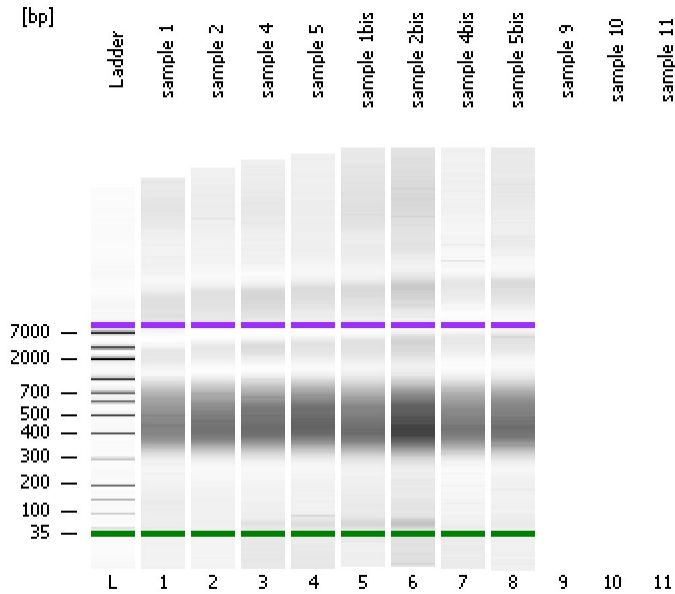


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-16\2016-09-16\_003.xad

Created: 9/16/2016 3:26:41 PM  
Modified: 9/16/2016 4:13:39 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

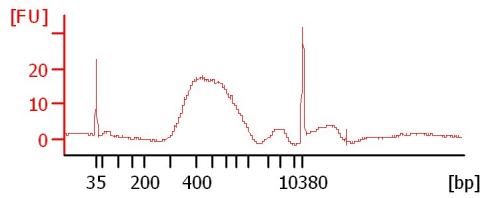
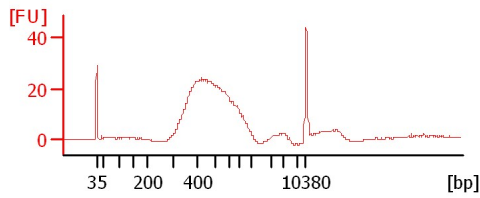
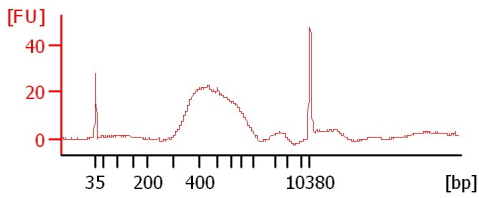
#### Chip Information:

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

sample 1

sample 2

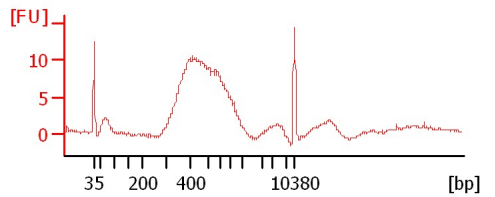
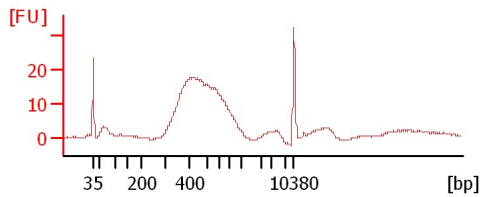
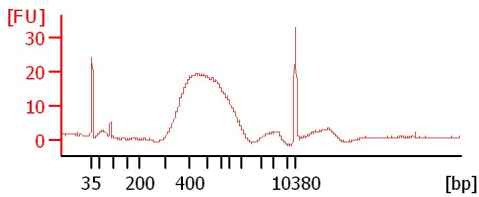
sample 4



sample 5

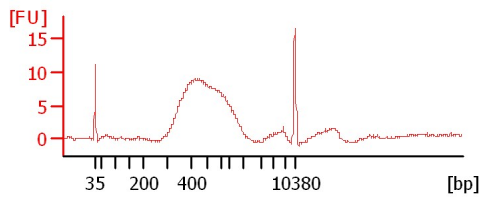
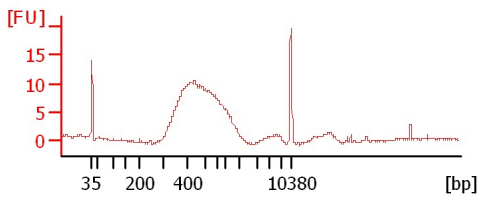
sample 1bis

sample 2bis



sample 4bis

sample 5bis



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-16\2016-09-16\_003.xad

Created: 9/16/2016 3:26:41 PM  
 Modified: 9/16/2016 4:13:39 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 4		<input type="checkbox"/>				
sample 5		<input type="checkbox"/>				
sample 1bis		<input type="checkbox"/>				
sample 2bis		<input type="checkbox"/>				
sample 4bis		<input type="checkbox"/>				
sample 5bis		<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\2016-09-16\2016-09-16\_003.xad

Created: 9/16/2016 3:26:41 PM  
Modified: 9/16/2016 4:13:39 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

