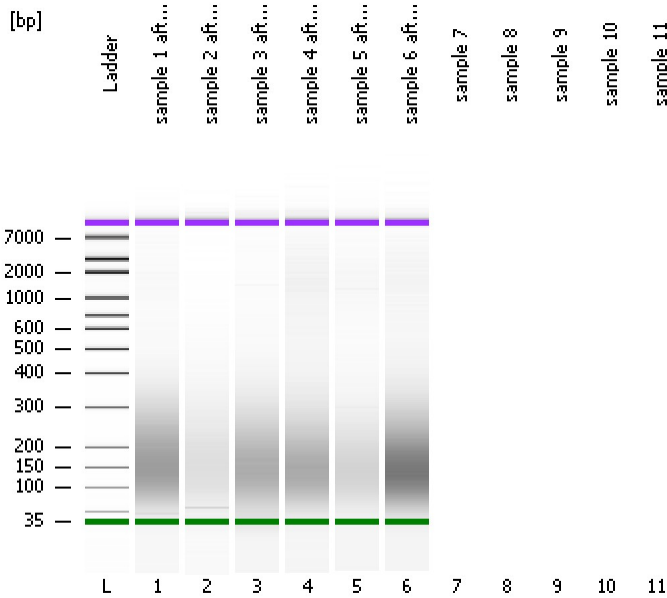


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_004.xad

Created: 6/25/2013 2:16:03 PM
Modified: 6/25/2013 2:43:45 PM

Electrophoresis File Run Summary



Instrument Information:

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

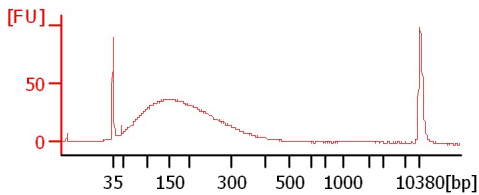
Assay Information:

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

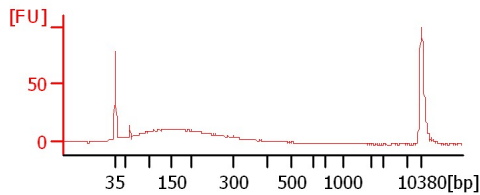
Chip Information:

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

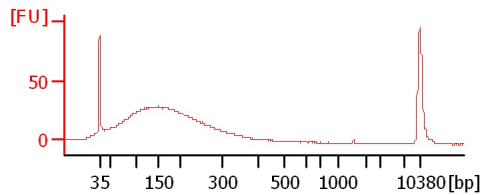
sample 1 after Covaris



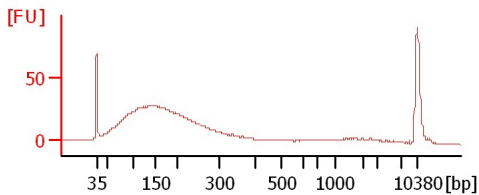
sample 2 after Covaris



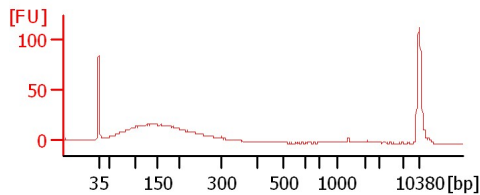
sample 3 after Covaris



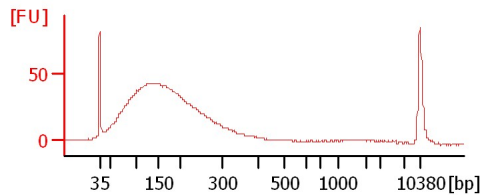
sample 4 after Covaris



sample 5 after Covaris



sample 6 after Covaris



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_004.xad

Created: 6/25/2013 2:16:03 PM
 Modified: 6/25/2013 2:43:45 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1 after Covaris		<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		<input type="checkbox"/>				
sample 8		<input type="checkbox"/>				
sample 9		<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\2013-06-25\2013-06-25_004.xad

Created: 6/25/2013 2:16:03 PM
Modified: 6/25/2013 2:43:45 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

