



Cement Bond / Gamma Ray  
Temp / CCL Log

Company Noble Energy Inc.

Well Battlement Mesa # 26-34A  
Field Battlement Mesa  
County Garfield State CO.

Company **Noble Energy Inc.**  
Well **Battlement Mesa # 26-34A**  
Field **Battlement Mesa**  
County **Garfield** State **CO.**

Location:

API # :

Other Services

SEC 26 TWP 75 RGE 95W  
1302' FSL  
1937' FWL

Permanent Datum Ground Level Elevation 8964  
Log Measured From Kelley Bushing or 24' AGL  
Drilling Measured From K.B.

Elevation  
K.B. 8988  
D.F. 8988  
G.L. 8964

Date of Service 9-10-08

Run Number 1

Depth Driller or PBTD 3295'

Depth Logger 3200

Bottom Log Interval 3200

Top Log Interval Surface

Open Hole Size 13.5

Type Fluid Water

Fluid Level Surface

Fluid Density

Max. Recorded Temperature

Max. Wellhead Pressure 0

Wellhead Connection

Estimated Cement Top 436

Unit Number P-75

Wireline Size 5/16

Location Grand Junction

Recorded By Ryan Richards

Witnessed By Lance Porter

Tubing Record Size WFt Top Bottom

Surface Casing 9 5/8 36# Surface 3281

Production Casing

Liner Record

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Perf-O-Log cannot and does not guarantee the accuracy or correctness of any interpretation, and Perf-O-Log will 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 Perf-O-Log's general terms and conditions set out in our current Price Schedule.

Comments

Log run eight hours after cementing log measured from Kelley Bushing

THANK YOU FOR USING PERF-O-LOG

Your Perf-O-Log Crew

Tool Data - Services

Serial Number

Engineer: Richard Hall  
Operator: Ryan Richards  
Operator: Don Hawker  
Operator: Martin Pedler

# Calibration Report

Database File: 75007.db  
 Dataset Pathname: pass5  
 Dataset Creation: Wed Sep 10 16:38:16 2008 by Log Std Casedhole 07120

## Gamma Ray Calibration Report

Serial Number: 14  
 Tool Model: MTEKCO  
 Performed: Sun Jun 13 13:33:21 1993

Calibrator Value: 1.0 cps

Background Reading: 0.0 cps  
 Calibrator Reading: 1.0 cps

Sensitivity: 1.0000 cps/cps

## Temperature Calibration Report

Serial Number: CBLTEMP  
 Tool Model: 2.75TEKCONEW  
 Performed: Tue Jan 29 07:47:20 2008

	Reference	Reading
Low Reference:	0.00 degF	0.00 usec
High Reference:	1.00 degF	1.00 usec
Gain:	0.33	
Offset:	-30.00	
Delta Spacing	1	

## Segmented Cement Bond Log Calibration Report

Serial Number: CBLTEMP  
 Tool Model: 2.75TEKCONEW

Calibration Casing Diameter: 5.500 in  
 Calibration Depth: 98.433 ft

Master Calibration, performed Wed Sep 10 16:33:00 2008:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.003	0.356	1.000	51.921	144.161	0.634
CAL						
5'	0.003	0.567	1.000	51.921	90.365	0.728
SUM						
S1						
S2						
S3						
S4						
S5						
S6						
S7						
S8						

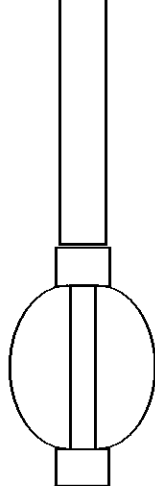
Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL						

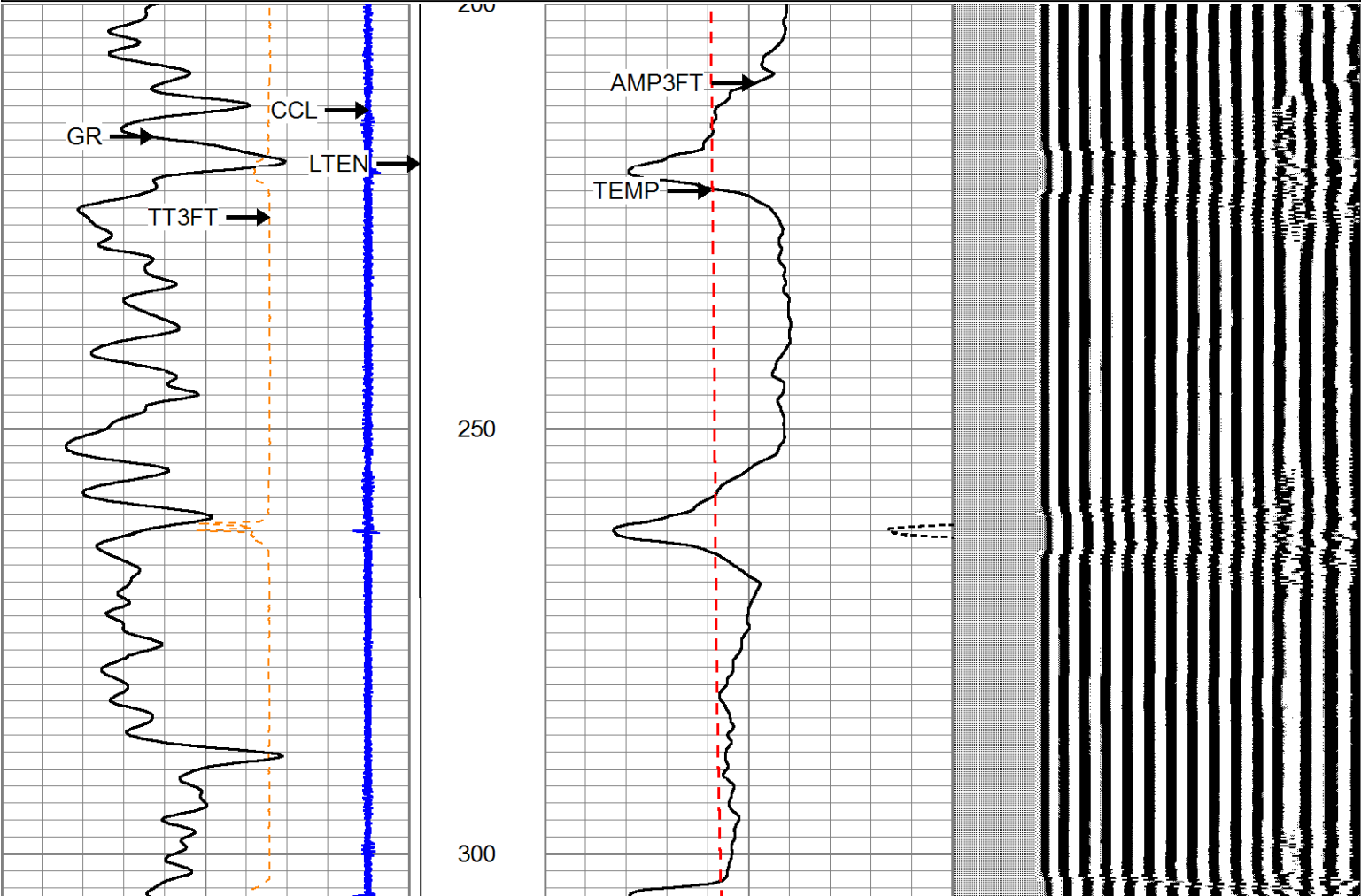
Air Zero Calibration, performed Wed Sep 10 16:27:40 2008:

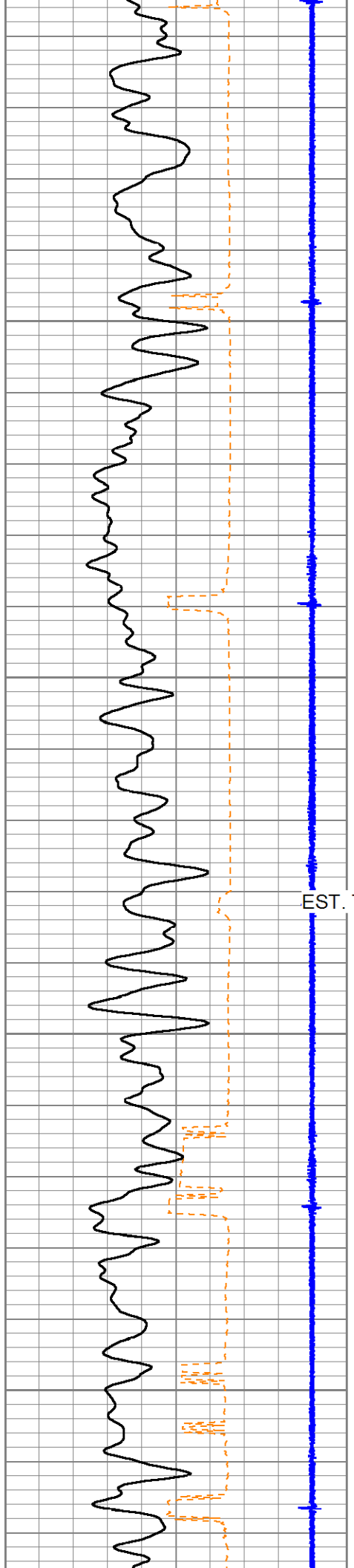
	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1			
S2			
S3			
S4			
S5			
S6			
S7			
S8			

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
CCL	18.44		CCL-MTEKCO (14) 2 3/4" TEKCO CCL	1.83	2.75	10.00
			comp 2 3/4" COMPUTALOG BOW SPRING	2.50	2.75	10.00
TEMP	12.65					
WVF3FT	10.48		CBL-2.75TEKCONEW (CBLTEMP) 2 3/4" TEKCO 400 DEG. (DUAL REC.) CBL TEMP TOOL	9.08	2.75	90.00
WVF5FT	9.48					
WVFTEMP	6.19					

