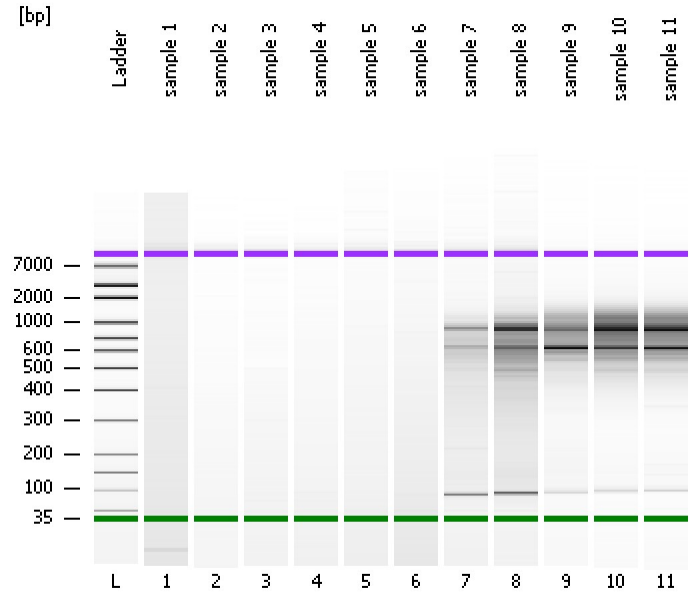
Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-31\2016-05-31_002.xad

Created: 5/31/2016 3:37:59 PM
Modified: 5/31/2016 4:21:30 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

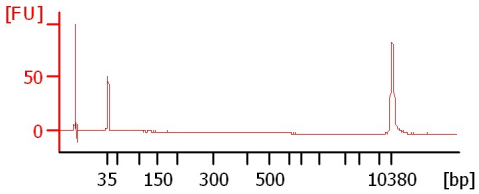
Chip Information:

Chip Lot #:

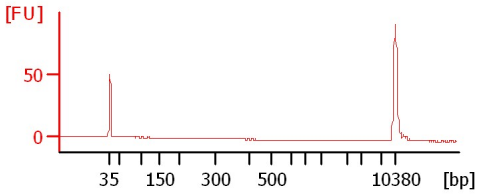
Reagent Kit Lot #:

Chip Comments:

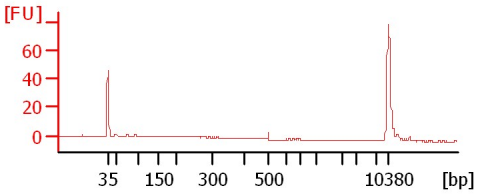
sample 1



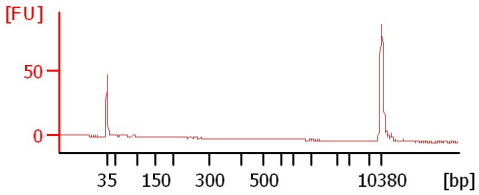
sample 2



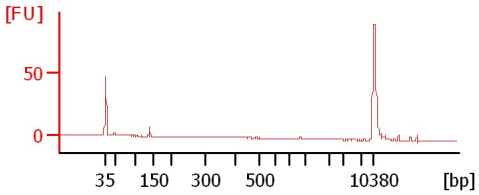
sample 3



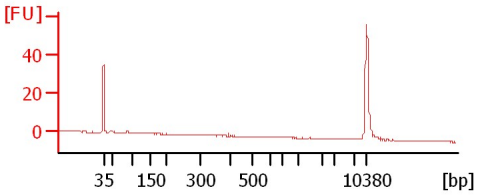
sample 4



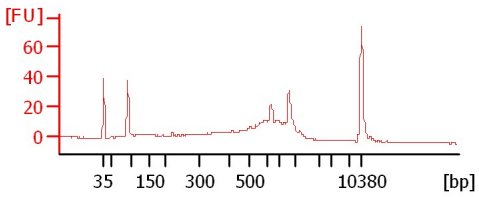
sample 5



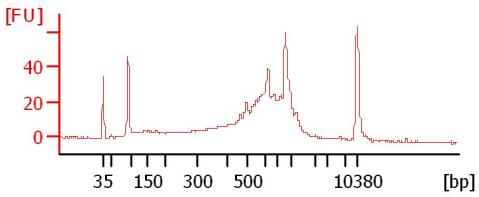
sample 6



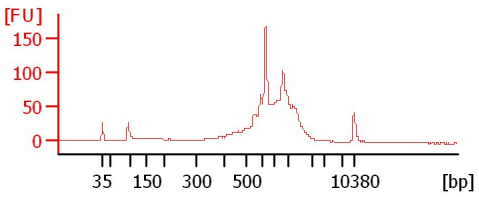
sample 7



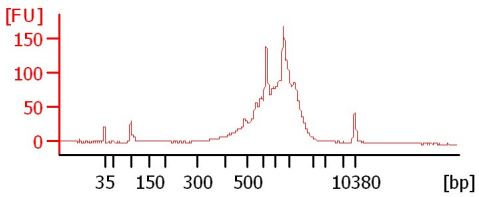
sample 8



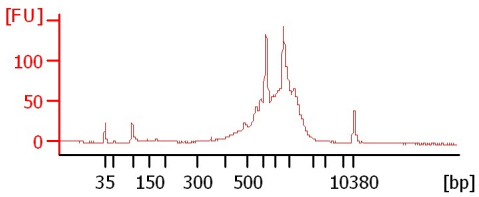
sample 9



sample 10



sample 11



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-31\2016-05-31_002.xad

Created: 5/31/2016 3:37:59 PM
Modified: 5/31/2016 4:21:30 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		☐	✔			
sample 2		☐	✔			
sample 3		☐	✔			
sample 4		☐	✔			
sample 5		☐	✔			
sample 6		☐	✔			
sample 7		☐	✔			
sample 8		☐	✔			
sample 9		☐	✔			
sample 10		☐	✔			
sample 11		☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-31\2016-05-31_002.xad

Created: 5/31/2016 3:37:59 PM
Modified: 5/31/2016 4:21:30 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

