



Pioneer Energy Services

Sonic Cement
Bond Log

API No.

15-051-26393-00-00

Company American Warrior, Inc.

Well Nicholson #1-16

Field District 57 North

County Ellis State Kansas

Location

2106' FSL & 1512' FWL

Other Services
Perforate

Sec: 16 Twp: 12S Rge: 20W

Elevation

Permanent Datum Ground Level Elevation 2239

Log Measured From Kelly Bushing 8 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing K.B. 2247
D.F. @
G.L. 2239

Run Number One

Date Survey 10/11/2012

Date Cementing 10/01/2012

Type Cementing Operation Primary

Depth Driller 4002

Depth Logger 3970

Logged Interval 3969 to 2740

Casing Driller 5.5 @ T.D.

Float Collar -- D.V. Tool 1612 @

Squeeze Depth

Amount & Type Cement

Amount & Type Admix

Type Fluid In Hole Water

Fluid Level Full

Salinity PPM CL

Weight lb/gal -- Vis. // // // //

Approx. Logged Cement Top 2745

Calculated Cement Top // // // //

Max. Hole Temperature 117

Tool No. RBT4-5

Spacing Recorded 3-5'

Equipment -- Location 14 Hays

Recorded By David Walker

Witnessed By Mr. Joe Smith

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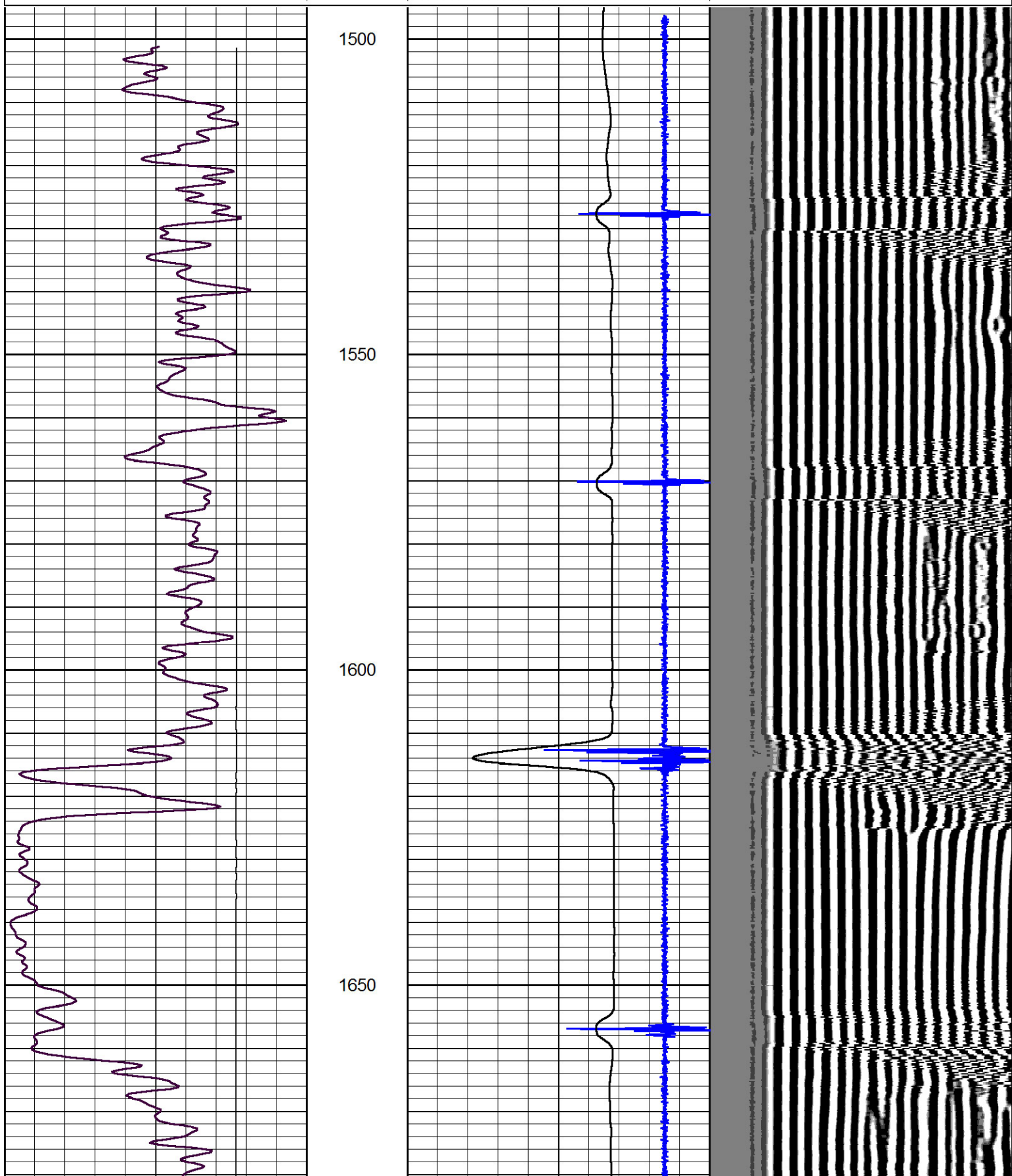
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

