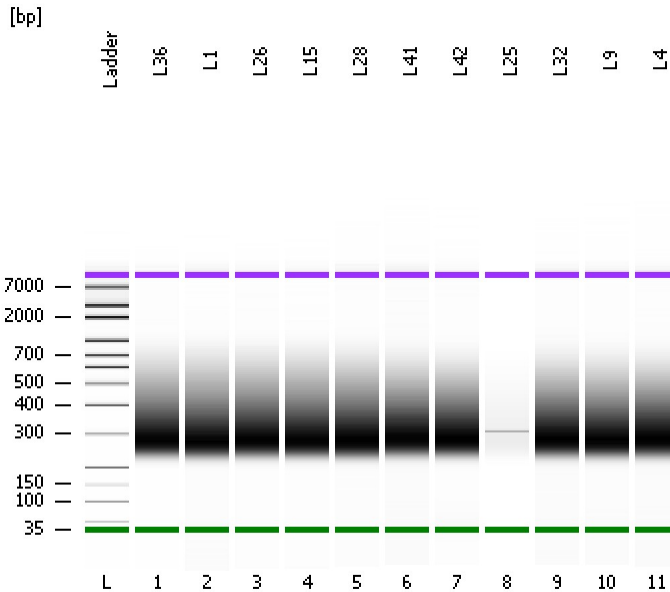


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-26\2018-06-26\_002.xad

Created: 6/26/2018 2:25:35 PM  
Modified: 6/26/2018 3:22:39 PM

**Electrophoresis File Run Summary**



Instrument Information:

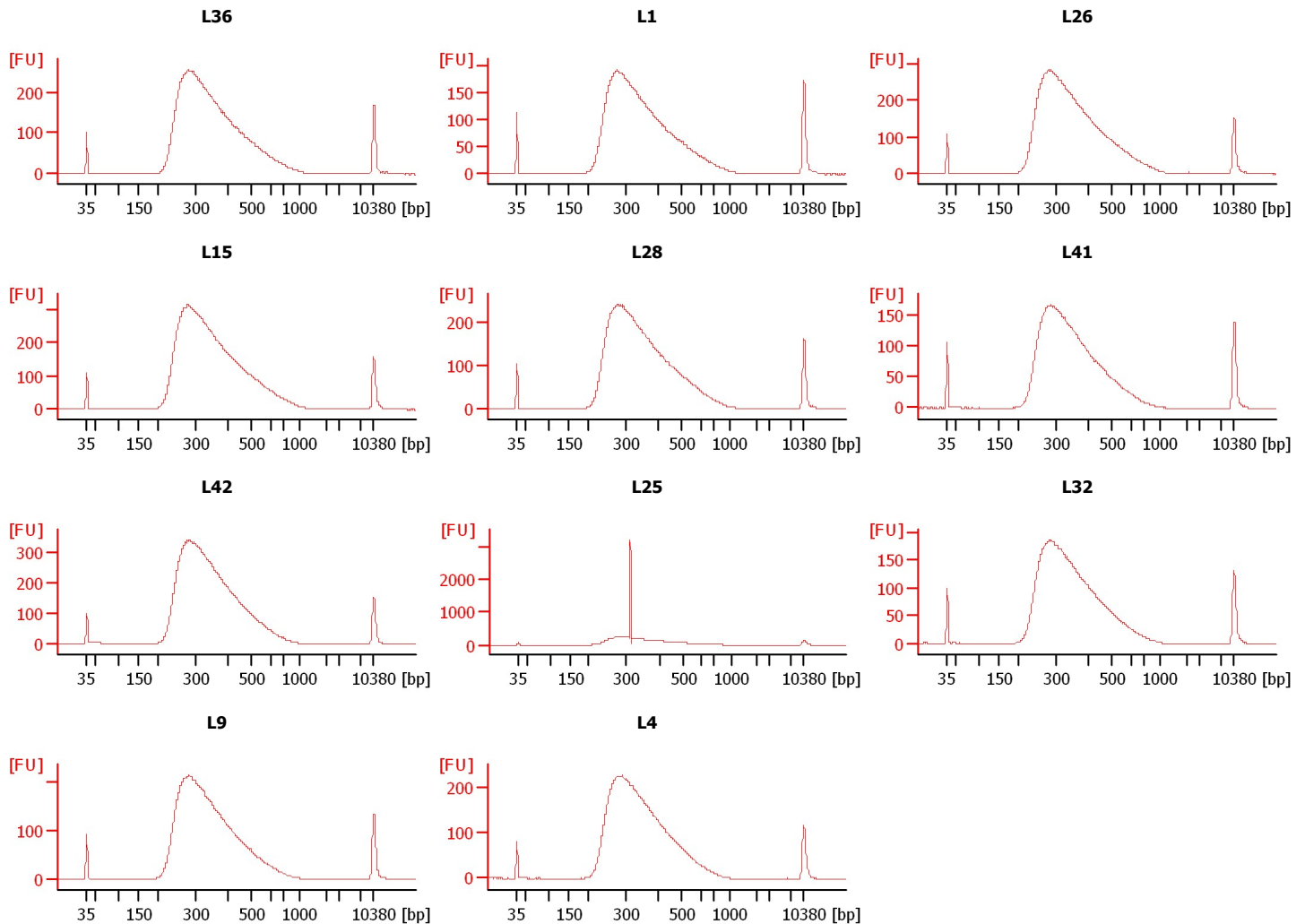
Instrument Name: DE34903152      Firmware: C.01.069  
Serial#: DE34903152      Type: G2938C

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\2018-06-26\2018-06-26\_002.xad

Created: 6/26/2018 2:25:35 PM  
Modified: 6/26/2018 3:22:39 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
L36		<input type="checkbox"/>	✓			
L1		<input type="checkbox"/>	✓			
L26		<input type="checkbox"/>	✓			
L15		<input type="checkbox"/>	✓			
L28		<input type="checkbox"/>	✓			
L41		<input type="checkbox"/>	✓			
L42		<input type="checkbox"/>	✓			
L25		<input type="checkbox"/>	✓			
L32		<input type="checkbox"/>	✓			
L9		<input type="checkbox"/>	✓			
L4		<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\2018-06-26\2018-06-26\_002.xad

