



Sonic Cement Bond Log

Pioneer Energy Services

API No.

15-053-20985-00-00

Company LB Exploration Inc.

Well Petermann 28 No.1

Field

County Ellsworth

State Kansas

Location

1420' FSL & 430' FEL

Other Services

Sec: 28 Twp: 17 S Rge: 10 W

Elevation

Permanent Datum Ground Level Elevation 1829

Log Measured From Kelly Bushing 13 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing K.B. 1842
D.F. 1829
G.L. 1829

Run Number One

Date Survey 9-12-2013

Date Cementing 8-22-2013

Type Cementing Operation Primary

Depth Driller 3600

Depth Logger 3362

Logged Interval 3361 to 2000

Casing Driller 5.5 @ TD @

Float Collar -- D.V. Tool 626

Squeeze Depth

Amount & Type Cement

Amount & Type Admix

Type Fluid In Hole

Fluid Level 80

Salinity PPM CL

Weight lb/gal -- Vis. 2178

Approx. Logged Cement Top

Calculated Cement Top

Max. Hole Temperature 114

Tool No. D2

Spacing Recorded 3-5

Equipment -- Location 71 Hays

Recorded By Scott Clermont

Witnessed By Michael Petermann

<<< Fold Here >>>

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.

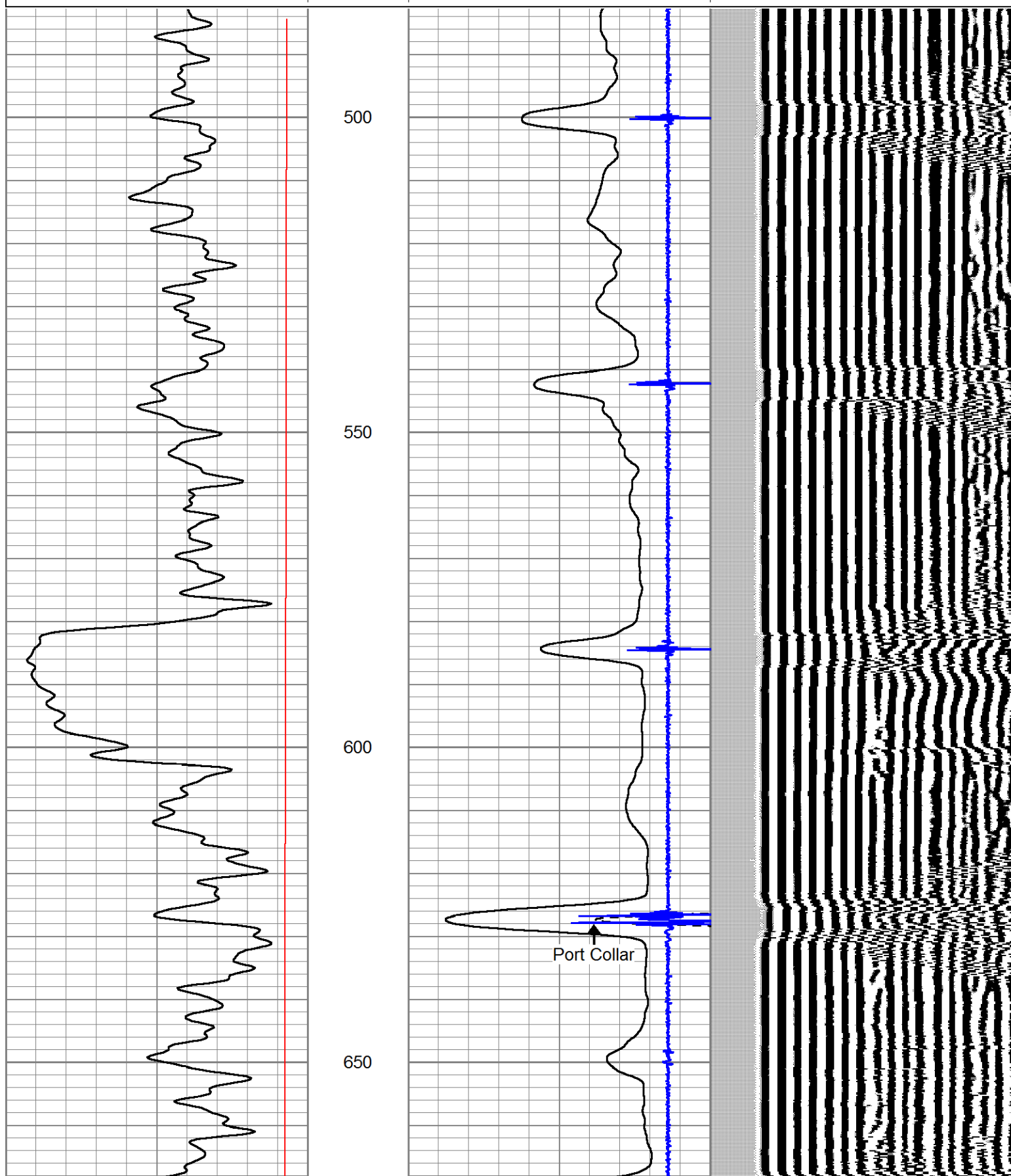
Comments

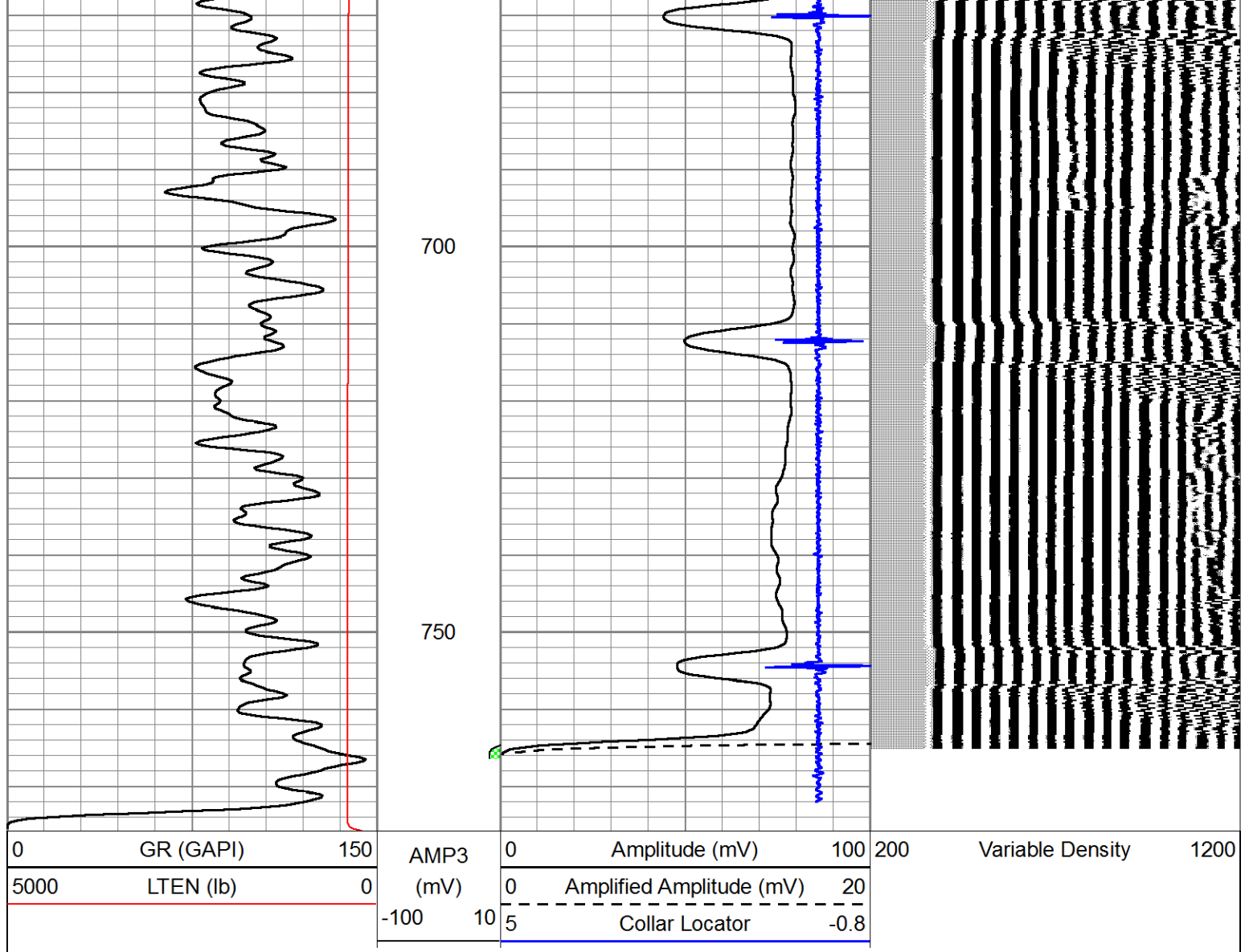
Thank you for using Pioneer Energy Services
(785) 625-3858

Claffin Ks., East to 4th Rd
1 1/4 North, West Into

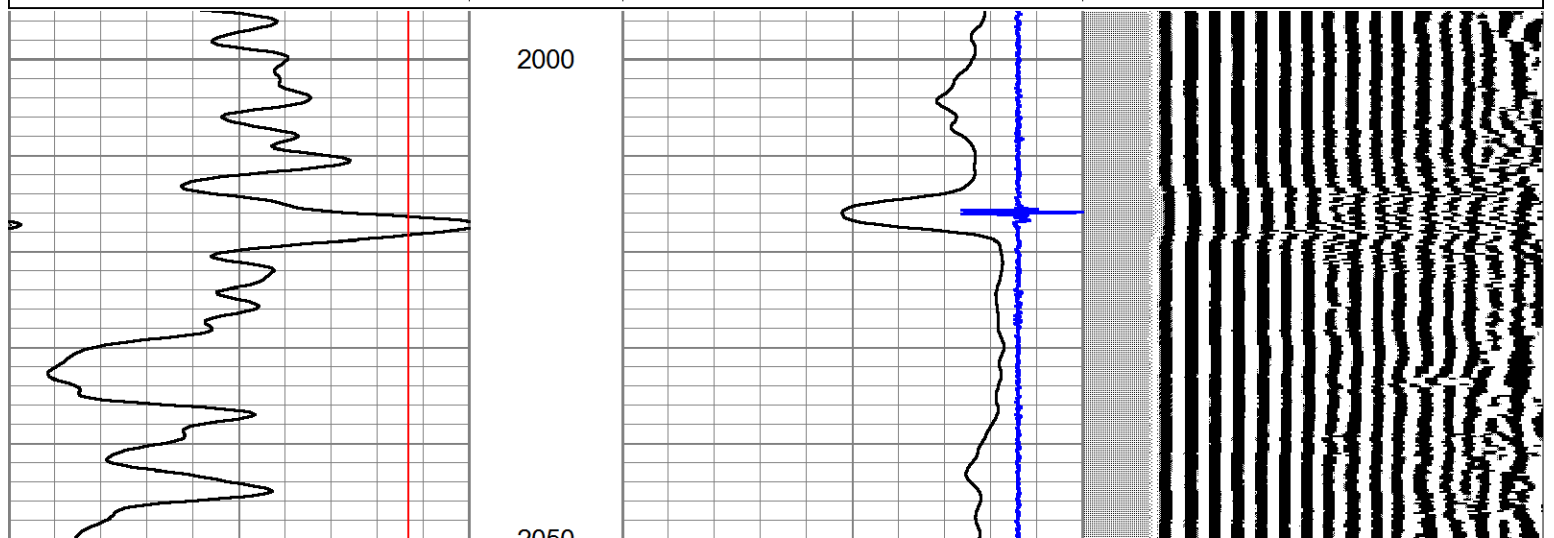
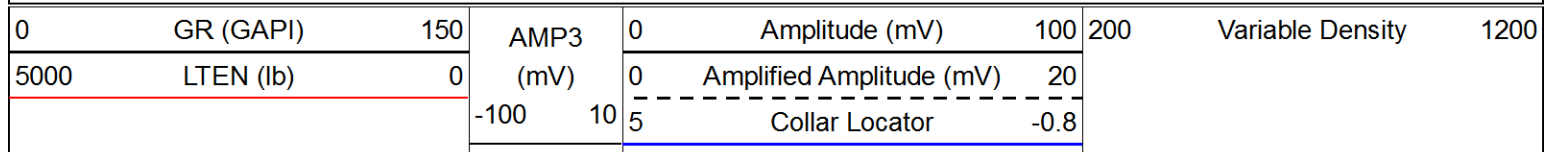
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Dataset Pathname: grcbl/pass5
Presentation Format: cbl dig
Dataset Creation: Thu Sep 12 09:04:20 2013 by Log SCH 111116
Charted by: Depth in Feet scaled 1:240

