

# Patterson

CEMENT BOND  
GAMMA RAY

Company Pioneer Natural Resources  
Well Hill Climb 22-2  
Field Purgatorie River  
County Las Animas State CO

Location: API # : 05 071 08175 00

1820' FNL & 2193' FWL

Other Services  
TEMP.  
LOG

SEC 2 TWP 33S RGE 67W

Permanent Datum Ground Level Elevation 7518'  
Log Measured From Kelly Bushing 4' Above G.L.  
Drilling Measured From Kelly Bushing

Elevation  
K.B. 7522'  
D.F. -----  
G.L. 7518'

Date 10/22/04

Run Number	one		
Depth Driller	2475'		
Depth Logger	2284'		
Bottom Logged Interval	2280'		
Top Log Interval	Surf.		
Open Hole Size	7 7/8"		
Type Fluid	water		
Density / Viscosity	///		
Max. Recorded Temp.	129F		
Estimated Cement Top	no cement logged		
Time Well Ready	ROA		
Time Logger on Bottom	11:40		
Equipment Number	T342		
Location	Trinidad		
Recorded By	Worley		
Witnessed By	Mr. Santesteven		

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record	Size		Wgt/Ft		Top		Bottom
Surface String	8 5/8"				00		522'
Prot. String							
Production String	5 1/2"				00		na
Liner							

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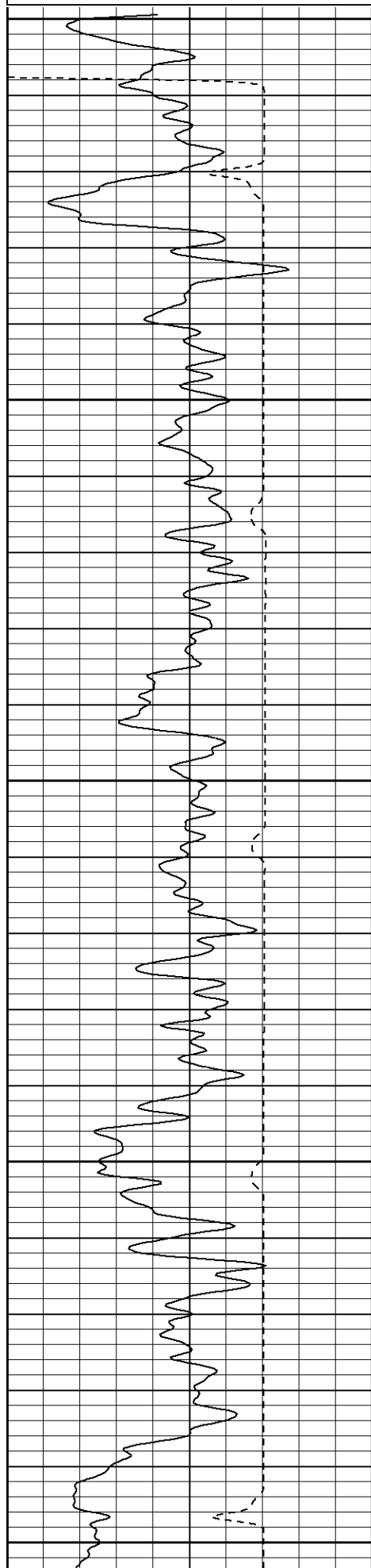
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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

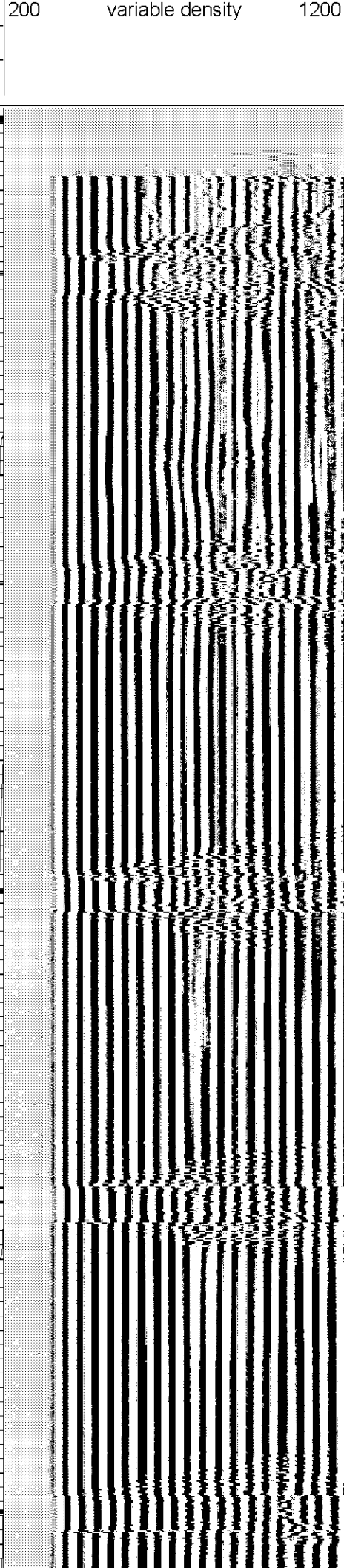
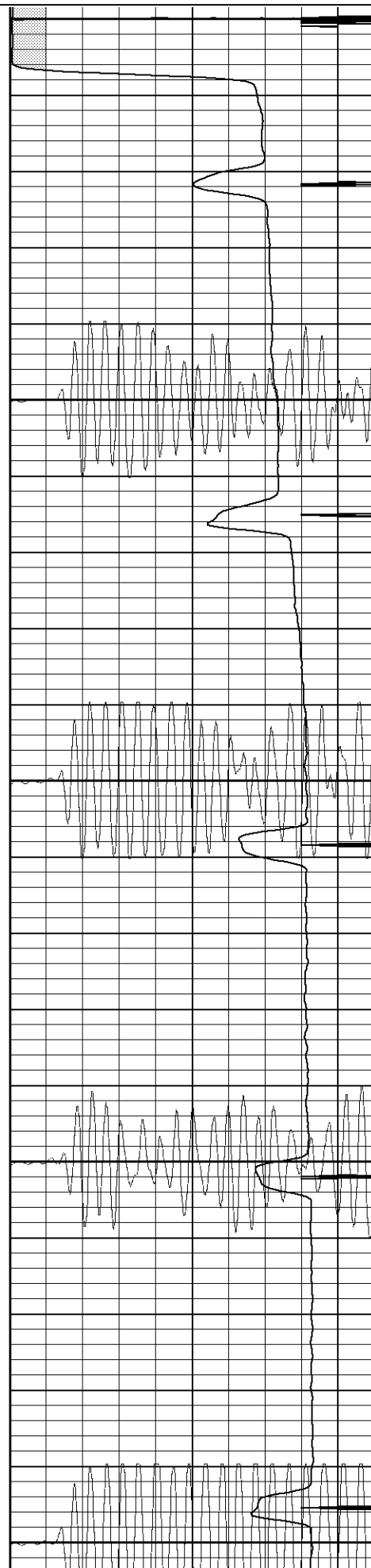
Sarcillo Canyon Past W. McDonalds House To T.  
Turn Left Take First Left Then Stay On Main Road To Vermejo Well,  
Take Sharp Left Up Hill Then First Left To Location.

