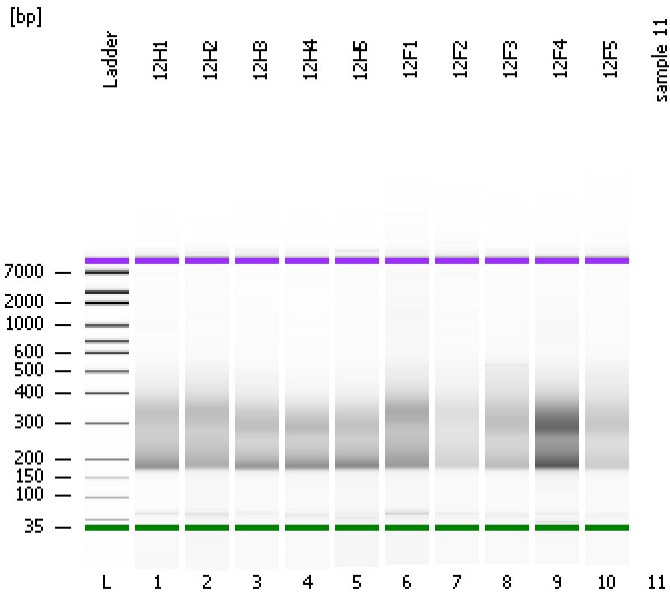


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-18\2019-10-18_002.xad

Created: 10/18/2019 1:18:53 PM
Modified: 10/18/2019 1:57:18 PM

Electrophoresis File Run Summary



Instrument Information:

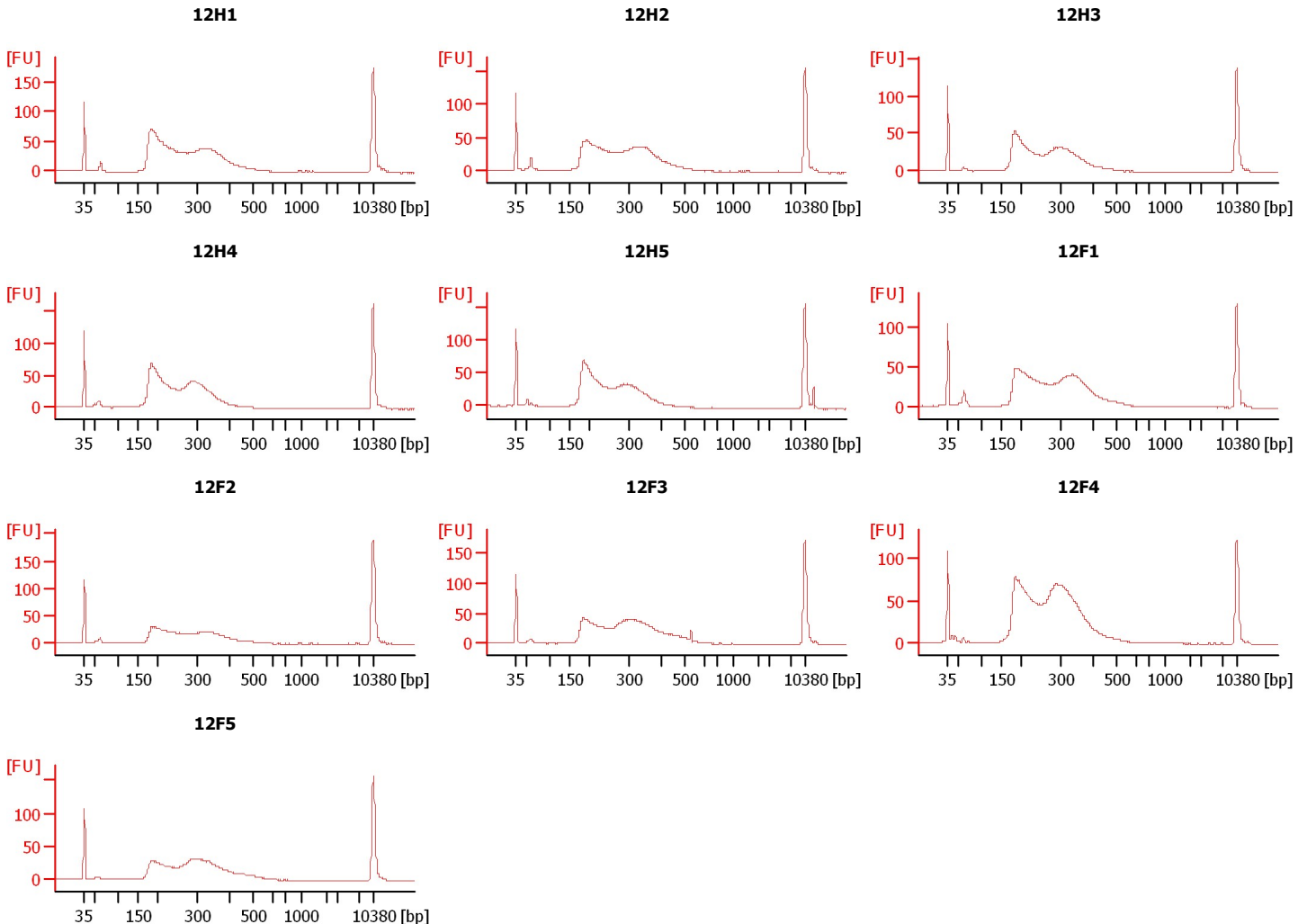
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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\2019-10-18\2019-10-18_002.xad

Created: 10/18/2019 1:18:53 PM
 Modified: 10/18/2019 1:57:18 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
12H1		<input type="checkbox"/>	✓			
12H2		<input type="checkbox"/>	✓			
12H3		<input type="checkbox"/>	✓			
12H4		<input type="checkbox"/>	✓			
12H5		<input type="checkbox"/>	✓			
12F1		<input type="checkbox"/>	✓			
12F2		<input type="checkbox"/>	✓			
12F3		<input type="checkbox"/>	✓			
12F4		<input type="checkbox"/>	✓			
12F5		<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\2019-10-18\2019-10-18_002.xad

Created: 10/18/2019 1:18:53 PM
Modified: 10/18/2019 1:57:18 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

