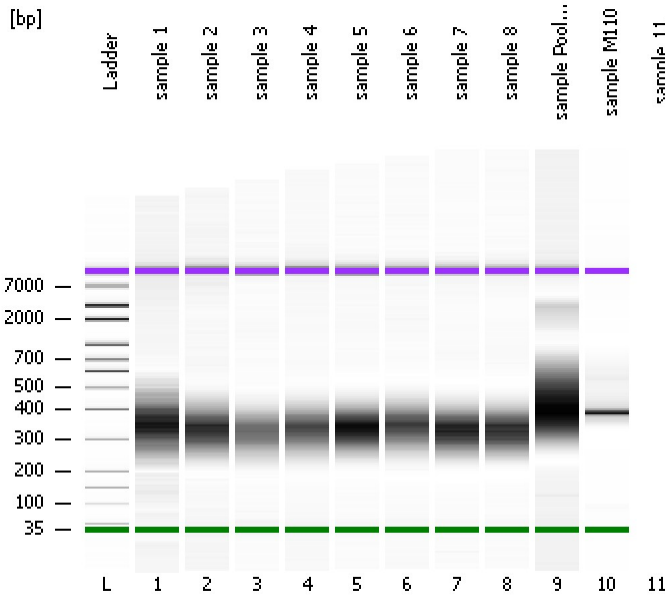


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-11\2015-03-11_002.xad

Created: 3/11/2015 3:35:02 PM
Modified: 3/11/2015 4:20:27 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

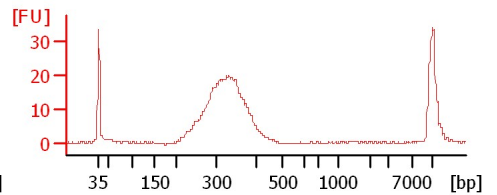
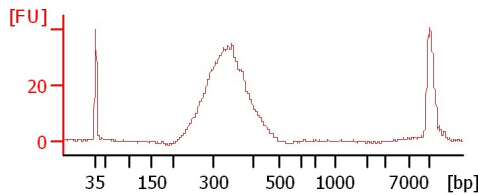
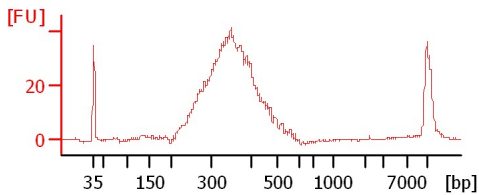
Chip Information:

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

sample 1

sample 2

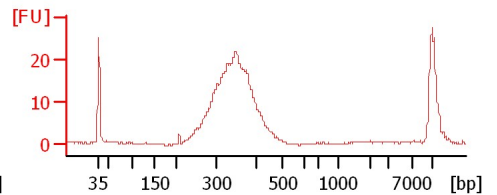
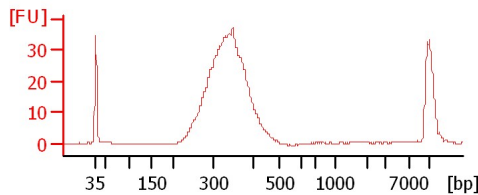
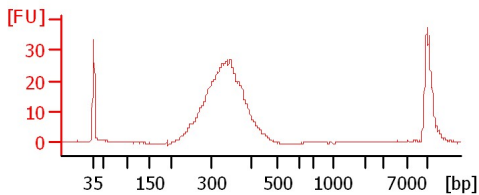
sample 3



sample 4

sample 5

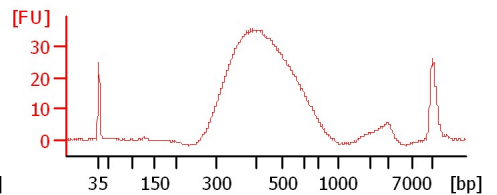
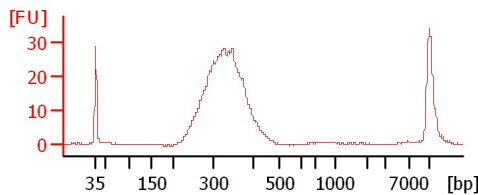
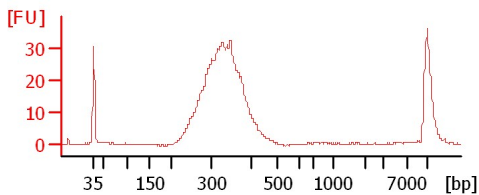
sample 6



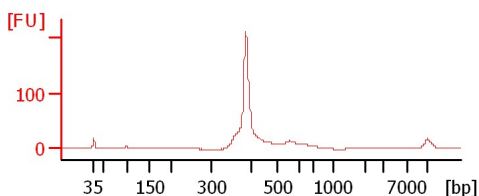
sample 7

sample 8

sample Pool Nagu



sample M110



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-11\2015-03-11_002.xad

Created: 3/11/2015 3:35:02 PM
 Modified: 3/11/2015 4:20:27 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 Pool Nagu		<input type="checkbox"/>	✓			
sample M110		<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\2015-03-11\2015-03-11_002.xad

Created: 3/11/2015 3:35:02 PM
Modified: 3/11/2015 4:20:27 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

