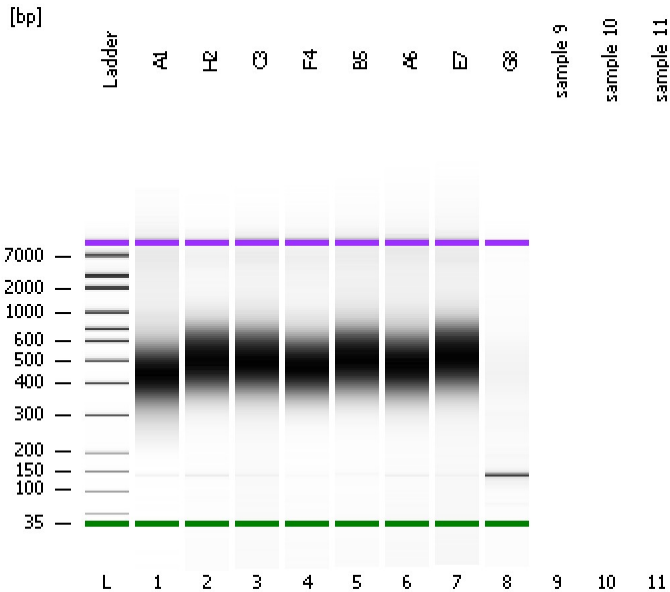


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-30\2019-10-30_002.xad

Created: 10/30/2019 1:20:42 PM
Modified: 10/30/2019 1:53:24 PM

Electrophoresis File Run Summary



Instrument Information:

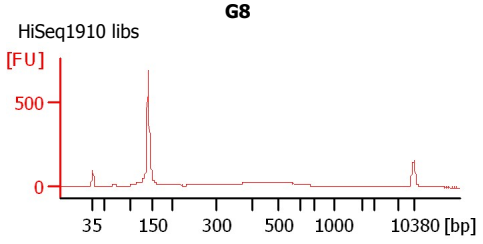
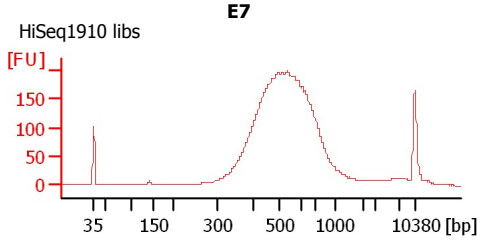
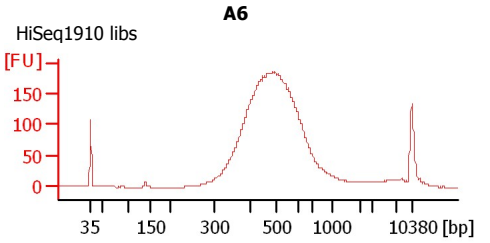
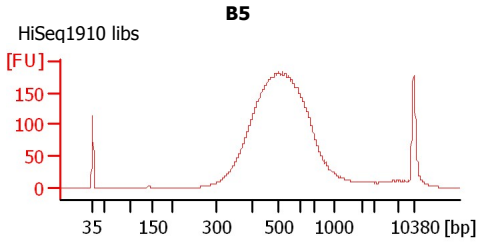
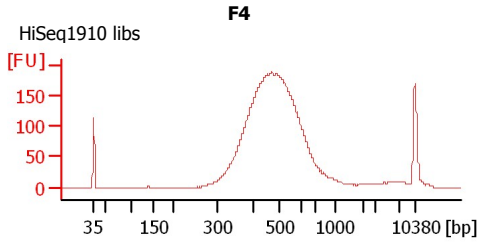
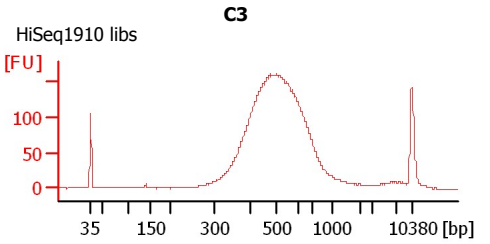
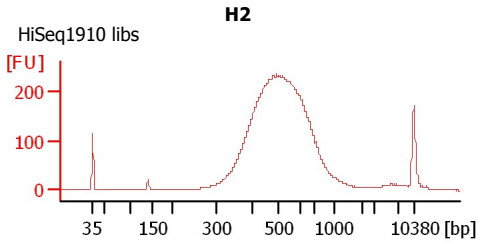
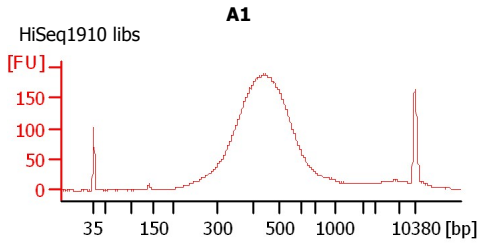
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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\2019-10-30\2019-10-30_002.xad

Created: 10/30/2019 1:20:42 PM
 Modified: 10/30/2019 1:53:24 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
A1	HiSeq1910 libs	<input type="checkbox"/>	✓			
H2	HiSeq1910 libs	<input type="checkbox"/>	✓			
C3	HiSeq1910 libs	<input type="checkbox"/>	✓			
F4	HiSeq1910 libs	<input type="checkbox"/>	✓			
B5	HiSeq1910 libs	<input type="checkbox"/>	✓			
A6	HiSeq1910 libs	<input type="checkbox"/>	✓			
E7	HiSeq1910 libs	<input type="checkbox"/>	✓			
G8	HiSeq1910 libs	<input type="checkbox"/>	✓			
sample 9		<input type="checkbox"/>				
sample 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\2019-10-30\2019-10-30_002.xad