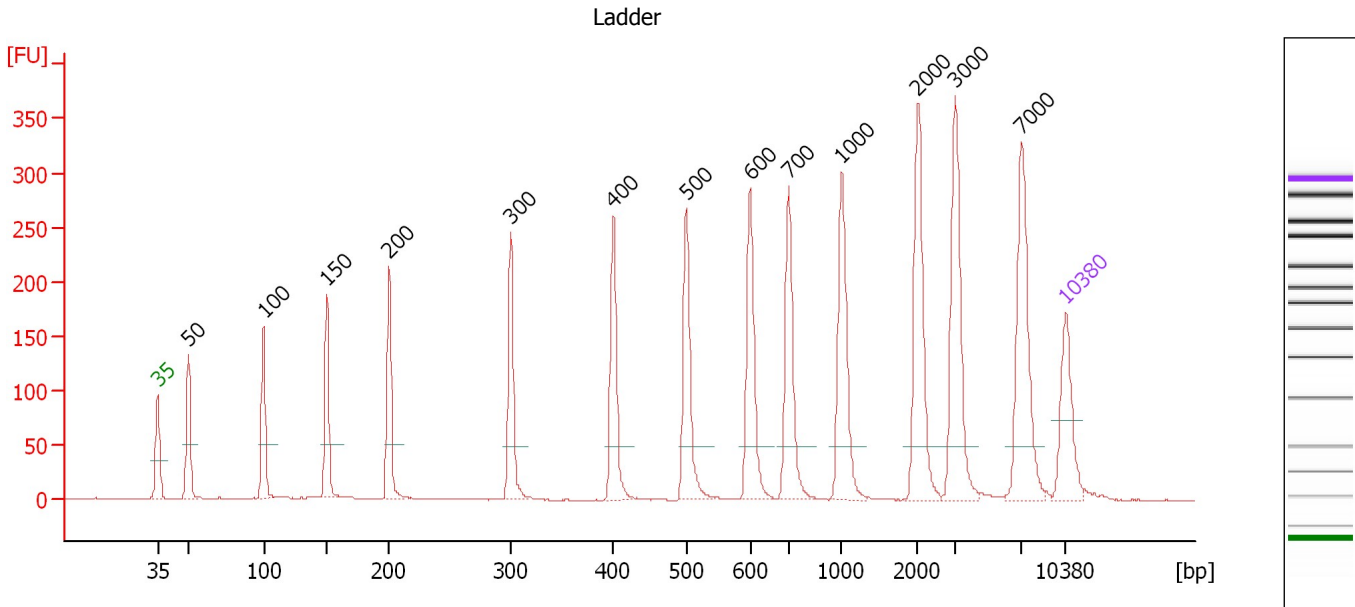
Ladder

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\2019-10-18\2019-10-18_002.xad

Created: 10/18/2019 1:18:53 PM
 Modified: 10/18/2019 1:57:18 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

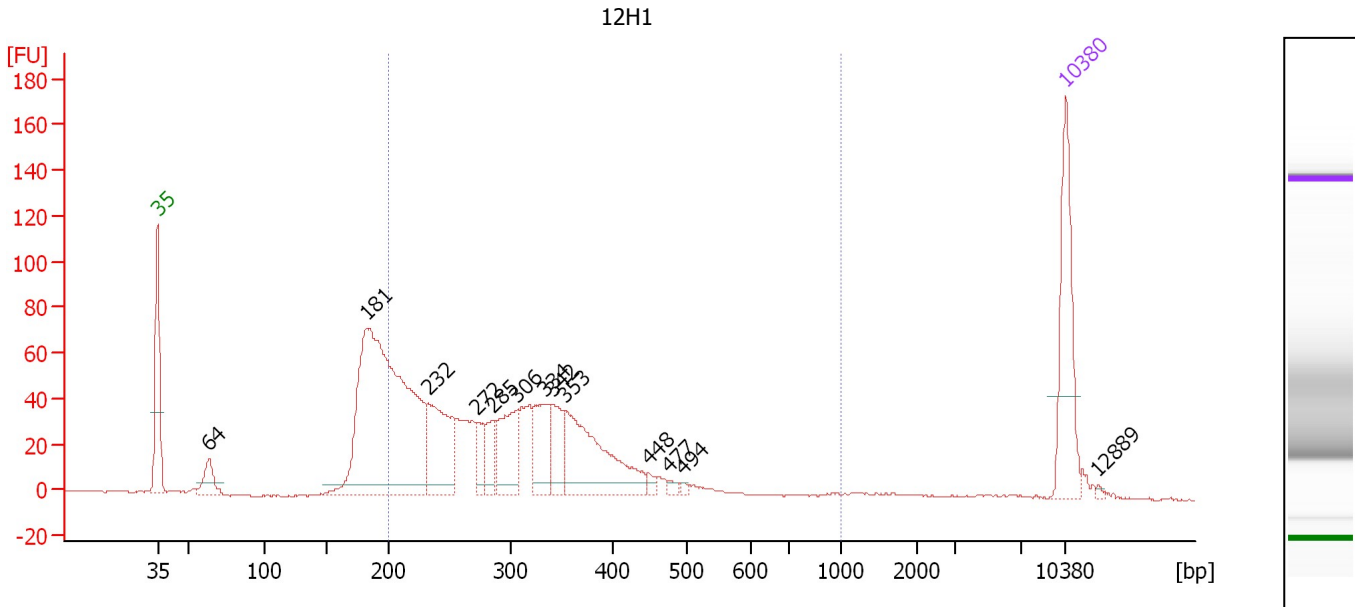
Peak table for Ladder

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	45.38
3	100	150.00	2,272.7	Ladder Peak	51.18
4	150	150.00	1,515.2	Ladder Peak	56.07
5	200	150.00	1,136.4	Ladder Peak	60.88
6	300	150.00	757.6	Ladder Peak	70.23
7	400	150.00	568.2	Ladder Peak	78.13
8	500	150.00	454.5	Ladder Peak	83.80
9	600	150.00	378.8	Ladder Peak	88.69
10	700	150.00	324.7	Ladder Peak	91.66
11	1,000	150.00	227.3	Ladder Peak	95.75
12	2,000	150.00	113.6	Ladder Peak	101.63
13	3,000	150.00	75.8	Ladder Peak	104.51
14	7,000	150.00	32.5	Ladder Peak	109.63
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-18\2019-10-18_002.xad

