



CEMENT BOND LOG

Mesa Wireline

Company ENCANA OIL & GAS (USA)		Company ENCANA OIL & GAS (USA)	
Well COSTIGAN 6-8-20		Well COSTIGAN 6-8-20	
Field WATTENBERG		Field WATTENBERG	
County WELD		County WELD	
State COLORADO		State COLORADO	
Location: SHL: 945' FSL & 1056' FEL BHL: 50' FSL & 1300' FEL		API #: 05-123-31717-0000	
SEC. 20 TWP. 1N RGE. 68W		Other Services	
Permanent Datum GROUND LEVEL Elevation 5213'		NONE	
Log Measured From KELLY BUSHING = 13'		Elevation	
Drilling Measured From KELLY BUSHING		K.B. 5226' D.F. 5227' G.L. 5213'	

Date	6 JULY 2011						
Run Number	ONE						
Depth Driller	8674'						
Depth Logger	8632'						
Bottom Logged Interval	8632'						
Top Log Interval	4000'						
Open Hole Size	7.875"						
Type Fluid	WATER						
Density / Viscosity	~8.34 LBS/GAL						
Max. Recorded Temp.	270 DegF						
Estimated Cement Top	4800'						
Time Well Ready	N/A						
Time Logger on Bottom	N/A						
Equipment Number	10801W / PB2						
Location	AULT, CO						
Recorded By	B. MAYNARICH						
Witnessed By	TOM MAJORS						
Borehole Record			Tubing Record				
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	0	1216'	N/A			
TWO	7.875"	0	8674'				
Casing Record	Size	Wgt/Ft	Top	Bottom			
Surface String	8.625"	24#	0	1216'			
Prot. String							
Production String	4.5"	11.6#	SURFACE	TD			
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

LOGS CORRELATED TO PSI HIGH RESOLUTION INDUCTION LOG DATED 14 JUNE 2011
SHORT JOINT @ 7591' - 7614'

WE APPRECIATE YOUR BUSINESS, MESA WIRELINE LLC, GRAND JUNCTION CO. (970) 257-0458



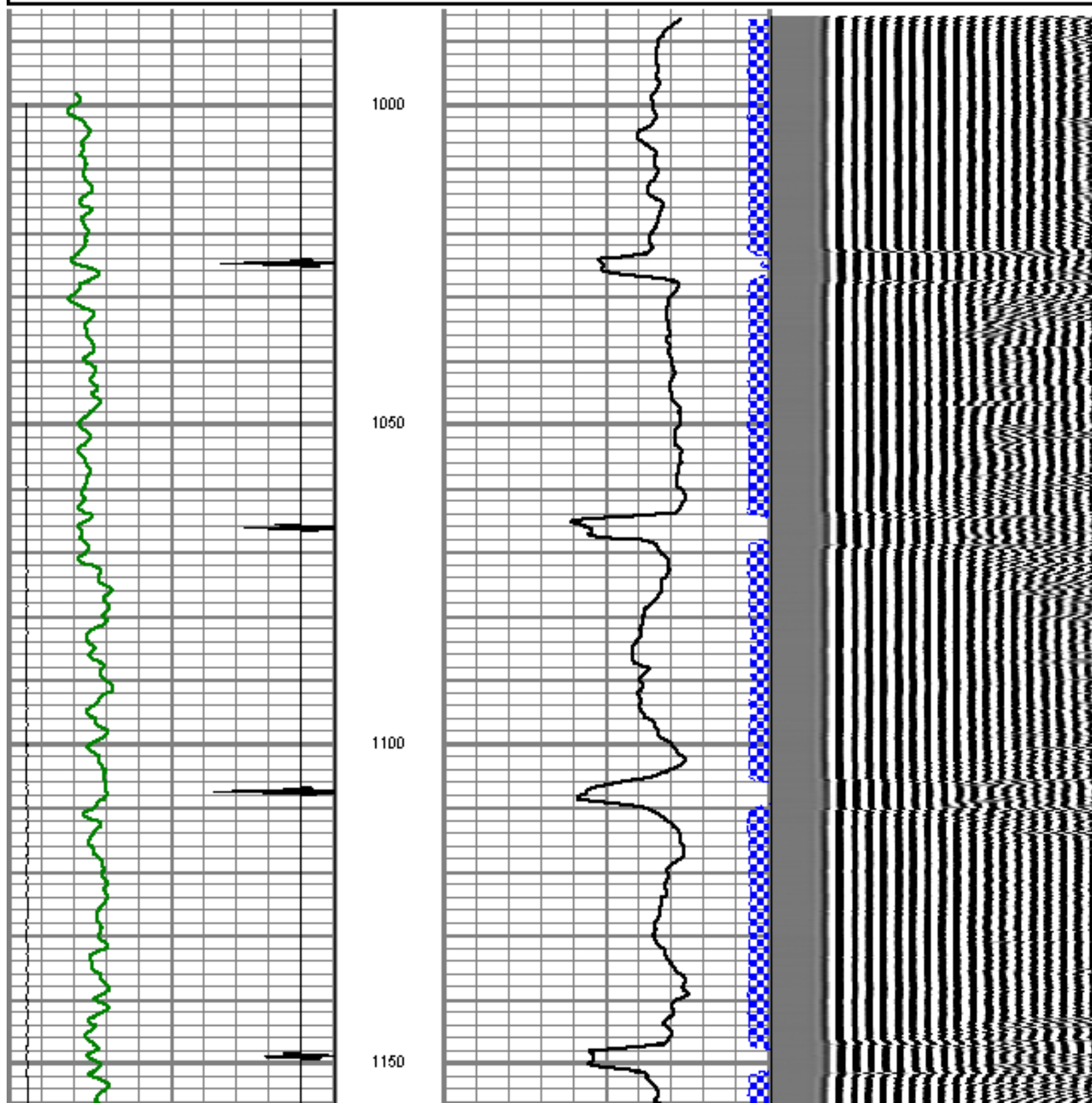
SURFACE CASING PASS

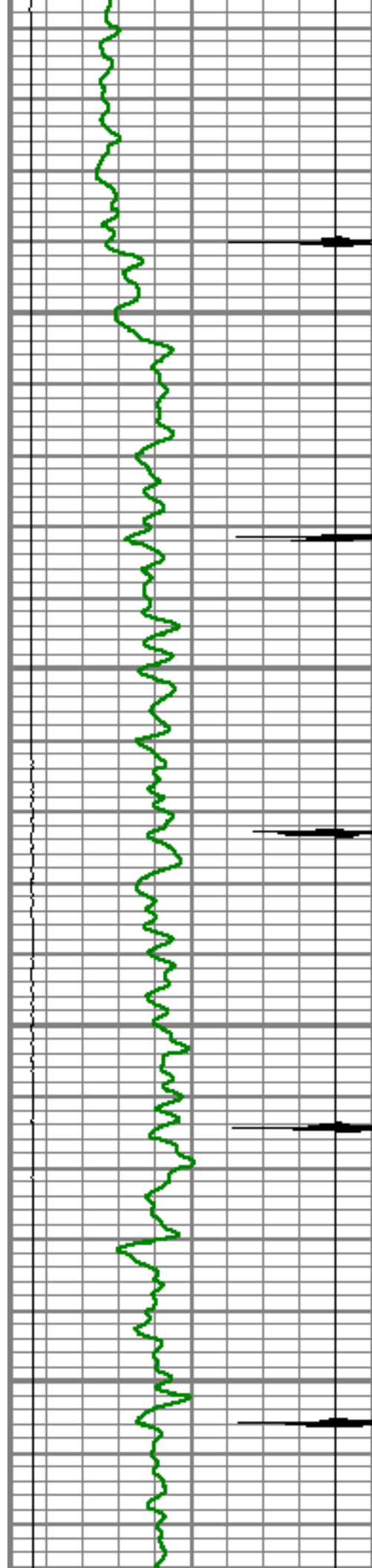
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Dataset Pathname: pass19
Presentation Format: dcbl_prb
Dataset Creation: Wed Jul 06 16:42:29 2011 by Log Std Casedhole 09061
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	300
0	LTEN (lb)	5000
9	CCL	-1

0	Amplified Amplitude (mV)	20
0	Amplitude (mV)	100
0	TT3 (usec)	280

200 Variable Density 1200



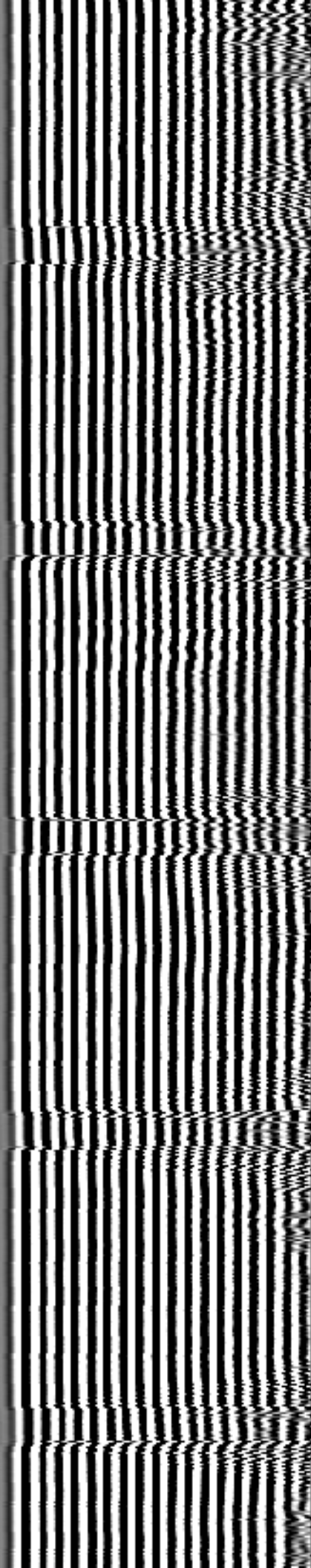
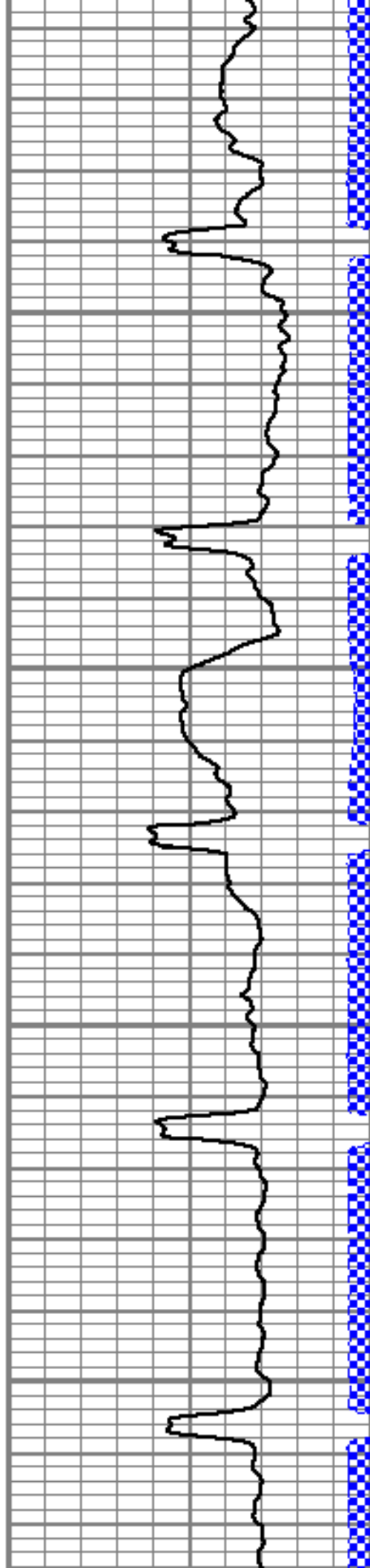


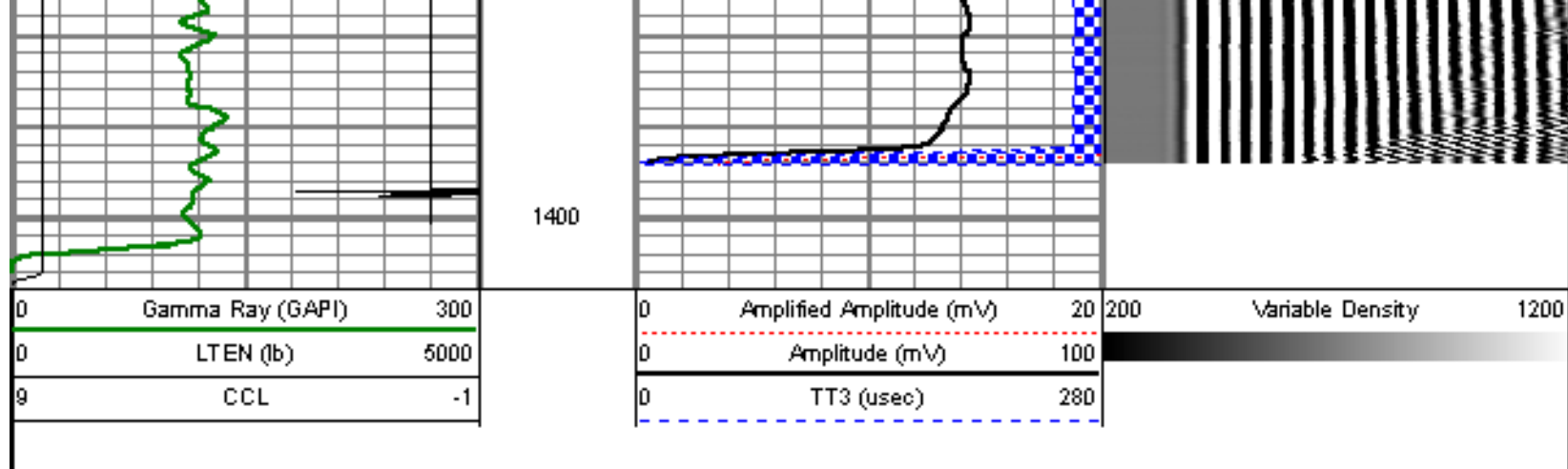
1200

1250

1300

1350

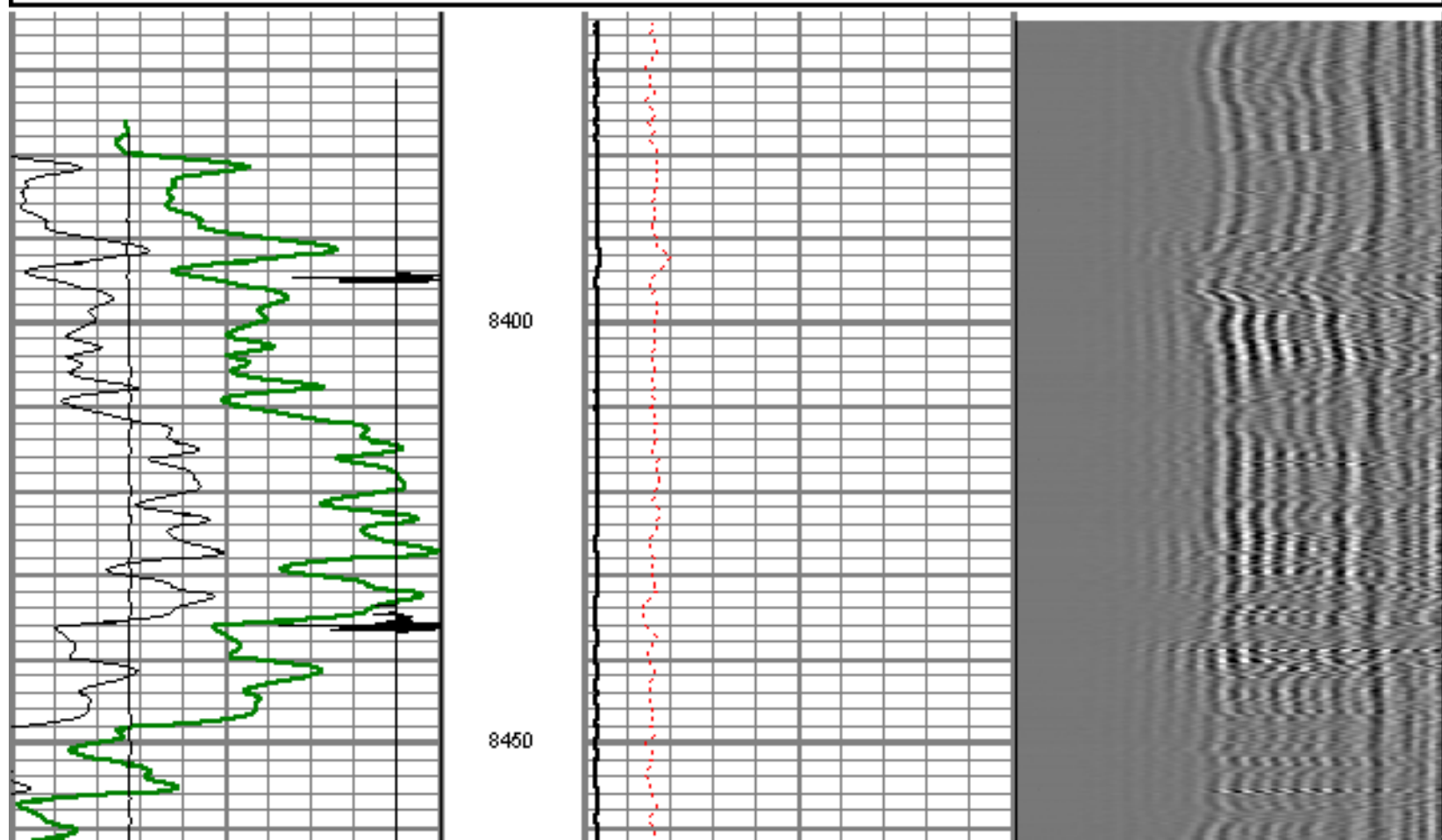
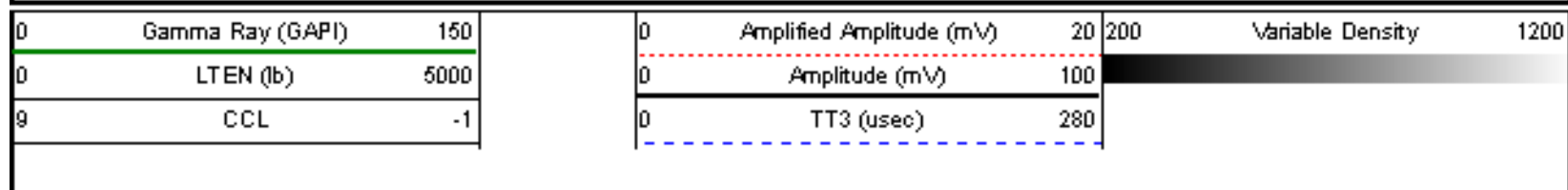


