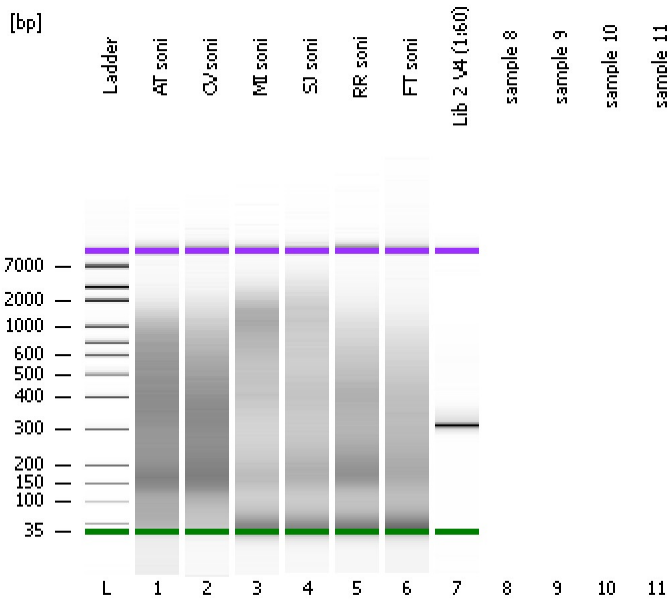


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-23\2015-02-23_004.xad

Created: 2/23/2015 1:14:49 PM
Modified: 2/23/2015 1:48:04 PM

Electrophoresis File Run Summary



Instrument Information:

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

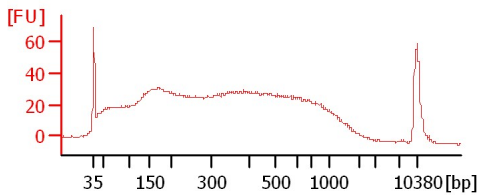
Assay Information:

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

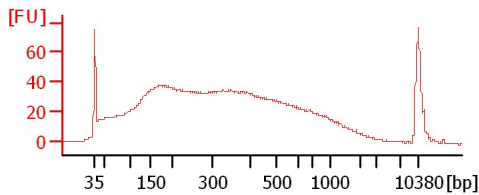
Chip Information:

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

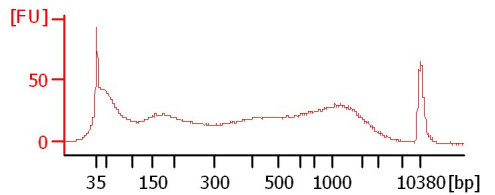
AT soni



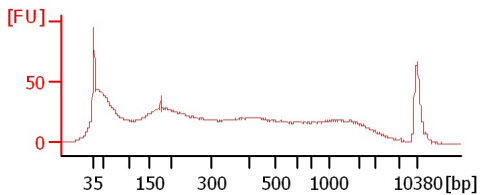
CV soni



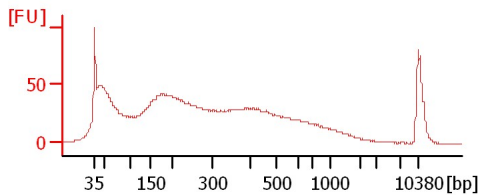
MI soni



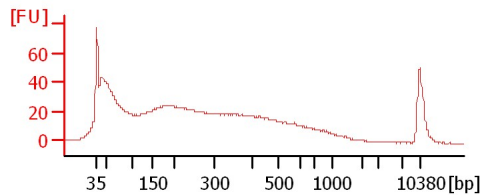
SJ soni



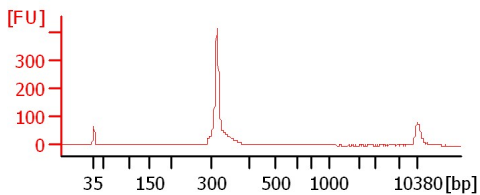
RR soni



FT soni



Lib 2 V4 (1:60)



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-23\2015-02-23_004.xad

Created: 2/23/2015 1:14:49 PM
Modified: 2/23/2015 1:48:04 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
AT soni		<input type="checkbox"/>	✓			
CV soni		<input type="checkbox"/>	✓			
MI soni		<input type="checkbox"/>	✓			
SJ soni		<input type="checkbox"/>	✓			
RR soni		<input type="checkbox"/>	✓			
FT soni		<input type="checkbox"/>	✓			
Lib 2 V4 (1:60)		<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\2015-02-23\2015-02-23_004.xad

Created: 2/23/2015 1:14:49 PM
Modified: 2/23/2015 1:48:04 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

