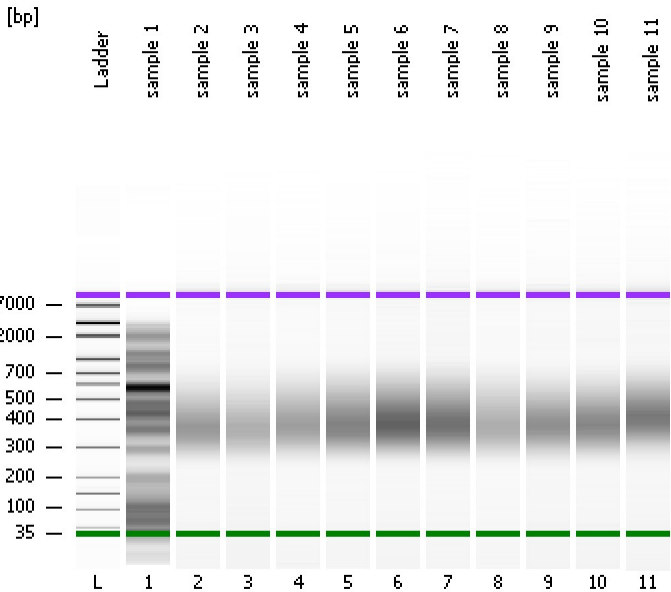


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02\_002.xad

Created: 6/2/2015 11:18:47 AM  
Modified: 6/2/2015 11:59:13 AM

**Electrophoresis File Run Summary**



Instrument Information:

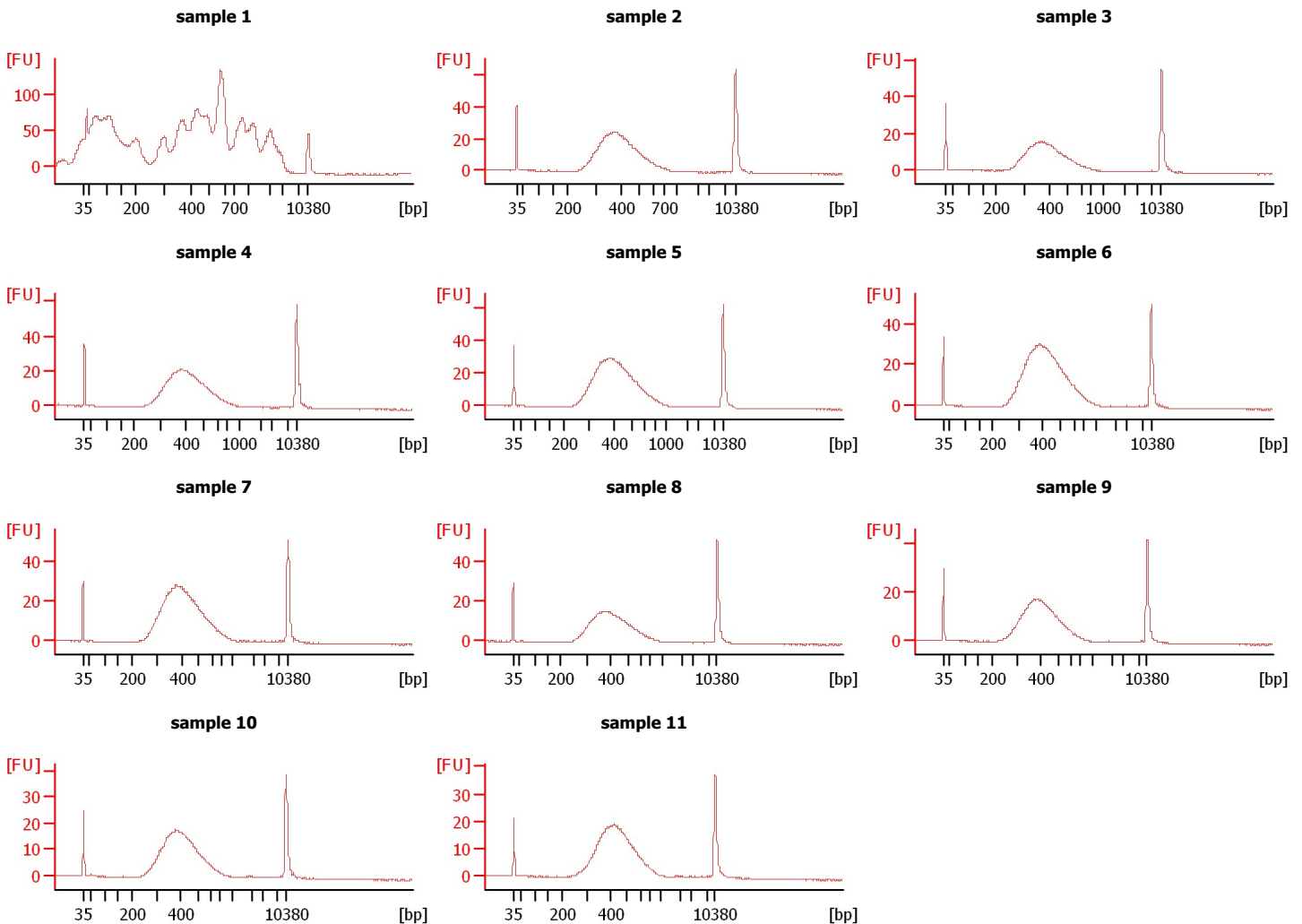
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02\_002.xad

Created: 6/2/2015 11:18:47 AM  
 Modified: 6/2/2015 11:59:13 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		<input type="checkbox"/>	✓			
sample 2		<input type="checkbox"/>	✓			
sample 3		<input type="checkbox"/>	✓			
sample 4		<input type="checkbox"/>	✓			
sample 5		<input type="checkbox"/>	✓			
sample 6		<input type="checkbox"/>	✓			
sample 7		<input type="checkbox"/>	✓			
sample 8		<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:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02\_002.xad