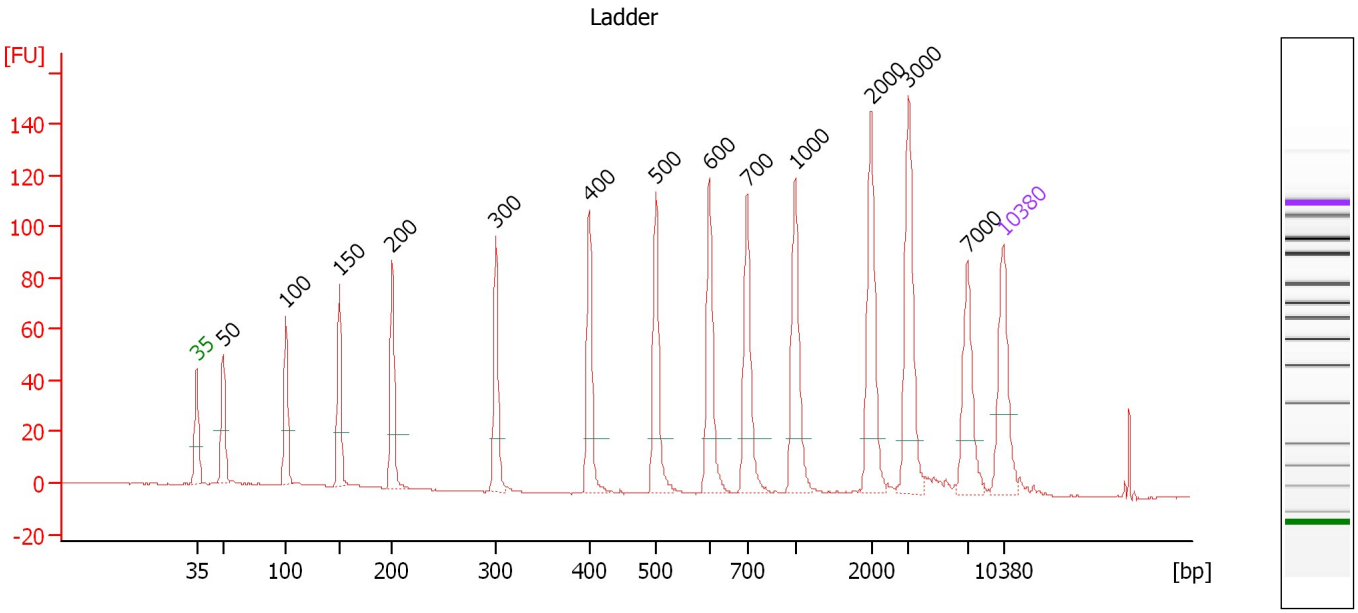
Ladder

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\2016-05-31\2016-05-31_002.xad

Created: 5/31/2016 3:37:59 PM
Modified: 5/31/2016 4:21:30 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

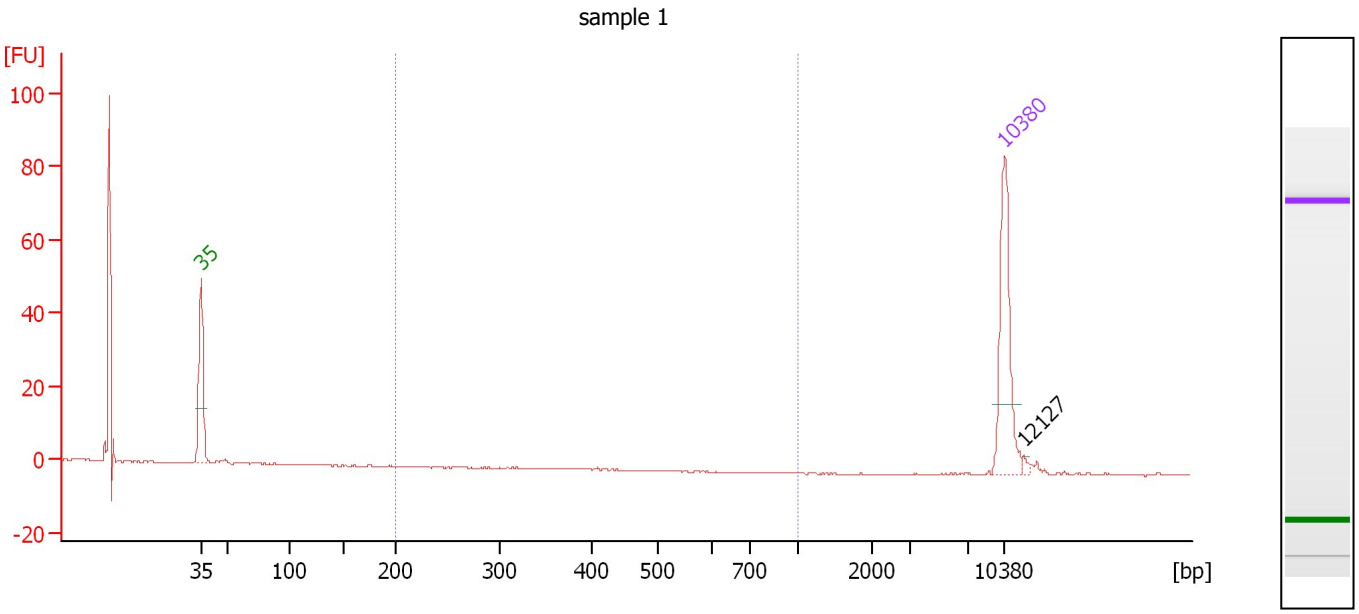
Peak table for Ladder

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	45.31
3		100	150.00	2,272.7	Ladder Peak	50.73
4		150	150.00	1,515.2	Ladder Peak	55.35
5		200	150.00	1,136.4	Ladder Peak	59.93
6		300	150.00	757.6	Ladder Peak	68.96
7		400	150.00	568.2	Ladder Peak	77.05
8		500	150.00	454.5	Ladder Peak	82.83
9		600	150.00	378.8	Ladder Peak	87.46
10		700	150.00	324.7	Ladder Peak	90.75
11		1,000	150.00	227.3	Ladder Peak	94.91
12		2,000	150.00	113.6	Ladder Peak	101.53
13		3,000	150.00	75.8	Ladder Peak	104.72
14		7,000	150.00	32.5	Ladder Peak	109.85
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-31\2016-05-31_002.xad

