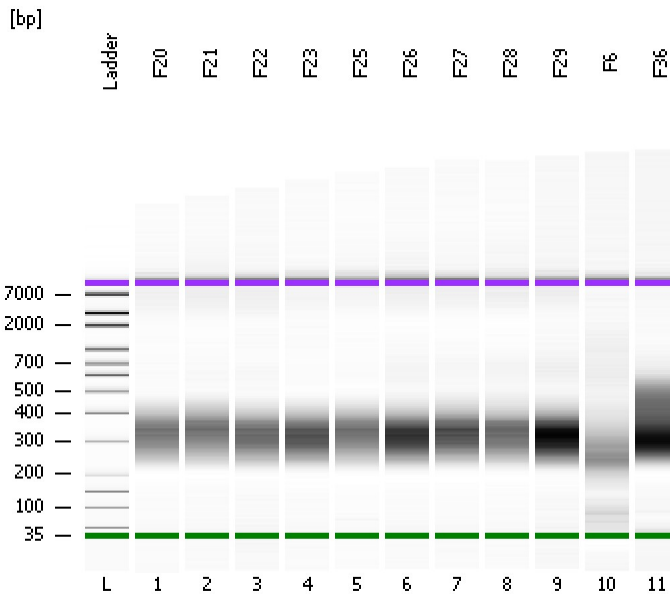


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_007.xad

Created: 4/23/2015 3:57:55 PM
Modified: 4/23/2015 4:41:20 PM

Electrophoresis File Run Summary



Instrument Information:

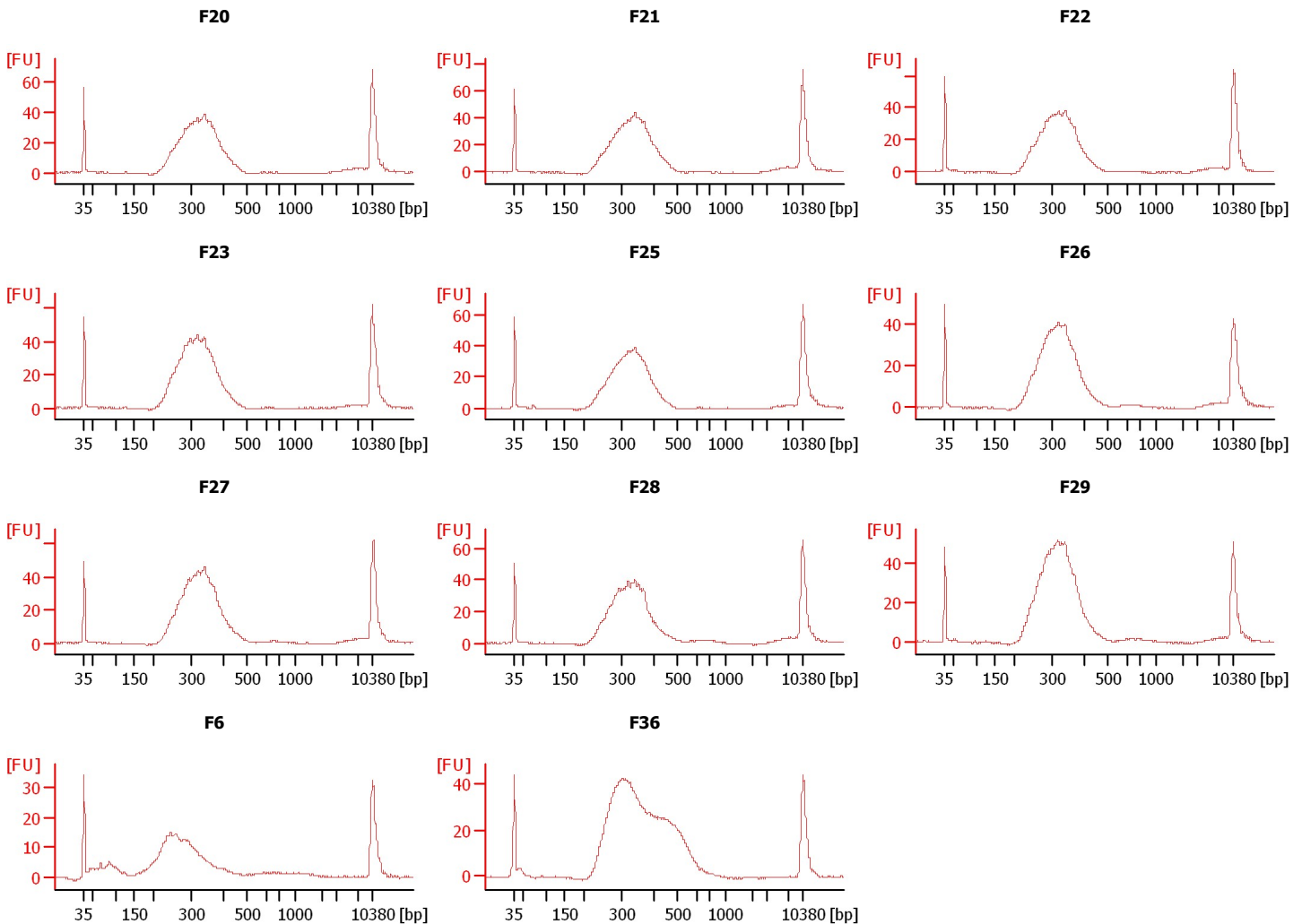
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2015-04-23\2015-04-23_007.xad

Created: 4/23/2015 3:57:55 PM
 Modified: 4/23/2015 4:41:20 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
F20		<input type="checkbox"/>	✓			
F21		<input type="checkbox"/>	✓			
F22		<input type="checkbox"/>	✓			
F23		<input type="checkbox"/>	✓			
F25		<input type="checkbox"/>	✓			
F26		<input type="checkbox"/>	✓			
F27		<input type="checkbox"/>	✓			
F28		<input type="checkbox"/>	✓			
F29		<input type="checkbox"/>	✓			
F6		<input type="checkbox"/>	✓			
F36		<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\2015-04-23\2015-04-23_007.xad

Created: 4/23/2015 3:57:55 PM
Modified: 4/23/2015 4:41:20 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

