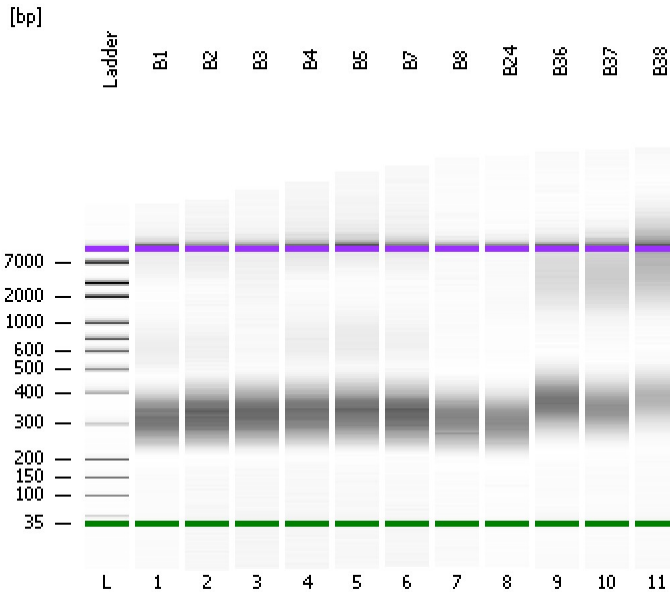


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_003.xad

Created: 4/22/2015 10:32:28 AM
Modified: 4/22/2015 5:15:38 PM

Electrophoresis File Run Summary



Instrument Information:

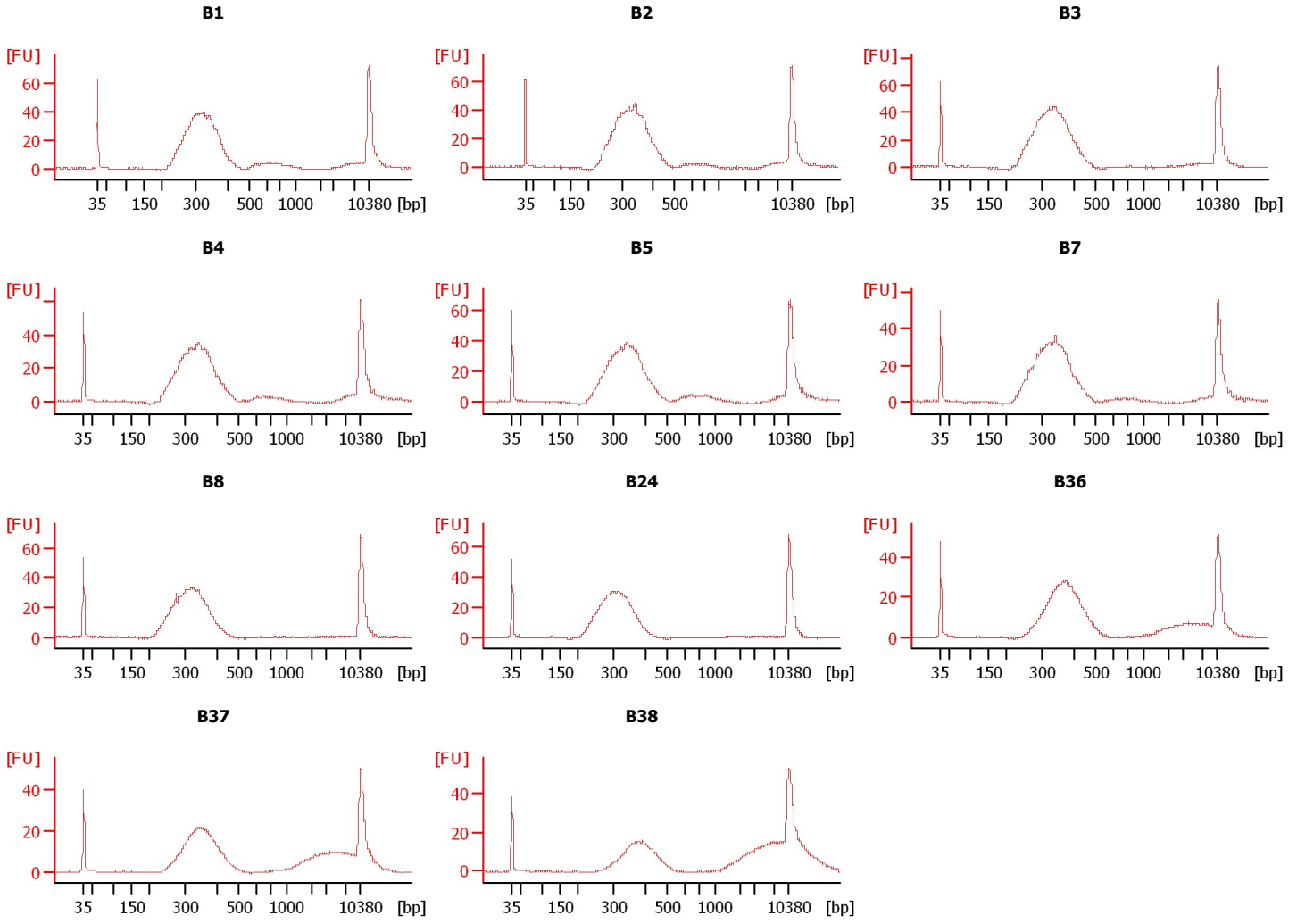
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2015-04-22\2015-04-22_003.xad

Created: 4/22/2015 10:32:28 AM
Modified: 4/22/2015 5:15:38 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
B1		<input type="checkbox"/>	✓			
B2		<input type="checkbox"/>	✓			
B3		<input type="checkbox"/>	✓			
B4		<input type="checkbox"/>	✓			
B5		<input type="checkbox"/>	✓			
B7		<input type="checkbox"/>	✓			
B8		<input type="checkbox"/>	✓			
B24		<input type="checkbox"/>	✓			
B36		<input type="checkbox"/>	✓			
B37		<input type="checkbox"/>	✓			
B38		<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\2015-04-22\2015-04-22_003.xad

Created: 4/22/2015 10:32:28 AM
Modified: 4/22/2015 5:15:38 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