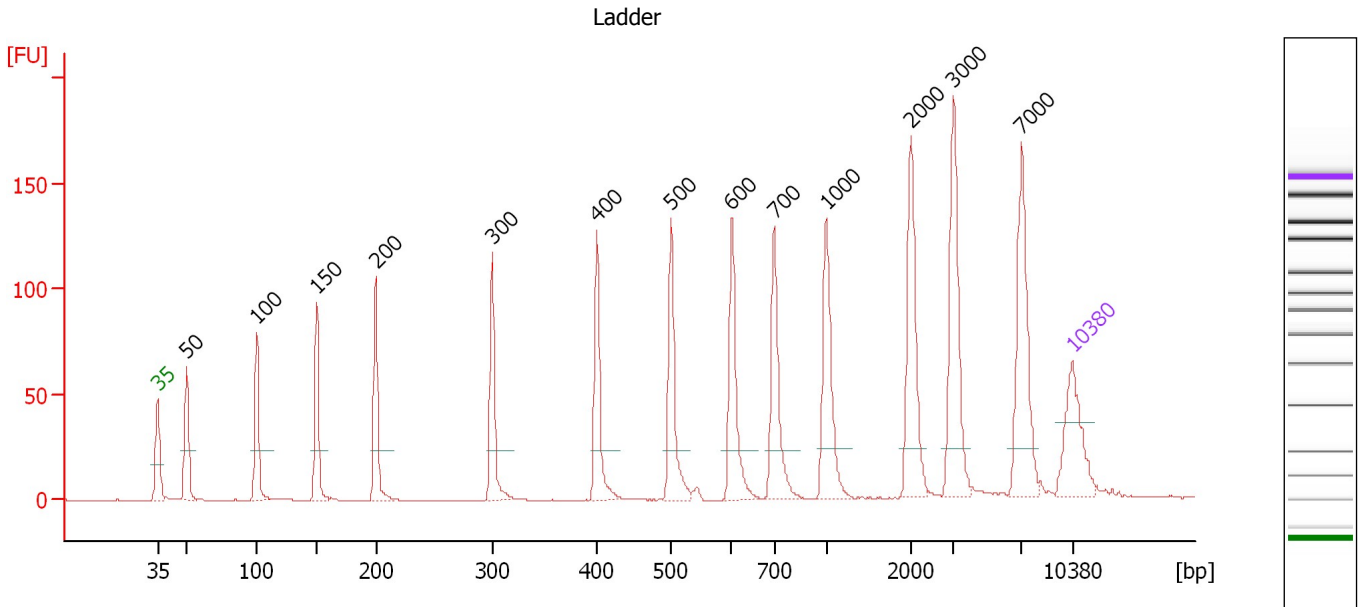
Ladder

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\2015-02-23\2015-02-23_004.xad

Created: 2/23/2015 1:14:49 PM
 Modified: 2/23/2015 1:48:04 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

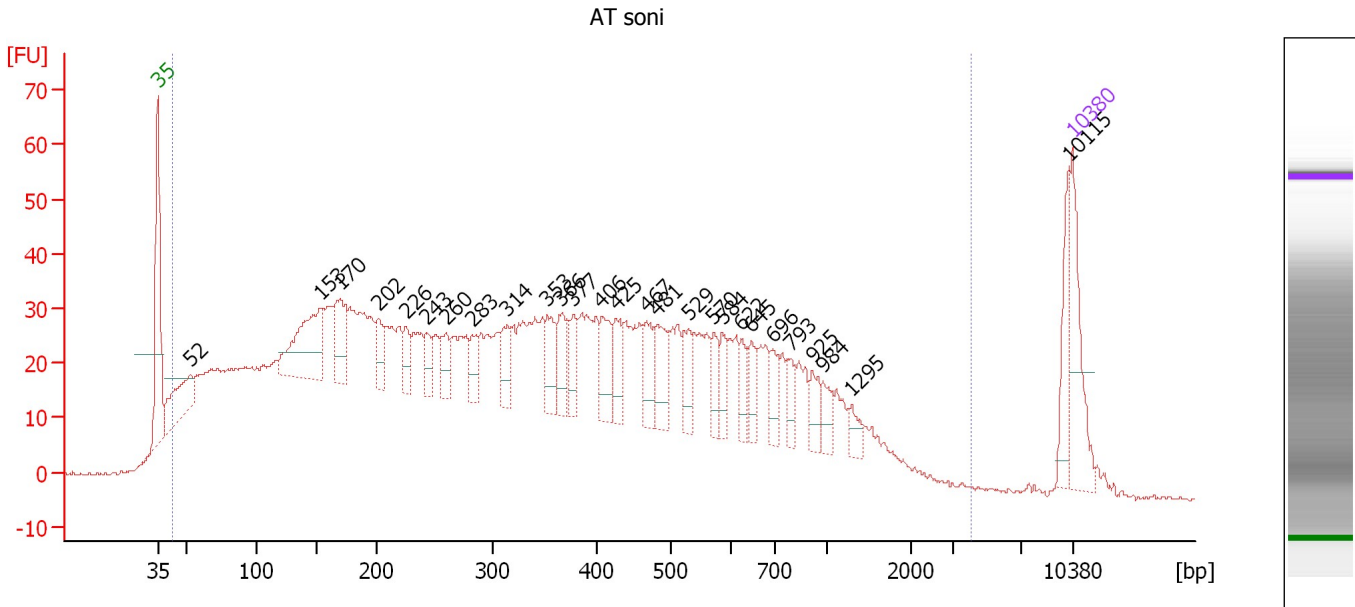
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.23
3	100	150.00	2,272.7	Ladder Peak	50.61
4	150	150.00	1,515.2	Ladder Peak	55.15
5	200	150.00	1,136.4	Ladder Peak	59.70
6	300	150.00	757.6	Ladder Peak	68.62
7	400	150.00	568.2	Ladder Peak	76.62
8	500	150.00	454.5	Ladder Peak	82.31
9	600	150.00	378.8	Ladder Peak	86.94
10	700	150.00	324.7	Ladder Peak	90.18
11	1,000	150.00	227.3	Ladder Peak	94.16
12	2,000	150.00	113.6	Ladder Peak	100.67
13	3,000	150.00	75.8	Ladder Peak	103.91
14	7,000	150.00	32.5	Ladder Peak	109.11
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-23\2015-02-23_004.xad

