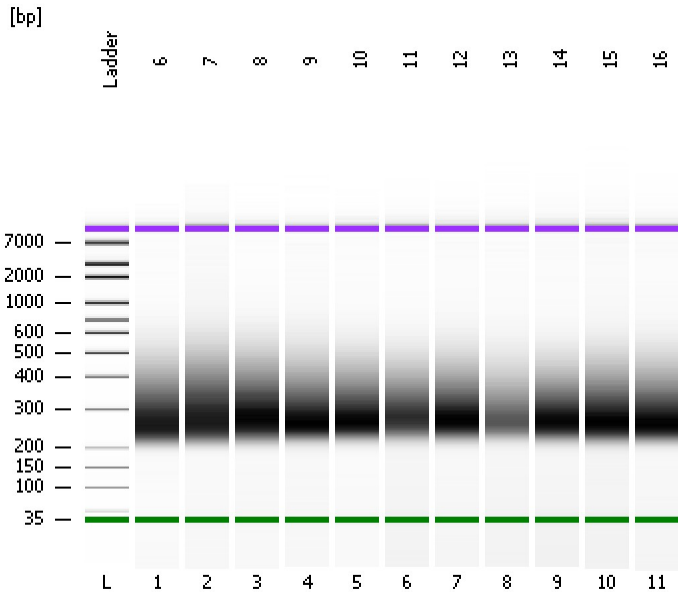


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-28\2014-07-28\_001.xad

Created: 7/28/2014 8:31:37 AM  
Modified: 7/28/2014 9:15:42 AM

### Electrophoresis File Run Summary



#### Instrument Information:

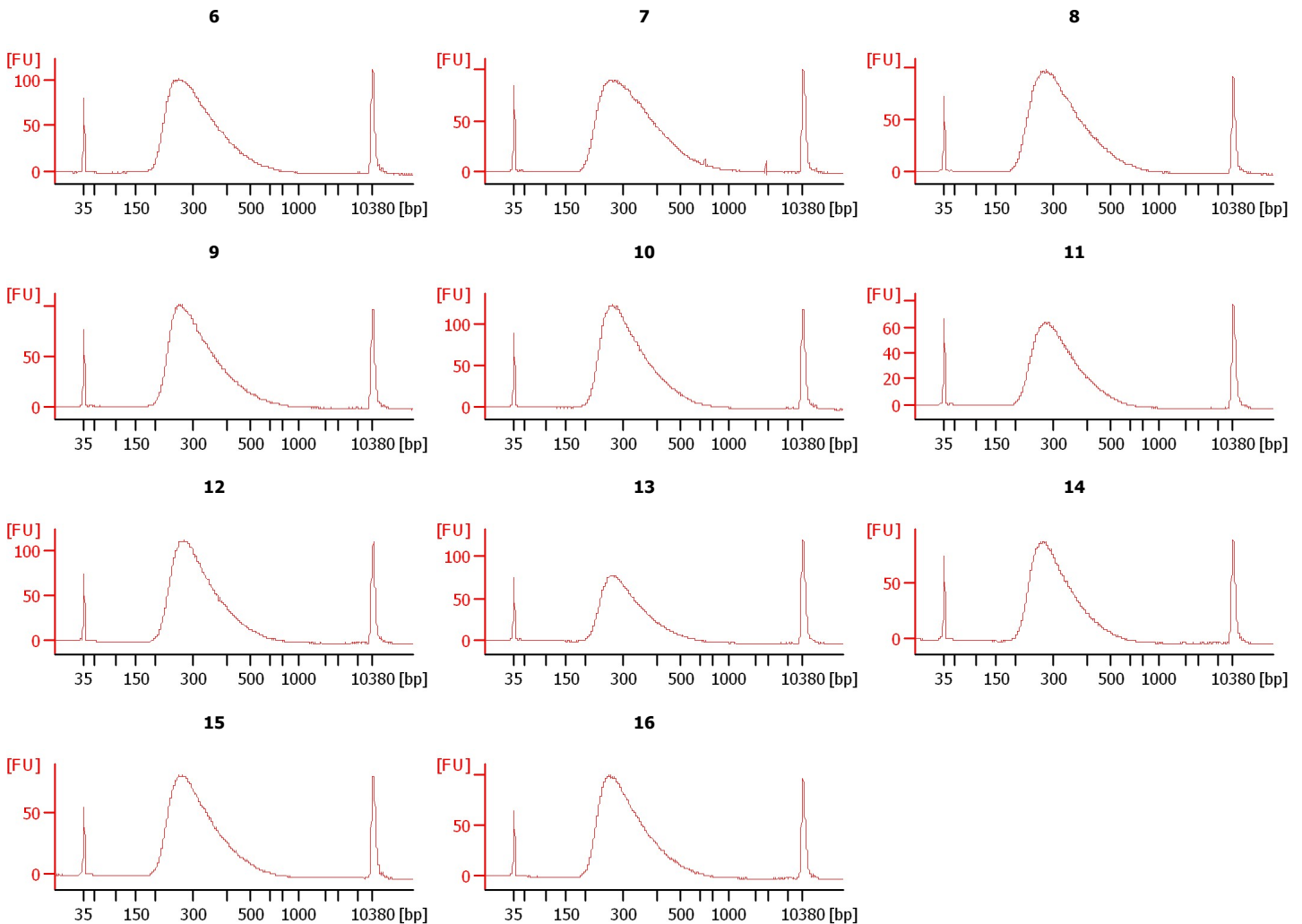
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

#### 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:



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-28\2014-07-28\_001.xad

Created: 7/28/2014 8:31:37 AM  
 Modified: 7/28/2014 9:15:42 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
6		<input type="checkbox"/>	✓			
7		<input type="checkbox"/>	✓			
8		<input type="checkbox"/>	✓			
9		<input type="checkbox"/>	✓			
10		<input type="checkbox"/>	✓			
11		<input type="checkbox"/>	✓			
12		<input type="checkbox"/>	✓			
13		<input type="checkbox"/>	✓			
14		<input type="checkbox"/>	✓			
15		<input type="checkbox"/>	✓			
16		<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\2014-07-28\2014-07-28\_001.xad

