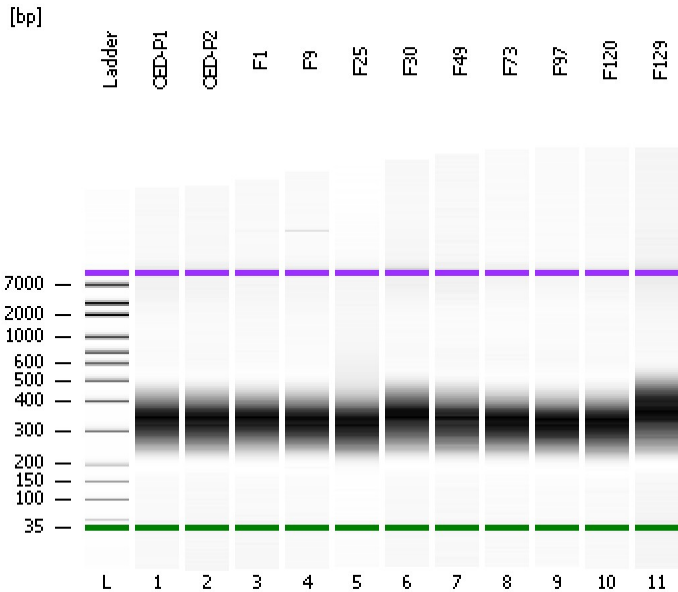


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-15\2016-09-15\_001.xad

Created: 9/15/2016 10:08:47 AM  
Modified: 9/15/2016 10:51:18 AM

**Electrophoresis File Run Summary**



Instrument Information:

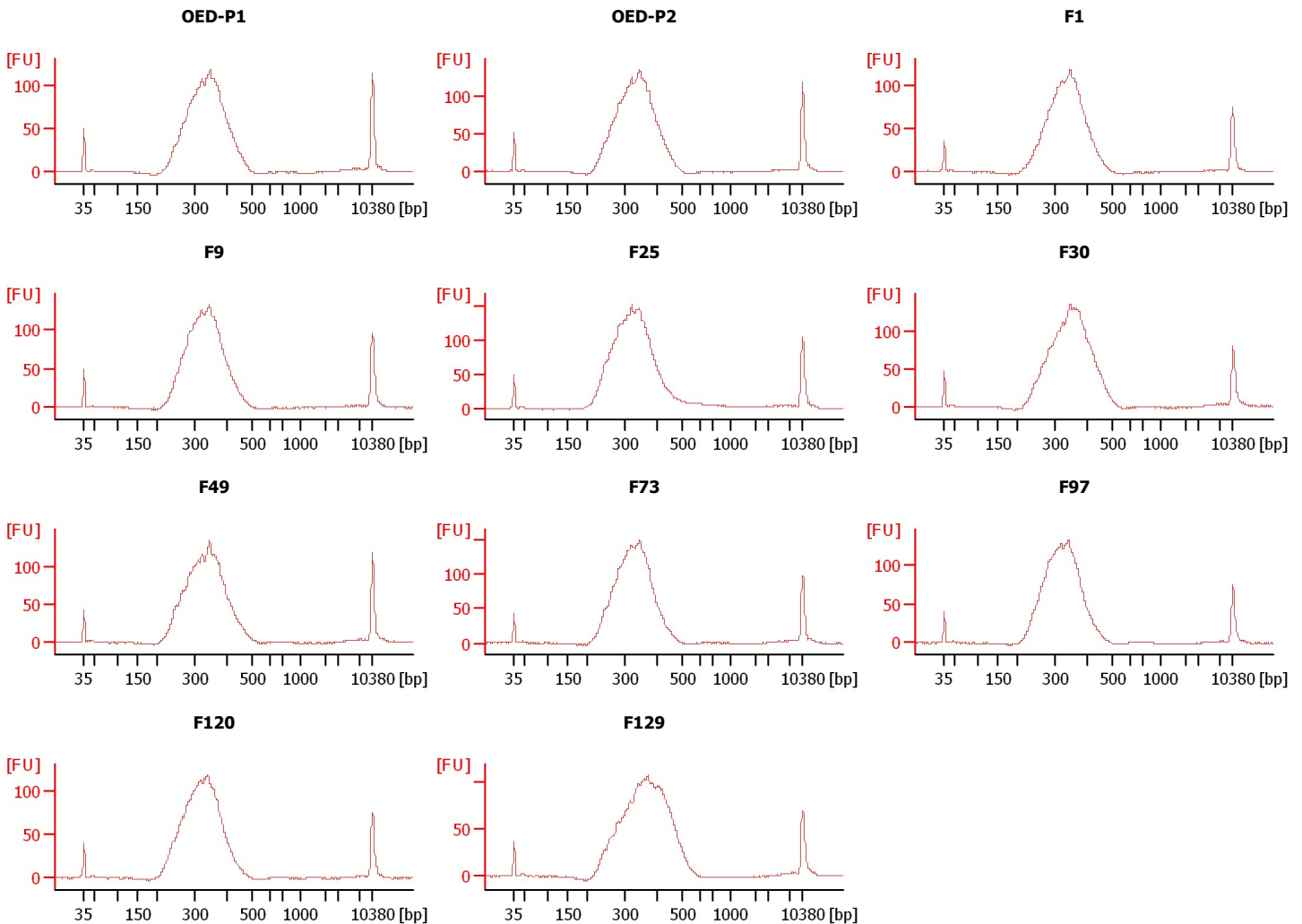
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-15\2016-09-15\_001.xad

Created: 9/15/2016 10:08:47 AM  
 Modified: 9/15/2016 10:51:18 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
OED-P1		<input type="checkbox"/>	✓			
OED-P2		<input type="checkbox"/>	✓			
F1		<input type="checkbox"/>	✓			
F9		<input type="checkbox"/>	✓			
F25		<input type="checkbox"/>	✓			
F30		<input type="checkbox"/>	✓			
F49		<input type="checkbox"/>	✓			
F73		<input type="checkbox"/>	✓			
F97		<input type="checkbox"/>	✓			
F120		<input type="checkbox"/>	✓			
F129		<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\2016-09-15\2016-09-15\_001.xad

Created: 9/15/2016 10:08:47 AM  
Modified: 9/15/2016 10:51:18 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