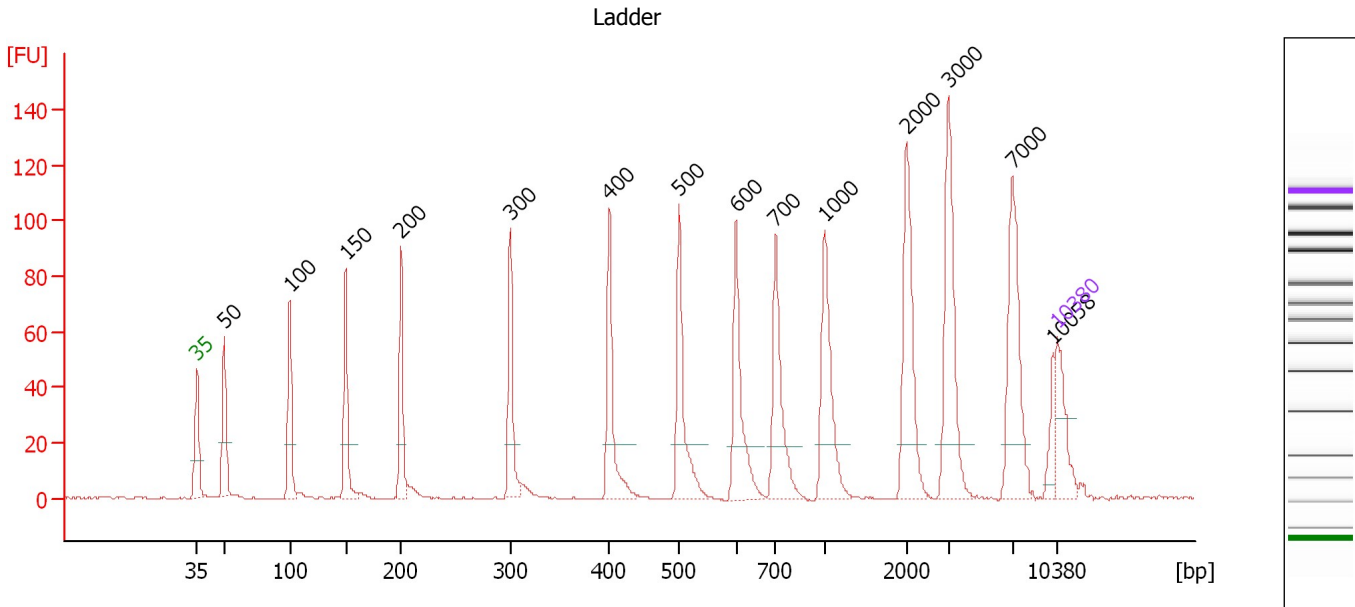
Ladder

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\2015-04-22\2015-04-22_003.xad

Created: 4/22/2015 10:32:28 AM
 Modified: 4/22/2015 5:15:38 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

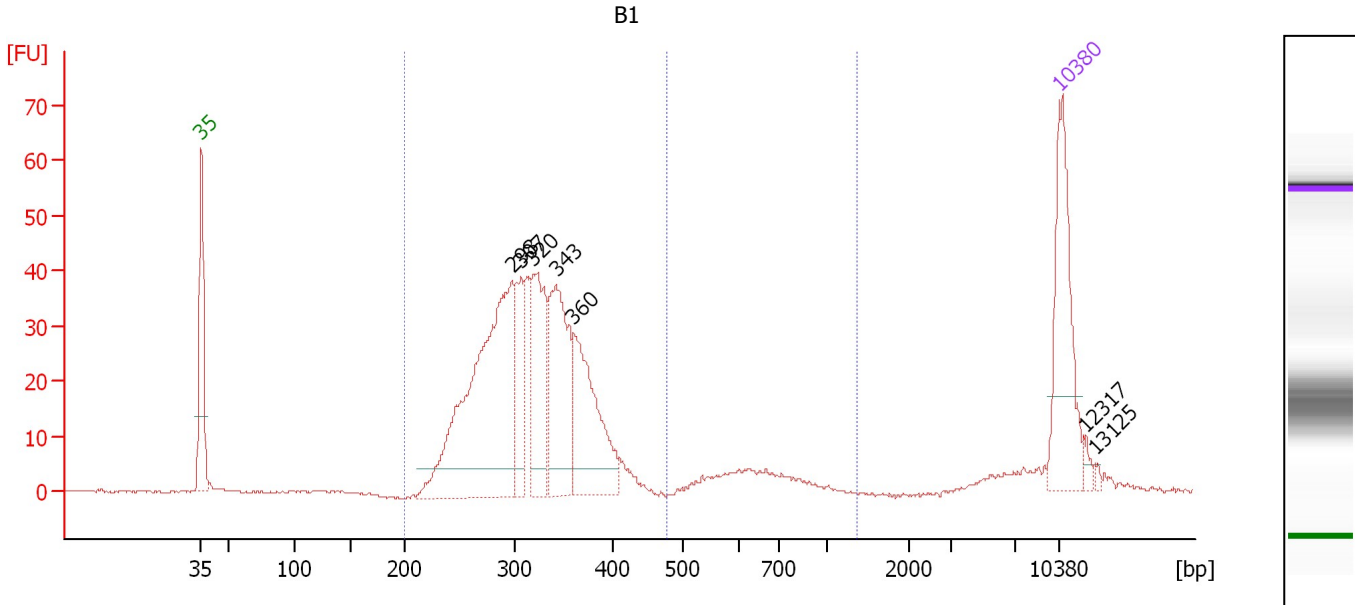
Peak table for Ladder

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	45.21
3	100	150.00	2,272.7	Ladder Peak	50.55
4	150	150.00	1,515.2	Ladder Peak	55.11
5	200	150.00	1,136.4	Ladder Peak	59.58
6	300	150.00	757.6	Ladder Peak	68.52
7	400	150.00	568.2	Ladder Peak	76.55
8	500	150.00	454.5	Ladder Peak	82.23
9	600	150.00	378.8	Ladder Peak	86.87
10	700	150.00	324.7	Ladder Peak	90.09
11	1,000	150.00	227.3	Ladder Peak	94.12
12	2,000	150.00	113.6	Ladder Peak	100.72
13	3,000	150.00	75.8	Ladder Peak	104.15
14	7,000	150.00	32.5	Ladder Peak	109.35
15	10,058	0.00	0.0		112.65
16	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_003.xad

Created: 4/22/2015 10:32:28 AM
 Modified: 4/22/2015 5:15:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : B1

Number of peaks found: 7 Corr. Area 1: 586.1
 Noise: 0.2 Corr. Area 2: 34.0

Peak table for sample 1 : B1

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	294.45	1,497.3		68.34
3	307	54.28	267.9		69.08
4	320	94.90	449.4		70.12
5	343	118.78	525.1		71.95
6	360	112.09	471.7		73.34
7	10,380	75.00	10.9	Upper Marker	113.00
8	12,317	0.00	0.0		115.09
9	13,125	0.00	0.0		115.96

