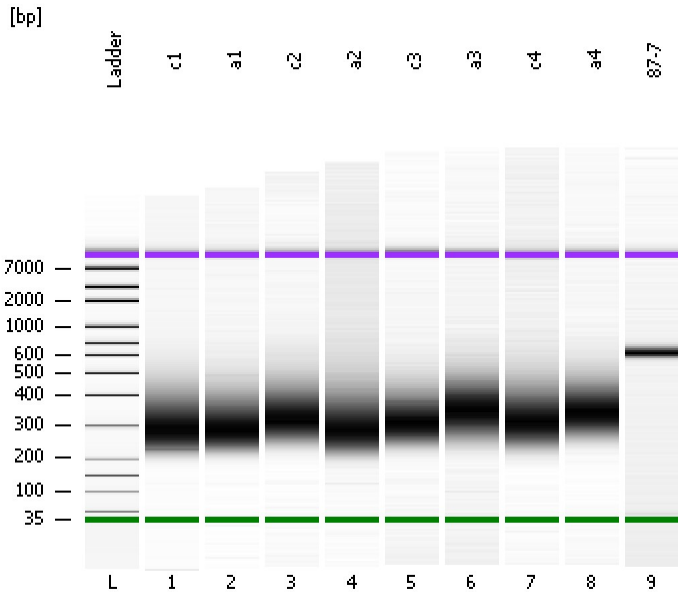


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ts and Settings\Bioanalyzer\2012-03-28\2012-03-28-fixed.xad

Created: 3/28/2012 1:20:37 PM  
Modified: 3/28/2012 3:25:57 PM

**Electrophoresis File Run Summary**



Instrument Information:

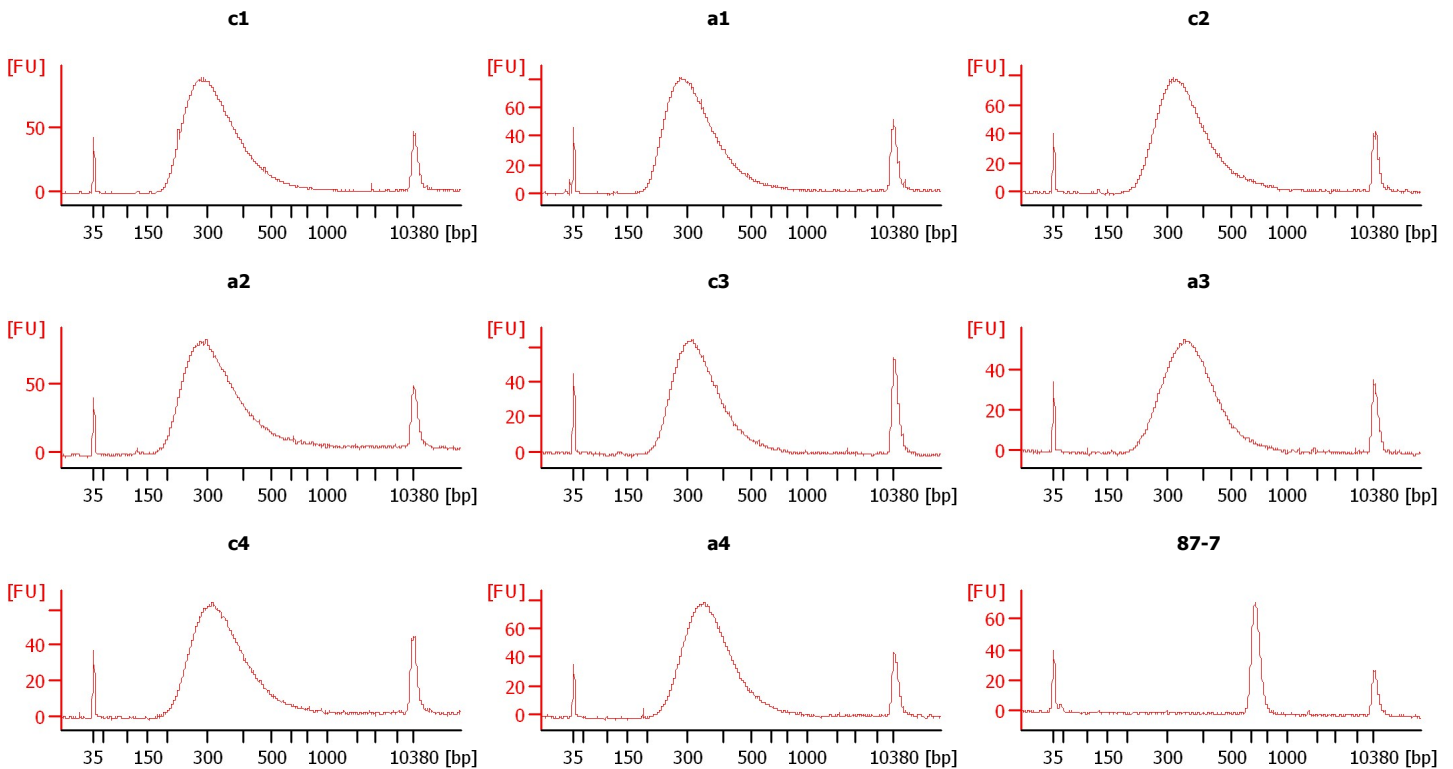
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:\...ts and Settings\Bioanalyzer\2012-03-28\2012-03-28-fixed.xad

