



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

CEMENT BOND GAMMA RAY

Company Pioneer Natural Resources
Well Cowboy Carl 31-6
Field Purgatorie River
County Las Animas
State CO

Company Pioneer Natural Resources
Well Cowboy Carl 31-6
Field Purgatorie River
County Las Animas
State CO

Location: API # : 05 071 09348 00

275' FNL & 1808' FEL

SEC 6 TWP 32S RGE 65W

Permanent Datum Ground Level Elevation 7350'
Log Measured From Kelly Bushing 4' Above G.L.
Drilling Measured From Kelly Bushing

Other Services
DEVI SUR/
TEMP

Elevation

K.B. 7354'
D.F. -----
G.L. 7350'

Date

8/31/07

Run Number

one

Depth Driller

1980'

Depth Logger

1918'

Bottom Logged Interval

1914'

Top Log Interval

Surf.

Open Hole Size

7 7/8"

Type Fluid

water

Density / Viscosity

///

Max. Recorded Temp.

113F

Estimated Cement Top

Surf.

Time Well Ready

ROA

Time Logger on Bottom

10:05

Equipment Number

0703

Location

Trinidad

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Worley

Witnessed By

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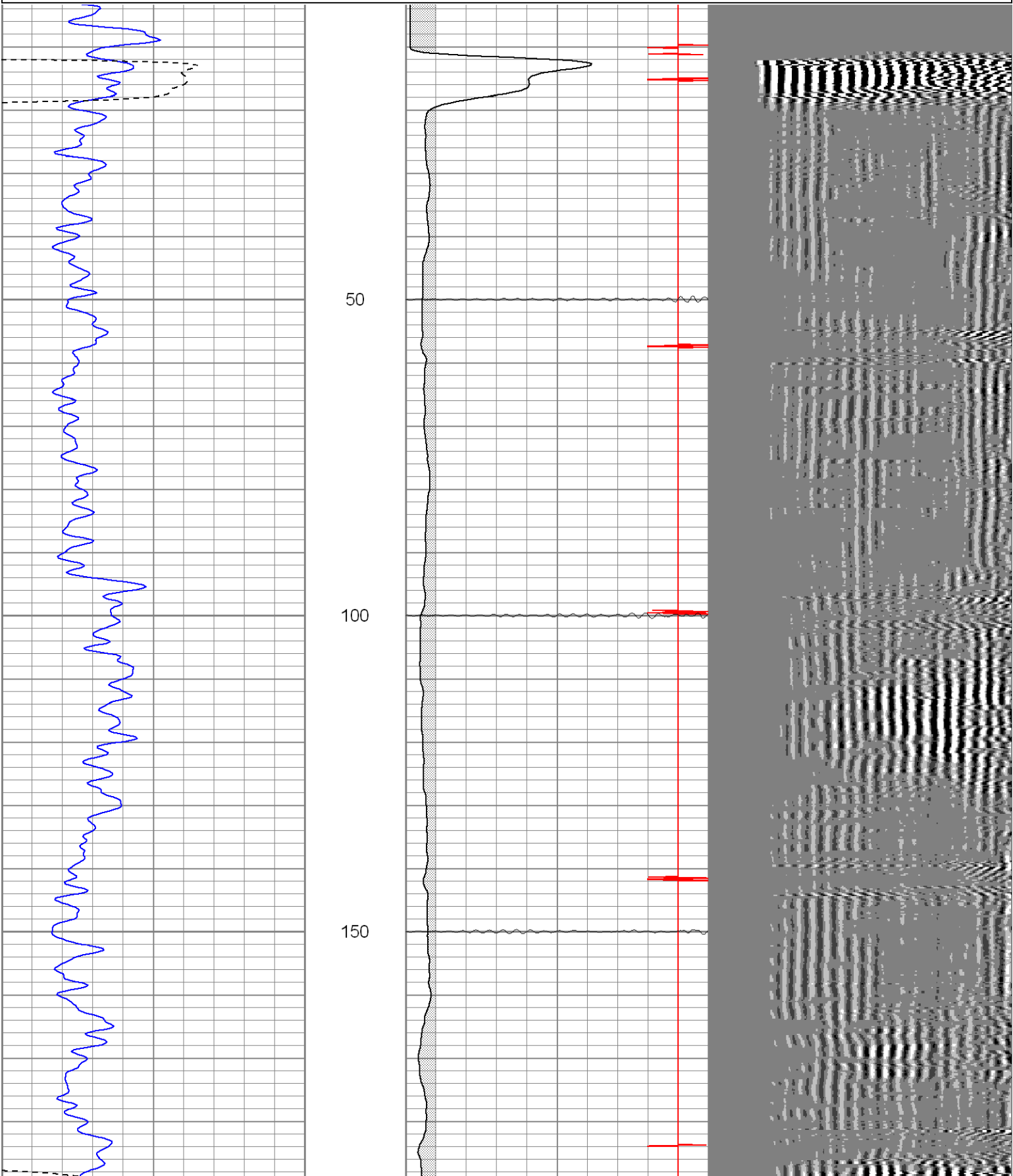
To

