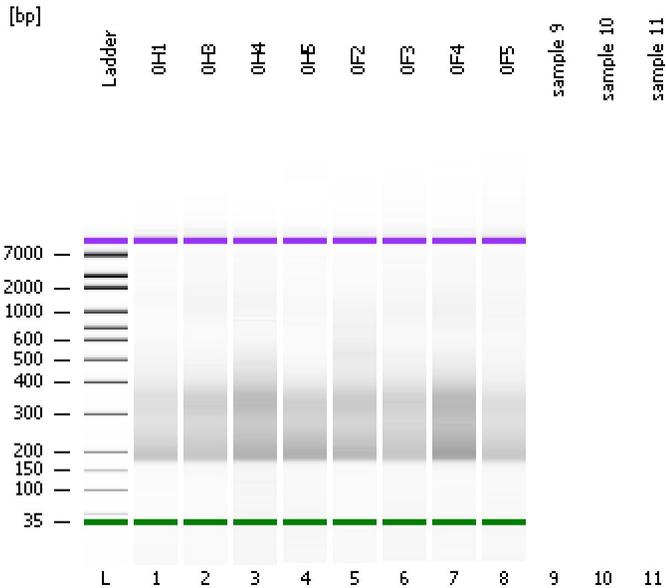


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_001.xad

Created: 6/6/2019 2:20:30 PM
Modified: 6/6/2019 2:53:13 PM

Electrophoresis File Run Summary



Instrument Information:

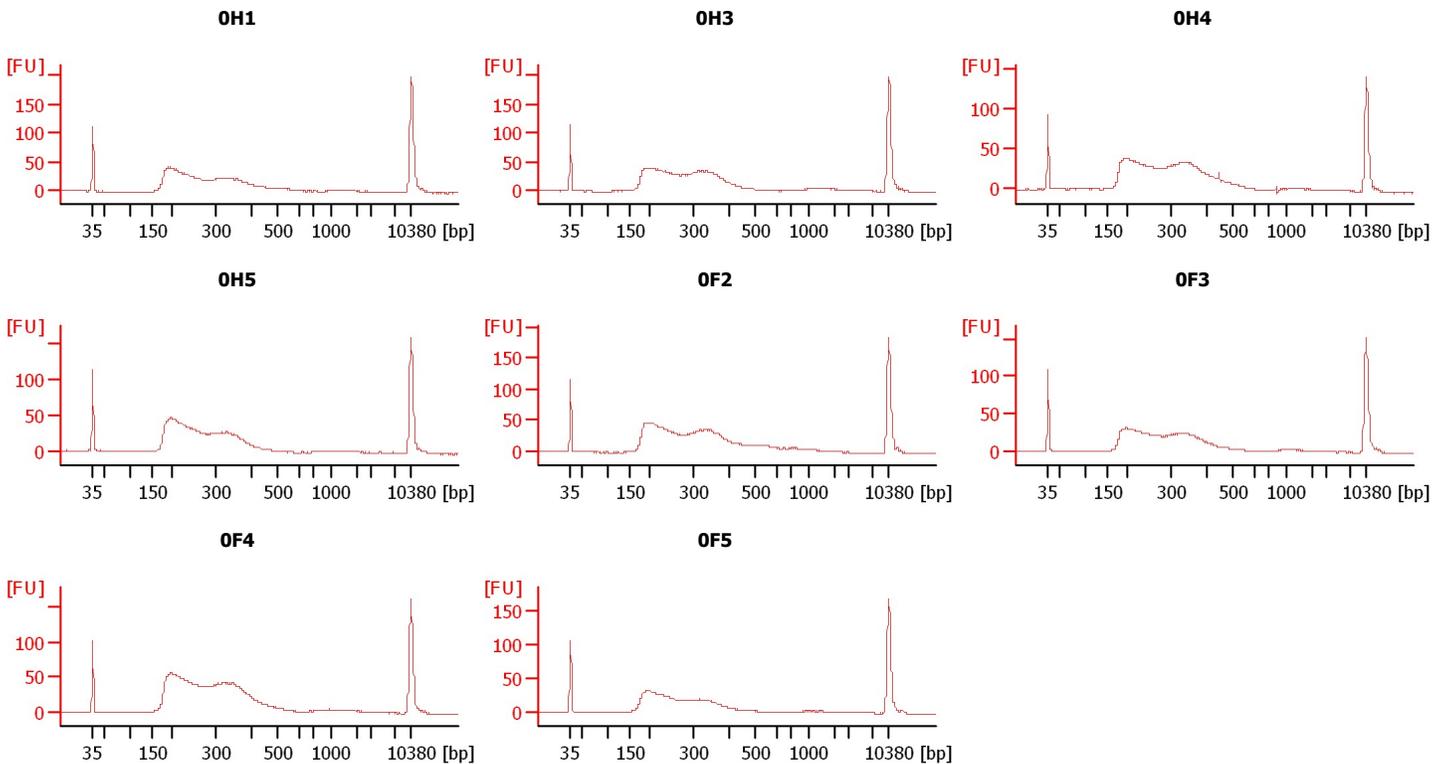
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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\2019-06-06\2019-06-06_001.xad

Created: 6/6/2019 2:20:30 PM
 Modified: 6/6/2019 2:53:13 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
0H1		<input type="checkbox"/>	✓			
0H3		<input type="checkbox"/>	✓			
0H4		<input type="checkbox"/>	✓			
0H5		<input type="checkbox"/>	✓			
0F2		<input type="checkbox"/>	✓			
0F3		<input type="checkbox"/>	✓			
0F4		<input type="checkbox"/>	✓			
0F5		<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\2019-06-06\2019-06-06_001.xad

Created: 6/6/2019 2:20:30 PM
Modified: 6/6/2019 2:53:13 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

