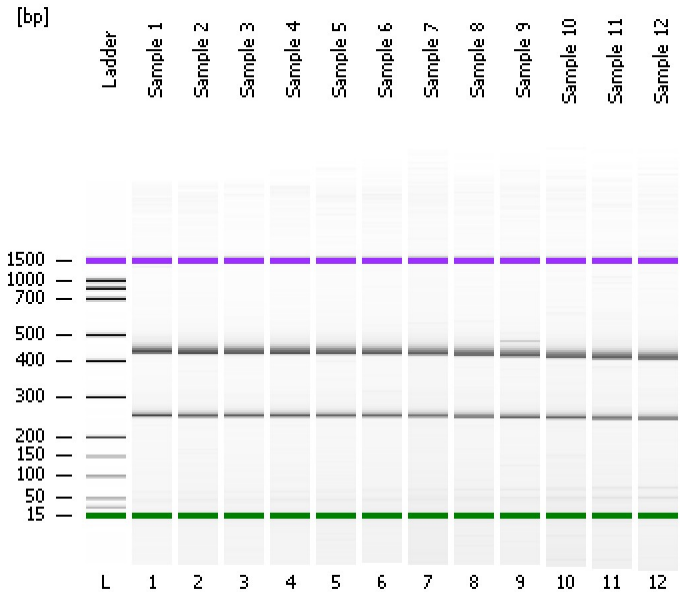


Assay Class: DNA 1000  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
Modified: 5/1/2013 5:12:16 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\DNA 1000 Series II.xsy

Assay Class: DNA 1000  
Version: 2.3  
Assay Comments: DNA Analysis 25 -1000 bp

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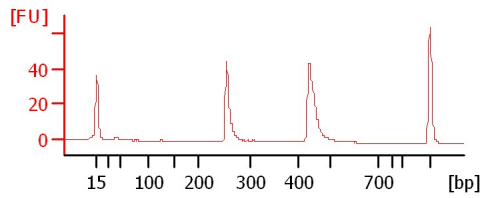
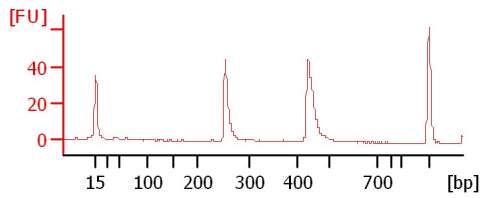
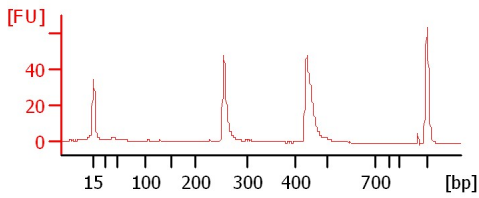
#### Chip Information:

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

Sample 1

Sample 2

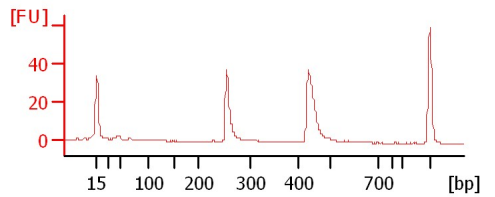
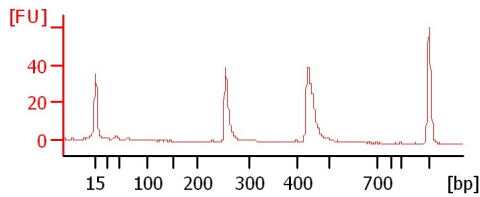
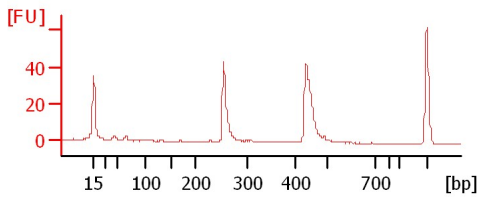
Sample 3



Sample 4

Sample 5

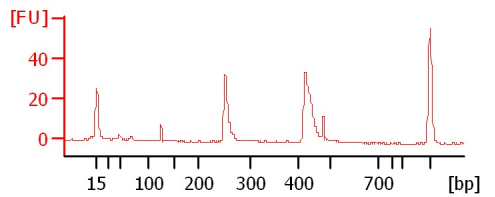
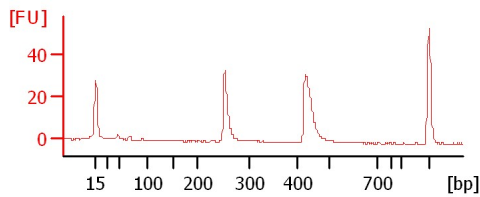
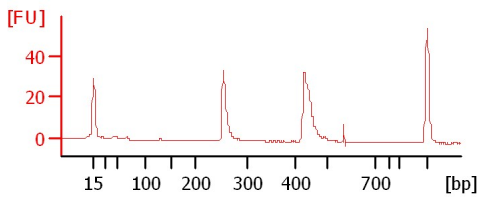
Sample 6



Sample 7

Sample 8

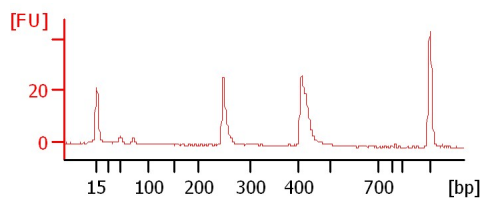
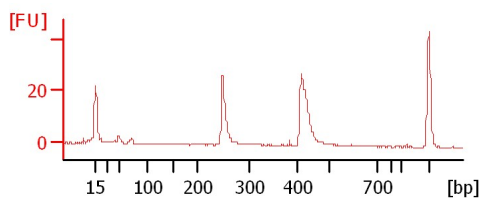
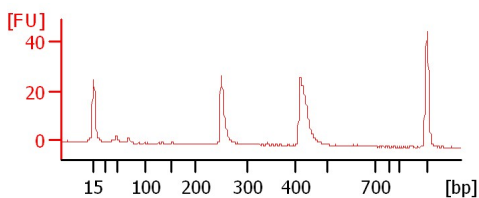
Sample 9



Sample 10

Sample 11

Sample 12



Assay Class: DNA 1000  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
 Modified: 5/1/2013 5:12:16 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"/>	✓			
Sample 12		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: DNA 1000  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
Modified: 5/1/2013 5:12:16 PM

