



**SUPERIOR**  
WELL SERVICES  
Black Lick, Pa.  
Mercer, Pa.  
Wooster, Oh.  
Cleveland, Ok.  
Trinidad, Co.

## CEMENT BOND LOG

Company Pioneer Natural Resources  
Well Triumph 13-10 Tr  
Field Purgatoire River  
County Las Animas State Colorado

Location: API # : 05 071 09188 00

1485' FSL & 469' FWL

SEC 10 TWP 32S RGE 66W

Permanent Datum Ground Level Elevation 7343'  
Log Measured From Kelly Bushing 4' Above G.L.  
Drilling Measured From Kelly Bushing

Other Services  
temp  
deviation  
Elevation  
K.B. 7347'  
D.F. ---  
G.L. 7343'

Date 04-12-07

Run Number	One
Depth Driller	1695'
Depth Logger	1650'
Bottom Logged Interval	1648'
Top Log Interval	Surface
Open Hole Size	7.875"
Type Fluid	Water
Density / Viscosity	///
Max. Recorded Temp.	91
Estimated Cement Top	Surface
Time Well Ready	Portable Mast
Time Logger on Bottom	11:00 a.m.
Equipment Number	T701
Location	Trinidad
Recorded By	Larry Smith
Witnessed By	

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"						
Prot. String							
Production String							
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

1.5 degree Deviation @ 1650'  
Well Directions:

Agulara exit, go to Gulnare, continue straight past bar, left at the gravel pit, right across thed creek, up Healy hill, at bottom of 4way stay left thru gate, first right , first left towards the croc,first left to location well on left hand side



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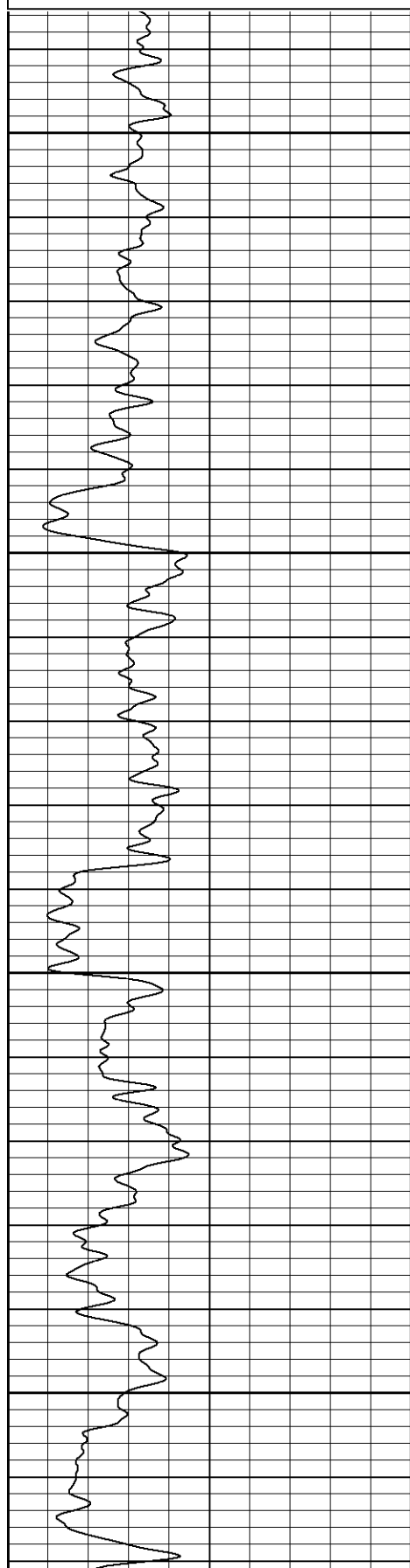
# Main Pass

Database File: triumphtr041207b.db  
Dataset Pathname: pass2  
Presentation Format: cblrt  
Dataset Creation: Thu Apr 12 11:09:00 2007 by Log Open-Cased 061129  
Charted by: Depth in Feet scaled 1:240

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

0	AMP3 (mV)	100
18	CCL	-2
100	CBL5	1200

200	Variable Density	1200
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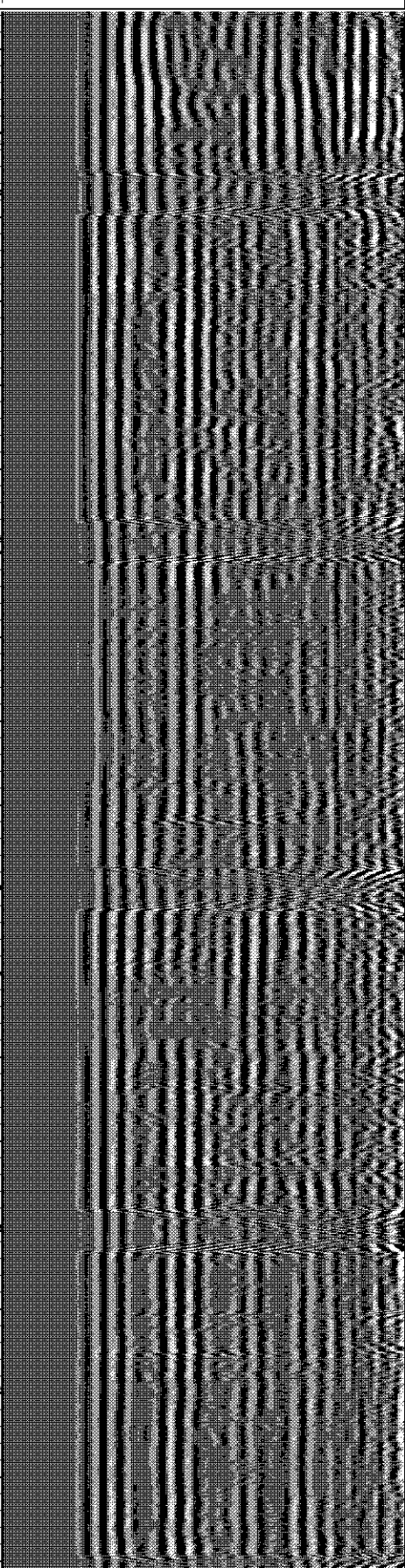
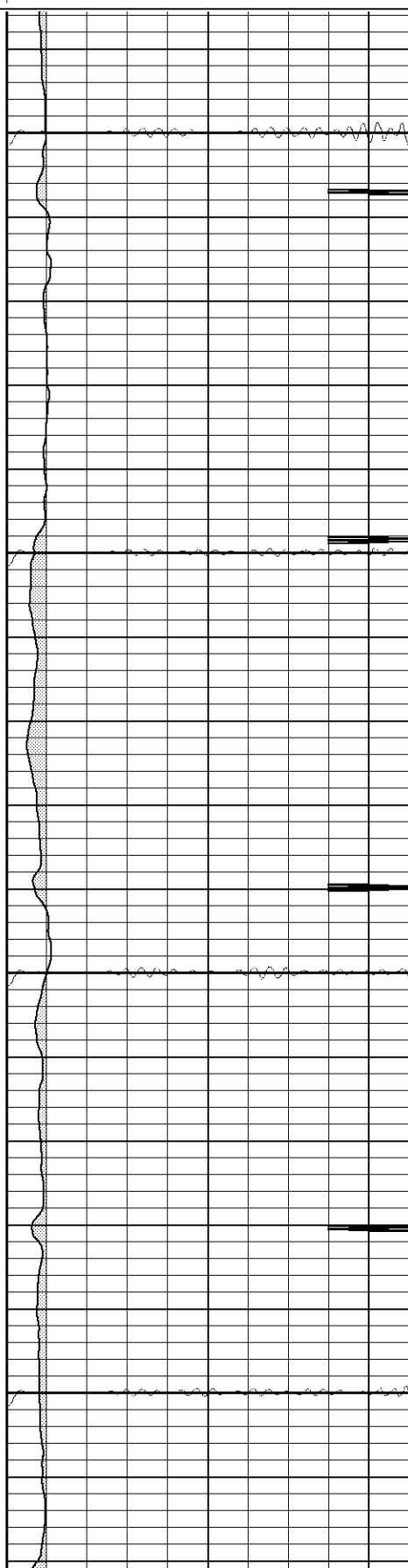