GR	3.58		GR-MTEKCO (14) 2 3/4" TEKCO GR	3.69	2.75	20.00
			comp 2 3/4" COMPUTALOG BOW SPRING	2.50	2.75	10.00
Dataset: 75007.db: field/well/run1/pass6 Total Length: 19.60 ft Total Weight: 140.00 lb O.D. 2.75 in						

Database File: 75007.db						
Dataset Pathname: pass6						
Presentation Format: cbltemp						
Dataset Creation: Wed Sep 10 17:27:34 2008 by Log Std Casedhole 07120						
Charted by: Depth in Feet scaled 1:240						
500	Travel Time (usec)	200	LTEN	0	Amplified Amplitude (mV)	20
-9	Collar Locator	1	0 (lb,3000	0	Amplitude (mV)	100
0	Gamma Ray (cps)	150		0	Temp (degF)	150
					Variable Density	1200





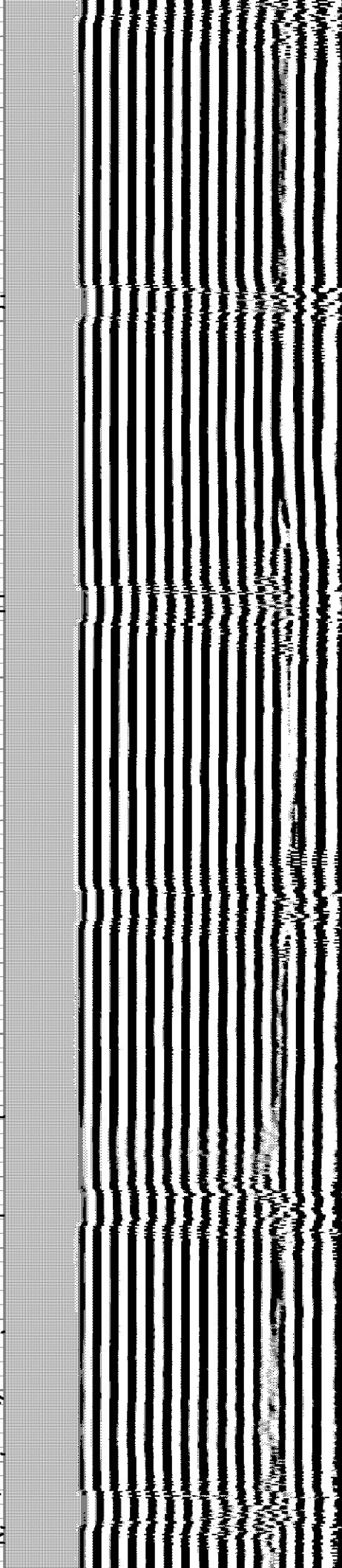
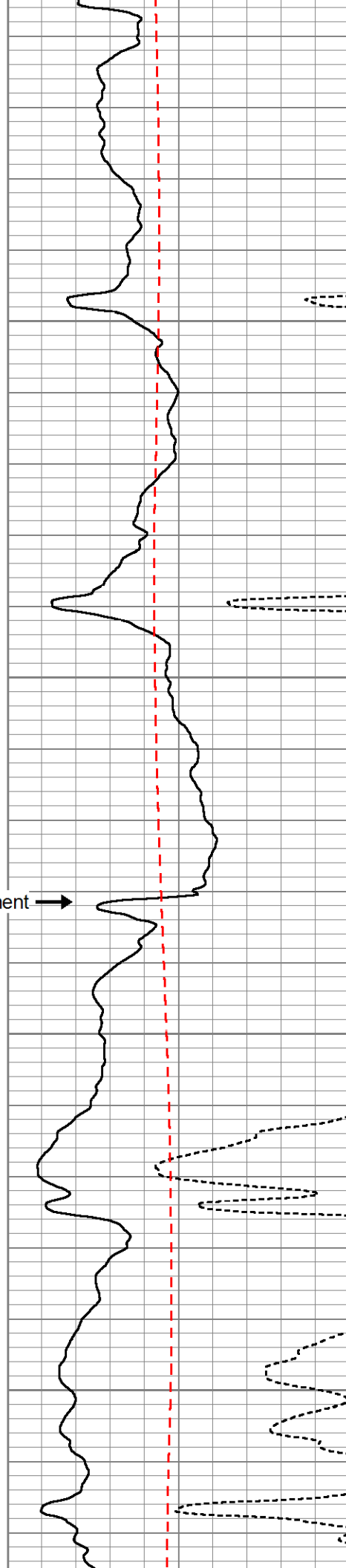
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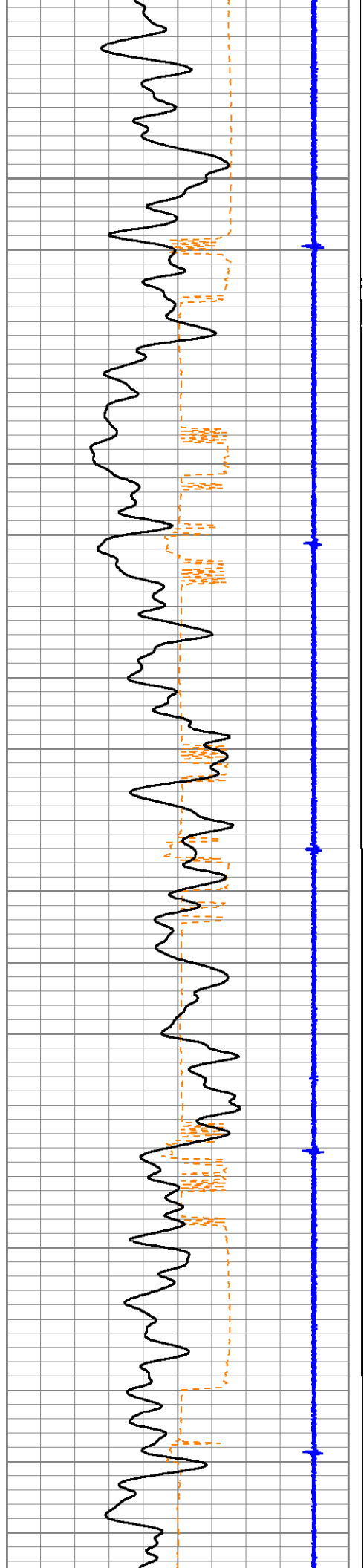
400

450

500

EST. Top of Cement →



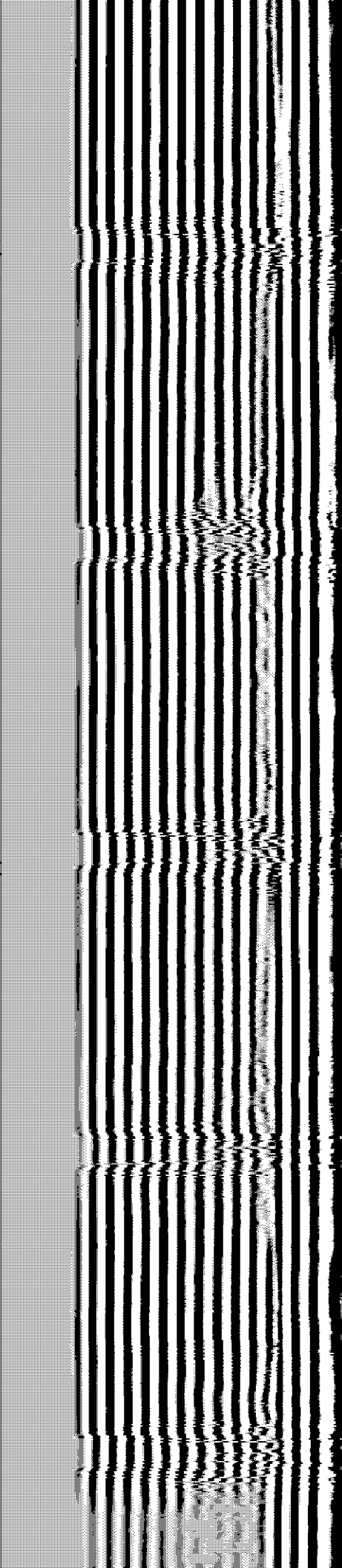
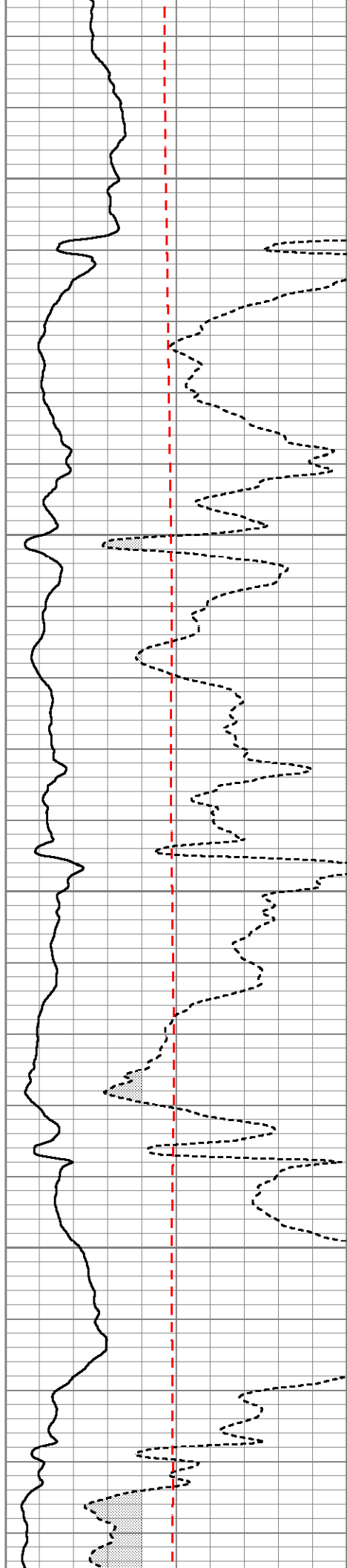