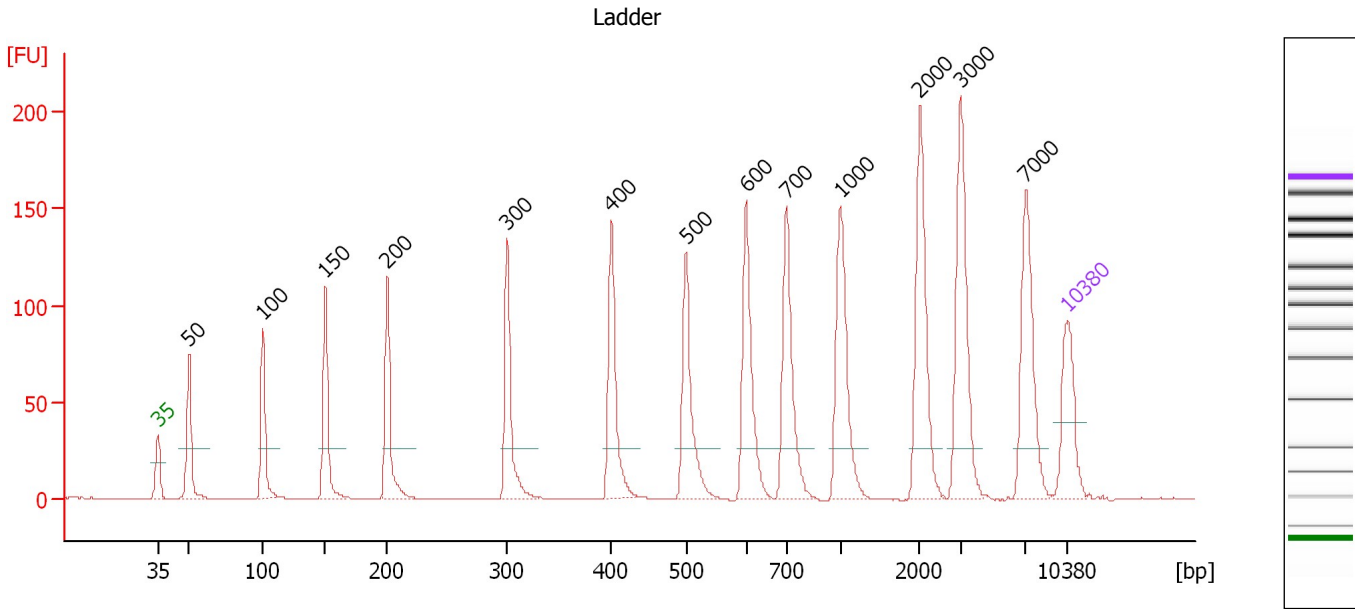
**Ladder**

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\2016-09-15\2016-09-15\_001.xad

Created: 9/15/2016 10:08:47 AM  
 Modified: 9/15/2016 10:51:18 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

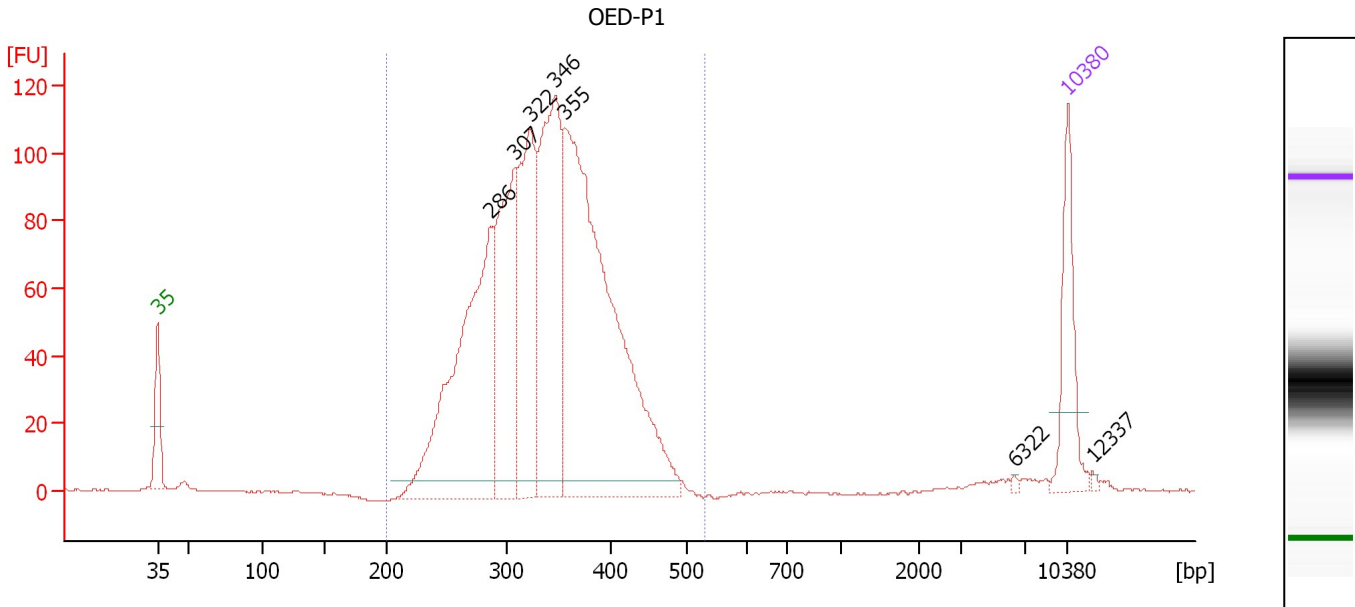
**Peak table for Ladder**

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	45.40
3	100	150.00	2,272.7	Ladder Peak	51.09
4	150	150.00	1,515.2	Ladder Peak	55.89
5	200	150.00	1,136.4	Ladder Peak	60.65
6	300	150.00	757.6	Ladder Peak	69.91
7	400	150.00	568.2	Ladder Peak	77.90
8	500	150.00	454.5	Ladder Peak	83.64
9	600	150.00	378.8	Ladder Peak	88.25
10	700	150.00	324.7	Ladder Peak	91.33
11	1,000	150.00	227.3	Ladder Peak	95.50
12	2,000	150.00	113.6	Ladder Peak	101.63
13	3,000	150.00	75.8	Ladder Peak	104.72
14	7,000	150.00	32.5	Ladder Peak	109.76
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-15\2016-09-15\_001.xad

Created: 9/15/2016 10:08:47 AM  
 Modified: 9/15/2016 10:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : OED-P1**

Number of peaks found: 7                      Corr. Area 1: 1,689.3  
 Noise: 0.2

