



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

## CEMENT BOND GAMMA RAY

Company Pioneer Natural Resources  
Well Blackberry 24-29  
Field Spanish Peaks  
County Las Animas  
State CO

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Well Blackberry 24-29  
Field Spanish Peaks  
County Las Animas  
State CO

Location: API # : 05 071 09244 00

761' FSL & 1724' FWL

SEC 29 TWP 31S RGE 66W

Permanent Datum Ground Level Elevation 7349'  
Log Measured From Kelly Busing 15' Above G.L.  
Drilling Measured From Kelly Busing

Elevation  
K.B. 7364'  
D.F. -----  
G.L. 7349'

Date 9/13/07

Run Number	two		
Depth Driller	2800'		
Depth Logger	2756'		
Bottom Logged Interval	2752'		
Top Log Interval	200'		
Open Hole Size	7 7/8"		
Type Fluid	water		
Density / Viscosity	///		
Max. Recorded Temp.	///		
Estimated Cement Top	Surf.		
Time Well Ready	ROA		
Time Logger on Bottom	9-35		
Equipment Number	0703		
Location	Trinidad		
Recorded By	Worley		
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	486'		
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

Aguliar to Gulnare, stay straight at Bar, go past turn off to gravel pit,  
take second right to location.

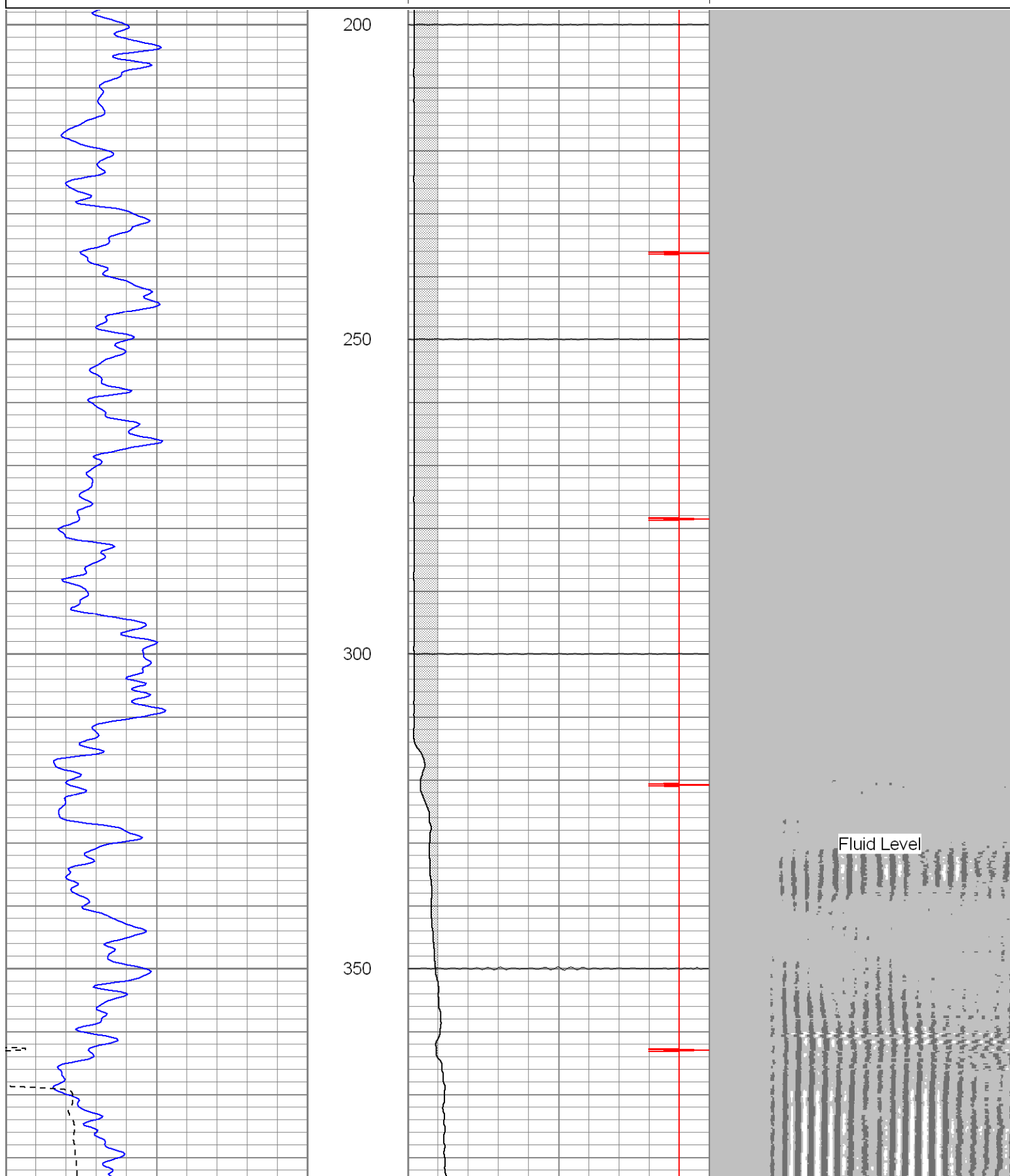


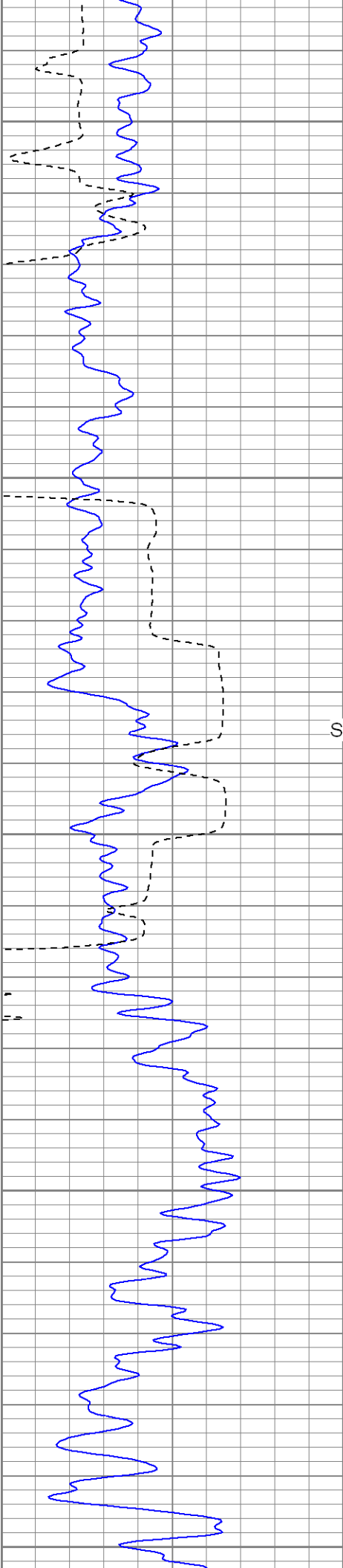
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# Main Pass

Database File: blackberry91307b.db  
Dataset Pathname: pass2.3  
Presentation Format: cblrt  
Dataset Creation: Thu Sep 13 12:33:04 2007 by Calc Std Casedhole 07051  
Charted by: Depth in Feet scaled 1:240

