



VDL CCL GAMMA-RAY
CEMENT BOND LOG

Pioneer Energy Services

Company GREAT WESTERN OIL & GAS LLC
Well LAND JG 31-17 D
Field WATTENBERG
County WELD State COLORADO

Company GREAT WESTERN OIL & GAS LLC
Well LAND JG 31-17 D
Field WATTENBERG
County WELD
State COLORADO

Location: SHL 308' FSL & 929' FWL SWSW
EST. BHL 2048' FSL& 1814" FWL NESW
SEC 31 TWP 2N RGE 64W
Permanent Datum GL Elevation 4933'
Log Measured From KB
Drilling Measured From KB
Other Services

Date APRIL 4/2013

Run Number	ONE
Depth Driller	7796'
Depth Logger	7734'
Bottom Logged Interval	7716'
Top Log Interval	30'
Open Hole Size	7 7/8"
Type Fluid	WATER
Density / Viscosity	NA
Max. Recorded Temp.	212 DEG. F
Estimated Cement Top	NA
Time Well Ready	NA
Time Logger on Bottom	NA
Equipment Number	9605
Location	FT MORGAN
Recorded By	TODD YOUNG
Witnessed By	SHAWN ARMSTRONG

Borehole Record		Tubing Record				
Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String				
Prot. String	4.5"	11.6 #	SURFACE	TD
Production String				
Liner				

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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

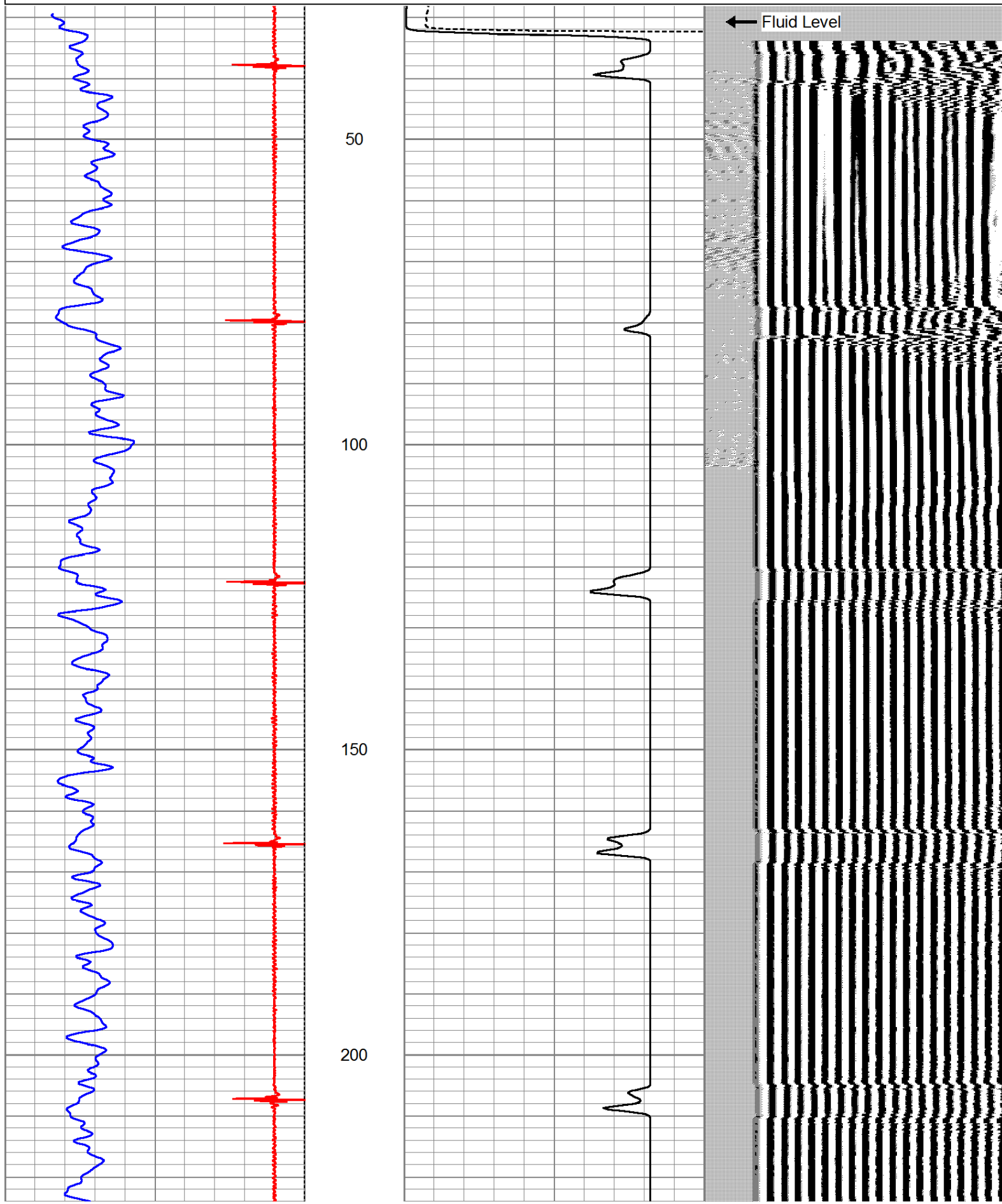
SO # 2-203803

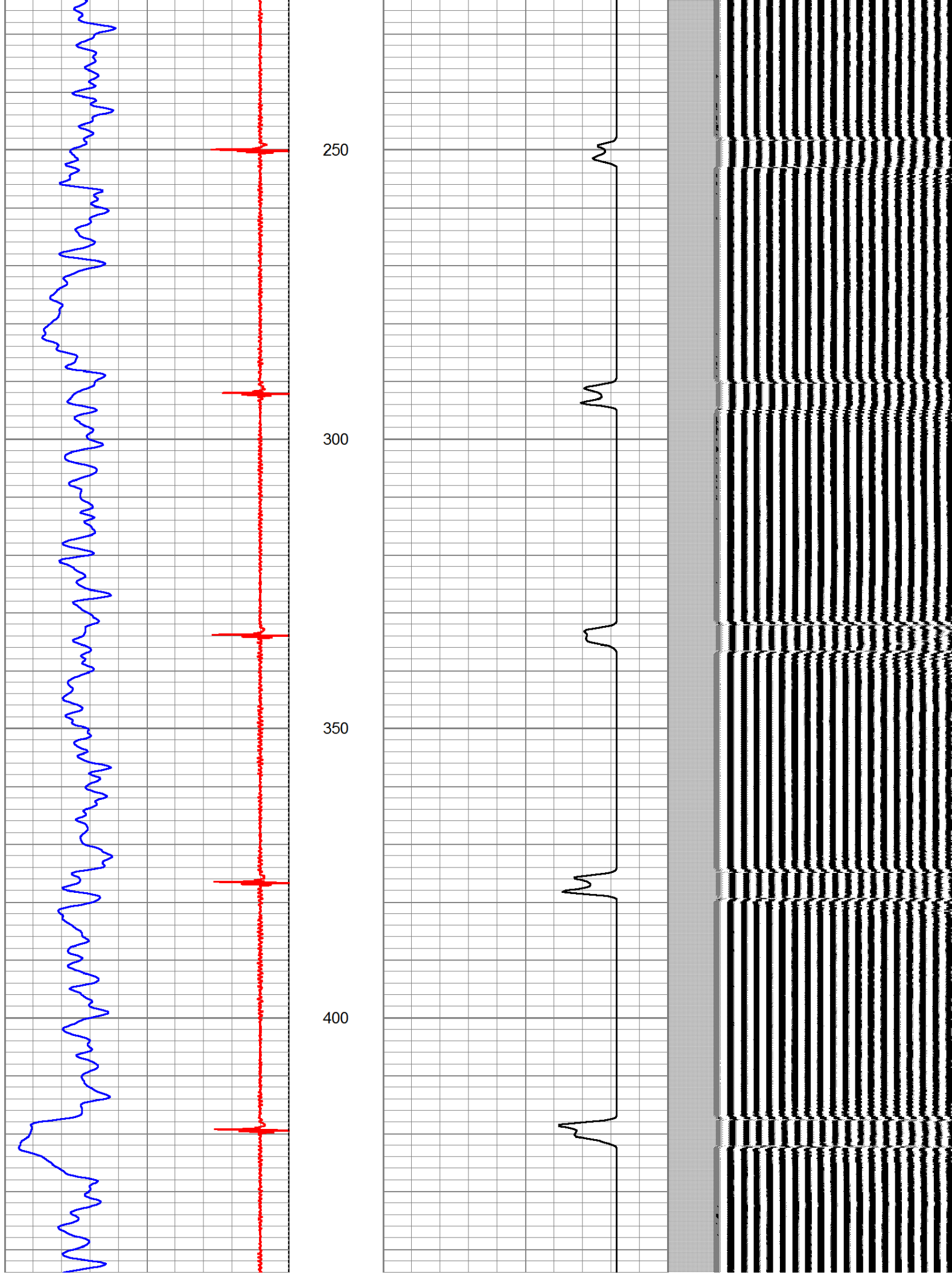
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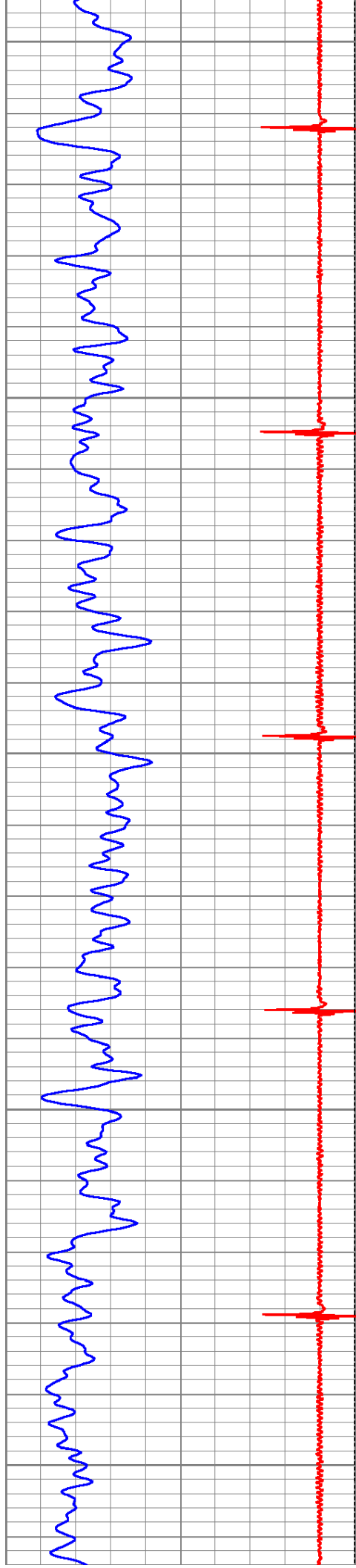
Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
CCL	19.31		CCL-titan01 (01t)	1.92	2.75	

			SDSCENT Centralizer for testing	3.00	3.25	20.00
WVF3	10.92					
			CBL-Probe (050215) 2.75 digital probe	8.75	2.75	106.50
WVF5	9.92					
			SDSCENT Centralizer for testing	3.00	3.25	20.00
			GR-probe 2.75 (51013)	3.67	2.75	100.00
GR	1.13					
Dataset: land jg 31-17d.db: field/well/run1/pass3 Total Length: 20.33 ft Total Weight: 246.50 lb O.D. 3.25 in						

9	Collar Locator	-1	LTEN	0	Amplified Amplitude (mV)	10	200	Variable Density	1200
0	Gamma Ray (GAPI)	200	0	(lb)2000	0	Amplitude (mV)	100		







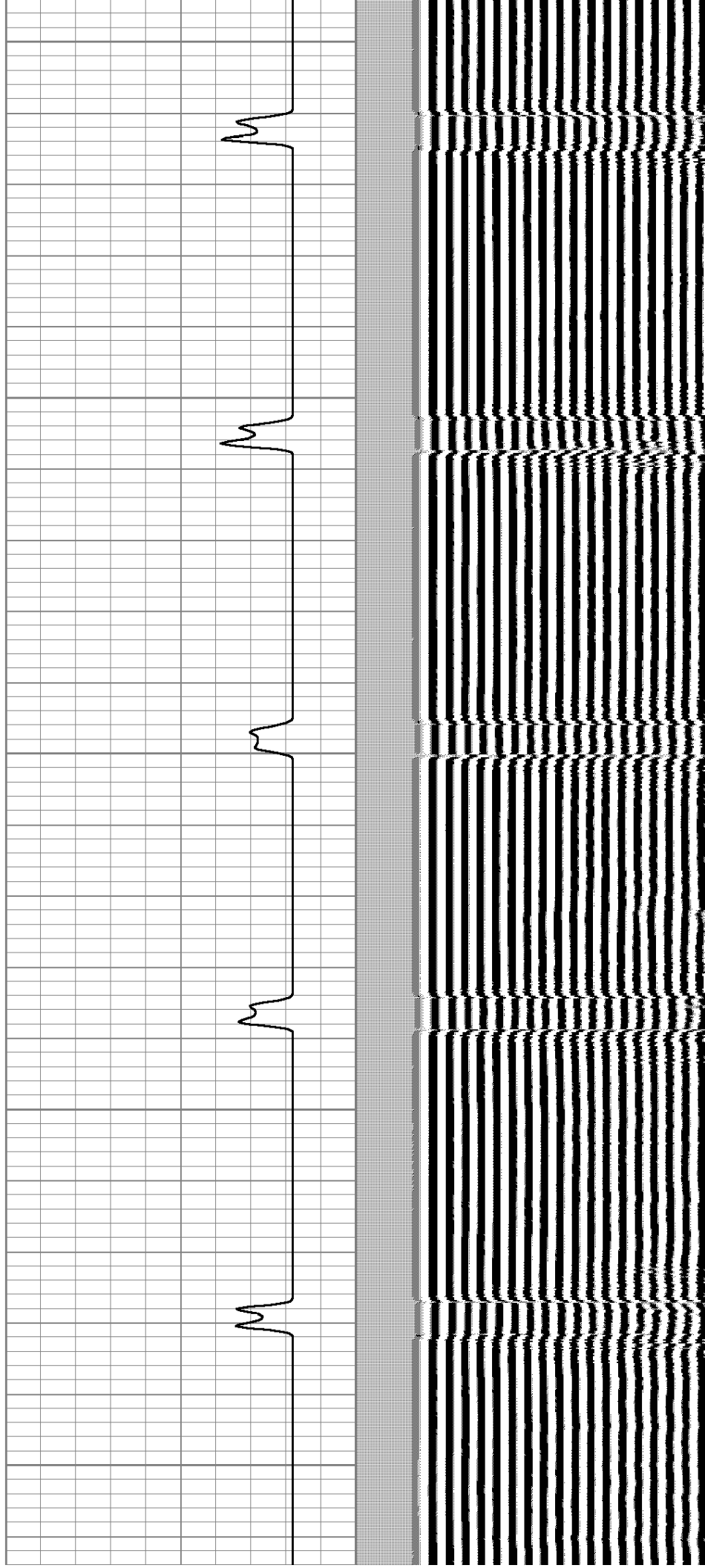
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600

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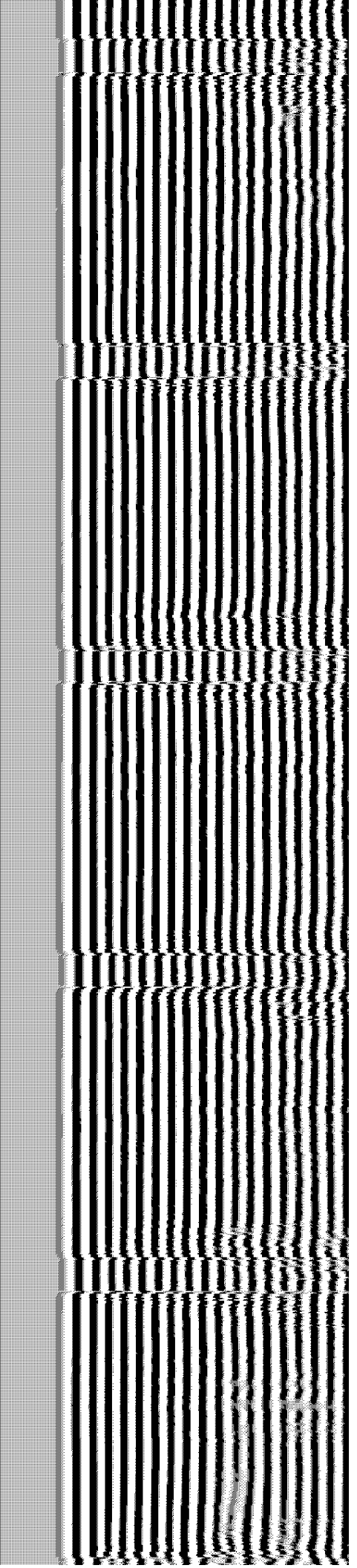
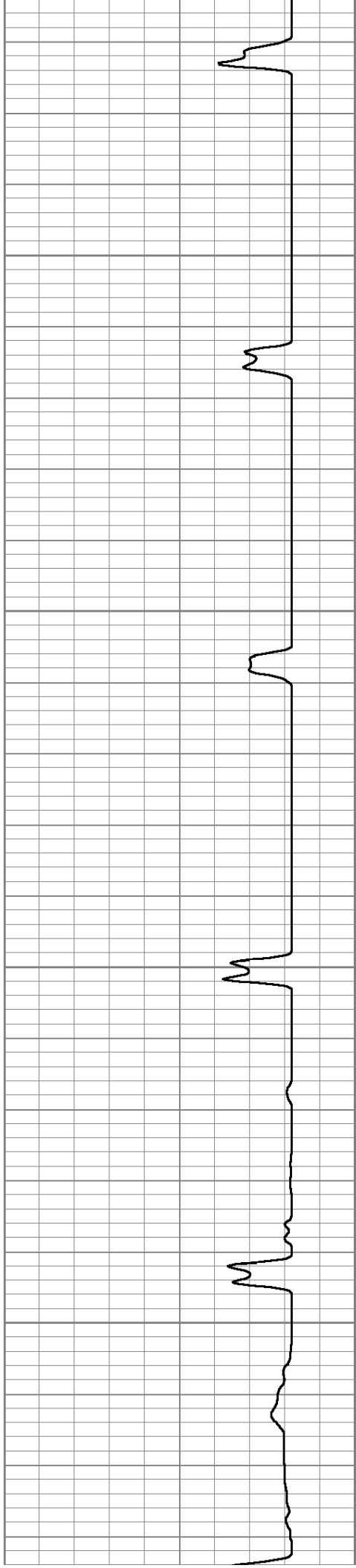


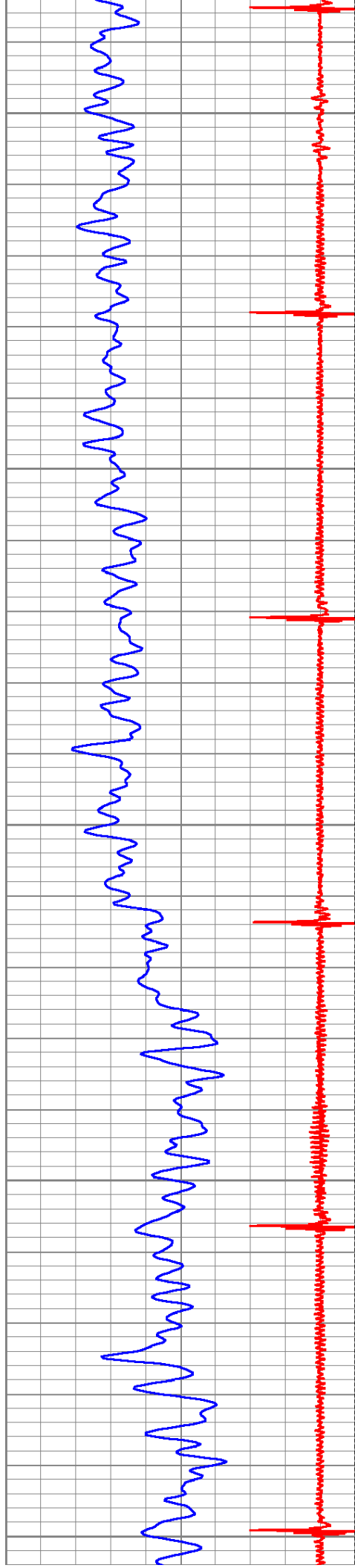
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750

