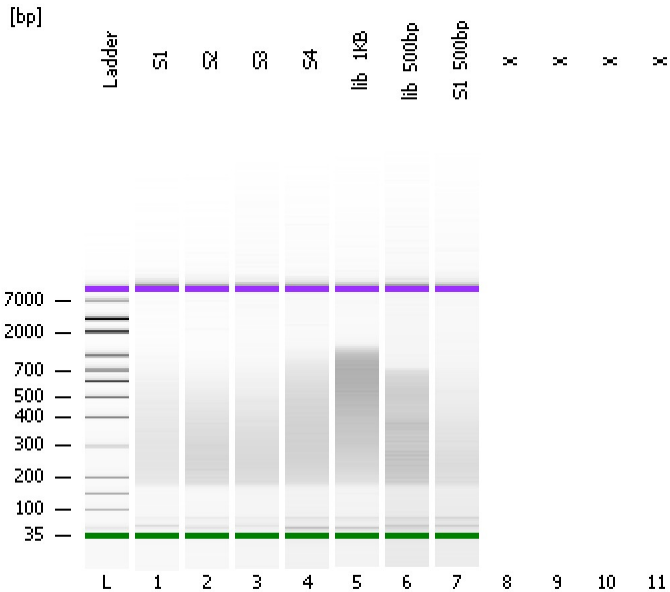


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_001.xad

Created: 3/10/2015 11:31:53 AM  
Modified: 3/10/2015 12:17:25 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

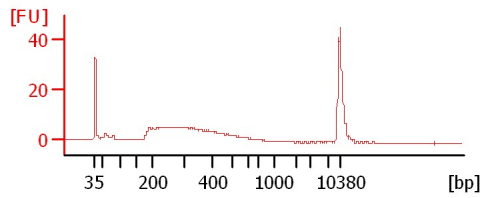
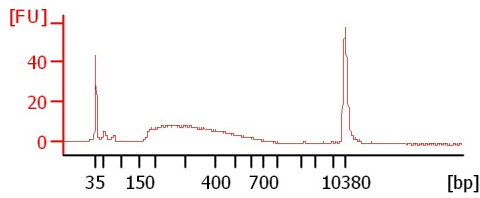
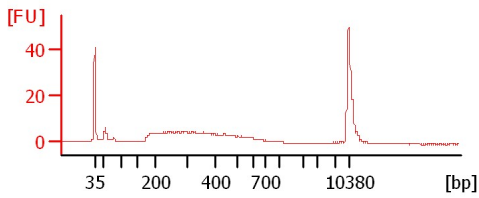
Chip Information:

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

**S1**

**S2**

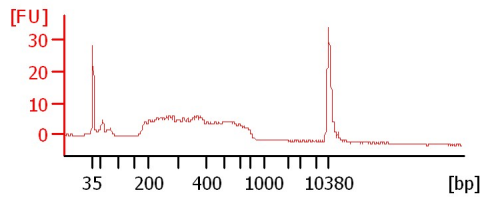
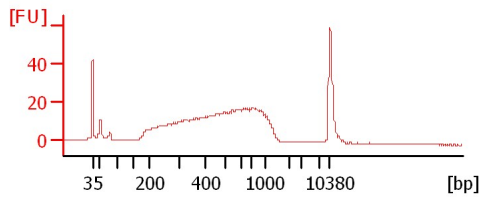
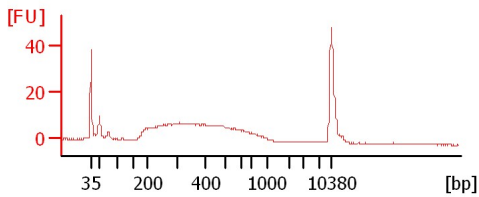
**S3**



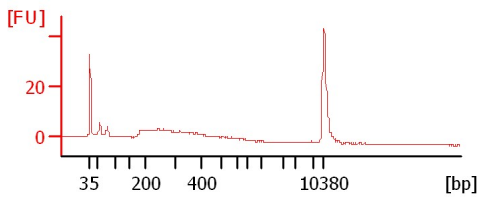
**S4**

**lib\_1KB**

**lib\_500bp**



**S1\_500bp**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_001.xad

Created: 3/10/2015 11:31:53 AM  
 Modified: 3/10/2015 12:17:25 PM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
S1		<input type="checkbox"/>	✓			
S2		<input type="checkbox"/>	✓			
S3		<input type="checkbox"/>	✓			
S4		<input type="checkbox"/>	✓			
lib_1KB		<input type="checkbox"/>	✓			
lib_500bp		<input type="checkbox"/>	✓			
S1_500bp		<input type="checkbox"/>	✓			
X		<input type="checkbox"/>				
X		<input type="checkbox"/>				
X		<input type="checkbox"/>				
X		<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\2015-03-10\2015-03-10\_001.xad

