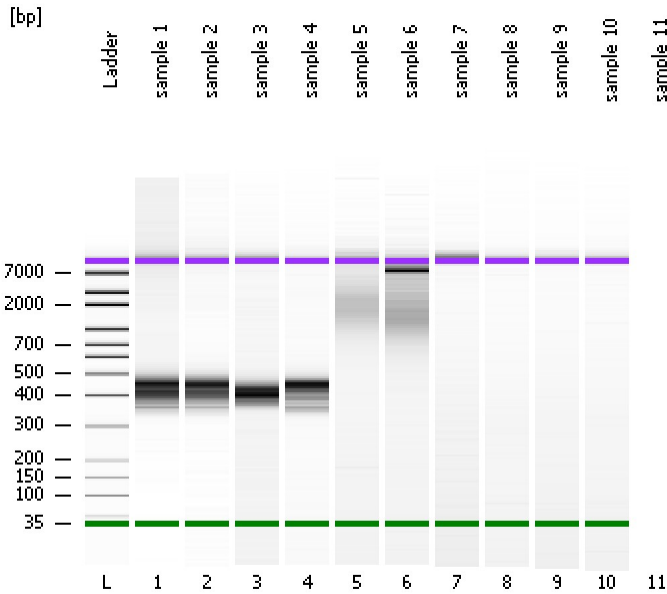


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... and Settings\Bioanalyzer\2013-09-18\2013-09-18\_006Ruta.xad

Created: 9/18/2013 2:24:43 PM  
Modified: 9/18/2013 3:09:27 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

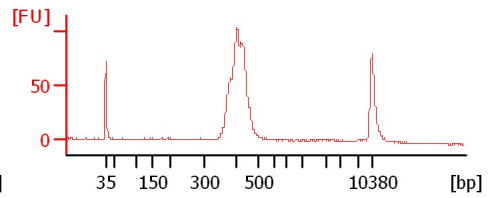
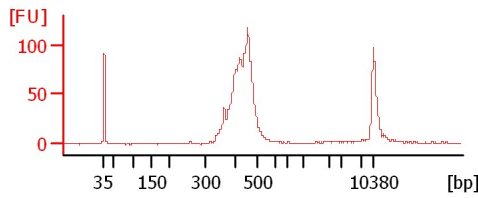
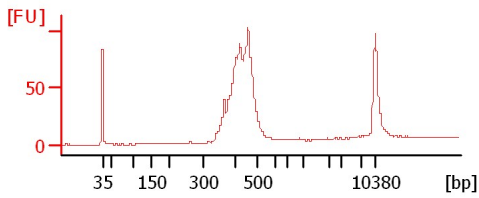
#### Chip Information:

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

sample 1

sample 2

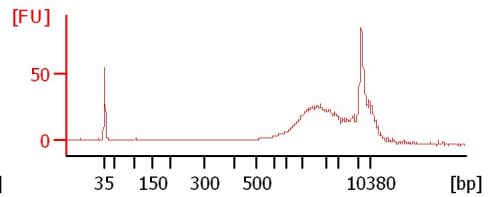
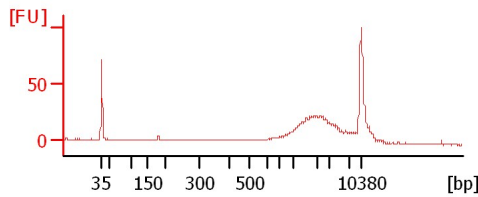
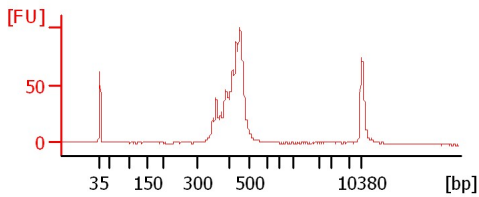
sample 3



sample 4

sample 5

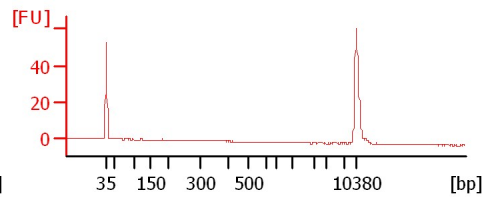
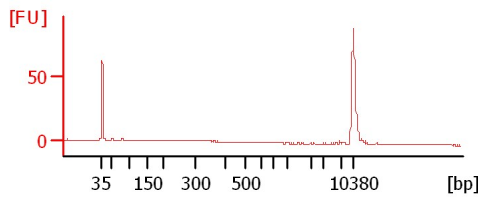
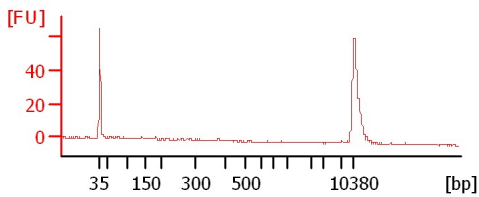
sample 6



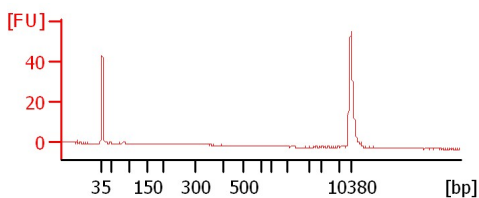
sample 7

sample 8

sample 9



sample 10



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... and Settings\Bioanalyzer\2013-09-18\2013-09-18\_006Ruta.xad

Created: 9/18/2013 2:24:43 PM  
 Modified: 9/18/2013 3:09:27 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:\... and Settings\Bioanalyzer\2013-09-18\2013-09-18\_006Ruta.xad

