



Sonic Cement Bond Log

Pioneer Energy Services

API No.

Company Mid-Con Energy
Well HRMU No. 14-1
Field Harker Ranch
County Cheyenne State Kansas

Location 469' FSL & 1320' FWL
S/2 - S/2 - SW
Sec: 1 Twp: 13S Rge: 43W
Other Services

Permanent Datum Ground Level Elevation
Log Measured From Kelly Bushing 15 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

K.B.
D.F.
G.L.

Run Number One

Date Survey 10/2/2014

Date Cementing

Type Cementing Operation Primary

Depth Driller 5270

Depth Logger 5273

Logged Interval 5271 to 1000

Casing Driller 5.5 @ T.D.

Float Collar -- D.V. Tool 2971

Squeeze Depth

Amount & Type Cement

Amount & Type Admix

Type Fluid In Hole Water

Fluid Level 225

Salinity PPM CL

Weight lb/gal -- Vis. 3800

Approx. Logged Cement Top

Calculated Cement Top

Max. Hole Temperature 122

Tool No. R-1

Spacing Recorded 3-5

Equipment -- Location 6 Colby

Recorded By K. Ladigan

Witnessed By Clark Morgan

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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.

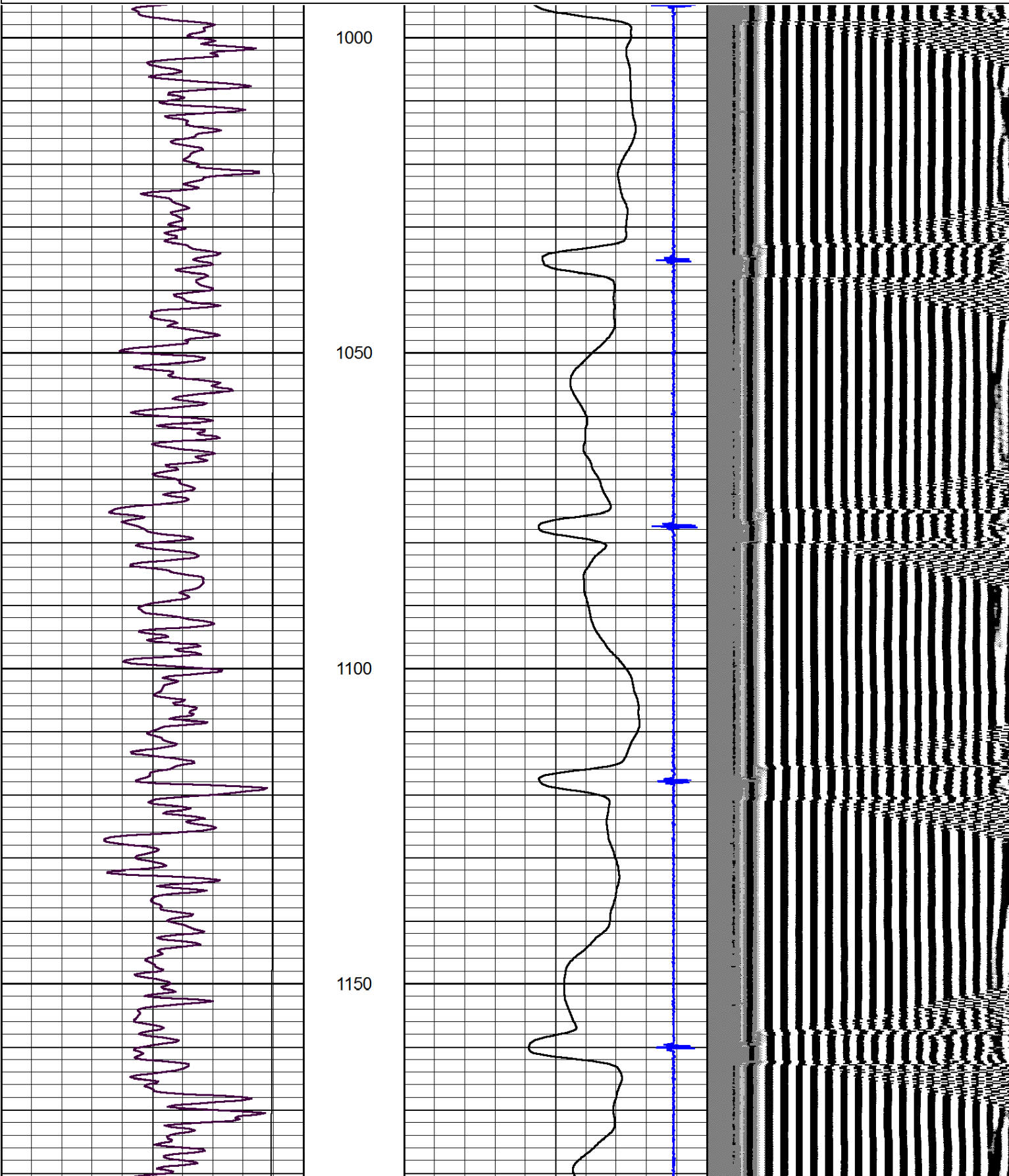
Comments

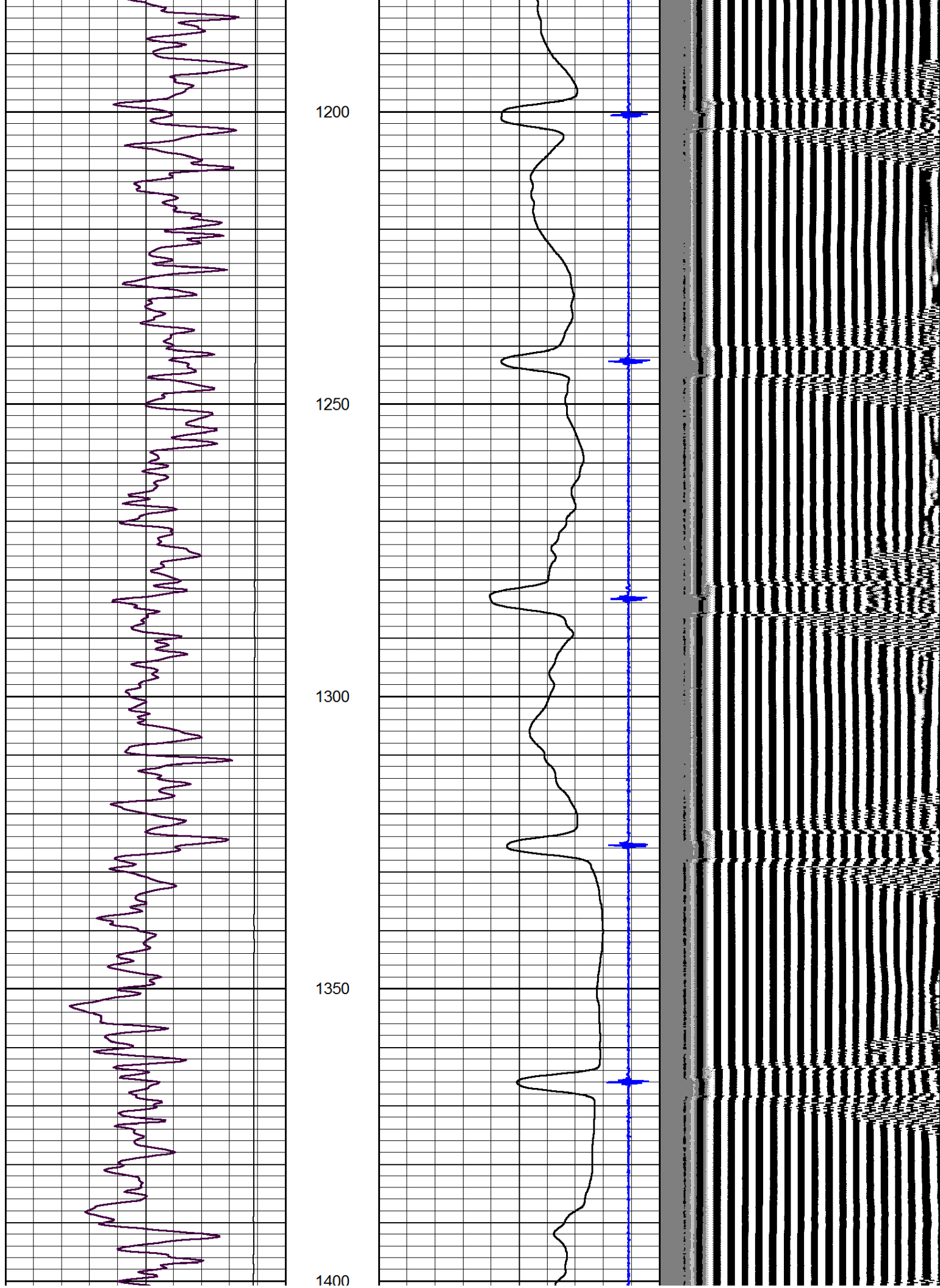
Thank you for using Pioneer Energy Services, Inc. 785.625.3858

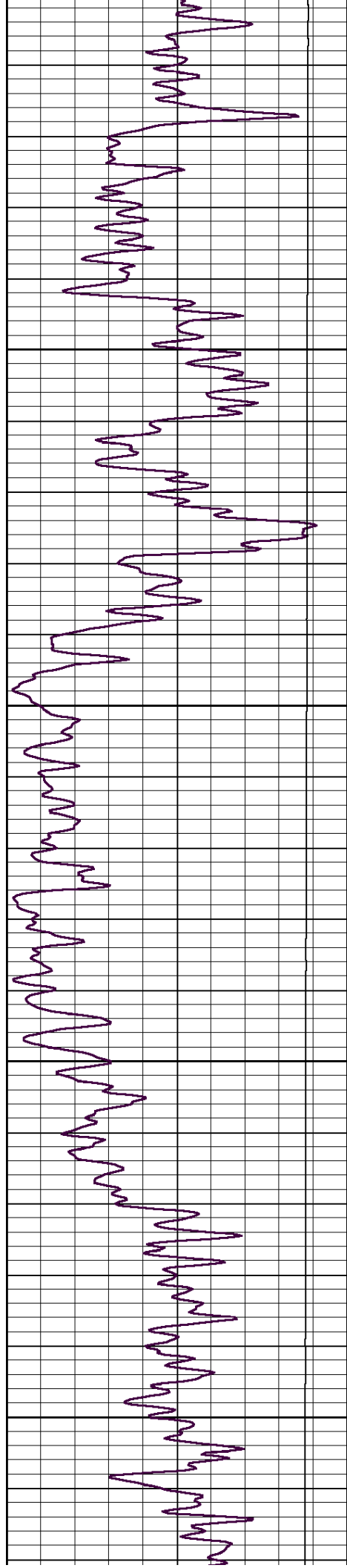
Arapahoe, CO., North out of Town on Main Street to "T", ¾ East
6 North on CR 54 (Not Marked) to Z Road, ¾ West
North Into.

Database File: midcon_hrmu14-1.db
Dataset Pathname: grcbl/pass3
Presentation Format: cbldr
Dataset Creation: Thu Oct 02 16:23:27 2014 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150	amp3ft	8	Casing Collars	-1	200	wvf5ft	1200	
			(mV)	0	Amplified Amplitude (mV)	100				
			-100	10	0	Pipe Amplitude (mV)				20





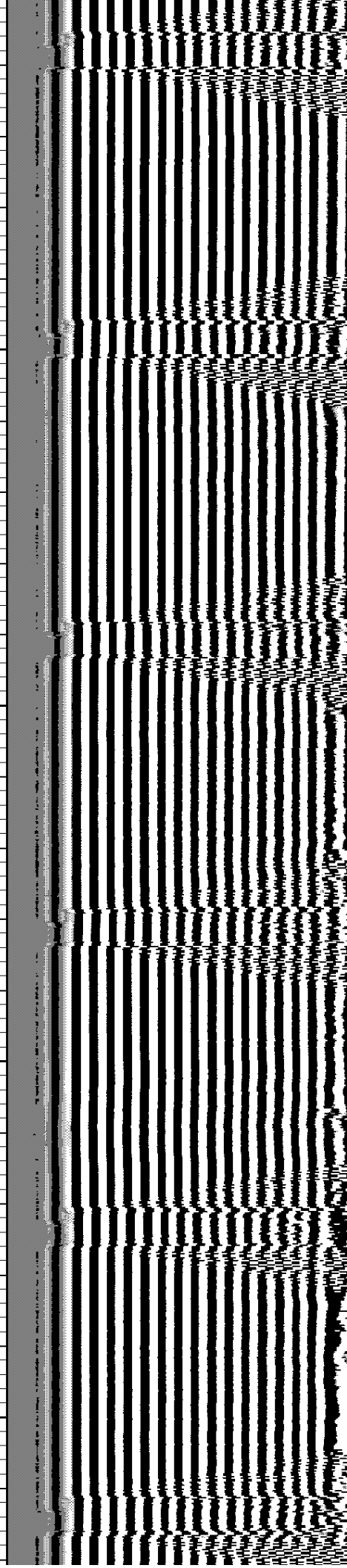
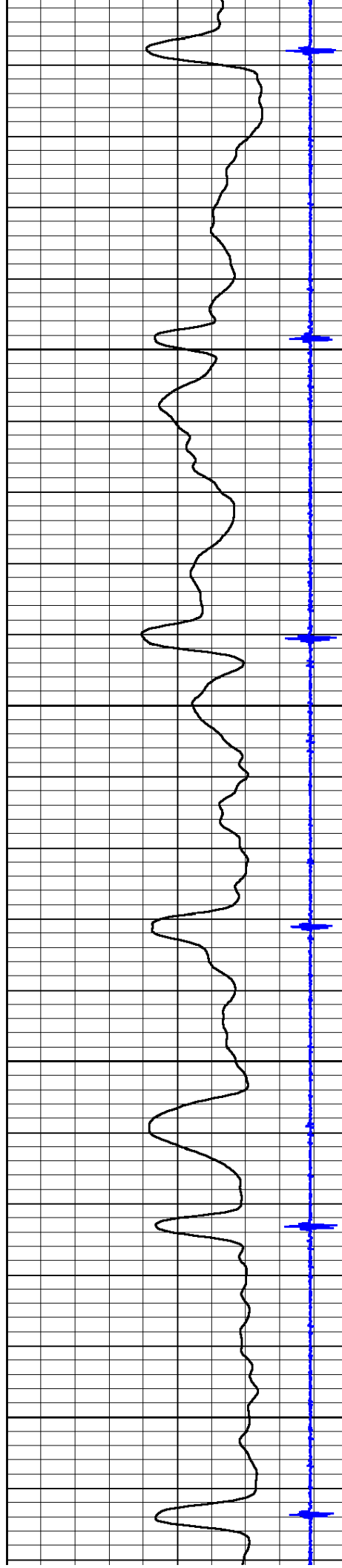


