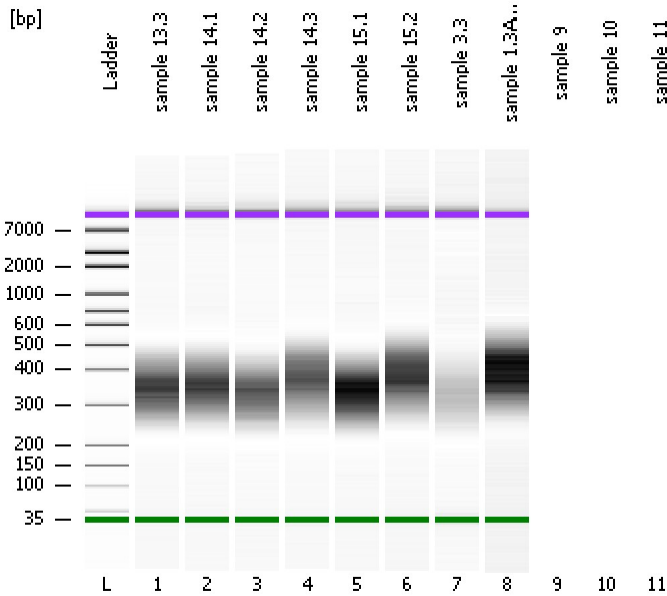


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-10\2014-12-10\_007.xad

Created: 12/10/2014 4:21:55 PM  
Modified: 12/10/2014 5:08:27 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

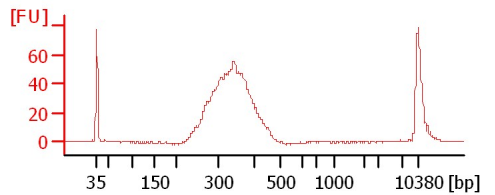
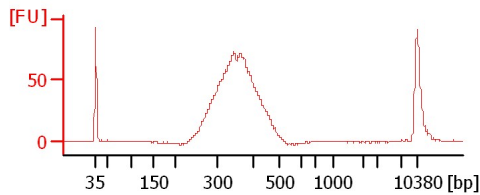
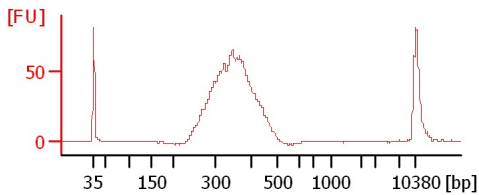
Chip Information:

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

sample 13.3

sample 14.1

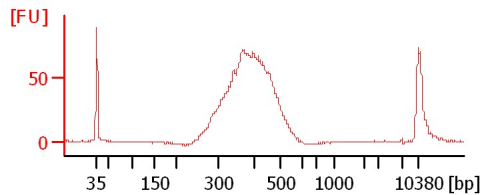
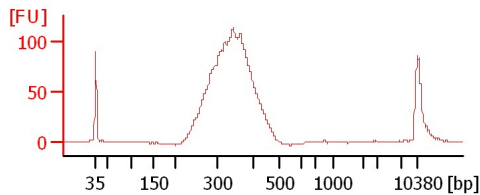
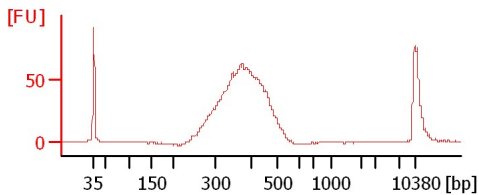
sample 14.2



sample 14.3

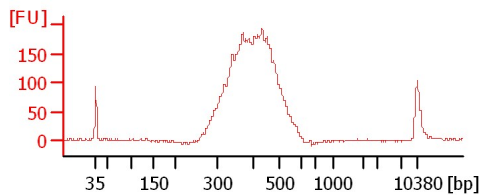
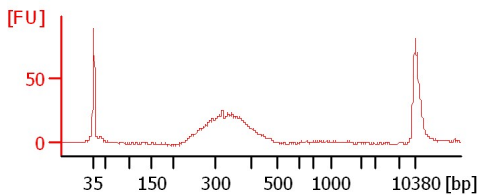
sample 15.1

sample 15.2



sample 3.3

sample 1.3Again



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-10\2014-12-10\_007.xad

Created: 12/10/2014 4:21:55 PM  
Modified: 12/10/2014 5:08:27 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 13.3		<input type="checkbox"/>	✓			
sample 14.1		<input type="checkbox"/>	✓			
sample 14.2		<input type="checkbox"/>	✓			
sample 14.3		<input type="checkbox"/>	✓			
sample 15.1		<input type="checkbox"/>	✓			
sample 15.2		<input type="checkbox"/>	✓			
sample 3.3		<input type="checkbox"/>	✓			
sample 1.3Again		<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\2014-12-10\2014-12-10\_007.xad

Created: 12/10/2014 4:21:55 PM  
 Modified: 12/10/2014 5:08:27 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

