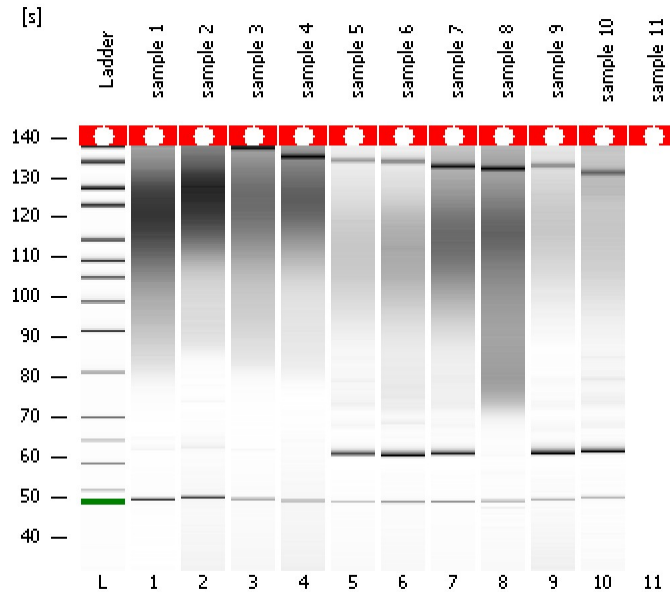


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
Modified: 12/4/2013 12:07:36 PM

**Electrophoresis File Run Summary**



Instrument Information:

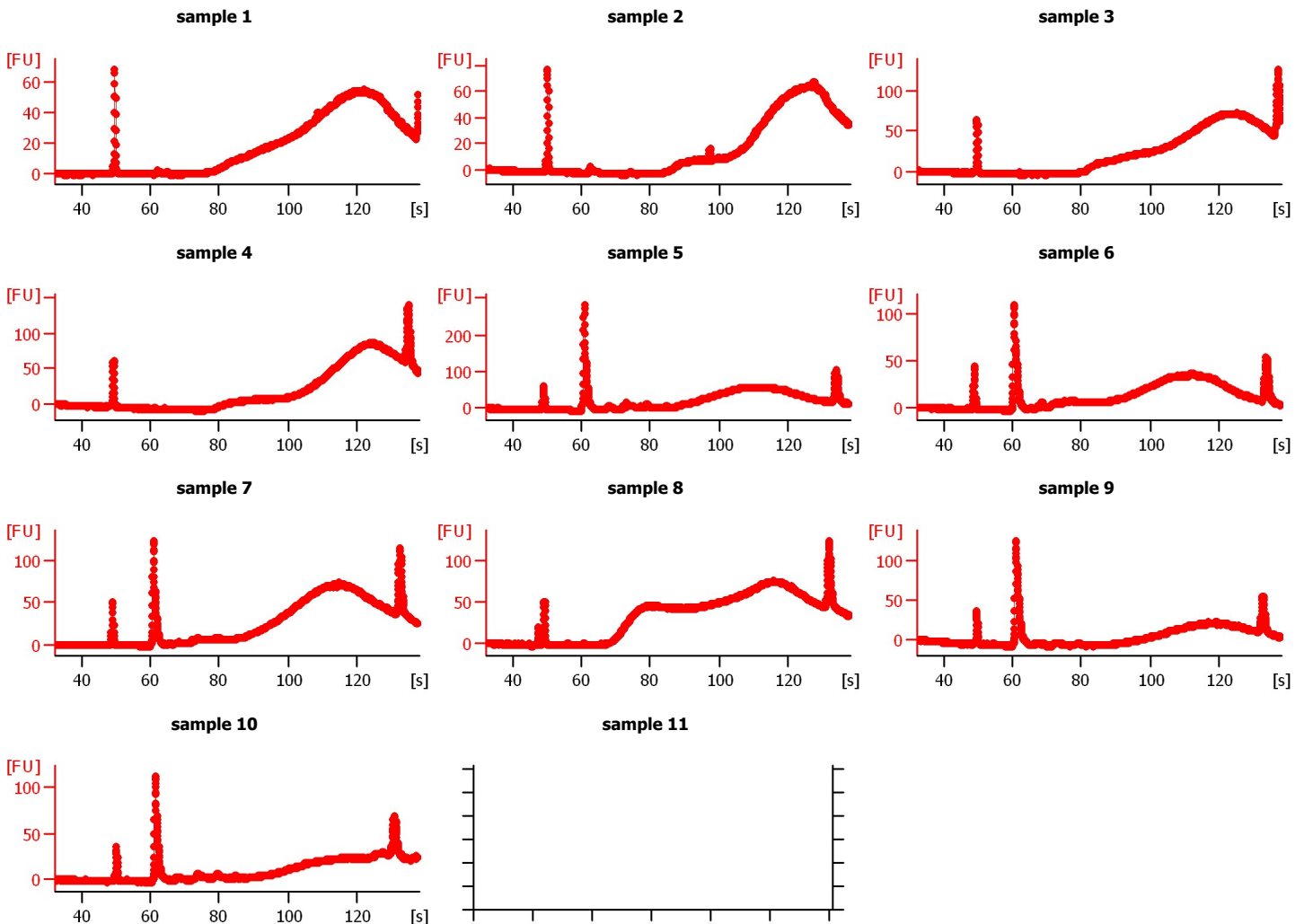
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
Modified: 12/4/2013 12:07:36 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:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
Modified: 12/4/2013 12:07:36 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