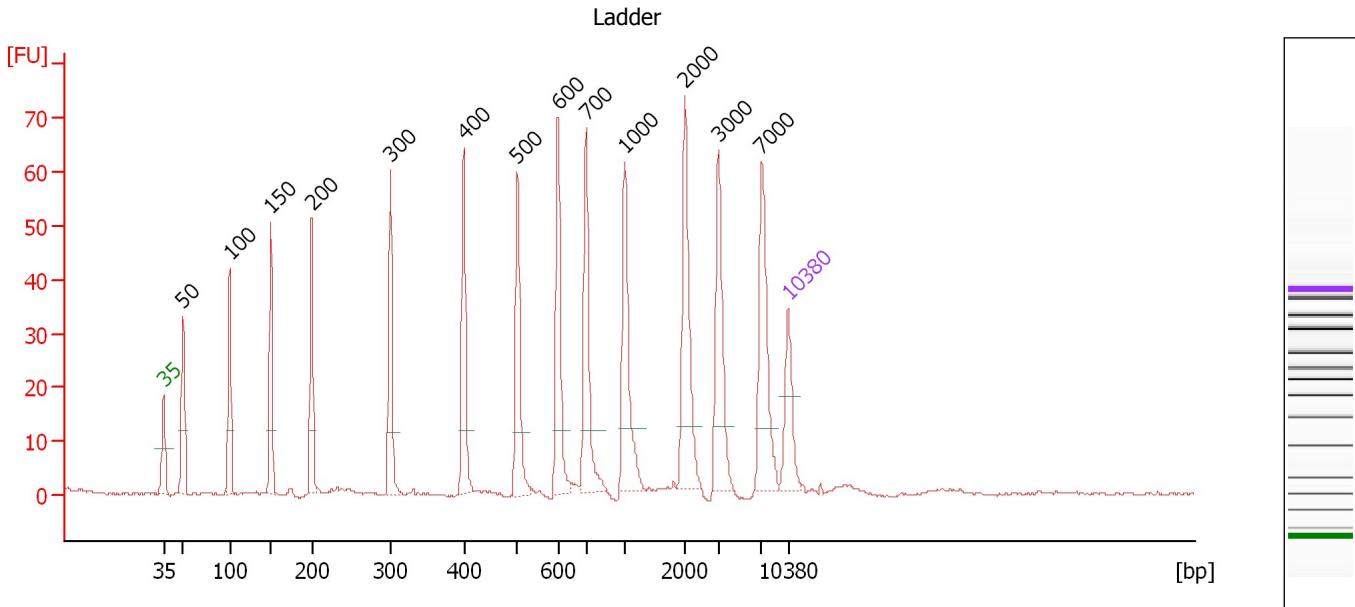
**Ladder**

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\2016-09-16\2016-09-16\_003.xad

Created: 9/16/2016 3:26:41 PM  
 Modified: 9/16/2016 4:13:39 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

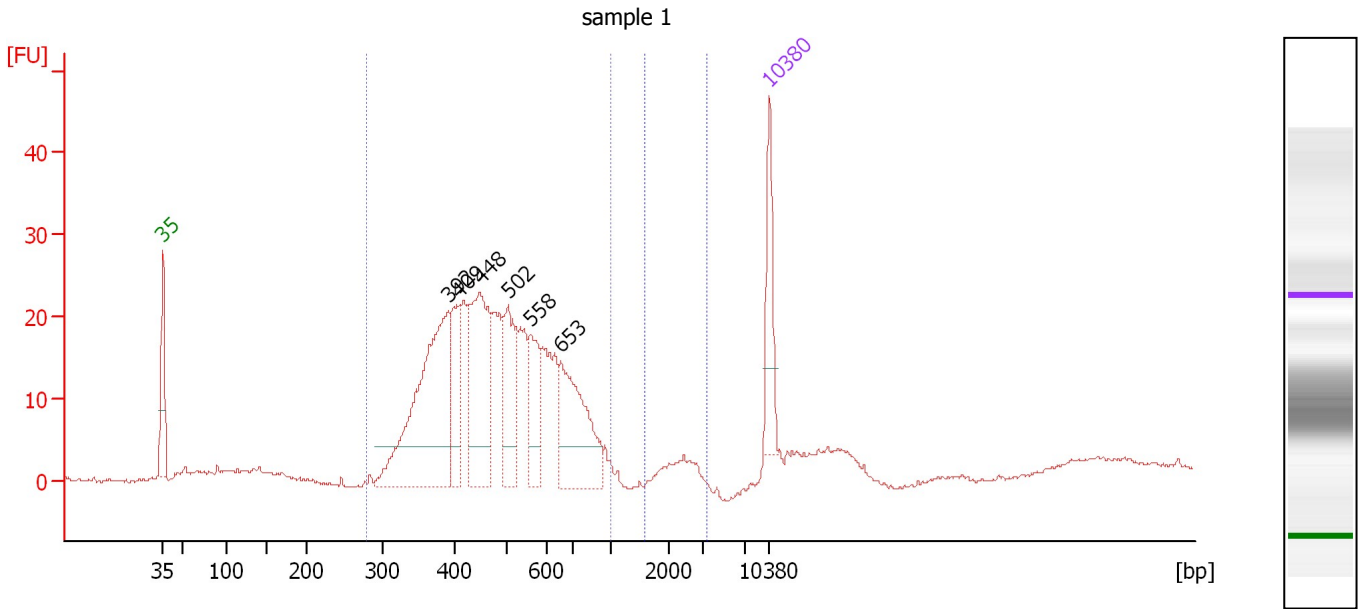
**Peak table for Ladder**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.21
3	100	150.00	2,272.7	Ladder Peak	50.41
4	150	150.00	1,515.2	Ladder Peak	55.02
5	200	150.00	1,136.4	Ladder Peak	59.62
6	300	150.00	757.6	Ladder Peak	68.41
7	400	150.00	568.2	Ladder Peak	76.65
8	500	150.00	454.5	Ladder Peak	82.69
9	600	150.00	378.8	Ladder Peak	87.24
10	700	150.00	324.7	Ladder Peak	90.34
11	1,000	150.00	227.3	Ladder Peak	94.71
12	2,000	150.00	113.6	Ladder Peak	101.46
13	3,000	150.00	75.8	Ladder Peak	105.23
14	7,000	150.00	32.5	Ladder Peak	110.07
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-16\2016-09-16\_003.xad