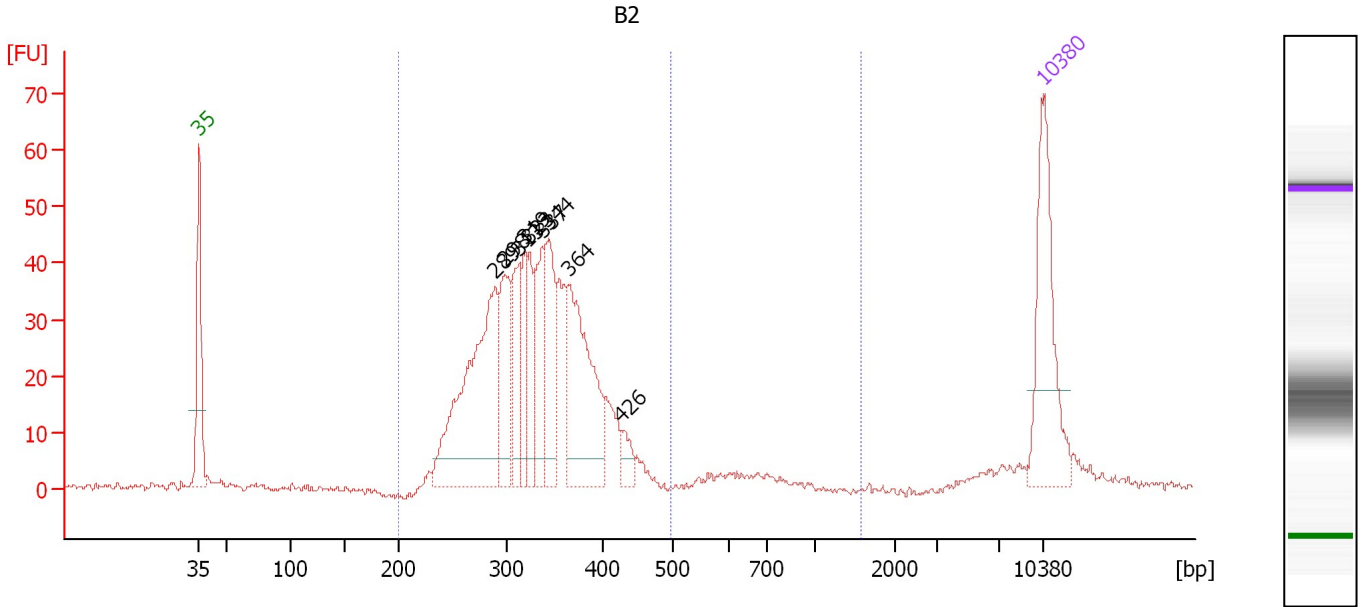
Region table for sample 1 : B1

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	318	480	586.1	3,467.2	90	13.6	710.43	Blue
480	661	1,369	34.0	81.3	5	17.3	34.43	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_003.xad

Created: 4/22/2015 10:32:28 AM
 Modified: 4/22/2015 5:15:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : B2

Number of peaks found: 9 Corr. Area 1: 656.4
 Noise: 0.7 Corr. Area 2: 14.3

Peak table for sample 2 : B2

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	289	200.85	1,052.0		67.56
3	298	66.32	337.6		68.31
4	313	48.93	237.0		69.55
5	319	41.01	194.5		70.08
6	323	40.11	187.9		70.39
7	337	54.31	244.5		71.45
8	344	66.33	292.4		72.03
9	364	127.15	529.9		73.62
10	426	13.33	47.4		78.04
11	10,380	75.00	10.9	Upper Marker	113.00

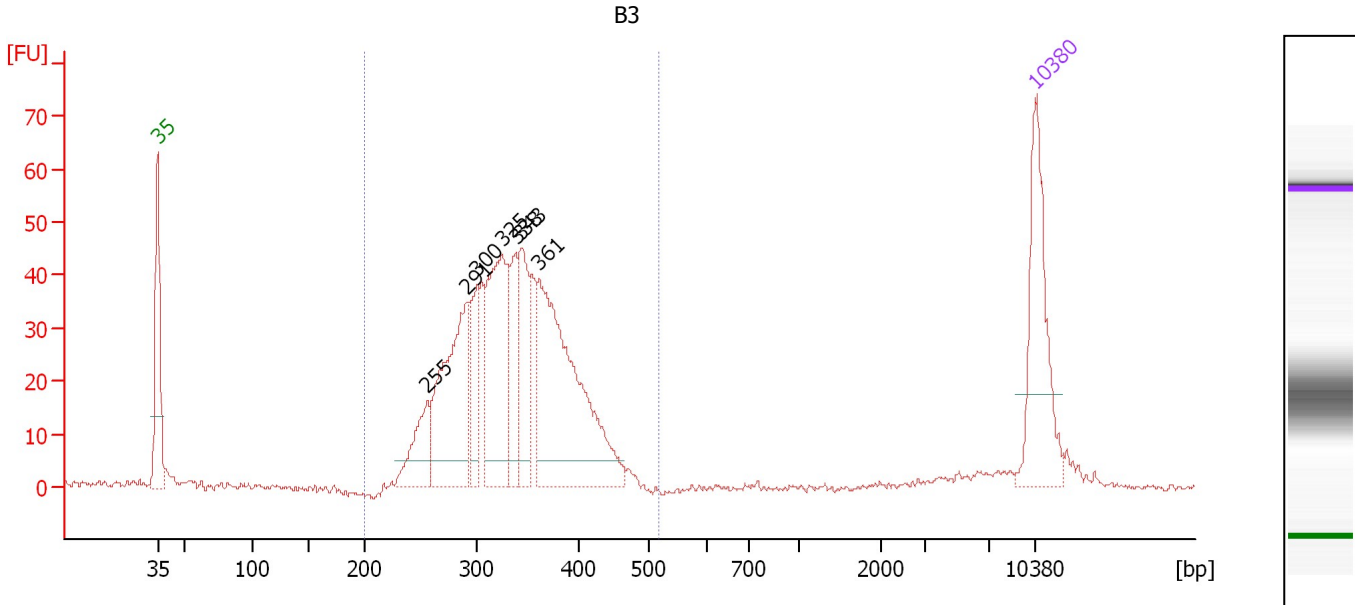
Region table for sample 2 : B2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	330	498	656.4	3,600.0	94	14.6	761.65	Blue
498	650	1,568	14.3	33.3	2	12.7	14.08	Green

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_003.xad

Created: 4/22/2015 10:32:28 AM
 Modified: 4/22/2015 5:15:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : B3

