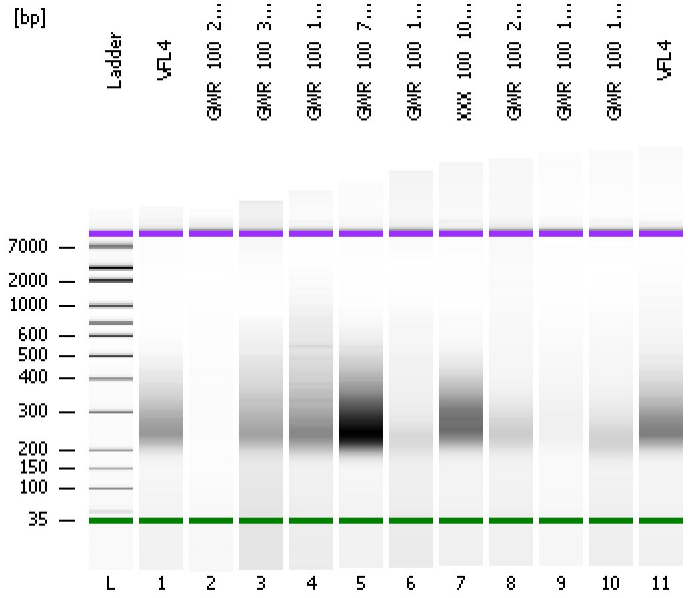
Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-16\2019-04-16_001.xad

Created: 4/16/2019 9:52:29 AM
Modified: 4/16/2019 10:35:20 AM

Electrophoresis File Run Summary



Instrument Information:

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

Assay Information:

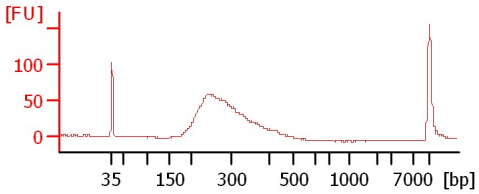
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy

Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

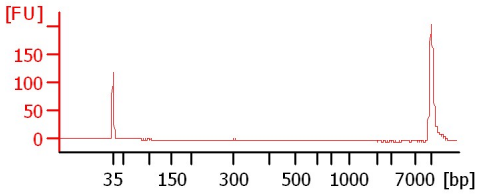
Chip Information:

Chip Lot #:
Reagent Kit Lot #:
Chip Comments:

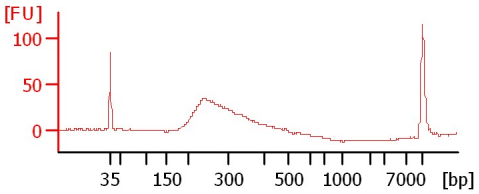
VFL4



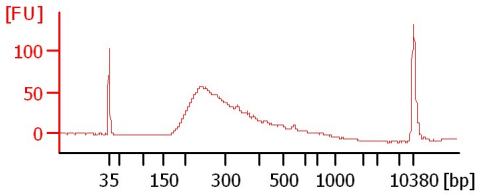
GWR_100_212_6_NW



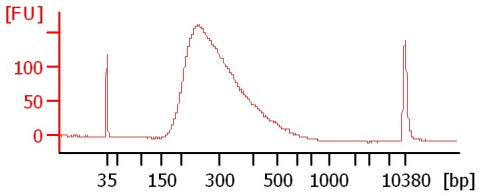
GWR_100_377_1_TW



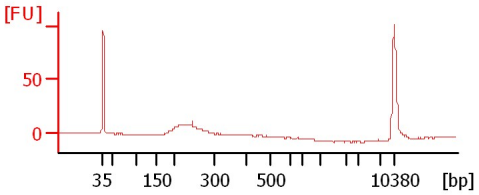
GWR_100_19_5_NW



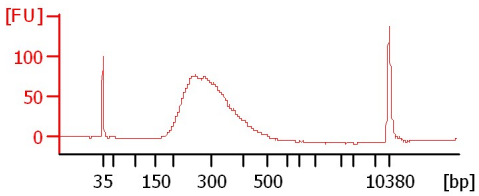
GWR_100_78_1_OW



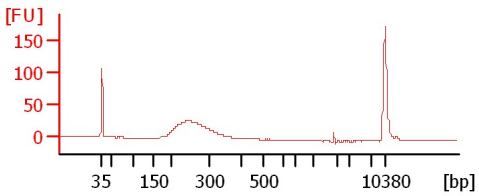
GWR_100_19_2_OW



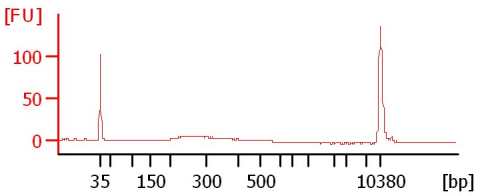
XXX_100_109_2_OW



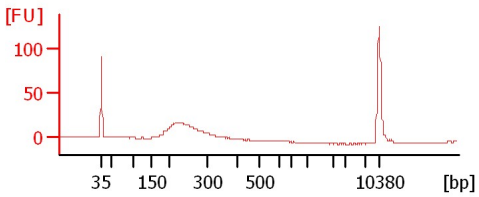
GWR_100_212_2_OW



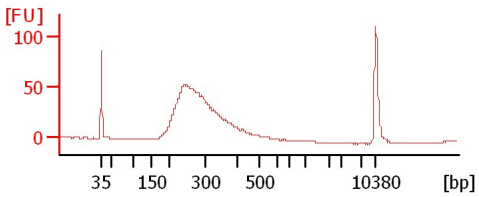
GWR_100_135_3_TW



GWR_100_135_5_NW



VFL4



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-16\2019-04-16_001.xad

Created: 4/16/2019 9:52:29 AM
Modified: 4/16/2019 10:35:20 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
VFL4		☐	✔			
GWR_100_212_6_NW		☐	✔			
GWR_100_377_1_TW		☐	✔			
GWR_100_19_5_NW		☐	✔			
GWR_100_78_1_OW		☐	✔			
GWR_100_19_2_OW		☐	✔			
XXX_100_109_2_OW		☐	✔			
GWR_100_212_2_OW		☐	✔			
GWR_100_135_3_TW		☐	✔			
GWR_100_135_5_NW		☐	✔			
VFL4		☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-16\2019-04-16_001.xad