**Peak table for sample 1 : OED-P1**

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	286	459.81	2,438.7		68.58
3	307	258.34	1,273.1		70.51
4	322	256.20	1,206.9		71.64
5	346	330.49	1,445.9		73.61
6	355	710.24	3,031.7		74.30
7	6,322	2.05	0.5		108.91
8	10,380	75.00	10.9	Upper Marker	113.00
9	12,337	0.00	0.0		114.87

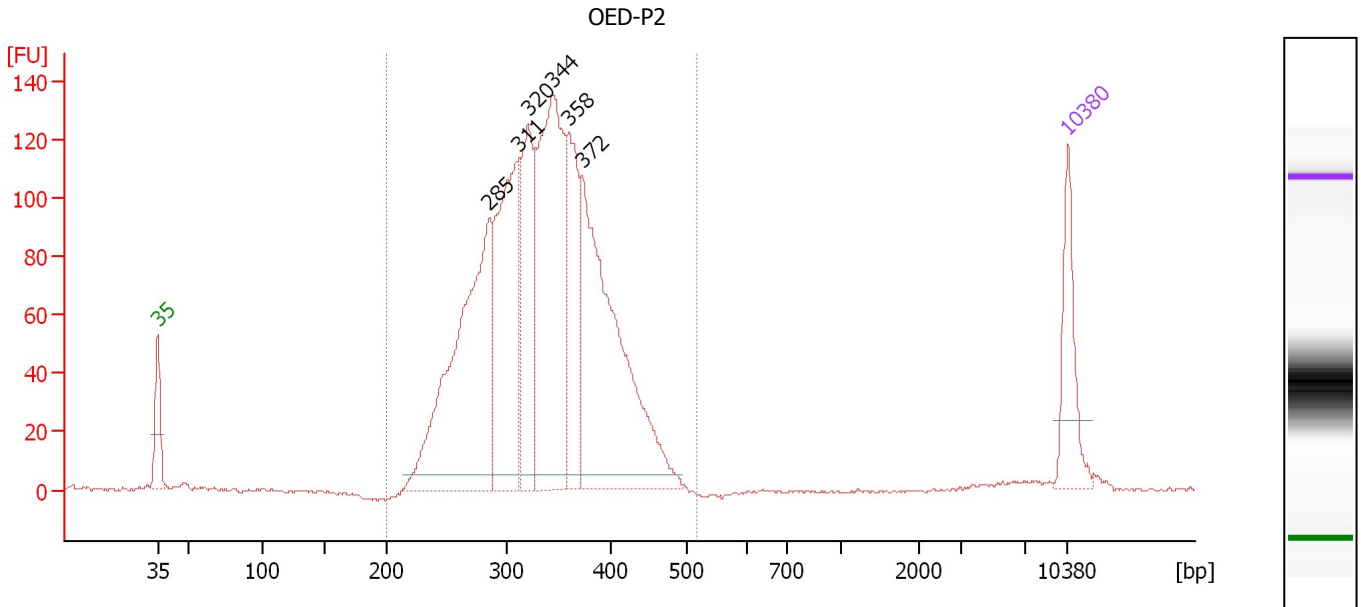
**Region table for sample 1 : OED-P1**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	532	337	1,689.3	8,996.1	1,938.47	99	15.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-15\2016-09-15\_001.xad

Created: 9/15/2016 10:08:47 AM  
 Modified: 9/15/2016 10:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : OED-P2**

Number of peaks found: 6                      Corr. Area 1: 1,957.5  
 Noise: 0.6

**Peak table for sample 2 : OED-P2**

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	285	512.39	2,724.5		68.52
3	311	339.65	1,657.3		70.75
4	320	224.53	1,063.7		71.50
5	344	448.67	1,975.8		73.43
6	358	177.07	748.7		74.57
7	372	491.22	2,000.6		75.67
8	10,380	75.00	10.9	Upper Marker	113.00

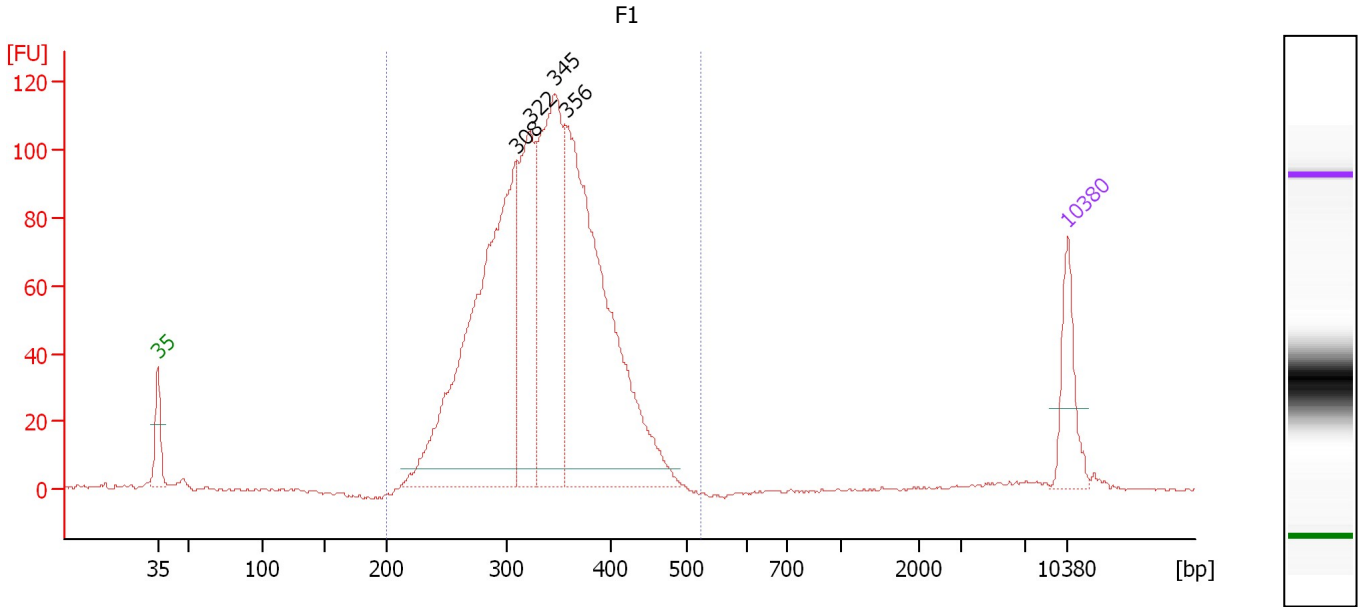
**Region table for sample 2 : OED-P2**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	519	334	1,957.5	10,304.0	2,199.79	99	15.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-15\2016-09-15\_001.xad

