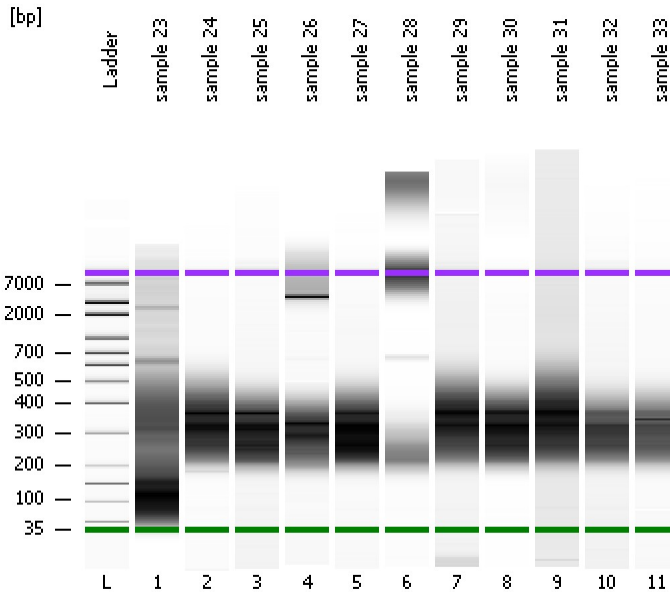


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-20\2018-06-20_003.xad

Created: 6/20/2018 3:00:48 PM
Modified: 6/20/2018 3:41:14 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

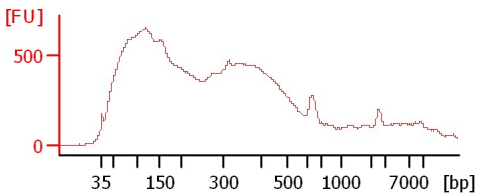
Assay Information:

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

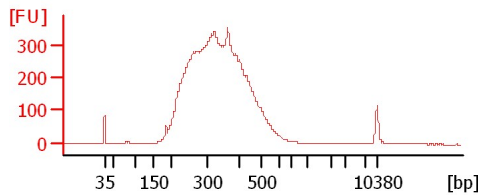
Chip Information:

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

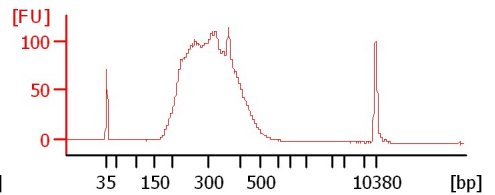
sample 23



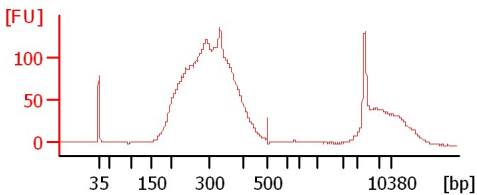
sample 24



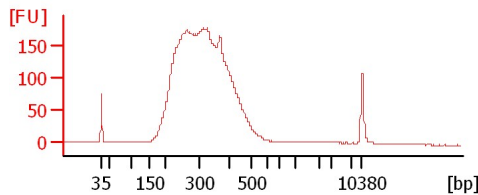
sample 25



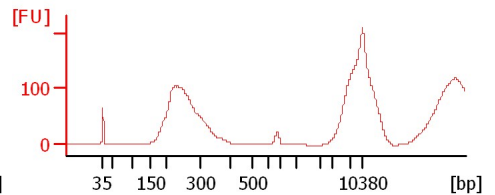
sample 26



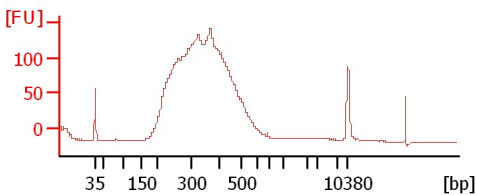
sample 27



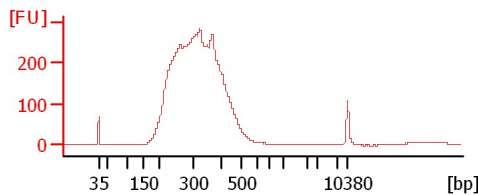
sample 28



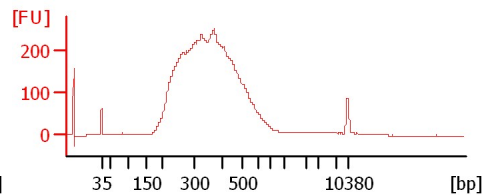
sample 29



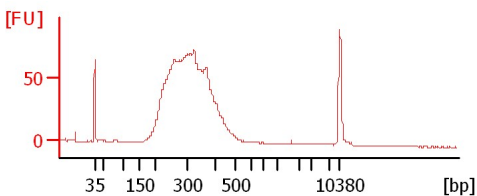
sample 30



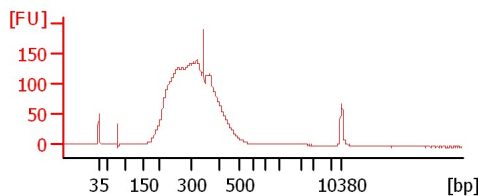
sample 31



sample 32



sample 33



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-20\2018-06-20_003.xad

Created: 6/20/2018 3:00:48 PM
Modified: 6/20/2018 3:41:14 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 23		<input type="checkbox"/>	✓			
sample 24		<input type="checkbox"/>	✓			
sample 25		<input type="checkbox"/>	✓			
sample 26		<input type="checkbox"/>	✓			
sample 27		<input type="checkbox"/>	✓			
sample 28		<input type="checkbox"/>	✓			
sample 29		<input type="checkbox"/>	✓			
sample 30		<input type="checkbox"/>	✓			
sample 31		<input type="checkbox"/>	✓			
sample 32		<input type="checkbox"/>	✓			
sample 33		<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\2018-06-20\2018-06-20_003.xad

Created: 6/20/2018 3:00:48 PM
Modified: 6/20/2018 3:41:14 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

