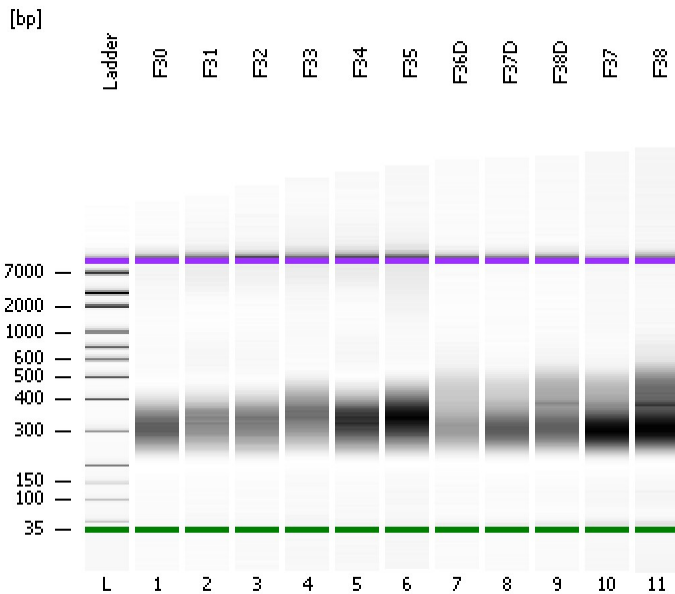


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24_001.xad

Created: 4/24/2015 9:27:32 AM
Modified: 4/24/2015 10:10:54 AM

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

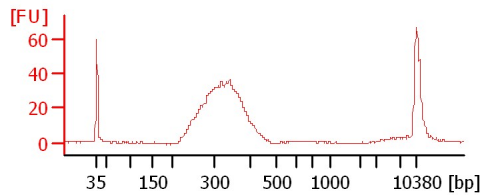
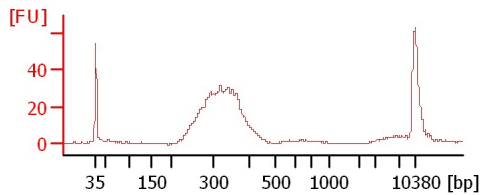
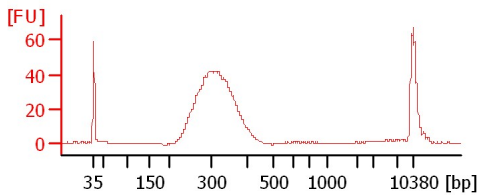
Chip Information:

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

F30

F31

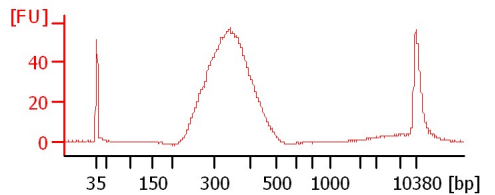
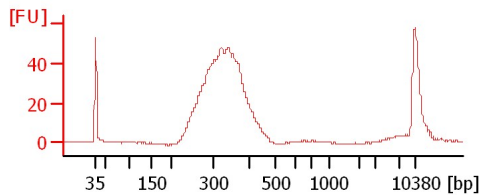
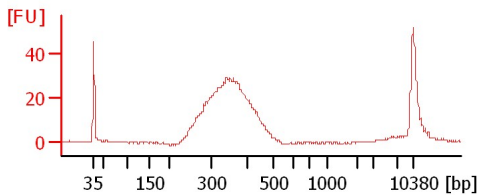
F32



F33

F34

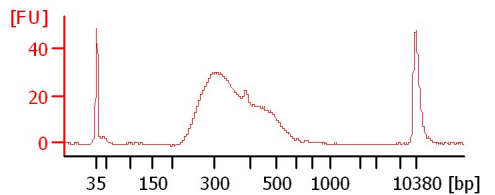
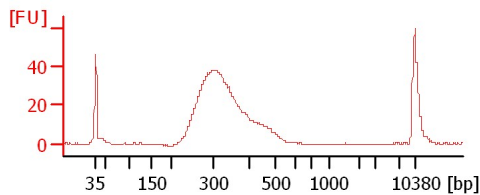
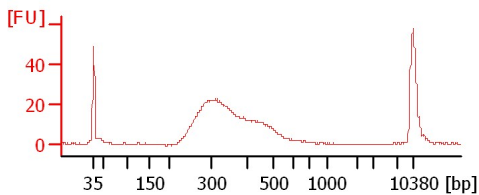
F35



F36D

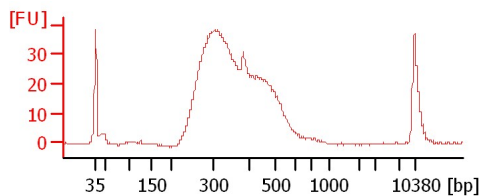
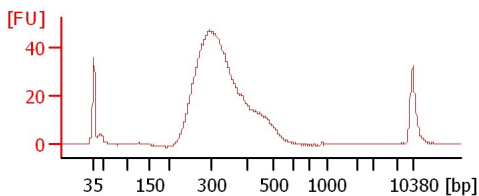
F37D

F38D



F37

F38



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24_001.xad

Created: 4/24/2015 9:27:32 AM
Modified: 4/24/2015 10:10:54 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
F30		<input type="checkbox"/>	✓			
F31		<input type="checkbox"/>	✓			
F32		<input type="checkbox"/>	✓			
F33		<input type="checkbox"/>	✓			
F34		<input type="checkbox"/>	✓			
F35		<input type="checkbox"/>	✓			
F36D		<input type="checkbox"/>	✓			
F37D		<input type="checkbox"/>	✓			
F38D		<input type="checkbox"/>	✓			
F37		<input type="checkbox"/>	✓			
F38		<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\2015-04-24\2015-04-24_001.xad

