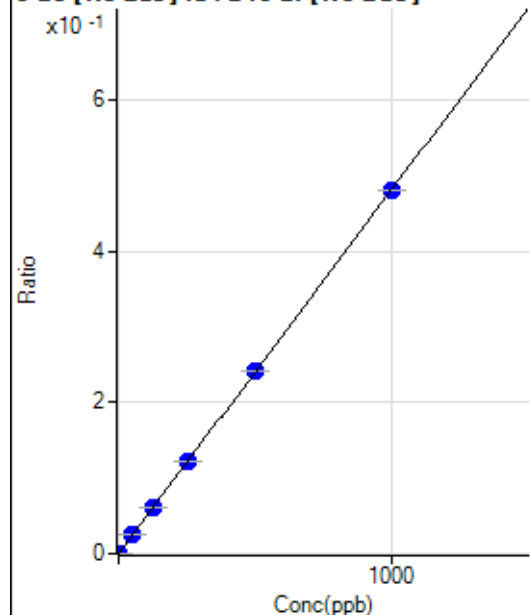


Batch Folder: D:\ICP-MS Data\P7120717 MS.b\
Analysis File: P7120717 MS.batch.bin
DA Date-Time: 2017-12-08 11:42:25
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2017-12-07 11:11:03
2			
3	006CALS.d	S02	2017-12-07 11:18:50
4	007CALS.d	S03	2017-12-07 11:22:40
5	008CALS.d	S04	2017-12-07 11:26:31
6	009CALS.d	S05	2017-12-07 11:30:20
7	010CALS.d	S06	2017-12-07 11:34:06
8	011CALS.d	S07	2017-12-07 11:37:50
9	012CALS.d	S08	2017-12-07 11:41:32

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	100.00	0.0000	P	20.2
2	☐	0.100					
3	☐	1.000	0.934	1722.37	0.0005	P	2.9
4	☐	50.000	51.106	87398.99	0.0246	P	1.3
5	☐	125.000	127.554	216338.22	0.0614	P	0.9
6	☐	250.000	254.201	430969.72	0.1223	P	0.7
7	☐	500.000	502.401	845452.57	0.2416	P	0.1
8	☐	1000.000	997.375	1648843.98	0.4796	P	0.2
9	☐			1483.45	0.0005	P	8.0

$$y = 4.8087\text{E-}004 * x + 2.7588\text{E-}005$$

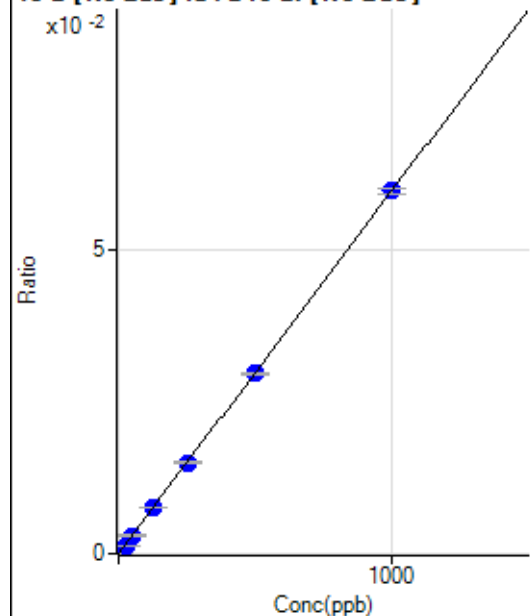
$$R = 1.0000$$

$$DL = 0.03482$$

$$BEC = 0.05737$$

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	47.22	0.0000	P	10.4
2	☐	2.500					
3	☐	25.000	21.289	4623.09	0.0013	P	0.9
4	☐	50.000	50.145	10643.06	0.0030	P	2.0
5	☐	125.000	126.601	26593.67	0.0075	P	2.0
6	☐	250.000	250.712	52611.89	0.0149	P	2.4
7	☐	500.000	497.037	103496.96	0.0296	P	1.6
8	☐	1000.000	1001.189	204768.48	0.0596	P	1.6
9	☐			4200.75	0.0013	P	10.6

$$y = 5.9484\text{E-}005 * x + 1.3027\text{E-}005$$

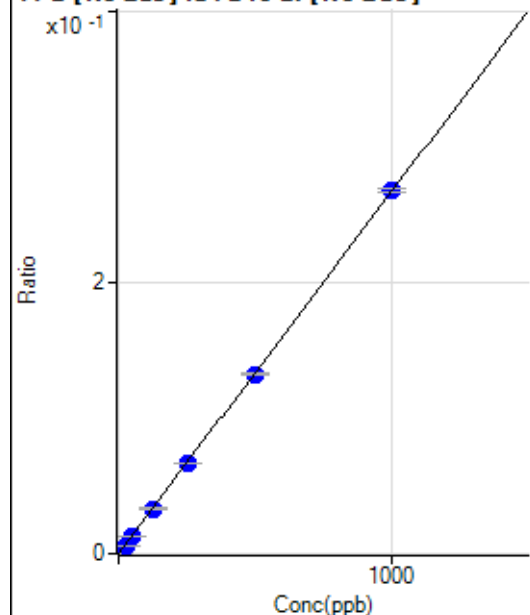
$$R = 1.0000$$

$$DL = 0.06858$$

$$BEC = 0.219$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	277.79	0.0001	P	9.3
2	☐	2.500					
3	☐	25.000	21.331	20837.25	0.0058	P	1.9
4	☐	50.000	48.351	46087.64	0.0130	P	0.8
5	☐	125.000	123.508	116400.87	0.0330	P	2.5
6	☐	250.000	249.509	234849.73	0.0666	P	2.1
7	☐	500.000	495.694	462902.44	0.1323	P	0.9
8	☐	1000.000	1002.636	919599.93	0.2675	P	1.1
9	☐			19104.48	0.0059	P	10.8

$$y = 2.6673\text{E-}004 * x + 7.6602\text{E-}005$$

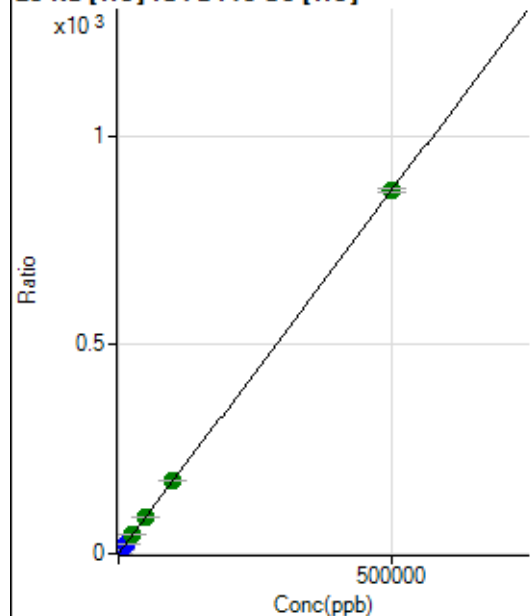
$$R = 1.0000$$

$$DL = 0.0804$$

$$BEC = 0.2872$$

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	7627.21	0.0481	P	3.6
2	☐	50.000					
3	☐	500.000	456.874	132701.53	0.8415	P	0.2
4	☐	5000.000	5059.329	1390535.38	8.8348	P	0.3
5	☐	12500.000	12661.550	3523842.61	22.0378	P	0.9
6	☐	25000.000	25351.207	6927945.73	44.0764	A	0.6
7	☐	50000.000	50949.245	13731027.39	88.5335	A	1.2
8	☐	100000.00	100776.18	27013567.27	175.0698	A	0.8
9	☐	500000.00	499727.68	132393716.8	867.9437	A	0.9

$$y = 0.0017 * x + 0.0481$$

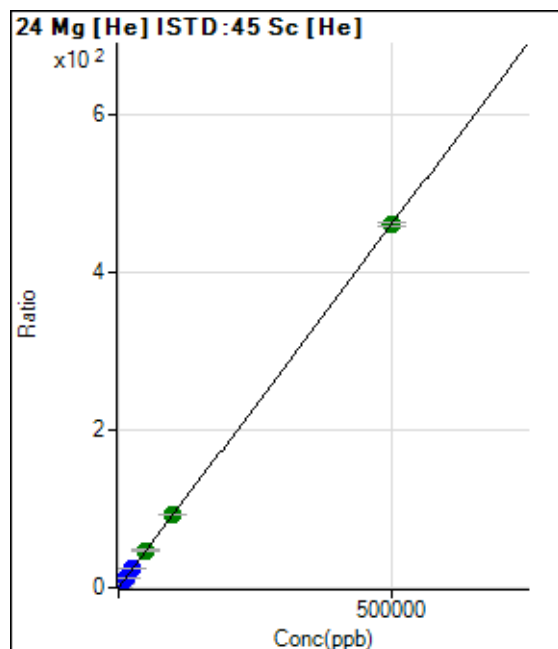
$$R = 1.0000$$

$$DL = 2.965$$

$$BEC = 27.67$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3311.61	0.0209	P	5.3
2	☐	50.000					
3	☐	500.000	464.112	70669.66	0.4482	P	1.2
4	☐	5000.000	5110.680	743830.01	4.7261	P	1.0
5	☐	12500.000	12667.329	1868096.66	11.6832	P	1.2
6	☐	25000.000	25721.449	3725427.13	23.7016	P	0.6
7	☐	50000.000	51534.895	7361649.64	47.4669	A	1.6
8	☐	100000.00	101366.58	14403296.50	93.3449	A	0.7
9	☐	500000.00	499531.86	70154619.63	459.9194	A	1.0

$$y = 9.2066\text{E-}004 * x + 0.0209$$

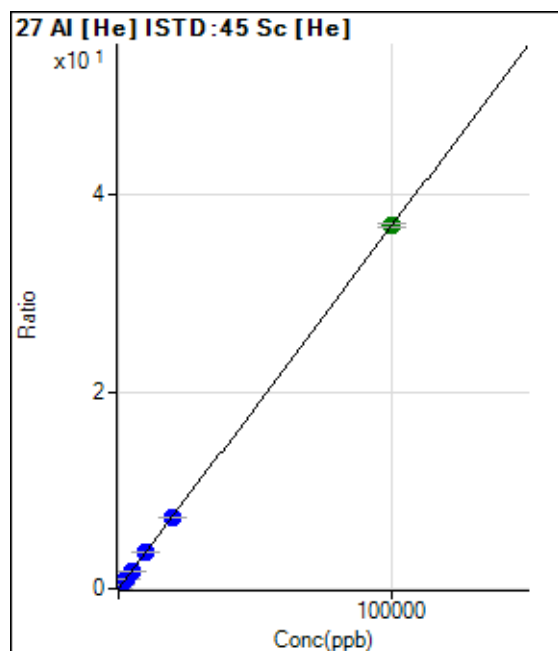
$$R = 1.0000$$

$$DL = 3.595$$

$$BEC = 22.67$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	41.67	0.0003	P	40.1
2	☐	2.000					
3	☐	20.000	19.488	1172.32	0.0074	P	3.4
4	☐	1000.000	1021.823	59223.39	0.3763	P	1.2
5	☐	2500.000	2468.580	145282.23	0.9087	P	2.1
6	☐	5000.000	4999.307	289208.22	1.8400	P	0.2
7	☐	10000.000	9964.393	568741.95	3.6671	P	1.1
8	☐	20000.000	19722.032	1119859.44	7.2578	P	1.2
9	☐	100000.00	100059.75	5616582.37	36.8212	A	1.0

$$y = 3.6799\text{E-}004 * x + 2.6273\text{E-}004$$

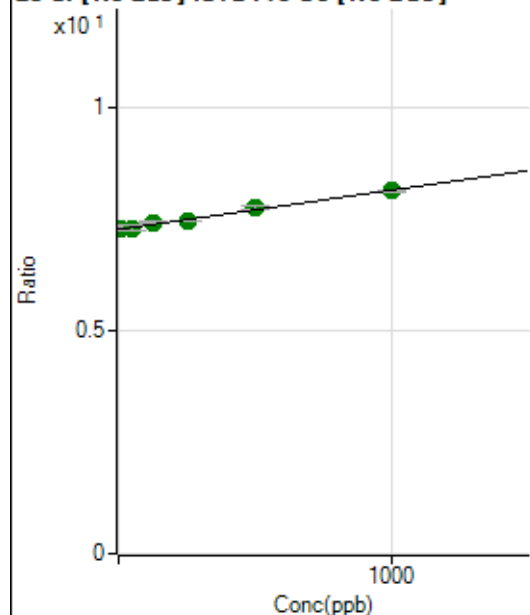
$$R = 1.0000$$

$$DL = 0.8588$$

$$BEC = 0.714$$

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	26808027.68	7.2621	A	0.7
2	☐	1.000					
3	☐	10.000	30.819	26760755.46	7.2893	A	0.3
4	☐	50.000	31.134	26340988.96	7.2896	A	1.7
5	☐	125.000	185.005	26499228.02	7.4251	A	0.4
6	☐	250.000	215.816	26937337.41	7.4522	A	0.2
7	☐	500.000	547.804	27844506.18	7.7446	A	0.8
8	☐	1000.000	977.878	29060741.97	8.1234	A	0.6
9	☐			26463766.39	7.7889	A	0.9

$$y = 8.8077\text{E-}004 * x + 7.2621$$

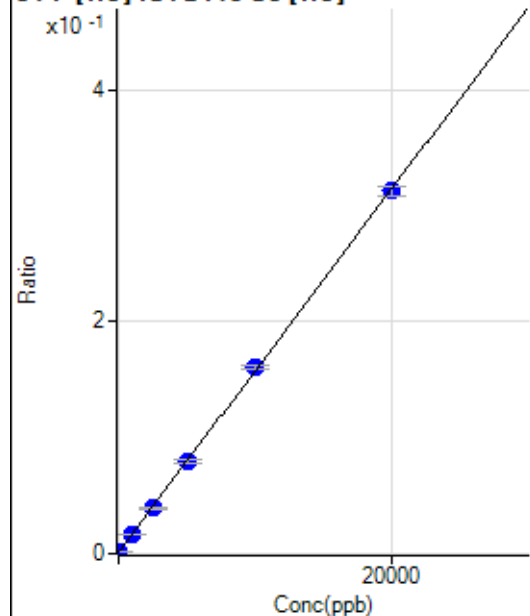
$$R = 0.9950$$

$$DL = 183.8$$

$$BEC = 8245$$

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	0.313	183.34	0.0012	P	11.5
2	☐	0.000					
3	☐	0.000	-0.313	180.56	0.0011	P	39.3
4	☐	1000.000	996.027	2636.46	0.0168	P	4.6
5	☐	2500.000	2442.757	6301.62	0.0394	P	4.1
6	☐	5000.000	4992.741	12472.34	0.0794	P	3.0
7	☐	10000.000	10206.944	24974.35	0.1610	P	1.7
8	☐	20000.000	19905.697	48284.47	0.3130	P	2.5
9	☐			108.34	0.0007	P	23.7