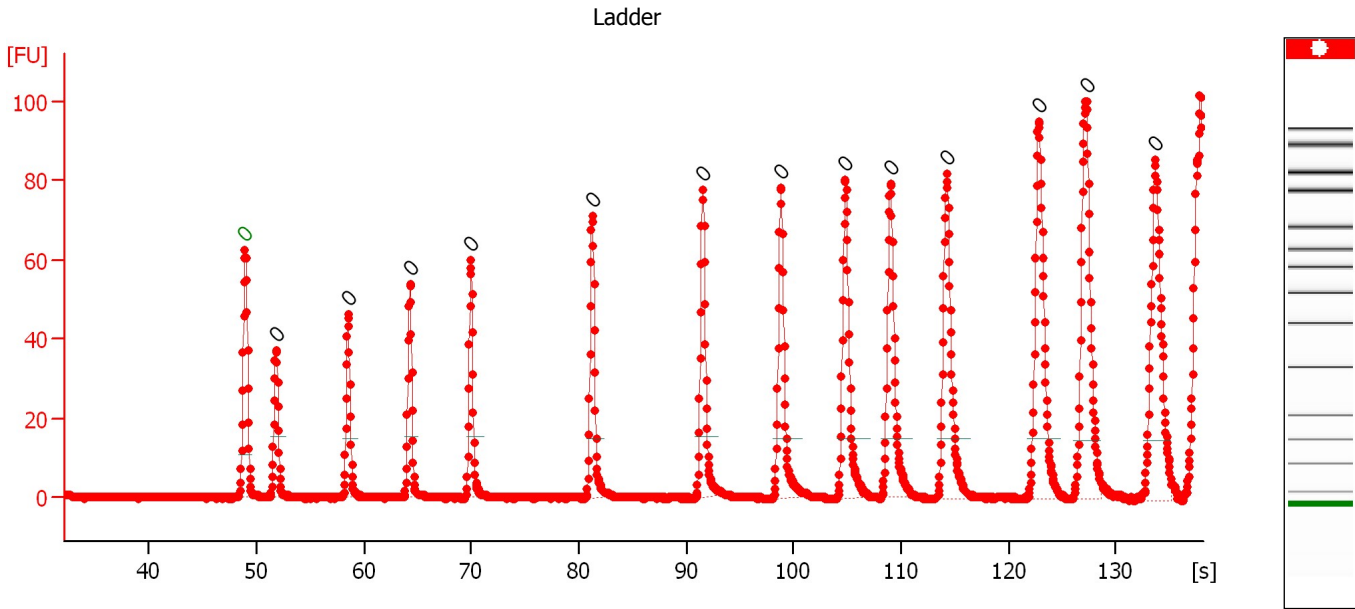
**Ladder**

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:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
 Modified: 12/4/2013 12:07:36 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

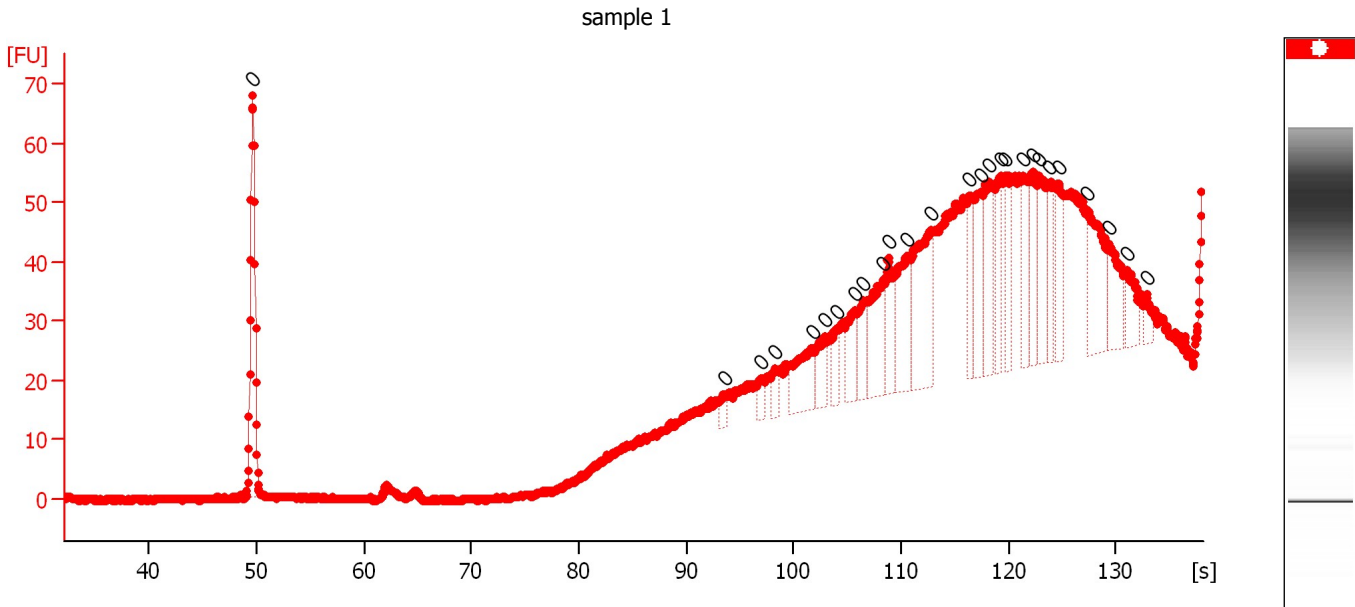
**Peak table for Ladder**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	48.95	0	0.00	0.0	Lower Marker
2	51.80	0	0.00	0.0	Ladder Peak
3	58.55	0	0.00	0.0	Ladder Peak
4	64.30	0	0.00	0.0	Ladder Peak
5	69.95	0	0.00	0.0	Ladder Peak
6	81.25	0	0.00	0.0	Ladder Peak
7	91.55	0	0.00	0.0	Ladder Peak
8	98.80	0	0.00	0.0	Ladder Peak
9	104.85	0	0.00	0.0	Ladder Peak
10	109.05	0	0.00	0.0	Ladder Peak
11	114.25	0	0.00	0.0	Ladder Peak
12	122.80	0	0.00	0.0	Ladder Peak
13	127.25	0	0.00	0.0	Ladder Peak
14	133.65	0	0.00	0.0	Ladder Peak

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
 Modified: 12/4/2013 12:07:36 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Noise: 0.2