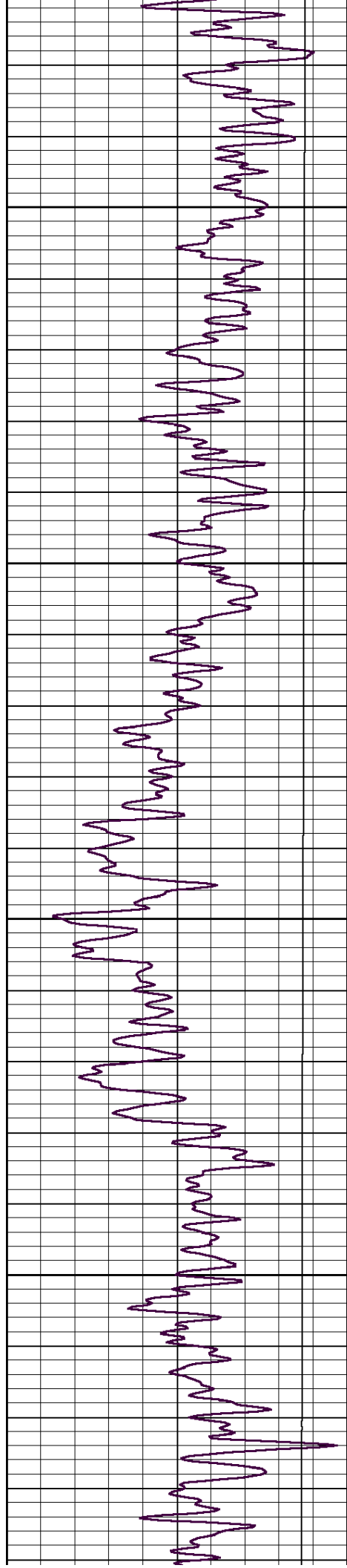
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1500

1550

1600



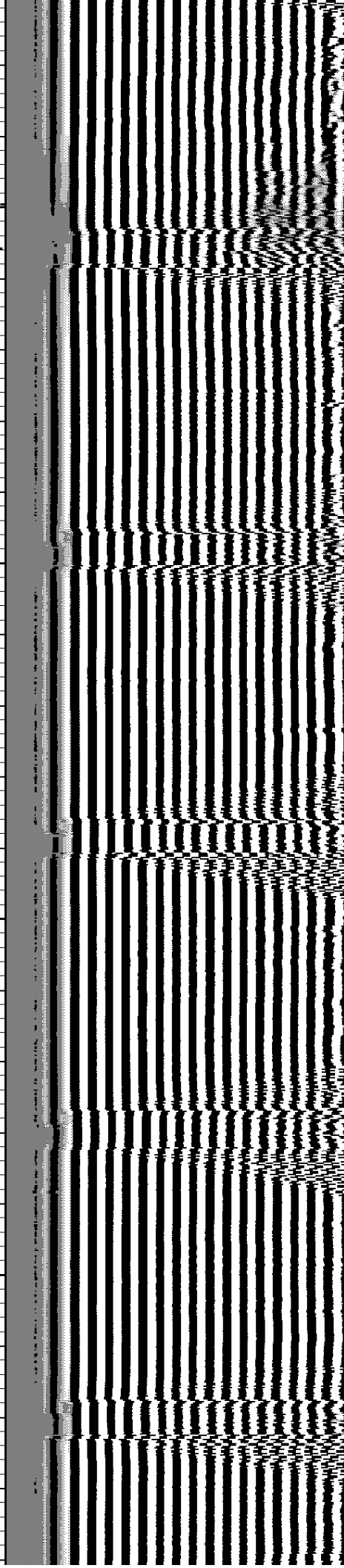
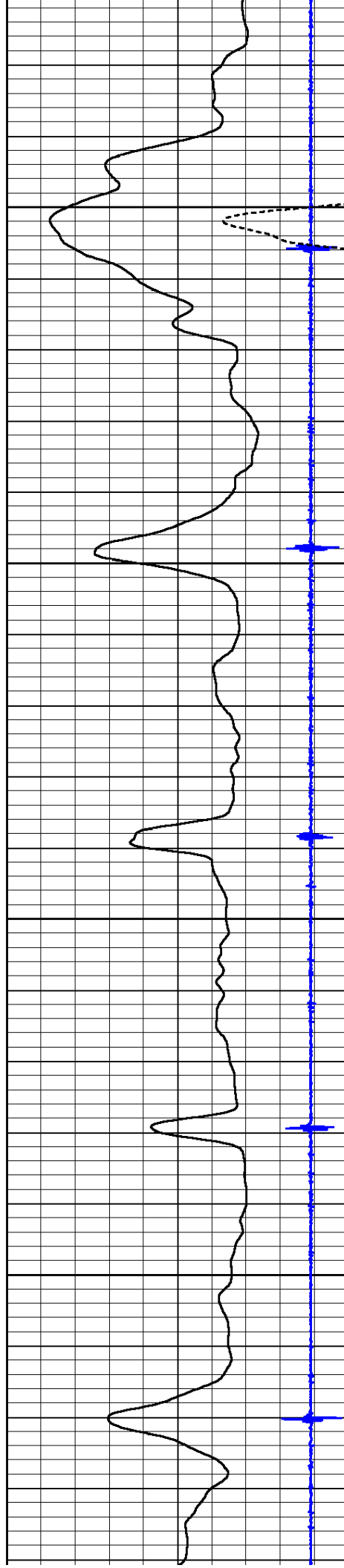


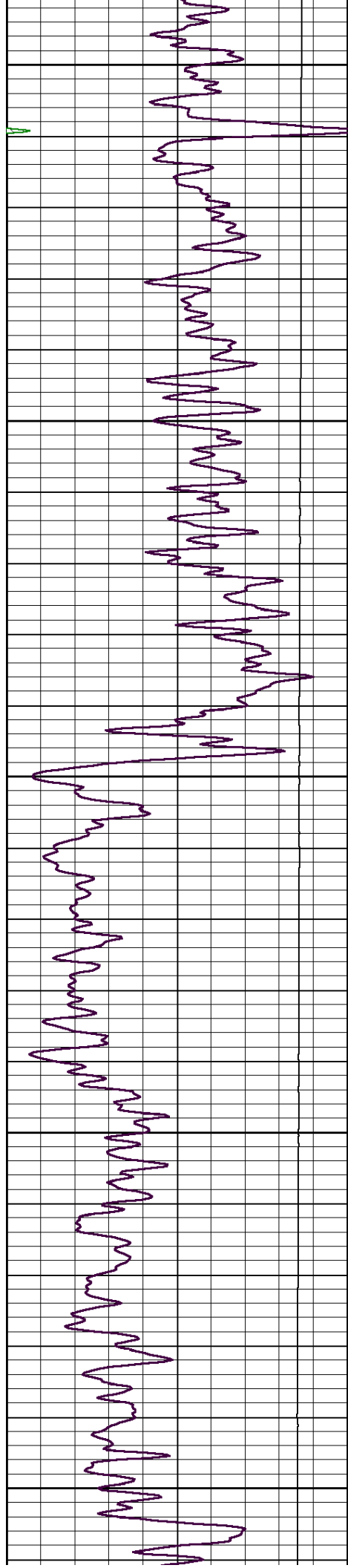
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1700

1750

1800





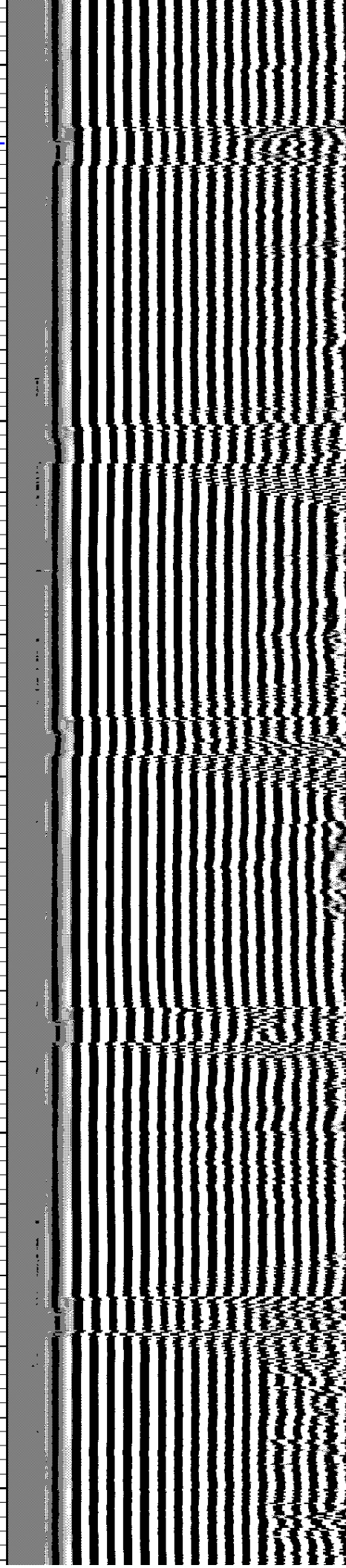
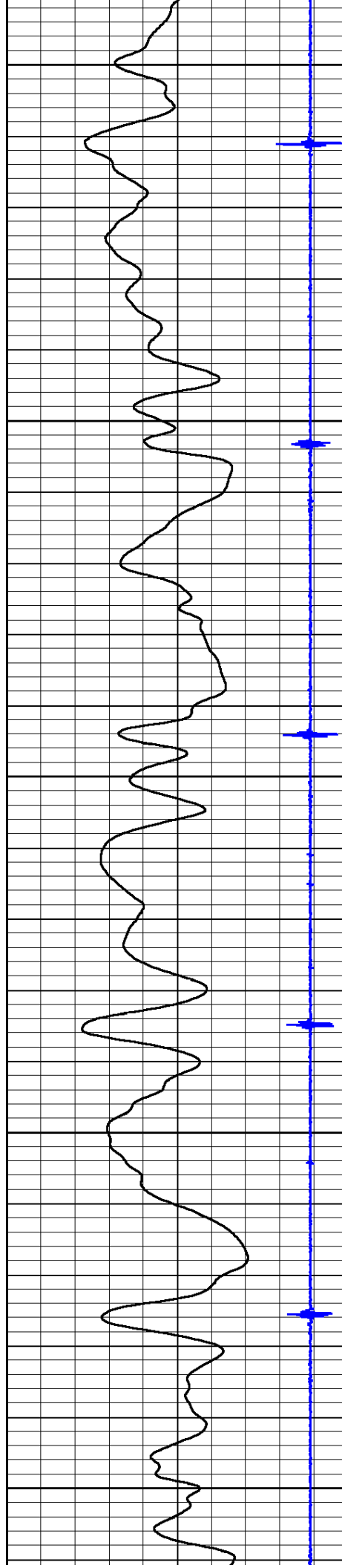
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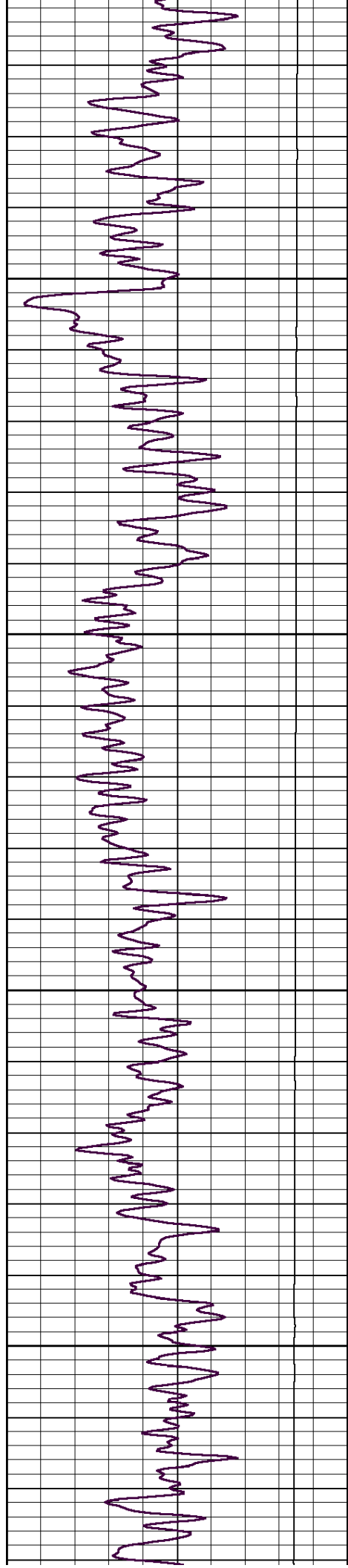
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1950

