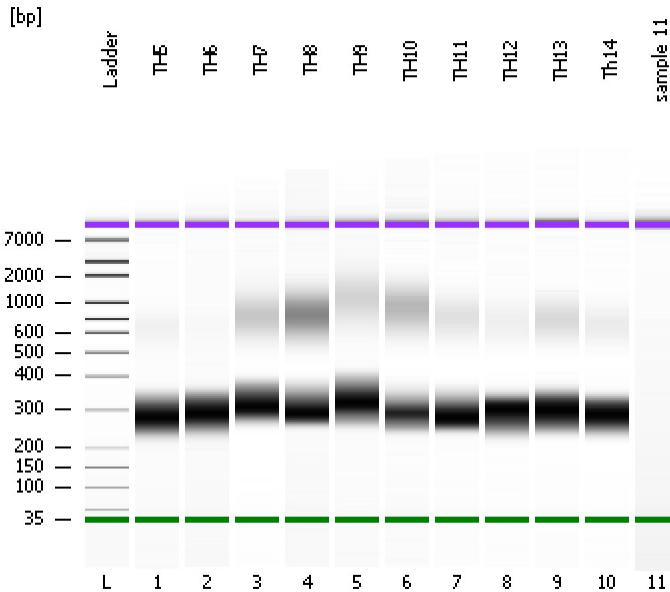


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-20\2012-04-20\_004.xad

Created: 4/20/2012 1:30:59 PM  
Modified: 4/23/2012 11:31:18 AM

**Electrophoresis File Run Summary**



Instrument Information:

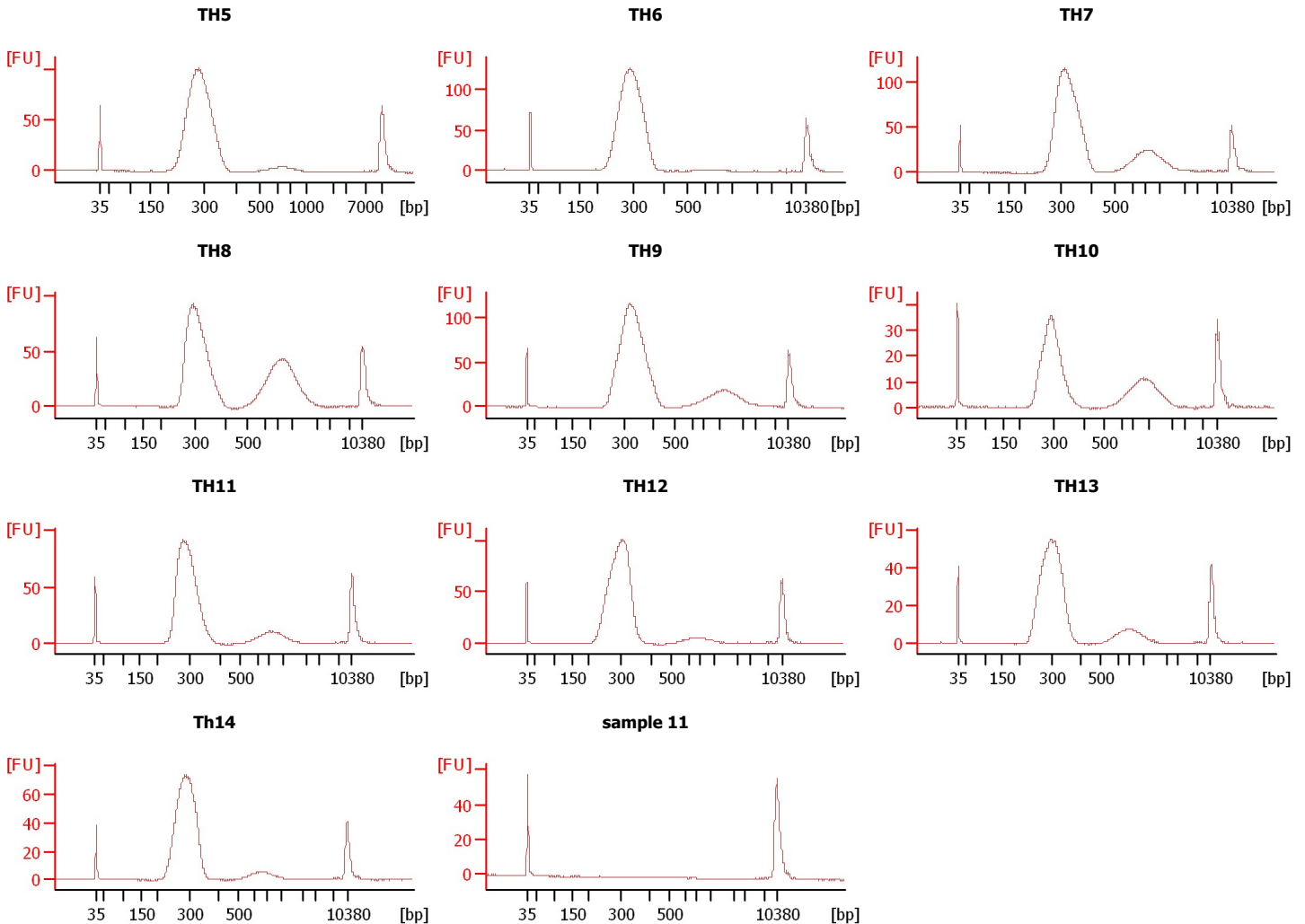
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:\...ents and Settings\Bioanalyzer\2012-04-20\2012-04-20\_004.xad

Created: 4/20/2012 1:30:59 PM  
 Modified: 4/23/2012 11:31:18 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
TH5		<input type="checkbox"/>	✓			
TH6		<input type="checkbox"/>	✓			
TH7		<input type="checkbox"/>	✓			
TH8		<input type="checkbox"/>	✓			
TH9		<input type="checkbox"/>	✓			
TH10		<input type="checkbox"/>	✓			
TH11		<input type="checkbox"/>	✓			
TH12		<input type="checkbox"/>	✓			
TH13		<input type="checkbox"/>	✓			
Th14		<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\2012-04-20\2012-04-20\_004.xad

Created: 4/20/2012 1:30:59 PM  
Modified: 4/23/2012 11:31:18 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