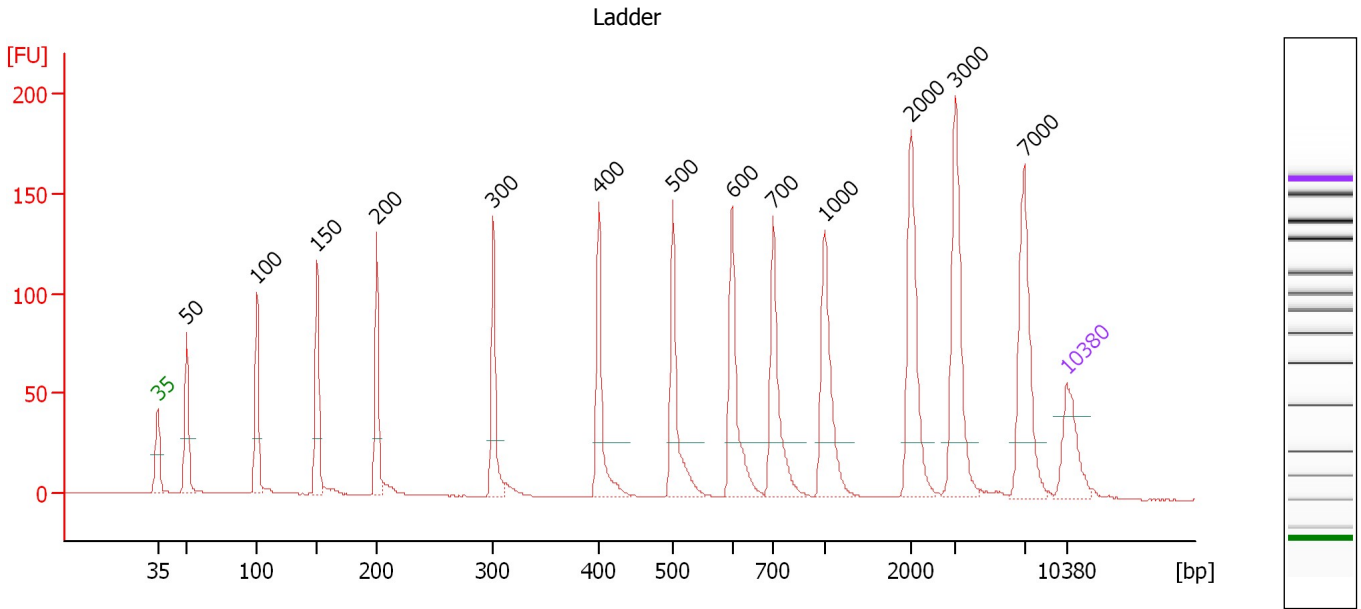
Ladder

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\2015-04-23\2015-04-23_007.xad

Created: 4/23/2015 3:57:55 PM
 Modified: 4/23/2015 4:41:20 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

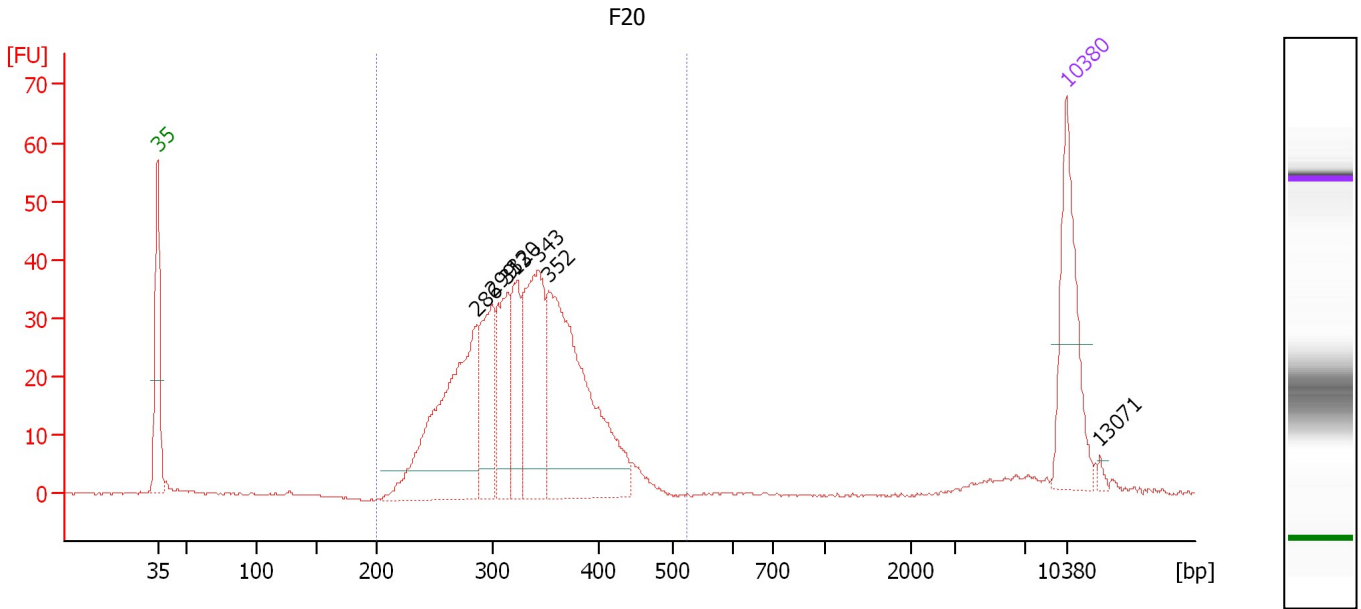
Peak table for Ladder

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	45.25
3	100	150.00	2,272.7	Ladder Peak	50.66
4	150	150.00	1,515.2	Ladder Peak	55.30
5	200	150.00	1,136.4	Ladder Peak	59.89
6	300	150.00	757.6	Ladder Peak	68.89
7	400	150.00	568.2	Ladder Peak	76.97
8	500	150.00	454.5	Ladder Peak	82.71
9	600	150.00	378.8	Ladder Peak	87.26
10	700	150.00	324.7	Ladder Peak	90.42
11	1,000	150.00	227.3	Ladder Peak	94.39
12	2,000	150.00	113.6	Ladder Peak	101.04
13	3,000	150.00	75.8	Ladder Peak	104.48
14	7,000	150.00	32.5	Ladder Peak	109.75
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_007.xad

Created: 4/23/2015 3:57:55 PM
 Modified: 4/23/2015 4:41:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : F20