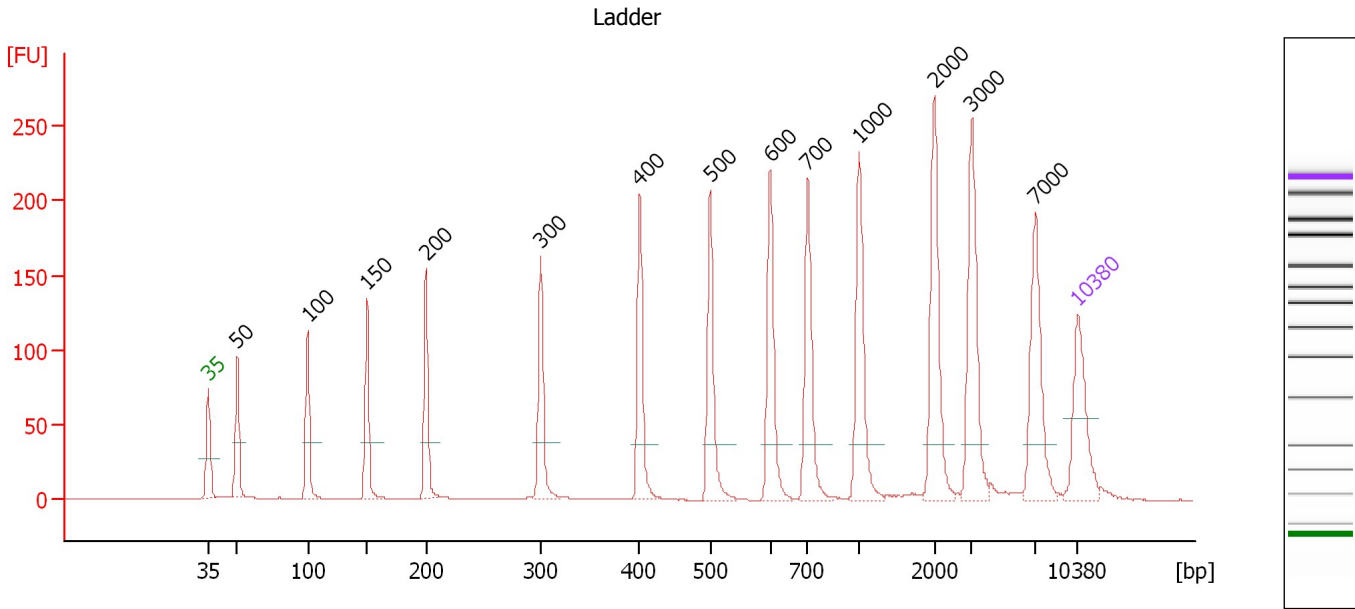
Ladder

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\2013-06-25\2013-06-25_004.xad

Created: 6/25/2013 2:16:03 PM
 Modified: 6/25/2013 2:43:45 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