Created: 10/18/2019 1:18:53 PM
 Modified: 10/18/2019 1:57:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 12H1

Number of peaks found: 13 Corr. Area 1: 1,029.3
 Noise: 0.3

Peak table for sample 1 : 12H1

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	29.80	710.0		46.96
3	181	493.70	4,121.8		59.10
4	232	104.68	683.5		63.88
5	272	22.37	124.4		67.65
6	285	30.49	162.0		68.83
7	306	66.79	330.7		70.70
8	334	53.71	244.0		72.88
9	342	40.60	180.0		73.52
10	353	129.63	556.2		74.43
11	448	5.38	18.2		80.84
12	477	3.99	12.7		82.48
13	494	2.74	8.4		83.44
14	10,380	75.00	10.9	Upper Marker	113.00
15	12,889	0.00	0.0		115.50

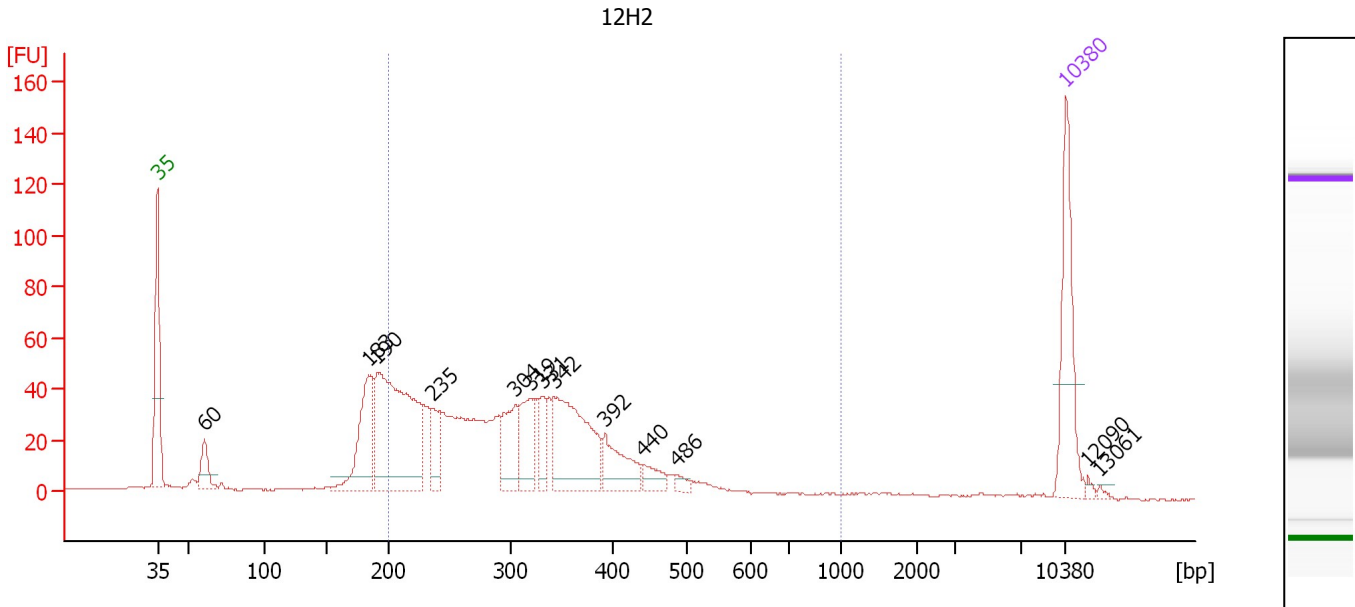
Region table for sample 1 : 12H1

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	307	772.99	1,029.3	4,147.1	73	28.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-18\2019-10-18_002.xad

Created: 10/18/2019 1:18:53 PM
 Modified: 10/18/2019 1:57:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 12H2

Number of peaks found: 13 Corr. Area 1: 969.8
 Noise: 0.3

Peak table for sample 2 : 12H2

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	32.45	813.2		46.59
3	183	103.82	858.6		59.27
4	190	271.39	2,159.7		59.96
5	235	37.08	238.6		64.20
6	304	56.40	280.9		70.56
7	319	54.46	258.4		71.76
8	331	29.84	136.6		72.68
9	342	137.79	610.4		73.55
10	392	49.17	190.3		77.47
11	440	17.56	60.4		80.42
12	486	7.04	22.0		83.00
13	10,380	75.00	10.9	Upper Marker	113.00
14	12,090	0.00	0.0		114.71
15	13,061	0.00	0.0		115.67