Created: 6/26/2018 2:25:35 PM  
Modified: 6/26/2018 3:22:39 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

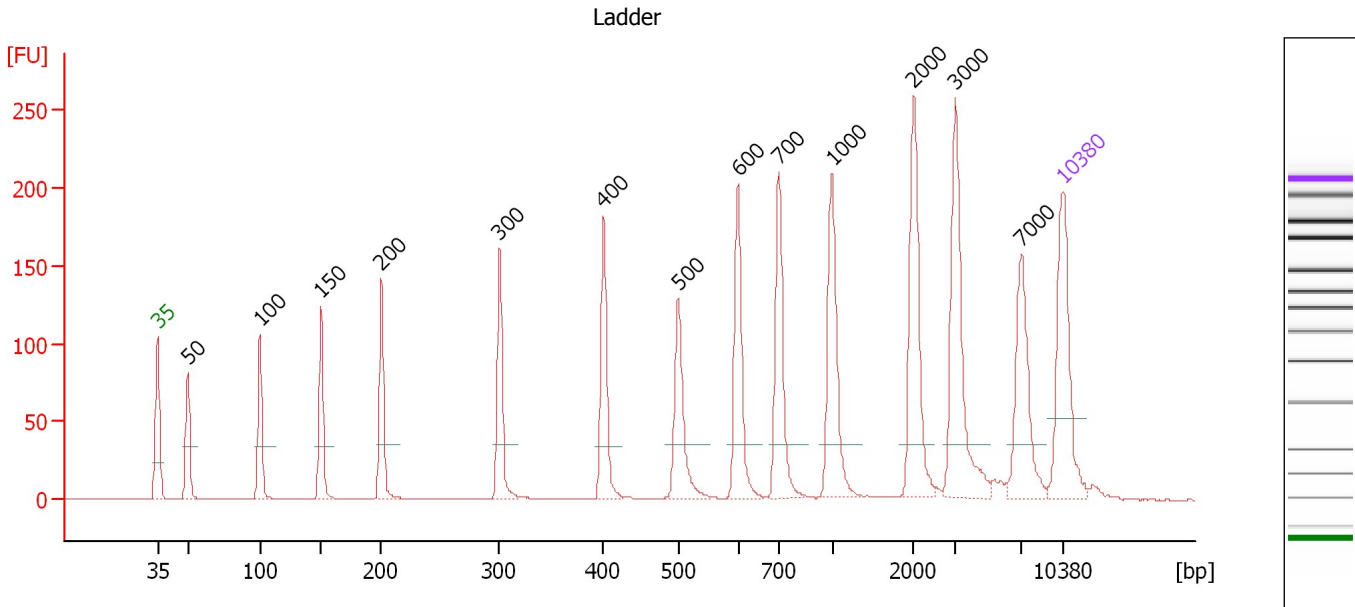
**Ladder**

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\2018-06-26\2018-06-26\_002.xad

Created: 6/26/2018 2:25:35 PM  
 Modified: 6/26/2018 3:22:39 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

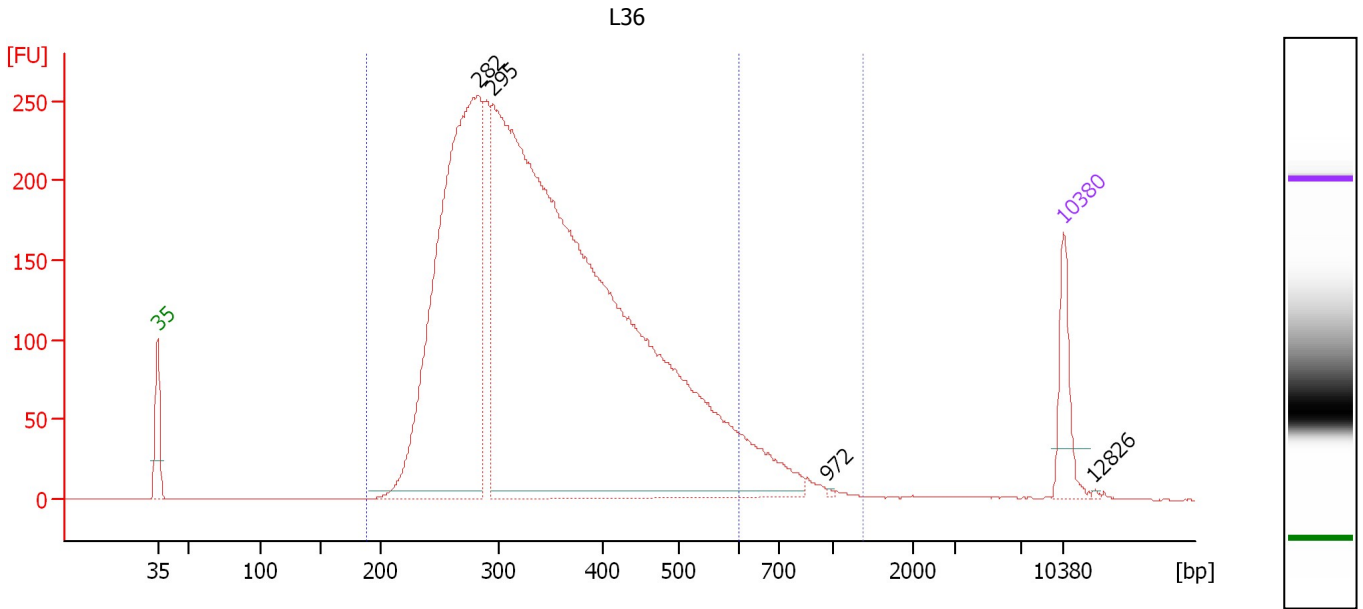
**Peak table for Ladder**

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	45.33
3	100	150.00	2,272.7	Ladder Peak	50.91
4	150	150.00	1,515.2	Ladder Peak	55.66
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	77.49
8	500	150.00	454.5	Ladder Peak	83.26
9	600	150.00	378.8	Ladder Peak	87.87
10	700	150.00	324.7	Ladder Peak	91.03
11	1,000	150.00	227.3	Ladder Peak	95.13
12	2,000	150.00	113.6	Ladder Peak	101.46
13	3,000	150.00	75.8	Ladder Peak	104.67
14	7,000	150.00	32.5	Ladder Peak	109.79
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-26\2018-06-26\_002.xad