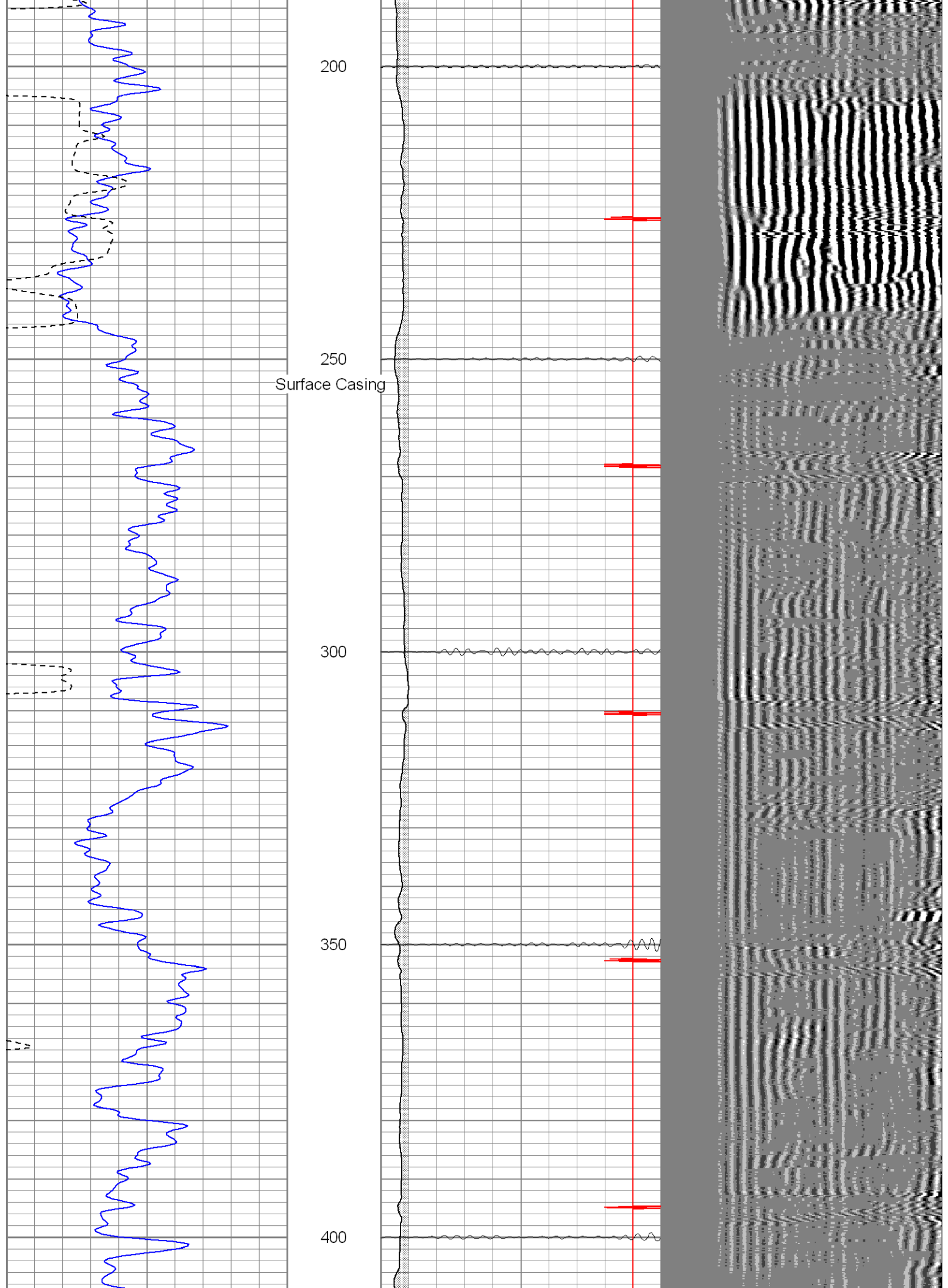
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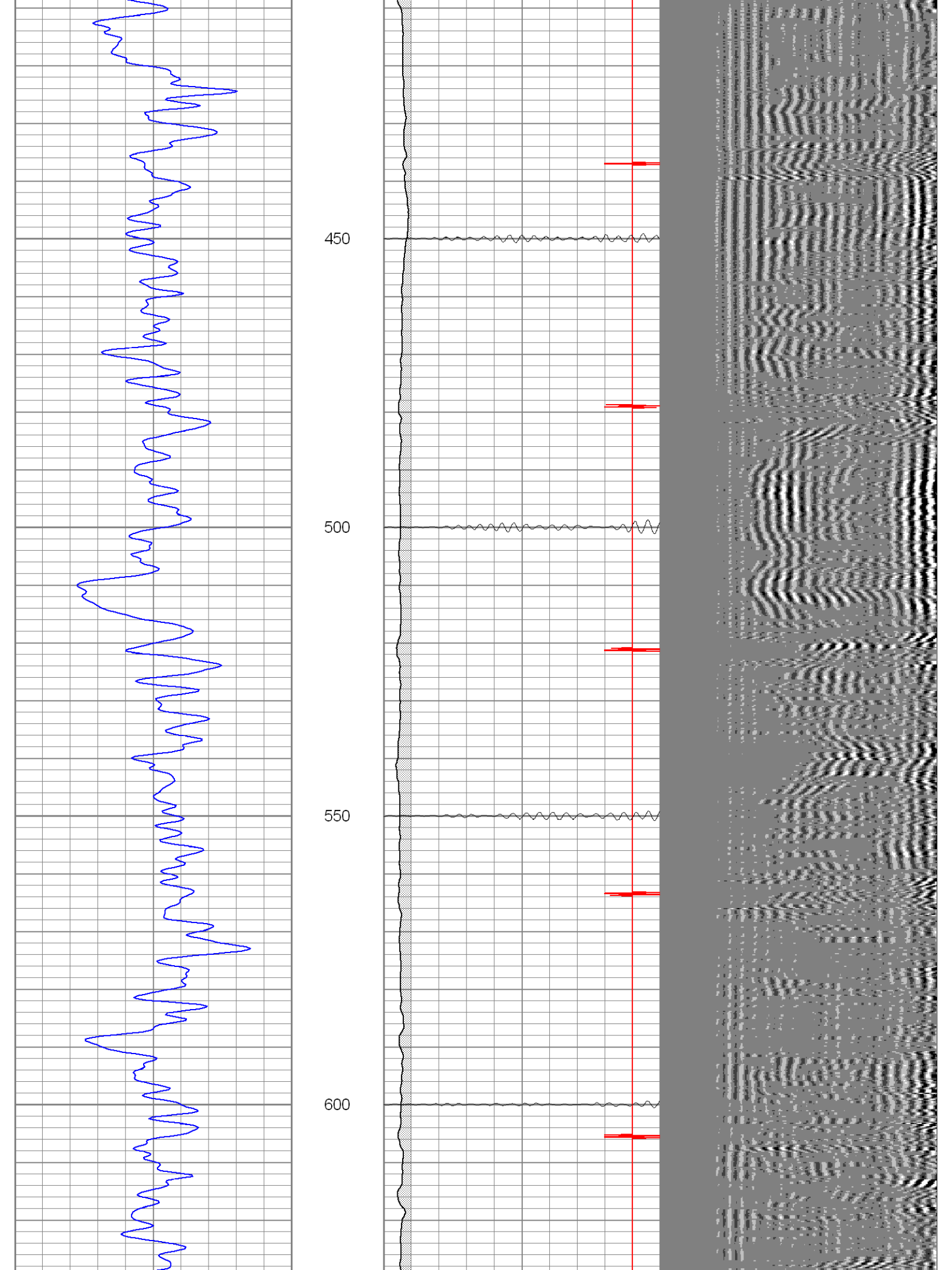
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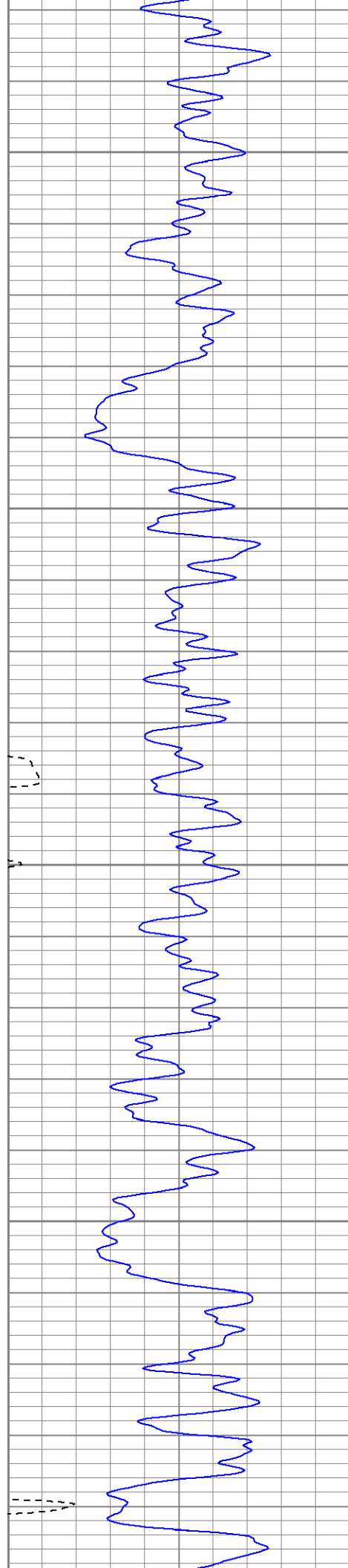
Database File: cowboycarl83107b.db
Dataset Pathname: pass2
Presentation Format: cblrt
Dataset Creation: Fri Aug 31 10:10:55 2007 by Log Std Casedhole 07051
Charted by: Depth in Feet scaled 1:240