Number of peaks found: 7 Corr. Area 1: 683.9
 Noise: 0.6

Peak table for sample 3 : B3

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	49.44	293.4		64.52
3	291	148.27	772.7		67.69
4	300	44.36	224.2		68.50
5	325	136.26	636.0		70.49
6	338	47.95	214.9		71.58
7	343	66.11	291.9		71.99
8	361	224.81	944.5		73.39
9	10,380	75.00	10.9	Upper Marker	113.00

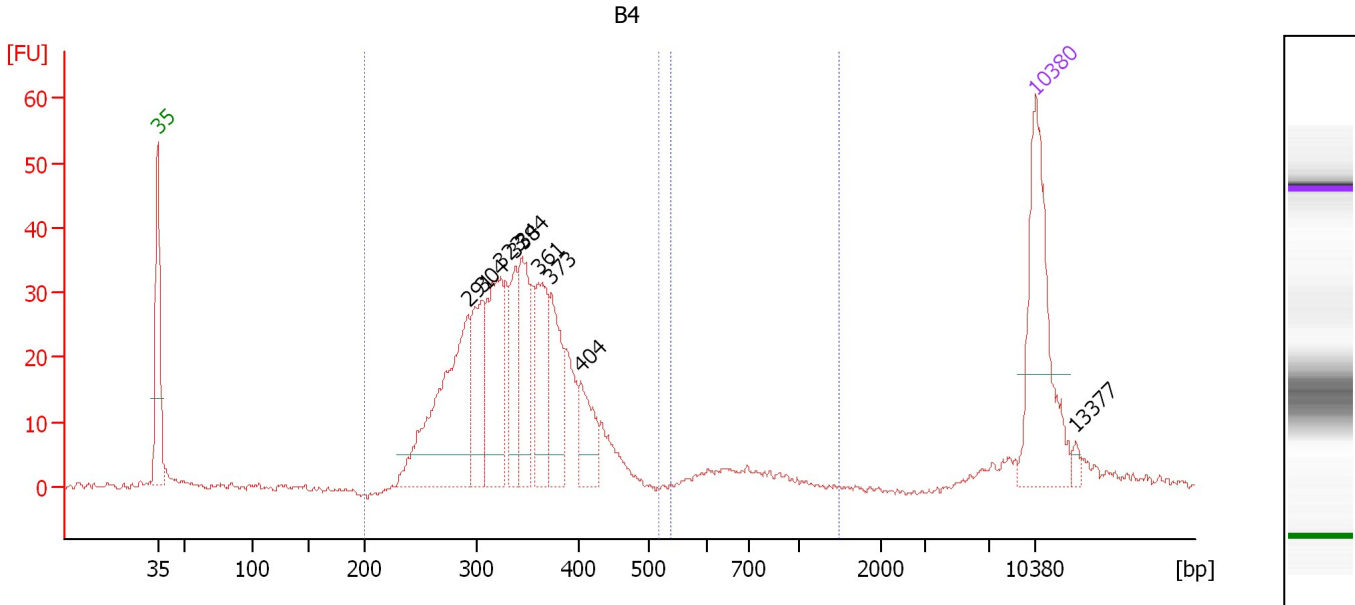
Region table for sample 3 : B3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	334	515	683.9	3,623.4	94	14.8	776.85	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_003.xad

Created: 4/22/2015 10:32:28 AM
 Modified: 4/22/2015 5:15:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : B4

Number of peaks found: 9 Corr. Area 1: 518.9
 Noise: 0.3 Corr. Area 2: 19.7

Peak table for sample 4 : B4

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	291	145.60	757.0		67.75
3	304	56.24	280.1		68.86
4	323	81.66	383.5		70.34
5	338	40.52	181.9		71.54
6	344	53.95	237.3		72.09
7	361	52.06	218.7		73.38
8	373	46.02	186.8		74.40
9	404	31.77	119.3		76.75
10	10,380	75.00	10.9	Upper Marker	113.00
11	13,377	0.00	0.0		116.23

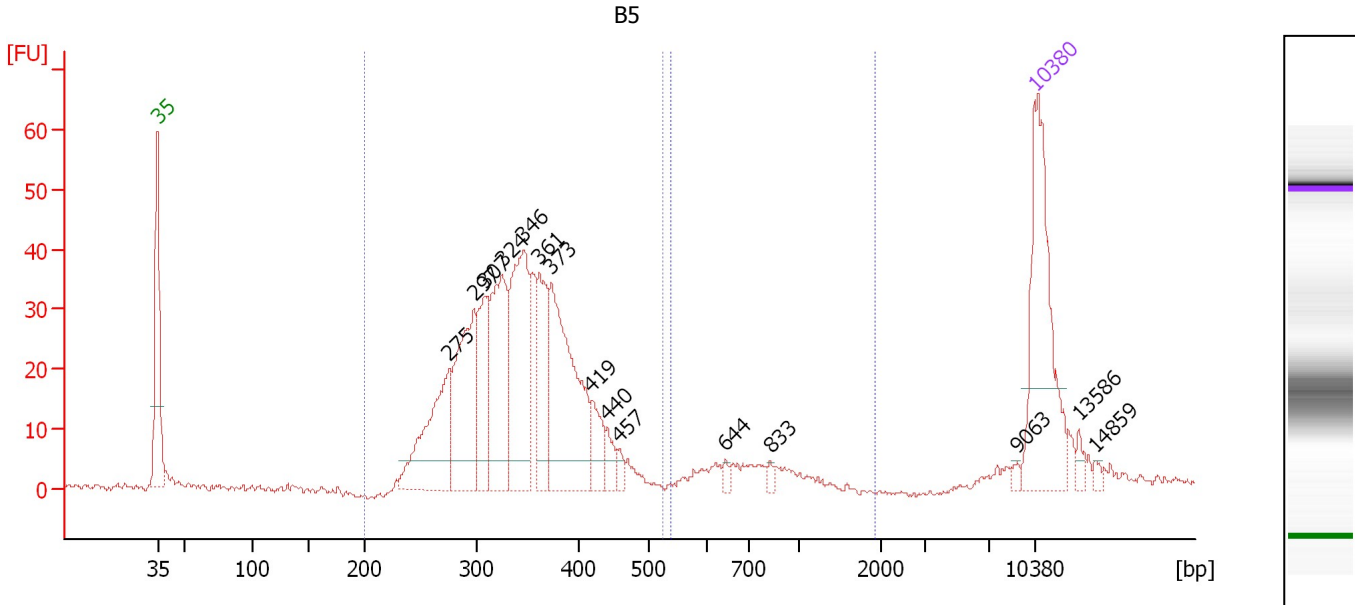
Region table for sample 4 : B4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	337	517	518.9	2,789.4	91	14.7	603.38	Blue
537	719	1,490	19.7	41.9	3	18.4	19.27	Dark Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_003.xad