Created: 9/18/2013 2:24:43 PM  
Modified: 9/18/2013 3:09:27 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

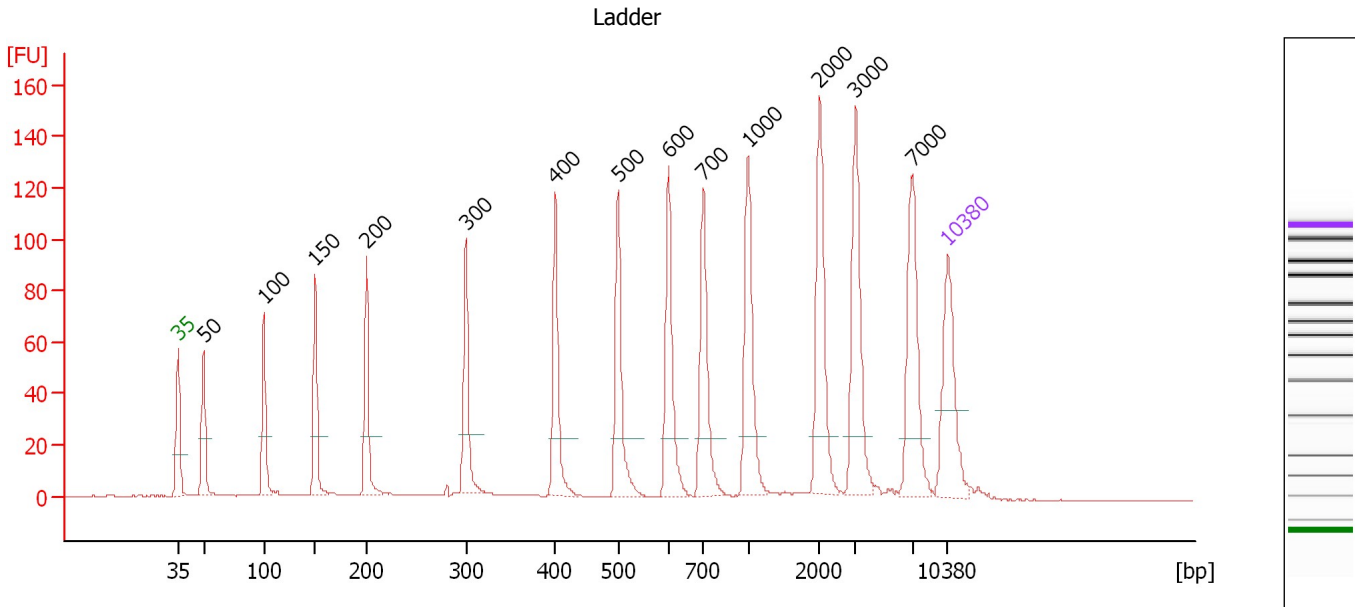
**Ladder**

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:\... and Settings\Bioanalyzer\2013-09-18\2013-09-18\_006Ruta.xad

Created: 9/18/2013 2:24:43 PM  
 Modified: 9/18/2013 3:09:27 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

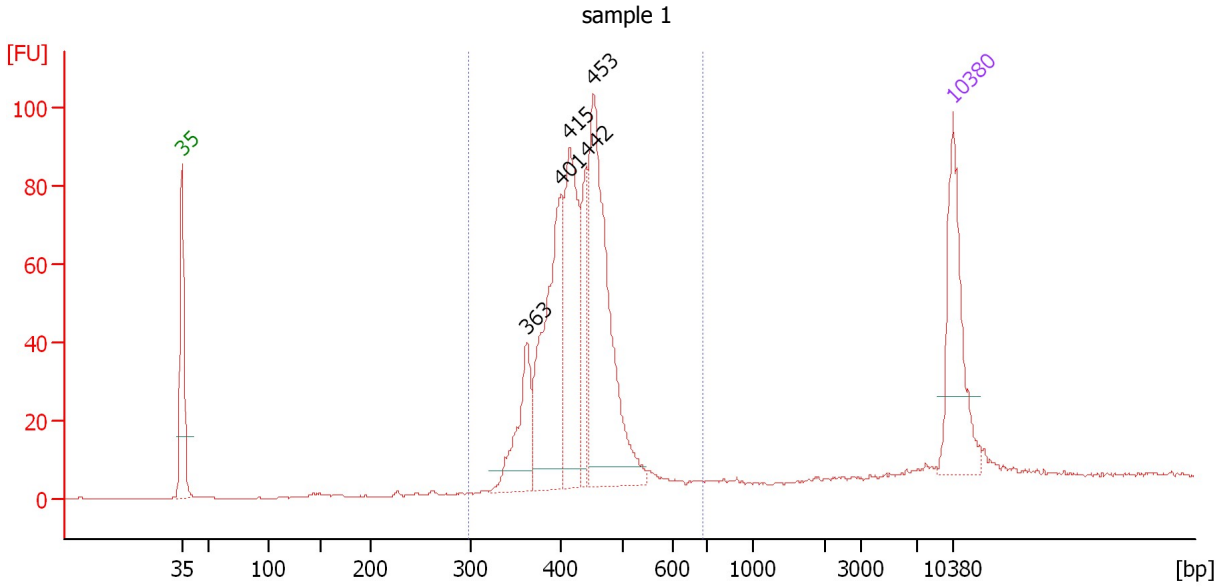
**Peak table for Ladder**

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:\... and Settings\Bioanalyzer\2013-09-18\2013-09-18\_006Ruta.xad

Created: 9/18/2013 2:24:43 PM  
 Modified: 9/18/2013 3:09:27 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 5                      Corr. Area 1: 761.5  
 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	363	68.06	284.2	
3	401	163.99	619.2	
4	415	137.32	501.4	
5	442	53.57	183.5	
6	453	224.38	749.9	
7	10,380	75.00	10.9	Upper Marker