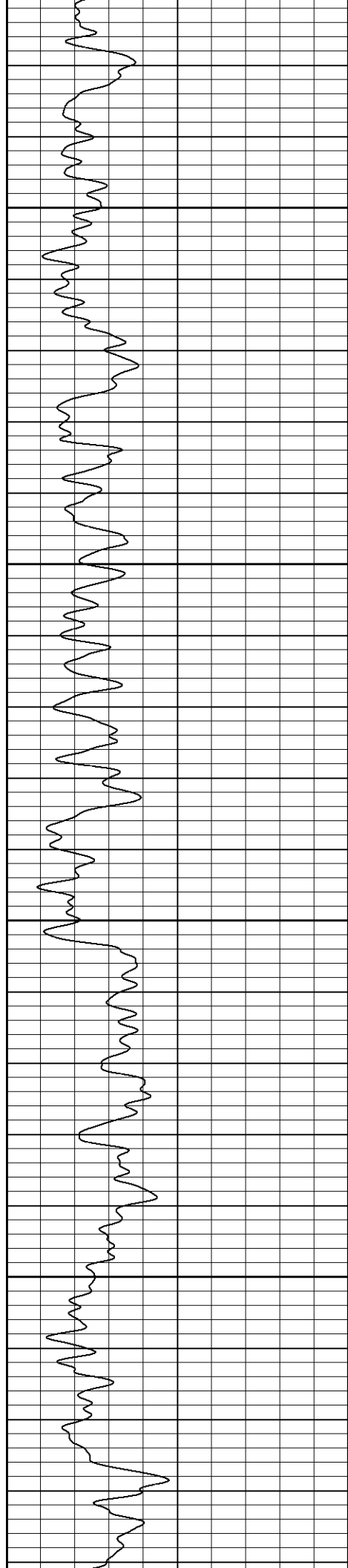
50

100

150

200



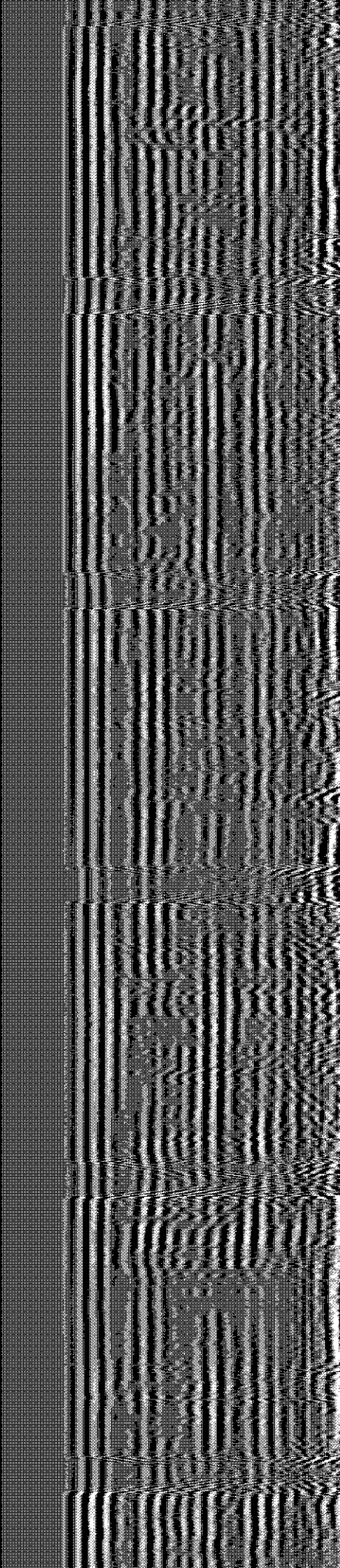
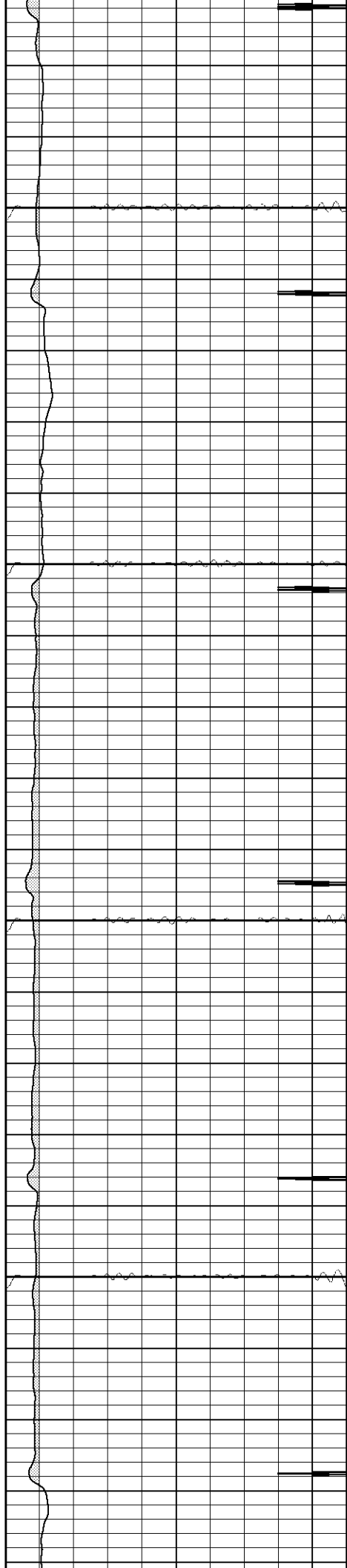