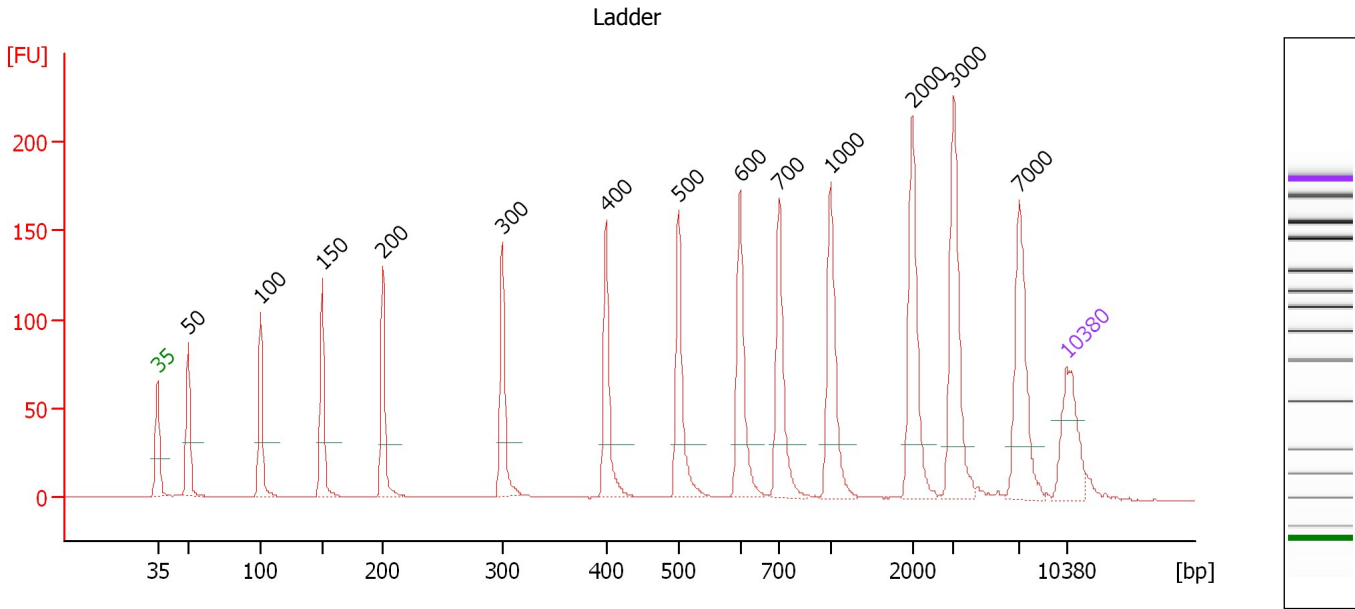
**Ladder**

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\2014-12-10\2014-12-10\_007.xad

Created: 12/10/2014 4:21:55 PM  
 Modified: 12/10/2014 5:08:27 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

