



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

## CEMENT BOND LOG

Company Pioneer Natural Resources  
Well Maximus 12-2  
Field Purgatoire River  
County Las Animas State Colorado

Location: API # : 05 071 09685 00

1834' FNL & 522' FWL

SEC 2 TWP 33S RGE 68W

Permanent Datum Ground Level Elevation 7920'  
Log Measured From Kelly Bushing 4' Above G.L.  
Drilling Measured From Kelly Bushing

Other Services  
INCL  
Elevation  
K.B. 7924'  
D.F. -----  
G.L. 7920'

Date 12-29-08

Run Number	One		
Depth Driller	2440'		
Depth Logger	2375'		
Bottom Logged Interval	2371'		
Top Log Interval	Surface		
Open Hole Size	7 7/8"		
Type Fluid	Water		
Density / Viscosity	///		
Max. Recorded Temp.	114 DEG F		
Estimated Cement Top	860'		
Time Well Ready	ROA		
Time Logger on Bottom	10:17 A.M.		
Equipment Number	T697		
Location	Trinidad		
Recorded By	J. Cappellucci		
Witnessed By			

Borehole Record				Tubing Record			
Bit	From	To	Size	Weight	From	To	

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8 5/8"		00	726'
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

#### Well Directions:

Wet Canyon to Hicks School, take left, take third right, drive thru the Julian Location, next left, go thru gate, at Y go right, drive thru the Mule Herder, go thru double green gates, go left, at Y go left, next Y go right, at next Y stay right, go thru double green gates, at Y stay left, go down hill thru double green gates, stay on main road, past wooden wall past old cabin, at Y stay right, stay on main road, at Y stay right up switchbacks, at top stay left, dead end on location.



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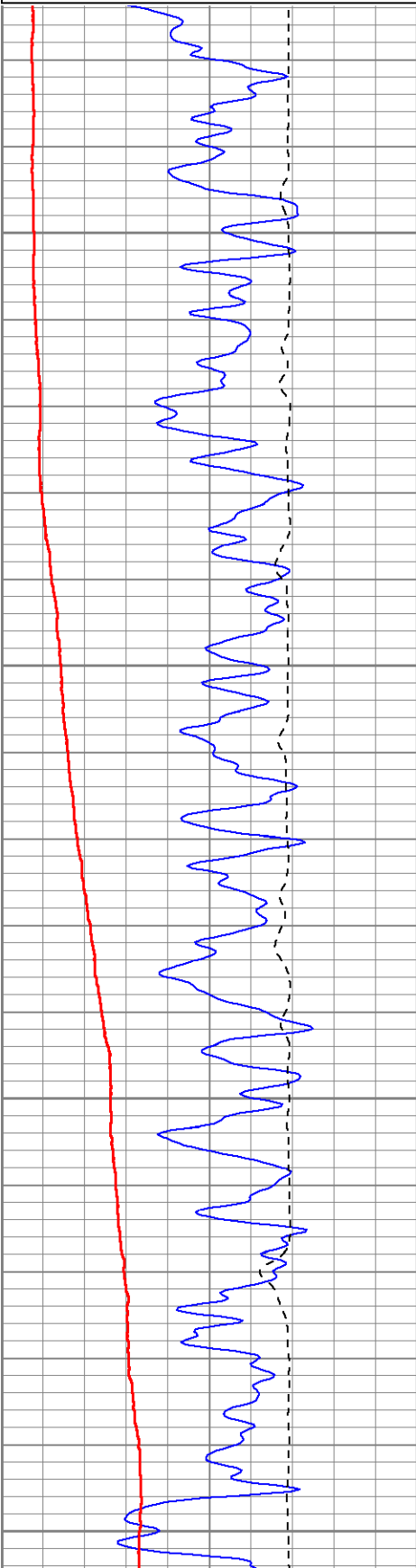
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Dataset Pathname: pass7.1  
Presentation Format: cblrtd  
Dataset Creation: Mon Dec 29 15:52:21 2008 by Calc Open-Cased 071220  
Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	200
400	TT3 (usec)	200
0	DEVI (°)	10

0	AMP3 (mV)	100
18	CCL	-2
200	CBL5	1200
0	AMP5 (mV)	100

200 Variable Density 1200

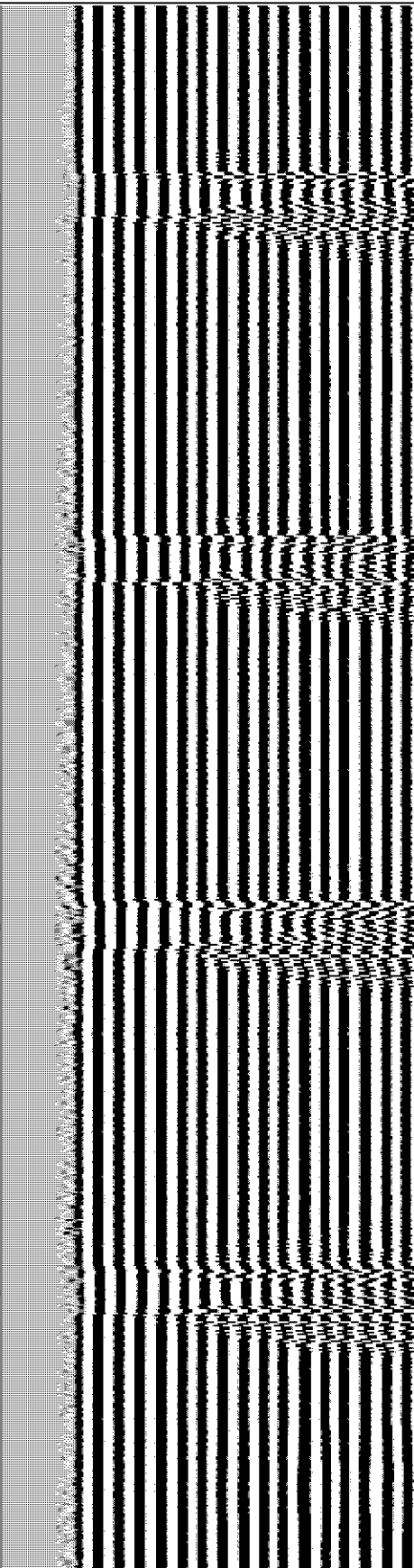
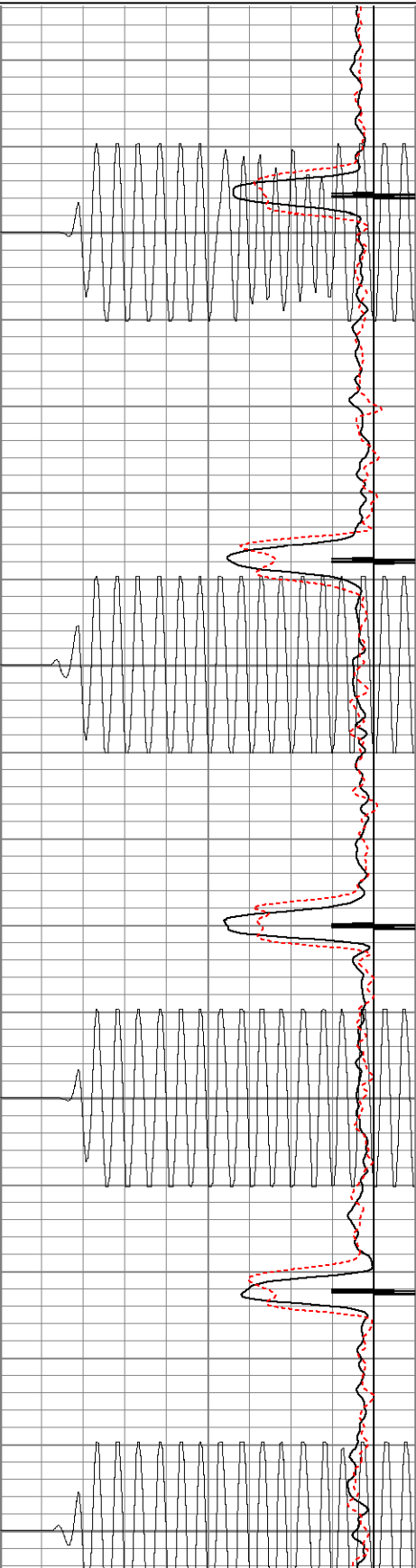