Created: 5/31/2016 3:37:59 PM
Modified: 5/31/2016 4:21:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found:	1	Corr. Area 1:	0.0
Noise:	0.1		

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	10,380	75.00	10.9	Upper Marker	113.00
3	12,127	0.00	0.0		114.63

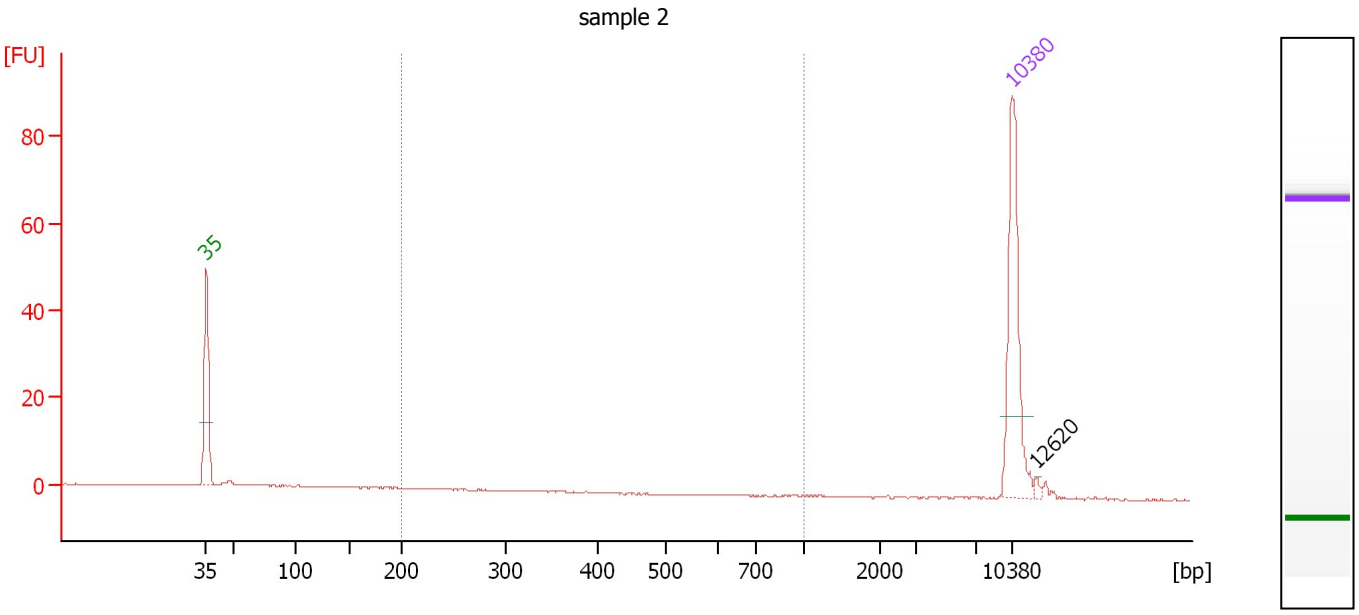
Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color	Conc. [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	0	0.0	0.0		0.00	0	0.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-31\2016-05-31_002.xad

Created: 5/31/2016 3:37:59 PM
Modified: 5/31/2016 4:21:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found:	1	Corr. Area 1:	0.9
Noise:	0.1		

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	10,380	75.00	10.9	Upper Marker	113.00
3	12,620	0.00	0.0		115.08

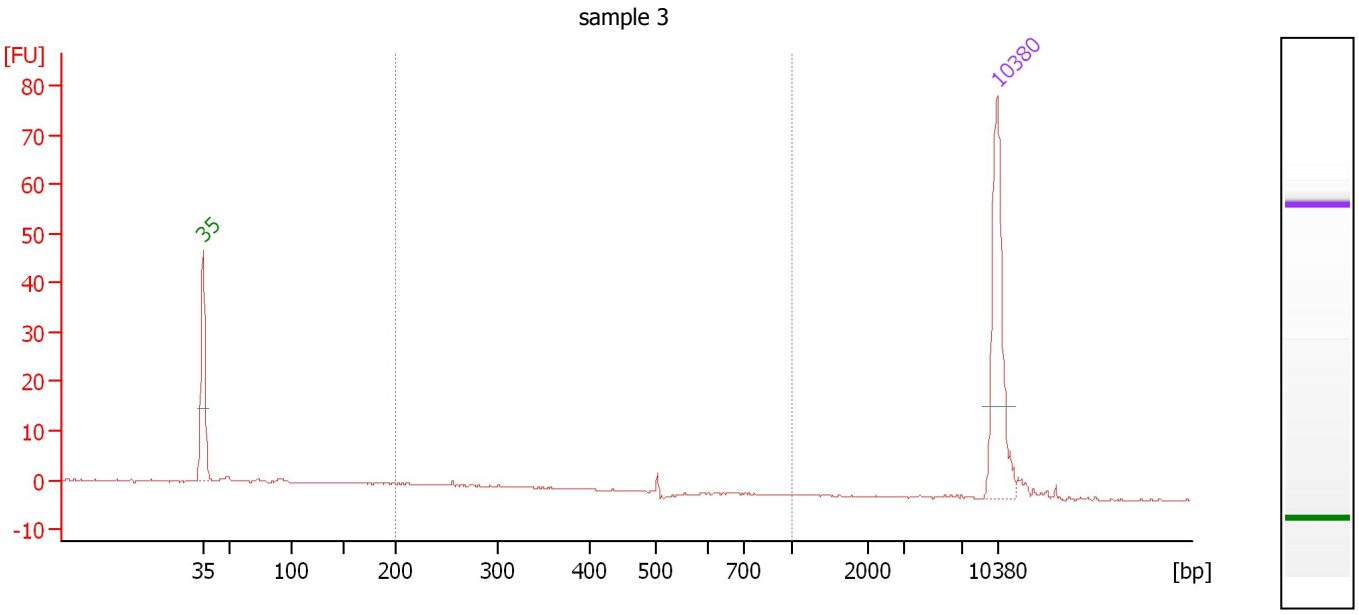
Region table for sample 2 : sample 2

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	228	0.9	8.8	1.32	5	10.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-31\2016-05-31_002.xad

Created: 5/31/2016 3:37:59 PM
Modified: 5/31/2016 4:21:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found:	0	Corr. Area 1:	9.7
Noise:	0.1		