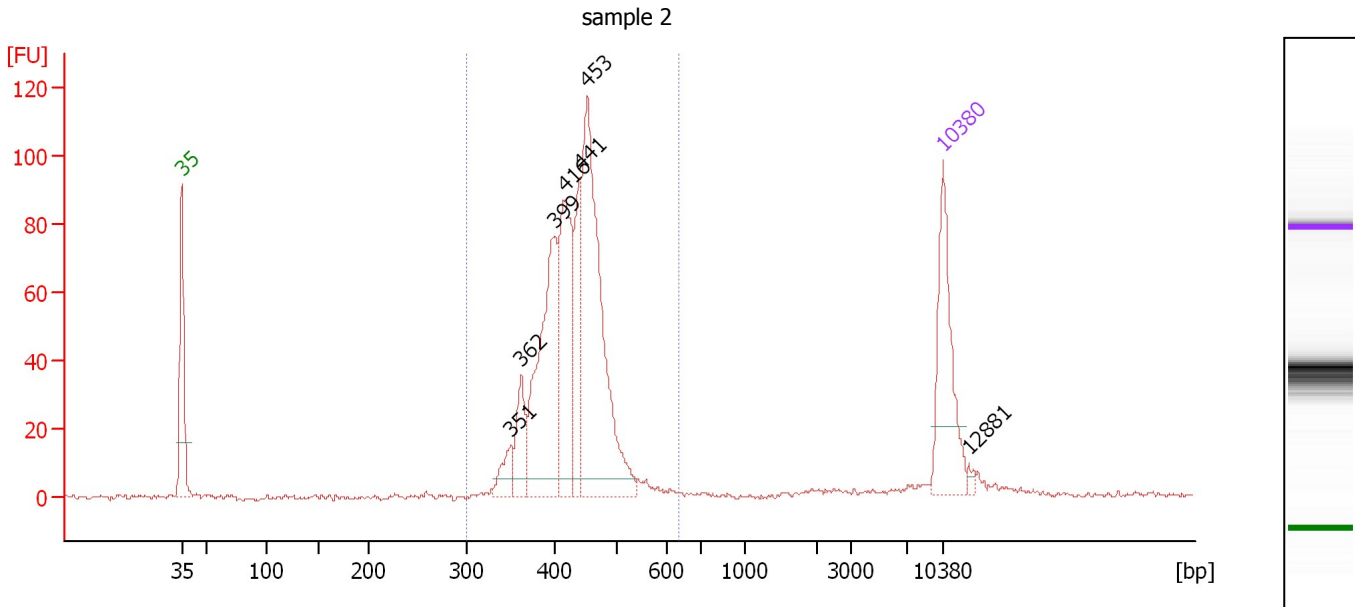
**Region table for sample 1 : sample 1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
299	686	429	2,361.0	660.18	761.5	94	10.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... and Settings\Bioanalyzer\2013-09-18\2013-09-18\_006Ruta.xad

Created: 9/18/2013 2:24:43 PM  
 Modified: 9/18/2013 3:09:27 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 7                      Corr. Area 1: 798.9  
 Noise: 0.7

**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	351	22.06	95.3	
3	362	39.79	166.4	
4	399	168.21	638.7	
5	416	131.09	477.6	
6	441	65.57	225.3	
7	453	259.65	868.3	
8	10,380	75.00	10.9	Upper Marker
9	12,881	0.00	0.0	

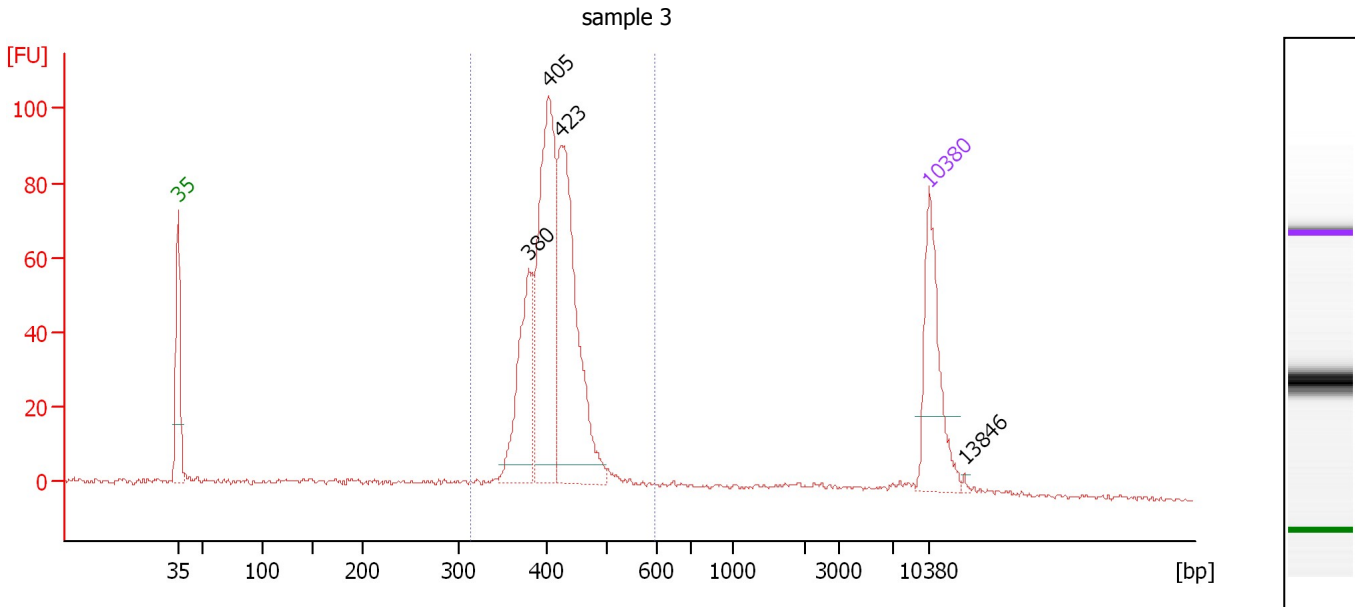
**Region table for sample 2 : sample 2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
301	636	429	2,487.9	696.48	798.9	95	10.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... and Settings\Bioanalyzer\2013-09-18\2013-09-18\_006Ruta.xad

