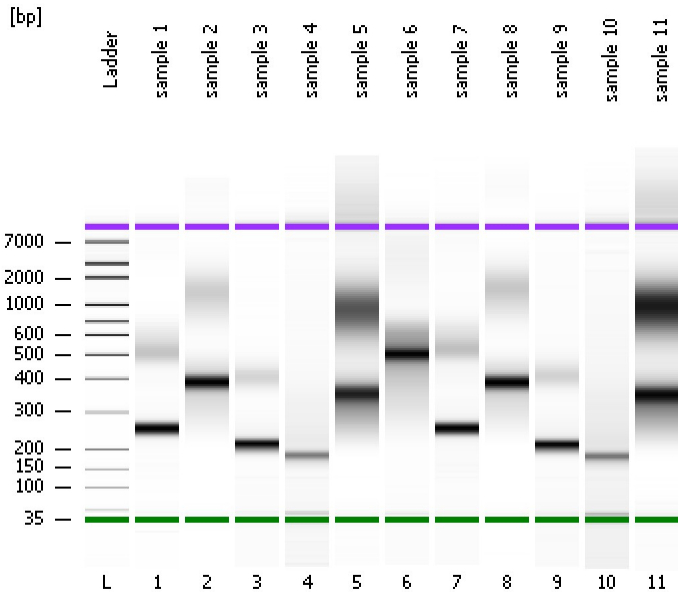


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-19\2012-06-19_002.xad

Created: 6/19/2012 11:45:14 AM
Modified: 6/19/2012 12:30:12 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

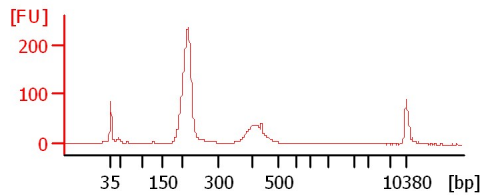
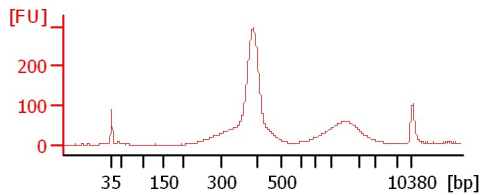
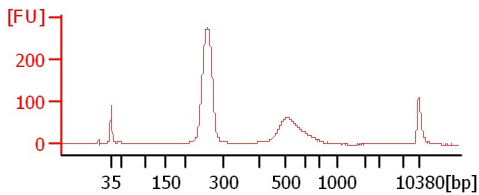
Chip Information:

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

sample 1

sample 2

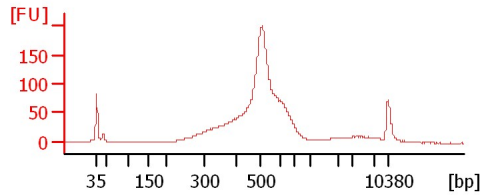
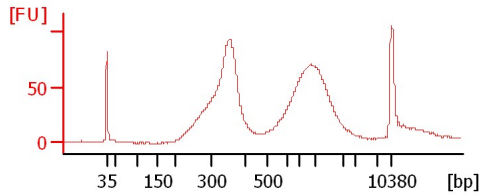
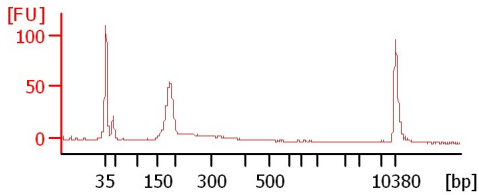
sample 3



sample 4

sample 5

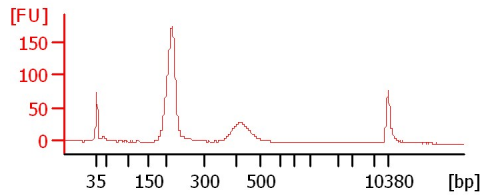
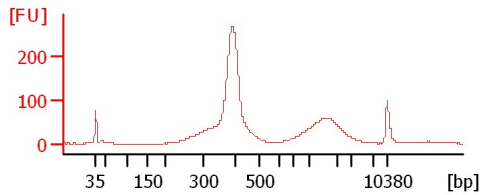
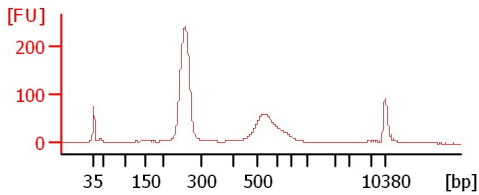
sample 6



sample 7

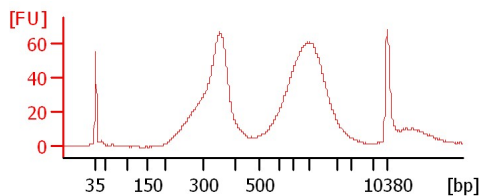
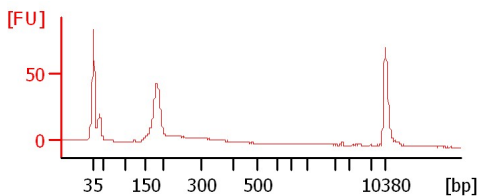
sample 8

sample 9



sample 10

sample 11



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-19\2012-06-19_002.xad

Created: 6/19/2012 11:45:14 AM
 Modified: 6/19/2012 12:30:12 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		<input type="checkbox"/>	✓			
sample 2		<input type="checkbox"/>	✓			
sample 3		<input type="checkbox"/>	✓			
sample 4		<input type="checkbox"/>	✓			
sample 5		<input type="checkbox"/>	✓			
sample 6		<input type="checkbox"/>	✓			
sample 7		<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\2012-06-19\2012-06-19_002.xad

Created: 6/19/2012 11:45:14 AM
Modified: 6/19/2012 12:30:12 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