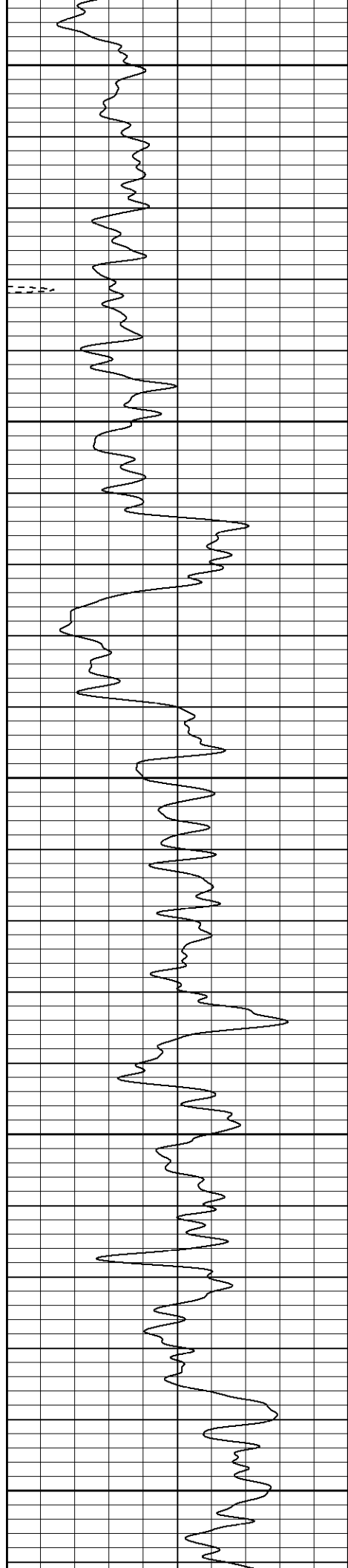
250

300

350

400





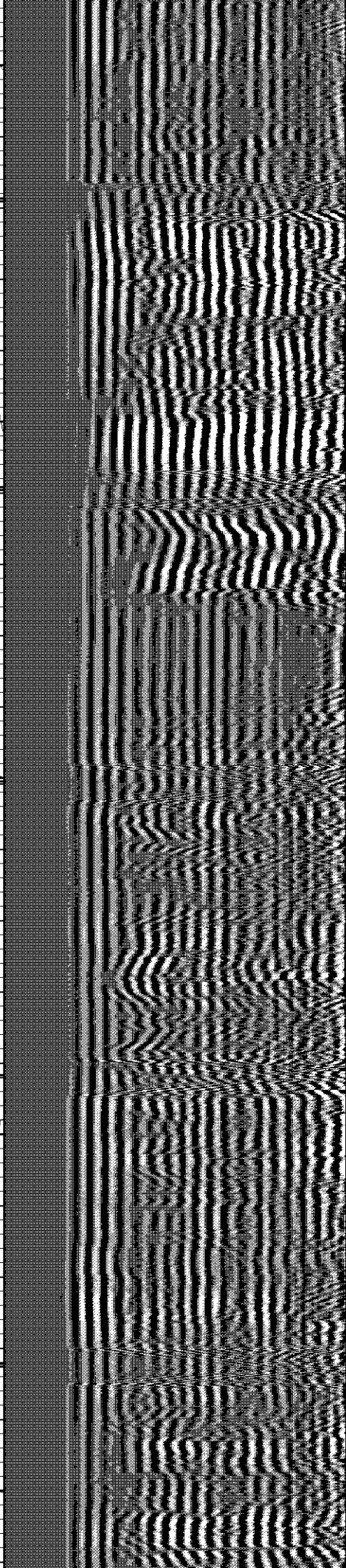
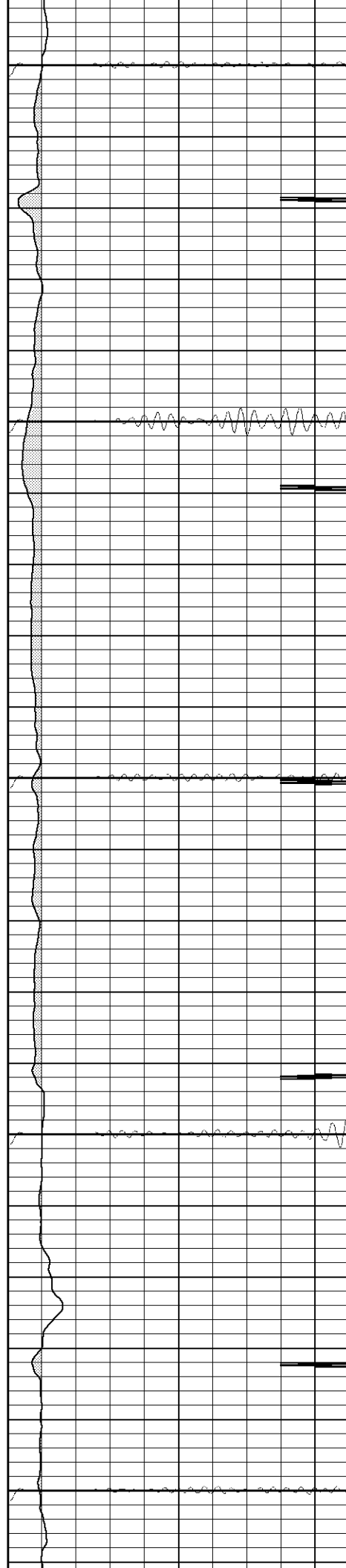
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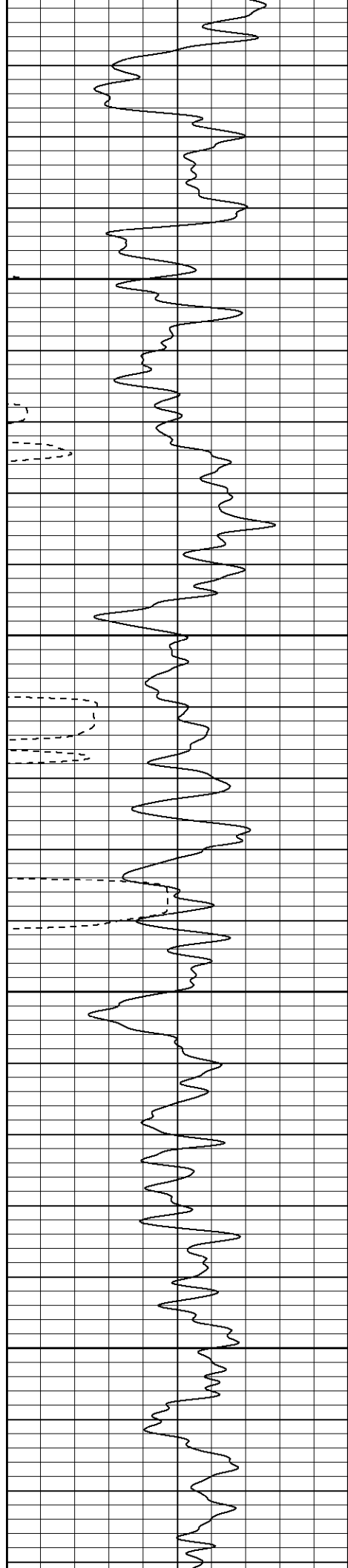
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550

