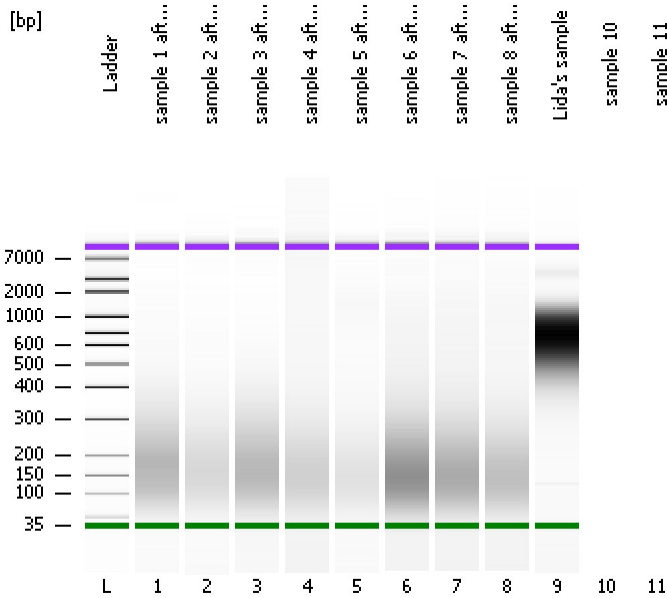


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-15\2013-07-15_002.xad

Created: 7/15/2013 2:16:47 PM
Modified: 7/15/2013 2:53:14 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

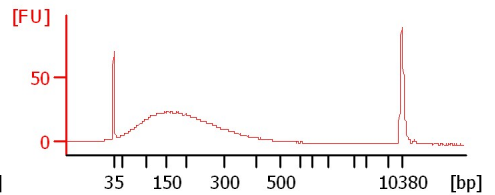
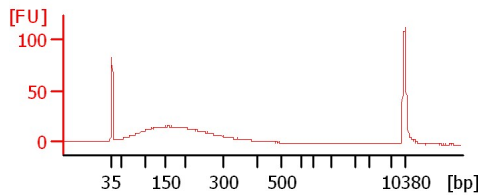
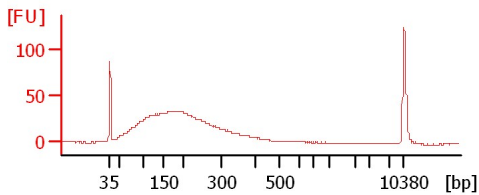
Chip Information:

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

sample 1 after Covaris 10xdilut

sample 2 after Covaris

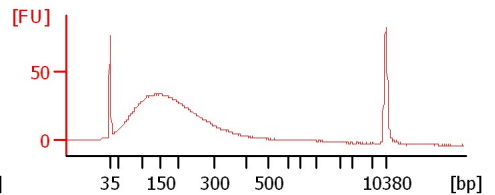
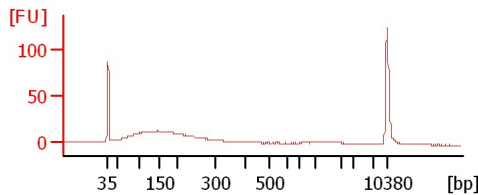
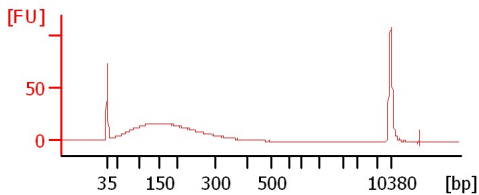
sample 3 after Covaris



sample 4 after Covaris

sample 5 after Covaris

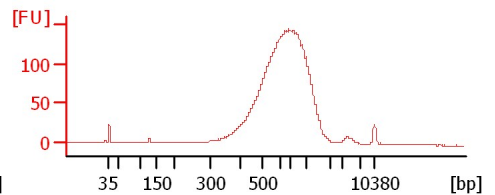
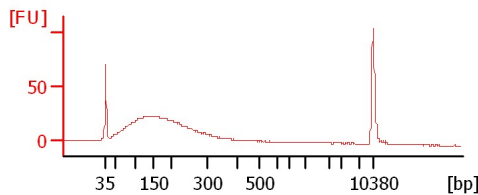
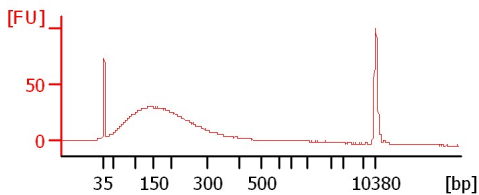
sample 6 after Covaris



sample 7 after Covaris

sample 8 after Covaris

Lida's sample



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-15\2013-07-15_002.xad

Created: 7/15/2013 2:16:47 PM
Modified: 7/15/2013 2:53:14 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1 after Covaris 10xdilut		<input type="checkbox"/>	✓			
sample 2 after Covaris		<input type="checkbox"/>	✓			
sample 3 after Covaris		<input type="checkbox"/>	✓			
sample 4 after Covaris		<input type="checkbox"/>	✓			
sample 5 after Covaris		<input type="checkbox"/>	✓			
sample 6 after Covaris		<input type="checkbox"/>	✓			
sample 7 after Covaris		<input type="checkbox"/>	✓			
sample 8 after Covaris		<input type="checkbox"/>	✓			
Lida's sample		<input type="checkbox"/>	✓			
sample 10		<input type="checkbox"/>				
sample 11		<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\2013-07-15\2013-07-15_002.xad