$$y = 1.5664\text{E-}005 * x + 0.0011$$

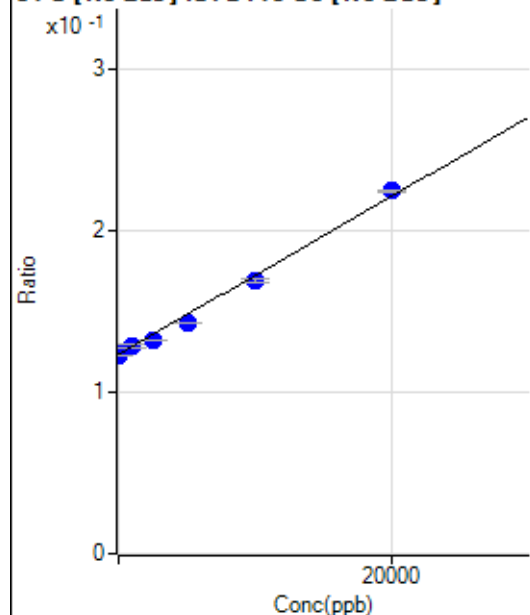
$$R = 0.9999$$

$$DL = 55.89$$

$$BEC = 73.41$$

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	126.640	457847.77	0.1240	P	0.7
2	☐	0.000					
3	☐	0.000	-126.640	450786.27	0.1228	P	0.5
4	☐	1000.000	1024.672	464064.22	0.1284	P	1.2
5	☐	2500.000	1777.232	471441.86	0.1321	P	0.6
6	☐	5000.000	3938.931	515695.61	0.1427	P	0.3
7	☐	10000.000	9377.411	608524.85	0.1693	P	1.2
8	☐	20000.000	20665.674	802963.77	0.2245	P	0.4
9	☐			406904.82	0.1198	P	0.4

$$y = 4.8896E-006 * x + 0.1234$$

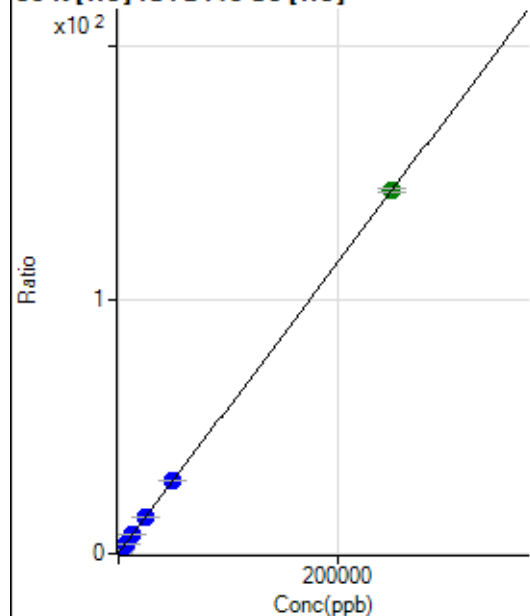
$$R = 0.9973$$

$$DL = 445.2$$

$$BEC = 2.524E+04$$

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	20790.31	0.1310	P	0.3
2	☐	50.000					
3	☐	500.000	451.100	61335.95	0.3890	P	0.8
4	☐	2500.000	2494.404	245127.07	1.5574	P	0.7
5	☐	6250.000	6160.622	584295.78	3.6540	P	0.4
6	☐	12500.000	12475.096	1141915.04	7.2649	P	0.4
7	☐	25000.000	25112.887	2247626.98	14.4919	P	1.1
8	☐	50000.000	49977.577	4430107.09	28.7108	P	0.9
9	☐	250000.00	249996.82	21826941.63	143.0925	A	0.9

$$y = 5.7185E-004 * x + 0.1310$$

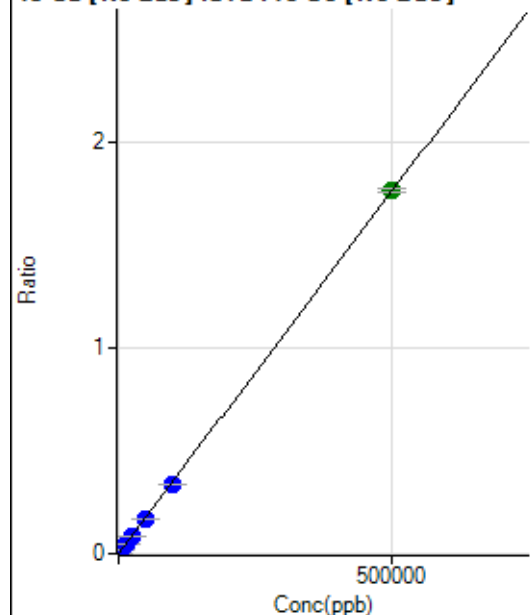
$$R = 1.0000$$

$$DL = 1.942$$

$$BEC = 229.1$$

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	113.89	0.0000	P	30.0
2	☐	50.000					
3	☐	500.000	421.179	5559.62	0.0015	P	8.3
4	☐	5000.000	4858.795	61969.44	0.0171	P	1.4
5	☐	12500.000	12127.257	152587.66	0.0428	P	0.8
6	☐	25000.000	23971.137	305377.77	0.0845	P	0.2
7	☐	50000.000	47771.765	605217.86	0.1683	P	0.8
8	☐	100000.00	95625.739	1205337.81	0.3369	P	0.0
9	☐	500000.00	501159.92	5999008.86	1.7657	A	1.0

$$y = 3.5231\text{E-}006 * x + 3.0820\text{E-}005$$

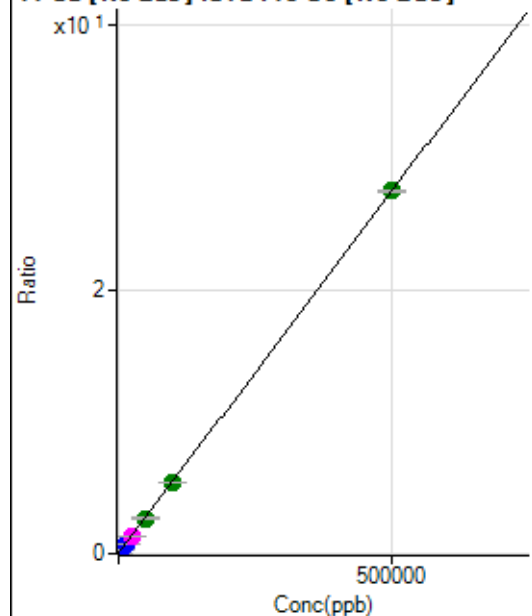
$$R = 1.0000$$

$$DL = 7.885$$

$$BEC = 8.748$$

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	95068.35	0.0258	P	1.9
2	☐	50.000					
3	☐	500.000	434.462	181947.56	0.0496	P	0.3
4	☐	5000.000	4943.296	1071908.87	0.2966	P	1.7
5	☐	12500.000	12527.209	2541738.62	0.7122	P	1.1
6	☐	25000.000	24427.650	4931810.87	1.3644	M	0.5
7	☐	50000.000	48473.657	9642792.49	2.6821	A	0.9
8	☐	100000.00	96756.081	19059950.08	5.3279	A	0.4
9	☐	500000.00	500829.98	93335877.78	27.4707	A	0.8

$$y = 5.4799\text{E-}005 * x + 0.0258$$

$$R = 1.0000$$

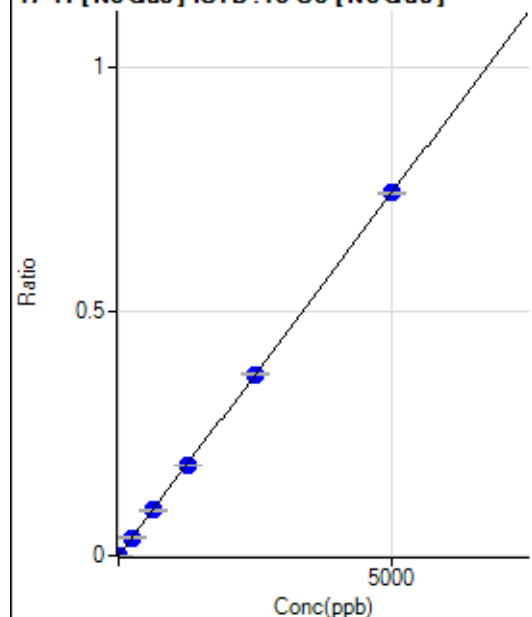
$$DL = 27.26$$

$$BEC = 469.9$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	105.56	0.0000	P	27.3
2	☐	0.500					
3	☐	5.000	4.556	2583.67	0.0007	P	5.3
4	☐	250.000	248.921	133381.52	0.0369	P	2.4
5	☐	625.000	626.816	331568.77	0.0929	P	2.2
6	☐	1250.000	1244.898	666896.77	0.1845	P	0.7
7	☐	2500.000	2496.407	1330086.81	0.3700	P	0.9
8	☐	5000.000	5002.900	2652165.53	0.7414	P	0.6
9	☐			758.39	0.0002	P	10.7

$$y = 1.4818\text{E-}004 * x + 2.8569\text{E-}005$$

$$R = 1.0000$$

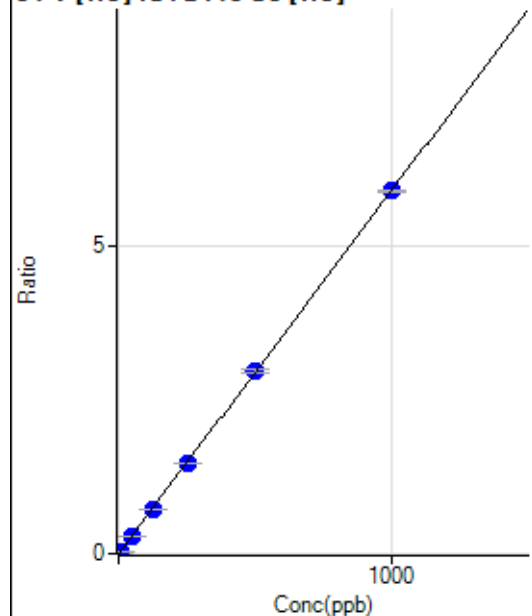
$$DL = 0.1578$$

$$BEC = 0.1928$$

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	5.56	0.0000	P	91.4
2	☐	0.500					
3	☐	5.000	4.381	4081.74	0.0259	P	1.8
4	☐	50.000	49.209	45704.09	0.2904	P	1.5
5	☐	125.000	122.084	115188.39	0.7204	P	0.8
6	☐	250.000	249.169	231093.49	1.4702	P	0.5
7	☐	500.000	502.309	459659.19	2.9638	P	1.6
8	☐	1000.000	999.461	909957.23	5.8972	P	0.6
9	☐			161.11	0.0011	P	23.1

$$y = 0.0059 * x + 3.4987\text{E-}005$$

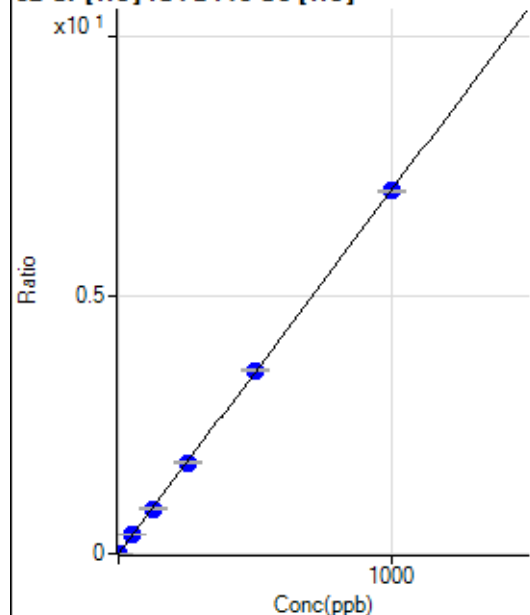
$$R = 1.0000$$

$$DL = 0.01626$$

$$BEC = 0.00593$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	153.34	0.0010	P	16.5
2	☐	0.200					
3	☐	2.000	1.953	2318.00	0.0147	P	1.9
4	☐	50.000	50.378	55908.98	0.3552	P	0.4
5	☐	125.000	123.922	139481.78	0.8724	P	1.8
6	☐	250.000	251.090	277678.49	1.7666	P	0.5
7	☐	500.000	503.210	548958.29	3.5395	P	1.1
8	☐	1000.000	998.239	1083276.46	7.0205	P	0.7
9	☐			9352.00	0.0613	P	1.6

$$y = 0.0070 * x + 9.6577E-004$$

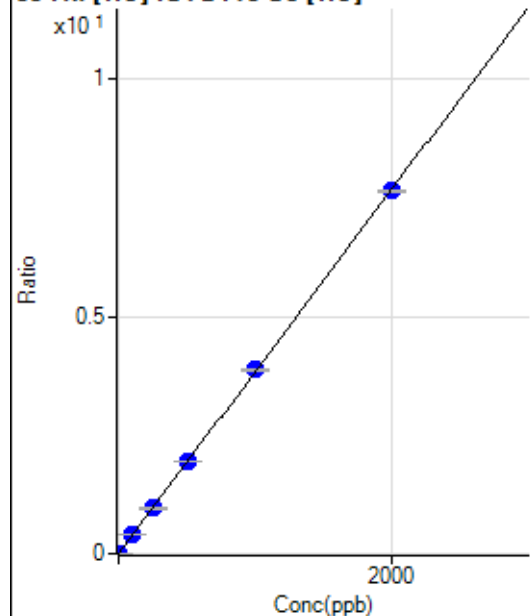
$$R = 1.0000$$

$$DL = 0.06806$$

$$BEC = 0.1373$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.00	0.0002	P	29.9
2	☐	0.100					
3	☐	1.000	0.931	593.35	0.0038	P	12.0
4	☐	100.000	100.857	60983.55	0.3875	P	0.6
5	☐	250.000	249.589	153265.89	0.9586	P	1.6
6	☐	500.000	504.140	304305.97	1.9360	P	0.6
7	☐	1000.000	1011.729	602543.55	3.8851	P	1.4
8	☐	2000.000	1993.109	1180937.73	7.6534	P	0.7
9	☐			2834.76	0.0186	P	6.1

$$y = 0.0038 * x + 1.8919E-004$$

$$R = 1.0000$$

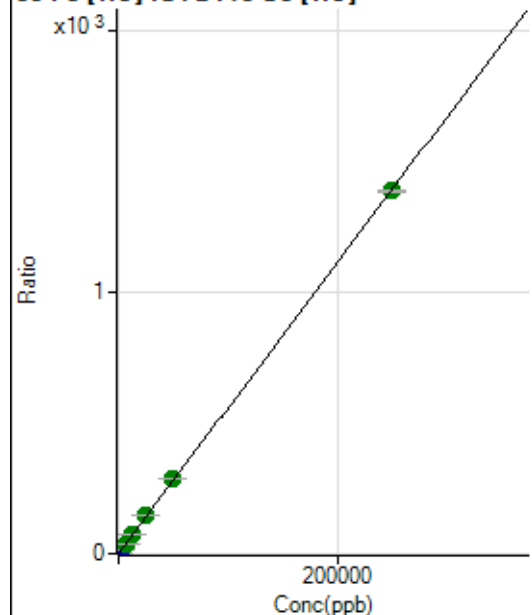
$$DL = 0.04415$$

$$BEC = 0.04927$$

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	1250.09	0.0079	P	5.3
2	☐	5.000					
3	☐	50.000	48.524	43836.13	0.2780	P	1.0
4	☐	2500.000	2602.193	2281095.07	14.4932	P	0.7
5	☐	6250.000	6426.093	5720837.63	35.7794	A	1.5
6	☐	12500.000	12972.403	11351469.47	72.2201	A	0.9
7	☐	25000.000	26045.347	22487427.35	144.9920	A	1.2
8	☐	50000.000	51416.168	44163925.99	286.2212	A	0.9
9	☐	250000.00	249583.18	211926330.6	1,389.338	A	0.9