Created: 10/30/2019 1:20:42 PM
Modified: 10/30/2019 1:53:24 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

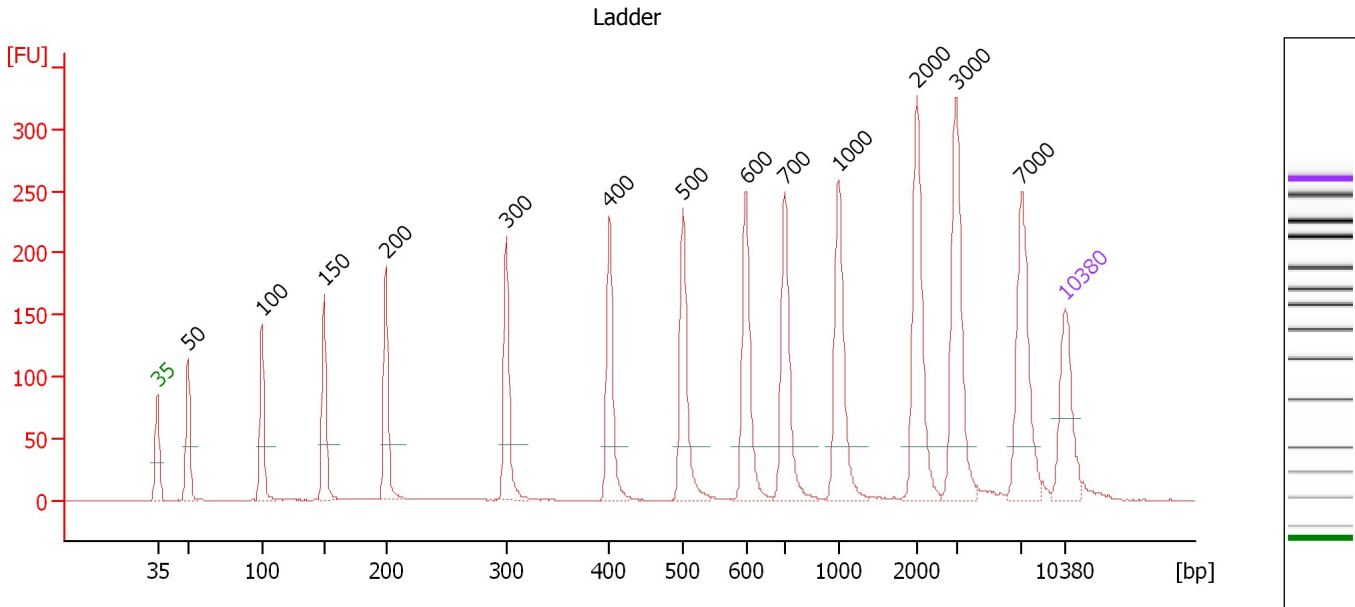
Ladder

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\2019-10-30\2019-10-30_002.xad

Created: 10/30/2019 1:20:42 PM
 Modified: 10/30/2019 1:53:24 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