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





Surface Casing

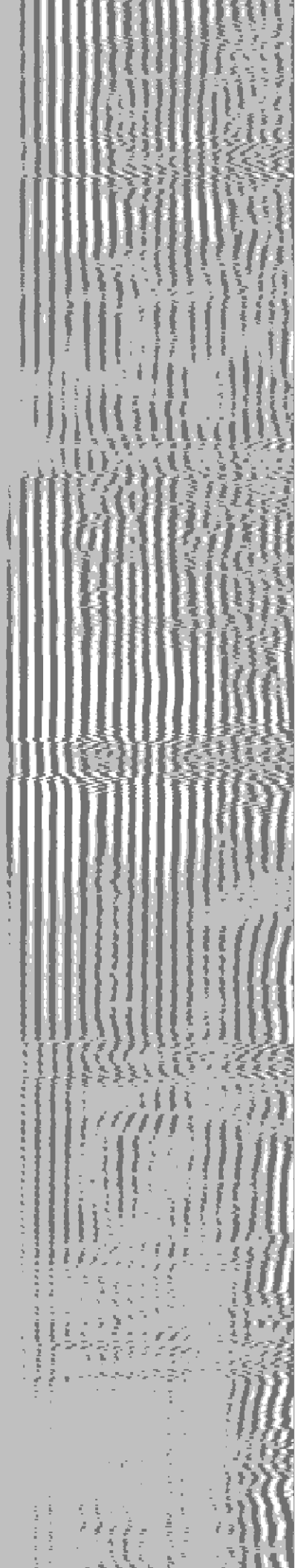
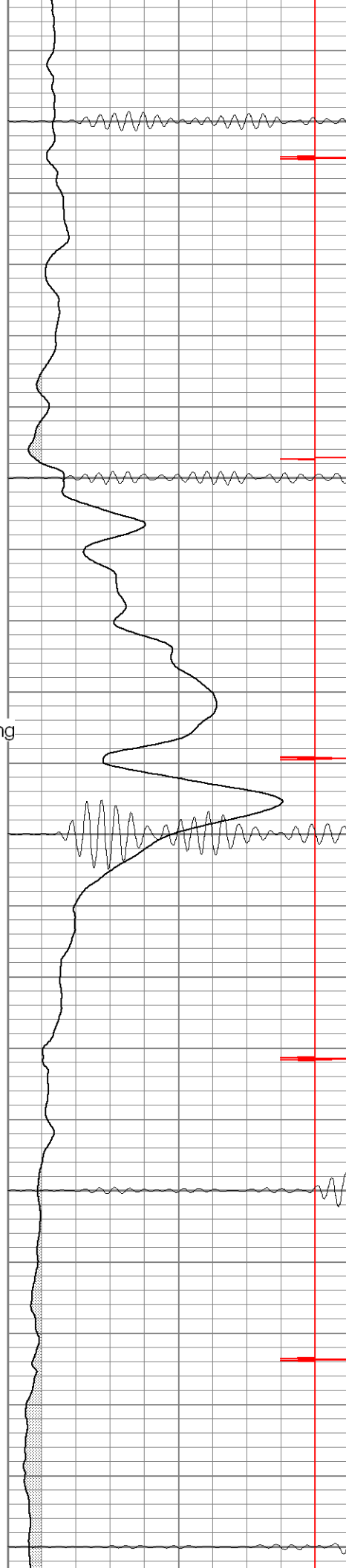
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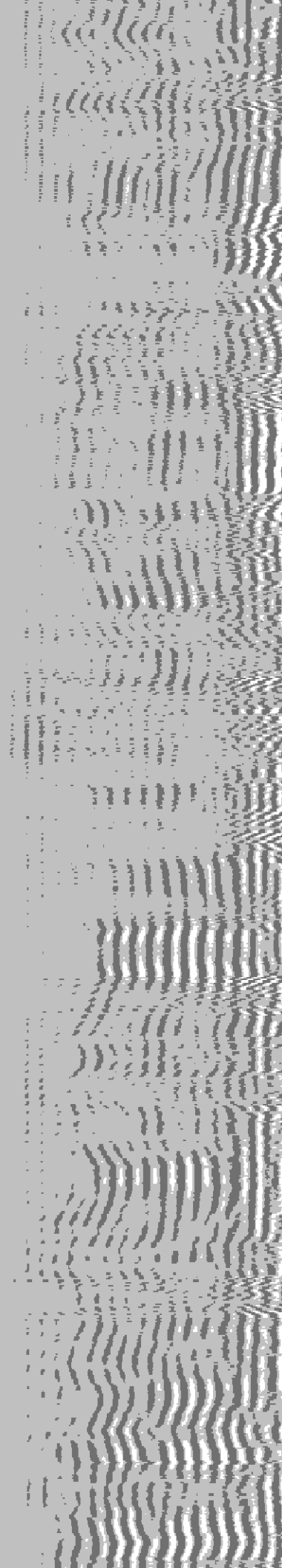
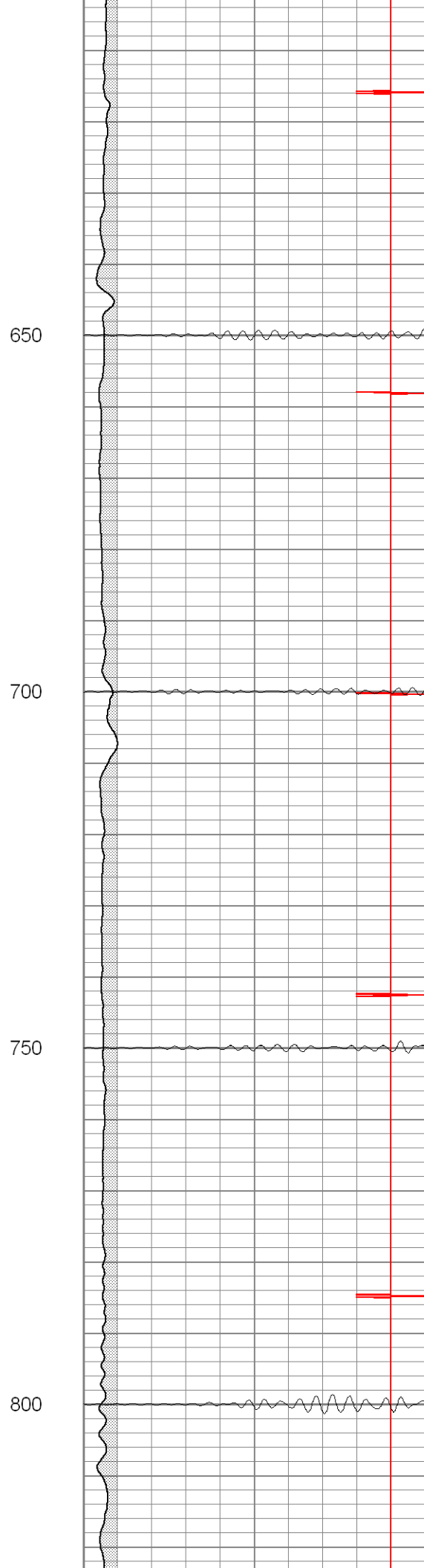
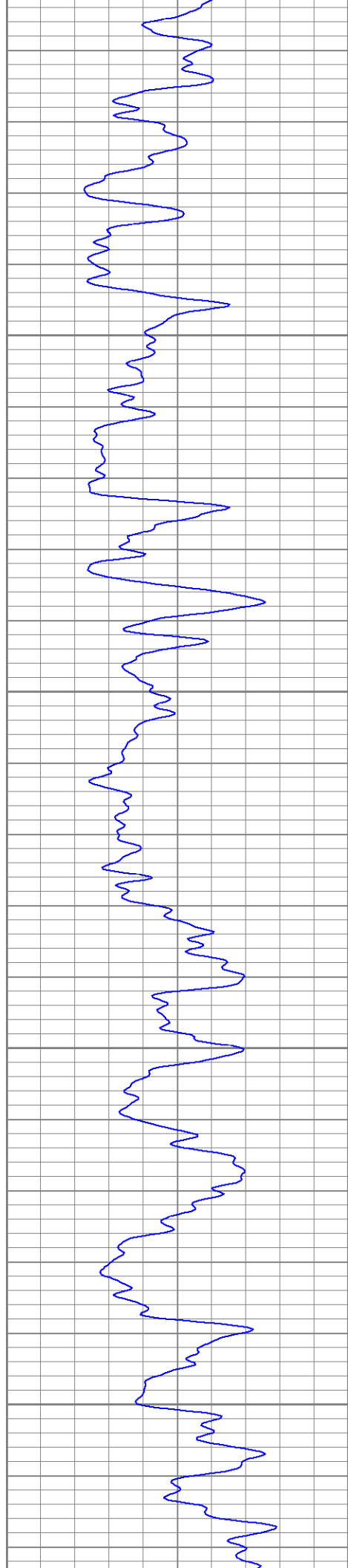
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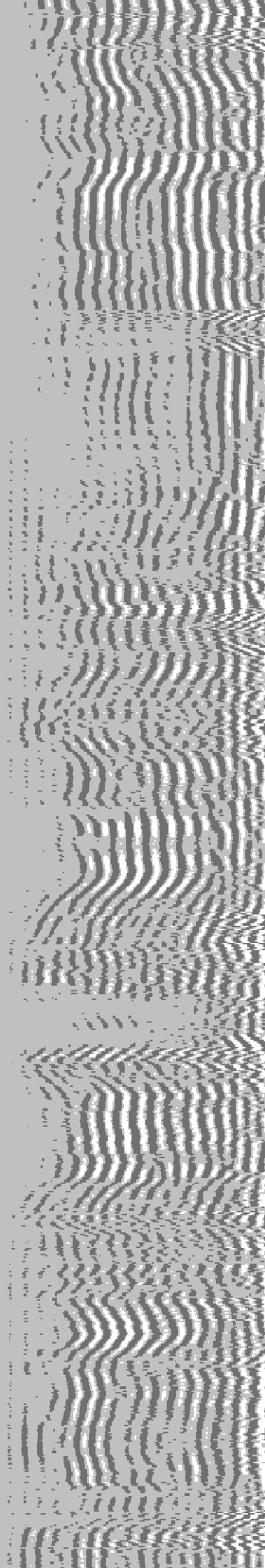
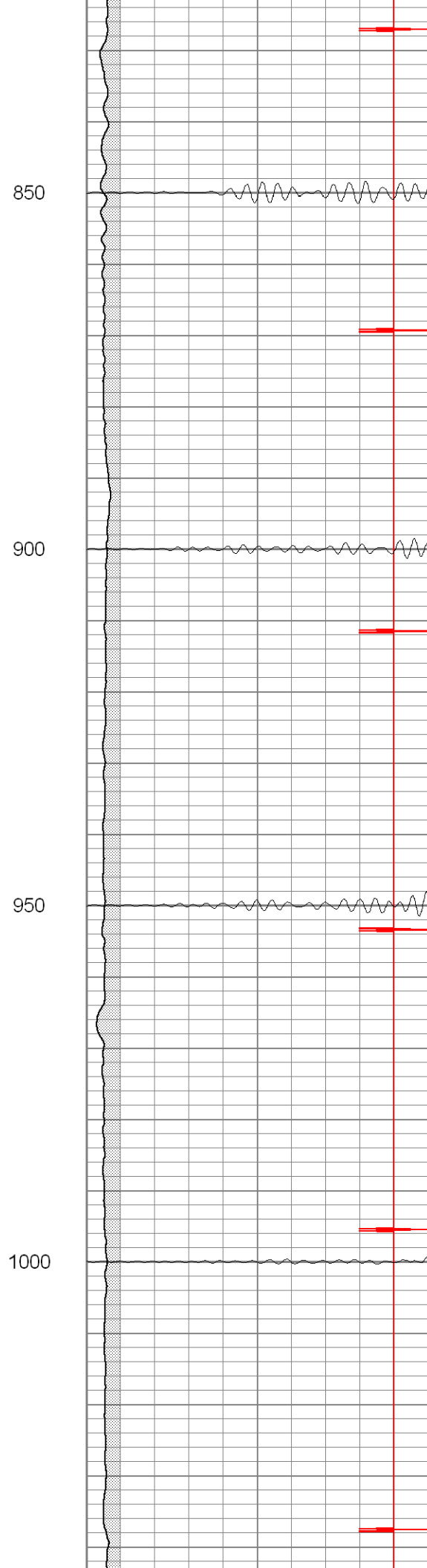
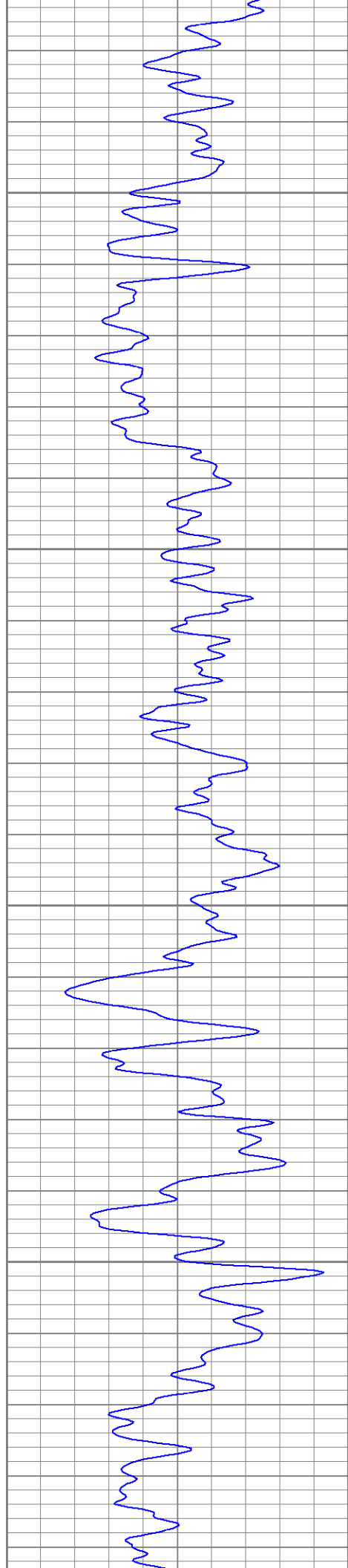
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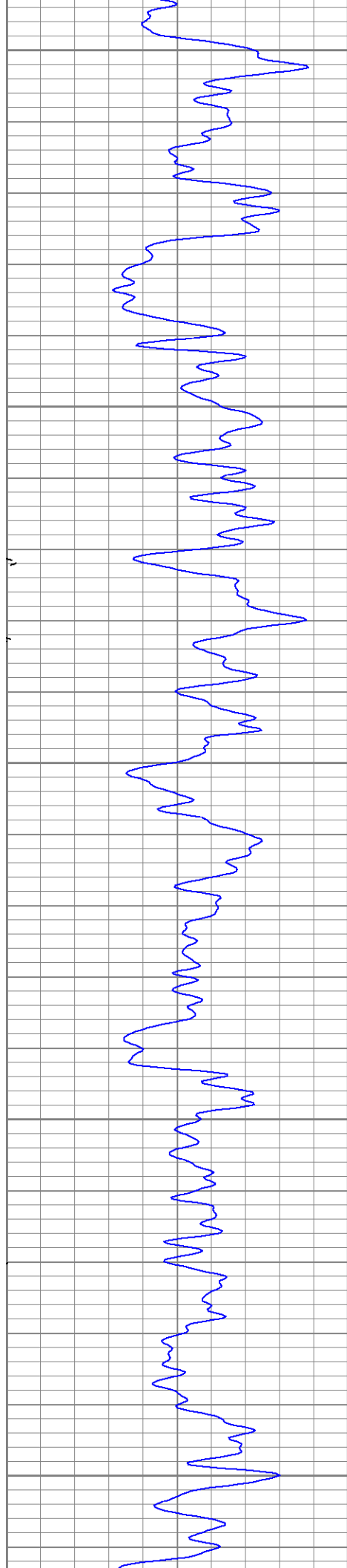
550