Created: 6/26/2018 2:25:35 PM  
 Modified: 6/26/2018 3:22:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : L36**

Number of peaks found: 4                      Corr. Area 1: 5,508.4  
 Noise: 0.2                                      Corr. Area 2: 5,312.8

**Peak table for sample 1 : L36**

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	1,372.14	7,383.3		67.76
3	295	3,450.71	17,748.5		68.94
4	972	2.17	3.4		94.74
5	10,380	75.00	10.9	Upper Marker	113.00
6	12,826	0.00	0.0		115.32

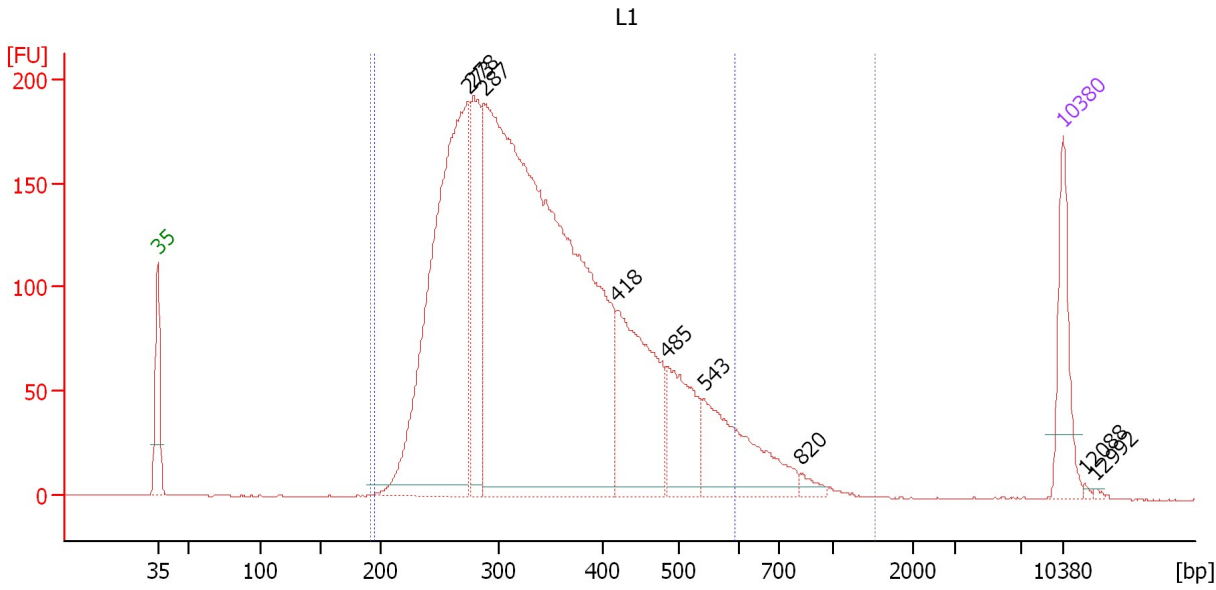
**Region table for sample 1 : L36**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
187	1,369	365	4,548.91	5,508.4	21,025.2	99	32.5
187	600	348	4,412.93	5,312.8	20,734.0	96	24.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-26\2018-06-26\_002.xad

Created: 6/26/2018 2:25:35 PM  
 Modified: 6/26/2018 3:22:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : L1**

Number of peaks found: 9                      Corr. Area 1: 4,171.9  
 Noise: 0.2                                      Corr. Area 2: 4,014.4

**Peak table for sample 2 : L1**

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	795.53	4,410.2		67.00
3	278	203.45	1,108.8		67.43
4	287	1,751.49	9,249.5		68.24
5	418	270.12	980.2		78.50
6	485	131.39	410.9		82.37
7	543	170.99	477.3		85.23
8	820	11.86	21.9		92.67
9	10,380	75.00	10.9	Upper Marker	113.00
10	12,088	0.00	0.0		114.62
11	12,992	0.00	0.0		115.48