$$y = 0.0056 * x + 0.0079$$

$$R = 1.0000$$

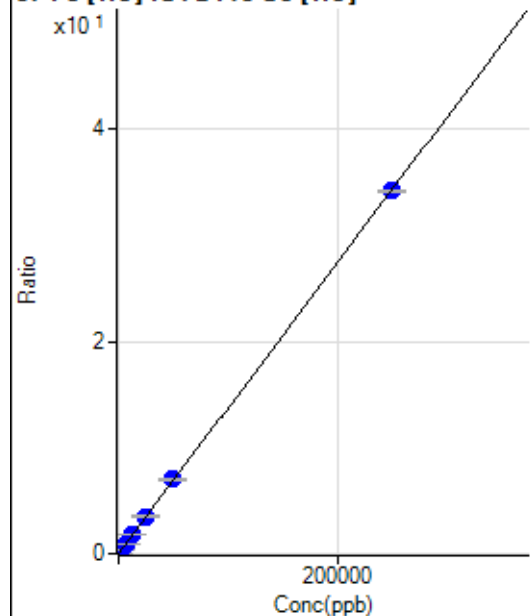
$$DL = 0.2257$$

$$BEC = 1.415$$

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	51.86	0.0003	P	12.8
2	☐	5.000					
3	☐	50.000	50.790	1148.23	0.0073	P	8.6
4	☐	2500.000	2603.647	56155.69	0.3568	P	0.4
5	☐	6250.000	6388.979	139911.75	0.8750	P	1.4
6	☐	12500.000	12866.510	276928.61	1.7618	P	0.4
7	☐	25000.000	25779.472	547417.22	3.5297	P	1.7
8	☐	50000.000	51051.456	1078516.84	6.9896	P	0.6
9	☐	250000.00	249688.92	5214456.25	34.1844	P	0.7

$$y = 1.3691E-004 * x + 3.2688E-004$$

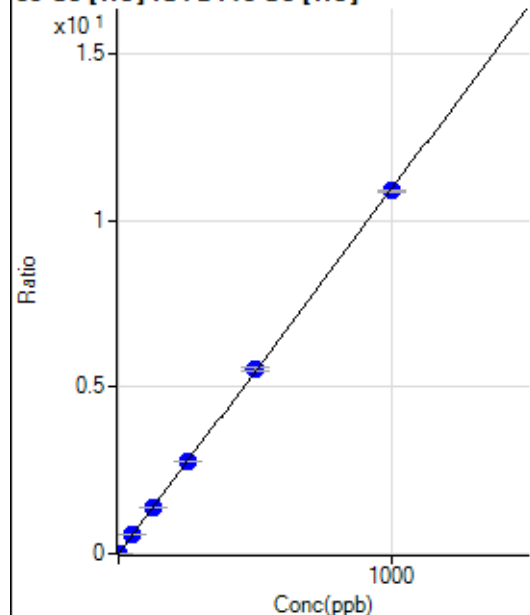
$$R = 1.0000$$

$$DL = 0.9136$$

$$BEC = 2.388$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	56.67	0.0004	P	21.3
2	☐	0.100					
3	☐	1.000	0.971	1729.02	0.0110	P	6.8
4	☐	50.000	51.477	88609.46	0.5630	P	1.1
5	☐	125.000	125.860	220018.04	1.3760	P	1.2
6	☐	250.000	254.794	437790.32	2.7853	P	0.5
7	☐	500.000	506.988	859471.66	5.5417	P	1.5
8	☐	1000.000	995.126	1678357.30	10.8771	P	0.7
9	☐			1906.82	0.0125	P	4.2

$$y = 0.0109 * x + 3.5713E-004$$

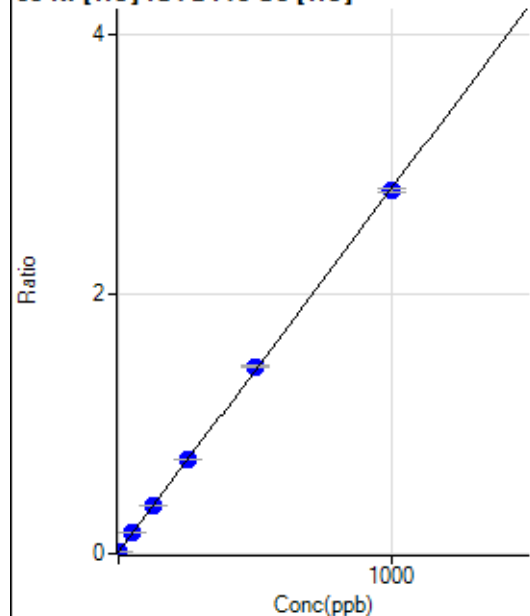
$$R = 1.0000$$

$$DL = 0.02086$$

$$BEC = 0.03267$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2036.84	0.0128	P	2.9
2	☐	0.100					
3	☐	1.000	0.920	2430.24	0.0154	P	4.4
4	☐	50.000	51.921	24915.80	0.1583	P	0.9
5	☐	125.000	127.263	59067.40	0.3694	P	0.9
6	☐	250.000	256.081	114794.91	0.7303	P	0.6
7	☐	500.000	509.141	223239.15	1.4393	P	0.8
8	☐	1000.000	993.531	431496.37	2.7965	P	0.9
9	☐			3969.49	0.0260	P	1.6

$$y = 0.0028 * x + 0.0128$$

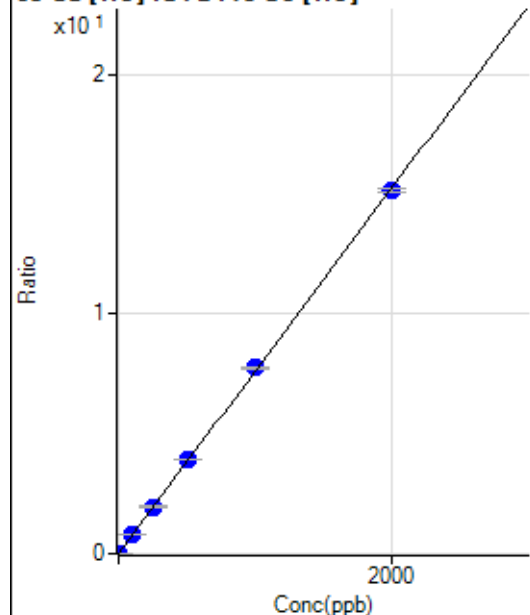
$$R = 0.9999$$

$$DL = 0.3994$$

$$BEC = 4.581$$

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	451.13	0.0028	P	10.2
2	☐	0.200					
3	☐	2.000	1.836	2653.62	0.0168	P	2.5
4	☐	100.000	103.752	124845.53	0.7932	P	0.7
5	☐	250.000	256.099	312387.59	1.9538	P	1.9
6	☐	500.000	512.333	613919.10	3.9058	P	0.5
7	☐	1000.000	1018.162	1203421.83	7.7592	P	1.1
8	☐	2000.000	1986.886	2335936.20	15.1390	P	1.0
9	☐			3541.60	0.0232	P	2.5

$$y = 0.0076 * x + 0.0028$$

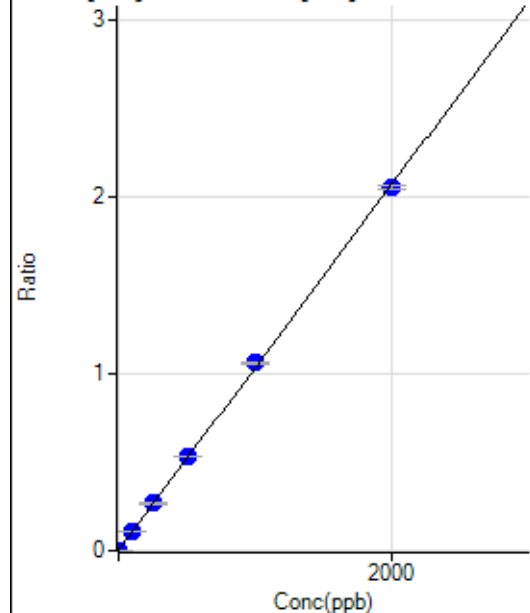
$$R = 0.9999$$

$$DL = 0.1138$$

$$BEC = 0.3731$$

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	320.01	0.0020	P	17.5
2	☐	0.200					
3	☐	2.000	1.979	640.03	0.0041	P	4.7
4	☐	100.000	104.812	17332.66	0.1101	P	1.6
5	☐	250.000	258.487	42948.72	0.2686	P	2.2
6	☐	500.000	514.416	83713.69	0.5326	P	0.7
7	☐	1000.000	1024.058	164134.46	1.0583	P	0.8
8	☐	2000.000	1983.066	315912.34	2.0474	P	1.0
9	☐			1054.50	0.0069	P	7.2

$$y = 0.0010 * x + 0.0020$$

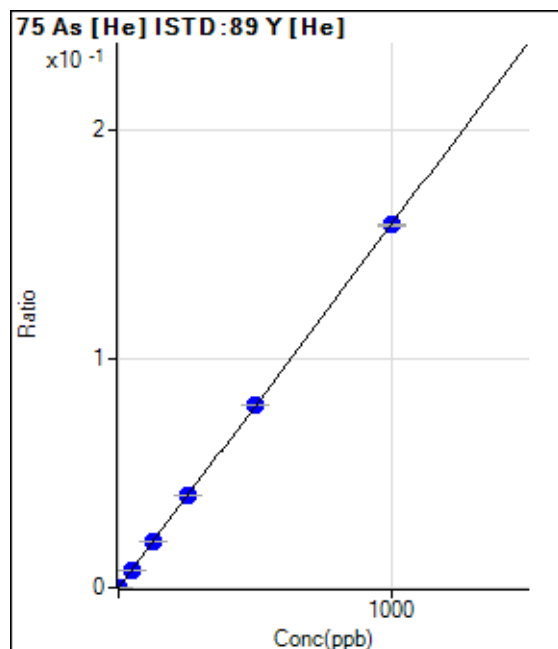
$$R = 0.9999$$

$$DL = 1.028$$

$$BEC = 1.956$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.62	0.0000	P	173.
2	☐	0.100					
3	☐	1.000	1.057	107.41	0.0002	P	15.4
4	☐	50.000	50.120	5031.16	0.0080	P	0.2
5	☐	125.000	125.141	12772.97	0.0199	P	0.1
6	☐	250.000	252.022	25316.54	0.0401	P	0.4
7	☐	500.000	502.355	50289.61	0.0799	P	0.2
8	☐	1000.000	998.293	99814.58	0.1587	P	0.7
9	☐			49.38	0.0001	P	15.3

$$y = 1.5895\text{E-}004 * x + 9.6483\text{E-}007$$

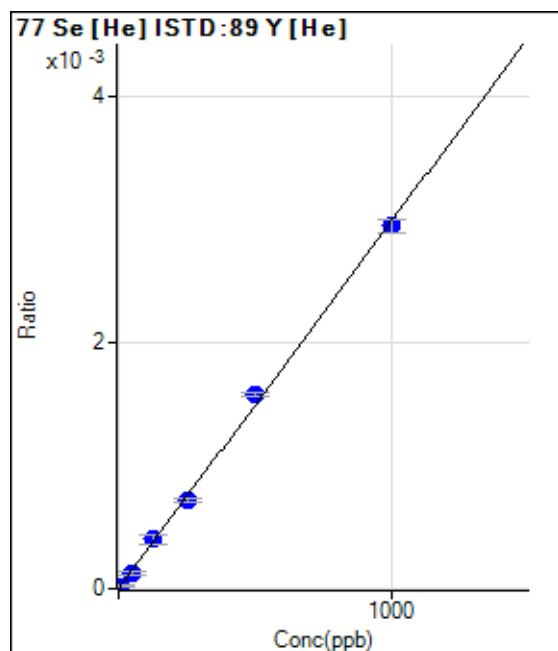
$$R = 1.0000$$

$$DL = 0.03154$$

$$BEC = 0.00607$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	7.012	13.33	0.0000	P	75.0
4	☐	50.000	43.530	82.22	0.0001	P	20.2
5	☐	125.000	134.254	257.79	0.0004	P	19.8
6	☐	250.000	239.303	452.24	0.0007	P	4.9
7	☐	500.000	529.172	996.72	0.0016	P	2.5
8	☐	1000.000	987.245	1856.82	0.0030	P	3.9
9	☐			1.11	0.0000	P	173.