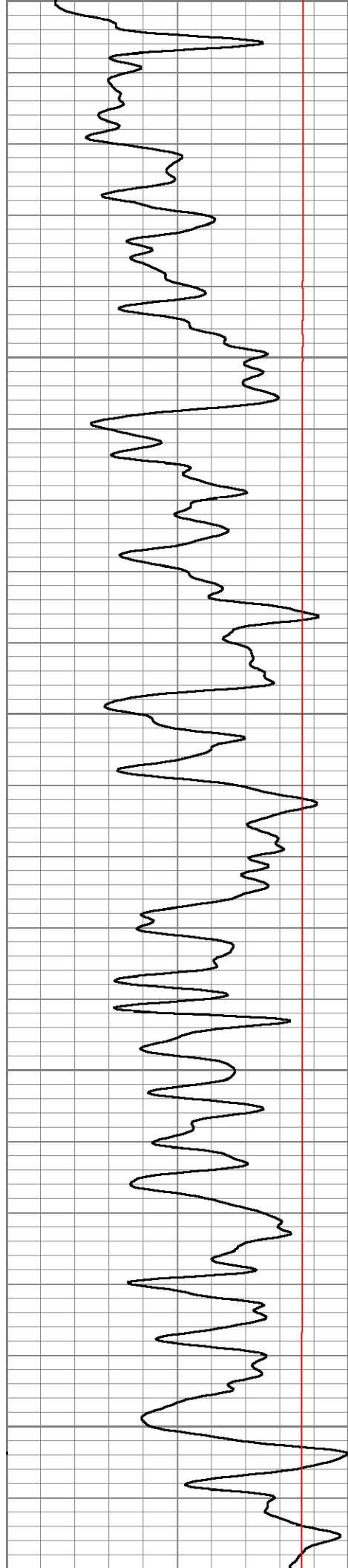
0	GR (GAPI)	150	AMP3	0	Amplitude (mV)	100	200	Variable Density	1200
5000	LTEN (lb)	0	(mV)	0	Amplified Amplitude (mV)	20			
			-100 10	5	Collar Locator	-0.8			



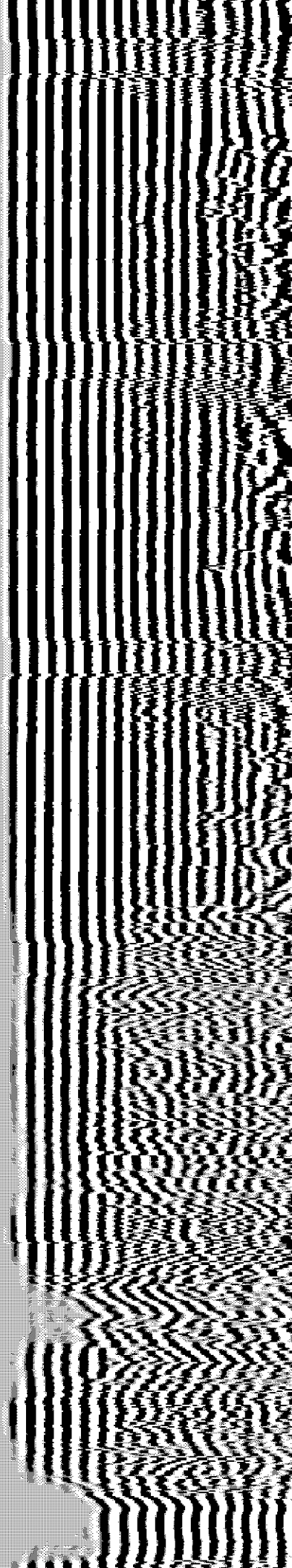
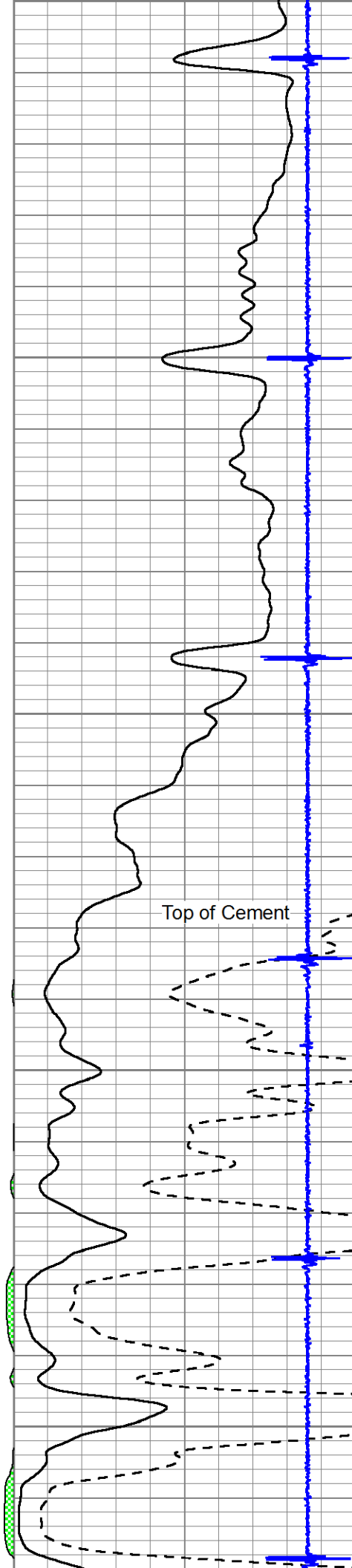