Created: 3/10/2015 11:31:53 AM  
Modified: 3/10/2015 12:17:25 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/ $\mu$ l] : 1950  
Uses Standard Area for Ladder Fragments  
Lower Marker Concentration [pg/ $\mu$ l] : 125  
Upper Marker Concentration [pg/ $\mu$ l] : 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

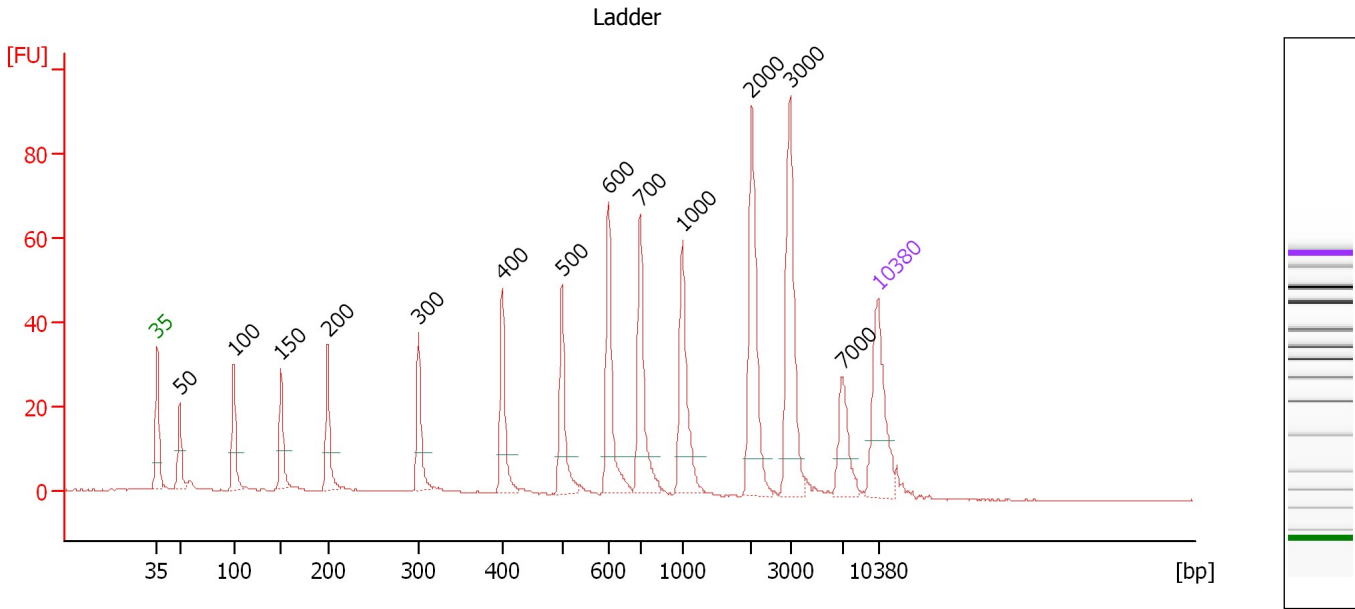
### Ladder

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\2015-03-10\2015-03-10\_001.xad

Created: 3/10/2015 11:31:53 AM  
 Modified: 3/10/2015 12:17:25 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