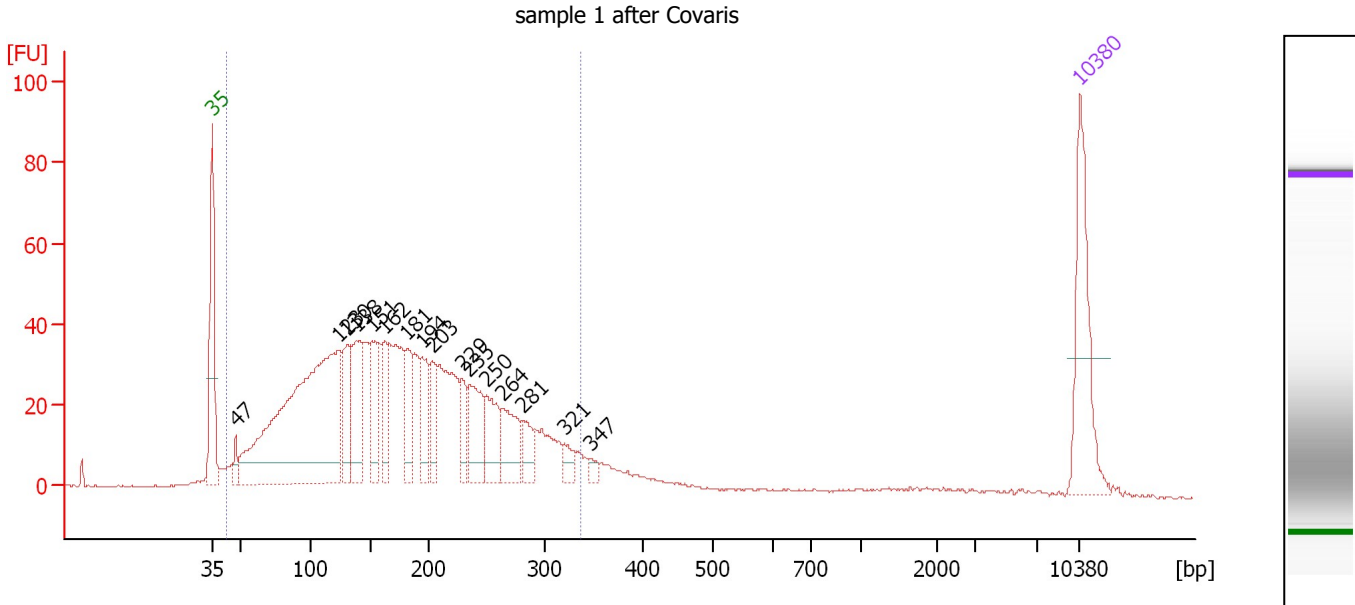
Peak table for Ladder

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\2013-06-25\2013-06-25_004.xad

Created: 6/25/2013 2:16:03 PM
 Modified: 6/25/2013 2:43:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1 after Covaris

Number of peaks found: 16 Corr. Area 1: 1,268.1
 Noise: 0.2

Peak table for sample 1 : sample 1 after Covaris

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	15.45	495.6	
3	123	501.96	6,162.7	
4	130	66.51	774.4	
5	138	105.12	1,152.7	
6	151	68.71	688.7	
7	162	50.42	472.6	
8	181	54.49	455.6	
9	194	48.61	380.6	
10	203	37.45	280.0	
11	229	29.27	194.0	
12	235	61.43	395.8	
13	250	51.49	312.1	
14	264	51.91	298.0	
15	281	26.31	141.8	
16	321	14.90	70.4	
17	347	6.99	30.6	
18	10,380	75.00	10.9	Upper Marker

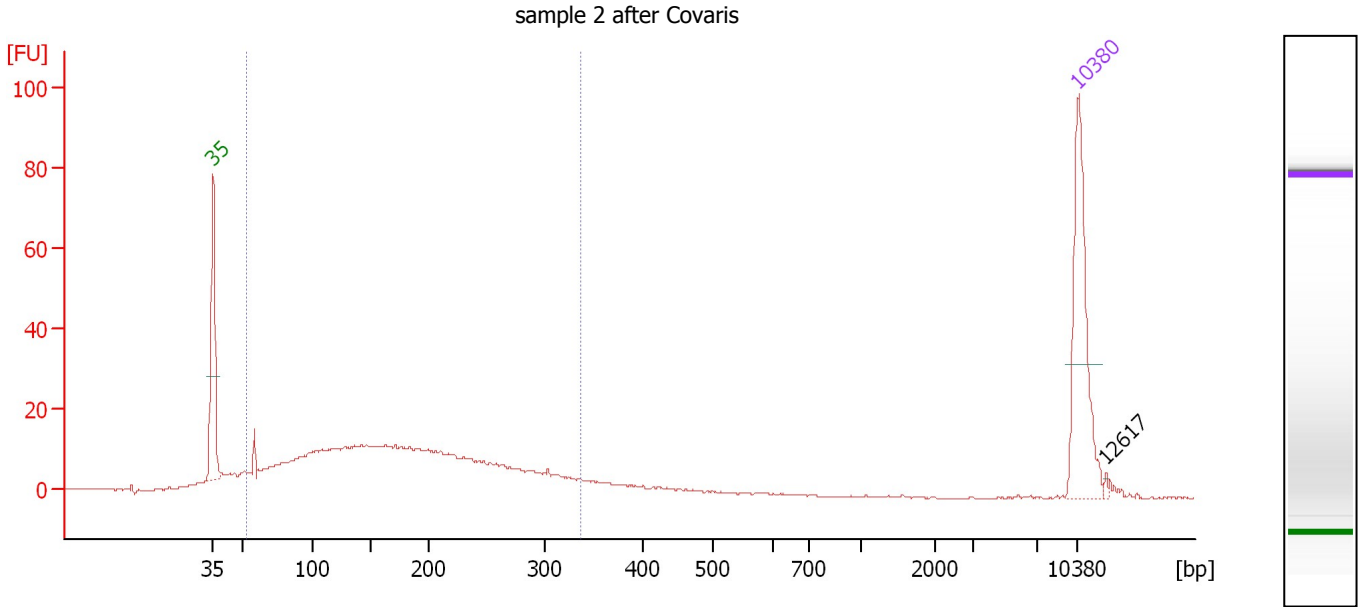
Region table for sample 1 : sample 1 after Covaris