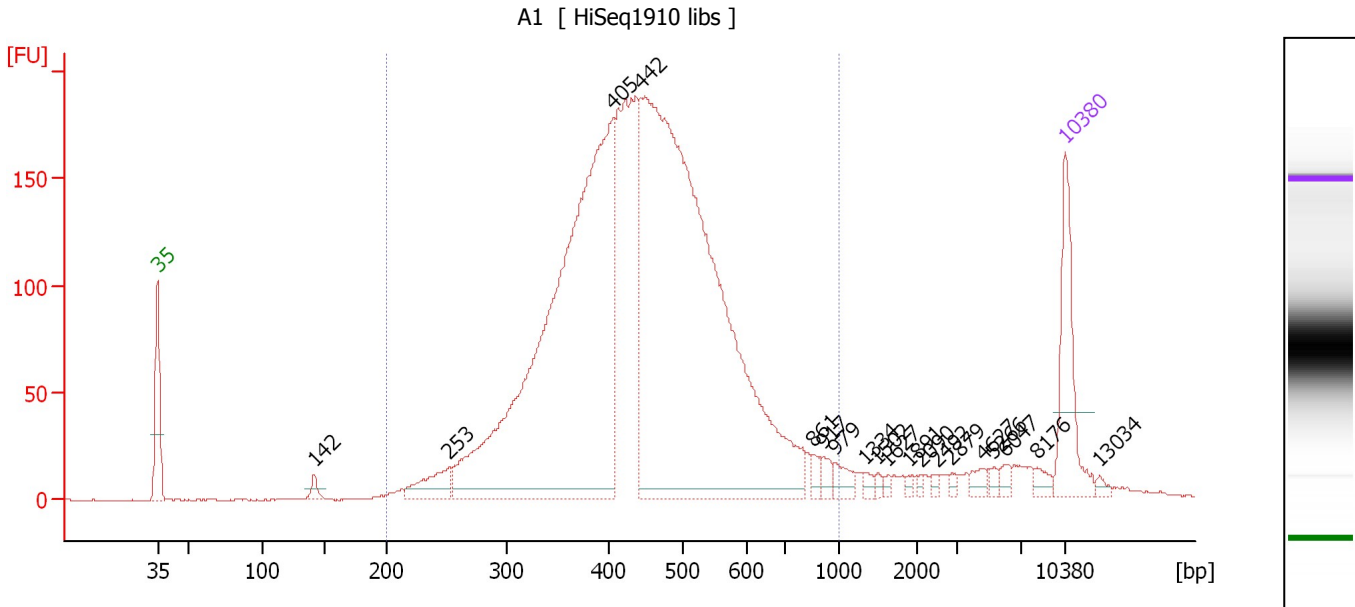
Peak table for Ladder

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	51.04
4	150	150.00	1,515.2	Ladder Peak	55.86
5	200	150.00	1,136.4	Ladder Peak	60.59
6	300	150.00	757.6	Ladder Peak	69.91
7	400	150.00	568.2	Ladder Peak	77.87
8	500	150.00	454.5	Ladder Peak	83.52
9	600	150.00	378.8	Ladder Peak	88.39
10	700	150.00	324.7	Ladder Peak	91.39
11	1,000	150.00	227.3	Ladder Peak	95.50
12	2,000	150.00	113.6	Ladder Peak	101.60
13	3,000	150.00	75.8	Ladder Peak	104.60
14	7,000	150.00	32.5	Ladder Peak	109.64
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-30\2019-10-30_002.xad

Created: 10/30/2019 1:20:42 PM
 Modified: 10/30/2019 1:53:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : A1

Number of peaks found: 19 Corr. Area 1: 3,556.4
 Noise: 0.3

Peak table for sample 1 : A1

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	142	12.37	132.2		55.07
3	253	46.72	280.3		65.48
4	405	897.86	3,361.3		78.13
5	442	1,119.24	3,838.0		80.23
6	861	8.07	14.2		93.60
7	917	11.29	18.7		94.36
8	979	14.33	22.2		95.21
9	1,334	6.02	6.8		97.53
10	1,502	3.41	3.4		98.56
11	1,627	3.42	3.2		99.32
12	1,891	3.30	2.6		100.93
13	2,090	3.05	2.2		101.87
14	2,492	3.73	2.3		103.08
15	2,879	3.35	1.8		104.24
16	4,627	8.01	2.6		106.65
17	5,266	4.70	1.4		107.46
18	6,047	6.64	1.7		108.44
19	8,176	8.02	1.5		110.81
20	10,380	75.00	10.9	Upper Marker	113.00
21	13,034	0.00	0.0		115.64

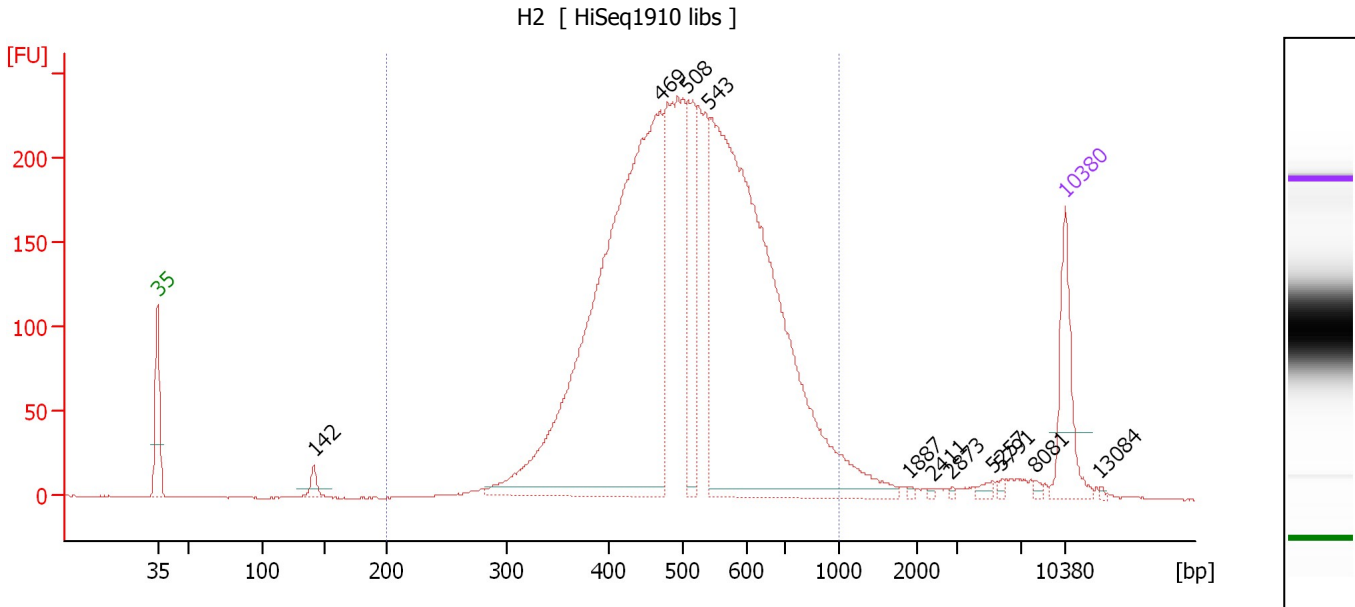
Region table for sample 1 : A1

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	452	2,412.46	3,556.4	8,778.0	94	25.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-30\2019-10-30_002.xad

Created: 10/30/2019 1:20:42 PM
 Modified: 10/30/2019 1:53:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : H2

Number of peaks found: 11 Corr. Area 1: 4,268.2
 Noise: 0.3

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	142	20.25	216.7		55.05
3	469	1,100.87	3,554.6		81.78
4	508	151.20	451.4		83.89
5	543	1,011.27	2,824.3		85.59
6	1,887	1.98	1.6		100.91
7	2,411	1.61	1.0		102.83
8	2,873	1.71	0.9		104.22
9	5,257	5.71	1.6		107.45
10	5,791	3.35	0.9		108.12
11	8,081	3.19	0.6		110.72
12	10,380	75.00	10.9	Upper Marker	113.00
13	13,084	0.00	0.0		115.69