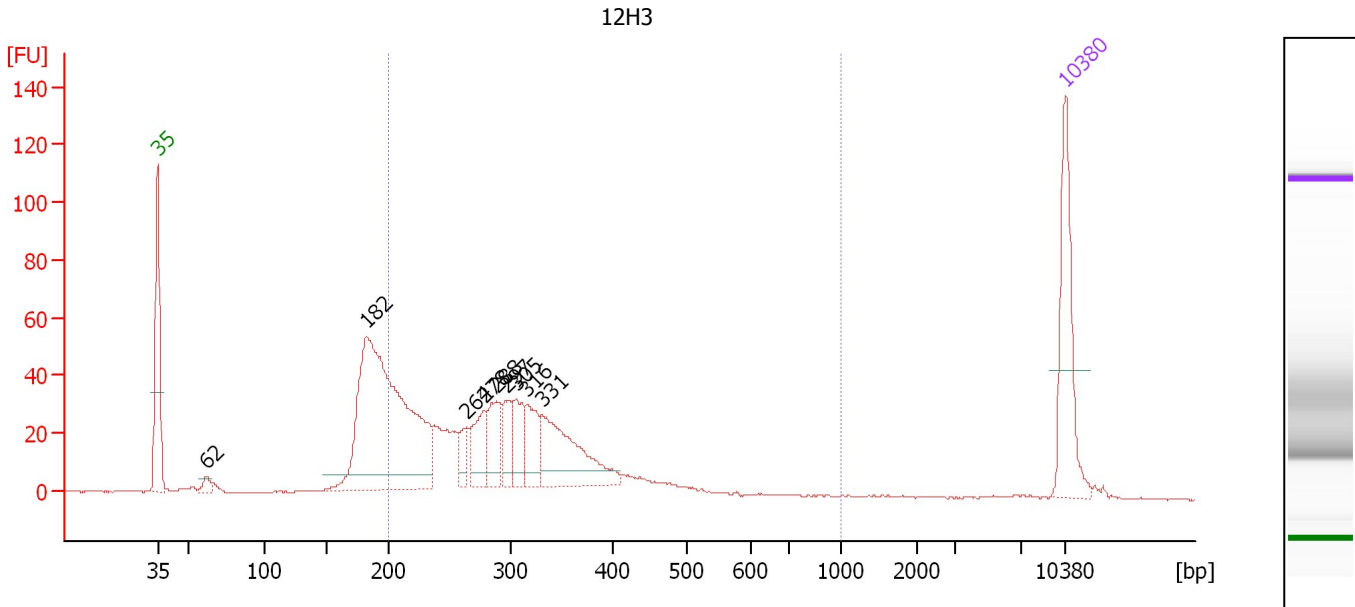
Region table for sample 2 : 12H2

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	319	884.91	969.8	4,621.5	75	29.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-18\2019-10-18_002.xad

Created: 10/18/2019 1:18:53 PM
 Modified: 10/18/2019 1:57:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 12H3

Number of peaks found: 9 Corr. Area 1: 696.7
 Noise: 0.2

Peak table for sample 3 : 12H3

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	10.42	254.2		46.78
3	182	431.04	3,596.7		59.11
4	264	20.40	117.1		66.86
5	278	46.31	252.4		68.17
6	288	46.67	245.1		69.15
7	297	33.22	169.2		69.99
8	305	37.64	186.8		70.65
9	316	42.08	201.8		71.49
10	331	106.83	489.5		72.65
11	10,380	75.00	10.9	Upper Marker	113.00

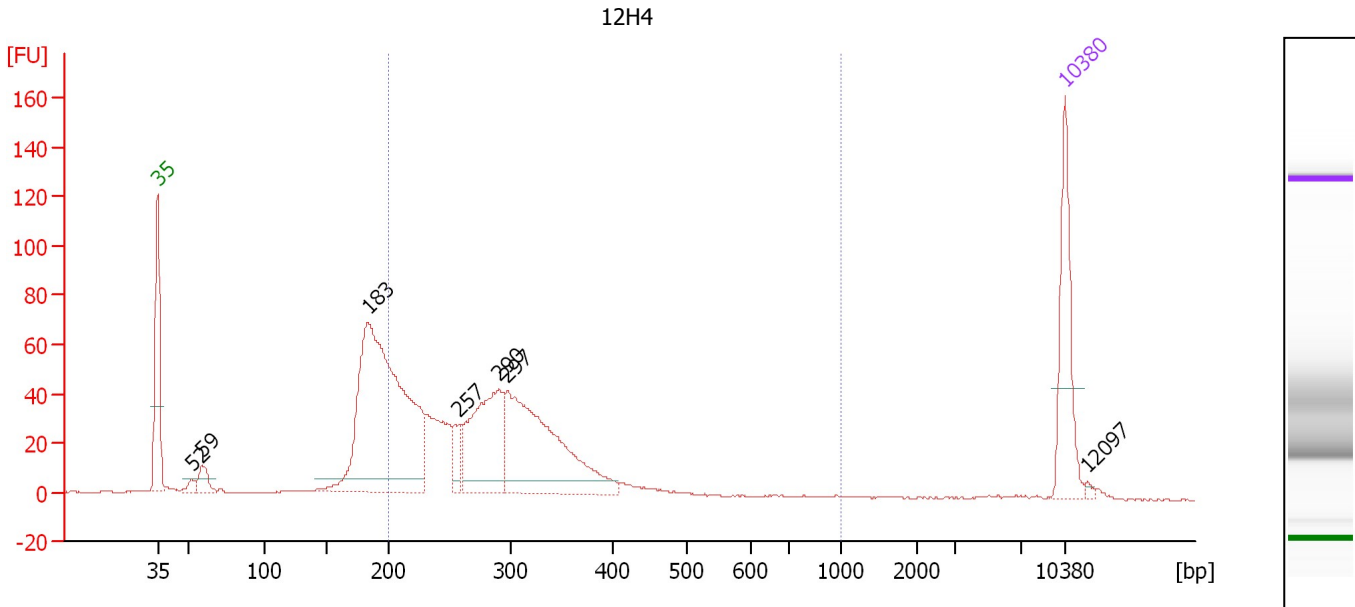
Region table for sample 3 : 12H3

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	301	669.62	696.7	3,608.1	72	26.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-18\2019-10-18_002.xad

Created: 10/18/2019 1:18:53 PM
 Modified: 10/18/2019 1:57:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 12H4

Number of peaks found: 7 Corr. Area 1: 815.4
 Noise: 0.3

Peak table for sample 4 : 12H4

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	52	9.04	261.3		45.66
3	59	24.73	630.7		46.47
4	183	503.28	4,174.4		59.22
5	257	28.66	168.6		66.25
6	290	156.41	817.1		69.30
7	297	255.23	1,301.3		69.96
8	10,380	75.00	10.9	Upper Marker	113.00
9	12,097	0.00	0.0		114.71