Created: 4/22/2015 10:32:28 AM
 Modified: 4/22/2015 5:15:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : B5

Number of peaks found: 15 Corr. Area 1: 577.1
 Noise: 0.6 Corr. Area 2: 38.8

Peak table for sample 5 : B5

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	275	77.36	426.7		66.25
3	297	89.95	459.0		68.24
4	307	46.96	232.1		69.05
5	324	82.05	383.3		70.47
6	346	96.66	423.8		72.17
7	361	45.76	191.8		73.45
8	373	112.62	457.1		74.40
9	419	19.64	71.1		77.62
10	440	10.16	35.0		78.81
11	457	4.91	16.3		79.80
12	644	3.10	7.3		88.28
13	833	2.83	5.1		91.88
14	9,063	2.48	0.4		111.58
15	10,380	75.00	10.9	Upper Marker	113.00
16	13,586	0.00	0.0		116.46
17	14,859	0.00	0.0		117.83

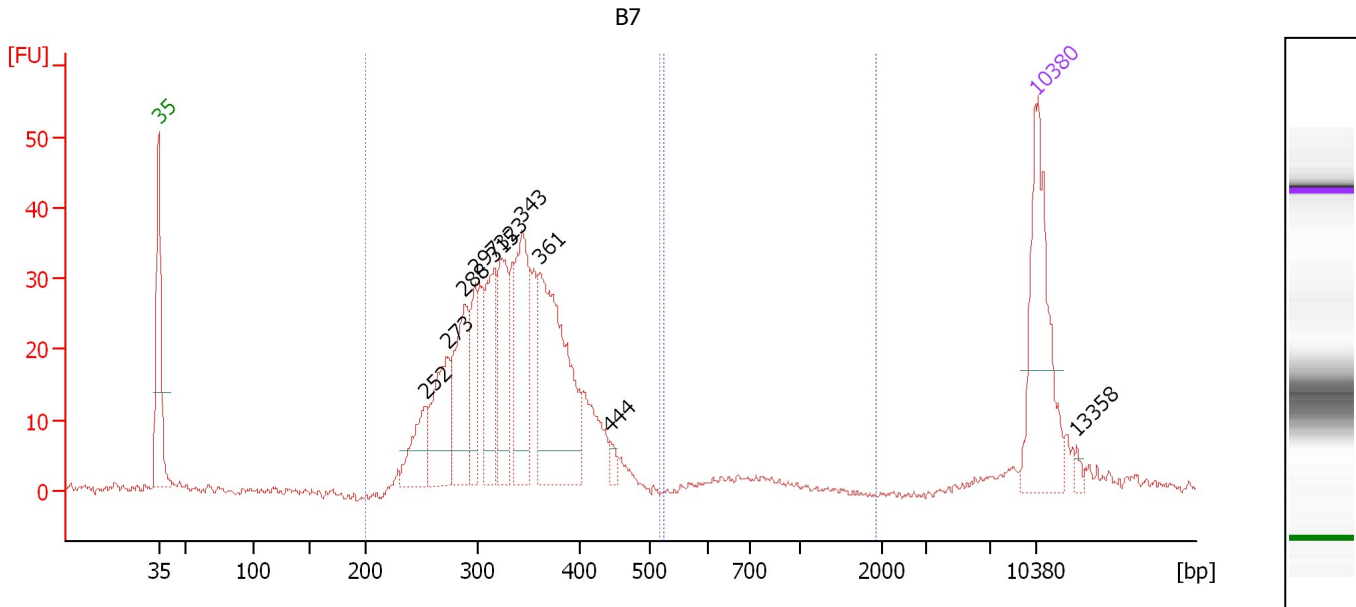
Region table for sample 5 : B5

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	340	521	577.1	2,852.2	87	15.1	621.86	Blue
536	772	1,922	38.8	72.6	6	24.8	34.87	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_003.xad

Created: 4/22/2015 10:32:28 AM
 Modified: 4/22/2015 5:15:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : B7

Number of peaks found: 10 Corr. Area 1: 512.3
 Noise: 0.5 Corr. Area 2: 9.5

Peak table for sample 6 : B7

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	252	35.71	214.6		64.24
3	273	62.35	345.9		66.11
4	288	70.68	372.4		67.40
5	297	36.33	185.2		68.27
6	315	54.96	264.0		69.75
7	323	60.88	286.0		70.33
8	343	85.88	379.5		71.96
9	361	144.32	606.1		73.40
10	444	5.32	18.2		79.05
11	10,380	75.00	10.9	Upper Marker	113.00
12	13,358	0.00	0.0		116.21

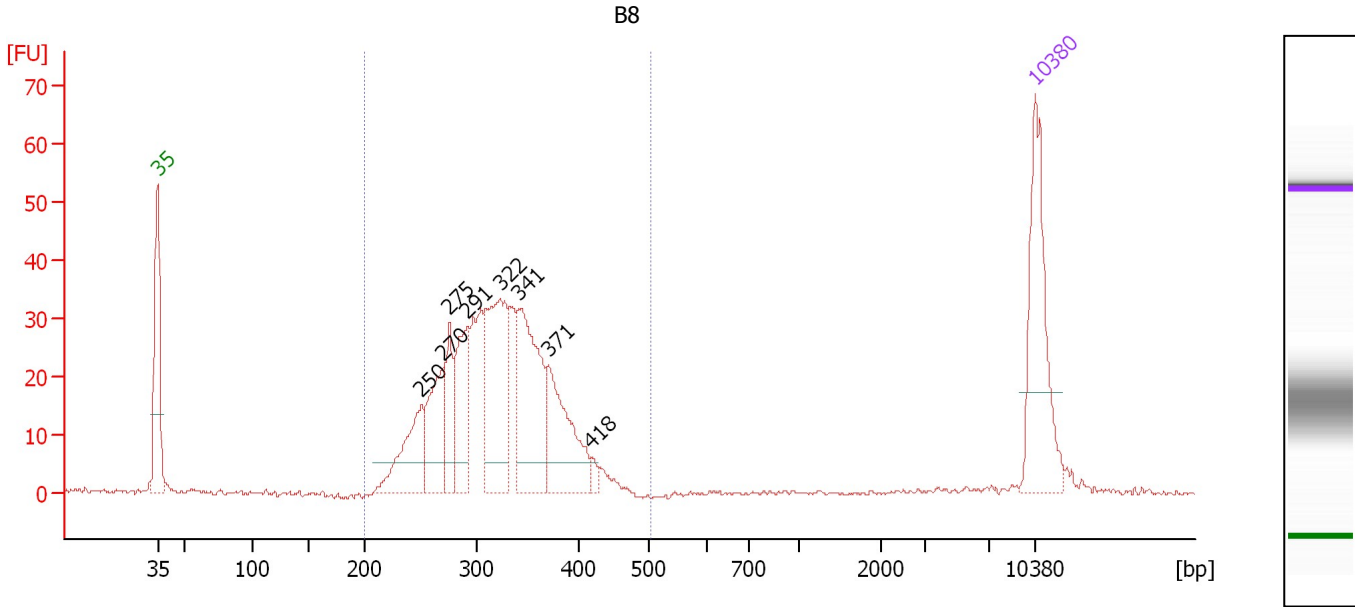
Region table for sample 6 : B7

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	334	515	512.3	3,310.9	94	14.9	708.57	Blue
524	725	1,923	9.5	23.6	2	16.0	11.04	Dark Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_003.xad

