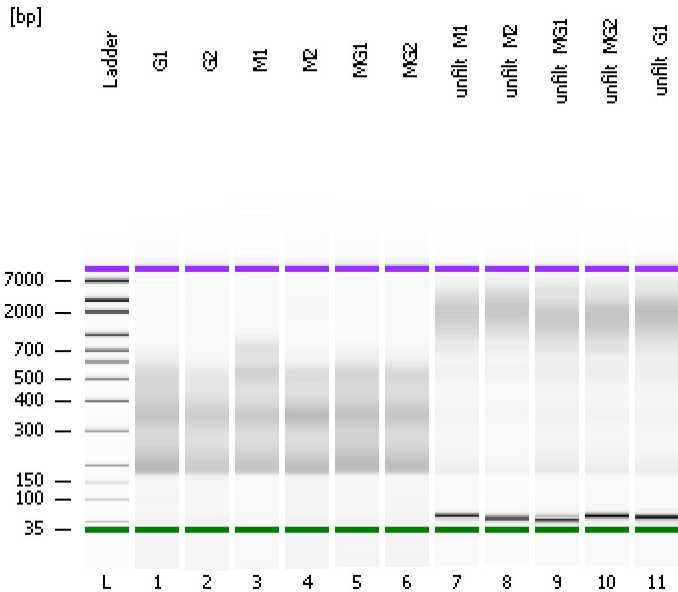


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
Modified: 5/3/2018 5:15:45 PM

### Electrophoresis File Run Summary



#### Instrument Information:

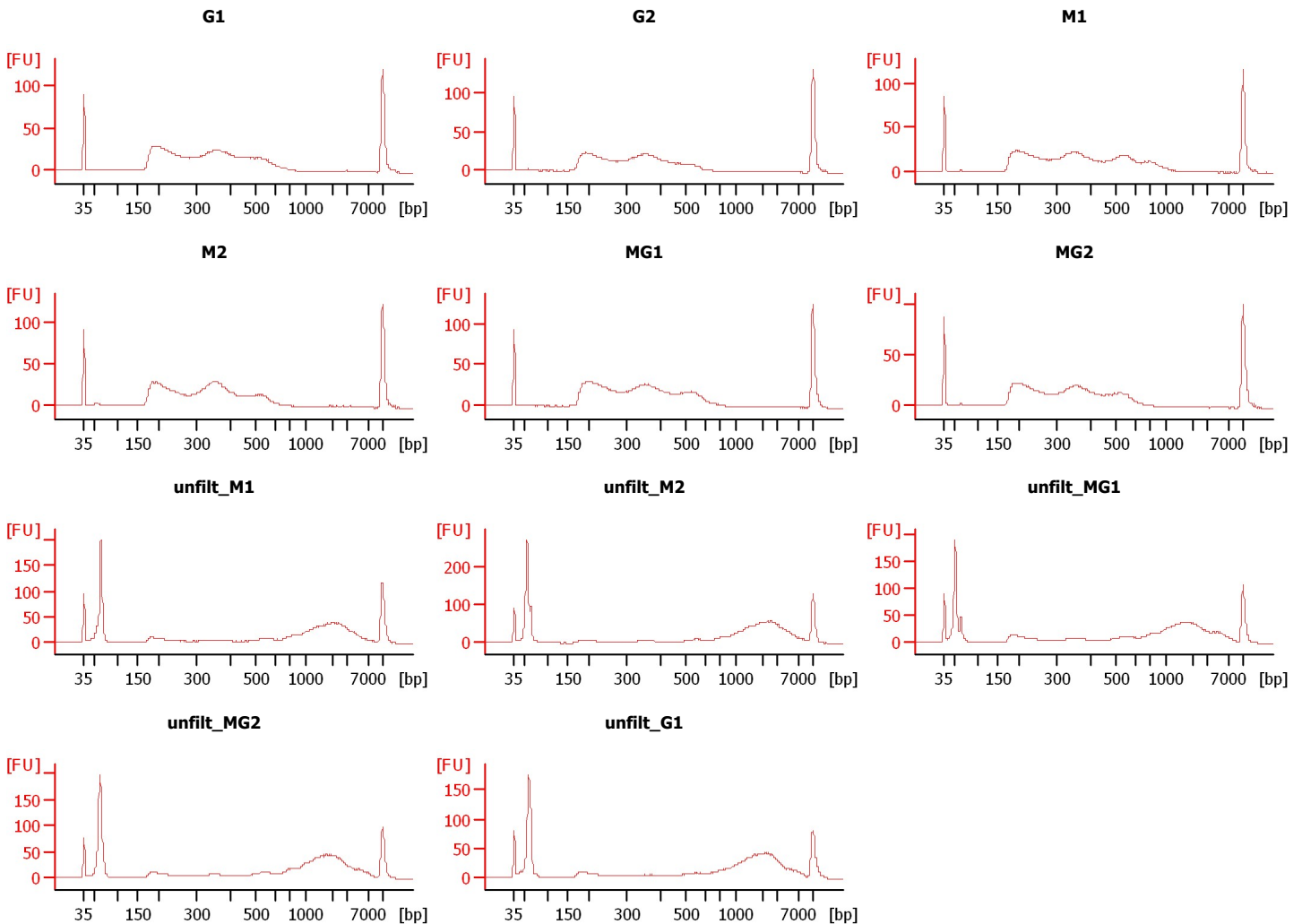
Instrument Name: DE34903152      Firmware: C.01.069  
Serial#: DE34903152      Type: G2938C

#### 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\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
Modified: 5/3/2018 5:15:45 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
G1		<input type="checkbox"/>	✓			
G2		<input type="checkbox"/>	✓			
M1		<input type="checkbox"/>	✓			
M2		<input type="checkbox"/>	✓			
MG1		<input type="checkbox"/>	✓			
MG2		<input type="checkbox"/>	✓			
unfilt_M1		<input type="checkbox"/>	✓			
unfilt_M2		<input type="checkbox"/>	✓			
unfilt_MG1		<input type="checkbox"/>	✓			
unfilt_MG2		<input type="checkbox"/>	✓			
unfilt_G1		<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\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
Modified: 5/3/2018 5:15:45 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

