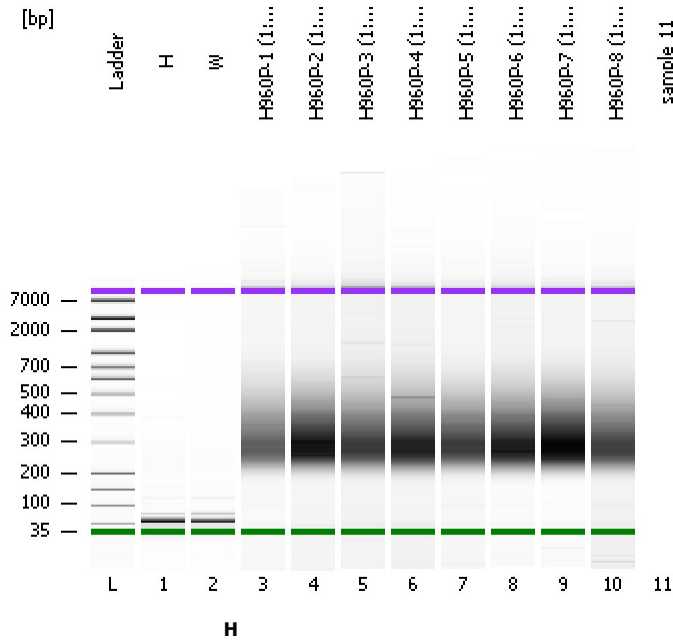


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-30\2017-08-30\_003.xad

Created: 8/30/2017 3:49:09 PM  
Modified: 8/30/2017 4:36:30 PM

**Electrophoresis File Run Summary**



Instrument Information:

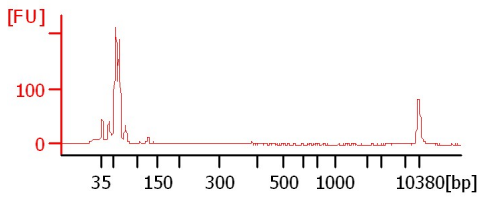
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

Assay Information:

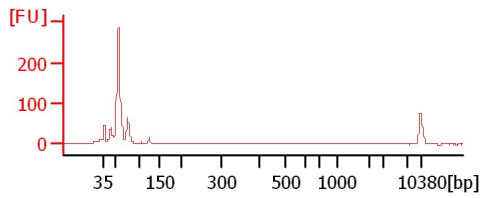
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy  
Assay Class: High Sensitivity DNA Assay  
Version: 1.03  
Assay Comments: Copyright © 2003-2010 Agilent Technologies

Chip Information:

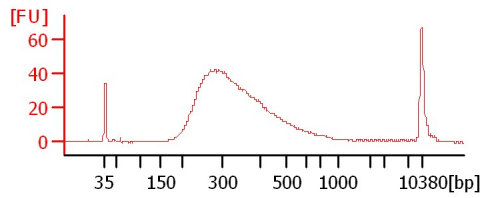
Chip Lot #:      Reagent Kit Lot #:      Chip Comments:



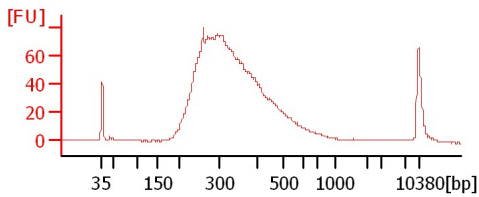
H960P-1 (1:10)



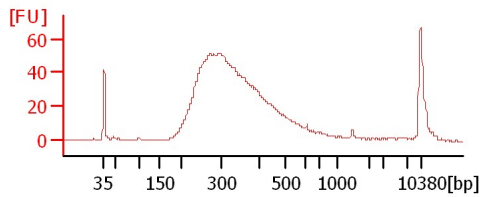
H960P-2 (1:10)



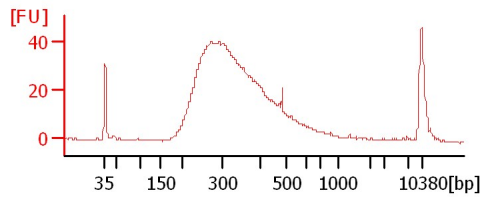
H960P-3 (1:10)



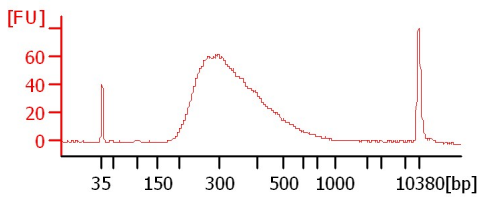
H960P-4 (1:10)



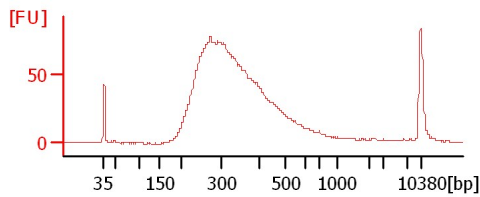
H960P-5 (1:10)



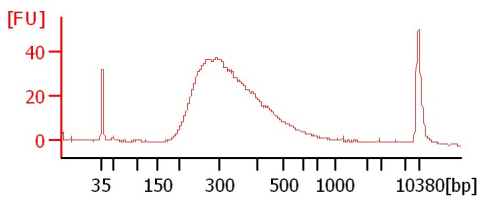
H960P-6 (1:10)



H960P-7 (1:10)



H960P-8 (1:10)



H960P-9 (1:10)

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-30\2017-08-30\_003.xad

Created: 8/30/2017 3:49:09 PM  
Modified: 8/30/2017 4:36:30 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
H		<input type="checkbox"/>	✓			
W		<input type="checkbox"/>	✓			
H960P-1 (1:10)		<input type="checkbox"/>	✓			
H960P-2 (1:10)		<input type="checkbox"/>	✓			
H960P-3 (1:10)		<input type="checkbox"/>	✓			
H960P-4 (1:10)		<input type="checkbox"/>	✓			
H960P-5 (1:10)		<input type="checkbox"/>	✓			
H960P-6 (1:10)		<input type="checkbox"/>	✓			
H960P-7 (1:10)		<input type="checkbox"/>	✓			
H960P-8 (1:10)		<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\2017-08-30\2017-08-30\_003.xad