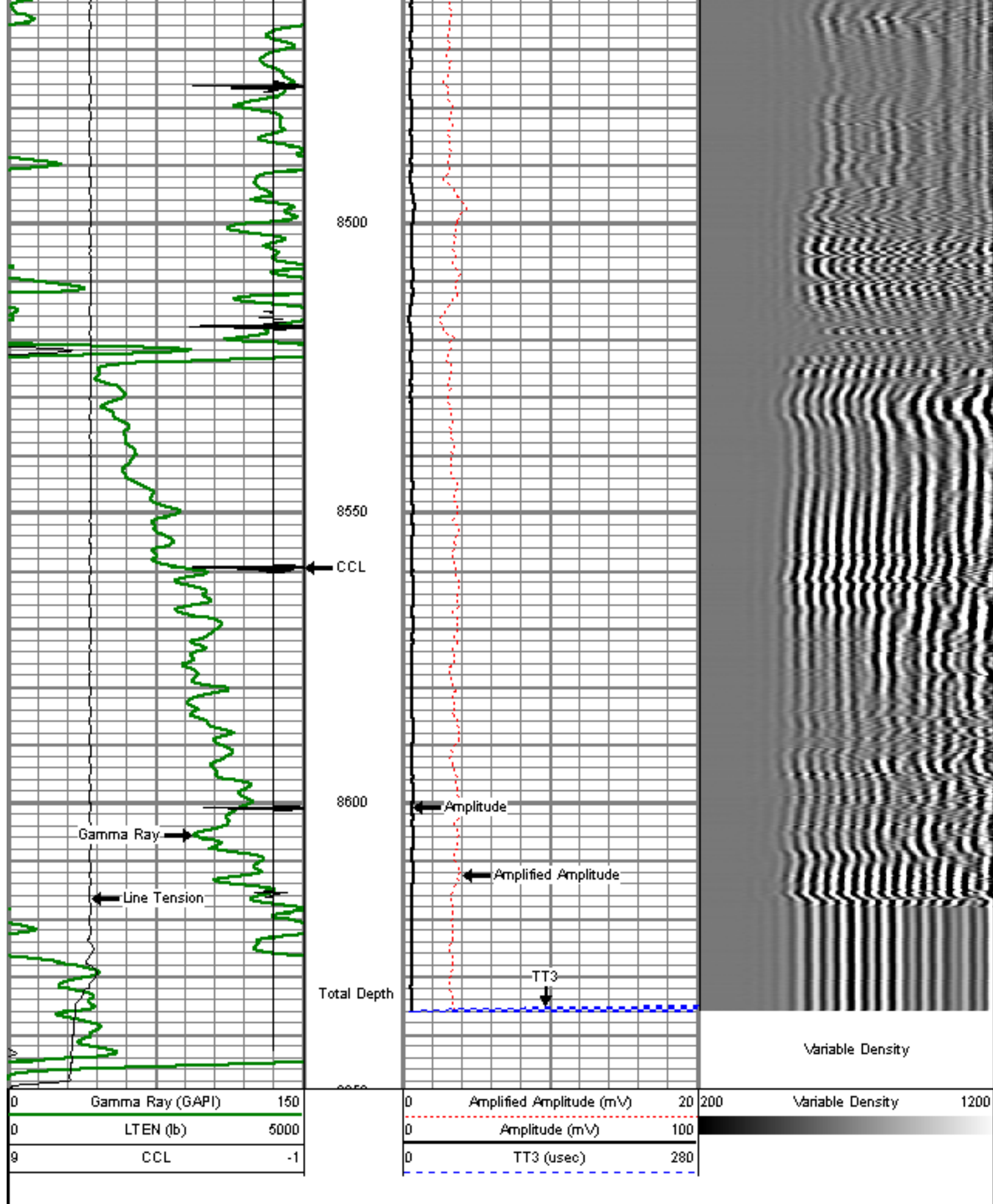


REPEAT PASS

5" = 100'

Database File: 6-8.db
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 Presentation Format: dcbl_prb
 Dataset Creation: Wed Jul 06 15:01:12 2011 by Log Std Casedhole 09061
 Charted by: Depth in Feet scaled 1:240





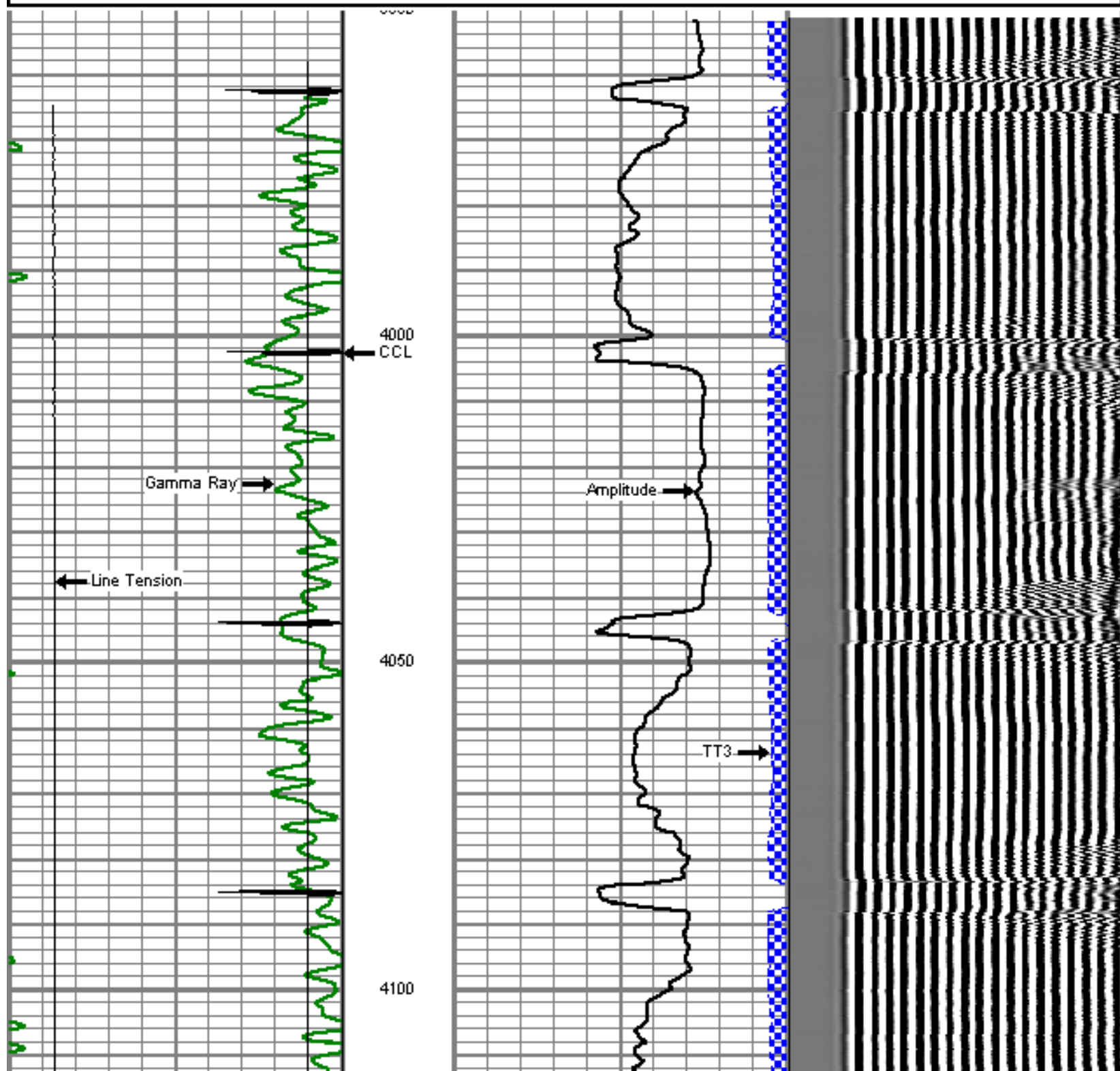
5" = 100'

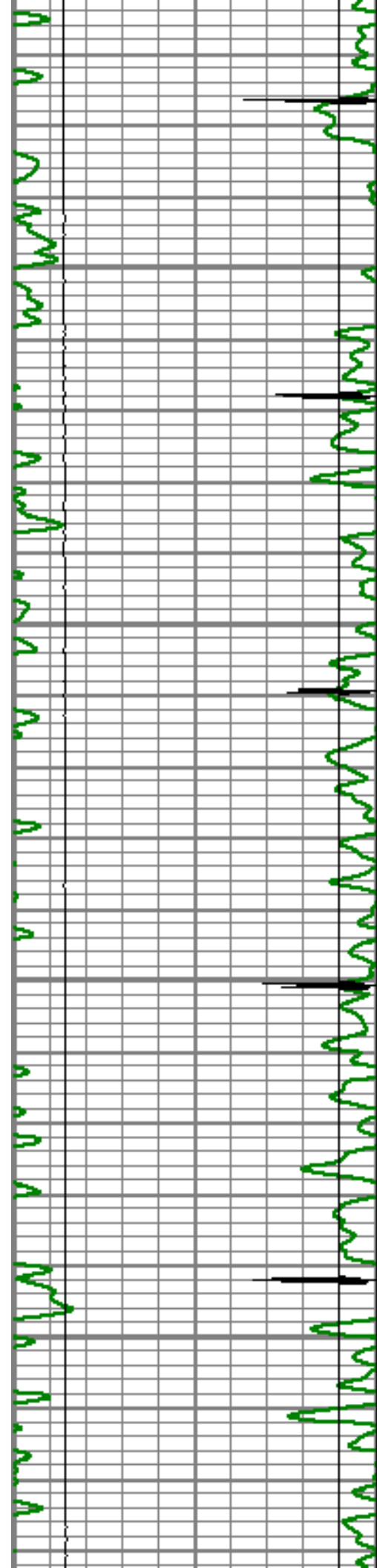
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 Dataset Pathname: pass18oh
 Presentation Format: dcbl_prb
 Dataset Creation: Wed Jul 06 17:01:27 2011
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
0	LTEN (lb)	5000
9	CCL	-1

0	Amplified Amplitude (mV)	20
0	Amplitude (mV)	100
0	TT3 (usec)	280

200	Variable Density	1200
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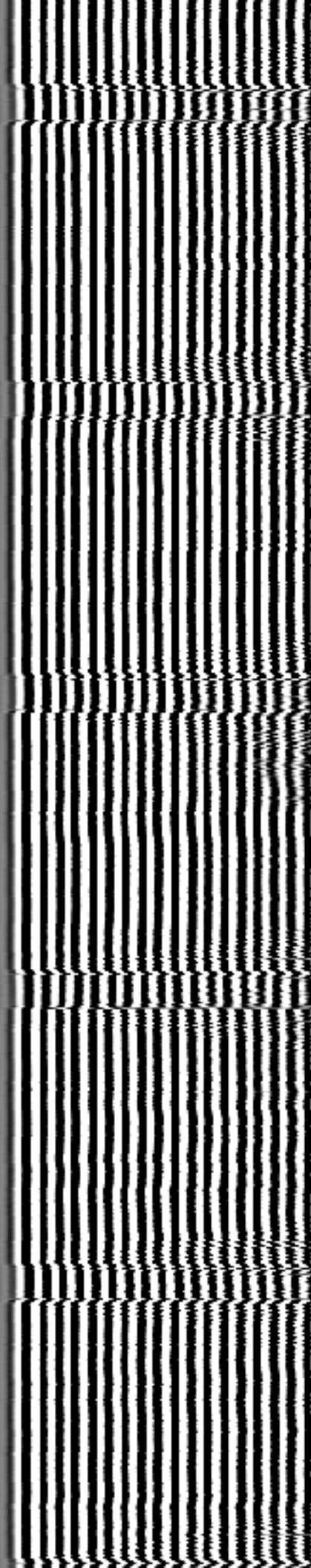
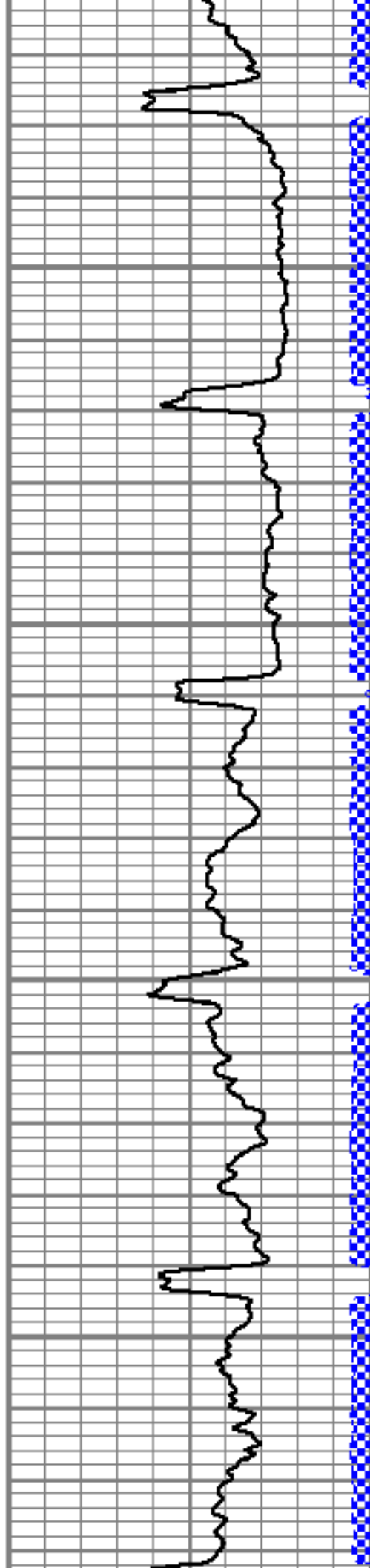


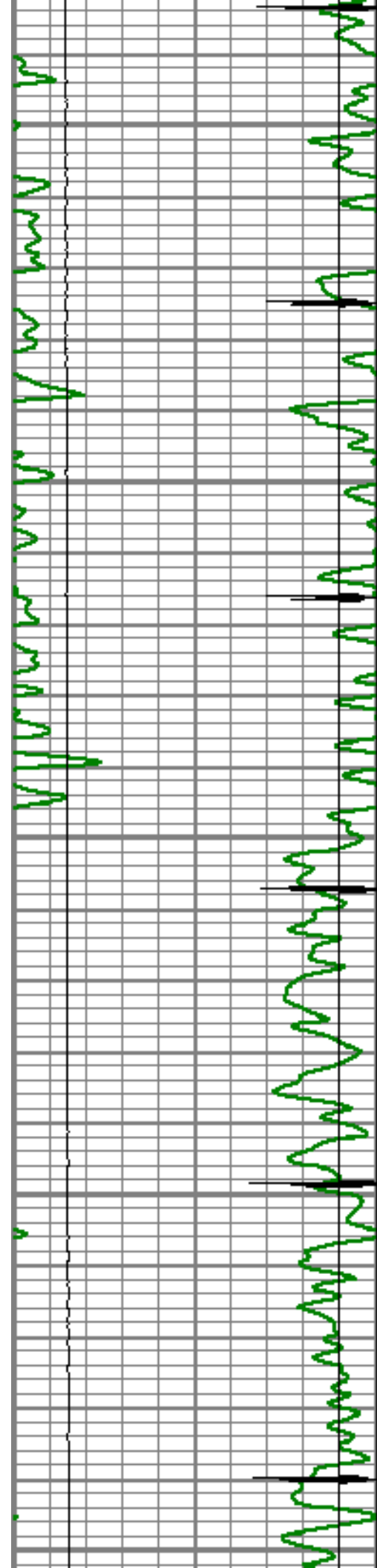
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4200