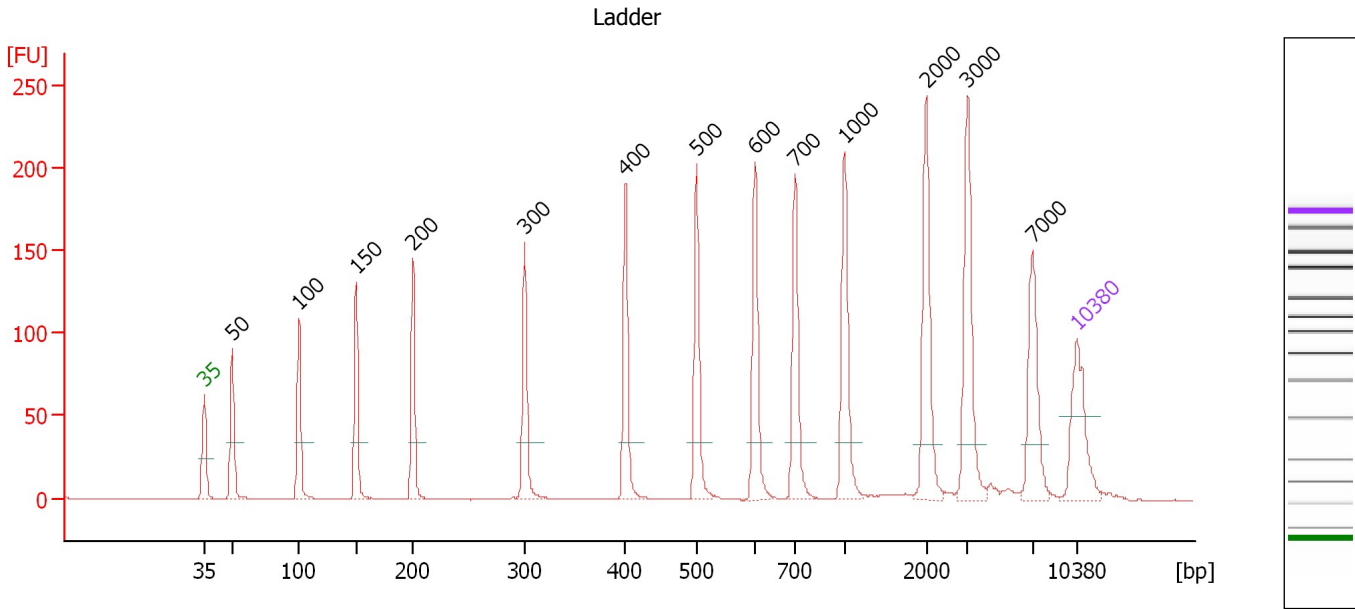
Ladder

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\2012-06-19\2012-06-19_002.xad

Created: 6/19/2012 11:45:14 AM
 Modified: 6/19/2012 12:30:12 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

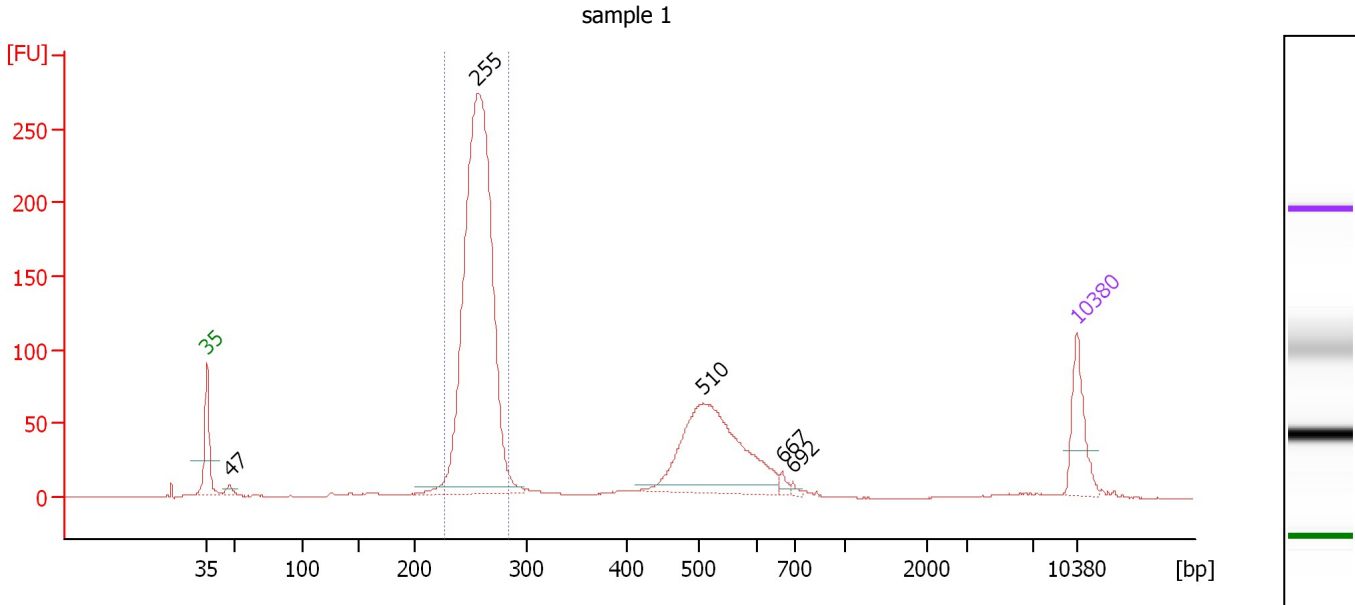
Peak table for Ladder

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	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-19\2012-06-19_002.xad

Created: 6/19/2012 11:45:14 AM
 Modified: 6/19/2012 12:30:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 5 Corr. Area 1: 1,190.7
 Noise: 0.2

Peak table for sample 1 : sample 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	16.69	538.8	
3	255	1,320.20	7,830.9	
4	510	407.05	1,210.3	
5	667	10.22	23.2	
6	692	6.39	14.0	
7	10,380	75.00	10.9	Upper Marker