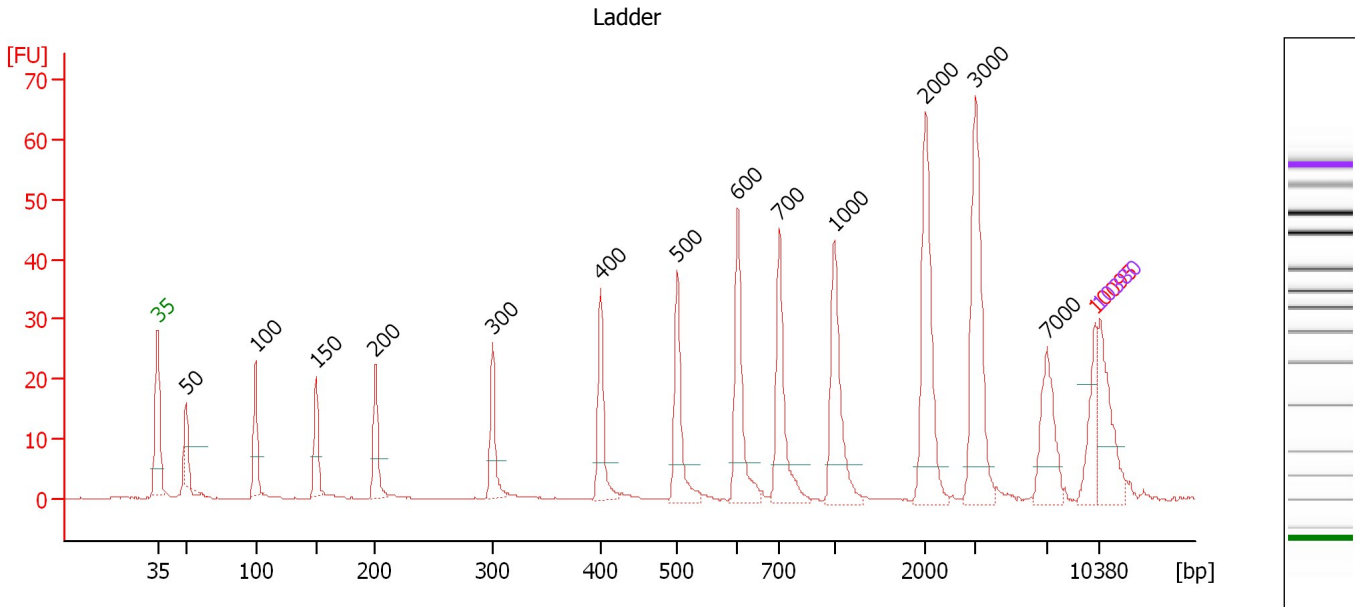
Ladder

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\2015-03-11\2015-03-11_002.xad

Created: 3/11/2015 3:35:02 PM
 Modified: 3/11/2015 4:20:27 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

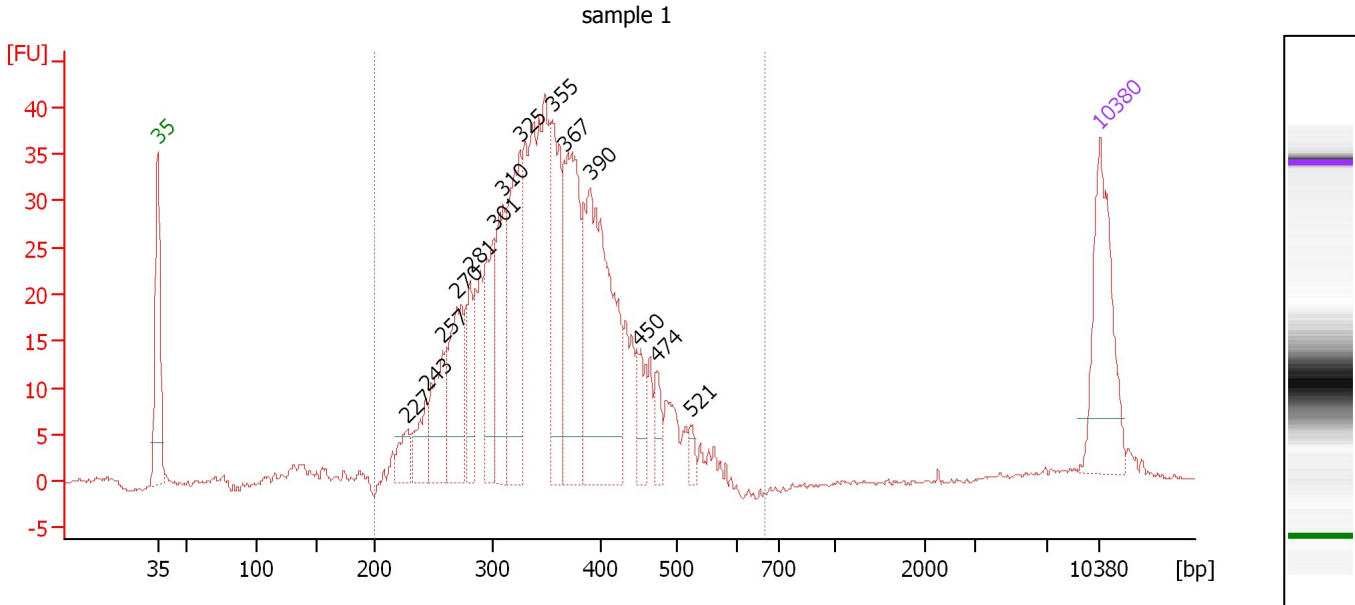
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.09
3	100	150.00	2,272.7	Ladder Peak	50.28
4	150	150.00	1,515.2	Ladder Peak	54.75
5	200	150.00	1,136.4	Ladder Peak	59.17
6	300	150.00	757.6	Ladder Peak	67.87
7	400	150.00	568.2	Ladder Peak	75.91
8	500	150.00	454.5	Ladder Peak	81.61
9	600	150.00	378.8	Ladder Peak	86.08
10	700	150.00	324.7	Ladder Peak	89.22
11	1,000	150.00	227.3	Ladder Peak	93.26
12	2,000	150.00	113.6	Ladder Peak	100.07
13	3,000	150.00	75.8	Ladder Peak	103.77
14	7,000	150.00	32.5	Ladder Peak	109.05
15	10,095	0.00	0.0	excluded peak	112.67
16	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-11\2015-03-11_002.xad

Created: 3/11/2015 3:35:02 PM
 Modified: 3/11/2015 4:20:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 14 Corr. Area 1: 660.1
 Noise: 0.2

