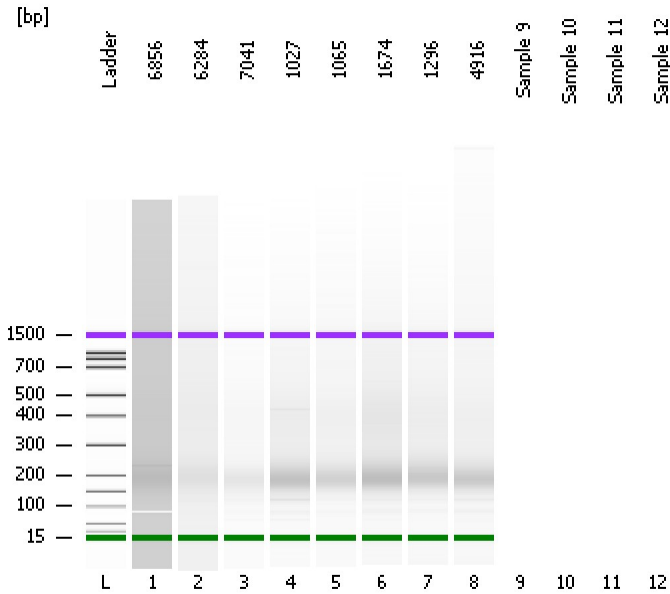


Assay Class: DNA 1000
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_003.xad

Created: 8/8/2013 12:10:19 PM
Modified: 8/8/2013 12:50:35 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

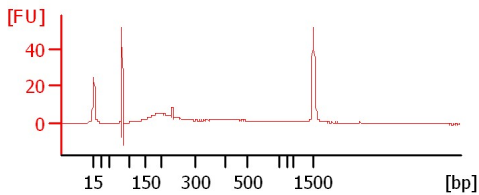
Assay Class: DNA 1000
Version: 2.3
Assay Comments: DNA Analysis 25 -1000 bp

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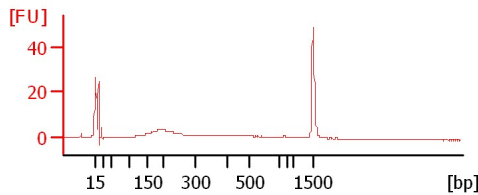
Chip Information:

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

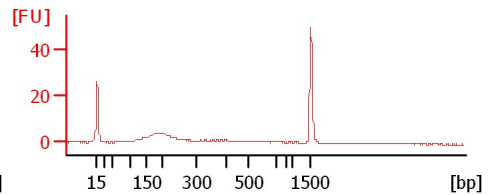
6856



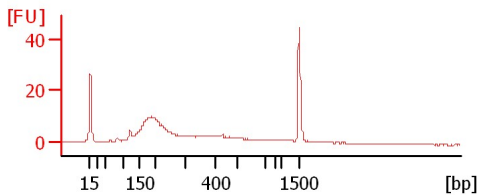
6284



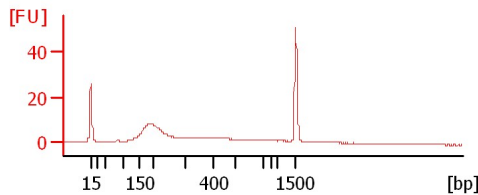
7041



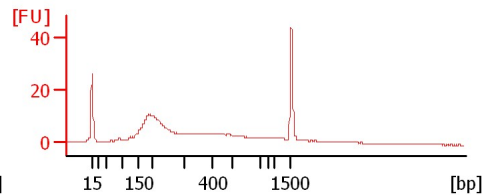
1027



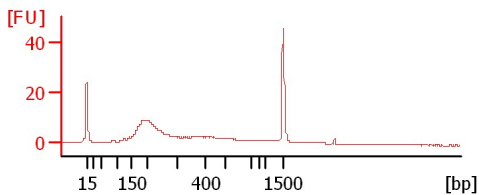
1065



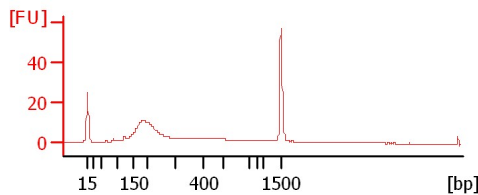
1674



1296



4916



Assay Class: DNA 1000
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_003.xad

Created: 8/8/2013 12:10:19 PM
Modified: 8/8/2013 12:50:35 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
6856		<input type="checkbox"/>	✓			
6284		<input type="checkbox"/>	✓			
7041		<input type="checkbox"/>	✓			
1027		<input type="checkbox"/>	✓			
1065		<input type="checkbox"/>	✓			
1674		<input type="checkbox"/>	✓			
1296		<input type="checkbox"/>	✓			
4916		<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\2013-08-08\2013-08-08_003.xad

