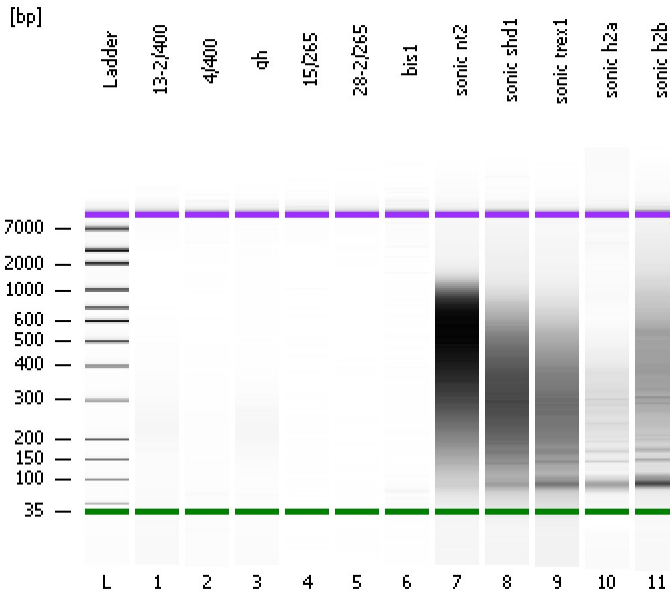


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-14\2013-06-14\_004.xad

Created: 6/14/2013 4:11:03 PM  
Modified: 6/14/2013 4:51:33 PM

**Electrophoresis File Run Summary**



Instrument Information:

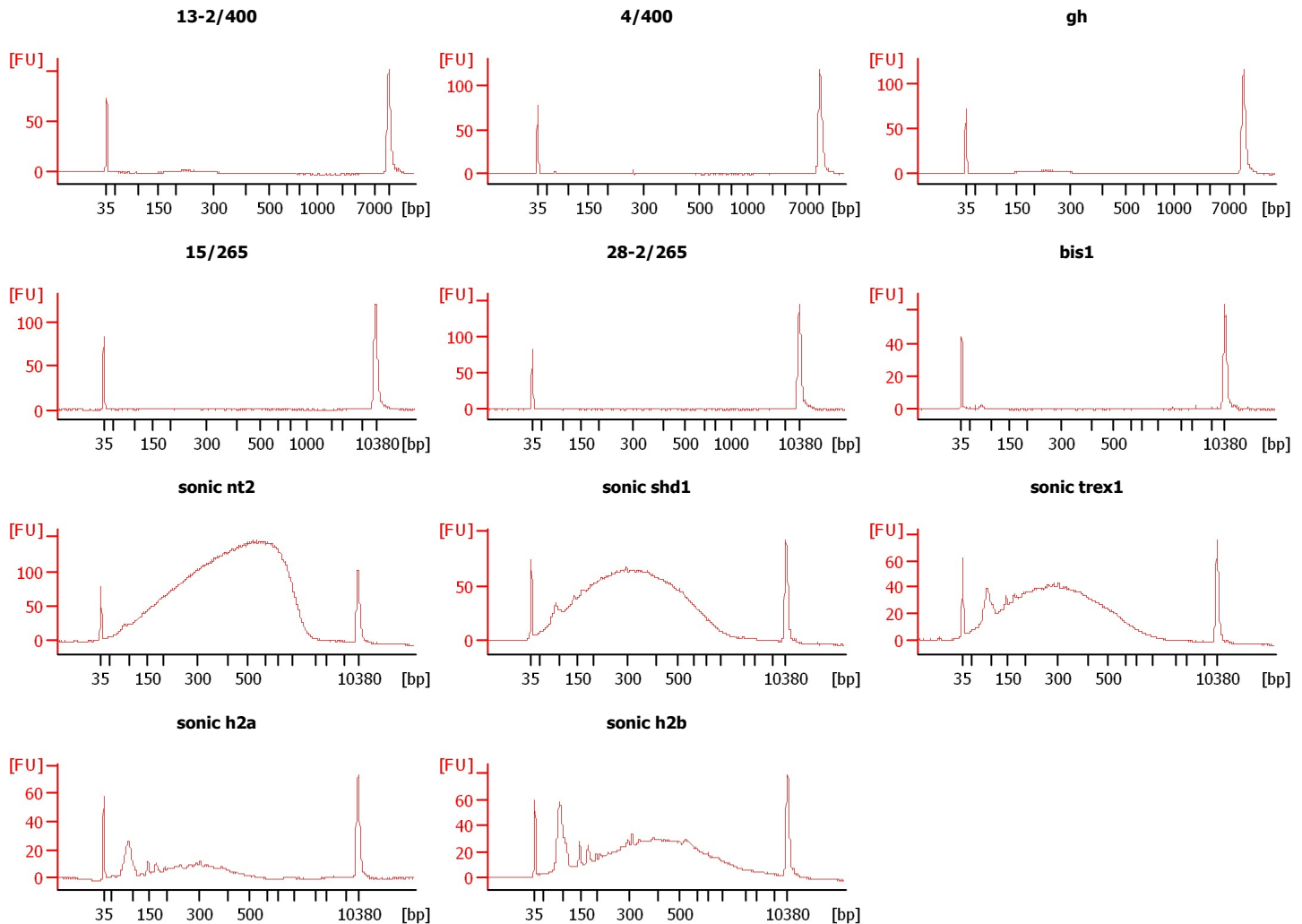
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-14\2013-06-14\_004.xad

Created: 6/14/2013 4:11:03 PM  
 Modified: 6/14/2013 4:51:33 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
13-2/400		<input type="checkbox"/>	✓			
4/400		<input type="checkbox"/>	✓			
gh		<input type="checkbox"/>	✓			
15/265		<input type="checkbox"/>	✓			
28-2/265		<input type="checkbox"/>	✓			
bis1		<input type="checkbox"/>	✓			
sonic nt2		<input type="checkbox"/>	✓			
sonic shd1		<input type="checkbox"/>	✓			
sonic trex1		<input type="checkbox"/>	✓			
sonic h2a		<input type="checkbox"/>	✓			
sonic h2b		<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\2013-06-14\2013-06-14\_004.xad

Created: 6/14/2013 4:11:03 PM  
Modified: 6/14/2013 4:51:33 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/ $\mu$ l] : 1950  
Uses Standard Area for Ladder Fragments  
Lower Marker Concentration [pg/ $\mu$ l] : 125  
Upper Marker Concentration [pg/ $\mu$ l] : 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