Created: 9/16/2016 3:26:41 PM  
 Modified: 9/16/2016 4:13:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : sample 1**

Number of peaks found: 6                      Corr. Area 1: 409.5  
 Noise: 0.2                                      Corr. Area 2: 5.1

**Peak table for sample 1 : sample 1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	392	392.59	1,518.6		75.97
3	409	90.04	333.5		77.20
4	448	229.96	778.2		79.54
5	502	128.18	386.6		82.80
6	558	87.05	236.4		85.32
7	653	183.59	425.9		88.89
8	10,380	75.00	10.9	Upper Marker	113.00

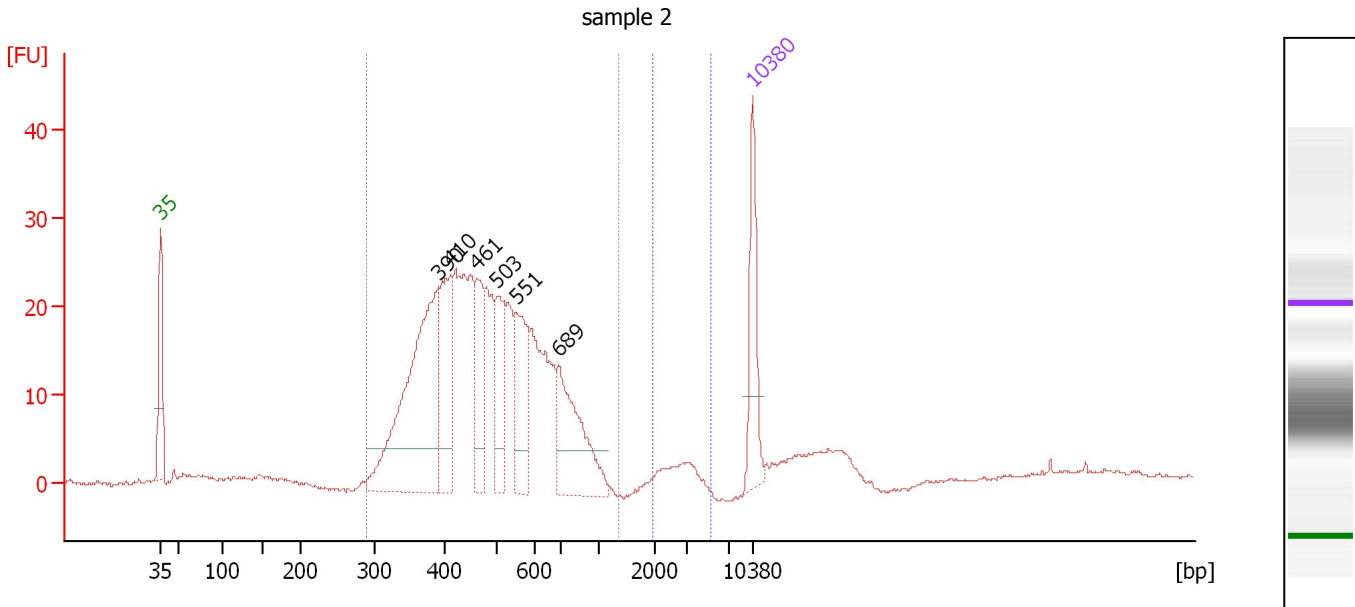
**Region table for sample 1 : sample 1**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
279	1,000	499	409.5	4,676.3	1,425.32	89	25.7
1,572	3,344	2,354	5.1	8.6	13.26	1	12.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-16\2016-09-16\_003.xad

Created: 9/16/2016 3:26:41 PM  
 Modified: 9/16/2016 4:13:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : sample 2**

Number of peaks found: 6                      Corr. Area 1: 443.8  
 Noise: 0.3                                      Corr. Area 2: 6.1

