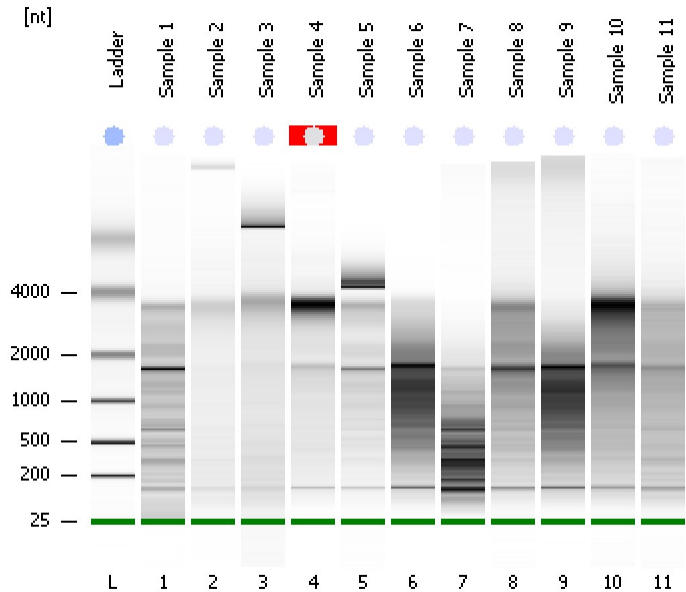


Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-09\2015-12-09\_004.xad

Created: 12/9/2015 3:32:59 PM  
Modified: 12/9/2015 3:55:01 PM

### Electrophoresis File Run Summary



#### Instrument Information:

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

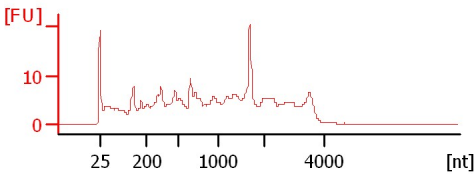
#### Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\RNA\Eukaryote Total RNA Pico Series II.xsy  
Assay Class: Eukaryote Total RNA Pico  
Version: 2.6  
Assay Comments: Total RNA Analysis pg sensitivity (Eukaryote)  
© Copyright 2003 - 2009 Agilent Technologies, Inc.

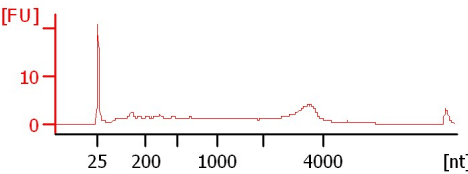
#### Chip Information:

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

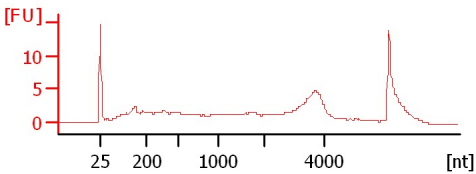
**Sample 1**  
RIN: 4.90



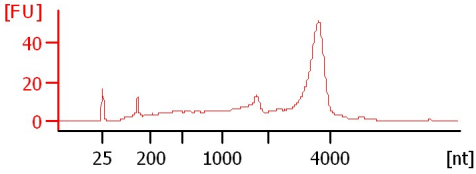
**Sample 2**  
RIN: 1.30



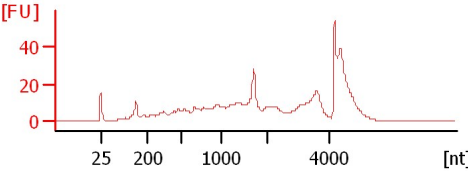
**Sample 3**  
RIN: 1.60



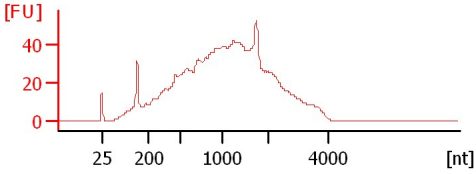
**Sample 4**  
RIN N/A



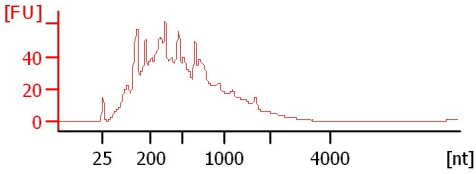
**Sample 5**  
RIN: 5.80



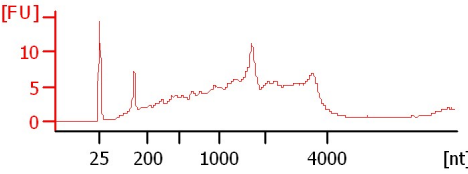
**Sample 6**  
RIN: 2.70



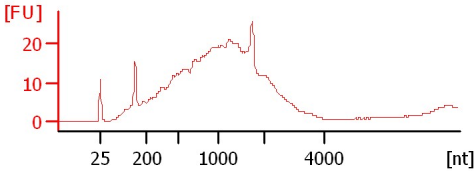
**Sample 7**  
RIN: 2.10



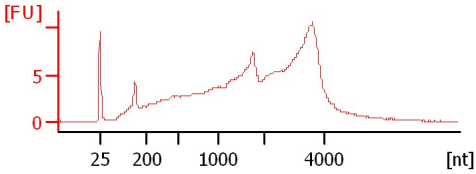
**Sample 8**  
RIN: 5



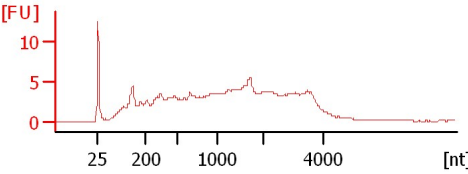
**Sample 9**  
RIN: 2.80



**Sample 10**  
RIN: 6.20



**Sample 11**  
RIN: 2.70



Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-09\2015-12-09\_004.xad

Created: 12/9/2015 3:32:59 PM  
 Modified: 12/9/2015 3:55:01 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
Sample 1		✓	RIN: 4.90	
Sample 2		✓	RIN: 1.30	
Sample 3		✓	RIN: 1.60	
Sample 4		✓	RIN N/A	
Sample 5		✓	RIN: 5.80	
Sample 6		✓	RIN: 2.70	
Sample 7		✓	RIN: 2.10	
Sample 8		✓	RIN:5	
Sample 9		✓	RIN: 2.80	
Sample 10		✓	RIN: 6.20	
Sample 11		✓	RIN: 2.70	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-09\2015-12-09\_004.xad

