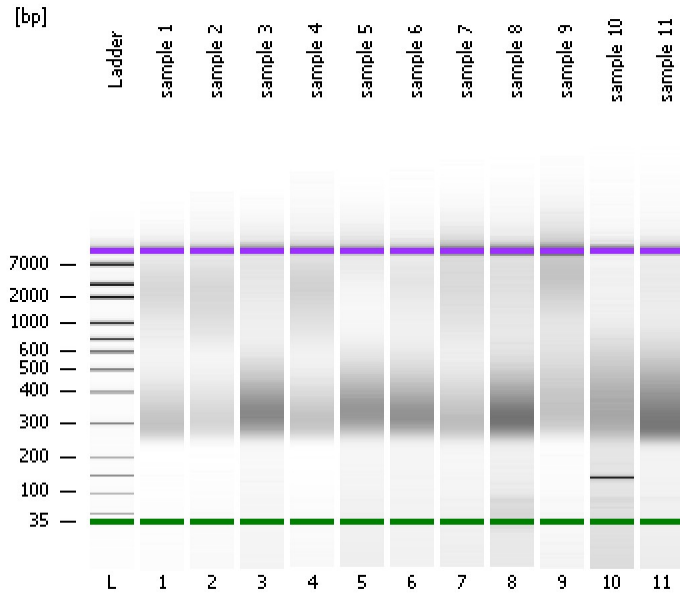


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02\_003.xad

Created: 4/2/2012 11:41:03 AM  
Modified: 4/2/2012 12:24:12 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

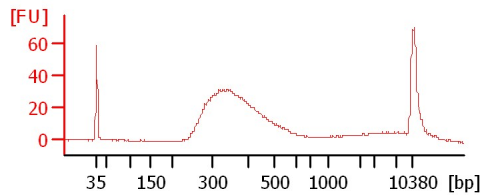
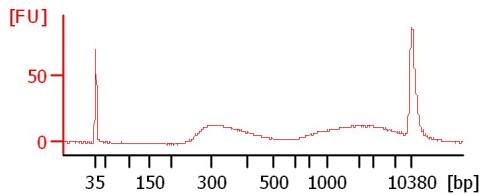
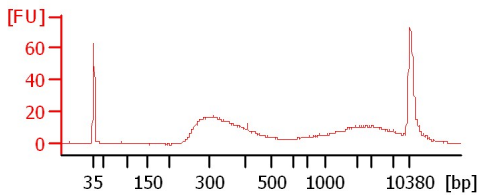
Chip Information:

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

sample 1

sample 2

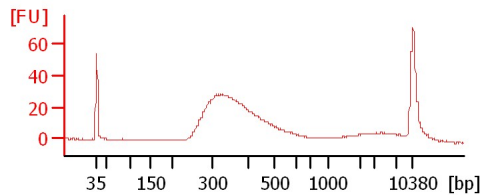
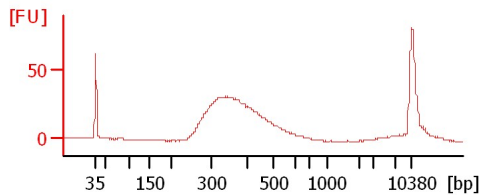
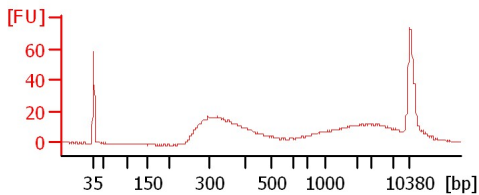
sample 3



sample 4

sample 5

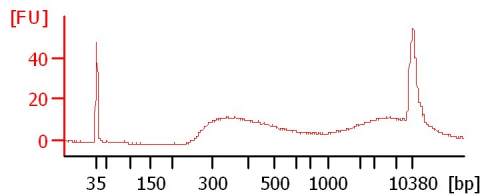
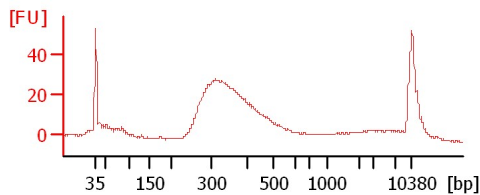
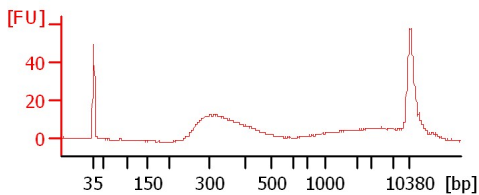
sample 6



sample 7

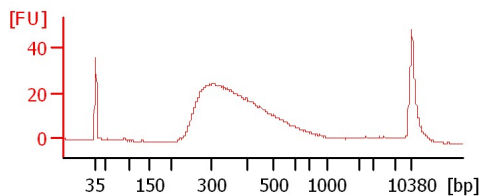
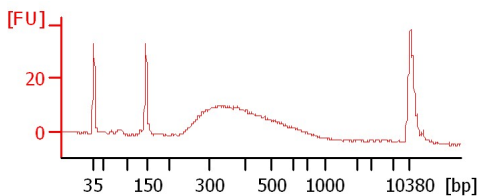
sample 8

sample 9



sample 10

sample 11



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02\_003.xad

Created: 4/2/2012 11:41:03 AM  
 Modified: 4/2/2012 12:24:12 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:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02\_003.xad

Created: 4/2/2012 11:41:03 AM  
Modified: 4/2/2012 12:24:12 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

