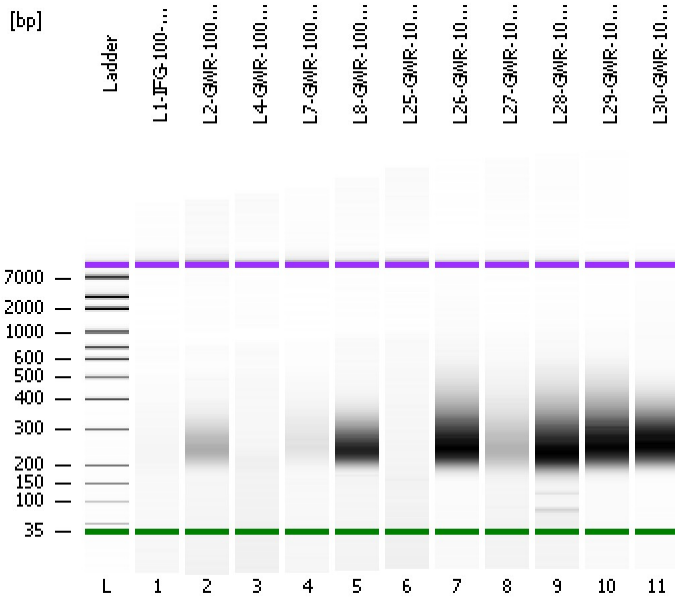


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-26\2019-02-26\_001.xad

Created: 2/26/2019 11:17:58 AM  
Modified: 2/26/2019 11:59:18 AM

### Electrophoresis File Run Summary



#### Instrument Information:

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

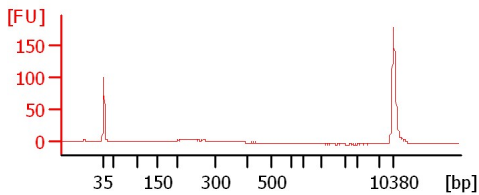
#### Assay Information:

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

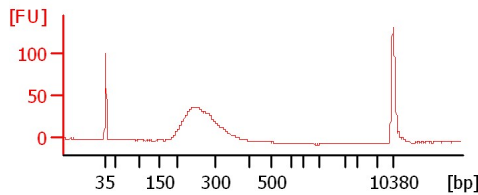
#### Chip Information:

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

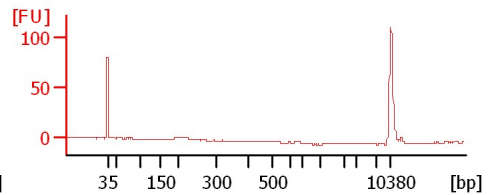
L1-IFG-100-38-4-NW



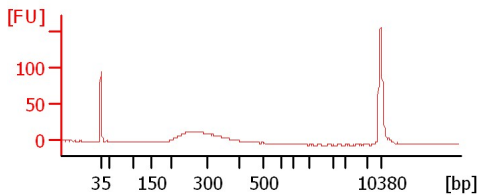
L2-GWR-100-377-6-NW



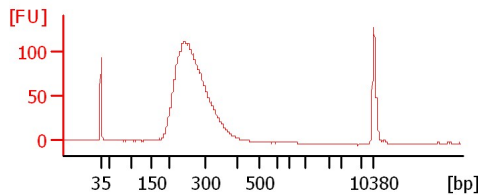
L4-GWR-100-19-2-TW



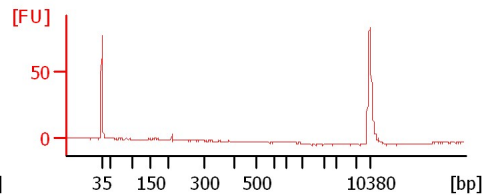
L7-GWR-100-364-4-NW



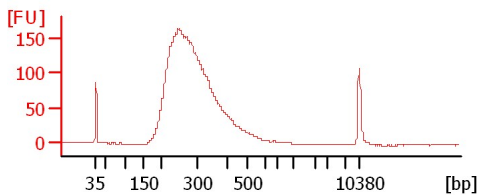
L8-GWR-100-135-2-TW



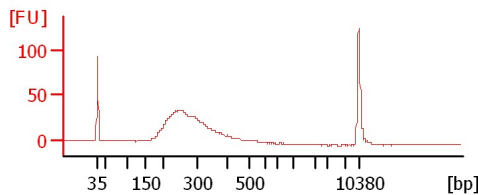
L25-GWR-100-78-6-NW



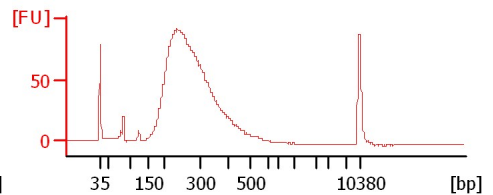
L26-GWR-100-135-1-TW



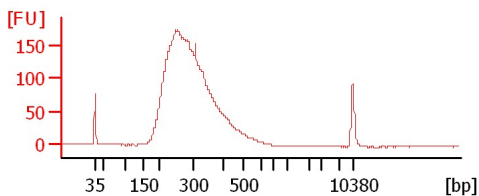
L27-GWR-100-245-5-NW



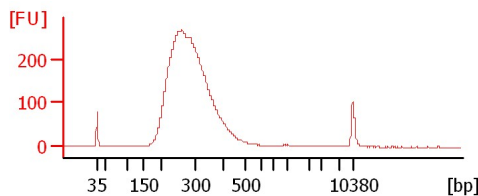
L28-GWR-100-19-3-OW



L29-GWR-100-90-3-OW



L30-GWR-100-245-1-TW



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-26\2019-02-26\_001.xad

Created: 2/26/2019 11:17:58 AM  
 Modified: 2/26/2019 11:59:18 AM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
L1-IFG-100-38-4-NW		<input type="checkbox"/>	✓			
L2-GWR-100-377-6-NW		<input type="checkbox"/>	✓			
L4-GWR-100-19-2-TW		<input type="checkbox"/>	✓			
L7-GWR-100-364-4-NW		<input type="checkbox"/>	✓			
L8-GWR-100-135-2-TW		<input type="checkbox"/>	✓			
L25-GWR-100-78-6-NW		<input type="checkbox"/>	✓			
L26-GWR-100-135-1-TW		<input type="checkbox"/>	✓			
L27-GWR-100-245-5-NW		<input type="checkbox"/>	✓			
L28-GWR-100-19-3-OW		<input type="checkbox"/>	✓			
L29-GWR-100-90-3-OW		<input type="checkbox"/>	✓			
L30-GWR-100-245-1-TW		<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\2019-02-26\2019-02-26\_001.xad

