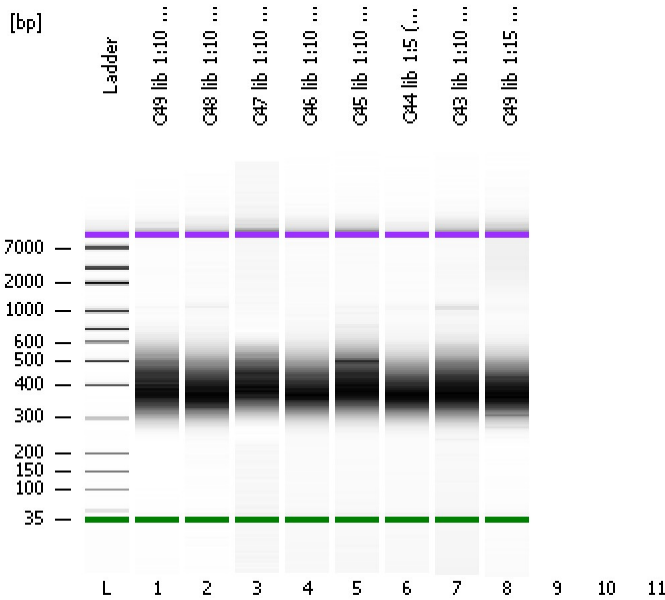


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-28\2012-02-28_003.xad

Created: 2/28/2012 12:08:17 PM
Modified: 2/28/2012 4:12:59 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

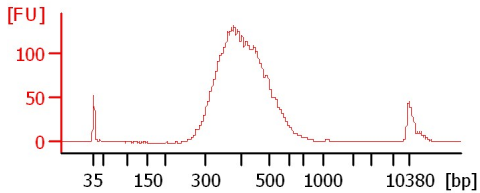
Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy
Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

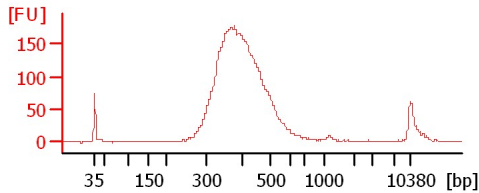
Chip Information:

Chip Lot #:
Reagent Kit Lot #:
Chip Comments:

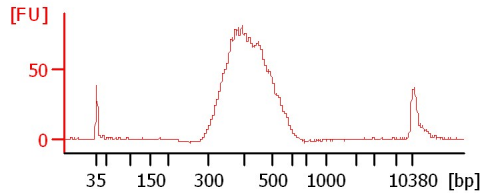
C49 lib 1:10 (5 ul DNA, 10 cycles)



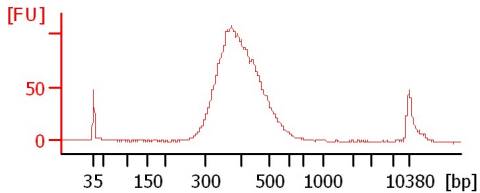
C48 lib 1:10 (5 ul DNA, 10 cycles)



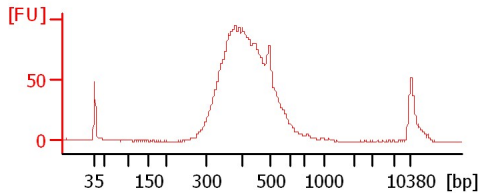
C47 lib 1:10 (5 ul DNA, 10 cycles)



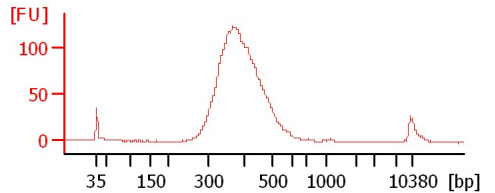
C46 lib 1:10 (5 ul DNA, 10 cycles)



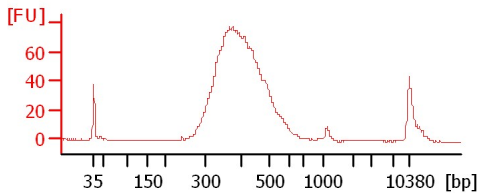
C45 lib 1:10 (5 ul DNA, 10 cycles)



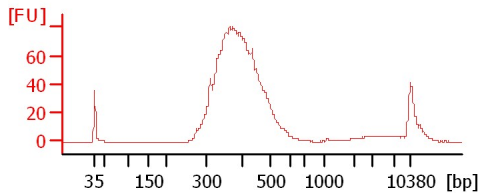
C44 lib 1:5 (5 ul DNA, 10 cycles)



C43 lib 1:10 (10ul DNA, 12 cycles)



C49 lib 1:15 (10 ul DNA, 12 cycles)



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-28\2012-02-28_003.xad

Created: 2/28/2012 12:08:17 PM
 Modified: 2/28/2012 4:12:59 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
C49 lib 1:10 (5 ul DNA, 10 cycles)		<input type="checkbox"/>	✓			
C48 lib 1:10 (5 ul DNA, 10 cycles)		<input type="checkbox"/>	✓			
C47 lib 1:10 (5 ul DNA, 10 cycles)		<input type="checkbox"/>	✓			
C46 lib 1:10 (5 ul DNA, 10 cycles)		<input type="checkbox"/>	✓			
C45 lib 1:10 (5 ul DNA, 10 cycles)		<input type="checkbox"/>	✓			
C44 lib 1:5 (5 ul DNA, 10 cycles)		<input type="checkbox"/>	✓			
C43 lib 1:10 (10ul DNA, 12 cycles)		<input type="checkbox"/>	✓			
C49 lib 1:15 (10 ul DNA, 12		<input type="checkbox"/>	✓			
		<input type="checkbox"/>				
		<input type="checkbox"/>				
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-28\2012-02-28_003.xad