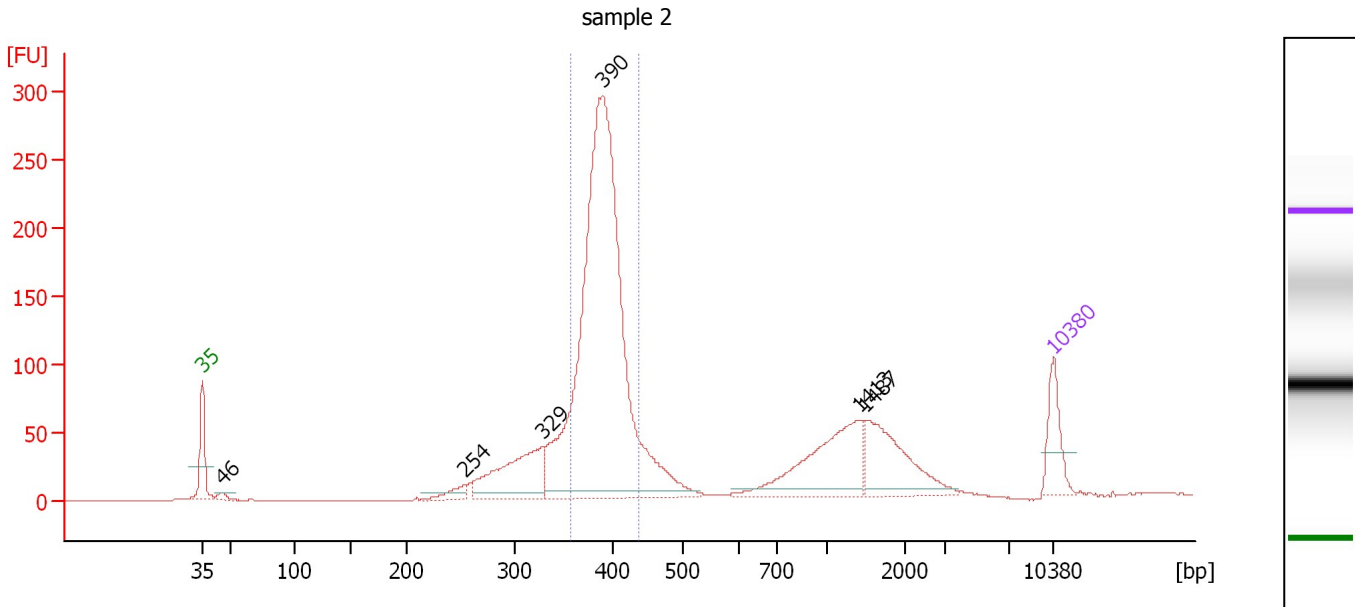
Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
227	284	256	7,783.2	1,316.97	1,190.7	62	4.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-19\2012-06-19_002.xad

Created: 6/19/2012 11:45:14 AM
 Modified: 6/19/2012 12:30:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 6 Corr. Area 1: 1,336.4
 Noise: 0.2

Peak table for sample 2 : sample 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	17.72	583.0	
3	254	36.73	218.9	
4	329	257.94	1,187.1	
5	390	1,694.78	6,582.8	
6	1,413	242.50	260.0	
7	1,487	188.95	192.5	
8	10,380	75.00	10.9	Upper Marker

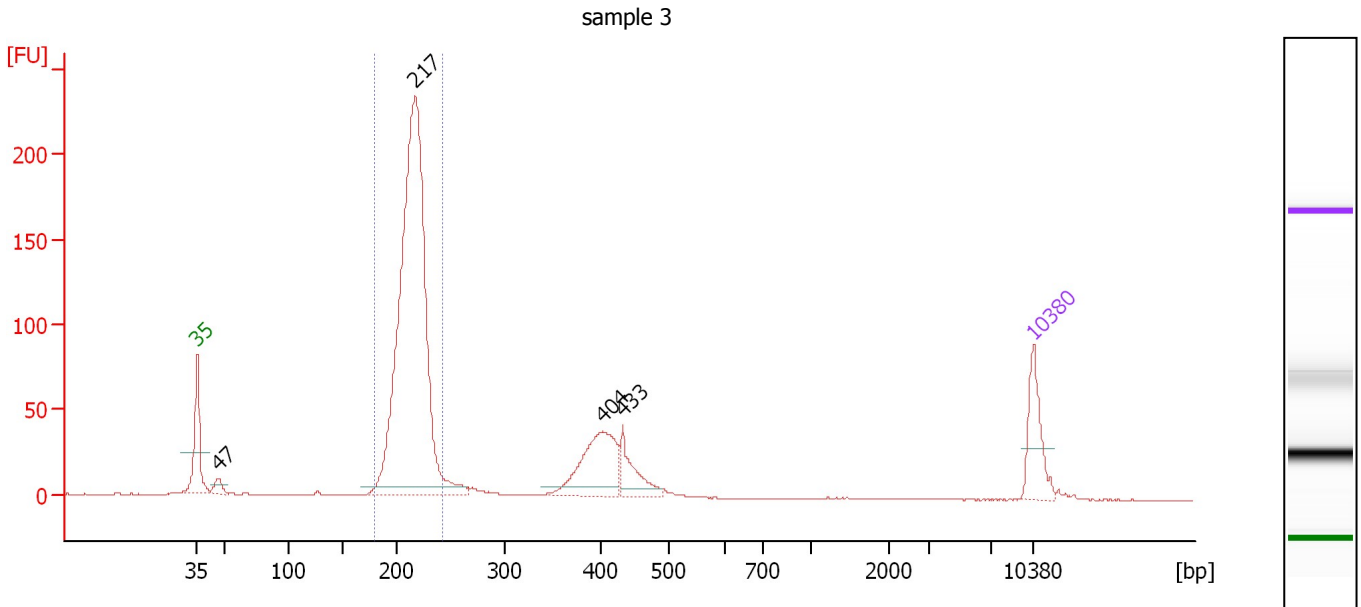
Region table for sample 2 : sample 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
357	438	391	5,497.7	1,414.92	1,336.4	55	4.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-19\2012-06-19_002.xad

Created: 6/19/2012 11:45:14 AM
 Modified: 6/19/2012 12:30:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 4 Corr. Area 1: 981.3
 Noise: 0.2

Peak table for sample 3 : sample 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	26.72	869.9	
3	217	1,336.12	9,334.5	
4	404	189.59	711.5	
5	433	75.10	263.0	
6	10,380	75.00	10.9	Upper Marker