Number of peaks found: 7 Corr. Area 1: 588.7
 Noise: 0.2

Peak table for sample 1 : F20

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	286	223.23	1,183.2		67.61
3	299	84.60	428.4		68.81
4	313	77.97	377.0		69.96
5	320	63.71	301.8		70.49
6	343	133.31	588.9		72.36
7	352	247.80	1,065.1		73.13
8	10,380	75.00	10.9	Upper Marker	113.00
9	13,071	0.00	0.0		115.59

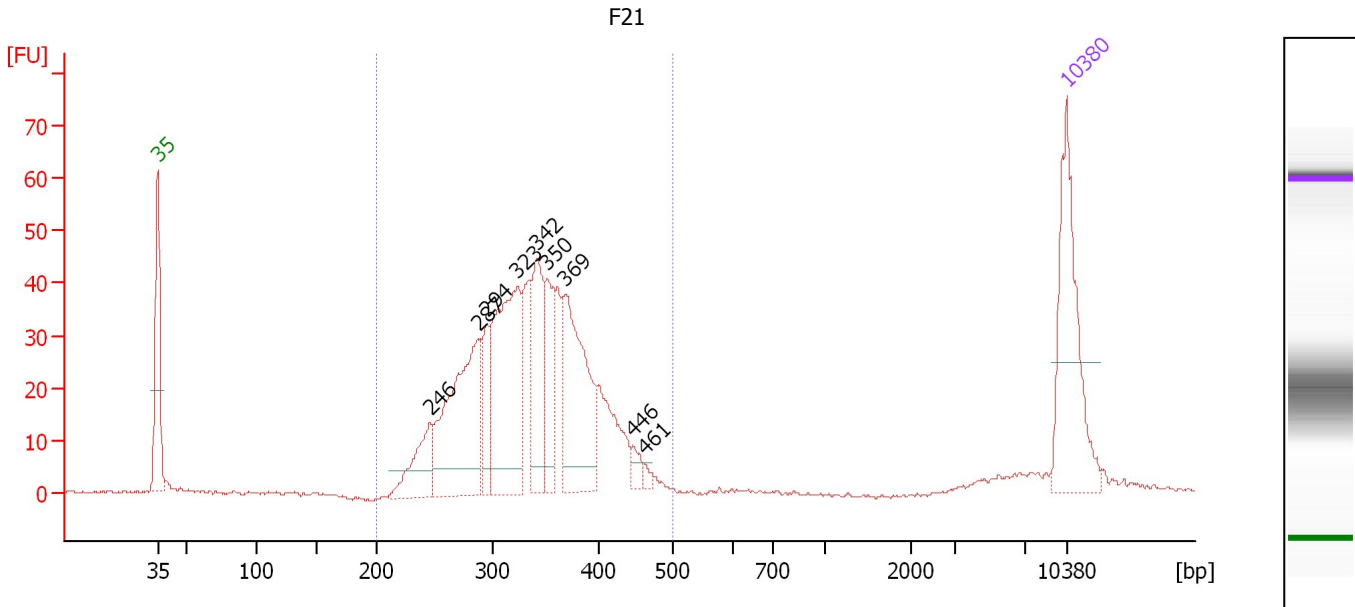
Region table for sample 1 : F20

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	328	523	588.7	3,896.9	95	15.3	817.10	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_007.xad

Created: 4/23/2015 3:57:55 PM
 Modified: 4/23/2015 4:41:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : F21

Number of peaks found: 9 Corr. Area 1: 660.4
 Noise: 0.3

Peak table for sample 2 : F21

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	246	46.91	289.3		64.00
3	287	141.94	750.6		67.67
4	294	34.67	178.6		68.36
5	323	141.22	663.4		70.71
6	342	67.32	298.4		72.27
7	350	44.27	191.4		72.96
8	369	108.54	446.3		74.43
9	446	7.77	26.4		79.62
10	461	3.31	10.9		80.50
11	10,380	75.00	10.9	Upper Marker	113.00

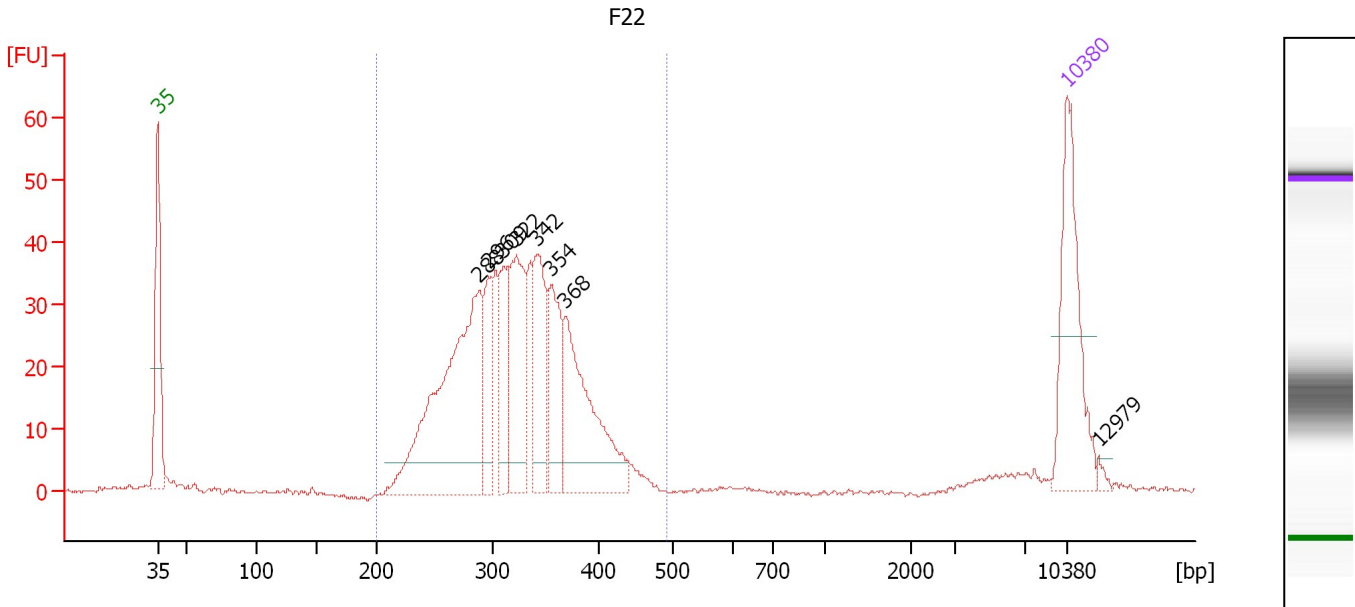
Region table for sample 2 : F21

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	334	500	660.4	3,407.8	96	15.7	727.68	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_007.xad

