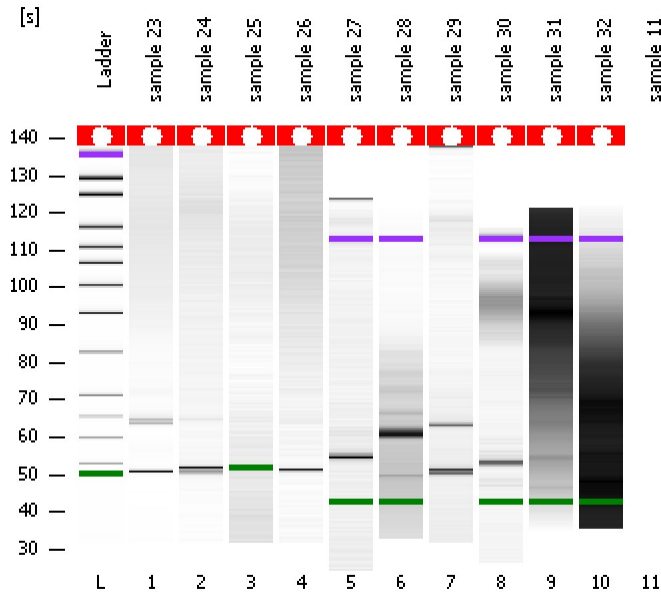


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
Modified: 1/21/2014 5:11:31 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

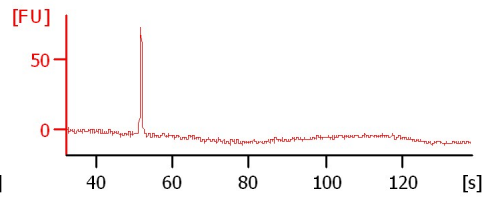
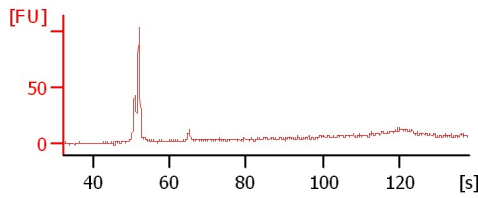
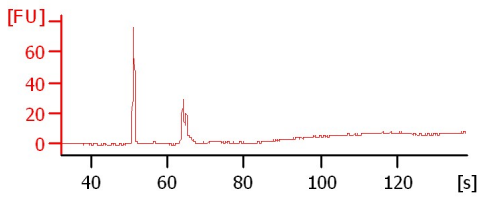
#### Chip Information:

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

sample 23

sample 24

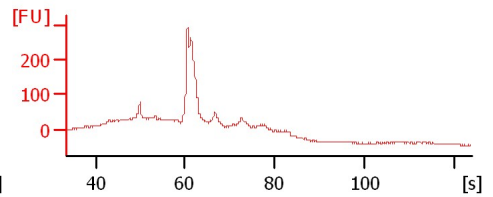
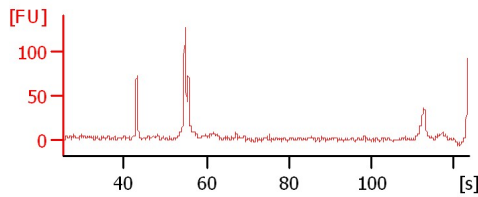
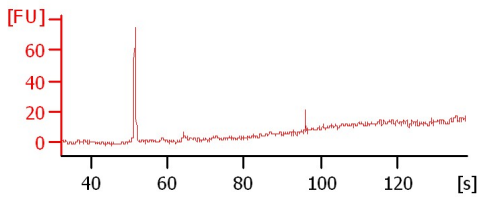
sample 25



sample 26

sample 27

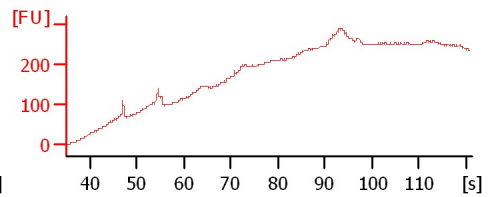
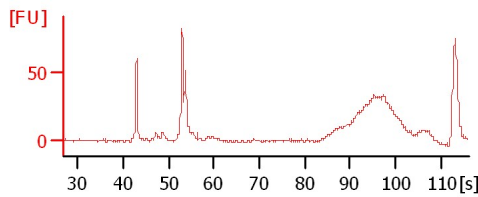
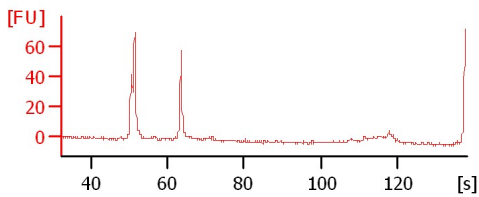
sample 28



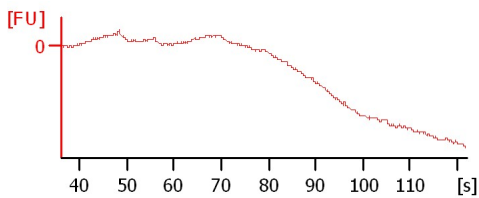
sample 29

sample 30

sample 31



sample 32



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
 Modified: 1/21/2014 5:11:31 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 23		<input type="checkbox"/>	✓			
sample 24		<input type="checkbox"/>	✓			
sample 25		<input type="checkbox"/>	✓			
sample 26		<input type="checkbox"/>	✓			
sample 27		<input type="checkbox"/>	✓			
sample 28		<input type="checkbox"/>	✓			
sample 29		<input type="checkbox"/>	✓			
sample 30		<input type="checkbox"/>	✓			
sample 31		<input type="checkbox"/>	✓			
sample 32		<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\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
Modified: 1/21/2014 5:11:31 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