600









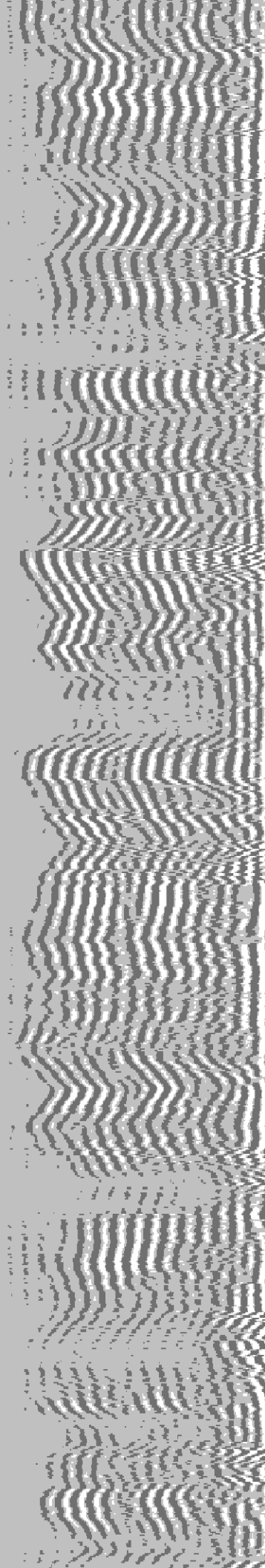
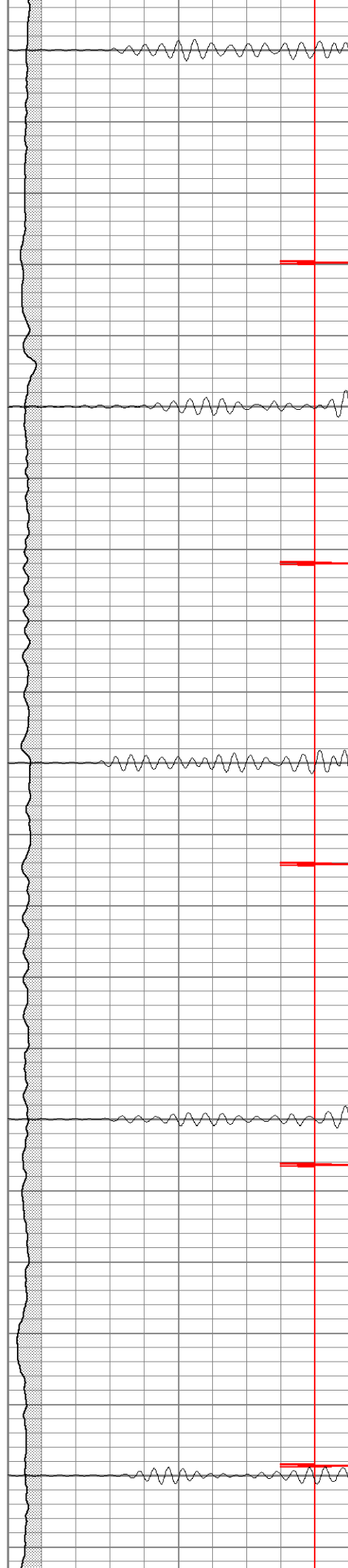
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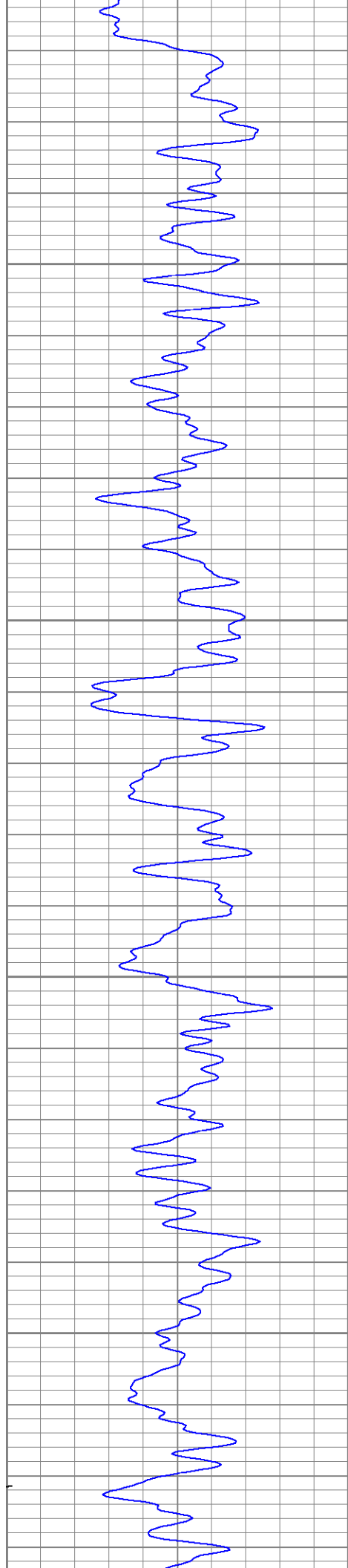
1100

