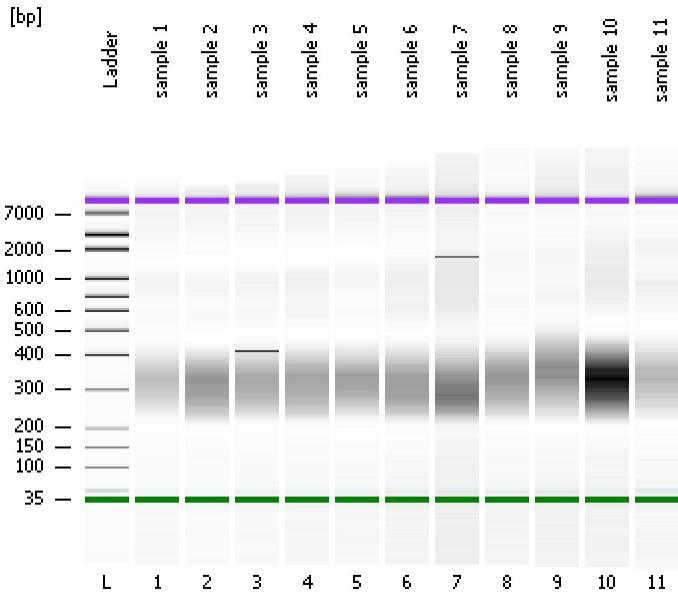


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad

Created: 3/15/2016 2:18:33 PM
Modified: 3/15/2016 3:03:55 PM

Electrophoresis File Run Summary



Instrument Information:

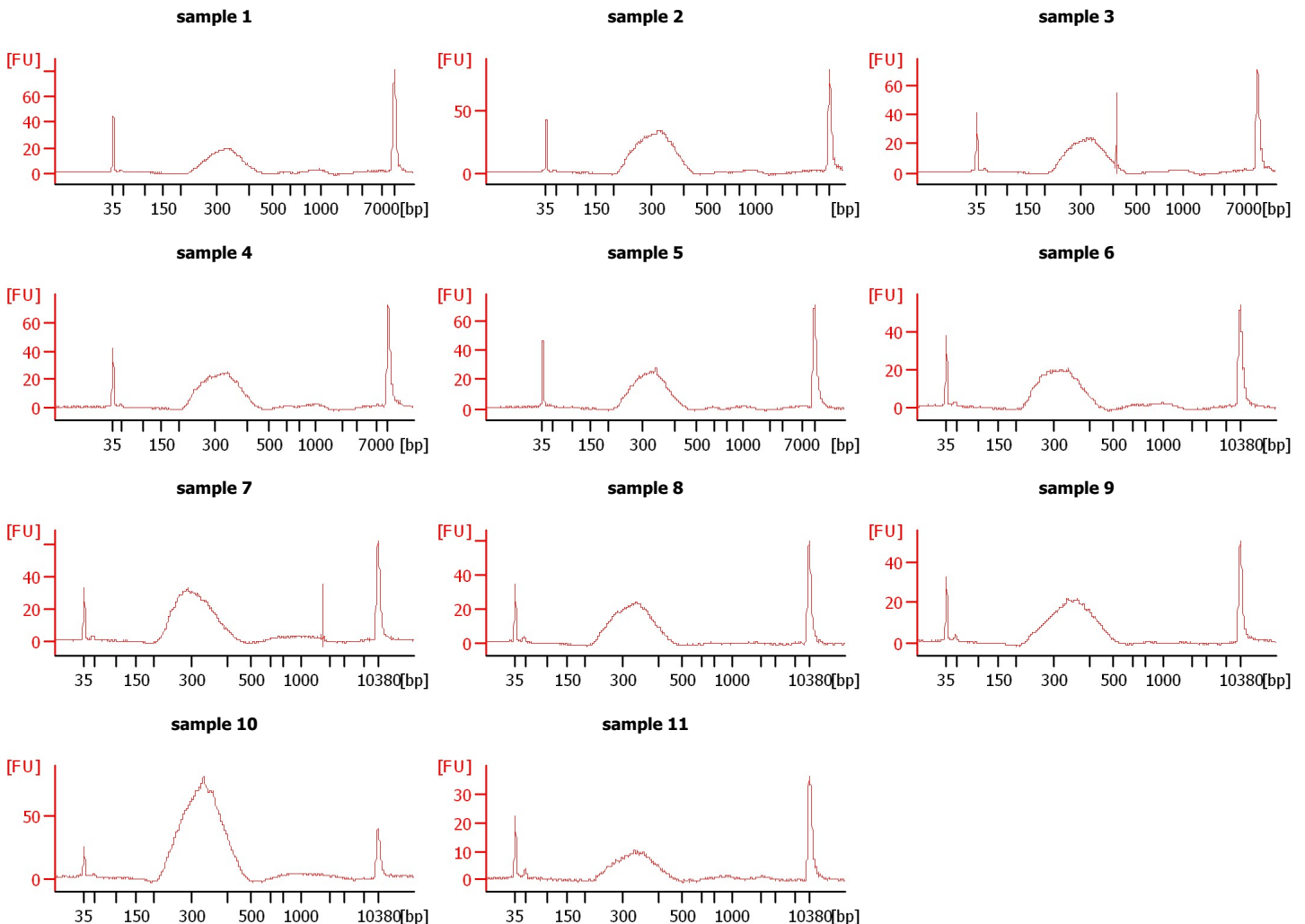
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:\... bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad

Created: 3/15/2016 2:18:33 PM
 Modified: 3/15/2016 3:03:55 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:\... bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad

Created: 3/15/2016 2:18:33 PM
Modified: 3/15/2016 3:03:55 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