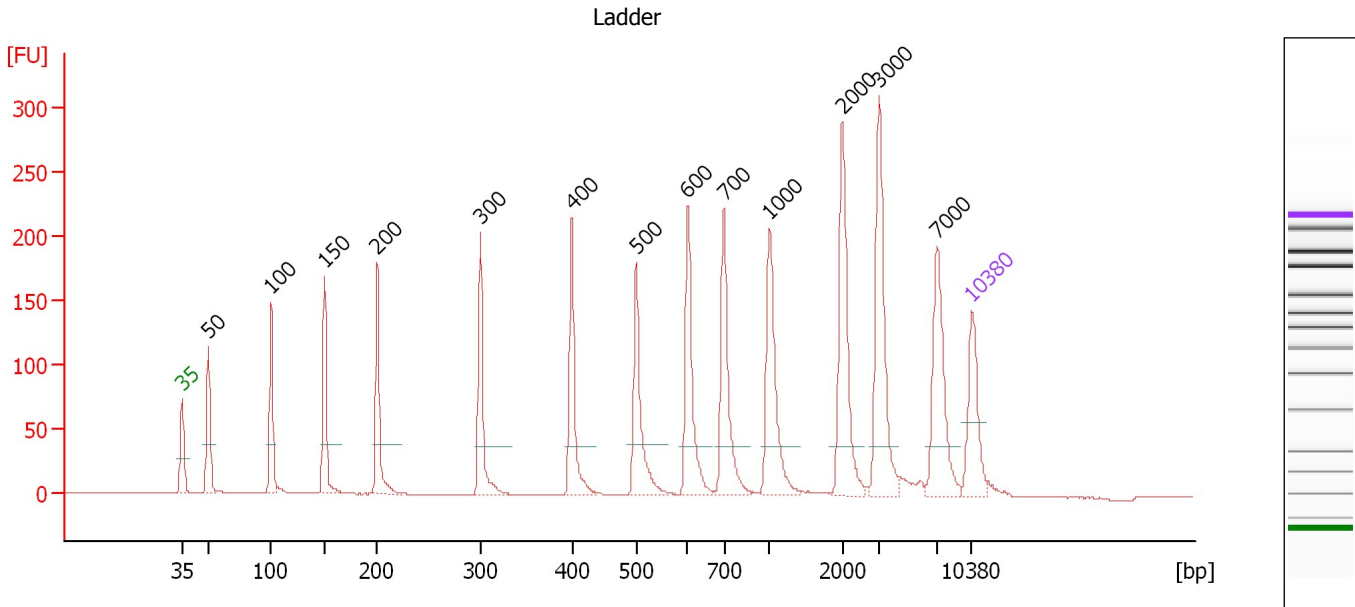
Ladder

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\2018-06-20\2018-06-20_003.xad

Created: 6/20/2018 3:00:48 PM
 Modified: 6/20/2018 3:41:14 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

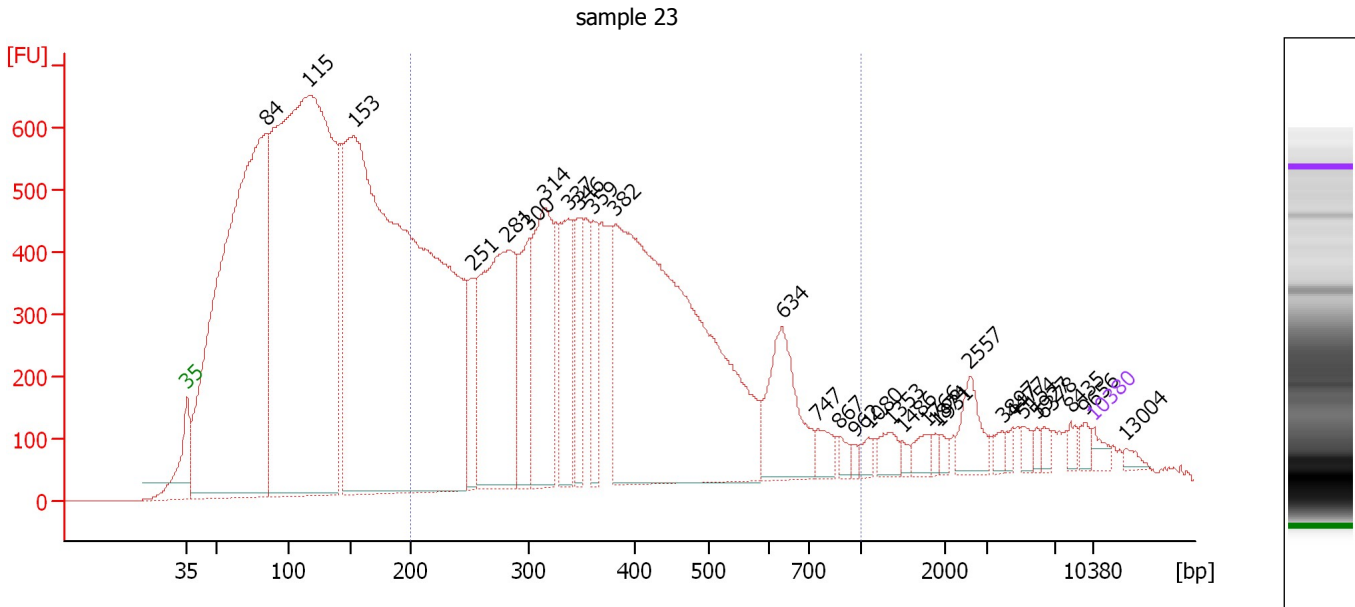
Peak table for Ladder

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	45.32
3	100	150.00	2,272.7	Ladder Peak	50.90
4	150	150.00	1,515.2	Ladder Peak	55.63
5	200	150.00	1,136.4	Ladder Peak	60.31
6	300	150.00	757.6	Ladder Peak	69.44
7	400	150.00	568.2	Ladder Peak	77.57
8	500	150.00	454.5	Ladder Peak	83.25
9	600	150.00	378.8	Ladder Peak	87.84
10	700	150.00	324.7	Ladder Peak	91.05
11	1,000	150.00	227.3	Ladder Peak	95.07
12	2,000	150.00	113.6	Ladder Peak	101.55
13	3,000	150.00	75.8	Ladder Peak	104.82
14	7,000	150.00	32.5	Ladder Peak	109.93
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-20\2018-06-20_003.xad

