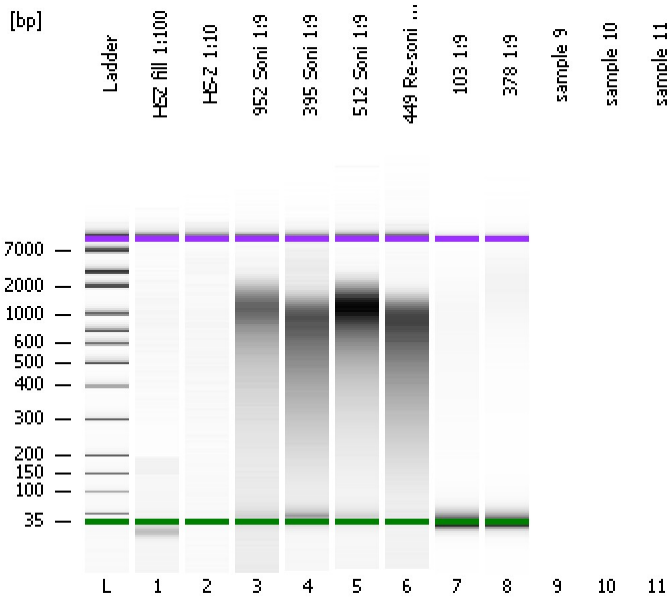


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-17\2013-01-17_001.xad

Created: 1/17/2013 12:16:07 PM
Modified: 1/17/2013 12:51:00 PM

Electrophoresis File Run Summary



Instrument Information:

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

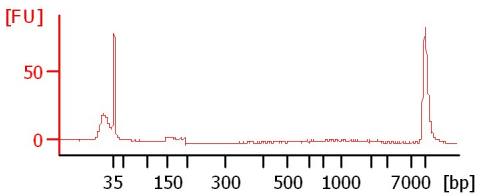
Assay Information:

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

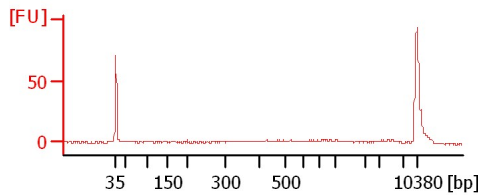
Chip Information:

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

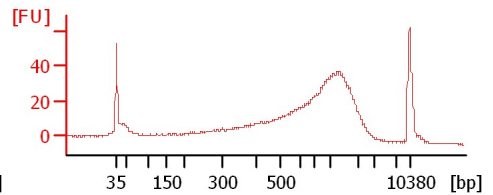
HSZ fill 1:100



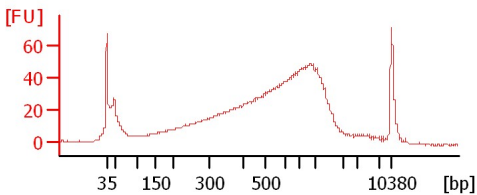
HS-Z 1:10



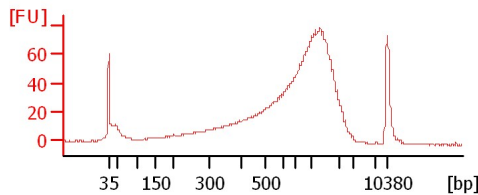
952 Soni 1:9



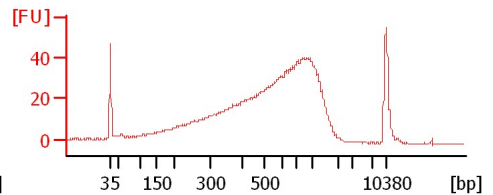
395 Soni 1:9



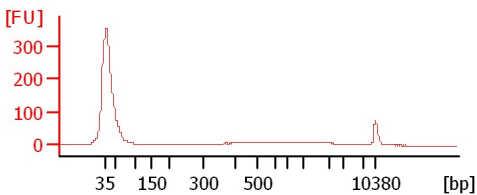
512 Soni 1:9



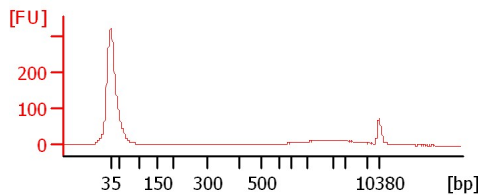
449 Re-soni 1:9



103 1:9



378 1:9



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-17\2013-01-17_001.xad

Created: 1/17/2013 12:16:07 PM
Modified: 1/17/2013 12:51:00 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
HSZ fill 1:100		<input type="checkbox"/>	✓			
HS-Z 1:10		<input type="checkbox"/>	✓			
952 Soni 1:9		<input type="checkbox"/>	✓			
395 Soni 1:9		<input type="checkbox"/>	✓			
512 Soni 1:9		<input type="checkbox"/>	✓			
449 Re-soni 1:9		<input type="checkbox"/>	✓			
103 1:9		<input type="checkbox"/>	✓			
378 1:9		<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\2013-01-17\2013-01-17_001.xad

Created: 1/17/2013 12:16:07 PM
Modified: 1/17/2013 12:51:00 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