Created: 2/28/2012 12:08:17 PM
Modified: 2/28/2012 4:12:59 PM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12
Minimum Visible Range [s] : 32
Maximum Visible Range [s] : 138
Start Analysis Time Range [s] : 33
End Analysis Time Range [s] : 137.5
Ladder Concentration [pg/μl] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/μl] : 125
Upper Marker Concentration [pg/μl] : 75
Used Upper Marker for Quantitation
Standard Curve Fit is Point to Point
Show Data Aligned to Lower and Upper Marker

Integrator Settings

Integration Start Time [s] : 33.05
Integration End Time [s] : 137
Slope Threshold : 0.8
Height Threshold [FU] : 5
Area Threshold : 0.1
Width Threshold [s] : 0.6
Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

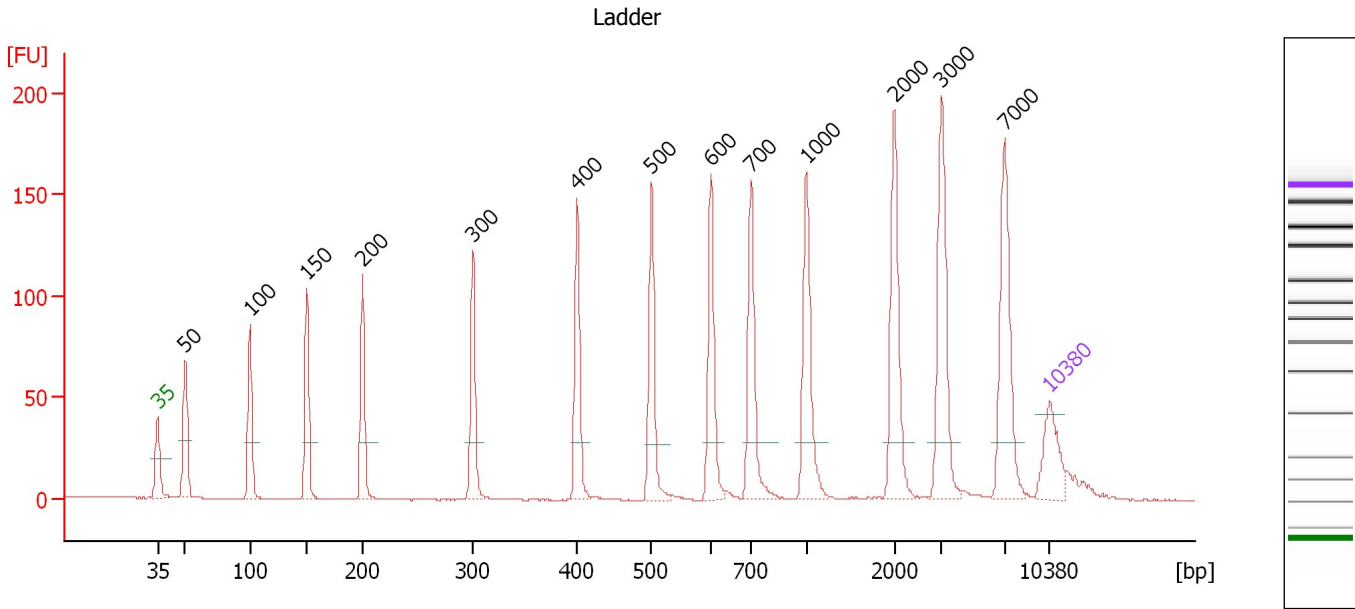
Ladder

Ladder Peak	Size	Area
1	35	160
2	50	210
3	100	208
4	150	221
5	200	242
6	300	270
7	400	305
8	500	306
9	600	336
10	700	321
11	1000	366
12	2000	413
13	3000	411
14	7000	400
15	10380	214

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-28\2012-02-28_003.xad

Created: 2/28/2012 12:08:17 PM
 Modified: 2/28/2012 4:12:59 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

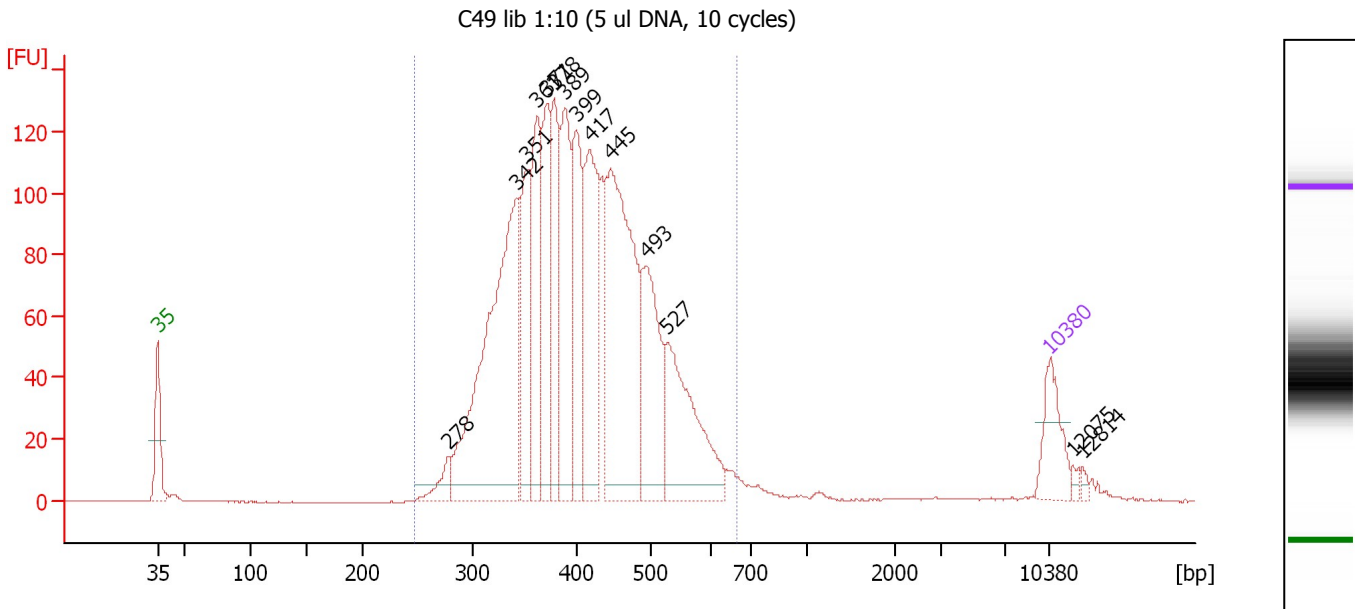
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	Ladder Peak
9	600	150.00	378.8	Ladder Peak
10	700	150.00	324.7	Ladder Peak
11	1,000	150.00	227.3	Ladder Peak
12	2,000	150.00	113.6	Ladder Peak
13	3,000	150.00	75.8	Ladder Peak
14	7,000	150.00	32.5	Ladder Peak
15	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-28\2012-02-28_003.xad

