



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

## CEMENT BOND LOG

Company Pioneer Natural Resources  
Well Iceman Deep 33-19  
Field Purgatorie River  
County Las Animas State CO

Location: API # : 05 071 09219 00

2096' FSL & 2071' FEL

SEC 19 TWP 32S RGE 67W

Permanent Datum GROUND LEVEL Elevation 8024'  
Log Measured From KELLY BUSHING 11' ABOVE G.L.  
Drilling Measured From KELLY BUSHING

Other Services  
Elevation  
K.B. 8035'  
D.F. 8034'  
G.L. 8024'

Date 5-16-07

Run Number	ONE
Depth Driller	6500'
Depth Logger	6458'
Bottom Logged Interval	6456'
Top Log Interval	2890'
Open Hole Size	7.875
Type Fluid	WATER
Density / Viscosity	///
Max. Recorded Temp.	///
Estimated Cement Top	///
Time Well Ready	Portable Mast
Time Logger on Bottom	1:00PM
Equipment Number	T0699
Location	Trinidad
Recorded By	J. Sinerros
Witnessed By	

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record	Size	Wgt/Ft	Top	Bottom			
Surface String	8.625"			3170'			
Prot. String							
Production String	5.5"						
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

Wet Canyon to San Pablo Gate, go past Dude Canyon Road, second right,  
first left, second right to location



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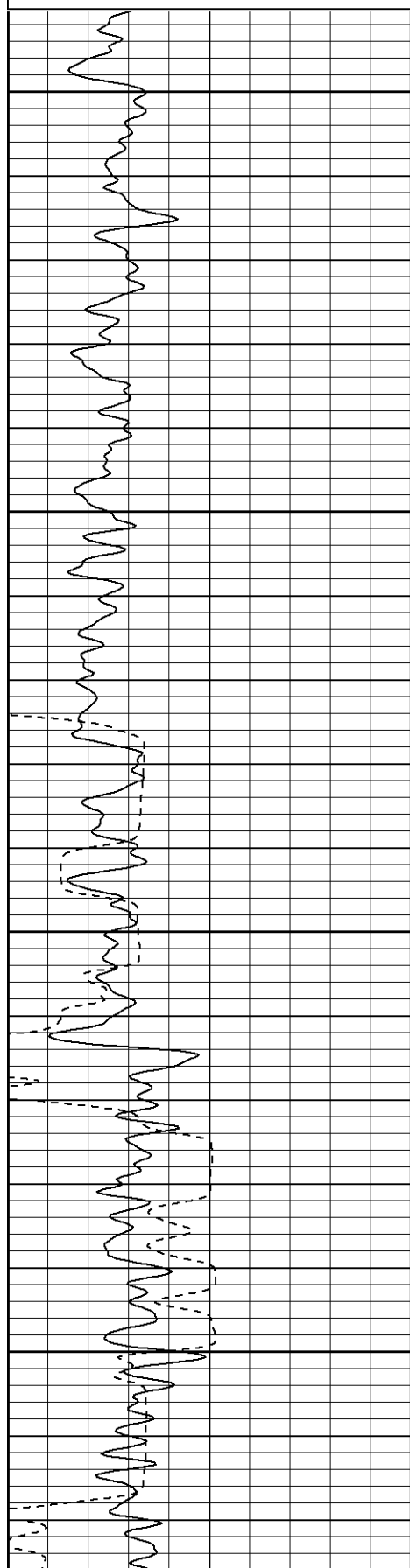
# Main Pass

Database File: icemandeep51607b.db  
Dataset Pathname: pass13  
Presentation Format: cb1t2  
Dataset Creation: Wed May 16 14:44:04 2007 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

variable density

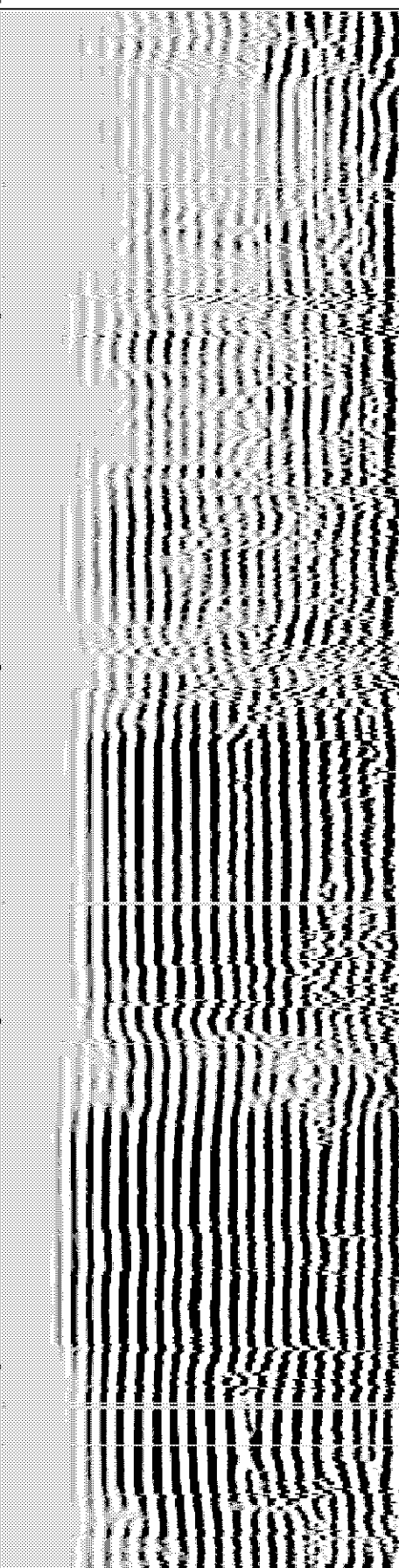
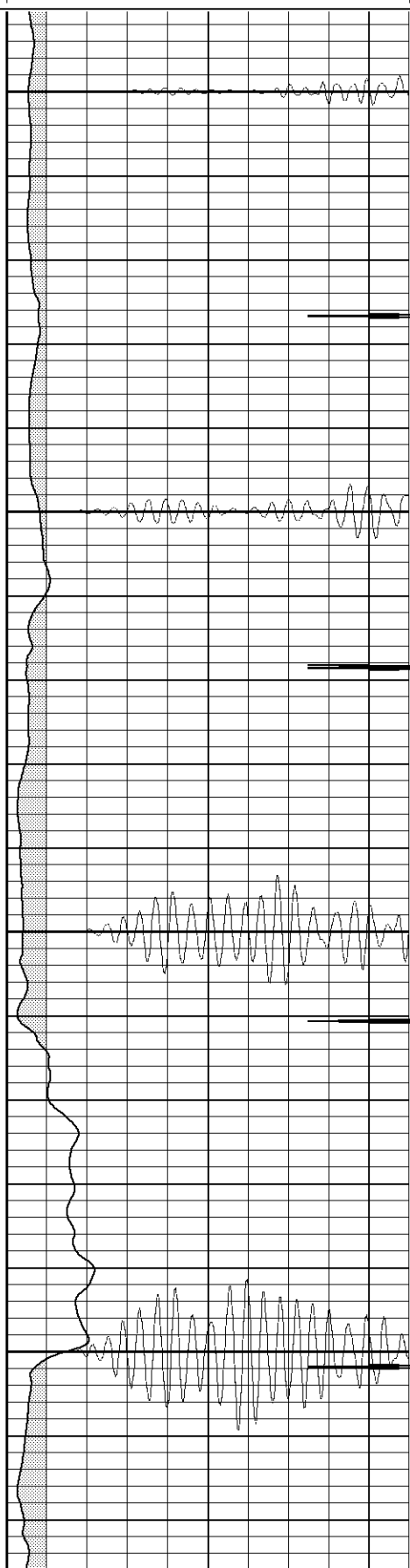