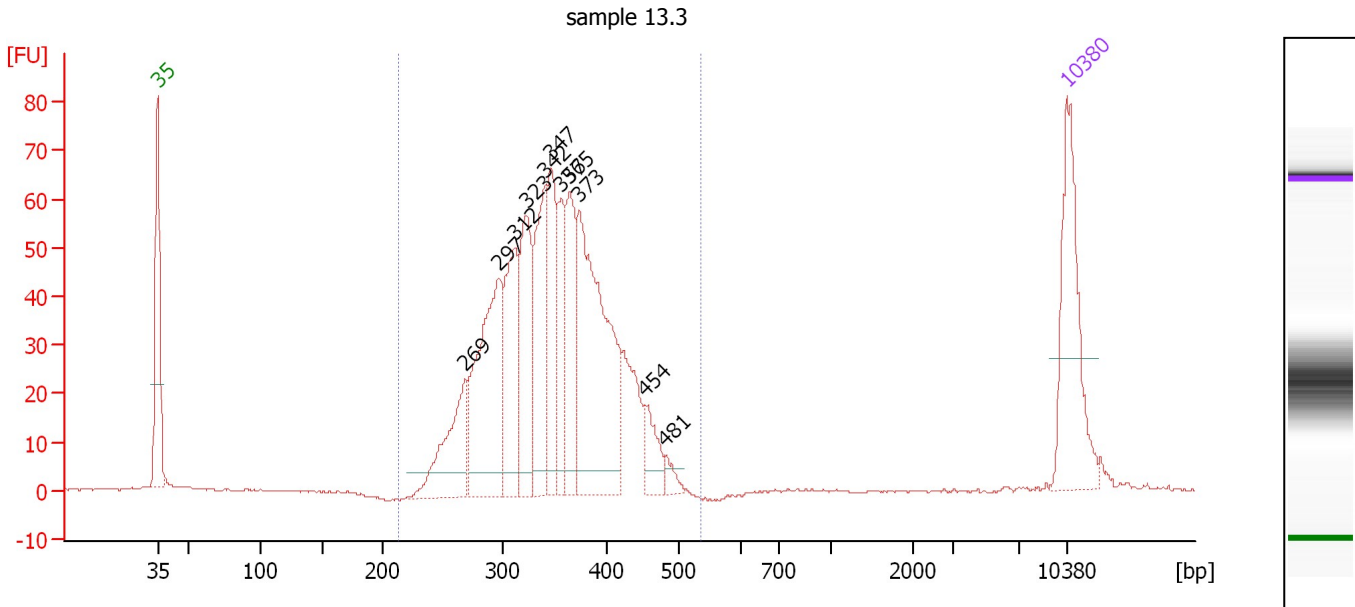
**Peak table for Ladder**

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	45.35
3	100	150.00	2,272.7	Ladder Peak	50.93
4	150	150.00	1,515.2	Ladder Peak	55.67
5	200	150.00	1,136.4	Ladder Peak	60.37
6	300	150.00	757.6	Ladder Peak	69.54
7	400	150.00	568.2	Ladder Peak	77.51
8	500	150.00	454.5	Ladder Peak	83.14
9	600	150.00	378.8	Ladder Peak	87.84
10	700	150.00	324.7	Ladder Peak	90.89
11	1,000	150.00	227.3	Ladder Peak	94.84
12	2,000	150.00	113.6	Ladder Peak	101.13
13	3,000	150.00	75.8	Ladder Peak	104.32
14	7,000	150.00	32.5	Ladder Peak	109.37
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-10\2014-12-10\_007.xad

Created: 12/10/2014 4:21:55 PM  
 Modified: 12/10/2014 5:08:27 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : sample 13.3**

Number of peaks found: 11      Corr. Area 1: 946.8  
 Noise: 0.2

**Peak table for sample 1 : sample 13.3**

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	269	78.92	444.1		66.72
3	297	152.07	774.7		69.30
4	312	92.22	447.7		70.50
5	323	90.14	423.3		71.35
6	342	92.30	409.3		72.86
7	347	79.50	346.9		73.31
8	357	50.03	212.5		74.06
9	365	68.13	282.8		74.73
10	373	201.07	815.7		75.40
11	454	24.58	82.0		80.56
12	481	8.55	26.9		82.07
13	10,380	75.00	10.9	Upper Marker	113.00

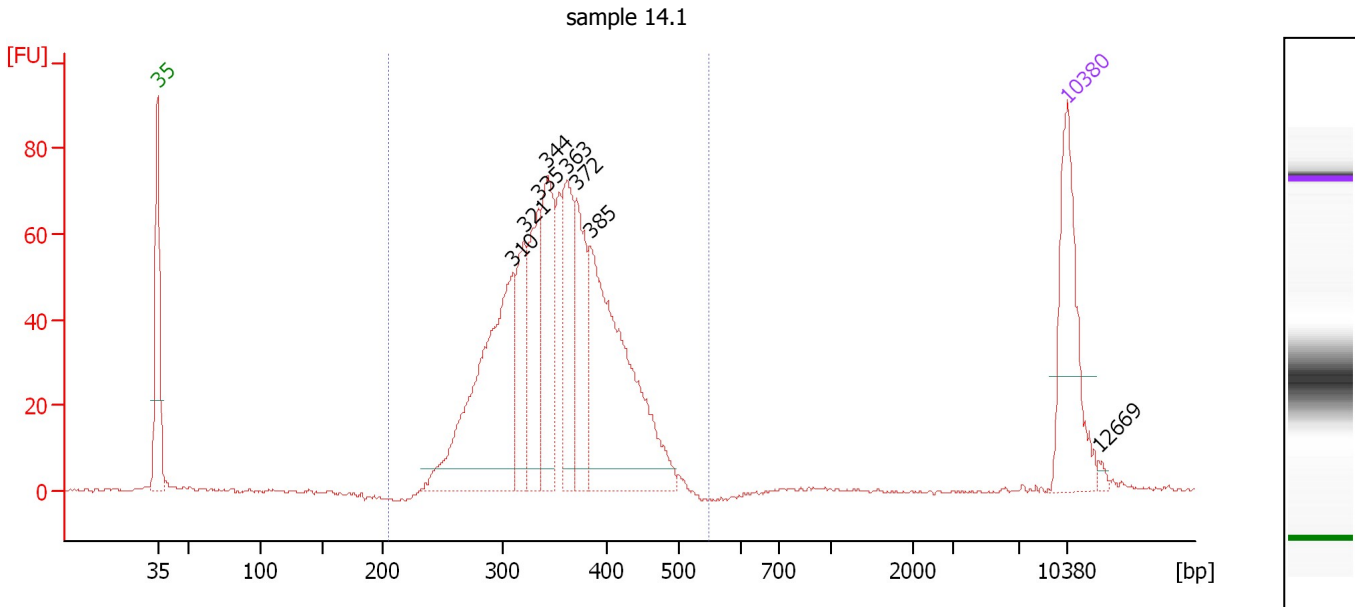
**Region table for sample 1 : sample 13.3**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
213	349	537	946.8	97	15.1	976.96	4,369.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-10\2014-12-10\_007.xad

Created: 12/10/2014 4:21:55 PM  
 Modified: 12/10/2014 5:08:27 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : sample 14.1**

Number of peaks found: 8                      Corr. Area 1: 1,034.9  
 Noise: 0.4

**Peak table for sample 2 : sample 14.1**

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	310	228.84	1,116.8		70.37
3	321	73.74	347.9		71.22
4	335	79.83	360.9		72.34
5	344	104.44	460.6		73.01
6	363	81.40	340.1		74.53
7	372	81.30	331.0		75.29
8	385	229.00	901.0		76.32
9	10,380	75.00	10.9	Upper Marker	113.00
10	12,669	0.00	0.0		115.46