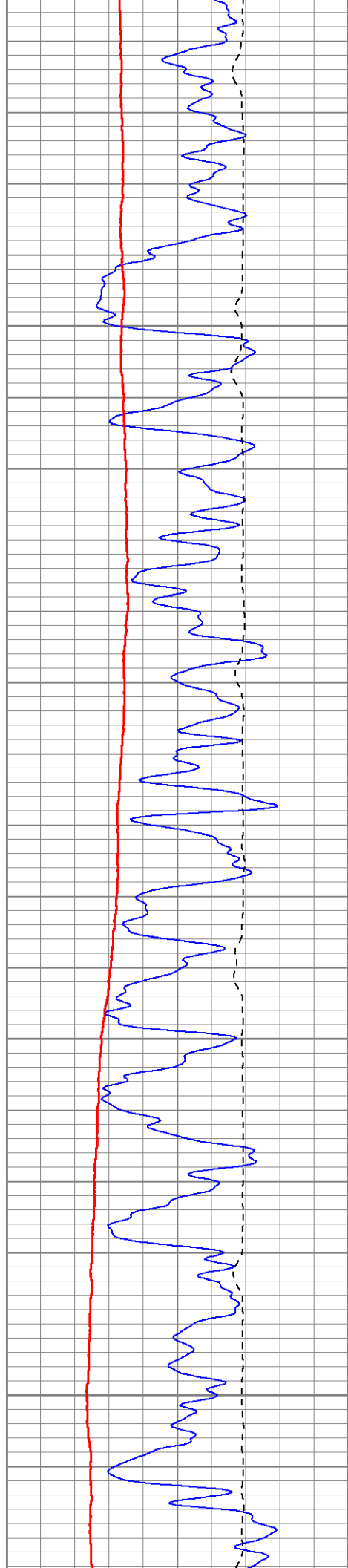
50

100

150

200



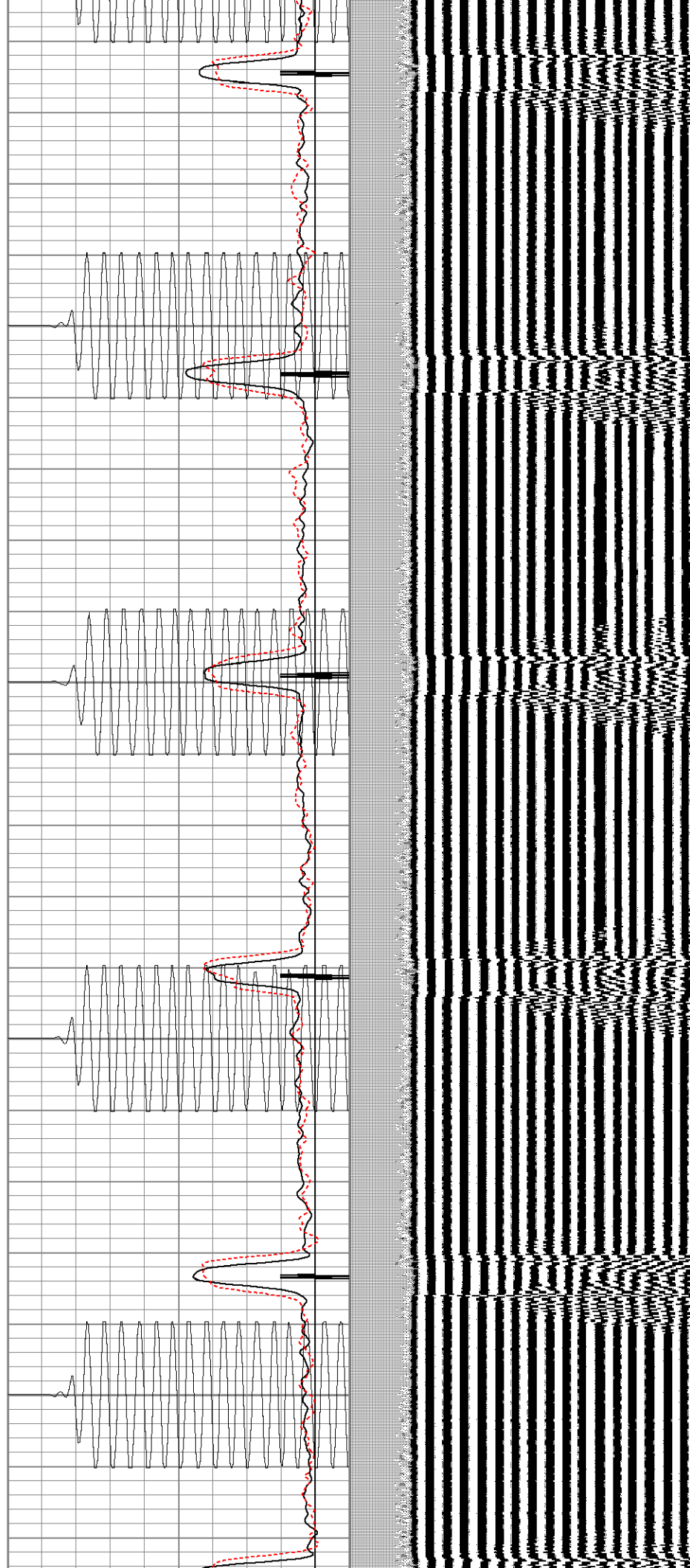


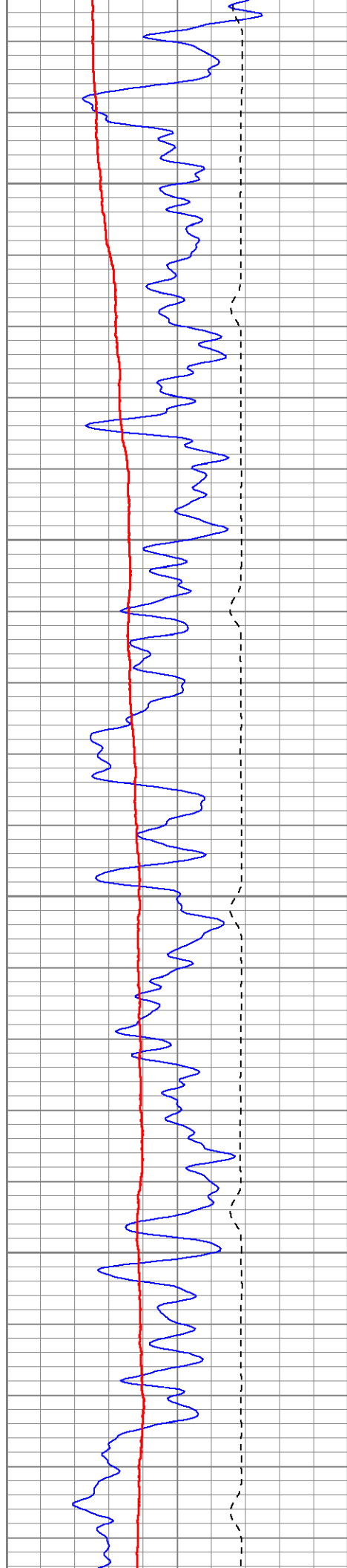
250

300

350

400



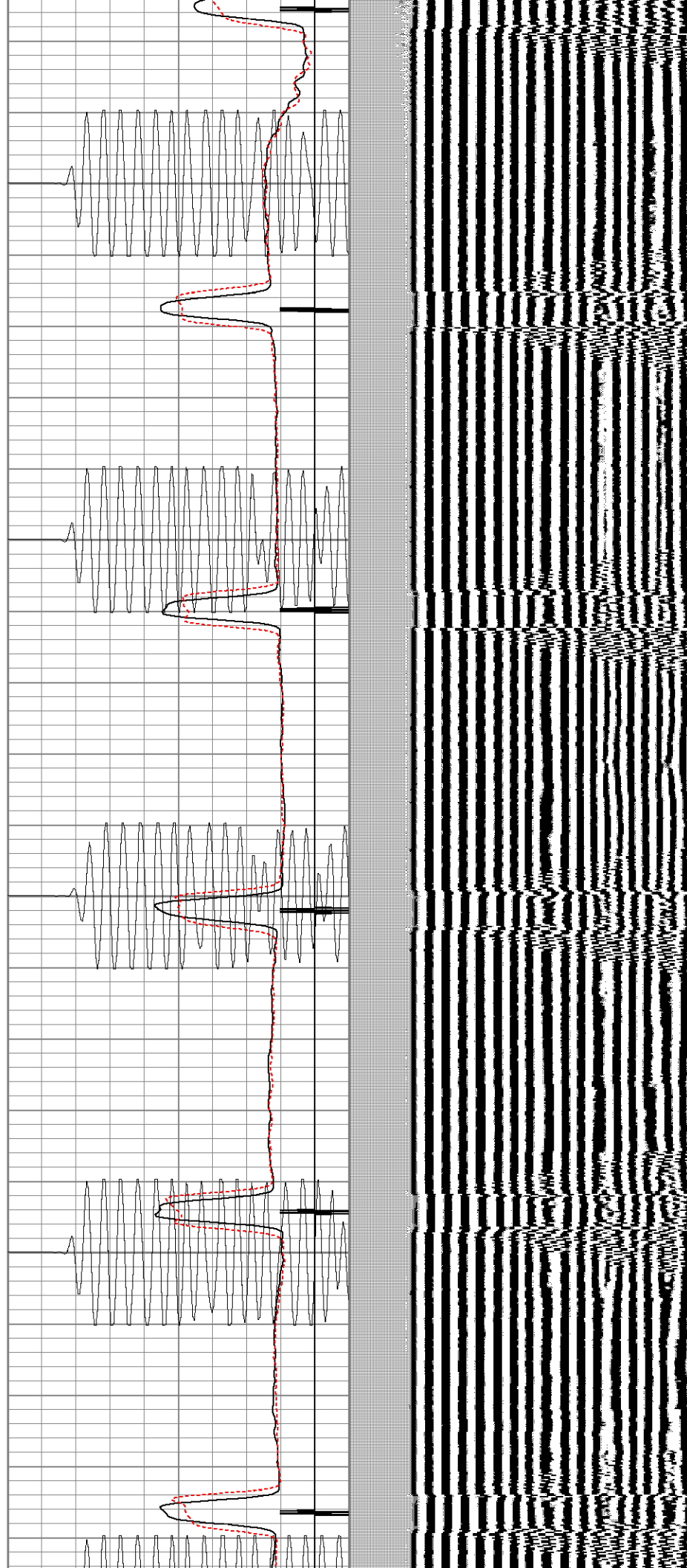


450

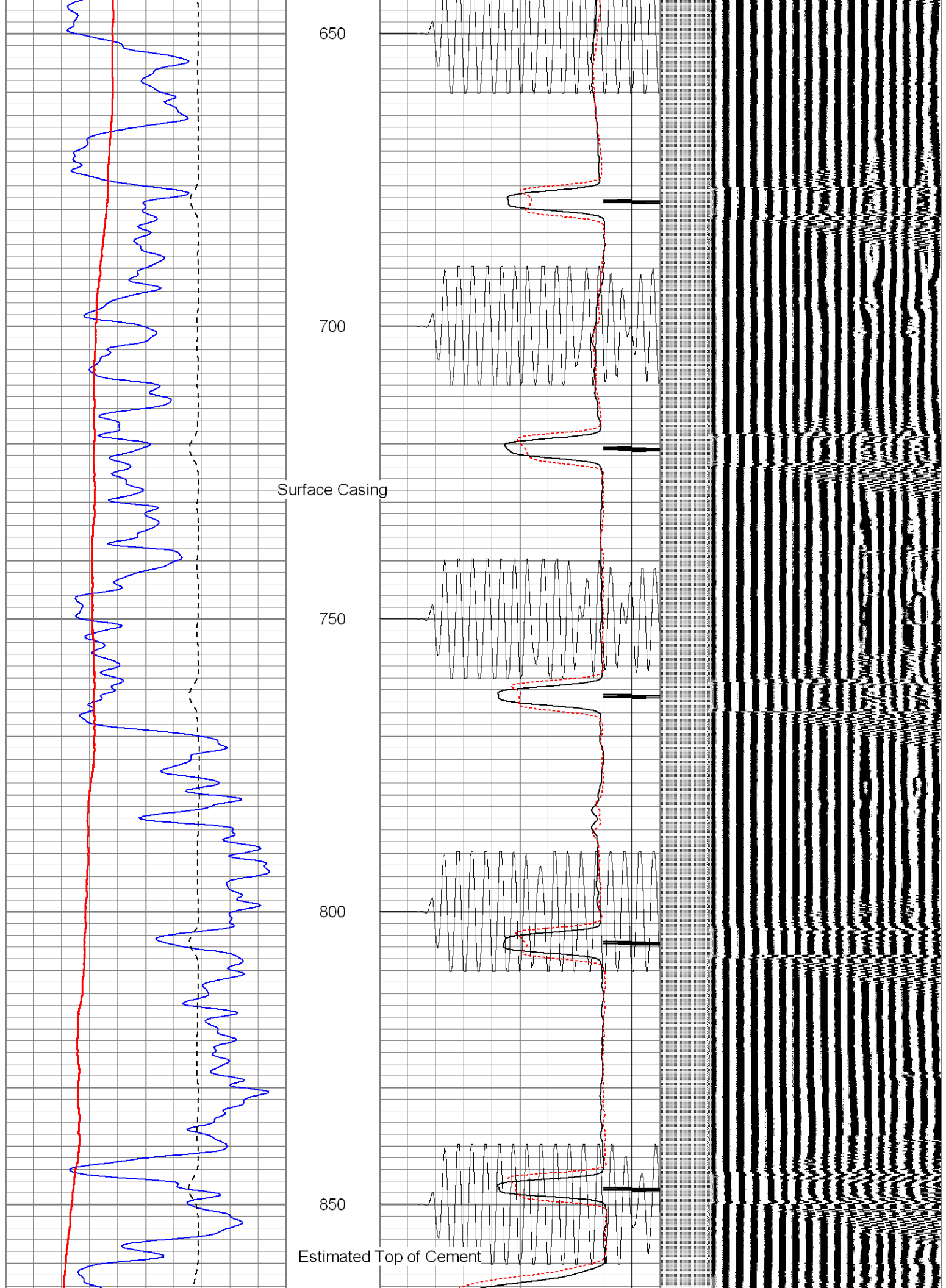