Created: 3/28/2012 1:20:37 PM  
 Modified: 3/28/2012 3:25:57 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
c1		<input type="checkbox"/>	✓			
a1		<input type="checkbox"/>	✓			
c2		<input type="checkbox"/>	✓			
a2		<input type="checkbox"/>	✓			
c3		<input type="checkbox"/>	✓			
a3		<input type="checkbox"/>	✓			
c4		<input type="checkbox"/>	✓			
a4		<input type="checkbox"/>	✓			
87-7		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ts and Settings\Bioanalyzer\2012-03-28\2012-03-28-fixed.xad

Created: 3/28/2012 1:20:37 PM  
Modified: 3/28/2012 3:25:57 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

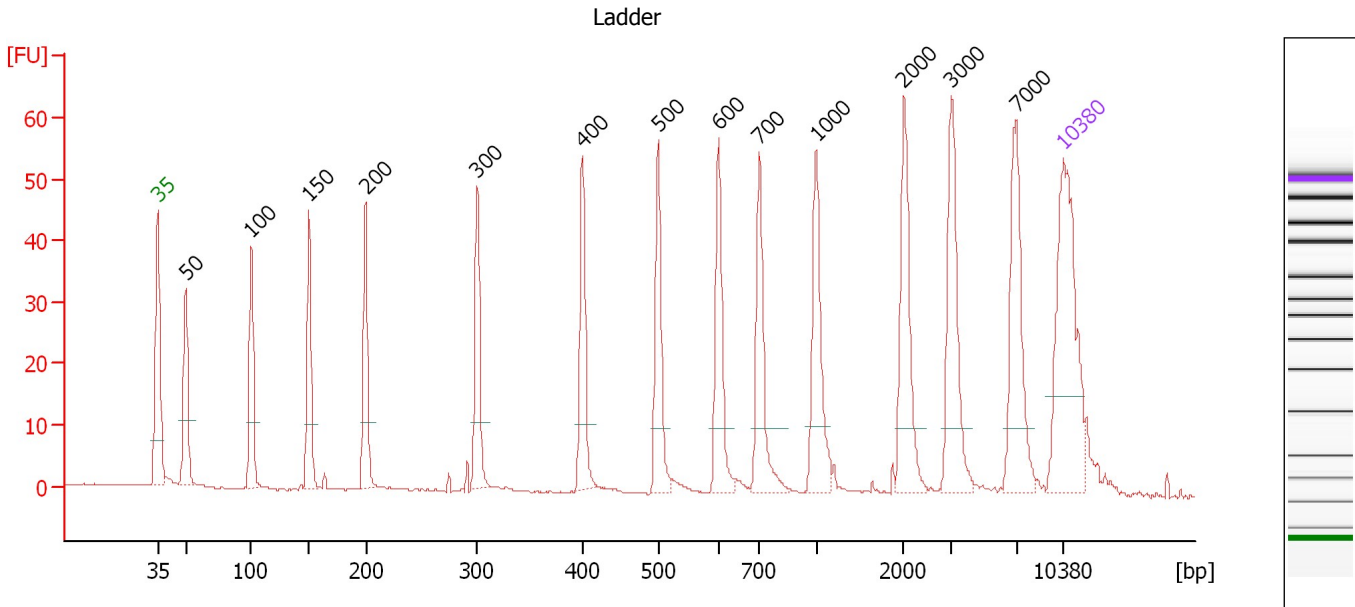
**Ladder**

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:\...ts and Settings\Bioanalyzer\2012-03-28\2012-03-28-fixed.xad

Created: 3/28/2012 1:20:37 PM  
 Modified: 3/28/2012 3:25:57 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

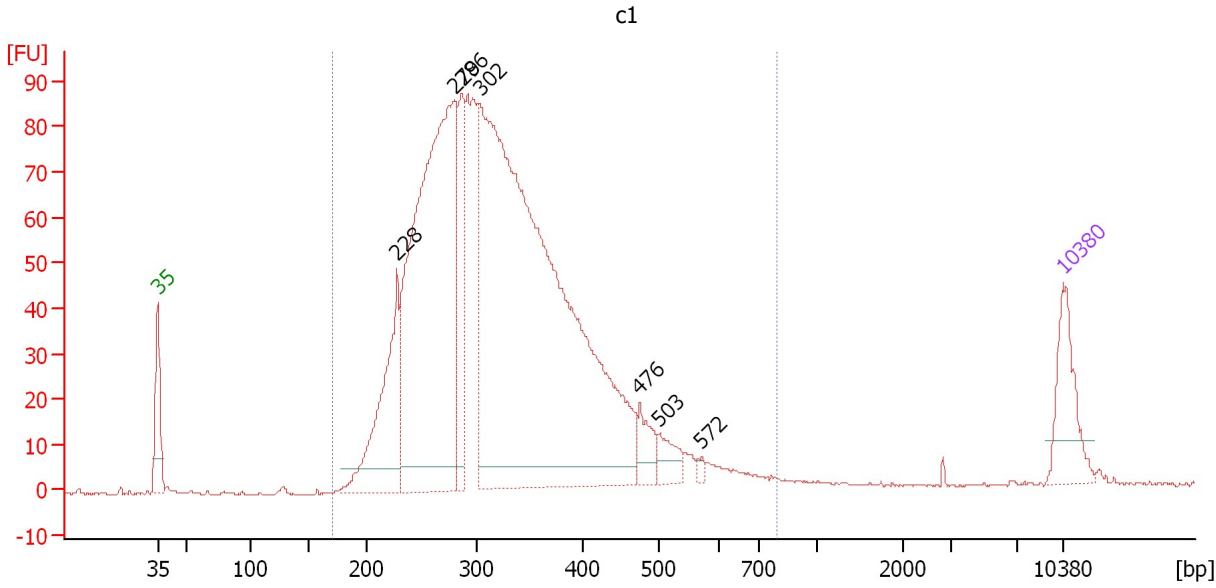
**Peak table for Ladder**

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:\...ts and Settings\Bioanalyzer\2012-03-28\2012-03-28-fixed.xad