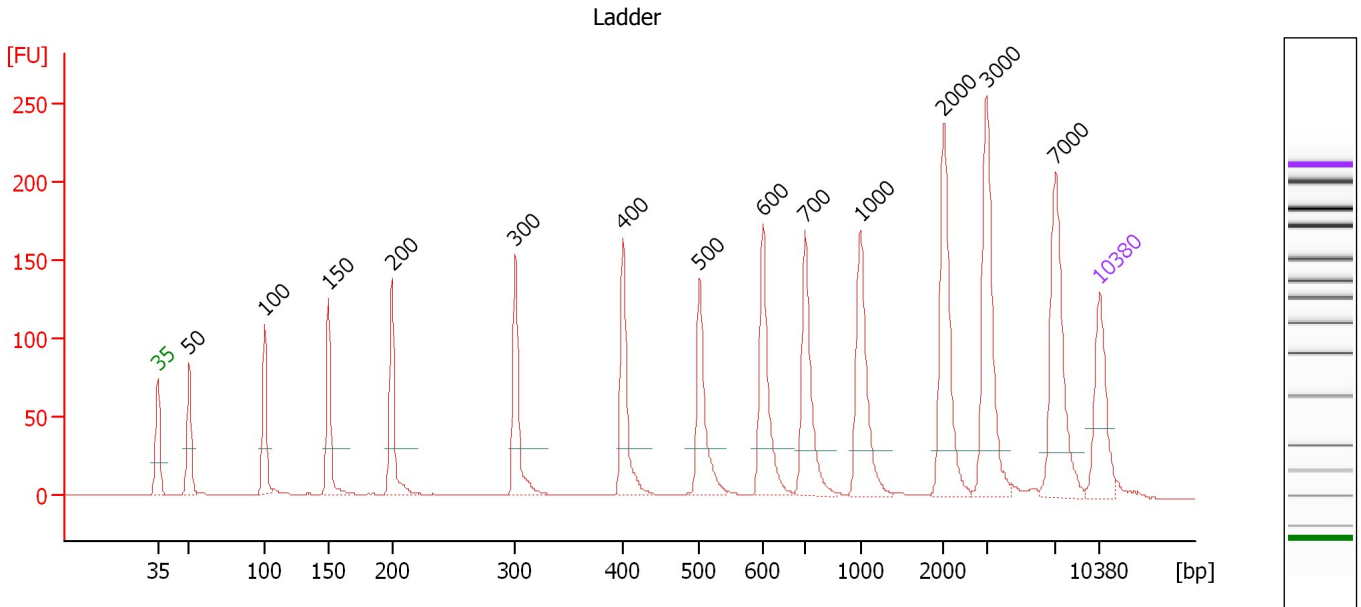
**Ladder**

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\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
 Modified: 5/3/2018 5:15:45 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.3

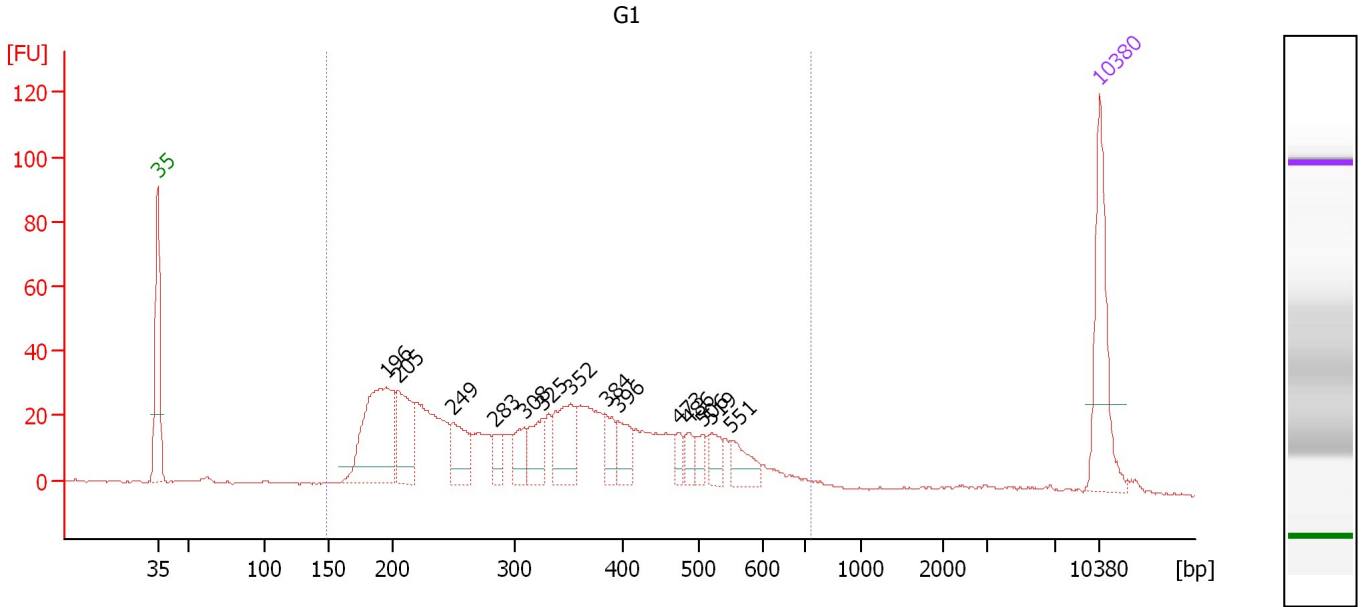
**Peak table for Ladder**

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	50.93
4	150	150.00	1,515.2	Ladder Peak	55.71
5	200	150.00	1,136.4	Ladder Peak	60.40
6	300	150.00	757.6	Ladder Peak	69.58
7	400	150.00	568.2	Ladder Peak	77.56
8	500	150.00	454.5	Ladder Peak	83.27
9	600	150.00	378.8	Ladder Peak	87.95
10	700	150.00	324.7	Ladder Peak	91.10
11	1,000	150.00	227.3	Ladder Peak	95.19
12	2,000	150.00	113.6	Ladder Peak	101.40
13	3,000	150.00	75.8	Ladder Peak	104.56
14	7,000	150.00	32.5	Ladder Peak	109.71
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
 Modified: 5/3/2018 5:15:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : G1**

Number of peaks found: 14                      Corr. Area 1: 903.3  
 Noise: 0.2

**Peak table for sample 1 : G1**

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	196	167.63	1,297.6		60.00
3	205	78.09	577.6		60.84
4	249	46.23	281.1		64.91
5	283	22.64	121.3		68.00
6	308	30.73	151.0		70.25
7	325	37.57	174.9		71.61
8	352	62.27	268.2		73.72
9	384	25.51	100.6		76.29
10	396	30.40	116.4		77.23
11	473	12.99	41.6		81.72
12	486	14.66	45.7		82.47
13	506	15.71	47.0		83.55
14	519	19.90	58.1		84.16
15	551	27.77	76.4		85.66
16	10,380	75.00	10.9	Upper Marker	113.00