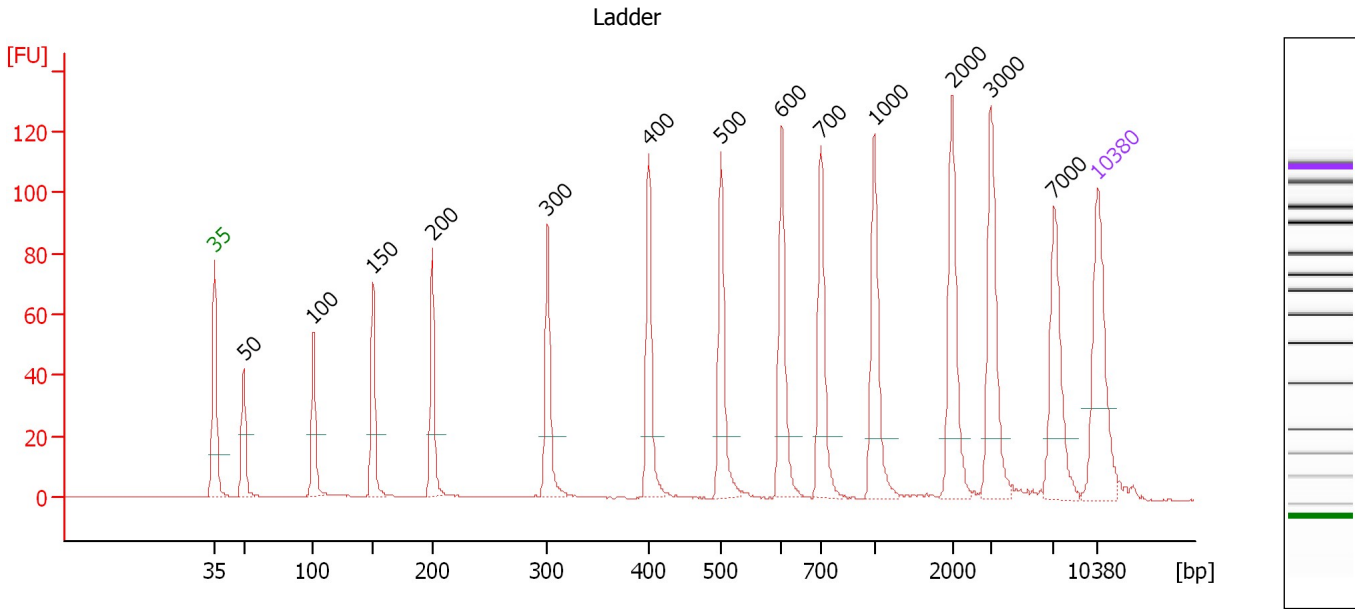
**Ladder**

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\2013-06-14\2013-06-14\_004.xad

Created: 6/14/2013 4:11:03 PM  
 Modified: 6/14/2013 4:51:33 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

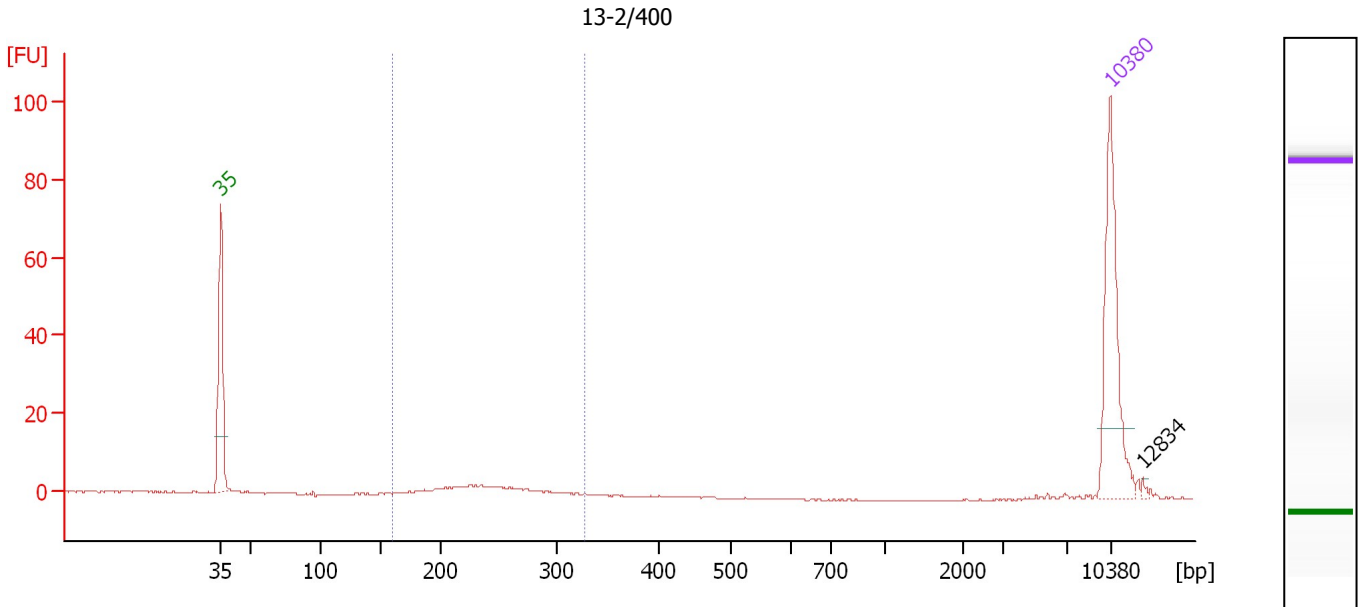
**Peak table for Ladder**

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\2013-06-14\2013-06-14\_004.xad

Created: 6/14/2013 4:11:03 PM  
 Modified: 6/14/2013 4:51:33 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 13-2/400**