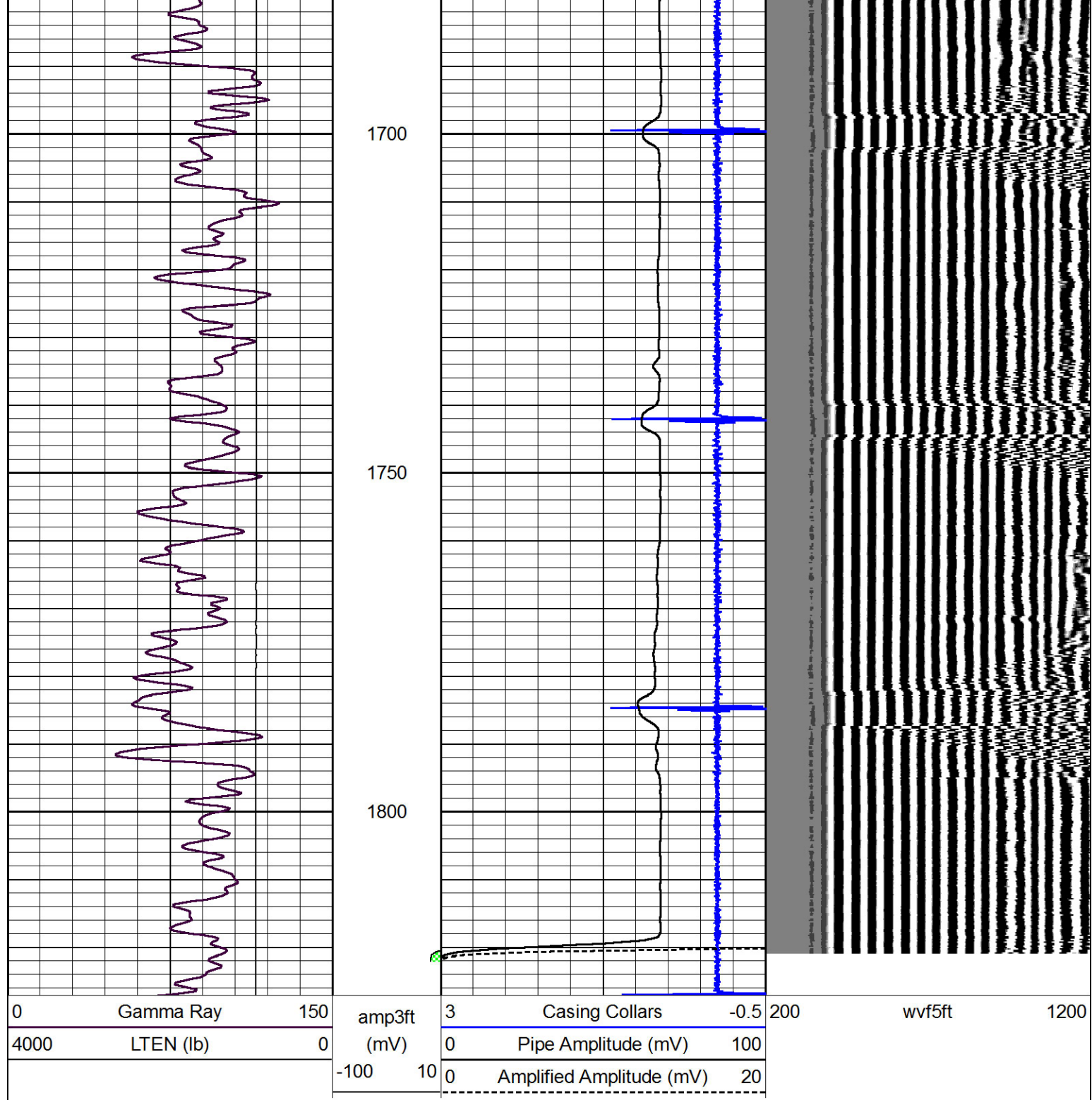
Comments

Thank you for using Pioneer Energy Services
785.625.3858
Ellis Kansas
2 1/2 North to curve, continue 1 1/4 North,
East into thru gate

Database File: american-warrior-nicholson#1-16.db
 Dataset Pathname: pass5
 Presentation Format: cblbr
 Dataset Creation: Thu Oct 11 10:25:10 2012 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240

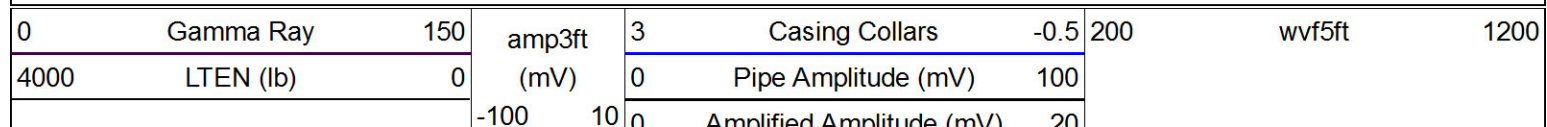
0	Gamma Ray	150	amp3ft	3	Casing Collars	-0.5	200	wvf5ft	1200
4000	LTEN (lb)	0	(mV)	0	Pipe Amplitude (mV)	100			
			-100 10	0	Amplified Amplitude (mV)	20			