Created: 8/30/2017 3:49:09 PM  
Modified: 8/30/2017 4:36:30 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

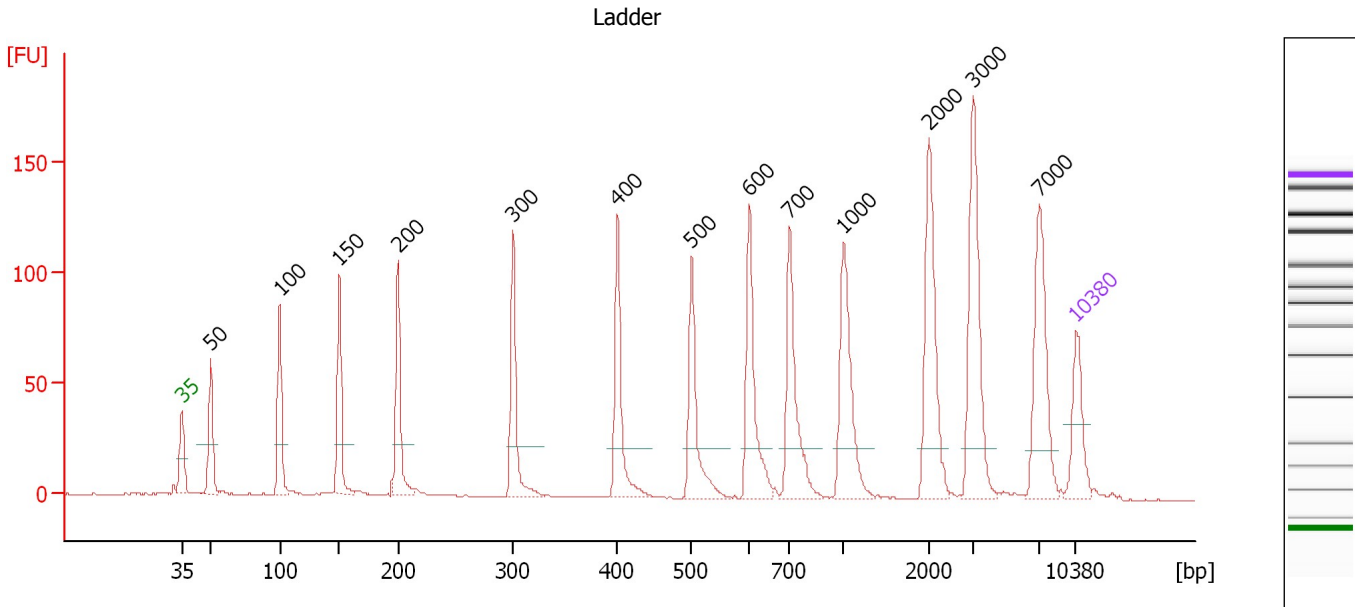
**Ladder**

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\2017-08-30\2017-08-30\_003.xad

Created: 8/30/2017 3:49:09 PM  
 Modified: 8/30/2017 4:36:30 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

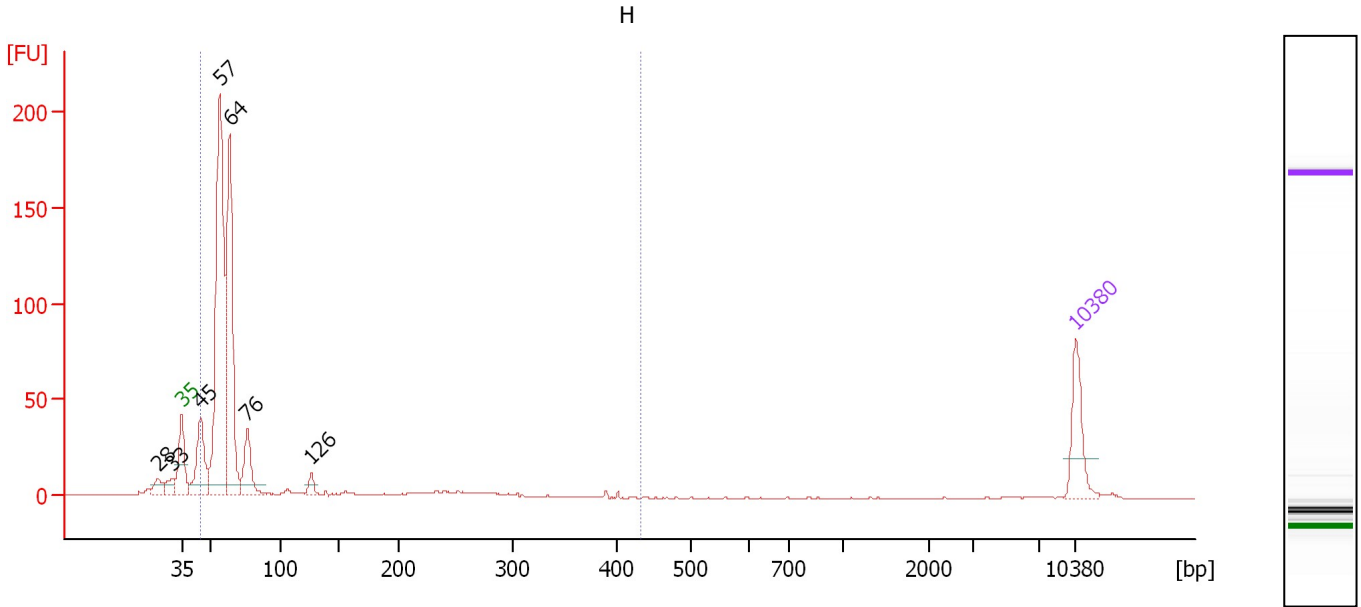
**Peak table for Ladder**

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	45.28
3	100	150.00	2,272.7	Ladder Peak	50.70
4	150	150.00	1,515.2	Ladder Peak	55.32
5	200	150.00	1,136.4	Ladder Peak	59.93
6	300	150.00	757.6	Ladder Peak	68.95
7	400	150.00	568.2	Ladder Peak	77.11
8	500	150.00	454.5	Ladder Peak	82.89
9	600	150.00	378.8	Ladder Peak	87.45
10	700	150.00	324.7	Ladder Peak	90.60
11	1,000	150.00	227.3	Ladder Peak	94.80
12	2,000	150.00	113.6	Ladder Peak	101.49
13	3,000	150.00	75.8	Ladder Peak	104.94
14	7,000	150.00	32.5	Ladder Peak	110.11
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-30\2017-08-30\_003.xad