**Peak table for sample 2 : sample 2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	390	357.04	1,387.3		75.83
3	410	129.36	477.7		77.28
4	461	88.08	289.2		80.36
5	503	87.95	265.0		82.82
6	551	100.95	277.4		85.03
7	689	140.96	310.0		90.00
8	10,380	75.00	10.9	Upper Marker	113.00

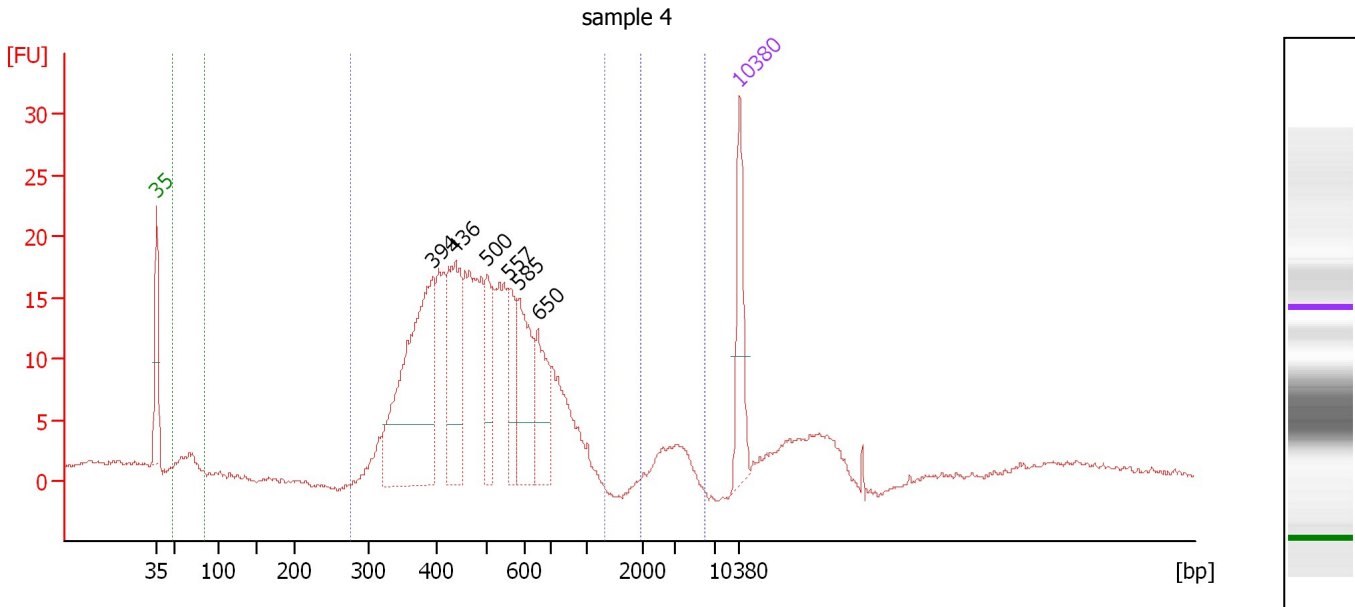
**Region table for sample 2 : sample 2**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
289	1,354	498	443.8	4,440.8	1,347.93	91	26.6
1,967	5,409	2,818	6.1	7.6	13.93	1	18.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-16\2016-09-16\_003.xad

Created: 9/16/2016 3:26:41 PM  
 Modified: 9/16/2016 4:13:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : sample 4**

Number of peaks found:	6	Corr. Area 2:	6.9
Noise:	0.2	Corr. Area 3:	3.6
Corr. Area 1:	317.0		

**Peak table for sample 3 : sample 4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	394	368.33	1,415.8		76.17
3	436	171.99	598.3		78.80
4	500	74.93	226.9		82.71
5	557	73.58	200.2		85.27
6	585	114.26	296.0		86.55
7	650	80.20	186.9		88.79
8	10,380	75.00	10.9	Upper Marker	113.00