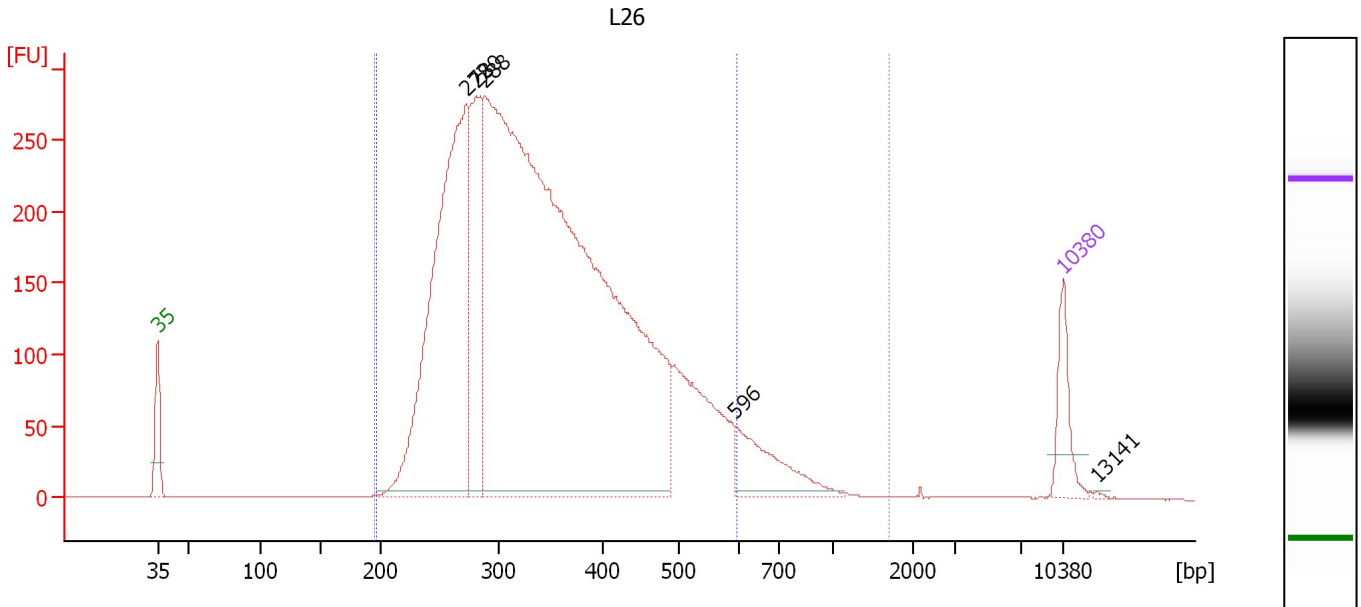
**Region table for sample 2 : L1**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
192	1,523	363	3,210.94	4,171.9	14,998.3	99	33.2
194	595	345	3,109.16	4,014.4	14,775.8	96	24.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-26\2018-06-26\_002.xad

Created: 6/26/2018 2:25:35 PM  
 Modified: 6/26/2018 3:22:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : L26**

Number of peaks found: 5                      Corr. Area 1: 6,173.6  
 Noise: 0.2                                      Corr. Area 2: 5,940.2

**Peak table for sample 3 : L26**

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	1,190.43	6,639.3		66.85
3	280	366.26	1,980.6		67.63
4	288	3,571.99	18,815.4		68.31
5	596	154.56	392.8		87.69
6	10,380	75.00	10.9	Upper Marker	113.00
7	13,141	0.00	0.0		115.62

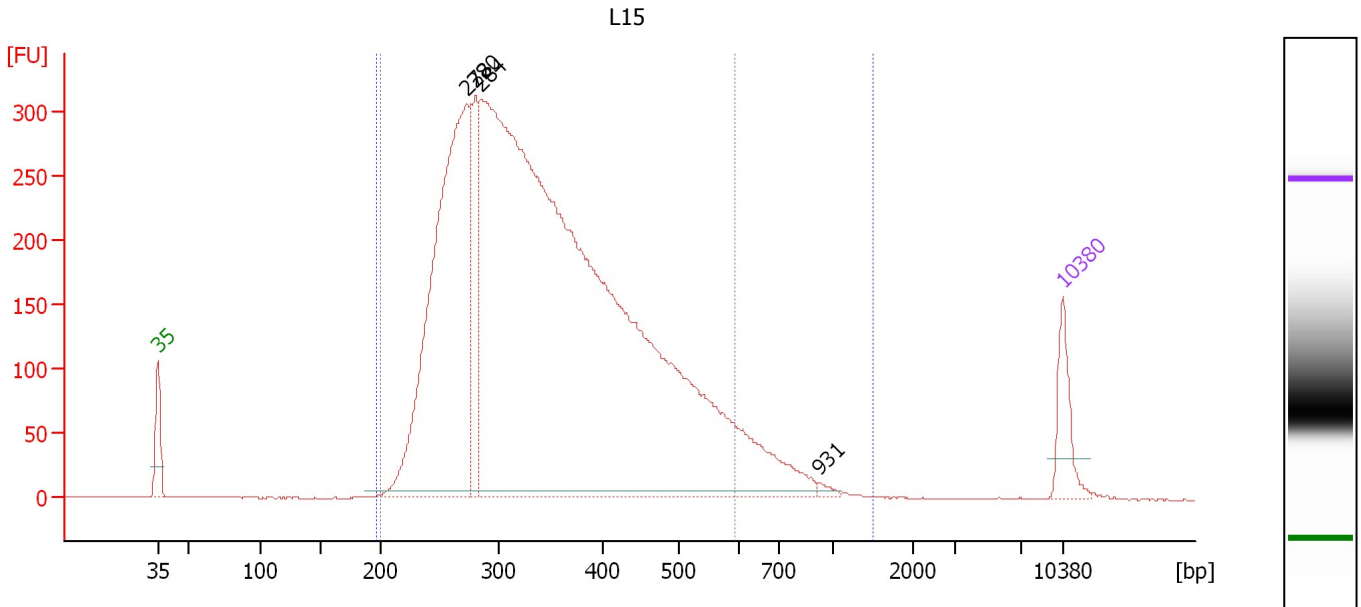
**Region table for sample 3 : L26**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
194	1,708	367	5,203.45	6,173.6	24,036.8	99	33.8
196	597	348	5,037.96	5,940.2	23,678.6	95	24.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-26\2018-06-26\_002.xad

Created: 6/26/2018 2:25:35 PM  
 Modified: 6/26/2018 3:22:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : L15**

Number of peaks found: 4                      Corr. Area 1: 6,562.6  
 Noise: 0.2                                      Corr. Area 2: 6,832.5

**Peak table for sample 4 : L15**

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	1,281.41	7,138.7		66.88
3	280	248.96	1,349.1		67.57
4	284	4,473.62	23,871.5		67.97
5	931	9.58	15.6		94.18
6	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : L15**