Created: 4/23/2015 3:57:55 PM
 Modified: 4/23/2015 4:41:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : F22

Number of peaks found: 8 Corr. Area 1: 584.9
 Noise: 0.3

Peak table for sample 3 : F22

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	288	245.35	1,292.7		67.77
3	296	48.12	246.4		68.52
4	309	46.17	226.4		69.62
5	322	94.83	446.1		70.67
6	342	72.60	321.8		72.27
7	354	65.68	280.9		73.27
8	368	119.23	490.3		74.42
9	10,380	75.00	10.9	Upper Marker	113.00
10	12,979	0.00	0.0		115.50

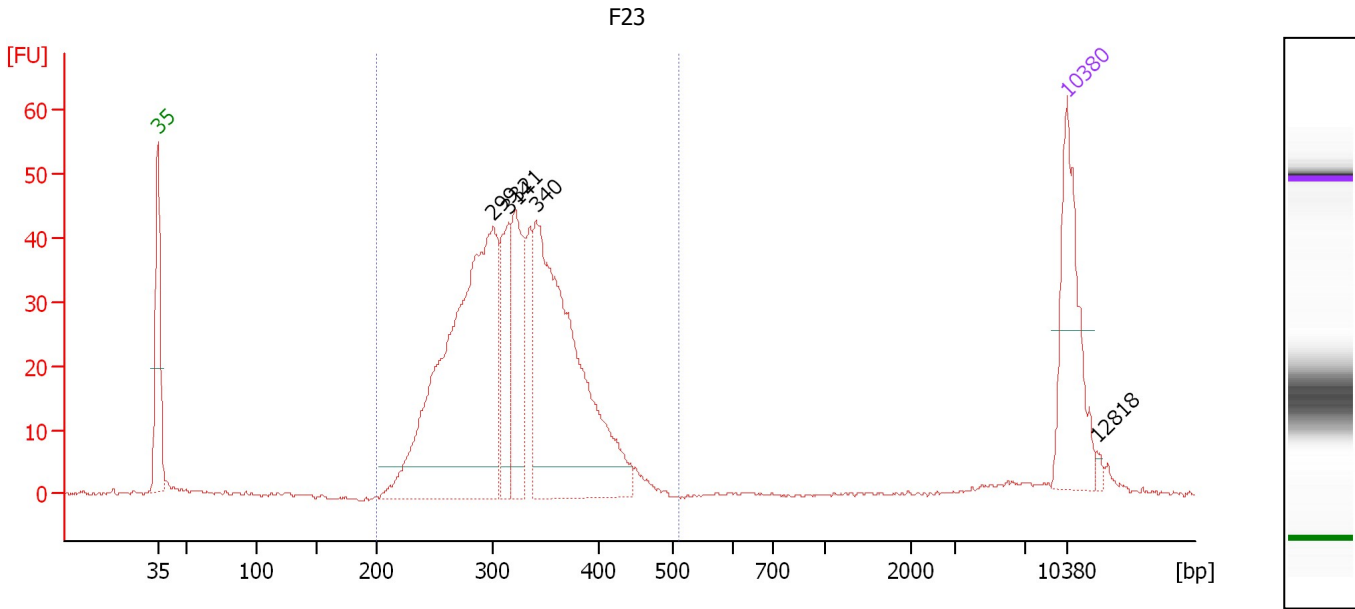
Region table for sample 3 : F22

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	322	491	584.9	3,761.9	95	15.2	775.84	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_007.xad

Created: 4/23/2015 3:57:55 PM
 Modified: 4/23/2015 4:41:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : F23

Number of peaks found: 5 Corr. Area 1: 660.7
 Noise: 0.3

Peak table for sample 4 : F23

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	299	411.90	2,085.6		68.82
3	314	65.28	314.7		70.04
4	321	96.15	453.5		70.60
5	340	322.75	1,437.6		72.13
6	10,380	75.00	10.9	Upper Marker	113.00
7	12,818	0.00	0.0		115.35

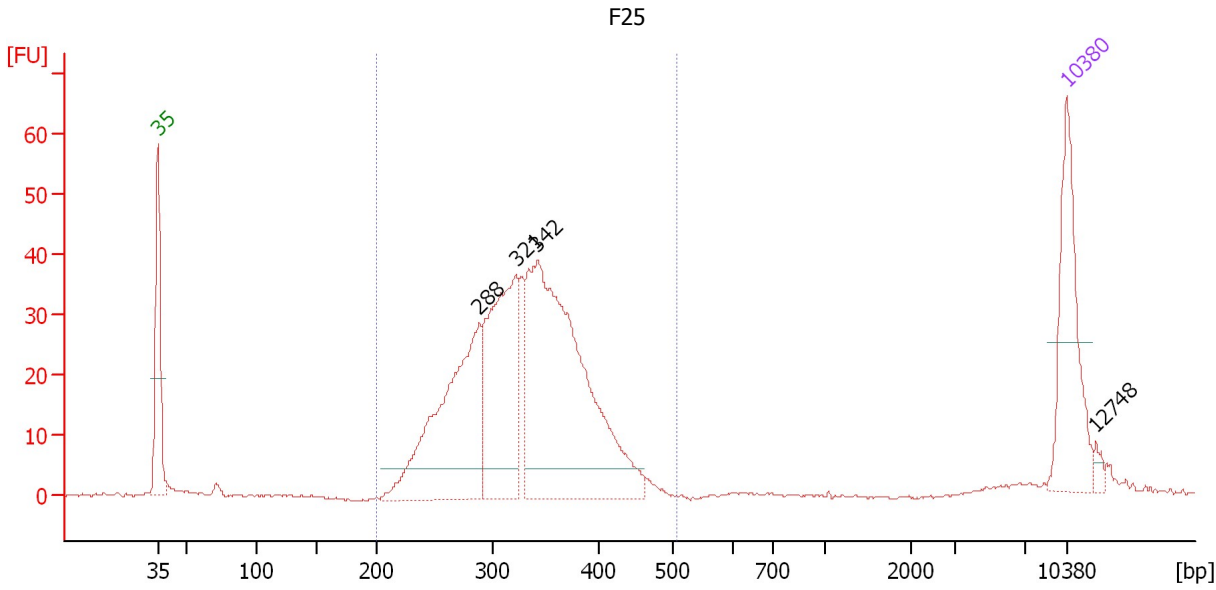
Region table for sample 4 : F23

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	321	510	660.7	4,524.5	97	15.2	929.33	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_007.xad

