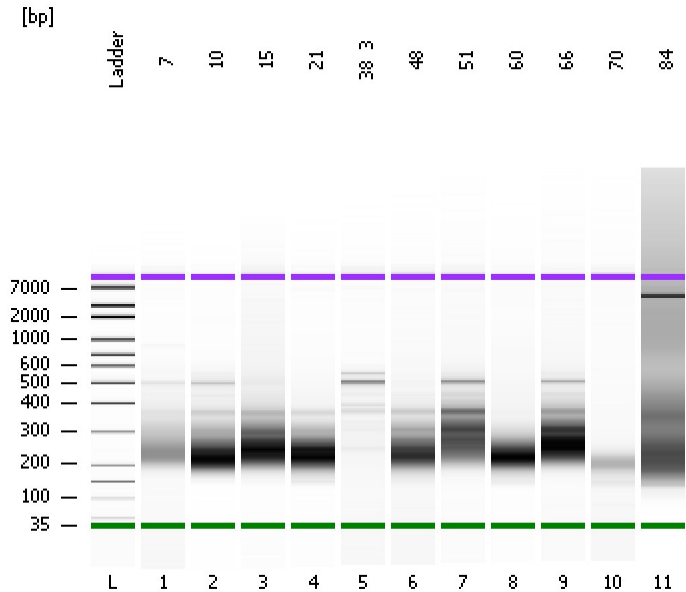


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-07\2019-11-07_004.xad

Created: 11/7/2019 4:14:37 PM
Modified: 11/7/2019 4:55:54 PM

Electrophoresis File Run Summary



Instrument Information:

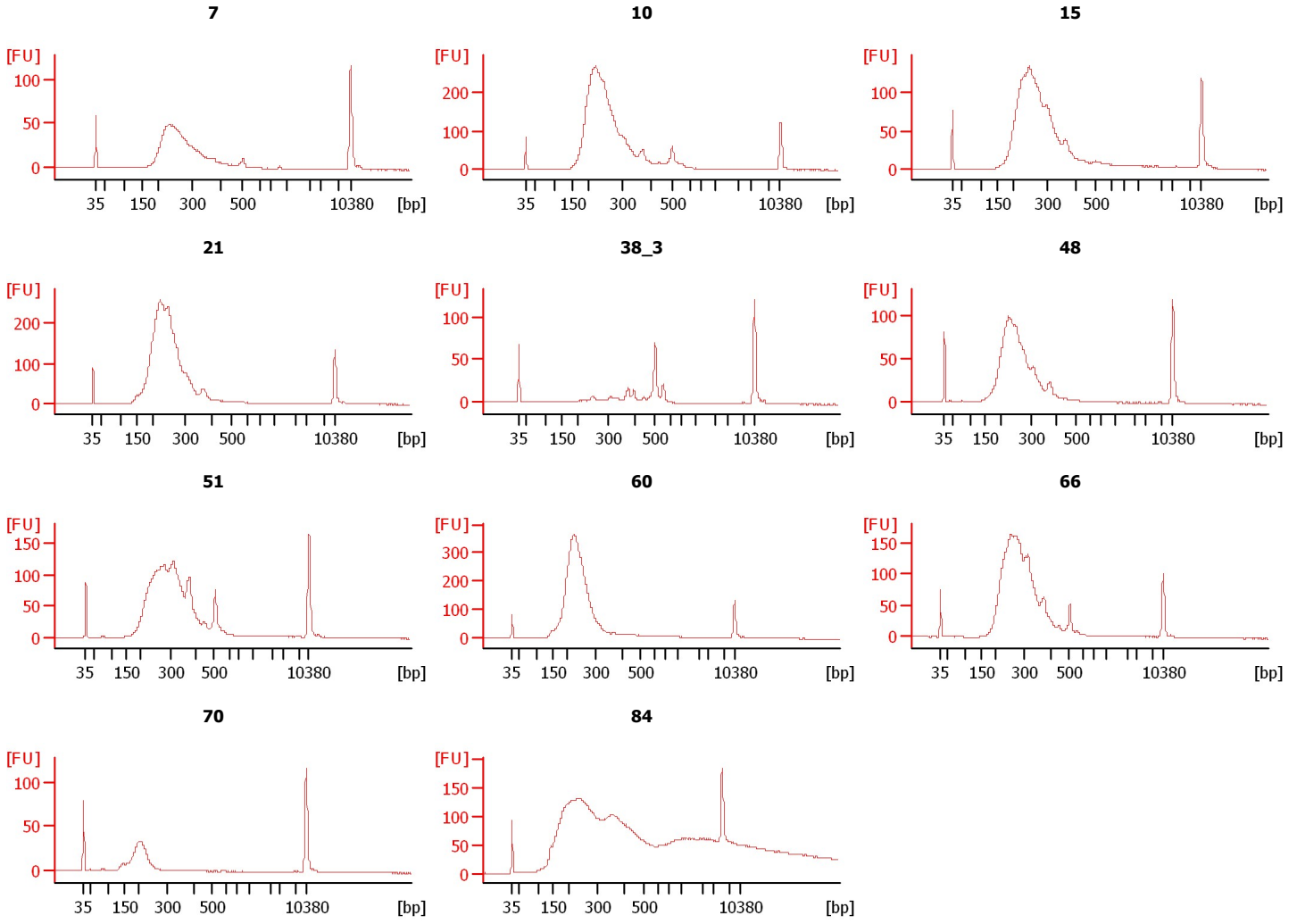
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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\2019-11-07\2019-11-07_004.xad

Created: 11/7/2019 4:14:37 PM
 Modified: 11/7/2019 4:55:54 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
7		<input type="checkbox"/>	✓			
10		<input type="checkbox"/>	✓			
15		<input type="checkbox"/>	✓			
21		<input type="checkbox"/>	✓			
38_3		<input type="checkbox"/>	✓			
48		<input type="checkbox"/>	✓			
51		<input type="checkbox"/>	✓			
60		<input type="checkbox"/>	✓			
66		<input type="checkbox"/>	✓			
70		<input type="checkbox"/>	✓			
84		<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\2019-11-07\2019-11-07_004.xad

Created: 11/7/2019 4:14:37 PM
Modified: 11/7/2019 4:55:54 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