1150

1200

1250



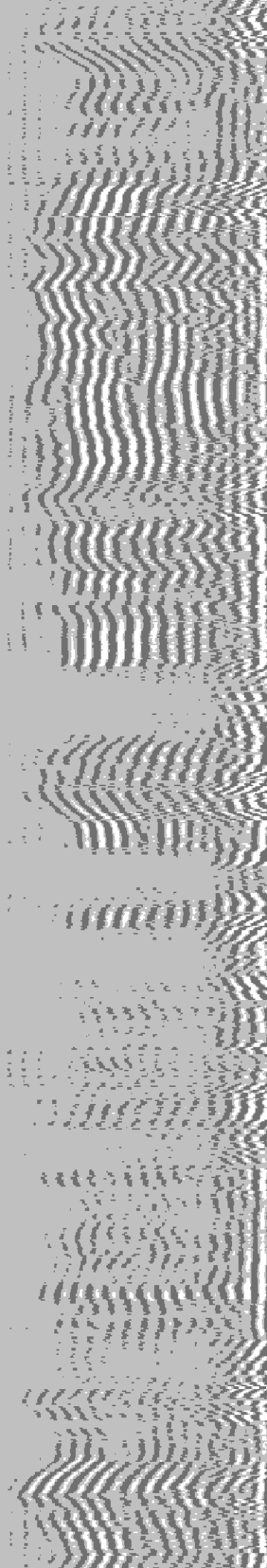
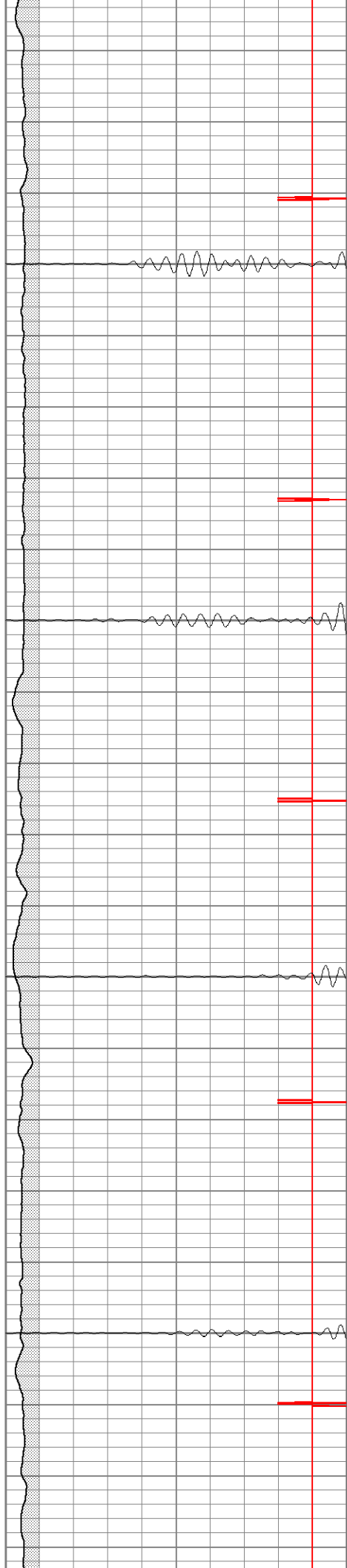