Created: 2/26/2019 11:17:58 AM  
Modified: 2/26/2019 11:59:18 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

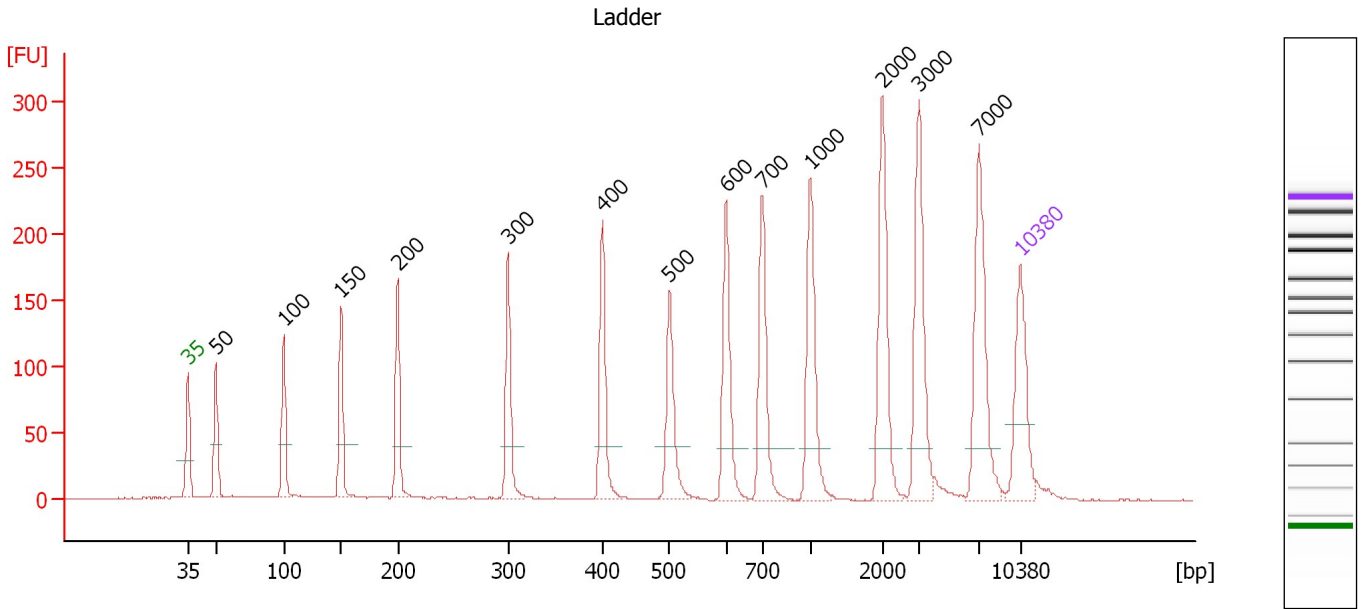
**Ladder**

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\2019-02-26\2019-02-26\_001.xad

Created: 2/26/2019 11:17:58 AM  
 Modified: 2/26/2019 11:59:18 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.4

