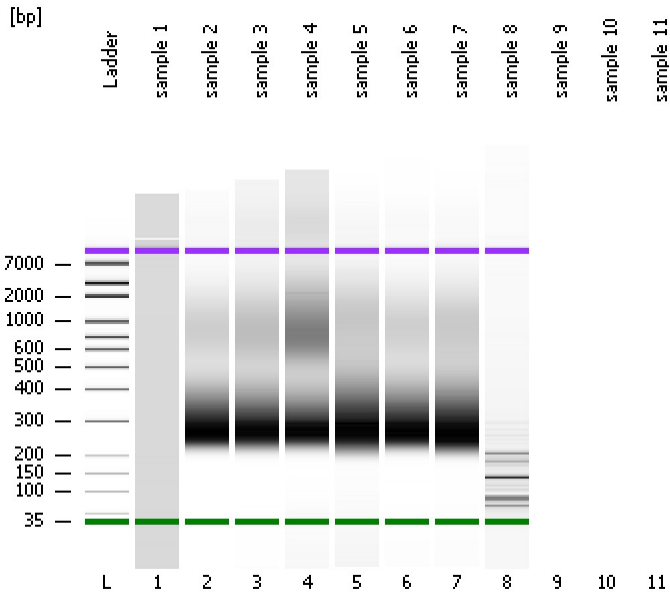


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_005.xad

Created: 8/1/2014 12:26:53 PM
Modified: 8/1/2014 1:00:20 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

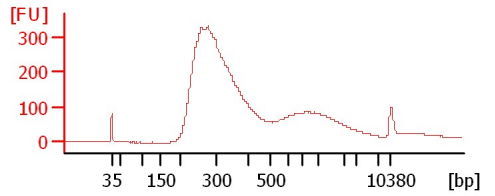
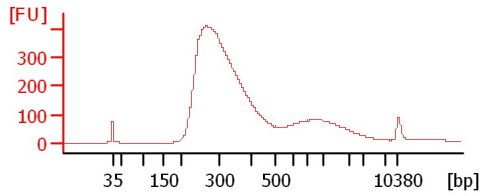
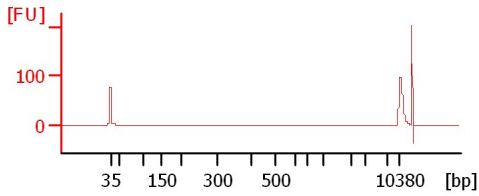
Chip Information:

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

sample 1

sample 2

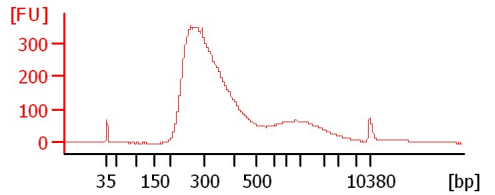
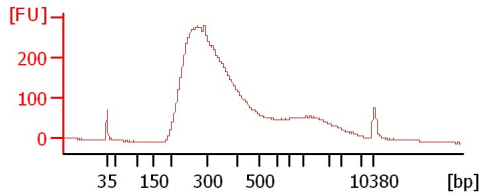
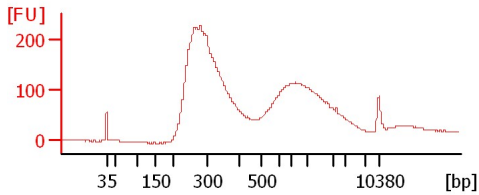
sample 3



sample 4

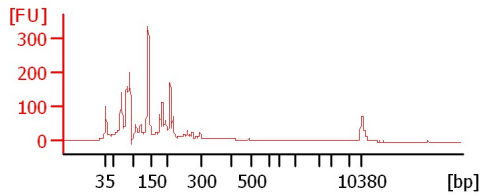
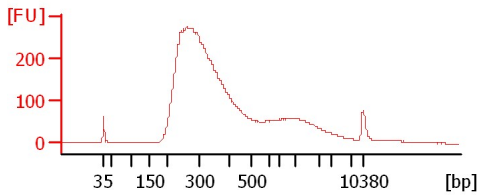
sample 5

sample 6



sample 7

sample 8



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_005.xad

Created: 8/1/2014 12:26:53 PM
 Modified: 8/1/2014 1:00:20 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		<input type="checkbox"/>	✓			
sample 2		<input type="checkbox"/>	✓			
sample 3		<input type="checkbox"/>	✓			
sample 4		<input type="checkbox"/>	✓			
sample 5		<input type="checkbox"/>	✓			
sample 6		<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:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_005.xad

Created: 8/1/2014 12:26:53 PM
Modified: 8/1/2014 1:00:20 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