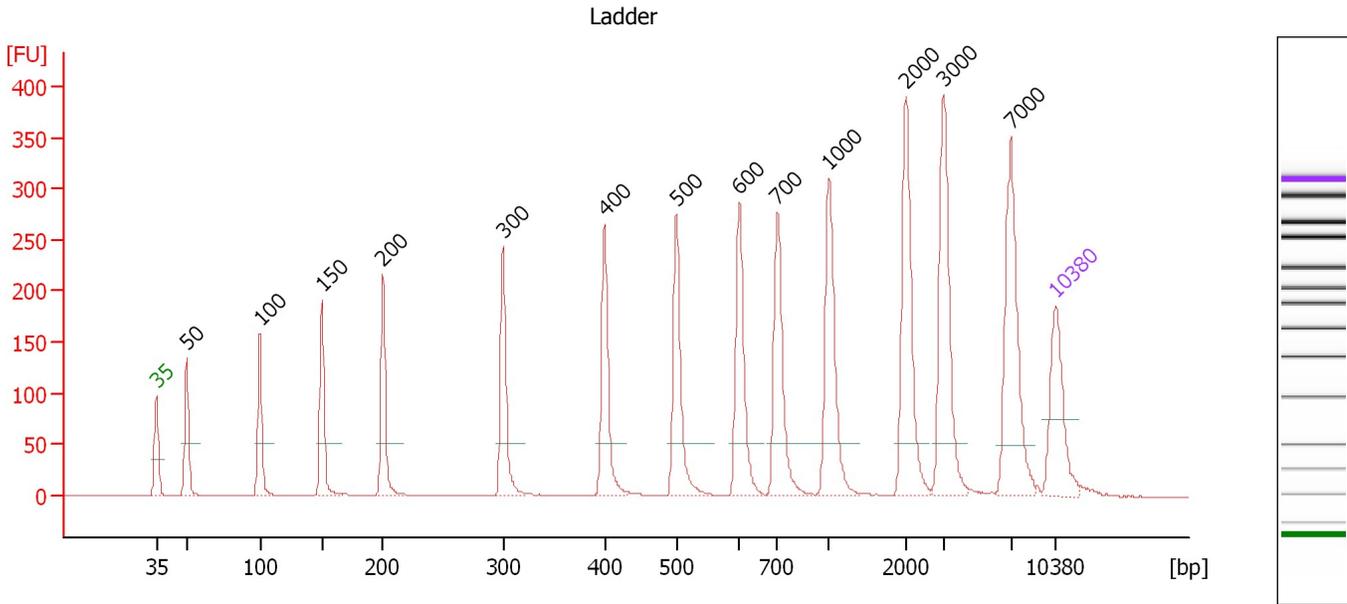
Ladder

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\2019-06-06\2019-06-06_001.xad

Created: 6/6/2019 2:20:30 PM
 Modified: 6/6/2019 2:53:13 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

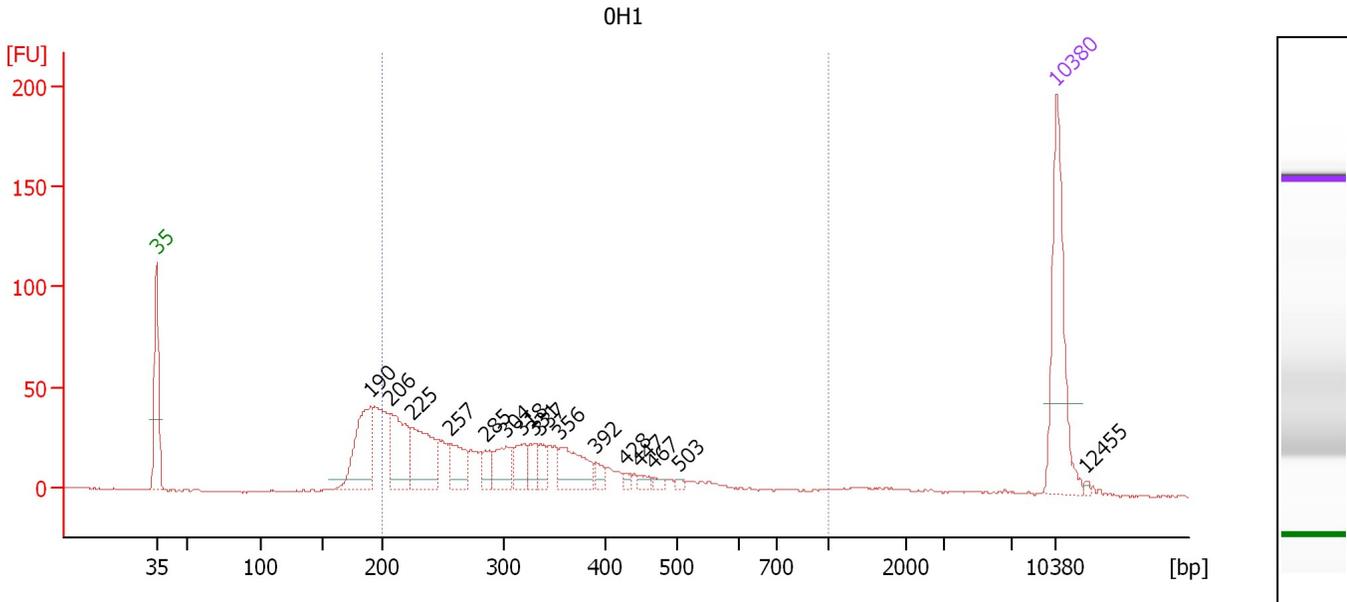
Peak table for Ladder

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	45.37
3	100	150.00	2,272.7	Ladder Peak	51.07
4	150	150.00	1,515.2	Ladder Peak	55.90
5	200	150.00	1,136.4	Ladder Peak	60.64
6	300	150.00	757.6	Ladder Peak	69.96
7	400	150.00	568.2	Ladder Peak	77.85
8	500	150.00	454.5	Ladder Peak	83.46
9	600	150.00	378.8	Ladder Peak	88.33
10	700	150.00	324.7	Ladder Peak	91.31
11	1,000	150.00	227.3	Ladder Peak	95.32
12	2,000	150.00	113.6	Ladder Peak	101.31
13	3,000	150.00	75.8	Ladder Peak	104.20
14	7,000	150.00	32.5	Ladder Peak	109.46
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_001.xad