Created: 7/28/2014 8:31:37 AM  
Modified: 7/28/2014 9:15:42 AM

**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

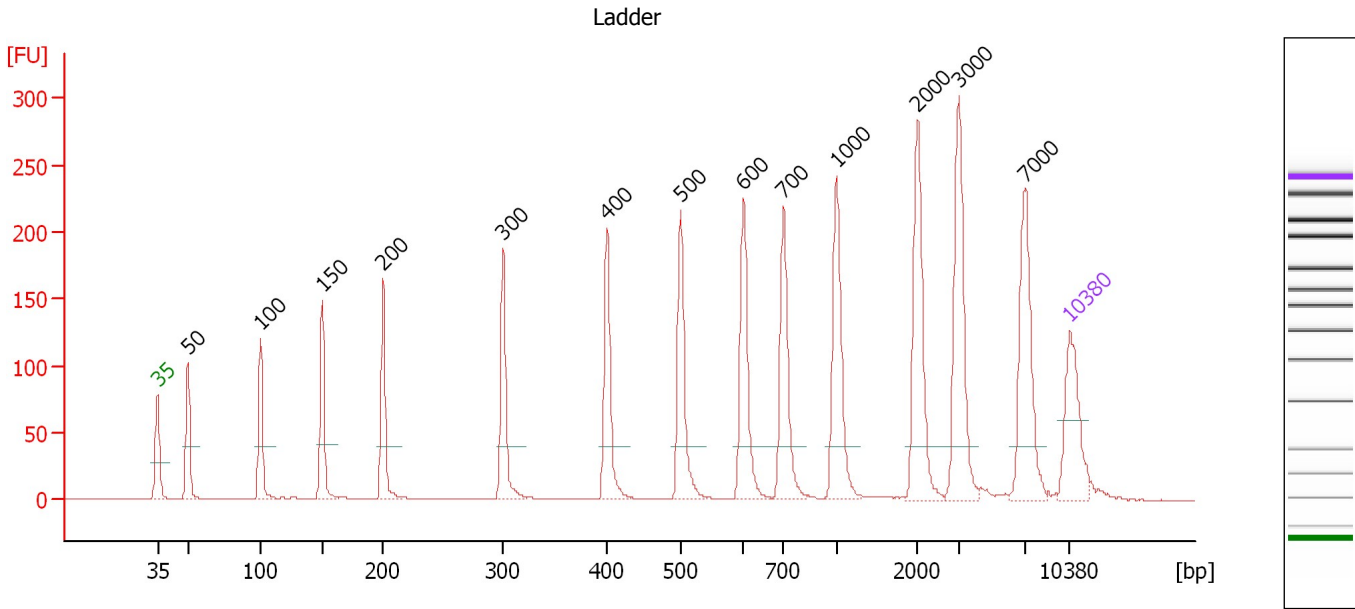
**Ladder**

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\2014-07-28\2014-07-28\_001.xad

Created: 7/28/2014 8:31:37 AM  
 Modified: 7/28/2014 9:15:42 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

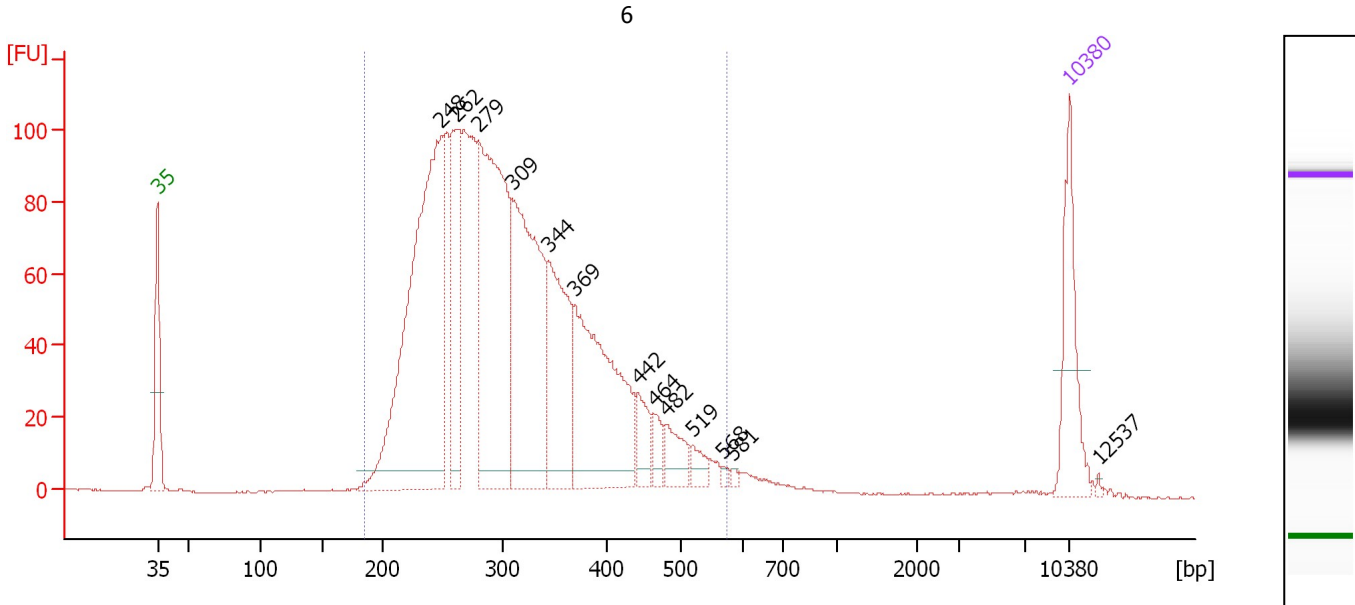
**Peak table for Ladder**

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:\... bioanalyzer\2100 expert\Data\2014-07-28\2014-07-28\_001.xad

Created: 7/28/2014 8:31:37 AM  
 Modified: 7/28/2014 9:15:42 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 6**

Number of peaks found: 13                      Corr. Area 1: 2,135.4  
 Noise: 0.2

**Peak table for sample 1 : 6**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	248	579.01	3,534.9	
3	262	157.76	913.0	
4	279	427.89	2,322.0	
5	309	334.76	1,643.9	
6	344	170.50	751.6	
7	369	264.48	1,087.1	
8	442	36.64	125.7	
9	464	19.36	63.2	
10	482	36.36	114.4	
11	519	15.41	45.0	
12	568	3.44	9.2	
13	581	3.81	9.9	
14	10,380	75.00	10.9	Upper Marker
15	12,537	0.00	0.0	