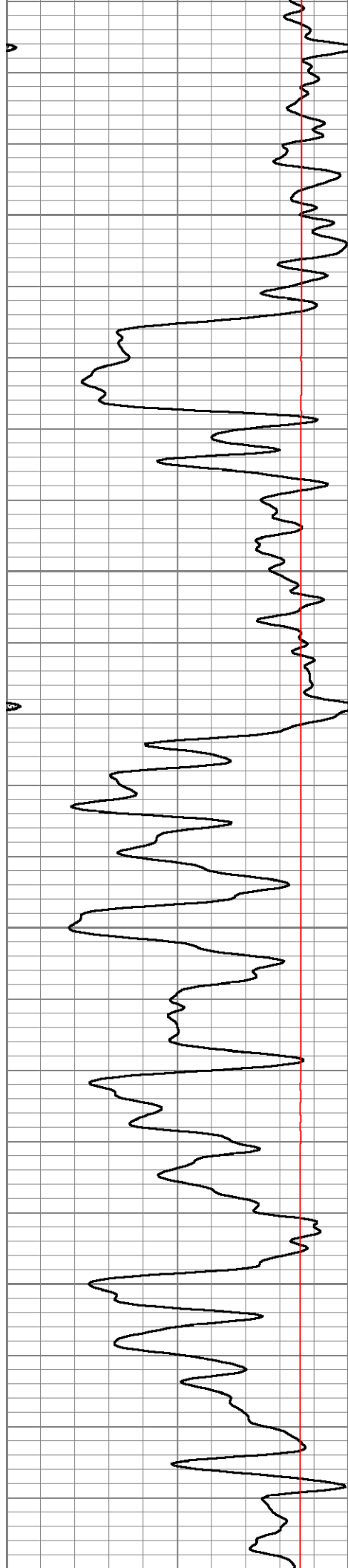
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 Dataset Pathname: grcbl/pass4.3
 Presentation Format: cbldig
 Dataset Creation: Thu Sep 12 08:57:35 2013 by Calc SCH 111116
 Charted by: Depth in Feet scaled 1:240





2050
2100
2150
2200
2250



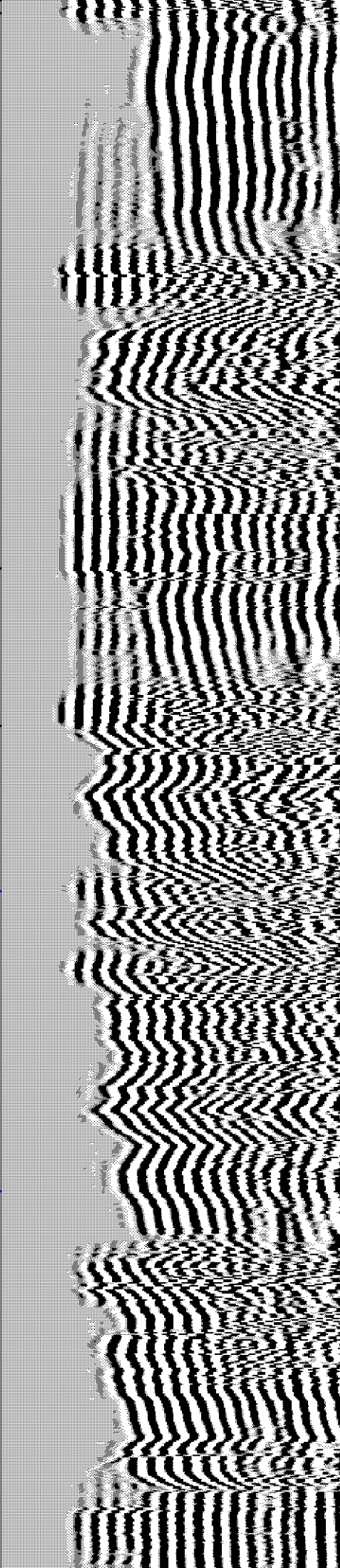
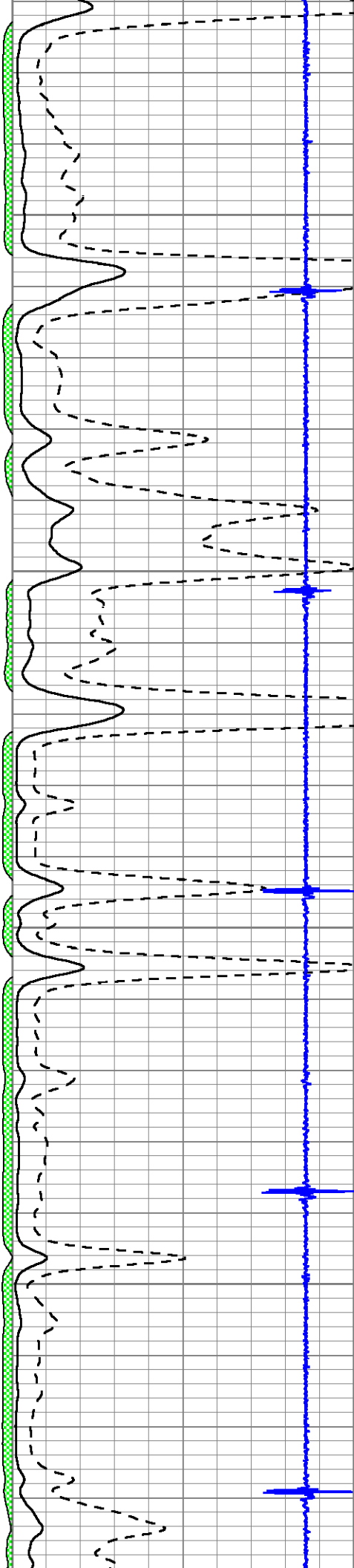


