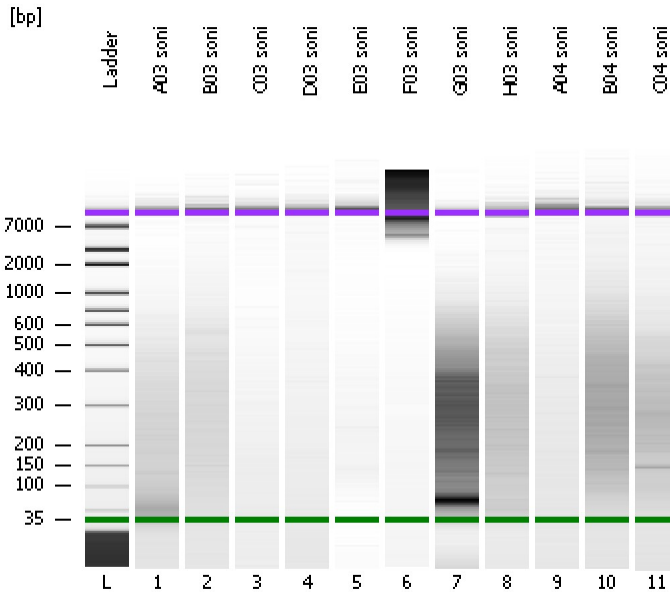


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_005.xad

Created: 12/22/2014 4:26:06 PM
Modified: 12/22/2014 5:34:06 PM

Electrophoresis File Run Summary



Instrument Information:

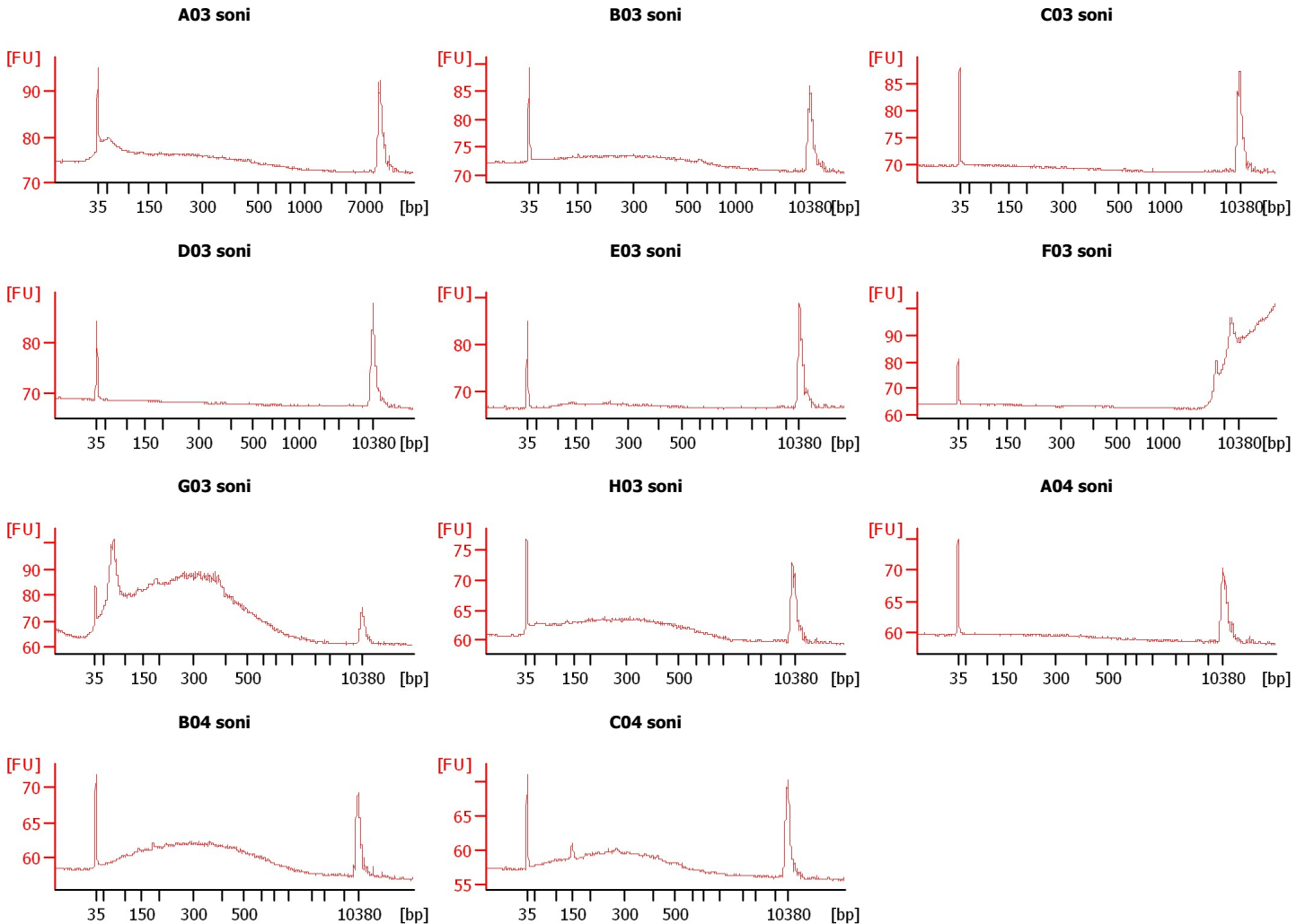
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2014-12-22\2014-12-22_005.xad

Created: 12/22/2014 4:26:06 PM
Modified: 12/22/2014 5:34:06 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
A03 soni		<input type="checkbox"/>	✓			
B03 soni		<input type="checkbox"/>	✓			
C03 soni		<input type="checkbox"/>	✓			
D03 soni		<input type="checkbox"/>	✓			
E03 soni		<input type="checkbox"/>	✓			
F03 soni		<input type="checkbox"/>	✓			
G03 soni		<input type="checkbox"/>	✓			
H03 soni		<input type="checkbox"/>	✓			
A04 soni		<input type="checkbox"/>	✓			
B04 soni		<input type="checkbox"/>	✓			
C04 soni		<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\2014-12-22\2014-12-22_005.xad

Created: 12/22/2014 4:26:06 PM
 Modified: 12/22/2014 5:34:06 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] : 1
 Area Threshold : 0.1
 Width Threshold [s] : 0.6
 Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
 Polynomial Order : 4