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
42	338	176	19,467.9	1,727.79	1,268.1	92	40.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_004.xad

Created: 6/25/2013 2:16:03 PM
 Modified: 6/25/2013 2:43:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2 after Covaris

Number of peaks found: 1 Corr. Area 1: 404.2
 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	10,380	75.00	10.9	Upper Marker
3	12,617	0.00	0.0	

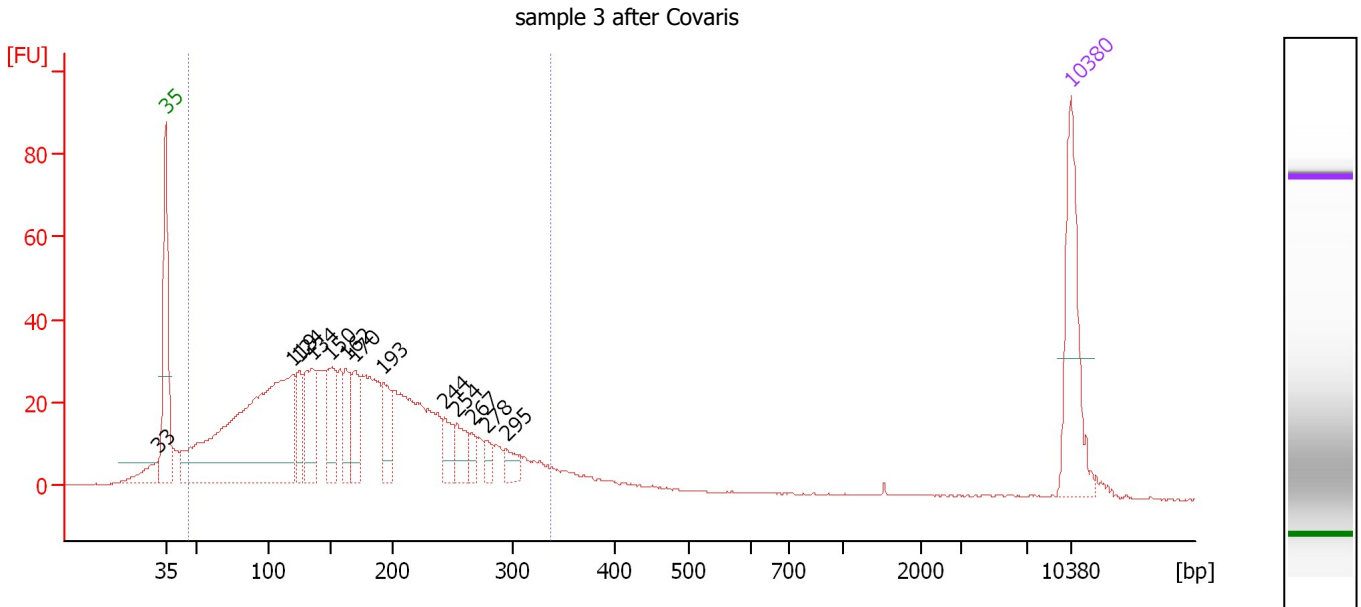
Region table for sample 2 : sample 2 after Covaris

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
53	338	177	5,882.3	527.51	404.2	87	40.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_004.xad

Created: 6/25/2013 2:16:03 PM
 Modified: 6/25/2013 2:43:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3 after Covaris

Number of peaks found: 13 Corr. Area 1: 997.7
 Noise: 0.2

Peak table for sample 3 : sample 3 after Covaris

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	33	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	119	450.80	5,744.9	
4	124	45.73	557.1	
5	134	72.98	822.6	
6	150	56.86	572.7	
7	162	40.90	382.3	
8	170	48.22	431.0	
9	193	38.96	306.2	
10	244	25.16	156.3	
11	254	29.50	176.1	
12	267	13.74	78.1	
13	278	10.25	55.8	
14	295	16.12	82.8	
15	10,380	75.00	10.9	Upper Marker