800

850





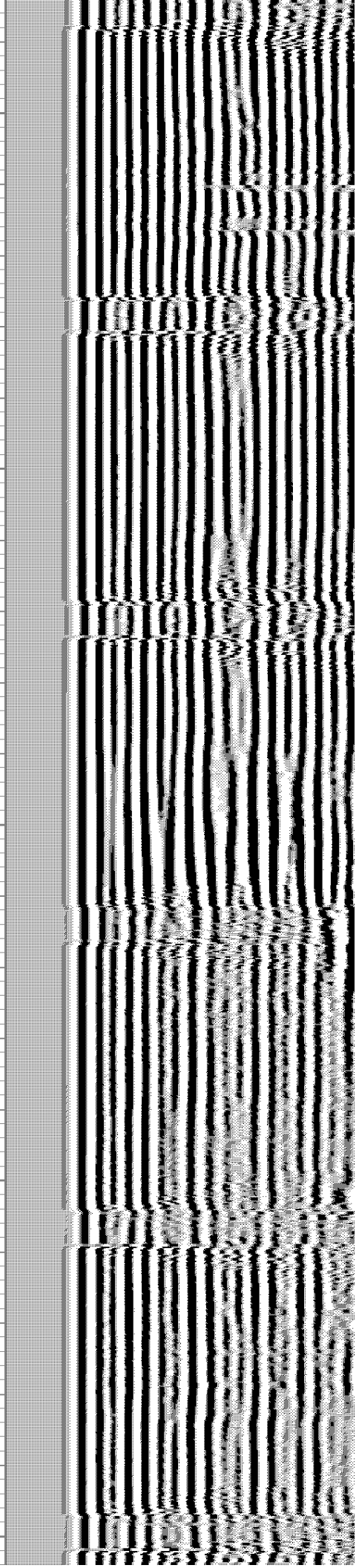
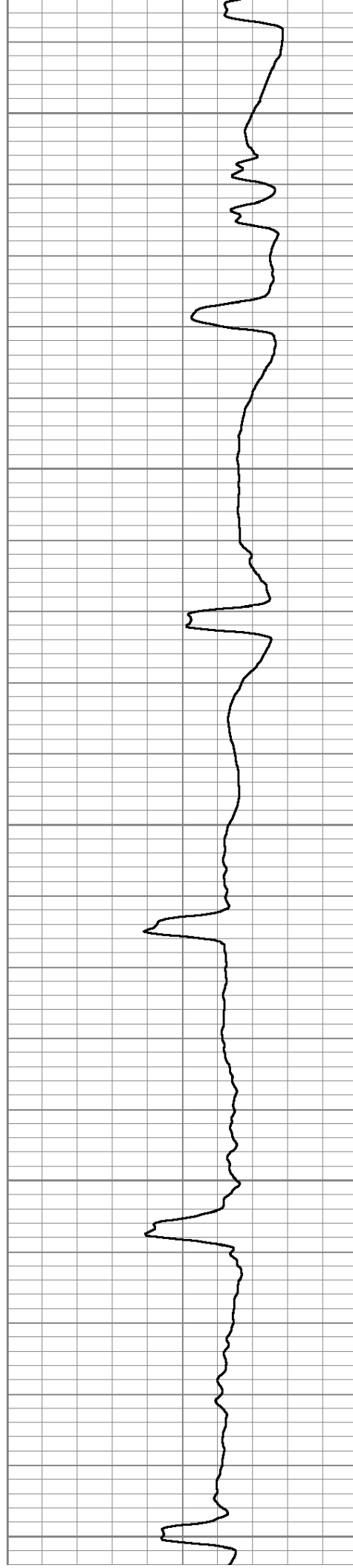
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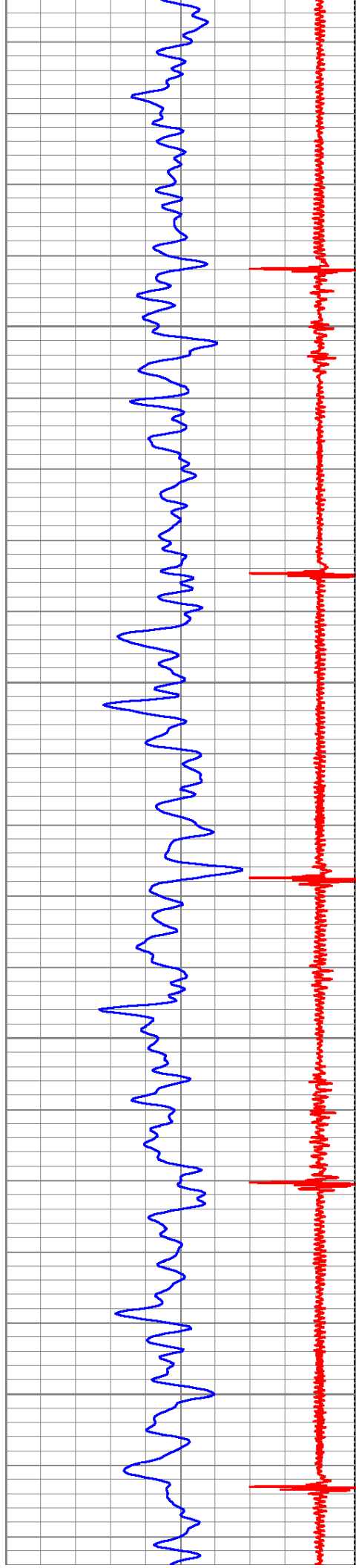
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1000

1050

1100



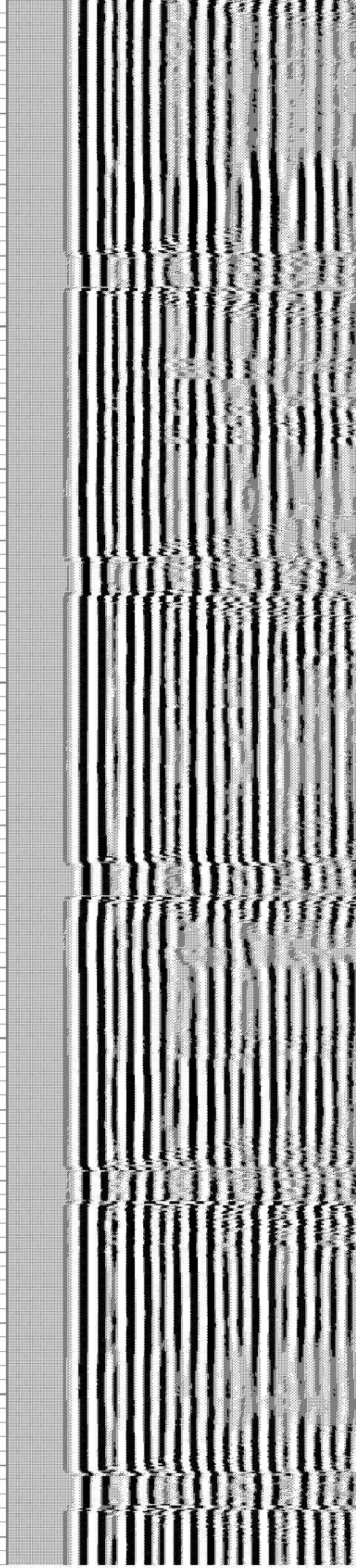
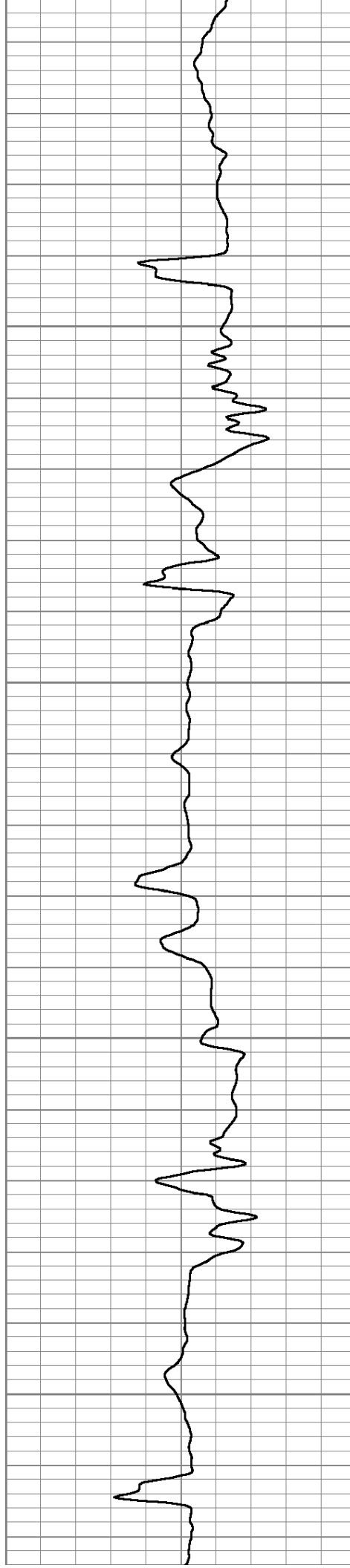


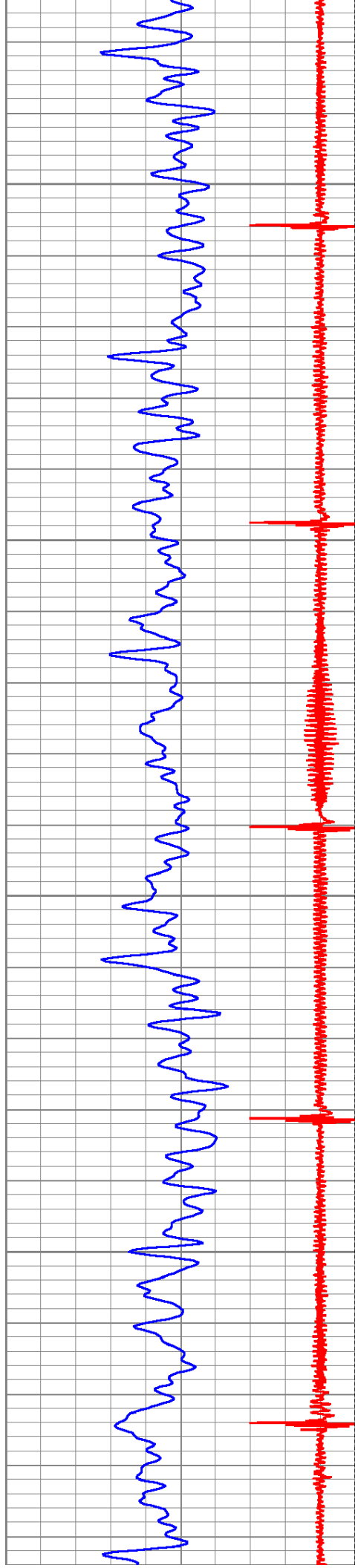
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1200

1250

1300



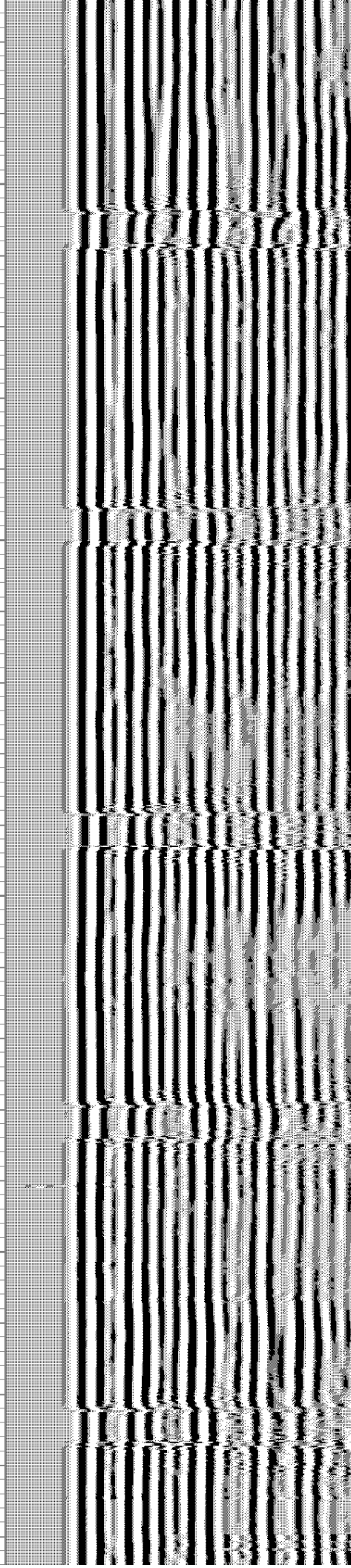
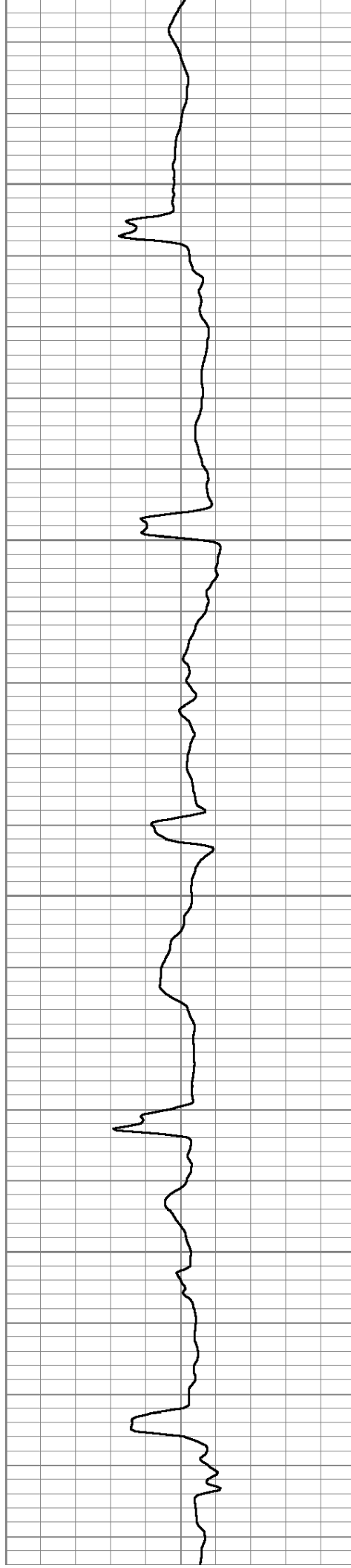


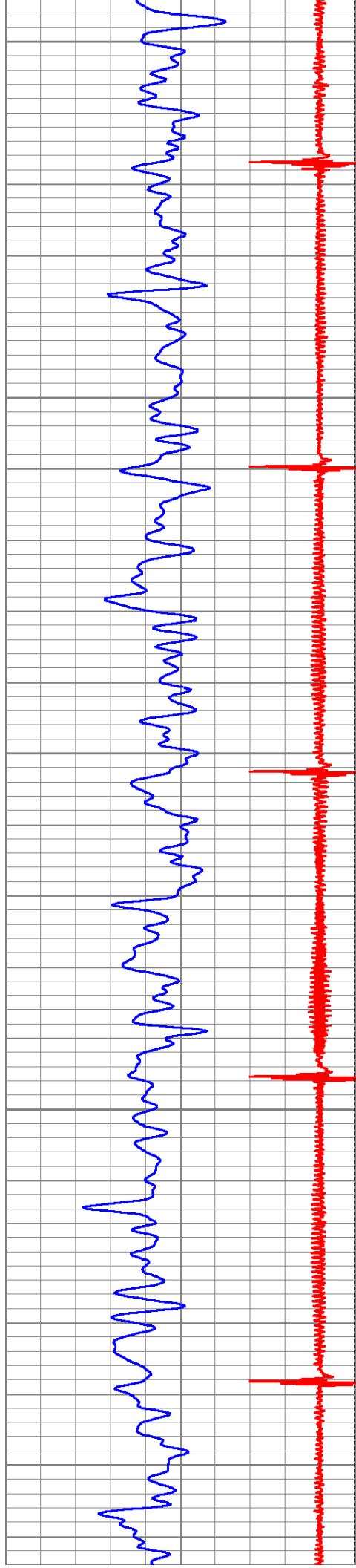
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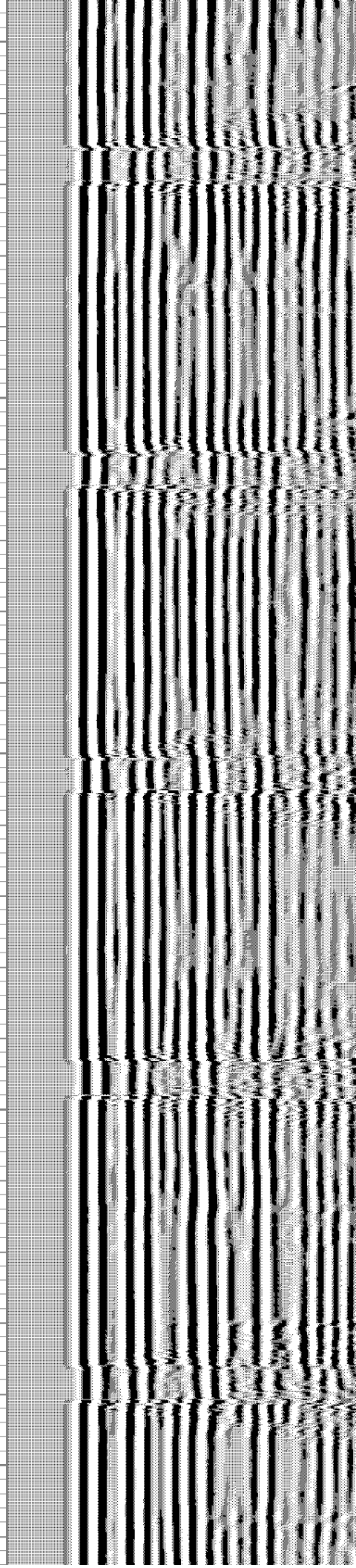
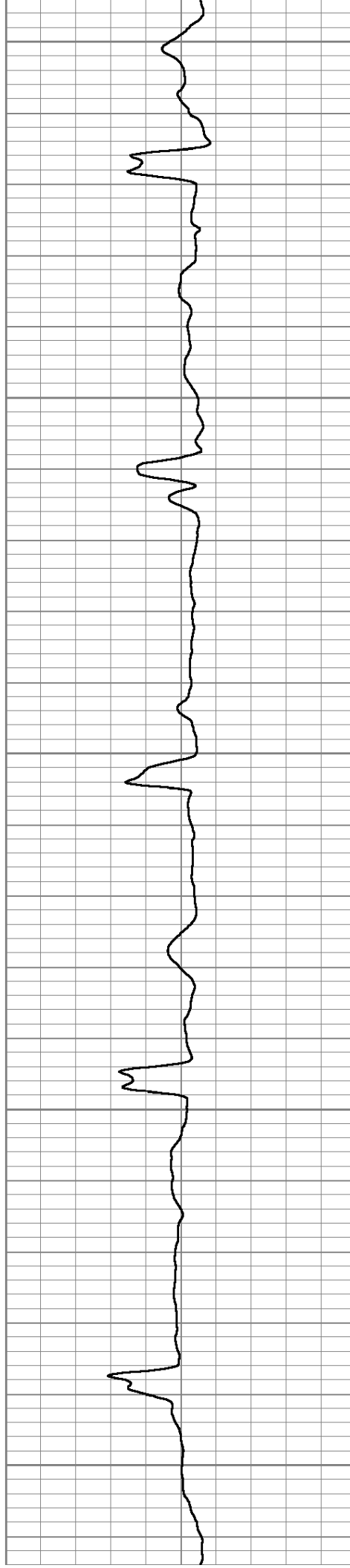
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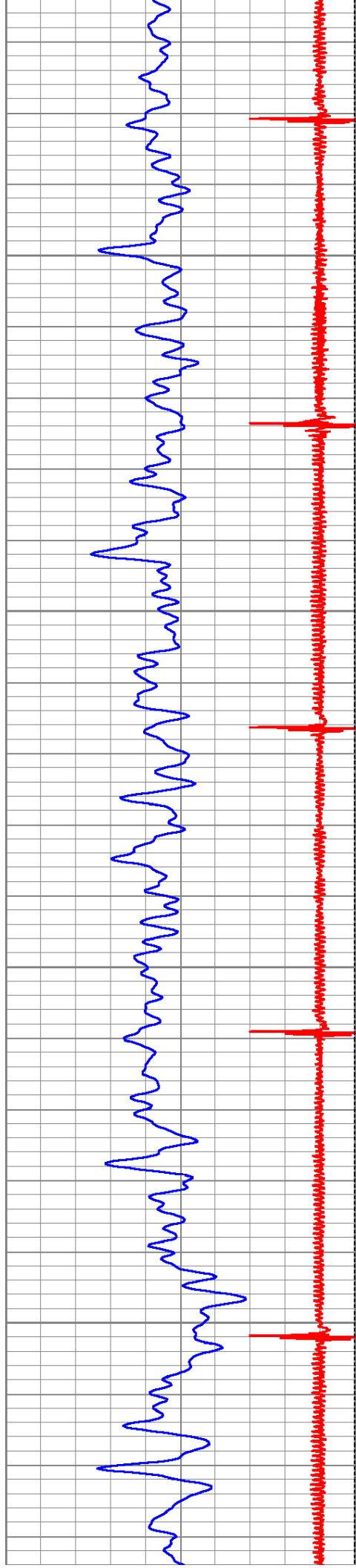
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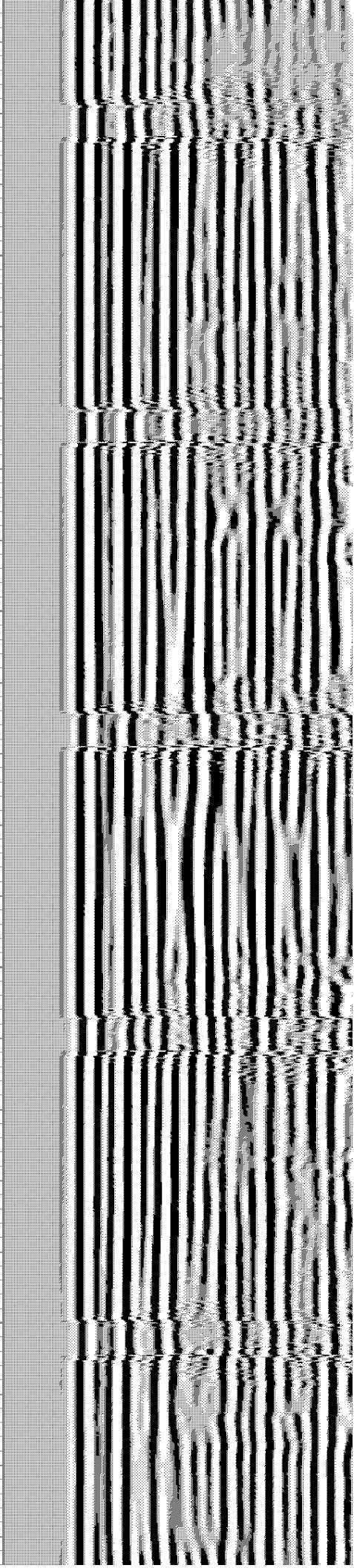
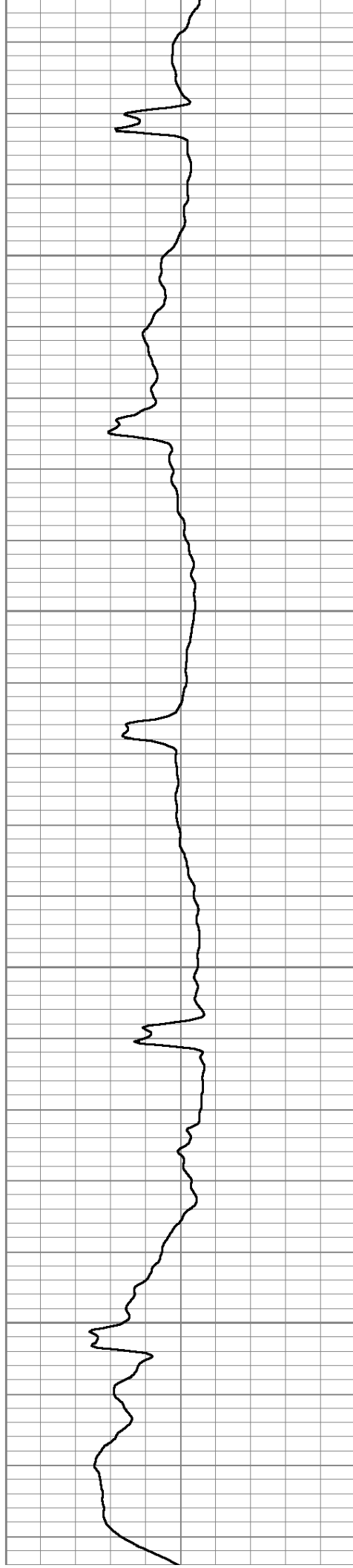


