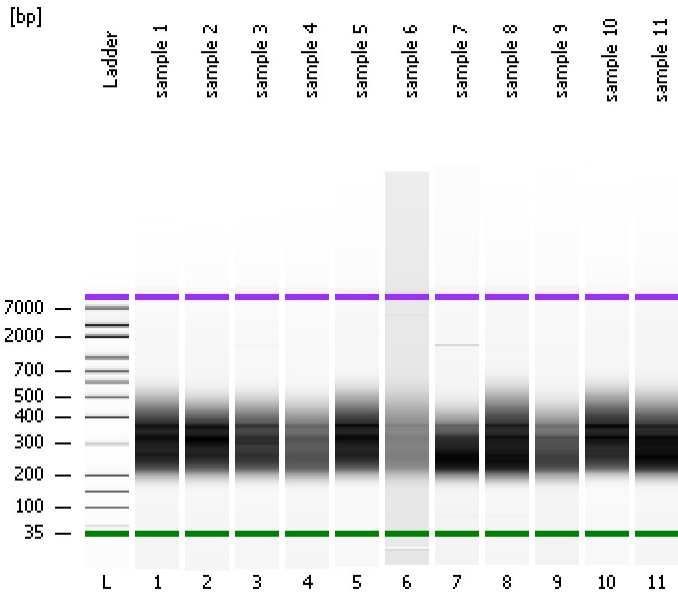


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-19\2018-06-19\_004.xad

Created: 6/19/2018 3:59:12 PM  
Modified: 6/19/2018 4:39:34 PM

**Electrophoresis File Run Summary**



Instrument Information:

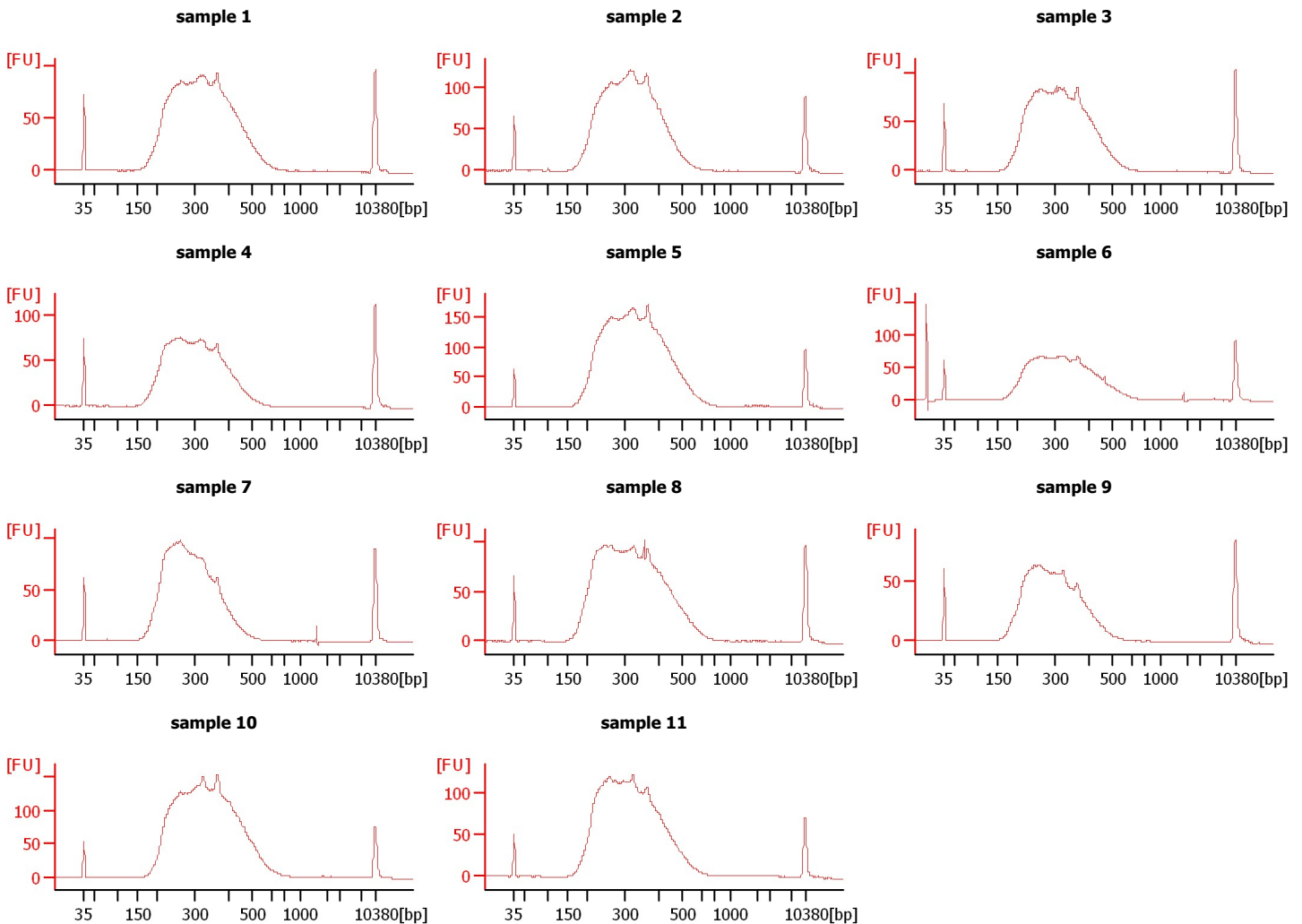
Instrument Name: DE34903152      Firmware: C.01.069  
Serial#: DE34903152      Type: G2938C

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:



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-19\2018-06-19\_004.xad

Created: 6/19/2018 3:59:12 PM  
Modified: 6/19/2018 4:39:34 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\2018-06-19\2018-06-19\_004.xad

Created: 6/19/2018 3:59:12 PM  
Modified: 6/19/2018 4:39:34 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

