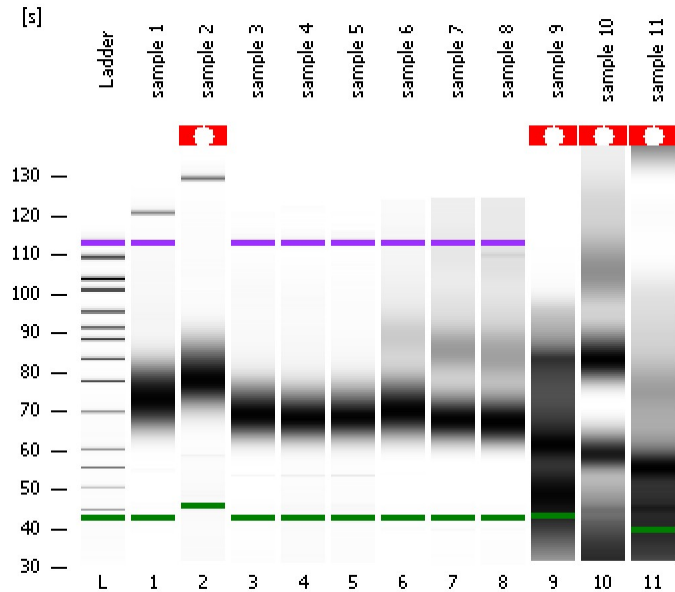


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-06\2017-06-06\_003.xad

Created: 6/6/2017 1:25:08 PM  
Modified: 6/6/2017 2:24:31 PM

**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

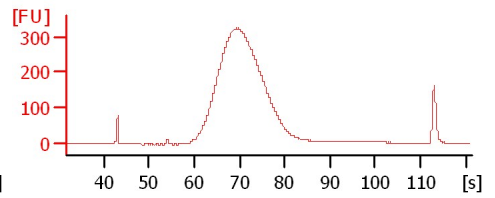
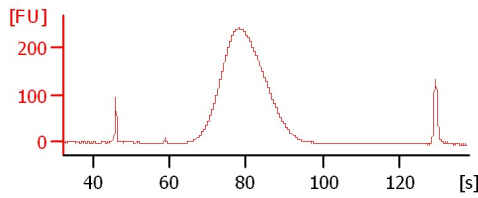
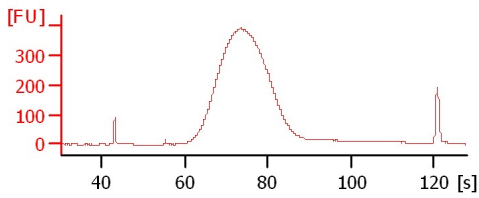
Chip Information:

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

sample 1

sample 2

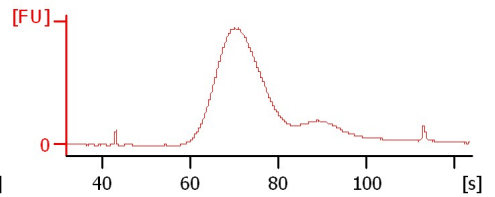
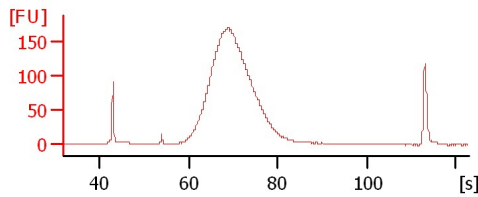
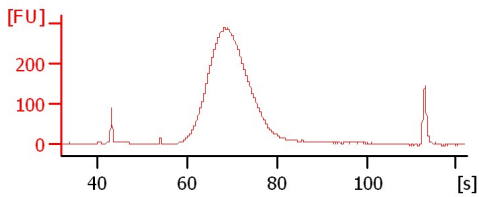
sample 3



sample 4

sample 5

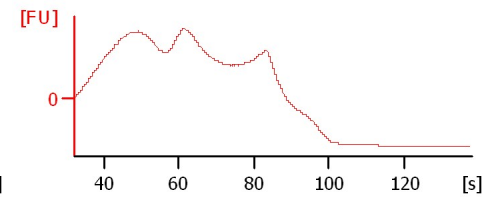
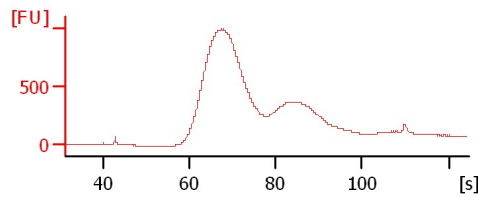
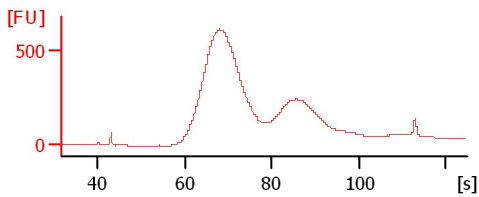
sample 6



sample 7

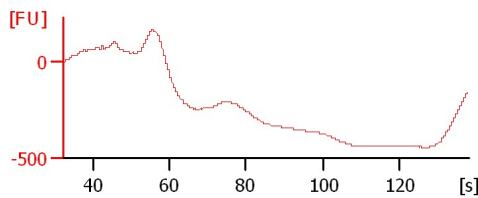
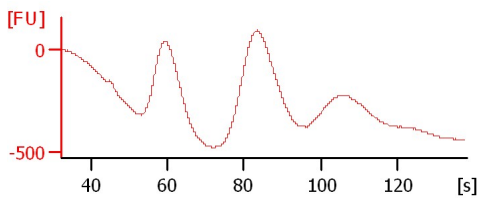
sample 8