2000

2050



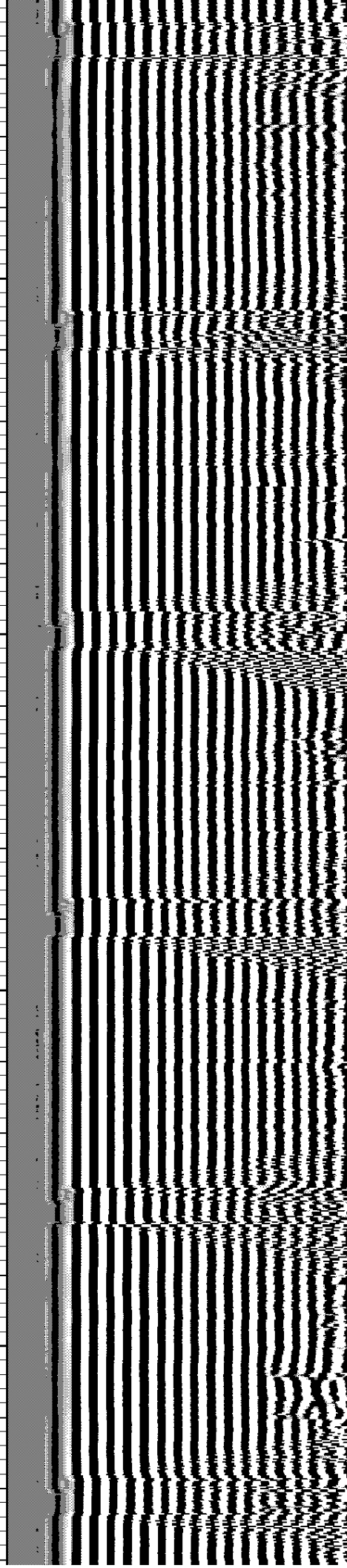
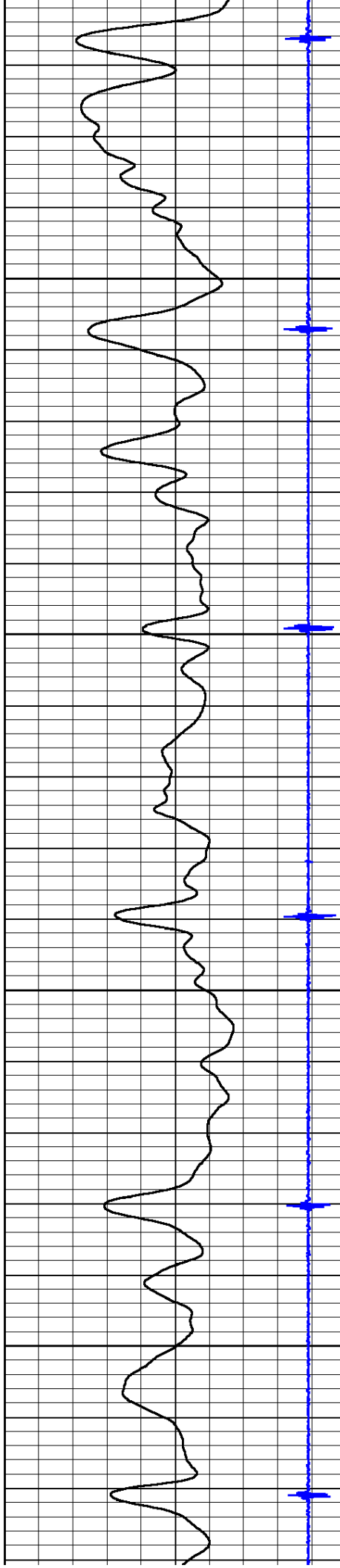


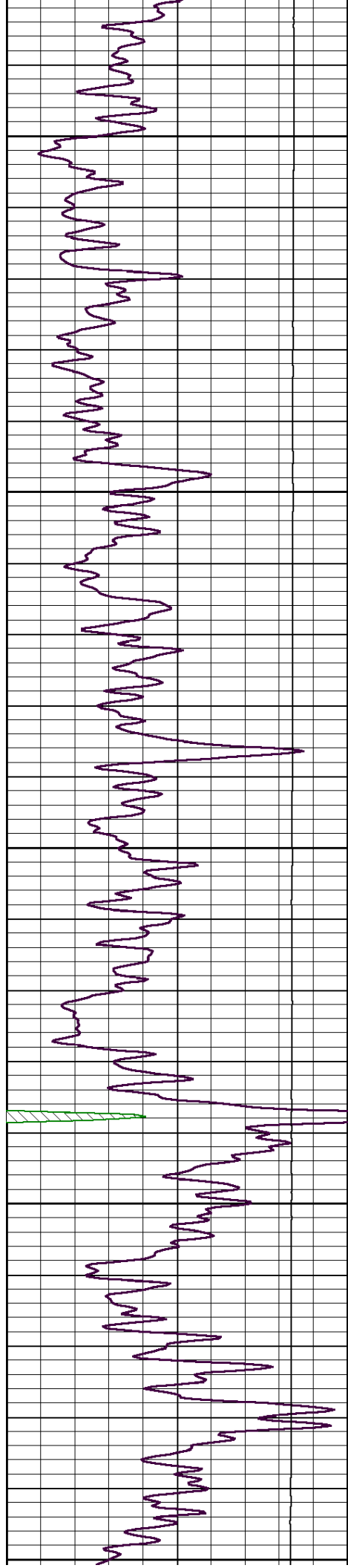
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2150

2200

2250





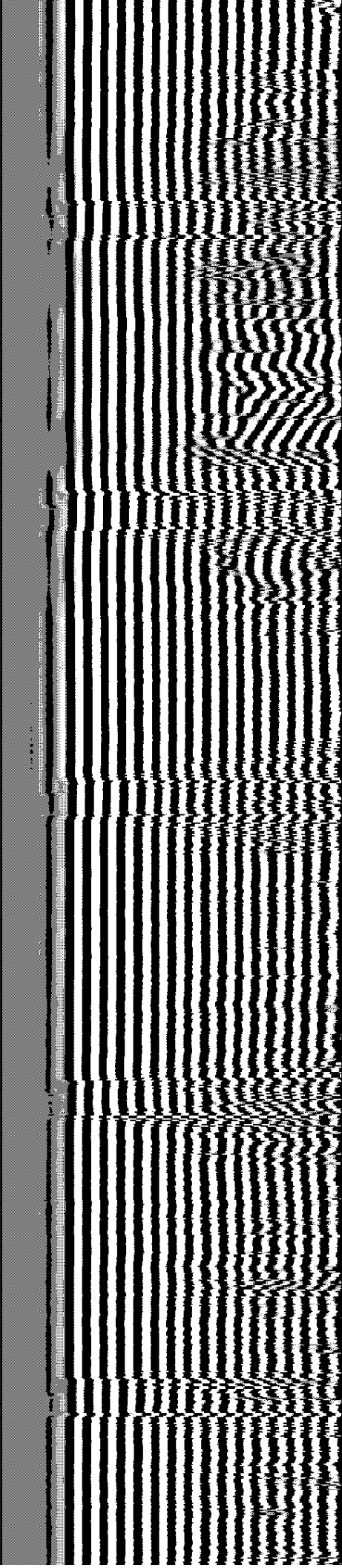
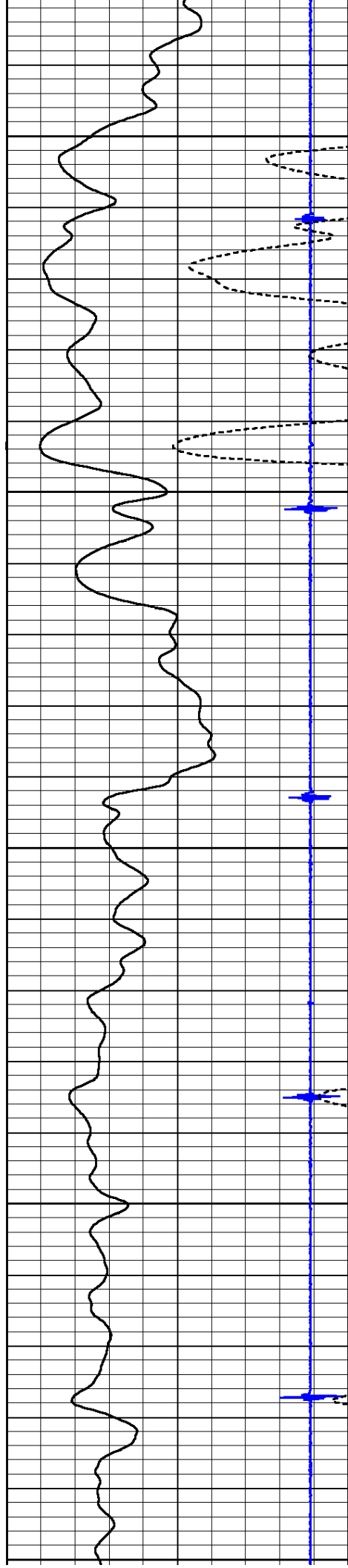
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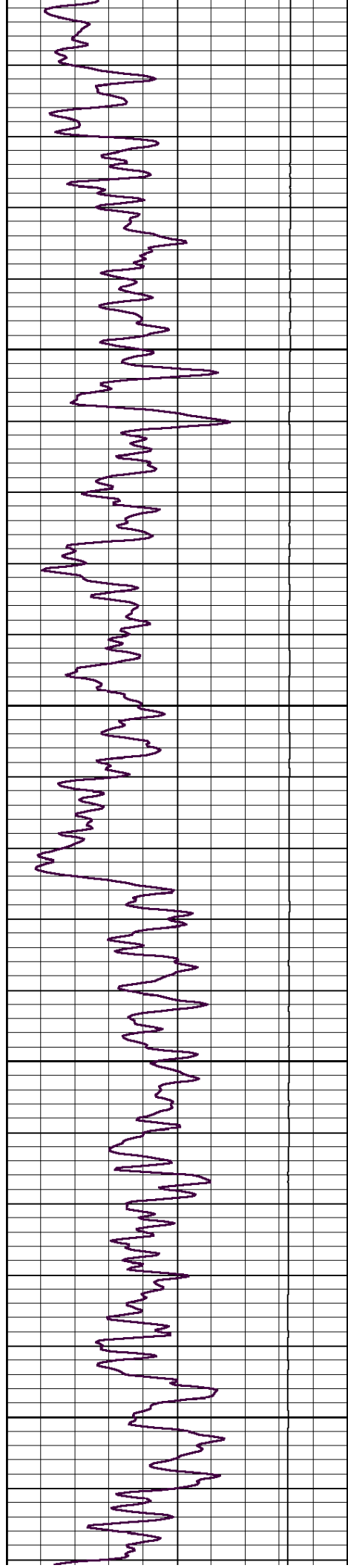
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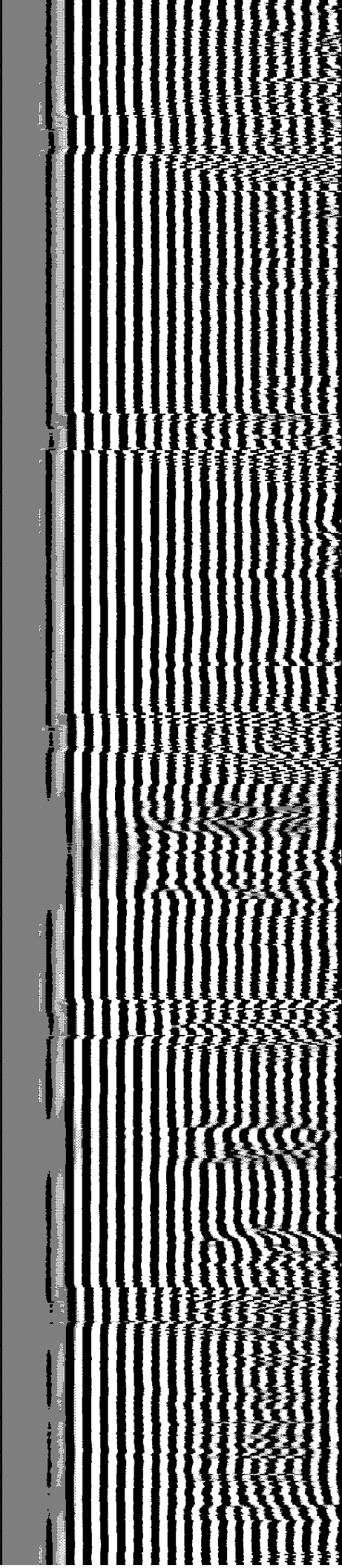
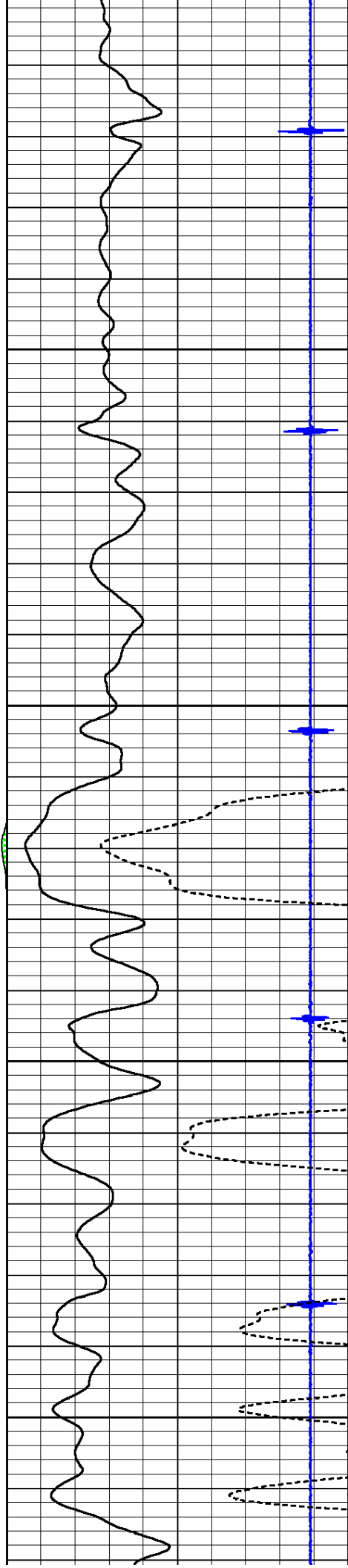