Created: 6/6/2019 2:20:30 PM
 Modified: 6/6/2019 2:53:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : OH1

Number of peaks found: 16 Corr. Area 1: 734.5
 Noise: 0.3

Peak table for sample 1 : OH1

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	190	83.79	667.8		59.70
3	206	68.22	502.7		61.16
4	225	70.30	474.1		62.94
5	257	32.52	192.1		65.91
6	285	14.56	77.4		68.56
7	304	29.65	148.0		70.25
8	318	23.53	112.2		71.35
9	331	14.40	66.0		72.37
10	337	14.98	67.4		72.86
11	356	41.76	177.5		74.41
12	392	8.56	33.1		77.20
13	428	3.75	13.3		79.42
14	447	5.58	18.9		80.48
15	467	3.74	12.1		81.63
16	503	2.91	8.8		83.58
17	10,380	75.00	10.9	Upper Marker	113.00
18	12,455	0.00	0.0		115.17

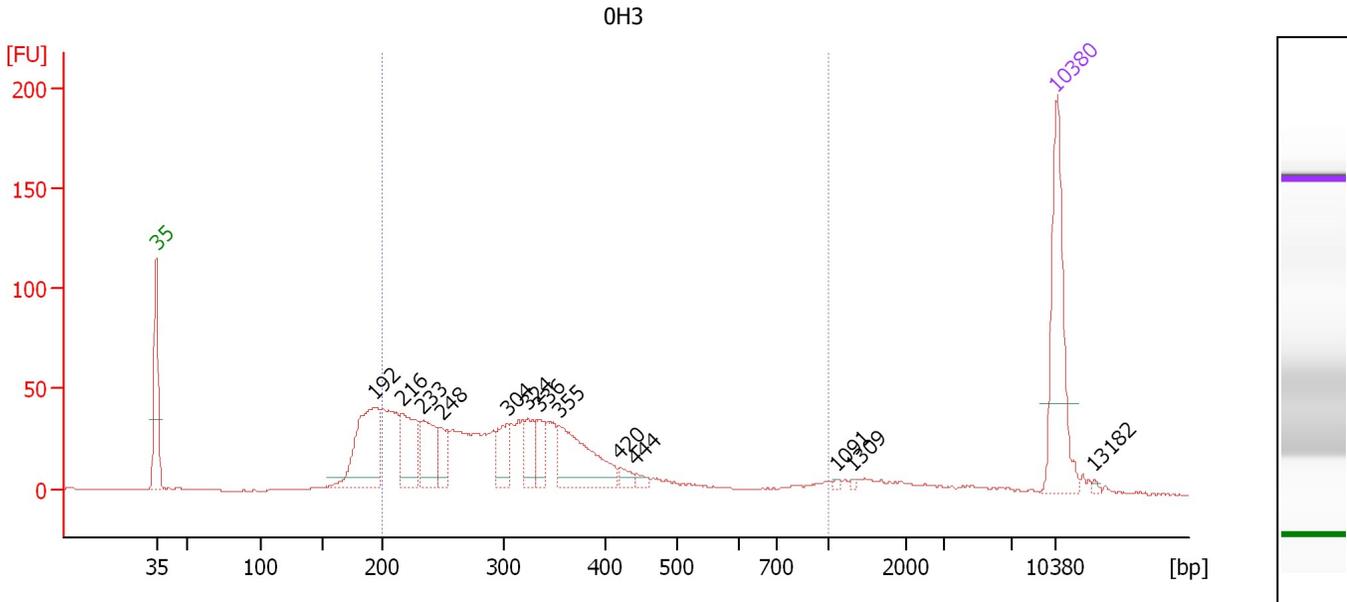
Region table for sample 1 : OH1

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	321	464.38	734.5	2,469.3	78	34.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_001.xad

Created: 6/6/2019 2:20:30 PM
 Modified: 6/6/2019 2:53:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 0H3

Number of peaks found: 13 Corr. Area 1: 958.2
 Noise: 0.3

Peak table for sample 2 : 0H3

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	192	101.65	800.7		59.91
3	216	59.70	418.9		62.12
4	233	45.89	298.6		63.70
5	248	25.10	153.1		65.15
6	304	31.42	156.5		70.29
7	324	30.71	143.5		71.87
8	336	21.76	98.1		72.81
9	355	76.64	327.0		74.30
10	420	7.48	27.0		78.99
11	444	4.45	15.2		80.30
12	1,091	1.56	2.2		95.86
13	1,309	1.43	1.6		97.17
14	10,380	75.00	10.9	Upper Marker	113.00
15	13,182	0.00	0.0		115.93

