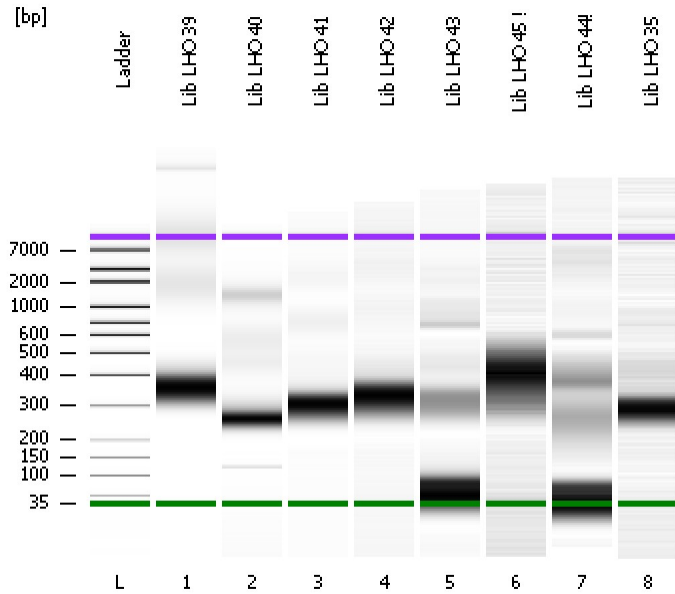


Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...and Settings\Bioanalyzer\2013-07-09\2013-07-09_002_LHOb.xad

Created: 7/9/2013 1:17:43 PM
 Modified: 7/9/2013 2:35:52 PM

Electrophoresis File Run Summary



Instrument Information:

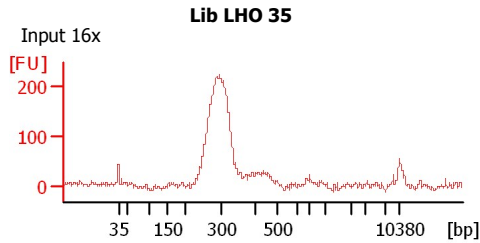
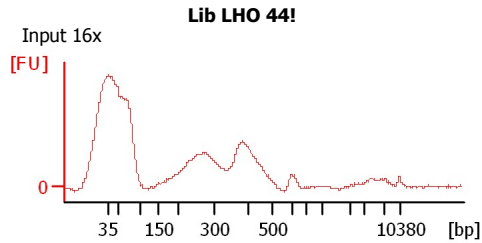
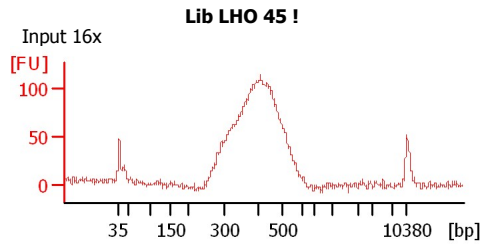
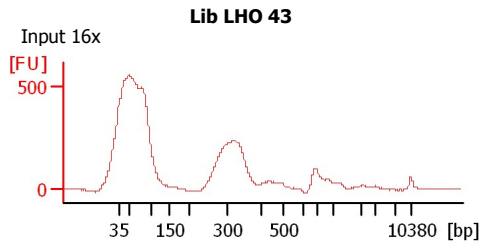
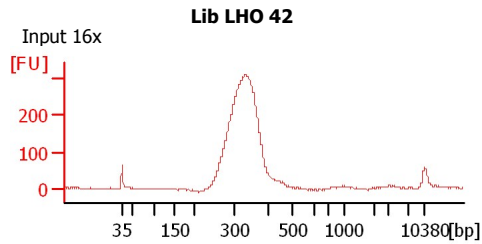
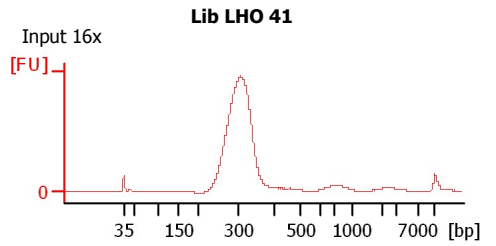
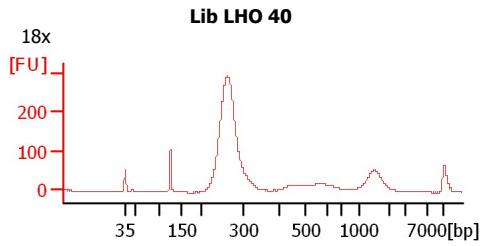
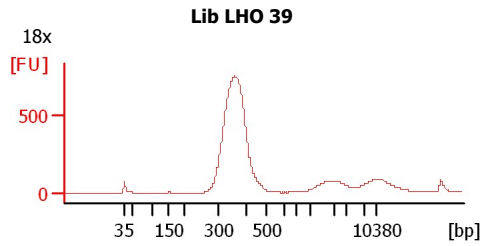
Instrument Name: DE13701086 Firmware: C.01.069
 Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...and Settings\Bioanalyzer\2013-07-09\2013-07-09_002_LHOb.xad

Created: 7/9/2013 1:17:43 PM
 Modified: 7/9/2013 2:35:52 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Lib LHO 39	18x	<input type="checkbox"/>	✓			
Lib LHO 40	18x	<input type="checkbox"/>	✓			
Lib LHO 41	Input 16x	<input type="checkbox"/>	✓			
Lib LHO 42	Input 16x	<input type="checkbox"/>	✓			
Lib LHO 43	Input 16x	<input type="checkbox"/>	✓			
Lib LHO 45 !	Input 16x	<input type="checkbox"/>	✓			
Lib LHO 44!	Input 16x	<input type="checkbox"/>	✓			
Lib LHO 35	Input 16x	<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...and Settings\Bioanalyzer\2013-07-09\2013-07-09_002_LHOb.xad

