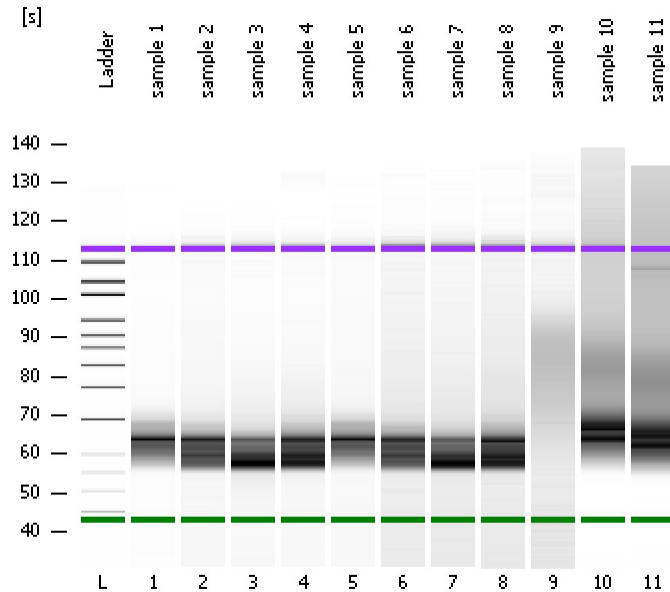


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-05\2013-09-05\_005.xad

Created: 9/5/2013 3:58:54 PM  
Modified: 9/5/2013 4:40:16 PM

### Electrophoresis File Run Summary



#### Instrument Information:

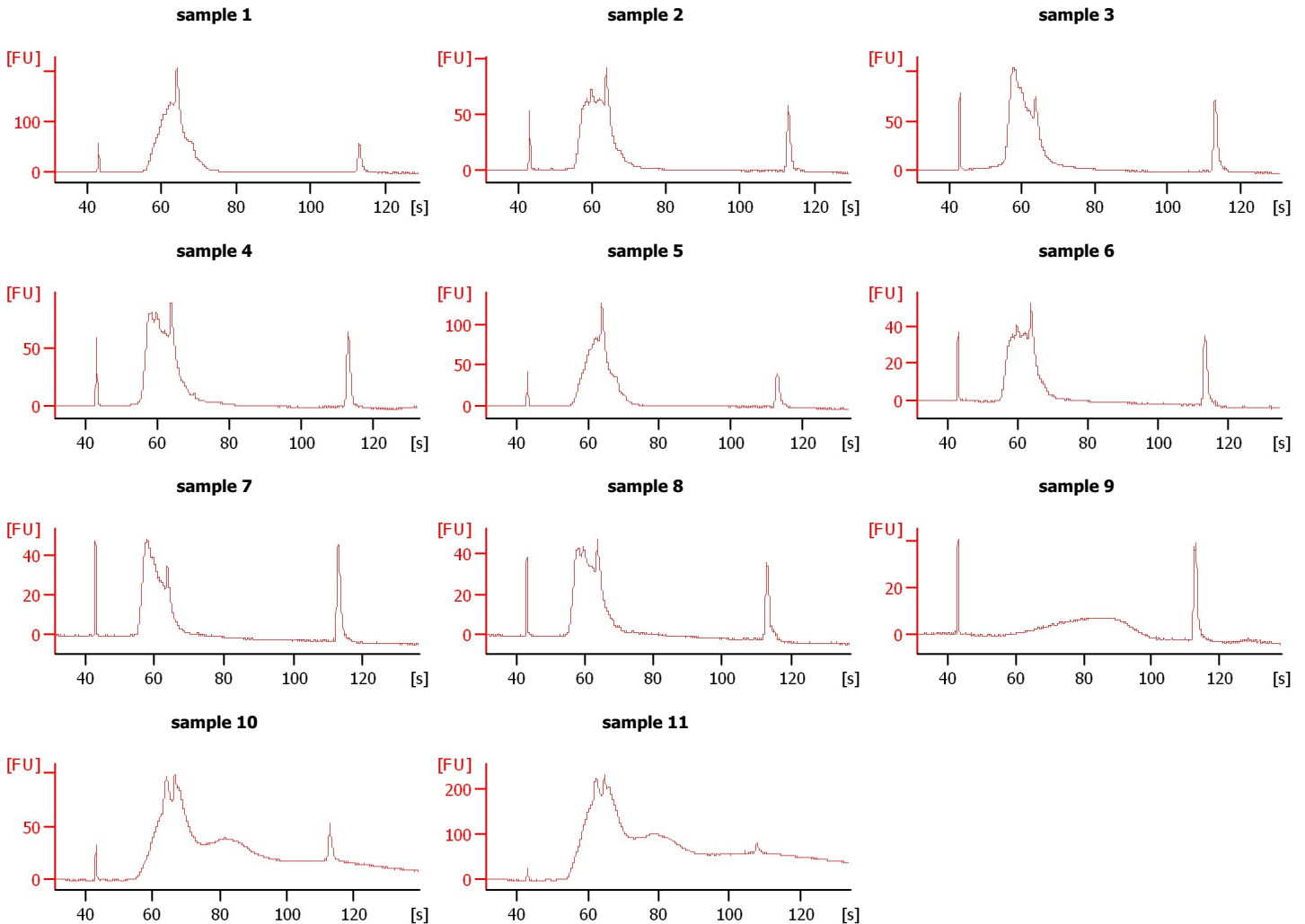
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