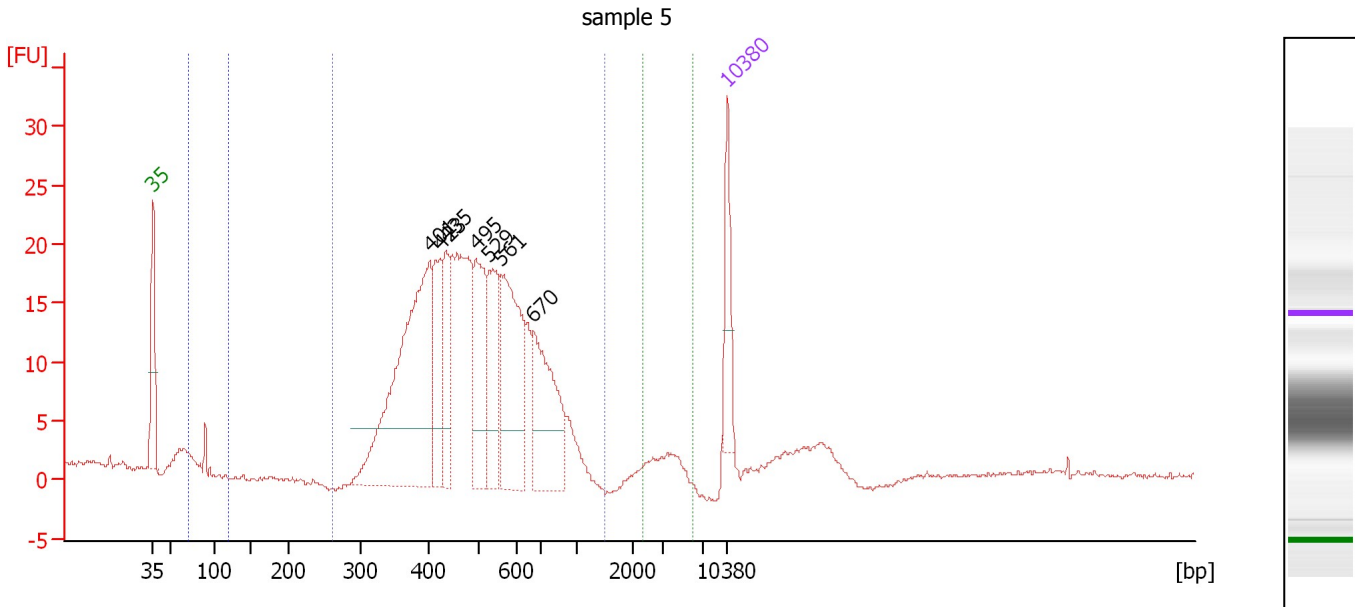
**Region table for sample 3 : sample 4**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
48	84	64	3.6	537.5	22.53	1	10.5
276	1,320	505	317.0	4,380.8	1,350.49	88	26.3
1,967	5,979	3,162	6.9	11.0	22.27	2	19.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-16\2016-09-16\_003.xad

Created: 9/16/2016 3:26:41 PM  
 Modified: 9/16/2016 4:13:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : sample 5**

Number of peaks found: 7                      Corr. Area 2: 2.9  
 Noise: 0.2                                      Corr. Area 3: 4.3  
 Corr. Area 1: 346.2

**Peak table for sample 4 : sample 5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	401	558.58	2,109.0		76.73
3	423	136.91	490.6		78.03
4	435	100.58	350.6		78.75
5	495	177.23	542.6		82.39
6	529	145.30	416.1		84.01
7	561	259.75	702.1		85.44
8	670	207.46	469.3		89.41
9	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : sample 5**

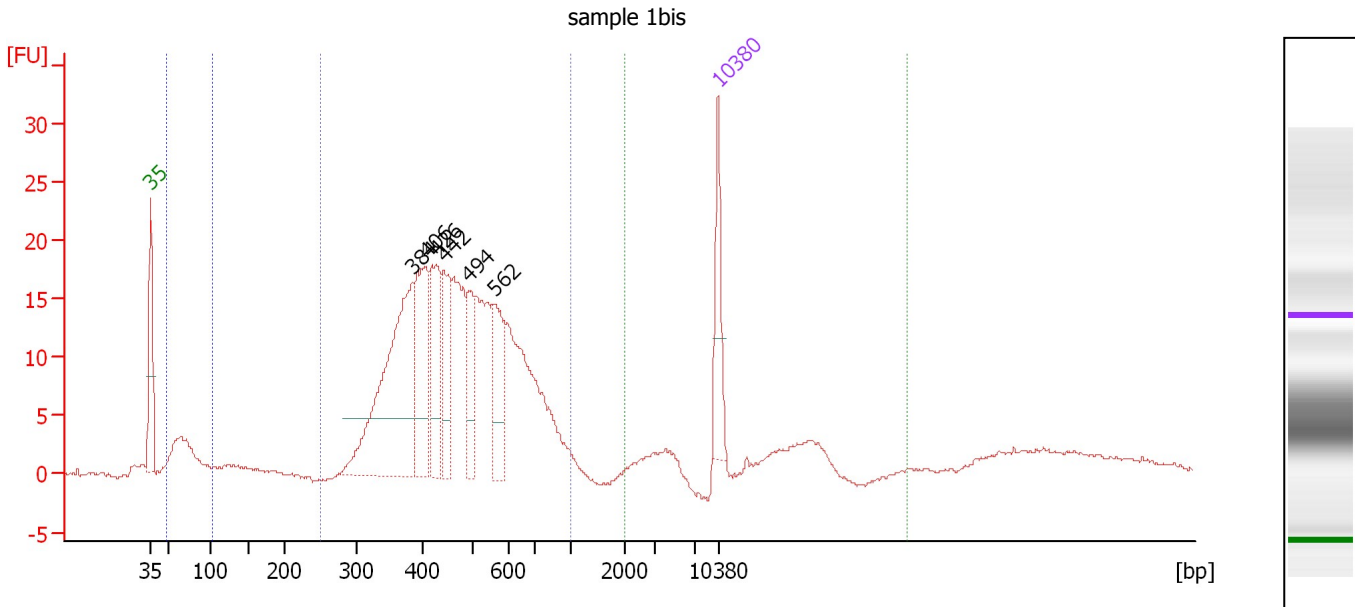
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
70	121	83	2.9	406.2	22.33	1	9.8
261	1,512	513	346.2	5,787.5	1,808.67	93	26.6
2,316	6,060	3,384	4.3	7.9	17.15	1	21.7