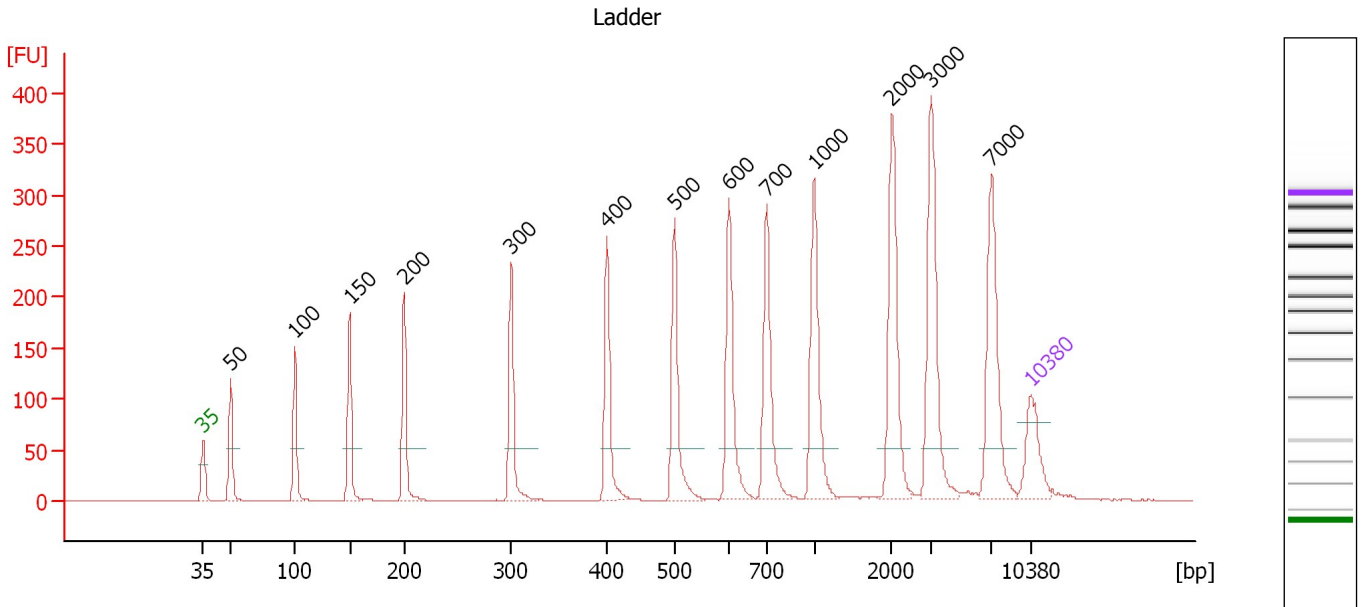
Ladder

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:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_005.xad

Created: 8/1/2014 12:26:53 PM
 Modified: 8/1/2014 1:00:20 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

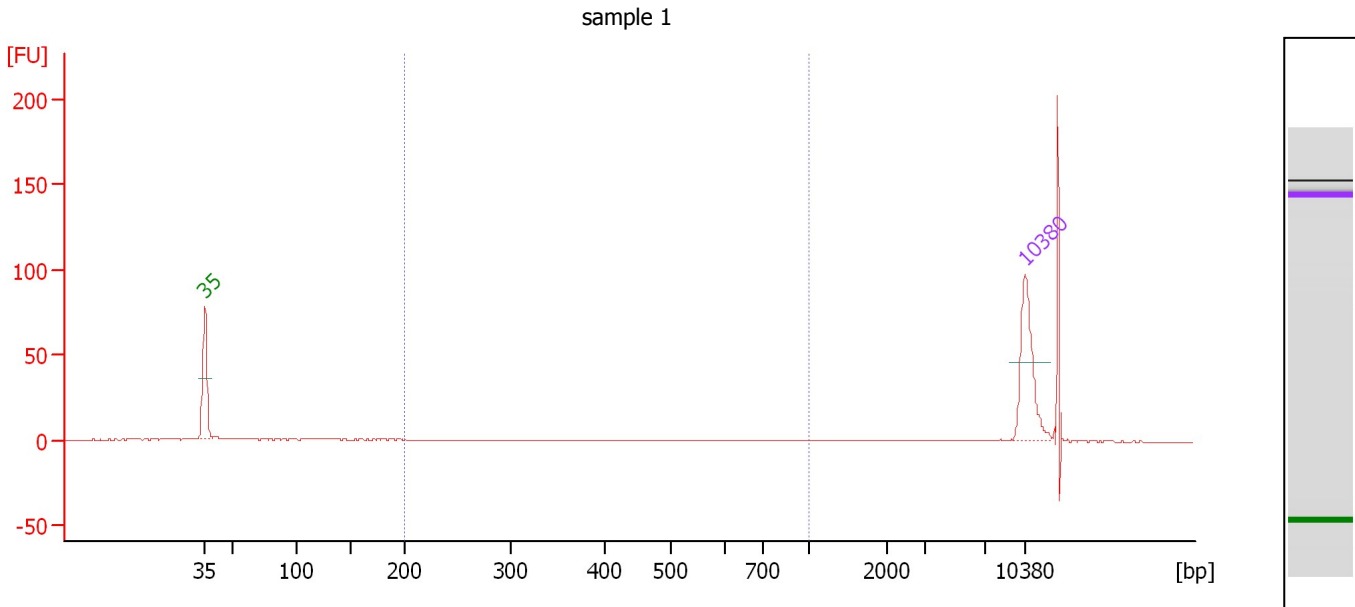
Peak table for Ladder

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:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_005.xad