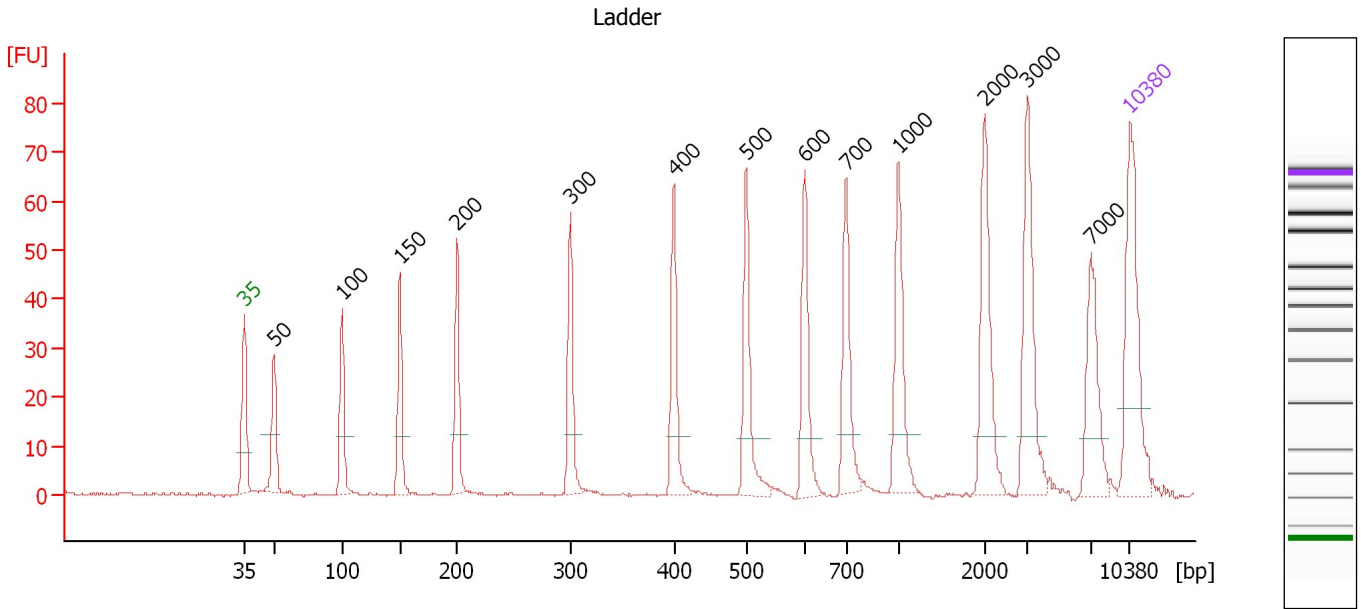
Ladder

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:\... bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad

Created: 3/15/2016 2:18:33 PM
 Modified: 3/15/2016 3:03:55 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

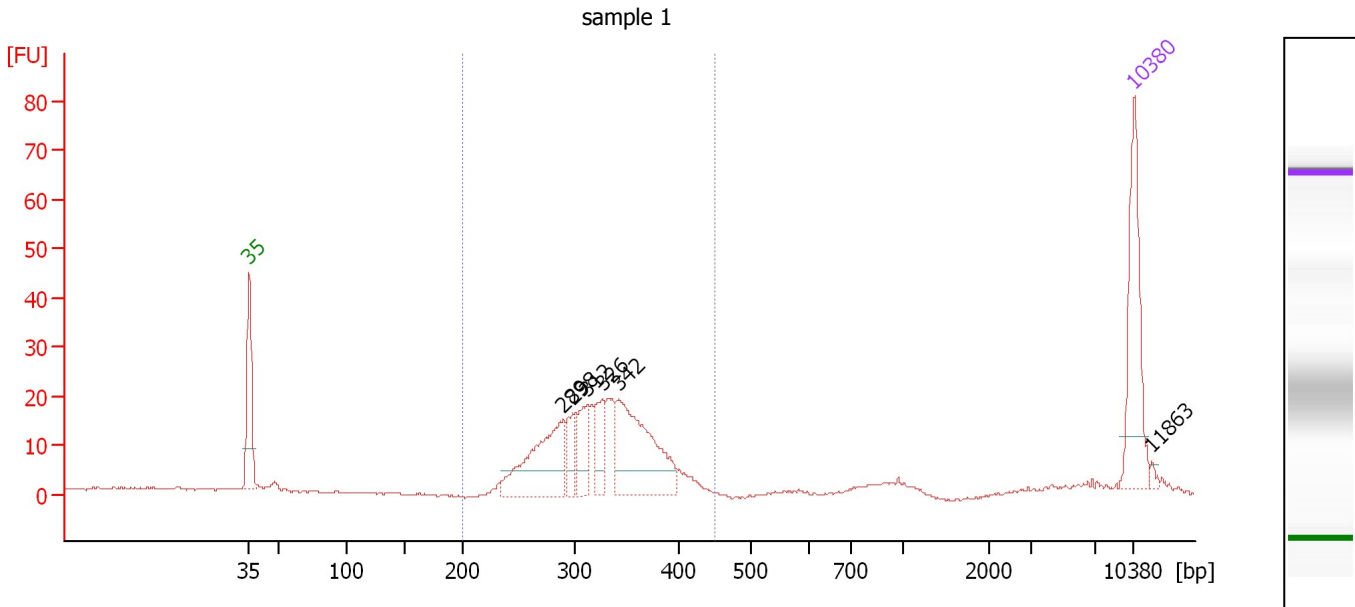
Peak table for Ladder

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	45.36
3	100	150.00	2,272.7	Ladder Peak	50.75
4	150	150.00	1,515.2	Ladder Peak	55.31
5	200	150.00	1,136.4	Ladder Peak	59.82
6	300	150.00	757.6	Ladder Peak	68.79
7	400	150.00	568.2	Ladder Peak	76.97
8	500	150.00	454.5	Ladder Peak	82.70
9	600	150.00	378.8	Ladder Peak	87.29
10	700	150.00	324.7	Ladder Peak	90.58
11	1,000	150.00	227.3	Ladder Peak	94.71
12	2,000	150.00	113.6	Ladder Peak	101.54
13	3,000	150.00	75.8	Ladder Peak	104.91
14	7,000	150.00	32.5	Ladder Peak	109.92
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad

Created: 3/15/2016 2:18:33 PM
 Modified: 3/15/2016 3:03:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 6 Corr. Area 1: 245.4
 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	289	122.02	639.6		67.81
3	298	31.11	158.4		68.57
4	312	39.83	193.6		69.75
5	326	35.93	166.9		70.93
6	342	142.37	631.4		72.20
7	10,380	75.00	10.9	Upper Marker	113.00
8	11,863	0.00	0.0		114.35