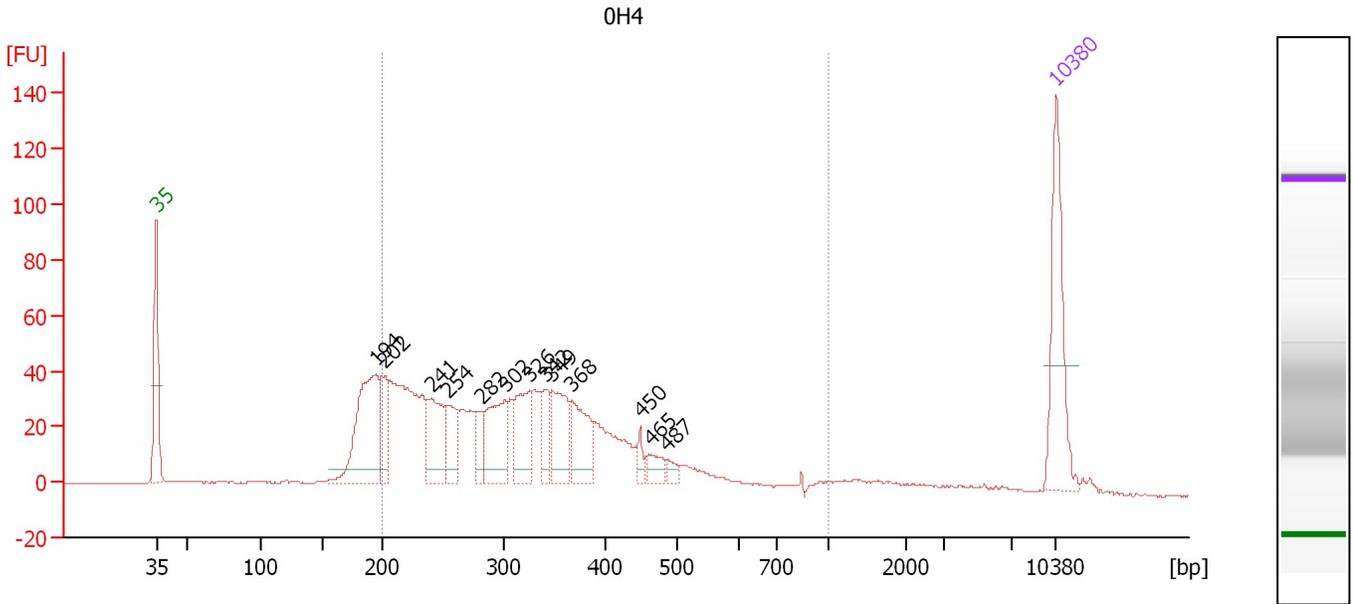
Region table for sample 2 : 0H3

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	327	592.96	958.2	3,100.4	77	37.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_001.xad

Created: 6/6/2019 2:20:30 PM
 Modified: 6/6/2019 2:53:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : OH4

Number of peaks found: 13 Corr. Area 1: 986.8
 Noise: 0.2

Peak table for sample 3 : OH4

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	194	145.57	1,138.0		60.05
3	202	50.22	377.5		60.79
4	241	67.02	421.5		64.45
5	254	43.31	258.1		65.69
6	282	22.51	120.8		68.30
7	302	69.58	348.7		70.14
8	326	59.81	277.9		72.02
9	342	25.17	111.4		73.30
10	349	56.46	245.3		73.81
11	368	53.81	221.6		75.32
12	450	9.57	32.2		80.64
13	465	13.51	44.0		81.51
14	487	7.96	24.8		82.74
15	10,380	75.00	10.9	Upper Marker	113.00

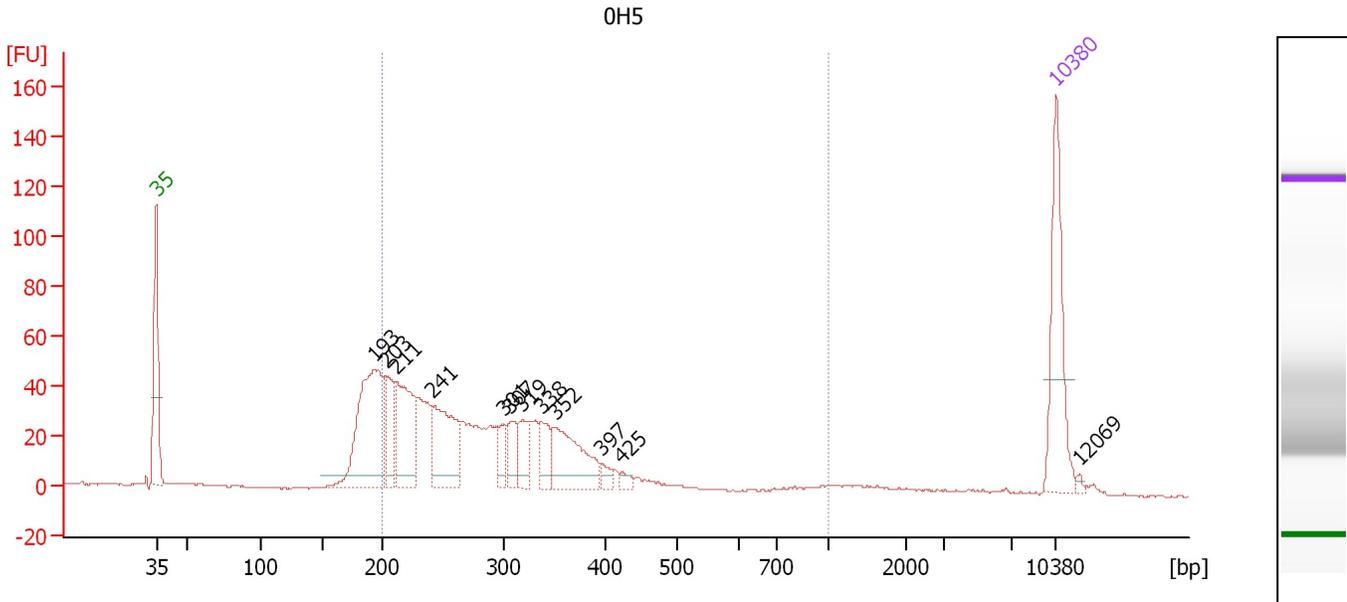
Region table for sample 3 : OH4

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	334	908.04	986.8	4,633.8	80	33.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_001.xad

Created: 6/6/2019 2:20:30 PM
 Modified: 6/6/2019 2:53:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : OH5