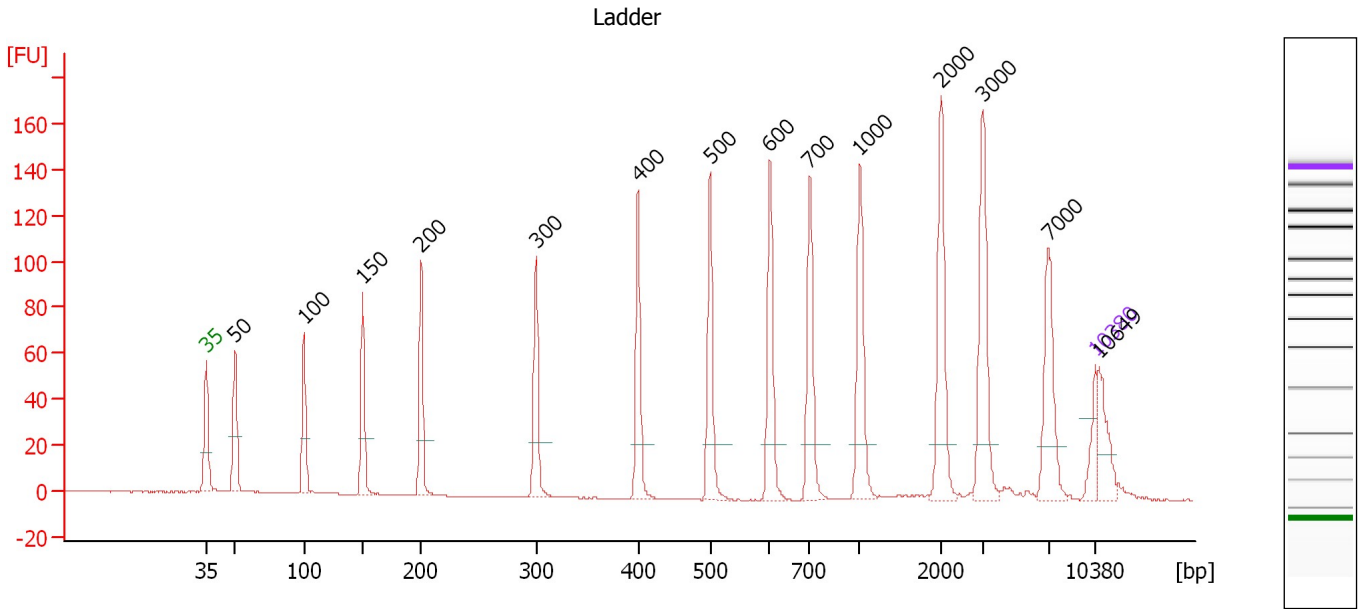
**Ladder**

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:\...ents and Settings\Bioanalyzer\2012-04-20\2012-04-20\_004.xad

Created: 4/20/2012 1:30:59 PM  
 Modified: 4/23/2012 11:31:18 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

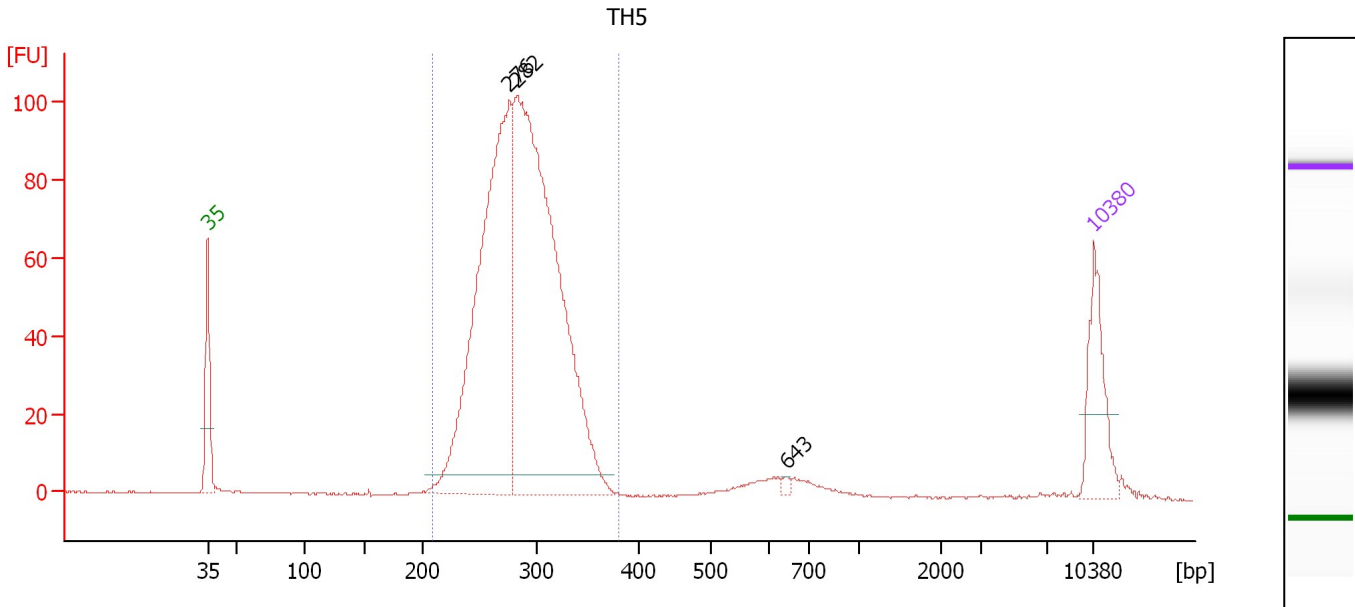
**Peak table for Ladder**

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
16	10,649	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-20\2012-04-20\_004.xad

Created: 4/20/2012 1:30:59 PM  
 Modified: 4/23/2012 11:31:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : TH5**

Number of peaks found: 3                      Corr. Area 1: 1,139.9  
 Noise: 0.2

**Peak table for sample 1 : TH5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	276	722.01	3,960.0	
3	282	968.64	5,199.1	
4	643	4.79	11.3	
5	10,380	75.00	10.9	Upper Marker