Created: 2/28/2012 12:08:17 PM
 Modified: 2/28/2012 4:12:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : C49 lib 1:10 (5 ul DNA, 10 cycles)

Number of peaks found: 14 Corr. Area 1: 2,153.5
 Noise: 0.1

Peak table for sample 1 : C49 lib 1:10 (5 ul DNA, 10 cycles)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	278	42.37	231.1	
3	342	719.99	3,191.7	
4	351	198.69	857.0	
5	361	233.87	980.6	
6	371	228.13	930.6	
7	378	199.42	799.0	
8	389	263.03	1,025.1	
9	399	231.46	879.3	
10	417	303.50	1,102.4	
11	445	543.90	1,851.1	
12	493	246.57	758.2	
13	527	275.58	792.1	
14	10,380	75.00	10.9	Upper Marker
15	12,075	0.00	0.0	
16	12,814	0.00	0.0	

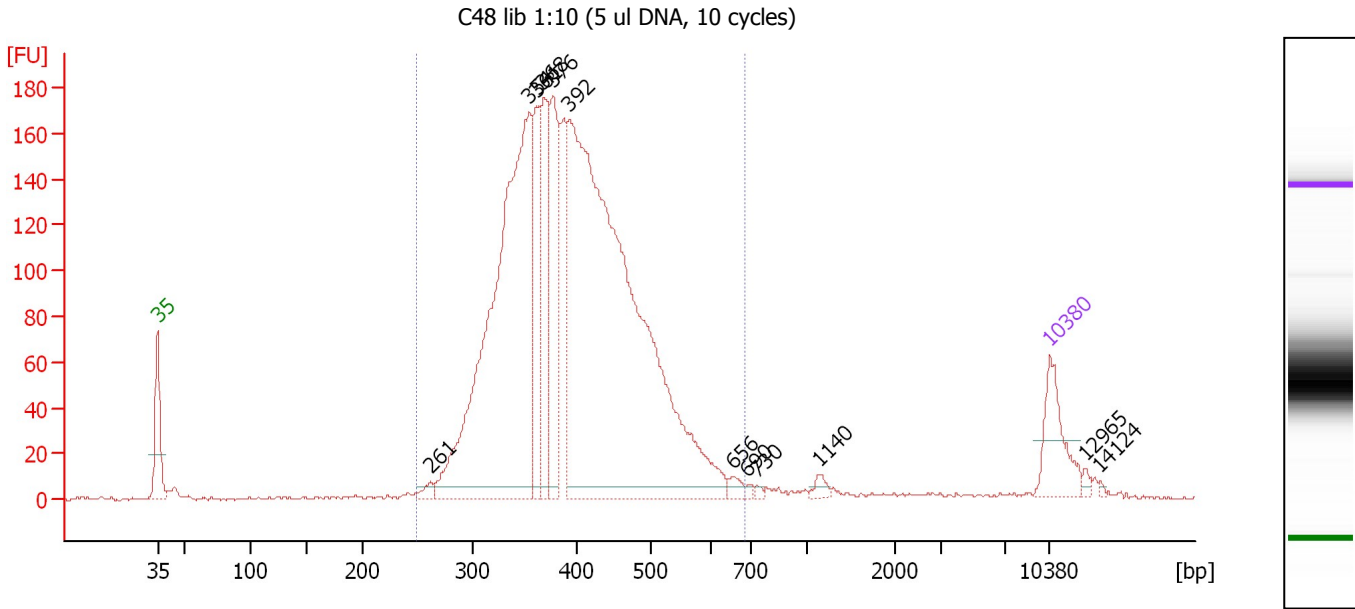
Region table for sample 1 : C49 lib 1:10 (5 ul DNA, 10 cycles)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
247	14,022.3	412	3,650.58	664	2,153.5	98	18.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-28\2012-02-28_003.xad

Created: 2/28/2012 12:08:17 PM
 Modified: 2/28/2012 4:12:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : C48 lib 1:10 (5 ul DNA, 10 cycles)

Number of peaks found: 12 Corr. Area 1: 2,769.4
 Noise: 0.8

Peak table for sample 2 : C48 lib 1:10 (5 ul DNA, 10 cycles)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	261	12.89	74.8	
3	354	981.46	4,200.7	
4	361	167.49	702.1	
5	368	194.23	800.2	
6	376	224.97	905.7	
7	392	1,484.08	5,738.3	
8	656	13.27	30.6	
9	690	4.33	9.5	
10	730	4.39	9.1	
11	1,140	11.12	14.8	
12	10,380	75.00	10.9	Upper Marker
13	12,965	0.00	0.0	
14	14,124	0.00	0.0	