Peak table for sample 1 : sample 1

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	227	23.24	155.0		61.54
3	243	30.19	188.1		62.92
4	257	60.56	356.4		64.17
5	270	90.36	508.0		65.22
6	281	49.80	268.5		66.22
7	301	69.92	351.4		67.99
8	310	88.56	432.3		68.71
9	325	125.09	582.7		69.90
10	355	113.23	483.3		72.29
11	367	140.81	581.5		73.25
12	390	216.26	840.0		75.11
13	450	22.05	74.2		78.79
14	474	18.17	58.1		80.13
15	521	8.12	23.6		82.56
16	10,380	75.00	10.9	Upper Marker	113.00

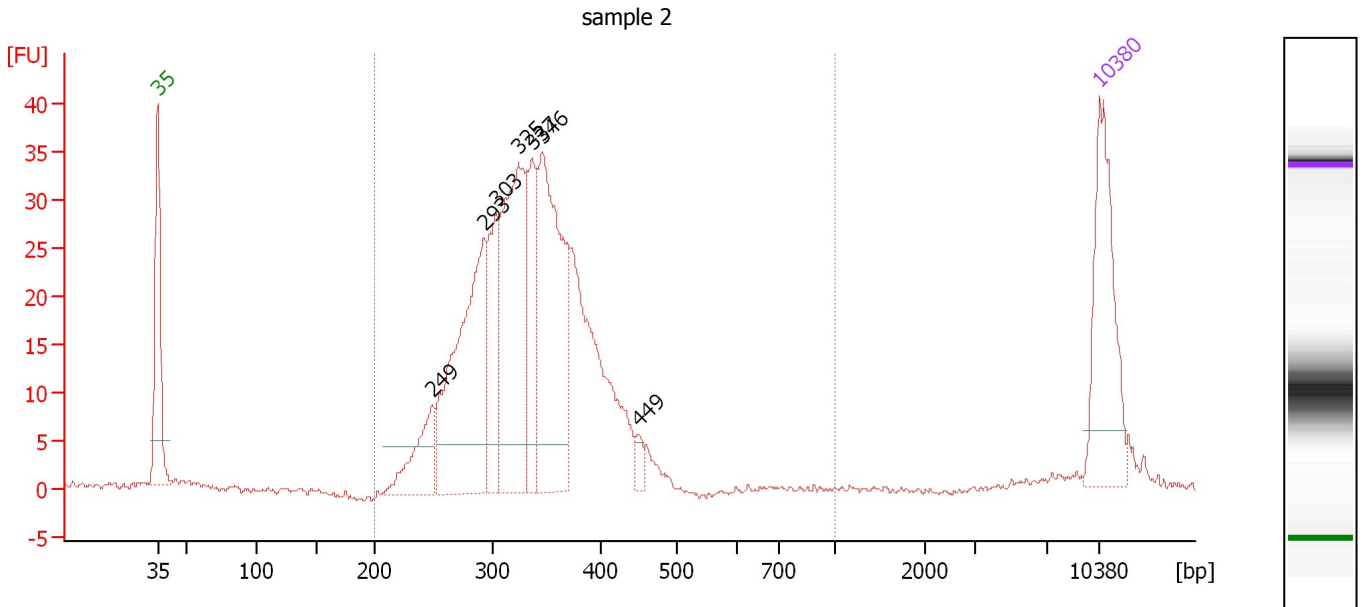
Region table for sample 1 : sample 1

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	354	665	660.1	6,616.4	95	18.8	1,471.70	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-11\2015-03-11_002.xad

Created: 3/11/2015 3:35:02 PM
 Modified: 3/11/2015 4:20:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 7 Corr. Area 1: 482.9
 Noise: 0.3

Peak table for sample 2 : sample 2

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	249	54.85	333.4		63.45
3	293	200.38	1,036.2		67.26
4	303	63.90	319.2		68.14
5	325	183.54	856.7		69.85
6	337	67.74	304.8		70.82
7	346	187.43	821.1		71.56
8	449	8.30	28.0		78.73
9	10,380	75.00	10.9	Upper Marker	113.00

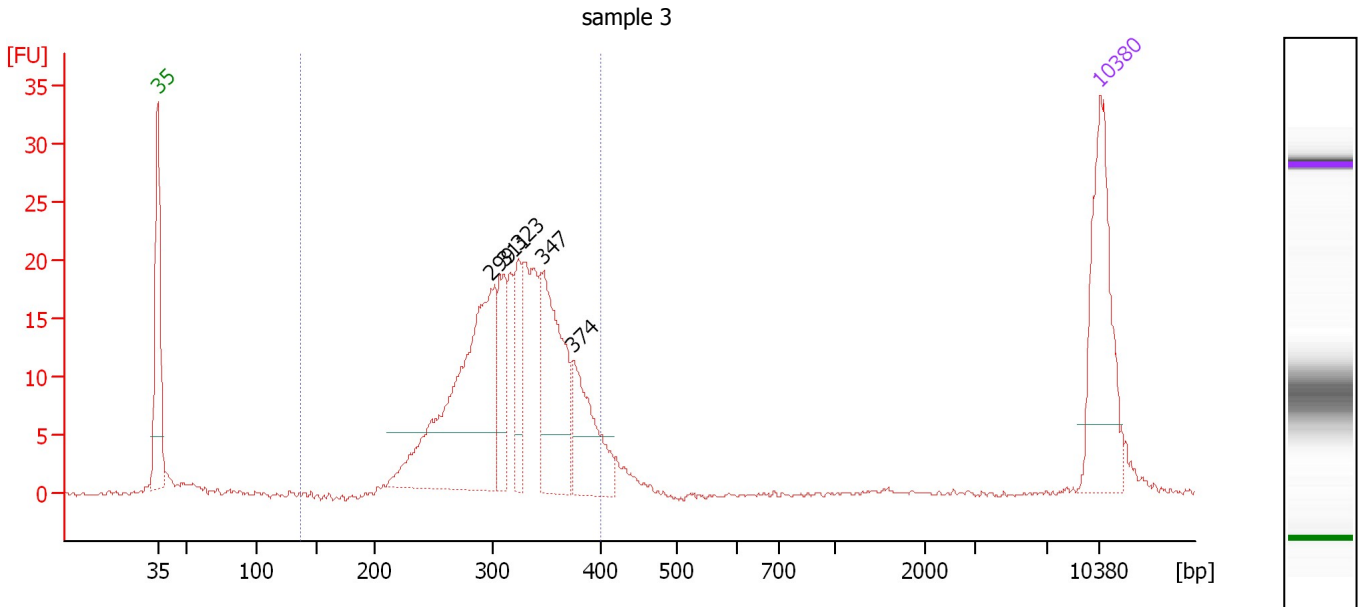
Region table for sample 2 : sample 2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	334	1,000	482.9	4,357.4	96	15.1	934.32	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-11\2015-03-11_002.xad