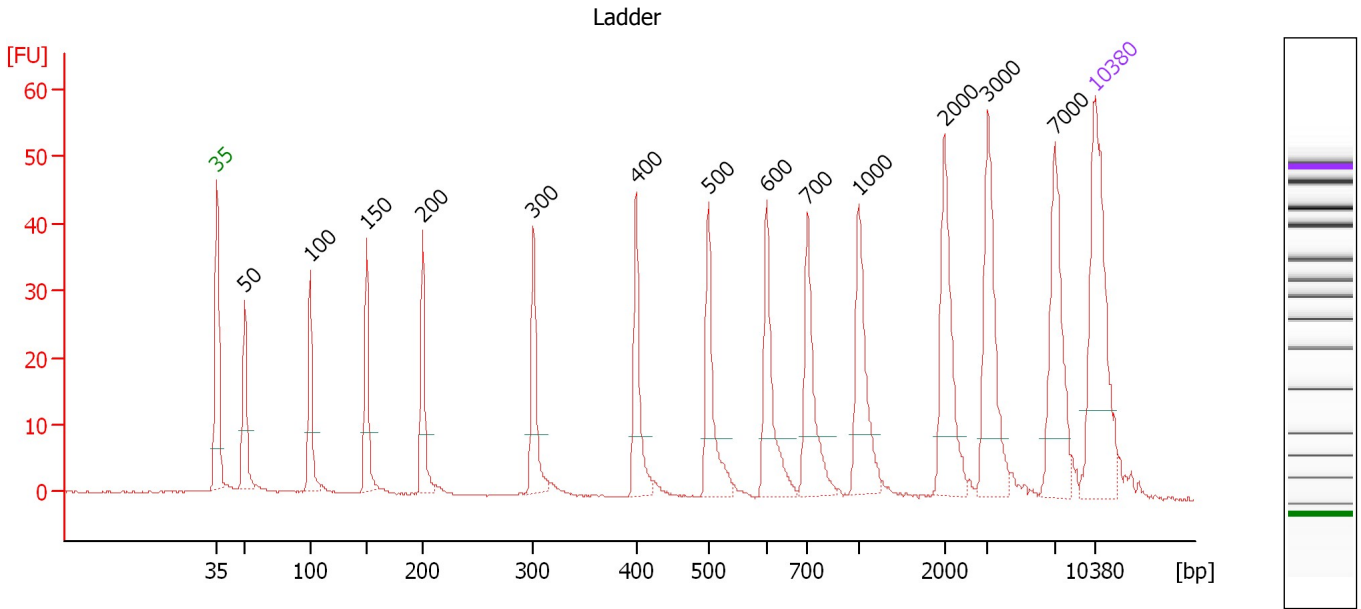
Ladder

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\2013-01-17\2013-01-17_001.xad

Created: 1/17/2013 12:16:07 PM
 Modified: 1/17/2013 12:51:00 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

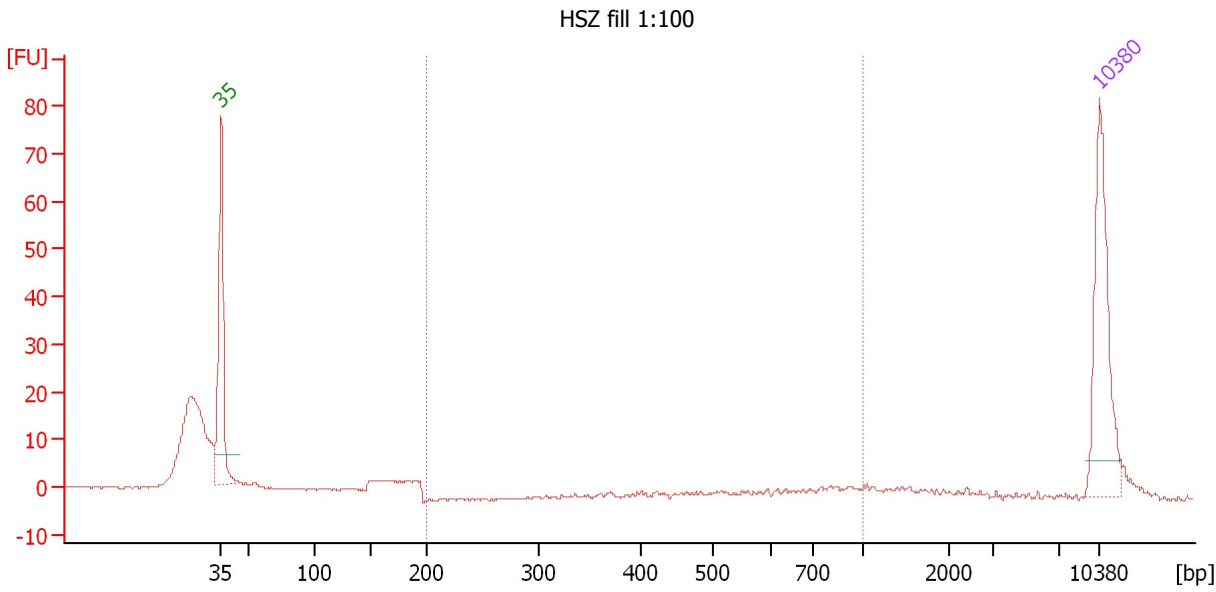
Peak table for Ladder

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\2013-01-17\2013-01-17_001.xad

