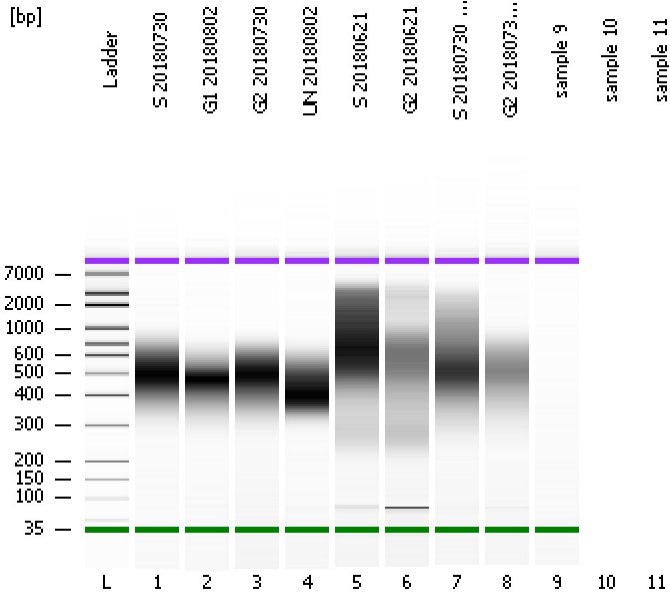


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
Modified: 8/2/2018 12:51:56 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

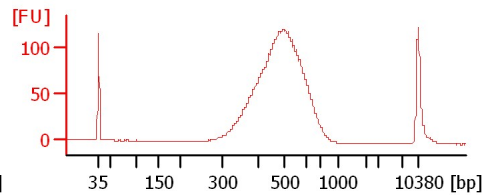
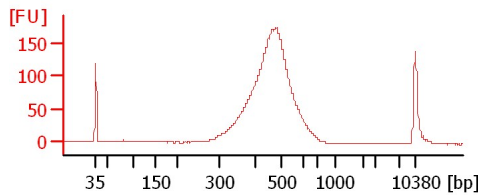
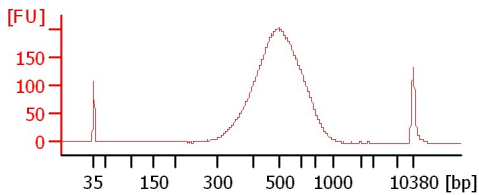
Chip Information:

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

**S 20180730**

**G1 20180802**

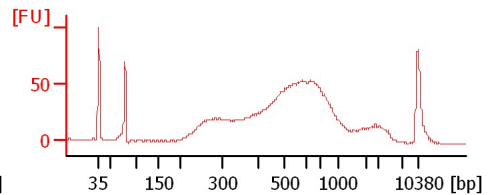
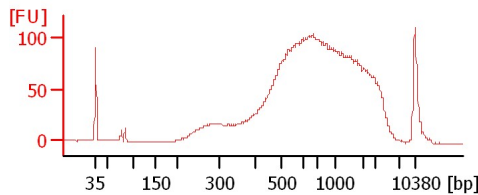
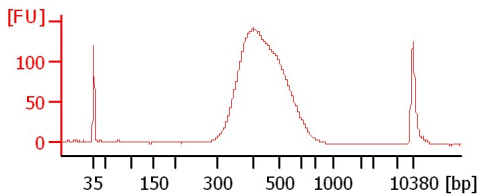
**G2 20180730**



**UN 20180802**

**S 20180621**

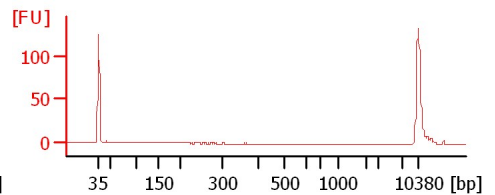
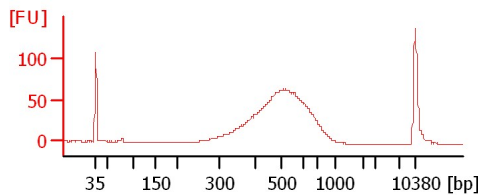
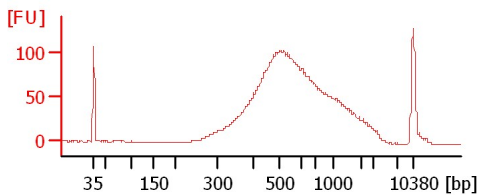
**G2 20180621**



**S 20180730 ss1**

**G2 20180730 ss1**

**sample 9**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
Modified: 8/2/2018 12:51:56 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
S 20180730		<input type="checkbox"/>	✓			
G1 20180802		<input type="checkbox"/>	✓			
G2 20180730		<input type="checkbox"/>	✓			
UN 20180802		<input type="checkbox"/>	✓			
S 20180621		<input type="checkbox"/>	✓			
G2 20180621		<input type="checkbox"/>	✓			
S 20180730 ss1		<input type="checkbox"/>	✓			
G2 20180730 ss1		<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\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
Modified: 8/2/2018 12:51:56 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

