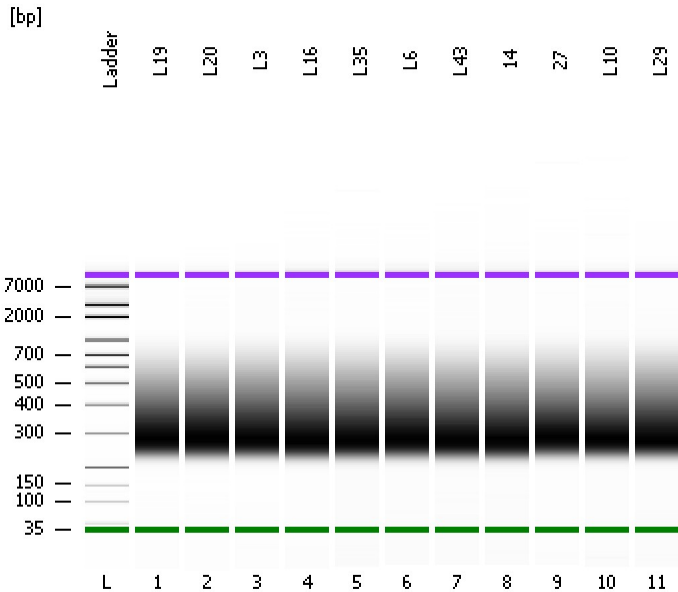


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-22\2018-06-22\_002.xad

Created: 6/22/2018 11:06:46 AM  
Modified: 6/22/2018 11:50:06 AM

**Electrophoresis File Run Summary**



Instrument Information:

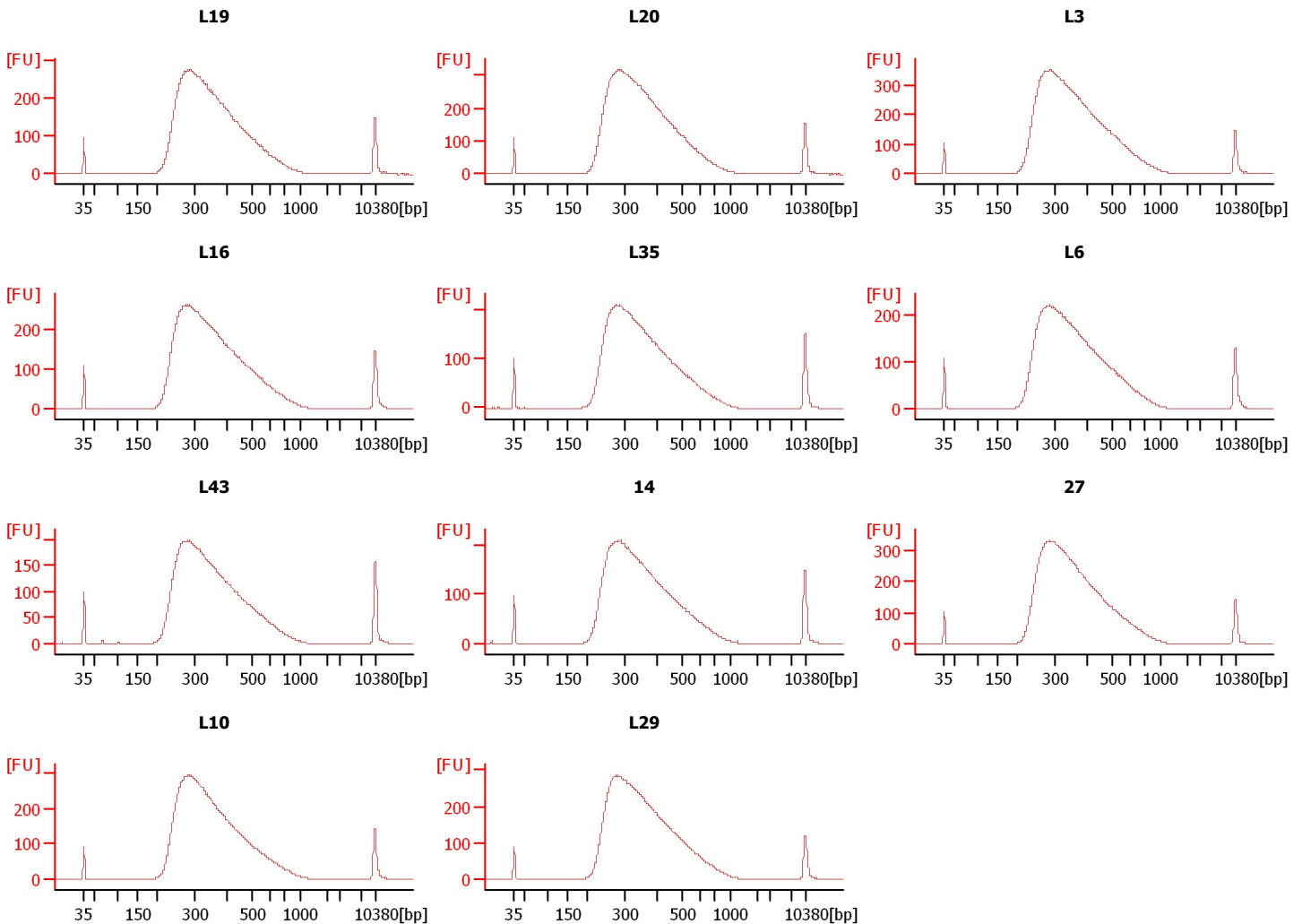
Instrument Name: DE34903152      Firmware: C.01.069  
Serial#: DE34903152      Type: G2938C

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\2018-06-22\2018-06-22\_002.xad

Created: 6/22/2018 11:06:46 AM  
 Modified: 6/22/2018 11:50:06 AM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
L19		<input type="checkbox"/>	✓			
L20		<input type="checkbox"/>	✓			
L3		<input type="checkbox"/>	✓			
L16		<input type="checkbox"/>	✓			
L35		<input type="checkbox"/>	✓			
L6		<input type="checkbox"/>	✓			
L43		<input type="checkbox"/>	✓			
14		<input type="checkbox"/>	✓			
27		<input type="checkbox"/>	✓			
L10		<input type="checkbox"/>	✓			
L29		<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\2018-06-22\2018-06-22\_002.xad