Created: 4/24/2015 9:27:32 AM
Modified: 4/24/2015 10:10:54 AM

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

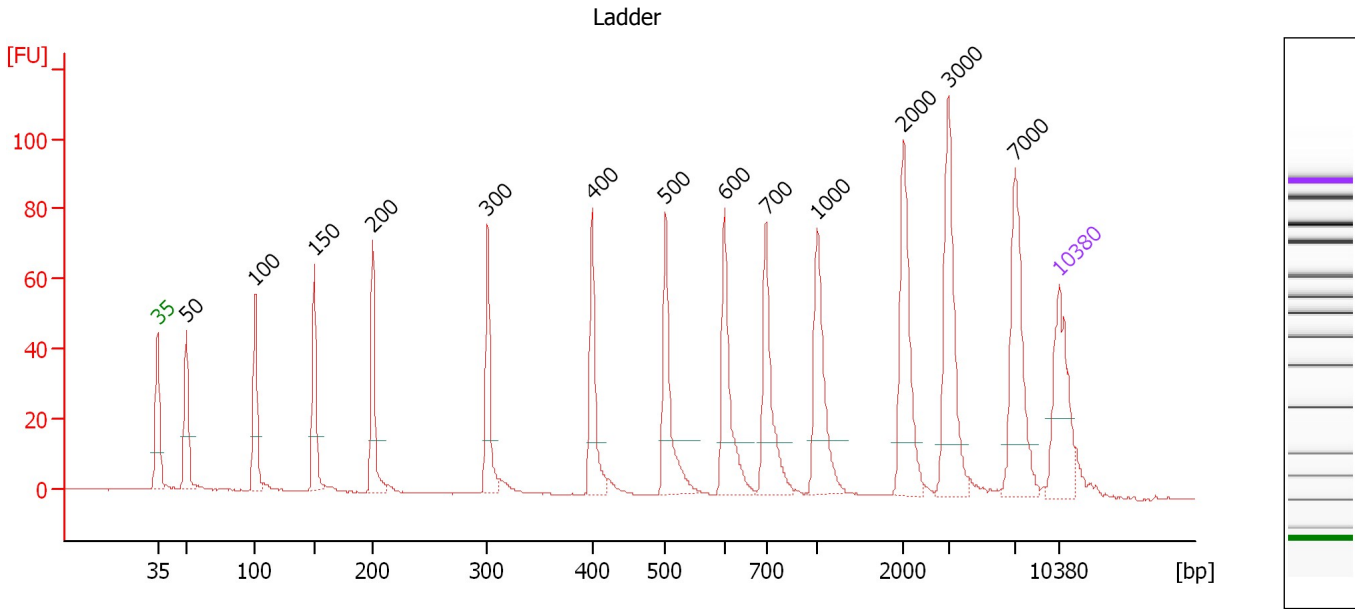
Ladder

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\2015-04-24\2015-04-24_001.xad

Created: 4/24/2015 9:27:32 AM
 Modified: 4/24/2015 10:10:54 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

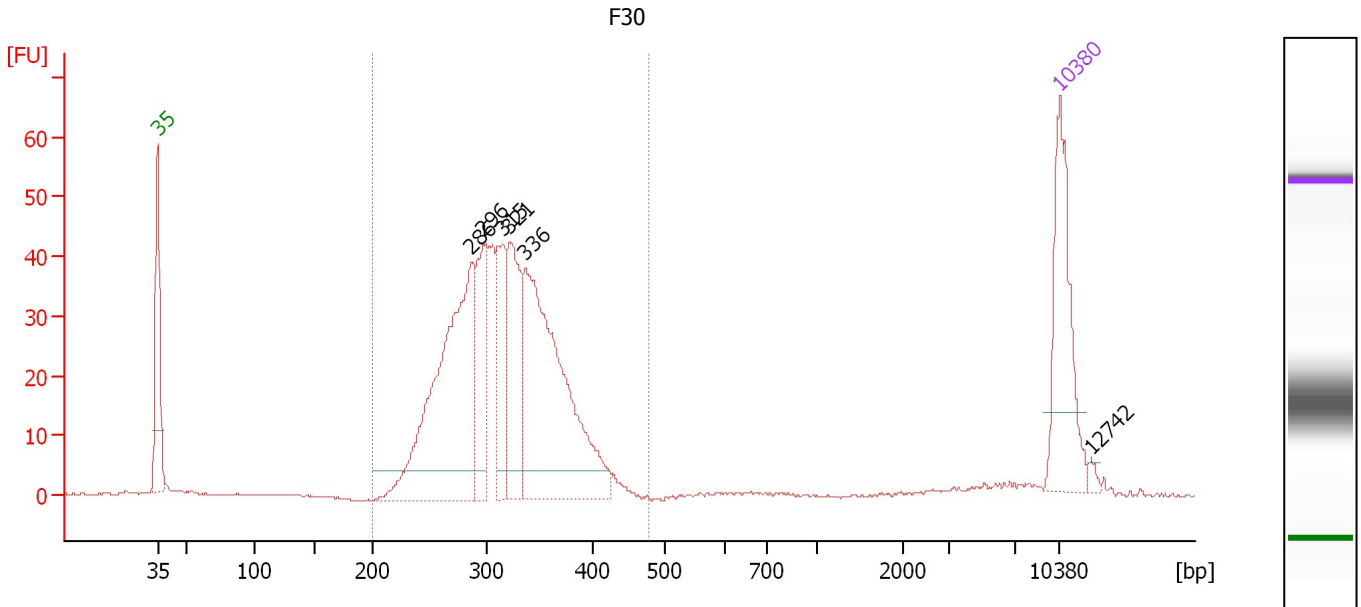
Peak table for Ladder

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	45.22
3	100	150.00	2,272.7	Ladder Peak	50.56
4	150	150.00	1,515.2	Ladder Peak	55.17
5	200	150.00	1,136.4	Ladder Peak	59.70
6	300	150.00	757.6	Ladder Peak	68.61
7	400	150.00	568.2	Ladder Peak	76.76
8	500	150.00	454.5	Ladder Peak	82.46
9	600	150.00	378.8	Ladder Peak	87.03
10	700	150.00	324.7	Ladder Peak	90.24
11	1,000	150.00	227.3	Ladder Peak	94.22
12	2,000	150.00	113.6	Ladder Peak	100.92
13	3,000	150.00	75.8	Ladder Peak	104.40
14	7,000	150.00	32.5	Ladder Peak	109.56
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24_001.xad

Created: 4/24/2015 9:27:32 AM
 Modified: 4/24/2015 10:10:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : F30

Number of peaks found: 6 Corr. Area 1: 614.8
 Noise: 0.2

Peak table for sample 1 : F30

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	276.99	1,468.4		67.35
3	296	78.12	399.2		68.30
4	315	65.34	314.7		69.79
5	321	94.86	448.2		70.29
6	336	266.76	1,202.1		71.56
7	10,380	75.00	10.9	Upper Marker	113.00
8	12,742	0.00	0.0		115.40