Created: 4/16/2019 9:52:29 AM
Modified: 4/16/2019 10:35:20 AM

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

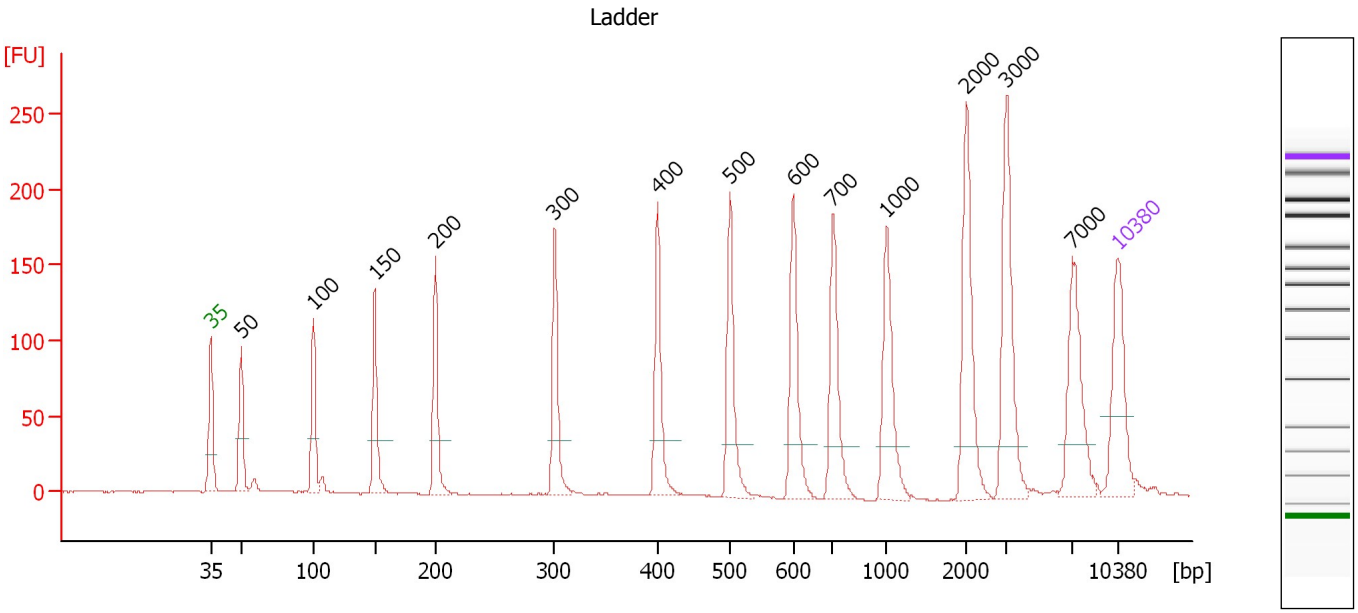
Ladder

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\2019-04-16\2019-04-16_001.xad

Created: 4/16/2019 9:52:29 AM
Modified: 4/16/2019 10:35:20 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.4

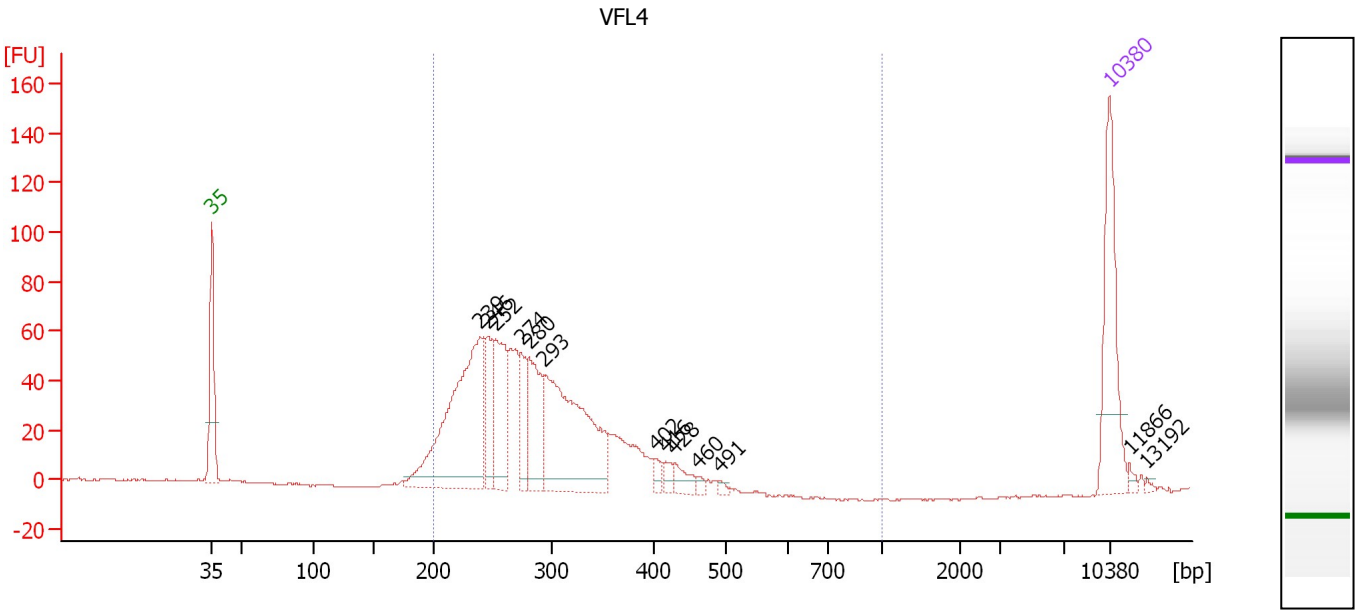
Peak table for Ladder

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	45.35
3		100	150.00	2,272.7	Ladder Peak	50.94
4		150	150.00	1,515.2	Ladder Peak	55.67
5		200	150.00	1,136.4	Ladder Peak	60.33
6		300	150.00	757.6	Ladder Peak	69.54
7		400	150.00	568.2	Ladder Peak	77.49
8		500	150.00	454.5	Ladder Peak	83.08
9		600	150.00	378.8	Ladder Peak	87.98
10		700	150.00	324.7	Ladder Peak	91.02
11		1,000	150.00	227.3	Ladder Peak	95.18
12		2,000	150.00	113.6	Ladder Peak	101.31
13		3,000	150.00	75.8	Ladder Peak	104.44
14		7,000	150.00	32.5	Ladder Peak	109.50
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-16\2019-04-16_001.xad

Created: 4/16/2019 9:52:29 AM
Modified: 4/16/2019 10:35:20 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : VFL4

