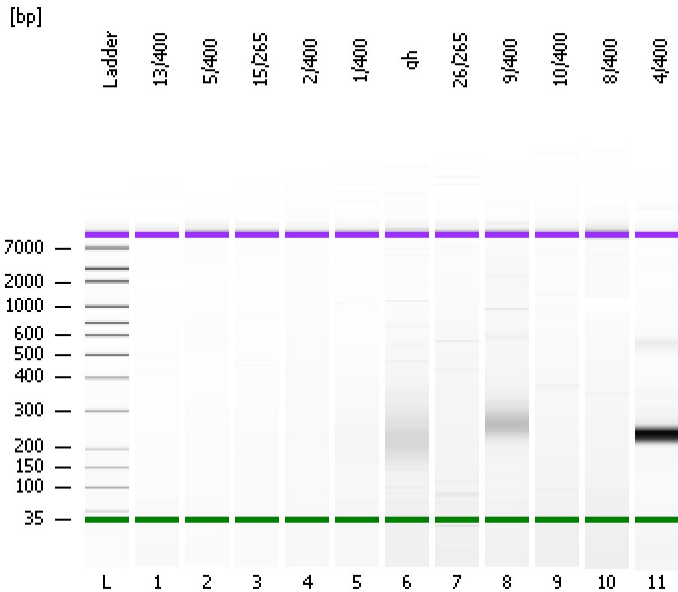


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
Modified: 6/28/2013 12:09:14 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

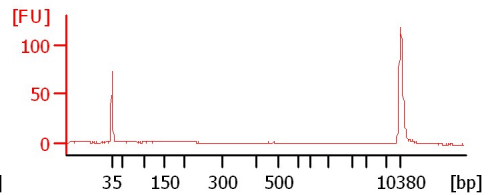
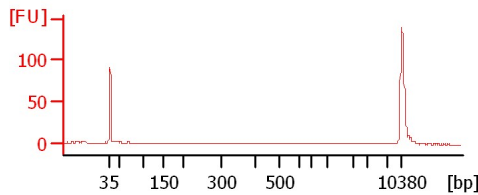
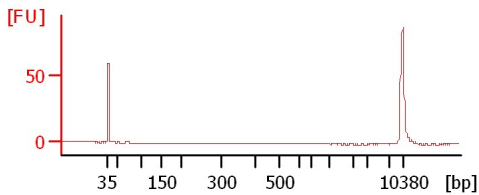
#### Chip Information:

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

13/400

5/400

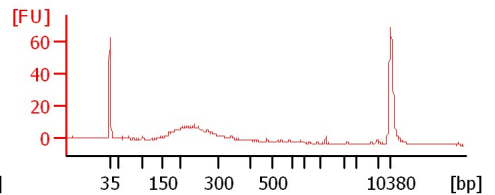
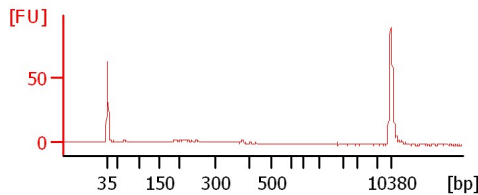
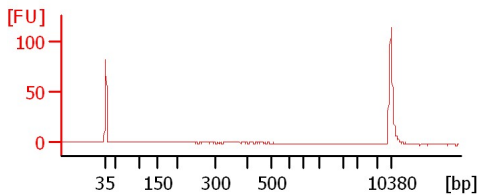
15/265



2/400

1/400

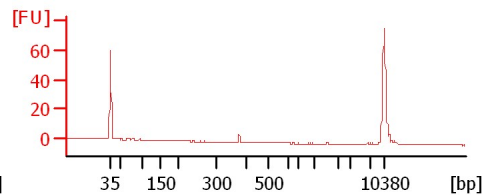
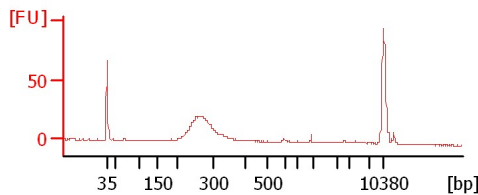
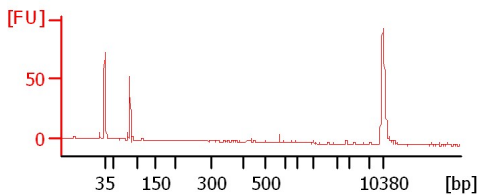
gh



26/265

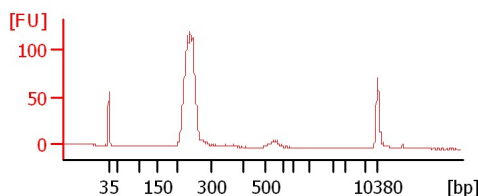
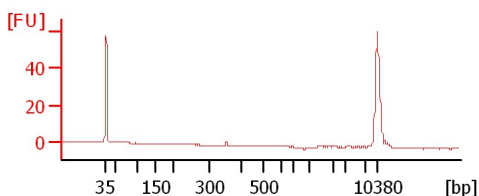
9/400

10/400



8/400

4/400



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
Modified: 6/28/2013 12:09:14 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
13/400		<input type="checkbox"/>	✓			
5/400		<input type="checkbox"/>	✓			
15/265		<input type="checkbox"/>	✓			
2/400		<input type="checkbox"/>	✓			
1/400		<input type="checkbox"/>	✓			
gh		<input type="checkbox"/>	✓			
26/265		<input type="checkbox"/>	✓			
9/400		<input type="checkbox"/>	✓			
10/400		<input type="checkbox"/>	✓			
8/400		<input type="checkbox"/>	✓			
4/400		<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\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
Modified: 6/28/2013 12:09:14 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