**Electrophoresis Assay Details**

**General Analysis Settings**

Number of Available Sample and Ladder Wells (Max.) : 13  
Minimum Visible Range [s] : 30  
Maximum Visible Range [s] : 129  
Start Analysis Time Range [s] : 30  
End Analysis Time Range [s] : 128.95  
Ladder Concentration [ng/μl] : 44  
Uses Standard Area for Ladder Fragments  
Lower Marker Concentration [ng/μl] : 4.2  
Upper Marker Concentration [ng/μl] : 2.1  
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] : 30  
Integration End Time [s] : 128.95  
Slope Threshold : 0.5  
Height Threshold [FU] : 20  
Area Threshold : 0.1  
Width Threshold [s] : 0.5  
Baseline Plateau [s] : 0.5

**Filter Settings**

Filter Width [s] : 0.5  
Polynomial Order : 4

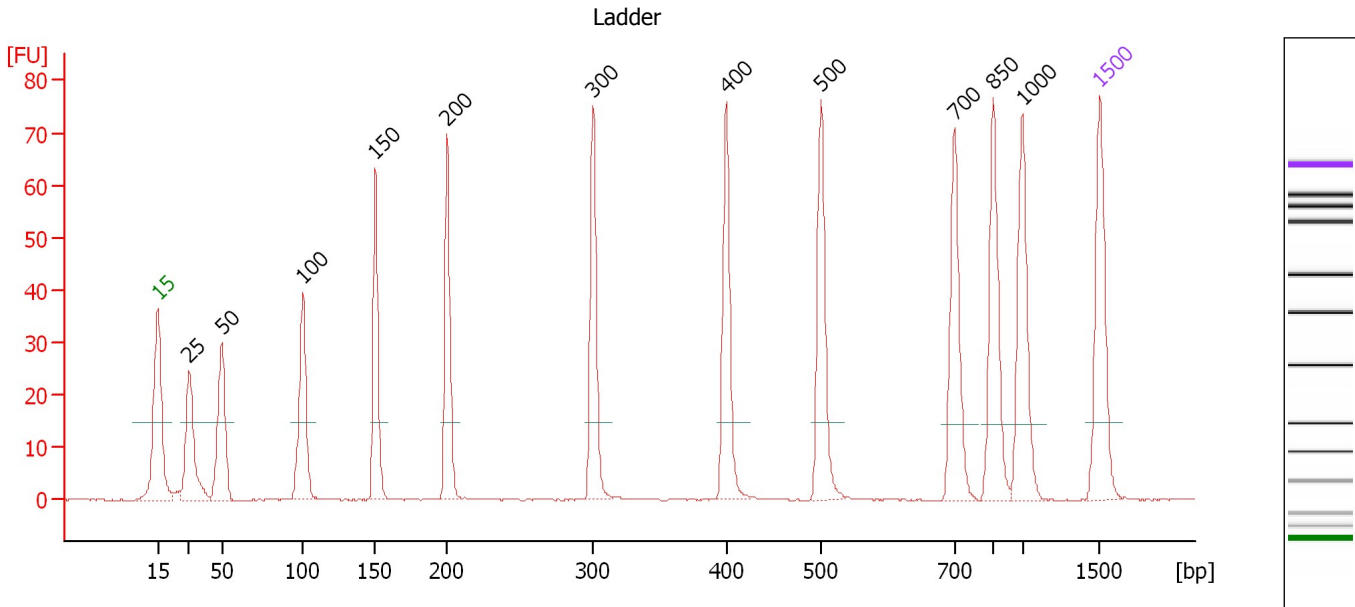
**Ladder**

Ladder Peak	Size	Area
1	15	25
2	25	26
3	50	34
4	100	41
5	150	45
6	200	52
7	300	63
8	400	76
9	500	83
10	700	88
11	850	86
12	1000	90
13	1500	52

Assay Class: DNA 1000  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
 Modified: 5/1/2013 5:12:16 PM