Created: 12/9/2015 3:32:59 PM  
Modified: 12/9/2015 3:55:01 PM

## Electrophoresis Assay Details

### General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12  
Minimum Visible Range [s] : 17  
Maximum Visible Range [s] : 70  
Start Analysis Time Range [s] : 18  
End Analysis Time Range [s] : 69  
Ladder Concentration [pg/ $\mu$ l] : 1000  
Lower Marker Concentration [pg/ $\mu$ l] : 0  
Upper Marker Concentration [pg/ $\mu$ l] : 0  
Used Lower Marker for Quantitation  
Standard Curve Fit is Logarithmic  
Show Data Aligned to Lower Marker

### Integrator Settings

Integration Start Time [s] : 18  
Integration End Time [s] : 69  
Slope Threshold : 0.6  
Height Threshold [FU] : 0.5  
Area Threshold : 0.2  
Width Threshold [s] : 0.3  
Baseline Plateau [s] : 6

### Filter Settings

Filter Width [s] : 0.5  
Polynomial Order : 4

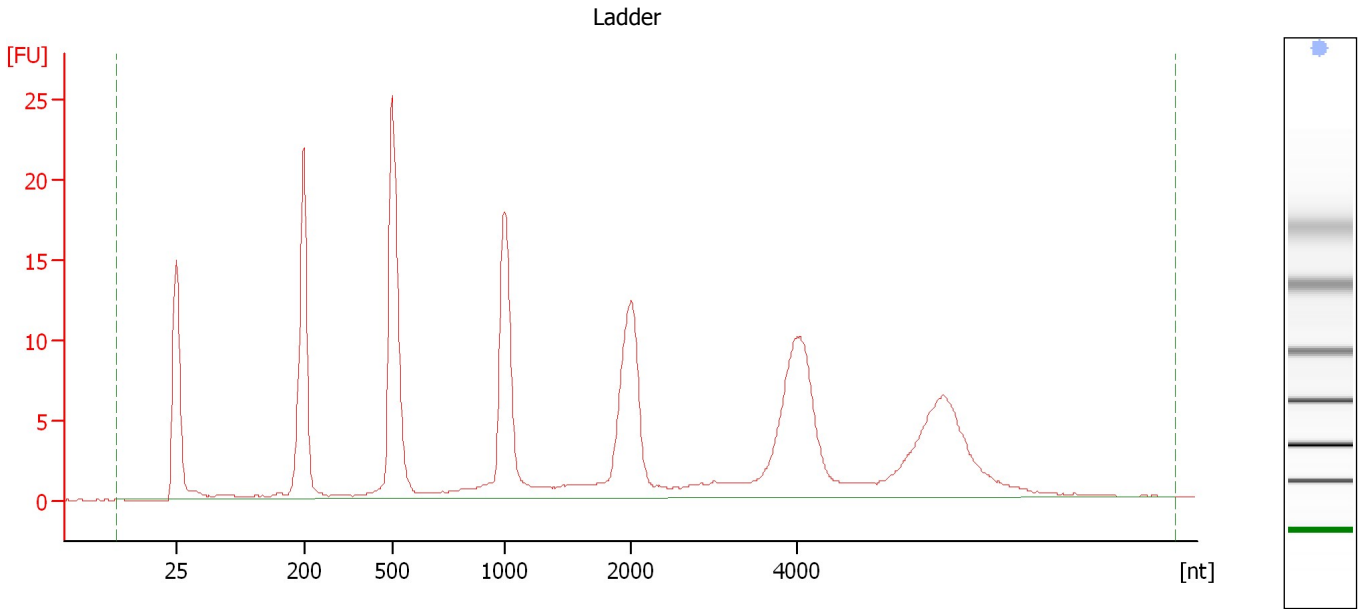
### Ladder

Ladder Peak	Size
1	25
2	200
3	500
4	1000
5	2000
6	4000

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-09\2015-12-09\_004.xad

Created: 12/9/2015 3:32:59 PM  
Modified: 12/9/2015 3:55:01 PM