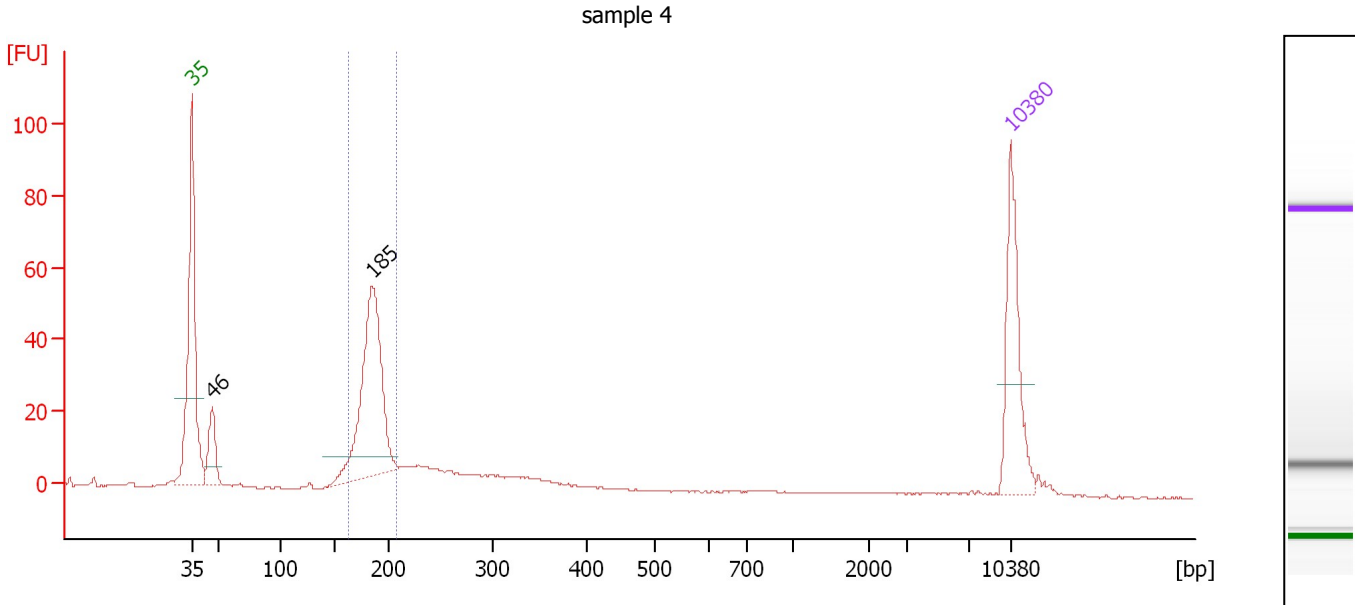
Region table for sample 3 : sample 3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
179	243	213	9,422.0	1,324.31	981.3	72	5.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-19\2012-06-19_002.xad

Created: 6/19/2012 11:45:14 AM
 Modified: 6/19/2012 12:30:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 2 Corr. Area 1: 211.1
 Noise: 0.1

Peak table for sample 4 : sample 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	52.13	1,710.4	
3	185	247.42	2,022.3	
4	10,380	75.00	10.9	Upper Marker

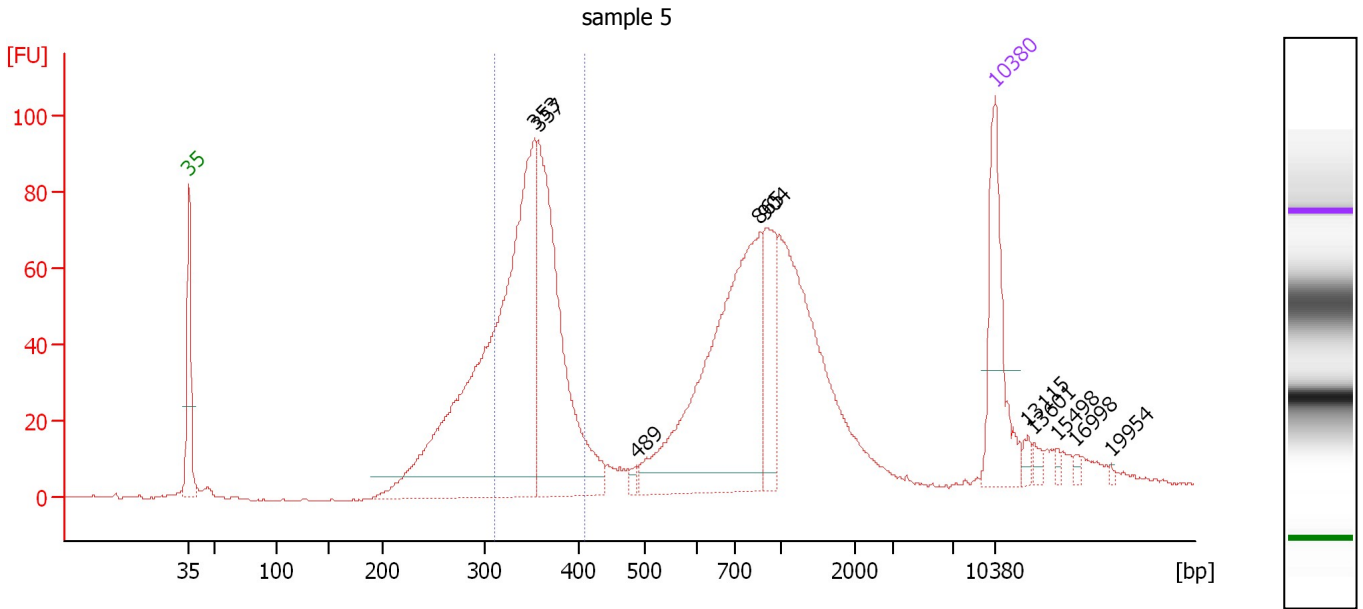
Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
163	208	185	2,269.0	276.56	211.1	49	5.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-19\2012-06-19_002.xad

Created: 6/19/2012 11:45:14 AM
 Modified: 6/19/2012 12:30:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 10 Corr. Area 1: 646.5
 Noise: 0.1