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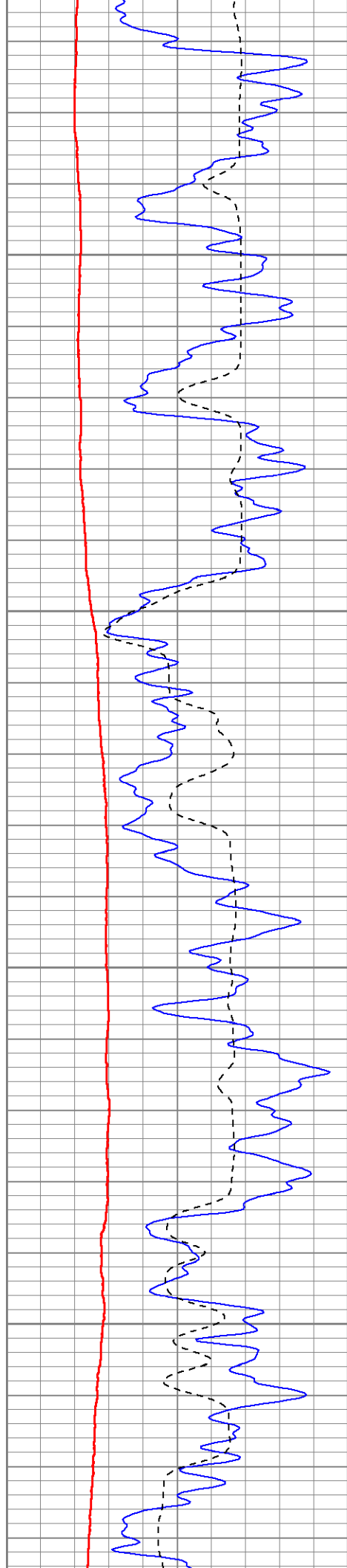
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600







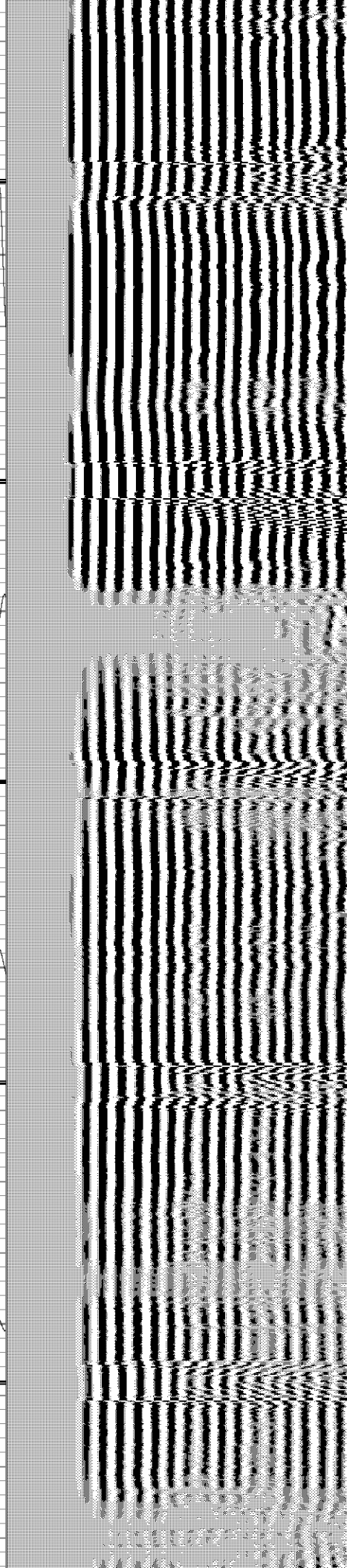
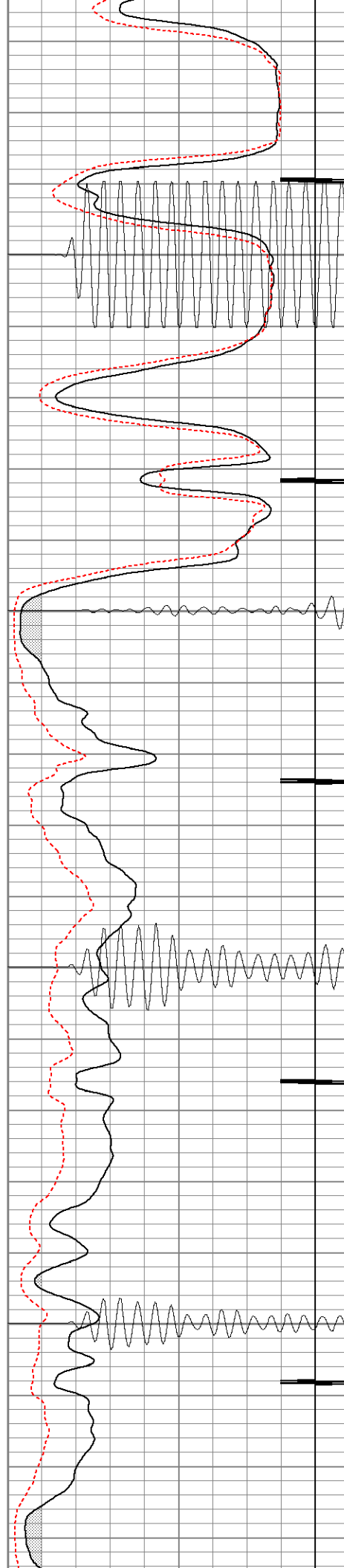