Created: 9/18/2013 2:24:43 PM  
 Modified: 9/18/2013 3:09:27 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 4                      Corr. Area 1: 642.6  
 Noise: 0.6

**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	380	115.63	461.5	
3	405	222.54	832.6	
4	423	229.37	820.9	
5	10,380	75.00	10.9	Upper Marker
6	13,846	0.00	0.0	

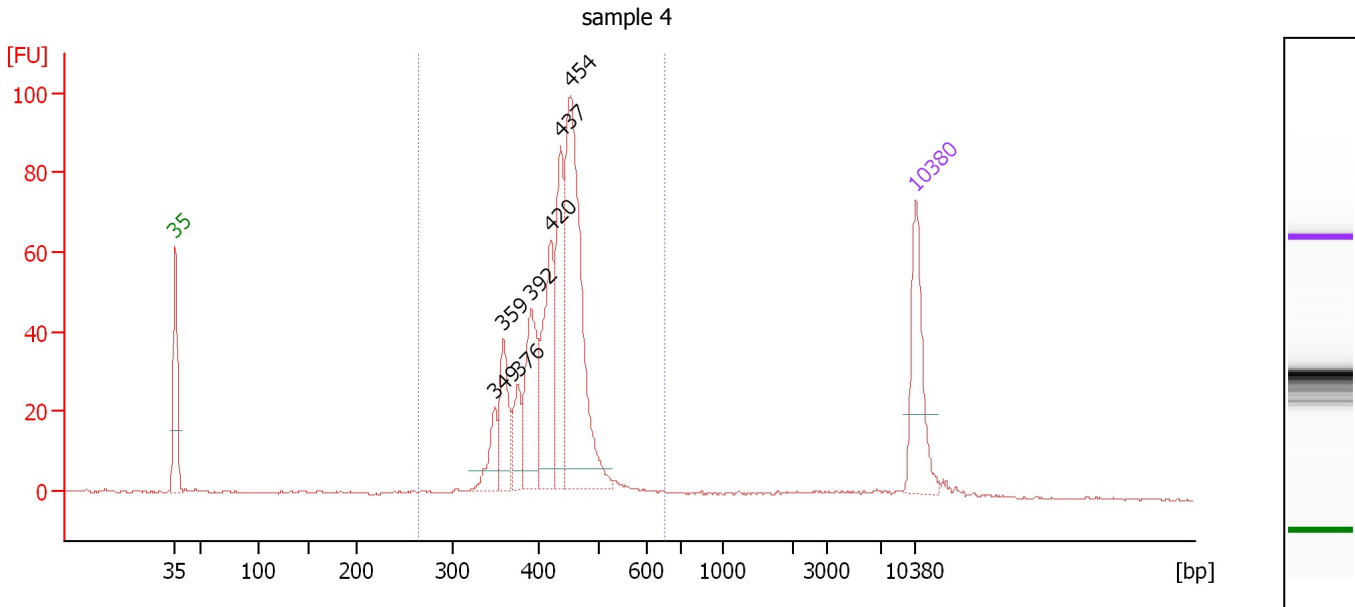
**Region table for sample 3 : sample 3**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
314	597	415	2,211.7	600.92	642.6	90	8.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... and Settings\Bioanalyzer\2013-09-18\2013-09-18\_006Ruta.xad

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 Modified: 9/18/2013 3:09:27 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 7                      Corr. Area 1: 625.4  
 Noise: 0.3

**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	349	36.58	158.7	
3	359	64.12	270.5	
4	376	38.88	156.5	
5	392	99.87	386.1	
6	420	117.27	422.6	
7	437	111.60	386.7	
8	454	280.97	937.3	
9	10,380	75.00	10.9	Upper Marker

