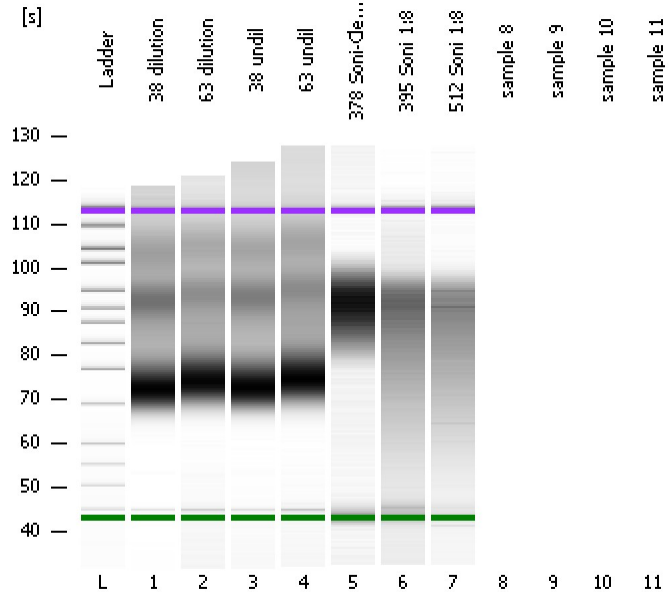


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-23\2013-01-23\_001.xad

Created: 1/23/2013 12:13:07 PM  
Modified: 1/23/2013 12:44:23 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

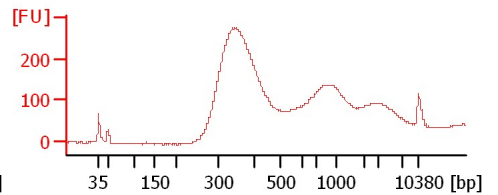
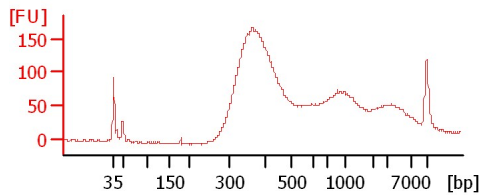
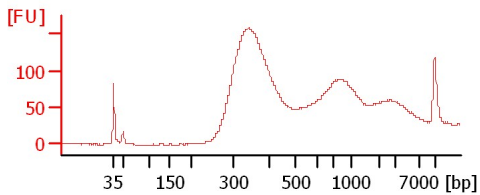
Chip Information:

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

**38 dilution**

**63 dilution**

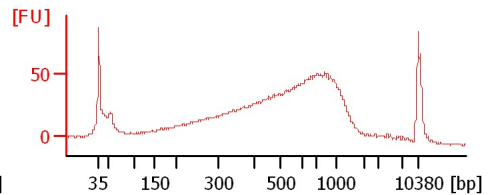
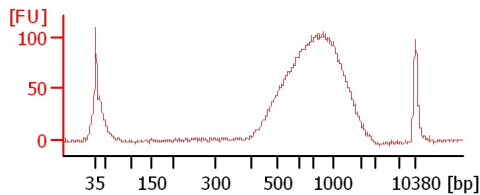
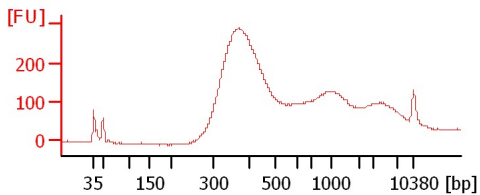
**38 undil**



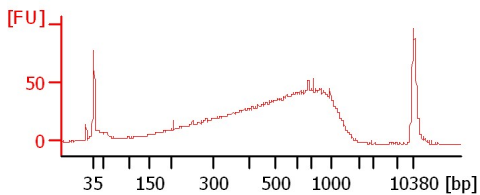
**63 undil**

**378 Soni-Cleaned**

**395 Soni 1:8**



**512 Soni 1:8**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-23\2013-01-23\_001.xad

Created: 1/23/2013 12:13:07 PM  
 Modified: 1/23/2013 12:44:23 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
38 dilution		<input type="checkbox"/>	✓			
63 dilution		<input type="checkbox"/>	✓			
38 undil		<input type="checkbox"/>	✓			
63 undil		<input type="checkbox"/>	✓			
378 Soni-Cleaned		<input type="checkbox"/>	✓			
395 Soni 1:8		<input type="checkbox"/>	✓			
512 Soni 1:8		<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\2013-01-23\2013-01-23\_001.xad

Created: 1/23/2013 12:13:07 PM  
Modified: 1/23/2013 12:44:23 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