Created: 7/15/2013 2:16:47 PM
Modified: 7/15/2013 2:53:14 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

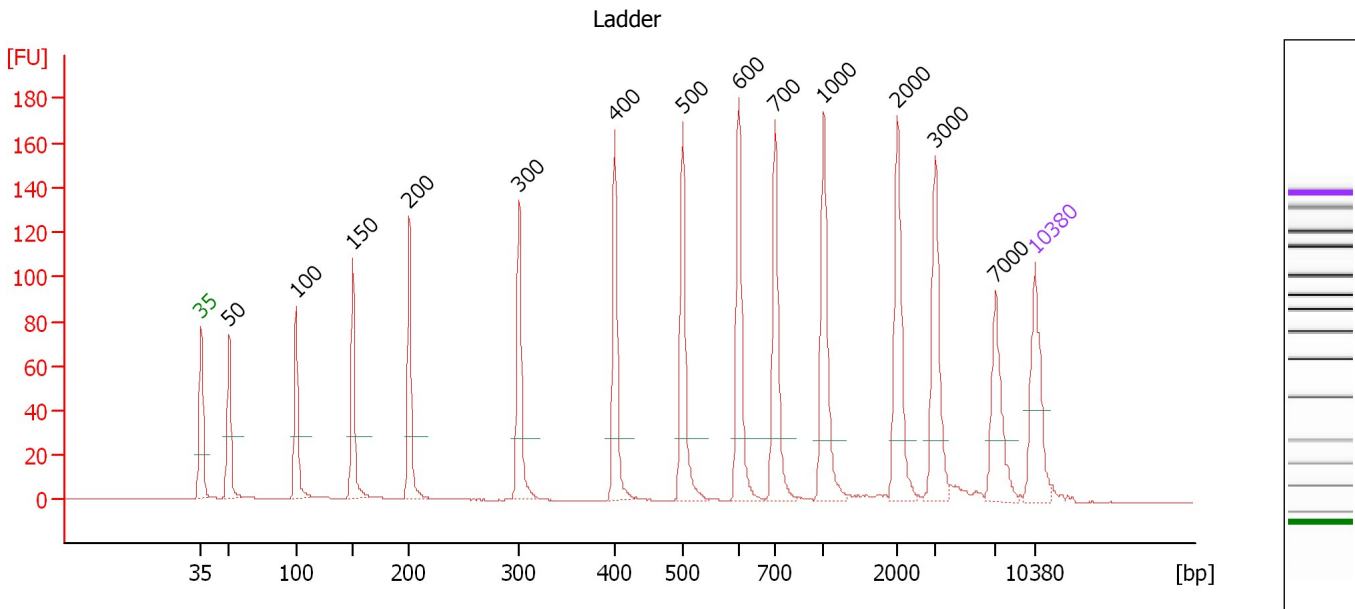
Ladder

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\2013-07-15\2013-07-15_002.xad

Created: 7/15/2013 2:16:47 PM
 Modified: 7/15/2013 2:53:14 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

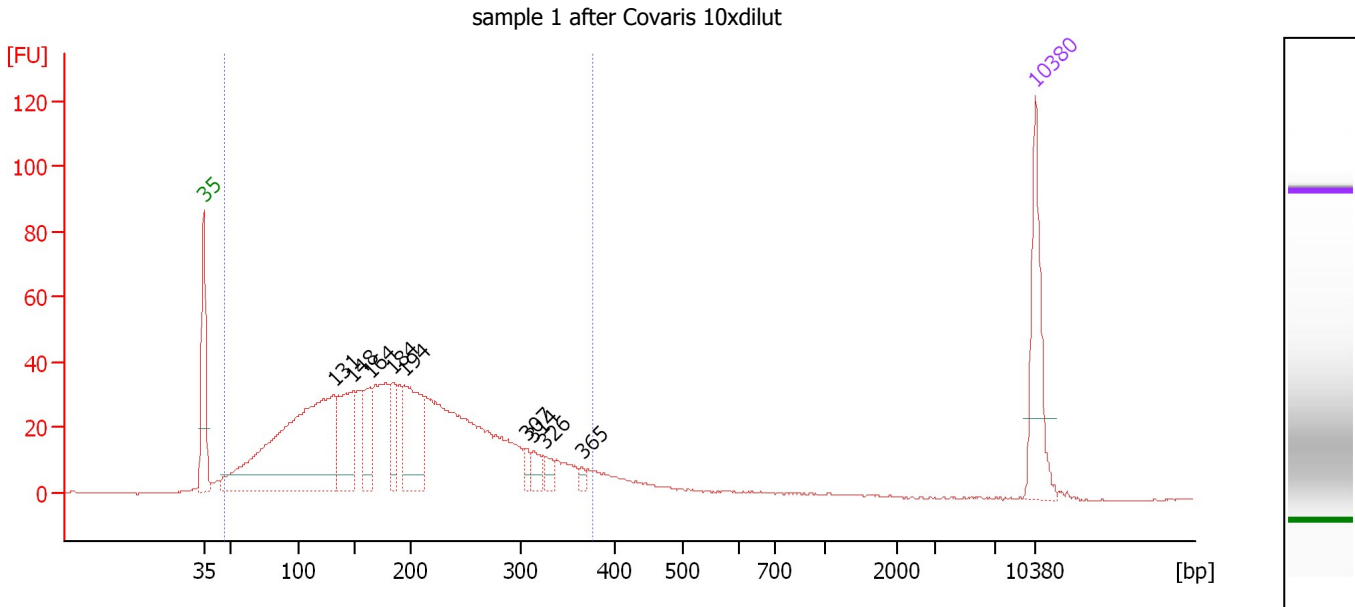
Peak table for Ladder

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\2013-07-15\2013-07-15_002.xad