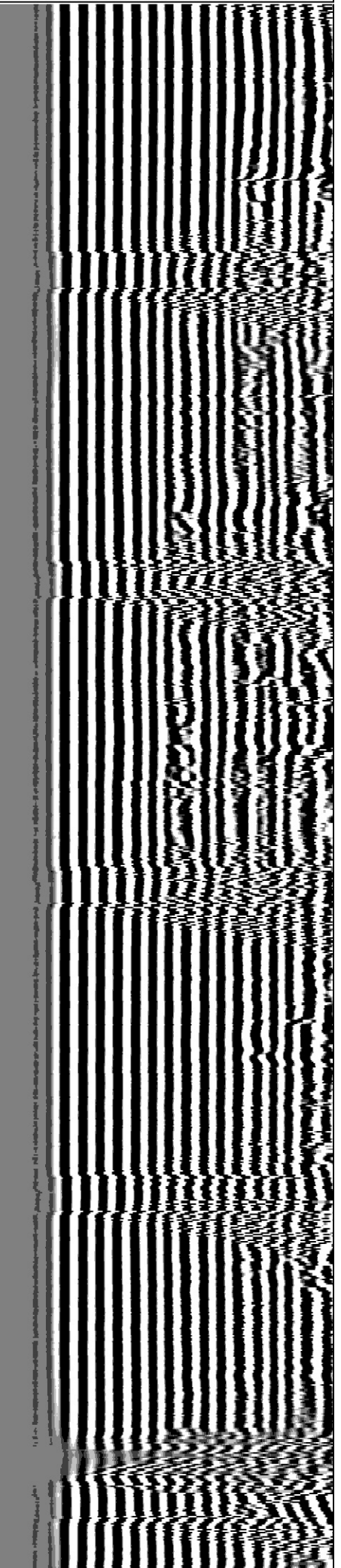
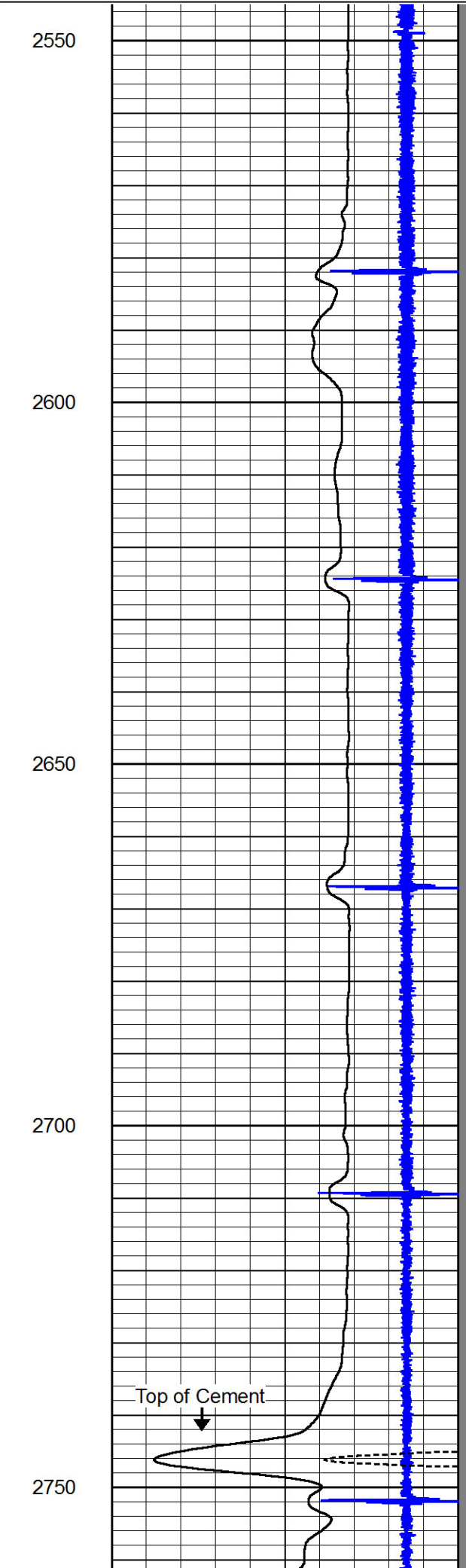
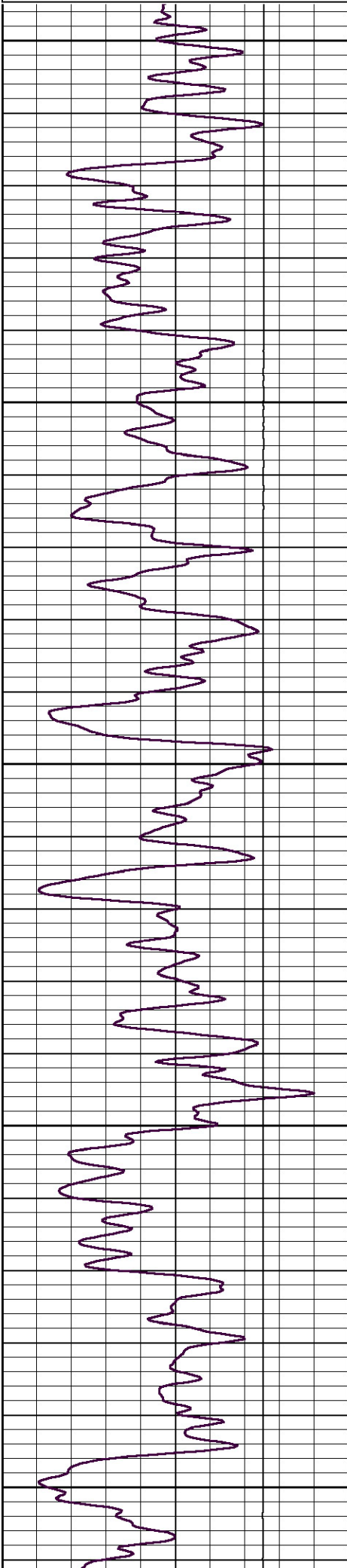


