

Patterson

**CEMENT BOND
LOG**

Company Pioneer Natural Resources
Well Wrangler 44-32 Tr
Field Purgatorie River
County Las Animas State Colorado

Location: API # : 05-071-08561-00
1104' FSL & 922' FEL
SEC 32 TWP 31S RGE 66W
Permanent Datum Ground Level Elevation 7463'
Log Measured From Kelly Bushing 4' Above G.L.
Drilling Measured From Kelly Bushing
Other Services
Elevation
K.B. 7467'
D.F. -----
G.L. 7463'

Company Pioneer Natural Resources
Well Wrangler 44-32 Tr
Field Purgatorie River
County Las Animas
State Colorado

Date 11-17-05

Run Number	One		
Depth Driller	2220'		
Depth Logger	1833'		
Bottom Logged Interval	1831'		
Top Log Interval	200'		
Open Hole Size	7 7/8"		
Type Fluid	Water		
Density / Viscosity	////		
Max. Recorded Temp.	120 DEG F		
Estimated Cement Top	Surface		
Time Well Ready	Portable Mast		
Time Logger on Bottom	12:45 P.M.		
Equipment Number	T096		
Location	Trinidad		
Recorded By	S. Allen		
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"		00	1011'
Prot. String				
Production String	5 1/2"		00	N/A
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

Well Directions:
Gulnare Gravel Pit-Continue West on Main Road to 2nd Left-Turn Left Through Gate-
Stay on Main Road-Go Through Double Green Gate-Stay on Road to Location.

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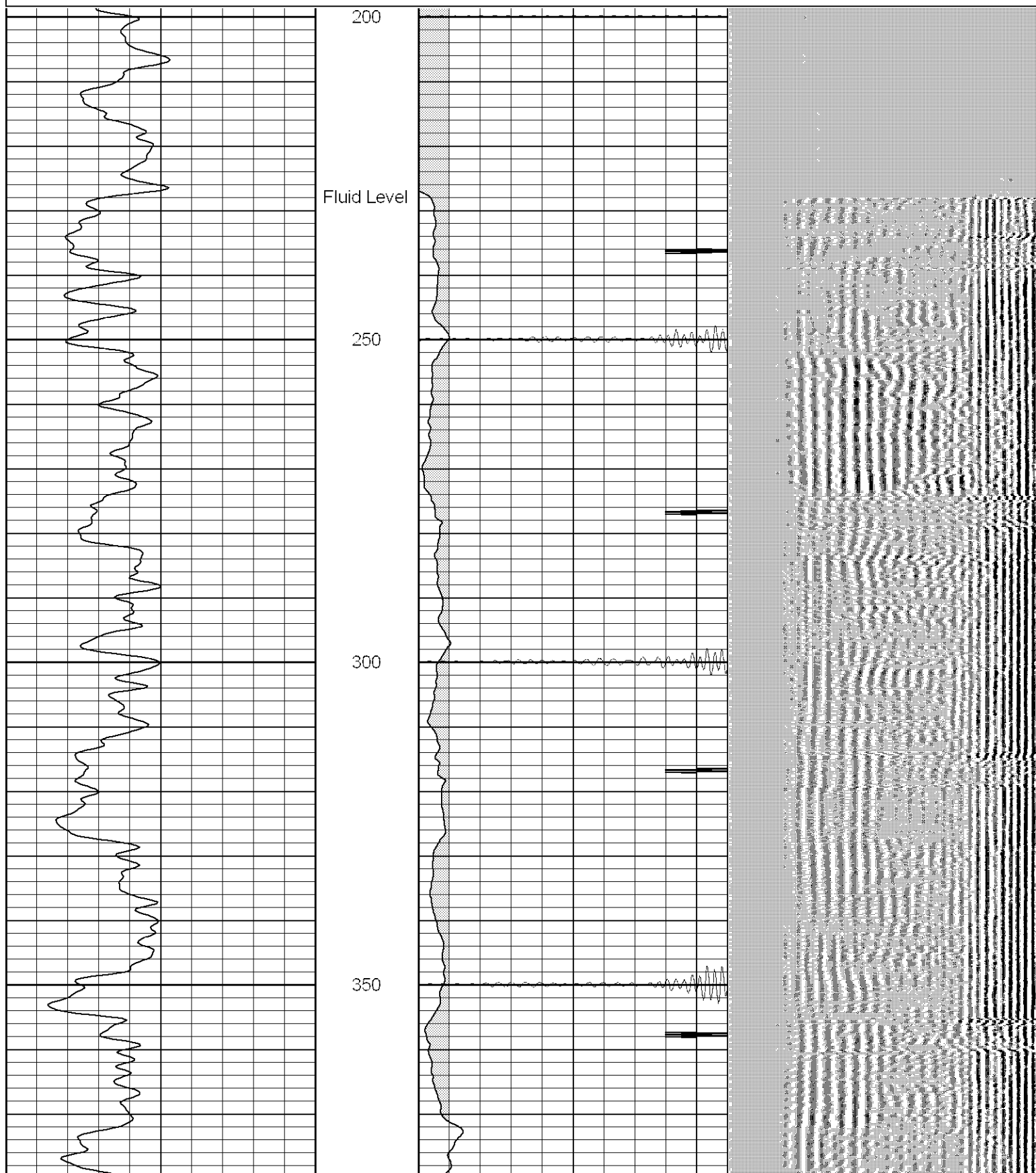
Main Pass