Created: 6/22/2018 11:06:46 AM  
Modified: 6/22/2018 11:50:06 AM

**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

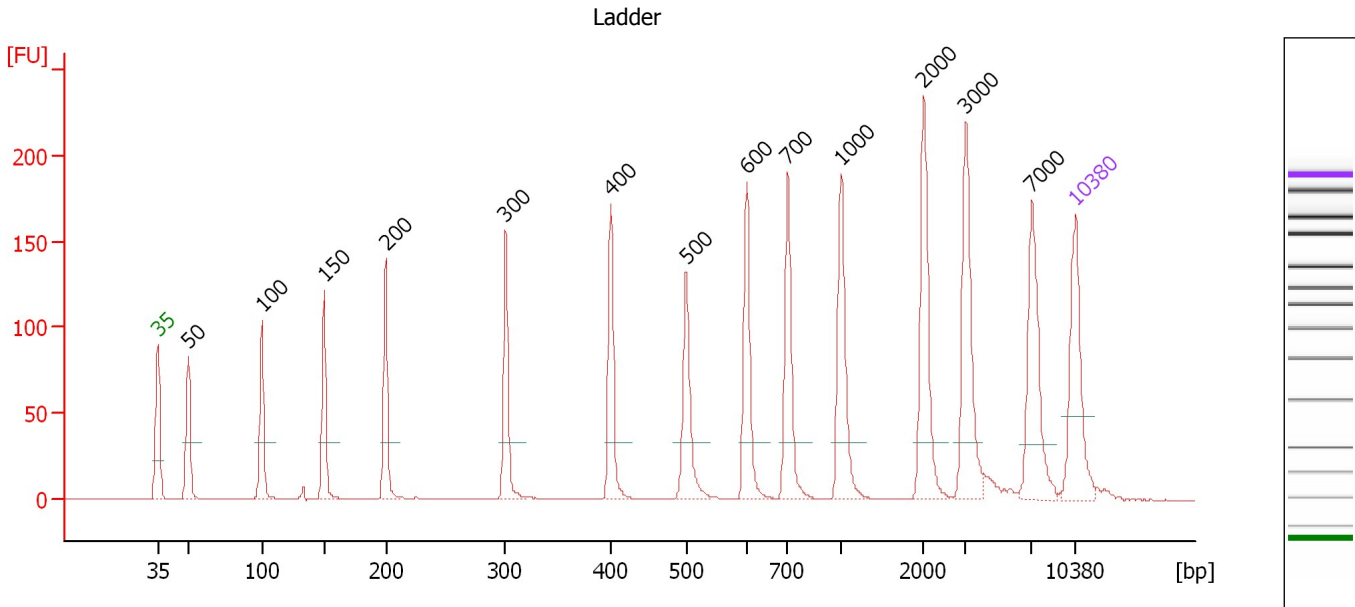
**Ladder**

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\2018-06-22\2018-06-22\_002.xad

Created: 6/22/2018 11:06:46 AM  
 Modified: 6/22/2018 11:50:06 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

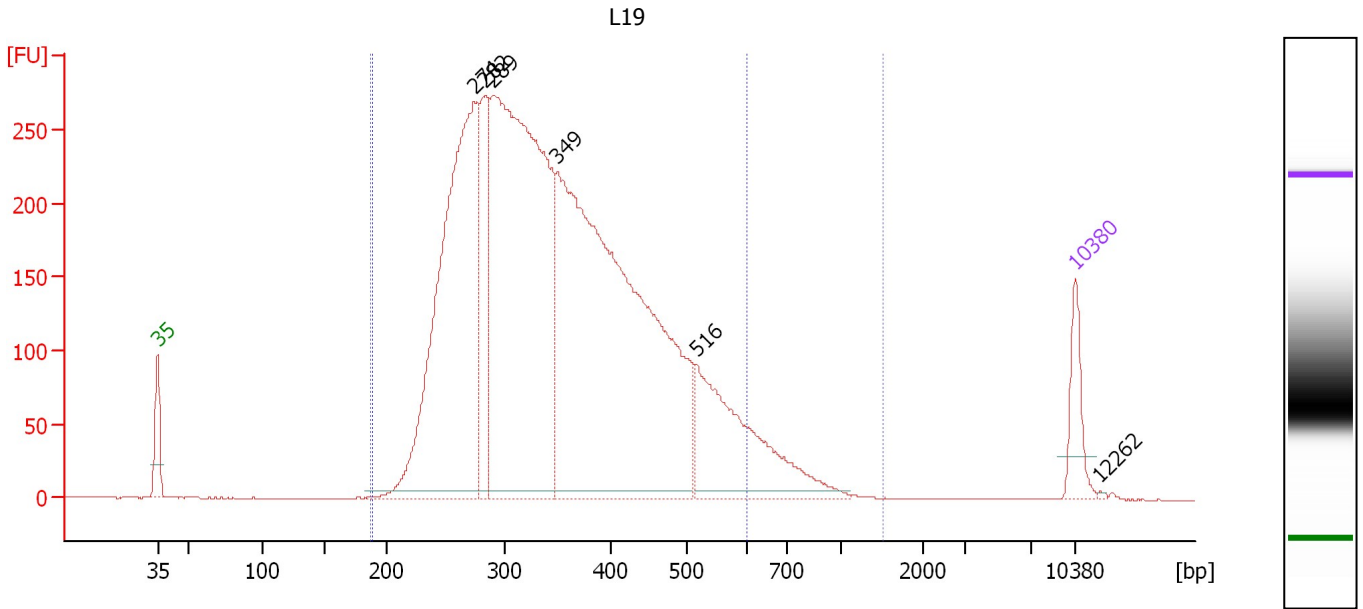
**Peak table for Ladder**

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	45.34
3	100	150.00	2,272.7	Ladder Peak	50.97
4	150	150.00	1,515.2	Ladder Peak	55.71
5	200	150.00	1,136.4	Ladder Peak	60.39
6	300	150.00	757.6	Ladder Peak	69.54
7	400	150.00	568.2	Ladder Peak	77.55
8	500	150.00	454.5	Ladder Peak	83.32
9	600	150.00	378.8	Ladder Peak	87.92
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	101.42
13	3,000	150.00	75.8	Ladder Peak	104.61
14	7,000	150.00	32.5	Ladder Peak	109.67
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-22\2018-06-22\_002.xad

