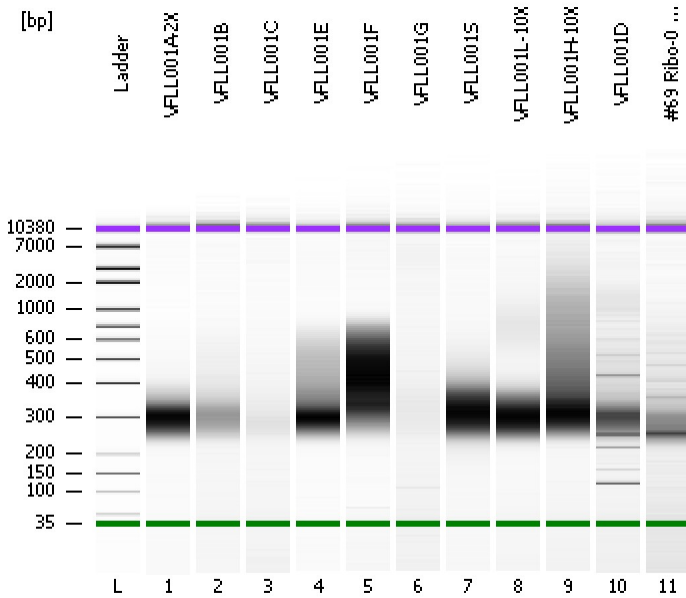


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
Modified: 6/19/2012 11:12:55 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

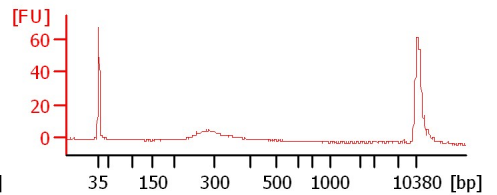
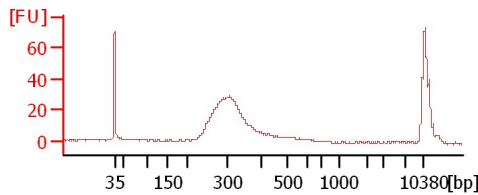
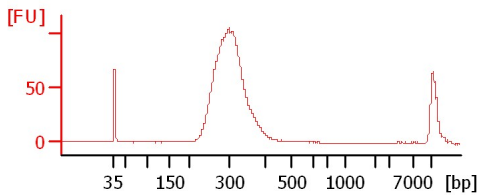
Chip Information:

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

VFL001A-2X

VFL001B

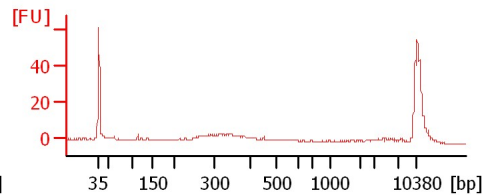
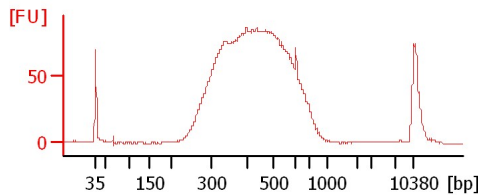
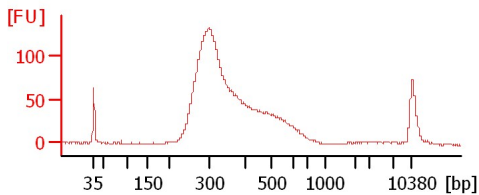
VFL001C



VFL001E

VFL001F

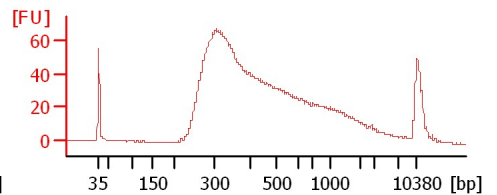
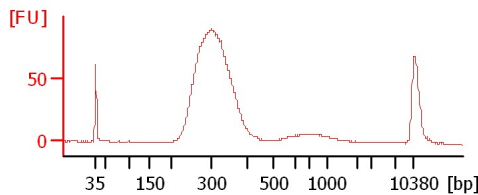
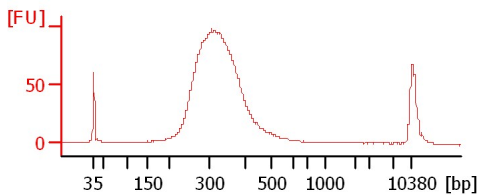
VFL001G



VFL001S

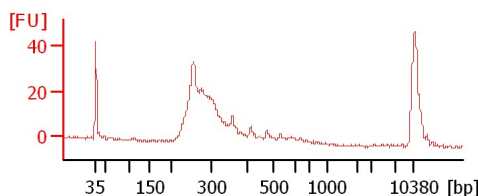
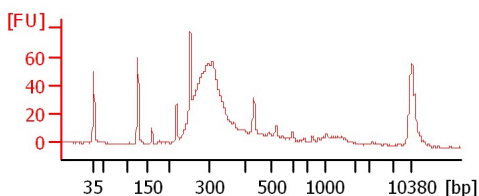
VFL001L-10X

VFL001H-10X



VFL001D

#69 Ribo-0 Lib (6/14/12)



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
 Modified: 6/19/2012 11:12:55 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
VFLL001A-2X		<input type="checkbox"/>	✓			
VFLL001B		<input type="checkbox"/>	✓			
VFLL001C		<input type="checkbox"/>	✓			
VFLL001E		<input type="checkbox"/>	✓			
VFLL001F		<input type="checkbox"/>	✓			
VFLL001G		<input type="checkbox"/>	✓			
VFLL001S		<input type="checkbox"/>	✓			
VFLL001L-10X		<input type="checkbox"/>	✓			
VFLL001H-10X		<input type="checkbox"/>	✓			
VFLL001D		<input type="checkbox"/>	✓			
#69 Ribo-0 Lib (6/14/12)		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
Modified: 6/19/2012 11:12:55 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