Created: 3/28/2012 1:20:37 PM  
 Modified: 3/28/2012 3:25:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : c1**

Number of peaks found: 7                      Corr. Area 1: 1,711.6  
 Noise: 0.2

**Peak table for sample 1 : c1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	228	255.05	1,696.1	
3	279	934.40	5,074.0	
4	286	154.38	817.8	
5	302	1,676.01	8,399.6	
6	476	45.91	146.2	
7	503	36.87	111.1	
8	572	7.16	19.0	
9	10,380	75.00	10.9	Upper Marker

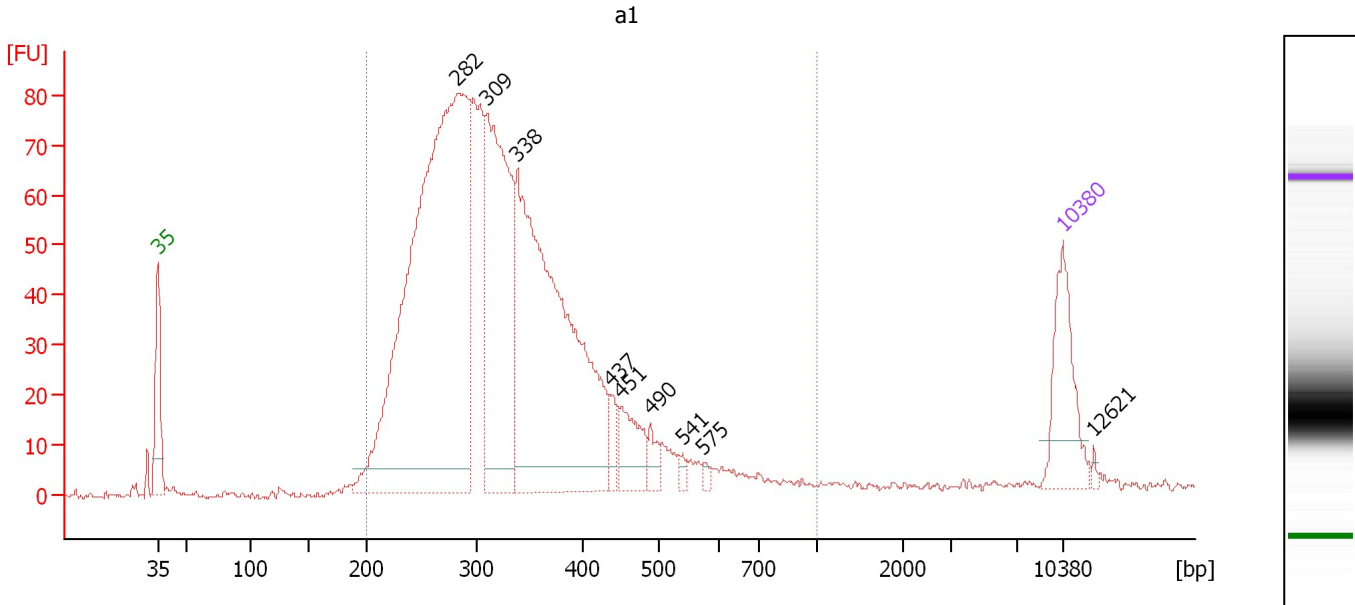
**Region table for sample 1 : c1**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
171	16,215.7	328	3,264.02	793	1,711.6	99	25.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ts and Settings\Bioanalyzer\2012-03-28\2012-03-28-fixed.xad

Created: 3/28/2012 1:20:37 PM  
 Modified: 3/28/2012 3:25:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : a1**

Number of peaks found: 9                      Corr. Area 1: 1,464.4  
 Noise: 0.7

**Peak table for sample 2 : a1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	282	1,037.79	5,578.7	
3	309	363.01	1,781.6	
4	338	624.13	2,798.7	
5	437	21.03	72.9	
6	451	58.11	195.0	
7	490	19.56	60.4	
8	541	7.48	21.0	
9	575	5.40	14.2	
10	10,380	75.00	10.9	Upper Marker
11	12,621	0.00	0.0	