Number of peaks found:	13	Corr. Area 1:	1,017.6
Noise:	0.5		

Peak table for sample 1 : VFL4

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	239	255.55	1,617.9		63.95
3	246	48.89	301.6		64.53
4	252	89.29	537.0		65.11
5	274	43.38	240.3		67.11
6	280	75.30	407.0		67.73
7	293	213.06	1,100.2		68.94
8	402	7.78	29.3		77.58
9	416	8.21	29.9		78.37
10	428	14.42	51.1		79.04
11	460	4.42	14.6		80.83
12	491	3.52	10.9		82.57
13	10,380	75.00	10.9	Upper Marker	113.00
14	11,866	0.00	0.0		114.54
15	13,192	0.00	0.0		115.91

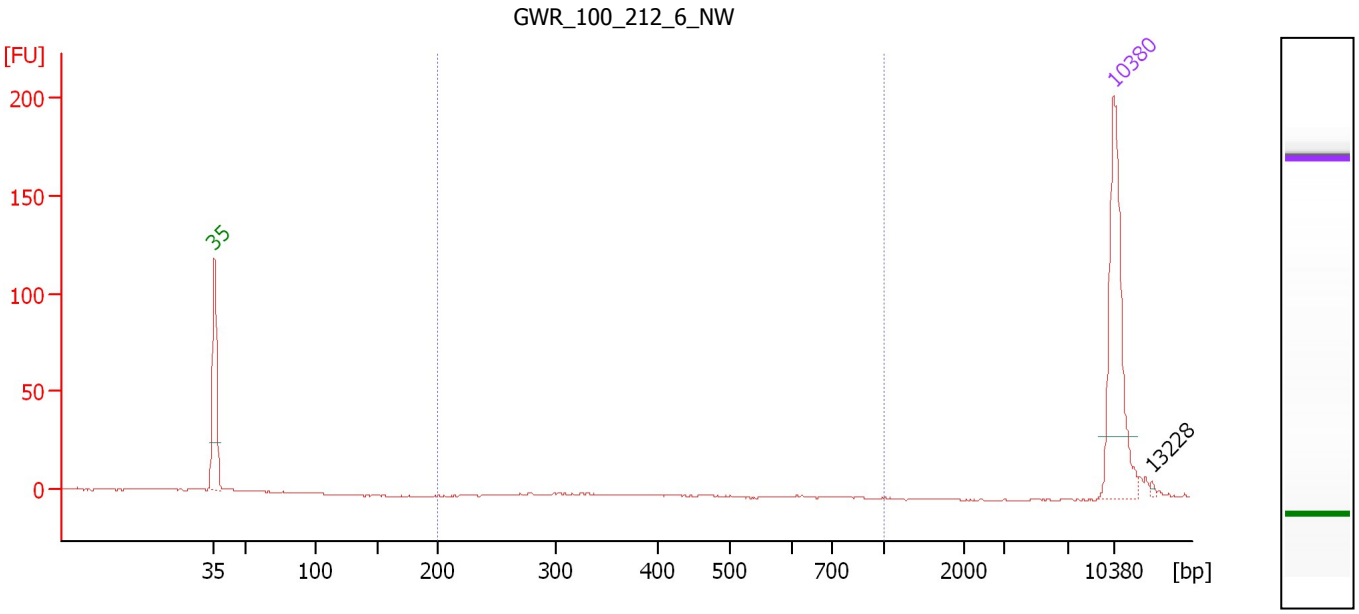
Region table for sample 1 : VFL4

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	286	805.65	1,017.6	4,447.6	96	19.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-16\2019-04-16_001.xad

Created: 4/16/2019 9:52:29 AM
Modified: 4/16/2019 10:35:20 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : GWR_100_212_6_NW

Number of peaks found:	1	Corr. Area 1:	0.0
Noise:	0.3		

Peak table for sample 2 : GWR_100_212_6_NW

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	10,380	75.00	10.9	Upper Marker	113.00
3	13,228	0.00	0.0		115.95

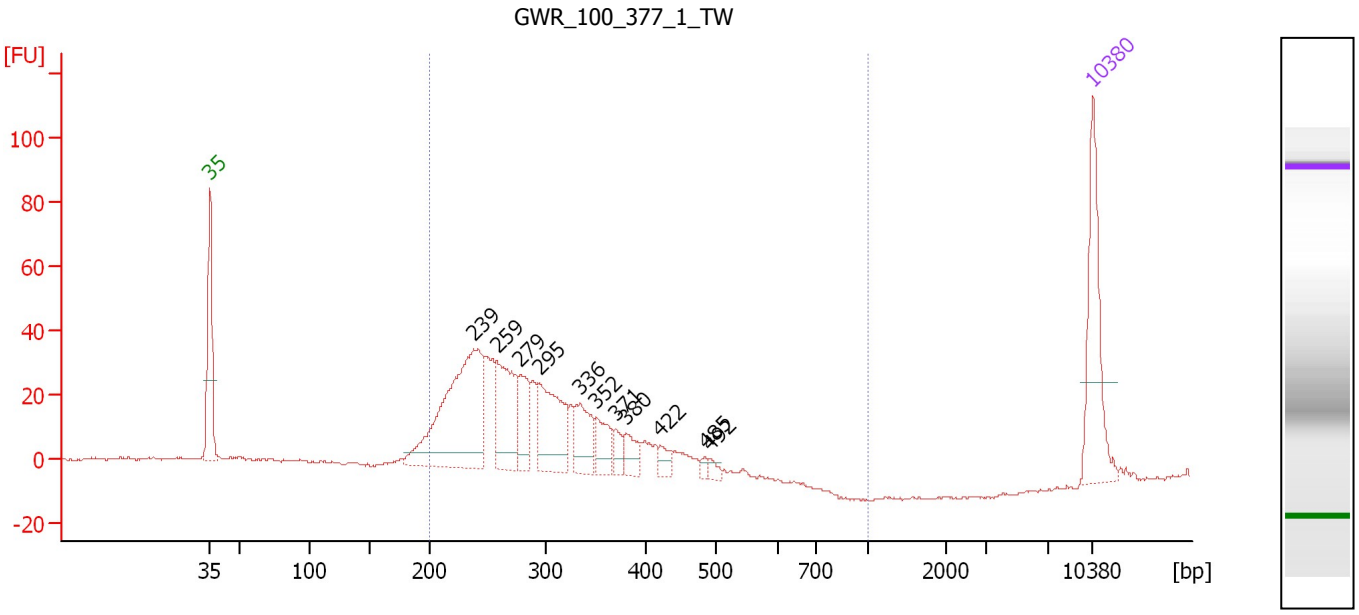
Region table for sample 2 : GWR_100_212_6_NW

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	0	0.00	0.0	0.0	0	0.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-16\2019-04-16_001.xad