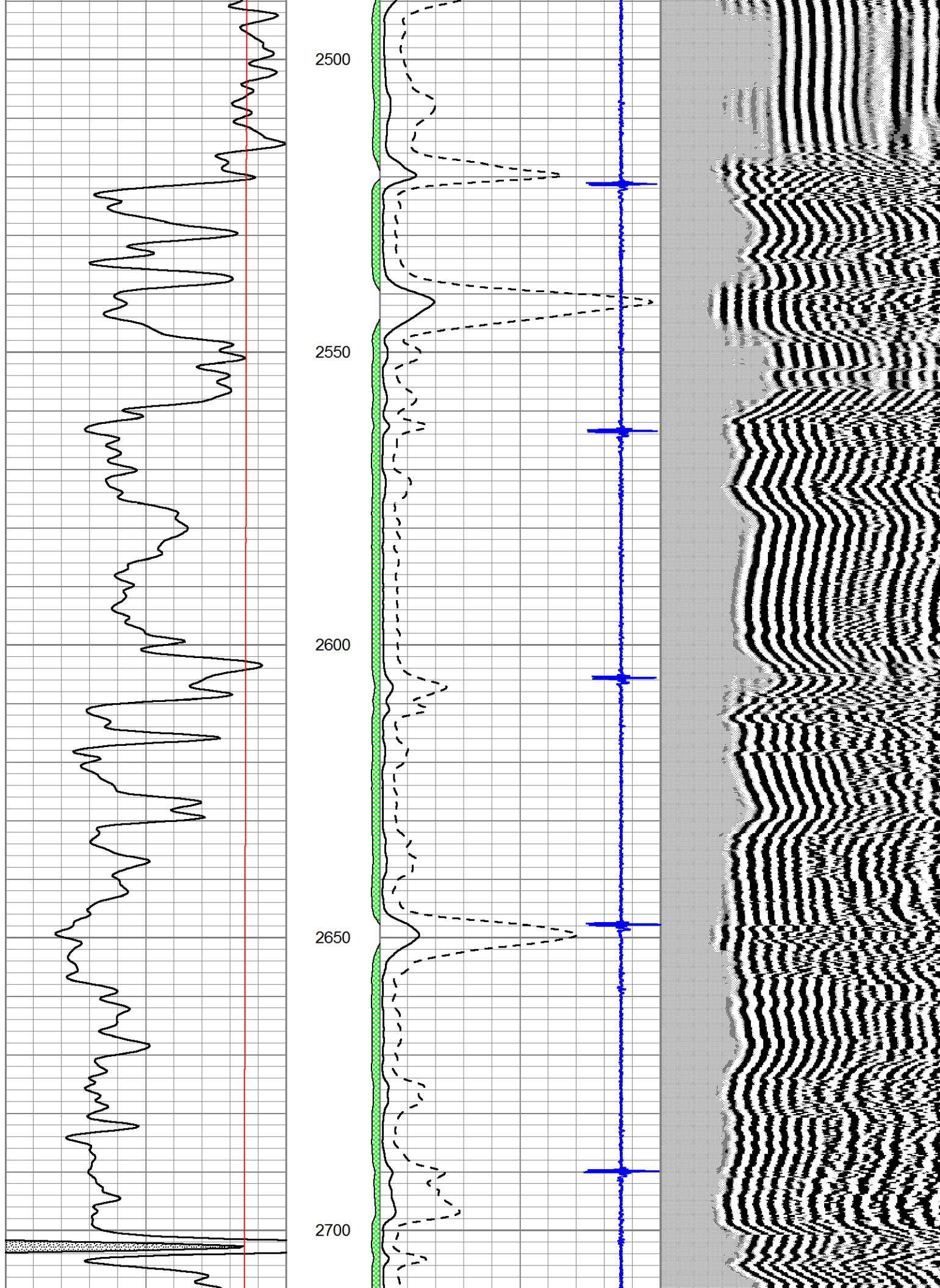
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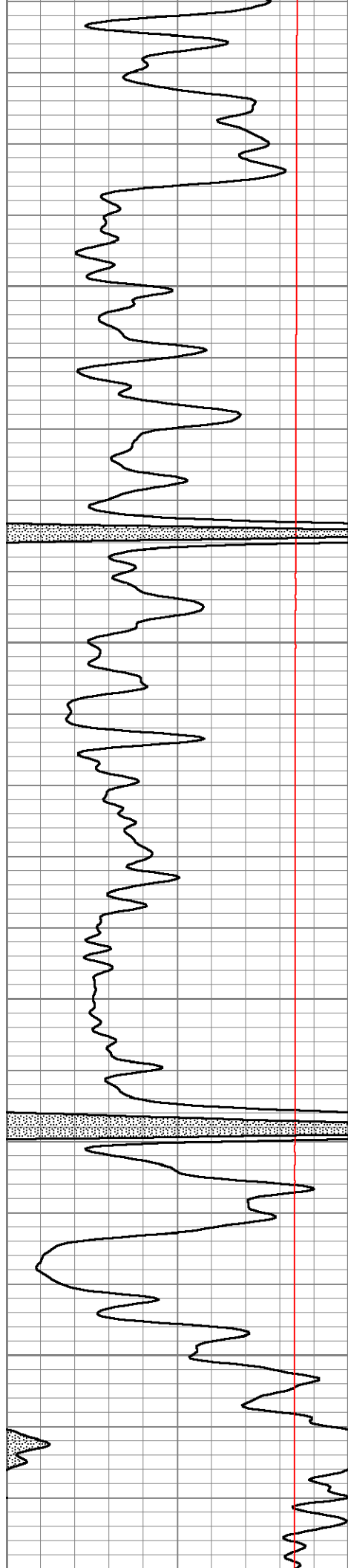
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2400