Number of peaks found: 1                      Corr. Area 1: 27.3  
 Noise: 0.2

**Peak table for sample 1 : 13-2/400**

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
3	12,834	0.00	0.0	

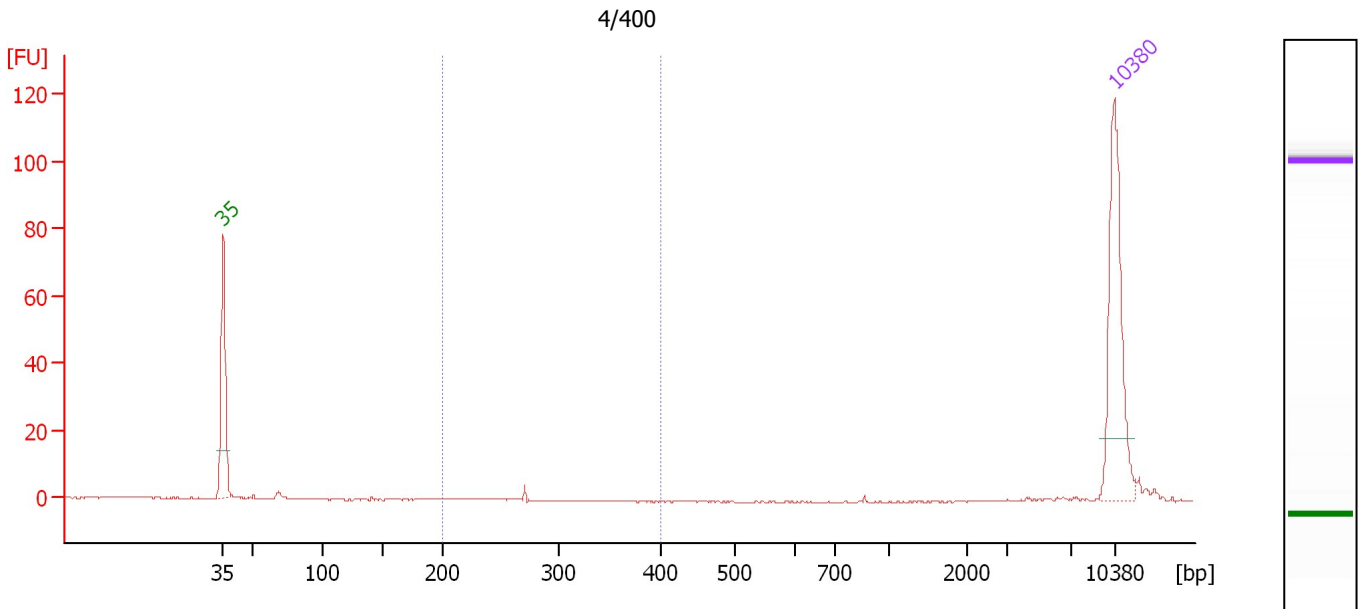
**Region table for sample 1 : 13-2/400**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
160	329	240	222.4	34.58	27.3	75	14.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-14\2013-06-14\_004.xad

Created: 6/14/2013 4:11:03 PM  
 Modified: 6/14/2013 4:51:33 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0  
 Noise: 0.1  
 Corr. Area 1: 0.9

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

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

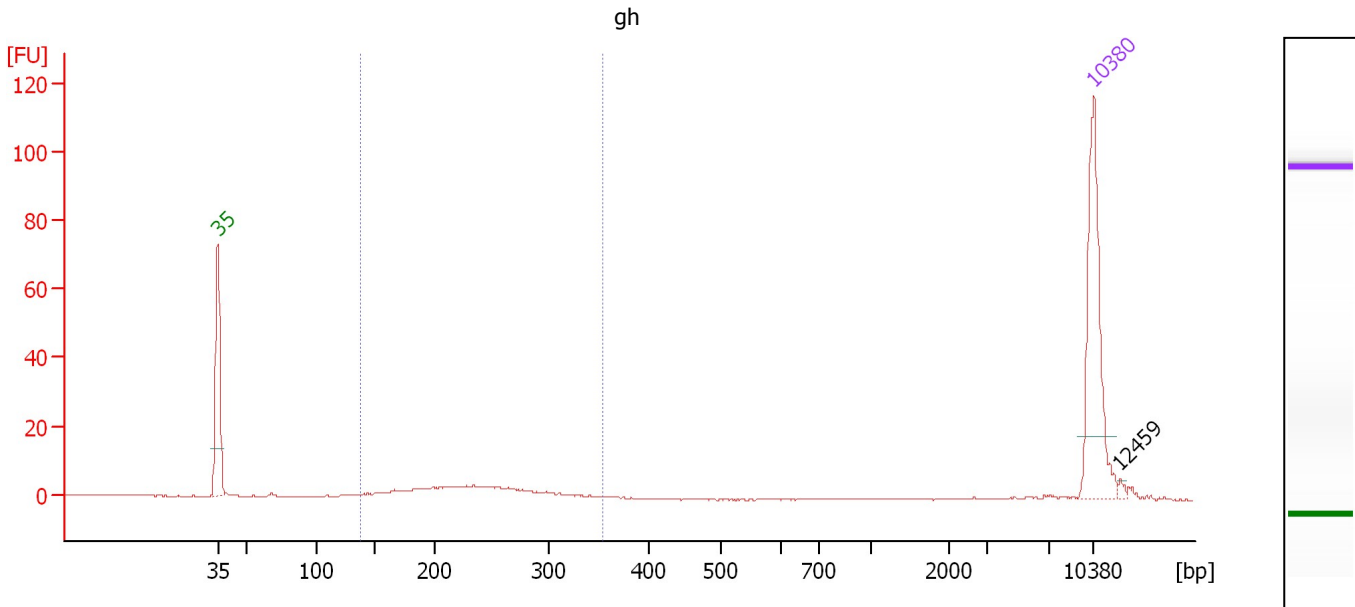
**Region table for sample 2 : 4/400**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	400	270	4.9	0.88	0.9	8	1.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-14\2013-06-14\_004.xad

Created: 6/14/2013 4:11:03 PM  
 Modified: 6/14/2013 4:51:33 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : gh**