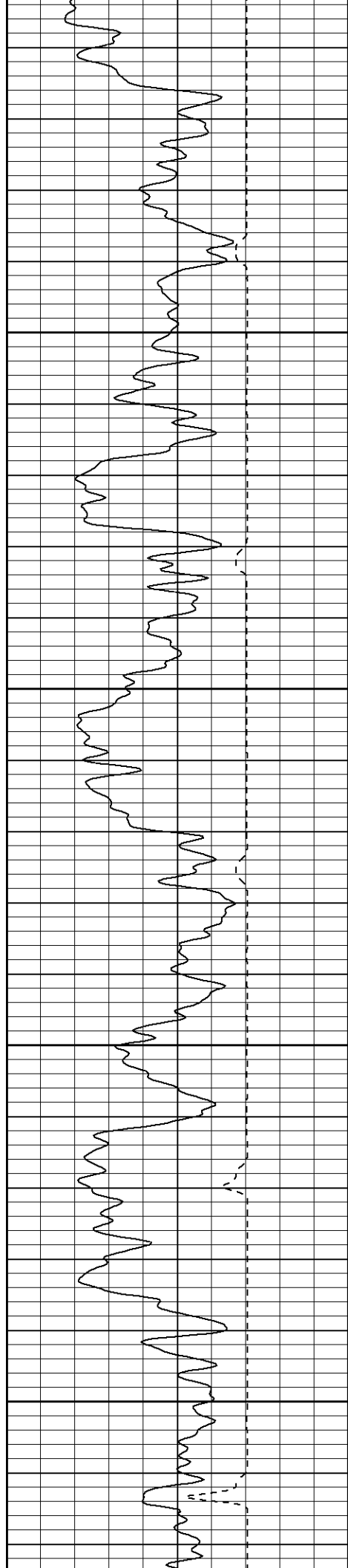
Database File: hillclimb102204bt.db  
Dataset Pathname: pass3  
Presentation Format: cbt2  
Dataset Creation: Fri Oct 22 11:44:16 2004 by Log Warrior 7.0 STD Cas  
Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	200
400	TT3 (usec)	200



0	Amplitude (mV)	100
18	Collar Locator	-2
200	CBL5	1200



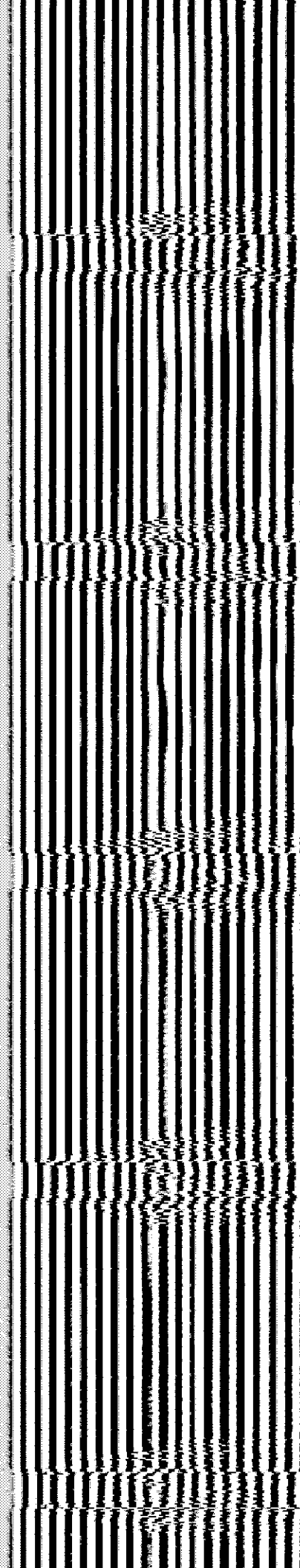
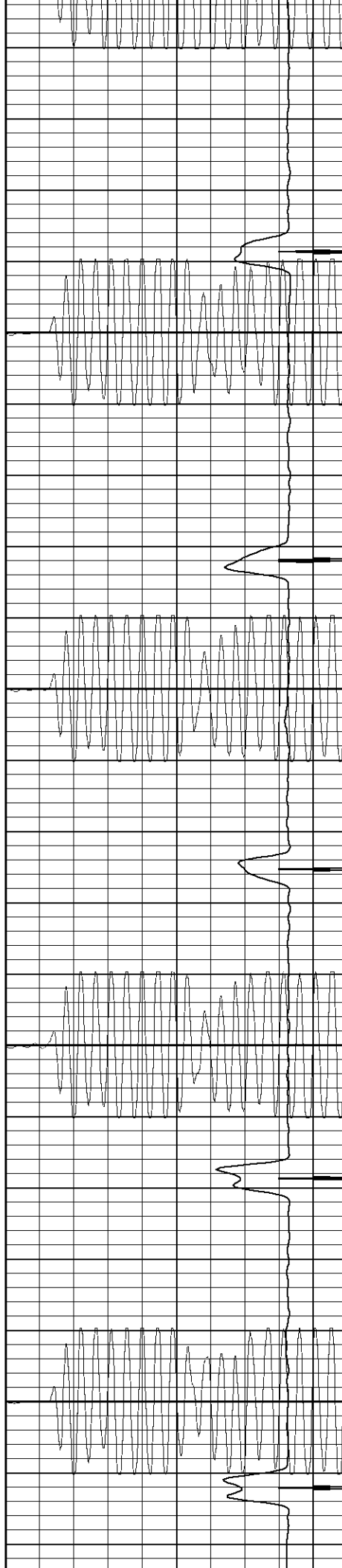