Created: 8/8/2013 12:10:19 PM
Modified: 8/8/2013 12:50:35 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

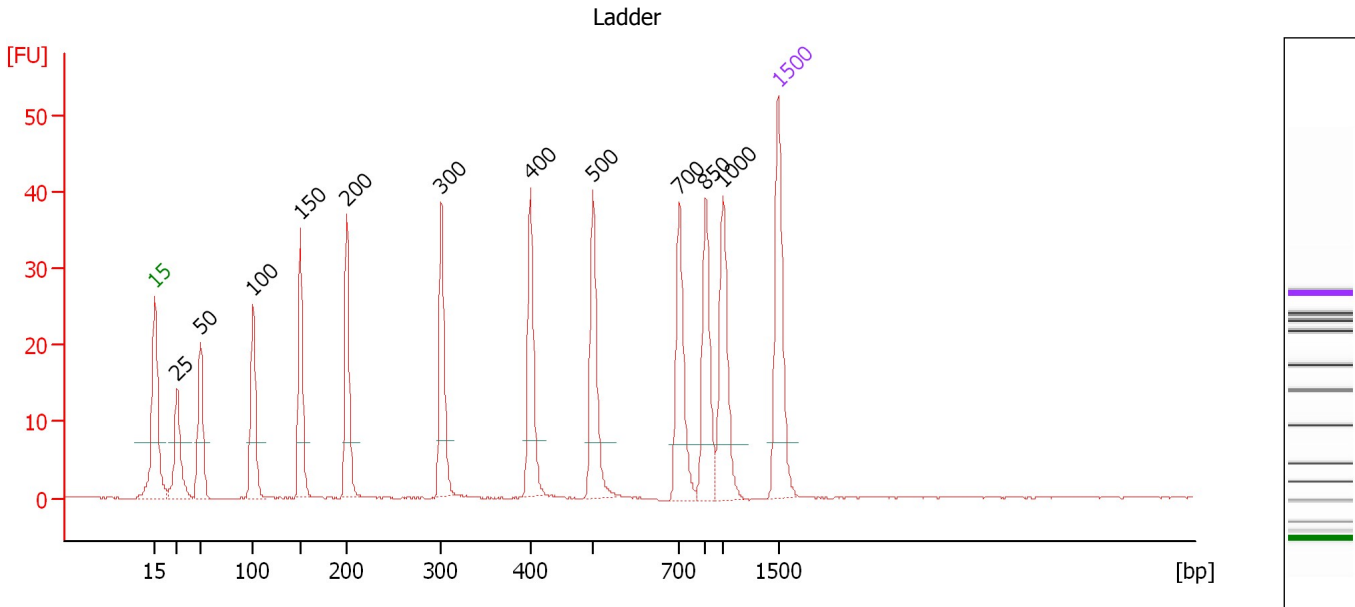
Ladder

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\2013-08-08\2013-08-08_003.xad