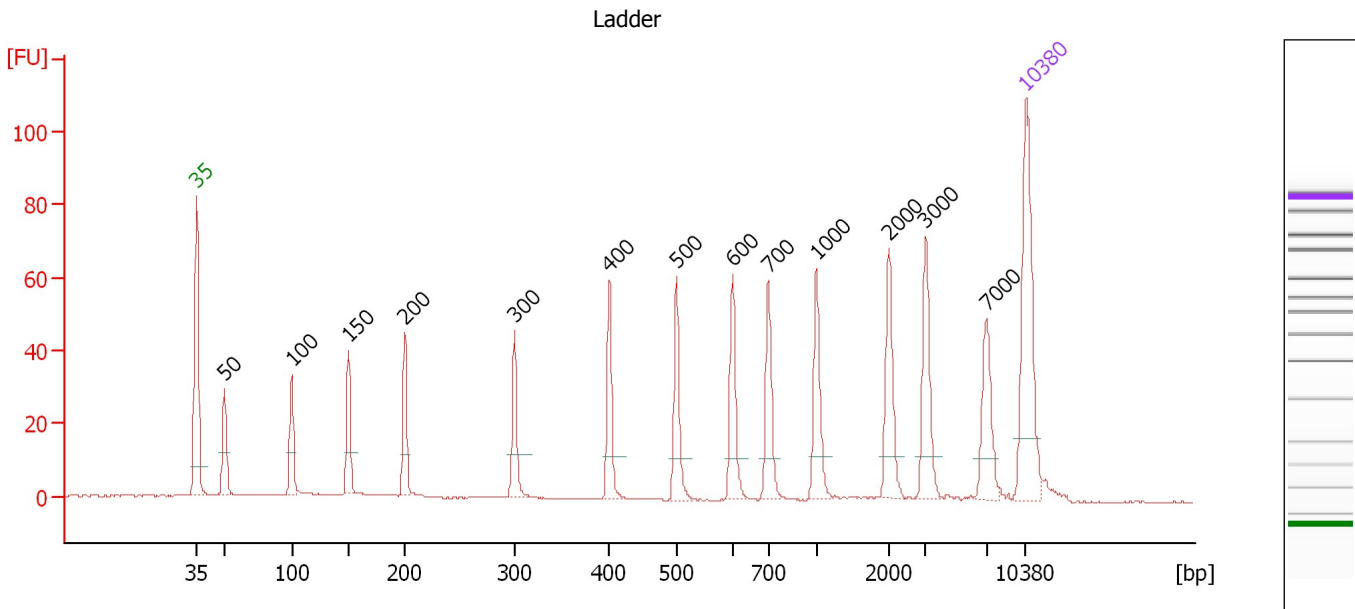
**Ladder**

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\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
 Modified: 6/28/2013 12:09:14 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

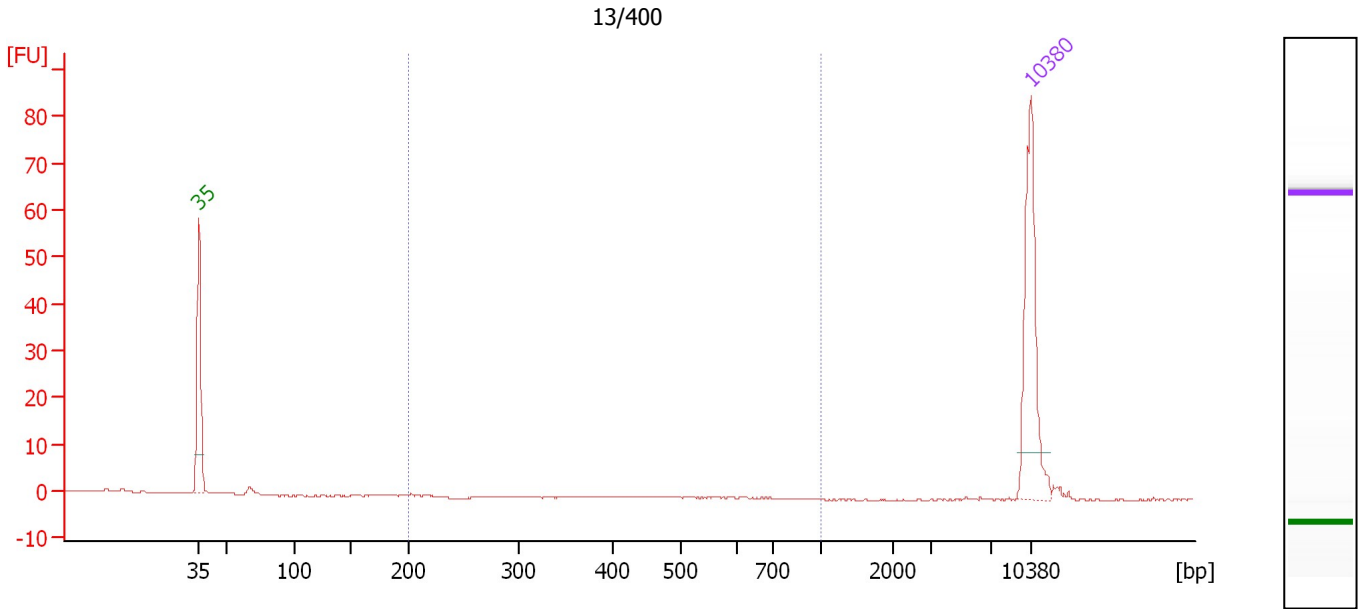
**Peak table for Ladder**

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\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
 Modified: 6/28/2013 12:09:14 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 13/400**