Created: 8/1/2014 12:26:53 PM
 Modified: 8/1/2014 1:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 0 Corr. Area 1: 14.2
 Noise: 0.2

Peak table for sample 1 : sample 1

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

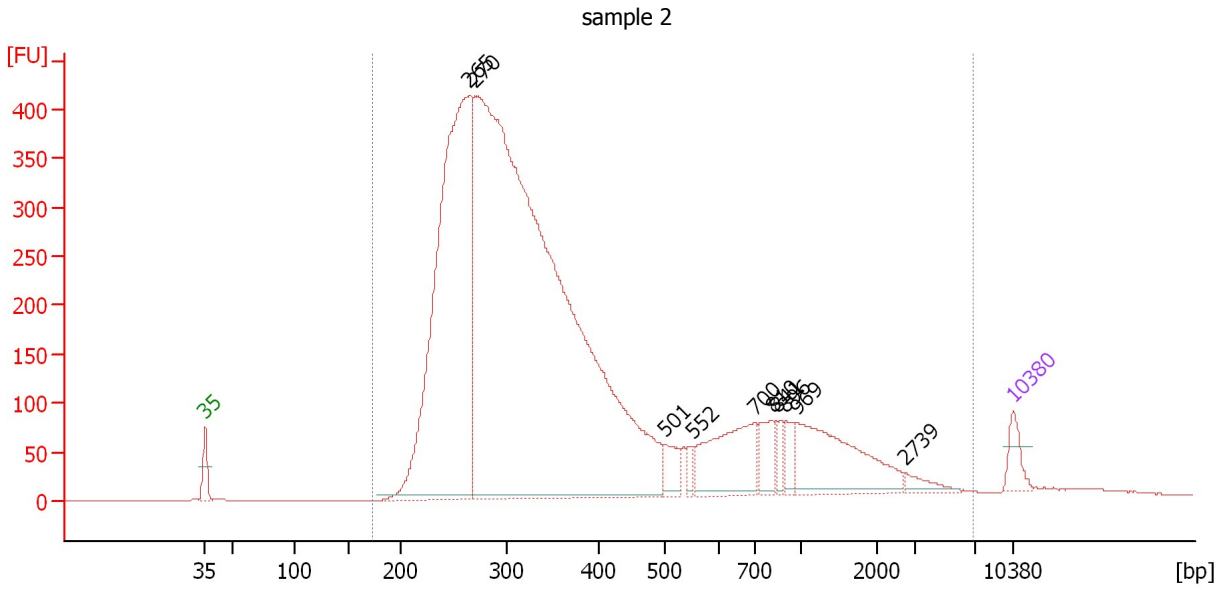
Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	467	63.6	15.17	14.2	16	41.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_005.xad

Created: 8/1/2014 12:26:53 PM
 Modified: 8/1/2014 1:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 10 Corr. Area 1: 8,834.4
 Noise: 0.1

Peak table for sample 2 : sample 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	265	3,209.92	18,325.7	
3	270	7,698.83	43,124.5	
4	501	107.69	325.9	
5	552	44.82	122.9	
6	700	440.76	954.3	
7	810	128.89	241.1	
8	841	53.32	96.0	
9	896	74.65	126.2	
10	969	510.57	798.3	
11	2,739	44.69	24.7	
12	10,380	75.00	10.9	Upper Marker

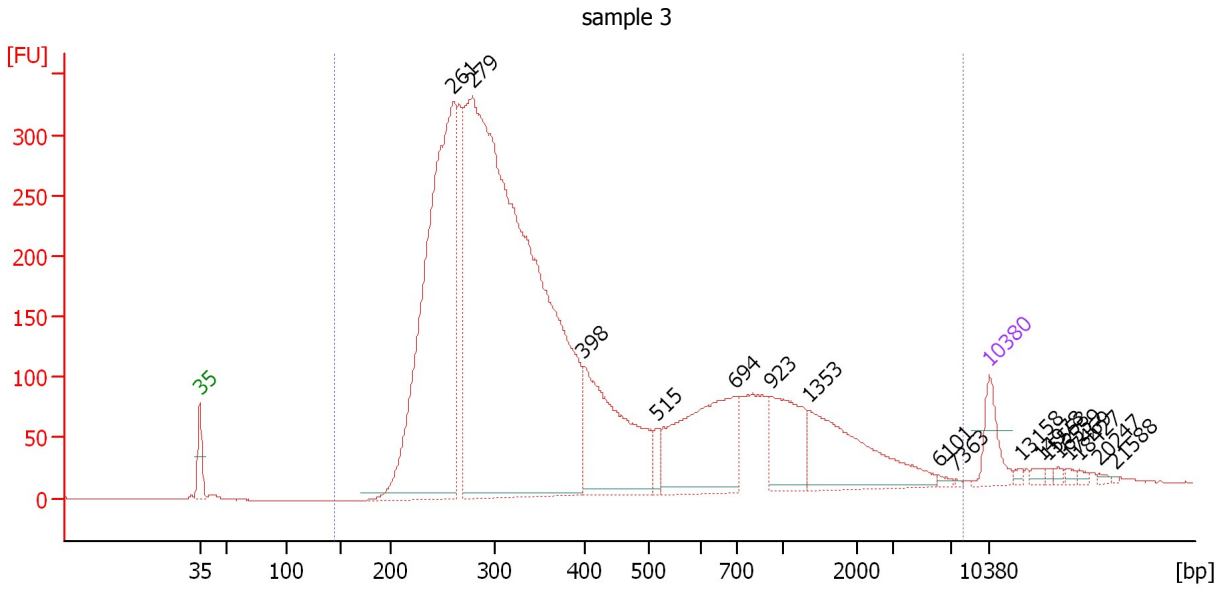
Region table for sample 2 : sample 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
173	6,885	497	54,250.2	11,579.48	8,834.4	99	100.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_005.xad