2450





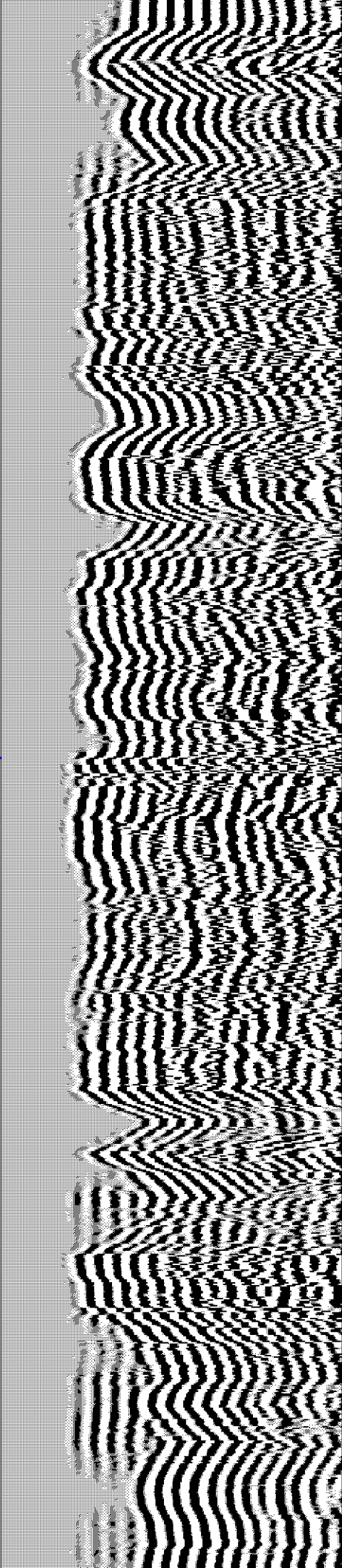
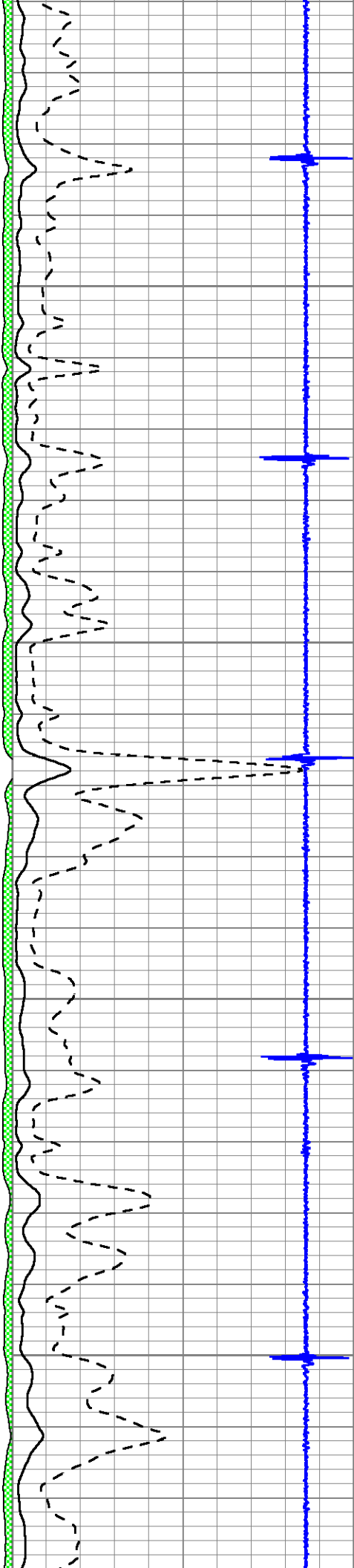