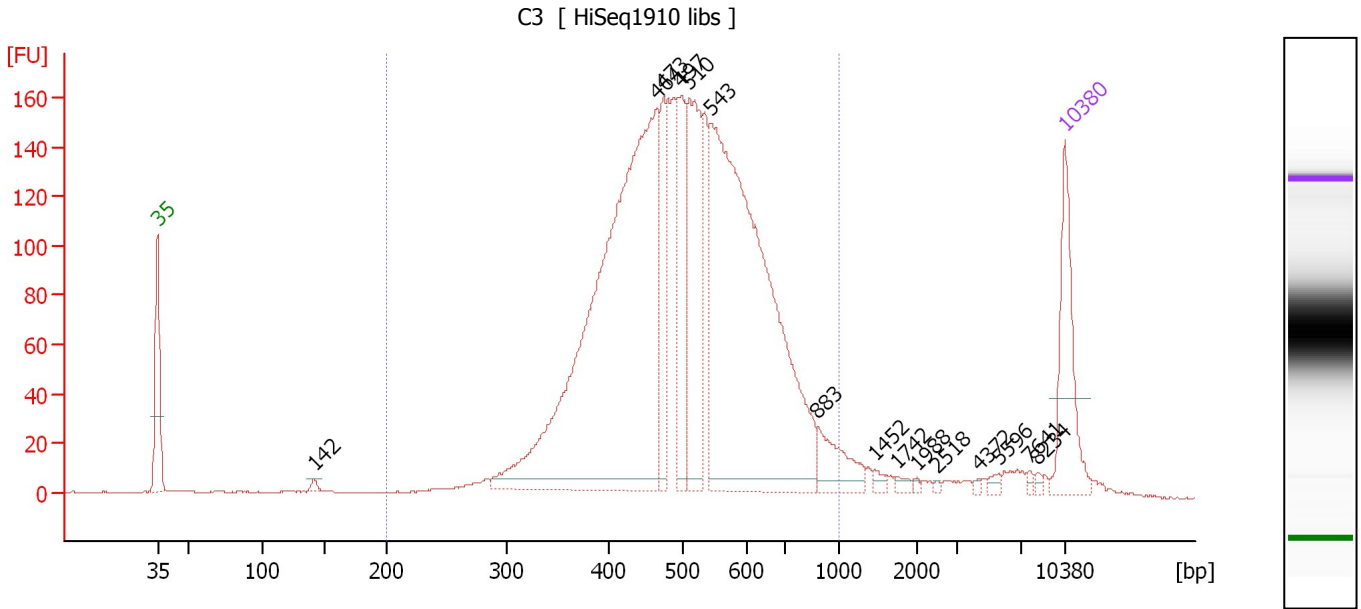
Region table for sample 2 : H2

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	519	2,757.38	4,268.2	8,622.0	95	23.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-30\2019-10-30_002.xad

Created: 10/30/2019 1:20:42 PM
 Modified: 10/30/2019 1:53:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : C3

Number of peaks found: 15 Corr. Area 1: 2,914.2
 Noise: 0.3

Peak table for sample 3 : C3

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	142	5.64	60.2		55.07
3	464	792.01	2,583.4		81.52
4	473	99.66	319.0		82.01
5	497	99.30	303.0		83.33
6	510	172.38	512.1		84.01
7	543	650.77	1,816.9		85.60
8	883	45.86	78.7		93.90
9	1,452	5.70	5.9		98.26
10	1,742	4.59	4.0		100.03
11	1,988	1.81	1.4		101.52
12	2,518	1.62	1.0		103.16
13	4,372	2.13	0.7		106.33
14	5,596	4.31	1.2		107.87
15	7,641	2.76	0.5		110.28
16	8,234	2.77	0.5		110.87
17	10,380	75.00	10.9	Upper Marker	113.00