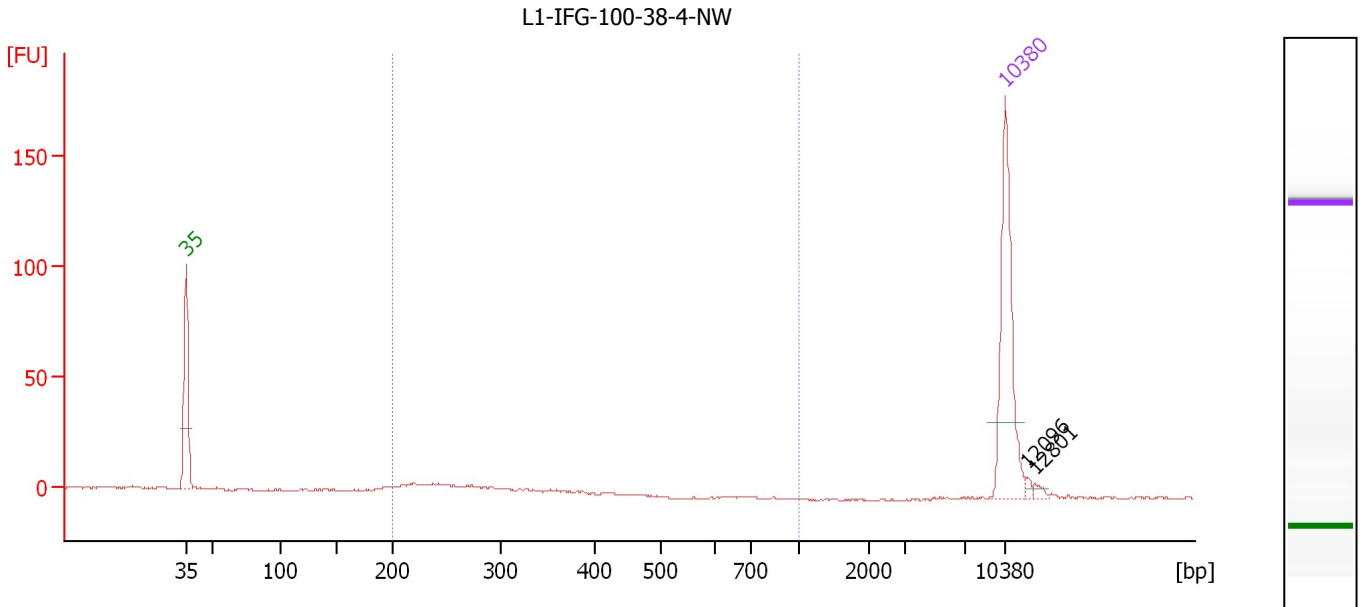
**Peak table for Ladder**

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	45.33
3	100	150.00	2,272.7	Ladder Peak	51.03
4	150	150.00	1,515.2	Ladder Peak	55.87
5	200	150.00	1,136.4	Ladder Peak	60.62
6	300	150.00	757.6	Ladder Peak	69.91
7	400	150.00	568.2	Ladder Peak	77.84
8	500	150.00	454.5	Ladder Peak	83.49
9	600	150.00	378.8	Ladder Peak	88.25
10	700	150.00	324.7	Ladder Peak	91.30
11	1,000	150.00	227.3	Ladder Peak	95.33
12	2,000	150.00	113.6	Ladder Peak	101.39
13	3,000	150.00	75.8	Ladder Peak	104.48
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\2019-02-26\2019-02-26\_001.xad

Created: 2/26/2019 11:17:58 AM  
 Modified: 2/26/2019 11:59:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : L1-IFG-100-38-4-NW**

Number of peaks found: 2                      Corr. Area 1: 38.6  
 Noise: 0.4

**Peak table for sample 1 : L1-IFG-100-38-4-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	12,096	0.00	0.0		114.78
4	12,801	0.00	0.0		115.50

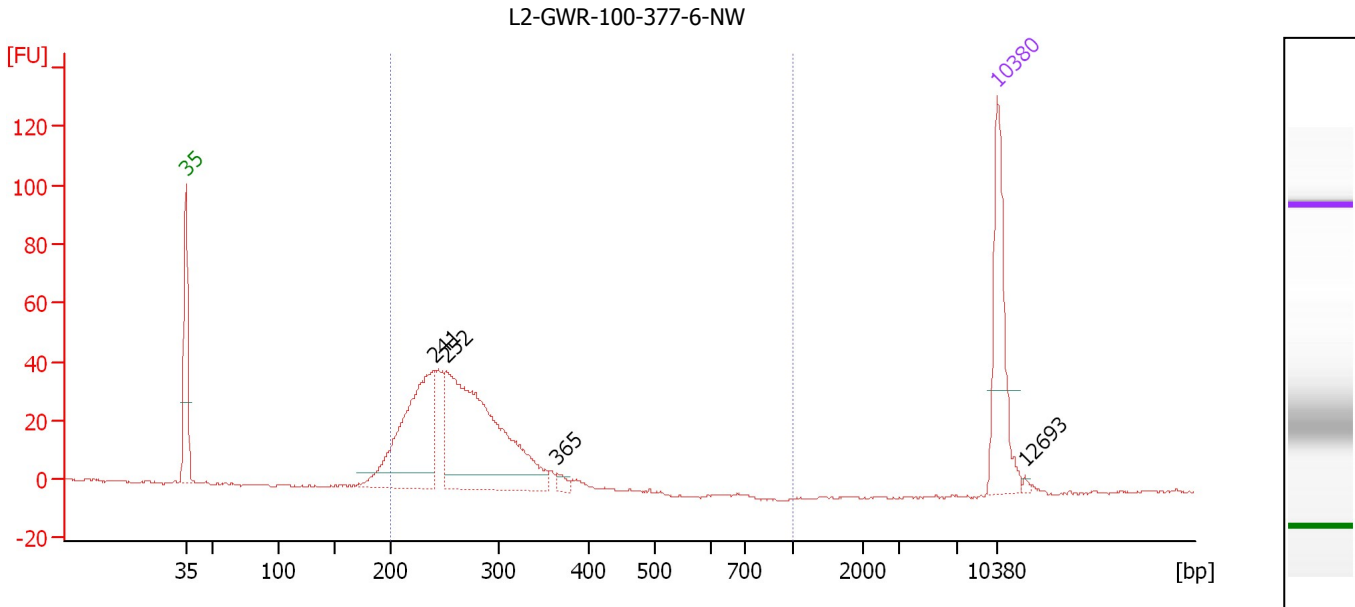
**Region table for sample 1 : L1-IFG-100-38-4-NW**

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	257	28.06	38.6	167.8	68	15.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-26\2019-02-26\_001.xad

Created: 2/26/2019 11:17:58 AM  
 Modified: 2/26/2019 11:59:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : L2-GWR-100-377-6-NW**

Number of peaks found: 4                      Corr. Area 1: 531.9  
 Noise: 0.3

**Peak table for sample 2 : L2-GWR-100-377-6-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	241	197.23	1,241.6		64.40
3	252	312.52	1,878.4		65.46
4	365	6.84	28.4		75.08
5	10,380	75.00	10.9	Upper Marker	113.00
6	12,693	0.00	0.0		115.39