$$y = 2.9905\text{E-}006 * x + 0.0000\text{E+}000$$

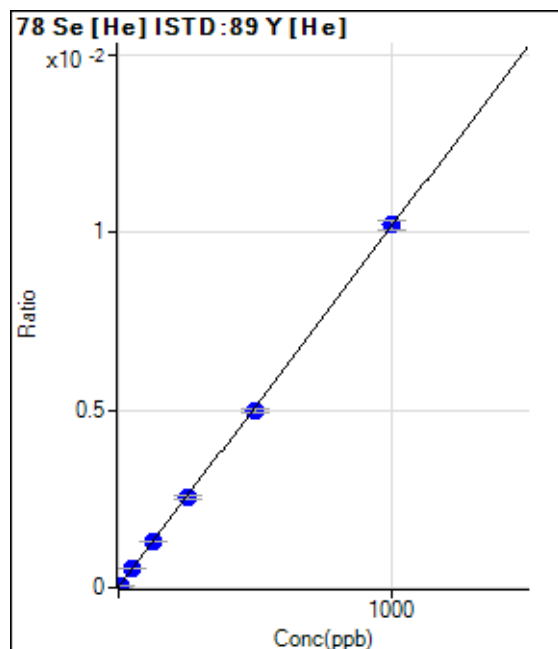
$$R = 0.9992$$

$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.11	0.0000	P	15.8
2	☐	0.500					
3	☐	5.000	4.970	43.21	0.0001	P	9.8
4	☐	50.000	51.015	338.28	0.0005	P	7.0
5	☐	125.000	127.006	839.54	0.0013	P	2.7
6	☐	250.000	248.309	1605.04	0.0025	P	3.8
7	☐	500.000	490.902	3151.60	0.0050	P	2.3
8	☐	1000.000	1004.671	6430.49	0.0102	P	2.6
9	☐			19.75	0.0000	P	28.4

$$y = 1.0159\text{E-}005 * x + 1.7466\text{E-}005$$

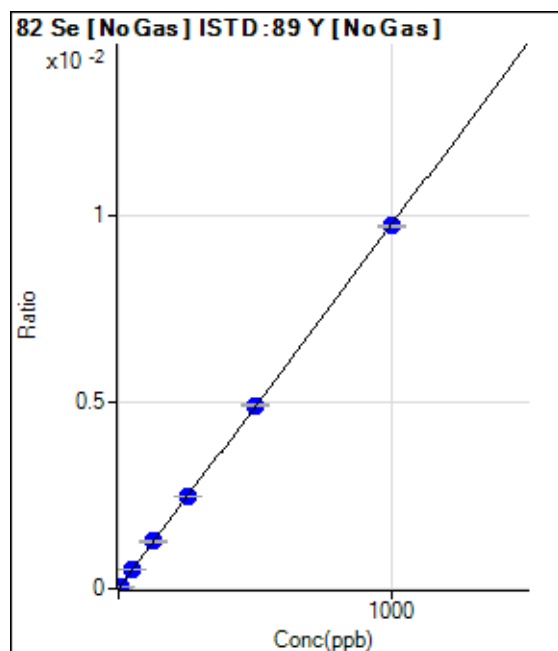
$$R = 0.9999$$

$$DL = 0.8164$$

$$BEC = 1.719$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.73	0.0000	P	79.9
2	☐	0.500					
3	☐	5.000	4.970	269.84	0.0001	P	9.7
4	☐	50.000	51.662	2491.24	0.0005	P	1.8
5	☐	125.000	129.537	6168.41	0.0013	P	1.2
6	☐	250.000	253.674	12171.30	0.0025	P	0.8
7	☐	500.000	503.751	24199.04	0.0049	P	0.7
8	☐	1000.000	996.556	47683.78	0.0097	P	0.3
9	☐			58.57	0.0000	P	33.7

$$y = 9.7596\text{E-}006 * x + 6.1604\text{E-}006$$

$$R = 1.0000$$

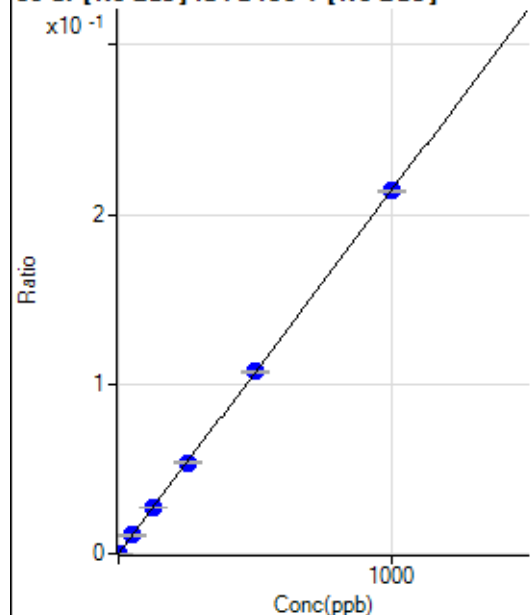
$$DL = 1.514$$

$$BEC = 0.6312$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	222.23	0.0000	P	24.9
2	☐	0.100					
3	☐	1.000	0.862	1130.65	0.0002	P	7.2
4	☐	50.000	50.167	52622.41	0.0108	P	0.3
5	☐	125.000	125.759	130883.07	0.0270	P	2.0
6	☐	250.000	250.953	263574.15	0.0537	P	0.9
7	☐	500.000	500.489	526730.67	0.1071	P	0.7
8	☐	1000.000	999.414	1048093.42	0.2139	P	0.4
9	☐			33629.00	0.0073	P	0.8

$$y = 2.1400\text{E-}004 * x + 4.4623\text{E-}005$$

$$R = 1.0000$$

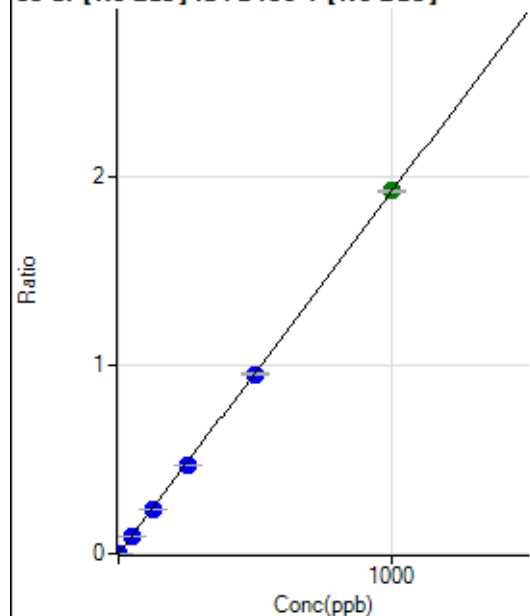
$$DL = 0.1558$$

$$BEC = 0.2085$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	205.57	0.0000	P	21.8
2	☐	0.100					
3	☐	1.000	0.869	8425.00	0.0017	P	1.4
4	☐	50.000	48.798	456688.10	0.0936	P	0.9
5	☐	125.000	123.755	1151738.71	0.2372	P	1.2
6	☐	250.000	246.577	2317477.18	0.4726	P	0.3
7	☐	500.000	495.675	4669809.13	0.9499	P	0.7
8	☐	1000.000	1003.234	9419998.21	1.9226	A	0.4
9	☐			294320.60	0.0635	P	0.1

$$y = 0.0019 * x + 4.1255\text{E-}005$$

$$R = 1.0000$$

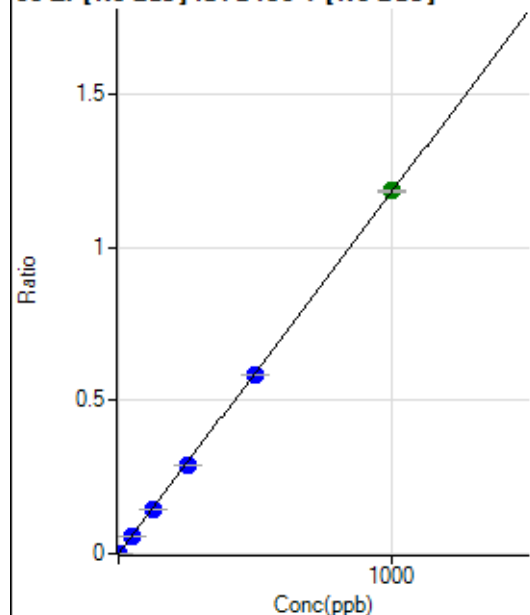
$$DL = 0.0141$$

$$BEC = 0.02153$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	269.46	0.0001	P	15.4
2	☐	0.100					
3	☐	1.000	0.830	5103.91	0.0010	P	7.7
4	☐	50.000	48.663	280685.10	0.0575	P	0.6
5	☐	125.000	123.709	709354.65	0.1461	P	1.2
6	☐	250.000	246.681	1428313.14	0.2913	P	0.3
7	☐	500.000	494.965	2872631.73	0.5844	P	0.9
8	☐	1000.000	1003.576	5804925.69	1.1848	A	0.3
9	☐			1000.08	0.0002	P	10.2

$$y = 0.0012 * x + 5.4119E-005$$

$$R = 1.0000$$

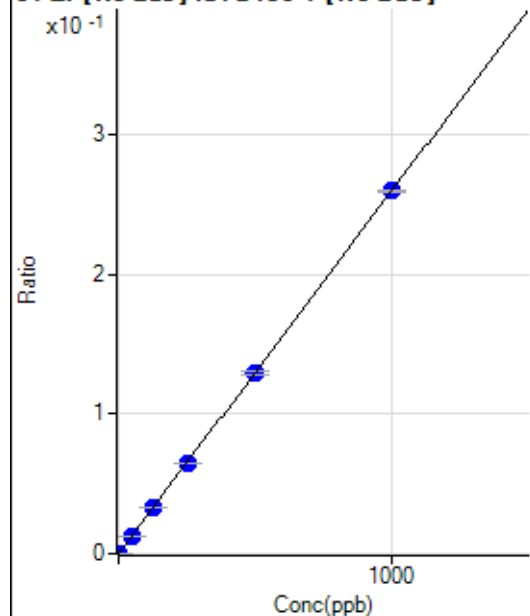
$$DL = 0.02113$$

$$BEC = 0.04584$$

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	61.12	0.0000	P	8.2
2	☐	0.100					
3	☐	1.000	0.796	1080.65	0.0002	P	12.1
4	☐	50.000	48.988	62138.15	0.0127	P	0.3
5	☐	125.000	126.060	158958.75	0.0327	P	1.0
6	☐	250.000	248.943	316975.16	0.0646	P	0.4
7	☐	500.000	499.009	636848.93	0.1296	P	1.6
8	☐	1000.000	1000.678	1272838.18	0.2598	P	0.3
9	☐			280.57	0.0001	P	12.4

$$y = 2.5960E-004 * x + 1.2276E-005$$

$$R = 1.0000$$

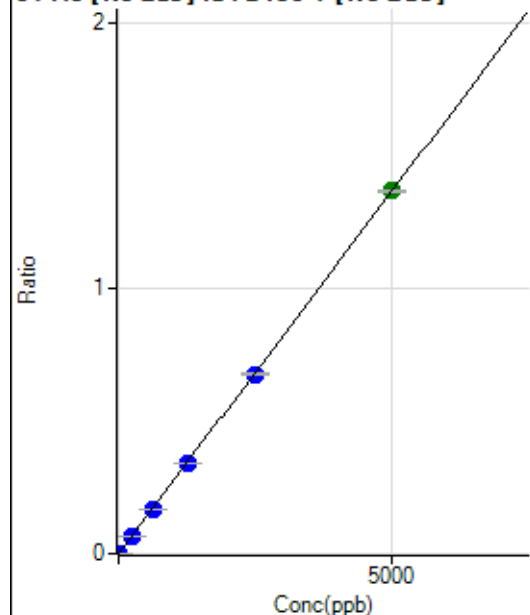
$$DL = 0.01166$$

$$BEC = 0.04729$$

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	125.01	0.0000	P	24.3
2	☐	0.500					
3	☐	5.000	4.435	6084.88	0.0012	P	6.8
4	☐	250.000	245.699	326698.08	0.0669	P	0.4
5	☐	625.000	622.982	823793.44	0.1697	P	0.2
6	☐	1250.000	1236.792	1651584.02	0.3368	P	0.1
7	☐	2500.000	2481.895	3322174.01	0.6758	P	1.1
8	☐	5000.000	5012.822	6687727.67	1.3650	A	0.5
9	☐			2994.91	0.0006	P	14.2

$$y = 2.7229\text{E-}004 * x + 2.5114\text{E-}005$$

$$R = 1.0000$$

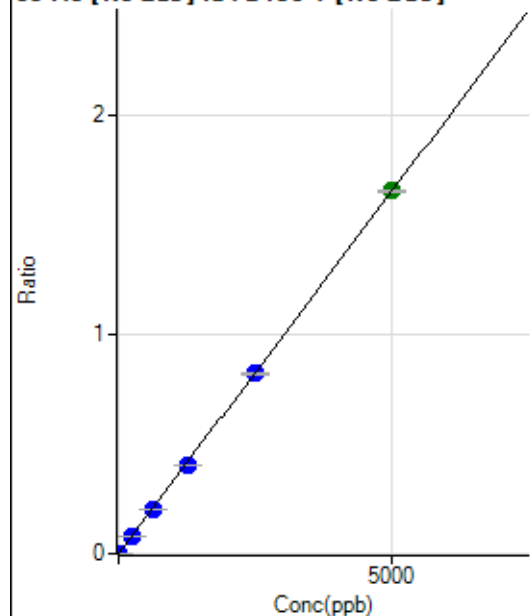
$$DL = 0.06729$$

$$BEC = 0.09223$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0000	P	57.5
2	☐	0.500					
3	☐	5.000	4.452	7277.12	0.0015	P	2.1
4	☐	250.000	244.671	394311.61	0.0808	P	0.4
5	☐	625.000	619.229	992647.96	0.2044	P	0.4
6	☐	1250.000	1231.616	1993921.11	0.4066	P	0.2
7	☐	2500.000	2488.524	4038627.69	0.8215	P	0.7
8	☐	5000.000	5011.322	8105889.50	1.6544	A	0.2
9	☐			4500.91	0.0010	P	1.3

$$y = 3.3013\text{E-}004 * x + 4.4693\text{E-}006$$

$$R = 1.0000$$

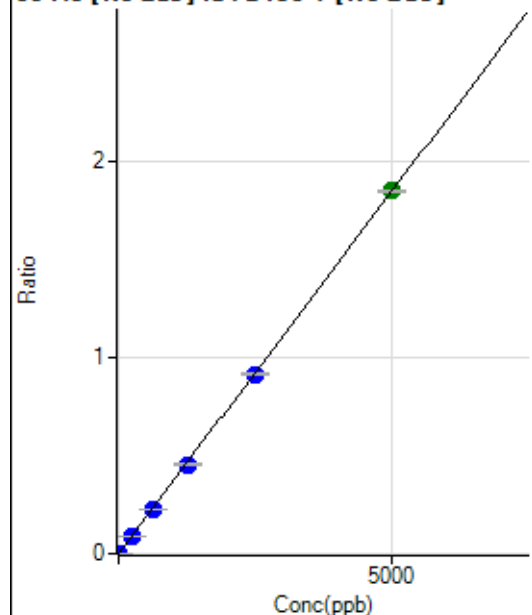
$$DL = 0.02334$$

$$BEC = 0.01354$$

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	38.89	0.0000	P	53.6
2	☐	0.500					
3	☐	5.000	4.409	8066.47	0.0016	P	3.5
4	☐	250.000	244.691	440667.89	0.0903	P	0.4
5	☐	625.000	619.010	1108841.13	0.2284	P	0.6
6	☐	1250.000	1235.146	2234487.90	0.4557	P	0.2
7	☐	2500.000	2482.283	4501655.65	0.9157	P	0.6
8	☐	5000.000	5013.587	9061923.46	1.8495	A	0.4
9	☐			5131.70	0.0011	P	7.3