Peak table for sample 5 : sample 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	353	552.02	2,366.3	
3	357	276.64	1,172.6	
4	489	6.04	18.7	
5	865	300.46	526.1	
6	904	70.62	118.4	
7	10,380	75.00	10.9	Upper Marker
8	13,115	0.00	0.0	
9	13,601	0.00	0.0	
10	15,498	0.00	0.0	
11	16,998	0.00	0.0	
12	19,954	0.00	0.0	

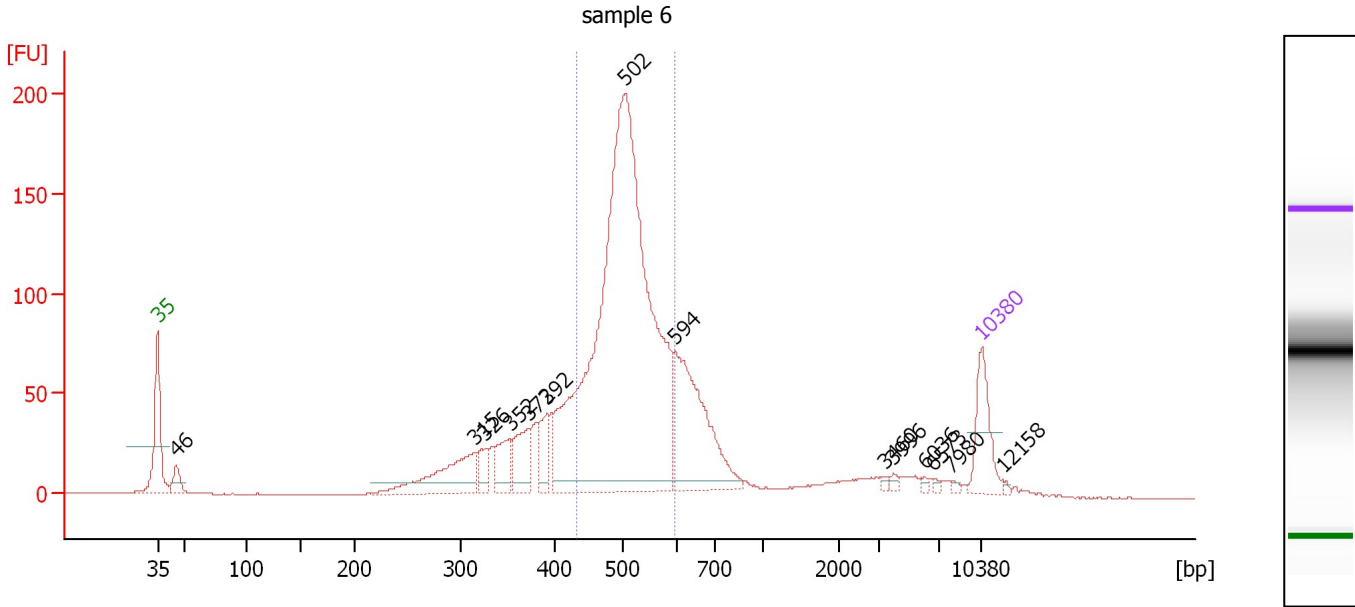
Region table for sample 5 : sample 5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
310	411	353	2,454.6	570.72	646.5	35	6.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-19\2012-06-19_002.xad

Created: 6/19/2012 11:45:14 AM
 Modified: 6/19/2012 12:30:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 14 Corr. Area 1: 1,180.8
 Noise: 0.2

Peak table for sample 6 : sample 6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	41.41	1,378.9	
3	315	161.37	775.7	
4	326	35.00	162.6	
5	352	56.86	244.6	
6	372	78.36	319.4	
7	392	59.90	231.5	
8	502	1,483.27	4,473.9	
9	594	282.87	721.0	
10	3,460	4.17	1.8	
11	3,996	5.28	2.0	
12	6,036	4.30	1.1	
13	6,573	4.45	1.0	
14	7,980	3.94	0.7	
15	10,380	75.00	10.9	Upper Marker
16	12,158	0.00	0.0	

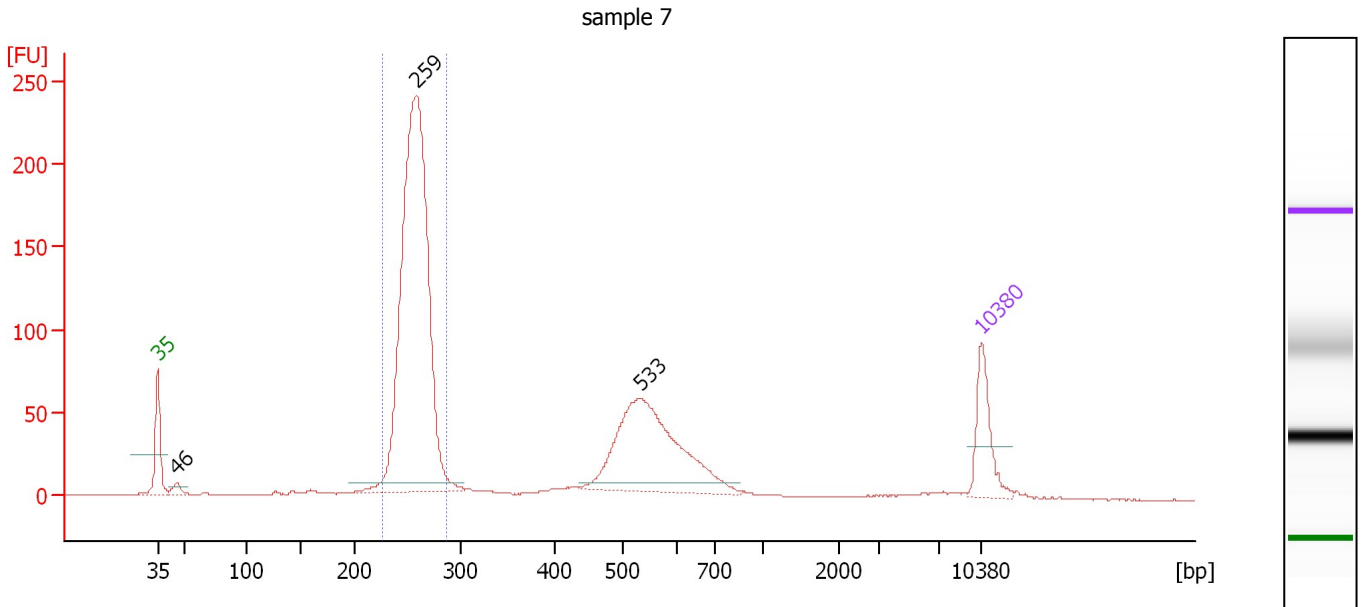
Region table for sample 6 : sample 6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
431	597	510	4,139.8	1,383.35	1,180.8	55	7.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-19\2012-06-19_002.xad