Created: 6/22/2018 11:06:46 AM  
 Modified: 6/22/2018 11:50:06 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : L19**

Number of peaks found: 6                      Corr. Area 1: 6,329.1  
 Noise: 0.2                                      Corr. Area 2: 6,111.9

**Peak table for sample 1 : L19**

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	274	1,308.34	7,240.2		67.14
3	282	318.23	1,709.1		67.90
4	289	1,806.42	9,457.9		68.57
5	349	2,001.37	8,690.0		73.46
6	516	442.35	1,298.7		84.06
7	10,380	75.00	10.9	Upper Marker	113.00
8	12,262	0.00	0.0		114.85

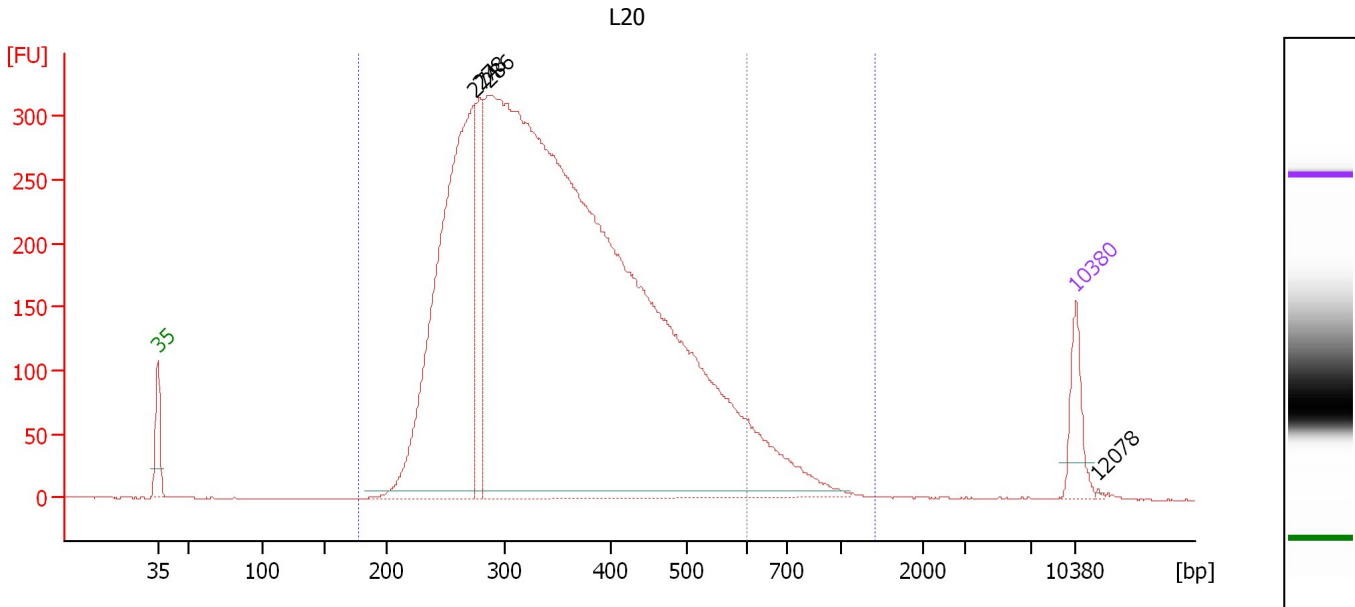
**Region table for sample 1 : L19**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
187	1,519	368	5,648.11	6,329.1	25,873.1	99	31.6
189	599	352	5,484.18	6,111.9	25,516.4	96	24.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-22\2018-06-22\_002.xad

Created: 6/22/2018 11:06:46 AM  
 Modified: 6/22/2018 11:50:06 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : L20**

Number of peaks found: 4                      Corr. Area 1: 7,309.6  
 Noise: 0.3                                      Corr. Area 2: 7,562.9

**Peak table for sample 2 : L20**

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	274	1,401.37	7,743.8		67.18
3	278	264.00	1,436.9		67.56
4	286	5,504.46	29,139.7		68.28
5	10,380	75.00	10.9	Upper Marker	113.00
6	12,078	0.00	0.0		114.67