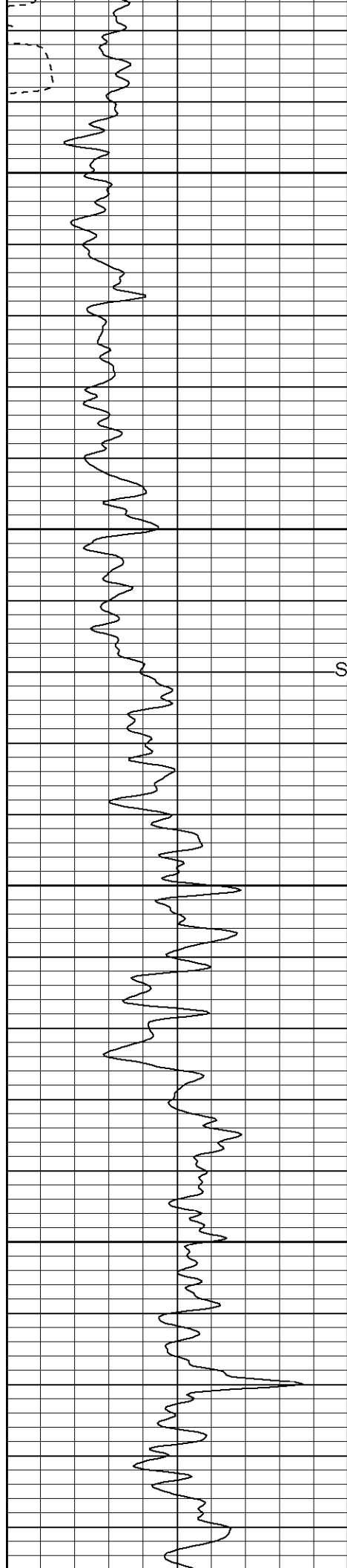
2900

2950

3000

3050





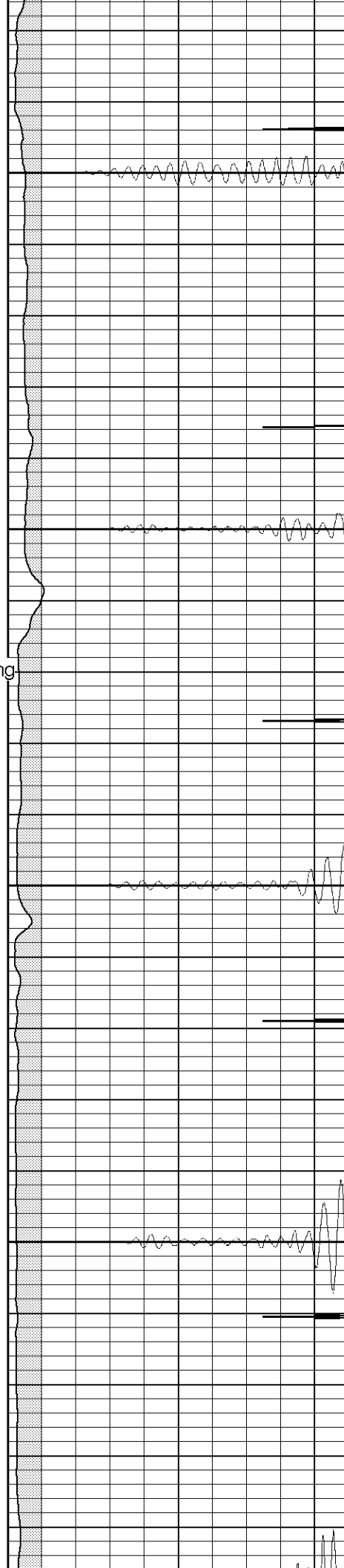
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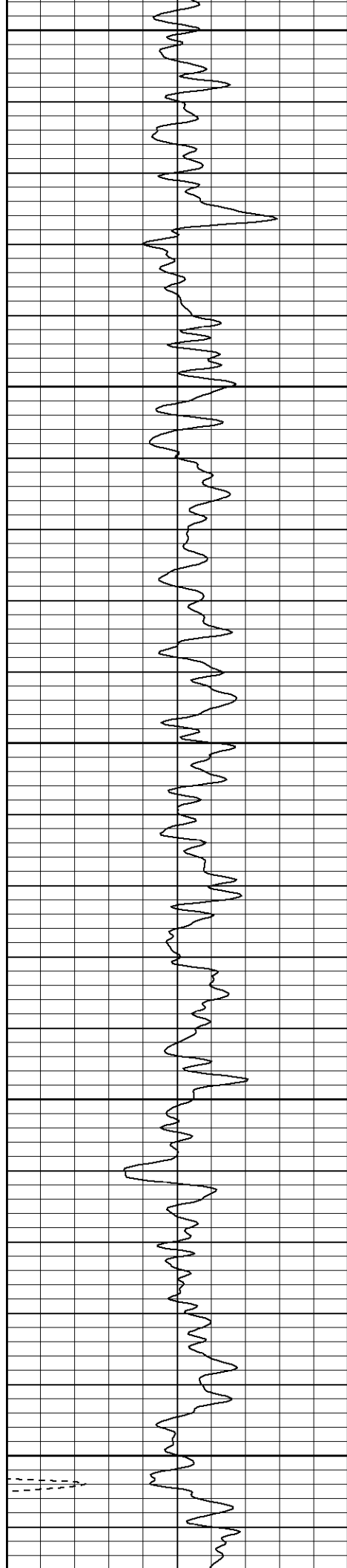
3150

Surface Casing

3200

3250





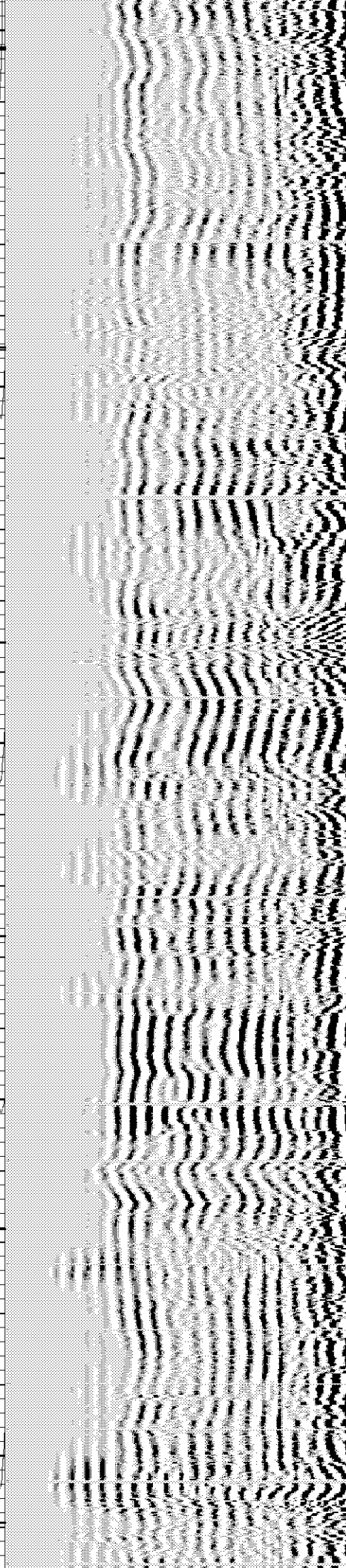
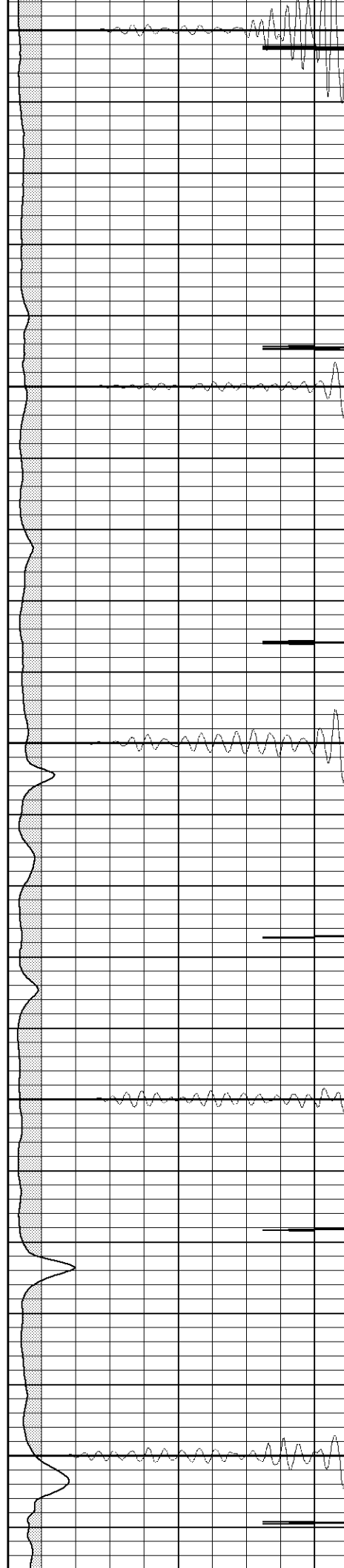
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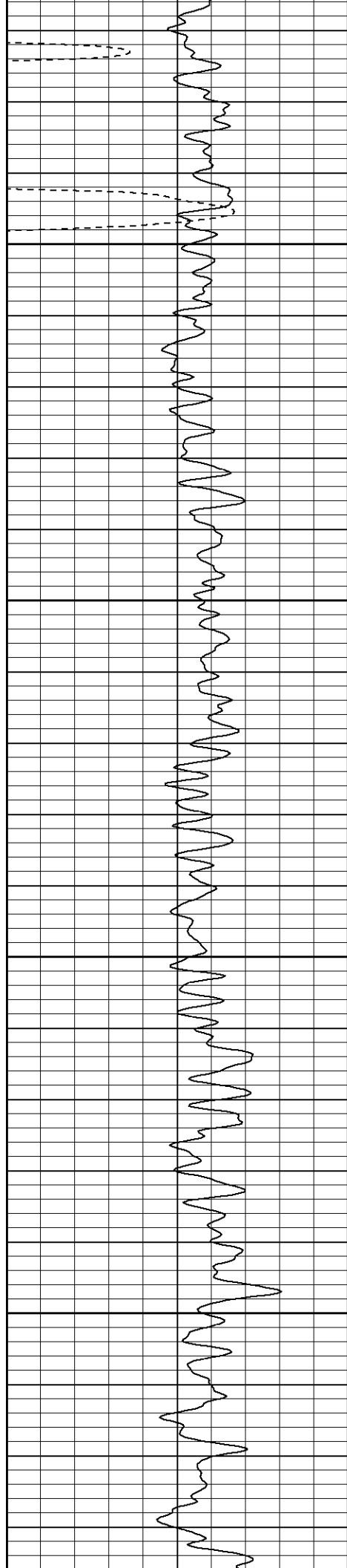
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3400

3450

3500



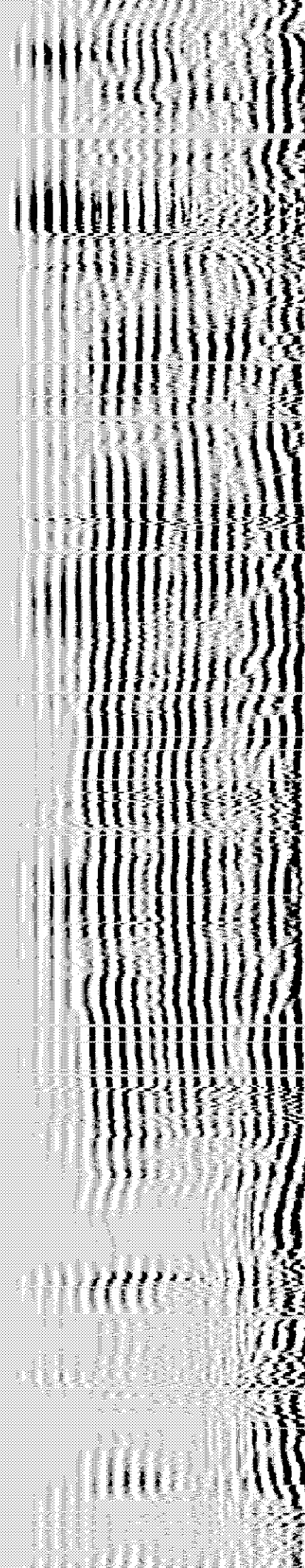
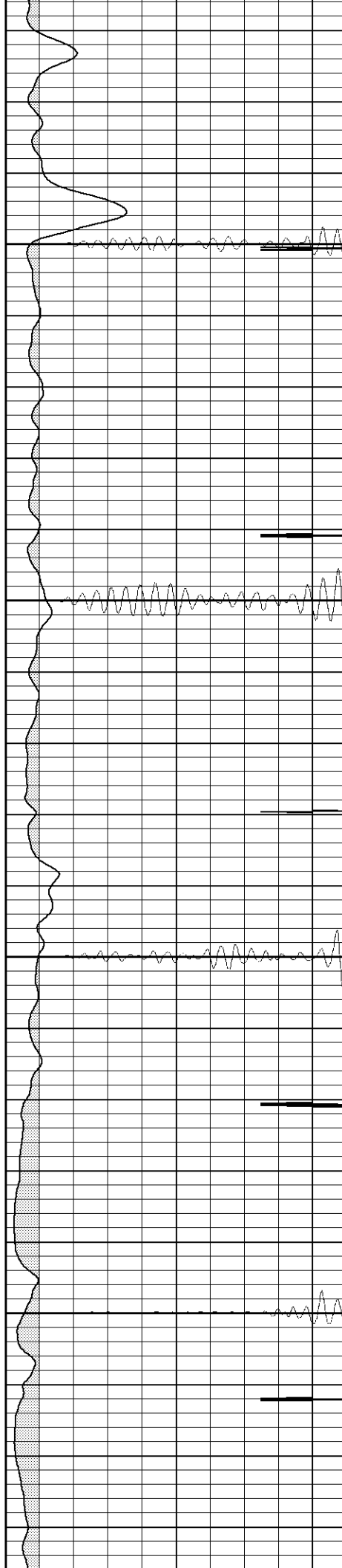