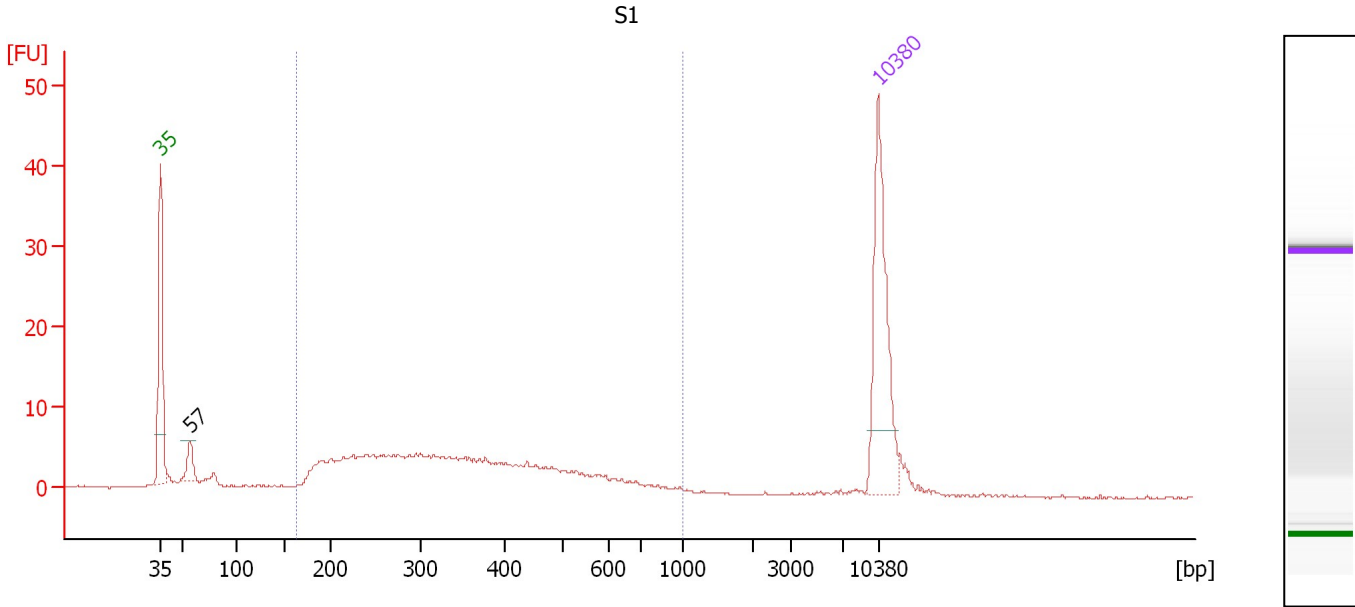
**Peak table for Ladder**

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	45.17
3	100	150.00	2,272.7	Ladder Peak	50.46
4	150	150.00	1,515.2	Ladder Peak	55.01
5	200	150.00	1,136.4	Ladder Peak	59.57
6	300	150.00	757.6	Ladder Peak	68.37
7	400	150.00	568.2	Ladder Peak	76.50
8	500	150.00	454.5	Ladder Peak	82.30
9	600	150.00	378.8	Ladder Peak	86.80
10	700	150.00	324.7	Ladder Peak	89.91
11	1,000	150.00	227.3	Ladder Peak	94.00
12	2,000	150.00	113.6	Ladder Peak	100.73
13	3,000	150.00	75.8	Ladder Peak	104.46
14	7,000	150.00	32.5	Ladder Peak	109.53
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_001.xad

Created: 3/10/2015 11:31:53 AM  
 Modified: 3/10/2015 12:17:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : S1**

Number of peaks found: 1                      Corr. Area 1: 155.8  
 Noise: 0.1

**Peak table for sample 1 : S1**

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	57	18.69	496.9		45.91
3	10,380	75.00	10.9	Upper Marker	113.00

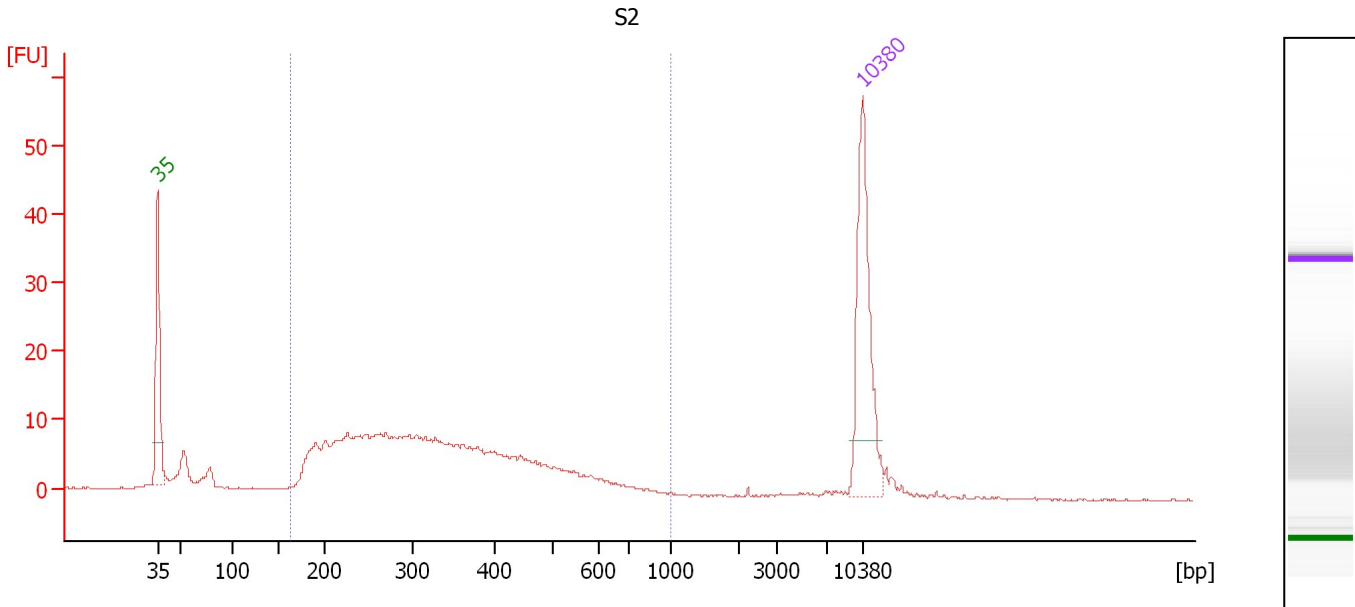
**Region table for sample 1 : S1**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
164	362	1,000	155.8	1,489.3	83	38.9	294.51	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_001.xad