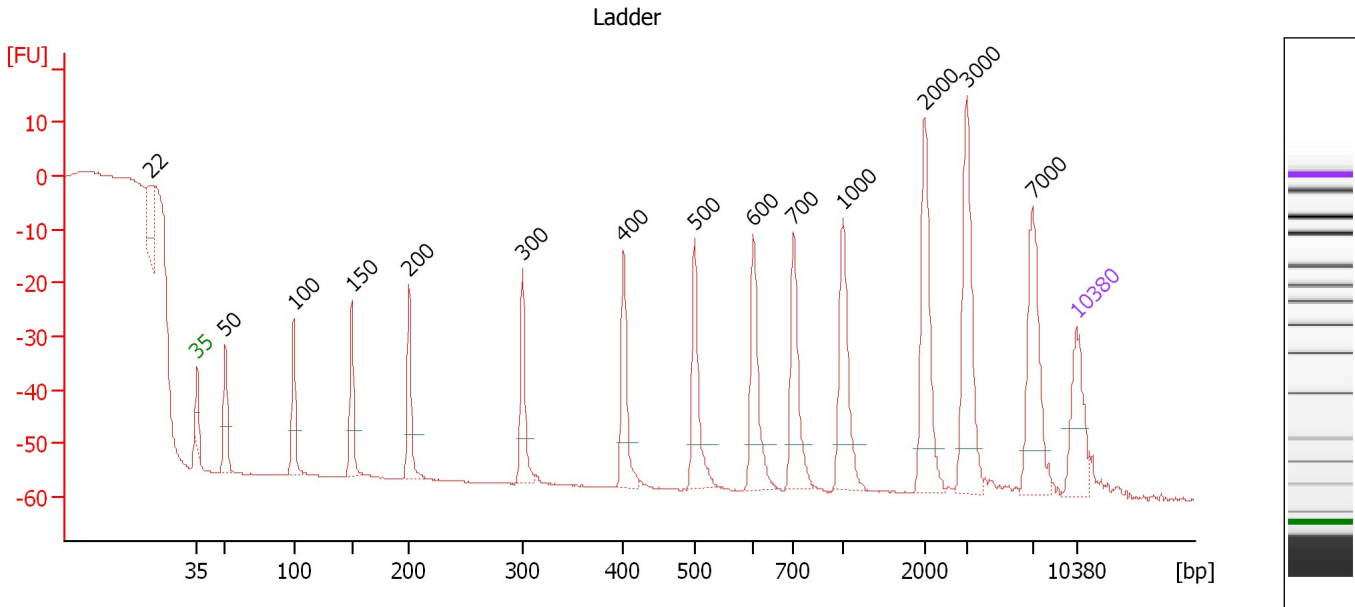
Ladder

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\2014-12-22\2014-12-22_005.xad

Created: 12/22/2014 4:26:06 PM
 Modified: 12/22/2014 5:34:06 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

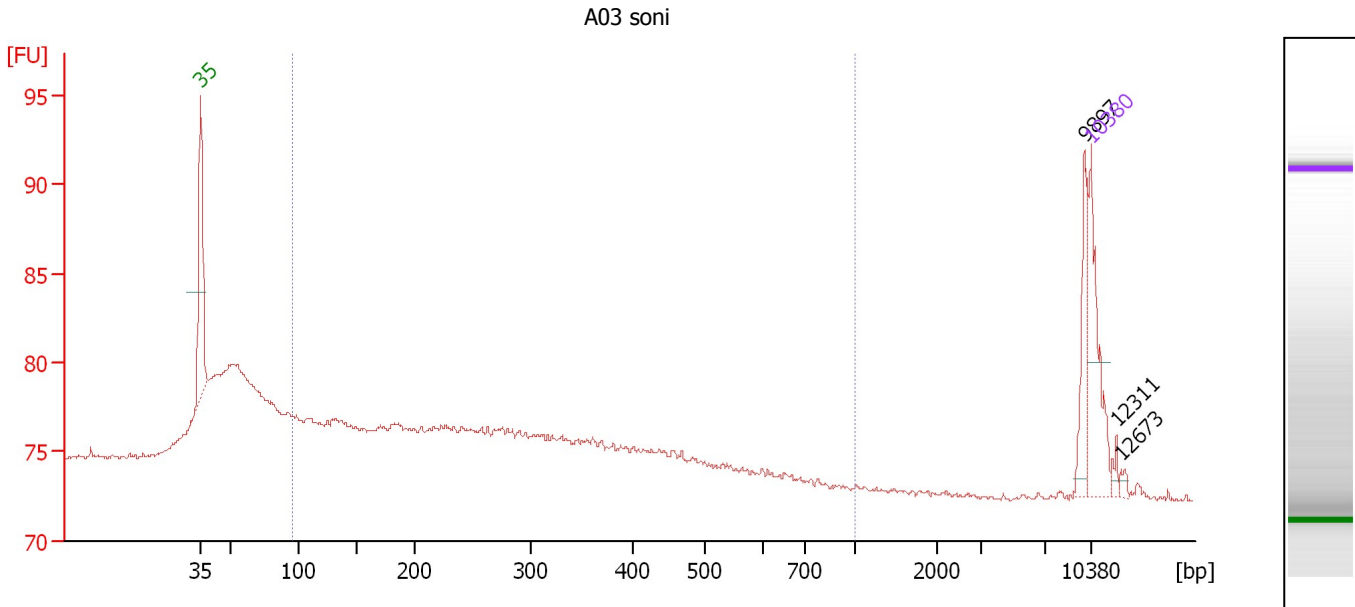
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	22	0.00	0.0		39.35
2	35	125.00	5,411.3	Lower Marker	43.00
3	50	150.00	4,545.5	Ladder Peak	45.25
4	100	150.00	2,272.7	Ladder Peak	50.68
5	150	150.00	1,515.2	Ladder Peak	55.31
6	200	150.00	1,136.4	Ladder Peak	59.85
7	300	150.00	757.6	Ladder Peak	68.89
8	400	150.00	568.2	Ladder Peak	76.96
9	500	150.00	454.5	Ladder Peak	82.61
10	600	150.00	378.8	Ladder Peak	87.28
11	700	150.00	324.7	Ladder Peak	90.46
12	1,000	150.00	227.3	Ladder Peak	94.41
13	2,000	150.00	113.6	Ladder Peak	100.90
14	3,000	150.00	75.8	Ladder Peak	104.30
15	7,000	150.00	32.5	Ladder Peak	109.48
16	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_005.xad

Created: 12/22/2014 4:26:06 PM
 Modified: 12/22/2014 5:34:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : A03 soni