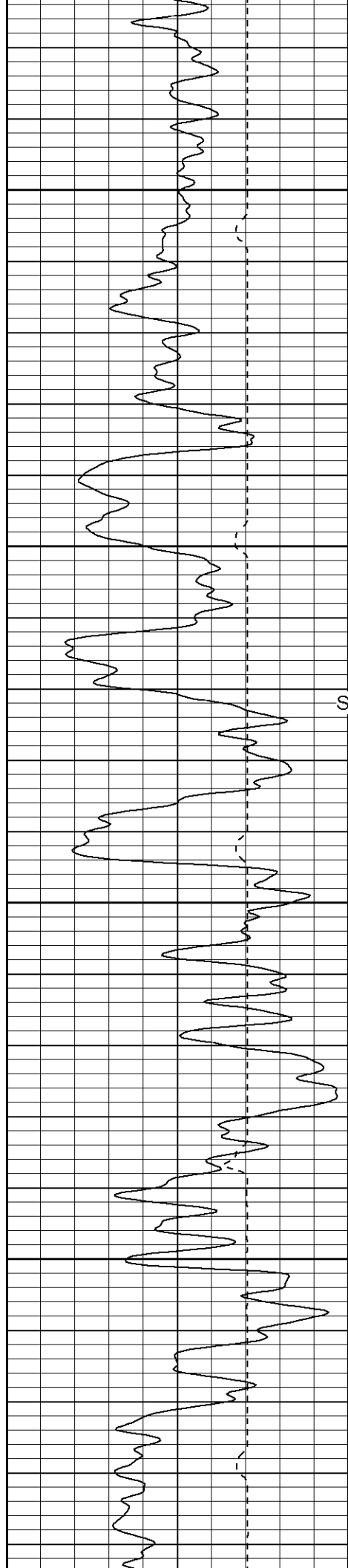
250

300

350

400





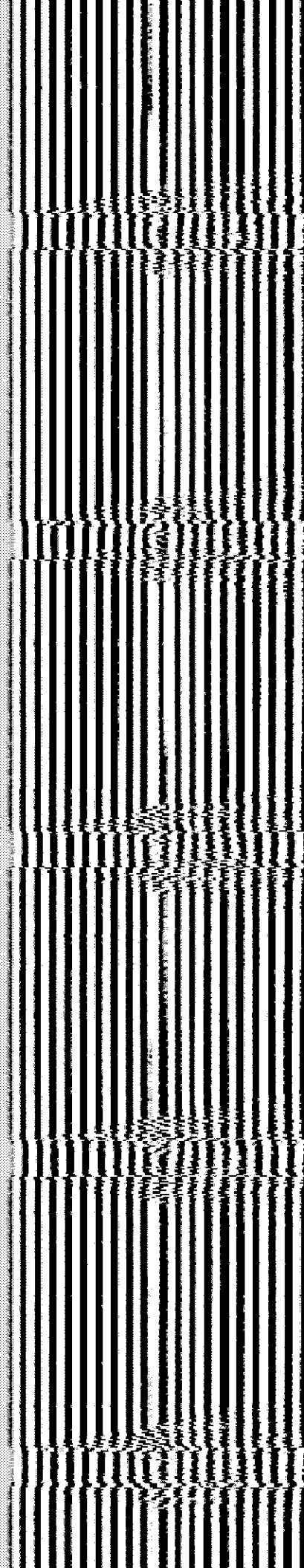
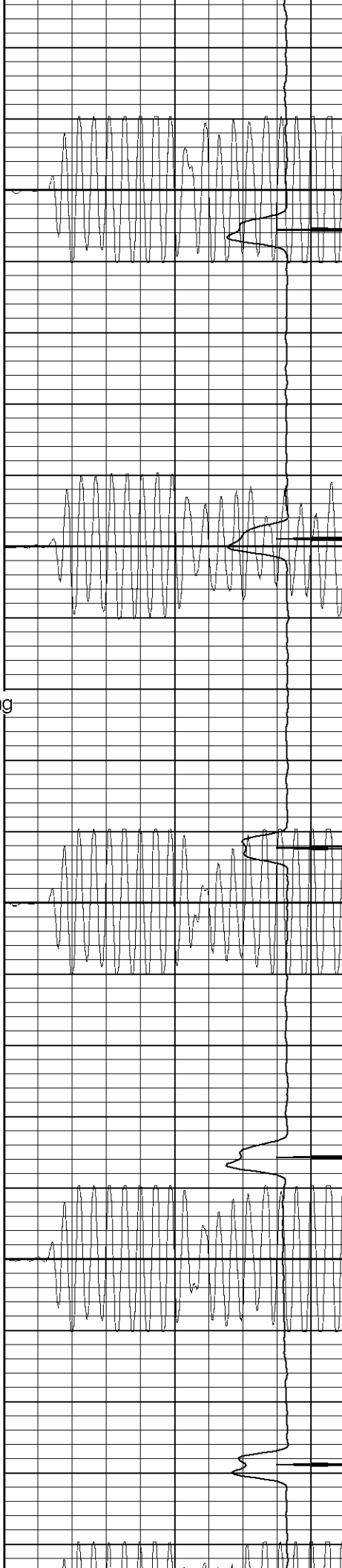
450