Created: 3/10/2015 11:31:53 AM  
 Modified: 3/10/2015 12:17:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : S2**

Number of peaks found: 0                      Corr. Area 1: 263.3  
 Noise: 0.1

**Peak table for sample 2 : S2**

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

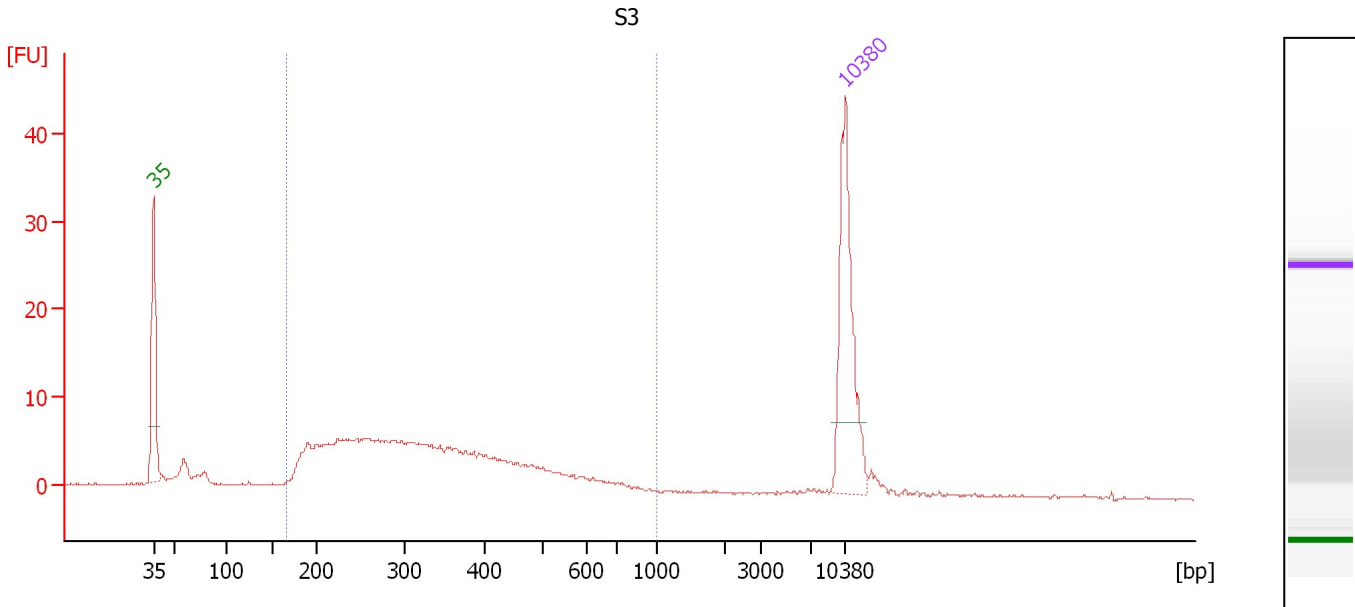
**Region table for sample 2 : S2**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
163	340	1,000	263.3	2,206.4	89	35.4	421.81	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_001.xad

Created: 3/10/2015 11:31:53 AM  
 Modified: 3/10/2015 12:17:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : S3**