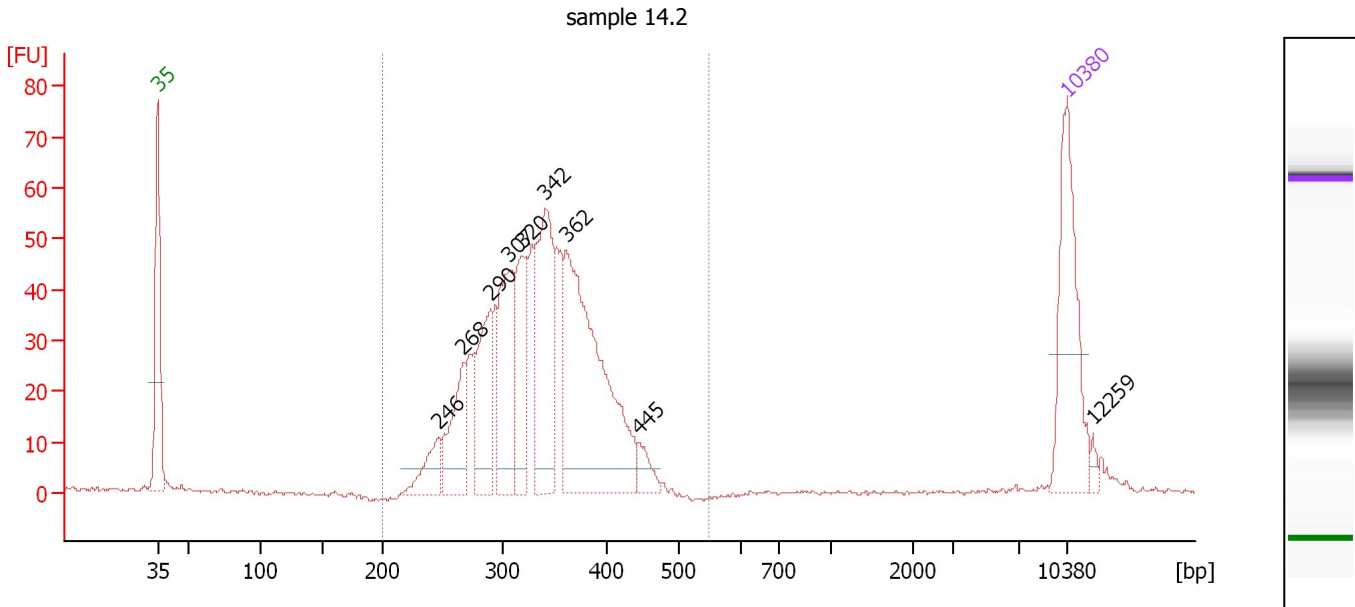
**Region table for sample 2 : sample 14.1**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
205	354	550	1,034.9	98	14.7	930.25	4,094.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-10\2014-12-10\_007.xad

Created: 12/10/2014 4:21:55 PM  
 Modified: 12/10/2014 5:08:27 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : sample 14.2**

Number of peaks found: 9                      Corr. Area 1: 757.2  
 Noise: 0.4

**Peak table for sample 3 : sample 14.2**

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	246	30.90	190.0		64.63
3	268	59.27	335.7		66.56
4	290	75.16	392.7		68.62
5	307	93.52	461.4		70.10
6	320	72.73	344.3		71.13
7	342	120.52	534.0		72.88
8	362	231.04	967.9		74.46
9	445	14.15	48.2		80.02
10	10,380	75.00	10.9	Upper Marker	113.00
11	12,259	0.00	0.0		115.02

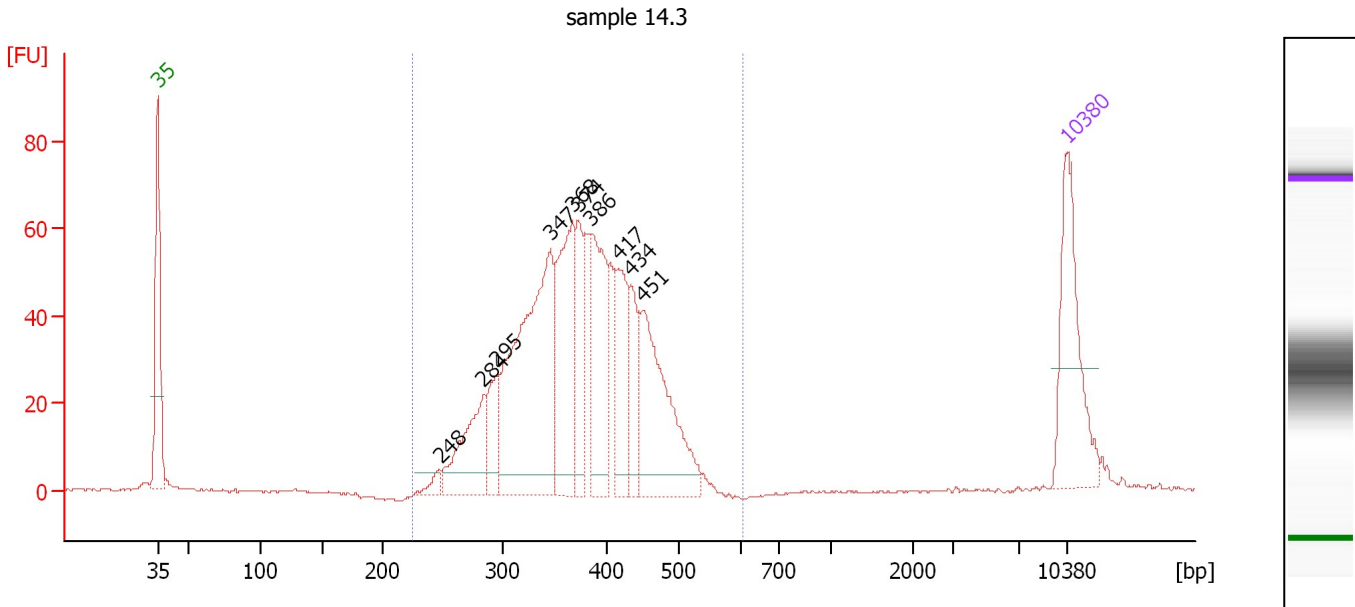
**Region table for sample 3 : sample 14.2**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	336	551	757.2	98	14.5	813.50	3,776.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-10\2014-12-10\_007.xad