Created: 1/17/2013 12:16:07 PM
 Modified: 1/17/2013 12:51:00 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : HSZ fill 1:100

Height Threshold [FU] : 20

Overall Results for sample 1 : HSZ fill 1:100

Number of peaks found: 0 Corr. Area 1: 5.5
 Noise: 0.1

Peak table for sample 1 : HSZ fill 1:100

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

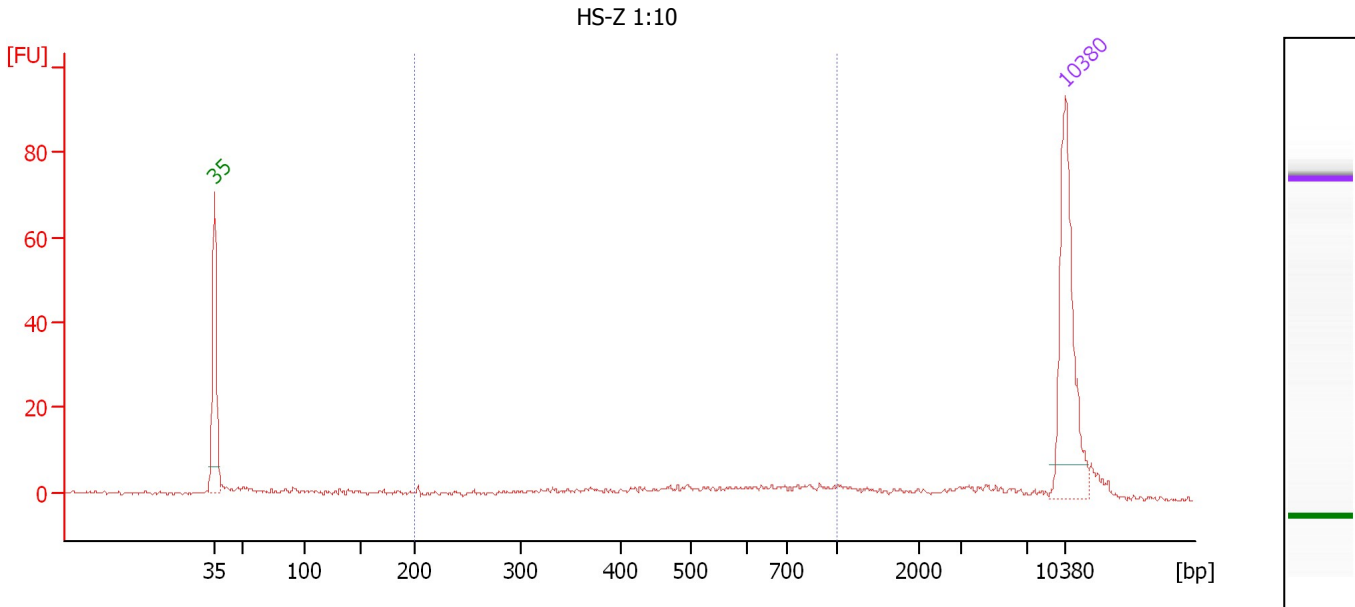
Region table for sample 1 : HSZ fill 1:100

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	796	10.8	5.53	5.5	4	16.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-17\2013-01-17_001.xad

Created: 1/17/2013 12:16:07 PM
 Modified: 1/17/2013 12:51:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : HS-Z 1:10

