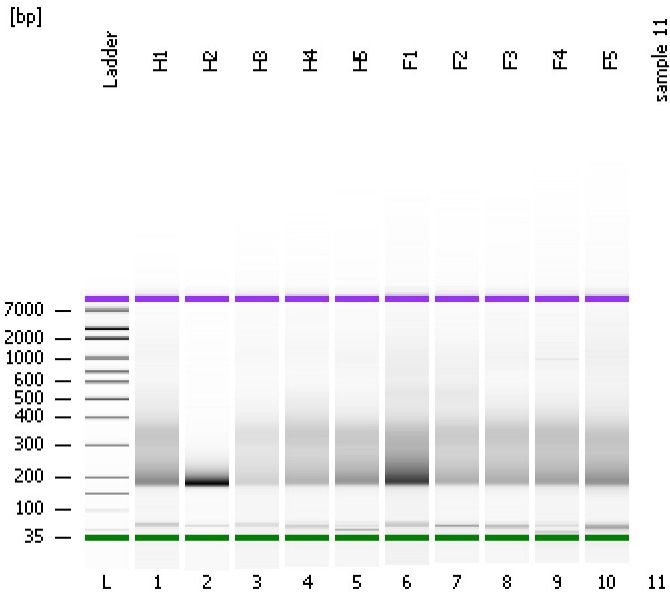


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_002.xad

Created: 5/30/2019 12:52:15 PM
Modified: 5/30/2019 1:30:41 PM

Electrophoresis File Run Summary



Instrument Information:

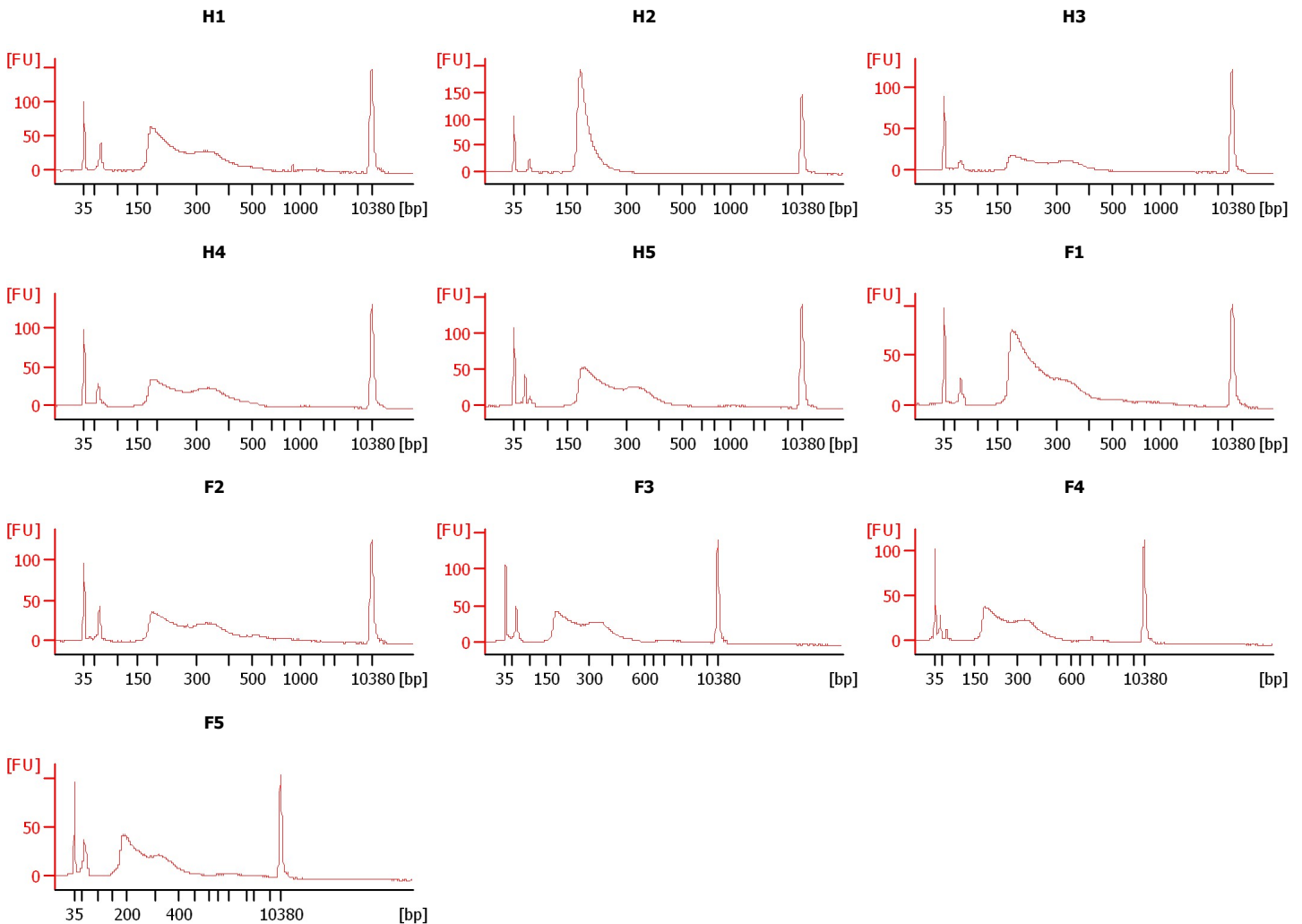
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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\2019-05-30\2019-05-30_002.xad

Created: 5/30/2019 12:52:15 PM
Modified: 5/30/2019 1:30:41 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
H1		<input type="checkbox"/>	✓			
H2		<input type="checkbox"/>	✓			
H3		<input type="checkbox"/>	✓			
H4		<input type="checkbox"/>	✓			
H5		<input type="checkbox"/>	✓			
F1		<input type="checkbox"/>	✓			
F2		<input type="checkbox"/>	✓			
F3		<input type="checkbox"/>	✓			
F4		<input type="checkbox"/>	✓			
F5		<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\2019-05-30\2019-05-30_002.xad

Created: 5/30/2019 12:52:15 PM
Modified: 5/30/2019 1:30:41 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