Number of peaks found: 0      Corr. Area 1: 0.0  
 Noise: 0.1

**Peak table for sample 1 : 13/400**

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

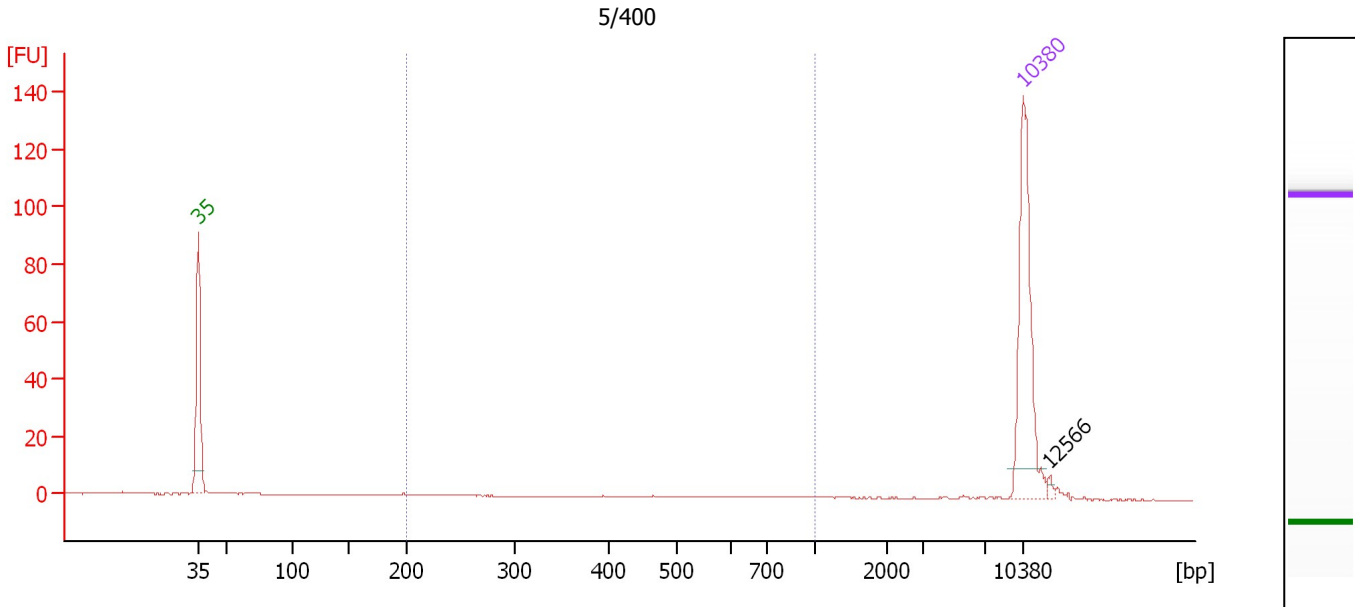
**Region table for sample 1 : 13/400**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	0	0.0	0.00	0.0	0	0.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
 Modified: 6/28/2013 12:09:14 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 5/400**

Number of peaks found: 1      Corr. Area 1: 9.5  
 Noise: 0.1

**Peak table for sample 2 : 5/400**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker
3	12,566	0.00	0.0	

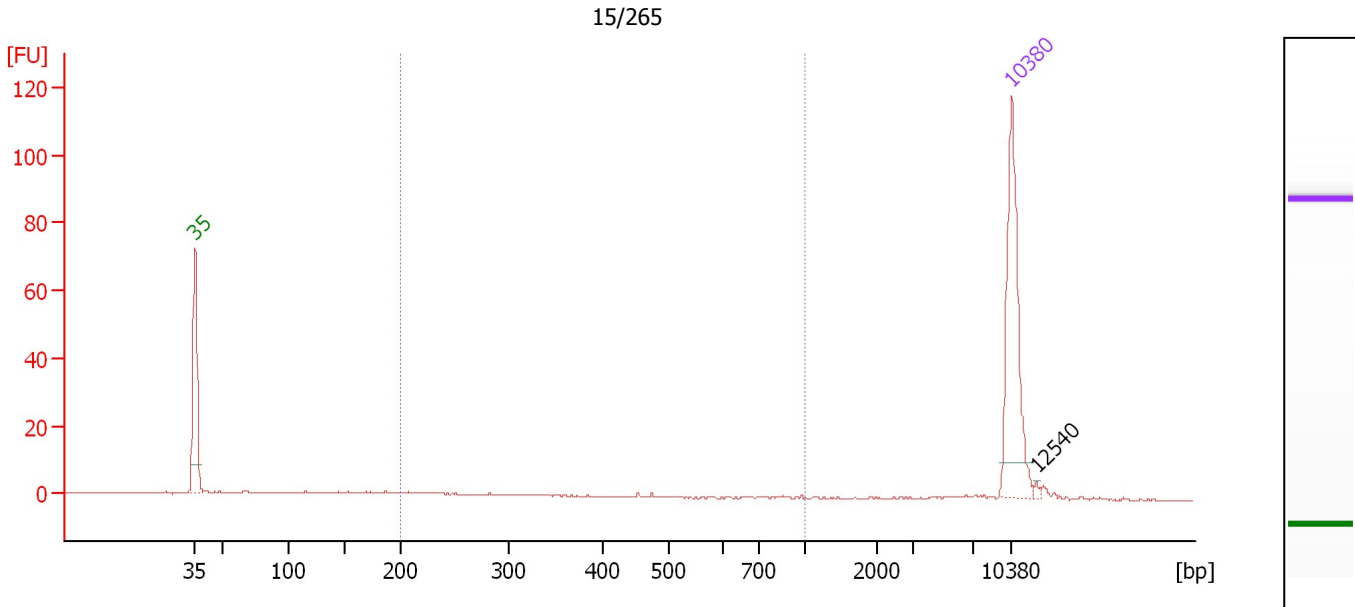
**Region table for sample 2 : 5/400**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	539	29.7	7.28	9.5	23	42.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
 Modified: 6/28/2013 12:09:14 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 15/265**