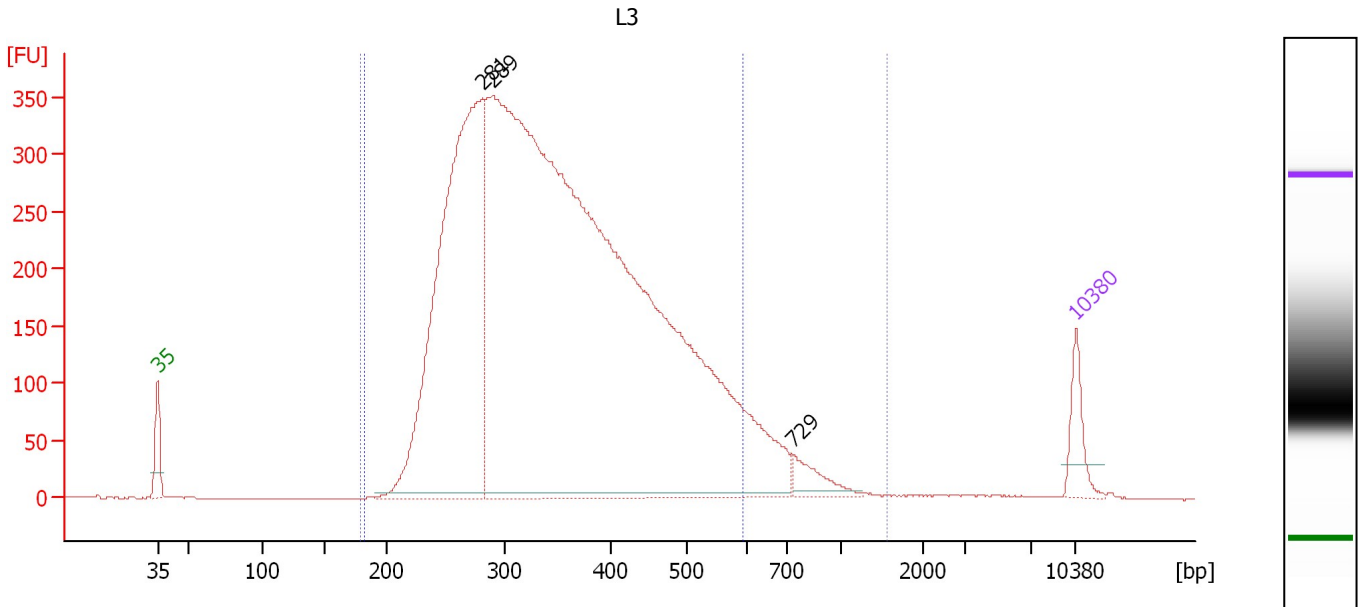
**Region table for sample 2 : L20**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
178	1,415	368	6,295.32	7,562.9	28,861.1	99	31.7
178	602	353	6,116.99	7,309.6	28,476.0	96	24.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-22\2018-06-22\_002.xad

Created: 6/22/2018 11:06:46 AM  
 Modified: 6/22/2018 11:50:06 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : L3**

Number of peaks found: 3                      Corr. Area 1: 8,392.6  
 Noise: 0.2                                      Corr. Area 2: 8,013.0

**Peak table for sample 3 : L3**

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	1,936.17	10,456.0		67.76
3	289	6,197.61	32,543.6		68.49
4	729	74.41	154.6		91.45
5	10,380	75.00	10.9	Upper Marker	113.00

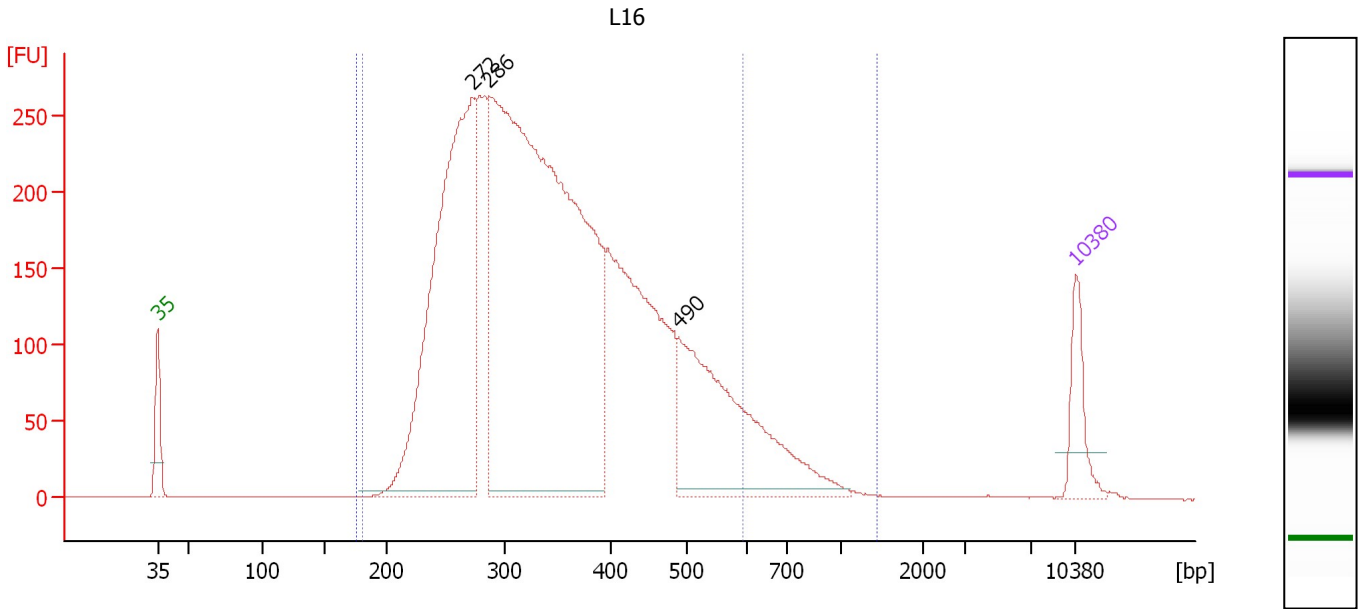
**Region table for sample 3 : L3**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
180	1,563	375	7,302.12	8,392.6	33,253.7	99	34.2
182	594	353	7,023.30	8,013.0	32,652.2	95	24.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-22\2018-06-22\_002.xad

Created: 6/22/2018 11:06:46 AM  
 Modified: 6/22/2018 11:50:06 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : L16**

Number of peaks found: 3                      Corr. Area 1: 6,006.2  
 Noise: 0.3                                      Corr. Area 2: 6,286.0

**Peak table for sample 4 : L16**

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	272	1,189.55	6,621.7		66.99
3	286	2,349.69	12,435.6		68.28
4	490	547.25	1,691.3		82.76
5	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : L16**