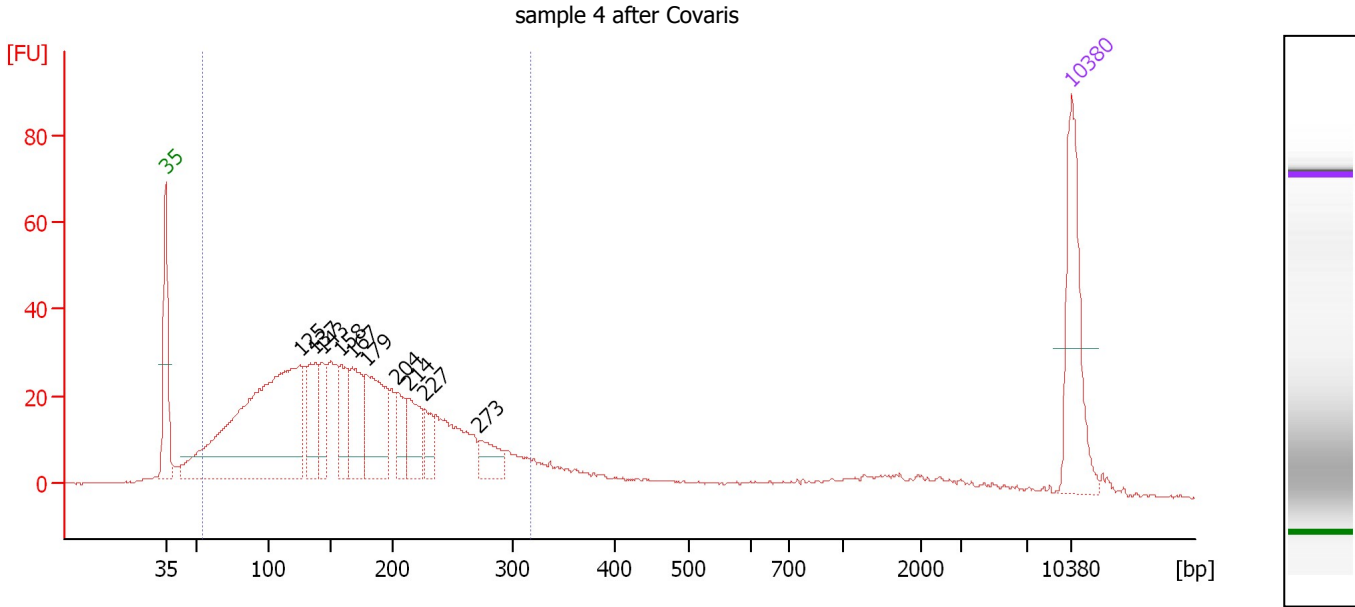
Region table for sample 3 : sample 3 after Covaris

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
46	337	169	16,693.8	1,426.27	997.7	89	41.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_004.xad

Created: 6/25/2013 2:16:03 PM
 Modified: 6/25/2013 2:43:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4 after Covaris

Number of peaks found: 10 Corr. Area 1: 897.1
 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	125	429.55	5,207.0	
3	137	63.54	701.9	
4	143	42.81	452.9	
5	158	48.50	464.1	
6	167	70.91	641.8	
7	179	103.24	874.8	
8	204	33.13	246.5	
9	214	44.43	314.8	
10	227	26.09	174.2	
11	273	29.55	164.0	
12	10,380	75.00	10.9	Upper Marker

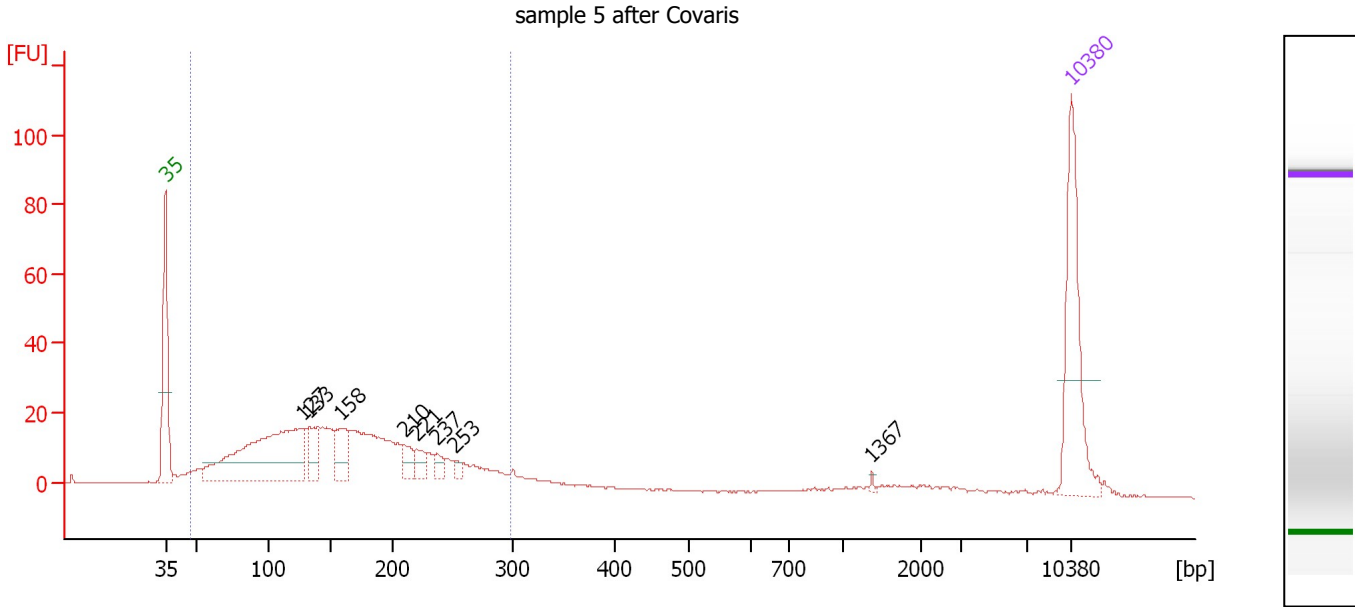
Region table for sample 4 : sample 4 after Covaris