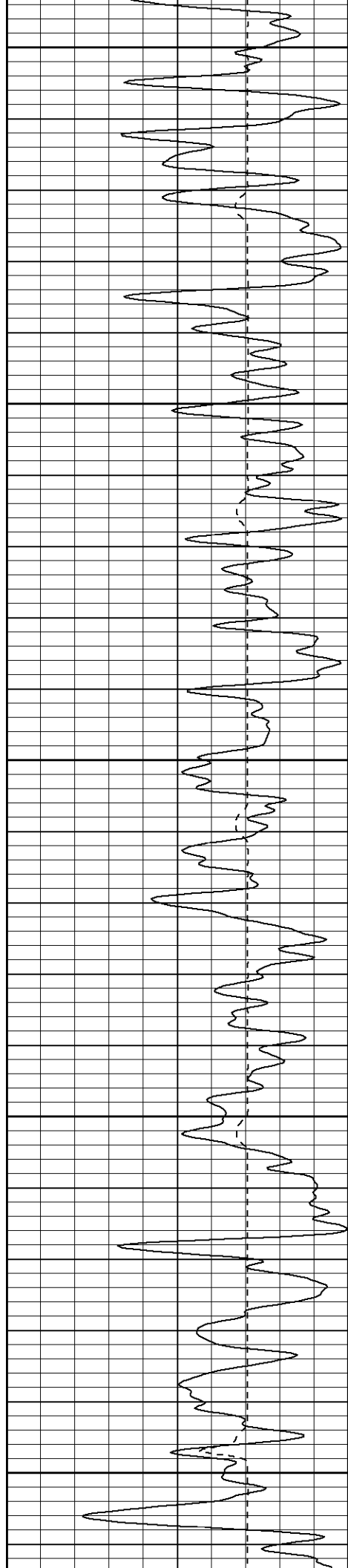
500

Surface Casing

550

600





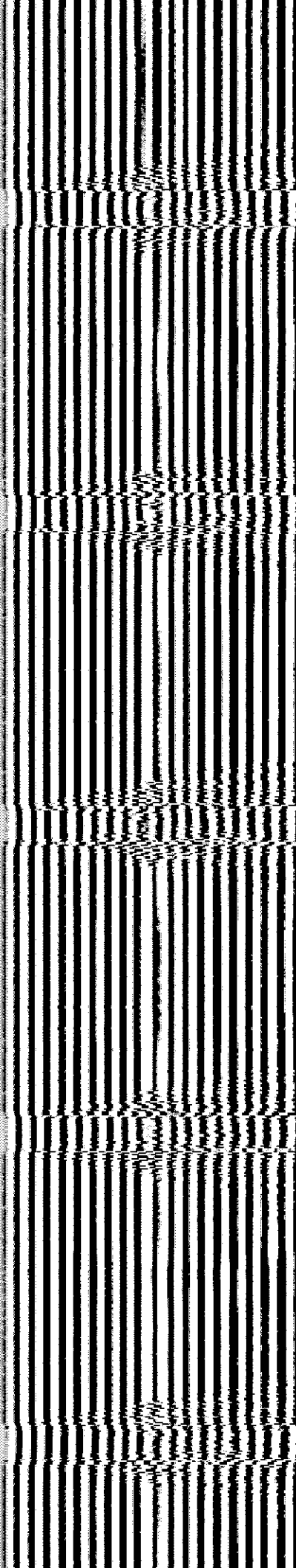
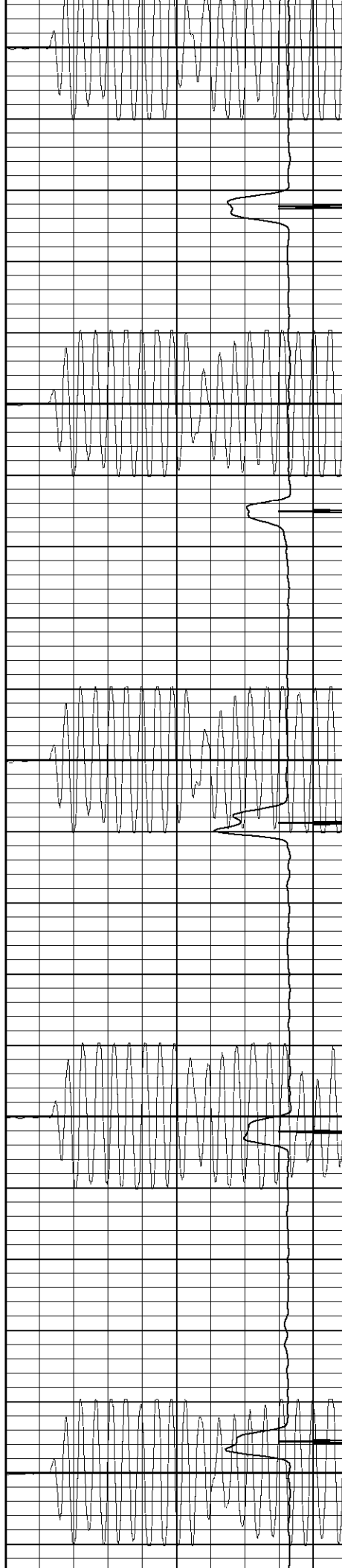
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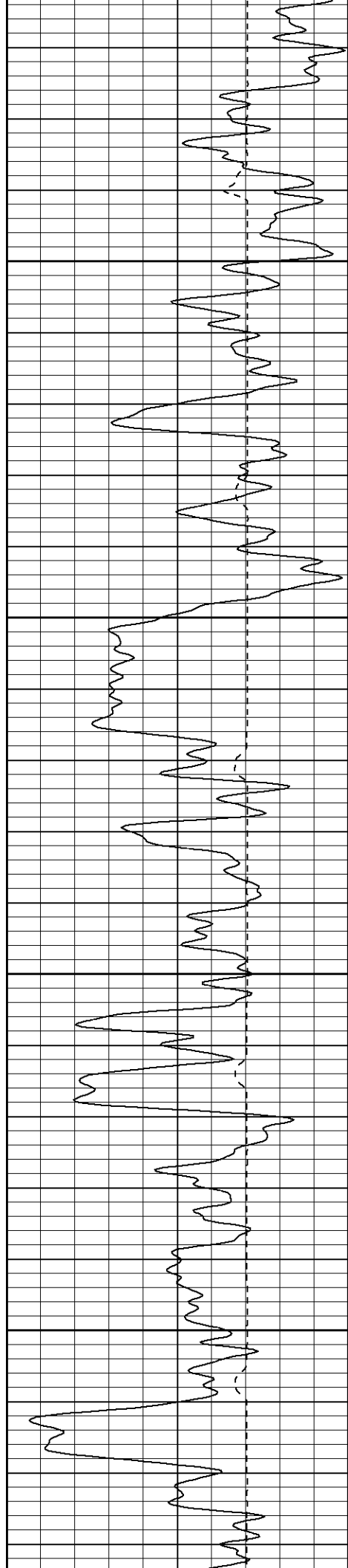
700

750

800

850



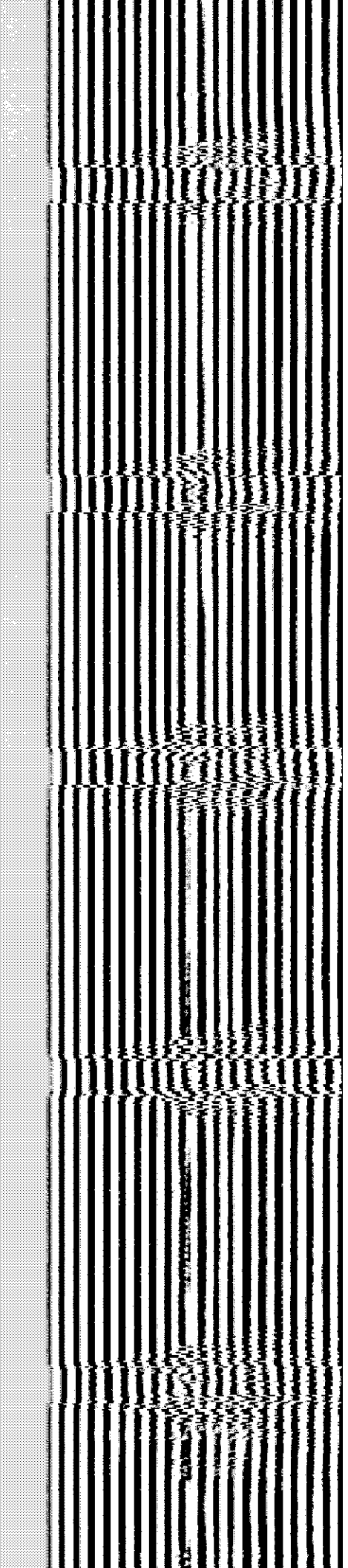
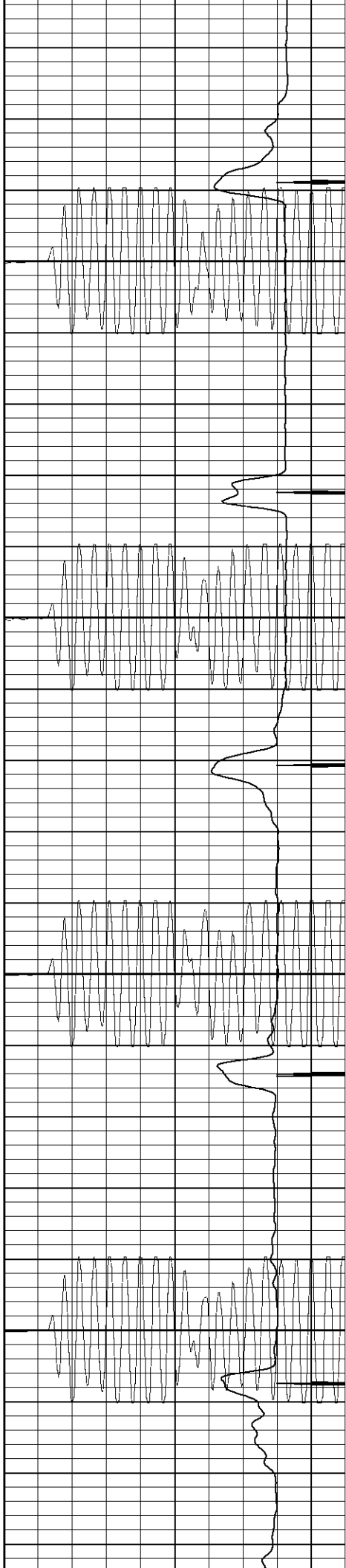