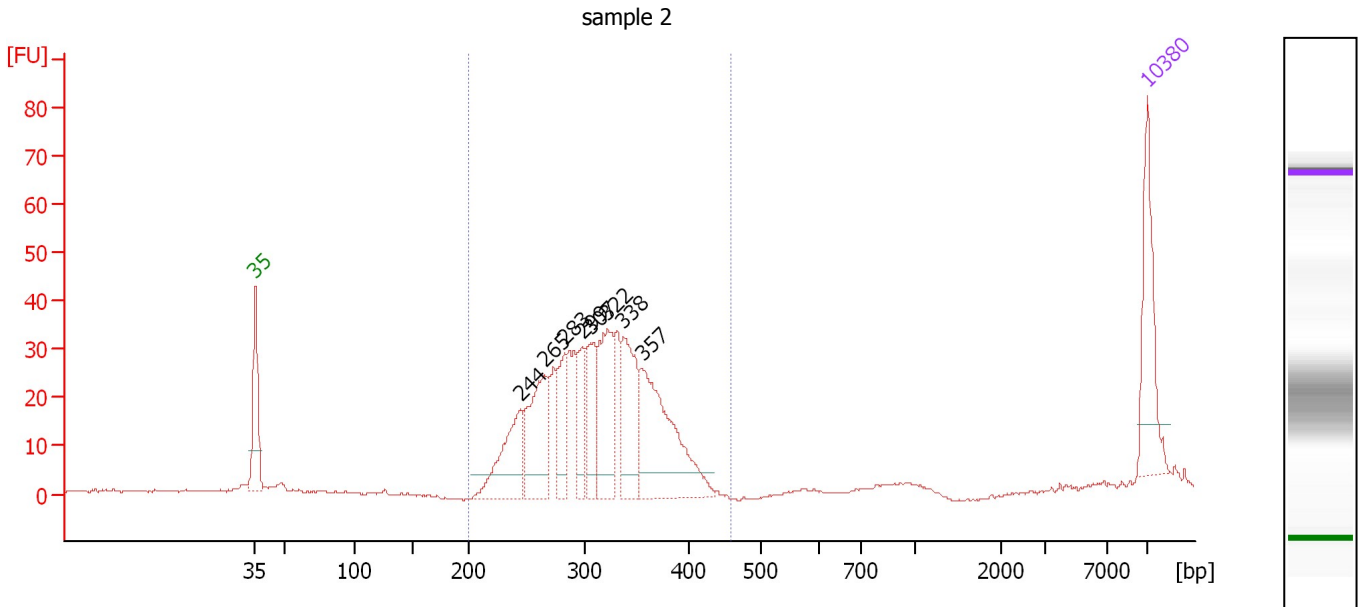
Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	451	323	245.4	1,932.7	404.32	92	12.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad

Created: 3/15/2016 2:18:33 PM
 Modified: 3/15/2016 3:03:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 8 Corr. Area 1: 492.7
 Noise: 0.2

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	244	110.07	682.5		63.79
3	265	125.45	716.4		65.68
4	283	58.60	313.7		67.27
5	299	46.50	235.4		68.73
6	307	72.13	356.1		69.36
7	322	117.61	552.9		70.62
8	338	106.31	476.3		71.91
9	357	193.85	823.7		73.42
10	10,380	75.00	10.9	Upper Marker	113.00

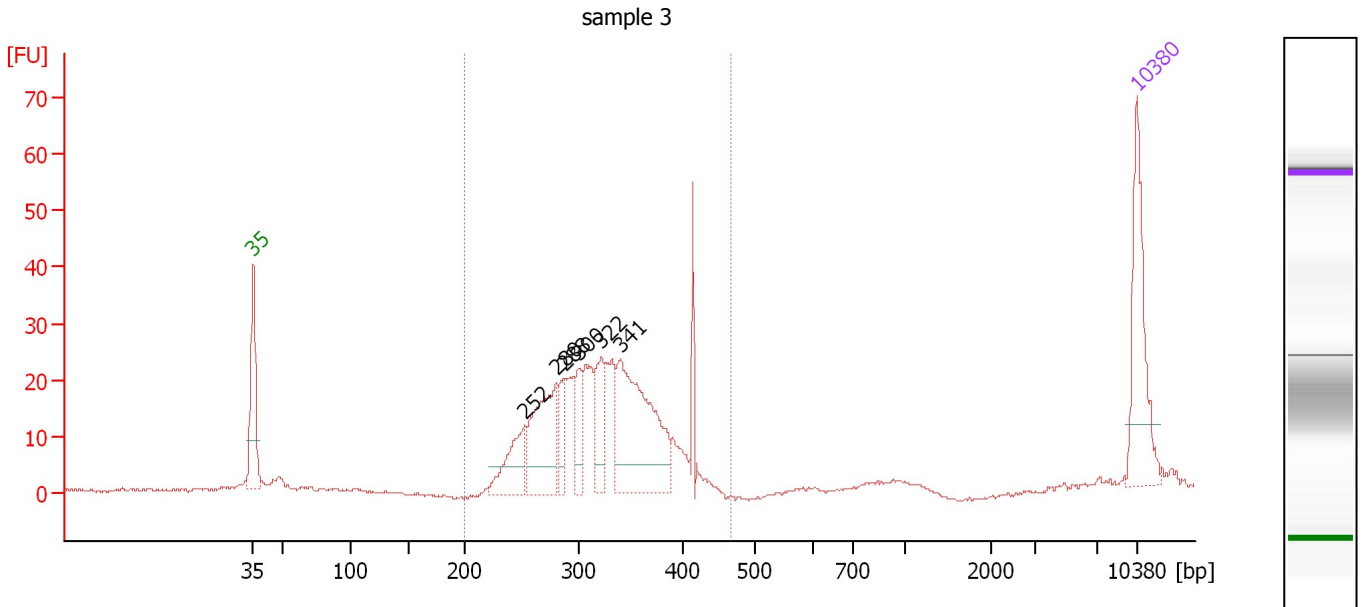
Region table for sample 2 : sample 2

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	459	312	492.7	4,526.5	907.91	98	14.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad

Created: 3/15/2016 2:18:33 PM
 Modified: 3/15/2016 3:03:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 6 Corr. Area 1: 353.1
 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	252	60.70	364.6		64.50
3	280	113.23	611.7		67.04
4	288	31.55	166.3		67.67
5	300	37.88	191.2		68.81
6	322	48.49	228.2		70.59
7	341	186.52	829.9		72.11
8	10,380	75.00	10.9	Upper Marker	113.00