sample 9



sample 10

sample 11



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-06\2017-06-06\_003.xad

Created: 6/6/2017 1:25:08 PM  
 Modified: 6/6/2017 2:24:31 PM

**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 #**

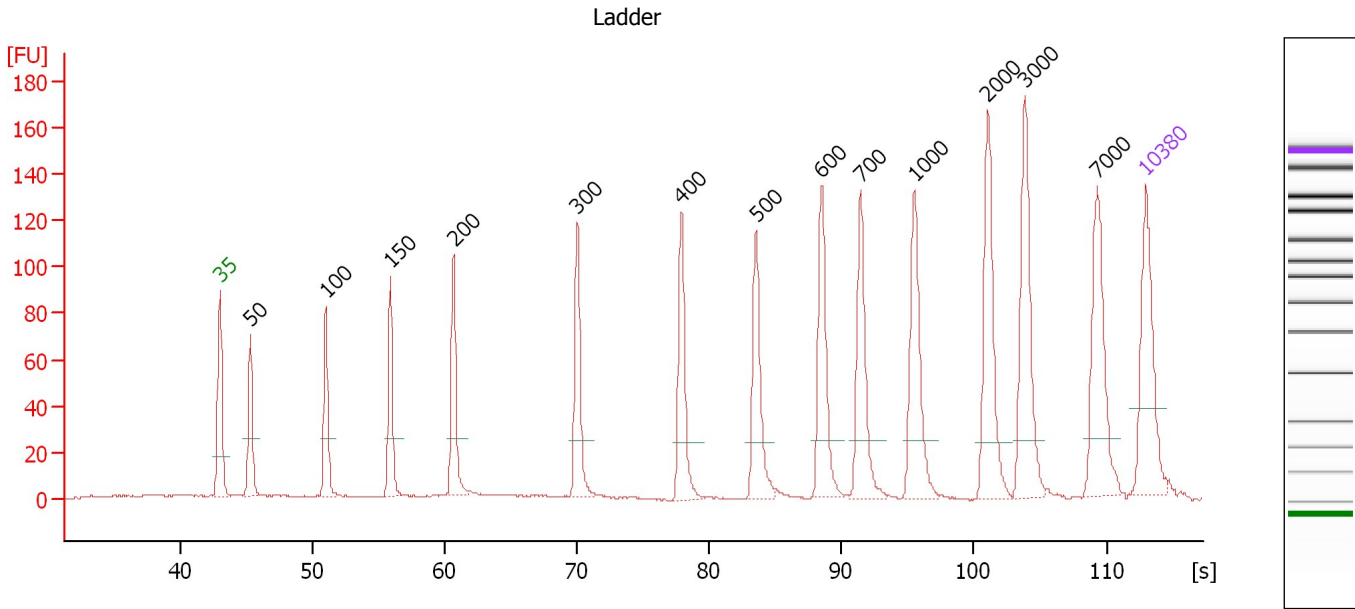
**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-06\2017-06-06\_003.xad

Created: 6/6/2017 1:25:08 PM  
 Modified: 6/6/2017 2:24:31 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.3

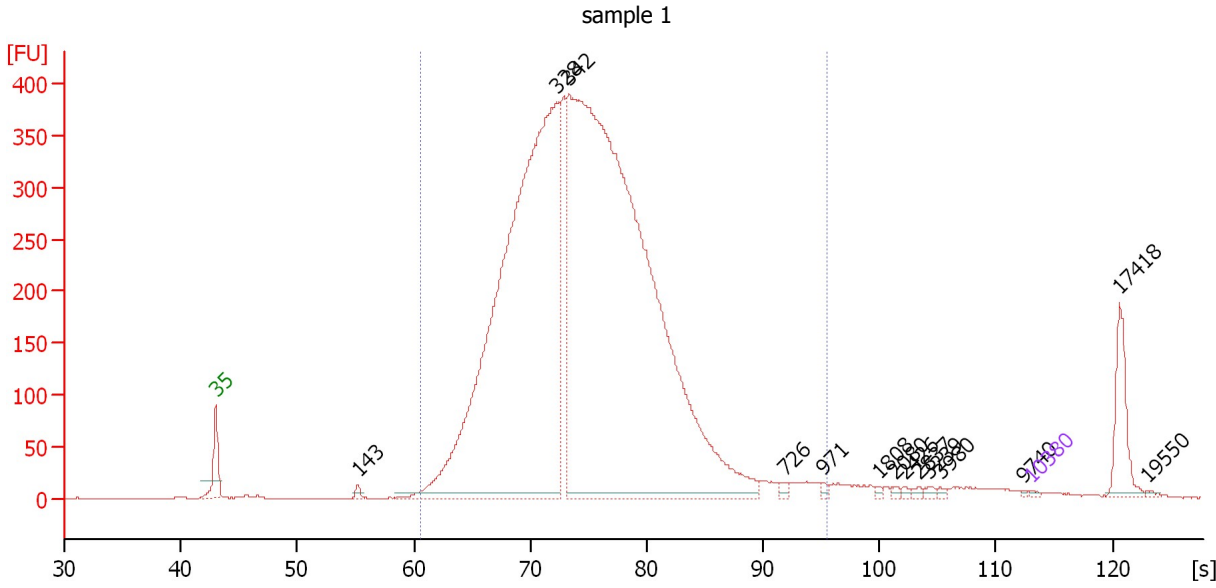
**Peak table for Ladder**

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	45.27
3	100	150.00	2,272.7	Ladder Peak	51.00
4	150	150.00	1,515.2	Ladder Peak	55.87
5	200	150.00	1,136.4	Ladder Peak	60.66
6	300	150.00	757.6	Ladder Peak	70.00
7	400	150.00	568.2	Ladder Peak	77.88
8	500	150.00	454.5	Ladder Peak	83.52
9	600	150.00	378.8	Ladder Peak	88.48
10	700	150.00	324.7	Ladder Peak	91.44
11	1,000	150.00	227.3	Ladder Peak	95.50
12	2,000	150.00	113.6	Ladder Peak	101.06
13	3,000	150.00	75.8	Ladder Peak	103.86
14	7,000	150.00	32.5	Ladder Peak	109.35
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-06\2017-06-06\_003.xad