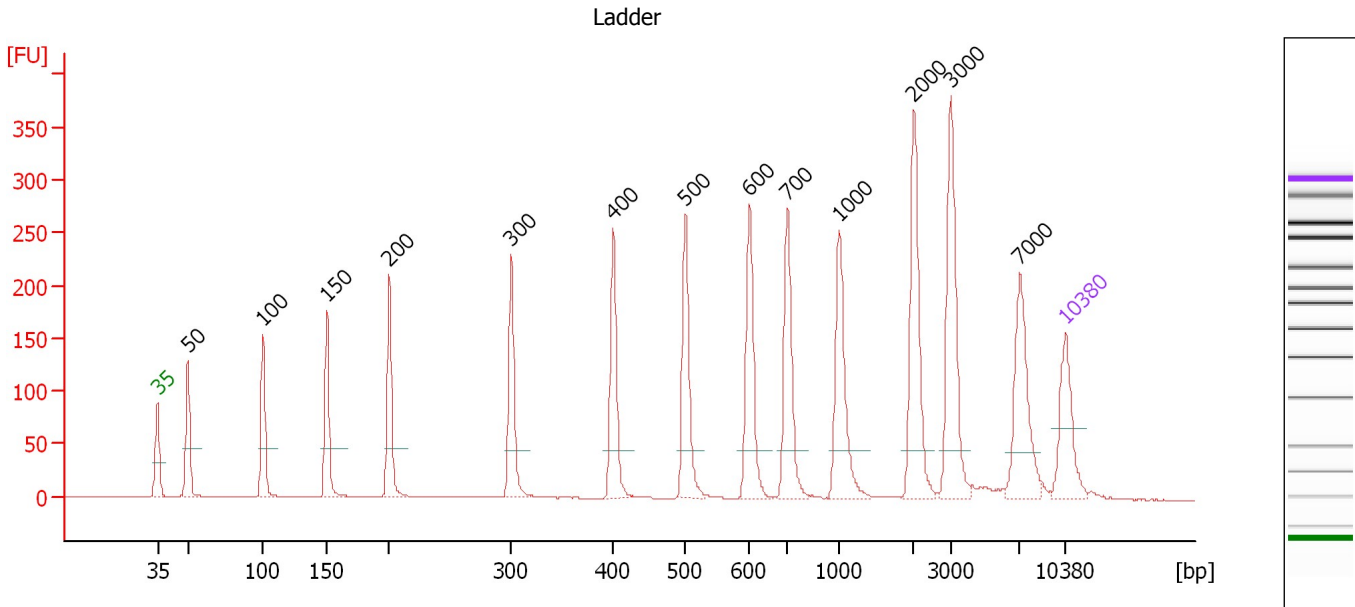
Ladder

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\2019-05-30\2019-05-30_002.xad

Created: 5/30/2019 12:52:15 PM
 Modified: 5/30/2019 1:30:41 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

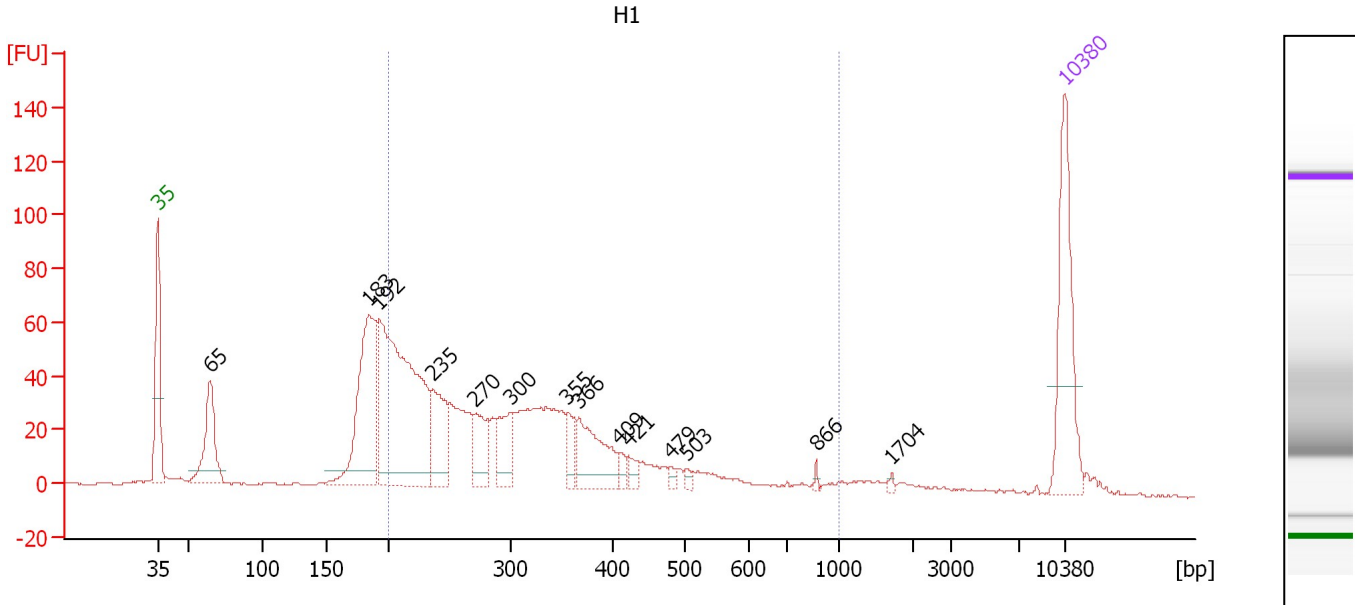
Peak table for Ladder

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	45.34
3	100	150.00	2,272.7	Ladder Peak	51.15
4	150	150.00	1,515.2	Ladder Peak	56.07
5	200	150.00	1,136.4	Ladder Peak	60.90
6	300	150.00	757.6	Ladder Peak	70.27
7	400	150.00	568.2	Ladder Peak	78.14
8	500	150.00	454.5	Ladder Peak	83.72
9	600	150.00	378.8	Ladder Peak	88.68
10	700	150.00	324.7	Ladder Peak	91.59
11	1,000	150.00	227.3	Ladder Peak	95.57
12	2,000	150.00	113.6	Ladder Peak	101.33
13	3,000	150.00	75.8	Ladder Peak	104.19
14	7,000	150.00	32.5	Ladder Peak	109.49
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_002.xad