Number of peaks found: 12 Corr. Area 1: 777.0
 Noise: 0.2

Peak table for sample 4 : OH5

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	193	183.76	1,446.2		59.93
3	203	50.63	378.2		60.91
4	211	101.09	724.7		61.70
5	241	98.74	620.0		64.49
6	301	19.57	98.5		70.02
7	307	27.87	137.4		70.53
8	319	29.05	138.2		71.42
9	338	27.90	125.1		72.95
10	352	75.10	323.7		74.02
11	397	8.00	30.5		77.65
12	425	6.15	22.0		79.23
13	10,380	75.00	10.9	Upper Marker	113.00
14	12,069	0.00	0.0		114.77

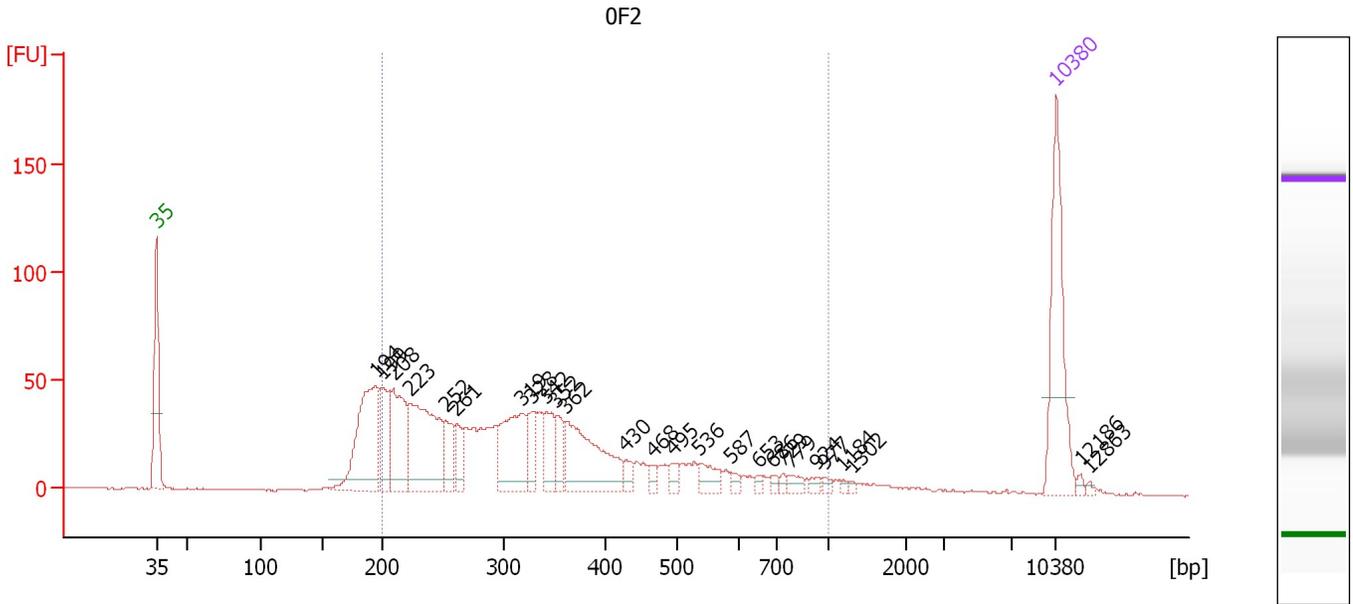
Region table for sample 4 : OH5

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	297	676.42	777.0	3,743.5	78	31.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_001.xad

Created: 6/6/2019 2:20:30 PM
 Modified: 6/6/2019 2:53:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : OF2

Number of peaks found: 26 Corr. Area 1: 1,112.6
 Noise: 0.3

Peak table for sample 5 : OF2

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	194	127.83	999.4		60.05
3	199	47.74	363.0		60.57
4	208	76.09	553.2		61.42
5	223	127.51	868.0		62.74
6	252	31.49	189.0		65.53
7	261	21.16	122.8		66.33
8	319	76.24	361.7		71.48
9	328	21.83	101.0		72.14
10	342	32.11	142.2		73.28
11	352	22.34	96.1		74.08
12	362	92.36	386.8		74.84
13	430	8.71	30.7		79.51
14	468	6.97	22.6		81.64
15	495	8.73	26.8		83.15
16	536	15.56	44.0		85.23
17	587	4.75	12.3		87.68
18	653	3.47	8.1		89.90
19	686	3.47	7.7		90.89
20	729	3.58	7.4		91.70
21	779	6.75	13.1		92.36
22	924	3.57	5.9		94.30
23	977	3.30	5.1		95.00
24	1,184	1.94	2.5		96.42
25	1,302	1.76	2.0		97.13

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_001.xad

Created: 6/6/2019 2:20:30 PM
 Modified: 6/6/2019 2:53:13 PM

Electropherogram Summary Continued ...

... Peak table for sample 5 : 0F2

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	10,380	75.00	10.9	Upper Marker	113.00
27	12,186	0.00	0.0		114.89
28	12,863	0.00	0.0		115.60