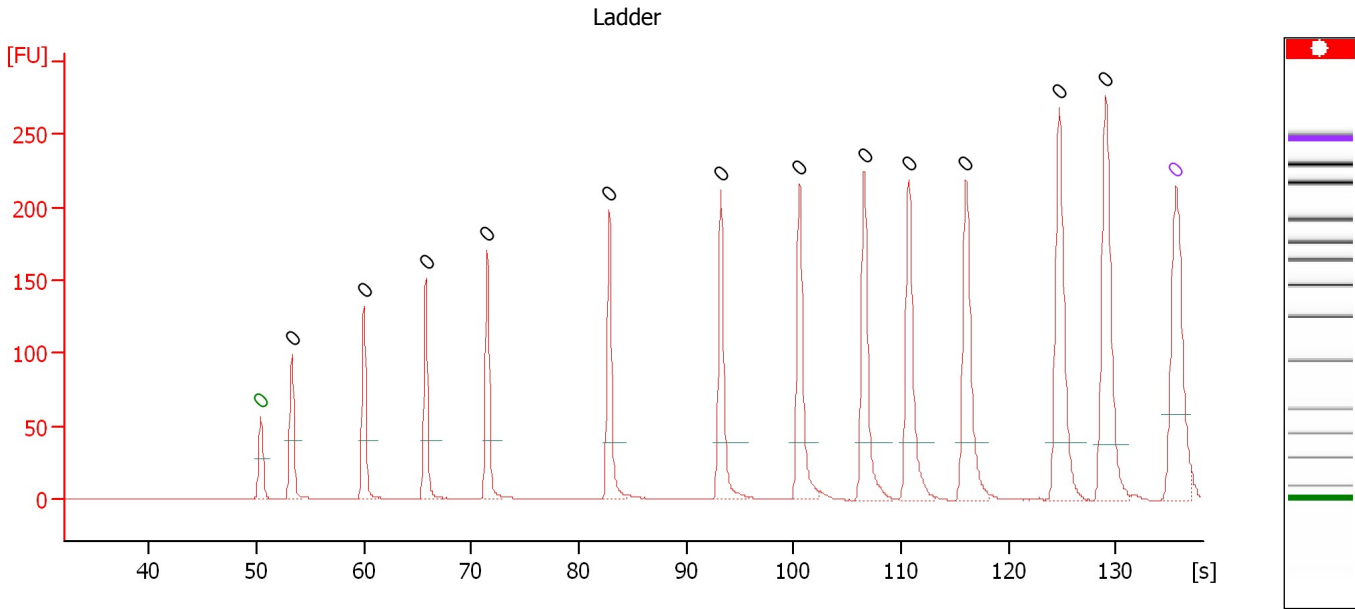
**Ladder**

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\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
 Modified: 1/21/2014 5:11:31 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

**Peak table for Ladder**

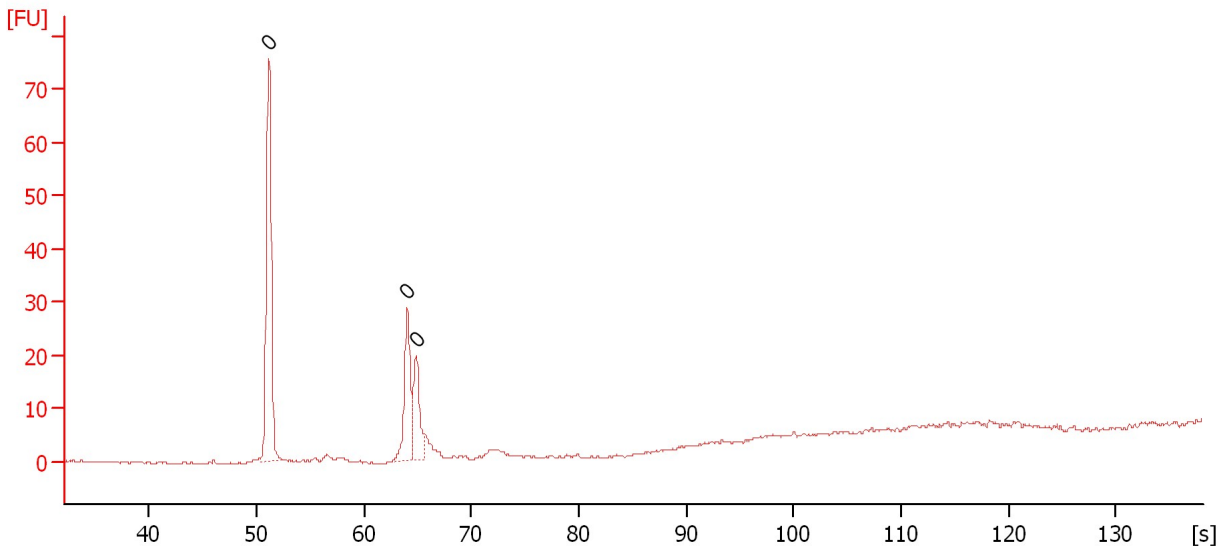
Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	50.40	0	0.00	0.0	Lower Marker
2	53.30	0	0.00	0.0	Ladder Peak
3	60.00	0	0.00	0.0	Ladder Peak
4	65.75	0	0.00	0.0	Ladder Peak
5	71.50	0	0.00	0.0	Ladder Peak
6	82.85	0	0.00	0.0	Ladder Peak
7	93.20	0	0.00	0.0	Ladder Peak
8	100.55	0	0.00	0.0	Ladder Peak
9	106.60	0	0.00	0.0	Ladder Peak
10	110.75	0	0.00	0.0	Ladder Peak
11	116.05	0	0.00	0.0	Ladder Peak
12	124.70	0	0.00	0.0	Ladder Peak
13	129.10	0	0.00	0.0	Ladder Peak
14	135.60	0	0.00	0.0	Upper Marker

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
Modified: 1/21/2014 5:11:31 PM