Number of peaks found: 0 Corr. Area 1: 48.9
 Noise: 0.4

Peak table for sample 2 : HS-Z 1:10

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

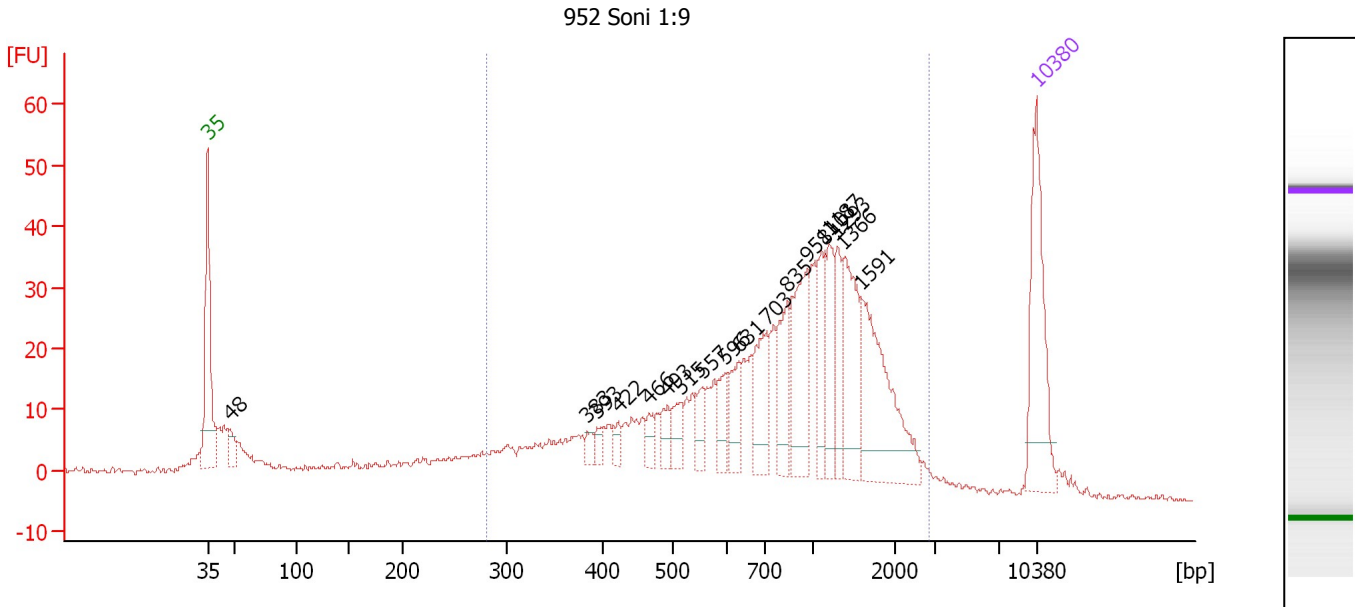
Region table for sample 2 : HS-Z 1:10

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	557	155.9	47.64	48.9	51	34.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-17\2013-01-17_001.xad

Created: 1/17/2013 12:16:07 PM
 Modified: 1/17/2013 12:51:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 952 Soni 1:9

Number of peaks found: 18 Corr. Area 1: 735.5
 Noise: 0.4

Peak table for sample 3 : 952 Soni 1:9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	19.60	620.9	
3	383	8.45	33.4	
4	393	9.17	35.3	
5	422	8.95	32.2	
6	466	12.46	40.5	
7	493	15.70	48.2	
8	515	20.95	61.6	
9	557	17.39	47.3	
10	596	21.89	55.7	
11	631	28.77	69.1	
12	703	48.34	104.2	
13	835	42.81	77.6	
14	958	67.35	106.5	
15	1,101	32.99	45.4	
16	1,187	37.72	48.1	
17	1,293	30.01	35.2	
18	1,366	65.22	72.3	
19	1,591	100.35	95.6	
20	10,380	75.00	10.9	Upper Marker

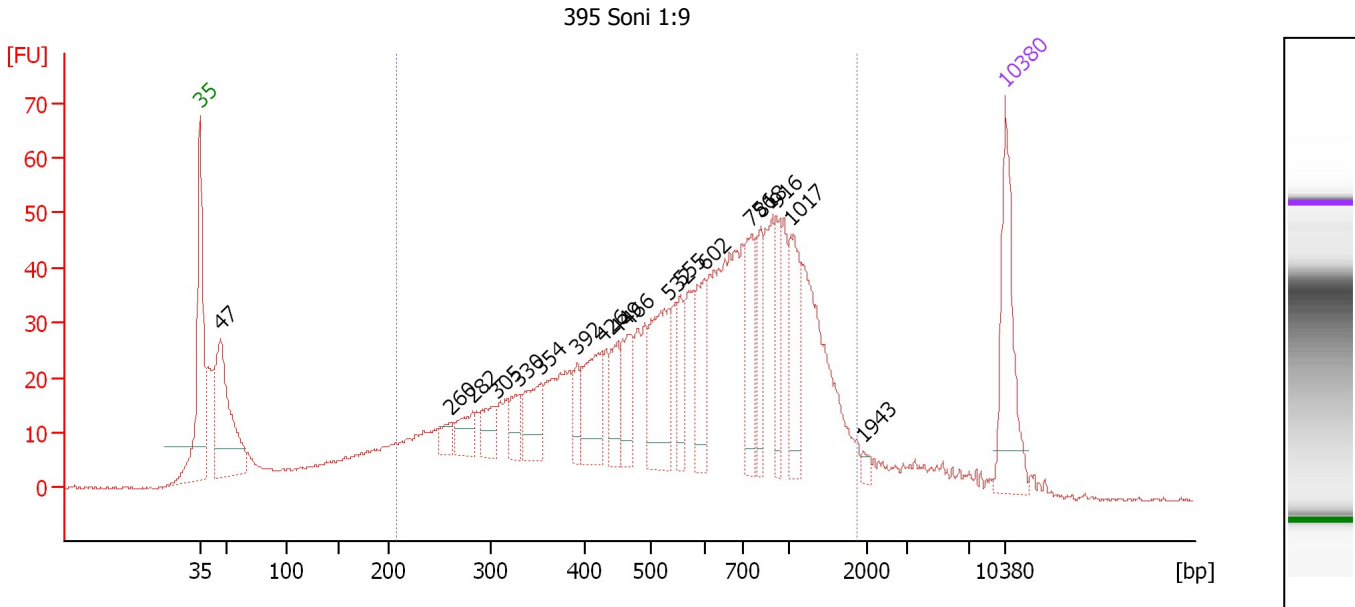
Region table for sample 3 : 952 Soni 1:9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
280	2,854	965	2,323.5	1,002.15	735.5	82	54.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-17\2013-01-17_001.xad