Number of peaks found: 0                      Corr. Area 1: 180.6  
 Noise: 0.1

**Peak table for sample 3 : S3**

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

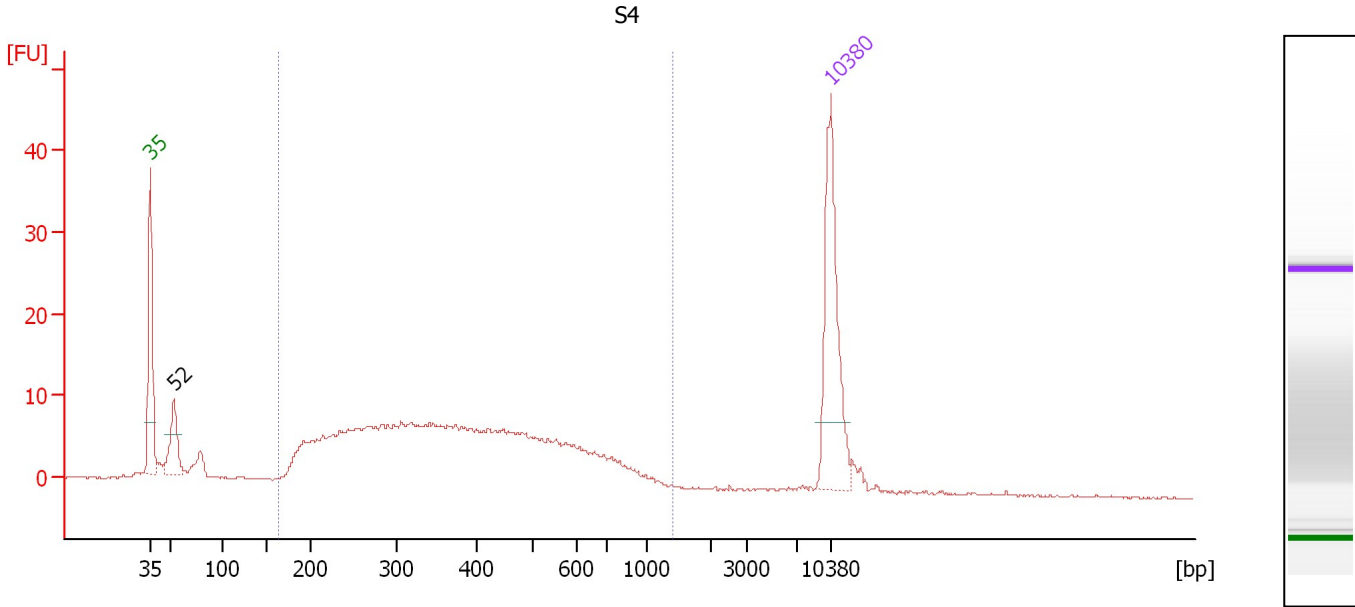
**Region table for sample 3 : S3**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
165	341	1,000	180.6	1,916.3	87	37.0	364.97	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_001.xad

Created: 3/10/2015 11:31:53 AM  
 Modified: 3/10/2015 12:17:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : S4**

Number of peaks found: 1                      Corr. Area 1: 278.6  
 Noise: 0.1

**Peak table for sample 4 : S4**

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	52	43.03	1,247.4		45.41
3	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : S4**

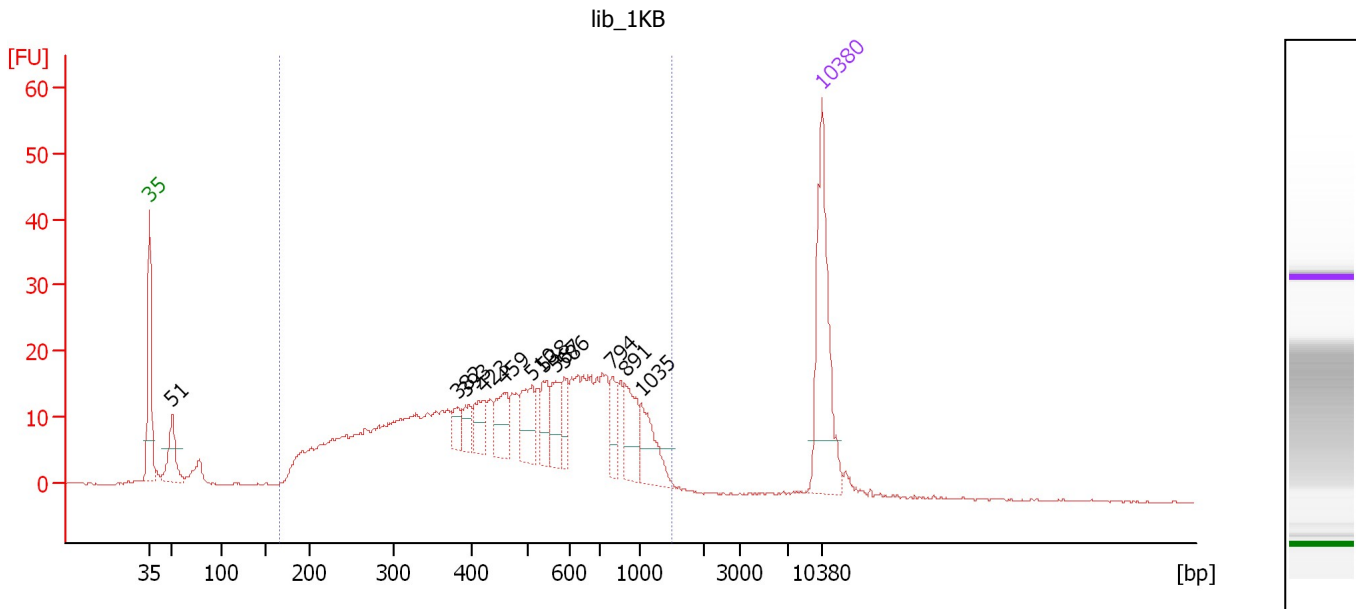
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
162	408	1,425	278.6	2,392.7	87	43.1	513.48	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_001.xad

