2.9

89 Y(ISTD) [No Gas]

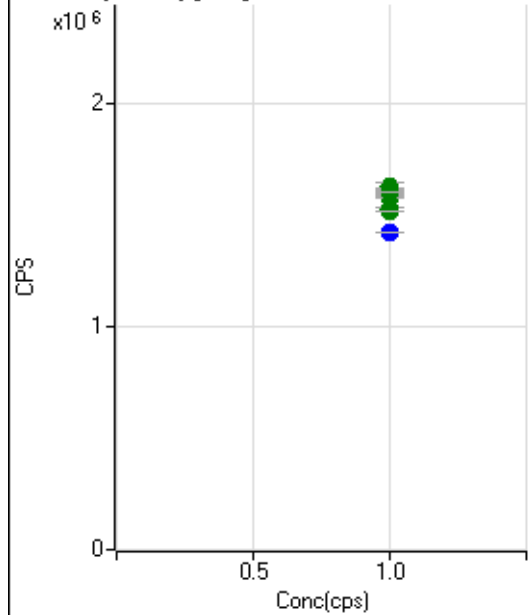
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6592022.12		A	0.4
2	☐	1.000					
3	☐	1.000		6361911.22		A	1.5
4	☐	1.000		6191290.88		A	5.8
5	☐	1.000		6430445.04		A	0.1
6	☐	1.000		6501371.08		A	0.6
7	☐	1.000		6592919.97		A	0.4
8	☐	1.000		6744772.26		A	0.4
9	☐	1.000		6577855.39		A	0.8

89 Y(ISTD) [He]

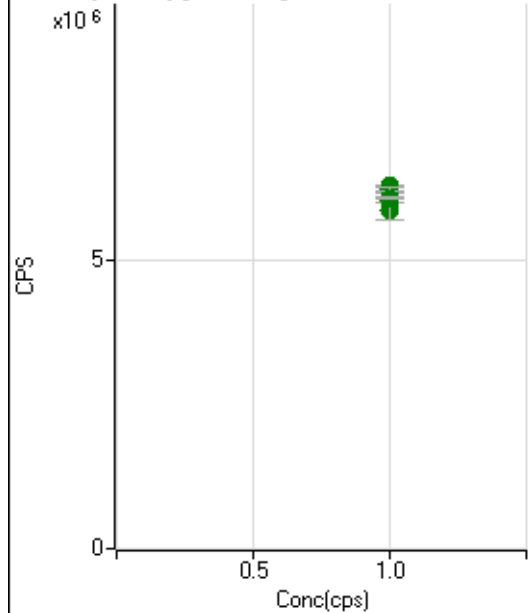
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		212112.28		P	3.4
2	☐	1.000					
3	☐	1.000		212606.00		P	0.1
4	☐	1.000		211292.41		P	0.8
5	☐	1.000		210146.72		P	0.1
6	☐	1.000		211532.74		P	0.6
7	☐	1.000		201350.09		P	0.1
8	☐	1.000		197328.22		P	0.2
9	☐	1.000		196622.72		P	1.1

103 Rh(ISTD) [NoGas]

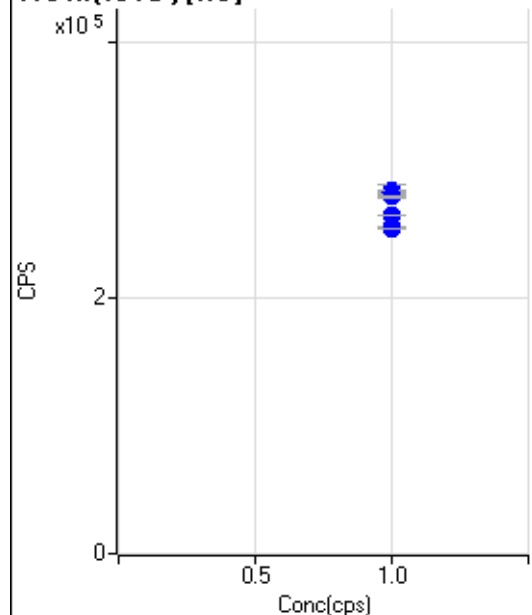
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5892002.65		A	0.3
2	☐	1.000					
3	☐	1.000		5663991.84		A	0.9
4	☐	1.000		5496157.50		A	6.3
5	☐	1.000		5663415.93		A	0.5
6	☐	1.000		5682093.23		A	0.8
7	☐	1.000		5650466.62		A	0.4
8	☐	1.000		5735652.73		A	0.5
9	☐	1.000		5421968.70		A	0.2

103Rh(ISTD)[He]