**Electropherogram Summary**



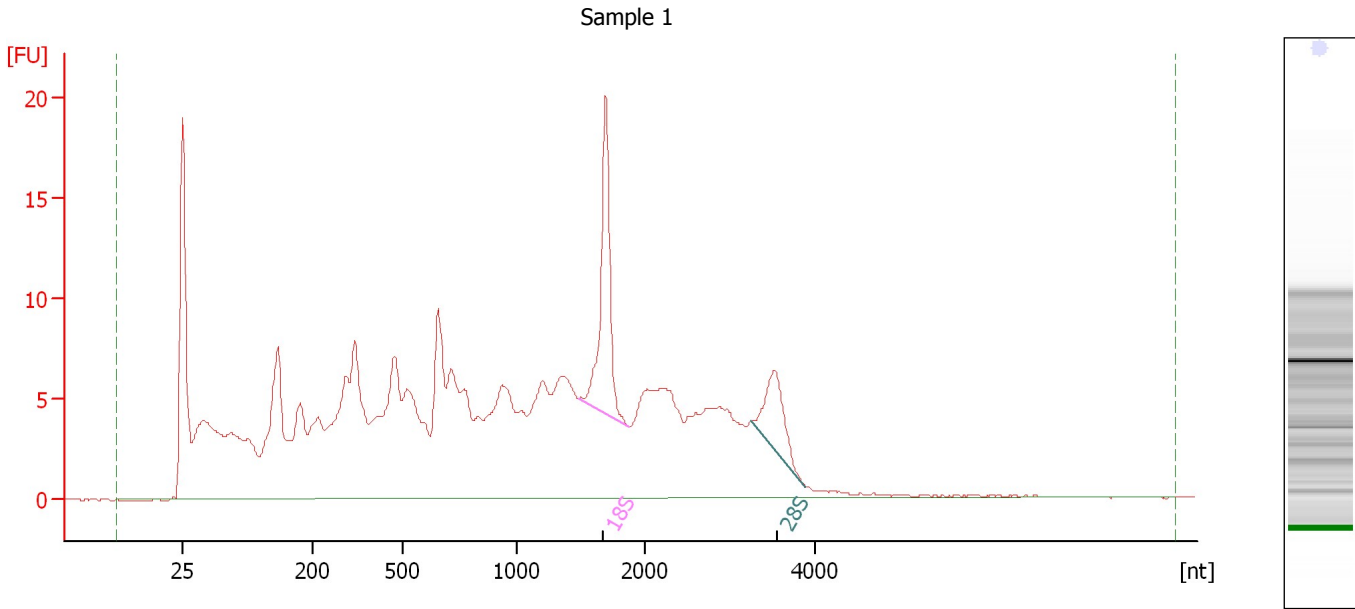
**Overall Results for Ladder**

RNA Area:	232.5	Result Flagging Color:	<span style="background-color: #ADD8E6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	1,000 pg/μl	Result Flagging Label:	All Other Samples

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-09\2015-12-09\_004.xad

Created: 12/9/2015 3:32:59 PM  
Modified: 12/9/2015 3:55:01 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	374.8	RNA Integrity Number (RIN):	4.9 (B.02.08)
RNA Concentration:	1,612 pg/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.4	Result Flagging Label:	RIN: 4.90

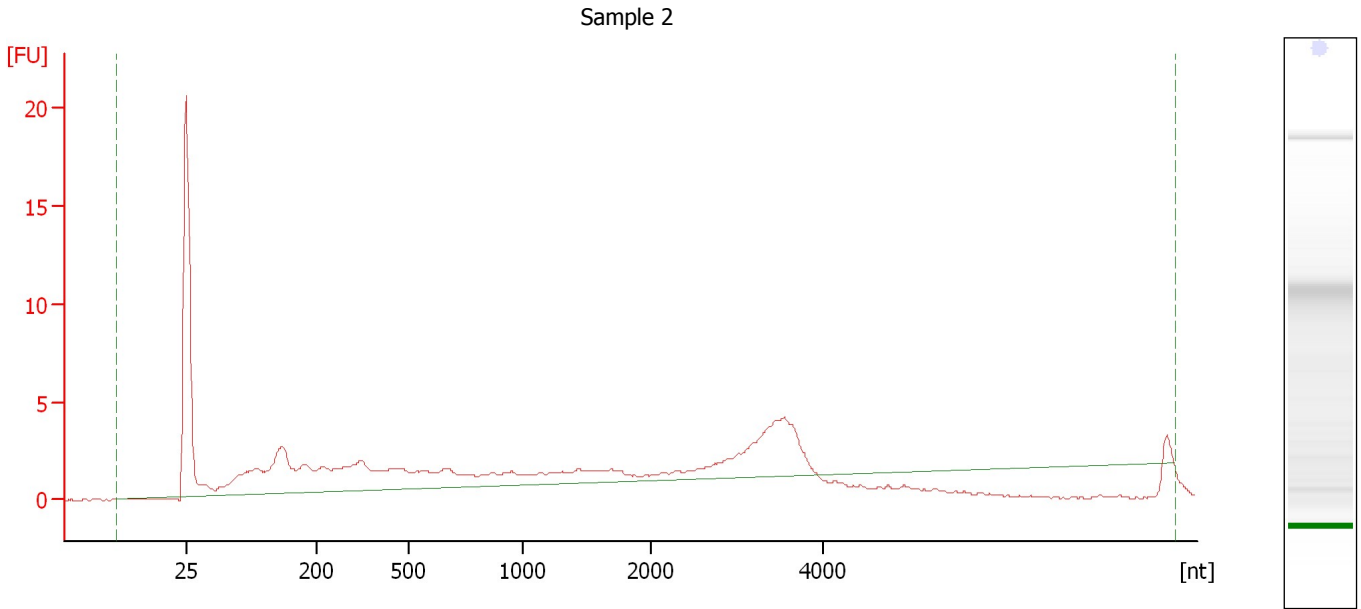
**Fragment table for sample 1 : Sample 1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,476	1,869	18.7	5.0
28S	3,253	3,884	7.9	2.1

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-09\2015-12-09\_004.xad

Created: 12/9/2015 3:32:59 PM  
Modified: 12/9/2015 3:55:01 PM

**Electropherogram Summary Continued ...**



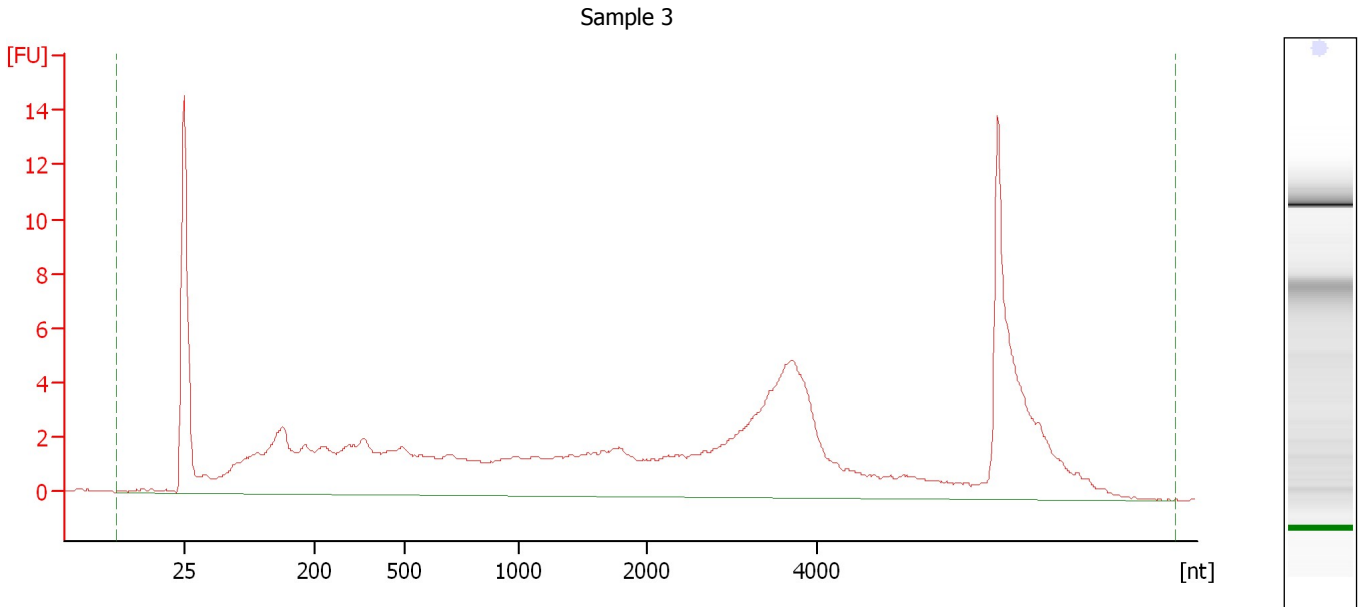
**Overall Results for sample 2 : Sample 2**