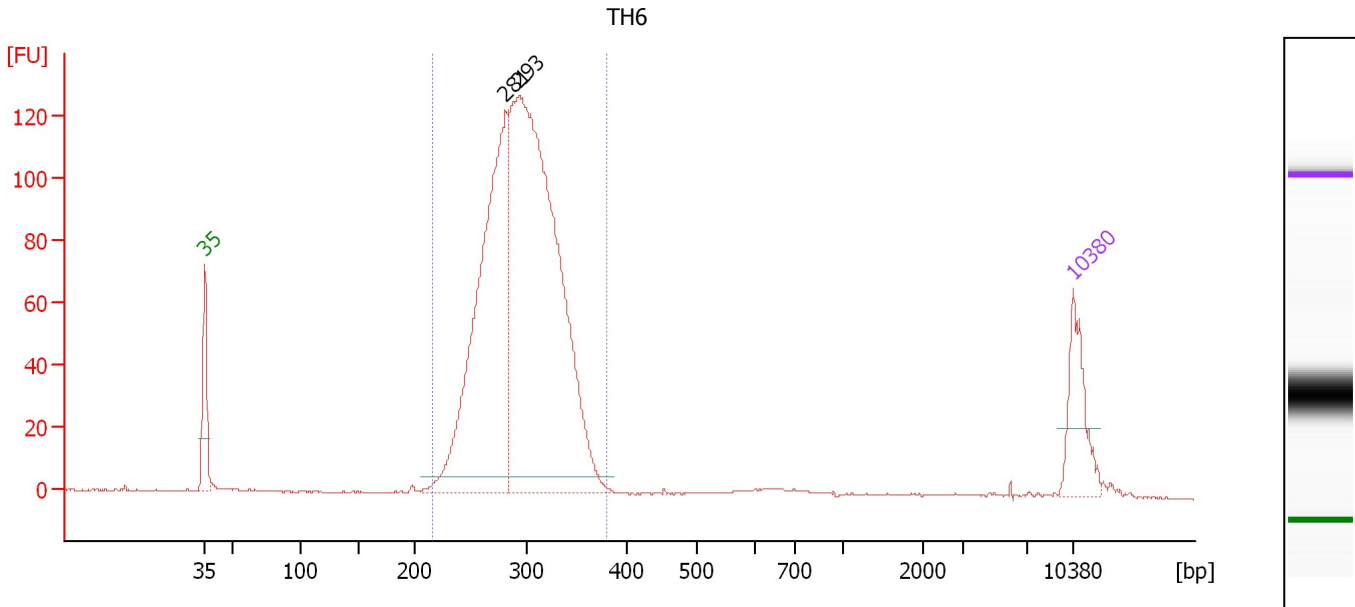
**Region table for sample 1 : TH5**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
208	9,039.8	286	1,689.55	381	1,139.9	94	10.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-20\2012-04-20\_004.xad

Created: 4/20/2012 1:30:59 PM  
 Modified: 4/23/2012 11:31:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : TH6**

Number of peaks found: 2                      Corr. Area 1: 1,408.6  
 Noise: 0.1

**Peak table for sample 2 : TH6**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	281	724.68	3,912.7	
3	293	1,216.13	6,290.0	
4	10,380	75.00	10.9	Upper Marker

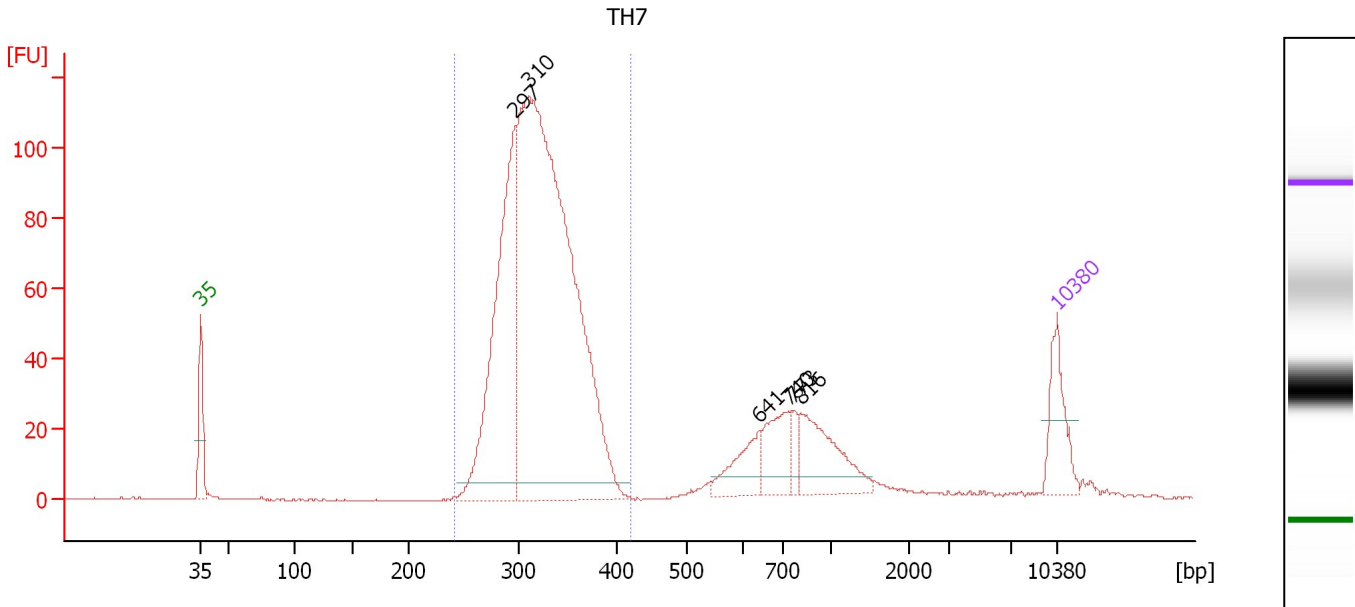
**Region table for sample 2 : TH6**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
215	10,019.8	295	1,929.55	379	1,408.6	96	10.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-20\2012-04-20\_004.xad

Created: 4/20/2012 1:30:59 PM  
 Modified: 4/23/2012 11:31:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : TH7**