Number of peaks found: 1      Corr. Area 1: 14.9  
 Noise: 0.1

**Peak table for sample 3 : 15/265**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker
3	12,540	0.00	0.0	

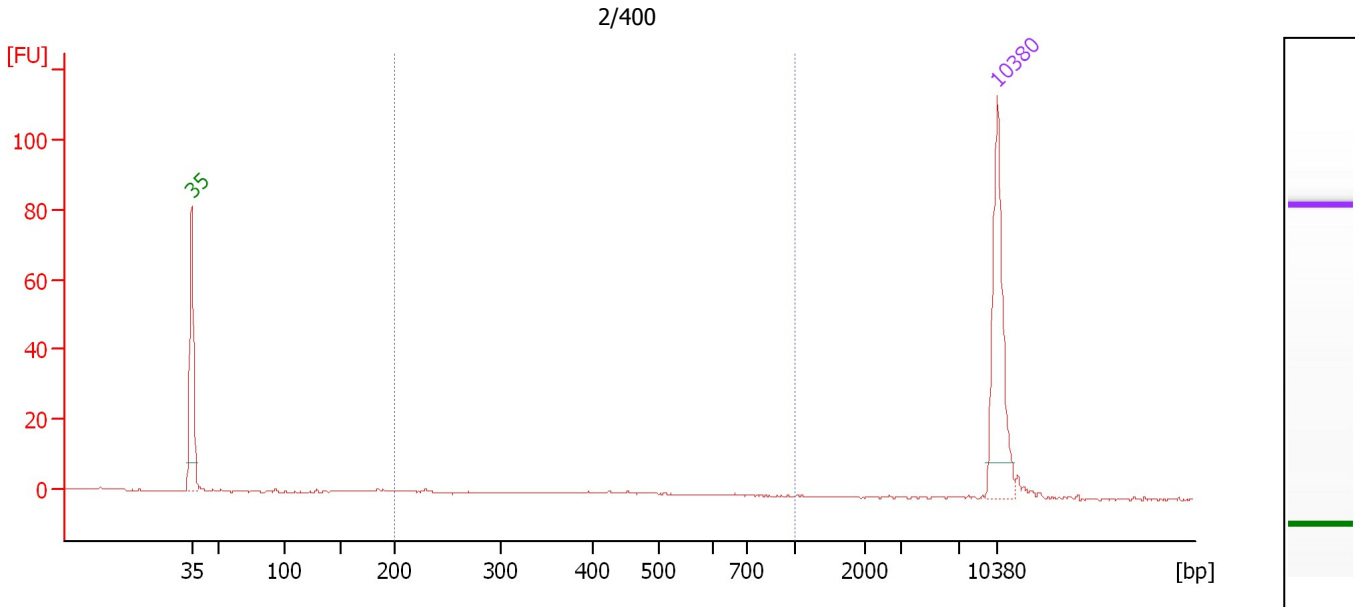
**Region table for sample 3 : 15/265**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	335	83.2	15.13	14.9	25	52.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
 Modified: 6/28/2013 12:09:14 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 2/400**

Number of peaks found: 0                      Corr. Area 1: 7.1  
 Noise: 0.3

**Peak table for sample 4 : 2/400**

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

**Region table for sample 4 : 2/400**

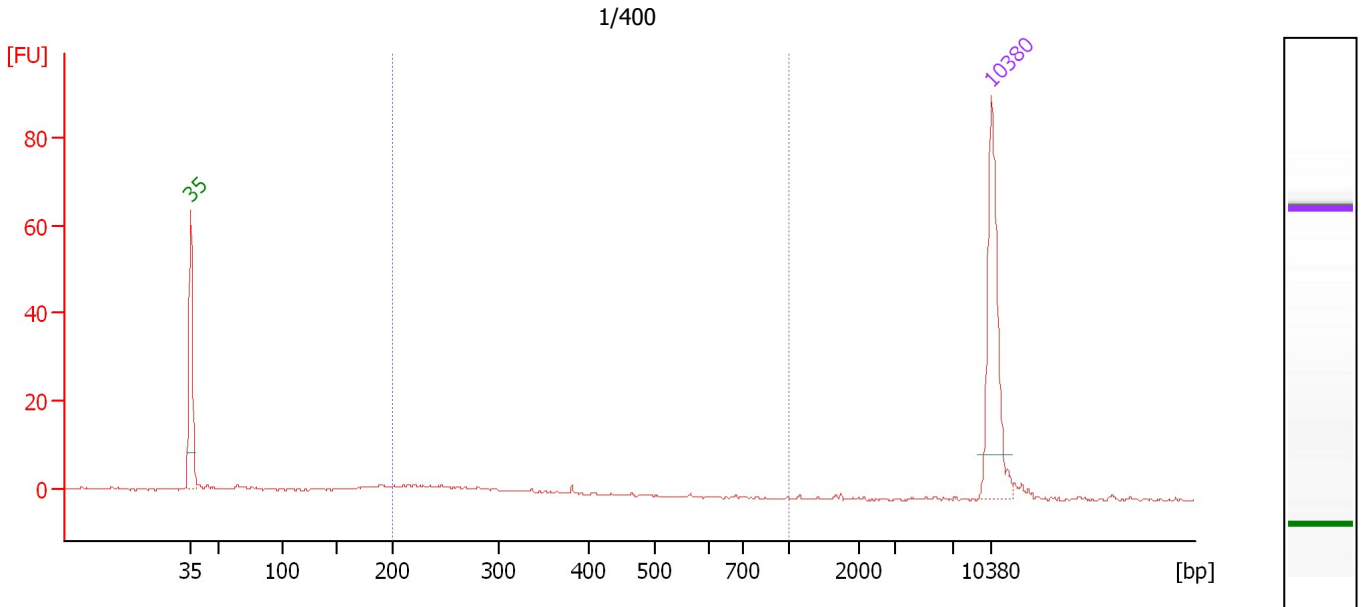
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	409	33.0	7.65	7.1	38	29.5	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
 Modified: 6/28/2013 12:09:14 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 1/400**