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	10,380	75.00	10.9	Upper Marker	113.00

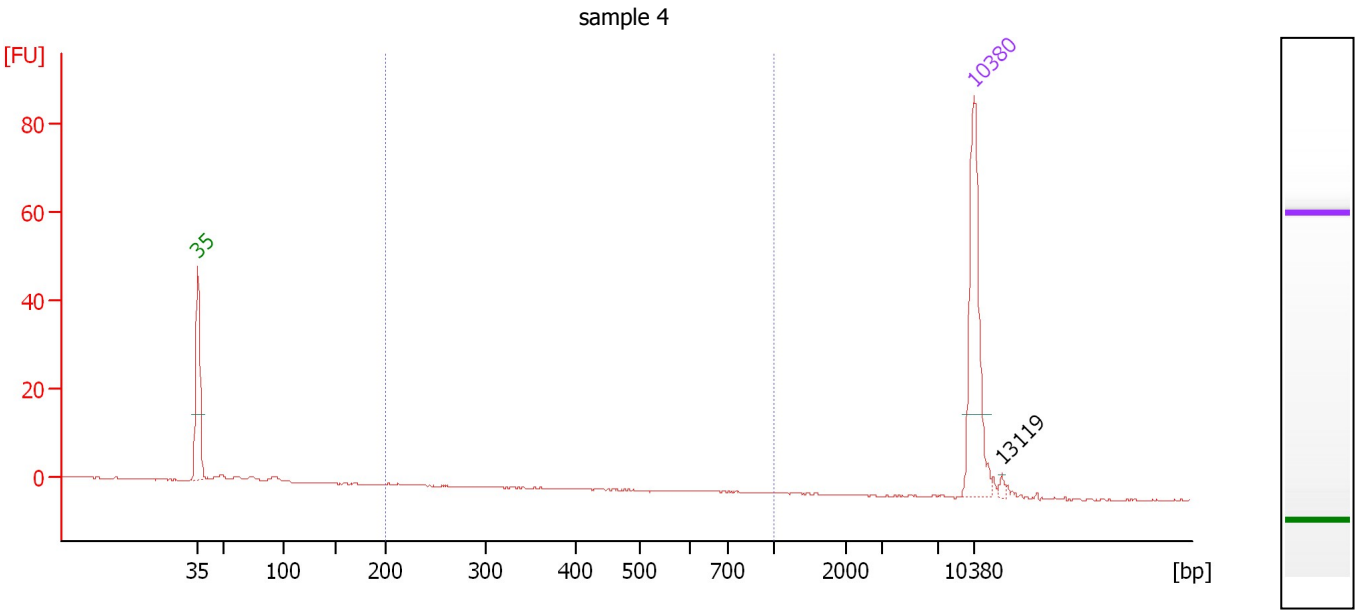
Region table for sample 3 : sample 3

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	303	9.7	83.4	15.24	27	29.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-31\2016-05-31_002.xad

Created: 5/31/2016 3:37:59 PM
Modified: 5/31/2016 4:21:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found:	1	Corr. Area 1:	0.0
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	10,380	75.00	10.9	Upper Marker	113.00
3	13,119	0.00	0.0		115.55

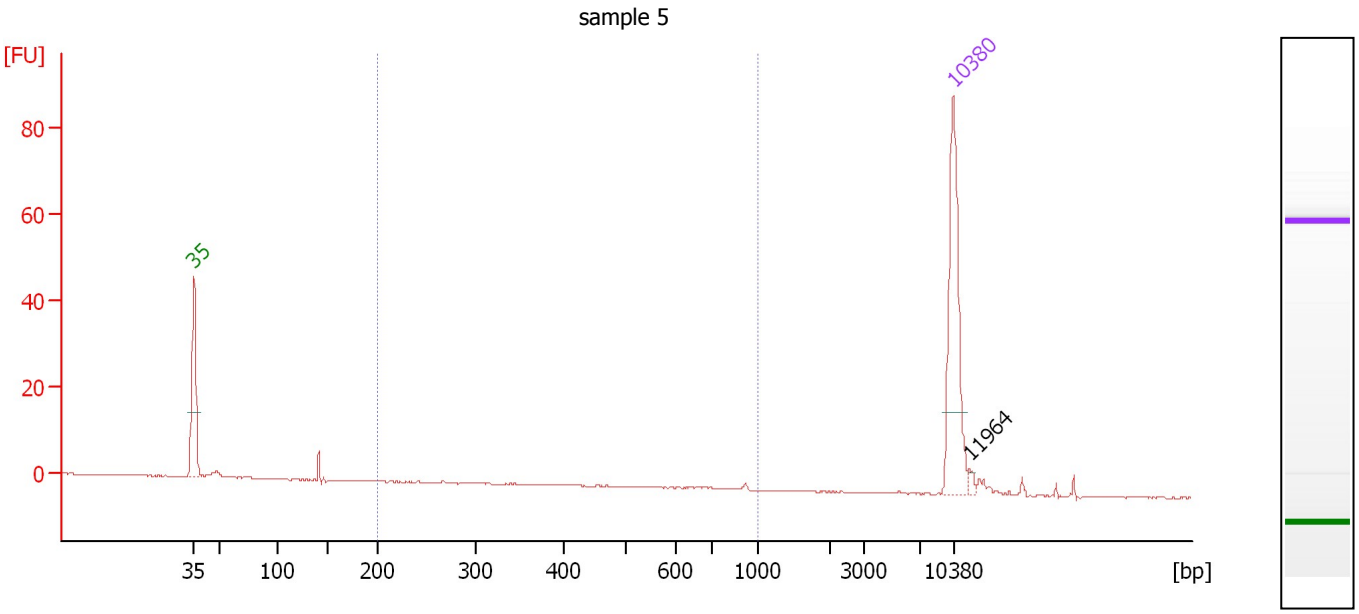
Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	204	0.0	0.4	0.05	0	1.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-31\2016-05-31_002.xad

Created: 5/31/2016 3:37:59 PM
Modified: 5/31/2016 4:21:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found:	1	Corr. Area 1:	0.4
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	10,380	75.00	10.9	Upper Marker	113.00
3	11,964	0.00	0.0		114.47