Created: 4/23/2015 3:57:55 PM
 Modified: 4/23/2015 4:41:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : F25

Number of peaks found: 4 Corr. Area 1: 576.1
 Noise: 0.3

Peak table for sample 5 : F25

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	288	216.97	1,143.2		67.77
3	321	180.94	853.0		70.62
4	342	362.91	1,608.2		72.27
5	10,380	75.00	10.9	Upper Marker	113.00
6	12,748	0.00	0.0		115.28

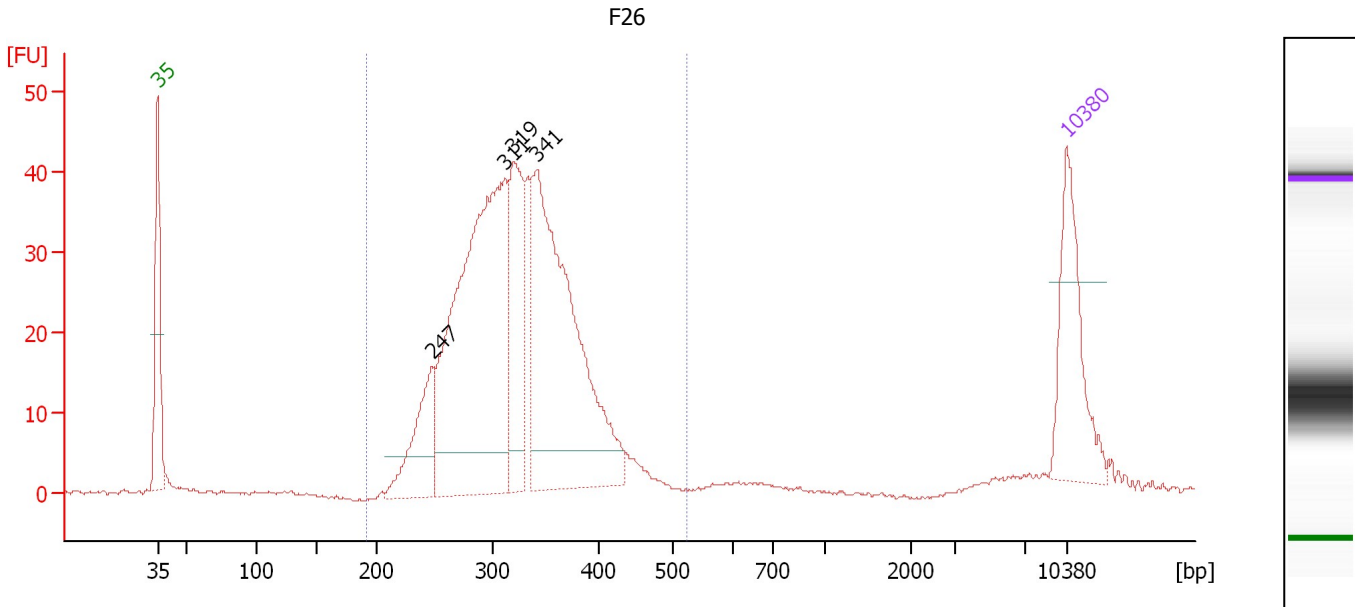
Region table for sample 5 : F25

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	328	508	576.1	3,639.3	95	15.4	763.83	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_007.xad

Created: 4/23/2015 3:57:55 PM
 Modified: 4/23/2015 4:41:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : F26

Number of peaks found: 4 Corr. Area 1: 605.3
 Noise: 0.3

Peak table for sample 6 : F26

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	247	82.18	504.2		64.12
3	311	417.72	2,035.2		69.77
4	319	122.64	582.9		70.40
5	341	339.22	1,508.1		72.18
6	10,380	75.00	10.9	Upper Marker	113.00

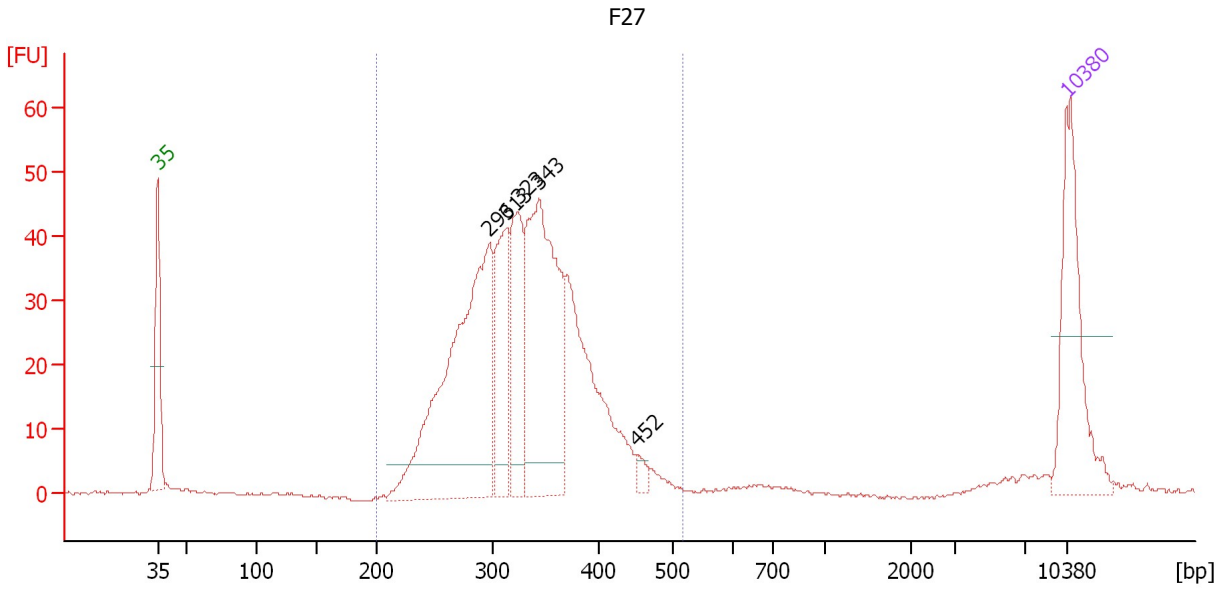
Region table for sample 6 : F26

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
191	322	522	605.3	5,027.1	96	15.3	1,037.42	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_007.xad