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

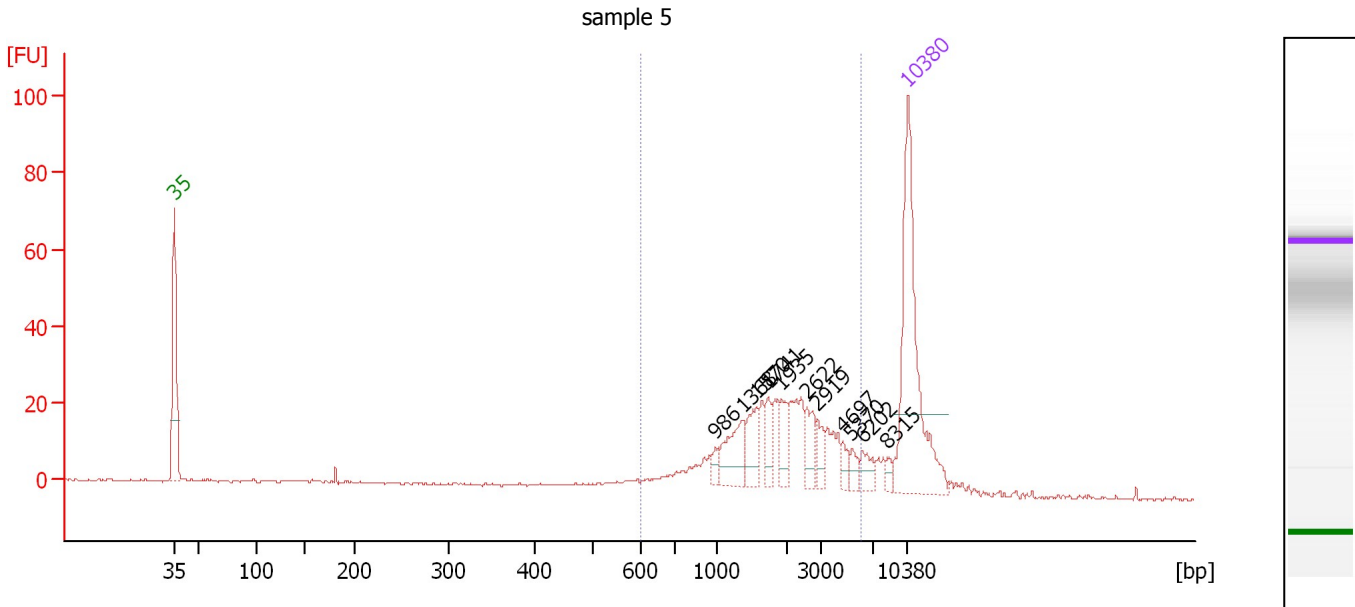
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
265	653	426	2,932.1	813.36	625.4	93	10.9	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... and Settings\Bioanalyzer\2013-09-18\2013-09-18\_006Ruta.xad

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 Modified: 9/18/2013 3:09:27 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 11                      Corr. Area 1: 288.9  
 Noise: 0.3

**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	986	3.90	6.0	
3	1,368	21.14	23.4	
4	1,570	14.36	13.9	
5	1,741	8.46	7.4	
6	1,935	11.32	8.9	
7	2,622	10.76	6.2	
8	2,919	7.58	3.9	
9	4,697	4.46	1.4	
10	5,370	4.26	1.2	
11	6,202	7.06	1.7	
12	8,315	2.81	0.5	
13	10,380	75.00	10.9	Upper Marker

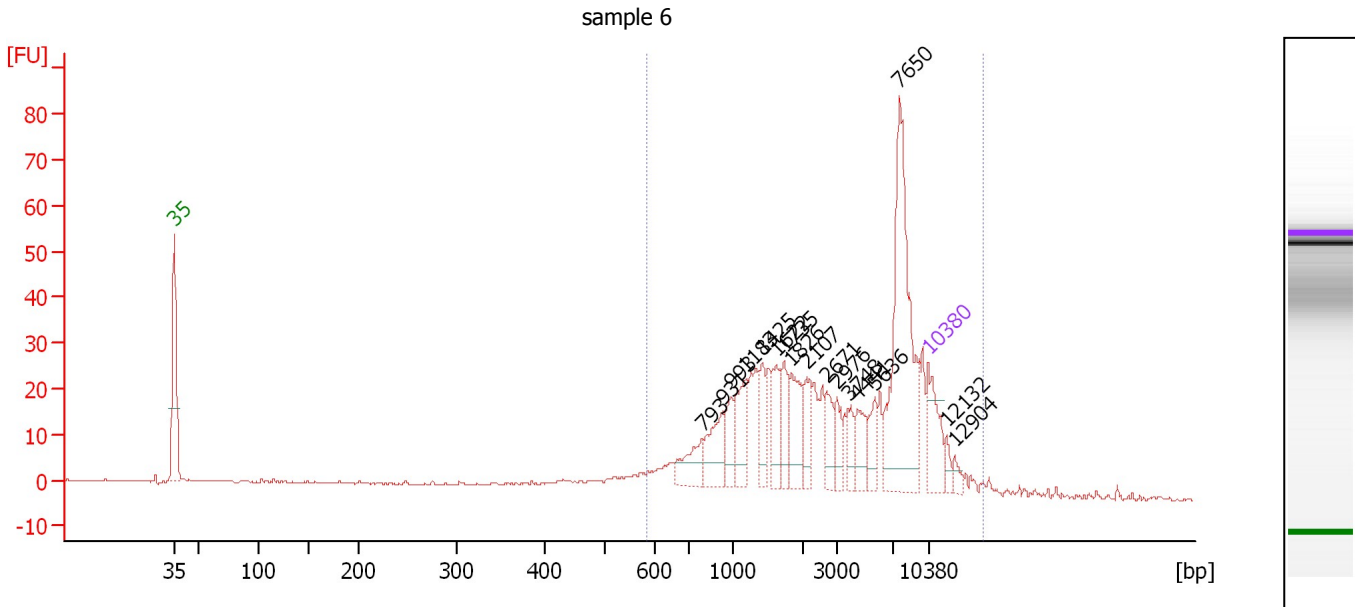
**Region table for sample 5 : sample 5**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
598	6,011	2,182	160.4	169.77	288.9	77	55.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... and Settings\Bioanalyzer\2013-09-18\2013-09-18\_006Ruta.xad

Created: 9/18/2013 2:24:43 PM  
 Modified: 9/18/2013 3:09:27 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 17      Corr. Area 1: 560.9  
 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	793	67.64	129.3	
3	931	80.39	130.8	
4	993	47.04	71.7	
5	1,183	79.41	101.7	
6	1,425	47.04	50.0	
7	1,622	56.28	52.6	
8	1,735	55.19	48.2	
9	1,826	82.85	68.7	
10	2,107	41.08	29.5	
11	2,671	39.33	22.3	
12	2,976	38.24	19.5	
13	3,748	27.12	11.0	
14	4,441	46.41	15.8	
15	5,636	39.11	10.5	
16	7,650	346.29	68.6	
17	10,380	75.00	10.9	Upper Marker
18	12,132	0.00	0.0	
19	12,904	0.00	0.0	