Created: 6/2/2015 11:18:47 AM  
Modified: 6/2/2015 11:59:13 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/ $\mu$ l] : 1950  
Uses Standard Area for Ladder Fragments  
Lower Marker Concentration [pg/ $\mu$ l] : 125  
Upper Marker Concentration [pg/ $\mu$ l] : 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

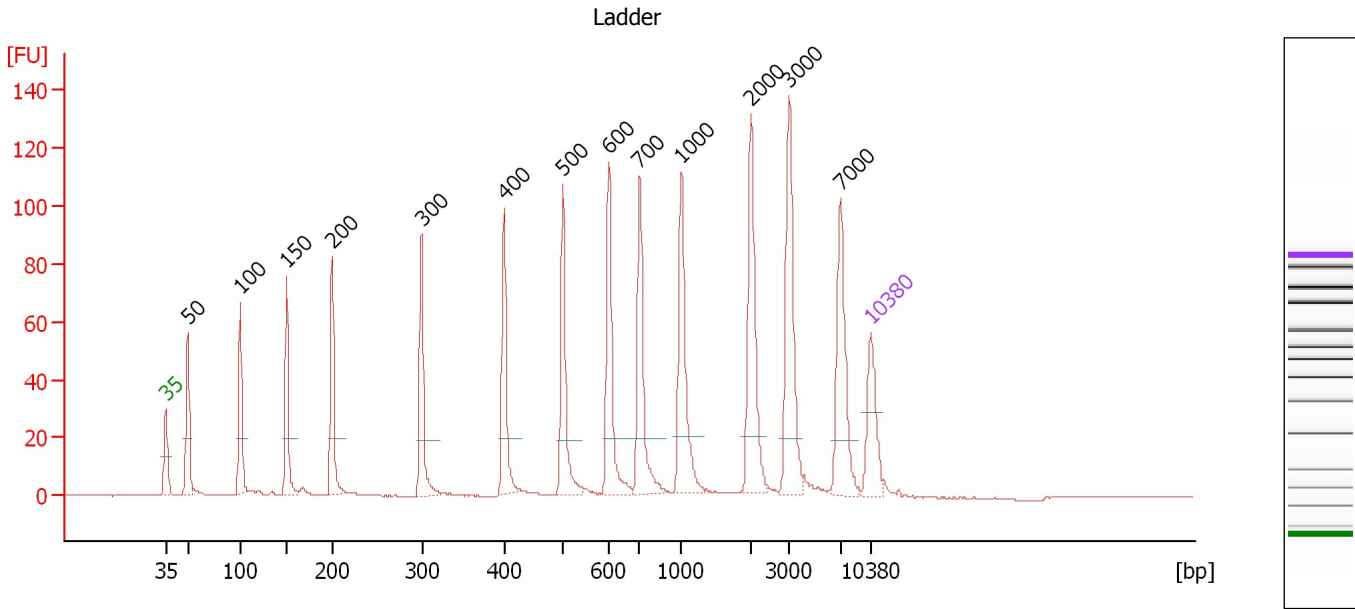
**Ladder**

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:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02\_002.xad

Created: 6/2/2015 11:18:47 AM  
 Modified: 6/2/2015 11:59:13 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

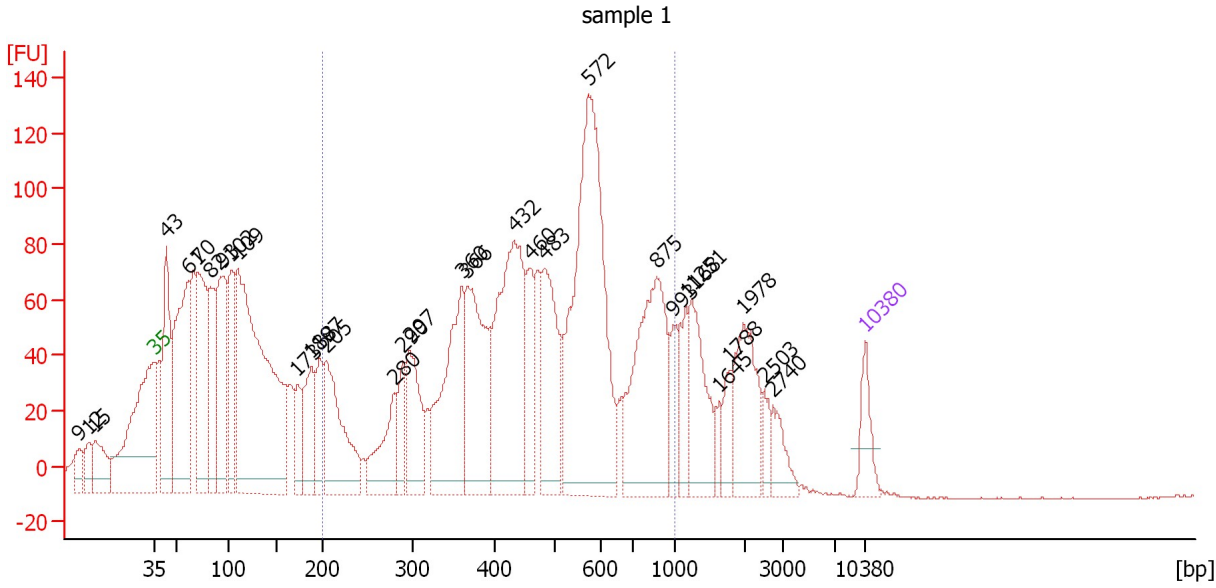
**Peak table for Ladder**

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	45.17
3	100	150.00	2,272.7	Ladder Peak	50.41
4	150	150.00	1,515.2	Ladder Peak	55.02
5	200	150.00	1,136.4	Ladder Peak	59.52
6	300	150.00	757.6	Ladder Peak	68.42
7	400	150.00	568.2	Ladder Peak	76.62
8	500	150.00	454.5	Ladder Peak	82.45
9	600	150.00	378.8	Ladder Peak	87.00
10	700	150.00	324.7	Ladder Peak	90.07
11	1,000	150.00	227.3	Ladder Peak	94.20
12	2,000	150.00	113.6	Ladder Peak	101.14
13	3,000	150.00	75.8	Ladder Peak	104.90
14	7,000	150.00	32.5	Ladder Peak	110.03
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02\_002.xad