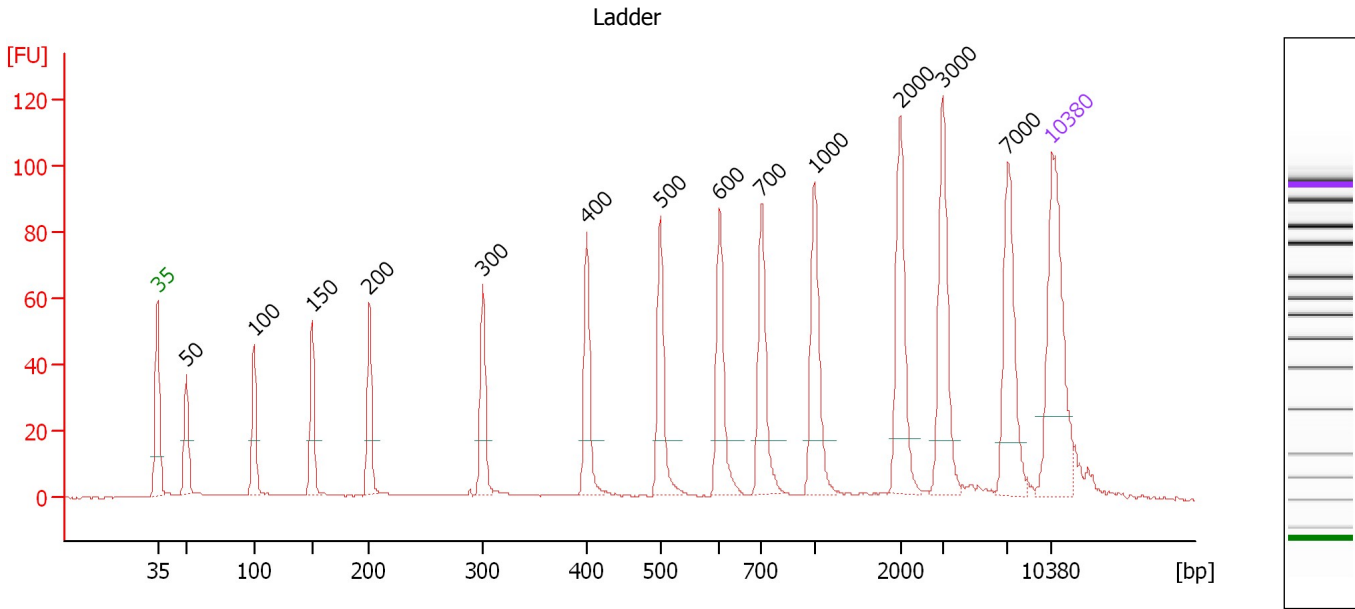
**Ladder**

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\2012-04-02\2012-04-02\_003.xad

Created: 4/2/2012 11:41:03 AM  
 Modified: 4/2/2012 12:24:12 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

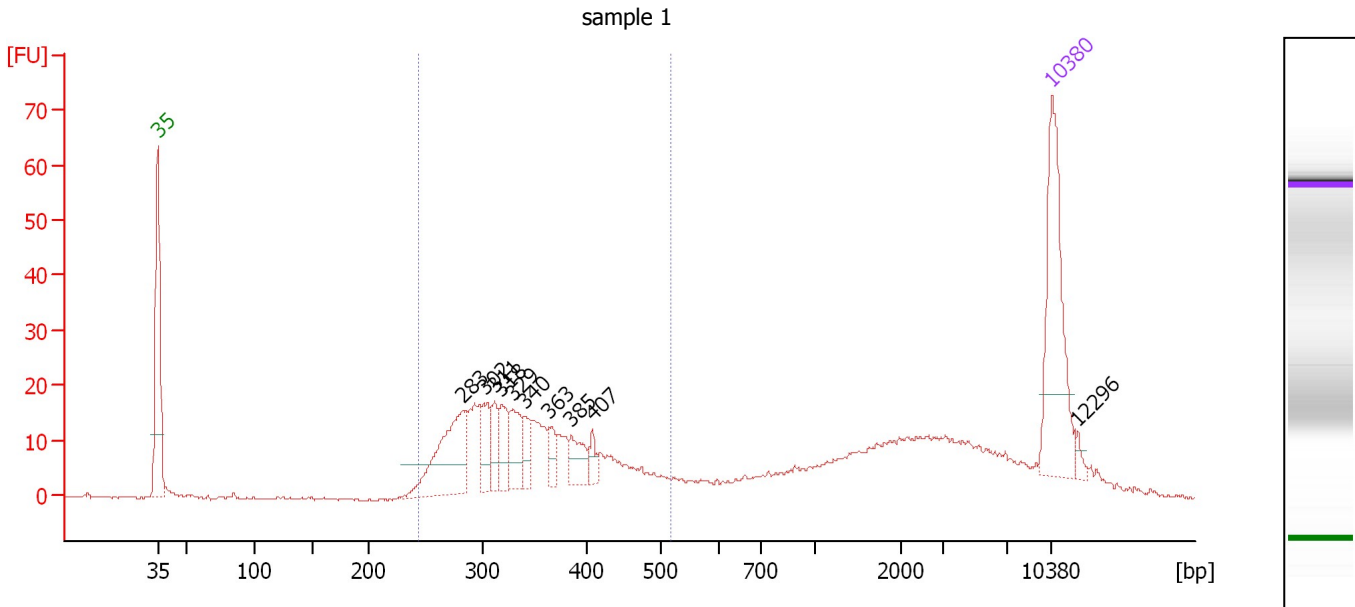
**Peak table for Ladder**

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:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02\_003.xad

Created: 4/2/2012 11:41:03 AM  
 Modified: 4/2/2012 12:24:12 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 10                      Corr. Area 1: 297.4  
 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	283	81.54	436.9	
3	302	26.28	132.0	
4	311	18.41	89.6	
5	318	24.12	114.9	
6	329	26.84	123.8	
7	340	15.19	67.7	
8	363	11.71	48.8	
9	385	20.27	79.9	
10	407	8.98	33.4	
11	10,380	75.00	10.9	Upper Marker
12	12,296	0.00	0.0	