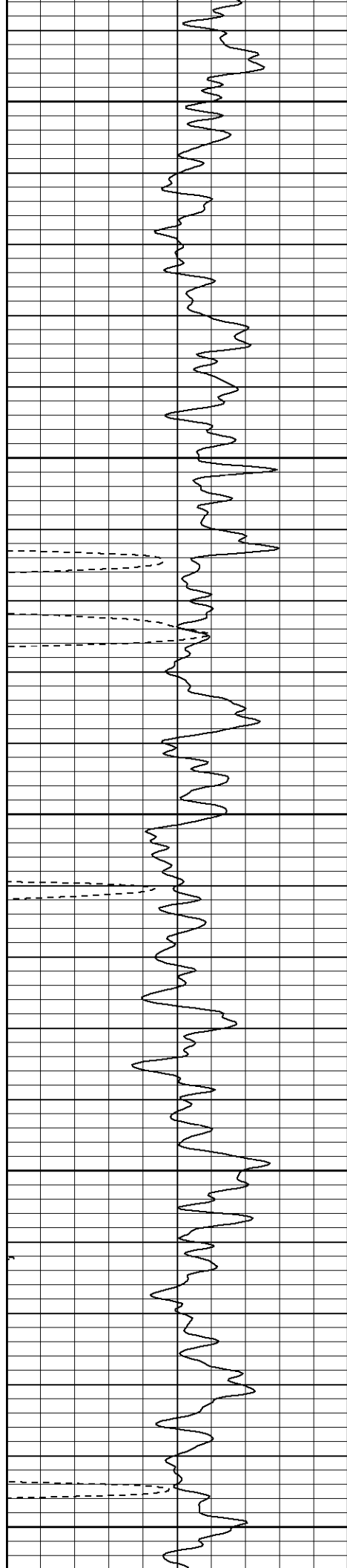
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3600

3650

3700





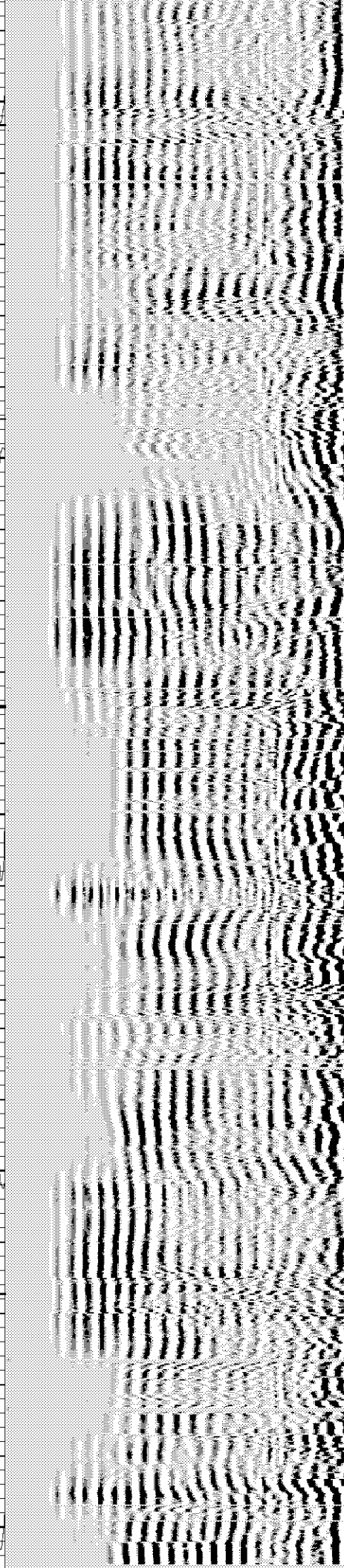
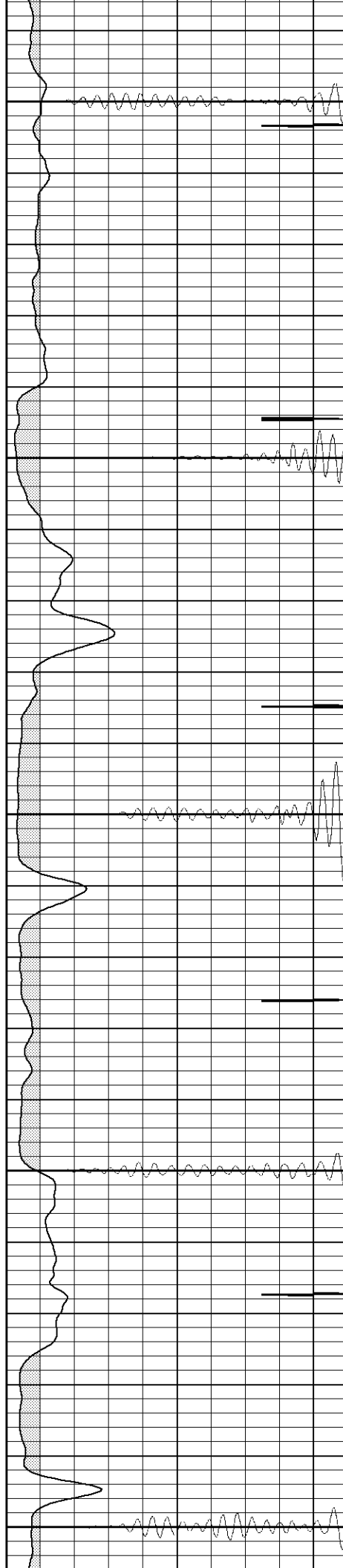
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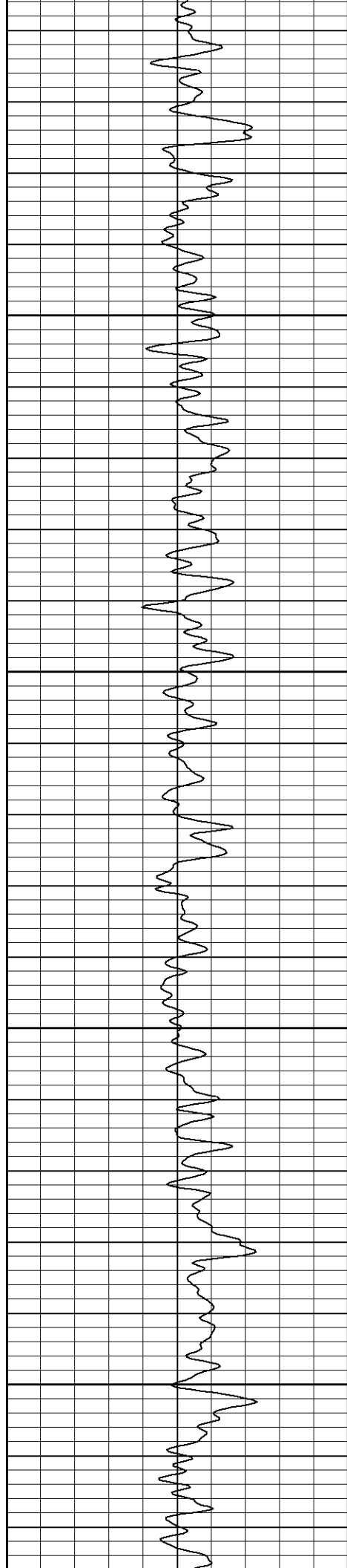
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3850

3900

3950



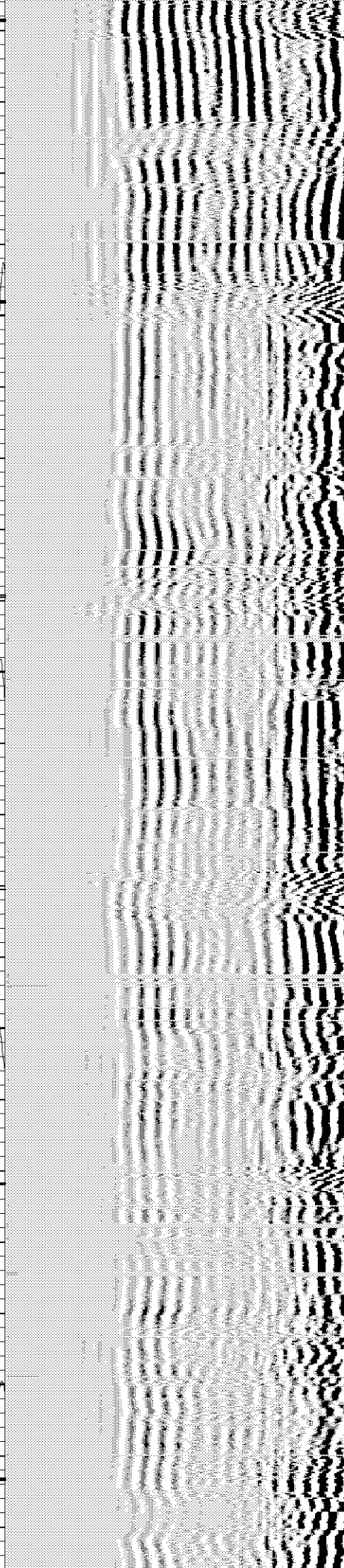
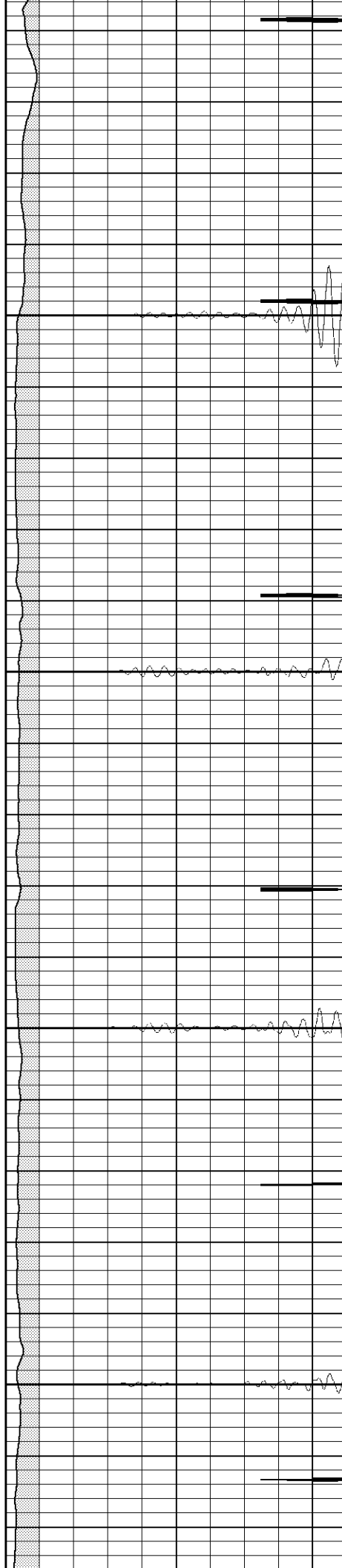