Created: 8/8/2013 12:10:19 PM
 Modified: 8/8/2013 12:50:35 PM

Electropherogram Summary



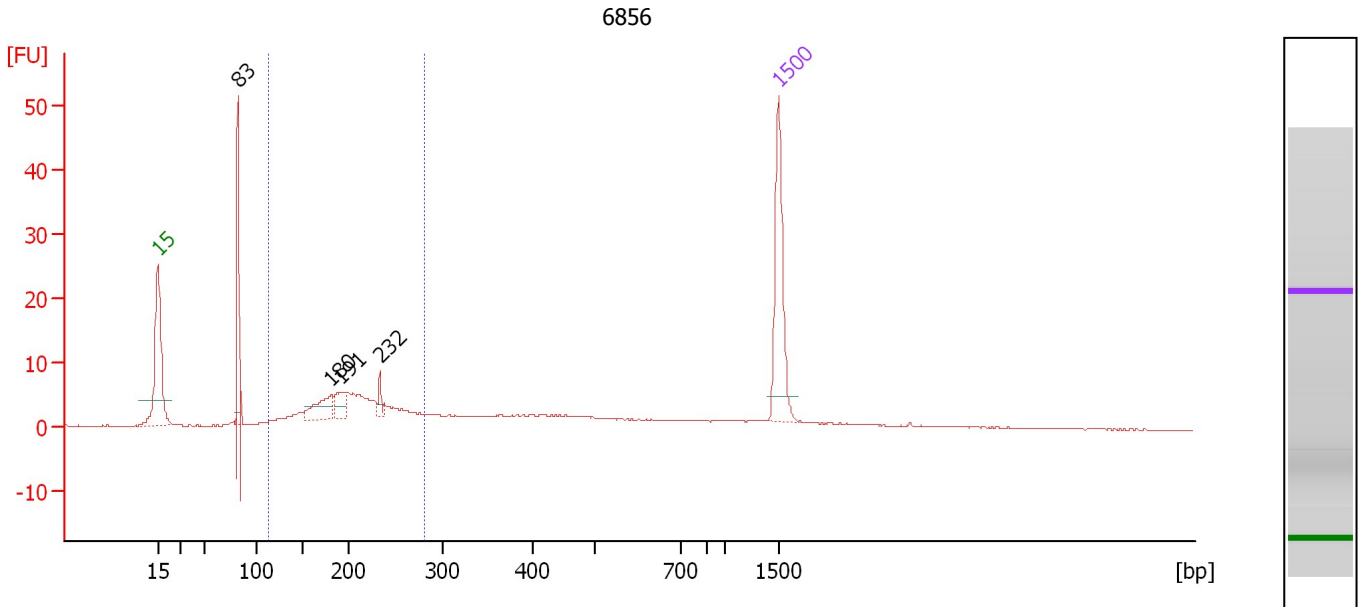
Peak table for Ladder

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\2013-08-08\2013-08-08_003.xad

Created: 8/8/2013 12:10:19 PM
 Modified: 8/8/2013 12:50:35 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : 6856

Height Threshold [FU] : 2

Overall Results for sample 1 : 6856

Number of peaks found: 4 Area 1: 45.3

Peak table for sample 1 : 6856

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	83	1.32	24.0	
3	180	0.74	6.2	
4	191	0.44	3.5	
5	232	0.22	1.5	
6	1,500	2.10	2.1	Upper Marker

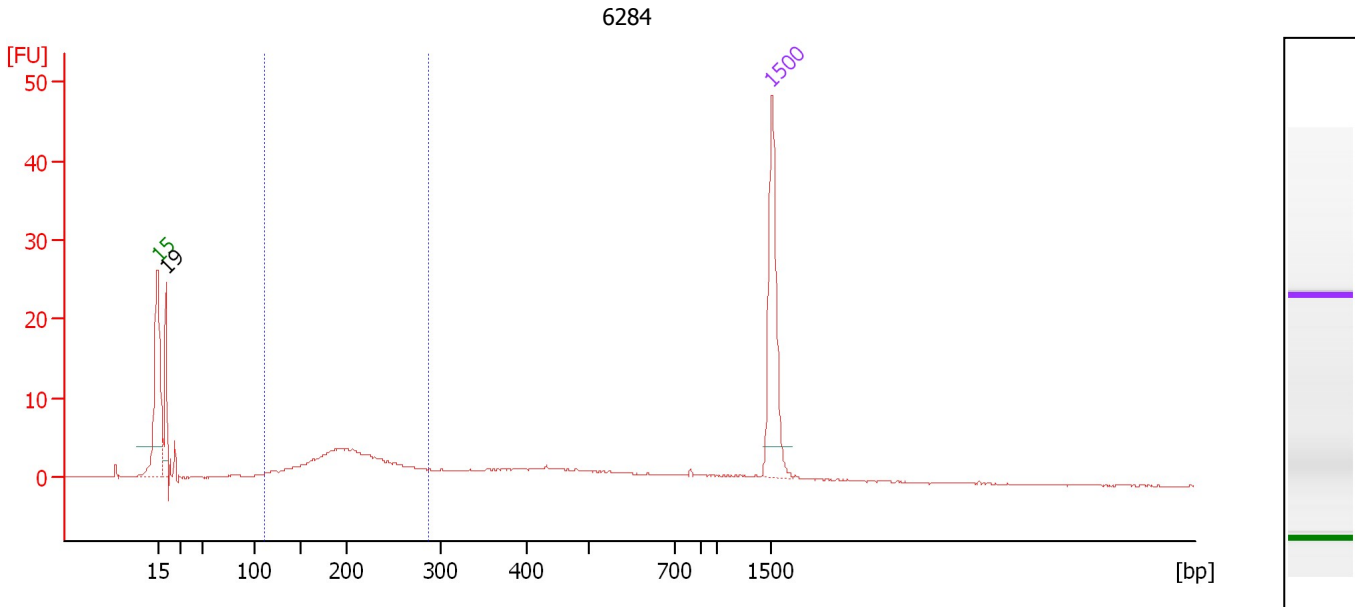
Region table for sample 1 : 6856

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
113	279	45.3	38	36.6	4.66	202	19.1	Region 1

Assay Class: DNA 1000
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_003.xad

Created: 8/8/2013 12:10:19 PM
 Modified: 8/8/2013 12:50:35 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : 6284

Height Threshold [FU] : 2

Overall Results for sample 2 : 6284

Number of peaks found: 1 Area 1: 31.3

Peak table for sample 2 : 6284

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	19	1.28	102.8	
3	1,500	2.10	2.1	Upper Marker