**Electropherogram Summary**



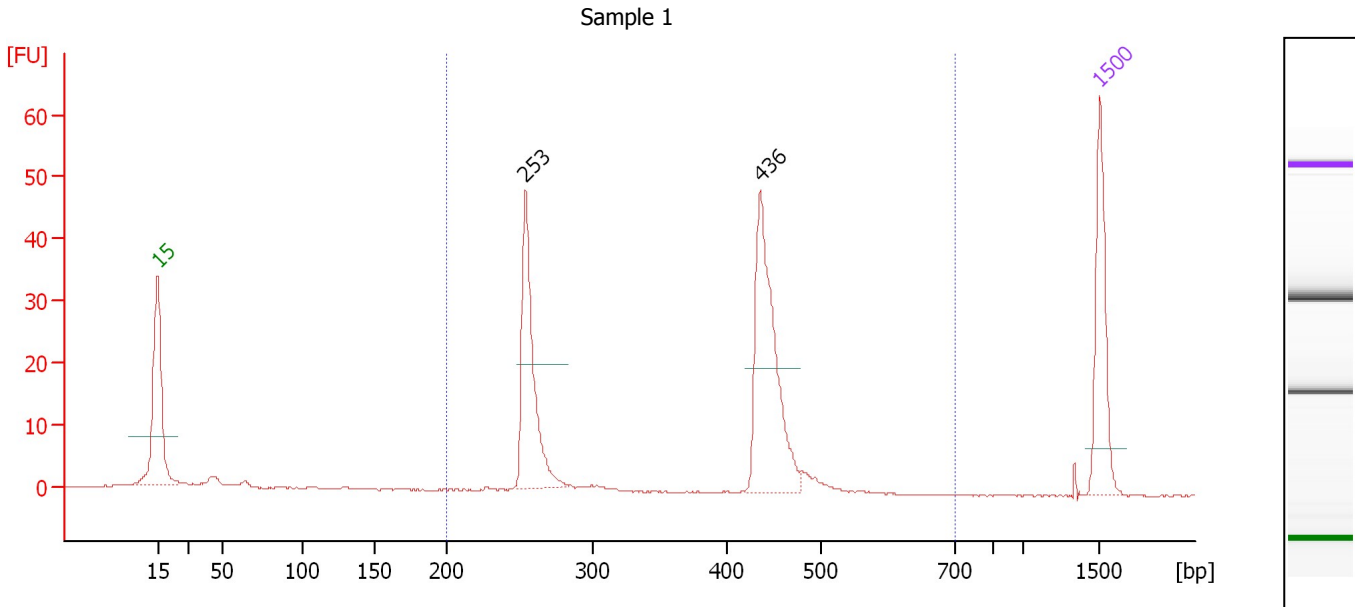
**Peak table for Ladder**

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	25	4.00	242.4	Ladder Peak
3	50	4.00	121.2	Ladder Peak
4	100	4.00	60.6	Ladder Peak
5	150	4.00	40.4	Ladder Peak
6	200	4.00	30.3	Ladder Peak
7	300	4.00	20.2	Ladder Peak
8	400	4.00	15.2	Ladder Peak
9	500	4.00	12.1	Ladder Peak
10	700	4.00	8.7	Ladder Peak
11	850	4.00	7.1	Ladder Peak
12	1,000	4.00	6.1	Ladder Peak
13	1,500	2.10	2.1	Upper Marker

Assay Class: DNA 1000  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
 Modified: 5/1/2013 5:12:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 2                      Area 1: 132.0

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

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	253	3.17	19.0	
3	436	4.04	14.0	
4	1,500	2.10	2.1	Upper Marker

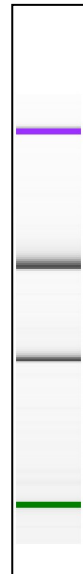
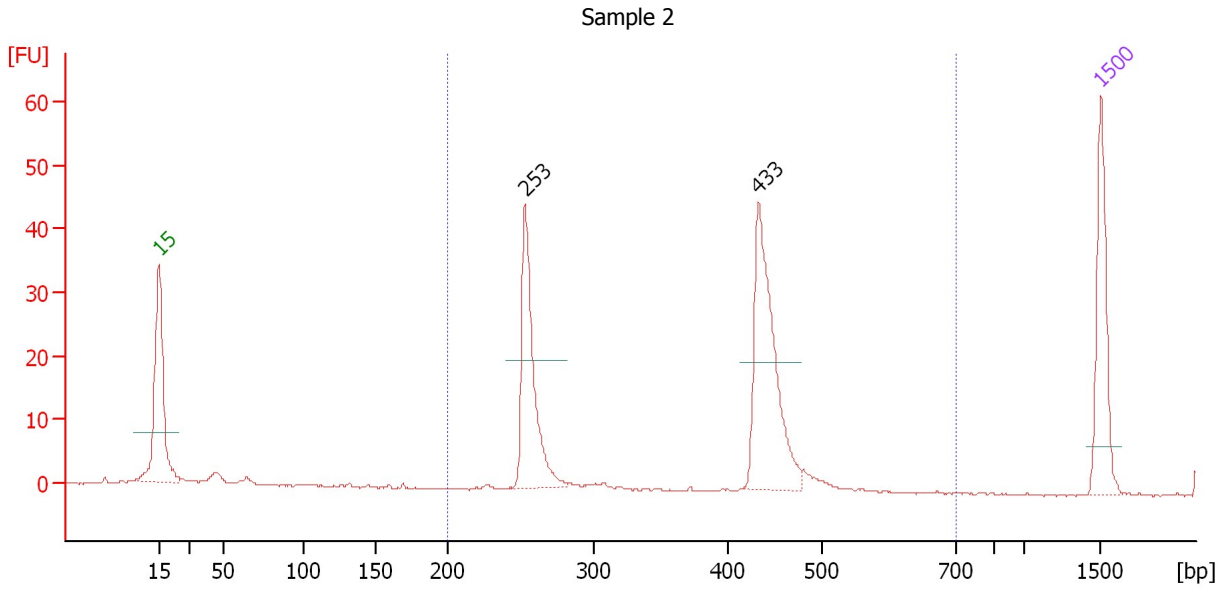
**Region table for sample 1 : Sample 1**

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
200	700	132.0	89	35.3	7.87	377	24.8	Region 1

Assay Class: DNA 1000  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
 Modified: 5/1/2013 5:12:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 2                      Area 1: 125.4

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

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	253	3.13	18.8	
3	433	3.96	13.8	
4	1,500	2.10	2.1	Upper Marker

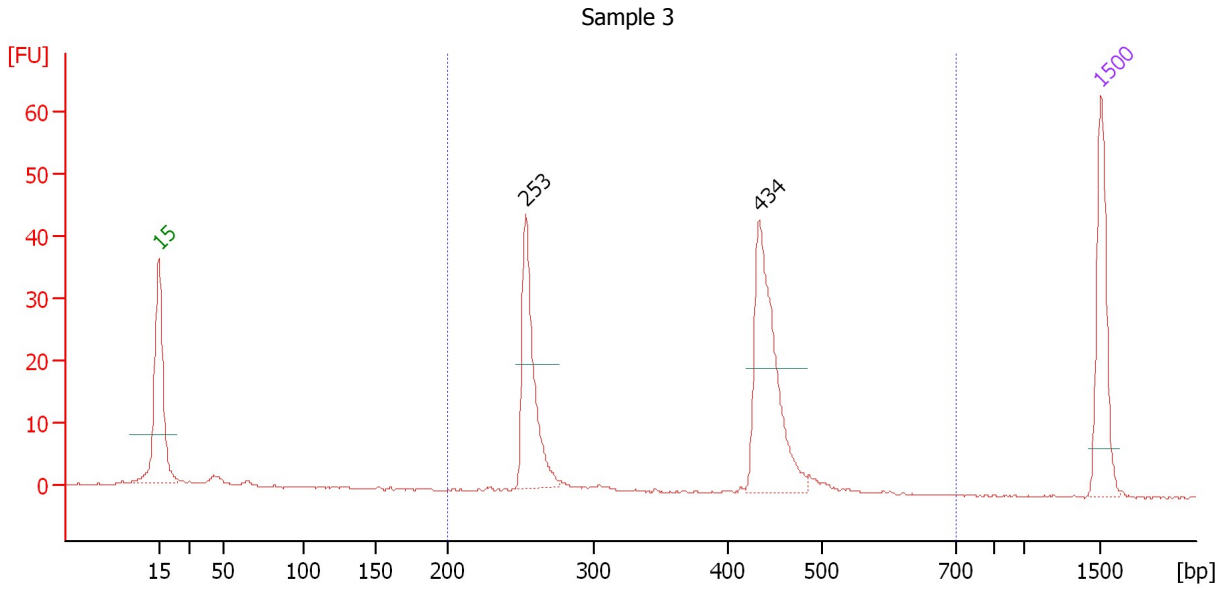
**Region table for sample 2 : Sample 2**