**Electropherogram Summary Continued ...**

sample 23



**Overall Results for sample 1 : sample 23**

Number of peaks found: 0                      Noise: 0.2

**Peak table for sample 1 : sample 23**

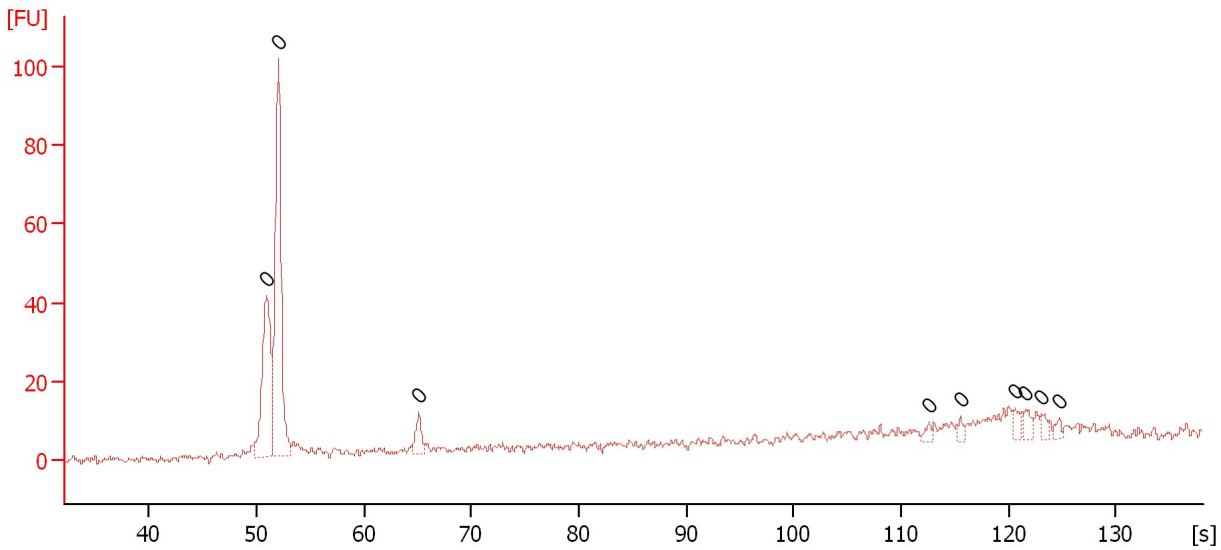
Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	51.15	0	0.00	0.0	
2	64.05	0	0.00	0.0	
3	64.90	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
Modified: 1/21/2014 5:11:31 PM

**Electropherogram Summary Continued ...**

sample 24



**Overall Results for sample 2 : sample 24**

Number of peaks found: 0                      Noise: 1.0

**Peak table for sample 2 : sample 24**

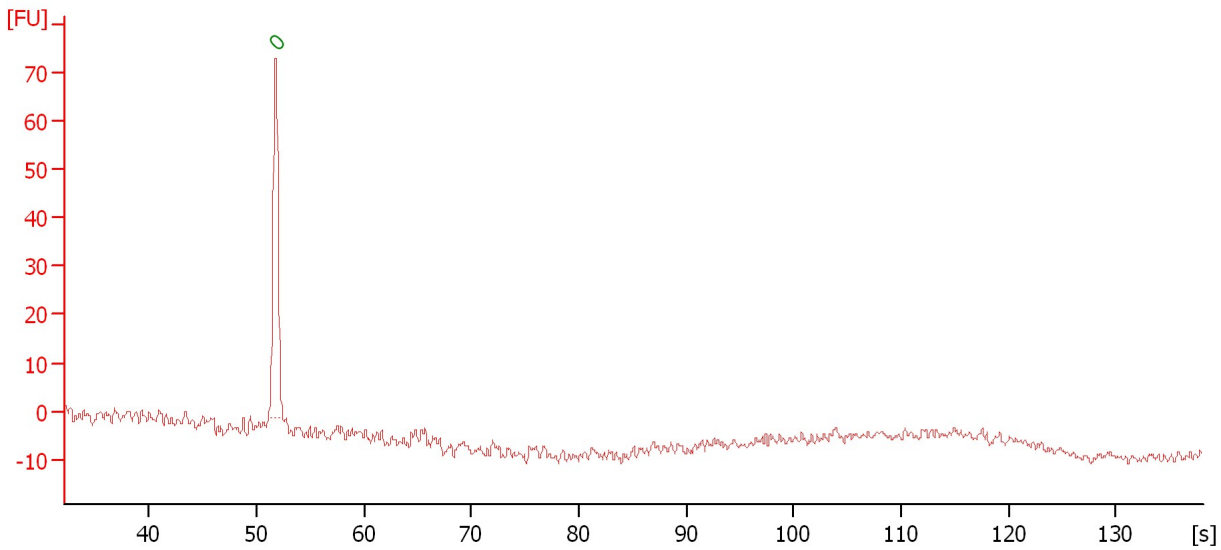
Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	50.95	0	0.00	0.0	
2	52.05	0	0.00	0.0	
3	65.10	0	0.00	0.0	
4	112.65	0	0.00	0.0	
5	115.50	0	0.00	0.0	
6	120.60	0	0.00	0.0	
7	121.60	0	0.00	0.0	
8	123.05	0	0.00	0.0	
9	124.75	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
Modified: 1/21/2014 5:11:31 PM

**Electropherogram Summary Continued ...**

sample 25



**Overall Results for sample 3 : sample 25**

Number of peaks found: 0                      Noise: 1.0

**Peak table for sample 3 : sample 25**

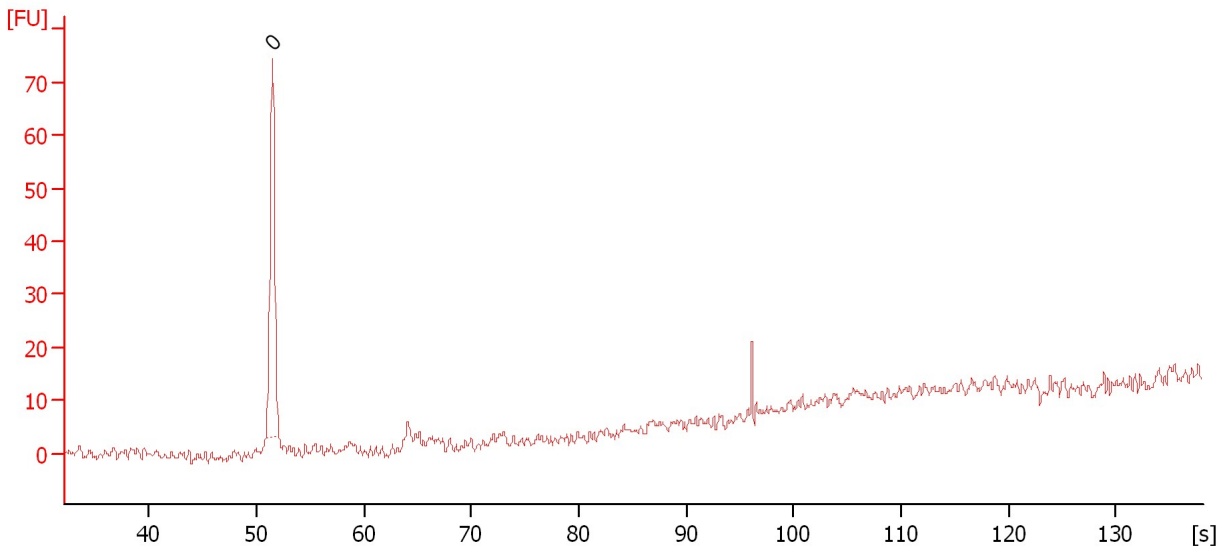
Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	51.80	0	0.00	0.0	Lower Marker