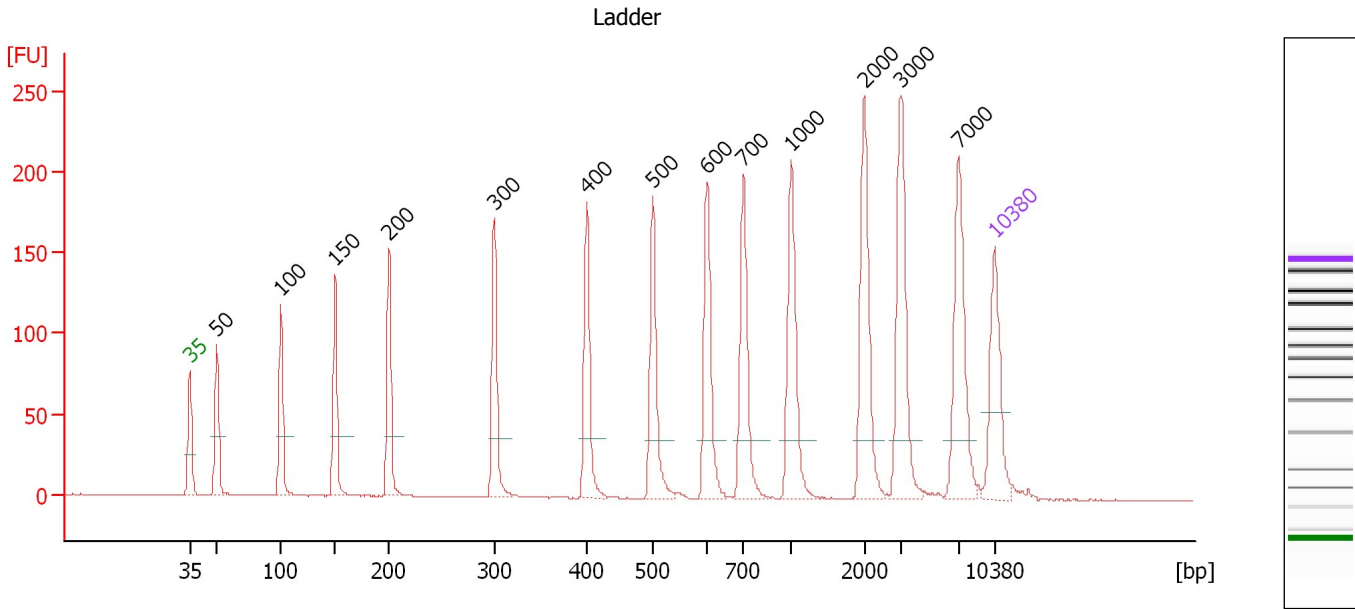
Ladder

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\2019-11-07\2019-11-07_004.xad

Created: 11/7/2019 4:14:37 PM
 Modified: 11/7/2019 4:55:54 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

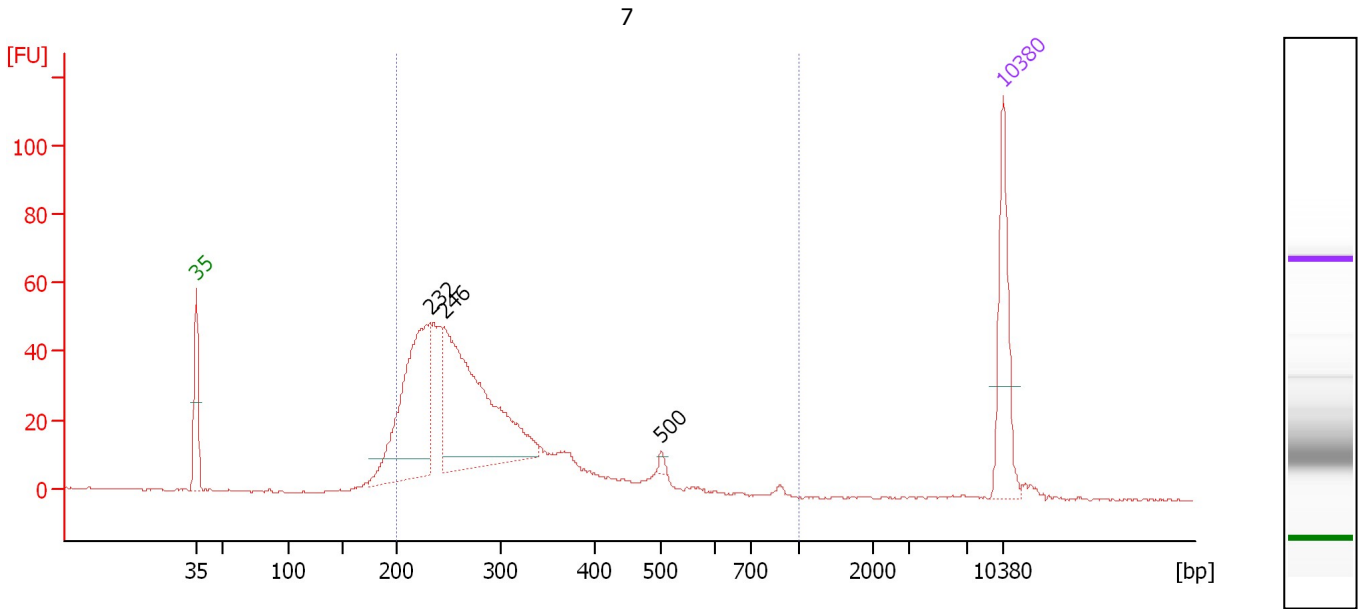
Peak table for Ladder

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	45.36
3	100	150.00	2,272.7	Ladder Peak	50.93
4	150	150.00	1,515.2	Ladder Peak	55.66
5	200	150.00	1,136.4	Ladder Peak	60.34
6	300	150.00	757.6	Ladder Peak	69.47
7	400	150.00	568.2	Ladder Peak	77.54
8	500	150.00	454.5	Ladder Peak	83.28
9	600	150.00	378.8	Ladder Peak	87.97
10	700	150.00	324.7	Ladder Peak	91.17
11	1,000	150.00	227.3	Ladder Peak	95.29
12	2,000	150.00	113.6	Ladder Peak	101.64
13	3,000	150.00	75.8	Ladder Peak	104.84
14	7,000	150.00	32.5	Ladder Peak	109.85
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-07\2019-11-07_004.xad

Created: 11/7/2019 4:14:37 PM
 Modified: 11/7/2019 4:55:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 7

Number of peaks found: 3 Corr. Area 1: 776.4
 Noise: 0.2

Peak table for sample 1 : 7

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	232	265.72	1,732.4		63.30
3	246	343.56	2,119.7		64.50
4	500	4.64	14.1		83.27
5	10,380	75.00	10.9	Upper Marker	113.00