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
200	700	125.4	89	34.2	7.62	378	24.5	Region 1

Assay Class: DNA 1000  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
 Modified: 5/1/2013 5:12:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 2                      Area 1: 124.9

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

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	253	2.87	17.2	
3	434	3.78	13.2	
4	1,500	2.10	2.1	Upper Marker

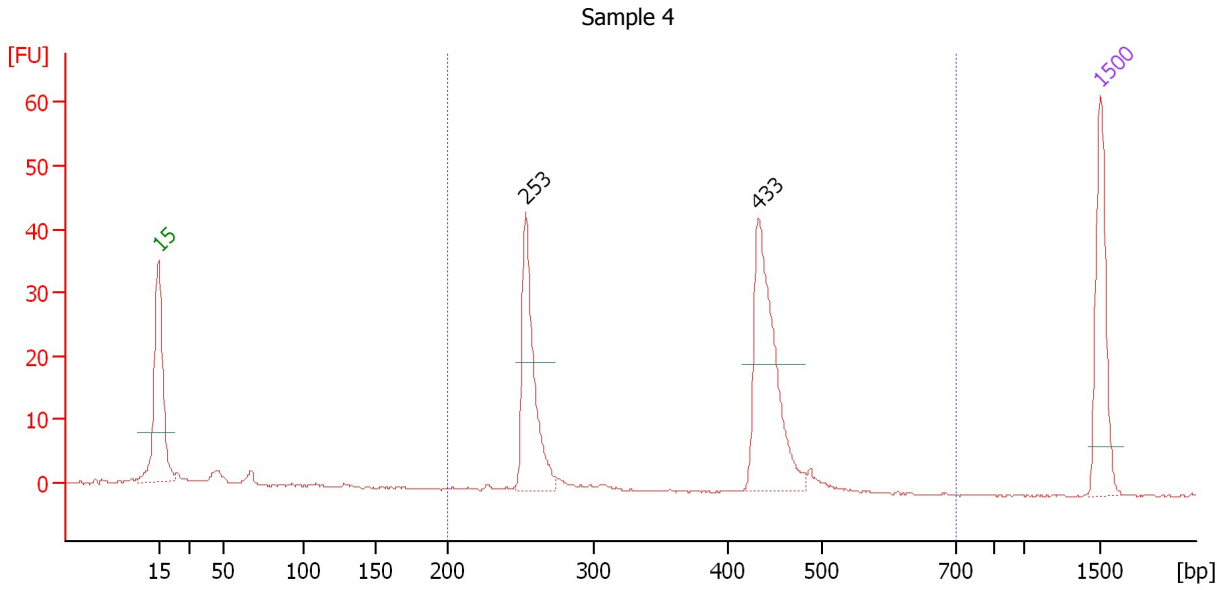
**Region table for sample 3 : Sample 3**

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
200	700	124.9	91	32.1	7.18	379	24.6	Region 1

Assay Class: DNA 1000  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
 Modified: 5/1/2013 5:12:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 2                      Area 1: 123.5

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

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	253	2.95	17.7	
3	433	3.80	13.3	
4	1,500	2.10	2.1	Upper Marker

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

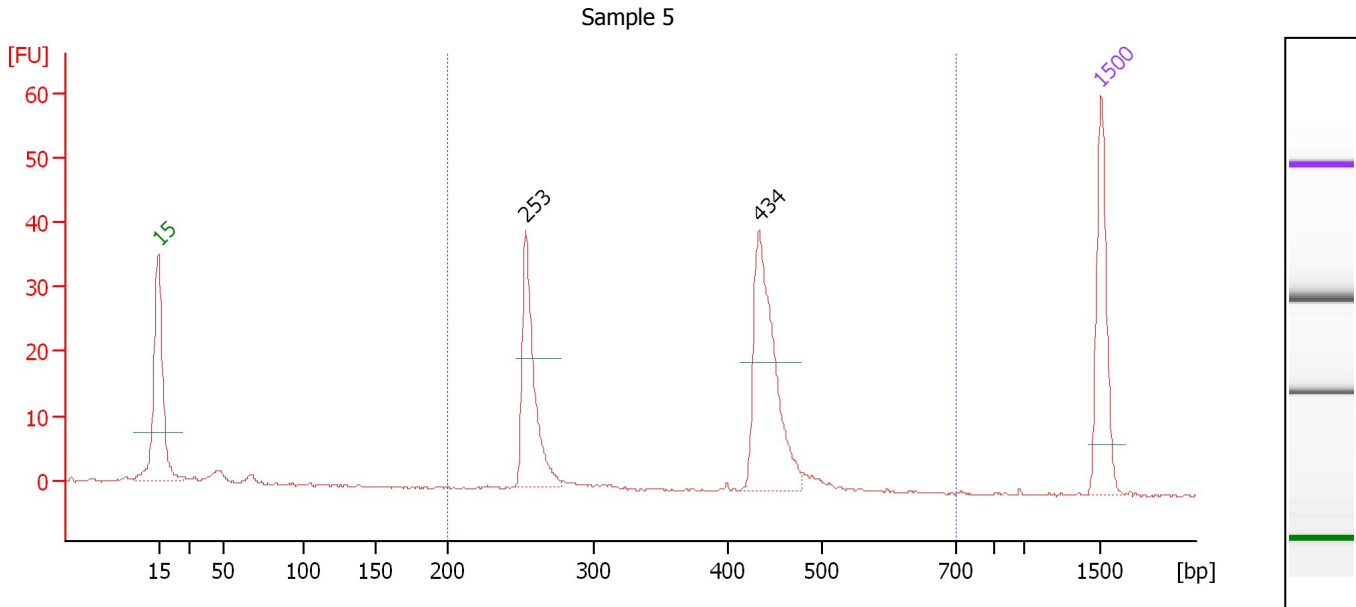
From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
200	700	123.5	83	33.0	7.38	379	24.7	Region 1



Assay Class: DNA 1000  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
 Modified: 5/1/2013 5:12:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 2      Area 1: 108.5