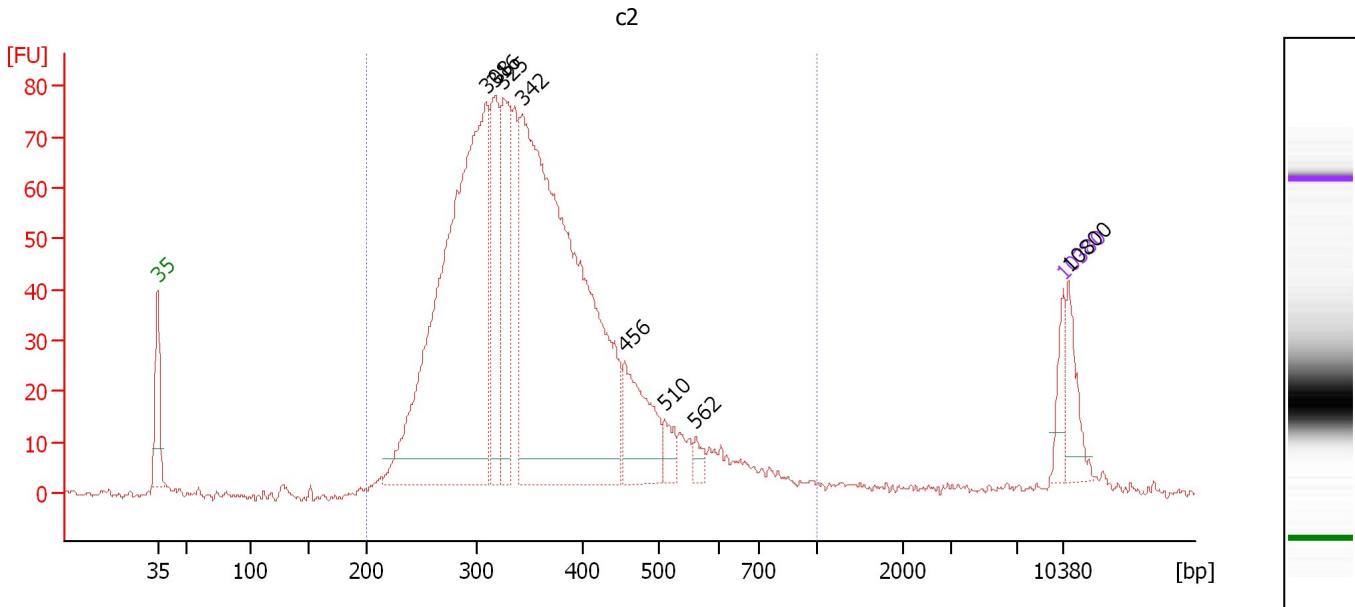
**Region table for sample 2 : a1**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	11,599.6	327	2,342.13	1,000	1,464.4	99	24.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ts and Settings\Bioanalyzer\2012-03-28\2012-03-28-fixed.xad

Created: 3/28/2012 1:20:37 PM  
 Modified: 3/28/2012 3:25:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : c2**

Number of peaks found: 8                      Corr. Area 1: 1,377.8  
 Noise: 0.7

**Peak table for sample 3 : c2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	308	2,400.63	11,794.9	
3	316	454.50	2,177.3	
4	325	469.93	2,192.2	
5	342	2,714.93	12,013.5	
6	456	333.76	1,109.2	
7	510	71.57	212.5	
8	562	39.19	105.7	
9	10,380	75.00	10.9	Upper Marker
10	10,800	0.00	0.0	

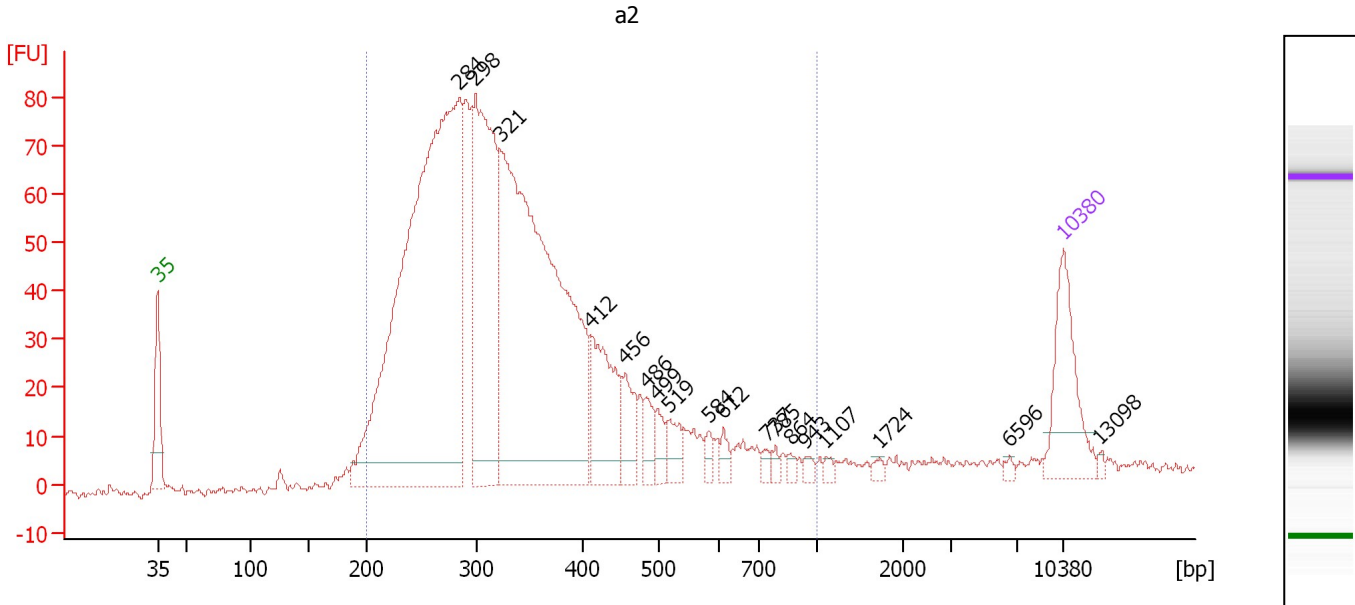
**Region table for sample 3 : c2**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	32,418.3	359	7,180.23	1,000	1,377.8	97	24.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ts and Settings\Bioanalyzer\2012-03-28\2012-03-28-fixed.xad

Created: 3/28/2012 1:20:37 PM  
 Modified: 3/28/2012 3:25:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : a2**

Number of peaks found: 18      Corr. Area 1: 1,656.7  
 Noise: 1.1

**Peak table for sample 4 : a2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	284	941.85	5,027.1	
3	298	348.16	1,767.4	
4	321	737.24	3,476.1	
5	412	106.51	391.4	
6	456	41.61	138.2	
7	486	23.88	74.5	
8	499	19.78	60.0	
9	519	26.68	77.9	
10	584	10.17	26.4	
11	612	11.96	29.6	
12	737	6.41	13.2	
13	785	5.58	10.8	
14	864	5.12	9.0	
15	943	6.12	9.8	
16	1,107	4.48	6.1	
17	1,724	4.58	4.0	
18	6,596	3.89	0.9	
19	10,380	75.00	10.9	Upper Marker
20	13,098	0.00	0.0	