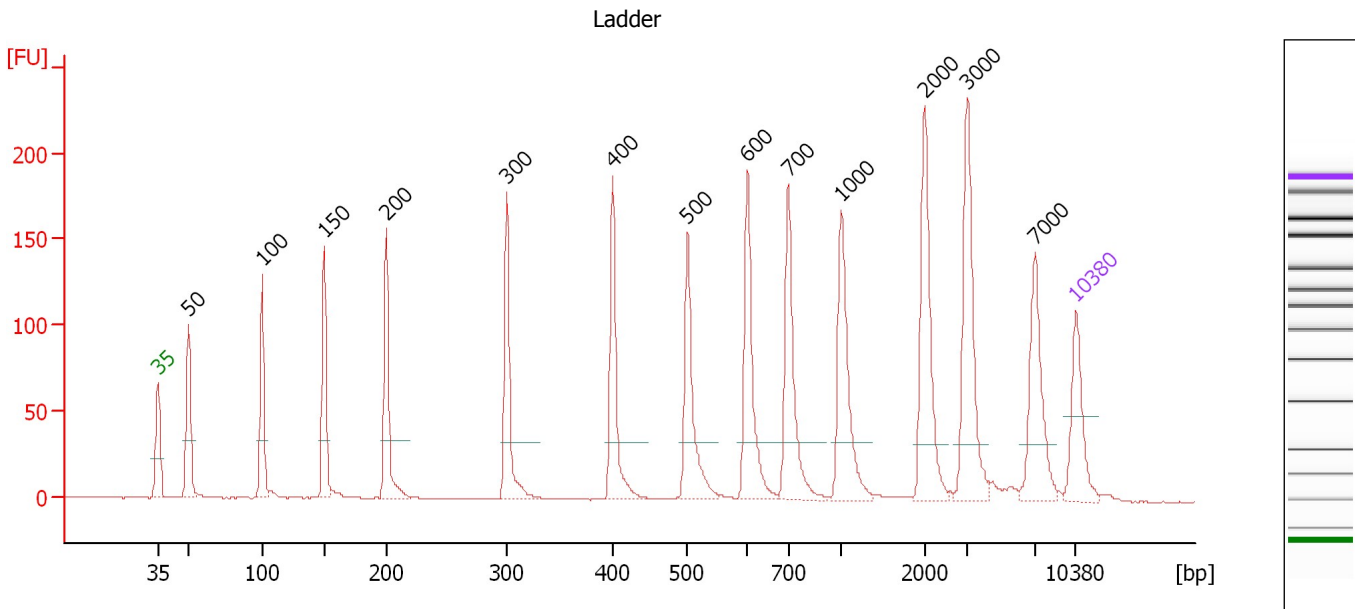
**Ladder**

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\2018-06-19\2018-06-19\_004.xad

Created: 6/19/2018 3:59:12 PM  
 Modified: 6/19/2018 4:39:34 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.3

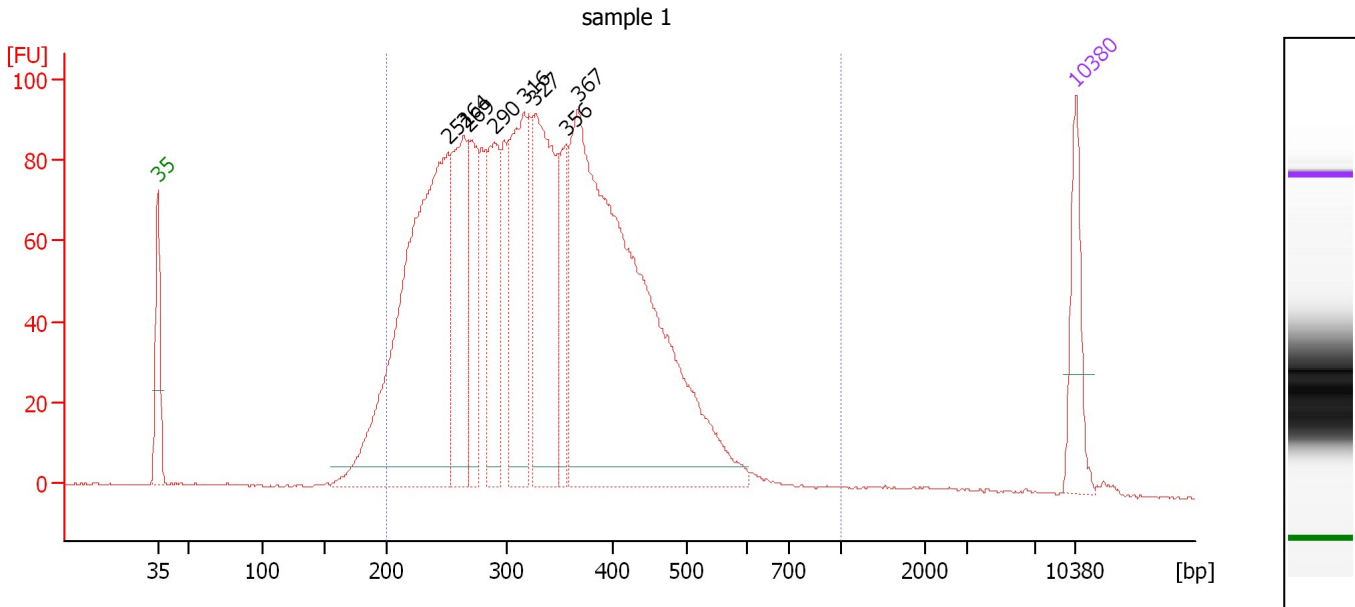
**Peak table for Ladder**

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	50.97
4	150	150.00	1,515.2	Ladder Peak	55.74
5	200	150.00	1,136.4	Ladder Peak	60.46
6	300	150.00	757.6	Ladder Peak	69.61
7	400	150.00	568.2	Ladder Peak	77.68
8	500	150.00	454.5	Ladder Peak	83.39
9	600	150.00	378.8	Ladder Peak	87.96
10	700	150.00	324.7	Ladder Peak	91.06
11	1,000	150.00	227.3	Ladder Peak	95.09
12	2,000	150.00	113.6	Ladder Peak	101.44
13	3,000	150.00	75.8	Ladder Peak	104.74
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\2018-06-19\2018-06-19\_004.xad