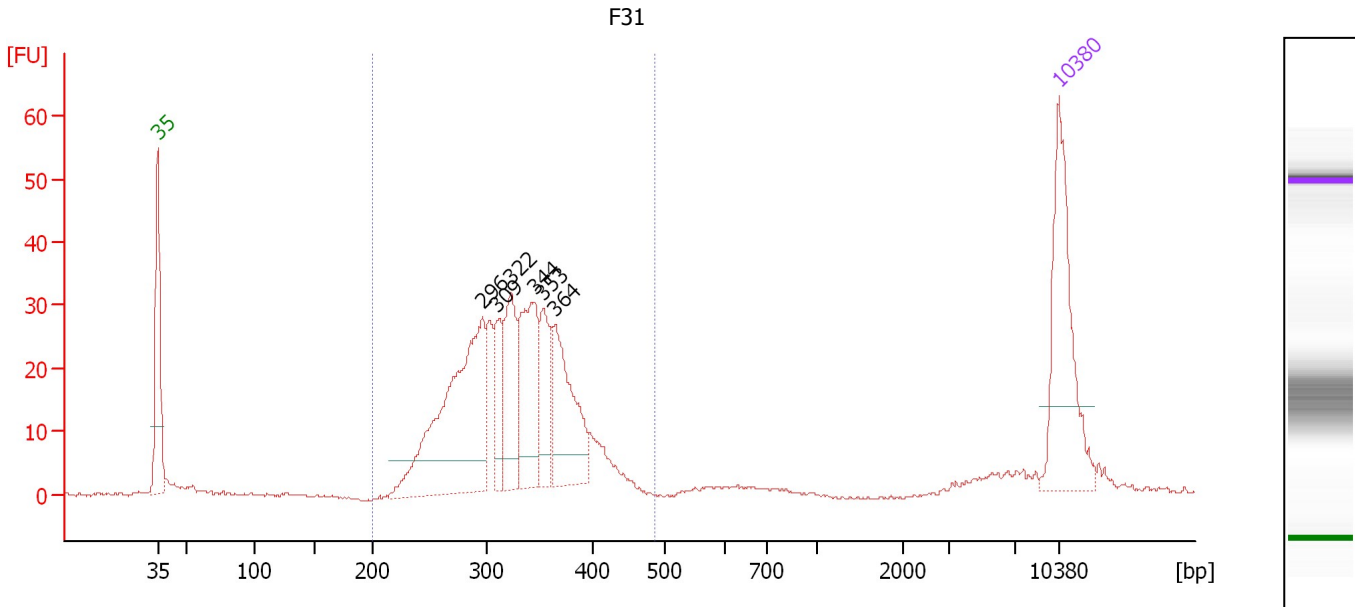
Region table for sample 1 : F30

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	315	478	614.8	4,024.9	96	13.6	818.67	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24_001.xad

Created: 4/24/2015 9:27:32 AM
 Modified: 4/24/2015 10:10:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : F31

Number of peaks found: 6 Corr. Area 1: 466.4
 Noise: 0.3

Peak table for sample 2 : F31

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	198.21	1,014.6		68.25
3	309	35.51	174.0		69.36
4	322	59.15	278.1		70.42
5	344	80.26	353.2		72.22
6	353	40.55	173.9		72.95
7	364	77.84	323.9		73.83
8	10,380	75.00	10.9	Upper Marker	113.00

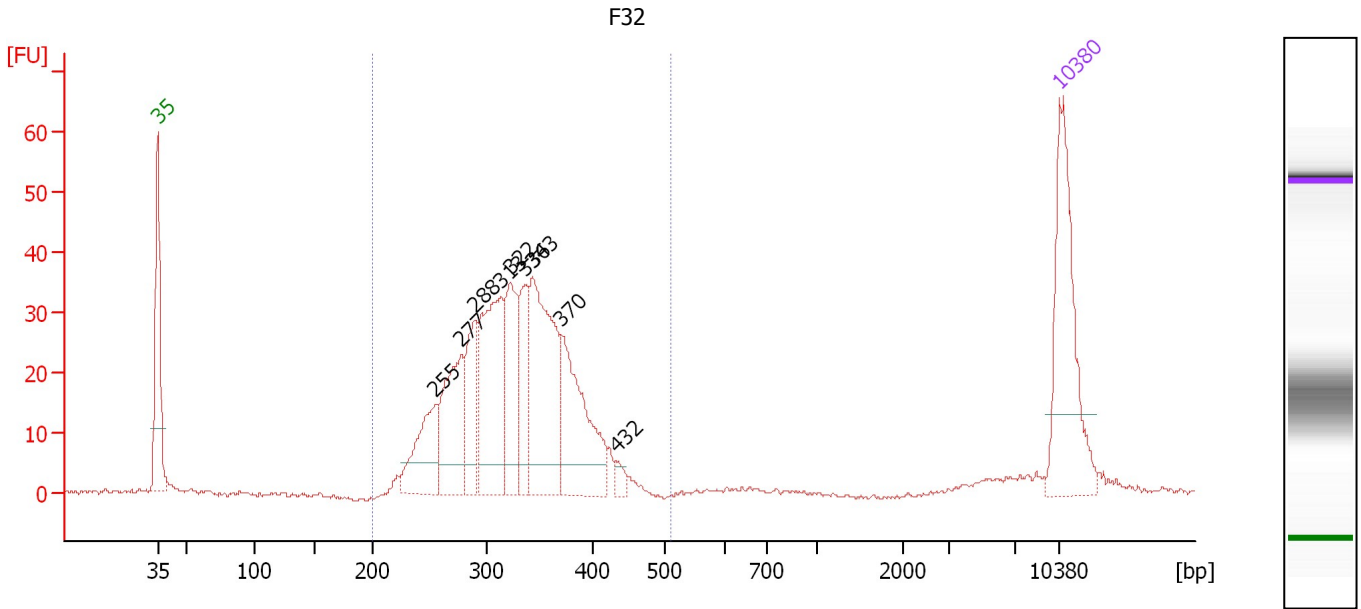
Region table for sample 2 : F31

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	325	486	466.4	2,809.3	90	14.3	587.37	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24_001.xad

Created: 4/24/2015 9:27:32 AM
 Modified: 4/24/2015 10:10:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : F32