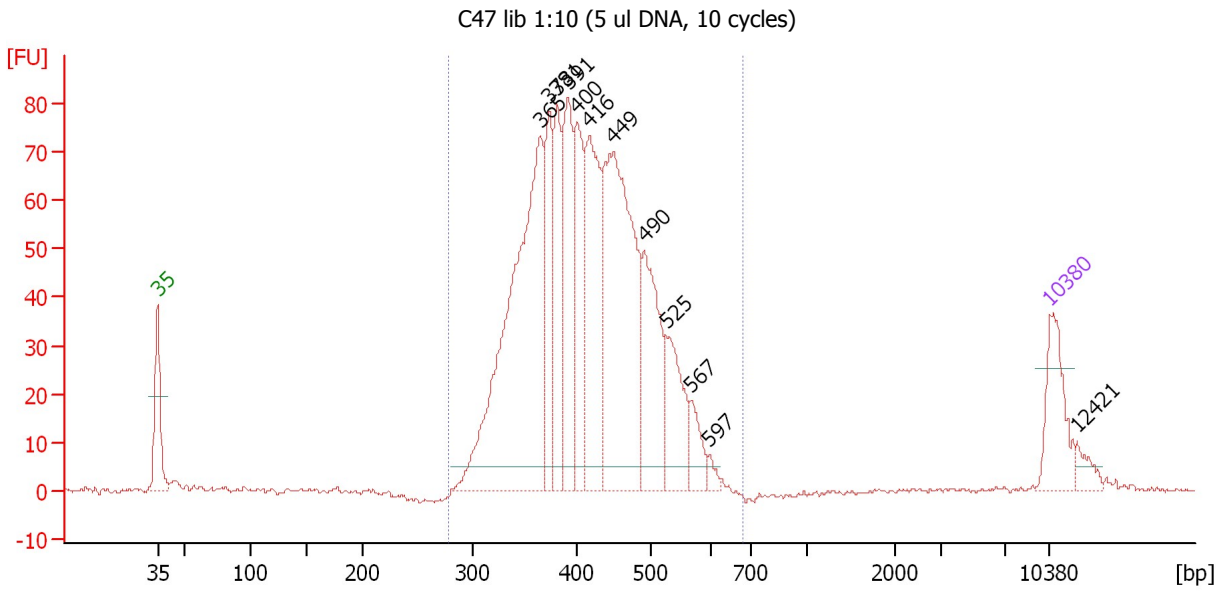
Region table for sample 2 : C48 lib 1:10 (5 ul DNA, 10 cycles)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
249	12,657.4	402	3,225.88	682	2,769.4	95	17.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-28\2012-02-28_003.xad

Created: 2/28/2012 12:08:17 PM
 Modified: 2/28/2012 4:12:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : C47 lib 1:10 (5 ul DNA, 10 cycles)

Number of peaks found: 12 Corr. Area 1: 1,178.1
 Noise: 0.4

Peak table for sample 3 : C47 lib 1:10 (5 ul DNA, 10 cycles)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	365	631.47	2,621.3	
3	373	148.40	602.5	
4	381	139.42	554.8	
5	391	195.75	758.0	
6	400	164.30	622.3	
7	416	239.59	872.0	
8	449	477.50	1,611.9	
9	490	184.87	571.2	
10	525	110.91	320.3	
11	567	41.74	111.6	
12	597	10.44	26.5	
13	10,380	75.00	10.9	Upper Marker
14	12,421	0.00	0.0	

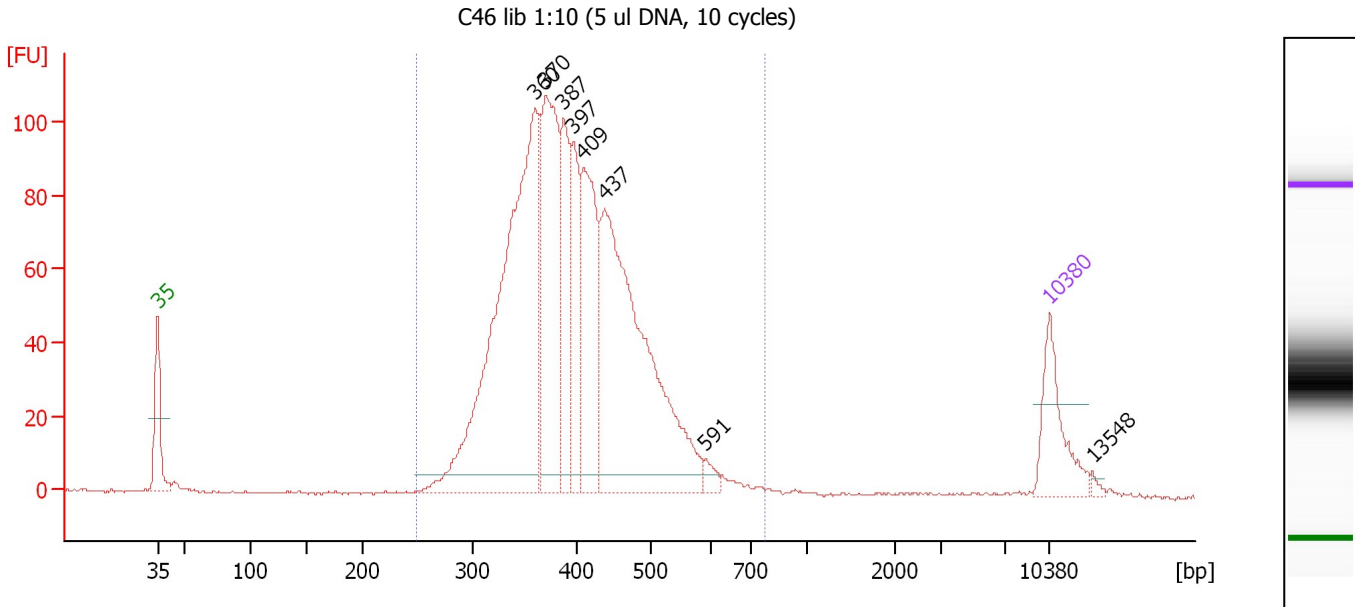
Region table for sample 3 : C47 lib 1:10 (5 ul DNA, 10 cycles)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
277	8,901.2	419	2,387.44	677	1,178.1	97	15.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-28\2012-02-28_003.xad