Created: 6/6/2017 1:25:08 PM  
 Modified: 6/6/2017 2:24:31 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 14                      Corr. Area 1: 7,609.6  
 Noise: 0.3

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

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	143	300.01	3,182.2		55.17
3	328	66,950.24	308,919.2		72.24
4	342	93,629.32	414,294.4		73.34
5	726	301.30	629.0		91.79
6	971	151.62	236.6		95.11
7	1,808	118.16	99.0		100.00
8	2,080	117.91	85.9		101.29
9	2,426	107.38	67.1		102.26
10	2,837	146.04	78.0		103.41
11	3,239	168.82	79.0		104.19
12	3,980	107.43	40.9		105.21
13	9,740	56.70	8.8		112.31
14	10,380	75.00	10.9	Upper Marker	113.00
15	17,418	0.00	0.0		120.61
16	19,550	0.00	0.0		122.91

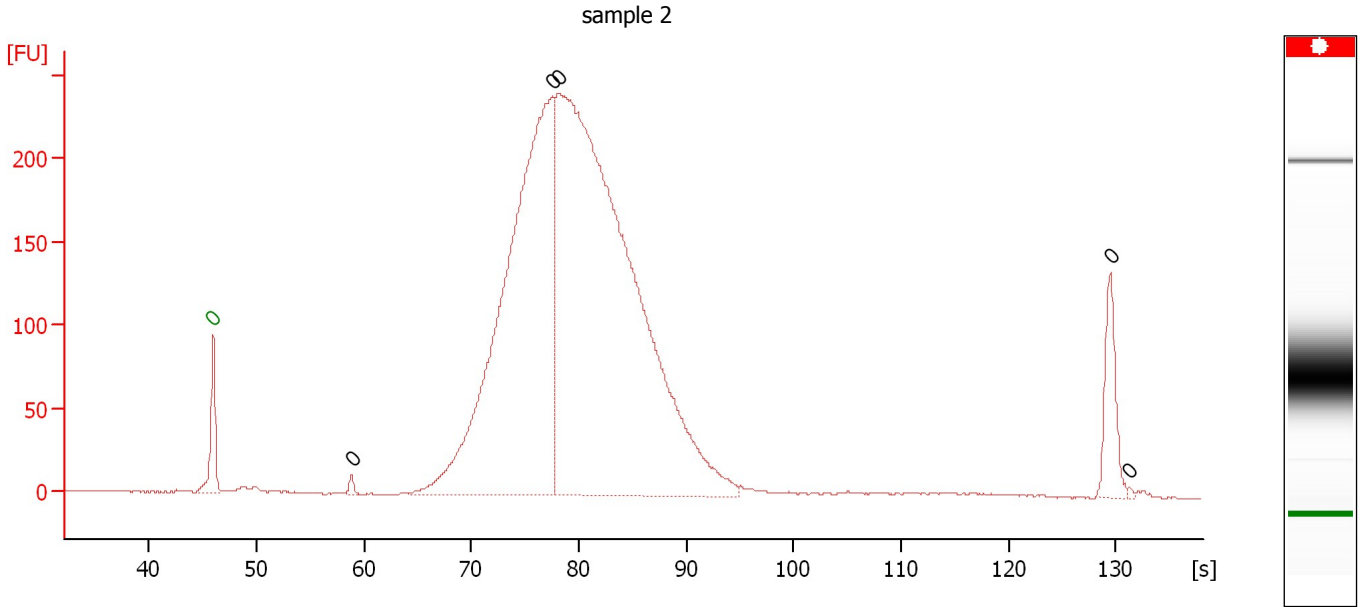
**Region table for sample 1 : sample 1**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	366	7,609.6	727,875.3	164,336.66	95	24.9

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-06\2017-06-06\_003.xad

Created: 6/6/2017 1:25:08 PM  
Modified: 6/6/2017 2:24:31 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 5                      Noise: 0.4

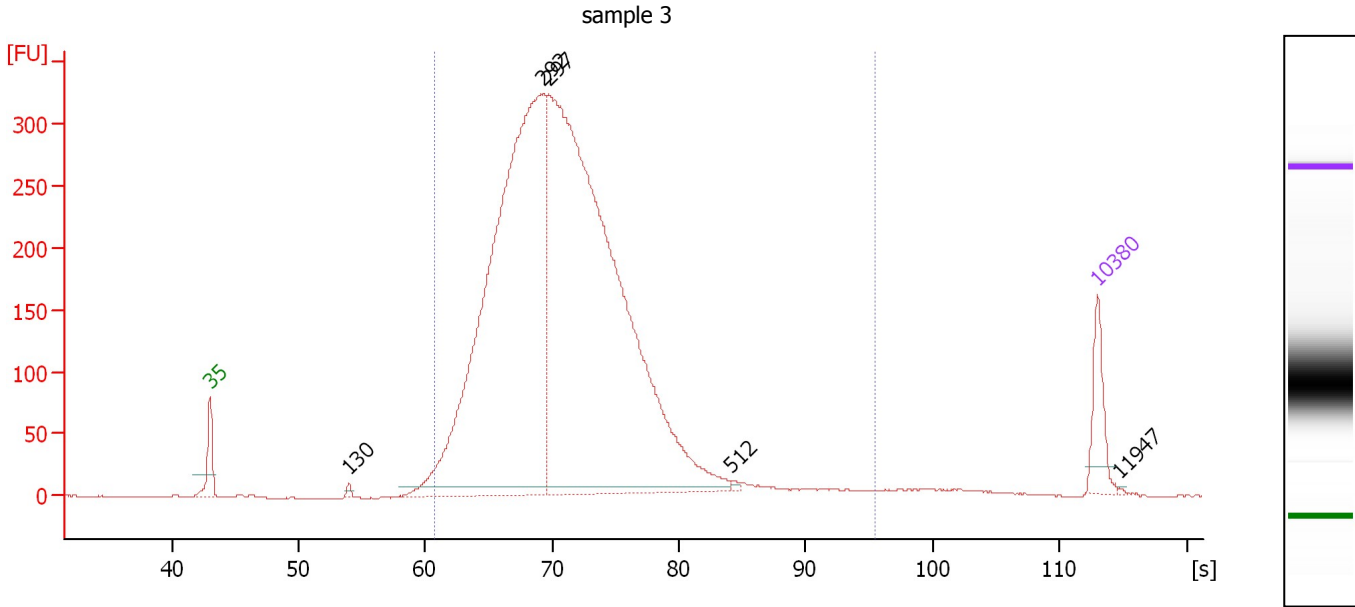
**Peak table for sample 2 : sample 2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	45.95
2	0	0.00	0.0		58.85
3	0	0.00	0.0		77.50
4	0	0.00	0.0		78.05
5	0	0.00	0.0		129.50
6	0	0.00	0.0		131.25

