



CEMENT BOND LOG
GAMMA RAY
CCL

Company		HRM RESOURCES LLC	
11/4'S	SES'W	Well	WELD 1
SEC.	20	Field	ROGGEN
TWP.	2N	County	WELD
		State	COLORADO
RGE.	62W	API#:	05-123-09245

API#: 05-123-09245
WBS:
11/4S. SESW SEC: 20 TWP: 2N RGE: 62W

Permanent Datum	GL	Elevation	Elev K.B.
Log Measured From	GL		Elev D.F.
Drill Measured From	KELLY BUSHIN	Feet Above Datum	Elev G.L.

Date	Gun Type	Gun Size
2-15-16		

Run Number	1	Charge Type		Gram Wt.	
Magna Depth	6816	Shots / Foot	From	To	# of Shots

Driller Depth	NA			

First Reading	6800			
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last Reading	850			
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Max Temperature	NA			
9				

maximal temperature	100			
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Est. Cement 1 op	6424				
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Fluid Type	WATER			

Fluid Density	8.3	
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Est. Fluid Level	850				
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Service Order	30001449				
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Truck No	992			
Service Order	0000110			

Truck NO	ZZZ	Casing Data
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Recorded By	J. JOHNSON	Size inches	Weight Lb/Ft	From	To
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Witnessed By		
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Magna Contact	Ryan Ludwar (307) 680-8124			
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Other Services					

Service	Type	Size	Depth	Comments
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Service	Type	Size	Depart	Comments

[illegible]