Created: 7/9/2013 1:17:43 PM
Modified: 7/9/2013 2:35:52 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

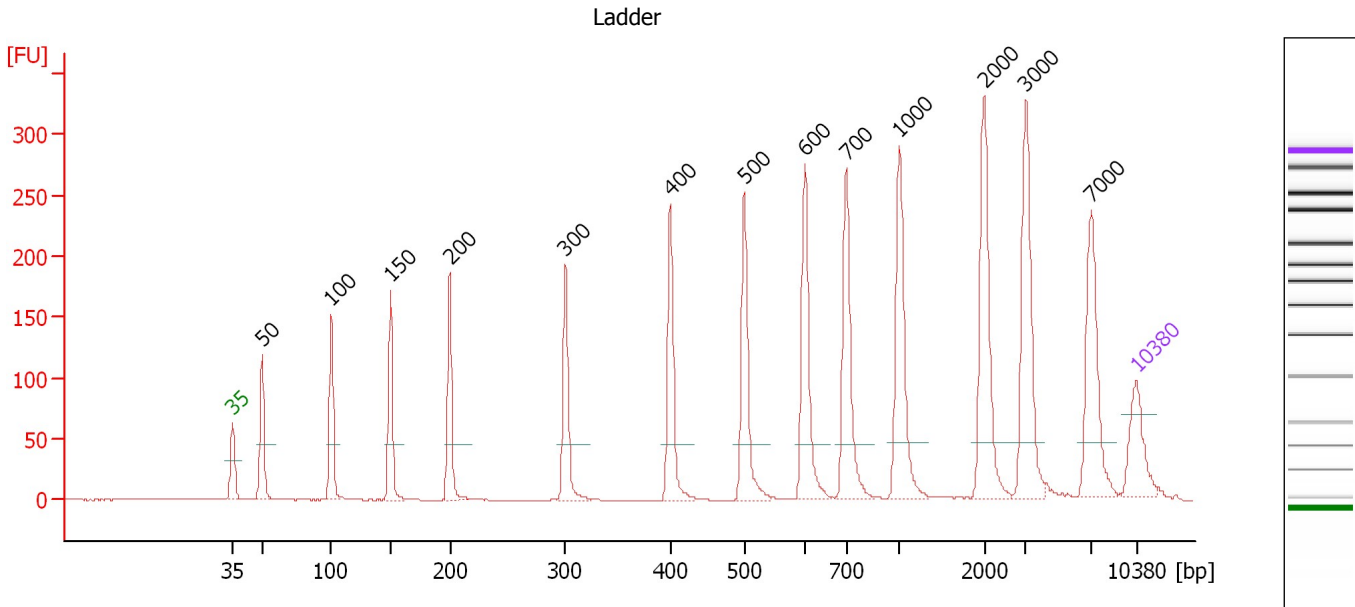
Ladder

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:\...and Settings\Bioanalyzer\2013-07-09\2013-07-09_002_LHOb.xad

Created: 7/9/2013 1:17:43 PM
 Modified: 7/9/2013 2:35:52 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

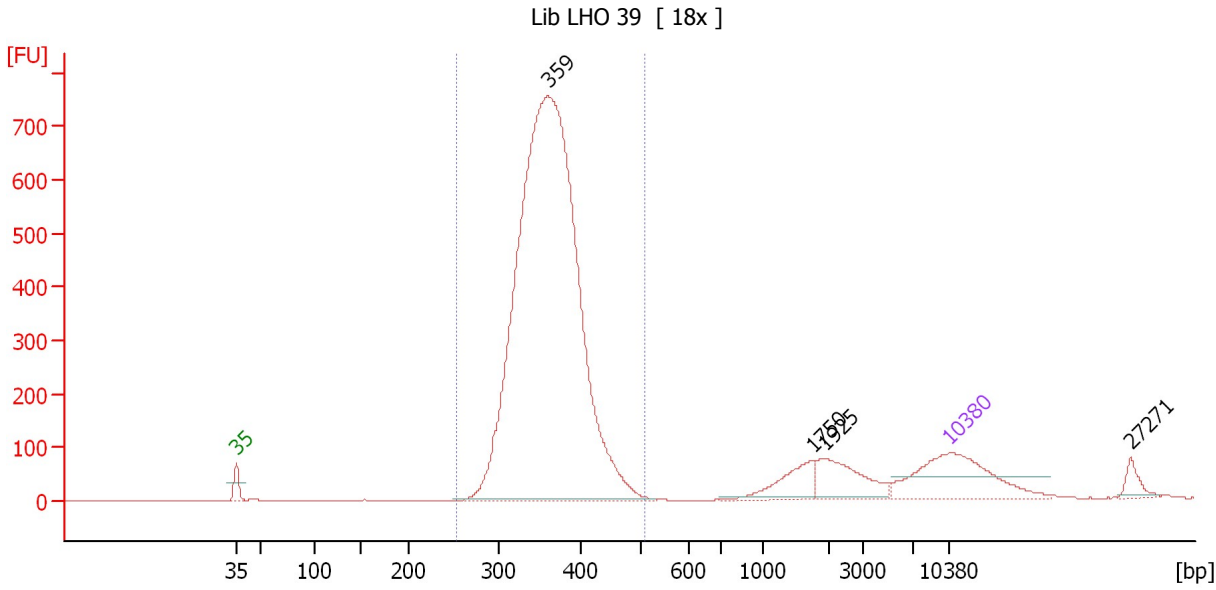
Peak table for Ladder

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:\...and Settings\Bioanalyzer\2013-07-09\2013-07-09_002_LHOb.xad