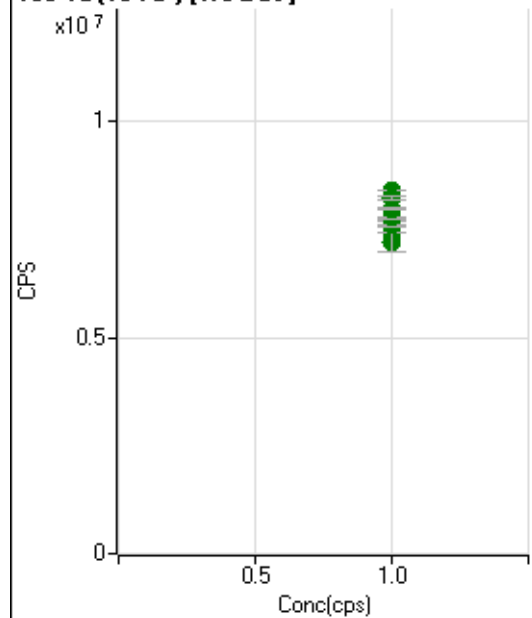
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1629597.60		A	2.2
2	☐	1.000					
3	☐	1.000		1619851.10		A	0.3
4	☐	1.000		1601072.21		A	0.4
5	☐	1.000		1581854.27		A	0.6
6	☐	1.000		1605994.85		A	0.3
7	☐	1.000		1528618.87		A	0.9
8	☐	1.000		1522536.80		A	0.1
9	☐	1.000		1427429.62		P	0.2

115In(ISTD)[NoGas]

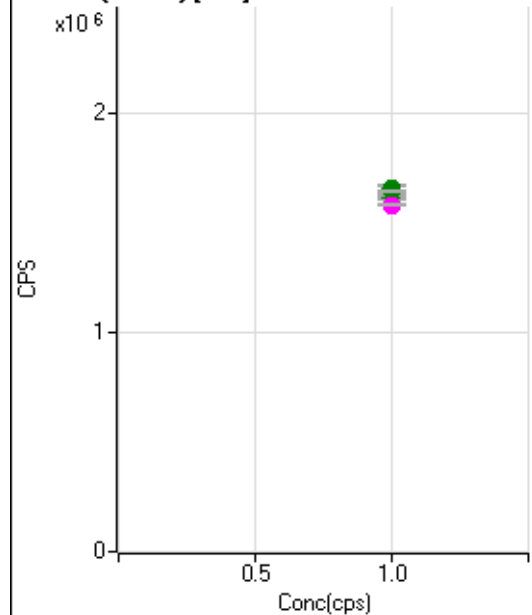
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6306723.51		A	0.3
2	☐	1.000					
3	☐	1.000		6036737.12		A	1.2
4	☐	1.000		5892491.13		A	6.4
5	☐	1.000		6098119.16		A	0.6
6	☐	1.000		6068748.67		A	1.3
7	☐	1.000		6190057.90		A	0.5
8	☐	1.000		6244783.81		A	1.0
9	☐	1.000		6095455.04		A	0.3

115 In(ISTD) [He]

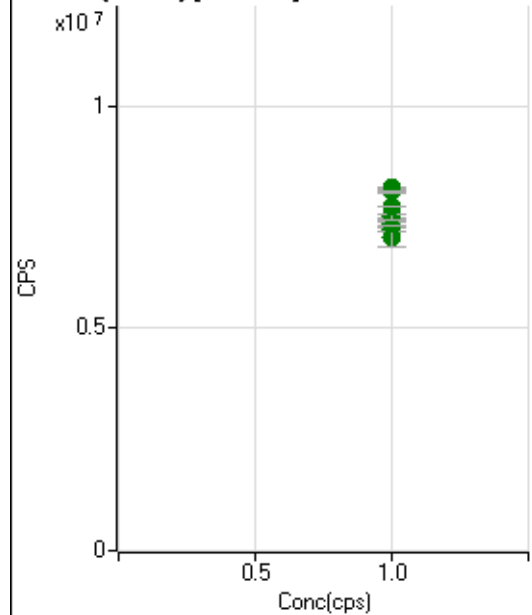
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		283724.76		P	3.5
2	☐	1.000					
3	☐	1.000		283325.68		P	0.2
4	☐	1.000		282702.04		P	0.9
5	☐	1.000		279359.08		P	0.5
6	☐	1.000		279569.63		P	0.6
7	☐	1.000		264482.22		P	0.2
8	☐	1.000		255392.91		P	0.1
9	☐	1.000		254124.13		P	0.5

