

# Cement Bond Log

Company		Pioneer Natural Resources	
Well		Timbale 32-12	
Field		Purgatorie River	
County		Las Animas	
State		Colorado	
Location:		API #: 05 071 09817 00	
SEC 12 TWP 33S RGE 68W		DEVI	
Permanent Datum Log Measured From		GL KB 9' AGL	Elevation 7894'
Drilling Measured From		KB	Elevation K.B. 7903' D.F. 7894' G.L. 7894'
Date	7-23-11		
Run Number	One		
Depth Driller	2548'		
Depth Logger	2531'		
Bottom Logged Interval	2529'		
Top Log Interval	Surface		
Open Hole Size	7 7/8		
Type Fluid	water		
Density / Viscosity	///		
Max. Recorded Temp.	///		
Estimated Cement Top	Surf.		
Time Well Ready	Portable Mast		
Time Logger on Bottom	7:30 A.M.		
Equipment Number	T590		
Location	Trinidad		
Recorded By	C. Sisneros		
Witnessed By	Mr. Curtis Adam		
Borehole Record		Tubing Record	
Run Number	Bit	From	To
Casing Record	Size	Wgt/Ft	Top
Surface String	8 5/8"		Bottom
Prot. String			552'
Production String	5 1/5"		
Liner			TD

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

## Comments

Logged under 1000 PSI.

## Directions:

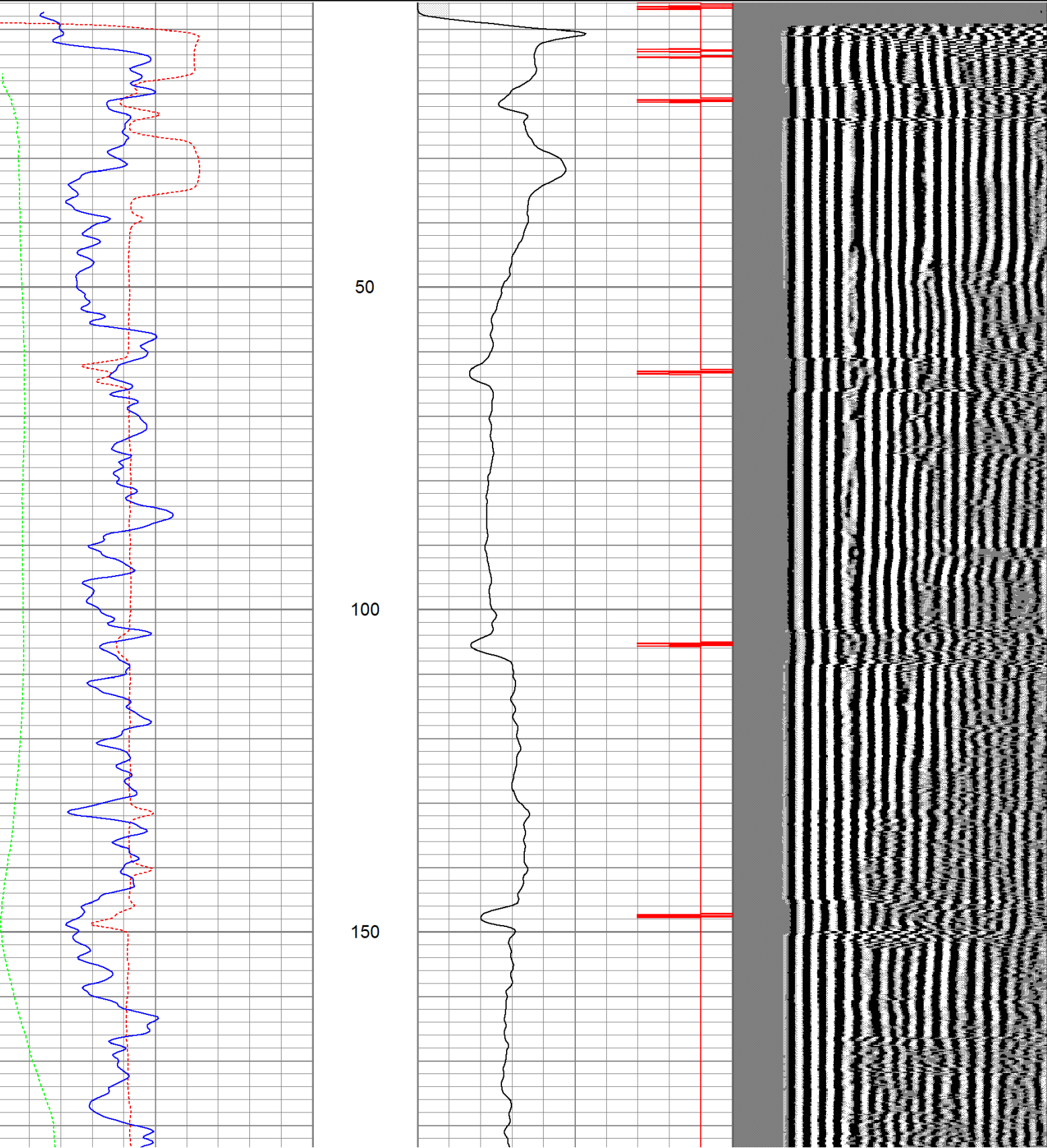
Rancho Escondido, turn left at trash dumpsters, go thru gate on cattle gaurd, straight to top of hill and go right, 2nd right to location.

Database File: timbale72311b.db  
Dataset Pathname: pass2  
Presentation Format: cbldig  
Dataset Creation: Sat Jul 23 07:47:01 2011 by Log Open-Cased 110302  
Charted by: Depth in Feet scaled 1:240

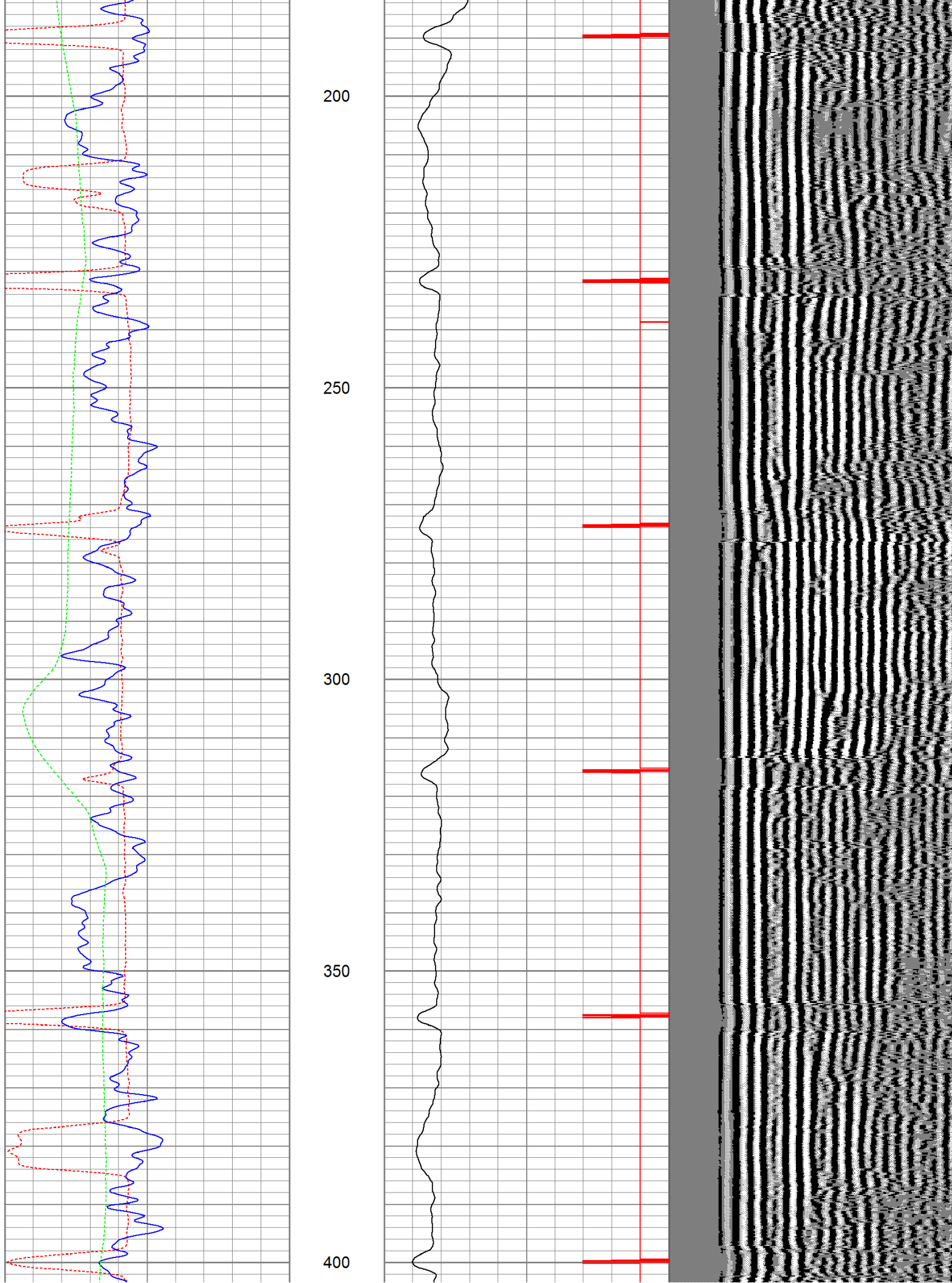
400	Travel Time (usec)	200
0	GR (GAPI)	200
0	DEVI (°)	10