4250

4300





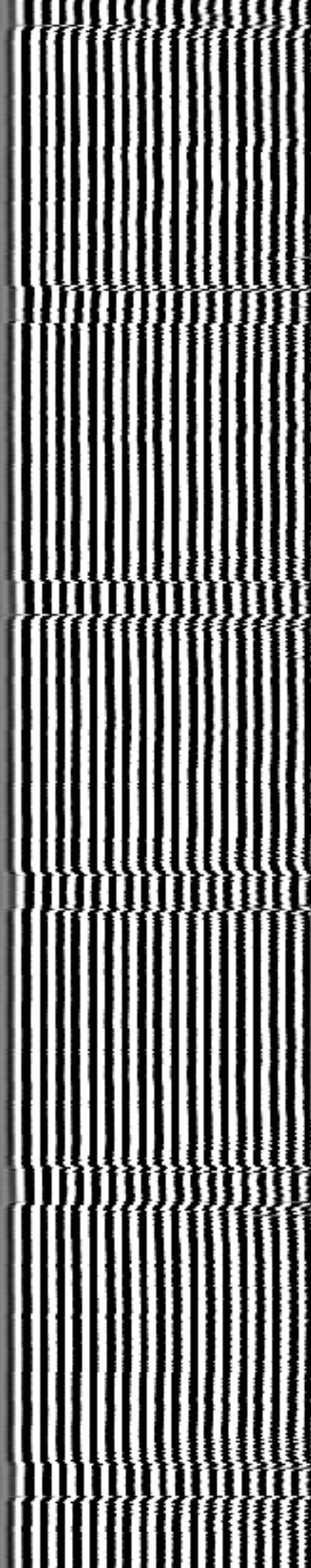
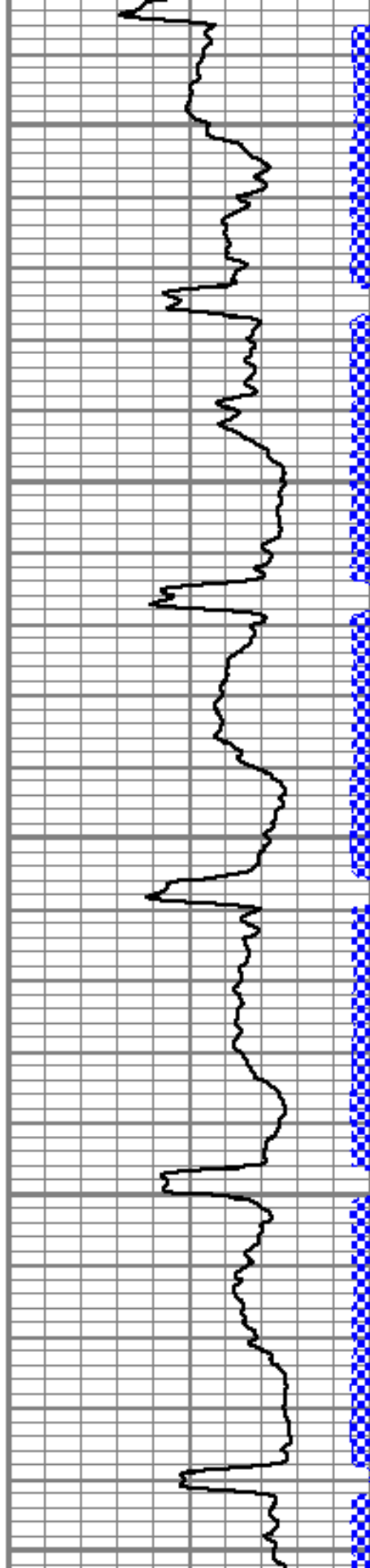
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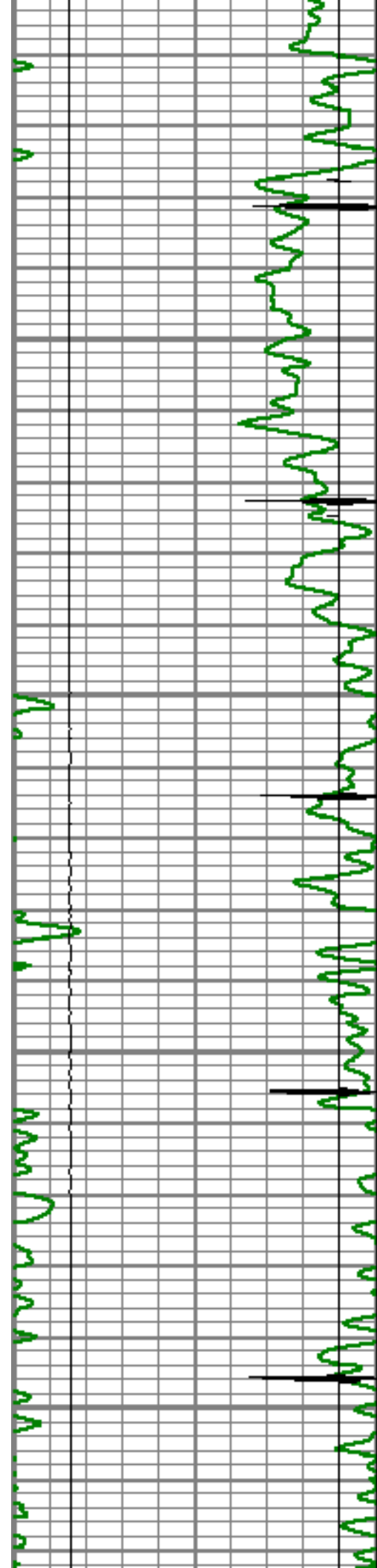
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4500

4550



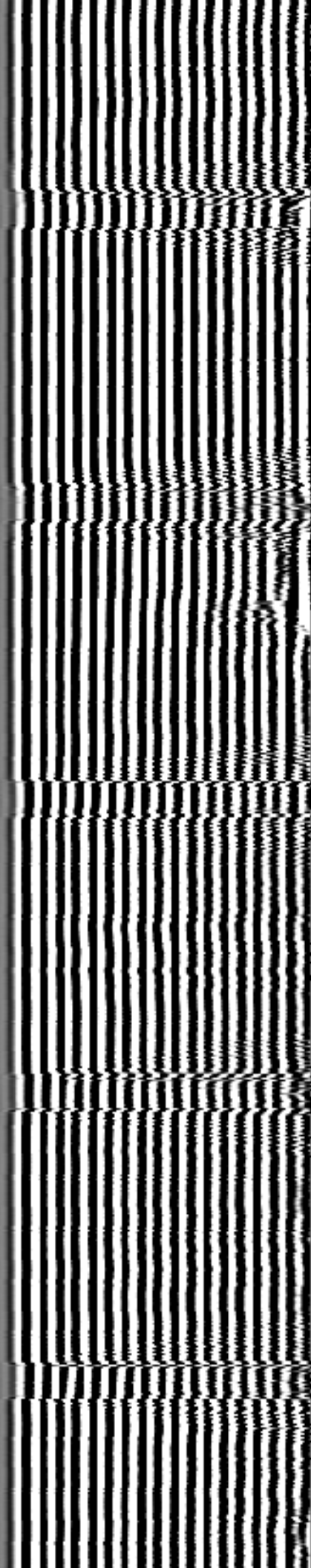
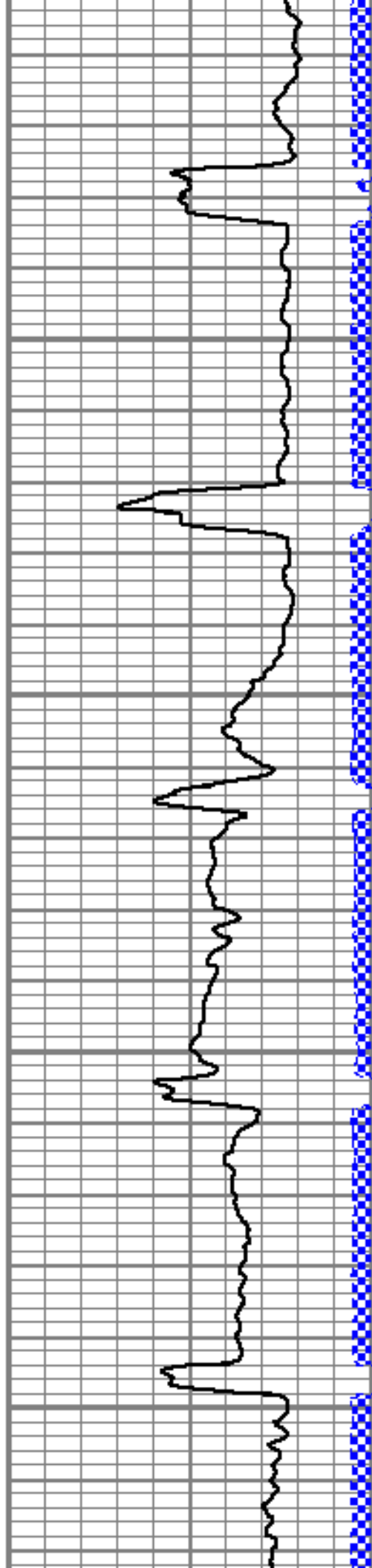


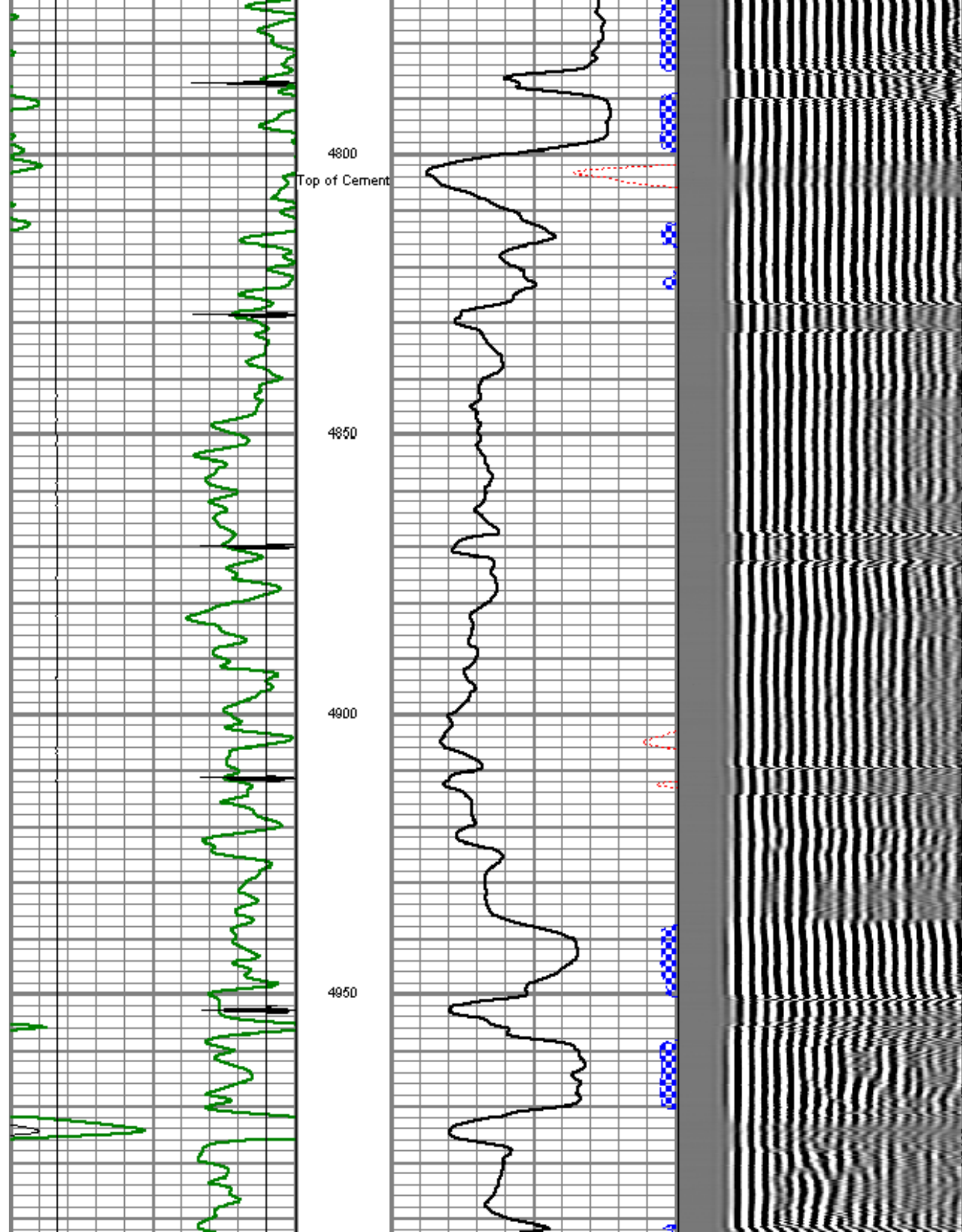
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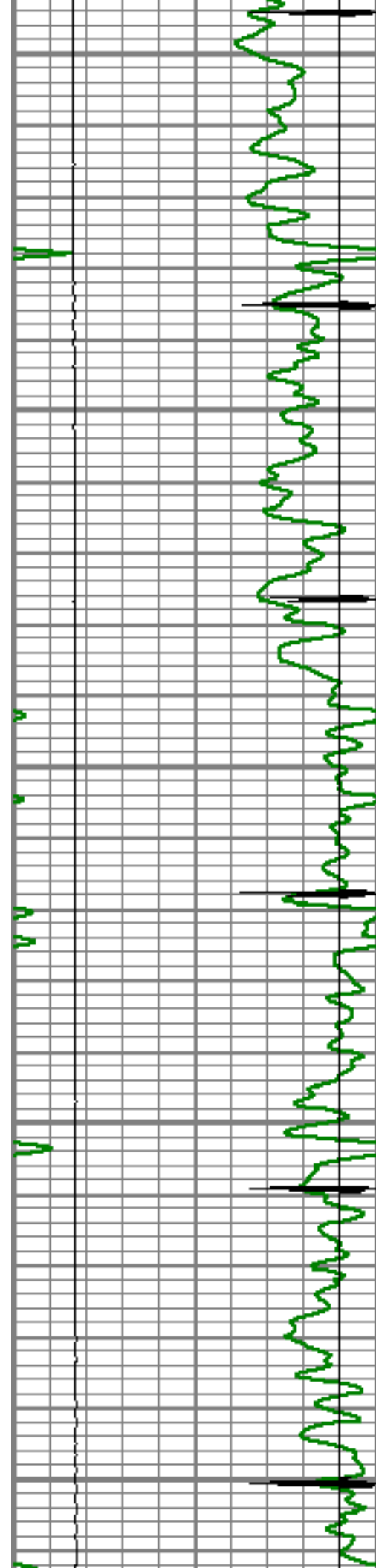
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4750







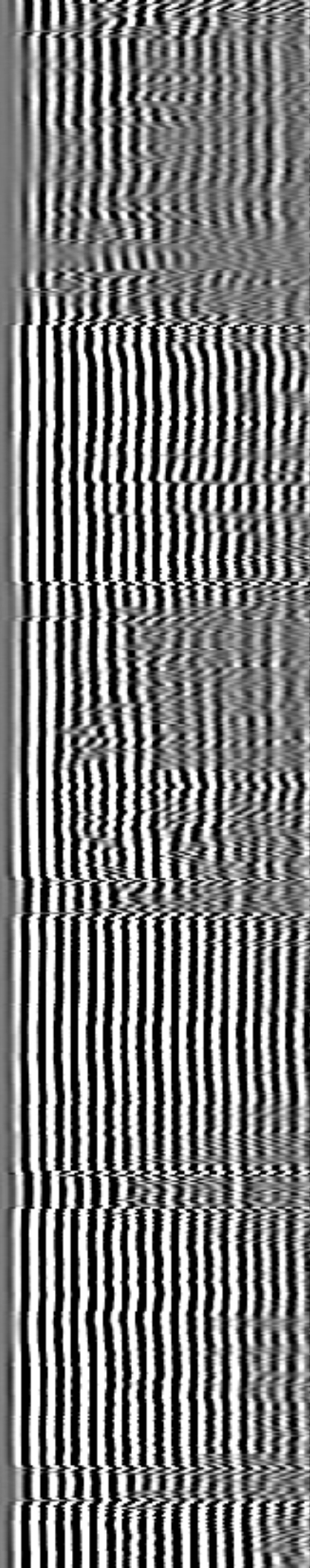
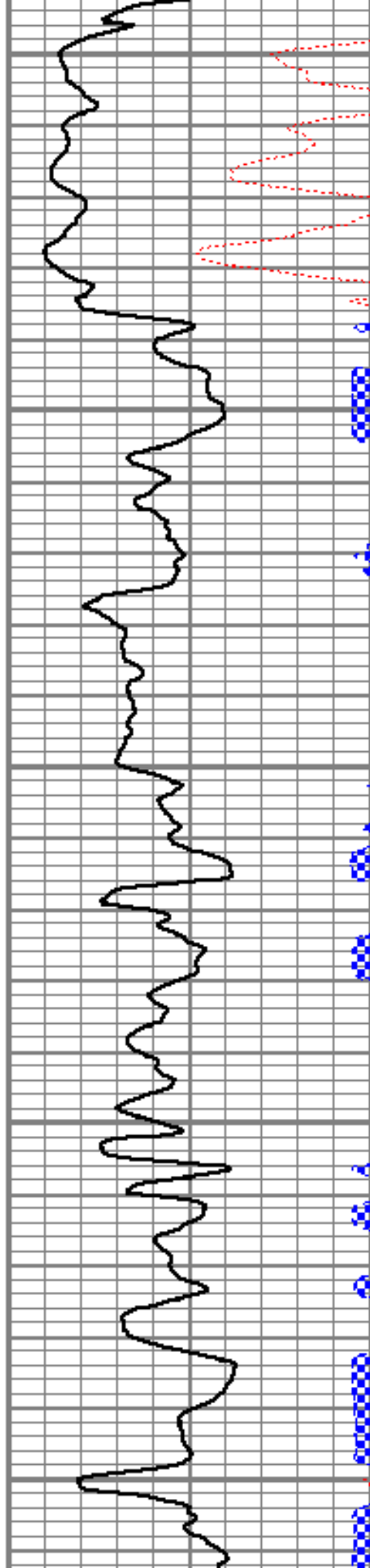
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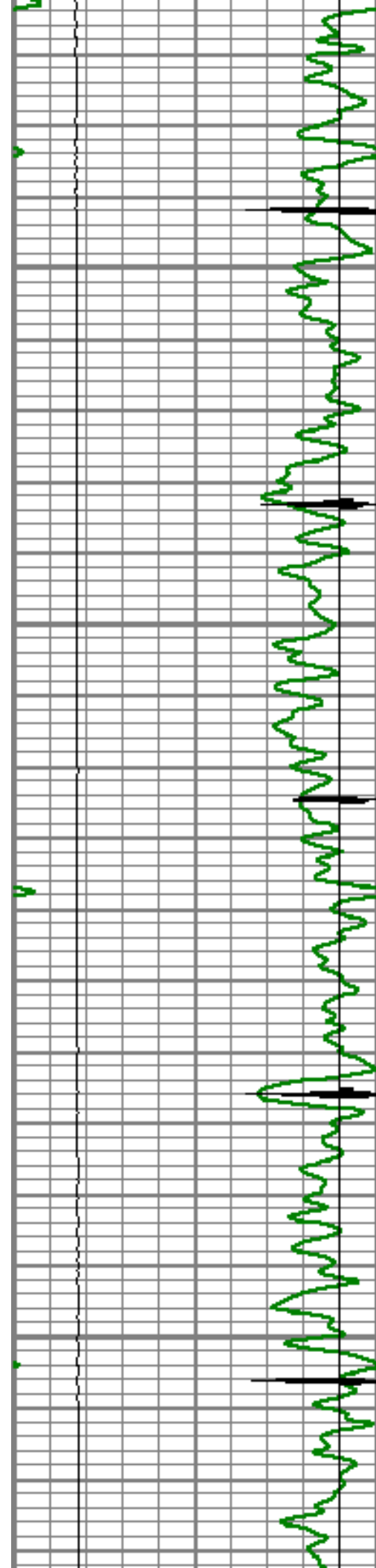
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5100