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

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	253	2.75	16.5	
3	434	3.69	12.9	
4	1,500	2.10	2.1	Upper Marker

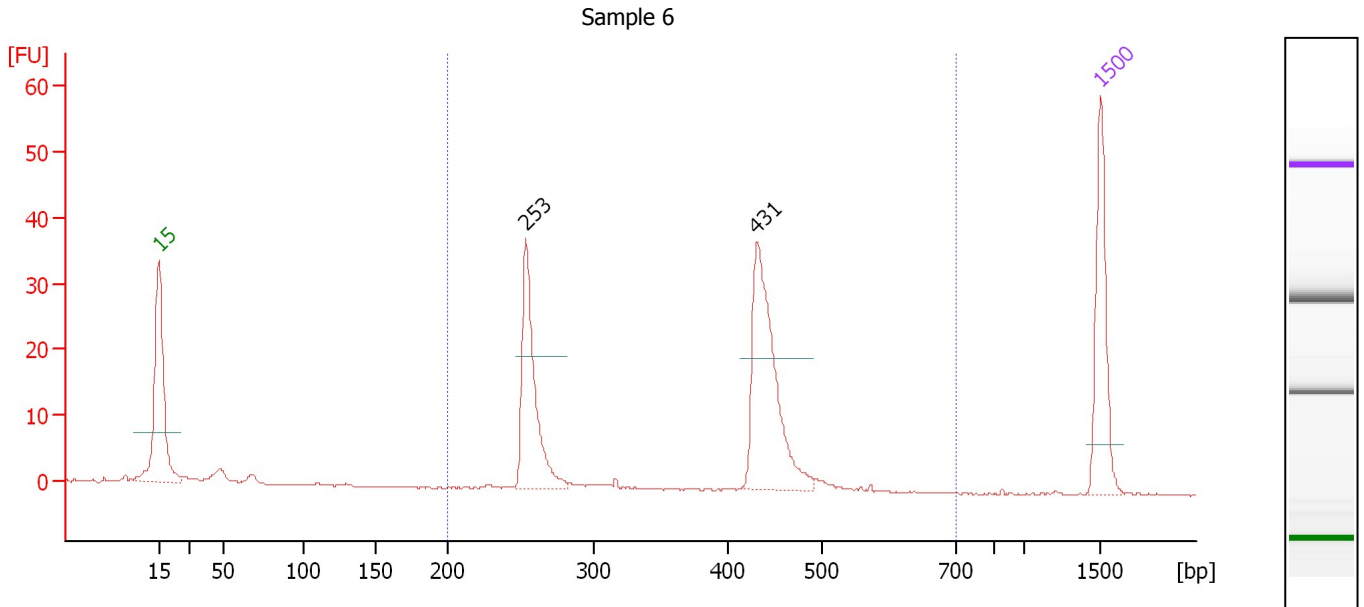
**Region table for sample 5 : Sample 5**

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
200	700	108.5	89	30.1	6.75	380	24.2	Region 1

Assay Class: DNA 1000  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
 Modified: 5/1/2013 5:12:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 2      Area 1: 106.2

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

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	253	2.83	16.9	
3	431	3.73	13.1	
4	1,500	2.10	2.1	Upper Marker

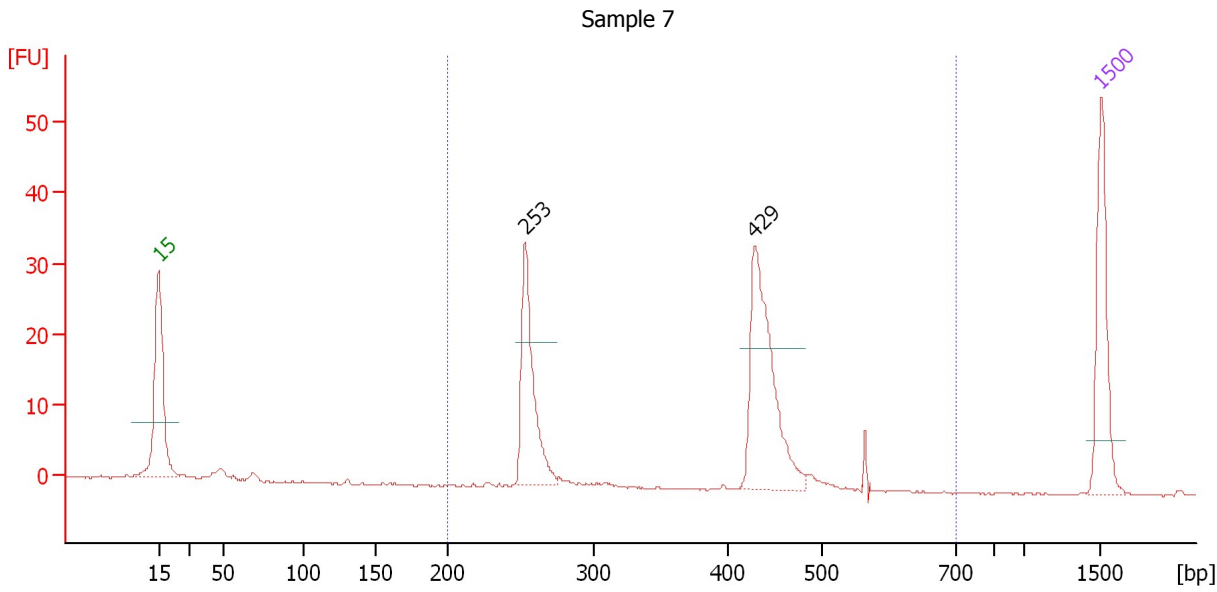
**Region table for sample 6 : Sample 6**

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
200	700	106.2	86	30.4	6.84	380	24.3	Region 1

Assay Class: DNA 1000  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
 Modified: 5/1/2013 5:12:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 2                      Area 1: 91.2

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

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	253	2.56	15.3	
3	429	3.60	12.7	
4	1,500	2.10	2.1	Upper Marker