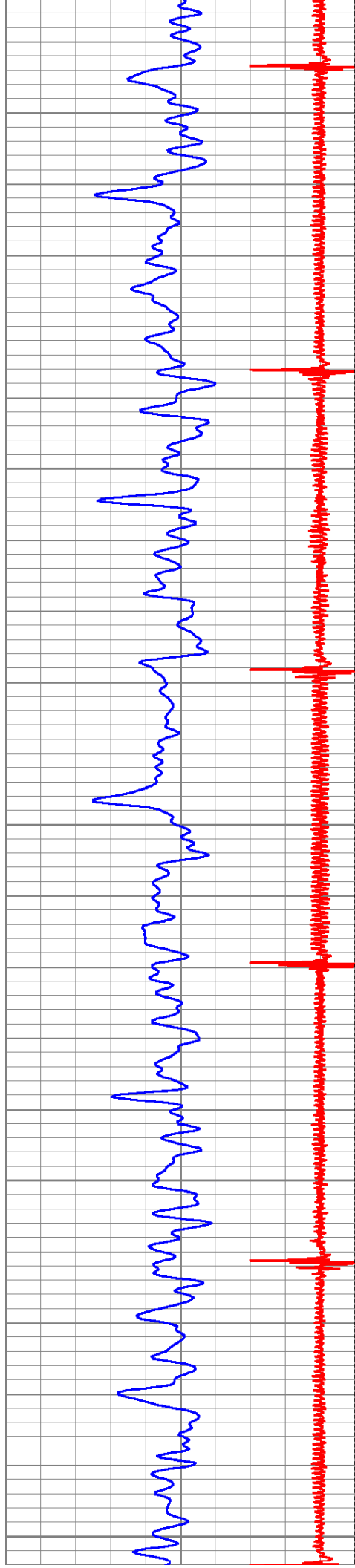
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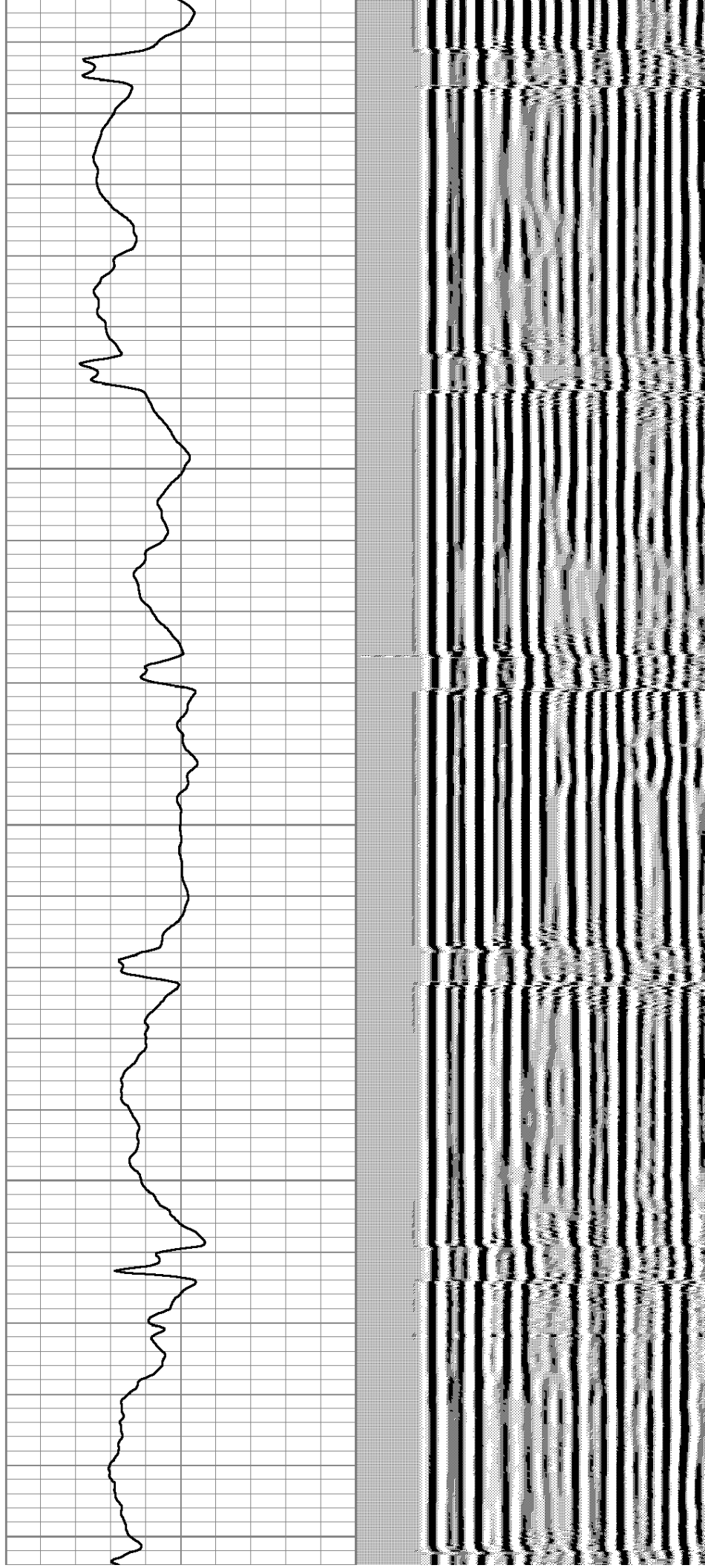
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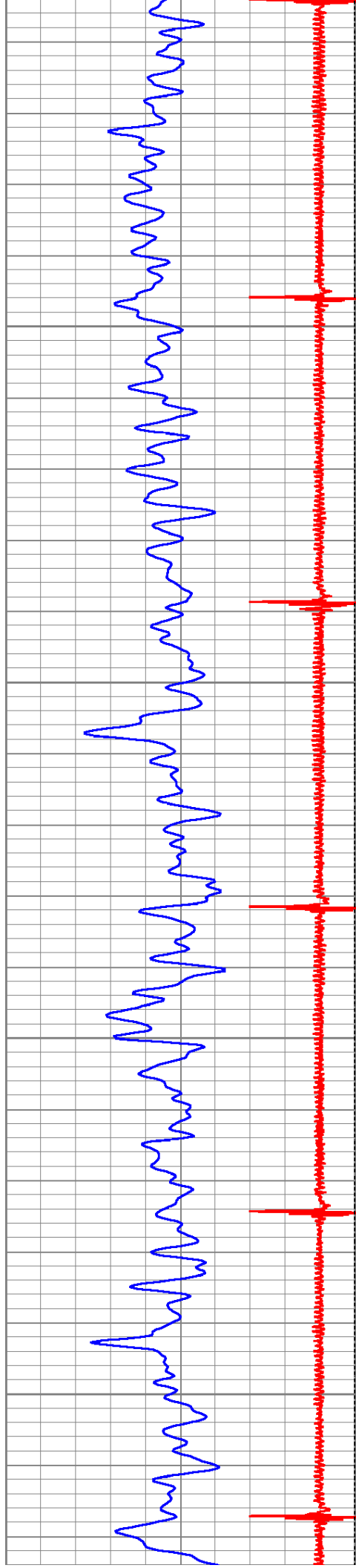
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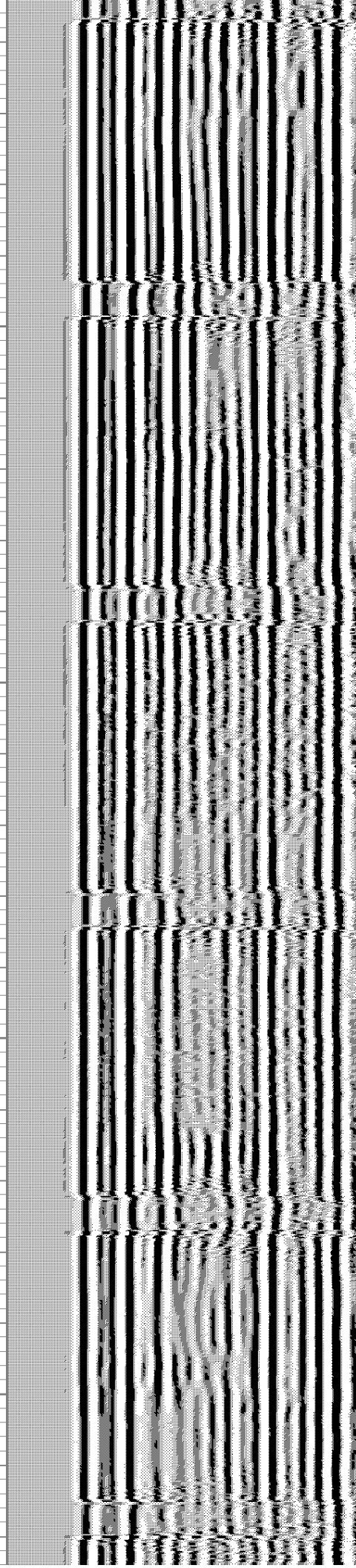
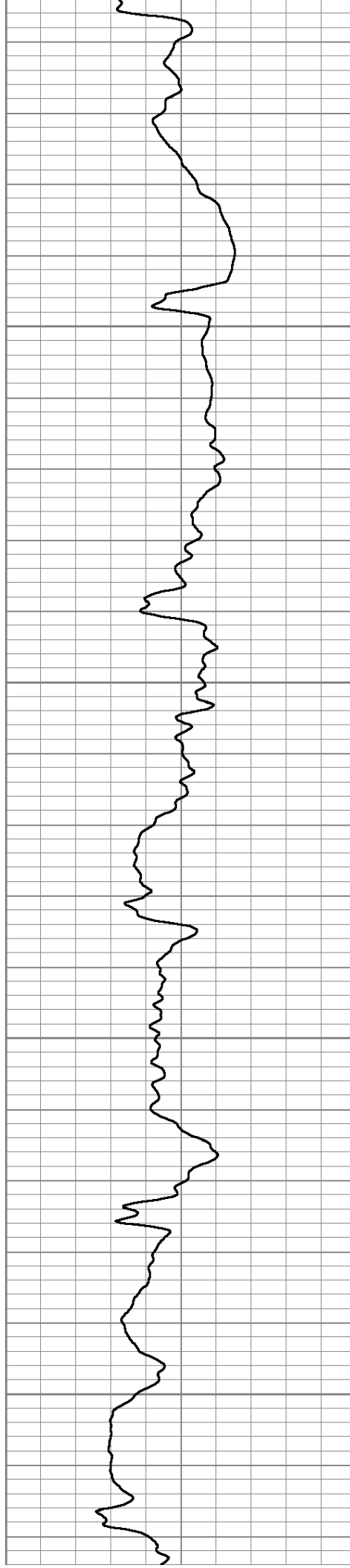


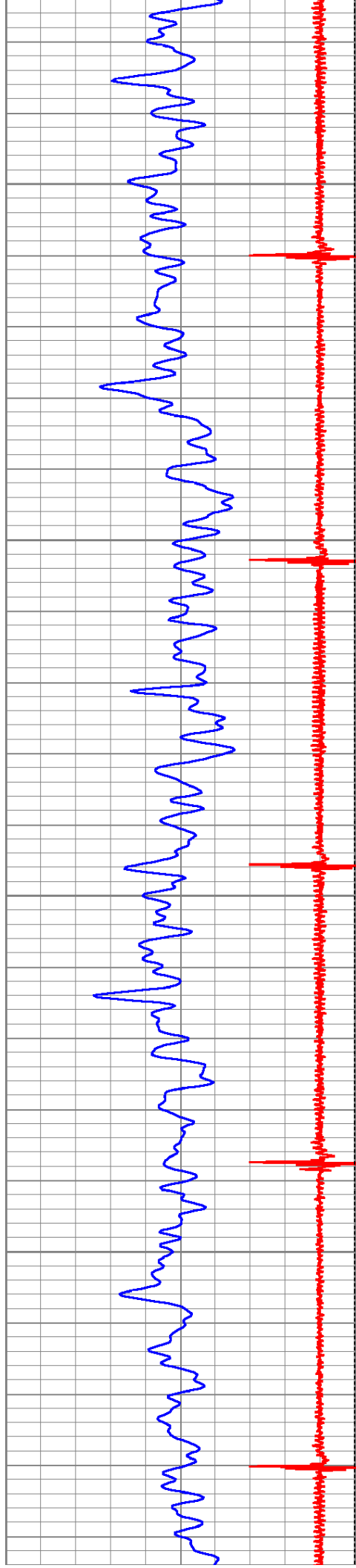
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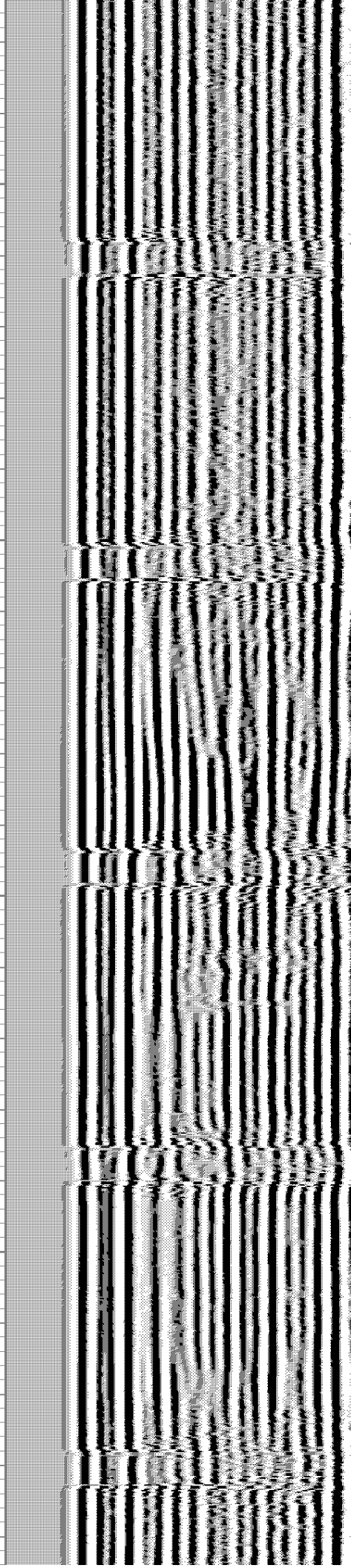
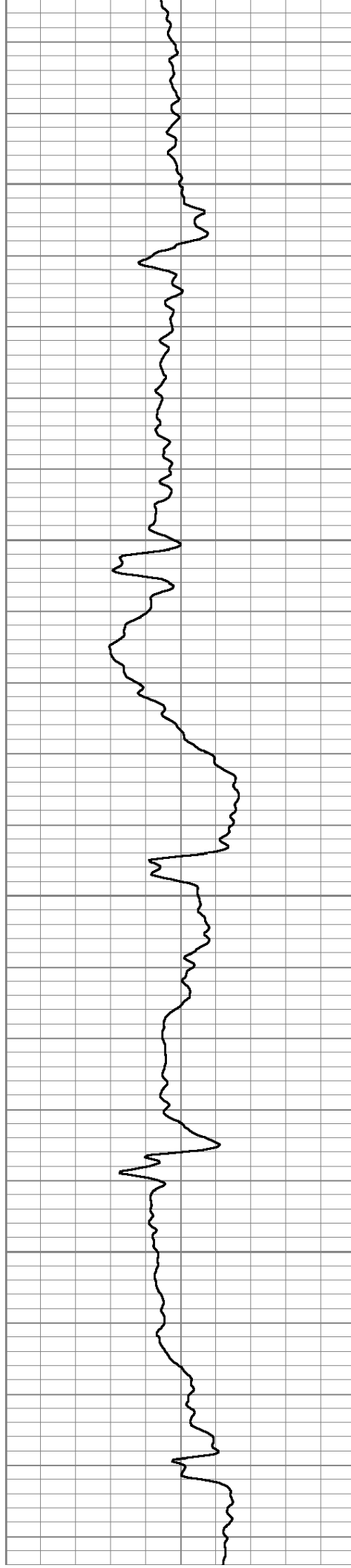