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-16\2016-09-16\_003.xad

Created: 9/16/2016 3:26:41 PM  
 Modified: 9/16/2016 4:13:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : sample 1bis**

Number of peaks found: 6                      Corr. Area 2: 17.4  
 Noise: 0.2                                      Corr. Area 3: 21.2  
 Corr. Area 1: 336.0

**Peak table for sample 5 : sample 1bis**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	384	422.07	1,667.1		75.30
3	406	183.32	684.2		77.01
4	426	143.58	511.2		78.20
5	442	111.34	381.8		79.18
6	494	92.07	282.3		82.34
7	562	114.78	309.5		85.50
8	10,380	75.00	10.9	Upper Marker	113.00

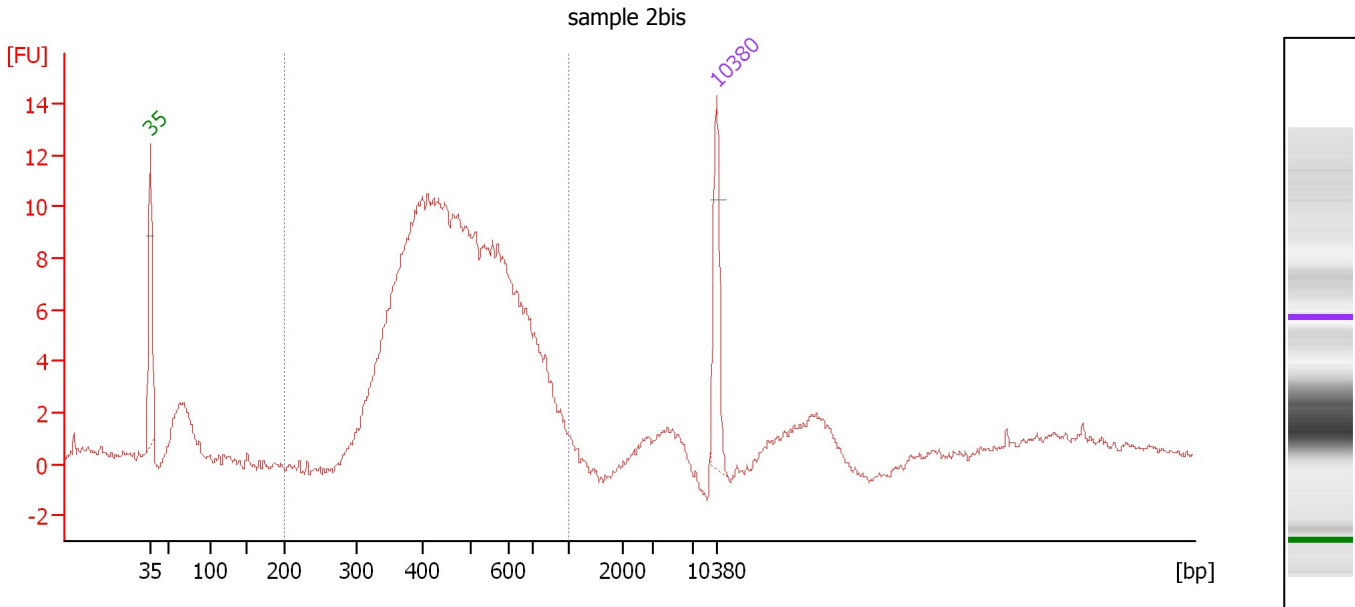
**Region table for sample 5 : sample 1bis**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
48	103	69	17.4	2,850.8	129.00	4	18.1
250	1,000	490	336.0	5,666.6	1,693.22	83	26.4
2,017	37,139	13,097	21.2	16.8	72.92	5	51.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-16\2016-09-16\_003.xad

Created: 9/16/2016 3:26:41 PM  
 Modified: 9/16/2016 4:13:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : sample 2bis**

Number of peaks found: 0                      Corr. Area 1: 169.4  
 Noise: 0.1

**Peak table for sample 6 : sample 2bis**

Pea k	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	10,380	75.00	10.9	Upper Marker	113.00