Created: 8/1/2014 12:26:53 PM
 Modified: 8/1/2014 1:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 17 Corr. Area 1: 7,160.5
 Noise: 0.4

Peak table for sample 3 : sample 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	261	1,743.86	10,132.4	
3	279	3,696.88	20,074.6	
4	398	540.03	2,057.1	
5	515	41.00	120.6	
6	694	445.28	972.1	
7	923	205.41	337.3	
8	1,353	306.37	343.1	
9	6,101	7.94	2.0	
10	7,363	2.46	0.5	
11	10,380	75.00	10.9	Upper Marker
12	13,158	0.00	0.0	
13	14,978	0.00	0.0	
14	15,553	0.00	0.0	
15	16,559	0.00	0.0	
16	17,469	0.00	0.0	
17	18,427	0.00	0.0	
18	20,247	0.00	0.0	
19	21,588	0.00	0.0	

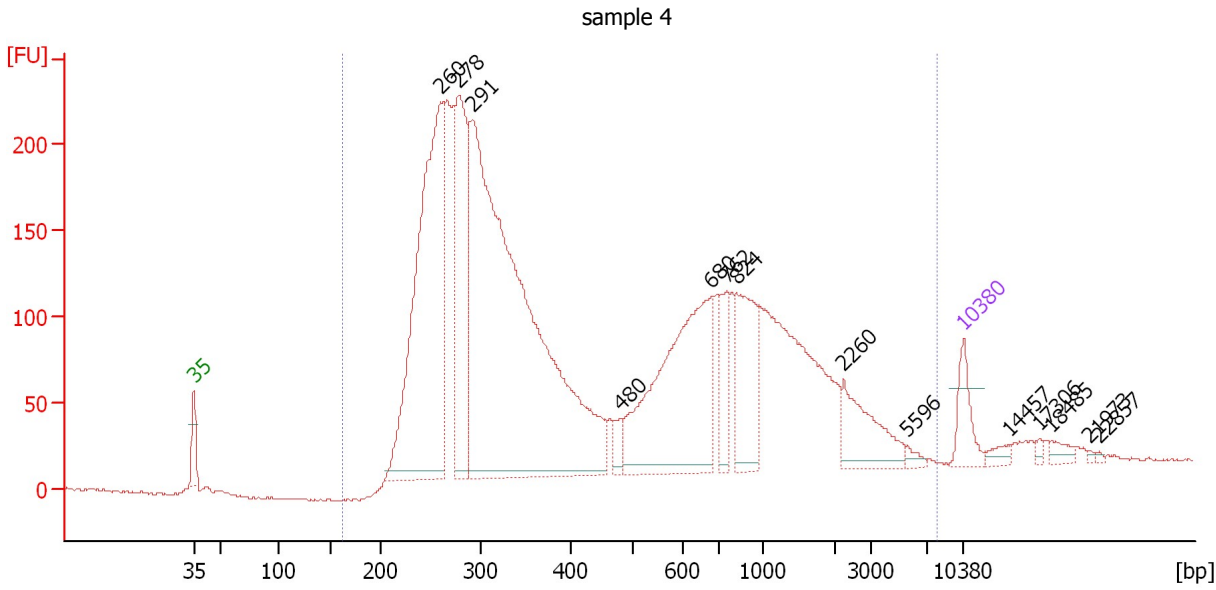
Region table for sample 3 : sample 3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
145	7,993	556	31,976.0	6,982.83	7,160.5	99	100.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_005.xad

Created: 8/1/2014 12:26:53 PM
 Modified: 8/1/2014 1:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 14 Corr. Area 1: 5,305.1
 Noise: 0.8