Created: 5/30/2019 12:52:15 PM
 Modified: 5/30/2019 1:30:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : H1

Number of peaks found: 14 Corr. Area 1: 961.2
 Noise: 0.3

Peak table for sample 1 : H1

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	65	79.47	1,854.1		47.08
3	183	163.33	1,351.6		59.27
4	192	300.10	2,368.9		60.12
5	235	63.62	409.8		64.20
6	270	38.80	218.0		67.42
7	300	39.46	199.3		70.27
8	355	20.97	89.4		74.63
9	366	58.88	243.6		75.49
10	409	7.26	26.9		78.62
11	421	8.57	30.8		79.33
12	479	4.61	14.6		82.55
13	503	4.03	12.1		83.88
14	866	2.39	4.2		93.79
15	1,704	1.77	1.6		99.63
16	10,380	75.00	10.9	Upper Marker	113.00

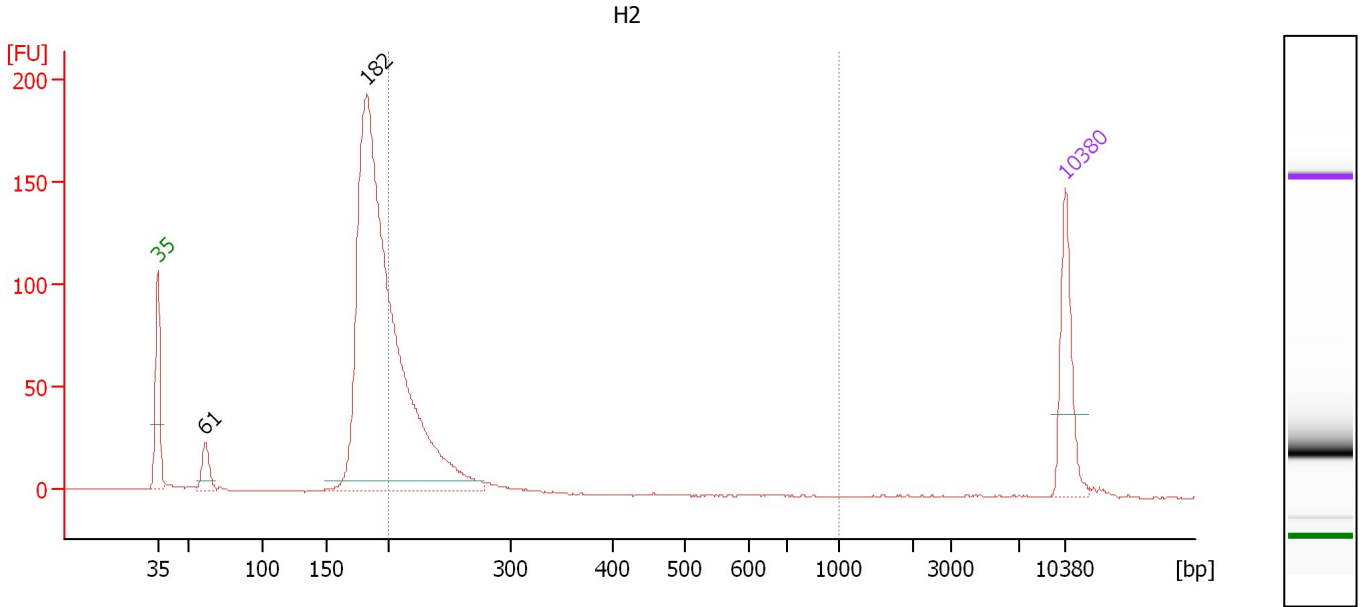
Region table for sample 1 : H1

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	324	746.58	961.2	3,978.8	68	37.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_002.xad

Created: 5/30/2019 12:52:15 PM
 Modified: 5/30/2019 1:30:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : H2

Number of peaks found: 2 Corr. Area 1: 376.6
 Noise: 0.2

Peak table for sample 2 : H2

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	61	39.16	965.4		46.67
3	182	1,142.18	9,516.5		59.15
4	10,380	75.00	10.9	Upper Marker	113.00