Created: 8/30/2017 3:49:09 PM  
 Modified: 8/30/2017 4:36:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : H**

Number of peaks found: 7                      Corr. Area 1: 669.6  
 Noise: 0.2

**Peak table for sample 1 : H**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	28	0.00	0.0		41.12
2	33	0.00	0.0		42.29
3	35	125.00	5,411.3	Lower Marker	43.00
4	45	155.96	5,286.1		44.48
5	57	735.05	19,662.1		46.00
6	64	479.40	11,406.9		46.76
7	76	99.50	1,974.8		48.14
8	126	20.83	250.0		53.12
9	10,380	75.00	10.9	Upper Marker	113.00

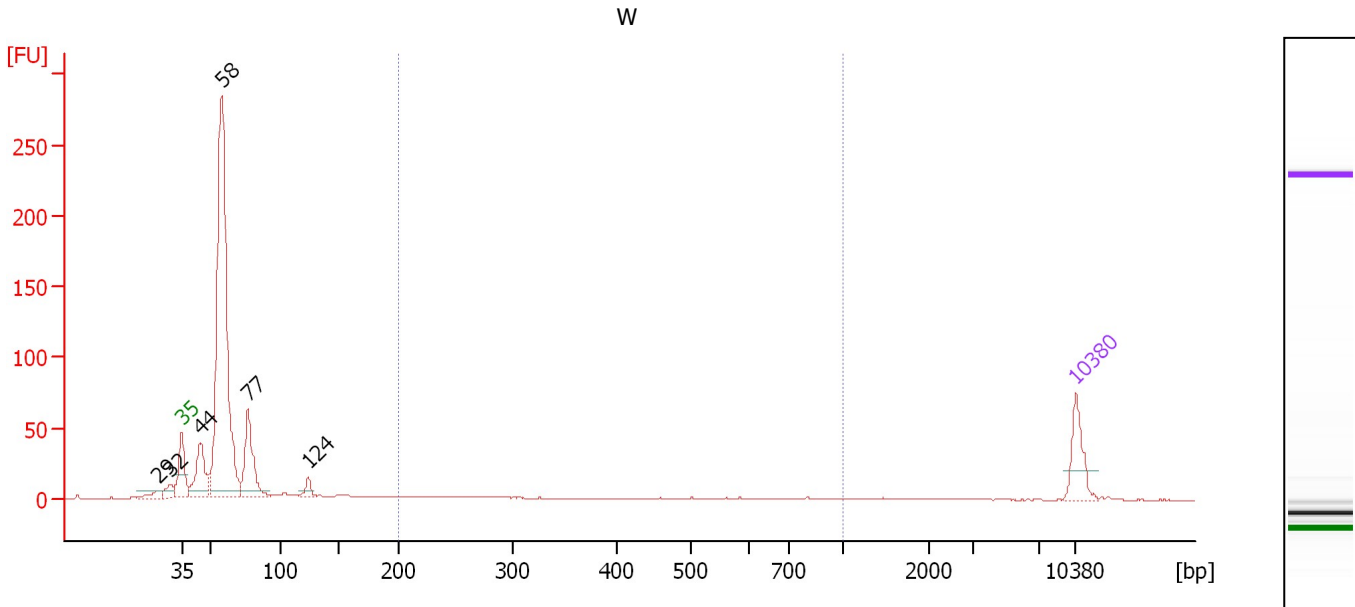
**Region table for sample 1 : H**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
45	433	74	669.6	36,955.1	1,525.23	90	65.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-30\2017-08-30\_003.xad

Created: 8/30/2017 3:49:09 PM  
 Modified: 8/30/2017 4:36:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : W**

Number of peaks found: 6                      Corr. Area 1: 50.2  
 Noise: 0.2

**Peak table for sample 2 : W**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	29	0.00	0.0		41.16
2	32	0.00	0.0		42.13
3	35	125.00	5,411.3	Lower Marker	43.00
4	44	172.29	5,880.0		44.43
5	58	1,323.19	34,486.5		46.16
6	77	234.17	4,610.9		48.20
7	124	32.00	389.9		52.95
8	10,380	75.00	10.9	Upper Marker	113.00

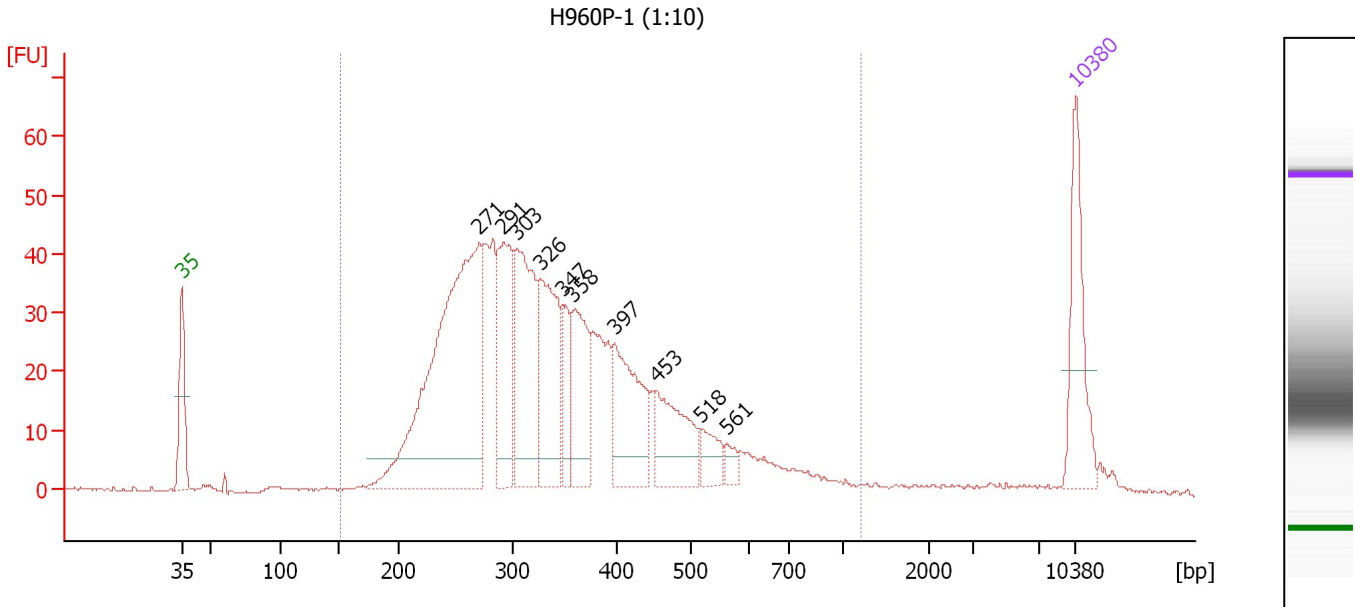
**Region table for sample 2 : W**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	412	50.2	431.6	90.15	6	49.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-30\2017-08-30\_003.xad