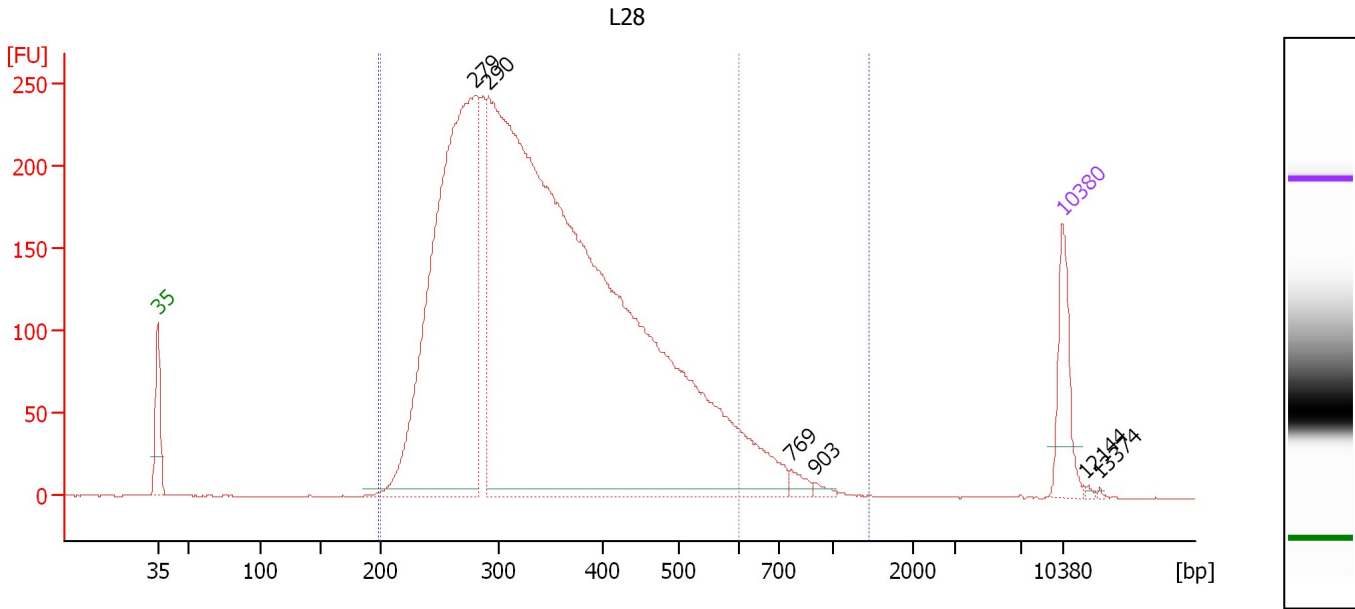
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
197	1,493	366	5,323.81	6,832.5	24,635.2	100	33.4
200	596	348	5,146.67	6,562.6	24,246.9	96	24.7



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-26\2018-06-26\_002.xad

Created: 6/26/2018 2:25:35 PM  
 Modified: 6/26/2018 3:22:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : L28**

Number of peaks found: 6                      Corr. Area 1: 5,187.7  
 Noise: 0.2                                      Corr. Area 2: 5,366.4

**Peak table for sample 5 : L28**

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	279	1,226.12	6,654.7		67.54
3	290	3,241.30	16,917.0		68.55
4	769	16.08	31.7		91.97
5	903	7.04	11.8		93.80
6	10,380	75.00	10.9	Upper Marker	113.00
7	12,144	0.00	0.0		114.68
8	13,374	0.00	0.0		115.84

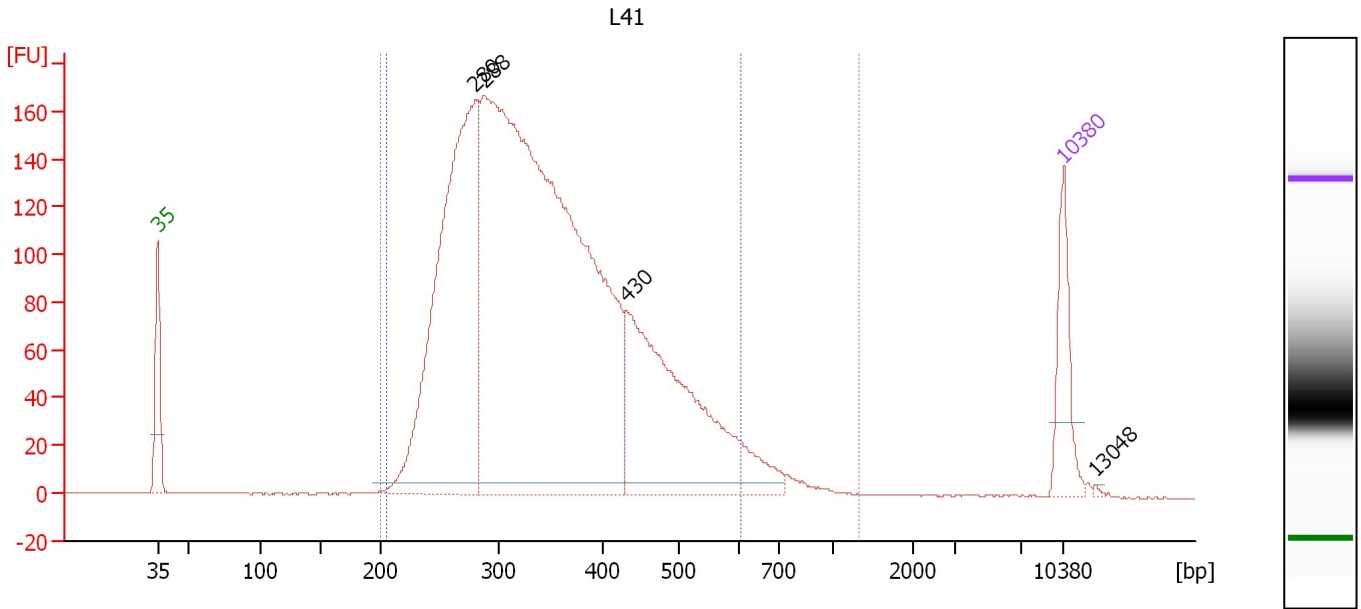
**Region table for sample 5 : L28**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
197	1,456	363	4,178.96	5,366.4	19,426.9	99	32.3
200	601	348	4,061.57	5,187.7	19,167.9	96	25.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-26\2018-06-26\_002.xad