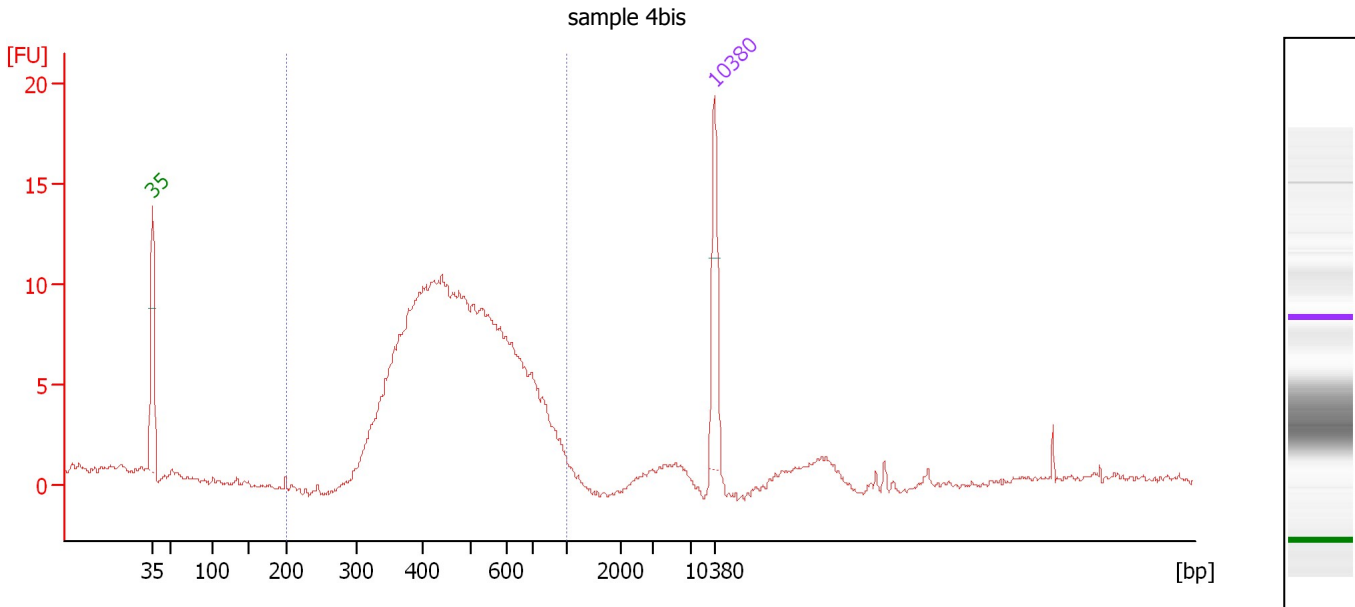
**Region table for sample 6 : sample 2bis**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	492	169.4	5,474.3	1,653.95	93	25.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-16\2016-09-16\_003.xad

Created: 9/16/2016 3:26:41 PM  
 Modified: 9/16/2016 4:13:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : sample 4bis**

Number of peaks found: 0                      Corr. Area 1: 172.5  
 Noise: 0.2

**Peak table for sample 7 : sample 4bis**

Pea k	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	10,380	75.00	10.9	Upper Marker	113.00

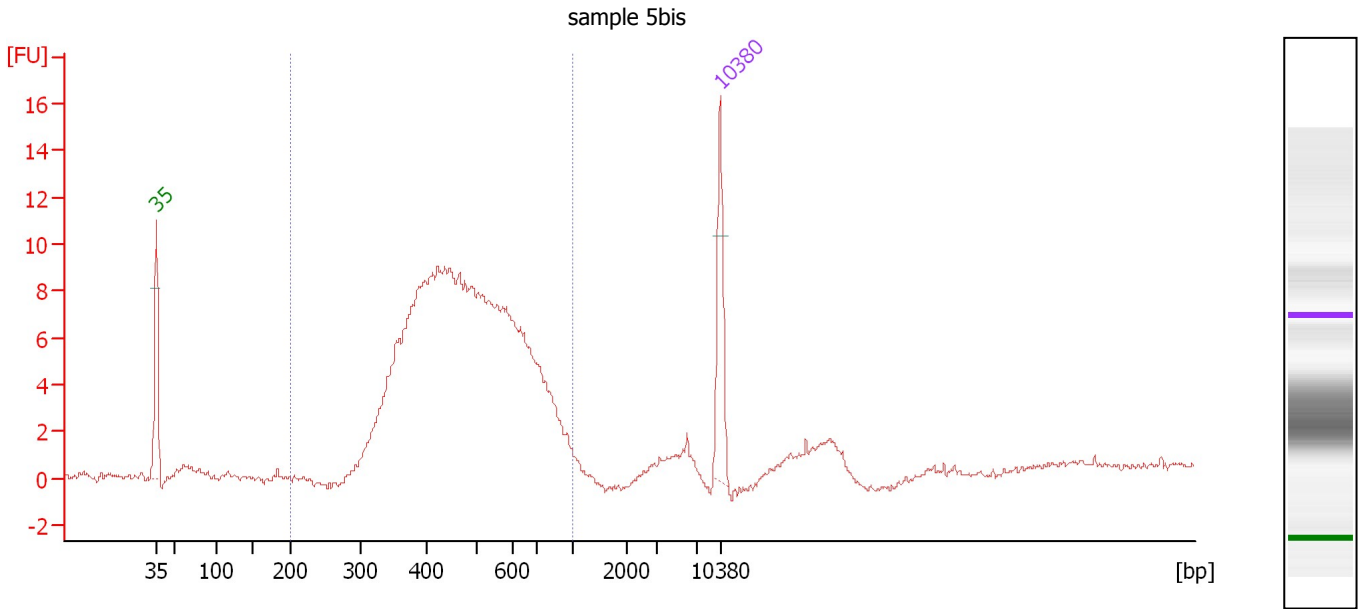
**Region table for sample 7 : sample 4bis**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	498	172.5	4,798.3	1,461.66	97	25.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-16\2016-09-16\_003.xad