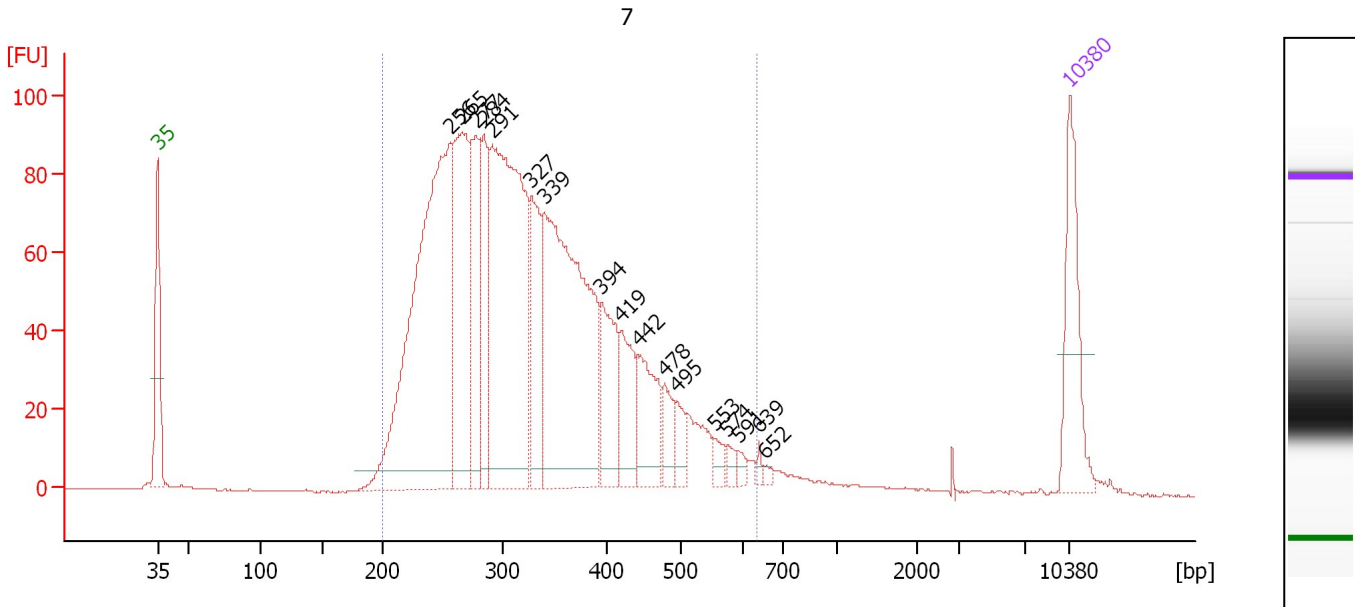
**Region table for sample 1 : 6**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
184	575	314	12,617.6	2,436.44	2,135.4	98	24.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-28\2014-07-28\_001.xad

Created: 7/28/2014 8:31:37 AM  
 Modified: 7/28/2014 9:15:42 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : Z**

Number of peaks found: 17                      Corr. Area 1: 2,115.8  
 Noise: 0.1

**Peak table for sample 2 : Z**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	256	552.32	3,269.8	
3	265	211.02	1,204.6	
4	277	126.34	690.4	
5	284	102.76	548.4	
6	291	436.59	2,276.7	
7	327	105.32	488.3	
8	339	402.79	1,798.4	
9	394	85.45	328.7	
10	419	67.65	244.4	
11	442	71.13	243.9	
12	478	29.10	92.3	
13	495	20.95	64.2	
14	553	10.77	29.5	
15	574	8.03	21.2	
16	591	6.92	17.7	
17	639	4.44	10.5	
18	652	3.70	8.6	
19	10,380	75.00	10.9	Upper Marker

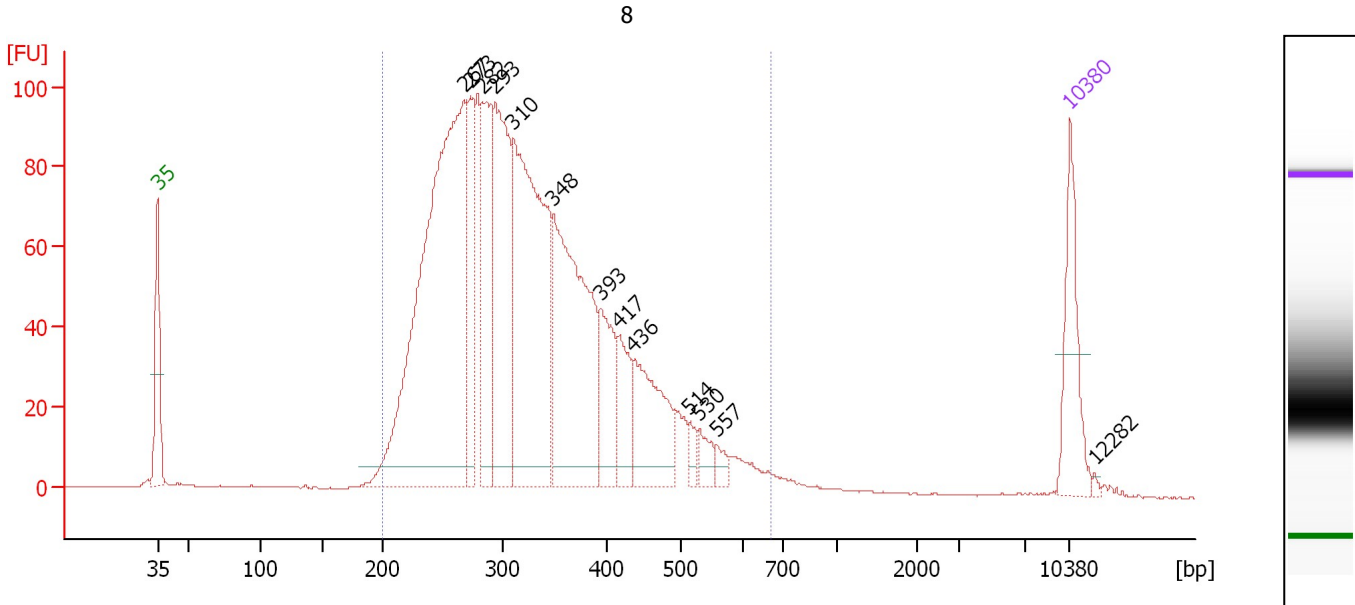
**Region table for sample 2 : Z**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	635	332	11,590.8	2,334.31	2,115.8	97	26.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-28\2014-07-28\_001.xad

Created: 7/28/2014 8:31:37 AM  
 Modified: 7/28/2014 9:15:42 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 8**