#### 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\2013-09-05\2013-09-05\_005.xad

Created: 9/5/2013 3:58:54 PM  
 Modified: 9/5/2013 4:40:16 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\2013-09-05\2013-09-05\_005.xad

Created: 9/5/2013 3:58:54 PM  
 Modified: 9/5/2013 4:40:16 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

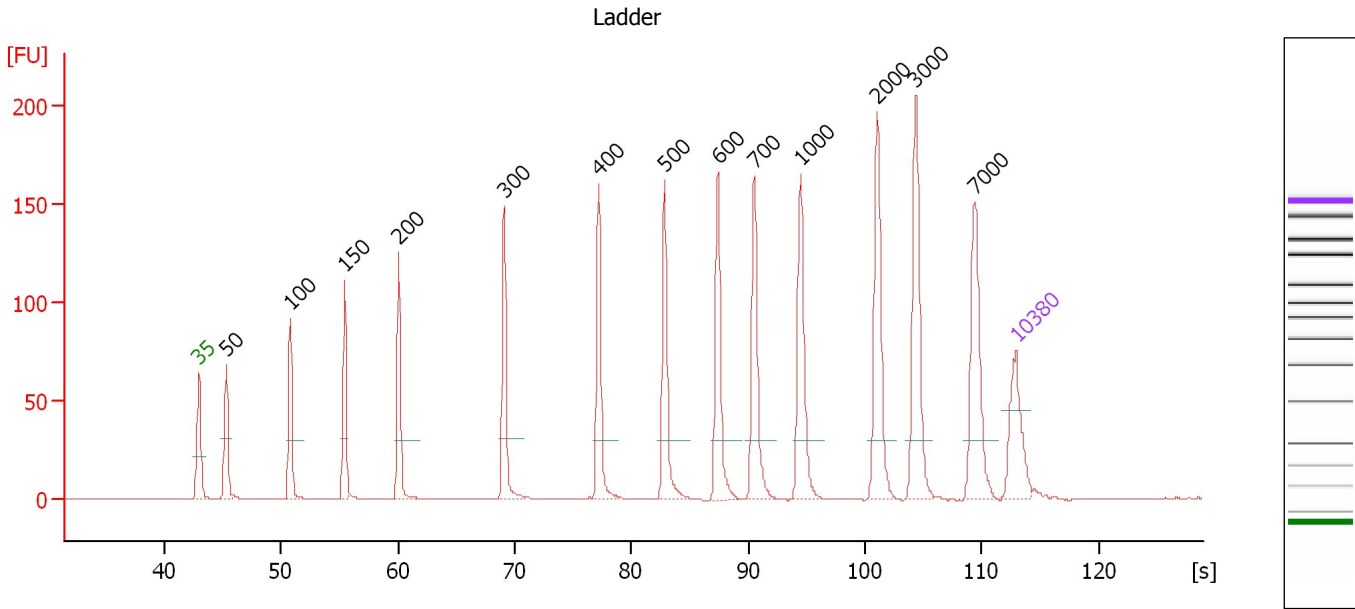
**Ladder**

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\2013-09-05\2013-09-05\_005.xad

Created: 9/5/2013 3:58:54 PM  
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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

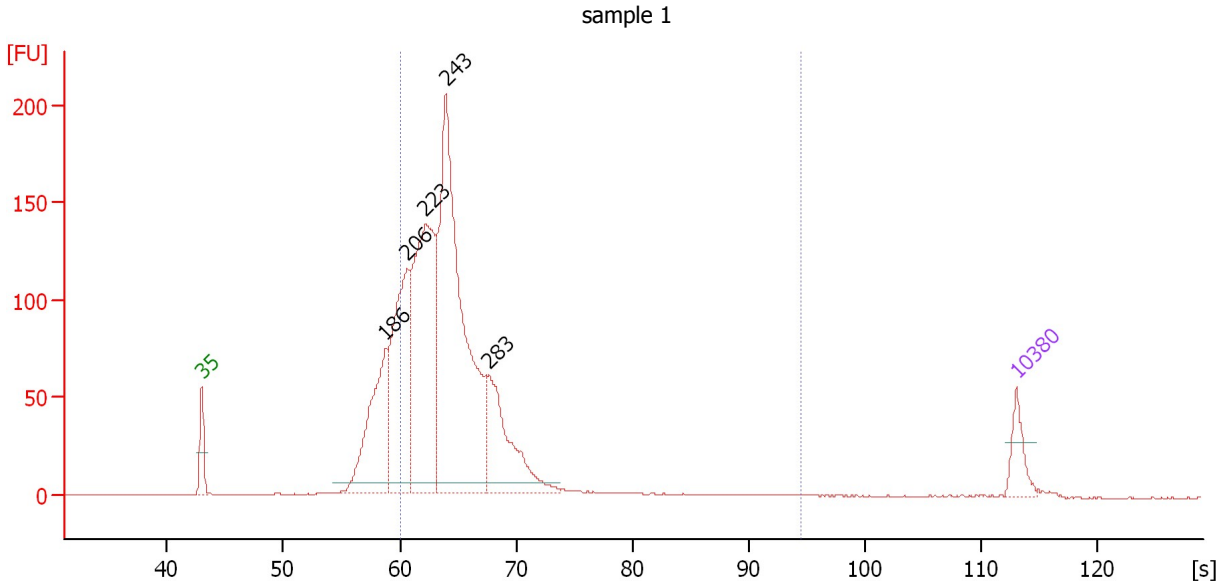
**Peak table for Ladder**

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\2013-09-05\2013-09-05\_005.xad