Created: 6/20/2018 3:00:48 PM
 Modified: 6/20/2018 3:41:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 23

Number of peaks found: 30 Corr. Area 1: 15,693.4
 Noise: 0.4

Peak table for sample 1 : sample 23

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	84	11,924.89	215,605.0		49.09
3	115	15,177.53	199,527.2		52.34
4	153	16,792.18	166,147.2		55.92
5	251	695.83	4,198.7		64.98
6	281	3,108.06	16,740.5		67.73
7	300	1,031.09	5,211.2		69.42
8	314	1,891.57	9,114.9		70.61
9	337	1,118.38	5,032.9		72.42
10	346	693.55	3,038.9		73.16
11	359	661.40	2,787.9		74.28
12	382	6,947.86	27,578.7		76.09
13	634	1,049.23	2,508.2		88.93
14	747	189.00	383.4		91.68
15	867	90.70	158.6		93.29
16	962	45.41	71.5		94.56
17	1,080	77.55	108.8		95.59
18	1,353	148.30	166.1		97.36
19	1,486	48.96	49.9		98.23
20	1,766	114.06	97.9		100.04
21	1,874	46.70	37.8		100.74
22	1,931	54.23	42.5		101.11
23	2,557	294.29	174.4		103.37
24	3,897	72.27	28.1		105.96
25	4,477	42.90	14.5		106.70

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-20\2018-06-20_003.xad

Created: 6/20/2018 3:00:48 PM
 Modified: 6/20/2018 3:41:14 PM

Electropherogram Summary Continued ...

... Peak table for sample 1 : sample 23

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	5,154	72.30	21.3		107.57
27	5,927	42.58	10.9		108.56
28	6,378	64.50	15.3		109.13
29	8,435	60.66	10.9		111.23
30	9,656	70.58	11.1		112.34
31	10,380	75.00	10.9	Upper Marker	113.00
32	13,004	0.00	0.0		115.39

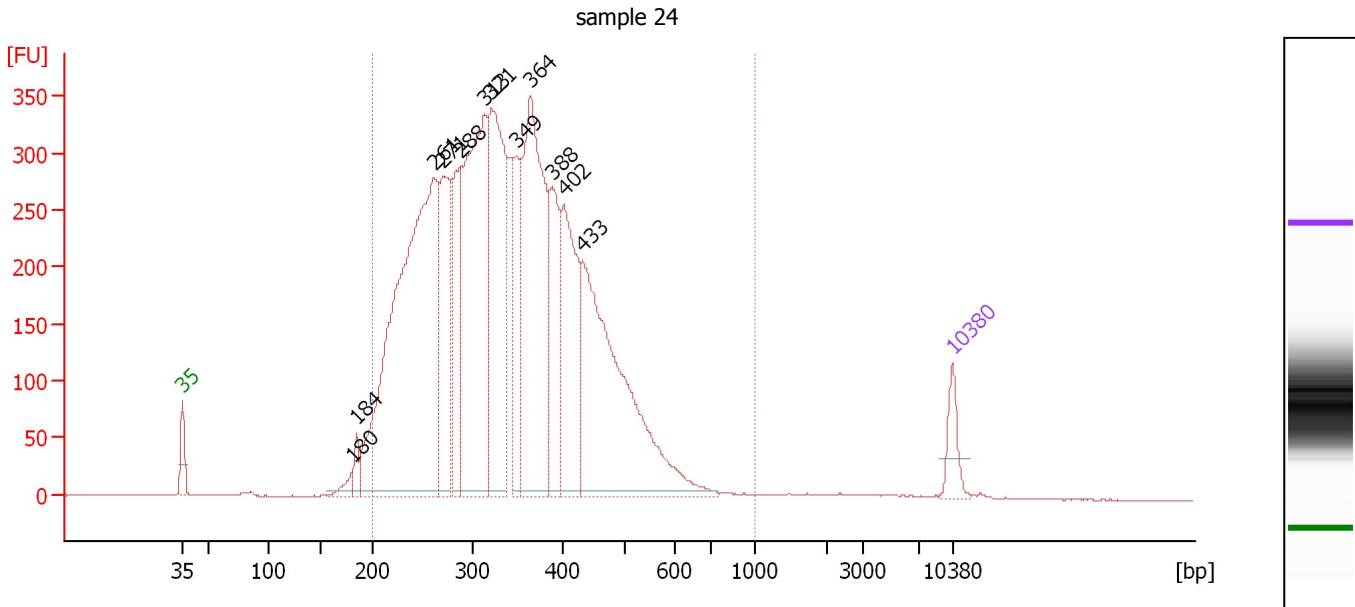
Region table for sample 1 : sample 23

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/ μ l]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	378	24,159.62	15,693.4	113,607.7	 43	36.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-20\2018-06-20_003.xad

Created: 6/20/2018 3:00:48 PM
 Modified: 6/20/2018 3:41:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 24

Number of peaks found: 12 Corr. Area 1: 8,374.8
 Noise: 0.4

Peak table for sample 2 : sample 24

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	180	46.27	388.8		58.46
3	184	58.52	480.8		58.85
4	261	2,279.60	13,232.5		65.88
5	271	532.17	2,980.0		66.75
6	288	425.81	2,239.3		68.35
7	313	1,193.65	5,780.6		70.49
8	321	920.22	4,348.7		71.12
9	349	299.12	1,300.0		73.39
10	364	1,104.46	4,595.9		74.66
11	388	415.48	1,622.7		76.59
12	402	529.96	1,995.6		77.71
13	433	1,203.66	4,210.6		79.45
14	10,380	75.00	10.9	Upper Marker	113.00