Created: 7/9/2013 1:17:43 PM
 Modified: 7/9/2013 2:35:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Lib LHO 39

Number of peaks found: 4 Corr. Area 1: 6,586.4
 Noise: 0.1

Peak table for sample 1 : Lib LHO 39

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	359	1,195.99	5,042.4	
3	1,750	32.99	28.6	
4	1,925	46.13	36.3	
5	10,380	75.00	10.9	Upper Marker
6	27,271	0.00	0.0	

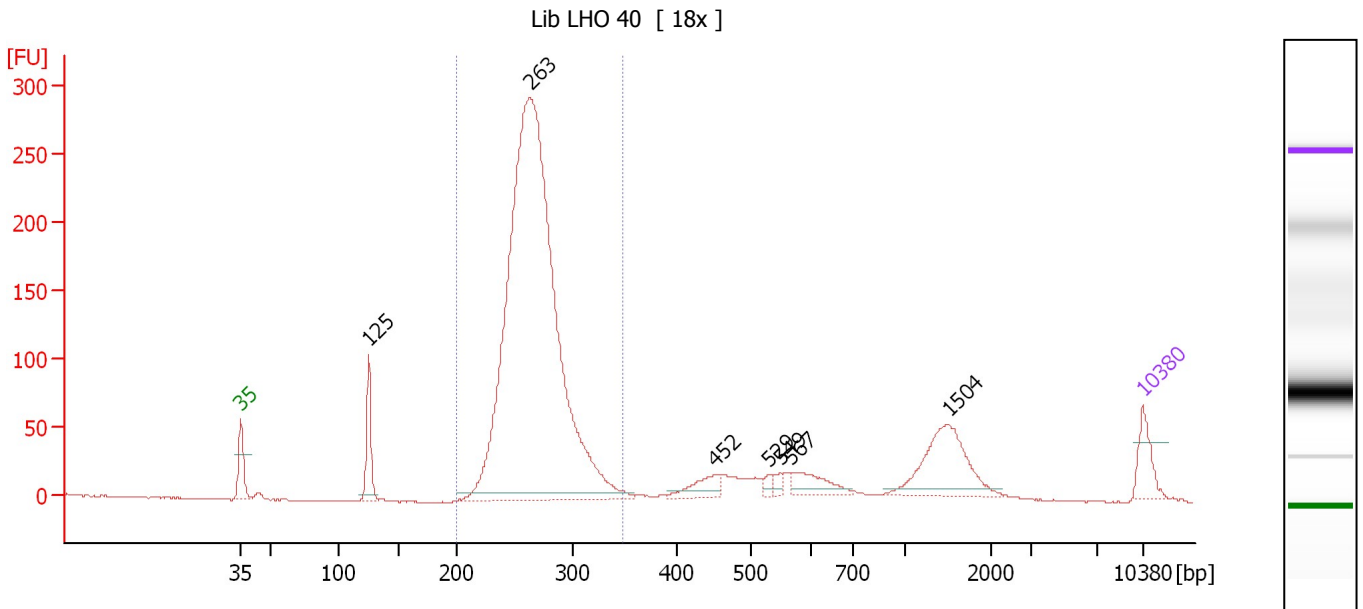
Region table for sample 1 : Lib LHO 39

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
254	511	361	5,042.2	1,191.59	6,586.4	90	9.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...and Settings\Bioanalyzer\2013-07-09\2013-07-09_002_LHOb.xad

Created: 7/9/2013 1:17:43 PM
 Modified: 7/9/2013 2:35:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Lib LHO 40

Number of peaks found: 7 Corr. Area 1: 1,995.5
 Noise: 0.4

Peak table for sample 2 : Lib LHO 40

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	125	189.85	2,300.6	
3	263	3,746.45	21,599.6	
4	452	79.36	266.1	
5	529	19.13	54.8	
6	549	22.43	61.8	
7	567	94.38	252.2	
8	1,504	256.24	258.1	
9	10,380	75.00	10.9	Upper Marker