Created: 6/19/2018 3:59:12 PM  
 Modified: 6/19/2018 4:39:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : sample 1**

Number of peaks found: 8                      Corr. Area 1: 2,427.4  
 Noise: 0.3

**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	251	836.45	5,047.0		65.14
3	264	239.55	1,374.0		66.33
4	269	161.60	911.9		66.73
5	290	197.18	1,031.2		68.67
6	316	266.84	1,279.1		70.91
7	327	329.73	1,526.9		71.81
8	356	106.21	451.8		74.14
9	367	1,060.53	4,375.2		75.04
10	10,380	75.00	10.9	Upper Marker	113.00

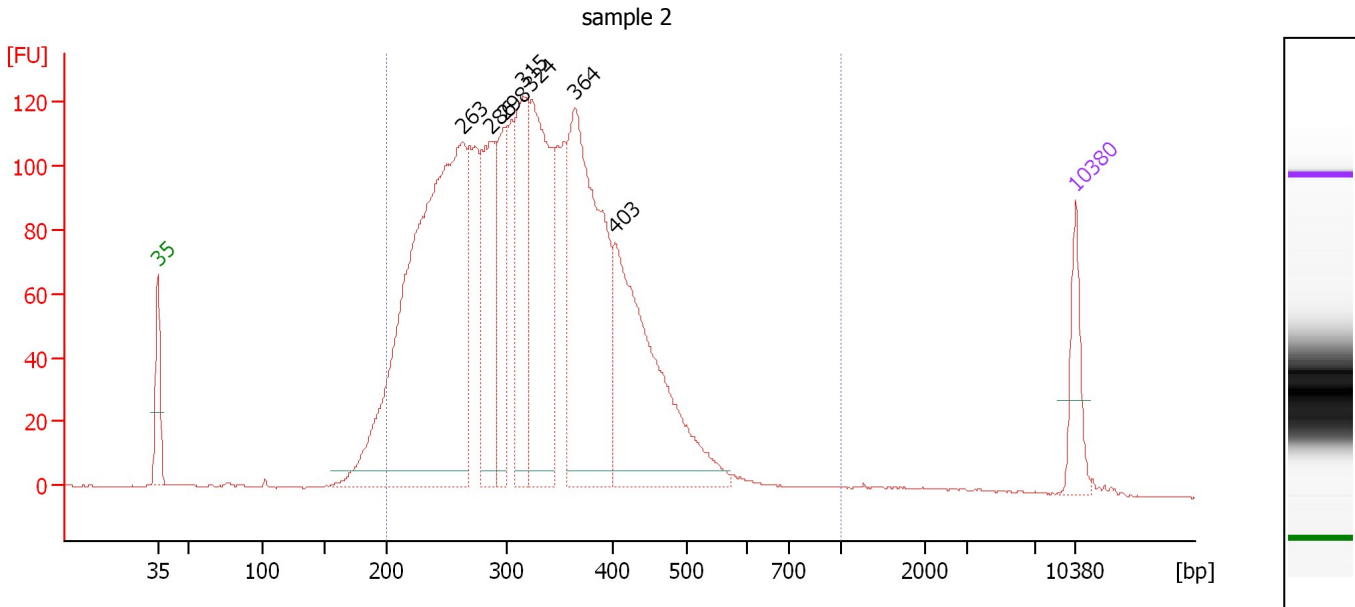
**Region table for sample 1 : sample 1**

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	337	3,402.08	2,427.4	16,695.9	96	27.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-19\2018-06-19\_004.xad

Created: 6/19/2018 3:59:12 PM  
 Modified: 6/19/2018 4:39:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : sample 2**

Number of peaks found: 7                      Corr. Area 1: 2,905.6  
 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	263	1,467.48	8,440.4		66.27
3	286	305.46	1,619.4		68.31
4	298	227.30	1,156.4		69.41
5	315	318.76	1,531.0		70.86
6	324	486.40	2,278.0		71.51
7	364	709.07	2,948.6		74.80
8	403	556.74	2,093.3		77.85
9	10,380	75.00	10.9	Upper Marker	113.00

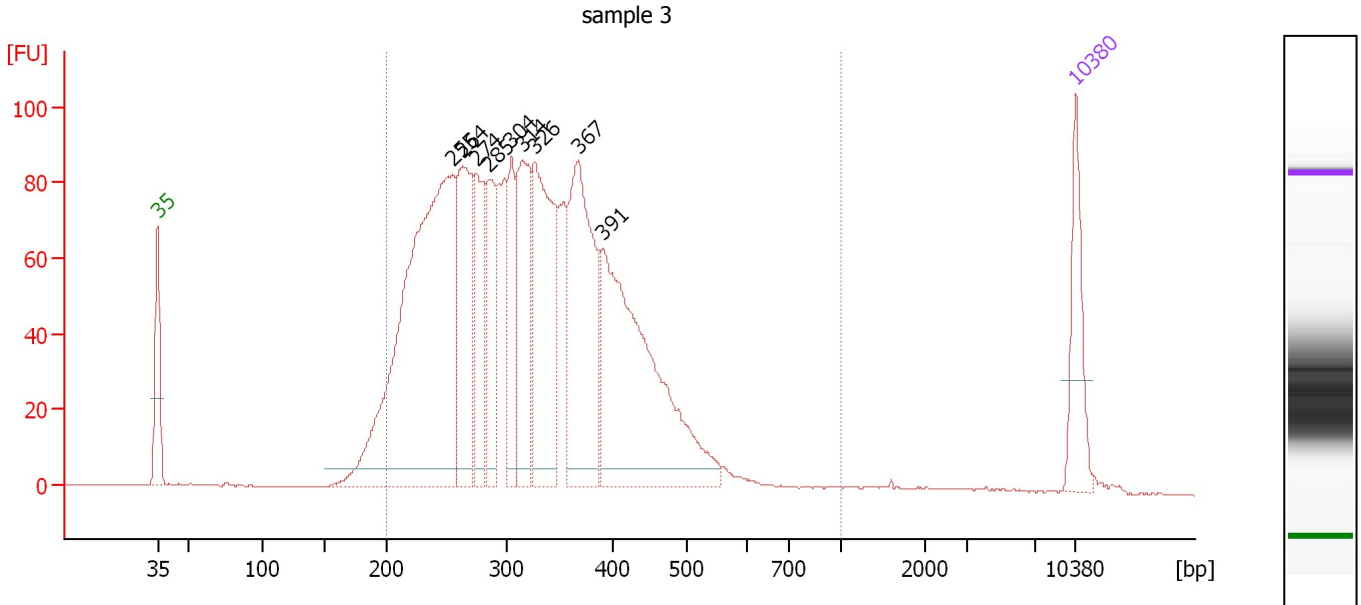
**Region table for sample 2 : sample 2**