Number of peaks found: 1                      Corr. Area 1: 58.2  
 Noise: 0.1

**Peak table for sample 3 : 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
3	12,459	0.00	0.0	

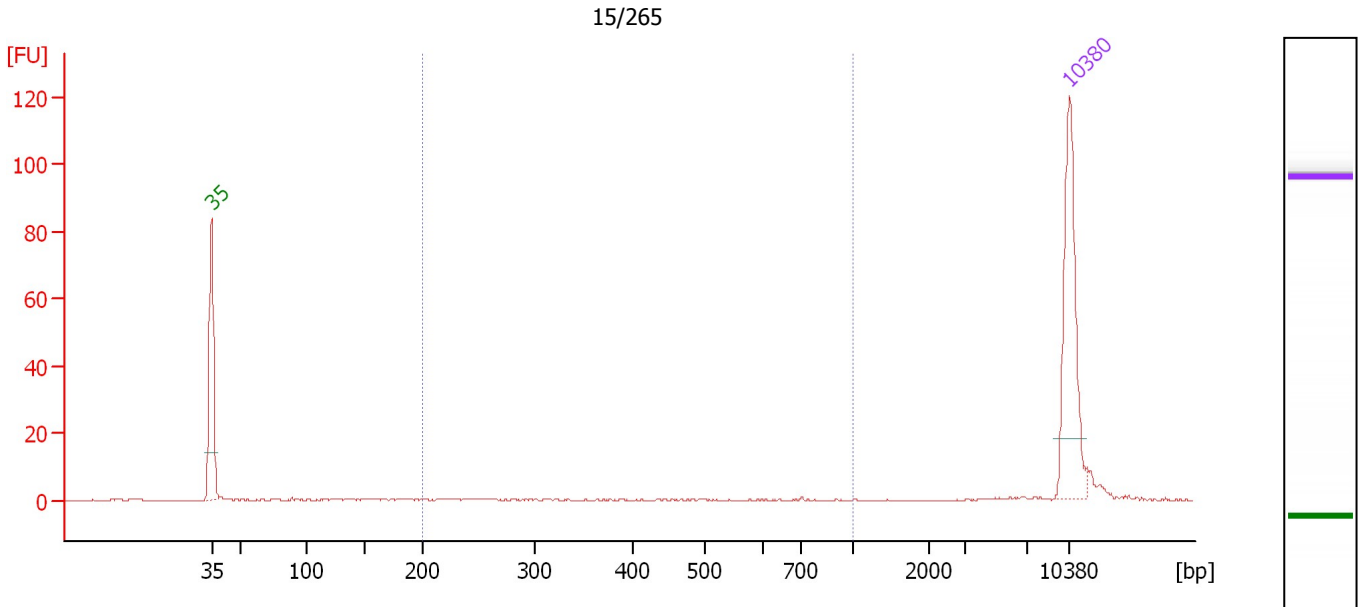
**Region table for sample 3 : gh**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
138	354	233	439.4	64.20	58.2	79	19.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-14\2013-06-14\_004.xad

Created: 6/14/2013 4:11:03 PM  
 Modified: 6/14/2013 4:51:33 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 15/265**

Number of peaks found: 0      Corr. Area 1: 6.1  
 Noise: 0.2

**Peak table for sample 4 : 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

**Region table for sample 4 : 15/265**

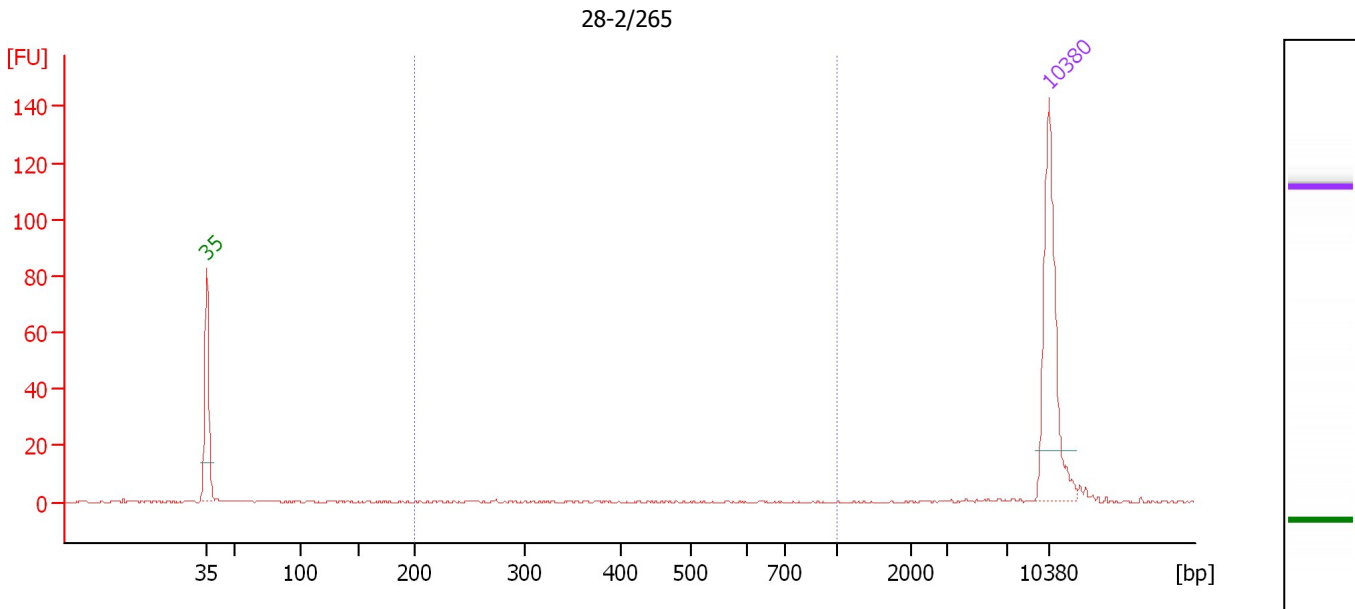
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	392	28.8	5.92	6.1	20	43.8	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-14\2013-06-14\_004.xad

Created: 6/14/2013 4:11:03 PM  
 Modified: 6/14/2013 4:51:33 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 28-2/265**