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
54	319	167	14,265.4	1,260.24	897.1	83	38.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_004.xad

Created: 6/25/2013 2:16:03 PM
 Modified: 6/25/2013 2:43:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5 after Covaris

Number of peaks found: 8 Corr. Area 1: 506.2
 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	127	205.85	2,455.1	
3	133	30.77	351.1	
4	158	36.44	349.1	
5	210	16.39	118.4	
6	221	13.28	91.2	
7	237	9.84	62.8	
8	253	5.55	33.3	
9	1,367	1.27	1.4	
10	10,380	75.00	10.9	Upper Marker

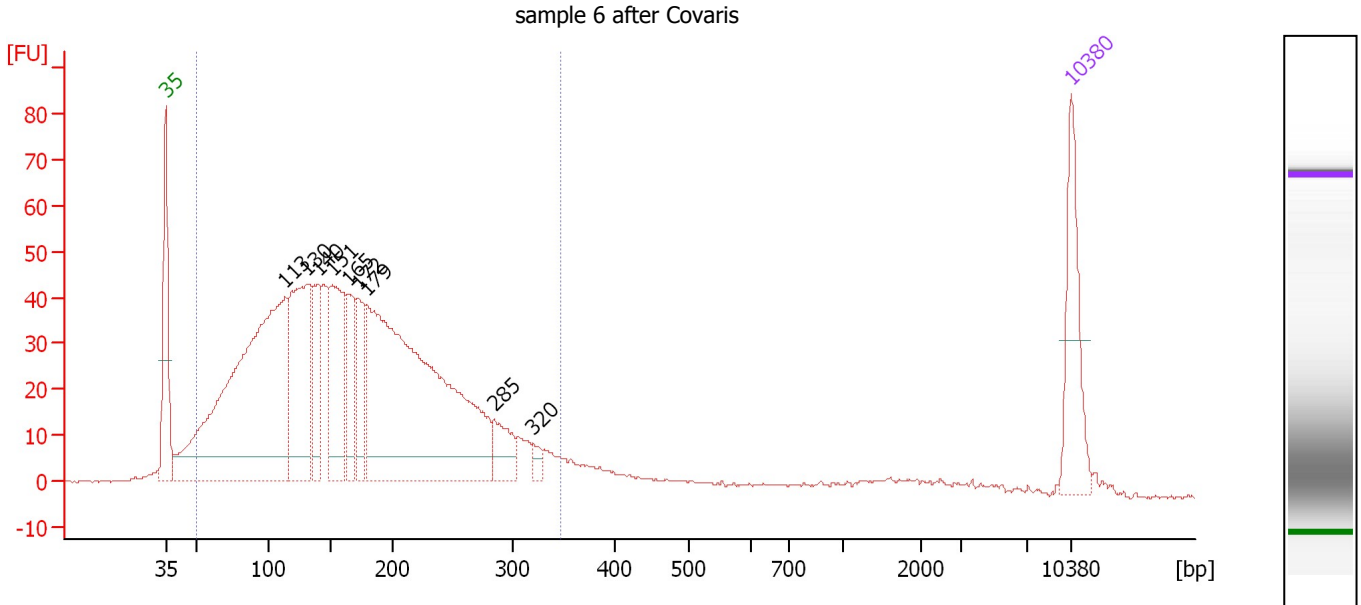
Region table for sample 5 : sample 5 after Covaris

