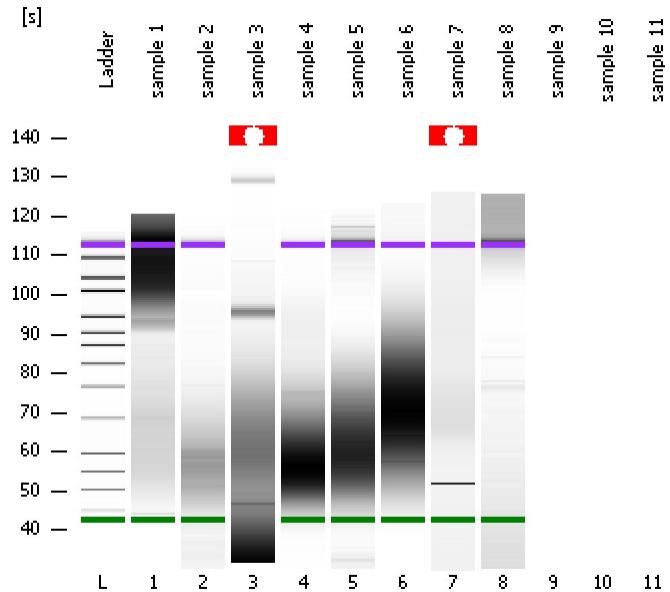


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09\_007.xad

Created: 10/9/2013 3:46:14 PM  
Modified: 10/9/2013 4:21:14 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

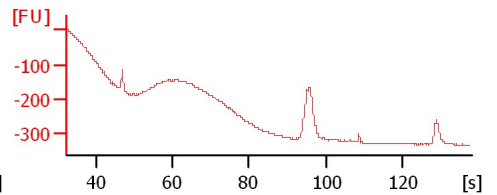
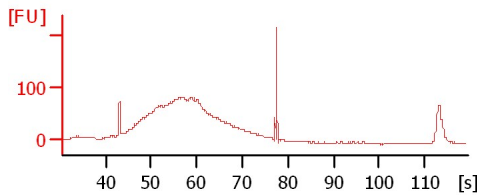
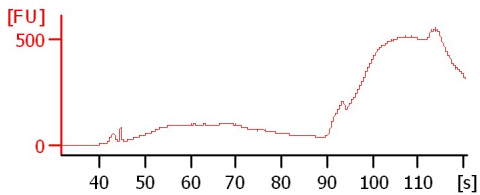
#### Chip Information:

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

sample 1

sample 2

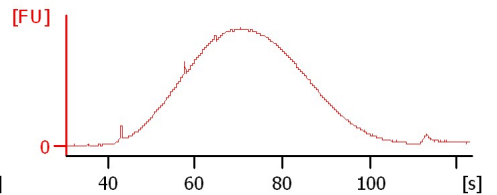
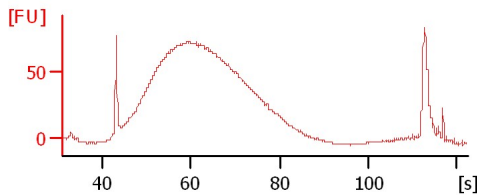
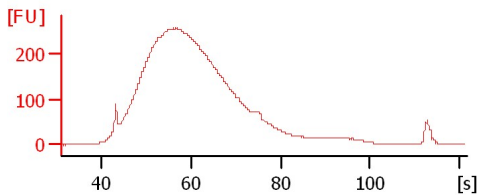
sample 3



sample 4

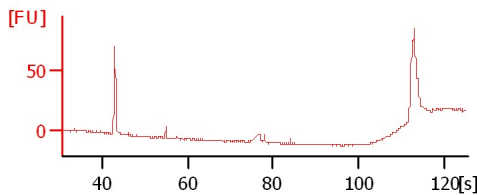
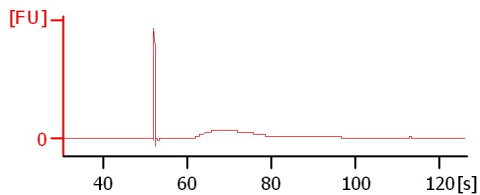
sample 5

sample 6



sample 7

sample 8



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09\_007.xad

Created: 10/9/2013 3:46:14 PM  
Modified: 10/9/2013 4:21:14 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\2013-10-09\2013-10-09\_007.xad

Created: 10/9/2013 3:46:14 PM  
Modified: 10/9/2013 4:21:14 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