Number of peaks found: 13                      Corr. Area 1: 2,101.9  
 Noise: 0.2

**Peak table for sample 3 : 8**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	267	811.13	4,597.1	
3	273	120.05	667.2	
4	282	169.57	910.3	
5	293	273.89	1,417.3	
6	310	452.06	2,209.7	
7	348	346.51	1,508.0	
8	393	93.74	360.9	
9	417	62.83	228.4	
10	436	129.13	449.1	
11	514	15.43	45.5	
12	530	21.71	62.0	
13	557	11.95	32.5	
14	10,380	75.00	10.9	Upper Marker
15	12,282	0.00	0.0	

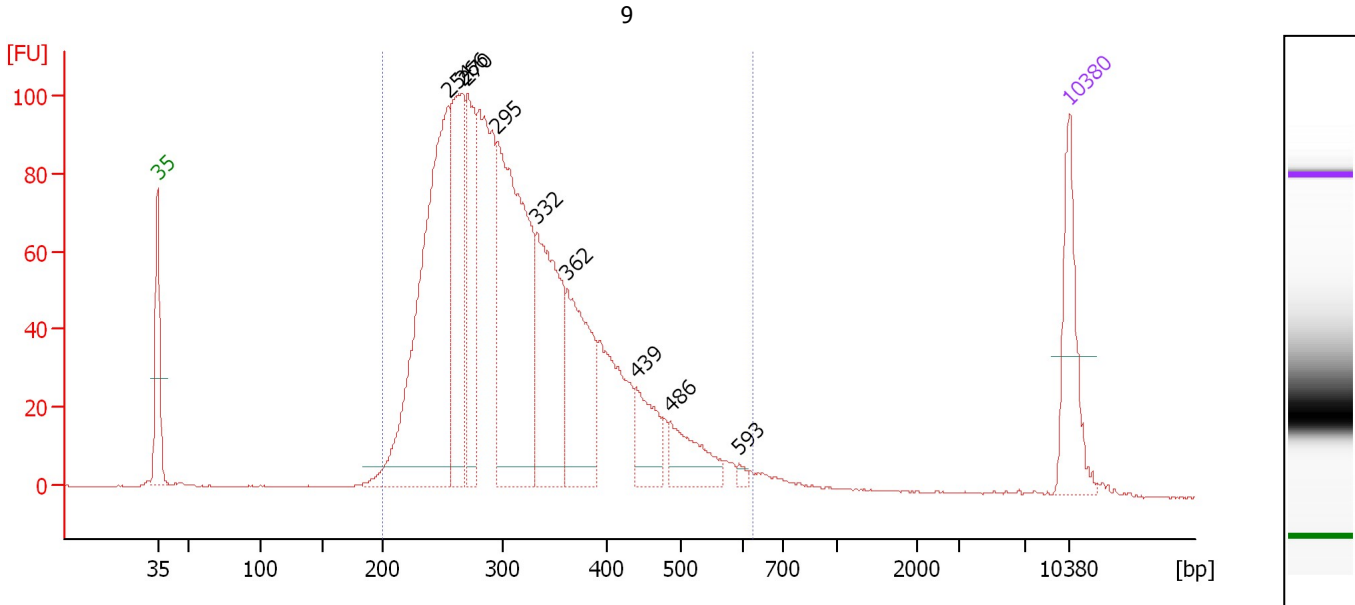
**Region table for sample 3 : 8**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	670	330	13,724.9	2,765.82	2,101.9	96	25.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-28\2014-07-28\_001.xad

Created: 7/28/2014 8:31:37 AM  
 Modified: 7/28/2014 9:15:42 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 9**

Number of peaks found: 9                      Corr. Area 1: 1,929.9  
 Noise: 0.1

**Peak table for sample 4 : 9**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	254	496.70	2,962.4	
3	266	206.16	1,175.4	
4	270	150.43	843.7	
5	295	398.25	2,045.5	
6	332	226.07	1,032.2	
7	362	161.61	677.2	
8	439	59.93	206.9	
9	486	60.46	188.5	
10	593	4.95	12.6	
11	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : 9**

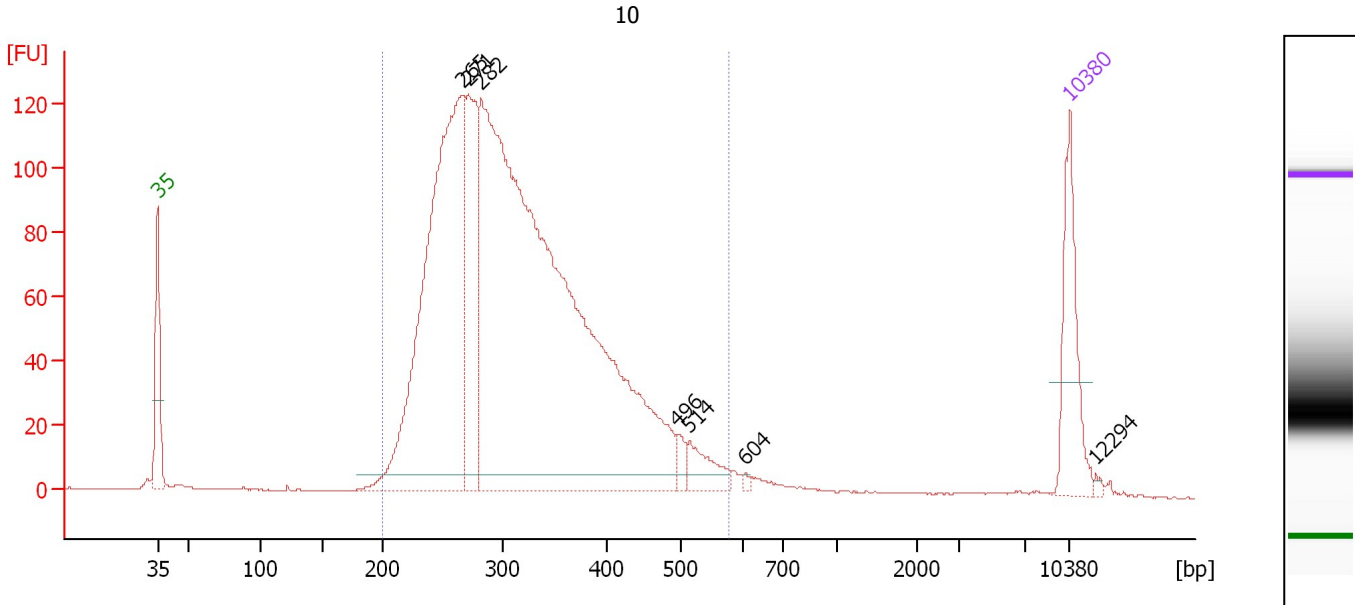
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	623	322	11,308.4	2,237.12	1,929.9	96	24.7