Created: 9/15/2016 10:08:47 AM  
 Modified: 9/15/2016 10:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : F1**

Number of peaks found: 4                      Corr. Area 1: 1,604.4  
 Noise: 0.3

**Peak table for sample 3 : F1**

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	308	862.65	4,237.3		70.59
3	322	316.68	1,491.6		71.64
4	345	497.55	2,185.5		73.50
5	356	837.23	3,560.7		74.41
6	10,380	75.00	10.9	Upper Marker	113.00

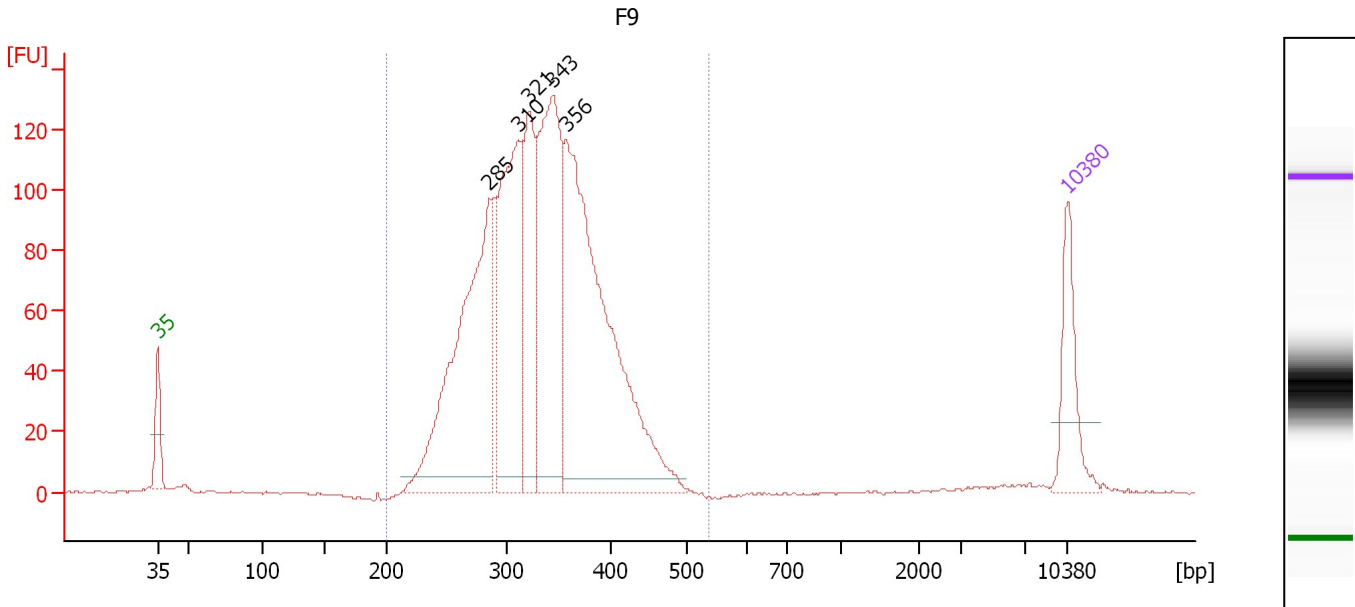
**Region table for sample 3 : F1**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	524	335	1,604.4	11,868.2	2,550.60	99	15.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-15\2016-09-15\_001.xad

Created: 9/15/2016 10:08:47 AM  
 Modified: 9/15/2016 10:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : F9**

Number of peaks found: 5                      Corr. Area 1: 1,883.9  
 Noise: 0.4

**Peak table for sample 4 : F9**

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	285	508.36	2,704.7		68.50
3	310	351.49	1,718.5		70.70
4	321	200.82	948.5		71.57
5	343	398.52	1,759.2		73.37
6	356	675.32	2,873.8		74.39
7	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : F9**

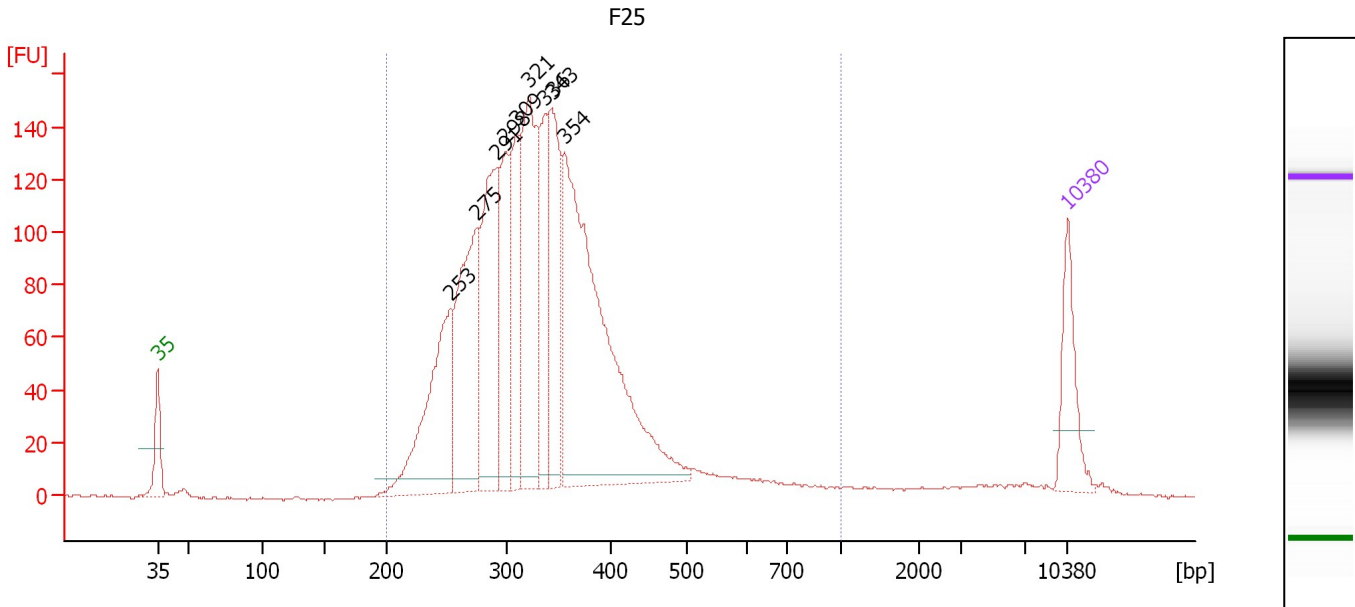
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	538	332	1,883.9	10,220.1	2,171.54	99	15.3