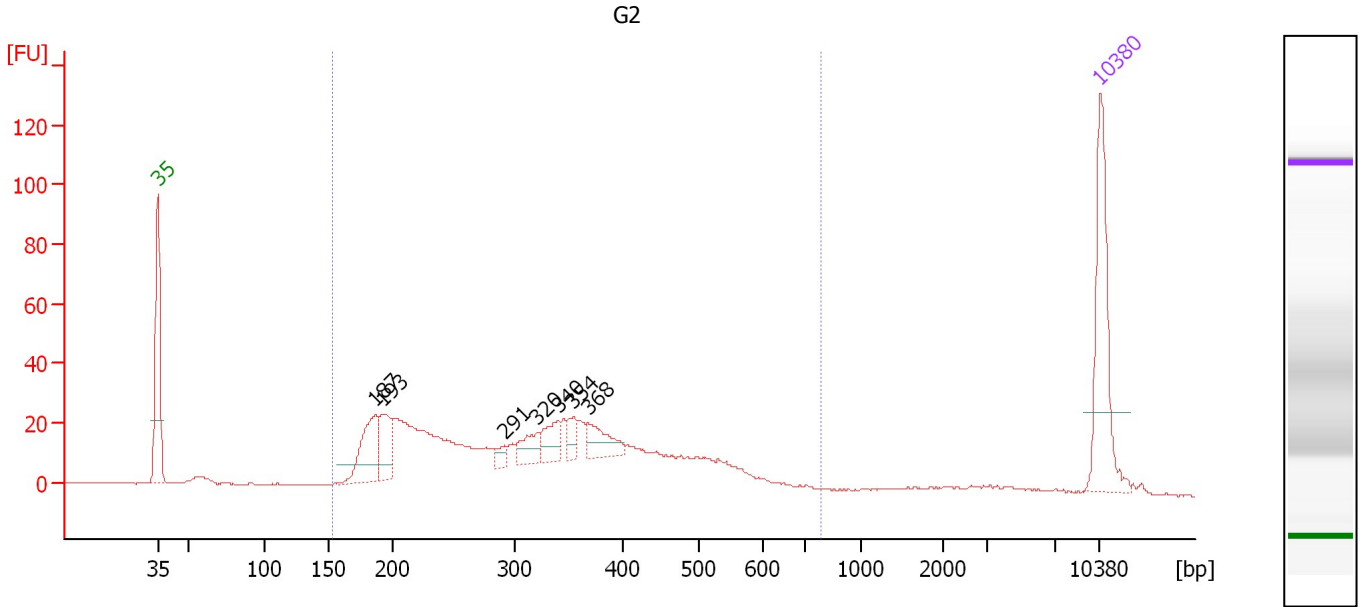
**Region table for sample 1 : G1**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
148	735	344	1,002.23	903.3	5,355.8	95	36.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
 Modified: 5/3/2018 5:15:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : G2**

Number of peaks found: 7                      Corr. Area 1: 726.7  
 Noise: 0.3

**Peak table for sample 2 : G2**

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	61.48	499.2		59.14
3	193	42.85	336.2		59.75
4	291	9.08	47.3		68.71
5	320	22.88	108.4		71.15
6	340	23.68	105.6		72.75
7	354	13.46	57.7		73.87
8	368	26.67	109.9		75.00
9	10,380	75.00	10.9	Upper Marker	113.00

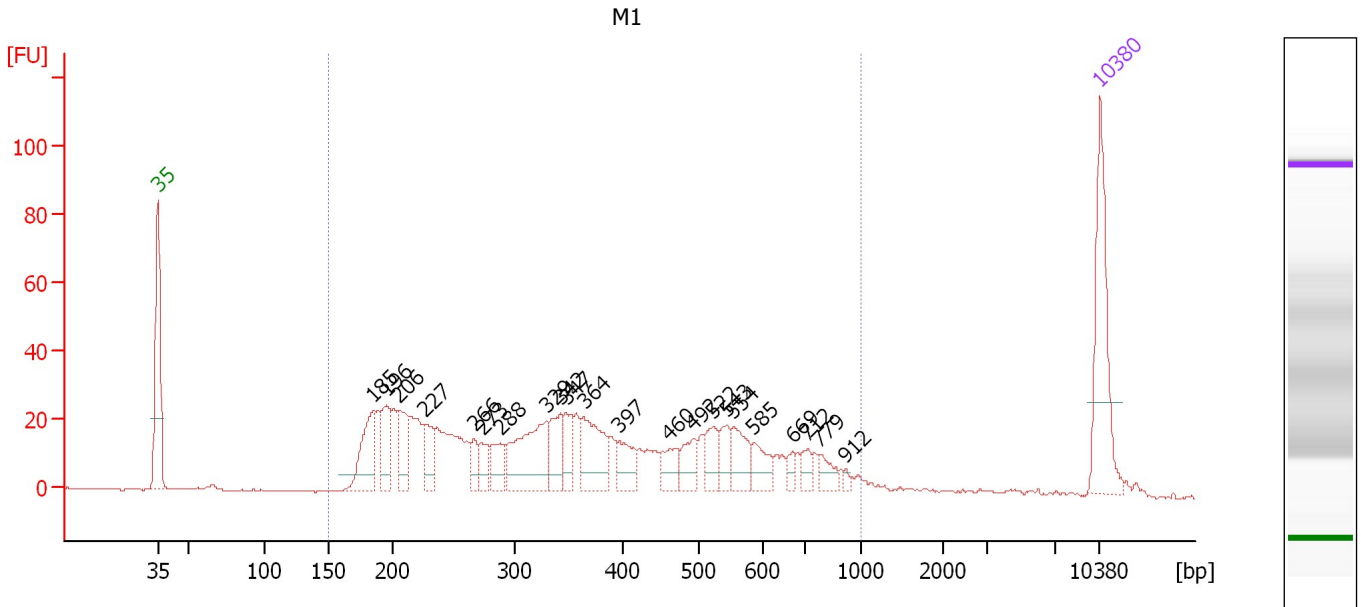
**Region table for sample 2 : G2**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
153	789	334	718.70	726.7	3,895.9	91	34.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
 Modified: 5/3/2018 5:15:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : M1**

Number of peaks found: 22                      Corr. Area 1: 845.7  
 Noise: 0.2


**Peak table for sample 3 : M1**

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	185	67.99	556.6		59.00
3	196	44.10	341.3		60.00
4	206	42.90	316.2		60.91
5	227	31.62	211.1		62.86
6	266	17.51	99.6		66.49
7	273	18.95	105.1		67.11
8	288	25.53	134.5		68.45
9	329	87.19	401.6		71.89
10	342	33.34	147.7		72.94
11	347	27.58	120.5		73.32
12	364	58.50	243.7		74.66
13	397	27.41	104.7		77.28
14	460	22.32	73.5		81.01
15	492	22.85	70.3		82.82
16	522	22.84	66.3		84.30
17	543	19.78	55.2		85.26
18	554	30.42	83.2		85.78
19	585	21.66	56.1		87.26
20	669	7.64	17.3		90.13
21	712	10.48	22.3		91.27
22	779	13.45	26.2		92.18
23	912	3.36	5.6		94.00
24	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
Modified: 5/3/2018 5:15:45 PM