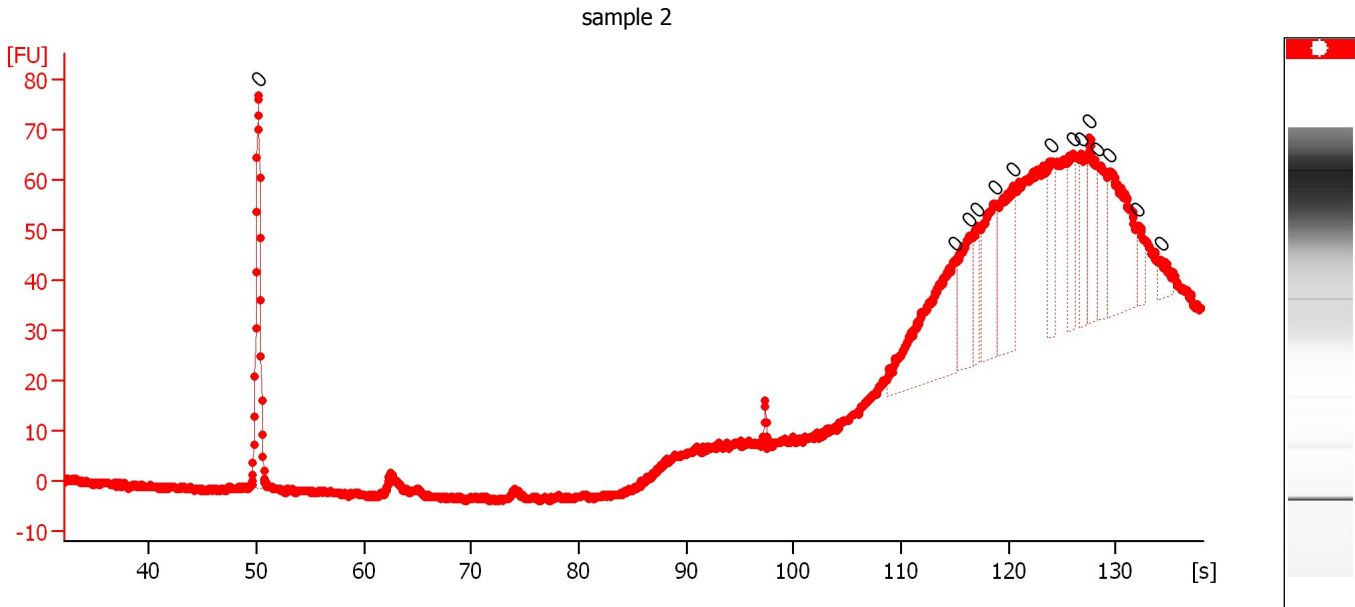
**Peak table for sample 1 : sample 1**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	49.65	0	0.00	0.0	
2	93.60	0	0.00	0.0	
3	97.00	0	0.00	0.0	
4	98.35	0	0.00	0.0	
5	101.75	0	0.00	0.0	
6	102.85	0	0.00	0.0	
7	103.95	0	0.00	0.0	
8	105.70	0	0.00	0.0	
9	106.55	0	0.00	0.0	
10	108.35	0	0.00	0.0	
11	108.80	0	0.00	0.0	
12	110.55	0	0.00	0.0	
13	112.85	0	0.00	0.0	
14	116.40	0	0.00	0.0	
15	117.45	0	0.00	0.0	
16	118.25	0	0.00	0.0	
17	119.25	0	0.00	0.0	
18	119.65	0	0.00	0.0	
19	121.40	0	0.00	0.0	
20	122.30	0	0.00	0.0	
21	122.90	0	0.00	0.0	
22	123.80	0	0.00	0.0	
23	124.65	0	0.00	0.0	
24	127.40	0	0.00	0.0	
25	129.35	0	0.00	0.0	
26	131.00	0	0.00	0.0	
27	132.85	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
 Modified: 12/4/2013 12:07:36 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Noise: 0.4

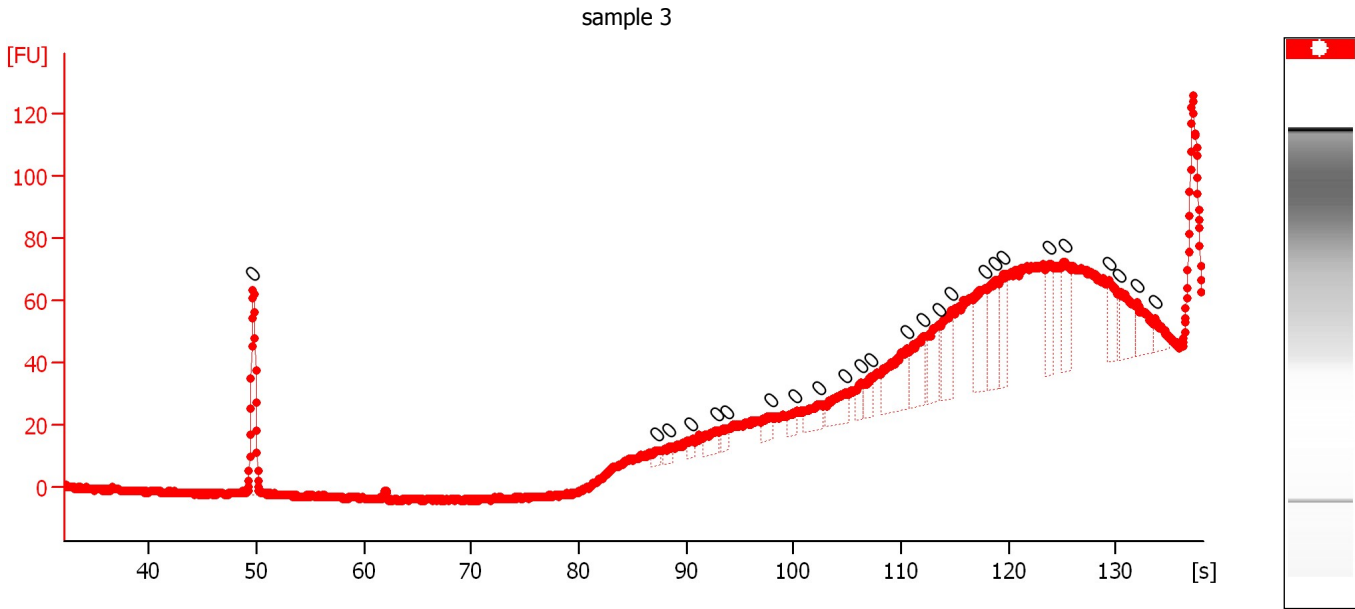
**Peak table for sample 2 : sample 2**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	50.15	0	0.00	0.0	
2	115.05	0	0.00	0.0	
3	116.40	0	0.00	0.0	
4	117.05	0	0.00	0.0	
5	118.70	0	0.00	0.0	
6	120.40	0	0.00	0.0	
7	124.00	0	0.00	0.0	
8	126.05	0	0.00	0.0	
9	126.70	0	0.00	0.0	
10	127.60	0	0.00	0.0	
11	128.35	0	0.00	0.0	
12	129.45	0	0.00	0.0	
13	132.00	0	0.00	0.0	
14	134.15	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
 Modified: 12/4/2013 12:07:36 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Noise: 0.3