$$y = 3.6890E-004 * x + 7.8022E-006$$

$$R = 1.0000$$

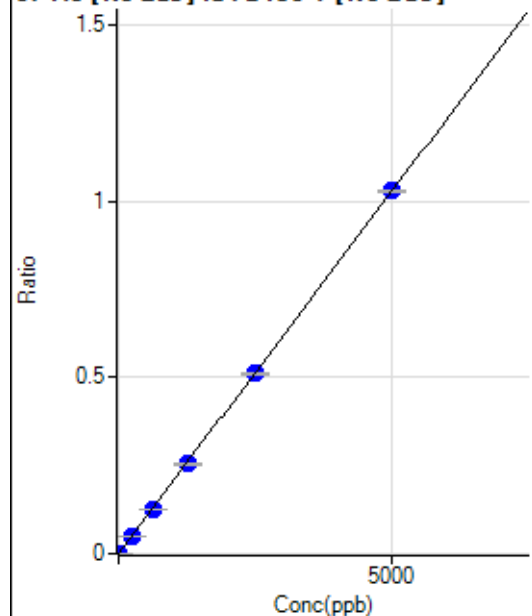
$$DL = 0.03401$$

$$BEC = 0.02115$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0000	P	78.4
2	☐	0.500					
3	☐	5.000	4.303	4389.76	0.0009	P	2.0
4	☐	250.000	246.179	247136.85	0.0506	P	0.6
5	☐	625.000	619.757	618837.03	0.1274	P	1.0
6	☐	1250.000	1236.464	1246899.58	0.2543	P	0.4
7	☐	2500.000	2486.722	2513828.85	0.5114	P	0.9
8	☐	5000.000	5010.870	5048678.67	1.0304	P	0.3
9	☐			2900.43	0.0006	P	4.6

$$y = 2.0564E-004 * x + 4.4725E-006$$

$$R = 1.0000$$

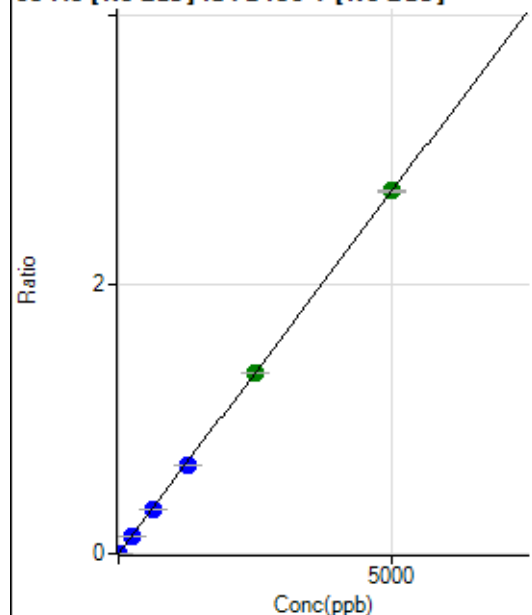
$$DL = 0.05114$$

$$BEC = 0.02175$$

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	22.22	0.0000	P	22.0
2	☐	0.500					
3	☐	5.000	4.379	11635.73	0.0024	P	2.3
4	☐	250.000	242.892	637002.48	0.1305	P	0.4
5	☐	625.000	615.375	1605306.80	0.3306	P	0.6
6	☐	1250.000	1231.497	3244459.64	0.6616	P	0.4
7	☐	2500.000	2494.468	6587979.01	1.3401	A	0.7
8	☐	5000.000	5008.951	13184813.40	2.6910	A	0.3
9	☐			7032.57	0.0015	P	1.6

$$y = 5.3724\text{E-}004 * x + 4.4660\text{E-}006$$

$$R = 1.0000$$

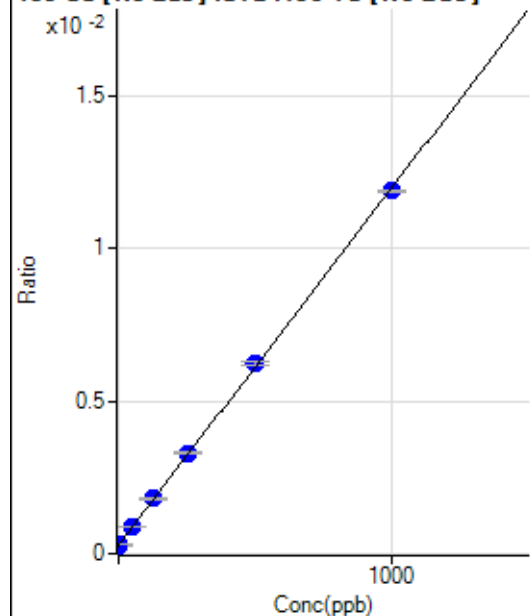
$$DL = 0.005495$$

$$BEC = 0.008313$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2216.94	0.0003	P	6.7
2	☐	0.100					
3	☐	1.000	2.417	2416.98	0.0003	P	5.1
4	☐	50.000	51.633	6952.00	0.0009	P	1.4
5	☐	125.000	130.910	14282.76	0.0018	P	1.1
6	☐	250.000	257.897	26247.32	0.0033	P	1.8
7	☐	500.000	508.980	50075.77	0.0062	P	1.5
8	☐	1000.000	992.714	96016.08	0.0119	P	0.6
9	☐			2041.90	0.0003	P	4.1

$$y = 1.1686\text{E-}005 * x + 2.7383\text{E-}004$$

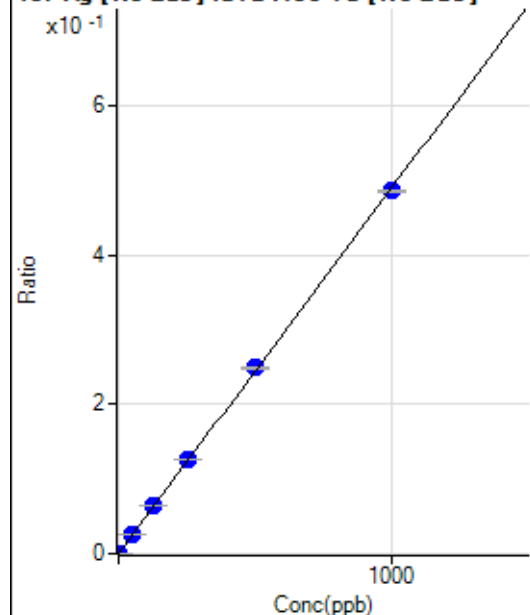
$$R = 0.9999$$

$$DL = 4.73$$

$$BEC = 23.43$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.56	0.0000	P	17.0
2	☐	0.100					
3	☐	1.000	0.966	3834.03	0.0005	P	10.3
4	☐	50.000	52.338	202938.54	0.0256	P	0.7
5	☐	125.000	130.894	507021.28	0.0640	P	1.2
6	☐	250.000	259.419	1013123.11	0.1269	P	0.2
7	☐	500.000	508.164	2000411.48	0.2486	P	0.8
8	☐	1000.000	992.710	3926226.26	0.4856	P	0.3
9	☐			333.35	0.0000	P	7.3

$$y = 4.8914\text{E-}004 * x + 6.8605\text{E-}006$$

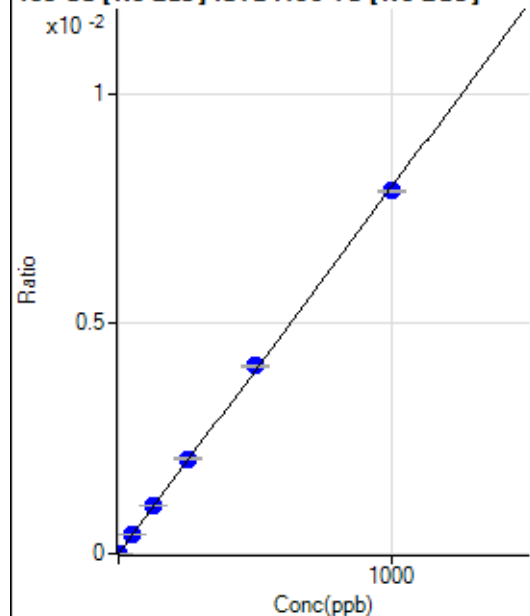
$$R = 0.9999$$

$$DL = 0.007137$$

$$BEC = 0.01403$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.33	0.0000	P	0.3
2	☐	0.100					
3	☐	1.000	0.722	54.17	0.0000	P	8.0
4	☐	50.000	52.232	3301.84	0.0004	P	7.1
5	☐	125.000	130.002	8199.75	0.0010	P	1.0
6	☐	250.000	259.508	16493.20	0.0021	P	0.8
7	☐	500.000	513.409	32884.13	0.0041	P	0.9
8	☐	1000.000	990.182	63713.43	0.0079	P	0.2
9	☐			20.83	0.0000	P	69.4

$$y = 7.9568\text{E-}006 * x + 1.0290\text{E-}006$$

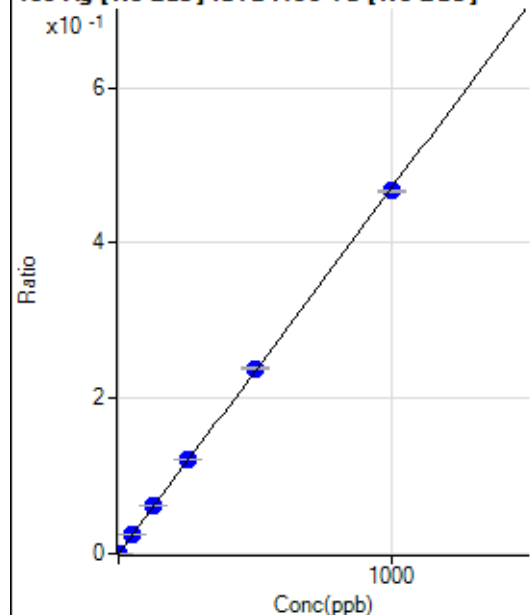
$$R = 0.9998$$

$$DL = 0.001324$$

$$BEC = 0.1293$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	25.00	0.0000	P	66.9
2	☐	0.100					
3	☐	1.000	0.977	3703.42	0.0005	P	0.3
4	☐	50.000	52.393	195375.58	0.0247	P	0.7
5	☐	125.000	130.074	484629.76	0.0612	P	0.3
6	☐	250.000	259.671	975393.22	0.1222	P	0.6
7	☐	500.000	507.805	1922756.75	0.2389	P	0.4
8	☐	1000.000	992.926	3777267.32	0.4672	P	0.3
9	☐			269.46	0.0000	P	2.0

$$y = 4.7048\text{E-}004 * x + 3.0928\text{E-}006$$

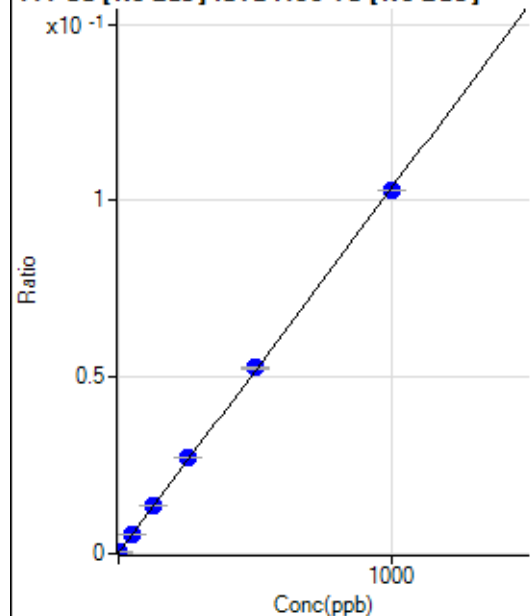
$$R = 0.9999$$

$$DL = 0.01319$$

$$BEC = 0.006574$$

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	1546.03	0.0002	P	6.8
2	☐	0.100					
3	☐	1.000	1.035	2383.17	0.0003	P	2.5
4	☐	50.000	53.133	45030.03	0.0057	P	0.4
5	☐	125.000	130.267	108110.34	0.0137	P	1.4
6	☐	250.000	259.275	215447.34	0.0270	P	0.1
7	☐	500.000	508.006	424044.68	0.0527	P	1.0
8	☐	1000.000	992.863	831199.50	0.1028	P	0.0
9	☐			1521.70	0.0002	P	2.7

$$y = 1.0335\text{E-}004 * x + 1.9096\text{E-}004$$

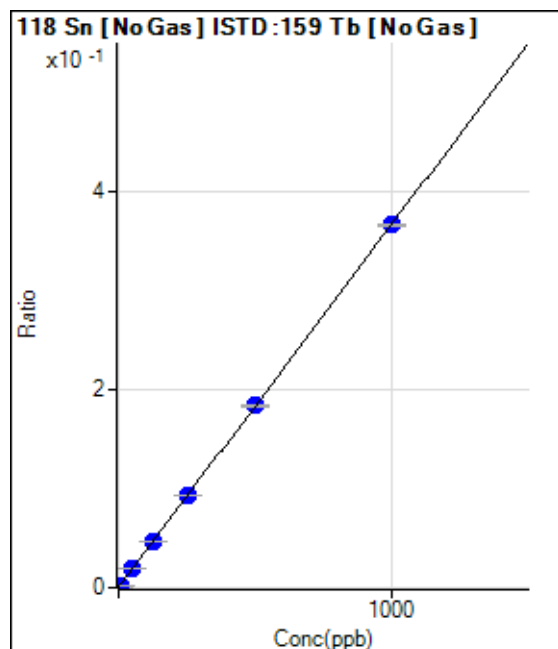
$$R = 0.9999$$

$$DL = 0.3745$$

$$BEC = 1.848$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3238.03	0.0004	P	149.
2	☐	0.500					
3	☐	5.000	3.598	13735.04	0.0017	P	0.8
4	☐	50.000	49.635	147095.68	0.0186	P	1.3
5	☐	125.000	125.246	366025.29	0.0462	P	1.2
6	☐	250.000	252.118	739649.54	0.0926	P	0.2
7	☐	500.000	500.268	1476265.39	0.1834	P	0.8
8	☐	1000.000	999.331	2959626.35	0.3660	P	0.7
9	☐			3770.11	0.0005	P	2.8

$$y = 3.6588\text{E-}004 * x + 4.0047\text{E-}004$$

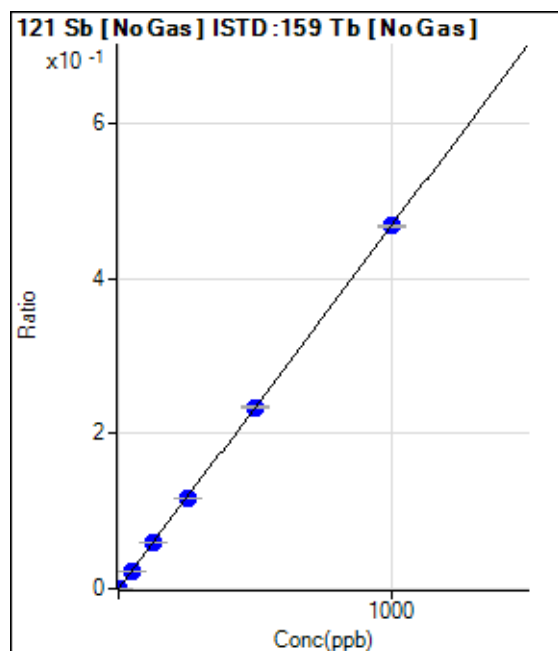
$$R = 1.0000$$

$$DL = 4.906$$

$$BEC = 1.095$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	33.33	0.0000	P	66.2
2	☐	0.200					
3	☐	2.000	1.836	6907.52	0.0009	P	2.9
4	☐	50.000	49.306	182980.71	0.0231	P	1.2
5	☐	125.000	125.422	465002.00	0.0587	P	1.4
6	☐	250.000	250.895	937851.39	0.1175	P	0.4
7	☐	500.000	499.958	1883826.17	0.2341	P	0.7
8	☐	1000.000	999.779	3784837.71	0.4681	P	0.5
9	☐			10087.40	0.0013	P	3.7