Peak table for sample 4 : sample 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	260	1,395.51	8,126.9	
3	278	612.88	3,335.9	
4	291	2,590.00	13,475.7	
5	480	40.83	128.8	
6	680	738.26	1,644.2	
7	762	127.98	254.4	
8	824	256.68	472.0	
9	2,260	155.37	104.1	
10	5,596	14.58	3.9	
11	10,380	75.00	10.9	Upper Marker
12	14,457	0.00	0.0	
13	17,306	0.00	0.0	
14	18,485	0.00	0.0	
15	21,973	0.00	0.0	
16	22,857	0.00	0.0	

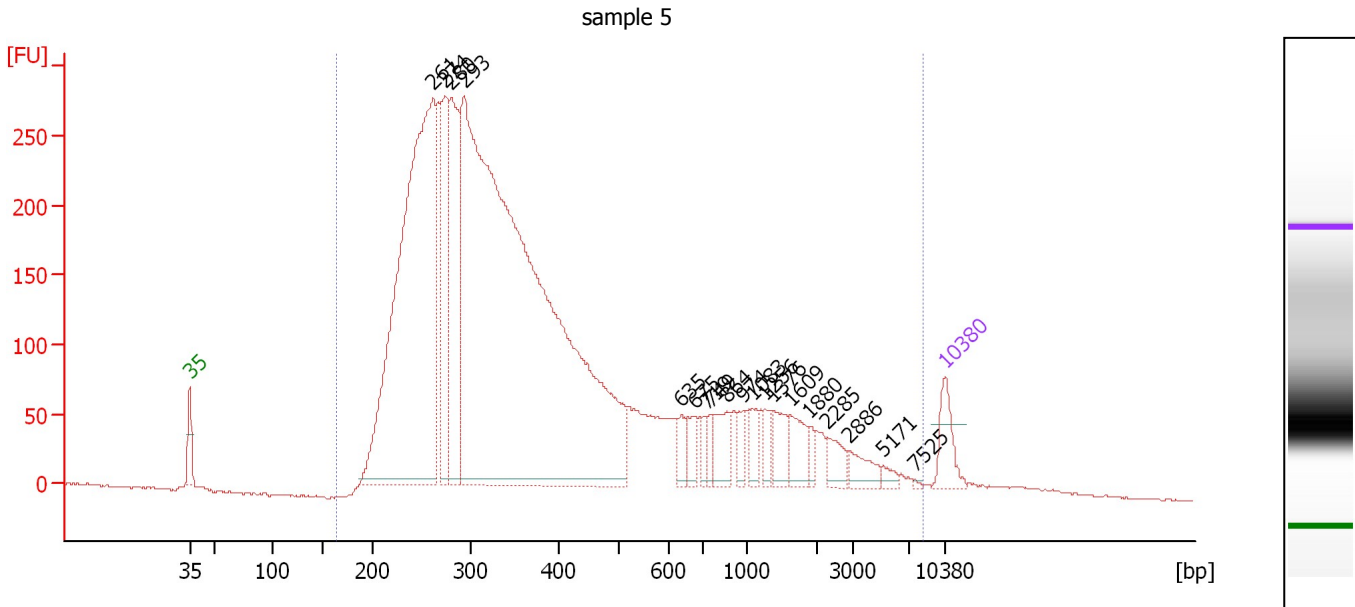
Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
161	7,946	698	28,815.4	6,891.25	5,305.1	98	100.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_005.xad

Created: 8/1/2014 12:26:53 PM
 Modified: 8/1/2014 1:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 19 Corr. Area 1: 7,107.3
 Noise: 0.6

Peak table for sample 5 : sample 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	261	2,116.85	12,276.8	
3	274	418.85	2,317.8	
4	280	533.64	2,884.1	
5	293	4,199.22	21,681.8	
6	635	53.59	128.0	
7	675	53.95	121.0	
8	719	36.72	77.3	
9	749	36.97	74.8	
10	864	84.51	148.3	
11	974	39.62	61.6	
12	1,083	44.68	62.5	
13	1,256	37.99	45.8	
14	1,376	73.30	80.7	
15	1,609	77.85	73.3	
16	1,880	22.51	18.1	
17	2,285	45.52	30.2	
18	2,886	49.04	25.7	
19	5,171	17.25	5.1	
20	7,525	3.17	0.6	
21	10,380	75.00	10.9	Upper Marker