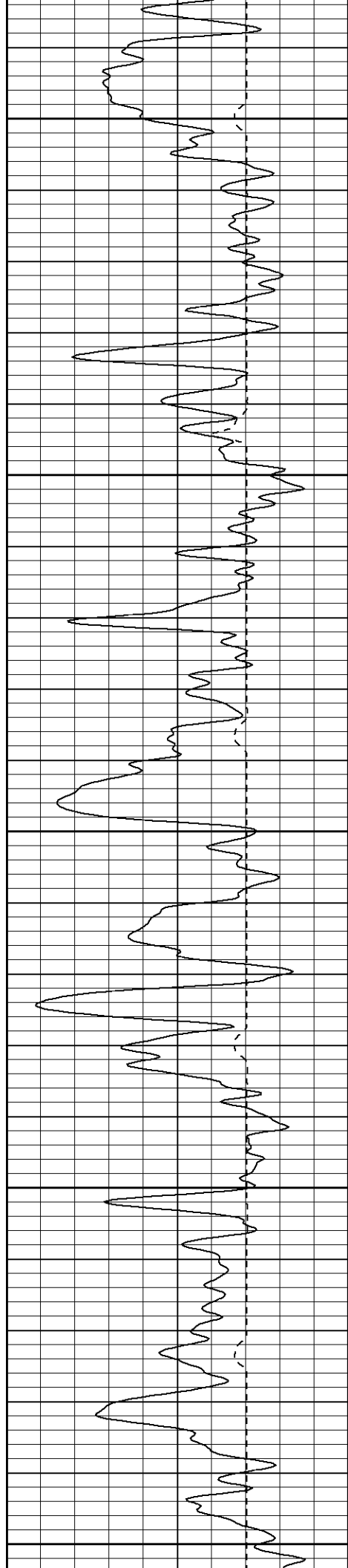
900

950

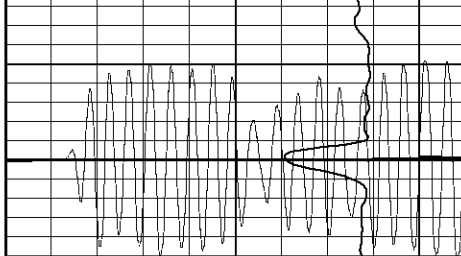
1000

1050





1100



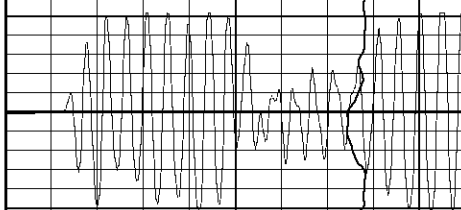
1150



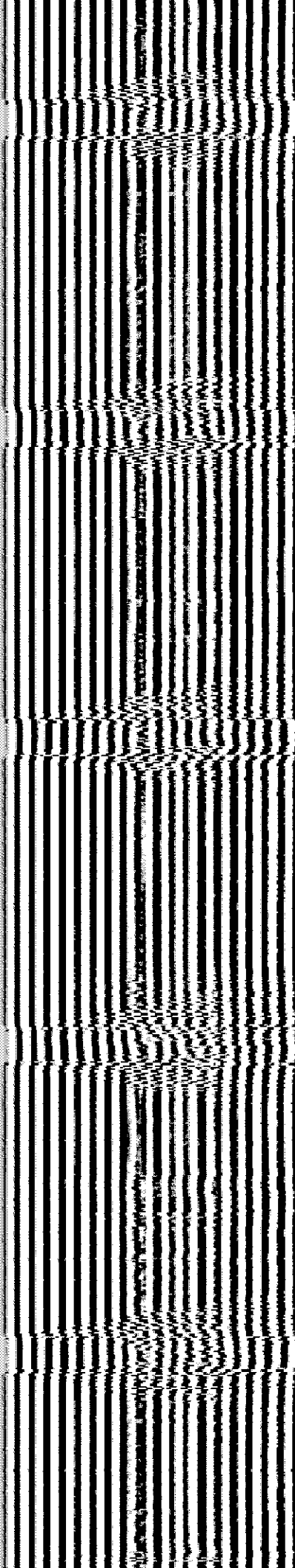
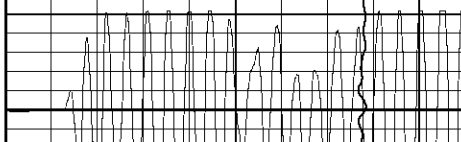
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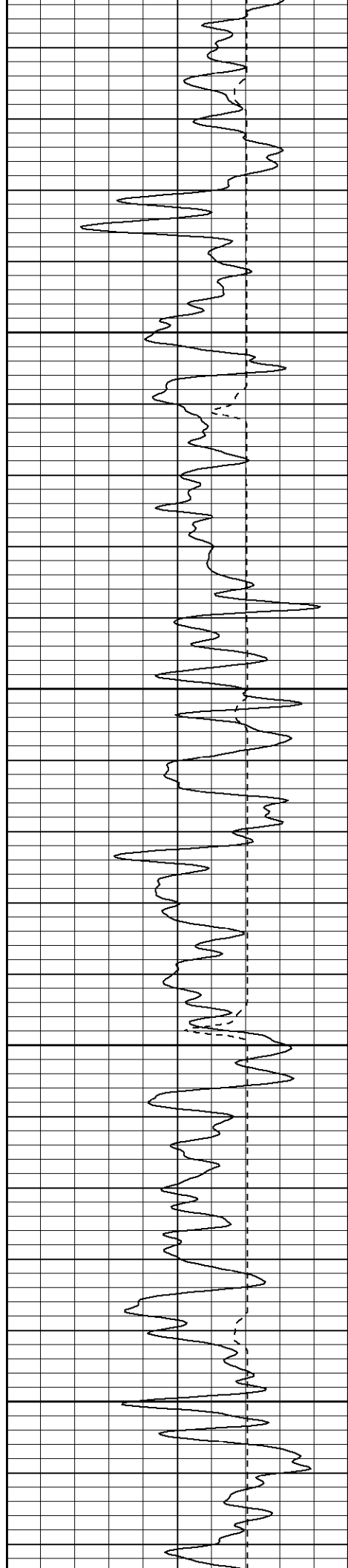


1250



1300



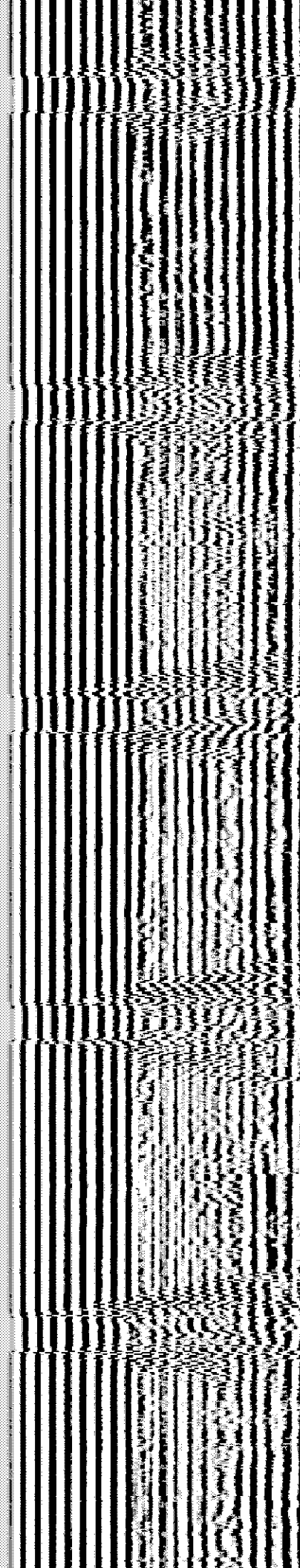
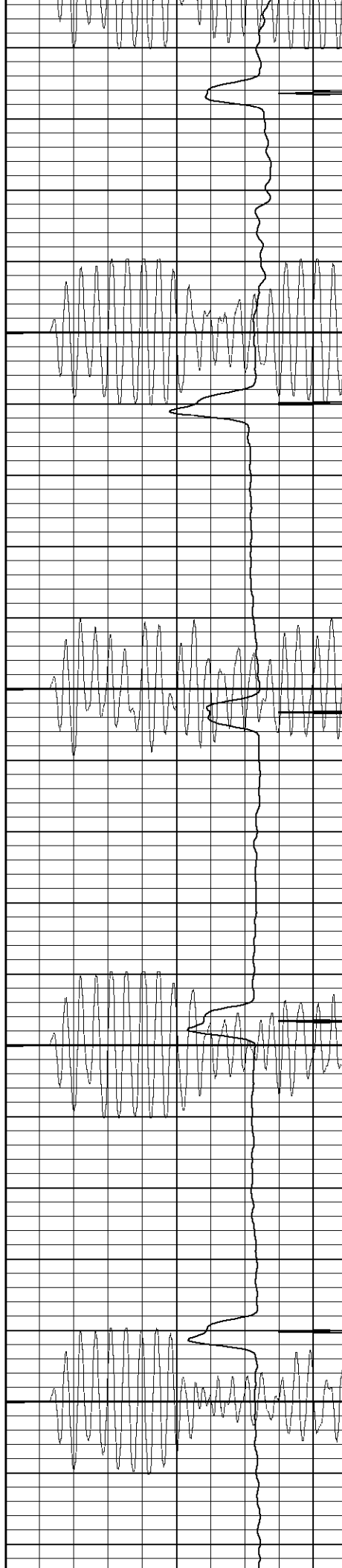