Created: 2/23/2015 1:14:49 PM
 Modified: 2/23/2015 1:48:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : AT soni

Number of peaks found: 27 Corr. Area 1: 2,187.5
 Noise: 0.5

Peak table for sample 1 : AT soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	52	90.17	2,608.3		45.49
3	153	155.62	1,540.8		55.43
4	170	75.39	672.7		56.96
5	202	32.98	247.4		59.88
6	226	26.55	178.0		62.02
7	243	26.90	167.7		63.54
8	260	31.88	185.7		65.07
9	283	28.18	150.8		67.12
10	314	35.23	169.8		69.78
11	353	40.69	174.8		72.83
12	366	40.54	167.7		73.92
13	377	29.27	117.6		74.79
14	406	49.58	184.9		76.98
15	425	38.54	137.3		78.07
16	467	37.72	122.4		80.42
17	481	52.81	166.2		81.25
18	529	34.44	98.6		83.65
19	570	26.70	70.9		85.57
20	584	24.67	64.0		86.22
21	622	23.30	56.7		87.66
22	645	27.90	65.5		88.40
23	696	27.11	59.0		90.06
24	793	22.60	43.2		91.41
25	925	23.17	38.0		93.16

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-23\2015-02-23_004.xad


Created: 2/23/2015 1:14:49 PM
 Modified: 2/23/2015 1:48:04 PM

Electropherogram Summary Continued ...

... Peak table for sample 1 : AT soni

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	984	20.96	32.3		93.94
27	1,295	14.72	17.2		96.08
28	10,115	40.09	6.0		112.69
29	10,380	75.00	10.9	Upper Marker	113.00

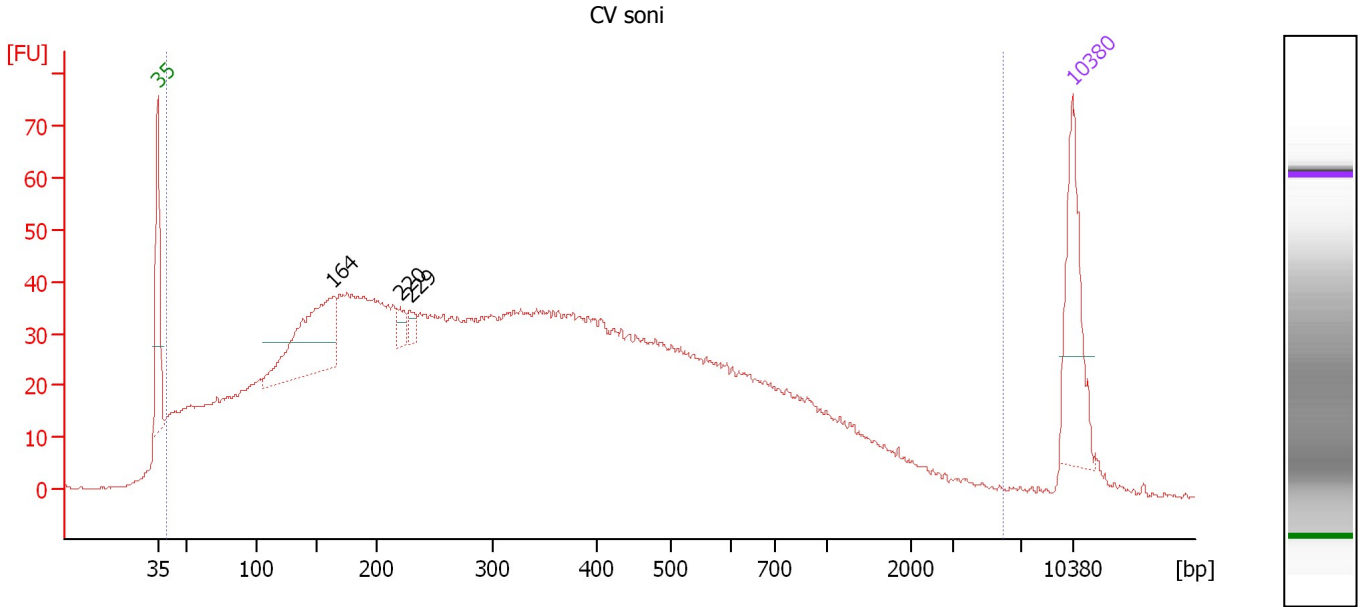
Region table for sample 1 : AT soni

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/ μ l]	Molarity [pmol/l]	Color
43	426	3,977	2,187.5	97	86.7	4,922.22	42,176.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-23\2015-02-23_004.xad

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Electropherogram Summary Continued ...