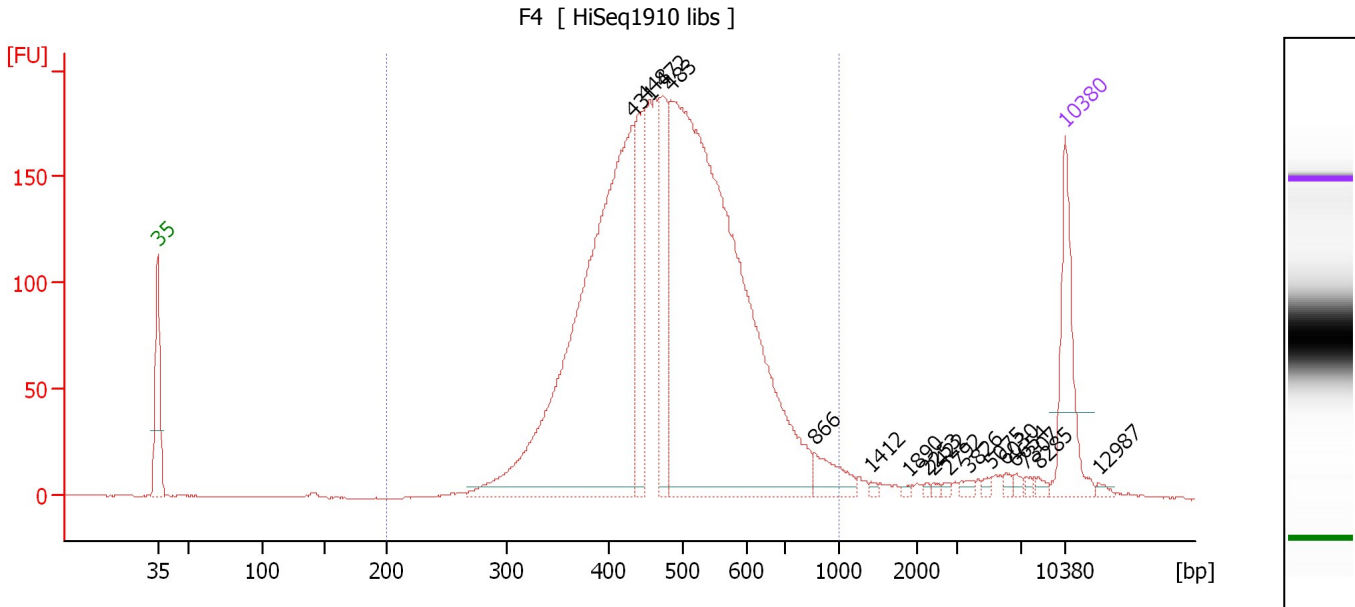
Region table for sample 3 : C3

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	512	2,128.31	2,914.2	6,776.2	93	23.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-30\2019-10-30_002.xad

Created: 10/30/2019 1:20:42 PM
 Modified: 10/30/2019 1:53:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : F4

Number of peaks found: 17 Corr. Area 1: 3,220.5
 Noise: 0.2

Peak table for sample 4 : 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	431	731.28	2,573.4		79.60
3	448	136.24	461.1		80.57
4	472	125.00	401.0		81.96
5	483	989.12	3,103.4		82.56
6	866	31.57	55.2		93.66
7	1,412	2.60	2.8		98.01
8	1,890	2.28	1.8		100.92
9	2,253	2.03	1.4		102.36
10	2,422	2.12	1.3		102.87
11	2,792	2.52	1.4		103.98
12	3,826	4.46	1.8		105.64
13	5,075	3.06	0.9		107.22
14	6,030	3.95	1.0		108.42
15	6,654	3.75	0.9		109.21
16	7,307	2.99	0.6		109.95
17	8,285	4.04	0.7		110.92
18	10,380	75.00	10.9	Upper Marker	113.00
19	12,987	0.00	0.0		115.59

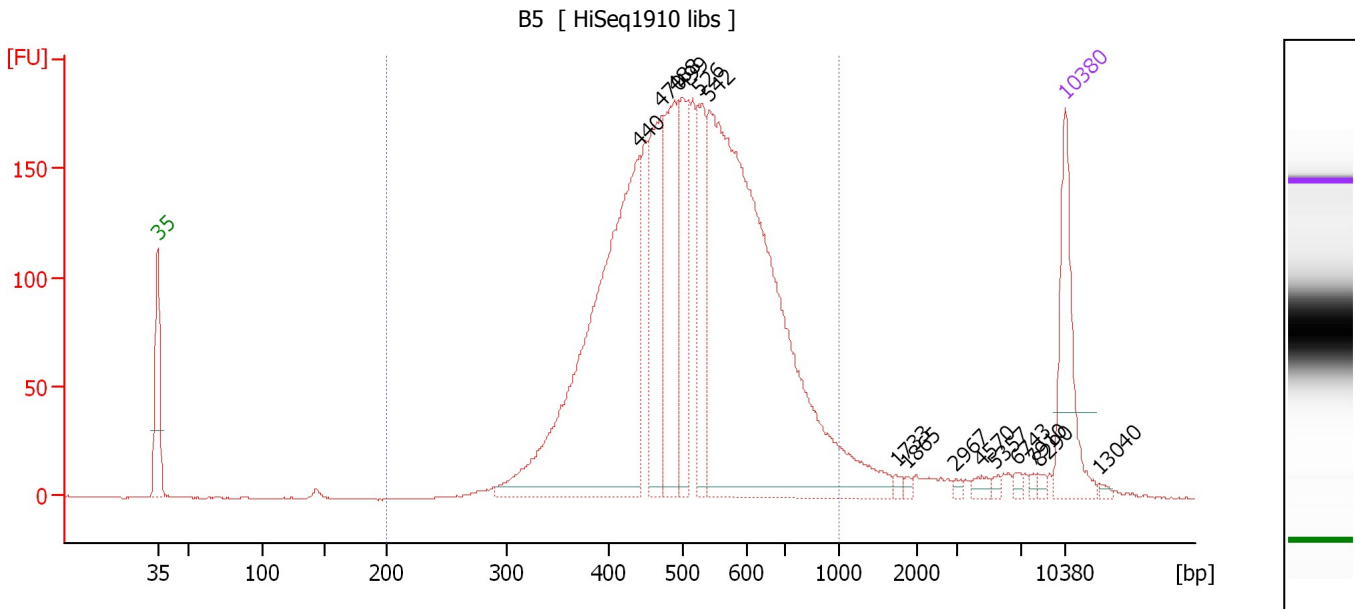
Region table for sample 4 : F4

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	489	2,145.54	3,220.5	7,066.2	95	22.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-30\2019-10-30_002.xad

Created: 10/30/2019 1:20:42 PM
 Modified: 10/30/2019 1:53:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : B5