5150

5200



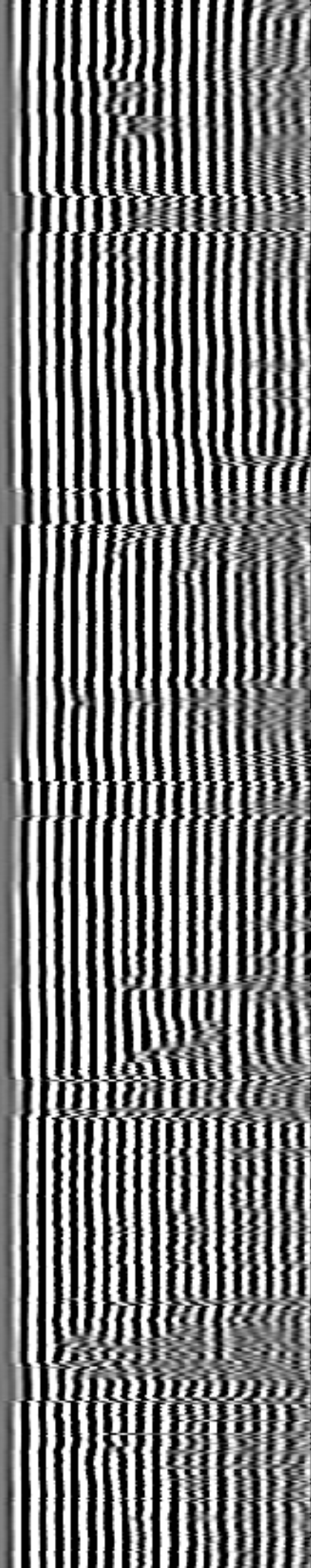
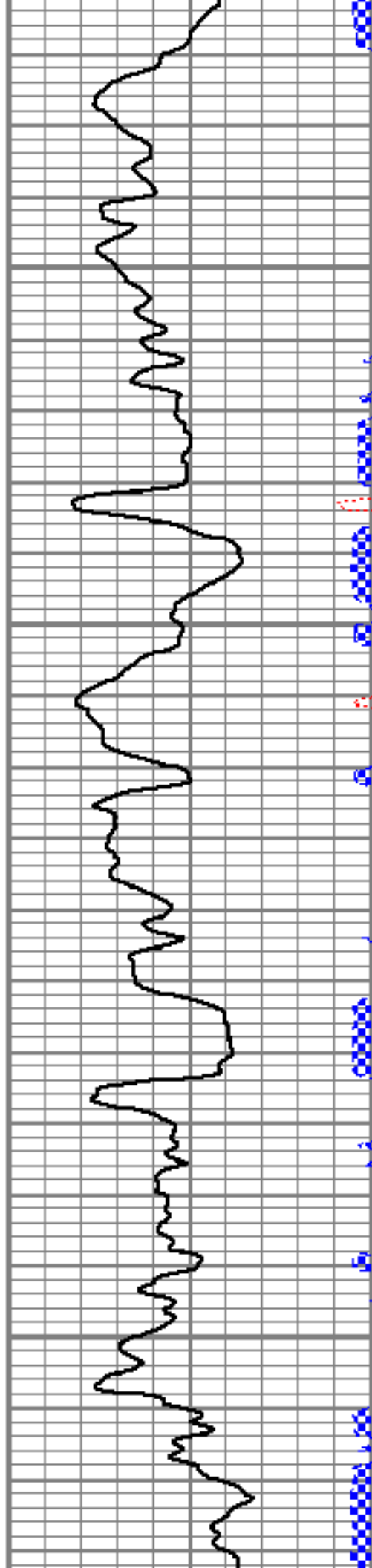


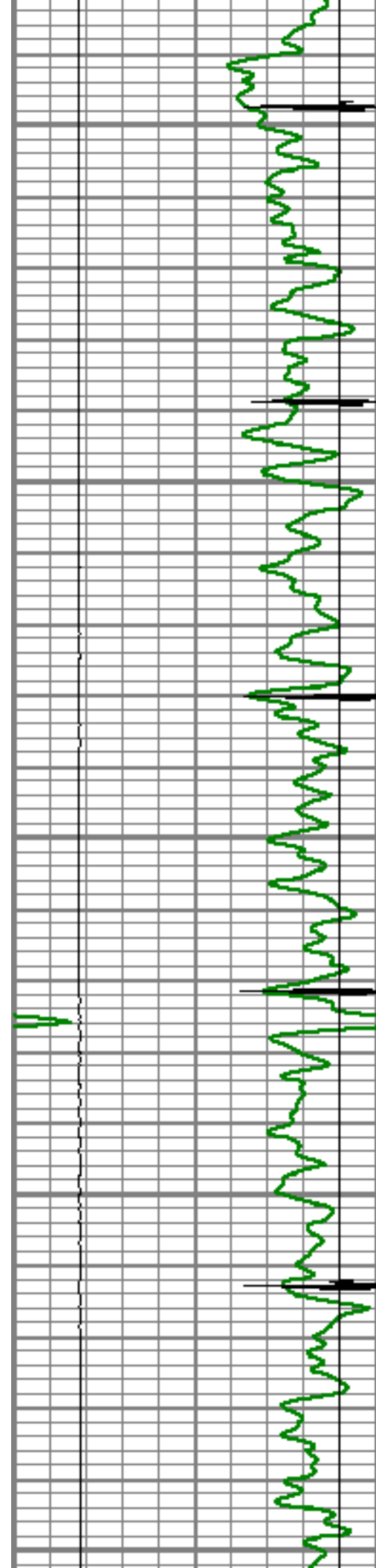
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5350

5400





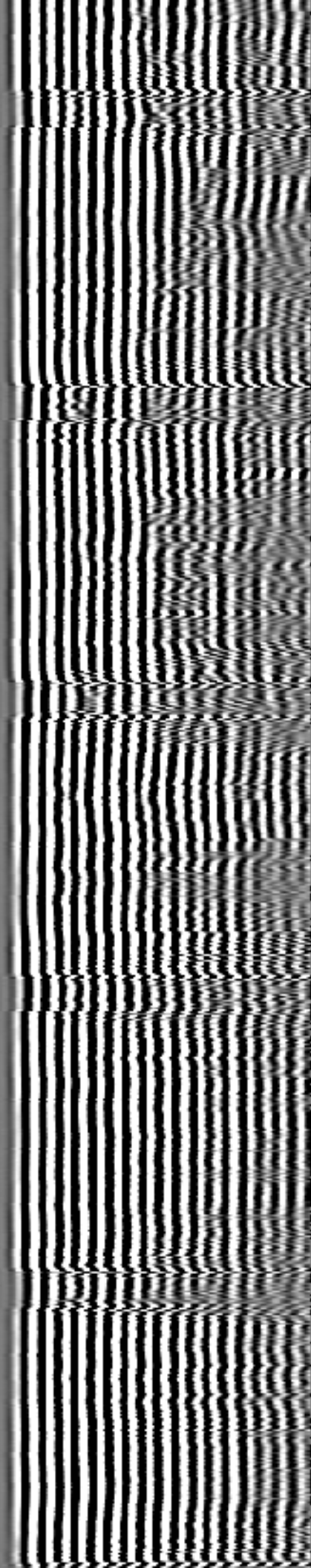
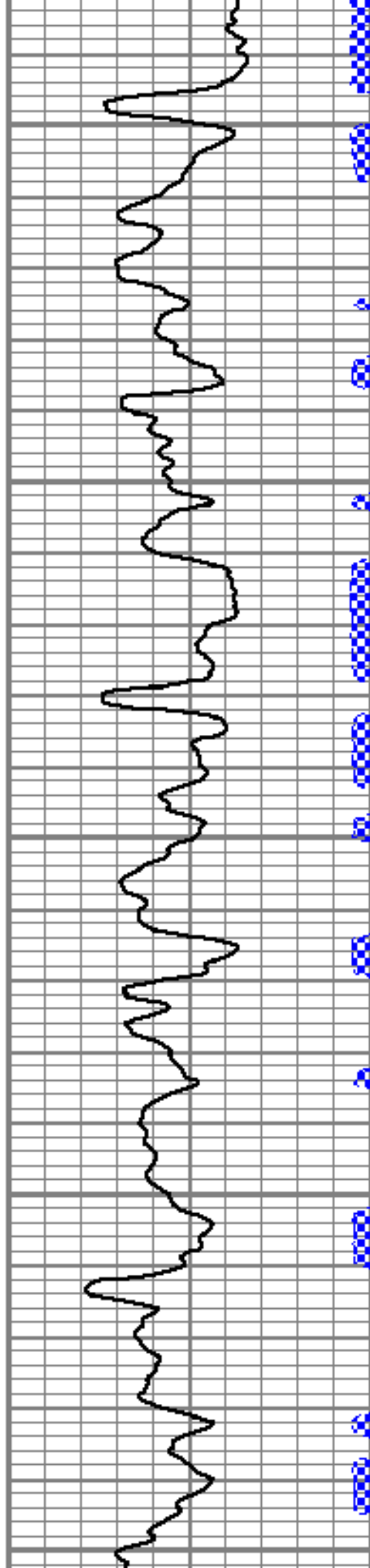
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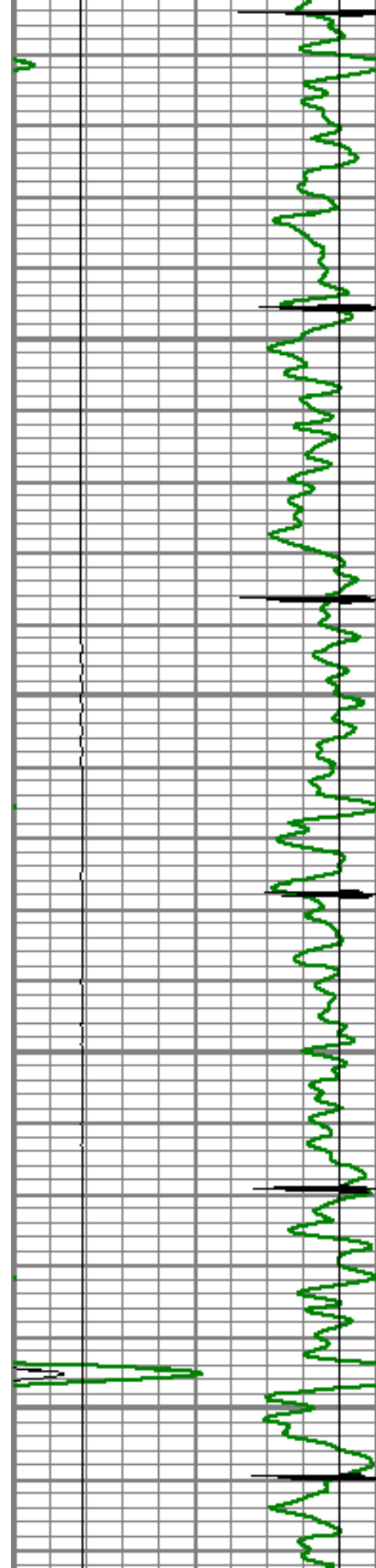
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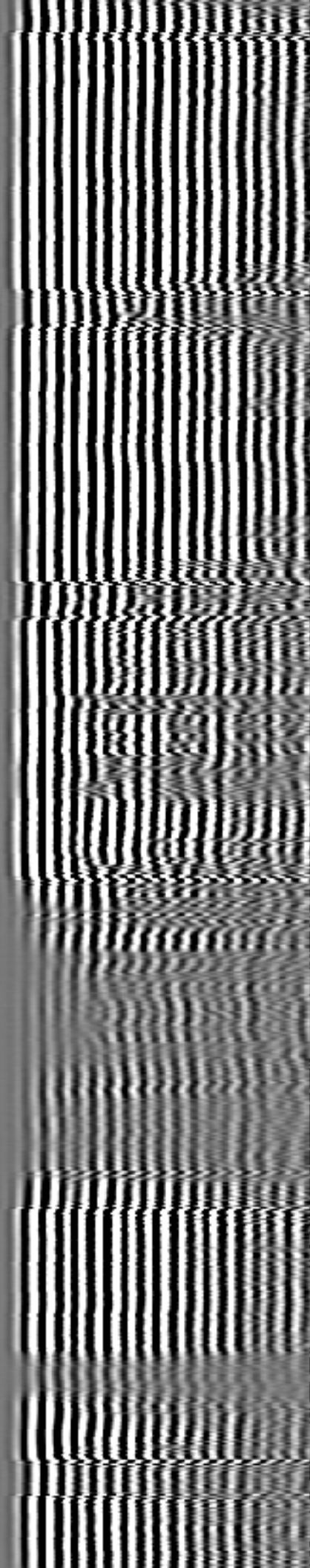
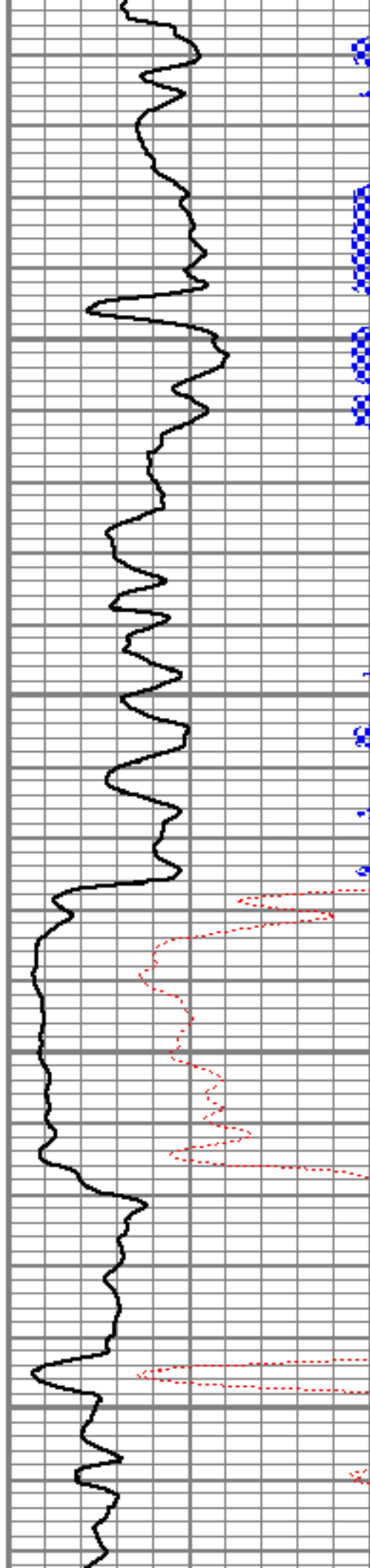