Created: 3/11/2015 3:35:02 PM
 Modified: 3/11/2015 4:20:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 5 Corr. Area 1: 271.0
 Noise: 0.2

Peak table for sample 3 : sample 3

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	221.26	1,121.7		67.77
3	311	52.36	255.5		68.72
4	323	41.76	195.6		69.76
5	347	111.46	486.7		71.65
6	374	64.74	262.2		73.83
7	10,380	75.00	10.9	Upper Marker	113.00

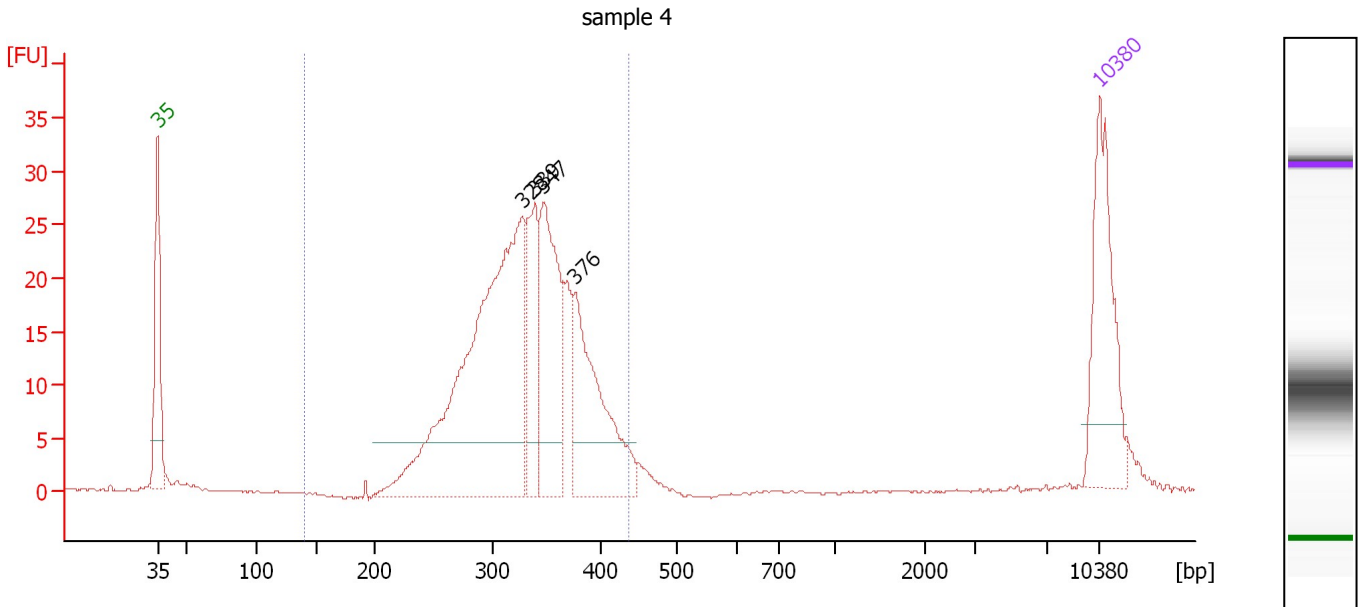
Region table for sample 3 : sample 3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
138	317	401	271.0	3,068.5	88	13.4	627.52	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-11\2015-03-11_002.xad

Created: 3/11/2015 3:35:02 PM
 Modified: 3/11/2015 4:20:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 4 Corr. Area 1: 342.4
 Noise: 0.1

Peak table for sample 4 : sample 4

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	328	372.88	1,724.2		70.10
3	339	72.55	324.2		71.01
4	347	125.98	549.6		71.67
5	376	123.69	497.9		74.01
6	10,380	75.00	10.9	Upper Marker	113.00