Created: 6/26/2018 2:25:35 PM  
 Modified: 6/26/2018 3:22:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : L41**

Number of peaks found: 4                      Corr. Area 1: 3,498.1  
 Noise: 0.2                                      Corr. Area 2: 3,410.7

**Peak table for sample 6 : L41**

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	837.43	4,538.0		67.58
3	288	1,956.49	10,309.5		68.30
4	430	489.94	1,726.6		79.22
5	10,380	75.00	10.9	Upper Marker	113.00
6	13,048	0.00	0.0		115.54

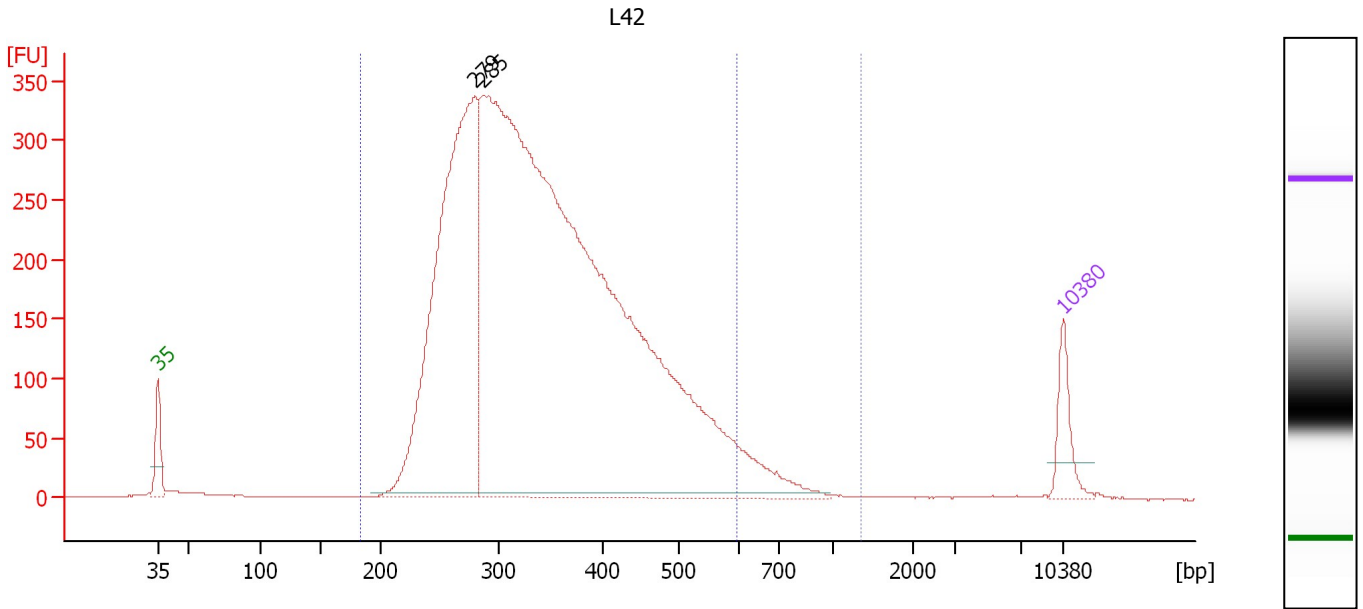
**Region table for sample 6 : L41**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,340	360	3,112.16	3,498.1	14,391.6	99	29.9
203	606	349	3,046.33	3,410.7	14,244.8	96	24.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-26\2018-06-26\_002.xad

Created: 6/26/2018 2:25:35 PM  
 Modified: 6/26/2018 3:22:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : L42**

Number of peaks found: 2                      Corr. Area 1: 7,026.0  
 Noise: 0.2                                      Corr. Area 2: 6,861.1

**Peak table for sample 7 : L42**

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	279	1,545.72	8,391.4		67.53
3	285	4,714.45	25,023.6		68.11
4	10,380	75.00	10.9	Upper Marker	113.00

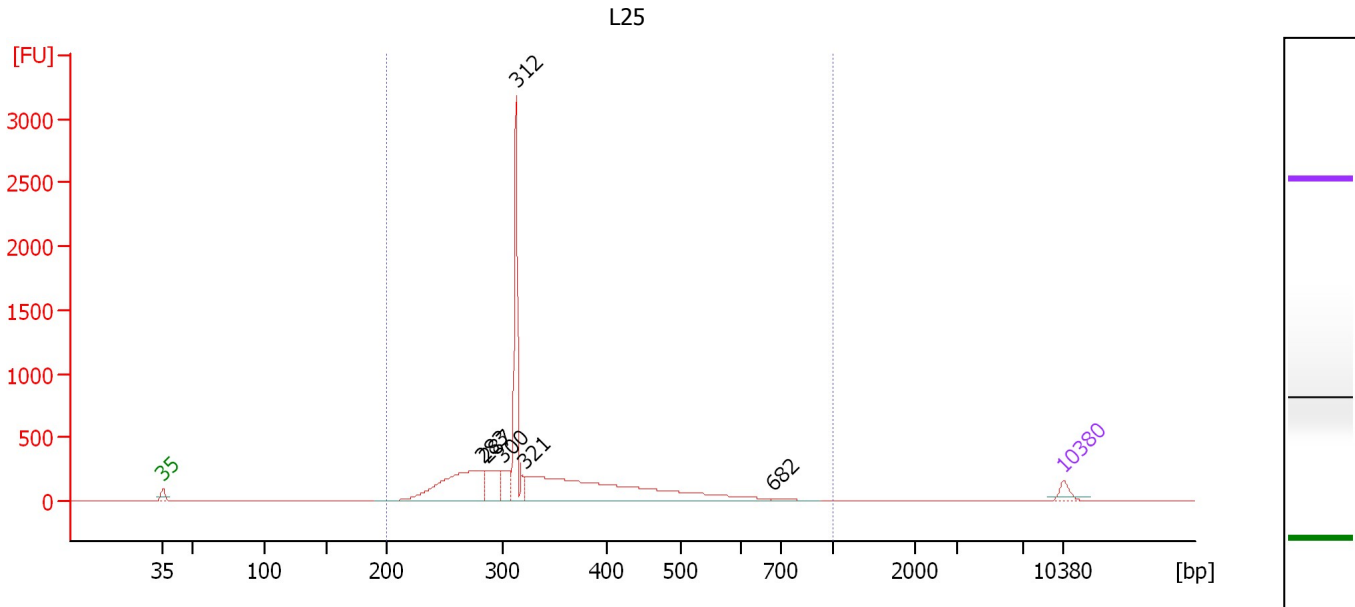
**Region table for sample 7 : L42**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
182	1,357	357	5,572.91	7,026.0	25,936.6	98	29.2
182	599	346	5,462.68	6,861.1	25,694.5	96	23.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-26\2018-06-26\_002.xad