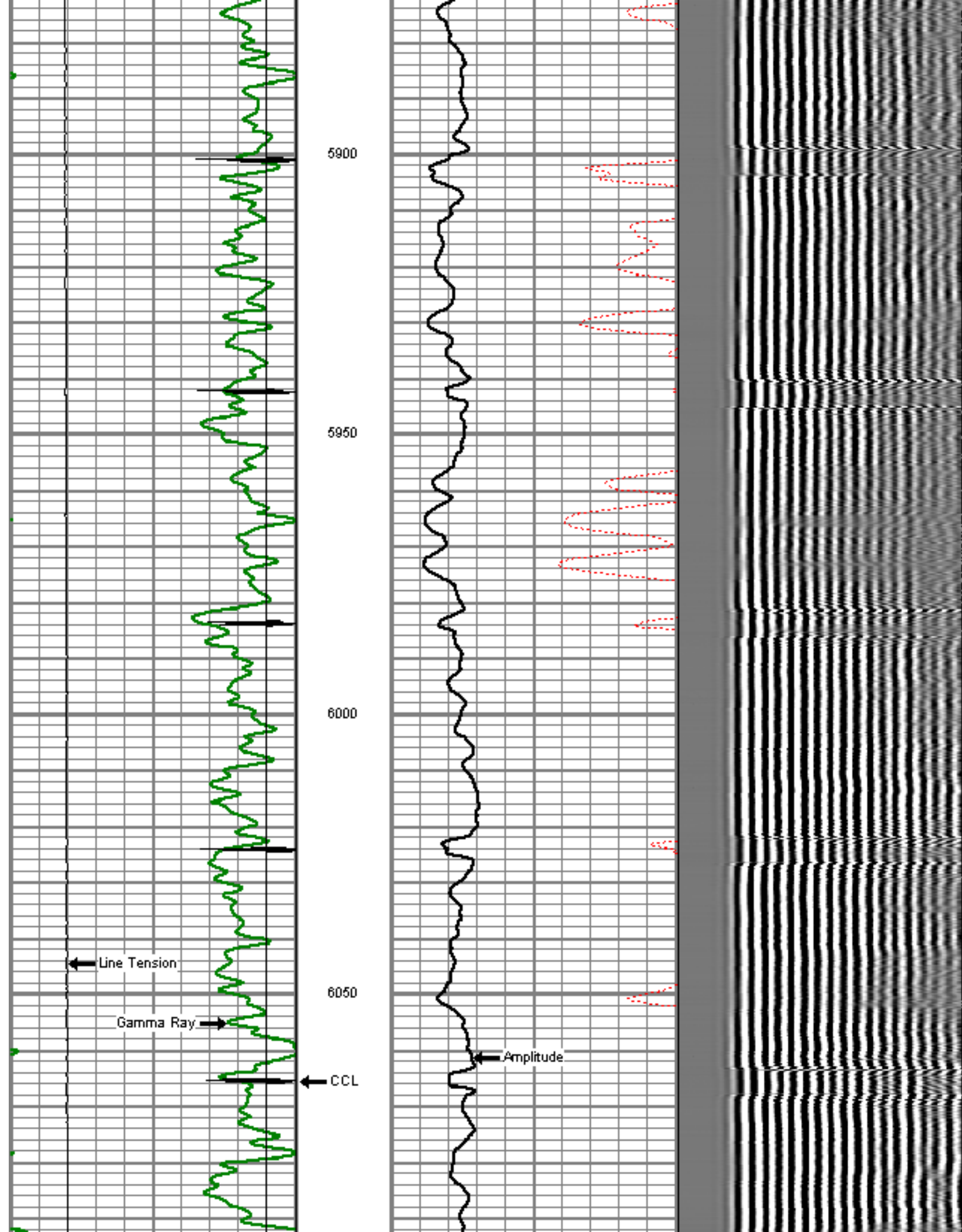
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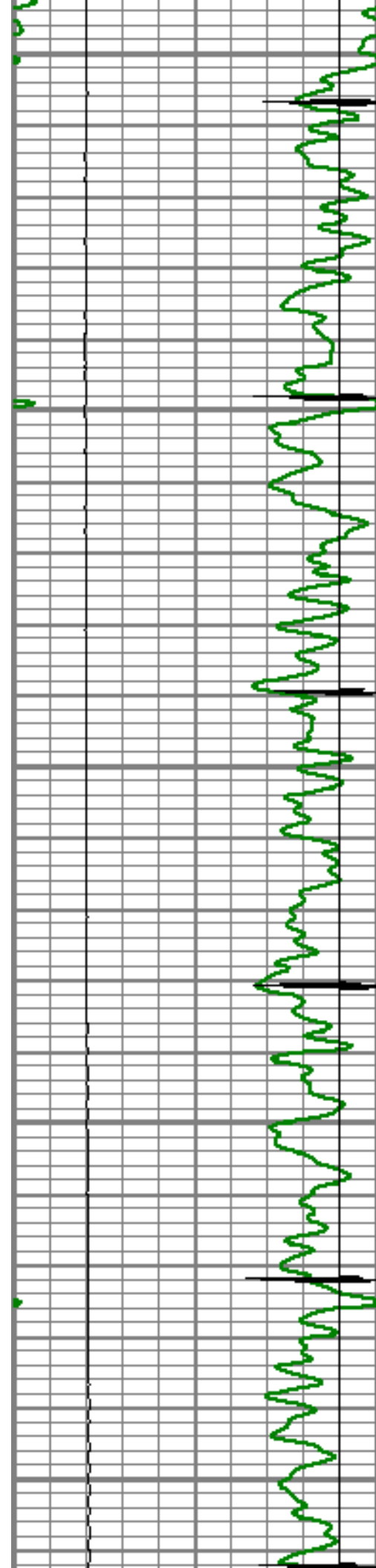
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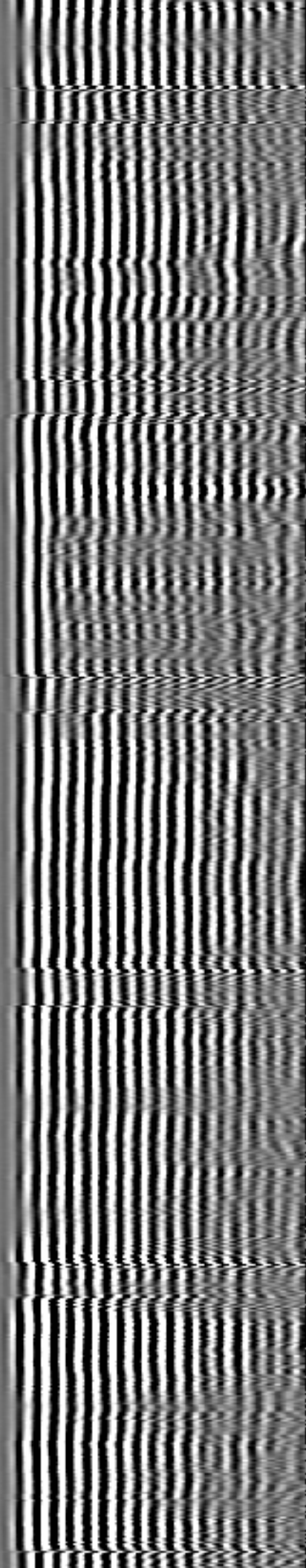
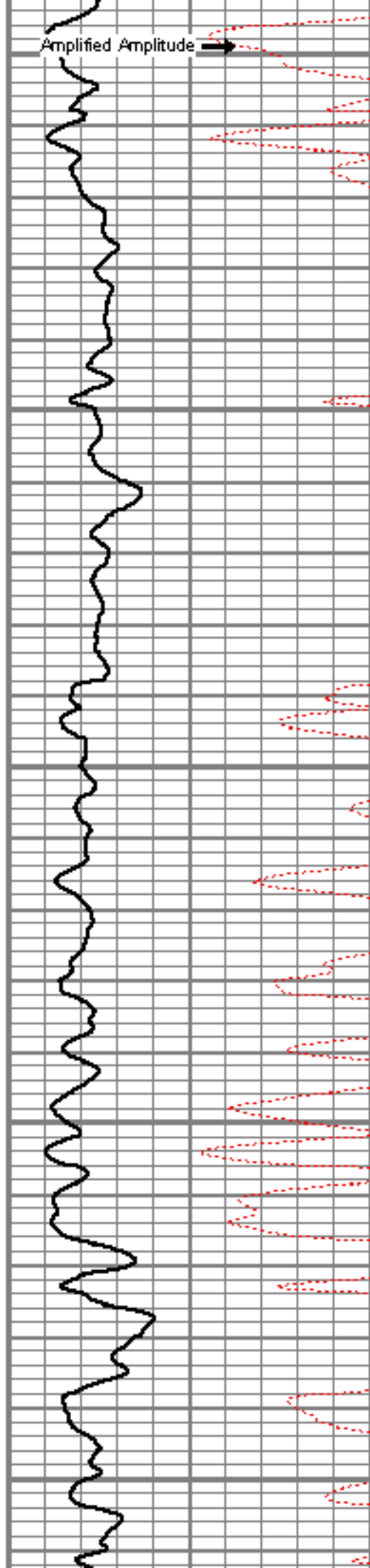
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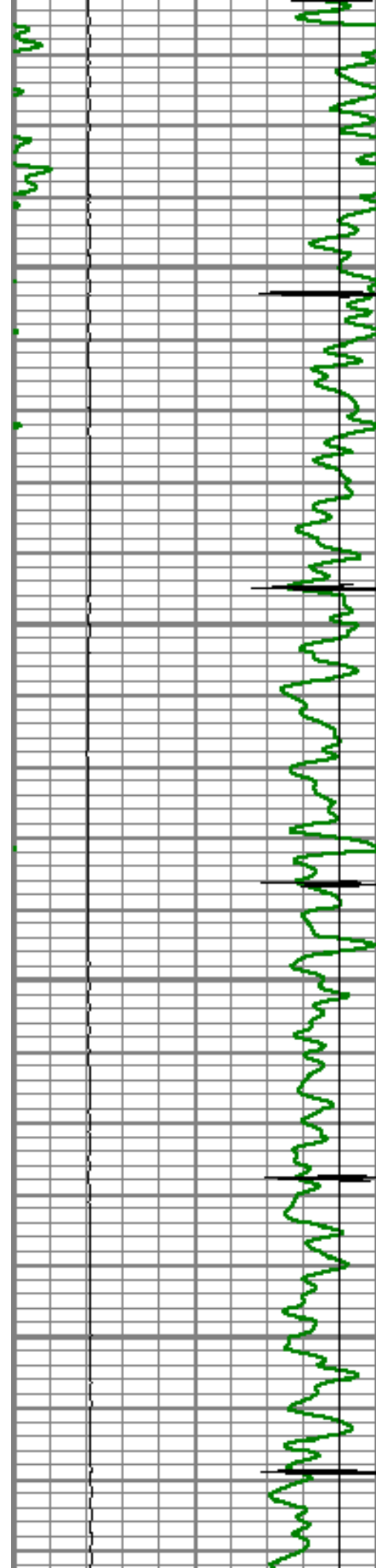
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6250

6300

Amplified Amplitude



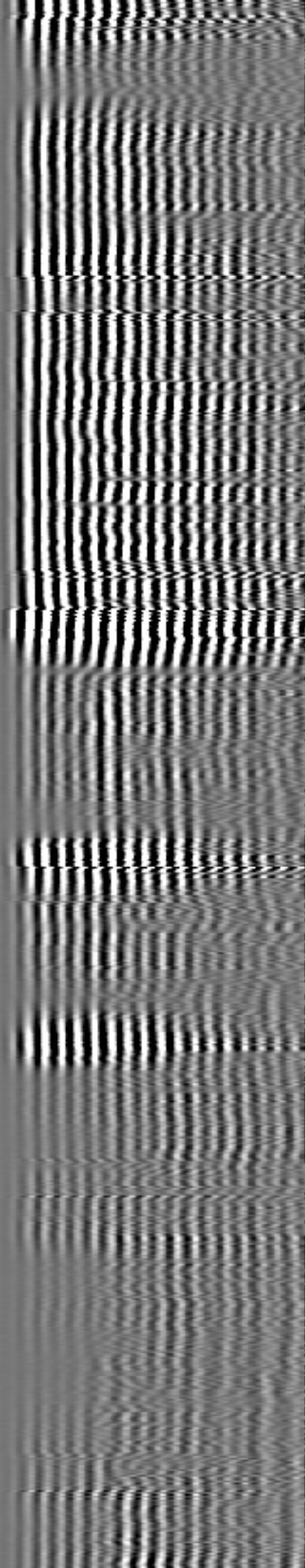
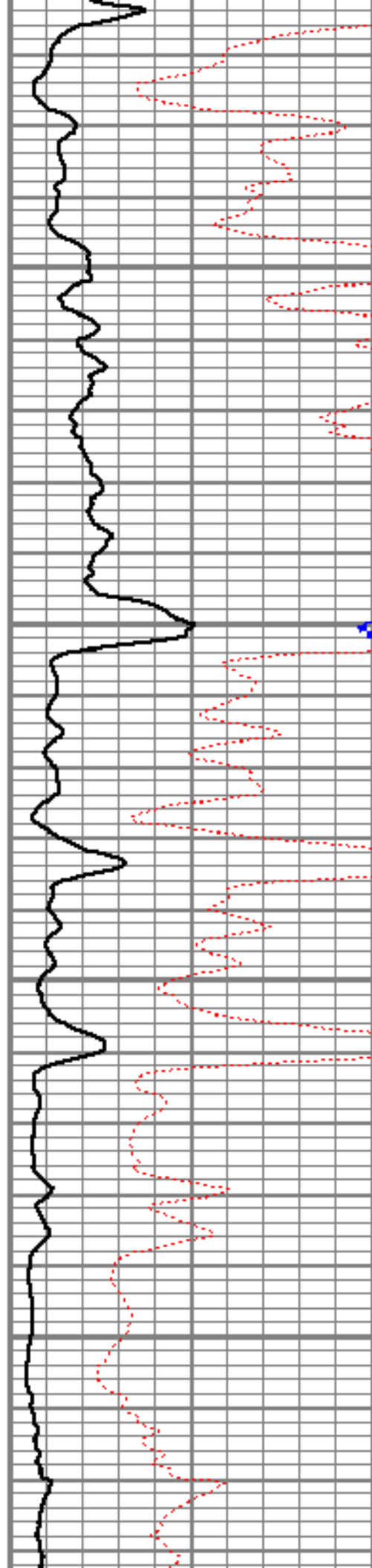