Created: 6/19/2012 11:45:14 AM
 Modified: 6/19/2012 12:30:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found: 3 Corr. Area 1: 1,021.0
 Noise: 0.2

Peak table for sample 7 : sample 7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	18.77	624.0	
3	259	1,120.70	6,565.7	
4	533	376.69	1,071.2	
5	10,380	75.00	10.9	Upper Marker

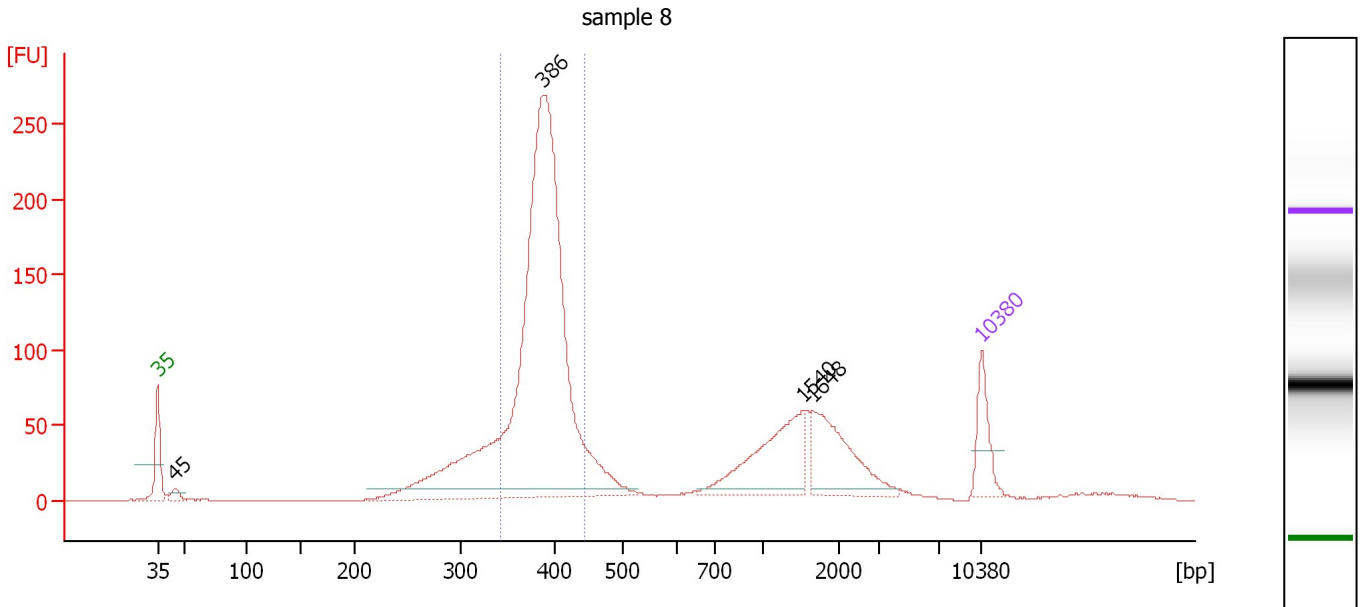
Region table for sample 7 : sample 7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
227	287	257	6,682.0	1,133.32	1,021.0	60	4.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-19\2012-06-19_002.xad

Created: 6/19/2012 11:45:14 AM
 Modified: 6/19/2012 12:30:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 4 Corr. Area 1: 1,308.7
 Noise: 0.2

Peak table for sample 8 : sample 8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	45	24.57	827.8	
3	386	1,855.15	7,277.3	
4	1,540	224.24	220.6	
5	1,648	190.45	175.1	
6	10,380	75.00	10.9	Upper Marker

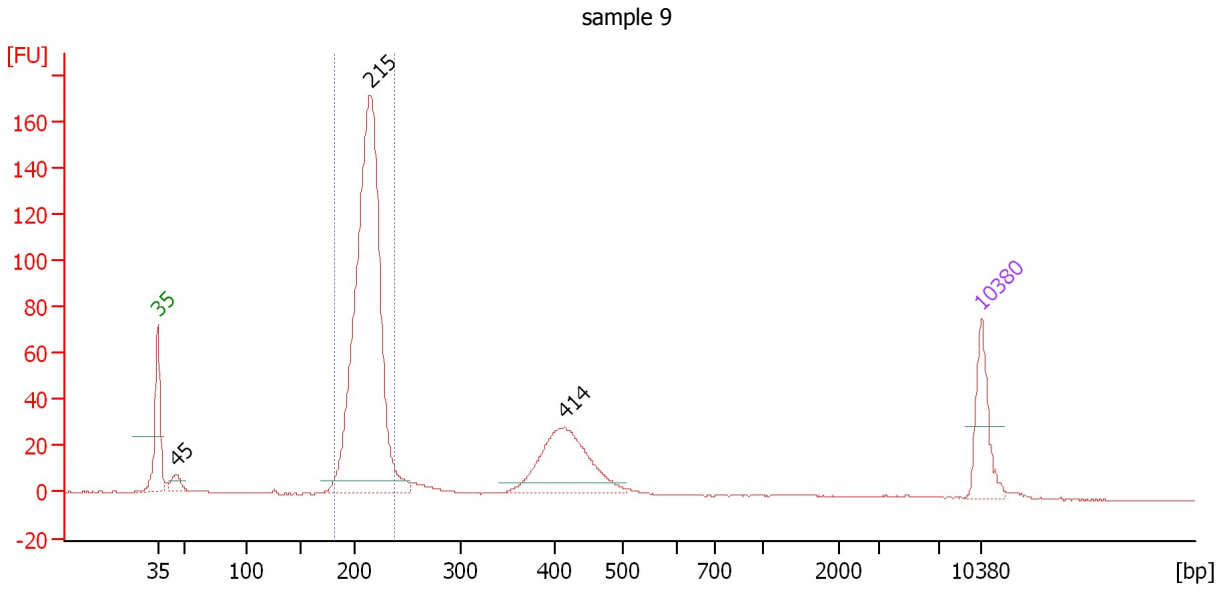
Region table for sample 8 : sample 8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
342	444	388	5,792.5	1,481.38	1,308.7	55	5.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-19\2012-06-19_002.xad