Created: 2/28/2012 12:08:17 PM
 Modified: 2/28/2012 4:12:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : C46 lib 1:10 (5 ul DNA, 10 cycles)

Number of peaks found: 8 Corr. Area 1: 1,522.8
 Noise: 0.4

Peak table for sample 4 : C46 lib 1:10 (5 ul DNA, 10 cycles)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	360	734.72	3,096.4	
3	370	306.03	1,254.7	
4	387	152.62	598.0	
5	397	122.59	468.1	
6	409	227.02	841.7	
7	437	572.87	1,984.1	
8	591	14.40	36.9	
9	10,380	75.00	10.9	Upper Marker
10	13,548	0.00	0.0	

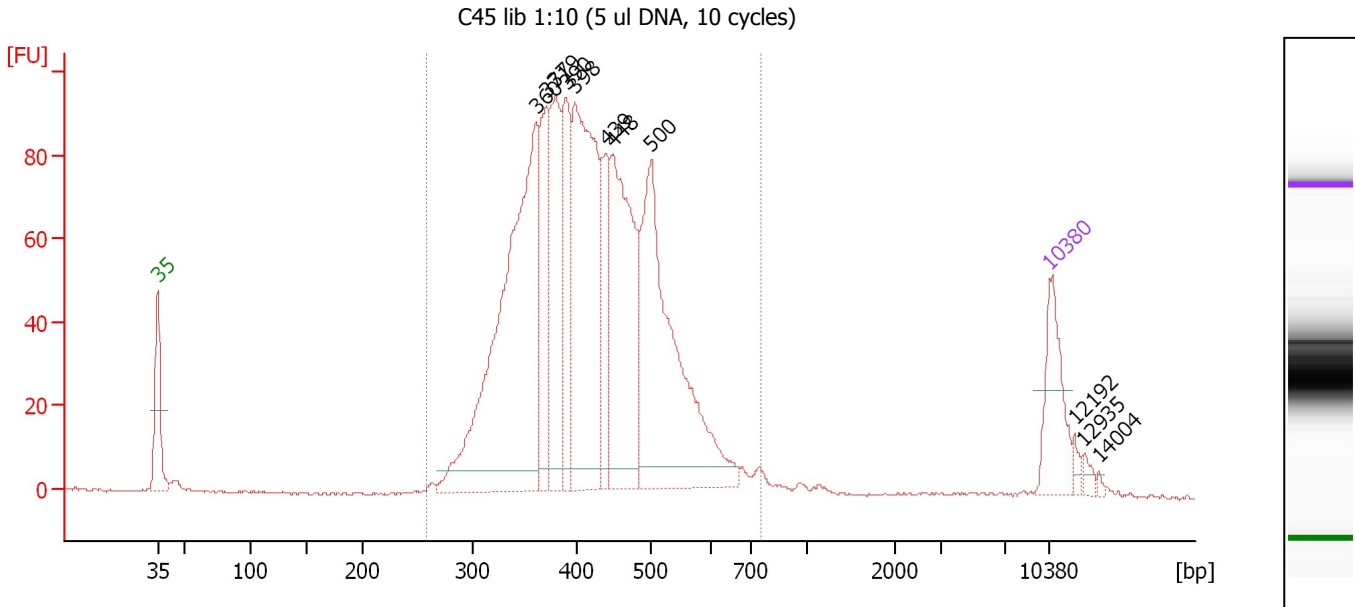
Region table for sample 4 : C46 lib 1:10 (5 ul DNA, 10 cycles)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
249	8,626.9	403	2,214.86	776	1,522.8	98	17.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-28\2012-02-28_003.xad

Created: 2/28/2012 12:08:17 PM
 Modified: 2/28/2012 4:12:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : C45 lib 1:10 (5 ul DNA, 10 cycles)

Number of peaks found: 11 Corr. Area 1: 1,566.8
 Noise: 0.3

Peak table for sample 5 : C45 lib 1:10 (5 ul DNA, 10 cycles)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	360	633.14	2,663.1	
3	371	140.63	574.3	
4	379	198.17	791.5	
5	390	137.37	534.3	
6	398	397.22	1,512.6	
7	439	105.29	363.6	
8	448	305.72	1,034.2	
9	500	441.67	1,339.5	
10	10,380	75.00	10.9	Upper Marker
11	12,192	0.00	0.0	
12	12,935	0.00	0.0	
13	14,004	0.00	0.0	