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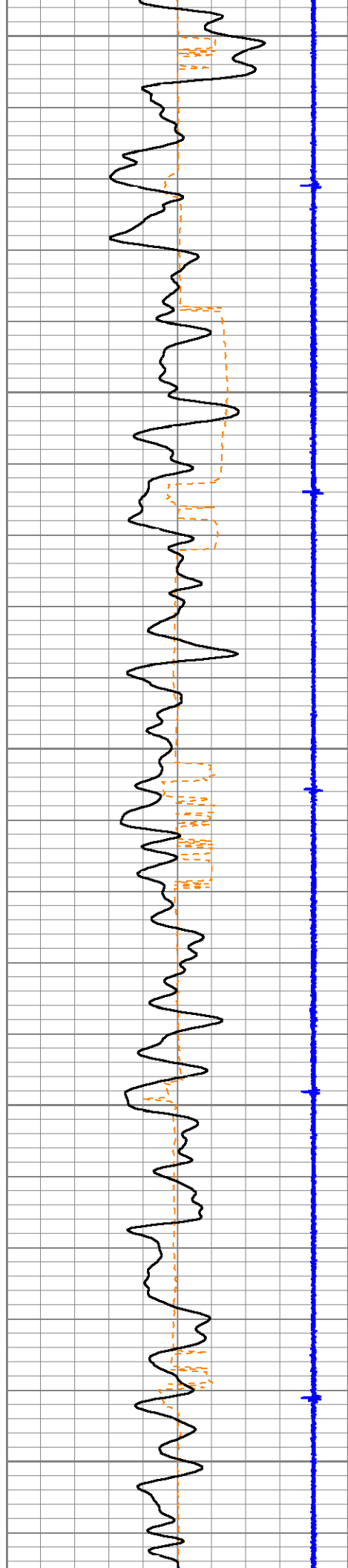
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650

700







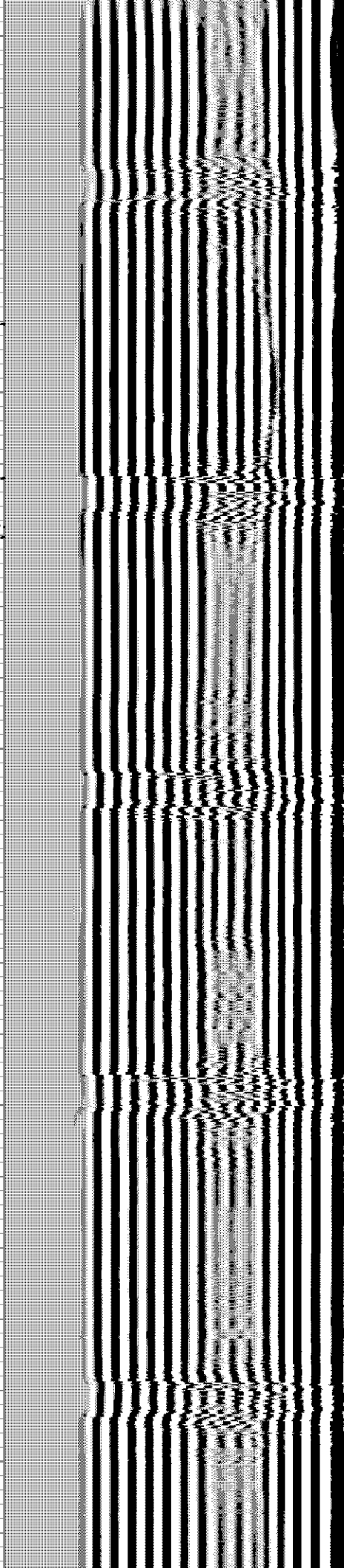
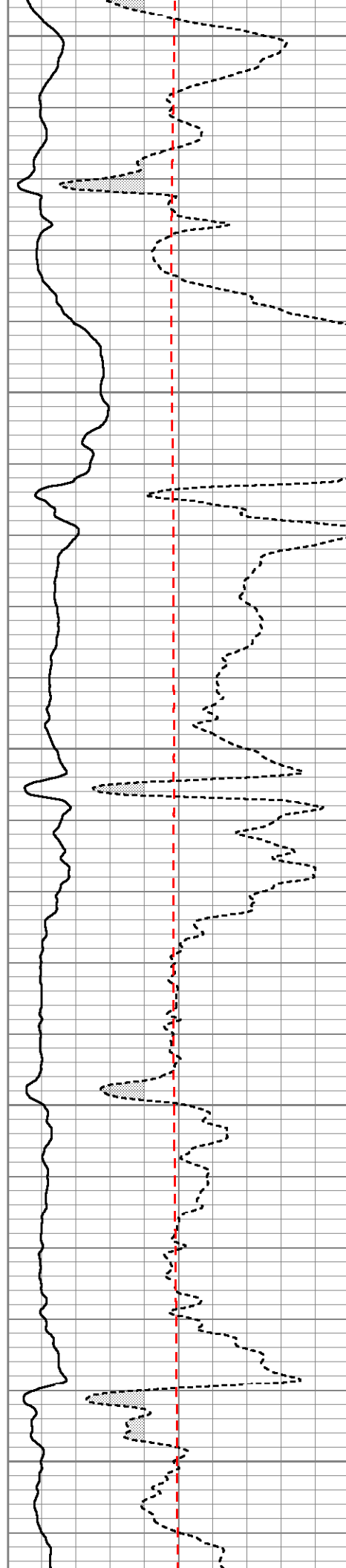
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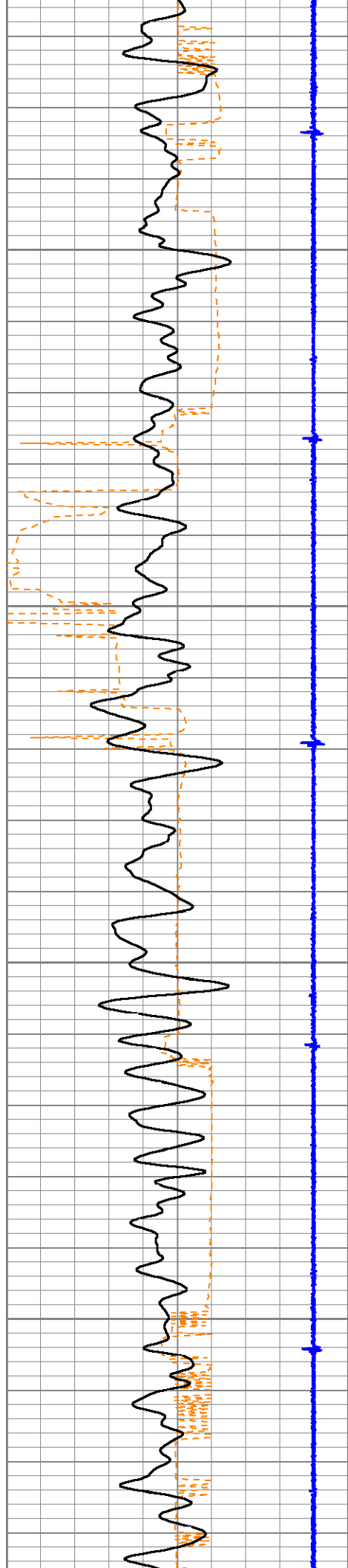
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850