Number of peaks found: 9 Corr. Area 1: 535.5
 Noise: 0.4

Peak table for sample 3 : F32

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	255	57.16	340.2		64.56
3	277	76.89	420.2		66.58
4	288	46.95	246.7		67.57
5	313	112.68	545.0		69.69
6	322	62.87	295.9		70.40
7	336	40.14	181.1		71.53
8	343	121.82	537.6		72.14
9	370	89.31	365.3		74.35
10	432	6.17	21.6		78.59
11	10,380	75.00	10.9	Upper Marker	113.00

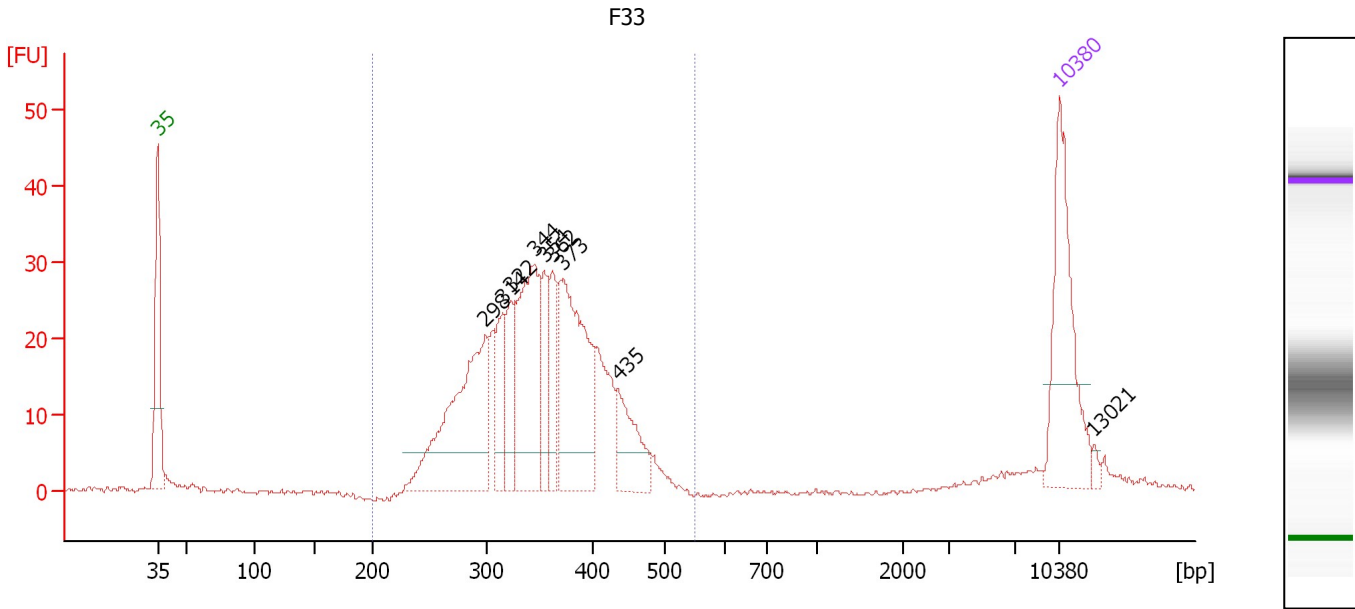
Region table for sample 3 : F32

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	325	509	535.5	3,011.2	95	14.7	628.19	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24_001.xad

Created: 4/24/2015 9:27:32 AM
 Modified: 4/24/2015 10:10:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : F33

Number of peaks found: 9 Corr. Area 1: 459.6
 Noise: 0.3

Peak table for sample 4 : F33

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	298	159.61	811.7		68.43
3	314	37.80	182.3		69.77
4	322	40.19	189.2		70.40
5	344	114.12	502.2		72.22
6	354	37.46	160.5		72.99
7	362	39.36	164.8		73.66
8	373	132.93	540.6		74.52
9	435	45.24	157.6		78.74
10	10,380	75.00	10.9	Upper Marker	113.00
11	13,021	0.00	0.0		115.69

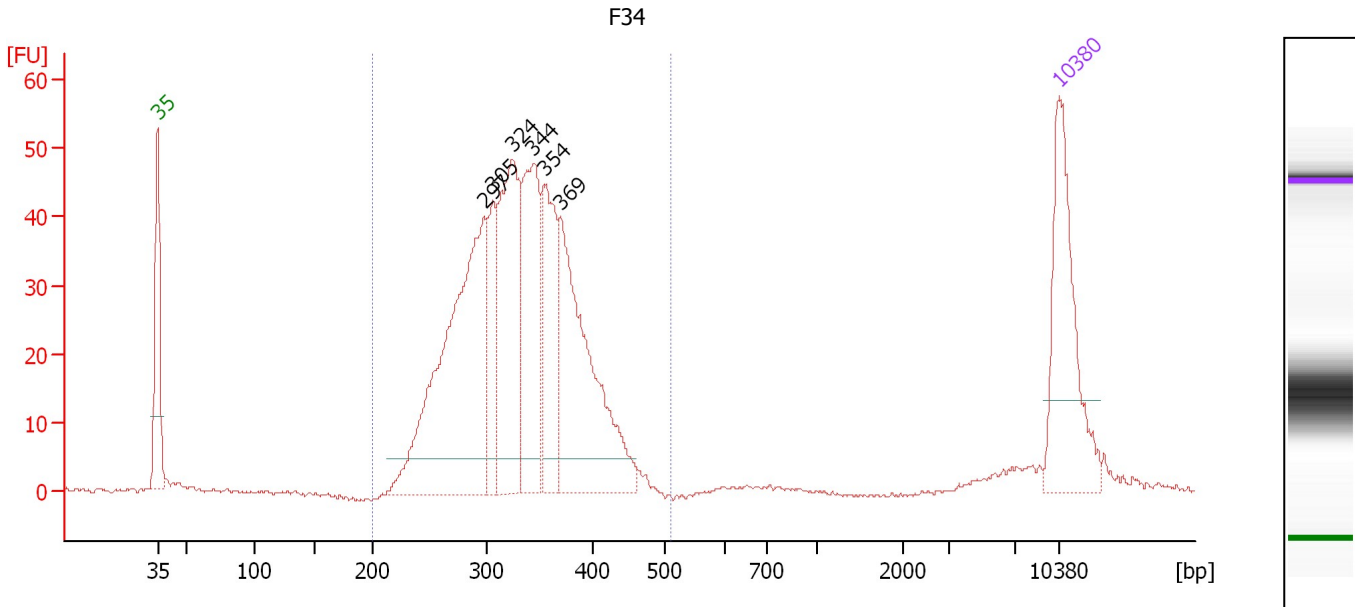
Region table for sample 4 : F33

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	351	549	459.6	3,148.8	94	15.7	705.70	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24_001.xad