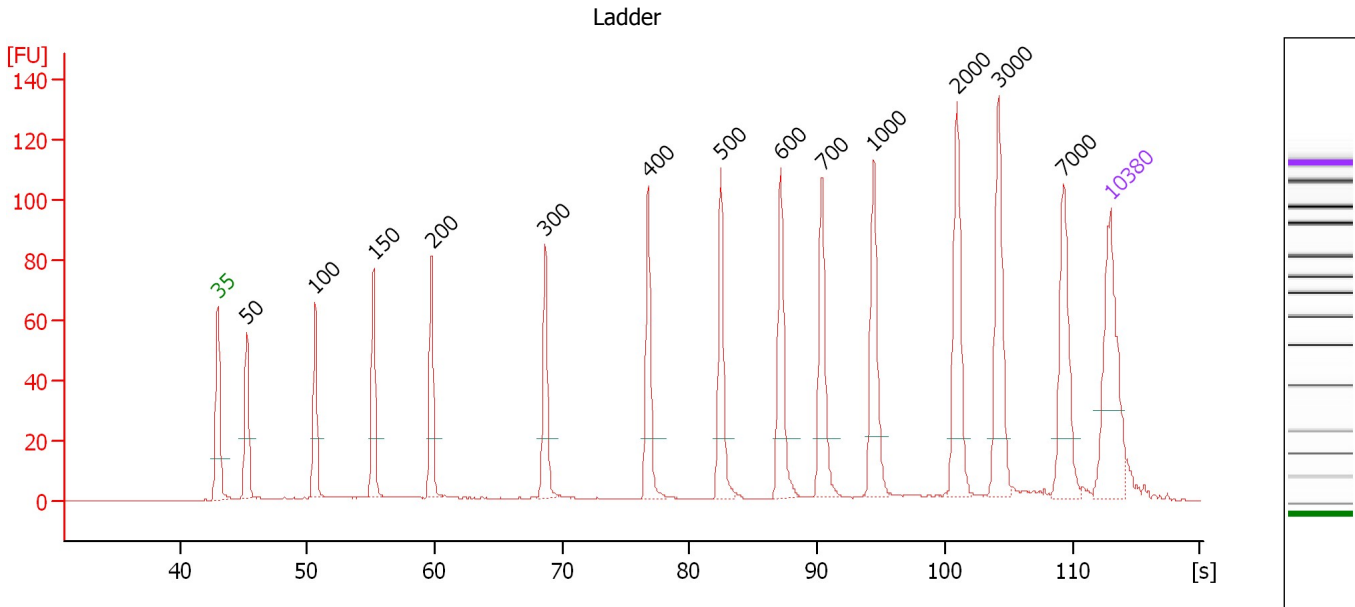
**Ladder**

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\2013-10-09\2013-10-09\_007.xad

Created: 10/9/2013 3:46:14 PM  
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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

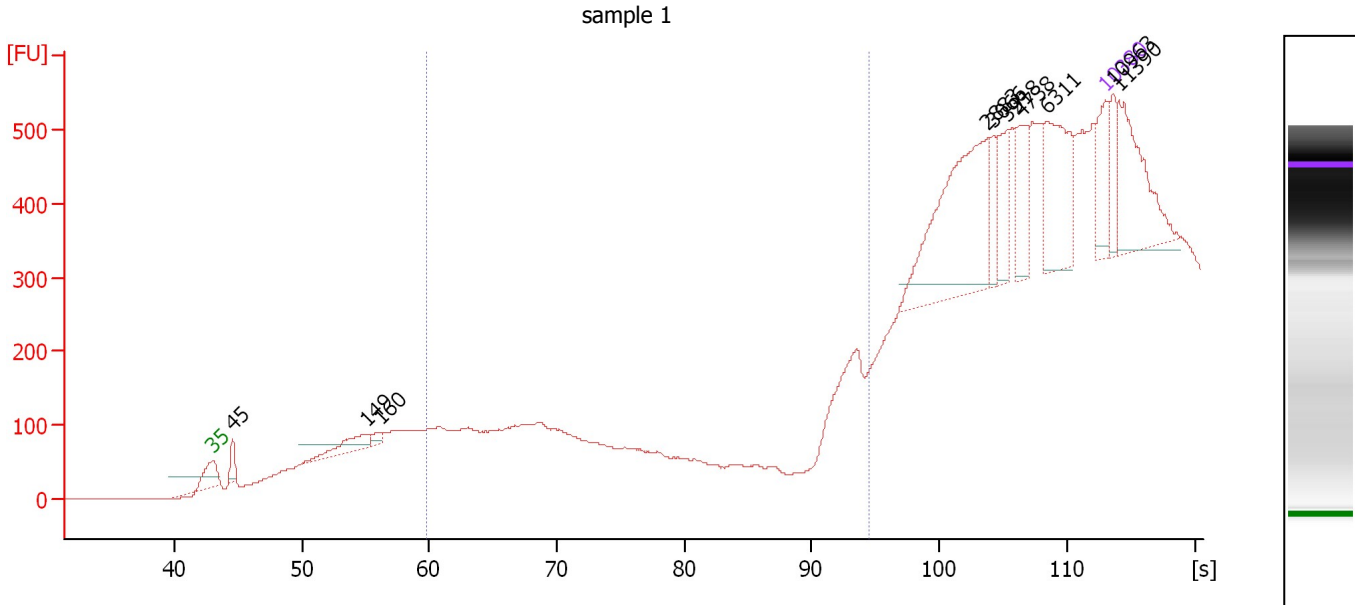
**Peak table for Ladder**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	Ladder Peak
9	600	150.00	378.8	Ladder Peak
10	700	150.00	324.7	Ladder Peak
11	1,000	150.00	227.3	Ladder Peak
12	2,000	150.00	113.6	Ladder Peak
13	3,000	150.00	75.8	Ladder Peak
14	7,000	150.00	32.5	Ladder Peak
15	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09\_007.xad