Number of peaks found: 6                      Corr. Area 1: 1,164.3  
 Noise: 0.1

**Peak table for sample 3 : TH7**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	297	590.38	3,015.4	
3	310	1,650.07	8,070.0	
4	641	80.04	189.3	
5	740	91.62	187.6	
6	773	23.31	45.7	
7	816	140.95	261.6	
8	10,380	75.00	10.9	Upper Marker

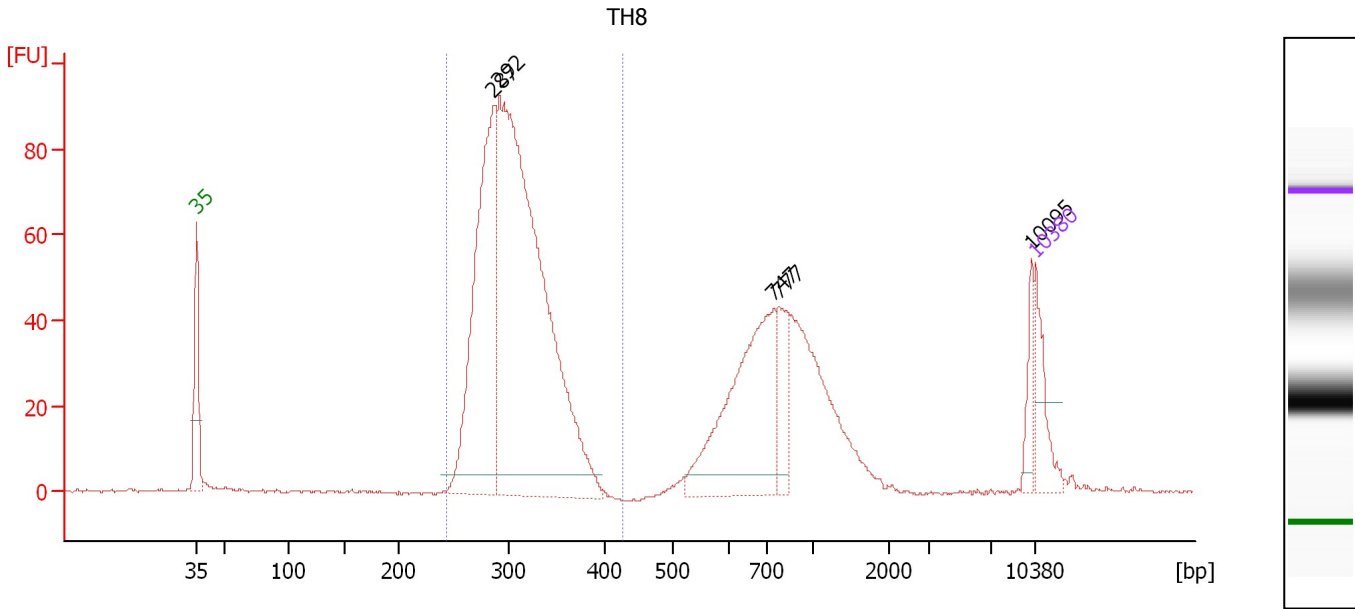
**Region table for sample 3 : TH7**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
243	10,226.3	321	2,146.05	420	1,164.3	81	9.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-20\2012-04-20\_004.xad

Created: 4/20/2012 1:30:59 PM  
 Modified: 4/23/2012 11:31:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : TH8**

Number of peaks found: 5                      Corr. Area 1: 873.9  
 Noise: 0.3

**Peak table for sample 4 : TH8**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	287	733.91	3,878.5	
3	292	1,605.37	8,327.1	
4	747	450.58	914.2	
5	777	113.13	220.5	
6	10,095	46.33	7.0	
7	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : TH8**

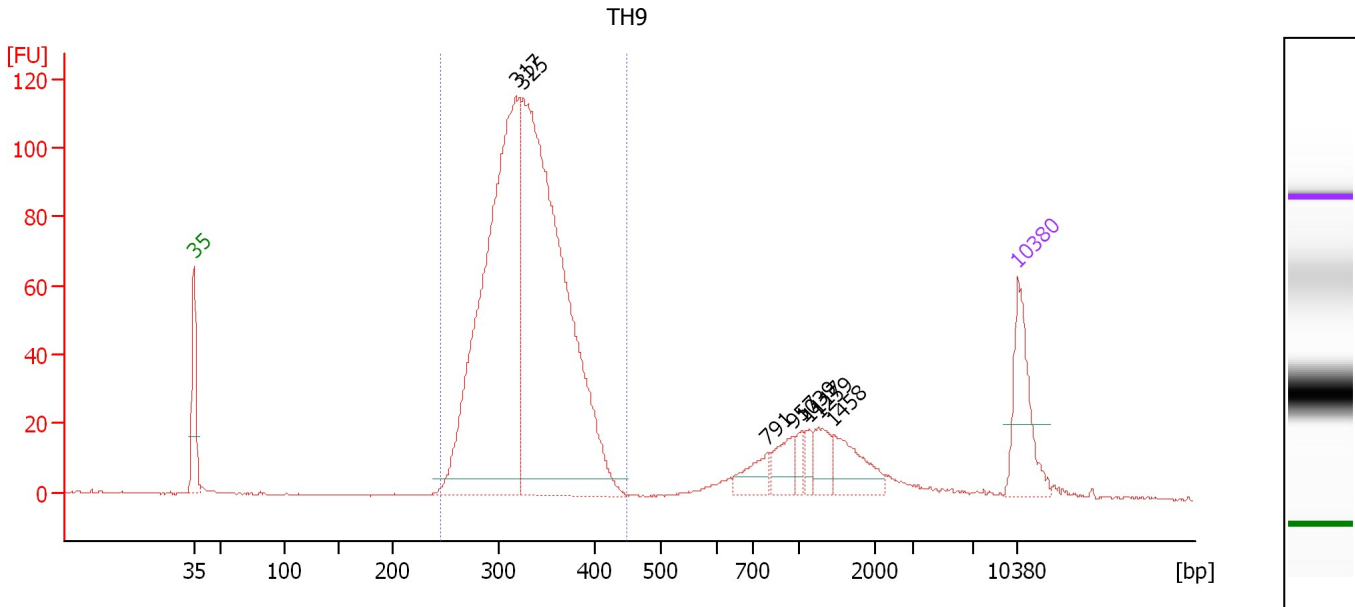
From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
244	10,982.1	307	2,204.91	428	873.9	64	9.5	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-20\2012-04-20\_004.xad