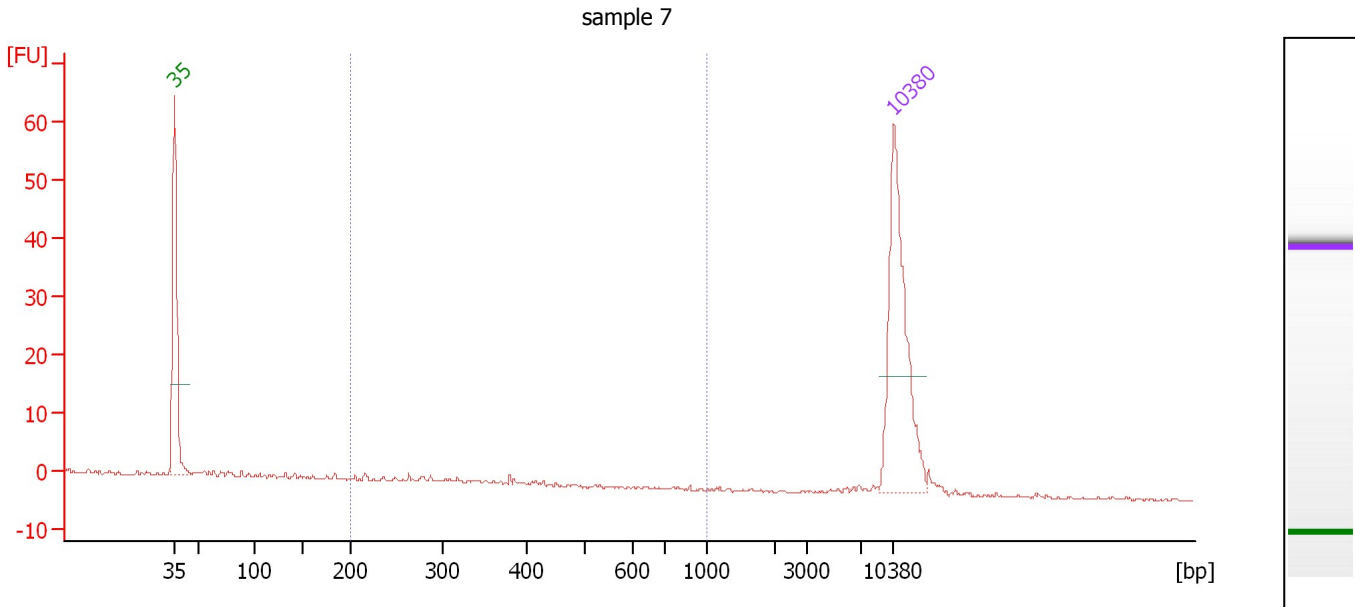
**Region table for sample 6 : sample 6**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
584	15,624	4,611	1,200.0	1,500.53	560.9	90	78.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... and Settings\Bioanalyzer\2013-09-18\2013-09-18\_006Ruta.xad

Created: 9/18/2013 2:24:43 PM  
 Modified: 9/18/2013 3:09:27 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Corr. Area 1: 3.1  
 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	10,380	75.00	10.9	Upper Marker

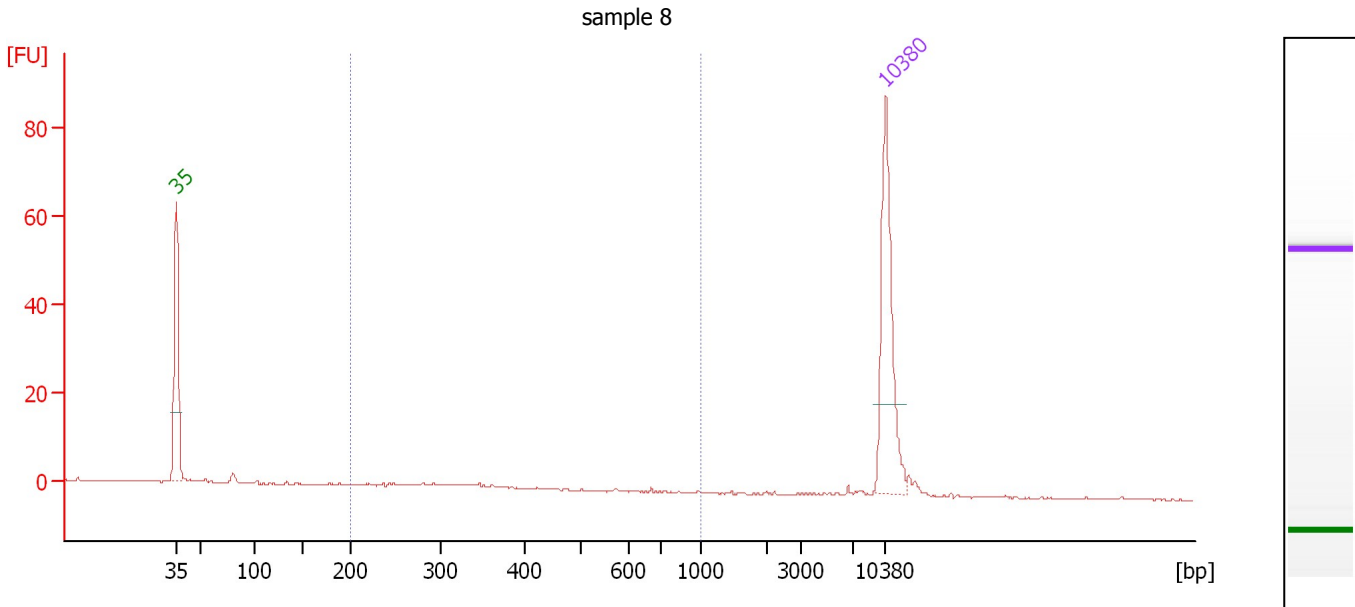
**Region table for sample 7 : sample 7**