Number of peaks found: 0                      Corr. Area 1: 23.2  
 Noise: 0.2

**Peak table for sample 5 : 1/400**

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

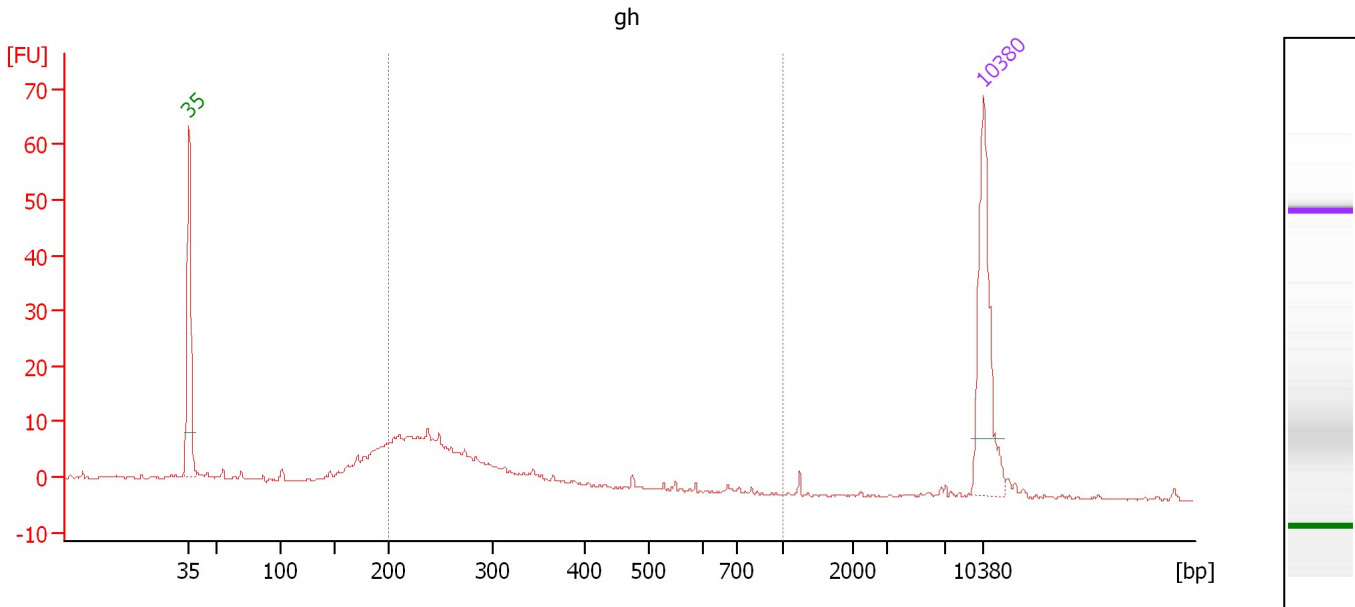
**Region table for sample 5 : 1/400**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	271	199.3	34.30	23.2	45	21.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
 Modified: 6/28/2013 12:09:14 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : gh**

Number of peaks found: 0                      Corr. Area 1: 132.6  
 Noise: 0.2

**Peak table for sample 6 : gh**

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

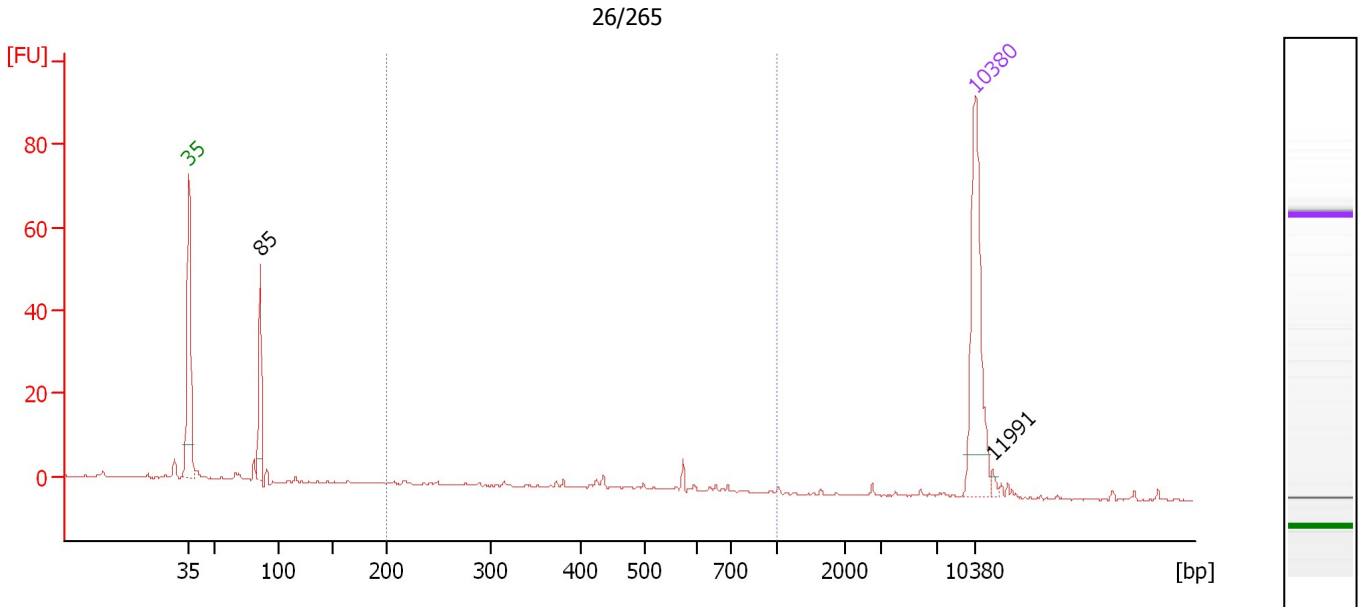
**Region table for sample 6 : gh**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	278	1,295.2	222.65	132.6	64	28.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
 Modified: 6/28/2013 12:09:14 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 26/265**

Number of peaks found: 2      Corr. Area 1: 10.8  
 Noise: 0.2

**Peak table for sample 7 : 26/265**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	85	52.33	928.2	
3	10,380	75.00	10.9	Upper Marker
4	11,991	0.00	0.0	

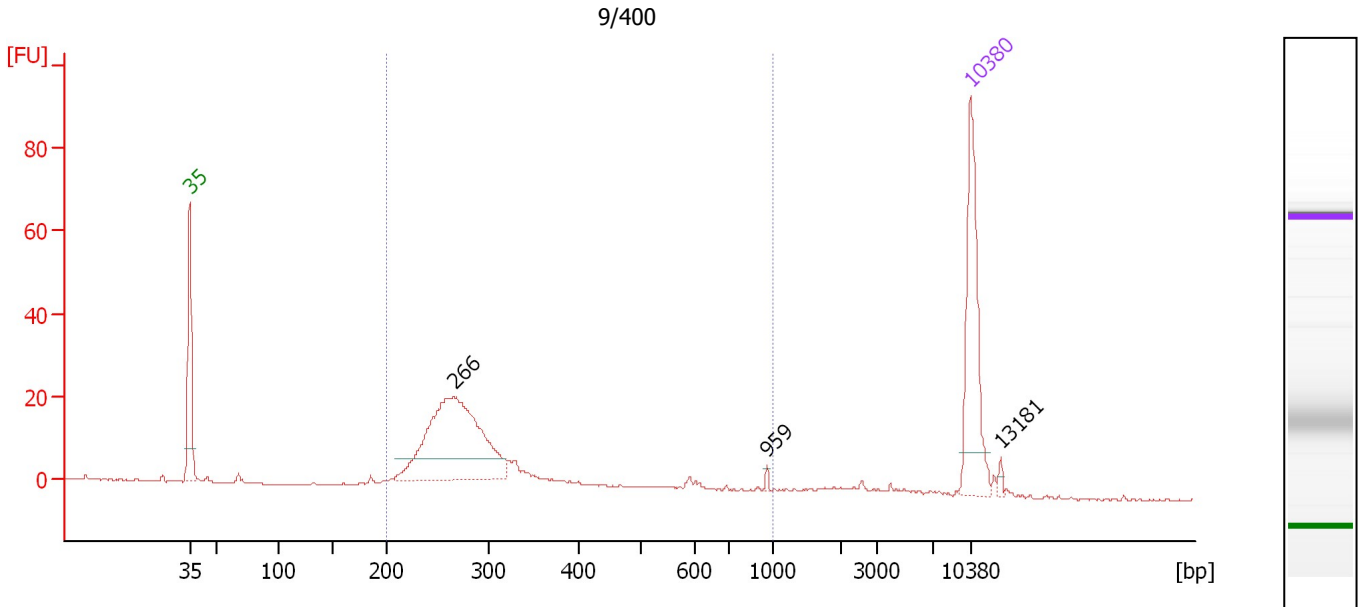
**Region table for sample 7 : 26/265**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	477	47.2	12.95	10.8	16	26.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
 Modified: 6/28/2013 12:09:14 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 9/400**