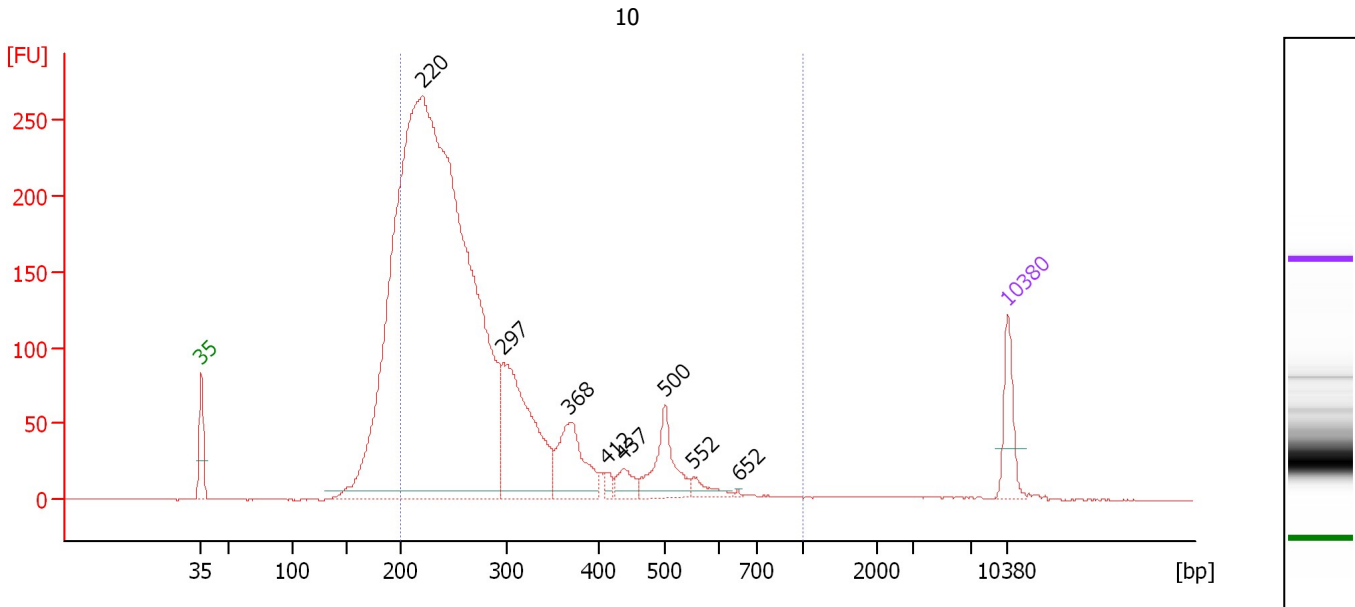
Region table for sample 1 : 7

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	291	936.60	776.4	5,271.6	93	30.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-07\2019-11-07_004.xad

Created: 11/7/2019 4:14:37 PM
 Modified: 11/7/2019 4:55:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 10

Number of peaks found: 8 Corr. Area 1: 3,581.8
 Noise: 0.2

Peak table for sample 2 : 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	220	4,353.03	29,975.9		62.17
3	297	479.84	2,447.2		69.20
4	368	196.00	807.3		74.94
5	412	18.01	66.2		78.23
6	437	44.35	153.8		79.67
7	500	139.19	421.9		83.28
8	552	29.36	80.6		85.73
9	652	1.91	4.4		89.62
10	10,380	75.00	10.9	Upper Marker	113.00

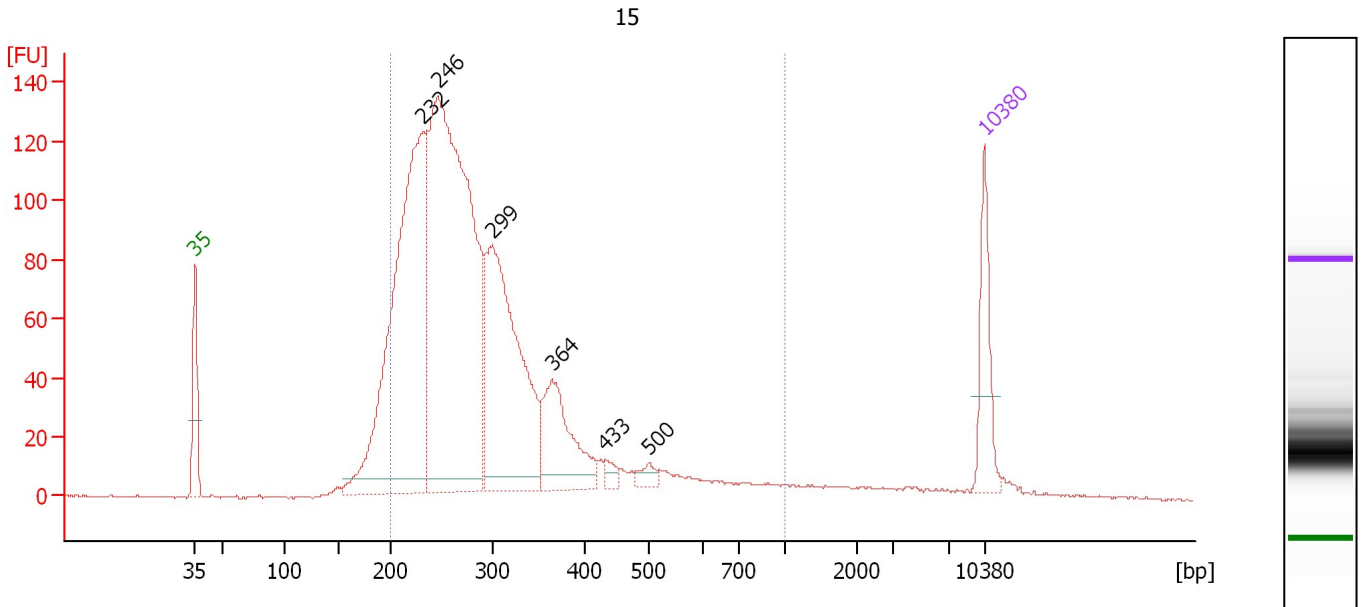
Region table for sample 2 : 10

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	283	4,382.51	3,581.8	25,561.2	84	32.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-07\2019-11-07_004.xad

Created: 11/7/2019 4:14:37 PM
 Modified: 11/7/2019 4:55:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 15