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
Modified: 1/21/2014 5:11:31 PM

**Electropherogram Summary Continued ...**

sample 26



**Overall Results for sample 4 : sample 26**

Number of peaks found: 0                      Noise: 1.2

**Peak table for sample 4 : sample 26**

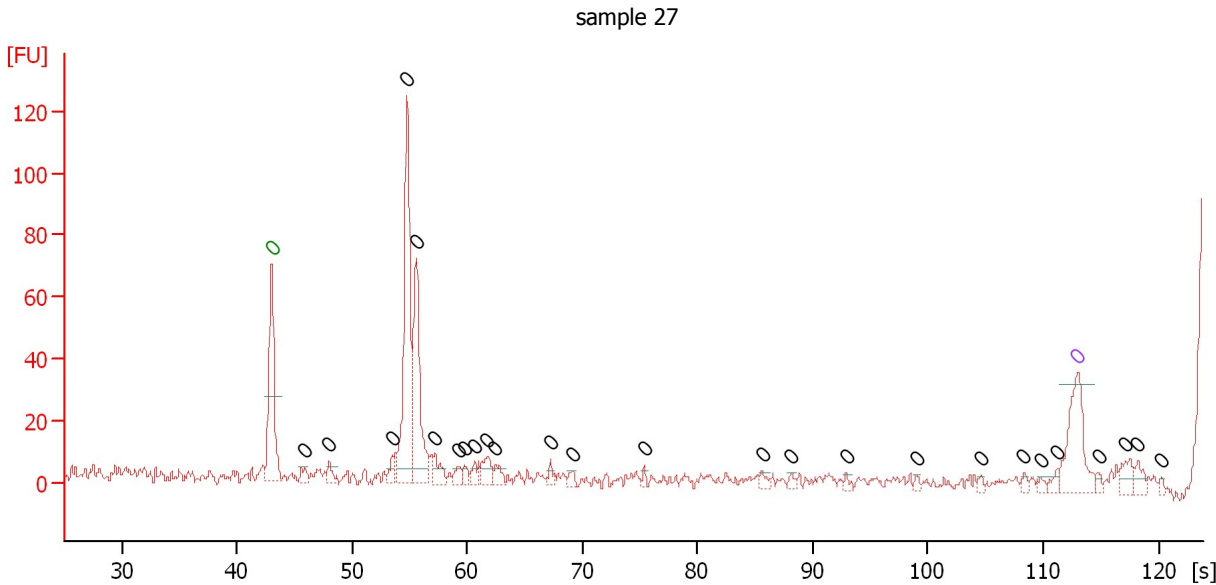
Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	51.50	0	0.00	0.0	



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
 Modified: 1/21/2014 5:11:31 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : sample 27**

Number of peaks found: 26                      Noise: 1.5

**Peak table for sample 5 : sample 27**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	0	0.00	0.0	Lower Marker
2	45.84	0	0.00	0.0	
3	47.99	0	0.00	0.0	
4	53.49	0	0.00	0.0	
5	54.75	0	0.00	0.0	
6	55.59	0	0.00	0.0	
7	57.18	0	0.00	0.0	
8	59.23	0	0.00	0.0	
9	59.74	0	0.00	0.0	
10	60.58	0	0.00	0.0	
11	61.75	0	0.00	0.0	
12	62.45	0	0.00	0.0	
13	67.20	0	0.00	0.0	
14	69.16	0	0.00	0.0	
15	75.37	0	0.00	0.0	
16	85.58	0	0.00	0.0	
17	88.14	0	0.00	0.0	
18	92.90	0	0.00	0.0	
19	98.96	0	0.00	0.0	
20	104.56	0	0.00	0.0	
21	108.34	0	0.00	0.0	
22	109.78	0	0.00	0.0	
23	111.23	0	0.00	0.0	
24	113.00	0	0.00	0.0	Upper Marker
25	114.82	0	0.00	0.0	
26	117.15	0	0.00	0.0	
27	118.22	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
Modified: 1/21/2014 5:11:31 PM