Created: 9/5/2013 3:58:54 PM  
 Modified: 9/5/2013 4:40:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 5                      Corr. Area 1: 1,667.7  
 Noise: 0.2

**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	186	572.16	4,668.2	
3	206	759.16	5,576.8	
4	223	1,096.06	7,442.1	
5	243	1,737.02	10,848.5	
6	283	464.73	2,487.8	
7	10,380	75.00	10.9	Upper Marker

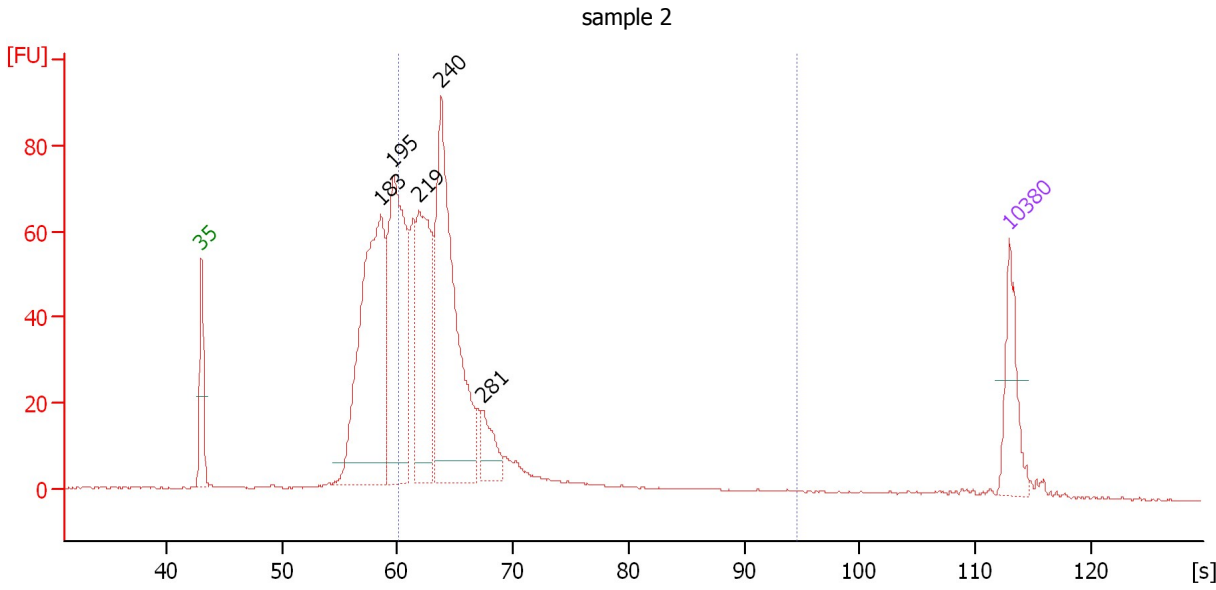
**Region table for sample 1 : sample 1**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
60.11	94.51	255	23,549.0	3,841.28	1,667.7 79	24.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-05\2013-09-05\_005.xad

Created: 9/5/2013 3:58:54 PM  
 Modified: 9/5/2013 4:40:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 5                      Corr. Area 1: 729.5  
 Noise: 0.2

**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	183	606.85	5,022.9	
3	195	471.66	3,663.4	
4	219	330.99	2,288.2	
5	240	566.07	3,568.8	
6	281	67.78	366.0	
7	10,380	75.00	10.9	Upper Marker

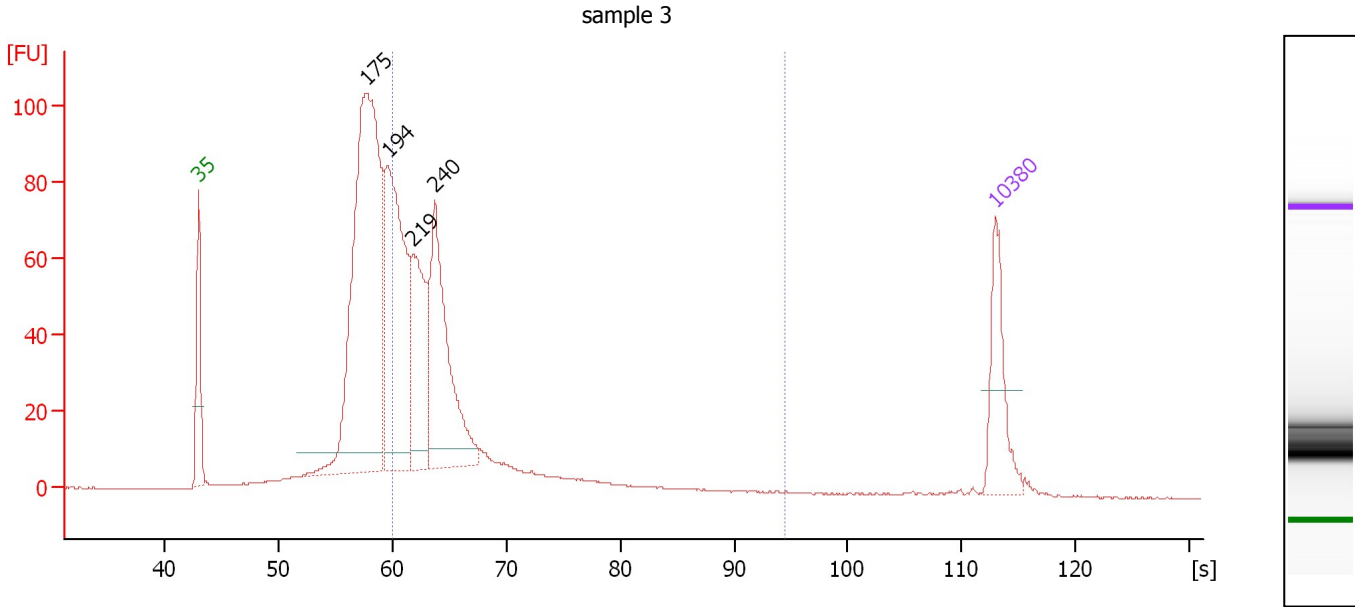
**Region table for sample 2 : sample 2**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
60.11	94.51	261	9,285.5	1,499.72	729.5 61	34.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-05\2013-09-05\_005.xad