Number of peaks found: 3                      Corr. Area 1: 250.1  
 Noise: 0.1

**Peak table for sample 8 : 9/400**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	266	226.46	1,289.5	
3	959	1.85	2.9	
4	10,380	75.00	10.9	Upper Marker
5	13,181	0.00	0.0	

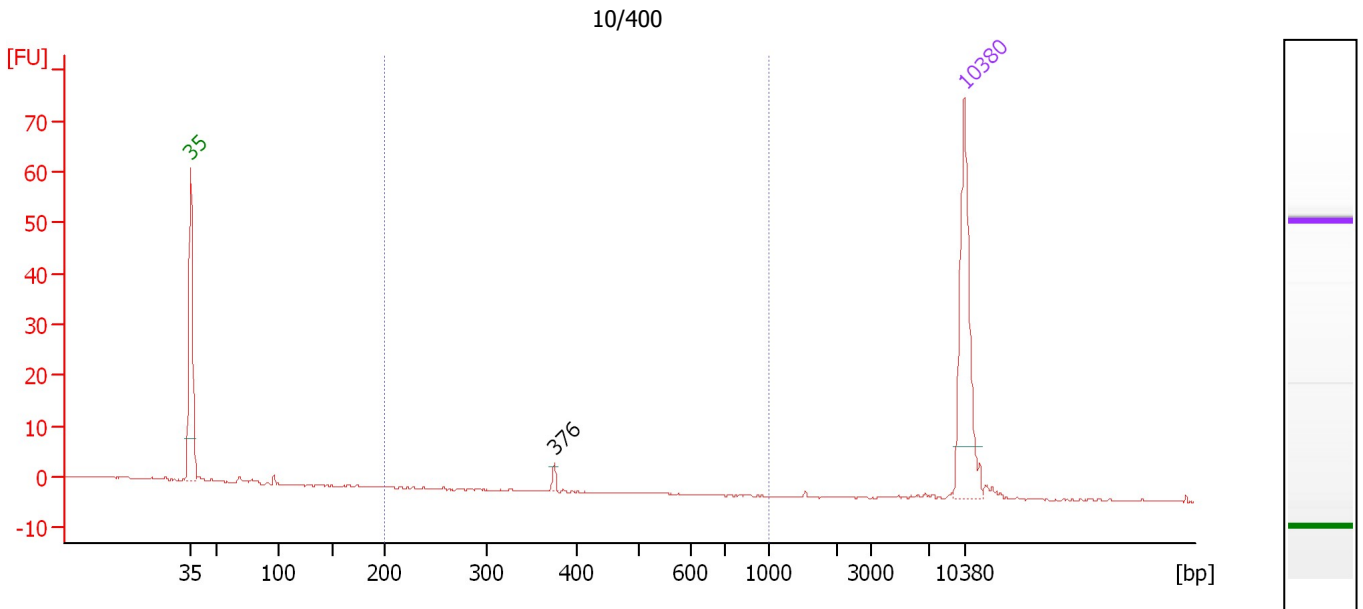
**Region table for sample 8 : 9/400**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	315	1,669.6	312.25	250.1	87	40.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
 Modified: 6/28/2013 12:09:14 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 10/400**

Number of peaks found: 1                      Corr. Area 1: 2.0  
 Noise: 0.1

**Peak table for sample 9 : 10/400**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	376	4.18	16.9	
3	10,380	75.00	10.9	Upper Marker

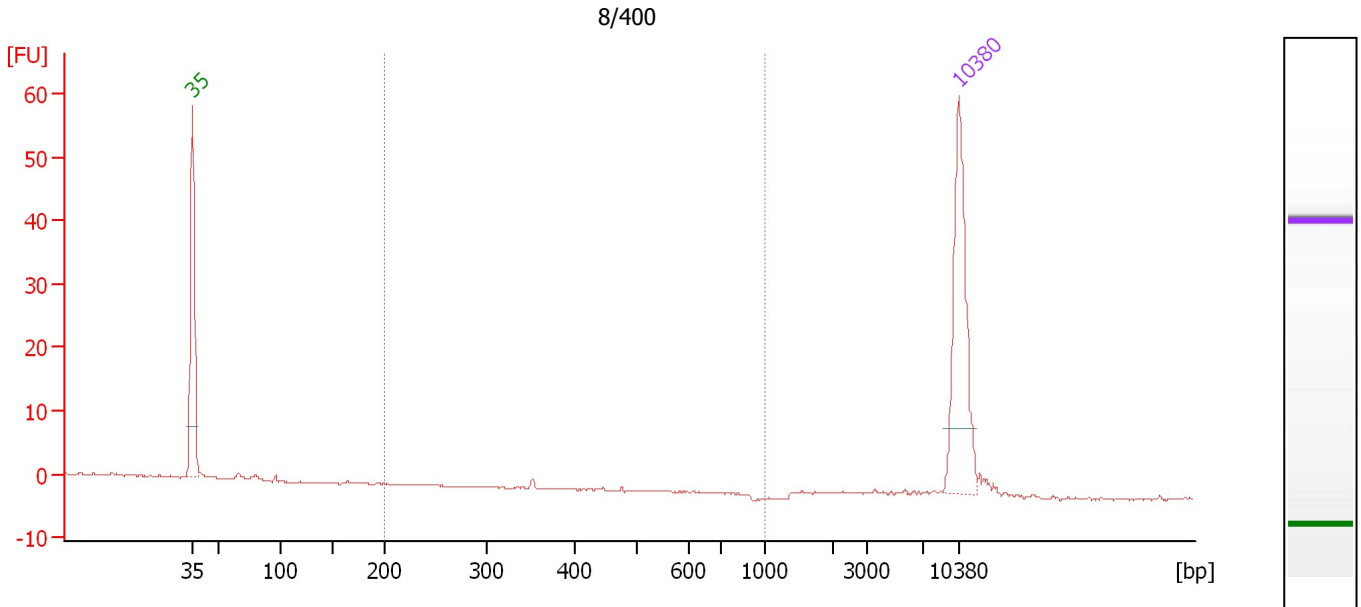
**Region table for sample 9 : 10/400**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	375	12.3	3.04	2.0	29	0.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
 Modified: 6/28/2013 12:09:14 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 8/400**