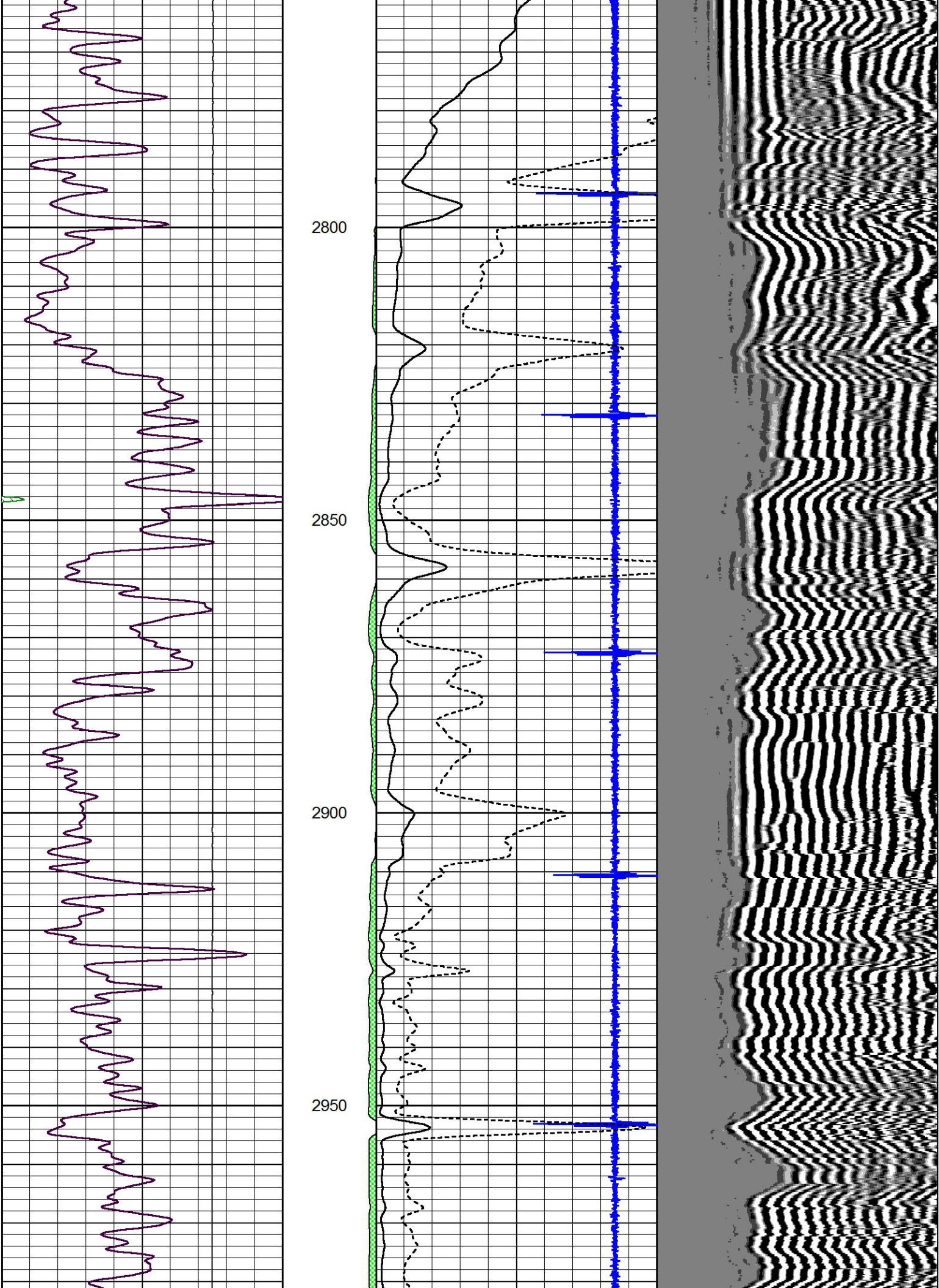


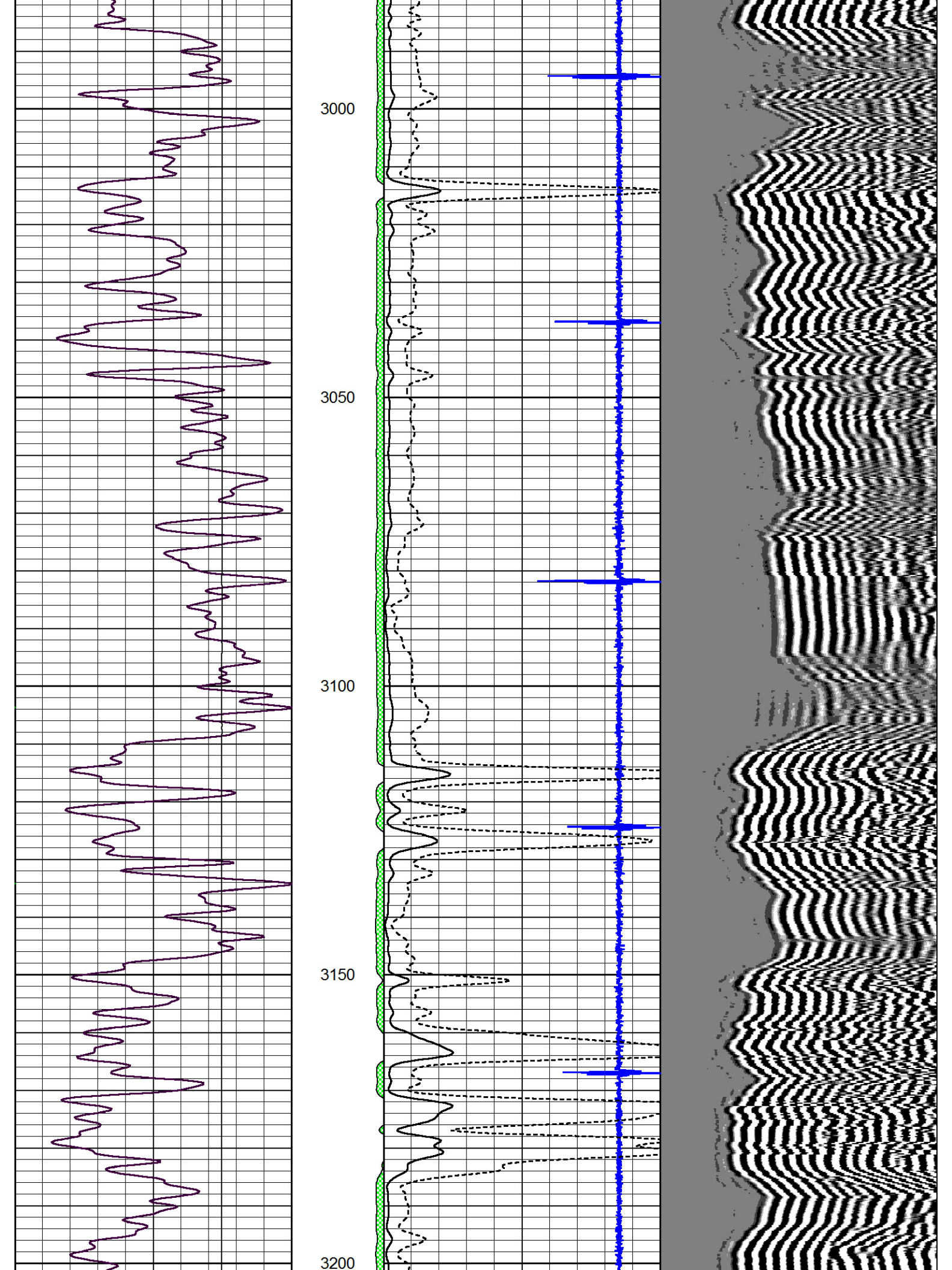
Main Pass

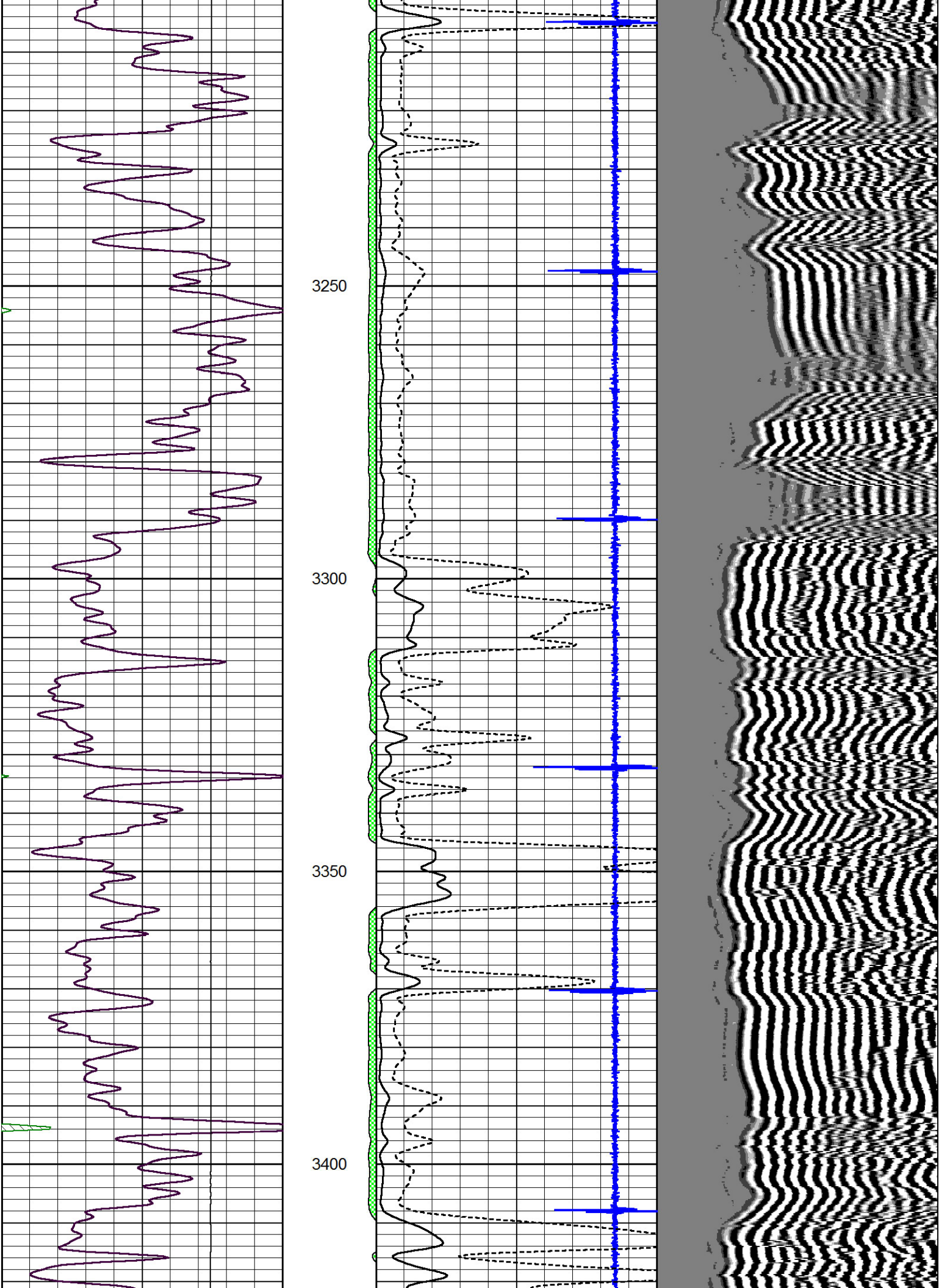
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 Dataset Pathname: pass4
 Presentation Format: cbldr
 Dataset Creation: Thu Oct 11 09:56:01 2012 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240