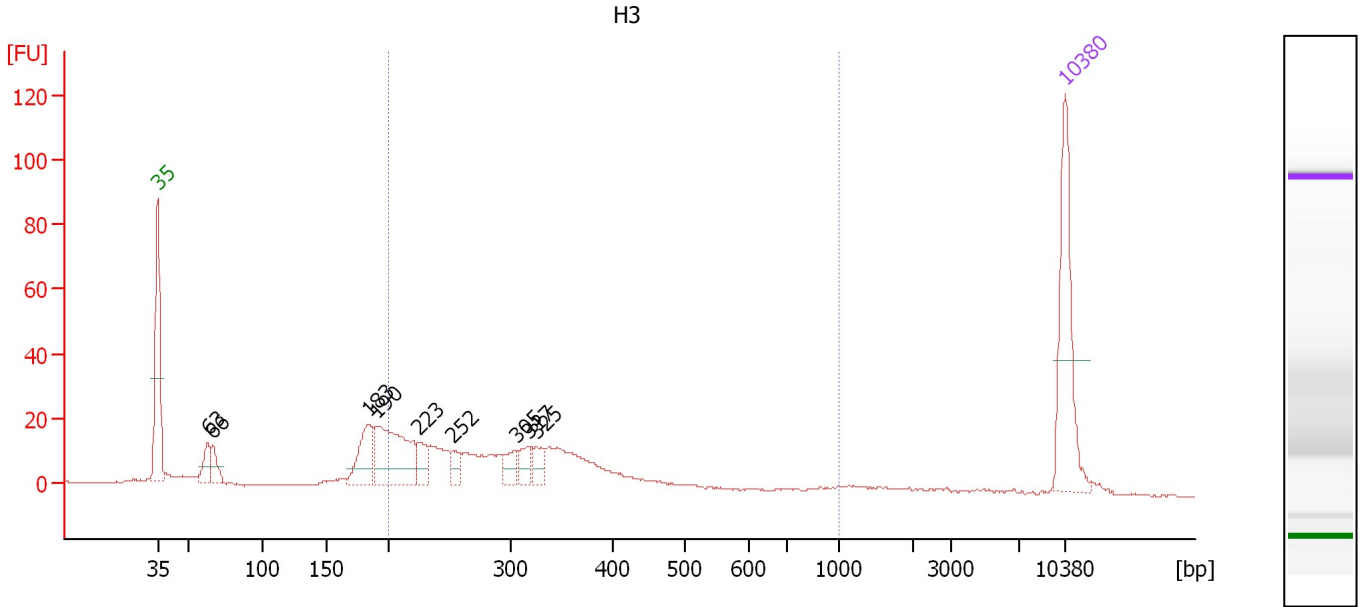
Region table for sample 2 : H2

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	224	361.24	376.6	2,448.9	32	10.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_002.xad

Created: 5/30/2019 12:52:15 PM
 Modified: 5/30/2019 1:30:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : H3

Number of peaks found: 9 Corr. Area 1: 332.5
 Noise: 0.3

Peak table for sample 3 : H3

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	63	23.64	569.1		46.85
3	66	18.46	421.6		47.24
4	183	50.65	418.9		59.28
5	190	107.94	859.0		59.97
6	223	22.55	153.1		63.08
7	252	15.19	91.3		65.79
8	305	16.73	83.1		70.67
9	317	15.91	76.0		71.61
10	325	14.94	69.7		72.20
11	10,380	75.00	10.9	Upper Marker	113.00

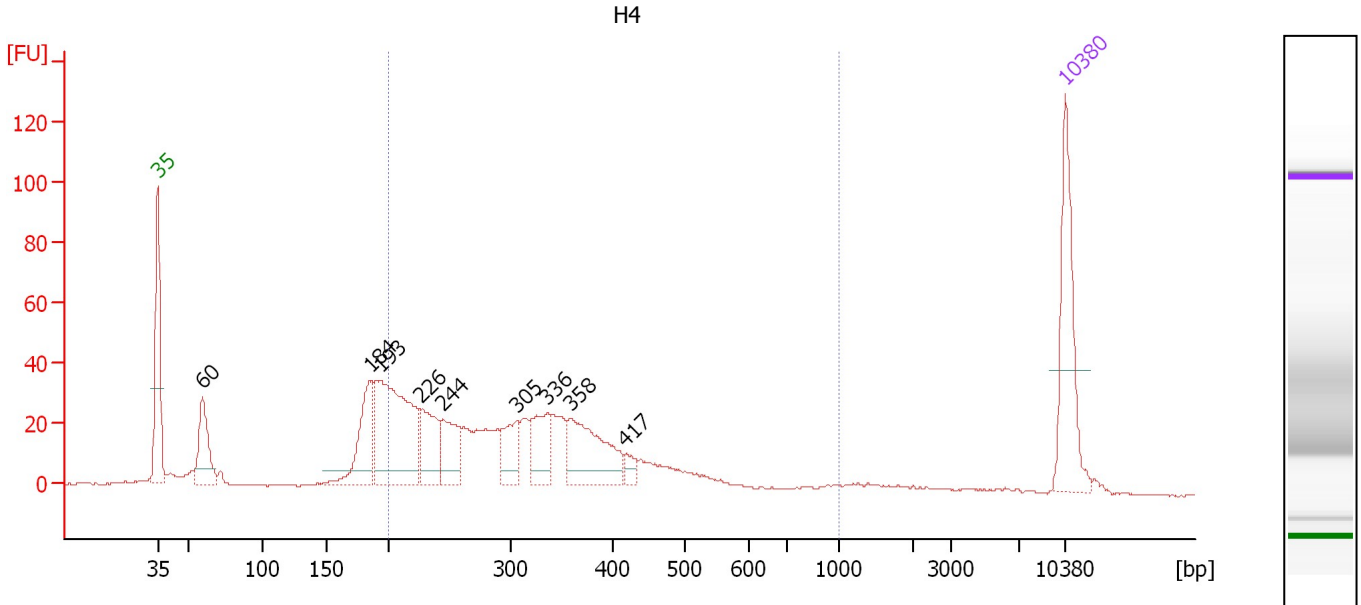
Region table for sample 3 : H3

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	316	352.13	332.5	1,874.8	65	34.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_002.xad

Created: 5/30/2019 12:52:15 PM
 Modified: 5/30/2019 1:30:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : H4

Number of peaks found: 9 Corr. Area 1: 679.7
 Noise: 0.3

Peak table for sample 4 : H4

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	60	69.02	1,756.8		46.45
3	184	76.08	625.4		59.38
4	193	200.92	1,579.6		60.20
5	226	63.14	423.2		63.34
6	244	51.06	316.5		65.07
7	305	39.71	197.0		70.70
8	336	46.84	211.4		73.08
9	358	88.91	376.0		74.86
10	417	10.16	36.9		79.12
11	10,380	75.00	10.9	Upper Marker	113.00