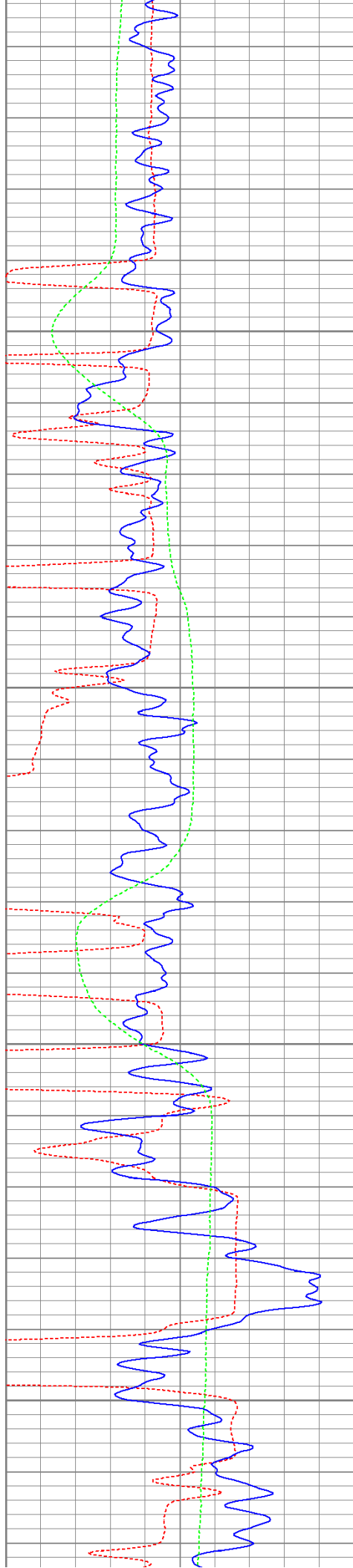
0	Amplitude (mV)	100
9	Collar Locator	-1