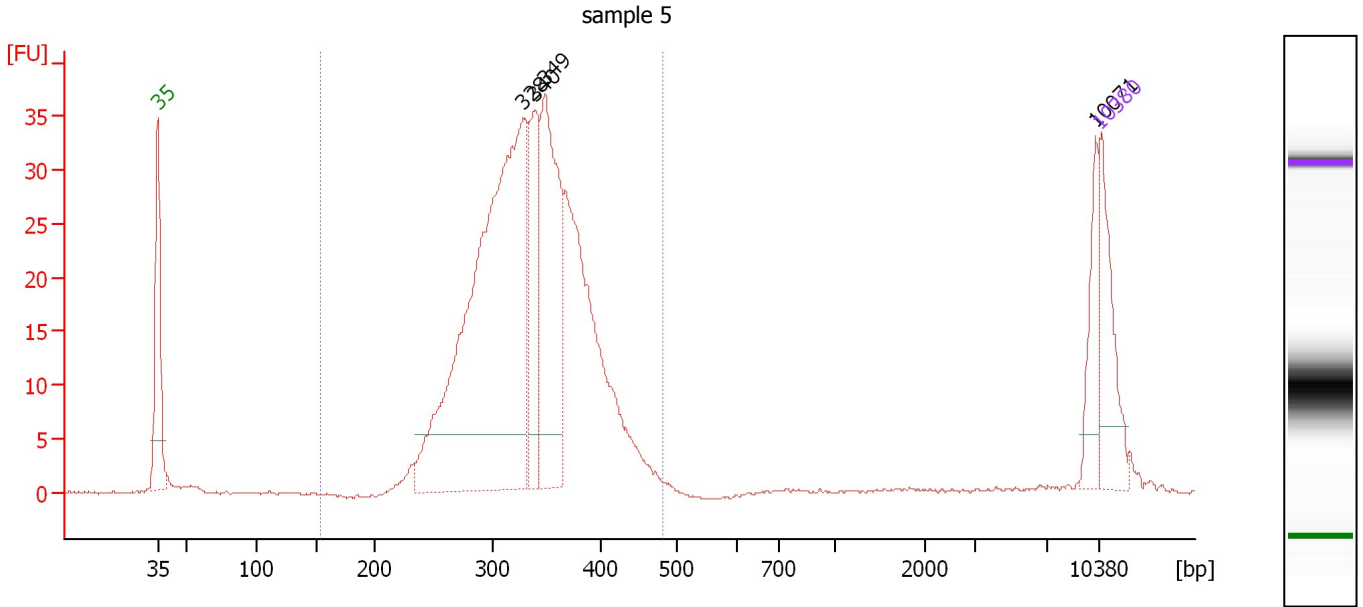
Region table for sample 4 : sample 4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
141	331	438	342.4	3,470.6	95	13.4	739.31	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-11\2015-03-11_002.xad

Created: 3/11/2015 3:35:02 PM
 Modified: 3/11/2015 4:20:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 4 Corr. Area 1: 470.0
 Noise: 0.1

Peak table for sample 5 : sample 5

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	328	762.12	3,517.3		70.14
3	340	127.55	568.7		71.07
4	349	256.14	1,112.6		71.79
5	10,071	49.88	7.5		112.64
6	10,380	75.00	10.9	Upper Marker	113.00

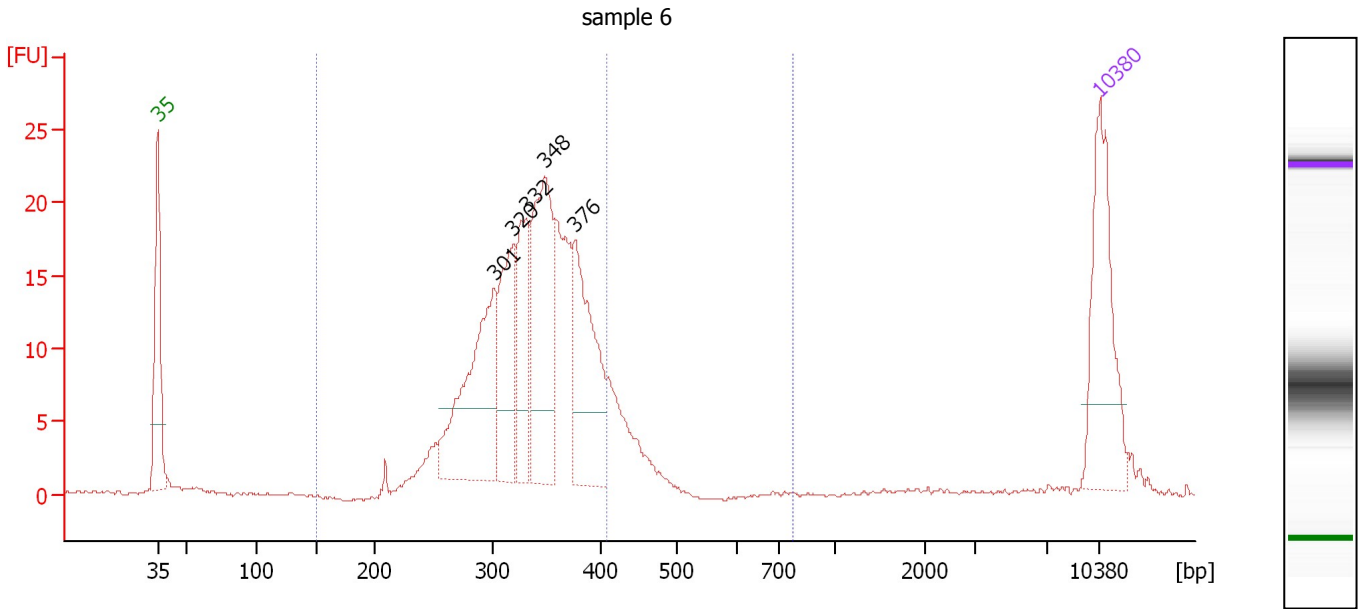
Region table for sample 5 : sample 5

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
154	335	480	470.0	7,438.9	94	13.7	1,606.61	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-11\2015-03-11_002.xad

Created: 3/11/2015 3:35:02 PM
 Modified: 3/11/2015 4:20:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 5 Corr. Area 1: 246.5
 Noise: 0.1 Corr. Area 2: 4.2

Peak table for sample 6 : sample 6

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	144.43	726.2		67.98
3	320	81.70	387.3		69.45
4	332	70.87	323.4		70.44
5	348	132.38	576.9		71.70
6	376	111.25	447.8		74.01
7	10,380	75.00	10.9	Upper Marker	113.00