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	330	4,729.65	2,905.6	23,495.2	95	26.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-19\2018-06-19\_004.xad

Created: 6/19/2018 3:59:12 PM  
 Modified: 6/19/2018 4:39:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : sample 3**

Number of peaks found: 9                      Corr. Area 1: 2,183.6  
 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	255	890.15	5,295.5		65.47
3	264	228.57	1,313.8		66.28
4	274	150.93	834.0		67.25
5	285	136.51	726.3		68.22
6	304	117.30	584.3		69.95
7	314	205.34	989.9		70.77
8	326	299.57	1,391.1		71.73
9	367	332.66	1,372.1		75.05
10	391	495.18	1,917.2		76.98
11	10,380	75.00	10.9	Upper Marker	113.00

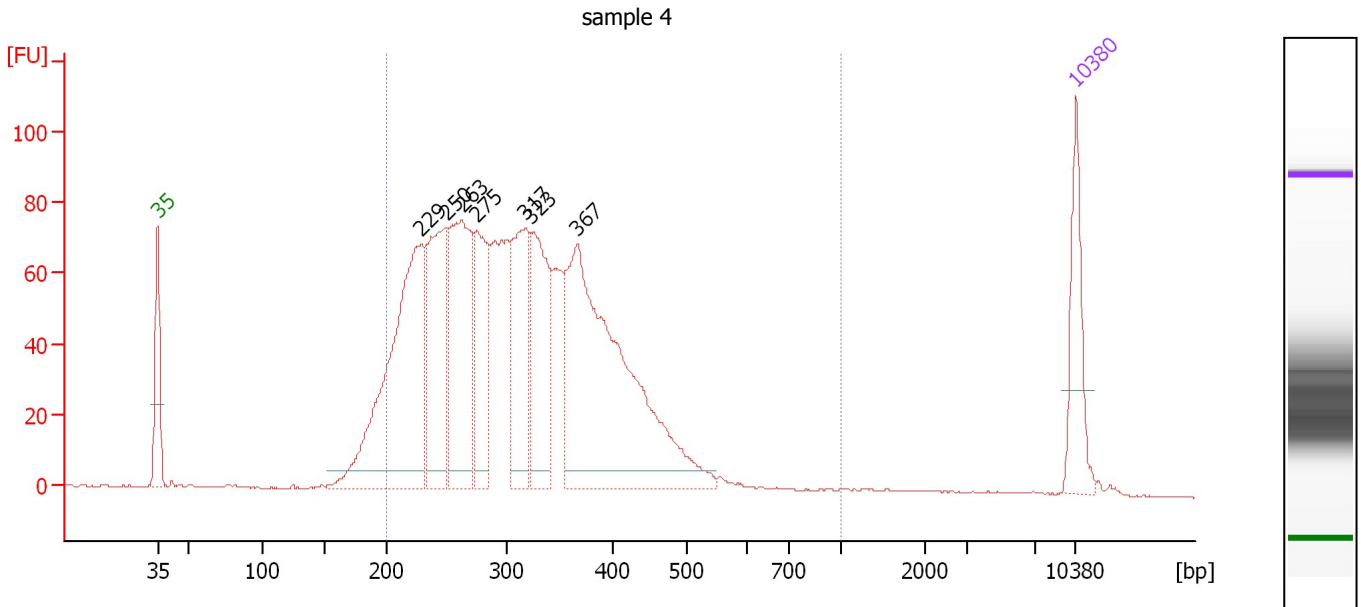
**Region table for sample 3 : sample 3**

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	328	3,170.50	2,183.6	15,864.4	95	26.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-19\2018-06-19\_004.xad

Created: 6/19/2018 3:59:12 PM  
 Modified: 6/19/2018 4:39:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : sample 4**

Number of peaks found: 7                      Corr. Area 1: 1,846.6  
 Noise: 0.2

**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	229	487.62	3,232.8		63.07
3	250	259.97	1,574.7		65.05
4	263	301.27	1,738.0		66.19
5	275	166.43	916.5		67.34
6	317	187.92	898.4		70.98
7	323	193.14	904.9		71.50
8	367	590.08	2,438.9		74.98
9	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : sample 4**