200 Variable Density 1200







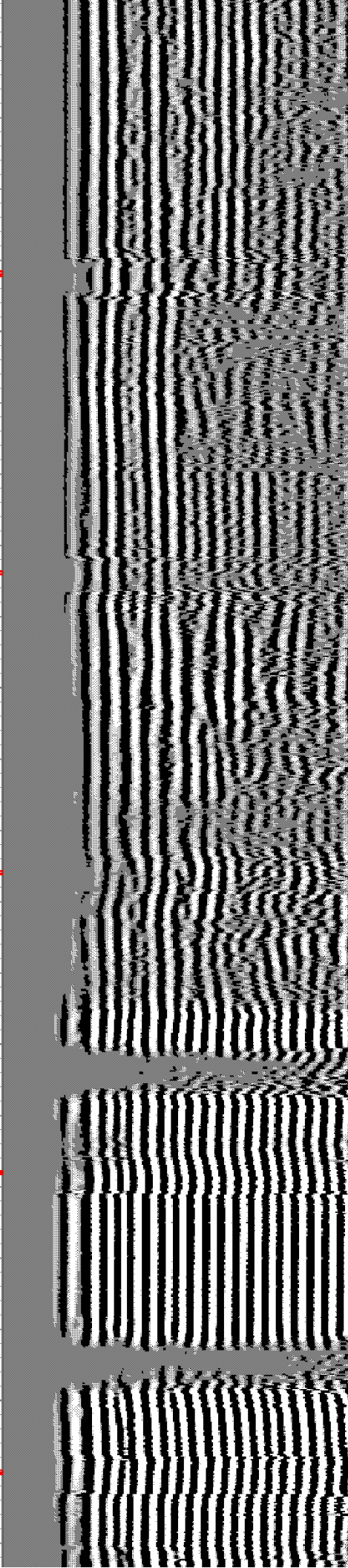


450

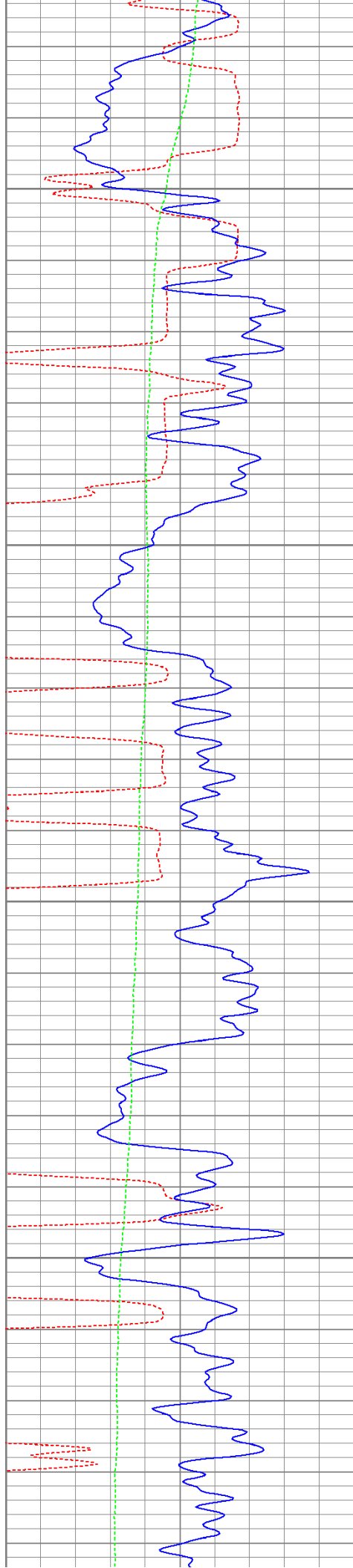
500

550

600





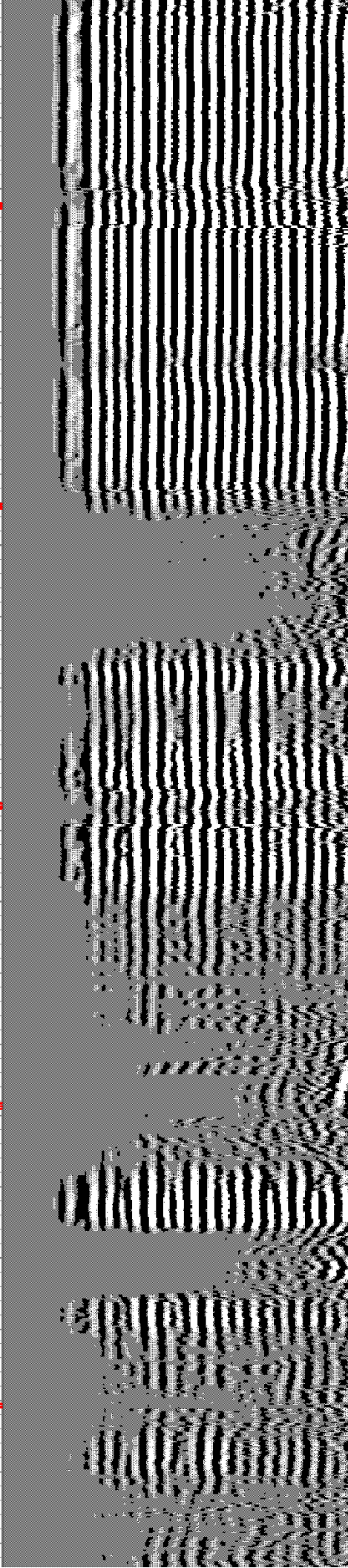


650

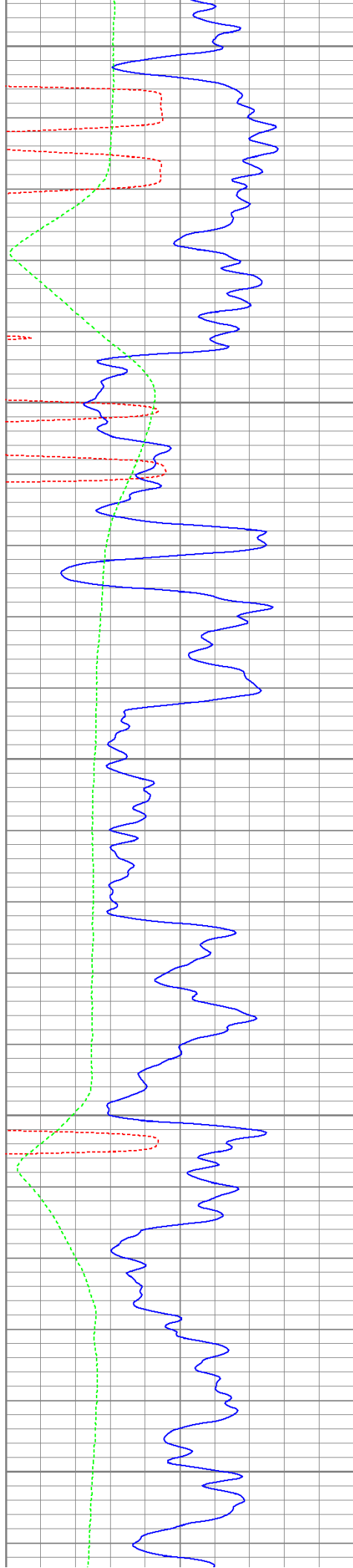
700

750

800







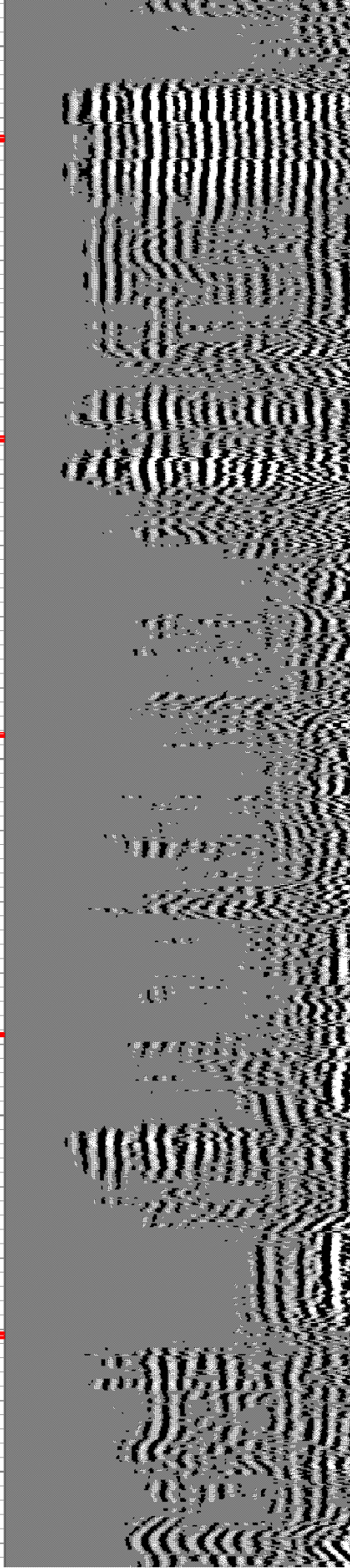
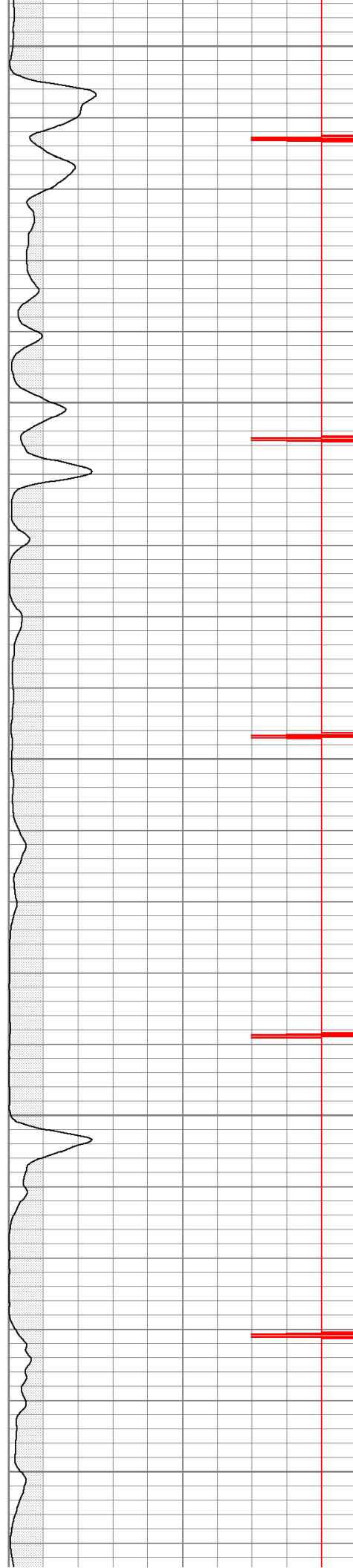
850