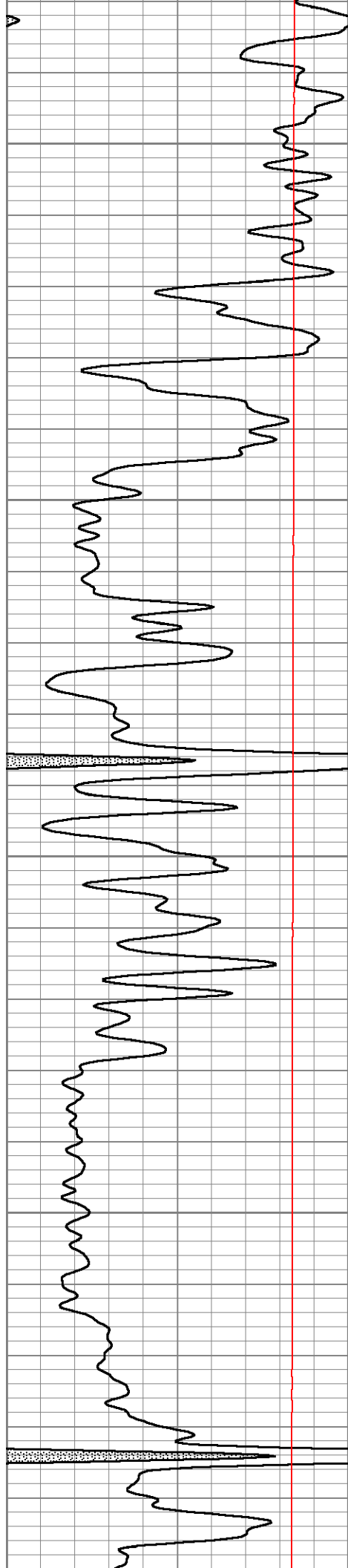
2750

2800

2850

2900





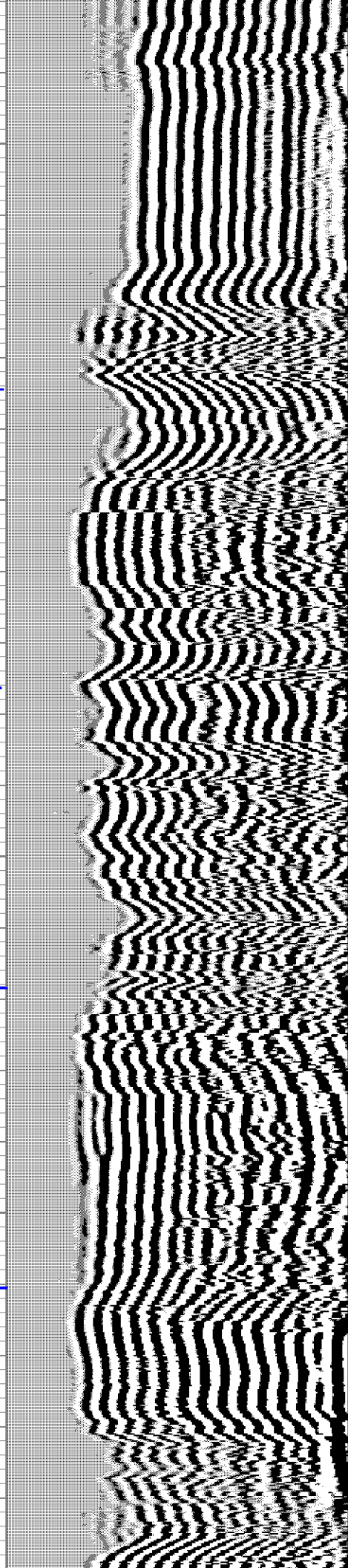
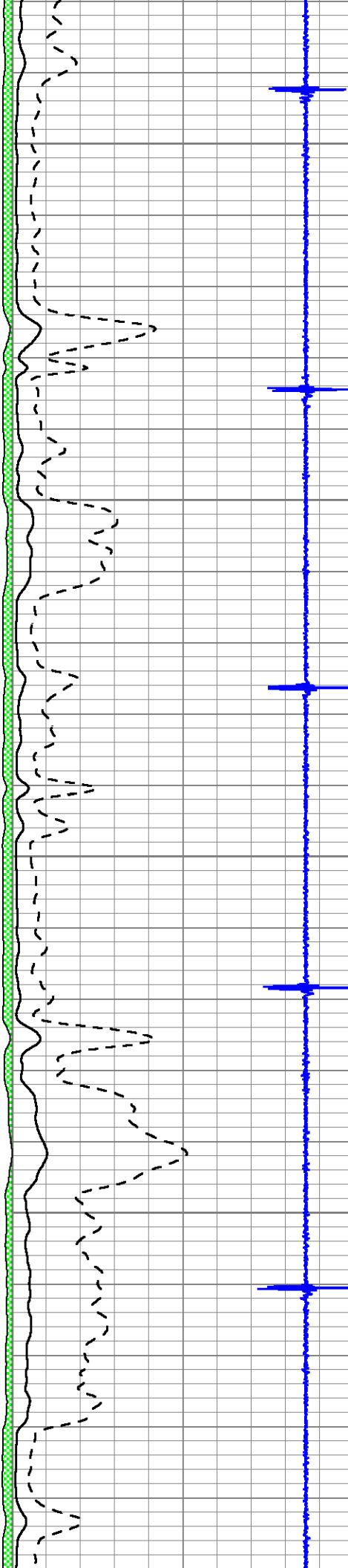
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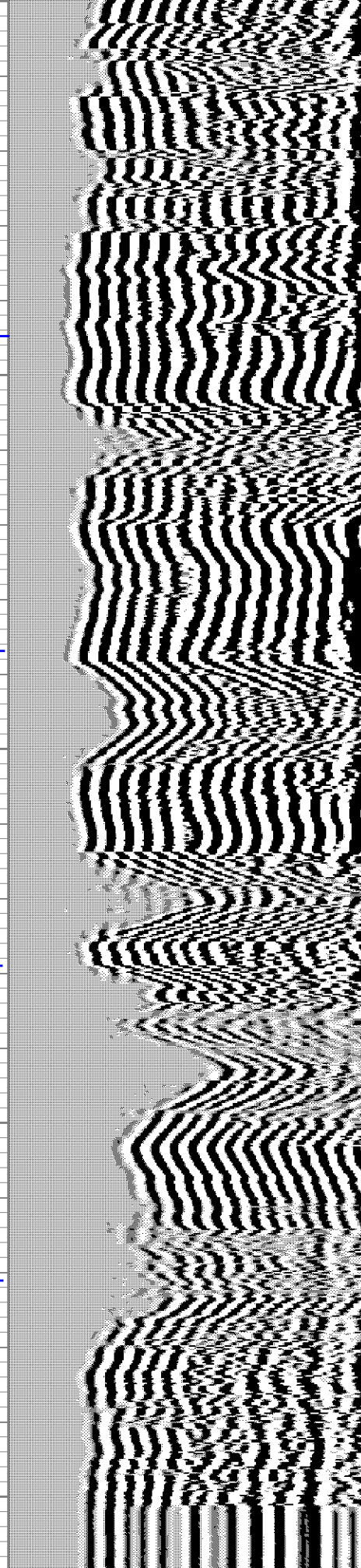
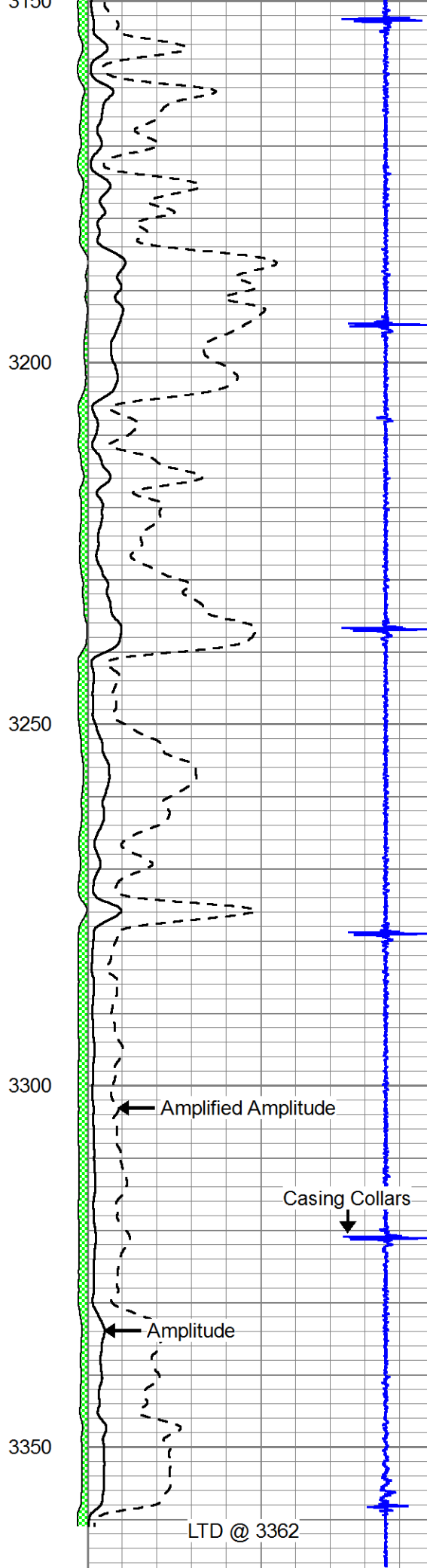
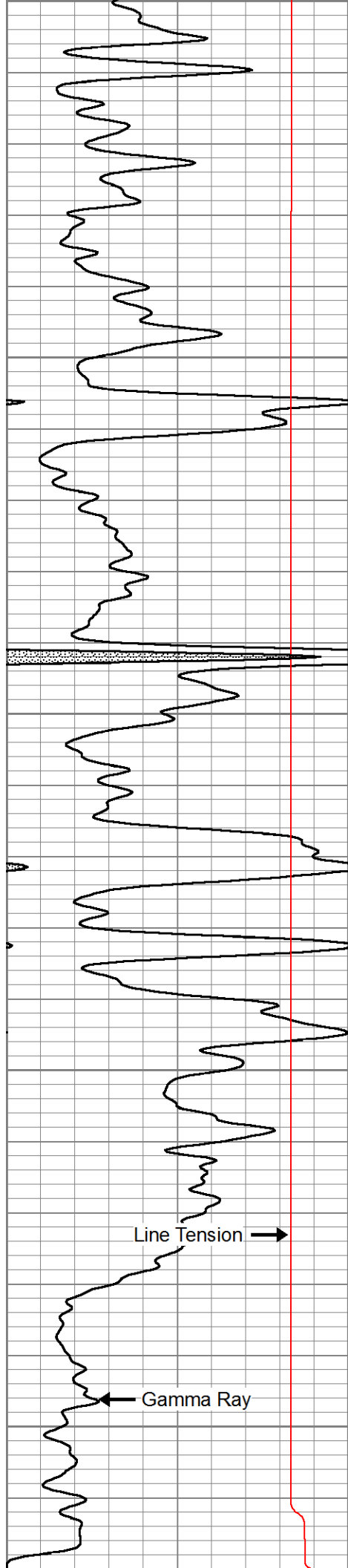
3000

3050

3100

3150





0	GR (GAPI)	150	AMP3	0	Amplitude (mV)	100	200	Variable Density	1200
5000	LTEN (lb)	0	(mV)	0	Amplified Amplitude (mV)	20			
			-100 10	5	Collar Locator	-0.8			



PIONEER

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Repeat Section

Database File:	lbexplo_petermann_28-1.db
Dataset Pathname:	grcbl/pass2
Presentation Format:	cbldig
Dataset Creation:	Thu Sep 12 08:24:11 2013 by Log SCH 111116
Charted by:	Depth in Feet scaled 1:240

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5000	LTEN (lb)	0	(mV)	0	Amplified Amplitude (mV)	20			
			-100 10	5	Collar Locator	-0.8			