**Electropherogram Summary Continued ...****... Region table for sample 3 : M1**

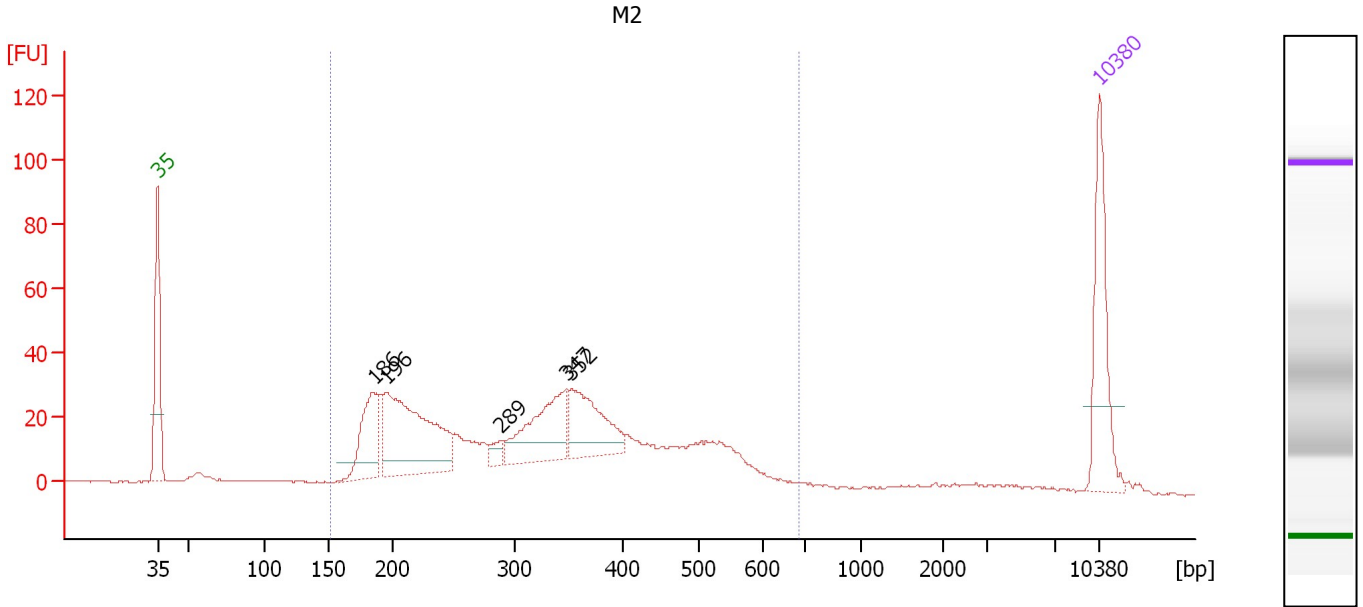
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/ $\mu$ l]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
151	1,000	394	1,003.46	845.7	5,029.9	 95	44.3



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
 Modified: 5/3/2018 5:15:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : M2**

Number of peaks found: 5                      Corr. Area 1: 835.0  
 Noise: 0.2

**Peak table for sample 4 : M2**

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	81.00	660.1		59.08
3	196	205.54	1,586.4		60.05
4	289	12.39	65.1		68.53
5	347	95.26	415.7		73.35
6	352	86.09	370.4		73.74
7	10,380	75.00	10.9	Upper Marker	113.00

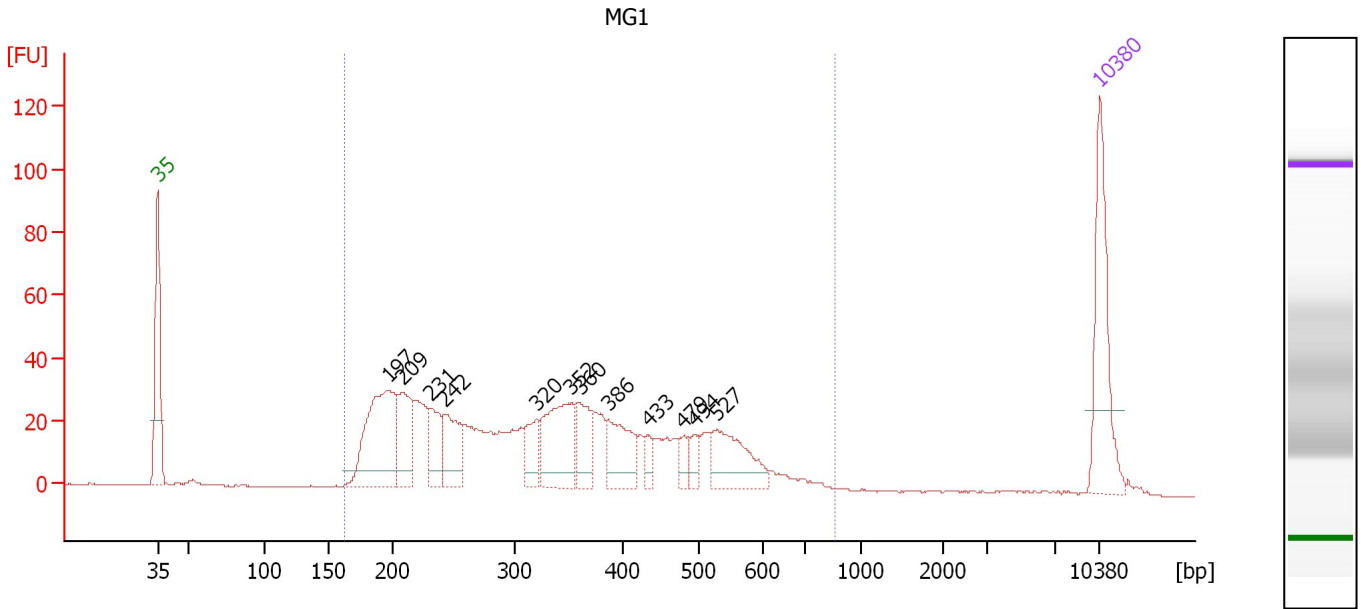
**Region table for sample 4 : M2**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
152	686	336	908.72	835.0	4,905.4	91	34.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
 Modified: 5/3/2018 5:15:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : MG1**