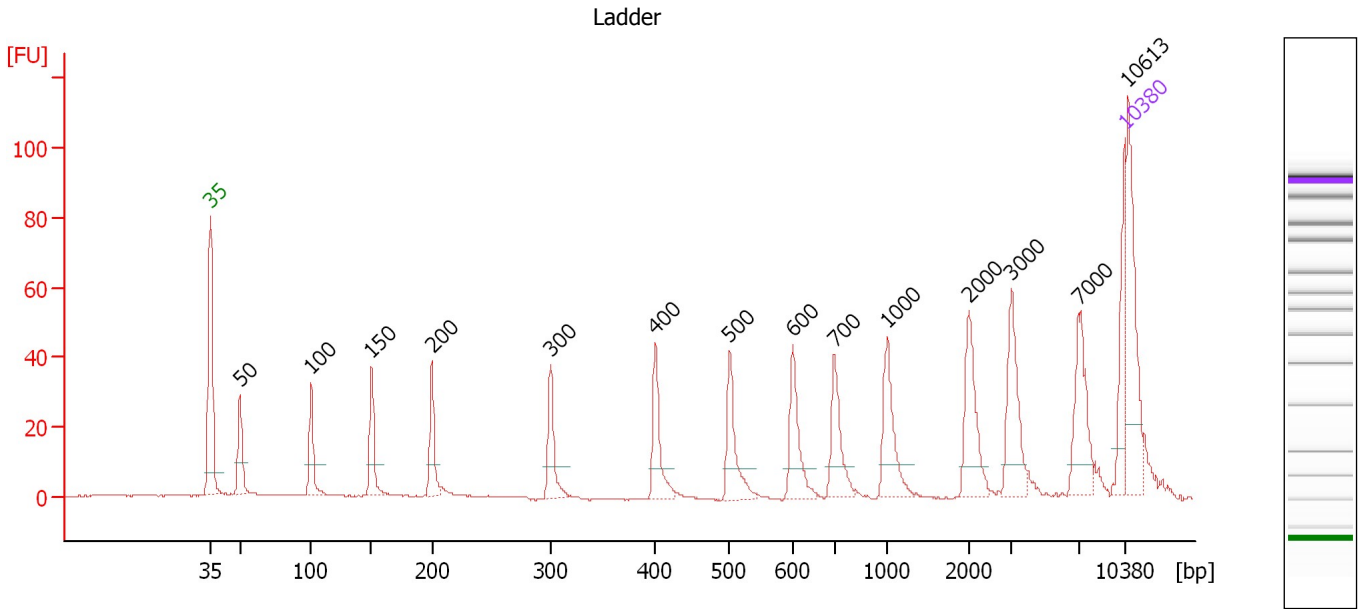
**Ladder**

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\2013-01-23\2013-01-23\_001.xad

Created: 1/23/2013 12:13:07 PM  
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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

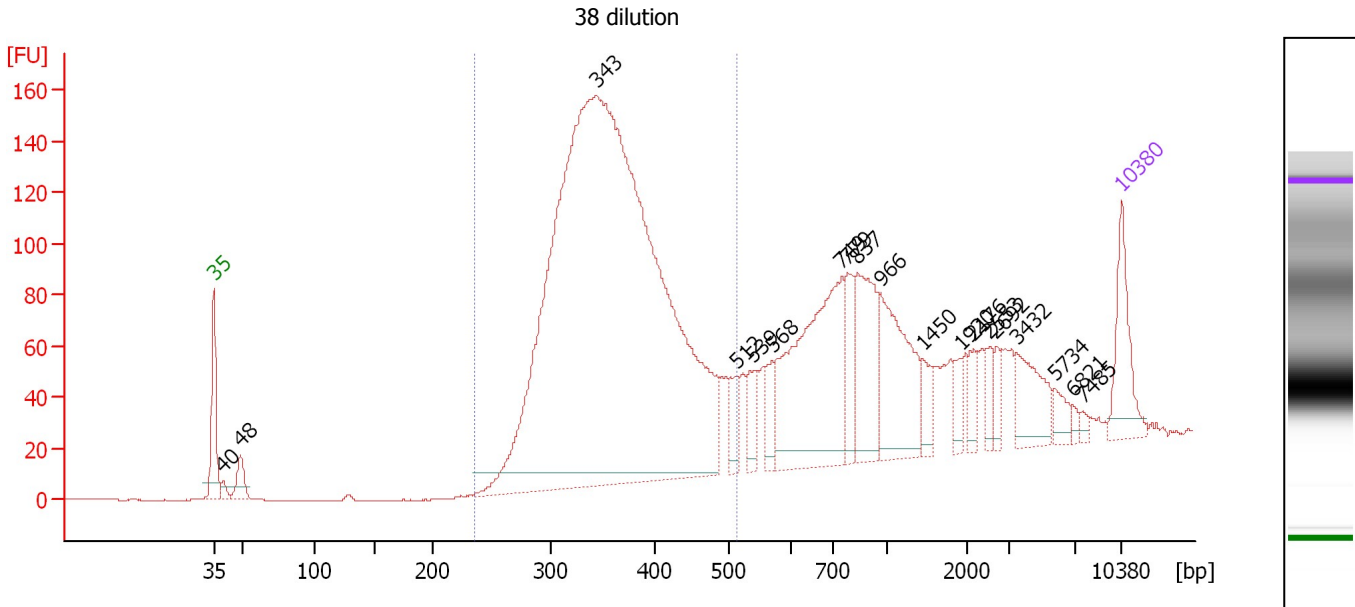
**Peak table for Ladder**

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	10,613	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-23\2013-01-23\_001.xad