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







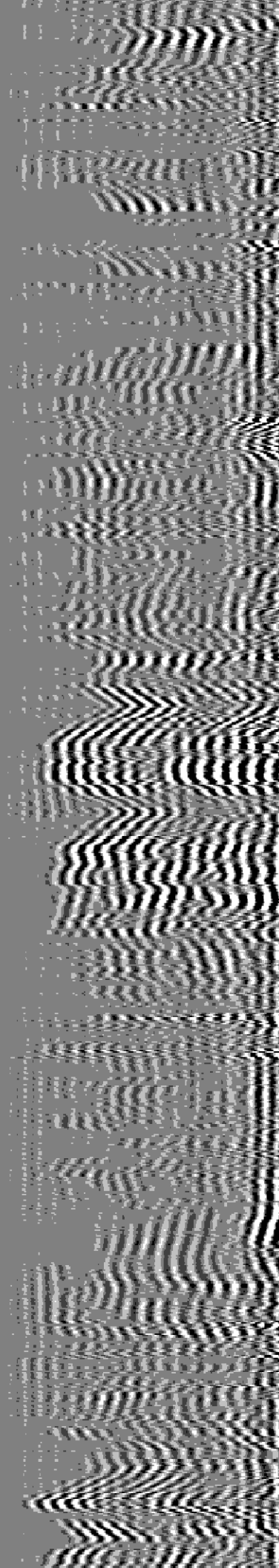
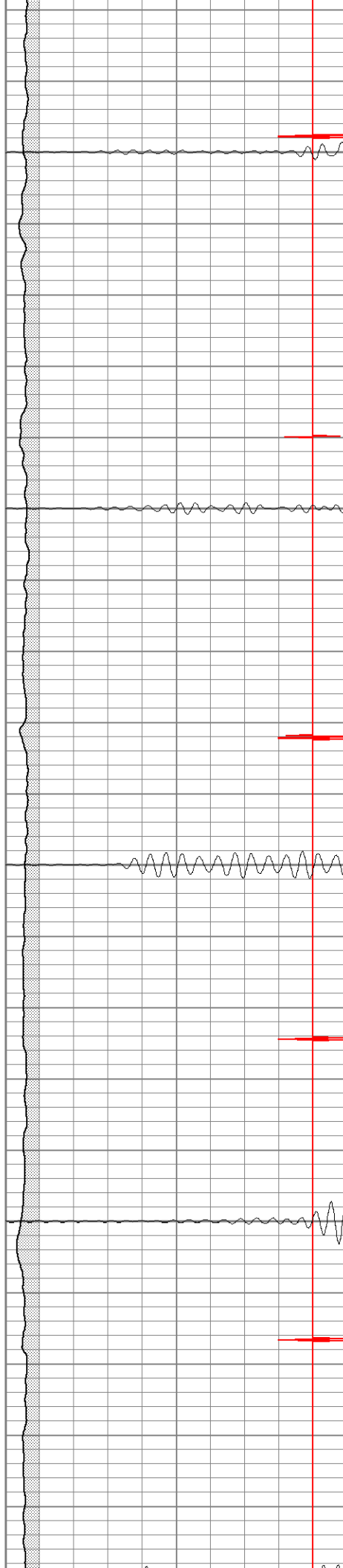