600

650



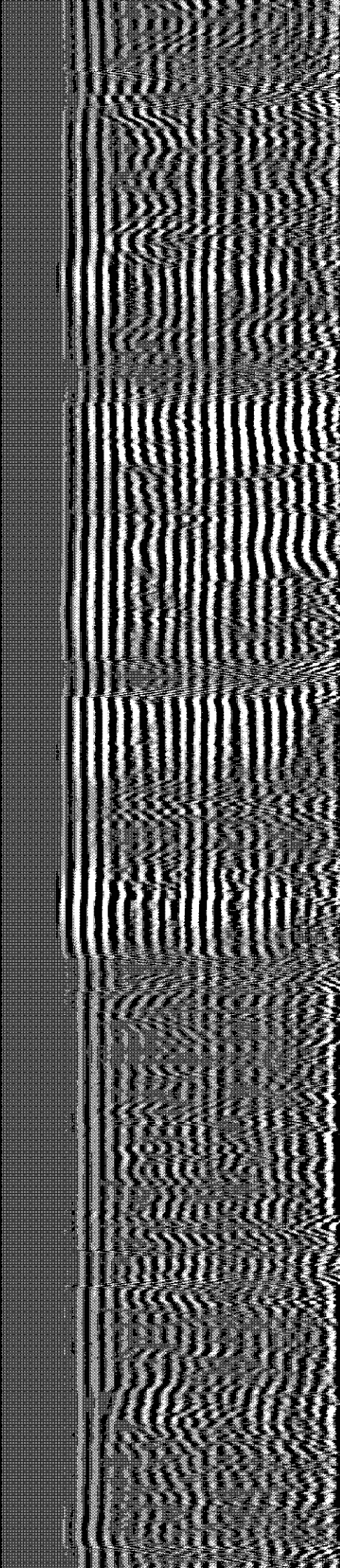
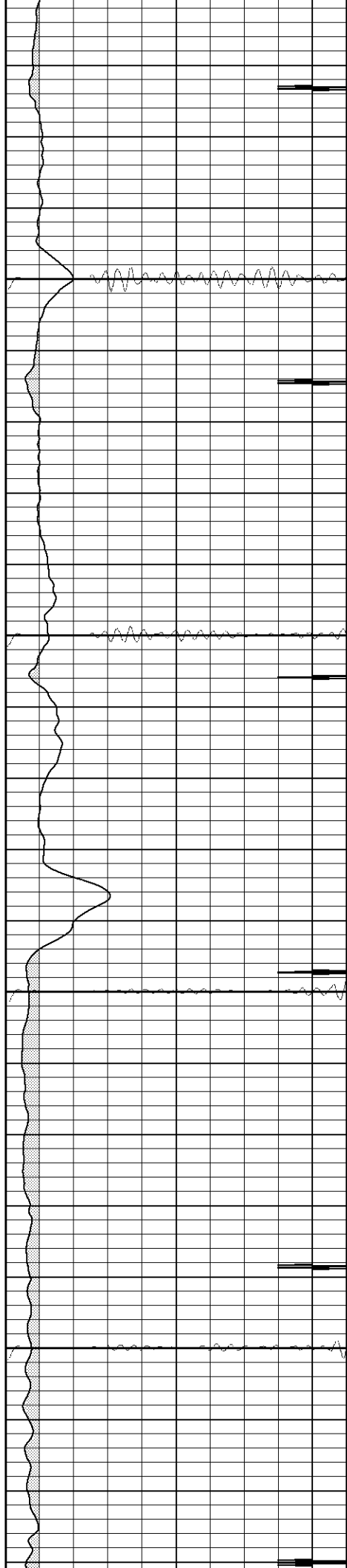


700

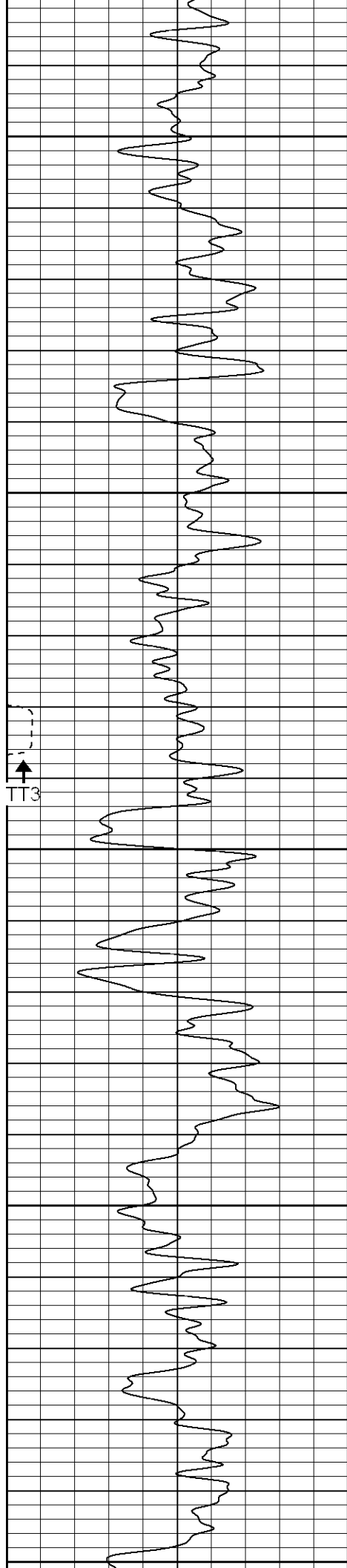
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800