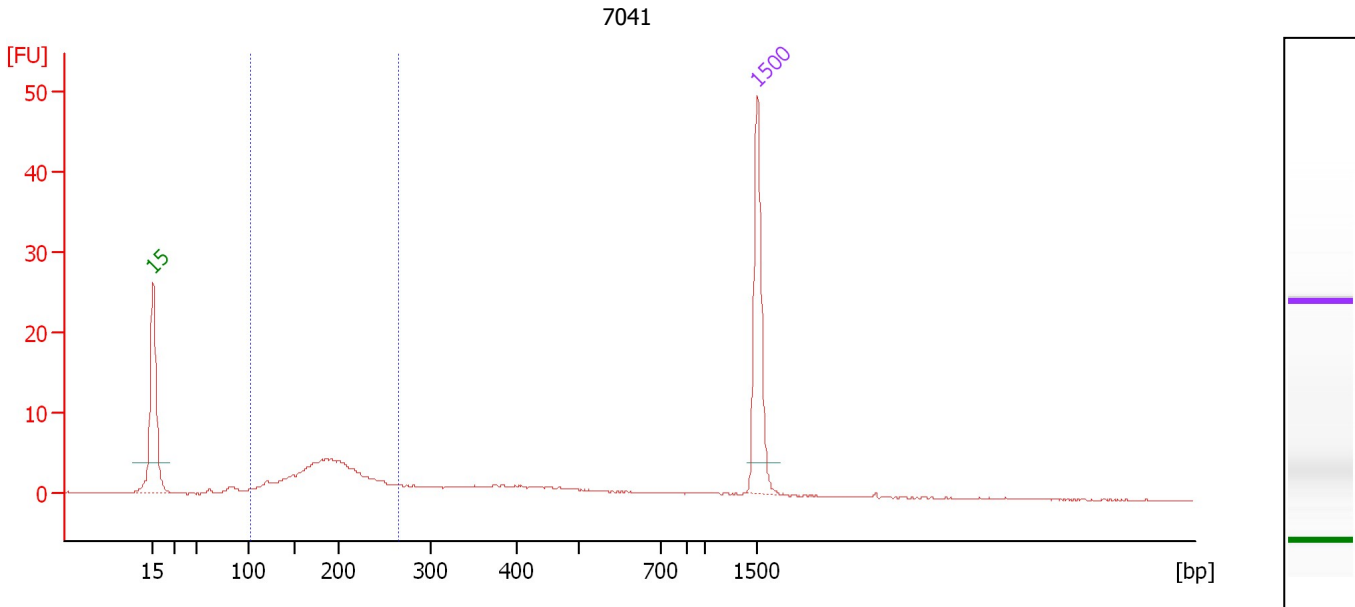
Region table for sample 2 : 6284

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
111	288	31.3	41	25.7	3.28	204	20.0	Region 1

Assay Class: DNA 1000
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_003.xad

Created: 8/8/2013 12:10:19 PM
 Modified: 8/8/2013 12:50:35 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : 7041

Height Threshold [FU] : 2

Overall Results for sample 3 : 7041

Number of peaks found: 0 Area 1: 31.8

Peak table for sample 3 : 7041

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	1,500	2.10	2.1	Upper Marker