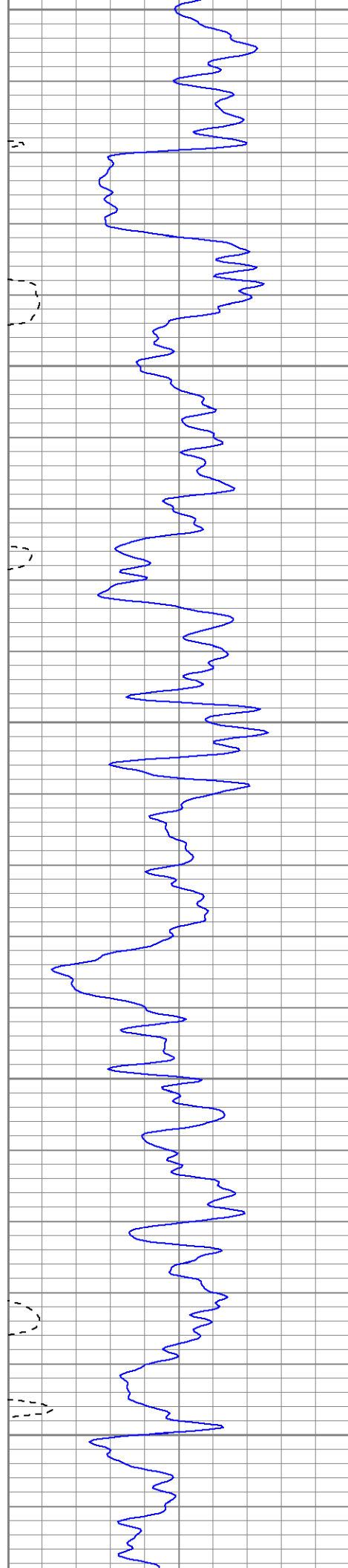
650

700

750

800





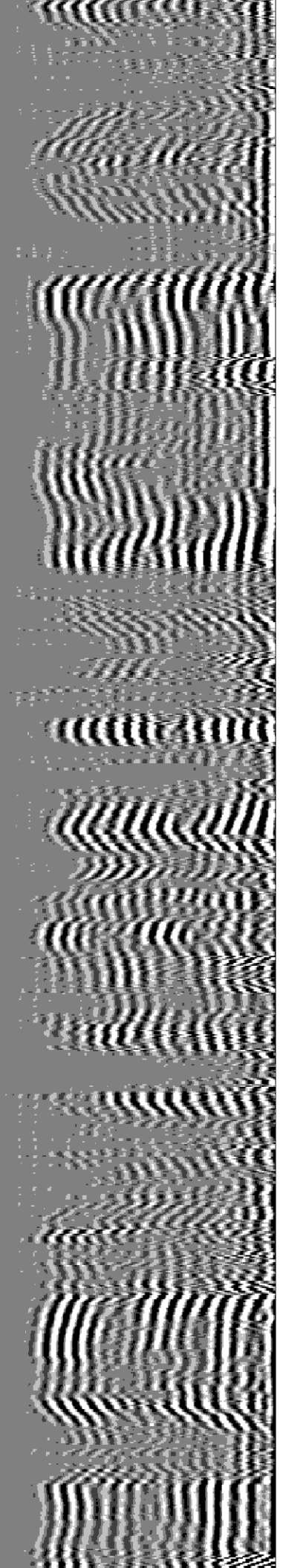
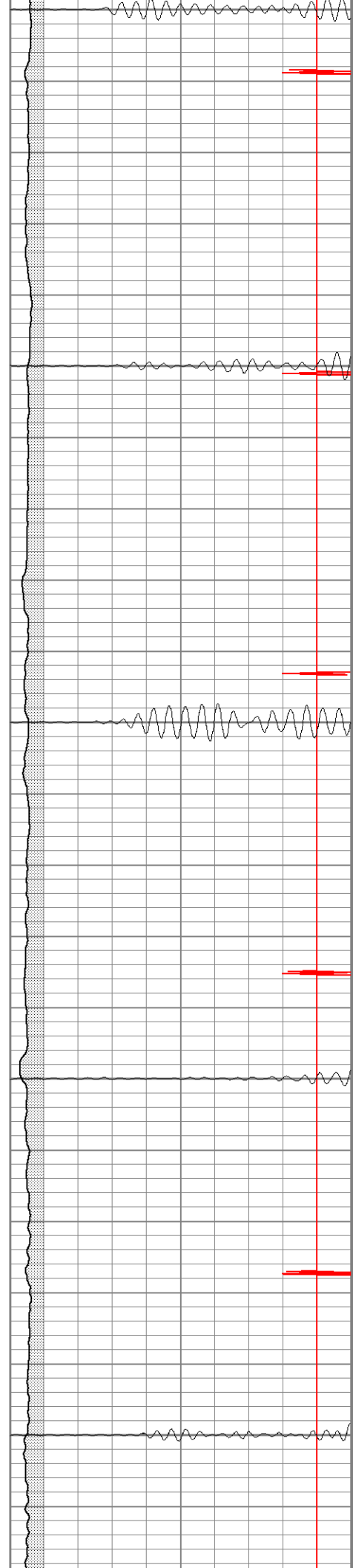