Created: 6/2/2015 11:18:47 AM  
 Modified: 6/2/2015 11:59:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : sample 1**

Number of peaks found: 32                      Corr. Area 1: 2,182.8  
 Noise: 0.2

**Peak table for sample 1 : sample 1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	9	0.00	0.0		35.65
2	12	0.00	0.0		36.55
3	15	0.00	0.0		37.23
4	35	125.00	5,411.3	Lower Marker	43.00
5	43	467.57	16,346.5		44.21
6	61	739.90	18,280.4		46.36
7	70	485.80	10,465.2		47.30
8	82	295.48	5,436.7		48.56
9	93	486.33	7,892.9		49.72
10	102	328.46	4,873.2		50.61
11	109	1,556.57	21,645.2		51.24
12	173	118.14	1,033.0		57.12
13	188	211.06	1,697.1		58.48
14	197	163.70	1,257.9		59.27
15	205	418.43	3,086.4		60.00
16	280	214.36	1,161.1		66.61
17	290	119.02	621.1		67.56
18	297	262.67	1,338.1		68.19
19	360	475.20	2,000.7		73.33
20	366	463.53	1,917.5		73.85
21	432	680.69	2,388.8		78.47
22	460	164.61	542.6		80.10
23	483	343.75	1,078.1		81.46
24	572	1,027.99	2,724.3		85.71
25	875	520.91	901.9		92.48

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02\_002.xad


Created: 6/2/2015 11:18:47 AM  
 Modified: 6/2/2015 11:59:13 AM

**Electropherogram Summary Continued ...**

**... Peak table for sample 1 : sample 1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	993	87.31	133.2		94.11
27	1,168	90.17	117.0		95.37
28	1,251	218.26	264.3		95.95
29	1,645	33.64	31.0		98.67
30	1,788	63.80	54.1		99.67
31	1,978	218.95	167.8		100.98
32	2,503	43.48	26.3		103.03
33	2,740	69.50	38.4		103.92
34	10,380	75.00	10.9	Upper Marker	113.00

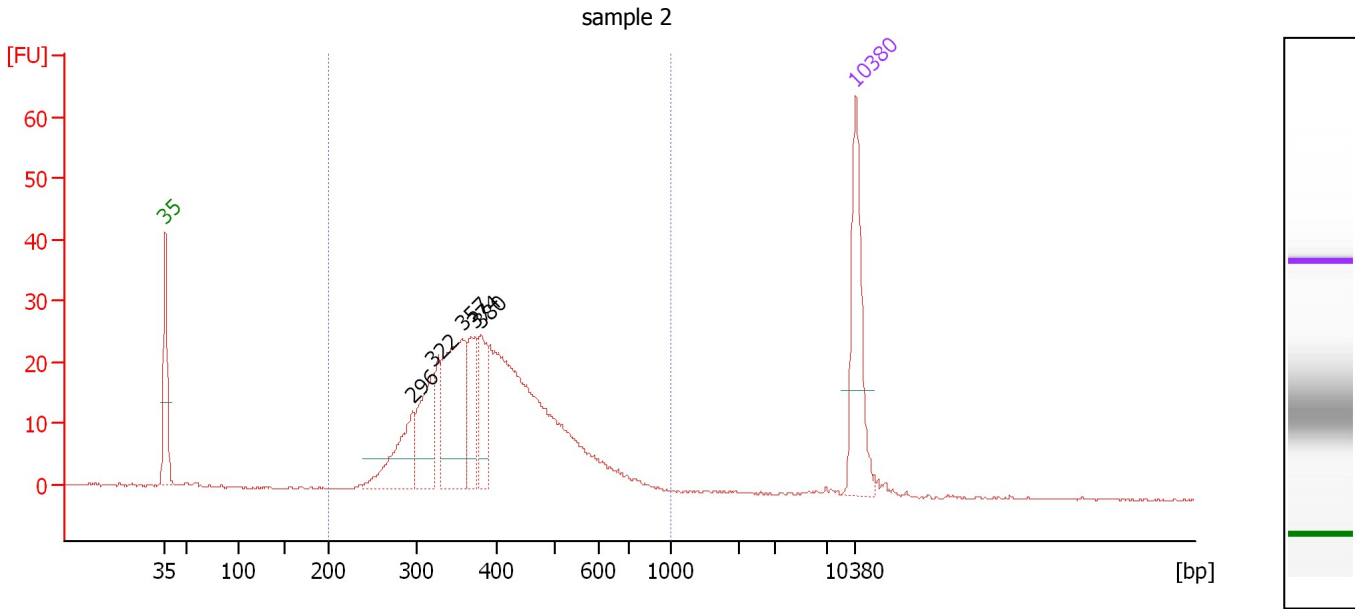
**Region table for sample 1 : sample 1**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	507	1,000	2,182.8	15,191.6	51	35.4	4,232.38	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02\_002.xad

Created: 6/2/2015 11:18:47 AM  
 Modified: 6/2/2015 11:59:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : sample 2**

Number of peaks found: 5                      Corr. Area 1: 465.1  
 Noise: 0.2

**Peak table for sample 2 : sample 2**

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	296	71.45	365.5		68.08
3	322	72.92	343.6		70.19
4	357	128.47	545.0		73.11
5	374	47.74	193.6		74.46
6	380	49.44	197.0		75.00
7	10,380	75.00	10.9	Upper Marker	113.00