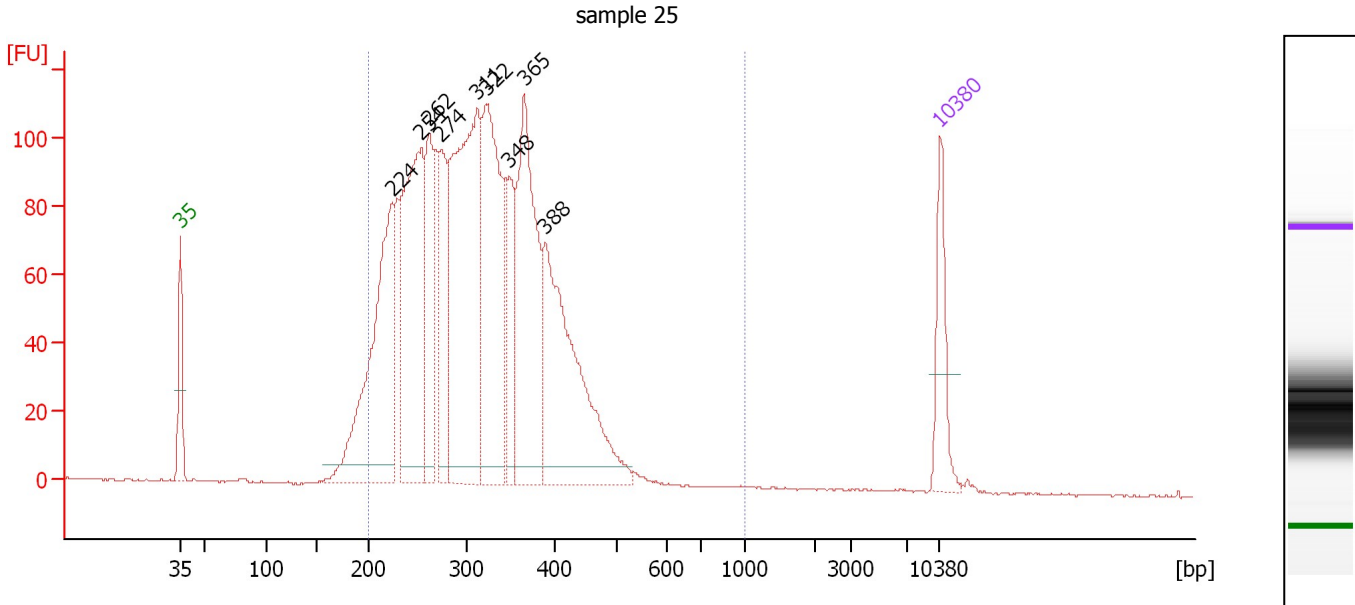
Region table for sample 2 : sample 24

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	345	9,183.34	8,374.8	44,036.2	97	26.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-20\2018-06-20_003.xad

Created: 6/20/2018 3:00:48 PM
 Modified: 6/20/2018 3:41:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 25

Number of peaks found: 9 Corr. Area 1: 2,509.5
 Noise: 0.3

Peak table for sample 3 : sample 25

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	224	462.00	3,125.0		62.50
3	254	464.73	2,776.6		65.20
4	262	178.98	1,036.3		65.94
5	274	168.17	929.8		67.07
6	311	585.72	2,850.5		70.36
7	322	408.23	1,923.3		71.20
8	348	106.69	464.3		73.36
9	365	378.39	1,570.4		74.73
10	388	414.17	1,617.2		76.60
11	10,380	75.00	10.9	Upper Marker	113.00

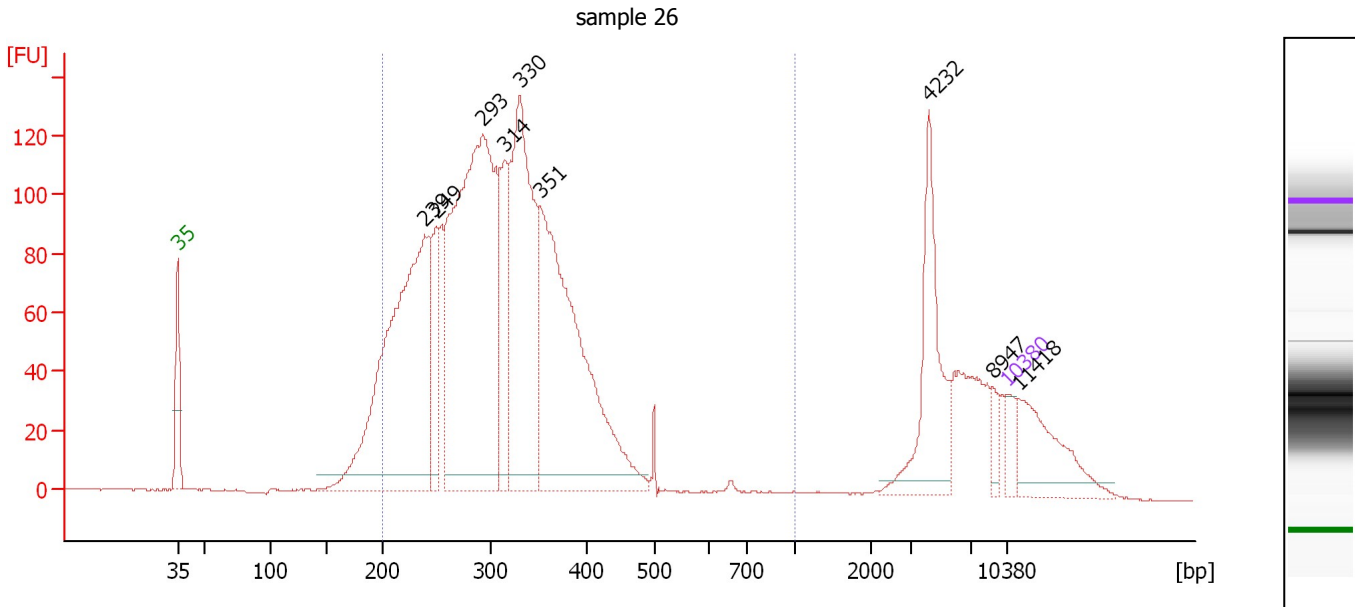
Region table for sample 3 : sample 25

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	317	3,337.68	2,509.5	17,032.8	96	23.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-20\2018-06-20_003.xad

Created: 6/20/2018 3:00:48 PM
 Modified: 6/20/2018 3:41:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 26

Number of peaks found: 9 Corr. Area 1: 2,613.8
 Noise: 0.2

Peak table for sample 4 : sample 26

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	239	2,622.47	16,633.1		63.86
3	249	404.22	2,457.4		64.80
4	293	3,177.57	16,455.8		68.76
5	314	583.87	2,814.5		70.60
6	330	1,671.06	7,677.2		71.86
7	351	2,233.74	9,647.9		73.57
8	4,232	547.22	195.9		106.39
9	8,947	69.62	11.8		111.70
10	10,380	75.00	10.9	Upper Marker	113.00
11	11,418	0.00	0.0		113.94