Created: 4/24/2015 9:27:32 AM
 Modified: 4/24/2015 10:10:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : F34

Number of peaks found: 6 Corr. Area 1: 721.3
 Noise: 0.3

Peak table for sample 5 : F34

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	297	259.02	1,322.7		68.32
3	305	56.52	281.0		69.00
4	324	137.23	641.8		70.56
5	344	112.05	493.9		72.17
6	354	81.05	347.0		73.00
7	369	172.07	705.7		74.27
8	10,380	75.00	10.9	Upper Marker	113.00

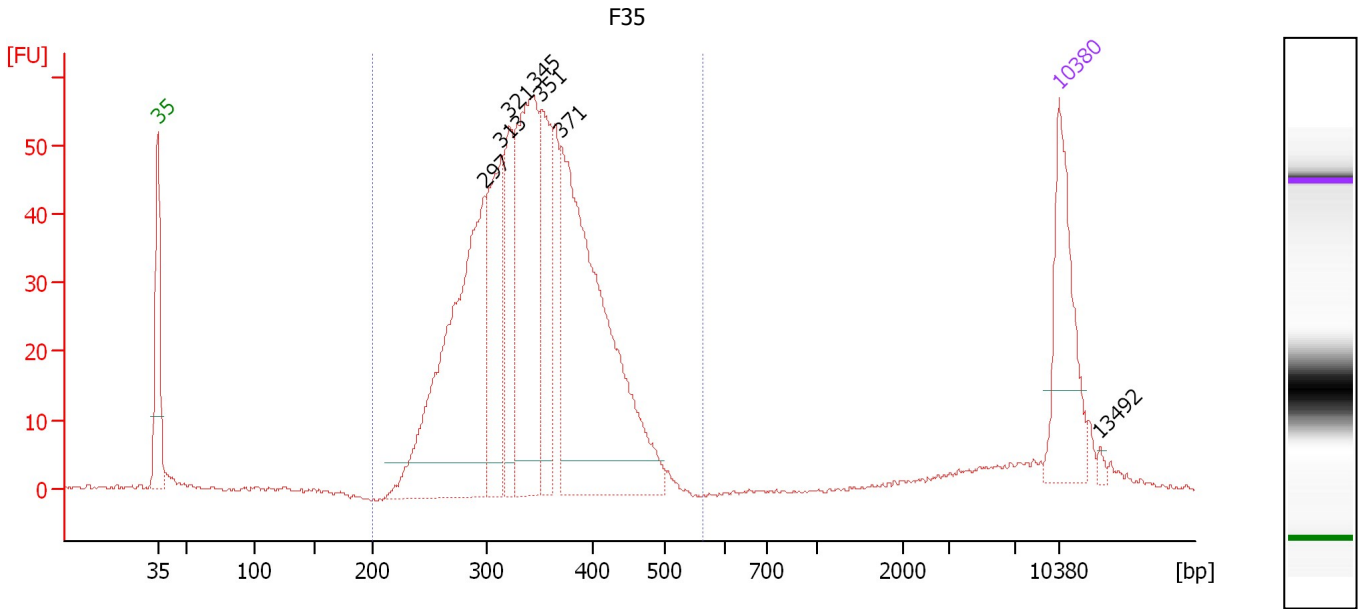
Region table for sample 5 : F34

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	330	507	721.3	3,919.7	96	14.7	830.79	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24_001.xad

Created: 4/24/2015 9:27:32 AM
 Modified: 4/24/2015 10:10:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : F35

Number of peaks found: 7 Corr. Area 1: 881.4
 Noise: 0.3

Peak table for sample 6 : F35

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	297	329.47	1,681.7		68.33
3	313	133.35	645.6		69.66
4	321	81.50	384.9		70.31
5	345	225.27	990.7		72.24
6	351	101.02	435.8		72.78
7	371	368.10	1,504.8		74.36
8	10,380	75.00	10.9	Upper Marker	113.00
9	13,492	0.00	0.0		116.17

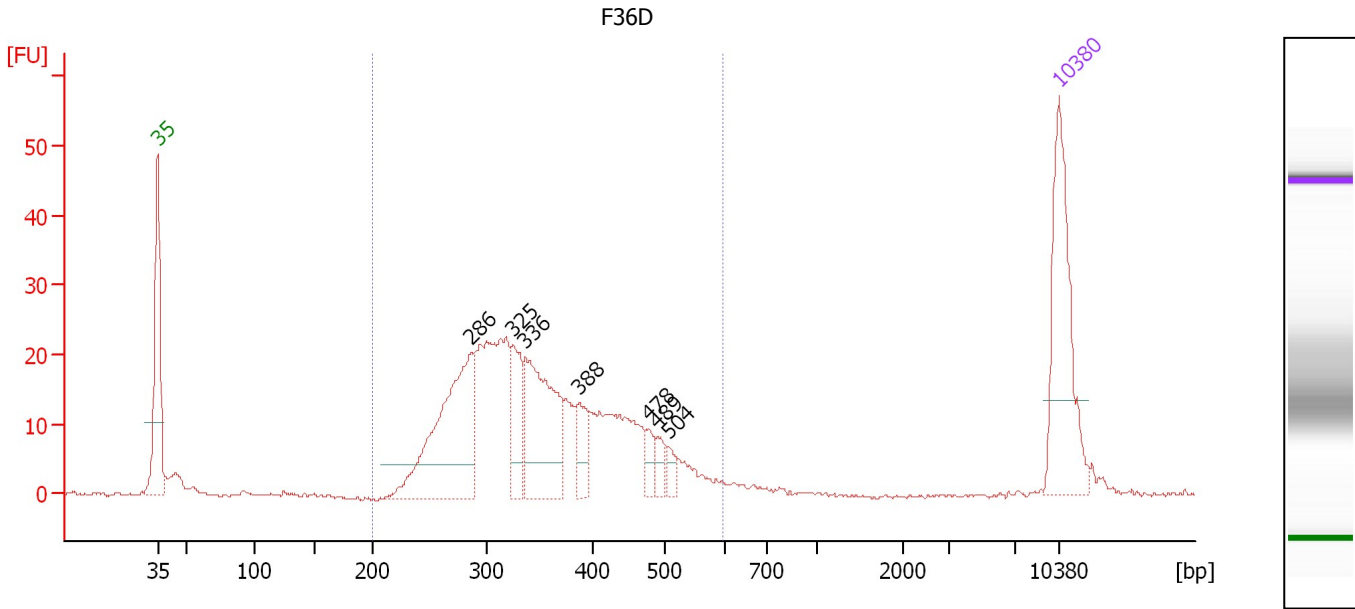
Region table for sample 6 : F35

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	344	564	881.4	5,721.2	96	15.6	1,256.50	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24_001.xad