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-28\2014-07-28\_001.xad

Created: 7/28/2014 8:31:37 AM  
 Modified: 7/28/2014 9:15:42 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 10**

Number of peaks found: 7                      Corr. Area 1: 2,297.1  
 Noise: 0.2

**Peak table for sample 5 : 10**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	265	649.63	3,708.4	
3	271	187.19	1,047.1	
4	282	1,403.40	7,547.2	
5	496	13.40	40.9	
6	514	34.92	102.9	
7	604	2.58	6.5	
8	10,380	75.00	10.9	Upper Marker
9	12,294	0.00	0.0	

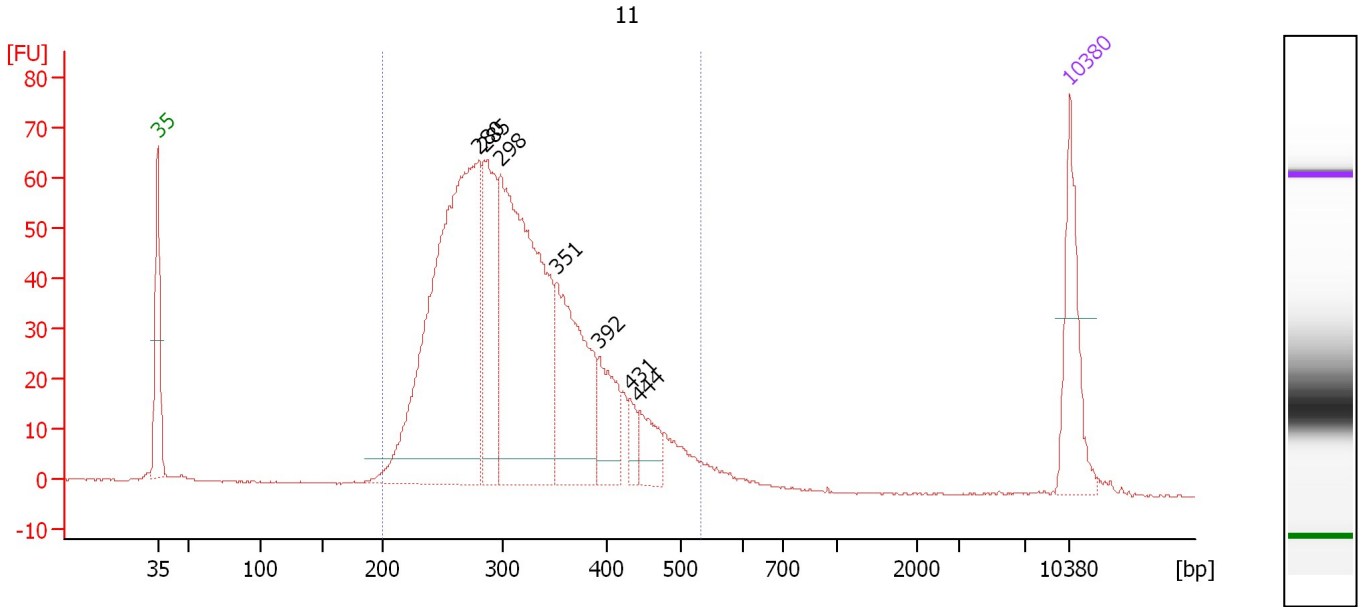
**Region table for sample 5 : 10**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	577	320	10,917.3	2,164.08	2,297.1	96	22.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-28\2014-07-28\_001.xad

Created: 7/28/2014 8:31:37 AM  
 Modified: 7/28/2014 9:15:42 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 11**

Number of peaks found: 7                      Corr. Area 1: 1,185.4  
 Noise: 0.2

**Peak table for sample 6 : 11**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	280	638.64	3,461.0	
3	285	171.61	913.7	
4	298	484.21	2,465.4	
5	351	202.77	876.0	
6	392	71.96	278.5	
7	431	21.44	75.3	
8	444	39.32	134.3	
9	10,380	75.00	10.9	Upper Marker

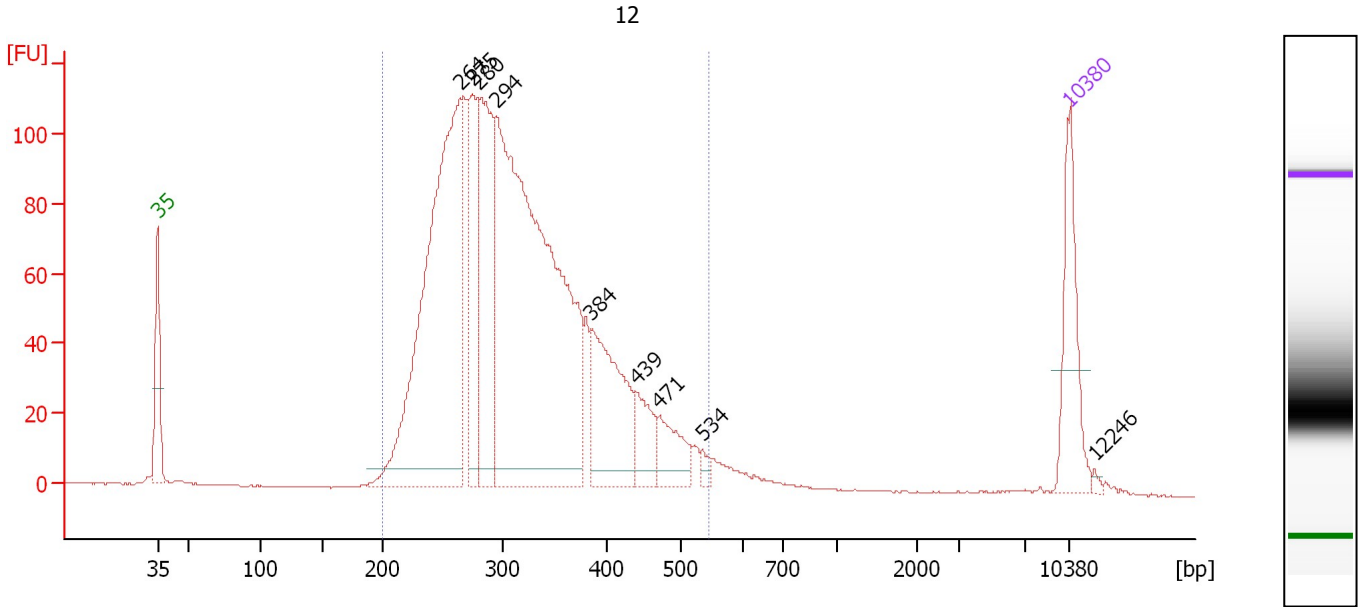
**Region table for sample 6 : 11**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	533	318	8,659.6	1,723.21	1,185.4	97	20.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-28\2014-07-28\_001.xad