850







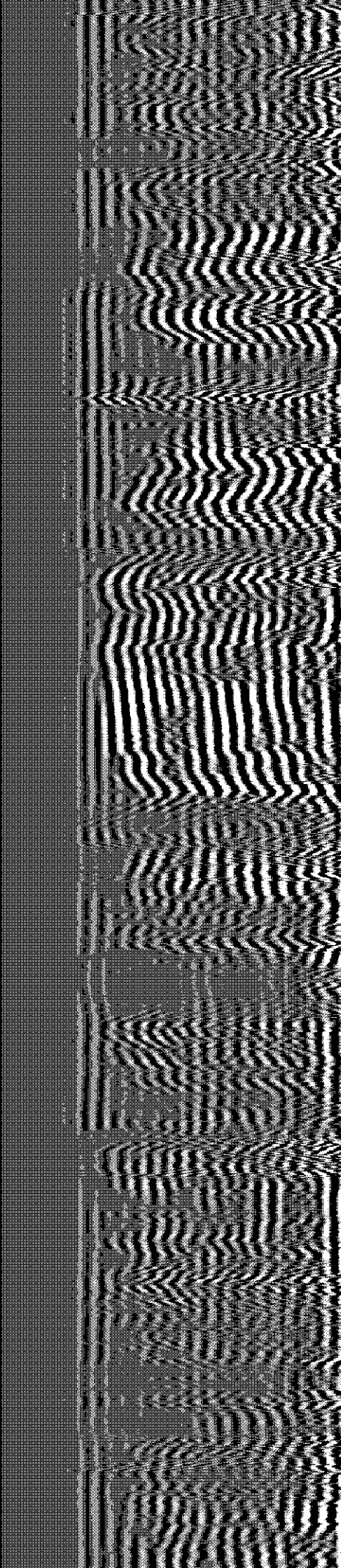
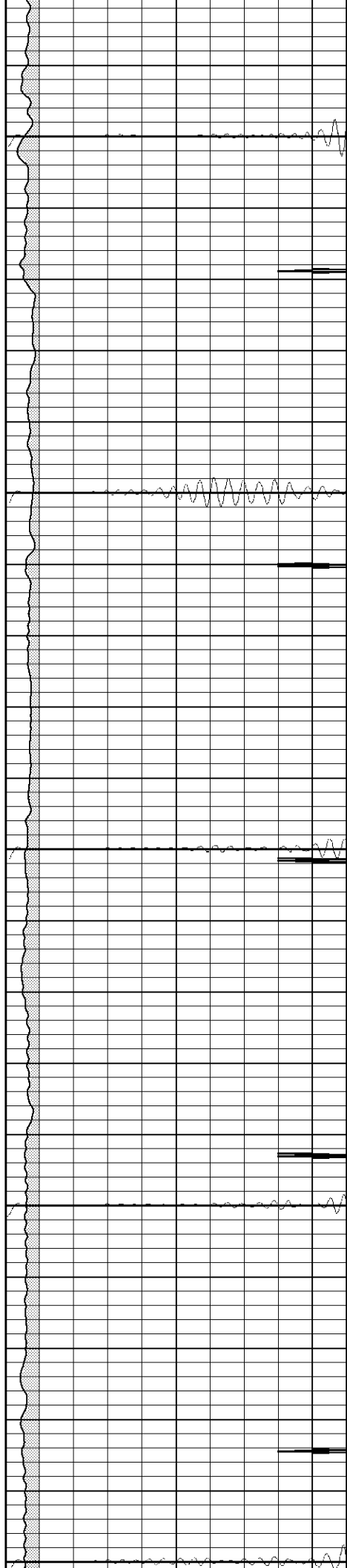
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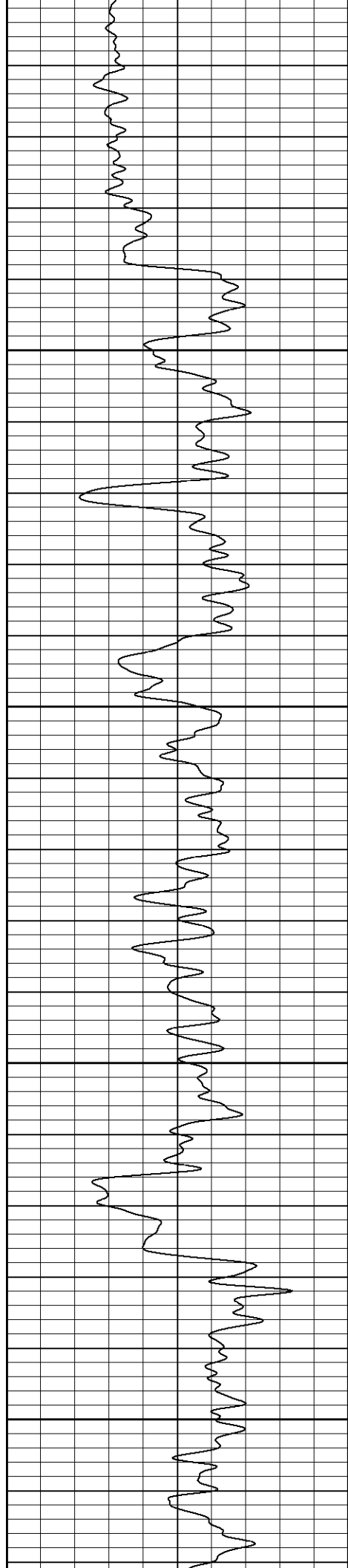
950