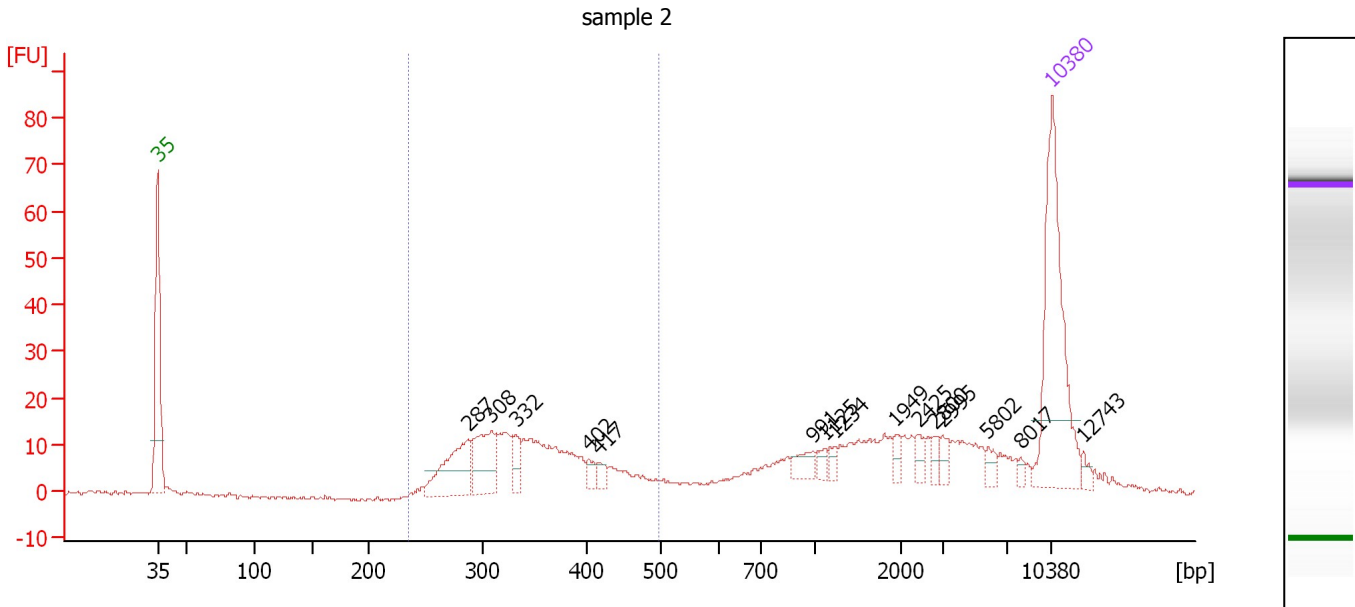
**Region table for sample 1 : sample 1**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
243	1,813.8	345	395.98	518	297.4	57	18.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02\_003.xad

Created: 4/2/2012 11:41:03 AM  
 Modified: 4/2/2012 12:24:12 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 15                      Corr. Area 1: 216.2  
 Noise: 0.4

**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	287	40.83	215.5	
3	308	34.55	169.7	
4	332	10.75	49.1	
5	402	5.53	20.8	
6	417	4.81	17.5	
7	991	7.94	12.1	
8	1,125	4.15	5.6	
9	1,234	3.51	4.3	
10	1,949	4.71	3.7	
11	2,425	4.67	2.9	
12	2,800	4.00	2.2	
13	2,995	5.05	2.6	
14	5,802	4.51	1.2	
15	8,017	2.18	0.4	
16	10,380	75.00	10.9	Upper Marker
17	12,743	0.00	0.0	

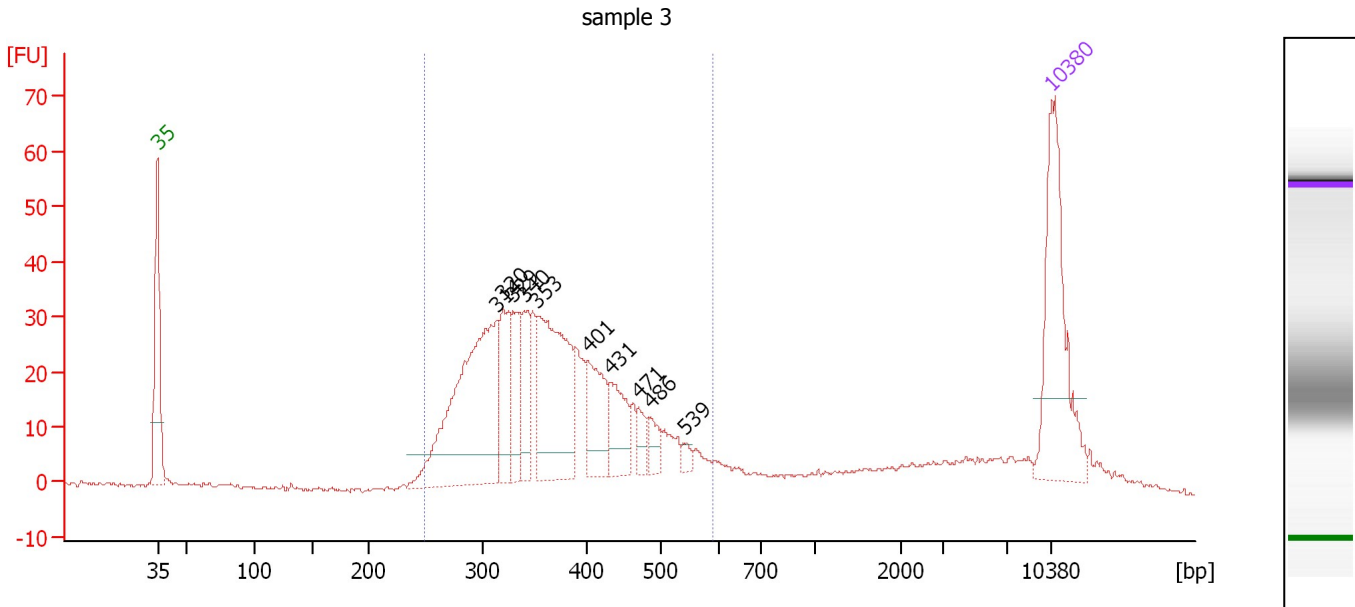
**Region table for sample 2 : sample 2**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
235	963.5	346	212.49	497	216.2	45	16.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02\_003.xad

Created: 4/2/2012 11:41:03 AM  
 Modified: 4/2/2012 12:24:12 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 10      Corr. Area 1: 626.3  
 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	314	177.13	854.7	
3	320	43.37	205.5	
4	329	33.60	154.8	
5	340	37.00	164.9	
6	353	114.94	494.0	
7	401	41.23	155.7	
8	431	32.98	115.8	
9	471	10.48	33.7	
10	486	9.90	30.9	
11	539	4.58	12.9	
12	10,380	75.00	10.9	Upper Marker