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
48	298	160	7,272.0	619.78	506.2	88	37.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_004.xad

Created: 6/25/2013 2:16:03 PM
 Modified: 6/25/2013 2:43:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6 after Covaris

Number of peaks found: 9 Corr. Area 1: 1,382.5
 Noise: 0.2

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	113	705.21	9,430.3	
3	130	249.37	2,900.8	
4	140	97.26	1,053.1	
5	151	172.30	1,727.9	
6	165	79.19	727.7	
7	172	85.45	751.5	
8	179	705.61	5,966.5	
9	285	44.65	237.2	
10	320	11.52	54.5	
11	10,380	75.00	10.9	Upper Marker

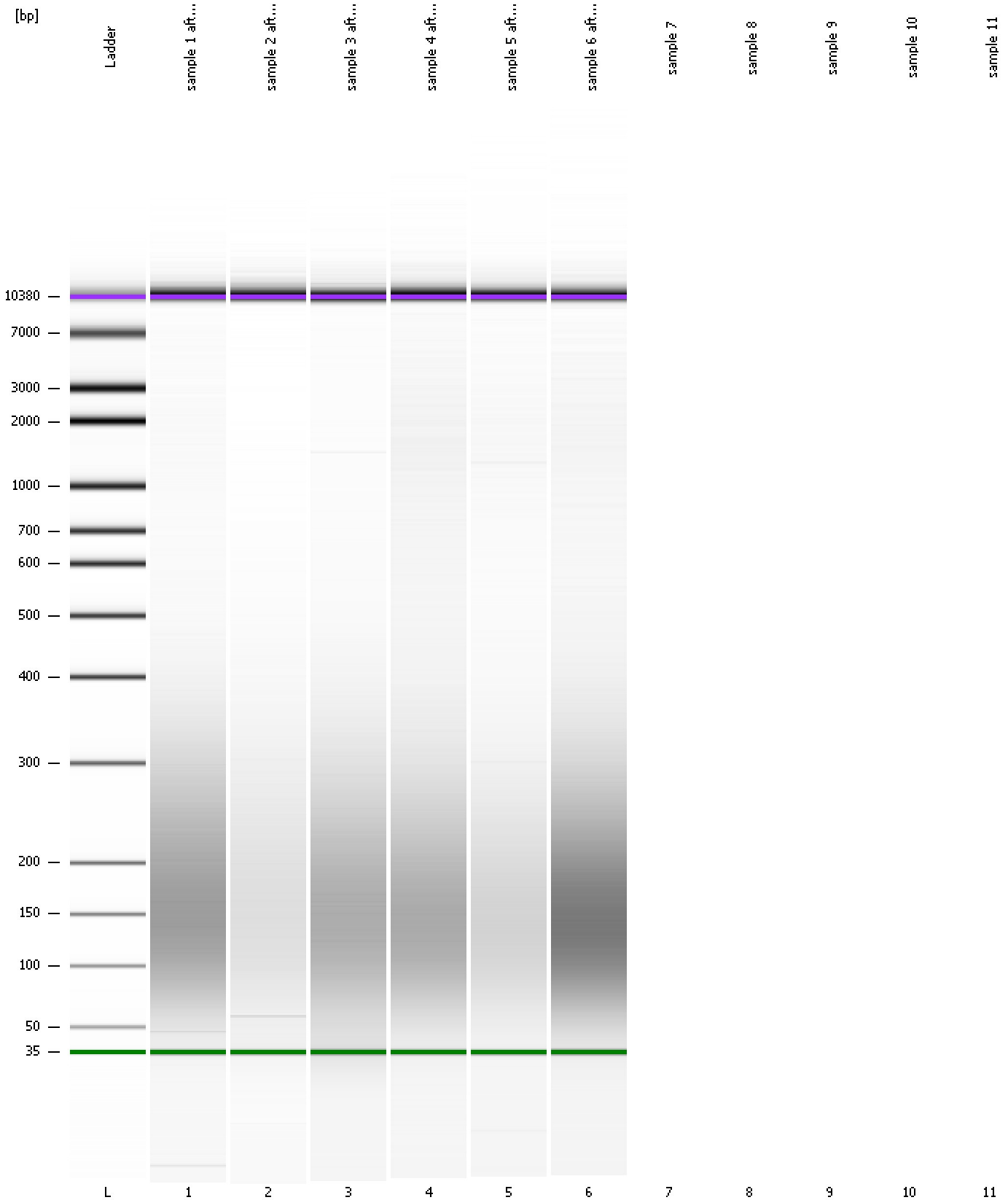
Region table for sample 6 : sample 6 after Covaris