Created: 6/19/2012 11:45:14 AM
 Modified: 6/19/2012 12:30:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9

Number of peaks found: 3 Corr. Area 1: 690.9
 Noise: 0.1

Peak table for sample 9 : sample 9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	45	31.53	1,055.1	
3	215	1,087.29	7,672.8	
4	414	231.16	845.4	
5	10,380	75.00	10.9	Upper Marker

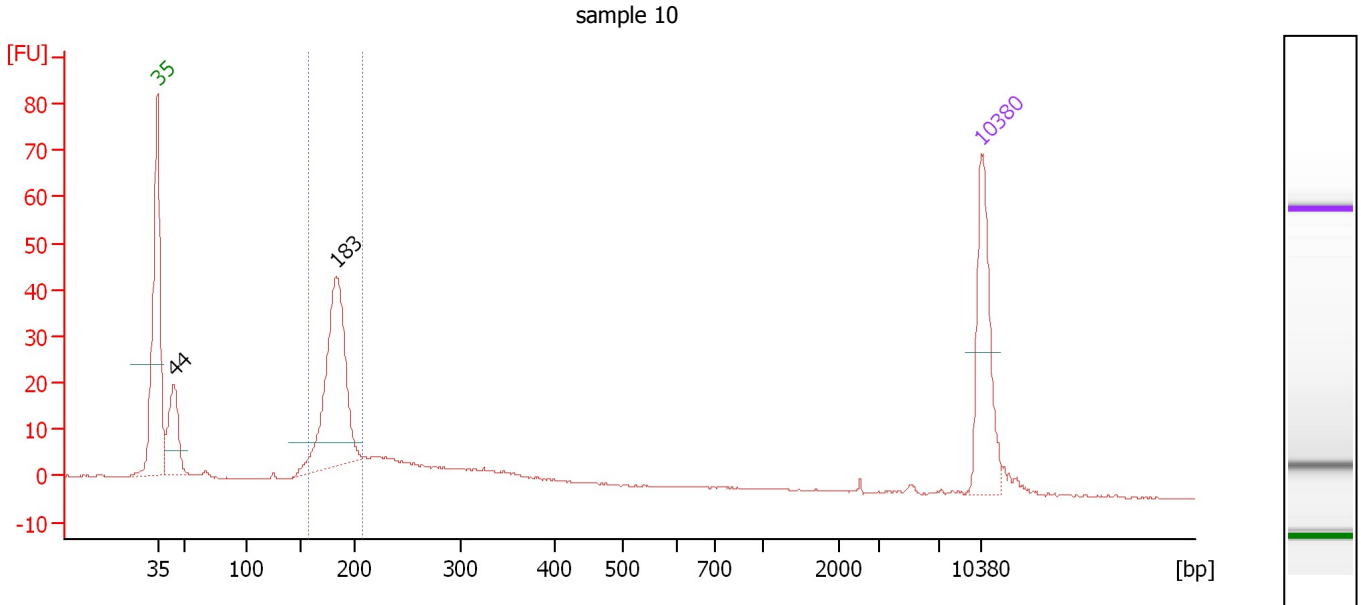
Region table for sample 9 : sample 9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
180	238	211	7,732.3	1,076.34	690.9	70	5.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-19\2012-06-19_002.xad

Created: 6/19/2012 11:45:14 AM
 Modified: 6/19/2012 12:30:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10

Number of peaks found: 2 Corr. Area 1: 164.3
 Noise: 0.1

Peak table for sample 10 : sample 10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	83.72	2,875.8	
3	183	235.84	1,949.5	
4	10,380	75.00	10.9	Upper Marker

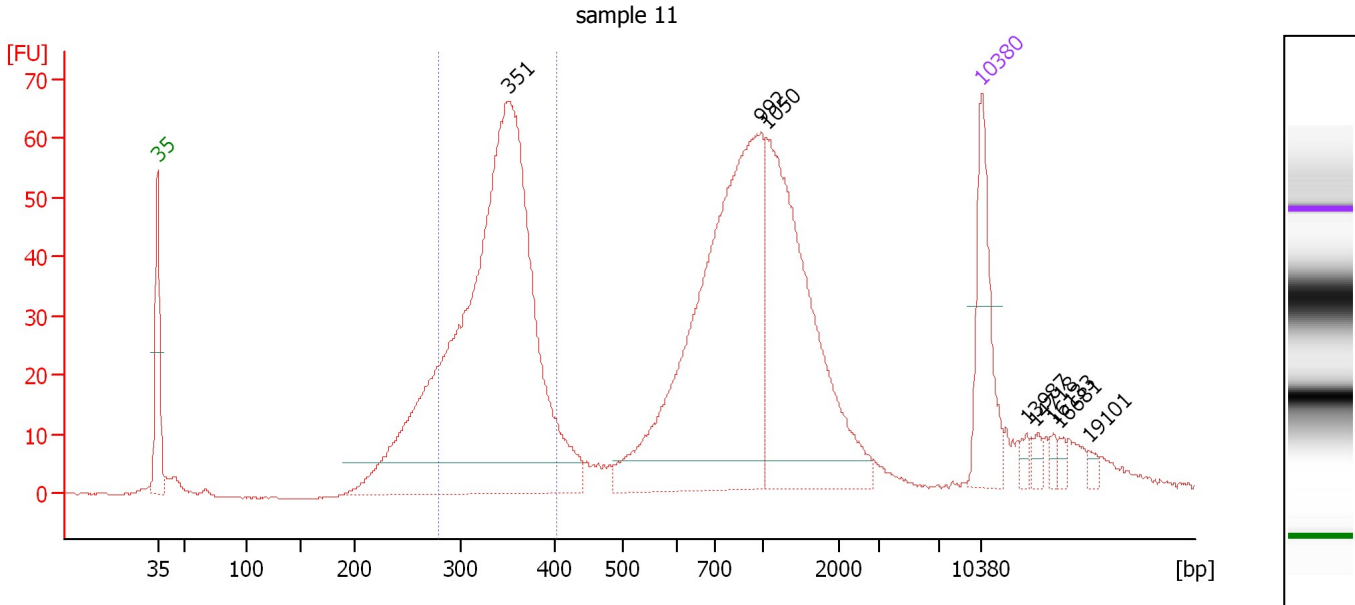
Region table for sample 10 : sample 10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
157	207	182	2,260.9	271.51	164.3	48	5.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-19\2012-06-19_002.xad