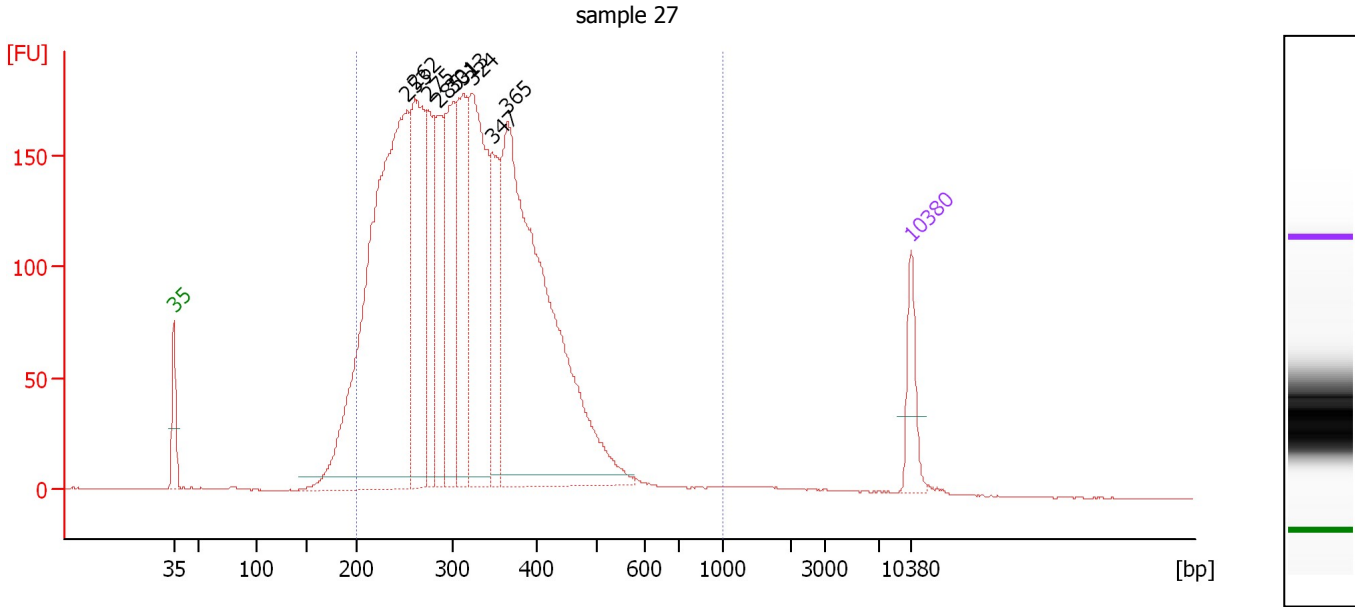
Region table for sample 4 : sample 26

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	311	10,808.97	2,613.8	55,837.1	80	23.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-20\2018-06-20_003.xad

Created: 6/20/2018 3:00:48 PM
 Modified: 6/20/2018 3:41:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 27

Number of peaks found: 9 Corr. Area 1: 4,370.0
 Noise: 0.3

Peak table for sample 5 : sample 27

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	253	1,632.99	9,785.6		65.13
3	262	542.26	3,139.2		65.95
4	275	256.86	1,415.0		67.16
5	285	281.97	1,498.9		68.07
6	301	359.45	1,811.6		69.49
7	313	358.00	1,732.5		70.50
8	324	591.64	2,764.3		71.42
9	347	216.46	944.3		73.29
10	365	1,375.30	5,712.7		74.71
11	10,380	75.00	10.9	Upper Marker	113.00

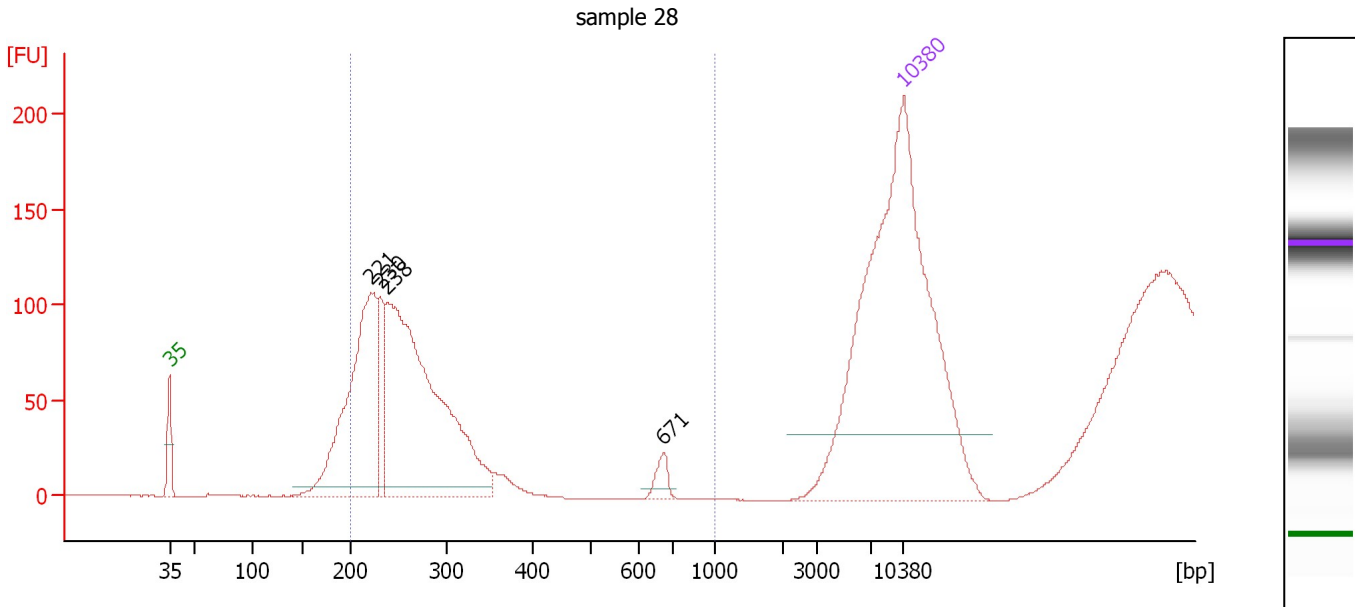
Region table for sample 5 : sample 27

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	323	5,635.90	4,370.0	28,547.1	95	26.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-20\2018-06-20_003.xad