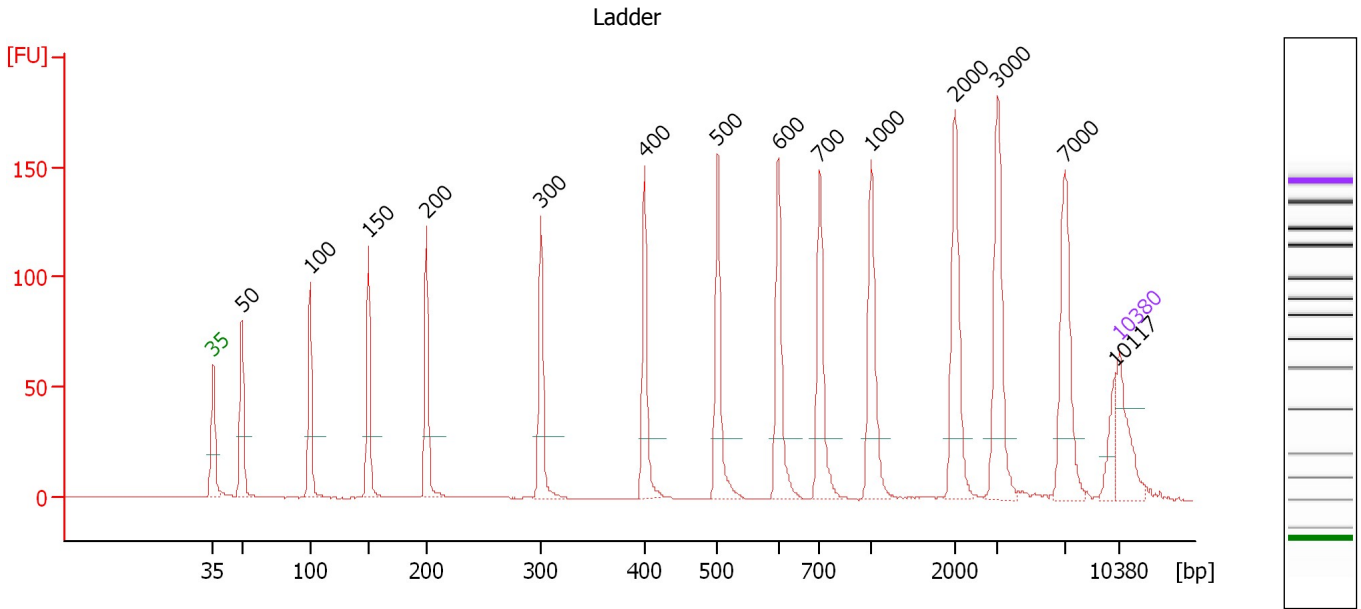
Ladder

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:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
 Modified: 6/19/2012 11:12:55 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

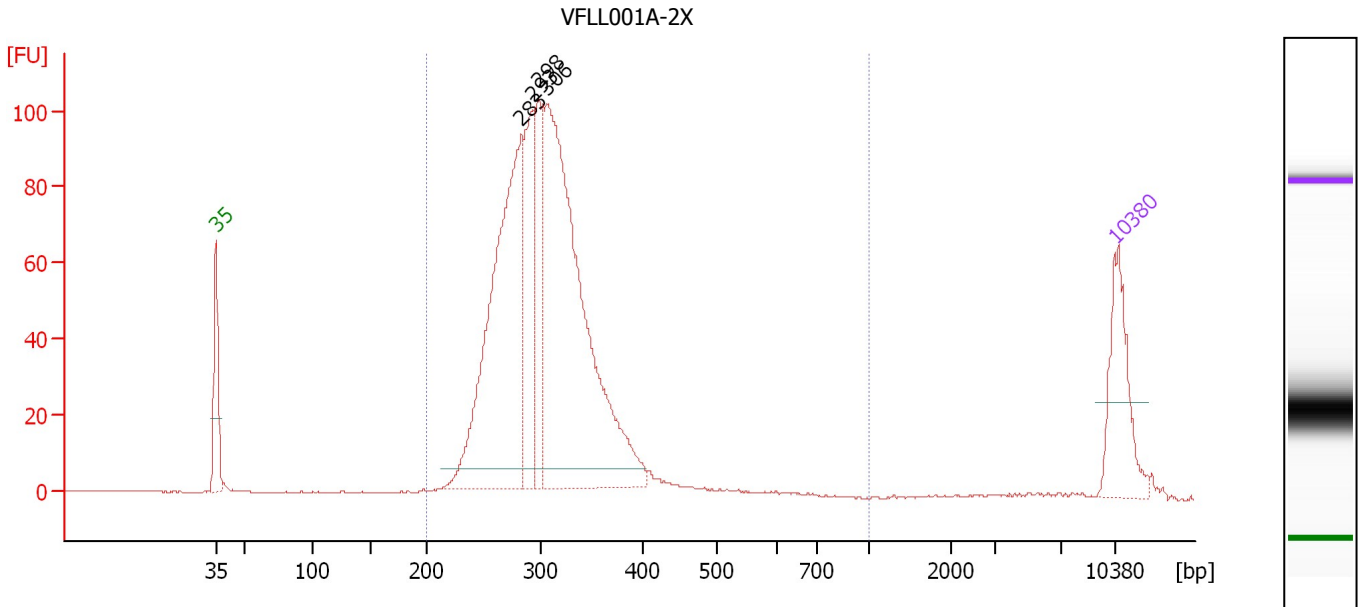
Peak table for Ladder

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	10,117	0.00	0.0	
16	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
 Modified: 6/19/2012 11:12:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : VFL001A-2X

Number of peaks found: 4 Corr. Area 1: 1,269.2
 Noise: 0.2

Peak table for sample 1 : VFL001A-2X

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	283	493.82	2,646.9	
3	293	168.11	867.9	
4	298	110.58	561.9	
5	306	655.97	3,250.7	
6	10,380	75.00	10.9	Upper Marker