Created: 6/19/2012 11:45:14 AM
 Modified: 6/19/2012 12:30:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found: 8 Corr. Area 1: 536.8
 Noise: 0.1

Peak table for sample 11 : sample 11

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	351	921.14	3,976.2	
3	992	451.12	688.9	
4	1,050	308.10	444.5	
5	10,380	75.00	10.9	Upper Marker
6	13,987	0.00	0.0	
7	14,718	0.00	0.0	
8	16,133	0.00	0.0	
9	16,681	0.00	0.0	
10	19,101	0.00	0.0	

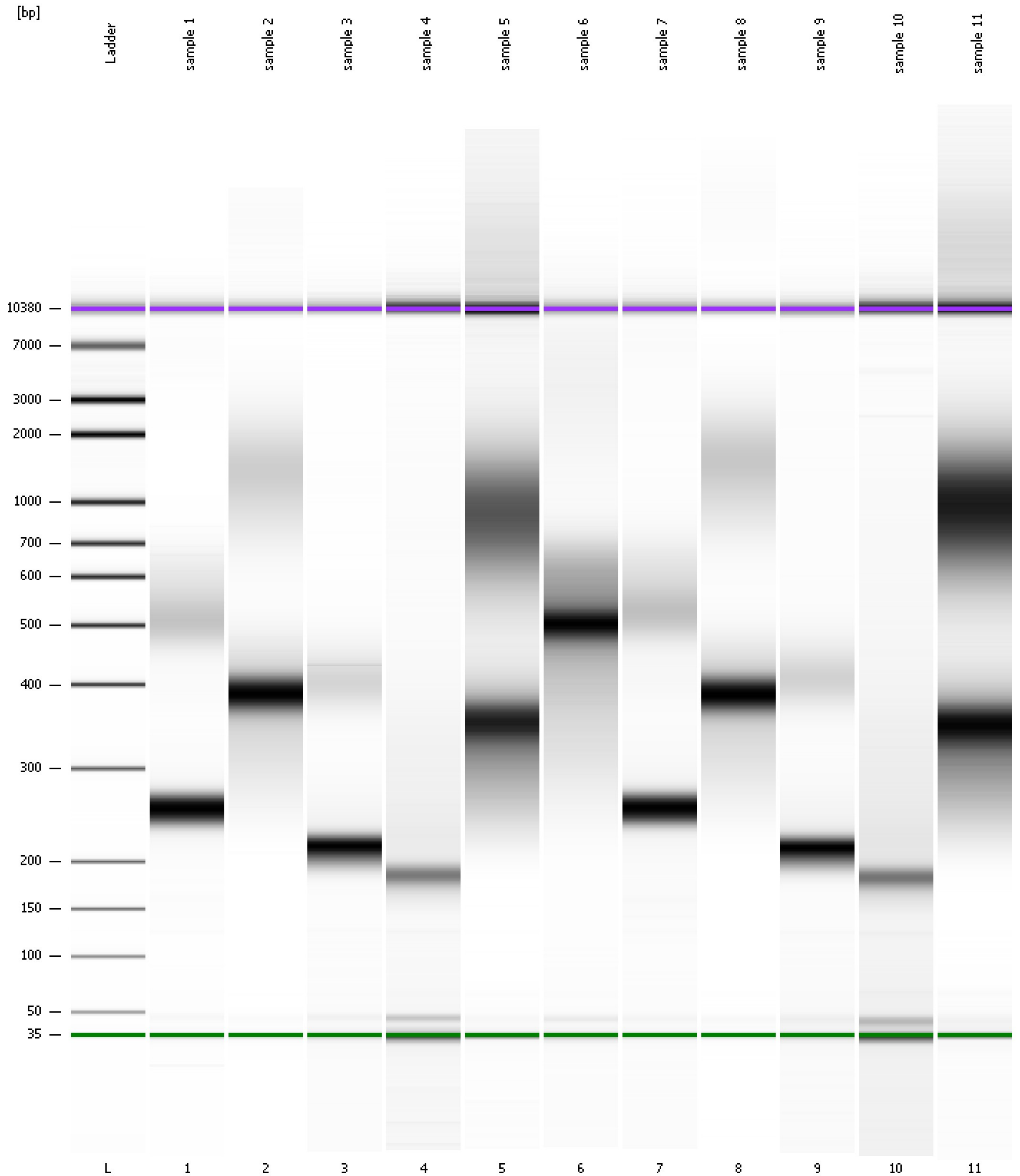
Region table for sample 11 : sample 11

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
279	402	340	3,412.2	760.35	536.8	37	8.6	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-19\2012-06-19_002.xad

Created: 6/19/2012 11:45:14 AM
Modified: 6/19/2012 12:30:12 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-19\2012-06-19_002.xad

Created: 6/19/2012 11:45:14 AM
 Modified: 6/19/2012 12:30:12 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		6/19/2012 12:26:32 PM	(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_002.xad)		Instrument	Run		6/19/2012 11:45:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/19/2012 11:45:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/19/2012 11:45:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/19/2012 11:45:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/19/2012 11:45:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/19/2012 11:45:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/19/2012 11:45:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1