Number of peaks found: 12                      Corr. Area 1: 947.0  
 Noise: 0.2

**Peak table for sample 5 : MG1**

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	197	143.61	1,103.1		60.14
3	209	64.98	472.0		61.19
4	231	40.09	263.1		63.23
5	242	52.91	330.9		64.27
6	320	31.85	151.0		71.15
7	352	83.94	361.2		73.74
8	360	38.61	162.4		74.39
9	386	51.58	202.2		76.48
10	433	12.31	43.1		79.42
11	479	12.79	40.5		82.06
12	494	12.06	37.0		82.91
13	527	62.22	178.7		84.55
14	10,380	75.00	10.9	Upper Marker	113.00

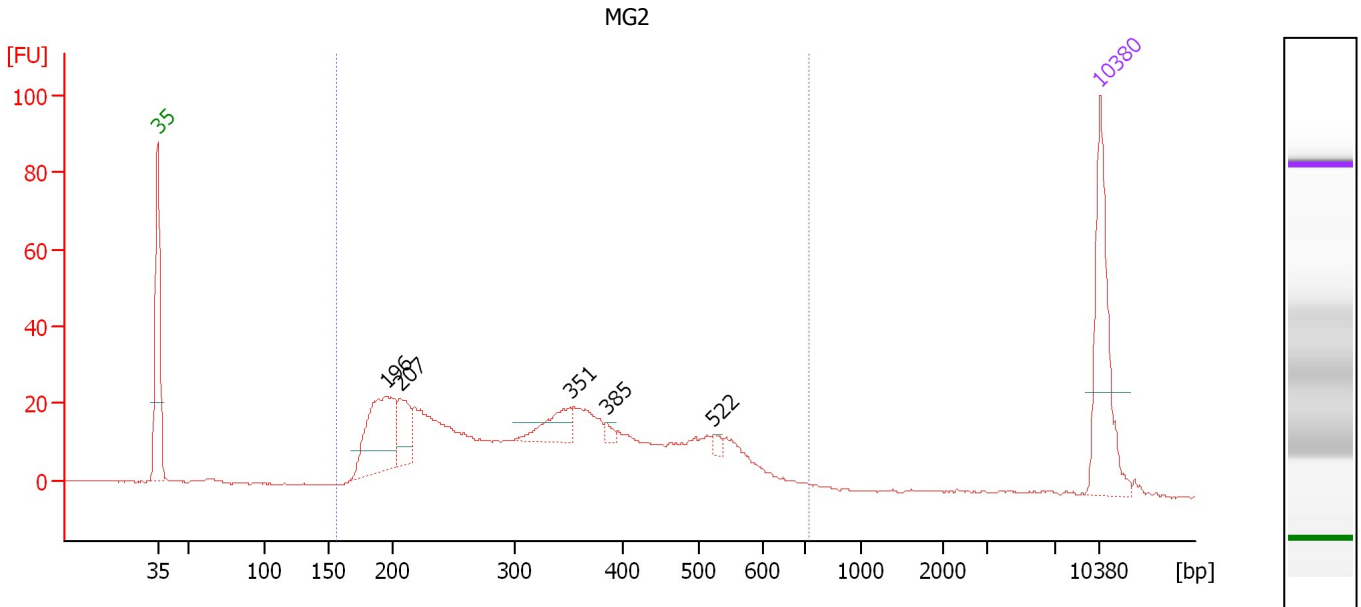
**Region table for sample 5 : MG1**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
163	866	350	951.31	947.0	4,997.3	97	36.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
 Modified: 5/3/2018 5:15:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : MG2**

Number of peaks found: 5                      Corr. Area 1: 662.6  
 Noise: 0.2

**Peak table for sample 6 : MG2**

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	196	106.93	828.4		59.98
3	207	39.88	291.8		61.04
4	351	32.50	140.4		73.62
5	385	4.56	18.0		76.35
6	522	4.72	13.7		84.31
7	10,380	75.00	10.9	Upper Marker	113.00

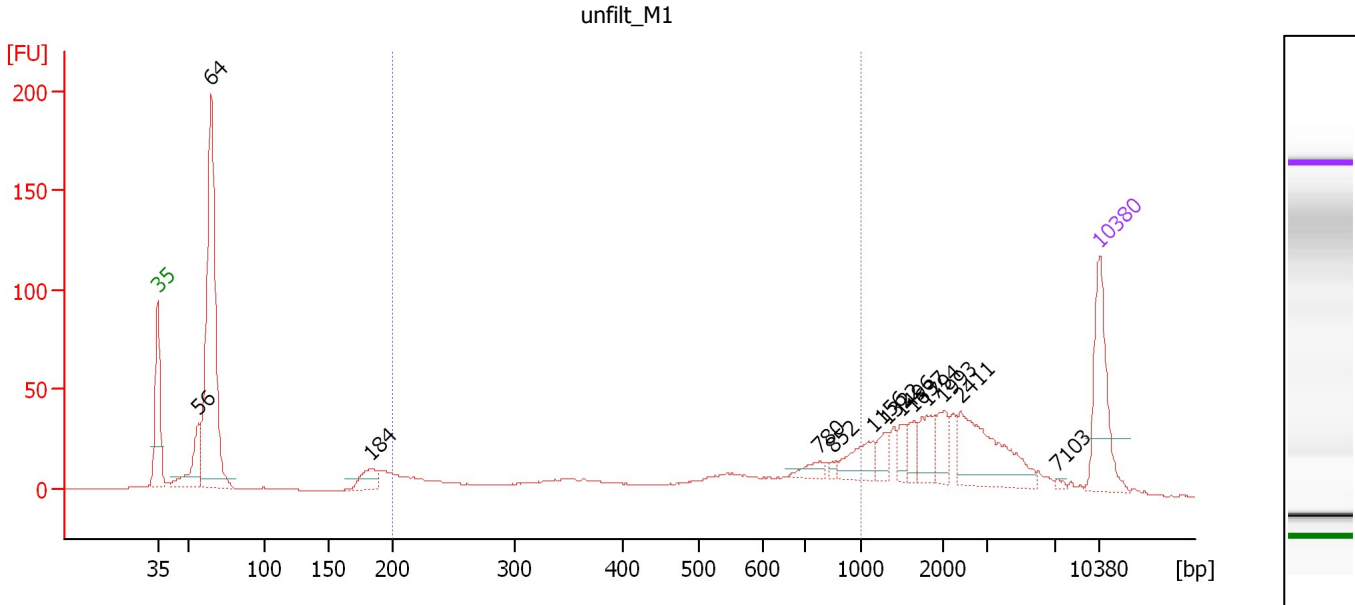
**Region table for sample 6 : MG2**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
156	720	344	779.20	662.6	4,133.2	98	35.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
 Modified: 5/3/2018 5:15:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : unfilt\_M1**