Created: 4/20/2012 1:30:59 PM  
 Modified: 4/23/2012 11:31:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : TH9**

Number of peaks found: 8                      Corr. Area 1: 1,311.1  
 Noise: 0.2

**Peak table for sample 5 : TH9**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	317	779.71	3,722.8	
3	325	947.62	4,422.1	
4	791	32.82	62.8	
5	957	34.14	54.1	
6	1,039	13.90	20.3	
7	1,117	12.59	17.1	
8	1,259	32.23	38.8	
9	1,458	52.98	55.1	
10	10,380	75.00	10.9	Upper Marker

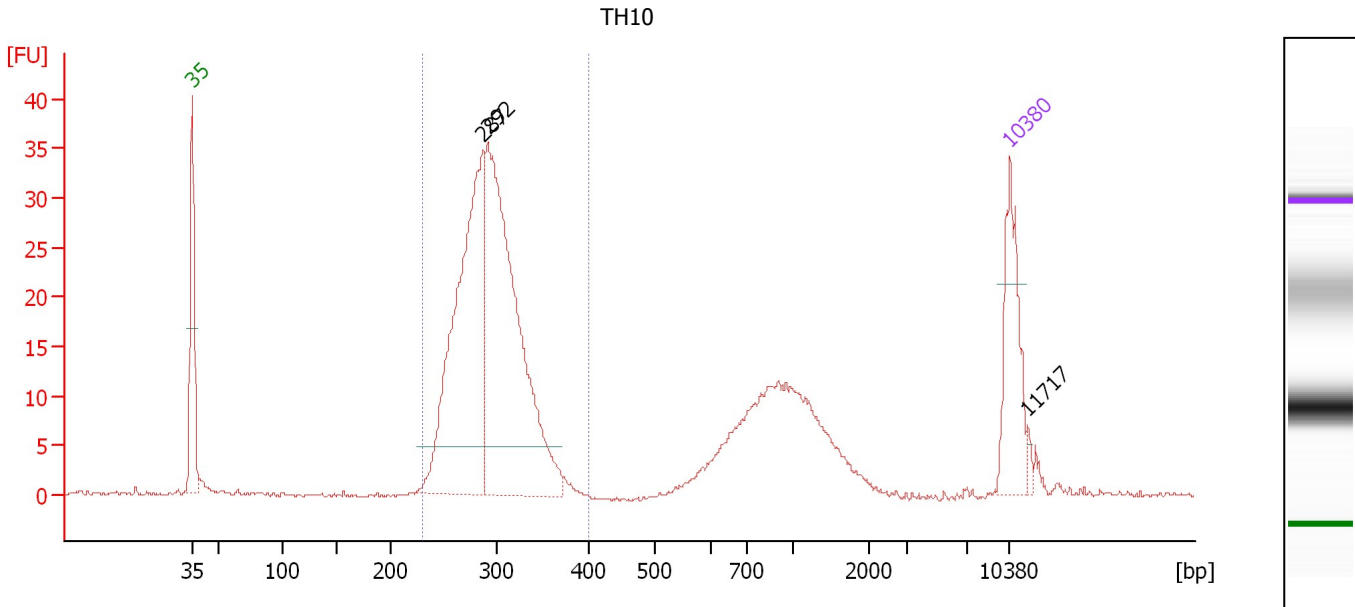
**Region table for sample 5 : TH9**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
244	7,971.4	328	1,704.37	449	1,311.1	84	11.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-20\2012-04-20\_004.xad

Created: 4/20/2012 1:30:59 PM  
 Modified: 4/23/2012 11:31:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : TH10**

Number of peaks found: 3                      Corr. Area 1: 315.5  
 Noise: 0.1

**Peak table for sample 6 : TH10**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	287	419.97	2,214.9	
3	292	486.32	2,520.6	
4	10,380	75.00	10.9	Upper Marker
5	11,717	0.00	0.0	

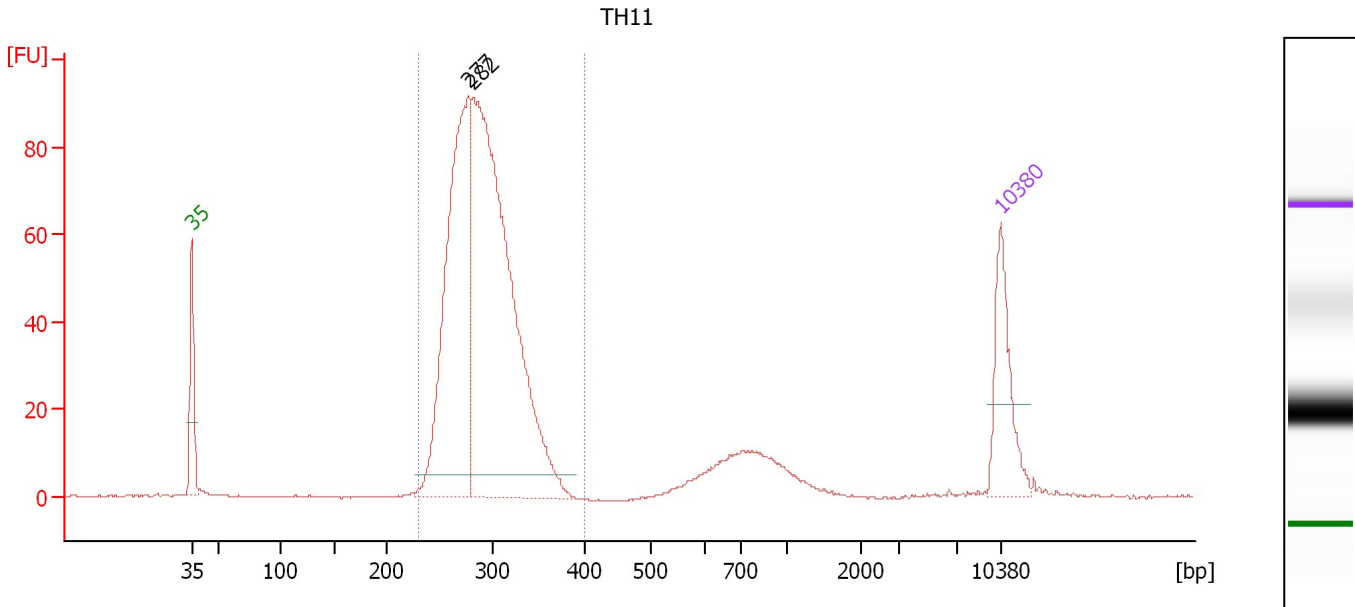
**Region table for sample 6 : TH10**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
231	4,649.6	295	895.67	399	315.5	71	9.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-20\2012-04-20\_004.xad