Created: 4/22/2015 10:32:28 AM
 Modified: 4/22/2015 5:15:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : B8

Number of peaks found: 8 Corr. Area 1: 499.3
 Noise: 0.4

Peak table for sample 7 : B8

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	250	63.95	387.5		64.05
3	270	63.90	358.9		65.81
4	275	38.73	213.7		66.25
5	291	66.26	344.9		67.72
6	322	119.28	560.8		70.31
7	341	114.94	511.4		71.77
8	371	79.99	326.7		74.21
9	418	5.19	18.8		77.58
10	10,380	75.00	10.9	Upper Marker	113.00

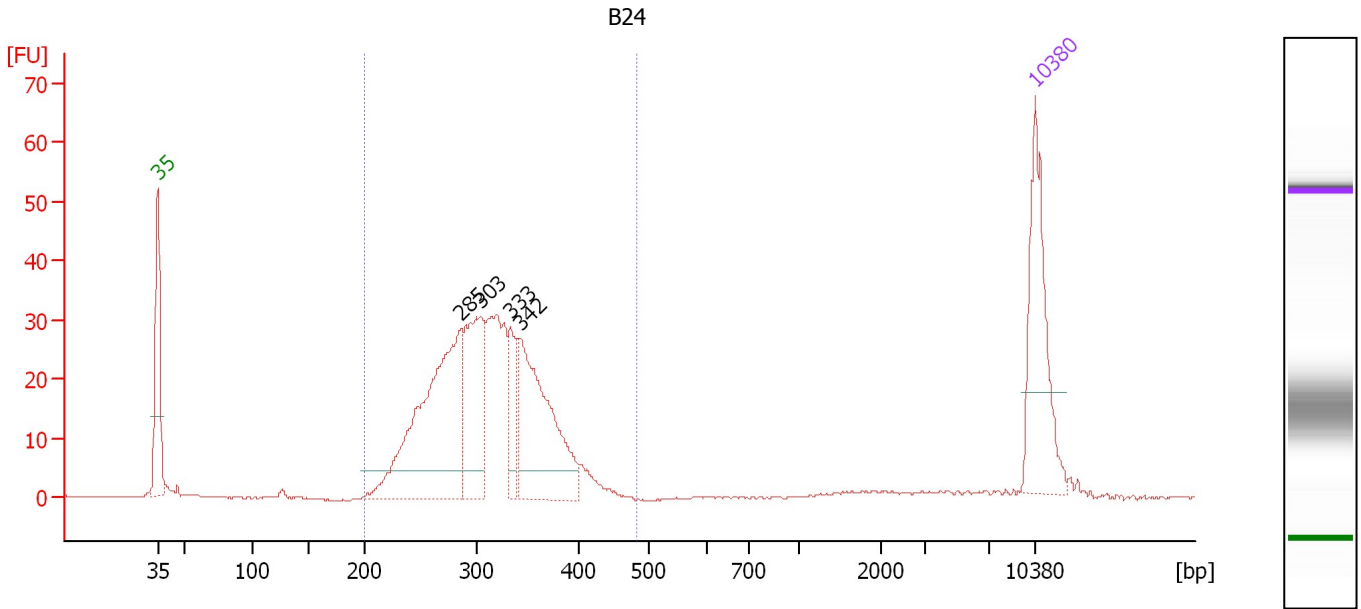
Region table for sample 7 : B8

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	319	501	499.3	3,227.8	98	14.8	660.66	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_003.xad

Created: 4/22/2015 10:32:28 AM
 Modified: 4/22/2015 5:15:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : B24

Number of peaks found: 4 Corr. Area 1: 461.8
 Noise: 0.2

Peak table for sample 8 : B24

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	285	227.92	1,210.6		67.20
3	303	108.08	540.2		68.77
4	333	36.76	167.2		71.18
5	342	146.00	646.2		71.91
6	10,380	75.00	10.9	Upper Marker	113.00