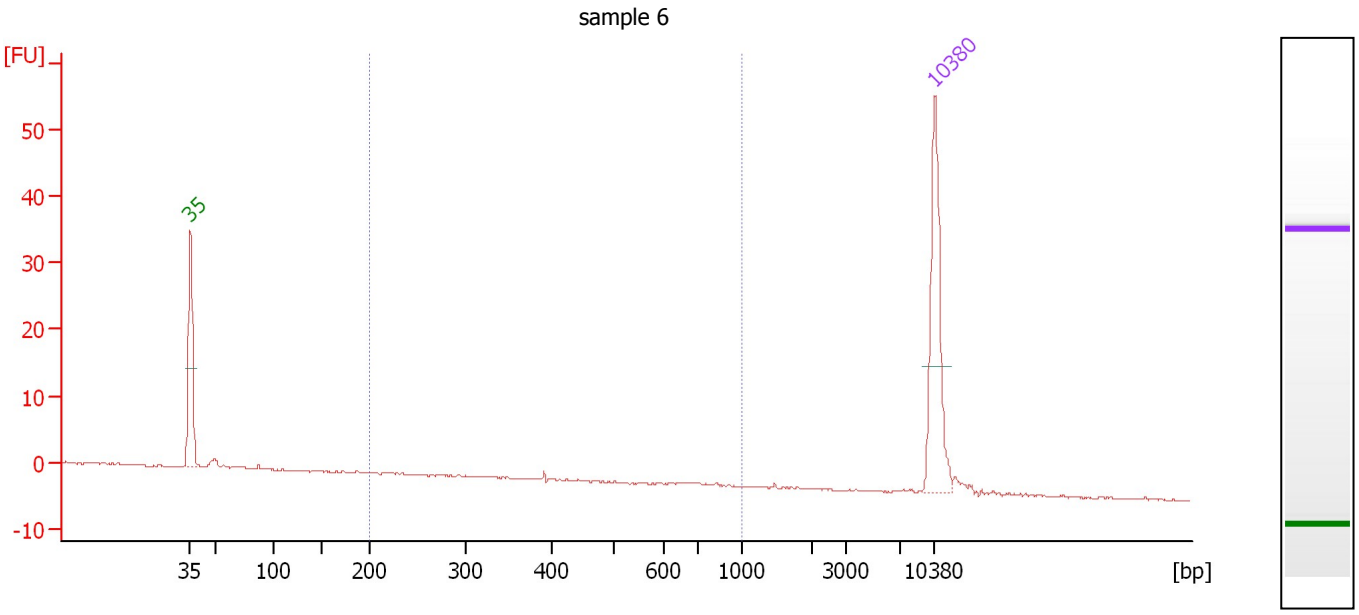
Region table for sample 5 : sample 5

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	848	0.4	1.0	0.43	3	23.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-31\2016-05-31_002.xad

Created: 5/31/2016 3:37:59 PM
Modified: 5/31/2016 4:21:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6

Number of peaks found:	0	Corr. Area 1:	0.8
Noise:	0.1		

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	10,380	75.00	10.9	Upper Marker	113.00

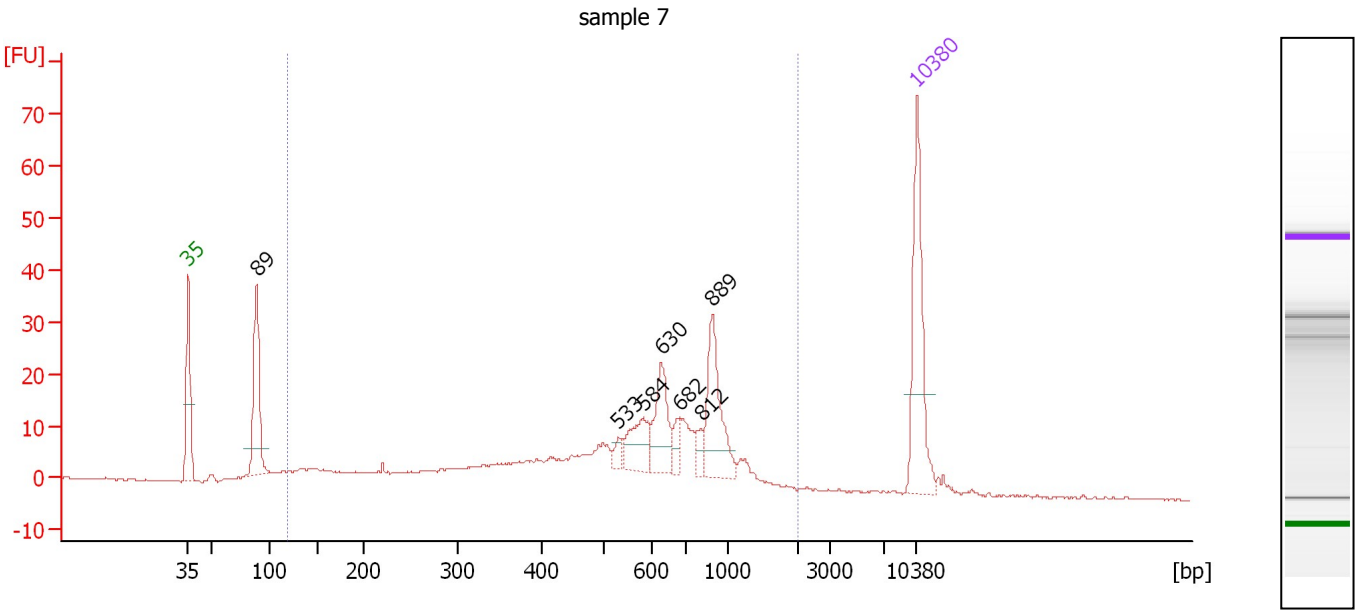
Region table for sample 6 : sample 6

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	508	0.8	6.2	1.60	9	39.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-31\2016-05-31_002.xad

Created: 5/31/2016 3:37:59 PM
Modified: 5/31/2016 4:21:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found:	7	Corr. Area 1:	360.1
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		89	104.65	1,777.3		49.56
3		533	7.77	22.1		84.35
4		584	35.00	90.8		86.71
5		630	45.76	110.0		88.45
6		682	12.43	27.6		90.14
7		812	9.54	17.8		92.30
8		889	64.95	110.7		93.37
9	▶	10,380	75.00	10.9	Upper Marker	113.00