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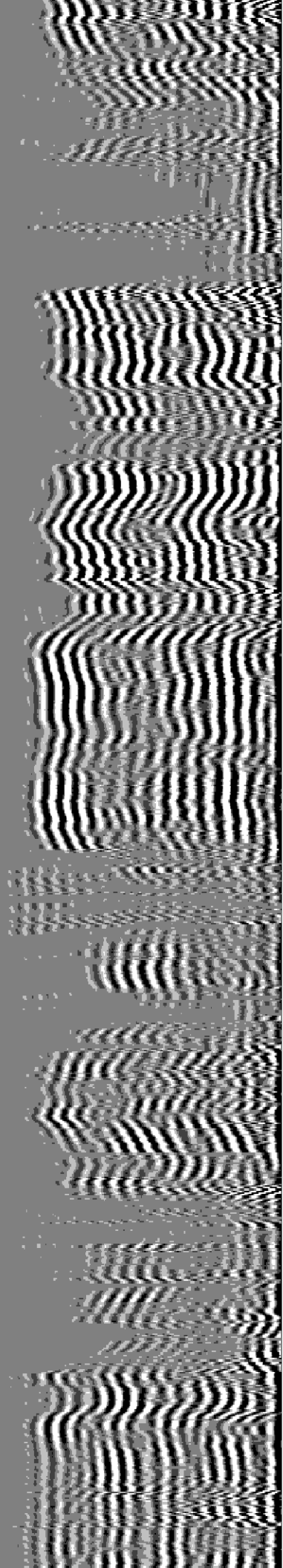
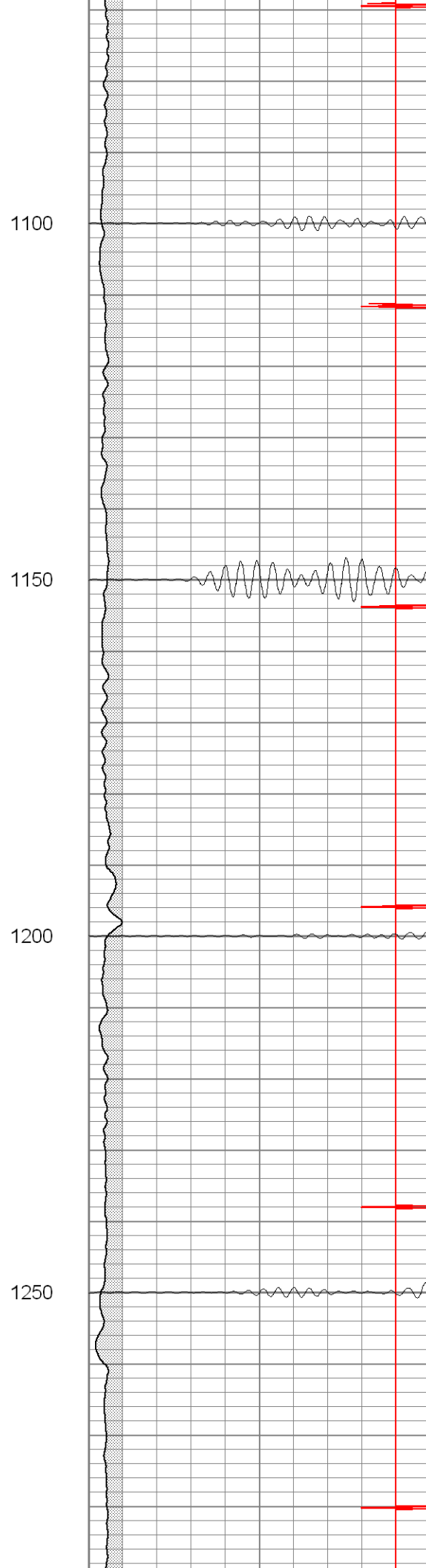
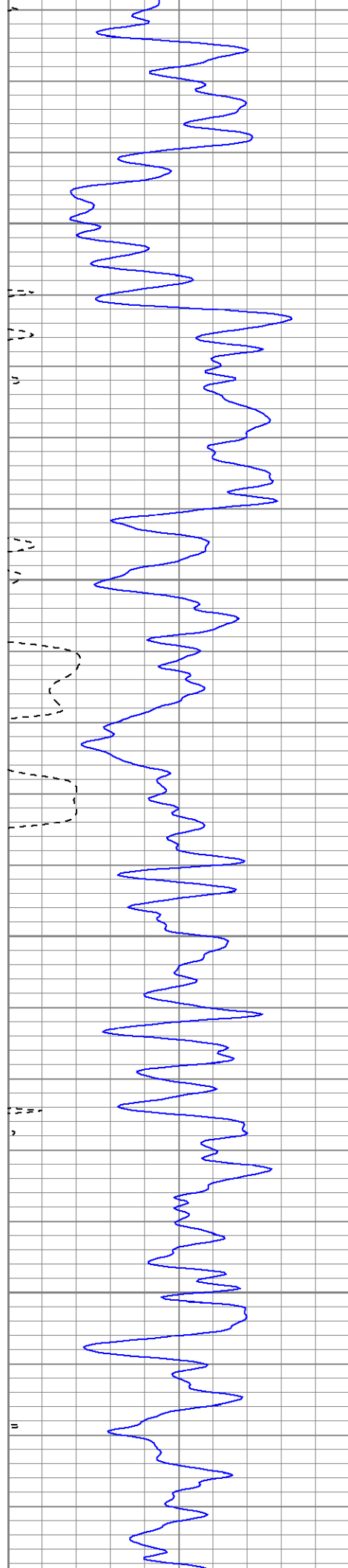
900