**Electropherogram Summary Continued ...**

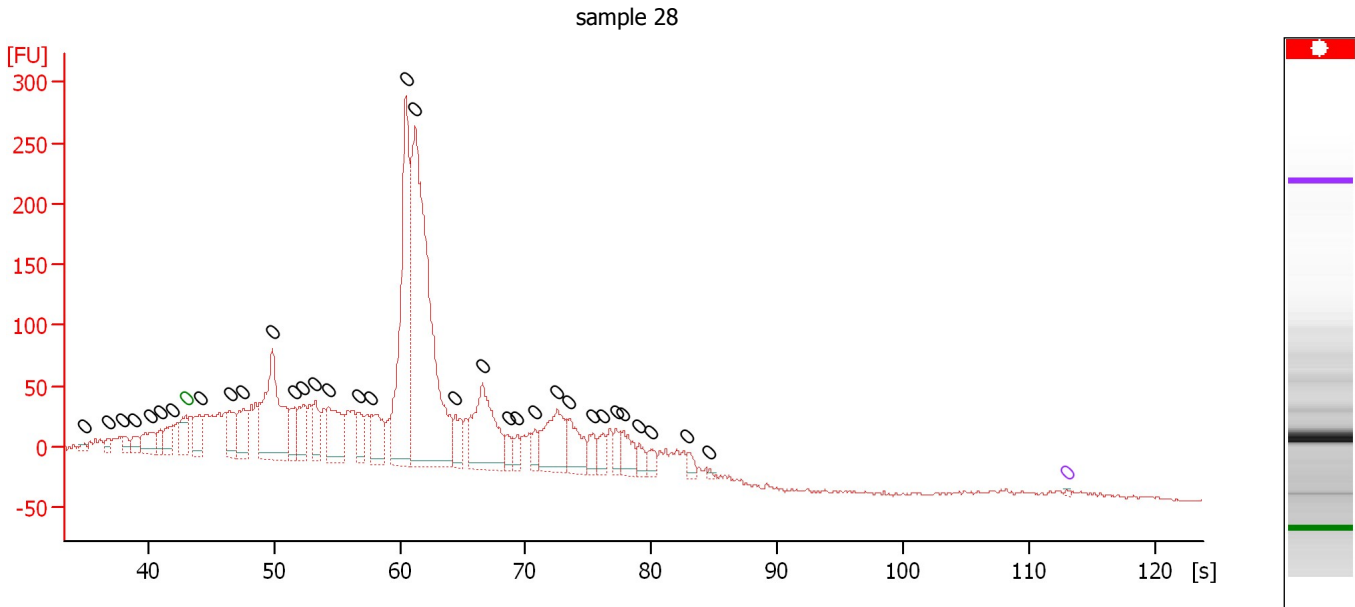
... Peak table for sample 5 : sample 27

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations
28	120.28	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
 Modified: 1/21/2014 5:11:31 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : sample 28**

Number of peaks found: 34                      Noise: 1.3

**Peak table for sample 6 : sample 28**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	34.94	0	0.00	0.0	
2	36.86	0	0.00	0.0	
3	37.97	0	0.00	0.0	
4	38.86	0	0.00	0.0	
5	40.14	0	0.00	0.0	
6	40.95	0	0.00	0.0	
7	41.93	0	0.00	0.0	
8	43.00	0	0.00	0.0	Lower Marker
9	44.11	0	0.00	0.0	
10	46.50	0	0.00	0.0	
11	47.56	0	0.00	0.0	
12	49.87	0	0.00	0.0	
13	51.62	0	0.00	0.0	
14	52.30	0	0.00	0.0	
15	53.28	0	0.00	0.0	
16	54.35	0	0.00	0.0	
17	56.78	0	0.00	0.0	
18	57.72	0	0.00	0.0	
19	60.49	0	0.00	0.0	
20	61.26	0	0.00	0.0	
21	64.41	0	0.00	0.0	
22	66.59	0	0.00	0.0	
23	68.59	0	0.00	0.0	
24	69.36	0	0.00	0.0	
25	70.73	0	0.00	0.0	
26	72.52	0	0.00	0.0	
27	73.50	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
Modified: 1/21/2014 5:11:31 PM

**Electropherogram Summary Continued ...****... Peak table for sample 6 : sample 28**

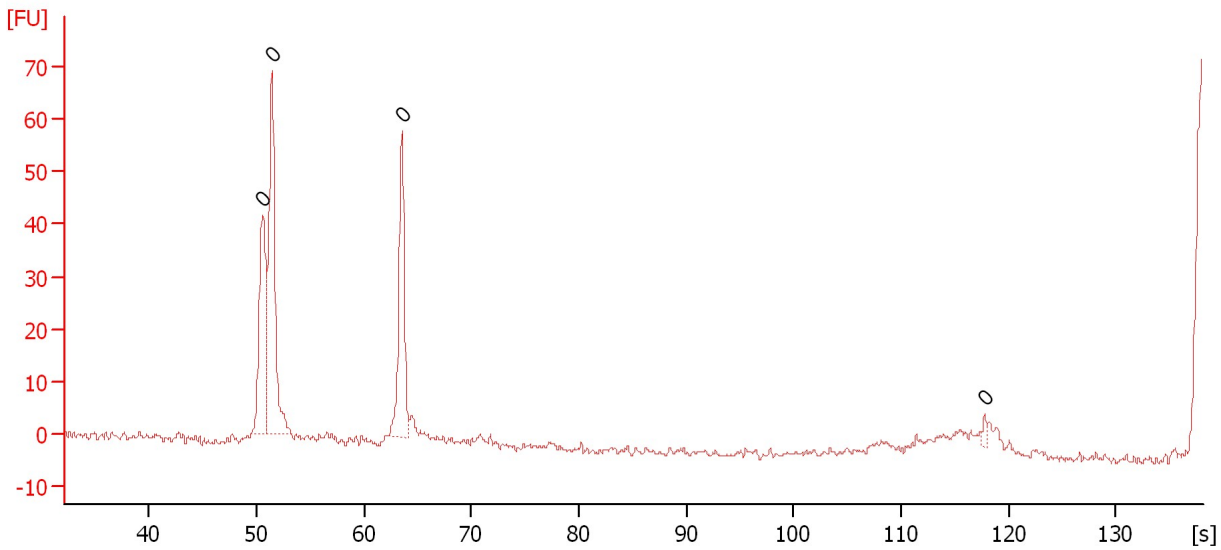
Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations
28	75.38	0	0.00	0.0	
29	76.14	0	0.00	0.0	
30	77.21	0	0.00	0.0	
31	77.68	0	0.00	0.0	
32	79.05	0	0.00	0.0	
33	79.98	0	0.00	0.0	
34	82.88	0	0.00	0.0	
35	84.59	0	0.00	0.0	
36	▶ 113.00	0	0.00	0.0	Upper Marker

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
Modified: 1/21/2014 5:11:31 PM