Created: 9/5/2013 3:58:54 PM  
 Modified: 9/5/2013 4:40:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 4                      Corr. Area 1: 673.1  
 Noise: 0.1

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

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	175	787.31	6,830.0	
3	194	411.18	3,204.0	
4	219	196.12	1,357.8	
5	240	296.00	1,866.5	
6	10,380	75.00	10.9	Upper Marker

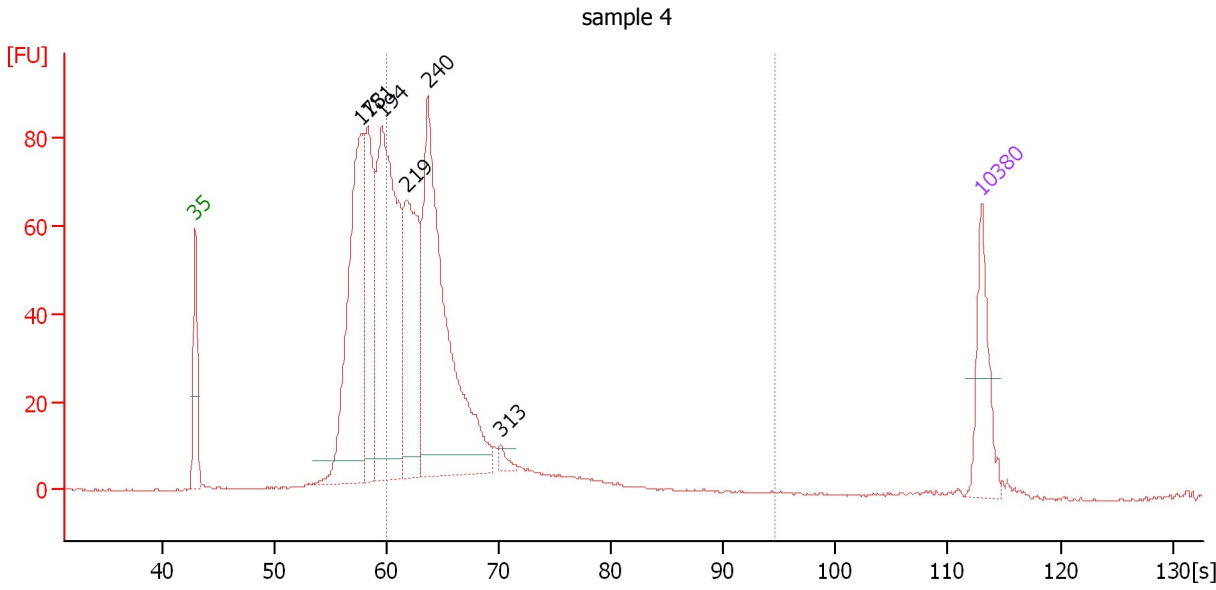
**Region table for sample 3 : sample 3**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution CV [%]	Color
60.11	94.51	260	6,087.3	977.68	673.1	48	32.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-05\2013-09-05\_005.xad

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 Modified: 9/5/2013 4:40:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 6                      Corr. Area 1: 786.2  
 Noise: 0.1

**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	175	433.28	3,754.1	
3	181	242.28	2,027.5	
4	194	536.16	4,178.2	
5	219	301.96	2,087.3	
6	240	575.57	3,627.5	
7	313	12.83	62.0	
8	10,380	75.00	10.9	Upper Marker

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

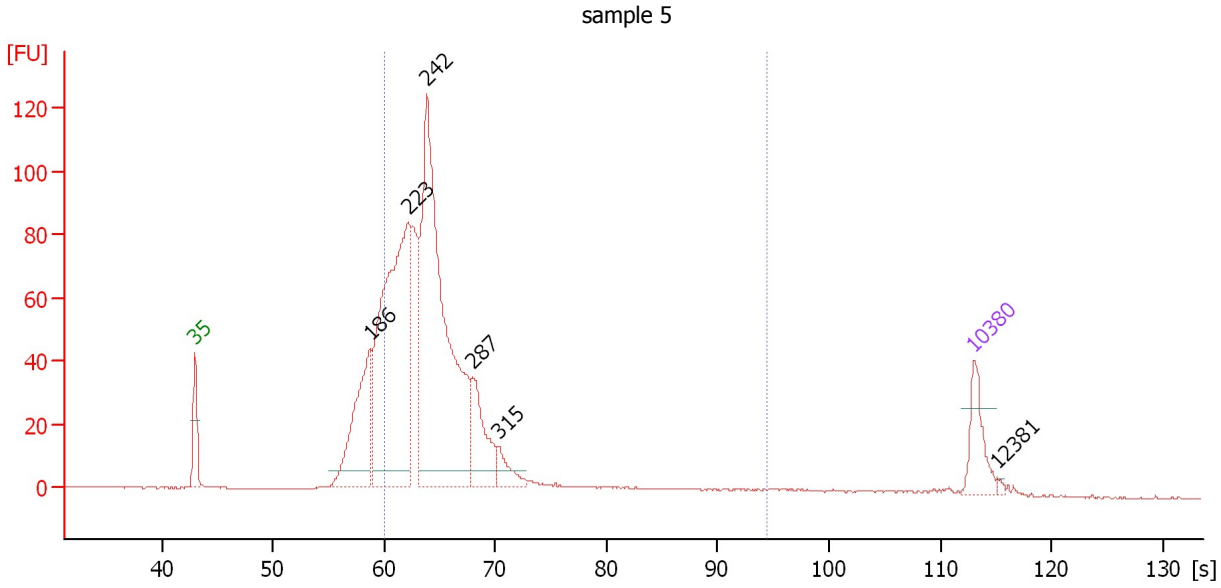
From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
60.11	94.51	263	8,413.2	1,372.19	786.2	58	31.6	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-05\2013-09-05\_005.xad