Number of peaks found: 0      Corr. Area 1: 1.5  
 Noise: 0.2

**Peak table for sample 5 : 28-2/265**

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

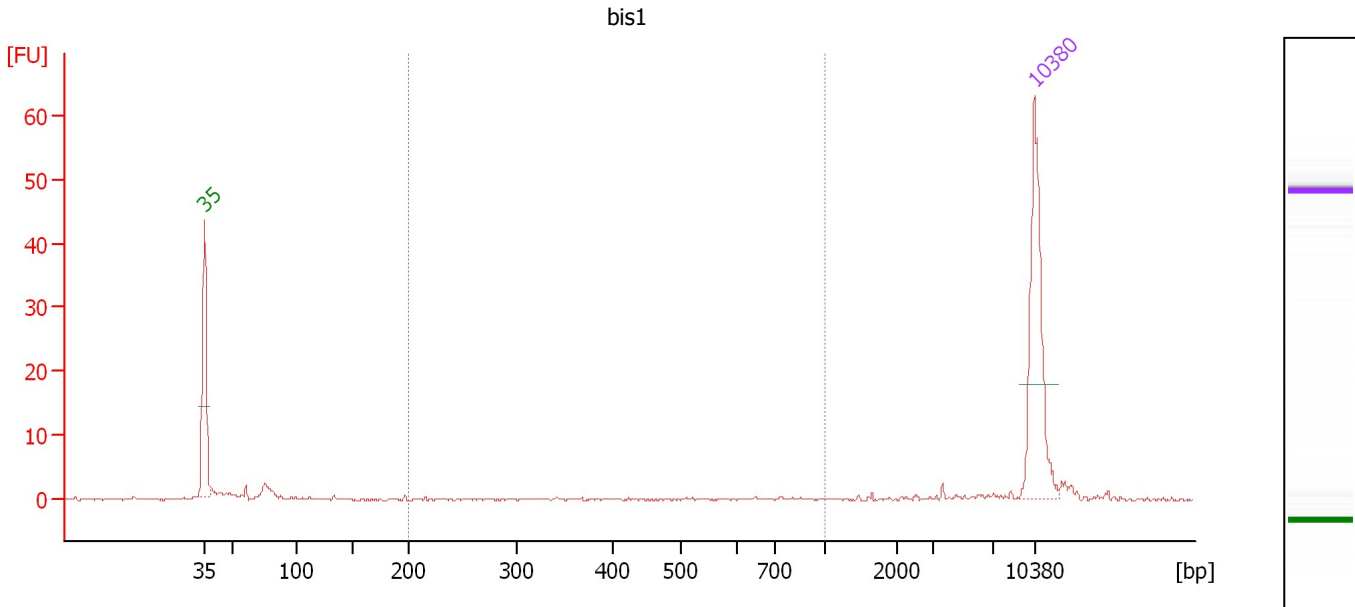
**Region table for sample 5 : 28-2/265**

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	305	6.6	1.21	1.5	7	28.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-14\2013-06-14\_004.xad

Created: 6/14/2013 4:11:03 PM  
 Modified: 6/14/2013 4:51:33 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : bis1**

Number of peaks found: 0                      Corr. Area 1: 5.4  
 Noise: 0.1

**Peak table for sample 6 : bis1**

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

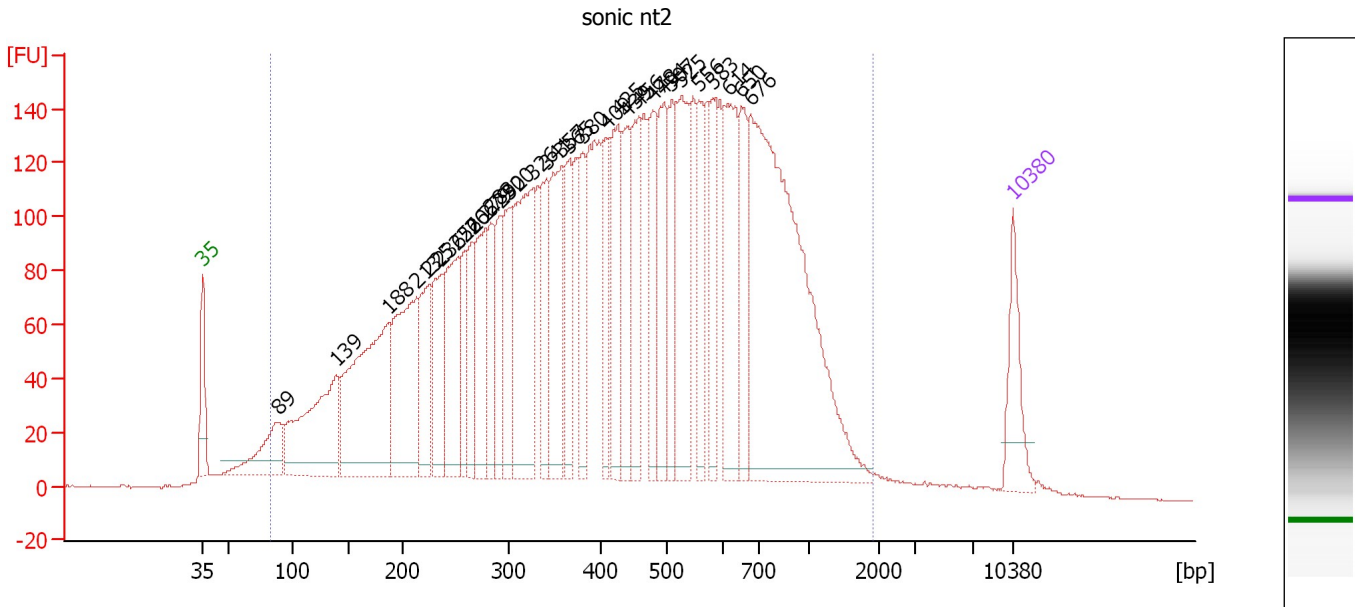
**Region table for sample 6 : bis1**

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	499	38.0	9.79	5.4	15	40.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-14\2013-06-14\_004.xad

Created: 6/14/2013 4:11:03 PM  
 Modified: 6/14/2013 4:51:33 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : sonic nt2**

Number of peaks found: 31                      Corr. Area 1: 6,490.5  
 Noise: 0.2

**Peak table for sample 7 : sonic nt2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	89	141.22	2,409.2	
3	139	349.05	3,793.6	
4	188	479.19	3,864.7	
5	213	320.27	2,275.7	
6	225	162.71	1,094.1	
7	236	162.09	1,038.8	
8	252	217.11	1,307.7	
9	260	104.43	609.5	
10	266	99.07	565.0	
11	279	176.89	959.7	
12	283	102.83	550.0	
13	292	119.04	616.9	
14	300	144.97	731.0	
15	326	333.05	1,546.5	
16	341	145.46	646.0	
17	357	209.63	890.6	
18	365	130.54	542.4	
19	380	121.16	482.9	
20	409	104.70	387.8	
21	425	171.01	609.5	
22	439	146.04	504.4	
23	456	147.21	488.8	
24	478	139.69	442.8	
25	494	156.65	480.5	
26	507	114.81	343.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-14\2013-06-14\_004.xad


Created: 6/14/2013 4:11:03 PM  
 Modified: 6/14/2013 4:51:33 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 7 : sonic nt2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	525	217.60	628.6	
28	556	114.86	312.8	
29	583	103.73	269.4	
30	614	206.47	509.3	
31	650	126.98	296.2	
32	676	831.75	1,864.2	
33	▶ 10,380	75.00	10.9	Upper Marker