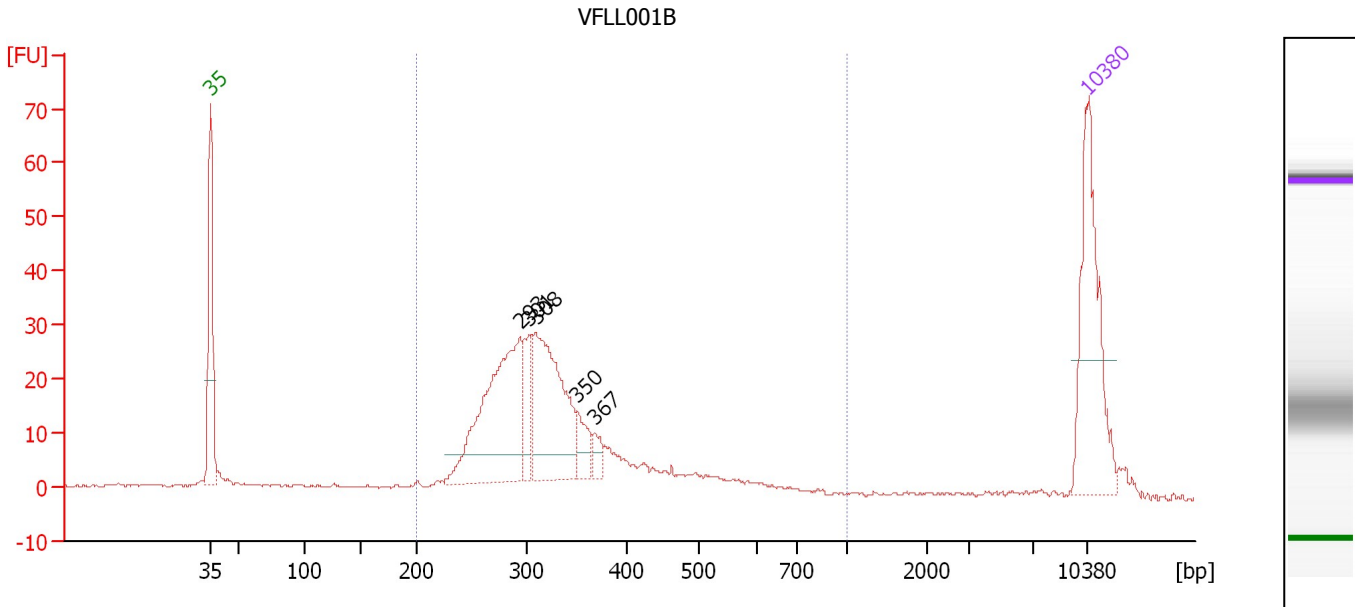
Region table for sample 1 : VFL001A-2X

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	307	7,634.1	1,509.78	1,269.2	98	15.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
 Modified: 6/19/2012 11:12:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : VFL001B

Number of peaks found: 5 Corr. Area 1: 433.7
 Noise: 0.2

Peak table for sample 2 : VFL001B

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	293	156.09	806.9	
3	301	30.92	155.7	
4	308	122.66	602.7	
5	350	18.53	80.2	
6	367	9.27	38.3	
7	10,380	75.00	10.9	Upper Marker

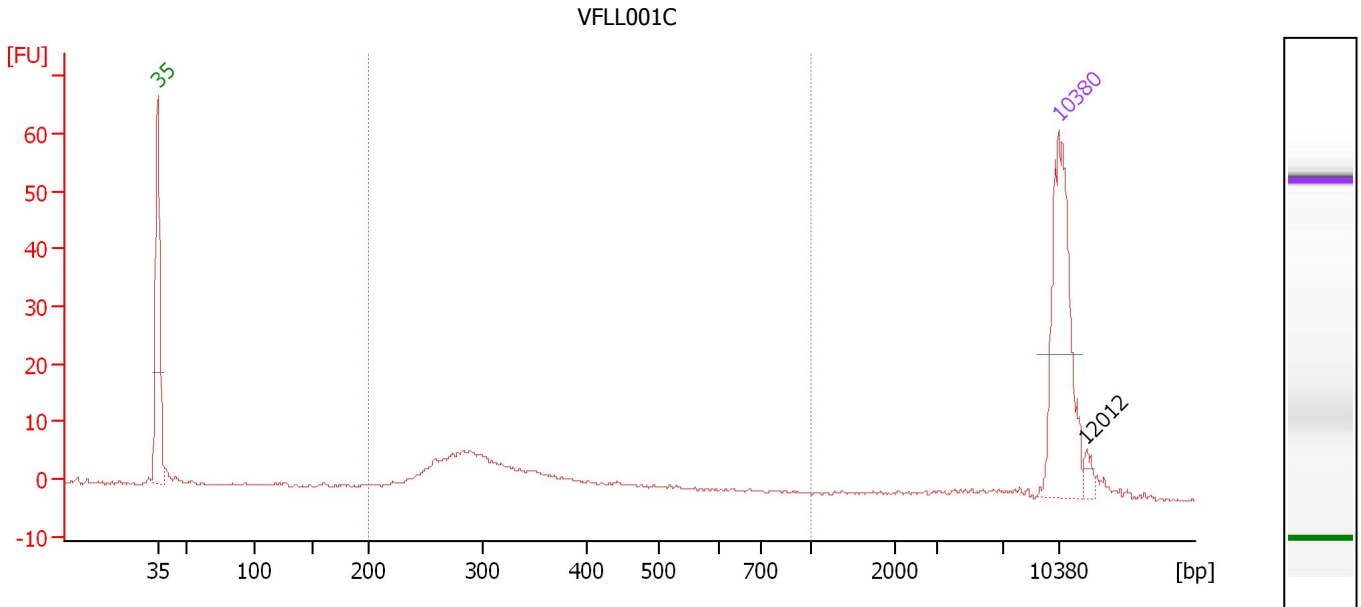
Region table for sample 2 : VFL001B

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	337	2,229.2	463.04	433.7	89	26.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
 Modified: 6/19/2012 11:12:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : VFL001C