Created: 7/15/2013 2:16:47 PM
 Modified: 7/15/2013 2:53:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1 after Covaris 10xdilut

Number of peaks found: 9 Corr. Area 1: 1,165.4
 Noise: 0.2

Peak table for sample 1 : sample 1 after Covaris 10xdilut

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	131	482.13	5,558.2	
3	148	116.00	1,184.0	
4	164	68.57	635.1	
5	184	49.48	407.6	
6	194	127.07	990.8	
7	307	12.30	60.7	
8	314	17.85	86.2	
9	326	13.85	64.4	
10	365	5.91	24.6	
11	10,380	75.00	10.9	Upper Marker

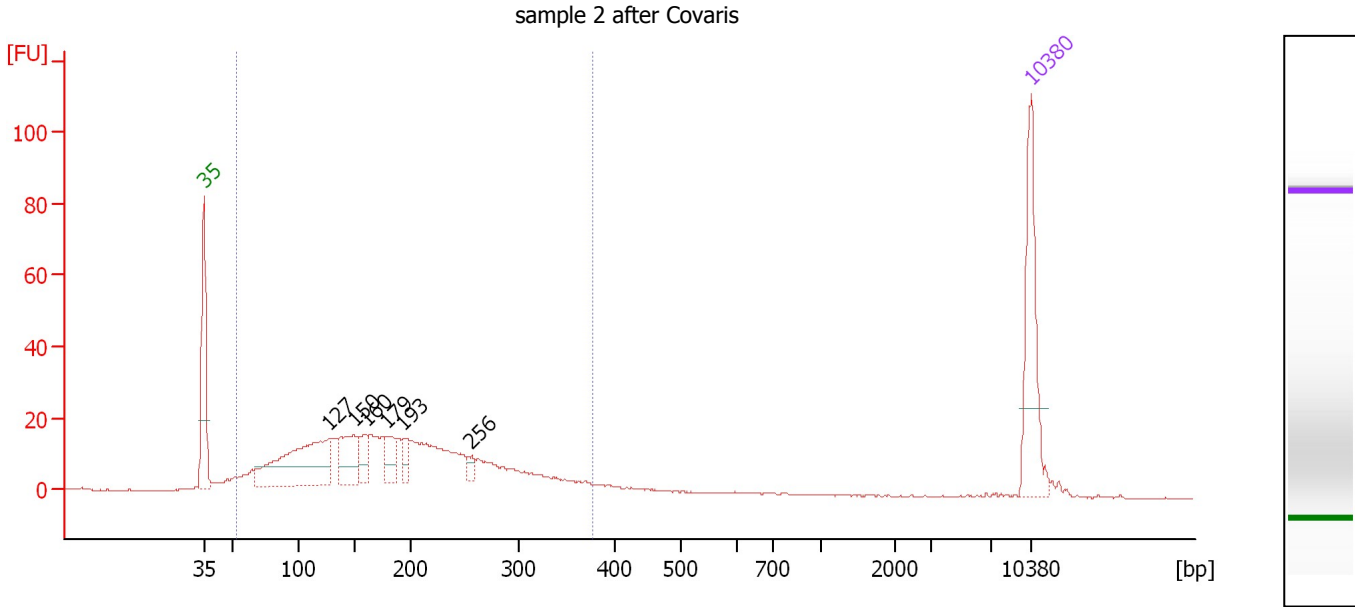
Region table for sample 1 : sample 1 after Covaris 10xdilut

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
47	377	191	16,551.1	1,586.62	1,165.4	94	40.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-15\2013-07-15_002.xad

Created: 7/15/2013 2:16:47 PM
 Modified: 7/15/2013 2:53:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2 after Covaris

Number of peaks found: 6 Corr. Area 1: 533.6
 Noise: 0.2

Peak table for sample 2 : sample 2 after Covaris

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	127	174.76	2,079.4	
3	150	60.13	608.6	
4	160	27.11	256.5	
5	179	31.14	263.3	
6	193	17.92	140.3	
7	256	9.23	54.7	
8	10,380	75.00	10.9	Upper Marker