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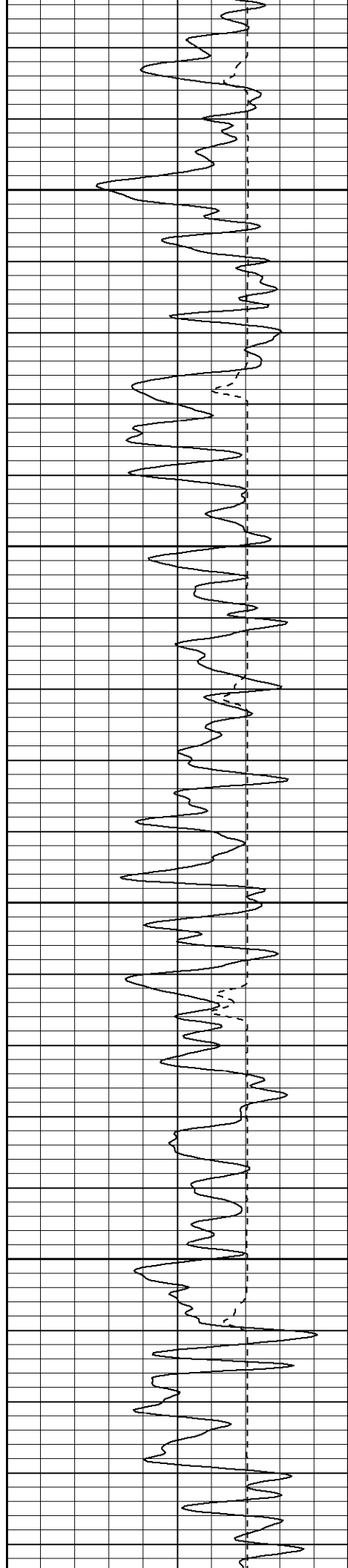
1400