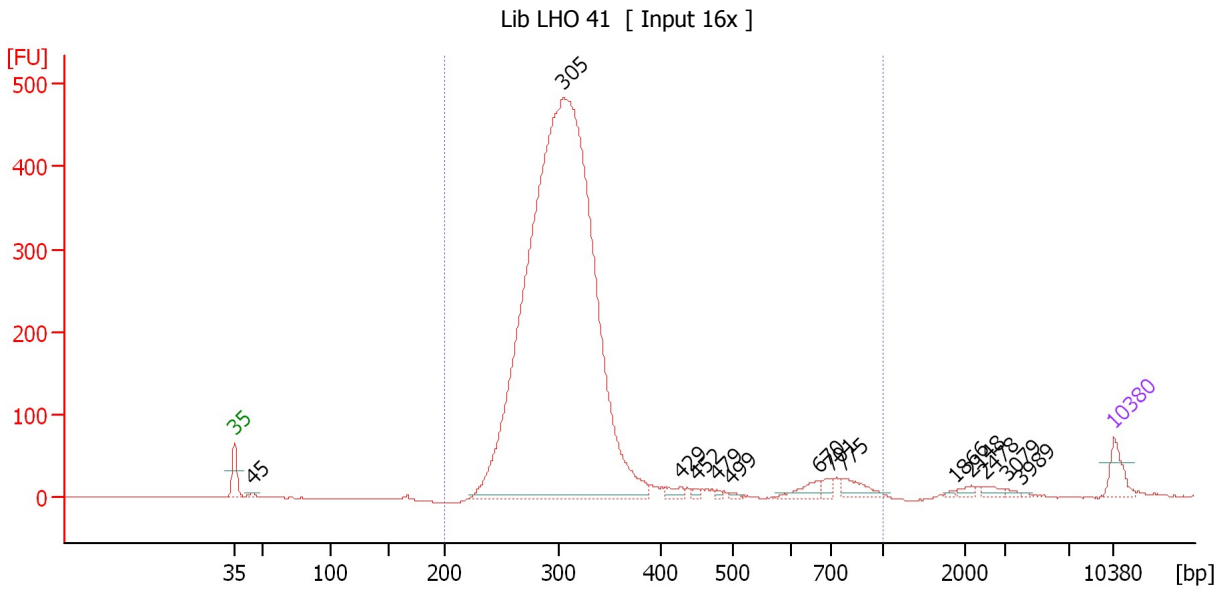
Region table for sample 2 : Lib LHO 40

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	348	267	20,755.9	3,640.59	1,995.5	77	8.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...and Settings\Bioanalyzer\2013-07-09\2013-07-09_002_LHO.b.xad

Created: 7/9/2013 1:17:43 PM
 Modified: 7/9/2013 2:35:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Lib LHO 41

Number of peaks found: 14 Corr. Area 1: 4,757.3
 Noise: 0.3

Peak table for sample 3 : Lib LHO 41

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	45	17.61	599.2	
3	305	7,347.39	36,474.5	
4	429	35.65	125.9	
5	452	14.25	47.8	
6	479	10.70	33.9	
7	499	9.48	28.8	
8	670	61.78	139.8	
9	701	34.71	75.1	
10	775	75.88	148.4	
11	1,866	7.42	6.0	
12	2,148	19.55	13.8	
13	2,478	25.50	15.6	
14	3,079	9.30	4.6	
15	3,989	4.58	1.7	
16	10,380	75.00	10.9	Upper Marker

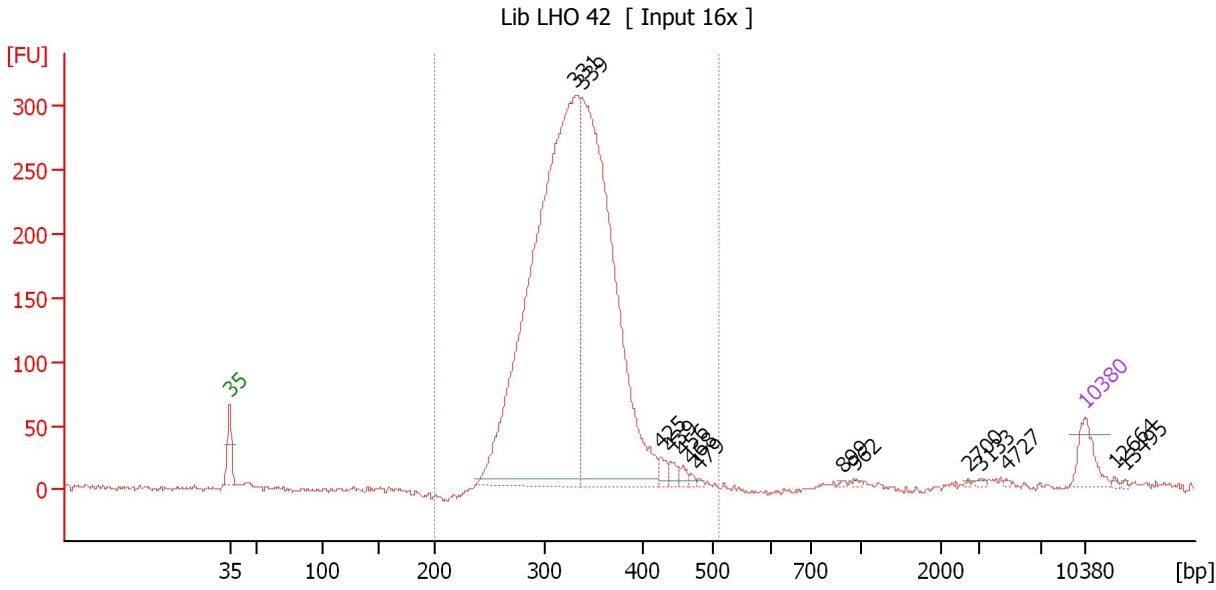
Region table for sample 3 : Lib LHO 41

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	323	37,989.1	7,669.22	4,757.3	98	28.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...and Settings\Bioanalyzer\2013-07-09\2013-07-09_002_LHOb.xad

Created: 7/9/2013 1:17:43 PM
 Modified: 7/9/2013 2:35:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Lib LHO 42