**Region table for sample 4 : a2**

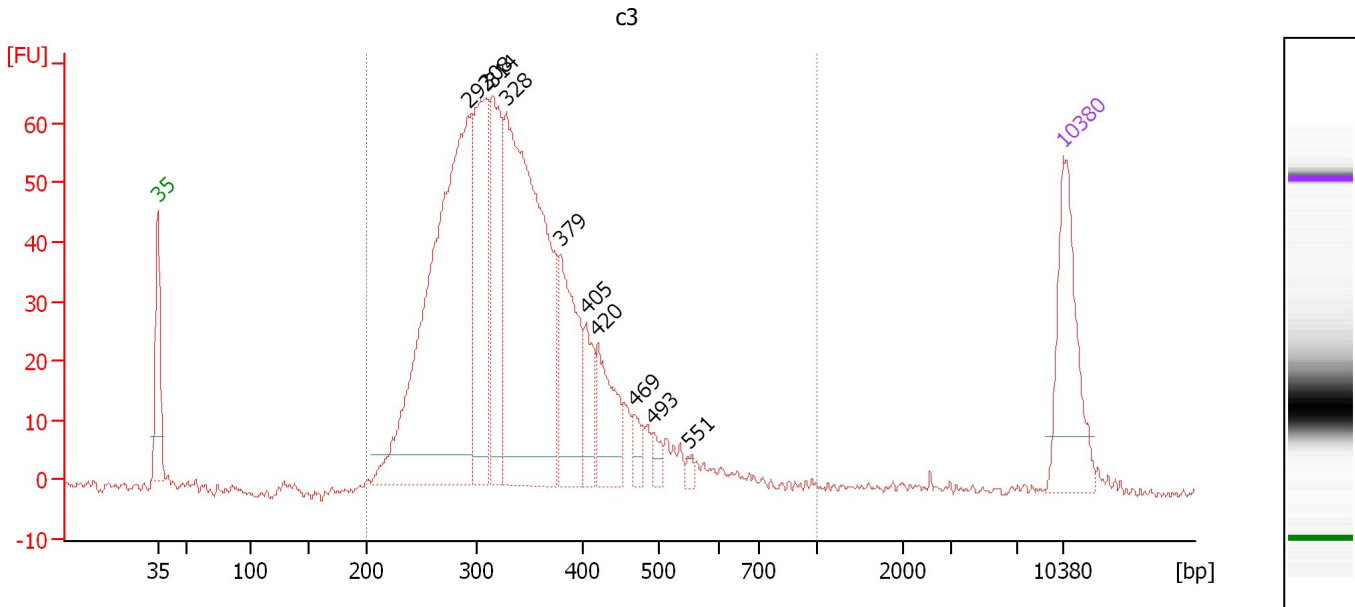
From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	12,120.3	347	2,490.27	1,000	1,656.7	93	34.0	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ts and Settings\Bioanalyzer\2012-03-28\2012-03-28-fixed.xad

Created: 3/28/2012 1:20:37 PM  
 Modified: 3/28/2012 3:25:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : c3**

Number of peaks found: 10                      Corr. Area 1: 1,053.1  
 Noise: 0.6

**Peak table for sample 5 : c3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	292	473.36	2,452.5	
3	308	170.40	837.0	
4	314	128.61	620.2	
5	328	403.95	1,868.7	
6	379	104.88	419.3	
7	405	35.38	132.3	
8	420	60.39	217.8	
9	469	14.24	46.0	
10	493	10.12	31.1	
11	551	5.18	14.2	
12	10,380	75.00	10.9	Upper Marker

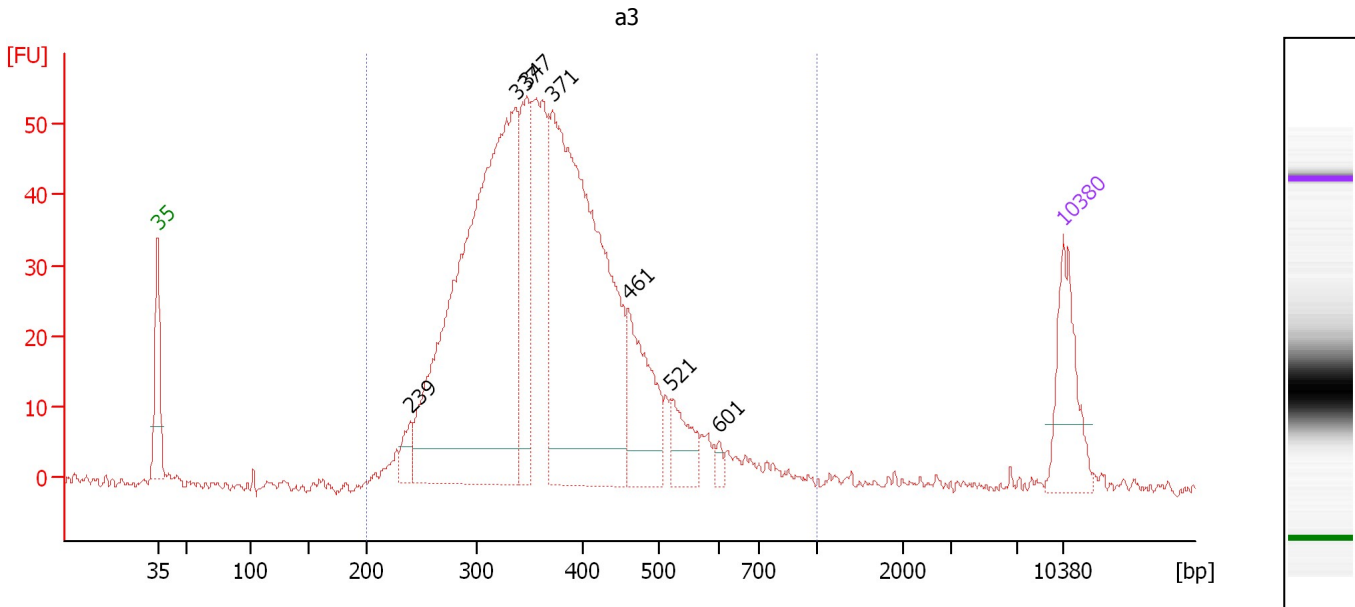
**Region table for sample 5 : c3**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	6,768.1	338	1,435.23	1,000	1,053.1	100	20.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ts and Settings\Bioanalyzer\2012-03-28\2012-03-28-fixed.xad