Created: 1/17/2013 12:16:07 PM
 Modified: 1/17/2013 12:51:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 395 Soni 1:9

Number of peaks found: 18 Corr. Area 1: 1,321.1
 Noise: 0.2

Peak table for sample 4 : 395 Soni 1:9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	185.06	5,972.4	
3	260	18.69	109.1	
4	282	31.52	169.2	
5	305	31.08	154.3	
6	330	27.15	124.6	
7	354	49.61	212.3	
8	392	19.97	77.2	
9	426	65.58	233.5	
10	449	39.80	134.4	
11	466	44.76	145.4	
12	532	92.17	262.4	
13	555	32.25	88.0	
14	602	54.53	137.3	
15	756	52.51	105.2	
16	818	40.34	74.8	
17	916	40.35	66.7	
18	1,017	59.56	88.7	
19	1,943	5.13	4.0	
20	10,380	75.00	10.9	Upper Marker

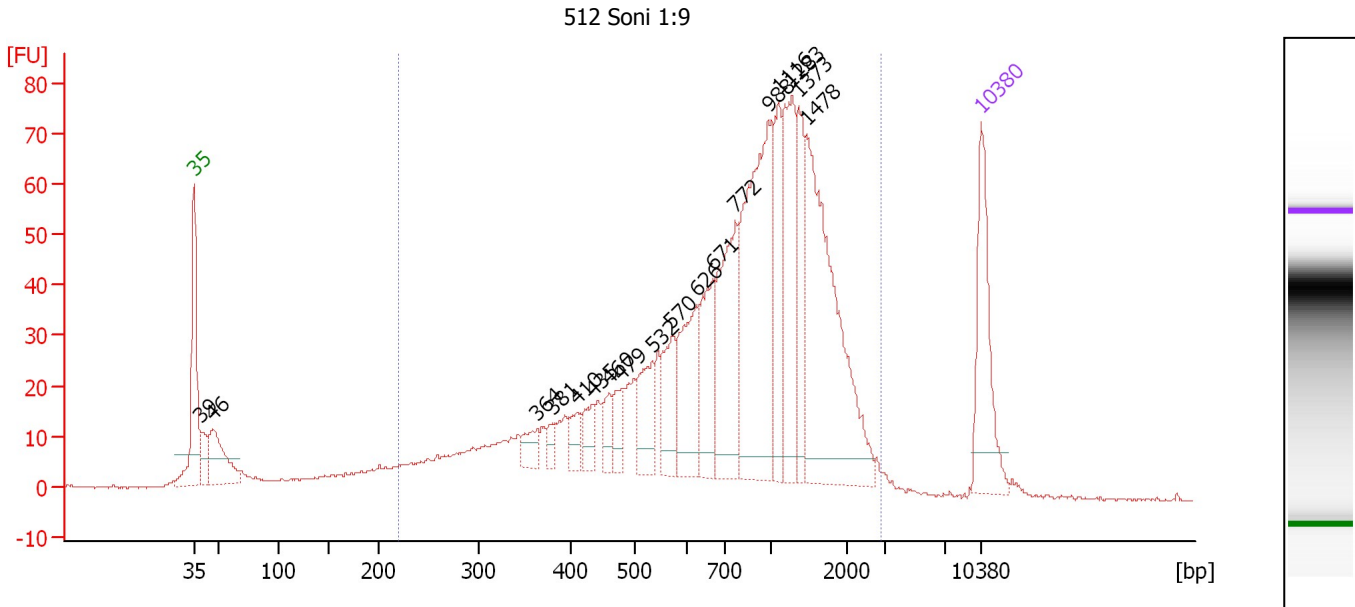
Region table for sample 4 : 395 Soni 1:9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
207	1,865	667	5,785.3	1,805.00	1,321.1	80	52.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-17\2013-01-17_001.xad

Created: 1/17/2013 12:16:07 PM
 Modified: 1/17/2013 12:51:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 512 Soni 1:9

Number of peaks found: 18 Corr. Area 1: 1,403.9
 Noise: 0.3

Peak table for sample 5 : 512 Soni 1:9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	31.13	1,204.0	
3	46	77.51	2,539.1	
4	364	20.47	85.1	
5	381	11.18	44.5	
6	410	19.48	71.9	
7	435	22.88	79.7	
8	460	21.88	72.0	
9	479	26.13	82.6	
10	532	49.15	139.9	
11	570	50.51	134.2	
12	626	87.60	212.1	
13	671	69.83	157.7	
14	772	123.87	243.0	
15	988	213.15	326.8	
16	1,116	69.97	95.0	
17	1,283	100.56	118.8	
18	1,373	58.67	64.7	
19	1,478	226.72	232.4	
20	10,380	75.00	10.9	Upper Marker