Number of peaks found: 6 Corr. Area 1: 2,177.3
 Noise: 0.3

Peak table for sample 3 : 15

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	232	880.93	5,757.8		63.24
3	246	1,130.82	6,970.6		64.52
4	299	514.05	2,608.2		69.34
5	364	169.18	704.0		74.64
6	433	14.01	49.1		79.42
7	500	16.59	50.2		83.30
8	10,380	75.00	10.9	Upper Marker	113.00

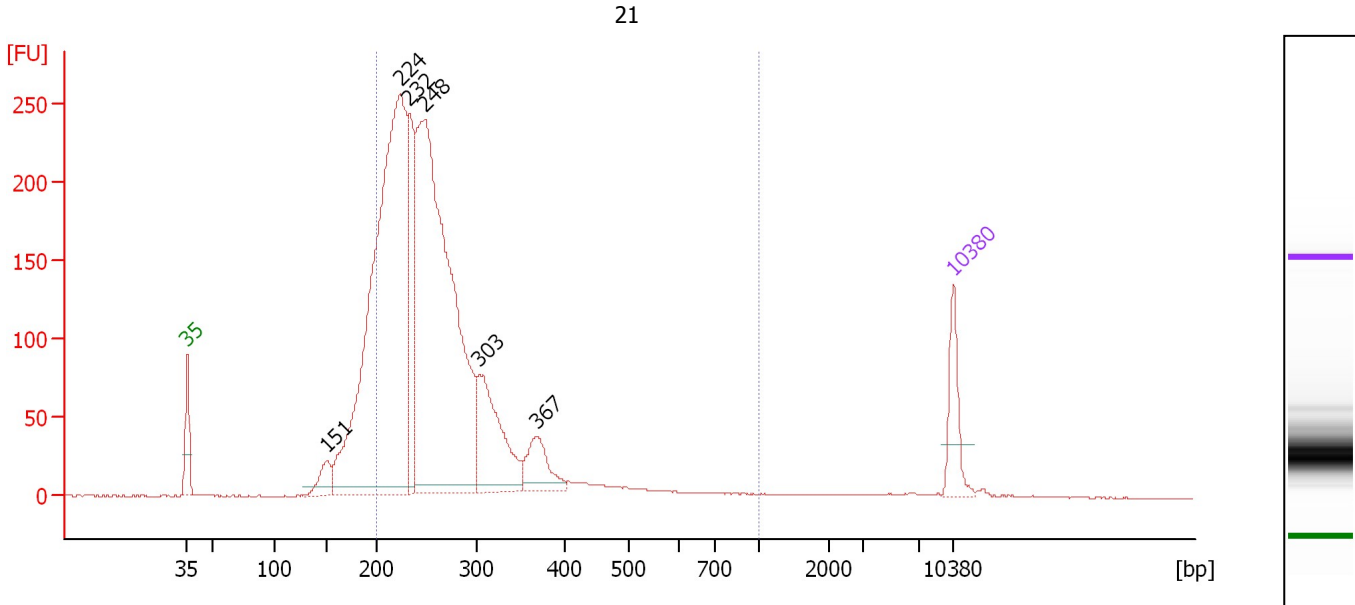
Region table for sample 3 : 15

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	298	2,685.30	2,177.3	14,909.9	90	34.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-07\2019-11-07_004.xad

Created: 11/7/2019 4:14:37 PM
 Modified: 11/7/2019 4:55:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 21

Number of peaks found: 6 Corr. Area 1: 3,210.0
 Noise: 0.3

Peak table for sample 4 : 21

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	151	65.26	656.5		55.71
3	224	1,677.47	11,371.2		62.49
4	232	268.21	1,751.3		63.26
5	248	1,516.72	9,264.5		64.73
6	303	280.12	1,401.7		69.69
7	367	104.31	430.9		74.86
8	10,380	75.00	10.9	Upper Marker	113.00

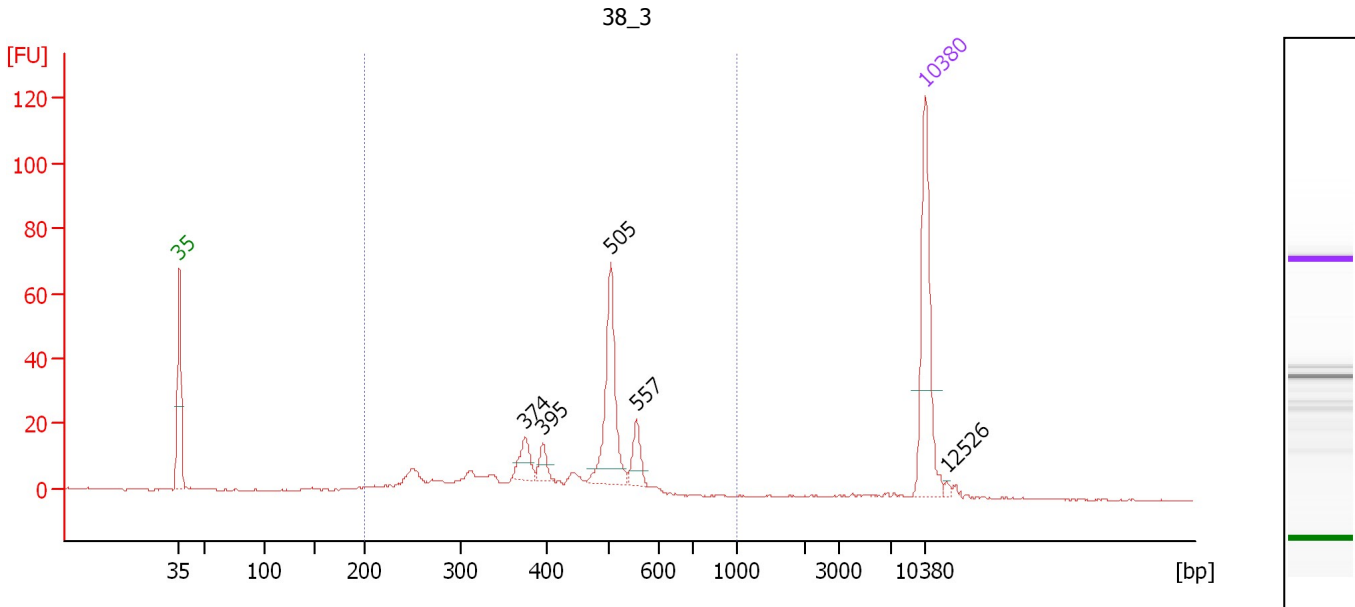
Region table for sample 4 : 21

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	269	3,491.87	3,210.0	20,765.3	84	28.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-07\2019-11-07_004.xad