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	314	19.0	3.63	3.1	23	30.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... and Settings\Bioanalyzer\2013-09-18\2013-09-18\_006Ruta.xad

Created: 9/18/2013 2:24:43 PM  
 Modified: 9/18/2013 3:09:27 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Corr. Area 1: 9.3  
 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	10,380	75.00	10.9	Upper Marker

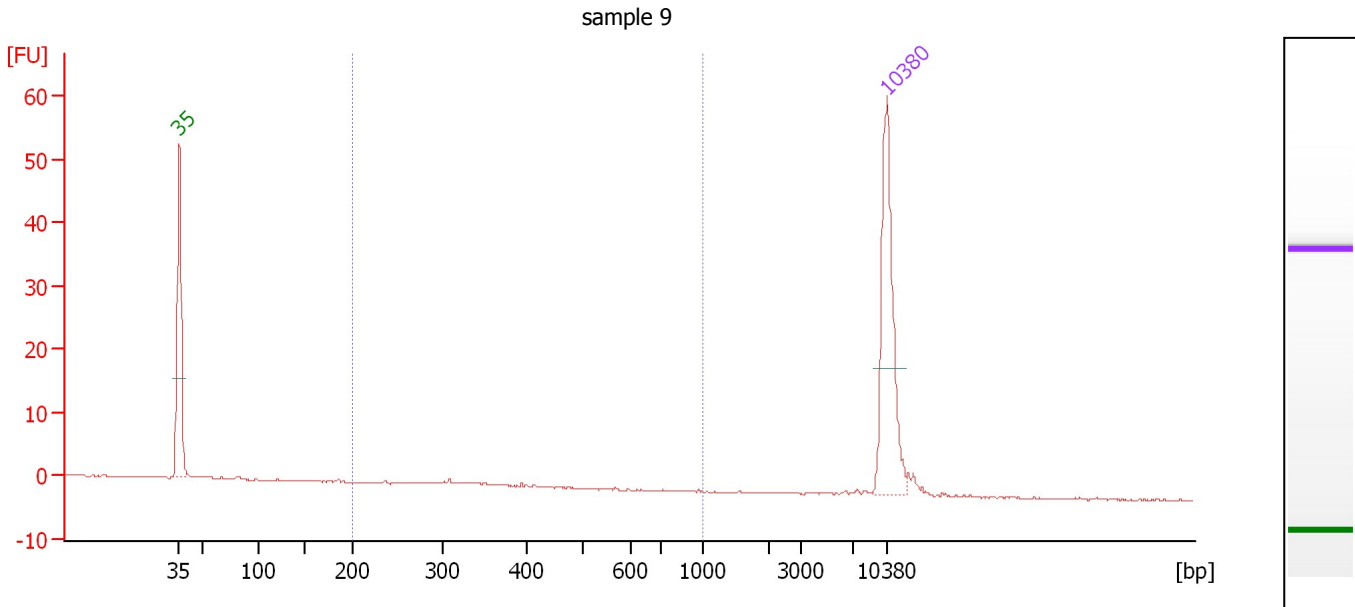
**Region table for sample 8 : sample 8**

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	315	61.0	11.95	9.3	35	26.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... and Settings\Bioanalyzer\2013-09-18\2013-09-18\_006Ruta.xad

Created: 9/18/2013 2:24:43 PM  
 Modified: 9/18/2013 3:09:27 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Corr. Area 1: 2.2  
 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

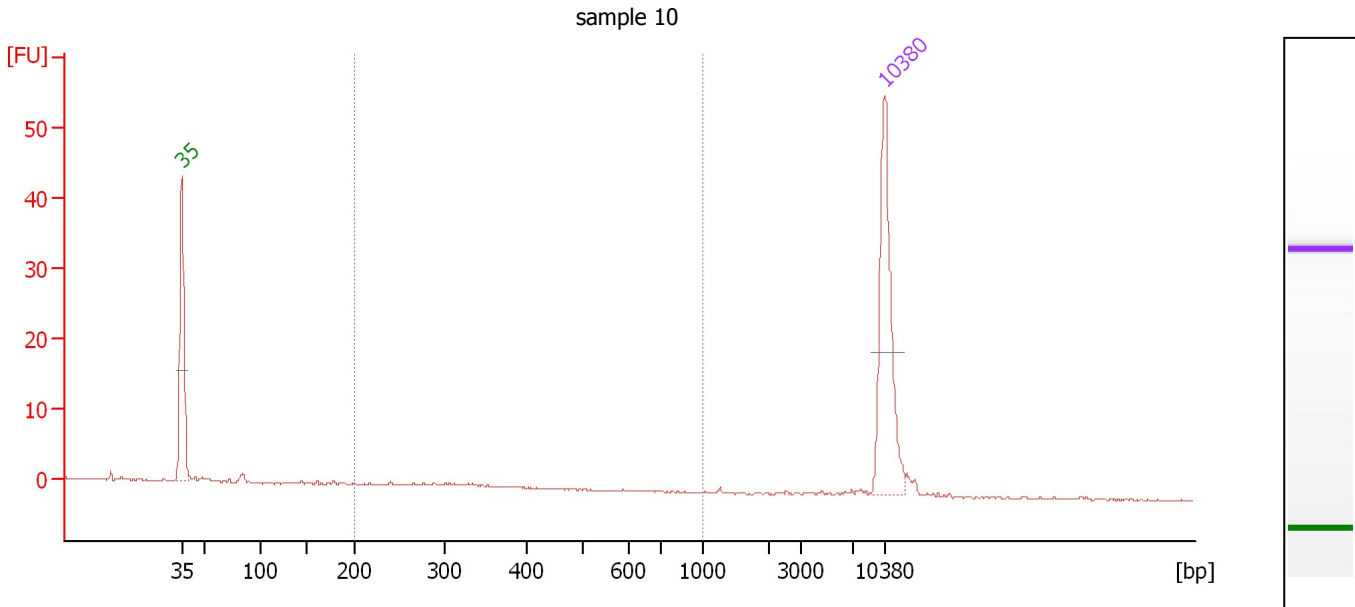
**Region table for sample 9 : sample 9**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	321	17.7	3.72	2.2	24	10.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... and Settings\Bioanalyzer\2013-09-18\2013-09-18\_006Ruta.xad