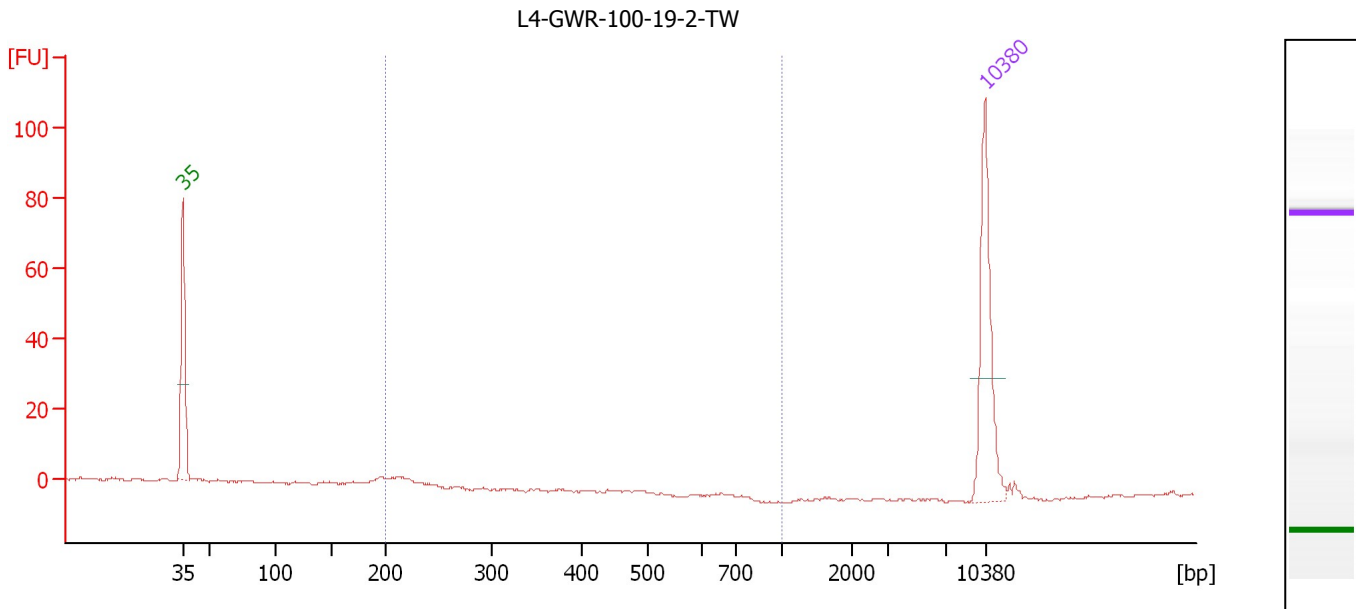
**Region table for sample 2 : L2-GWR-100-377-6-NW**

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	265	498.21	531.9	2,900.4	96	14.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-26\2019-02-26\_001.xad

Created: 2/26/2019 11:17:58 AM  
 Modified: 2/26/2019 11:59:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : L4-GWR-100-19-2-TW**

Number of peaks found: 0                      Corr. Area 1: 8.6  
 Noise: 0.4

**Peak table for sample 3 : L4-GWR-100-19-2-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

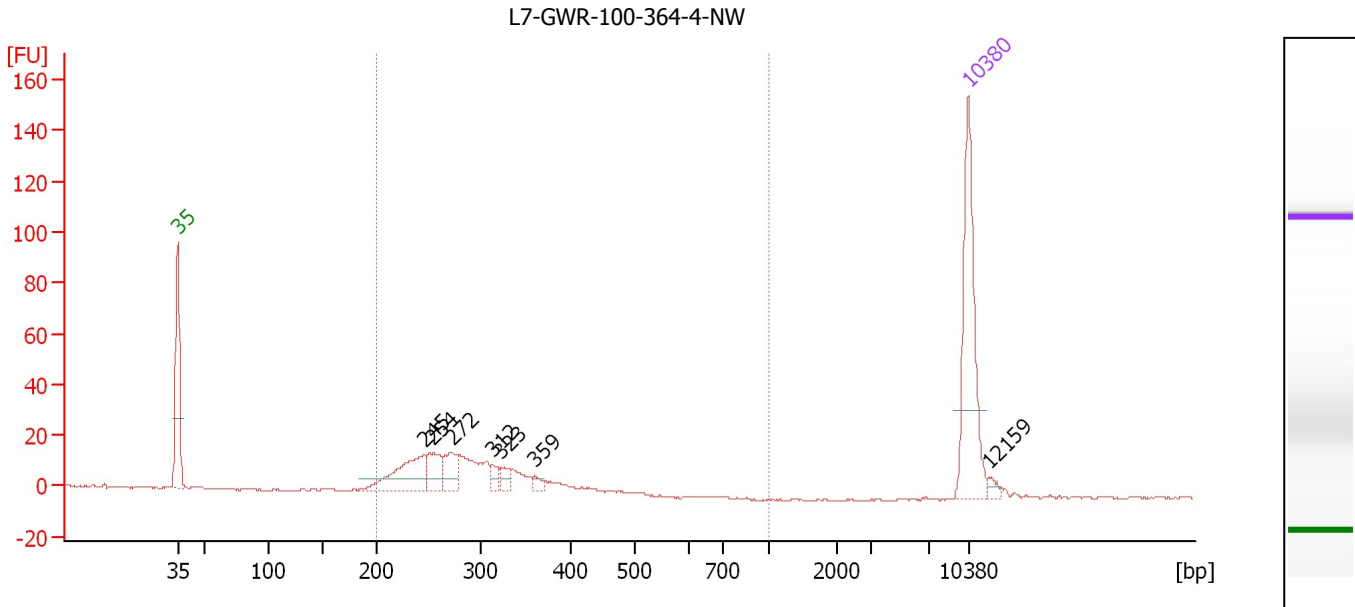
**Region table for sample 3 : L4-GWR-100-19-2-TW**

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	216	10.71	8.6	75.2	28	4.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-26\2019-02-26\_001.xad

Created: 2/26/2019 11:17:58 AM  
 Modified: 2/26/2019 11:59:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : L7-GWR-100-364-4-NW**

Number of peaks found: 7                      Corr. Area 1: 230.6  
 Noise: 0.3

**Peak table for sample 4 : L7-GWR-100-364-4-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	245	55.29	341.8		64.81
3	254	25.60	152.6		65.66
4	272	23.50	130.9		67.31
5	312	7.42	36.0		70.90
6	323	8.04	37.8		71.70
7	359	5.22	22.0		74.63
8	10,380	75.00	10.9	Upper Marker	113.00
9	12,159	0.00	0.0		114.84