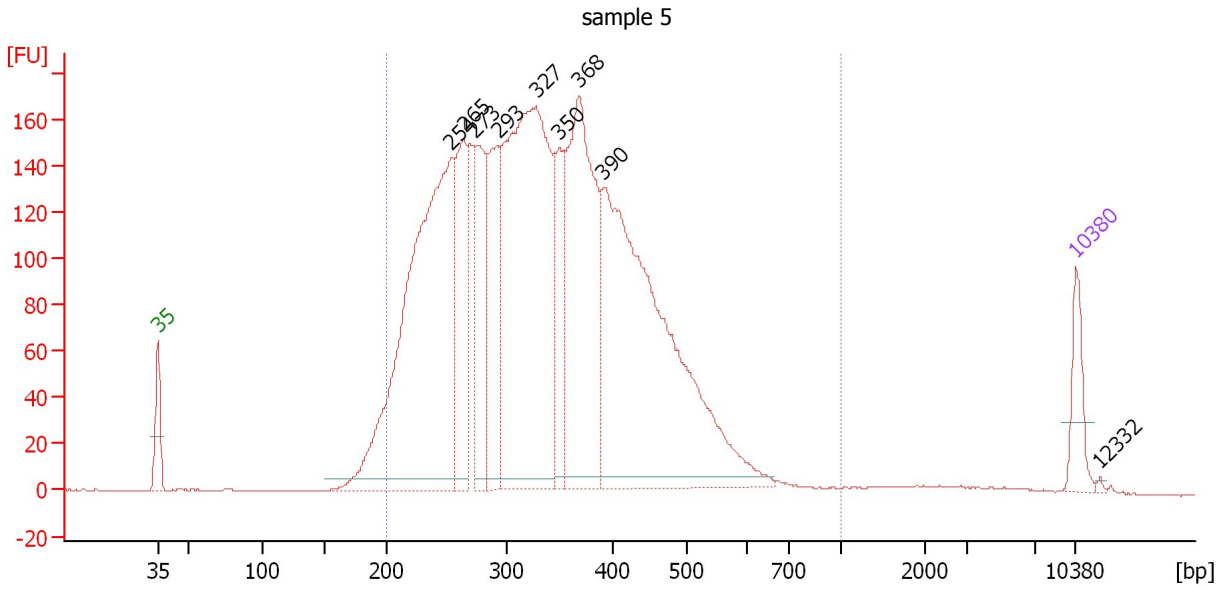
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	318	2,467.25	1,846.6	12,680.9	94	26.1



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-19\2018-06-19\_004.xad

Created: 6/19/2018 3:59:12 PM  
 Modified: 6/19/2018 4:39:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : sample 5**

Number of peaks found: 9                      Corr. Area 1: 4,194.5  
 Noise: 0.2

**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	254	1,421.15	8,476.5		65.41
3	265	393.07	2,251.2		66.37
4	273	328.60	1,821.6		67.17
5	293	313.40	1,622.9		68.94
6	327	1,306.74	6,047.3		71.82
7	350	196.17	849.4		73.64
8	368	766.34	3,156.6		75.09
9	390	1,321.45	5,128.9		76.90
10	10,380	75.00	10.9	Upper Marker	113.00
11	12,332	0.00	0.0		114.82

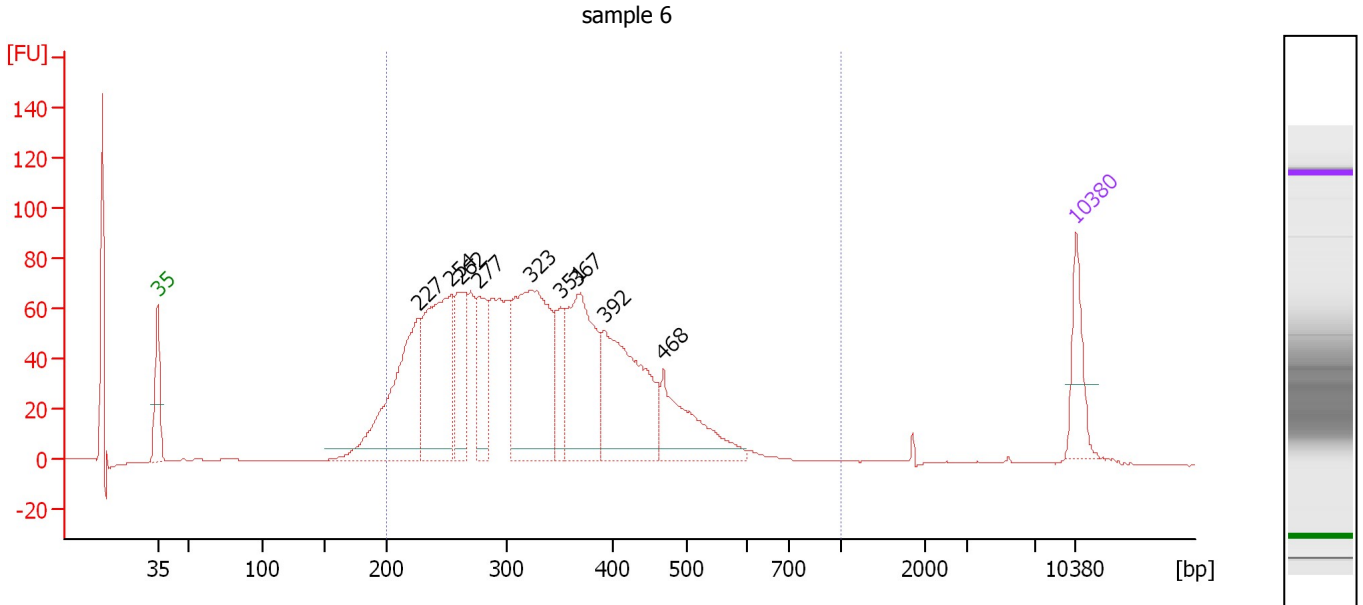
**Region table for sample 5 : sample 5**

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	343	6,232.84	4,194.5	30,137.1	96	27.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-19\2018-06-19\_004.xad

Created: 6/19/2018 3:59:12 PM  
 Modified: 6/19/2018 4:39:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : sample 6**

Number of peaks found: 9                      Corr. Area 1: 1,790.8  
 Noise: 0.2