Created: 10/9/2013 3:46:14 PM  
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**Electropherogram Summary Continued ...**



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

Number of peaks found: 10                      Corr. Area 1: 0.0  
 Noise: 0.3

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	45	44.11	1,476.1	
3	149	89.79	912.6	
4	160	24.06	228.3	
5	2,883	372.12	195.6	
6	3,066	44.42	22.0	
7	3,918	78.70	30.4	
8	4,738	89.73	28.7	
9	6,311	185.77	44.6	
10	10,380	75.00	10.9	Upper Marker
11	10,963	0.00	0.0	
12	11,390	0.00	0.0	

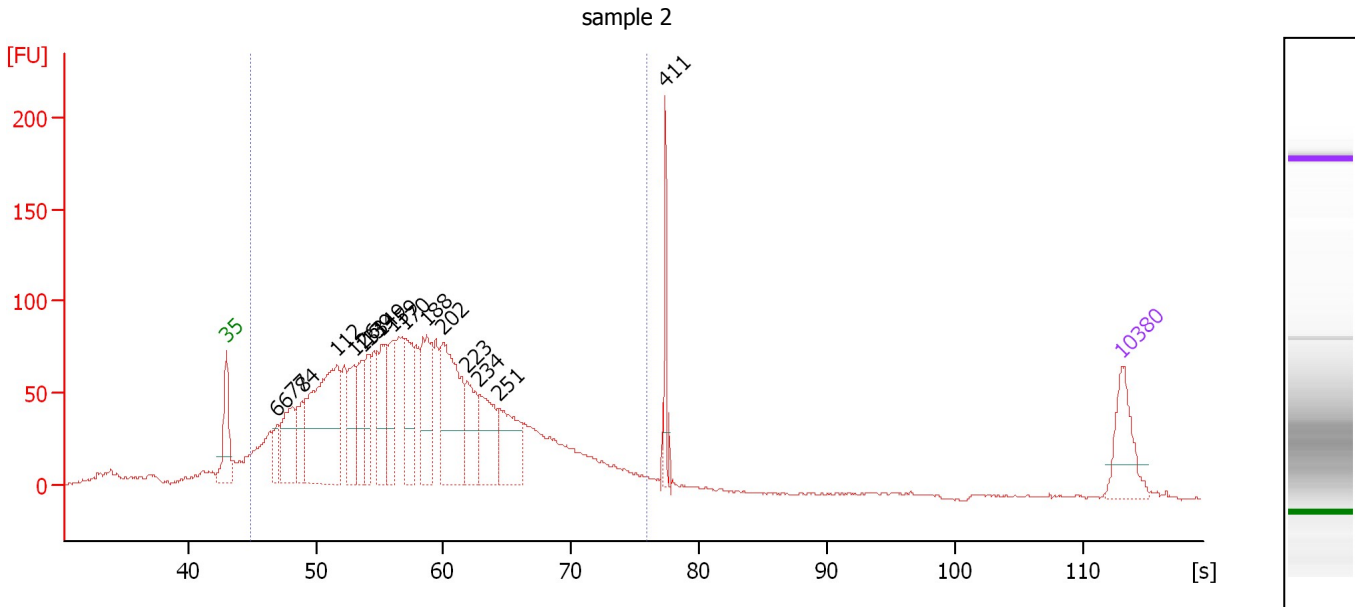
**Region table for sample 1 : sample 1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	0	0.0	0.00	0.0	0	0.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09\_007.xad

Created: 10/9/2013 3:46:14 PM  
 Modified: 10/9/2013 4:21:14 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 2 : sample 2**

Height Threshold [FU] : 30

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

Number of peaks found: 16      Corr. Area 1: 2,628.7  
 Noise: 0.4

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	66	59.04	1,355.3	
3	77	167.12	3,288.9	
4	84	92.17	1,661.5	
5	112	493.25	6,697.6	
6	126	130.12	1,567.7	
7	133	116.13	1,326.8	
8	139	119.92	1,311.3	
9	149	151.82	1,543.2	
10	159	142.72	1,362.2	
11	170	162.94	1,453.8	
12	188	194.59	1,566.0	
13	202	314.14	2,354.6	
14	223	124.16	844.3	
15	234	145.57	942.2	
16	251	148.98	897.5	
17	411	68.97	254.2	
18	10,380	75.00	10.9	Upper Marker