Created: 7/28/2014 8:31:37 AM  
 Modified: 7/28/2014 9:15:42 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 12**

Number of peaks found: 9                      Corr. Area 1: 2,056.4  
 Noise: 0.1

**Peak table for sample 7 : 12**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	264	606.96	3,482.5	
3	275	137.80	760.0	
4	280	224.29	1,214.7	
5	294	809.65	4,173.8	
6	384	155.45	612.7	
7	439	46.40	160.1	
8	471	49.41	158.8	
9	534	7.69	21.8	
10	10,380	75.00	10.9	Upper Marker
11	12,246	0.00	0.0	

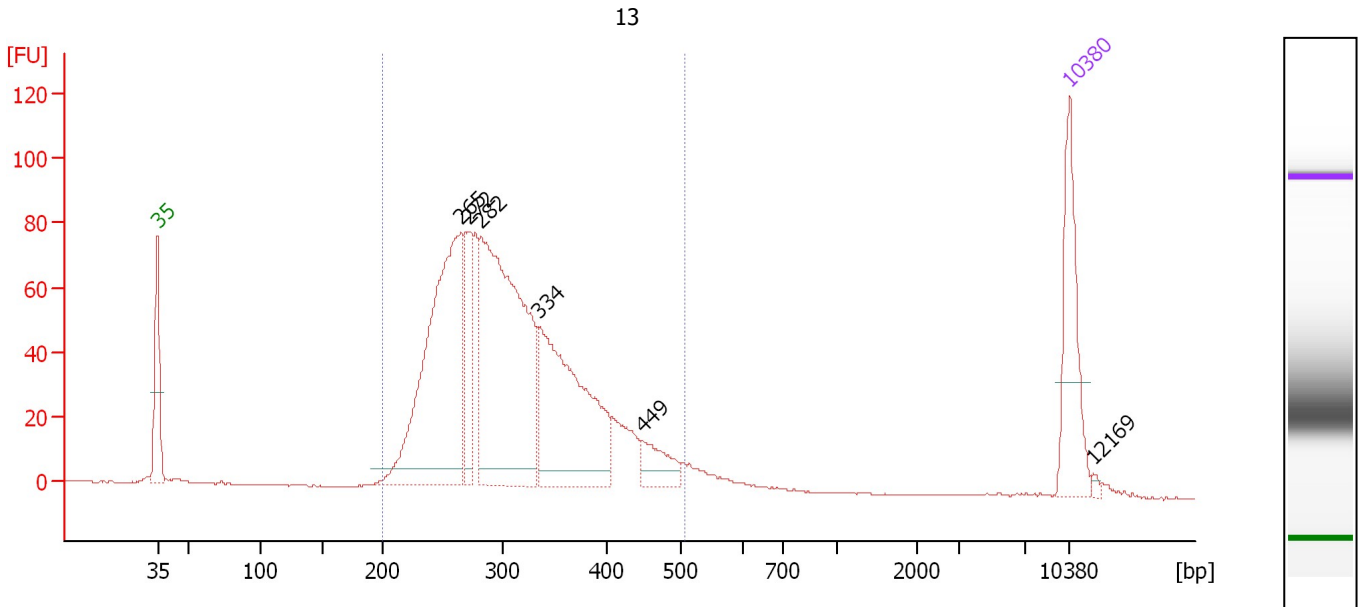
**Region table for sample 7 : 12**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	545	317	10,768.6	2,131.31	2,056.4	96	21.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-28\2014-07-28\_001.xad

Created: 7/28/2014 8:31:37 AM  
 Modified: 7/28/2014 9:15:42 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 13**

Number of peaks found: 6                      Corr. Area 1: 1,354.8  
 Noise: 0.1

**Peak table for sample 8 : 13**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	265	368.75	2,107.6	
3	272	71.02	396.0	
4	282	409.80	2,202.5	
5	334	245.40	1,112.1	
6	449	34.36	116.1	
7	10,380	75.00	10.9	Upper Marker
8	12,169	0.00	0.0	

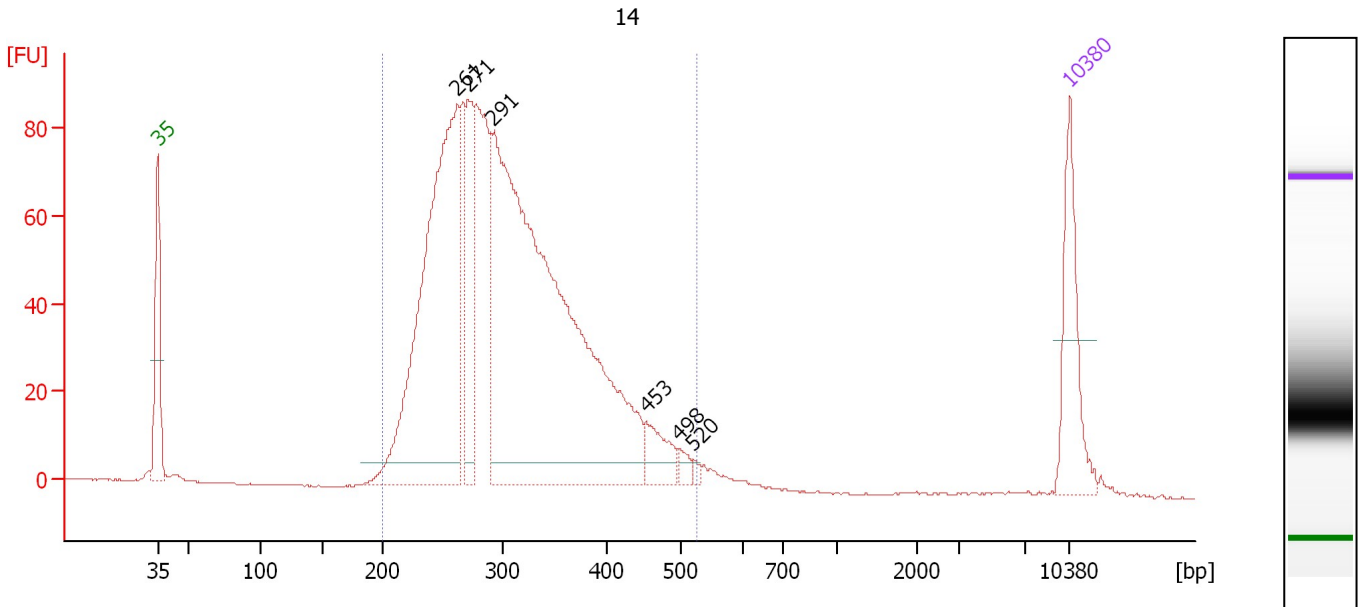
**Region table for sample 8 : 13**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	506	311	6,443.0	1,260.97	1,354.8	95	20.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-28\2014-07-28\_001.xad