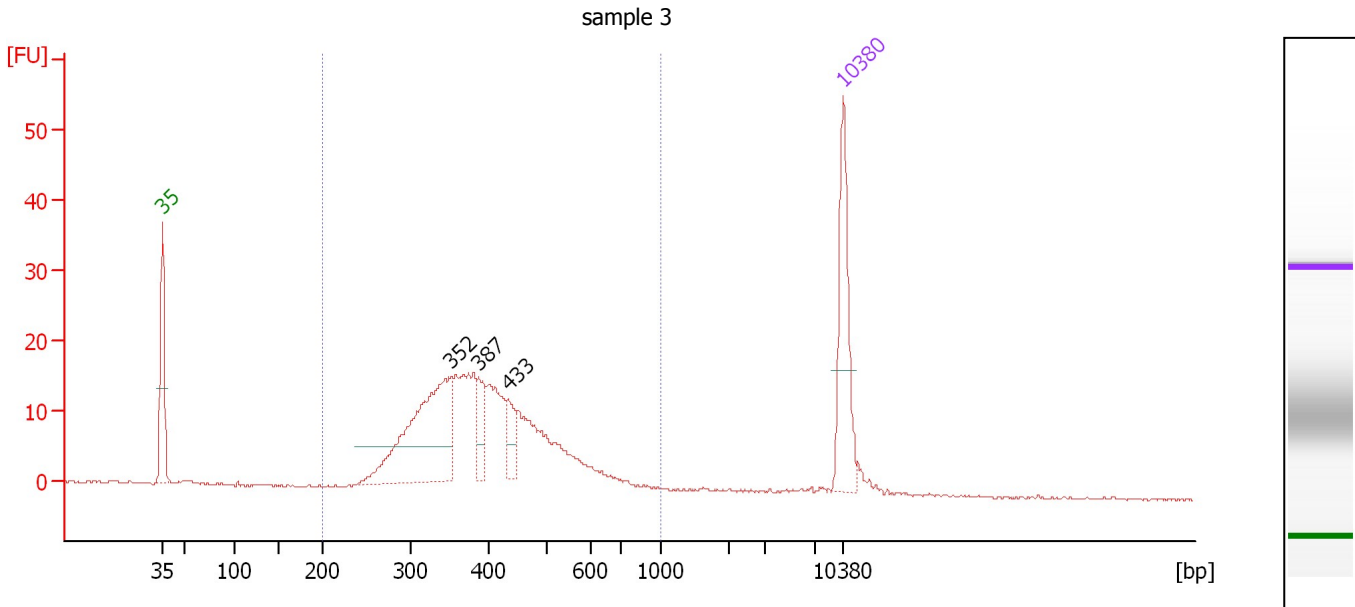
**Region table for sample 2 : sample 2**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	407	1,000	465.1	3,002.3	98	24.1	754.42	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02\_002.xad

Created: 6/2/2015 11:18:47 AM  
 Modified: 6/2/2015 11:59:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : sample 3**

Number of peaks found: 3                      Corr. Area 1: 305.3  
 Noise: 0.2

**Peak table for sample 3 : sample 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	352	202.72	873.5		72.66
3	387	31.59	123.7		75.56
4	433	27.17	95.2		78.52
5	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 3 : sample 3**

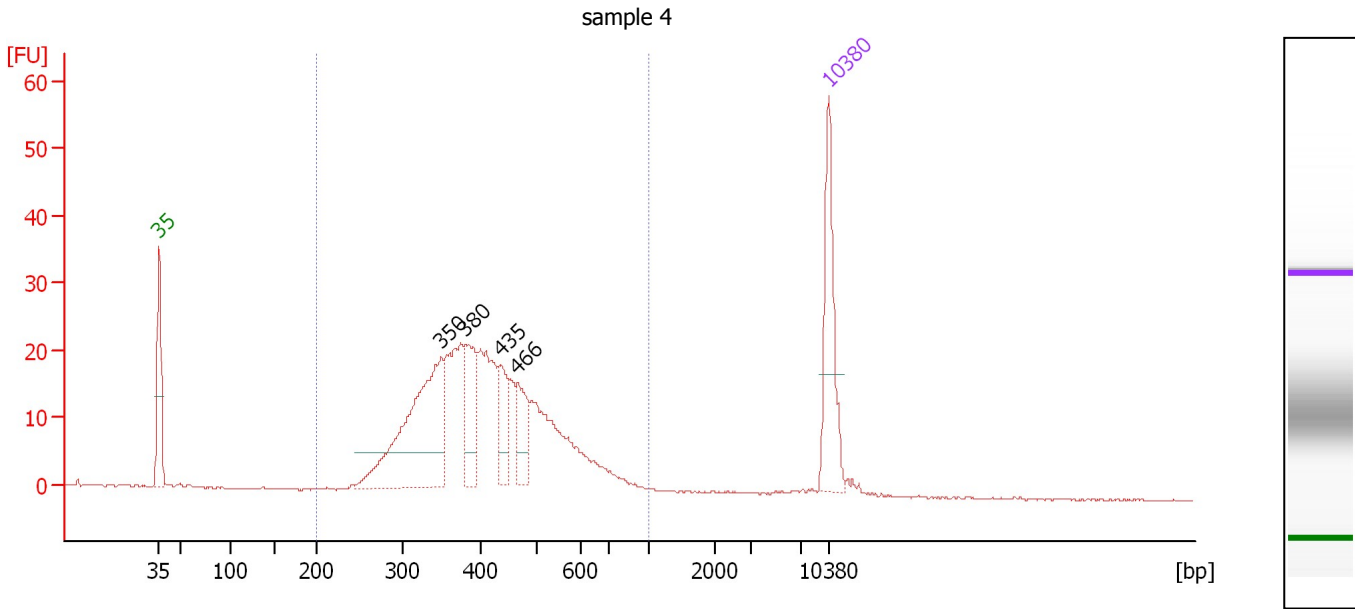
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	405	1,000	305.3	2,487.1	95	24.5	620.88	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02\_002.xad

Created: 6/2/2015 11:18:47 AM  
 Modified: 6/2/2015 11:59:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : sample 4**