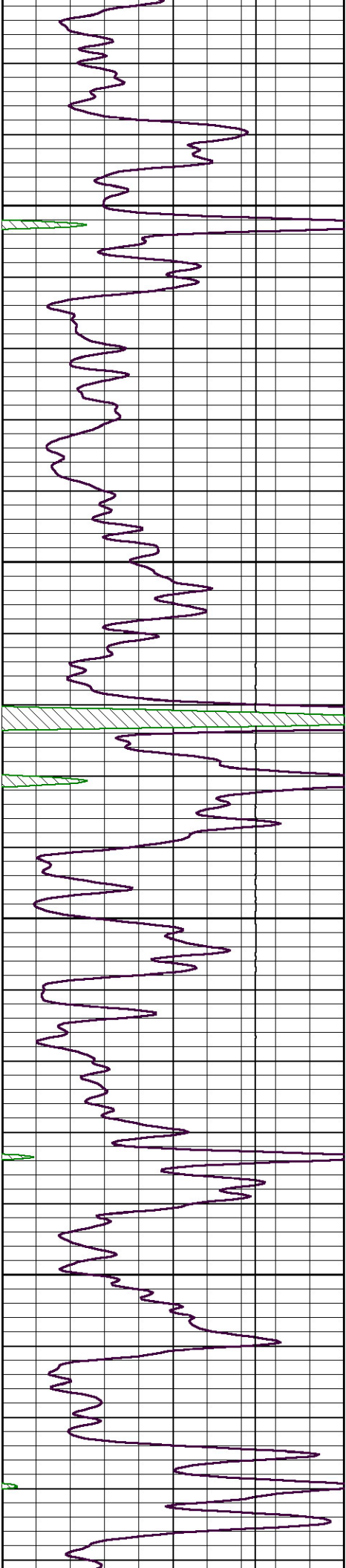










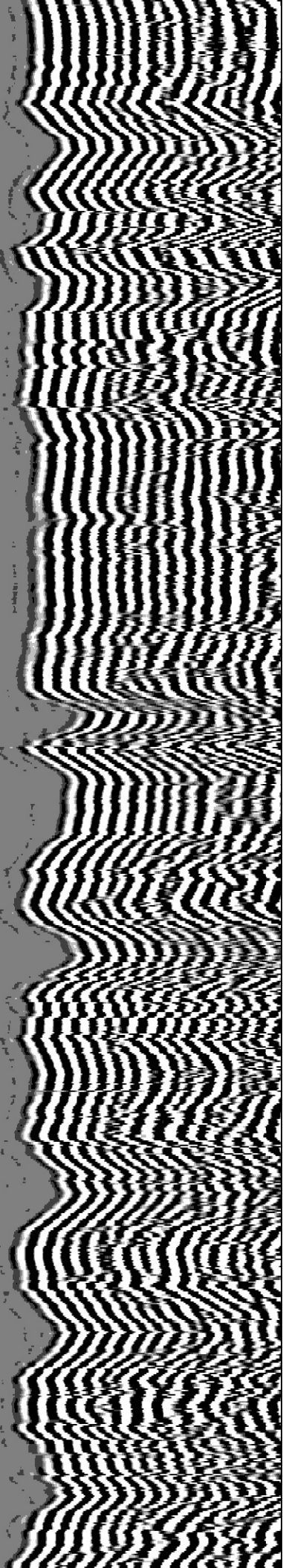
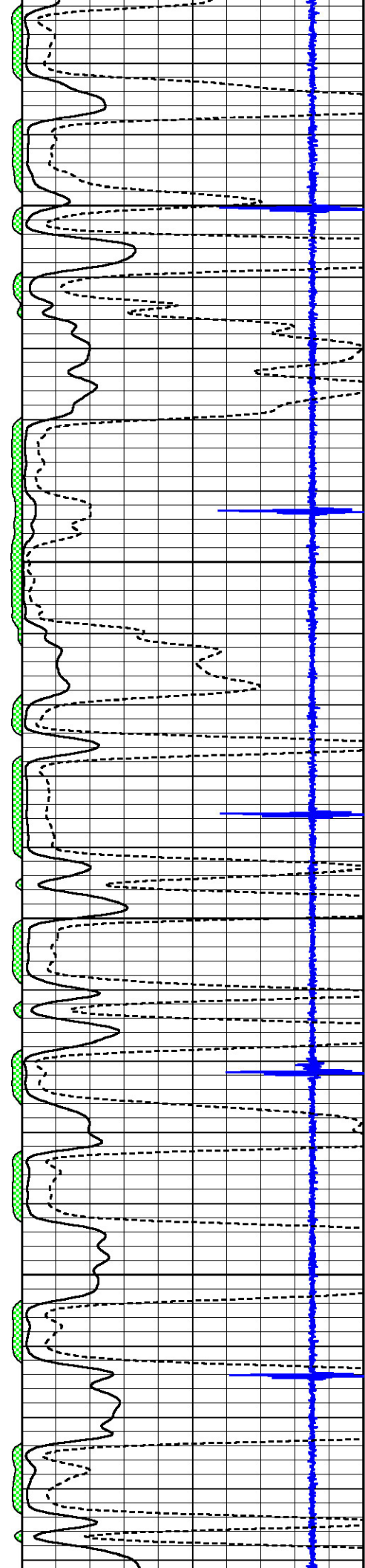