900

950



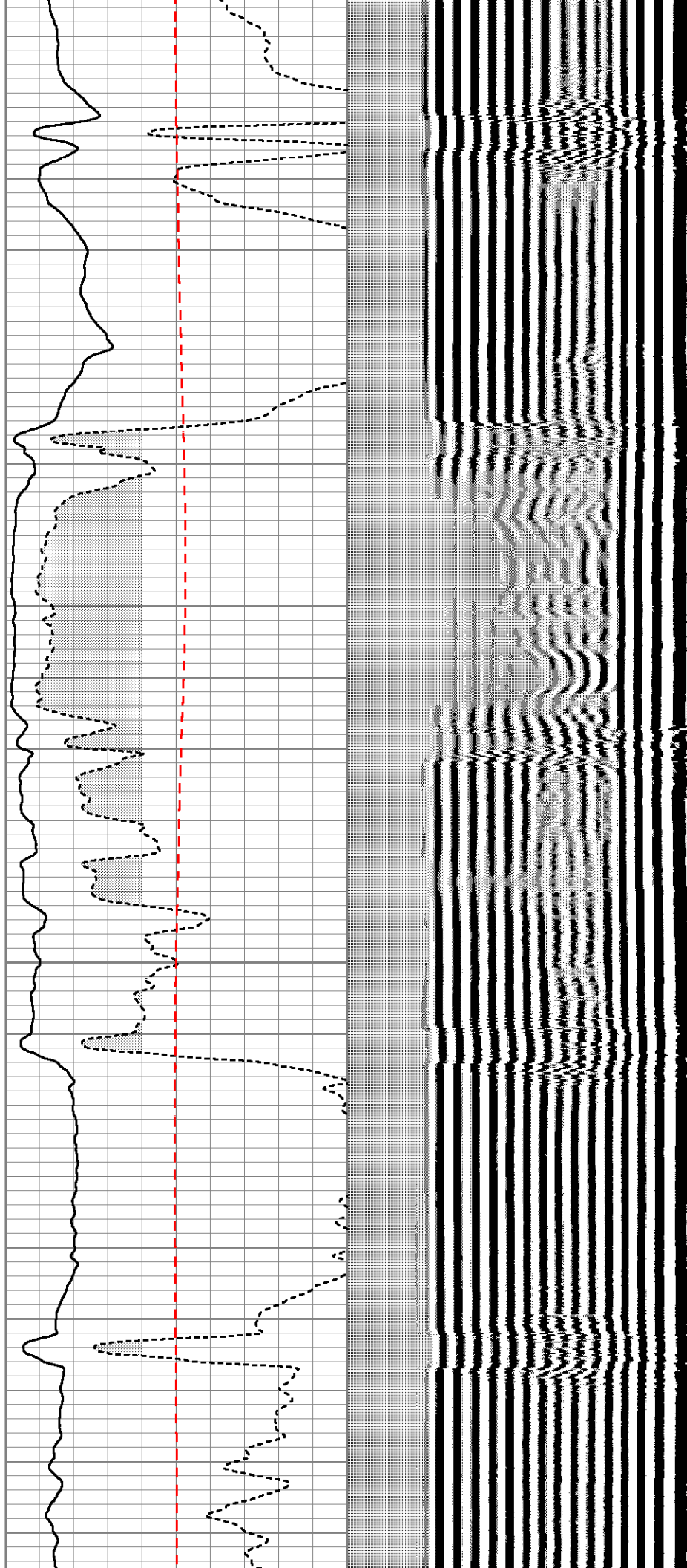


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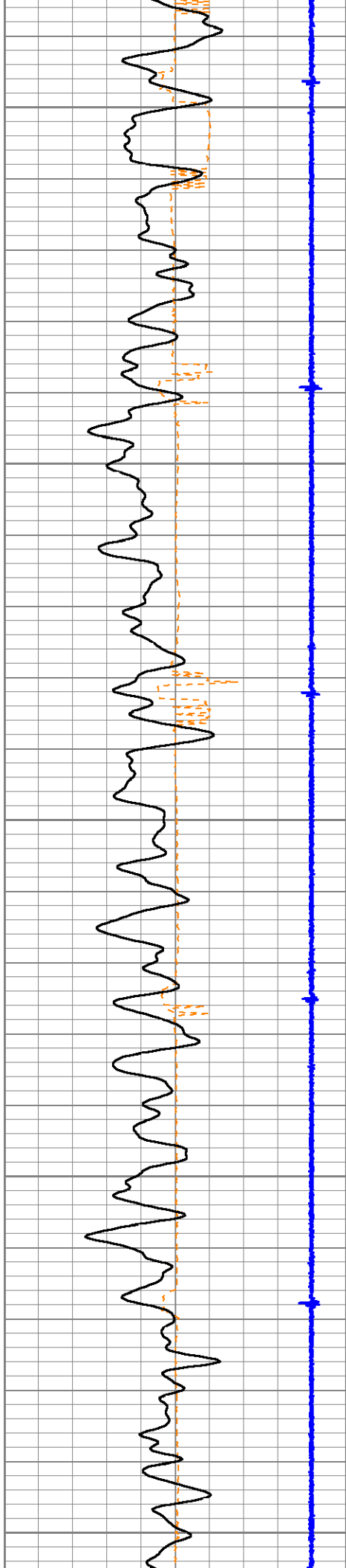
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1100

1150







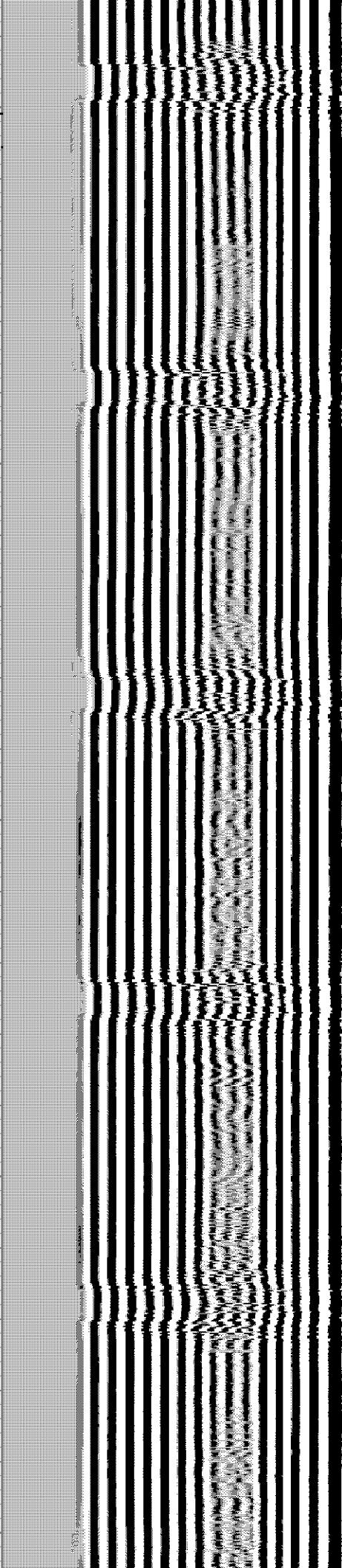
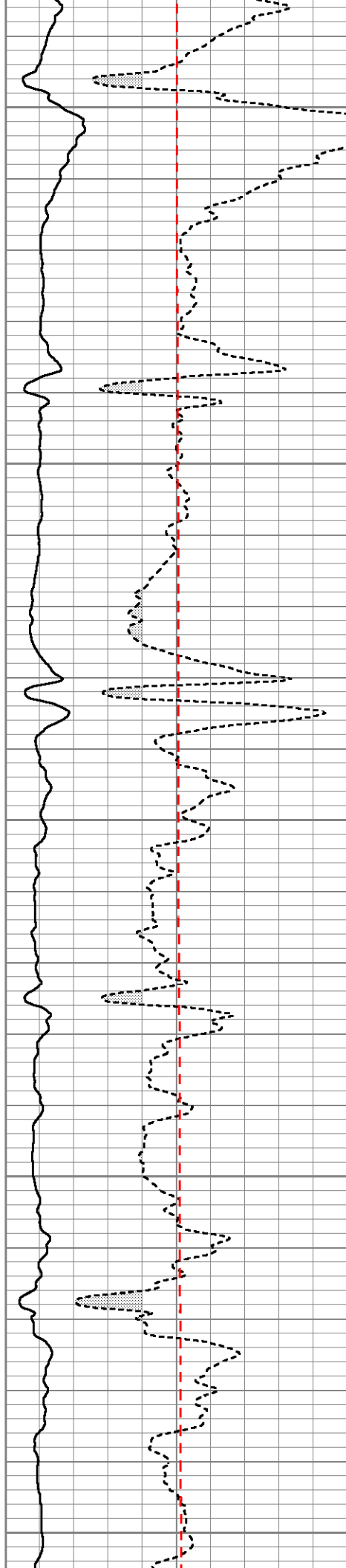
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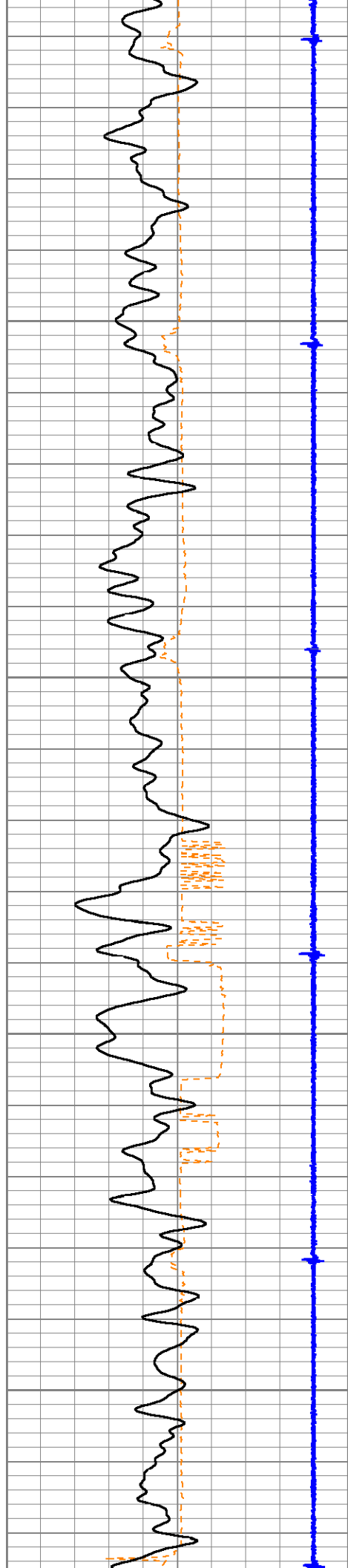
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1300

1350

1400



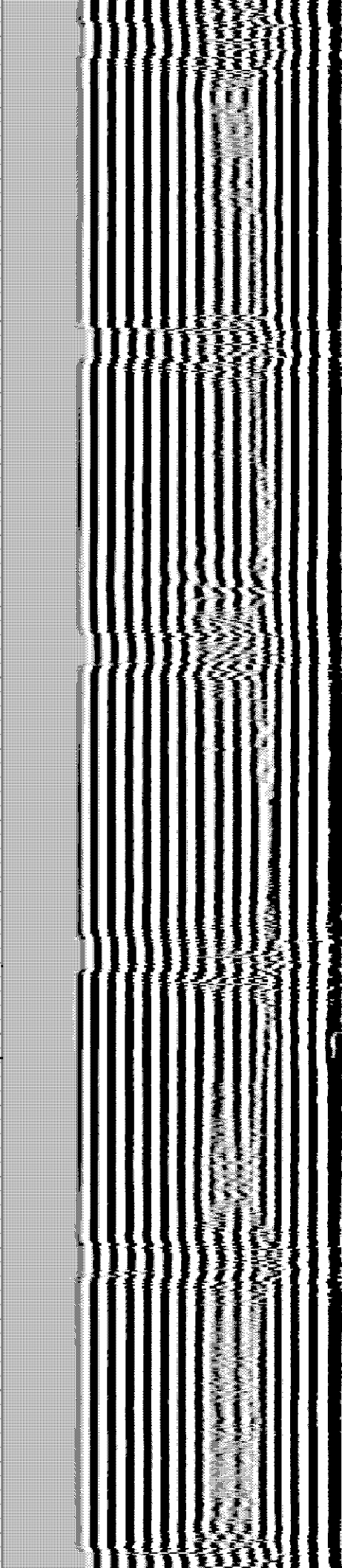
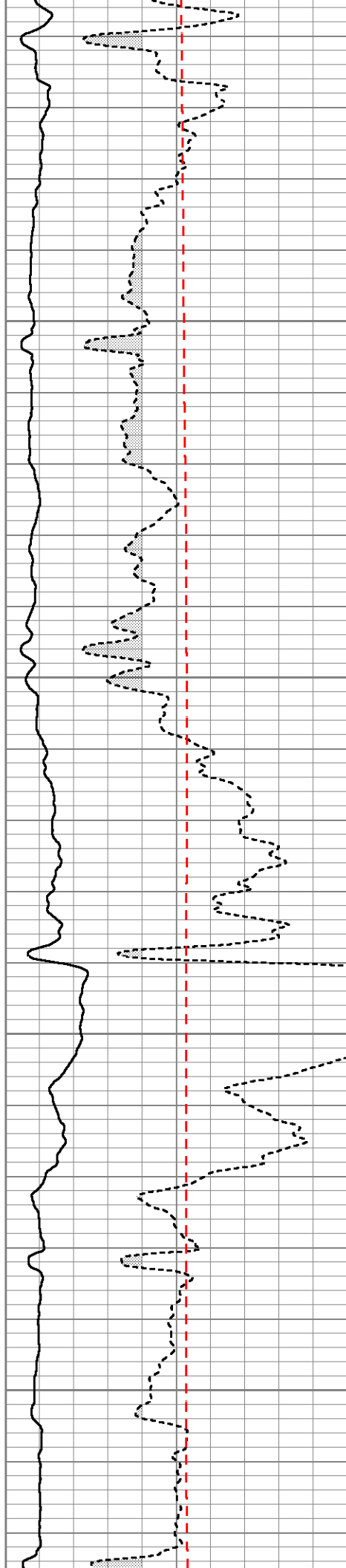