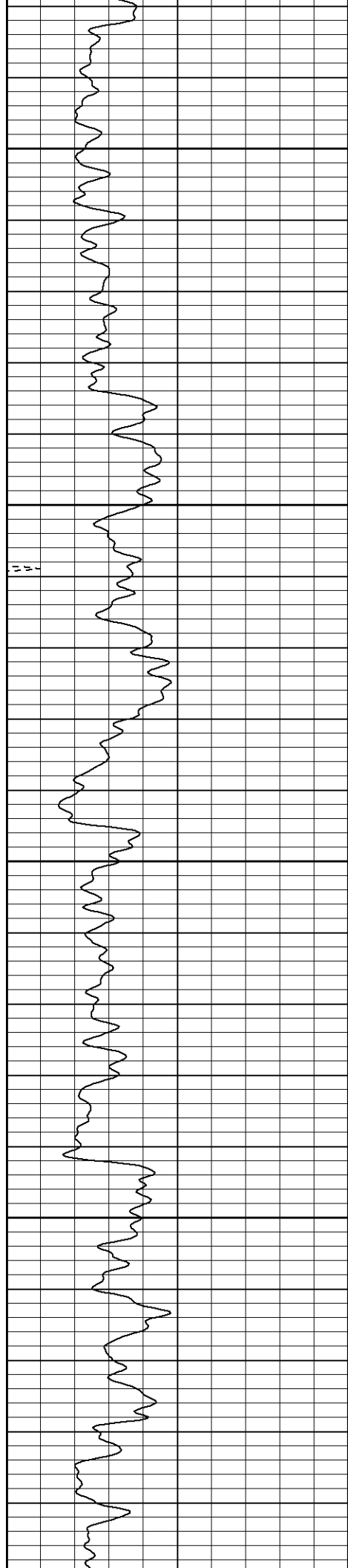
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Dataset Pathname: pass2
Presentation Format: cblrt
Dataset Creation: Thu Nov 17 12:52:59 2005 by Log Warrior 7.0 STD Ope
Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	200
400	TT3 (usec)	200
<hr/>		
200	GR (GAPI)	400

0	Amplitude (mV)	100
18	CCL	-2
<hr/>		
200	CBL5	1200

200 VDL 1200



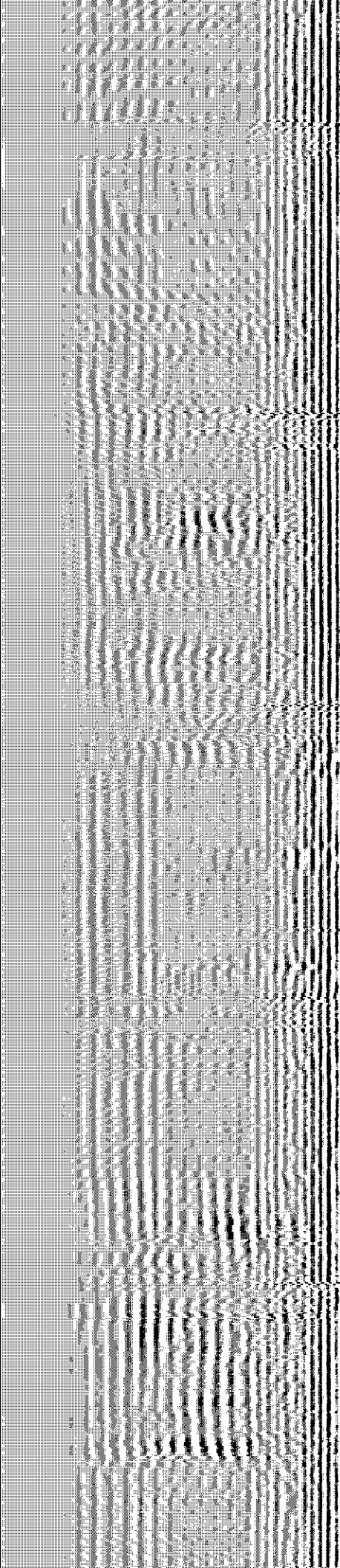
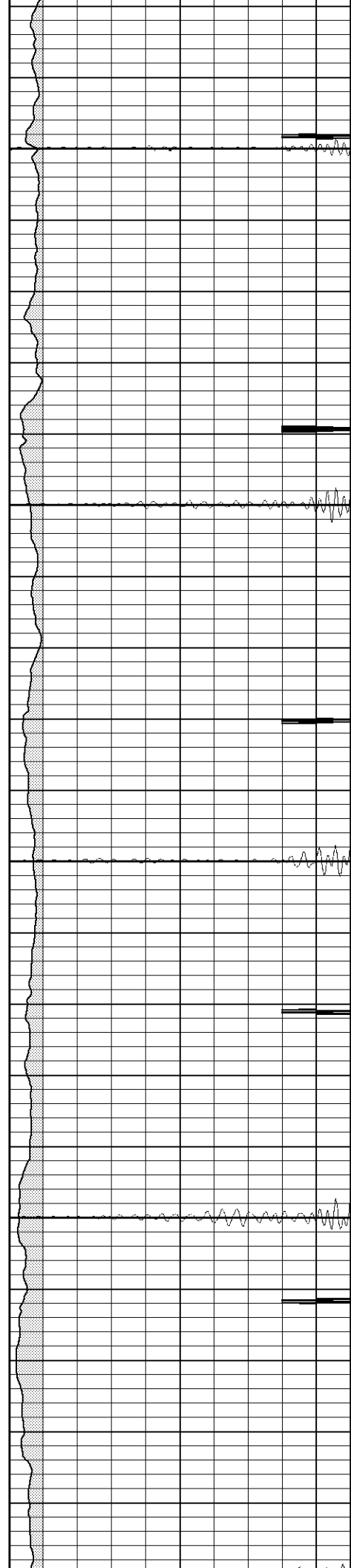