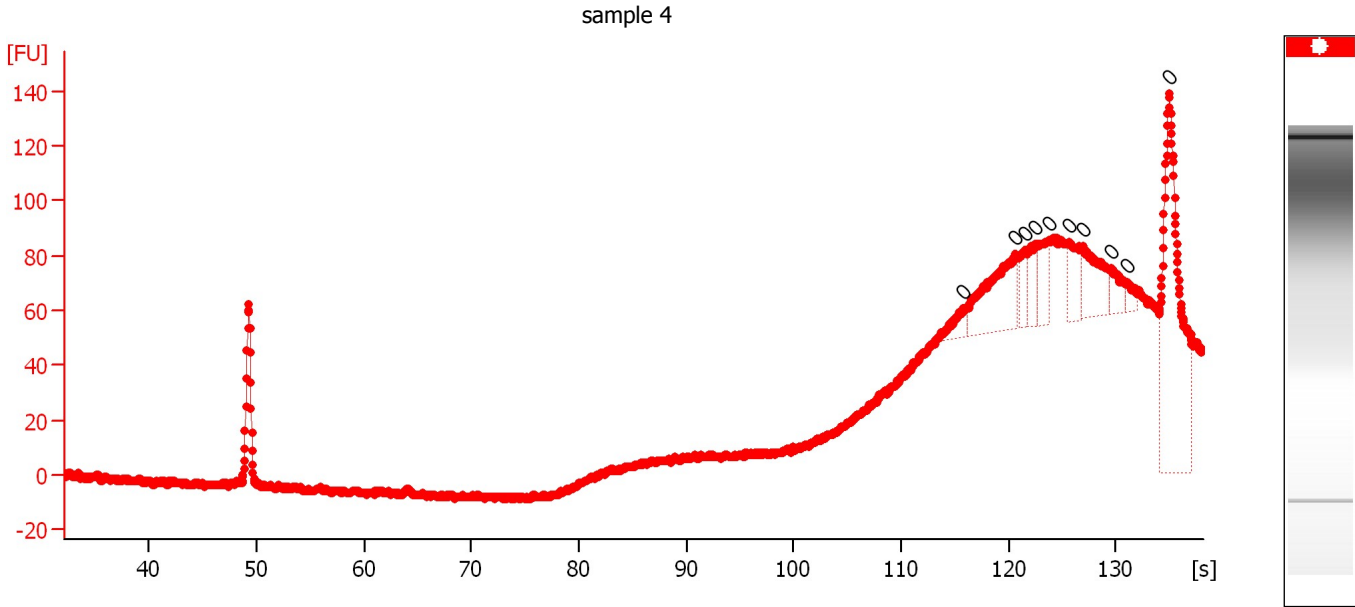
**Peak table for sample 3 : sample 3**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	49.70	0	0.00	0.0	
2	87.30	0	0.00	0.0	
3	88.40	0	0.00	0.0	
4	90.40	0	0.00	0.0	
5	92.80	0	0.00	0.0	
6	93.85	0	0.00	0.0	
7	97.85	0	0.00	0.0	
8	100.20	0	0.00	0.0	
9	102.35	0	0.00	0.0	
10	104.80	0	0.00	0.0	
11	106.25	0	0.00	0.0	
12	107.25	0	0.00	0.0	
13	110.50	0	0.00	0.0	
14	112.05	0	0.00	0.0	
15	113.50	0	0.00	0.0	
16	114.75	0	0.00	0.0	
17	117.80	0	0.00	0.0	
18	118.85	0	0.00	0.0	
19	119.55	0	0.00	0.0	
20	123.85	0	0.00	0.0	
21	125.20	0	0.00	0.0	
22	129.35	0	0.00	0.0	
23	130.35	0	0.00	0.0	
24	131.95	0	0.00	0.0	
25	133.65	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
 Modified: 12/4/2013 12:07:36 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Noise: 0.7

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

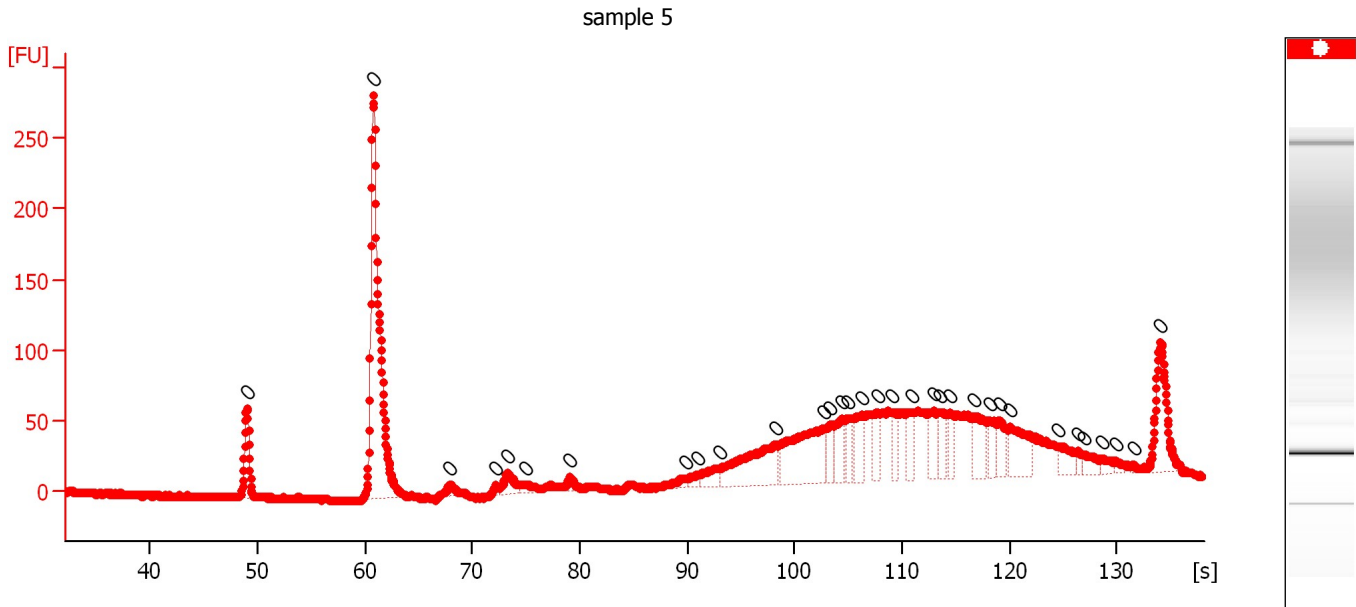
Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	115.80	0	0.00	0.0	
2	120.65	0	0.00	0.0	
3	121.50	0	0.00	0.0	
4	122.45	0	0.00	0.0	
5	123.75	0	0.00	0.0	
6	125.60	0	0.00	0.0	
7	126.95	0	0.00	0.0	
8	129.50	0	0.00	0.0	
9	131.05	0	0.00	0.0	
10	135.00	0	0.00	0.0	