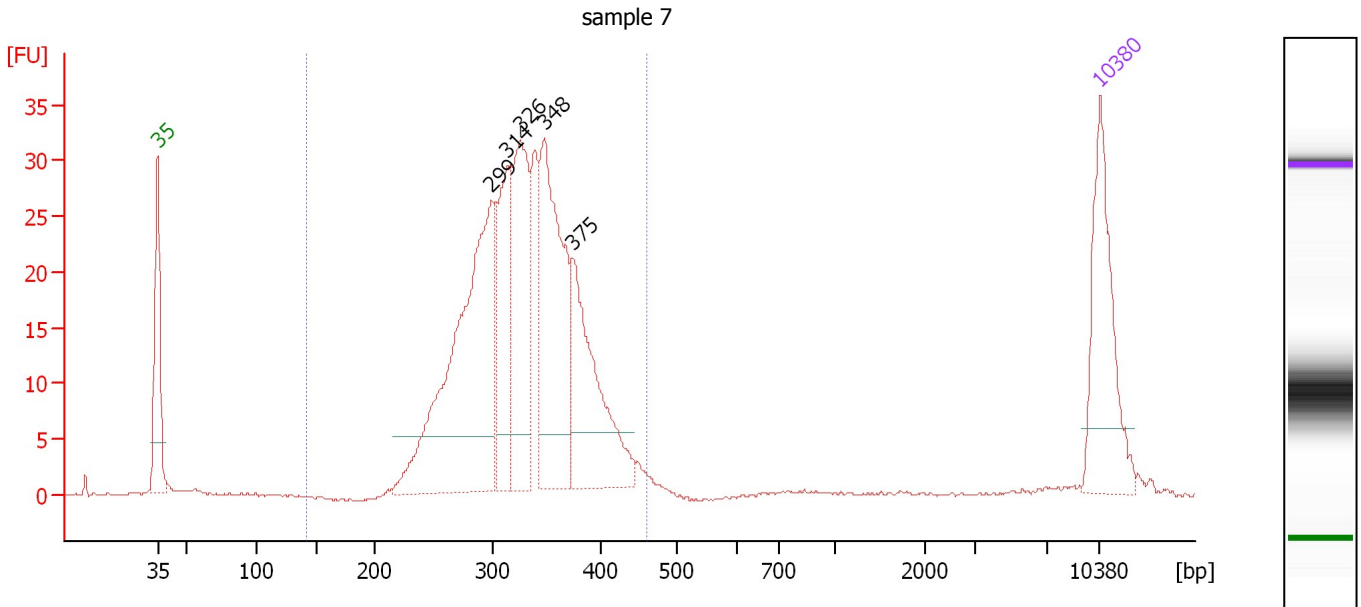
Region table for sample 6 : sample 6

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
150	334	408	246.5	3,273.5	89	12.1	707.89	Blue
770	10,692	36,532	4.2	2.0	2	20.9	8.00	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-11\2015-03-11_002.xad

Created: 3/11/2015 3:35:02 PM
 Modified: 3/11/2015 4:20:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found: 5 Corr. Area 1: 417.7
 Noise: 0.1

Peak table for sample 7 : sample 7

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	295.84	1,498.7		67.79
3	314	90.70	438.2		68.96
4	326	130.88	607.9		69.98
5	348	173.91	757.0		71.74
6	375	124.73	504.5		73.87
7	10,380	75.00	10.9	Upper Marker	113.00

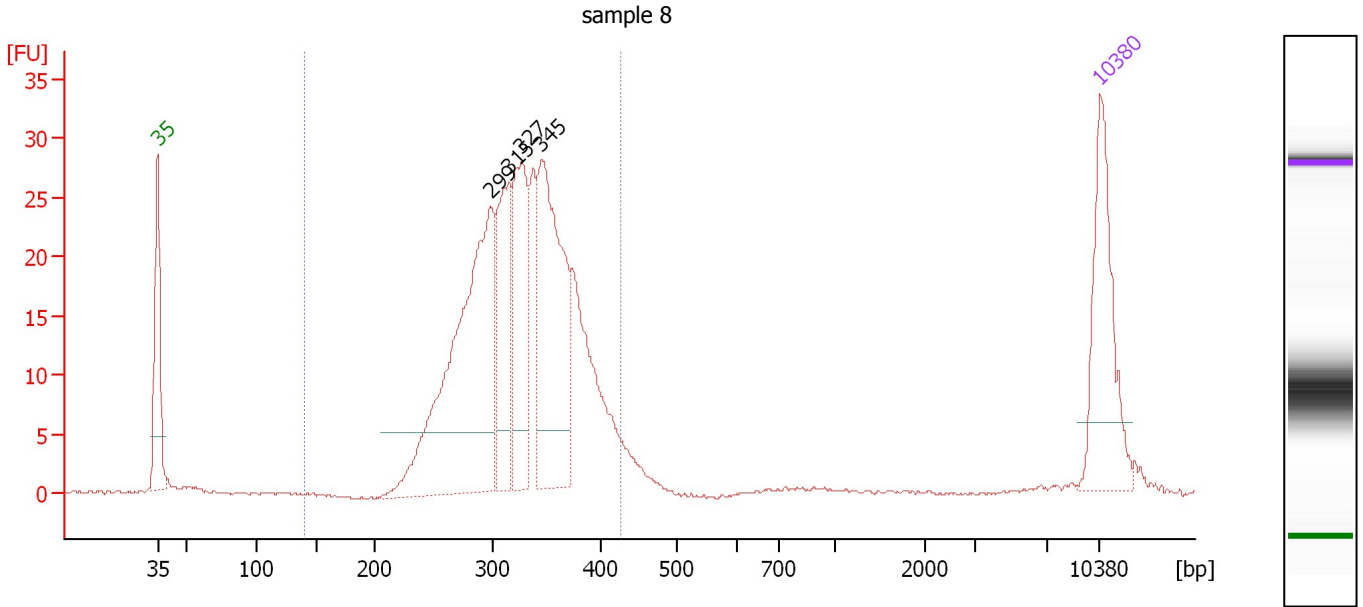
Region table for sample 7 : sample 7

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
142	328	460	417.7	4,407.6	97	13.8	931.57	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-11\2015-03-11_002.xad