Created: 1/23/2013 12:13:07 PM  
 Modified: 1/23/2013 12:44:23 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 38 dilution**

Number of peaks found: 19      Corr. Area 1: 2,041.7  
 Noise: 0.2

**Peak table for sample 1 : 38 dilution**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	40	16.72	639.8	
3	48	44.88	1,402.4	
4	343	2,555.08	11,290.5	
5	512	42.32	125.3	
6	539	44.37	124.7	
7	568	34.34	91.6	
8	749	354.41	717.0	
9	779	62.44	121.4	
10	837	142.36	257.8	
11	966	166.99	261.8	
12	1,450	32.00	33.4	
13	1,920	21.86	17.2	
14	2,176	24.22	16.9	
15	2,553	23.02	13.7	
16	2,692	18.74	10.5	
17	3,432	69.69	30.8	
18	5,734	21.18	5.6	
19	6,821	6.30	1.4	
20	7,485	6.58	1.3	
21	10,380	75.00	10.9	Upper Marker

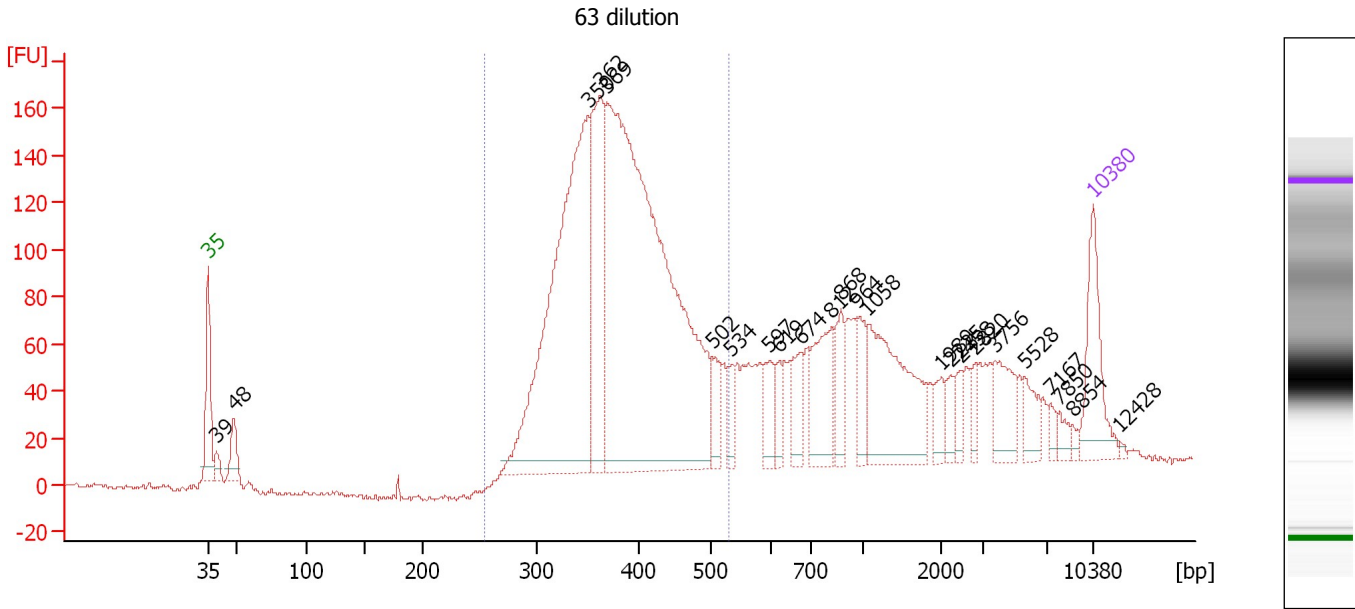
**Region table for sample 1 : 38 dilution**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
235	513	363	10,041.5	2,343.77	2,041.7	62	14.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-23\2013-01-23\_001.xad

Created: 1/23/2013 12:13:07 PM  
 Modified: 1/23/2013 12:44:23 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 63 dilution**

Number of peaks found: 24                      Corr. Area 1: 2,266.6  
 Noise: 1.2

**Peak table for sample 2 : 63 dilution**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	19.56	757.0	
3	48	45.73	1,434.9	
4	350	670.02	2,900.4	
5	362	222.03	928.9	
6	369	1,086.49	4,461.2	
7	502	38.42	115.9	
8	534	26.86	76.2	
9	597	37.41	94.9	
10	619	24.83	60.7	
11	674	43.34	97.5	
12	812	92.11	171.8	
13	868	42.84	74.8	
14	964	40.20	63.2	
15	1,058	167.04	239.3	
16	1,989	21.51	16.4	
17	2,225	18.20	12.4	
18	2,458	15.86	9.8	
19	2,820	14.63	7.9	
20	3,756	50.93	20.5	
21	5,528	28.60	7.8	
22	7,167	9.46	2.0	
23	7,850	11.72	2.3	
24	8,854	4.49	0.8	
25	10,380	75.00	10.9	Upper Marker
26	12,428	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-23\2013-01-23\_001.xad