Created: 8/30/2017 3:49:09 PM  
 Modified: 8/30/2017 4:36:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : H960P-1 (1:10)**

Number of peaks found: 10      Corr. Area 1: 983.4  
 Noise: 0.2

**Peak table for sample 3 : H960P-1 (1:10)**

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	271	494.88	2,771.0		66.30
3	291	137.00	712.4		68.17
4	303	186.11	929.9		69.22
5	326	145.98	679.3		71.04
6	347	48.31	210.7		72.81
7	358	95.74	405.7		73.65
8	397	121.49	463.5		76.88
9	453	91.41	305.9		80.16
10	518	29.03	84.9		83.71
11	561	12.50	33.7		85.69
12	10,380	75.00	10.9	Upper Marker	113.00

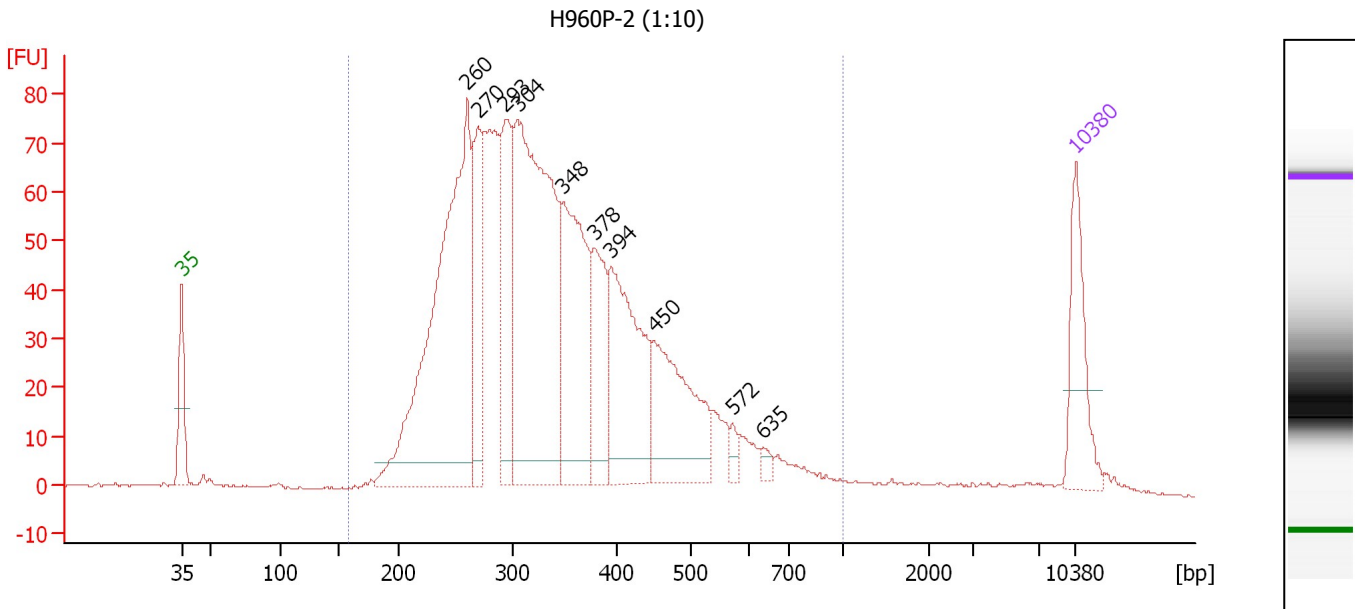
**Region table for sample 3 : H960P-1 (1:10)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
152	1,215	355	983.4	8,522.0	1,762.26	96	35.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-30\2017-08-30\_003.xad

Created: 8/30/2017 3:49:09 PM  
 Modified: 8/30/2017 4:36:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : H960P-2 (1:10)**

Number of peaks found: 10      Corr. Area 1: 1,696.4  
 Noise: 0.3

**Peak table for sample 4 : H960P-2 (1:10)**

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	260	626.03	3,646.3		65.36
3	270	152.67	858.0		66.21
4	293	175.30	905.7		68.34
5	304	557.13	2,774.0		69.30
6	348	257.43	1,120.5		72.88
7	378	118.85	476.2		75.33
8	394	222.86	857.3		76.61
9	450	180.43	608.2		79.97
10	572	11.59	30.7		86.16
11	635	8.28	19.7		88.56
12	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : H960P-2 (1:10)**