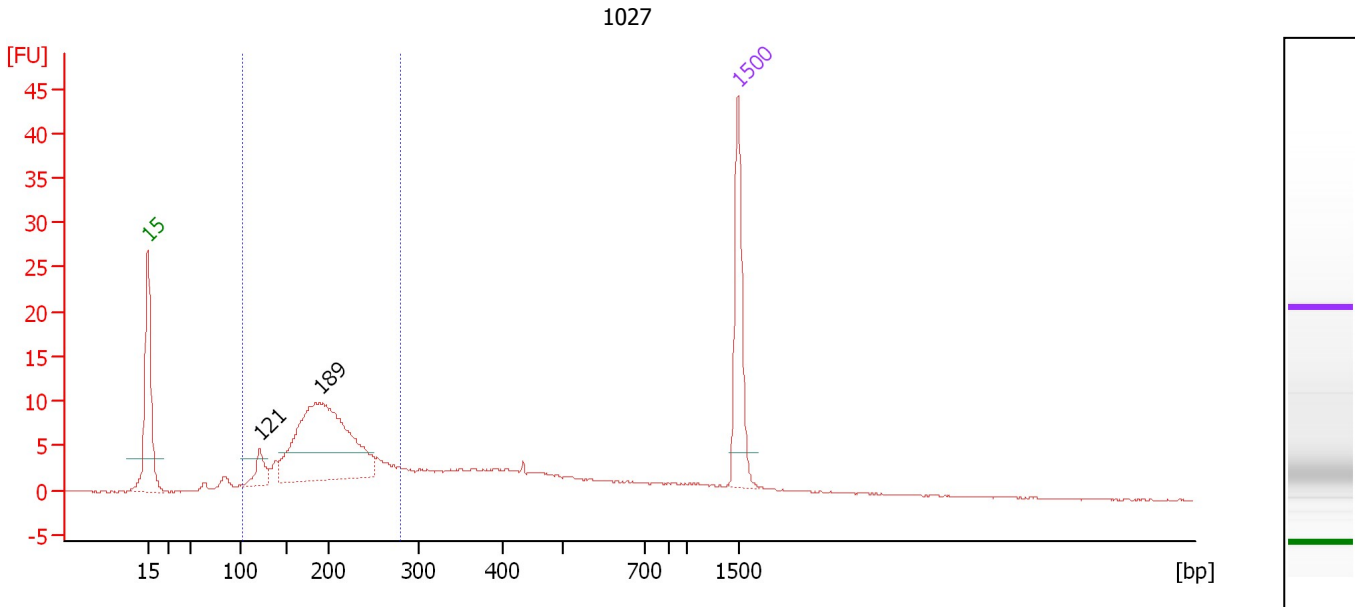
Region table for sample 3 : 7041

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
103	265	31.8	51	29.2	3.43	188	19.6	Region 1

Assay Class: DNA 1000
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_003.xad

Created: 8/8/2013 12:10:19 PM
 Modified: 8/8/2013 12:50:35 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : 1027

Height Threshold [FU] : 3

Overall Results for sample 4 : 1027

Number of peaks found: 2 Area 1: 75.7

Peak table for sample 4 : 1027

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	121	0.56	7.0	
3	189	5.87	47.1	
4	1,500	2.10	2.1	Upper Marker

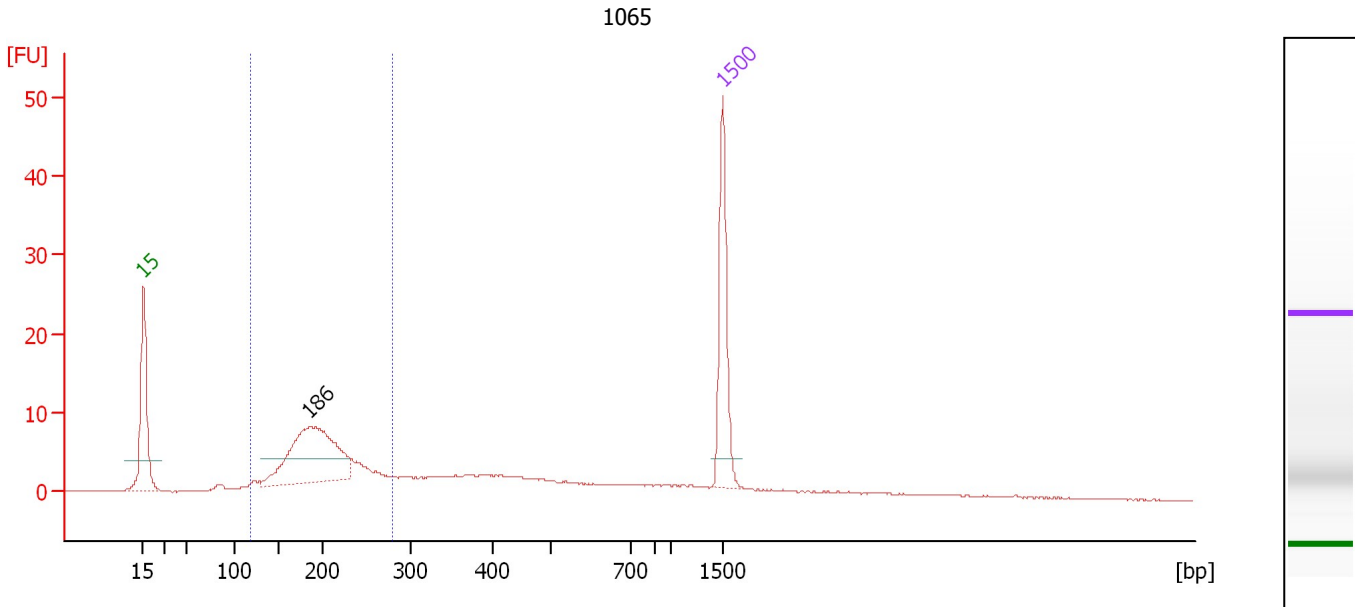
Region table for sample 4 : 1027

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
103	280	75.7	52	76.5	9.29	195	20.6	Region 1

Assay Class: DNA 1000
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_003.xad

Created: 8/8/2013 12:10:19 PM
 Modified: 8/8/2013 12:50:35 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : 1065