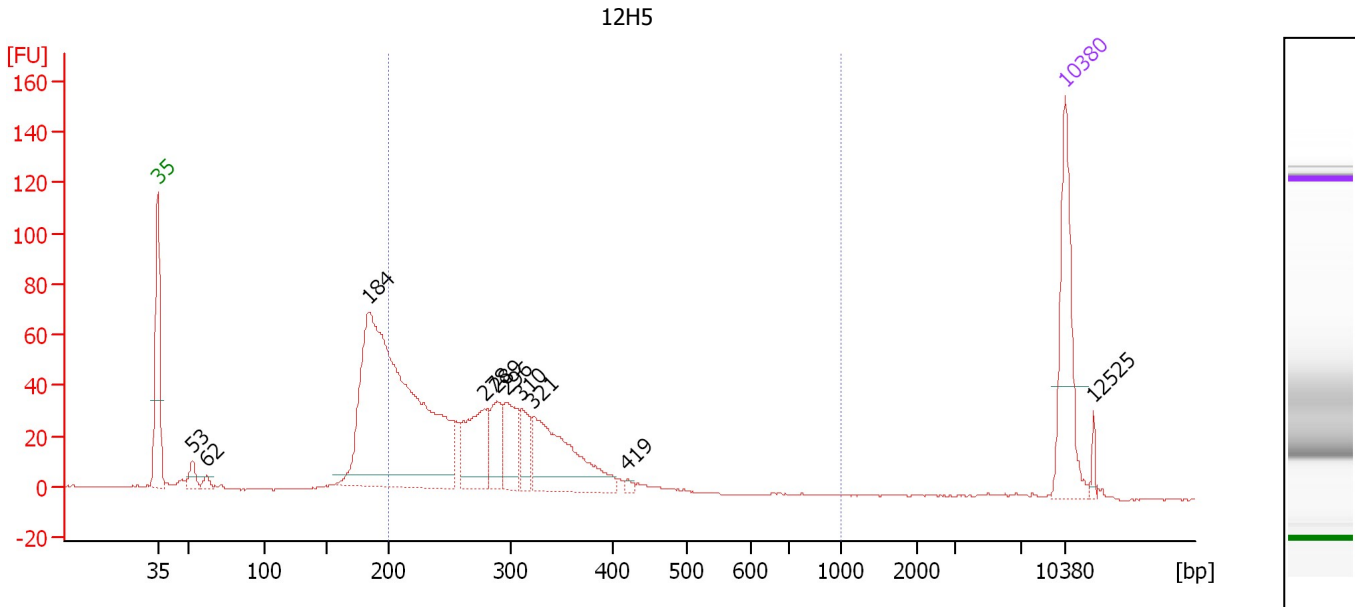
Region table for sample 4 : 12H4

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	287	747.77	815.4	4,151.8	69	23.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-18\2019-10-18_002.xad

Created: 10/18/2019 1:18:53 PM
 Modified: 10/18/2019 1:57:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 12H5

Number of peaks found: 10 Corr. Area 1: 739.5
 Noise: 0.2

Peak table for sample 5 : 12H5

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	53	16.71	482.0		45.67
3	62	7.94	193.5		46.79
4	184	559.66	4,611.2		59.33
5	278	78.28	426.5		68.18
6	289	47.48	249.4		69.15
7	296	52.00	265.9		69.88
8	310	30.24	147.6		71.05
9	321	125.69	592.4		71.92
10	419	3.41	12.3		79.22
11	10,380	75.00	10.9	Upper Marker	113.00
12	12,525	0.00	0.0		115.14

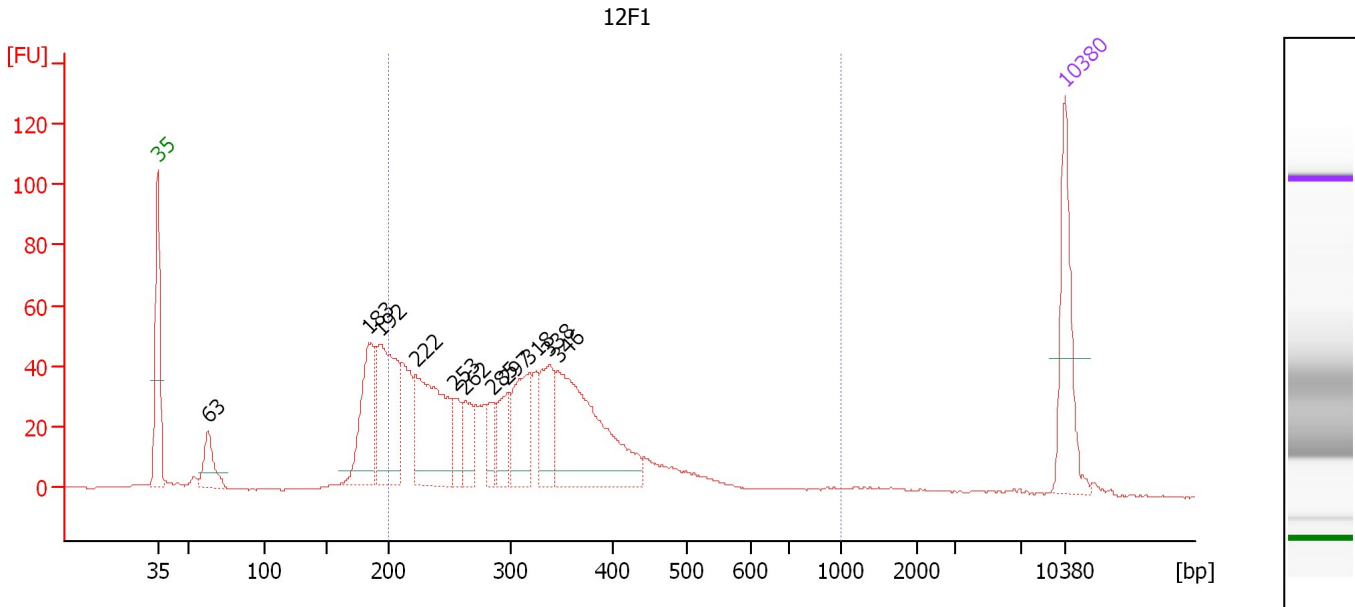
Region table for sample 5 : 12H5

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	282	635.96	739.5	3,576.9	70	20.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-18\2019-10-18_002.xad

Created: 10/18/2019 1:18:53 PM
 Modified: 10/18/2019 1:57:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 12F1

Number of peaks found: 11 Corr. Area 1: 984.4
 Noise: 0.2

Peak table for sample 6 : 12F1

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	50.54	1,217.8		46.88
3	183	124.59	1,031.7		59.25
4	192	169.37	1,334.6		60.14
5	222	178.61	1,220.0		62.92
6	253	36.82	220.4		65.85
7	262	41.59	240.3		66.70
8	285	28.48	151.4		68.83
9	297	43.30	220.7		69.98
10	318	82.77	394.9		71.62
11	338	65.85	295.5		73.21
12	346	218.97	957.6		73.90
13	10,380	75.00	10.9	Upper Marker	113.00