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-06\2017-06-06\_003.xad

Created: 6/6/2017 1:25:08 PM  
 Modified: 6/6/2017 2:24:31 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 5                      Corr. Area 1: 5,683.6  
 Noise: 0.3

**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	130	9.12	105.9		53.97
3	292	2,210.30	11,450.7		69.30
4	297	2,638.37	13,459.6		69.72
5	512	5.12	15.2		84.12
6	10,380	75.00	10.9	Upper Marker	113.00
7	11,947	0.00	0.0		114.69

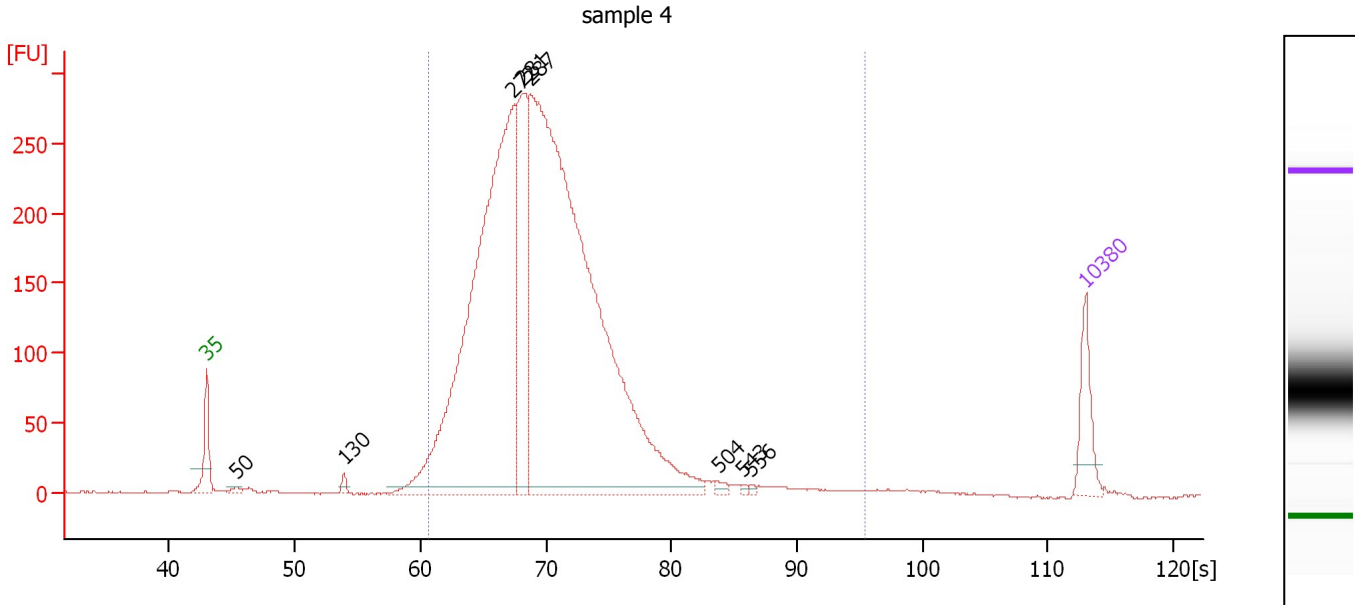
**Region table for sample 3 : sample 3**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	317	5,683.6	24,341.4	4,836.40	98	23.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-06\2017-06-06\_003.xad

Created: 6/6/2017 1:25:08 PM  
 Modified: 6/6/2017 2:24:31 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 8                      Corr. Area 1: 4,677.0  
 Noise: 0.5

**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	50	13.44	404.8		45.31
3	130	14.91	174.1		53.90
4	272	1,698.33	9,449.1		67.42
5	281	432.03	2,333.1		68.19
6	287	2,510.71	13,255.8		68.78
7	504	9.42	28.3		83.71
8	543	4.31	12.0		85.63
9	556	3.64	9.9		86.27
10	10,380	75.00	10.9	Upper Marker	113.00