Number of peaks found: 13                      Corr. Area 1: 320.2  
 Noise: 0.3

**Peak table for sample 7 : unfilt\_M1**

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	56	72.87	1,969.9		46.04
3	64	434.18	10,219.1		46.97
4	184	31.33	258.4		58.86
5	780	12.58	24.4		92.19
6	852	4.89	8.7		93.17
7	1,156	31.27	41.0		96.16
8	1,322	18.35	21.0		97.19
9	1,496	14.97	15.2		98.27
10	1,637	15.43	14.3		99.14
11	1,794	28.23	23.8		100.12
12	1,993	24.39	18.5		101.36
13	2,411	86.30	54.2		102.70
14	7,103	2.51	0.5		109.81
15	10,380	75.00	10.9	Upper Marker	113.00

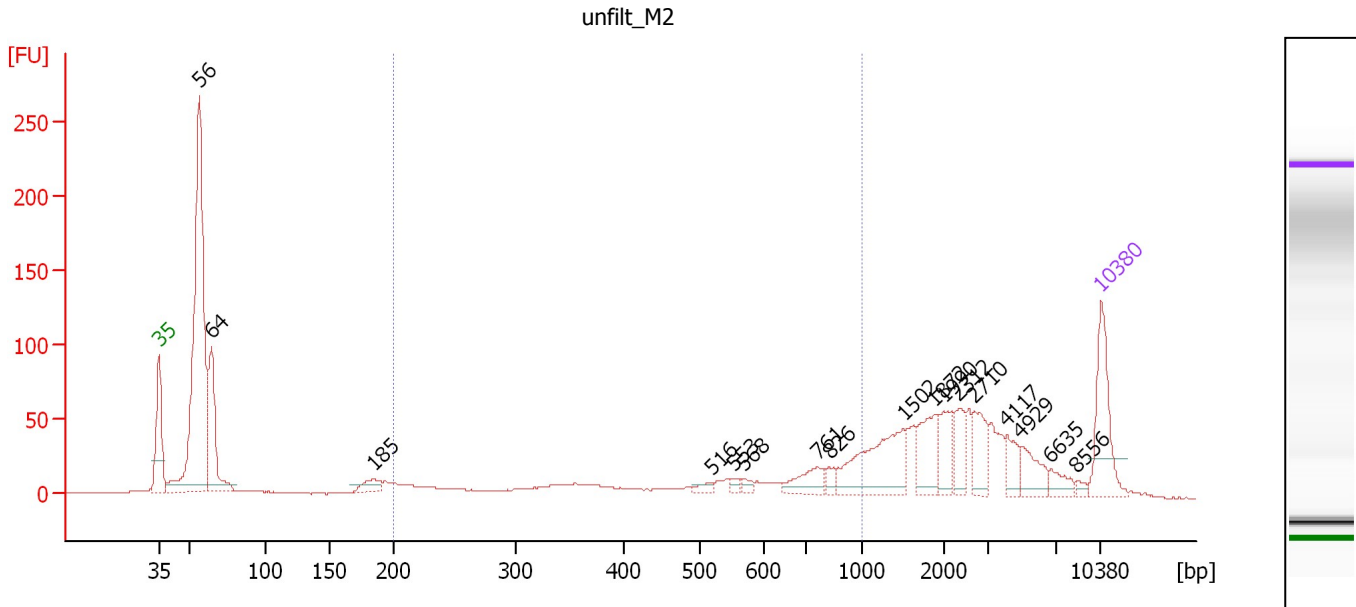
**Region table for sample 7 : unfilt\_M1**

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	549	297.41	320.2	1,129.5	27	42.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
 Modified: 5/3/2018 5:15:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : unfilt\_M2**

Number of peaks found: 17                      Corr. Area 1: 342.7  
 Noise: 0.2

**Peak table for sample 8 : unfilt\_M2**

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	56	623.02	16,861.1		46.03
3	64	158.40	3,752.0		46.92
4	185	23.15	189.5		59.00
5	516	8.51	25.0		84.04
6	553	6.06	16.6		85.76
7	568	7.54	20.1		86.44
8	761	34.03	67.8		91.93
9	826	10.66	19.6		92.82
10	1,502	111.53	112.5		98.31
11	1,872	53.18	43.0		100.61
12	1,990	36.74	28.0		101.34
13	2,312	31.76	20.8		102.39
14	2,710	38.01	21.3		103.64
15	4,117	22.38	8.2		105.99
16	4,929	33.73	10.4		107.04
17	6,635	16.59	3.8		109.24
18	8,556	5.21	0.9		111.22
19	10,380	75.00	10.9	Upper Marker	113.00

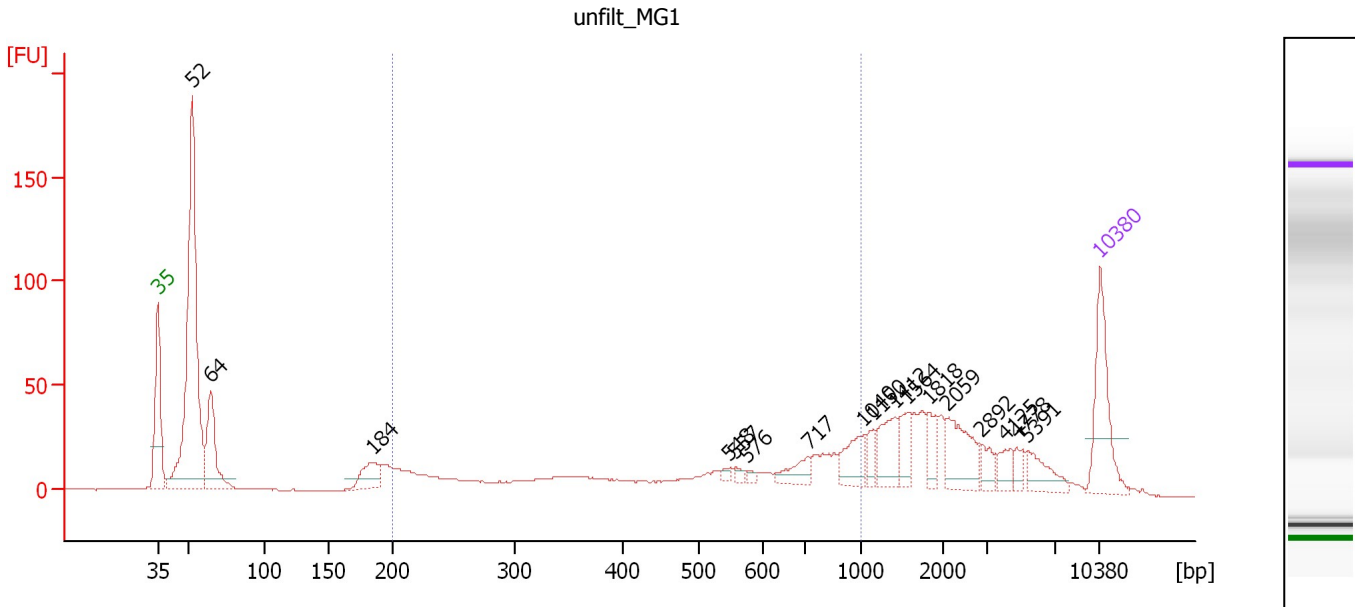
**Region table for sample 8 : unfilt\_M2**