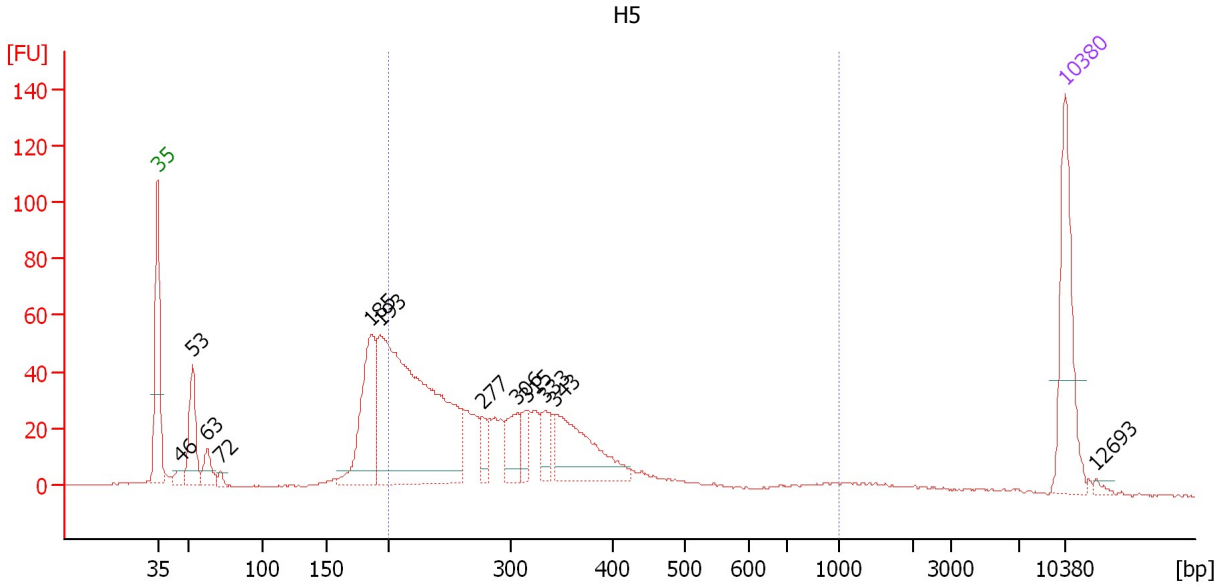
Region table for sample 4 : H4

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	326	656.41	679.7	3,414.3	71	33.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_002.xad

Created: 5/30/2019 12:52:15 PM
 Modified: 5/30/2019 1:30:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : H5

Number of peaks found: 12 Corr. Area 1: 810.2
 Noise: 0.3

Peak table for sample 5 : H5

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	46	11.44	373.6		44.78
3	53	62.51	1,794.5		45.67
4	63	24.50	592.2		46.82
5	72	5.96	126.0		47.86
6	185	121.51	994.2		59.47
7	193	431.66	3,393.0		60.20
8	277	23.02	126.0		68.09
9	306	34.40	170.2		70.76
10	315	21.15	101.8		71.44
11	333	24.71	112.3		72.90
12	343	94.46	416.8		73.69
13	10,380	75.00	10.9	Upper Marker	113.00
14	12,693	0.00	0.0		115.40

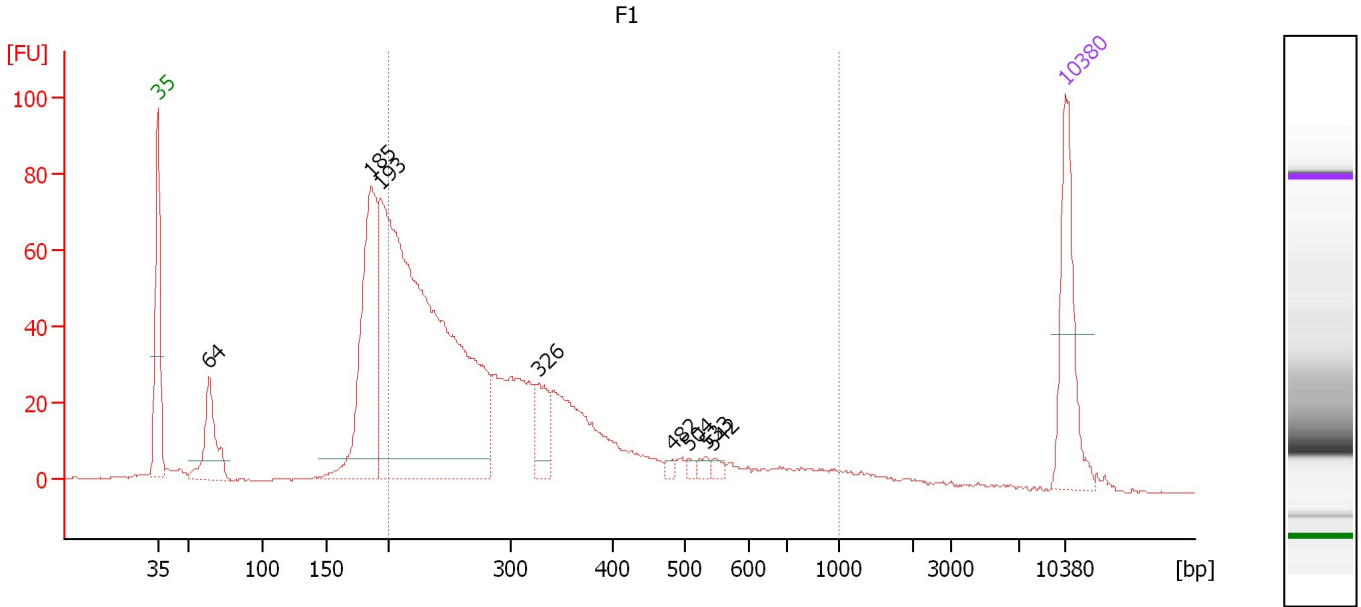
Region table for sample 5 : H5

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	728.48	810.2	3,980.2	68	37.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_002.xad

Created: 5/30/2019 12:52:15 PM
 Modified: 5/30/2019 1:30:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : F1

Number of peaks found: 8 Corr. Area 1: 979.5
 Noise: 0.2

Peak table for sample 6 : 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	64	81.59	1,929.9		46.98
3	185	234.60	1,916.9		59.49
4	193	843.22	6,630.9		60.19
5	326	42.50	197.4		72.33
6	482	4.77	15.0		82.70
7	504	4.55	13.7		83.94
8	533	6.51	18.5		85.33
9	542	5.88	16.4		85.82
10	10,380	75.00	10.9	Upper Marker	113.00