Overall Results for sample 2 : CV soni

Number of peaks found: 3 Corr. Area 1: 2,397.3
 Noise: 0.3

Peak table for sample 2 : CV soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	164	164.01	1,512.2		56.46
3	220	14.52	99.9		61.52
4	229	11.42	75.4		62.32
5	10,380	75.00	10.9	Upper Marker	113.00

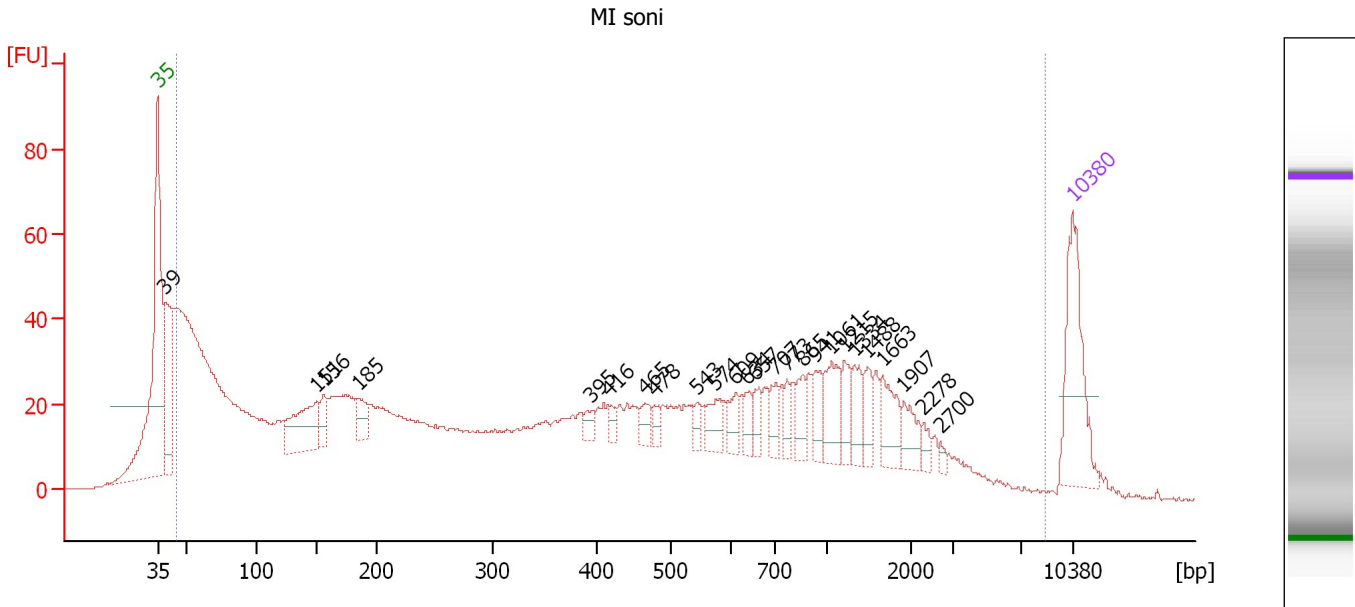
Region table for sample 2 : CV soni

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
40	427	5,921	2,397.3	98	100.0	3,623.58	31,168.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-23\2015-02-23_004.xad

Created: 2/23/2015 1:14:49 PM
 Modified: 2/23/2015 1:48:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : MI soni

Number of peaks found: 25 Corr. Area 1: 1,941.3
 Noise: 0.3

Peak table for sample 3 : MI soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	39	116.11	4,512.9		43.59
3	151	83.97	845.1		55.21
4	156	22.63	219.7		55.71
5	185	25.35	207.5		58.35
6	395	9.26	35.5		76.20
7	416	8.70	31.7		77.52
8	465	13.65	44.4		80.35
9	478	9.30	29.5		81.03
10	543	9.73	27.1		84.31
11	574	23.81	62.9		85.72
12	609	17.62	43.8		87.22
13	634	13.78	32.9		88.04
14	657	13.72	31.7		88.77
15	707	19.18	41.1		90.27
16	773	13.99	27.4		91.14
17	865	19.94	34.9		92.37
18	941	19.73	31.8		93.37
19	1,061	36.50	52.1		94.55
20	1,215	21.30	26.6		95.56
21	1,334	21.47	24.4		96.33
22	1,488	17.35	17.7		97.33
23	1,663	30.14	27.5		98.47
24	1,907	20.77	16.5		100.07
25	2,278	7.31	4.9		101.57

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-23\2015-02-23_004.xad


Created: 2/23/2015 1:14:49 PM
 Modified: 2/23/2015 1:48:04 PM

Electropherogram Summary Continued ...