Number of peaks found: 15 Corr. Area 1: 3,251.9
 Noise: 0.3

Peak table for sample 5 : B5

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	440	526.34	1,811.2		80.15
3	470	143.26	461.5		81.85
4	488	148.14	460.1		82.84
5	499	112.40	341.5		83.45
6	526	94.13	271.3		84.77
7	542	747.99	2,090.2		85.58
8	1,733	3.33	2.9		99.97
9	1,865	2.90	2.4		100.77
10	2,967	2.90	1.5		104.50
11	4,570	6.25	2.1		106.58
12	5,357	3.05	0.9		107.57
13	6,743	3.75	0.8		109.32
14	7,910	2.84	0.5		110.55
15	8,290	2.98	0.5		110.92
16	10,380	75.00	10.9	Upper Marker	113.00
17	13,040	0.00	0.0		115.64

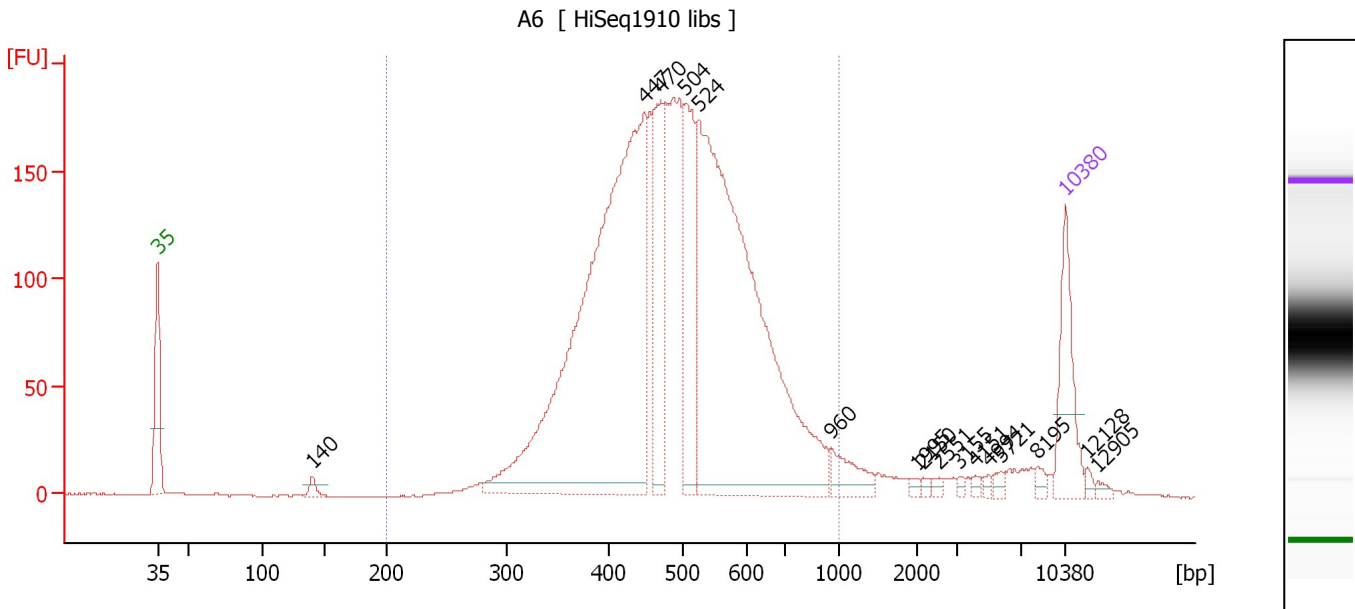
Region table for sample 5 : B5

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	522	1,884.78	3,251.9	5,852.9	93	23.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-30\2019-10-30_002.xad

Created: 10/30/2019 1:20:42 PM
 Modified: 10/30/2019 1:53:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : A6

Number of peaks found: 16 Corr. Area 1: 3,265.2
 Noise: 0.2

Peak table for sample 6 : A6

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	140	11.87	128.3		54.92
3	447	947.17	3,209.7		80.53
4	470	162.71	524.4		81.84
5	504	164.23	493.7		83.72
6	524	851.19	2,462.1		84.68
7	960	37.94	59.9		94.96
8	1,995	4.26	3.2		101.57
9	2,150	3.92	2.8		102.05
10	2,551	4.38	2.6		103.25
11	3,155	3.84	1.8		104.80
12	4,151	3.71	1.4		106.05
13	4,994	3.92	1.2		107.11
14	5,721	6.28	1.7		108.03
15	8,195	7.26	1.3		110.83
16	10,380	75.00	10.9	Upper Marker	113.00
17	12,128	0.00	0.0		114.74
18	12,905	0.00	0.0		115.51