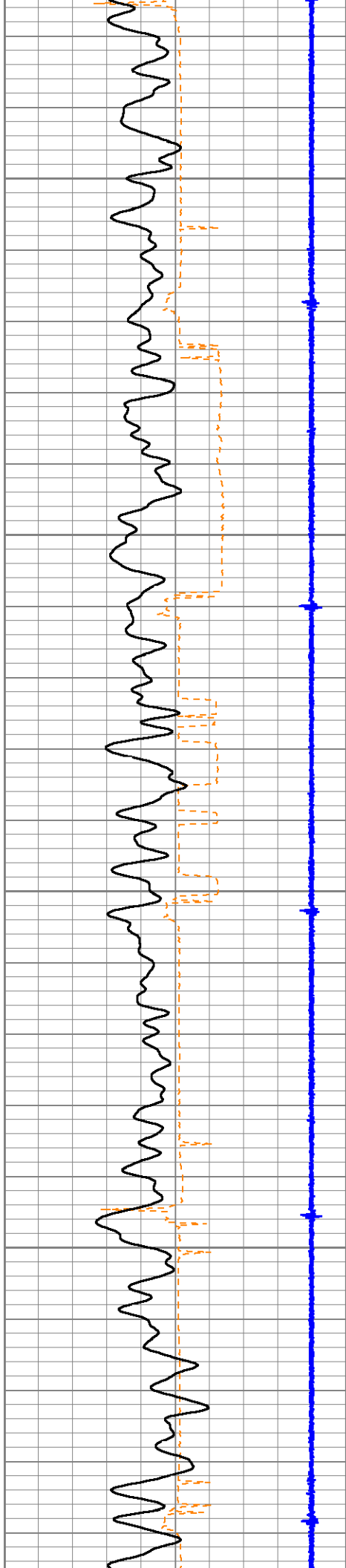
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1500

1550

1600



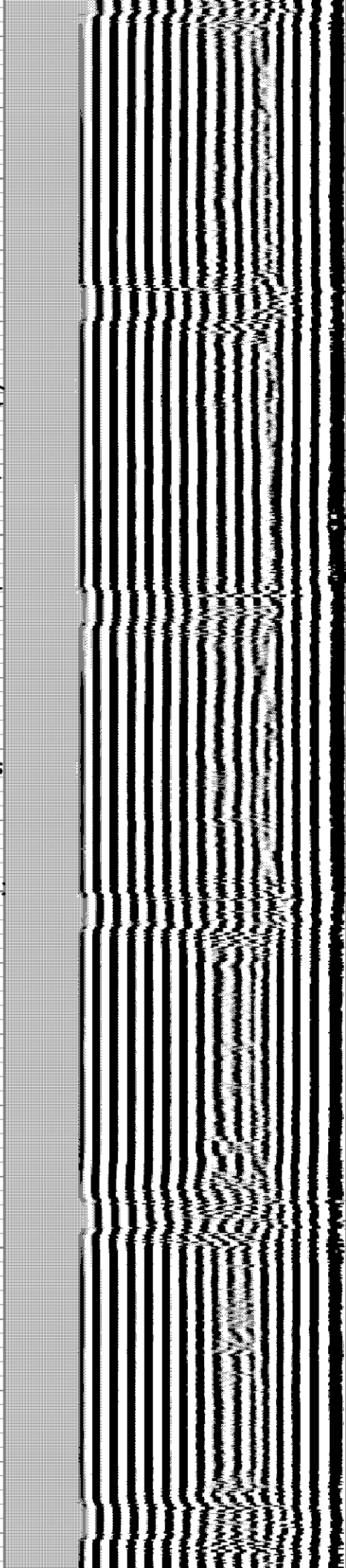
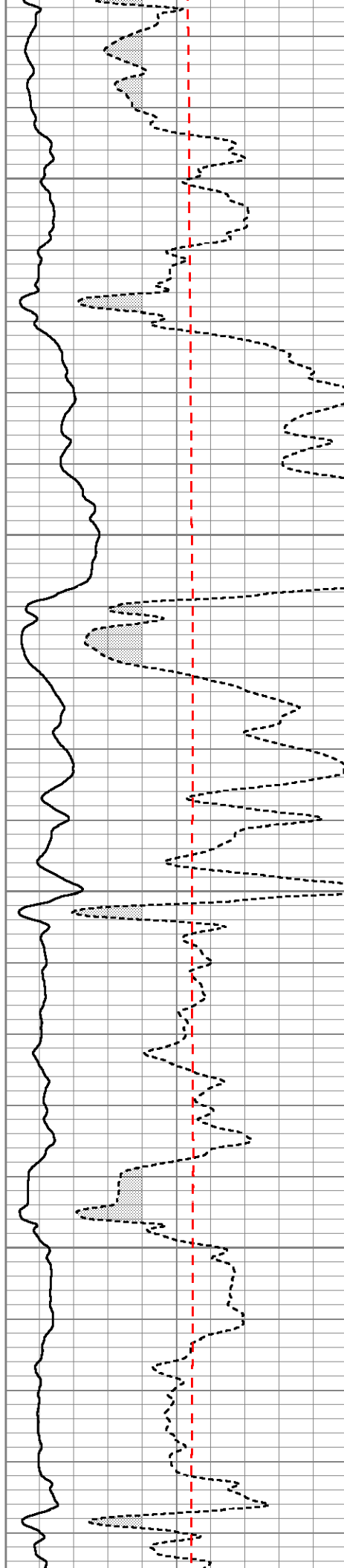


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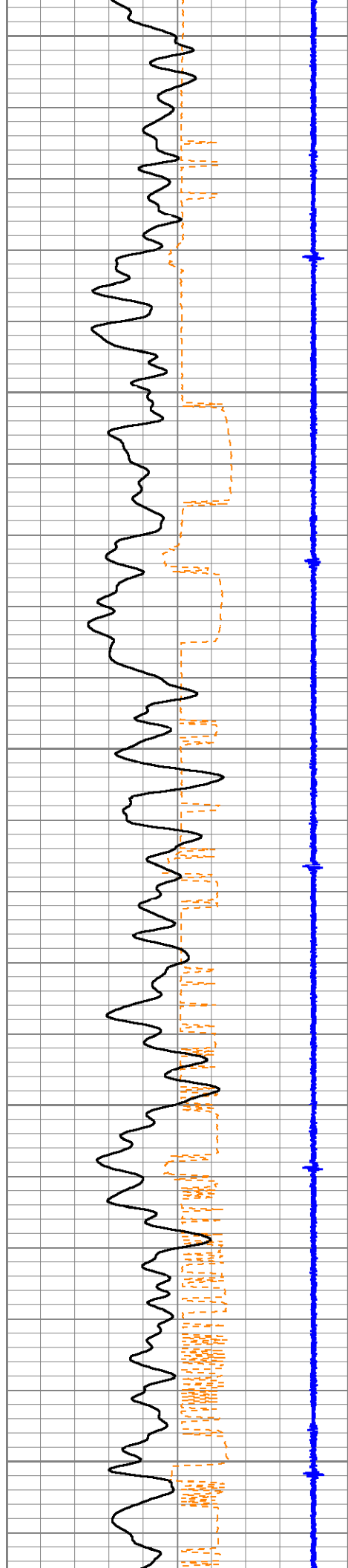
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1750