RNA Area:	75.8	RNA Integrity Number (RIN):	1.3 (B.02.08)
RNA Concentration:	326 µg/µl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 1.30

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-09\2015-12-09\_004.xad

Created: 12/9/2015 3:32:59 PM  
Modified: 12/9/2015 3:55:01 PM

**Electropherogram Summary Continued ...**



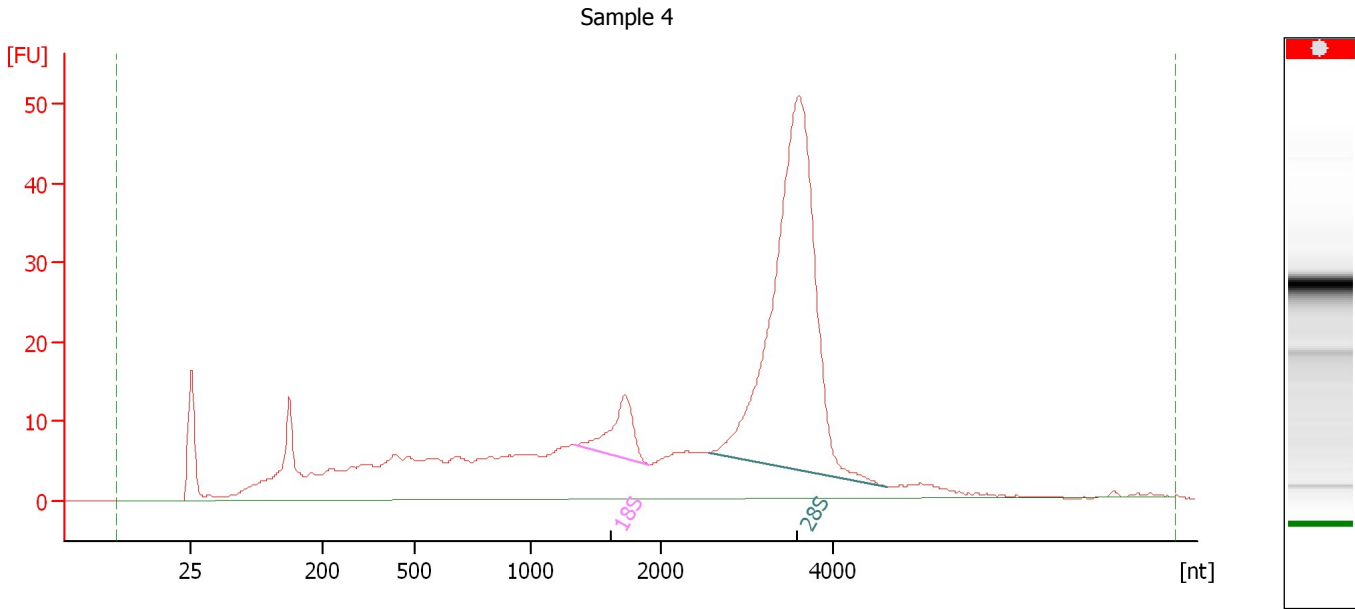
**Overall Results for sample 3 : Sample 3**

RNA Area:	172.3	RNA Integrity Number (RIN):	1.6 (B.02.08)
RNA Concentration:	741 pg/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 1.60

Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-09\2015-12-09\_004.xad

Created: 12/9/2015 3:32:59 PM  
 Modified: 12/9/2015 3:55:01 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	597.7	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	2,571 pg/μl	Result Flagging Color:	<span style="background-color: #cccccc; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	9.4	Result Flagging Label:	RIN N/A

**Fragment table for sample 4 : Sample 4**

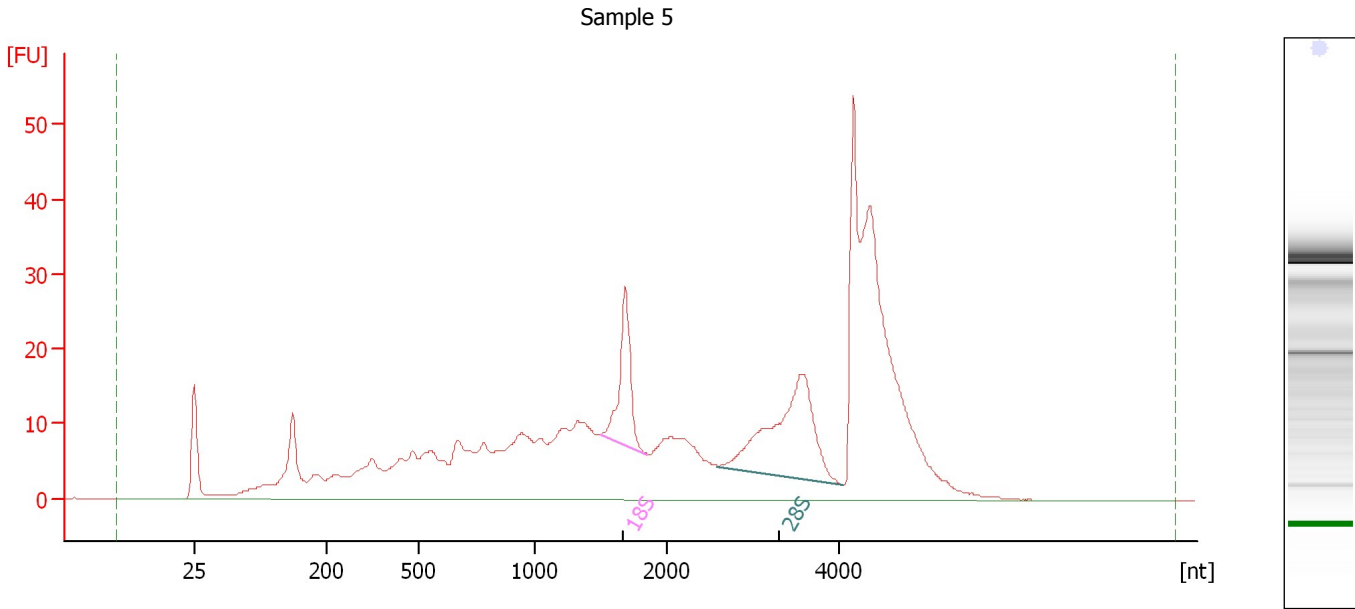
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,339	1,914	22.0	3.7
28S	2,566	4,630	207.0	34.6



Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-09\2015-12-09\_004.xad

Created: 12/9/2015 3:32:59 PM  
Modified: 12/9/2015 3:55:01 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	647.9	RNA Integrity Number (RIN):	5.8 (B.02.08)
RNA Concentration:	2,787 pg/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	2.2	Result Flagging Label:	RIN: 5.80

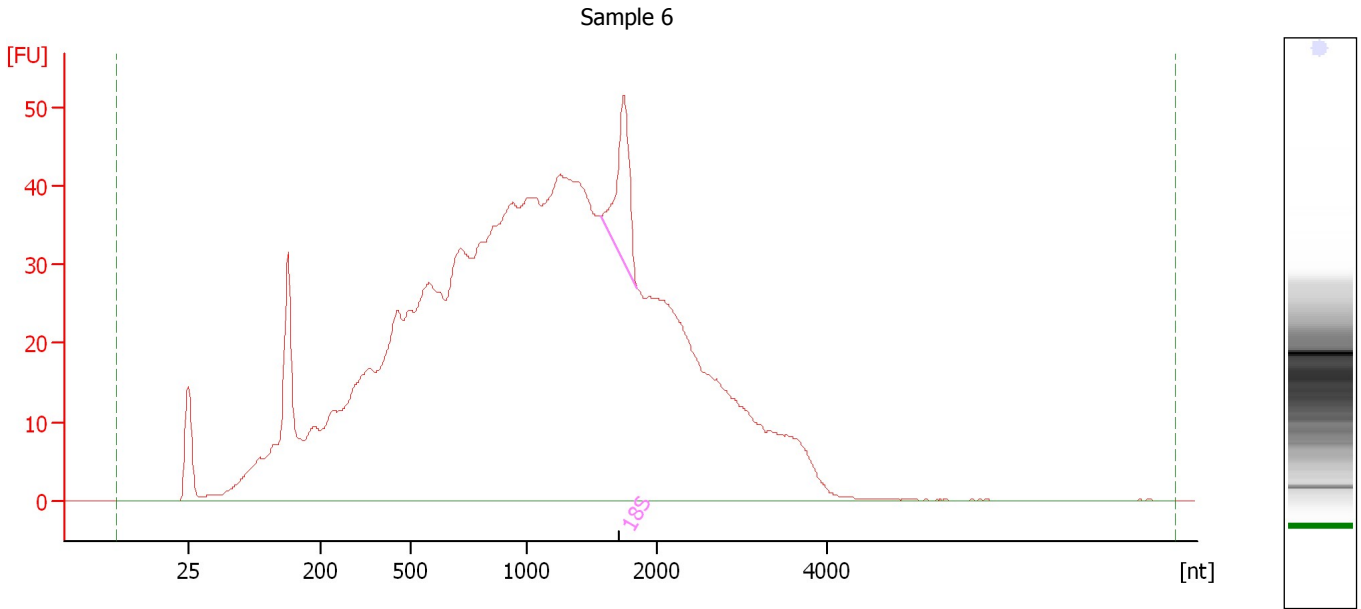
**Fragment table for sample 5 : Sample 5**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,491	1,850	27.6	4.3
28S	2,589	4,046	60.3	9.3

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-09\2015-12-09\_004.xad

Created: 12/9/2015 3:32:59 PM  
Modified: 12/9/2015 3:55:01 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	1,585.2	RNA Integrity Number (RIN):	2.7 (B.02.08)
RNA Concentration:	6,819 µg/µl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.70

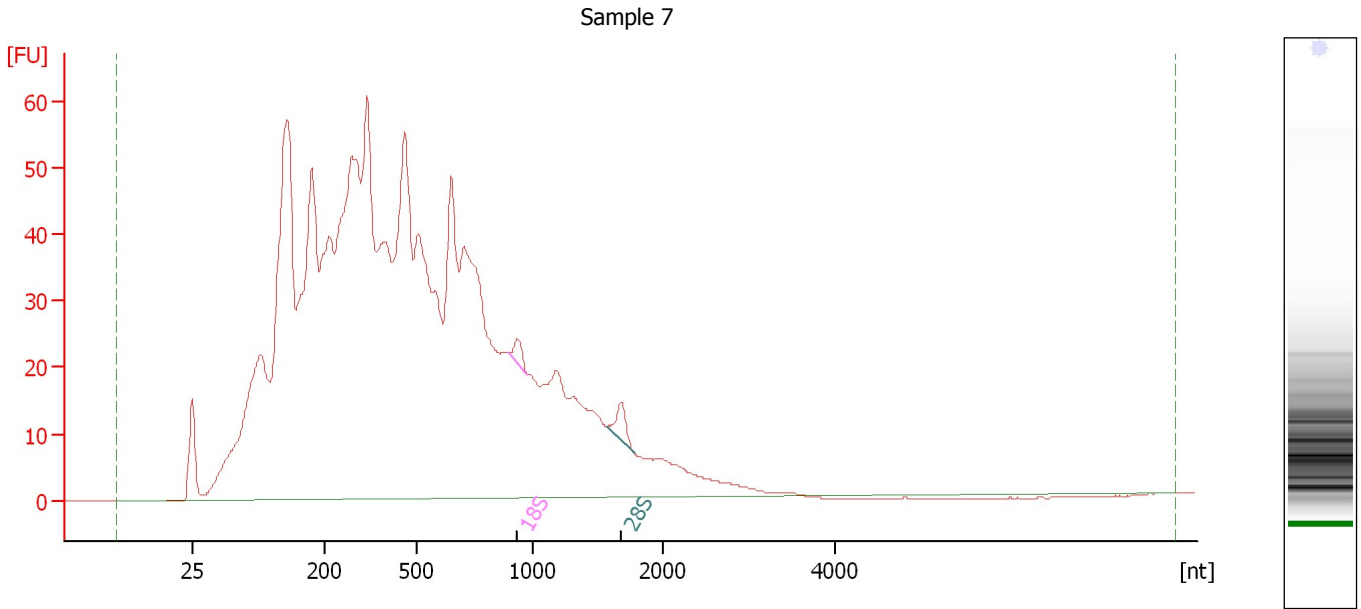
**Fragment table for sample 6 : Sample 6**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,566	1,855	32.6	2.1