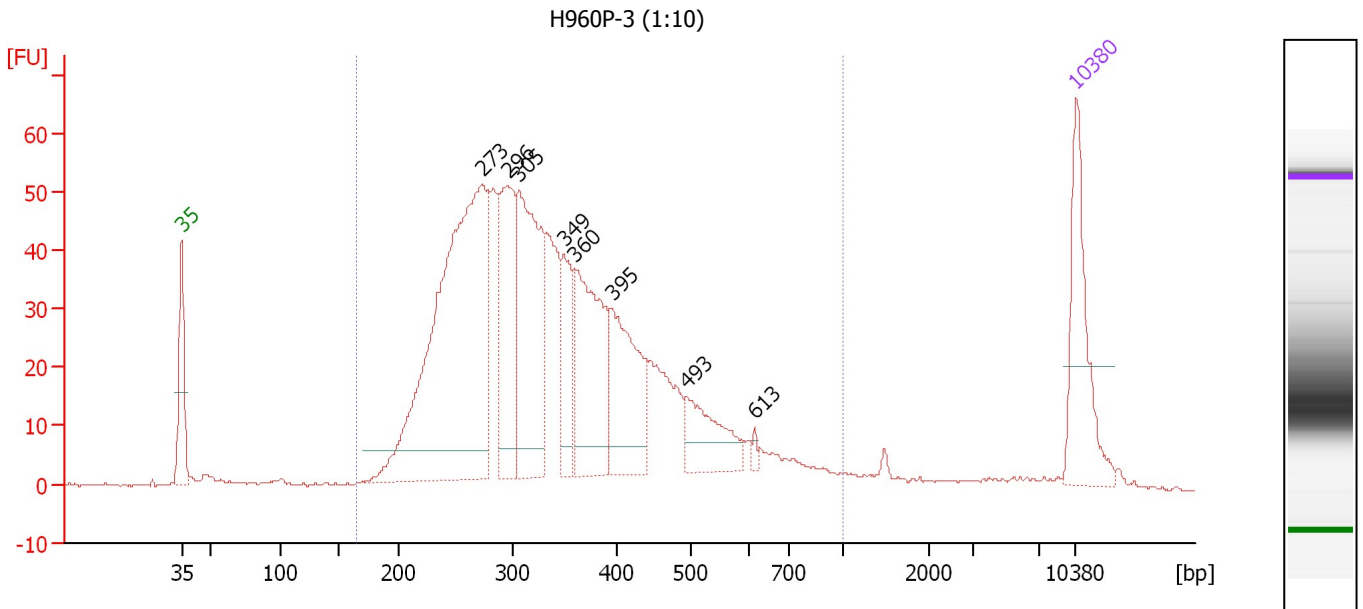
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
158	1,000	350	1,696.4	13,016.9	2,701.34	97	31.4



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-30\2017-08-30\_003.xad

Created: 8/30/2017 3:49:09 PM  
 Modified: 8/30/2017 4:36:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : H960P-3 (1:10)**

Number of peaks found: 8                      Corr. Area 1: 1,181.4  
 Noise: 0.2

**Peak table for sample 5 : H960P-3 (1:10)**

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	273	524.40	2,912.8		66.50
3	296	142.72	731.3		68.56
4	305	214.40	1,064.3		69.38
5	349	67.37	292.9		72.91
6	360	153.69	647.0		73.84
7	395	117.88	452.7		76.67
8	493	63.26	194.4		82.49
9	613	4.83	11.9		87.87
10	10,380	75.00	10.9	Upper Marker	113.00

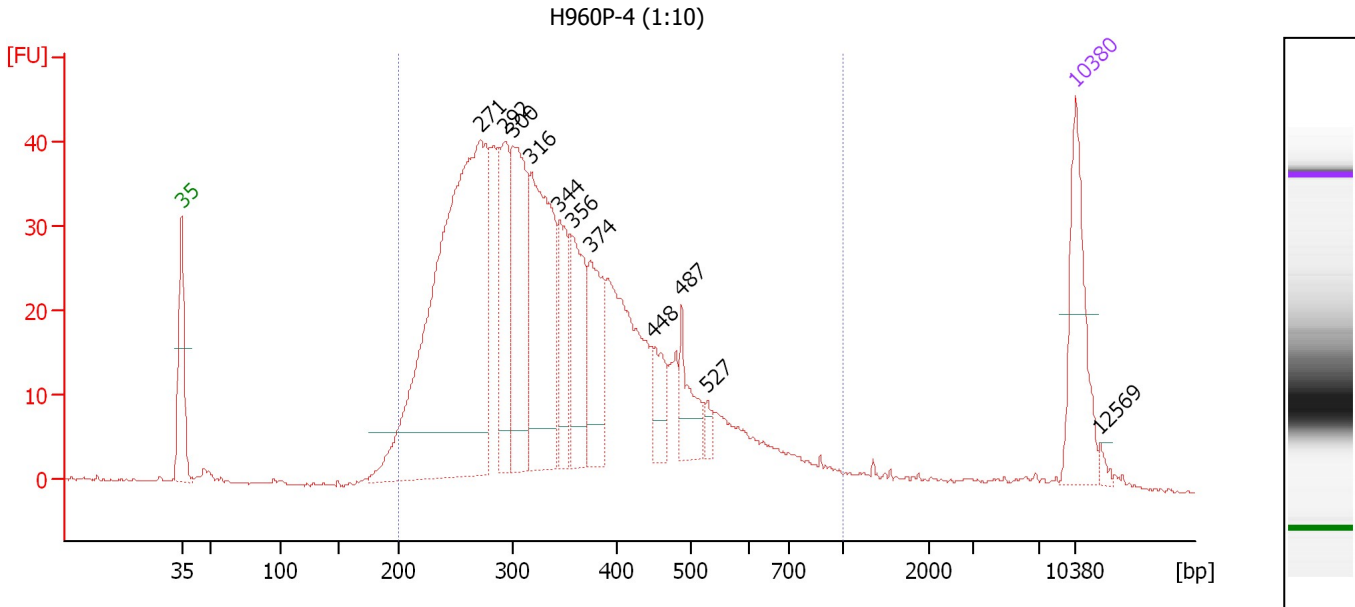
**Region table for sample 5 : H960P-3 (1:10)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
165	1,000	354	1,181.4	8,338.3	1,728.58	95	33.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-30\2017-08-30\_003.xad

Created: 8/30/2017 3:49:09 PM  
 Modified: 8/30/2017 4:36:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : H960P-4 (1:10)**

Number of peaks found: 11                      Corr. Area 1: 925.9  
 Noise: 0.2

**Peak table for sample 6 : H960P-4 (1:10)**

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	271	652.67	3,649.4		66.33
3	292	109.04	565.1		68.26
4	300	162.21	820.2		68.92
5	316	216.09	1,034.6		70.30
6	344	71.38	314.3		72.55
7	356	93.93	399.5		73.54
8	374	81.62	330.8		74.97
9	448	37.35	126.4		79.87
10	487	43.75	136.2		82.13
11	527	10.12	29.1		84.11
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,569	0.00	0.0		114.87