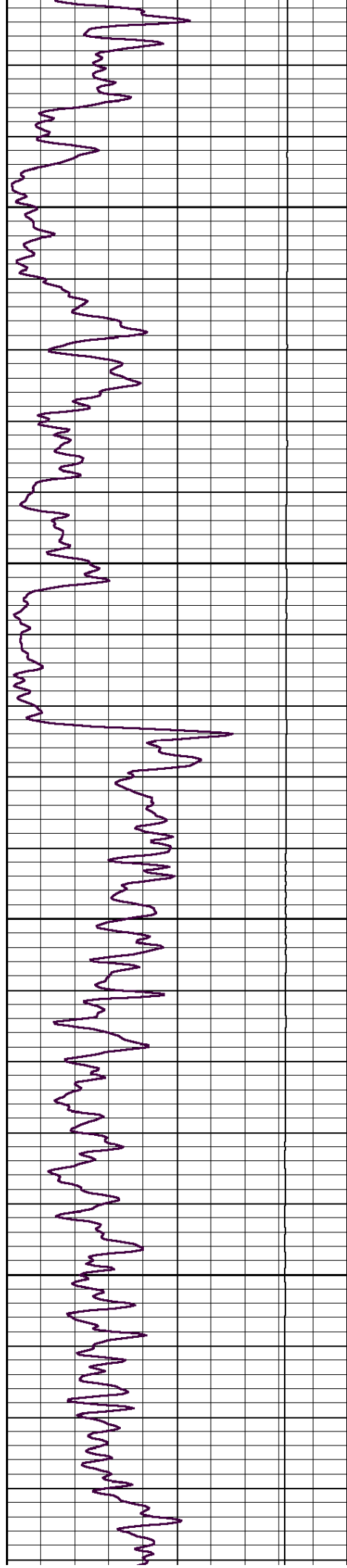
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2600

2650

2700



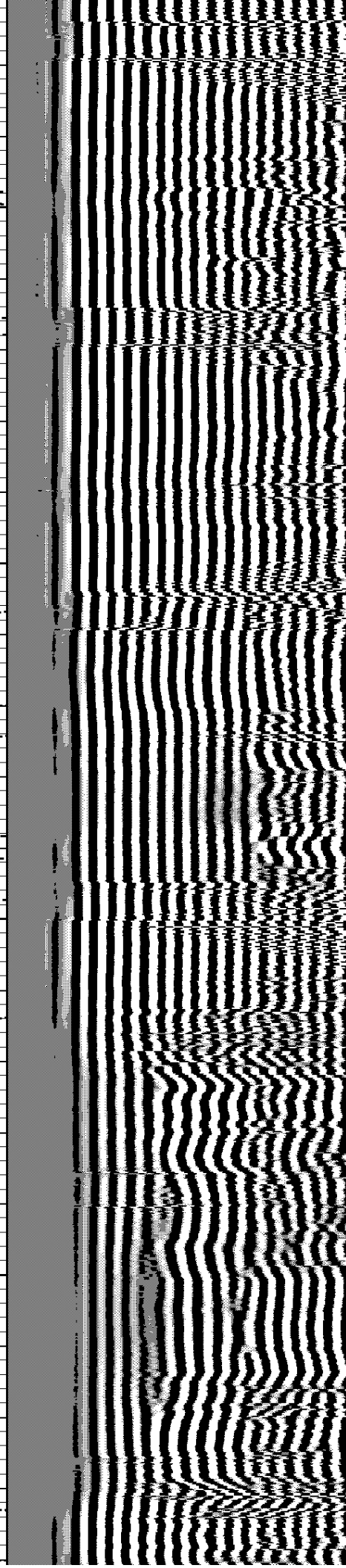
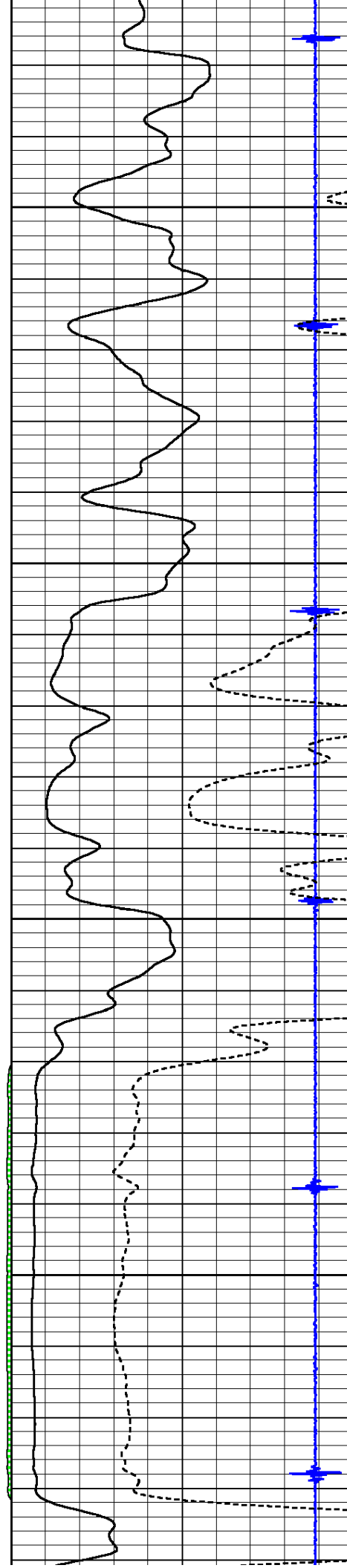


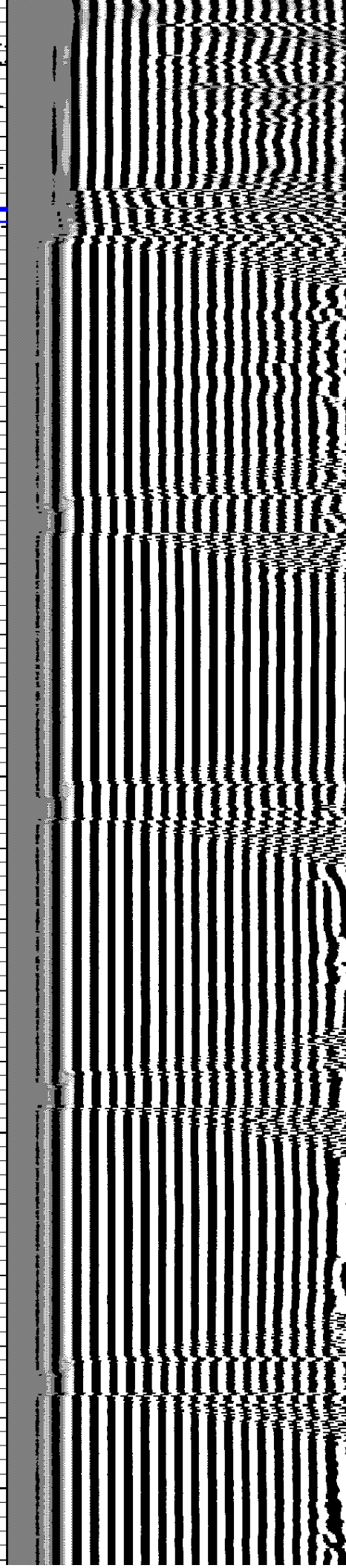
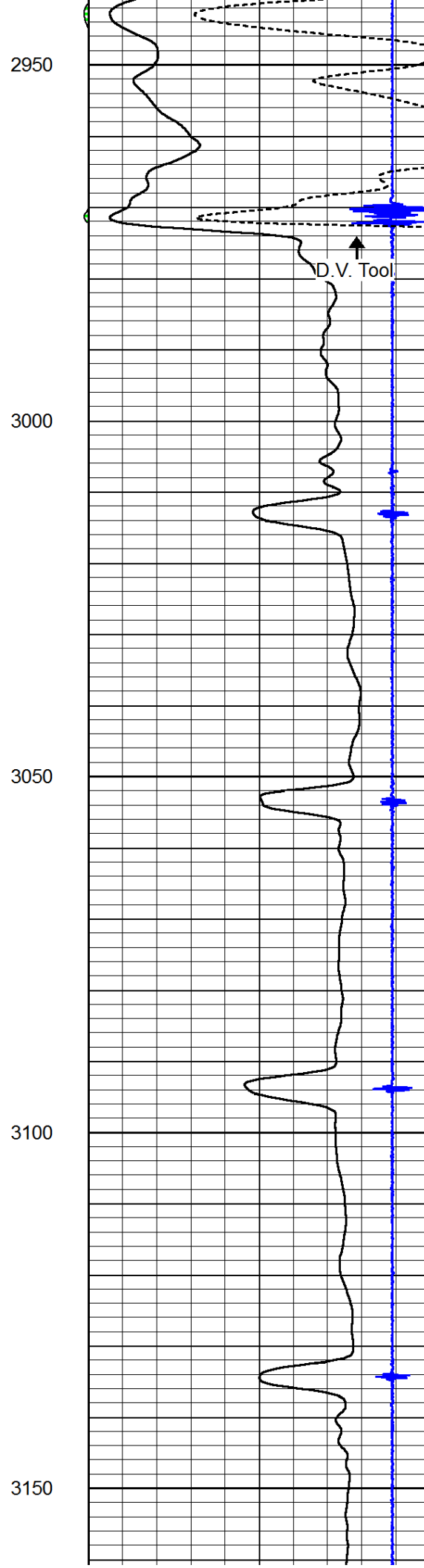
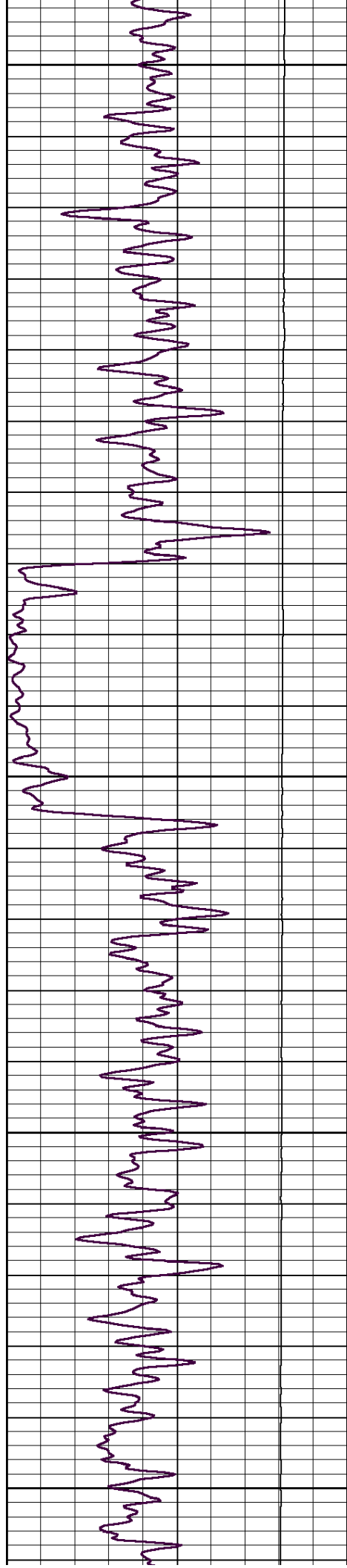
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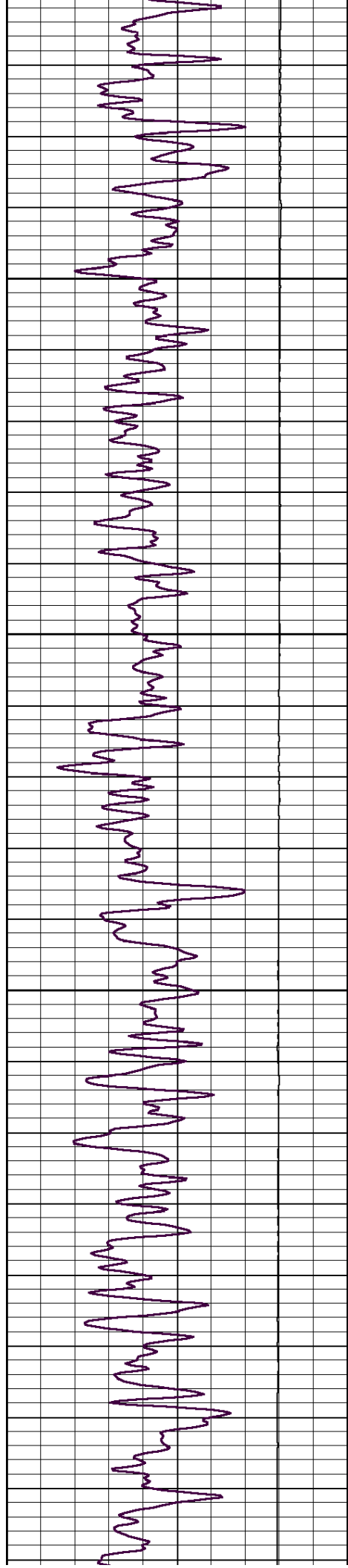
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2900