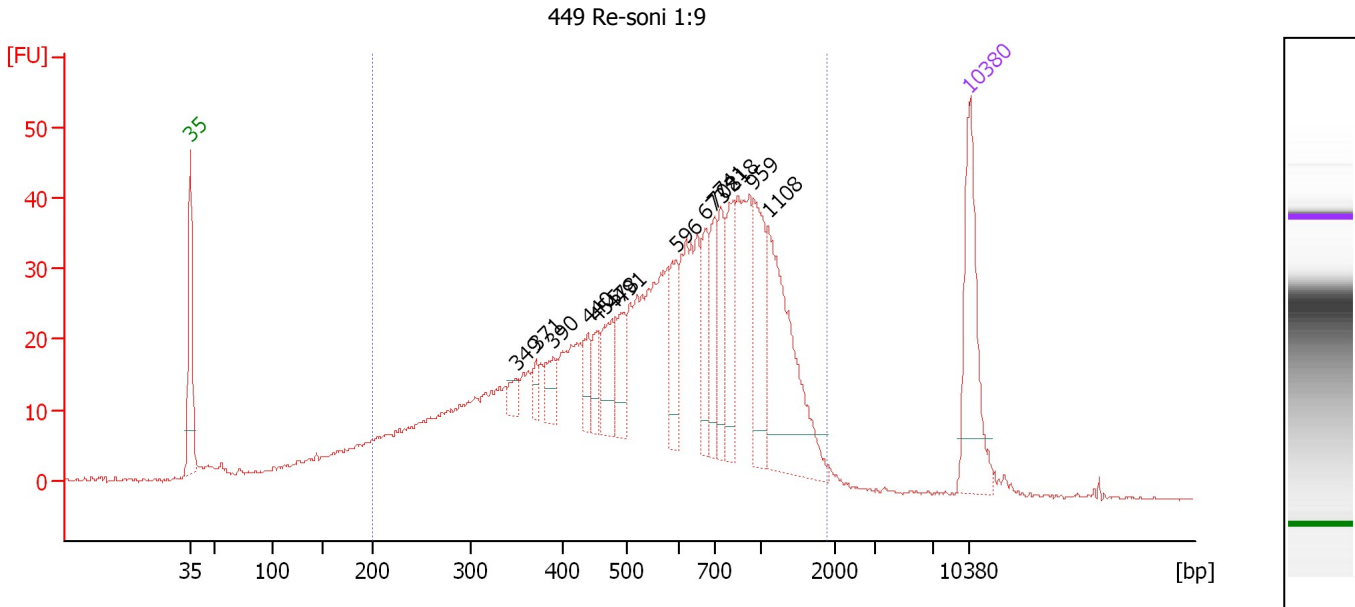
Region table for sample 5 : 512 Soni 1:9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
220	2,883	960	3,969.8	1,631.86	1,403.9	90	54.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-17\2013-01-17_001.xad

Created: 1/17/2013 12:16:07 PM
 Modified: 1/17/2013 12:51:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 449 Re-soni 1:9

Number of peaks found: 14 Corr. Area 1: 1,076.4
 Noise: 0.2

Peak table for sample 6 : 449 Re-soni 1:9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	349	11.40	49.5	
3	371	11.82	48.3	
4	390	23.23	90.3	
5	440	22.04	75.9	
6	455	20.74	69.1	
7	478	42.50	134.7	
8	491	33.38	102.9	
9	596	36.94	93.9	
10	673	36.44	82.0	
11	702	41.13	88.8	
12	741	44.86	91.8	
13	818	50.09	92.8	
14	959	61.58	97.3	
15	1,108	135.10	184.8	
16	10,380	75.00	10.9	Upper Marker

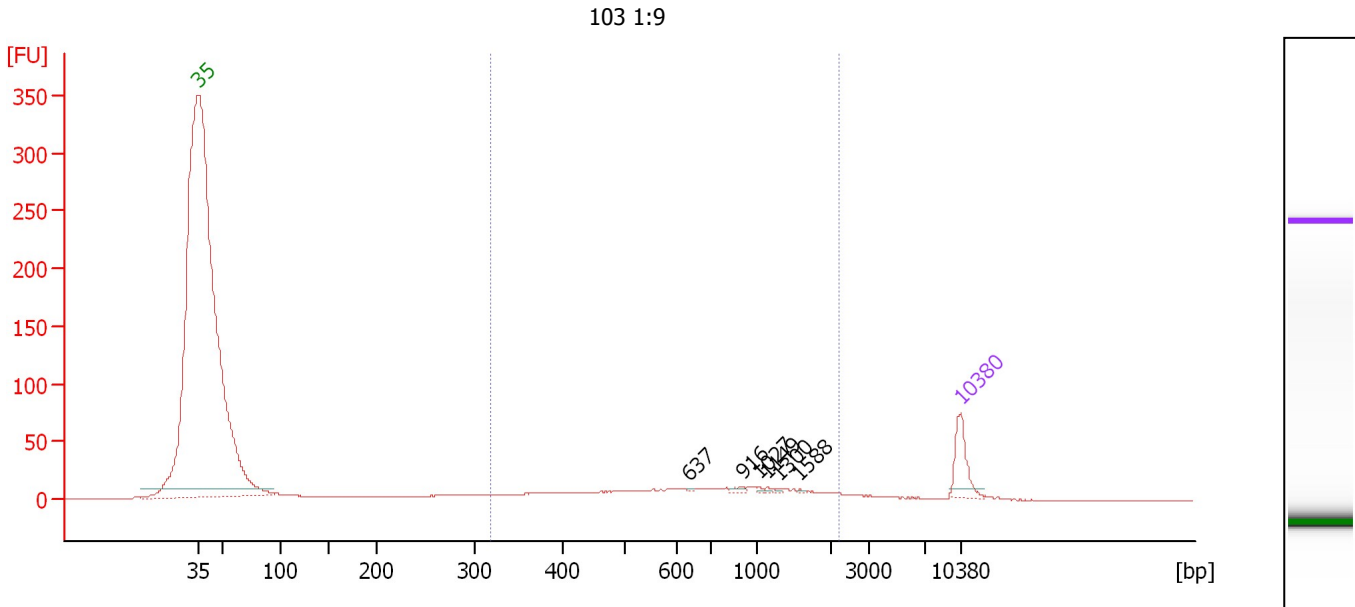
Region table for sample 6 : 449 Re-soni 1:9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,873	661	5,435.8	1,691.13	1,076.4	90	50.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-17\2013-01-17_001.xad