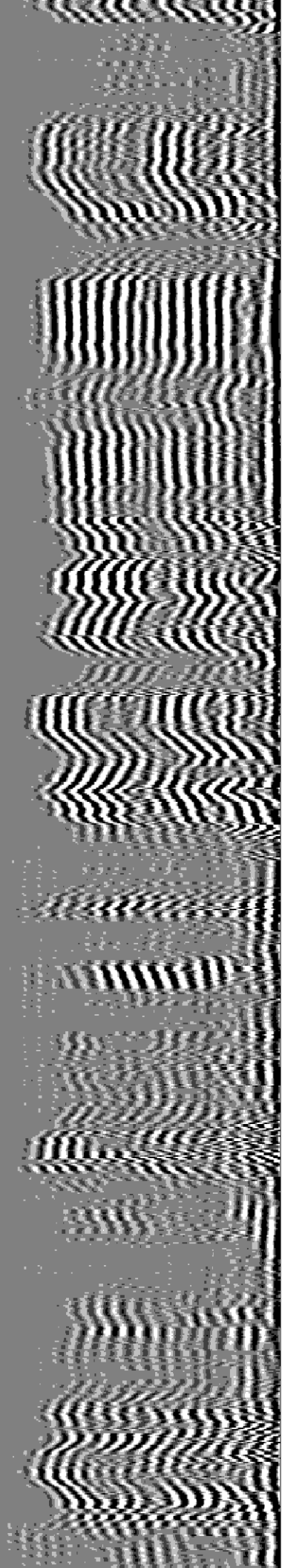
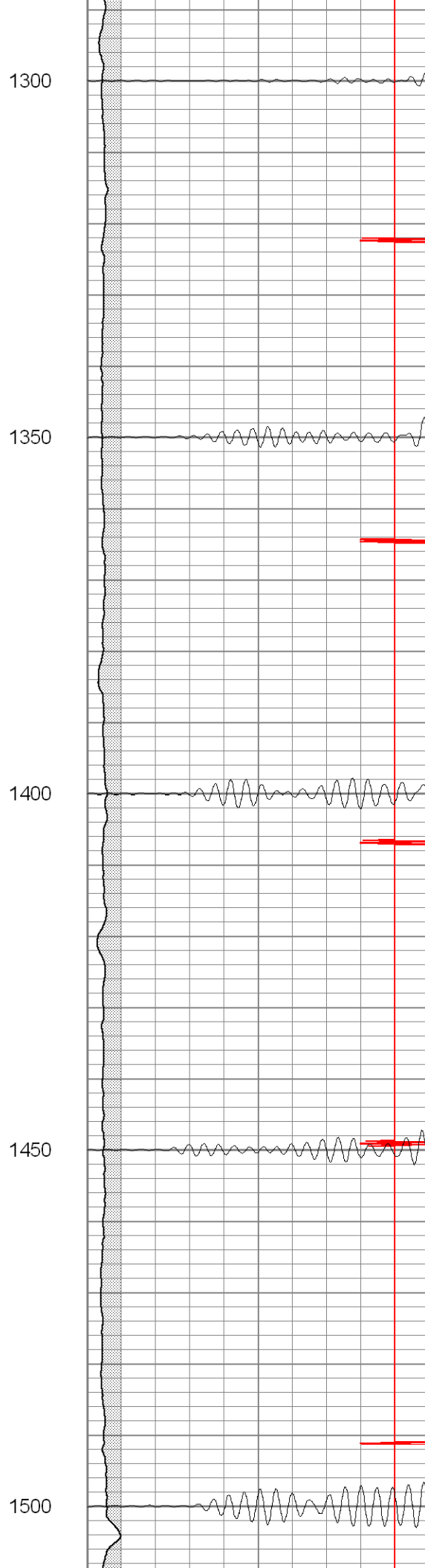
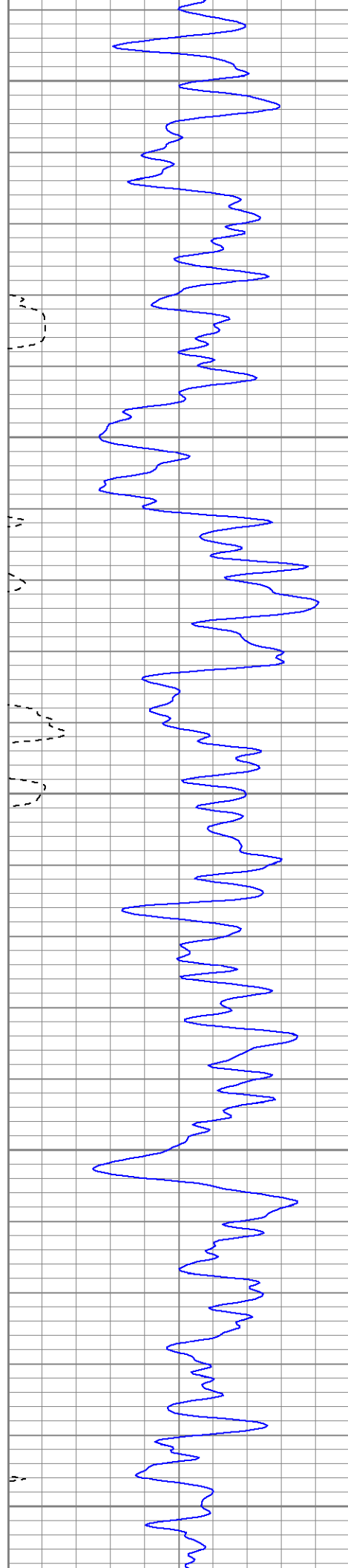
950