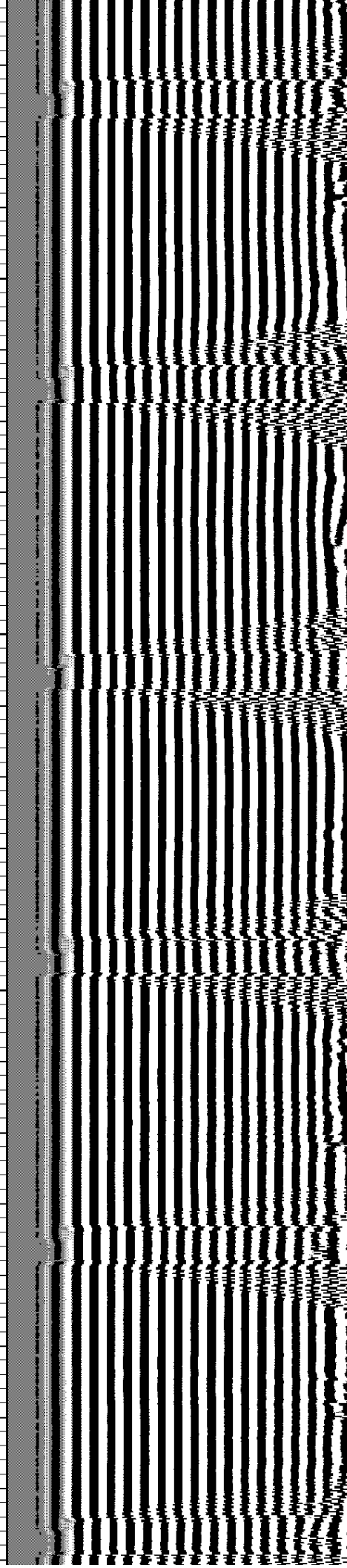
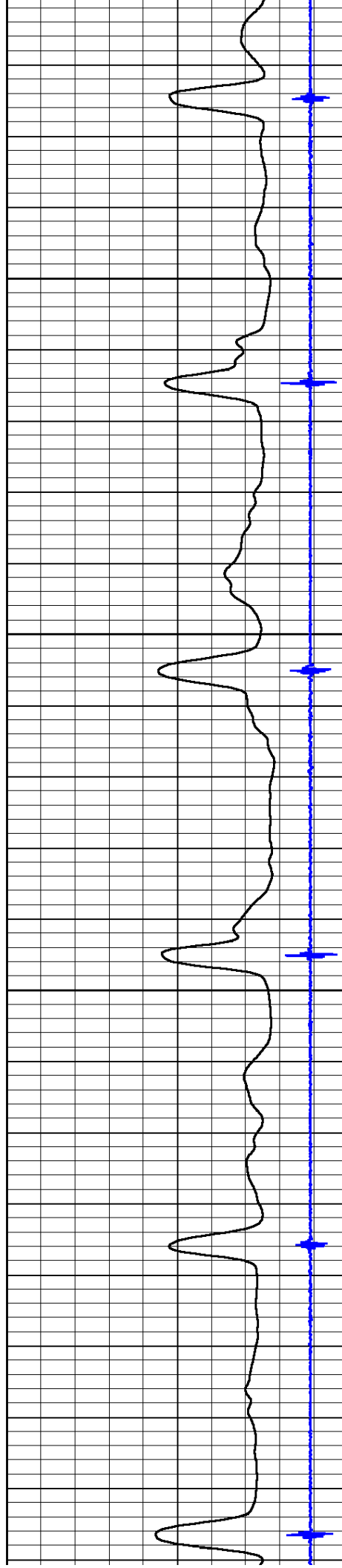


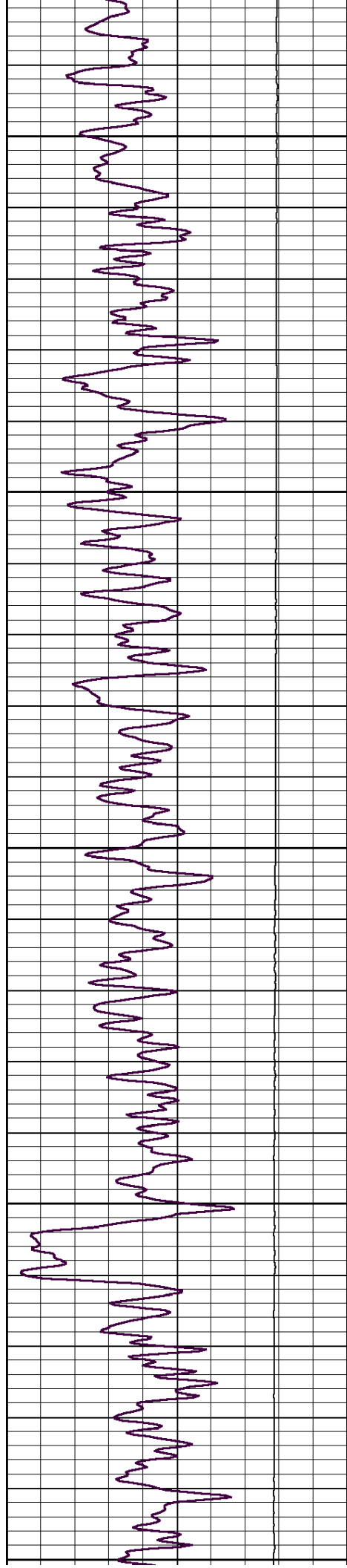
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3250

3300

3350





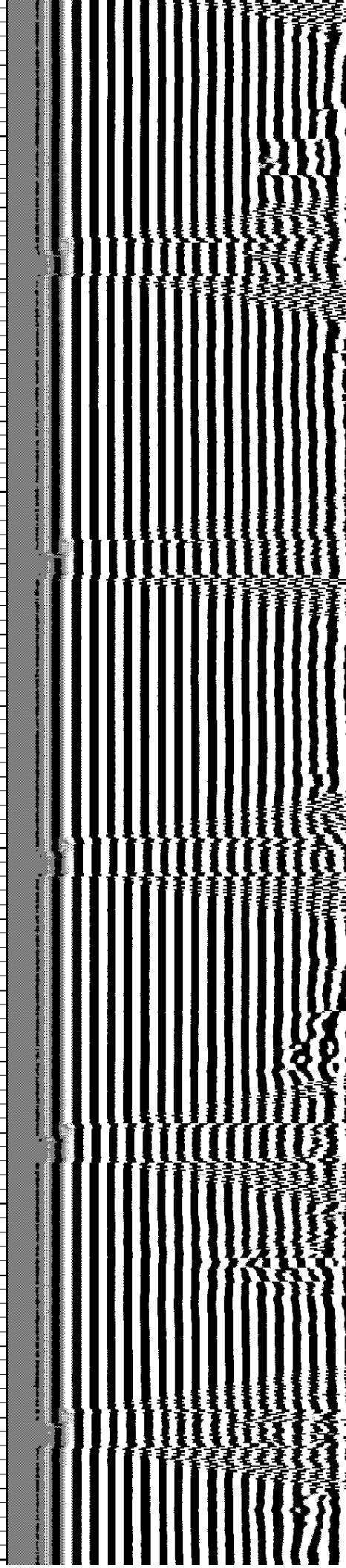
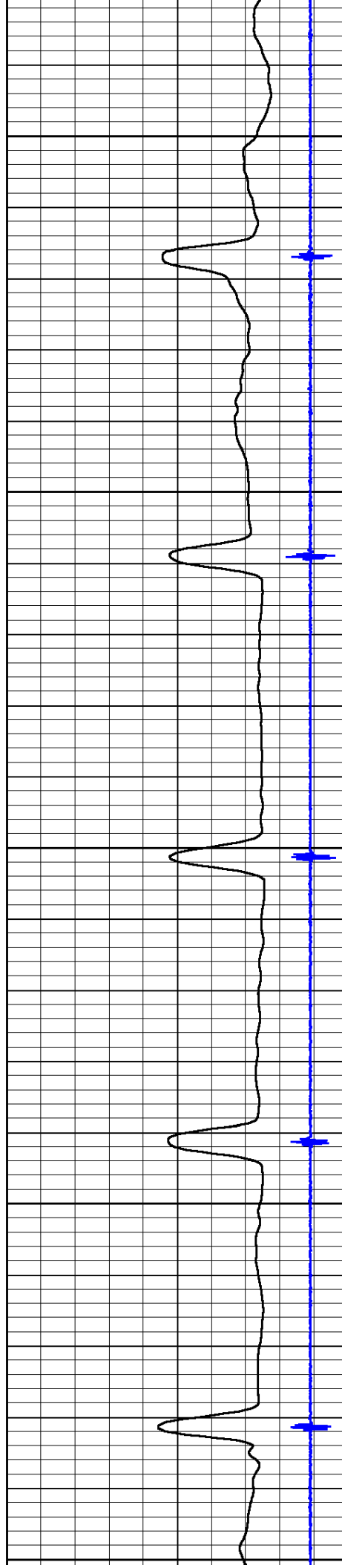
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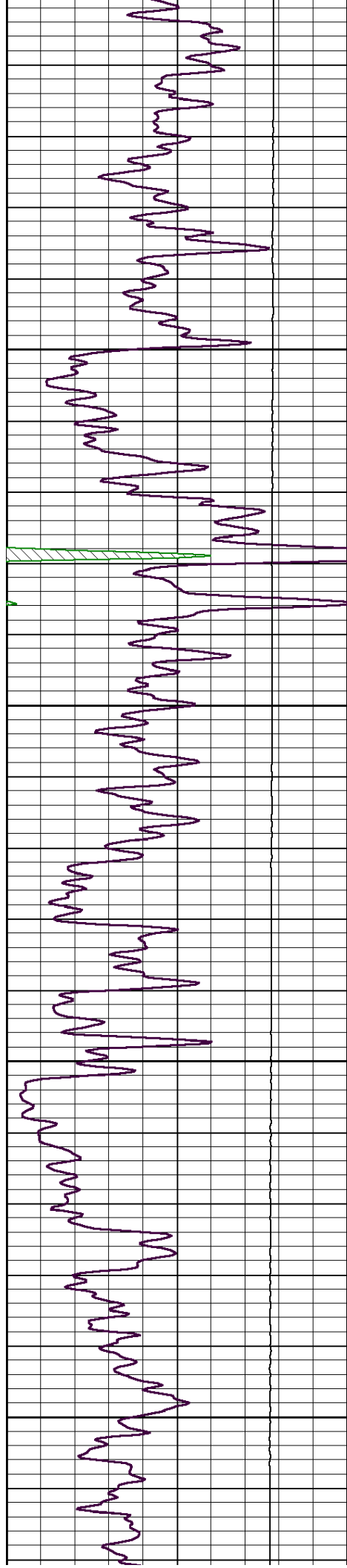
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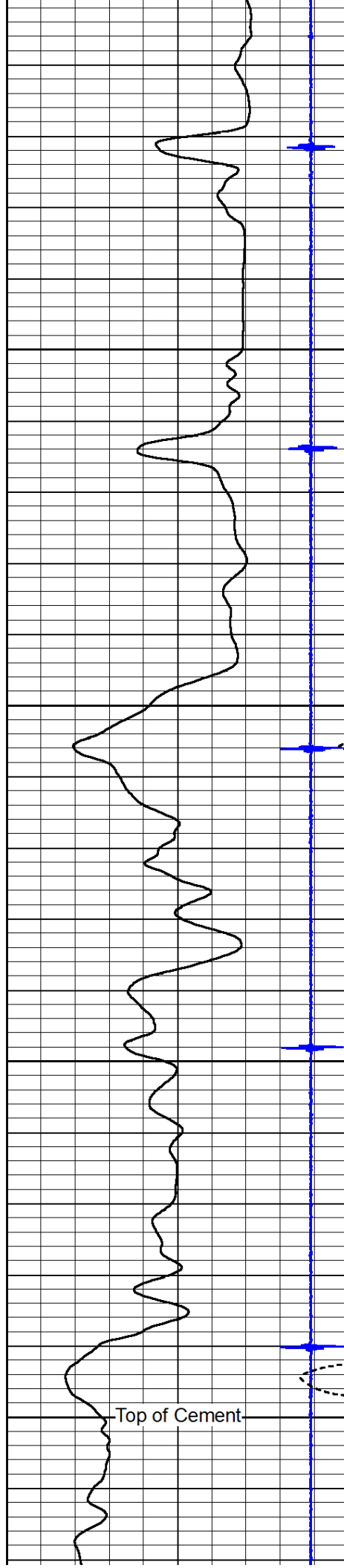