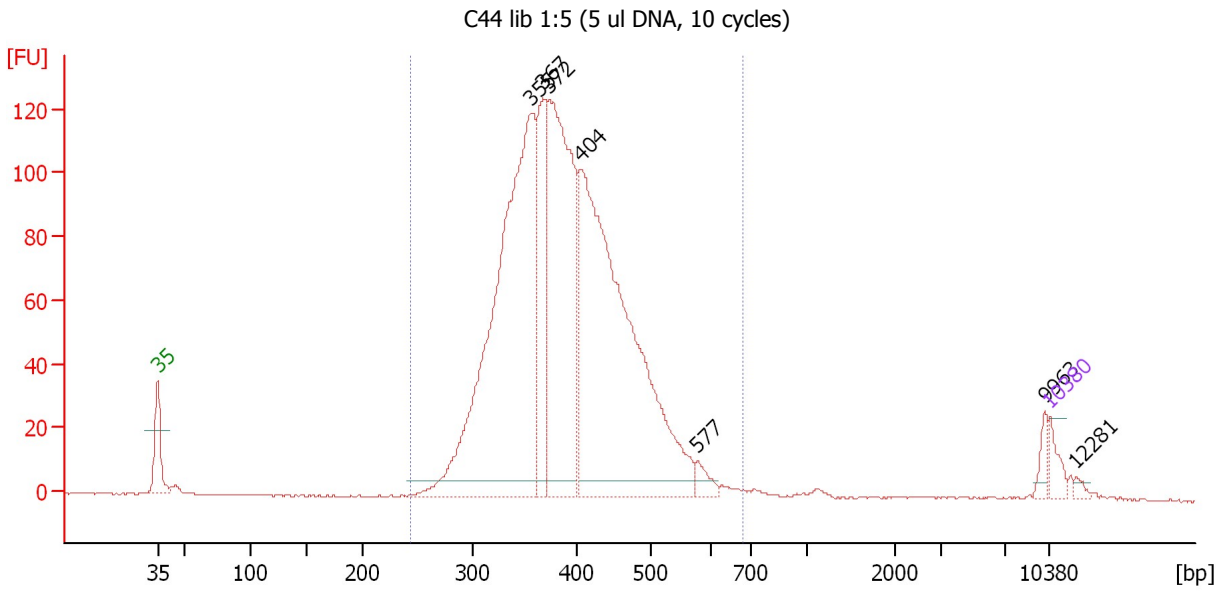
Region table for sample 5 : C45 lib 1:10 (5 ul DNA, 10 cycles)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
258	9,179.3	422	2,451.28	751	1,566.8	97	18.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-28\2012-02-28_003.xad

Created: 2/28/2012 12:08:17 PM
 Modified: 2/28/2012 4:12:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : C44 lib 1:5 (5 ul DNA, 10 cycles)

Number of peaks found: 7 Corr. Area 1: 1,727.8
 Noise: 0.2

Peak table for sample 6 : C44 lib 1:5 (5 ul DNA, 10 cycles)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	355	3,705.75	15,803.3	
3	367	832.46	3,434.7	
4	372	2,209.10	8,997.7	
5	404	3,591.01	13,460.2	
6	577	88.26	231.7	
7	9,963	63.41	9.6	
8	10,380	75.00	10.9	Upper Marker
9	12,281	0.00	0.0	

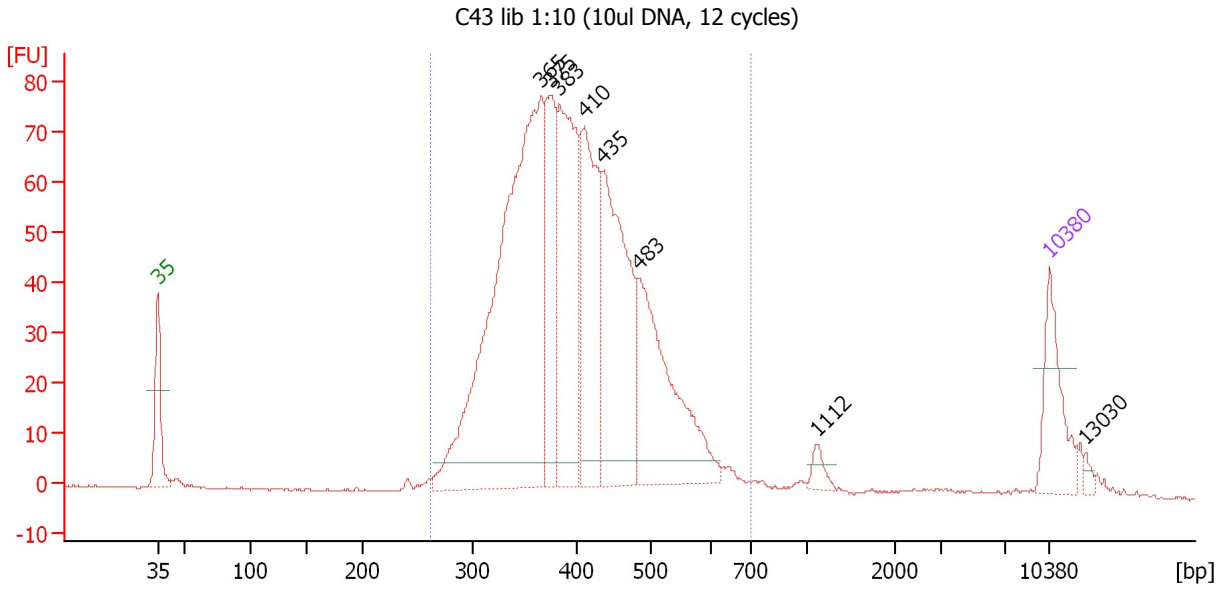
Region table for sample 6 : C44 lib 1:5 (5 ul DNA, 10 cycles)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
243	41,570.6	395	10,487.50	679	1,727.8	97	16.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-28\2012-02-28_003.xad

Created: 2/28/2012 12:08:17 PM
 Modified: 2/28/2012 4:12:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : C43 lib 1:10 (10ul DNA, 12 cycles)

Number of peaks found: 8 Corr. Area 1: 1,239.7
 Noise: 0.3

Peak table for sample 7 : C43 lib 1:10 (10ul DNA, 12 cycles)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	365	839.56	3,482.5	
3	375	176.19	712.2	
4	383	311.19	1,230.3	
5	410	255.84	945.5	
6	435	322.28	1,122.5	
7	483	281.78	884.8	
8	1,112	15.71	21.4	
9	10,380	75.00	10.9	Upper Marker
10	13,030	0.00	0.0	