Created: 4/16/2019 9:52:29 AM
Modified: 4/16/2019 10:35:20 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : GWR_100_377_1_TW

Number of peaks found:	11	Corr. Area 1:	632.5
Noise:	0.4		

Peak table for sample 3 : GWR_100_377_1_TW

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	239	245.37	1,558.3		63.88
3	259	98.09	574.4		65.74
4	279	46.38	252.0		67.60
5	295	95.30	489.5		69.08
6	336	47.41	214.0		72.38
7	352	31.91	137.5		73.65
8	371	14.05	57.4		75.17
9	380	20.85	83.1		75.93
10	422	11.89	42.7		78.72
11	485	4.28	13.4		82.23
12	492	6.54	20.2		82.61
13	10,380	75.00	10.9	Upper Marker	113.00

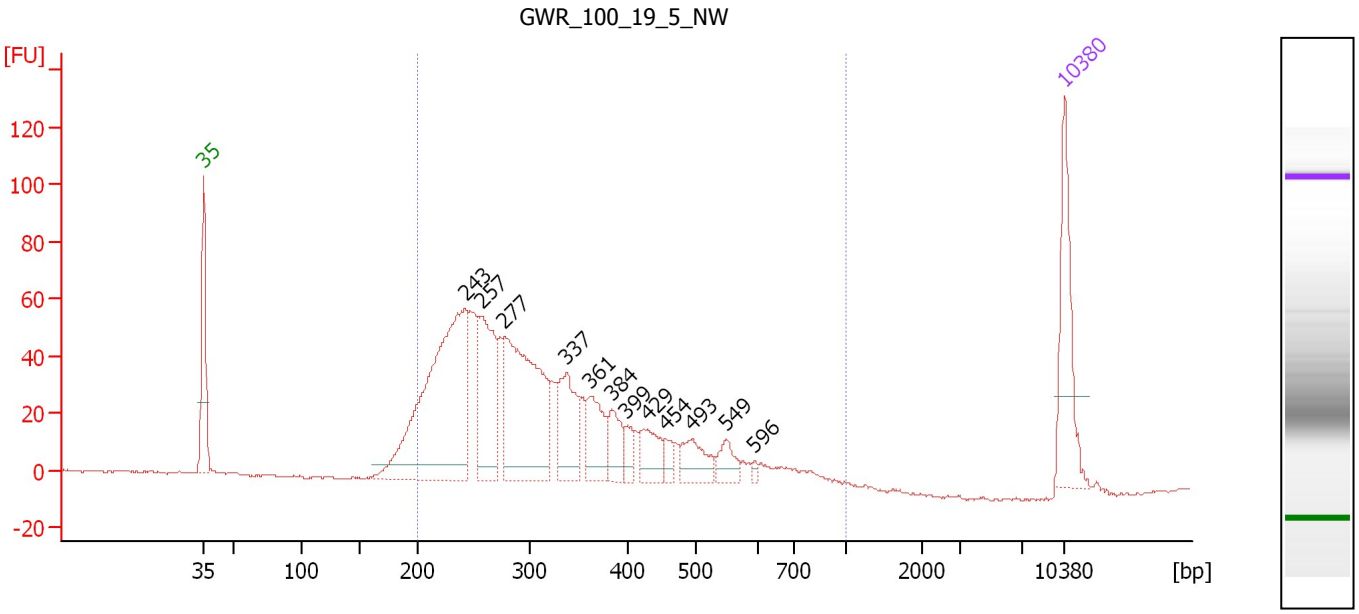
Region table for sample 3 : GWR_100_377_1_TW

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	292	685.77	632.5	3,750.1	90	21.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-16\2019-04-16_001.xad

Created: 4/16/2019 9:52:29 AM
Modified: 4/16/2019 10:35:20 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : GWR_100_19_5_NW

Number of peaks found:	12	Corr. Area 1:	1,254.1
Noise:	0.4		

Peak table for sample 4 : GWR_100_19_5_NW

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	243	381.63	2,380.3		64.28
3	257	134.60	793.4		65.58
4	277	255.06	1,393.9		67.45
5	337	84.98	382.2		72.47
6	361	56.56	237.5		74.38
7	384	36.91	145.7		76.20
8	399	17.30	65.8		77.37
9	429	37.85	133.7		79.11
10	454	13.57	45.3		80.49
11	493	36.55	112.3		82.70
12	549	23.24	64.1		85.48
13	596	3.85	9.8		87.77
14	10,380	75.00	10.9	Upper Marker	113.00

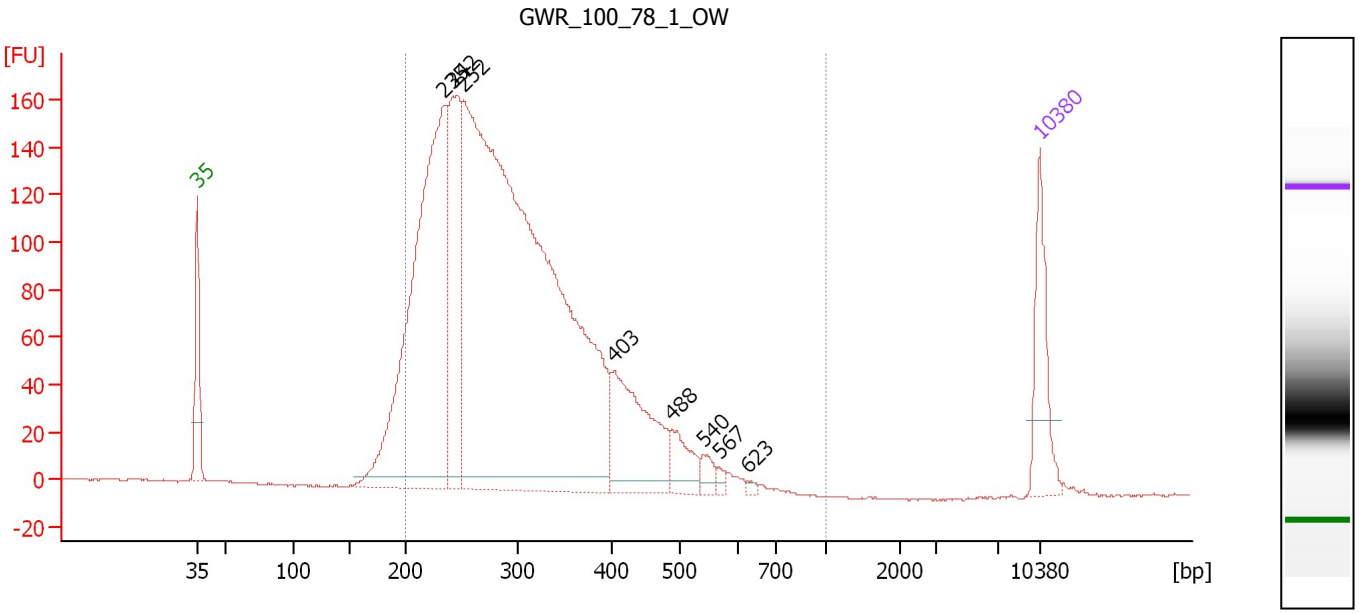
Region table for sample 4 : GWR_100_19_5_NW