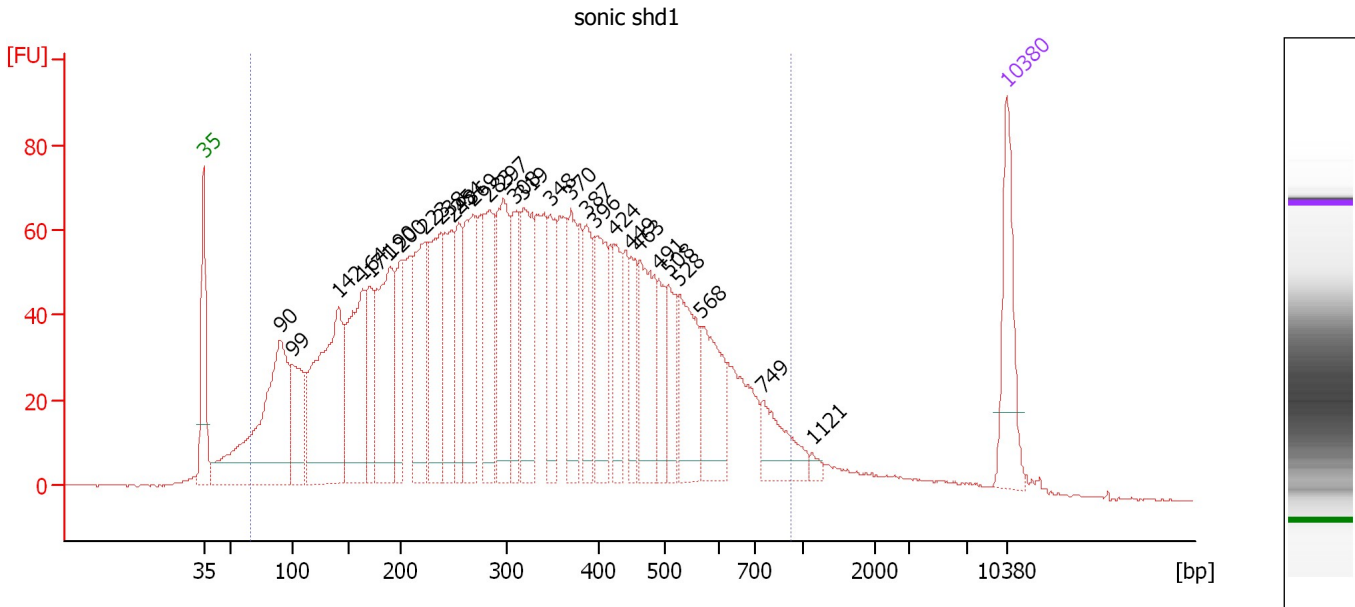
#### Region table for sample 7 : sonic nt2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
82	1,916	474	37,489.8	7,355.39	6,490.5	97	55.1	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-14\2013-06-14\_004.xad

Created: 6/14/2013 4:11:03 PM  
 Modified: 6/14/2013 4:51:33 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : sonic shd1**

Number of peaks found: 29                      Corr. Area 1: 3,264.3  
 Noise: 0.1

**Peak table for sample 8 : sonic shd1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	90	371.66	6,269.1	
3	99	127.04	1,943.1	
4	142	318.01	3,402.6	
5	164	220.83	2,042.4	
6	171	87.99	780.7	
7	190	212.90	1,701.5	
8	200	83.93	635.9	
9	223	163.20	1,109.4	
10	238	151.02	960.8	
11	248	126.62	772.5	
12	254	91.26	543.4	
13	269	156.74	883.8	
14	283	142.71	762.8	
15	297	158.24	806.7	
16	308	89.67	440.5	
17	319	152.92	726.7	
18	348	89.94	391.9	
19	370	89.90	367.8	
20	387	78.36	306.7	
21	396	111.09	425.3	
22	424	65.56	234.3	
23	449	53.95	182.0	
24	463	121.56	397.9	
25	491	49.74	153.5	
26	508	64.62	192.8	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-14\2013-06-14\_004.xad


Created: 6/14/2013 4:11:03 PM  
 Modified: 6/14/2013 4:51:33 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 8 : sonic shd1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	528	104.65	300.2	
28	568	96.01	256.0	
29	749	61.71	124.7	
30	1,121	6.50	8.8	
31	10,380	75.00	10.9	Upper Marker

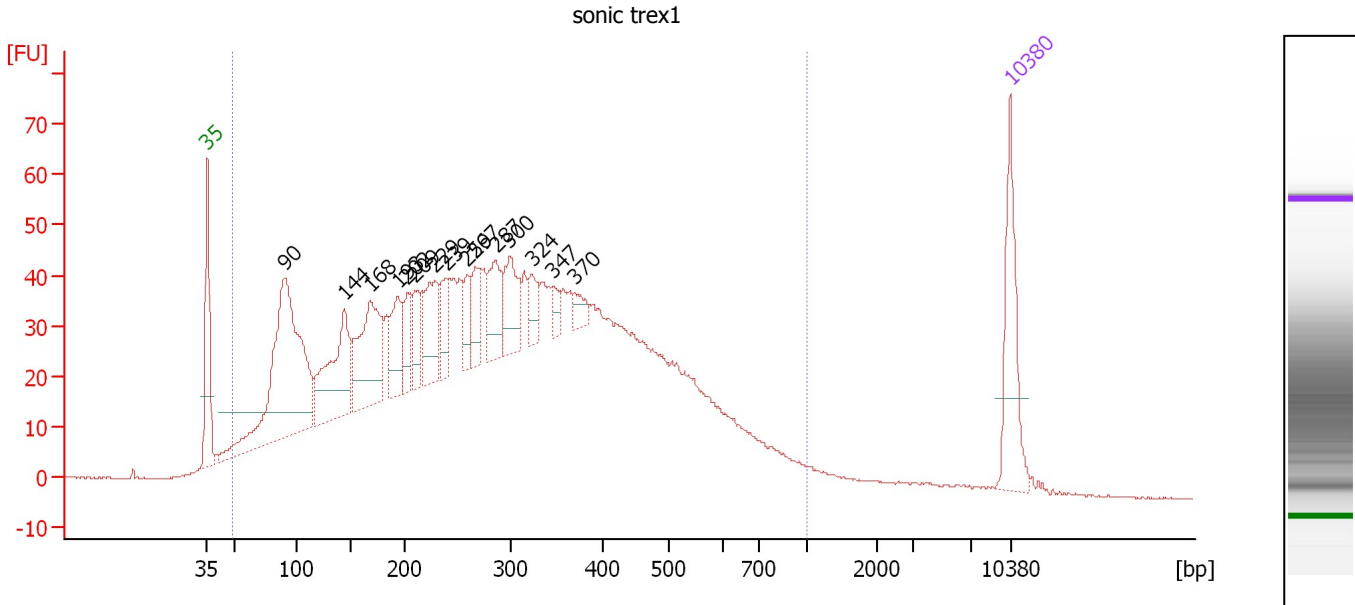
#### Region table for sample 8 : sonic shd1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
67	928	337	30,456.3	4,423.54	3,264.3	95	48.1	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-14\2013-06-14\_004.xad