Created: 11/7/2019 4:14:37 PM
 Modified: 11/7/2019 4:55:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 38_3

Number of peaks found: 5 Corr. Area 1: 285.6
 Noise: 0.2

Peak table for sample 5 : 38_3

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	374	20.57	83.2		75.47
3	395	12.12	46.5		77.12
4	505	86.85	260.5		83.53
5	557	19.78	53.8		85.93
6	10,380	75.00	10.9	Upper Marker	113.00
7	12,526	0.00	0.0		115.00

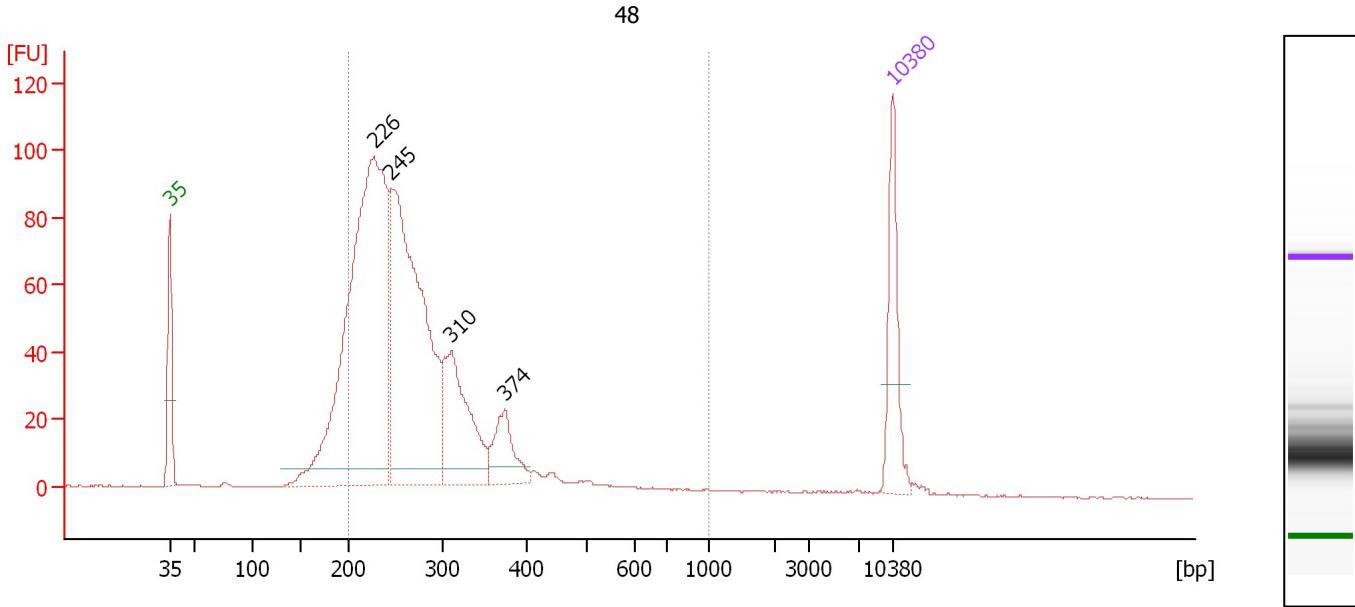
Region table for sample 5 : 38_3

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Total	Size distribution in CV [%]
200	1,000	432	298.26	285.6	1,165.1	90	23.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-07\2019-11-07_004.xad

Created: 11/7/2019 4:14:37 PM
 Modified: 11/7/2019 4:55:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 48

Number of peaks found: 4 Corr. Area 1: 1,329.3
 Noise: 0.2

Peak table for sample 6 : 48

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	226	828.72	5,550.0		62.73
3	245	581.09	3,595.0		64.44
4	310	182.27	890.9		70.28
5	374	68.16	276.1		75.44
6	10,380	75.00	10.9	Upper Marker	113.00

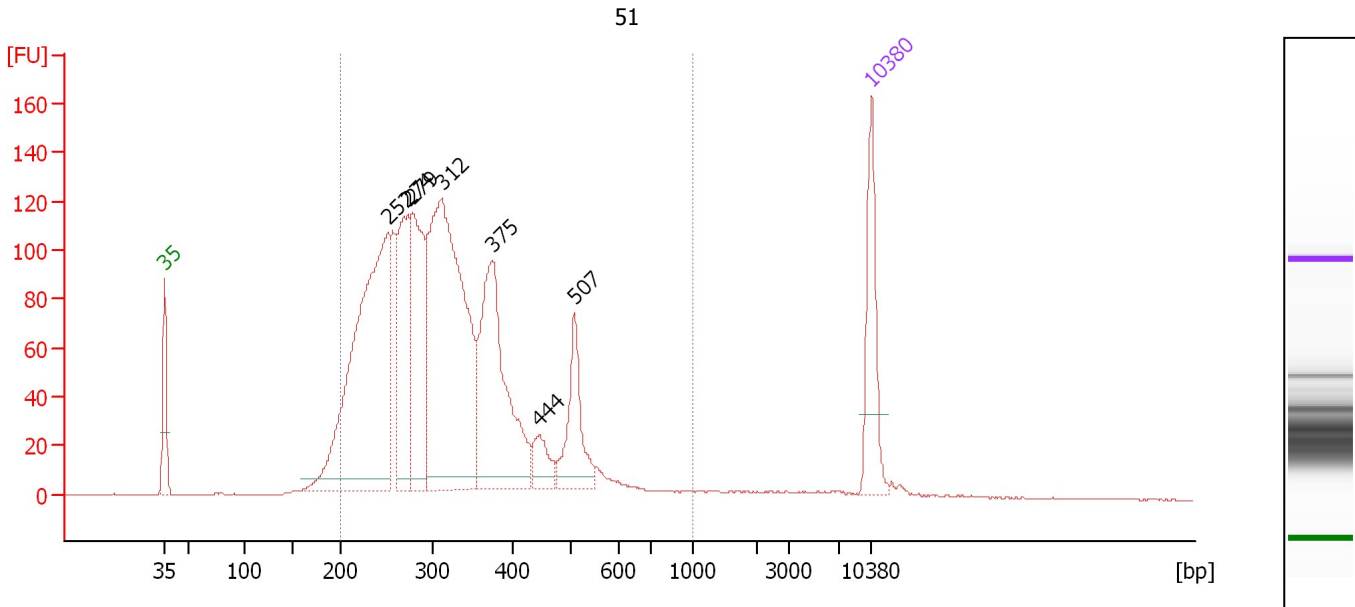
Region table for sample 6 : 48

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	276	1,559.50	1,329.3	9,069.8	87	27.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-07\2019-11-07_004.xad