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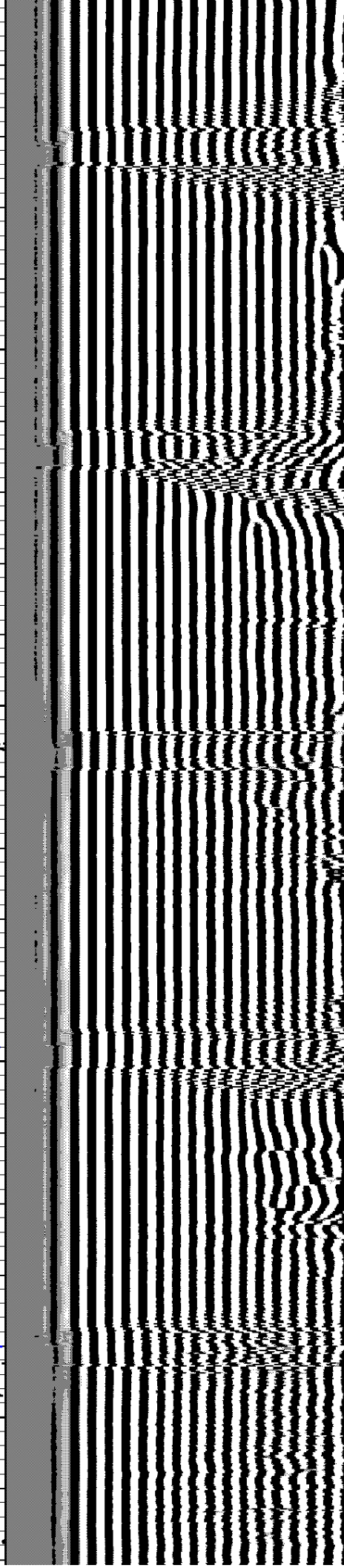
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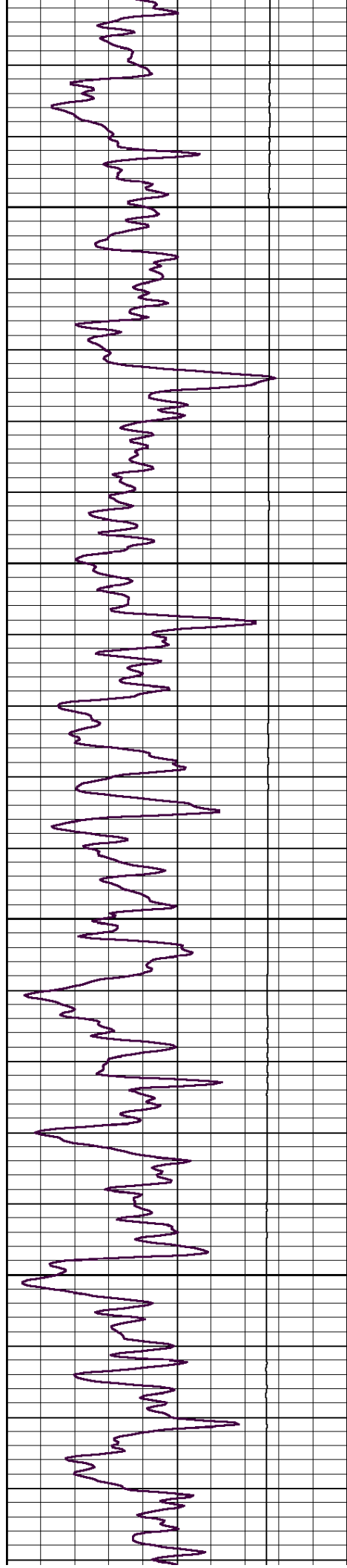
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3800



Top of Cement



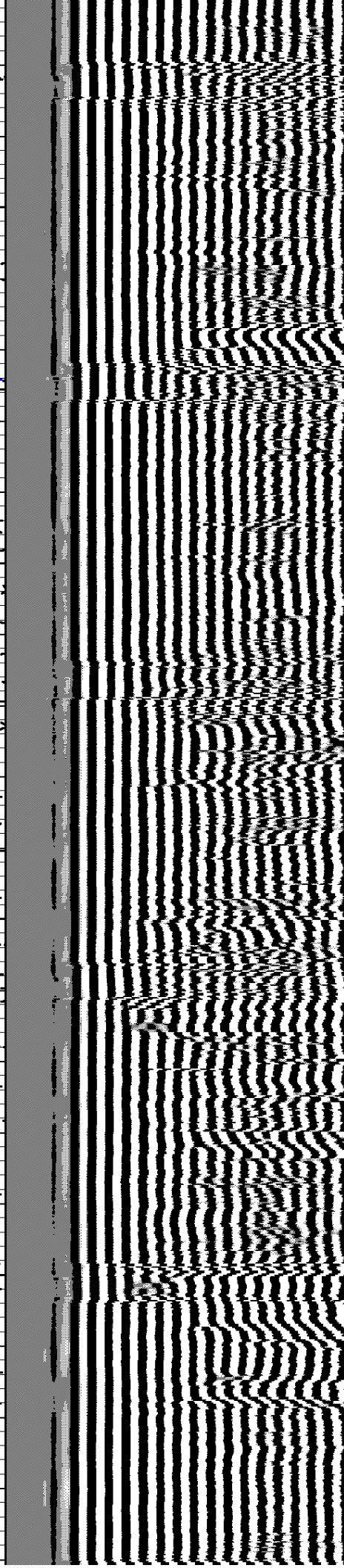
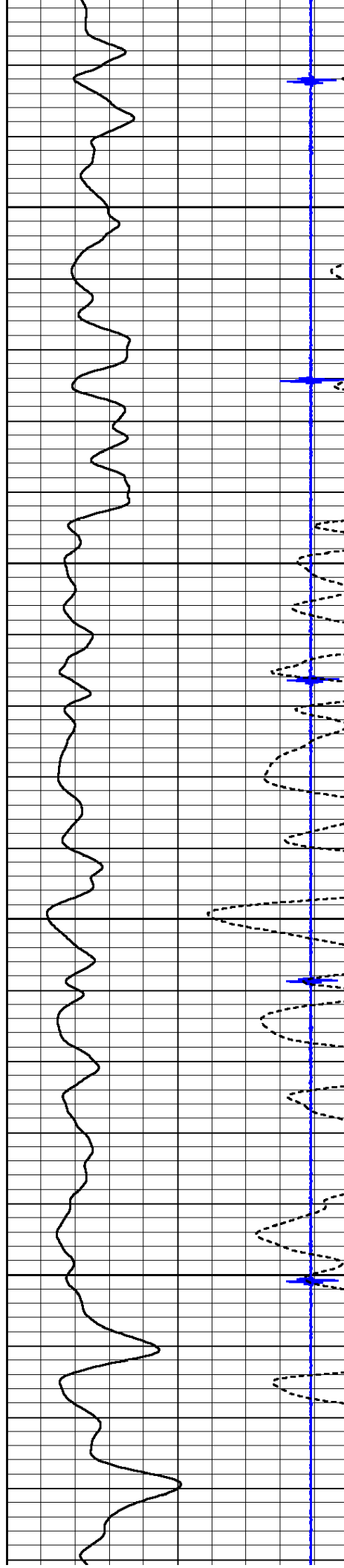


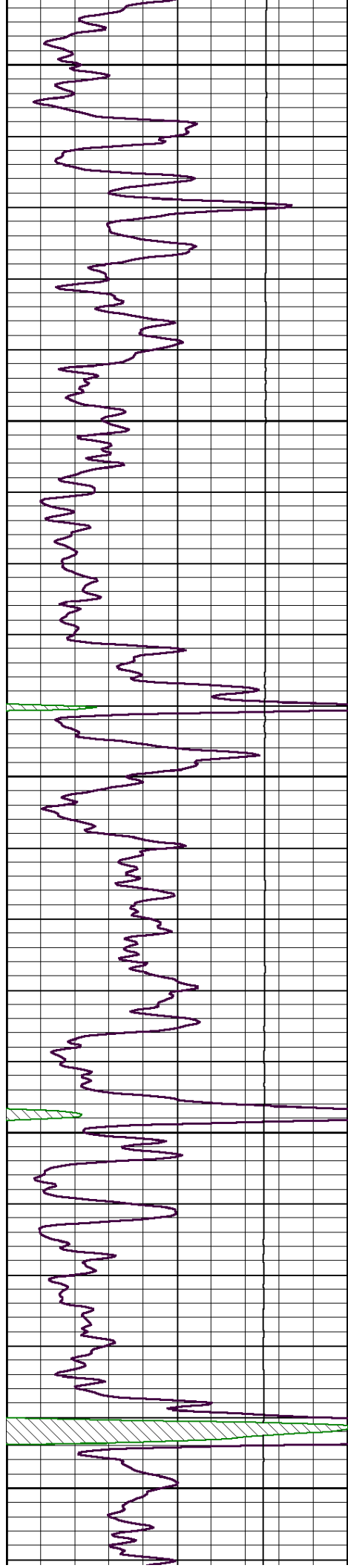
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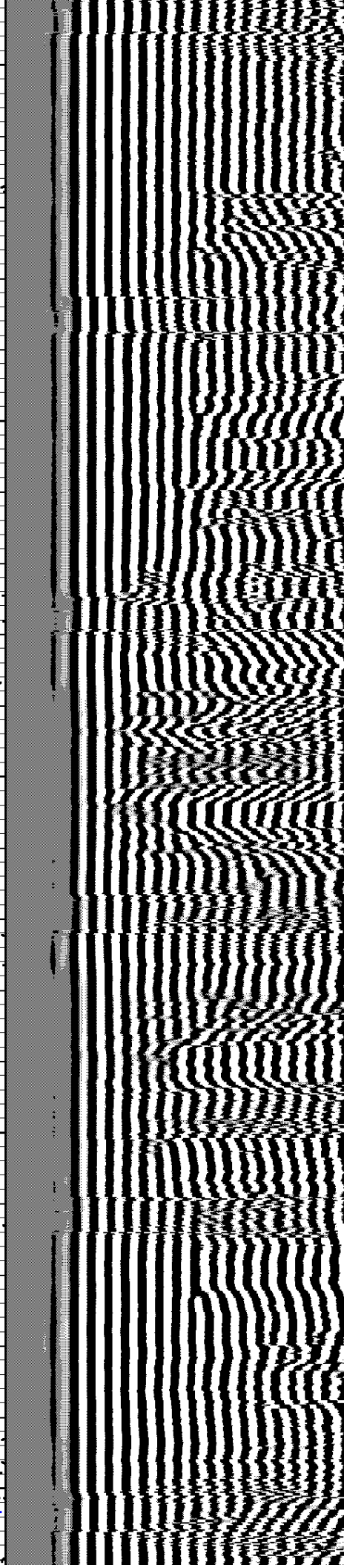
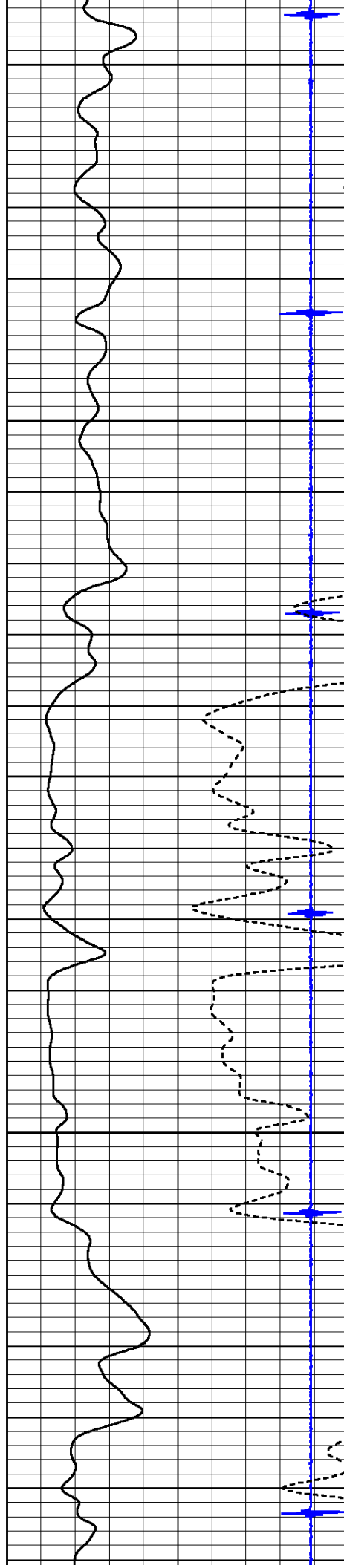
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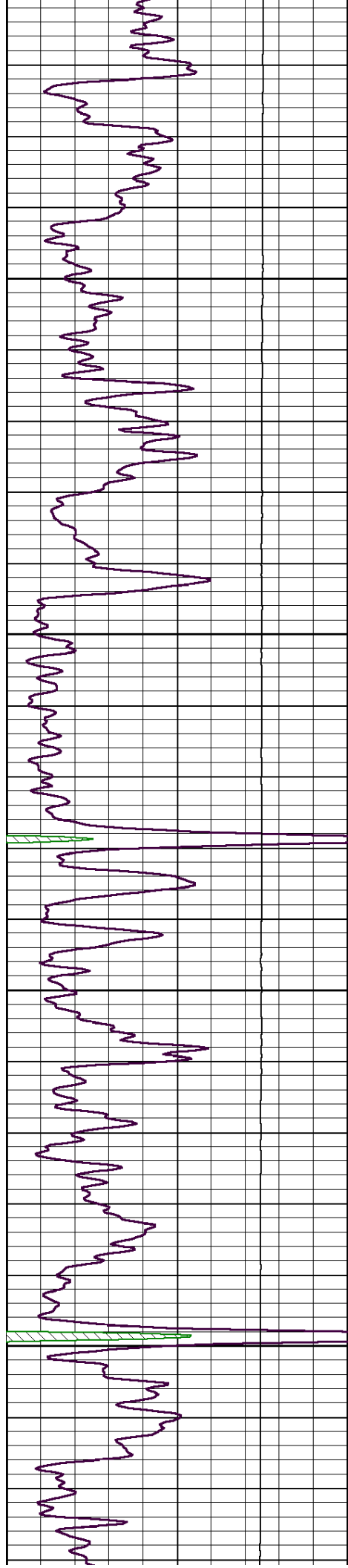
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4150