Created: 12/10/2014 4:21:55 PM  
 Modified: 12/10/2014 5:08:27 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : sample 14.3**

Number of peaks found: 10                      Corr. Area 1: 967.3  
 Noise: 0.2

**Peak table for sample 4 : sample 14.3**

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	248	8.47	51.8		64.75
3	284	77.28	411.9		68.10
4	295	39.47	202.6		69.09
5	347	251.72	1,100.5		73.25
6	368	120.07	494.2		74.97
7	374	51.80	210.0		75.42
8	386	106.68	419.1		76.37
9	417	65.56	238.4		78.45
10	434	42.93	149.7		79.45
11	451	132.34	444.4		80.40
12	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : sample 14.3**

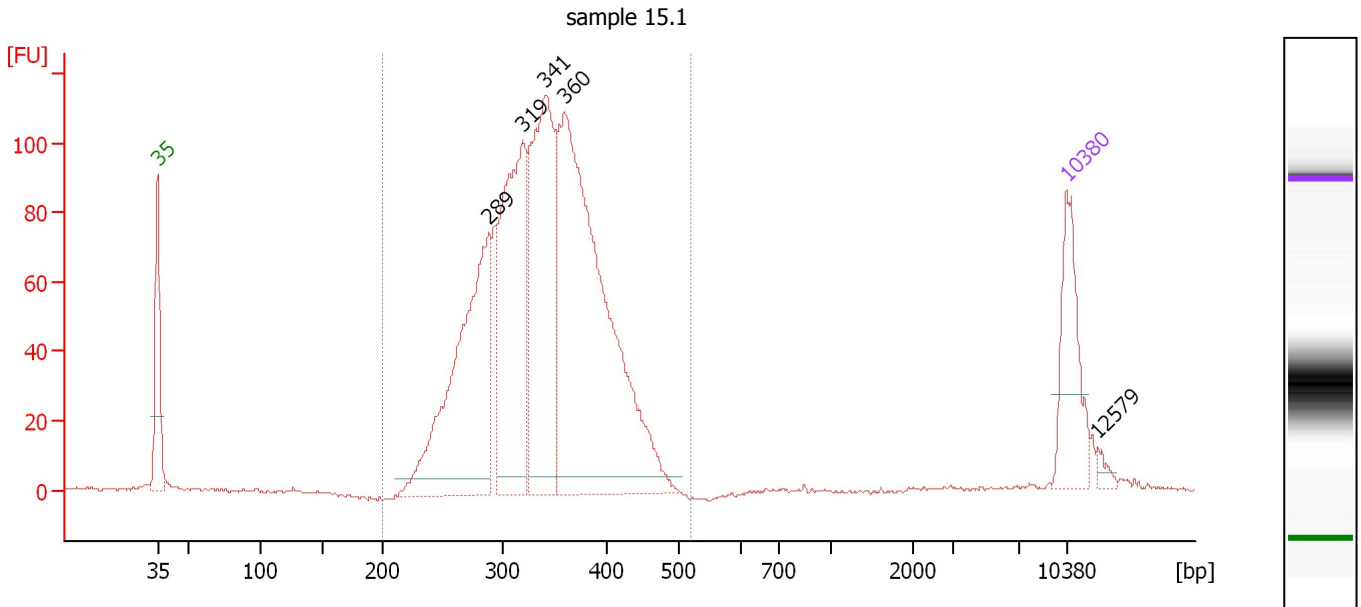
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
225	377	607	967.3	98	16.2	949.71	3,956.0	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-10\2014-12-10\_007.xad

Created: 12/10/2014 4:21:55 PM  
 Modified: 12/10/2014 5:08:27 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : sample 15.1**

Number of peaks found: 5                      Corr. Area 1: 1,656.5  
 Noise: 0.4

**Peak table for sample 5 : sample 15.1**

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	289	350.12	1,834.4		68.55
3	319	303.34	1,438.6		71.09
4	341	321.41	1,427.6		72.82
5	360	616.42	2,594.8		74.32
6	10,380	75.00	10.9	Upper Marker	113.00
7	12,579	0.00	0.0		115.36