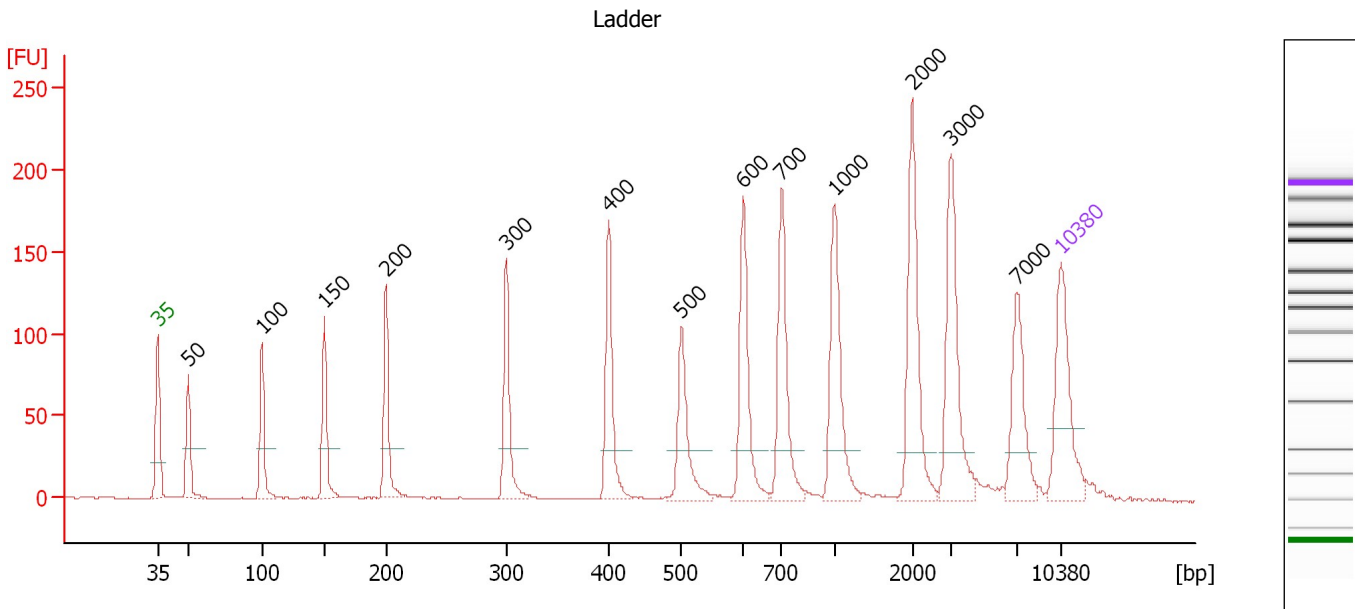
**Ladder**

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\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
 Modified: 8/2/2018 12:51:56 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.3

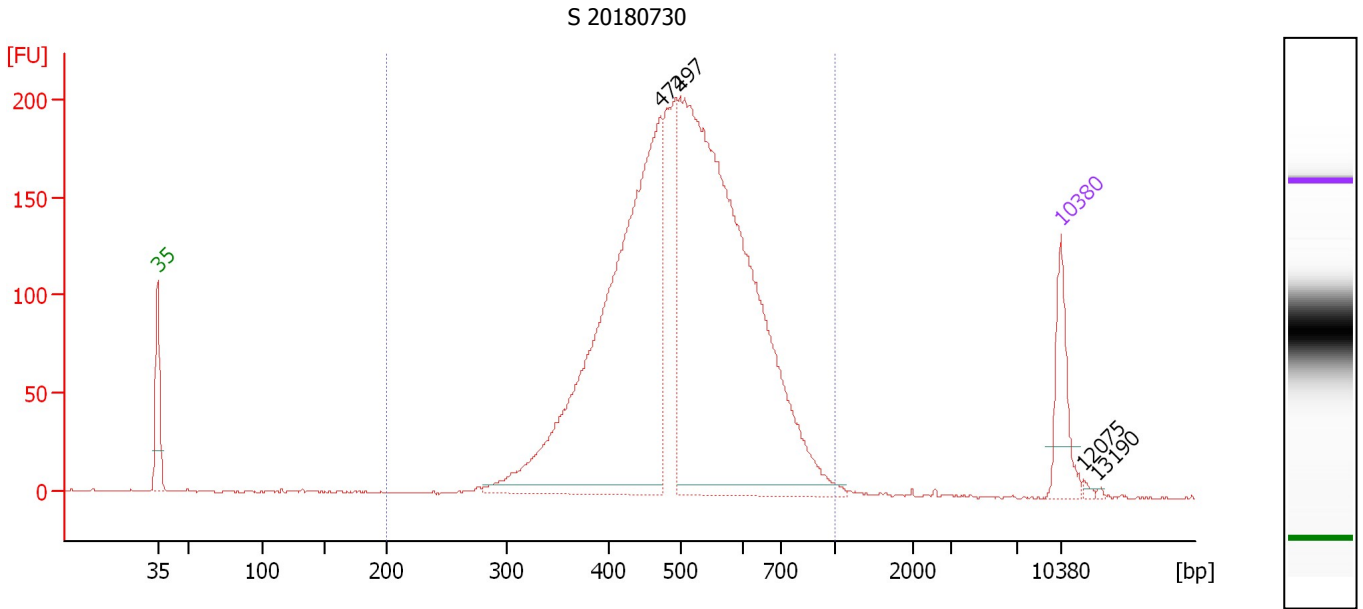
**Peak table for Ladder**

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	51.09
4	150	150.00	1,515.2	Ladder Peak	55.92
5	200	150.00	1,136.4	Ladder Peak	60.70
6	300	150.00	757.6	Ladder Peak	70.04
7	400	150.00	568.2	Ladder Peak	77.96
8	500	150.00	454.5	Ladder Peak	83.59
9	600	150.00	378.8	Ladder Peak	88.37
10	700	150.00	324.7	Ladder Peak	91.37
11	1,000	150.00	227.3	Ladder Peak	95.43
12	2,000	150.00	113.6	Ladder Peak	101.47
13	3,000	150.00	75.8	Ladder Peak	104.46
14	7,000	150.00	32.5	Ladder Peak	109.56
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
 Modified: 8/2/2018 12:51:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : S 20180730**