Created: 6/14/2013 4:11:03 PM  
 Modified: 6/14/2013 4:51:33 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : sonic trex1**

Number of peaks found: 15                      Corr. Area 1: 2,155.0  
 Noise: 0.1

**Peak table for sample 9 : sonic trex1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	90	423.54	7,144.2	
3	144	165.70	1,748.7	
4	168	164.79	1,488.1	
5	193	65.41	513.4	
6	202	47.36	355.2	
7	209	44.08	319.3	
8	229	84.75	560.7	
9	239	44.04	279.0	
10	259	34.90	204.2	
11	267	40.46	229.5	
12	287	60.47	319.8	
13	300	66.25	334.9	
14	324	29.79	139.3	
15	347	12.55	54.8	
16	370	17.53	71.7	
17	10,380	75.00	10.9	Upper Marker

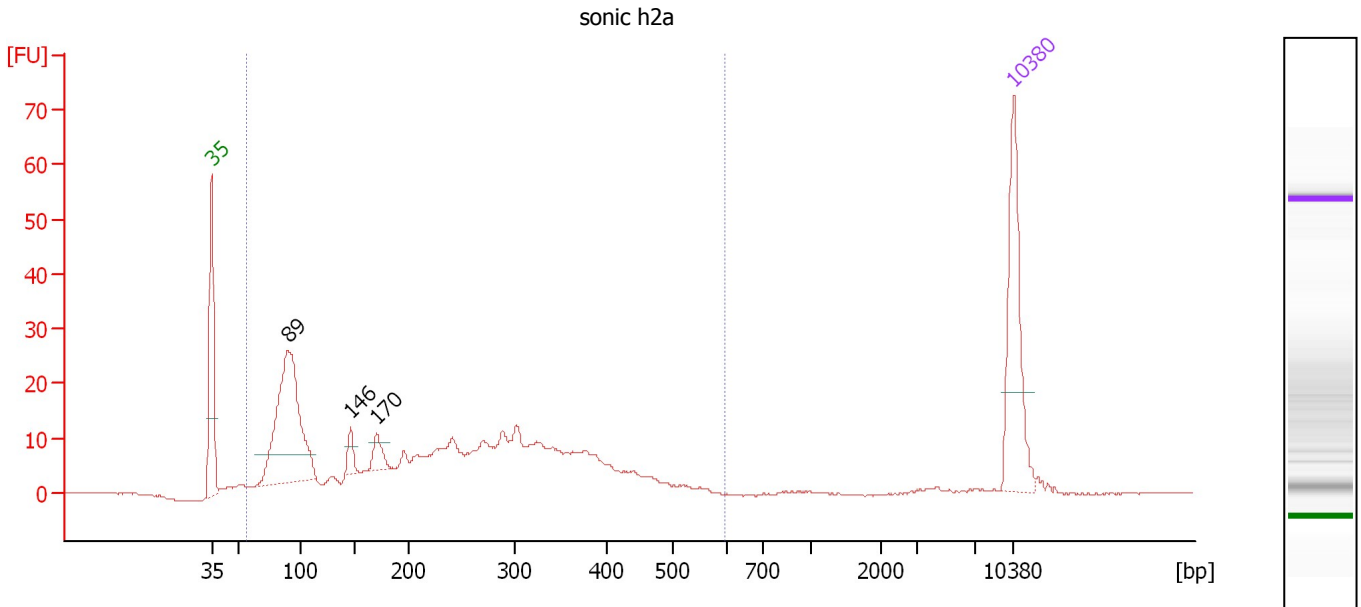
**Region table for sample 9 : sonic trex1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
50	1,000	309	30,732.0	3,848.71	2,155.0	97	52.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-14\2013-06-14\_004.xad

Created: 6/14/2013 4:11:03 PM  
 Modified: 6/14/2013 4:51:33 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : sonic h2a**

Number of peaks found: 3                      Corr. Area 1: 439.1  
 Noise: 0.1

**Peak table for sample 10 : sonic h2a**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	89	235.93	3,996.4	
3	146	15.98	166.3	
4	170	19.74	176.1	
5	10,380	75.00	10.9	Upper Marker

**Region table for sample 10 : sonic h2a**

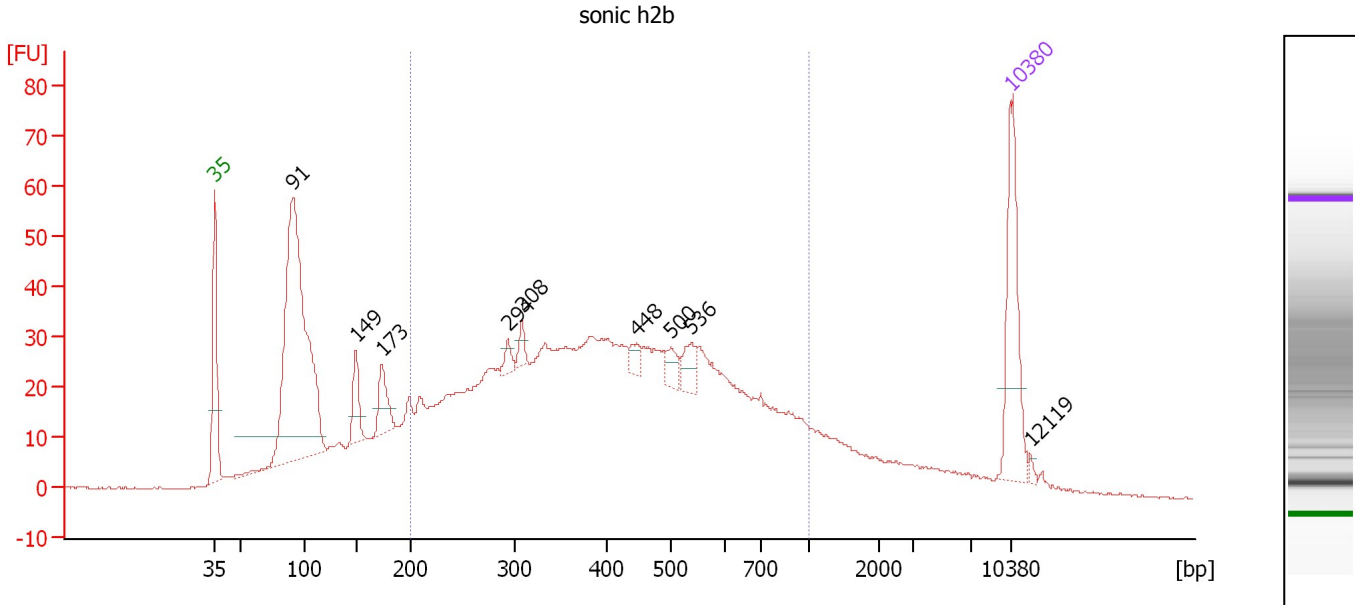
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
57	599	238	7,928.1	785.64	439.1	97	49.3	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-14\2013-06-14\_004.xad