Number of peaks found: 0      Corr. Area 1: 0.3  
 Noise: 0.1

**Peak table for sample 10 : 8/400**

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

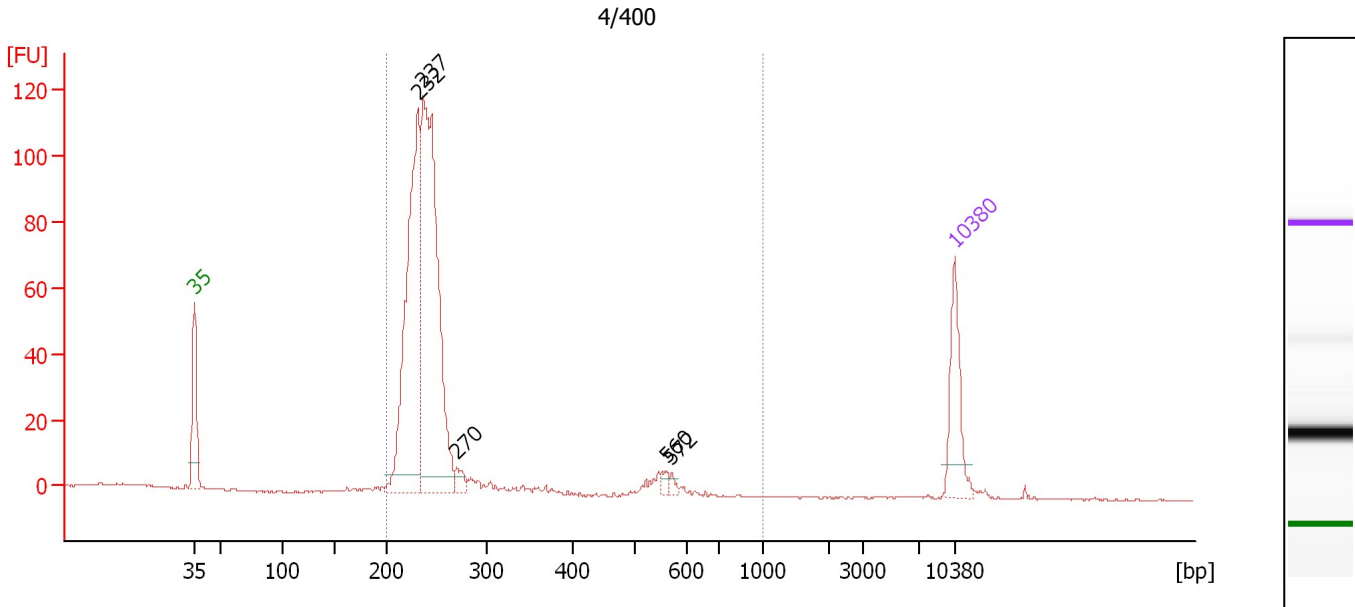
**Region table for sample 10 : 8/400**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	353	2.3	0.54	0.3	4	0.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
 Modified: 6/28/2013 12:09:14 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 4/400**

Number of peaks found: 5                      Corr. Area 1: 629.6  
 Noise: 0.2

**Peak table for sample 11 : 4/400**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	232	502.25	3,280.0	
3	237	646.33	4,135.7	
4	270	18.27	102.4	
5	560	8.65	23.4	
6	572	6.83	18.1	
7	10,380	75.00	10.9	Upper Marker