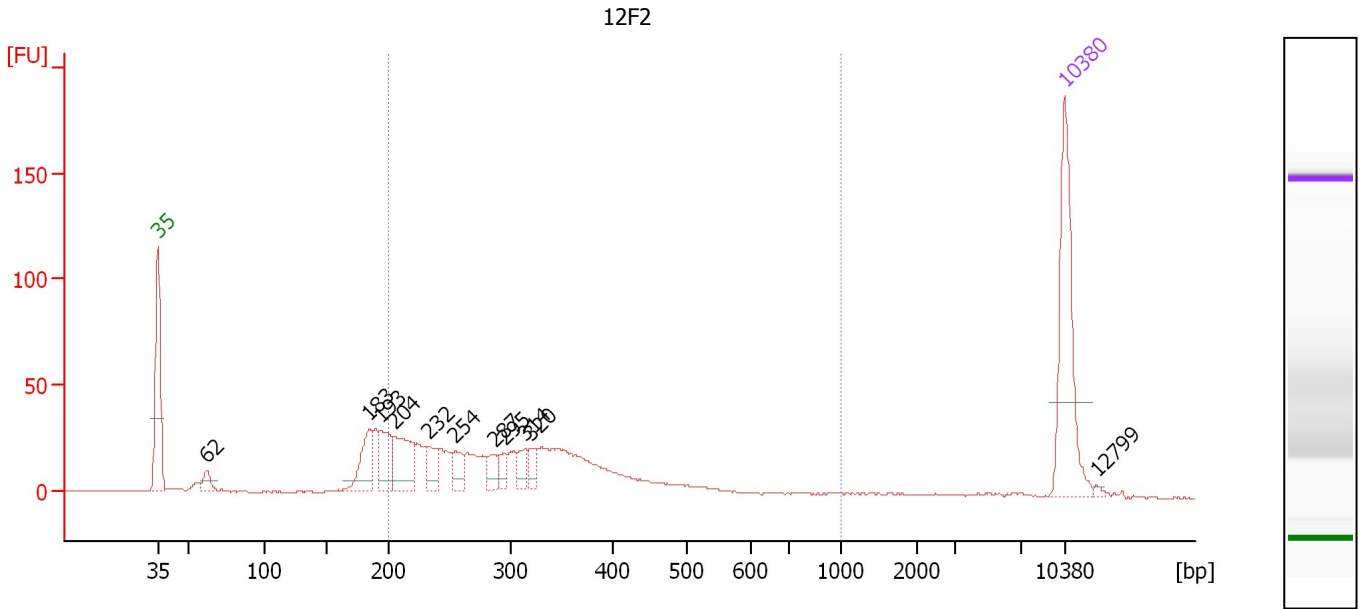
Region table for sample 6 : 12F1

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	323	1,043.77	984.4	5,431.9	77	32.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-18\2019-10-18_002.xad

Created: 10/18/2019 1:18:53 PM
 Modified: 10/18/2019 1:57:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 12F2

Number of peaks found: 11 Corr. Area 1: 591.9
 Noise: 0.2

Peak table for sample 7 : 12F2

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	12.51	303.8		46.82
3	183	37.73	311.8		59.28
4	193	36.94	290.4		60.19
5	204	50.50	374.4		61.29
6	232	18.44	120.3		63.90
7	254	17.14	102.1		65.96
8	287	13.63	72.1		68.98
9	295	10.61	54.5		69.73
10	314	13.76	66.4		71.34
11	320	11.49	54.4		71.79
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,799	0.00	0.0		115.41

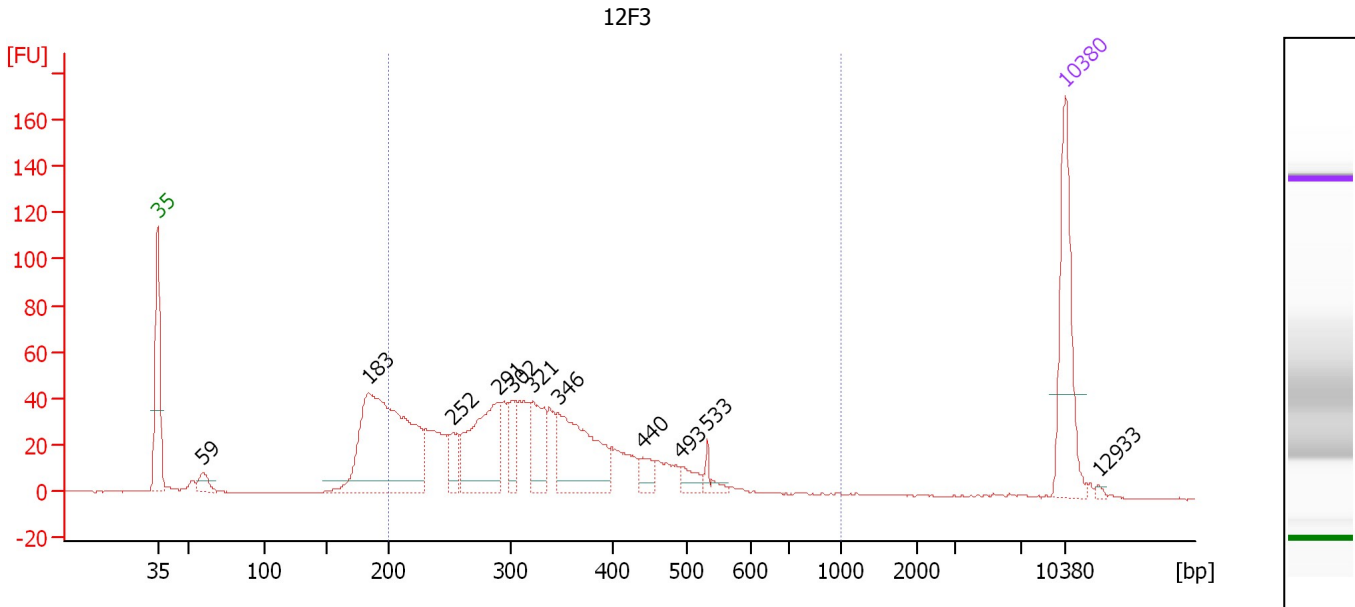
Region table for sample 7 : 12F2

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	324	389.04	591.9	2,034.7	75	34.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-18\2019-10-18_002.xad