$$y = 4.6819\text{E-}004 * x + 4.1236\text{E-}006$$

$$R = 1.0000$$

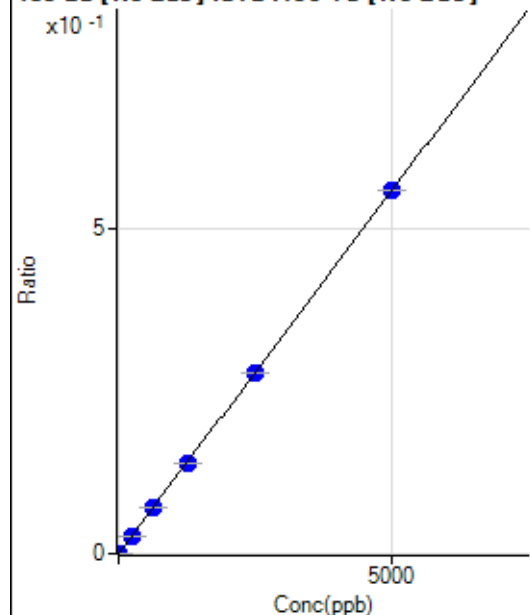
$$DL = 0.0175$$

$$BEC = 0.008807$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0000	P	12.2
2	☐	1.000					
3	☐	10.000	9.192	8230.55	0.0010	P	2.1
4	☐	250.000	247.430	218478.64	0.0276	P	1.6
5	☐	625.000	629.254	555104.64	0.0701	P	0.8
6	☐	1250.000	1254.544	1115798.34	0.1398	P	0.5
7	☐	2500.000	2495.236	2237070.14	0.2780	P	0.5
8	☐	5000.000	5000.844	4504450.23	0.5571	P	0.1
9	☐			1500.15	0.0002	P	10.7

$$y = 1.1140\text{E-}004 * x + 4.8033\text{E-}006$$

$$R = 1.0000$$

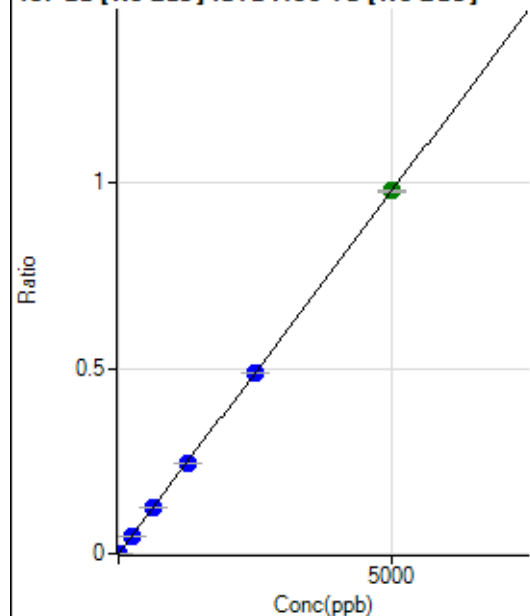
$$DL = 0.01576$$

$$BEC = 0.04312$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.89	0.0000	P	41.8
2	☐	1.000					
3	☐	10.000	8.722	13701.75	0.0017	P	1.3
4	☐	250.000	247.104	382842.84	0.0483	P	0.2
5	☐	625.000	625.230	967812.19	0.1222	P	0.3
6	☐	1250.000	1244.296	1941823.11	0.2432	P	0.2
7	☐	2500.000	2489.527	3916262.02	0.4866	P	0.5
8	☐	5000.000	5006.781	7913091.67	0.9787	A	0.3
9	☐			2594.82	0.0003	P	6.3

$$y = 1.9546\text{E-}004 * x + 7.8890\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.05061$$

$$BEC = 0.04036$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			28.89		P	35.2
5	☐			62.22		P	6.2
6	☐			100.00		P	29.1
7	☐			171.12		P	22.2
8	☐			320.02		P	29.2
9	☐			37.78		P	56.7

150 Nd [He] No available calibration points

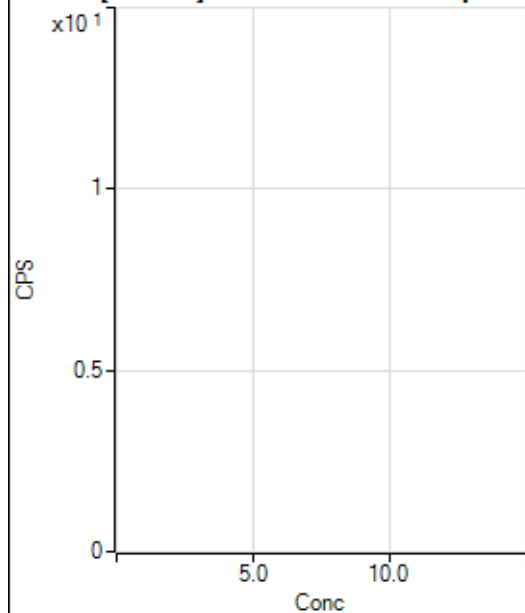
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			2.22		P	86.6
5	☐			4.44		P	114.
6	☐			8.89		P	94.4
7	☐			13.33		P	50.0
8	☐			17.78		P	47.2
9	☐			16.67		P	52.9

156 Dy [No Gas] No available calibration points

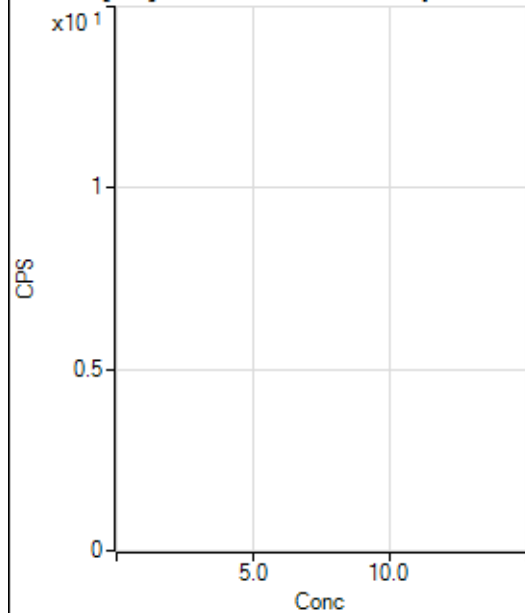
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25.00		P	66.7
2	☐						
3	☐			25.00		P	66.7
4	☐			25.00		P	33.3
5	☐			25.00		P	0.0
6	☐			47.22		P	36.7
7	☐			72.23		P	17.6
8	☐			91.67		P	41.7
9	☐			44.45		P	54.1

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	173.
2	☐						
3	☐			4.44		P	43.4
4	☐			5.56		P	34.7
5	☐			7.78		P	107.
6	☐			8.89		P	57.3
7	☐			14.44		P	35.3
8	☐			25.55		P	27.1
9	☐			15.55		P	44.6

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25.00		P	88.2
2	☐						
3	☐			13.89		P	34.7
4	☐			22.22		P	78.1
5	☐			38.89		P	49.5
6	☐			30.55		P	15.7
7	☐			36.11		P	35.3
8	☐			52.78		P	50.8
9	☐			38.89		P	32.7

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			22.22		P	31.2
2	☐						
3	☐			22.22		P	48.2
4	☐			22.22		P	45.8
5	☐			21.11		P	48.2
6	☐			30.00		P	57.7
7	☐			32.22		P	46.6
8	☐			47.78		P	8.1
9	☐			34.44		P	5.6

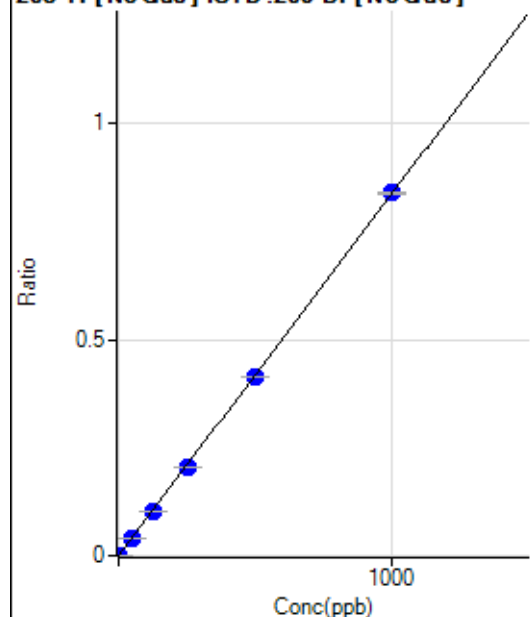
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			19.44		P	89.2
2	☐						
3	☐			36.11		P	35.3
4	☐			27.78		P	91.7
5	☐			19.44		P	65.5
6	☐			16.67		P	50.0
7	☐			52.78		P	39.7
8	☐			25.00		P	66.7
9	☐			16.67		P	86.6

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.56		P	91.6
2	☐						
3	☐			16.67		P	20.0
4	☐			10.00		P	66.7
5	☐			15.56		P	75.3
6	☐			7.78		P	65.5
7	☐			15.56		P	65.5
8	☐			18.89		P	10.2
9	☐			20.00		P	0.0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0000	P	21.4
2	☐	0.100					
3	☐	1.000	0.911	4495.40	0.0008	P	6.0
4	☐	50.000	48.924	237084.51	0.0409	P	1.1
5	☐	125.000	123.724	593069.58	0.1035	P	0.6
6	☐	250.000	246.952	1191662.64	0.2065	P	0.3
7	☐	500.000	494.829	2375698.51	0.4138	P	0.2
8	☐	1000.000	1003.561	4742776.97	0.8393	P	0.3
9	☐			1189.00	0.0002	P	9.7

$$y = 8.3633\text{E-}004 * x + 3.7459\text{E-}006$$

$$R = 1.0000$$

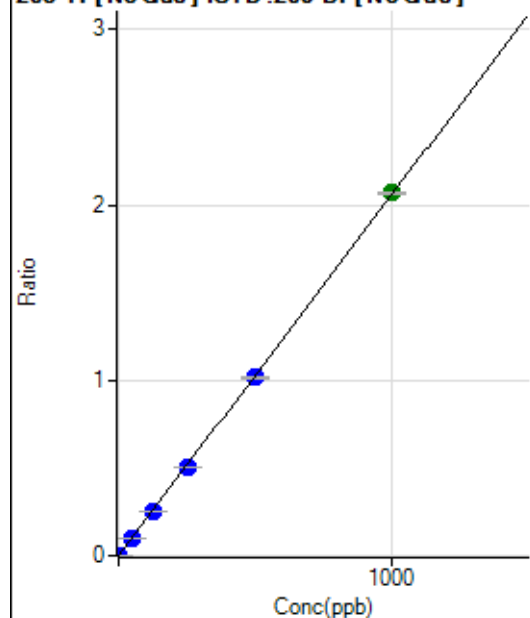
$$DL = 0.002878$$

$$BEC = 0.004479$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	91.67	0.0000	P	16.0
2	☐	0.100					
3	☐	1.000	0.866	10546.26	0.0018	P	1.8
4	☐	50.000	48.170	574107.16	0.0991	P	1.7
5	☐	125.000	122.454	1443634.19	0.2519	P	0.5
6	☐	250.000	243.431	2888989.34	0.5007	P	0.2
7	☐	500.000	493.131	5822681.21	1.0143	P	0.4
8	☐	1000.000	1005.486	11686619.44	2.0681	A	0.4
9	☐			2778.20	0.0006	P	8.0

$$y = 0.0021 * x + 1.5461\text{E-}005$$

$$R = 0.9999$$

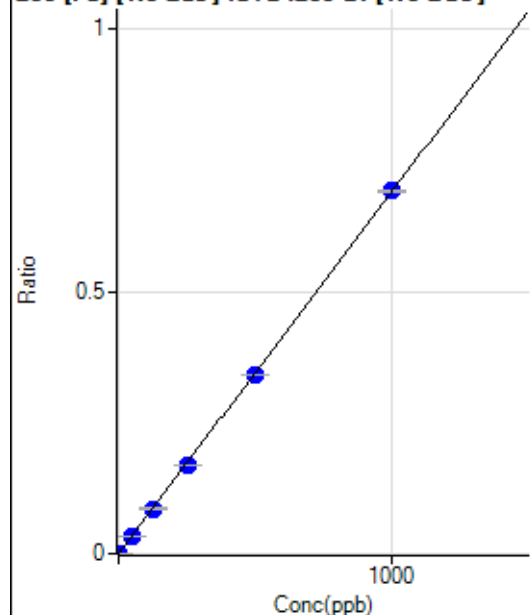
$$DL = 0.0036$$

$$BEC = 0.007517$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	222.23	0.0000	P	2.2
2	☐	0.100					
3	☐	1.000	0.832	3589.48	0.0006	P	4.4
4	☐	50.000	49.290	197183.28	0.0340	P	1.2
5	☐	125.000	124.700	493158.99	0.0860	P	0.5
6	☐	250.000	246.551	981361.65	0.1701	P	0.2
7	☐	500.000	494.874	1959613.50	0.3414	P	0.2
8	☐	1000.000	1003.499	3911312.53	0.6922	P	0.2
9	☐			6116.38	0.0012	P	0.2

$$y = 6.8971\text{E-}004 * x + 3.7471\text{E-}005$$

$$R = 1.0000$$

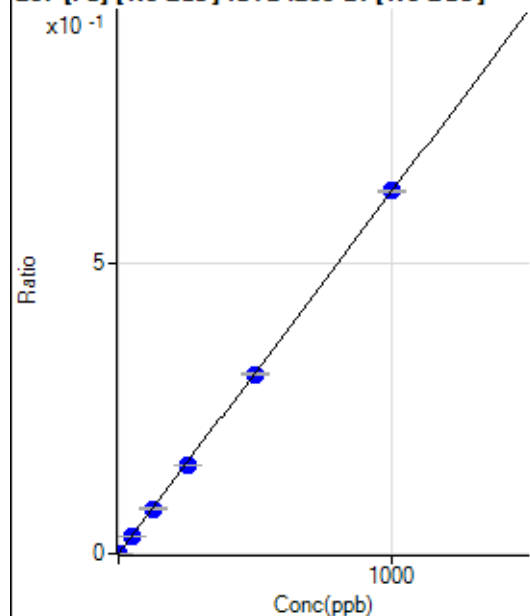
$$DL = 0.0036$$

$$BEC = 0.05433$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	172.23	0.0000	P	10.9
2	☐	0.100					
3	☐	1.000	0.916	3522.80	0.0006	P	2.5
4	☐	50.000	49.227	177824.18	0.0307	P	0.6
5	☐	125.000	124.199	443539.08	0.0774	P	1.2
6	☐	250.000	246.579	886344.61	0.1536	P	0.2
7	☐	500.000	496.540	1775651.37	0.3093	P	0.5
8	☐	1000.000	1002.724	3529546.29	0.6246	P	0.6
9	☐			4976.98	0.0010	P	2.8