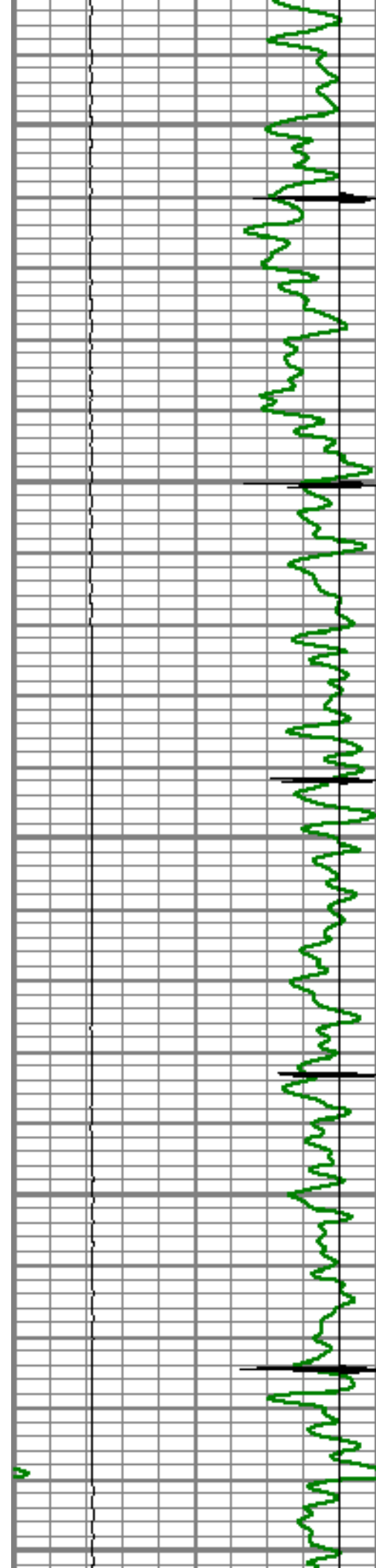
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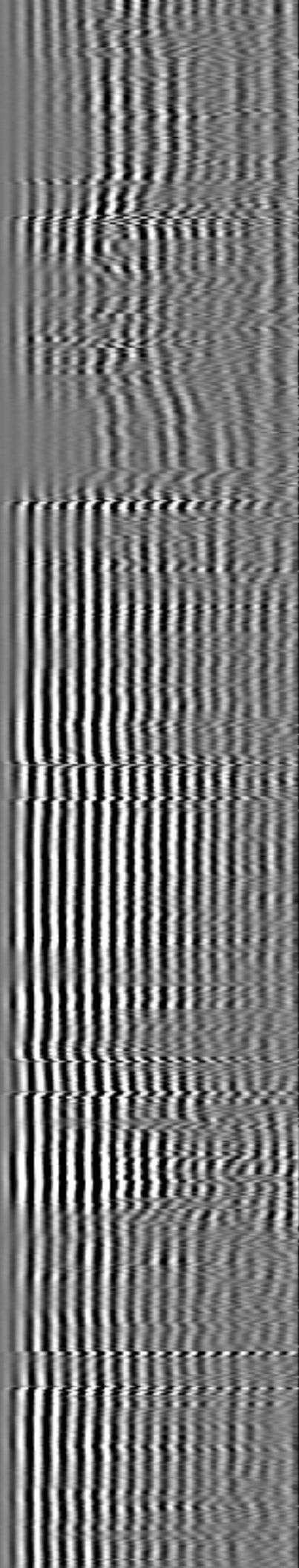
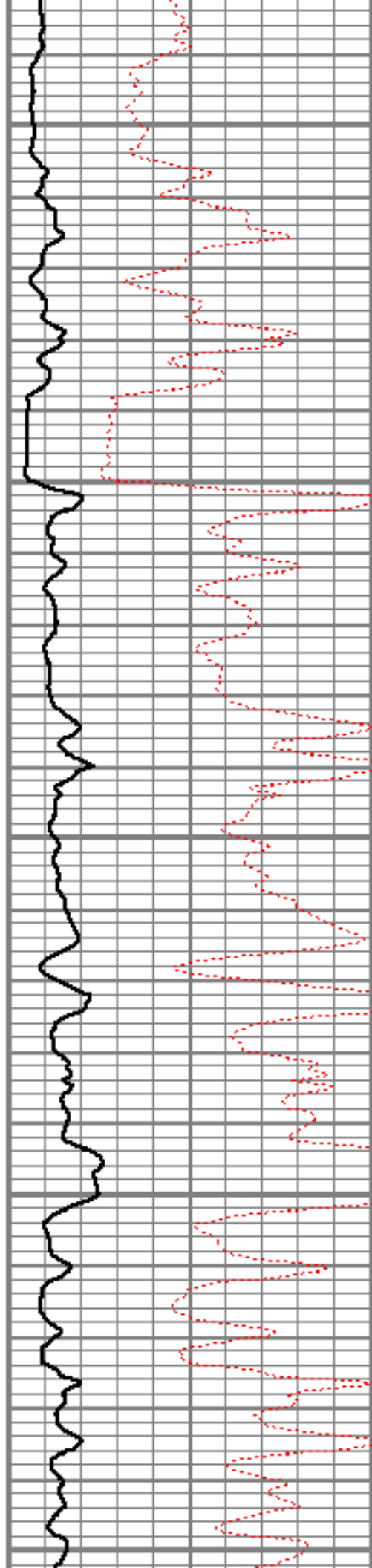
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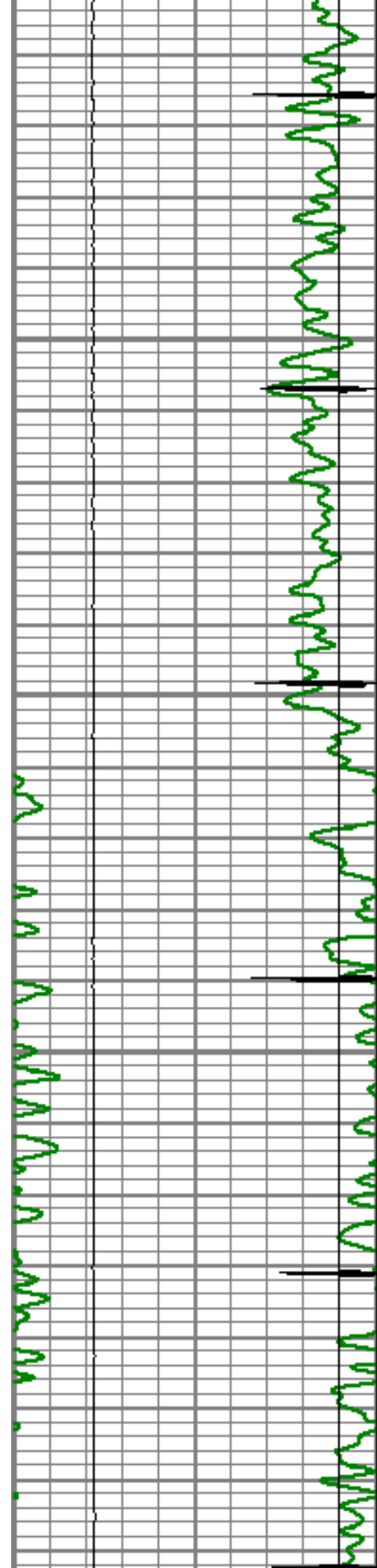
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6650

6700

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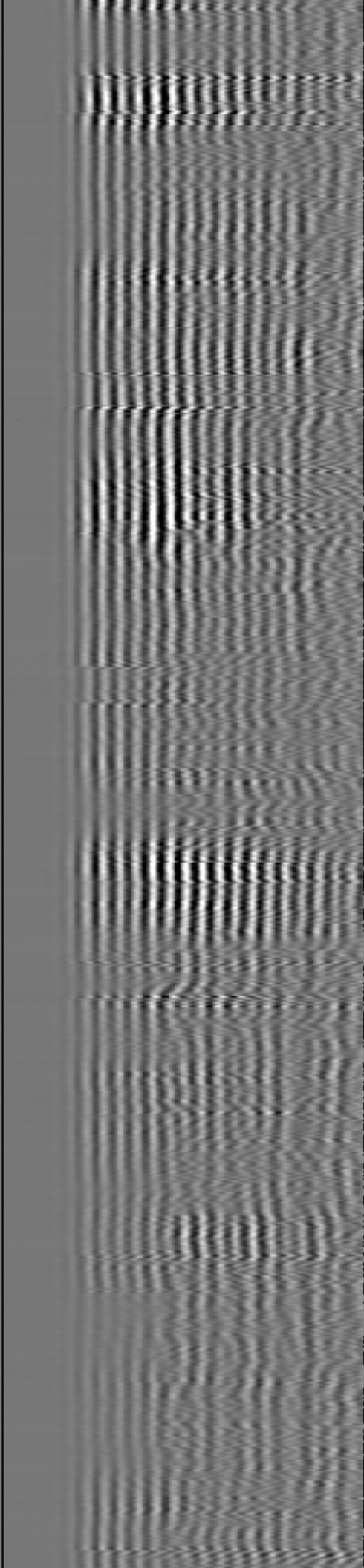
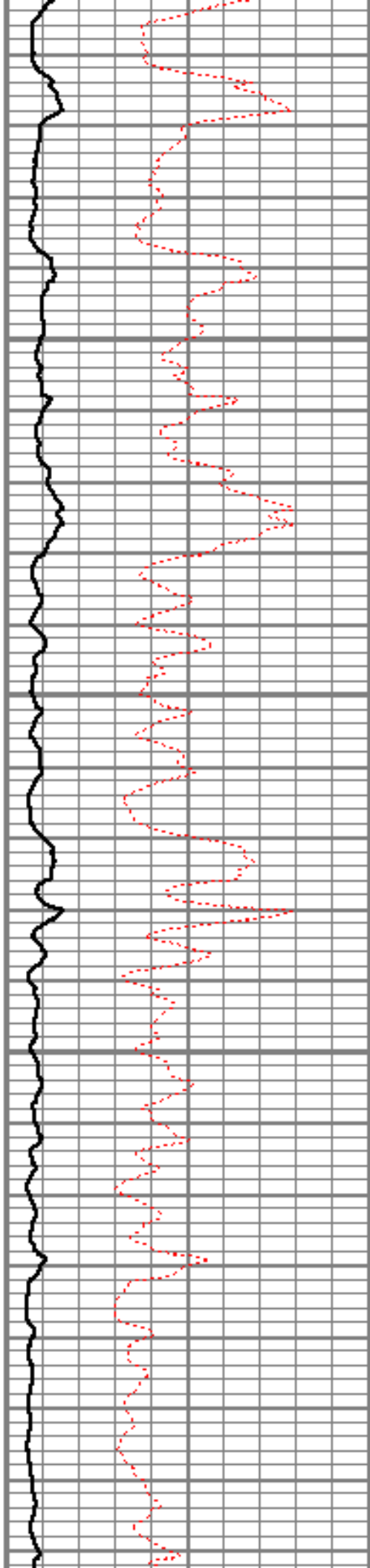


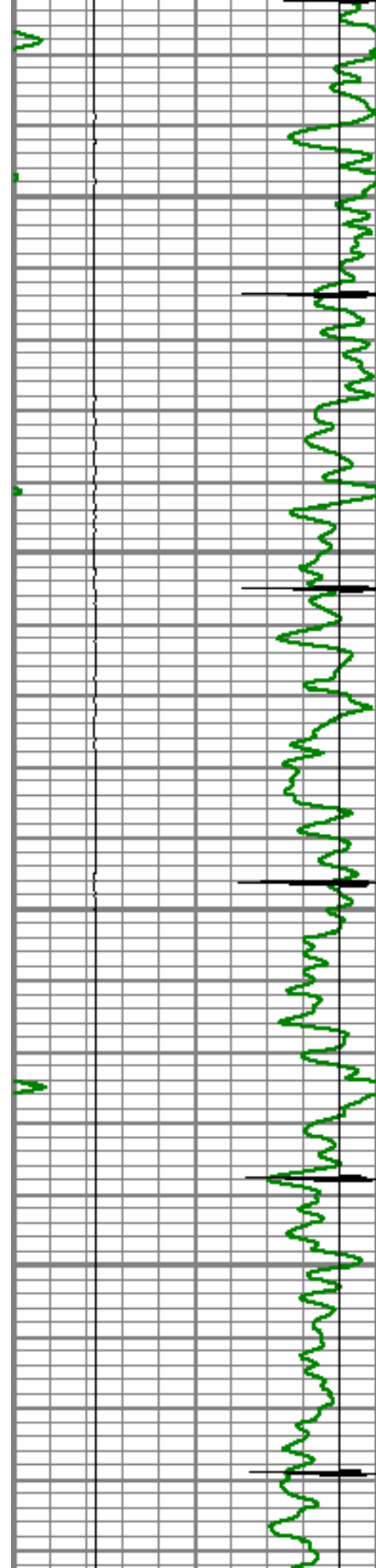
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6850

6900

6950



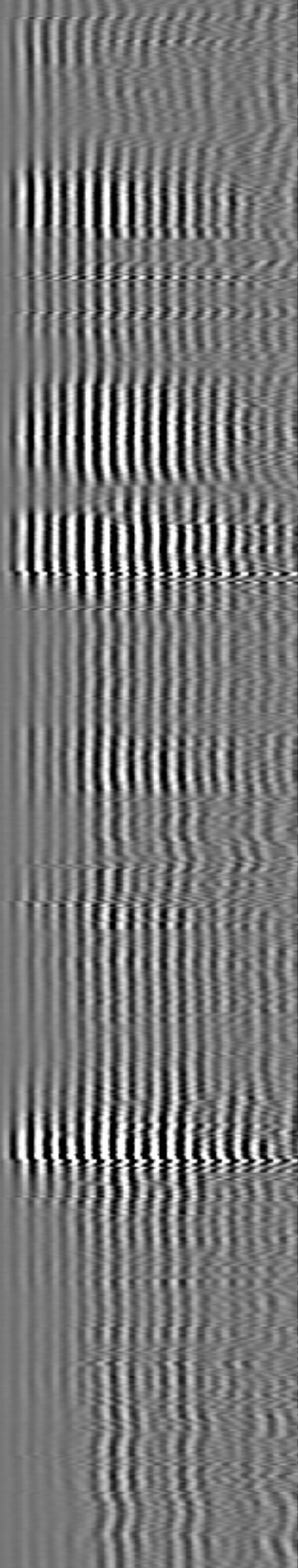
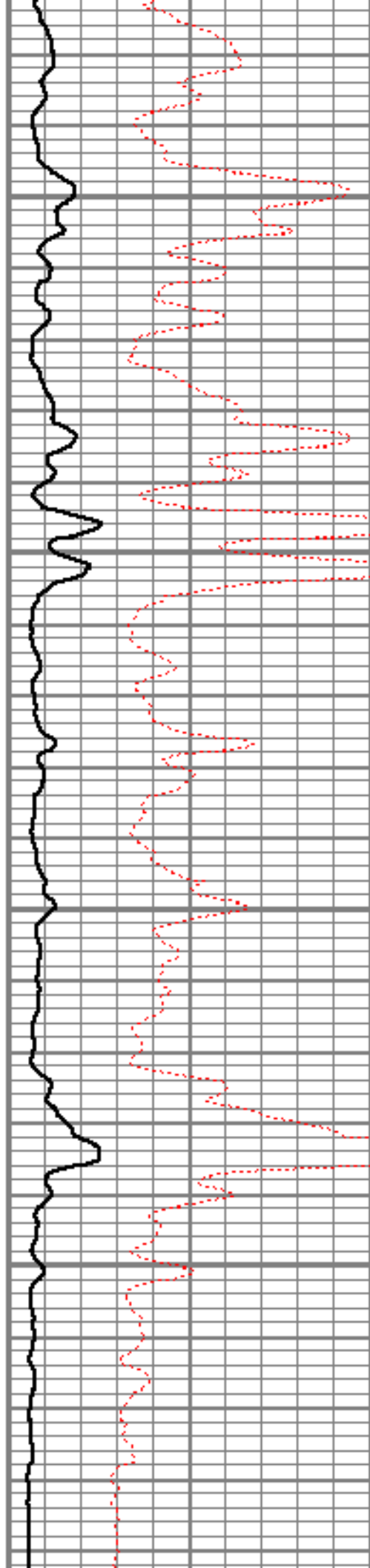


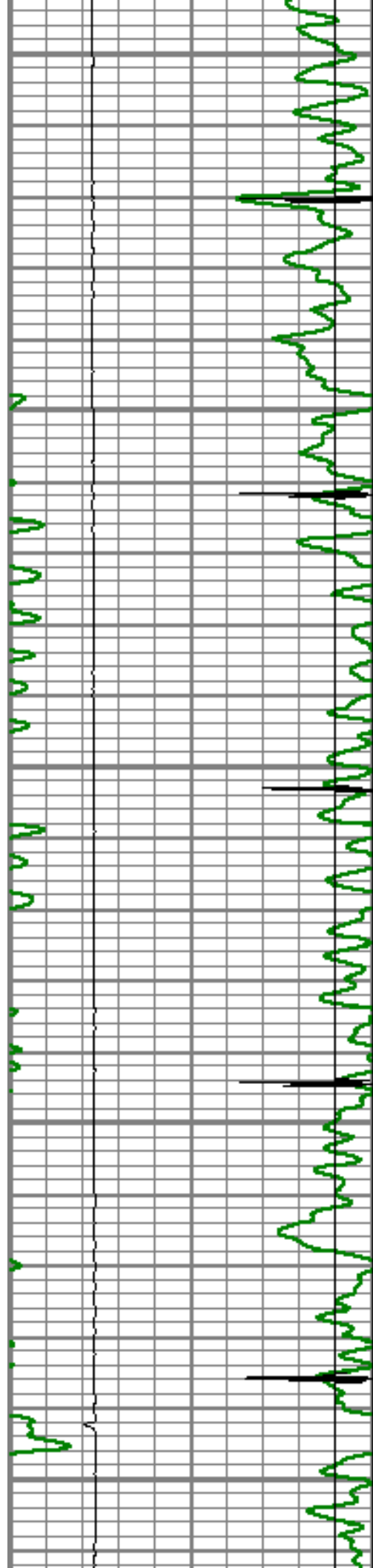
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7050