Created: 10/18/2019 1:18:53 PM
 Modified: 10/18/2019 1:57:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 12F3

Number of peaks found: 11 Corr. Area 1: 957.2
 Noise: 0.2

Peak table for sample 8 : 12F3

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	59	15.46	394.9		46.46
3	183	289.14	2,388.0		59.29
4	252	26.14	157.1		65.76
5	291	112.11	584.1		69.37
6	302	29.08	145.9		70.39
7	321	48.87	230.4		71.92
8	346	109.77	480.0		73.90
9	440	15.03	51.7		80.42
10	493	14.02	43.1		83.42
11	533	10.84	30.8		85.41
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,933	0.00	0.0		115.55

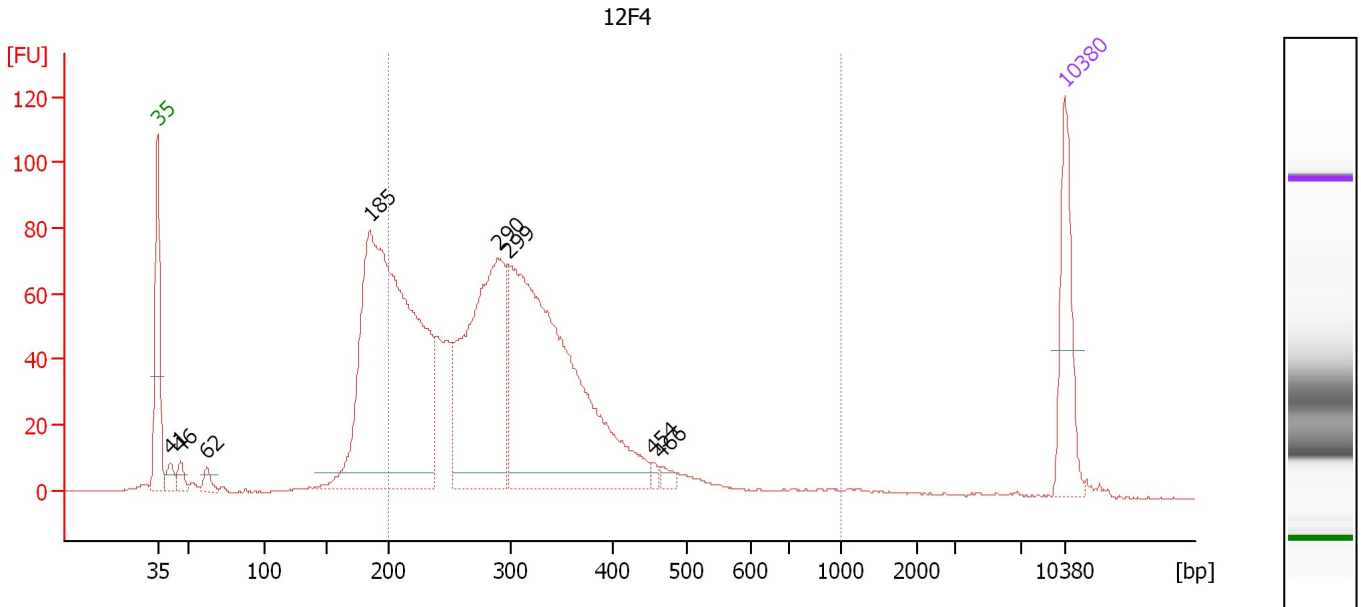
Region table for sample 8 : 12F3

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	331	729.20	957.2	3,683.3	81	29.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-18\2019-10-18_002.xad

Created: 10/18/2019 1:18:53 PM
 Modified: 10/18/2019 1:57:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 12F4

Number of peaks found: 8 Corr. Area 1: 1,422.6
 Noise: 0.2

Peak table for sample 9 : 12F4

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	41	19.75	727.2		43.98
3	46	18.17	598.5		44.75
4	62	15.78	384.1		46.80
5	185	818.28	6,718.6		59.40
6	290	394.43	2,063.0		69.26
7	299	614.99	3,116.1		70.14
8	454	6.03	20.1		81.19
9	466	8.16	26.5		81.85
10	10,380	75.00	10.9	Upper Marker	113.00

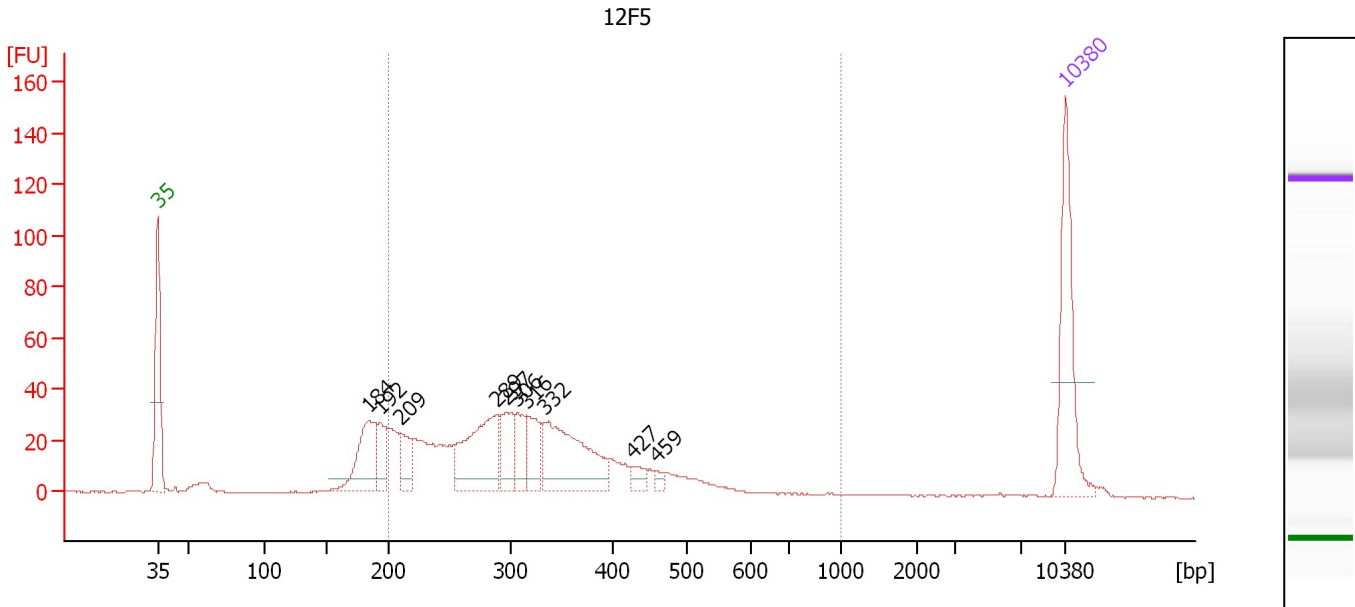
Region table for sample 9 : 12F4

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	307	1,570.03	1,422.6	8,360.6	78	29.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-18\2019-10-18_002.xad