Created: 4/23/2015 3:57:55 PM
 Modified: 4/23/2015 4:41:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : F27

Number of peaks found: 5 Corr. Area 1: 662.9
 Noise: 0.3

Peak table for sample 7 : F27

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	296	295.35	1,509.8		68.56
3	313	88.75	430.3		69.90
4	323	87.50	410.3		70.75
5	343	213.81	944.6		72.36
6	452	7.69	25.8		79.95
7	10,380	75.00	10.9	Upper Marker	113.00

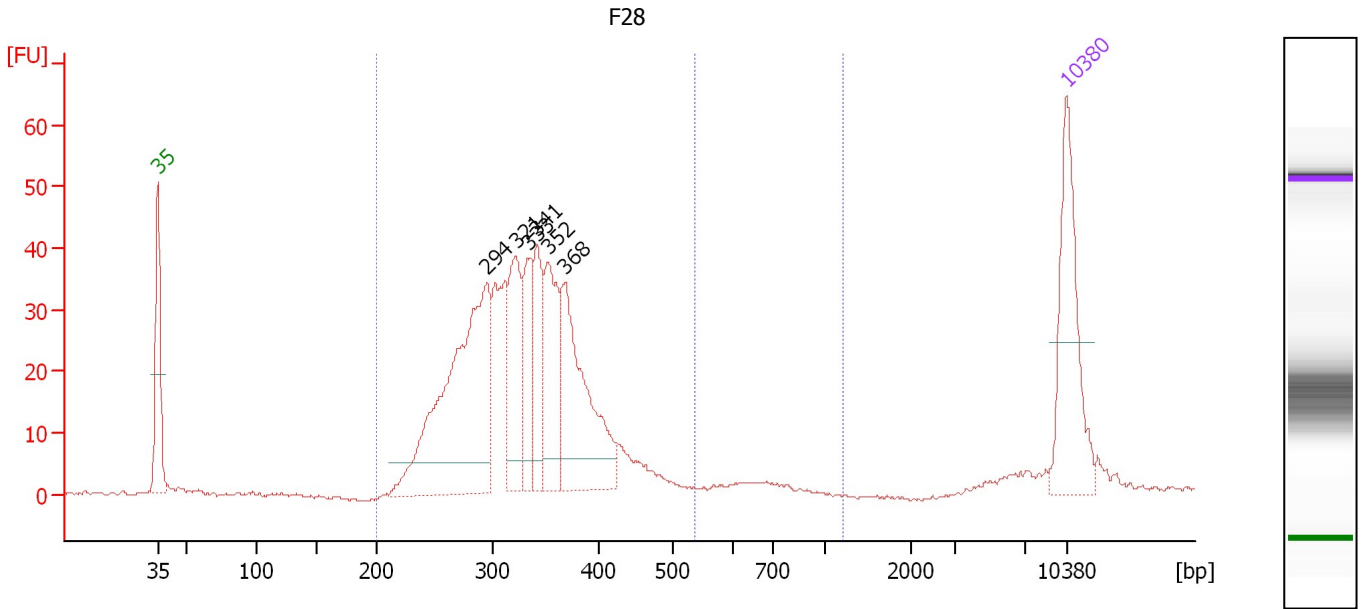
Region table for sample 7 : F27

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	330	516	662.9	4,049.8	96	15.7	853.82	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_007.xad

Created: 4/23/2015 3:57:55 PM
 Modified: 4/23/2015 4:41:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : F28

Number of peaks found: 6 Corr. Area 1: 597.1
 Noise: 0.3 Corr. Area 2: 14.3

Peak table for sample 8 : F28

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	294	260.66	1,343.2		68.35
3	321	76.68	361.8		70.59
4	333	46.81	213.0		71.56
5	341	58.10	258.2		72.20
6	352	77.89	335.7		73.05
7	368	129.27	532.1		74.39
8	10,380	75.00	10.9	Upper Marker	113.00