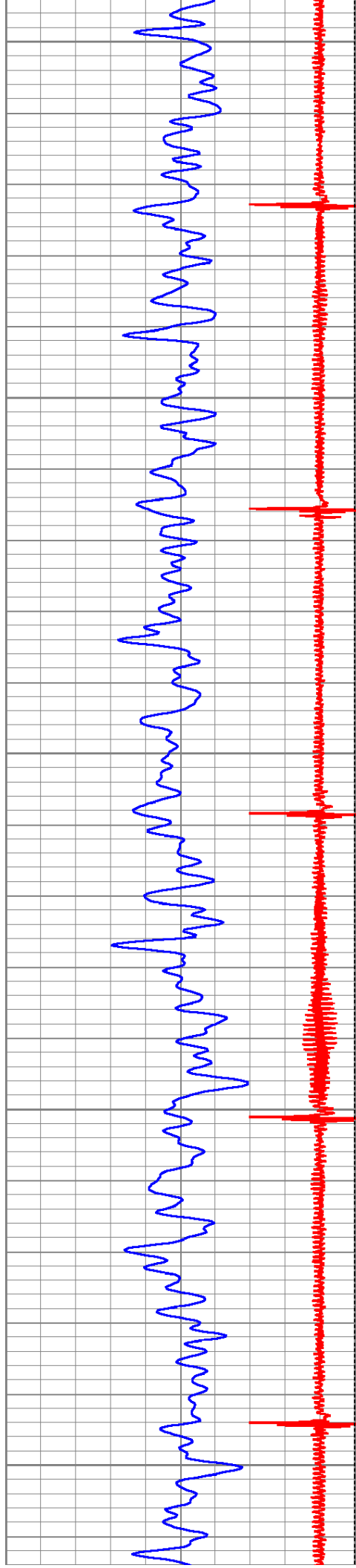
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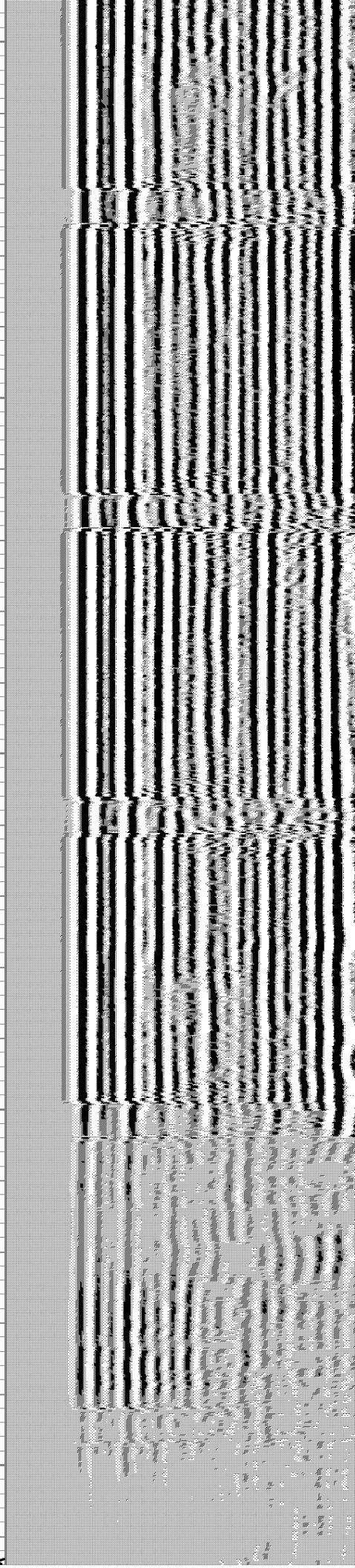
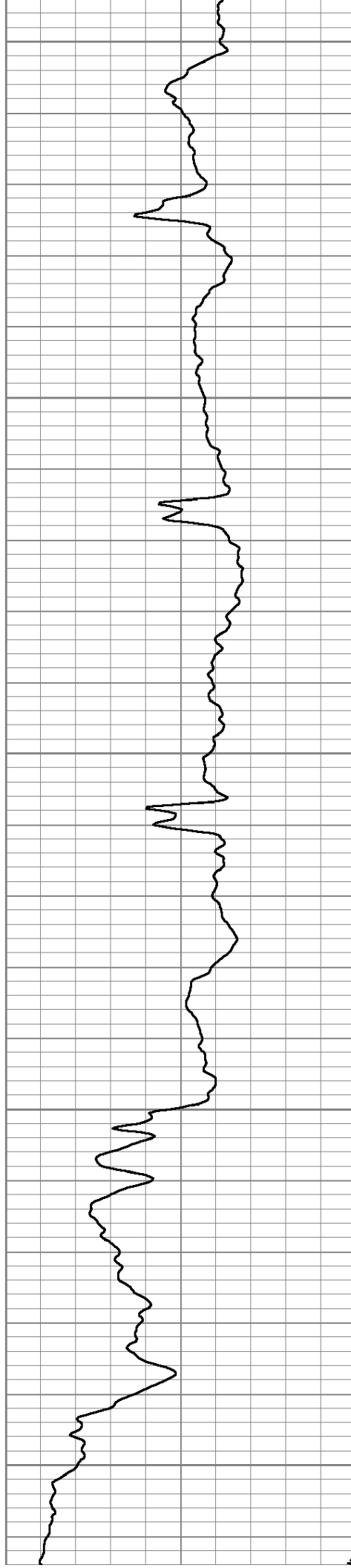
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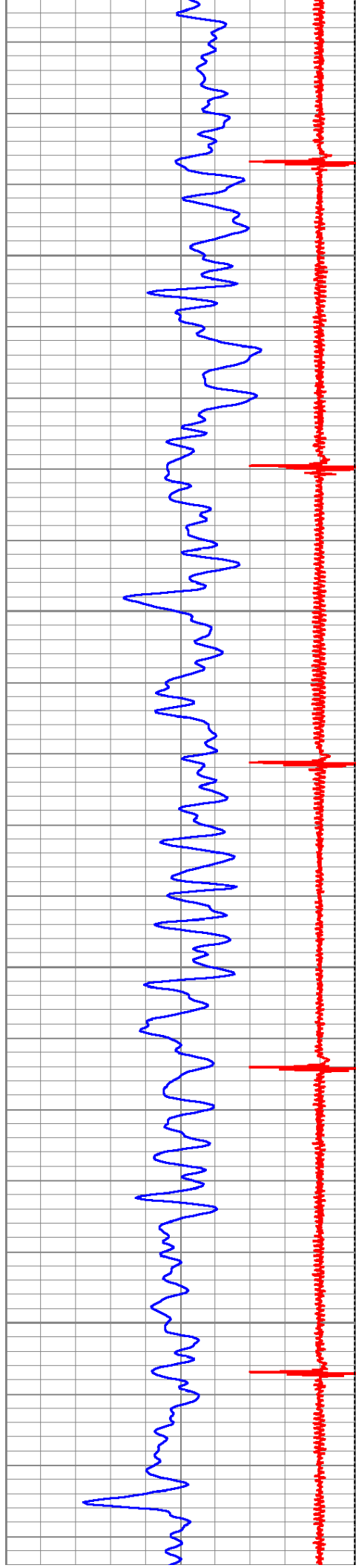
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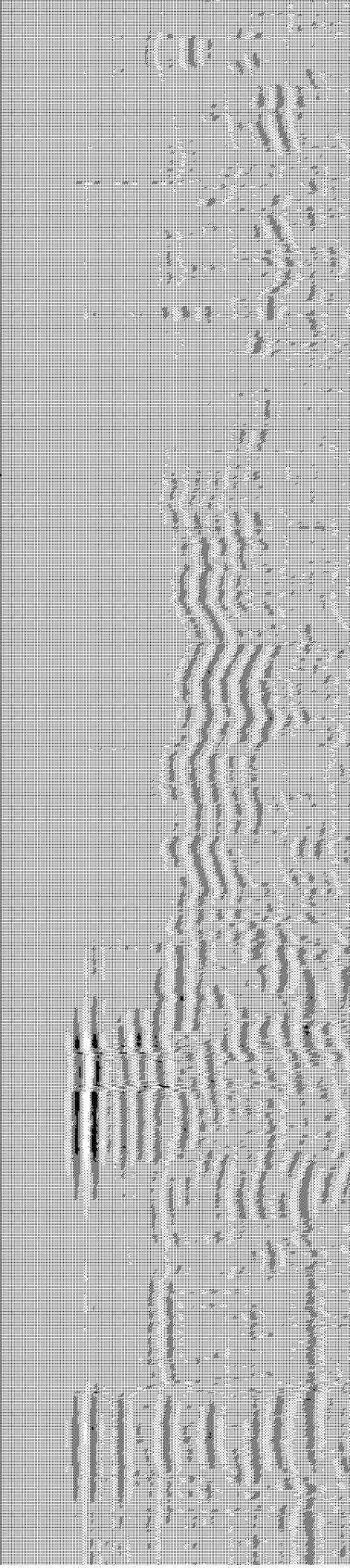
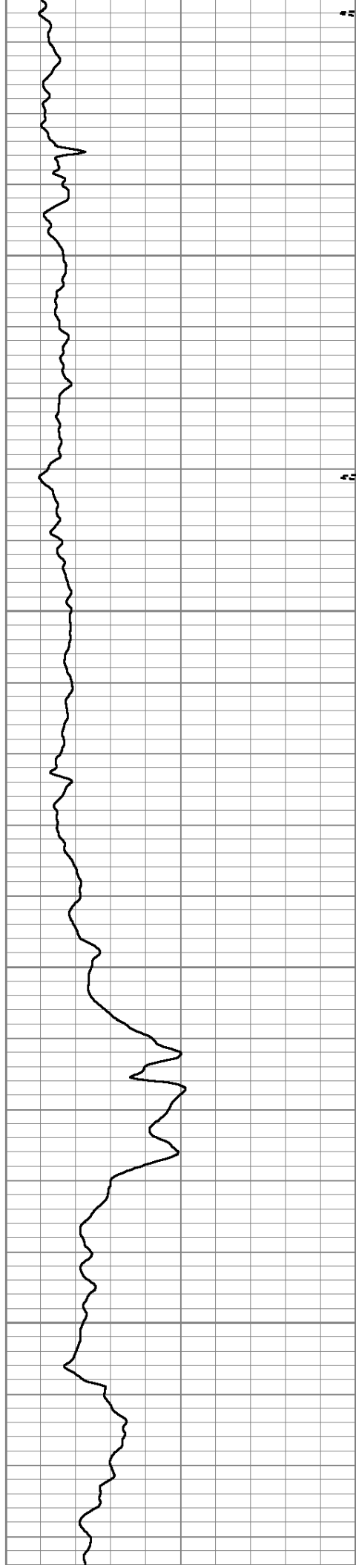


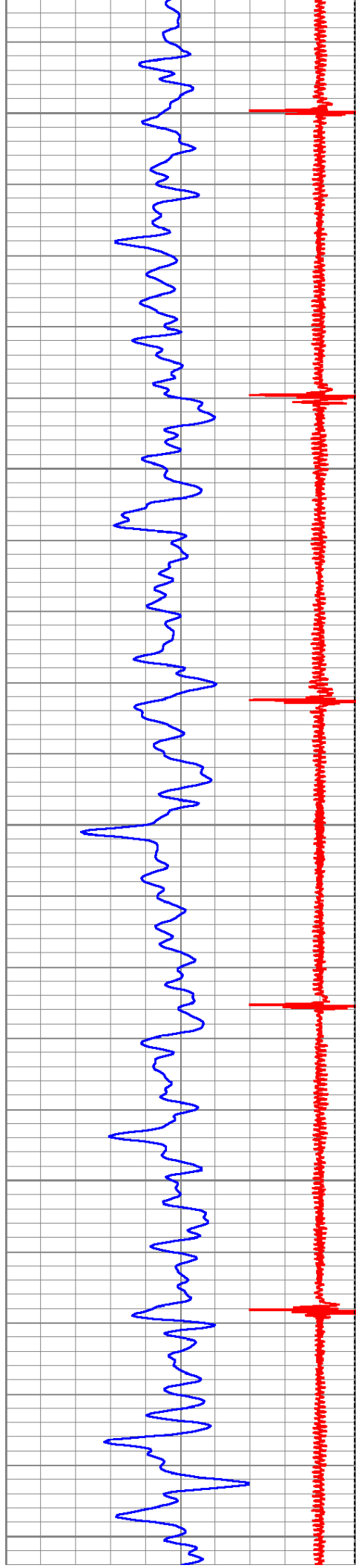
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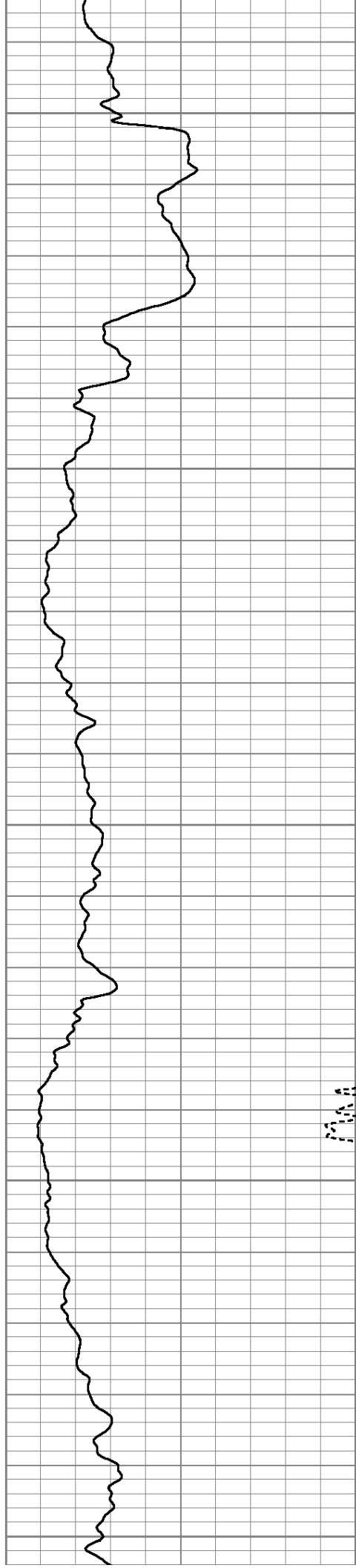
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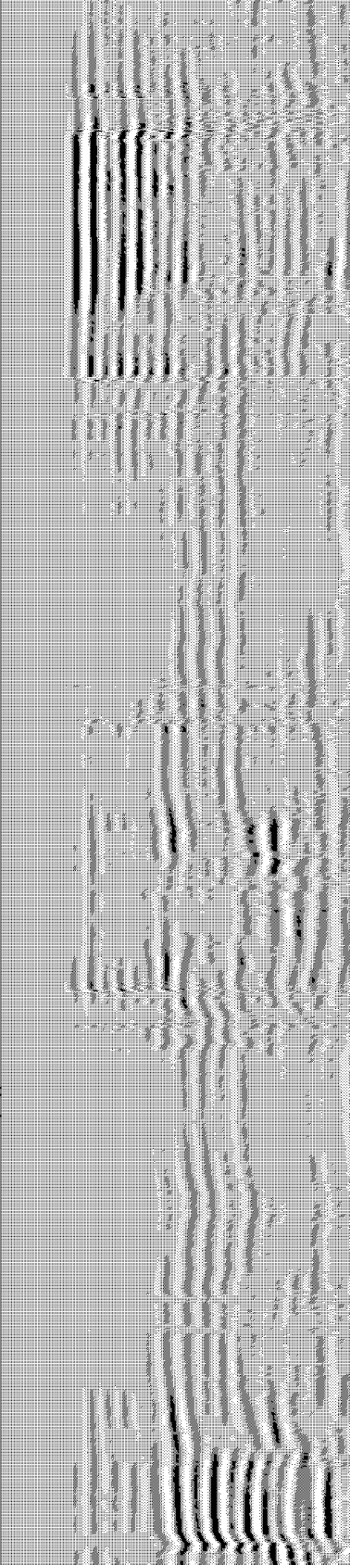
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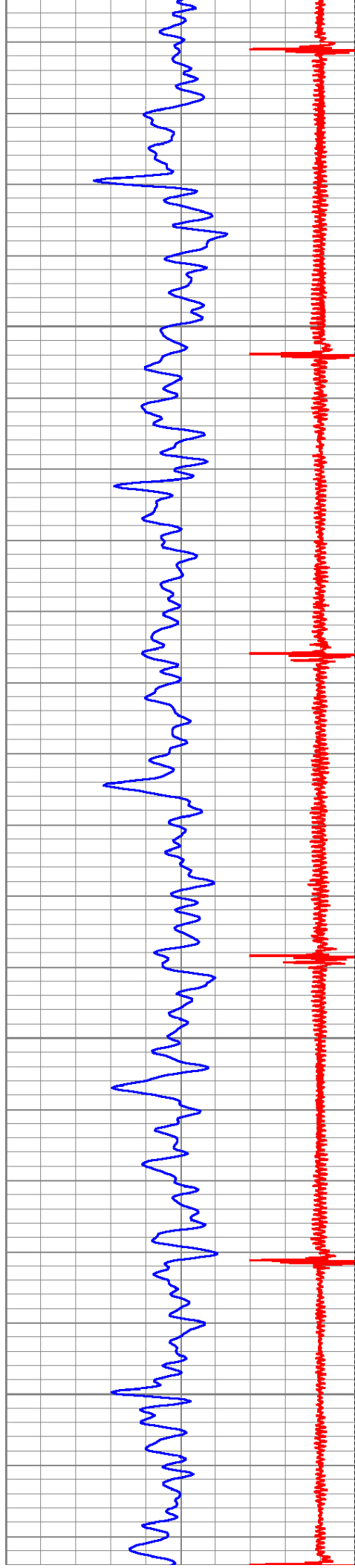
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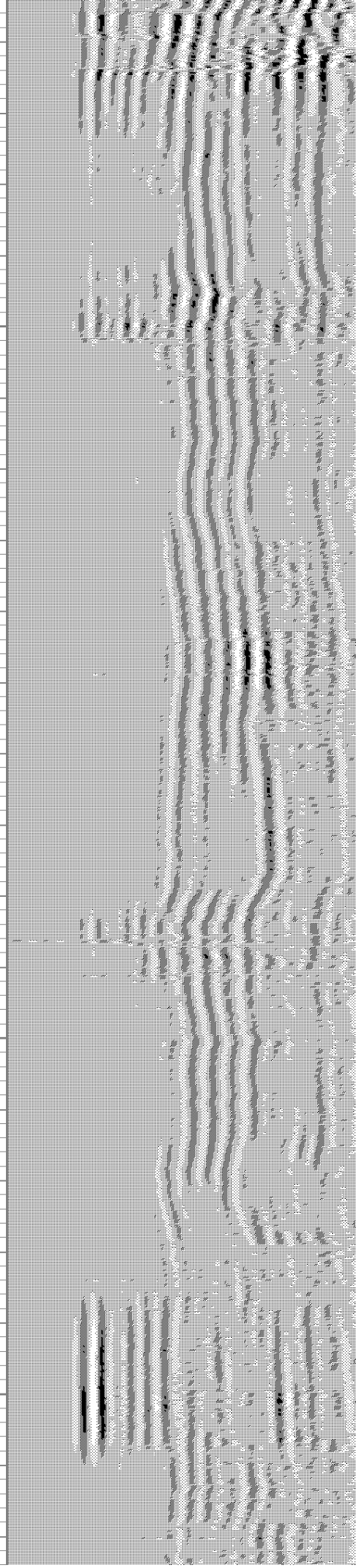
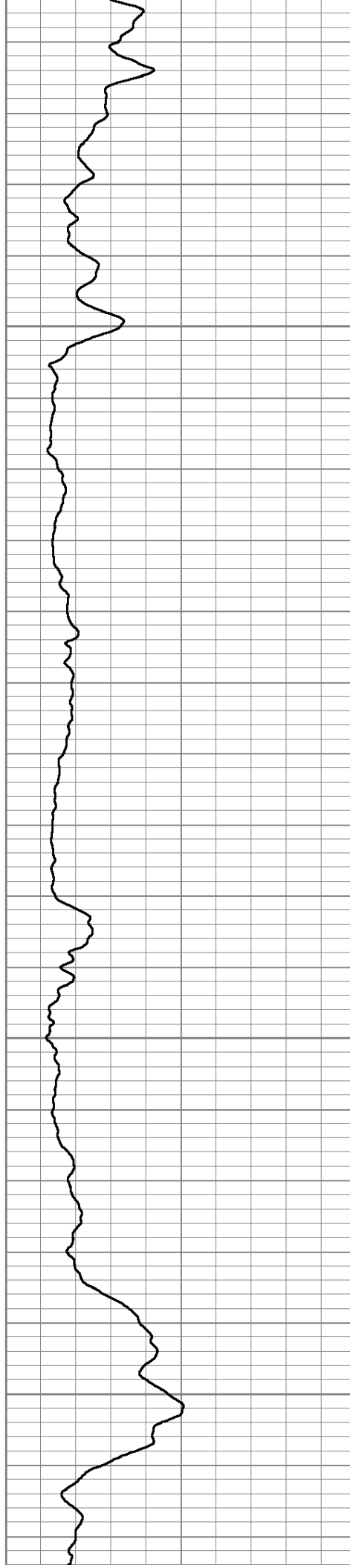