Number of peaks found: 4                      Corr. Area 1: 3,162.0  
 Noise: 0.5

**Peak table for sample 1 : S 20180730**

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	472	1,070.90	3,436.4		82.02
3	497	1,371.41	4,179.4		83.43
4	10,380	75.00	10.9	Upper Marker	113.00
5	12,075	0.00	0.0		114.73
6	13,190	0.00	0.0		115.86

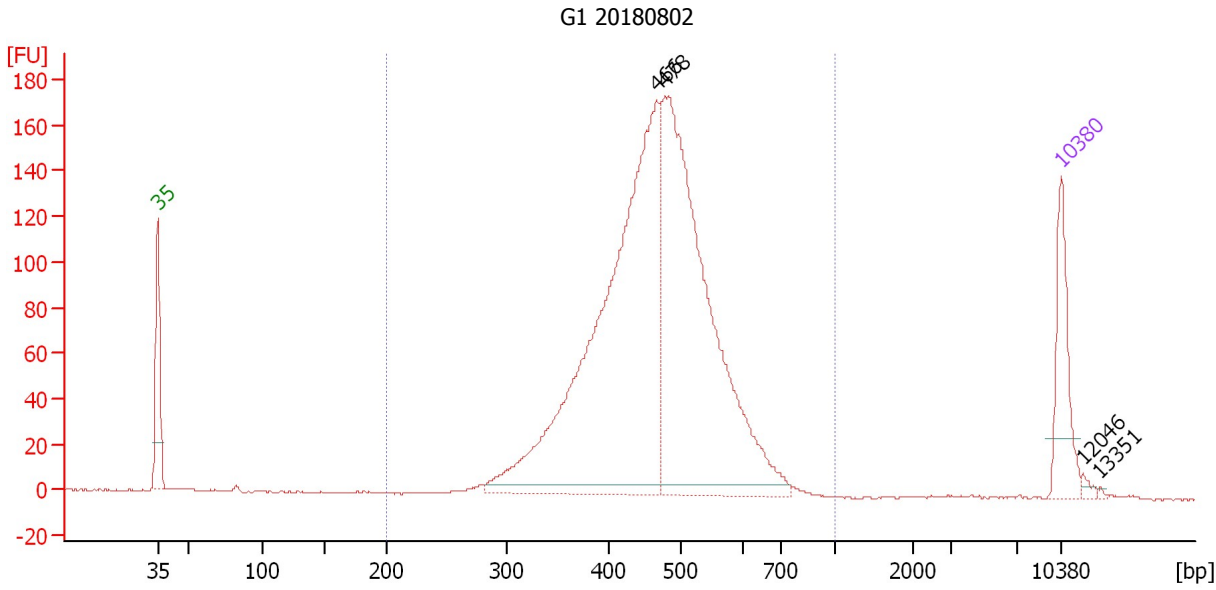
**Region table for sample 1 : S 20180730**

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	509	2,649.92	3,162.0	8,354.5	98	21.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
 Modified: 8/2/2018 12:51:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : G1 20180802**

Number of peaks found: 4                      Corr. Area 1: 2,085.1  
 Noise: 0.4

**Peak table for sample 2 : G1 20180802**

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	466	872.75	2,840.7		81.64
3	478	743.77	2,359.0		82.33
4	10,380	75.00	10.9	Upper Marker	113.00
5	12,046	0.00	0.0		114.70
6	13,351	0.00	0.0		116.03

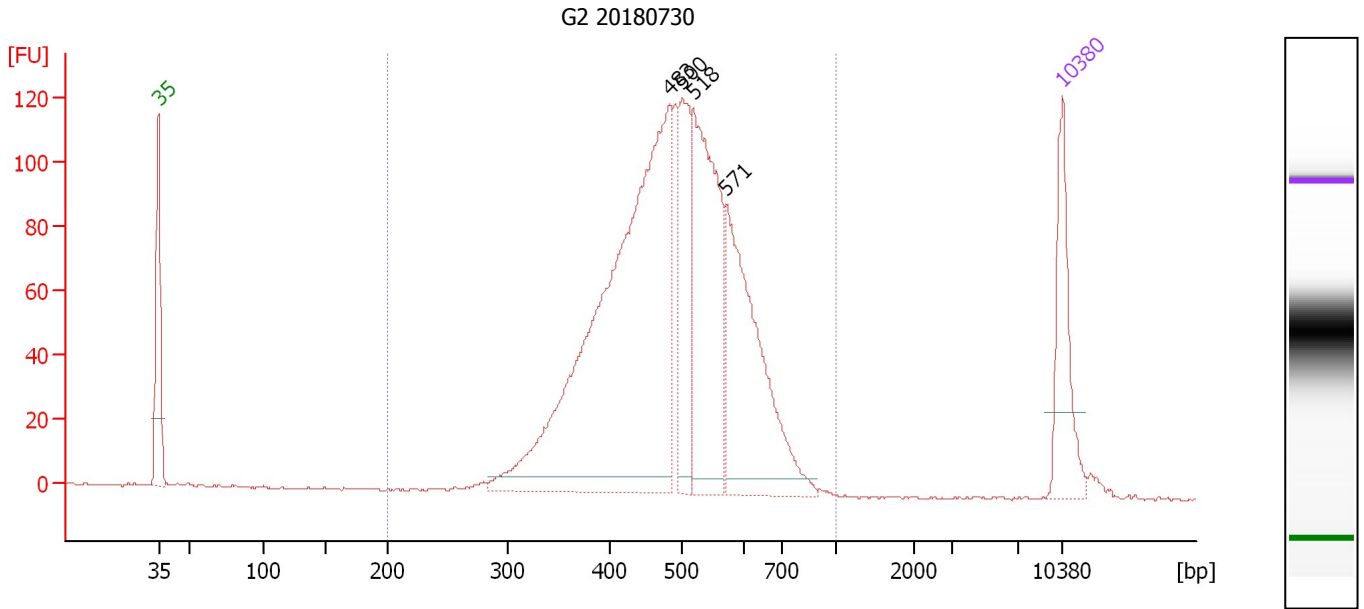
**Region table for sample 2 : G1 20180802**