Number of peaks found: 3 Corr. Area 1: 119.3
 Noise: 0.1

Peak table for sample 1 : A03 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	9,897	50.02	7.7		112.50
3	10,380	75.00	10.9	Upper Marker	113.00
4	12,311	0.00	0.0		115.01
5	12,673	0.00	0.0		115.39

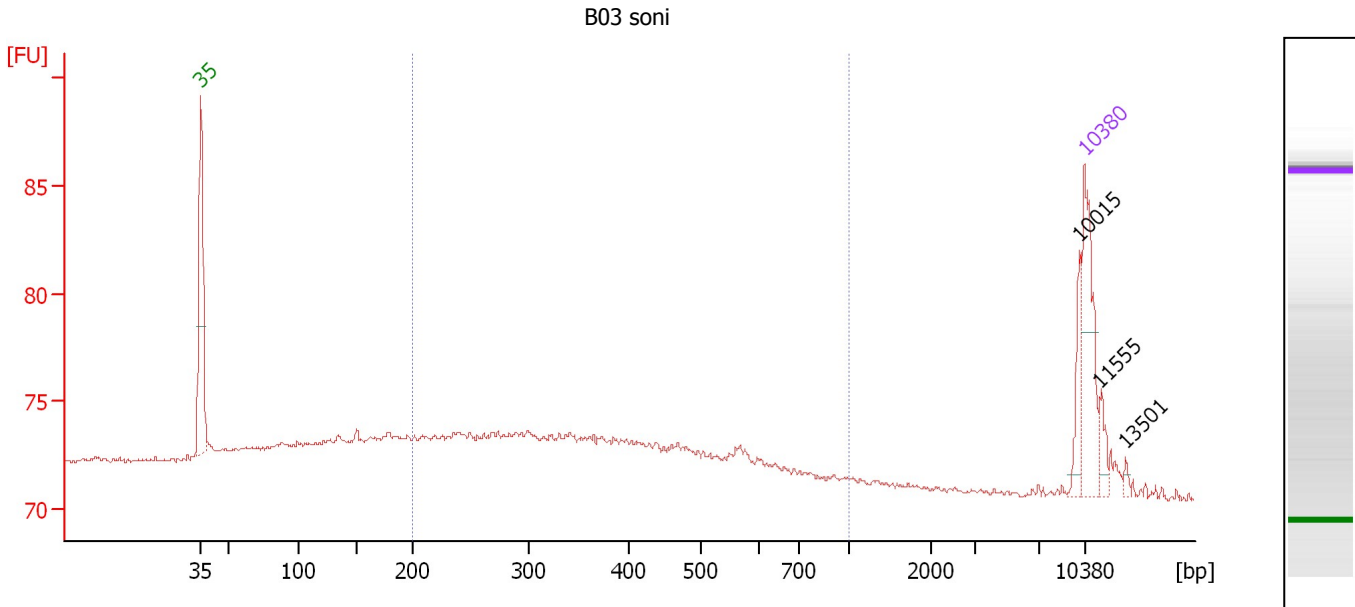
Region table for sample 1 : A03 soni

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
96	280	1,000	119.3	57	46.5	986.60	7,491.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_005.xad

Created: 12/22/2014 4:26:06 PM
 Modified: 12/22/2014 5:34:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : B03 soni

Number of peaks found: 3 Corr. Area 1: 72.4
 Noise: 0.1

Peak table for sample 2 : B03 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	10,015	23.13	3.5		112.62
3	10,380	75.00	10.9	Upper Marker	113.00
4	11,555	0.00	0.0		114.23
5	13,501	0.00	0.0		116.25

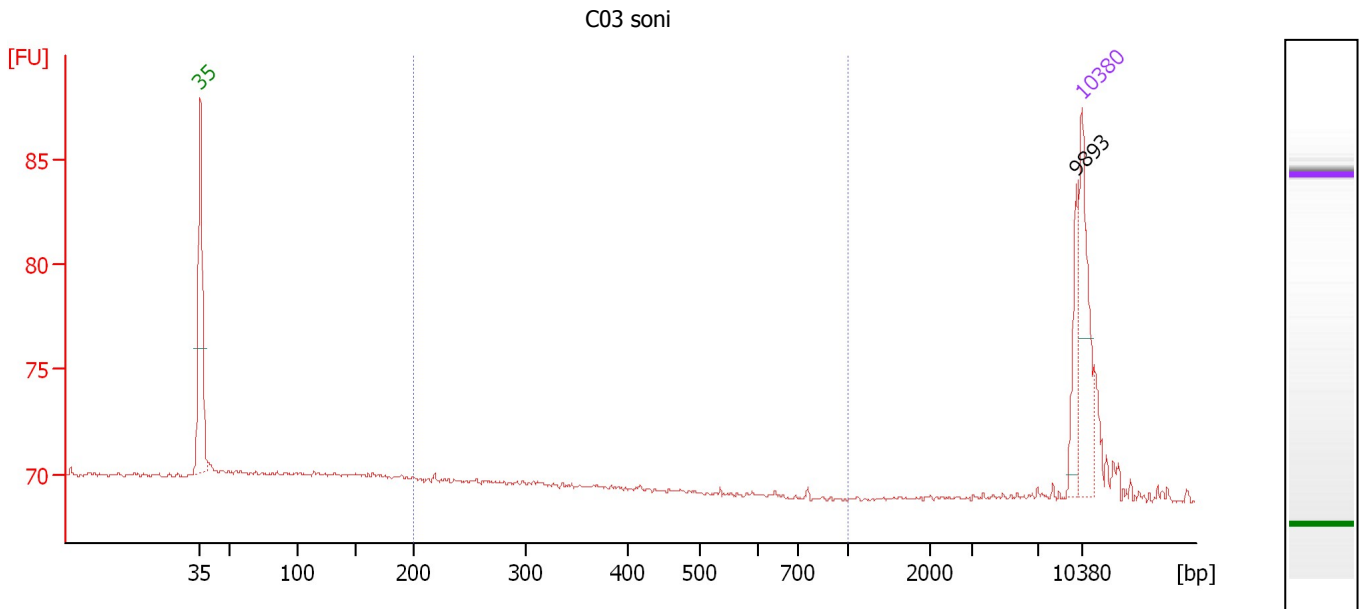
Region table for sample 2 : B03 soni

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	390	1,000	72.4	57	37.5	575.33	2,657.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_005.xad

Created: 12/22/2014 4:26:06 PM
 Modified: 12/22/2014 5:34:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : C03 soni