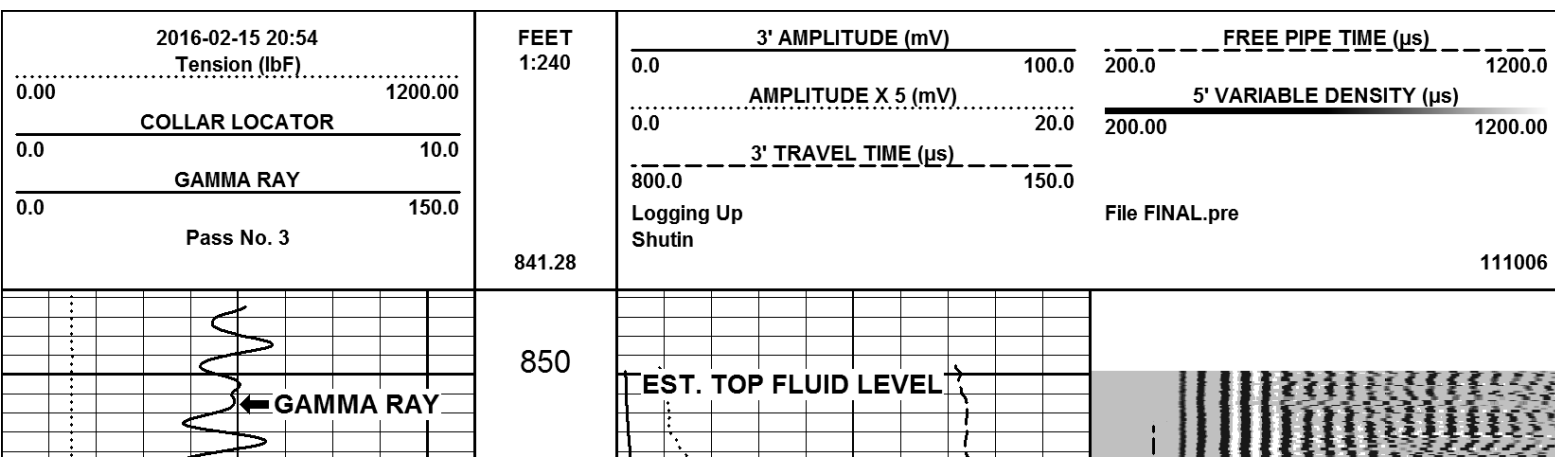
				THANK YOU FOR CHOOSING MAGNA!
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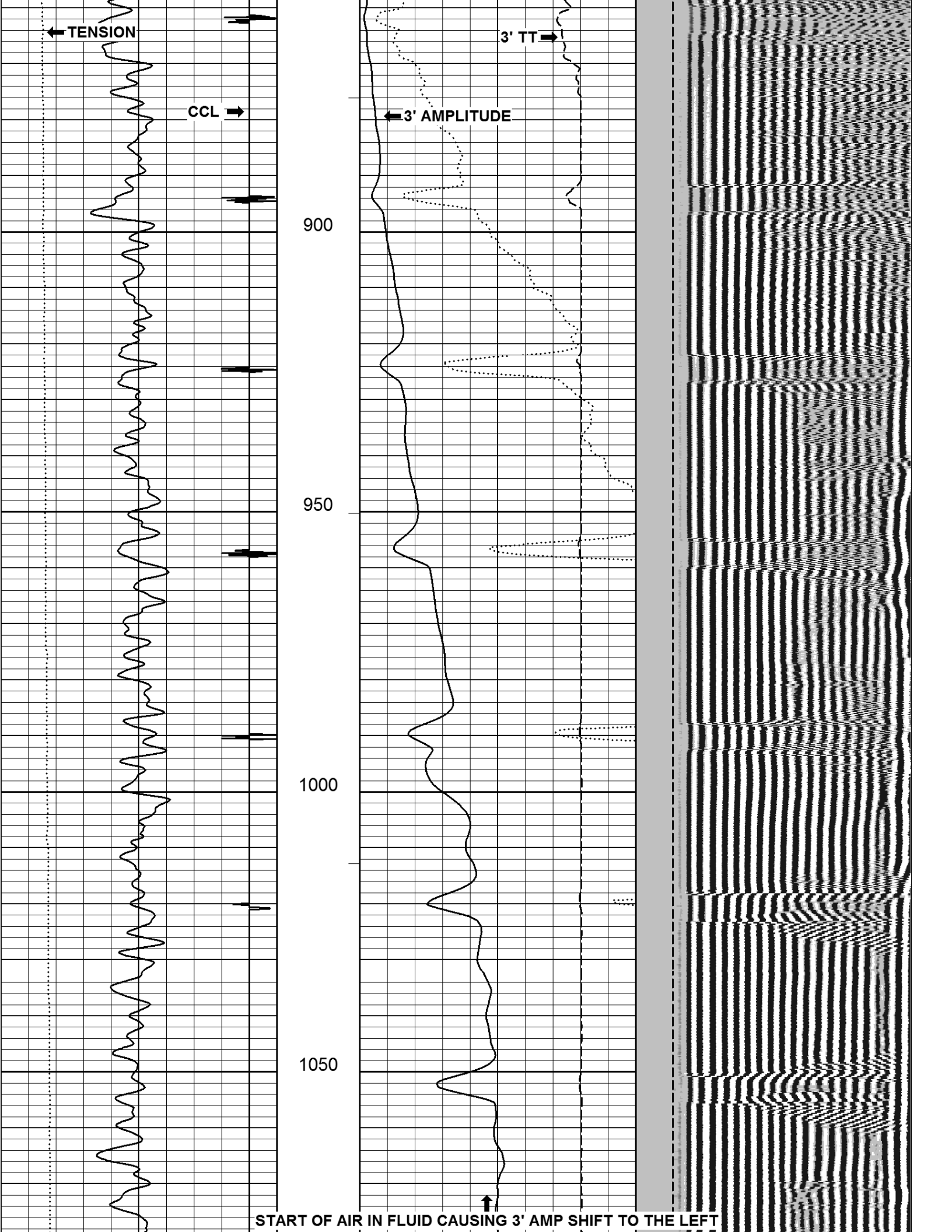