Created: 4/20/2012 1:30:59 PM  
 Modified: 4/23/2012 11:31:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : TH11**

Number of peaks found: 2                      Corr. Area 1: 869.2  
 Noise: 0.1

**Peak table for sample 7 : TH11**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	277	493.74	2,696.2	
3	282	791.64	4,260.5	
4	10,380	75.00	10.9	Upper Marker

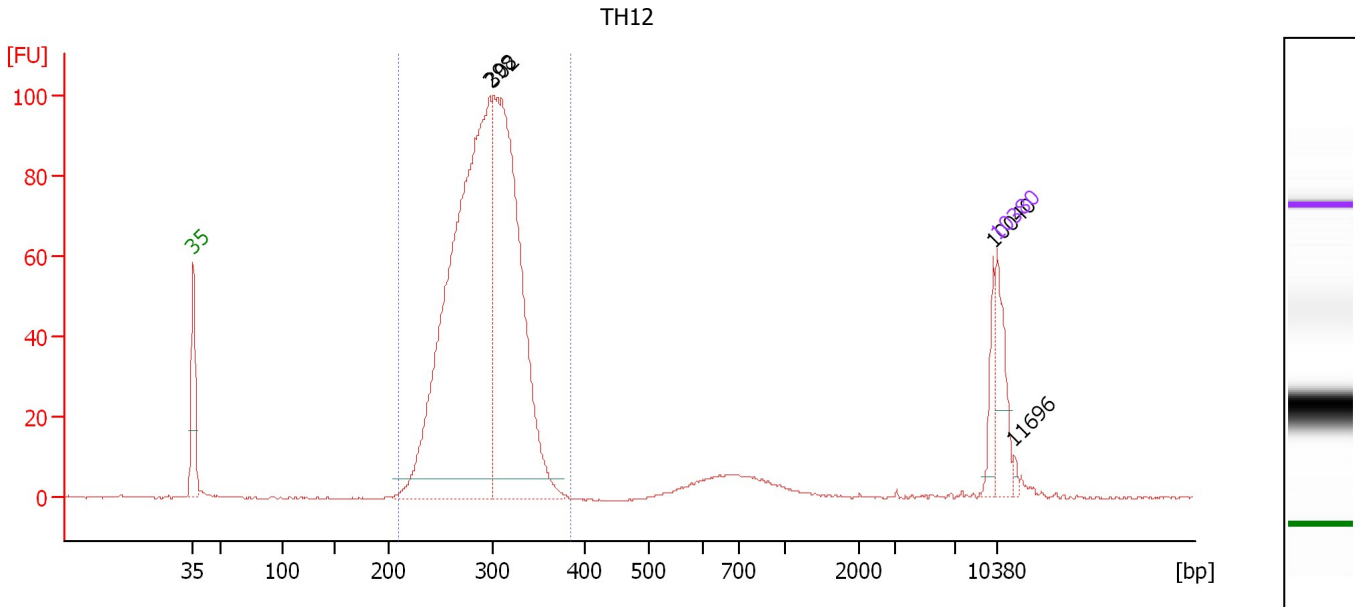
**Region table for sample 7 : TH11**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
230	6,493.4	291	1,237.08	400	869.2	90	9.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-20\2012-04-20\_004.xad

Created: 4/20/2012 1:30:59 PM  
 Modified: 4/23/2012 11:31:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : TH12**

Number of peaks found: 4      Corr. Area 1: 1,042.0  
 Noise: 0.2

**Peak table for sample 8 : TH12**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	298	1,352.78	6,866.9	
3	302	947.86	4,759.3	
4	10,040	37.44	5.6	
5	10,380	75.00	10.9	Upper Marker
6	11,696	0.00	0.0	

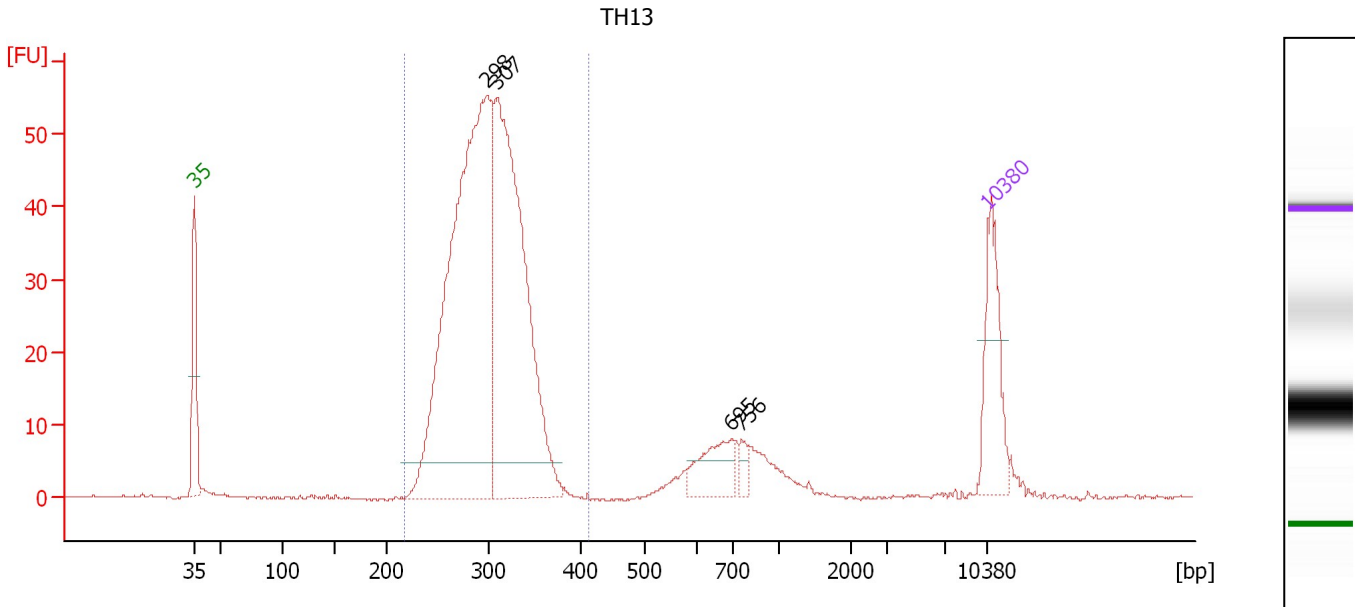
**Region table for sample 8 : TH12**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
211	12,233.6	293	2,338.43	386	1,042.0	92	10.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-20\2012-04-20\_004.xad