Height Threshold [FU] : 3

Overall Results for sample 5 : 1065

Number of peaks found: 1 Area 1: 56.6

Peak table for sample 5 : 1065

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	186	3.80	31.0	
3	1,500	2.10	2.1	Upper Marker

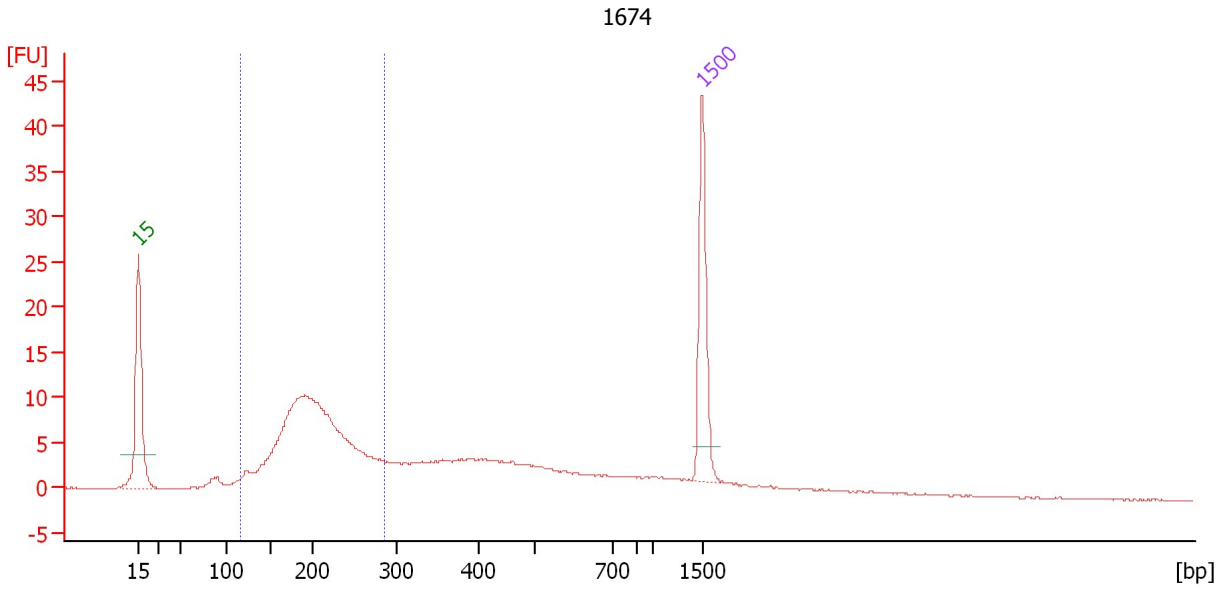
Region table for sample 5 : 1065

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
117	280	56.6	46	48.3	6.11	200	18.1	Region 1

Assay Class: DNA 1000
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_003.xad

Created: 8/8/2013 12:10:19 PM
 Modified: 8/8/2013 12:50:35 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 6 : 1674

Height Threshold [FU] : 5

Overall Results for sample 6 : 1674

Number of peaks found: 0 Area 1: 74.4

Peak table for sample 6 : 1674

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	1,500	2.10	2.1	Upper Marker