**Region table for sample 4 : L7-GWR-100-364-4-NW**

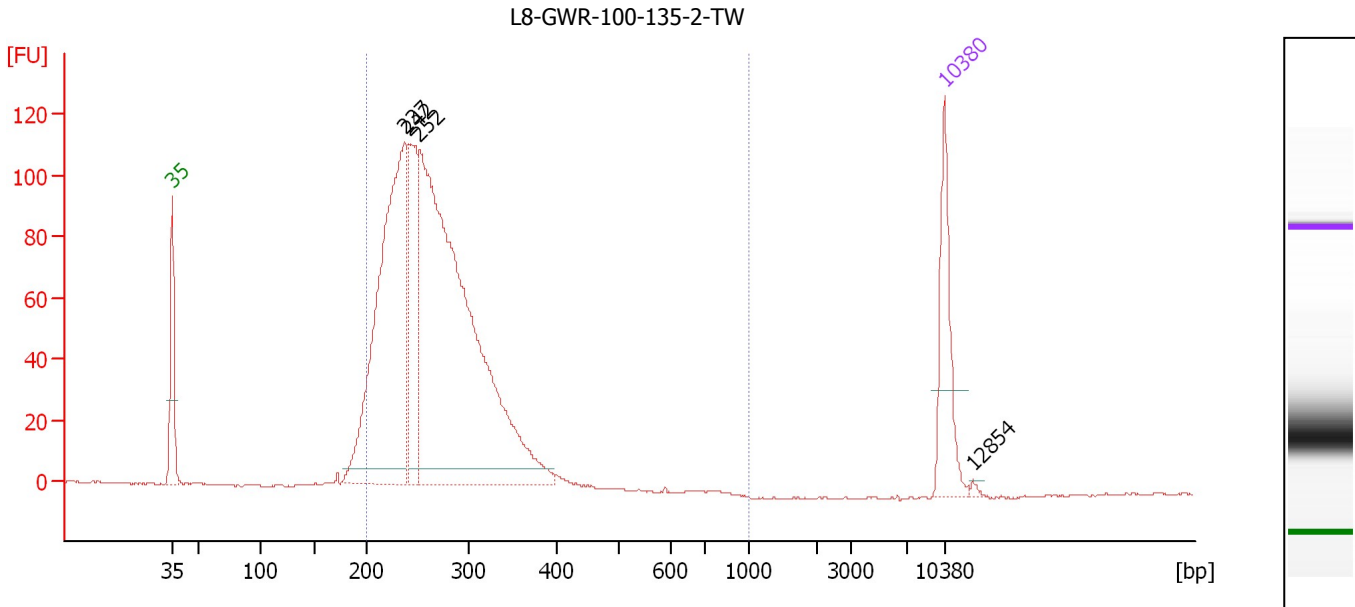
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	284	176.10	230.6	967.4	96	16.9



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-26\2019-02-26\_001.xad

Created: 2/26/2019 11:17:58 AM  
 Modified: 2/26/2019 11:59:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : L8-GWR-100-135-2-TW**

Number of peaks found: 4                      Corr. Area 1: 1,543.7  
 Noise: 0.3

**Peak table for sample 5 : L8-GWR-100-135-2-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	237	549.82	3,514.2		64.06
3	242	168.25	1,054.6		64.50
4	252	913.52	5,500.7		65.42
5	10,380	75.00	10.9	Upper Marker	113.00
6	12,854	0.00	0.0		115.56

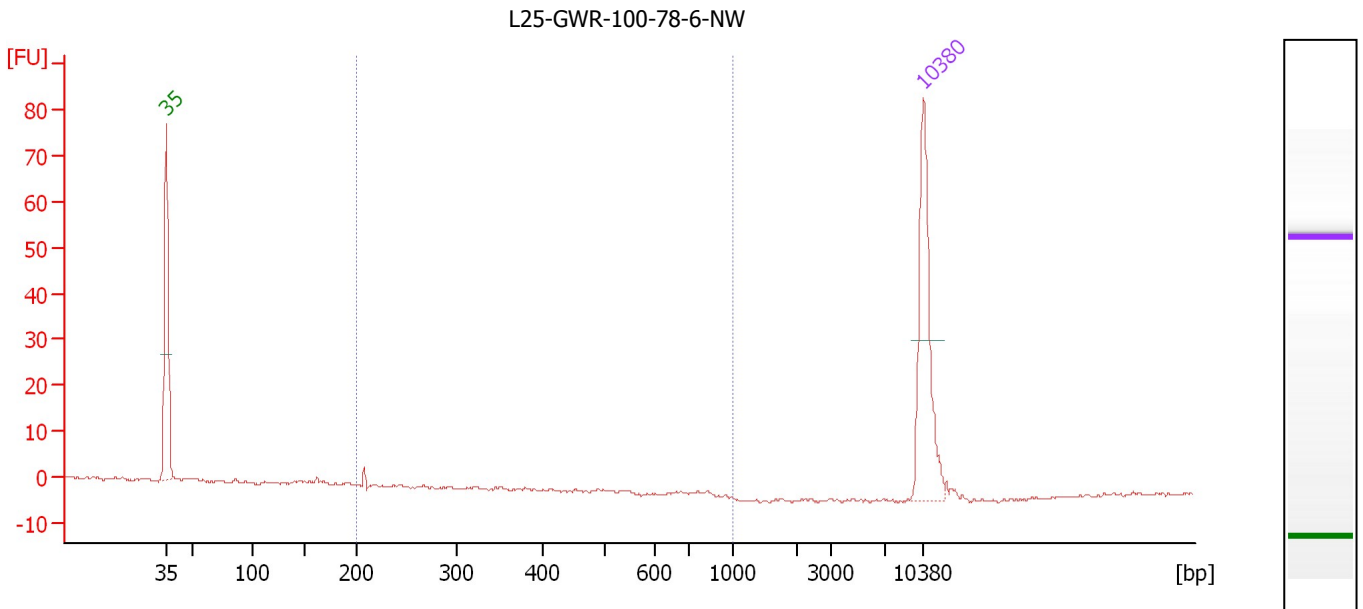
**Region table for sample 5 : L8-GWR-100-135-2-TW**

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	266	1,560.69	1,543.7	9,068.9	97	15.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-26\2019-02-26\_001.xad