Number of peaks found: 1 Corr. Area 1: 0.6
 Noise: 0.1

Peak table for sample 3 : C03 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	9,893	34.96	5.4		112.49
3	10,380	75.00	10.9	Upper Marker	113.00

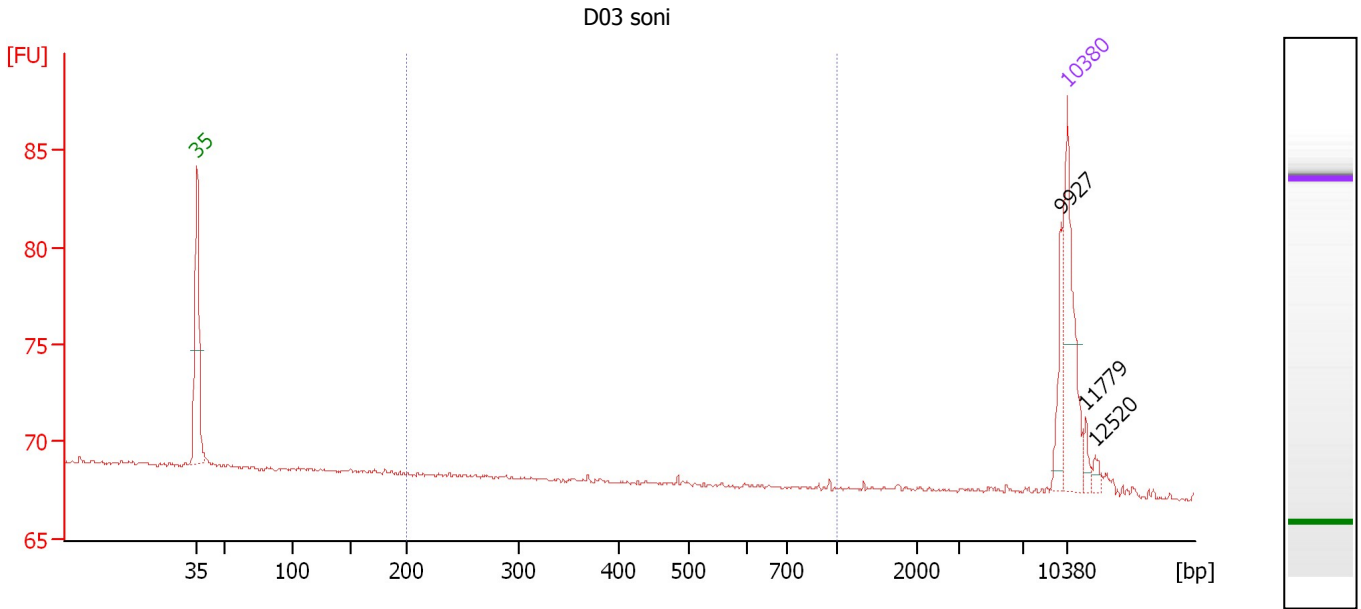
Region table for sample 3 : C03 soni

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	238	1,000	0.6	3	22.9	5.83	38.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_005.xad

Created: 12/22/2014 4:26:06 PM
 Modified: 12/22/2014 5:34:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : D03 soni

Number of peaks found: 3 Corr. Area 1: 0.6
 Noise: 0.1

Peak table for sample 4 : D03 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	9,927	29.36	4.5		112.53
3	10,380	75.00	10.9	Upper Marker	113.00
4	11,779	0.00	0.0		114.46
5	12,520	0.00	0.0		115.23

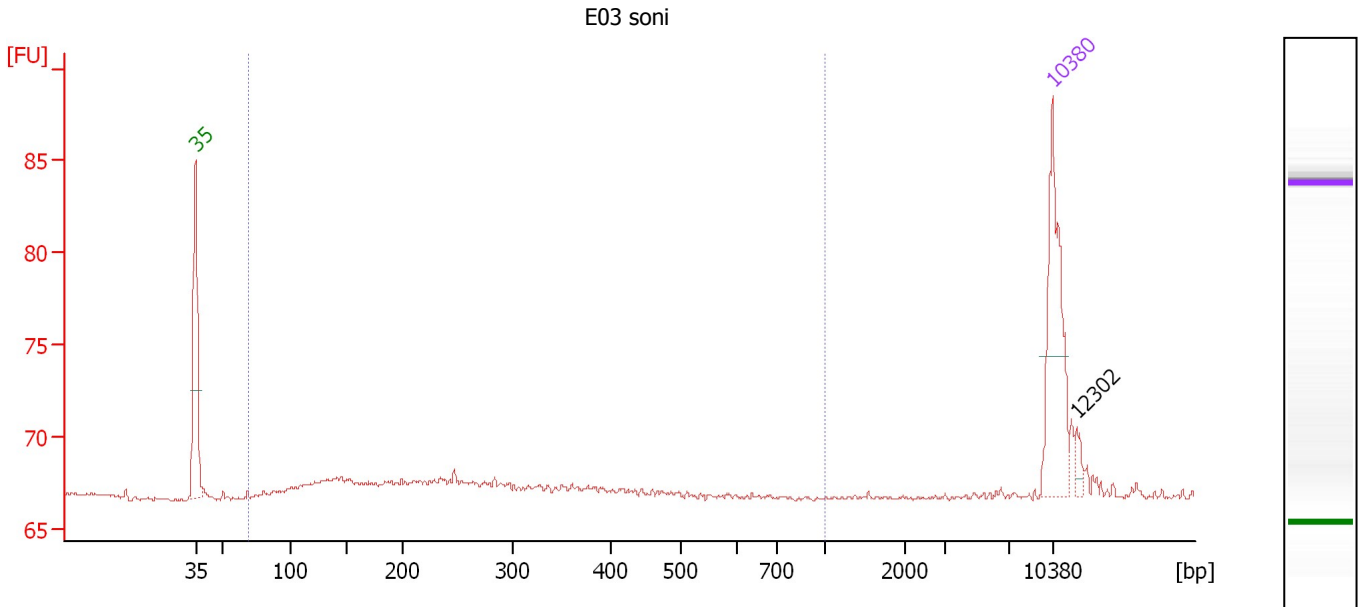
Region table for sample 4 : D03 soni

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	540	1,000	0.6	3	47.8	3.95	15.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_005.xad

Created: 12/22/2014 4:26:06 PM
 Modified: 12/22/2014 5:34:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : E03 soni