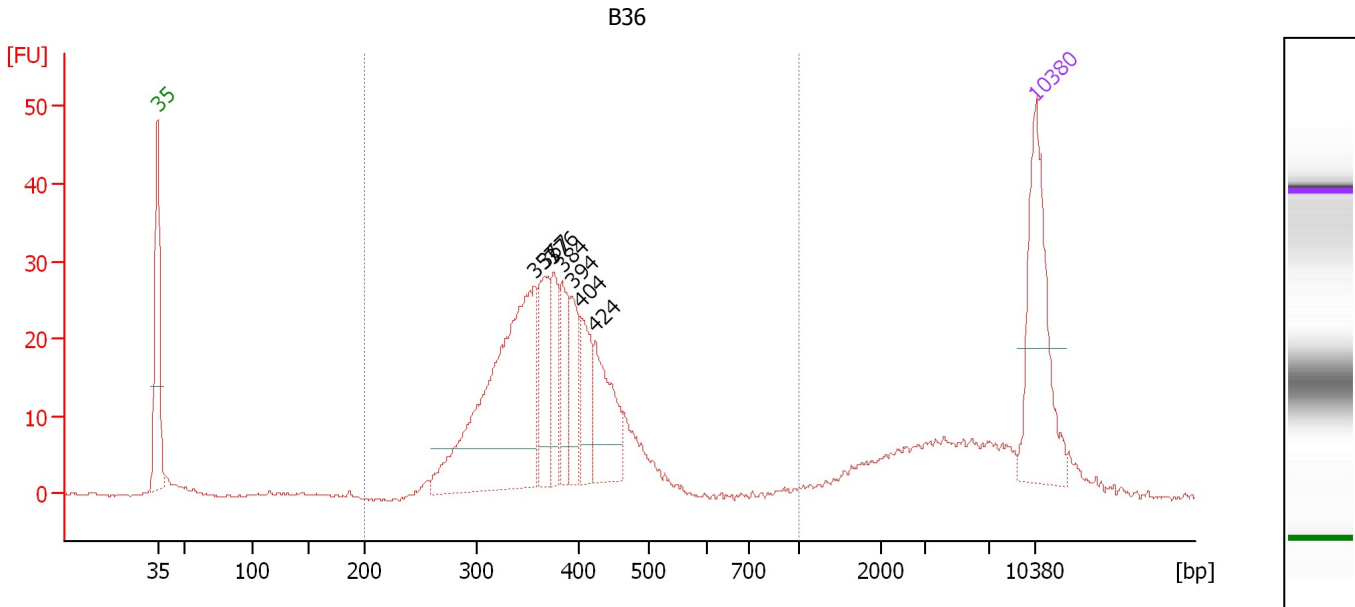
Region table for sample 8 : B24

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	311	483	461.8	3,181.9	96	14.6	635.08	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_003.xad

Created: 4/22/2015 10:32:28 AM
 Modified: 4/22/2015 5:15:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : B36

Number of peaks found: 7 Corr. Area 1: 390.0
 Noise: 0.2

Peak table for sample 9 : B36

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	357	229.04	972.1		73.09
3	367	49.62	204.6		73.93
4	376	35.87	144.7		74.58
5	384	35.59	140.4		75.27
6	394	34.09	131.1		76.07
7	404	36.33	136.3		76.76
8	424	54.91	196.3		77.90
9	10,380	75.00	10.9	Upper Marker	113.00

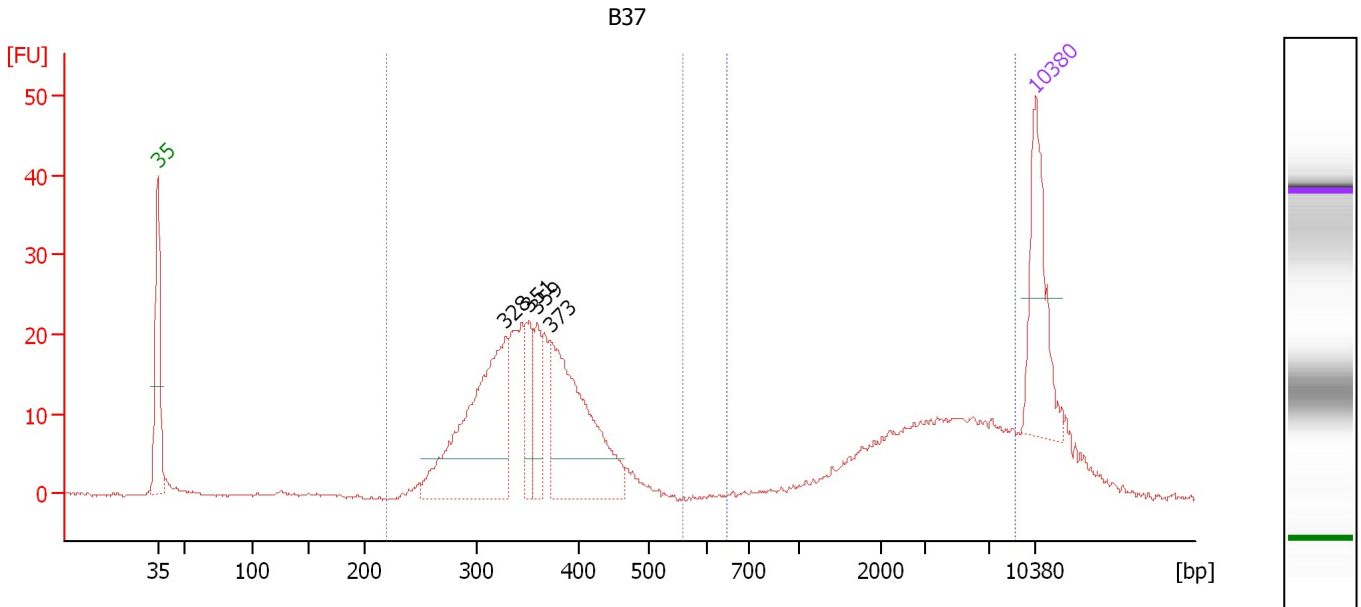
Region table for sample 9 : B36

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	376	1,000	390.0	2,366.6	81	16.5	569.52	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_003.xad

Created: 4/22/2015 10:32:28 AM
 Modified: 4/22/2015 5:15:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : B37

Number of peaks found: 4 Corr. Area 1: 286.5
 Noise: 0.2 Corr. Area 2: 110.8

Peak table for sample 10 : B37

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	229.65	1,061.9		70.74
3	351	41.21	178.0		72.59
4	359	39.36	166.2		73.24
5	373	190.70	775.5		74.34
6	10,380	75.00	10.9	Upper Marker	113.00