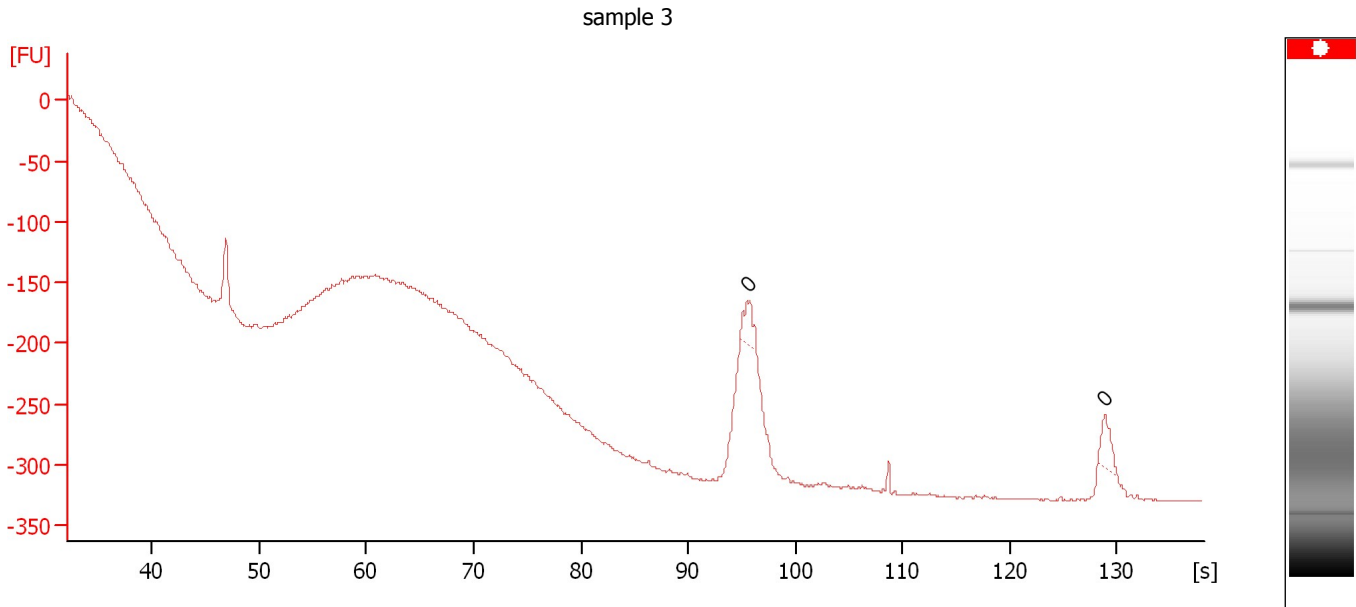
**Region table for sample 2 : sample 2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
48	390	182	40,325.0	3,692.10	2,628.7	91	41.5	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09\_007.xad

Created: 10/9/2013 3:46:14 PM  
Modified: 10/9/2013 4:21:14 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Noise: 1.0

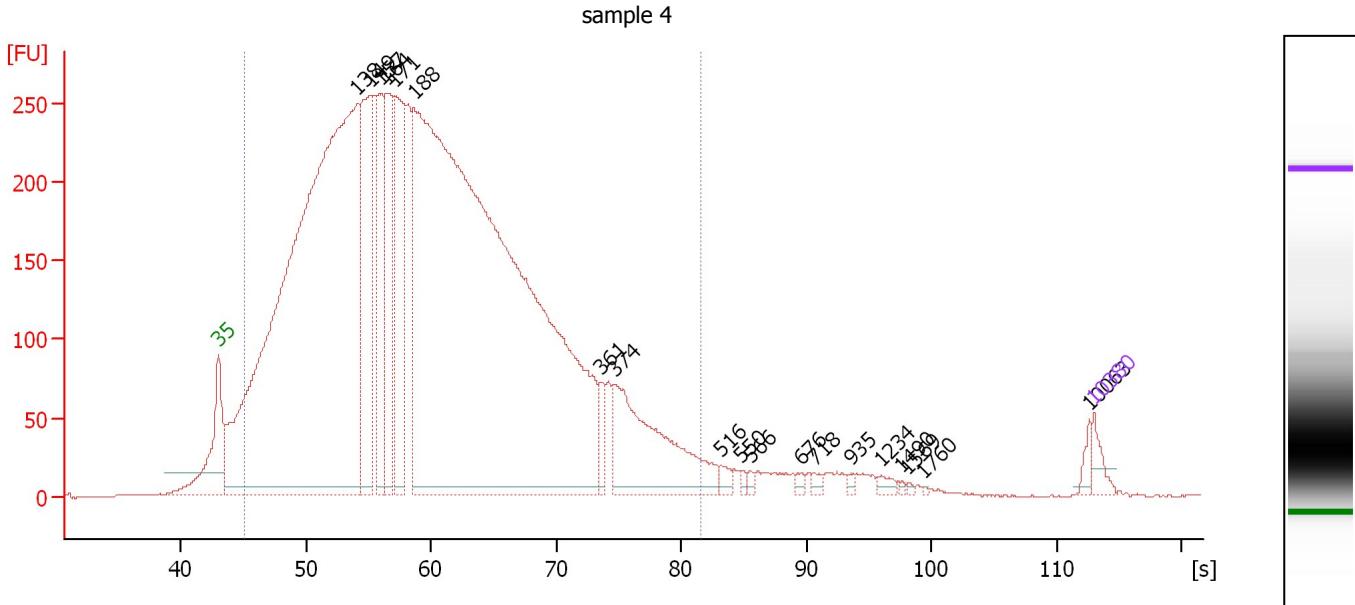
**Peak table for sample 3 : sample 3**

Peak	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	
2	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09\_007.xad