900

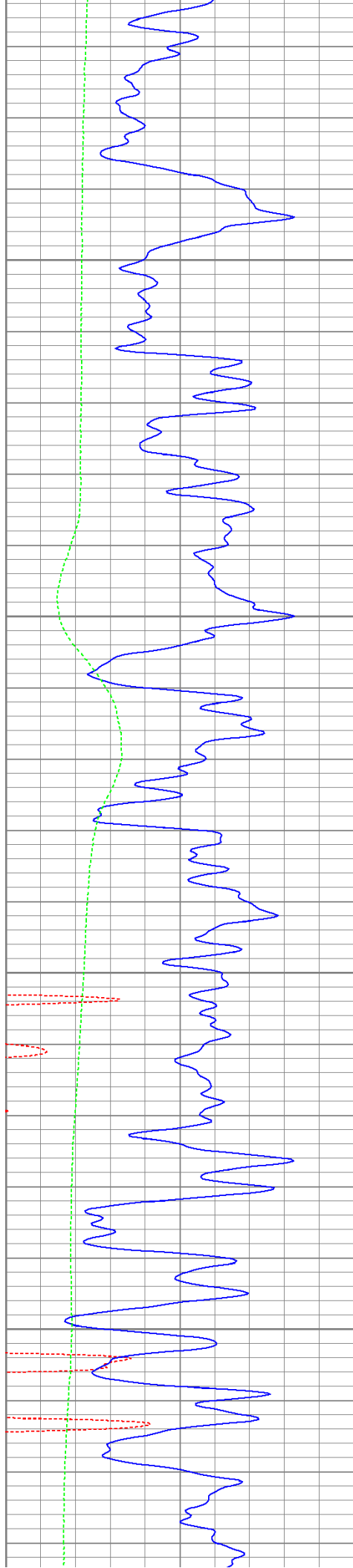
950

1000

1050





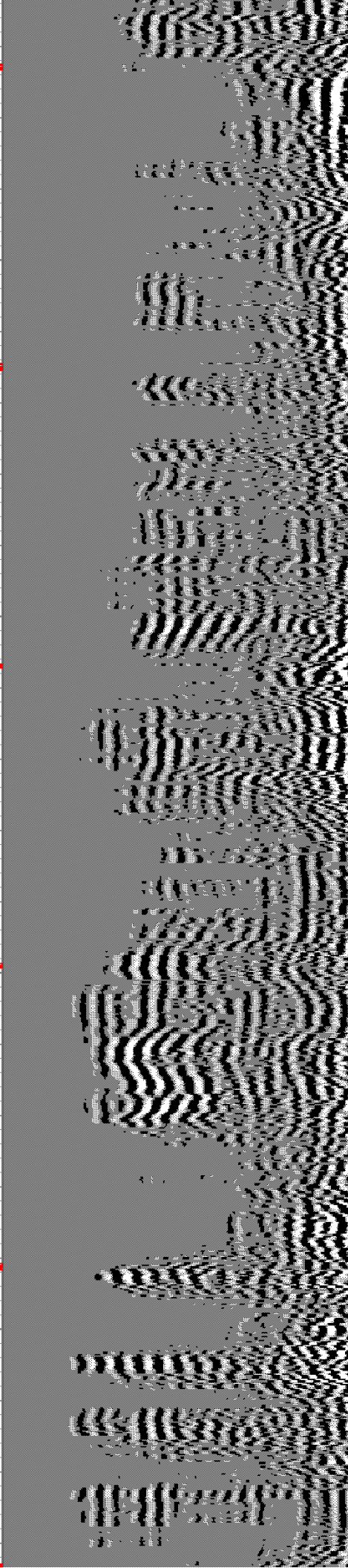
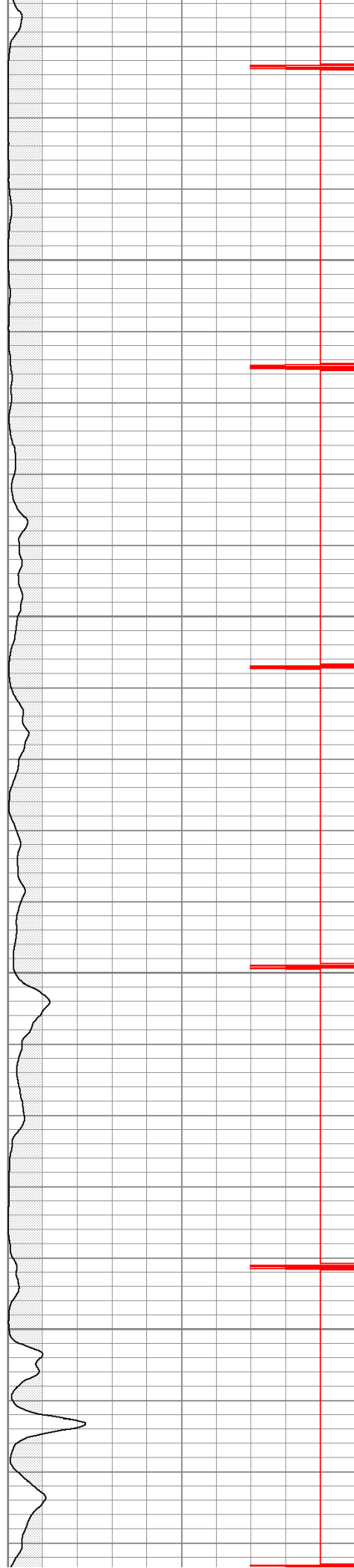