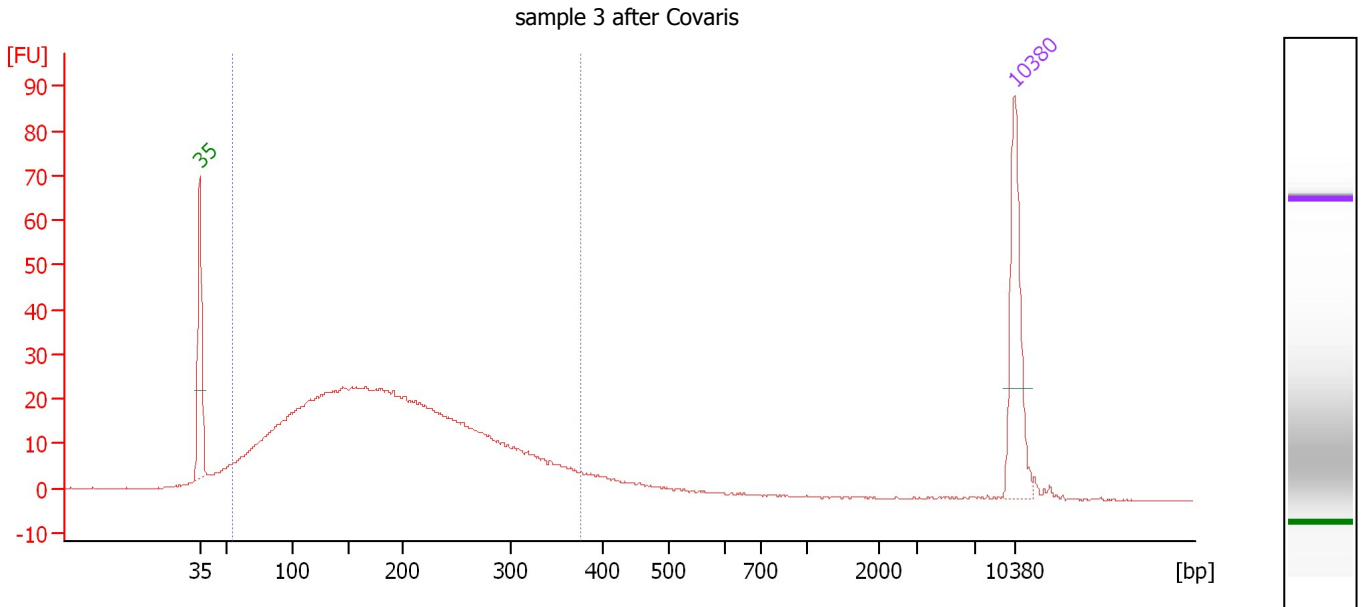
Region table for sample 2 : sample 2 after Covaris

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
54	379	187	7,721.5	740.50	533.6	92	40.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-15\2013-07-15_002.xad

Created: 7/15/2013 2:16:47 PM
 Modified: 7/15/2013 2:53:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3 after Covaris

Number of peaks found: 0 Corr. Area 1: 812.5
 Noise: 0.1

Peak table for sample 3 : sample 3 after Covaris

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

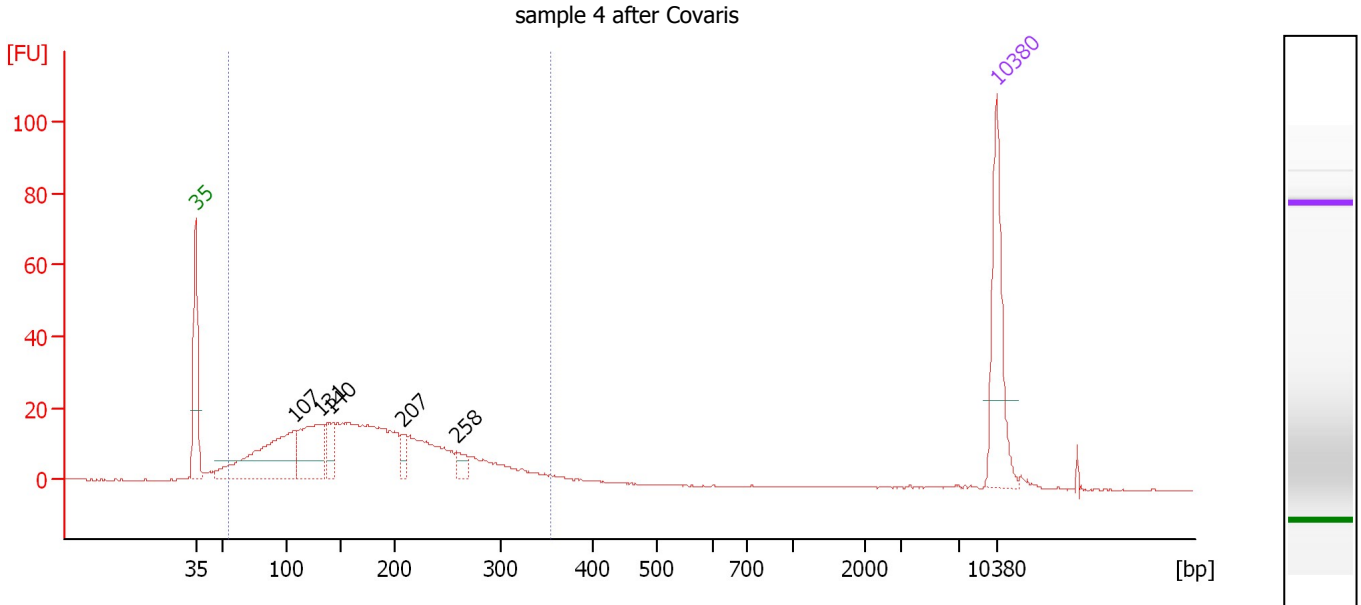
Region table for sample 3 : sample 3 after Covaris

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
55	376	190	13,998.5	1,352.62	812.5	92	40.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-15\2013-07-15_002.xad

Created: 7/15/2013 2:16:47 PM
 Modified: 7/15/2013 2:53:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4 after Covaris

Number of peaks found: 5 Corr. Area 1: 526.3
 Noise: 0.1

Peak table for sample 4 : sample 4 after Covaris

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	107	175.78	2,481.4	
3	131	102.60	1,183.2	
4	140	33.28	360.9	
5	207	17.40	127.6	
6	258	15.23	89.5	
7	10,380	75.00	10.9	Upper Marker