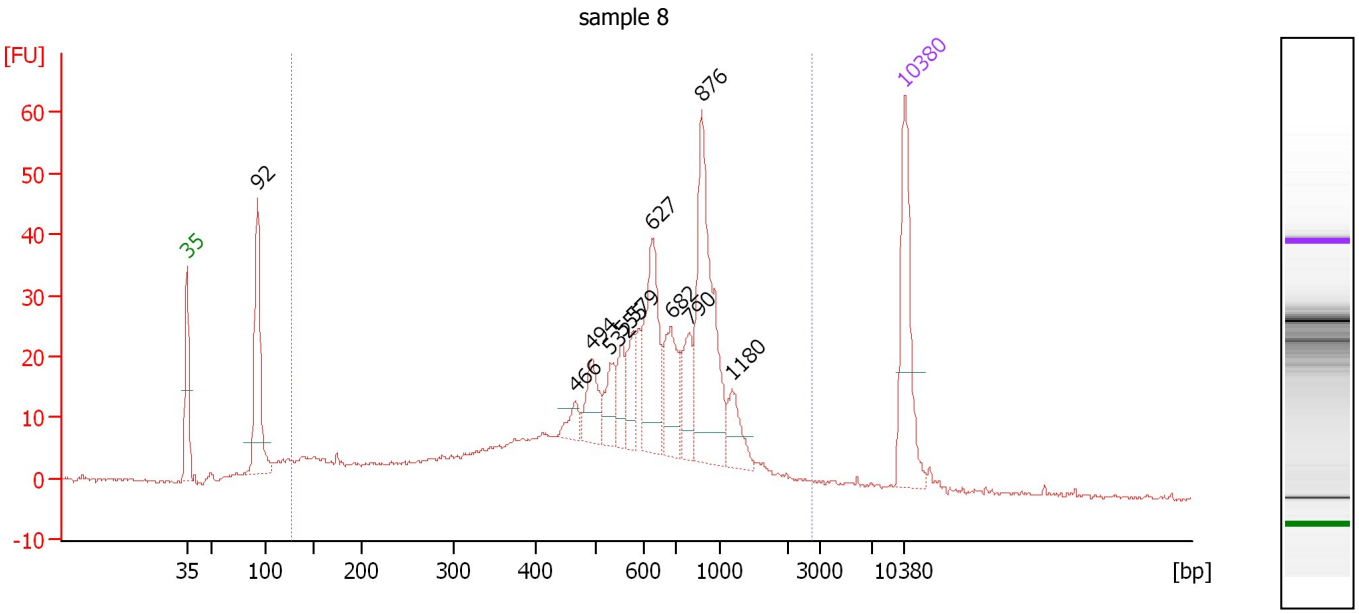
Region table for sample 7 : sample 7

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
121	2,003	612	360.1	2,160.5	560.73	83	48.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-31\2016-05-31_002.xad

Created: 5/31/2016 3:37:59 PM
Modified: 5/31/2016 4:21:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 8

Number of peaks found:	11	Corr. Area 1:	666.2
Noise:	0.3		

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	92	141.31	2,326.2		49.86
3	466	15.79	51.4		80.86
4	494	35.89	110.1		82.47
5	532	28.31	80.7		84.29
6	555	24.41	66.6		85.38
7	579	30.56	80.0		86.48
8	627	91.76	221.7		88.35
9	682	55.71	123.7		90.17
10	790	34.47	66.1		91.99
11	876	152.48	263.8		93.19
12	1,180	27.24	35.0		96.10
13	10,380	75.00	10.9	Upper Marker	113.00

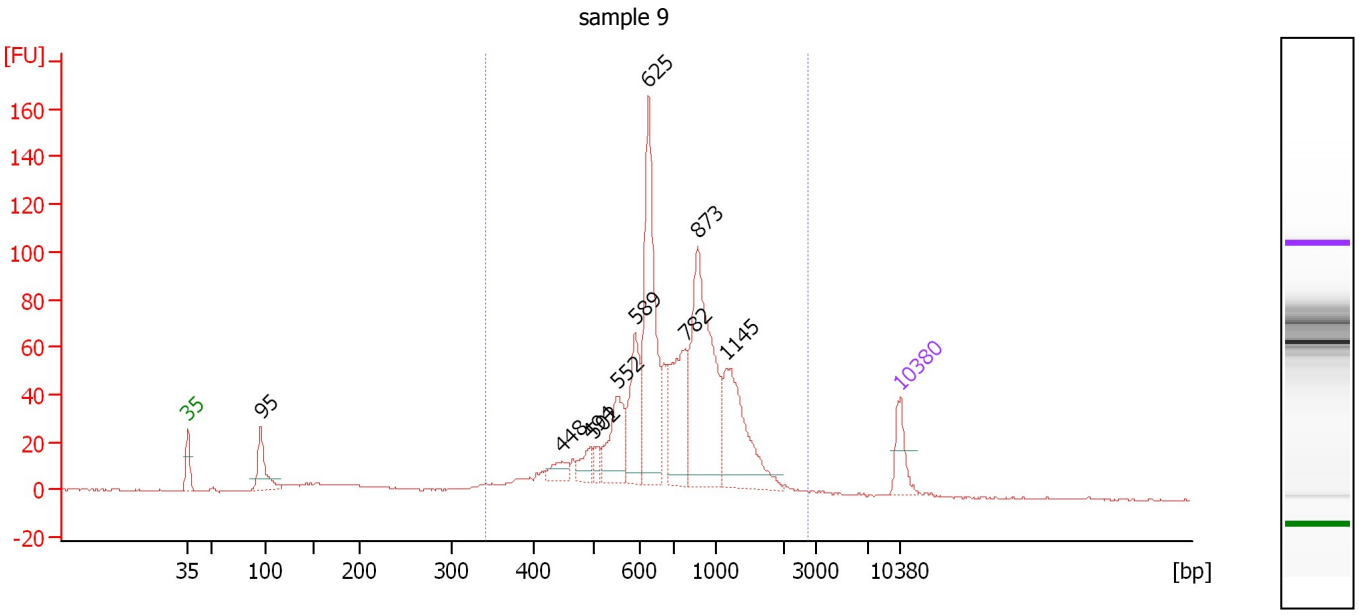
Region table for sample 8 : sample 8

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
127	2,725	666	666.2	3,832.3	1,092.18	86	51.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-31\2016-05-31_002.xad