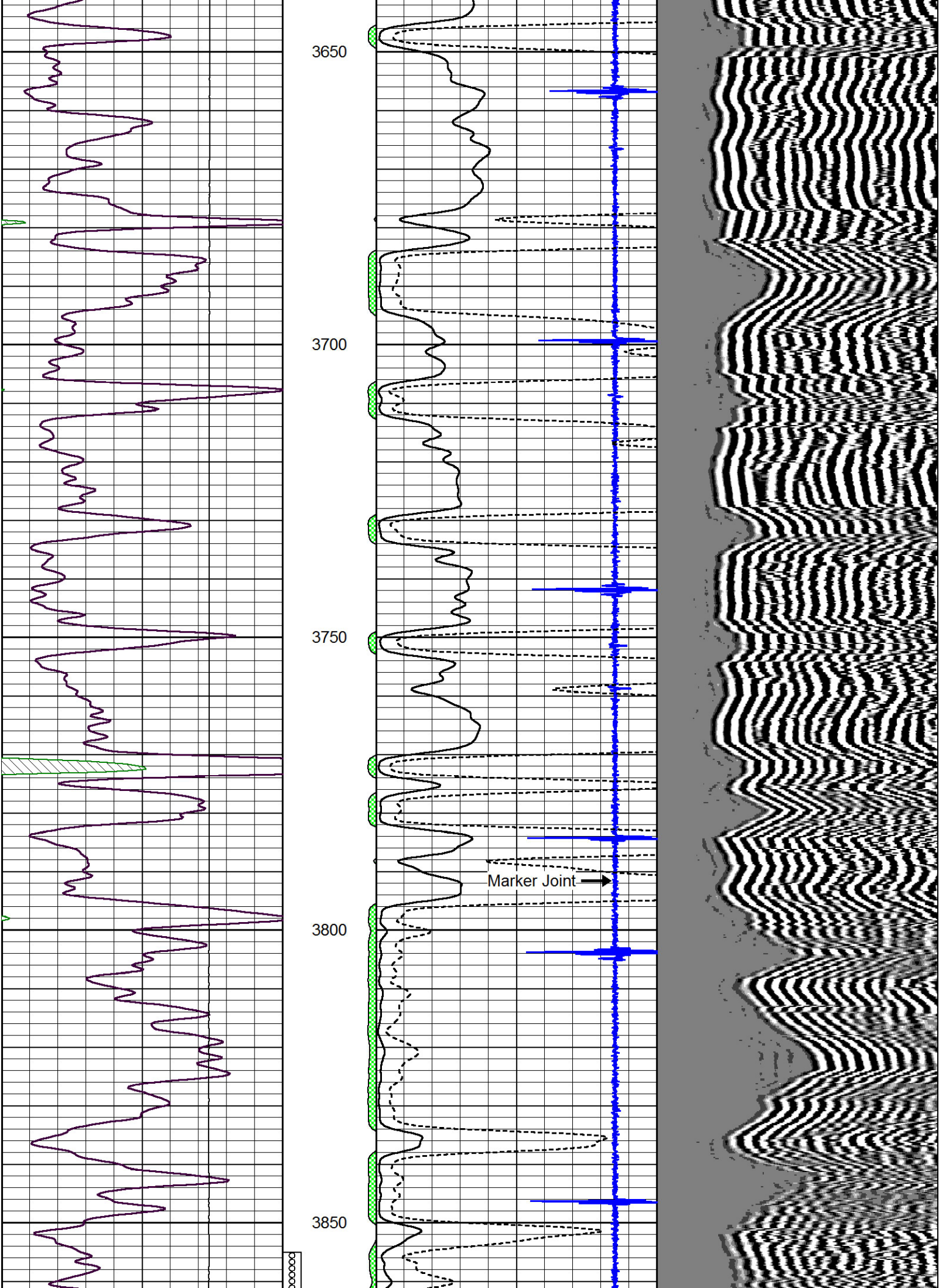
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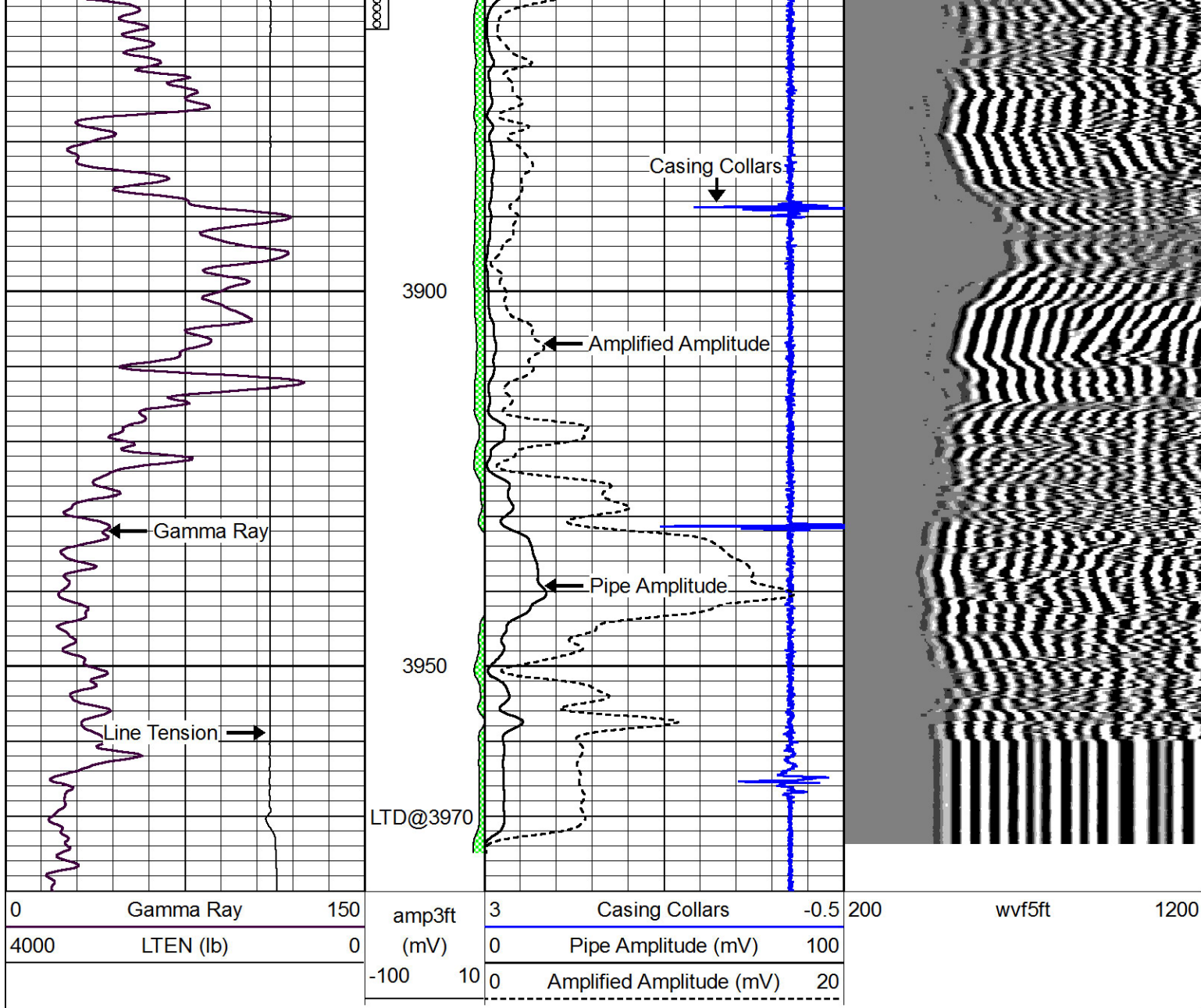
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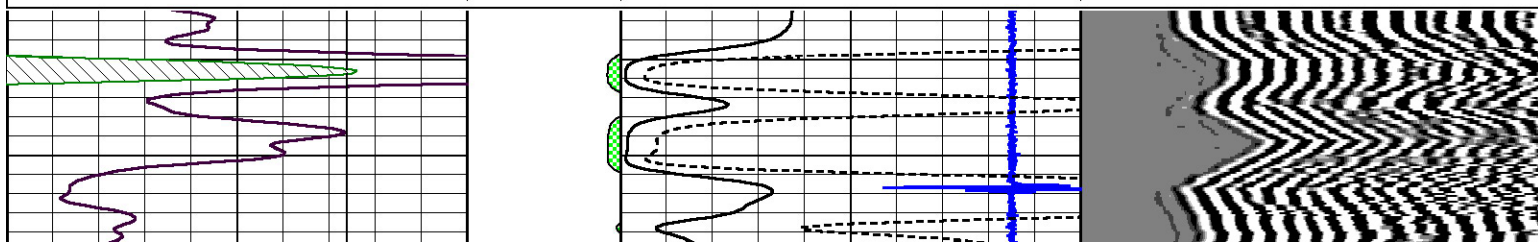
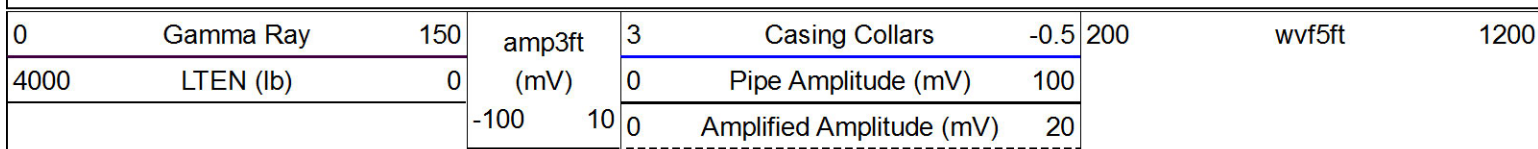