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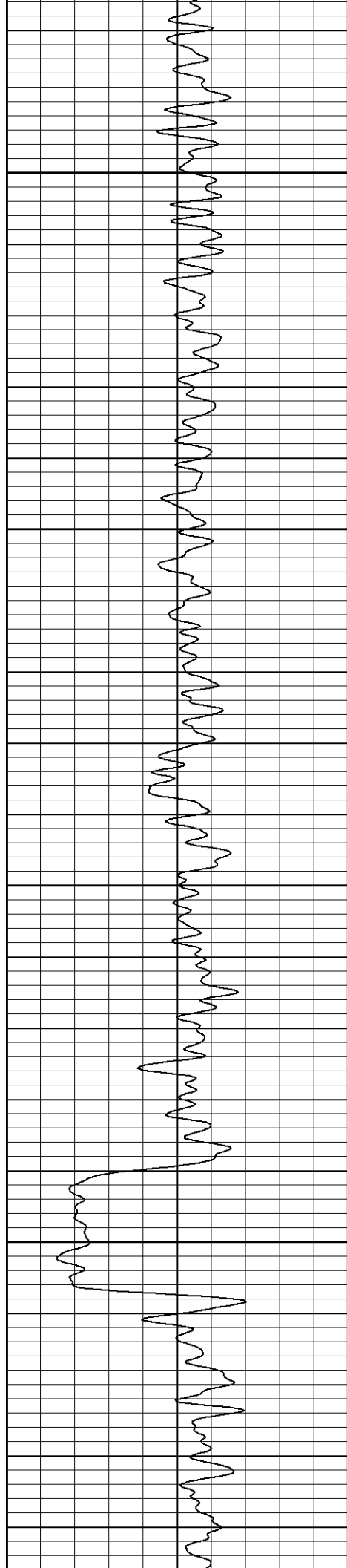
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4100

4150





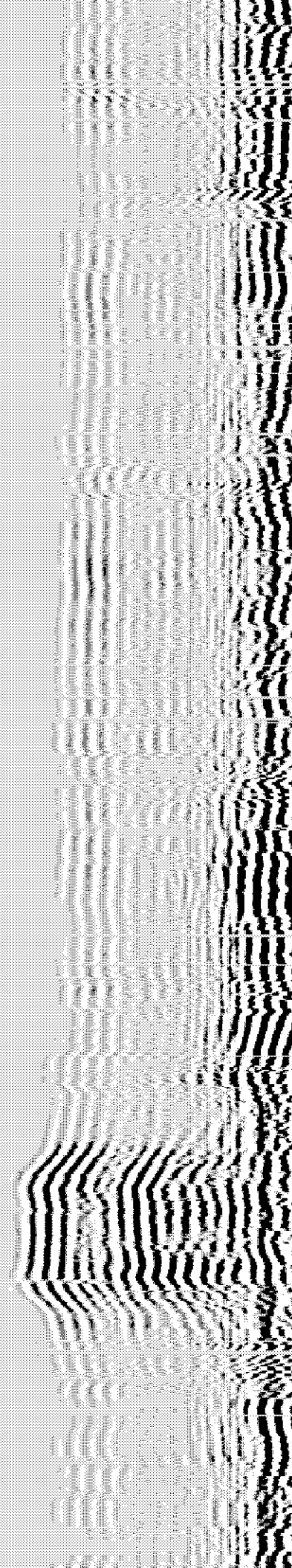
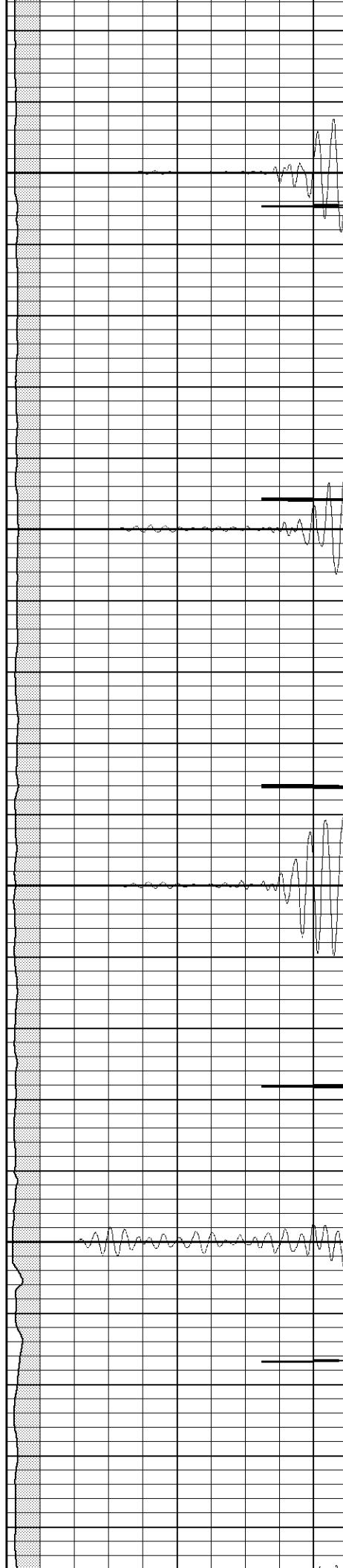


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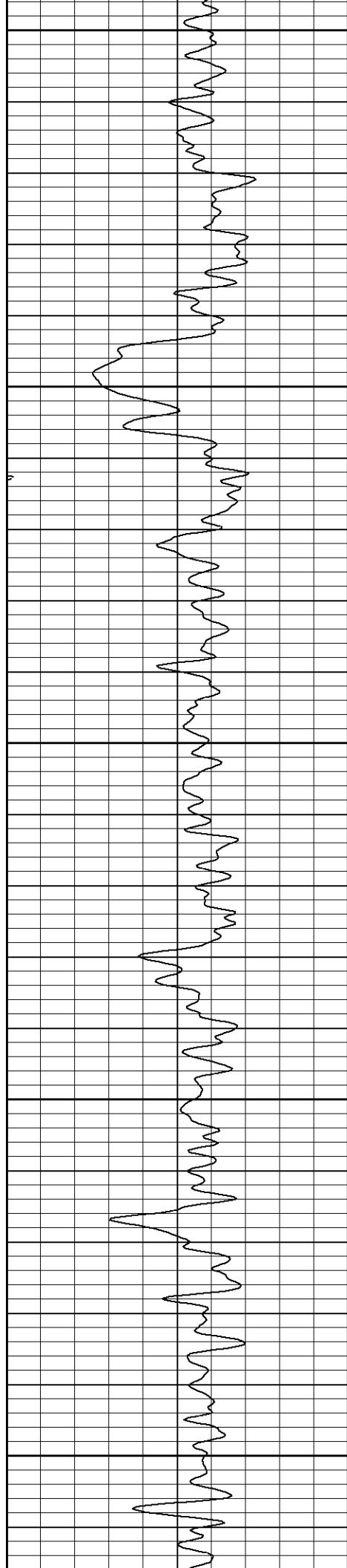
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4350







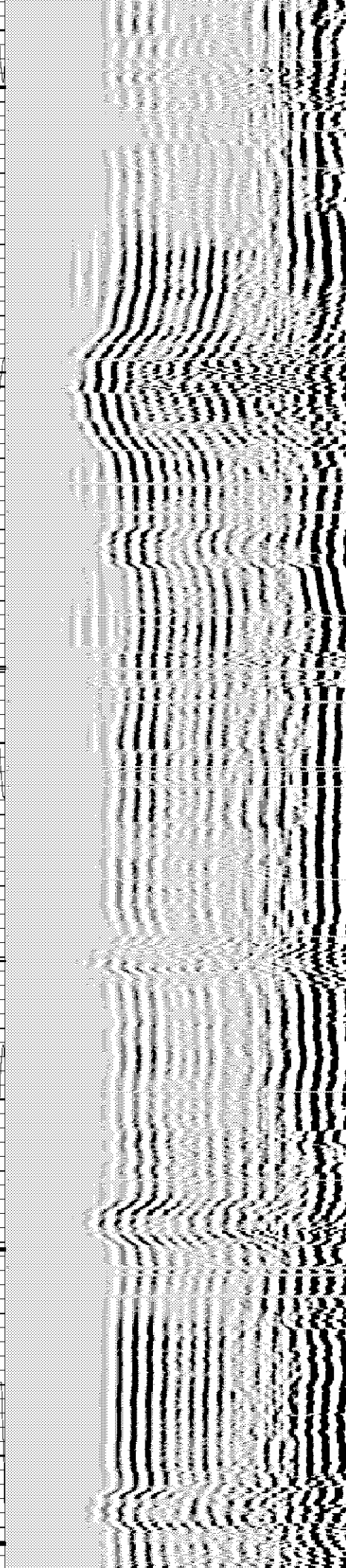
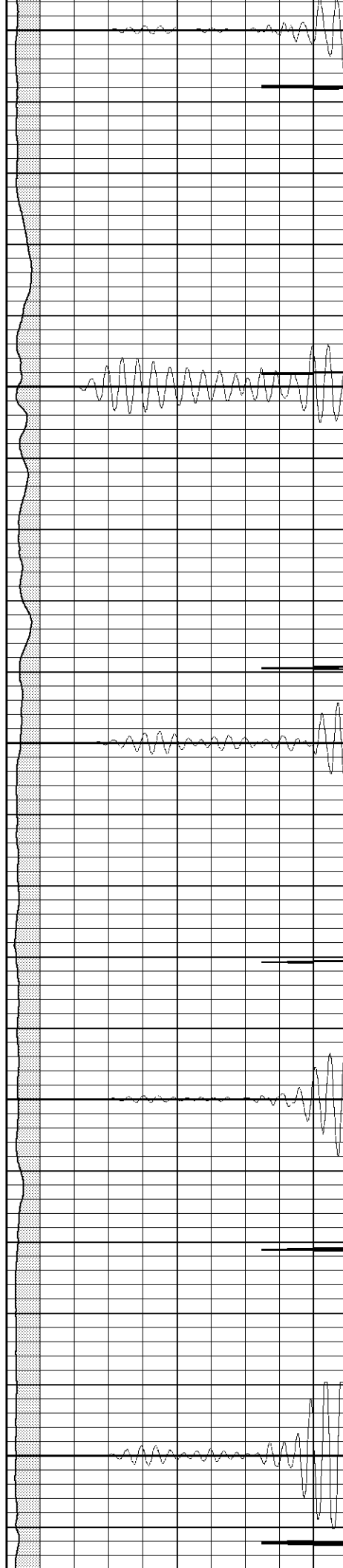
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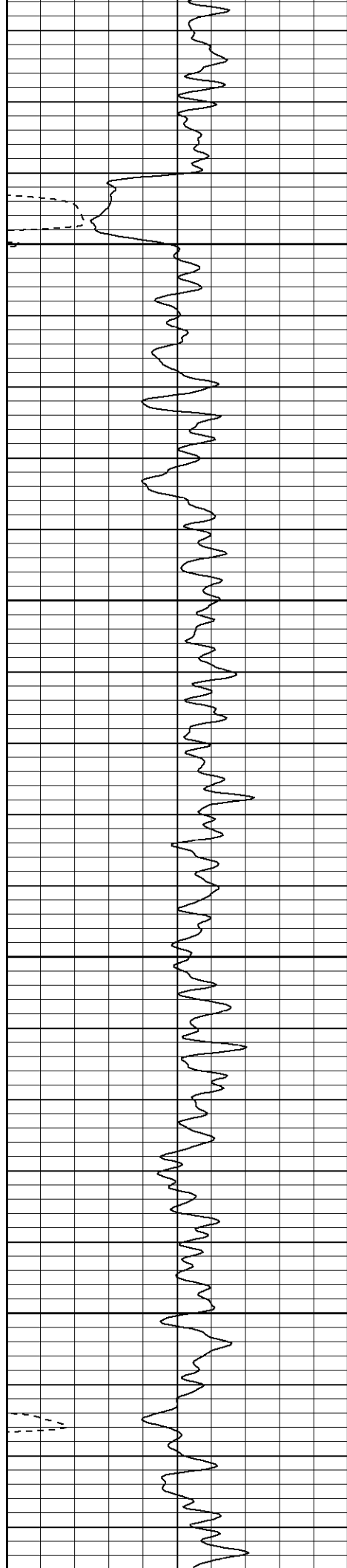
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4500