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	465	1,646.23	2,085.1	5,571.9	99	16.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
 Modified: 8/2/2018 12:51:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : G2 20180730**

Number of peaks found: 4                      Corr. Area 1: 1,792.5  
 Noise: 0.3

**Peak table for sample 3 : G2 20180730**

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	483	755.16	2,370.3		82.61
3	500	124.32	376.7		83.59
4	518	276.50	809.3		84.43
5	571	253.21	671.6		86.99
6	10,380	75.00	10.9	Upper Marker	113.00

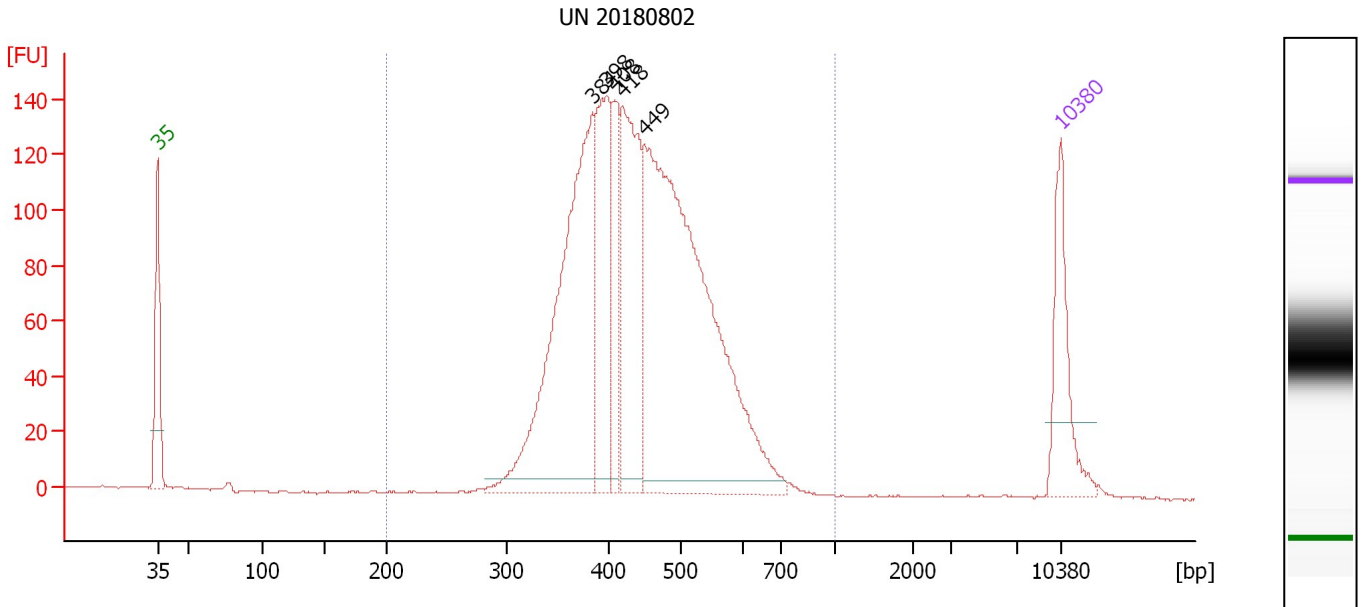
**Region table for sample 3 : G2 20180730**

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	491	1,498.83	1,792.5	4,854.1	99	18.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
 Modified: 8/2/2018 12:51:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : UN 20180802**

Number of peaks found: 5                      Corr. Area 1: 2,165.1  
 Noise: 0.3

**Peak table for sample 4 : UN 20180802**

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	384	448.58	1,768.1		76.72
3	398	180.09	686.3		77.76
4	408	85.69	317.9		78.43
5	418	222.01	803.9		78.99
6	449	691.11	2,333.6		80.70
7	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : UN 20180802**