Created: 5/31/2016 3:37:59 PM
Modified: 5/31/2016 4:21:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9

Number of peaks found:	10	Corr. Area 1:	1,102.9
Noise:	0.4		

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	95	167.28	2,669.7		50.18
3	448	52.28	176.8		79.83
4	494	50.58	155.0		82.51
5	502	34.52	104.2		82.93
6	552	193.64	531.7		85.23
7	589	205.62	528.8		86.96
8	625	538.94	1,307.4		88.27
9	782	278.80	540.2		91.88
10	873	581.44	1,009.6		93.14
11	1,145	314.21	415.9		95.87
12	10,380	75.00	10.9	Upper Marker	113.00

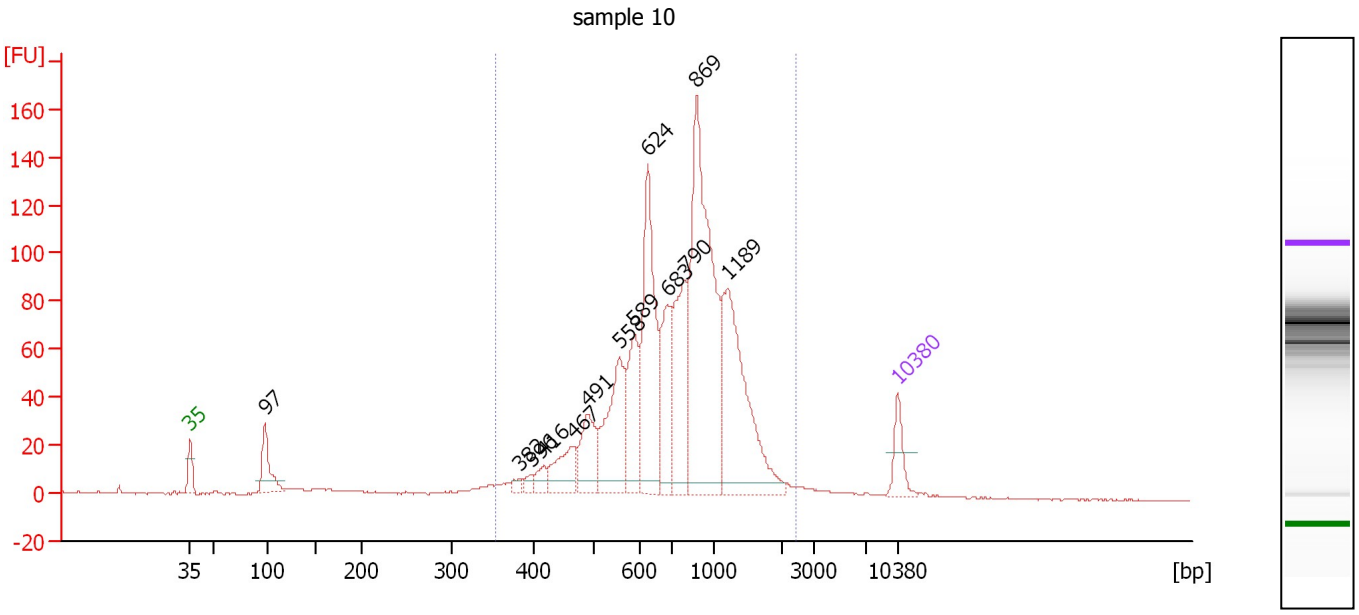
Region table for sample 9 : sample 9

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
341	2,732	806	1,102.9	6,125.5	2,776.33	90	40.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-31\2016-05-31_002.xad

Created: 5/31/2016 3:37:59 PM
Modified: 5/31/2016 4:21:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 10

Number of peaks found:	13	Corr. Area 1:	1,495.8
Noise:	0.4		

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	97	182.80	2,858.3		50.39
3	382	20.95	83.2		75.57
4	396	23.09	88.3		76.73
5	416	42.80	155.7		78.00
6	467	146.36	475.3		80.90
7	491	187.37	577.9		82.33
8	558	343.15	932.6		85.50
9	589	232.67	598.0		86.97
10	624	525.80	1,277.2		88.24
11	683	252.27	559.5		90.19
12	790	337.69	648.0		91.99
13	869	972.80	1,695.3		93.10
14	1,189	576.75	735.0		96.16
15	10,380	75.00	10.9	Upper Marker	113.00