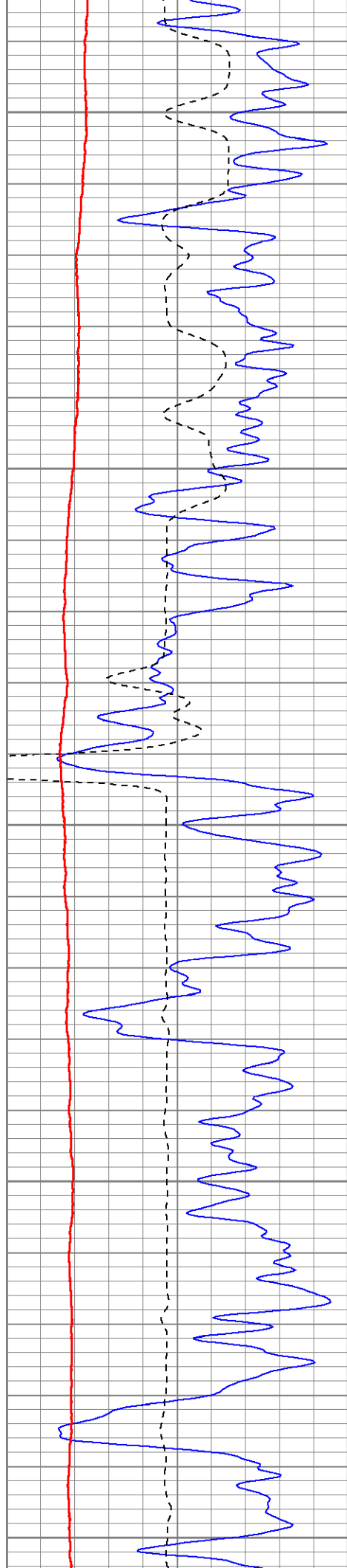
900

950

1000

1050





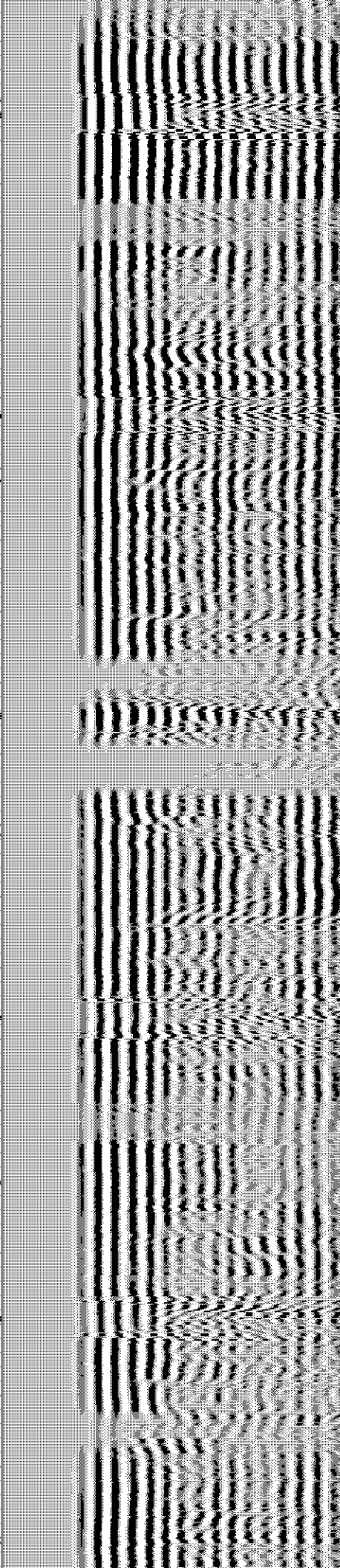
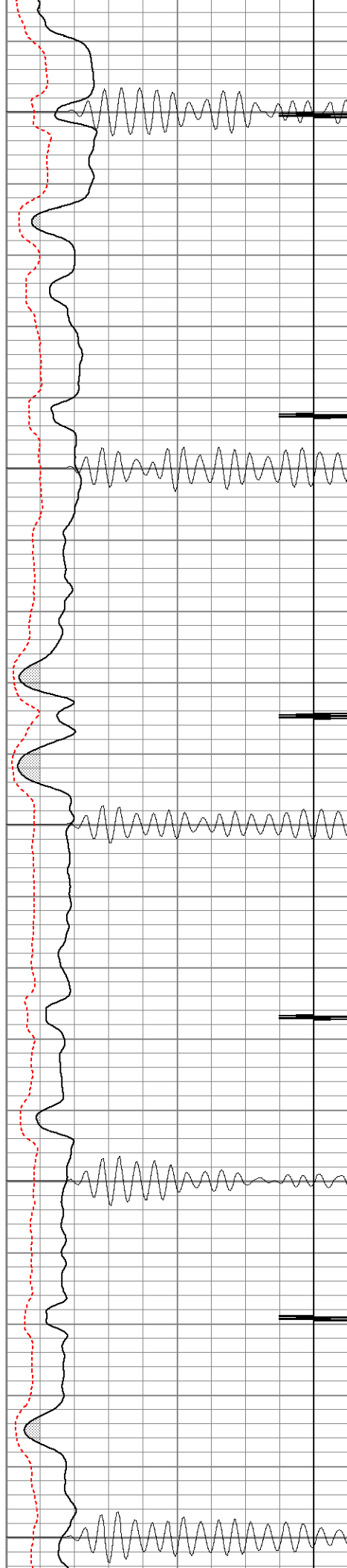
1100