Number of peaks found: 4                      Corr. Area 1: 411.1  
 Noise: 0.2

**Peak table for sample 4 : sample 4**

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	350	222.94	966.3		72.48
3	380	66.03	263.2		74.99
4	435	48.47	168.8		78.67
5	466	42.57	138.5		80.45
6	10,380	75.00	10.9	Upper Marker	113.00

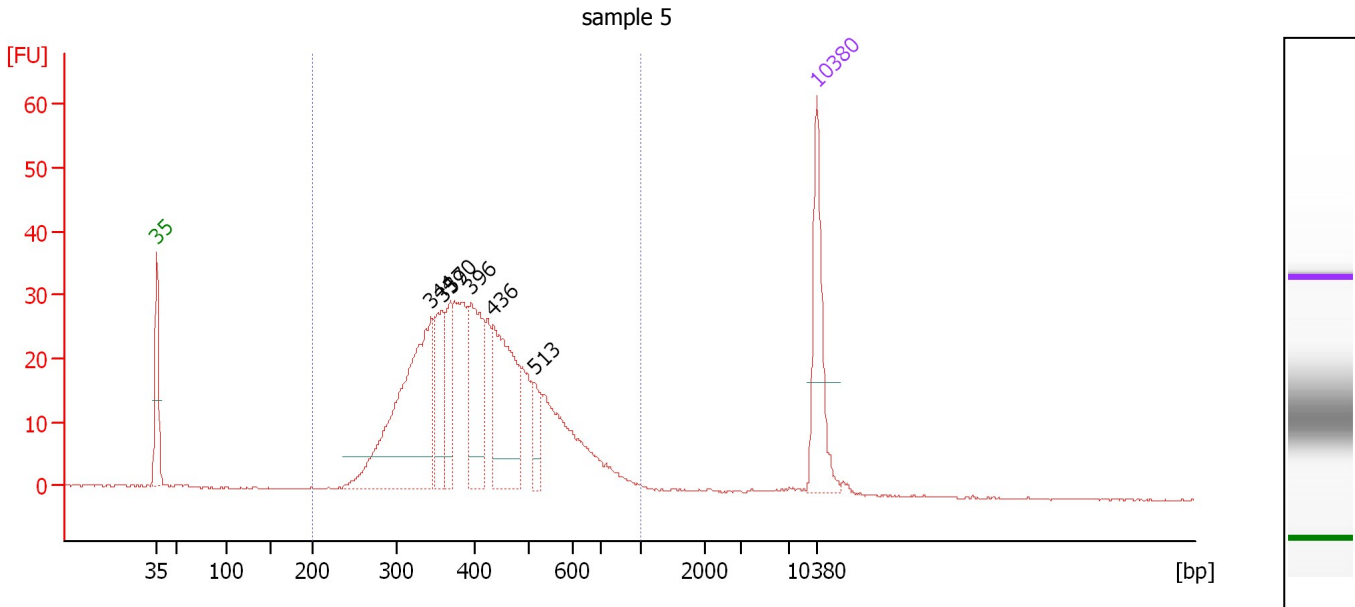
**Region table for sample 4 : sample 4**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	423	1,000	411.1	3,082.0	98	25.0	799.57	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02\_002.xad

Created: 6/2/2015 11:18:47 AM  
 Modified: 6/2/2015 11:59:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : sample 5**

Number of peaks found: 6                      Corr. Area 1: 589.3  
 Noise: 0.1

**Peak table for sample 5 : sample 5**

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	344	280.19	1,233.6		72.04
3	359	72.05	304.4		73.23
4	370	50.09	205.3		74.13
5	396	113.01	431.9		76.33
6	436	146.42	509.1		78.71
7	513	32.94	97.2		83.06
8	10,380	75.00	10.9	Upper Marker	113.00

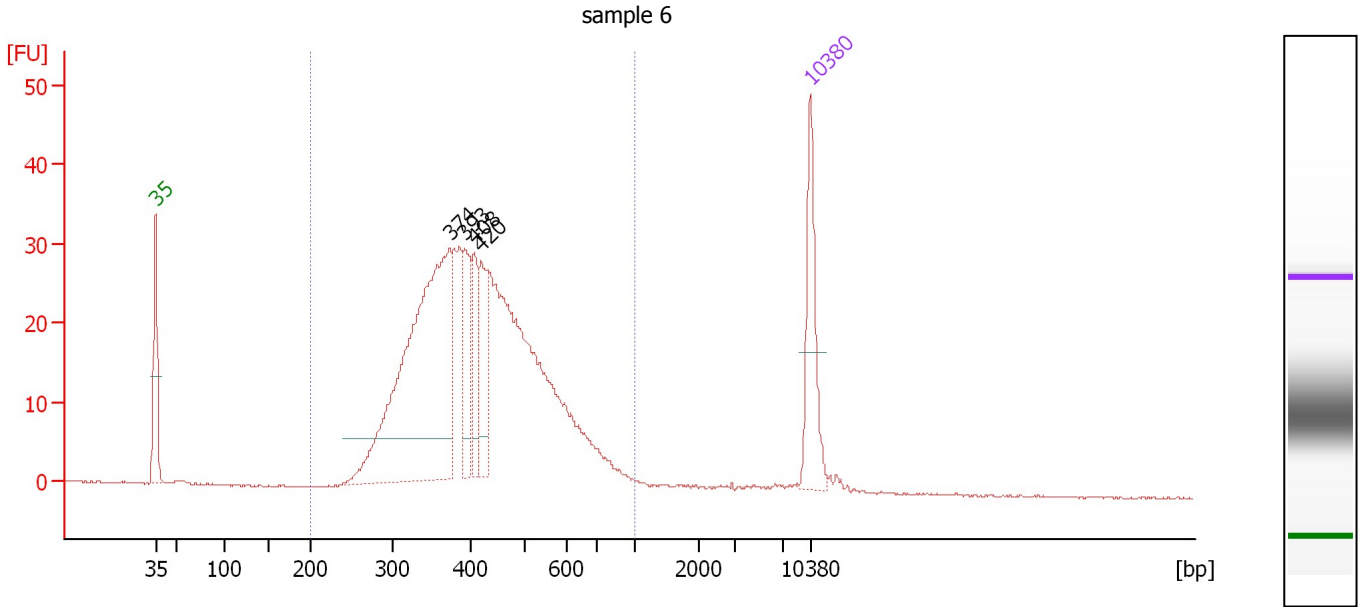
**Region table for sample 5 : sample 5**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	426	1,000	589.3	4,101.7	98	26.1	1,066.73	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02\_002.xad