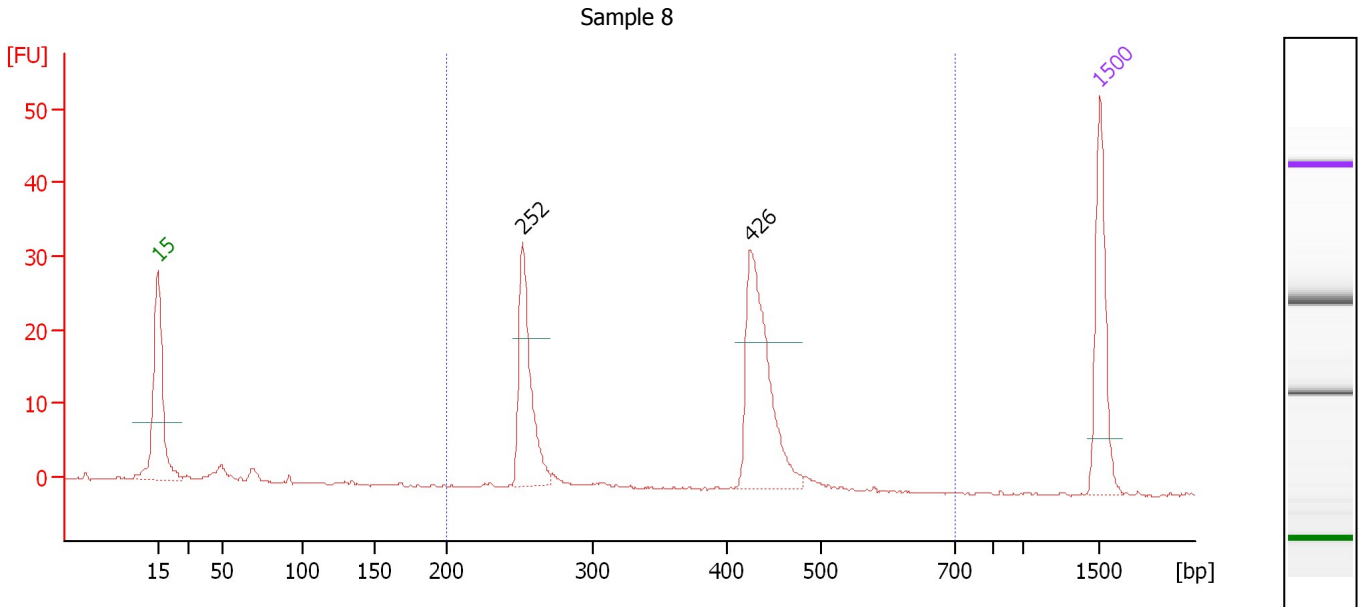
**Region table for sample 7 : Sample 7**

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
200	700	91.2	91	28.3	6.38	382	24.2	Region 1

Assay Class: DNA 1000  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
 Modified: 5/1/2013 5:12:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 2                      Area 1: 89.7

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

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	252	2.64	15.9	
3	426	3.70	13.2	
4	1,500	2.10	2.1	Upper Marker

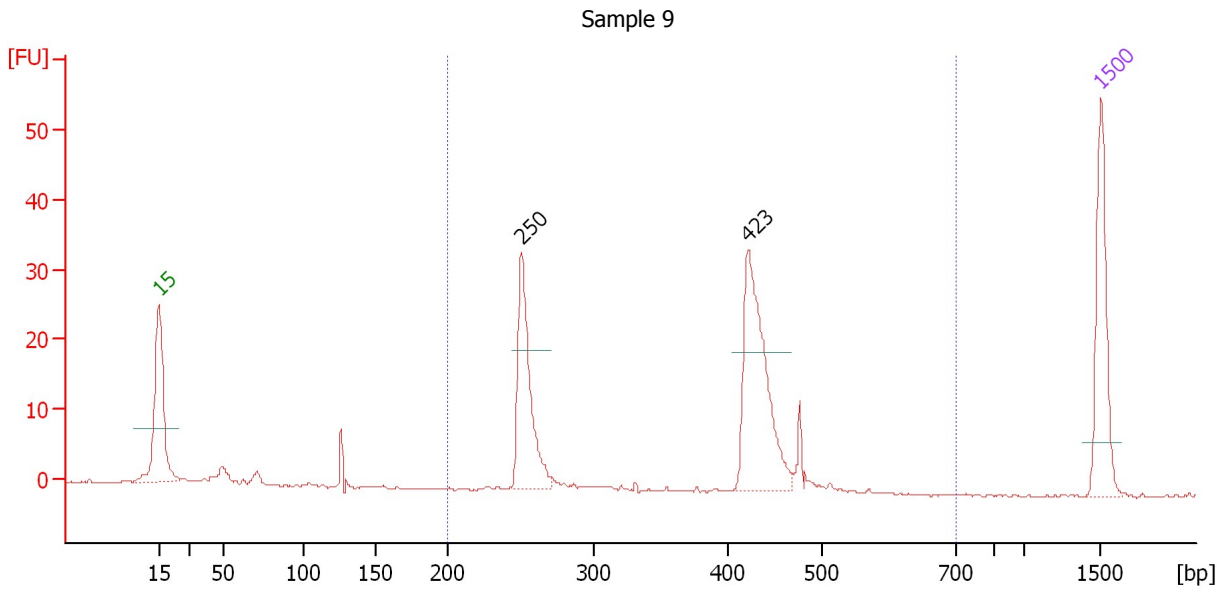
**Region table for sample 8 : Sample 8**

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
200	700	89.7	87	30.0	6.69	376	23.8	Region 1

Assay Class: DNA 1000  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
 Modified: 5/1/2013 5:12:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 2                      Area 1: 94.6

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

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	250	2.59	15.7	
3	423	3.57	12.8	
4	1,500	2.10	2.1	Upper Marker