Created: 3/28/2012 1:20:37 PM  
 Modified: 3/28/2012 3:25:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : a3**

Number of peaks found: 7                      Corr. Area 1: 1,010.0  
 Noise: 0.9

**Peak table for sample 6 : a3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	239	26.80	169.6	
3	337	822.91	3,699.8	
4	347	141.45	617.1	
5	371	667.35	2,725.2	
6	461	128.85	423.9	
7	521	51.62	150.1	
8	601	8.74	22.0	
9	10,380	75.00	10.9	Upper Marker

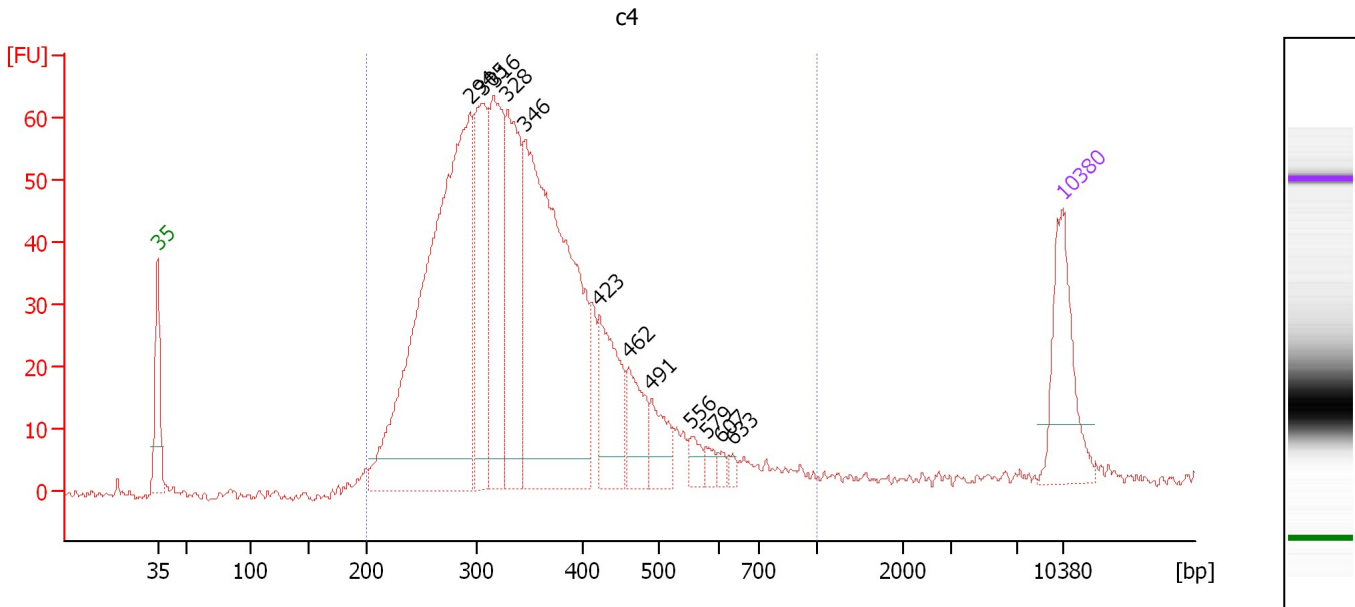
**Region table for sample 6 : a3**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	9,438.1	378	2,194.87	1,000	1,010.0	97	25.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ts and Settings\Bioanalyzer\2012-03-28\2012-03-28-fixed.xad

Created: 3/28/2012 1:20:37 PM  
 Modified: 3/28/2012 3:25:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : c4**

Number of peaks found: 12                      Corr. Area 1: 1,204.3  
 Noise: 0.8

**Peak table for sample 7 : c4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	294	656.72	3,389.9	
3	305	175.13	869.1	
4	316	179.35	861.1	
5	328	193.46	892.6	
6	346	508.43	2,228.1	
7	423	97.65	350.1	
8	462	54.53	178.9	
9	491	40.81	125.9	
10	556	15.67	42.7	
11	579	9.25	24.2	
12	607	6.76	16.9	
13	633	5.75	13.8	
14	10,380	75.00	10.9	Upper Marker