Created: 6/26/2018 2:25:35 PM  
 Modified: 6/26/2018 3:22:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : L25**

Number of peaks found: 6                      Corr. Area 1: 6,051.8  
 Noise: 0.2

**Peak table for sample 8 : L25**

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	283	1,181.35	6,334.1		67.85
3	287	351.77	1,859.2		68.22
4	300	242.93	1,226.2		69.45
5	312	1,190.17	5,777.5		70.41
6	321	2,227.42	10,500.1		71.16
7	682	33.82	75.2		90.45
8	10,380	75.00	10.9	Upper Marker	113.00

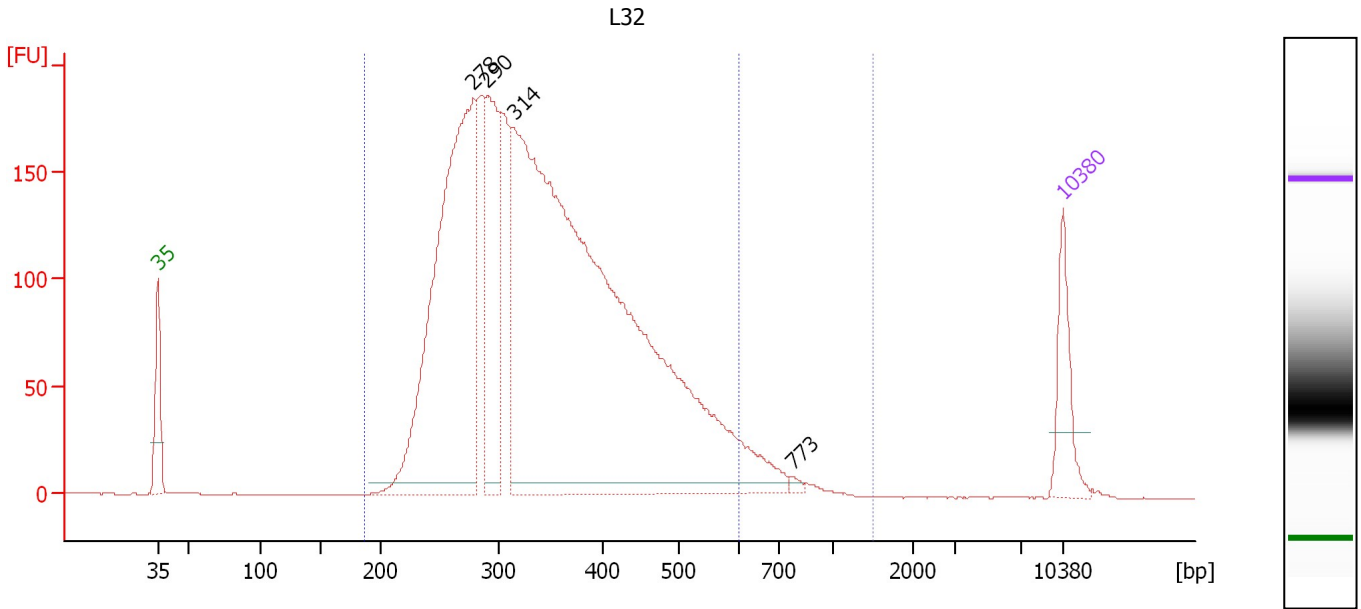
**Region table for sample 8 : L25**

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	350	4,969.70	6,051.8	23,257.0	100	27.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-26\2018-06-26\_002.xad

Created: 6/26/2018 2:25:35 PM  
 Modified: 6/26/2018 3:22:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : L32**

Number of peaks found: 4                      Corr. Area 1: 3,891.1  
 Noise: 0.1                                      Corr. Area 2: 3,789.3

**Peak table for sample 9 : L32**

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	278	936.34	5,107.4		67.41
3	290	298.53	1,562.1		68.48
4	314	2,169.85	10,485.4		70.53
5	773	6.54	12.8		92.03
6	10,380	75.00	10.9	Upper Marker	113.00