159 Tb(ISTD) [NoGas]

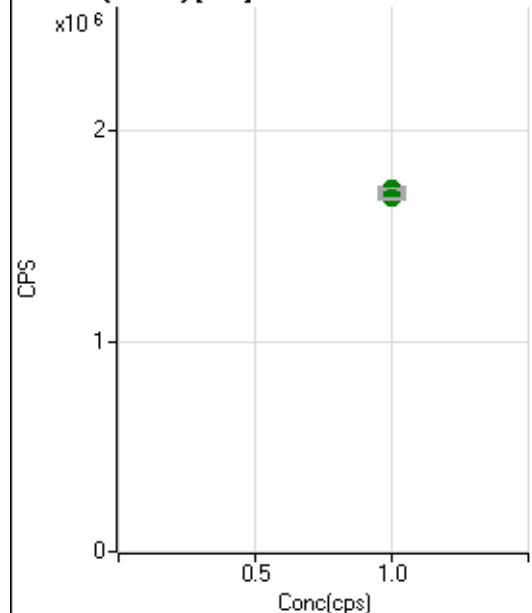
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7724071.07		A	0.8
2	☐	1.000					
3	☐	1.000		7443260.79		A	0.5
4	☐	1.000		7222245.03		A	6.0
5	☐	1.000		7595278.01		A	0.4
6	☐	1.000		7779664.67		A	0.2
7	☐	1.000		7982883.98		A	0.7
8	☐	1.000		8403574.04		A	0.1
9	☐	1.000		8250578.42		A	0.9

159 Tb(ISTD) [He]

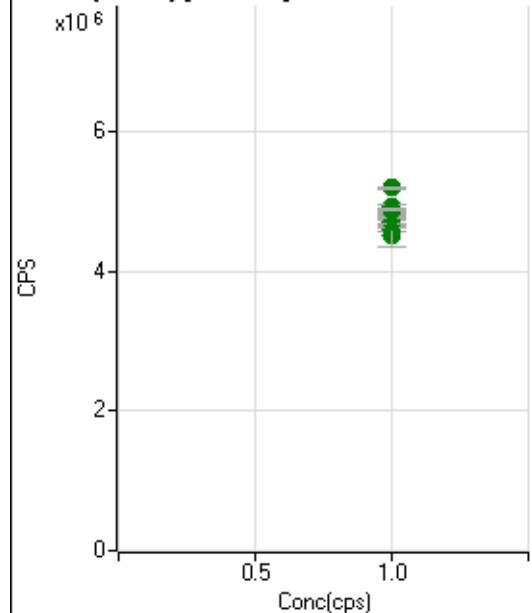
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1653936.61		A	2.8
2	☐	1.000					
3	☐	1.000		1612177.27		A	1.1
4	☐	1.000		1626091.44		A	0.4
5	☐	1.000		1619219.00		A	0.7
6	☐	1.000		1655353.07		A	0.9
7	☐	1.000		1615508.95		A	1.3
8	☐	1.000		1647594.42		A	0.5
9	☐	1.000		1582530.20		M	0.8

165 Ho(ISTD) [NoGas]

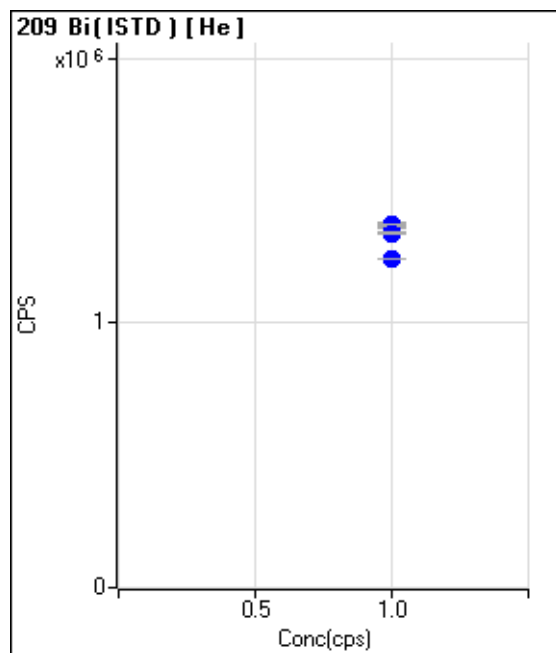
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7452149.04		A	0.8
2	☐	1.000					
3	☐	1.000		7209751.98		A	1.5
4	☐	1.000		7060101.63		A	6.1
5	☐	1.000		7347888.10		A	1.2
6	☐	1.000		7513616.83		A	1.6
7	☐	1.000		7744153.39		A	0.3
8	☐	1.000		8152390.72		A	0.5
9	☐	1.000		8071383.86		A	0.4

165 Ho(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1716519.44		A	2.0
2	☐	1.000					
3	☐	1.000		1702010.98		A	1.1
4	☐	1.000		1692812.04		A	0.2
5	☐	1.000		1691916.64		A	0.5
6	☐	1.000		1723155.94		A	0.7
7	☐	1.000		1696999.02		A	0.7
8	☐	1.000		1721371.35		A	0.8
9	☐	1.000		1677416.05		A	0.4