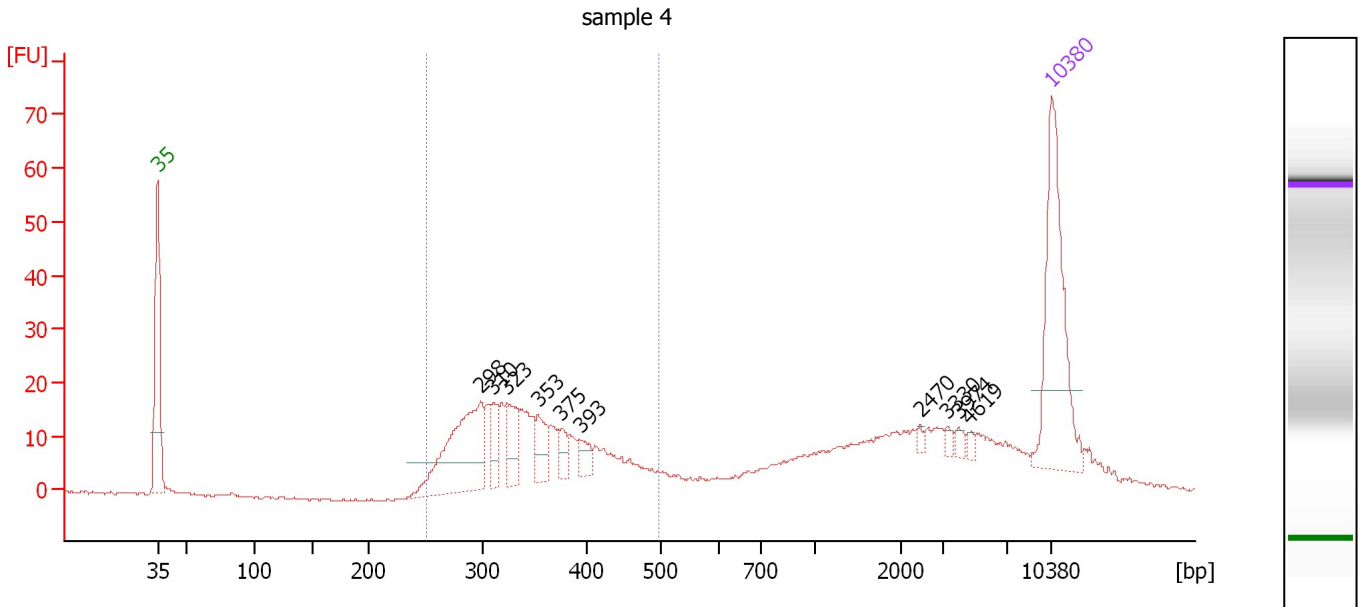
**Region table for sample 3 : sample 3**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
248	2,832.1	372	659.79	589	626.3	80	20.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02\_003.xad

Created: 4/2/2012 11:41:03 AM  
 Modified: 4/2/2012 12:24:12 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 10      Corr. Area 1: 267.5  
 Noise: 0.2

**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	298	93.87	477.1	
3	310	17.33	84.6	
4	323	25.70	120.4	
5	353	17.67	75.9	
6	375	10.54	42.6	
7	393	9.69	37.3	
8	2,470	2.24	1.4	
9	3,330	2.72	1.2	
10	3,974	3.40	1.3	
11	4,619	2.58	0.8	
12	10,380	75.00	10.9	Upper Marker

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

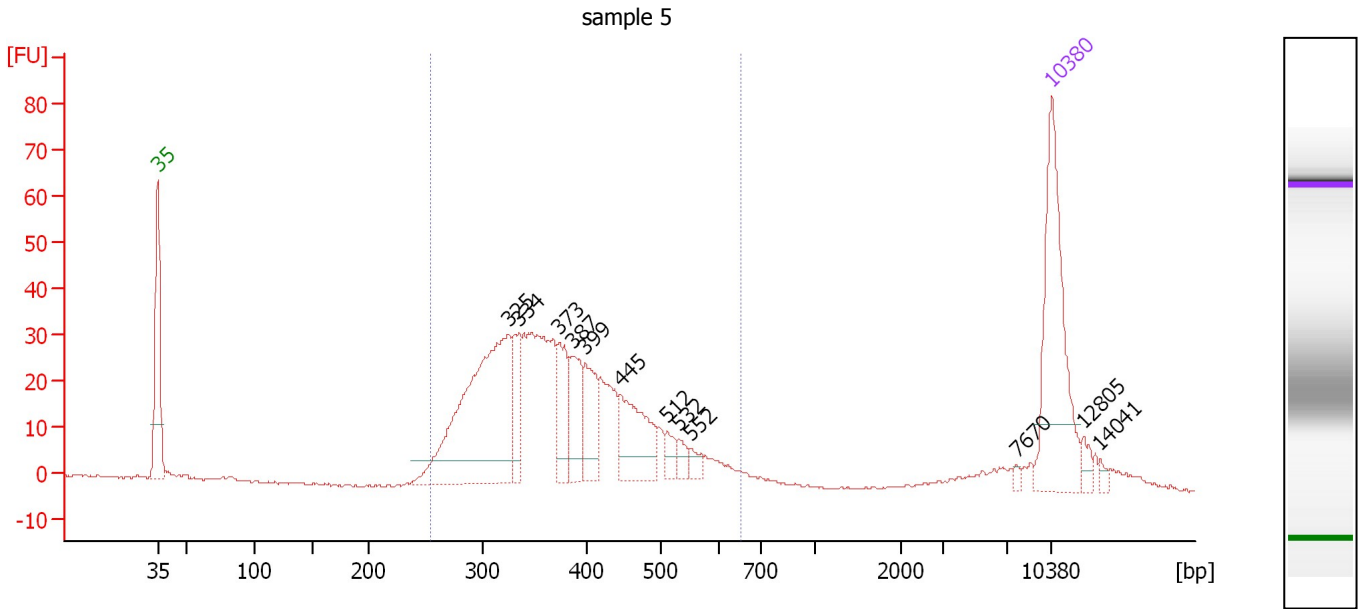
From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
251	1,430.1	347	316.03	498	267.5	53	16.6	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02\_003.xad

Created: 4/2/2012 11:41:03 AM  
 Modified: 4/2/2012 12:24:12 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 12      Corr. Area 1: 631.8  
 Noise: 0.3