**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	227	419.23	2,793.5		62.97
3	254	408.62	2,439.7		65.38
4	262	171.97	996.2		66.10
5	277	160.68	880.4		67.47
6	323	482.90	2,264.9		71.47
7	351	105.15	454.0		73.72
8	367	326.98	1,351.5		74.98
9	392	357.77	1,383.8		77.01
10	468	188.62	610.5		81.57
11	10,380	75.00	10.9	Upper Marker	113.00

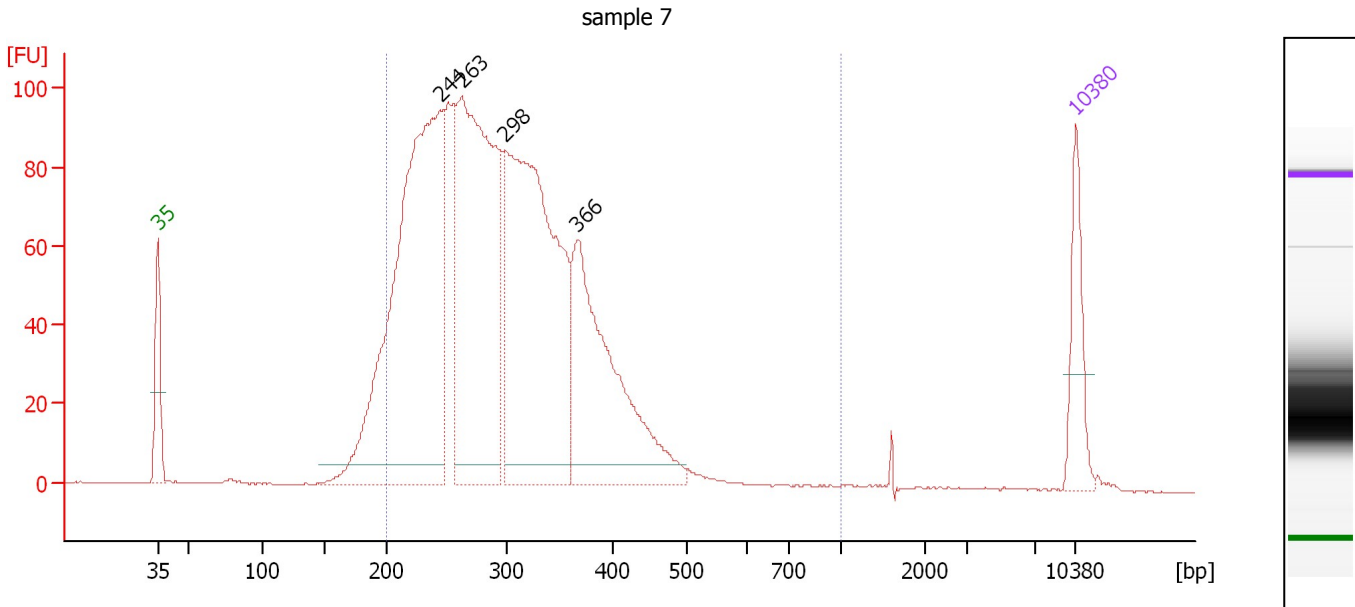
**Region table for sample 6 : sample 6**

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	336	2,949.88	1,790.8	14,594.0	91	27.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-19\2018-06-19\_004.xad

Created: 6/19/2018 3:59:12 PM  
 Modified: 6/19/2018 4:39:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : sample 7**

Number of peaks found: 4                      Corr. Area 1: 1,980.0  
 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	244	1,006.79	6,240.3		64.53
3	263	774.99	4,469.2		66.20
4	298	817.13	4,153.3		69.44
5	366	432.54	1,789.2		74.96
6	10,380	75.00	10.9	Upper Marker	113.00

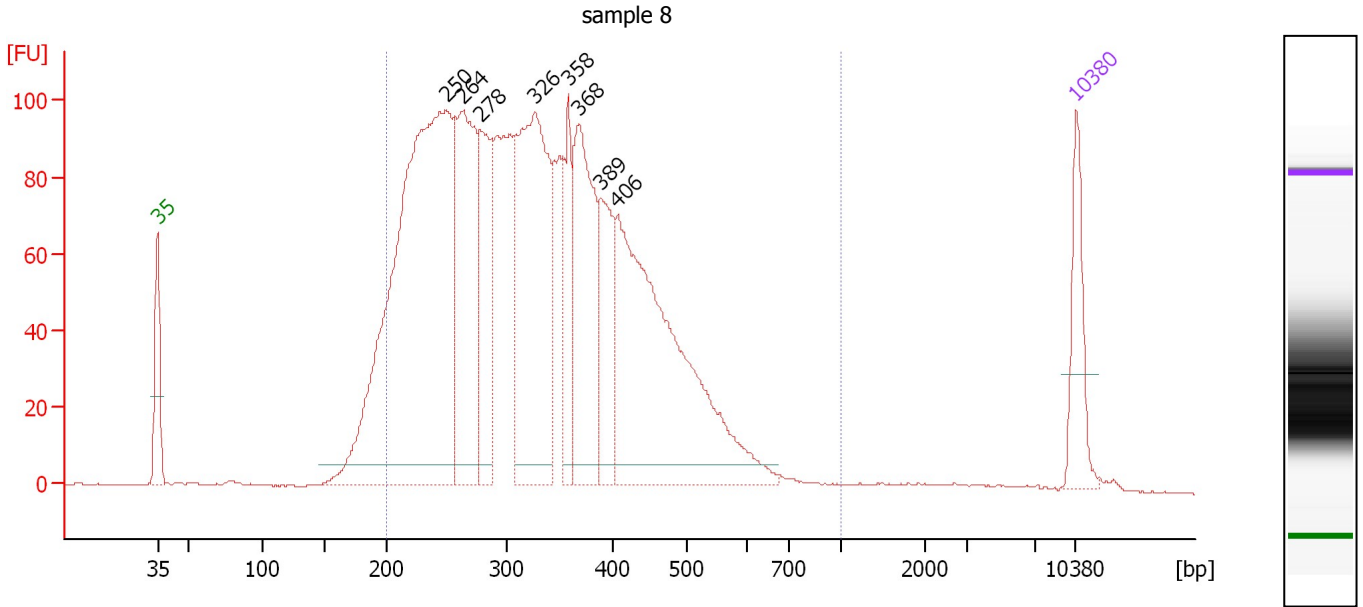
**Region table for sample 7 : sample 7**