**Electropherogram Summary Continued ...**

sample 29



**Overall Results for sample 7 : sample 29**

Number of peaks found: 0                      Noise: 0.6

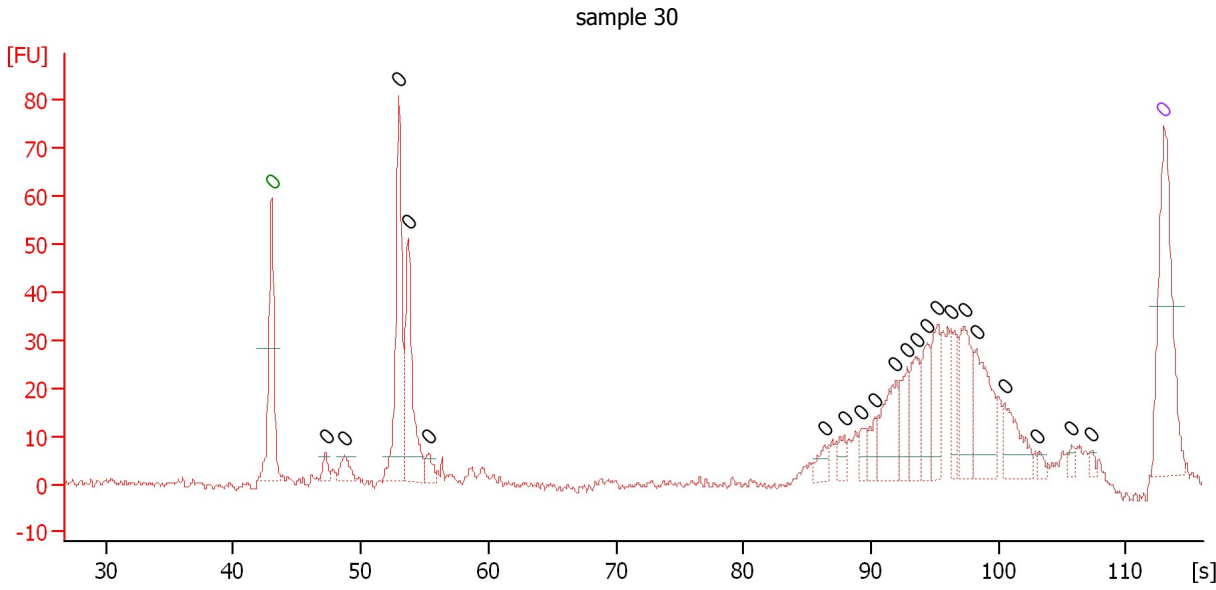
**Peak table for sample 7 : sample 29**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	50.55	0	0.00	0.0	
2	51.45	0	0.00	0.0	
3	63.55	0	0.00	0.0	
4	117.75	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
 Modified: 1/21/2014 5:11:31 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : sample 30**

Number of peaks found: 21                      Noise: 0.8

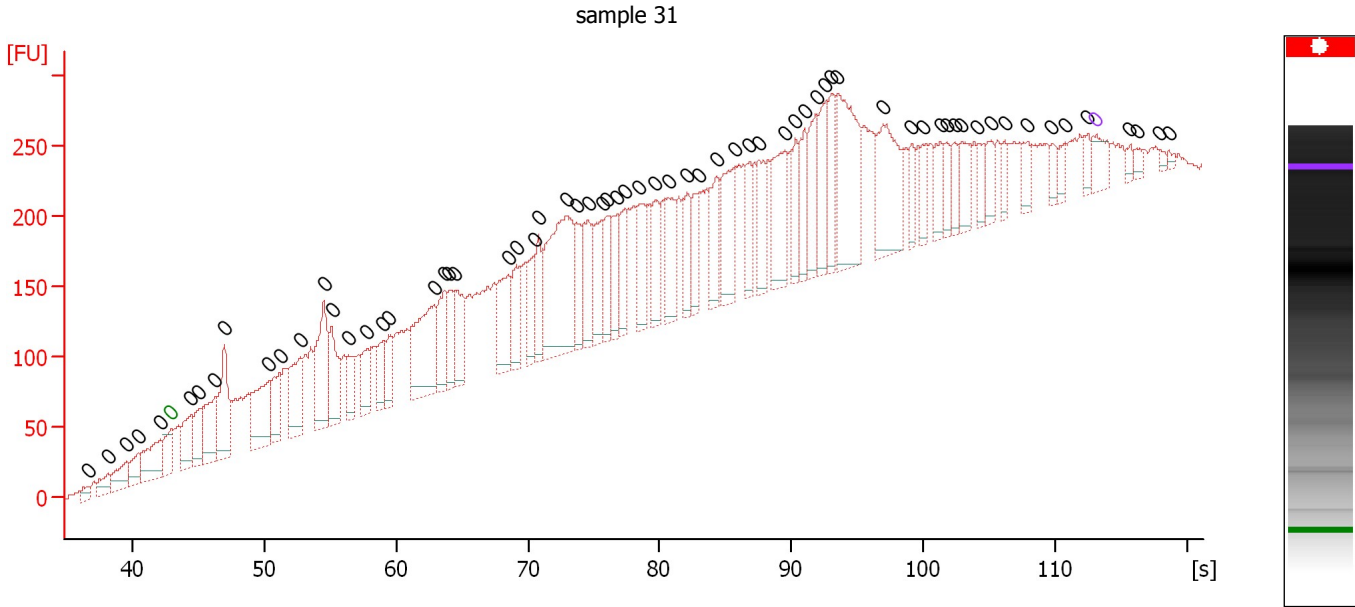
**Peak table for sample 8 : sample 30**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	0	0.00	0.0	Lower Marker
2	47.25	0	0.00	0.0	
3	48.73	0	0.00	0.0	
4	52.98	0	0.00	0.0	
5	53.70	0	0.00	0.0	
6	55.30	0	0.00	0.0	
7	86.34	0	0.00	0.0	
8	87.90	0	0.00	0.0	
9	89.25	0	0.00	0.0	
10	90.30	0	0.00	0.0	
11	91.94	0	0.00	0.0	
12	92.87	0	0.00	0.0	
13	93.54	0	0.00	0.0	
14	94.38	0	0.00	0.0	
15	95.23	0	0.00	0.0	
16	96.32	0	0.00	0.0	
17	97.37	0	0.00	0.0	
18	98.26	0	0.00	0.0	
19	100.45	0	0.00	0.0	
20	103.10	0	0.00	0.0	
21	105.76	0	0.00	0.0	
22	107.23	0	0.00	0.0	
23	113.00	0	0.00	0.0	Upper Marker

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
 Modified: 1/21/2014 5:11:31 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : sample 31**