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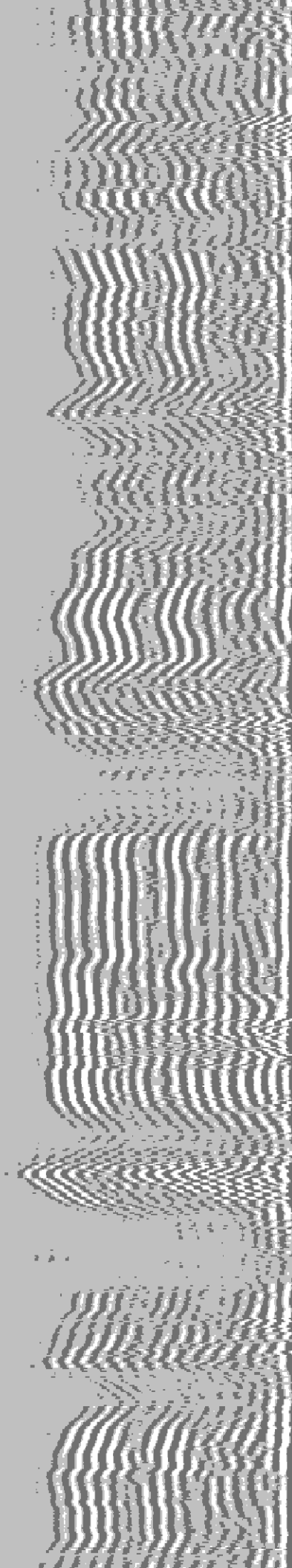
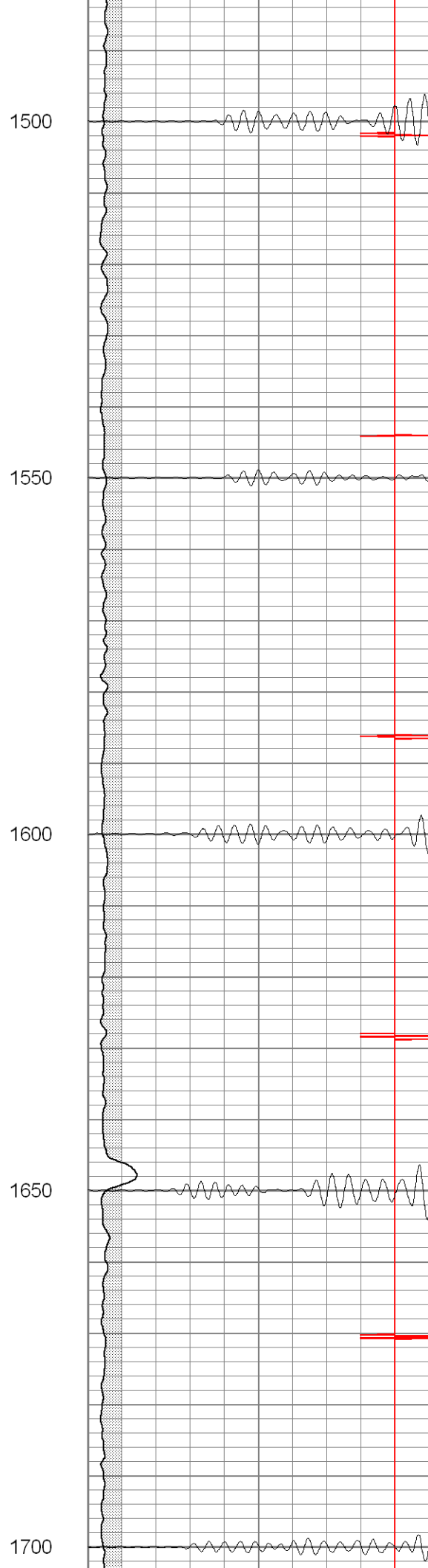
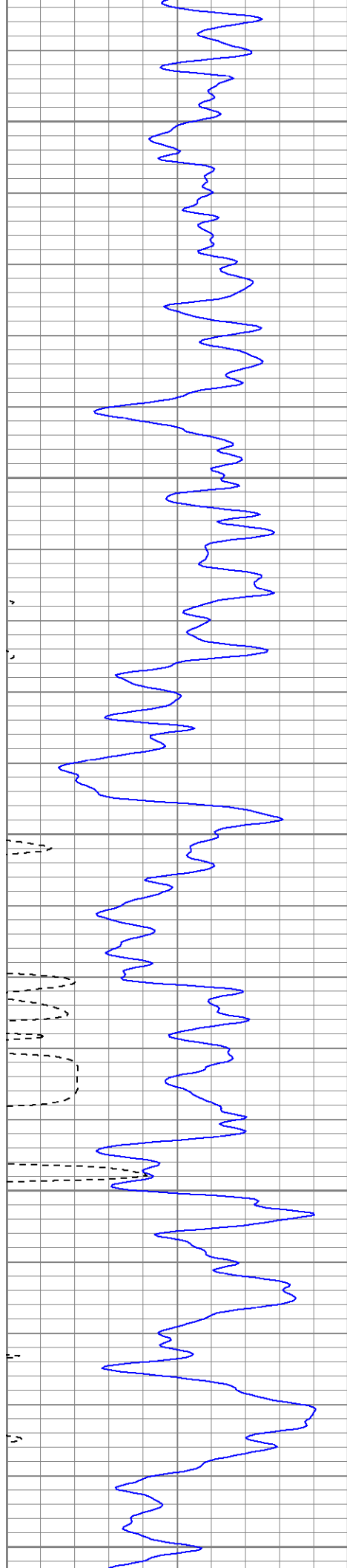
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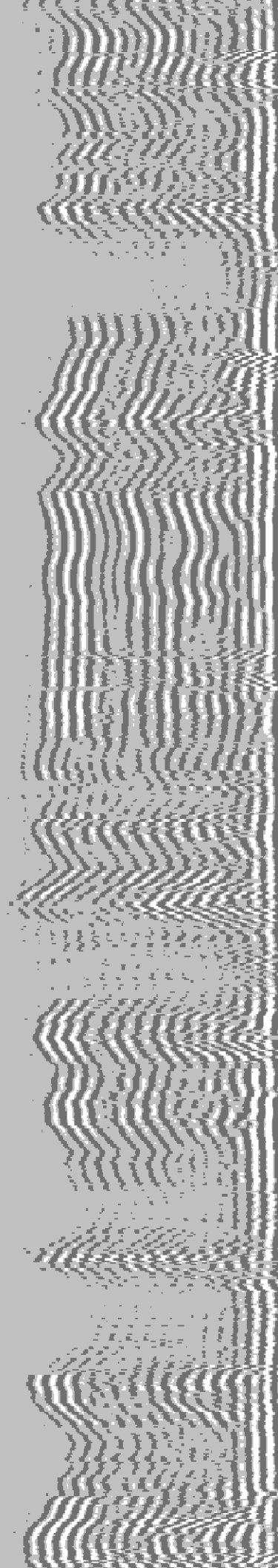
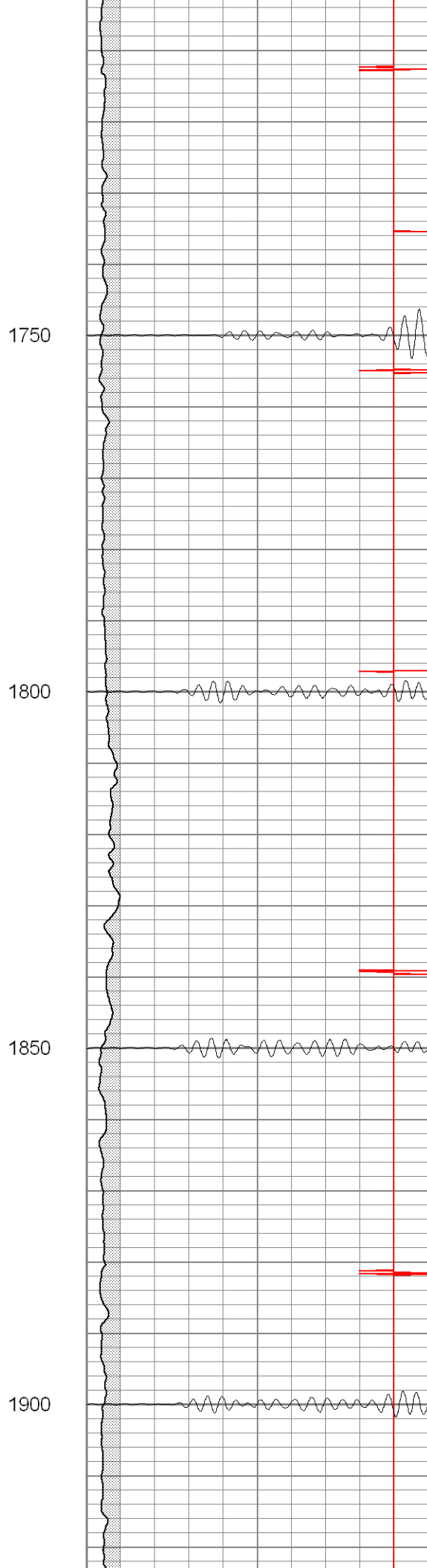
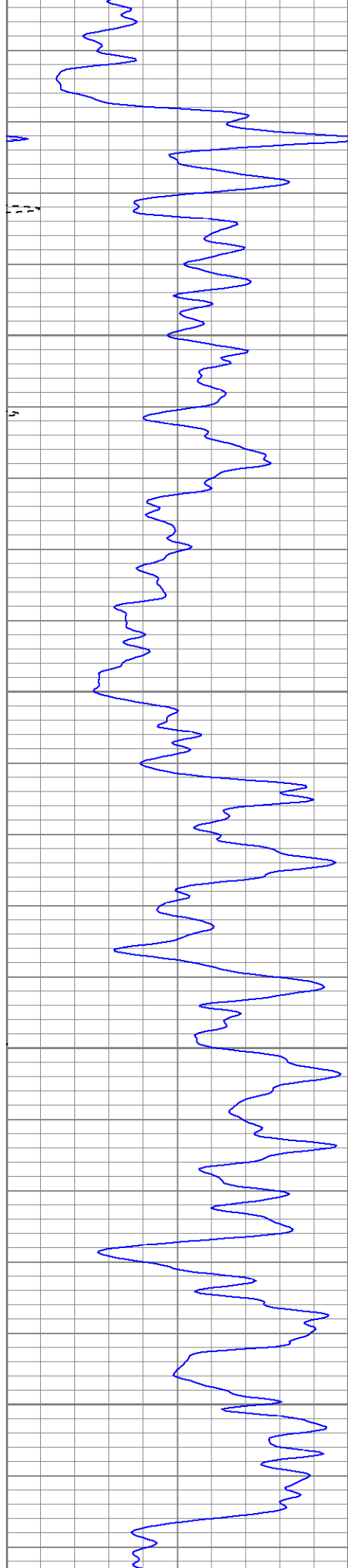
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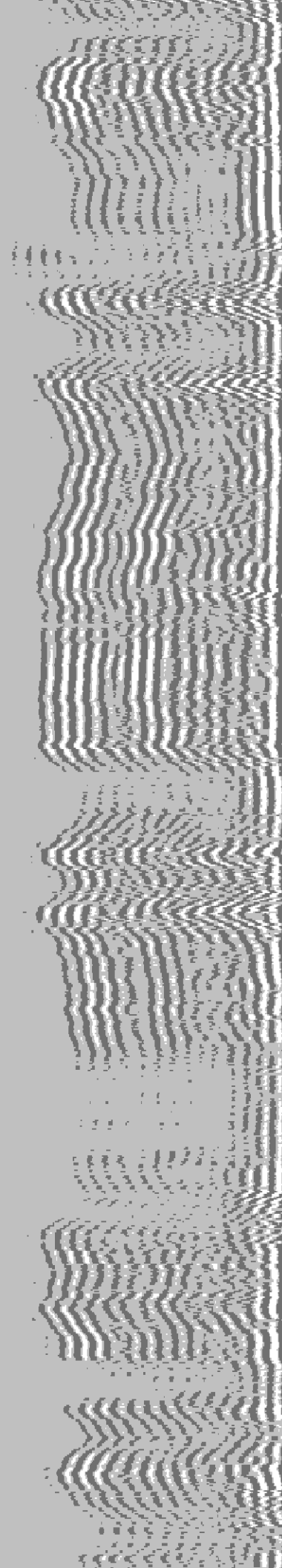
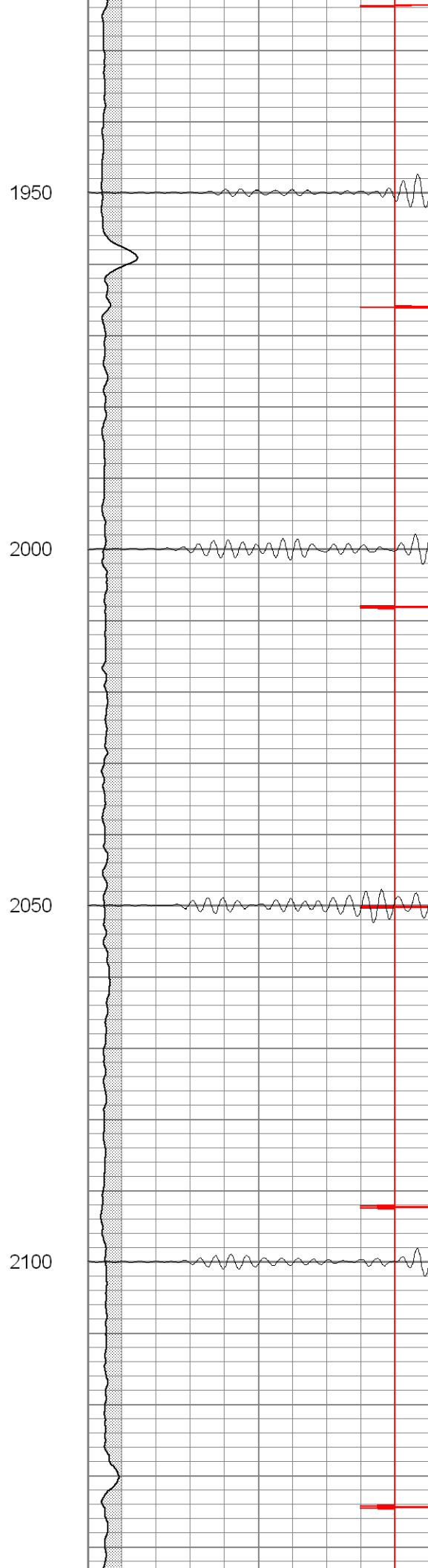
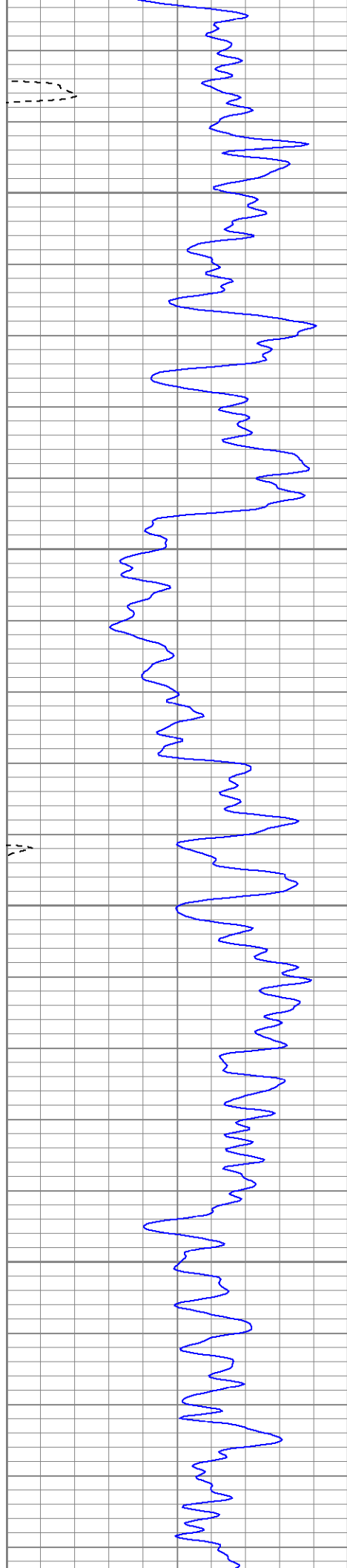