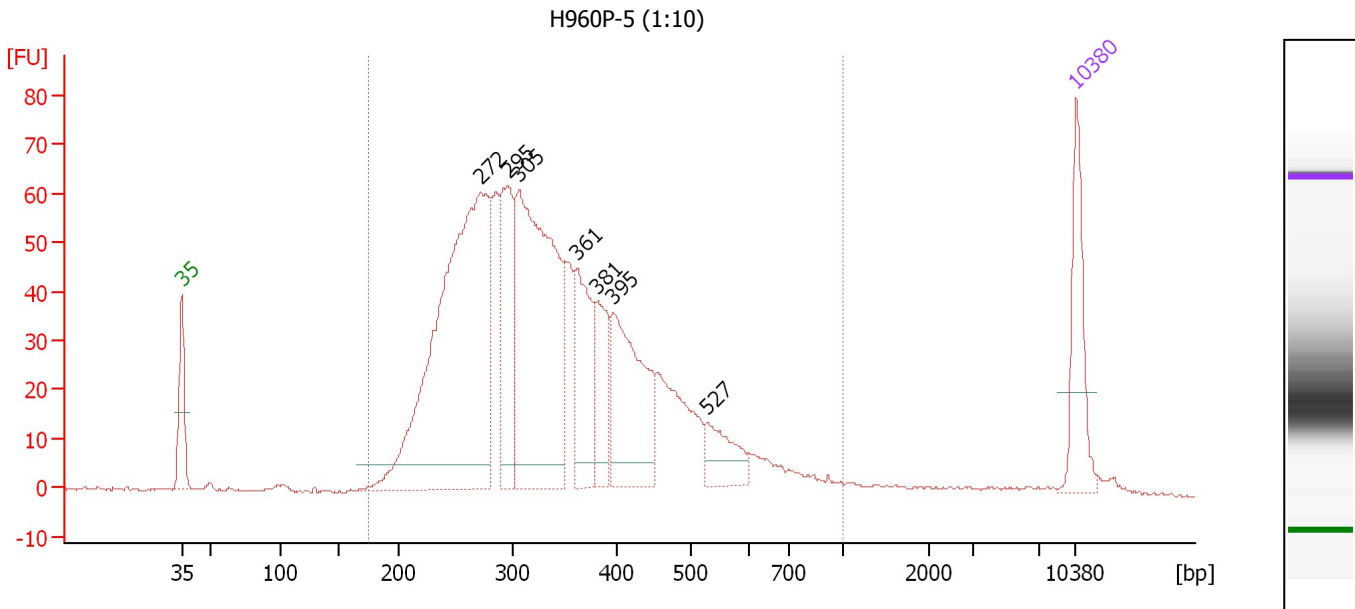
**Region table for sample 6 : H960P-4 (1:10)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	354	925.9	9,668.8	2,015.30	95	33.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-30\2017-08-30\_003.xad

Created: 8/30/2017 3:49:09 PM  
 Modified: 8/30/2017 4:36:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : H960P-5 (1:10)**

Number of peaks found: 7                      Corr. Area 1: 1,328.4  
 Noise: 0.2

**Peak table for sample 7 : H960P-5 (1:10)**

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	272	721.37	4,024.2		66.39
3	295	164.46	843.5		68.54
4	305	492.76	2,445.5		69.38
5	361	133.70	560.6		73.96
6	381	81.69	325.1		75.54
7	395	191.26	733.1		76.73
8	527	54.93	157.9		84.13
9	10,380	75.00	10.9	Upper Marker	113.00

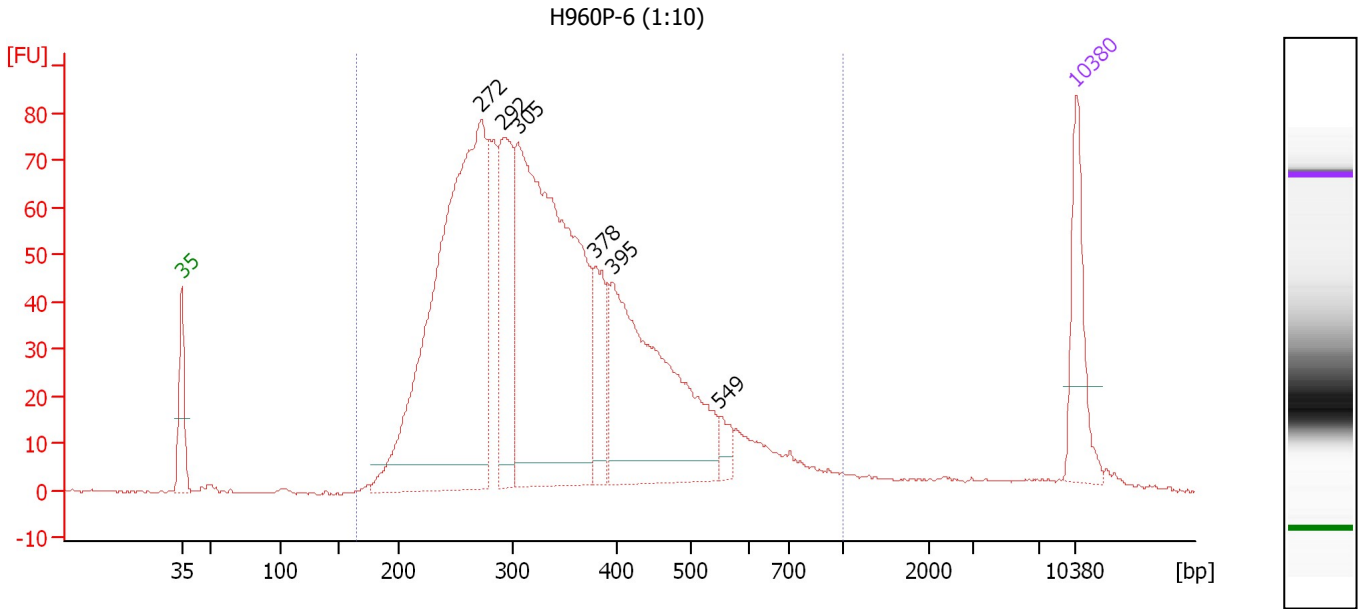
**Region table for sample 7 : H960P-5 (1:10)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
175	1,000	350	1,328.4	10,670.9	2,219.48	97	31.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-30\2017-08-30\_003.xad