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-09\2015-12-09\_004.xad

Created: 12/9/2015 3:32:59 PM  
Modified: 12/9/2015 3:55:01 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	1,725.2	RNA Integrity Number (RIN):	2.1 (B.02.08)
RNA Concentration:	7,421 pg/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	1.8	Result Flagging Label:	RIN: 2.10

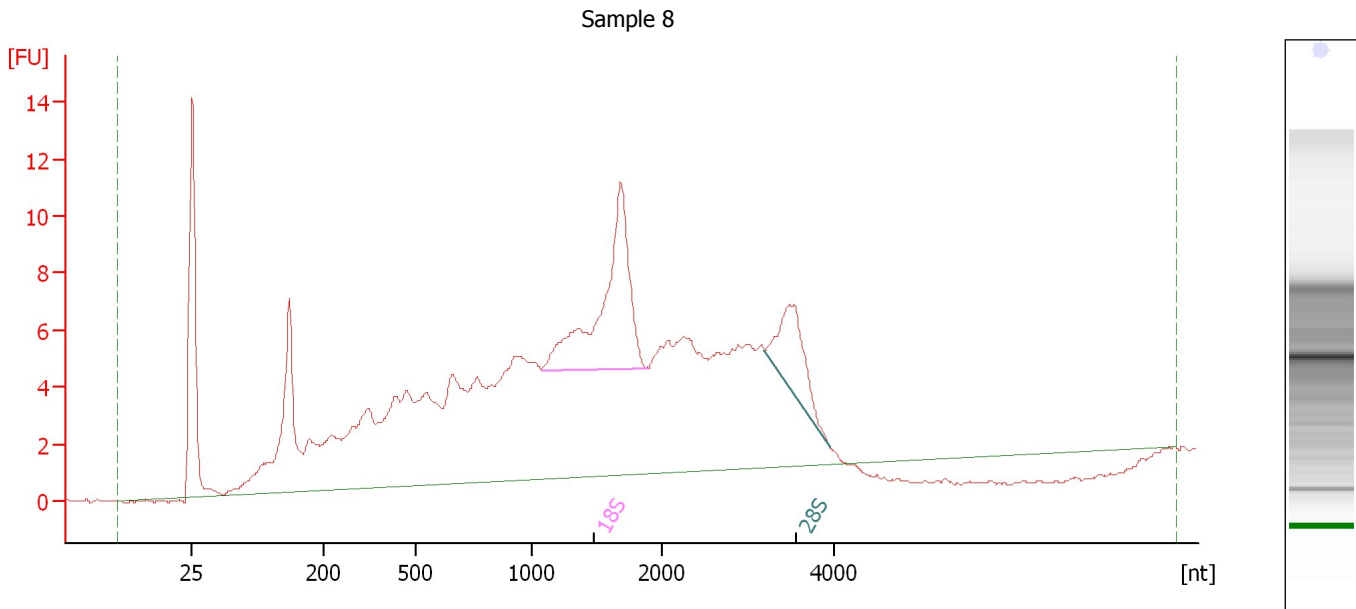
**Fragment table for sample 7 : Sample 7**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	901	979	3.9	0.2
28S	1,578	1,783	6.9	0.4

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-09\2015-12-09\_004.xad

Created: 12/9/2015 3:32:59 PM  
Modified: 12/9/2015 3:55:01 PM

**Electropherogram Summary Continued ...**



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

RNA Area: 254.8                      RNA Integrity Number (RIN): 5 (B.02.08)  
RNA Concentration: 1,096 µg/µl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.4              Result Flagging Label: RIN:5