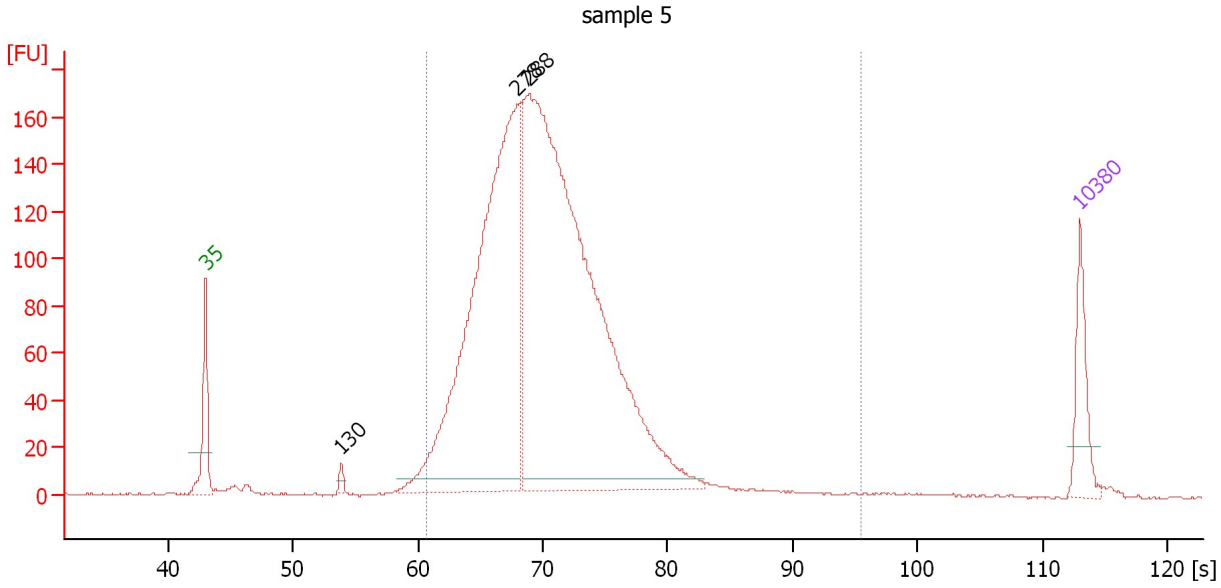
**Region table for sample 4 : sample 4**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	305	4,677.0	23,539.9	4,521.94	97	22.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-06\2017-06-06\_003.xad

Created: 6/6/2017 1:25:08 PM  
 Modified: 6/6/2017 2:24:31 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 3                      Corr. Area 1: 2,782.4  
 Noise: 0.4

**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	130	14.69	171.8		53.88
3	278	1,310.62	7,145.3		67.94
4	288	2,000.36	10,522.2		68.88
5	10,380	75.00	10.9	Upper Marker	113.00

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

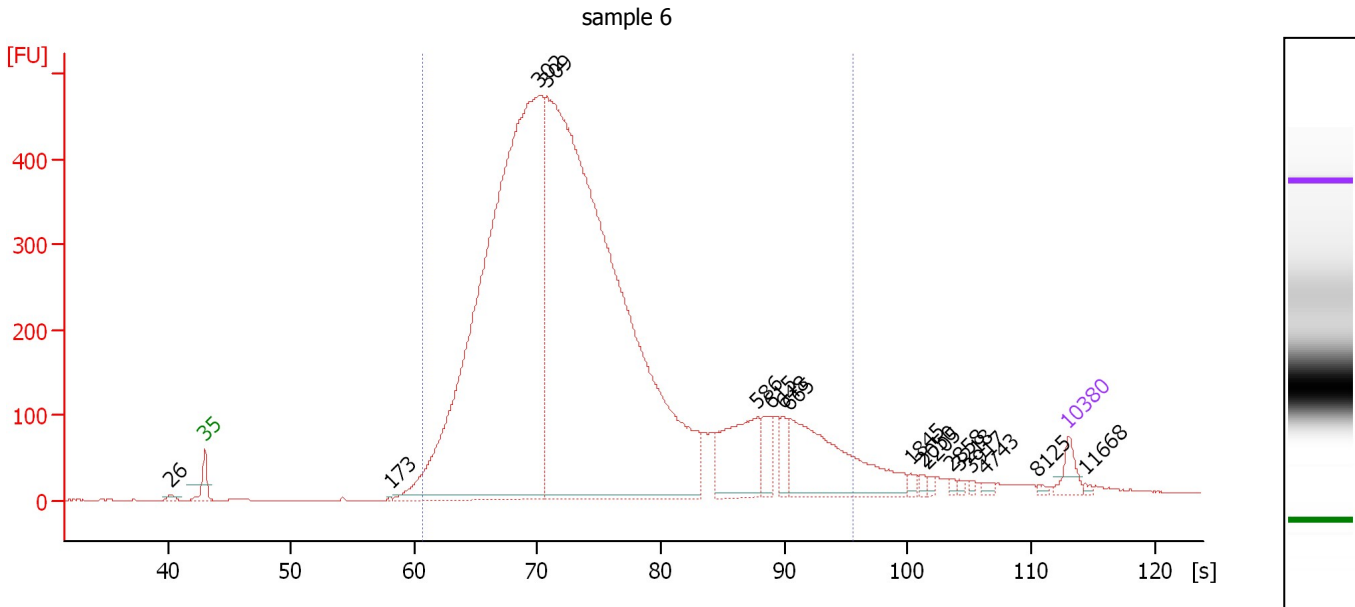
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	308	2,782.4	17,436.4	3,382.57	97	21.7



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-06\2017-06-06\_003.xad

Created: 6/6/2017 1:25:08 PM  
 Modified: 6/6/2017 2:24:31 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 17                      Corr. Area 1: 9,745.2  
 Noise: 0.3