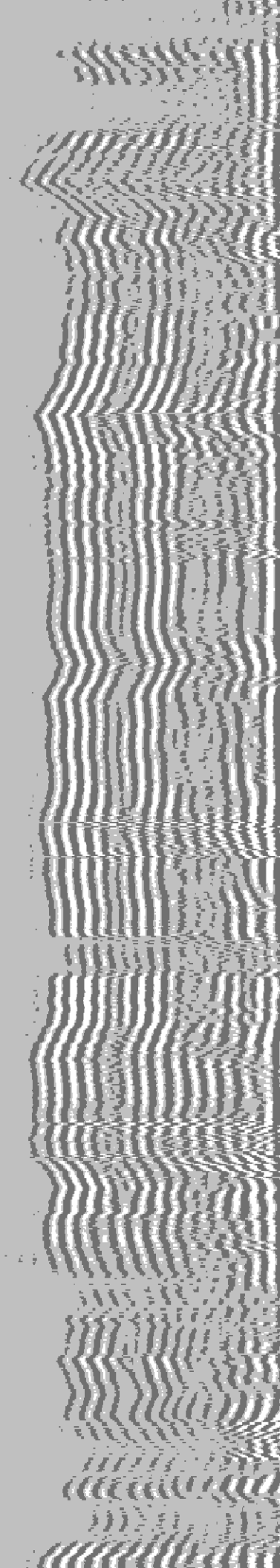
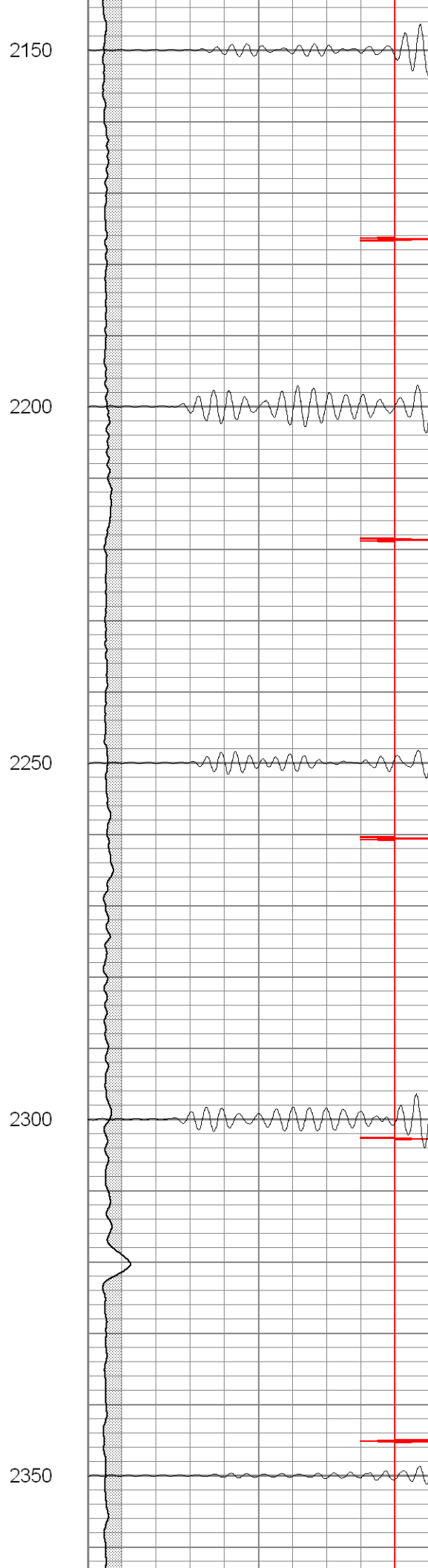
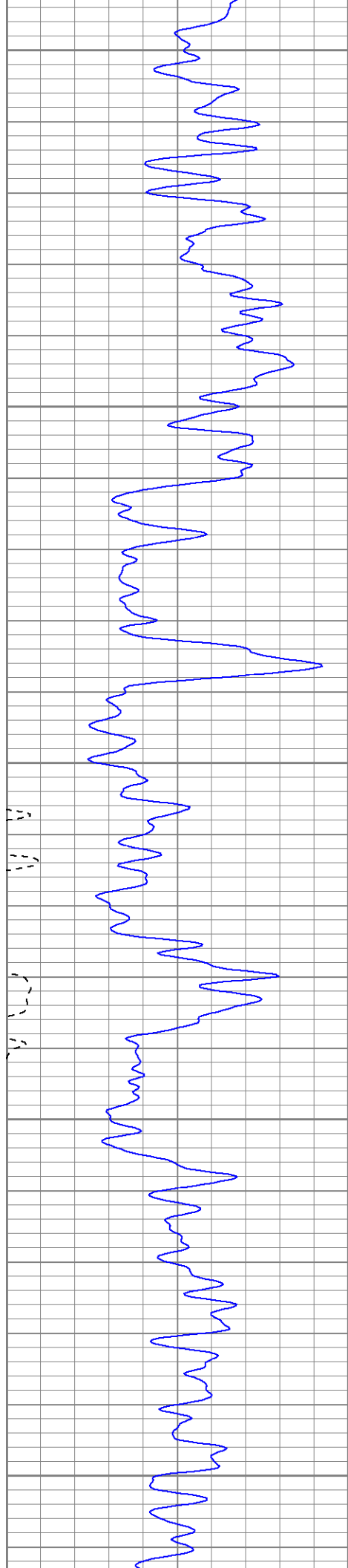