Created: 11/7/2019 4:14:37 PM
 Modified: 11/7/2019 4:55:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 51

Number of peaks found: 7 Corr. Area 1: 2,518.9
 Noise: 0.2

Peak table for sample 7 : 51

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	252	535.97	3,218.0		65.12
3	274	169.37	935.5		67.13
4	279	199.33	1,082.7		67.55
5	312	535.37	2,598.6		70.45
6	375	269.47	1,088.8		75.52
7	444	34.64	118.2		80.06
8	507	85.64	256.1		83.60
9	10,380	75.00	10.9	Upper Marker	113.00

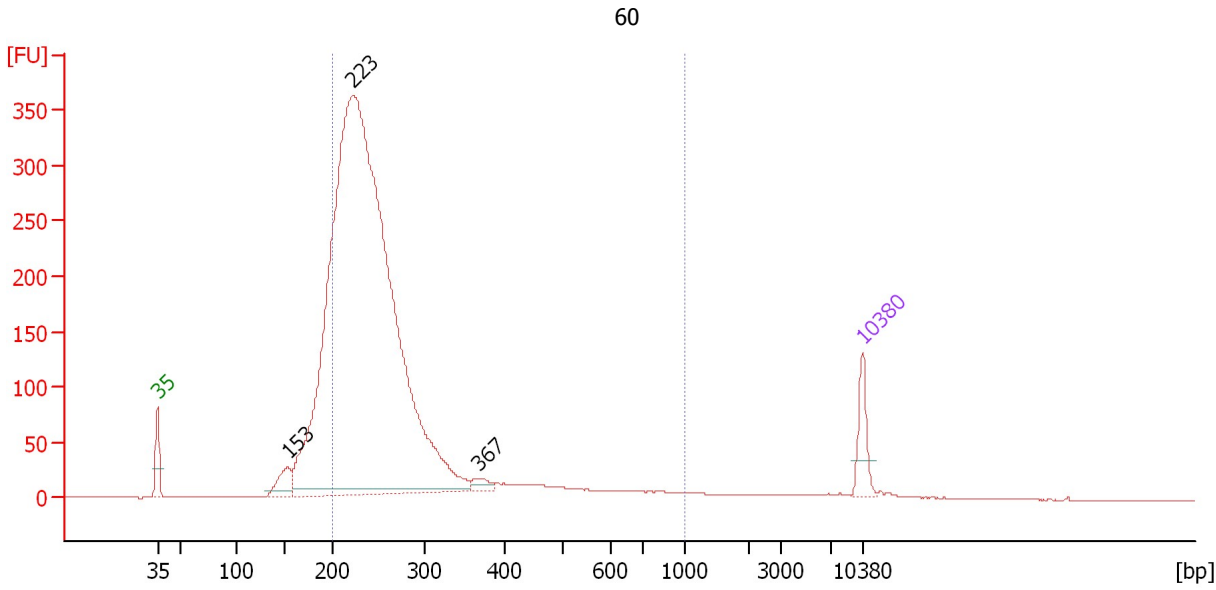
Region table for sample 7 : 51

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	325	2,003.39	2,518.9	10,185.5	94	29.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-07\2019-11-07_004.xad

Created: 11/7/2019 4:14:37 PM
 Modified: 11/7/2019 4:55:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 60

Number of peaks found: 3 Corr. Area 1: 3,754.6
 Noise: 0.3

Peak table for sample 8 : 60

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	153	93.99	931.9		55.92
3	223	4,952.74	33,705.1		62.41
4	367	30.65	126.5		74.89
5	10,380	75.00	10.9	Upper Marker	113.00

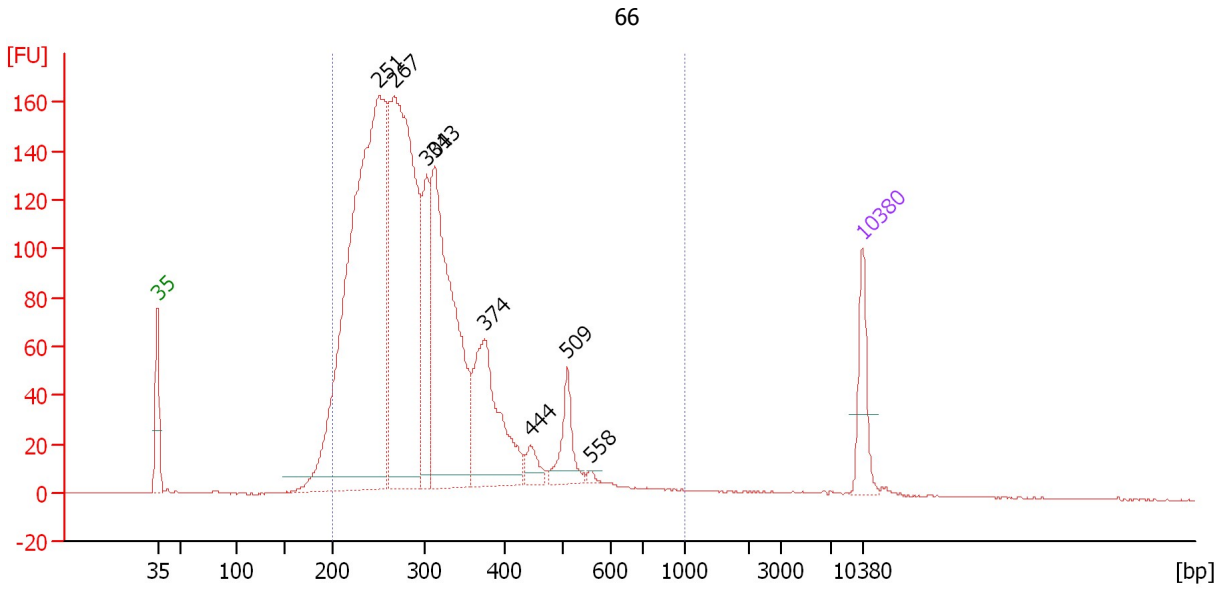
Region table for sample 8 : 60

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	268	4,416.86	3,754.6	26,868.2	82	35.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-07\2019-11-07_004.xad