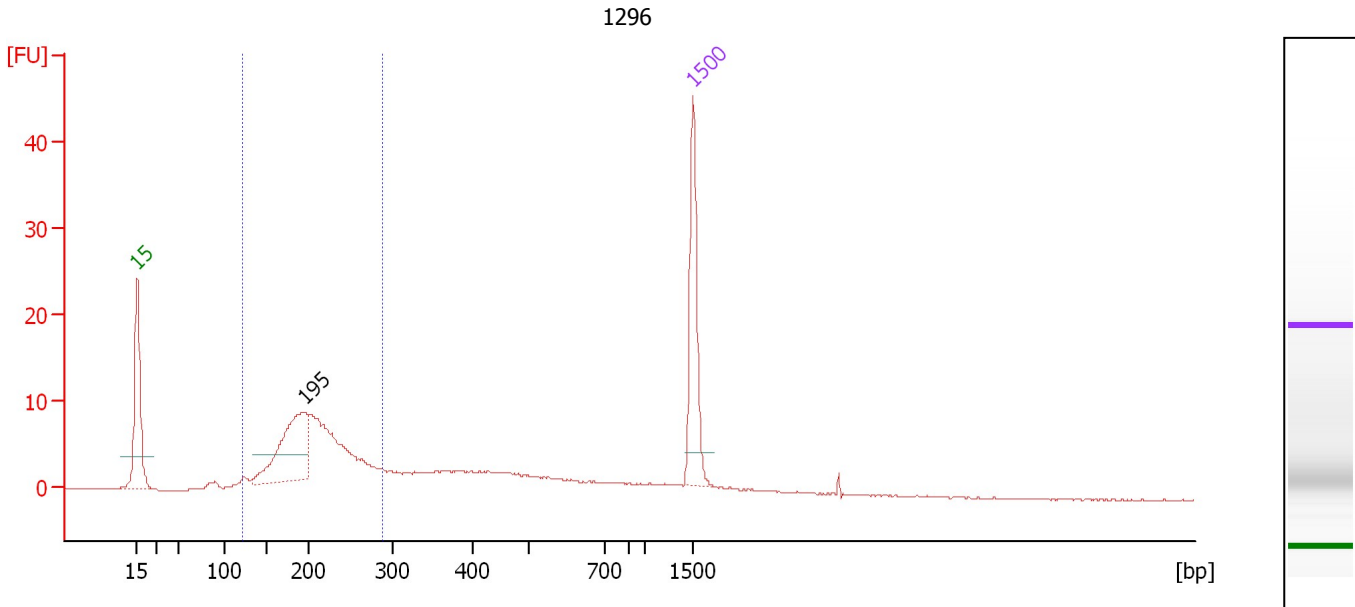
Region table for sample 6 : 1674

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
115	286	74.4	45	73.4	9.43	204	18.9	Region 1

Assay Class: DNA 1000
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_003.xad

Created: 8/8/2013 12:10:19 PM
 Modified: 8/8/2013 12:50:35 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : 1296

Height Threshold [FU] : 3

Overall Results for sample 7 : 1296

Number of peaks found: 1 Area 1: 60.9

Peak table for sample 7 : 1296

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	195	2.74	21.2	
3	1,500	2.10	2.1	Upper Marker

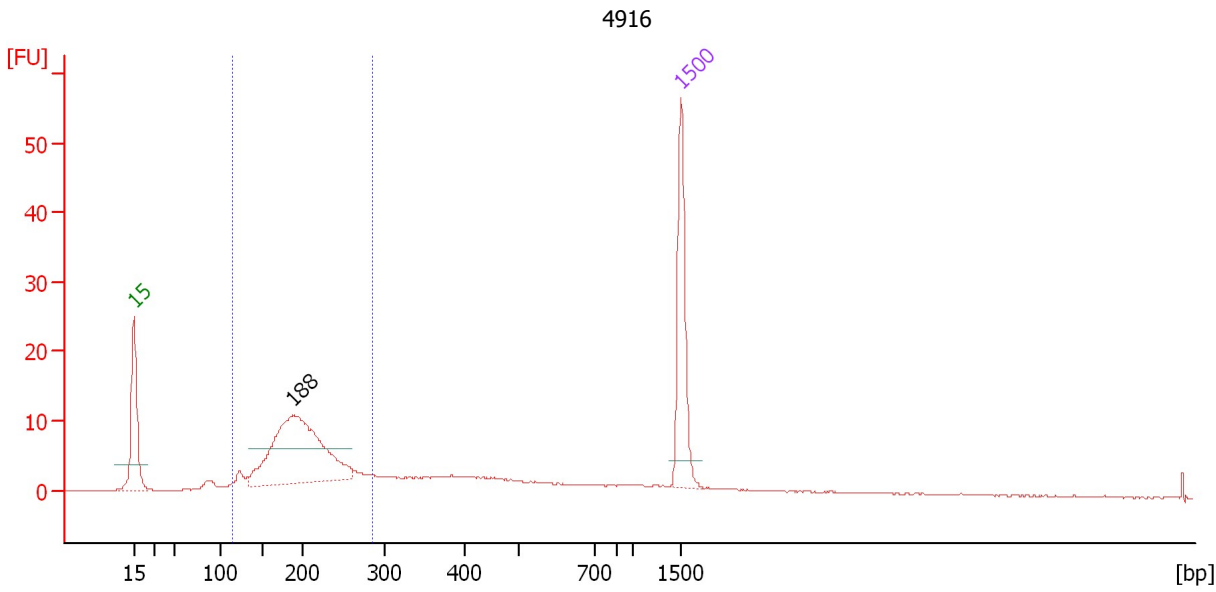
Region table for sample 7 : 1296

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
121	287	60.9	52	56.0	7.36	207	17.8	Region 1

Assay Class: DNA 1000
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_003.xad

Created: 8/8/2013 12:10:19 PM
 Modified: 8/8/2013 12:50:35 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : 4916

Height Threshold [FU] : 5

Overall Results for sample 8 : 4916

Number of peaks found: 1 Area 1: 69.7

Peak table for sample 8 : 4916

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	188	4.79	38.5	
3	1,500	2.10	2.1	Upper Marker