1150

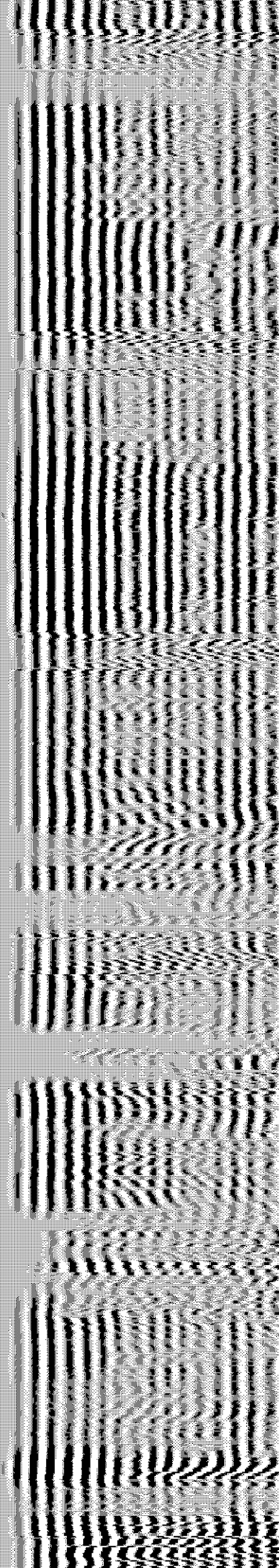
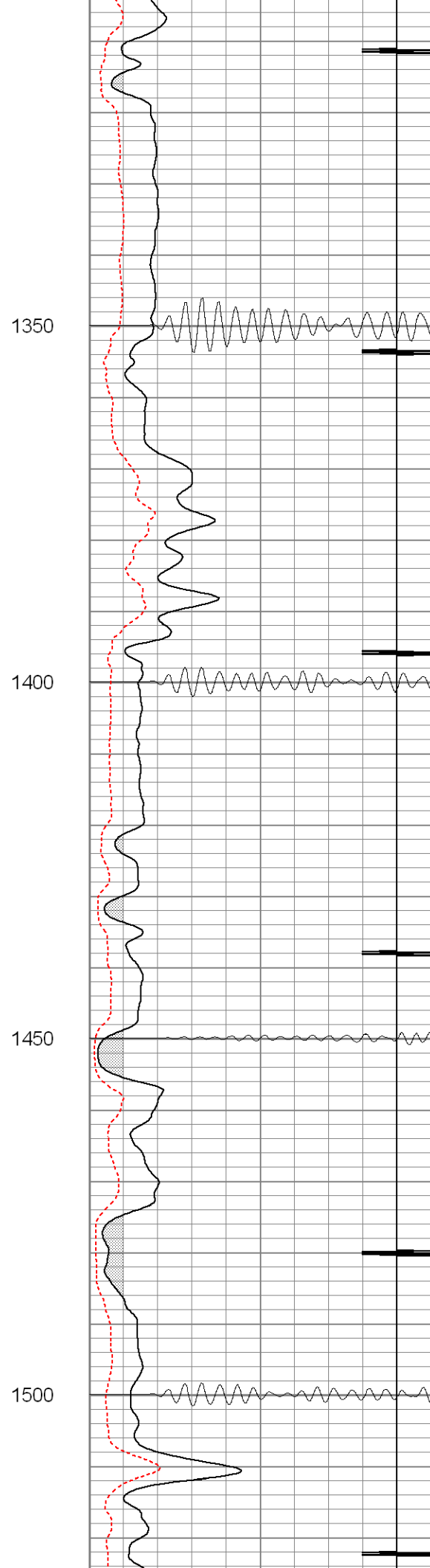
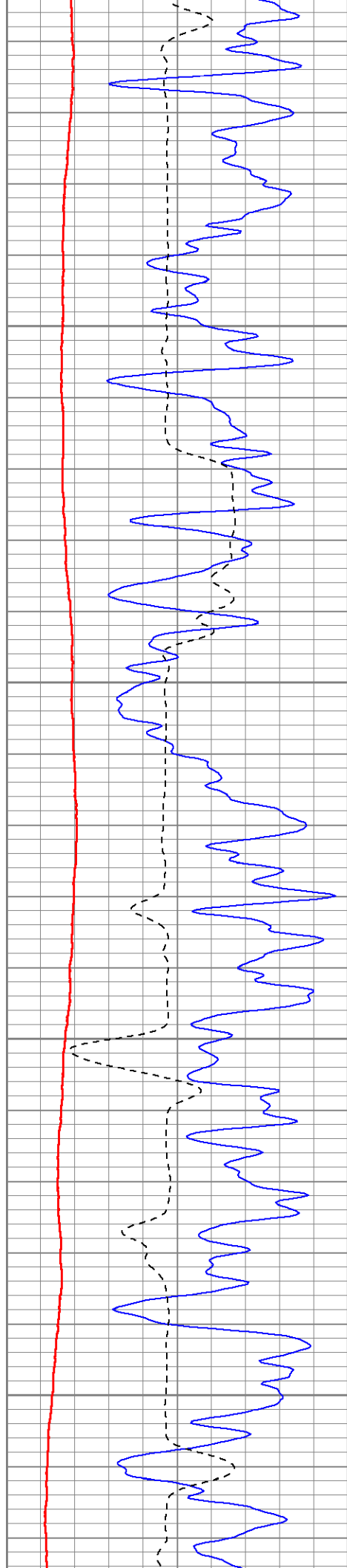
1200

1250

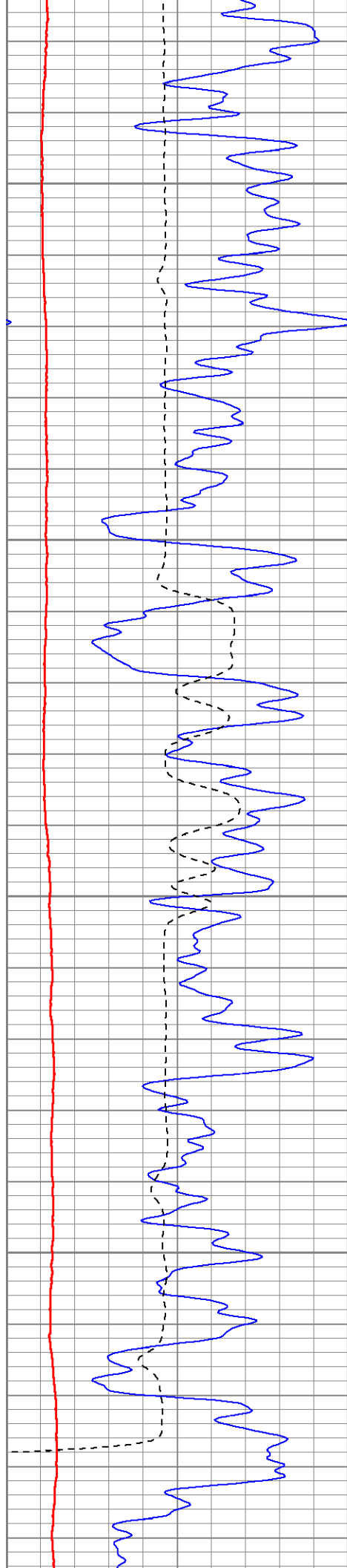
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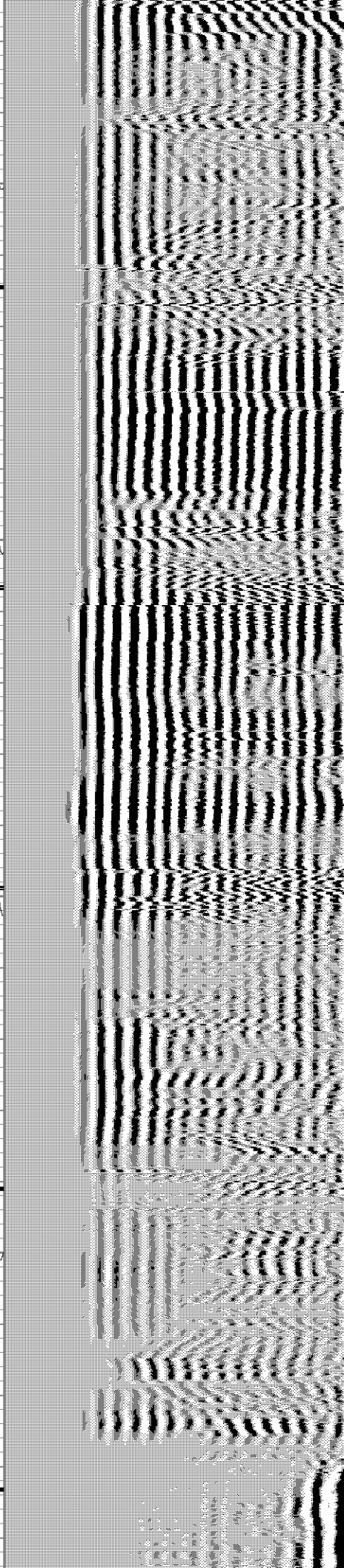
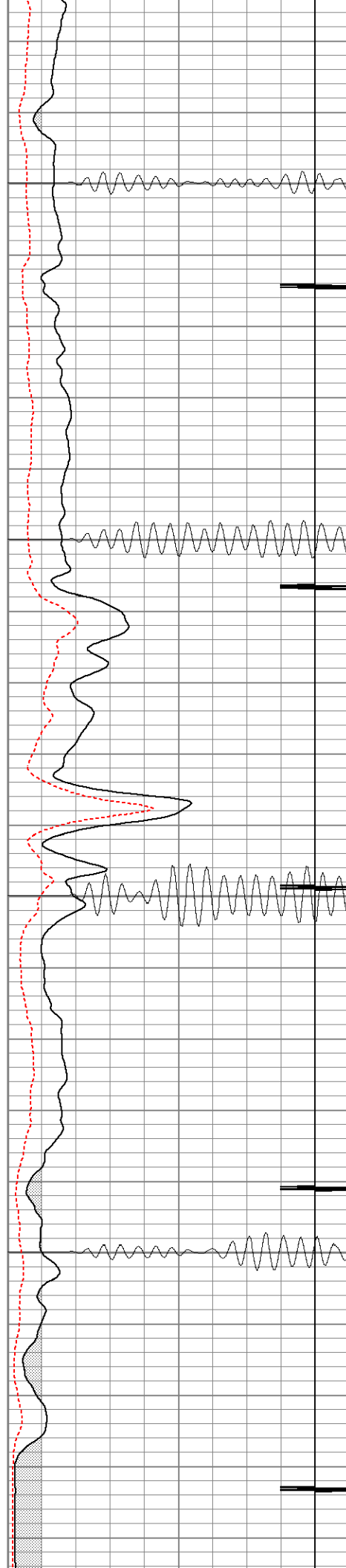