Number of peaks found: 1 Corr. Area 1: 94.2
 Noise: 0.1

Peak table for sample 3 : VFL001C

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
3	12,012	0.00	0.0	

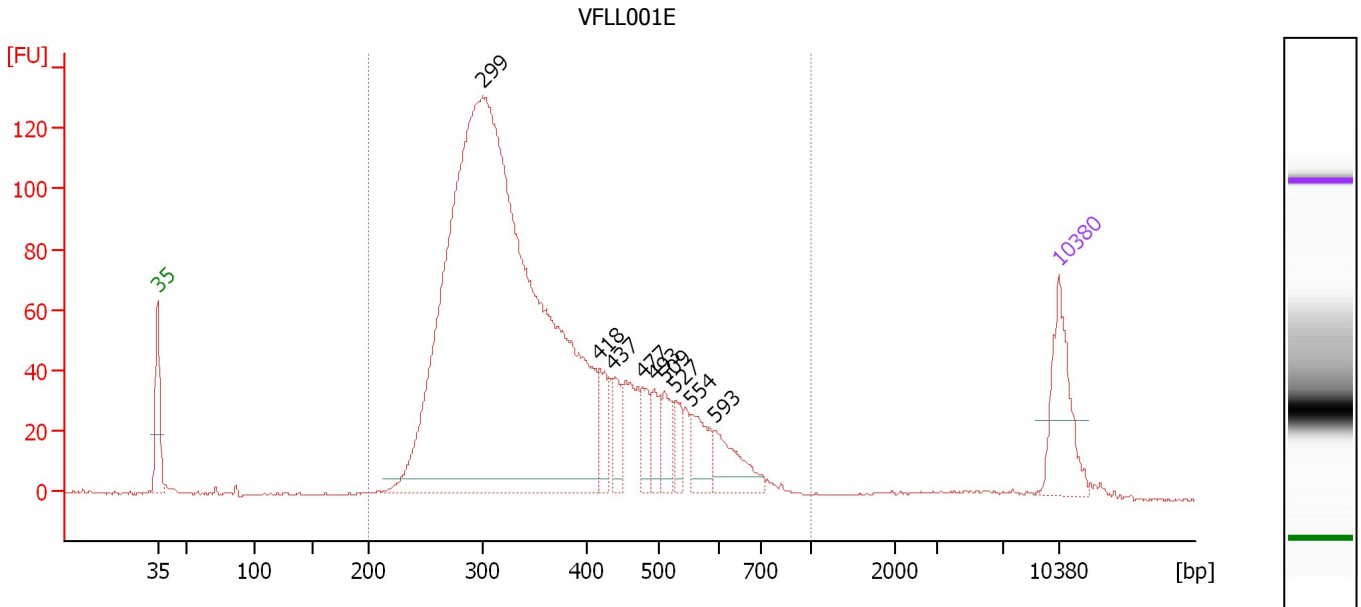
Region table for sample 3 : VFL001C

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	341	562.4	115.77	94.2	76	31.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
 Modified: 6/19/2012 11:12:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : VFL001E

Number of peaks found: 9 Corr. Area 1: 2,129.9
 Noise: 0.3

Peak table for sample 4 : VFL001E

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	299	1,935.16	9,807.3	
3	418	43.42	157.2	
4	437	37.97	131.7	
5	477	33.79	107.4	
6	493	34.11	104.7	
7	509	37.64	112.0	
8	527	25.78	74.1	
9	554	47.73	130.6	
10	593	55.07	140.8	
11	10,380	75.00	10.9	Upper Marker

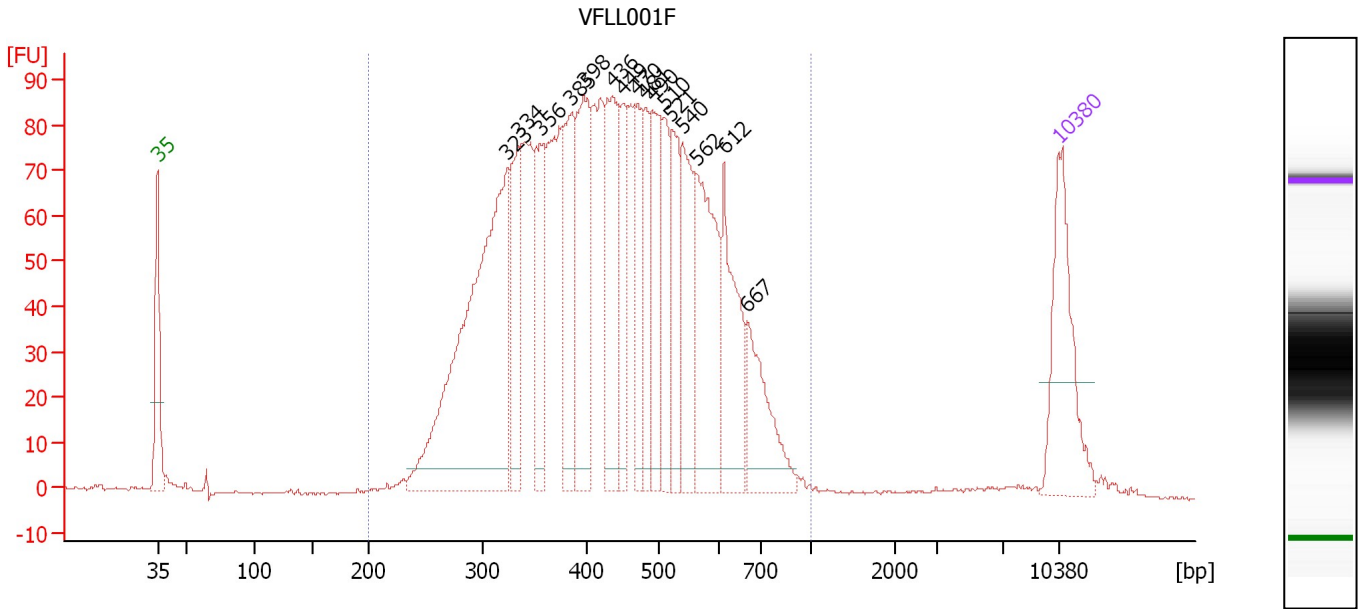
Region table for sample 4 : VFL001E

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	367	10,581.5	2,337.28	2,129.9	98	28.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
 Modified: 6/19/2012 11:12:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : VFL001F

Number of peaks found: 16 Corr. Area 1: 2,348.4
 Noise: 0.3

Peak table for sample 5 : VFL001F

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	323	381.21	1,789.2	
3	334	83.80	380.6	
4	356	81.68	347.8	
5	385	100.52	395.2	
6	398	129.16	491.9	
7	436	112.92	392.8	
8	449	57.53	194.0	
9	470	56.42	181.8	
10	481	59.69	187.9	
11	490	83.81	259.0	
12	510	59.85	178.0	
13	521	64.29	186.9	
14	540	82.68	232.2	
15	562	121.71	328.2	
16	612	90.74	224.6	
17	667	70.87	161.0	
18	10,380	75.00	10.9	Upper Marker