4200

4250



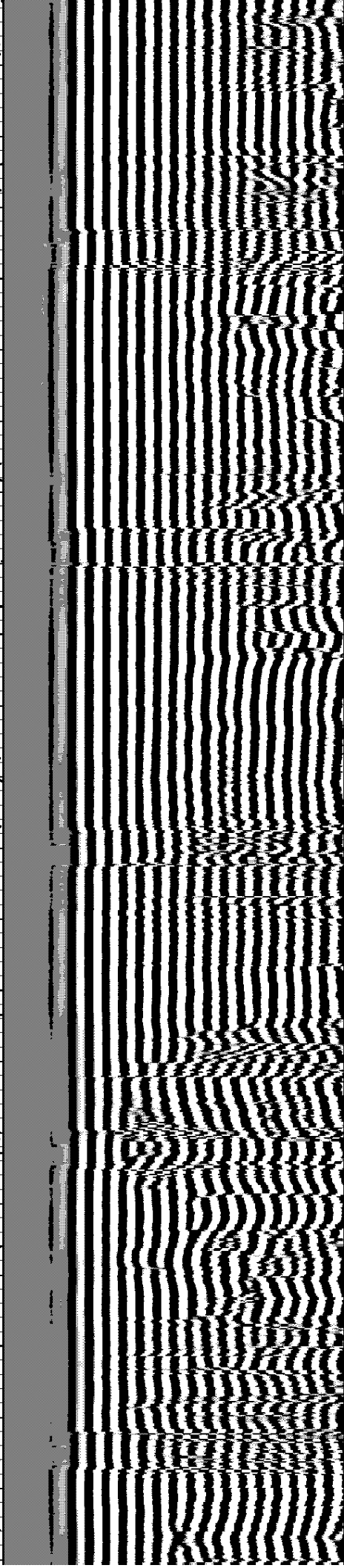
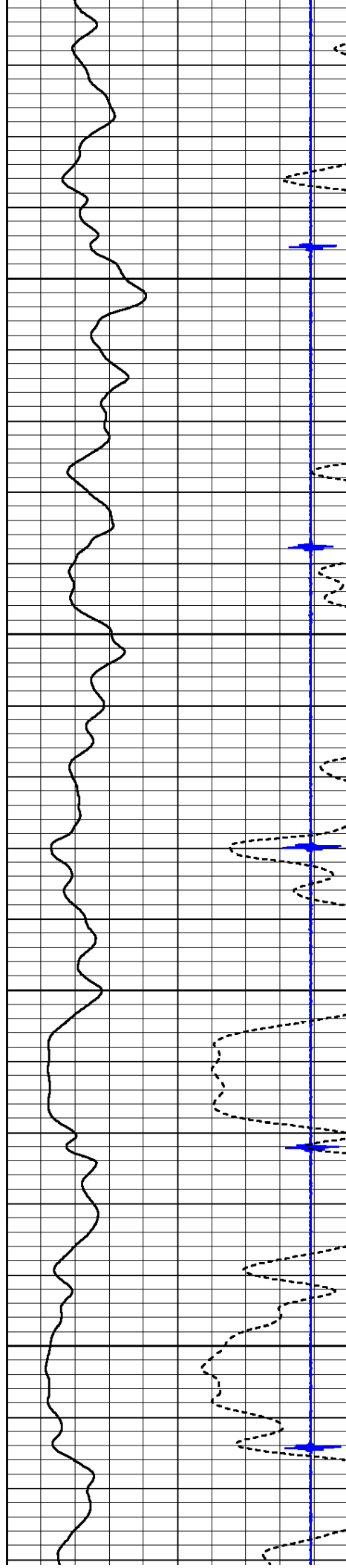