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-15\2016-09-15\_001.xad

Created: 9/15/2016 10:08:47 AM  
 Modified: 9/15/2016 10:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : F25**

Number of peaks found: 9                      Corr. Area 1: 2,459.8  
 Noise: 0.5

**Peak table for sample 5 : F25**

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	286.65	1,714.4		65.59
3	275	298.96	1,649.3		67.56
4	291	280.13	1,456.3		69.12
5	298	172.95	878.8		69.74
6	309	165.85	813.4		70.63
7	321	308.43	1,454.5		71.61
8	336	142.88	643.8		72.81
9	343	212.61	939.9		73.33
10	354	678.83	2,901.9		74.26
11	10,380	75.00	10.9	Upper Marker	113.00

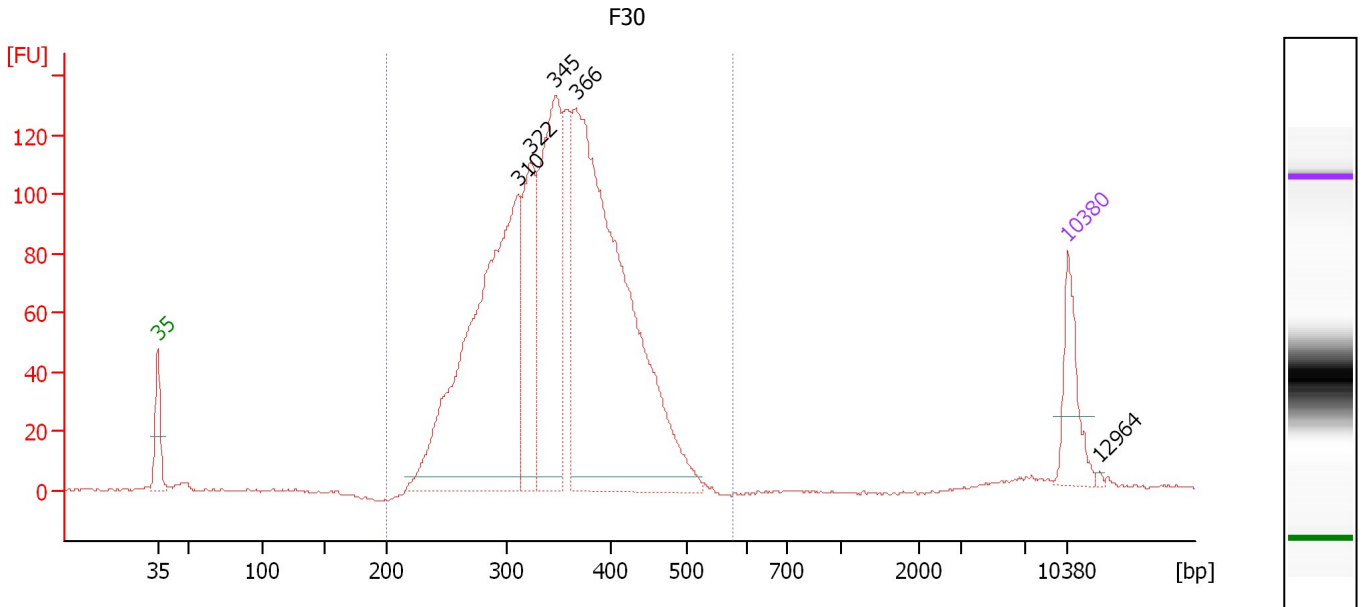
**Region table for sample 5 : F25**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	340	2,459.8	13,122.5	2,758.86	96	26.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-15\2016-09-15\_001.xad

Created: 9/15/2016 10:08:47 AM  
 Modified: 9/15/2016 10:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : F30**

Number of peaks found: 5                      Corr. Area 1: 2,031.3  
 Noise: 0.5

**Peak table for sample 6 : F30**

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	310	867.78	4,236.9		70.74
3	322	249.46	1,175.6		71.63
4	345	450.76	1,978.3		73.53
5	366	1,074.40	4,451.9		75.16
6	10,380	75.00	10.9	Upper Marker	113.00
7	12,964	0.00	0.0		115.47

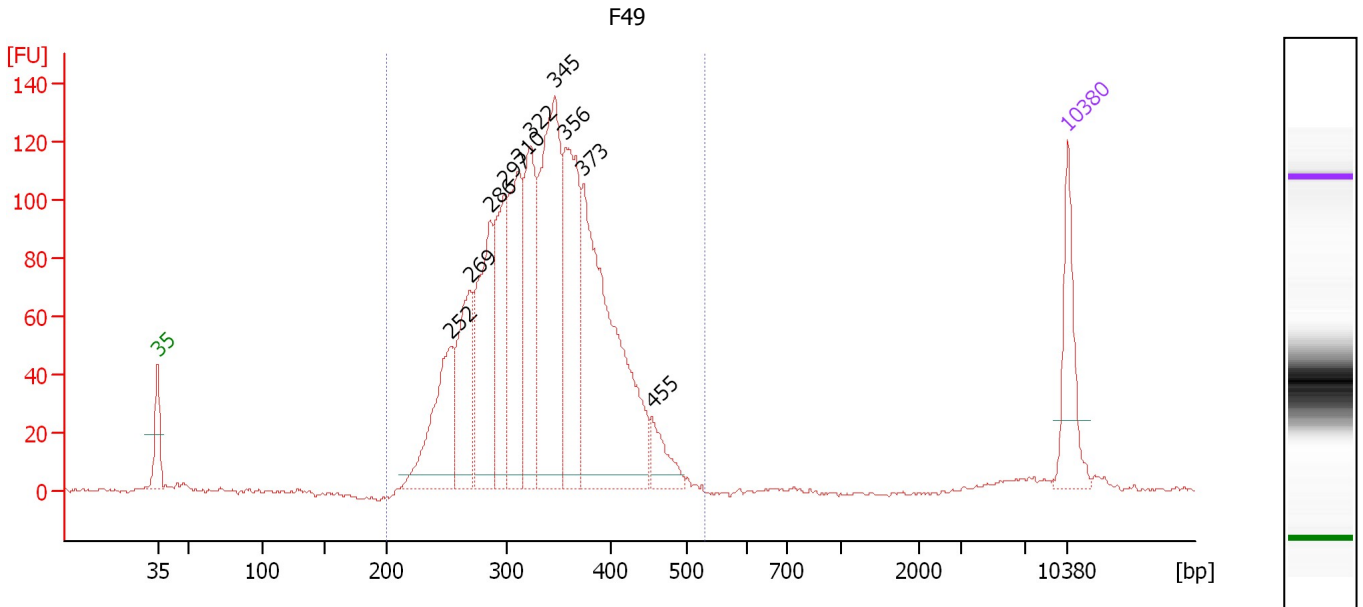
**Region table for sample 6 : F30**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	578	349	2,031.3	12,592.6	2,791.80	97	16.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-15\2016-09-15\_001.xad