1100

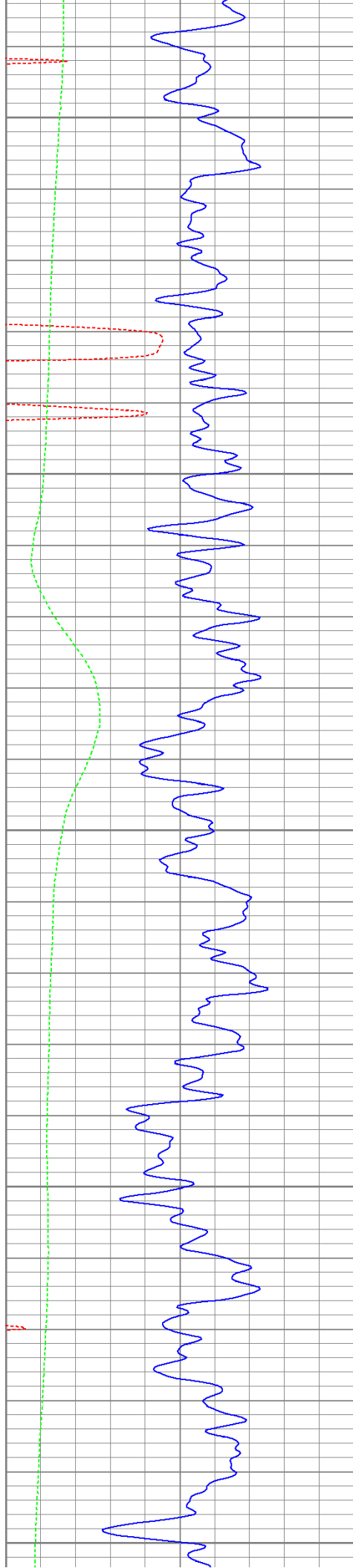
1150

1200

1250







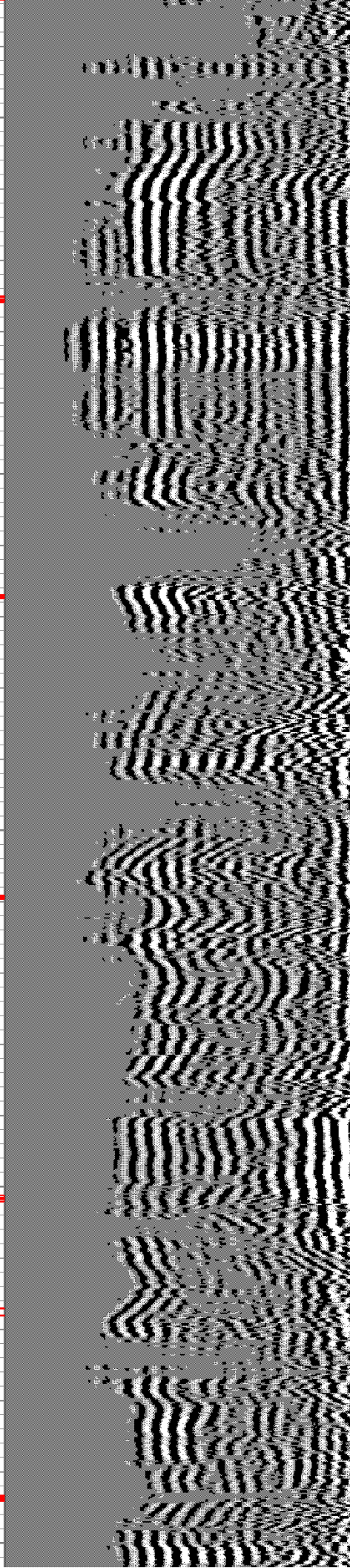
1300

1350

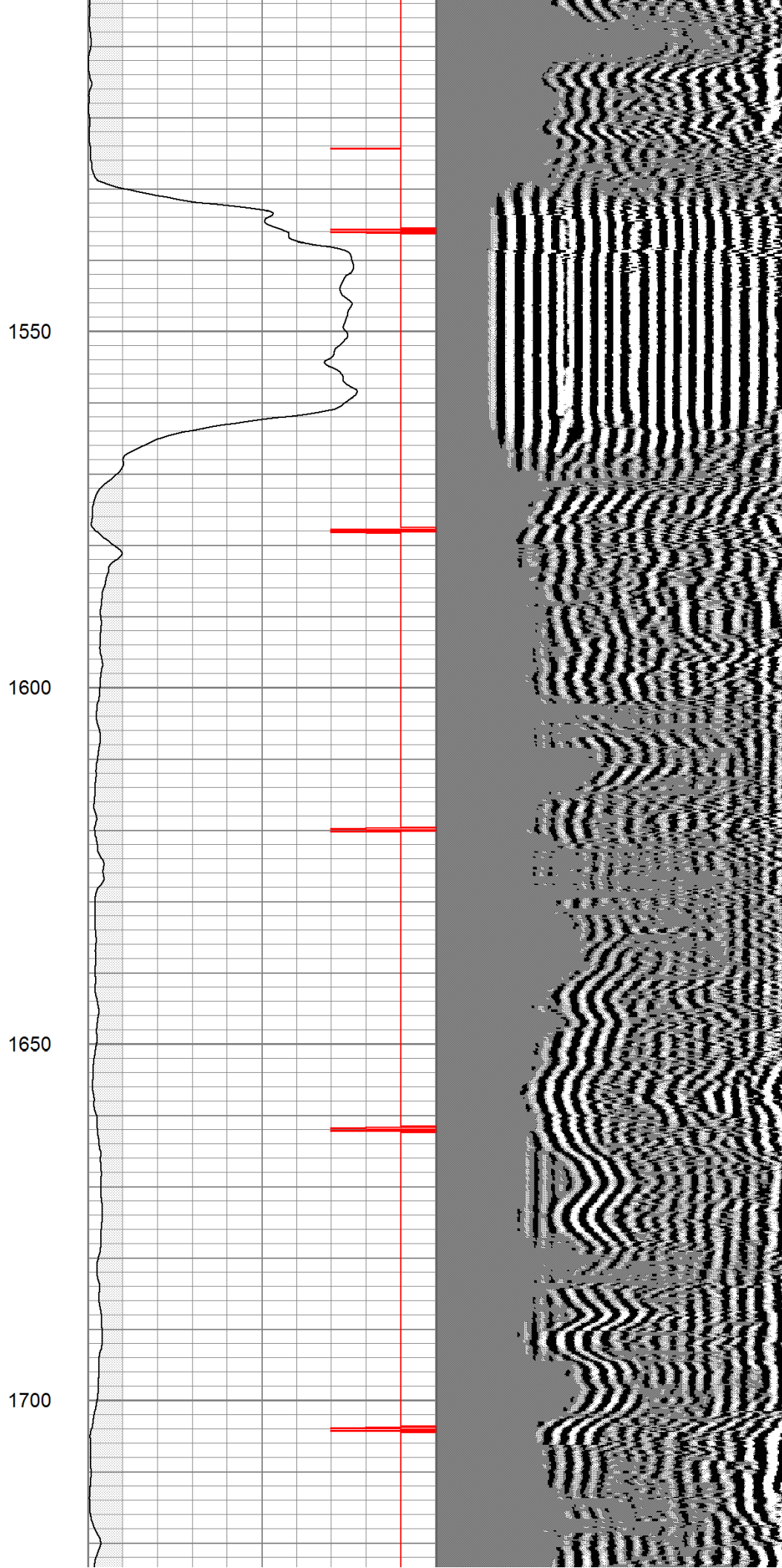
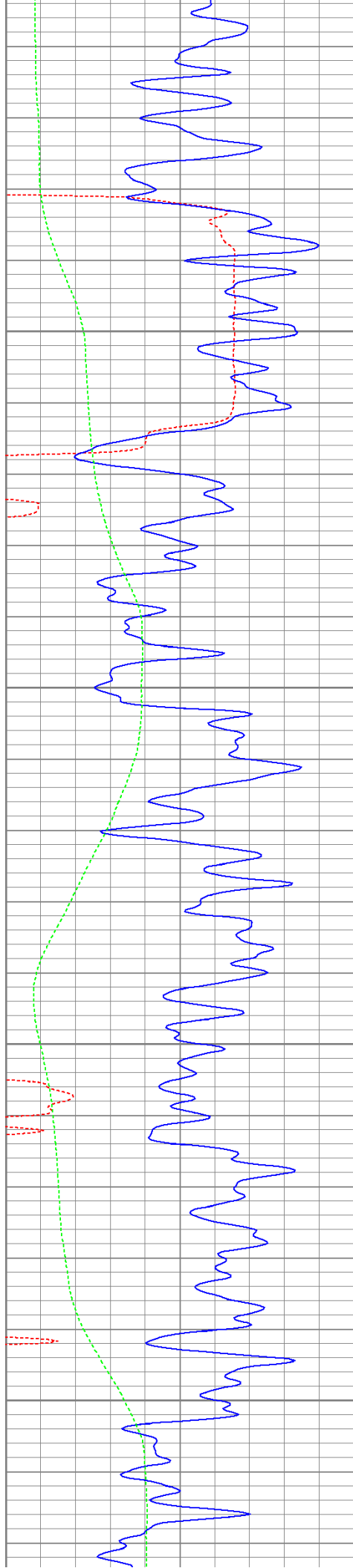
1400