1450

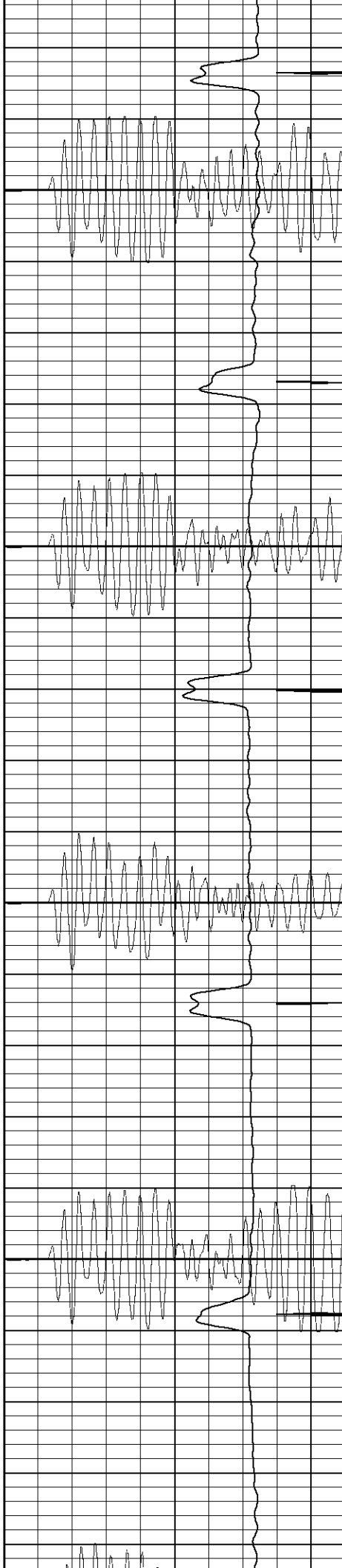
1500



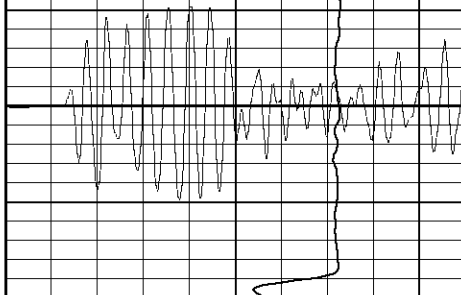




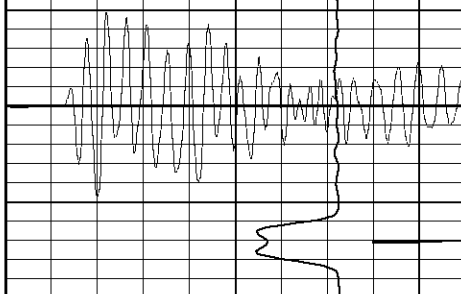
1550



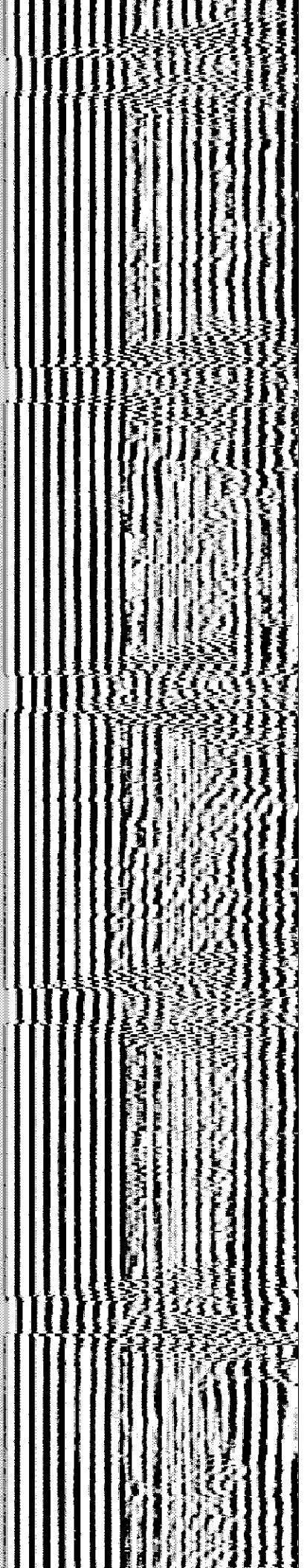
1600

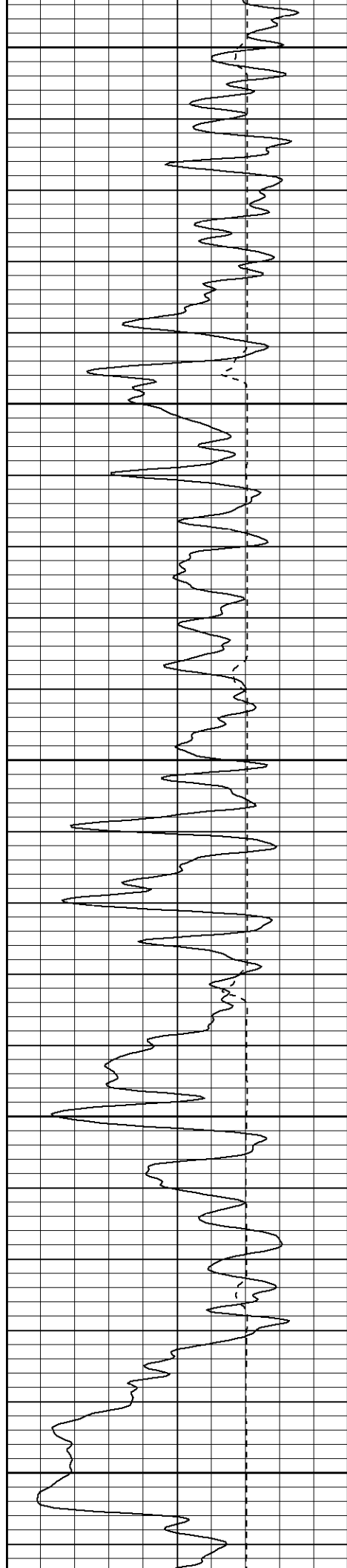


1650



1700





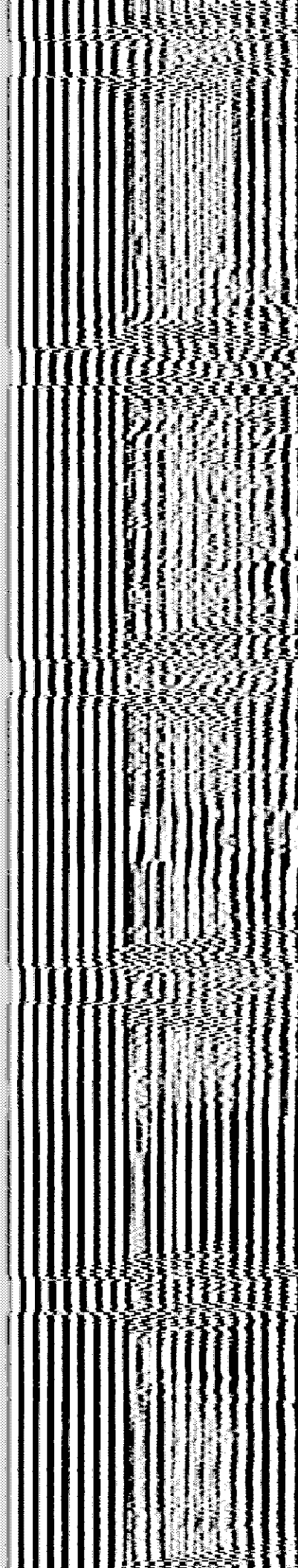
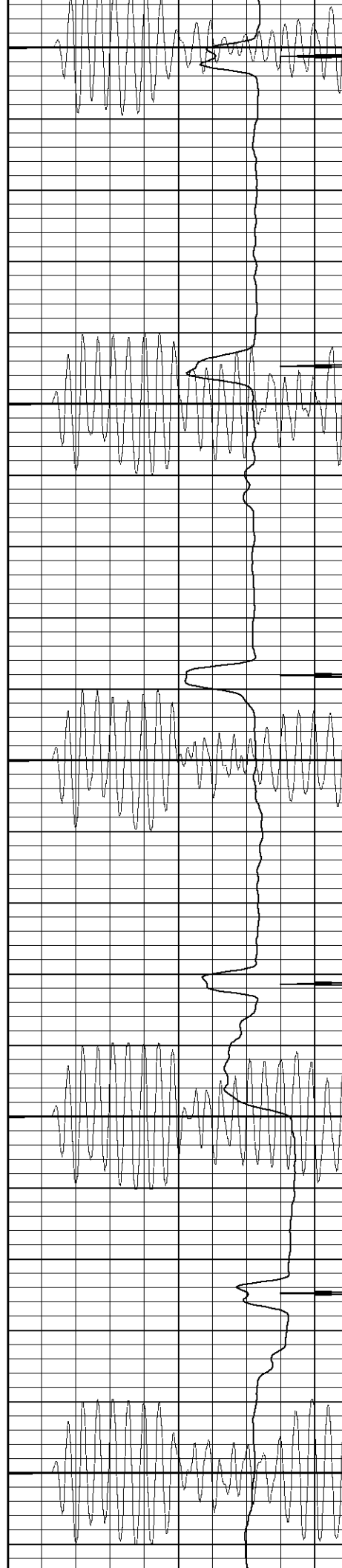
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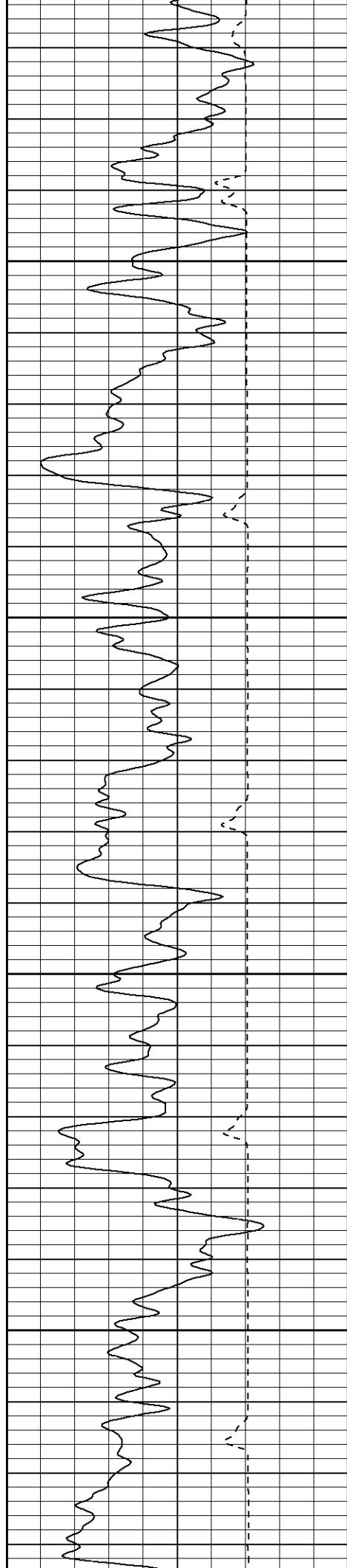
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1850