Created: 7/28/2014 8:31:37 AM  
 Modified: 7/28/2014 9:15:42 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 14**

Number of peaks found: 6                      Corr. Area 1: 1,512.9  
 Noise: 0.1

**Peak table for sample 9 : 14**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	261	560.39	3,247.0	
3	271	114.62	641.5	
4	291	944.85	4,924.1	
5	453	39.45	132.1	
6	498	9.95	30.3	
7	520	4.14	12.1	
8	10,380	75.00	10.9	Upper Marker

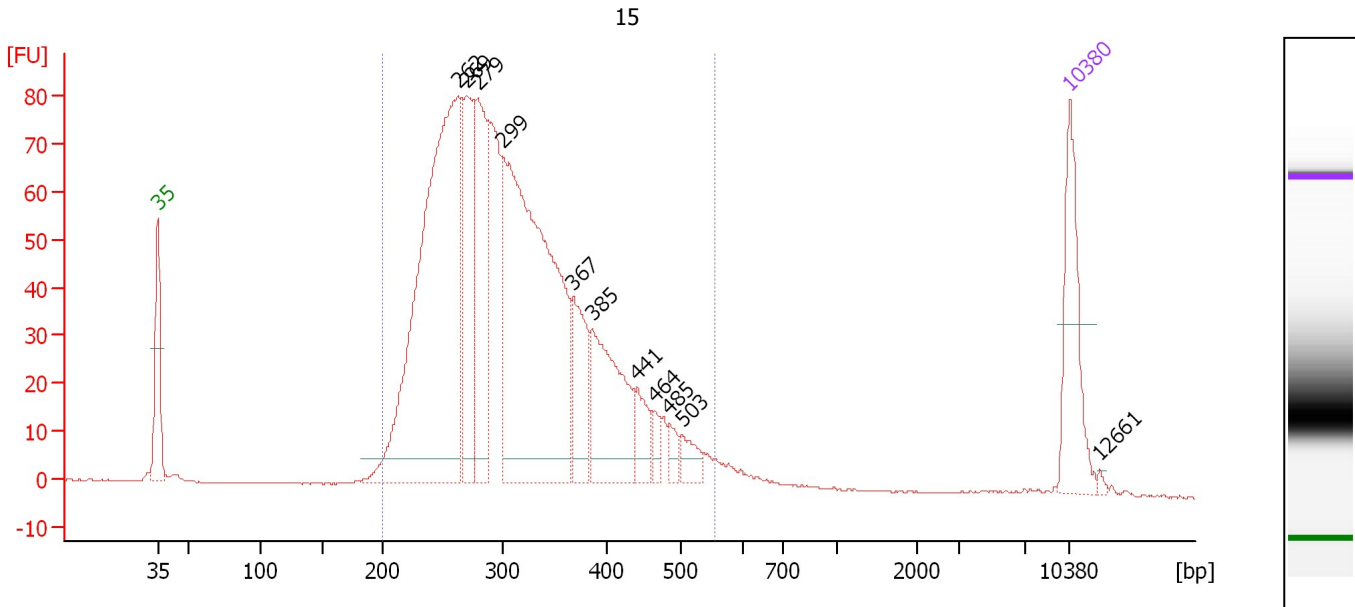
**Region table for sample 9 : 14**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	525	310	9,743.6	1,894.13	1,512.9	97	20.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-28\2014-07-28\_001.xad

Created: 7/28/2014 8:31:37 AM  
 Modified: 7/28/2014 9:15:42 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 15**

Number of peaks found: 11      Corr. Area 1: 1,515.6  
 Noise: 0.1

**Peak table for sample 10 : 15**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	262	610.78	3,530.1	
3	269	136.35	768.4	
4	279	167.64	909.6	
5	299	550.54	2,786.0	
6	367	78.77	325.5	
7	385	138.34	544.3	
8	441	33.48	115.1	
9	464	13.31	43.5	
10	485	13.22	41.3	
11	503	21.45	64.6	
12	10,380	75.00	10.9	Upper Marker
13	12,661	0.00	0.0	

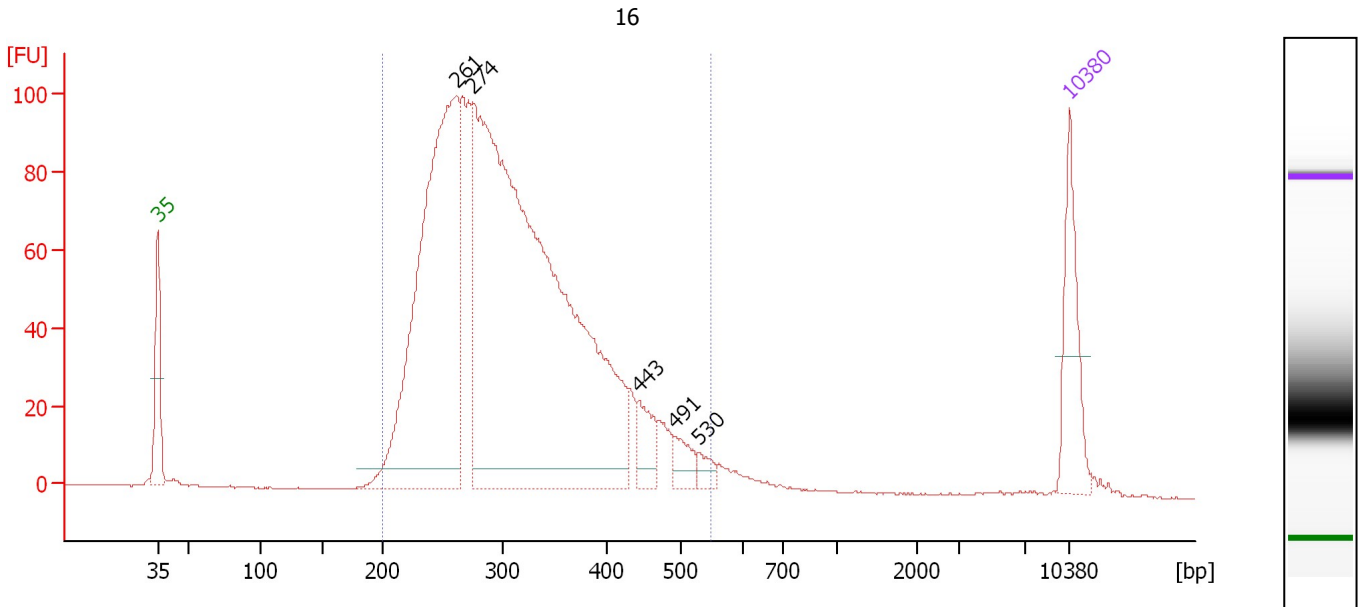
**Region table for sample 10 : 15**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	553	315	10,265.8	2,006.61	1,515.6	96	22.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-28\2014-07-28\_001.xad