1000

1050

1100



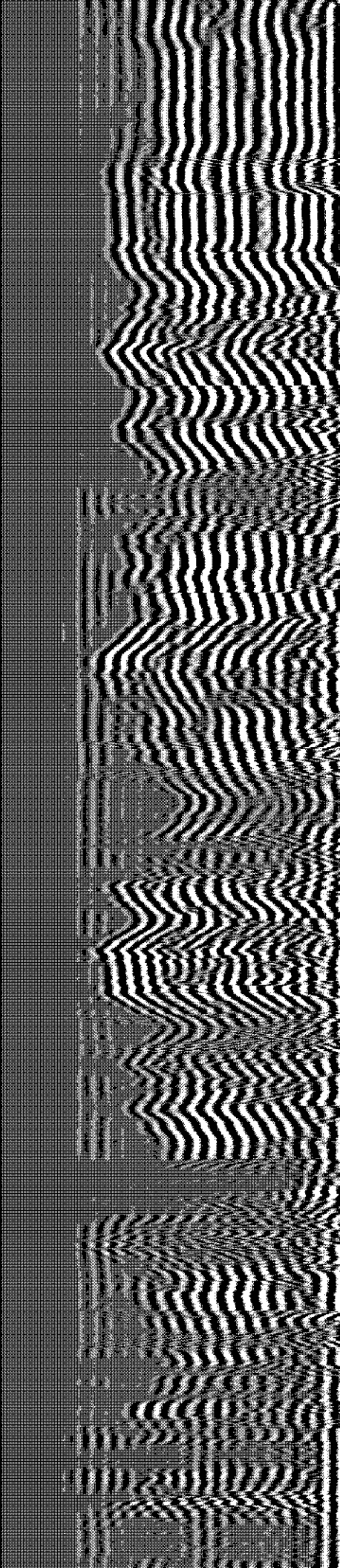
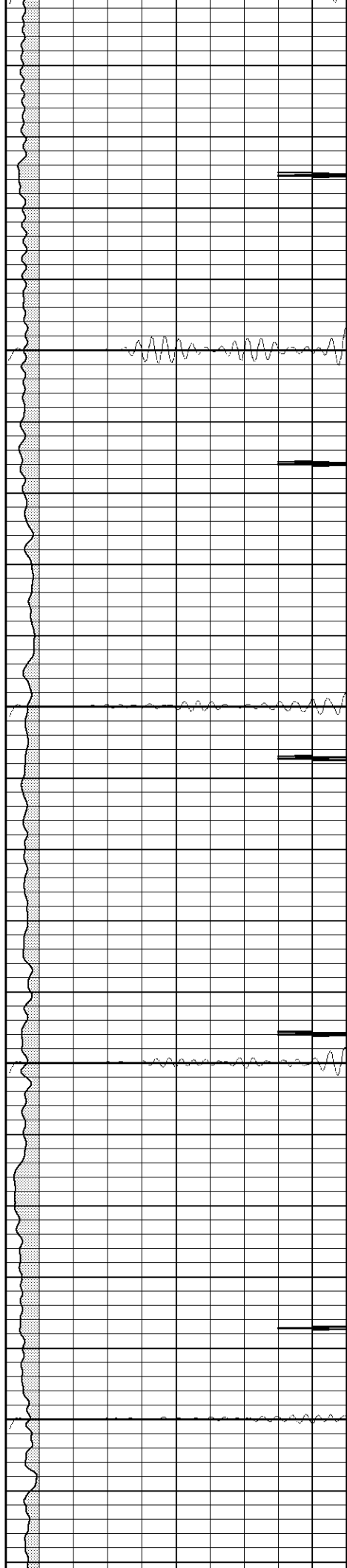


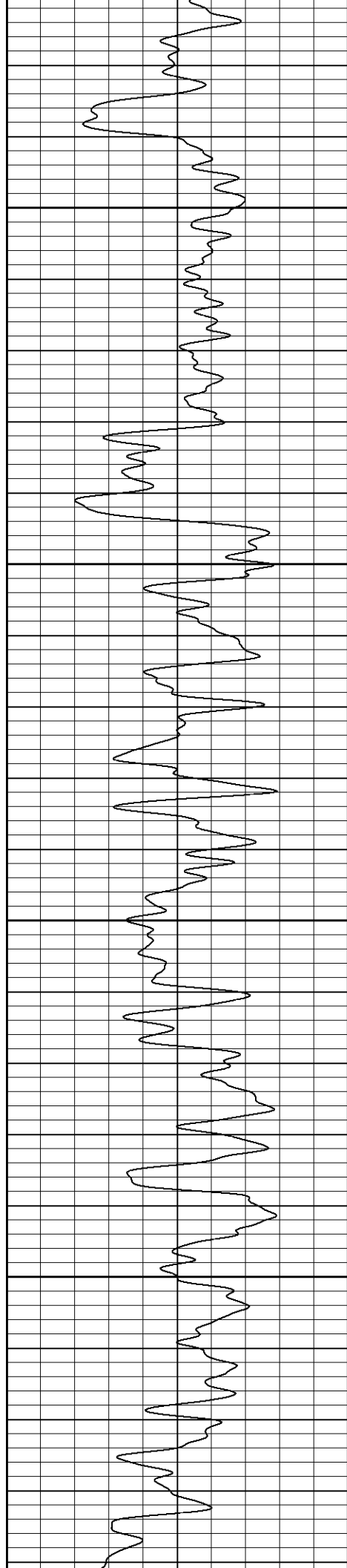
1150

1200

1250

1300



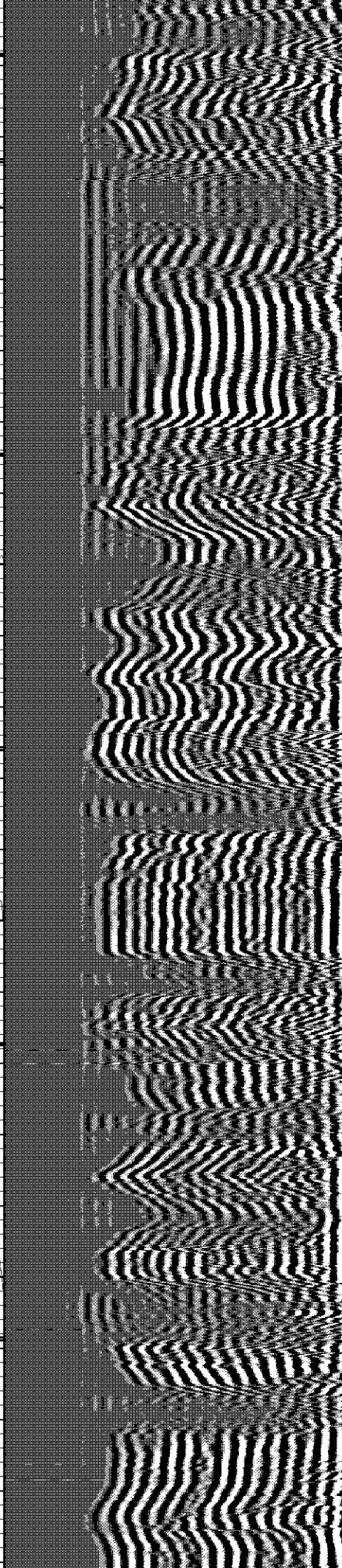
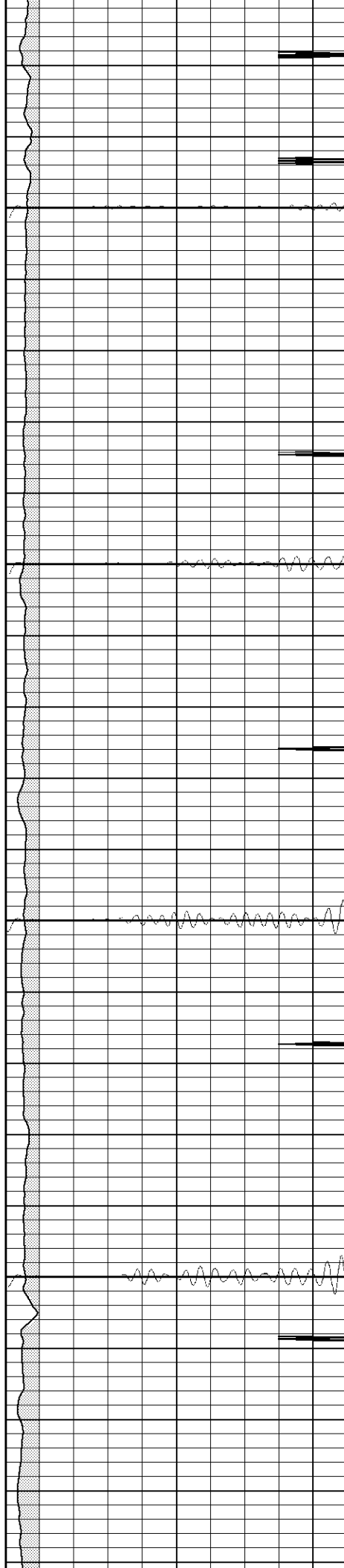