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	26	0.00	0.0		40.30
2	35	125.00	5,411.3	Lower Marker	43.00
3	173	6.59	57.8		58.06
4	302	6,861.66	34,417.4		70.16
5	309	8,091.90	39,645.2		70.73
6	586	511.89	1,323.0		87.79
7	615	152.57	375.7		88.93
8	648	105.23	246.2		89.88
9	665	843.80	1,922.1		90.41
10	1,845	22.84	18.8		100.20
11	2,050	15.23	11.3		101.20
12	2,205	16.51	11.3		101.64
13	2,858	12.86	6.8		103.47
14	3,218	12.18	5.7		104.16
15	3,917	11.16	4.3		105.12
16	4,743	18.00	5.7		106.25
17	8,125	11.25	2.1		110.56
18	10,380	75.00	10.9	Upper Marker	113.00
19	11,668	0.00	0.0		114.39

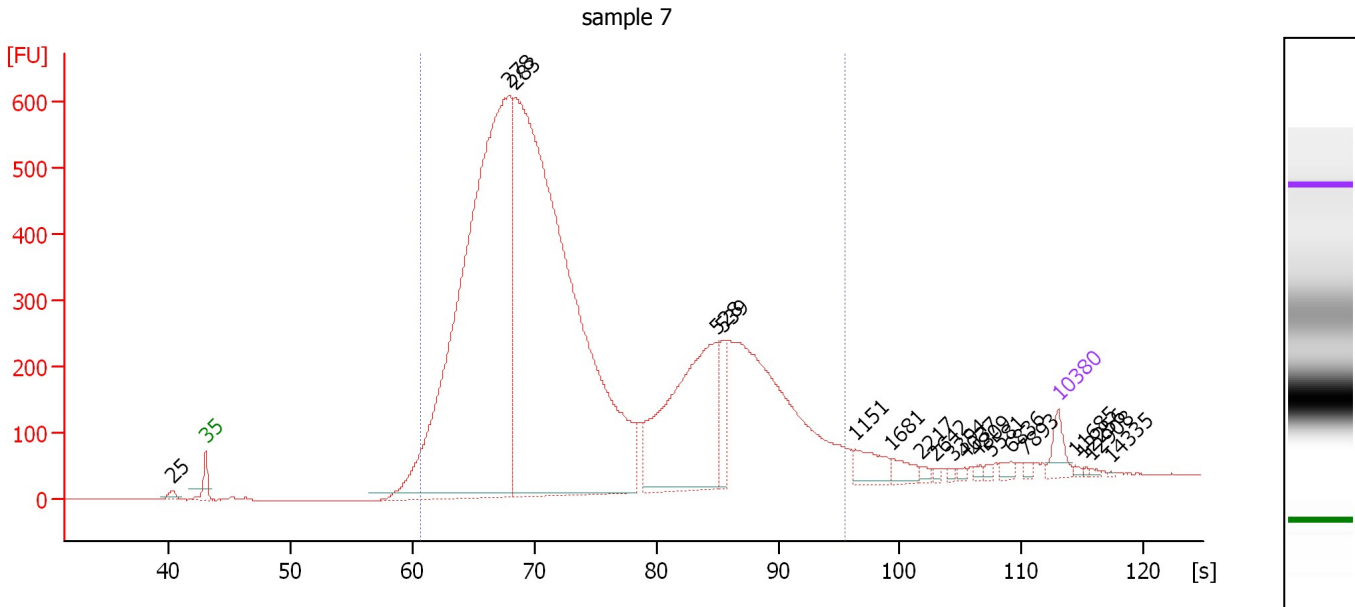
**Region table for sample 6 : sample 6**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	369	9,745.2	74,358.1	15,933.15	96	37.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-06\2017-06-06\_003.xad

Created: 6/6/2017 1:25:08 PM  
 Modified: 6/6/2017 2:24:31 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 19                      Corr. Area 1: 11,976.7  
 Noise: 0.7

**Peak table for sample 7 : sample 7**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	25	0.00	0.0		40.27
2	35	125.00	5,411.3	Lower Marker	43.00
3	278	5,114.00	27,916.4		67.91
4	283	5,764.41	30,837.6		68.43
5	528	1,203.94	3,453.3		84.92
6	539	161.46	453.9		85.45
7	1,151	124.86	164.4		96.34
8	1,681	56.84	51.2		99.29
9	2,217	18.37	12.6		101.67
10	2,642	11.33	6.5		102.86
11	3,394	10.52	4.7		104.40
12	4,037	12.10	4.5		105.29
13	4,809	12.89	4.1		106.34
14	5,581	12.17	3.3		107.40
15	6,836	24.83	5.5		109.12
16	7,893	13.24	2.5		110.31
17	10,380	75.00	10.9	Upper Marker	113.00
18	11,685	0.00	0.0		114.41
19	12,256	0.00	0.0		115.03
20	12,908	0.00	0.0		115.73
21	14,335	0.00	0.0		117.28