Created: 10/9/2013 3:46:14 PM  
 Modified: 10/9/2013 4:21:14 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 19      Corr. Area 1: 9,748.7  
 Noise: 0.5

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	138	10,598.57	116,666.0	
3	149	1,565.95	15,887.8	
4	157	935.75	9,010.2	
5	164	1,110.65	10,263.2	
6	171	1,258.11	11,144.6	
7	188	12,967.82	104,752.6	
8	361	140.53	589.4	
9	374	1,137.02	4,605.5	
10	516	55.13	161.7	
11	550	23.89	65.8	
12	566	24.22	64.8	
13	676	25.94	58.2	
14	718	30.15	63.6	
15	935	22.42	36.3	
16	1,234	36.21	44.5	
17	1,490	9.39	9.5	
18	1,569	8.88	8.6	
19	1,760	5.41	4.7	
20	10,063	45.88	6.9	
21	10,380	75.00	10.9	Upper Marker

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

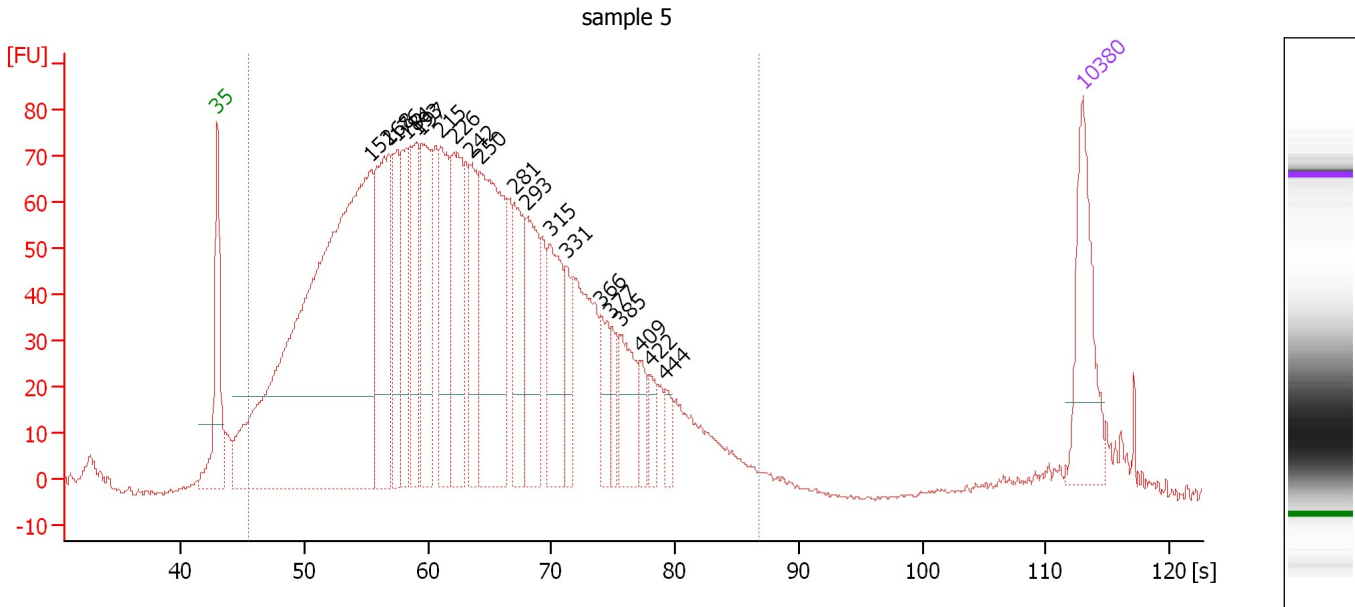
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
48	484	202	311,641.0	29,951.55	9,748.7	95	45.8	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09\_007.xad

Created: 10/9/2013 3:46:14 PM  
 Modified: 10/9/2013 4:21:14 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 5 : sample 5**

Height Threshold [FU] : 20

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

Number of peaks found: 20      Corr. Area 1: 3,015.7  
 Noise: 0.5

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	152	1,104.77	10,994.0	
3	168	227.13	2,054.1	
4	176	106.33	917.2	
5	184	110.94	912.3	
6	193	122.76	964.6	
7	197	147.49	1,133.6	
8	215	131.83	930.9	
9	226	156.15	1,045.7	
10	242	99.84	624.3	
11	250	267.99	1,623.7	
12	281	96.24	519.4	
13	293	108.21	559.8	
14	315	107.89	518.5	
15	331	48.05	219.6	
16	366	40.63	168.2	
17	377	25.56	102.7	
18	385	60.68	238.5	
19	409	21.43	79.4	
20	422	22.64	81.2	
21	444	16.07	54.9	
22	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09\_007.xad