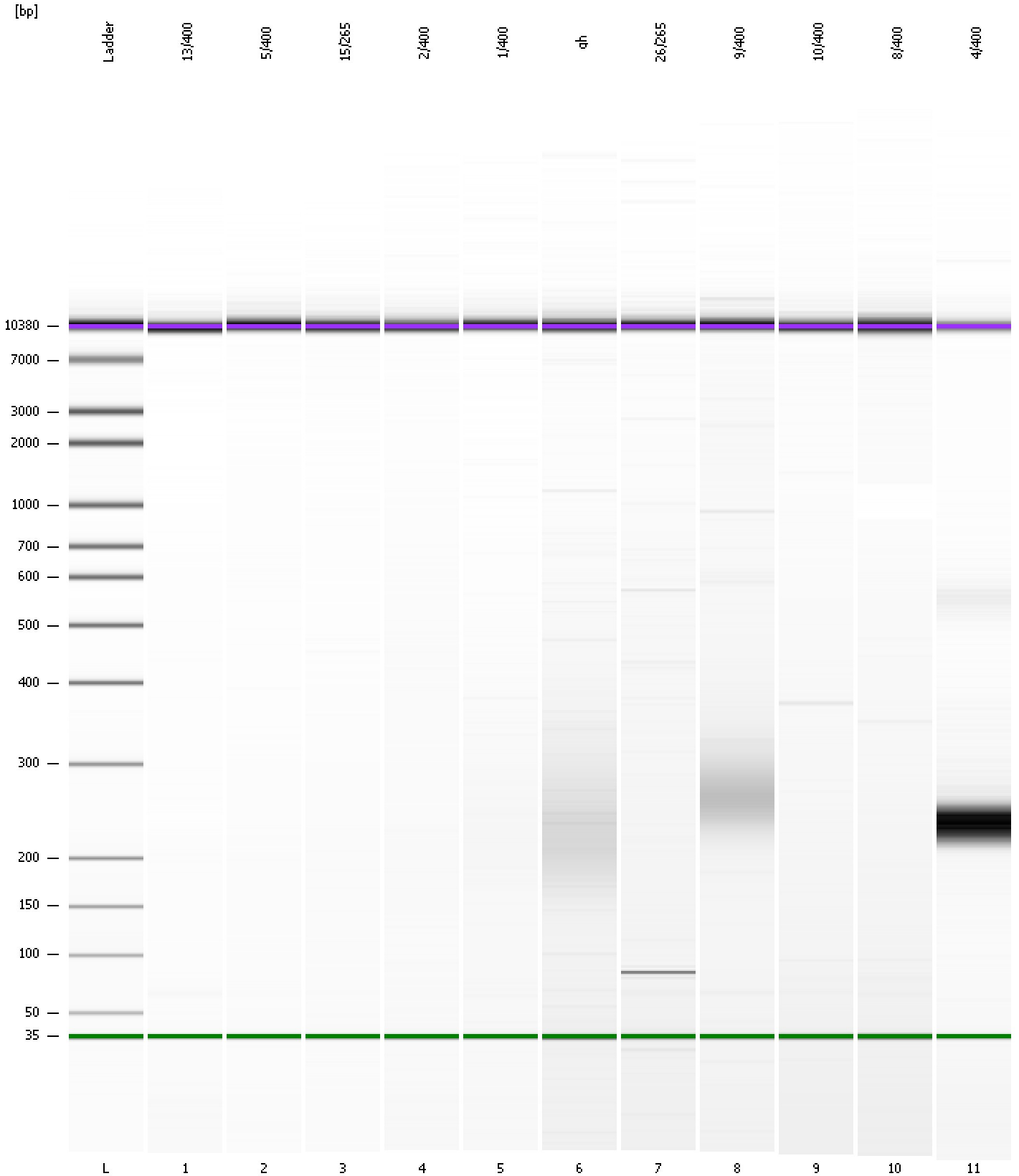
**Region table for sample 11 : 4/400**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	254	7,566.2	1,212.30	629.6	97	27.0	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
Modified: 6/28/2013 12:09:14 PM

**Gel Image**



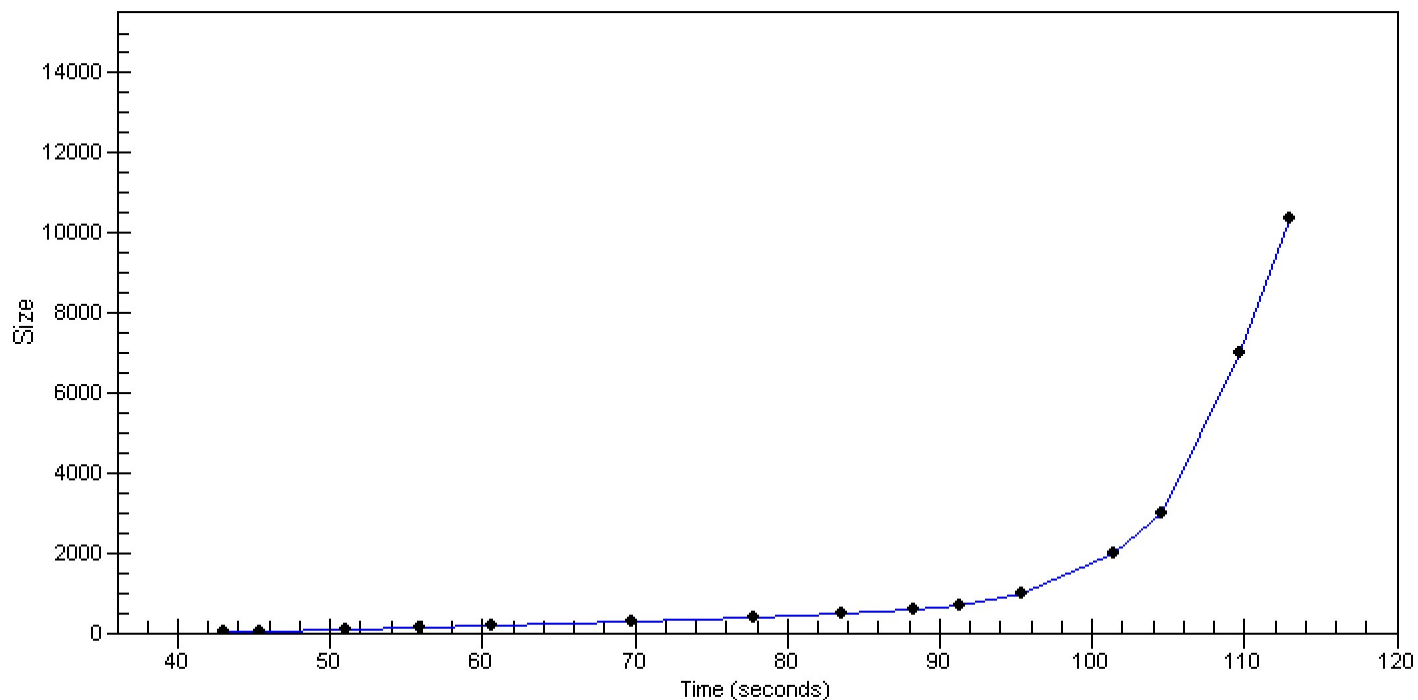


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
Modified: 6/28/2013 12:09:14 PM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-28\2013-06-28\_002.xad

Created: 6/28/2013 11:27:54 AM  
 Modified: 6/28/2013 12:09:14 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		6/28/2013 12:09:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-06-28\2013-06-28_002.xad)		Instrument	Run		6/28/2013 11:28:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/28/2013 11:28:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/28/2013 11:28:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/28/2013 11:28:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/28/2013 11:28:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/28/2013 11:28:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/28/2013 11:28:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1