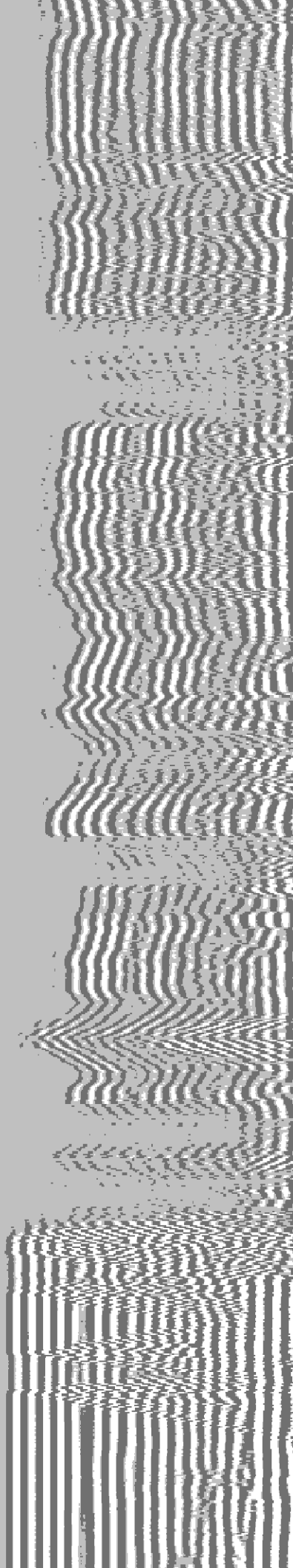
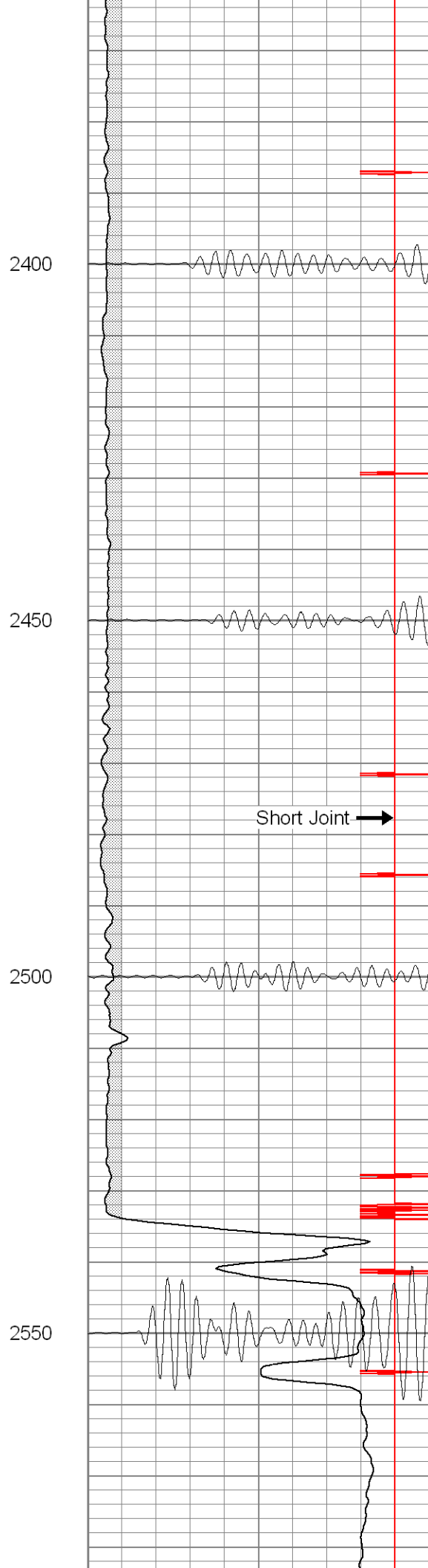
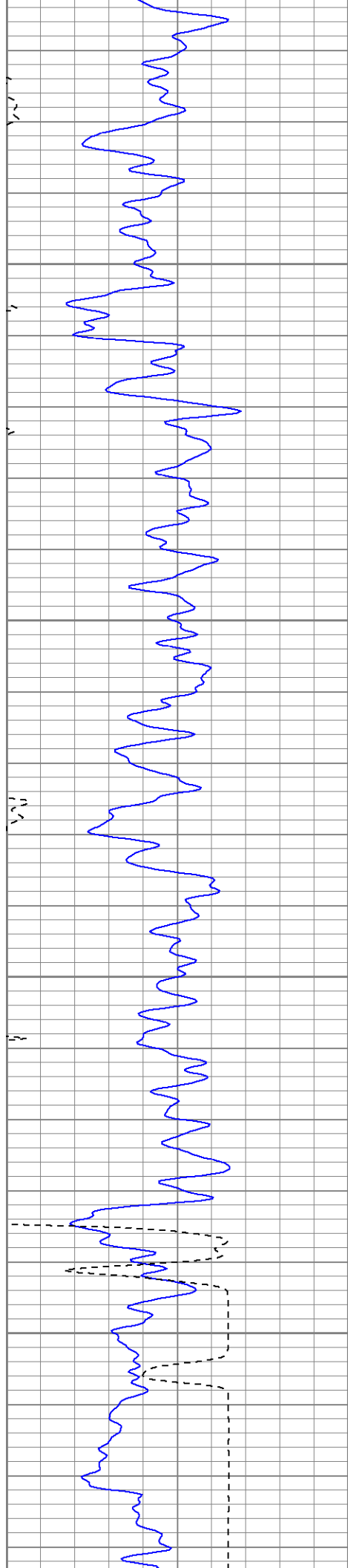