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	571	295.50	342.7	1,061.3	20	40.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
 Modified: 5/3/2018 5:15:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : unfilt\_MG1**

Number of peaks found: 17      Corr. Area 1: 410.0  
 Noise: 0.2

**Peak table for sample 9 : unfilt\_MG1**

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	492.93	14,391.1		45.58
3	64	110.45	2,607.5		46.94
4	184	44.94	369.2		58.94
5	548	5.47	15.1		85.49
6	557	5.54	15.1		85.92
7	576	4.25	11.2		86.81
8	717	24.04	50.8		91.33
9	1,040	37.17	54.2		95.43
10	1,150	15.83	20.9		96.12
11	1,412	42.41	45.5		97.75
12	1,564	24.08	23.3		98.69
13	1,818	23.09	19.2		100.27
14	2,059	52.01	38.3		101.59
15	2,892	14.71	7.7		104.22
16	4,125	16.08	5.9		106.01
17	4,778	10.75	3.4		106.85
18	5,391	28.24	7.9		107.64
19	10,380	75.00	10.9	Upper Marker	113.00

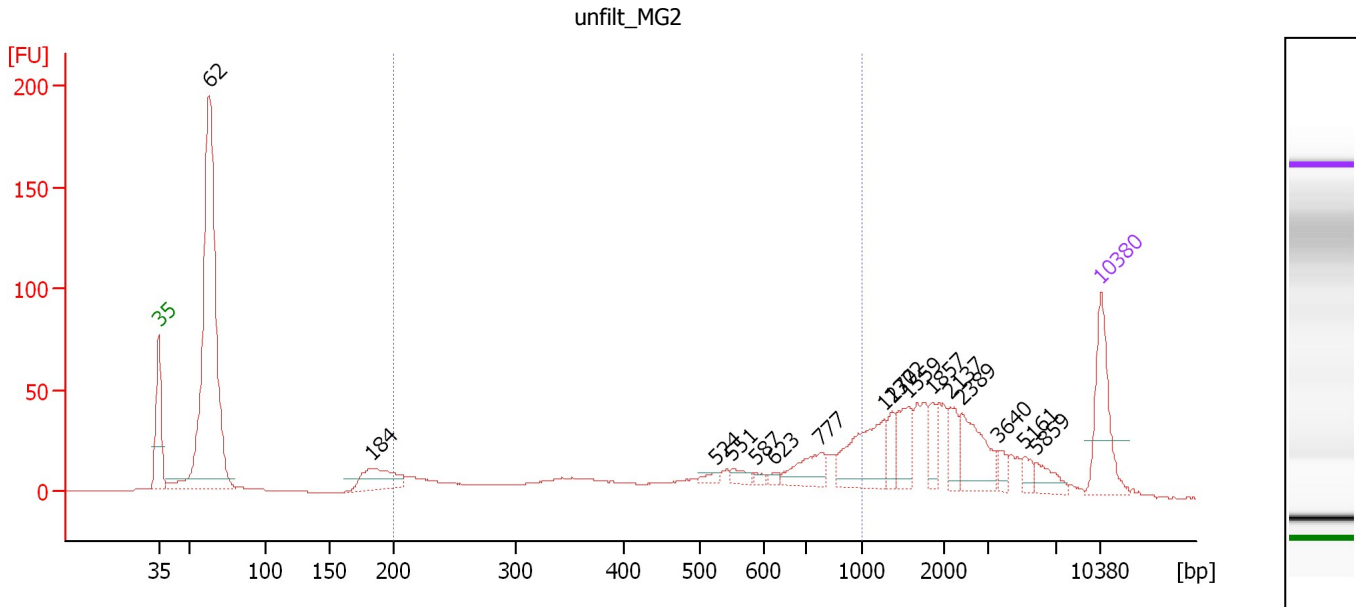
**Region table for sample 9 : unfilt\_MG1**

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	540	430.96	410.0	1,663.4	31	43.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
 Modified: 5/3/2018 5:15:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : unfilt\_MG2**

Number of peaks found: 16                      Corr. Area 1: 401.3  
 Noise: 0.1

**Peak table for sample 10 : unfilt\_MG2**

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	718.95	17,431.2		46.76
3	184	67.56	557.1		58.87
4	524	7.78	22.5		84.38
5	551	11.56	31.8		85.65
6	587	5.10	13.2		87.34
7	623	5.28	12.9		88.66
8	777	42.73	83.3		92.15
9	1,270	82.78	98.8		96.86
10	1,372	21.63	23.9		97.50
11	1,559	41.58	40.4		98.66
12	1,857	24.84	20.3		100.51
13	2,137	24.23	17.2		101.84
14	2,389	58.72	37.2		102.63
15	3,640	10.90	4.5		105.38
16	5,161	12.22	3.6		107.34
17	5,859	19.24	5.0		108.24
18	10,380	75.00	10.9	Upper Marker	113.00