Number of peaks found: 1 Corr. Area 1: 30.4
 Noise: 0.1

Peak table for sample 5 : E03 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	10,380	75.00	10.9	Upper Marker	113.00
3	12,302	0.00	0.0		115.00

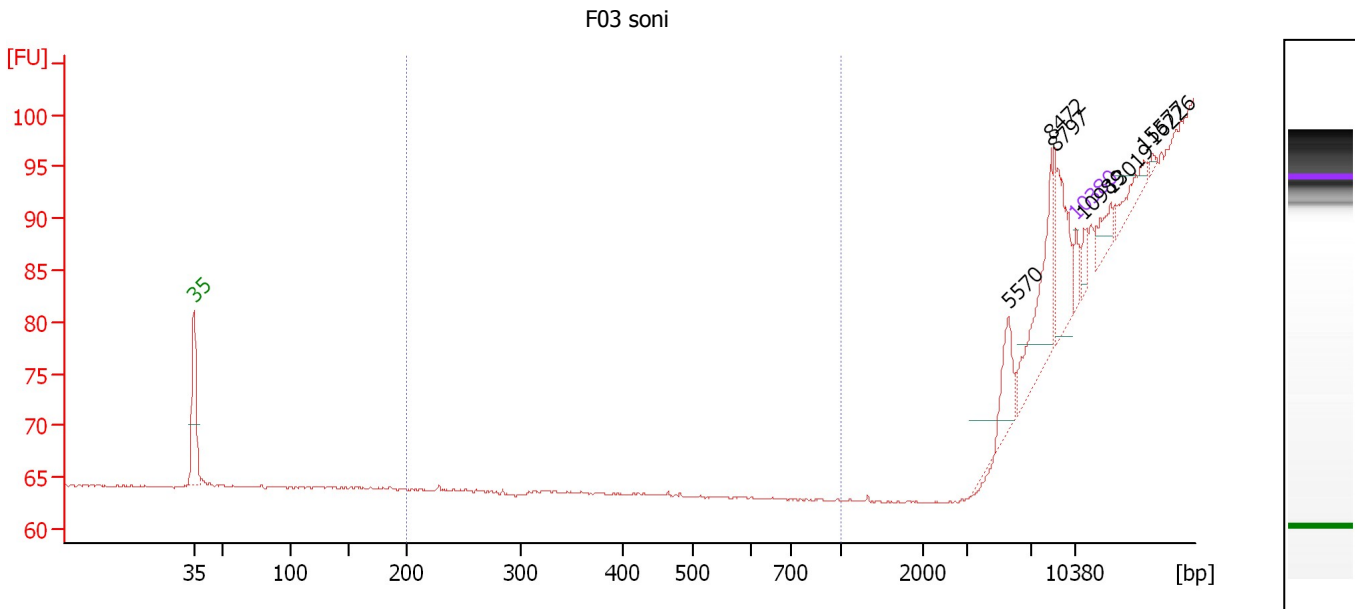
Region table for sample 5 : E03 soni

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
70	250	1,000	30.4	81	41.8	172.93	1,364.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_005.xad

Created: 12/22/2014 4:26:06 PM
 Modified: 12/22/2014 5:34:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : F03 soni

Number of peaks found: 7 Corr. Area 1: 0.0
 Noise: 0.1

Peak table for sample 6 : F03 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	5,570	232.09	63.1		107.63
3	8,472	510.02	91.2		111.01
4	8,797	371.14	63.9		111.35
5	10,380	75.00	10.9	Upper Marker	113.00
6	10,989	0.00	0.0		113.63
7	13,019	0.00	0.0		115.75
8	15,577	0.00	0.0		118.42
9	16,226	0.00	0.0		119.09

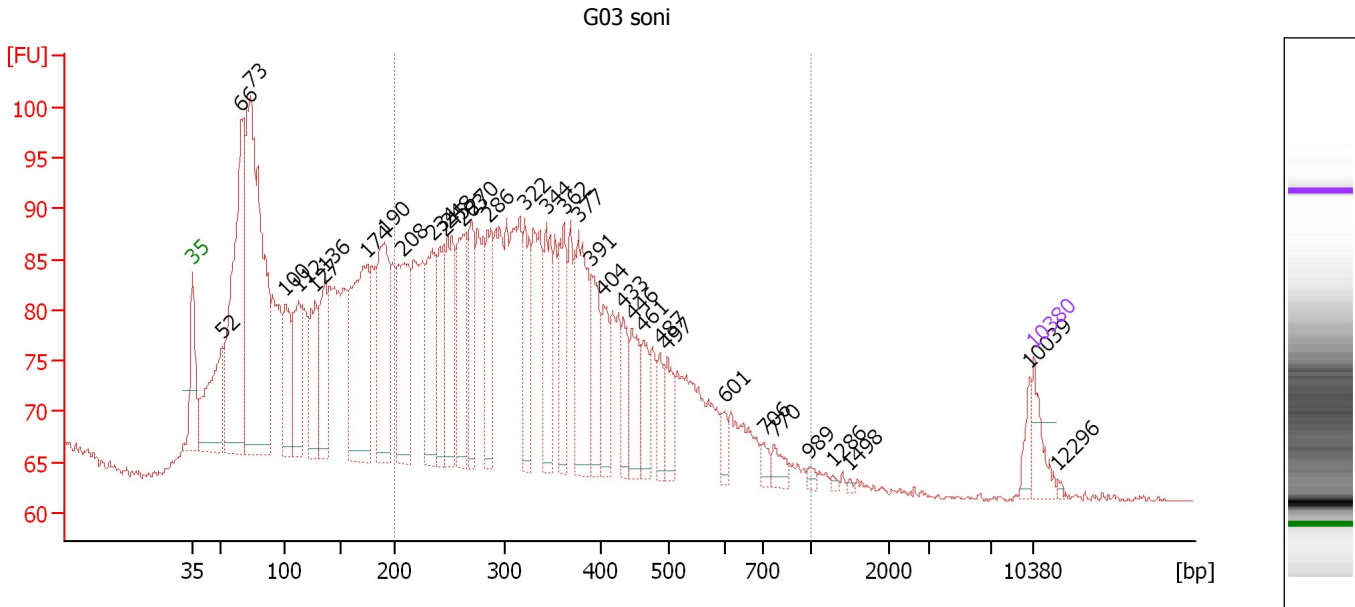
Region table for sample 6 : F03 soni

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	0	1,000	0.0	0	0.0	0.00	0.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_005.xad