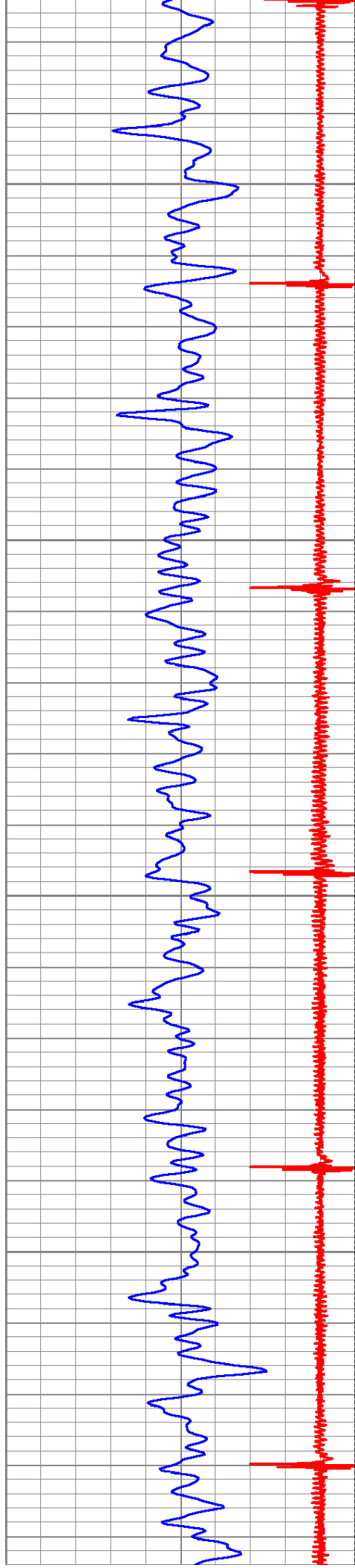
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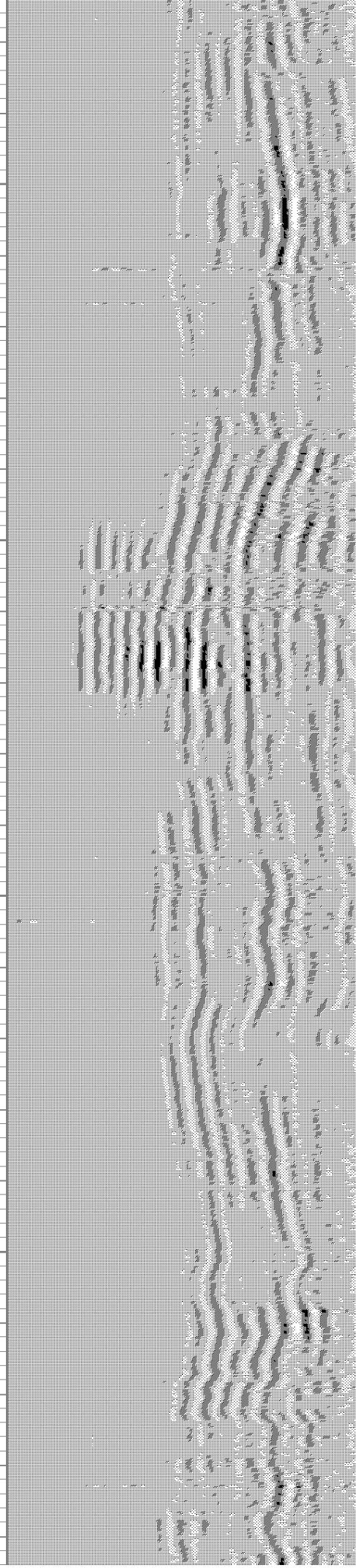
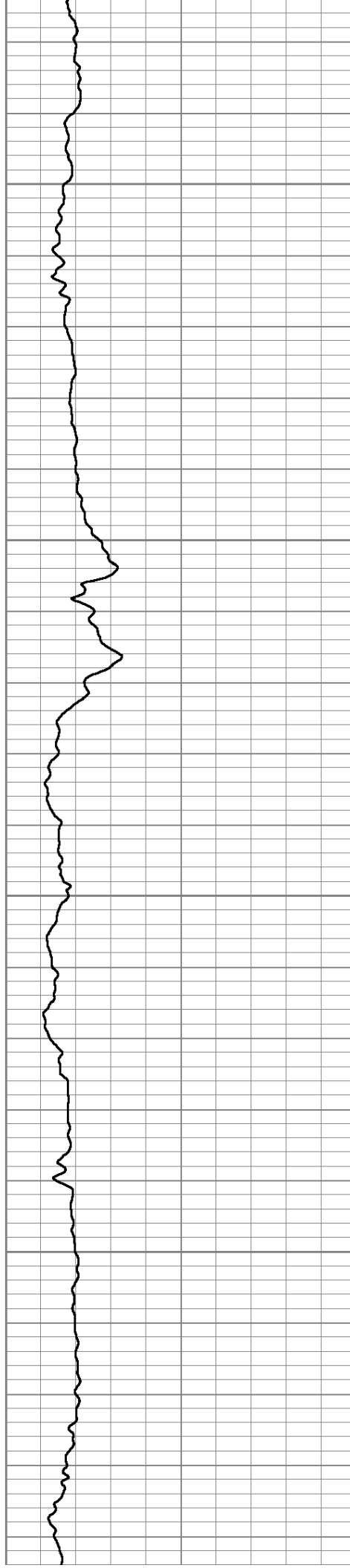


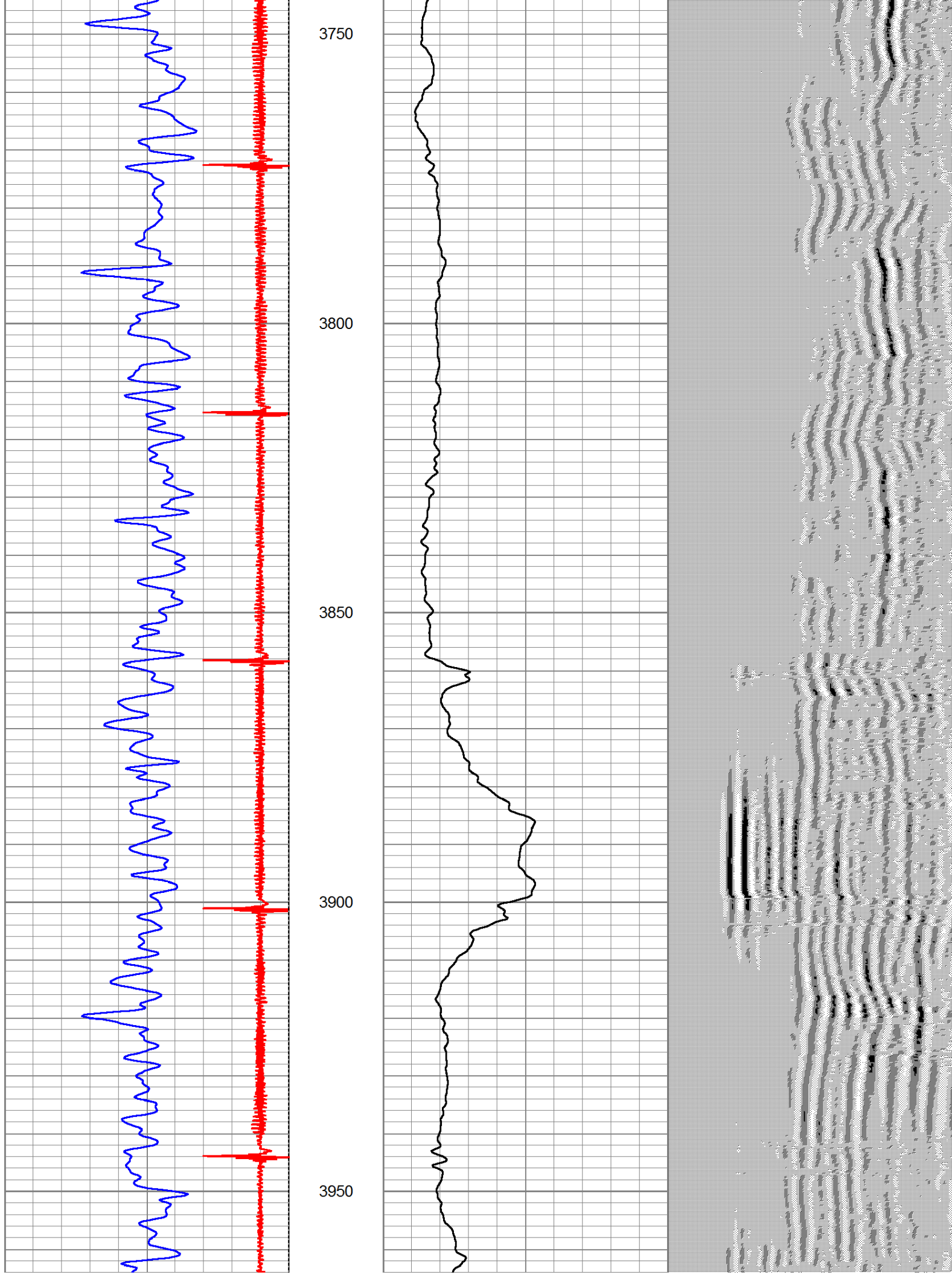
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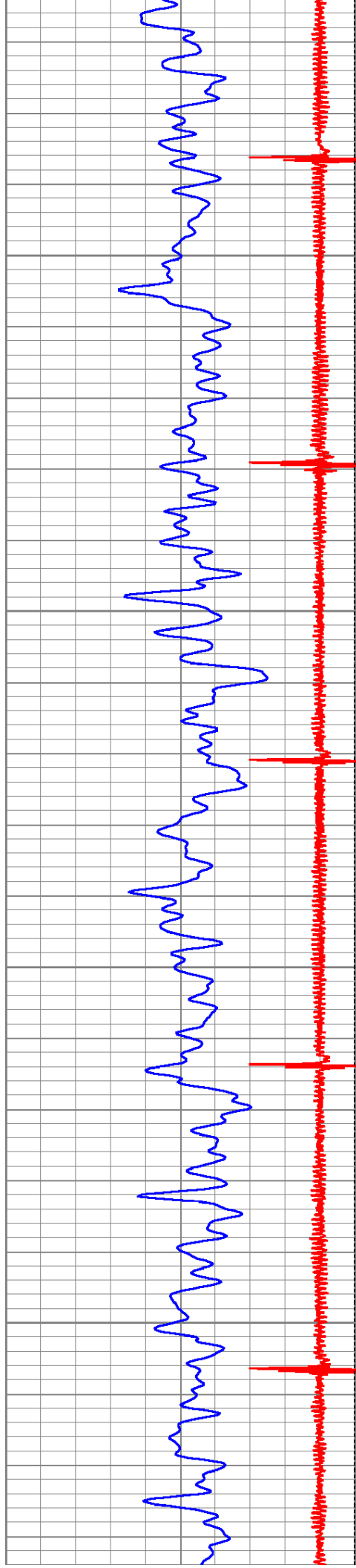
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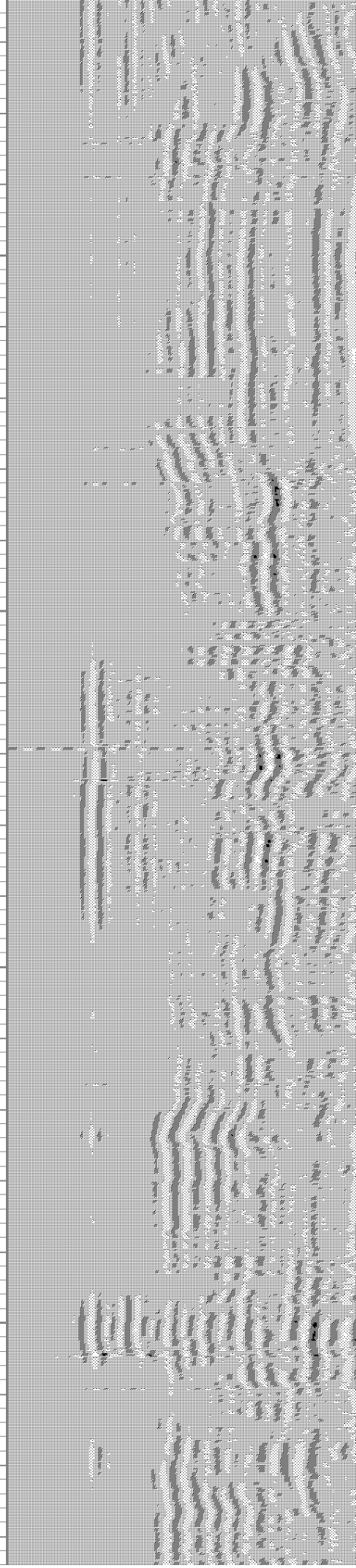
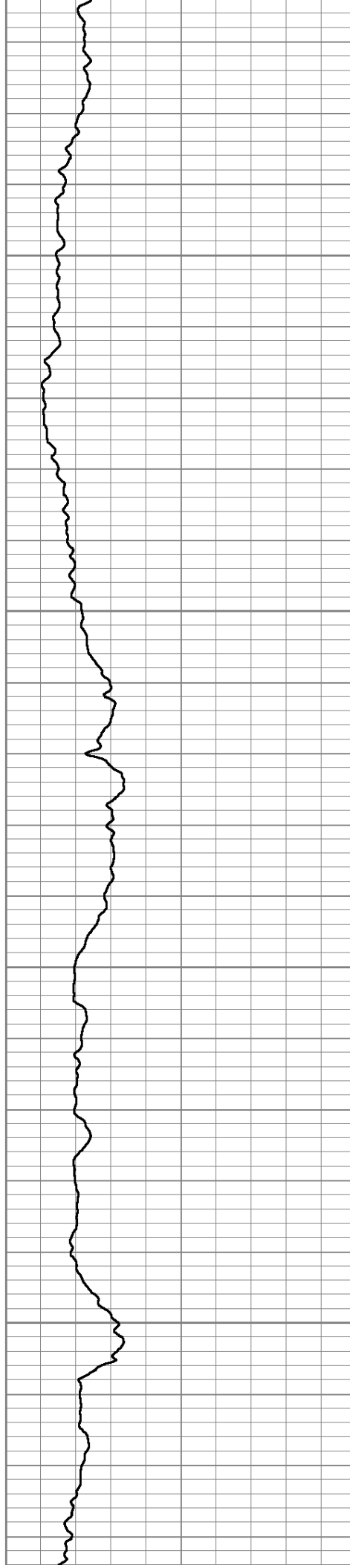


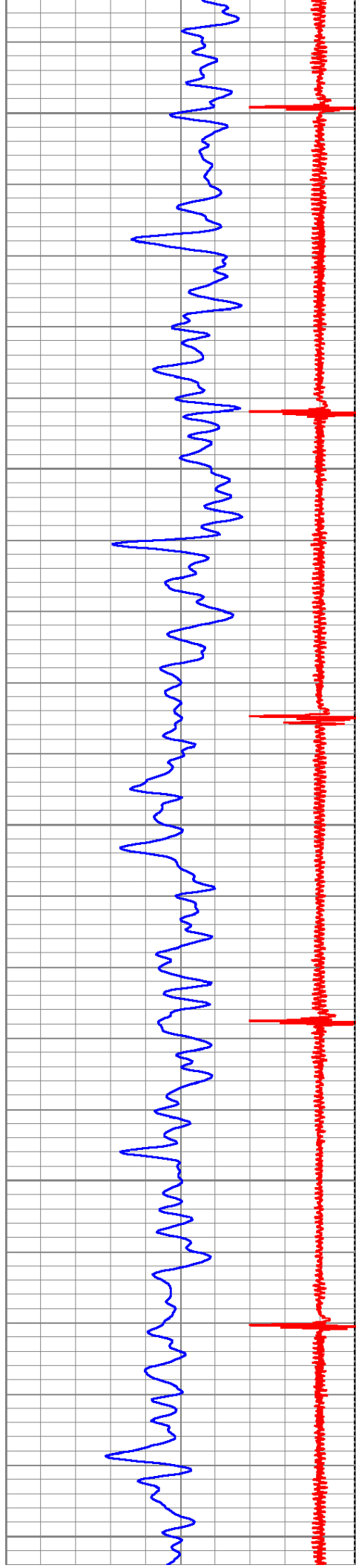
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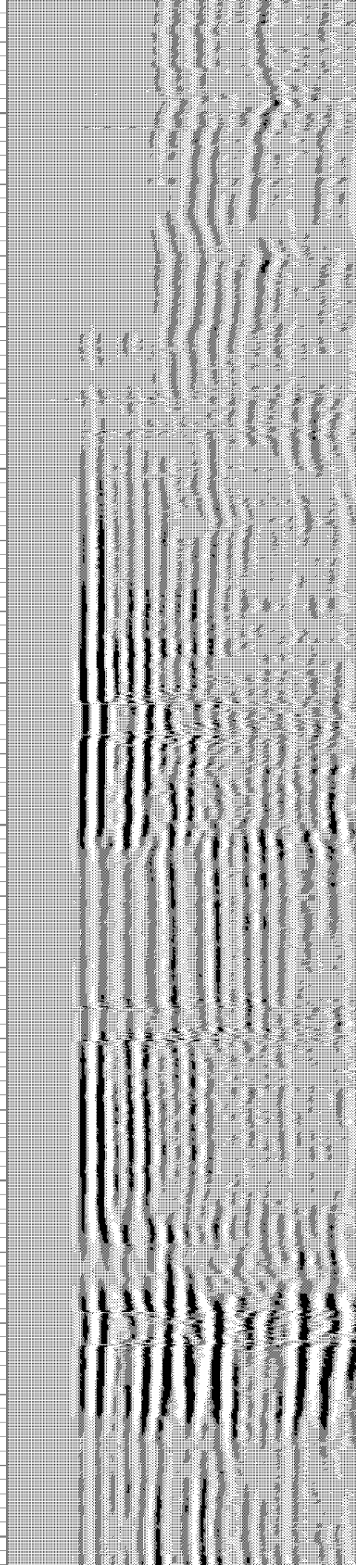
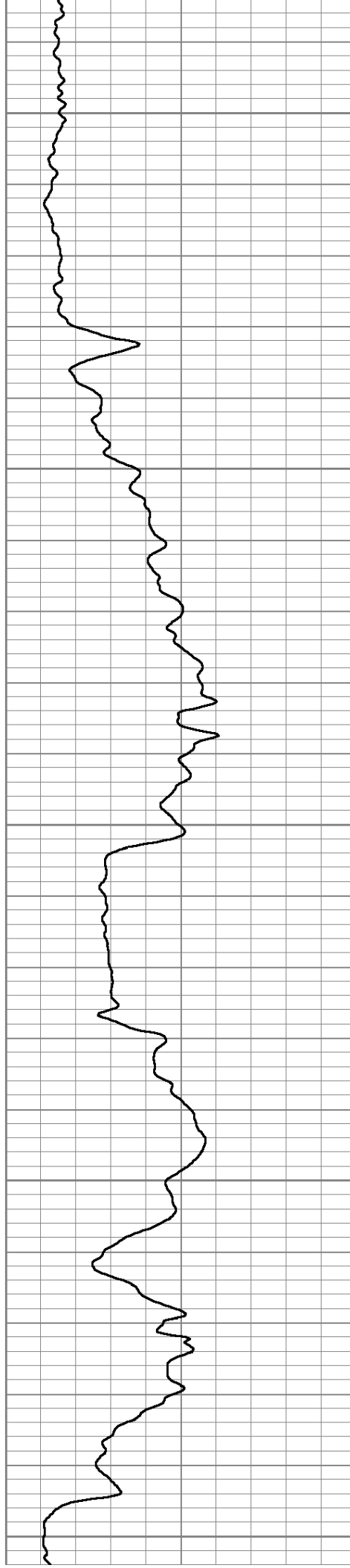
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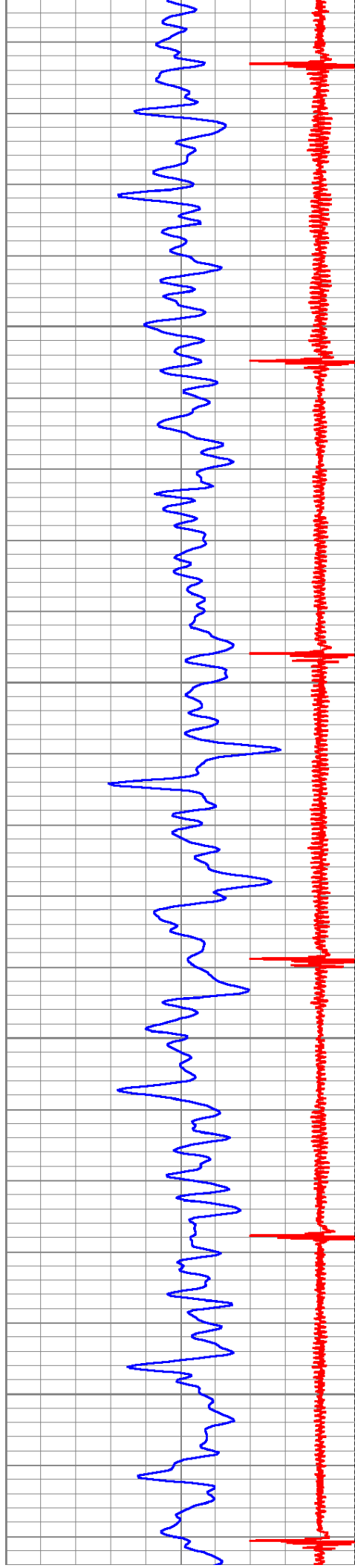
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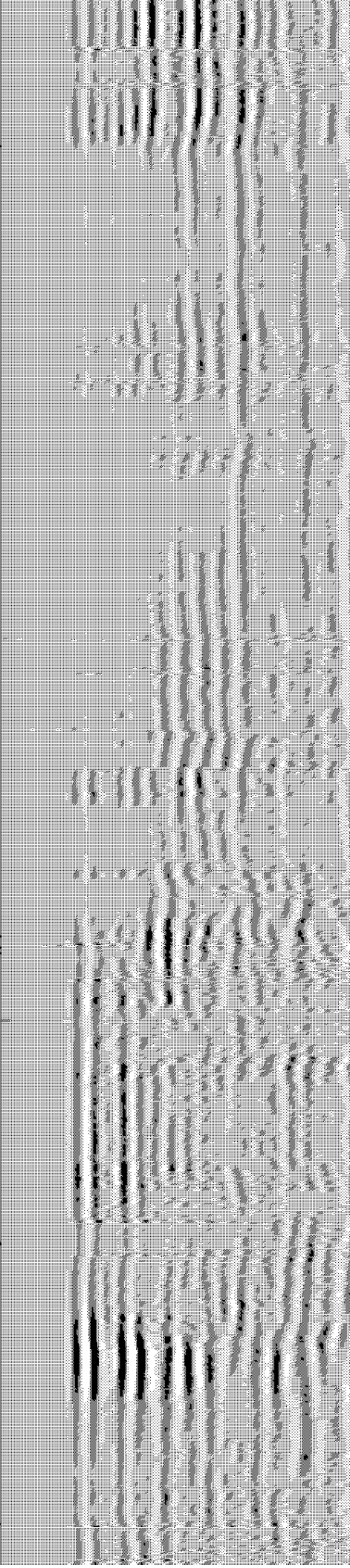
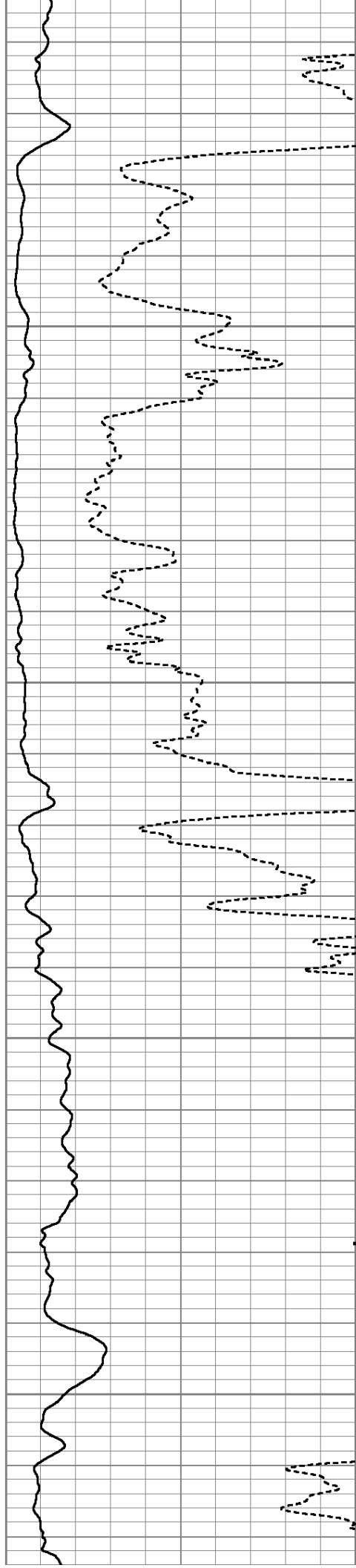