Created: 1/23/2013 12:13:07 PM  
Modified: 1/23/2013 12:44:23 PM

**Electropherogram Summary Continued ...**

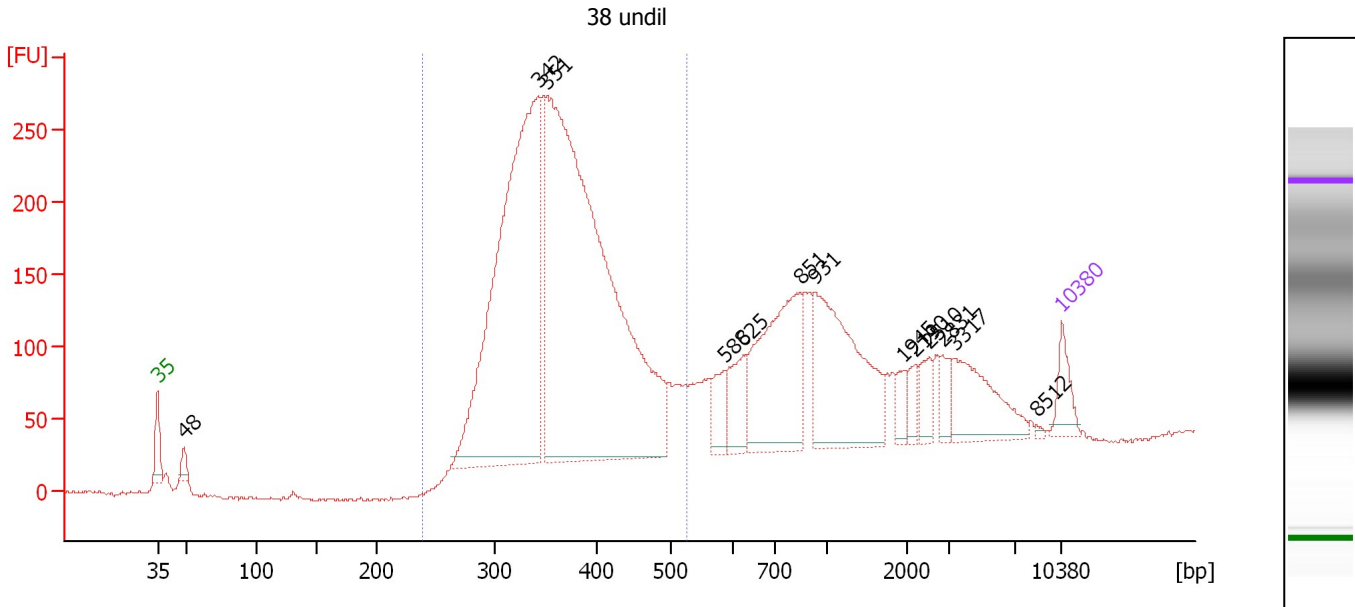
... Region table for sample 2 : 63 dilution

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
254	529	384	8,195.0	2,028.45	2,266.6	63	14.5	■

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-23\2013-01-23\_001.xad

Created: 1/23/2013 12:13:07 PM  
 Modified: 1/23/2013 12:44:23 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 38 undil**

Number of peaks found: 13                      Corr. Area 1: 3,532.2  
 Noise: 1.1

**Peak table for sample 3 : 38 undil**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	54.12	1,692.3	
3	342	2,066.13	9,140.7	
4	351	2,972.30	12,843.0	
5	588	101.66	261.8	
6	625	146.76	356.0	
7	851	562.75	1,002.2	
8	931	582.28	947.7	
9	1,945	45.51	35.4	
10	2,190	44.63	30.9	
11	2,510	66.15	39.9	
12	2,831	56.41	30.2	
13	3,317	226.94	103.7	
14	8,512	5.41	1.0	
15	10,380	75.00	10.9	Upper Marker