Created: 2/26/2019 11:17:58 AM  
 Modified: 2/26/2019 11:59:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : L25-GWR-100-78-6-NW**

Number of peaks found: 0                      Corr. Area 1: 0.8  
 Noise: 0.3

**Peak table for sample 6 : L25-GWR-100-78-6-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

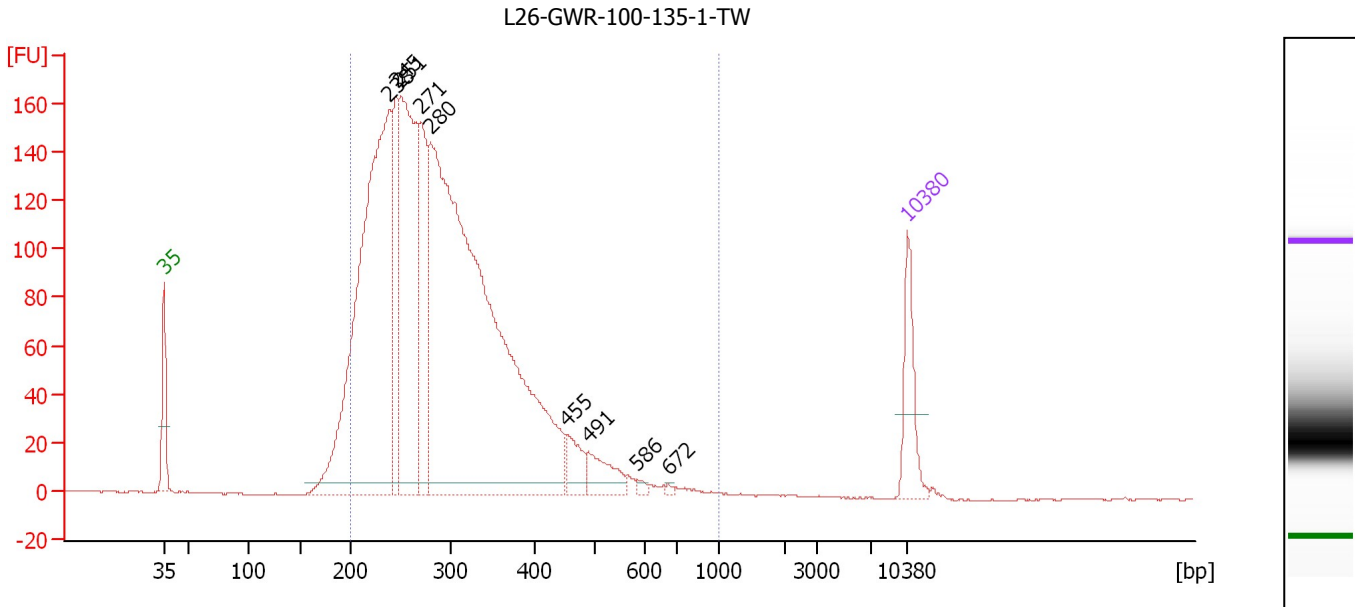
**Region table for sample 6 : L25-GWR-100-78-6-NW**

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	207	1.20	0.8	8.8	31	0.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-26\2019-02-26\_001.xad

Created: 2/26/2019 11:17:58 AM  
 Modified: 2/26/2019 11:59:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : L26-GWR-100-135-1-TW**

Number of peaks found: 9                      Corr. Area 1: 3,149.3  
 Noise: 0.2

**Peak table for sample 7 : L26-GWR-100-135-1-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	238	1,104.32	7,017.6		64.19
3	245	204.09	1,259.8		64.84
4	251	542.83	3,278.4		65.35
5	271	258.21	1,444.2		67.20
6	280	1,737.06	9,396.7		68.06
7	455	49.85	165.9		80.96
8	491	60.09	185.5		82.97
9	586	6.81	17.6		87.59
10	672	3.54	8.0		90.45
11	10,380	75.00	10.9	Upper Marker	113.00

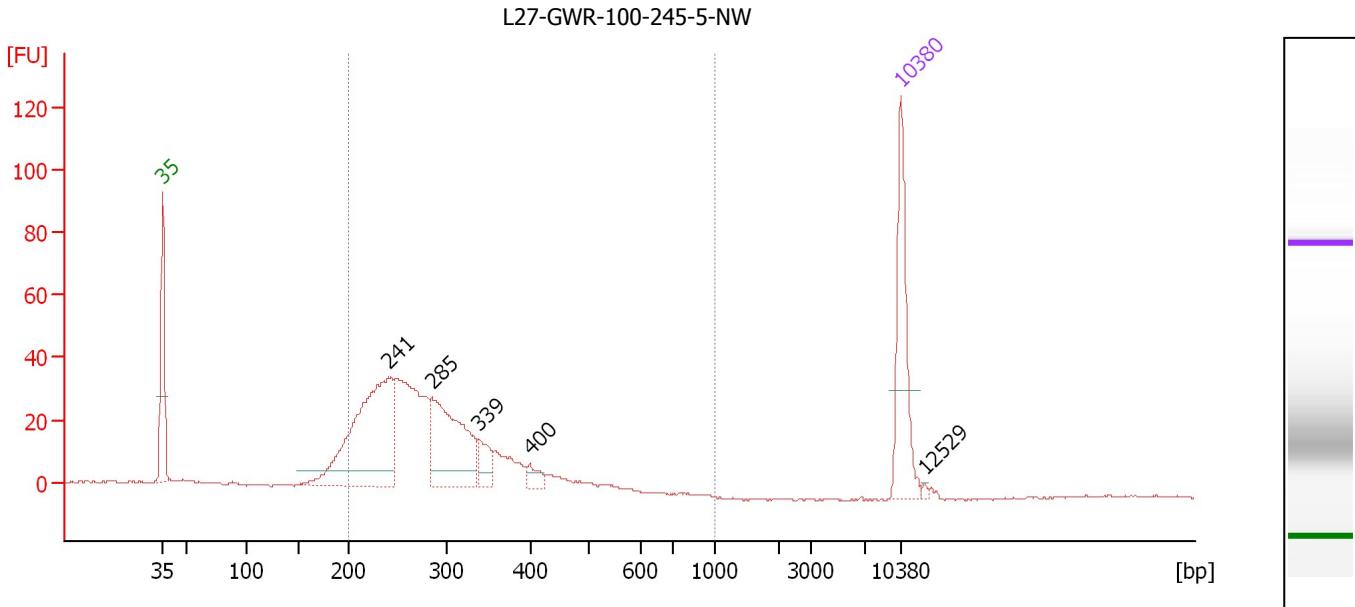
**Region table for sample 7 : L26-GWR-100-135-1-TW**