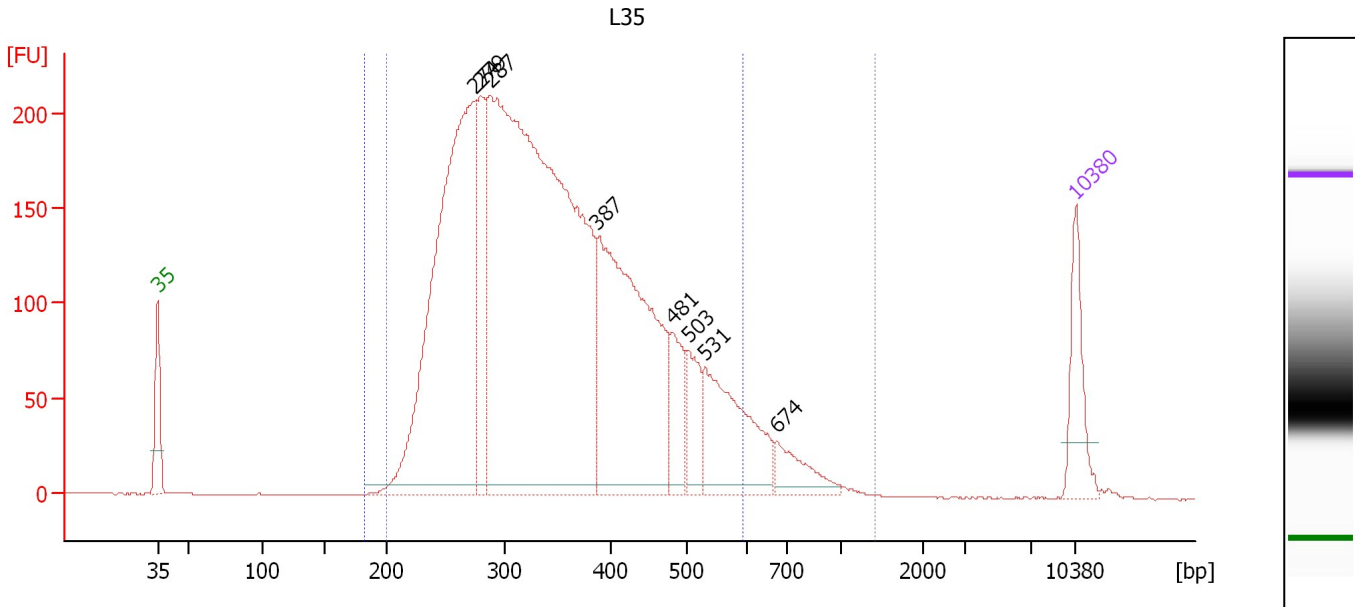
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
176	1,447	371	4,835.43	6,286.0	22,277.6	99	33.8
181	593	350	4,653.96	6,006.2	21,882.8	95	25.1



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-22\2018-06-22\_002.xad

Created: 6/22/2018 11:06:46 AM  
 Modified: 6/22/2018 11:50:06 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : L35**

Number of peaks found: 8                      Corr. Area 1: 4,908.5  
 Noise: 0.2                                      Corr. Area 2: 4,706.3

**Peak table for sample 5 : L35**

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	274	962.61	5,330.3		67.13
3	279	204.49	1,109.9		67.63
4	287	1,879.07	9,923.6		68.34
5	387	621.18	2,434.3		76.48
6	481	90.14	283.7		82.25
7	503	77.82	234.4		83.46
8	531	222.26	634.7		84.73
9	674	61.37	138.0		90.24
10	10,380	75.00	10.9	Upper Marker	113.00

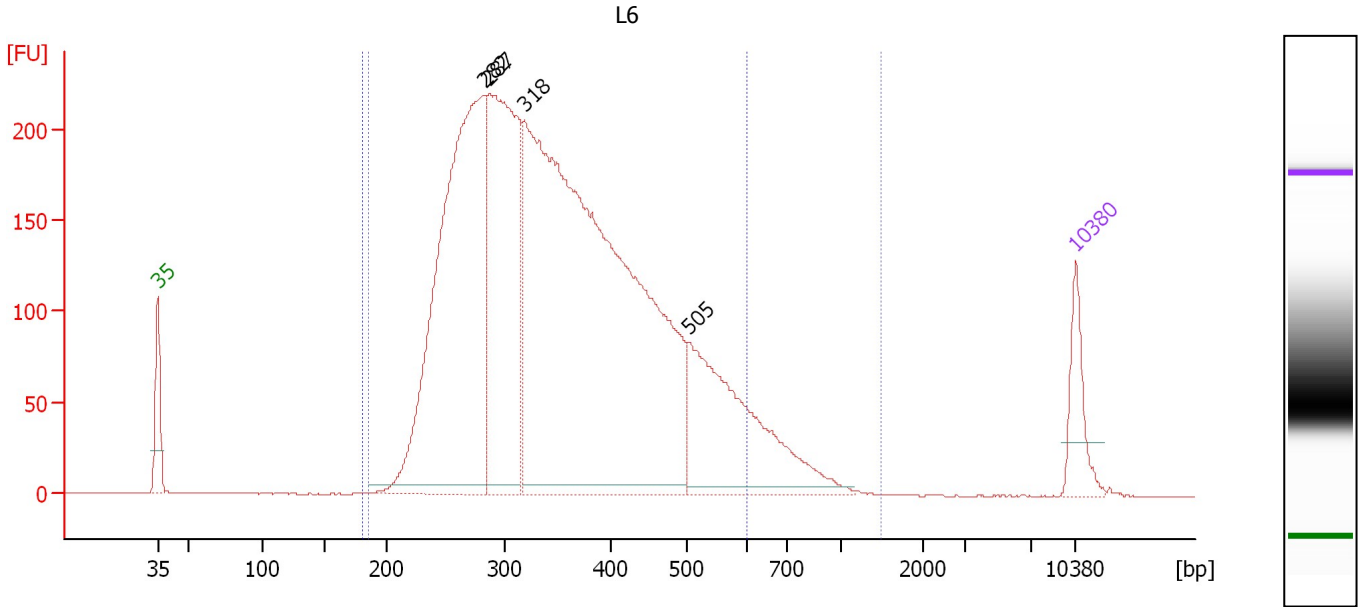
**Region table for sample 5 : L35**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
182	593	350	3,829.81	4,706.3	18,004.6	96	25.0
200	1,412	369	3,966.83	4,908.5	18,287.5	100	33.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-22\2018-06-22\_002.xad