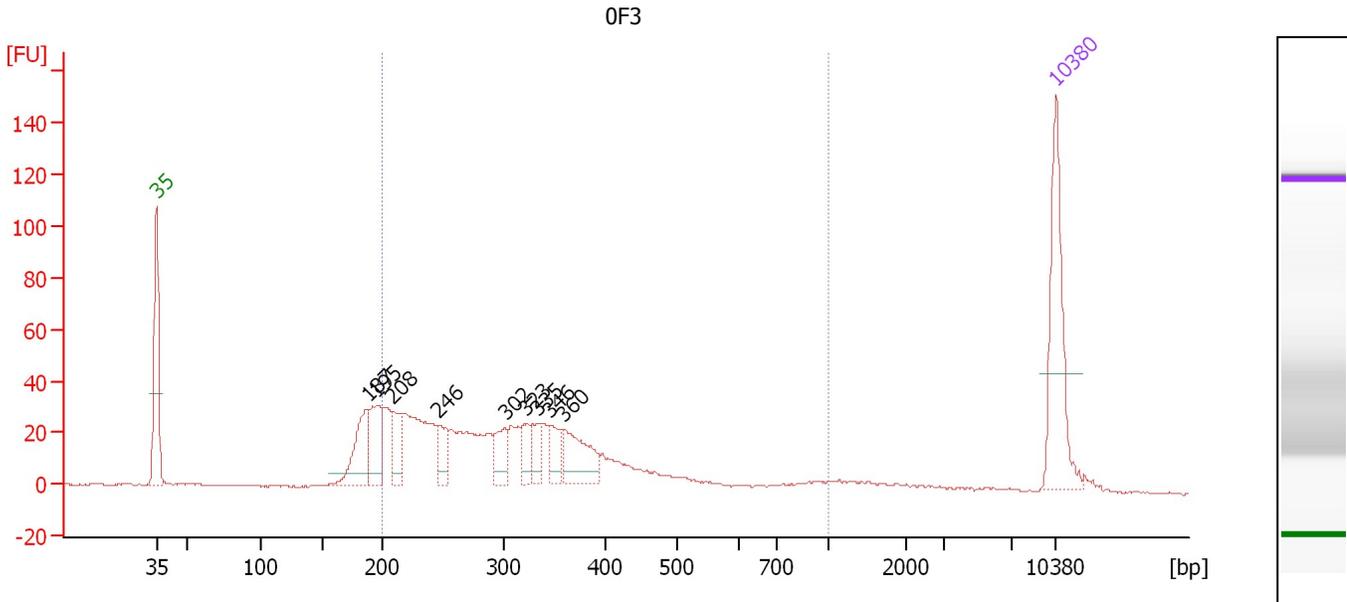
Region table for sample 5 : 0F2

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/ μ l]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	357	759.62	1,112.6	3,826.7	82	41.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_001.xad

Created: 6/6/2019 2:20:30 PM
 Modified: 6/6/2019 2:53:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : OF3

Number of peaks found: 9 Corr. Area 1: 708.1
 Noise: 0.2

Peak table for sample 6 : OF3

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	187	60.01	485.3		59.44
3	195	54.18	421.0		60.16
4	208	31.41	228.5		61.41
5	246	25.45	156.5		64.97
6	302	26.72	134.1		70.12
7	323	20.45	95.8		71.80
8	335	20.11	91.0		72.71
9	346	24.19	105.8		73.63
10	360	50.16	210.8		74.73
11	10,380	75.00	10.9	Upper Marker	113.00

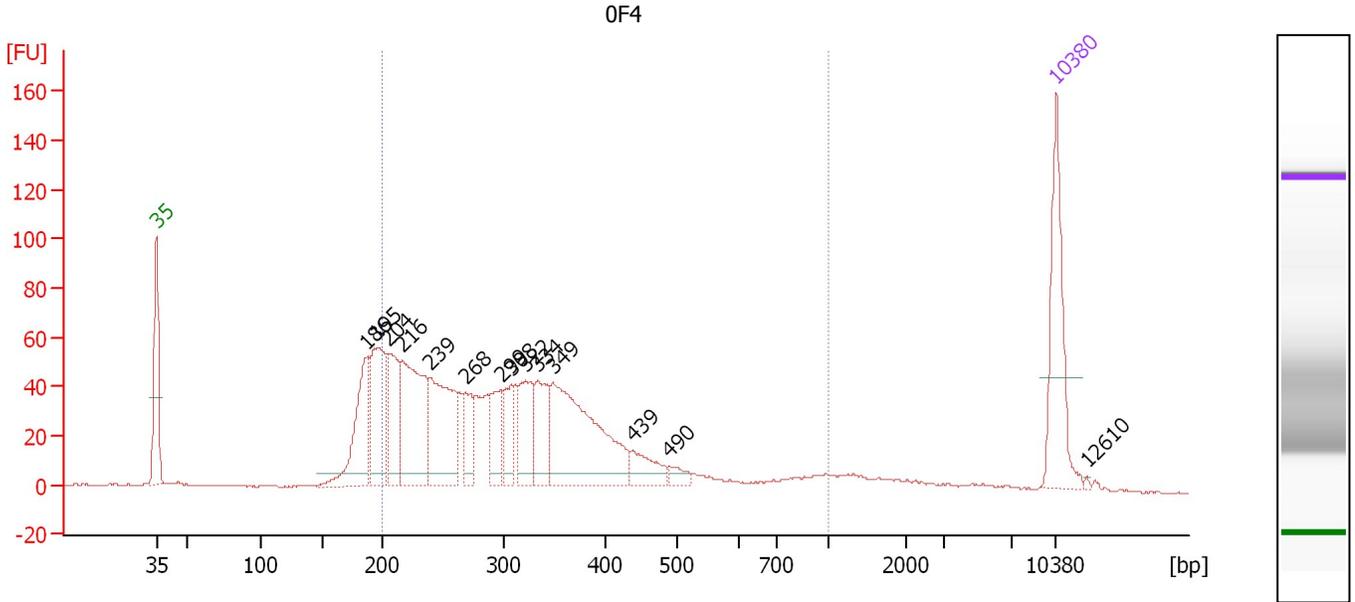
Region table for sample 6 : OF3

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	332	577.71	708.1	3,002.6	78	38.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_001.xad

Created: 6/6/2019 2:20:30 PM
 Modified: 6/6/2019 2:53:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 0F4

Number of peaks found: 14 Corr. Area 1: 1,236.2
 Noise: 0.3

Peak table for sample 7 : 0F4

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	186	104.84	853.0		59.33
3	195	114.56	890.4		60.16
4	204	74.88	555.5		61.03
5	216	153.85	1,078.0		62.15
6	239	130.28	827.0		64.24
7	268	42.37	239.1		67.01
8	299	42.65	216.4		69.83
9	308	41.27	202.8		70.61
10	322	58.00	272.5		71.73
11	334	51.49	233.4		72.65
12	349	188.50	818.5		73.82
13	439	28.15	97.1		80.04
14	490	9.82	30.4		82.91
15	10,380	75.00	10.9	Upper Marker	113.00
16	12,610	0.00	0.0		115.33