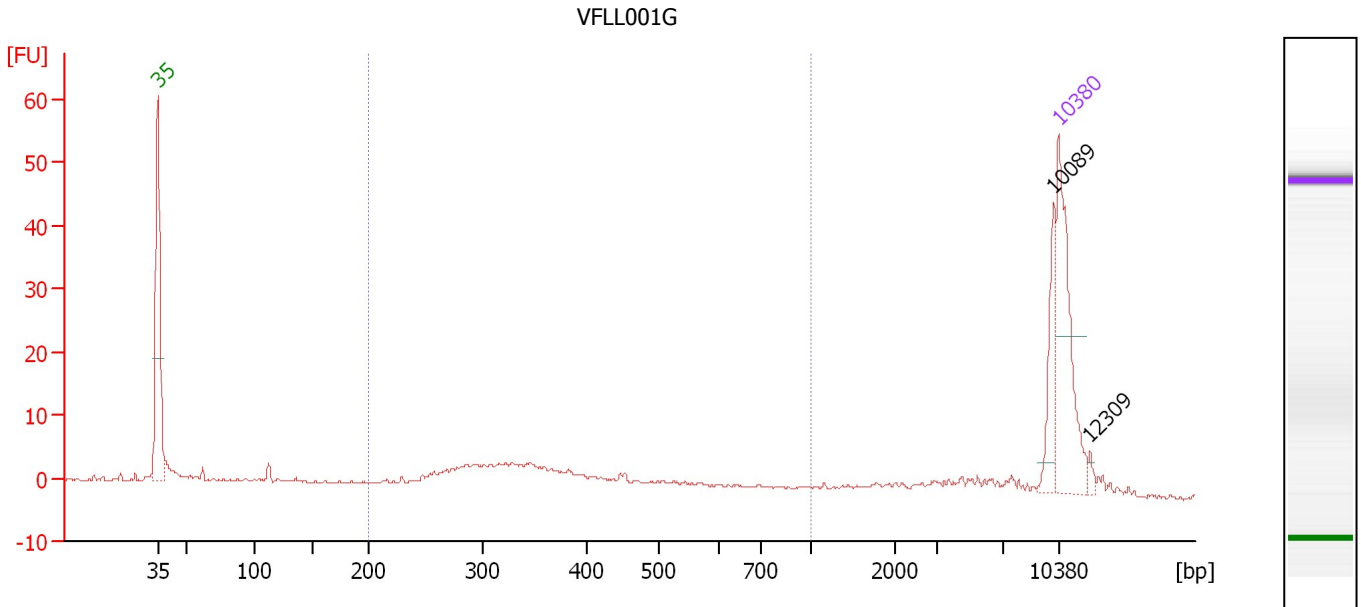
Region table for sample 5 : VFL001F

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	445	7,858.9	2,090.84	2,348.4	98	26.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
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Electropherogram Summary Continued ...



Overall Results for sample 6 : VFL001G

Number of peaks found: 2 Corr. Area 1: 71.0
 Noise: 0.2

Peak table for sample 6 : VFL001G

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,089	24.64	3.7	
3	10,380	75.00	10.9	Upper Marker
4	12,309	0.00	0.0	

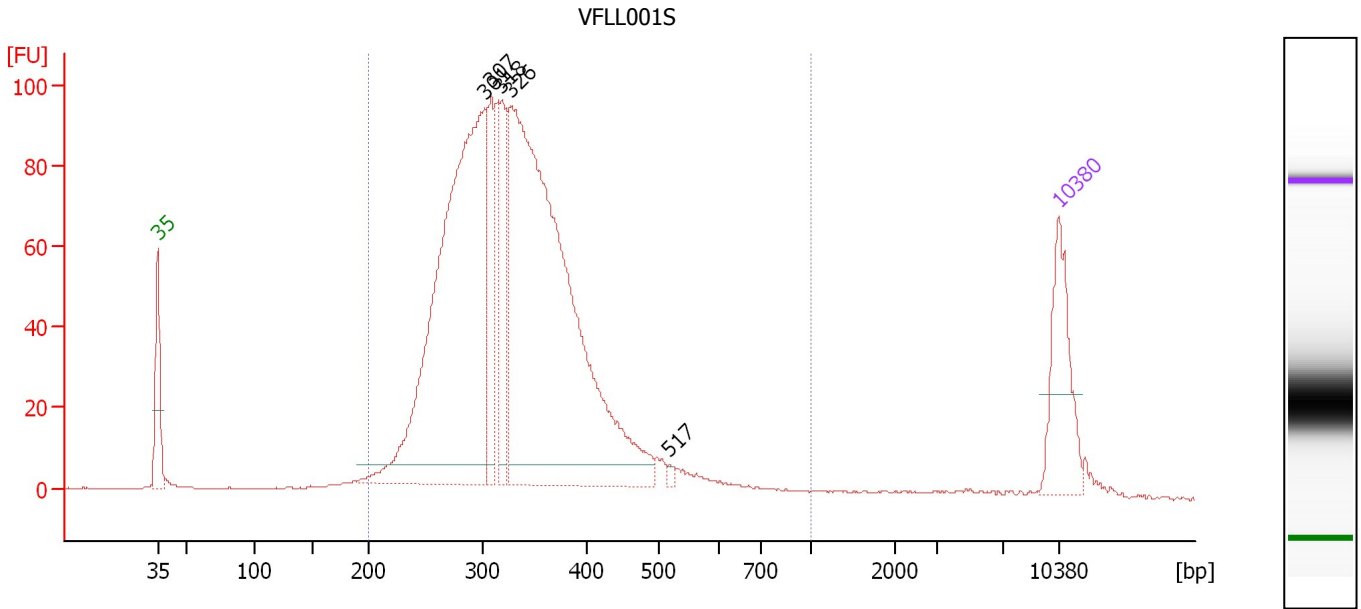
Region table for sample 6 : VFL001G

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	380	553.9	124.13	71.0	52	34.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
 Modified: 6/19/2012 11:12:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : VFL001S

Number of peaks found: 5 Corr. Area 1: 1,660.6
 Noise: 0.2

Peak table for sample 7 : VFL001S

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	301	716.39	3,608.6	
3	307	101.22	499.3	
4	318	105.84	504.9	
5	326	853.96	3,965.1	
6	517	4.43	13.0	
7	10,380	75.00	10.9	Upper Marker