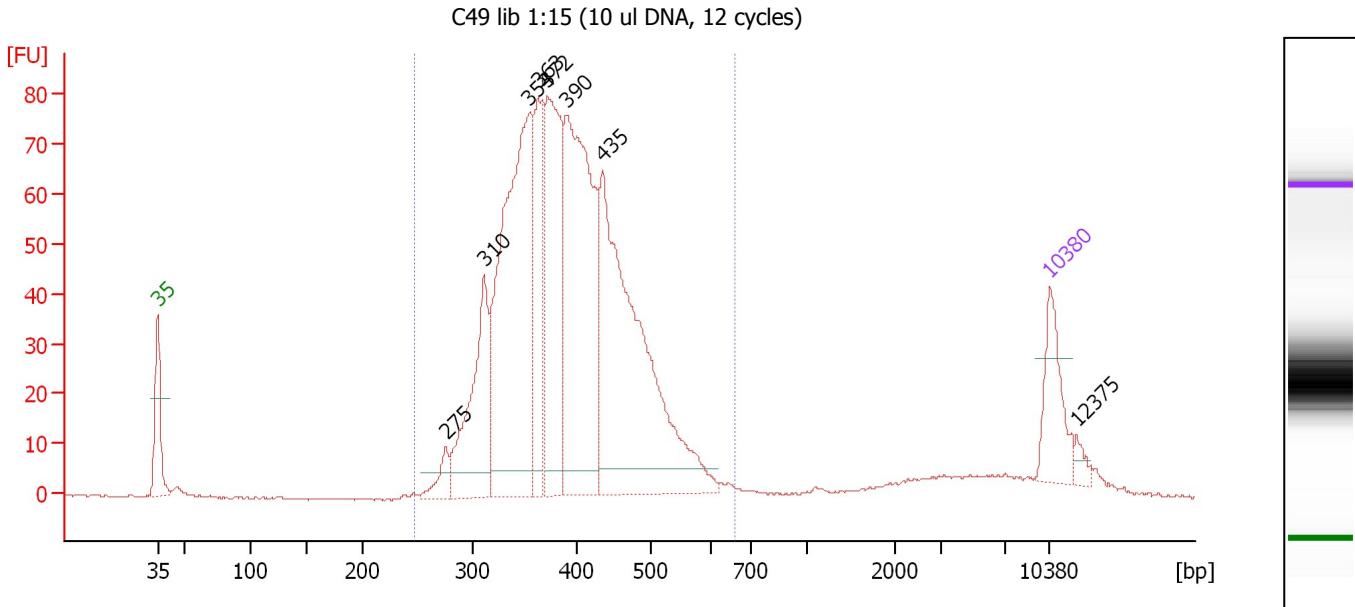
Region table for sample 7 : C43 lib 1:10 (10ul DNA, 12 cycles)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
261	8,963.1	406	2,307.25	699	1,239.7	96	18.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-28\2012-02-28_003.xad

Created: 2/28/2012 12:08:17 PM
 Modified: 2/28/2012 4:12:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : C49 lib 1:15 (10 ul DNA, 12 cycles)

Number of peaks found: 8 Corr. Area 1: 1,190.6
 Noise: 0.2

Peak table for sample 8 : C49 lib 1:15 (10 ul DNA, 12 cycles)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	275	35.22	193.9	
3	310	233.72	1,141.8	
4	354	610.77	2,611.6	
5	363	176.10	735.6	
6	372	309.71	1,262.6	
7	390	520.00	2,022.4	
8	435	611.68	2,132.6	
9	10,380	75.00	10.9	Upper Marker
10	12,375	0.00	0.0	

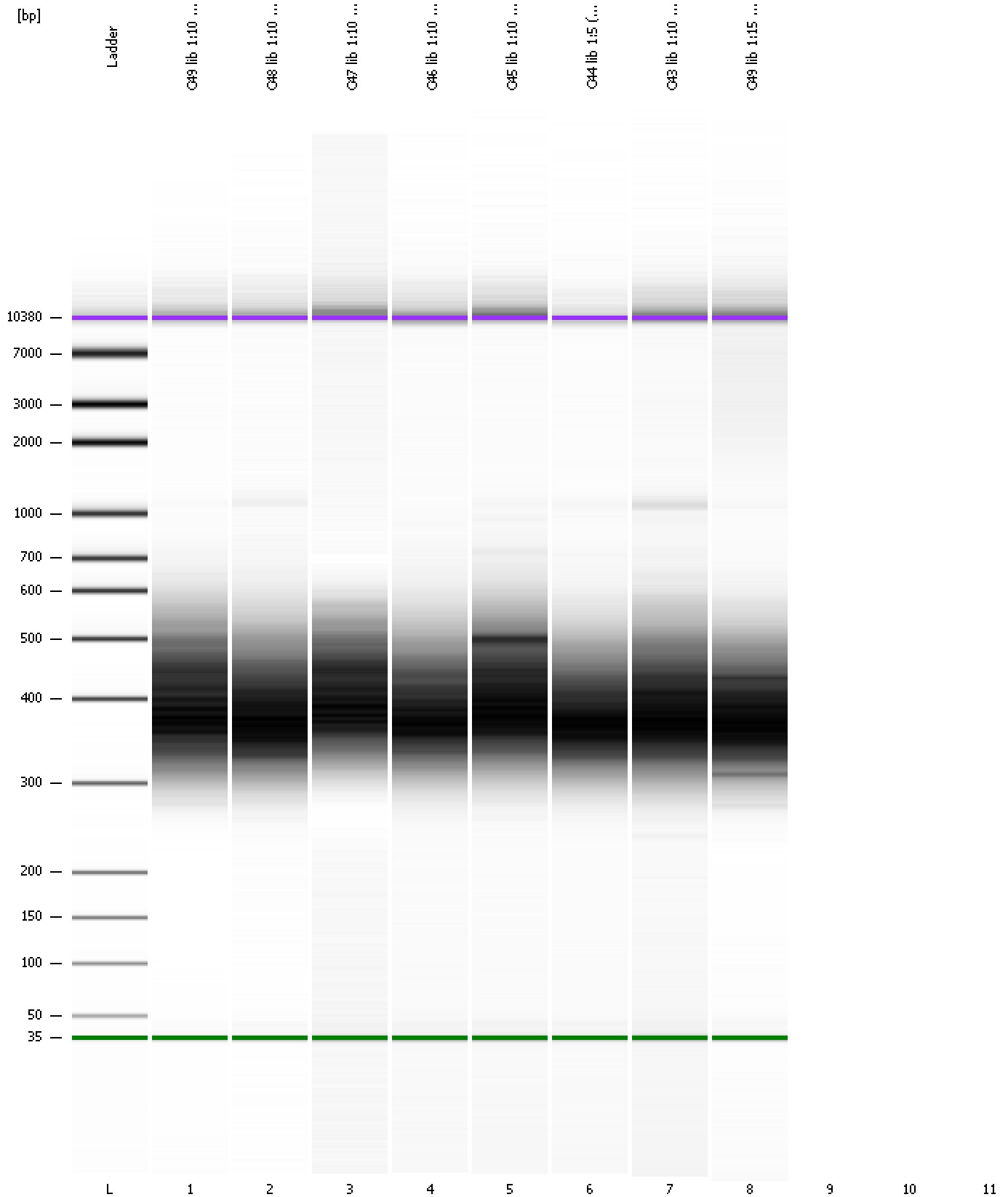
Region table for sample 8 : C49 lib 1:15 (10 ul DNA, 12 cycles)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
247	10,029.6	395	2,529.16	660	1,190.6	93	16.7	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-28\2012-02-28_003.xad