Created: 7/28/2014 8:31:37 AM  
 Modified: 7/28/2014 9:15:42 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 16**

Number of peaks found: 5                      Corr. Area 1: 1,815.6  
 Noise: 0.1

**Peak table for sample 11 : 16**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	261	696.07	4,042.3	
3	274	1,343.32	7,415.0	
4	443	42.22	144.5	
5	491	27.18	83.8	
6	530	14.60	41.8	
7	10,380	75.00	10.9	Upper Marker

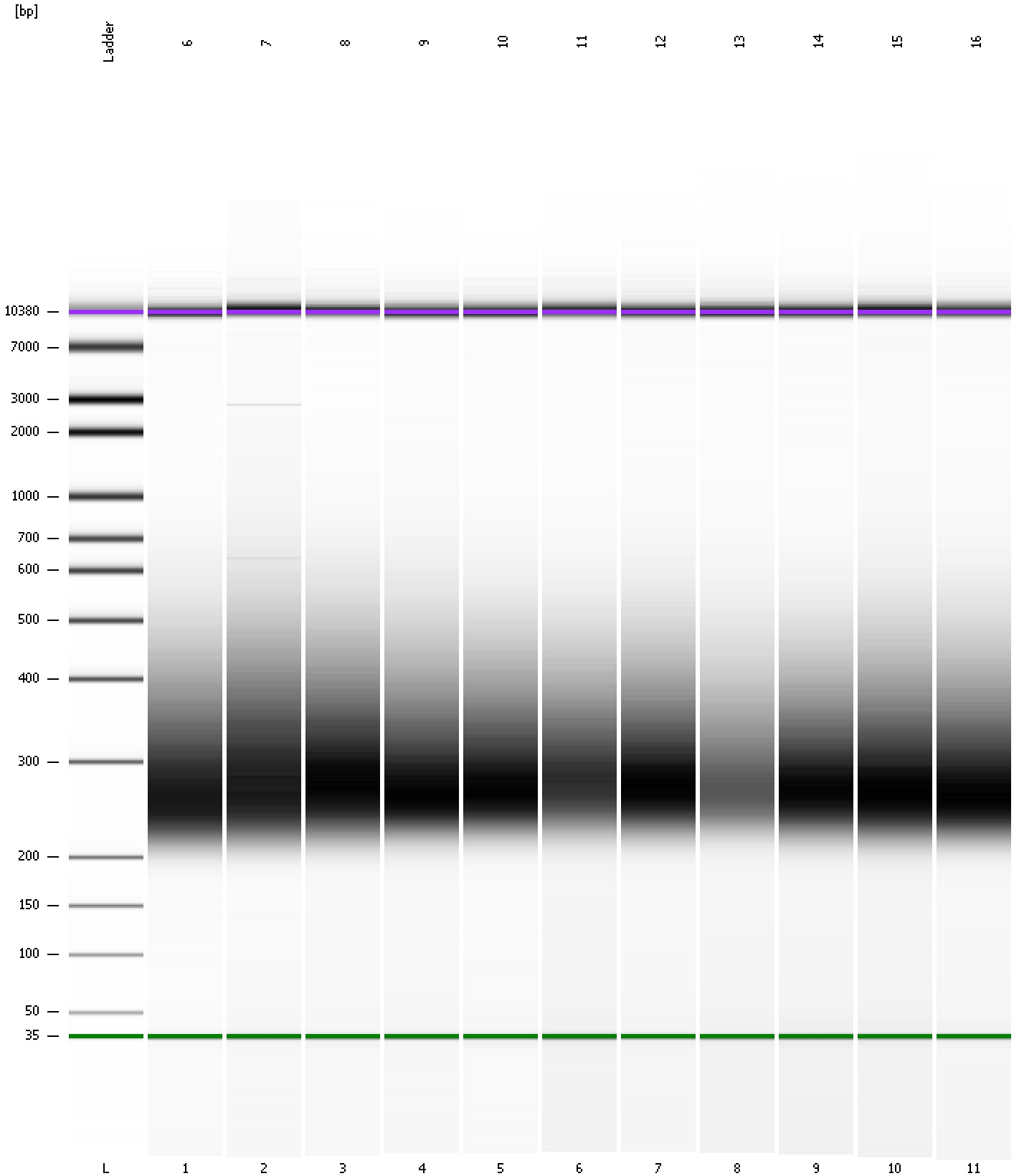
**Region table for sample 11 : 16**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	547	313	11,439.8	2,225.20	1,815.6	97	22.4

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-28\2014-07-28\_001.xad

Created: 7/28/2014 8:31:37 AM  
Modified: 7/28/2014 9:15:42 AM

**Gel Image**





Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-28\2014-07-28\_001.xad

Created: 7/28/2014 8:31:37 AM  
 Modified: 7/28/2014 9:15:42 AM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		7/28/2014 9:12:56 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\Data\2014-07-28\2014-07-28_001.xad)		Instrument	Run		7/28/2014 8:31:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/28/2014 8:31:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/28/2014 8:31:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/28/2014 8:31:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/28/2014 8:31:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/28/2014 8:31:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/28/2014 8:31:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1