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 Modified: 8/30/2017 4:36:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : H960P-6 (1:10)**

Number of peaks found: 6                      Corr. Area 1: 1,709.2  
 Noise: 0.2

**Peak table for sample 8 : H960P-6 (1:10)**

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	272	807.36	4,496.9		66.43
3	292	187.24	972.7		68.20
4	305	742.88	3,693.0		69.34
5	378	89.01	356.5		75.34
6	395	376.98	1,445.6		76.71
7	549	19.92	55.0		85.11
8	10,380	75.00	10.9	Upper Marker	113.00

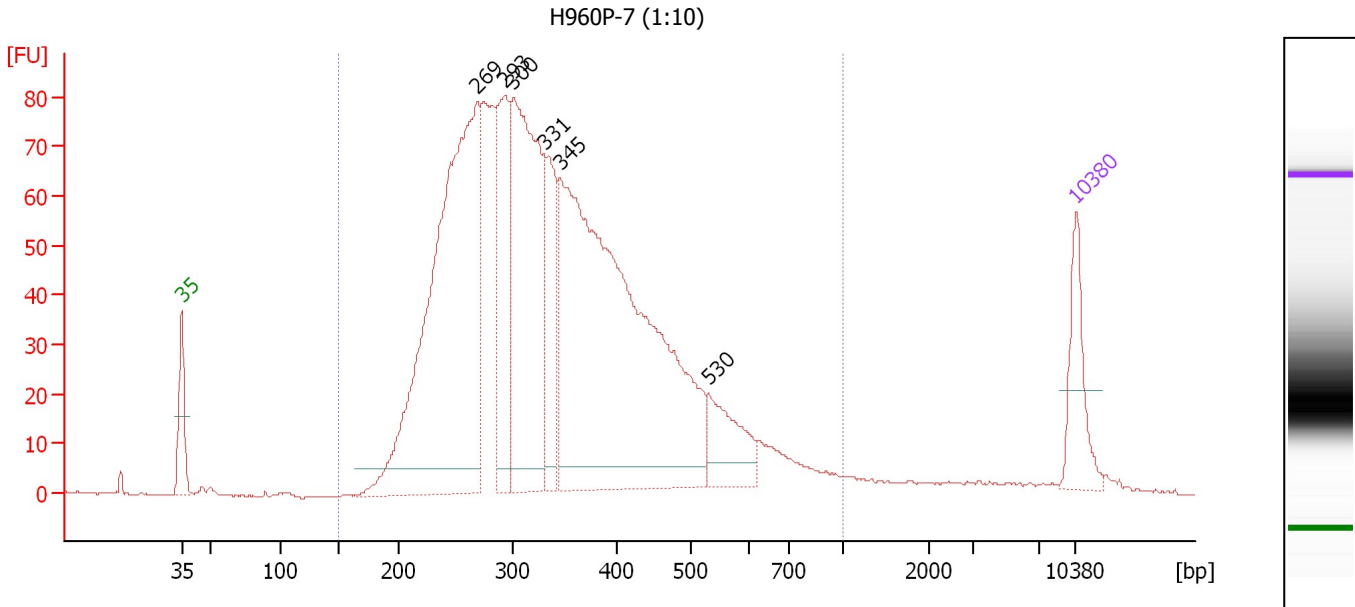
**Region table for sample 8 : H960P-6 (1:10)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
166	1,000	353	1,709.2	12,203.1	2,522.18	95	33.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-30\2017-08-30\_003.xad

Created: 8/30/2017 3:49:09 PM  
 Modified: 8/30/2017 4:36:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : H960P-7 (1:10)**

Number of peaks found: 6                      Corr. Area 1: 1,815.8  
 Noise: 0.2

**Peak table for sample 9 : H960P-7 (1:10)**

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	269	999.15	5,626.3		66.16
3	293	227.91	1,180.2		68.28
4	300	534.19	2,695.9		68.97
5	331	163.59	748.5		71.49
6	345	1,133.43	4,975.1		72.64
7	530	104.74	299.2		84.28
8	10,380	75.00	10.9	Upper Marker	113.00

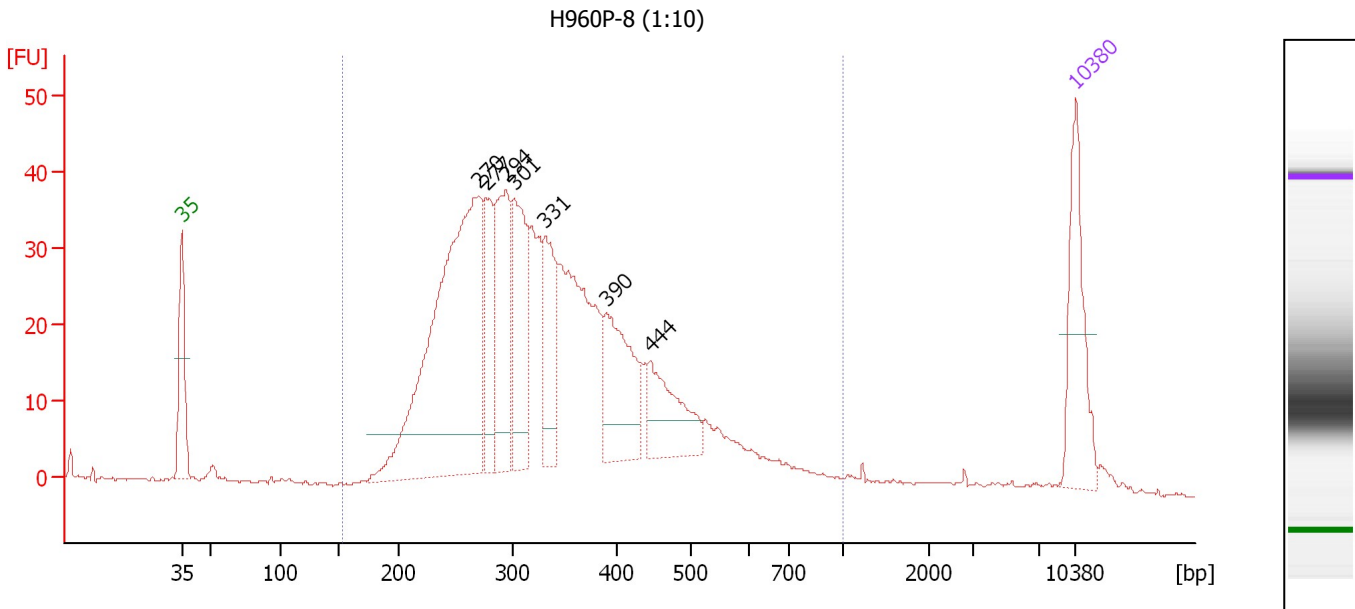
**Region table for sample 9 : H960P-7 (1:10)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
150	1,000	352	1,815.8	17,001.3	3,525.72	97	32.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-30\2017-08-30\_003.xad