4550

4600



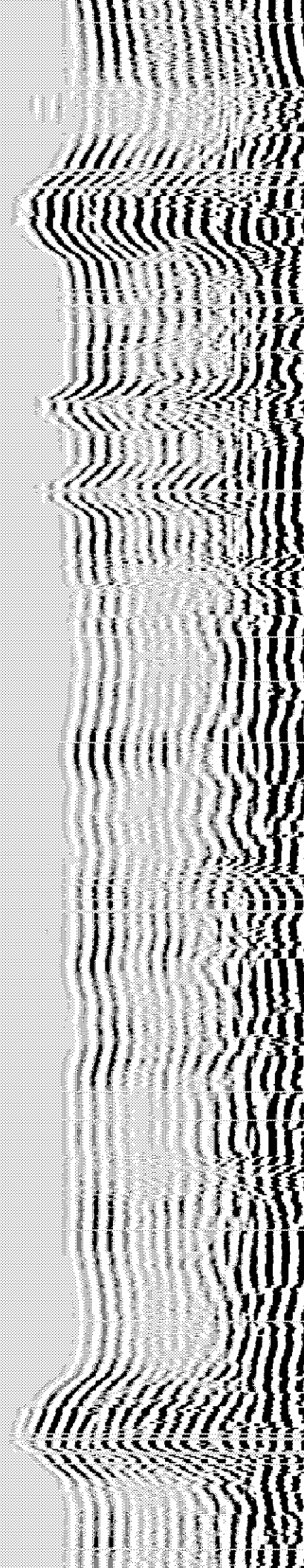
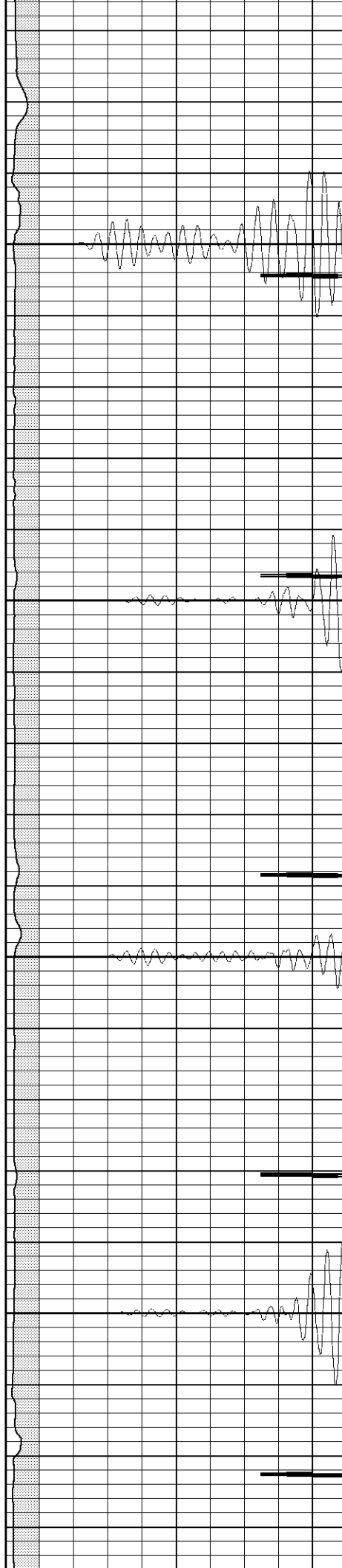


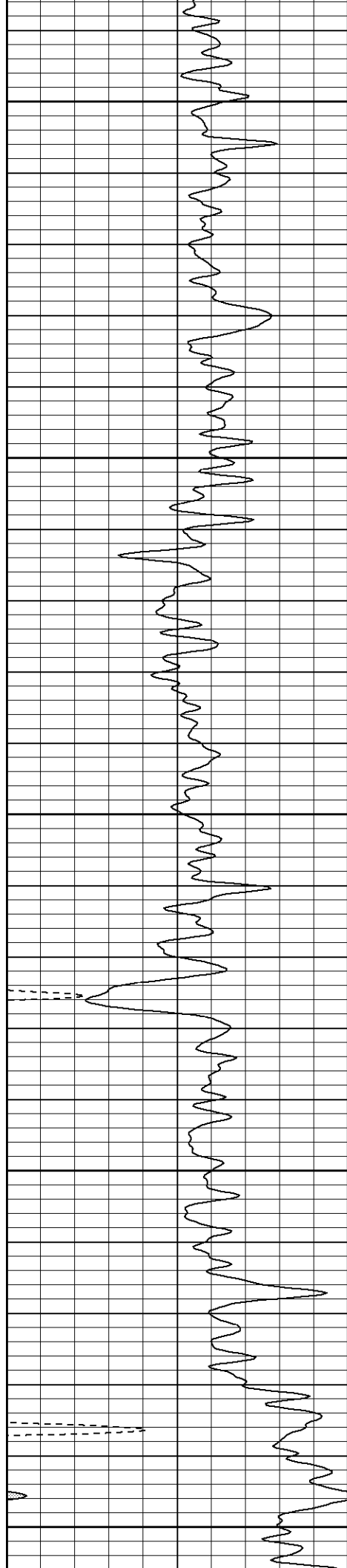
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4700