**Region table for sample 3 : 38 undil**

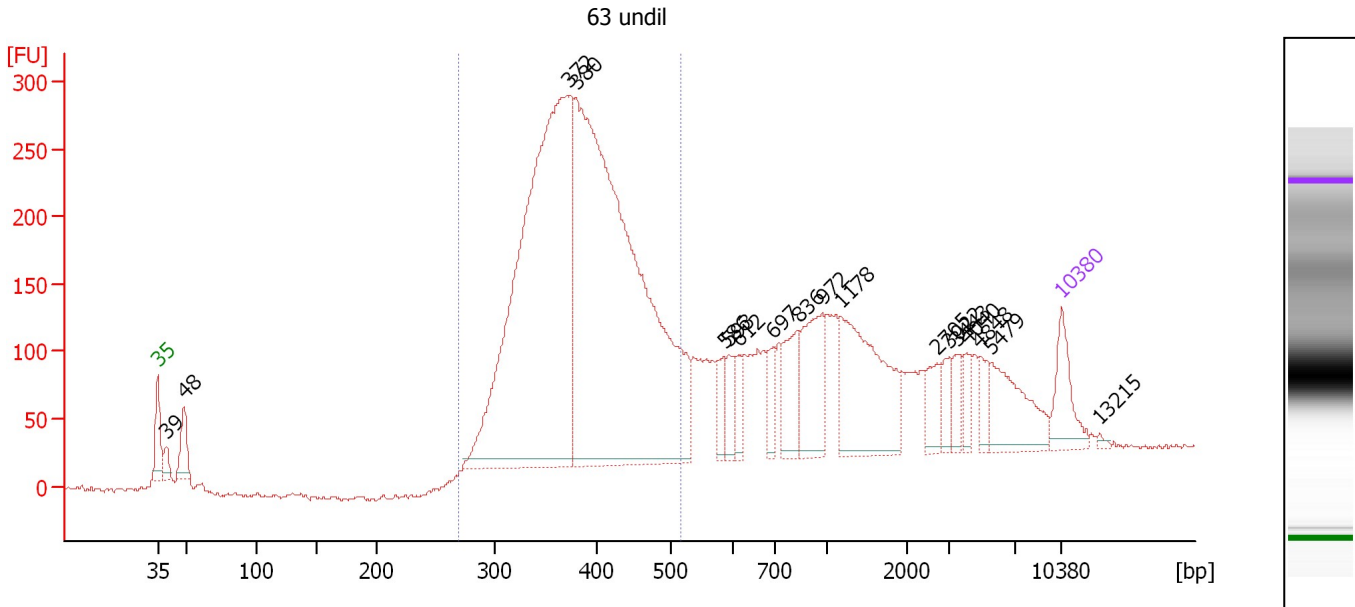
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
239	527	368	22,024.2	5,223.68	3,532.2	65	14.7	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-23\2013-01-23\_001.xad

Created: 1/23/2013 12:13:07 PM  
 Modified: 1/23/2013 12:44:23 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 63 undil**

Number of peaks found: 18      Corr. Area 1: 3,790.4  
 Noise: 1.6

**Peak table for sample 4 : 63 undil**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	33.58	1,289.9	
3	48	86.78	2,720.5	
4	372	1,535.12	6,258.4	
5	380	1,748.30	6,979.1	
6	586	49.21	127.2	
7	593	46.69	119.3	
8	612	40.21	99.6	
9	697	49.33	107.2	
10	836	103.76	188.1	
11	972	149.48	233.1	
12	1,178	276.68	355.9	
13	2,705	47.94	26.9	
14	3,022	32.03	16.1	
15	3,443	35.13	15.5	
16	4,040	31.45	11.8	
17	4,848	33.09	10.3	
18	5,479	123.22	34.1	
19	10,380	75.00	10.9	Upper Marker
20	13,215	0.00	0.0	

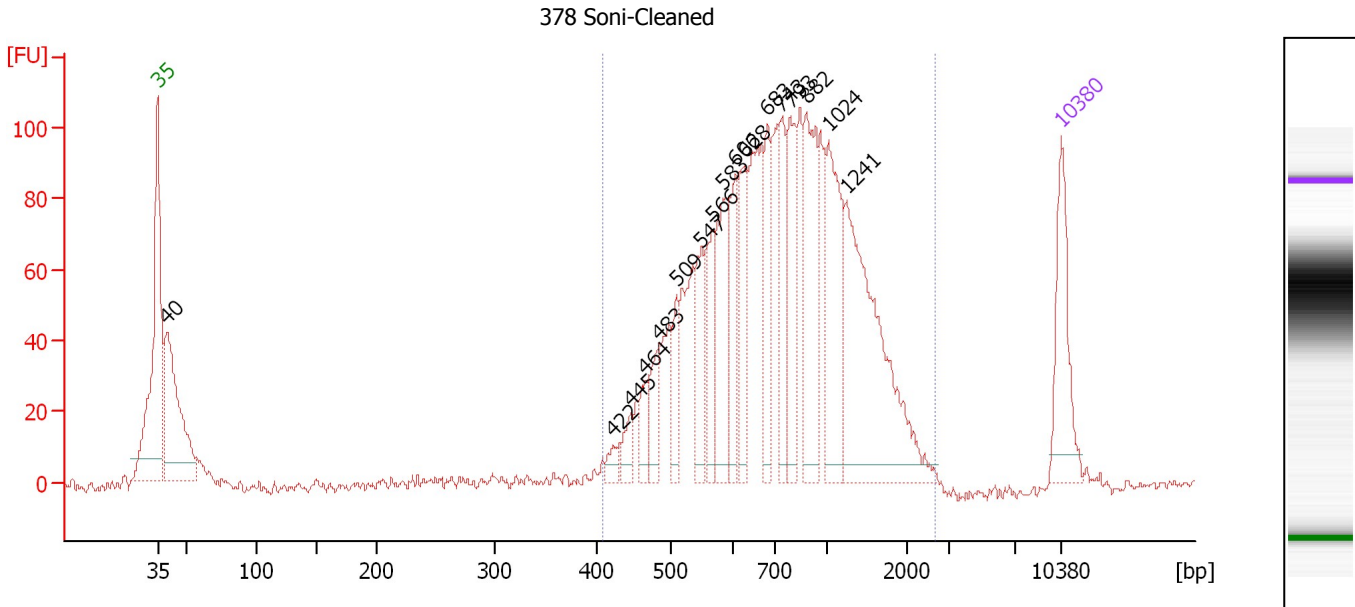
**Region table for sample 4 : 63 undil**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
271	514	387	12,878.4	3,220.73	3,790.4	61	13.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-23\2013-01-23\_001.xad