... Peak table for sample 3 : MI soni

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	2,700	3.31	1.9		102.93
27	10,380	75.00	10.9	Upper Marker	113.00

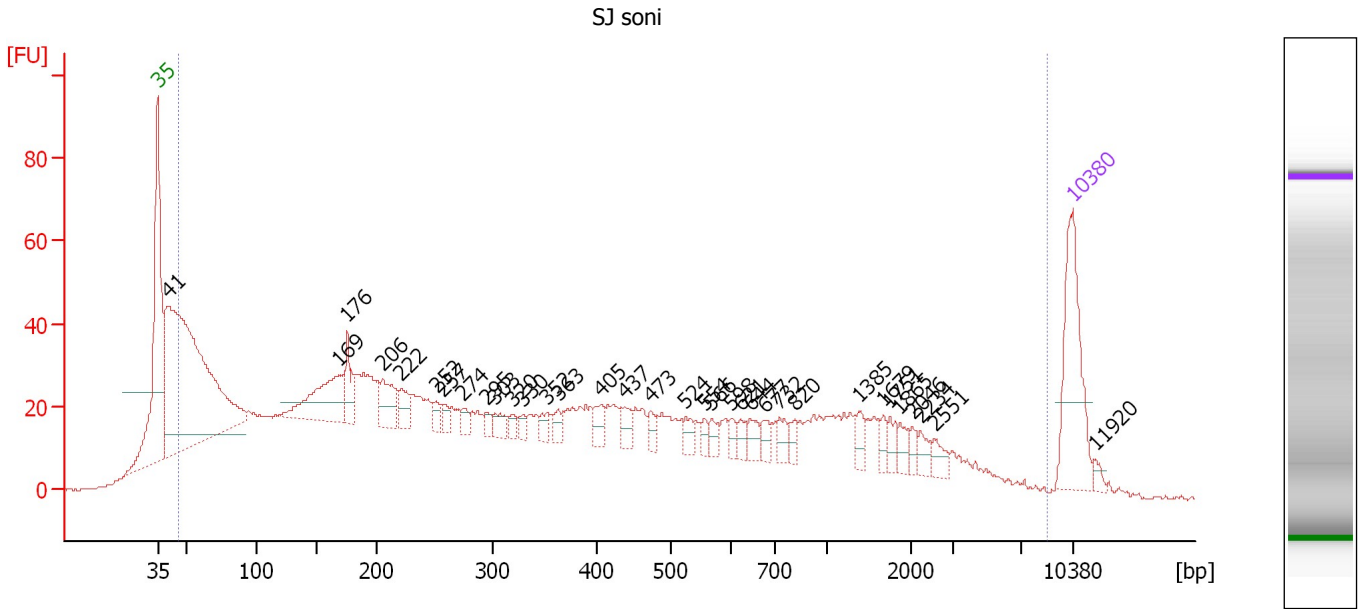
Region table for sample 3 : MI soni

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/ μ l]	Molarity [pmol/l]	Color
45	693	8,517	1,941.3	94	100.0	2,814.60	28,655.2	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-23\2015-02-23_004.xad

Created: 2/23/2015 1:14:49 PM
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Electropherogram Summary Continued ...



Overall Results for sample 4 : SJ soni

Number of peaks found: 34 Corr. Area 1: 1,966.1
 Noise: 0.3

Peak table for sample 4 : SJ soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	41	542.95	20,237.2		43.84
3	169	91.28	817.1		56.91
4	176	34.74	299.2		57.51
5	206	36.76	270.0		60.27
6	222	19.12	130.5		61.67
7	252	10.63	63.9		64.33
8	257	9.10	53.6		64.79
9	274	9.01	49.8		66.33
10	295	6.85	35.2		68.15
11	303	12.33	61.7		68.85
12	320	7.14	33.8		70.21
13	330	6.72	30.9		71.00
14	352	9.52	41.0		72.77
15	363	8.69	36.3		73.66
16	405	14.14	52.8		76.93
17	437	12.28	42.6		78.70
18	473	10.37	33.2		80.80
19	524	10.97	31.7		83.41
20	554	7.24	19.8		84.81
21	566	8.17	21.9		85.37
22	598	7.37	18.7		86.87
23	621	7.87	19.2		87.61
24	644	12.07	28.4		88.36
25	677	9.98	22.3		89.43

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-23\2015-02-23_004.xad


Created: 2/23/2015 1:14:49 PM
 Modified: 2/23/2015 1:48:04 PM

Electropherogram Summary Continued ...

... Peak table for sample 4 : SJ soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	732	12.16	25.2		90.60
27	820	7.67	14.2		91.77
28	1,385	10.83	11.8		96.67
29	1,679	8.25	7.4		98.58
30	1,751	8.78	7.6		99.05
31	1,865	8.94	7.3		99.79
32	2,046	6.52	4.8		100.82
33	2,234	8.30	5.6		101.43
34	2,551	9.45	5.6		102.45
35	10,380	75.00	10.9	Upper Marker	113.00
36	11,920	0.00	0.0		114.77