**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	325	177.41	827.3	
3	334	26.13	118.5	
4	373	33.12	134.6	
5	387	30.91	121.1	
6	399	32.40	123.1	
7	445	48.28	164.4	
8	512	8.74	25.9	
9	532	6.95	19.8	
10	552	5.65	15.5	
11	7,670	1.90	0.4	
12	10,380	75.00	10.9	Upper Marker
13	12,805	0.00	0.0	
14	14,041	0.00	0.0	

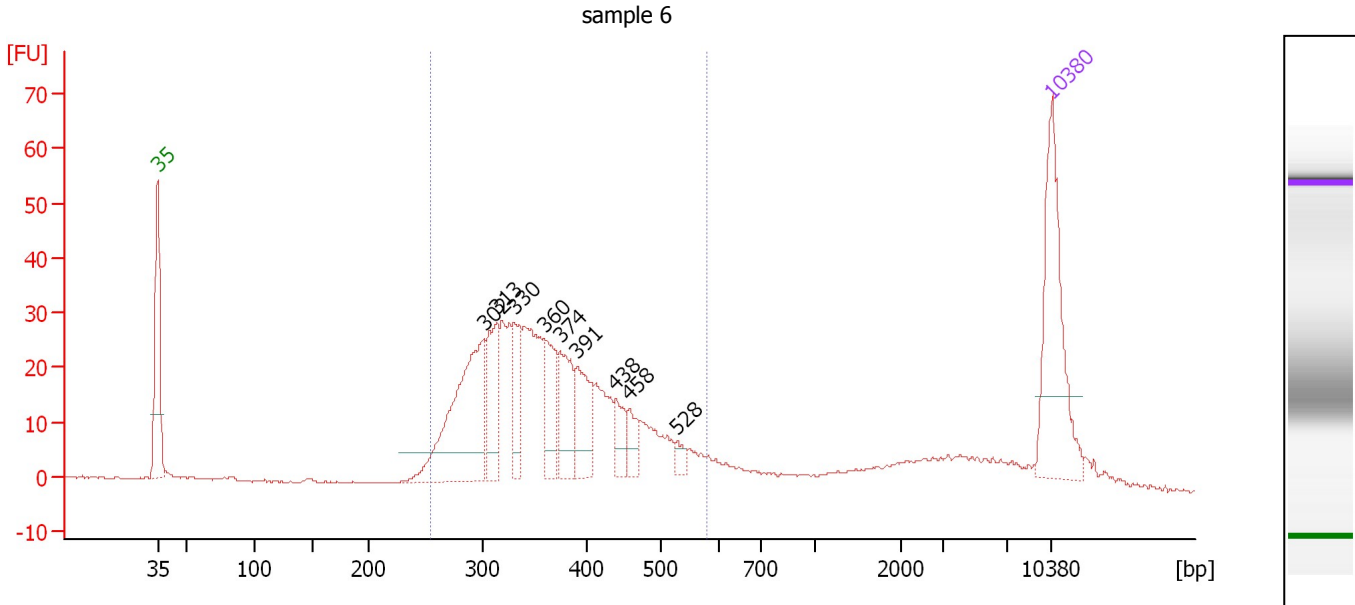
**Region table for sample 5 : sample 5**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
255	2,326.7	384	556.25	650	631.8	87	21.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02\_003.xad

Created: 4/2/2012 11:41:03 AM  
 Modified: 4/2/2012 12:24:12 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 9                      Corr. Area 1: 530.3  
 Noise: 0.2

**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	302	136.51	685.4	
3	313	51.24	247.8	
4	330	33.83	155.2	
5	360	38.82	163.5	
6	374	42.01	170.0	
7	391	41.70	161.7	
8	438	18.51	64.0	
9	458	14.12	46.7	
10	528	6.39	18.3	
11	10,380	75.00	10.9	Upper Marker

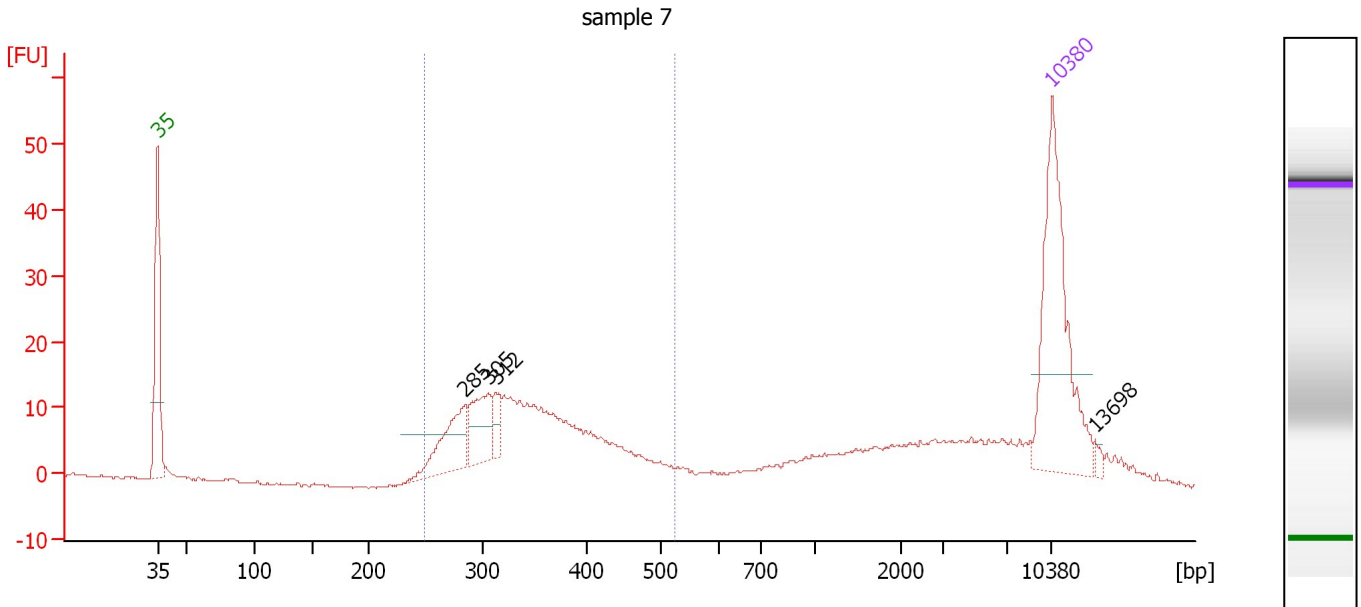
**Region table for sample 6 : sample 6**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
254	2,738.4	369	635.34	576	530.3	79	19.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02\_003.xad