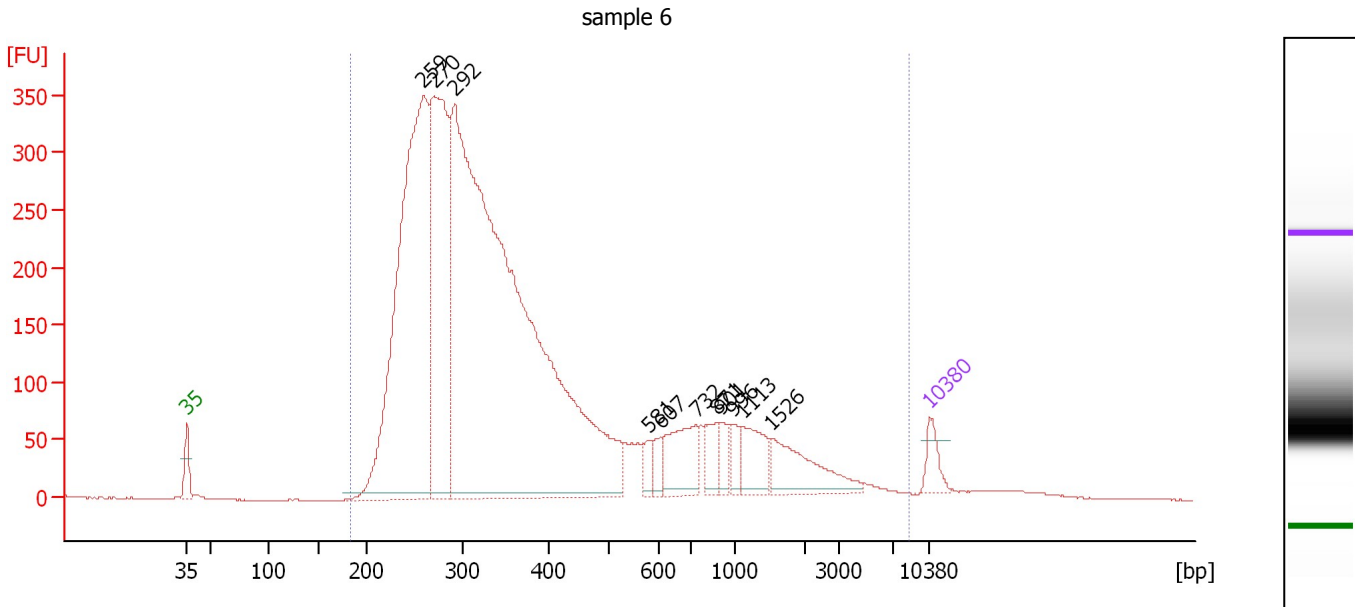
Region table for sample 5 : sample 5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
162	8,412	605	38,357.5	8,356.55	7,107.3	99	100.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_005.xad

Created: 8/1/2014 12:26:53 PM
 Modified: 8/1/2014 1:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 11 Corr. Area 1: 7,536.8
 Noise: 0.4

Peak table for sample 6 : sample 6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	259	3,087.47	18,069.9	
3	270	1,685.42	9,458.6	
4	292	6,288.06	32,607.2	
5	581	66.44	173.3	
6	607	67.96	169.7	
7	732	285.79	591.3	
8	871	111.20	193.4	
9	901	85.10	143.0	
10	996	71.18	108.3	
11	1,113	195.02	265.5	
12	1,526	271.85	270.0	
13	10,380	75.00	10.9	Upper Marker

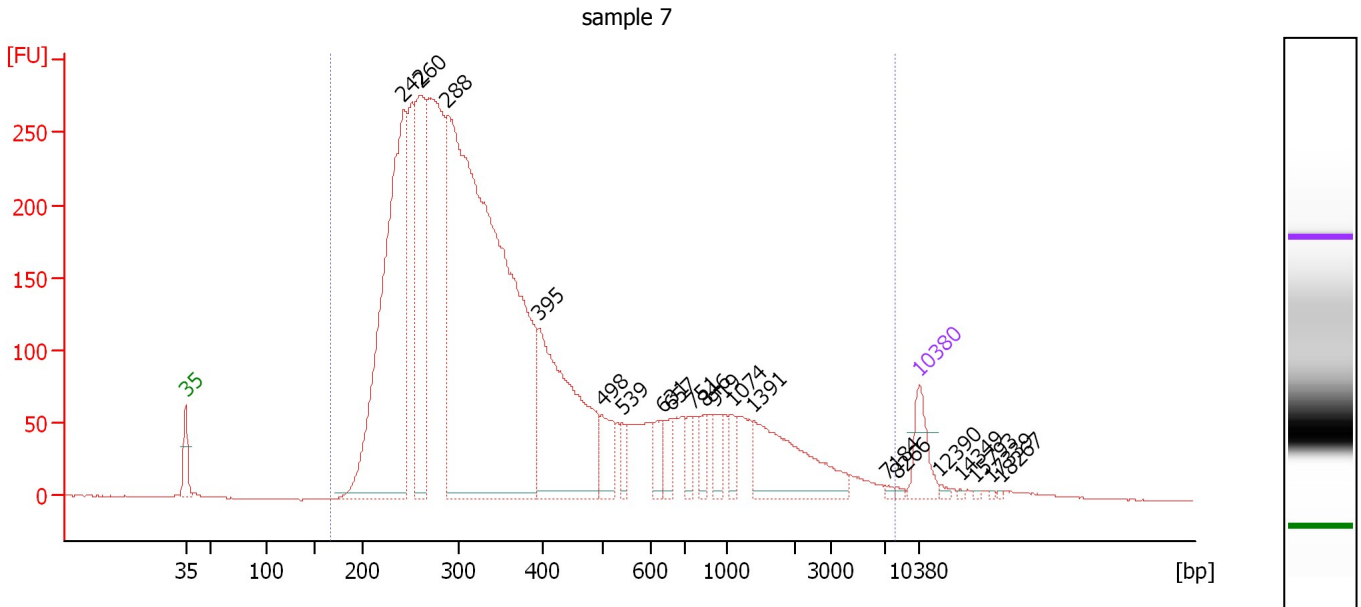
Region table for sample 6 : sample 6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
184	8,409	532	55,461.9	11,926.51	7,536.8	99	100.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_005.xad