Created: 1/23/2013 12:13:07 PM  
 Modified: 1/23/2013 12:44:23 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 378 Soni-Cleaned**

Number of peaks found: 17      Corr. Area 1: 1,740.2  
 Noise: 1.5

**Peak table for sample 5 : 378 Soni-Cleaned**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	40	242.50	9,250.8	
3	422	13.62	48.9	
4	445	20.92	71.2	
5	464	27.96	91.3	
6	483	39.17	122.9	
7	509	39.34	117.0	
8	547	67.35	186.6	
9	566	62.80	168.0	
10	583	106.82	277.5	
11	606	63.56	159.0	
12	628	67.01	161.6	
13	683	69.08	153.2	
14	743	69.82	142.3	
15	793	83.60	159.8	
16	882	127.02	218.2	
17	1,024	127.50	188.7	
18	1,241	247.86	302.6	
19	10,380	75.00	10.9	Upper Marker

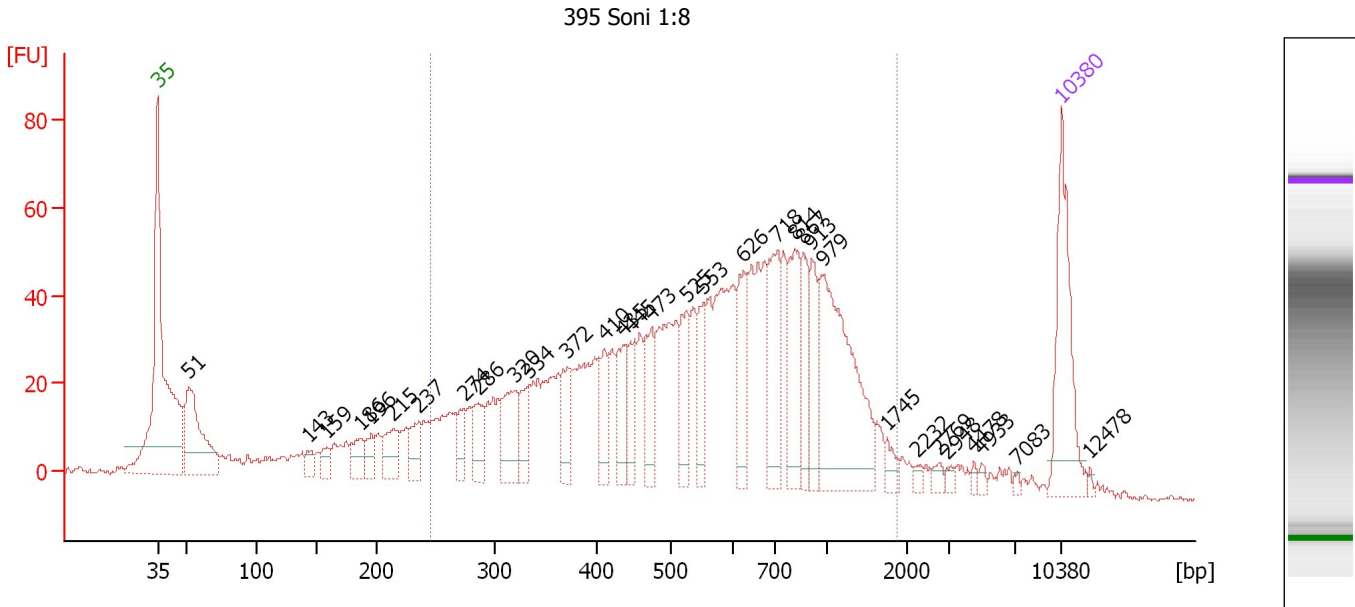
**Region table for sample 5 : 378 Soni-Cleaned**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
406	2,661	859	3,704.6	1,743.94	1,740.1	89	44.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-23\2013-01-23\_001.xad

Created: 1/23/2013 12:13:07 PM  
 Modified: 1/23/2013 12:44:23 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 395 Soni 1:8**

Number of peaks found: 32      Corr. Area 1: 1,445.0  
 Noise: 0.7

**Peak table for sample 6 : 395 Soni 1:8**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	51	122.71	3,622.6	
3	143	13.03	138.4	
4	159	14.76	140.8	
5	186	24.76	201.6	
6	196	18.67	144.4	
7	215	33.30	235.1	
8	237	26.22	167.7	
9	274	21.29	117.6	
10	286	31.87	168.7	
11	320	52.68	249.2	
12	334	31.06	141.0	
13	372	36.50	148.9	
14	410	34.85	128.6	
15	435	40.07	139.6	
16	445	30.44	103.6	
17	473	43.10	138.2	
18	525	45.80	132.3	
19	553	36.58	100.3	
20	626	53.28	129.0	
21	718	69.98	147.7	
22	814	63.62	118.4	
23	867	34.45	60.2	
24	913	39.72	65.9	
25	979	158.12	244.6	
26	1,745	10.15	8.8	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-23\2013-01-23\_001.xad