Created: 2/28/2012 12:08:17 PM
Modified: 2/28/2012 4:12:59 PM

Gel Image

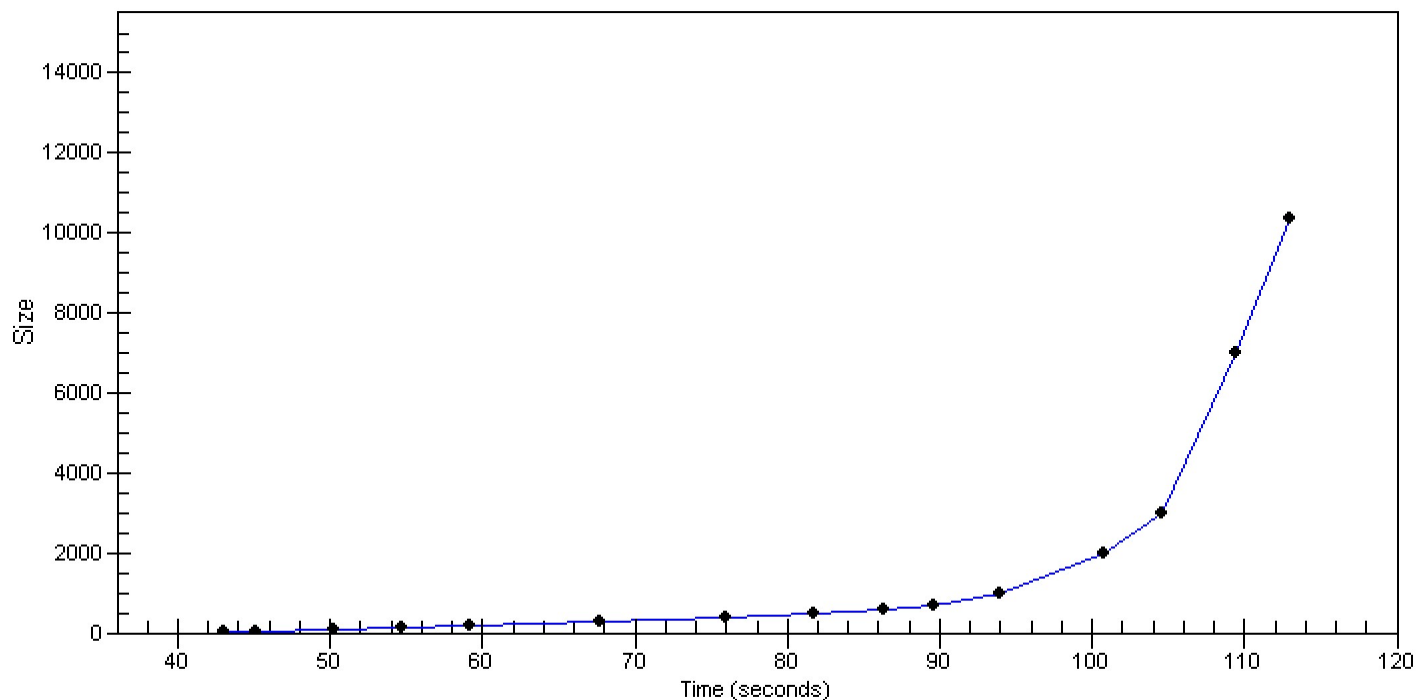


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-28\2012-02-28_003.xad

Created: 2/28/2012 12:08:17 PM
Modified: 2/28/2012 4:12:59 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-28\2012-02-28_003.xad

Created: 2/28/2012 12:08:17 PM
Modified: 2/28/2012 4:12:59 PM

Invalid Samples

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-28\2012-02-28_003.xad

Created: 2/28/2012 12:08:17 PM
 Modified: 2/28/2012 4:12:59 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 9)		Instrument	Run		2/28/2012 12:40:59 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-02-28\2012-02-28_003.xad)		Instrument	Run		2/28/2012 12:08:23 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/28/2012 12:08:23 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/28/2012 12:08:23 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/28/2012 12:08:23 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/28/2012 12:08:23 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/28/2012 12:08:23 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/28/2012 12:08:23 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1