Number of peaks found: 14 Corr. Area 1: 3,447.1
 Noise: 1.9

Peak table for sample 4 : Lib LHO 42

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	331	2,945.49	13,482.9	
3	339	2,021.37	9,046.5	
4	425	30.24	107.8	
5	439	28.99	100.1	
6	456	19.95	66.2	
7	468	8.79	28.5	
8	479	5.85	18.5	
9	899	4.17	7.0	
10	962	5.46	8.6	
11	2,700	3.01	1.7	
12	3,133	5.64	2.7	
13	4,727	3.40	1.1	
14	10,380	75.00	10.9	Upper Marker
15	12,664	0.00	0.0	
16	13,495	0.00	0.0	

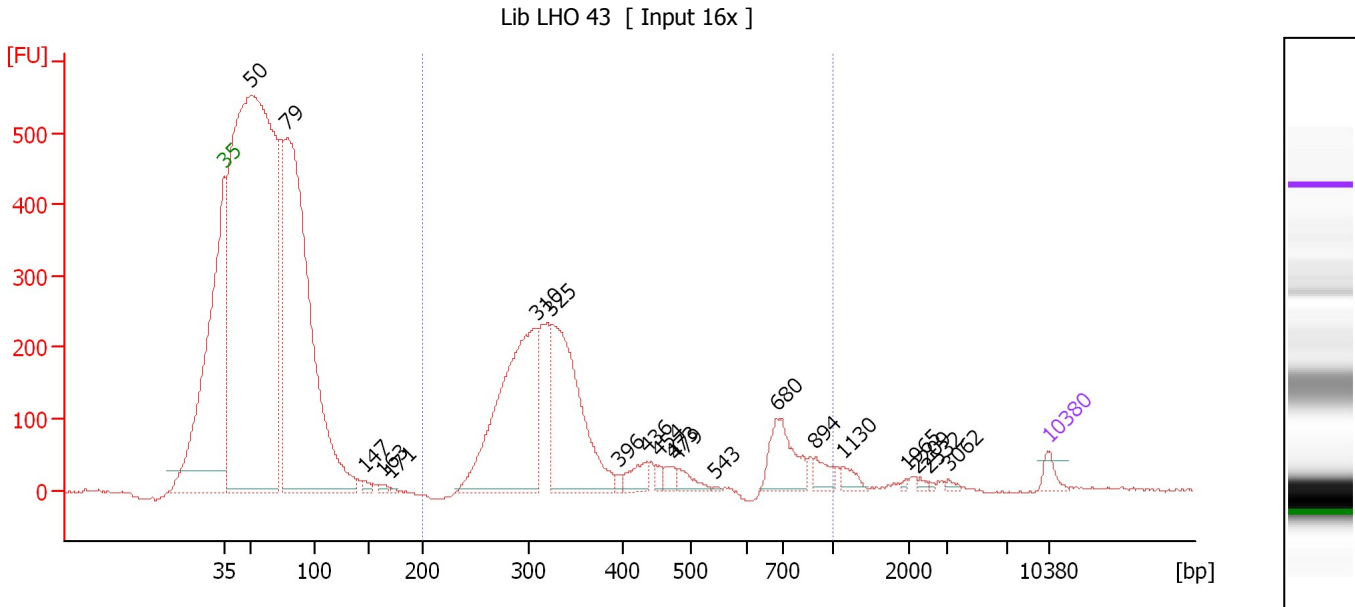
Region table for sample 4 : Lib LHO 42

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	510	331	24,747.5	5,316.35	3,447.1	97	11.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...and Settings\Bioanalyzer\2013-07-09\2013-07-09_002_LHOb.xad

Created: 7/9/2013 1:17:43 PM
 Modified: 7/9/2013 2:35:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Lib LHO 43

Number of peaks found: 20 Corr. Area 1: 3,183.4
 Noise: 2.3

Peak table for sample 5 : Lib LHO 43

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	13,618.50	413,089.3	
3	79	7,319.20	141,081.5	
4	147	60.61	626.6	
5	163	38.14	354.9	
6	171	15.92	141.3	
7	310	2,510.04	12,268.6	
8	325	1,930.59	9,013.4	
9	396	39.56	151.3	
10	436	177.60	617.8	
11	454	52.18	174.3	
12	473	83.97	269.2	
13	479	125.53	397.1	
14	543	11.05	30.8	
15	680	475.75	1,059.7	
16	894	125.10	211.9	
17	1,130	81.35	109.1	
18	1,965	11.51	8.9	
19	2,209	19.29	13.2	
20	2,532	9.61	5.7	
21	3,062	21.24	10.5	
22	10,380	75.00	10.9	Upper Marker