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
 Modified: 12/4/2013 12:07:36 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Noise: 0.6

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

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	49.00	0	0.00	0.0	
2	60.80	0	0.00	0.0	
3	67.90	0	0.00	0.0	
4	72.20	0	0.00	0.0	
5	73.25	0	0.00	0.0	
6	75.00	0	0.00	0.0	
7	79.10	0	0.00	0.0	
8	89.80	0	0.00	0.0	
9	90.95	0	0.00	0.0	
10	92.95	0	0.00	0.0	
11	98.30	0	0.00	0.0	
12	102.70	0	0.00	0.0	
13	103.25	0	0.00	0.0	
14	104.45	0	0.00	0.0	
15	105.05	0	0.00	0.0	
16	106.30	0	0.00	0.0	
17	107.70	0	0.00	0.0	
18	109.10	0	0.00	0.0	
19	110.90	0	0.00	0.0	
20	112.95	0	0.00	0.0	
21	113.45	0	0.00	0.0	
22	114.45	0	0.00	0.0	
23	116.70	0	0.00	0.0	
24	118.15	0	0.00	0.0	
25	119.10	0	0.00	0.0	
26	120.10	0	0.00	0.0	
27	124.60	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
Modified: 12/4/2013 12:07:36 PM

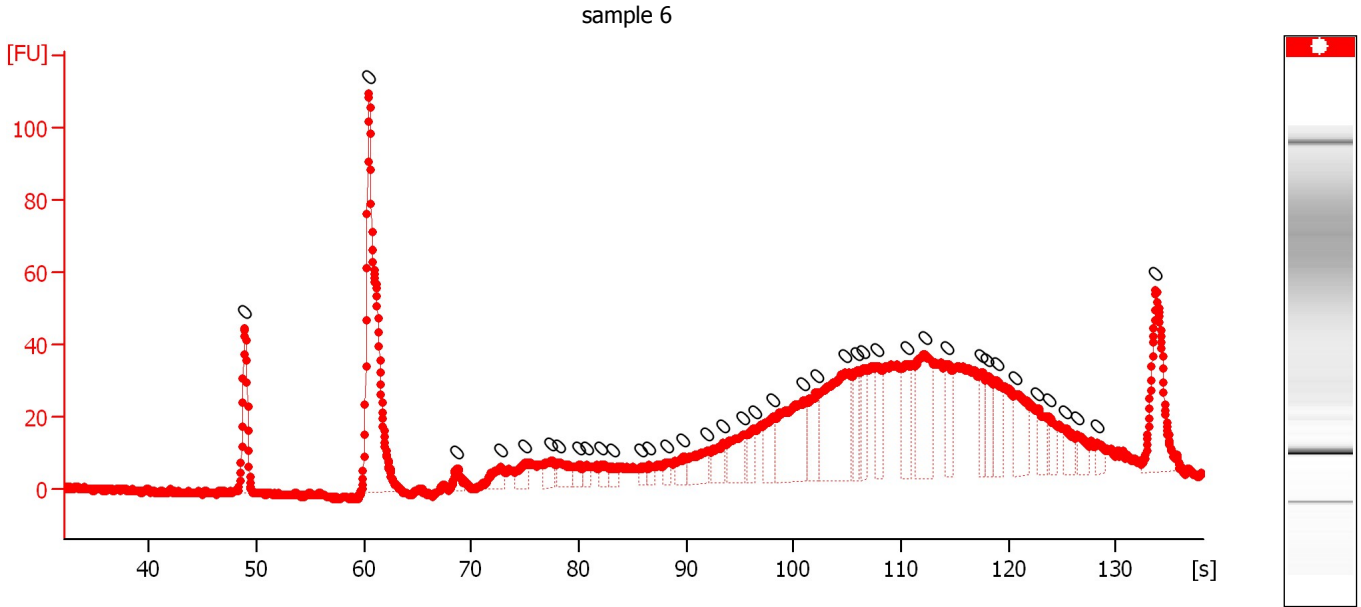
**Electropherogram Summary Continued ...****... Peak table for sample 5 : sample 5**

<b>Peak</b>	<b>Aligned Migration Time [s]</b>	<b>Size [bp]</b>	<b>Conc. [pg/<math>\mu</math>l]</b>	<b>Molarity [pmol/l]</b>	<b>Observations</b>
28	126.45	0	0.00	0.0	
29	127.00	0	0.00	0.0	
30	128.65	0	0.00	0.0	
31	129.90	0	0.00	0.0	
32	131.55	0	0.00	0.0	
33	134.10	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
 Modified: 12/4/2013 12:07:36 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Noise: 0.4

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

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	48.90	0	0.00	0.0	
2	60.50	0	0.00	0.0	
3	68.65	0	0.00	0.0	
4	72.75	0	0.00	0.0	
5	75.00	0	0.00	0.0	
6	77.40	0	0.00	0.0	
7	78.05	0	0.00	0.0	
8	80.00	0	0.00	0.0	
9	80.75	0	0.00	0.0	
10	82.00	0	0.00	0.0	
11	83.10	0	0.00	0.0	
12	85.80	0	0.00	0.0	
13	86.60	0	0.00	0.0	
14	88.25	0	0.00	0.0	
15	89.75	0	0.00	0.0	
16	91.95	0	0.00	0.0	
17	93.40	0	0.00	0.0	
18	95.30	0	0.00	0.0	
19	96.35	0	0.00	0.0	
20	98.10	0	0.00	0.0	
21	100.95	0	0.00	0.0	
22	102.10	0	0.00	0.0	
23	104.80	0	0.00	0.0	
24	105.95	0	0.00	0.0	
25	106.45	0	0.00	0.0	
26	107.75	0	0.00	0.0	
27	110.55	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
Modified: 12/4/2013 12:07:36 PM