Created: 4/2/2012 11:41:03 AM  
 Modified: 4/2/2012 12:24:12 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 4  
 Noise: 0.1  
 Corr. Area 1: 235.5

**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	285	38.46	204.7	
3	305	31.30	155.4	
4	312	11.24	54.5	
5	10,380	75.00	10.9	Upper Marker
6	13,698	0.00	0.0	

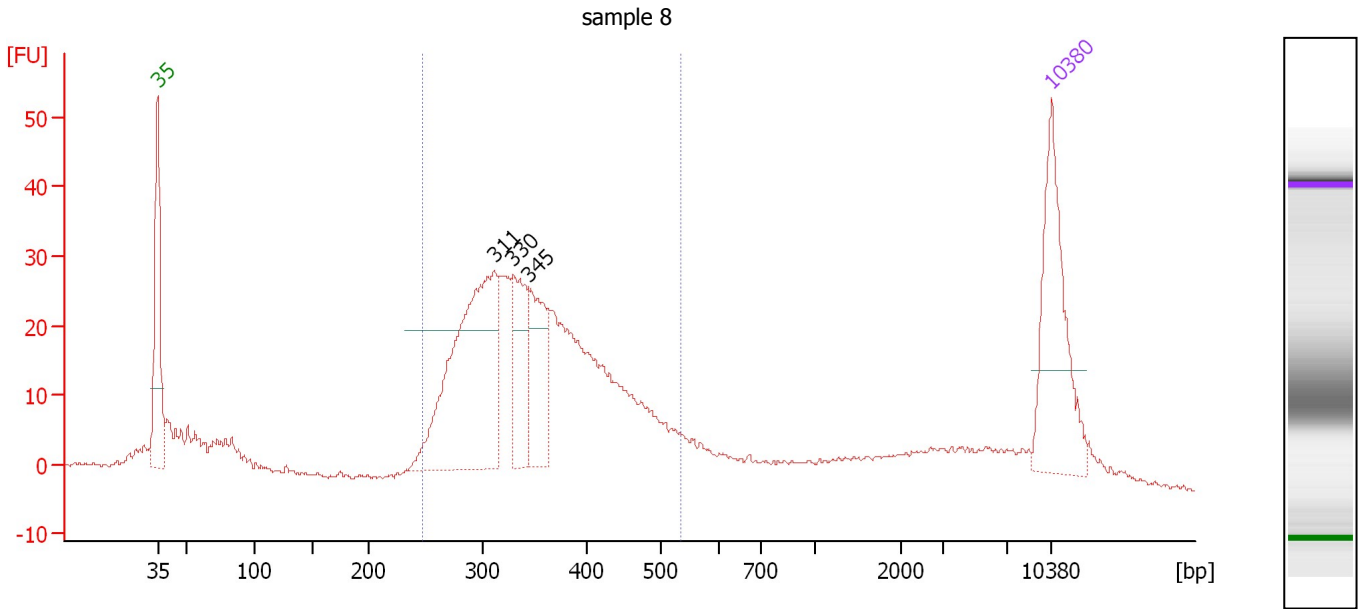
**Region table for sample 7 : sample 7**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
248	1,205.7	352	268.35	523	235.5	55	18.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02\_003.xad

Created: 4/2/2012 11:41:03 AM  
 Modified: 4/2/2012 12:24:12 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 8 : sample 8**

Height Threshold [FU] : 20

**Overall Results for sample 8 : sample 8**

Number of peaks found: 3                      Corr. Area 1: 510.6  
 Noise: 0.2

**Peak table for sample 8 : sample 8**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	311	211.49	1,031.6	
3	330	62.29	286.4	
4	345	62.51	274.7	
5	10,380	75.00	10.9	Upper Marker

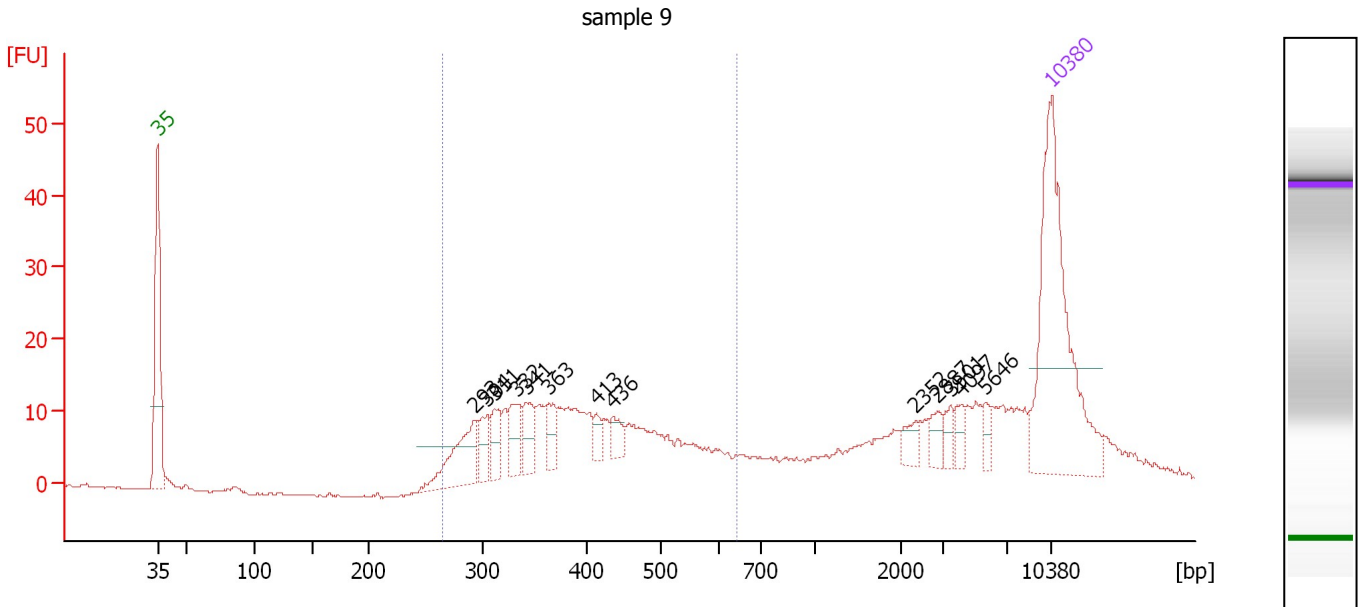
**Region table for sample 8 : sample 8**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
247	2,851.8	357	643.03	536	510.6	71	18.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02\_003.xad