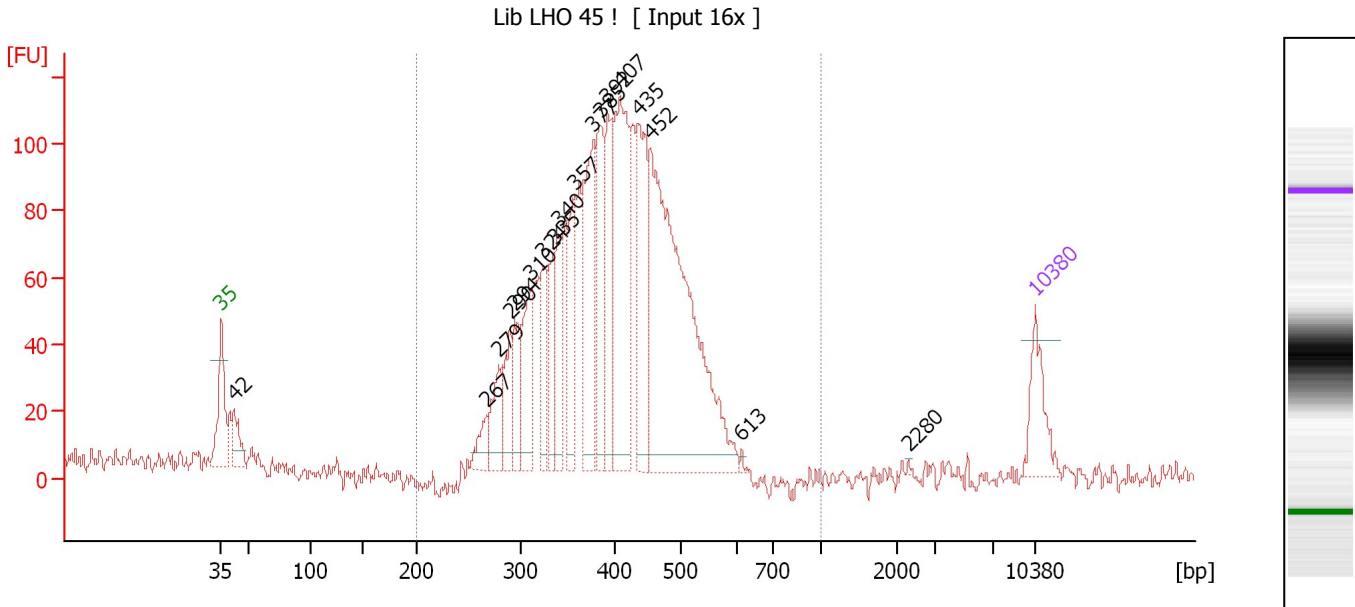
Region table for sample 5 : Lib LHO 43

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	391	28,262.8	6,282.06	3,183.4	27	42.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...and Settings\Bioanalyzer\2013-07-09\2013-07-09_002_LHOb.xad

Created: 7/9/2013 1:17:43 PM
 Modified: 7/9/2013 2:35:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Lib LHO 45 !

Number of peaks found: 18 Corr. Area 1: 1,824.1
 Noise: 3.3

Peak table for sample 6 : Lib LHO 45 !

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	75.26	2,697.8	
3	267	48.84	277.0	
4	279	96.46	523.9	
5	290	95.55	499.7	
6	294	95.59	493.0	
7	310	146.93	717.9	
8	324	100.95	472.5	
9	335	103.40	467.6	
10	340	120.11	535.9	
11	357	140.73	597.1	
12	377	254.18	1,021.7	
13	385	182.66	718.1	
14	392	185.14	715.2	
15	407	370.98	1,379.7	
16	435	255.99	892.5	
17	452	840.66	2,817.2	
18	613	4.14	10.2	
19	2,280	1.85	1.2	
20	10,380	75.00	10.9	Upper Marker

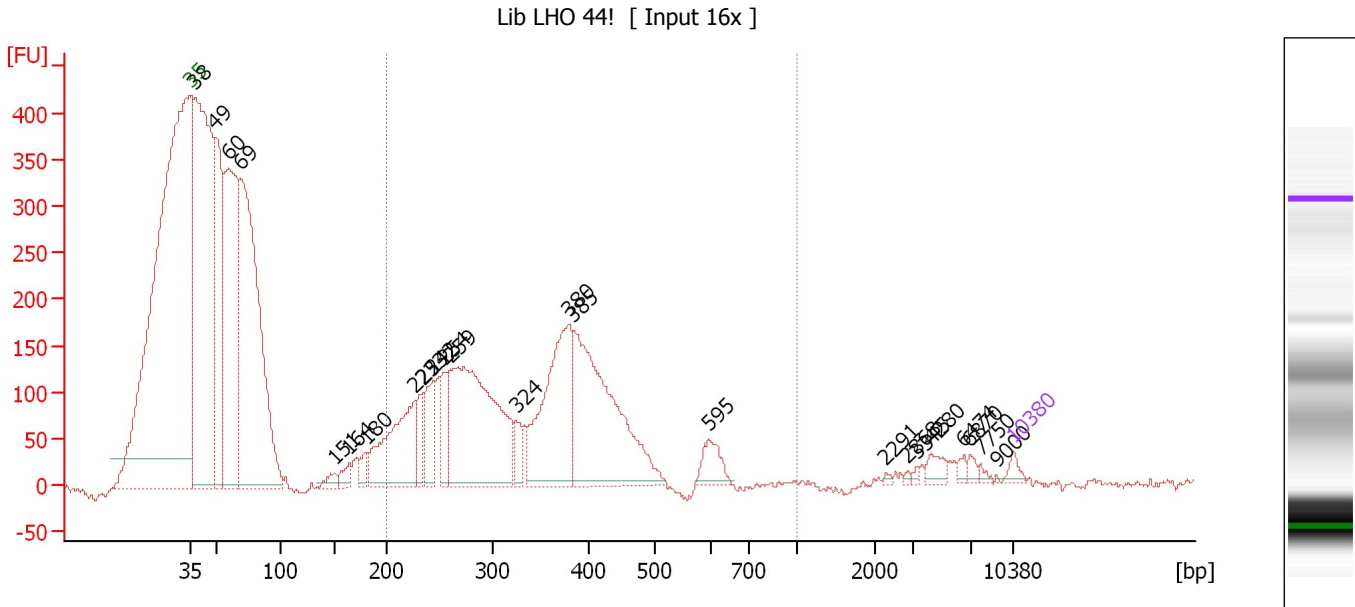
Region table for sample 6 : Lib LHO 45 !