Created: 9/15/2016 10:08:47 AM  
 Modified: 9/15/2016 10:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : F49**

Number of peaks found: 10                      Corr. Area 1: 1,898.7  
 Noise: 0.7

**Peak table for sample 7 : F49**

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	252	173.51	1,043.3		65.46
3	269	159.10	897.3		67.01
4	286	215.67	1,142.8		68.61
5	297	166.92	850.2		69.68
6	310	212.60	1,037.7		70.74
7	322	193.14	909.5		71.65
8	345	364.76	1,601.3		73.52
9	356	234.26	997.5		74.37
10	373	442.34	1,795.9		75.76
11	455	45.65	152.1		81.04
12	10,380	75.00	10.9	Upper Marker	113.00

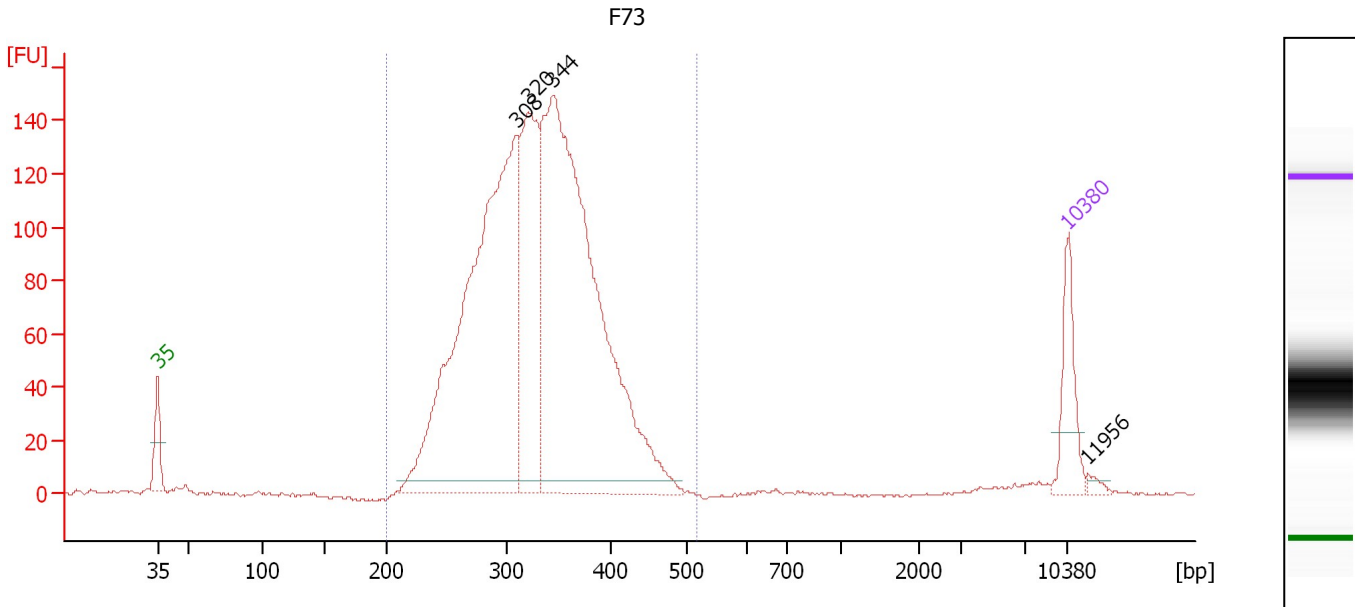
**Region table for sample 7 : F49**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	530	335	1,898.7	10,411.6	2,220.99	99	16.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-15\2016-09-15\_001.xad

Created: 9/15/2016 10:08:47 AM  
 Modified: 9/15/2016 10:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : F73**

Number of peaks found: 4                      Corr. Area 1: 2,112.7  
 Noise: 0.4

**Peak table for sample 8 : F73**

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	308	1,082.92	5,318.7		70.59
3	320	392.93	1,860.7		71.51
4	344	1,201.82	5,289.8		73.45
5	10,380	75.00	10.9	Upper Marker	113.00
6	11,956	0.00	0.0		114.51

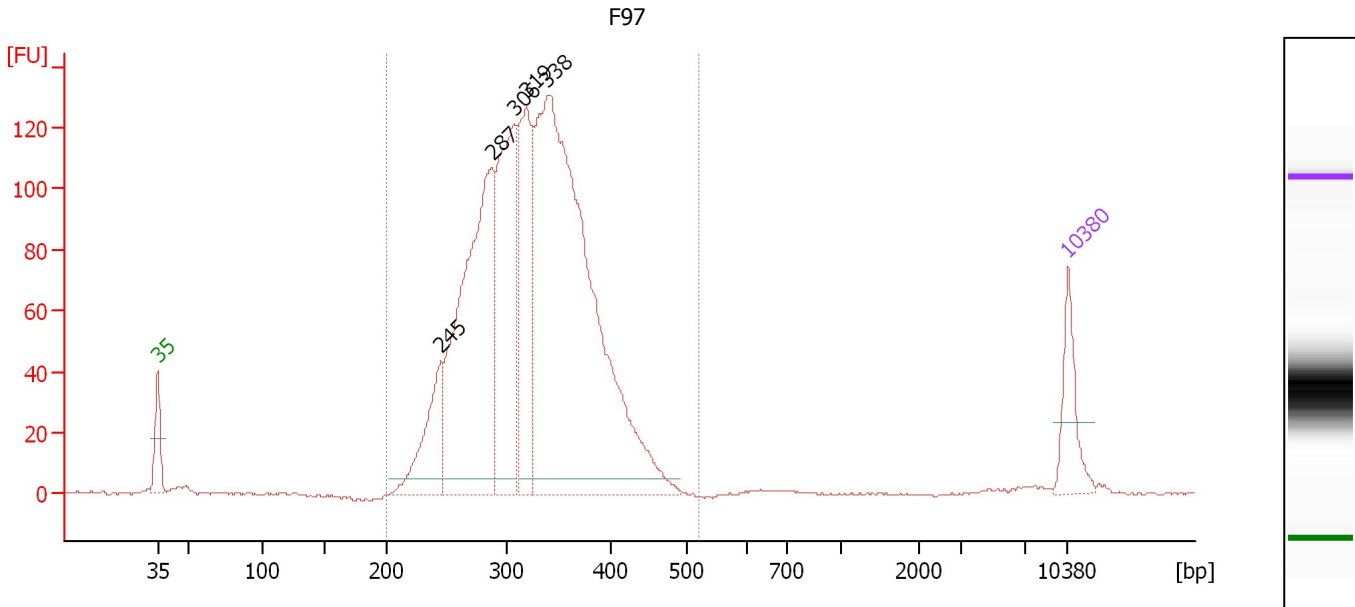
**Region table for sample 8 : F73**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	519	328	2,112.7	12,802.7	2,688.24	99	15.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-15\2016-09-15\_001.xad