Created: 4/24/2015 9:27:32 AM
 Modified: 4/24/2015 10:10:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : F36D

Number of peaks found: 7 Corr. Area 1: 406.2
 Noise: 0.2

Peak table for sample 7 : F36D

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	151.48	802.8		67.35
3	325	42.22	197.1		70.61
4	336	105.65	476.1		71.56
5	388	22.74	88.8		75.77
6	478	11.09	35.2		81.18
7	489	11.08	34.3		81.83
8	504	7.11	21.4		82.63
9	10,380	75.00	10.9	Upper Marker	113.00

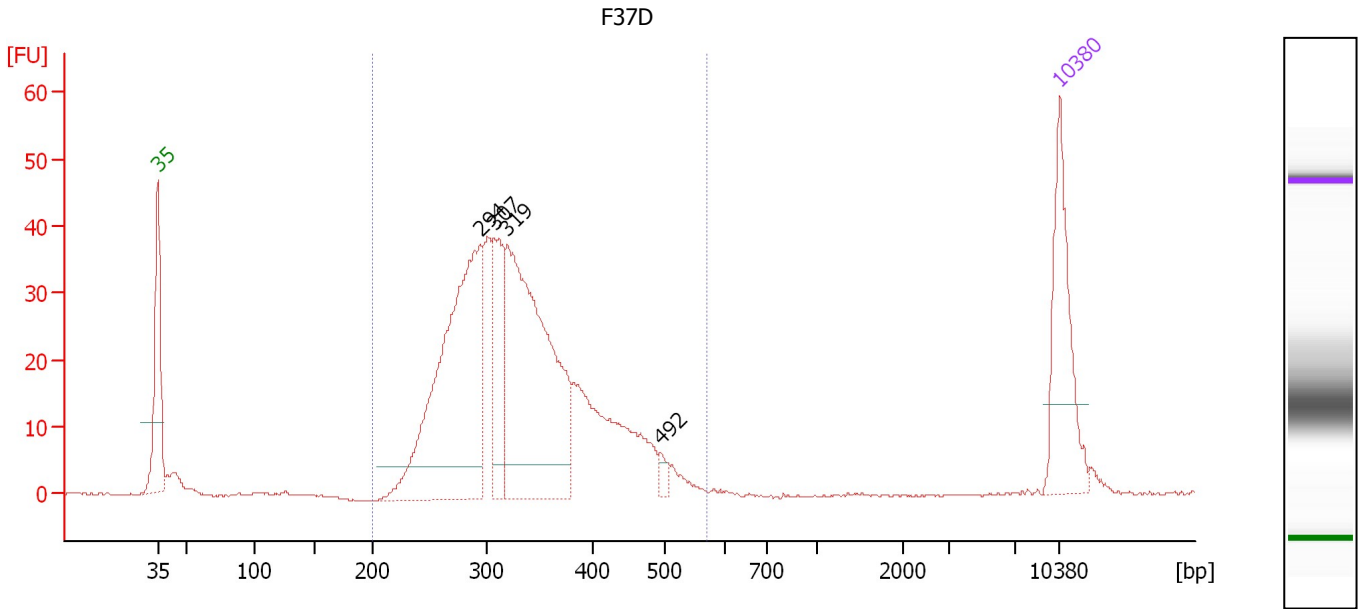
Region table for sample 7 : F36D

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	354	597	406.2	2,692.0	96	21.6	592.36	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24_001.xad

Created: 4/24/2015 9:27:32 AM
 Modified: 4/24/2015 10:10:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : F37D

Number of peaks found: 4 Corr. Area 1: 594.2
 Noise: 0.1

Peak table for sample 8 : F37D

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	337.30	1,741.2		68.03
3	307	91.41	451.8		69.14
4	319	323.40	1,536.4		70.15
5	492	7.83	24.1		82.01
6	10,380	75.00	10.9	Upper Marker	113.00