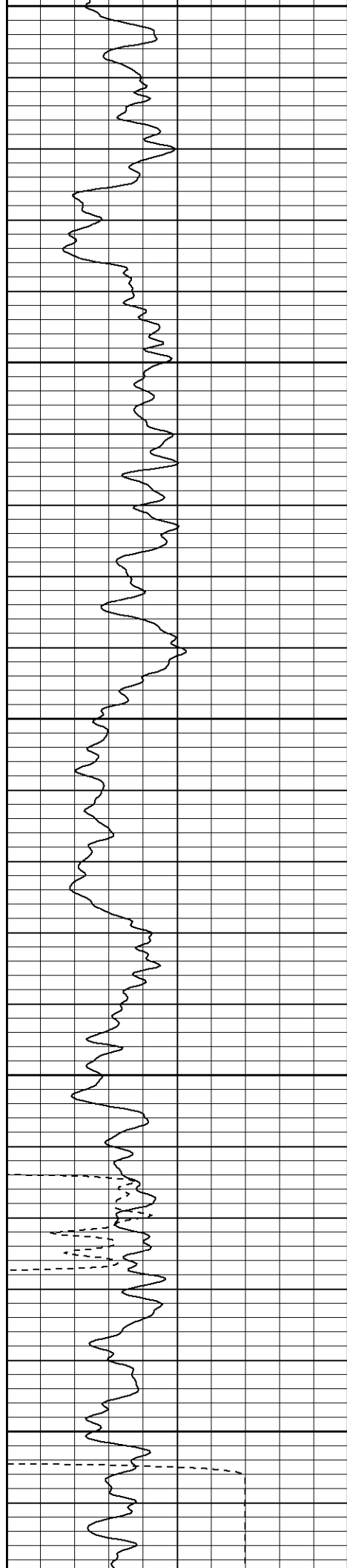
400

450

500

550





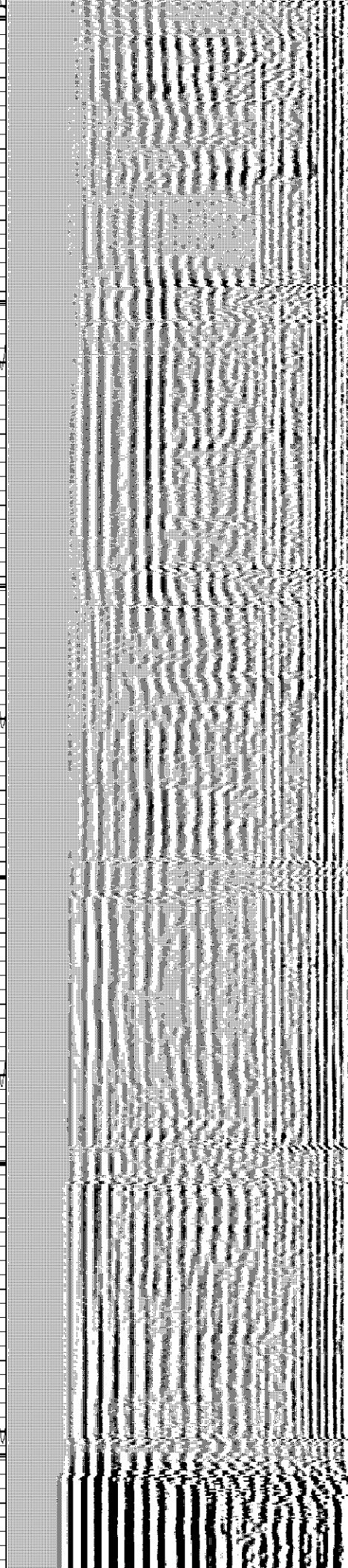
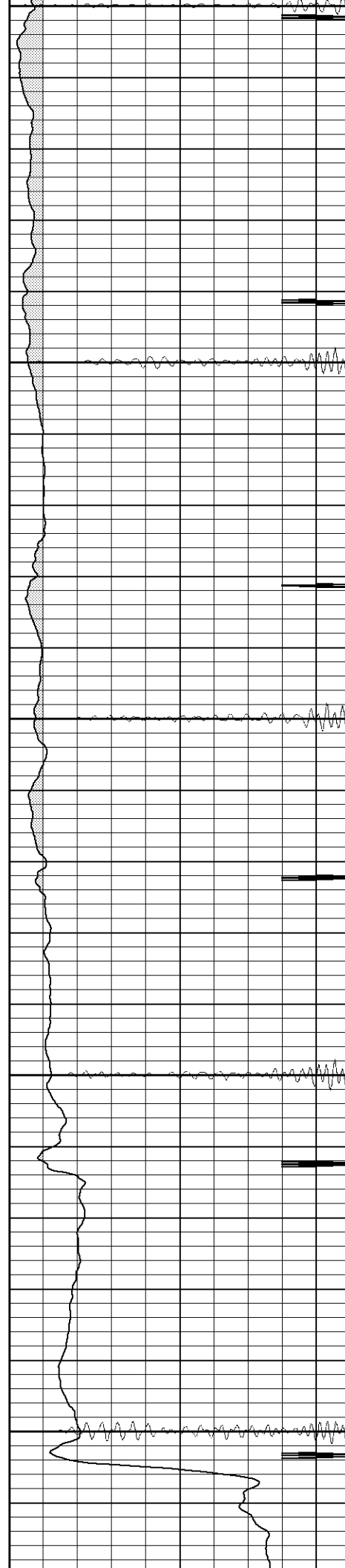
600