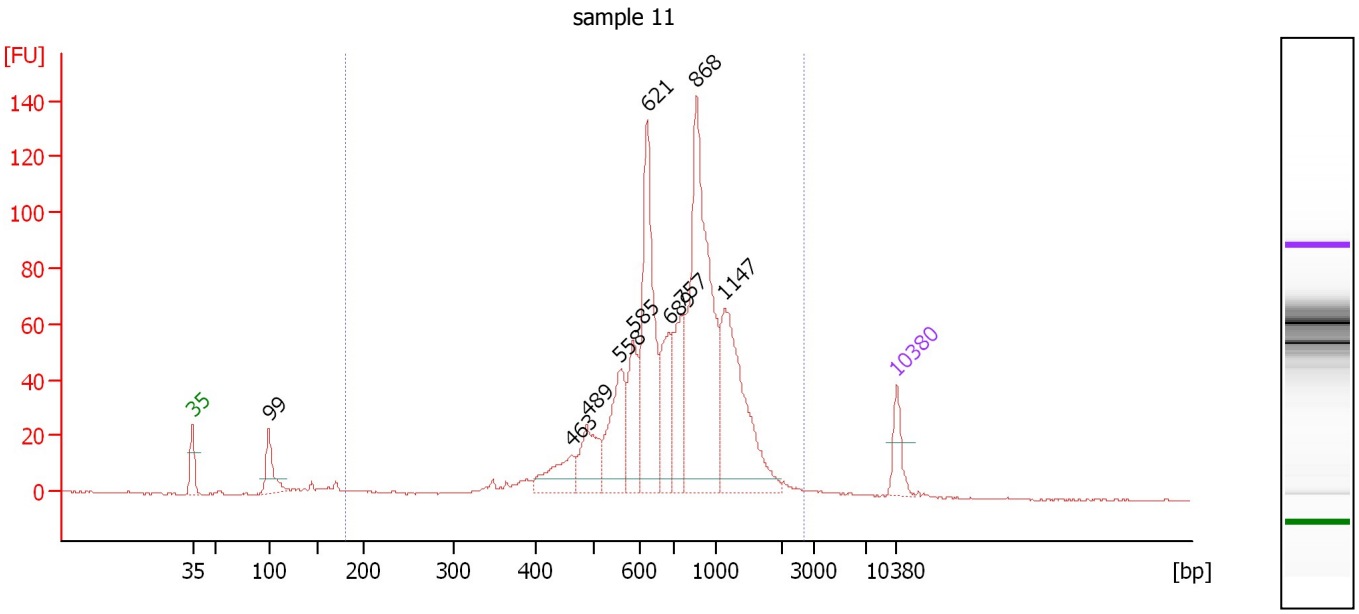
Region table for sample 10 : sample 10

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
352	2,475	837	1,495.8	8,177.4	3,833.21	92	39.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-31\2016-05-31_002.xad

Created: 5/31/2016 3:37:59 PM
Modified: 5/31/2016 4:21:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found:	10	Corr. Area 1:	1,182.4
Noise:	0.2		

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	99	159.54	2,451.0		50.58
3	463	148.23	485.4		80.68
4	489	176.18	545.6		82.21
5	558	269.38	732.0		85.50
6	585	212.58	550.5		86.77
7	621	546.17	1,332.8		88.15
8	689	209.40	460.7		90.37
9	757	234.66	469.6		91.54
10	868	932.15	1,627.4		93.08
11	1,147	501.92	662.9		95.88
12	10,380	75.00	10.9	Upper Marker	113.00

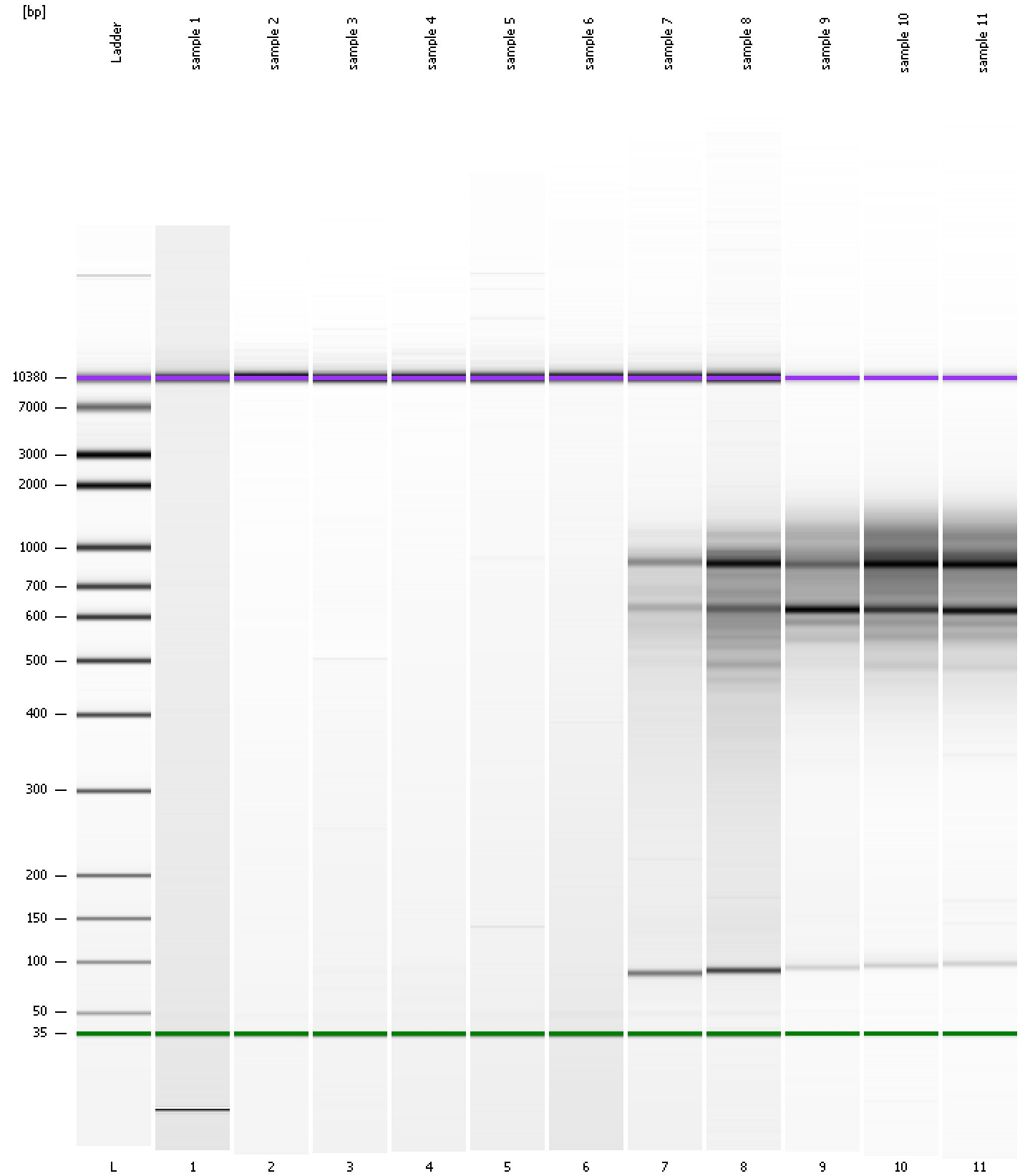
Region table for sample 11 : sample 11

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
181	2,677	830	1,182.4	7,713.5	3,499.71	94	40.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-31\2016-05-31_002.xad

Created: 5/31/2016 3:37:59 PM
Modified: 5/31/2016 4:21:30 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-31\2016-05-31_002.xad

Created: 5/31/2016 3:37:59 PM
Modified: 5/31/2016 4:21:30 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		5/31/2016 4:19:16 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\2016-05-31\2016-05-31_002.xad)		Instrument	Run		5/31/2016 3:38:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/31/2016 3:38:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/31/2016 3:38:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/31/2016 3:38:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/31/2016 3:38:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/31/2016 3:38:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/31/2016 3:38:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1