Created: 9/15/2016 10:08:47 AM  
 Modified: 9/15/2016 10:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : F97**

Number of peaks found: 5                      Corr. Area 1: 1,872.8  
 Noise: 0.3

**Peak table for sample 9 : F97**

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	245	180.45	1,116.7		64.80
3	287	760.18	4,015.0		68.70
4	306	453.31	2,241.3		70.43
5	319	335.82	1,596.9		71.40
6	338	1,444.44	6,469.9		72.97
7	10,380	75.00	10.9	Upper Marker	113.00

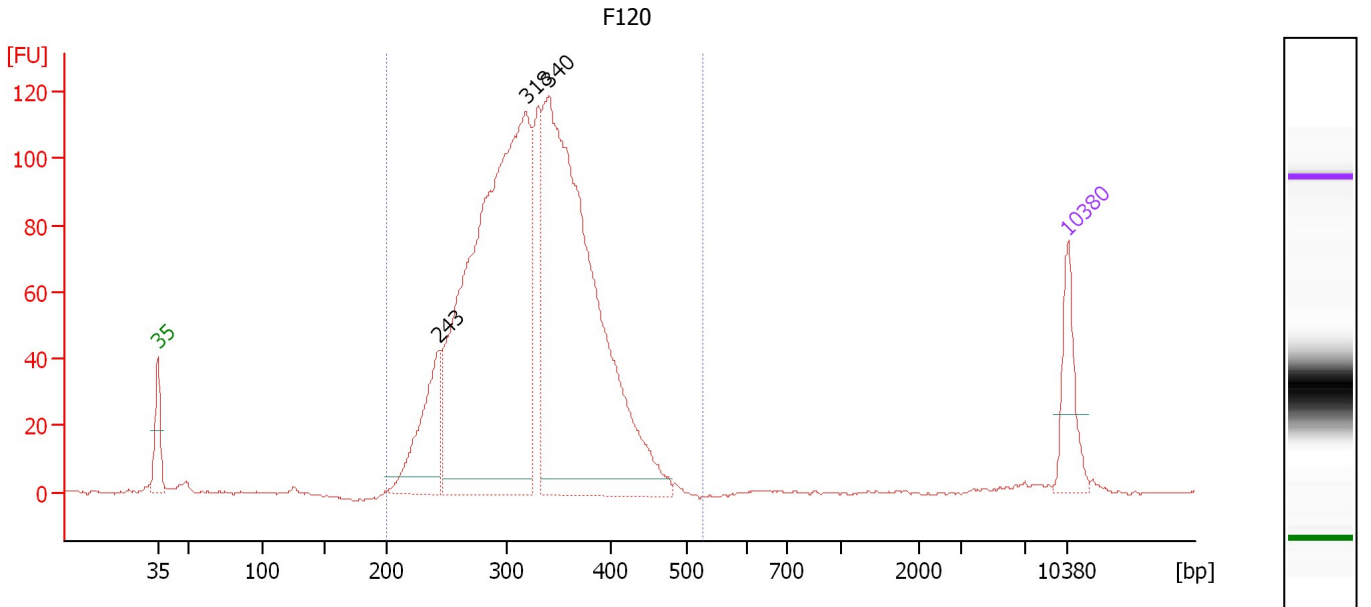
**Region table for sample 9 : F97**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	523	324	1,872.8	15,107.0	3,131.44	99	15.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-15\2016-09-15\_001.xad

Created: 9/15/2016 10:08:47 AM  
 Modified: 9/15/2016 10:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : F120**

Number of peaks found: 3                      Corr. Area 1: 1,724.6  
 Noise: 0.4

**Peak table for sample 10 : F120**

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	243	206.81	1,288.5		64.65
3	318	1,308.31	6,236.7		71.34
4	340	1,171.11	5,224.7		73.08
5	10,380	75.00	10.9	Upper Marker	113.00

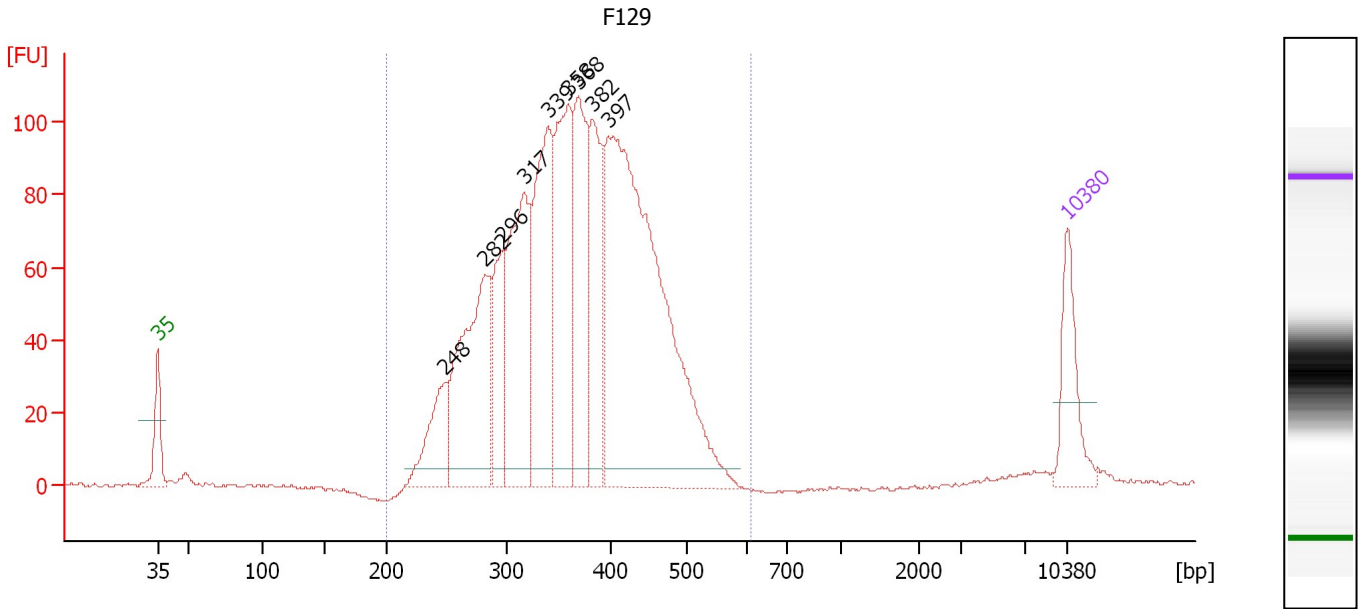
**Region table for sample 10 : F120**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	530	323	1,724.6	13,722.0	2,833.03	99	15.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-15\2016-09-15\_001.xad