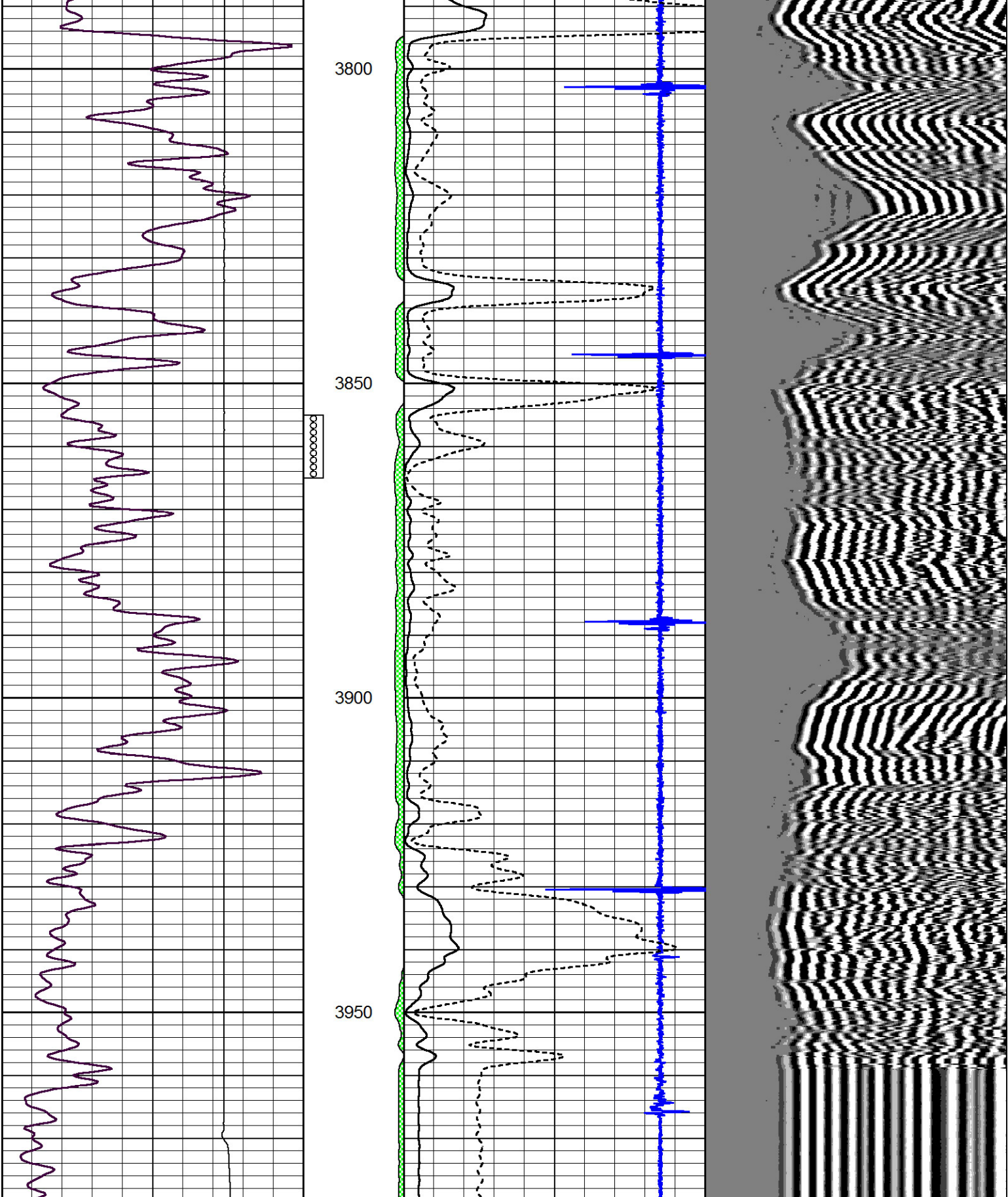




Repeat Section

Database File: american-warrior-nicholson#1-16.db
 Dataset Pathname: pass3
 Presentation Format: cbldr
 Dataset Creation: Thu Oct 11 09:49:44 2012 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240





0	Gamma Ray	150	amp3ft	3	Casing Collars	-0.5	200	wvf5ft	1200
4000	LTEN (lb)	0	(mV)	0	Pipe Amplitude (mV)	100			
			-100 10	0	Amplified Amplitude (mV)	20			