Created: 1/17/2013 12:16:07 PM
 Modified: 1/17/2013 12:51:00 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : 103 1:9

Height Threshold [FU] : 2

Overall Results for sample 7 : 103 1:9

Number of peaks found: 6 Corr. Area 1: 293.2
 Noise: 0.2

Peak table for sample 7 : 103 1:9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	637	1.87	4.4	
3	916	7.08	11.7	
4	1,027	2.98	4.4	
5	1,149	3.45	4.5	
6	1,300	2.62	3.1	
7	1,588	2.06	2.0	
8	10,380	75.00	10.9	Upper Marker

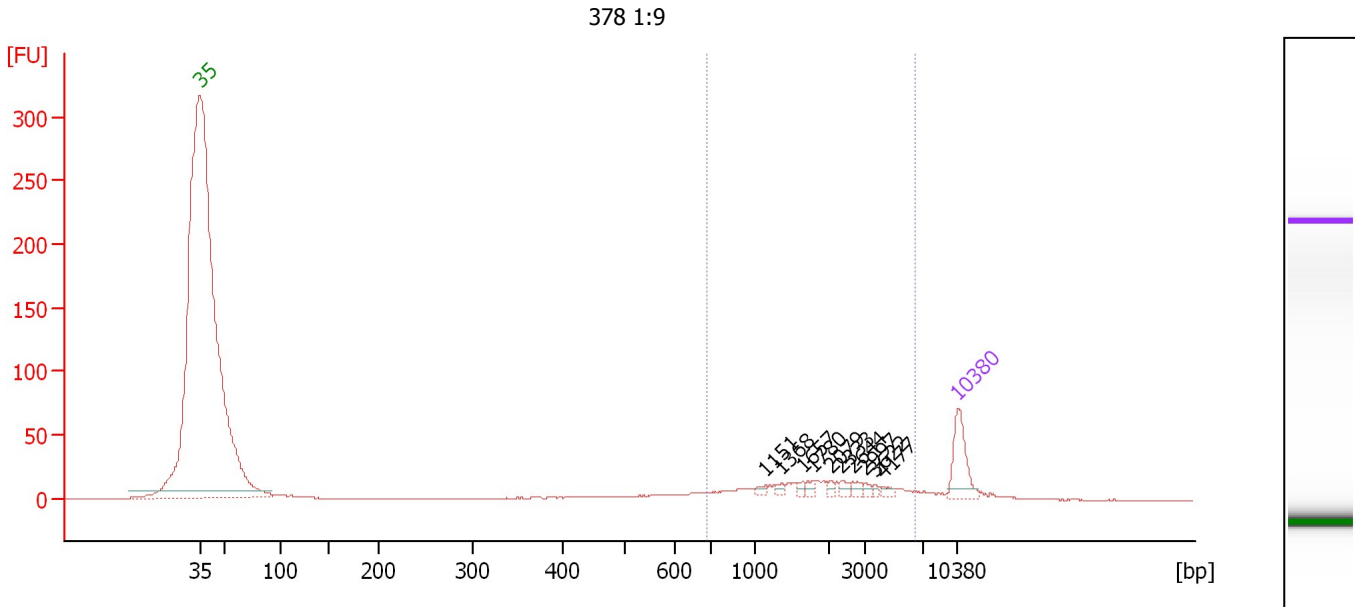
Region table for sample 7 : 103 1:9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
318	2,234	823	957.1	370.89	293.2	67	56.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-17\2013-01-17_001.xad

Created: 1/17/2013 12:16:07 PM
 Modified: 1/17/2013 12:51:00 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : 378 1:9

Height Threshold [FU] : 6

Overall Results for sample 8 : 378 1:9

Number of peaks found: 10 Corr. Area 1: 217.3
 Noise: 0.2

Peak table for sample 8 : 378 1:9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	1,151	8.73	11.5	
3	1,368	8.85	9.8	
4	1,657	8.17	7.5	
5	1,780	9.05	7.7	
6	2,079	6.85	5.0	
7	2,333	10.17	6.6	
8	2,644	11.45	6.6	
9	2,997	7.15	3.6	
10	3,622	5.16	2.2	
11	4,177	8.30	3.0	
12	10,380	75.00	10.9	Upper Marker