Created: 6/22/2018 11:06:46 AM  
 Modified: 6/22/2018 11:50:06 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : L6**

Number of peaks found: 4                      Corr. Area 1: 5,202.3  
 Noise: 0.2                                      Corr. Area 2: 4,995.4

**Peak table for sample 6 : L6**

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	282	1,250.74	6,719.6		67.89
3	287	796.32	4,211.0		68.30
4	318	2,305.31	10,984.3		70.98
5	505	470.39	1,412.6		83.53
6	10,380	75.00	10.9	Upper Marker	113.00

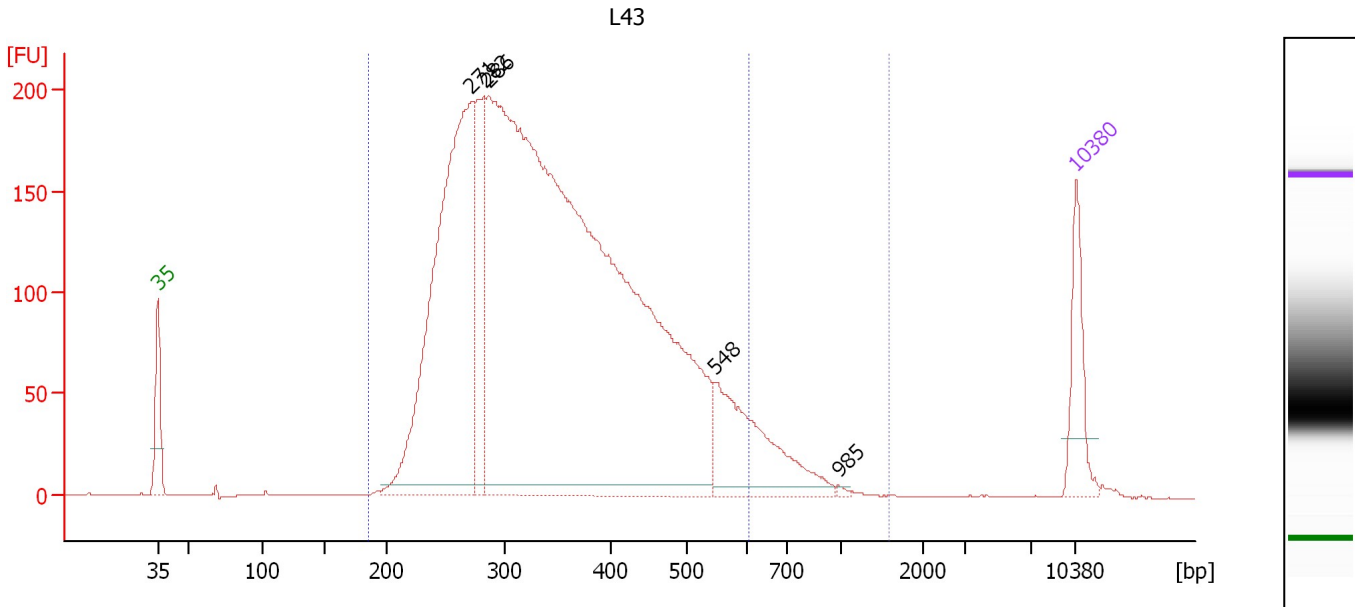
**Region table for sample 6 : L6**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
181	601	354	4,439.44	4,995.4	20,631.7	96	25.1
186	1,492	372	4,594.02	5,202.3	20,962.8	100	32.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-22\2018-06-22\_002.xad

Created: 6/22/2018 11:06:46 AM  
 Modified: 6/22/2018 11:50:06 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : L43**

Number of peaks found: 5                      Corr. Area 1: 4,542.8  
 Noise: 0.3                                      Corr. Area 2: 4,382.1

**Peak table for sample 7 : L43**

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	271	896.17	5,002.2		66.93
3	282	199.41	1,072.3		67.87
4	286	2,813.57	14,917.8		68.24
5	548	216.71	599.5		85.51
6	985	2.93	4.5		94.88
7	10,380	75.00	10.9	Upper Marker	113.00

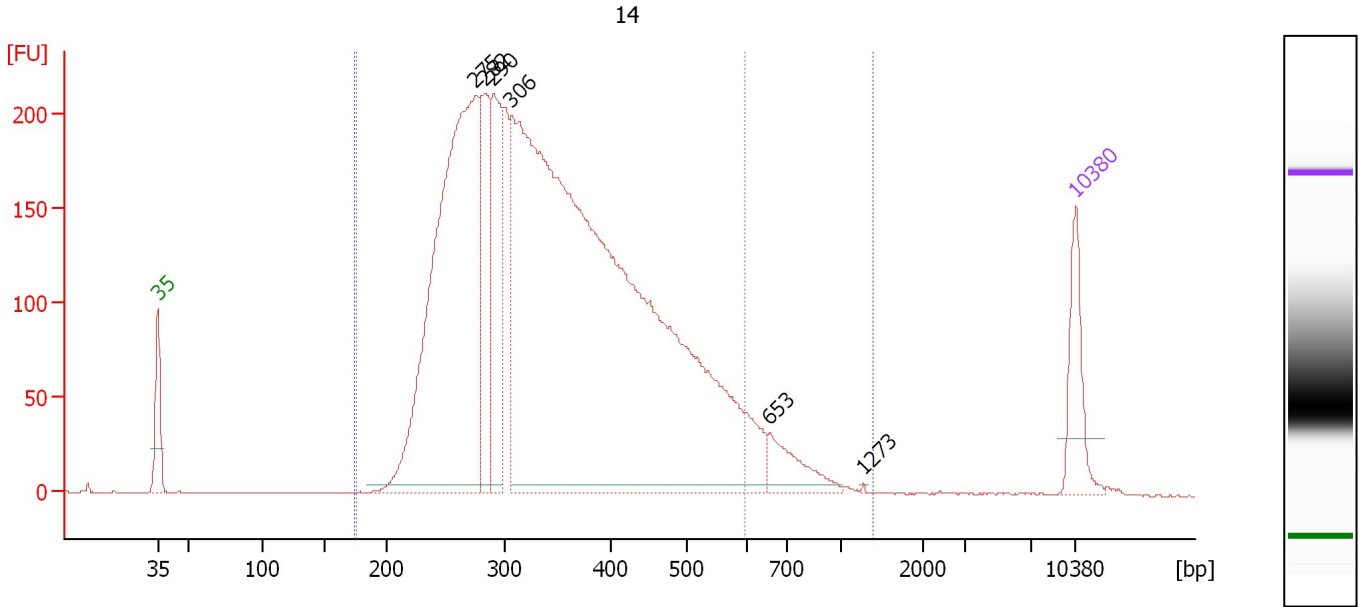
**Region table for sample 7 : L43**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
186	1,578	368	3,738.02	4,542.8	17,275.9	99	33.1
186	605	351	3,626.56	4,382.1	17,037.6	96	25.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-22\2018-06-22\_002.xad