Created: 6/14/2013 4:11:03 PM  
 Modified: 6/14/2013 4:51:33 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : sonic h2b**

Number of peaks found: 9                      Corr. Area 1: 1,110.8  
 Noise: 0.1

**Peak table for sample 11 : sonic h2b**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	91	466.13	7,740.7	
3	149	37.94	386.5	
4	173	38.54	338.1	
5	294	11.16	57.5	
6	308	11.83	58.2	
7	448	9.93	33.6	
8	500	15.50	47.0	
9	536	19.65	55.5	
10	10,380	75.00	10.9	Upper Marker
11	12,119	0.00	0.0	

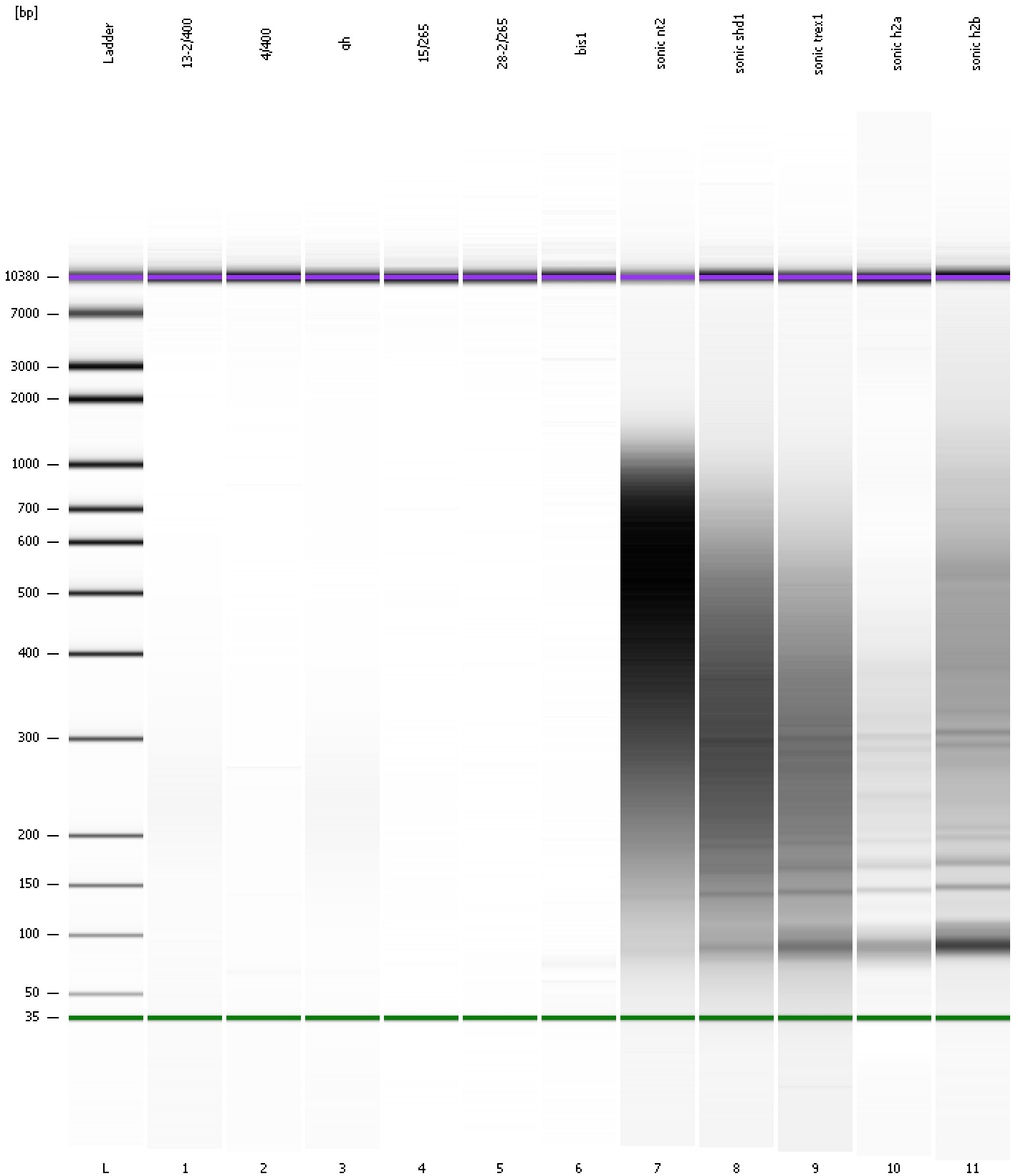
**Region table for sample 11 : sonic h2b**

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	440	6,963.5	1,662.62	1,110.8	64	38.8	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-14\2013-06-14\_004.xad

Created: 6/14/2013 4:11:03 PM  
Modified: 6/14/2013 4:51:33 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-14\2013-06-14\_004.xad

Created: 6/14/2013 4:11:03 PM  
 Modified: 6/14/2013 4:51:33 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		6/14/2013 4:51:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-06-14\2013-06-14_004.xad)		Instrument	Run		6/14/2013 4:11:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/14/2013 4:11:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/14/2013 4:11:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/14/2013 4:11:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/14/2013 4:11:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/14/2013 4:11:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/14/2013 4:11:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1