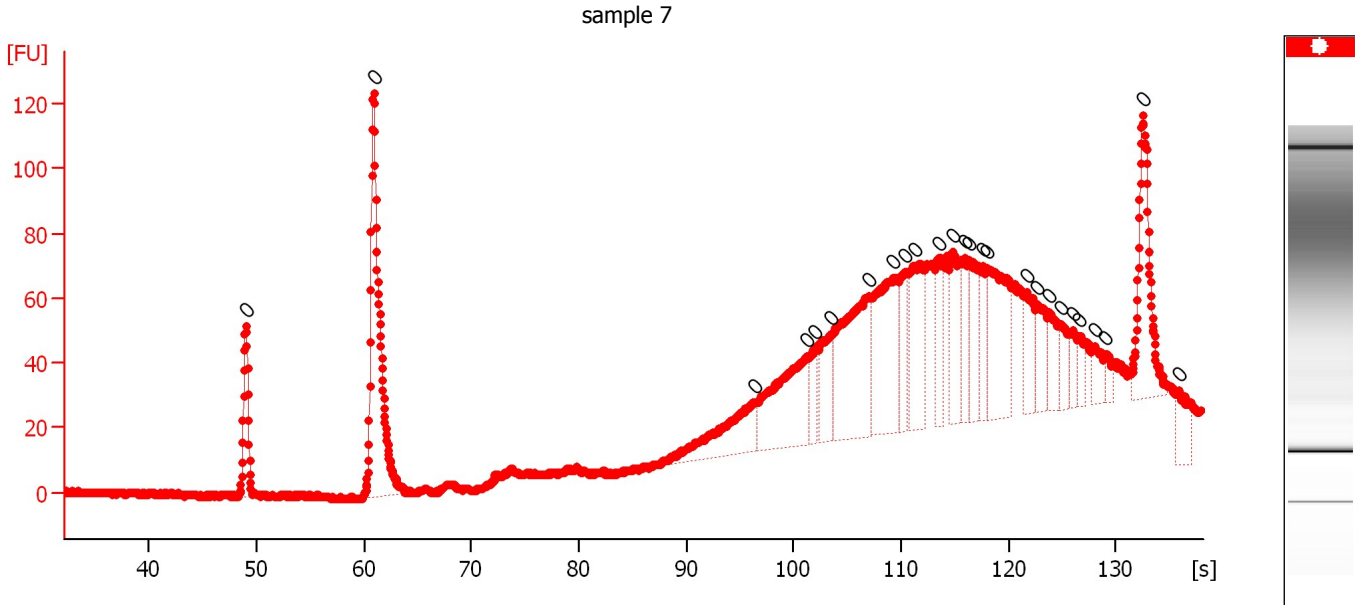
**Electropherogram Summary Continued ...****... Peak table for sample 6 : sample 6**

<b>Peak</b>	<b>Aligned Migration Time [s]</b>	<b>Size [bp]</b>	<b>Conc. [pg/<math>\mu</math>l]</b>	<b>Molarity [pmol/l]</b>	<b>Observations</b>
28	112.15	0	0.00	0.0	
29	114.20	0	0.00	0.0	
30	117.50	0	0.00	0.0	
31	118.00	0	0.00	0.0	
32	118.90	0	0.00	0.0	
33	120.55	0	0.00	0.0	
34	122.65	0	0.00	0.0	
35	123.80	0	0.00	0.0	
36	125.20	0	0.00	0.0	
37	126.45	0	0.00	0.0	
38	128.25	0	0.00	0.0	
39	133.75	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
 Modified: 12/4/2013 12:07:36 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Noise: 0.4

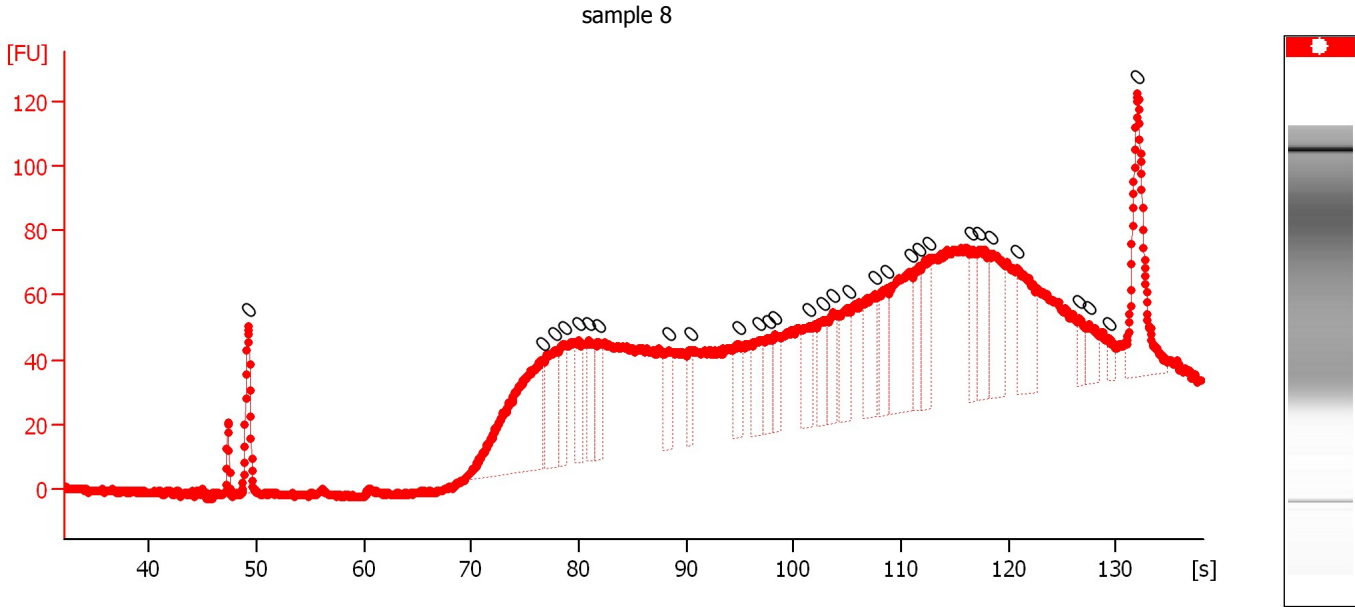
**Peak table for sample 7 : sample 7**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	49.00	0	0.00	0.0	
2	60.90	0	0.00	0.0	
3	96.45	0	0.00	0.0	
4	101.15	0	0.00	0.0	
5	102.05	0	0.00	0.0	
6	103.50	0	0.00	0.0	
7	107.00	0	0.00	0.0	
8	109.30	0	0.00	0.0	
9	110.40	0	0.00	0.0	
10	111.25	0	0.00	0.0	
11	113.45	0	0.00	0.0	
12	114.80	0	0.00	0.0	
13	115.90	0	0.00	0.0	
14	116.35	0	0.00	0.0	
15	117.65	0	0.00	0.0	
16	118.05	0	0.00	0.0	
17	121.65	0	0.00	0.0	
18	122.70	0	0.00	0.0	
19	123.80	0	0.00	0.0	
20	124.90	0	0.00	0.0	
21	125.95	0	0.00	0.0	
22	126.65	0	0.00	0.0	
23	128.00	0	0.00	0.0	
24	129.10	0	0.00	0.0	
25	132.55	0	0.00	0.0	
26	135.85	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
 Modified: 12/4/2013 12:07:36 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Noise: 0.4