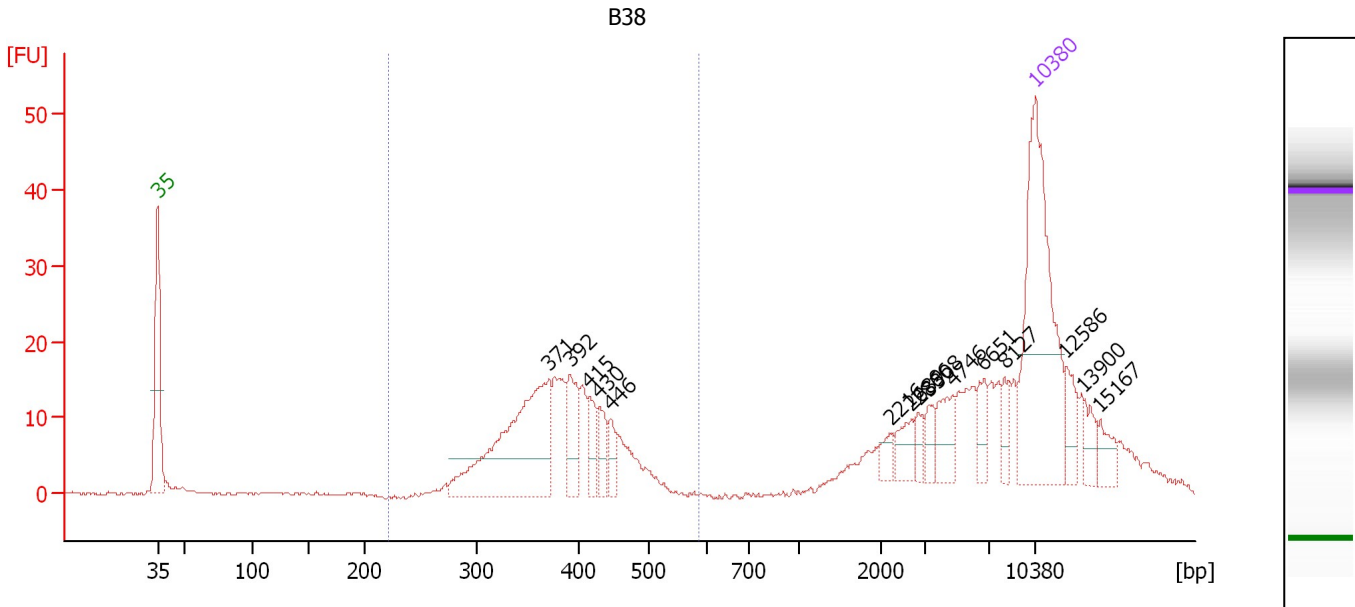
Region table for sample 10 : B37

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
219	353	556	286.5	2,656.8	68	13.8	604.40	Blue
648	4,111	8,885	110.8	84.8	26	54.0	165.29	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_003.xad

Created: 4/22/2015 10:32:28 AM
 Modified: 4/22/2015 5:15:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : B38

Number of peaks found: 15 Corr. Area 1: 187.4
 Noise: 0.2

Peak table for sample 11 : B38

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	371	97.49	398.7		74.18
3	392	20.95	81.0		75.90
4	415	10.96	40.0		77.42
5	430	10.97	38.7		78.23
6	446	7.99	27.2		79.14
7	2,216	4.68	3.2		101.46
8	2,689	8.45	4.8		103.08
9	2,866	4.26	2.3		103.69
10	3,308	6.15	2.8		104.55
11	4,746	12.04	3.8		106.42
12	6,651	8.68	2.0		108.90
13	8,127	6.22	1.2		110.57
14	10,380	75.00	10.9	Upper Marker	113.00
15	12,586	0.00	0.0		115.38
16	13,900	0.00	0.0		116.80
17	15,167	0.00	0.0		118.16

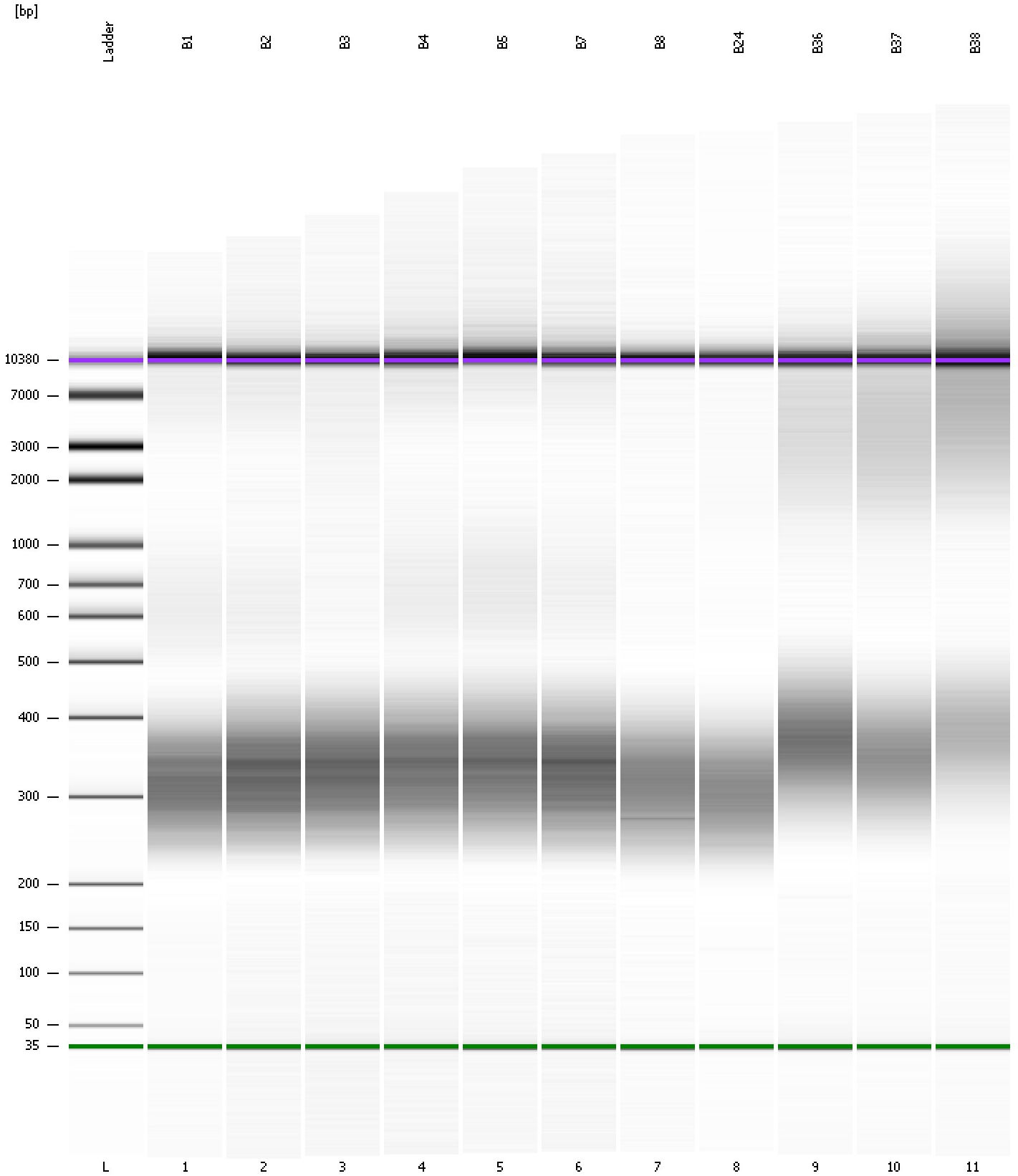
Region table for sample 11 : B38

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
220	384	585	187.4	809.3	50	13.2	201.01	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_003.xad

Created: 4/22/2015 10:32:28 AM
Modified: 4/22/2015 5:15:38 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_003.xad

Created: 4/22/2015 10:32:28 AM
 Modified: 4/22/2015 5:15:38 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		4/22/2015 11:13:47 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-04-22\2015-04-22_003.xad)		Instrument	Run		4/22/2015 10:32:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/22/2015 10:32:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/22/2015 10:32:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/22/2015 10:32:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/22/2015 10:32:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/22/2015 10:32:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/22/2015 10:32:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1