7100

7150





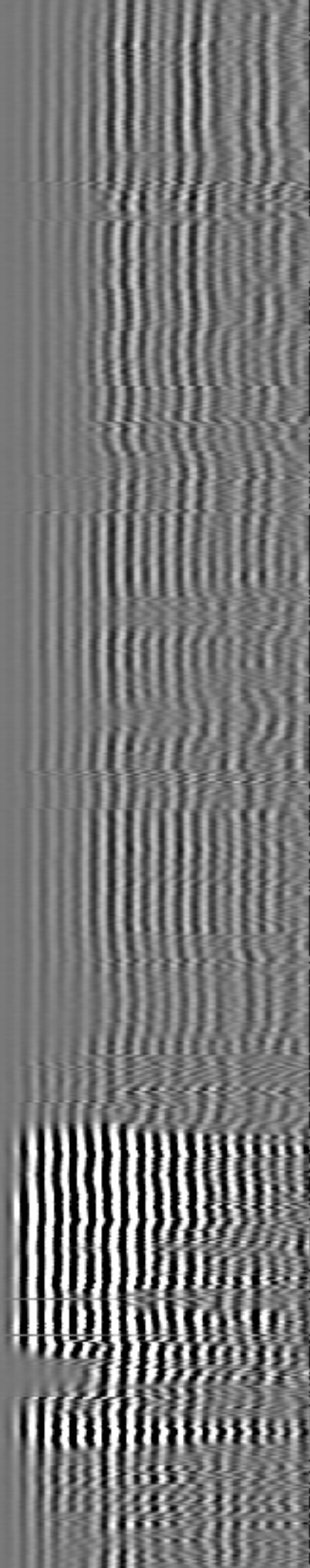
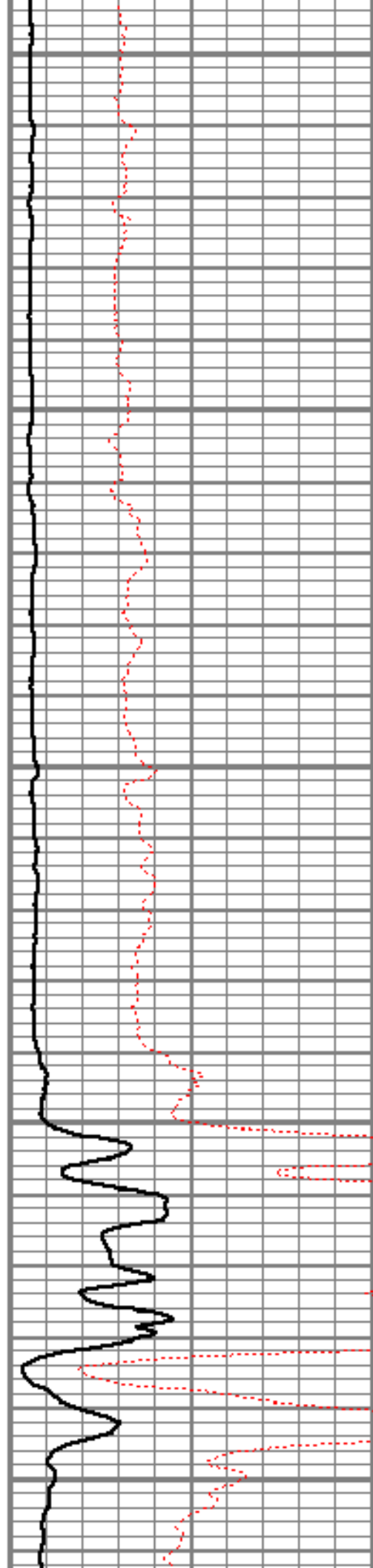
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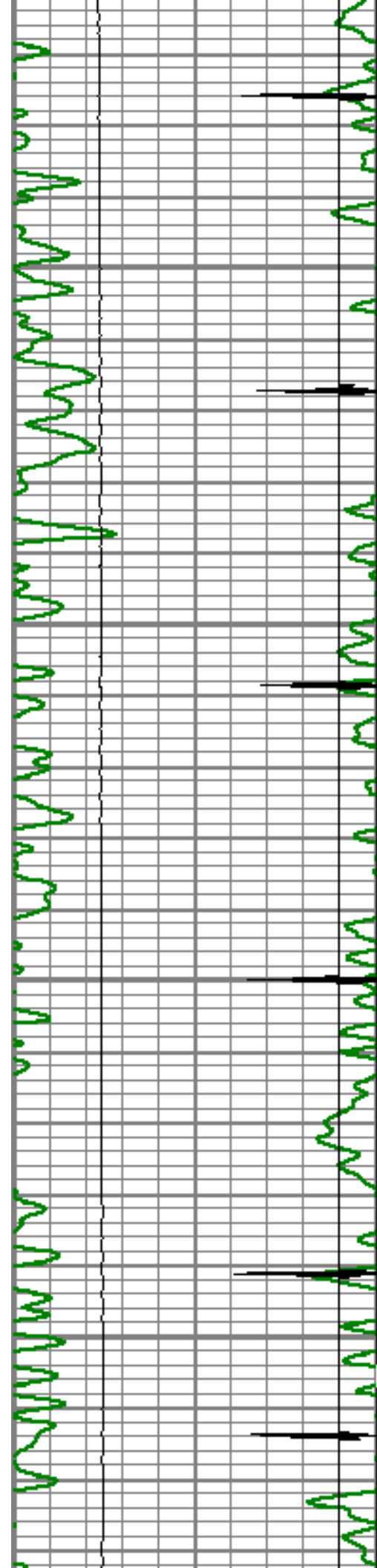
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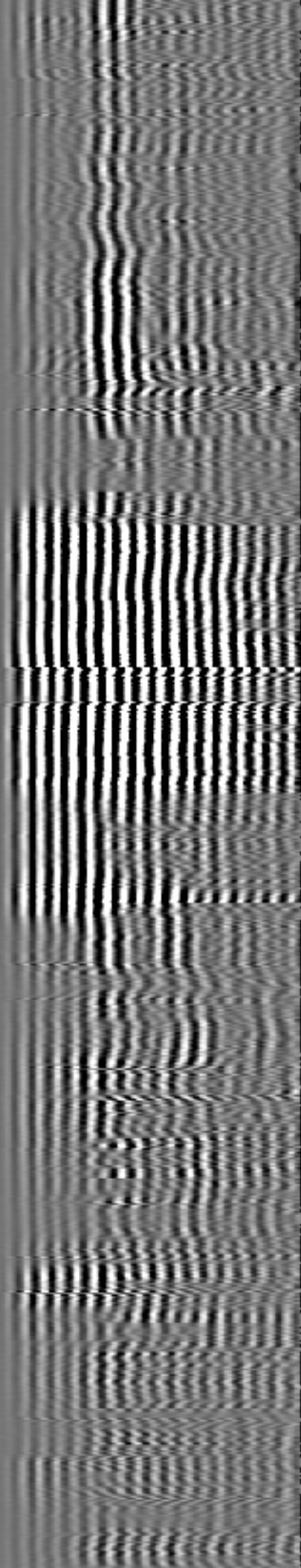
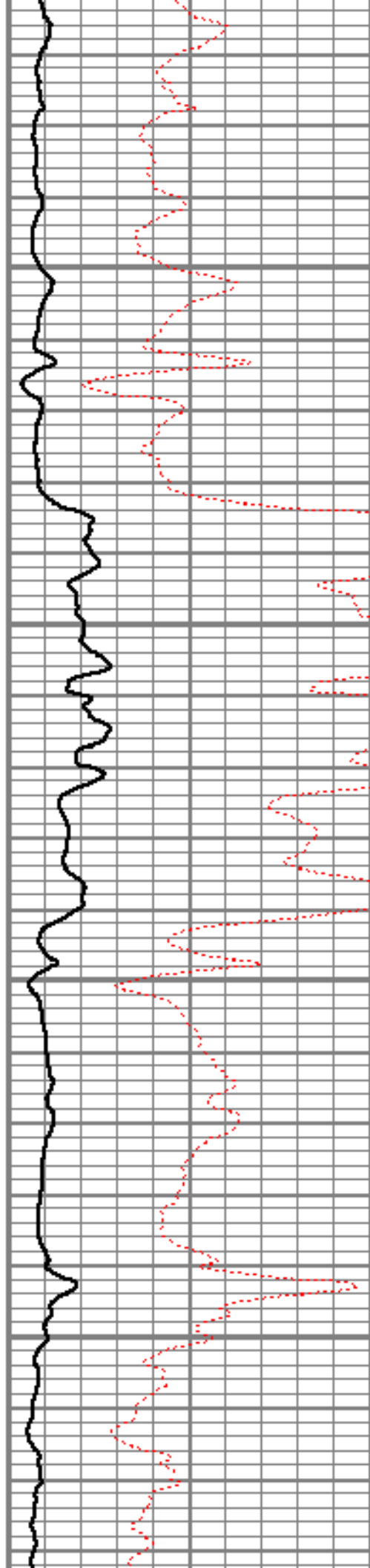
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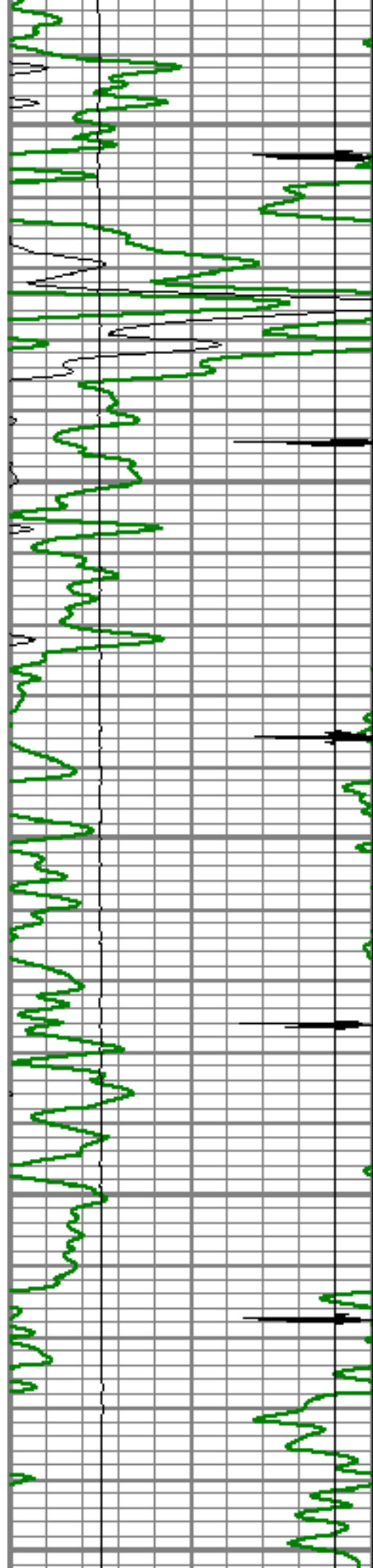
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7550

7600

Short Joint





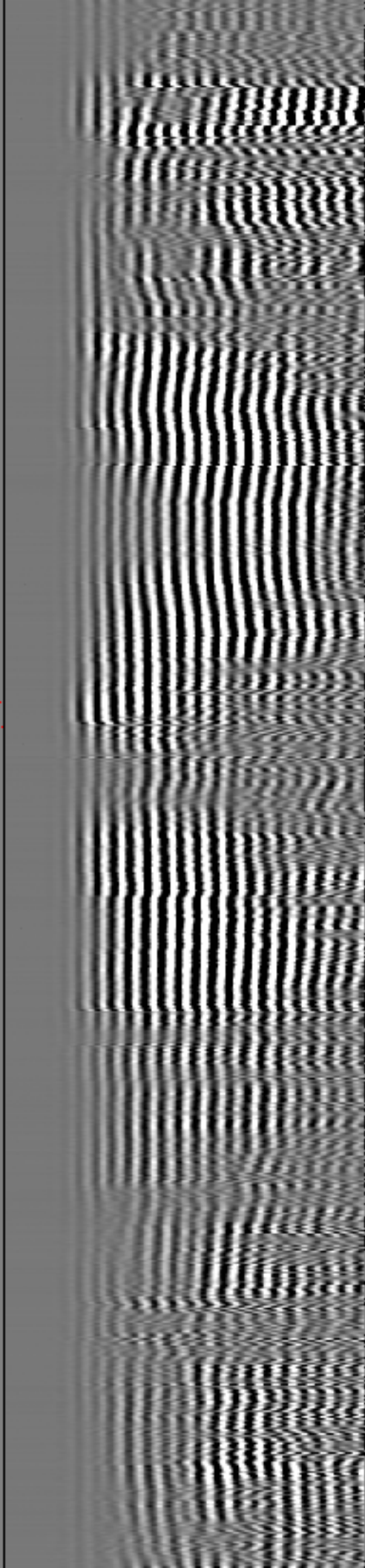
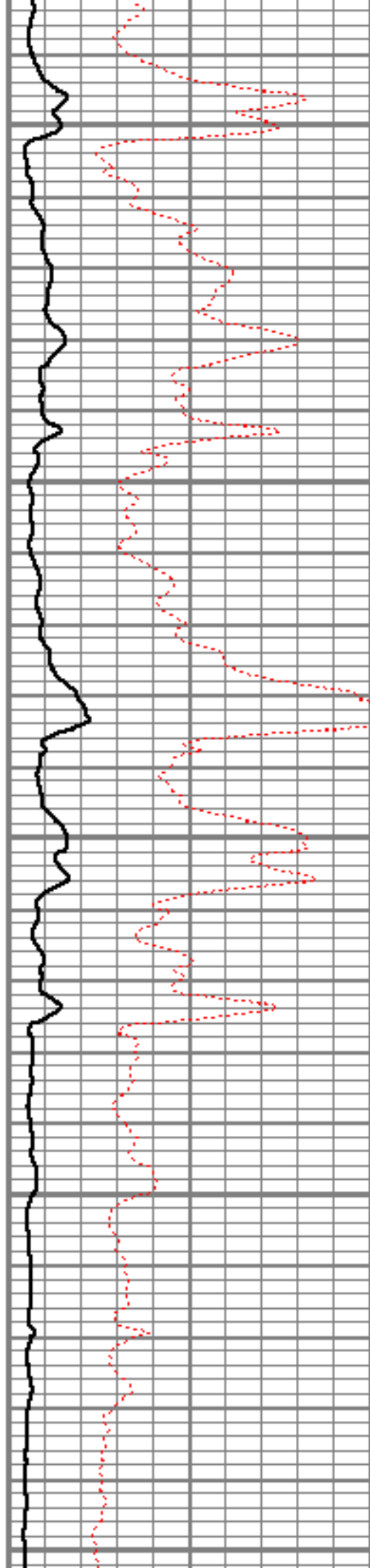
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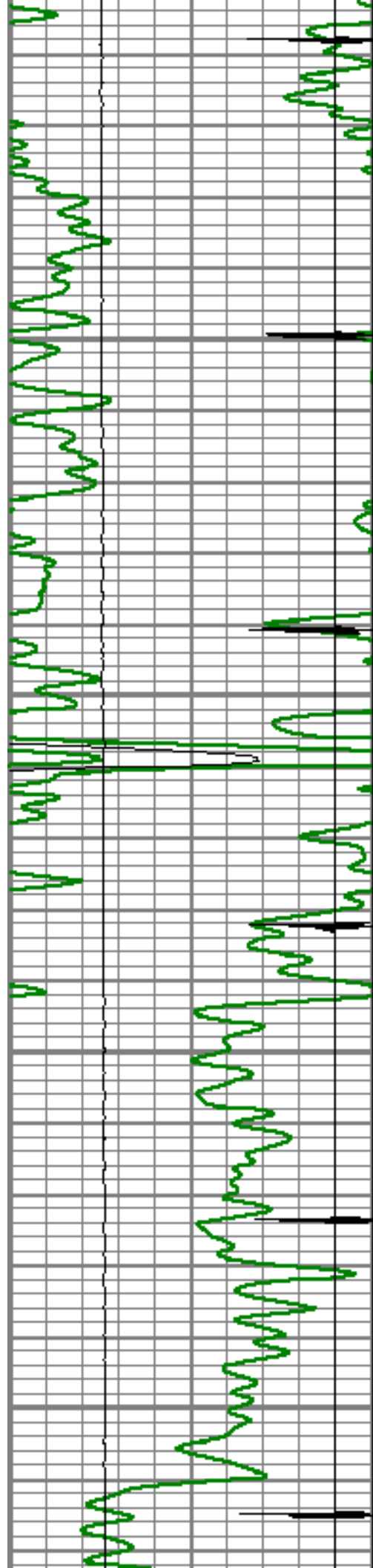
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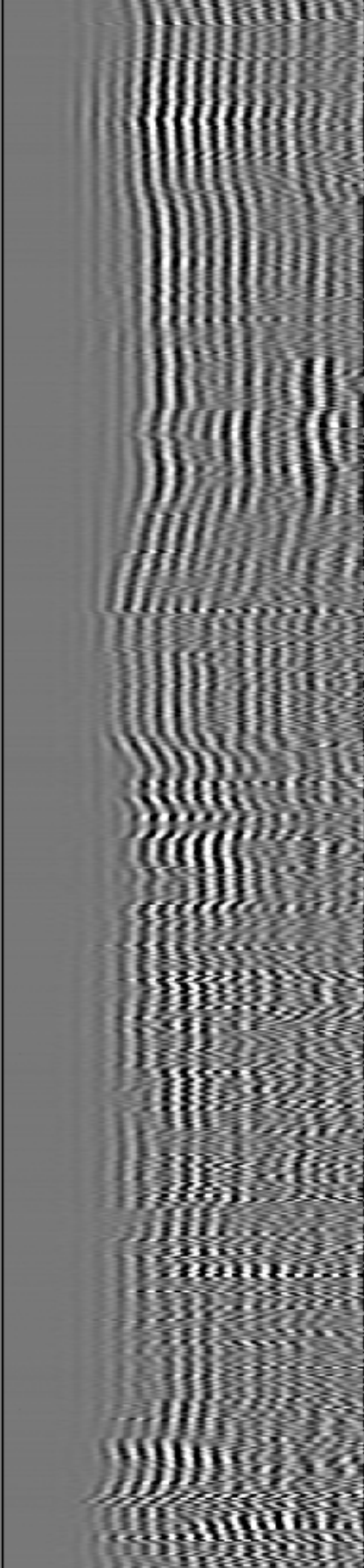
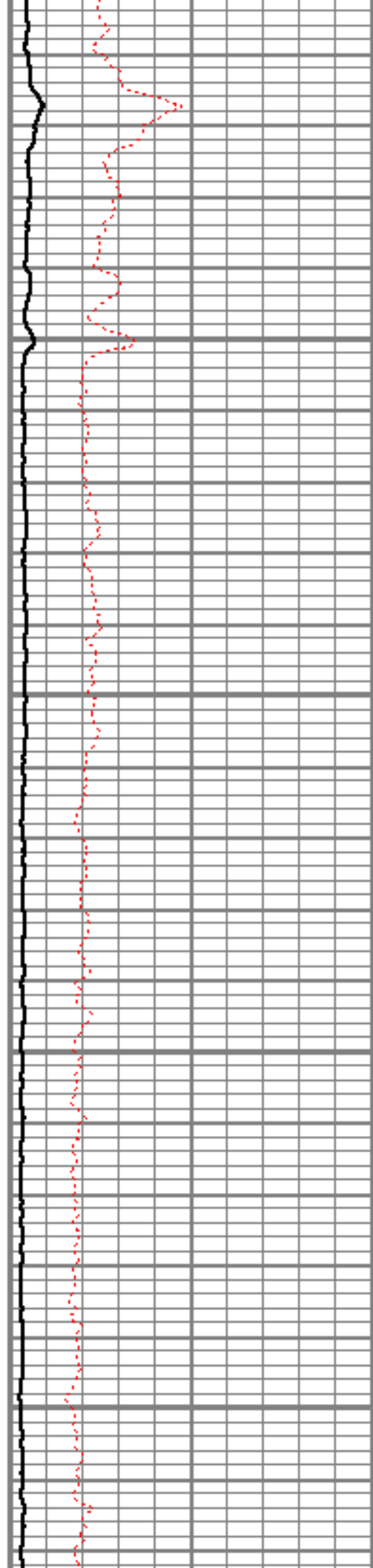