Created: 6/20/2018 3:00:48 PM
 Modified: 6/20/2018 3:41:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 28

Number of peaks found: 4 Corr. Area 1: 761.7
 Noise: 0.3

Peak table for sample 6 : sample 28

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	221	55.19	378.6		62.22
3	230	10.84	71.3		63.08
4	238	90.17	573.7		63.79
5	671	2.75	6.2		90.12
6	10,380	75.00	10.9	Upper Marker	113.00

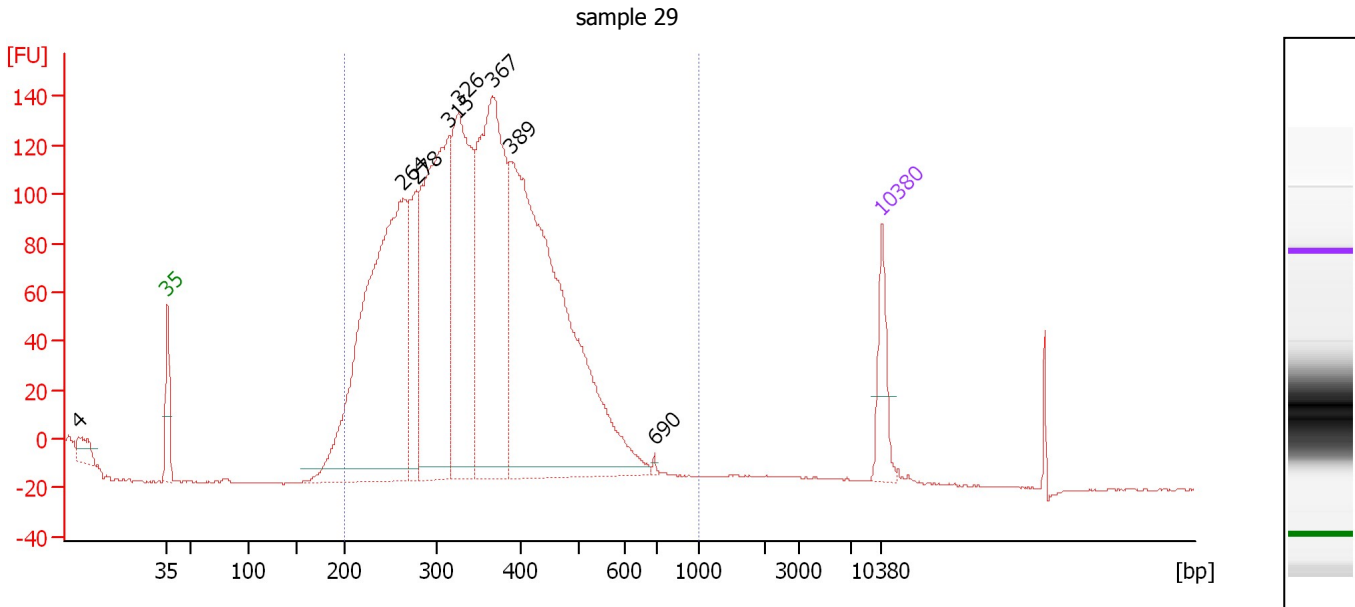
Region table for sample 6 : sample 28

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	242	75.02	761.7	469.7	89	10.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-20\2018-06-20_003.xad

Created: 6/20/2018 3:00:48 PM
 Modified: 6/20/2018 3:41:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 29

Number of peaks found: 8 Corr. Area 1: 3,381.5
 Noise: 0.2

Peak table for sample 7 : sample 29

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	4	0.00	0.0		34.28
2	35	125.00	5,411.3	Lower Marker	43.00
3	264	1,197.25	6,874.4		66.14
4	278	224.30	1,224.2		67.40
5	315	762.30	3,670.3		70.63
6	326	594.62	2,767.0		71.52
7	367	790.59	3,260.8		74.92
8	389	1,290.62	5,024.7		76.69
9	690	3.80	8.3		90.75
10	10,380	75.00	10.9	Upper Marker	113.00