Number of peaks found: 67      Noise: 2.4

**Peak table for sample 9 : sample 31**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	36.74	0	0.00	0.0	
2	38.24	0	0.00	0.0	
3	39.62	0	0.00	0.0	
4	40.48	0	0.00	0.0	
5	42.19	0	0.00	0.0	
6	43.00	0	0.00	0.0	Lower Marker
7	44.50	0	0.00	0.0	
8	45.12	0	0.00	0.0	
9	46.29	0	0.00	0.0	
10	47.03	0	0.00	0.0	
11	50.40	0	0.00	0.0	
12	51.22	0	0.00	0.0	
13	52.80	0	0.00	0.0	
14	54.55	0	0.00	0.0	
15	55.16	0	0.00	0.0	
16	56.46	0	0.00	0.0	
17	57.81	0	0.00	0.0	
18	58.98	0	0.00	0.0	
19	59.47	0	0.00	0.0	
20	62.93	0	0.00	0.0	
21	63.70	0	0.00	0.0	
22	64.07	0	0.00	0.0	
23	64.52	0	0.00	0.0	
24	68.58	0	0.00	0.0	
25	69.15	0	0.00	0.0	
26	70.45	0	0.00	0.0	
27	70.82	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
 Modified: 1/21/2014 5:11:31 PM

**Electropherogram Summary Continued ...**

... Peak table for sample 9 : sample 31

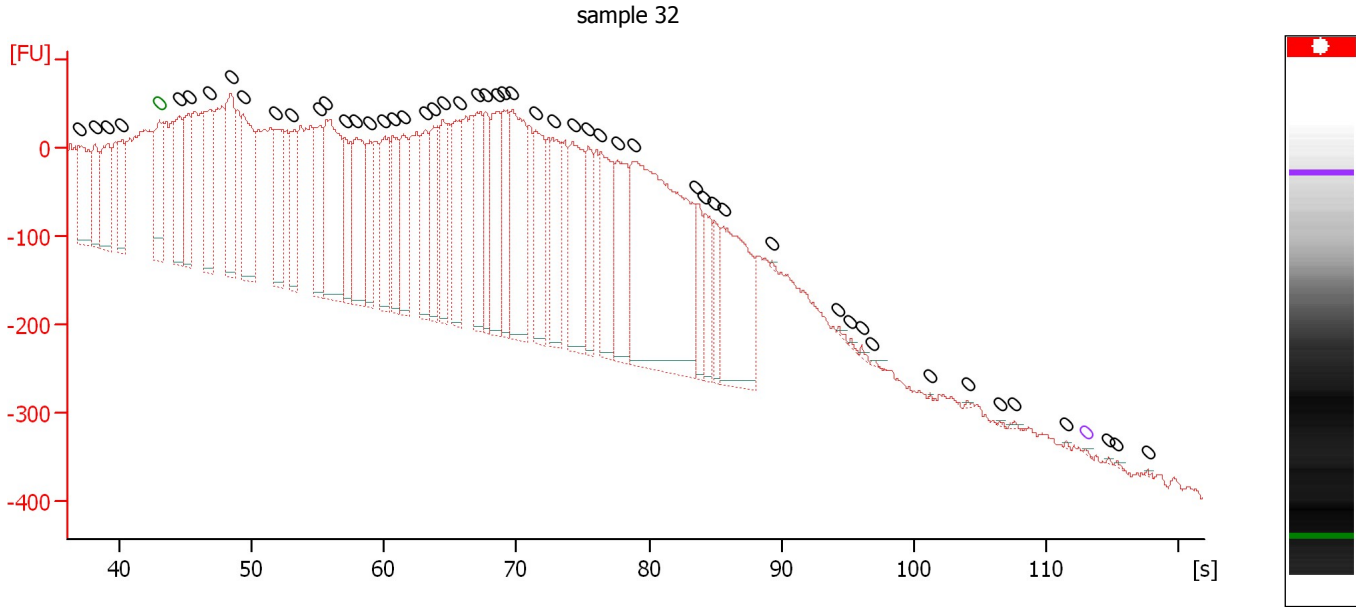
Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
28	72.90	0	0.00	0.0	
29	73.67	0	0.00	0.0	
30	74.56	0	0.00	0.0	
31	75.70	0	0.00	0.0	
32	75.99	0	0.00	0.0	
33	76.76	0	0.00	0.0	
34	77.41	0	0.00	0.0	
35	78.47	0	0.00	0.0	
36	79.65	0	0.00	0.0	
37	80.62	0	0.00	0.0	
38	82.09	0	0.00	0.0	
39	82.98	0	0.00	0.0	
40	84.28	0	0.00	0.0	
41	85.67	0	0.00	0.0	
42	86.77	0	0.00	0.0	
43	87.54	0	0.00	0.0	
44	89.45	0	0.00	0.0	
45	90.26	0	0.00	0.0	
46	90.95	0	0.00	0.0	
47	91.85	0	0.00	0.0	
48	92.58	0	0.00	0.0	
49	92.95	0	0.00	0.0	
50	93.48	0	0.00	0.0	
51	96.89	0	0.00	0.0	
52	99.09	0	0.00	0.0	
53	99.90	0	0.00	0.0	
54	101.25	0	0.00	0.0	
55	101.73	0	0.00	0.0	
56	102.34	0	0.00	0.0	
57	102.87	0	0.00	0.0	
58	104.09	0	0.00	0.0	
59	105.11	0	0.00	0.0	
60	106.13	0	0.00	0.0	
61	107.83	0	0.00	0.0	
62	109.66	0	0.00	0.0	
63	110.68	0	0.00	0.0	
64	112.39	0	0.00	0.0	
65	113.00	0	0.00	0.0	Upper Marker
66	115.60	0	0.00	0.0	
67	116.09	0	0.00	0.0	
68	117.88	0	0.00	0.0	
69	118.57	0	0.00	0.0	



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
 Modified: 1/21/2014 5:11:31 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : sample 32**