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	404	13,467.0	3,428.99	1,824.1	96	18.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...and Settings\Bioanalyzer\2013-07-09\2013-07-09_002_LHOb.xad

Created: 7/9/2013 1:17:43 PM
 Modified: 7/9/2013 2:35:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Lib LHO 44!

Number of peaks found: 24 Corr. Area 1: 3,426.8
 Noise: 4.2

Peak table for sample 7 : Lib LHO 44!

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	38	9,238.18	368,425.1	
3	49	3,478.55	108,083.5	
4	60	4,868.51	122,796.7	
5	69	7,531.21	166,558.1	
6	151	150.30	1,507.2	
7	164	190.83	1,758.4	
8	180	219.95	1,849.0	
9	225	1,798.10	12,092.9	
10	233	395.98	2,576.4	
11	242	622.78	3,891.5	
12	254	502.91	3,004.7	
13	259	3,797.93	22,204.1	
14	324	268.97	1,257.0	
15	380	2,225.02	8,867.8	
16	385	3,121.41	12,295.5	
17	595	327.80	834.5	
18	2,291	19.17	12.7	
19	2,868	20.20	10.7	
20	3,345	22.02	10.0	
21	4,280	133.85	47.4	
22	6,474	55.14	12.9	
23	6,870	59.95	13.2	
24	7,750	36.47	7.1	
25	9,000	6.99	1.2	
26	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...and Settings\Bioanalyzer\2013-07-09\2013-07-09_002_LHOb.xad

Created: 7/9/2013 1:17:43 PM
Modified: 7/9/2013 2:35:52 PM

Electropherogram Summary Continued ...

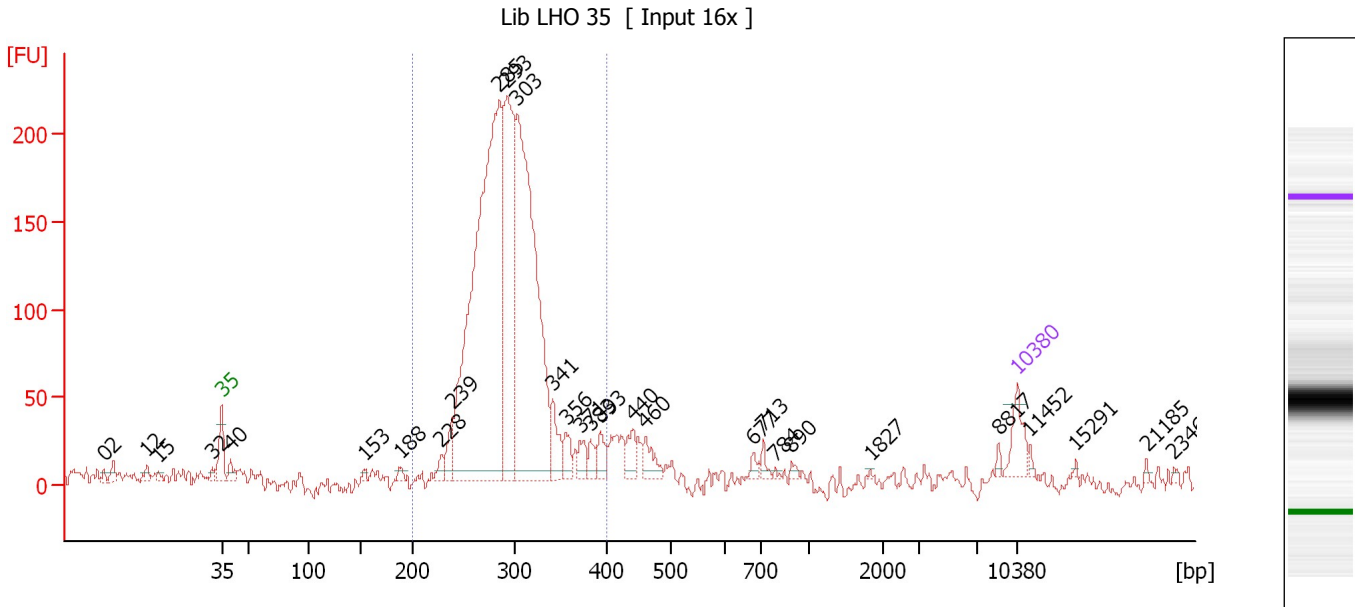
... Region table for sample 7 : Lib LHO 44!

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	341	61,609.9	12,608.47	3,426.8	39	26.6	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...and Settings\Bioanalyzer\2013-07-09\2013-07-09_002_LHOb.xad

Created: 7/9/2013 1:17:43 PM
 Modified: 7/9/2013 2:35:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Lib LHO 35

Number of peaks found: 30 Corr. Area 1: 1,897.7
 Noise: 5.3

Peak table for sample 8 : Lib LHO 35

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	
2	2	0.00	0.0	
3	12	0.00	0.0	
4	15	0.00	0.0	
5	32	0.00	0.0	
6	35	125.00	5,411.3	Lower Marker
7	40	47.51	1,801.5	
8	153	13.44	132.9	
9	188	20.76	167.2	
10	228	33.27	220.9	
11	239	76.71	486.0	
12	285	2,106.53	11,191.1	
13	293	800.24	4,137.4	
14	303	1,434.15	7,163.8	
15	341	103.11	458.1	
16	356	62.13	264.4	
17	371	50.17	204.8	
18	383	42.44	168.0	
19	393	59.63	229.8	
20	440	63.64	219.0	
21	460	68.54	225.8	
22	677	21.00	47.0	
23	713	21.43	45.6	
24	784	5.78	11.2	
25	890	11.58	19.7	
26	1,827	2.53	2.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...and Settings\Bioanalyzer\2013-07-09\2013-07-09_002_LHOb.xad

Created: 7/9/2013 1:17:43 PM
 Modified: 7/9/2013 2:35:52 PM

Electropherogram Summary Continued ...