1900

1950



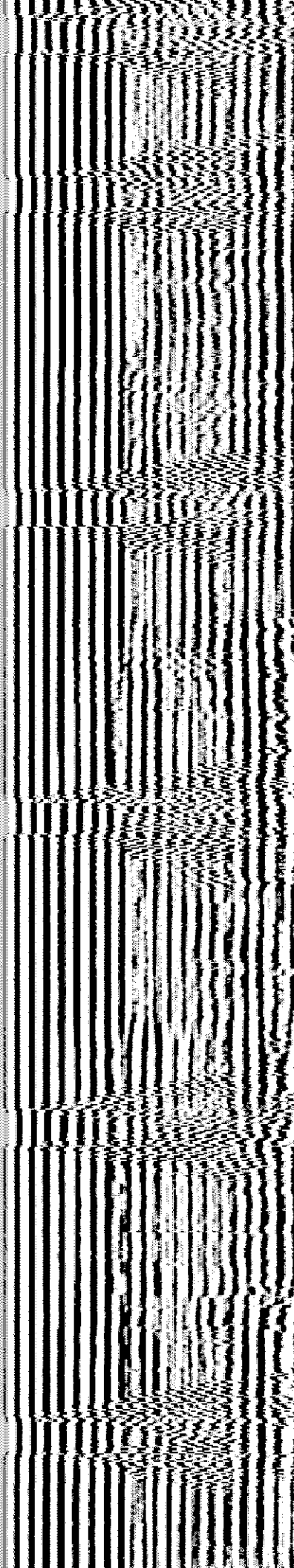
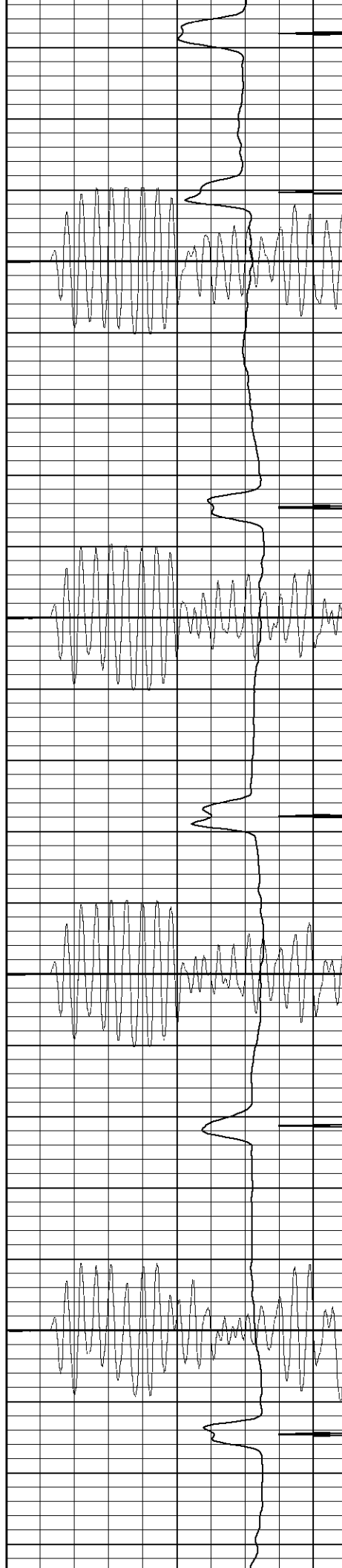


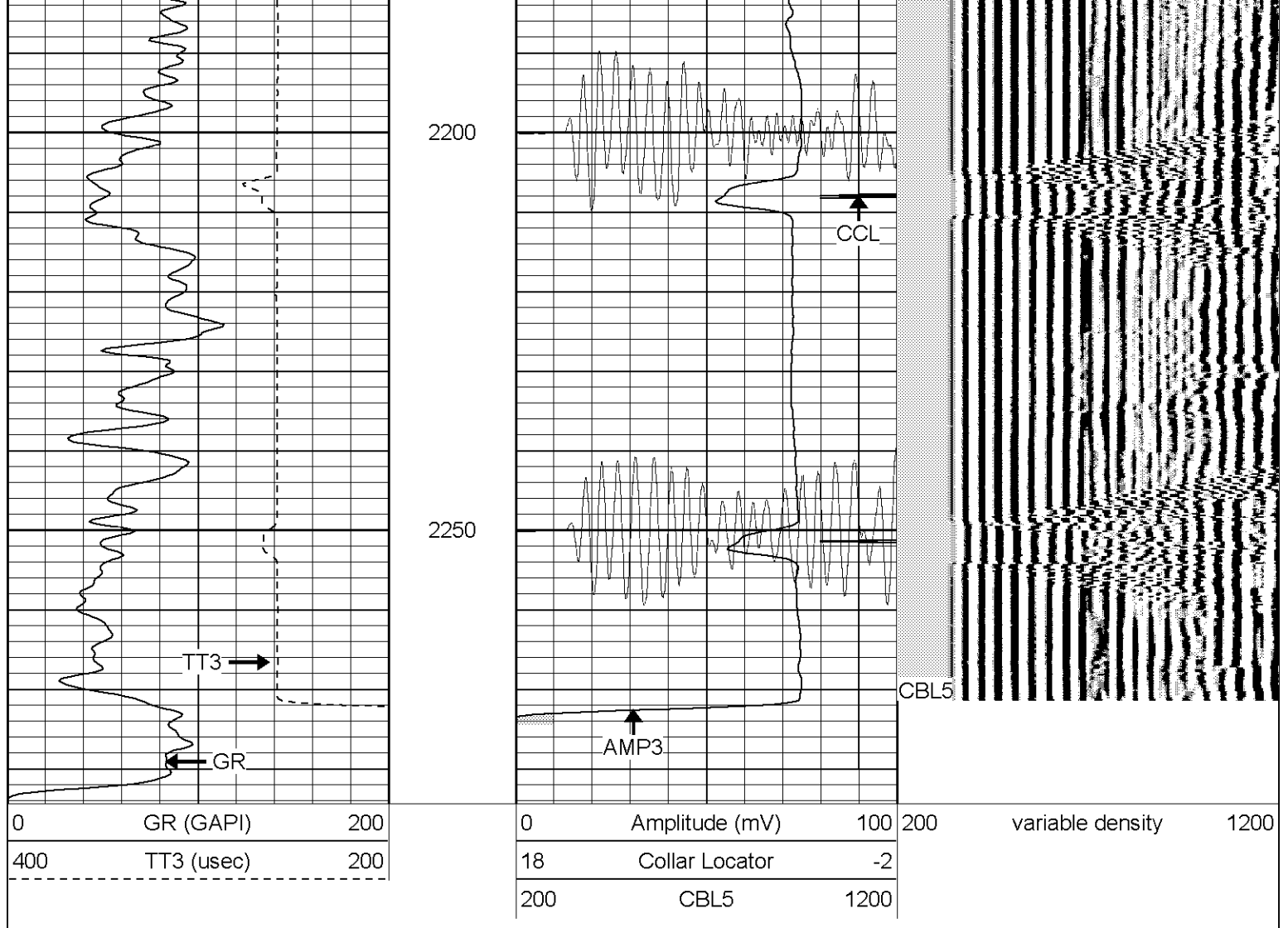
2000

2050

2100

2150





Gamma Ray Calibration Report			
Serial Number:	Titan3		
Tool Model:	T3		
Performed:	Thu Sep 30 14:36:38 2004		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	1.1000	GAPI/cps	

Cement Bond Log Calibration Report			
Serial Number:	Titan3		
Tool Model:	T3		
Performed:	Fri Oct 22 11:37:30 2004		
Depth:	2230.09	ft	
Casing Diameter:	5.5	in	
	3' Spacing	5' Spacing	
Signal Zero:	0	0	mV
Calibrated Amplitude:	85	85	mV
Reading at Signal Zero:	0.04	0.00917969	V
Reading in Free Pipe:	1.2	2.1	V
Gain:	73.2759	40.6539	

Offset:

-2.93103

-0.37319