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4800





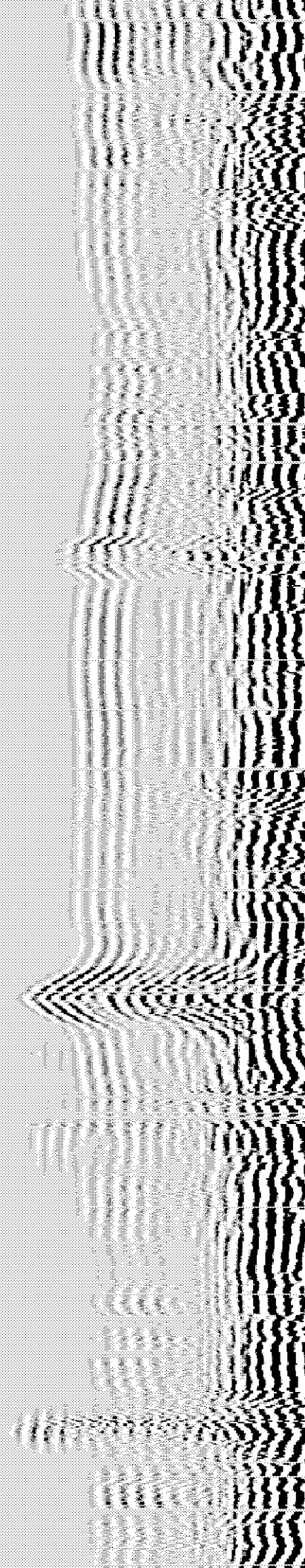
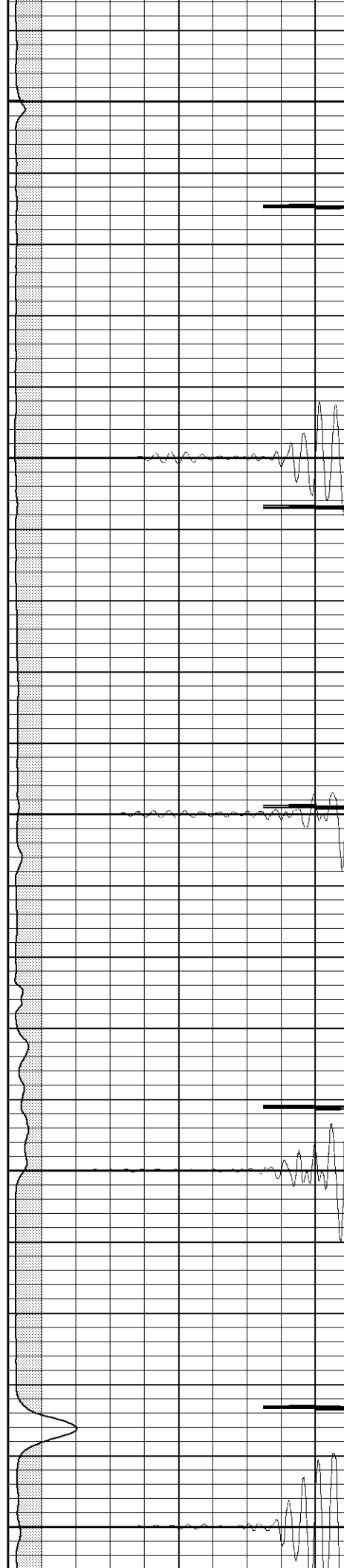
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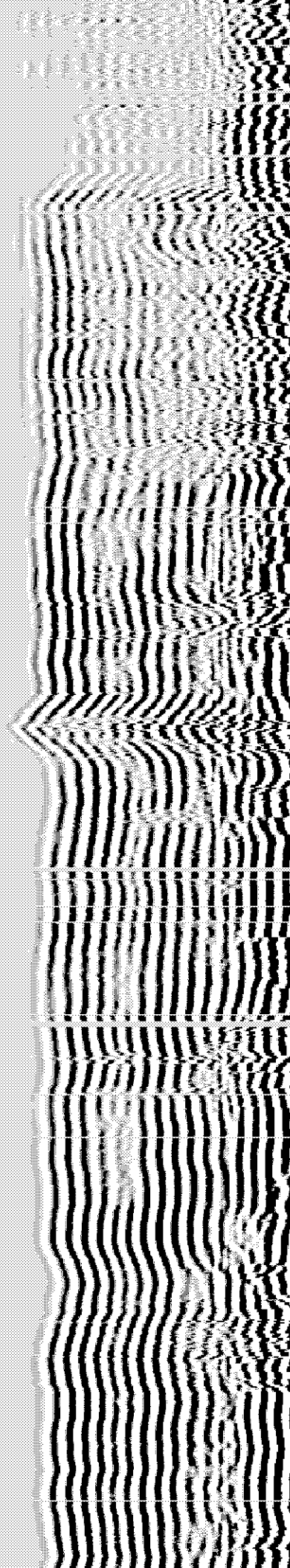
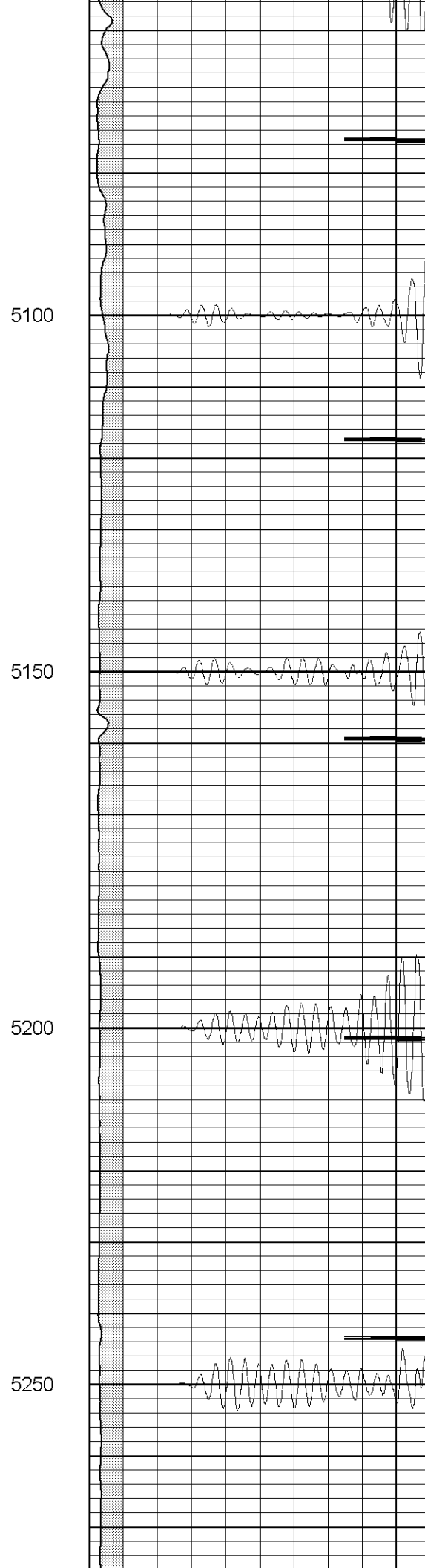
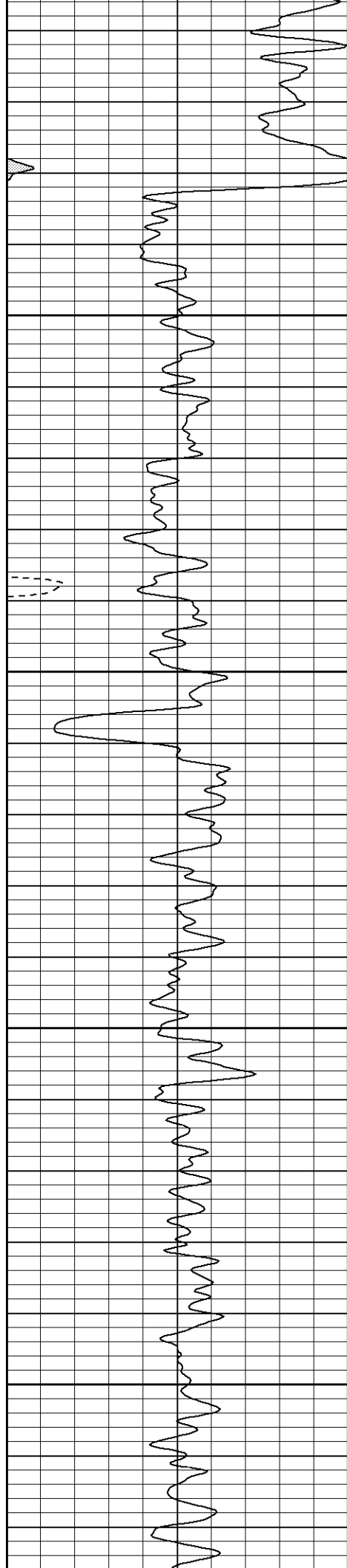
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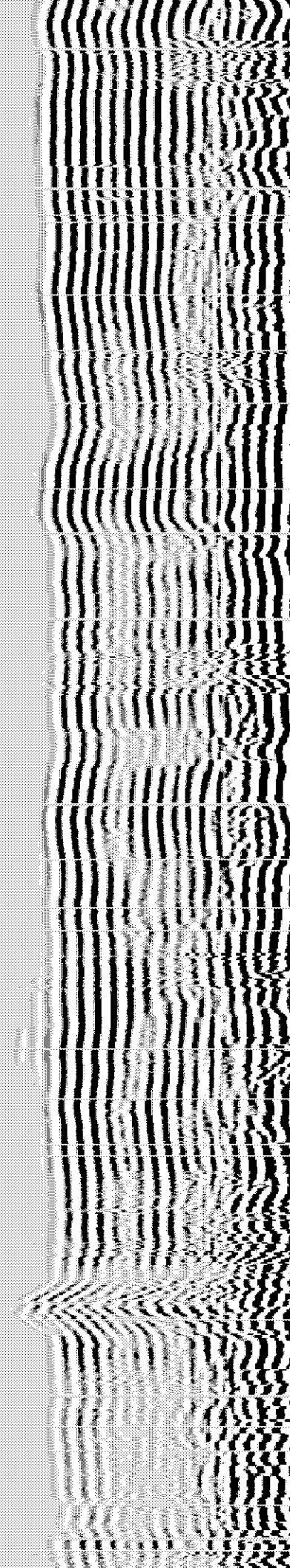
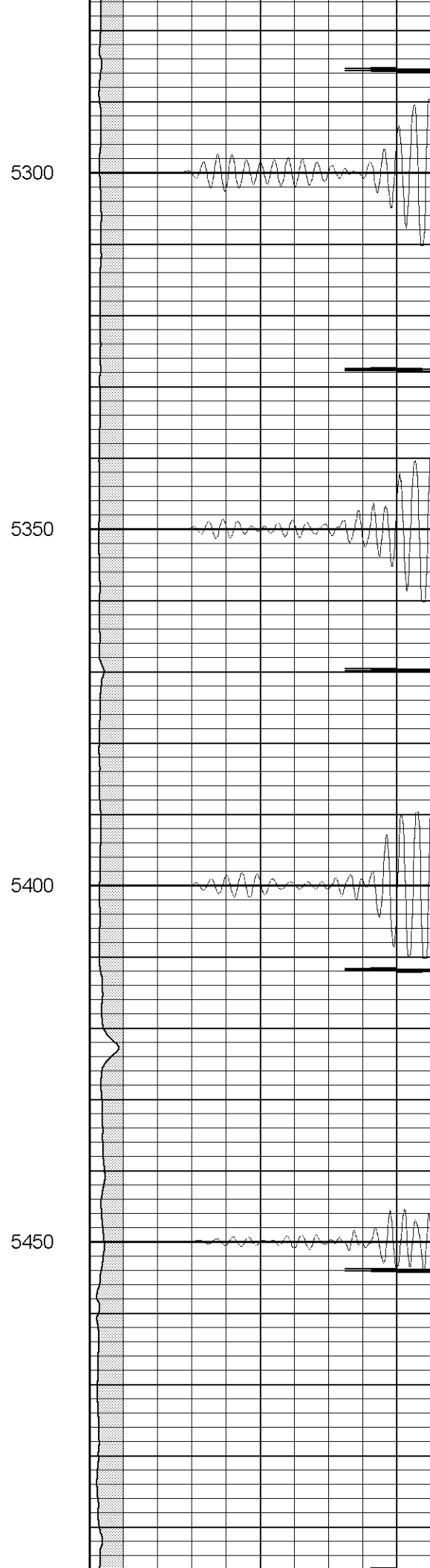
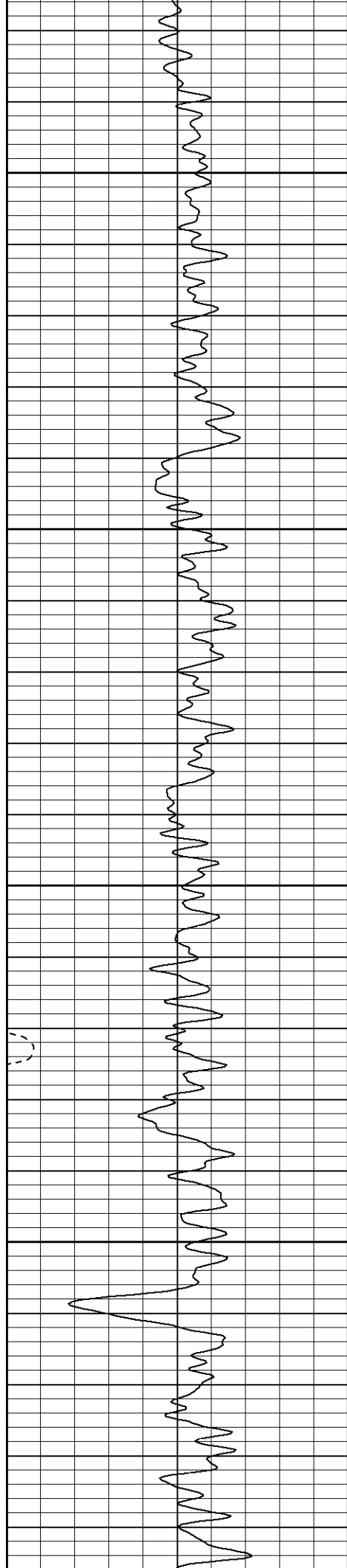
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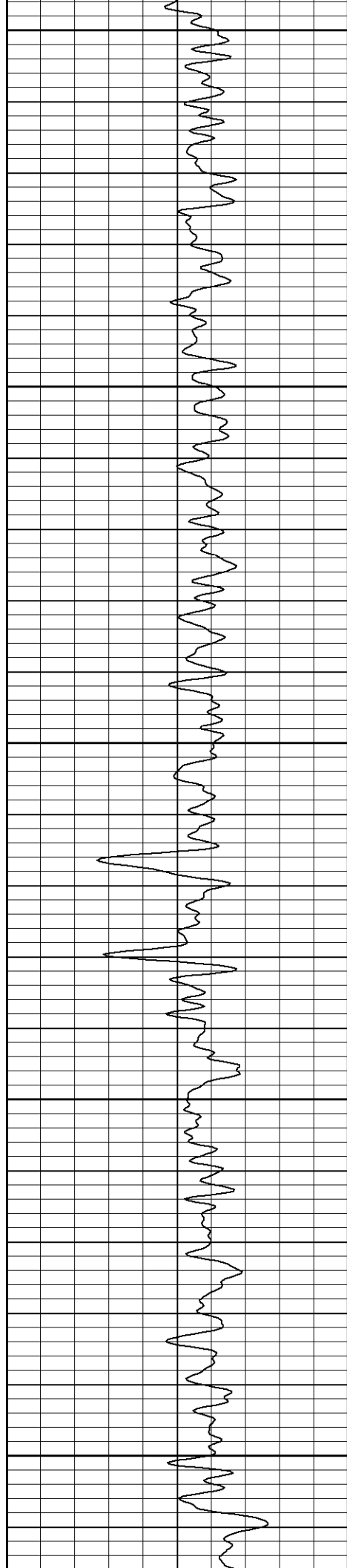
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5050