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 Modified: 9/5/2013 4:40:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 6                      Corr. Area 1: 1,007.1  
 Noise: 0.1

**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	186	349.54	2,851.0	
3	223	995.37	6,752.4	
4	242	1,185.78	7,437.7	
5	287	185.38	978.4	
6	315	55.35	266.4	
7	10,380	75.00	10.9	Upper Marker
8	12,381	0.00	0.0	

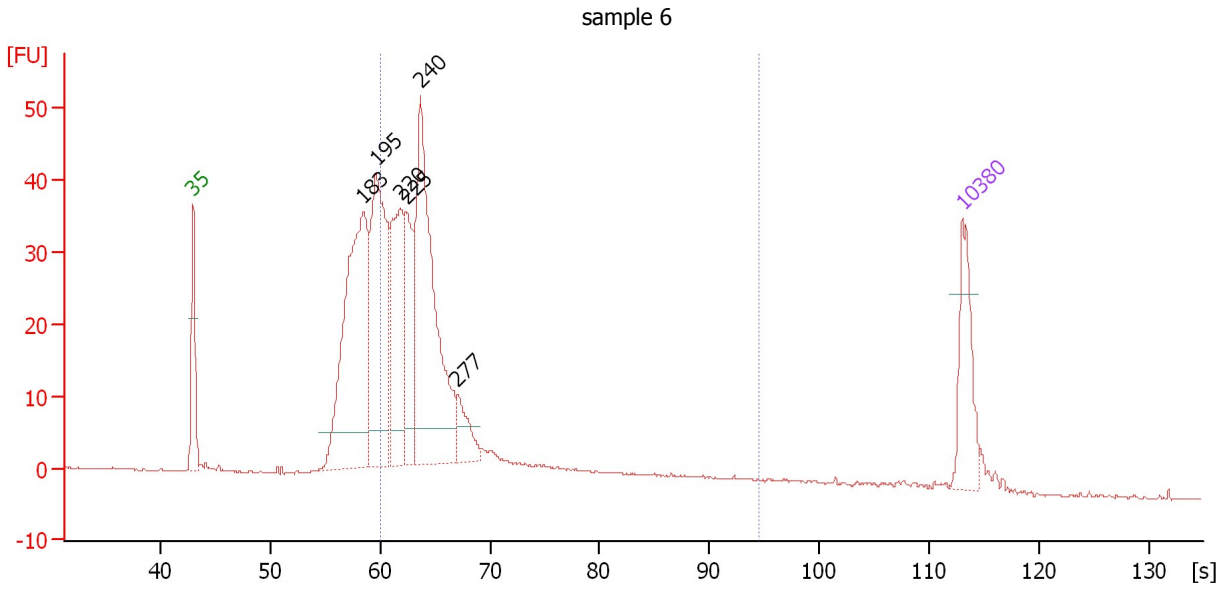
**Region table for sample 5 : sample 5**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
60.11	94.51	261	15,449.6	2,532.60	1,007.1	78	30.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-05\2013-09-05\_005.xad

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 Modified: 9/5/2013 4:40:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 6      Corr. Area 1: 420.2  
 Noise: 0.1

**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	183	471.37	3,910.5	
3	195	352.85	2,745.3	
4	220	223.50	1,542.6	
5	225	143.42	966.1	
6	240	448.99	2,839.5	
7	277	48.70	266.4	
8	10,380	75.00	10.9	Upper Marker