Created: 3/10/2015 11:31:53 AM  
 Modified: 3/10/2015 12:17:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : lib\_1KB**

Number of peaks found: 12                      Corr. Area 1: 596.6  
 Noise: 0.1

**Peak table for sample 5 : lib\_1KB**

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	51	40.46	1,190.7		45.33
3	382	11.66	46.3		75.03
4	393	13.25	51.1		75.92
5	423	19.44	69.7		77.81
6	459	27.13	89.6		79.92
7	510	31.78	94.4		82.75
8	538	20.58	57.9		84.02
9	567	21.61	57.8		85.30
10	586	15.17	39.2		86.19
11	794	16.75	32.0		91.18
12	891	27.99	47.6		92.52
13	1,035	29.15	42.6		94.24
14	10,380	75.00	10.9	Upper Marker	113.00

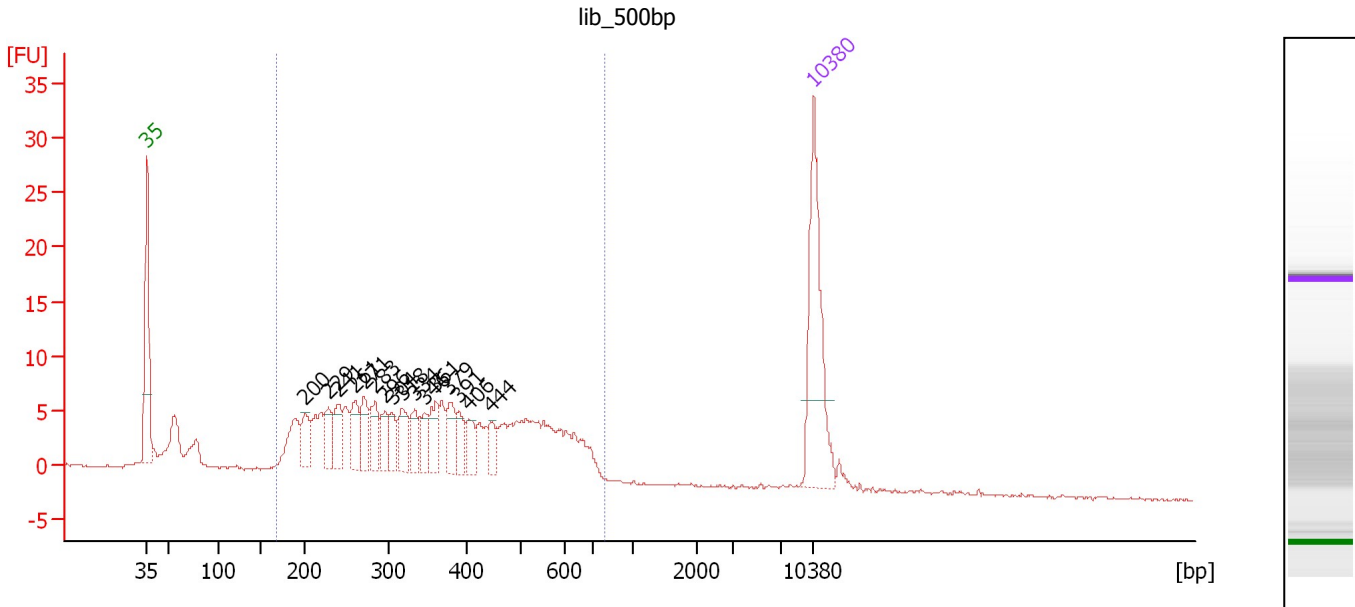
**Region table for sample 5 : lib\_1KB**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
166	531	1,500	596.6	3,488.2	92	47.4	901.32	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_001.xad