Number of peaks found: 52      Noise: 3.8

**Peak table for sample 10 : sample 32**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	36.97	0	0.00	0.0	
2	38.18	0	0.00	0.0	
3	39.03	0	0.00	0.0	
4	40.13	0	0.00	0.0	
5	43.00	0	0.00	0.0	Lower Marker
6	44.50	0	0.00	0.0	
7	45.23	0	0.00	0.0	
8	46.85	0	0.00	0.0	
9	48.43	0	0.00	0.0	
10	49.32	0	0.00	0.0	
11	51.83	0	0.00	0.0	
12	52.96	0	0.00	0.0	
13	55.15	0	0.00	0.0	
14	55.63	0	0.00	0.0	
15	57.05	0	0.00	0.0	
16	57.90	0	0.00	0.0	
17	58.91	0	0.00	0.0	
18	60.00	0	0.00	0.0	
19	60.69	0	0.00	0.0	
20	61.46	0	0.00	0.0	
21	63.12	0	0.00	0.0	
22	63.77	0	0.00	0.0	
23	64.46	0	0.00	0.0	
24	65.63	0	0.00	0.0	
25	67.01	0	0.00	0.0	
26	67.70	0	0.00	0.0	
27	68.63	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
Modified: 1/21/2014 5:11:31 PM

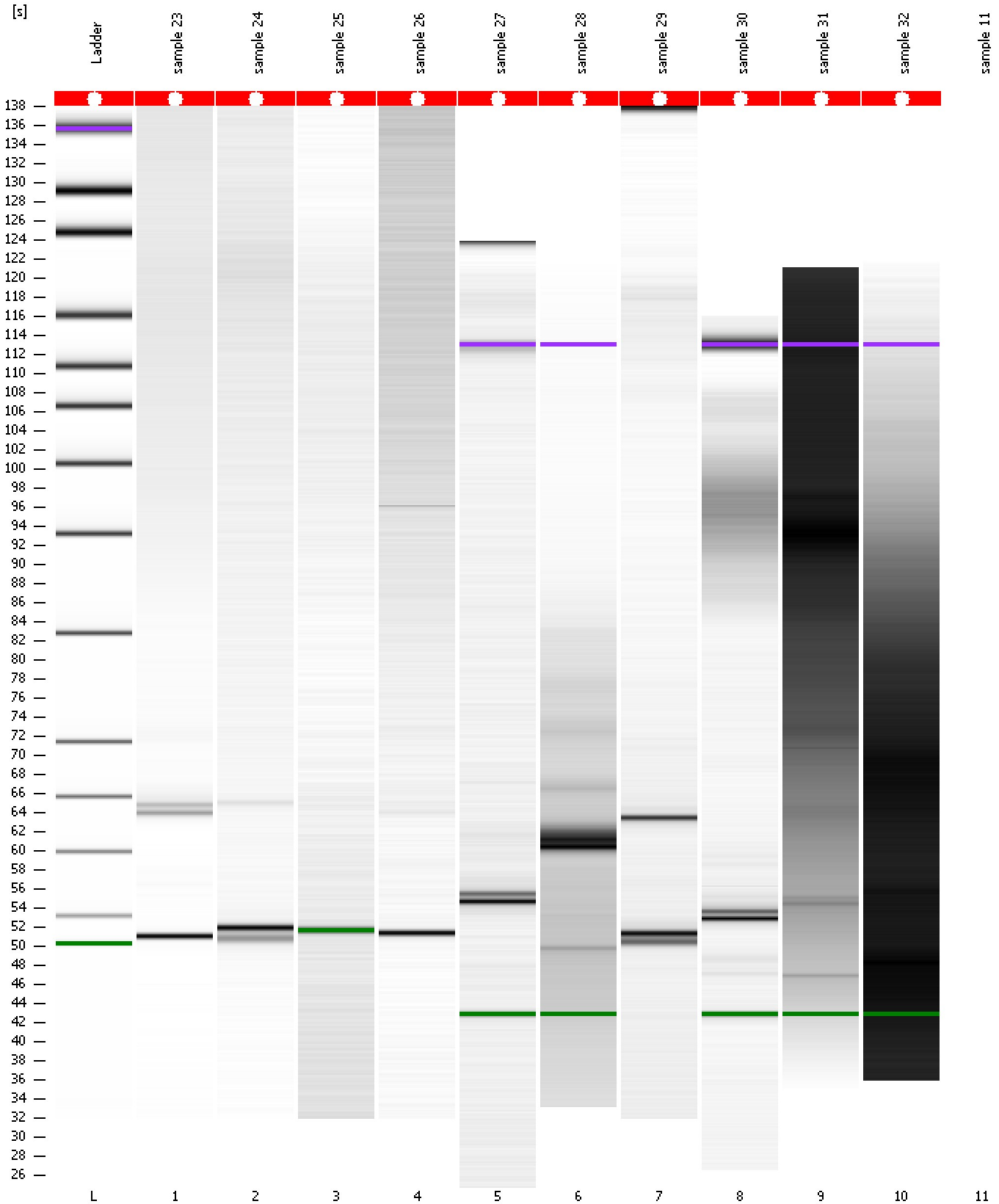
**Electropherogram Summary Continued ...****... Peak table for sample 10 : sample 32**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations
28	69.03	0	0.00	0.0	
29	69.68	0	0.00	0.0	
30	71.46	0	0.00	0.0	
31	72.76	0	0.00	0.0	
32	74.26	0	0.00	0.0	
33	75.43	0	0.00	0.0	
34	76.36	0	0.00	0.0	
35	77.57	0	0.00	0.0	
36	78.79	0	0.00	0.0	
37	83.61	0	0.00	0.0	
38	84.17	0	0.00	0.0	
39	84.94	0	0.00	0.0	
40	85.59	0	0.00	0.0	
41	89.28	0	0.00	0.0	
42	94.34	0	0.00	0.0	
43	95.23	0	0.00	0.0	
44	96.08	0	0.00	0.0	
45	96.89	0	0.00	0.0	
46	101.26	0	0.00	0.0	
47	104.05	0	0.00	0.0	
48	106.52	0	0.00	0.0	
49	107.62	0	0.00	0.0	
50	111.50	0	0.00	0.0	
51	113.00	0	0.00	0.0	Upper Marker
52	114.74	0	0.00	0.0	
53	115.35	0	0.00	0.0	
54	117.66	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
Modified: 1/21/2014 5:11:31 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-01-21\2014-01-21\_004.xad

Created: 1/21/2014 4:33:02 PM  
Modified: 1/21/2014 5:11:31 PM

**Invalid Samples**

Sample 11 has not been run, no results available.