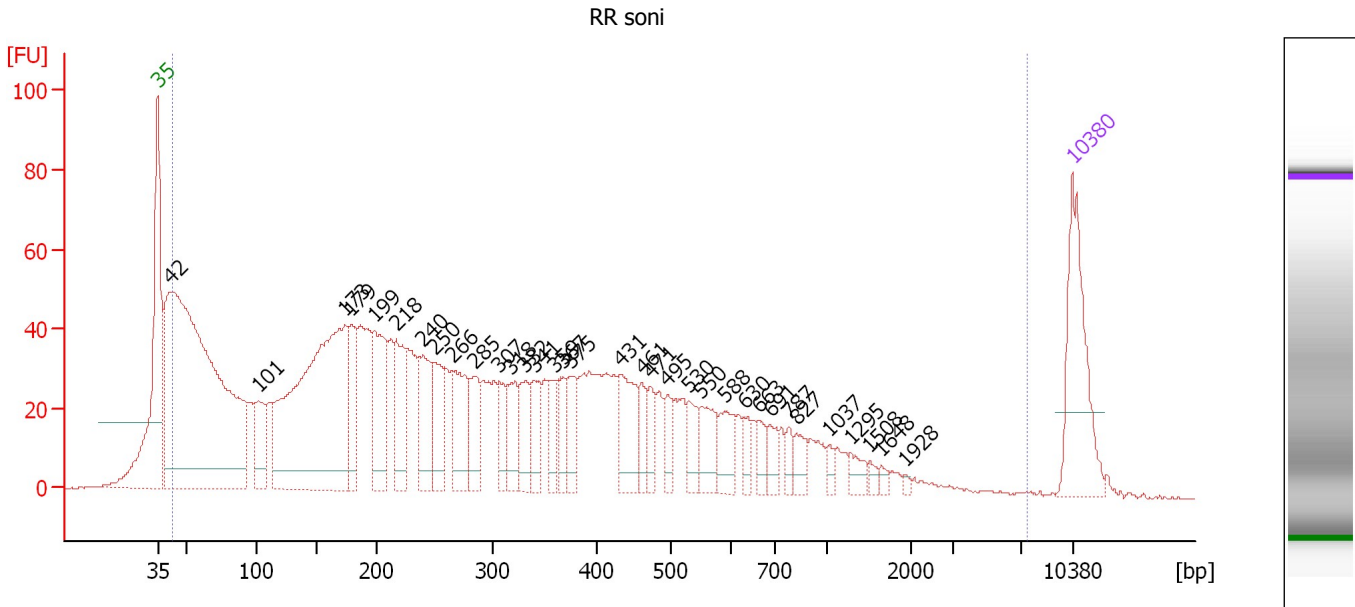
Region table for sample 4 : SJ soni

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
46	649	8,678	1,966.1	93	100.0	2,777.74	28,093.7	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-23\2015-02-23_004.xad

Created: 2/23/2015 1:14:49 PM
 Modified: 2/23/2015 1:48:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : RR soni

Number of peaks found: 34 Corr. Area 1: 2,358.0
 Noise: 0.2

Peak table for sample 5 : RR soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	42	769.37	27,905.9		44.01
3	101	53.04	793.9		50.72
4	173	405.38	3,541.1		57.29
5	179	61.09	516.4		57.82
6	199	96.42	735.0		59.59
7	218	61.94	431.4		61.27
8	240	58.94	371.9		63.28
9	250	49.58	300.7		64.14
10	266	68.18	388.5		65.58
11	285	42.69	226.7		67.31
12	307	28.52	140.8		69.18
13	318	35.70	170.2		70.04
14	332	34.95	159.7		71.14
15	341	32.63	145.2		71.86
16	359	26.11	110.2		73.35
17	367	26.11	107.7		74.02
18	375	31.51	127.2		74.64
19	431	53.39	187.7		78.38
20	461	20.27	66.7		80.06
21	471	19.26	61.9		80.68
22	495	17.57	53.8		82.03
23	530	21.56	61.6		83.71
24	550	31.84	87.7		84.62
25	588	27.70	71.4		86.39

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-23\2015-02-23_004.xad


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Electropherogram Summary Continued ...

... Peak table for sample 5 : RR soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	630	11.91	28.6		87.92
27	663	12.93	29.5		88.98
28	691	13.88	30.4		89.89
29	787	9.47	18.2		91.33
30	827	15.10	27.7		91.86
31	1,037	6.36	9.3		94.40
32	1,295	11.05	12.9		96.08
33	1,508	4.57	4.6		97.47
34	1,648	4.14	3.8		98.38
35	1,928	2.27	1.8		100.20
36	10,380	75.00	10.9	Upper Marker	113.00