$$y = 6.2288\text{E-}004 * x + 2.9037\text{E-}005$$

$$R = 1.0000$$

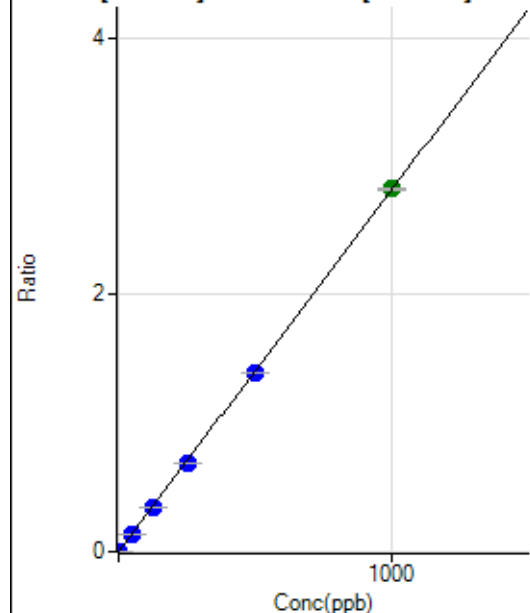
$$DL = 0.01528$$

$$BEC = 0.04662$$

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	816.71	0.0001	P	5.9
2	☐	0.100					
3	☐	1.000	0.880	15339.11	0.0026	P	2.2
4	☐	50.000	48.832	796234.02	0.1374	P	0.7
5	☐	125.000	123.812	1995798.00	0.3482	P	1.0
6	☐	250.000	245.849	3988848.21	0.6913	P	0.2
7	☐	500.000	495.597	7999486.31	1.3935	P	0.4
8	☐	1000.000	1003.446	15942728.34	2.8213	A	0.2
9	☐			23128.76	0.0047	P	1.3

$$y = 0.0028 * x + 1.3770E-004$$

$$R = 1.0000$$

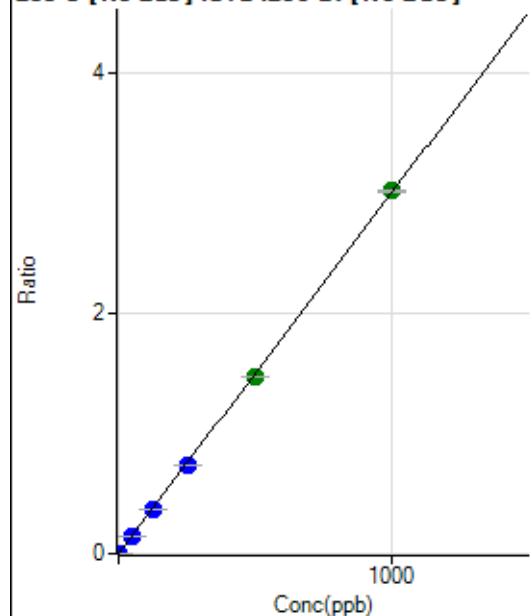
$$DL = 0.008741$$

$$BEC = 0.04898$$

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	52.78	0.0000	P	59.7
2	☐	0.100					
3	☐	1.000	0.844	14895.36	0.0025	P	1.2
4	☐	50.000	47.336	821404.45	0.1418	P	1.2
5	☐	125.000	121.416	2084048.25	0.3636	P	0.9
6	☐	250.000	244.943	4232560.55	0.7336	P	0.4
7	☐	500.000	491.517	8450212.69	1.4720	A	0.7
8	☐	1000.000	1006.087	17026359.93	3.0131	A	0.3
9	☐			844.51	0.0002	P	9.0

$$y = 0.0030 * x + 8.8995E-006$$

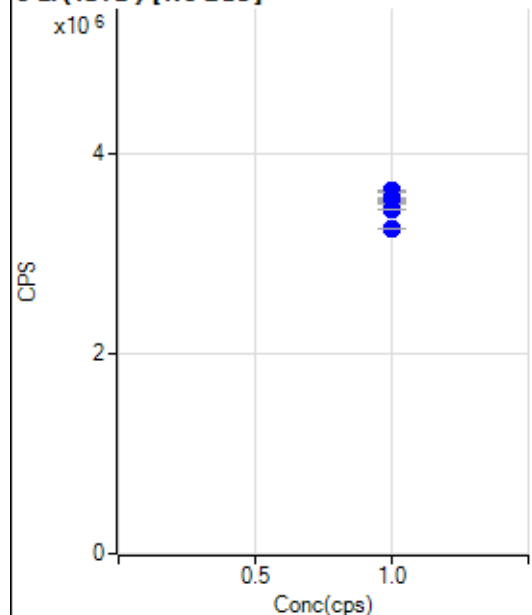
$$R = 0.9999$$

$$DL = 0.005325$$

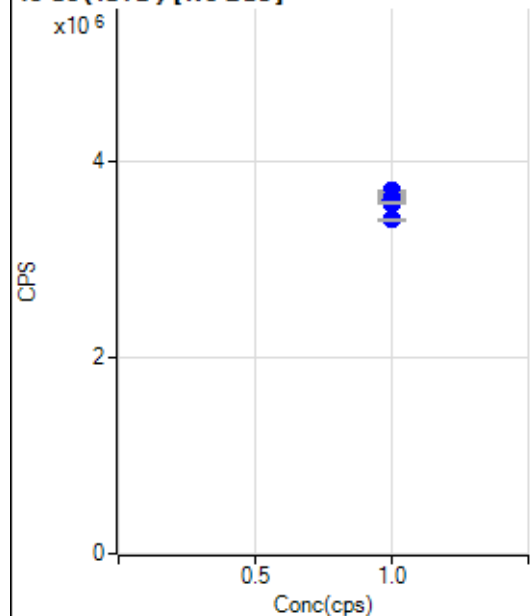
$$BEC = 0.002972$$

Weight: <None>

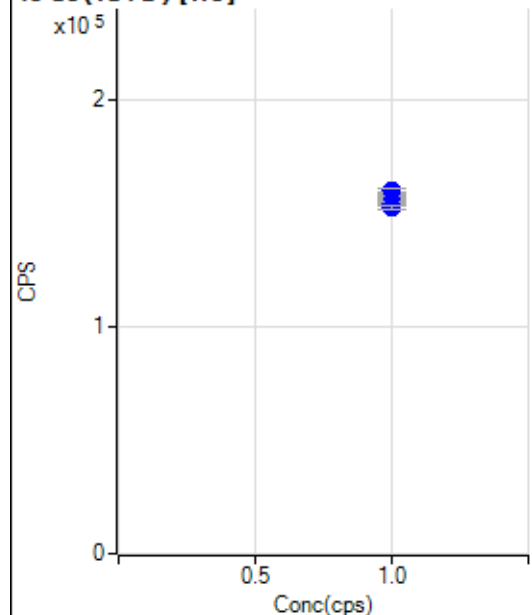
Min Conc: 0

6 Li (ISTD) [No Gas]

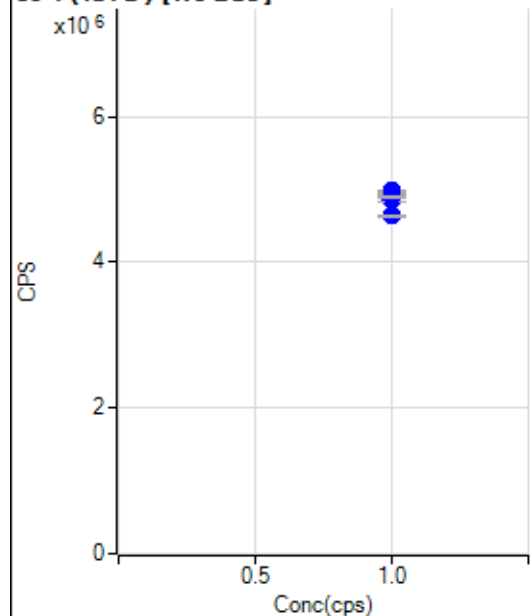
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3625794.94		P	0.4
2	☐	1.000					
3	☐	1.000		3613623.83		P	0.1
4	☐	1.000		3552511.09		P	0.5
5	☐	1.000		3525567.41		P	0.7
6	☐	1.000		3524897.24		P	0.3
7	☐	1.000		3499131.23		P	0.2
8	☐	1.000		3437701.93		P	0.3
9	☐	1.000		3248981.69		P	0.2

45 Sc (ISTD) [No Gas]

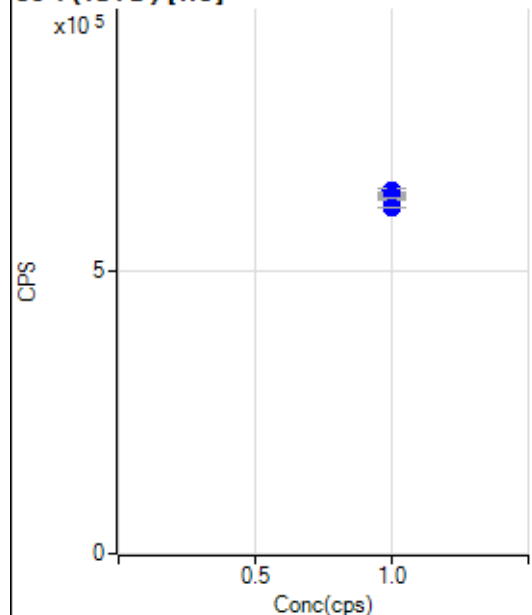
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3691567.18		P	0.5
2	☐	1.000					
3	☐	1.000		3671274.00		P	0.4
4	☐	1.000		3614019.09		P	1.3
5	☐	1.000		3568892.01		P	0.7
6	☐	1.000		3614684.63		P	0.6
7	☐	1.000		3595510.63		P	1.0
8	☐	1.000		3577437.06		P	0.4
9	☐	1.000		3397802.72		P	0.9

45 Sc (ISTD) [He]

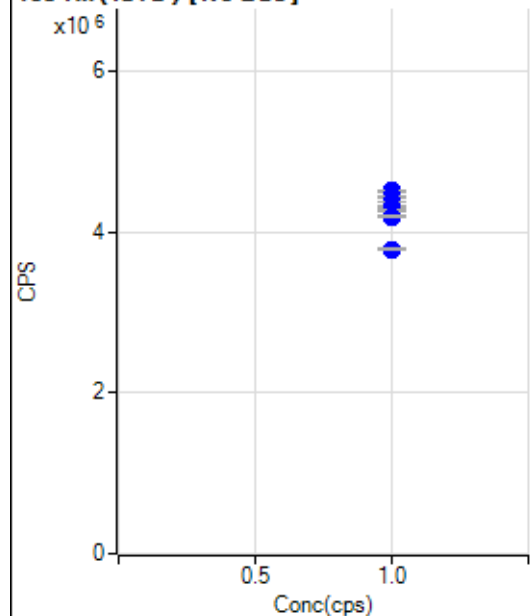
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		158696.75		P	0.5
2	☐	1.000					
3	☐	1.000		157690.73		P	0.3
4	☐	1.000		157393.16		P	0.4
5	☐	1.000		159911.68		P	1.3
6	☐	1.000		157183.66		P	0.5
7	☐	1.000		155108.48		P	1.1
8	☐	1.000		154309.18		P	1.0
9	☐	1.000		152544.59		P	0.8

89 Y (ISTD) [No Gas]

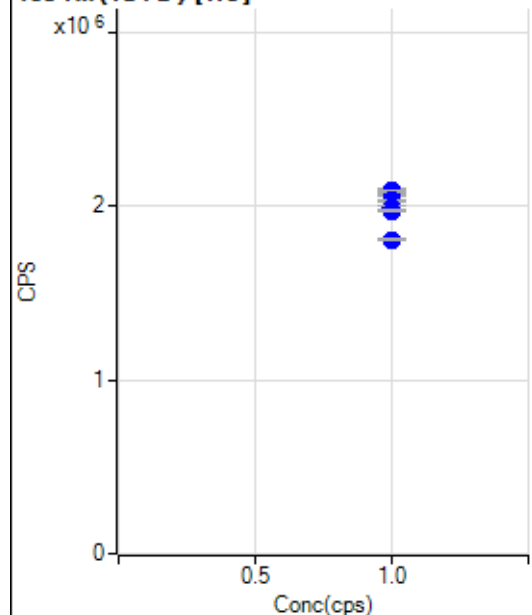
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4979504.54		P	0.5
2	☐	1.000					
3	☐	1.000		4936394.13		P	0.1
4	☐	1.000		4881456.00		P	0.2
5	☐	1.000		4855722.29		P	0.6
6	☐	1.000		4903911.70		P	0.3
7	☐	1.000		4916093.47		P	0.8
8	☐	1.000		4899599.82		P	0.2
9	☐	1.000		4636429.17		P	0.8

89 Y(ISTD) [He]

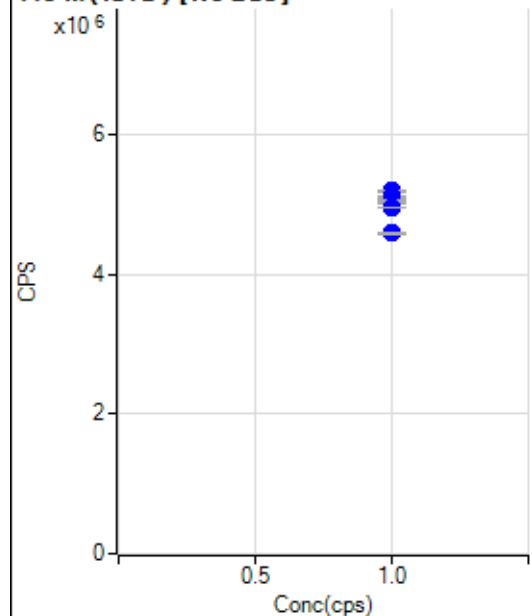
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		635503.64		P	1.0
2	☐	1.000					
3	☐	1.000		635848.38		P	0.1
4	☐	1.000		631450.22		P	0.2
5	☐	1.000		642101.04		P	0.9
6	☐	1.000		631960.03		P	0.5
7	☐	1.000		629796.24		P	0.5
8	☐	1.000		629045.22		P	0.7
9	☐	1.000		613040.79		P	0.3