Created: 1/23/2013 12:13:07 PM  
 Modified: 1/23/2013 12:44:23 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 6 : 395 Soni 1:8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	2,232	3.72	2.5	
28	2,769	5.41	3.0	
29	2,948	3.40	1.7	
30	4,478	2.89	1.0	
31	4,933	3.51	1.1	
32	7,083	2.16	0.5	
33	10,380	75.00	10.9	Upper Marker
34	12,478	0.00	0.0	

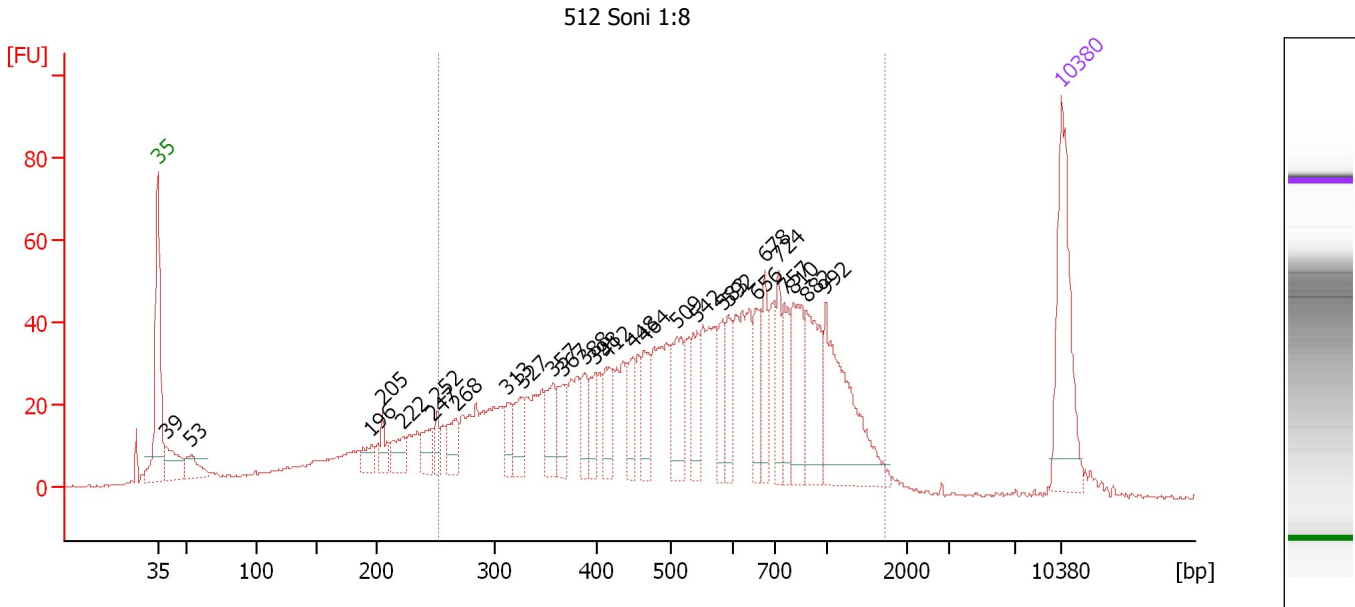
#### Region table for sample 6 : 395 Soni 1:8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
247	1,875	643	4,947.9	1,587.84	1,445.0	81	49.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-23\2013-01-23\_001.xad

Created: 1/23/2013 12:13:07 PM  
 Modified: 1/23/2013 12:44:23 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 512 Soni 1:8**

Number of peaks found: 28      Corr. Area 1: 1,348.1  
 Noise: 0.3

**Peak table for sample 7 : 512 Soni 1:8**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	38.73	1,499.6	
3	53	26.35	753.2	
4	196	14.89	115.1	
5	205	15.97	117.9	
6	222	20.97	143.0	
7	247	20.33	124.5	
8	252	14.91	89.7	
9	268	23.44	132.7	
10	313	17.81	86.1	
11	327	29.65	137.2	
12	357	29.14	123.6	
13	367	26.24	108.4	
14	388	22.84	89.3	
15	398	22.38	85.1	
16	412	30.52	112.3	
17	448	26.83	90.8	
18	464	31.87	104.1	
19	509	47.48	141.3	
20	542	33.42	93.4	
21	583	26.14	67.9	
22	592	26.54	67.9	
23	656	29.93	69.1	
24	678	32.22	72.0	
25	724	29.83	62.5	
26	757	27.40	54.9	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-23\2013-01-23\_001.xad