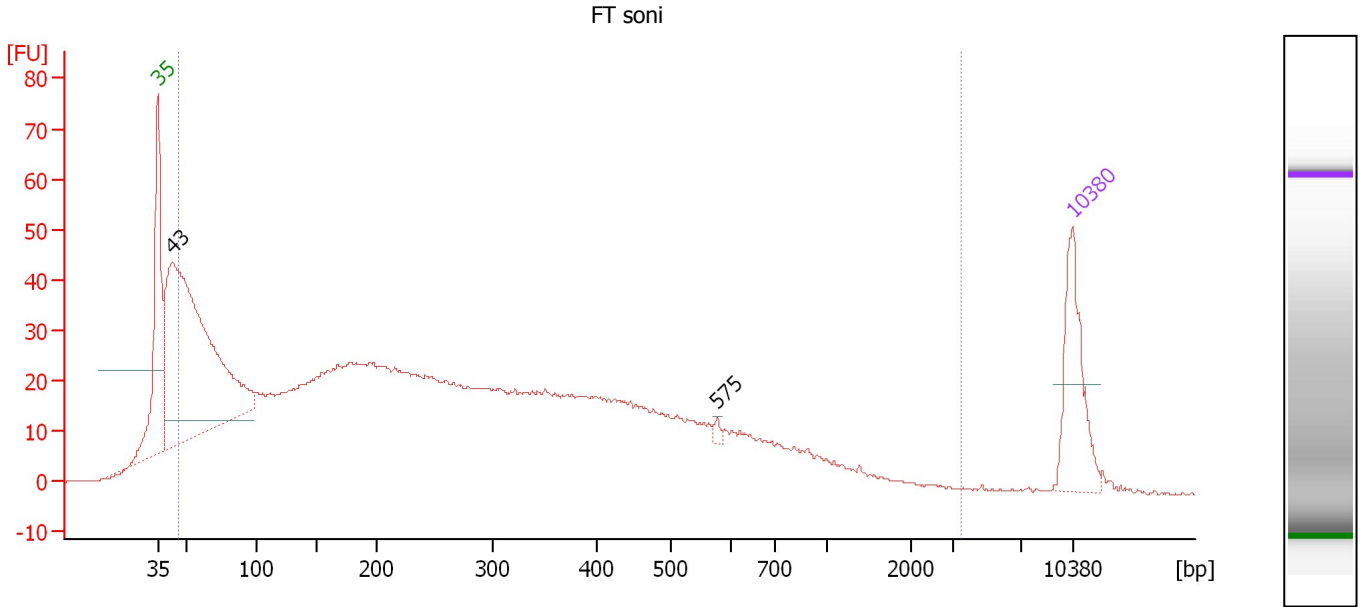
Region table for sample 5 : RR soni

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
43	382	7,387	2,358.0	96	100.0	2,668.18	28,558.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-23\2015-02-23_004.xad

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 Modified: 2/23/2015 1:48:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : FT soni

Number of peaks found: 2 Corr. Area 1: 1,552.0
 Noise: 0.2

Peak table for sample 6 : FT soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	43	703.34	25,074.3		44.11
3	575	4.06	10.7		85.80
4	10,380	75.00	10.9	Upper Marker	113.00

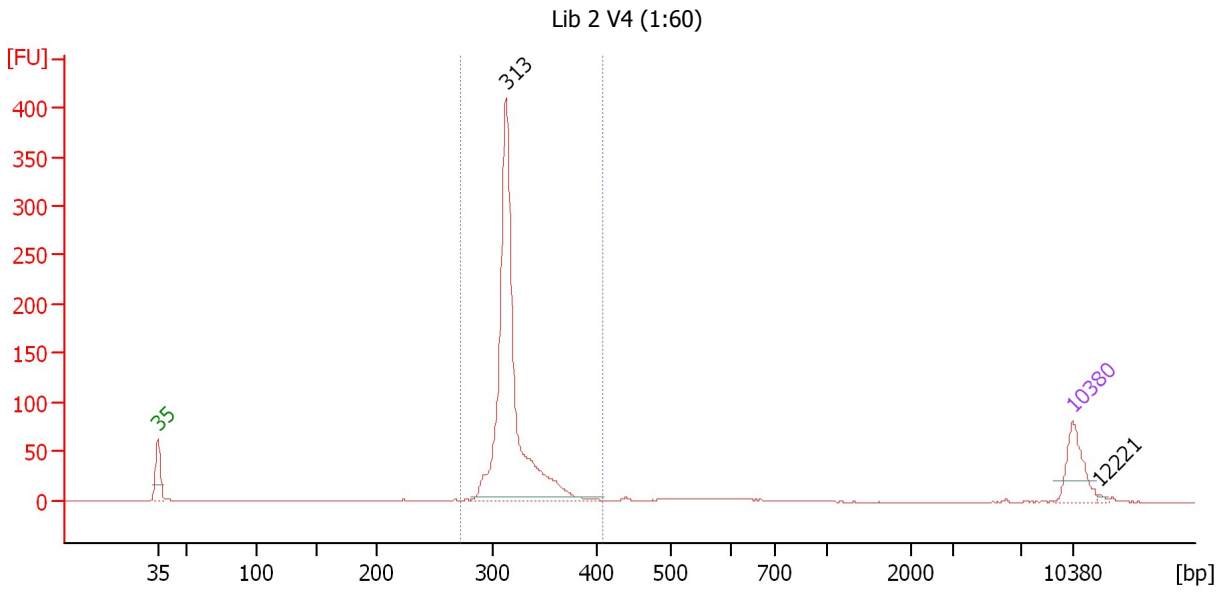
Region table for sample 6 : FT soni

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
46	323	3,434	1,552.0	93	92.6	2,792.60	31,767.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-23\2015-02-23_004.xad

Created: 2/23/2015 1:14:49 PM
 Modified: 2/23/2015 1:48:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Lib 2 V4 (1:60)