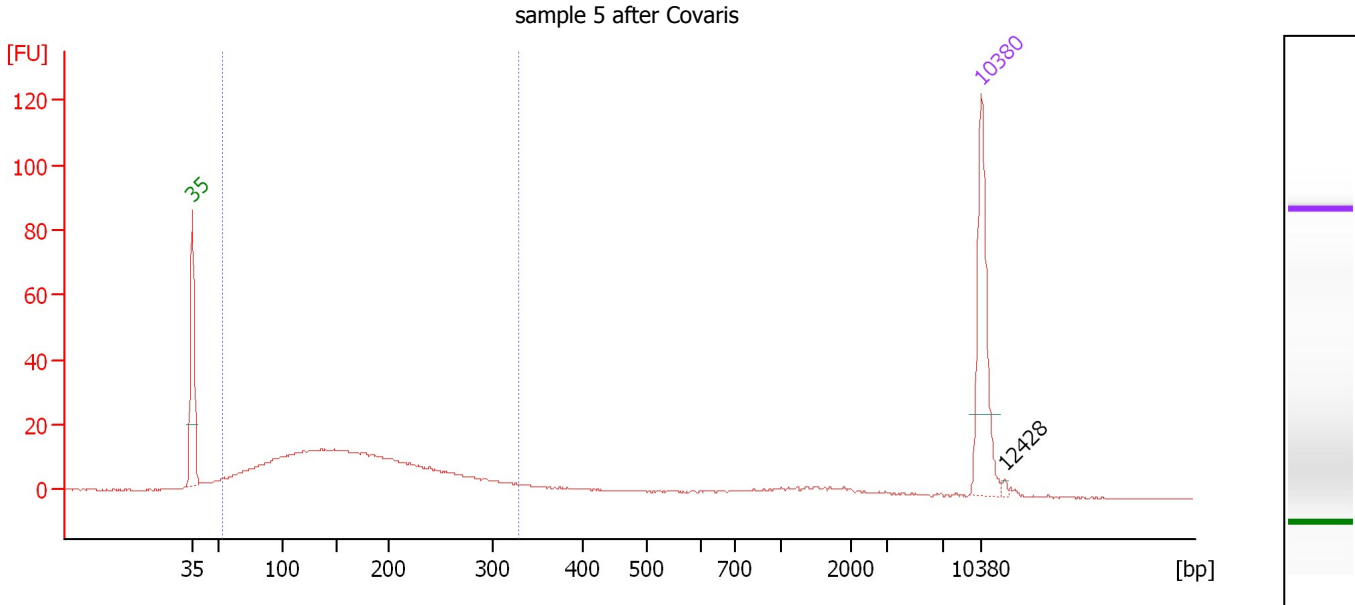
Region table for sample 4 : sample 4 after Covaris

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
55	354	176	8,275.2	762.83	526.3	93	39.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-15\2013-07-15_002.xad

Created: 7/15/2013 2:16:47 PM
 Modified: 7/15/2013 2:53:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5 after Covaris

Number of peaks found: 1 Corr. Area 1: 398.2
 Noise: 0.1

Peak table for sample 5 : sample 5 after Covaris

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker
3	12,428	0.00	0.0	

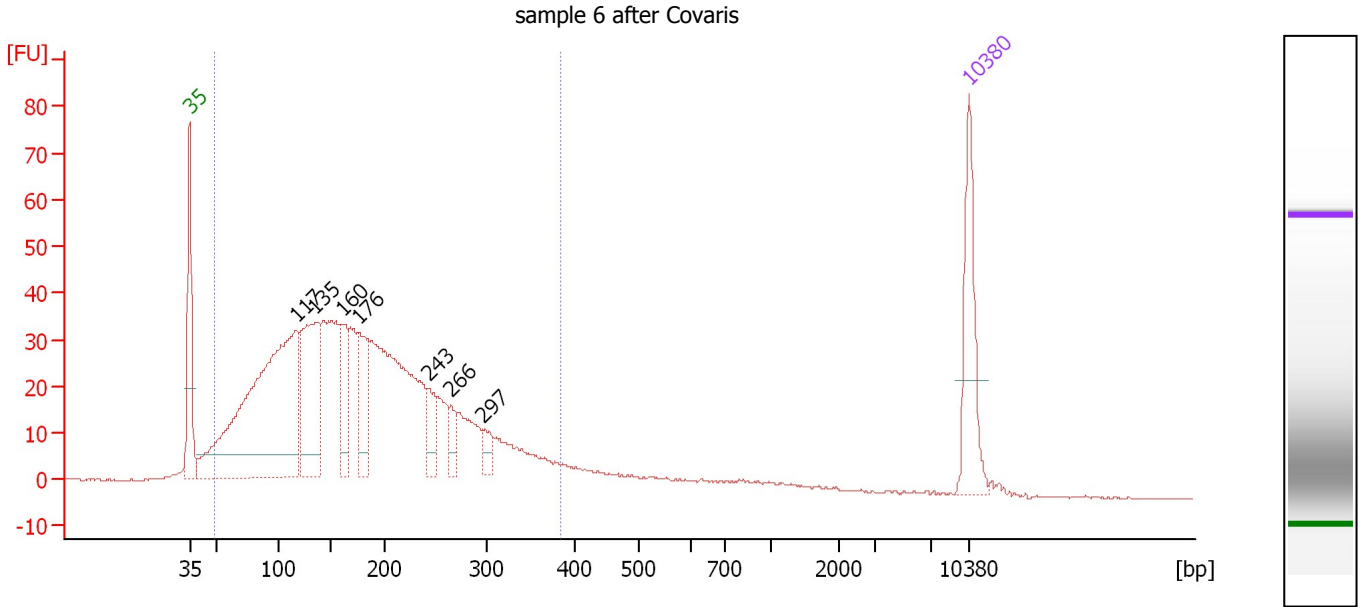
Region table for sample 5 : sample 5 after Covaris