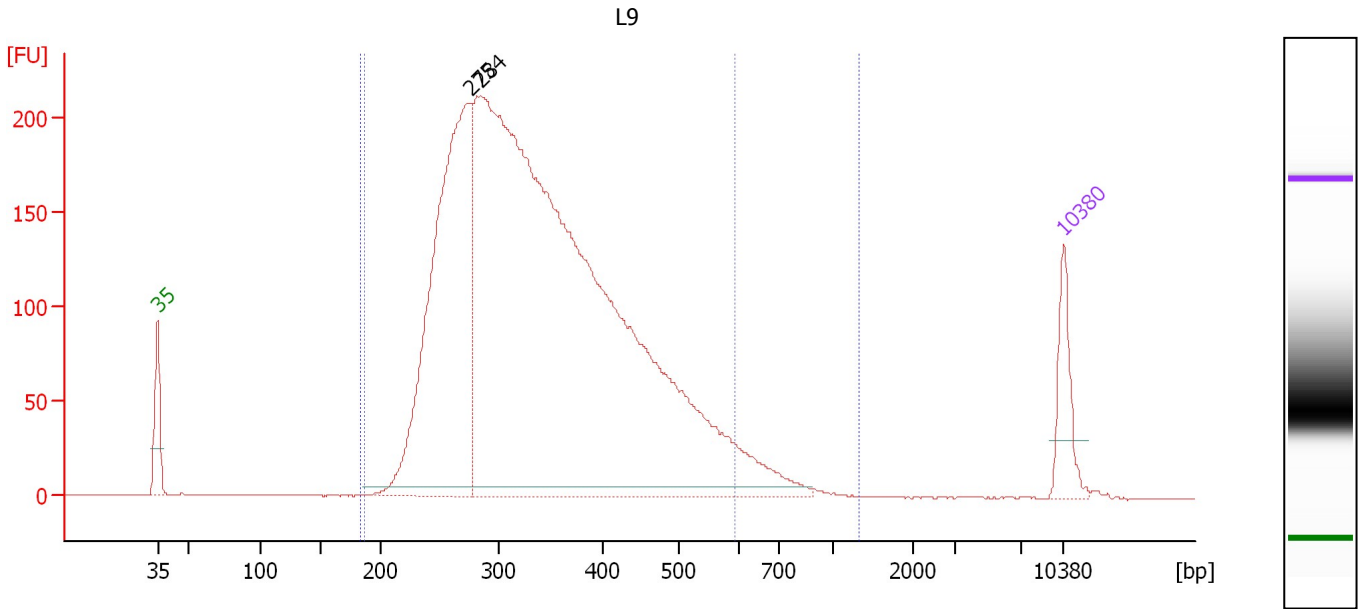
**Region table for sample 9 : L32**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
185	1,498	360	3,542.60	3,891.1	16,442.2	100	30.2
185	603	348	3,464.46	3,789.3	16,272.7	97	24.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-26\2018-06-26\_002.xad

Created: 6/26/2018 2:25:35 PM  
 Modified: 6/26/2018 3:22:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : L9**

Number of peaks found: 2                      Corr. Area 1: 4,201.7  
 Noise: 0.1                                      Corr. Area 2: 4,308.7

**Peak table for sample 10 : L9**

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	1,009.45	5,556.1		67.18
3	284	3,342.19	17,819.9		67.99
4	10,380	75.00	10.9	Upper Marker	113.00

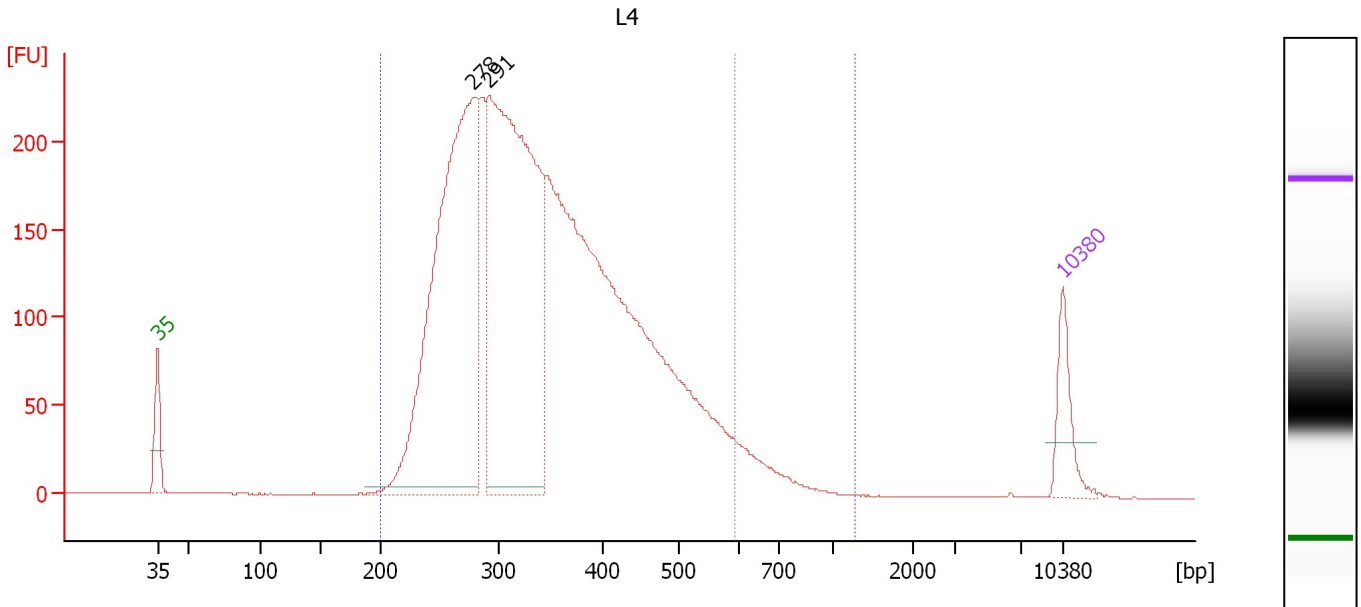
**Region table for sample 10 : L9**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
183	1,340	354	3,910.20	4,308.7	18,392.2	100	29.4
185	595	343	3,828.55	4,201.7	18,210.2	97	24.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-26\2018-06-26\_002.xad

Created: 6/26/2018 2:25:35 PM  
 Modified: 6/26/2018 3:22:39 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : L4**

Number of peaks found: 2                      Corr. Area 1: 4,612.3  
 Noise: 0.2                                      Corr. Area 2: 4,726.6

**Peak table for sample 11 : L4**

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	278	1,239.58	6,762.5		67.40
3	291	1,316.02	6,855.3		68.60
4	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : L4**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
199	1,273	356	4,449.73	4,726.6	20,735.2	100	28.8
200	595	346	4,358.91	4,612.3	20,531.8	97	23.9

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-06-26\2018-06-26\_002.xad

Created: 6/26/2018 2:25:35 PM  
Modified: 6/26/2018 3:22:39 PM

**Gel Image**