Created: 12/22/2014 4:26:06 PM
 Modified: 12/22/2014 5:34:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : G03 soni

Number of peaks found: 35 Corr. Area 1: 762.8
 Noise: 0.1

Peak table for sample 7 : G03 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	440.94	12,907.0		45.44
3	66	1,037.05	23,640.1		47.04
4	73	1,578.40	32,759.5		47.75
5	100	269.41	4,083.6		50.68
6	112	298.18	4,035.8		51.79
7	127	284.36	3,397.4		53.16
8	136	308.14	3,434.7		54.01
9	174	686.04	5,981.5		57.47
10	190	504.36	4,024.1		58.94
11	208	436.95	3,190.1		60.53
12	234	318.87	2,064.4		62.93
13	245	223.77	1,384.8		63.91
14	248	310.77	1,896.5		64.22
15	263	355.86	2,054.0		65.50
16	270	229.88	1,288.3		66.21
17	286	219.34	1,163.7		67.59
18	322	214.52	1,010.0		70.65
19	344	239.24	1,054.3		72.43
20	362	219.08	917.0		73.89
21	377	361.71	1,454.3		75.09
22	391	183.55	712.0		76.20
23	404	134.07	503.0		77.18
24	433	104.07	364.2		78.82
25	446	137.55	466.9		79.58

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_005.xad


Created: 12/22/2014 4:26:06 PM
 Modified: 12/22/2014 5:34:06 PM

Electropherogram Summary Continued ...

... Peak table for sample 7 : G03 soni

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	461	109.70	360.3		80.42
27	487	79.61	247.6		81.88
28	497	105.77	322.2		82.46
29	601	39.66	100.0		87.30
30	706	30.37	65.2		90.54
31	770	44.37	87.3		91.38
32	989	13.14	20.1		94.27
33	1,286	7.29	8.6		96.27
34	1,498	4.54	4.6		97.64
35	10,039	36.35	5.5		112.64
36	10,380	75.00	10.9	Upper Marker	113.00
37	12,296	0.00	0.0		115.00

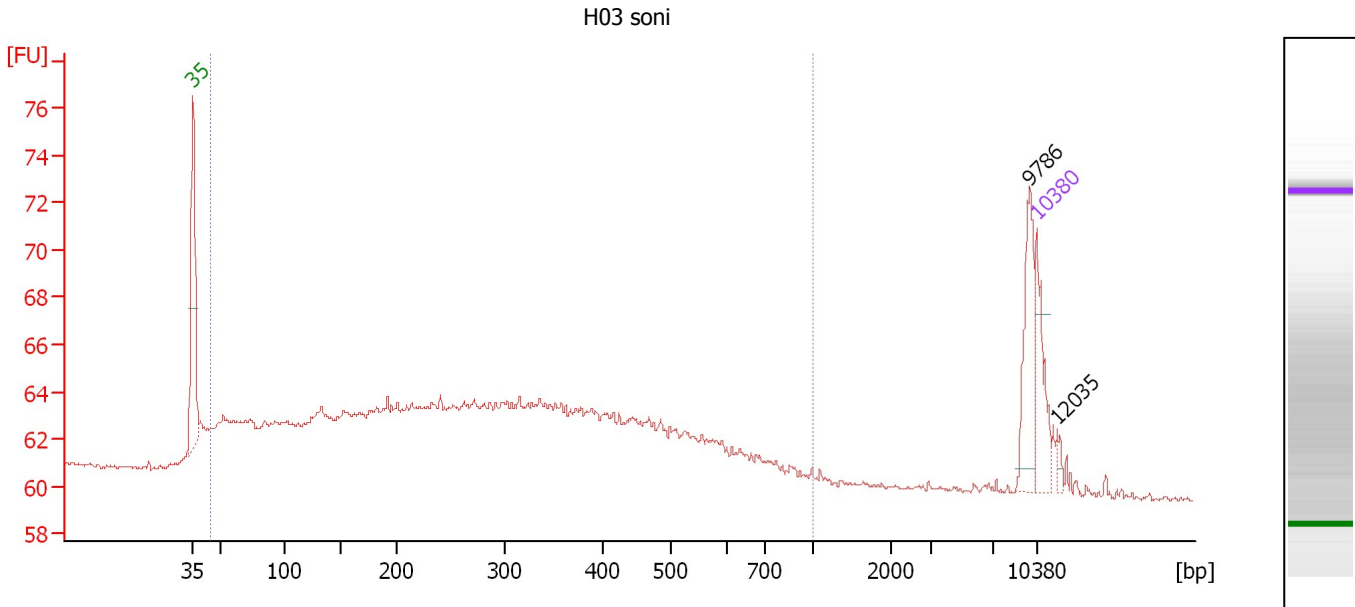
Region table for sample 7 : G03 soni

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	359	1,000	762.8	56	34.5	7,071.27	34,267.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_005.xad

Created: 12/22/2014 4:26:06 PM
 Modified: 12/22/2014 5:34:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : H03 soni

Number of peaks found: 2 Corr. Area 1: 185.6
 Noise: 0.1

Peak table for sample 8 : H03 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	9,786	104.81	16.2		112.38
3	10,380	75.00	10.9	Upper Marker	113.00
4	12,035	0.00	0.0		114.73