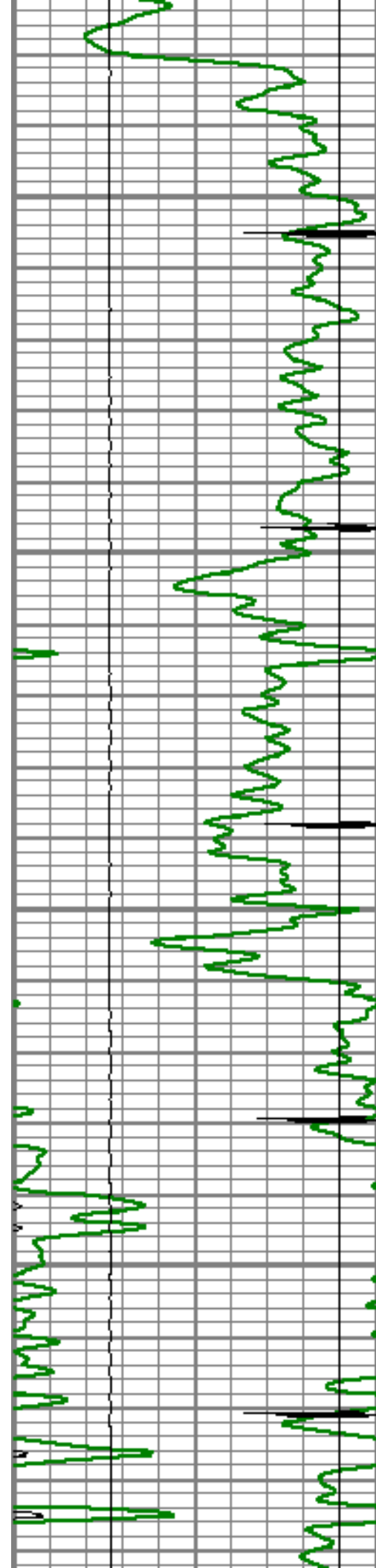
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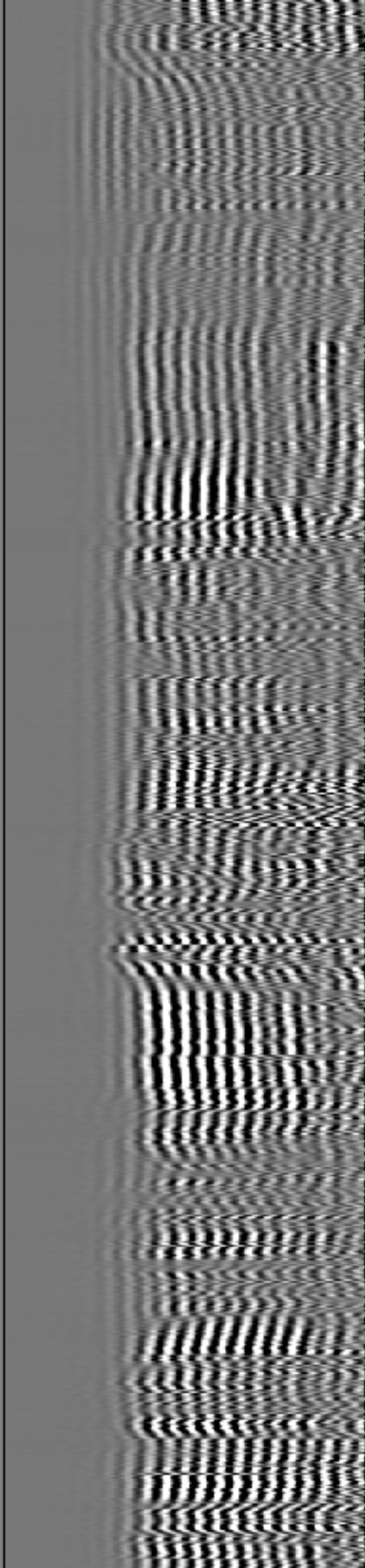
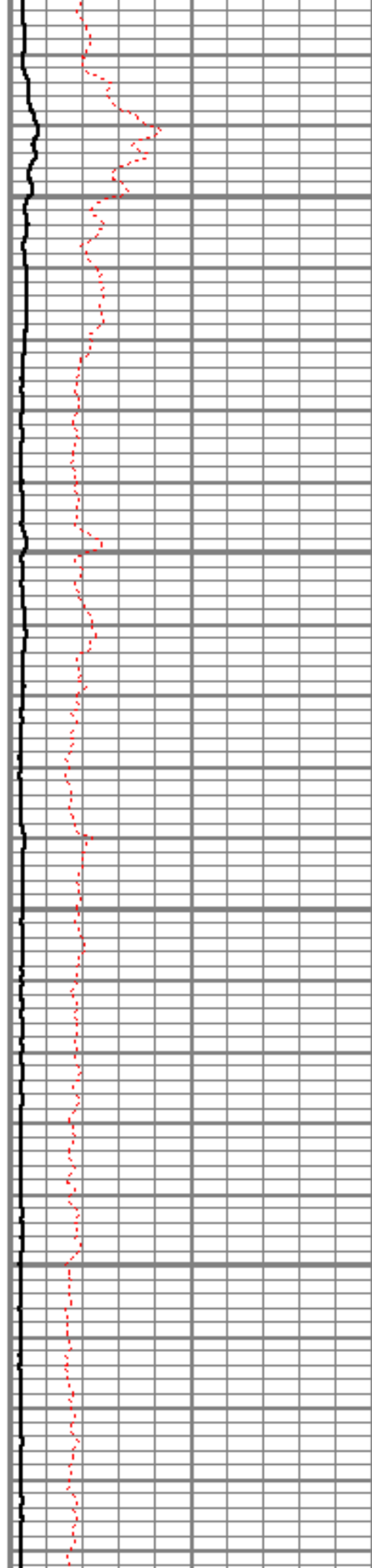


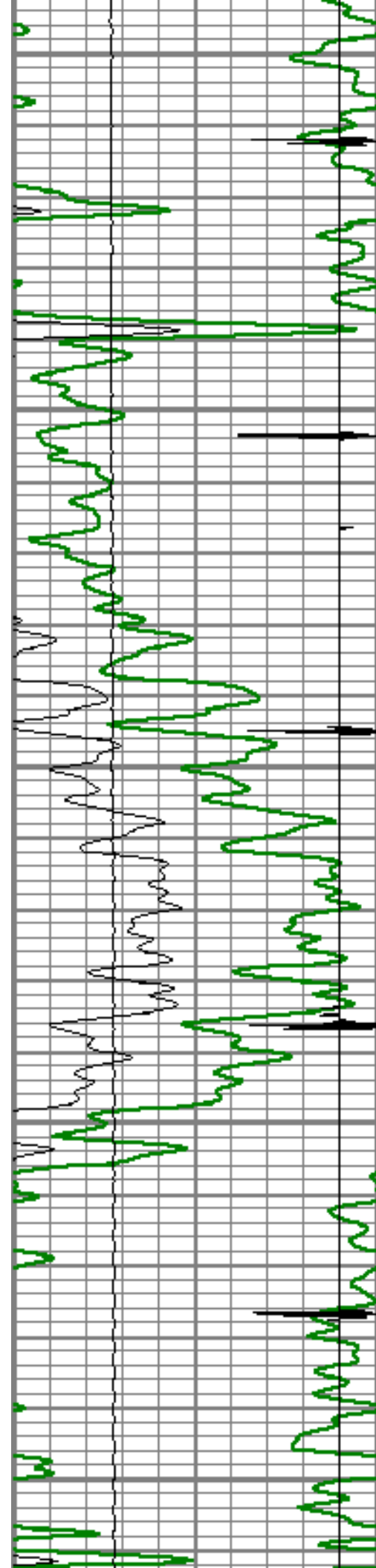
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8200

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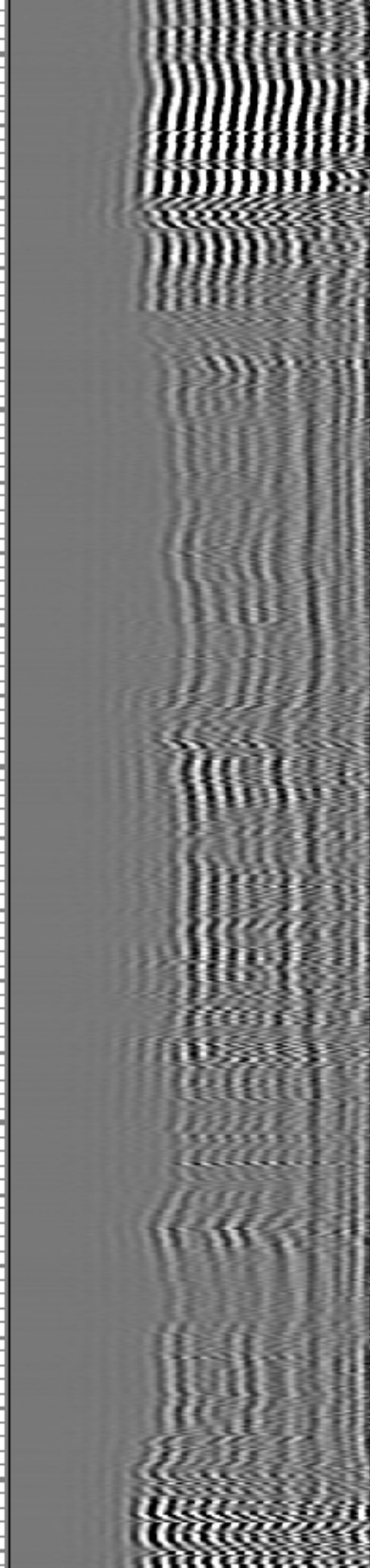
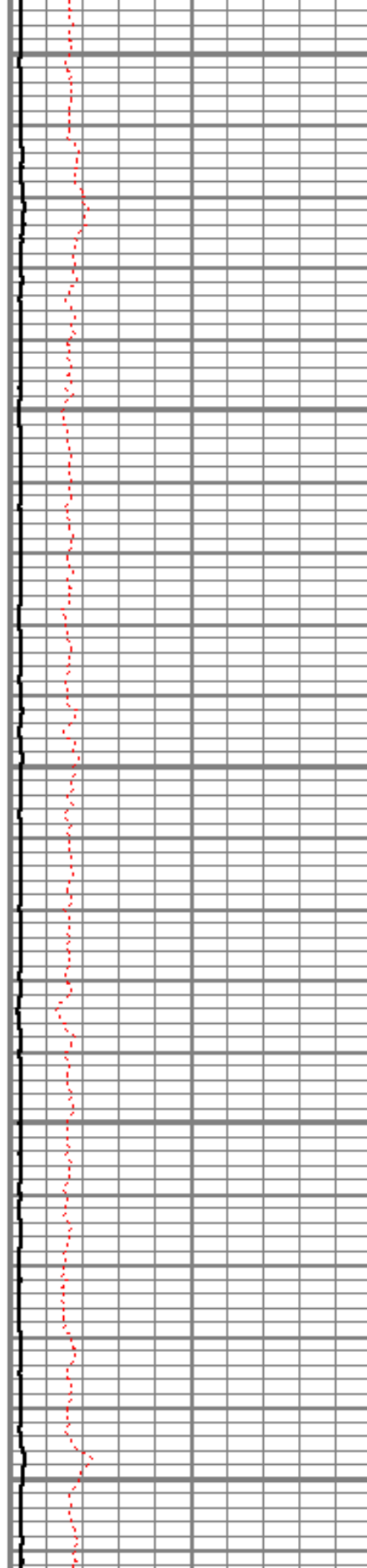
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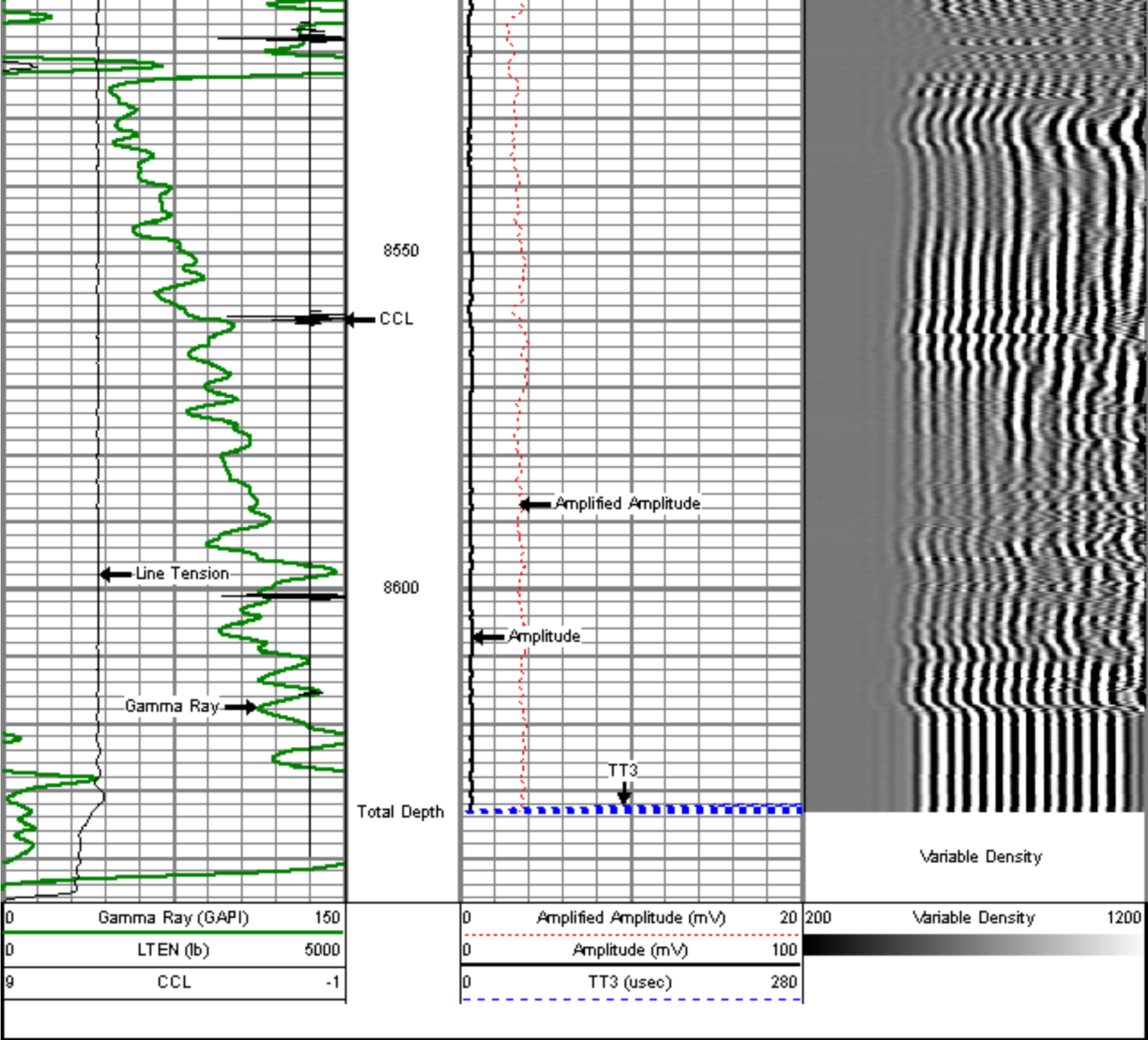
8350


8400

8450

8500





Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			titan	1.02	1.44	1.50
			Centralizer-Probe (CENT-PROBE-1) Probe Bowspring Centralizer	2.88	2.75	10.00

WVF3	13.54		CBL-Probe (DCBL_PRB_275_01) Probe 2.75" Dual Receiver Bond	8.77	2.75	60.00
WVF5	12.54					
			Centralizer-Probe (CENT-PROBE-2) Probe Bowspring Centralizer	2.88	2.75	10.00
CCL	5.50		GR-Probe (GRCCL_PRB_275_01) Probe 2.75" 4 Channel Probe	4.54	2.75	30.00
GR	2.77					
TEMP	0.17		TEMP-1.375TEMP (11116HT) 1.375" Temp Tool	1.88	1.40	30.00
Dataset: 6-8.db: field/well/run1/pass18oh Total Length: 21.96 ft Total Weight: 141.50 lb O.D.: 2.75 in						



Company ENCANA OIL & GAS (USA)
 Well COSTIGAN 6-8-20
 Field WATTENBERG
 County WELD
 State COLORADO