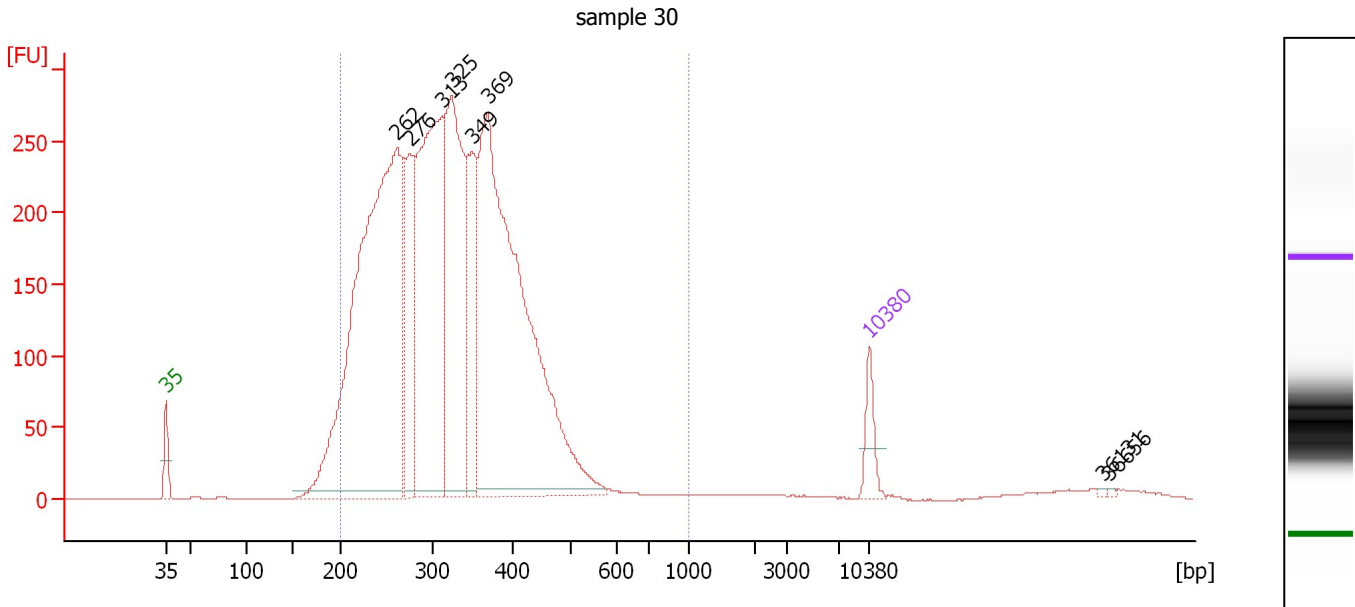
Region table for sample 7 : sample 29

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	350	4,424.11	3,381.5	20,783.0	99	24.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-20\2018-06-20_003.xad

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 Modified: 6/20/2018 3:41:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 30

Number of peaks found: 8 Corr. Area 1: 6,236.3
 Noise: 0.2

Peak table for sample 8 : sample 30

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	262	2,677.69	15,468.0		66.00
3	276	462.42	2,536.2		67.27
4	313	1,401.24	6,779.1		70.51
5	325	1,022.52	4,768.0		71.47
6	349	453.72	1,969.3		73.43
7	369	2,254.62	9,265.9		75.03
8	10,380	75.00	10.9	Upper Marker	113.00
9	36,131	0.00	0.0		136.42
10	36,656	0.00	0.0		136.90

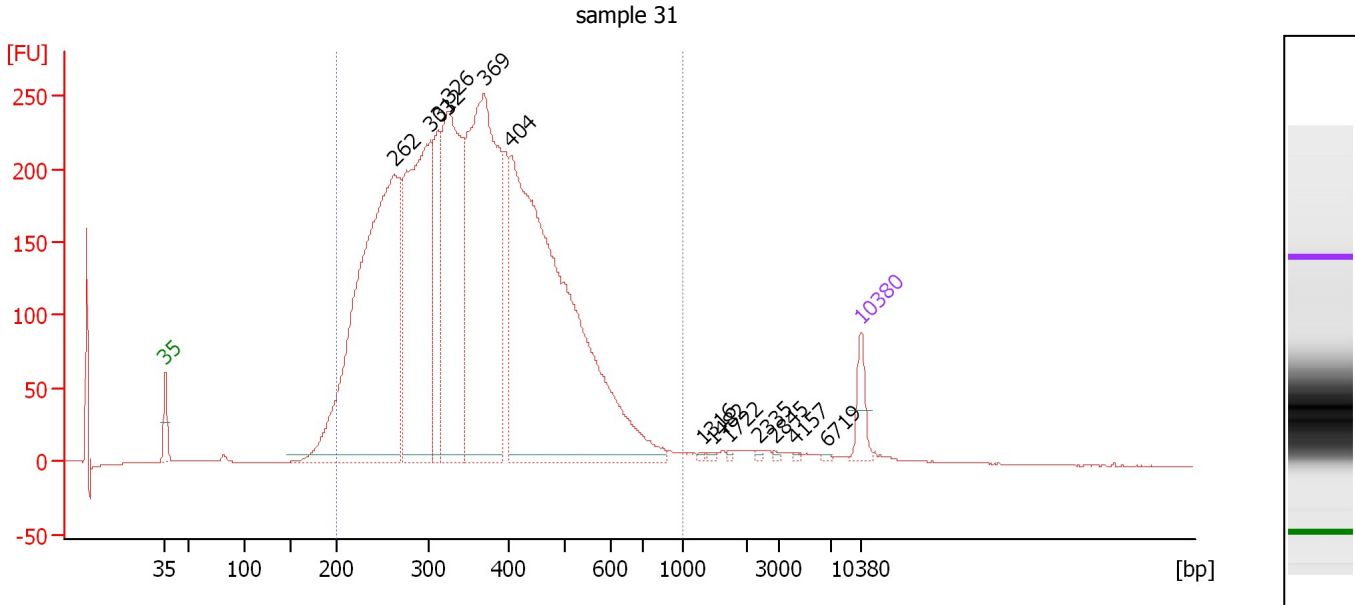
Region table for sample 8 : sample 30

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	325	8,274.55	6,236.3	41,312.4	96	24.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-20\2018-06-20_003.xad

Created: 6/20/2018 3:00:48 PM
 Modified: 6/20/2018 3:41:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 31

Number of peaks found: 13 Corr. Area 1: 6,447.0
 Noise: 0.2

Peak table for sample 9 : sample 31

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	262	2,389.33	13,793.8		66.01
3	303	1,379.18	6,888.4		69.71
4	312	386.67	1,878.2		70.41
5	326	1,075.73	5,003.1		71.54
6	369	1,670.53	6,853.8		75.08
7	404	2,529.35	9,481.5		77.81
8	1,316	5.36	6.2		97.12
9	1,482	6.92	7.1		98.20
10	1,722	5.27	4.6		99.75
11	2,335	5.70	3.7		102.65
12	2,845	5.61	3.0		104.31
13	4,157	4.71	1.7		106.30
14	6,719	4.99	1.1		109.57
15	10,380	75.00	10.9	Upper Marker	113.00