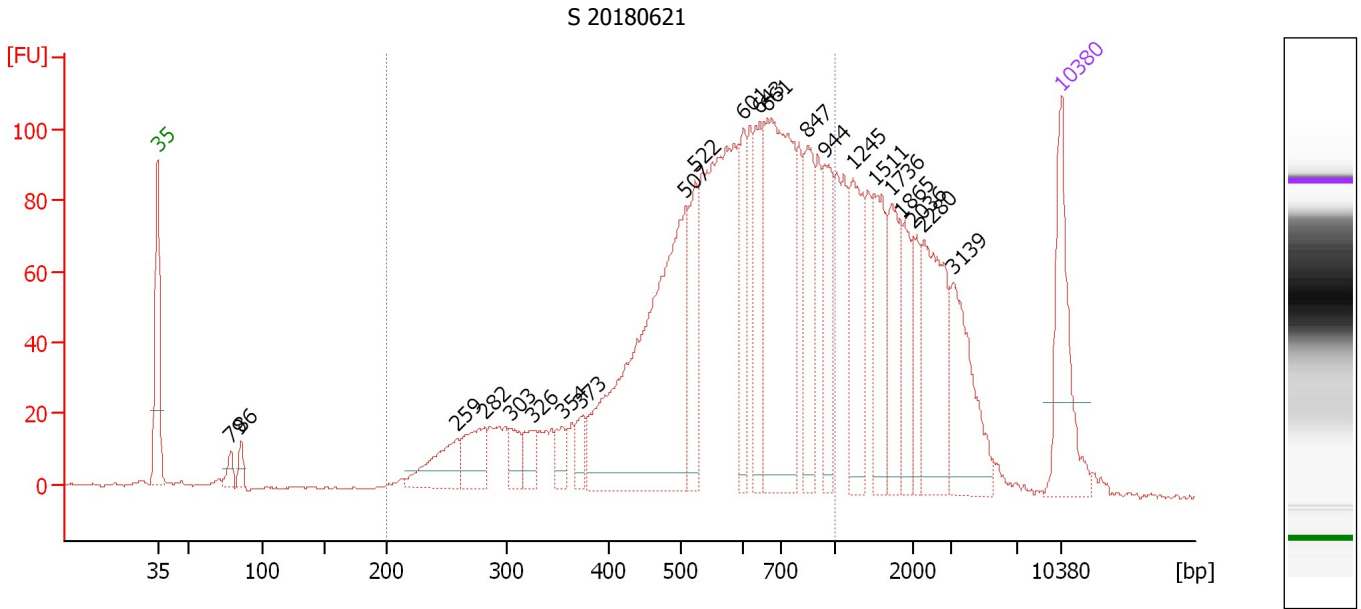
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	445	1,626.20	2,165.1	5,756.0	99	17.6



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
 Modified: 8/2/2018 12:51:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : S 20180621**

Number of peaks found: 22      Corr. Area 1: 1,998.6  
 Noise: 0.3

**Peak table for sample 5 : S 20180621**

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	13.38	256.6		48.69
3	86	13.89	245.3		49.47
4	259	56.78	332.5		66.19
5	282	49.43	265.9		68.33
6	303	24.46	122.1		70.32
7	326	24.01	111.5		72.12
8	354	20.37	87.1		74.35
9	373	18.17	73.8		75.81
10	507	376.65	1,125.2		83.93
11	522	72.17	209.3		84.66
12	601	58.91	148.5		88.40
13	643	79.67	187.7		89.67
14	661	245.64	562.9		90.20
15	847	76.50	136.8		93.36
16	944	65.41	105.0		94.67
17	1,245	79.07	96.3		96.91
18	1,511	66.47	66.7		98.51
19	1,736	61.28	53.5		99.88
20	1,865	46.32	37.6		100.65
21	2,036	29.84	22.2		101.58
22	2,280	97.10	64.5		102.31
23	3,139	78.55	37.9		104.64
24	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
Modified: 8/2/2018 12:51:56 PM

**Electropherogram Summary Continued ...**

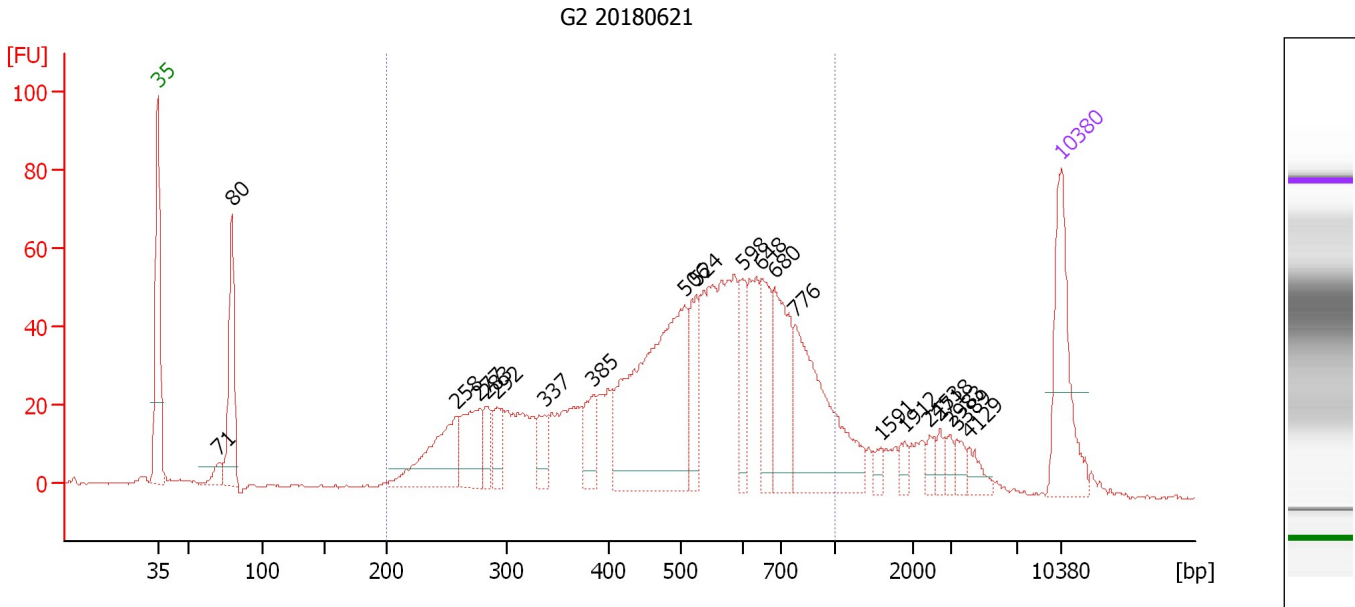
... Region table for sample 5 : S 20180621