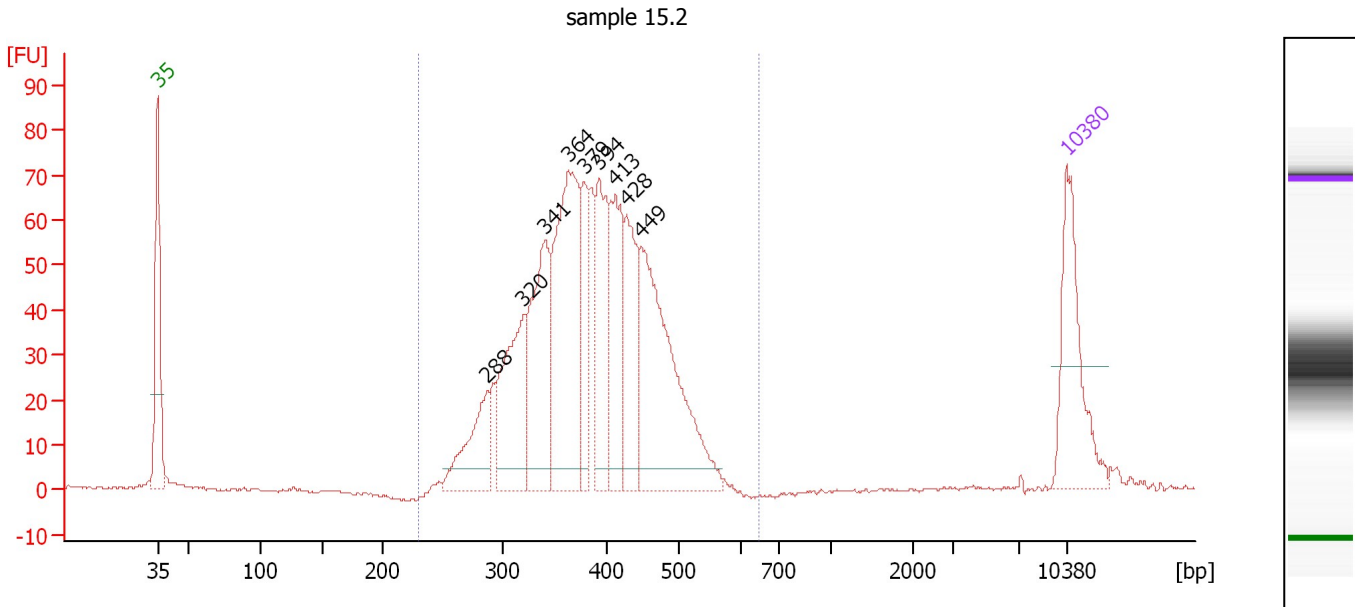
**Region table for sample 5 : sample 15.1**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	339	518	1,656.5	98	14.9	1,615.07	7,447.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-10\2014-12-10\_007.xad

Created: 12/10/2014 4:21:55 PM  
 Modified: 12/10/2014 5:08:27 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : sample 15.2**

Number of peaks found: 9                      Corr. Area 1: 1,109.7  
 Noise: 0.5

**Peak table for sample 6 : sample 15.2**

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	288	71.98	379.3		68.39
3	320	122.07	577.3		71.16
4	341	133.25	592.3		72.80
5	364	211.50	879.8		74.66
6	379	60.14	240.4		75.84
7	394	89.17	343.0		77.02
8	413	90.87	333.3		78.25
9	428	88.65	313.5		79.11
10	449	211.21	713.3		80.25
11	10,380	75.00	10.9	Upper Marker	113.00

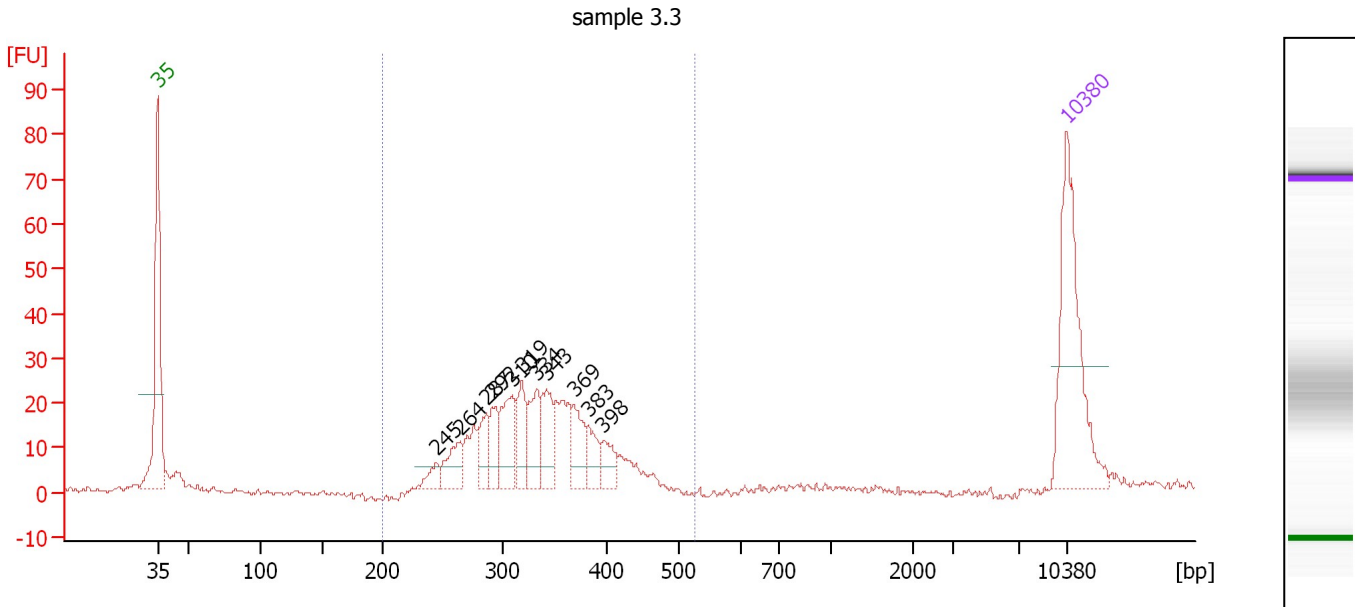
**Region table for sample 6 : sample 15.2**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
230	389	650	1,109.7	98	16.3	1,144.71	4,621.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-10\2014-12-10\_007.xad