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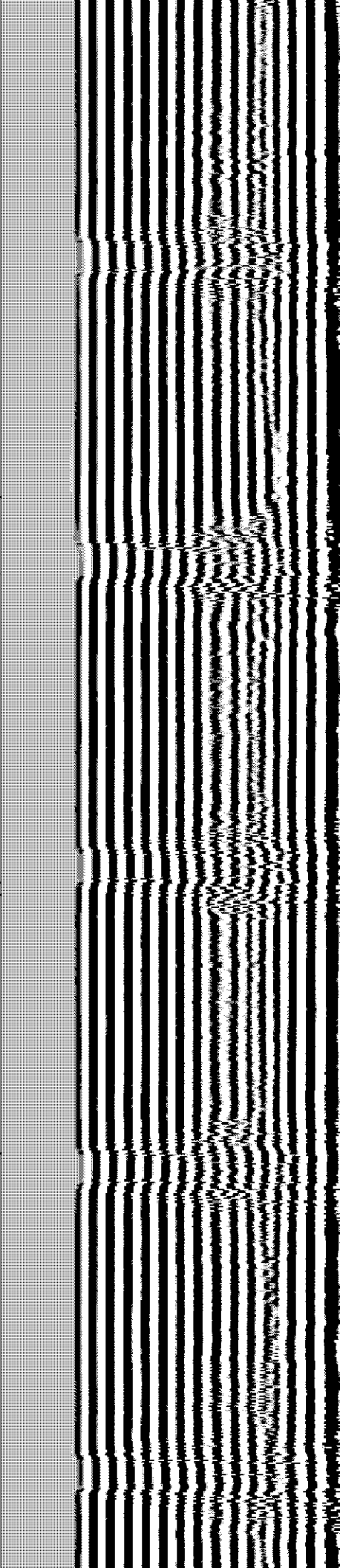
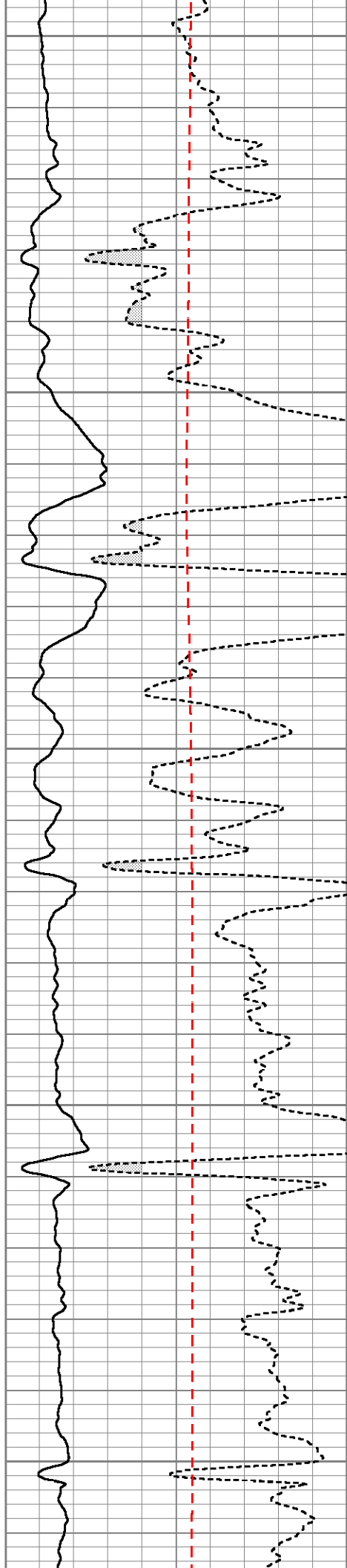
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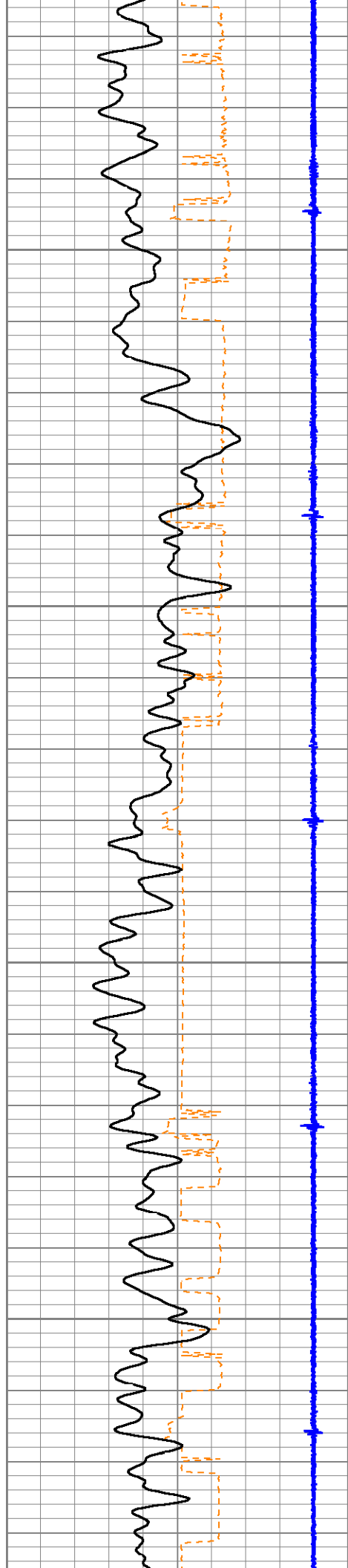
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2000

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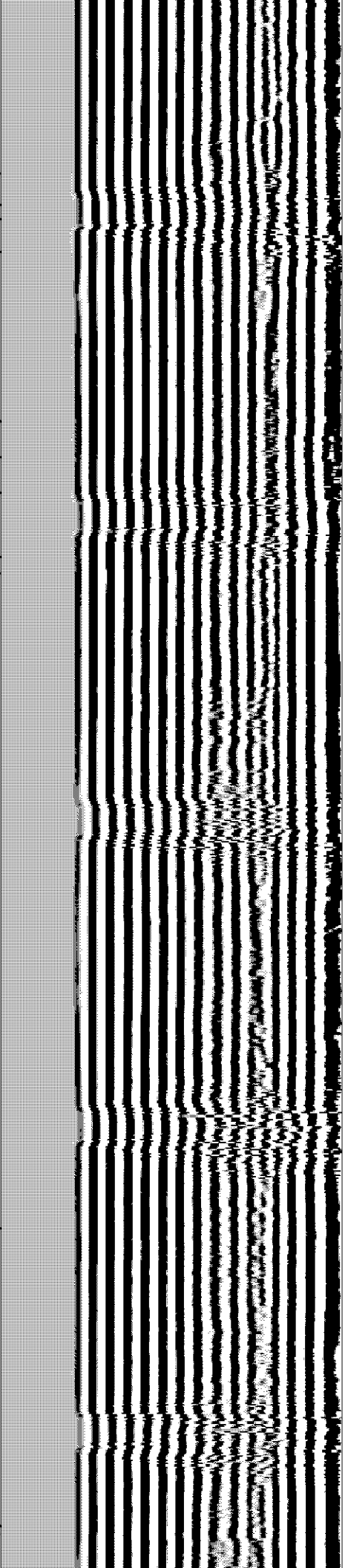
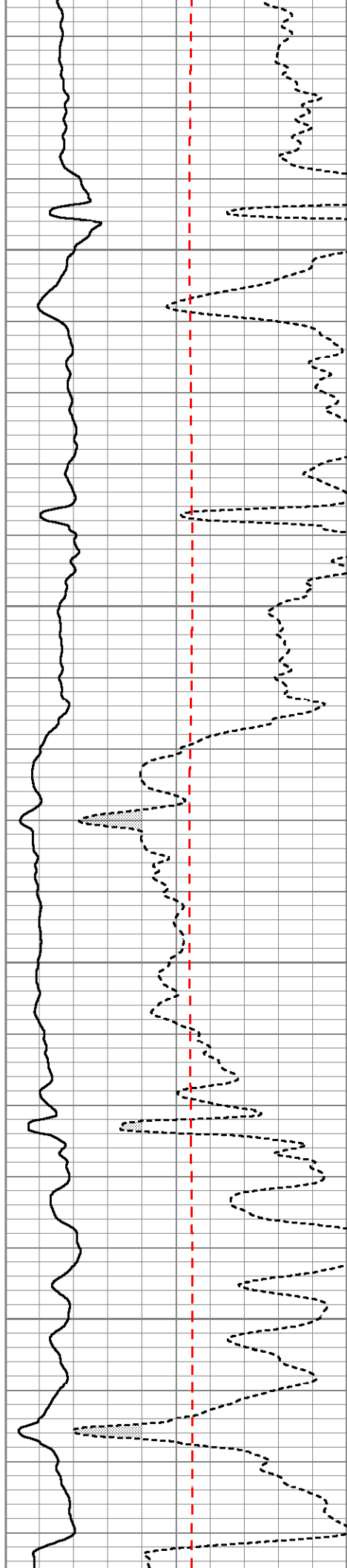


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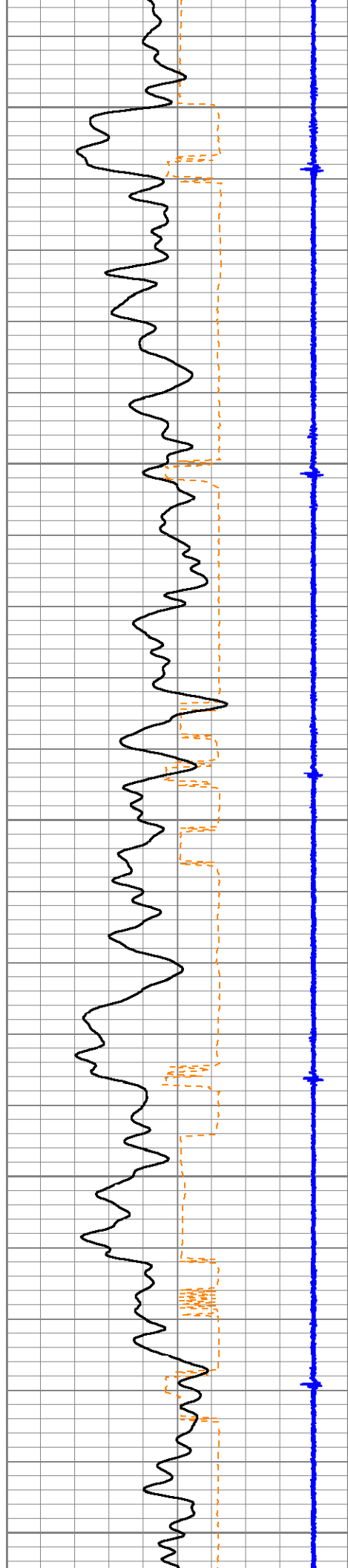
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2200