Created: 8/1/2014 12:26:53 PM
 Modified: 8/1/2014 1:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found: 20 Corr. Area 1: 6,706.0
 Noise: 0.3

Peak table for sample 7 : sample 7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	242	1,388.59	8,690.5	
3	260	678.55	3,953.3	
4	288	2,866.83	15,075.0	
5	395	663.43	2,543.3	
6	498	104.75	318.7	
7	539	40.02	112.4	
8	631	52.66	126.4	
9	657	54.11	124.7	
10	751	45.40	91.6	
11	846	43.75	78.3	
12	919	48.08	79.3	
13	1,074	39.36	55.5	
14	1,391	261.19	284.4	
15	7,184	5.01	1.1	
16	8,266	4.35	0.8	
17	10,380	75.00	10.9	Upper Marker
18	12,390	0.00	0.0	
19	14,349	0.00	0.0	
20	15,793	0.00	0.0	
21	17,339	0.00	0.0	
22	18,267	0.00	0.0	

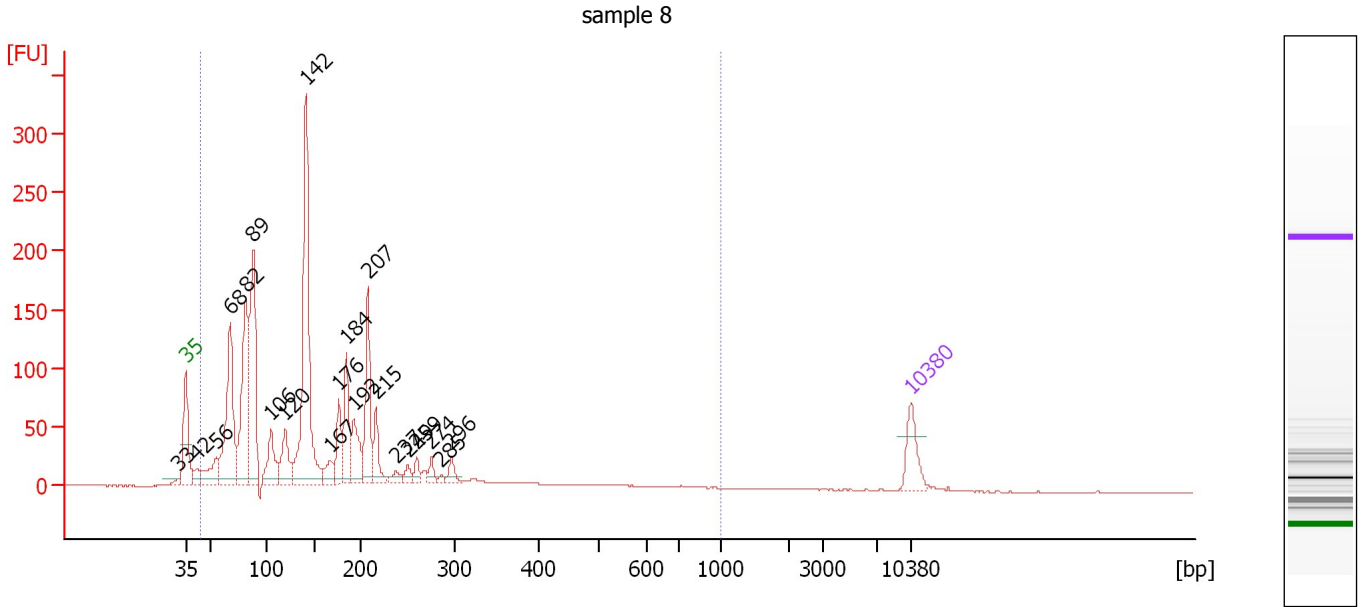
Region table for sample 7 : sample 7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
165	8,116	557	35,683.7	7,595.32	6,706.0	99	100.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_005.xad

Created: 8/1/2014 12:26:53 PM
 Modified: 8/1/2014 1:00:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 21 Corr. Area 1: 2,126.5
 Noise: 0.2

Peak table for sample 8 : sample 8


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	42	43.76	1,581.6	
4	56	113.27	3,068.6	
5	68	462.57	10,261.6	
6	82	479.17	8,843.2	
7	89	515.26	8,795.6	
8	106	148.37	2,125.8	
9	120	131.32	1,655.8	
10	142	819.83	8,761.0	
11	167	54.64	494.4	
12	176	115.40	991.2	
13	184	177.55	1,460.1	
14	192	137.30	1,083.0	
15	207	233.10	1,708.4	
16	215	98.77	695.2	
17	237	25.15	160.9	
18	249	26.62	161.8	
19	259	29.67	173.6	
20	274	27.65	152.7	
21	285	9.47	50.3	
22	296	32.94	168.6	
23	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_005.xad

Created: 8/1/2014 12:26:53 PM
Modified: 8/1/2014 1:00:20 PM

Electropherogram Summary Continued ...