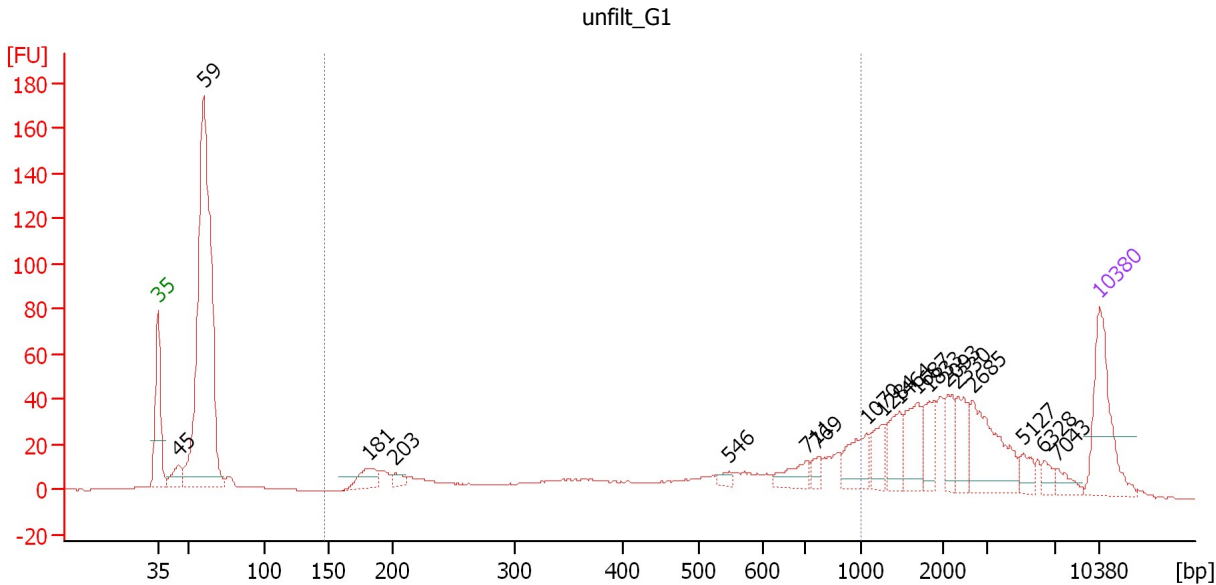
**Region table for sample 10 : unfilt\_MG2**

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	558	430.24	401.3	1,591.3	28	41.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
 Modified: 5/3/2018 5:15:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : unfilt\_G1**

Number of peaks found: 18                      Corr. Area 1: 383.6  
 Noise: 0.2

**Peak table for sample 11 : unfilt\_G1**

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	45	30.01	1,014.9		44.55
3	59	615.27	15,694.6		46.41
4	181	32.87	275.1		58.62
5	203	9.61	71.8		60.65
6	546	6.86	19.0		85.44
7	711	23.99	51.2		91.25
8	769	11.15	22.0		92.05
9	1,070	38.12	54.0		95.62
10	1,284	25.53	30.1		96.95
11	1,464	33.64	34.8		98.07
12	1,687	41.16	37.0		99.46
13	1,833	26.78	22.1		100.36
14	2,093	24.69	17.9		101.70
15	2,330	30.33	19.7		102.44
16	2,685	74.87	42.2		103.56
17	5,127	13.42	4.0		107.30
18	6,328	9.32	2.2		108.84
19	7,043	10.76	2.3		109.75
20	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : unfilt\_G1**

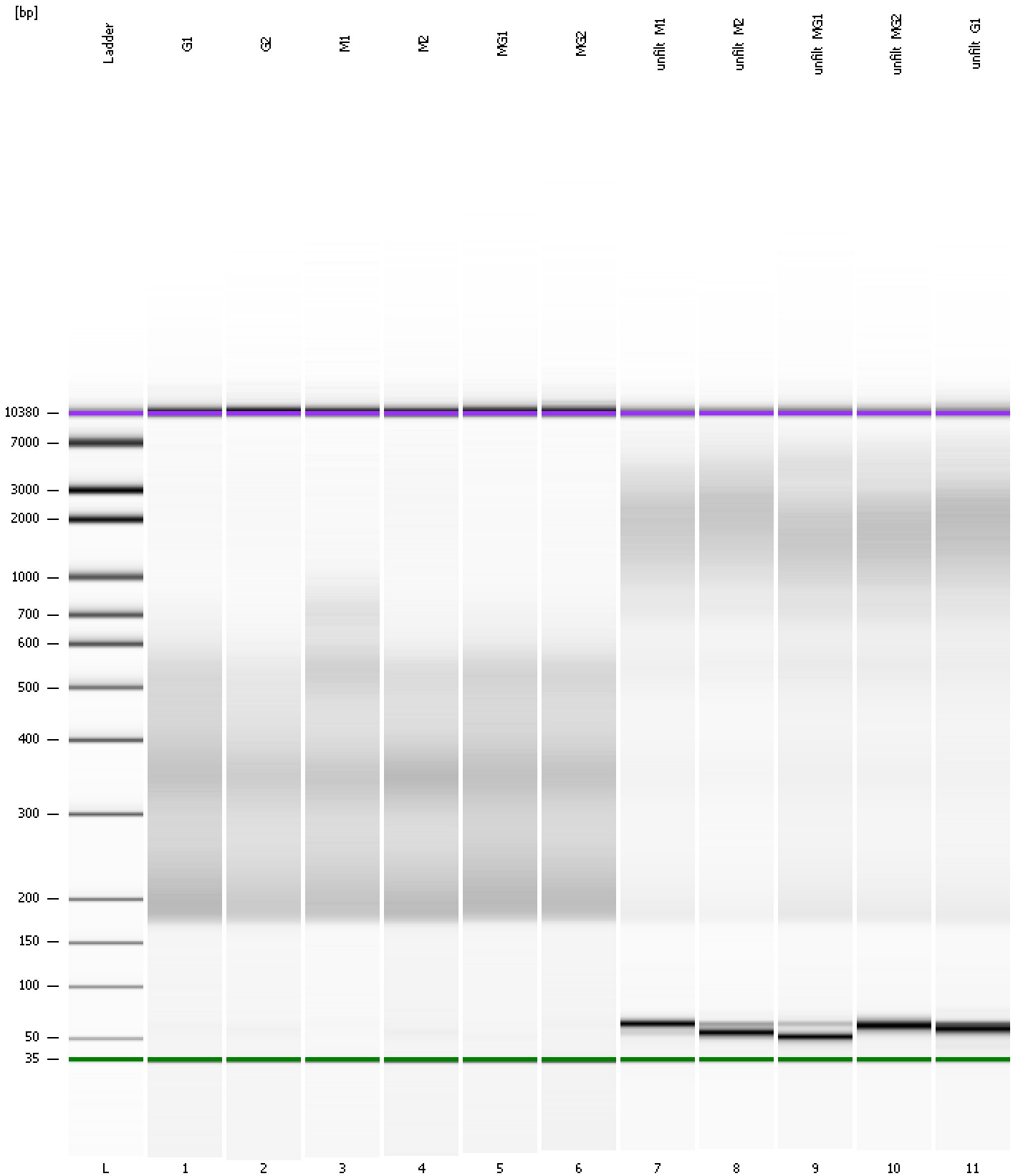
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
147	1,000	523	405.78	383.6	1,778.4	29	47.0



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
Modified: 5/3/2018 5:15:45 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-05-03\2018-05-03\_002.xad

Created: 5/3/2018 4:25:44 PM  
Modified: 5/3/2018 5:15:45 PM

**Curves**

**Standard Curve**