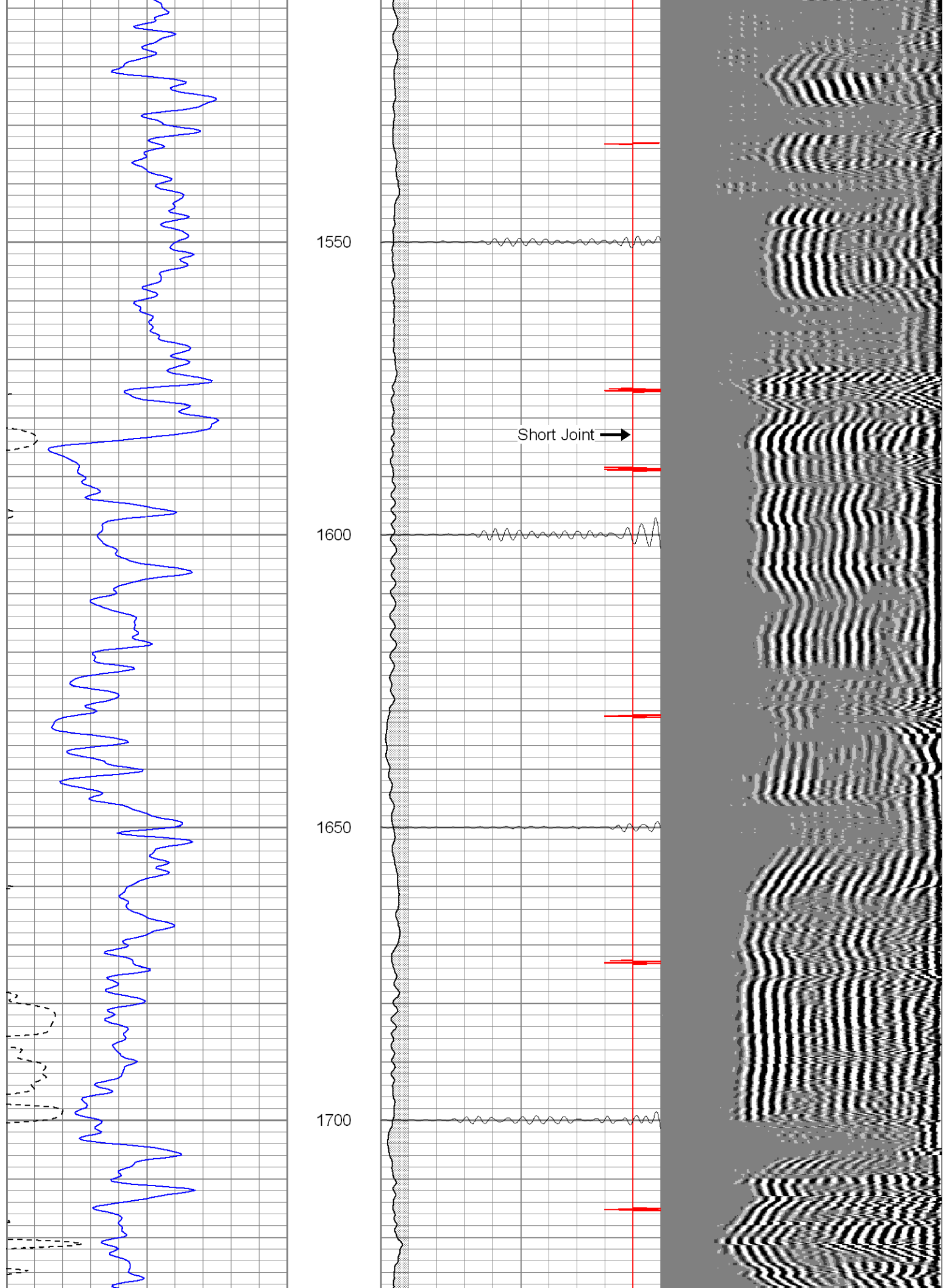
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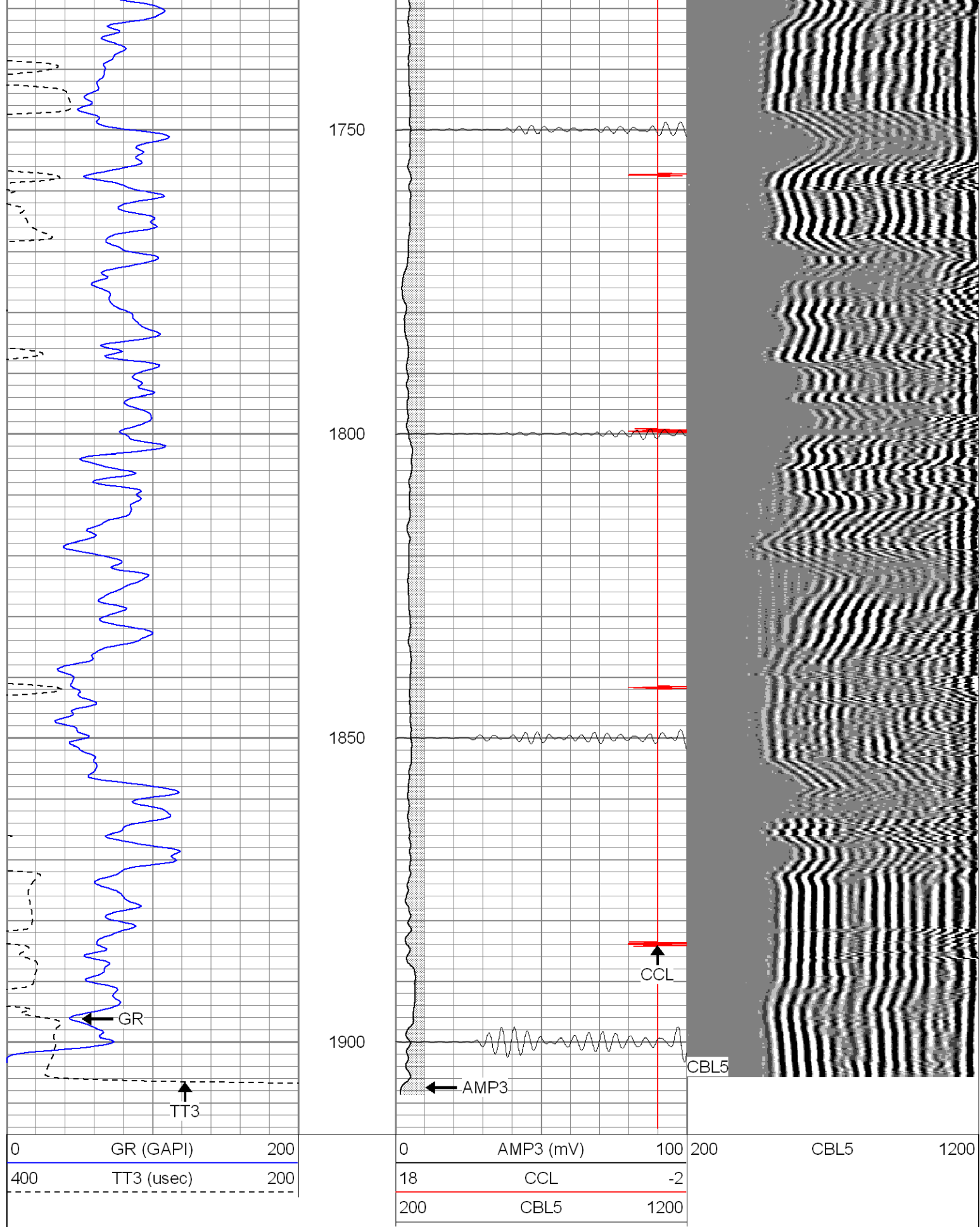
1050