1350

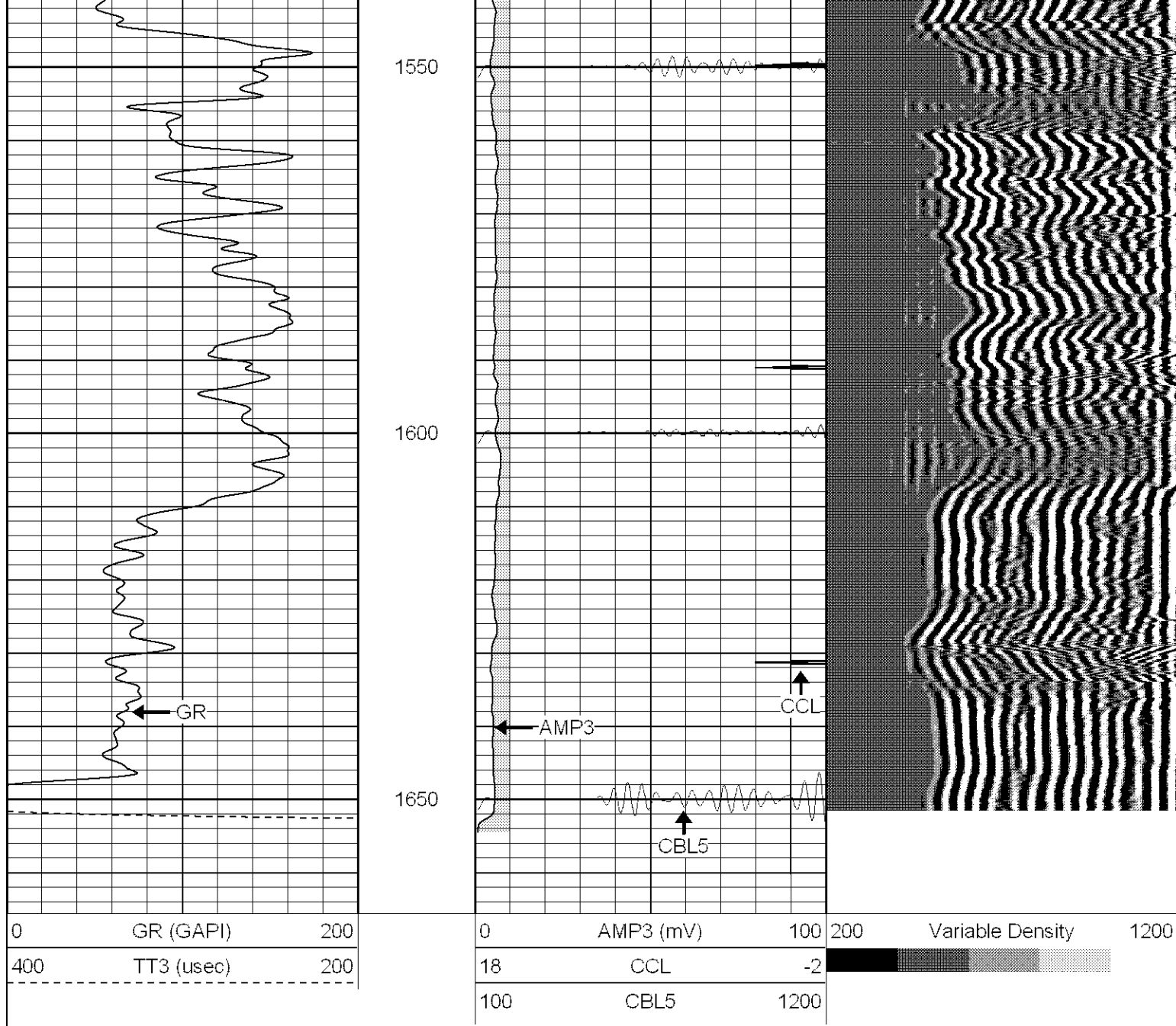
1400

1450

1500







**SUPERIOR**

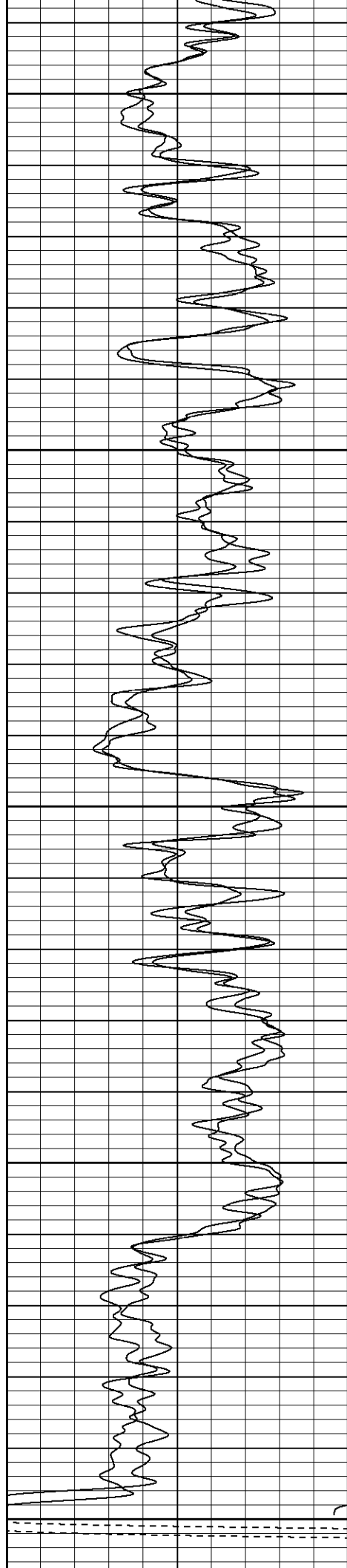
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# Repeat Section