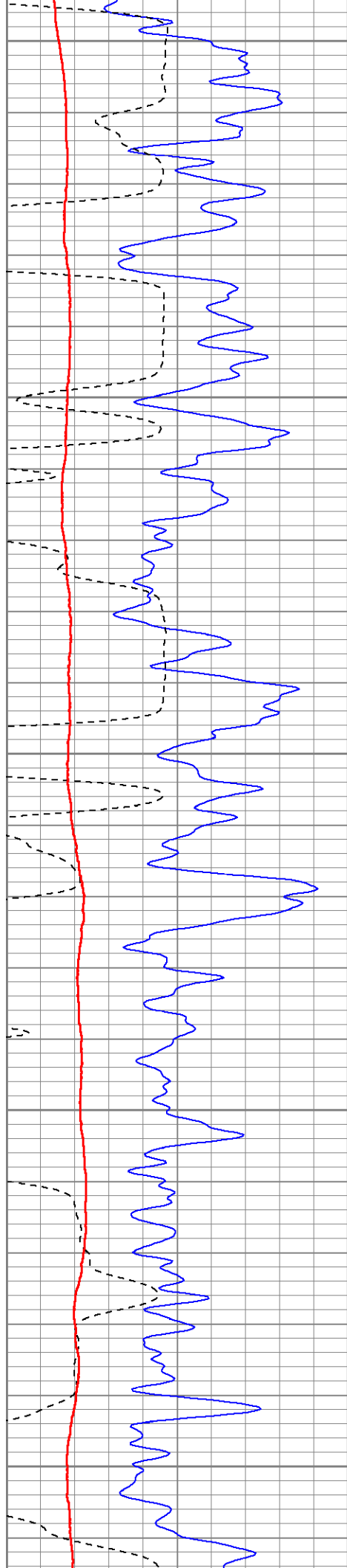
1550

1600

1650

1700





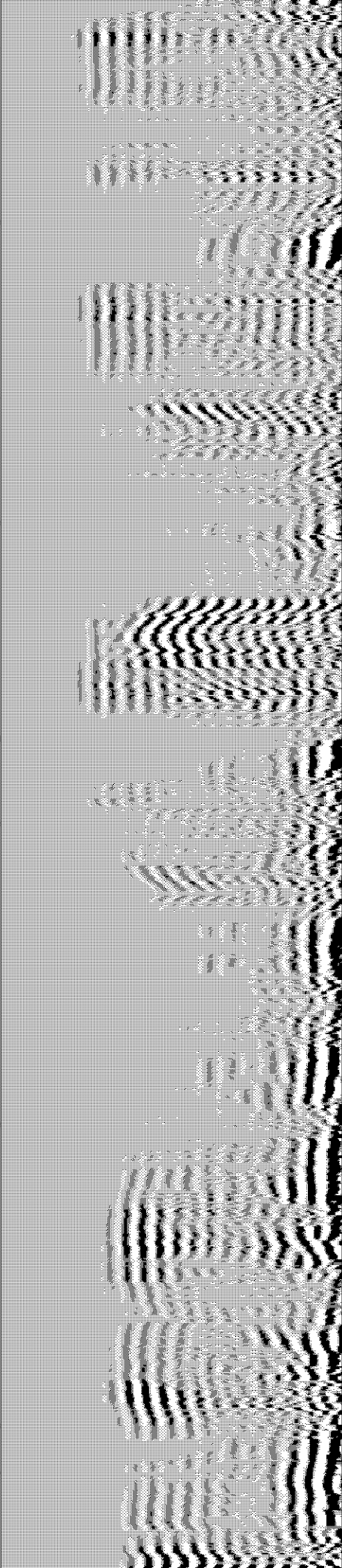
1750

1800

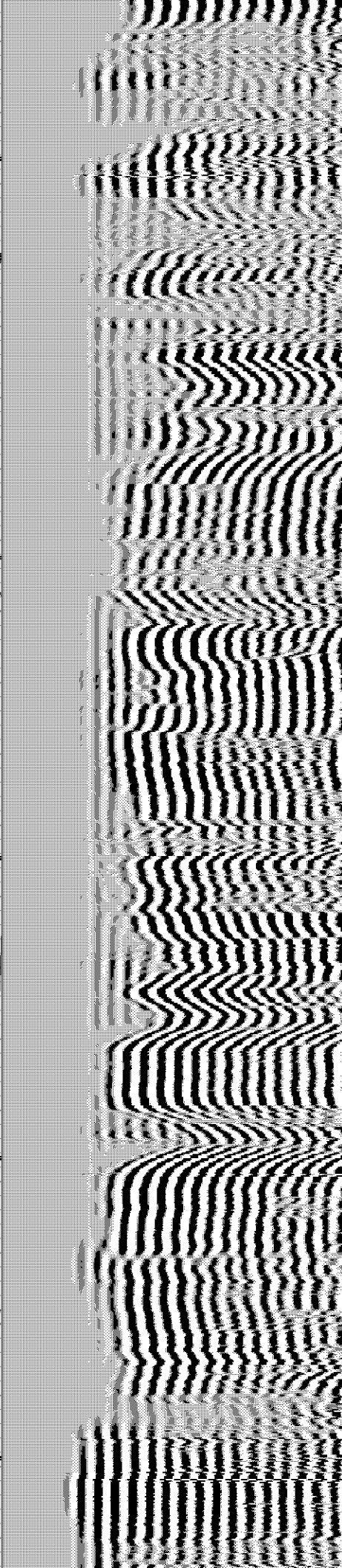
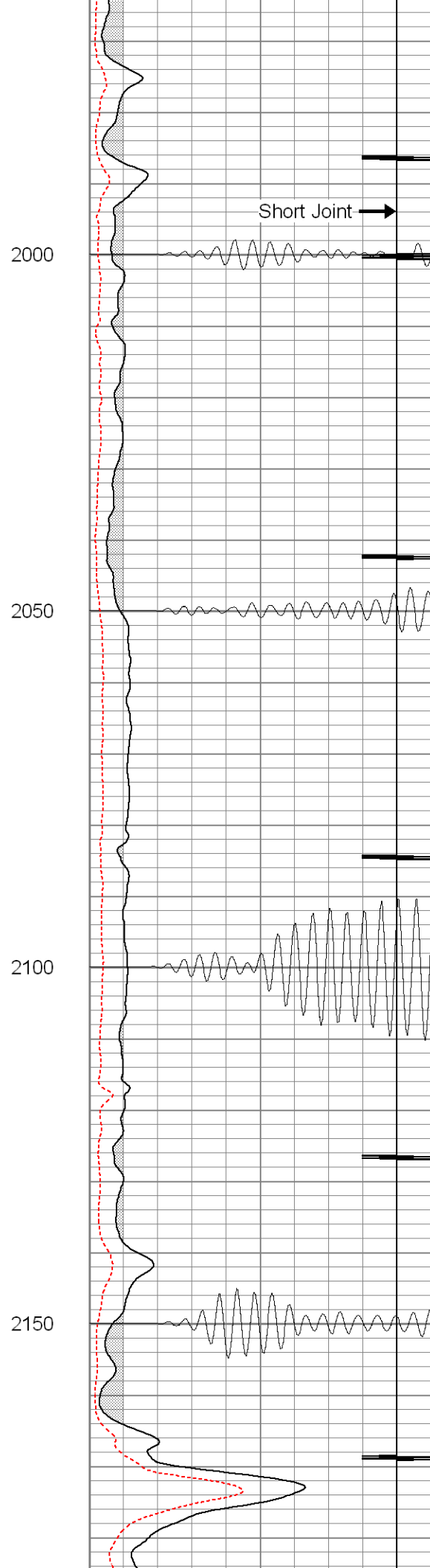
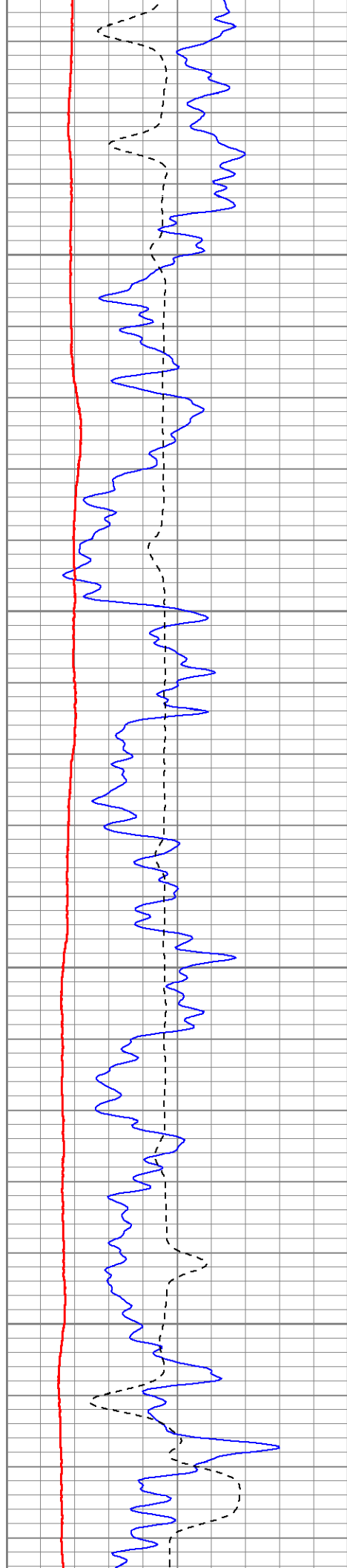
1850