Number of peaks found: 2 Corr. Area 1: 809.2
 Noise: 0.1

Peak table for sample 7 : Lib 2 V4 (1:60)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	313	891.37	4,313.6		69.67
3	10,380	75.00	10.9	Upper Marker	113.00
4	12,221	0.00	0.0		115.12

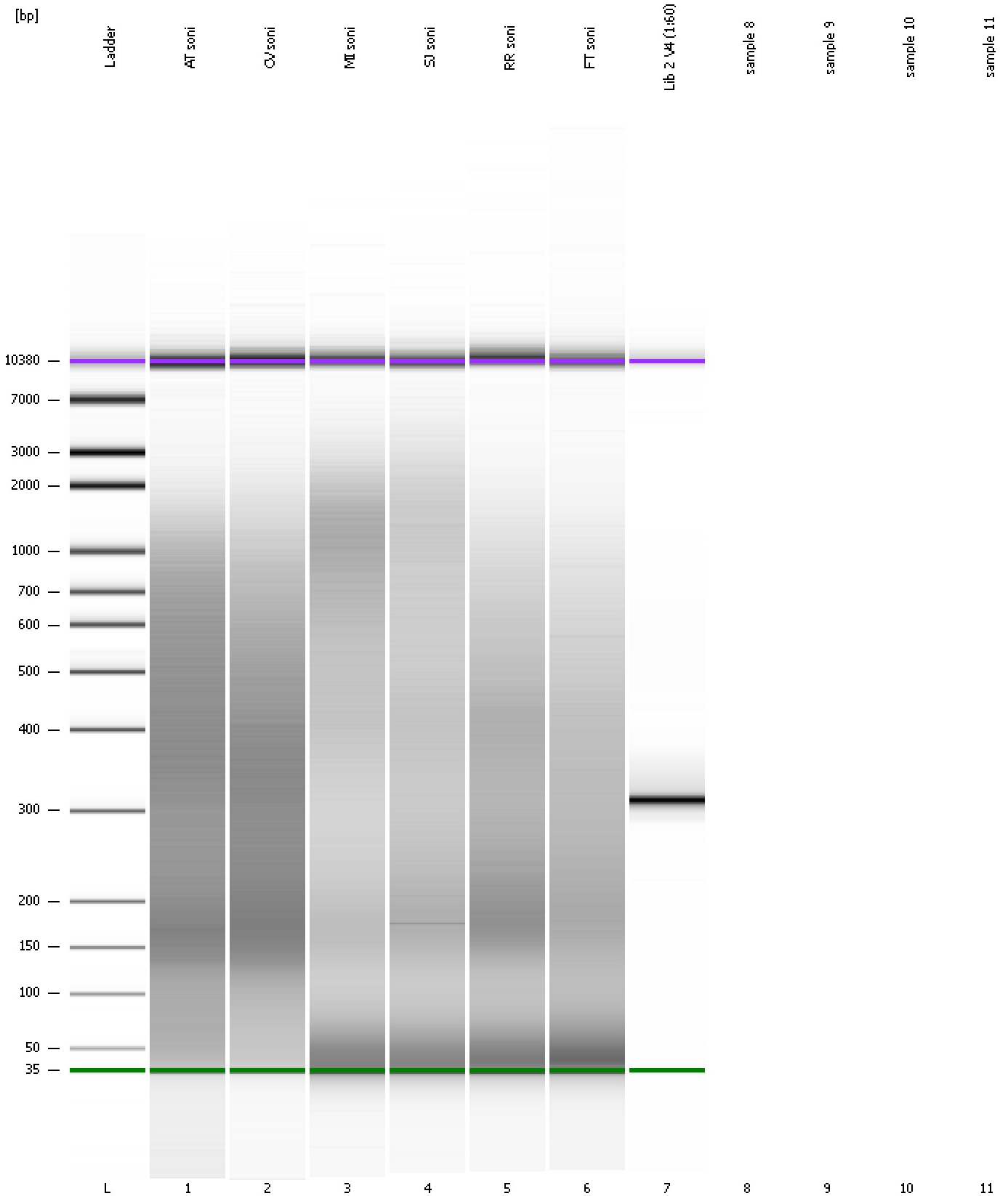
Region table for sample 7 : Lib 2 V4 (1:60)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
273	319	408	809.2	93	5.6	887.81	4,216.1	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-23\2015-02-23_004.xad

Created: 2/23/2015 1:14:49 PM
Modified: 2/23/2015 1:48:04 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-02-23\2015-02-23_004.xad

Created: 2/23/2015 1:14:49 PM
Modified: 2/23/2015 1:48:04 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\2015-02-23\2015-02-23_004.xad

Created: 2/23/2015 1:14:49 PM
 Modified: 2/23/2015 1:48:04 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		2/23/2015 1:44:05 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-02-23\2015-02-23_004.xad)		Instrument	Run		2/23/2015 1:14:55 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/23/2015 1:14:55 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/23/2015 1:14:55 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/23/2015 1:14:55 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/23/2015 1:14:55 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/23/2015 1:14:55 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/23/2015 1:14:55 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1