Created: 10/9/2013 3:46:14 PM  
Modified: 10/9/2013 4:21:14 PM

**Electropherogram Summary Continued ...**

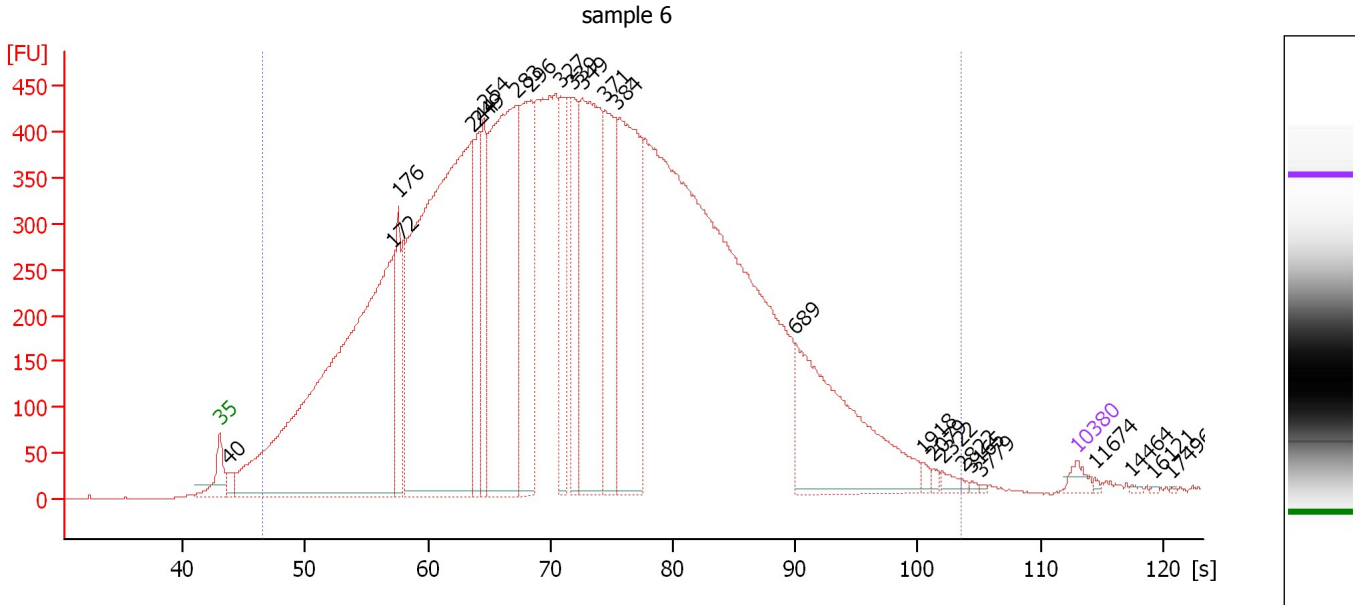
... Region table for sample 5 : sample 5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
53	593	239	31,231.5	3,531.39	3,015.7	97	44.3	■

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09\_007.xad

Created: 10/9/2013 3:46:14 PM  
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**Electropherogram Summary Continued ...**



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

Number of peaks found: 24                      Corr. Area 1: 20,543.4  
 Noise: 0.7

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	40	139.95	5,312.5	
3	172	9,201.59	81,129.6	
4	176	949.78	8,168.0	
5	244	8,401.91	52,179.7	
6	249	990.62	6,019.0	
7	254	997.94	5,957.9	
8	283	4,351.77	23,279.2	
9	296	2,073.40	10,595.5	
10	327	975.21	4,523.9	
11	339	1,078.15	4,824.3	
12	349	2,923.56	12,693.8	
13	371	1,441.19	5,881.0	
14	384	2,818.27	11,124.9	
15	689	2,278.83	5,009.9	
16	1,918	39.37	31.1	
17	2,079	28.75	21.0	
18	2,322	53.87	35.2	
19	2,822	17.32	9.3	
20	3,165	14.79	7.1	
21	3,779	8.57	3.4	
22	10,380	75.00	10.9	Upper Marker
23	11,674	0.00	0.0	
24	14,464	0.00	0.0	
25	16,121	0.00	0.0	
26	17,496	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09\_007.xad