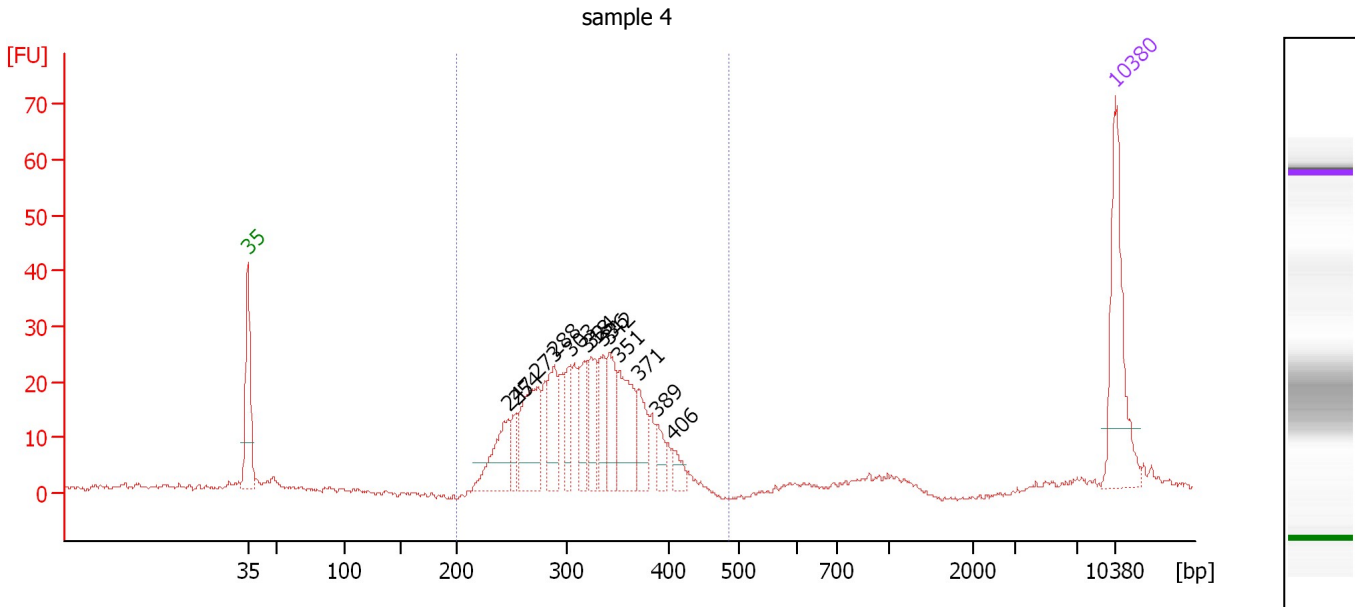
Region table for sample 3 : sample 3

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	469	322	353.1	3,142.8	648.62	93	14.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad

Created: 3/15/2016 2:18:33 PM
 Modified: 3/15/2016 3:03:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 13 Corr. Area 1: 373.4
 Noise: 0.4

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	247	59.97	367.6		64.05
3	254	21.83	130.3		64.65
4	273	87.15	484.4		66.33
5	288	48.47	254.6		67.75
6	303	31.57	157.8		69.05
7	318	43.58	207.4		70.29
8	324	42.09	197.1		70.72
9	336	36.47	164.6		71.71
10	342	47.14	209.1		72.19
11	351	69.91	301.8		72.96
12	371	35.13	143.4		74.60
13	389	17.21	67.0		76.06
14	406	13.57	50.6		77.31
15	10,380	75.00	10.9	Upper Marker	113.00

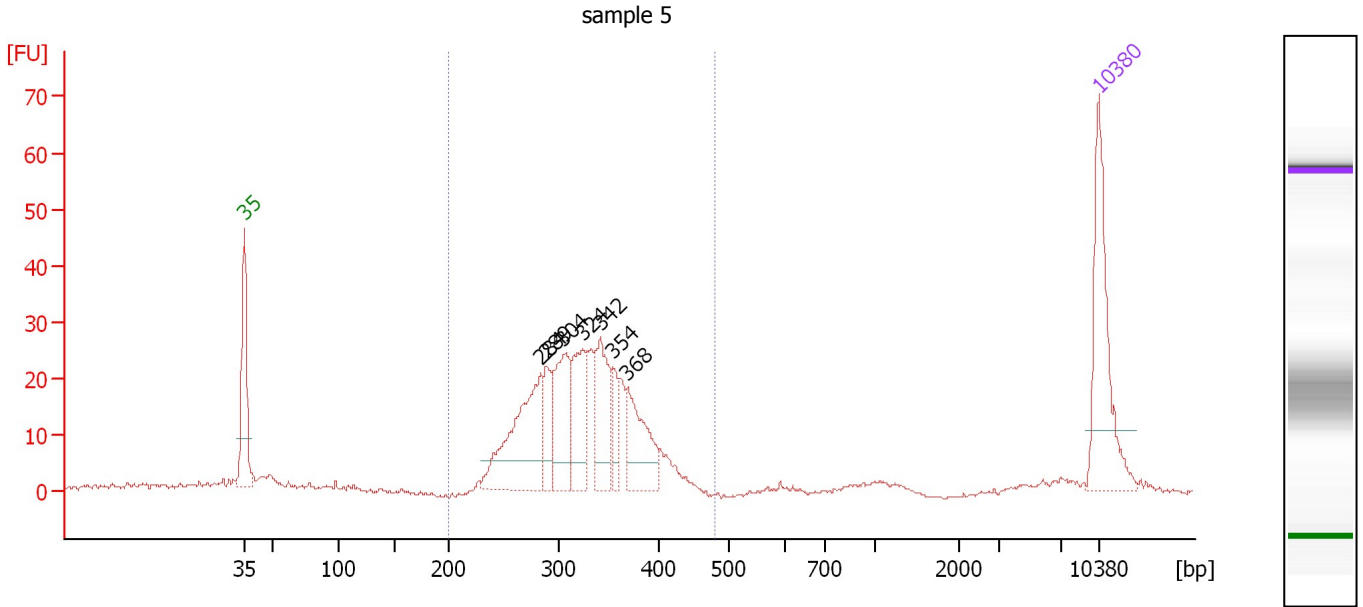
Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	484	318	373.4	3,139.3	640.25	95	14.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad

Created: 3/15/2016 2:18:33 PM
 Modified: 3/15/2016 3:03:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 7 Corr. Area 1: 362.2
 Noise: 0.4

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	284	128.57	686.4		67.34
3	289	34.09	178.9		67.78
4	304	75.19	374.6		69.13
5	324	62.46	291.7		70.79
6	342	66.10	293.2		72.19
7	354	23.31	99.7		73.24
8	368	62.71	258.0		74.37
9	10,380	75.00	10.9	Upper Marker	113.00

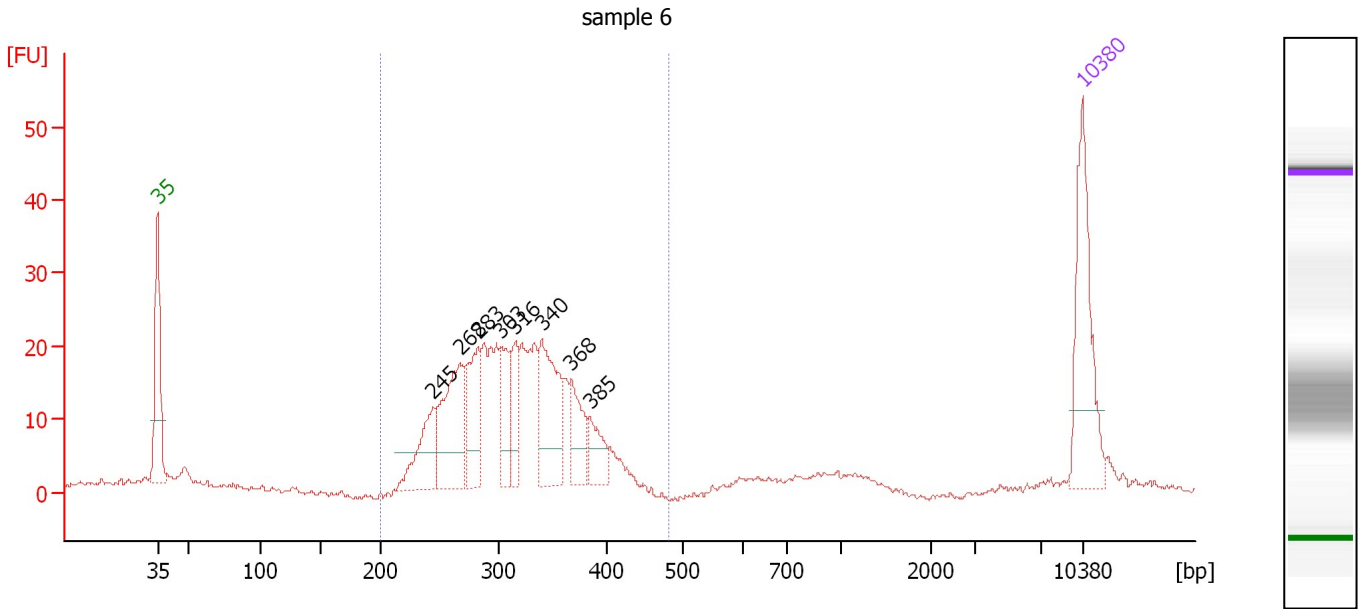
Region table for sample 5 : sample 5

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	481	324	362.2	2,589.5	539.80	89	13.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad

Created: 3/15/2016 2:18:33 PM
 Modified: 3/15/2016 3:03:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found: 8 Corr. Area 1: 330.0
 Noise: 0.5

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	245	57.63	356.5		63.85
3	268	97.94	554.6		65.88
4	283	62.13	332.9		67.24
5	303	39.83	199.4		69.01
6	316	34.33	164.5		70.11
7	340	86.55	385.3		72.09
8	368	37.64	155.0		74.34
9	385	27.33	107.5		75.75
10	10,380	75.00	10.9	Upper Marker	113.00

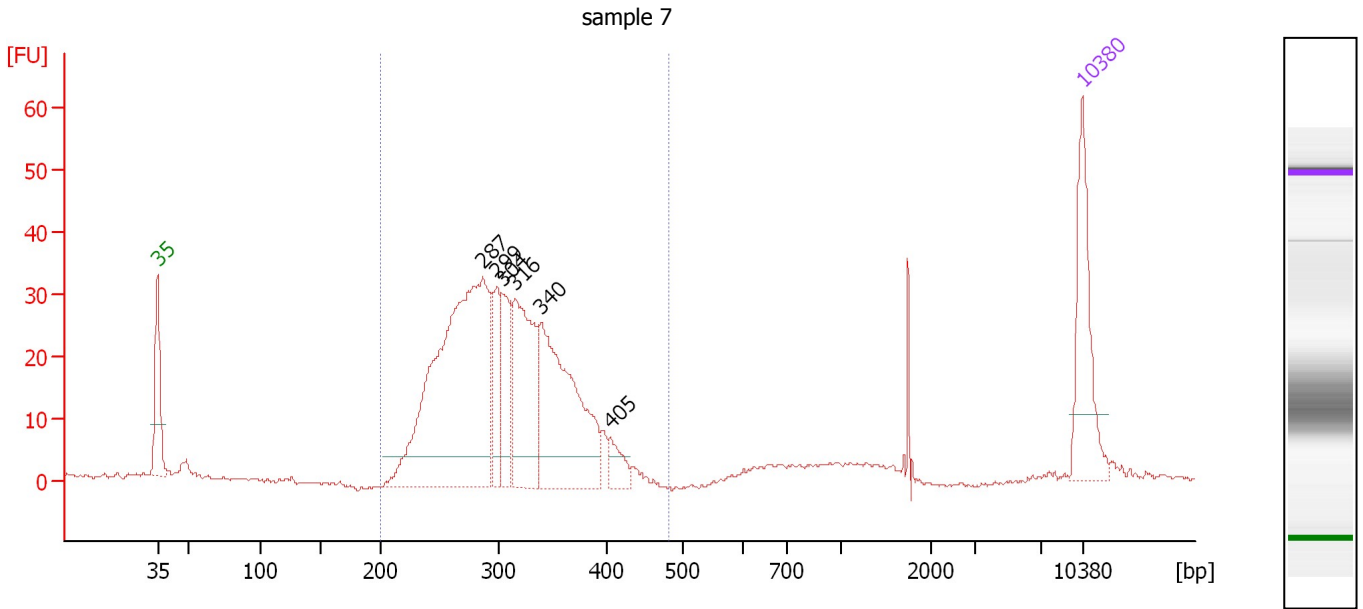
Region table for sample 6 : sample 6

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	482	315	330.0	3,316.1	670.56	85	15.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad

Created: 3/15/2016 2:18:33 PM
 Modified: 3/15/2016 3:03:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found: 6 Corr. Area 1: 477.0
 Noise: 0.2

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	287	453.56	2,397.3		67.59
3	299	52.99	268.8		68.68
4	304	66.18	330.3		69.08
5	316	148.57	713.1		70.07
6	340	218.52	974.1		72.05
7	405	21.75	81.3		77.28
8	10,380	75.00	10.9	Upper Marker	113.00

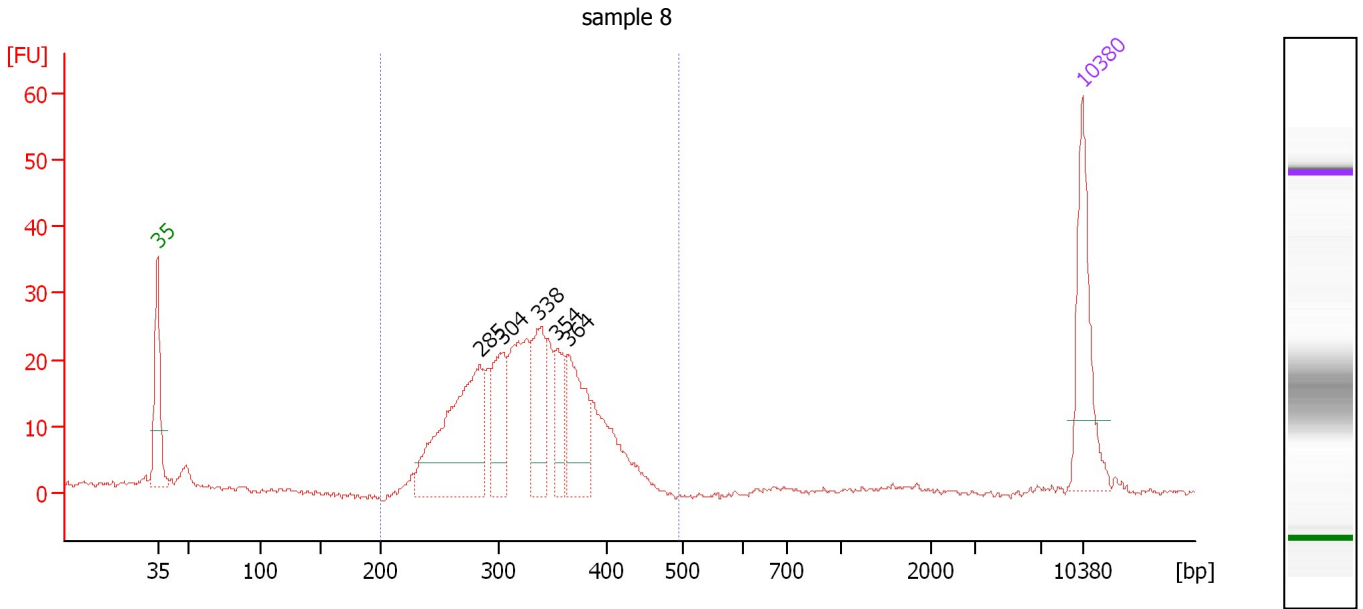
Region table for sample 7 : sample 7

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	482	307	477.0	4,739.0	935.56	90	15.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad

Created: 3/15/2016 2:18:33 PM
 Modified: 3/15/2016 3:03:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found: 5 Corr. Area 1: 353.8
 Noise: 0.4

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	285	205.46	1,093.5		67.42
3	304	79.54	396.5		69.11
4	338	80.16	359.2		71.91
5	354	47.58	203.8		73.19
6	364	85.33	354.8		74.06
7	10,380	75.00	10.9	Upper Marker	113.00

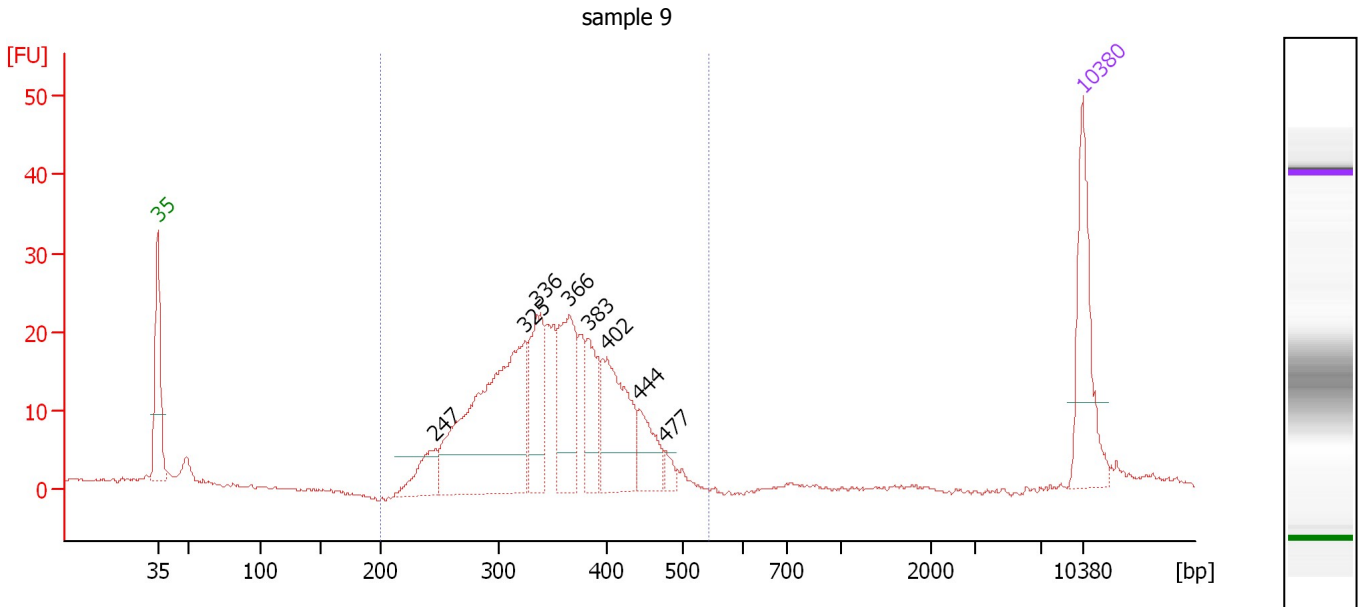
Region table for sample 8 : sample 8

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	495	328	353.8	3,451.1	724.65	93	14.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad

Created: 3/15/2016 2:18:33 PM
 Modified: 3/15/2016 3:03:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9

Number of peaks found: 8 Corr. Area 1: 344.2
 Noise: 0.2

Peak table for sample 9 : sample 9

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	247	42.15	258.8		64.02
3	325	289.31	1,347.0		70.87
4	336	86.86	392.1		71.70
5	366	102.44	423.8		74.20
6	383	56.92	225.1		75.59
7	402	109.43	412.6		77.07
8	444	41.68	142.3		79.48
9	477	10.37	32.9		81.38
10	10,380	75.00	10.9	Upper Marker	113.00

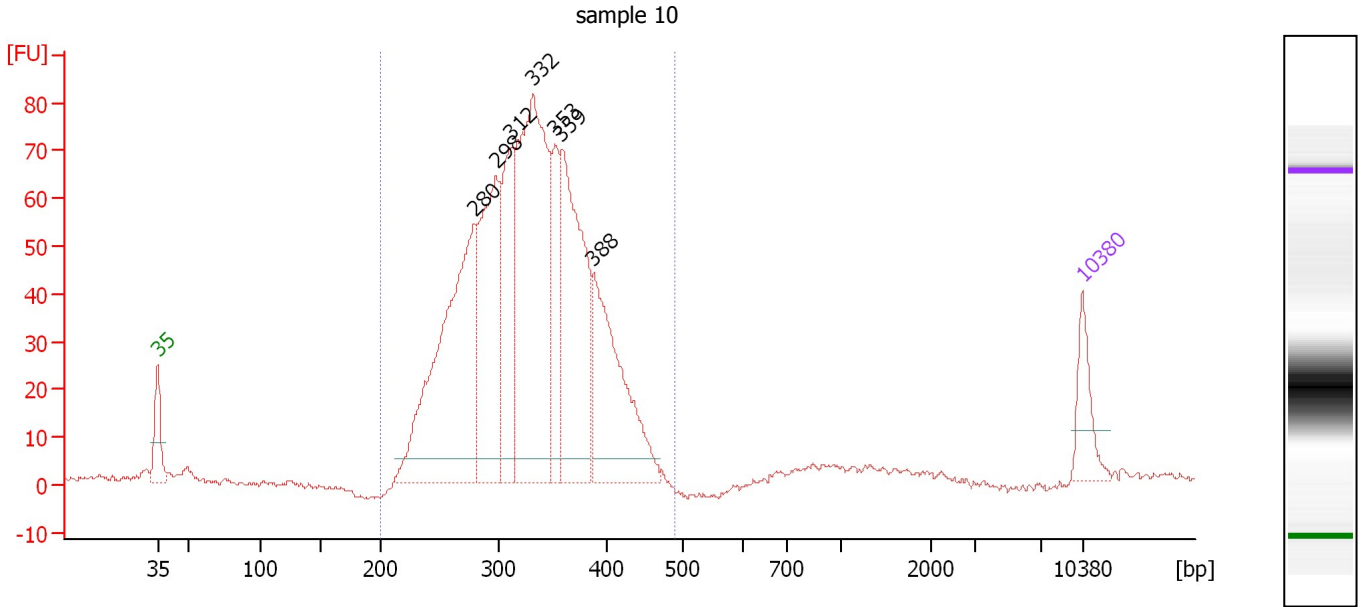
Region table for sample 9 : sample 9

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	544	353	344.2	3,636.3	815.15	91	16.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad

Created: 3/15/2016 2:18:33 PM
 Modified: 3/15/2016 3:03:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10

Number of peaks found: 7 Corr. Area 1: 1,156.2
 Noise: 0.6

Peak table for sample 10 : sample 10

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	280	784.84	4,251.9		66.97
3	298	464.63	2,360.3		68.64
4	312	296.66	1,439.4		69.79
5	332	847.01	3,864.2		71.42
6	353	177.60	763.3		73.09
7	359	518.25	2,188.7		73.60
8	388	397.08	1,549.6		76.01
9	10,380	75.00	10.9	Upper Marker	113.00