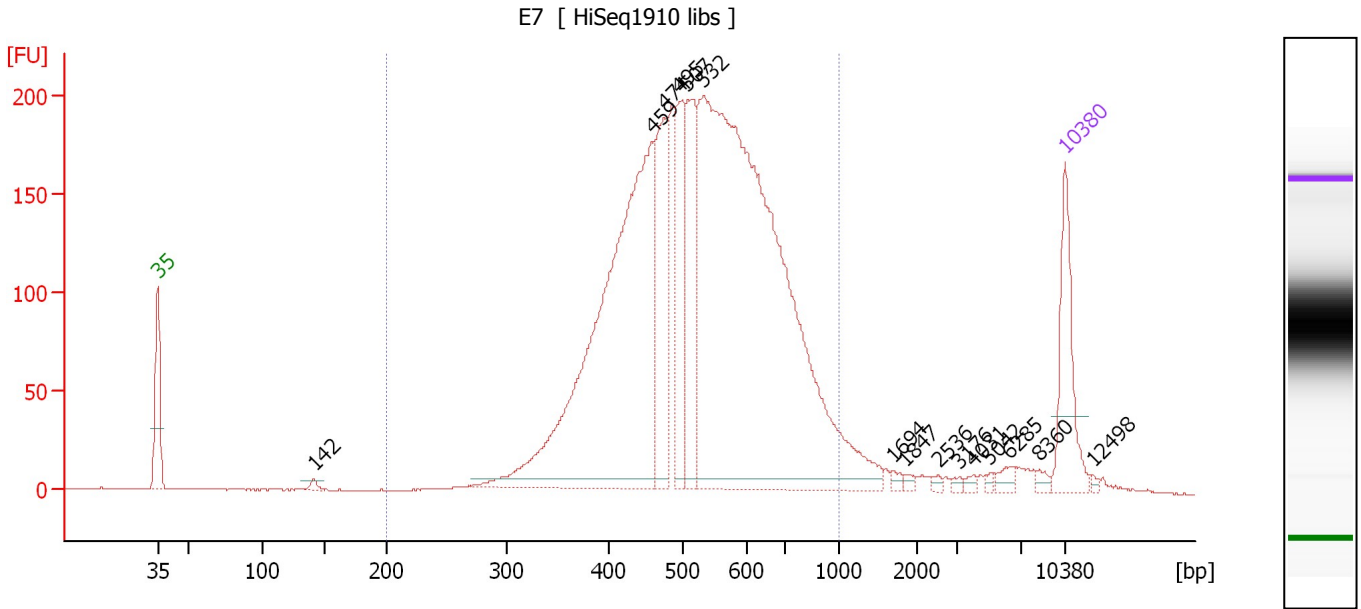
Region table for sample 6 : A6

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	498	2,534.19	3,265.2	8,249.1	93	23.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-30\2019-10-30_002.xad

Created: 10/30/2019 1:20:42 PM
 Modified: 10/30/2019 1:53:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : E7

Number of peaks found: 15 Corr. Area 1: 3,618.3
 Noise: 0.3

Peak table for sample 7 : E7

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	142	5.81	62.3		55.04
3	459	697.62	2,300.5		81.23
4	474	155.35	496.4		82.06
5	495	116.22	355.8		83.24
6	507	145.73	435.3		83.87
7	532	1,136.87	3,235.5		85.10
8	1,694	4.23	3.8		99.73
9	1,847	3.32	2.7		100.66
10	2,536	3.08	1.8		103.21
11	3,176	2.99	1.4		104.83
12	4,031	3.77	1.4		105.90
13	5,042	2.79	0.8		107.17
14	6,285	8.50	2.0		108.74
15	8,360	5.65	1.0		110.99
16	10,380	75.00	10.9	Upper Marker	113.00
17	12,498	0.00	0.0		115.10

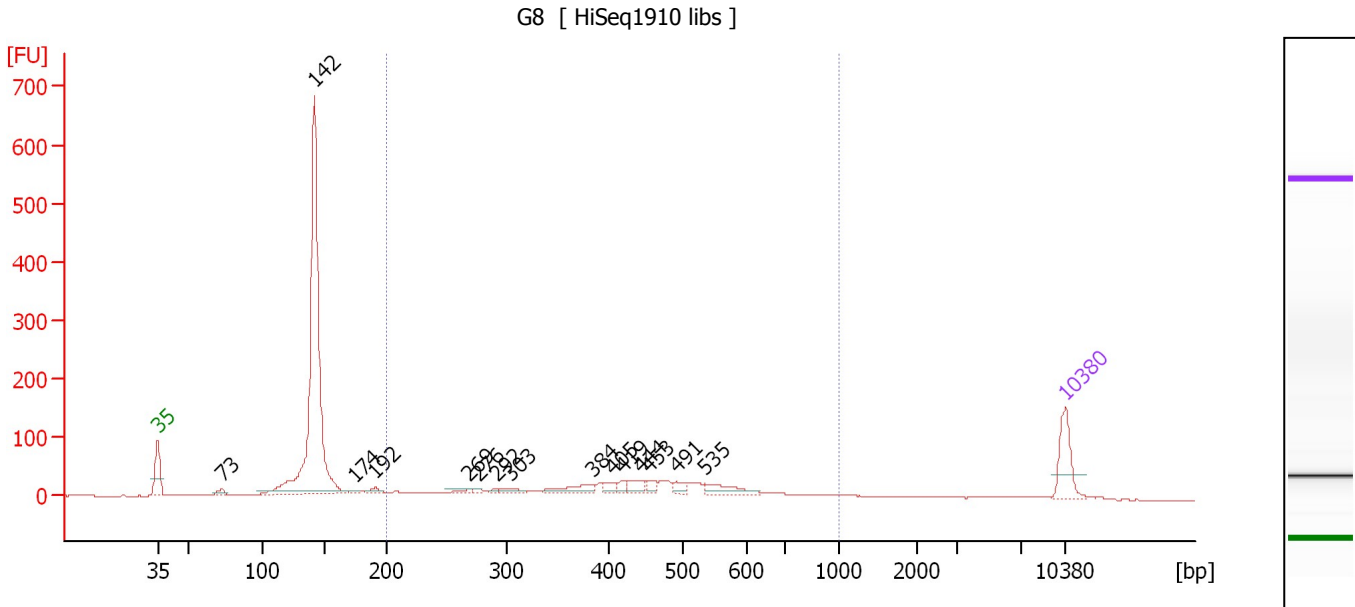
Region table for sample 7 : E7

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	536	2,333.49	3,618.3	7,115.2	92	24.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-30\2019-10-30_002.xad

Created: 10/30/2019 1:20:42 PM
 Modified: 10/30/2019 1:53:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : G8