Created: 6/2/2015 11:18:47 AM  
 Modified: 6/2/2015 11:59:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : sample 6**

Number of peaks found: 4                      Corr. Area 1: 585.4  
 Noise: 0.1

**Peak table for sample 6 : sample 6**

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	496.95	2,014.8		74.47
3	393	71.53	275.6		76.06
4	408	59.09	219.5		77.09
5	420	69.19	249.8		77.77
6	10,380	75.00	10.9	Upper Marker	113.00

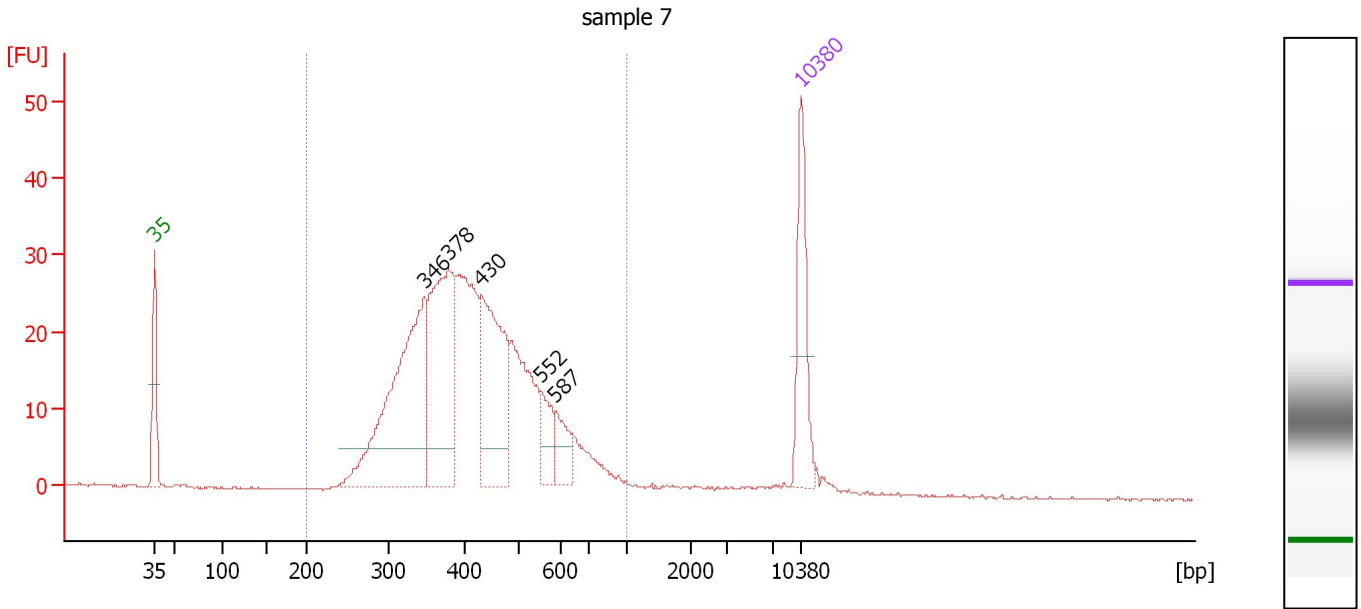
**Region table for sample 6 : sample 6**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	432	1,000	585.4	5,246.1	97	25.6	1,386.01	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02\_002.xad

Created: 6/2/2015 11:18:47 AM  
 Modified: 6/2/2015 11:59:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : sample 7**

Number of peaks found: 5                      Corr. Area 1: 552.9  
 Noise: 0.1

**Peak table for sample 7 : sample 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	346	308.58	1,350.9		72.20
3	378	227.42	912.2		74.80
4	430	174.18	613.6		78.38
5	552	38.94	106.8		84.84
6	587	32.60	84.2		86.40
7	10,380	75.00	10.9	Upper Marker	113.00

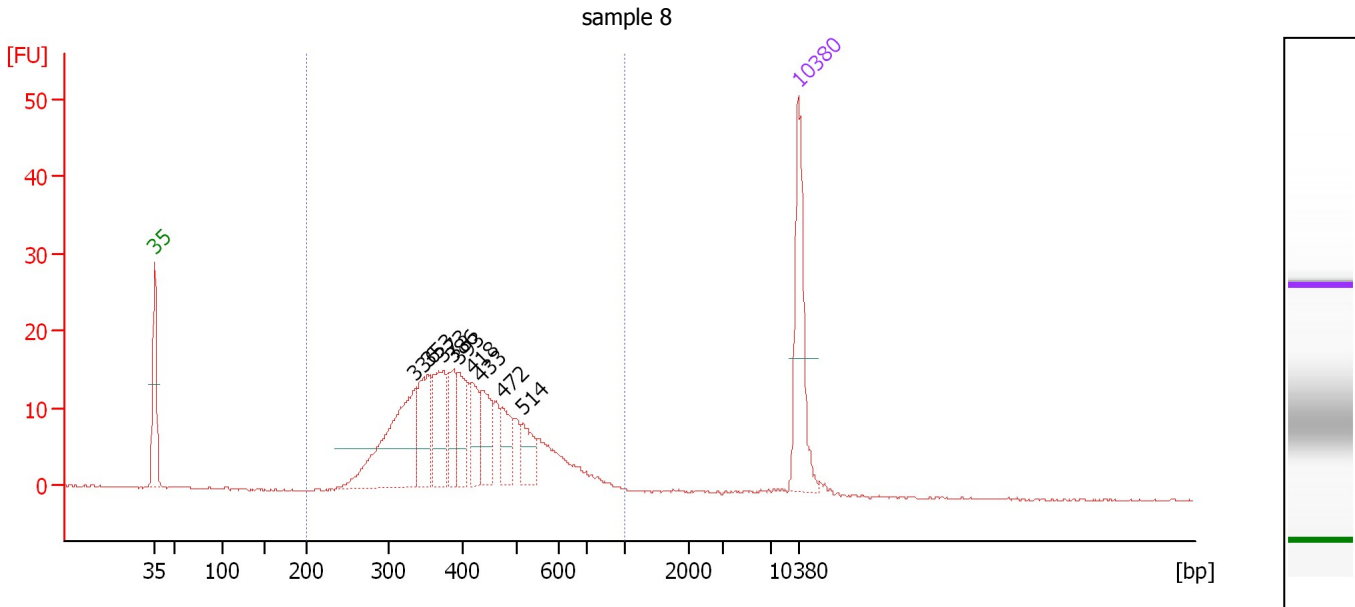
**Region table for sample 7 : sample 7**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	429	1,000	552.9	4,601.6	97	26.0	1,204.34	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02\_002.xad