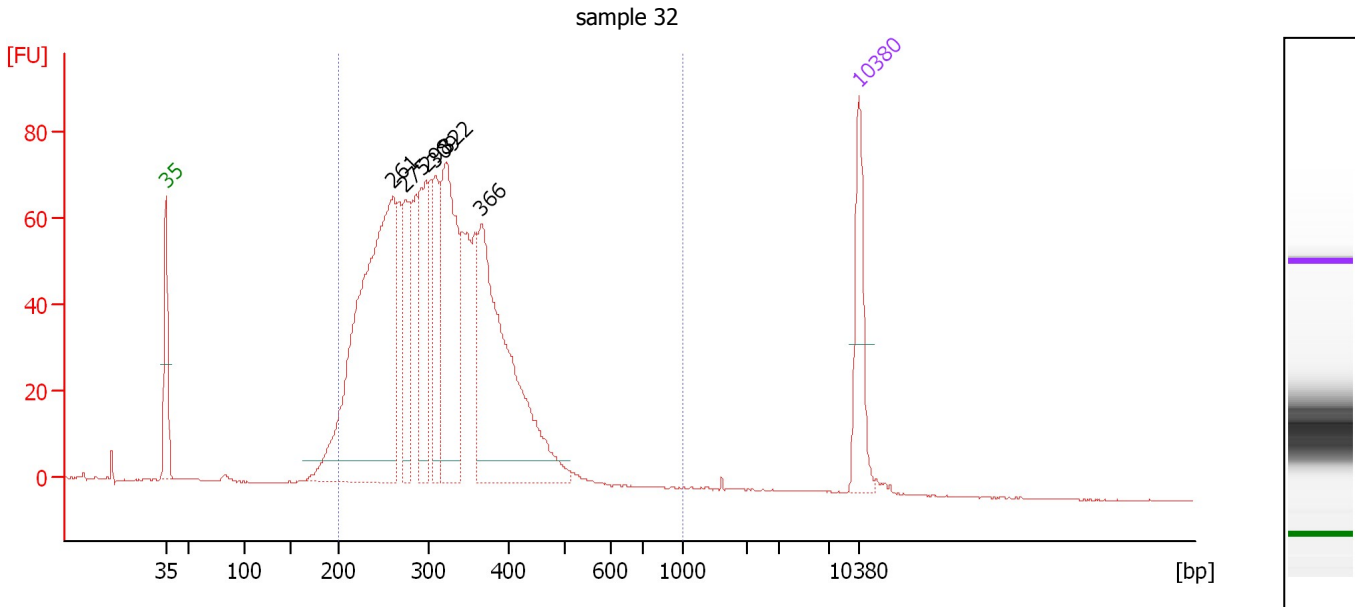
Region table for sample 9 : sample 31

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	367	9,660.93	6,447.0	44,564.7	94	29.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-20\2018-06-20_003.xad

Created: 6/20/2018 3:00:48 PM
 Modified: 6/20/2018 3:41:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 32

Number of peaks found: 6 Corr. Area 1: 1,477.5
 Noise: 0.2

Peak table for sample 10 : sample 32

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	261	671.76	3,898.8		65.88
3	275	132.34	730.2		67.12
4	298	139.95	712.4		69.22
5	309	100.92	494.5		70.19
6	322	265.51	1,247.4		71.27
7	366	404.99	1,675.7		74.82
8	10,380	75.00	10.9	Upper Marker	113.00

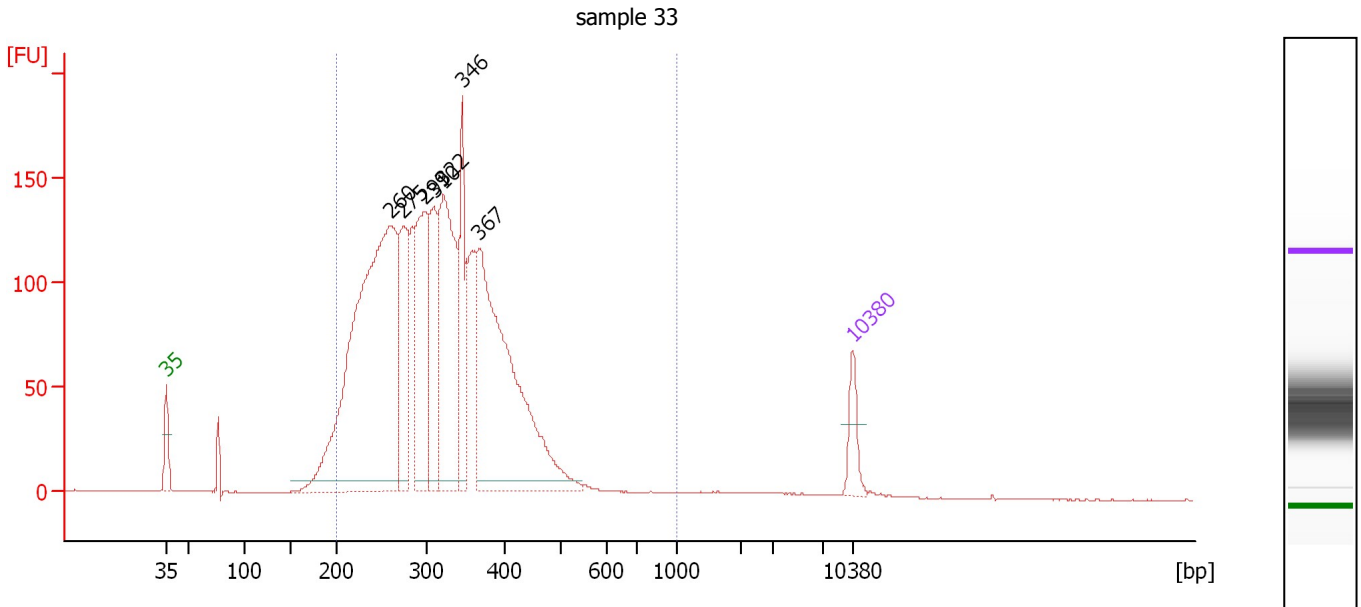
Region table for sample 10 : sample 32

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	316	2,190.49	1,477.5	11,152.9	97	22.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-20\2018-06-20_003.xad

Created: 6/20/2018 3:00:48 PM
 Modified: 6/20/2018 3:41:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 33

Number of peaks found: 7 Corr. Area 1: 2,992.0
 Noise: 0.1

Peak table for sample 11 : sample 33

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	260	2,067.05	12,053.9		65.77
3	275	391.41	2,158.8		67.13
4	299	510.29	2,590.0		69.30
5	310	324.65	1,584.9		70.28
6	322	763.84	3,589.8		71.26
7	346	266.80	1,169.1		73.16
8	367	1,207.39	4,982.6		74.90
9	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 11 : sample 33

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	318	6,006.74	2,992.0	30,441.9	96	23.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-20\2018-06-20_003.xad

Created: 6/20/2018 3:00:48 PM
Modified: 6/20/2018 3:41:14 PM

Gel Image