Created: 9/18/2013 2:24:43 PM  
 Modified: 9/18/2013 3:09:27 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Corr. Area 1: 3.7  
 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	10,380	75.00	10.9	Upper Marker

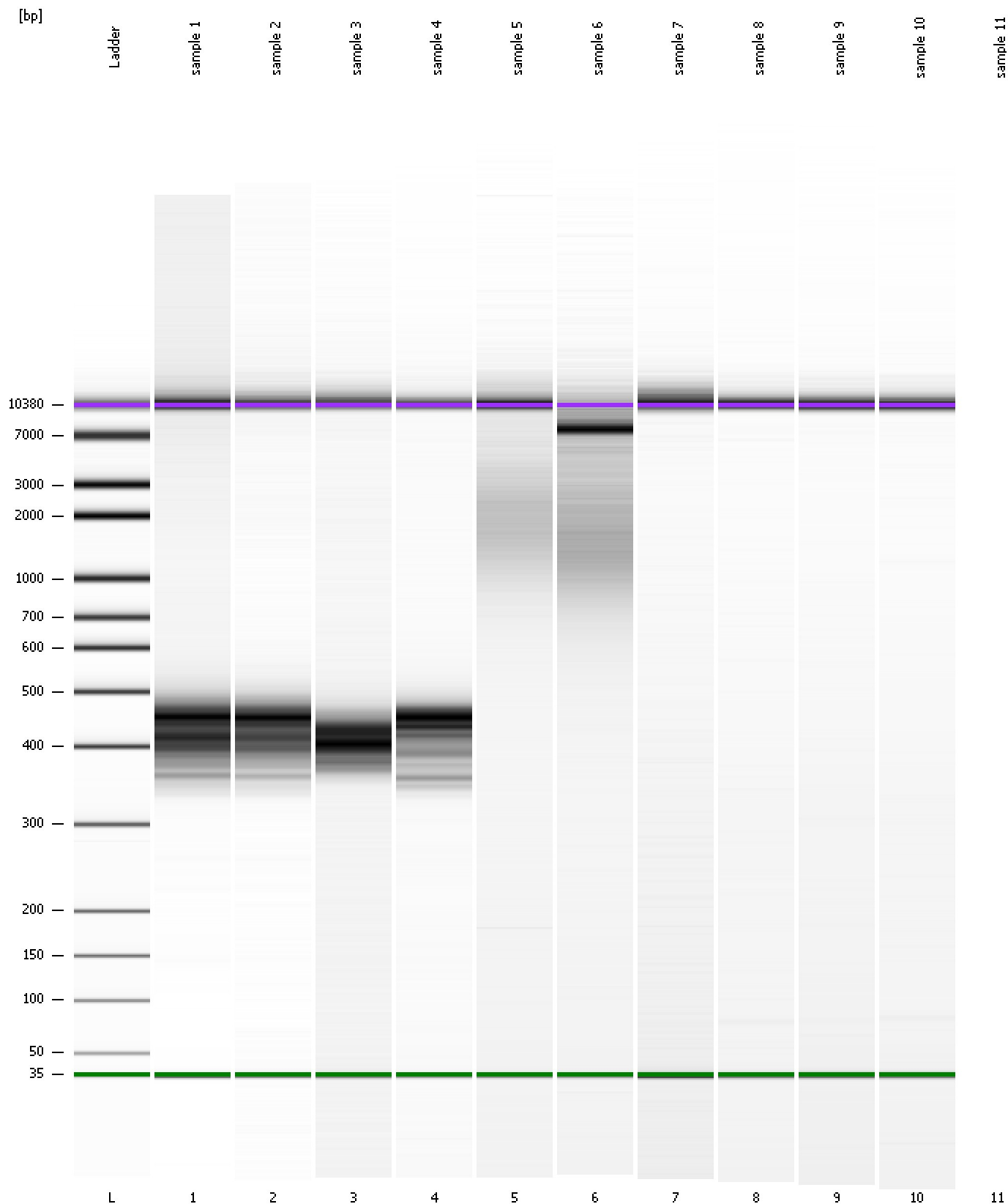
**Region table for sample 10 : sample 10**

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	301	35.8	6.95	3.7	27	14.1	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... and Settings\Bioanalyzer\2013-09-18\2013-09-18\_006Ruta.xad

Created: 9/18/2013 2:24:43 PM  
Modified: 9/18/2013 3:09:27 PM

**Gel Image**



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Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... and Settings\Bioanalyzer\2013-09-18\2013-09-18\_006Ruta.xad

Created: 9/18/2013 2:24:43 PM  
Modified: 9/18/2013 3:09:27 PM

**Invalid Samples**

Sample 11 has not been run, no results available.