Created: 3/11/2015 3:35:02 PM
 Modified: 3/11/2015 4:20:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 4 Corr. Area 1: 366.7
 Noise: 0.2

Peak table for sample 8 : sample 8

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	303.77	1,540.8		67.76
3	315	98.03	471.2		69.10
4	327	111.87	519.1		70.01
5	345	184.89	811.6		71.50
6	10,380	75.00	10.9	Upper Marker	113.00

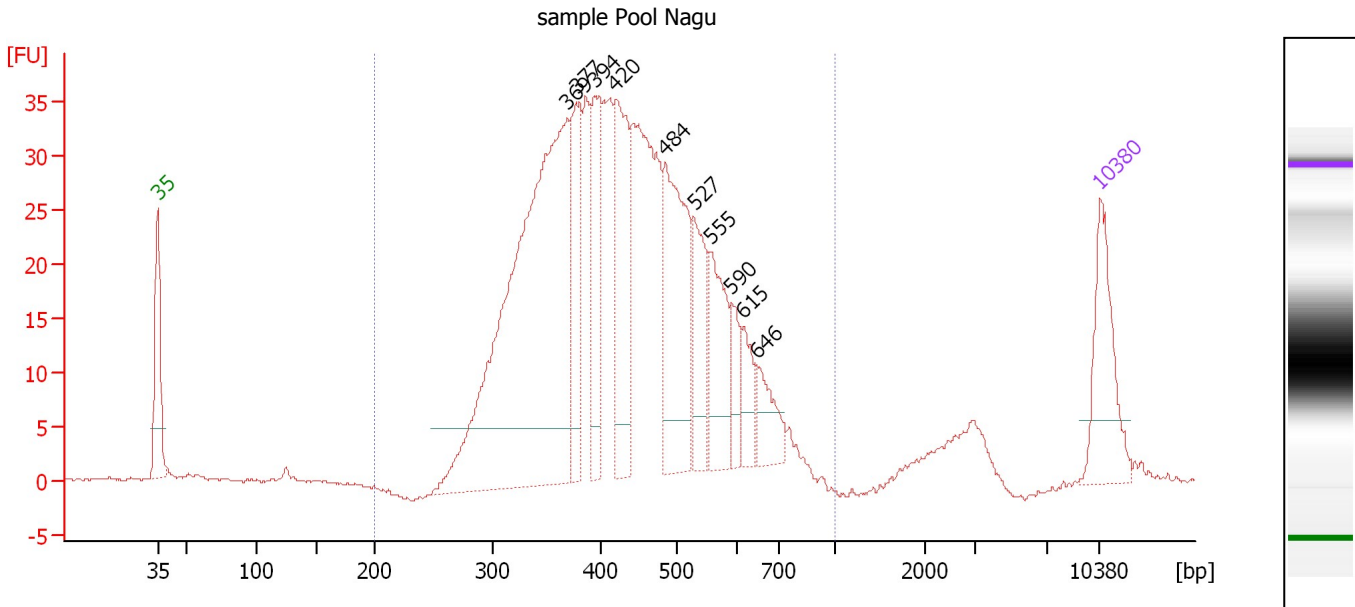
Region table for sample 8 : sample 8

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
141	326	426	366.7	4,231.9	95	13.1	889.77	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-11\2015-03-11_002.xad

Created: 3/11/2015 3:35:02 PM
 Modified: 3/11/2015 4:20:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample Pool Nagu

Number of peaks found: 10 Corr. Area 1: 707.8
 Noise: 0.1

Peak table for sample 9 : sample Pool Nagu

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	369	667.57	2,739.8		73.43
3	377	108.52	435.9		74.08
4	394	99.50	382.7		75.42
5	420	145.95	526.9		77.03
6	484	195.02	610.8		80.69
7	527	77.45	222.5		82.84
8	555	90.68	247.5		84.08
9	590	32.76	84.1		85.63
10	615	36.49	89.9		86.55
11	646	42.29	99.3		87.52
12	10,380	75.00	10.9	Upper Marker	113.00

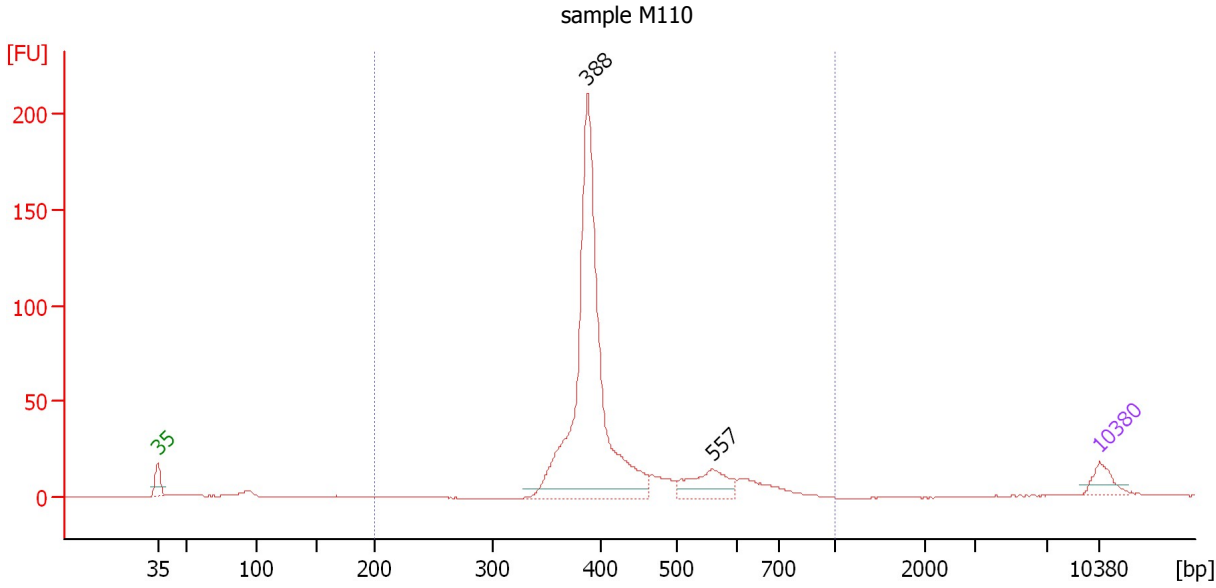
Region table for sample 9 : sample Pool Nagu