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/ $\mu$ l]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	589	1,718.01	1,998.6	5,218.0	 69	30.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
 Modified: 8/2/2018 12:51:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : G2 20180621**

Number of peaks found: 21                      Corr. Area 1: 1,288.2  
 Noise: 0.5

**Peak table for sample 6 : G2 20180621**

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	71	15.53	331.6		47.77
3	80	112.83	2,147.0		48.76
4	258	94.74	556.0		66.13
5	277	64.35	351.6		67.92
6	283	24.32	130.1		68.47
7	292	30.88	160.2		69.31
8	337	25.34	113.9		72.99
9	385	33.02	130.0		76.76
10	506	275.04	824.1		83.86
11	524	51.62	149.2		84.75
12	598	39.11	99.1		88.28
13	648	53.48	125.0		89.82
14	680	88.53	197.3		90.76
15	776	147.02	287.0		92.40
16	1,591	7.12	6.8		99.00
17	1,912	8.15	6.5		100.94
18	2,453	8.91	5.5		102.82
19	2,718	7.64	4.3		103.62
20	2,983	8.95	4.5		104.41
21	3,389	9.68	4.3		104.96
22	4,129	12.46	4.6		105.90
23	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
Modified: 8/2/2018 12:51:56 PM

**Electropherogram Summary Continued ...**

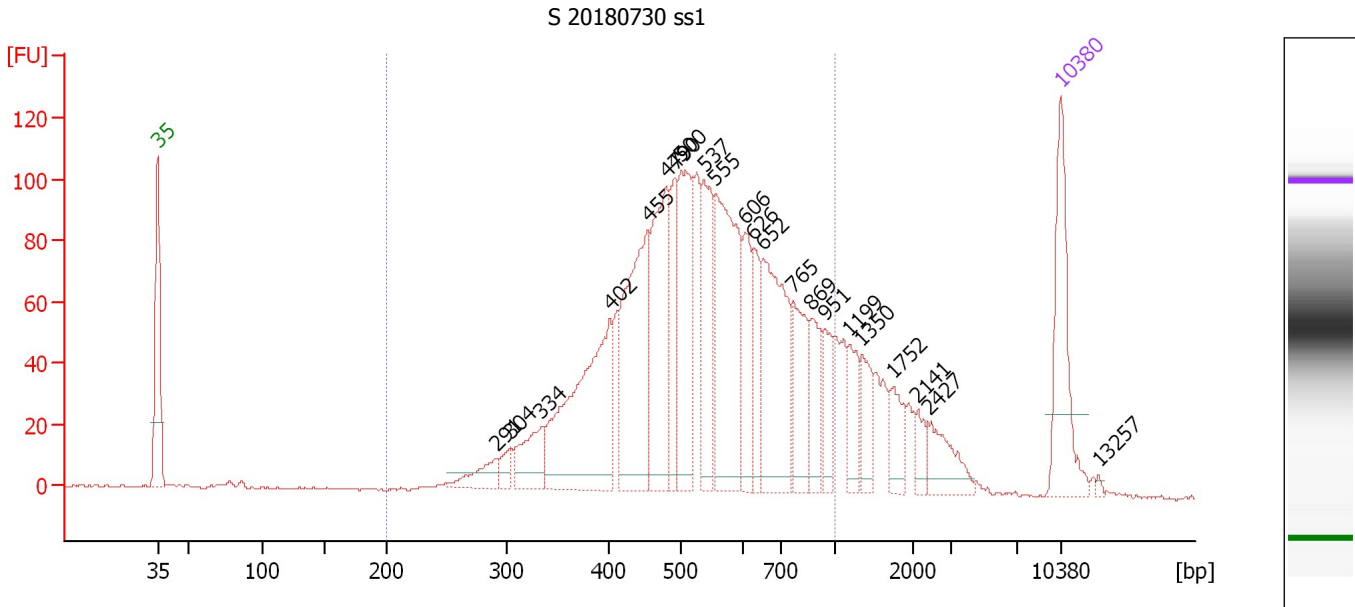
... Region table for sample 6 : G2 20180621

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/ $\mu$ l]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	520	1,374.33	1,288.2	4,817.4	 83	33.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
 Modified: 8/2/2018 12:51:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : S 20180730 ss1**

Number of peaks found: 22      Corr. Area 1: 1,983.3  
 Noise: 0.3

**Peak table for sample 7 : S 20180730 ss1**

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	291	28.55	148.6		69.21
3	304	14.82	73.8		70.37
4	334	49.76	225.6		72.75
5	402	200.96	758.0		78.05
6	455	182.65	608.8		81.03
7	479	142.61	451.3		82.39
8	490	66.58	205.7		83.05
9	500	120.03	363.5		83.61
10	537	90.09	254.0		85.37
11	555	177.05	483.1		86.23
12	606	57.52	143.8		88.56
13	626	44.24	107.0		89.16
14	652	139.92	325.3		89.92
15	765	62.54	123.9		92.24
16	869	42.01	73.2		93.66
17	951	31.91	50.8		94.77
18	1,199	29.95	37.8		96.64
19	1,350	30.89	34.7		97.55
20	1,752	24.73	21.4		99.97
21	2,141	15.24	10.8		101.89
22	2,427	32.07	20.0		102.75
23	10,380	75.00	10.9	Upper Marker	113.00
24	13,257	0.00	0.0		115.93