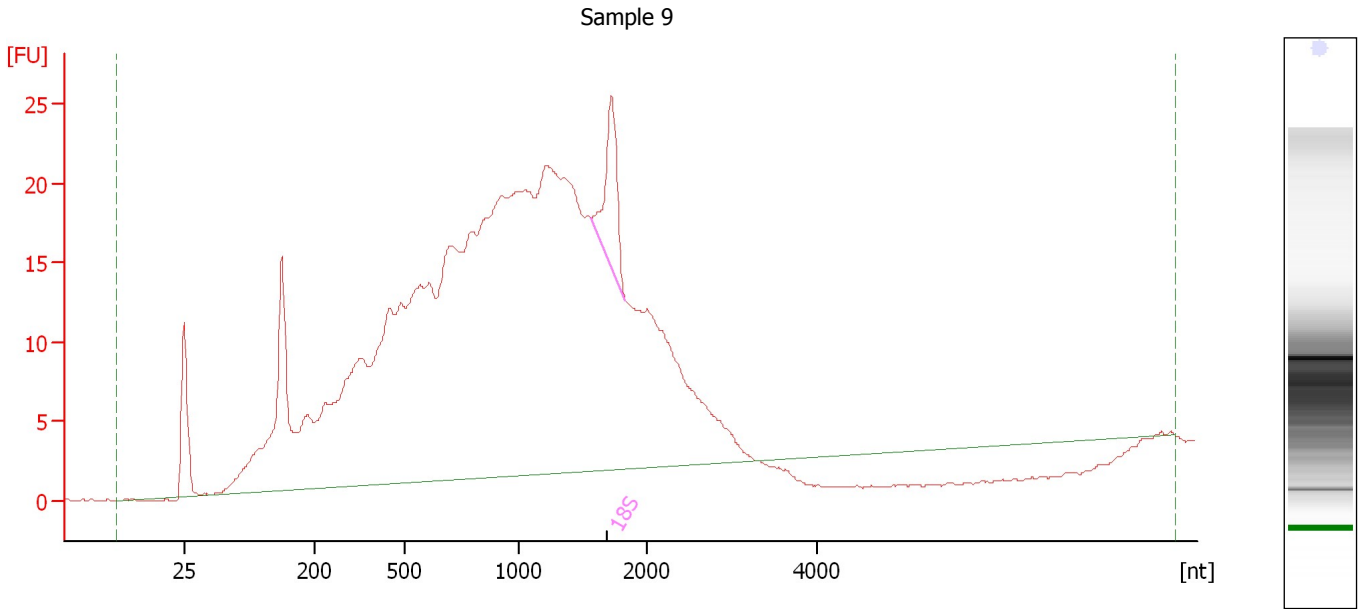
**Fragment table for sample 8 : Sample 8**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,076	1,898	22.2	8.7
28S	3,200	3,958	8.1	3.2

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-09\2015-12-09\_004.xad

Created: 12/9/2015 3:32:59 PM  
Modified: 12/9/2015 3:55:01 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	667.2	RNA Integrity Number (RIN):	2.8 (B.02.08)
RNA Concentration:	2,870 pg/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.80

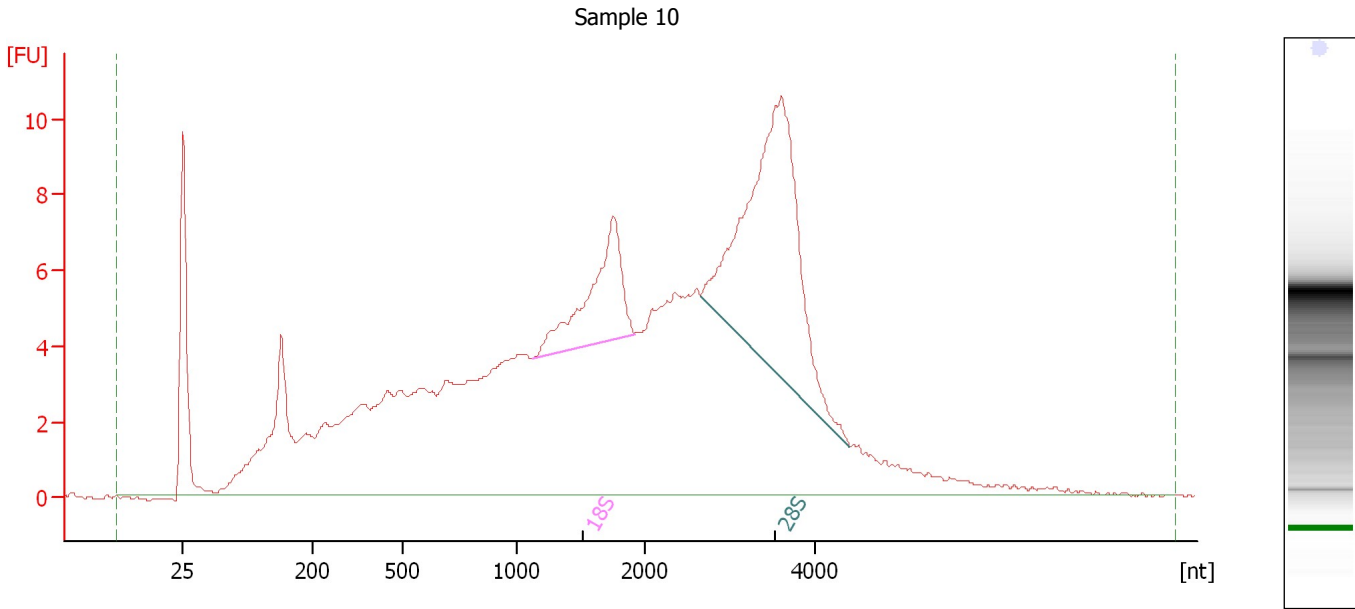
**Fragment table for sample 9 : Sample 9**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,561	1,828	15.2	2.3

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-09\2015-12-09\_004.xad

Created: 12/9/2015 3:32:59 PM  
Modified: 12/9/2015 3:55:01 PM

**Electropherogram Summary Continued ...**



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

RNA Area: 292.0                      RNA Integrity Number (RIN): 6.2 (B.02.08)  
RNA Concentration: 1,256 pg/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 3.0                      Result Flagging Label: RIN: 6.20

**Fragment table for sample 10 : Sample 10**

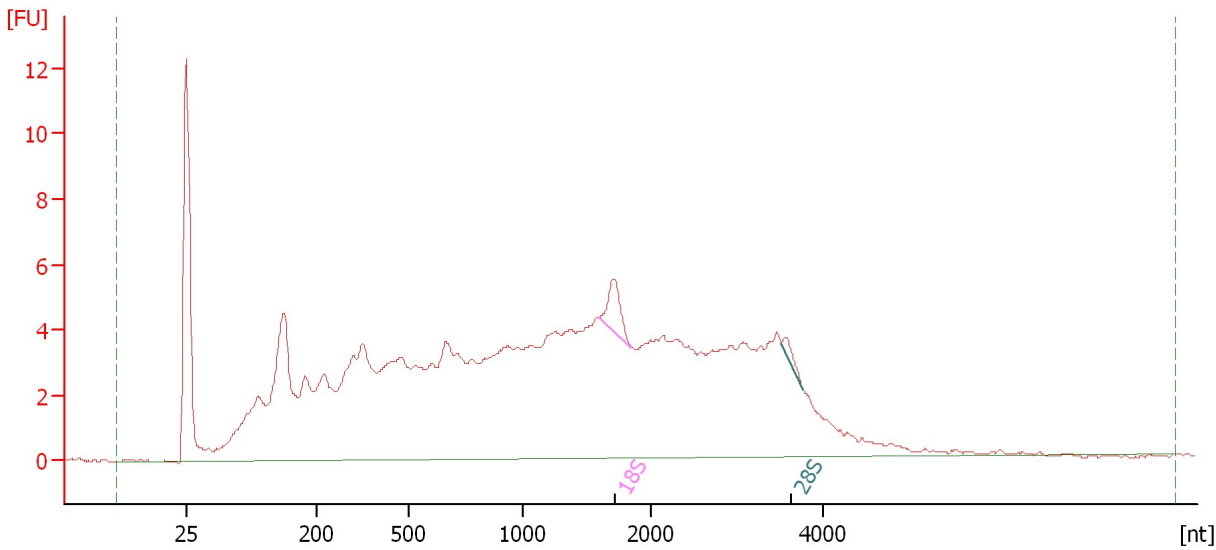
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,126	1,910	13.2	4.5
28S	2,647	4,414	40.1	13.7