Created: 4/20/2012 1:30:59 PM  
 Modified: 4/23/2012 11:31:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : TH13**

Number of peaks found: 4      Corr. Area 1: 604.3  
 Noise: 0.1

**Peak table for sample 9 : TH13**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	298	771.54	3,927.4	
3	307	574.92	2,834.6	
4	695	55.14	120.2	
5	756	12.92	25.9	
6	10,380	75.00	10.9	Upper Marker

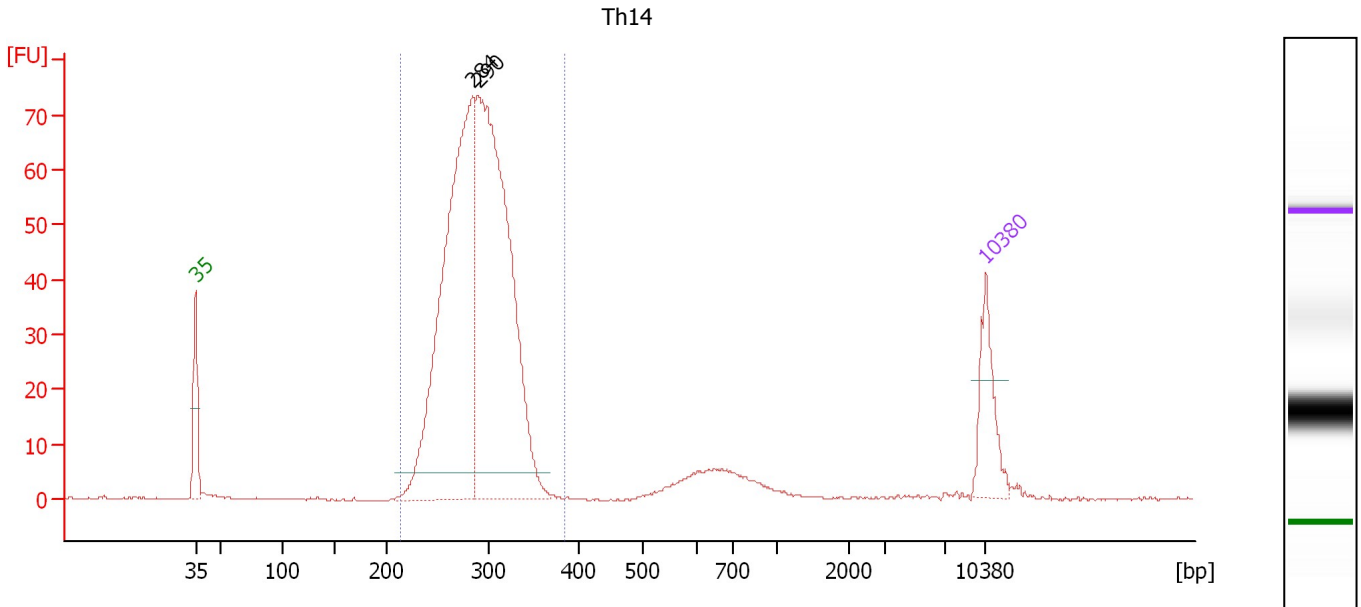
**Region table for sample 9 : TH13**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
218	6,980.8	299	1,362.66	413	604.3	87	10.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-20\2012-04-20\_004.xad

Created: 4/20/2012 1:30:59 PM  
 Modified: 4/23/2012 11:31:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : Th14**

Number of peaks found: 2                      Corr. Area 1: 730.1  
 Noise: 0.1

**Peak table for sample 10 : Th14**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	284	857.85	4,581.5	
3	290	915.62	4,784.7	
4	10,380	75.00	10.9	Upper Marker

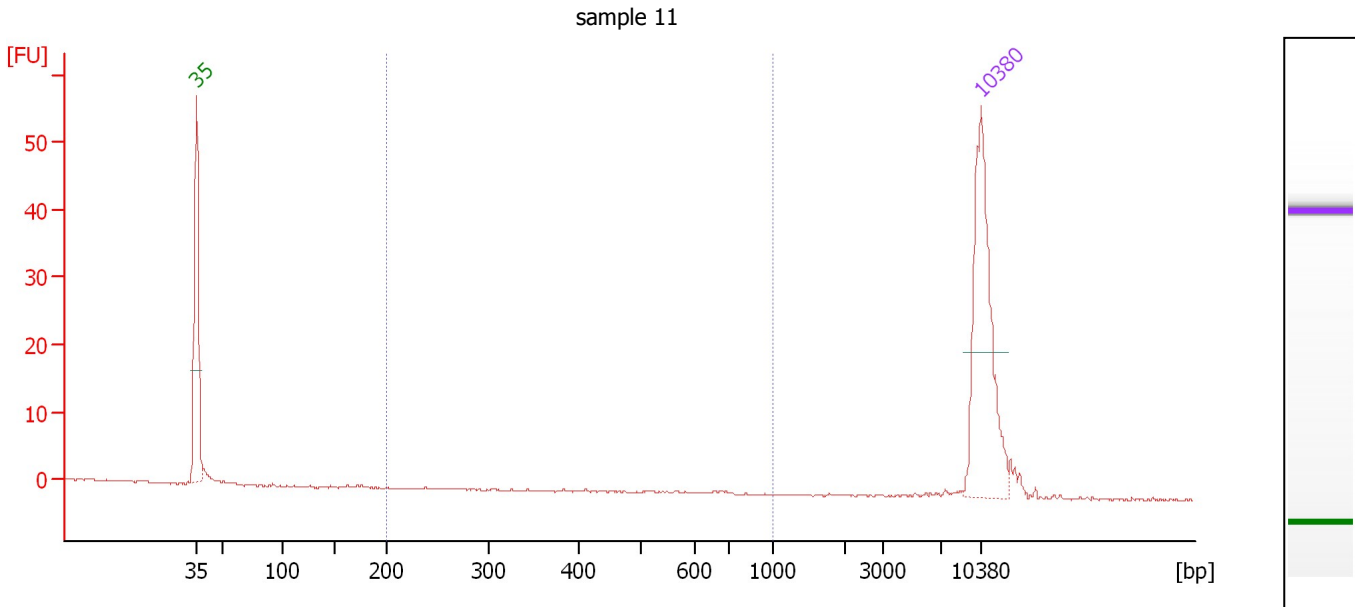
**Region table for sample 10 : Th14**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
214	9,309.4	289	1,759.09	383	730.1	93	9.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-20\2012-04-20\_004.xad