Created: 12/10/2014 4:21:55 PM  
 Modified: 12/10/2014 5:08:27 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : sample 3.3**

Number of peaks found: 11                      Corr. Area 1: 339.5  
 Noise: 0.7

**Peak table for sample 7 : sample 3.3**

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	245	10.56	65.4		64.45
3	264	23.52	134.8		66.27
4	287	19.96	105.5		68.32
5	292	20.99	109.0		68.78
6	310	36.55	178.7		70.33
7	319	23.93	113.7		71.05
8	334	29.83	135.4		72.24
9	343	28.66	126.6		72.97
10	369	23.14	94.9		75.06
11	383	16.63	65.8		76.16
12	398	15.06	57.4		77.34
13	10,380	75.00	10.9	Upper Marker	113.00

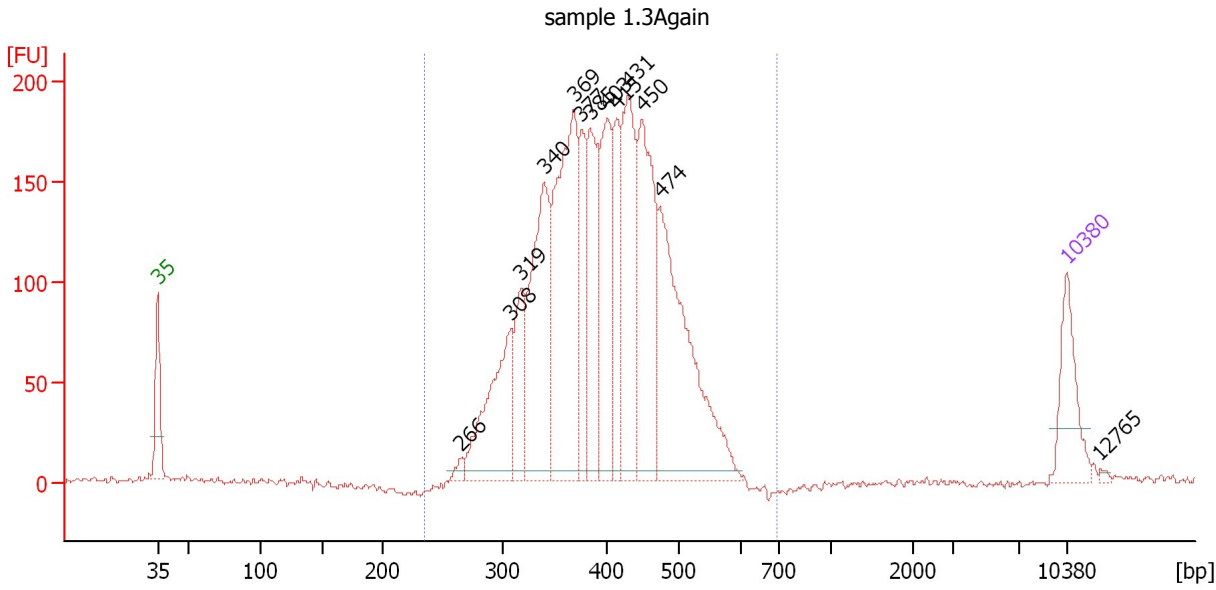
**Region table for sample 7 : sample 3.3**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	334	527	339.5	92	15.1	331.06	1,548.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-10\2014-12-10\_007.xad

Created: 12/10/2014 4:21:55 PM  
 Modified: 12/10/2014 5:08:27 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : sample 1.3Again**

Number of peaks found: 13                      Corr. Area 1: 3,012.3  
 Noise: 1.7