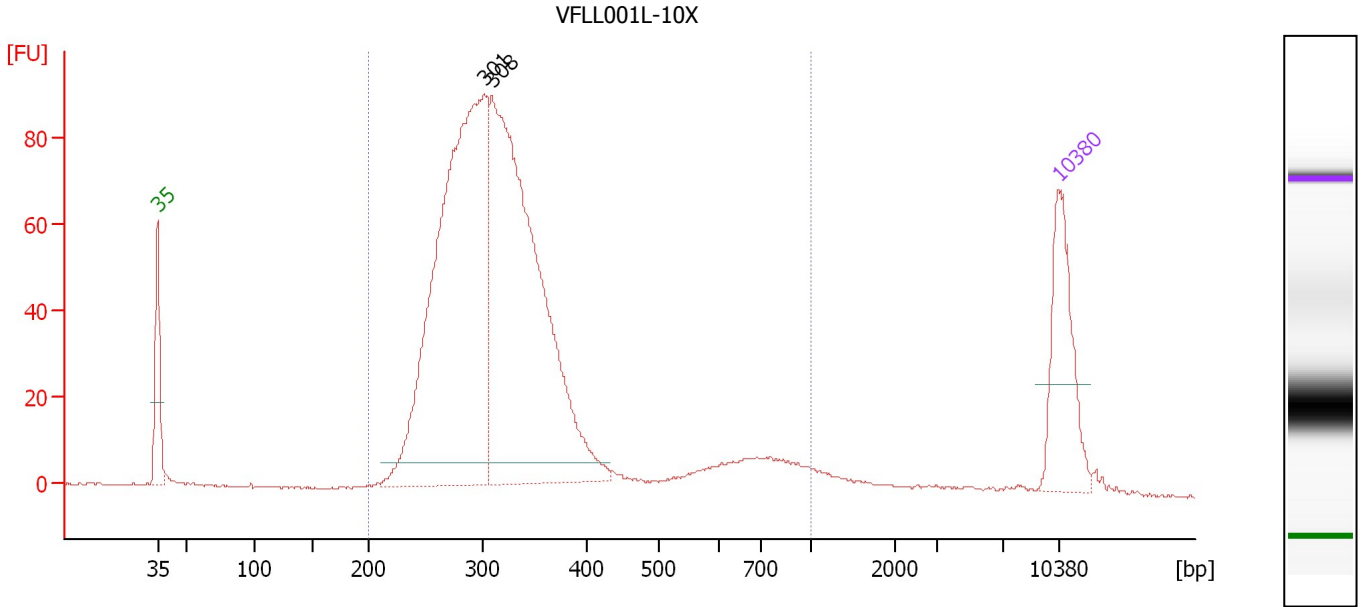
Region table for sample 7 : VFL001S

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	335	9,153.7	1,922.24	1,660.6	97	22.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
 Modified: 6/19/2012 11:12:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : VFL001L-10X

Number of peaks found: 2 Corr. Area 1: 1,325.1
 Noise: 0.2

Peak table for sample 8 : VFL001L-10X

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	301	617.91	3,113.6	
3	308	578.14	2,841.7	
4	10,380	75.00	10.9	Upper Marker

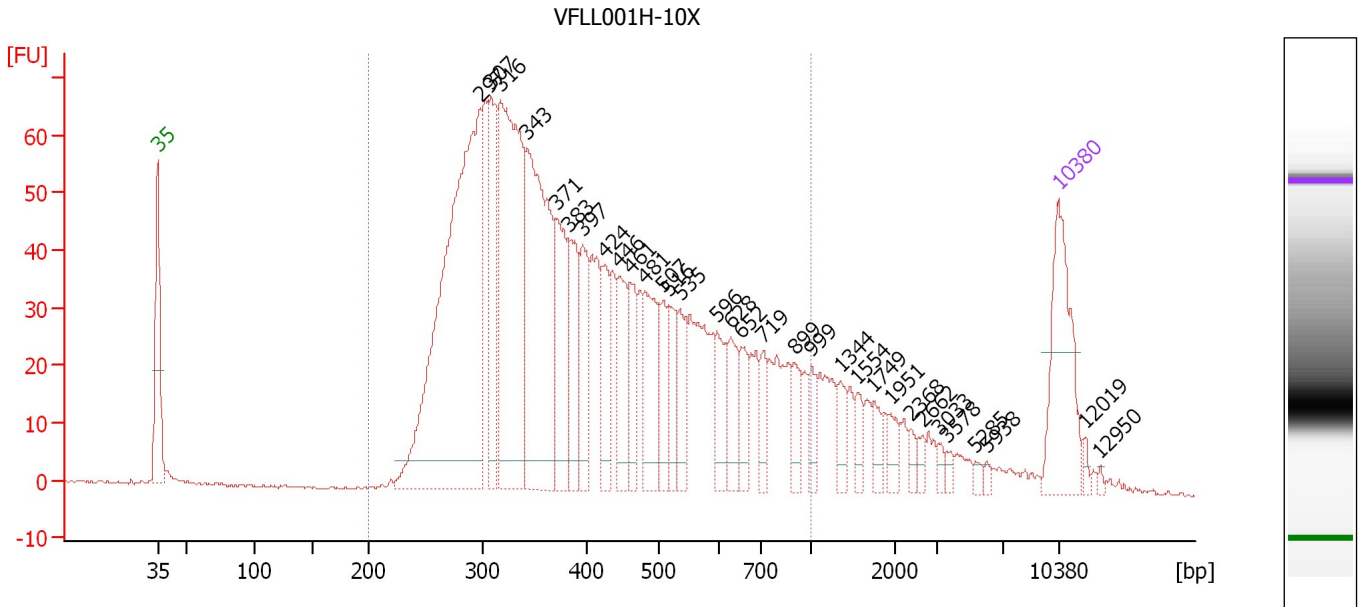
Region table for sample 8 : VFL001L-10X

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	340	6,342.1	1,304.12	1,325.1	96	34.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
 Modified: 6/19/2012 11:12:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : VFL001H-10X

Number of peaks found: 32 Corr. Area 1: 1,603.8
 Noise: 0.2

Peak table for sample 9 : VFL001H-10X

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	297	489.56	2,498.6	
3	307	109.41	539.9	
4	316	285.50	1,367.1	
5	343	233.54	1,032.4	
6	371	83.40	340.2	
7	383	65.42	258.7	
8	397	58.08	221.9	
9	424	43.43	155.2	
10	446	51.91	176.5	
11	461	41.50	136.5	
12	481	66.98	210.9	
13	507	36.55	109.2	
14	516	32.86	96.4	
15	535	35.24	99.7	
16	596	32.99	83.9	
17	628	32.05	77.4	
18	652	25.84	60.0	
19	719	20.09	42.4	
20	899	21.70	36.6	
21	999	16.25	24.7	
22	1,344	15.49	17.5	
23	1,554	12.40	12.1	
24	1,749	12.07	10.5	
25	1,951	12.03	9.3	
26	2,368	6.18	4.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad


Created: 6/19/2012 10:10:28 AM
 Modified: 6/19/2012 11:12:55 AM

Electropherogram Summary Continued ...