Created: 11/7/2019 4:14:37 PM
 Modified: 11/7/2019 4:55:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 66

Number of peaks found: 8 Corr. Area 1: 2,831.6
 Noise: 0.2

Peak table for sample 9 : 66

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	251	1,514.02	9,136.8		65.00
3	267	970.54	5,502.4		66.48
4	304	210.95	1,052.6		69.76
5	313	652.08	3,155.2		70.53
6	374	298.52	1,208.7		75.46
7	444	35.61	121.6		80.05
8	509	80.13	238.4		83.72
9	558	6.18	16.8		86.02
10	10,380	75.00	10.9	Upper Marker	113.00

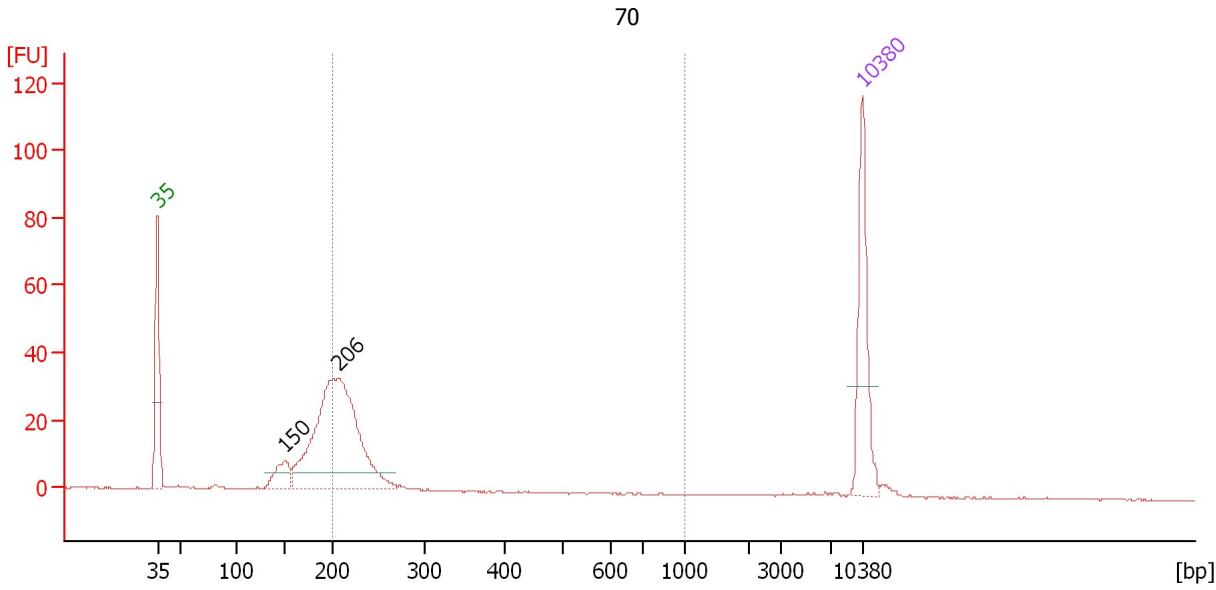
Region table for sample 9 : 66

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	306	3,953.80	2,831.6	21,129.7	95	29.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-07\2019-11-07_004.xad

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 Modified: 11/7/2019 4:55:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 70

Number of peaks found: 2 Corr. Area 1: 172.4
 Noise: 0.2

Peak table for sample 10 : 70

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	150	34.02	343.9		55.65
3	206	336.18	2,467.4		60.93
4	10,380	75.00	10.9	Upper Marker	113.00

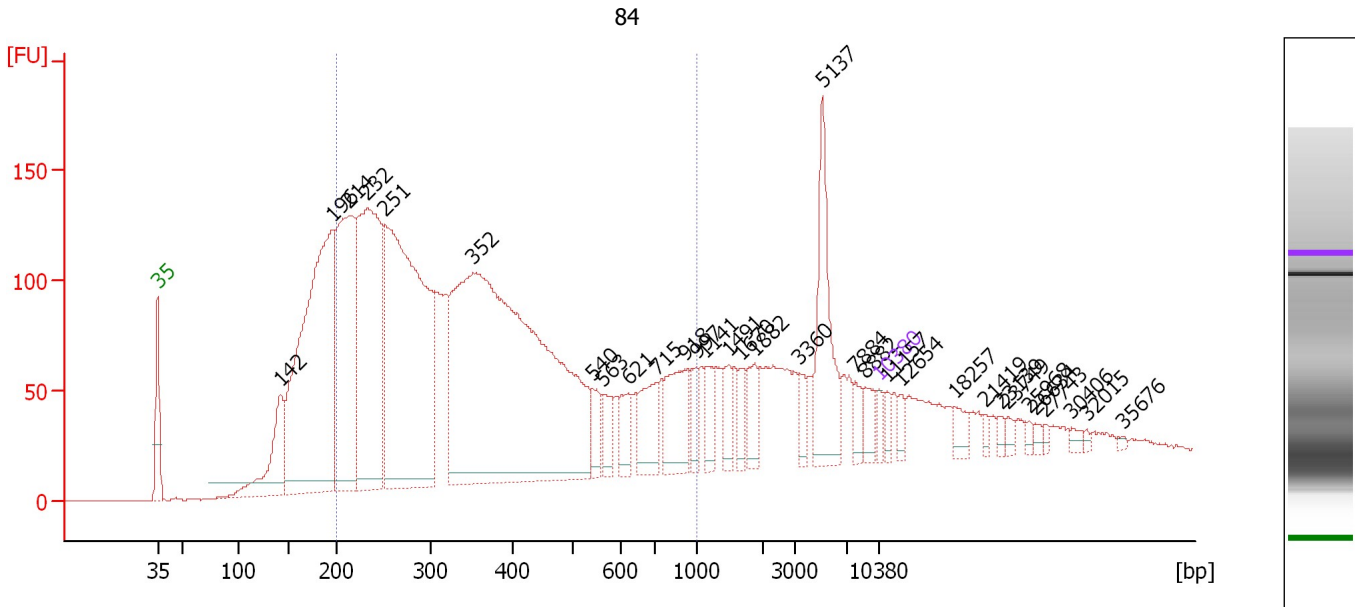
Region table for sample 10 : 70

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	233	212.07	172.4	1,430.7	51	27.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-07\2019-11-07_004.xad