Created: 4/20/2012 1:30:59 PM  
 Modified: 4/23/2012 11:31:18 AM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Corr. Area 1: 0.1  
 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	10,380	75.00	10.9	Upper Marker

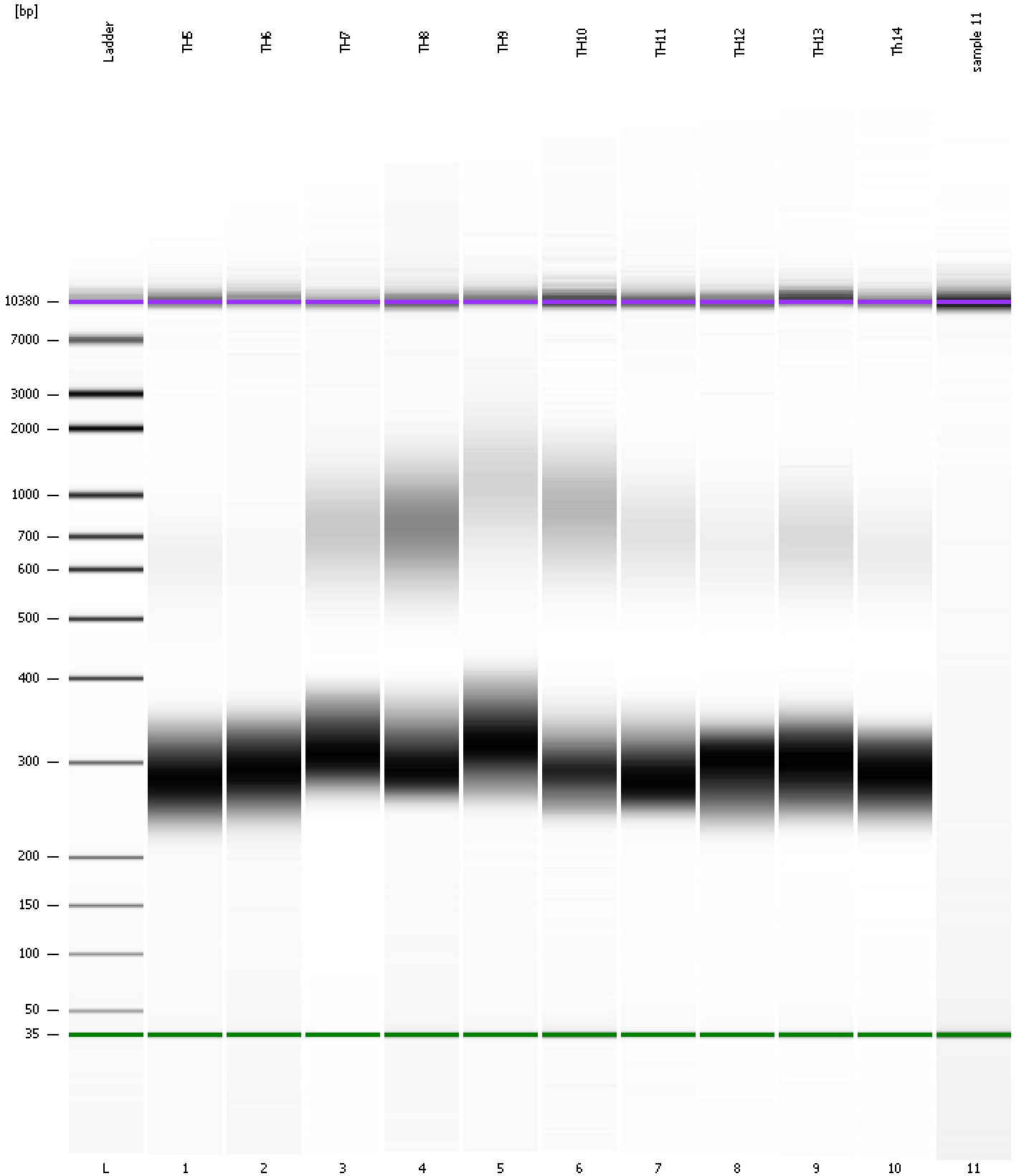
**Region table for sample 11 : sample 11**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	0.1	673	0.06	1,000	0.1	1	1.4	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-20\2012-04-20\_004.xad

Created: 4/20/2012 1:30:59 PM  
Modified: 4/23/2012 11:31:18 AM

**Gel Image**





Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-20\2012-04-20\_004.xad

Created: 4/20/2012 1:30:59 PM  
 Modified: 4/23/2012 11:31:18 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		4/20/2012 2:12:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-04-20\2012-04-20_004.xad)		Instrument	Run		4/20/2012 1:31:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/20/2012 1:31:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/20/2012 1:31:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/20/2012 1:31:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/20/2012 1:31:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/20/2012 1:31:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/20/2012 1:31:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1