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	439	1,000	707.8	7,611.3	96	22.9	2,063.70	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-11\2015-03-11_002.xad

Created: 3/11/2015 3:35:02 PM
 Modified: 3/11/2015 4:20:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample M110

Number of peaks found: 2 Corr. Area 1: 620.5
 Noise: 0.2

Peak table for sample 10 : sample M110

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	388	2,249.96	8,788.3		74.94
3	557	233.91	635.8		84.18
4	10,380	75.00	10.9	Upper Marker	113.00

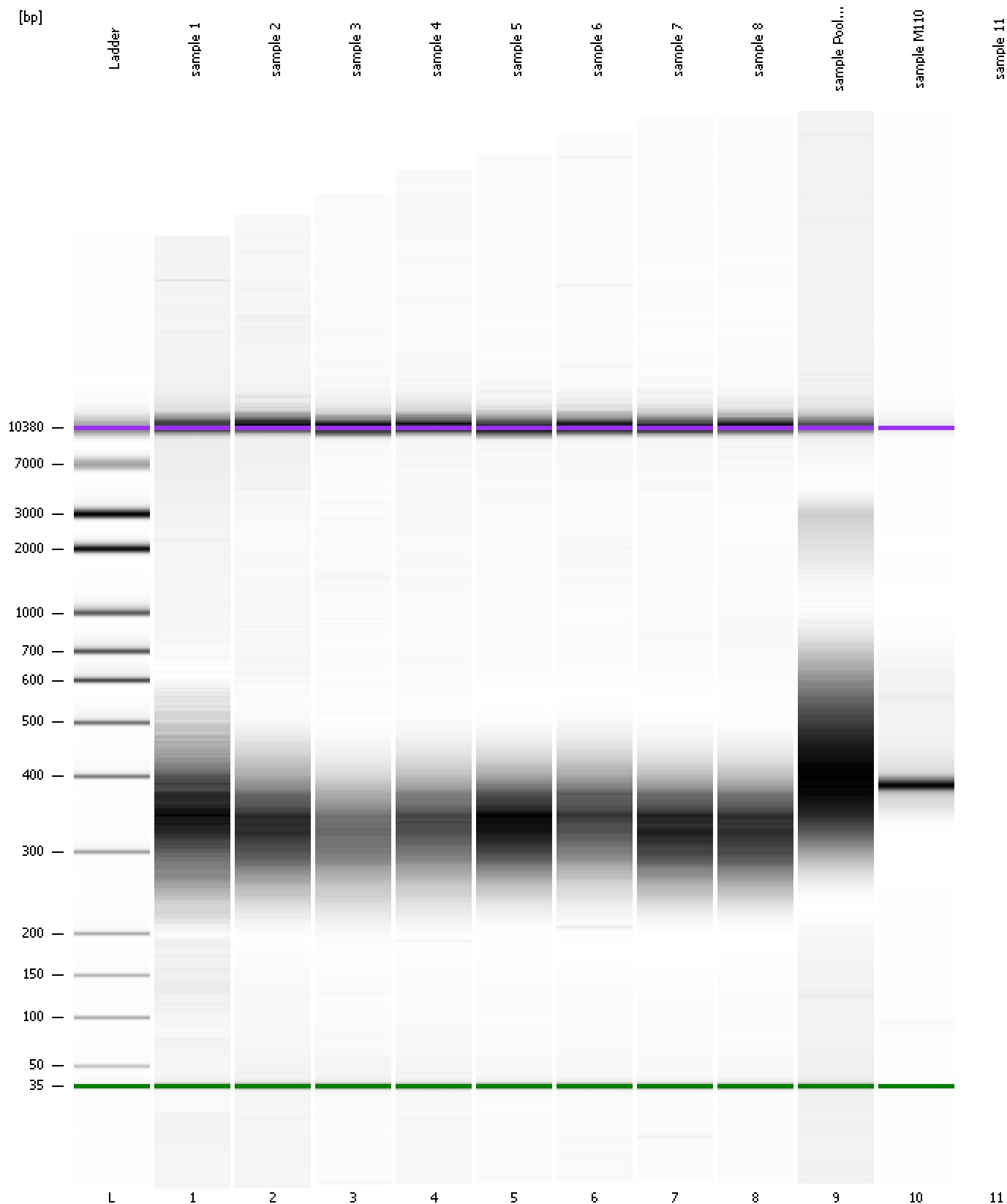
Region table for sample 10 : sample M110

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	426	1,000	620.5	9,664.5	97	19.0	2,626.35	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-11\2015-03-11_002.xad

Created: 3/11/2015 3:35:02 PM
Modified: 3/11/2015 4:20:27 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-11\2015-03-11_002.xad

Created: 3/11/2015 3:35:02 PM
Modified: 3/11/2015 4:20:27 PM

Invalid Samples

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-11\2015-03-11_002.xad

Created: 3/11/2015 3:35:02 PM
 Modified: 3/11/2015 4:20:27 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 11)		Instrument	Run		3/11/2015 6:13:29 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-03-11\2015-03-11_002.xad)		Instrument	Run		3/11/2015 5:35:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/11/2015 5:35:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/11/2015 5:35:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/11/2015 5:35:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/11/2015 5:35:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/11/2015 5:35:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/11/2015 5:35:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1