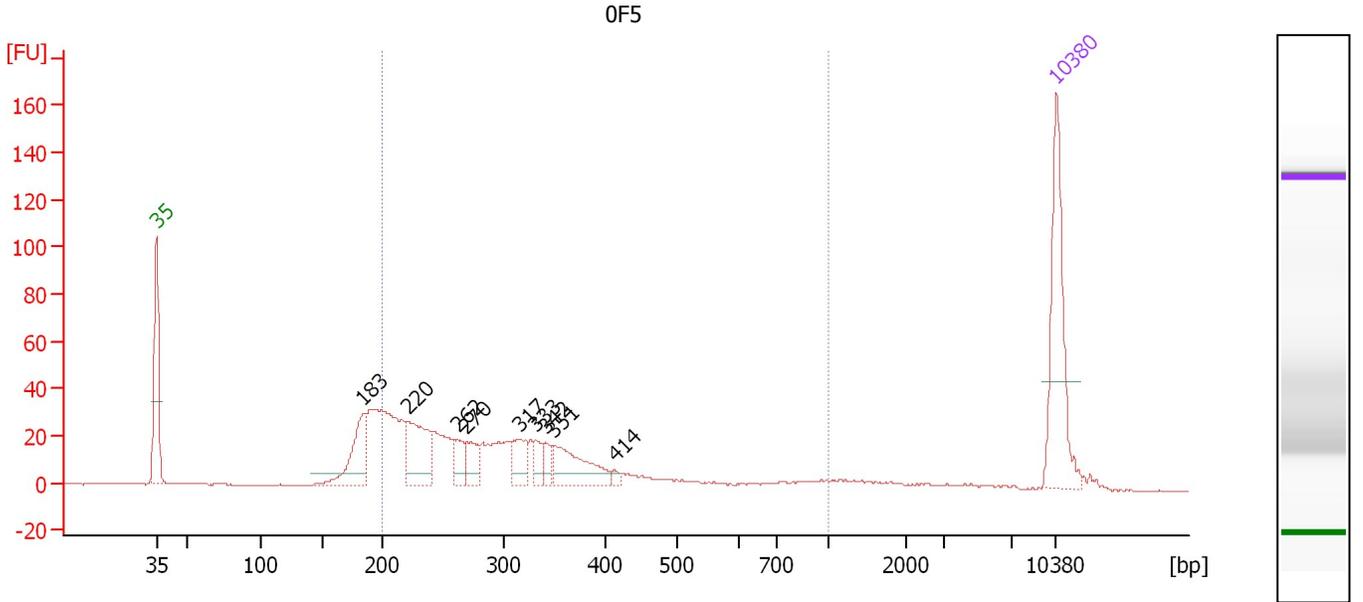
Region table for sample 7 : 0F4

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	329	999.09	1,236.2	5,210.4	81	37.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_001.xad

Created: 6/6/2019 2:20:30 PM
 Modified: 6/6/2019 2:53:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : OF5

Number of peaks found: 9 Corr. Area 1: 595.4
 Noise: 0.2

Peak table for sample 8 : OF5

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	183	56.25	464.7		59.07
3	220	66.22	455.1		62.55
4	262	17.77	102.8		66.41
5	270	22.63	127.0		67.15
6	317	26.43	126.2		71.31
7	333	12.77	58.1		72.54
8	342	11.81	52.3		73.27
9	351	47.95	207.2		73.96
10	414	3.75	13.7		78.66
11	10,380	75.00	10.9	Upper Marker	113.00