1450

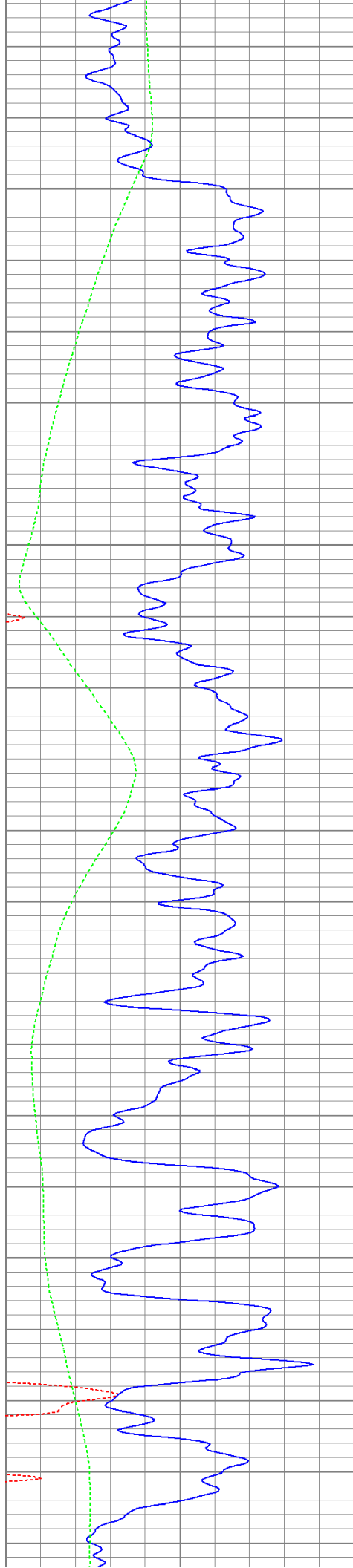
1500









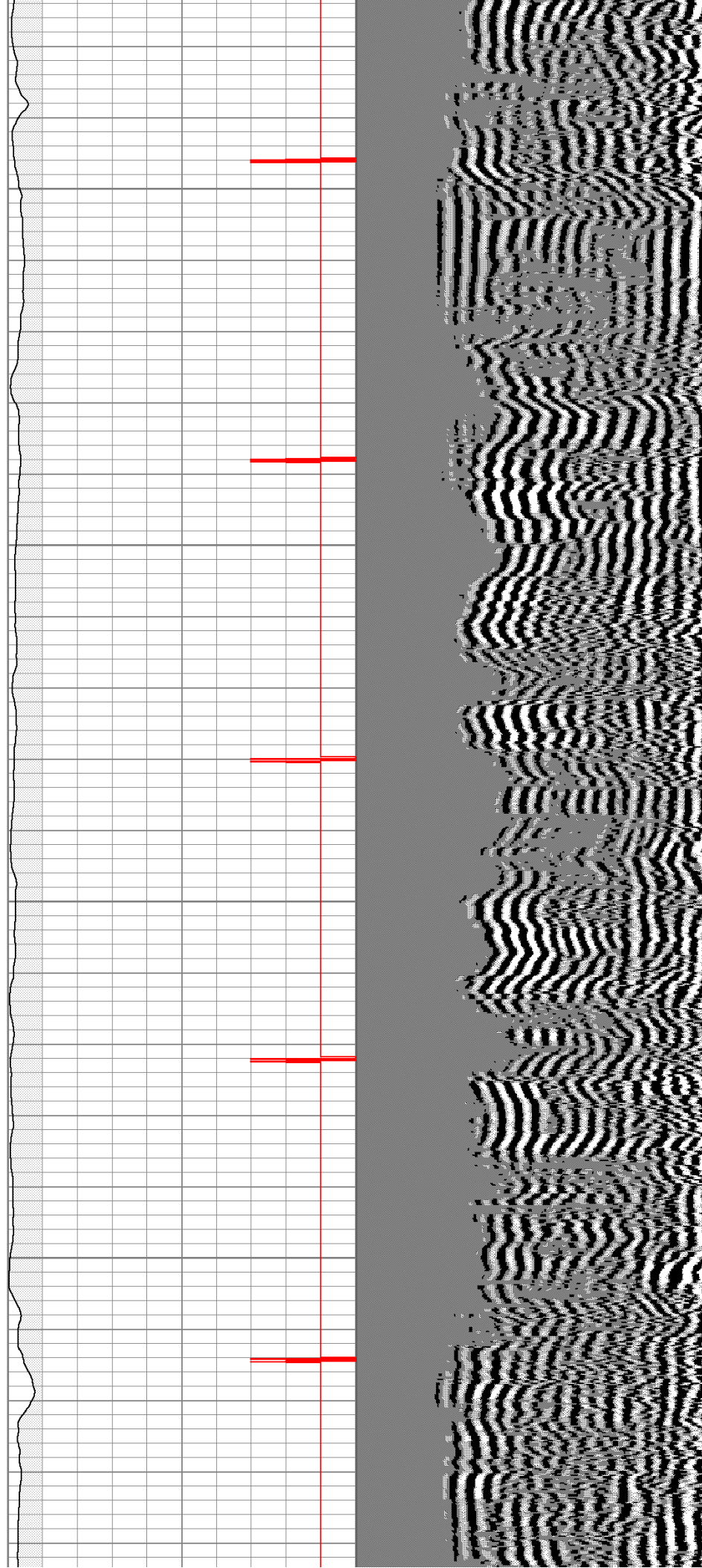


1750

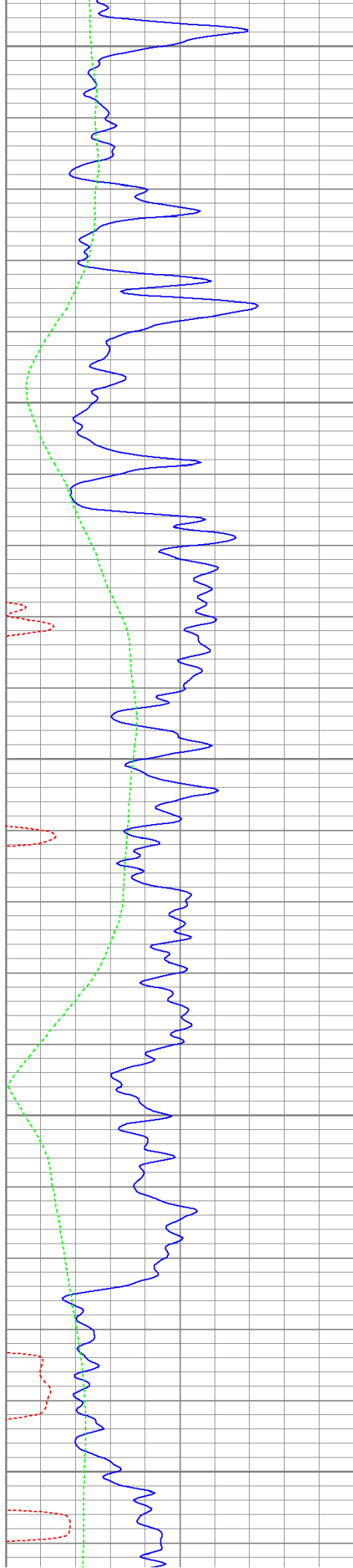
1800

1850

1900







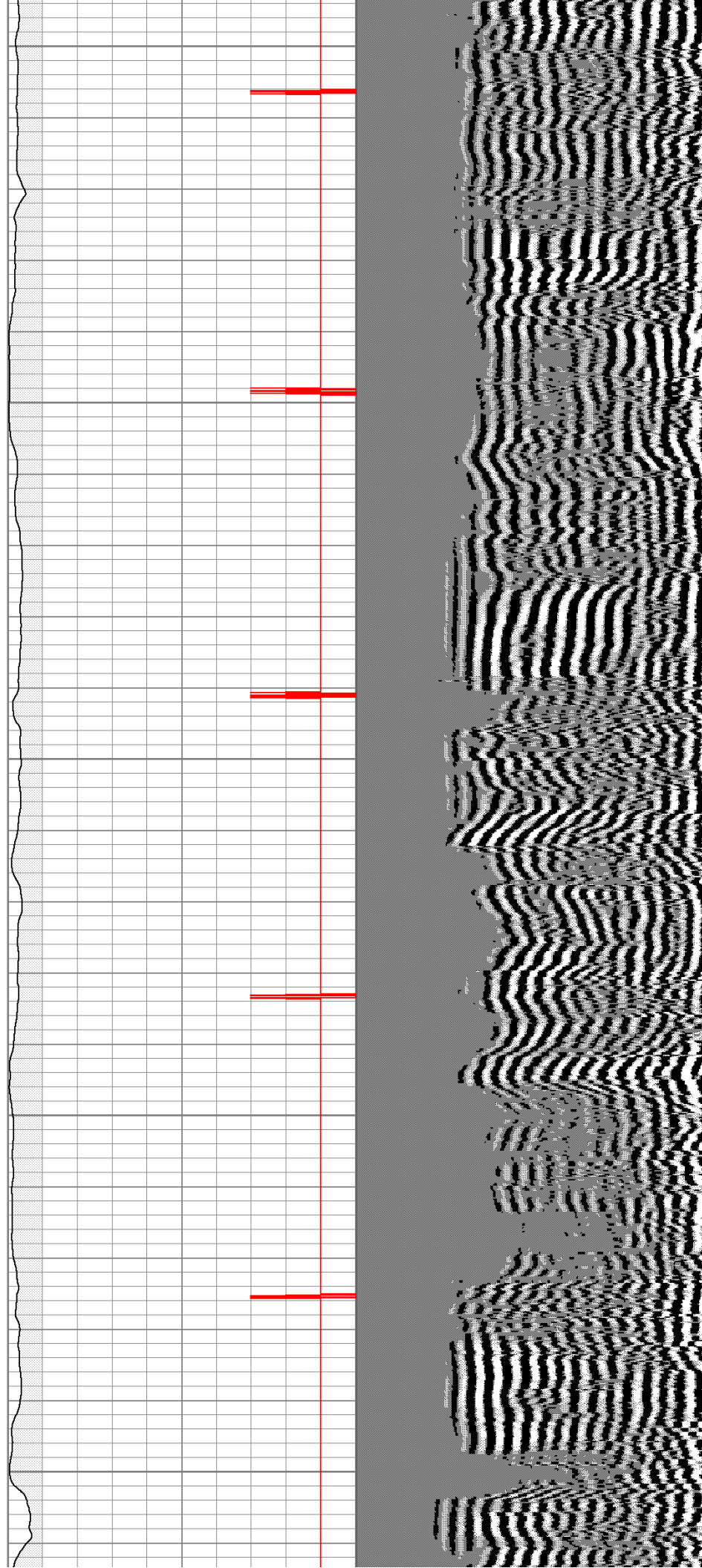
1950

2000

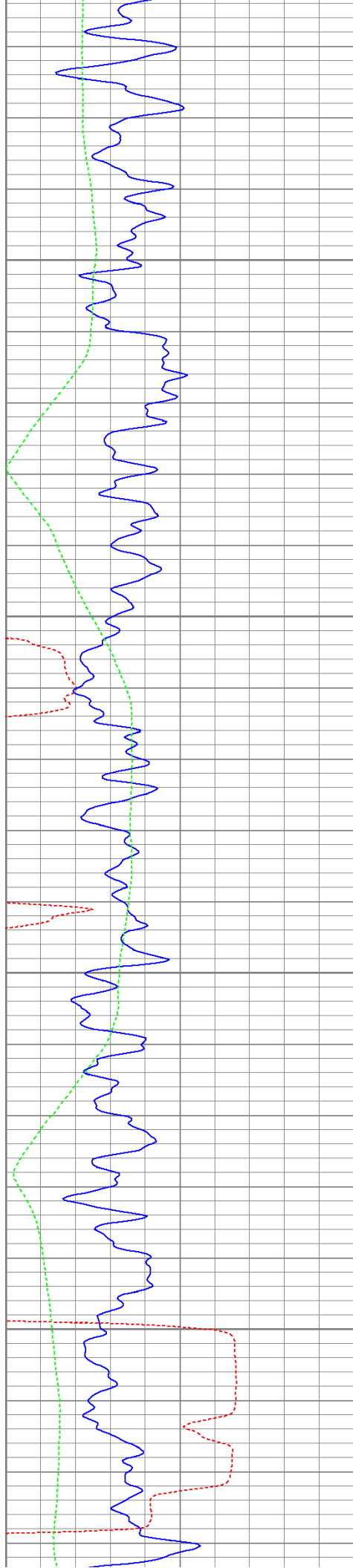
2050

2100

2150







2200

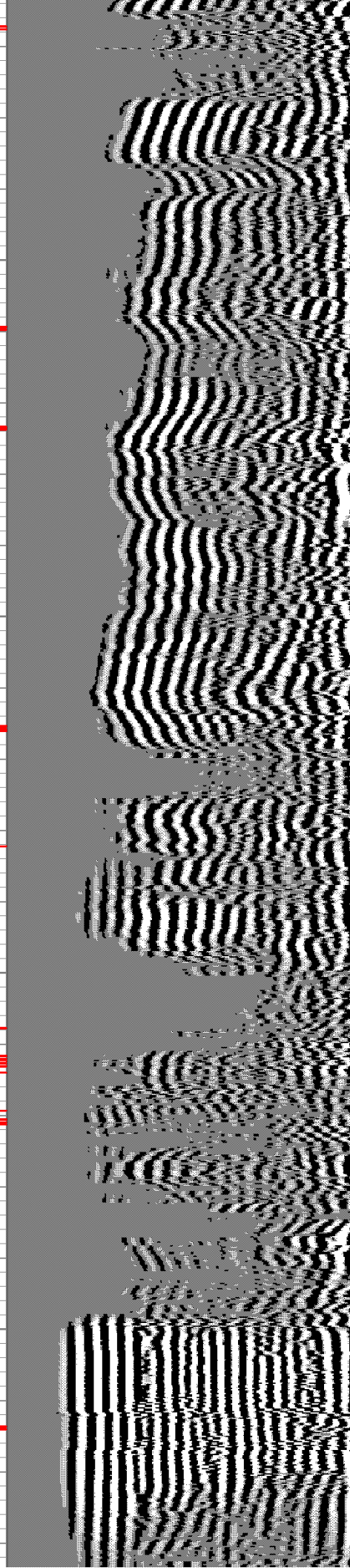
2250

2300

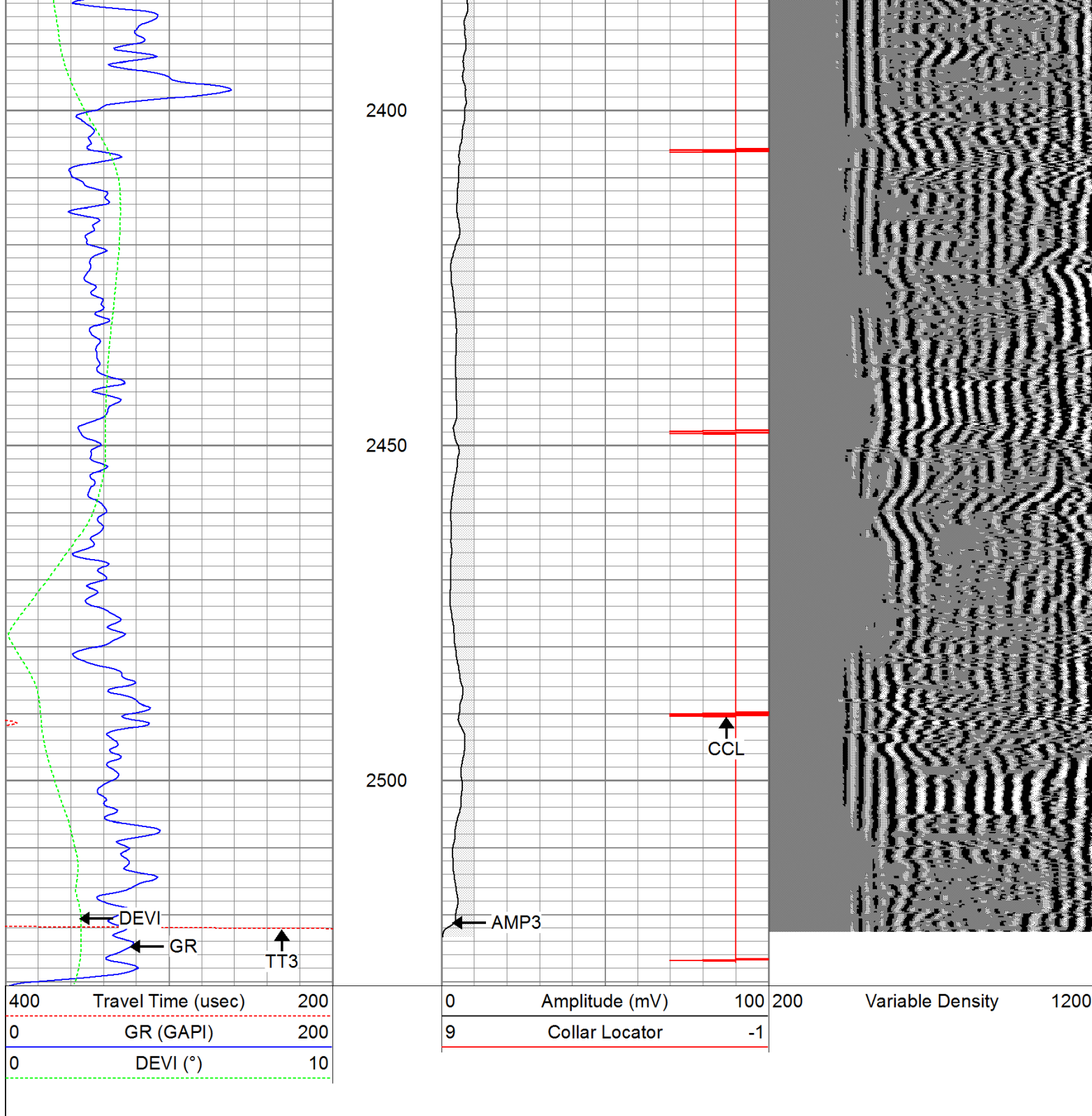
2350

Short Joint →

ECP →

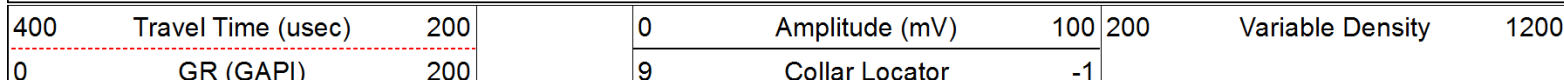


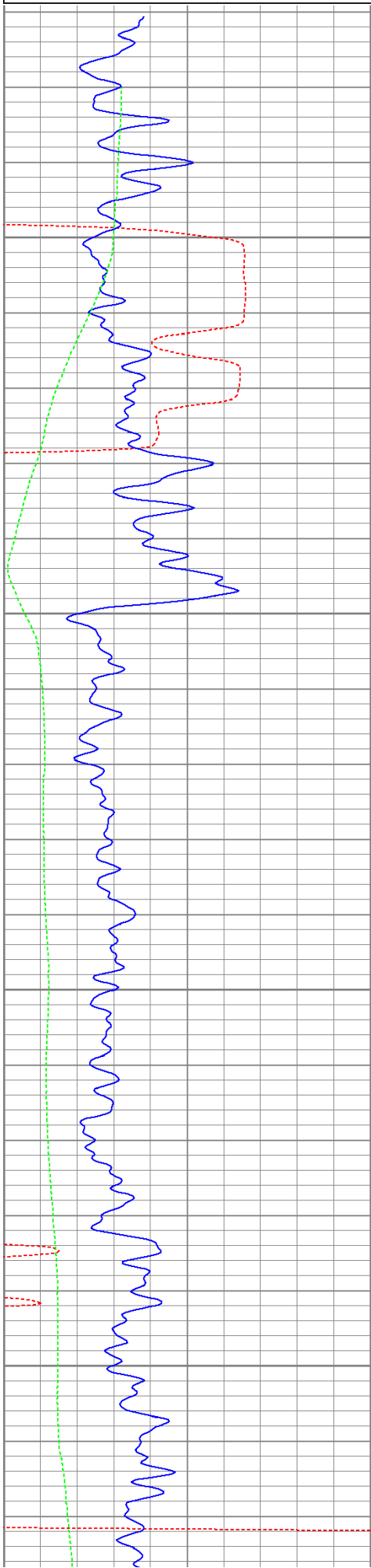
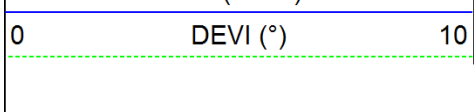




# Repeat Pass

Database File: timbale72311b.db  
 Dataset Pathname: pass1  
 Presentation Format: cbldig  
 Dataset Creation: Sat Jul 23 07:36:50 2011 by Log Open-Cased 110302  
 Charted by: Depth in Feet scaled 1:240



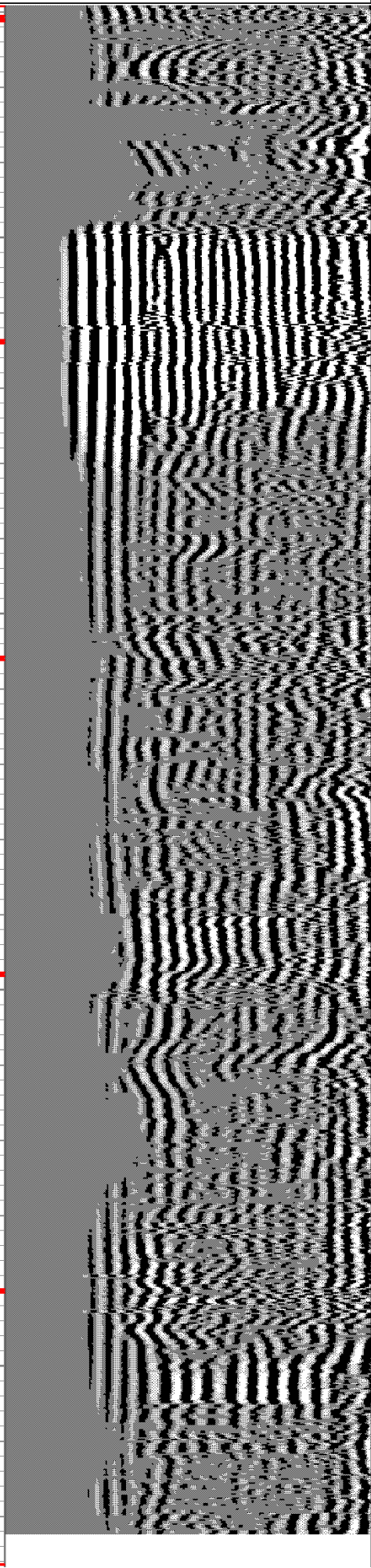
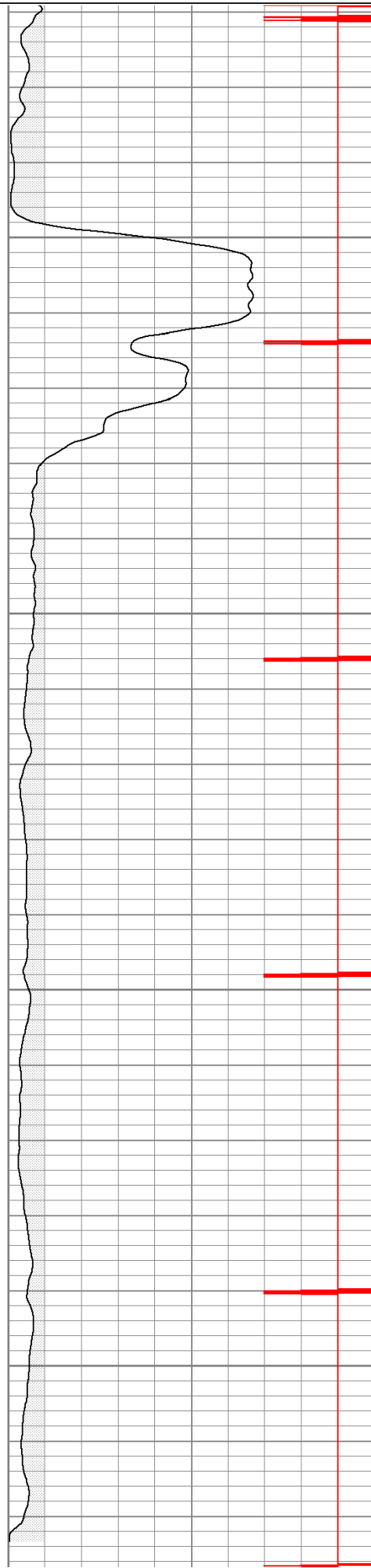


2350

2400

2450


2500