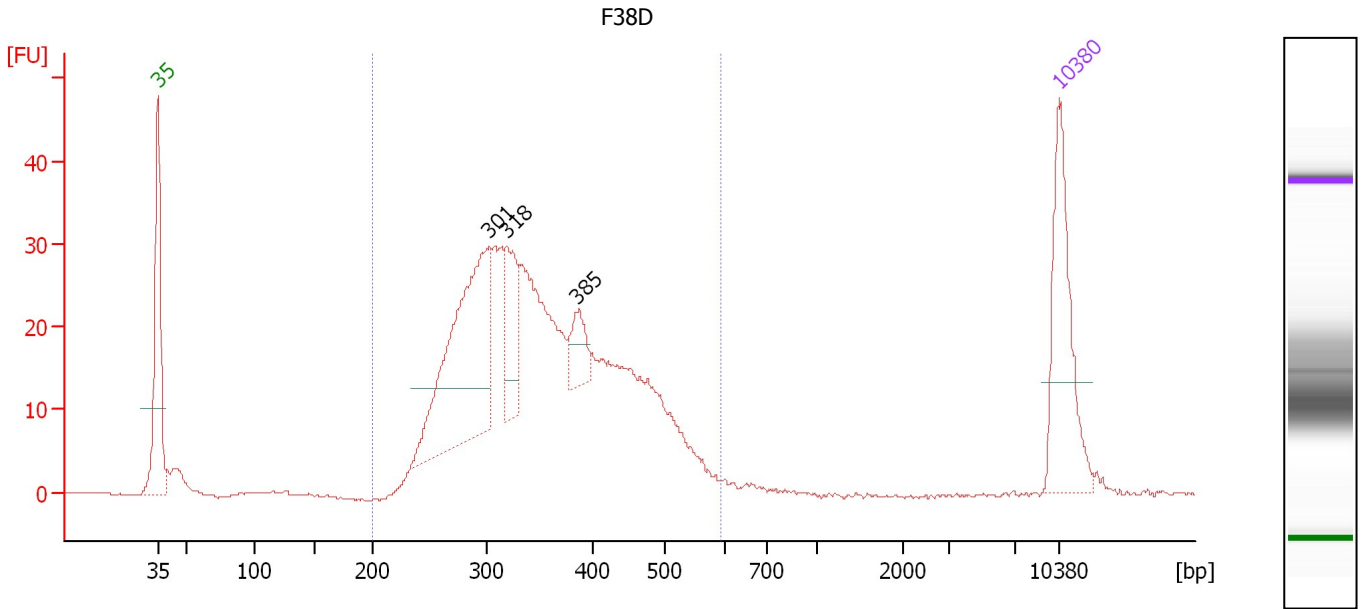
Region table for sample 8 : F37D

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	333	570	594.2	4,475.2	98	18.9	942.67	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24_001.xad

Created: 4/24/2015 9:27:32 AM
 Modified: 4/24/2015 10:10:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : F38D

Number of peaks found: 3 Corr. Area 1: 558.2
 Noise: 0.1

Peak table for sample 9 : F38D

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	301	207.80	1,046.1		68.69
3	318	57.34	272.8		70.11
4	385	26.60	104.6		75.56
5	10,380	75.00	10.9	Upper Marker	113.00

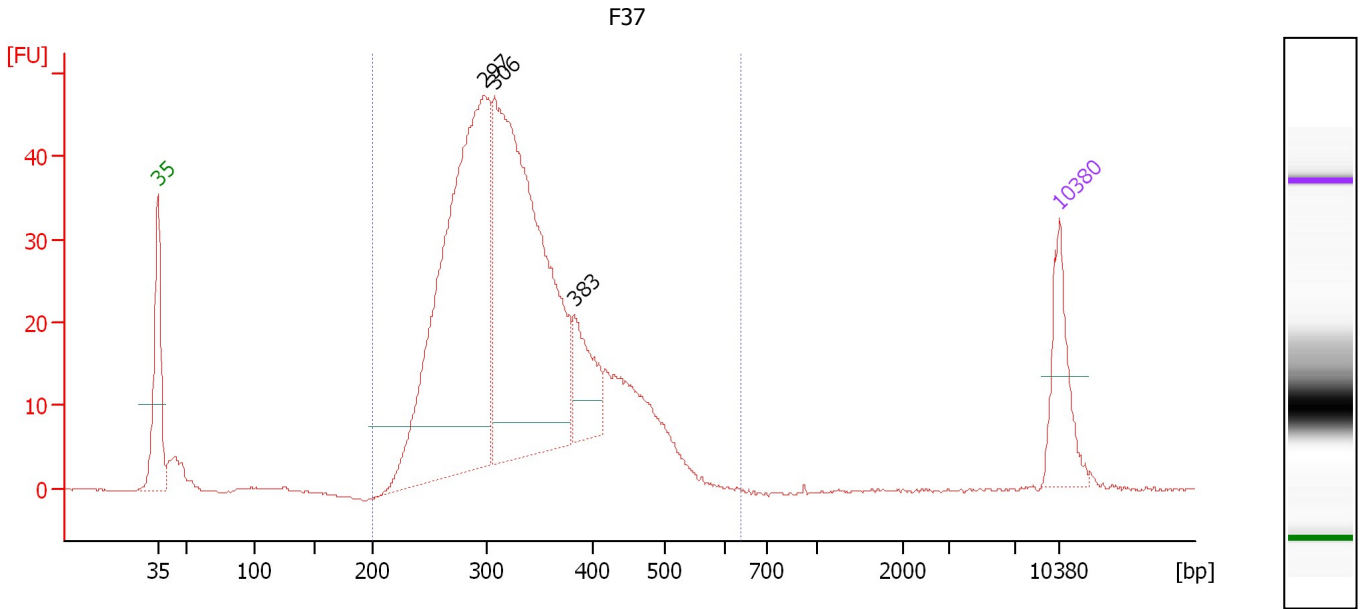
Region table for sample 9 : F38D

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	357	593	558.2	4,424.1	97	21.4	982.99	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24_001.xad

Created: 4/24/2015 9:27:32 AM
 Modified: 4/24/2015 10:10:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : F37

Number of peaks found: 3 Corr. Area 1: 735.4
 Noise: 0.1

Peak table for sample 10 : F37

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	297	854.73	4,359.0		68.35
3	306	795.02	3,933.0		69.12
4	383	95.61	378.7		75.33
5	10,380	75.00	10.9	Upper Marker	113.00