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	1,214.09	1,254.1	6,315.3	95	34.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-16\2019-04-16_001.xad

Created: 4/16/2019 9:52:29 AM
Modified: 4/16/2019 10:35:20 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : GWR_100_78_1_OW

Number of peaks found:	8	Corr. Area 1:	3,309.9
Noise:	0.3		

Peak table for sample 5 : GWR_100_78_1_OW

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	235	793.83	5,127.3		63.51
3	242	282.45	1,766.4		64.22
4	252	1,894.17	11,394.1		65.11
5	403	191.43	720.0		77.65
6	488	50.32	156.1		82.43
7	540	17.99	50.5		85.04
8	567	7.23	19.3		86.37
9	623	4.43	10.8		88.68
10	10,380	75.00	10.9	Upper Marker	113.00

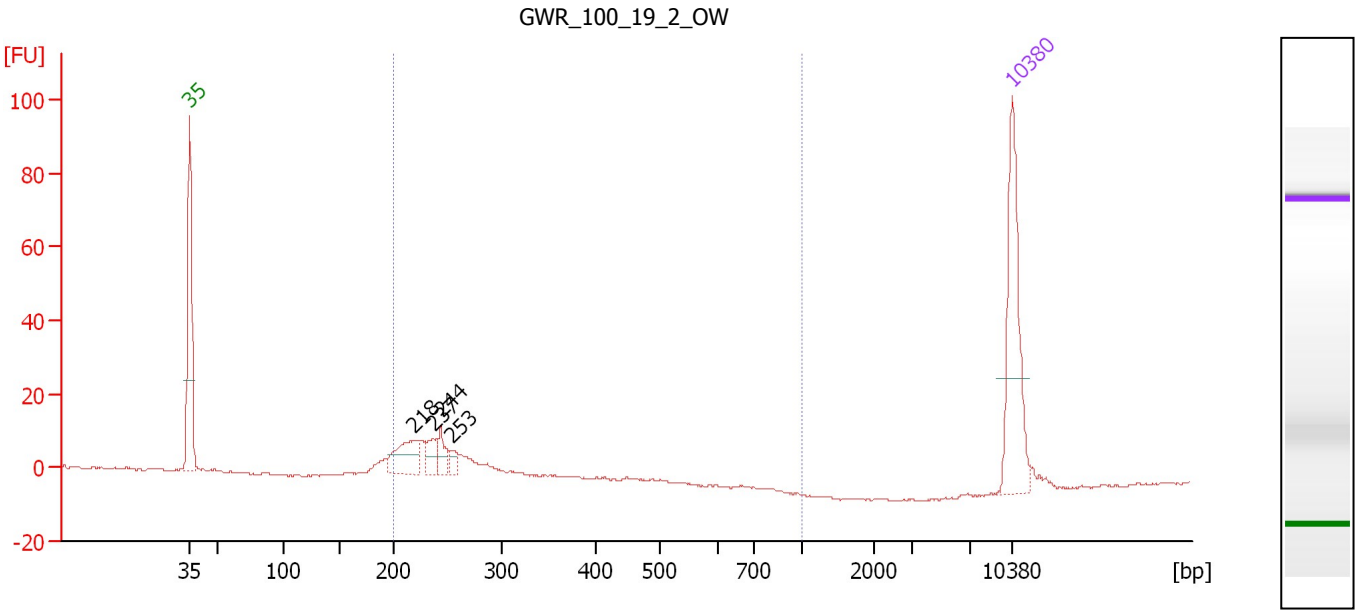
Region table for sample 5 : GWR_100_78_1_OW

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	303	2,845.72	3,309.9	15,285.3	95	25.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-16\2019-04-16_001.xad

Created: 4/16/2019 9:52:29 AM
Modified: 4/16/2019 10:35:20 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : GWR_100_19_2_OW

Number of peaks found:	4	Corr. Area 1:	85.5
Noise:	0.3		

Peak table for sample 6 : GWR_100_19_2_OW

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	218	41.61	289.3		61.98
3	237	19.14	122.6		63.70
4	244	15.80	98.1		64.38
5	253	9.00	53.8		65.24
6	10,380	75.00	10.9	Upper Marker	113.00

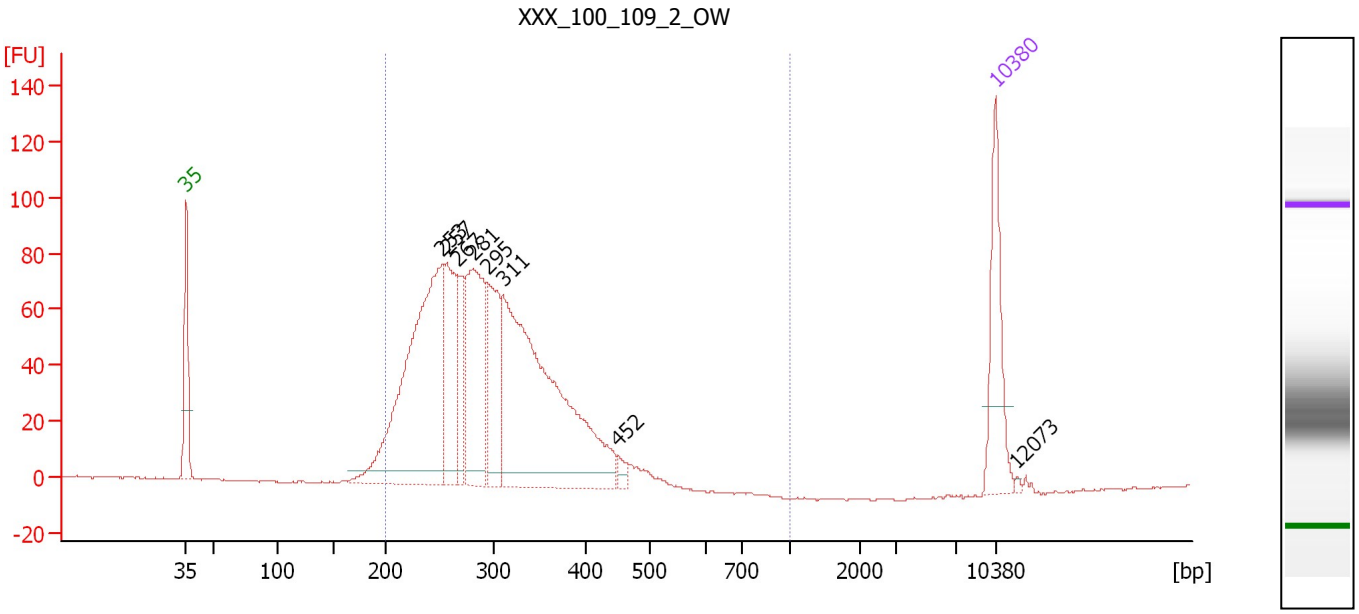
Region table for sample 6 : GWR_100_19_2_OW