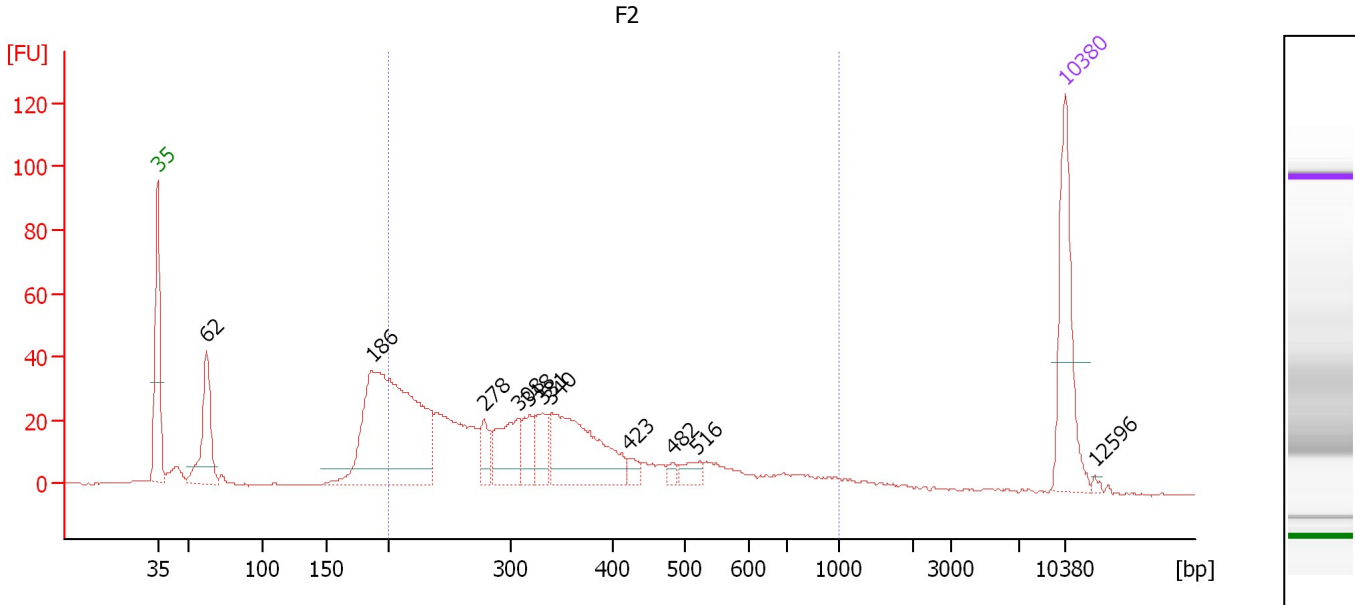
Region table for sample 6 : F1

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	320	1,082.72	979.5	5,946.8	71	42.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_002.xad

Created: 5/30/2019 12:52:15 PM
 Modified: 5/30/2019 1:30:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : F2

Number of peaks found: 11 Corr. Area 1: 697.0
 Noise: 0.2

Peak table for sample 7 : F2

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	62	89.29	2,167.5		46.79
3	186	340.68	2,780.5		59.51
4	278	23.10	126.0		68.18
5	308	56.34	277.5		70.87
6	318	27.07	128.9		71.69
7	331	32.21	147.3		72.73
8	340	124.61	555.8		73.39
9	423	8.65	31.0		79.43
10	482	5.70	17.9		82.72
11	516	13.43	39.4		84.53
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,596	0.00	0.0		115.30

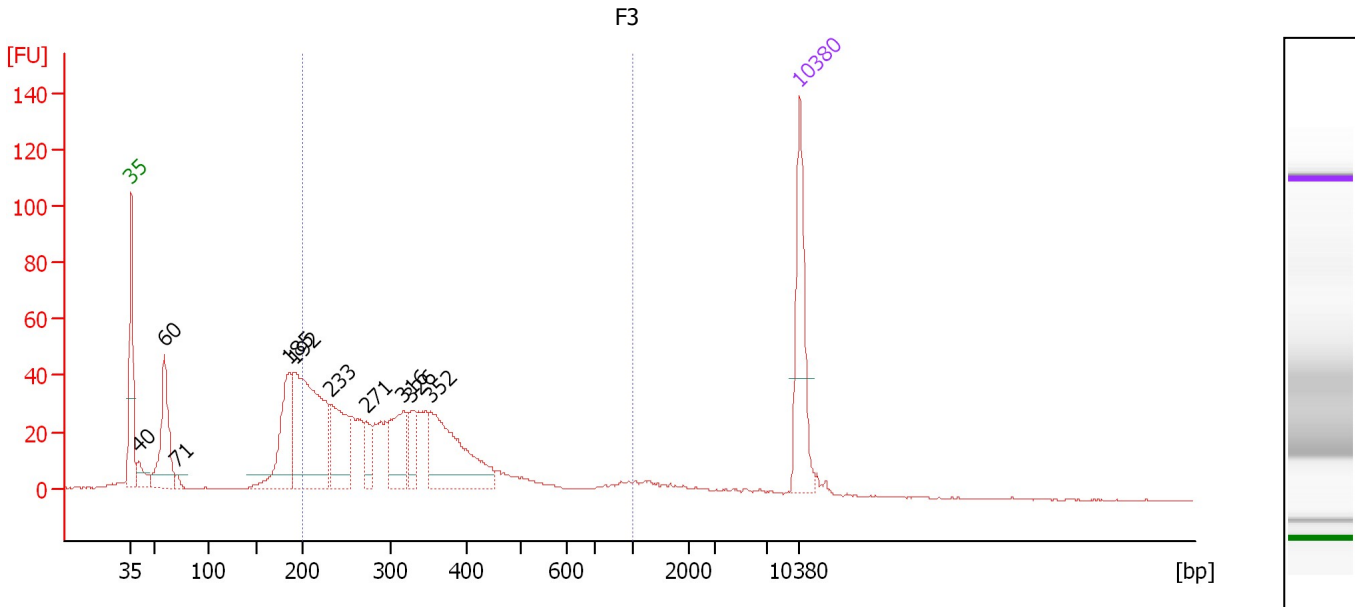
Region table for sample 7 : F2

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	352	681.27	697.0	3,461.2	72	41.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_002.xad

Created: 5/30/2019 12:52:15 PM
 Modified: 5/30/2019 1:30:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : F3