Created: 6/2/2015 11:18:47 AM  
 Modified: 6/2/2015 11:59:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : sample 8**

Number of peaks found: 9                      Corr. Area 1: 306.6  
 Noise: 0.1

**Peak table for sample 8 : sample 8**

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	336	154.04	694.9		71.36
3	353	63.75	273.8		72.75
4	373	66.78	271.0		74.43
5	386	41.10	161.3		75.48
6	393	43.32	167.0		76.06
7	418	34.22	124.0		77.68
8	433	43.48	152.1		78.55
9	472	30.72	98.6		80.81
10	514	29.04	85.6		83.07
11	10,380	75.00	10.9	Upper Marker	113.00

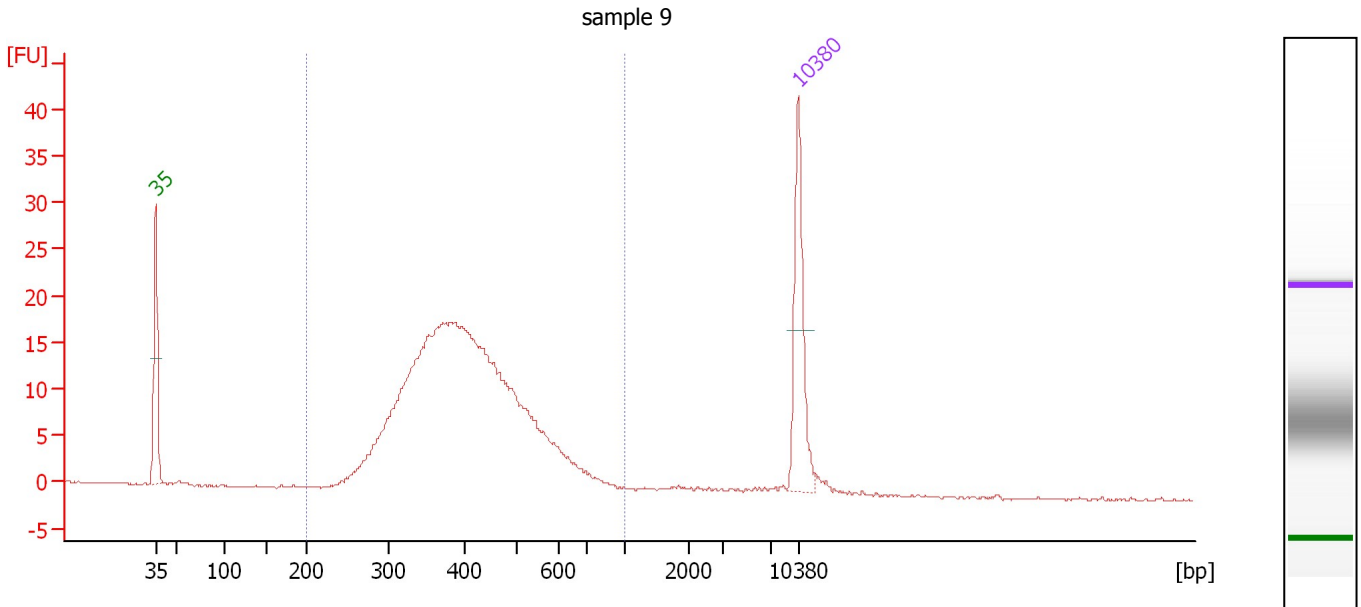
**Region table for sample 8 : sample 8**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	424	1,000	306.6	2,679.2	97	26.3	692.24	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02\_002.xad

Created: 6/2/2015 11:18:47 AM  
 Modified: 6/2/2015 11:59:13 AM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Corr. Area 1: 321.4  
 Noise: 0.1