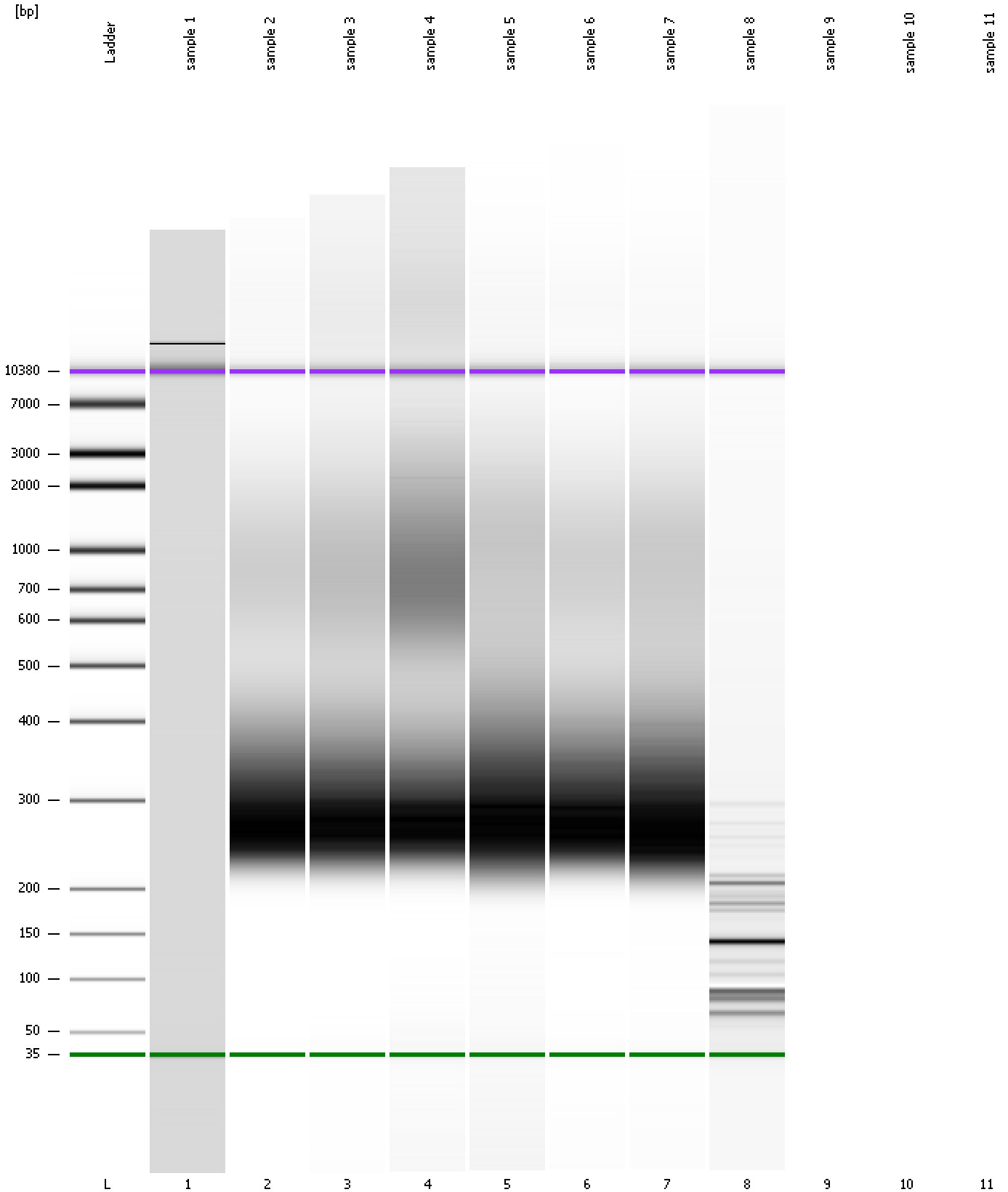
... Region table for sample 8 : sample 8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
44	1,000	167	53,639.4	4,029.30	 2,126.5	98	68.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_005.xad

Created: 8/1/2014 12:26:53 PM
Modified: 8/1/2014 1:00:20 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_005.xad

Created: 8/1/2014 12:26:53 PM
Modified: 8/1/2014 1:00:20 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:\... bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_005.xad

Created: 8/1/2014 12:26:53 PM
 Modified: 8/1/2014 1:00:20 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		8/1/2014 12:59:37 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\Data\2014-08-01\2014-08-01_005.xad)		Instrument	Run		8/1/2014 12:26:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/1/2014 12:26:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/1/2014 12:26:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/1/2014 12:26:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/1/2014 12:26:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/1/2014 12:26:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/1/2014 12:26:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1