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Color % of Total	Size distribution in CV [%]
200	1,000	238	101.19	85.5	644.7	88	9.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-16\2019-04-16_001.xad

Created: 4/16/2019 9:52:29 AM
Modified: 4/16/2019 10:35:20 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : XXX_100_109_2_OW

Number of peaks found:	8	Corr. Area 1:	1,479.6
Noise:	0.3		

Peak table for sample 7 : XXX_100_109_2_OW

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	253	442.41	2,652.9		65.18
3	257	136.64	806.6		65.55
4	267	67.19	381.0		66.52
5	281	196.43	1,058.4		67.81
6	295	118.19	607.7		69.05
7	311	495.38	2,415.9		70.39
8	452	9.63	32.3		80.40
9	10,380	75.00	10.9	Upper Marker	113.00
10	12,073	0.00	0.0		114.75

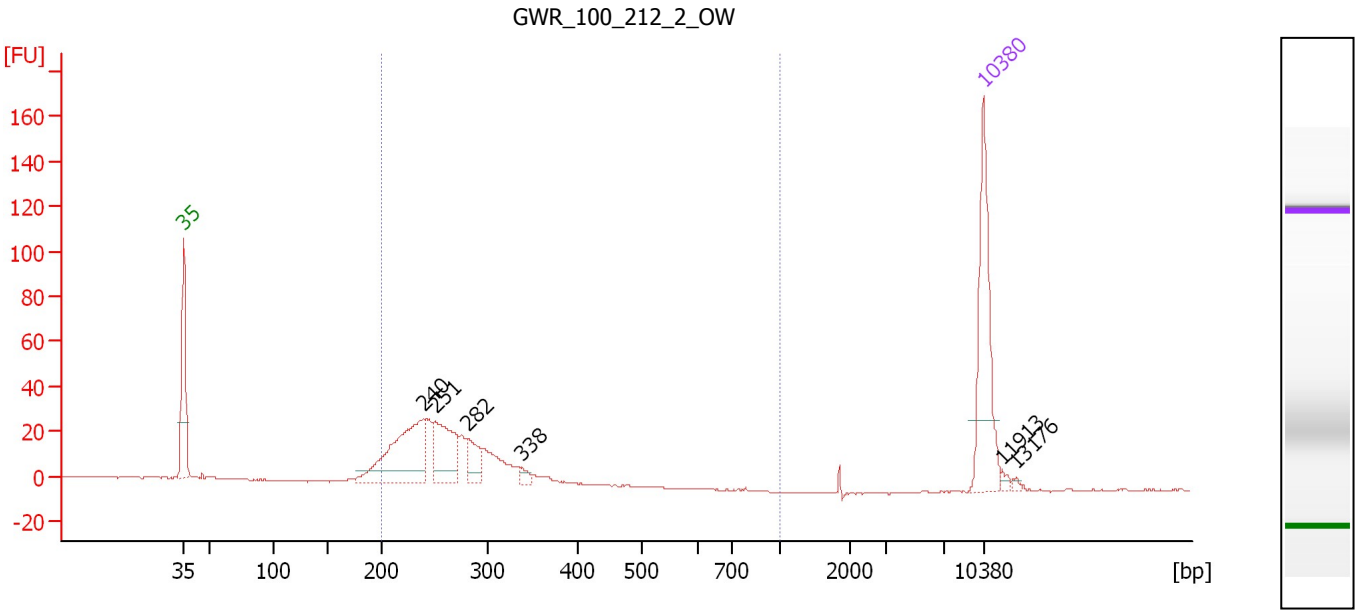
Region table for sample 7 : XXX_100_109_2_OW

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	1,374.46	1,479.6	7,318.3	98	19.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-16\2019-04-16_001.xad

Created: 4/16/2019 9:52:29 AM
Modified: 4/16/2019 10:35:20 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : GWR_100_212_2_OW

Number of peaks found:	6	Corr. Area 1:	359.8
Noise:	0.2		

Peak table for sample 8 : GWR_100_212_2_OW

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	240	121.80	769.3		64.00
3	251	68.13	411.3		65.03
4	282	27.25	146.5		67.87
5	338	6.08	27.3		72.54
6	10,380	75.00	10.9	Upper Marker	113.00
7	11,913	0.00	0.0		114.59
8	13,176	0.00	0.0		115.89

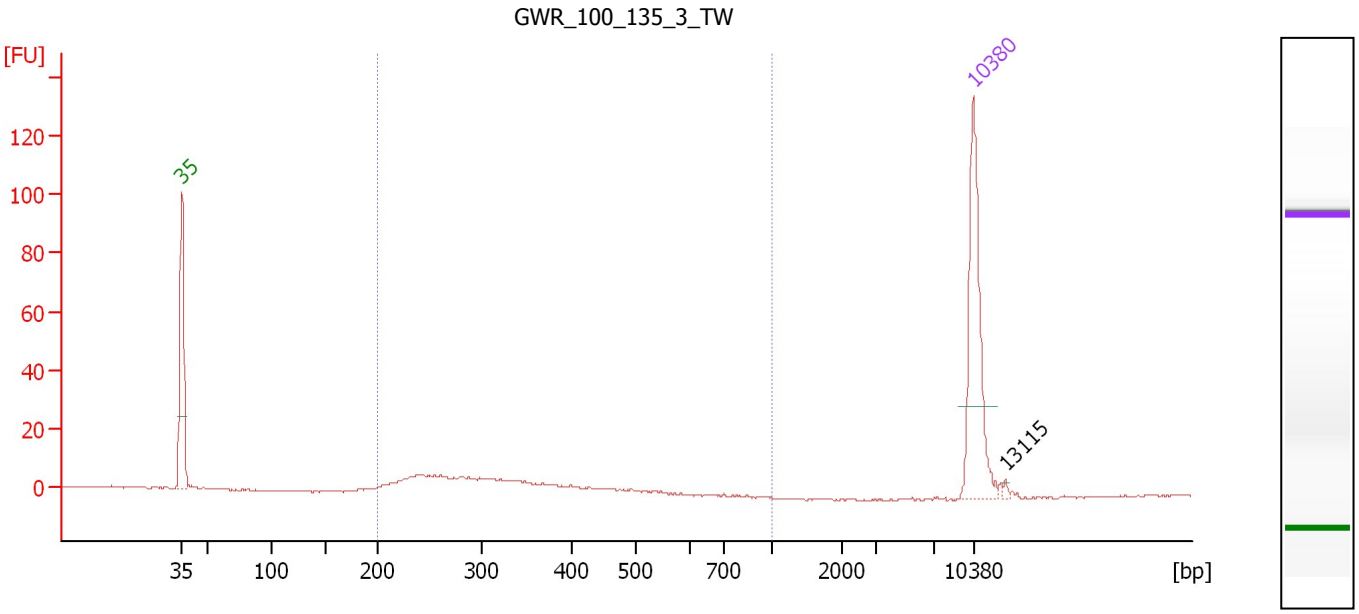
Region table for sample 8 : GWR_100_212_2_OW