2250







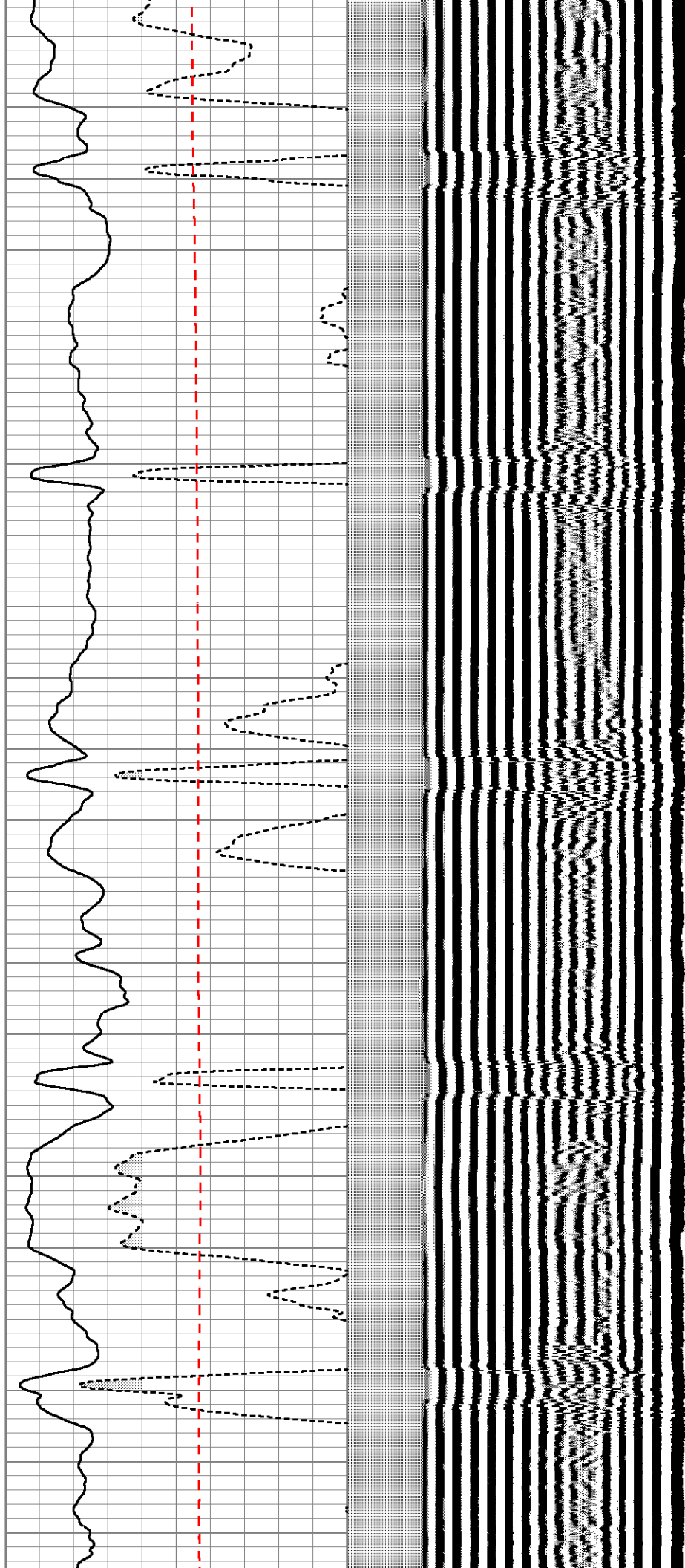
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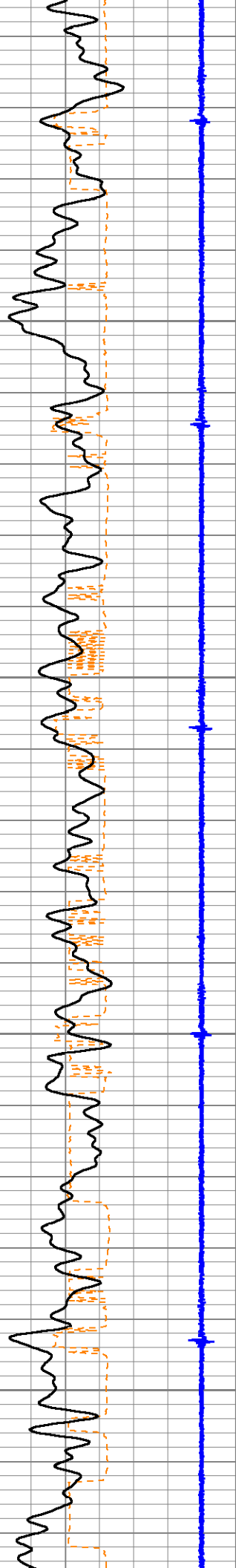
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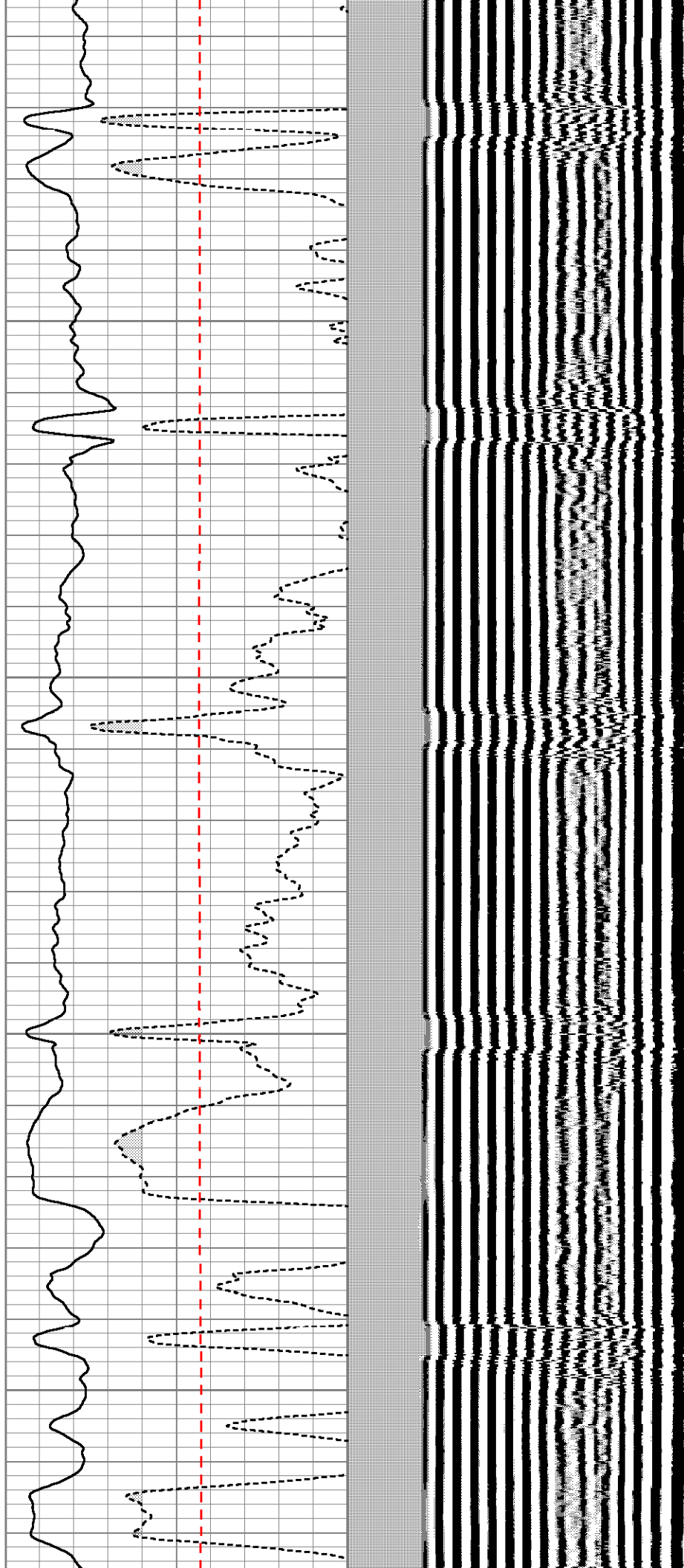


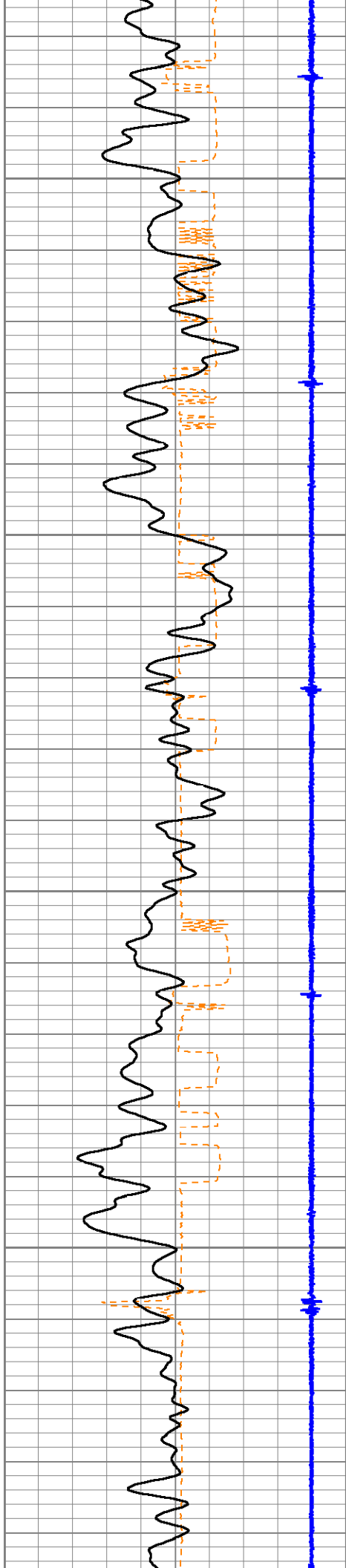
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2600