Number of peaks found: 10 Corr. Area 1: 782.3
 Noise: 0.2

Peak table for sample 8 : F3

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	40	26.84	1,016.7		43.78
3	60	118.73	3,017.3		46.46
4	71	6.77	144.2		47.80
5	185	104.85	857.9		59.47
6	192	247.41	1,951.2		60.14
7	233	90.29	587.2		63.99
8	271	27.75	155.1		67.56
9	316	65.00	311.7		71.52
10	326	30.93	143.8		72.31
11	352	134.52	578.8		74.37
12	10,380	75.00	10.9	Upper Marker	113.00

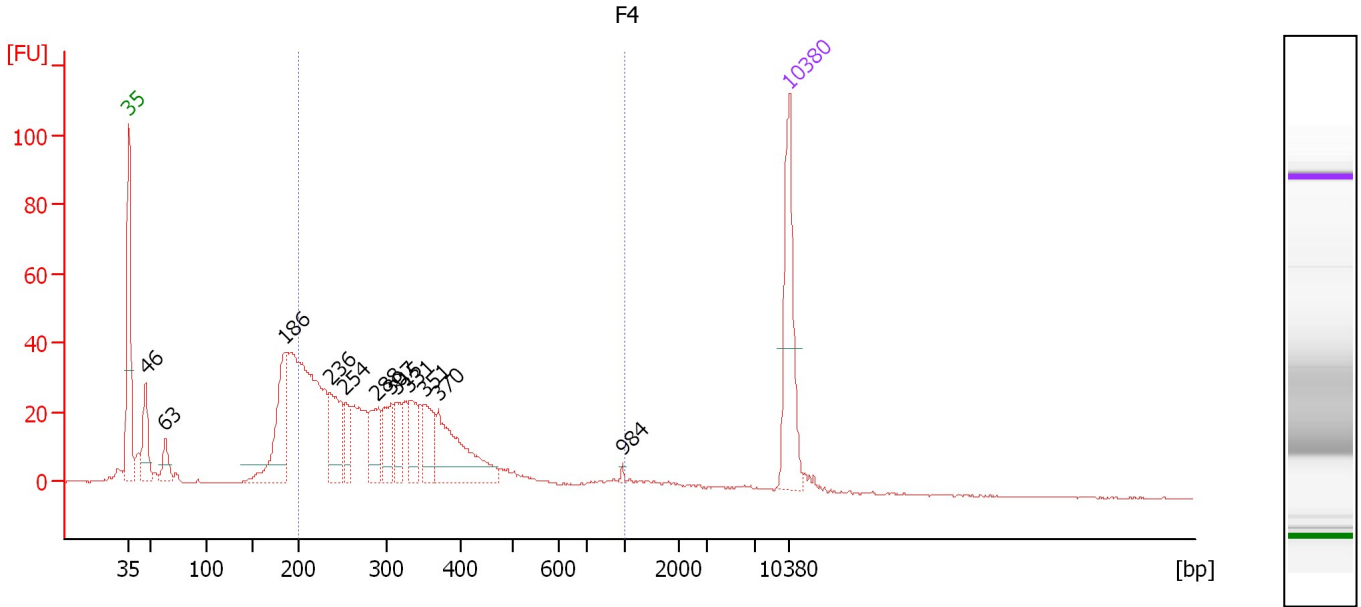
Region table for sample 8 : F3

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	326	727.72	782.3	3,818.6	68	37.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_002.xad

Created: 5/30/2019 12:52:15 PM
 Modified: 5/30/2019 1:30:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : F4

Number of peaks found: 12 Corr. Area 1: 684.4
 Noise: 0.2

Peak table for sample 9 : F4

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	46	57.54	1,886.2		44.75
3	63	25.99	625.7		46.84
4	186	108.63	886.7		59.51
5	236	63.99	410.0		64.32
6	254	28.43	169.6		65.96
7	288	43.12	226.6		69.18
8	307	41.34	204.0		70.82
9	315	28.81	138.6		71.44
10	331	37.28	170.4		72.74
11	351	38.01	164.2		74.27
12	370	94.51	386.8		75.79
13	984	1.64	2.5		95.36
14	10,380	75.00	10.9	Upper Marker	113.00

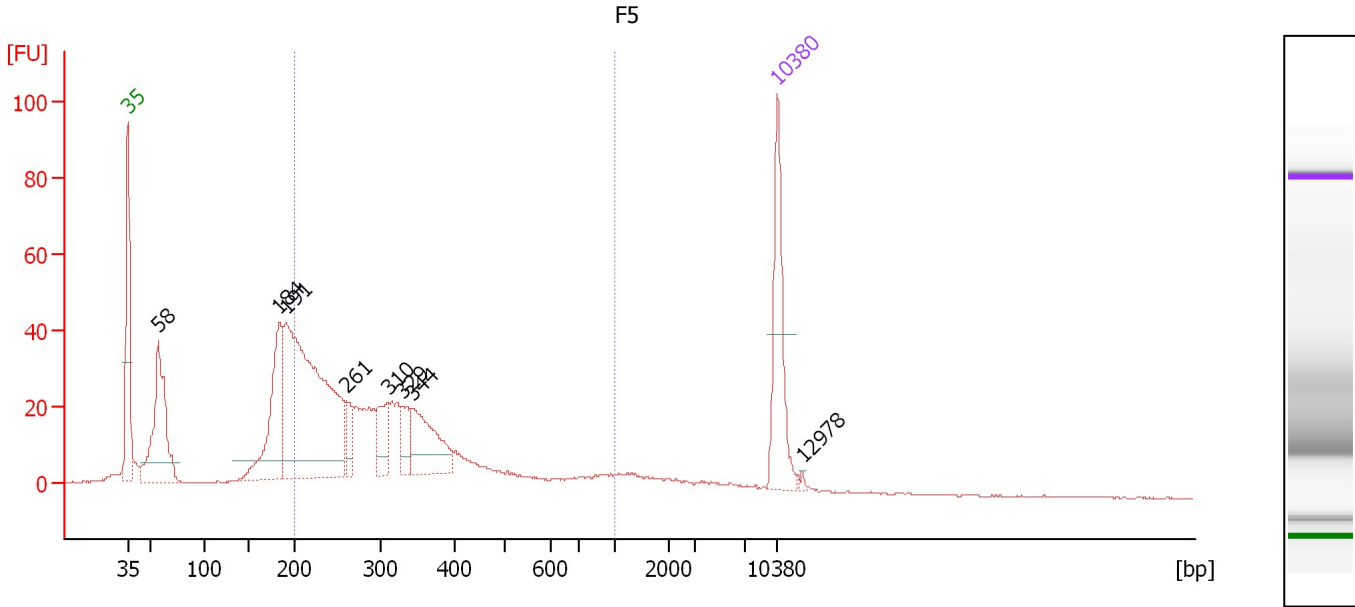
Region table for sample 9 : F4

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	323	735.17	684.4	3,881.7	70	37.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_002.xad