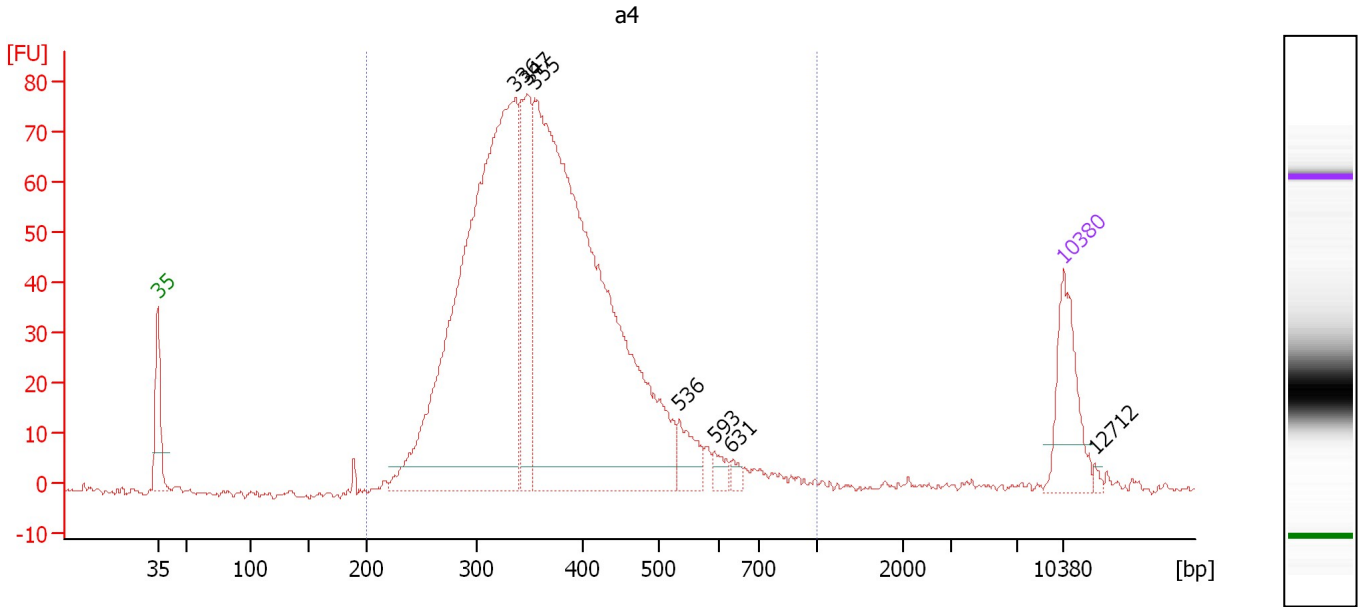
**Region table for sample 7 : c4**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	9,469.4	354	2,035.91	1,000	1,204.3	97	28.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ts and Settings\Bioanalyzer\2012-03-28\2012-03-28-fixed.xad

Created: 3/28/2012 1:20:37 PM  
 Modified: 3/28/2012 3:25:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : a4**

Number of peaks found: 7      Corr. Area 1: 1,320.1  
 Noise: 0.6

**Peak table for sample 8 : a4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	336	932.30	4,206.3	
3	347	170.97	746.9	
4	355	1,077.02	4,602.5	
5	536	41.05	116.0	
6	593	14.20	36.3	
7	631	8.62	20.7	
8	10,380	75.00	10.9	Upper Marker
9	12,712	0.00	0.0	

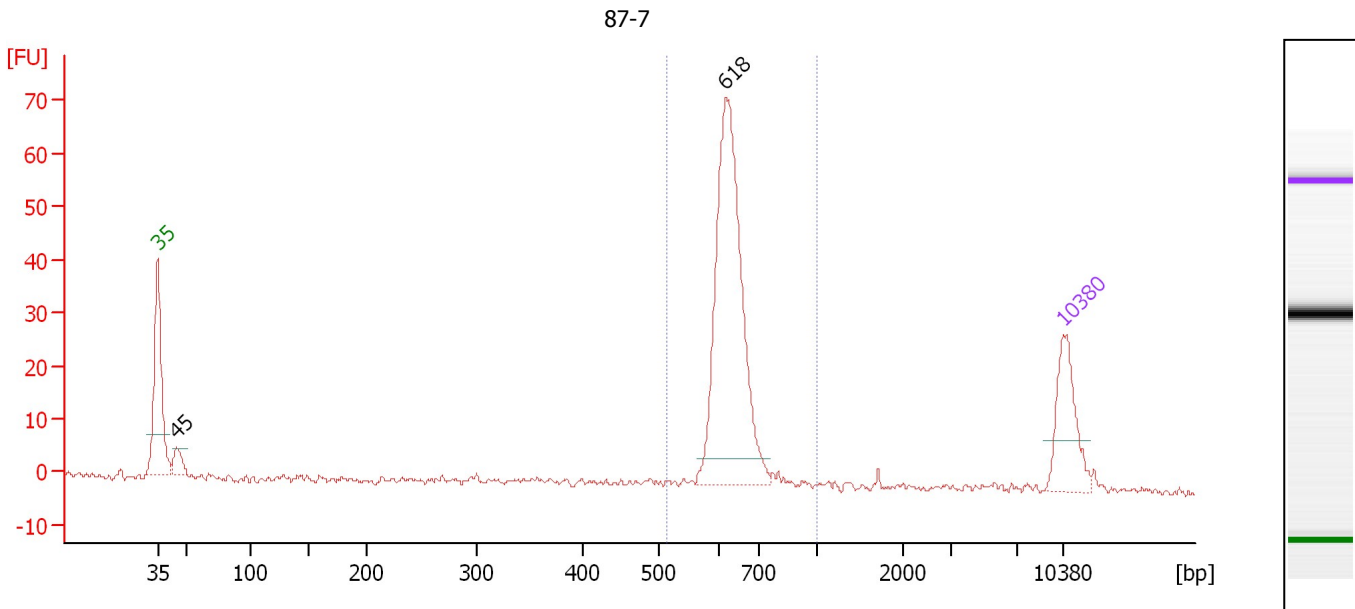
**Region table for sample 8 : a4**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	9,697.6	374	2,252.36	1,000	1,320.1	99	23.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ts and Settings\Bioanalyzer\2012-03-28\2012-03-28-fixed.xad