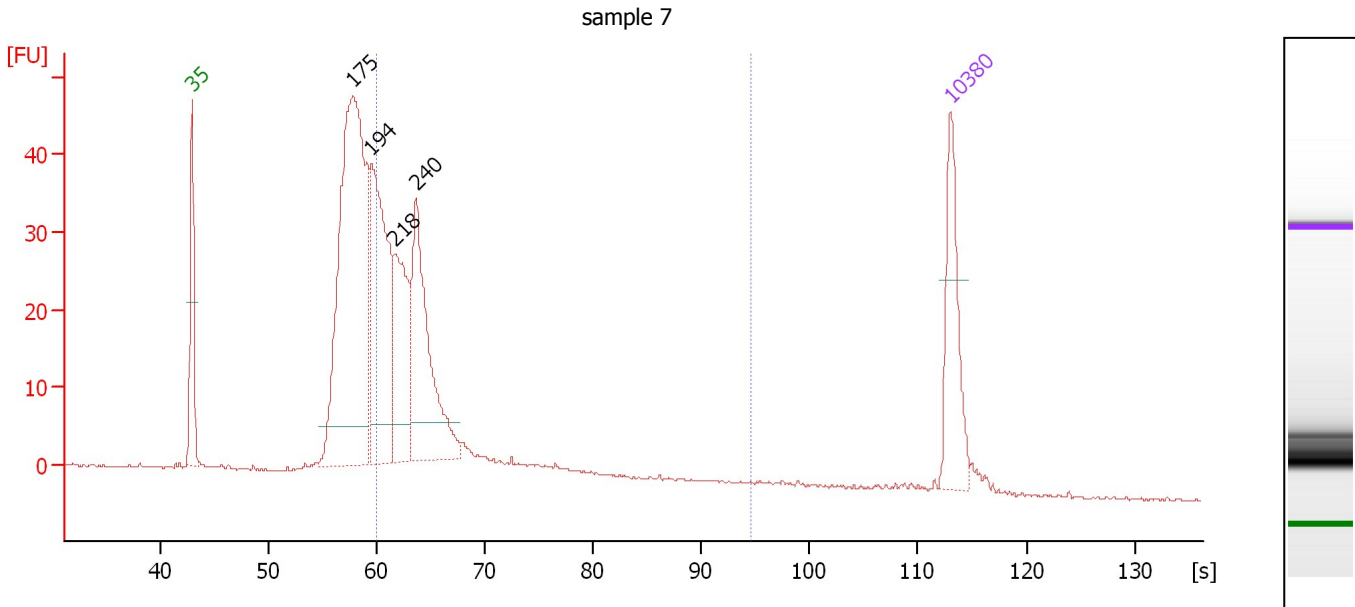
**Region table for sample 6 : sample 6**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
60.11	94.51	272	7,460.8	1,220.66	420.2	62	39.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-05\2013-09-05\_005.xad

Created: 9/5/2013 3:58:54 PM  
 Modified: 9/5/2013 4:40:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 4                      Corr. Area 1: 297.1  
 Noise: 0.1

**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	175	585.08	5,054.3	
3	194	276.12	2,155.8	
4	218	147.29	1,025.9	
5	240	221.57	1,401.5	
6	10,380	75.00	10.9	Upper Marker

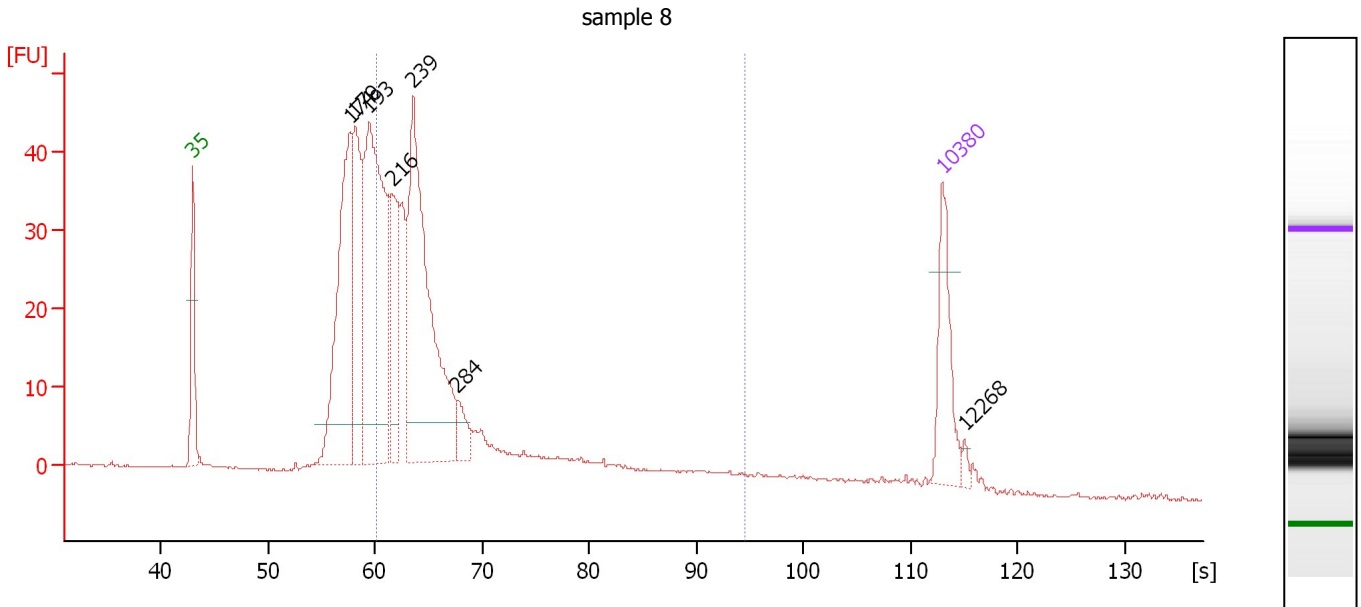
**Region table for sample 7 : sample 7**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
60.11	94.51	260	4,246.9	679.67	297.1	49	34.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-05\2013-09-05\_005.xad

Created: 9/5/2013 3:58:54 PM  
 Modified: 9/5/2013 4:40:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 7                      Corr. Area 1: 431.2  
 Noise: 0.1

**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	174	353.65	3,072.3	
3	179	200.11	1,691.4	
4	193	479.33	3,757.4	
5	216	130.66	914.7	
6	239	470.18	2,984.9	
7	284	29.90	159.4	
8	10,380	75.00	10.9	Upper Marker
9	12,268	0.00	0.0	