Created: 10/18/2019 1:18:53 PM
 Modified: 10/18/2019 1:57:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 12F5

Number of peaks found: 10 Corr. Area 1: 702.2
 Noise: 0.2

Peak table for sample 10 : 12F5

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	184	74.97	618.4		59.31
3	192	32.56	256.6		60.14
4	209	30.95	224.2		61.74
5	289	104.54	548.6		69.17
6	297	35.14	179.3		69.95
7	306	30.10	149.2		70.67
8	316	38.27	183.5		71.50
9	332	118.33	539.4		72.79
10	427	11.83	42.0		79.65
11	459	5.70	18.8		81.46
12	10,380	75.00	10.9	Upper Marker	113.00

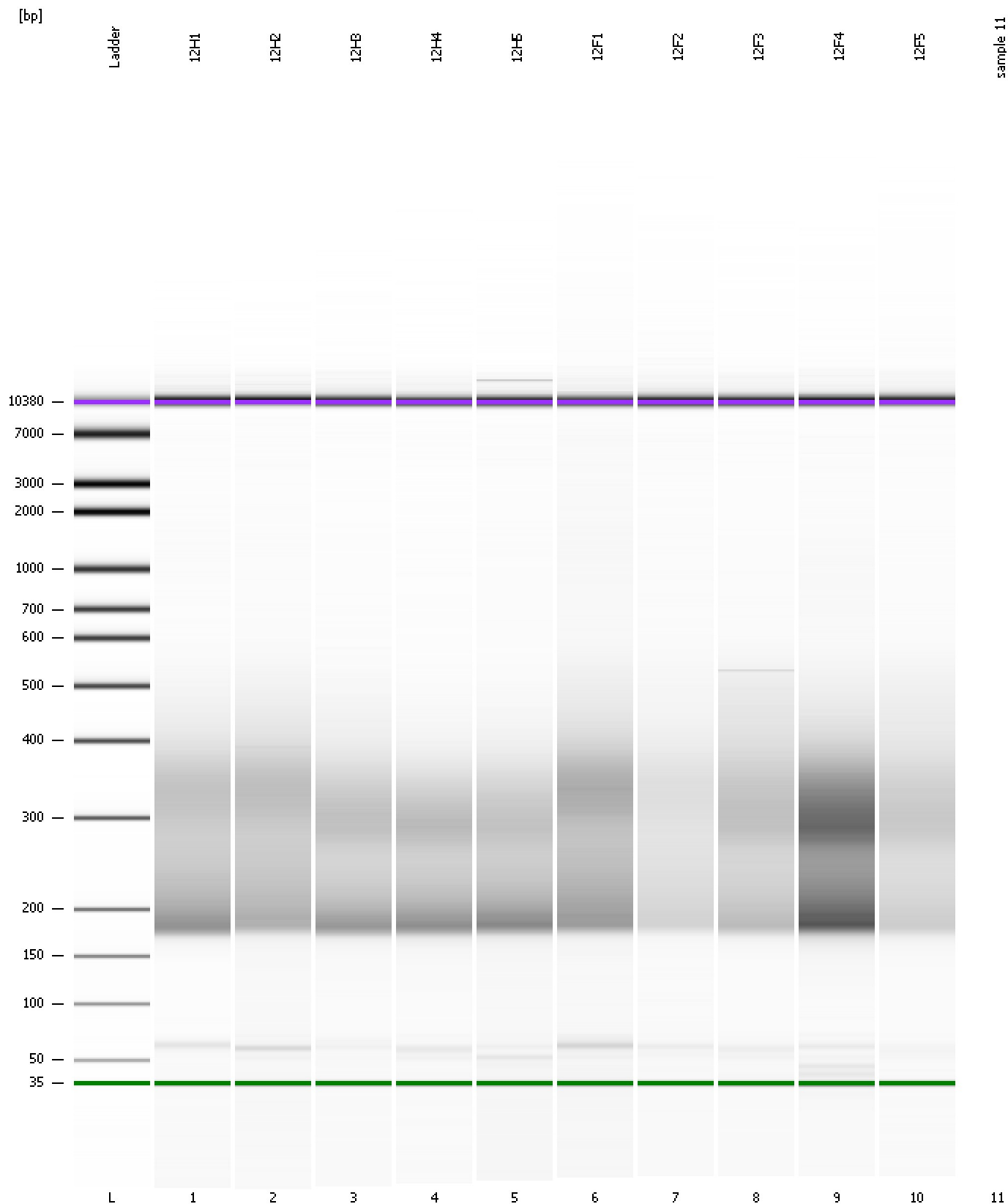
Region table for sample 10 : 12F5

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	328	599.14	702.2	3,039.4	80	30.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-18\2019-10-18_002.xad

Created: 10/18/2019 1:18:53 PM
Modified: 10/18/2019 1:57:18 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-18\2019-10-18_002.xad

Created: 10/18/2019 1:18:53 PM
Modified: 10/18/2019 1:57:18 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\2019-10-18\2019-10-18_002.xad

Created: 10/18/2019 1:18:53 PM
 Modified: 10/18/2019 1:57:18 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		10/18/2019 1:57:17 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\2019-10-18\2019-10-18_002.xad)		Instrument	Run		10/18/2019 1:18:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		10/18/2019 1:18:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/18/2019 1:18:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/18/2019 1:18:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		10/18/2019 1:18:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/18/2019 1:18:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/18/2019 1:18:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1