1900

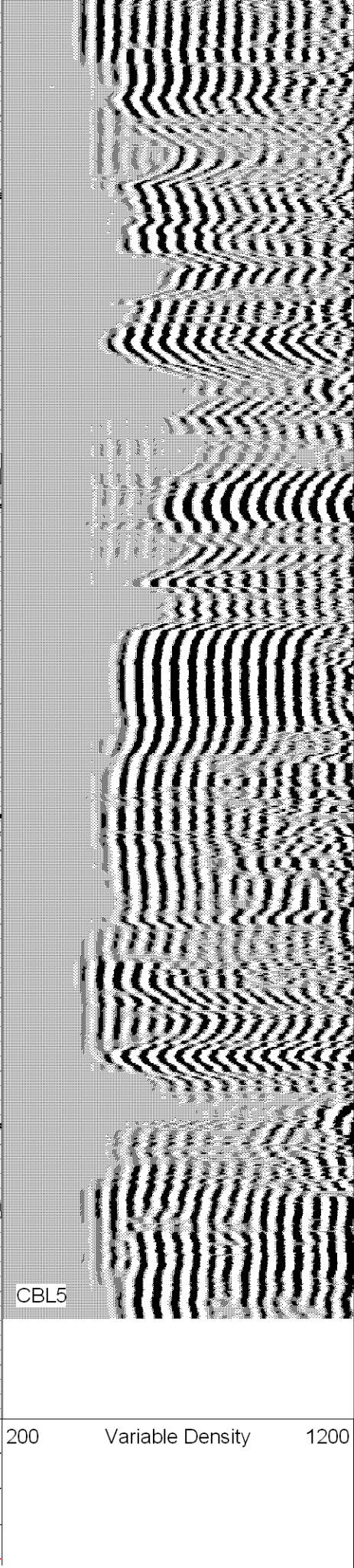
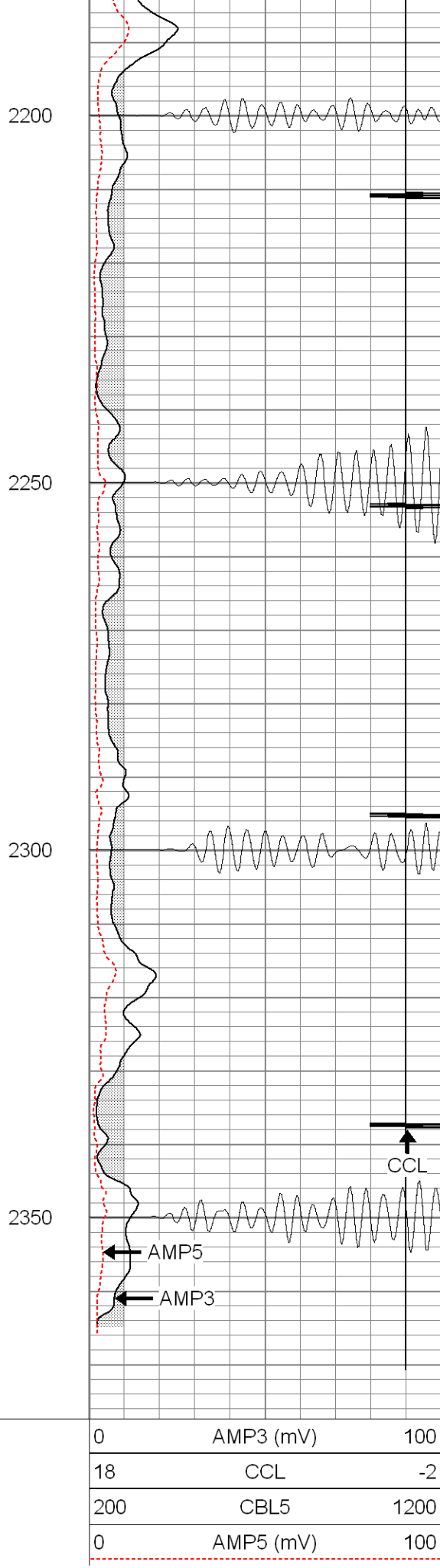
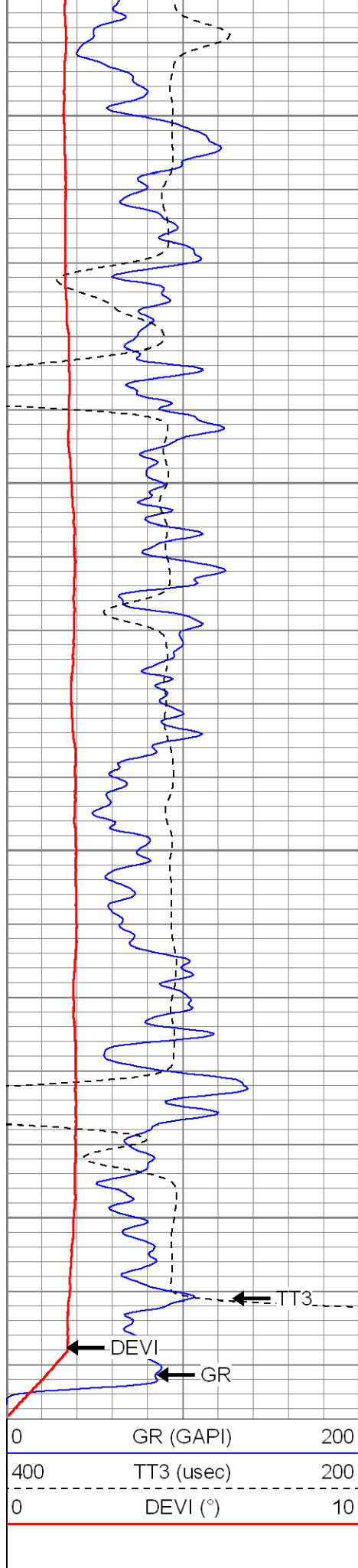
1950