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-09\2015-12-09\_004.xad

Created: 12/9/2015 3:32:59 PM  
Modified: 12/9/2015 3:55:01 PM

**Electropherogram Summary Continued ...**

Sample 11



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

RNA Area:	233.3	RNA Integrity Number (RIN):	2.7 (B.02.08)
RNA Concentration:	1,004 pg/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.2	Result Flagging Label:	RIN: 2.70

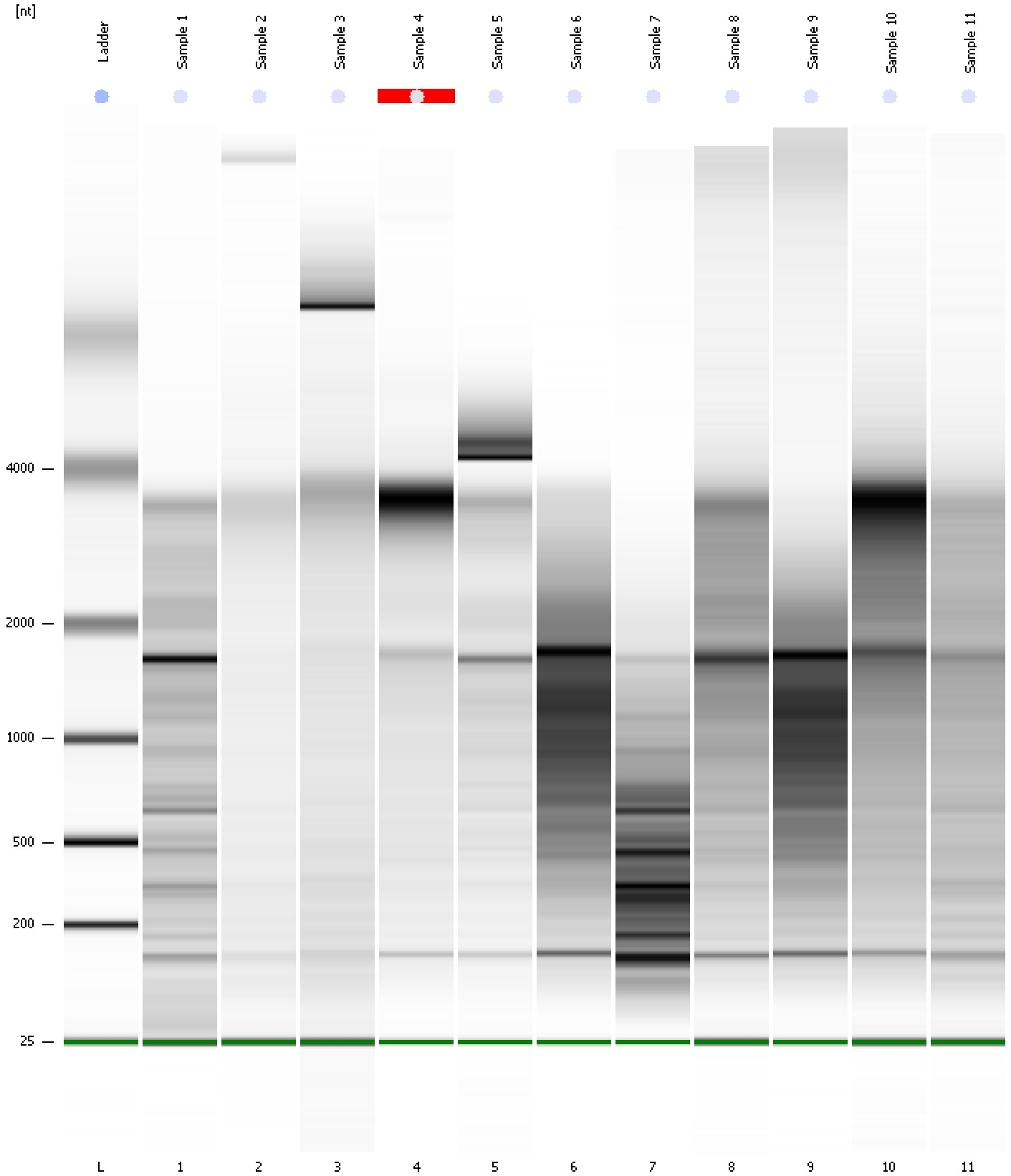
**Fragment table for sample 11 : Sample 11**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,589	1,837	2.4	1.0
28S	3,522	3,773	0.5	0.2

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-09\2015-12-09\_004.xad

Created: 12/9/2015 3:32:59 PM  
Modified: 12/9/2015 3:55:01 PM

**Gel Image**





Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-09\2015-12-09\_004.xad

Created: 12/9/2015 3:32:59 PM  
 Modified: 12/9/2015 3:55:01 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		12/9/2015 3:55:00 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-12-09\2015-12-09_004.xad)		Instrument	Run		12/9/2015 3:33:04 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		12/9/2015 3:33:04 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		12/9/2015 3:33:04 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		12/9/2015 3:33:04 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		12/9/2015 3:33:04 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		12/9/2015 3:33:04 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		12/9/2015 3:33:04 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1