Created: 11/7/2019 4:14:37 PM
 Modified: 11/7/2019 4:55:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 84

Number of peaks found: 32 Corr. Area 1: 3,599.5
 Noise: 0.2

Peak table for sample 11 : 84

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	929.06	9,912.8		54.90
3	196	4,578.38	35,379.9		59.97
4	214	2,527.66	17,935.4		61.57
5	232	3,129.79	20,420.1		63.28
6	251	4,649.67	28,013.0		65.04
7	352	7,193.22	31,002.3		73.63
8	540	207.86	583.0		85.17
9	563	188.08	505.8		86.25
10	621	237.29	579.1		88.63
11	715	405.56	859.2		91.37
12	918	499.20	823.7		94.17
13	997	150.44	228.6		95.25
14	1,141	210.96	280.2		96.19
15	1,491	166.43	169.1		98.41
16	1,670	138.15	125.3		99.55
17	1,882	189.15	152.3		100.89
18	3,360	129.51	58.4		105.29
19	5,137	784.50	231.4		107.52
20	7,884	113.05	21.7		110.67
21	8,882	138.00	23.5		111.60
22	10,380	75.00	10.9	Upper Marker	113.00
23	11,157	0.00	0.0		113.72
24	12,654	0.00	0.0		115.12
25	18,257	0.00	0.0		120.35

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-07\2019-11-07_004.xad

Created: 11/7/2019 4:14:37 PM
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Electropherogram Summary Continued ...

... Peak table for sample 11 : 84

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	21,419	0.00	0.0		123.30
27	23,139	0.00	0.0		124.90
28	23,749	0.00	0.0		125.47
29	25,968	0.00	0.0		127.54
30	26,634	0.00	0.0		128.16
31	27,743	0.00	0.0		129.19
32	30,406	0.00	0.0		131.68
33	32,015	0.00	0.0		133.18
34	35,676	0.00	0.0		136.59

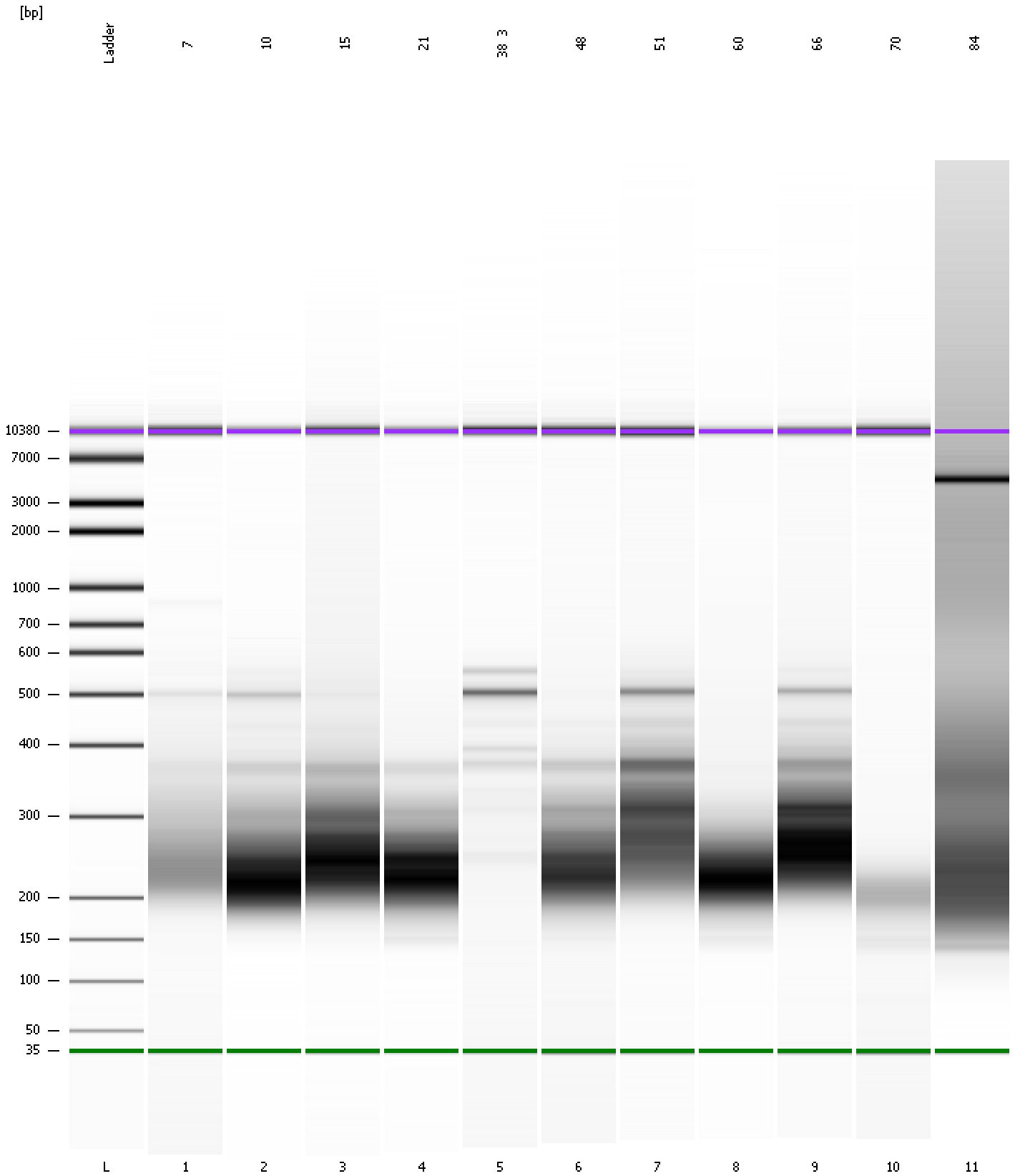
Region table for sample 11 : 84

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	385	19,589.85	3,599.5	95,278.9	 64	45.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-07\2019-11-07_004.xad

Created: 11/7/2019 4:14:37 PM
Modified: 11/7/2019 4:55:54 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-07\2019-11-07_004.xad

Created: 11/7/2019 4:14:37 PM
 Modified: 11/7/2019 4:55:54 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		11/7/2019 4:55:54 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2019-11-07\2019-11-07_004.xad)		Instrument	Run		11/7/2019 4:14:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		11/7/2019 4:14:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/7/2019 4:14:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/7/2019 4:14:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		11/7/2019 4:14:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/7/2019 4:14:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/7/2019 4:14:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1