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
53	329	169	5,968.1	530.11	398.2	83	39.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-15\2013-07-15_002.xad

Created: 7/15/2013 2:16:47 PM
 Modified: 7/15/2013 2:53:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6 after Covaris

Number of peaks found: 7 Corr. Area 1: 1,145.7
 Noise: 0.1

Peak table for sample 6 : sample 6 after Covaris

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	117	587.40	7,605.0	
3	135	200.57	2,247.6	
4	160	74.82	706.5	
5	176	92.28	793.9	
6	243	38.68	240.7	
7	266	22.62	128.9	
8	297	19.35	98.7	
9	10,380	75.00	10.9	Upper Marker

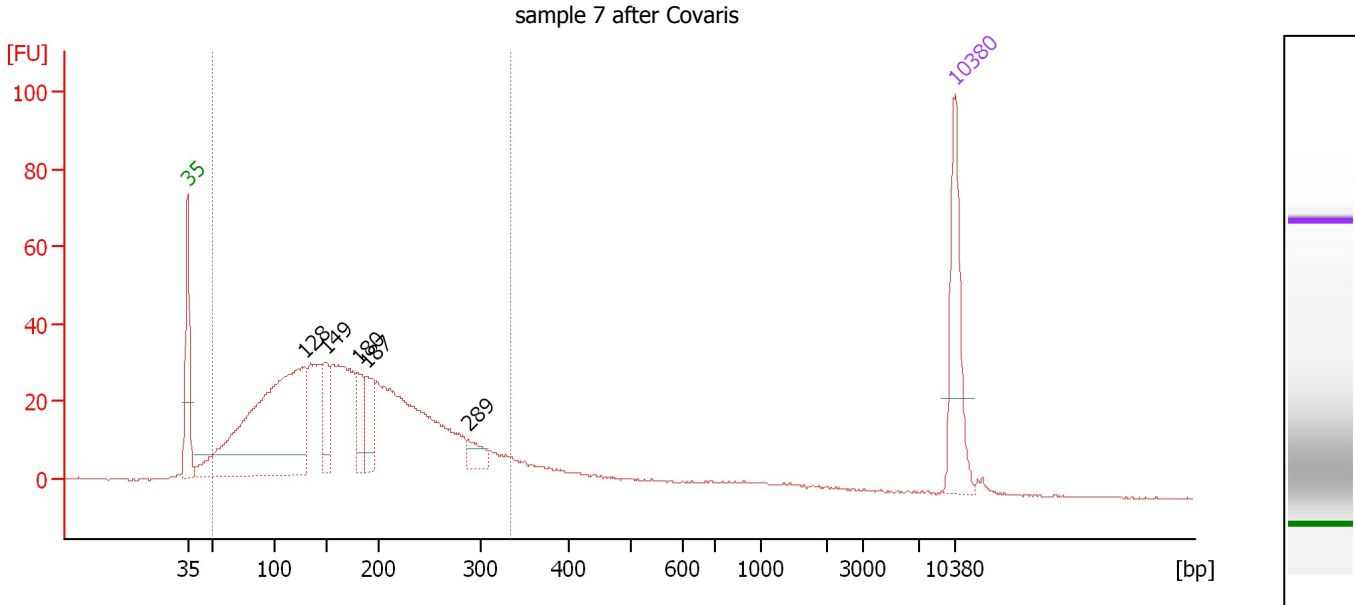
Region table for sample 6 : sample 6 after Covaris

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
49	382	179	22,279.8	2,009.53	1,145.7	92	42.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-15\2013-07-15_002.xad

Created: 7/15/2013 2:16:47 PM
 Modified: 7/15/2013 2:53:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7 after Covaris

Number of peaks found: 5 Corr. Area 1: 973.8
 Noise: 0.1

Peak table for sample 7 : sample 7 after Covaris

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	128	479.67	5,664.0	
3	149	56.63	574.5	
4	180	45.80	386.4	
5	187	50.93	412.1	
6	289	20.61	108.1	
7	10,380	75.00	10.9	Upper Marker