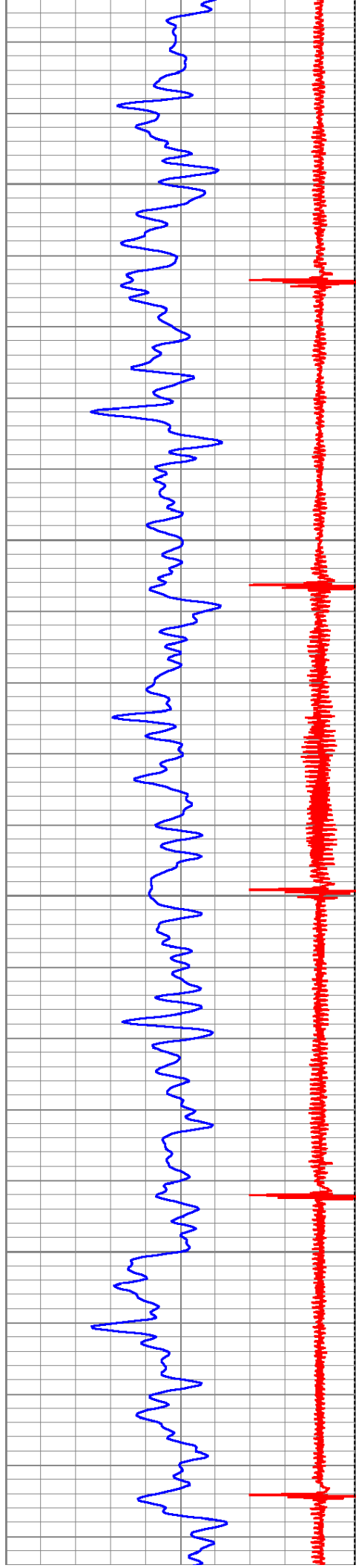
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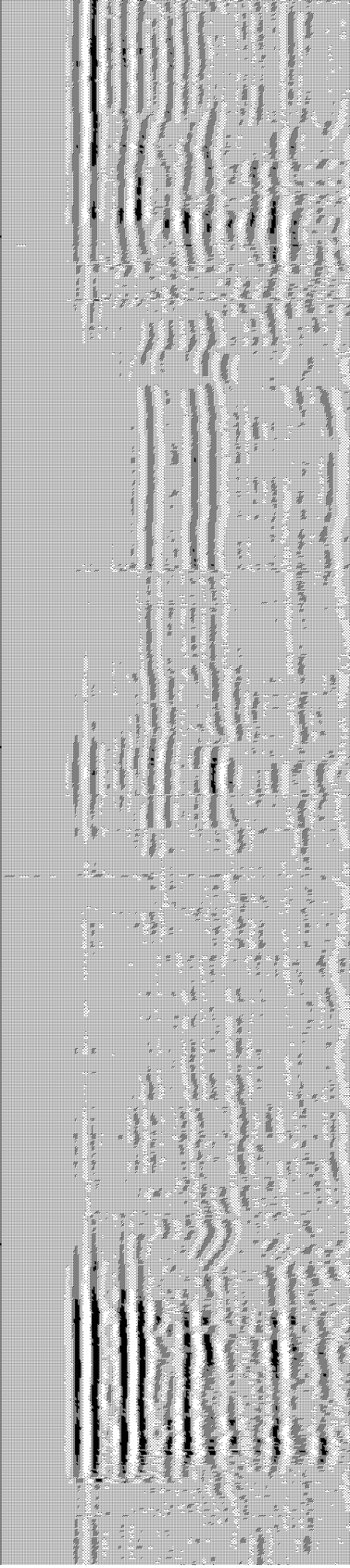
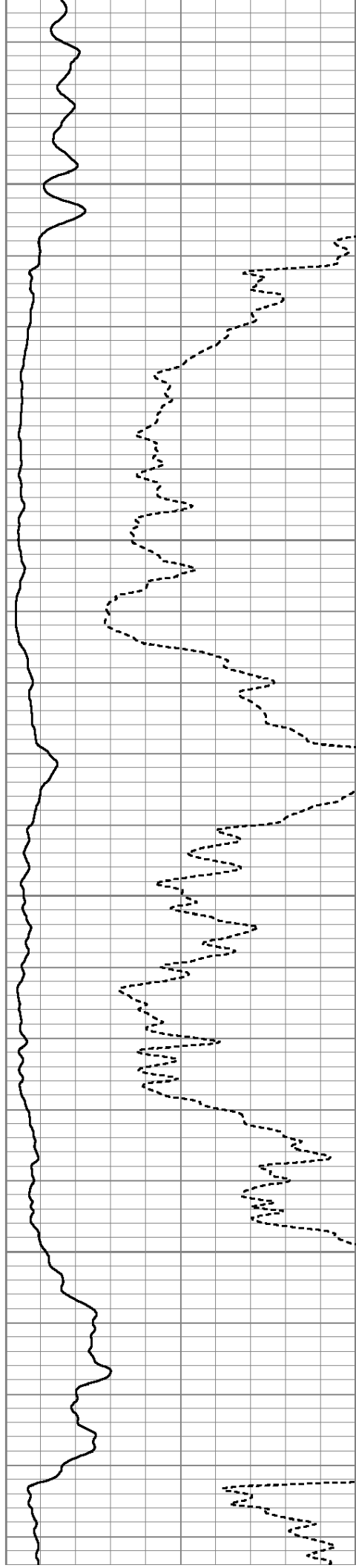


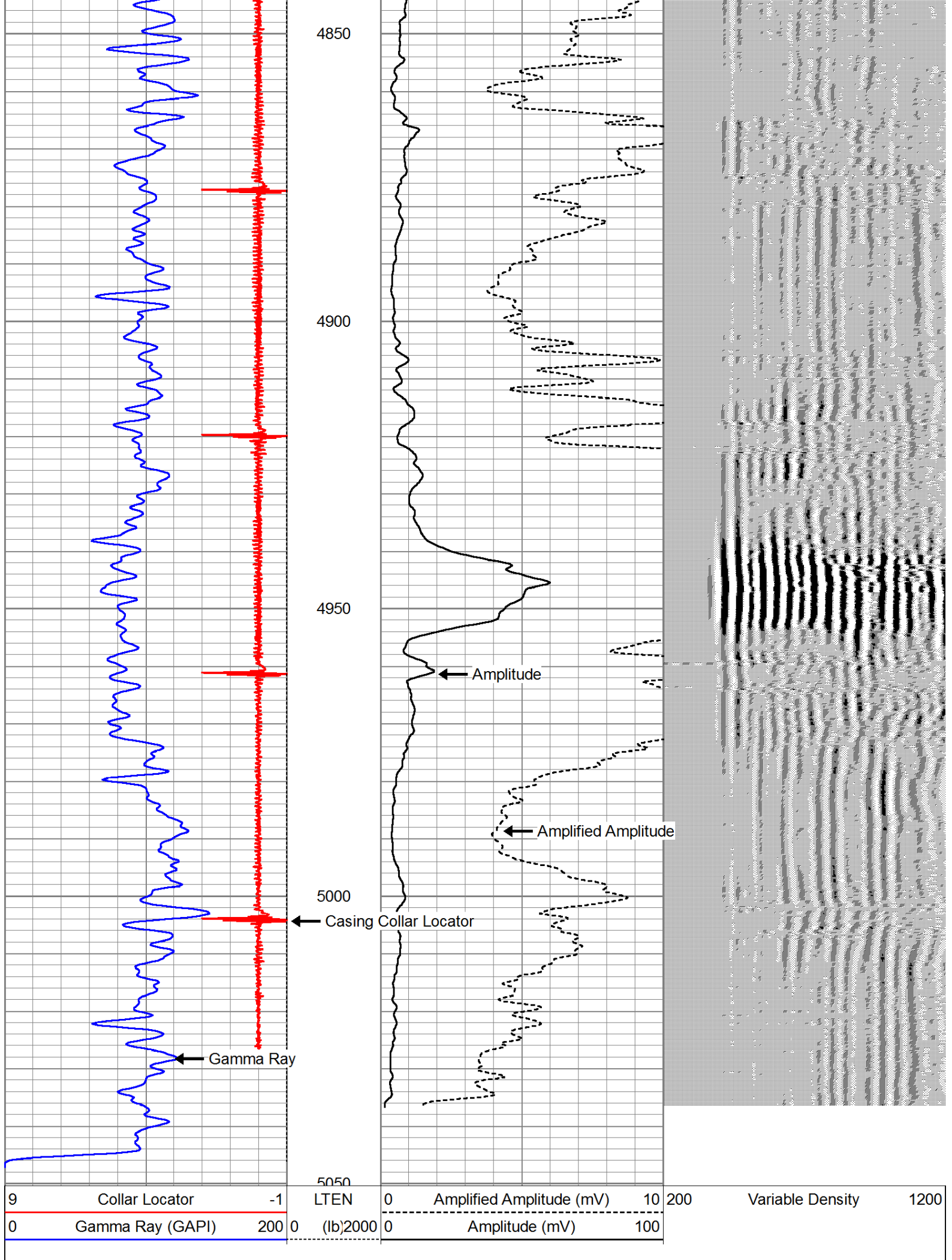
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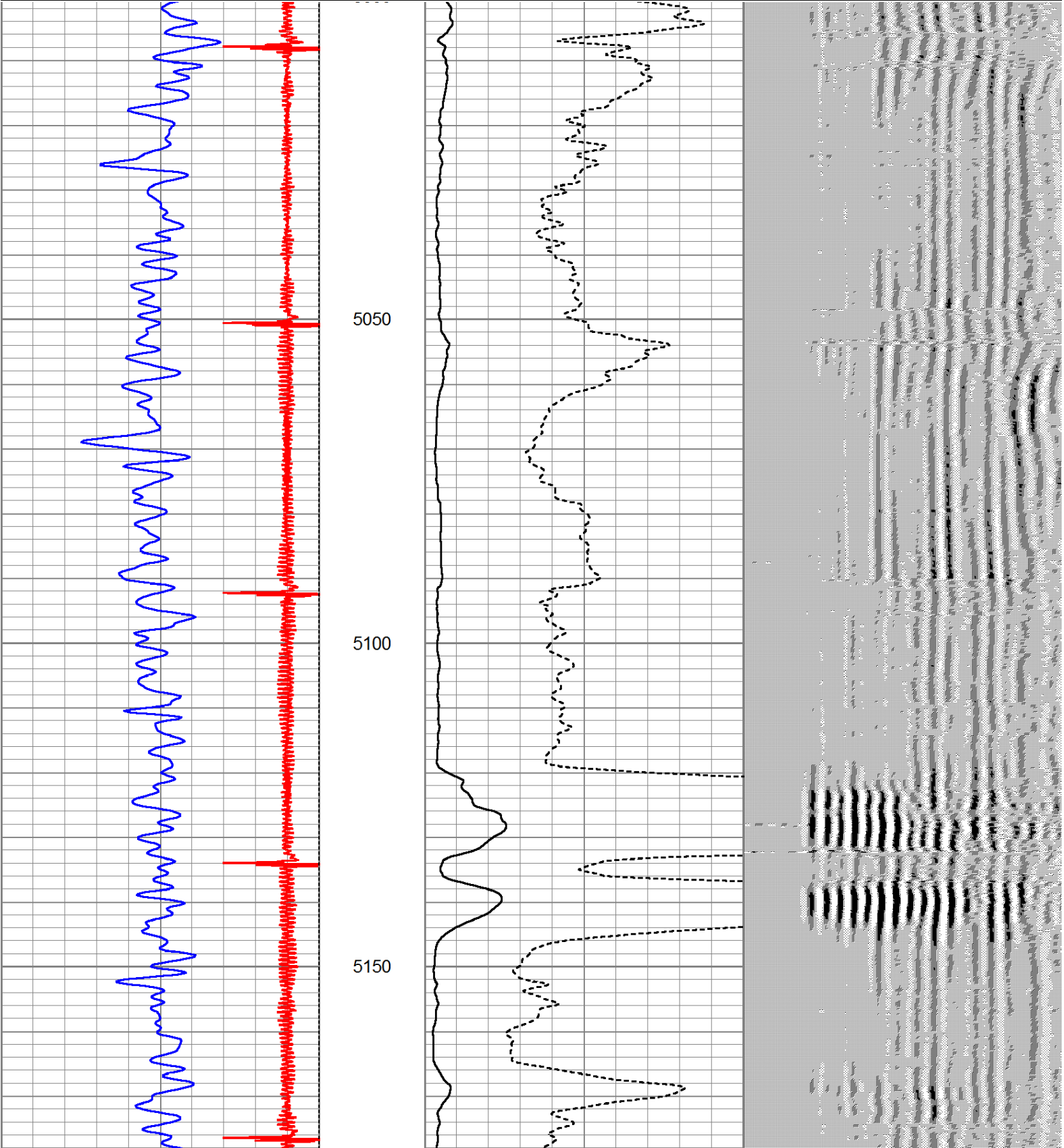
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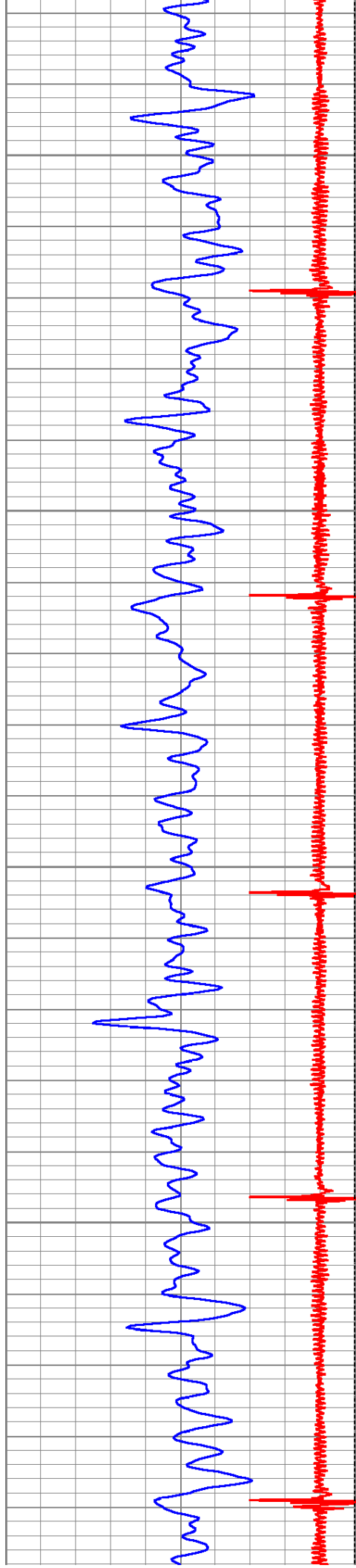




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Dataset Pathname: pass2
Presentation Format: cbl_dr
Dataset Creation: Thu Apr 04 11:42:48 2013 by Log SCH 120126
Charted by: Depth in Feet scaled 1:240

9	Collar Locator	-1	LTEN	0	Amplified Amplitude (mV)	10	200	Variable Density	1200
0	Gamma Ray (GAPI)	200	0 (lb)2000	0	Amplitude (mV)	100			



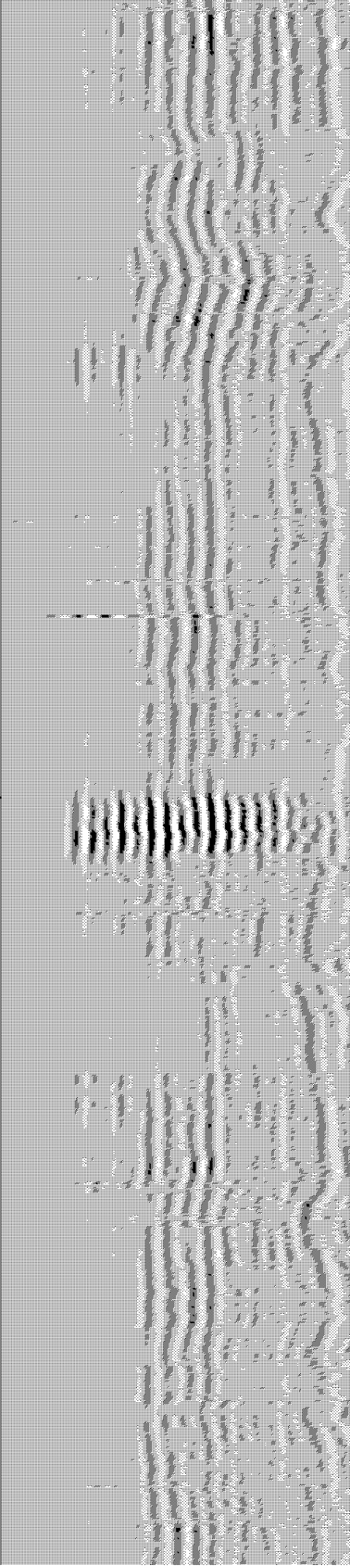
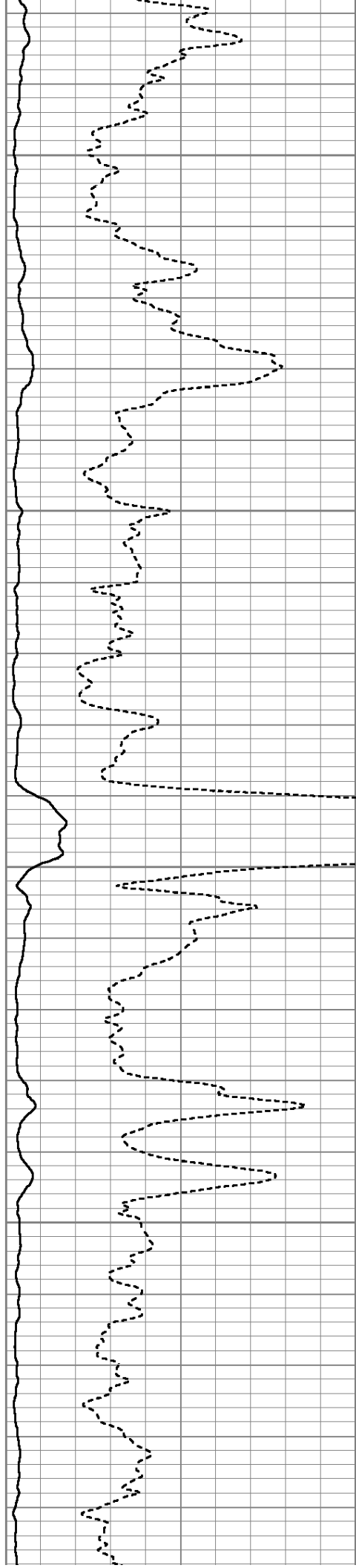