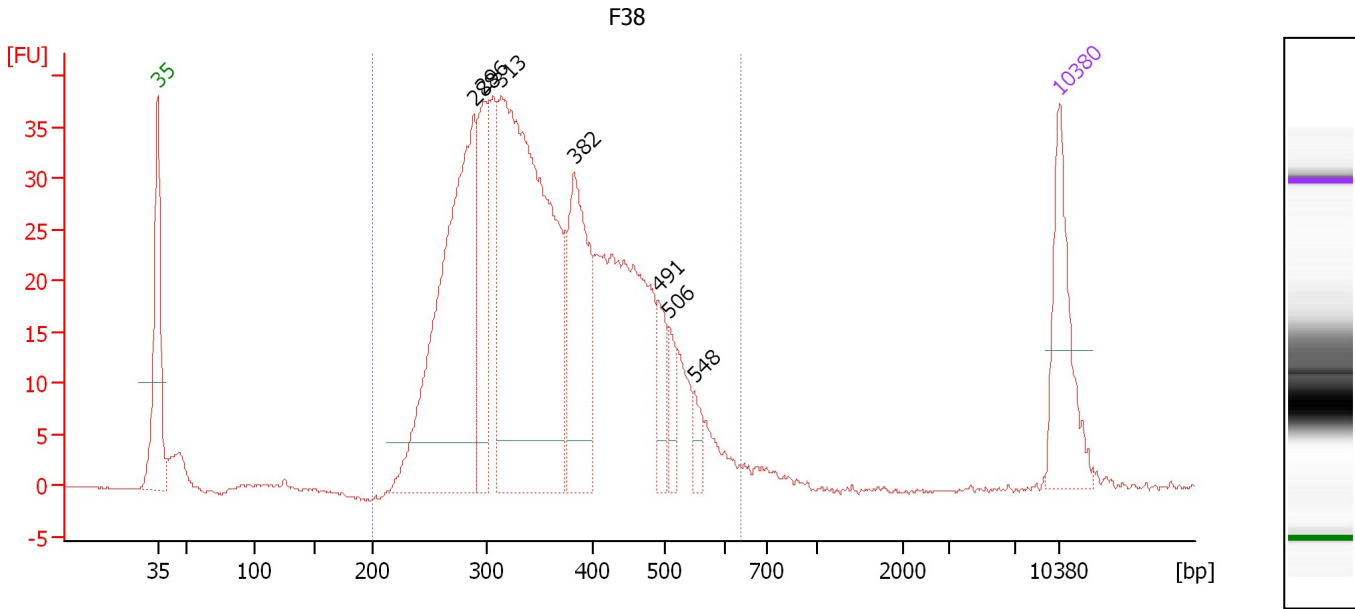
Region table for sample 10 : F37

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	334	641	735.4	10,259.4	98	19.7	2,154.60	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24_001.xad

Created: 4/24/2015 9:27:32 AM
 Modified: 4/24/2015 10:10:54 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : F38

Number of peaks found: 7 Corr. Area 1: 749.4
 Noise: 0.1

Peak table for sample 11 : F38

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	423.66	2,226.8		67.57
3	296	109.72	560.8		68.29
4	313	573.53	2,778.8		69.65
5	382	164.62	652.3		75.32
6	491	33.32	102.9		81.93
7	506	26.11	78.3		82.71
8	548	18.28	50.6		84.64
9	10,380	75.00	10.9	Upper Marker	113.00

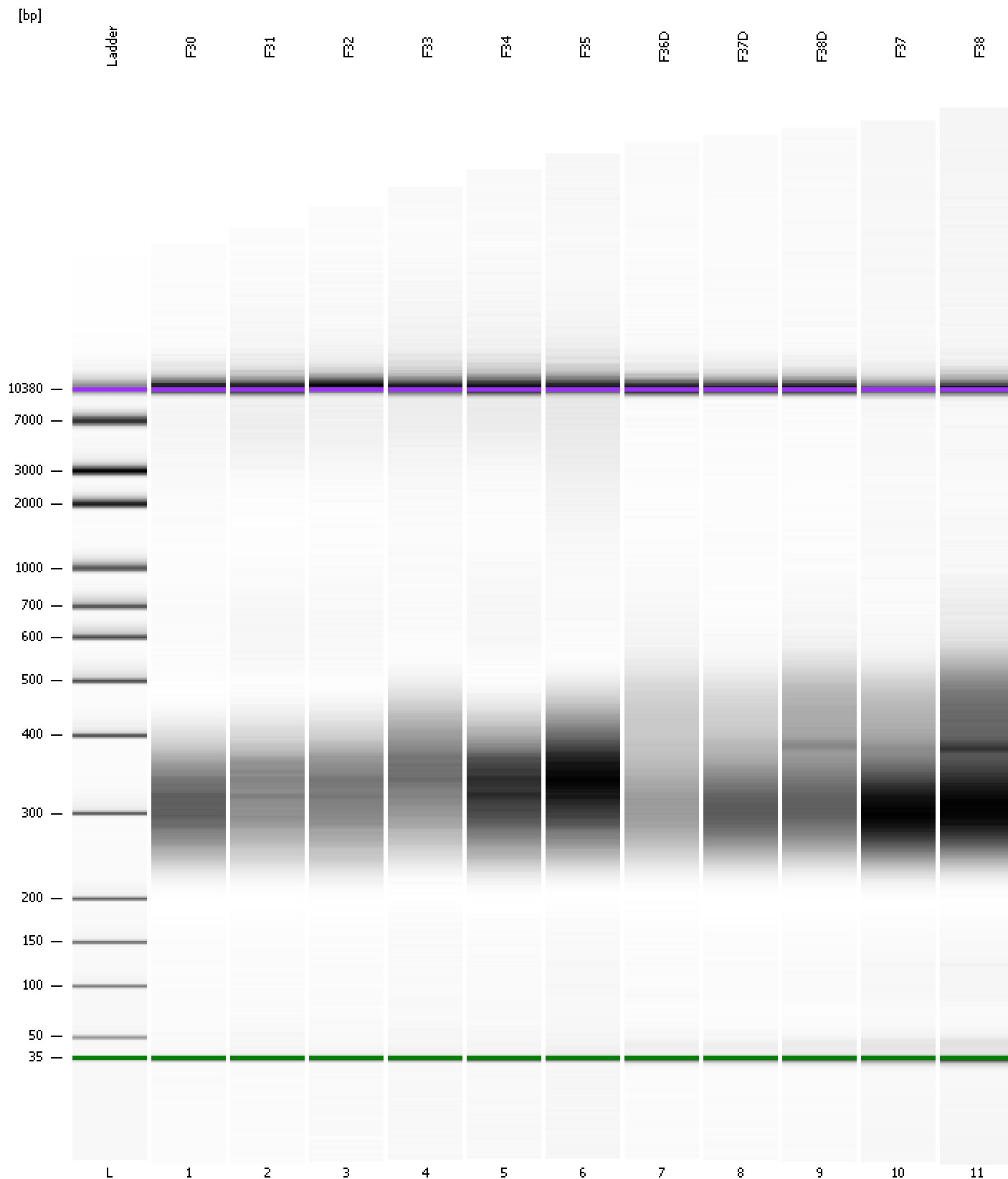
Region table for sample 11 : F38

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	364	640	749.4	7,667.0	98	22.8	1,721.41	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24_001.xad

Created: 4/24/2015 9:27:32 AM
Modified: 4/24/2015 10:10:54 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24_001.xad

Created: 4/24/2015 9:27:32 AM
 Modified: 4/24/2015 10:10:54 AM

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		4/24/2015 10:08:51 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-04-24\2015-04-24_001.xad)		Instrument	Run		4/24/2015 9:27:38 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/24/2015 9:27:38 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/24/2015 9:27:38 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/24/2015 9:27:38 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/24/2015 9:27:38 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/24/2015 9:27:38 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/24/2015 9:27:38 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1