Created: 1/23/2013 12:13:07 PM  
Modified: 1/23/2013 12:44:23 PM

**Electropherogram Summary Continued ...****... Peak table for sample 7 : 512 Soni 1:8**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	810	51.31	96.0	
28	882	54.85	94.2	
29	992	99.75	152.4	
30	▶ 10,380	75.00	10.9	Upper Marker

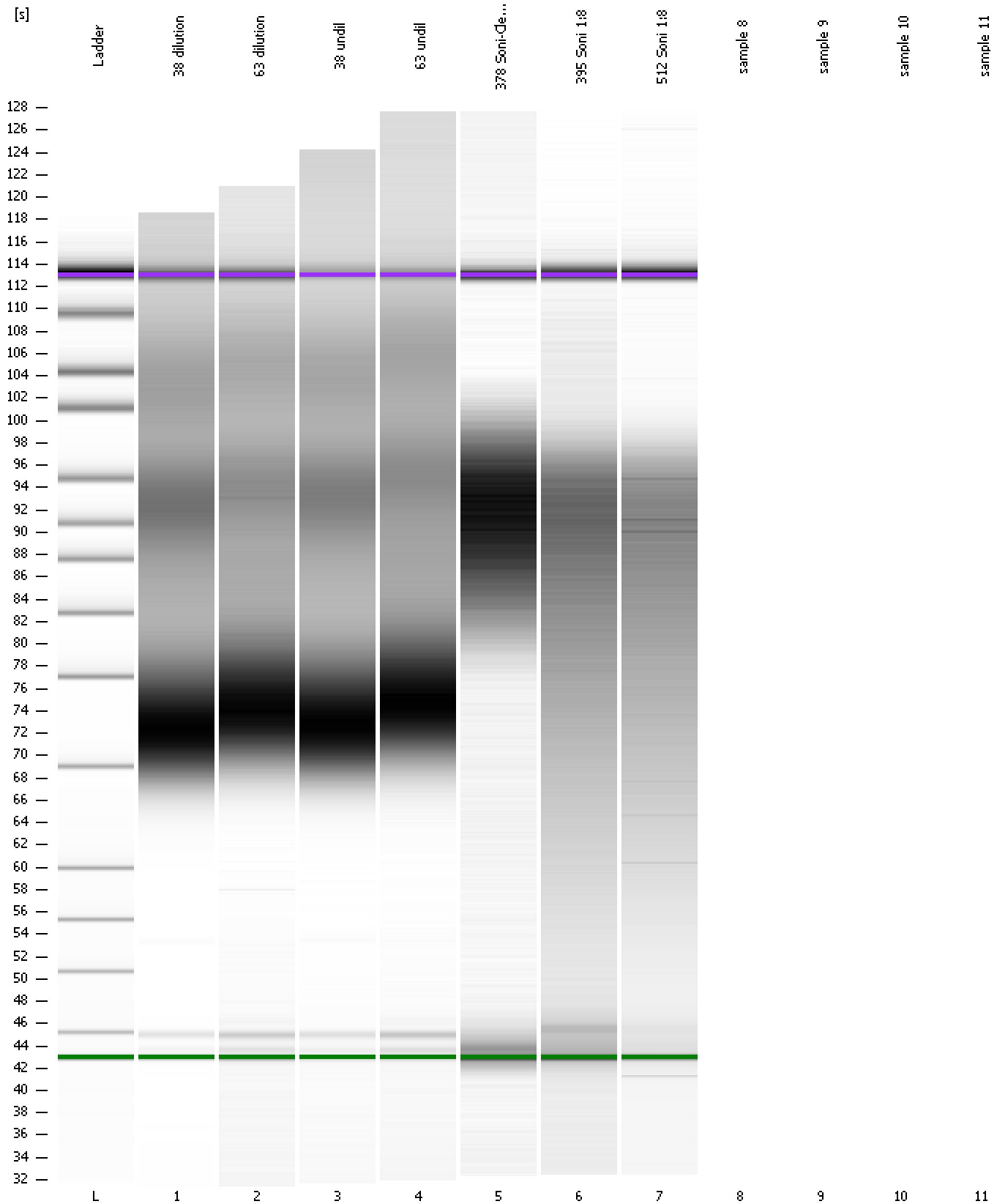
**Region table for sample 7 : 512 Soni 1:8**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
253	1,720	607	4,393.6	1,367.36	1,348.1	80	46.4	■

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-23\2013-01-23\_001.xad

Created: 1/23/2013 12:13:07 PM  
Modified: 1/23/2013 12:44:23 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-23\2013-01-23\_001.xad

Created: 1/23/2013 12:13:07 PM  
Modified: 1/23/2013 12:44:23 PM

**Invalid Samples**

Sample 8 has not been run, no results available.

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\2013-01-23\2013-01-23\_001.xad

Created: 1/23/2013 12:13:07 PM  
 Modified: 1/23/2013 12:44:23 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 8)		Instrument	Run		1/23/2013 12:42:59 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-01-23\2013-01-23_001.xad)		Instrument	Run		1/23/2013 12:13:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/23/2013 12:13:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/23/2013 12:13:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/23/2013 12:13:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/23/2013 12:13:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/23/2013 12:13:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/23/2013 12:13:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1