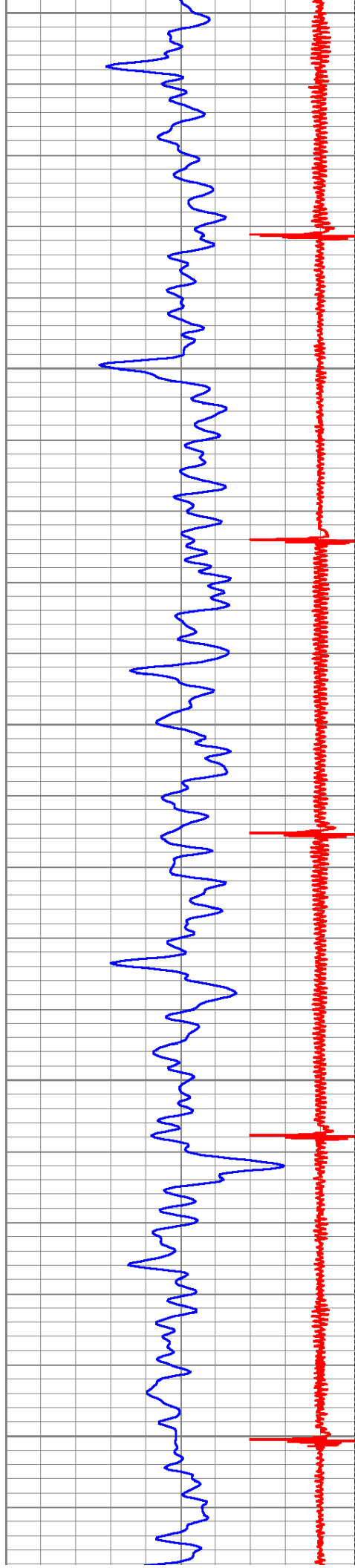
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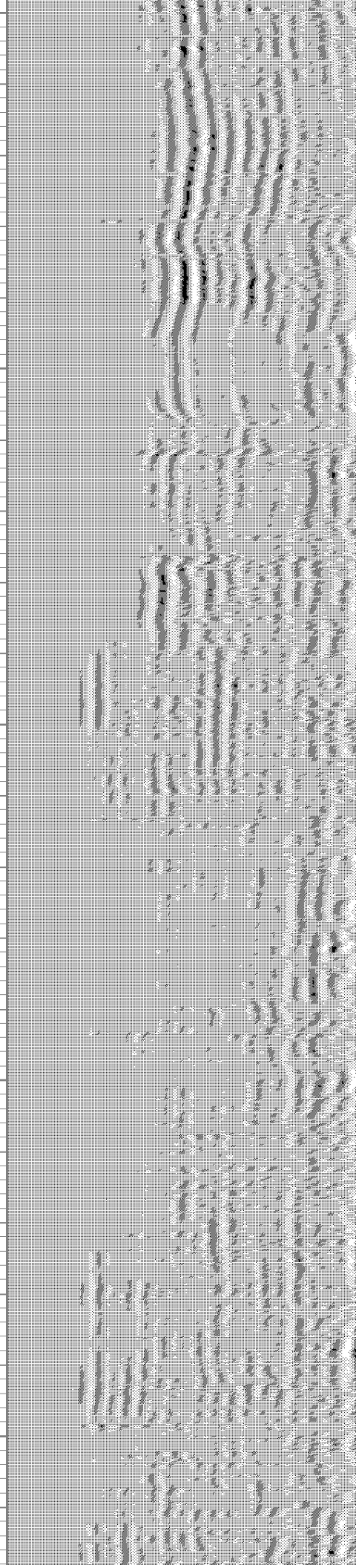
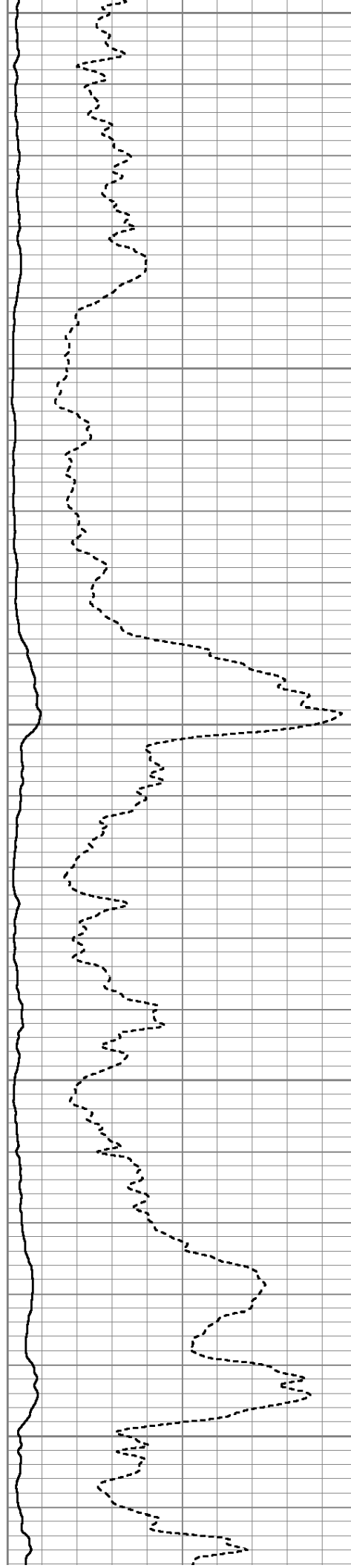
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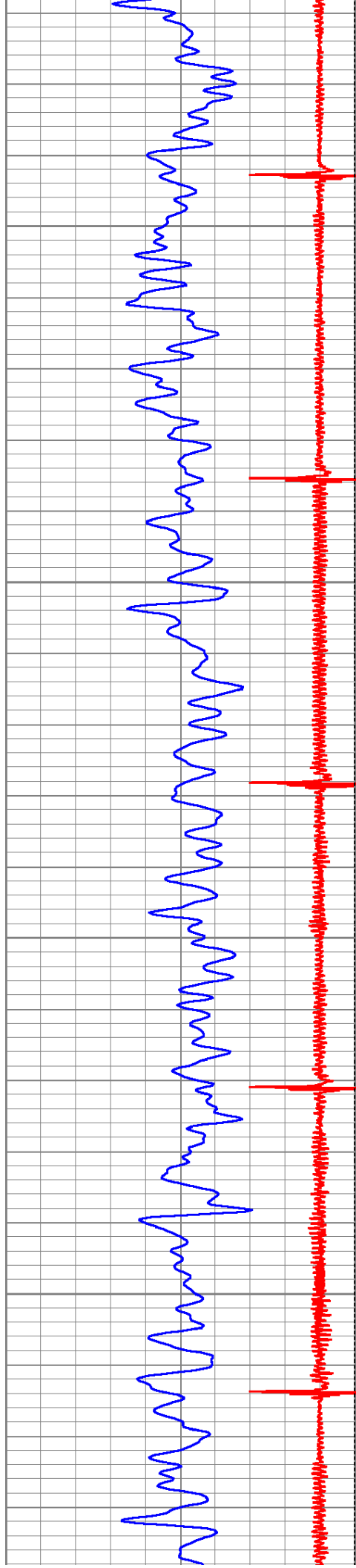
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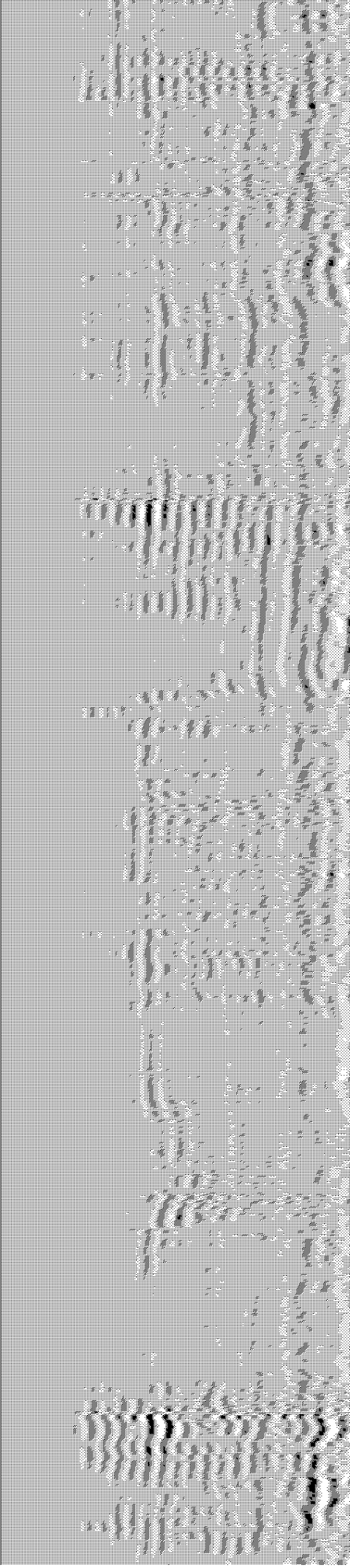
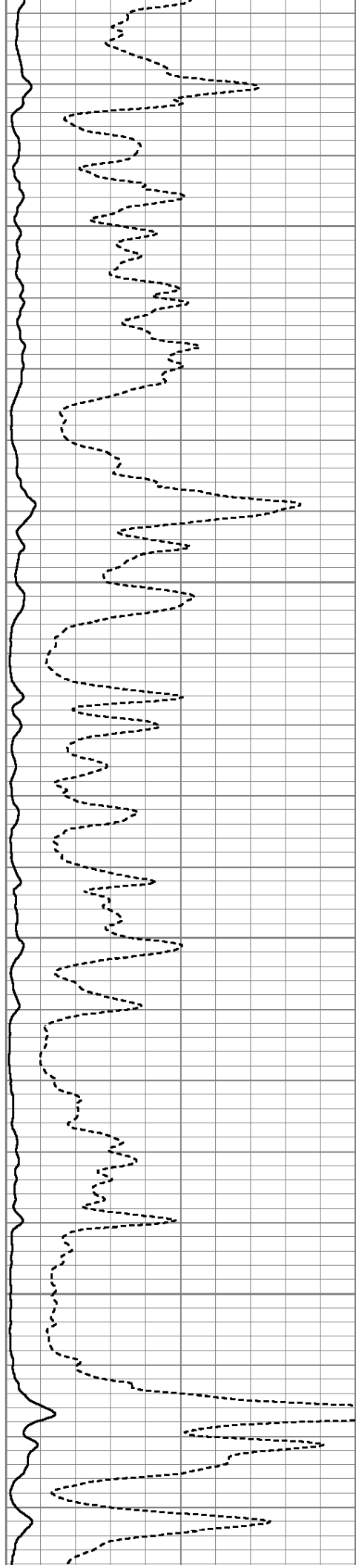


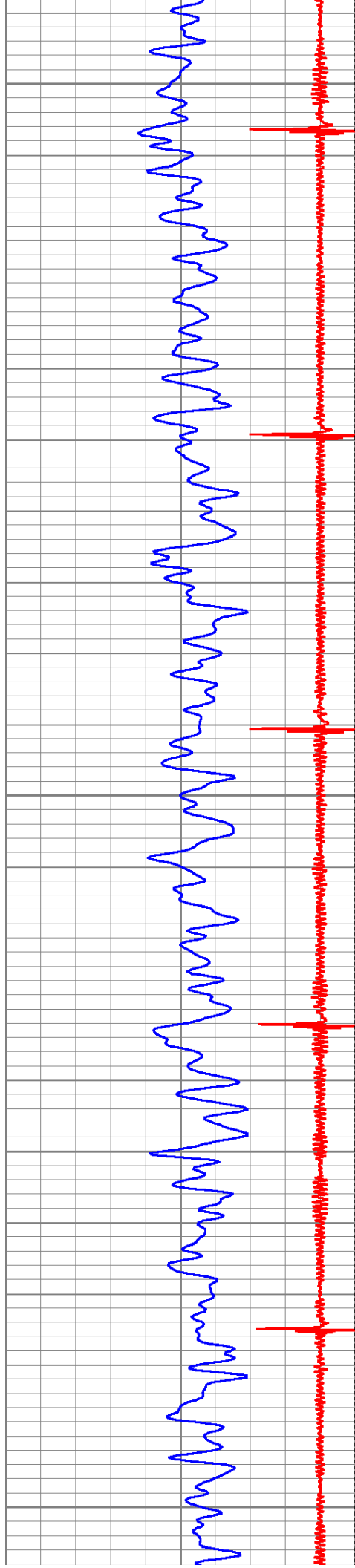
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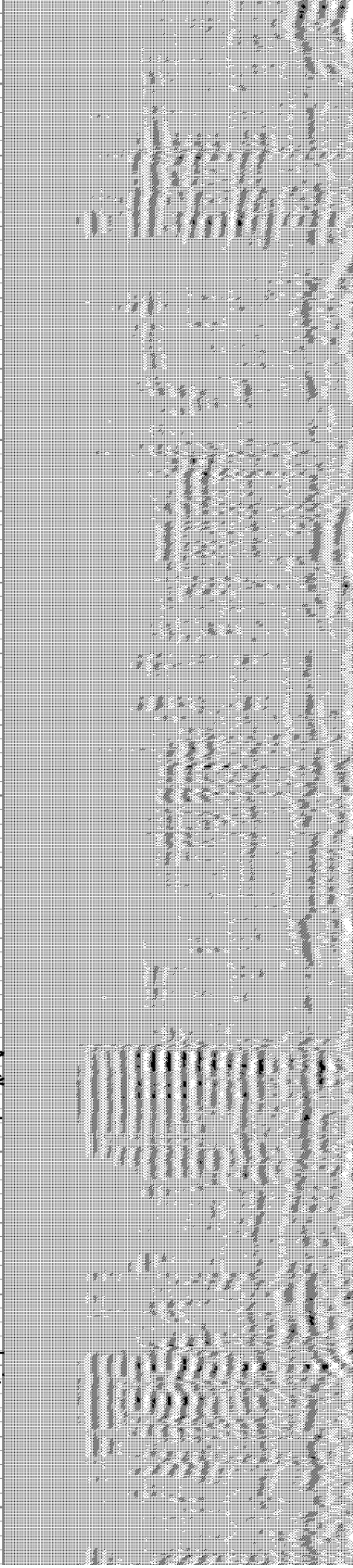
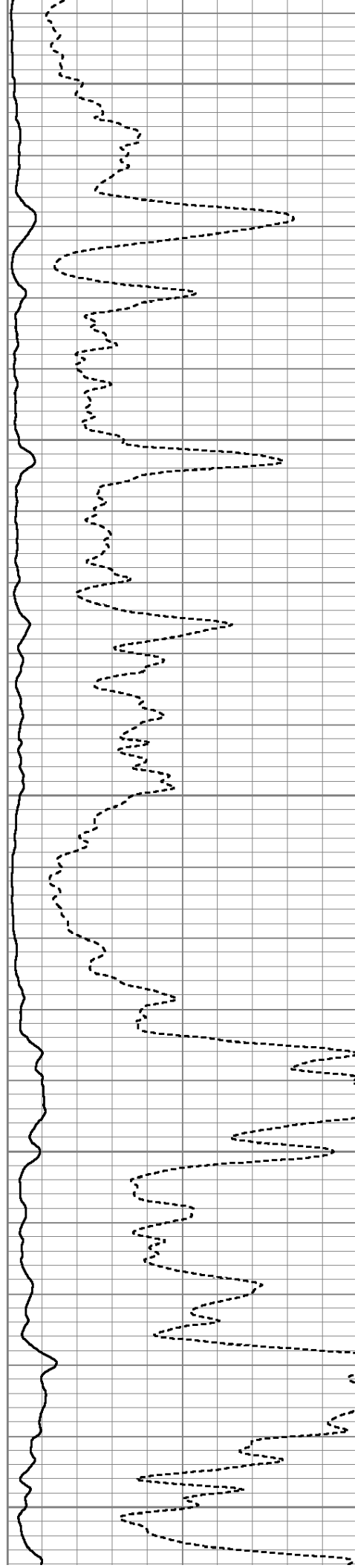
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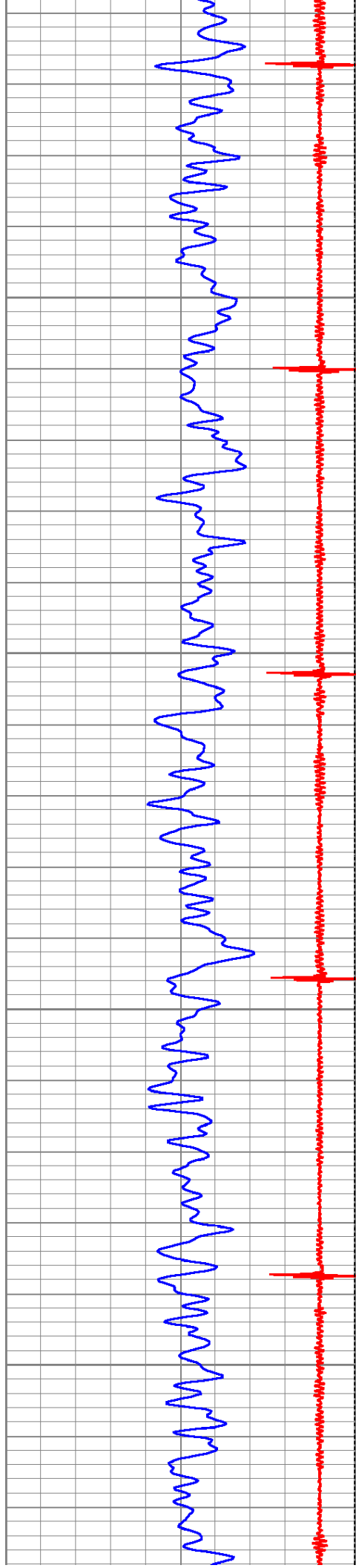
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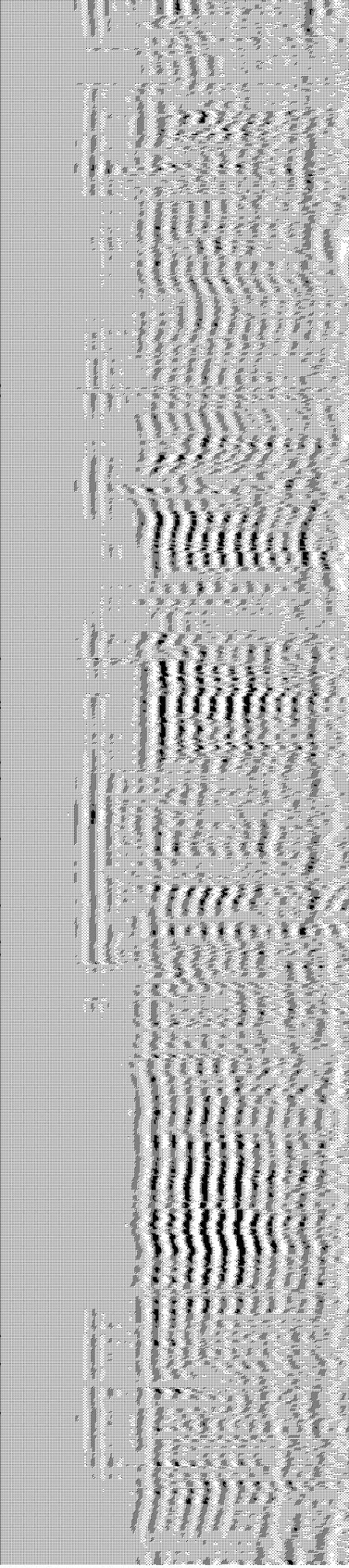
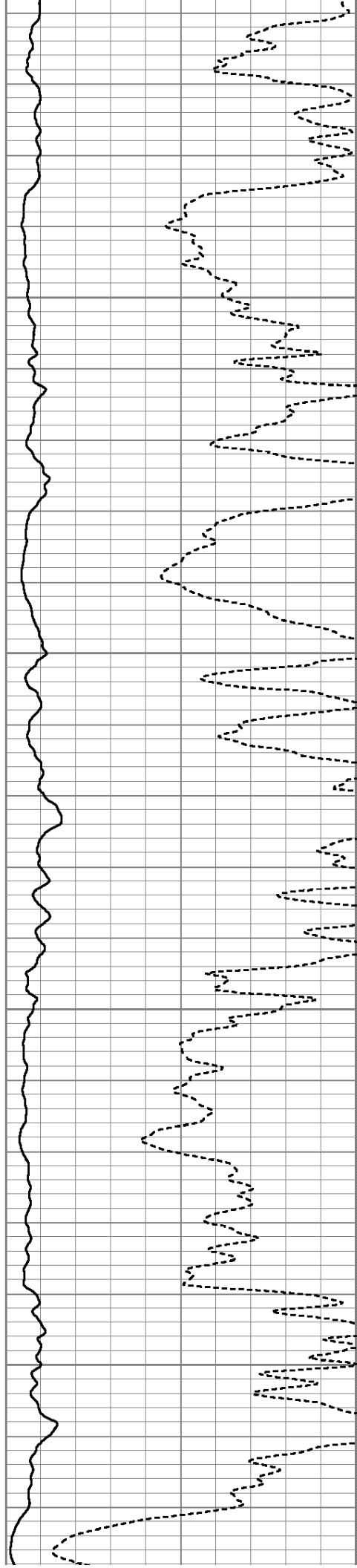