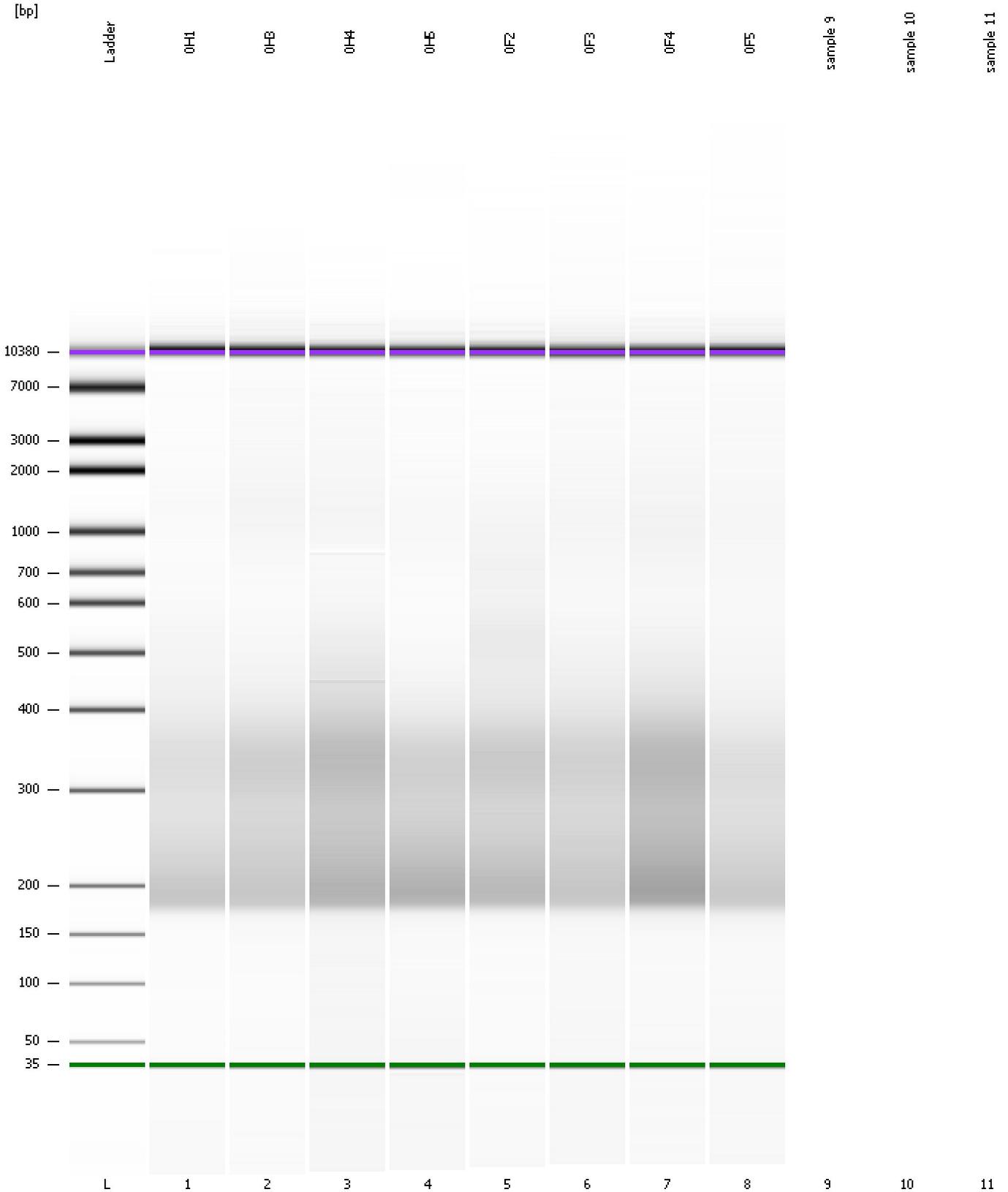
Region table for sample 8 : OF5

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	328	451.12	595.4	2,403.0	74	41.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_001.xad

Created: 6/6/2019 2:20:30 PM
Modified: 6/6/2019 2:53:13 PM

Gel Image

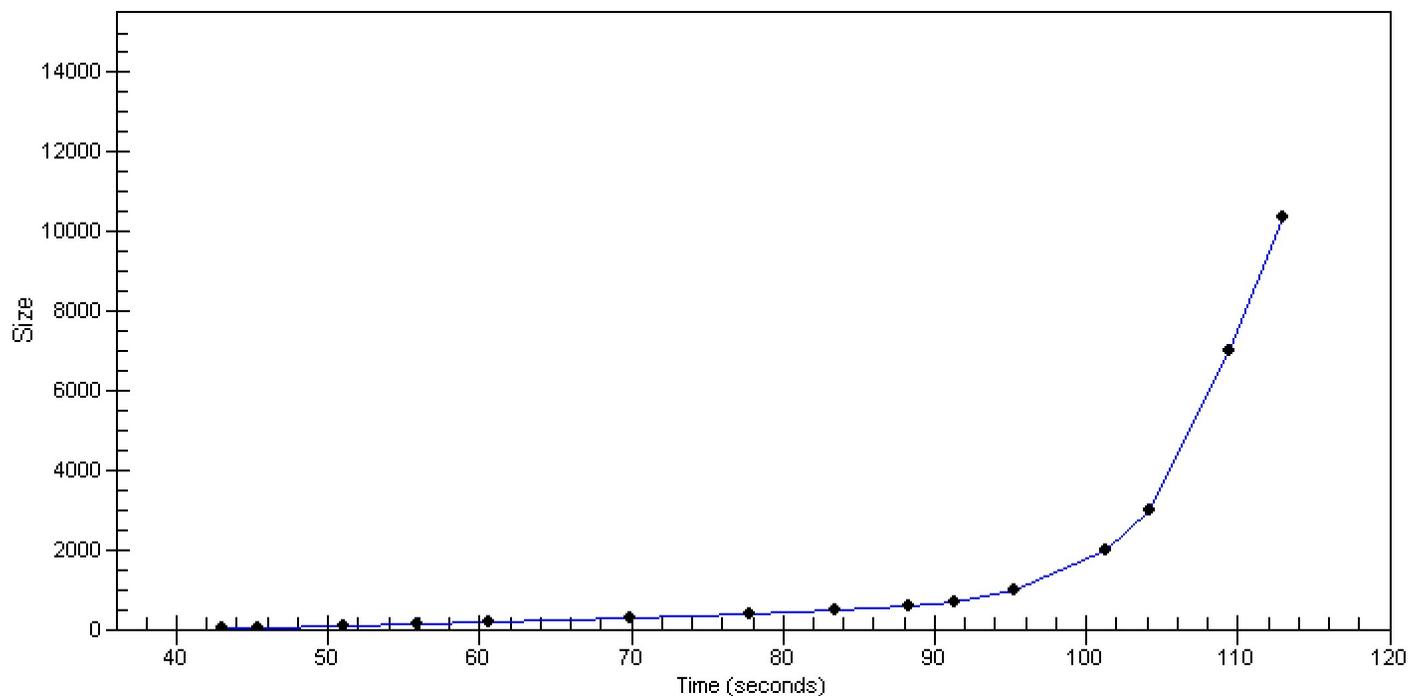


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_001.xad

Created: 6/6/2019 2:20:30 PM
Modified: 6/6/2019 2:53:13 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-06-06\2019-06-06_001.xad

Created: 6/6/2019 2:20:30 PM
Modified: 6/6/2019 2:53:13 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\2019-06-06\2019-06-06_001.xad

Created: 6/6/2019 2:20:30 PM
 Modified: 6/6/2019 2:53:13 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		6/6/2019 2:53:12 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\2019-06-06\2019-06-06_001.xad)		Instrument	Run		6/6/2019 2:20:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		6/6/2019 2:20:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/6/2019 2:20:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/6/2019 2:20:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		6/6/2019 2:20:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/6/2019 2:20:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/6/2019 2:20:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1