103 Rh(ISTD) [No Gas]

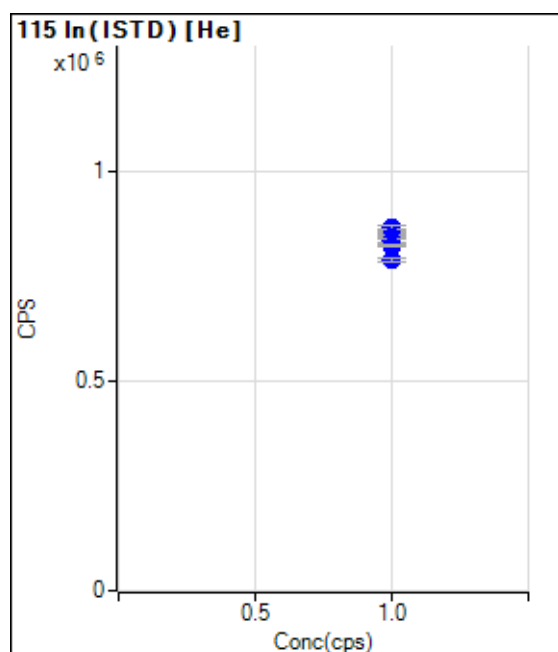
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4510720.68		P	0.3
2	☐	1.000					
3	☐	1.000		4438457.95		P	0.2
4	☐	1.000		4376082.52		P	0.3
5	☐	1.000		4308073.92		P	0.8
6	☐	1.000		4309800.66		P	0.3
7	☐	1.000		4274639.72		P	0.7
8	☐	1.000		4192246.01		P	0.2
9	☐	1.000		3784415.45		P	0.8

103 Rh (ISTD) [He]

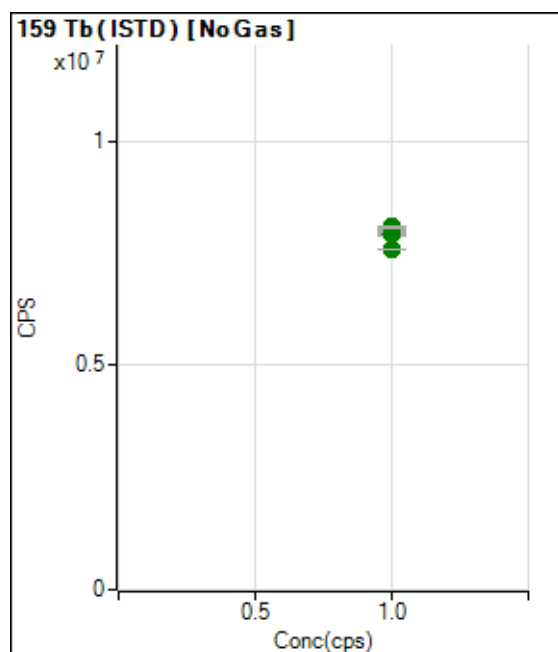
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2083599.12		P	1.5
2	☐	1.000					
3	☐	1.000		2089207.30		P	0.5
4	☐	1.000		2063269.83		P	0.6
5	☐	1.000		2087298.09		P	0.8
6	☐	1.000		2034309.73		P	0.7
7	☐	1.000		1994530.75		P	1.0
8	☐	1.000		1974348.58		P	0.3
9	☐	1.000		1809830.37		P	0.7

115 In (ISTD) [No Gas]

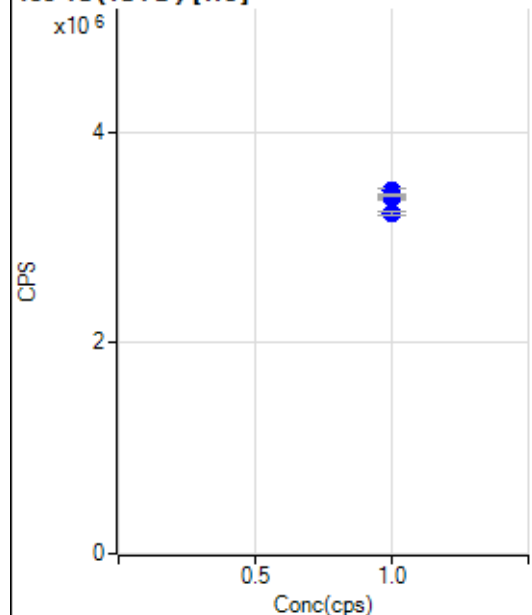
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5196354.20		P	0.5
2	☐	1.000					
3	☐	1.000		5124088.90		P	0.2
4	☐	1.000		5076992.81		P	0.4
5	☐	1.000		5016779.65		P	0.7
6	☐	1.000		5043770.45		P	0.2
7	☐	1.000		5043355.13		P	0.5
8	☐	1.000		4961756.21		P	0.2
9	☐	1.000		4593549.63		P	0.8



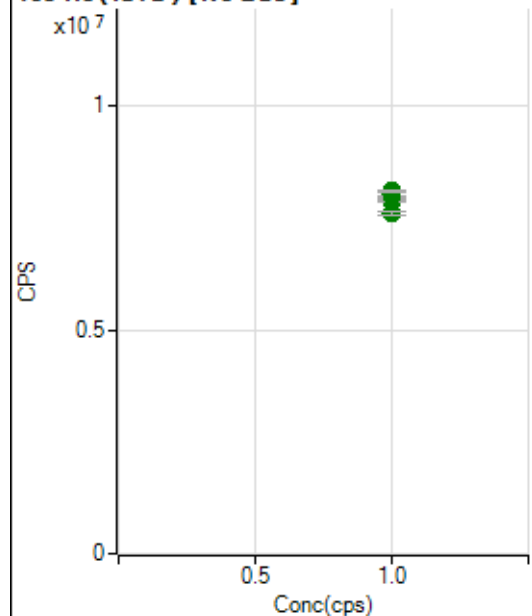
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		858800.04		P	1.2
2	☐	1.000					
3	☐	1.000		859514.89		P	0.4
4	☐	1.000		850803.93		P	0.2
5	☐	1.000		866128.04		P	1.0
6	☐	1.000		846989.41		P	0.2
7	☐	1.000		834486.41		P	1.4
8	☐	1.000		823148.17		P	0.9
9	☐	1.000		789723.56		P	0.9



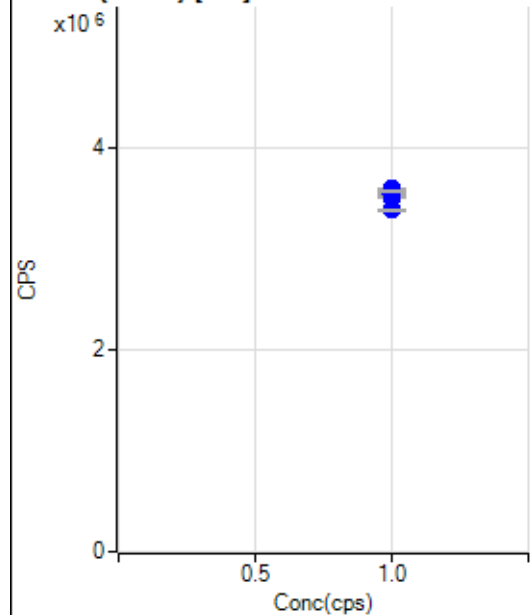
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8095016.55		A	0.3
2	☐	1.000					
3	☐	1.000		8000120.44		A	0.5
4	☐	1.000		7925072.87		A	0.1
5	☐	1.000		7918938.08		A	1.0
6	☐	1.000		7983738.63		A	0.3
7	☐	1.000		8048029.04		A	0.6
8	☐	1.000		8085725.16		A	0.2
9	☐	1.000		7604309.54		A	0.3

159 Tb (ISTD) [He]

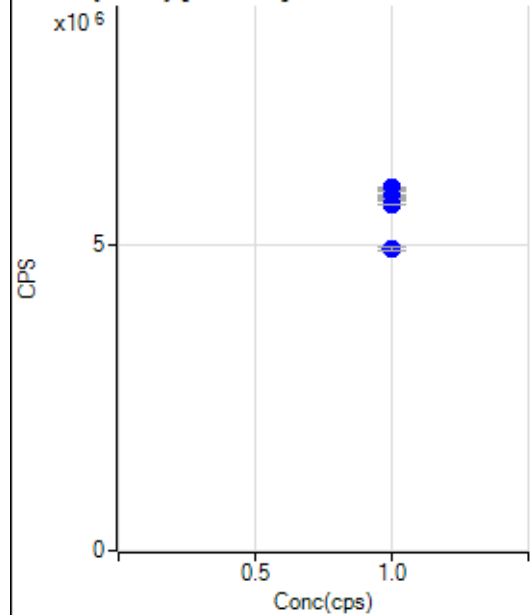
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3396609.53		P	1.2
2	☐	1.000					
3	☐	1.000		3389503.80		P	0.3
4	☐	1.000		3368458.00		P	0.3
5	☐	1.000		3442131.68		P	1.3
6	☐	1.000		3401814.46		P	0.4
7	☐	1.000		3386299.12		P	0.8
8	☐	1.000		3406187.41		P	0.6
9	☐	1.000		3229643.56		P	0.6

165 Ho (ISTD) [No Gas]

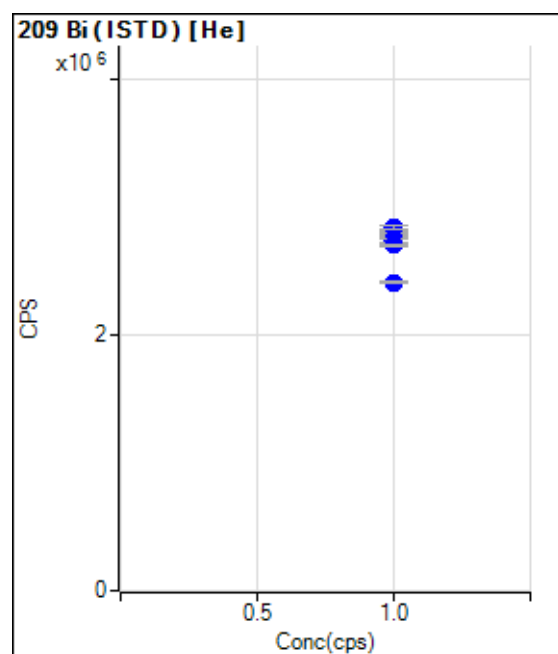
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8114543.32		A	0.2
2	☐	1.000					
3	☐	1.000		7988410.86		A	0.6
4	☐	1.000		7919300.96		A	0.5
5	☐	1.000		7887802.17		A	0.9
6	☐	1.000		7997824.31		A	0.2
7	☐	1.000		8038293.84		A	0.8
8	☐	1.000		8088543.50		A	0.5
9	☐	1.000		7601646.44		A	1.0

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3518969.08		P	0.8
2	☐	1.000					
3	☐	1.000		3515608.25		P	0.4
4	☐	1.000		3496820.68		P	0.2
5	☐	1.000		3586004.36		P	0.8
6	☐	1.000		3526349.19		P	0.7
7	☐	1.000		3536900.71		P	0.9
8	☐	1.000		3560270.40		P	0.8
9	☐	1.000		3375573.42		P	0.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5930482.00		P	0.3
2	☐	1.000					
3	☐	1.000		5873086.79		P	0.1
4	☐	1.000		5794054.92		P	0.6
5	☐	1.000		5731490.33		P	0.7
6	☐	1.000		5769781.93		P	0.3
7	☐	1.000		5740613.53		P	0.2
8	☐	1.000		5650857.70		P	0.3
9	☐	1.000		4944147.49		P	1.2



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2800455.03		P	1.1
2	☐	1.000					
3	☐	1.000		2798821.63		P	0.5
4	☐	1.000		2782516.83		P	0.7
5	☐	1.000		2832873.43		P	1.2
6	☐	1.000		2753636.59		P	0.6
7	☐	1.000		2729389.44		P	1.0
8	☐	1.000		2696976.73		P	0.8
9	☐	1.000		2409492.66		P	0.9

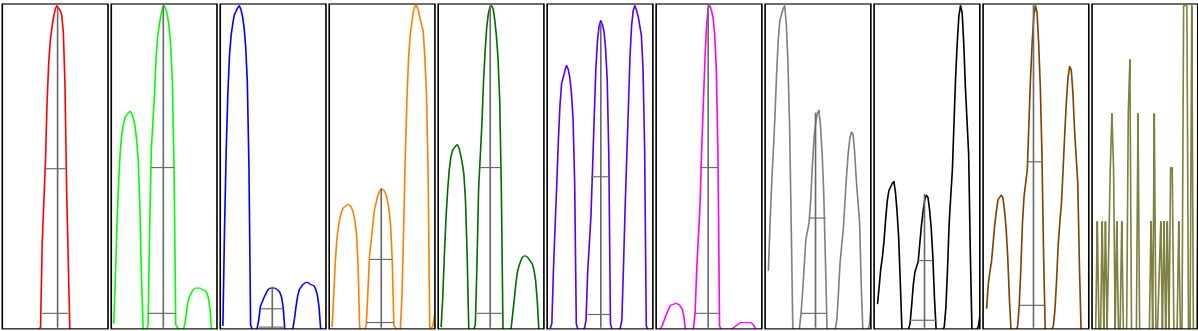
US EPA Tune Check Sample Report

Batch Folder D:\ICP-MS Data\P7120717 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]				
Mass	Count	RSD%	RSD%	RSD%
	(Mean)	(Actual)	(Required)	(Flag)
9	10559	0.35	5.00	
24	66163	0.26	5.00	
25	8514	0.23	5.00	
26	9494	0.23	5.00	
59	35496	0.38	5.00	
113	4395	0.52	5.00	
115	57906	0.60	5.00	
206	17173	0.66	5.00	
207	15541	0.80	5.00	
208	37090	0.42	5.00	
220	0	60.86		

	Replicate 1	Replicate 2	Replicate 3	Replicate 4	Replicate 5
Mass	Count	Count	Count	Count	Count
9	10500	10558	10587	10554	10596
24	65926	66068	66179	66274	66371
25	8482	8514	8531	8513	8529
26	9461	9482	9510	9508	9509
59	35300	35410	35579	35582	35607
113	4432	4391	4385	4372	4394
115	58398	58078	57858	57701	57495
206	16993	17223	17292	17209	17147
207	15357	15706	15546	15529	15566
208	36810	37145	37177	37150	37168
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	17018	9.10	8.9 - 9.1		0.786	0.900	
24	105691	24.00	23.9 - 24.1		0.790	0.900	
25	13670	25.00	24.9 - 25.1		0.788	0.900	
26	15347	26.00	25.9 - 26.1		0.791	0.900	
59	60247	59.00	58.9 - 59.1		0.784	0.900	
113	8696	113.05	112.9 - 113.1		0.690	0.900	
115	115301	115.00	114.9 - 115.1		0.701	0.900	
206	36398	205.95	205.9 - 206.1		0.736	0.900	
207	33355	206.95	206.9 - 207.1		0.725	0.900	
208	80680	207.95	207.9 - 208.1		0.732	0.900	
220			-				

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
RF Power	1600	W	Carrier Gas	0.80	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	8.2	V	Deflect	13.2	V
Extract 2	-130.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-70	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	160	V			

[He]

Mass	Count	RSD%	RSD%
	(Mean)	(Actual)	(Required)
59	9713	0.31	
89	82737	0.30	
205	13088	0.56	

	Replicate 1	Replicate 2	Replicate 3	Replicate 4	Replicate 5
Mass	Count	Count	Count	Count	Count
59	9744	9677	9704	9698	9745
89	82606	82599	82499	83101	82882
205	13011	13092	13019	13163	13157

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.80	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	8.5	V	Deflect	1.4	V
Extract 2	-135.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-80	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	4.1	mL/min	OctP RF	200	V			