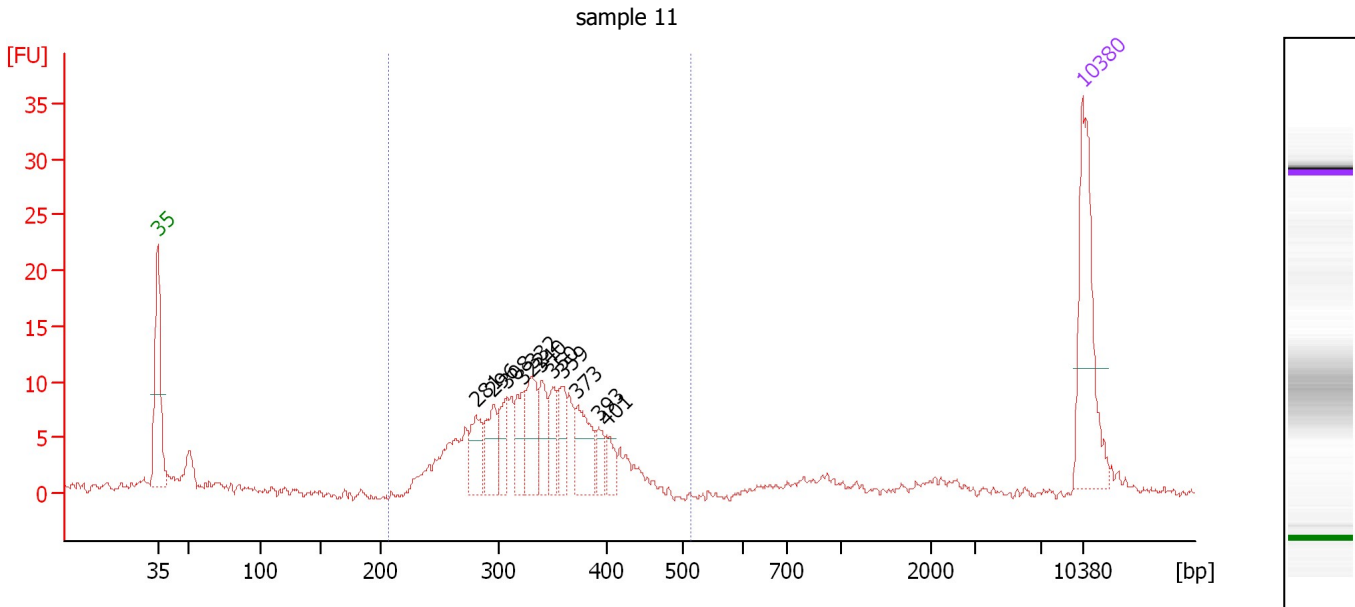
Region table for sample 10 : sample 10

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	490	329	1,156.2	16,795.7	3,533.07	95	15.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad

Created: 3/15/2016 2:18:33 PM
 Modified: 3/15/2016 3:03:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found: 11 Corr. Area 1: 137.8
 Noise: 0.4

Peak table for sample 11 : sample 11

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	281	32.18	173.5		67.09
3	296	34.37	175.9		68.44
4	308	25.83	127.0		69.46
5	322	28.96	136.1		70.62
6	332	41.93	191.3		71.41
7	340	27.97	124.7		72.06
8	350	23.10	99.9		72.89
9	359	26.27	110.8		73.64
10	373	38.34	155.5		74.80
11	393	15.47	59.7		76.38
12	401	13.28	50.2		77.03
13	10,380	75.00	10.9	Upper Marker	113.00

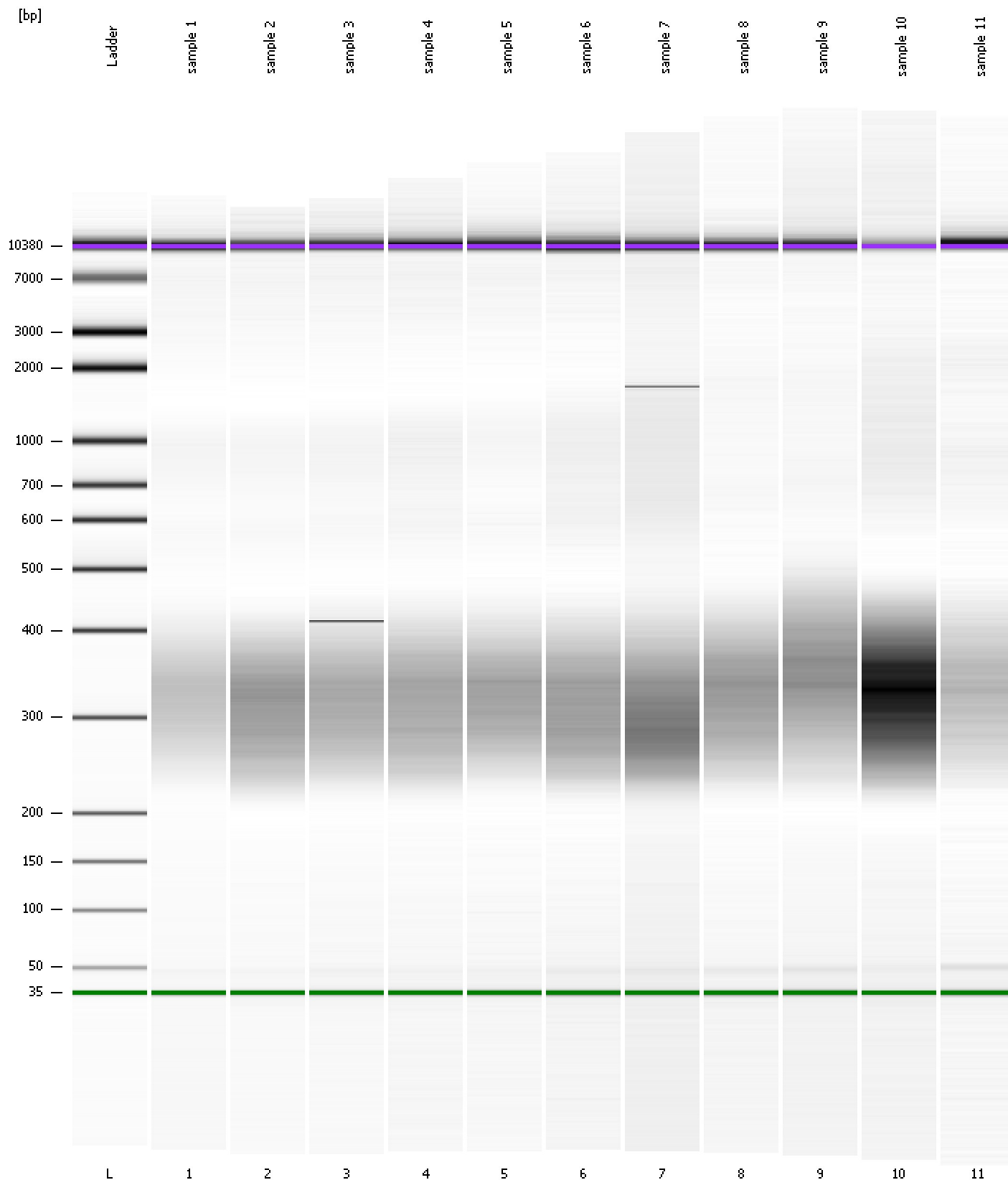
Region table for sample 11 : sample 11

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
207	515	334	137.8	2,033.0	435.64	82	14.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad

Created: 3/15/2016 2:18:33 PM
Modified: 3/15/2016 3:03:55 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad

Created: 3/15/2016 2:18:33 PM
 Modified: 3/15/2016 3:03:55 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		3/15/2016 2:59:50 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-03-15\2016-03-15_003.xad)		Instrument	Run		3/15/2016 2:18:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/15/2016 2:18:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/15/2016 2:18:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/15/2016 2:18:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/15/2016 2:18:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/15/2016 2:18:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/15/2016 2:18:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1