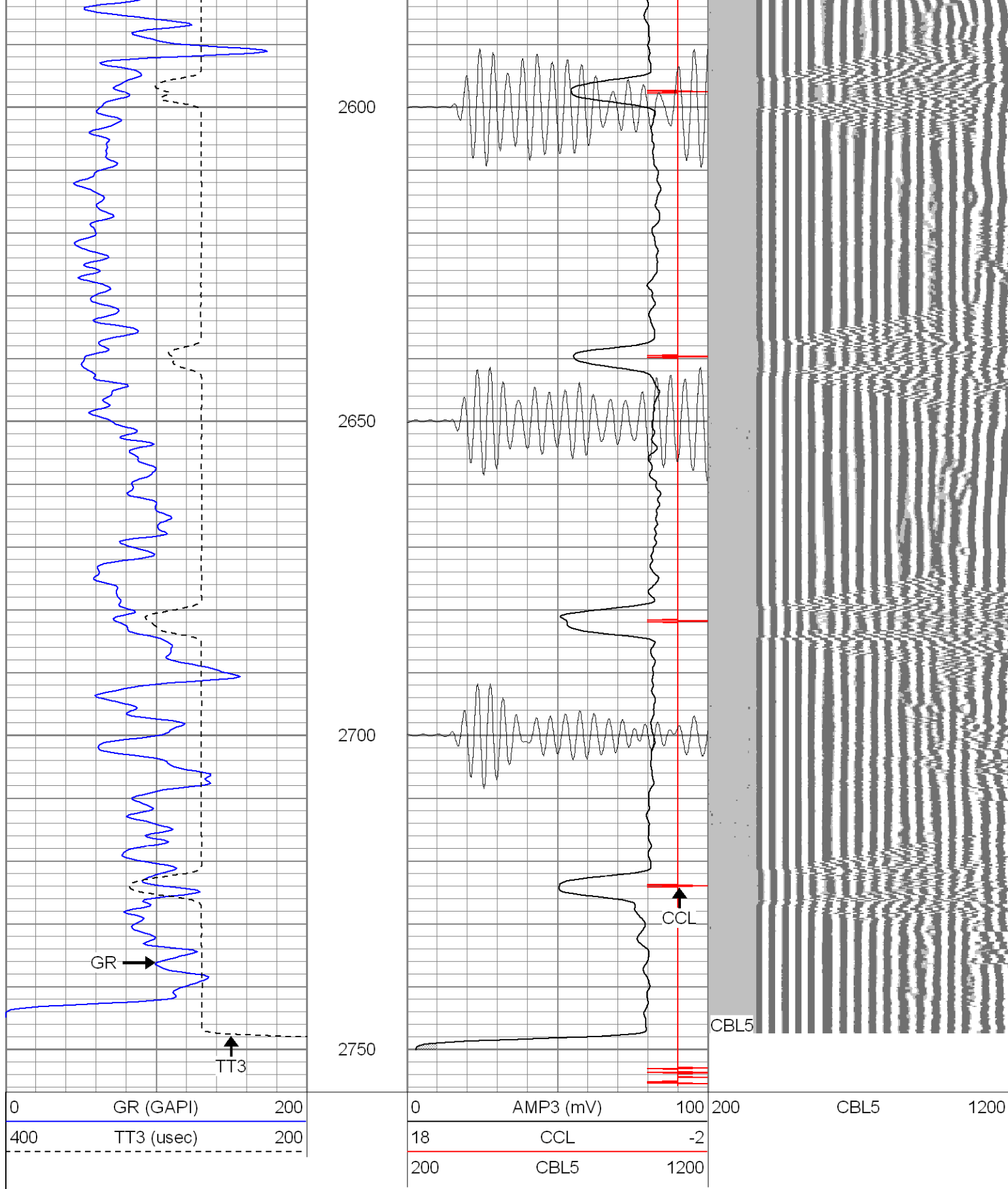












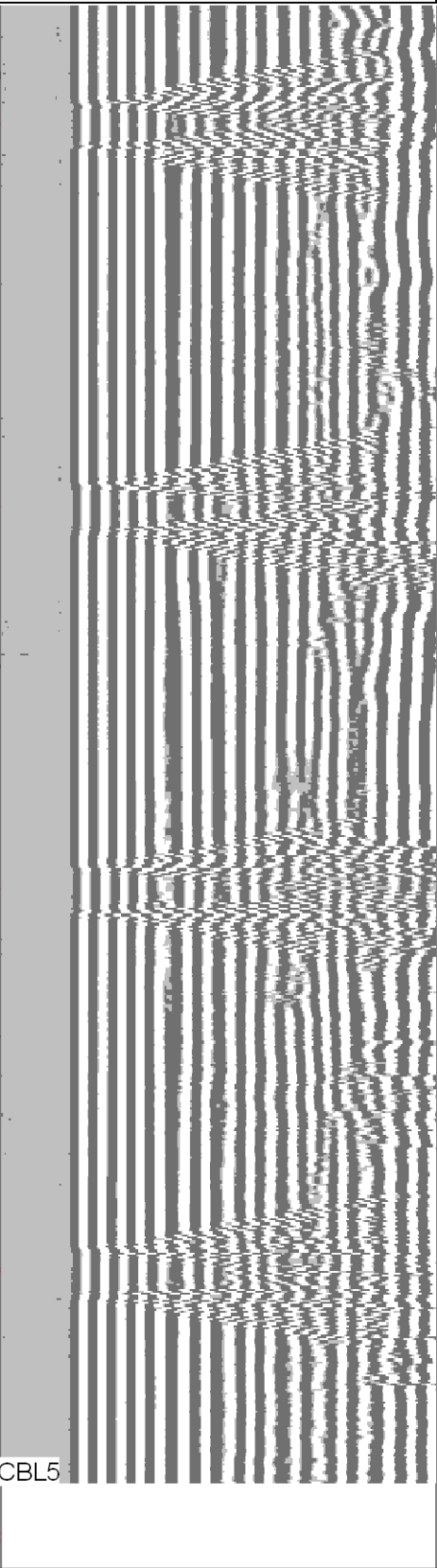
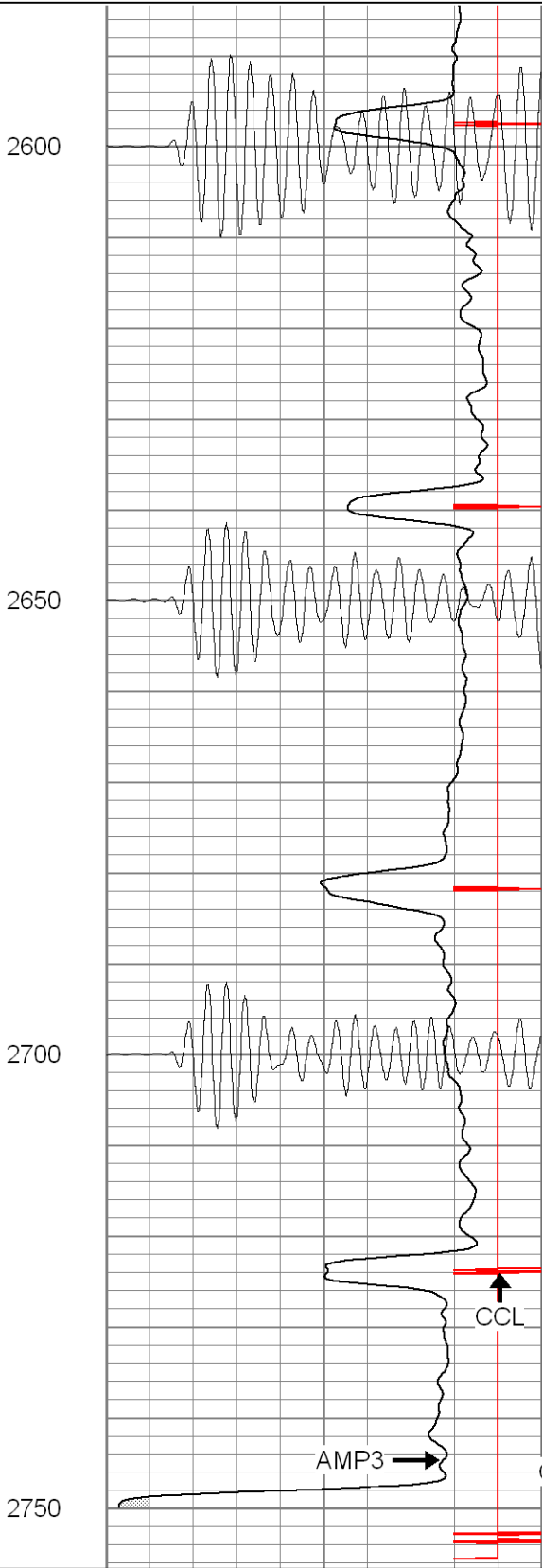
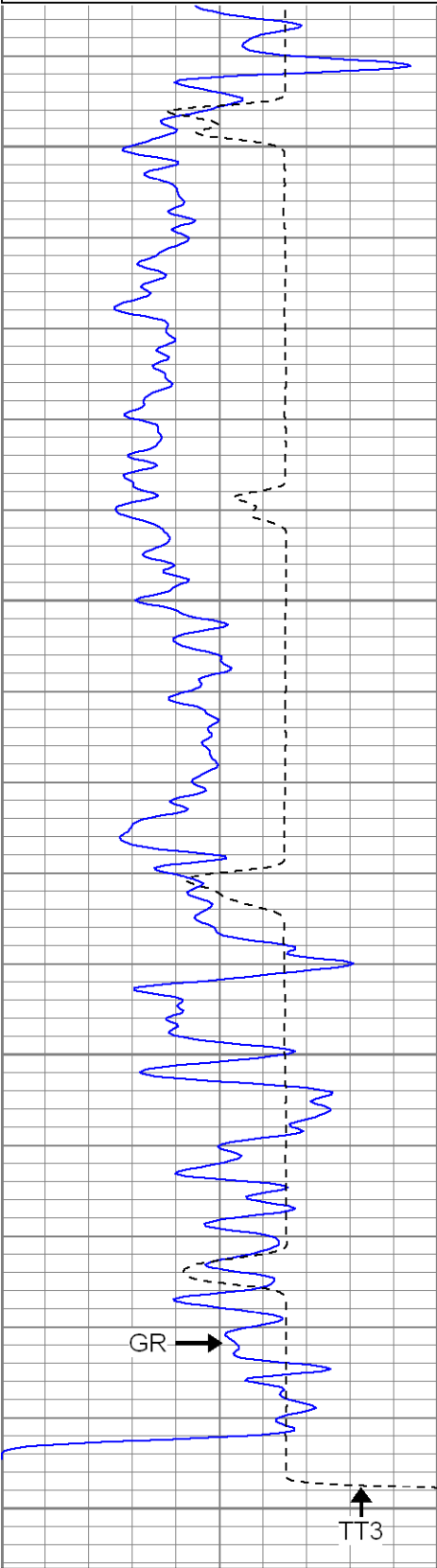
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# Repeat Section

0	GR (GAPI)	200
400	TT3 (usec)	200
<hr style="border-top: 1px dashed black;"/>		

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

200	CBL5	1200
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0	GR (GAPI)	200
400	TT3 (usec)	200
<hr style="border-top: 1px dashed black;"/>		

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

200	CBL5	1200
-----	------	------

## Cement Bond Log Calibration Report

Serial Number:	Titan2		
Tool Model:	T2		
Performed:	Thu Sep 13 09:31:30 2007		
Depth:	0	ft	
Casing Diameter:	0	in	
	3' Spacing	5' Spacing	
Signal Zero:	0	0	mV
Calibrated Amplitude:	85	85	mV
Reading at Signal Zero:	-0.04	0	V
Reading in Free Pipe:	1.1	1.6	V
Gain:	74.5614	53.125	
Offset:	2.98246	0	

## Gamma Ray Calibration Report

Serial Number:	TITAN2	
Tool Model:	T2	
Performed:	Thu Sep 13 09:31:39 2007	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.6000	GAPI/cps