Created: 4/2/2012 11:41:03 AM  
 Modified: 4/2/2012 12:24:12 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : sample 9**

Number of peaks found: 13      Corr. Area 1: 259.3  
 Noise: 0.2

**Peak table for sample 9 : sample 9**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	293	30.94	160.1	
3	304	11.88	59.2	
4	311	12.46	60.6	
5	332	14.44	65.9	
6	341	13.18	58.5	
7	363	11.01	45.9	
8	413	5.04	18.5	
9	436	6.83	23.7	
10	2,352	5.50	3.5	
11	2,887	5.61	2.9	
12	3,501	4.49	1.9	
13	4,097	4.21	1.6	
14	5,646	4.06	1.1	
15	10,380	75.00	10.9	Upper Marker

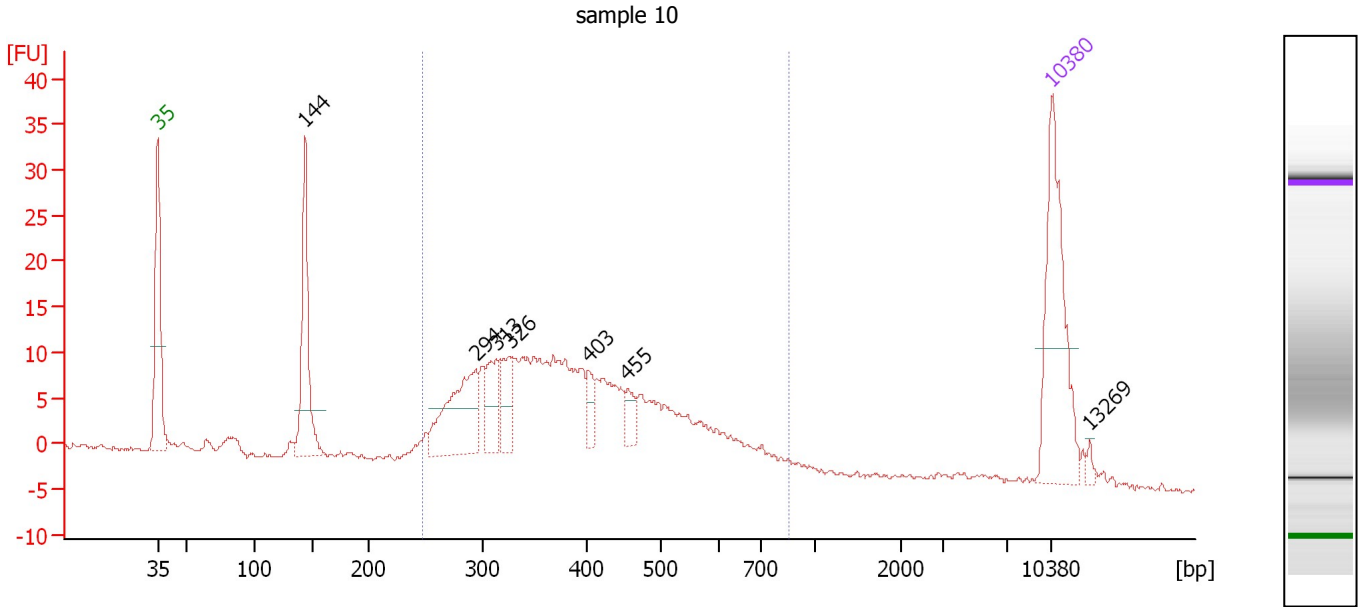
**Region table for sample 9 : sample 9**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
264	1,046.0	406	261.72	642	259.3	54	22.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02\_003.xad

Created: 4/2/2012 11:41:03 AM  
 Modified: 4/2/2012 12:24:12 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : sample 10**

Number of peaks found: 7                      Corr. Area 1: 277.6  
 Noise: 0.2

**Peak table for sample 10 : sample 10**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	144	95.69	1,007.4	
3	294	73.95	380.7	
4	313	29.05	140.8	
5	326	26.32	122.4	
6	403	12.57	47.3	
7	455	10.63	35.4	
8	10,380	75.00	10.9	Upper Marker
9	13,269	0.00	0.0	

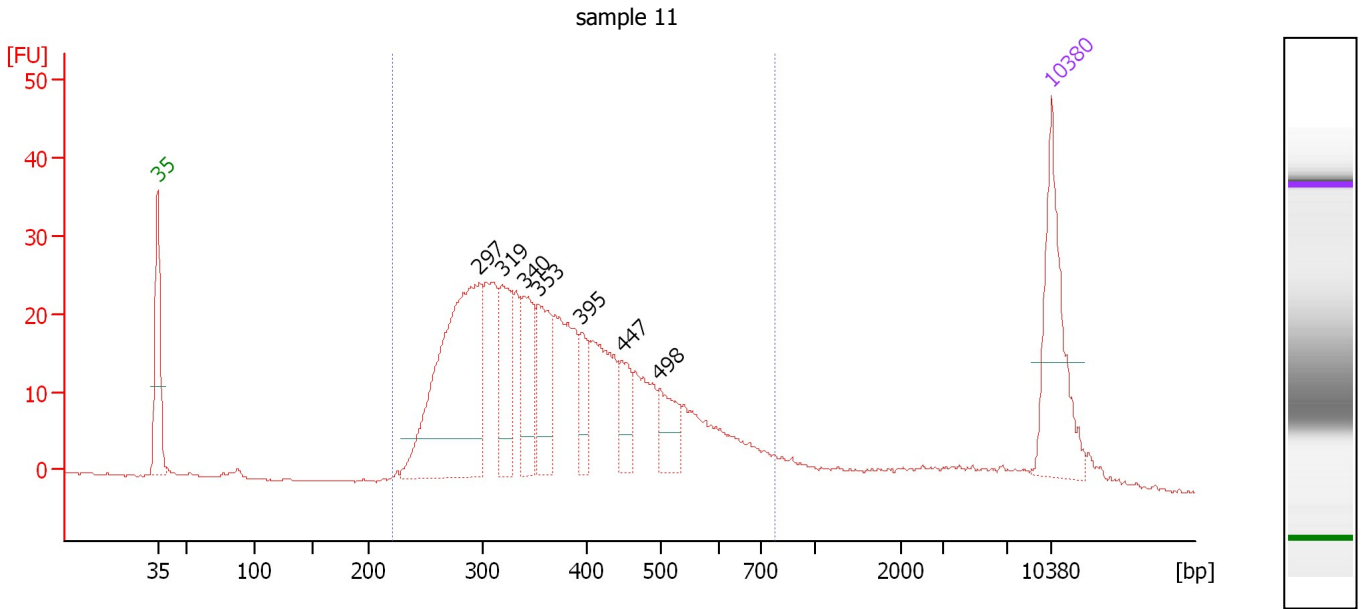
**Region table for sample 10 : sample 10**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
247	2,170.4	408	532.14	853	277.6	80	27.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02\_003.xad