2650

2700



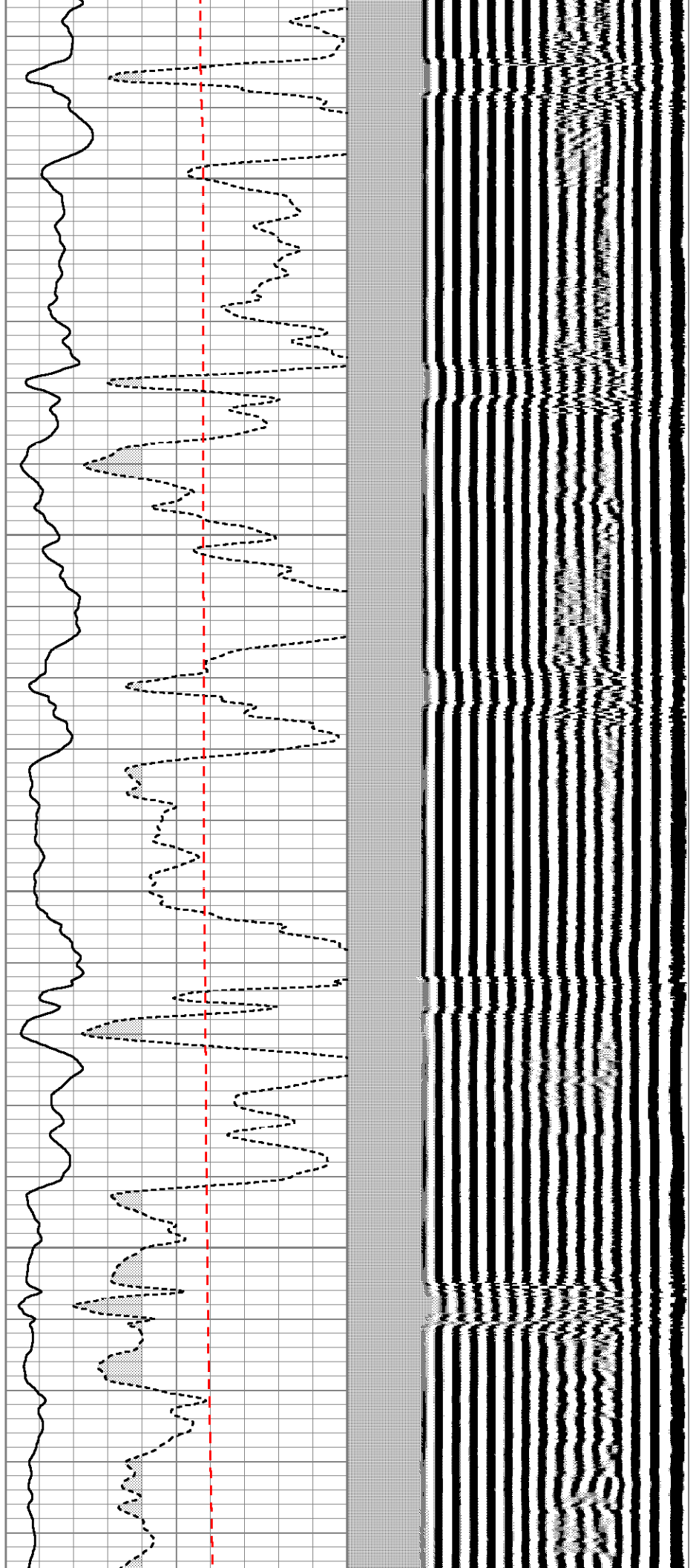


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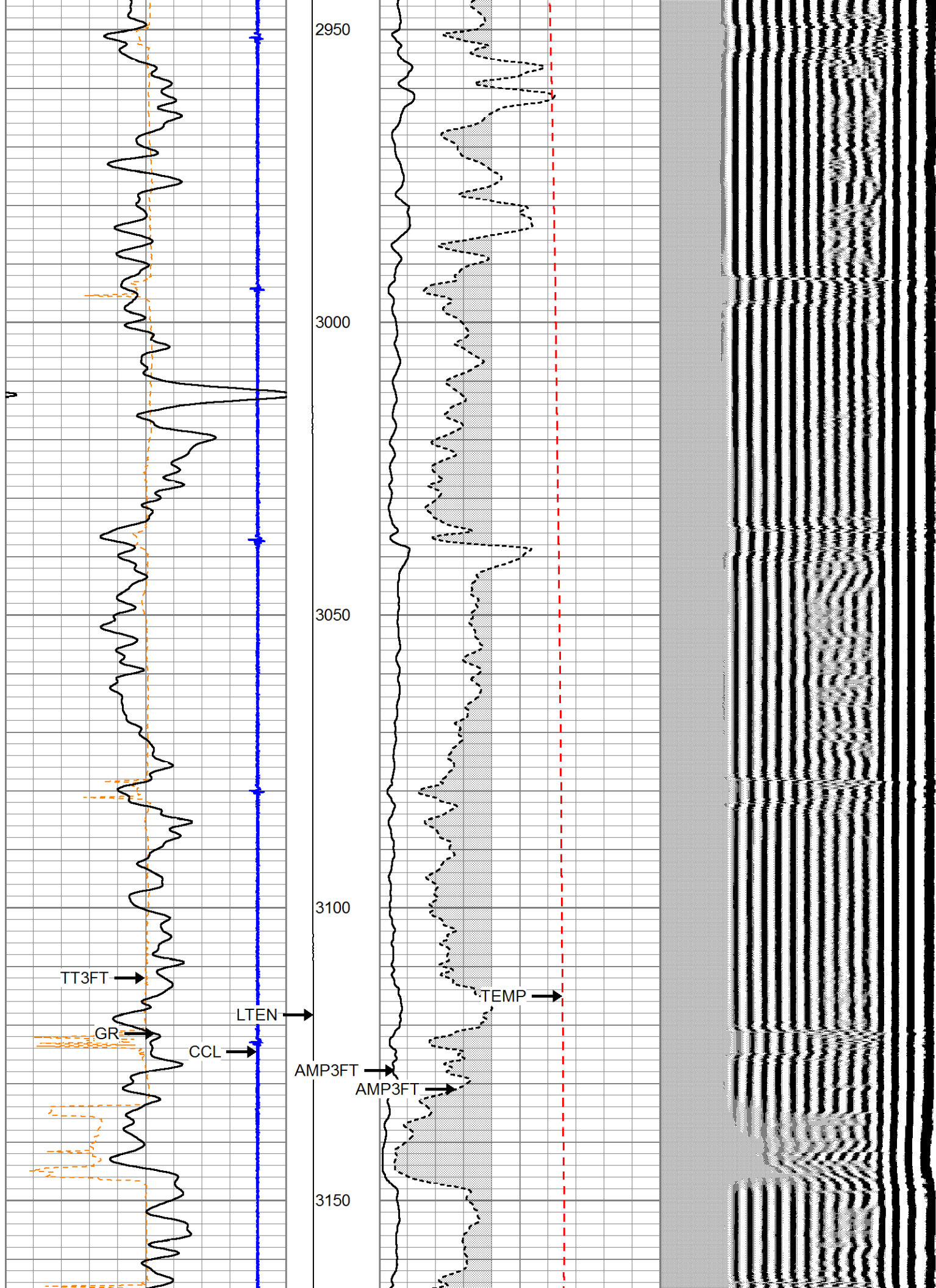
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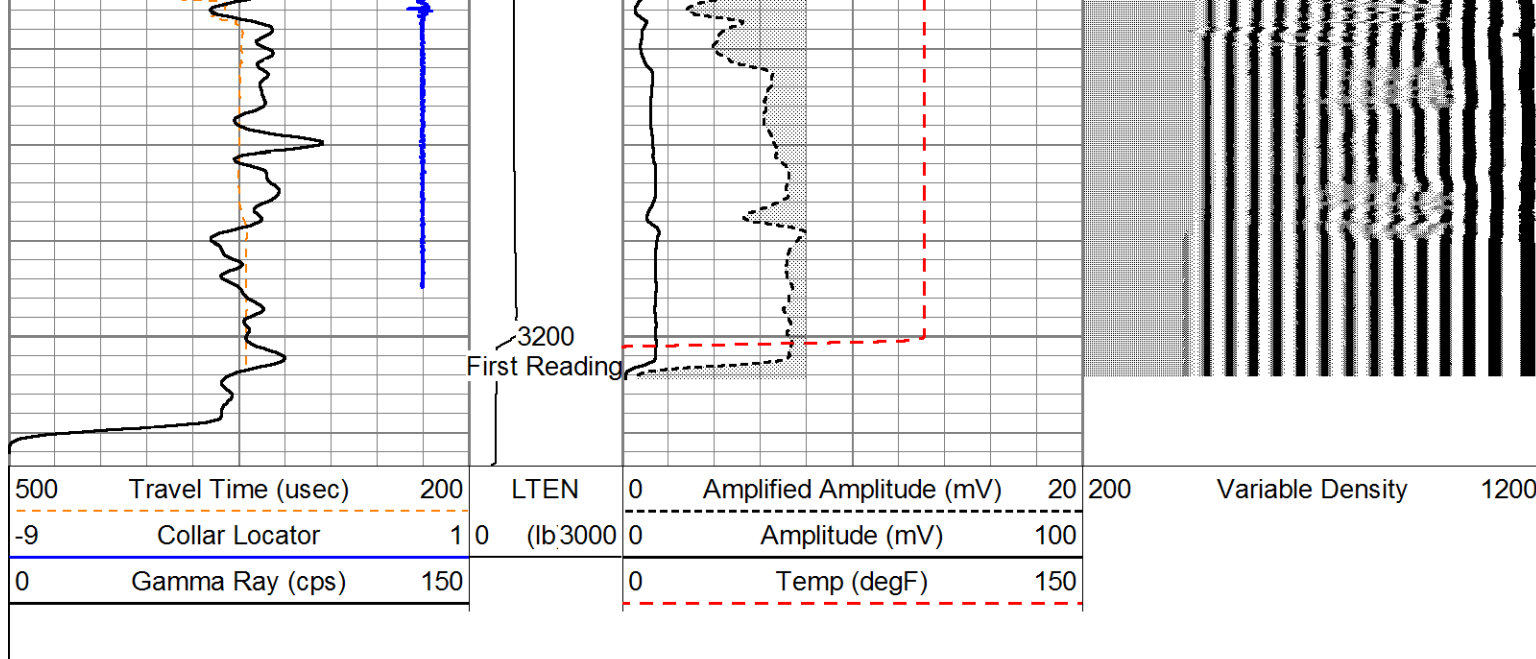
2850

2900









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