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	303	3,670.07	3,149.3	19,788.5	96	28.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-26\2019-02-26\_001.xad

Created: 2/26/2019 11:17:58 AM  
 Modified: 2/26/2019 11:59:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : L27-GWR-100-245-5-NW**

Number of peaks found: 5                      Corr. Area 1: 604.6  
 Noise: 0.2

**Peak table for sample 8 : L27-GWR-100-245-5-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	241	255.59	1,606.8		64.43
3	285	153.94	818.1		68.52
4	339	26.47	118.4		72.97
5	400	11.89	45.1		77.82
6	10,380	75.00	10.9	Upper Marker	113.00
7	12,529	0.00	0.0		115.22

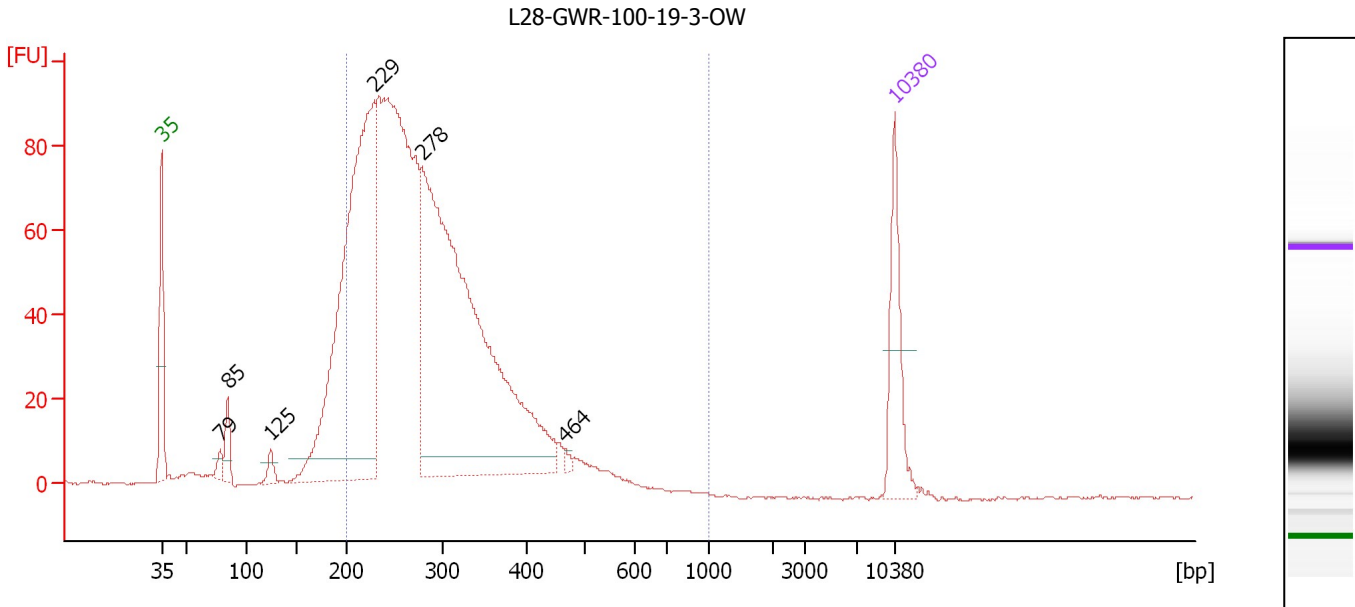
**Region table for sample 8 : L27-GWR-100-245-5-NW**

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	286	633.69	604.6	3,522.2	91	21.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-26\2019-02-26\_001.xad

Created: 2/26/2019 11:17:58 AM  
 Modified: 2/26/2019 11:59:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : L28-GWR-100-19-3-OW**

Number of peaks found: 6                      Corr. Area 1: 1,702.6  
 Noise: 0.3

**Peak table for sample 9 : L28-GWR-100-19-3-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	79	14.73	283.6		48.60
3	85	36.06	643.1		49.31
4	125	18.34	222.6		53.44
5	229	778.95	5,154.4		63.31
6	278	949.88	5,181.0		67.84
7	464	5.67	18.5		81.49
8	10,380	75.00	10.9	Upper Marker	113.00