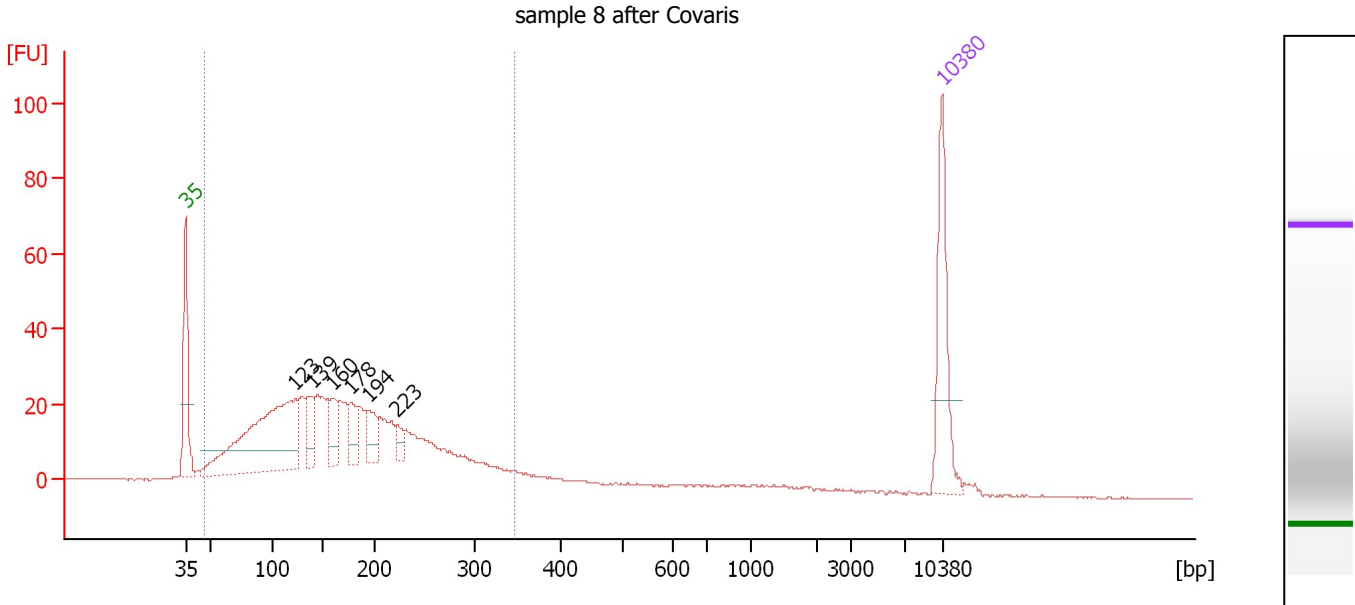
Region table for sample 7 : sample 7 after Covaris

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
49	334	173	15,976.8	1,430.42	973.8	89	39.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-15\2013-07-15_002.xad

Created: 7/15/2013 2:16:47 PM
 Modified: 7/15/2013 2:53:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8 after Covaris

Number of peaks found: 6 Corr. Area 1: 716.0
 Noise: 0.1

Peak table for sample 8 : sample 8 after Covaris

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	123	300.98	3,703.4	
3	139	40.38	439.3	
4	160	45.07	426.7	
5	178	33.98	289.7	
6	194	34.75	271.6	
7	223	14.51	98.6	
8	10,380	75.00	10.9	Upper Marker

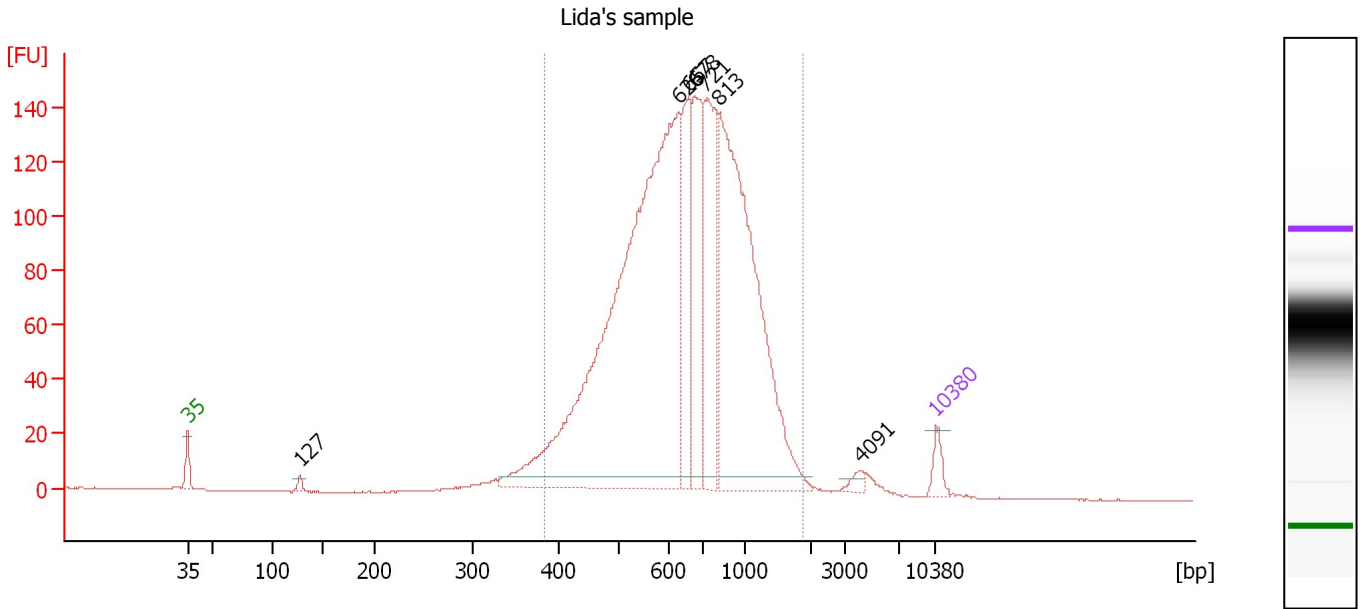
Region table for sample 8 : sample 8 after Covaris

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
47	347	171	12,352.2	1,087.90	716.0	91	40.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-15\2013-07-15_002.xad