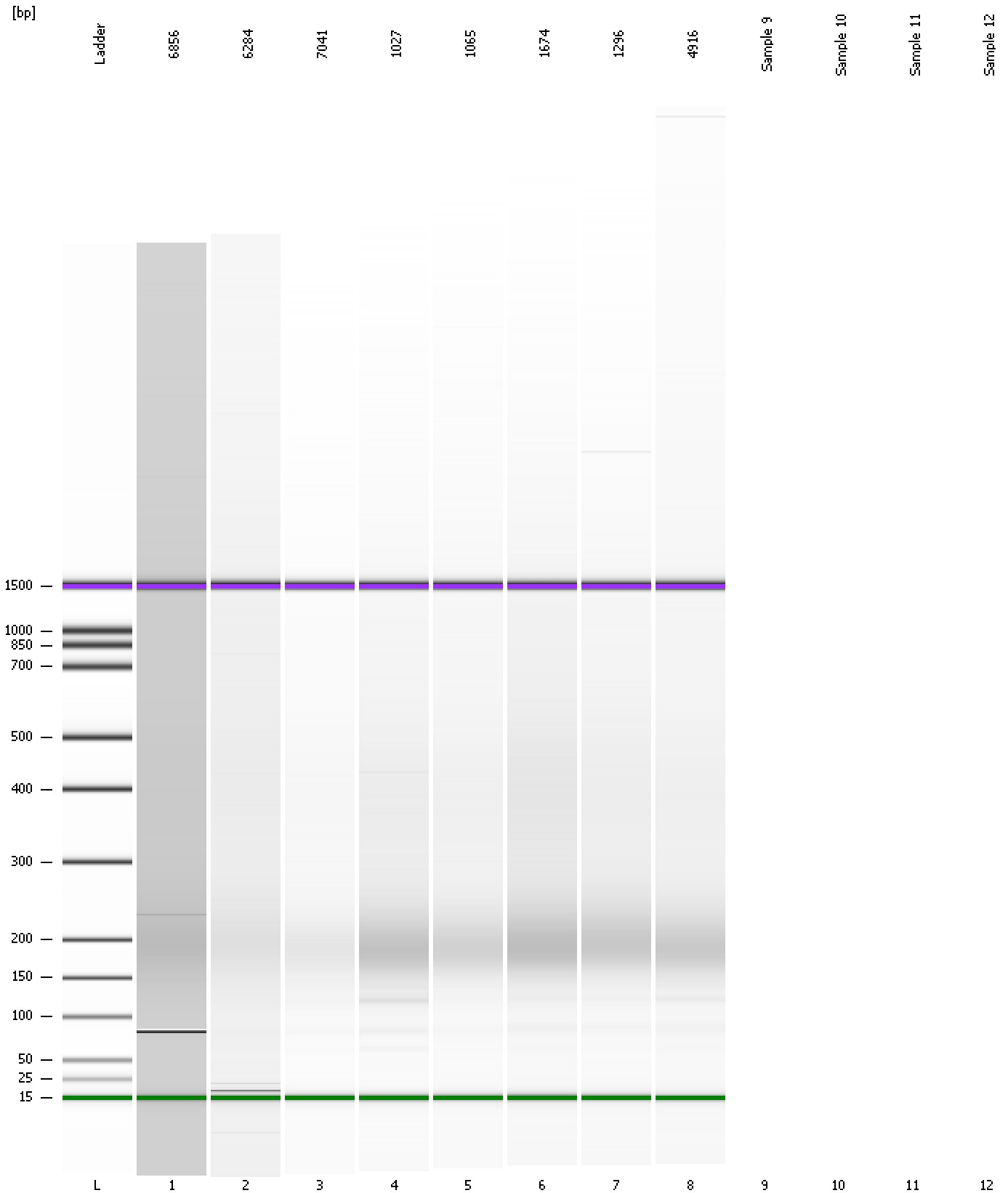
Region table for sample 8 : 4916

From [bp]	To [bp]	Area	% of Total	Molarity [nmol/l]	Conc. [ng/μl]	Average Size [bp]	Size distribution in CV [%]	Co Name
115	284	69.7	52	52.8	6.62	199	18.8	Region 1

Assay Class: DNA 1000
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_003.xad

Created: 8/8/2013 12:10:19 PM
Modified: 8/8/2013 12:50:35 PM

Gel Image



Assay Class: DNA 1000
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_003.xad

Created: 8/8/2013 12:10:19 PM
Modified: 8/8/2013 12:50:35 PM

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.

Sample 12 has not been run, no results available.

Assay Class: DNA 1000
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-08\2013-08-08_003.xad

Created: 8/8/2013 12:10:19 PM
 Modified: 8/8/2013 12:50:35 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 9)		Instrument	Run		8/8/2013 12:41:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-08-08\2013-08-08_003.xad)		Instrument	Run		8/8/2013 12:10:26 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/8/2013 12:10:26 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/8/2013 12:10:26 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/8/2013 12:10:26 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/8/2013 12:10:26 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/8/2013 12:10:26 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/8/2013 12:10:26 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1