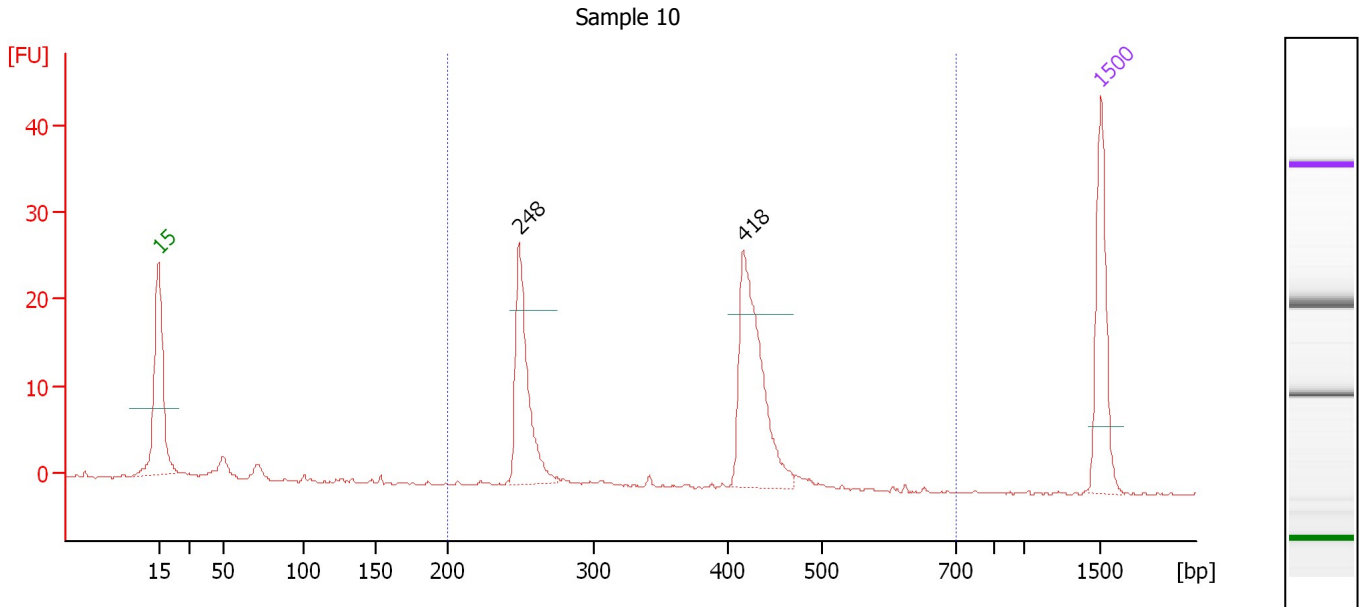
**Region table for sample 9 : Sample 9**

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
200	700	94.6	86	29.7	6.65	377	23.4	Region 1

Assay Class: DNA 1000  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
 Modified: 5/1/2013 5:12:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 2                      Area 1: 67.7

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

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	248	2.76	16.8	
3	418	3.63	13.2	
4	1,500	2.10	2.1	Upper Marker

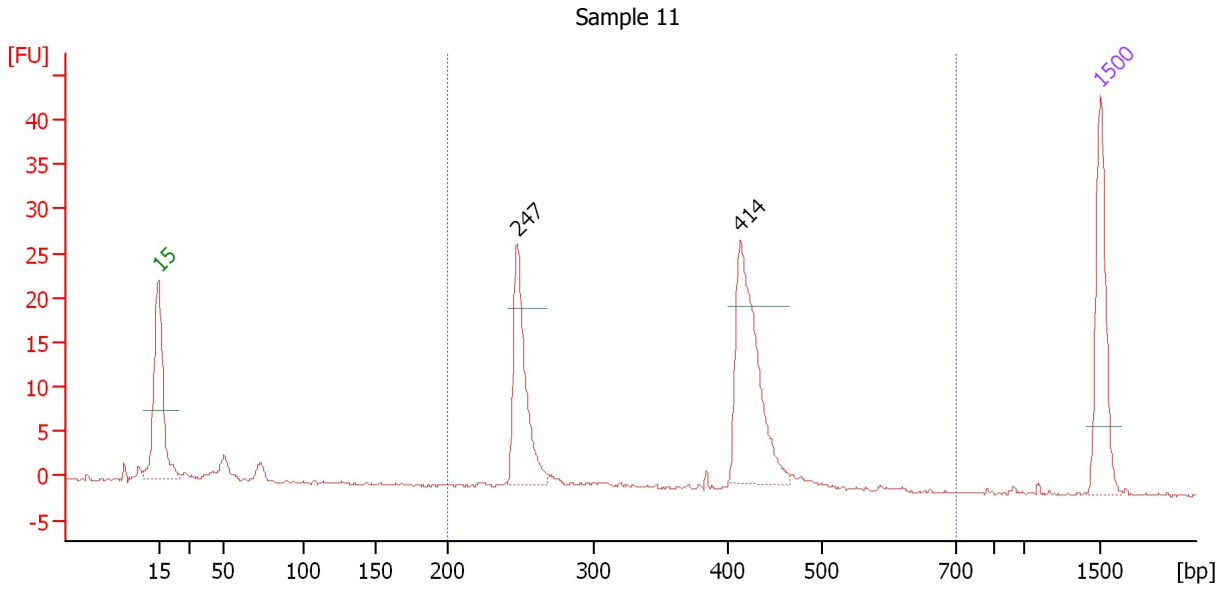
**Region table for sample 10 : Sample 10**

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
200	700	67.7	96	27.5	6.01	367	23.3	Region 1

Assay Class: DNA 1000  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
 Modified: 5/1/2013 5:12:16 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 2                      Area 1: 77.0

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

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	247	2.70	16.6	
3	414	3.60	13.2	
4	1,500	2.10	2.1	Upper Marker

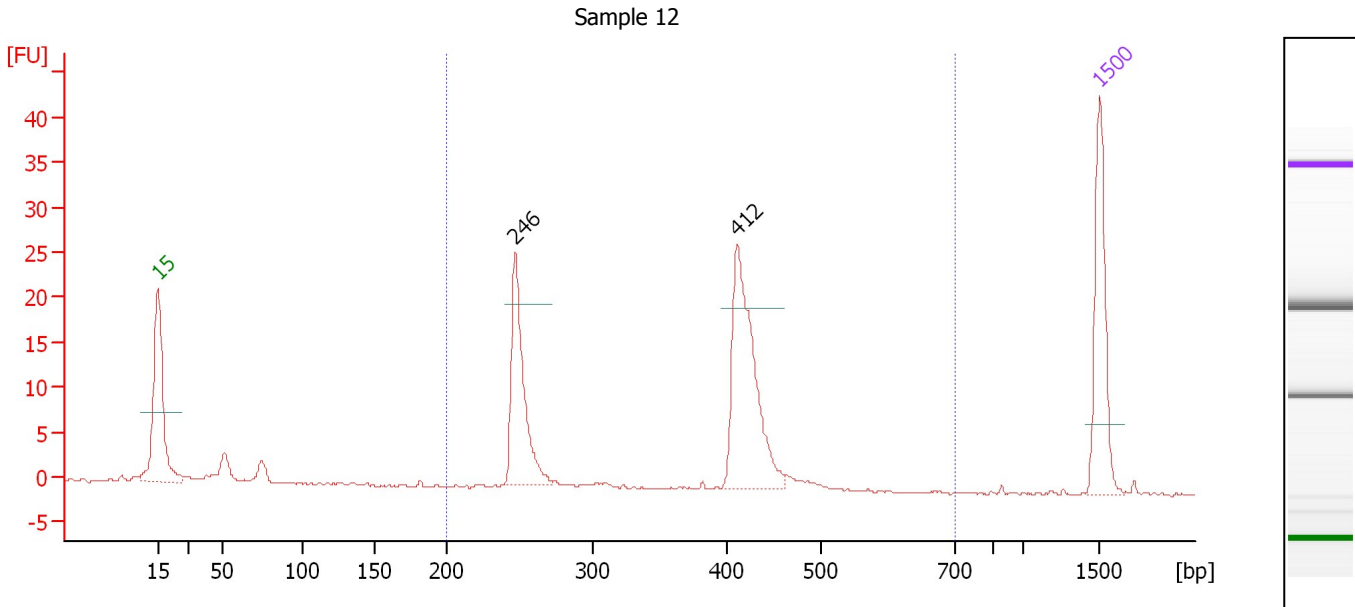
**Region table for sample 11 : Sample 11**