Database File: cowboycarl83107b.db

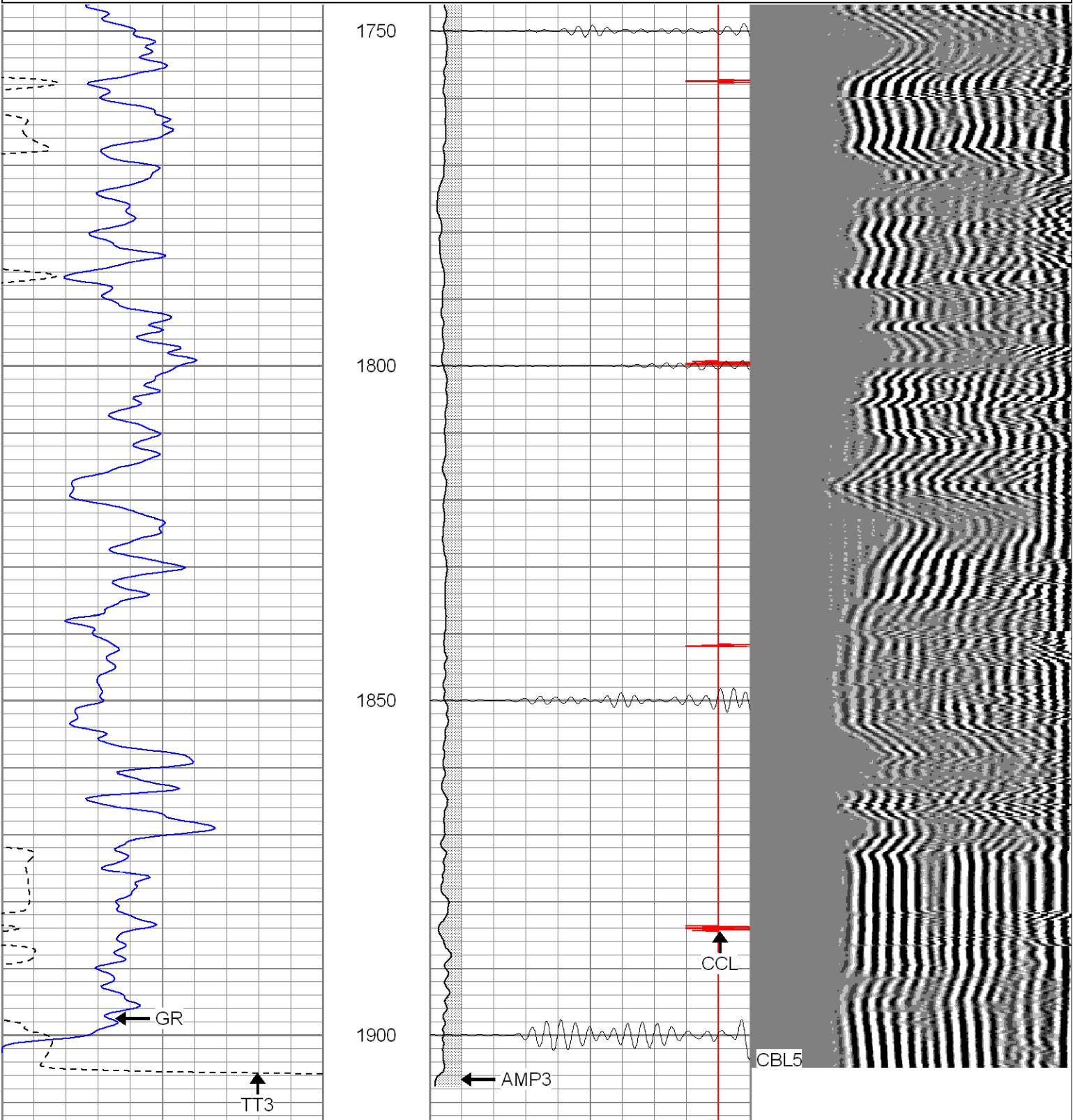
Dataset Pathname: pass1

Presentation Format: cblrt

Dataset Creation: Fri Aug 31 10:05:17 2007 by Log 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			



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

	200	CBL5	1200
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Calibration Report

Database File: cowboycarl83107b.db
 Dataset Pathname: pass1
 Dataset Creation: Fri Aug 31 10:05:17 2007 by Log Std Casedhole 07051

Cement Bond Log Calibration Report

Serial Number:	Titan2		
Tool Model:	T2		
Performed:	Fri Aug 31 09:56:44 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:	1.8	1.7	V
Gain:	46.1957	50	
Offset:	1.84783	0	

Gamma Ray Calibration Report

Serial Number:	TITAN2	
Tool Model:	T2	
Performed:	Fri Aug 31 09:56:59 2007	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.6000	GAPI/cps