Created: 3/10/2015 11:31:53 AM  
 Modified: 3/10/2015 12:17:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : lib\_500bp**

Number of peaks found: 16                      Corr. Area 1: 235.9  
 Noise: 0.1

**Peak table for sample 6 : lib\_500bp**

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	200	21.57	163.3		59.58
3	229	20.43	135.3		62.10
4	241	23.73	149.3		63.16
5	261	24.98	145.3		64.90
6	271	22.73	127.2		65.79
7	283	20.78	111.1		66.91
8	296	15.02	77.0		67.98
9	304	15.34	76.5		68.70
10	318	23.54	112.2		69.82
11	334	16.21	73.6		71.11
12	346	13.40	58.7		72.12
13	361	21.44	90.1		73.30
14	379	21.19	84.8		74.75
15	391	13.93	54.0		75.76
16	406	14.83	55.4		76.82
17	444	12.54	42.8		79.06
18	10,380	75.00	10.9	Upper Marker	113.00

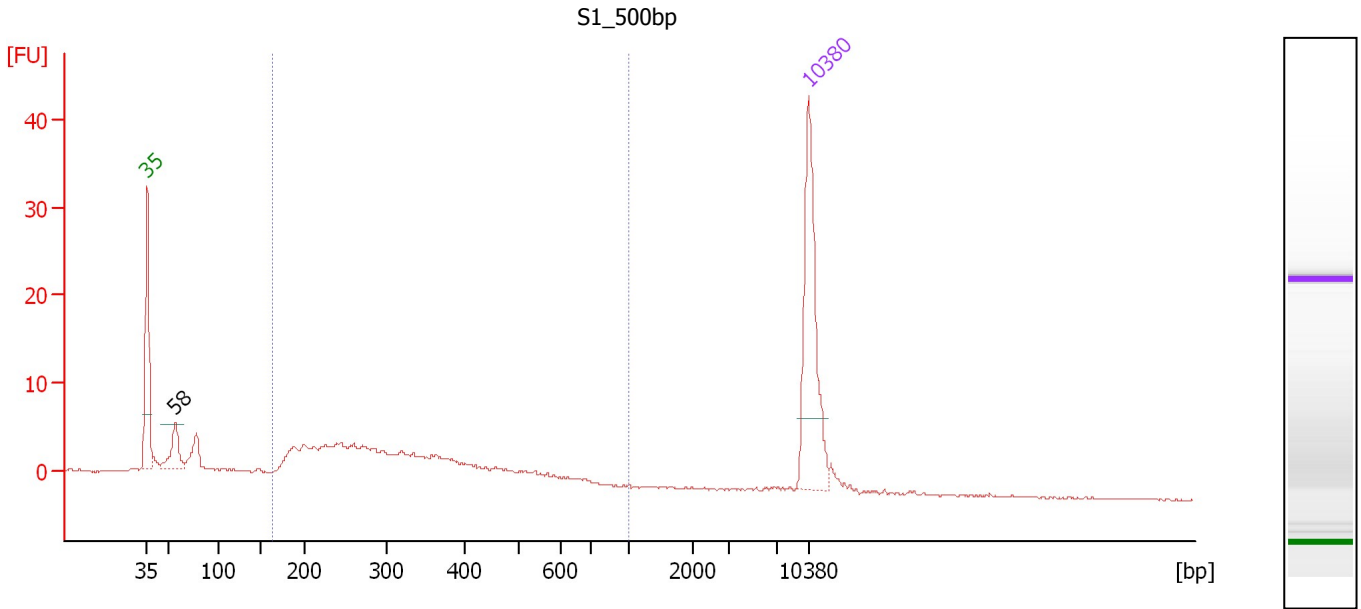
**Region table for sample 6 : lib\_500bp**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
166	377	782	235.9	3,004.7	88	35.8	617.40	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_001.xad

Created: 3/10/2015 11:31:53 AM  
 Modified: 3/10/2015 12:17:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : S1\_500bp**

Number of peaks found: 1                      Corr. Area 1: 104.0  
 Noise: 0.1

**Peak table for sample 7 : S1\_500bp**

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	58	29.07	763.6		45.99
3	10,380	75.00	10.9	Upper Marker	113.00