Created: 4/2/2012 11:41:03 AM  
 Modified: 4/2/2012 12:24:12 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : sample 11**

Number of peaks found: 7                      Corr. Area 1: 572.3  
 Noise: 0.1

**Peak table for sample 11 : sample 11**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	297	262.51	1,340.7	
3	319	66.96	318.5	
4	340	62.49	278.4	
5	353	57.11	245.2	
6	395	25.75	98.8	
7	447	29.57	100.1	
8	498	33.13	100.8	
9	10,380	75.00	10.9	Upper Marker

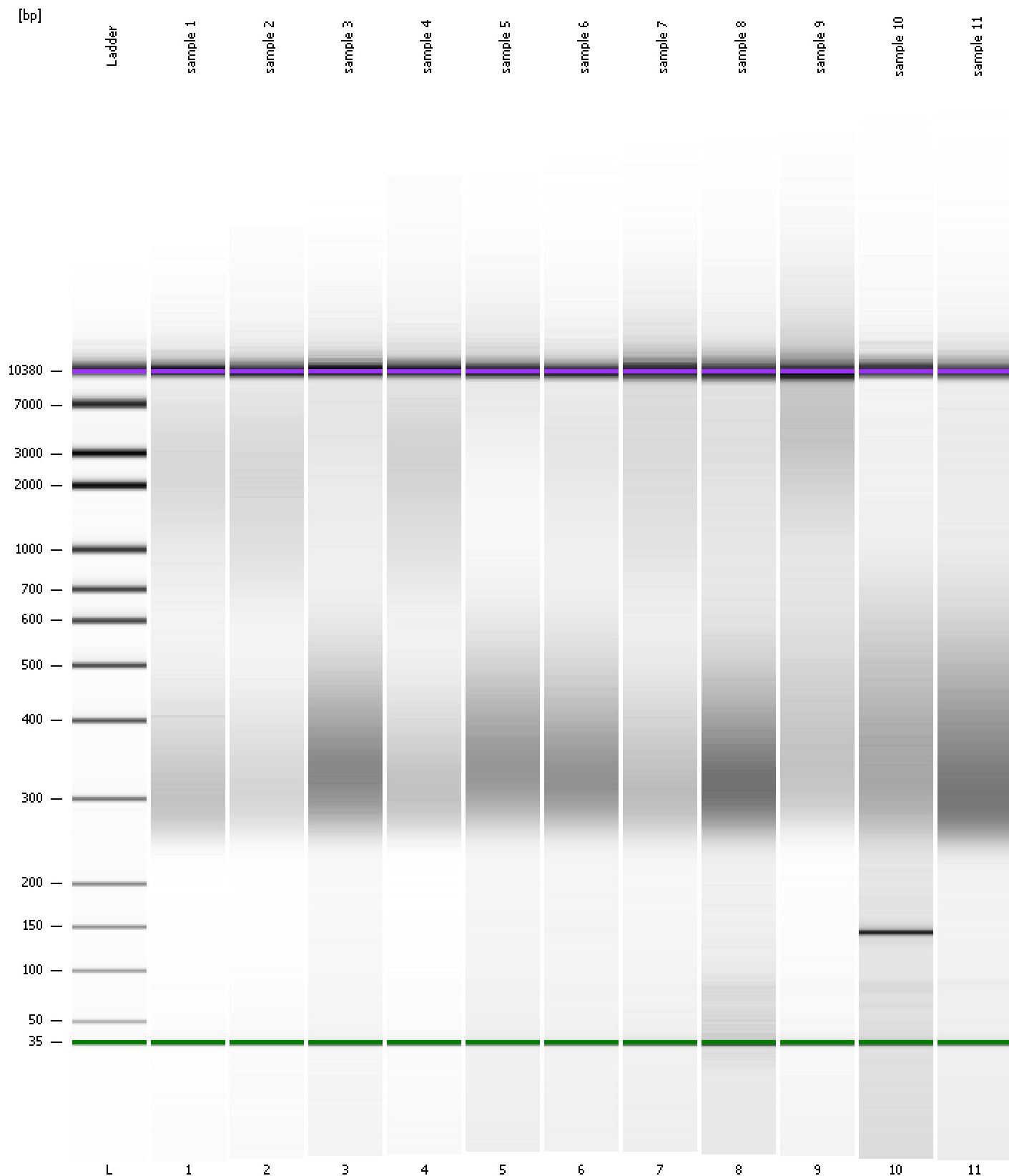
**Region table for sample 11 : sample 11**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
220	4,360.5	387	1,013.29	771	572.3	90	27.6	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02\_003.xad

Created: 4/2/2012 11:41:03 AM  
Modified: 4/2/2012 12:24:12 PM

**Gel Image**





Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-02\2012-04-02\_003.xad

Created: 4/2/2012 11:41:03 AM  
 Modified: 4/2/2012 12:24:12 PM

**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		4/2/2012 12:22:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-04-02\2012-04-02_003.xad)		Instrument	Run		4/2/2012 11:41:03 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/2/2012 11:41:03 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/2/2012 11:41:03 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/2/2012 11:41:03 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/2/2012 11:41:03 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/2/2012 11:41:03 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/2/2012 11:41:03 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1