**Peak table for sample 8 : sample 1.3Again**

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	266	12.17	69.4		66.39
3	308	219.05	1,076.8		70.19
4	319	111.89	532.2		71.02
5	340	306.30	1,363.5		72.76
6	369	410.54	1,685.4		75.05
7	377	117.96	474.7		75.64
8	385	168.08	661.2		76.33
9	403	208.89	786.2		77.66
10	415	114.52	418.4		78.34
11	431	240.25	844.5		79.26
12	450	273.69	922.0		80.31
13	474	395.29	1,263.1		81.69
14	10,380	75.00	10.9	Upper Marker	113.00
15	12,765	0.00	0.0		115.56

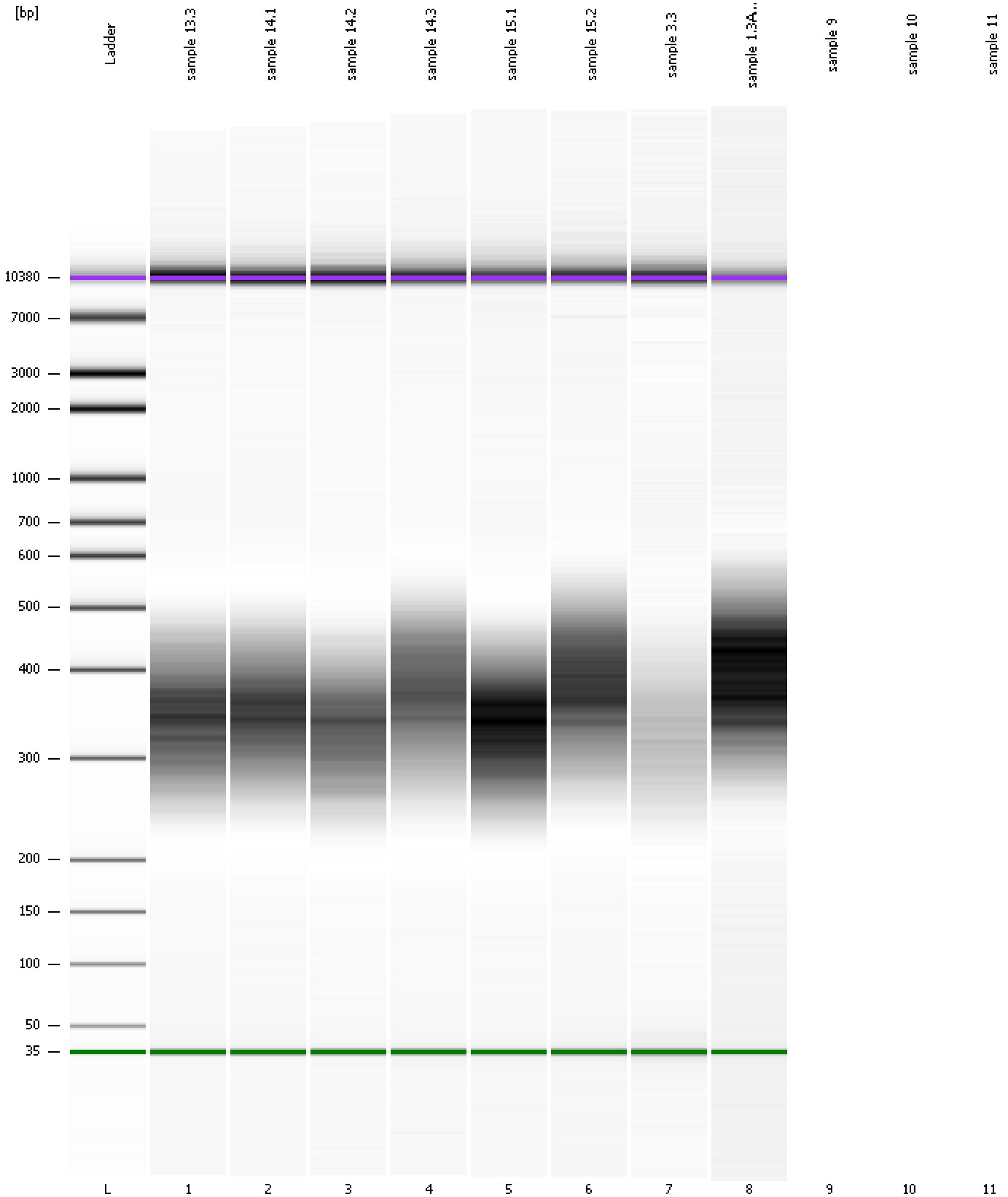
**Region table for sample 8 : sample 1.3Again**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
235	403	693	3,012.3	100	16.5	2,556.22	9,974.7	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-10\2014-12-10\_007.xad

Created: 12/10/2014 4:21:55 PM  
Modified: 12/10/2014 5:08:27 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-10\2014-12-10\_007.xad

Created: 12/10/2014 4:21:55 PM  
Modified: 12/10/2014 5:08:27 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:\...ents and Settings\Bioanalyzer\2014-12-10\2014-12-10\_007.xad

Created: 12/10/2014 4:21:55 PM  
 Modified: 12/10/2014 5:08:27 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		12/10/2014 4:54:37 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-12-10\2014-12-10_007.xad)		Instrument	Run		12/10/2014 4:22:00 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		12/10/2014 4:22:00 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		12/10/2014 4:22:00 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		12/10/2014 4:22:00 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		12/10/2014 4:22:00 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		12/10/2014 4:22:00 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		12/10/2014 4:22:00 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1