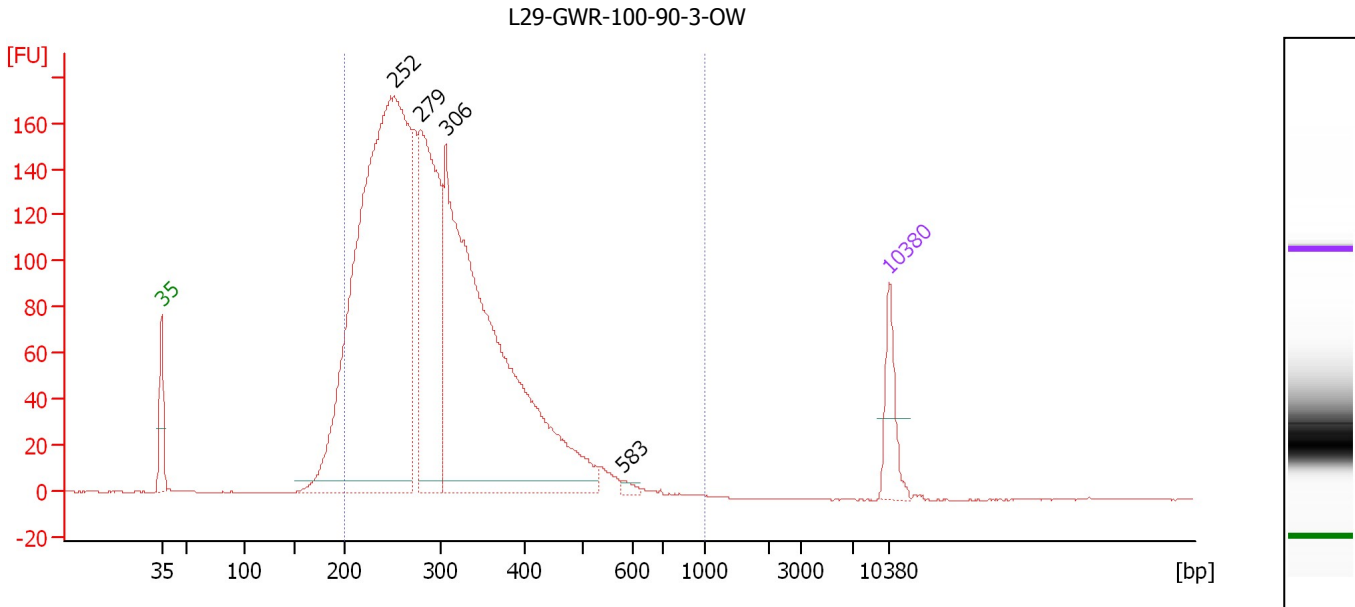
**Region table for sample 9 : L28-GWR-100-19-3-OW**

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	290	2,400.45	1,702.6	13,357.6	87	25.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-26\2019-02-26\_001.xad

Created: 2/26/2019 11:17:58 AM  
 Modified: 2/26/2019 11:59:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : L29-GWR-100-90-3-OW**

Number of peaks found: 4                      Corr. Area 1: 3,312.6  
 Noise: 0.3

**Peak table for sample 10 : L29-GWR-100-90-3-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	252	2,125.89	12,803.8		65.41
3	279	693.79	3,772.6		67.92
4	306	1,558.09	7,714.0		70.38
5	583	9.70	25.2		87.46
6	10,380	75.00	10.9	Upper Marker	113.00

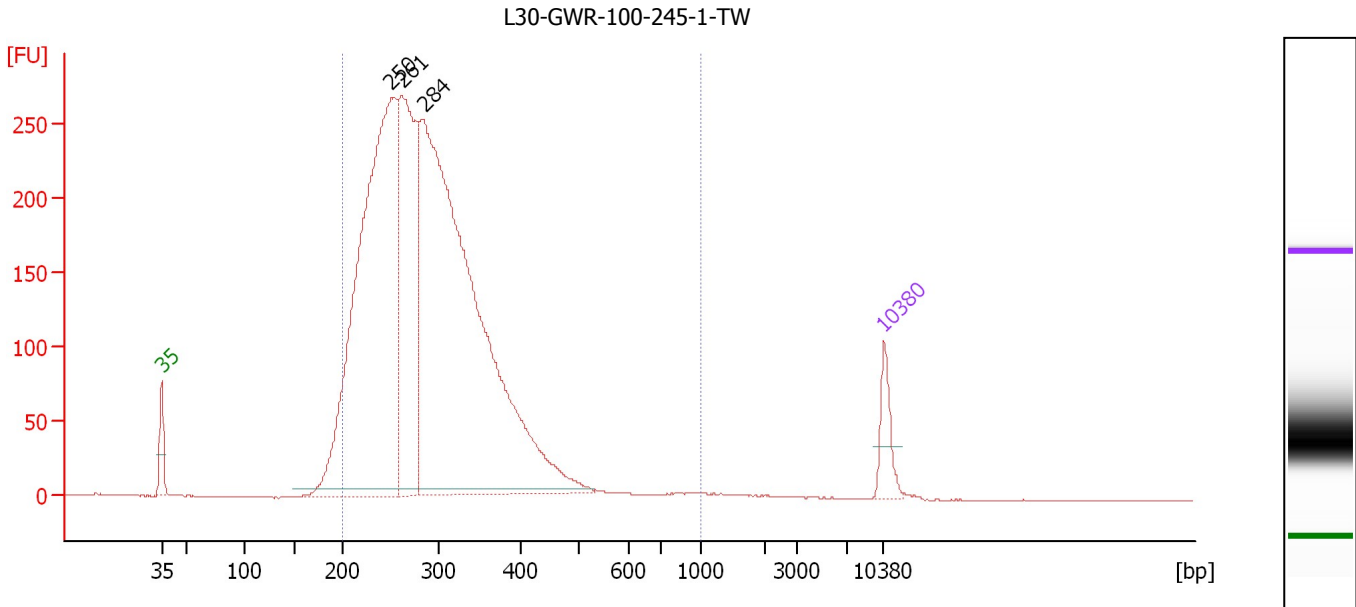
**Region table for sample 10 : L29-GWR-100-90-3-OW**

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	301	4,308.58	3,312.6	23,157.3	95	25.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-26\2019-02-26\_001.xad

Created: 2/26/2019 11:17:58 AM  
 Modified: 2/26/2019 11:59:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : L30-GWR-100-245-1-TW**

Number of peaks found: 3                                      Corr. Area 1: 4,823.7  
 Noise: 0.3

**Peak table for sample 11 : L30-GWR-100-245-1-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	250	2,230.62	13,518.3		65.27
3	261	957.98	5,558.2		66.30
4	284	2,893.63	15,439.7		68.42
5	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : L30-GWR-100-245-1-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	294	5,772.83	4,823.7	31,363.7	97	24.2

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-26\2019-02-26\_001.xad

Created: 2/26/2019 11:17:58 AM  
Modified: 2/26/2019 11:59:18 AM

**Gel Image**