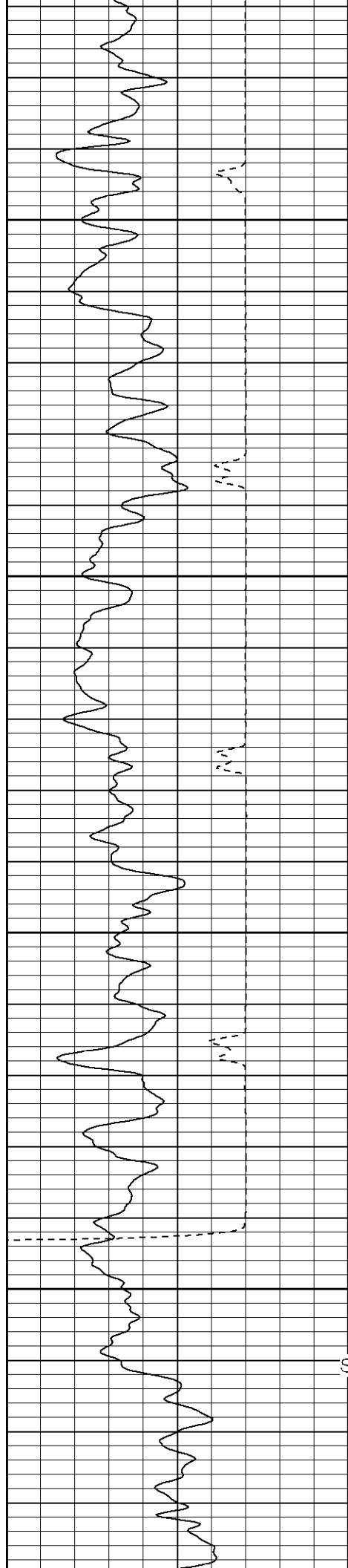
650

700

750

800





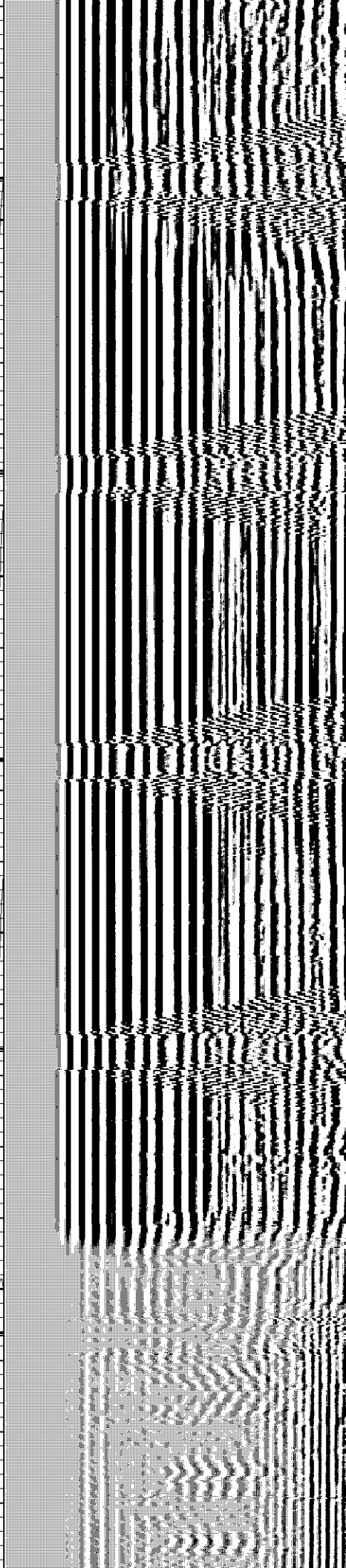
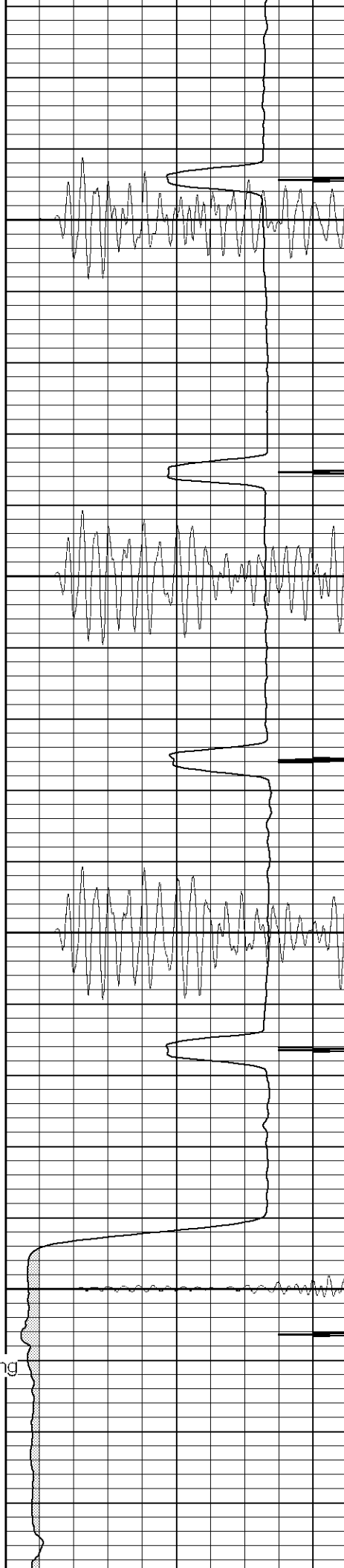
850