... Peak table for sample 8 : Lib LHO 35

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	8,817	9.92	1.7	
28	10,380	75.00	10.9	Upper Marker
29	11,452	0.00	0.0	
30	15,291	0.00	0.0	
31	21,185	0.00	0.0	
32	23,462	0.00	0.0	

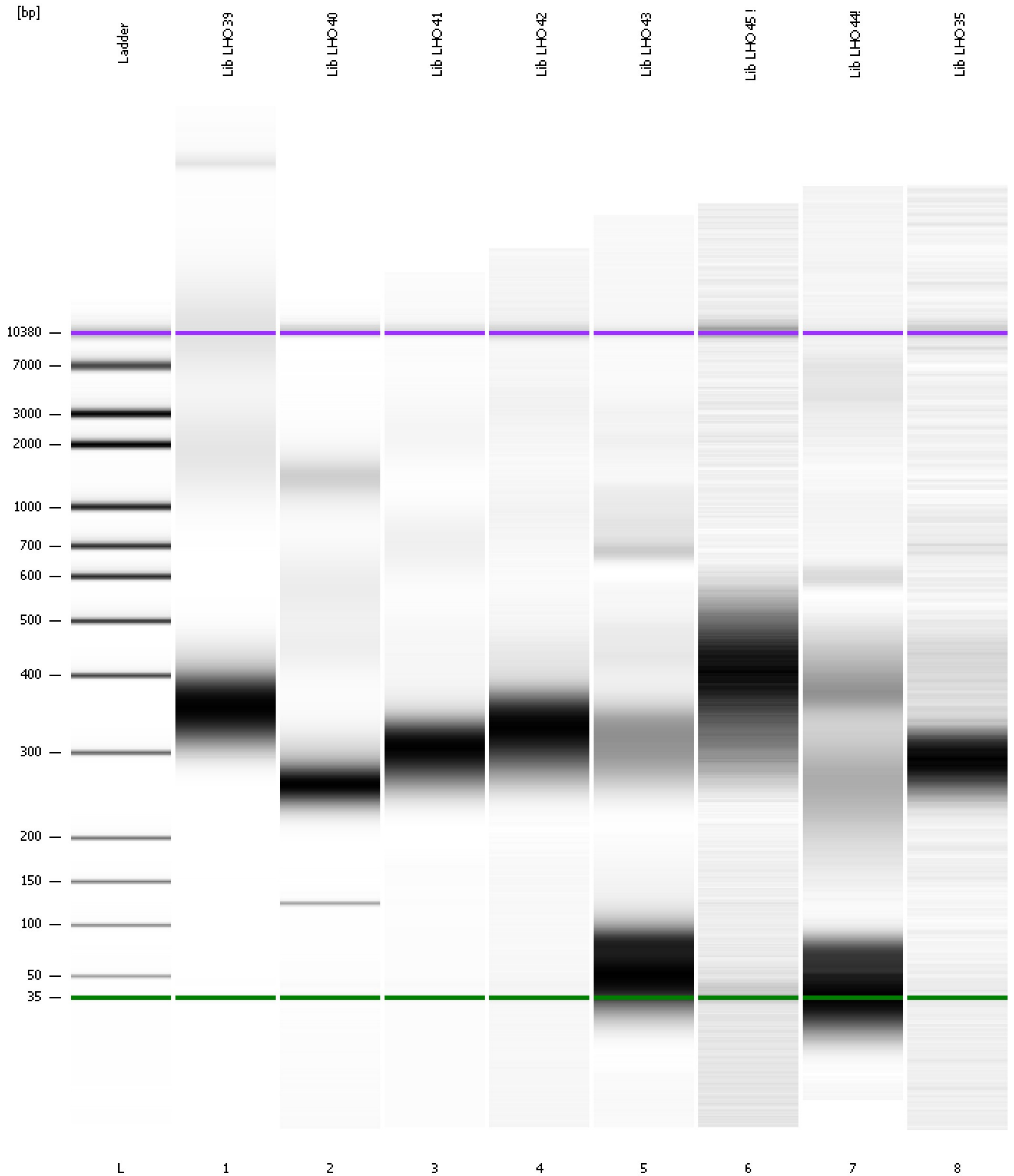
Region table for sample 8 : Lib LHO 35

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	400	294	23,721.1	4,559.36	1,897.7	94	10.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...and Settings\Bioanalyzer\2013-07-09\2013-07-09_002_LHOb.xad

Created: 7/9/2013 1:17:43 PM
Modified: 7/9/2013 2:35:52 PM

Gel Image



Assay Class: High Sensitivity DNA Assay Created: 7/9/2013 1:17:43 PM
 Data Path: C:\...and Settings\Bioanalyzer\2013-07-09\2013-07-09_002_LHOb.xad Modified: 7/9/2013 2:35:52 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		7/9/2013 1:58:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-07-09\2013-07-09_002.xad)		Instrument	Run		7/9/2013 1:17:43 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/9/2013 1:17:43 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/9/2013 1:17:43 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/9/2013 1:17:43 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/9/2013 1:17:43 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/9/2013 1:17:43 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/9/2013 1:17:43 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1