Created: 6/22/2018 11:06:46 AM  
 Modified: 6/22/2018 11:50:06 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 14**

Number of peaks found: 6                      Corr. Area 1: 4,714.6  
 Noise: 0.2                                      Corr. Area 2: 4,903.9

**Peak table for sample 8 : 14**

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	1,048.85	5,779.8		67.25
3	282	192.95	1,035.1		67.93
4	290	227.17	1,187.1		68.62
5	306	2,542.75	12,605.9		69.99
6	653	70.32	163.0		89.60
7	1,273	1.04	1.2		96.82
8	10,380	75.00	10.9	Upper Marker	113.00

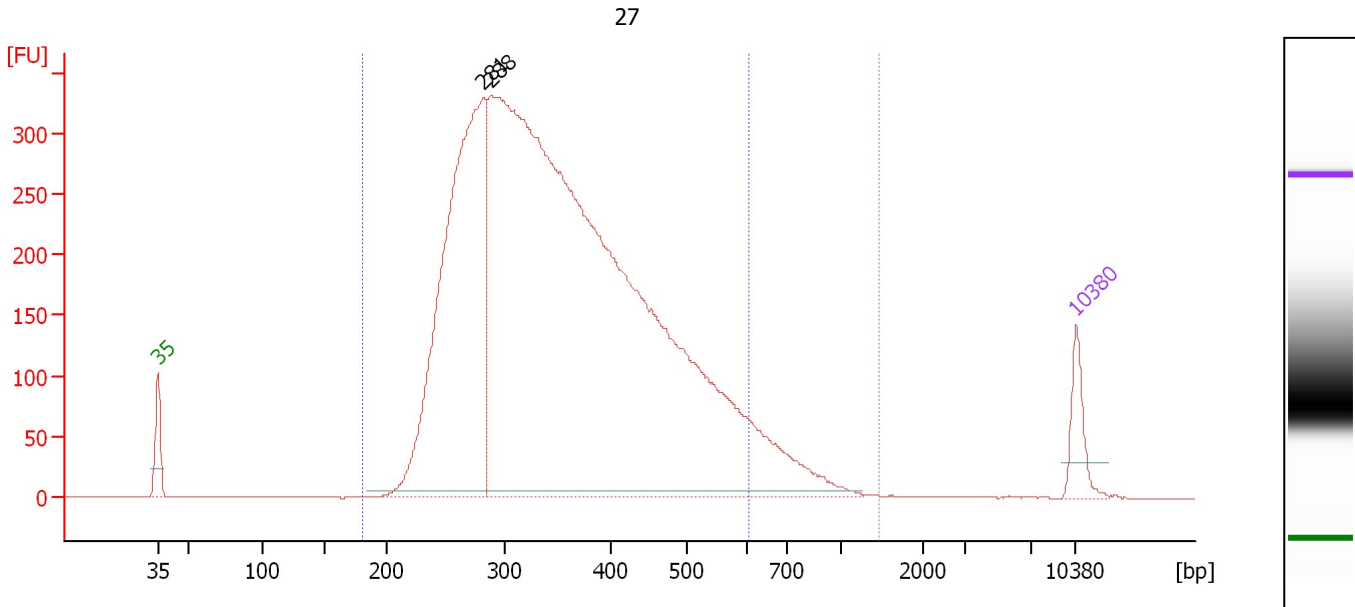
**Region table for sample 8 : 14**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
174	1,398	368	3,896.64	4,903.9	18,019.1	99	33.0
177	597	350	3,769.84	4,714.6	17,744.5	95	25.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-22\2018-06-22\_002.xad

Created: 6/22/2018 11:06:46 AM  
 Modified: 6/22/2018 11:50:06 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 27**

Number of peaks found: 2                      Corr. Area 1: 7,390.2  
 Noise: 0.2                                      Corr. Area 2: 7,116.0

**Peak table for sample 9 : 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	281	1,694.50	9,121.2		67.84
3	288	5,622.63	29,591.3		68.43
4	10,380	75.00	10.9	Upper Marker	113.00