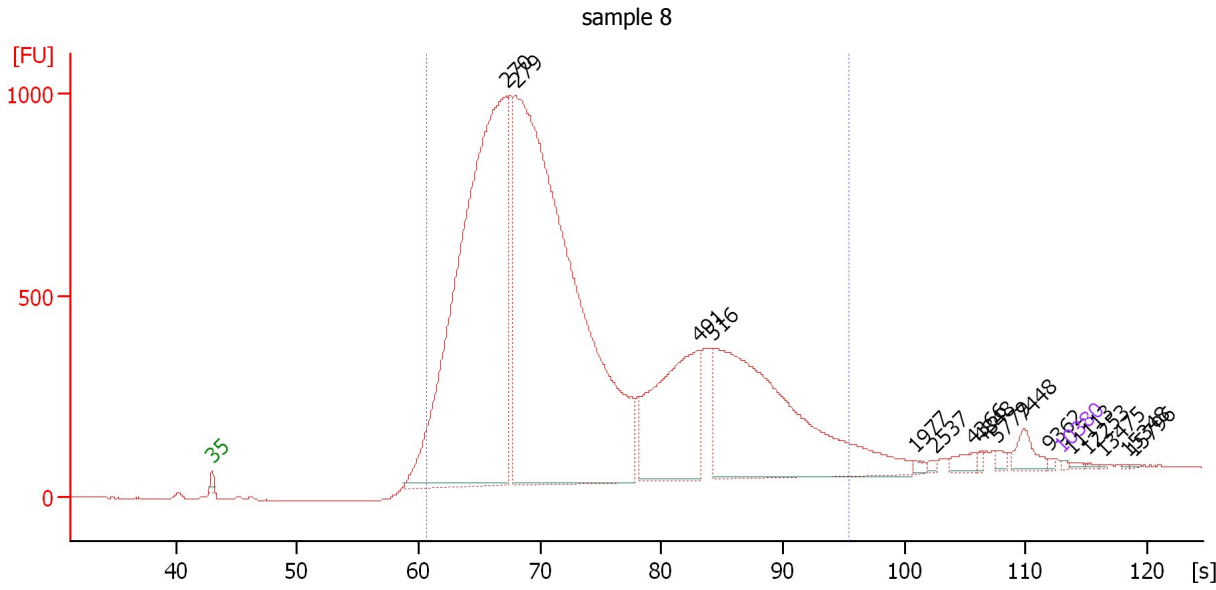
**Region table for sample 7 : sample 7**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	374	11,976.7	62,361.2	13,026.74	95	40.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-06\2017-06-06\_003.xad

Created: 6/6/2017 1:25:08 PM  
 Modified: 6/6/2017 2:24:31 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 16                      Corr. Area 1: 20,559.0  
 Noise: 1.0

**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	270	60,610.80	340,529.1		67.17
3	279	74,307.39	404,060.3		68.01
4	491	12,918.64	39,858.1		83.02
5	516	23,732.19	69,737.6		84.30
6	1,977	179.69	137.7		100.94
7	2,537	167.44	100.0		102.57
8	4,366	550.48	191.0		105.74
9	4,848	158.07	49.4		106.40
10	5,779	252.85	66.3		107.67
11	7,448	1,003.77	204.2		109.83
12	9,362	83.71	13.5		111.90
13	10,380	75.00	10.9	Upper Marker	113.00
14	11,113	0.00	0.0		113.79
15	12,253	0.00	0.0		115.03
16	13,475	0.00	0.0		116.35
17	15,348	0.00	0.0		118.37
18	15,796	0.00	0.0		118.86

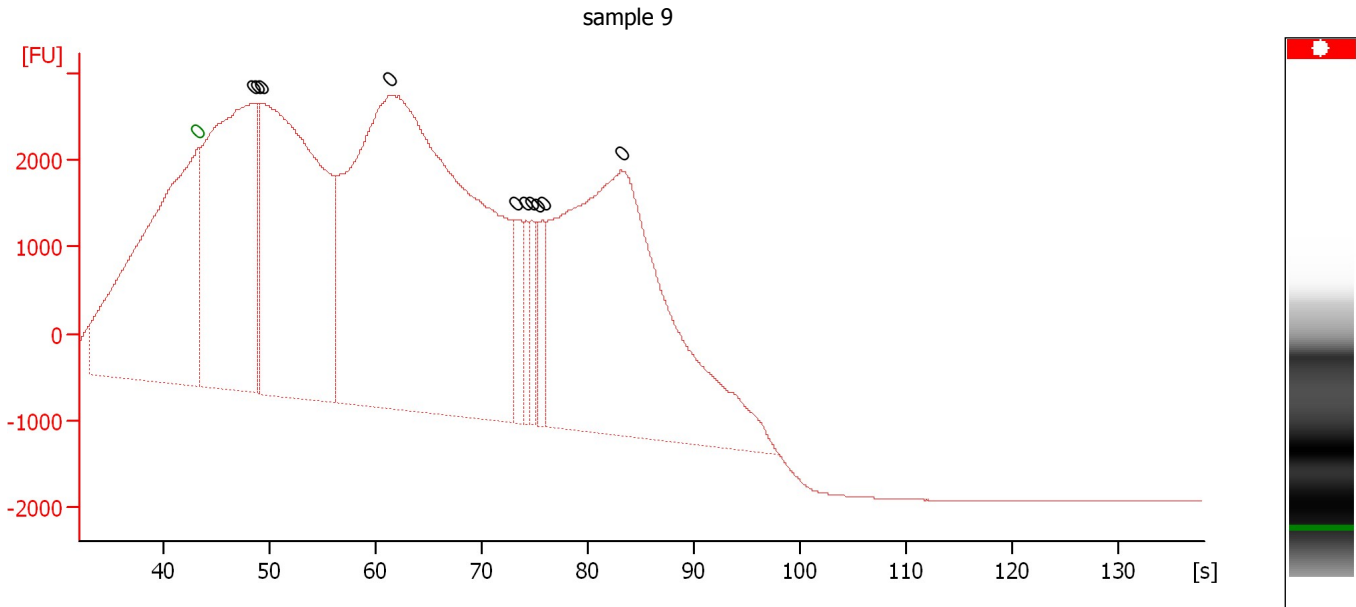
**Region table for sample 8 : sample 8**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	364	20,559.0	848,051.2	173,238.80	95	39.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-06\2017-06-06\_003.xad

Created: 6/6/2017 1:25:08 PM  
 Modified: 6/6/2017 2:24:31 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 10                      Noise: 1.3