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
Modified: 8/2/2018 12:51:56 PM

**Electropherogram Summary Continued ...**

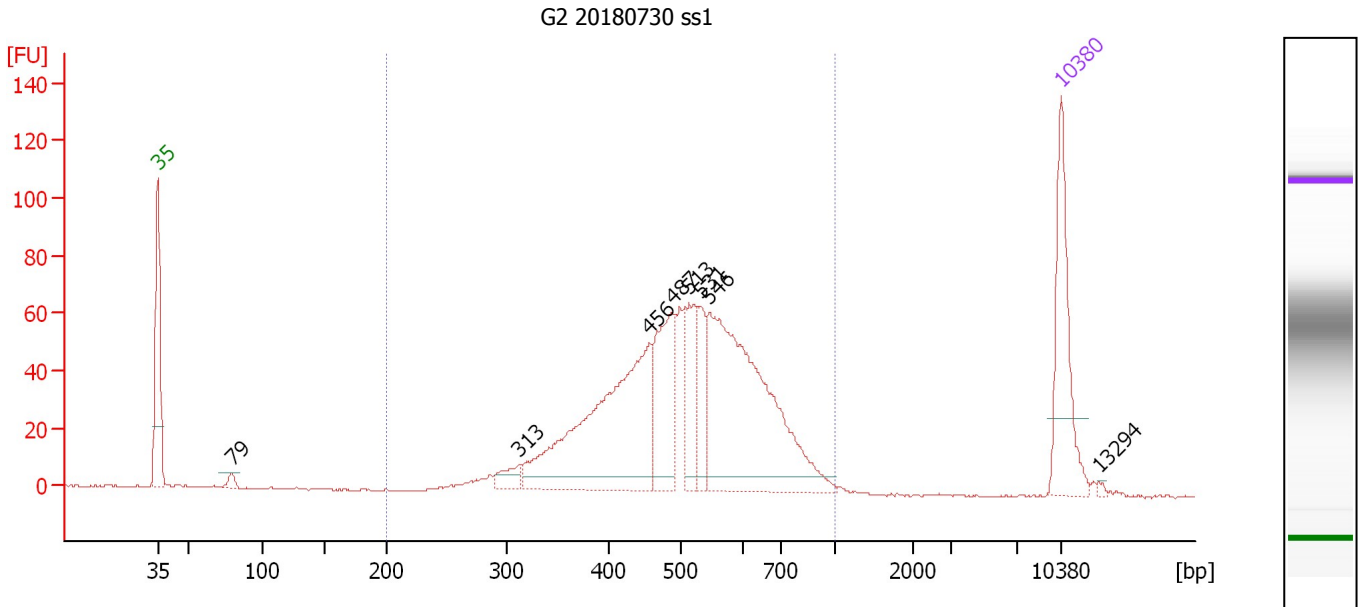
... Region table for sample 7 : S 20180730 ss1

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/ $\mu$ l]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	547	1,597.98	1,983.3	4,919.0	 85	28.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
 Modified: 8/2/2018 12:51:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : G2 20180730 ss1**

Number of peaks found: 8                      Corr. Area 1: 1,094.1  
 Noise: 0.3

**Peak table for sample 8 : G2 20180730 ss1**

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	7.95	151.8		48.73
3	313	17.34	84.0		71.04
4	456	264.44	878.2		81.12
5	487	96.57	300.4		82.86
6	513	64.50	190.6		84.19
7	531	38.31	109.3		85.06
8	546	289.87	804.7		85.78
9	10,380	75.00	10.9	Upper Marker	113.00
10	13,294	0.00	0.0		115.97

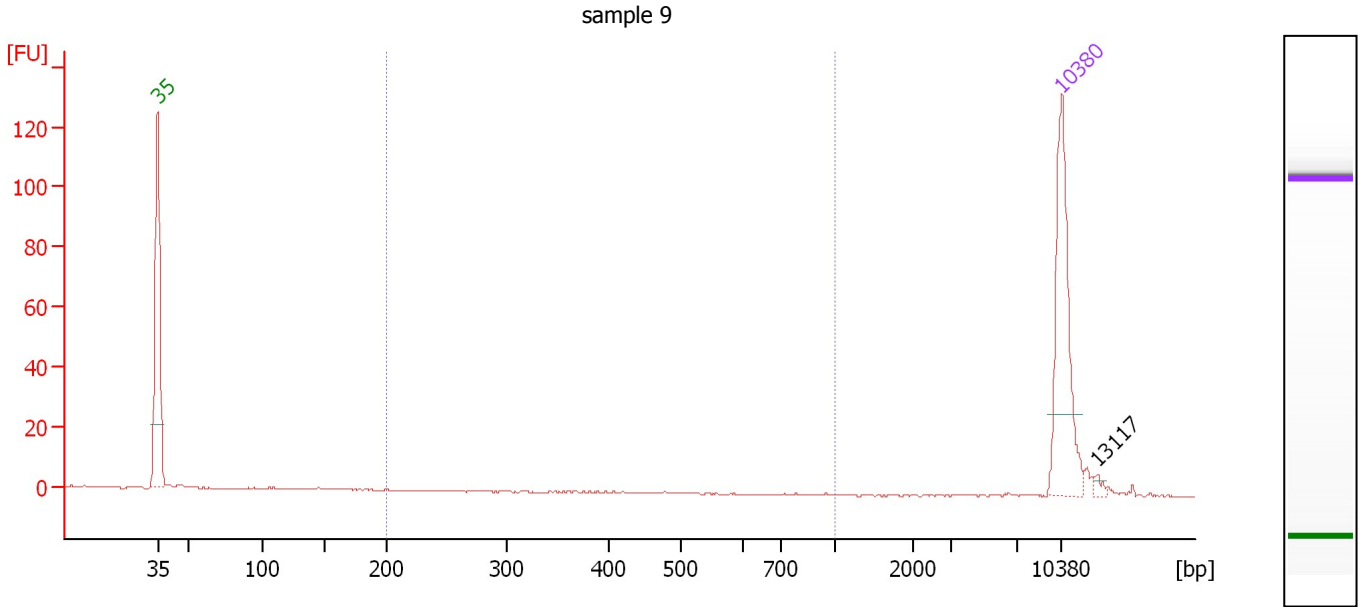
**Region table for sample 8 : G2 20180730 ss1**