Created: 7/15/2013 2:16:47 PM
 Modified: 7/15/2013 2:53:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Lida's sample

Number of peaks found: 7 Corr. Area 1: 2,259.2
 Noise: 0.1

Peak table for sample 9 : Lida's sample

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	127	37.07	442.3	
3	626	4,544.25	11,001.5	
4	657	678.07	1,563.8	
5	678	689.55	1,540.3	
6	721	908.33	1,908.3	
7	813	2,534.64	4,723.3	
8	4,091	36.45	13.5	
9	10,380	75.00	10.9	Upper Marker

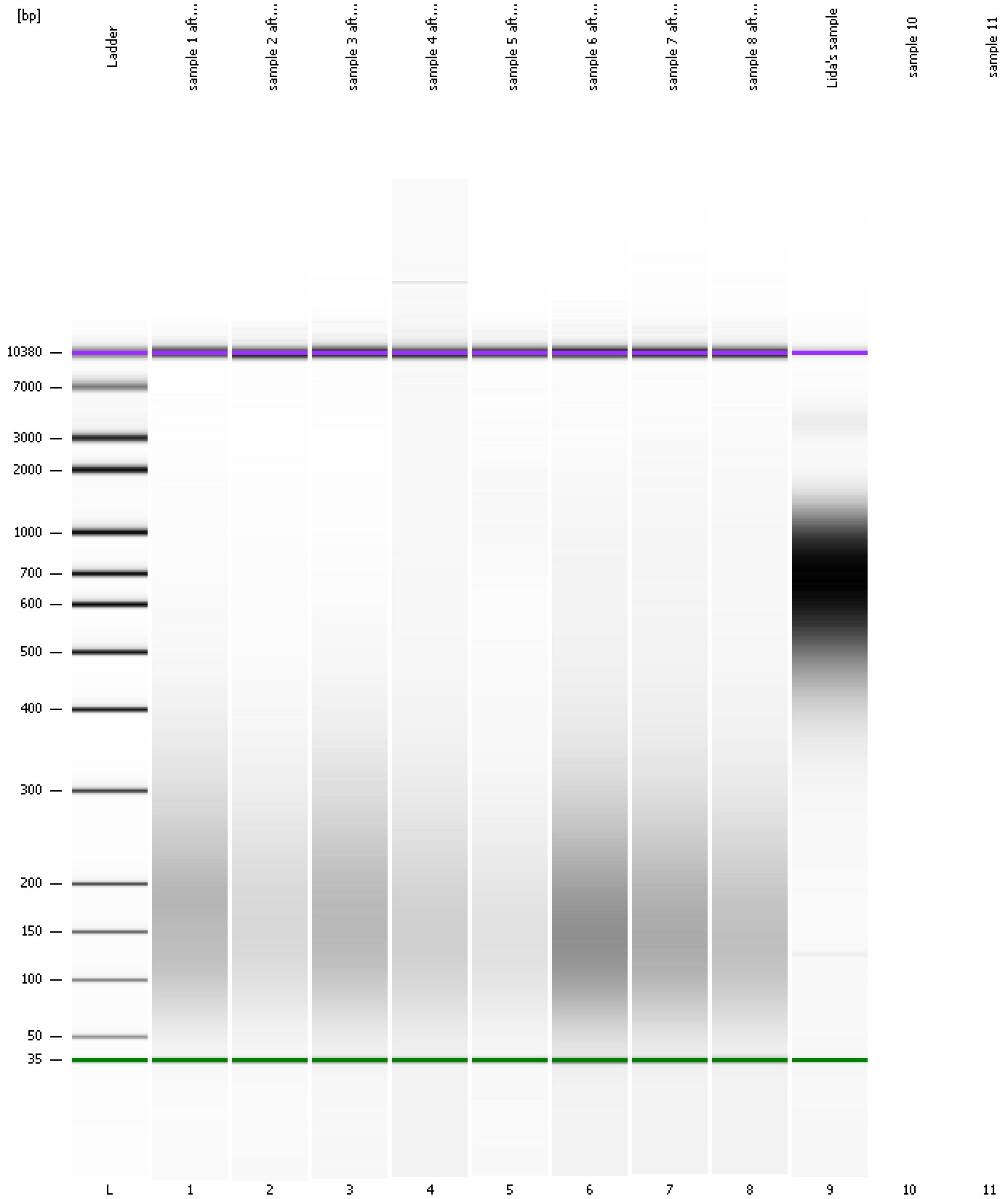
Region table for sample 9 : Lida's sample

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
385	1,852	726	22,911.5	9,685.35	2,259.2	95	35.7	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-15\2013-07-15_002.xad

Created: 7/15/2013 2:16:47 PM
Modified: 7/15/2013 2:53:14 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-15\2013-07-15_002.xad

Created: 7/15/2013 2:16:47 PM
Modified: 7/15/2013 2:53:14 PM

Invalid Samples

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\2013-07-15\2013-07-15_002.xad

Created: 7/15/2013 2:16:47 PM
 Modified: 7/15/2013 2:53:14 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 10)		Instrument	Run		7/15/2013 2:52:22 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-07-15\2013-07-15_002.xad)		Instrument	Run		7/15/2013 2:16:52 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/15/2013 2:16:52 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/15/2013 2:16:52 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/15/2013 2:16:52 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/15/2013 2:16:52 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/15/2013 2:16:52 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/15/2013 2:16:52 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1