400	Travel Time (usec)	200	0	Amplitude (mV)	100	200	Variable Density	1200
0	GR (GAPI)	200	9	Collar Locator	-1			
0	DEVI (°)	10						

Calibration Report					
Database File:	timbale72311b.db				
Dataset Pathname:	pass1				
Dataset Creation:	Sat Jul 23 07:36:50 2011 by Log Open-Cased 110302				
Gamma Ray Calibration Report					
Serial Number:	080616				
Tool Model:	275D_INC				
Performed:	Wed May 04 17:31:09 2011				
Calibrator Value:	200.0	GAPI			
Background Reading:	50.0	cps			
Calibrator Reading:	250.0	cps			
Sensitivity:	1.0000	GAPI/cps			
Inclinometer Calibration Report					
Performed:	Wed May 04 17:39:54 2011				
	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	-3585.20	3595.40	-1.00	1.00	gee
Y Accelerometer	-3619.40	3520.00	-1.00	1.00	gee
Z Accelerometer					
Cement Bond Log Calibration Report					
Serial Number:	081024				
Tool Model:	PROBEDIGITALCBL				
Performed:	Tue Jul 19 09:25:23 2011				
Depth:	93.4615	ft			
Casing Diameter:	5.5	in			
	3' Spacing	5' Spacing			
Signal Zero:	0	0	mV		
Calibrated Amplitude:	85	85	mV		
Reading at Signal Zero:	-0.00874023	-0.0092041	V		
Reading in Free Pipe:	1.72476	1.66304	V		
Gain:	49.0339	50.83			
Offset:	0.428567	0.467844			

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			None	0.75	1.50	5.00
			Star	0.29	1.50	0.50

Tool Joint	Tool Joint Depth (ft)	Tool Joint Diagram	Tool Joint Description	Tool Joint Weight (lb)	Tool Joint Length (ft)	Tool Joint O.D. (in)
WVF3	9.04		CBL-PROBEDIGITALCBL (081024)	8.75	2.75	106.50
WVF5	8.04		PROBE DIGITAL CBL			
CCL	3.50		Star	0.29	1.50	0.50
ACCX	1.83		GR-275D_INC (080616)	4.50	2.75	50.00
ACCY	1.83		2-3/4" GR-CCL with Inclination			
ACCZ	1.83					
GR	0.83					
Dataset: timbale72311b.db: field/well/run1/pass1 Total Length: 14.58 ft Total Weight: 162.50 lb O.D. 2.75 in						