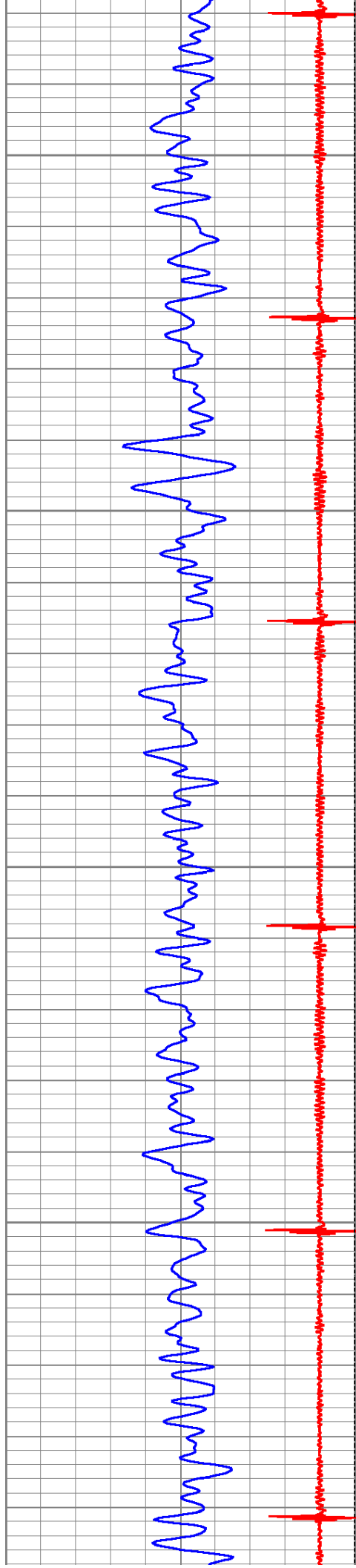
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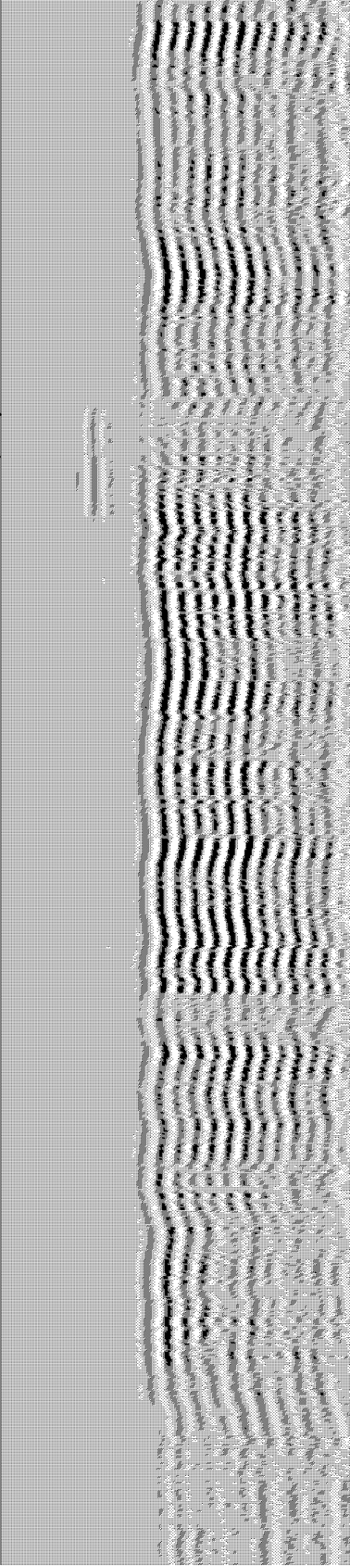
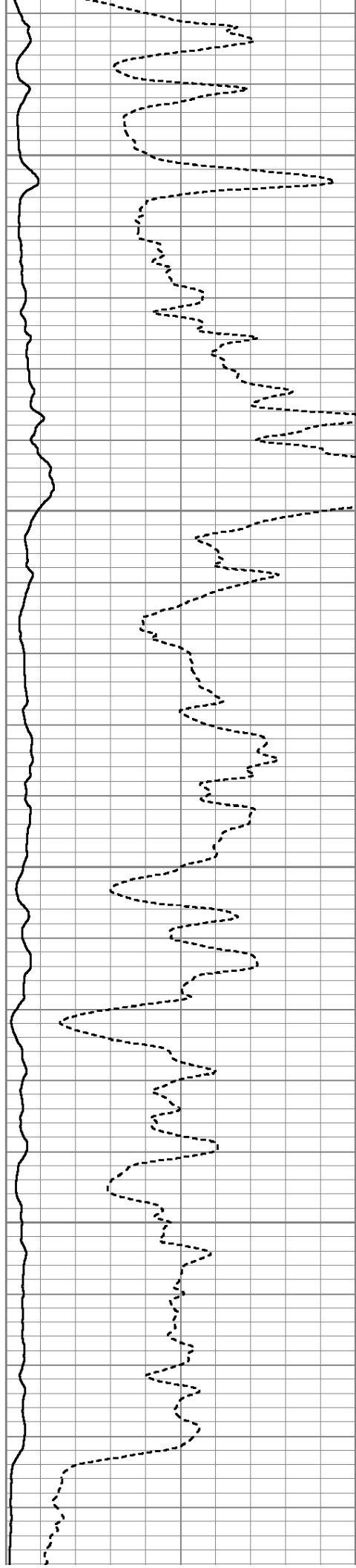


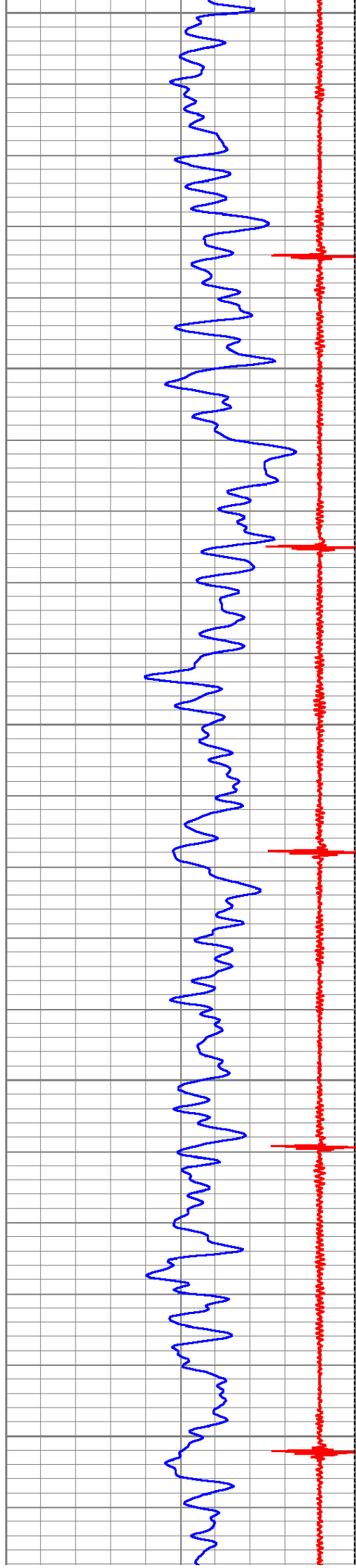
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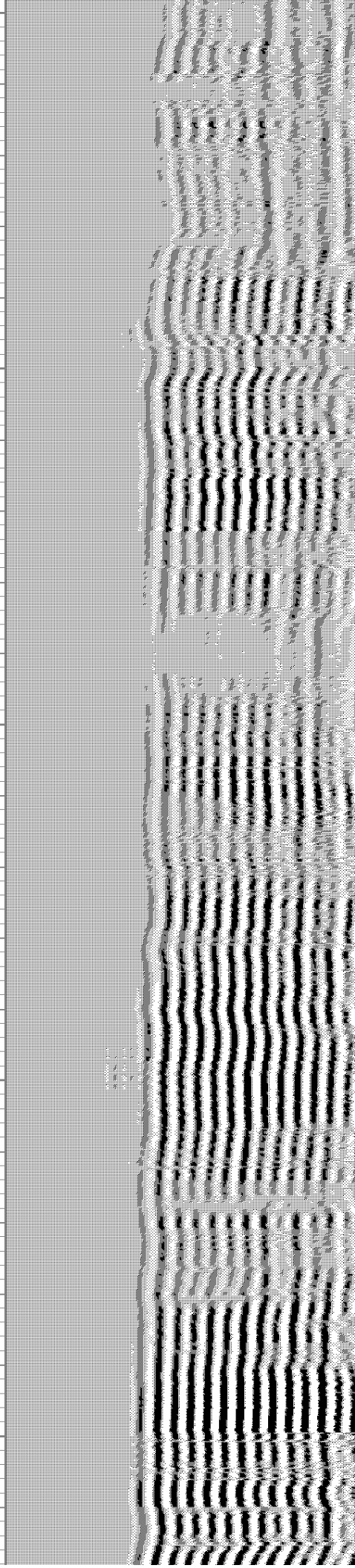
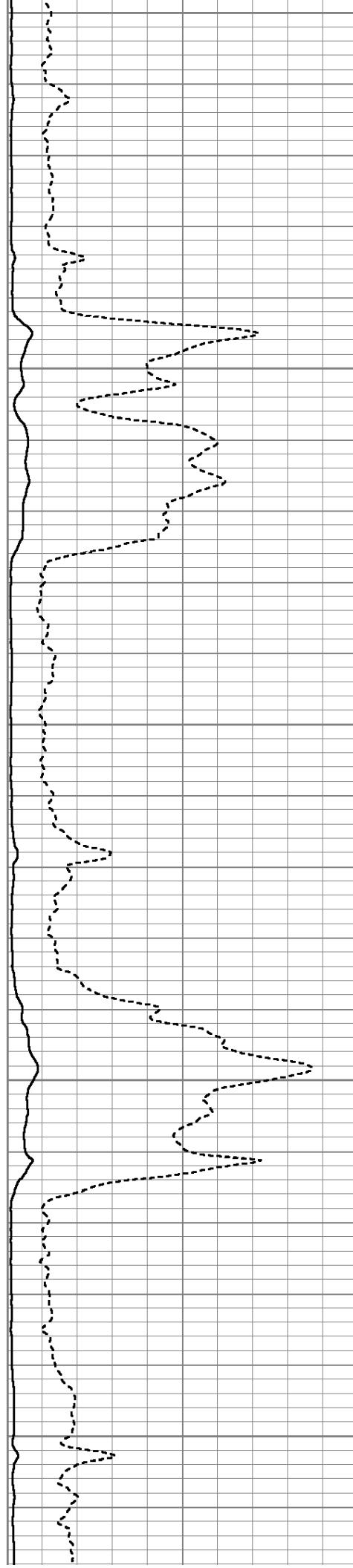
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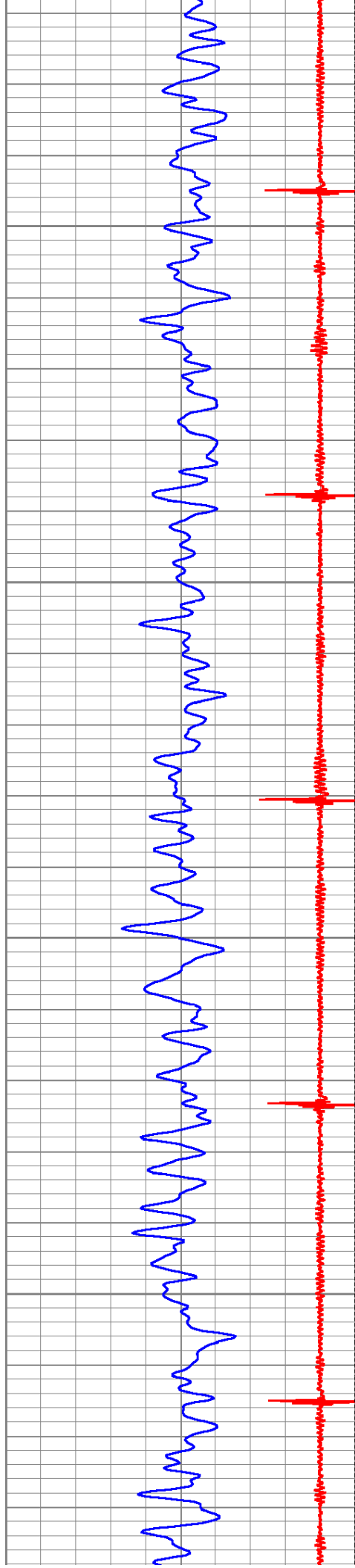
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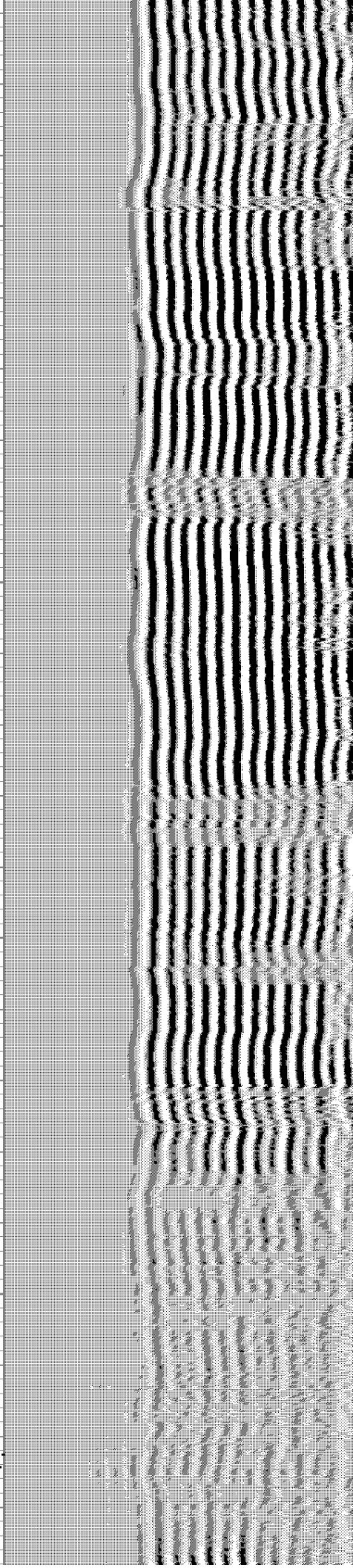
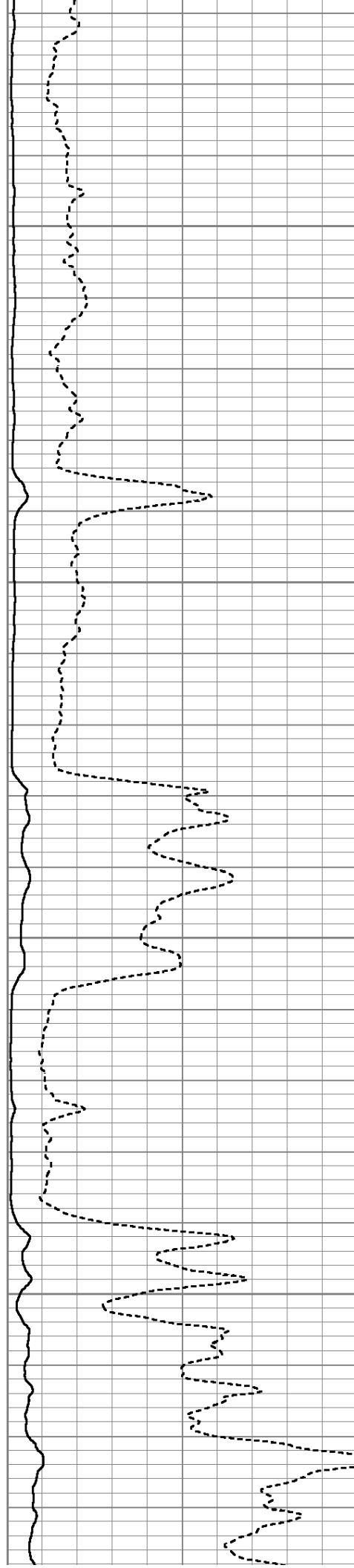


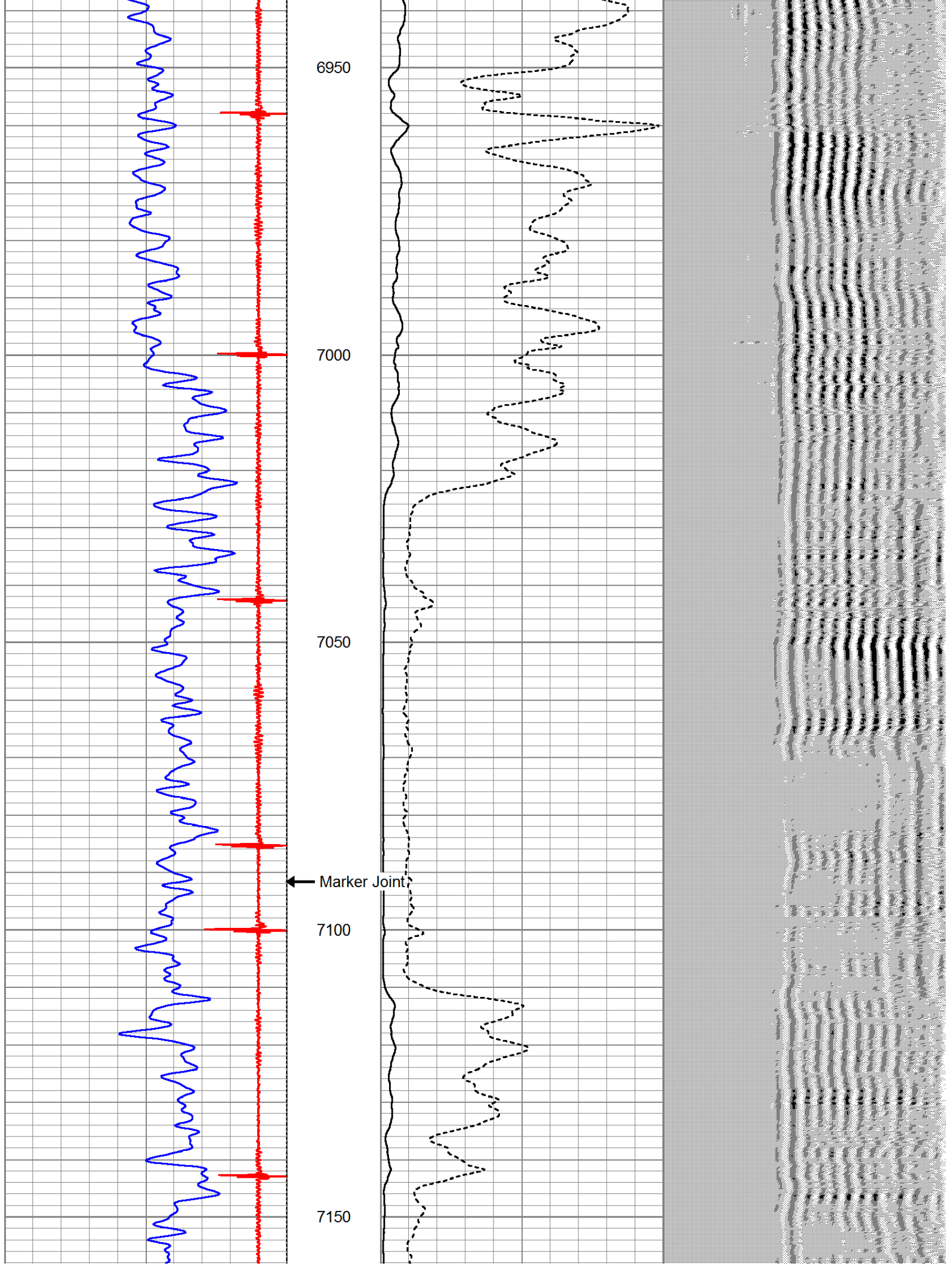
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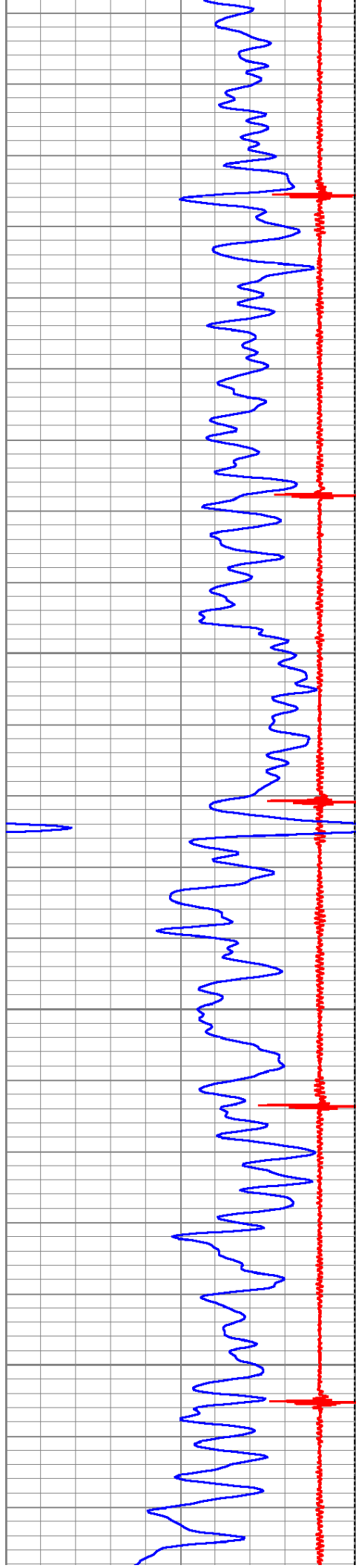
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