Created: 9/15/2016 10:08:47 AM  
 Modified: 9/15/2016 10:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : F129**

Number of peaks found: 9                      Corr. Area 1: 1,859.6  
 Noise: 0.5

**Peak table for sample 11 : F129**

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	248	116.49	711.8		65.09
3	282	322.45	1,734.4		68.22
4	296	128.49	656.6		69.59
5	317	283.51	1,357.2		71.23
6	339	292.21	1,305.5		73.04
7	358	282.71	1,195.4		74.57
8	368	221.84	913.5		75.34
9	382	174.96	694.6		76.44
10	397	824.38	3,142.7		77.70
11	10,380	75.00	10.9	Upper Marker	113.00

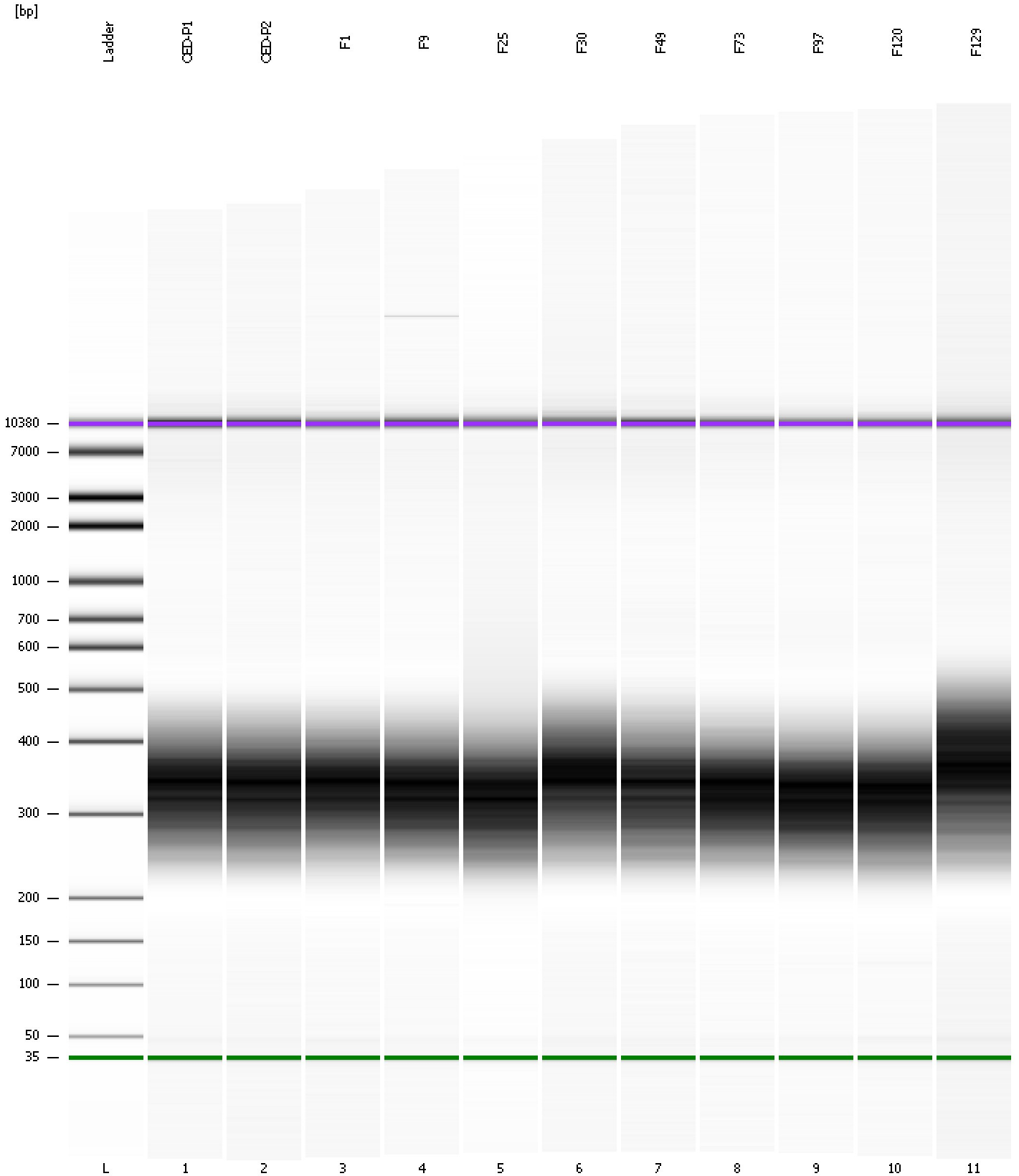
**Region table for sample 11 : F129**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	612	366	1,859.6	11,498.3	2,642.77	98	18.8

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-15\2016-09-15\_001.xad

Created: 9/15/2016 10:08:47 AM  
Modified: 9/15/2016 10:51:18 AM

**Gel Image**





Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-15\2016-09-15\_001.xad

Created: 9/15/2016 10:08:47 AM  
 Modified: 9/15/2016 10:51:18 AM

**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		9/15/2016 10:50:06 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-09-15\2016-09-15_001.xad)		Instrument	Run		9/15/2016 10:08:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		9/15/2016 10:08:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		9/15/2016 10:08:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		9/15/2016 10:08:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		9/15/2016 10:08:52 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		9/15/2016 10:08:52 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		9/15/2016 10:08:52 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1