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	512	850.21	1,094.1	2,716.6	98	23.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
 Modified: 8/2/2018 12:51:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : sample 9**

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

**Peak table for sample 9 : sample 9**

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	13,117	0.00	0.0		115.79

**Region table for sample 9 : sample 9**

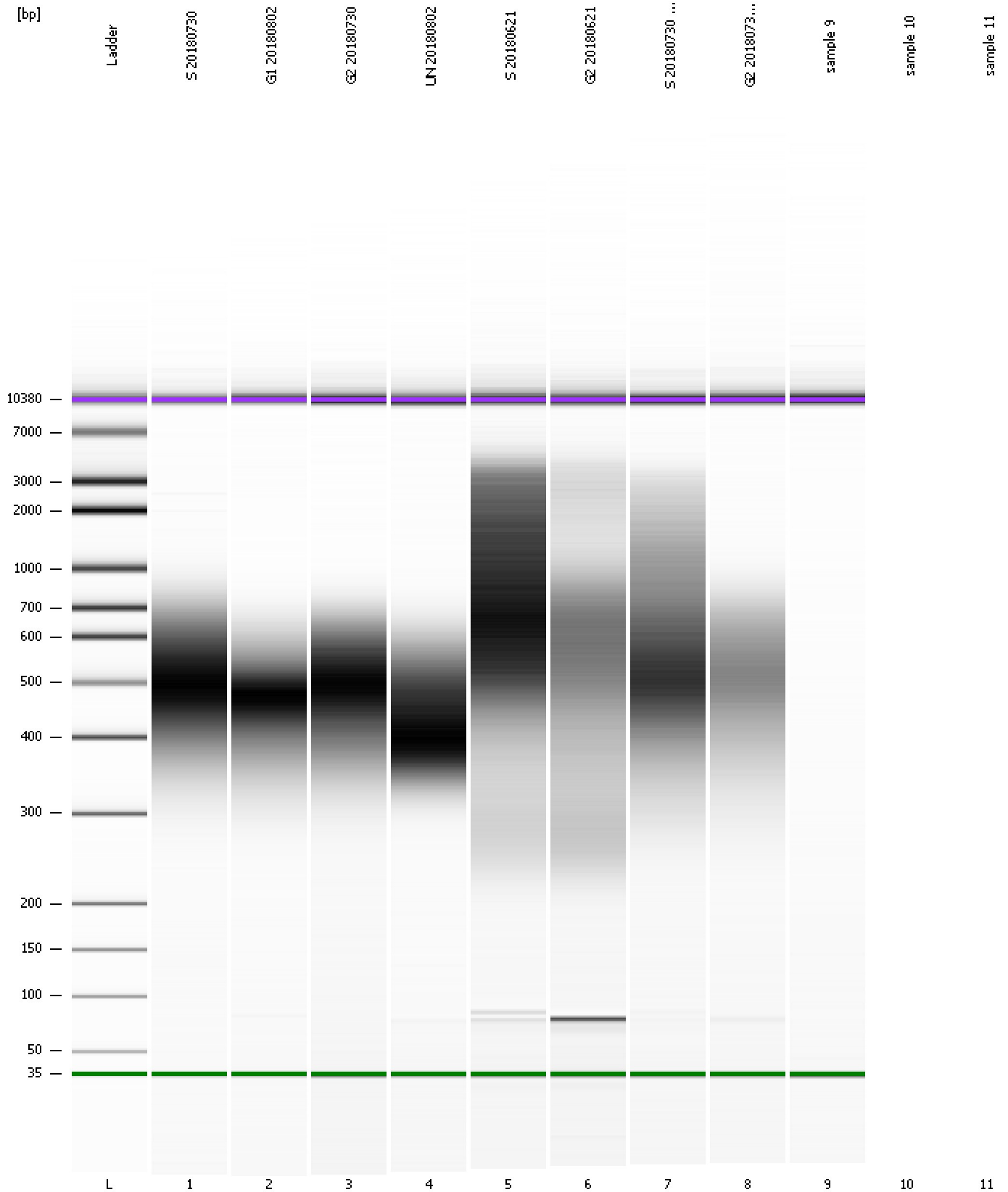
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	336	0.15	0.2	0.8	1	26.0



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
Modified: 8/2/2018 12:51:56 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-02\2018-08-02\_001.xad

Created: 8/2/2018 12:16:19 PM  
Modified: 8/2/2018 12:51:56 PM

**Invalid Samples**

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.