Created: 5/30/2019 12:52:15 PM
 Modified: 5/30/2019 1:30:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : F5

Number of peaks found: 8 Corr. Area 1: 647.2
 Noise: 0.1

Peak table for sample 10 : F5

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	58	182.47	4,764.3		46.28
3	184	144.11	1,188.8		59.32
4	191	441.99	3,509.6		60.01
5	261	26.56	154.1		66.62
6	310	38.32	187.4		71.05
7	329	28.94	133.3		72.54
8	344	80.82	355.8		73.75
9	10,380	75.00	10.9	Upper Marker	113.00
10	12,978	0.00	0.0		115.70

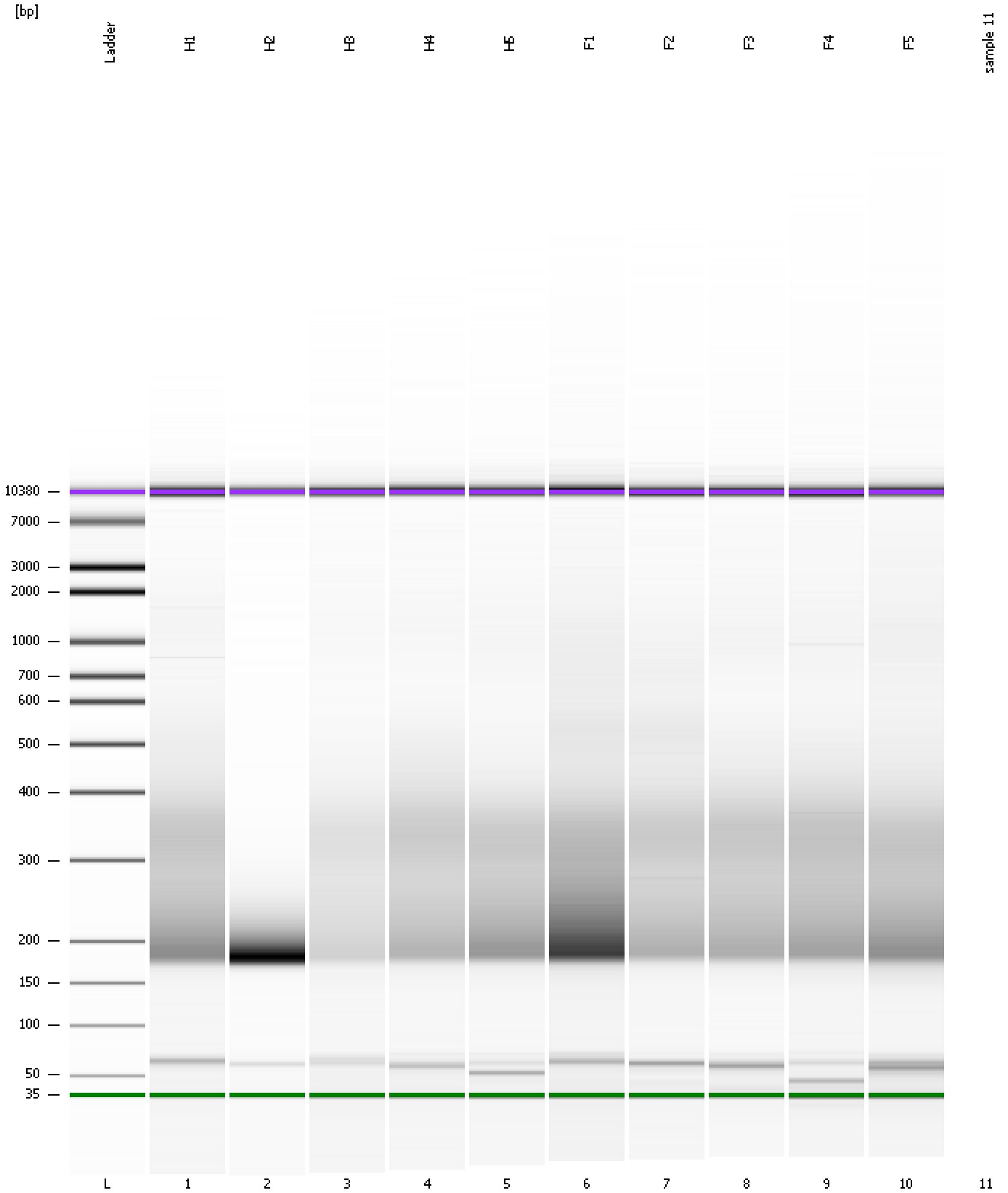
Region table for sample 10 : F5

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	325	776.13	647.2	4,160.6	63	41.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_002.xad

Created: 5/30/2019 12:52:15 PM
Modified: 5/30/2019 1:30:41 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_002.xad

Created: 5/30/2019 12:52:15 PM
Modified: 5/30/2019 1:30:41 PM

Invalid Samples

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_002.xad

Created: 5/30/2019 12:52:15 PM
 Modified: 5/30/2019 1:30:41 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 11)		Instrument	Run		5/30/2019 1:30:41 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2019-05-30\2019-05-30_002.xad)		Instrument	Run		5/30/2019 12:52:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		5/30/2019 12:52:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/30/2019 12:52:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/30/2019 12:52:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		5/30/2019 12:52:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/30/2019 12:52:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/30/2019 12:52:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1