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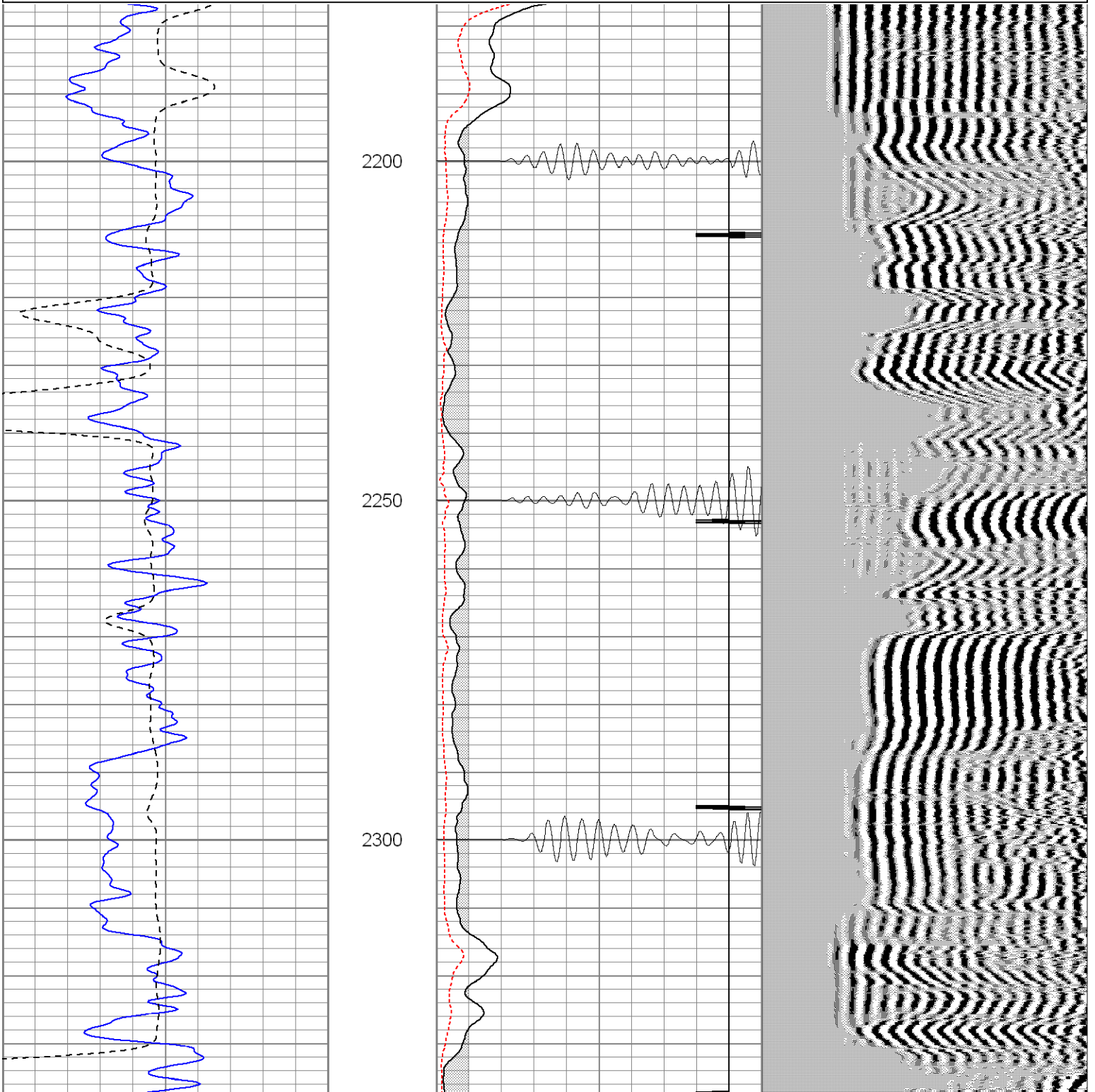
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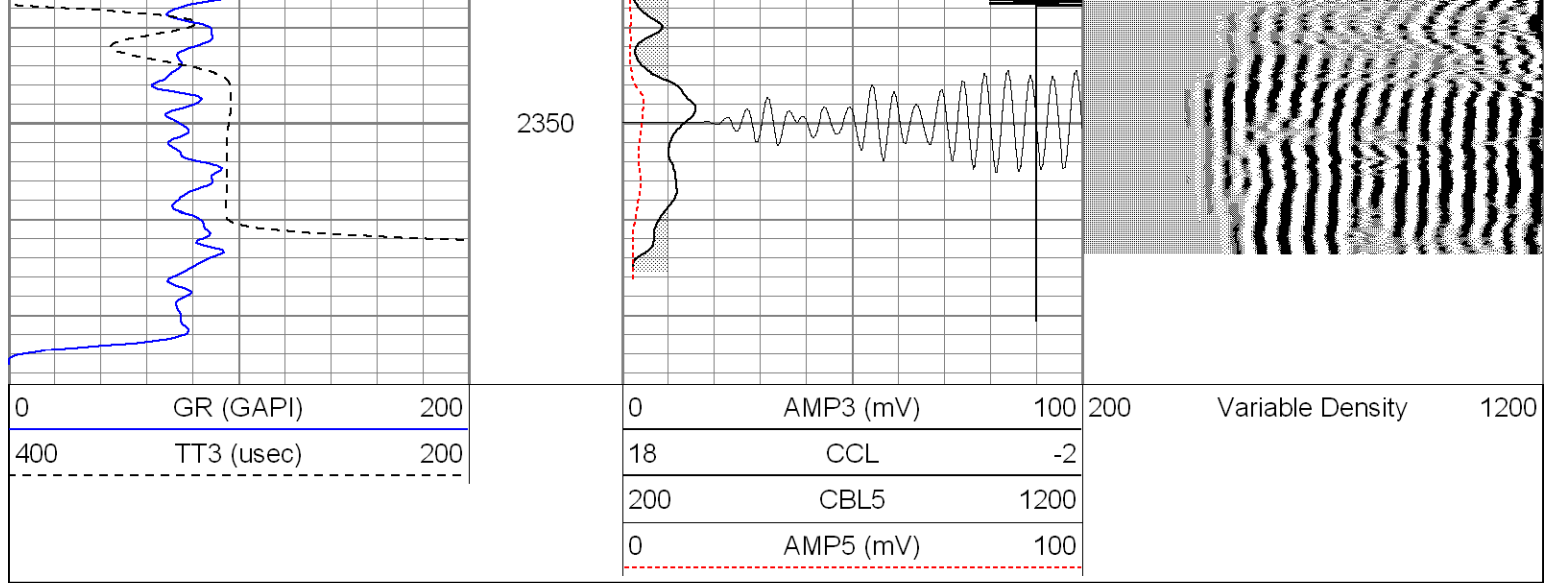
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Dataset Pathname: pass6.1  
Presentation Format: cblrtd  
Dataset Creation: Mon Dec 29 16:02:57 2008 by Calc Open-Cased 071220  
Charted by: Depth in Feet scaled 1:240

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

0	AMP3 (mV)	100
18	CCL	-2
200	CBL5	1200
0	AMP5 (mV)	100

200 Variable Density 1200





### Calibration Report

Database File: maximus122908b.db  
 Dataset Pathname: pass7  
 Dataset Creation: Mon Dec 29 12:47:12 2008 by Log Open-Cased 071220

### Gamma Ray Calibration Report

Serial Number: 080351  
 Tool Model: 275D\_INC  
 Performed: Fri Dec 26 07:42:21 2008

Calibrator Value: 200.0 GAPI

Background Reading: 50.0 cps  
 Calibrator Reading: 250.0 cps

Sensitivity: 1.0000 GAPI/cps

### Inclinometer Calibration Report

Performed: Fri Dec 26 07:59:33 2008

	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	-3579.00	3617.00	-1.00	1.00	gee
Y Accelerometer	-3671.40	3529.80	-1.00	1.00	gee
Z Accelerometer					

### Cement Bond Log Calibration Report

Serial Number: 081024  
 Tool Model: PROBEDIGITALCBL  
 Performed: Mon Dec 29 12:33:19 2008

Depth: 48.1103 ft  
 Casing Diameter: 5.5 in

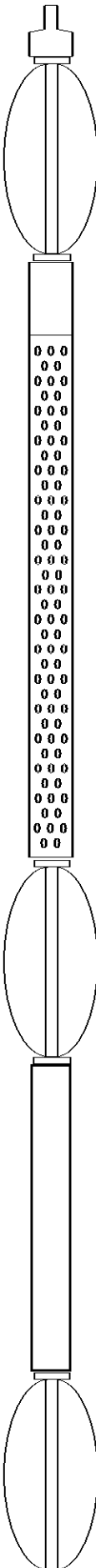
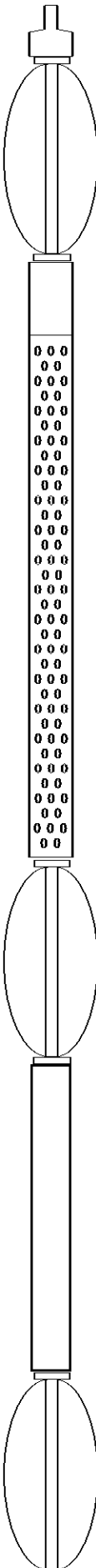
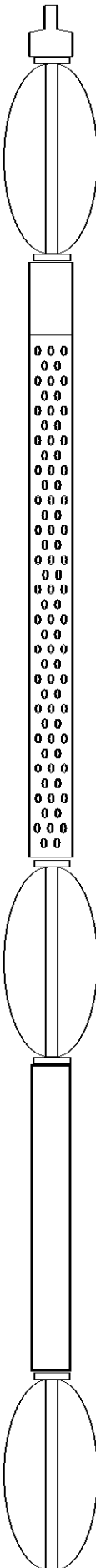
	3' Spacing	5' Spacing	
Signal Zero:	0	0	mV
Calibrated Amplitude:	85	85	mV
Reading at Signal Zero:	-0.04	-0.04	V
Reading in Free Pipe:	0.670898	0.74707	V



Gain:  
Offset:

119.567  
4.78268

107.995  
4.31982

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
WVF3	14.75		None	0.75	1.50	5.00
			X	3.00	1.69	25.00
			CBLPROBE-PROBEDIGITALCBL (0810248.75 PROBE DIGITAL CBL	248.75	2.75	106.50
WVF5	13.75					
CCL	6.50		X	3.00	1.69	25.00
			GR-275D_INC (080351) 2-3/4" GR-CCL with Inclination	4.50	2.75	50.00
ACCX	4.83					
ACCY	4.83					
ACCZ	4.83					
GR	3.83					
			X	3.00	1.69	25.00

Dataset:	maximus122908b.db: field/well/run1/pass7
Total Length:	23.00 ft
Total Weight:	236.50 lb
O.D.	2.75 in