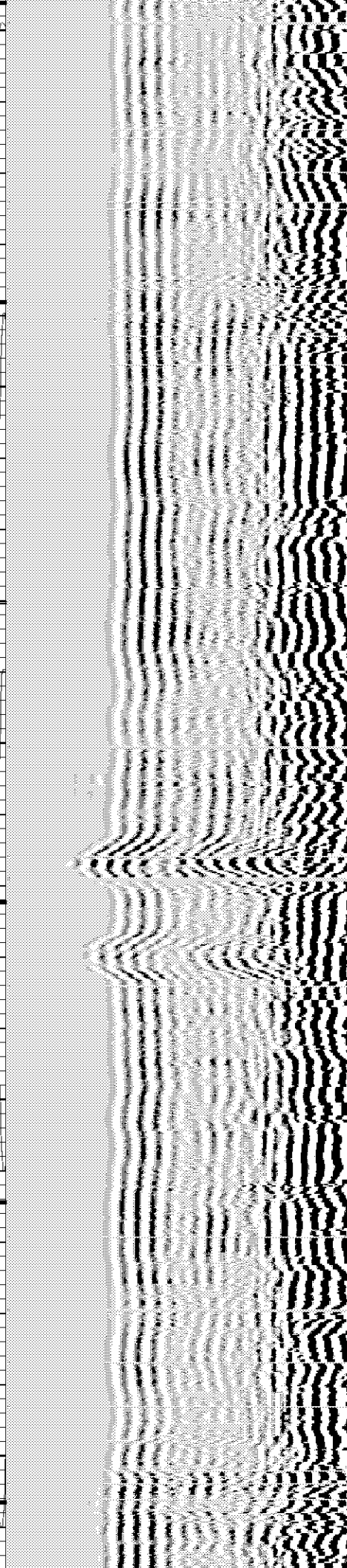
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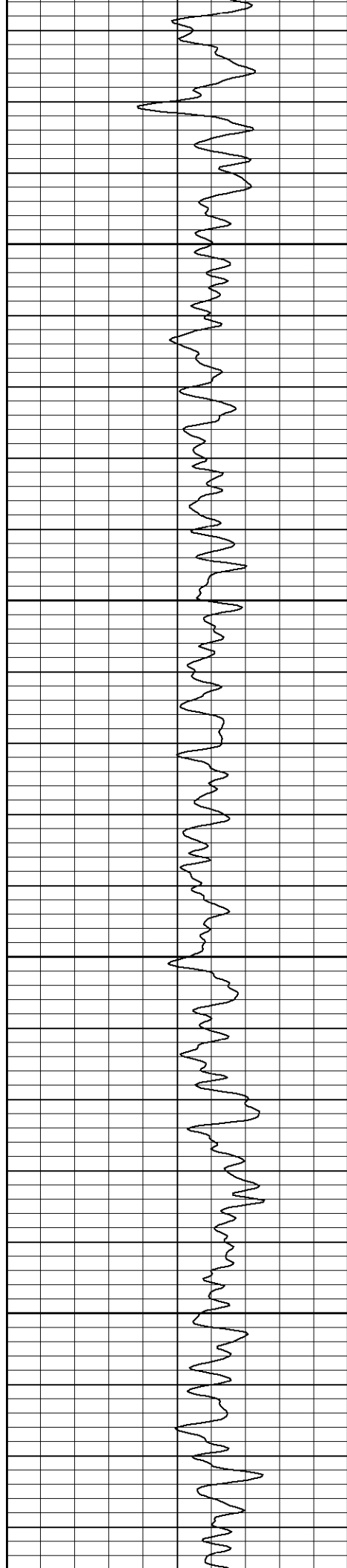
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5600

5650

5700



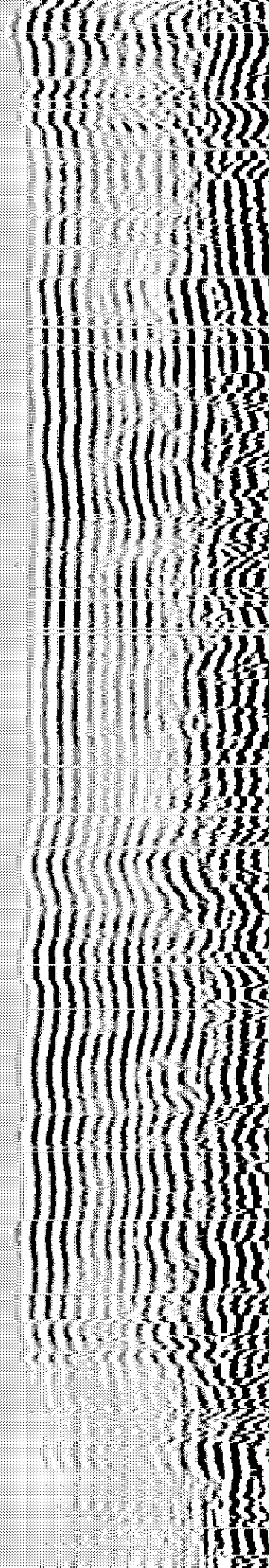
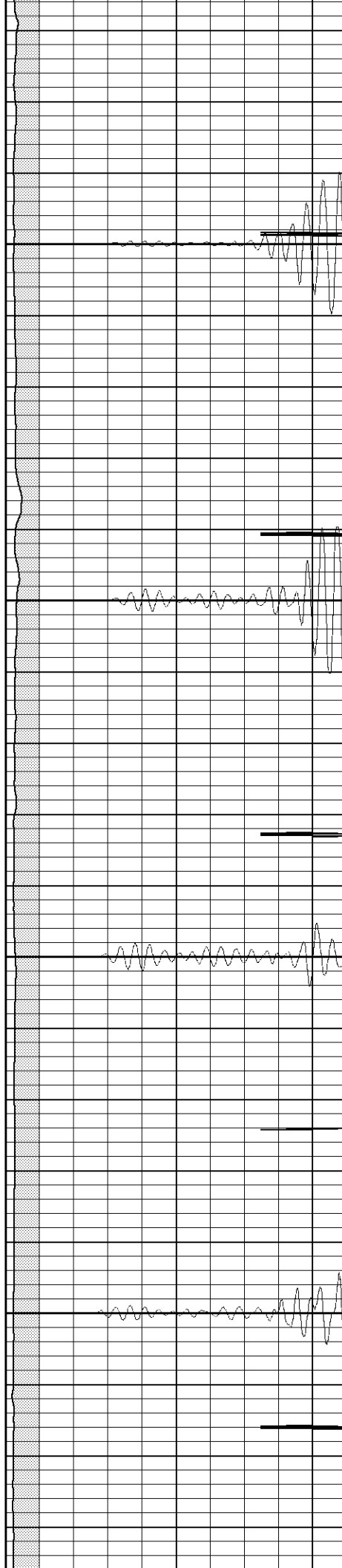


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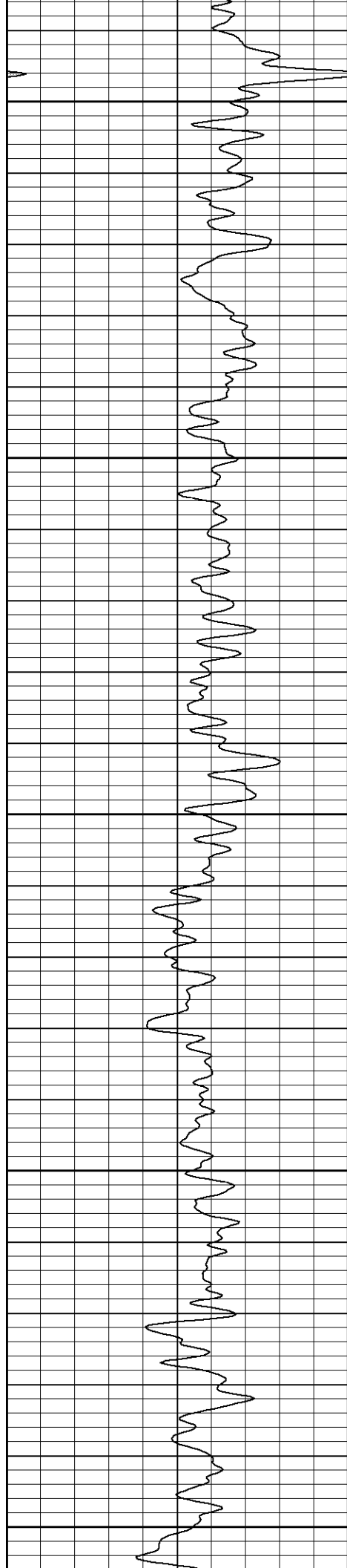
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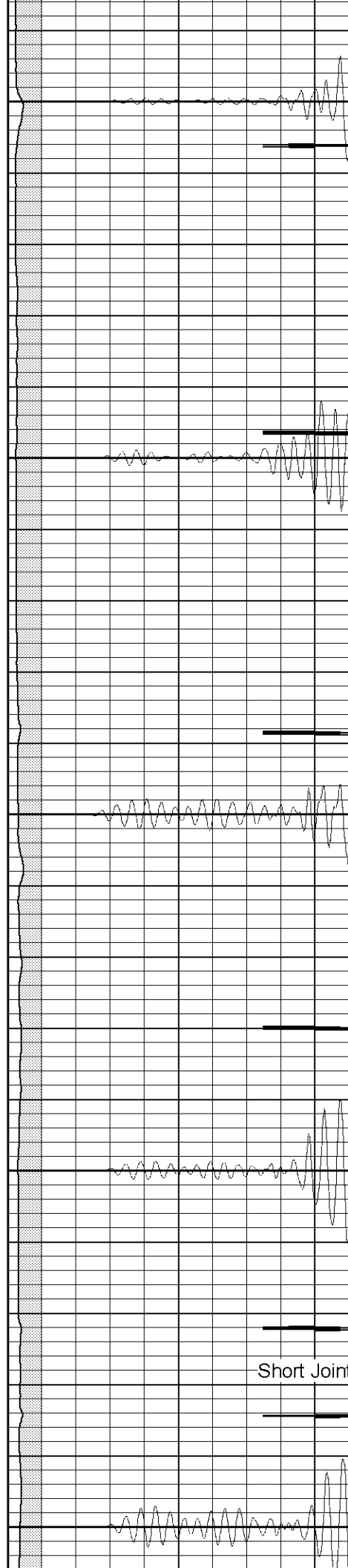
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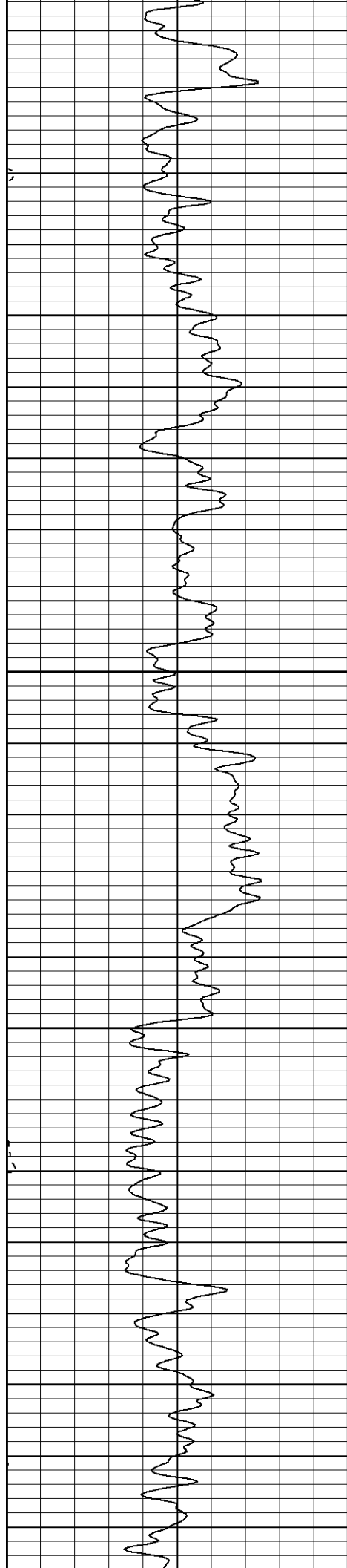
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6100