Database File: triumphtr041207b.db  
Dataset Pathname: pass1  
Presentation Format: cblrt  
Dataset Creation: Thu Apr 12 11:00:44 2007 by Log Open-Cased 061129  
Charted by: Depth in Feet scaled 1:240

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

0	AMP3 (mV)	100	200	Variable Density	1200
18	CCL	-2			
100	CBL5	1200			
100	CBL5-repeat	1200			
0	AMP3-repeat (mV)	100			
18	CCL-repeat	-2			



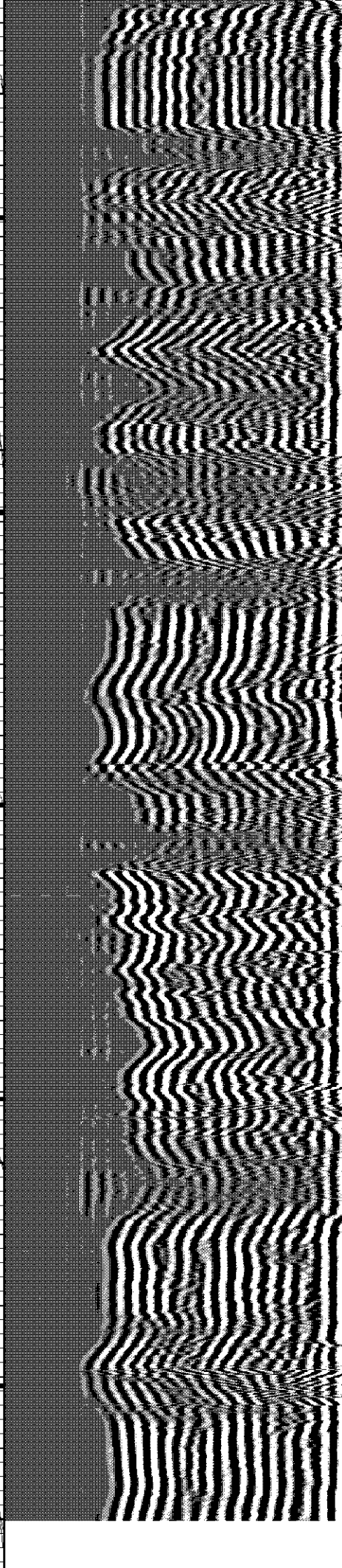
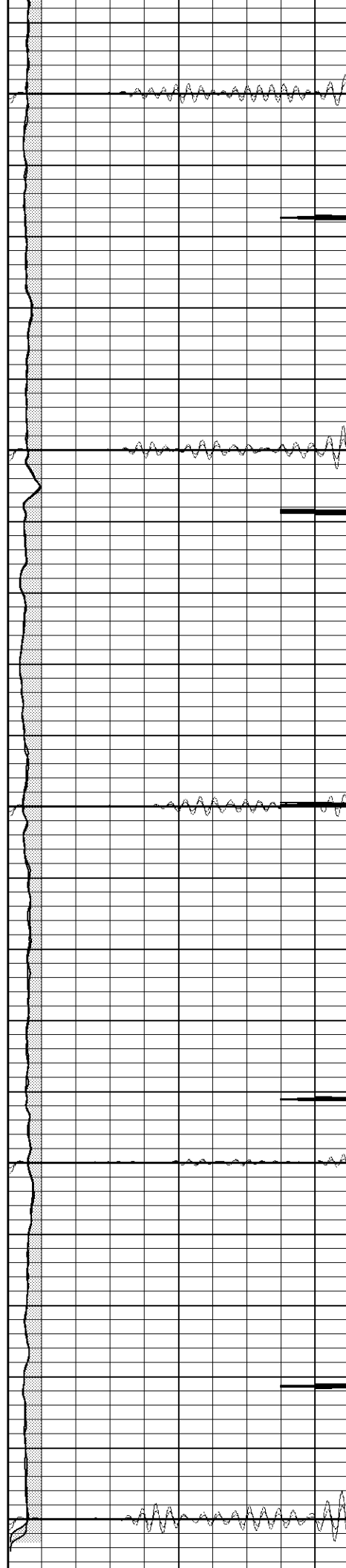
1450

1500

1550

1600

1650



0	GR (GAPI)	200	0	AMP3 (mV)	100	200	Variable Density	1200
400	TT3 (usec)	200	18	CCL	-2			
0	GR-repeat (GAPI)	200	100	CBL5	1200			
400	TT3-repeat (usec)	200	100	CBL5-repeat	1200			
			0	AMP3-repeat (mV)	100			
			18	CCL-repeat	-2			

# Calibration Report

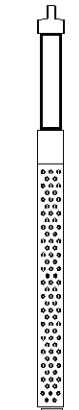
Database File: triumphtr041207b.db  
Dataset Pathname: pass2  
Dataset Creation: Thu Apr 12 11:09:00 2007 by Log Open-Cased 061129

# Cement Bond Log Calibration Report

Serial Number:	Titan2		
Tool Model:	2		
Performed:	Tue Apr 03 12:22:40 2007		
Depth:	131.206	ft	
Casing Diameter:	5.5	in	
	3' Spacing	5' Spacing	
Signal Zero:	1	1	mV
Calibrated Amplitude:	85	85	mV
Reading at Signal Zero:	0.00546875	0.00556641	V
Reading in Free Pipe:	1.91	1.48699	V
Gain:	44.1053	56.7022	
Offset:	1	0.684372	

# Gamma Ray Calibration Report

Serial Number:	TITAN2POINT	
Tool Model:	T2POINT	
Performed:	Mon Apr 02 12:28:07 2007	
Calibrator Value:	240.0	GAPI
Background Reading:	40.0	cps
Calibrator Reading:	200.0	cps
Sensitivity:	1.0500	GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	18.06		None	0.75	1.50	5.00
			GR-T2POINT (TITAN2POINT)	2.52	2.44	25.00
WVF5	13.91		CBL-2 (Titan2)	7.23	2.44	110.00
WVF3	12.91					
			X	2.00	1.60	25.00