Created: 9/16/2016 3:26:41 PM  
 Modified: 9/16/2016 4:13:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : sample 5bis**

Number of peaks found: 0                      Corr. Area 1: 165.2  
 Noise: 0.2

**Peak table for sample 8 : sample 5bis**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	10,380	75.00	10.9	Upper Marker	113.00

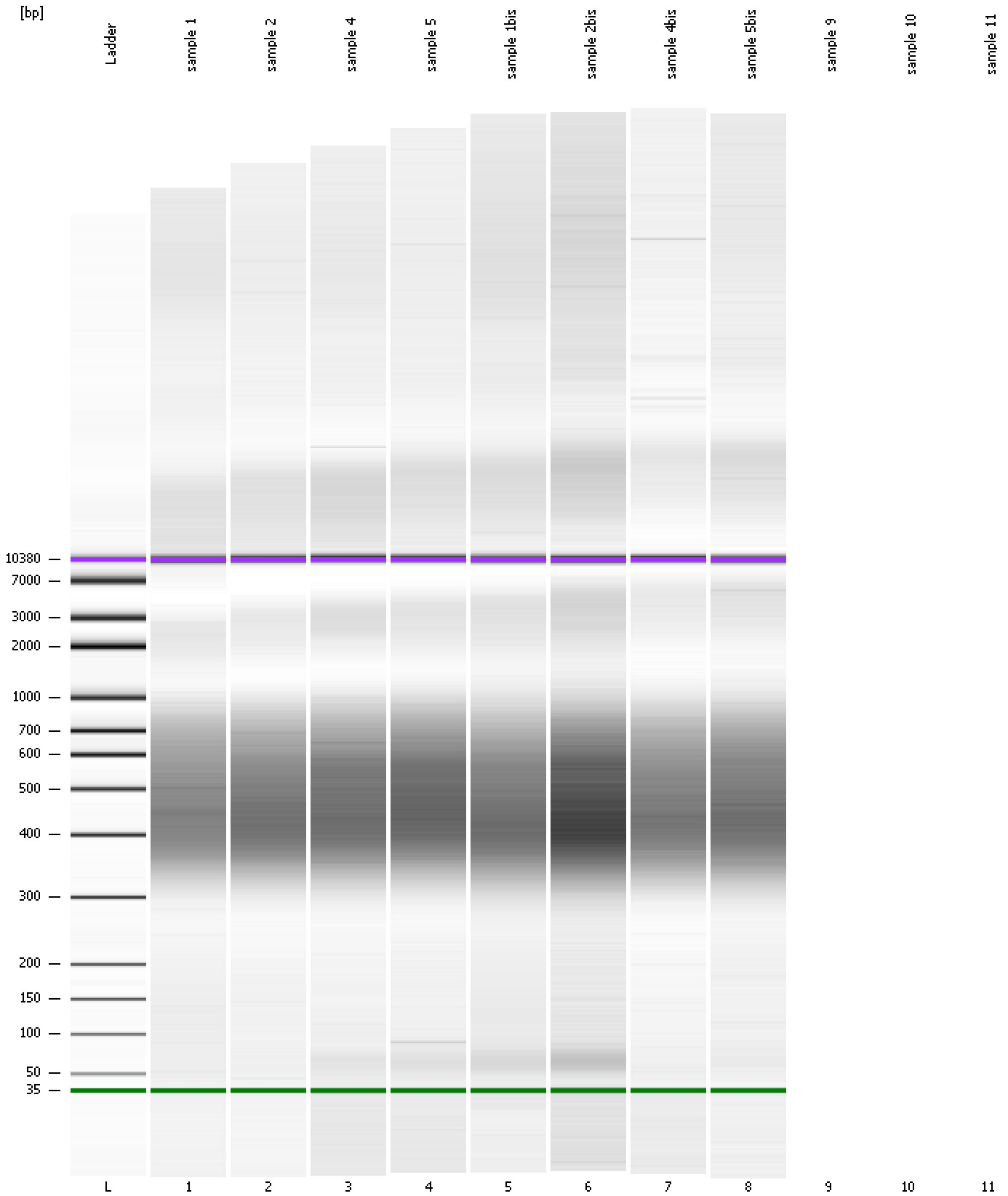
**Region table for sample 8 : sample 5bis**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	500	165.2	5,034.6	1,530.90	93	26.6

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-16\2016-09-16\_003.xad

Created: 9/16/2016 3:26:41 PM  
Modified: 9/16/2016 4:13:39 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-16\2016-09-16\_003.xad

Created: 9/16/2016 3:26:41 PM  
Modified: 9/16/2016 4:13:39 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\2016-09-16\2016-09-16\_003.xad

Created: 9/16/2016 3:26:41 PM  
 Modified: 9/16/2016 4:13:39 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		9/16/2016 3:59:25 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\2016-09-16\2016-09-16_003.xad)		Instrument	Run		9/16/2016 3:26:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		9/16/2016 3:26:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		9/16/2016 3:26:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		9/16/2016 3:26:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		9/16/2016 3:26:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		9/16/2016 3:26:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		9/16/2016 3:26:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1