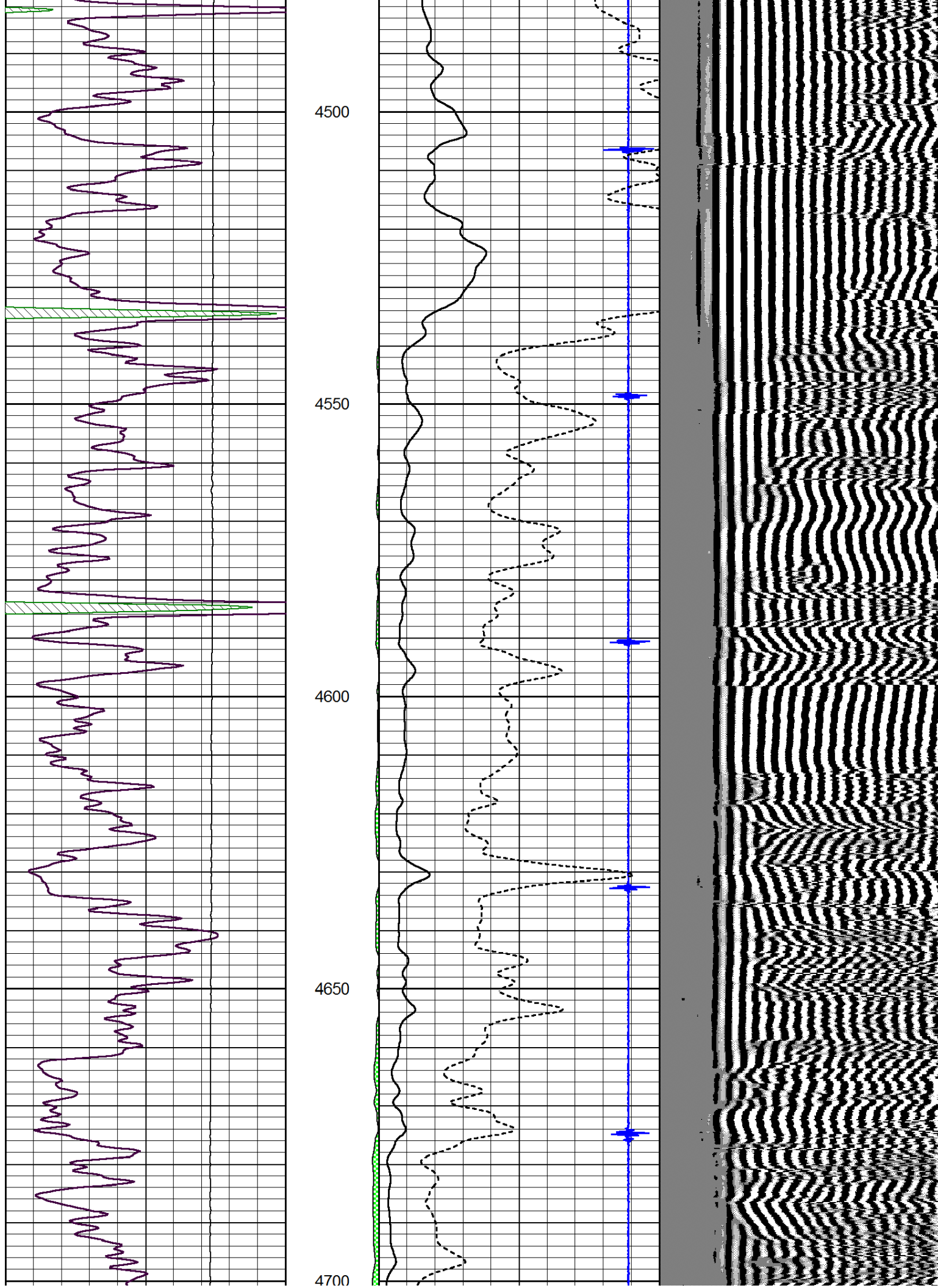
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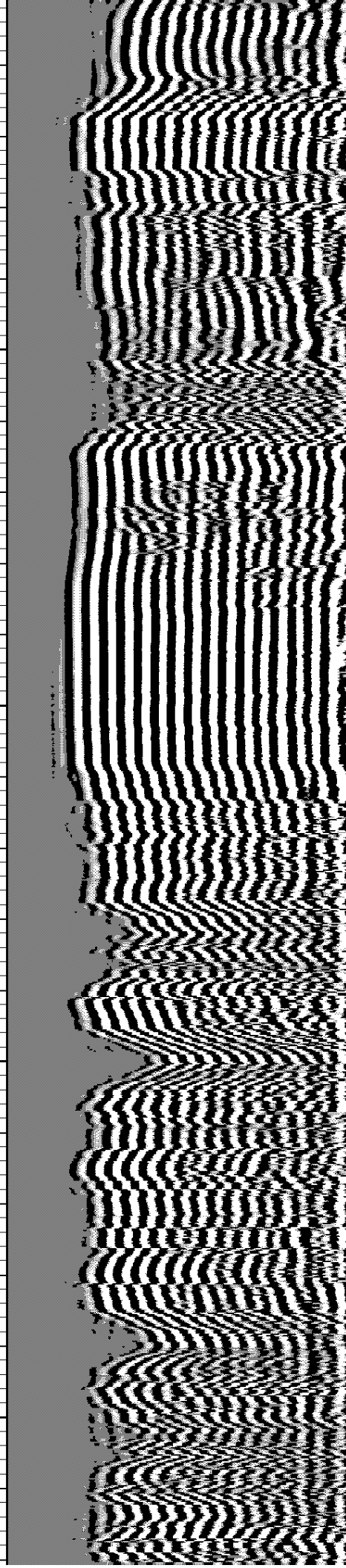
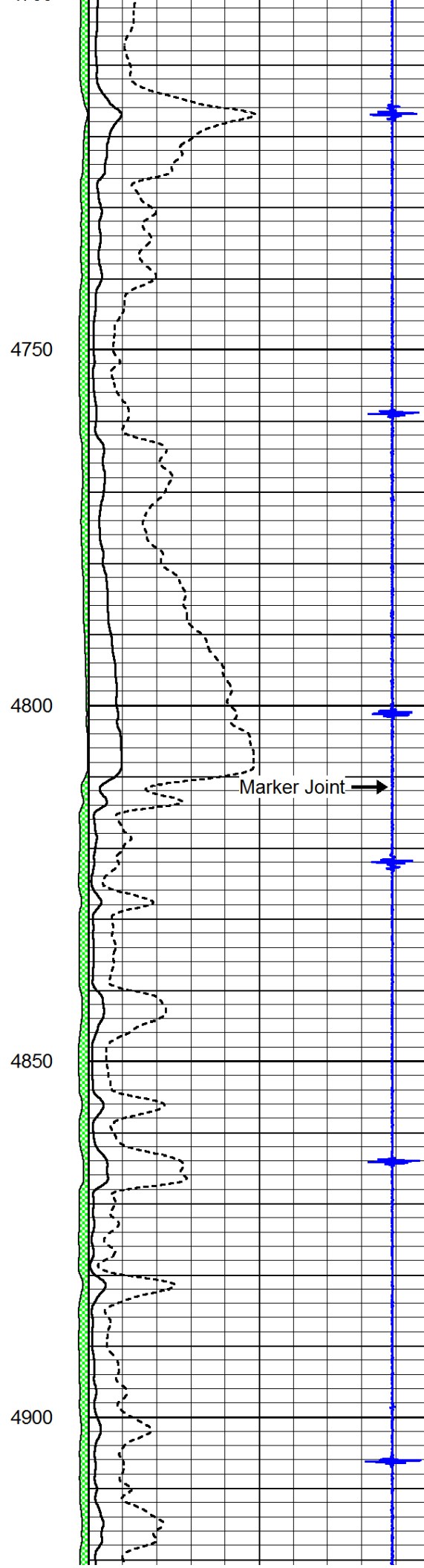
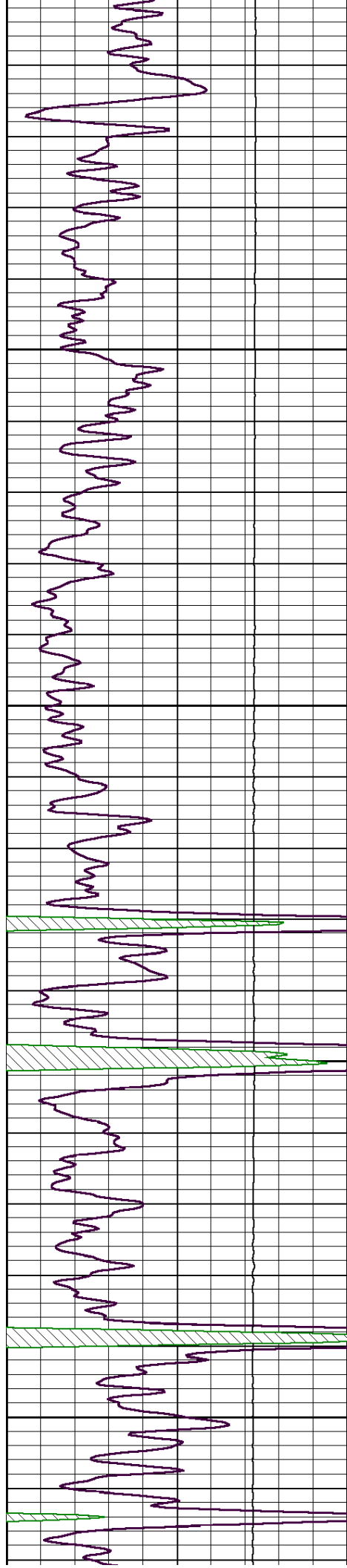
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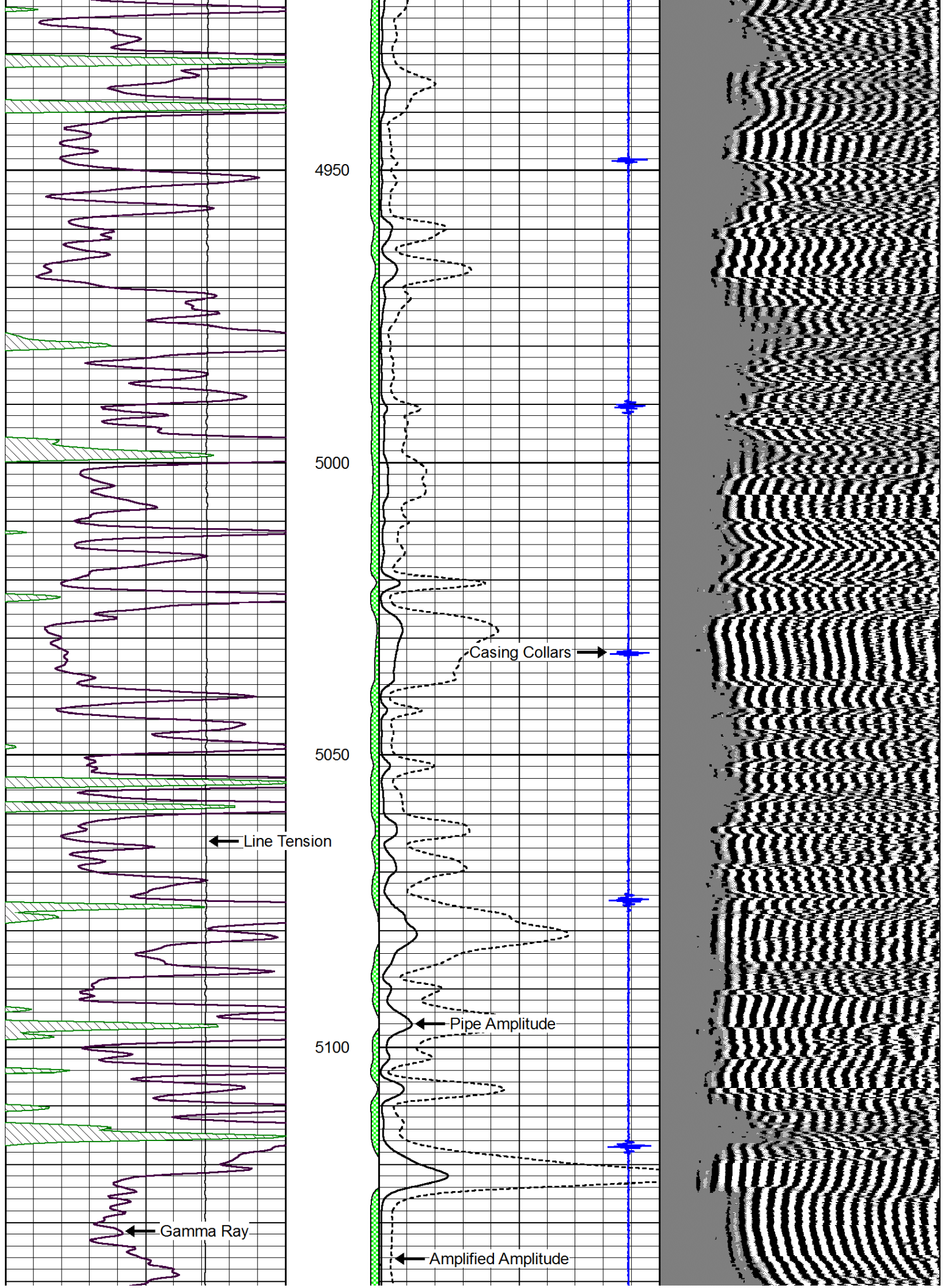
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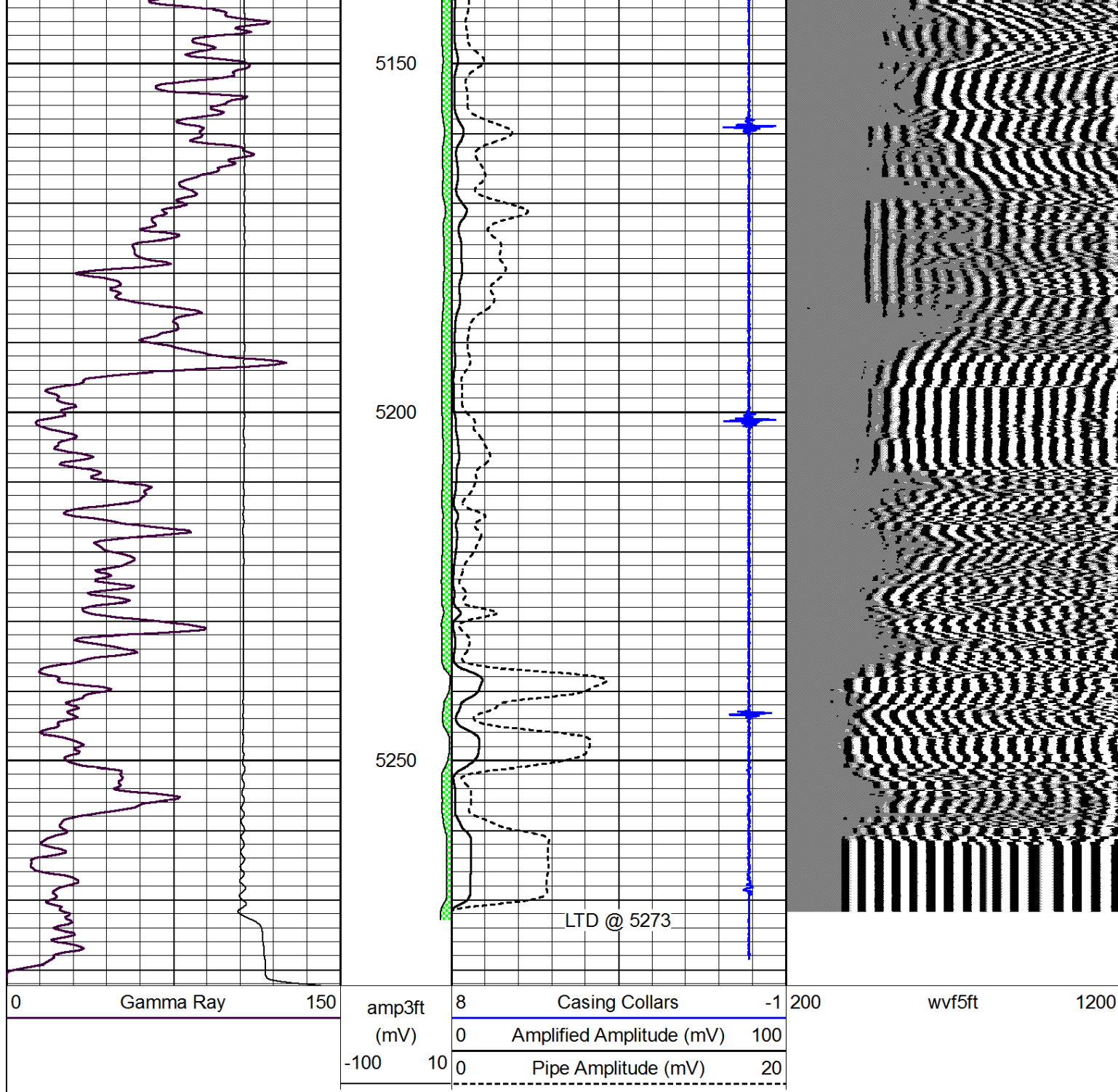
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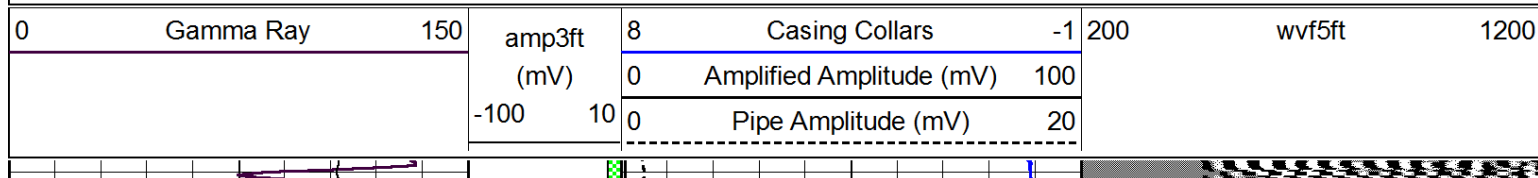


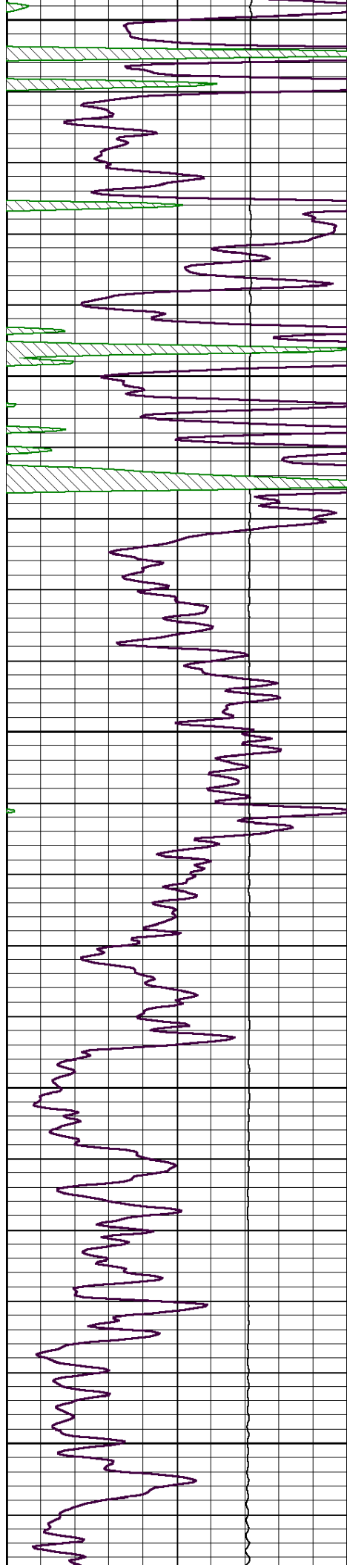


Pioneer Energy Services

Repeat Section

Database File: midcon_hrmu14-1.db
 Dataset Pathname: grcbl/pass2
 Presentation Format: cbldr
 Dataset Creation: Thu Oct 02 16:17:11 2014 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240





5050

5100

5150

5200

5250