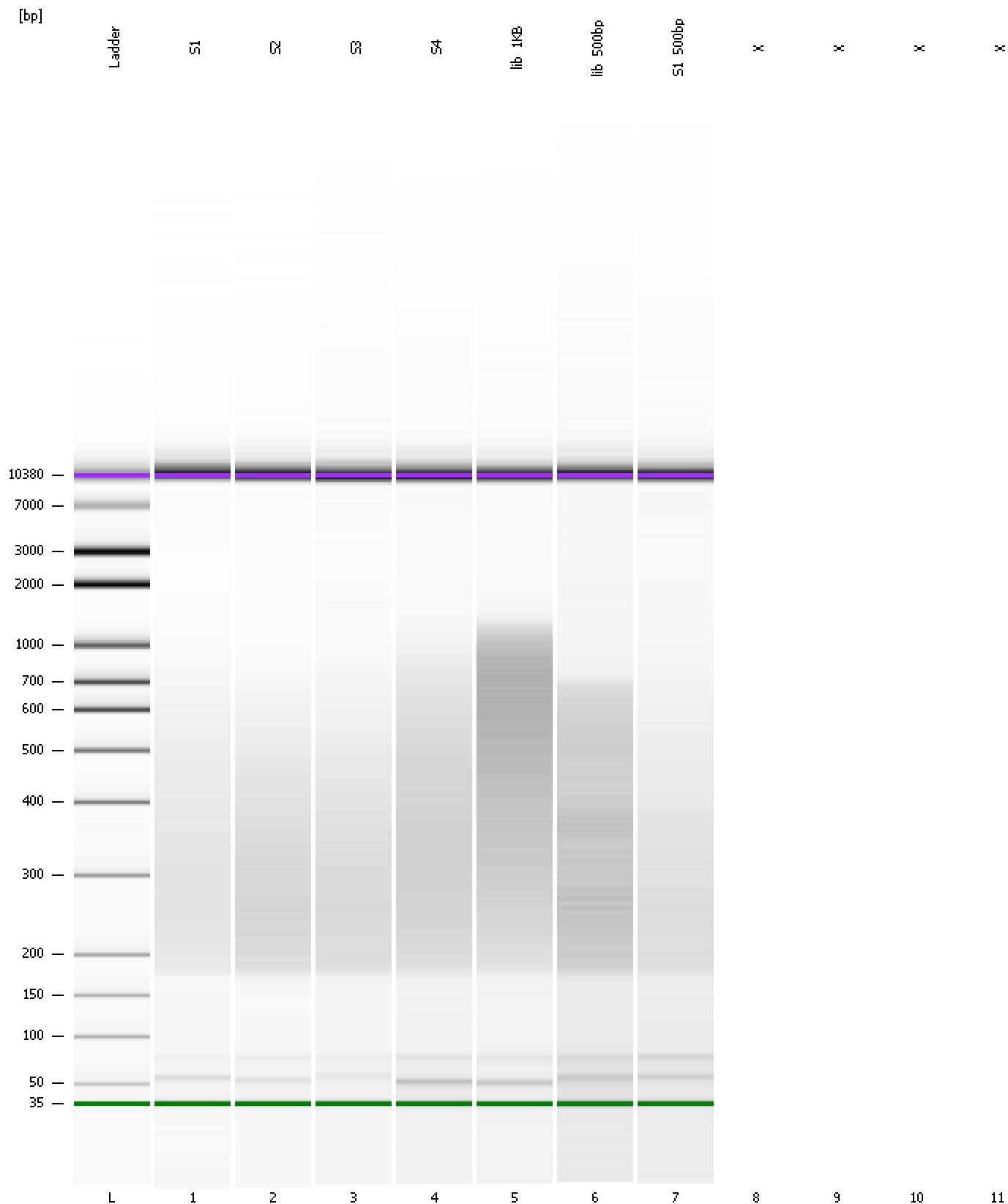
**Region table for sample 7 : S1\_500bp**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
163	323	1,000	104.0	1,235.3	75	34.8	225.97	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_001.xad

Created: 3/10/2015 11:31:53 AM  
Modified: 3/10/2015 12:17:25 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_001.xad

Created: 3/10/2015 11:31:53 AM  
Modified: 3/10/2015 12:17:25 PM

**Invalid Samples**

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\2015-03-10\2015-03-10\_001.xad

Created: 3/10/2015 11:31:53 AM  
 Modified: 3/10/2015 12:17:25 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 8)		Instrument	Run		3/10/2015 2:01:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-03-10\2015-03-10_001.xad)		Instrument	Run		3/10/2015 1:31:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/10/2015 1:31:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/10/2015 1:31:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/10/2015 1:31:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/10/2015 1:31:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/10/2015 1:31:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/10/2015 1:31:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1