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	262	277.92	359.8	1,632.1	92	14.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-16\2019-04-16_001.xad

Created: 4/16/2019 9:52:29 AM
Modified: 4/16/2019 10:35:20 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : GWR_100_135_3_TW

Number of peaks found:	1	Corr. Area 1:	89.5
Noise:	0.3		

Peak table for sample 9 : GWR_100_135_3_TW

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	10,380	75.00	10.9	Upper Marker	113.00
3	13,115	0.00	0.0		115.83

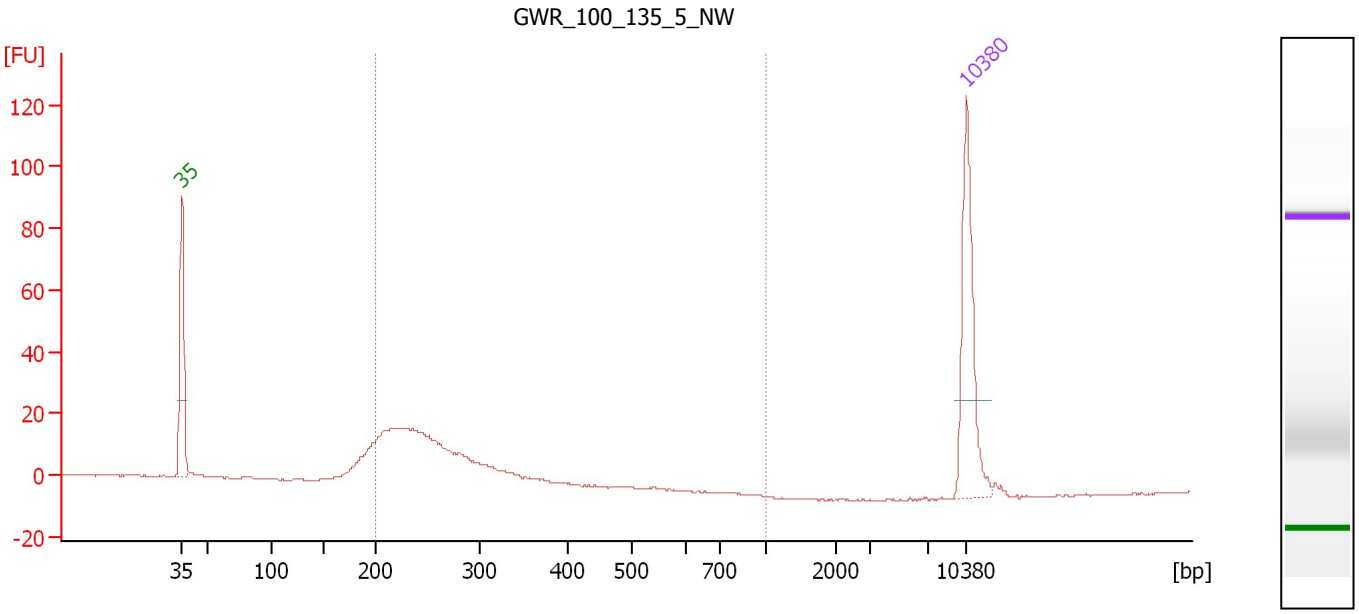
Region table for sample 9 : GWR_100_135_3_TW

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Color % of Total	Size distribution in CV [%]
200	1,000	298	79.14	89.5	422.8	92	20.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-16\2019-04-16_001.xad

Created: 4/16/2019 9:52:29 AM
Modified: 4/16/2019 10:35:20 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : GWR_100_135_5_NW

Number of peaks found:	0	Corr. Area 1:	213.8
Noise:	0.2		

Peak table for sample 10 : GWR_100_135_5_NW

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	10,380	75.00	10.9	Upper Marker	113.00

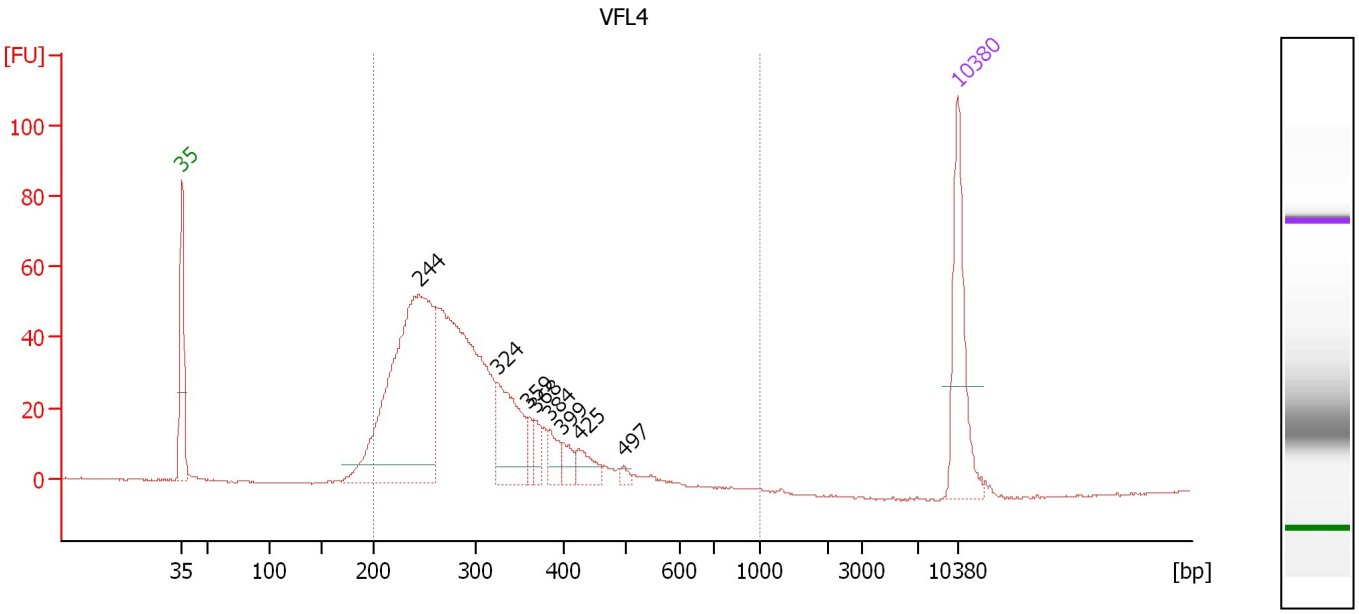
Region table for sample 10 : GWR_100_135_5_NW