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
51	348	169	26,273.4	2,308.41	1,382.5	91	40.6	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_004.xad

Created: 6/25/2013 2:16:03 PM
Modified: 6/25/2013 2:43:45 PM

Gel Image

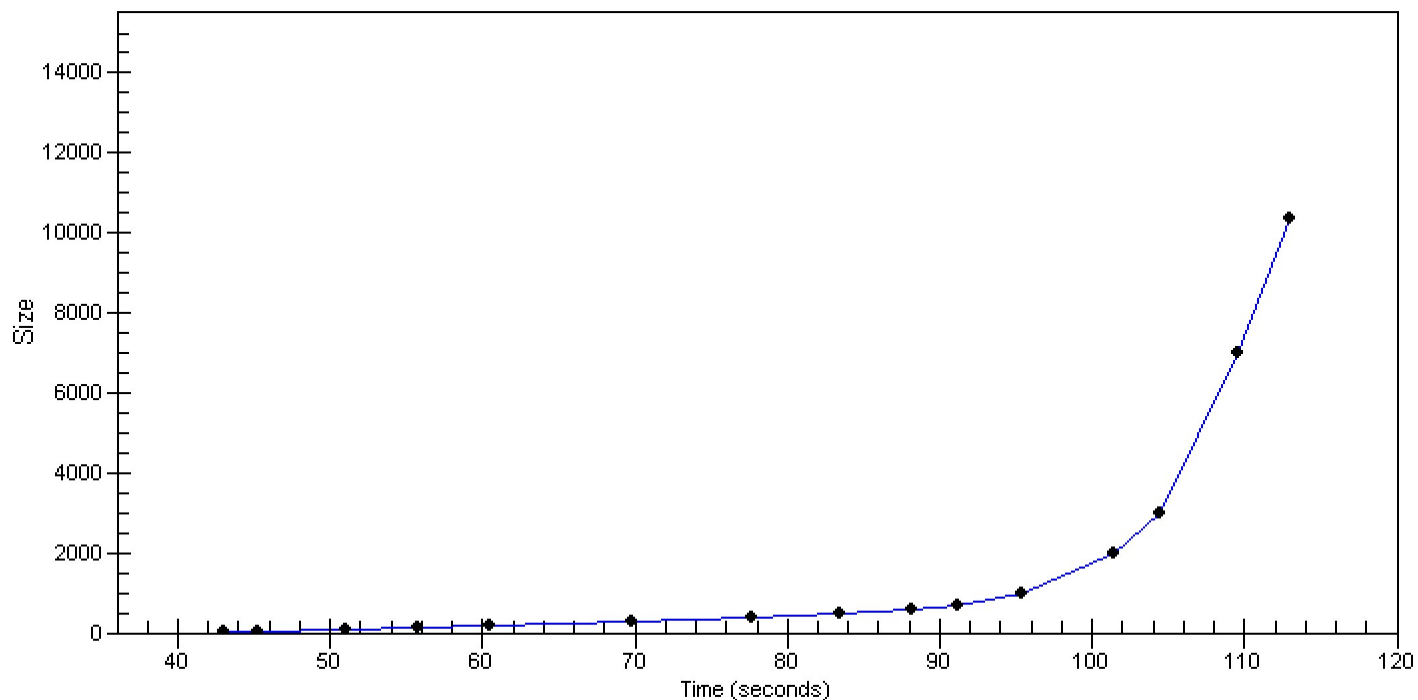


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_004.xad

Created: 6/25/2013 2:16:03 PM
Modified: 6/25/2013 2:43:45 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_004.xad

Created: 6/25/2013 2:16:03 PM
Modified: 6/25/2013 2:43:45 PM

Invalid Samples

Sample 7 has not been run, no results available.

Sample 8 has not been run, no results available.

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\2013-06-25\2013-06-25_004.xad

Created: 6/25/2013 2:16:03 PM
 Modified: 6/25/2013 2:43:45 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 7)		Instrument	Run		6/25/2013 2:43:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-06-25\2013-06-25_004.xad)		Instrument	Run		6/25/2013 2:16:08 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/25/2013 2:16:08 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/25/2013 2:16:08 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/25/2013 2:16:08 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/25/2013 2:16:08 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/25/2013 2:16:08 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/25/2013 2:16:08 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1