... Peak table for sample 9 : VFLL001H-10X

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	2,662	5.66	3.2	
28	3,033	4.68	2.3	
29	3,578	4.07	1.7	
30	5,285	3.53	1.0	
31	5,938	3.06	0.8	
32	10,380	75.00	10.9	Upper Marker
33	12,019	0.00	0.0	
34	12,950	0.00	0.0	

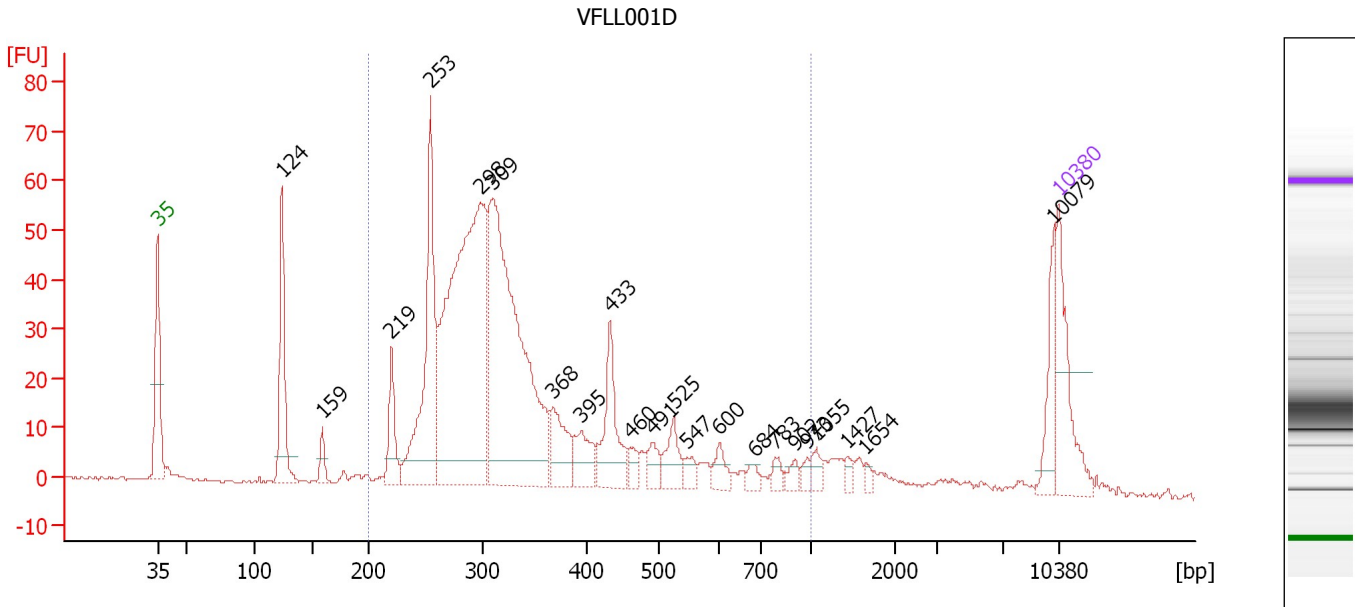
Region table for sample 9 : VFLL001H-10X

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	432	8,965.8	2,186.36	1,603.8	88	37.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
 Modified: 6/19/2012 11:12:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : VFL001D

Number of peaks found: 22 Corr. Area 1: 846.6
 Noise: 0.4

Peak table for sample 10 : VFL001D

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	124	128.48	1,566.0	
3	159	19.08	181.8	
4	219	52.93	365.8	
5	253	219.24	1,311.1	
6	298	551.48	2,807.7	
7	309	476.46	2,339.5	
8	368	58.14	239.2	
9	395	40.23	154.2	
10	433	77.74	272.1	
11	460	13.37	44.0	
12	491	20.40	63.0	
13	525	33.77	97.5	
14	547	12.81	35.5	
15	600	17.94	45.3	
16	684	10.12	22.4	
17	783	9.99	19.3	
18	902	9.35	15.7	
19	973	7.22	11.2	
20	1,055	11.67	16.8	
21	1,427	7.02	7.5	
22	1,654	5.02	4.6	
23	10,079	35.26	5.3	
24	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
Modified: 6/19/2012 11:12:55 AM

Electropherogram Summary Continued ...

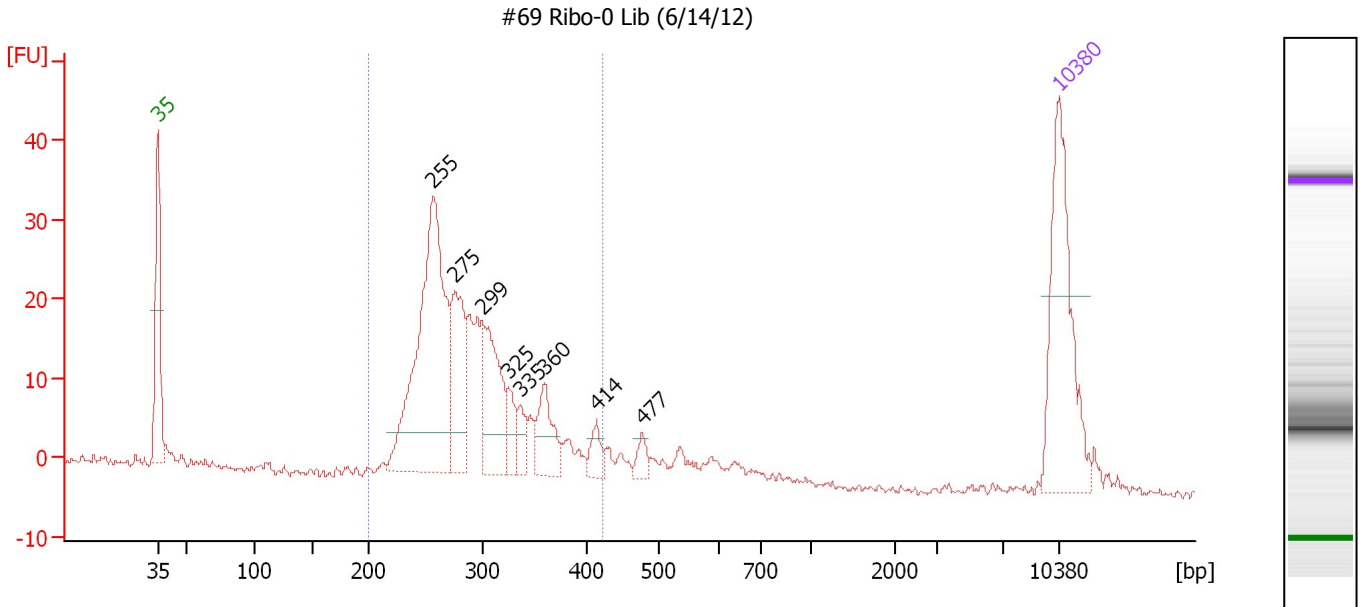
... Region table for sample 10 : VFLL001D