Created: 3/28/2012 1:20:37 PM  
 Modified: 3/28/2012 3:25:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 87-7**

Number of peaks found: 2                      Corr. Area 1: 193.0  
 Noise: 0.7

**Peak table for sample 9 : 87-7**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	45	29.63	995.5	
3	618	418.74	1,026.7	
4	10,380	75.00	10.9	Upper Marker

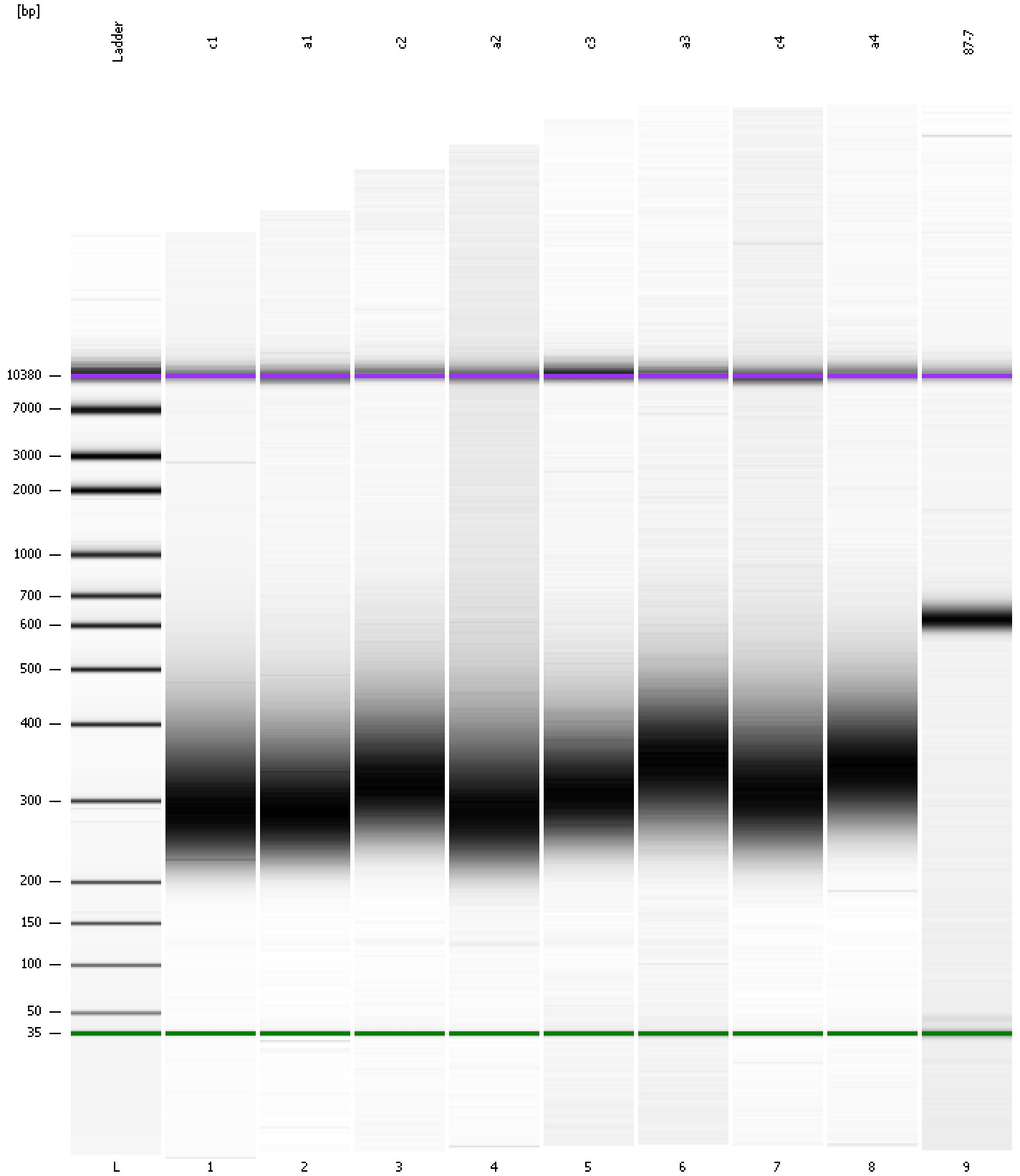
**Region table for sample 9 : 87-7**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
513	1,043.2	633	434.23	1,000	193.0	84	6.9	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ts and Settings\Bioanalyzer\2012-03-28\2012-03-28-fixed.xad

Created: 3/28/2012 1:20:37 PM  
Modified: 3/28/2012 3:25:57 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ts and Settings\Bioanalyzer\2012-03-28\2012-03-28-fixed.xad

Created: 3/28/2012 1:20:37 PM  
 Modified: 3/28/2012 3:25:57 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run aborted on port 1		Instrument	Run		3/28/2012 2:00:00 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-03-28\2012-03-28_002.xad)		Instrument	Run		3/28/2012 1:20:37 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/28/2012 1:20:37 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/28/2012 1:20:37 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/28/2012 1:20:37 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/28/2012 1:20:37 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/28/2012 1:20:37 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/28/2012 1:20:37 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1