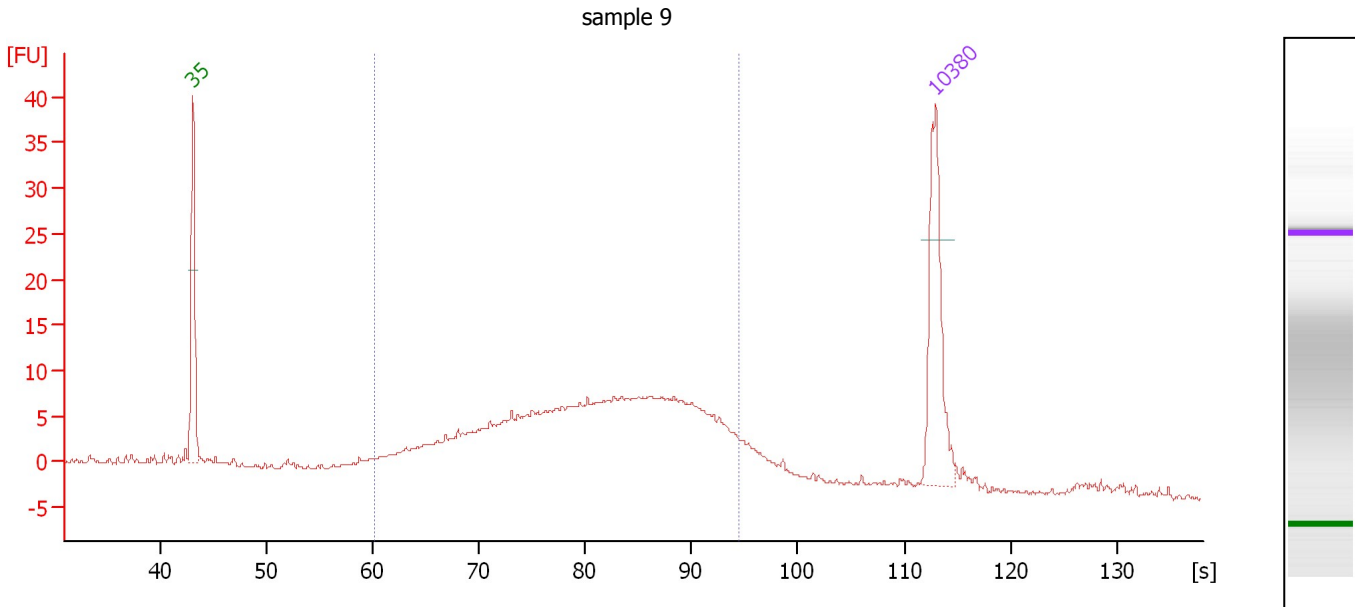
**Region table for sample 8 : sample 8**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
60.11	94.51	284	7,460.4	1,242.50	431.2 58	42.5	■

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-05\2013-09-05\_005.xad

Created: 9/5/2013 3:58:54 PM  
 Modified: 9/5/2013 4:40:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Corr. Area 1: 271.2  
 Noise: 0.1

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

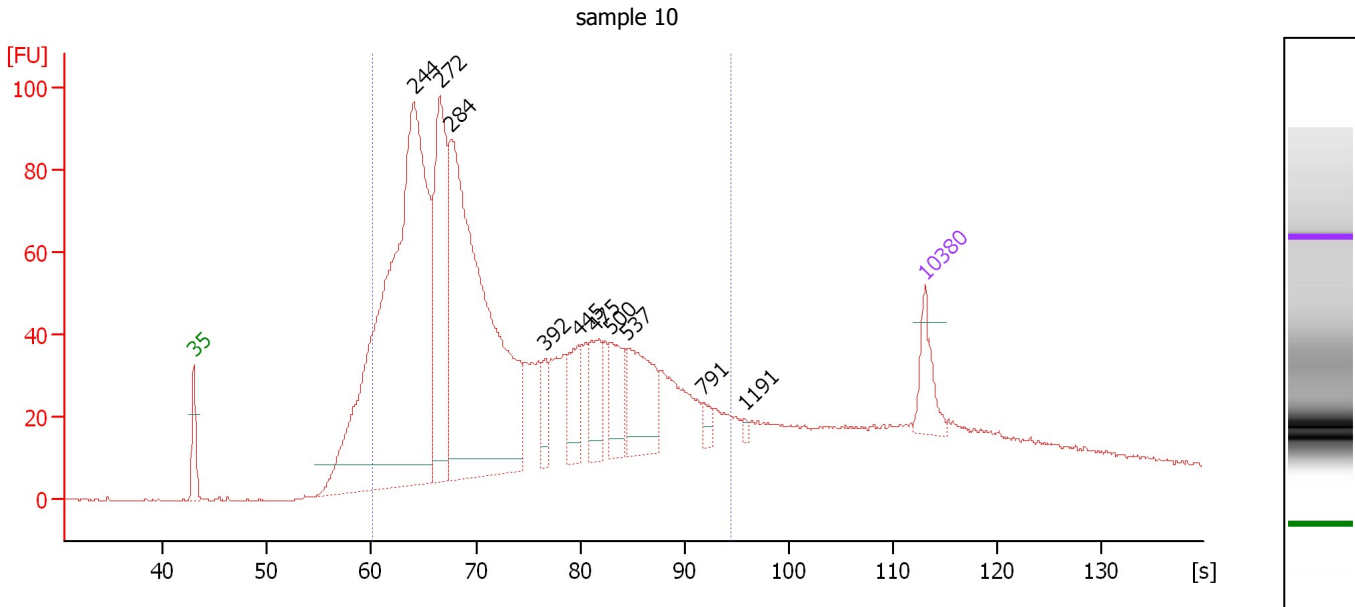
**Region table for sample 9 : sample 9**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
60.11	94.51	494	2,286.6	619.00	271.2	81	35.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-05\2013-09-05\_005.xad