Created: 10/9/2013 3:46:14 PM  
Modified: 10/9/2013 4:21:14 PM

**Electropherogram Summary Continued ...**

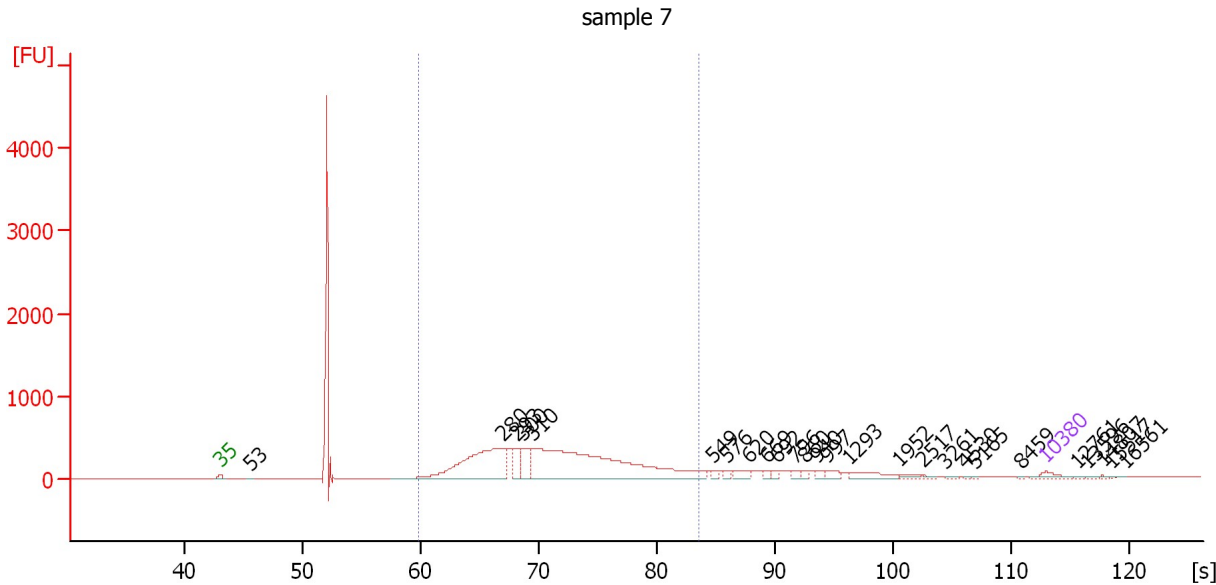
... Region table for sample 6 : sample 6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
61	2,771	388	335,025.8	53,426.61	20,543.4	99	68.0	■

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09\_007.xad

Created: 10/9/2013 3:46:14 PM  
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**Electropherogram Summary Continued ...**



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

Number of peaks found: 26                      Corr. Area 1: 7,663.5  
 Noise: 0.5

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	53	5.20	149.0	
3	280	2,402.03	12,997.6	
4	293	330.47	1,707.8	
5	300	446.41	2,256.2	
6	310	4,661.36	22,790.7	
7	549	61.20	168.8	
8	576	55.10	144.9	
9	620	127.40	311.5	
10	669	53.22	120.6	
11	692	57.51	125.9	
12	796	65.16	124.1	
13	860	48.20	85.0	
14	940	54.05	87.1	
15	997	93.85	142.6	
16	1,293	187.54	219.8	
17	1,952	44.67	34.7	
18	2,517	21.76	13.1	
19	3,261	14.88	6.9	
20	4,530	7.72	2.6	
21	5,165	7.33	2.2	
22	8,459	5.13	0.9	
23	10,380	75.00	10.9	Upper Marker
24	12,761	0.00	0.0	
25	13,596	0.00	0.0	
26	14,807	0.00	0.0	


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09\_007.xad

Created: 10/9/2013 3:46:14 PM  
Modified: 10/9/2013 4:21:14 PM

**Electropherogram Summary Continued ...****... Peak table for sample 7 : sample 7**

Peak	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations
27	15,517	0.00	0.0	
28	16,561	0.00	0.0	

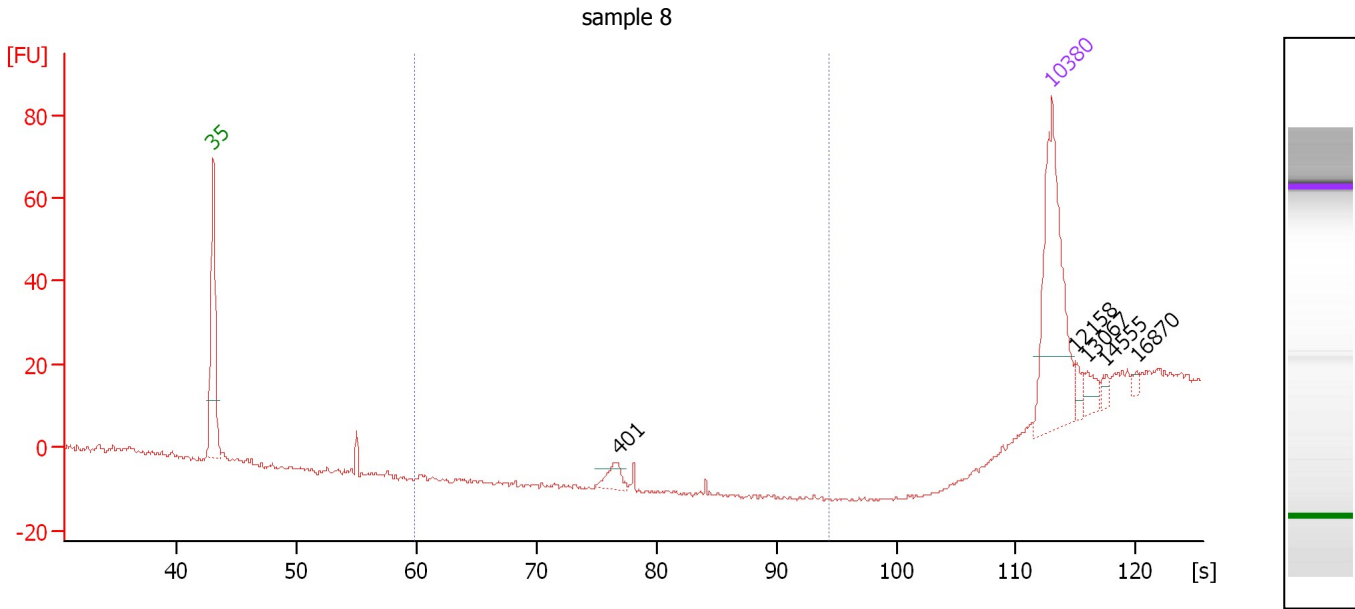
**Region table for sample 7 : sample 7**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ $\mu$ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	524	333	36,141.3	7,516.51	7,663.5	67	20.7	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09\_007.xad