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	353	7,947.2	1,652.23	846.6	84	36.8	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
 Modified: 6/19/2012 11:12:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : #69 Ribo-0 Lib (6/14/12)

Number of peaks found: 8 Corr. Area 1: 324.4
 Noise: 0.5

Peak table for sample 11 : #69 Ribo-0 Lib (6/14/12)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	255	205.71	1,221.6	
3	275	65.61	361.5	
4	299	65.81	333.3	
5	325	15.69	73.2	
6	335	11.82	53.4	
7	360	29.50	124.2	
8	414	11.02	40.3	
9	477	8.02	25.5	
10	10,380	75.00	10.9	Upper Marker

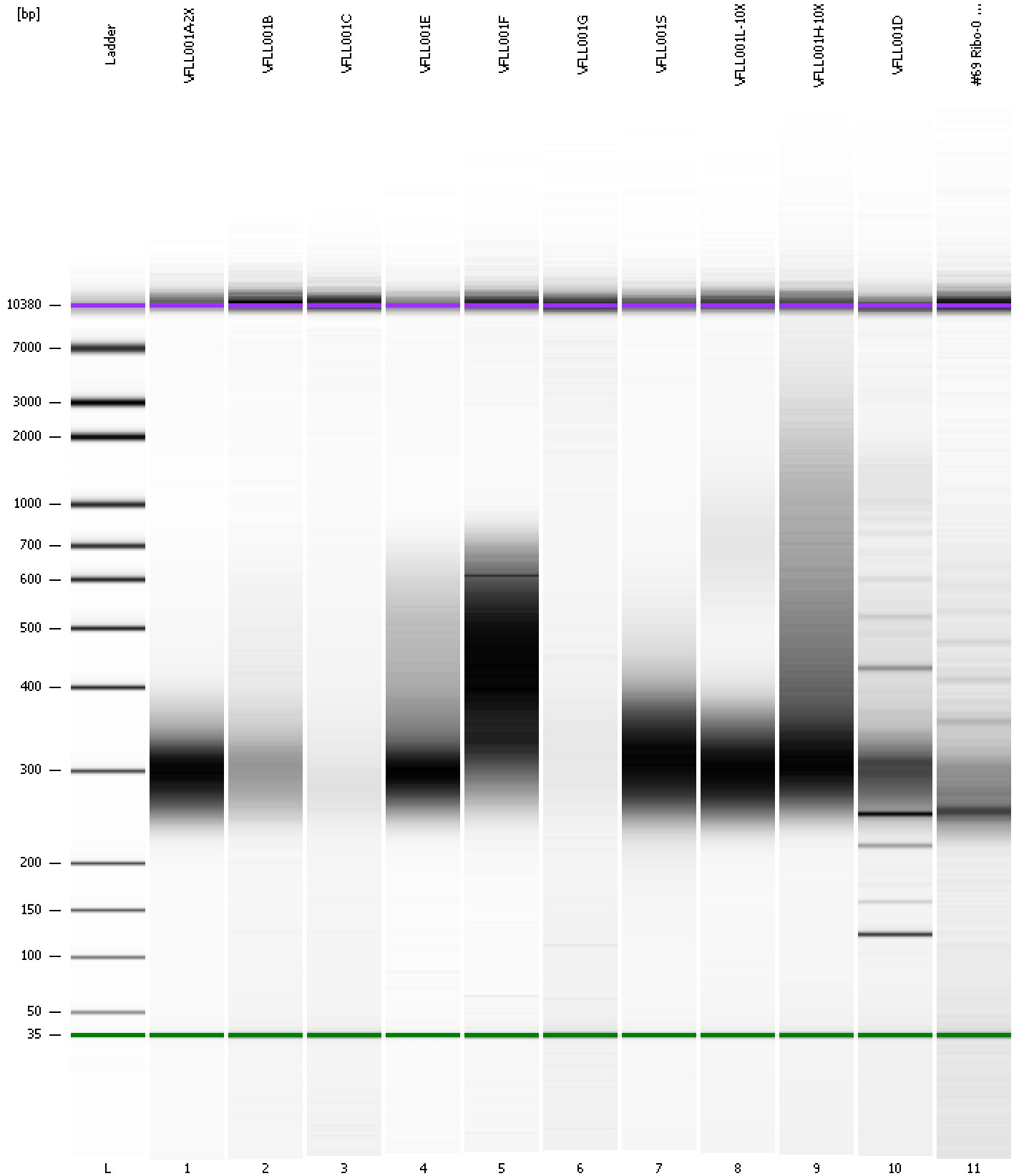
Region table for sample 11 : #69 Ribo-0 Lib (6/14/12)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	422	292	2,612.9	490.06	324.4	81	15.5	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
Modified: 6/19/2012 11:12:55 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...d Settings\Bioanalyzer\2012-06-19\2012-06-19_001_69_lib.xad

Created: 6/19/2012 10:10:28 AM
 Modified: 6/19/2012 11:12:55 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		6/19/2012 10:51:45 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-06-19\2012-06-19_001.xad)		Instrument	Run		6/19/2012 10:10:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/19/2012 10:10:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/19/2012 10:10:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/19/2012 10:10:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/19/2012 10:10:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/19/2012 10:10:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/19/2012 10:10:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1