Created: 9/5/2013 3:58:54 PM  
 Modified: 9/5/2013 4:40:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 10      Corr. Area 1: 1,902.6  
 Noise: 0.1

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	244	2,130.22	13,220.7	
3	272	550.63	3,066.2	
4	284	1,455.83	7,780.6	
5	392	58.40	225.6	
6	445	117.98	401.5	
7	475	116.65	371.9	
8	500	124.94	378.8	
9	537	207.88	586.6	
10	791	25.03	47.9	
11	1,191	7.82	9.9	
12	10,380	75.00	10.9	Upper Marker

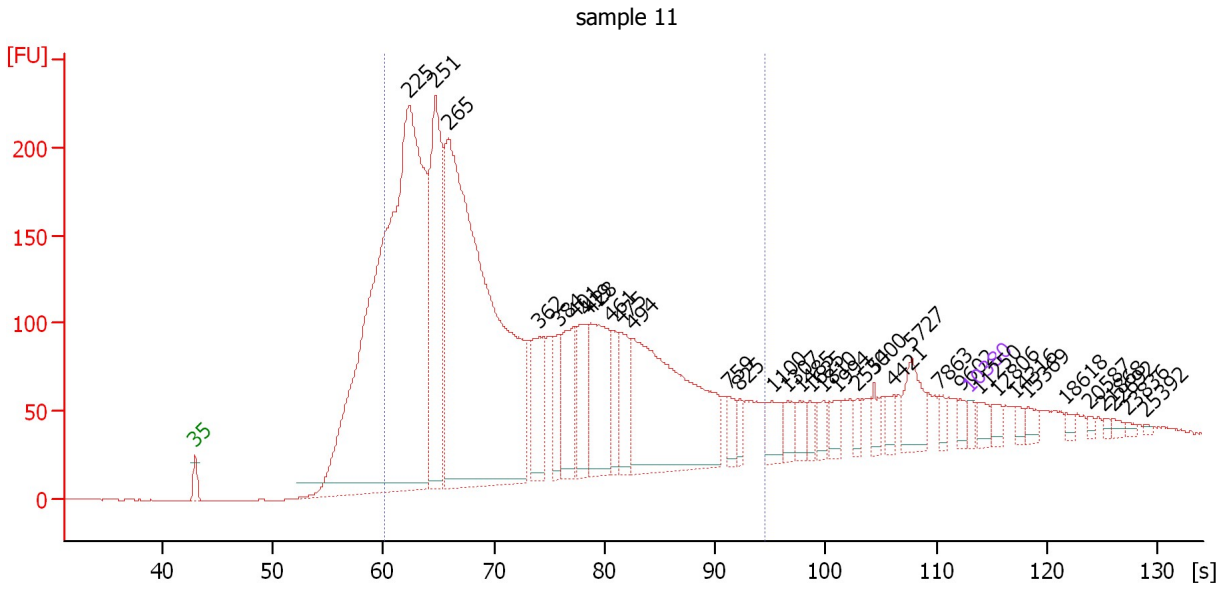
**Region table for sample 10 : sample 10**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
60.11	94.51	378	26,449.2	5,442.64	1,902.6 82	42.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-05\2013-09-05\_005.xad

Created: 9/5/2013 3:58:54 PM  
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**Electropherogram Summary Continued ...**



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

Number of peaks found: 35                      Corr. Area 1: 4,491.0  
 Noise: 0.3

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	225	12,641.50	85,249.2	
3	251	2,989.77	18,041.5	
4	265	9,554.44	54,719.4	
5	362	859.20	3,596.7	
6	384	490.06	1,935.9	
7	401	792.84	2,999.4	
8	419	646.90	2,337.0	
9	428	1,234.60	4,370.7	
10	461	421.49	1,386.4	
11	475	538.13	1,715.7	
12	494	3,197.35	9,804.4	
13	759	174.14	347.6	
14	825	130.84	240.2	
15	1,100	266.83	367.4	
16	1,307	157.77	182.9	
17	1,485	158.07	161.3	
18	1,625	93.83	87.5	
19	1,810	145.14	121.5	
20	1,994	152.53	115.9	
21	2,554	84.99	50.4	
22	3,000	123.47	62.4	
23	4,421	136.59	46.8	
24	5,727	382.27	101.1	
25	7,863	74.98	14.4	
26	9,602	84.80	13.4	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-05\2013-09-05\_005.xad

Created: 9/5/2013 3:58:54 PM  
 Modified: 9/5/2013 4:40:16 PM

**Electropherogram Summary Continued ...**

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

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	10,380	75.00	10.9	Upper Marker
28	11,250	0.00	0.0	
29	12,806	0.00	0.0	
30	14,316	0.00	0.0	
31	15,369	0.00	0.0	
32	18,618	0.00	0.0	
33	20,587	0.00	0.0	
34	21,868	0.00	0.0	
35	22,692	0.00	0.0	
36	23,836	0.00	0.0	
37	25,392	0.00	0.0	

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

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area % of Total	Size distribution in CV [%]	Color
60.11	94.51	363	142,958.9	28,343.59	4,491.0 76	43.0	