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

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	49.20	0	0.00	0.0	
2	76.55	0	0.00	0.0	
3	77.80	0	0.00	0.0	
4	78.65	0	0.00	0.0	
5	80.00	0	0.00	0.0	
6	81.00	0	0.00	0.0	
7	81.80	0	0.00	0.0	
8	88.40	0	0.00	0.0	
9	90.35	0	0.00	0.0	
10	94.90	0	0.00	0.0	
11	96.80	0	0.00	0.0	
12	97.75	0	0.00	0.0	
13	98.35	0	0.00	0.0	
14	101.50	0	0.00	0.0	
15	102.80	0	0.00	0.0	
16	103.75	0	0.00	0.0	
17	105.10	0	0.00	0.0	
18	107.55	0	0.00	0.0	
19	108.70	0	0.00	0.0	
20	110.85	0	0.00	0.0	
21	111.65	0	0.00	0.0	
22	112.65	0	0.00	0.0	
23	116.45	0	0.00	0.0	
24	117.35	0	0.00	0.0	
25	118.45	0	0.00	0.0	
26	120.90	0	0.00	0.0	
27	126.60	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
Modified: 12/4/2013 12:07:36 PM

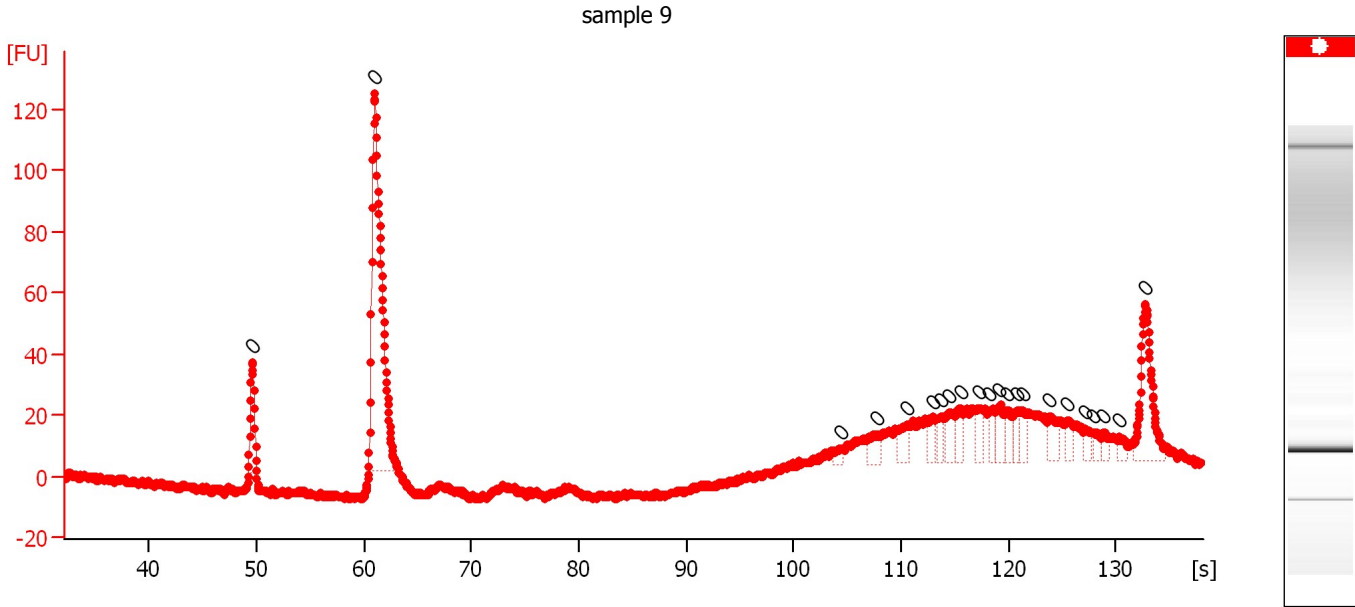
**Electropherogram Summary Continued ...****... Peak table for sample 8 : sample 8**

<b>Peak</b>	<b>Aligned Migration Time [s]</b>	<b>Size [bp]</b>	<b>Conc. [pg/<math>\mu</math>l]</b>	<b>Molarity [pmol/l]</b>	<b>Observations</b>
28	127.45	0	0.00	0.0	
29	129.35	0	0.00	0.0	
30	132.05	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
 Modified: 12/4/2013 12:07:36 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Noise: 0.8