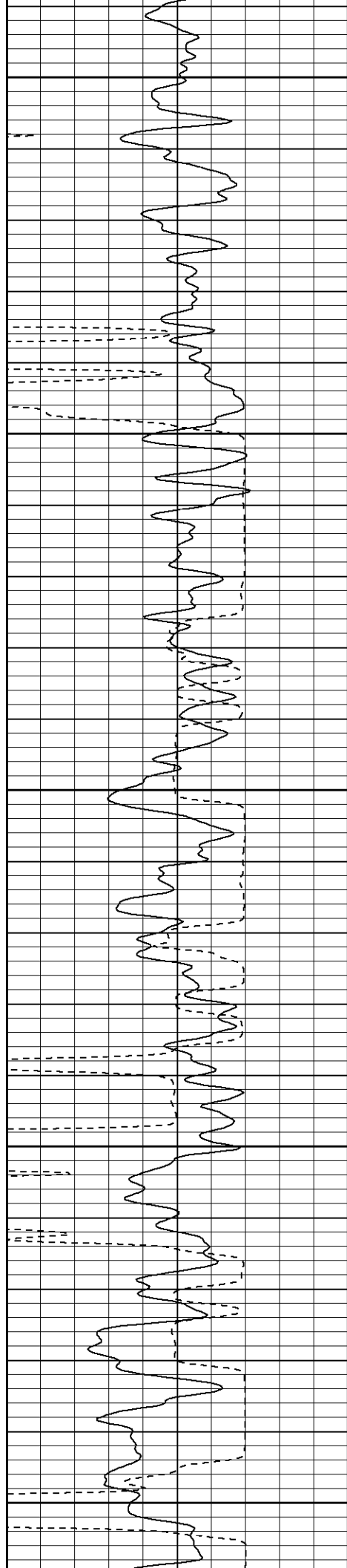
900

950

1000

Surface Casing





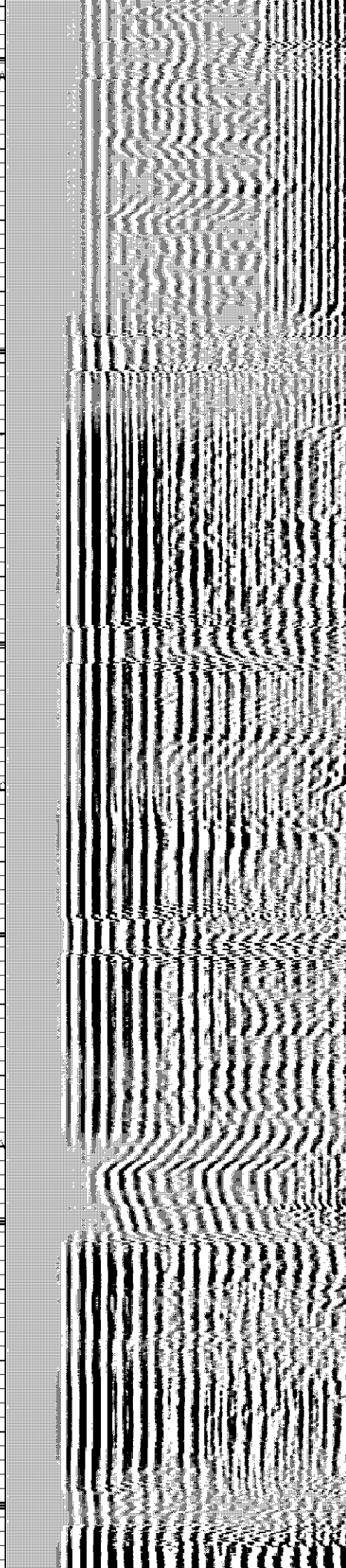
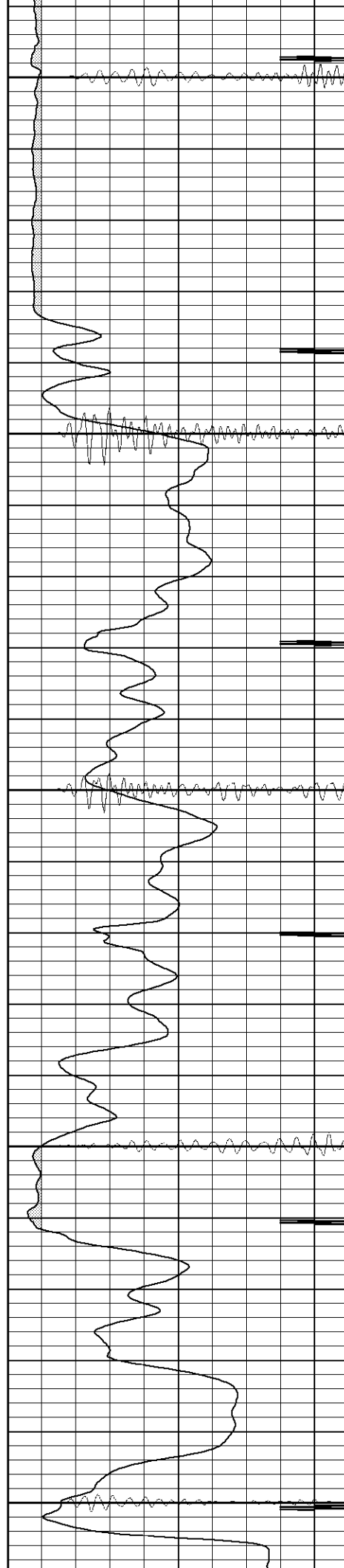
1050