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Color % of Total	Size distribution in CV [%]
200	1,000	253	208.69	213.8	1,270.3	83	15.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-16\2019-04-16_001.xad

Created: 4/16/2019 9:52:29 AM
Modified: 4/16/2019 10:35:20 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : VFL4

Number of peaks found:	8	Corr. Area 1:	912.7
Noise:	0.2		

Peak table for sample 11 : VFL4

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	244	403.85	2,508.4		64.38
3	324	93.01	434.9		71.45
4	359	15.03	63.5		74.20
5	368	15.65	64.5		74.92
6	384	19.58	77.3		76.22
7	399	14.64	55.7		77.37
8	425	21.75	77.6		78.87
9	497	4.89	14.9		82.91
10	10,380	75.00	10.9	Upper Marker	113.00

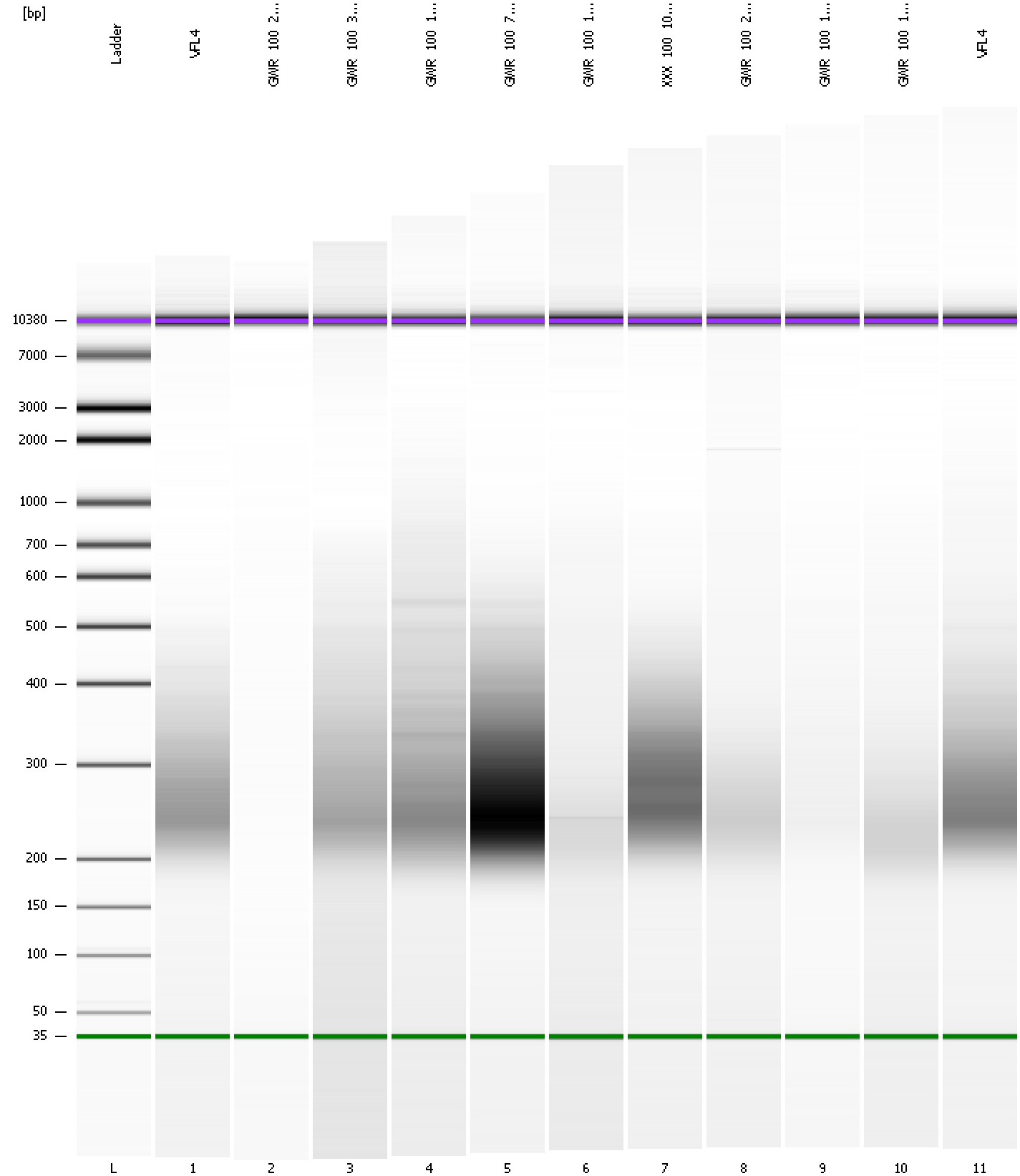
Region table for sample 11 : VFL4

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	295	927.67	912.7	5,039.0	97	23.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-16\2019-04-16_001.xad

Created: 4/16/2019 9:52:29 AM
Modified: 4/16/2019 10:35:20 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-16\2019-04-16_001.xad

Created: 4/16/2019 9:52:29 AM
Modified: 4/16/2019 10:35:20 AM

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		4/16/2019 10:33:47 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2019-04-16\2019-04-16_001.xad)		Instrument	Run		4/16/2019 9:52:34 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		4/16/2019 9:52:34 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/16/2019 9:52:34 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/16/2019 9:52:34 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		4/16/2019 9:52:34 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/16/2019 9:52:34 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/16/2019 9:52:34 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1