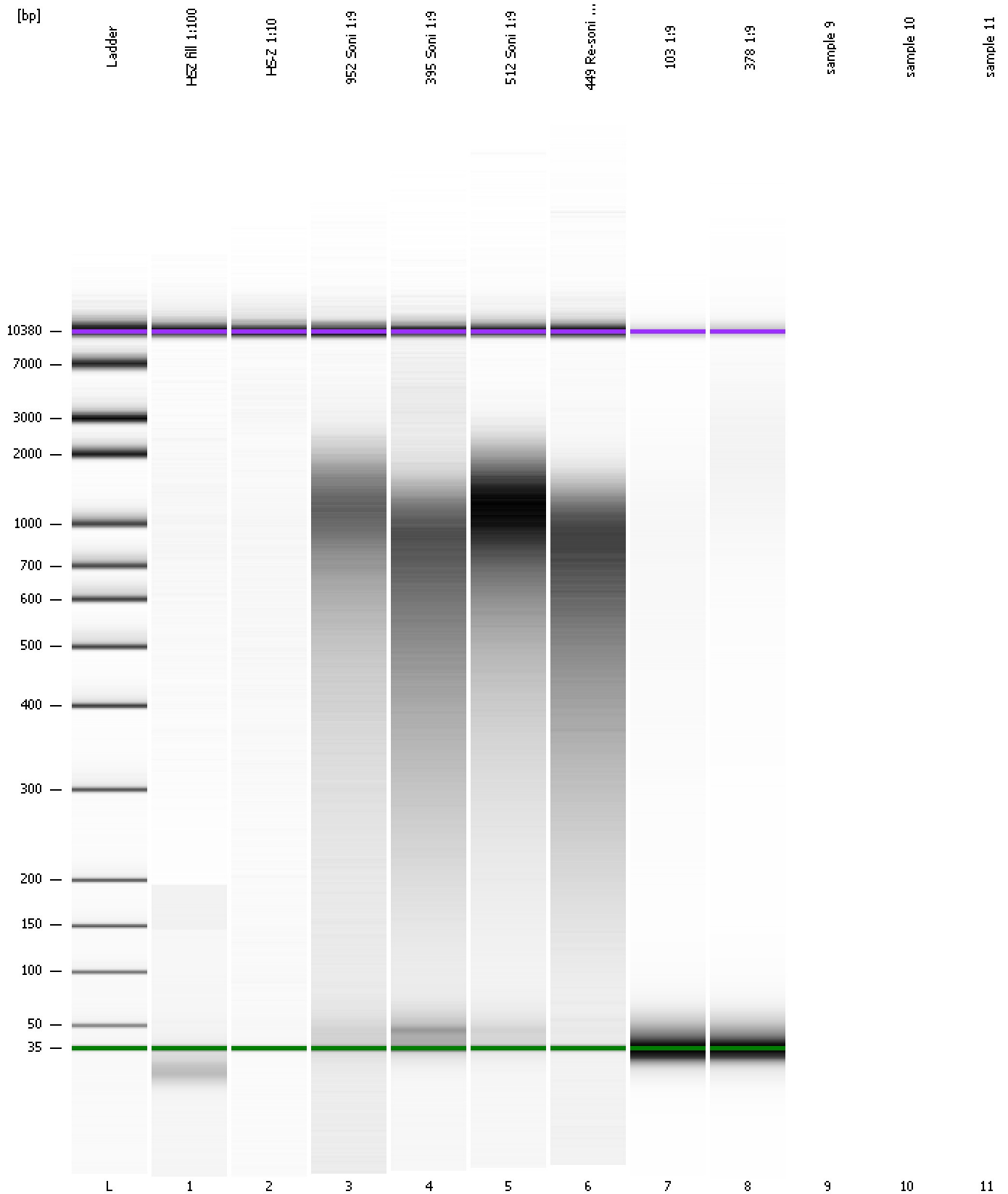
Region table for sample 8 : 378 1:9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
692	6,416	2,273	200.7	214.91	217.3	61	59.8	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-17\2013-01-17_001.xad

Created: 1/17/2013 12:16:07 PM
Modified: 1/17/2013 12:51:00 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-17\2013-01-17_001.xad

Created: 1/17/2013 12:16:07 PM
Modified: 1/17/2013 12:51:00 PM

Invalid Samples

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\2013-01-17\2013-01-17_001.xad

Created: 1/17/2013 12:16:07 PM
 Modified: 1/17/2013 12:51:00 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 9)		Instrument	Run		1/17/2013 12:48:51 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-01-17\2013-01-17_001.xad)		Instrument	Run		1/17/2013 12:16:12 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/17/2013 12:16:12 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/17/2013 12:16:12 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/17/2013 12:16:12 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/17/2013 12:16:12 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/17/2013 12:16:12 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/17/2013 12:16:12 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1