Created: 10/9/2013 3:46:14 PM  
 Modified: 10/9/2013 4:21:14 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 5                      Corr. Area 1: 0.0  
 Noise: 0.4

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	401	10.48	39.6	
3	10,380	75.00	10.9	Upper Marker
4	12,158	0.00	0.0	
5	13,067	0.00	0.0	
6	14,555	0.00	0.0	
7	16,870	0.00	0.0	

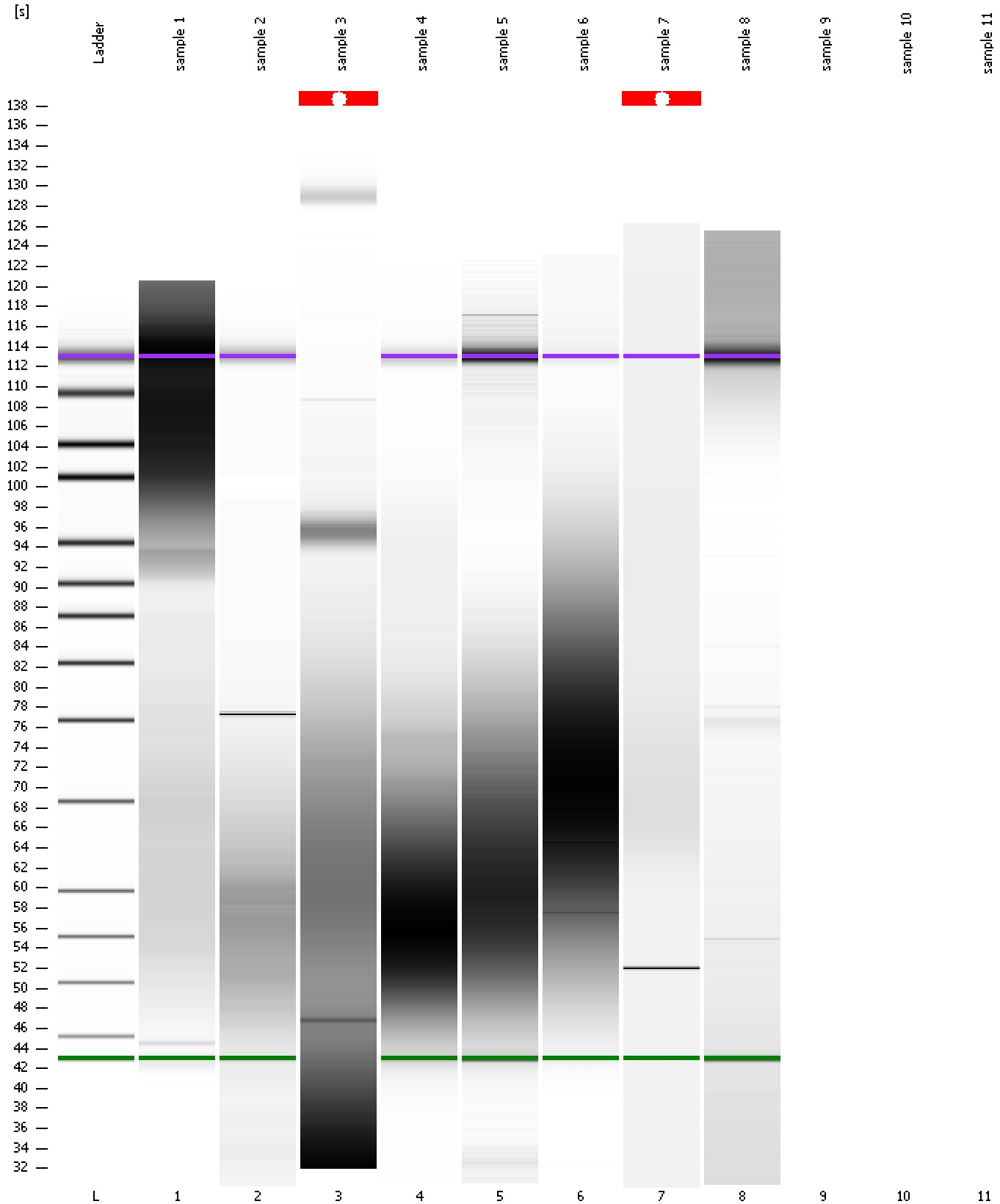
**Region table for sample 8 : sample 8**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	0	0.0	0.00	0.0	0	0.0	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09\_007.xad

Created: 10/9/2013 3:46:14 PM  
Modified: 10/9/2013 4:21:14 PM

**Gel Image**





Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09\_007.xad

Created: 10/9/2013 3:46:14 PM  
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**Invalid Samples**

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.