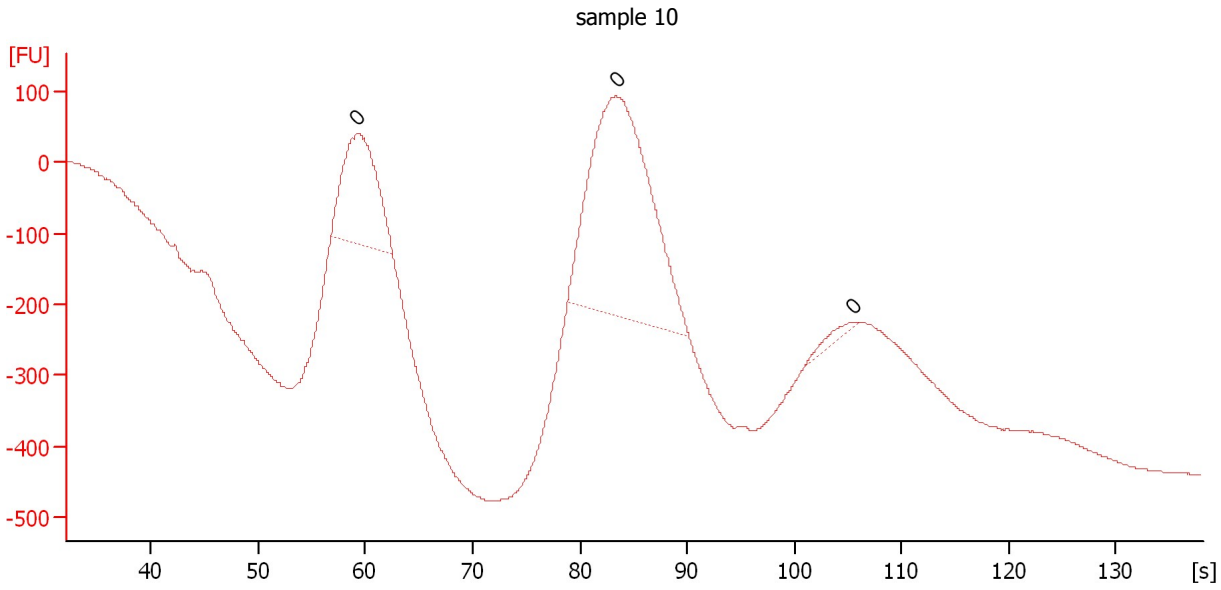
**Peak table for sample 9 : sample 9**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	43.30
2	0	0.00	0.0		48.55
3	0	0.00	0.0		48.95
4	0	0.00	0.0		49.35
5	0	0.00	0.0		61.30
6	0	0.00	0.0		73.20
7	0	0.00	0.0		74.25
8	0	0.00	0.0		74.75
9	0	0.00	0.0		75.35
10	0	0.00	0.0		75.80
11	0	0.00	0.0		83.15

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-06\2017-06-06\_003.xad

Created: 6/6/2017 1:25:08 PM  
Modified: 6/6/2017 2:24:31 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Noise: 0.9

**Peak table for sample 10 : sample 10**

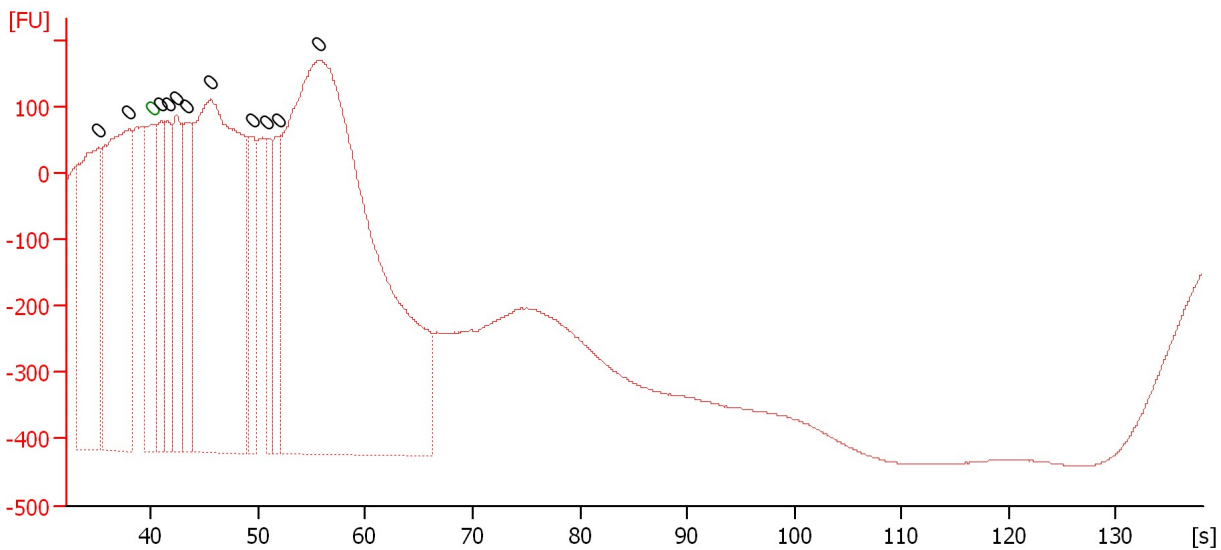
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		59.25
2	0	0.00	0.0		83.35
3	0	0.00	0.0		105.55

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-06\2017-06-06\_003.xad

Created: 6/6/2017 1:25:08 PM  
 Modified: 6/6/2017 2:24:31 PM

**Electropherogram Summary Continued ...**

sample 11



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

Number of peaks found: 11                      Noise: 0.4

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		35.15
2	0	0.00	0.0		37.95
3	0	0.00	0.0	Lower Marker	40.05
4	0	0.00	0.0		40.90
5	0	0.00	0.0		41.55
6	0	0.00	0.0		42.40
7	0	0.00	0.0		43.35
8	0	0.00	0.0		45.60
9	0	0.00	0.0		49.40
10	0	0.00	0.0		50.75
11	0	0.00	0.0		51.85
12	0	0.00	0.0		55.55

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-06\2017-06-06\_003.xad

Created: 6/6/2017 1:25:08 PM  
Modified: 6/6/2017 2:24:31 PM

**Gel Image**