**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

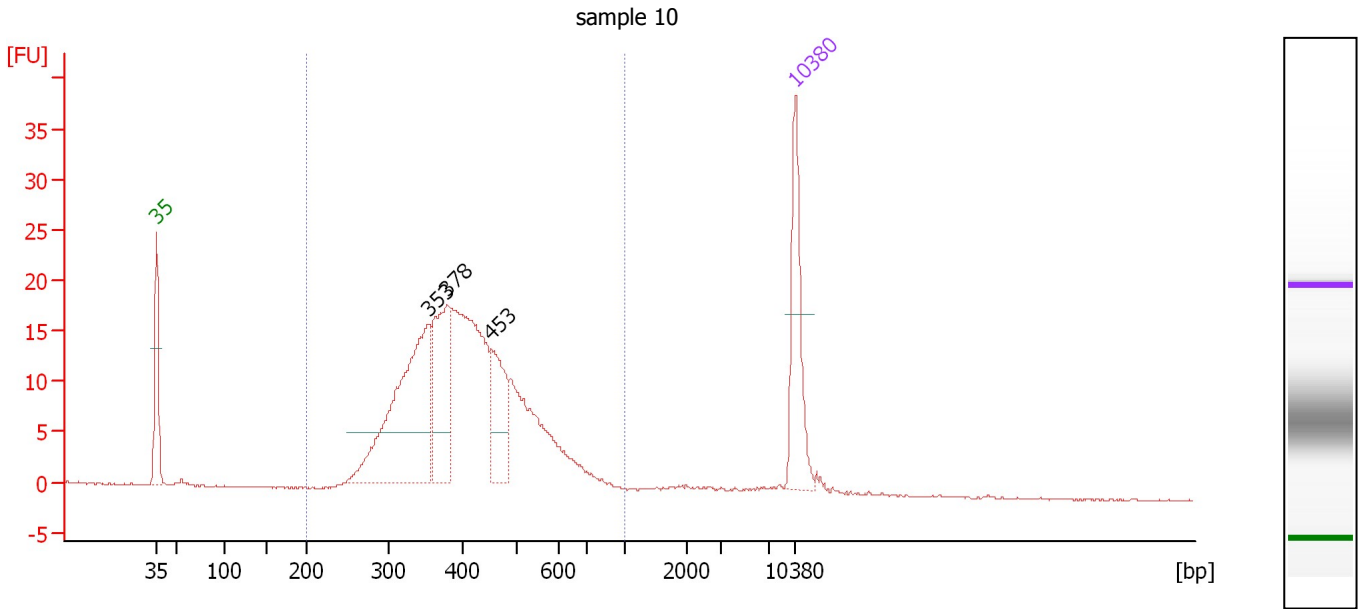
**Region table for sample 9 : sample 9**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	417	1,000	321.4	3,424.4	97	23.8	881.73	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02\_002.xad

Created: 6/2/2015 11:18:47 AM  
 Modified: 6/2/2015 11:59:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : sample 10**

Number of peaks found: 3                      Corr. Area 1: 324.8  
 Noise: 0.1

**Peak table for sample 10 : sample 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	353	258.24	1,109.4		72.74
3	378	118.61	475.0		74.84
4	453	74.89	250.6		79.69
5	10,380	75.00	10.9	Upper Marker	113.00

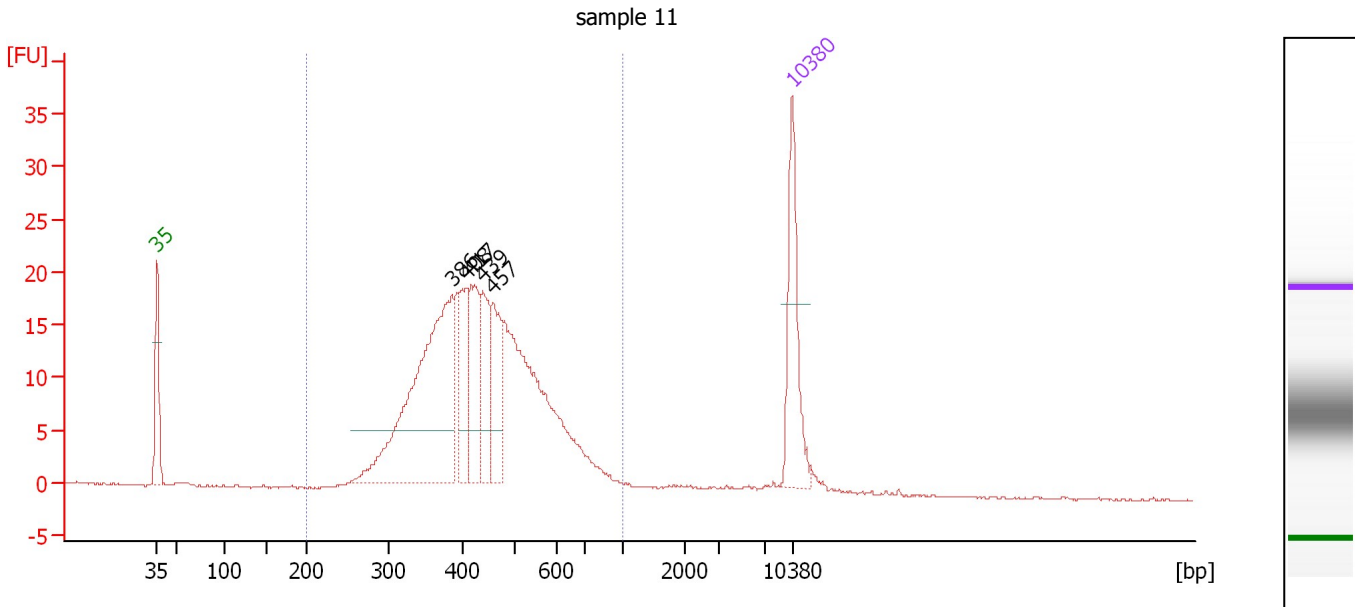
**Region table for sample 10 : sample 10**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	420	1,000	324.8	3,543.3	96	24.1	917.29	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02\_002.xad

Created: 6/2/2015 11:18:47 AM  
 Modified: 6/2/2015 11:59:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : sample 11**

Number of peaks found: 5                      Corr. Area 1: 342.4  
 Noise: 0.1

**Peak table for sample 11 : sample 11**

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	386	317.46	1,246.1		75.47
3	408	63.24	235.1		77.06
4	417	78.10	284.1		77.59
5	439	62.81	216.9		78.88
6	457	66.98	222.1		79.94
7	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : sample 11**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	448	1,000	342.4	3,542.7	96	24.4	977.93	Blue



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-02\2015-06-02\_002.xad

Created: 6/2/2015 11:18:47 AM  
Modified: 6/2/2015 11:59:13 AM

**Gel Image**