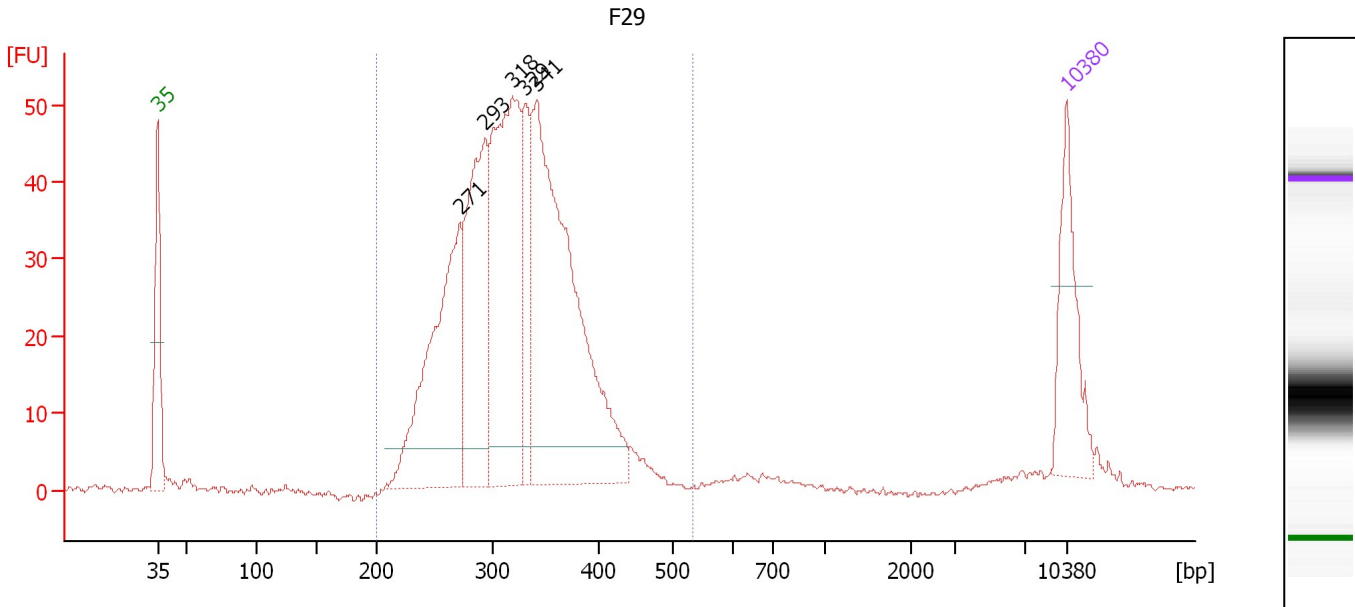
Region table for sample 8 : F28

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	329	536	597.1	3,782.2	91	16.3	794.34	Blue
536	667	1,216	14.3	37.1	2	14.6	16.00	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_007.xad

Created: 4/23/2015 3:57:55 PM
 Modified: 4/23/2015 4:41:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : F29

Number of peaks found: 5 Corr. Area 1: 755.9
 Noise: 0.3

Peak table for sample 9 : F29

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	271	281.62	1,573.2		66.30
3	293	227.02	1,174.5		68.24
4	318	325.43	1,549.9		70.35
5	329	89.44	411.3		71.27
6	341	462.76	2,057.0		72.19
7	10,380	75.00	10.9	Upper Marker	113.00

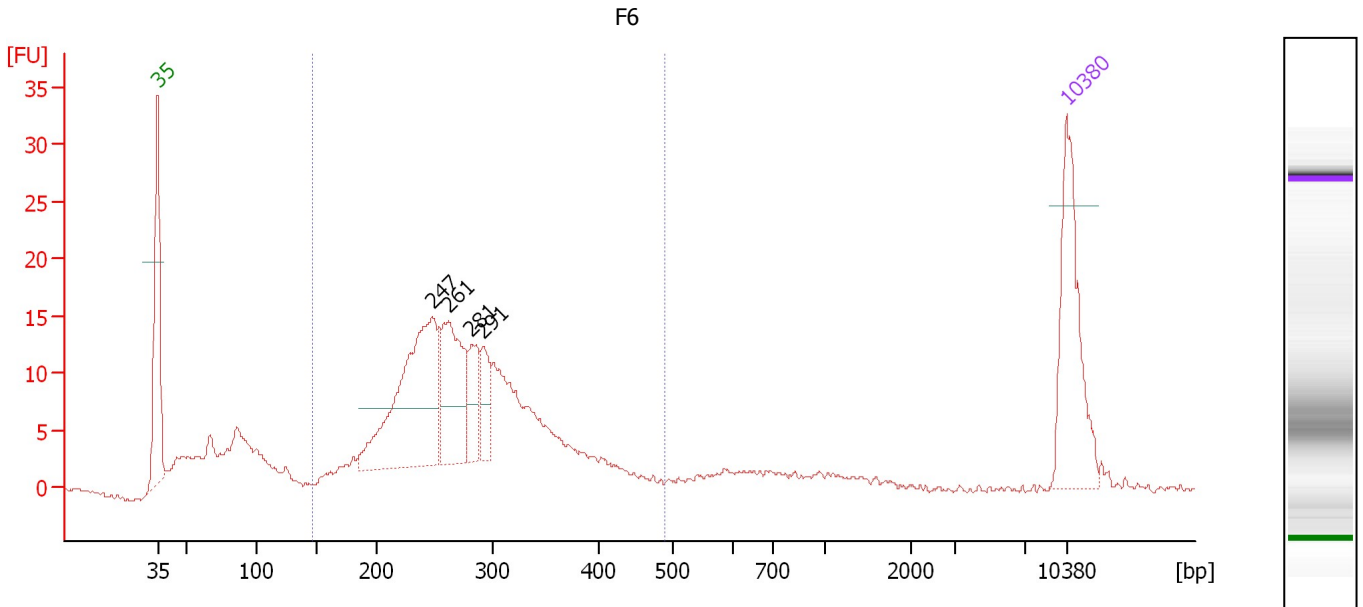
Region table for sample 9 : F29

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	321	532	755.9	7,012.7	95	15.5	1,441.88	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_007.xad

Created: 4/23/2015 3:57:55 PM
 Modified: 4/23/2015 4:41:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : F6

Number of peaks found: 4 Corr. Area 1: 249.9
 Noise: 0.2

Peak table for sample 10 : F6

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	247	188.76	1,156.3		64.15
3	261	95.90	556.1		65.40
4	281	36.49	196.9		67.15
5	291	29.54	153.8		68.08
6	10,380	75.00	10.9	Upper Marker	113.00