209 Bi(ISTD) [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4836367.81		A	0.6
2	☐	1.000					
3	☐	1.000		4595970.35		A	1.1
4	☐	1.000		4503939.65		A	6.8
5	☐	1.000		4709665.45		A	1.0
6	☐	1.000		4781005.52		A	0.7
7	☐	1.000		4933962.46		A	1.4
8	☐	1.000		5196727.46		A	0.8
9	☐	1.000		4883207.60		A	0.8



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1359634.75		P	3.1
2	☐	1.000					
3	☐	1.000		1364817.53		P	0.3
4	☐	1.000		1363969.47		P	0.2
5	☐	1.000		1361855.17		P	0.2
6	☐	1.000		1371899.87		P	0.4
7	☐	1.000		1339268.31		P	0.4
8	☐	1.000		1341326.11		P	0.7
9	☐	1.000		1243512.83		P	0.3

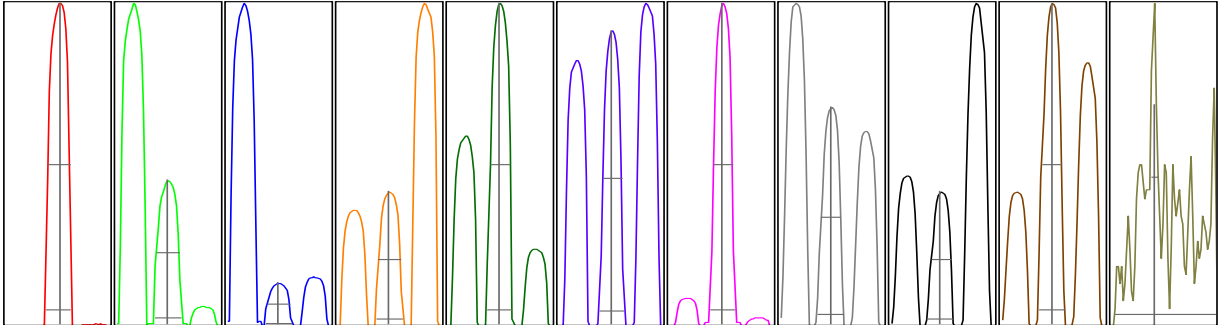
US EPA Tune Check Sample Report

Batch Folder D:\P8100317 MS.b
Report Comment
Instrument Name G8403A JP17141814

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	7276	0.65	5.00	
24	71952	1.06	5.00	
25	9372	0.75	5.00	
26	10570	0.70	5.00	
59	71667	1.10	5.00	
113	9504	1.14	5.00	
115	122757	0.88	5.00	
206	26038	0.88	5.00	
207	23389	0.72	5.00	
208	55952	0.93	5.00	
220	2	19.38		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	7315	7312	7202	7295	7256
24	72306	72342	70596	72227	72289
25	9445	9360	9260	9403	9393
26	10608	10567	10446	10638	10592
59	72276	71761	70295	71943	72063
113	9566	9535	9315	9524	9580
115	123107	123313	121132	123949	122282
206	26041	26100	25654	26140	26257
207	23516	23272	23148	23507	23501
208	56068	56203	55066	55998	56426
220	1	2	2	2	2

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	11776	9.10	8.9 - 9.1		0.740	0.900	
24	115082	24.00	23.9 - 24.1		0.787	0.900	
25	15132	25.00	24.9 - 25.1		0.780	0.900	
26	17397	26.00	25.9 - 26.1		0.782	0.900	
59	123775	59.00	58.9 - 59.1		0.734	0.900	
113	17732	113.05	112.9 - 113.1		0.728	0.900	
115	225644	115.05	114.9 - 115.1		0.732	0.900	
206	47335	206.00	205.9 - 206.1		0.770	0.900	
207	42208	206.95	206.9 - 207.1		0.744	0.900	
208	101571	208.00	207.9 - 208.1		0.770	0.900	
220	2	219.75	-		2.913		

X% = 5 Integration Time [sec] = 0.1 Acquisition Time [sec] = 268 Y Axis = Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Plasma Mode		HMI	Aerosol Dilution		HMI-8			

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.5	V	Deflect	13.4	V
Extract 2	-250.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-105	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination	5.0	V
He Flow	0.0	mL/min	OctP RF	180	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	9815	1.40	
89	2168	1.31	
205	13953	1.03	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	9582	9910	9809	9917	9859
89	2121	2196	2185	2167	2170
205	13708	14082	13996	14008	13968

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Plasma Mode		HMI	Aerosol Dilution		HMI-8			

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.5	V	Deflect	2.0	V
Extract 2	-250.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-105	V	Cell Exit	-60	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination	5.0	V
He Flow	5.0	mL/min	OctP RF	200	V			