Created: 8/30/2017 3:49:09 PM  
 Modified: 8/30/2017 4:36:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : H960P-8 (1:10)**

Number of peaks found: 7                      Corr. Area 1: 822.6  
 Noise: 0.2

**Peak table for sample 10 : H960P-8 (1:10)**

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	270	501.04	2,810.4		66.26
3	277	82.79	453.7		66.83
4	294	135.90	700.9		68.39
5	301	126.65	637.7		69.03
6	331	95.03	435.5		71.45
7	390	112.42	436.7		76.30
8	444	81.49	278.2		79.64
9	10,380	75.00	10.9	Upper Marker	113.00

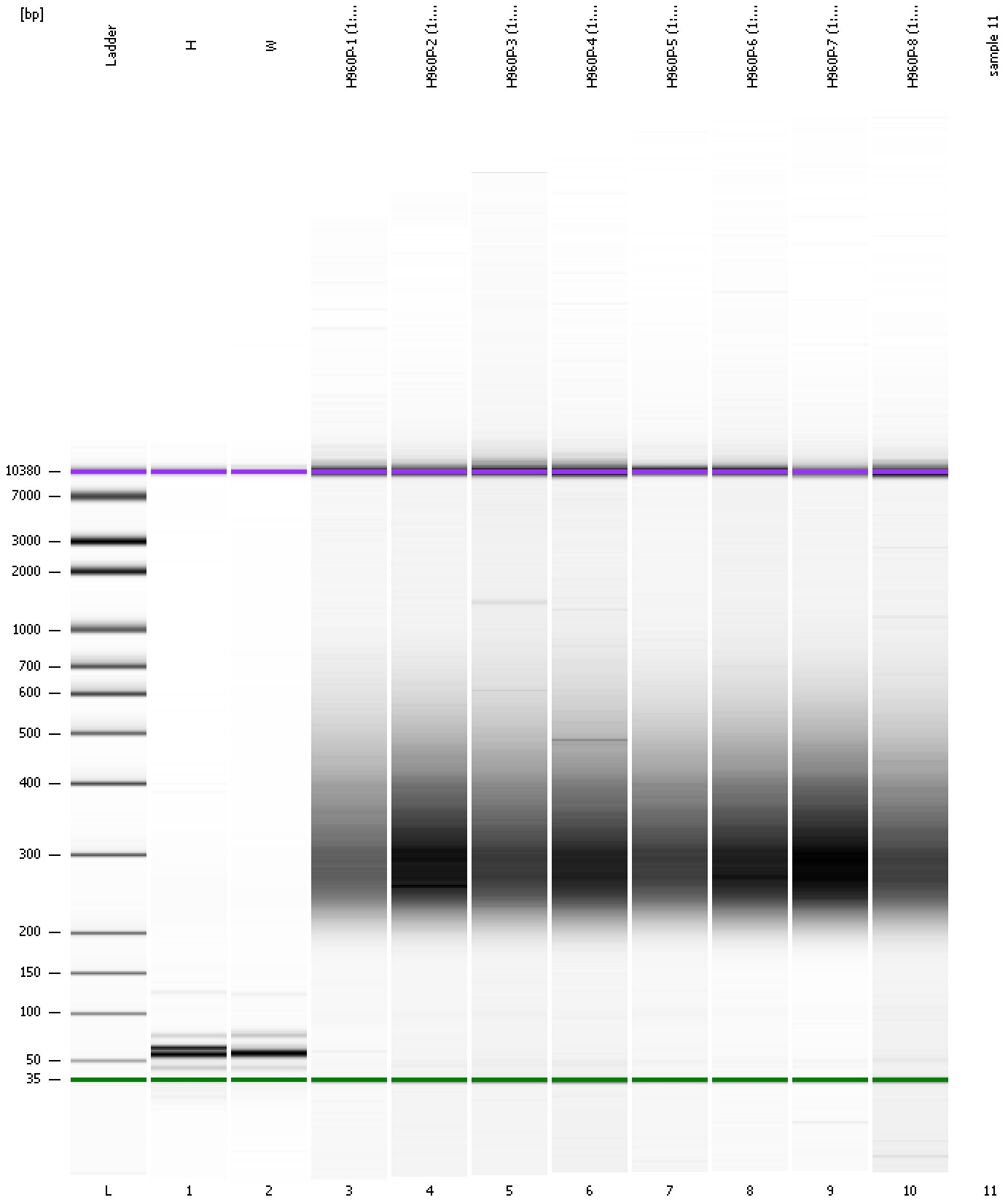
**Region table for sample 10 : H960P-8 (1:10)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
153	1,000	347	822.6	8,403.2	1,726.94	97	31.8

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-30\2017-08-30\_003.xad

Created: 8/30/2017 3:49:09 PM  
Modified: 8/30/2017 4:36:30 PM

**Gel Image**



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Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-08-30\2017-08-30\_003.xad

Created: 8/30/2017 3:49:09 PM  
Modified: 8/30/2017 4:36:30 PM

**Invalid Samples**

Sample 11 has not been run, no results available.