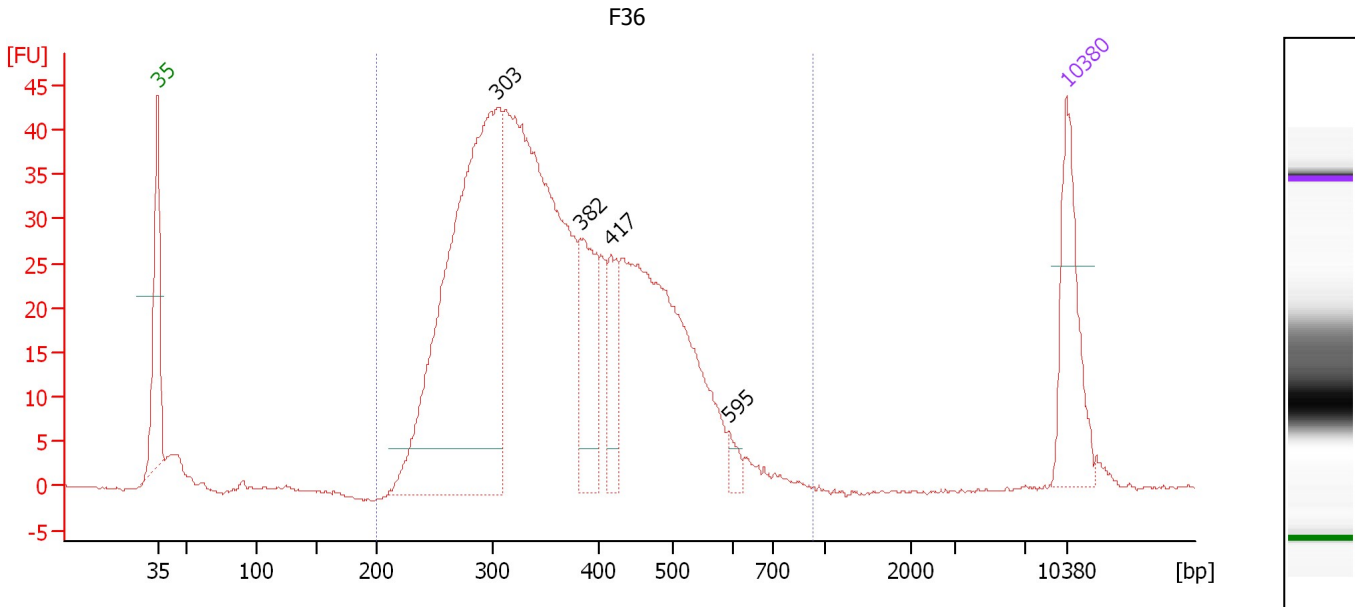
Region table for sample 10 : F6

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
147	280	489	249.9	3,875.9	75	21.5	676.11	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_007.xad

Created: 4/23/2015 3:57:55 PM
 Modified: 4/23/2015 4:41:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : F36

Number of peaks found: 4 Corr. Area 1: 869.8
 Noise: 0.2

Peak table for sample 11 : F36

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	303	611.80	3,058.7		69.13
3	382	97.51	386.4		75.54
4	417	54.11	196.4		77.97
5	595	10.57	26.9		87.03
6	10,380	75.00	10.9	Upper Marker	113.00

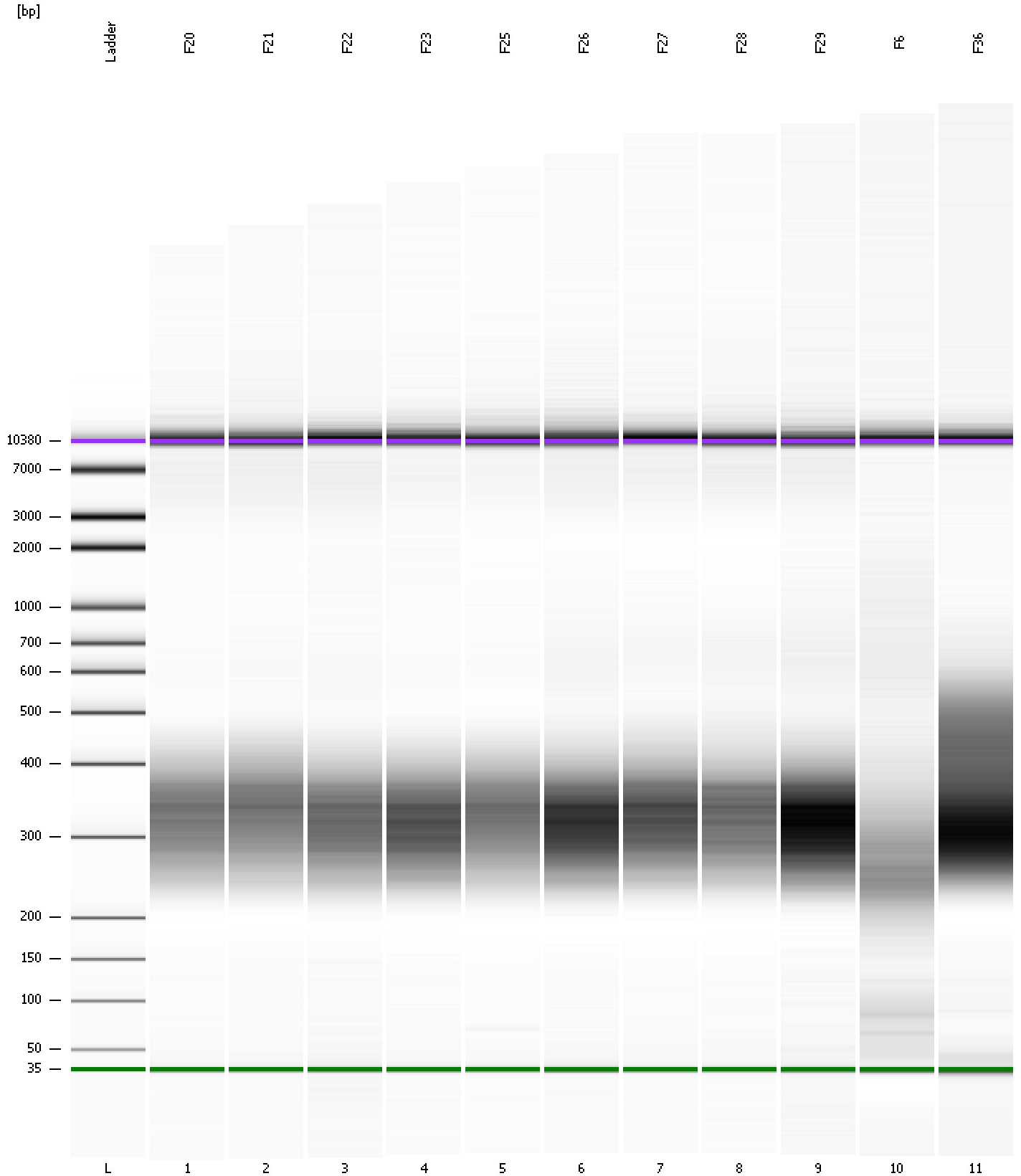
Region table for sample 11 : F36

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	370	931	869.8	7,684.2	98	25.0	1,731.83	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_007.xad

Created: 4/23/2015 3:57:55 PM
Modified: 4/23/2015 4:41:20 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23_007.xad

Created: 4/23/2015 3:57:55 PM
 Modified: 4/23/2015 4:41:20 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		4/23/2015 4:39:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-04-23\2015-04-23_007.xad)		Instrument	Run		4/23/2015 3:58:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/23/2015 3:58:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/23/2015 3:58:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/23/2015 3:58:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/23/2015 3:58:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/23/2015 3:58:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/23/2015 3:58:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1