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
200	700	77.0	86	31.8	6.99	369	23.8	Region 1

Assay Class: DNA 1000  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
 Modified: 5/1/2013 5:12:16 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : Sample 12**

Number of peaks found: 2                      Area 1: 70.2

**Peak table for sample 12 : Sample 12**

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	246	2.51	15.4	
3	412	3.54	13.0	
4	1,500	2.10	2.1	Upper Marker

**Region table for sample 12 : Sample 12**

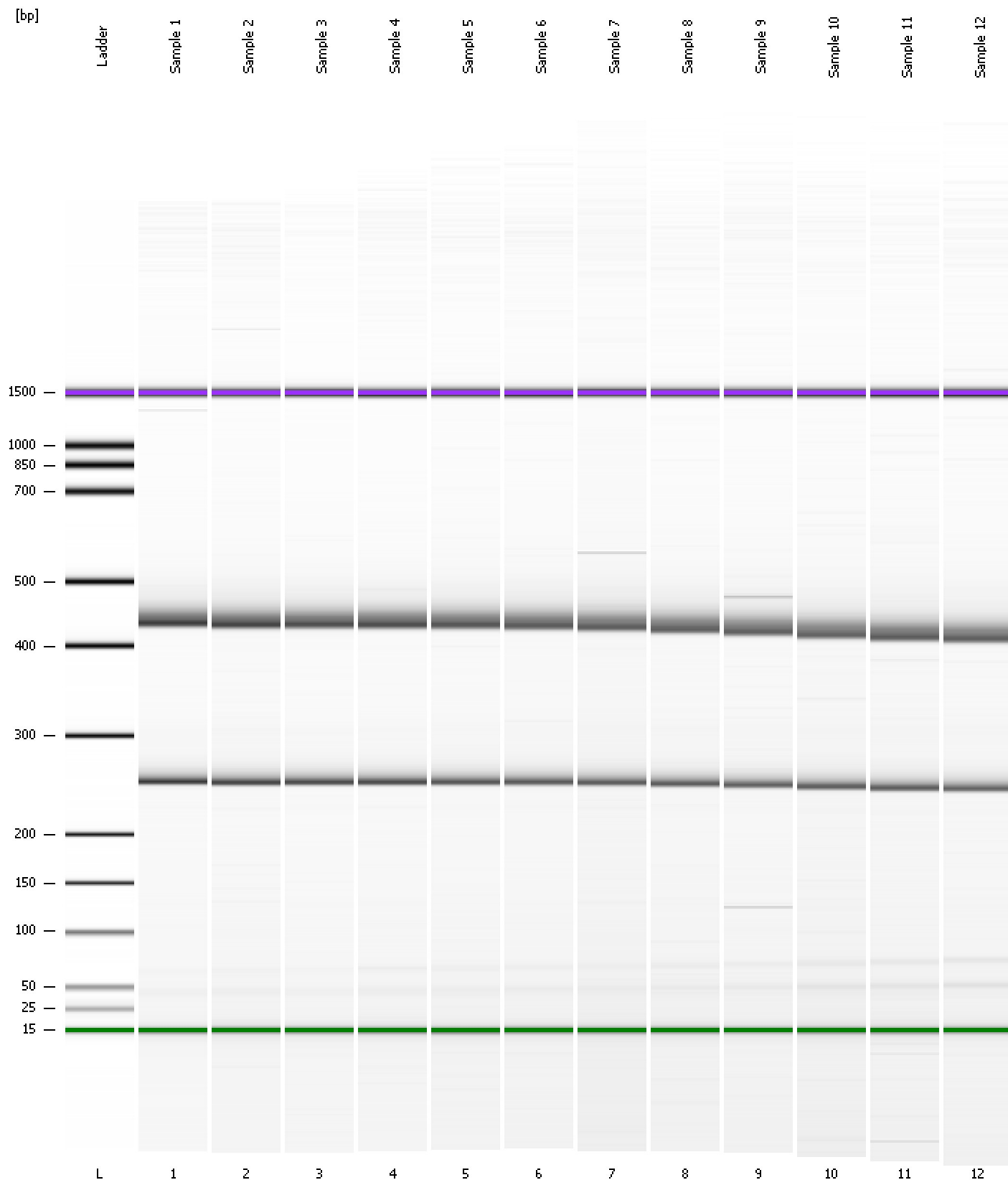
From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
200	700	70.2	86	28.5	6.22	366	22.9	Region 1



Assay Class: DNA 1000  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
Modified: 5/1/2013 5:12:16 PM

**Gel Image**



Assay Class: DNA 1000  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-01\2013-05-01\_002.xad

Created: 5/1/2013 4:07:04 PM  
 Modified: 5/1/2013 5:12:16 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 13)		Instrument	Run		5/1/2013 4:48:51 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-05-01\2013-05-01_002.xad)		Instrument	Run		5/1/2013 4:07:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/1/2013 4:07:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/1/2013 4:07:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/1/2013 4:07:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/1/2013 4:07:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/1/2013 4:07:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/1/2013 4:07:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1