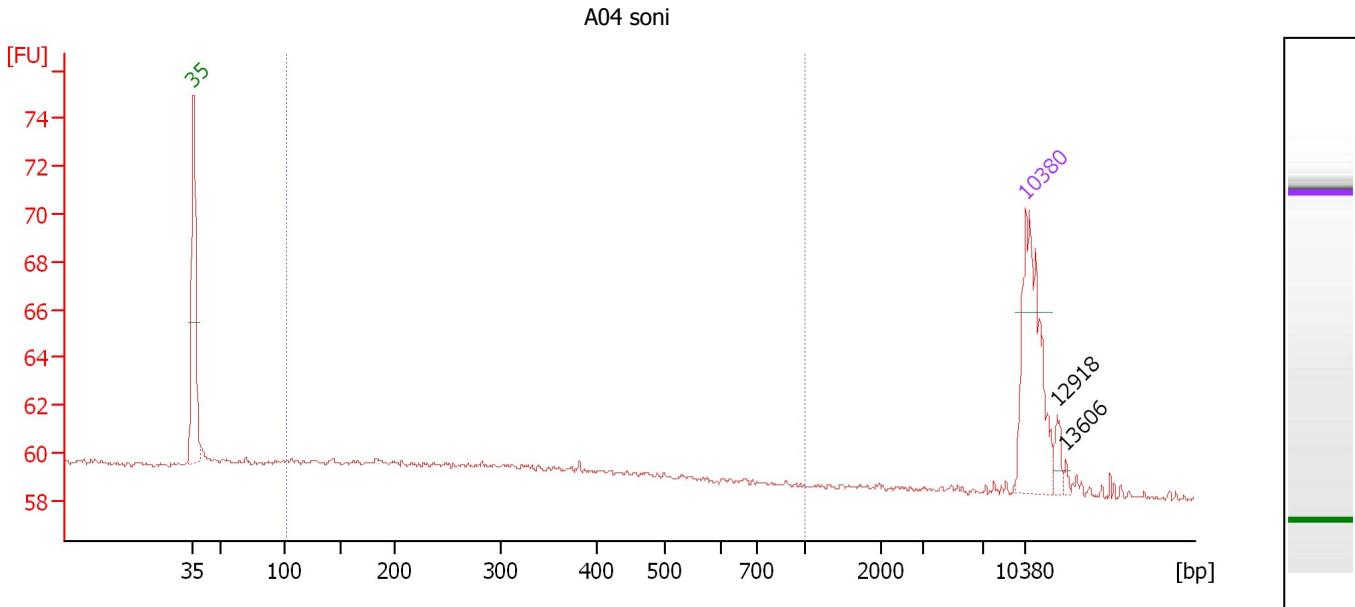
Region table for sample 8 : H03 soni

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
45	309	1,000	185.6	89	56.1	2,942.99	26,965.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_005.xad

Created: 12/22/2014 4:26:06 PM
 Modified: 12/22/2014 5:34:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : A04 soni

Number of peaks found: 2 Corr. Area 1: 21.8
 Noise: 0.1

Peak table for sample 9 : A04 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	10,380	75.00	10.9	Upper Marker	113.00
3	12,918	0.00	0.0		115.65
4	13,606	0.00	0.0		116.36

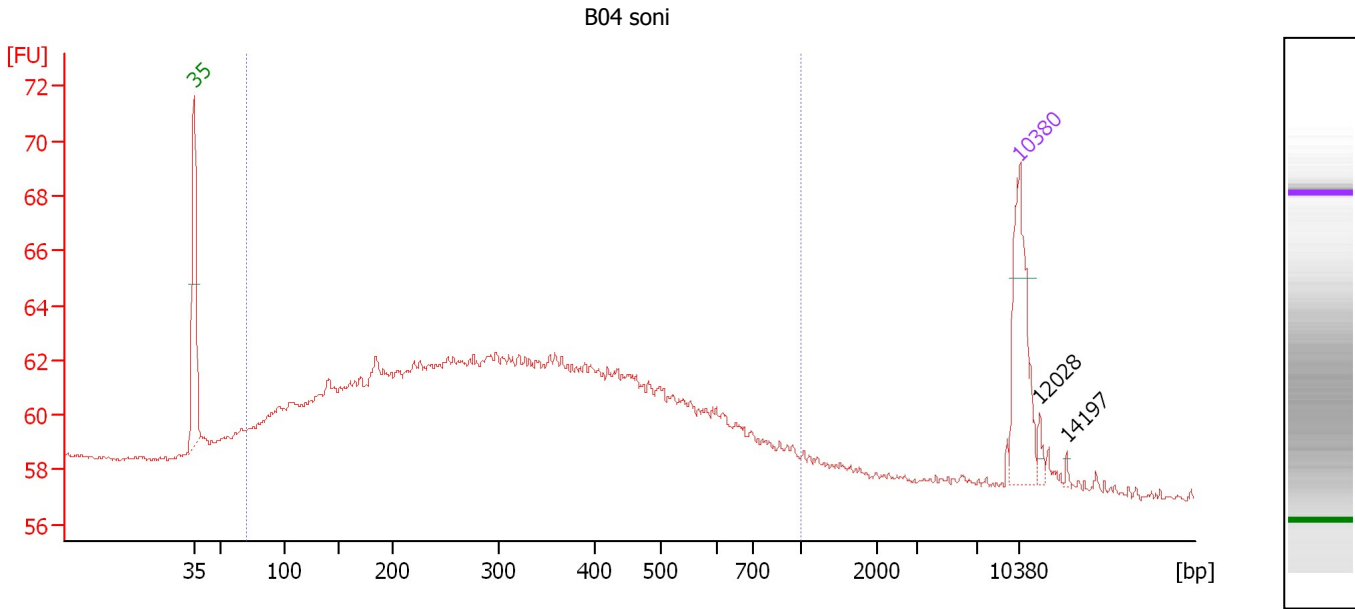
Region table for sample 9 : A04 soni

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
102	319	1,000	21.8	66	48.3	141.76	950.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_005.xad

Created: 12/22/2014 4:26:06 PM
 Modified: 12/22/2014 5:34:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : B04 soni

Number of peaks found: 2 Corr. Area 1: 218.6
 Noise: 0.1

Peak table for sample 10 : B04 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	10,380	75.00	10.9	Upper Marker	113.00
3	12,028	0.00	0.0		114.72
4	14,197	0.00	0.0		116.98