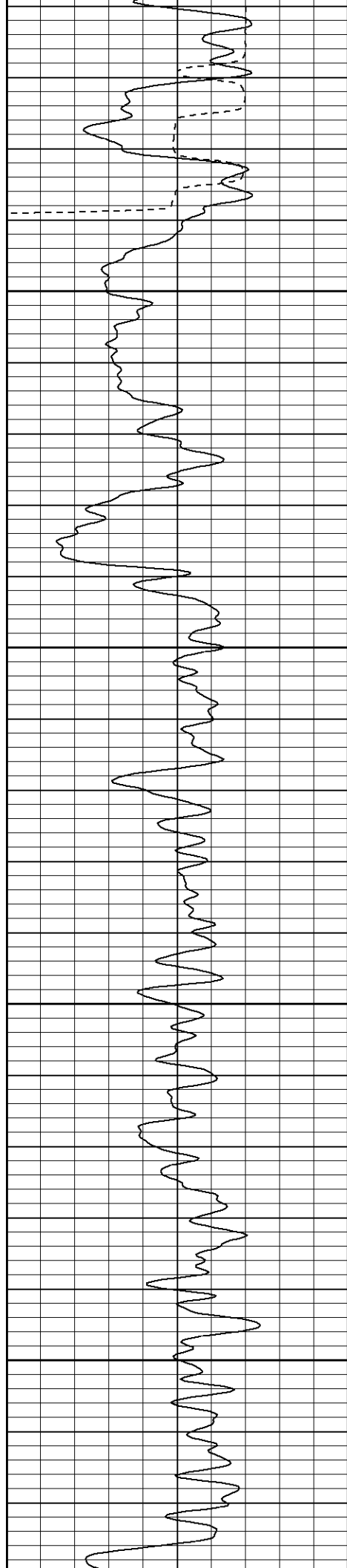
1100

1150

1200

1250



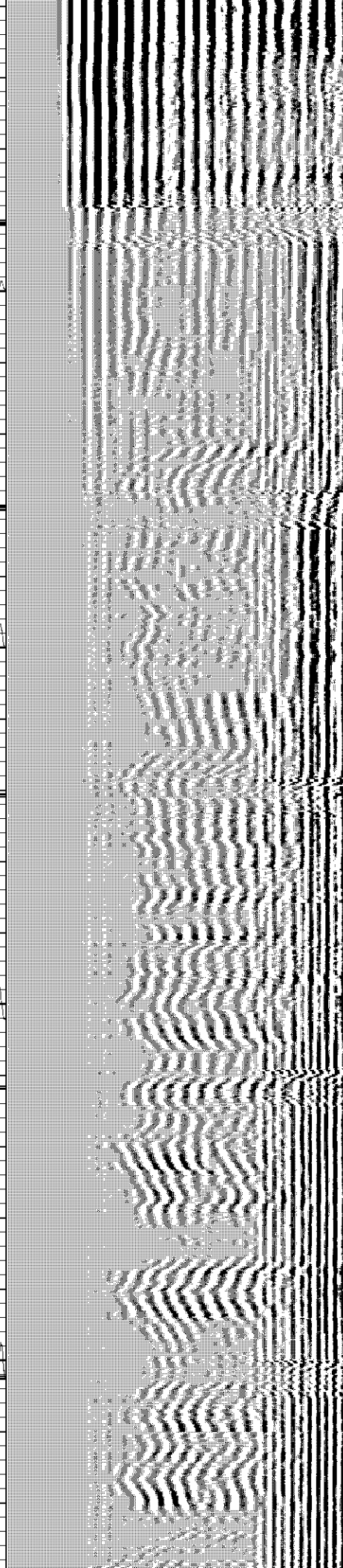
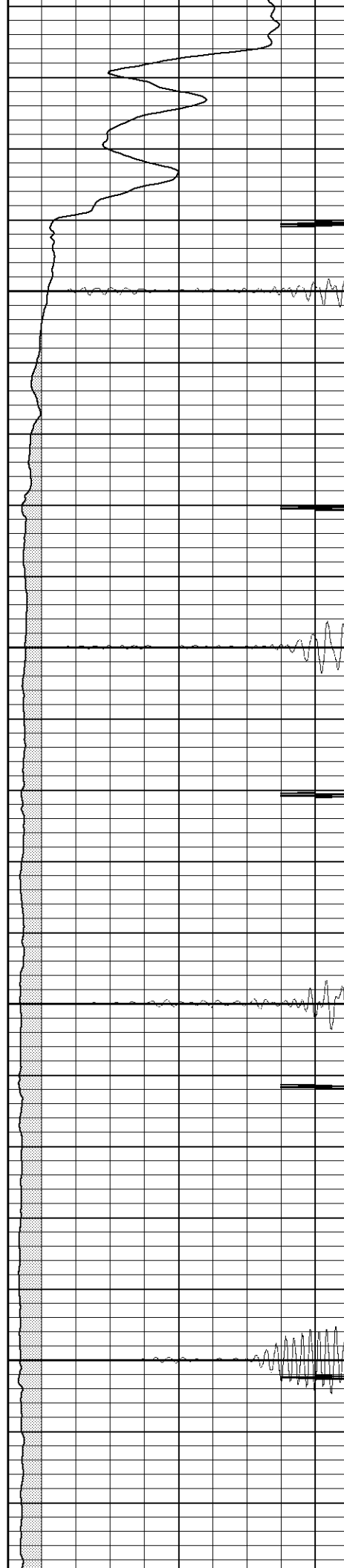


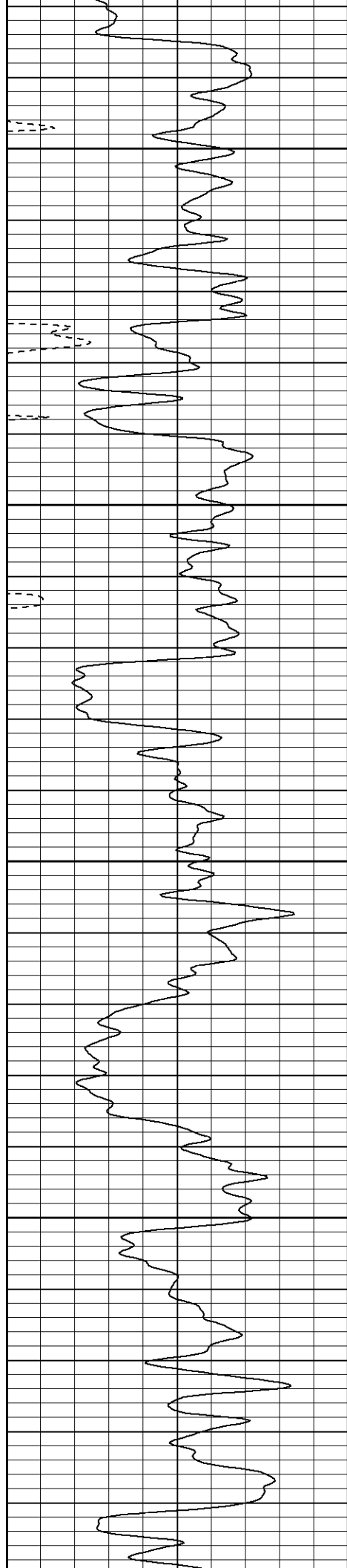
1300

1350

1400

1450





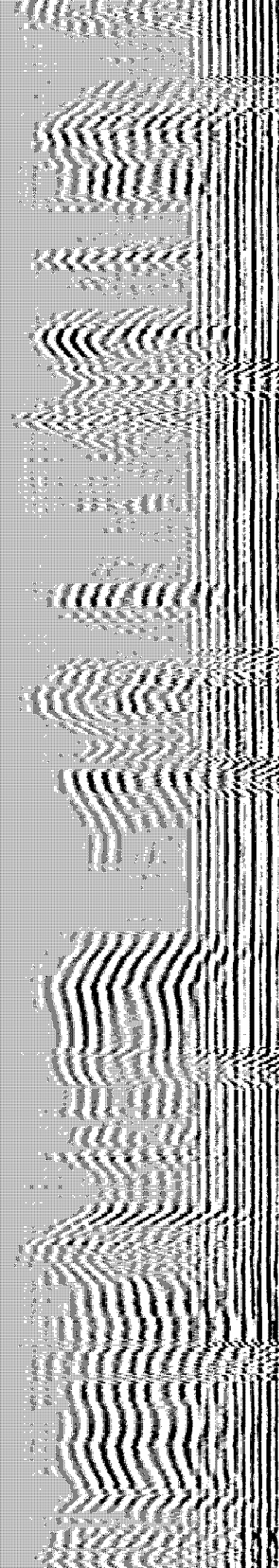
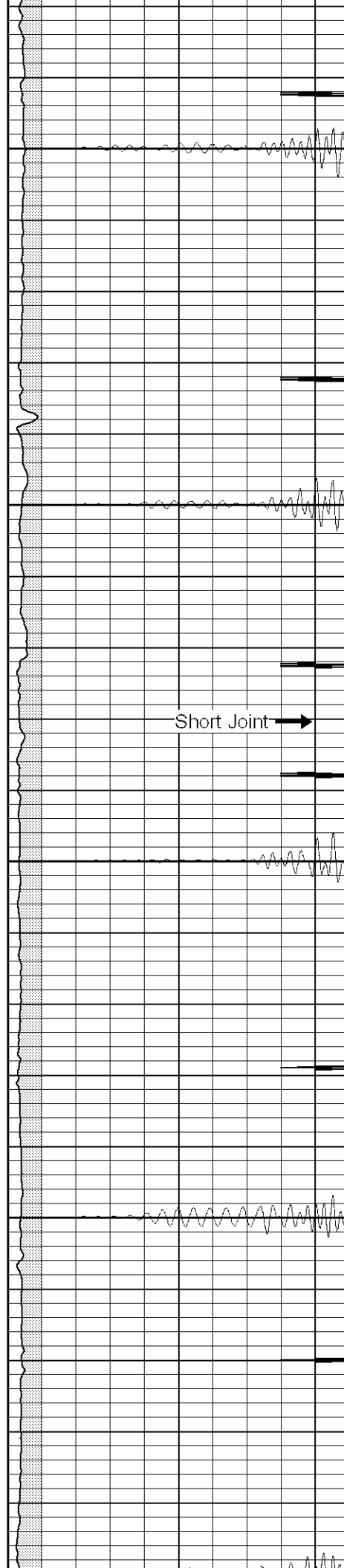
1500