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	301	3,091.86	1,980.0	16,518.3	94	23.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-19\2018-06-19\_004.xad

Created: 6/19/2018 3:59:12 PM  
 Modified: 6/19/2018 4:39:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : sample 8**

Number of peaks found: 8                      Corr. Area 1: 2,640.7  
 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	250	1,132.96	6,869.6		65.03
3	264	370.14	2,128.0		66.28
4	278	193.42	1,054.9		67.58
5	326	490.56	2,278.6		71.73
6	358	114.08	483.0		74.28
7	368	273.85	1,126.2		75.13
8	389	132.13	514.9		76.78
9	406	600.69	2,241.2		78.03
10	10,380	75.00	10.9	Upper Marker	113.00

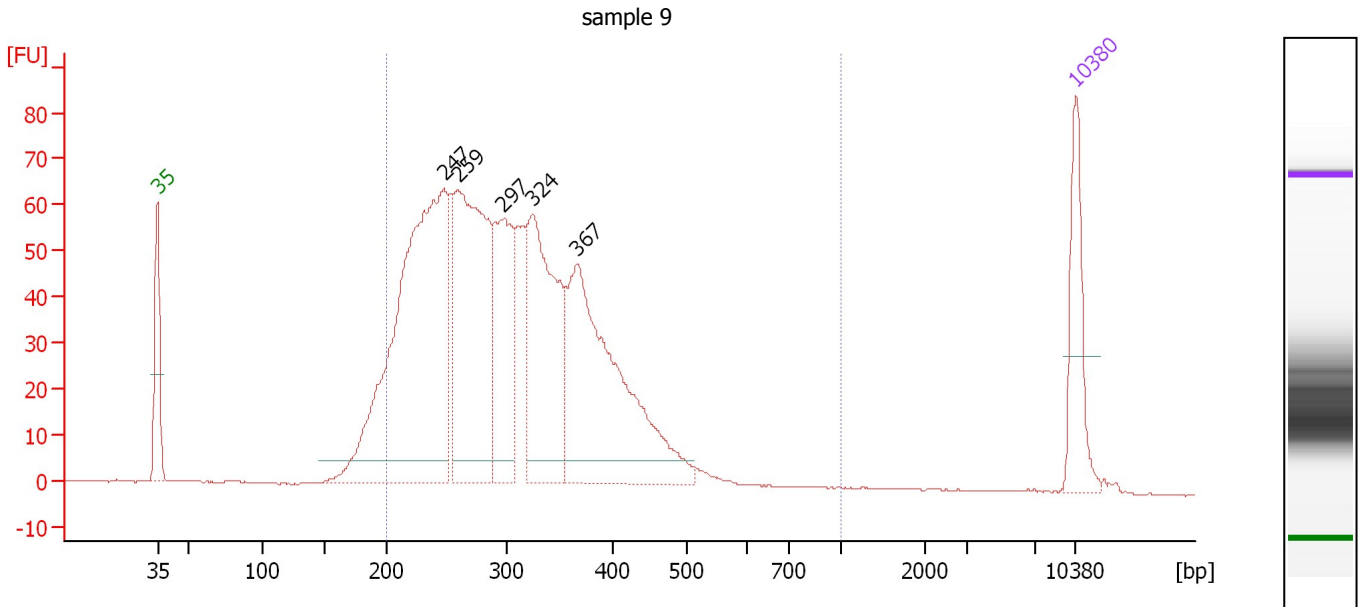
**Region table for sample 8 : sample 8**

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	337	3,659.54	2,640.7	18,186.7	94	29.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-19\2018-06-19\_004.xad

Created: 6/19/2018 3:59:12 PM  
 Modified: 6/19/2018 4:39:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : sample 9**

Number of peaks found: 5                      Corr. Area 1: 1,384.6  
 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	705.25	4,318.5		64.80
3	259	414.93	2,424.1		65.89
4	297	195.95	999.7		69.34
5	324	304.34	1,421.9		71.57
6	367	400.51	1,653.6		75.02
7	10,380	75.00	10.9	Upper Marker	113.00