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

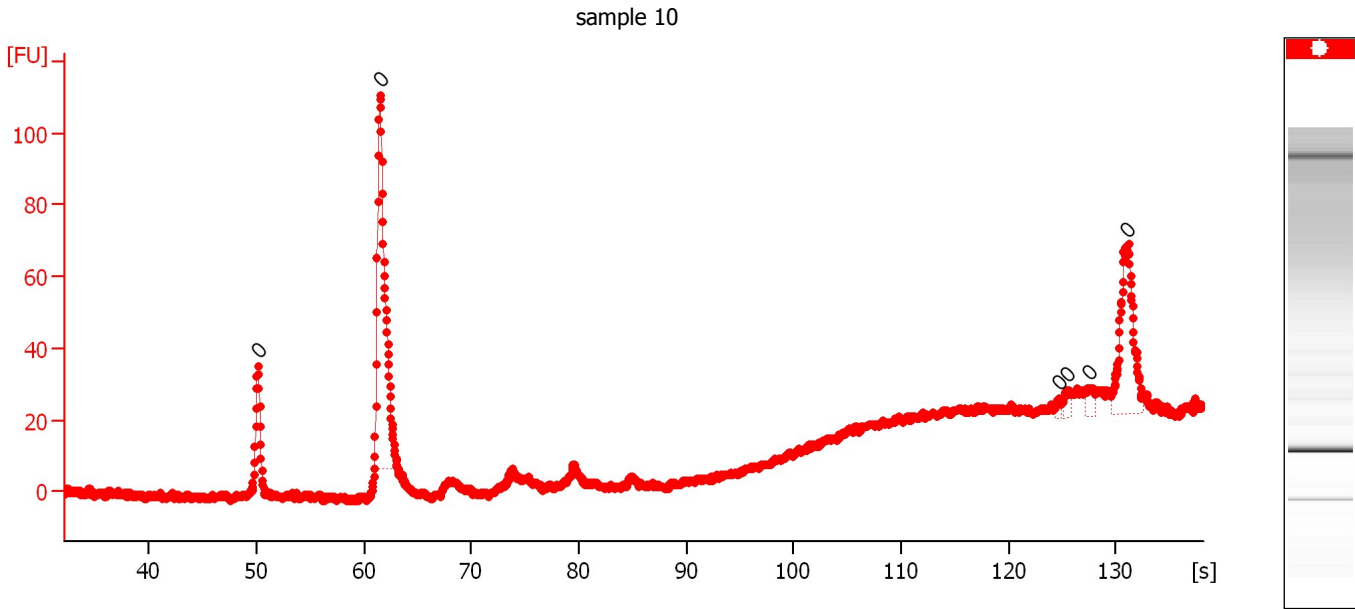
Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	49.60	0	0.00	0.0	
2	61.00	0	0.00	0.0	
3	104.35	0	0.00	0.0	
4	107.85	0	0.00	0.0	
5	110.65	0	0.00	0.0	
6	112.90	0	0.00	0.0	
7	113.75	0	0.00	0.0	
8	114.50	0	0.00	0.0	
9	115.55	0	0.00	0.0	
10	117.30	0	0.00	0.0	
11	118.25	0	0.00	0.0	
12	119.15	0	0.00	0.0	
13	119.80	0	0.00	0.0	
14	120.80	0	0.00	0.0	
15	121.30	0	0.00	0.0	
16	123.85	0	0.00	0.0	
17	125.55	0	0.00	0.0	
18	127.15	0	0.00	0.0	
19	127.85	0	0.00	0.0	
20	128.85	0	0.00	0.0	
21	130.35	0	0.00	0.0	
22	132.80	0	0.00	0.0	



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
Modified: 12/4/2013 12:07:36 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0      Noise: 0.7

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

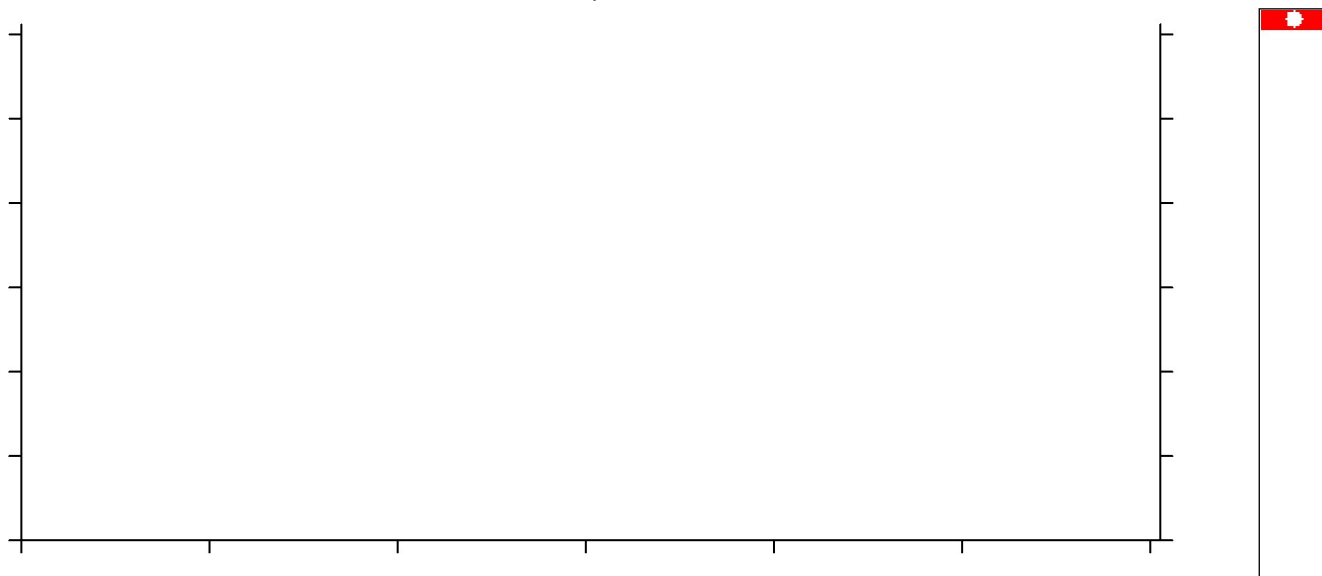
Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	50.10	0	0.00	0.0	
2	61.50	0	0.00	0.0	
3	124.70	0	0.00	0.0	
4	125.55	0	0.00	0.0	
5	127.60	0	0.00	0.0	
6	131.10	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

Created: 12/4/2013 11:29:13 AM  
Modified: 12/4/2013 12:07:36 PM

**Electropherogram Summary Continued ...**

sample 11



**Setpoint Deviations for sample 11 : sample 11**

End Analysis Time Range [s] : 14.9

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

Noise: 1.5

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-04\2013-12-04\_002.xad

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Modified: 12/4/2013 12:07:36 PM

**Gel Image**