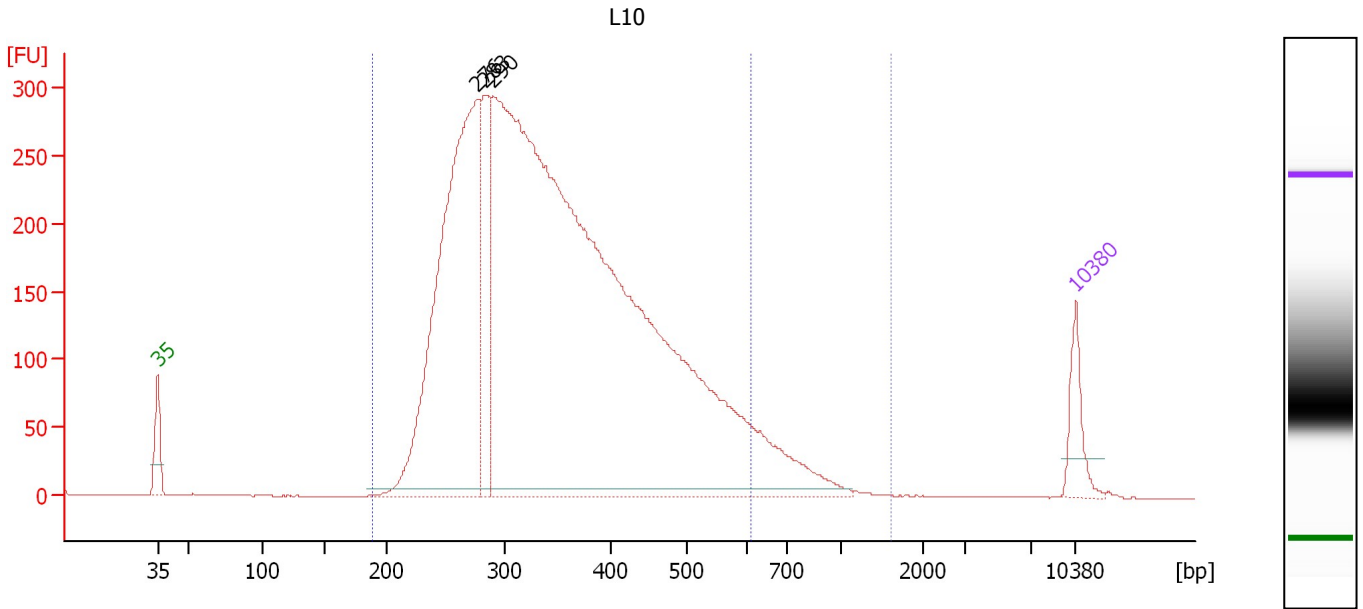
**Region table for sample 9 : 27**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
182	1,467	373	6,442.00	7,390.2	29,248.8	99	32.8
182	607	355	6,239.71	7,116.0	28,821.0	96	24.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-22\2018-06-22\_002.xad

Created: 6/22/2018 11:06:46 AM  
 Modified: 6/22/2018 11:50:06 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : L10**

Number of peaks found: 3                      Corr. Area 1: 6,452.1  
 Noise: 0.1                                      Corr. Area 2: 6,218.8

**Peak table for sample 10 : L10**

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	276	1,481.10	8,122.4		67.37
3	283	287.75	1,542.1		67.96
4	290	4,798.00	25,089.0		68.60
5	10,380	75.00	10.9	Upper Marker	113.00

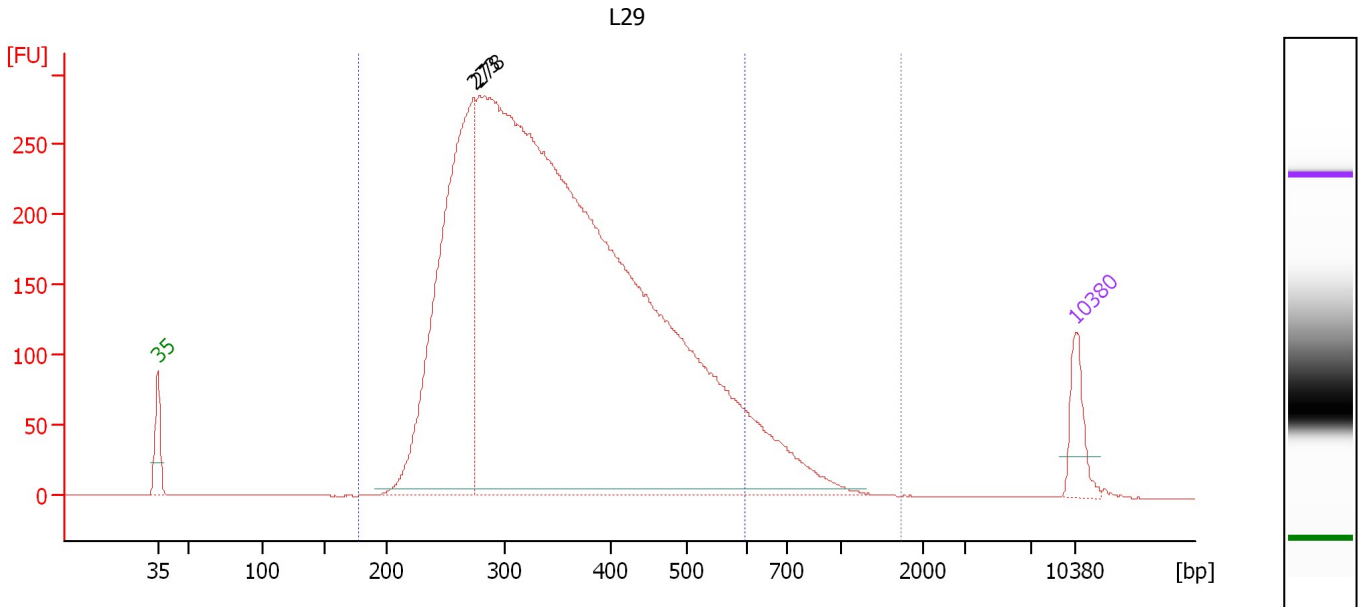
**Region table for sample 10 : L10**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
189	1,605	369	5,838.03	6,452.1	26,830.8	99	34.0
189	610	351	5,660.43	6,218.8	26,459.9	96	25.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-22\2018-06-22\_002.xad

Created: 6/22/2018 11:06:46 AM  
 Modified: 6/22/2018 11:50:06 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : L29**

Number of peaks found: 2                      Corr. Area 1: 6,486.8  
 Noise: 0.2                                      Corr. Area 2: 6,207.1

**Peak table for sample 11 : L29**

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	273	1,313.59	7,278.4		67.11
3	278	5,634.69	30,688.9		67.54
4	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : L29**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
178	1,720	374	6,016.29	6,486.8	27,396.3	100	34.0
178	597	354	5,797.11	6,207.1	26,924.8	95	24.8

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-22\2018-06-22\_002.xad

Created: 6/22/2018 11:06:46 AM  
Modified: 6/22/2018 11:50:06 AM

**Gel Image**