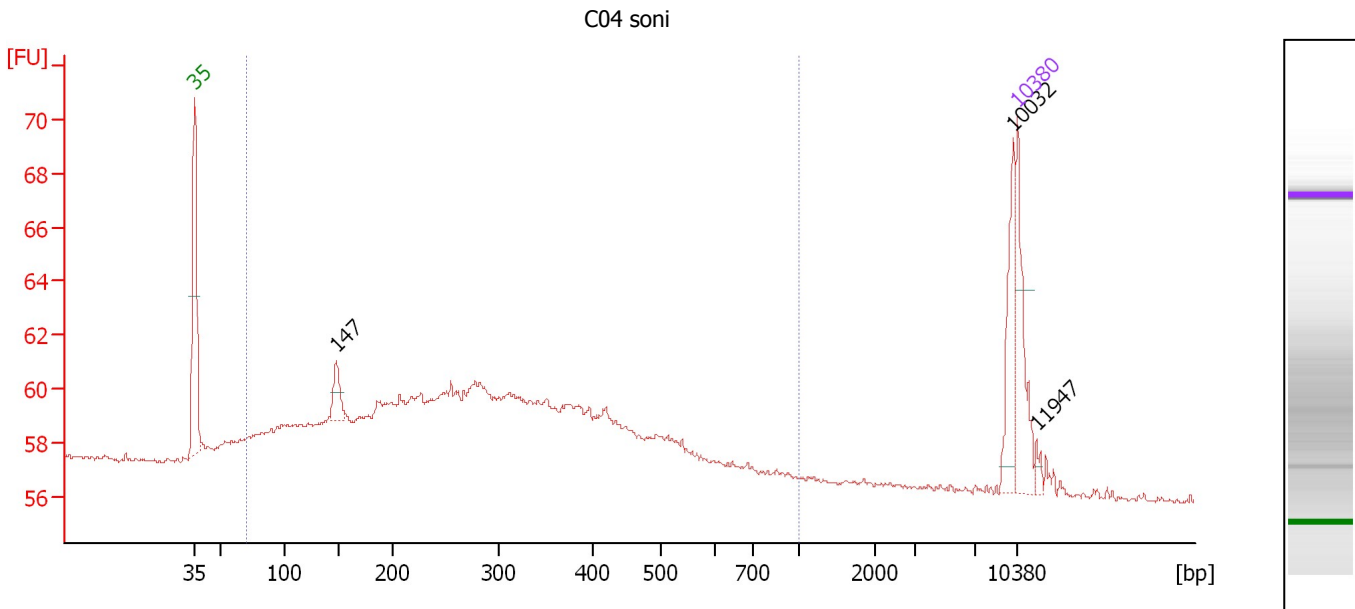
Region table for sample 10 : B04 soni

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
71	344	1,000	218.6	91	50.7	1,870.05	12,866.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_005.xad

Created: 12/22/2014 4:26:06 PM
 Modified: 12/22/2014 5:34:06 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : C04 soni

Number of peaks found: 3 Corr. Area 1: 139.4
 Noise: 0.1

Peak table for sample 11 : C04 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	147	40.80	419.4		55.07
3	10,032	60.34	9.1		112.64
4	10,380	75.00	10.9	Upper Marker	113.00
5	11,947	0.00	0.0		114.63

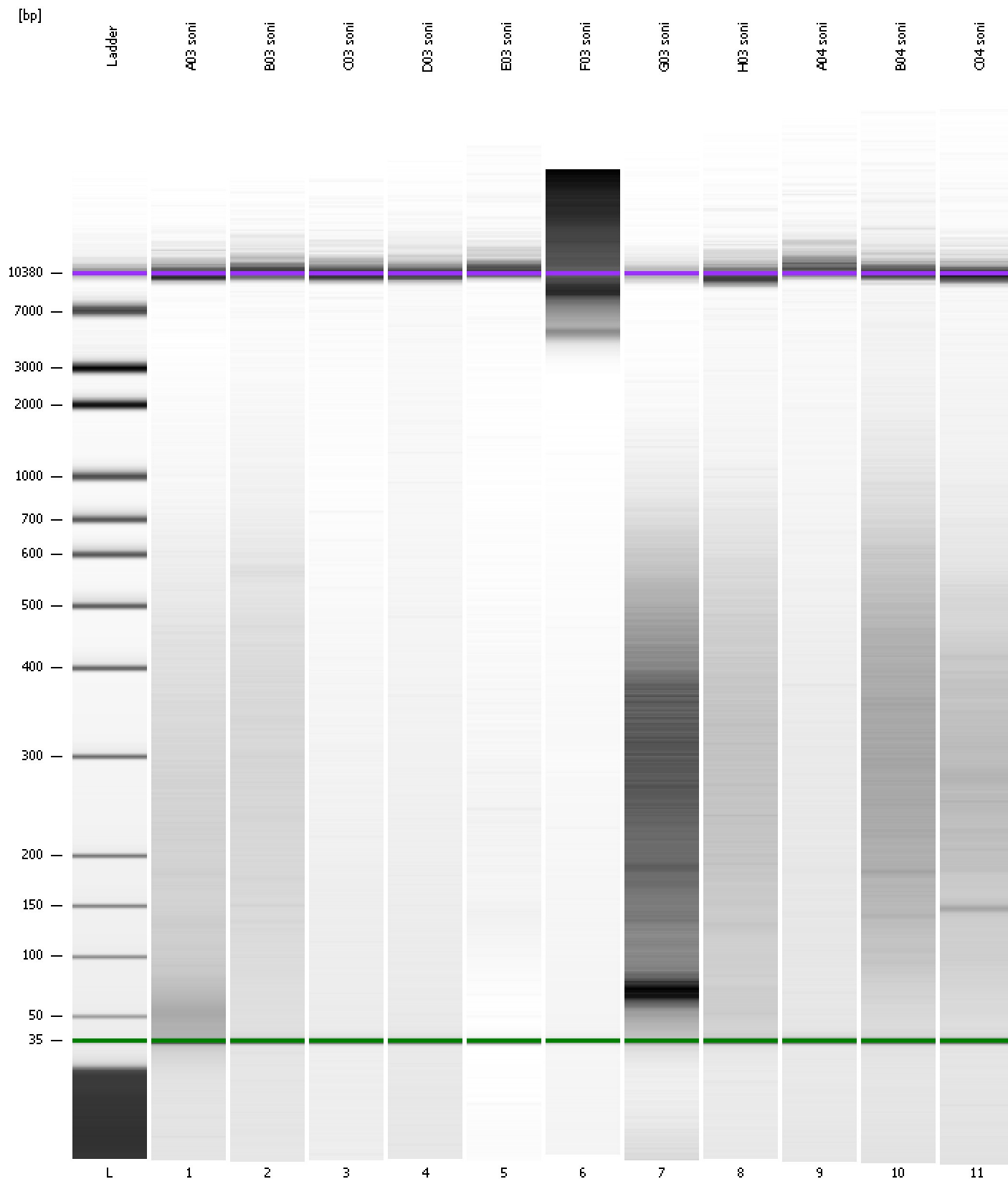
Region table for sample 11 : C04 soni

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
71	308	1,000	139.4	88	48.5	1,796.83	13,147.2	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_005.xad

Created: 12/22/2014 4:26:06 PM
Modified: 12/22/2014 5:34:06 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_005.xad

Created: 12/22/2014 4:26:06 PM
 Modified: 12/22/2014 5:34:06 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		12/22/2014 5:07:23 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-12-22\2014-12-22_005.xad)		Instrument	Run		12/22/2014 4:26:11 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		12/22/2014 4:26:11 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		12/22/2014 4:26:11 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		12/22/2014 4:26:11 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		12/22/2014 4:26:11 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		12/22/2014 4:26:11 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		12/22/2014 4:26:11 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1