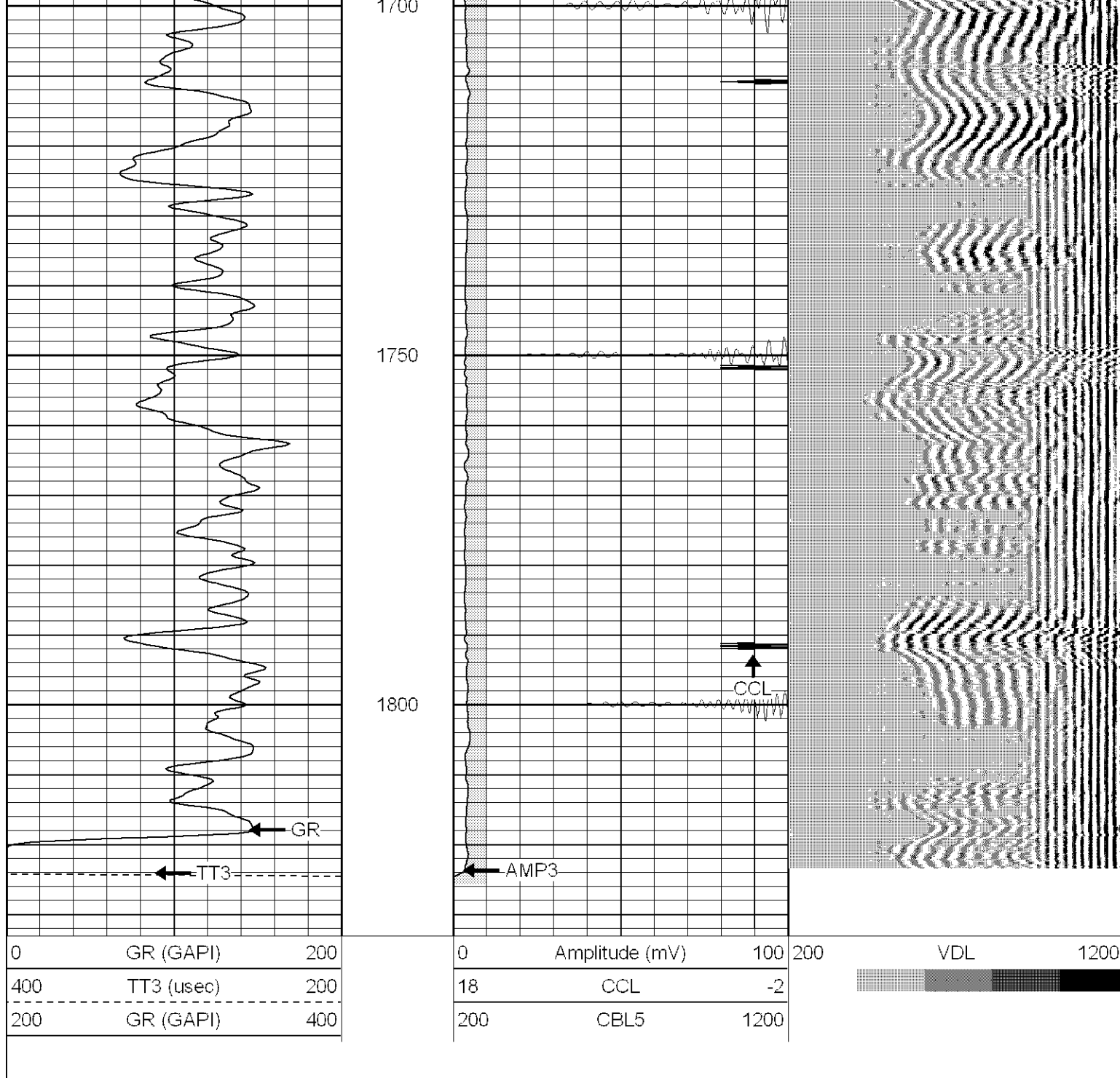
1550

1600

1650

Short Joint →





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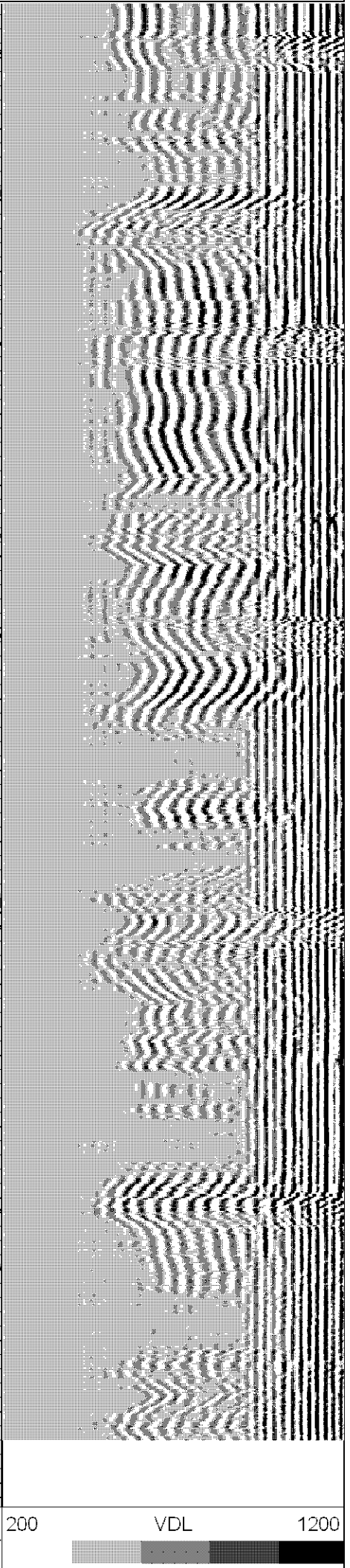
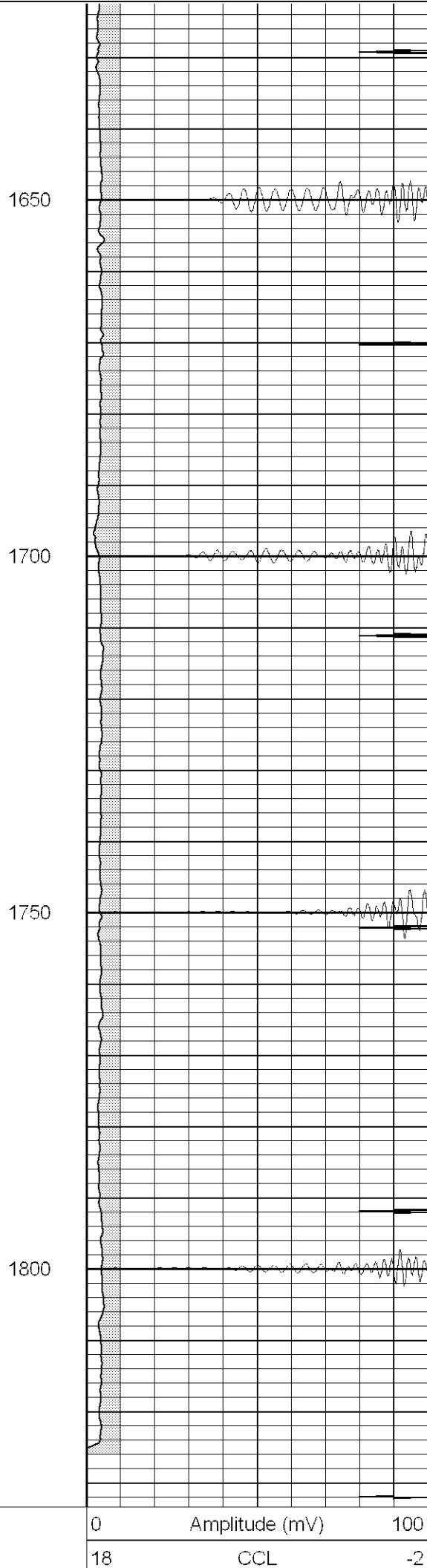
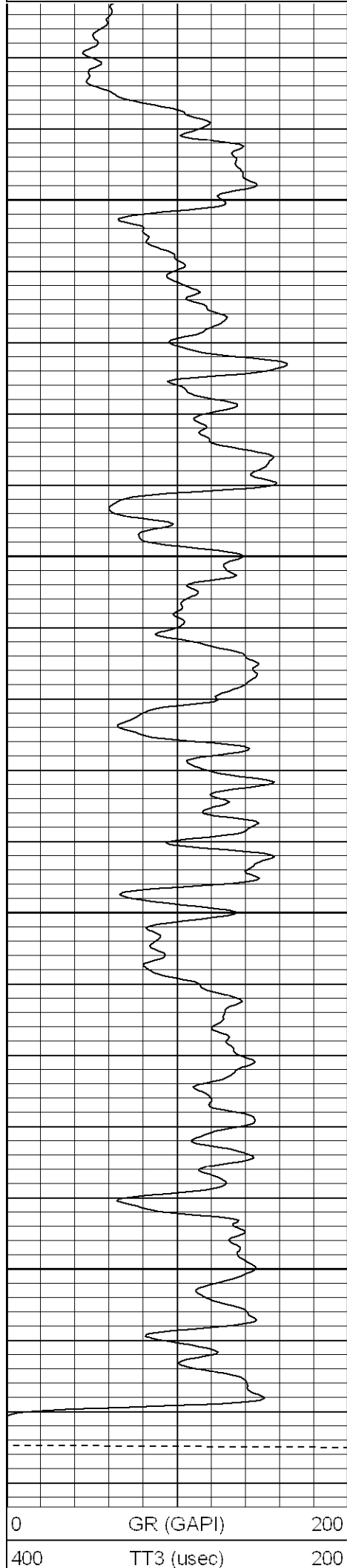
Repeat Section

Database File: wranglertr11705b.db
 Dataset Pathname: pass1
 Presentation Format: cblrt
 Dataset Creation: Thu Nov 17 12:45:39 2005 by Log Warrior 7.0 STD Ope
 Charted by: Depth in Feet scaled 1:240

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

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

200 1200
 VDL



200	GR (GAPI)	400	200	CBL5	1200
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Cement Bond Log Calibration Report

Serial Number:	Titan3				
Tool Model:	T3				
Performed:	Wed Nov 09 09:59:57 2005				
Depth:	758.779	ft			
Casing Diameter:	5.5	in			
	3' Spacing		5' Spacing		
Signal Zero:	1		1	mV	
Calibrated Amplitude:	85		85	mV	
Reading at Signal Zero:	0.02		0.01	V	
Reading in Free Pipe:	1		1.4	V	
Gain:	85.7143		60.4317		
Offset:	-0.714286		0.395683		

Gamma Ray Calibration Report

Serial Number:	Titan3				
Tool Model:	T2				
Performed:	Tue Sep 20 15:01:32 2005				
Calibrator Value:	200.0	GAPI			
Background Reading:	54.0	cps			
Calibrator Reading:	219.0	cps			
Sensitivity:	1.1000	GAPI/cps			

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	13.64		GR-T2 (Titan3)	2.52	2.44	25.00
WVF5	9.49		CBL-T3 (Titan3)	7.23	2.44	110.00
WVF3	8.49					
CENT	5.15		X	3.00	1.69	25.00
CCL	0.83		CCL-T5 (Titan3) Long	2.15	2.75	15.00

Dataset:	/field/well/run1/_plots/_jobs_/cbl				
Total Length:	14.91 ft				
Total Weight:	175.00 lb				
O.D.	2.75 in				