6150



Short Joint

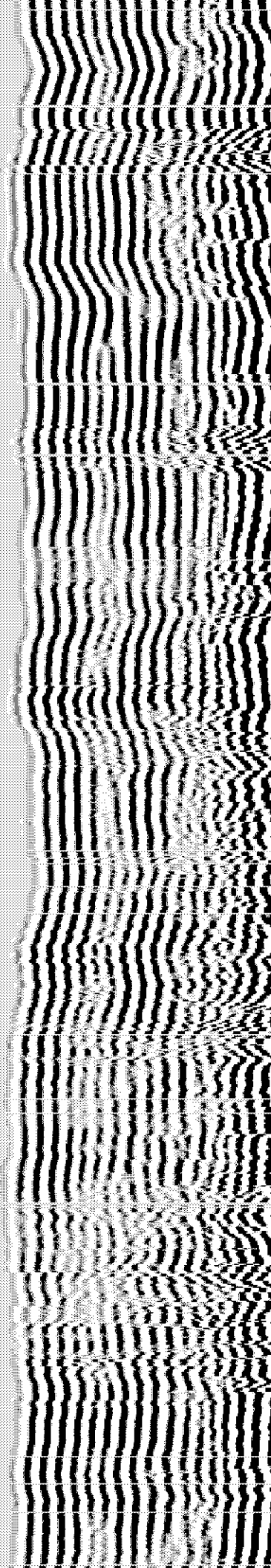
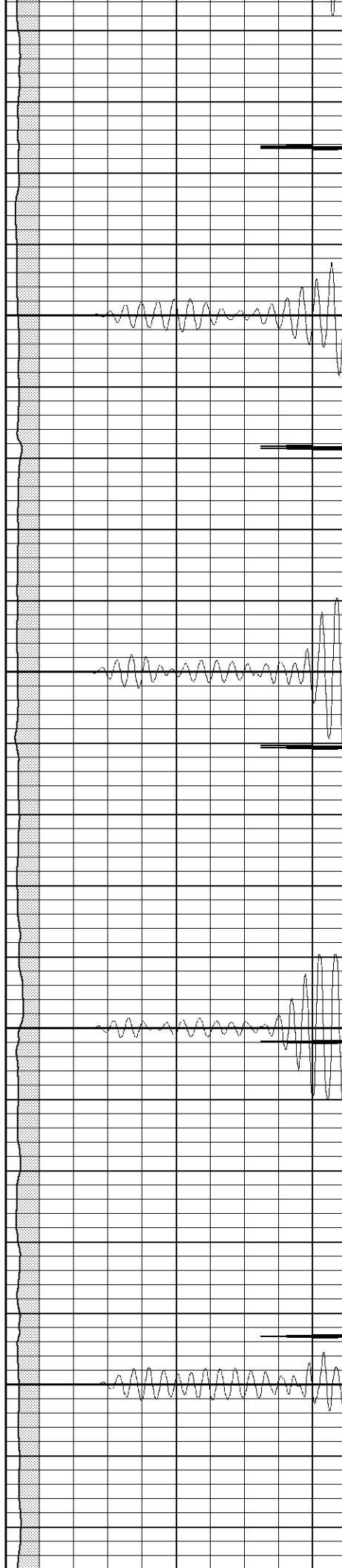


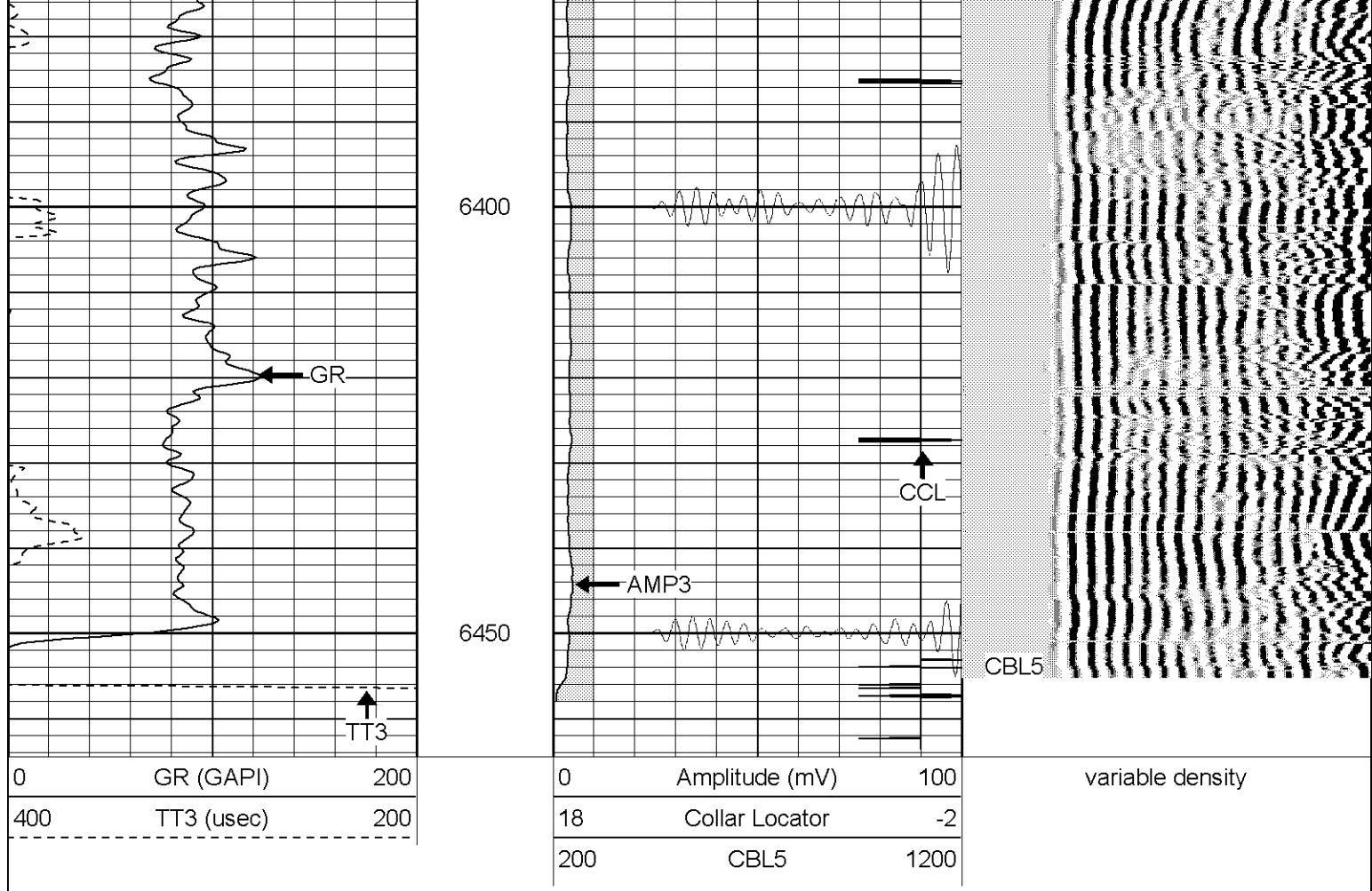
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6250

6300

6350





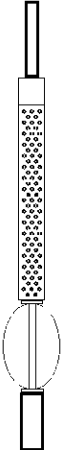
### Cement Bond Log Calibration Report

Serial Number:	Titan3		
Tool Model:	T3		
Performed:	Wed May 16 11:57:46 2007		
Depth:	0	ft	
Casing Diameter:	0	in	
	3' Spacing	5' Spacing	
Signal Zero:	0	0	mV
Calibrated Amplitude:	85	1	mV
Reading at Signal Zero:	0.02	0	V
Reading in Free Pipe:	2.26	1	V
Gain:	37.9464	1	
Offset:	1	0	

### Gamma Ray Calibration Report

Serial Number:	Titan3	
Tool Model:	T5	
Performed:	Mon Mar 26 09:01:45 2007	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.2000	GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
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Sensor	Onset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	13.40		GR-T5 (Titan3)	2.52	1.63	25.00
WVF5	9.24		CBL-T3 (Titan3)	7.23	2.25	110.00
WVF3	8.24					
CENT	4.91					
CCL	0.70					
			X	3.00	3.00	25.00
			CCL-T2 (Titan2) Short	1.91	2.75	15.00

Dataset: /field/well/run/\_plots/\_jobs/\_cbl

Total Length: 14.66 ft

Total Weight: 175.00 lb

O.D. 3.00 in