Number of peaks found: 15 Corr. Area 1: 738.0
 Noise: 0.3

Peak table for sample 8 : G8

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	73	15.76	328.2		47.94
3	142	1,070.49	11,410.7		55.10
4	174	7.45	64.7		58.17
5	192	14.86	117.5		59.80
6	269	8.79	49.5		67.06
7	276	5.40	29.6		67.70
8	292	5.15	26.8		69.13
9	303	16.81	84.0		70.17
10	384	42.81	168.9		76.59
11	405	19.64	73.4		78.17
12	419	16.46	59.6		78.91
13	444	28.69	98.0		80.35
14	453	15.45	51.7		80.84
15	491	20.35	62.8		83.01
16	535	43.49	123.1		85.24
17	10,380	75.00	10.9	Upper Marker	113.00

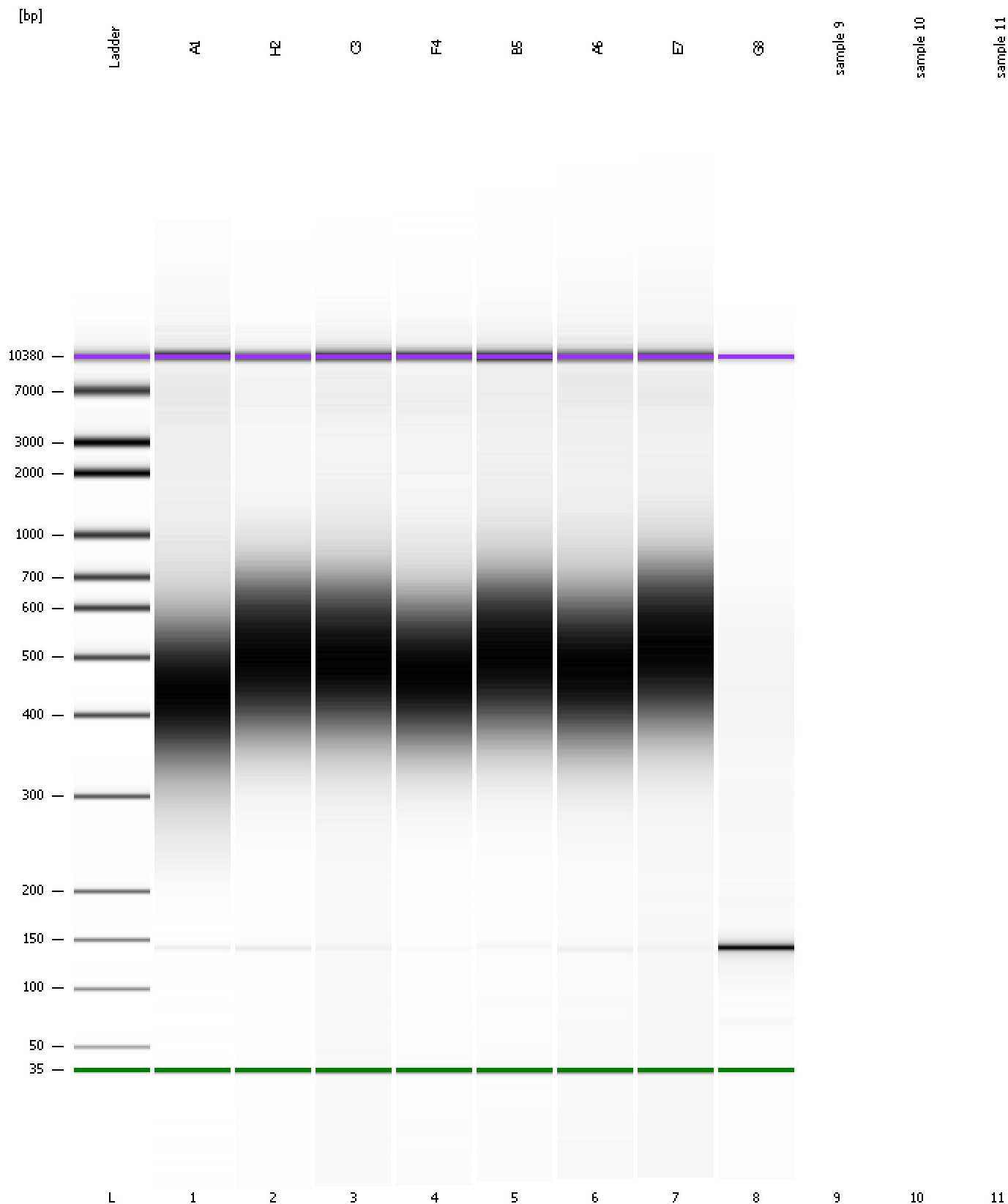
Region table for sample 8 : G8

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	445	596.13	738.0	2,374.2	38	33.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-30\2019-10-30_002.xad

Created: 10/30/2019 1:20:42 PM
Modified: 10/30/2019 1:53:24 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-30\2019-10-30_002.xad

Created: 10/30/2019 1:20:42 PM
Modified: 10/30/2019 1:53:24 PM

Invalid Samples

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-30\2019-10-30_002.xad

Created: 10/30/2019 1:20:42 PM
 Modified: 10/30/2019 1:53:24 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 9)		Instrument	Run		10/30/2019 1:53:24 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\2019-10-30\2019-10-30_002.xad)		Instrument	Run		10/30/2019 1:20:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		10/30/2019 1:20:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/30/2019 1:20:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/30/2019 1:20:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		10/30/2019 1:20:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/30/2019 1:20:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/30/2019 1:20:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1