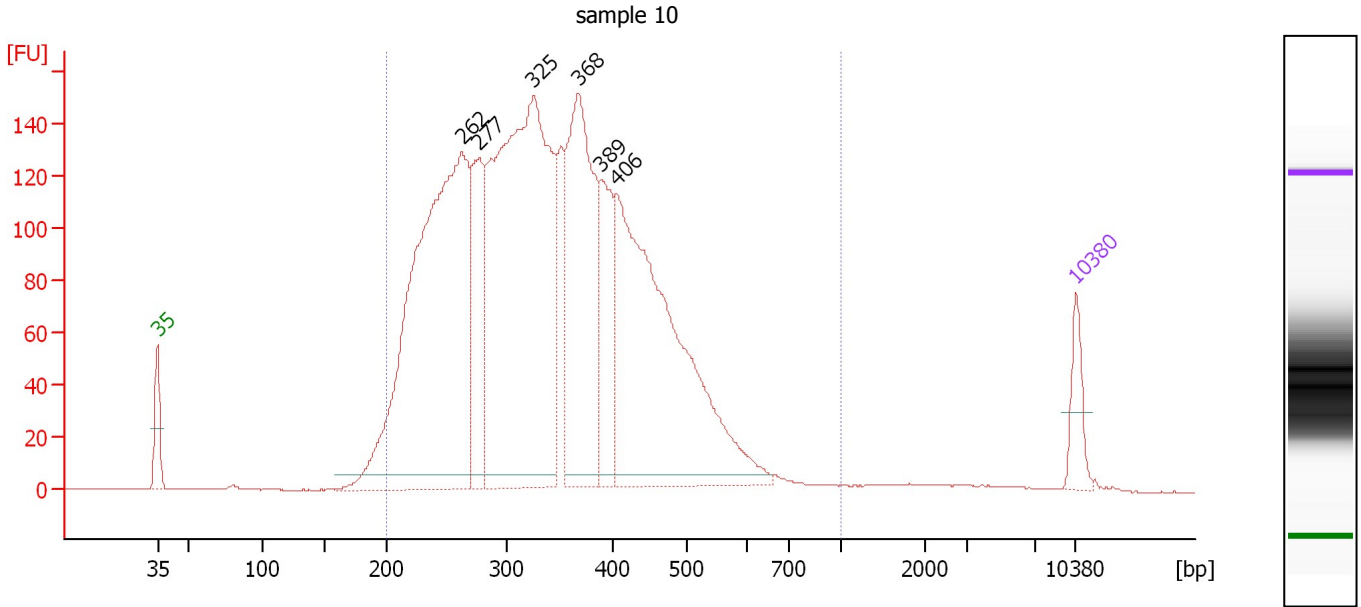
**Region table for sample 9 : sample 9**

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	310	2,127.60	1,384.6	11,143.1	94	25.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-19\2018-06-19\_004.xad

Created: 6/19/2018 3:59:12 PM  
 Modified: 6/19/2018 4:39:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : sample 10**

Number of peaks found: 6                      Corr. Area 1: 3,603.0  
 Noise: 0.1

**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	262	1,876.38	10,831.9		66.18
3	277	371.34	2,030.7		67.51
4	325	1,840.14	8,575.7		71.64
5	368	804.56	3,316.2		75.07
6	389	278.31	1,083.4		76.81
7	406	1,285.44	4,795.8		78.03
8	10,380	75.00	10.9	Upper Marker	113.00

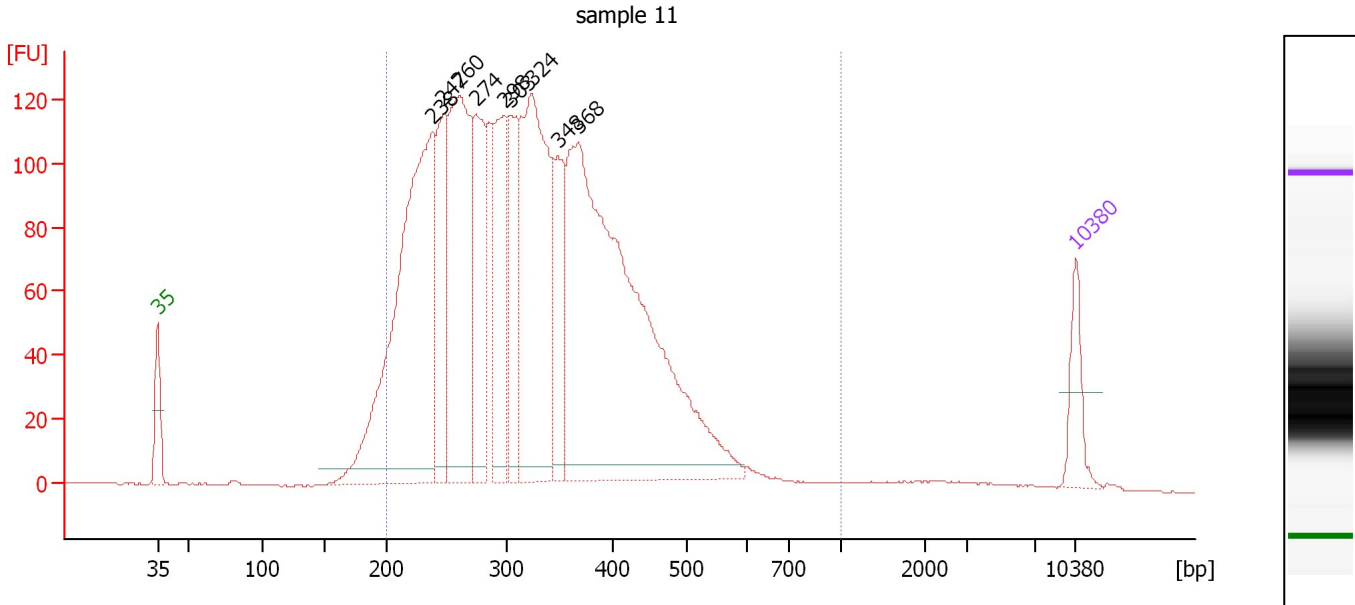
**Region table for sample 10 : sample 10**

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	348	6,806.36	3,603.0	32,510.2	97	27.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-19\2018-06-19\_004.xad

Created: 6/19/2018 3:59:12 PM  
 Modified: 6/19/2018 4:39:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : sample 11**

Number of peaks found: 9                      Corr. Area 1: 2,930.9  
 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	238	1,162.41	7,389.7		63.97
3	247	325.68	1,995.4		64.79
4	260	656.87	3,826.4		65.96
5	274	344.73	1,905.0		67.25
6	298	308.11	1,567.2		69.42
7	303	234.02	1,168.7		69.89
8	324	721.82	3,378.3		71.53
9	348	214.41	932.4		73.52
10	368	1,555.07	6,402.3		75.10
11	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : sample 11**

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	330	5,702.69	2,930.9	28,576.0	95	27.7

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-19\2018-06-19\_004.xad

Created: 6/19/2018 3:59:12 PM  
Modified: 6/19/2018 4:39:34 PM

**Gel Image**