				YOUR CREW: J. JOHNSON, J.BLOCKBERG
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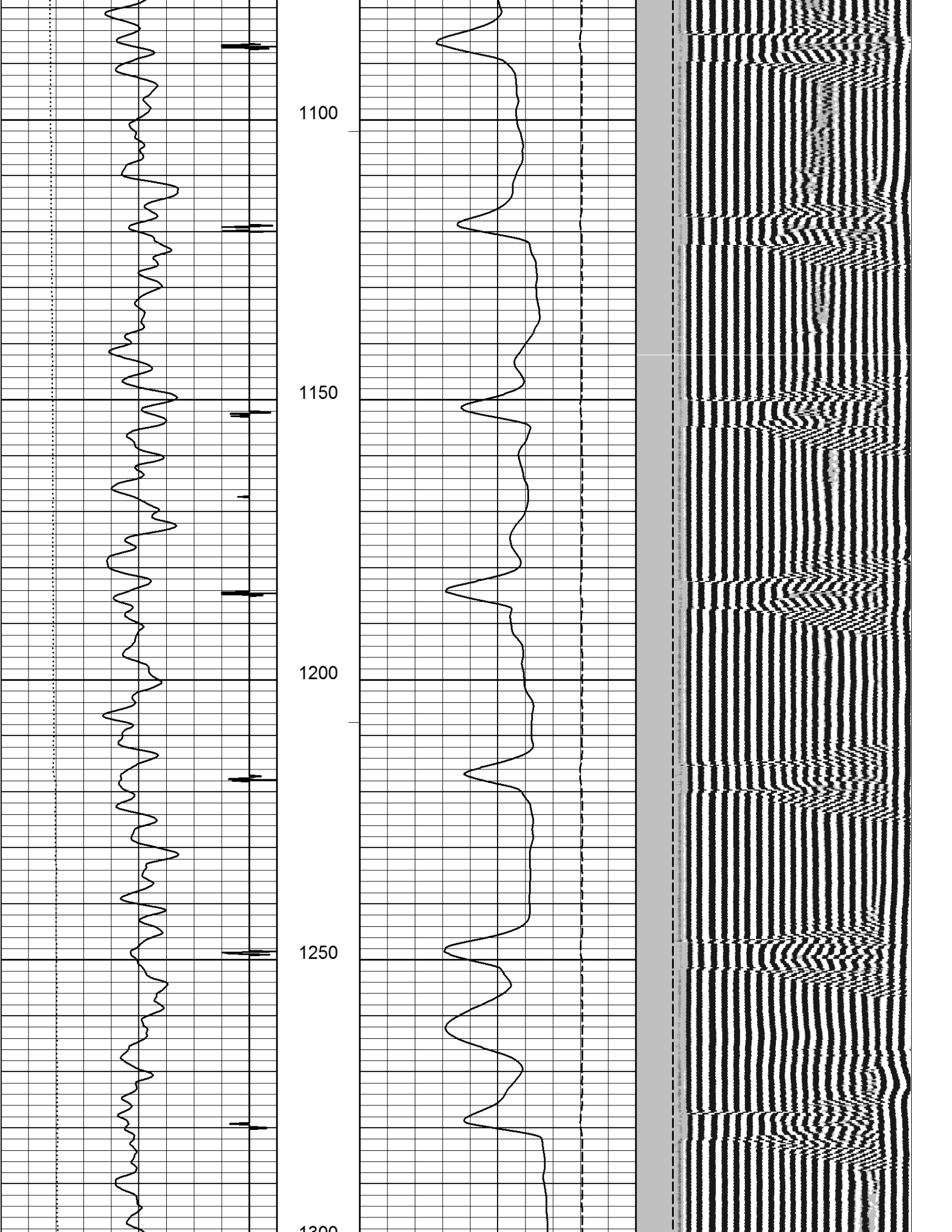
Remarks:

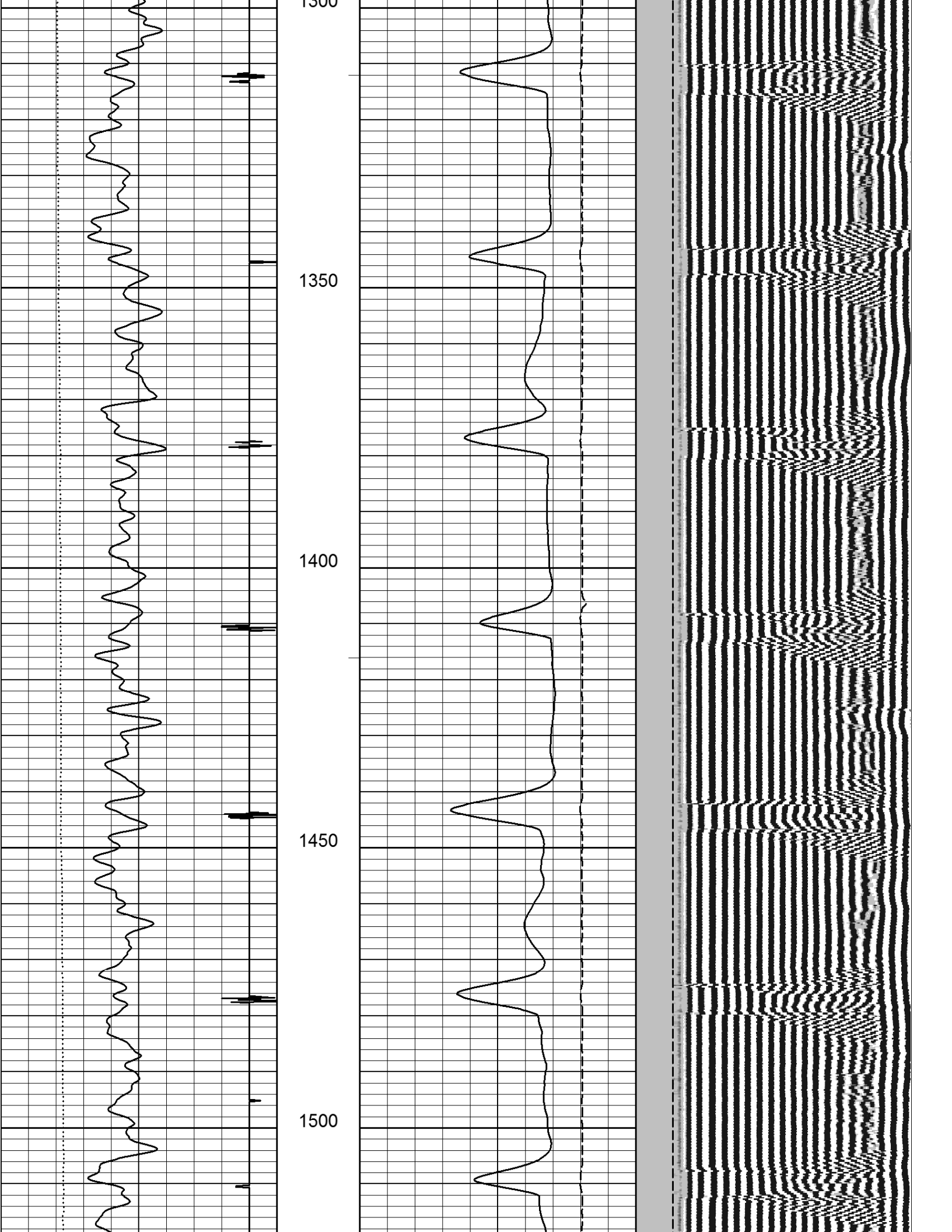
Previous Well Information	
Depth Control Log	
Perforated	
Bridge Plug Set At	
Cement Retainer Set At	
Production Packer Set At	

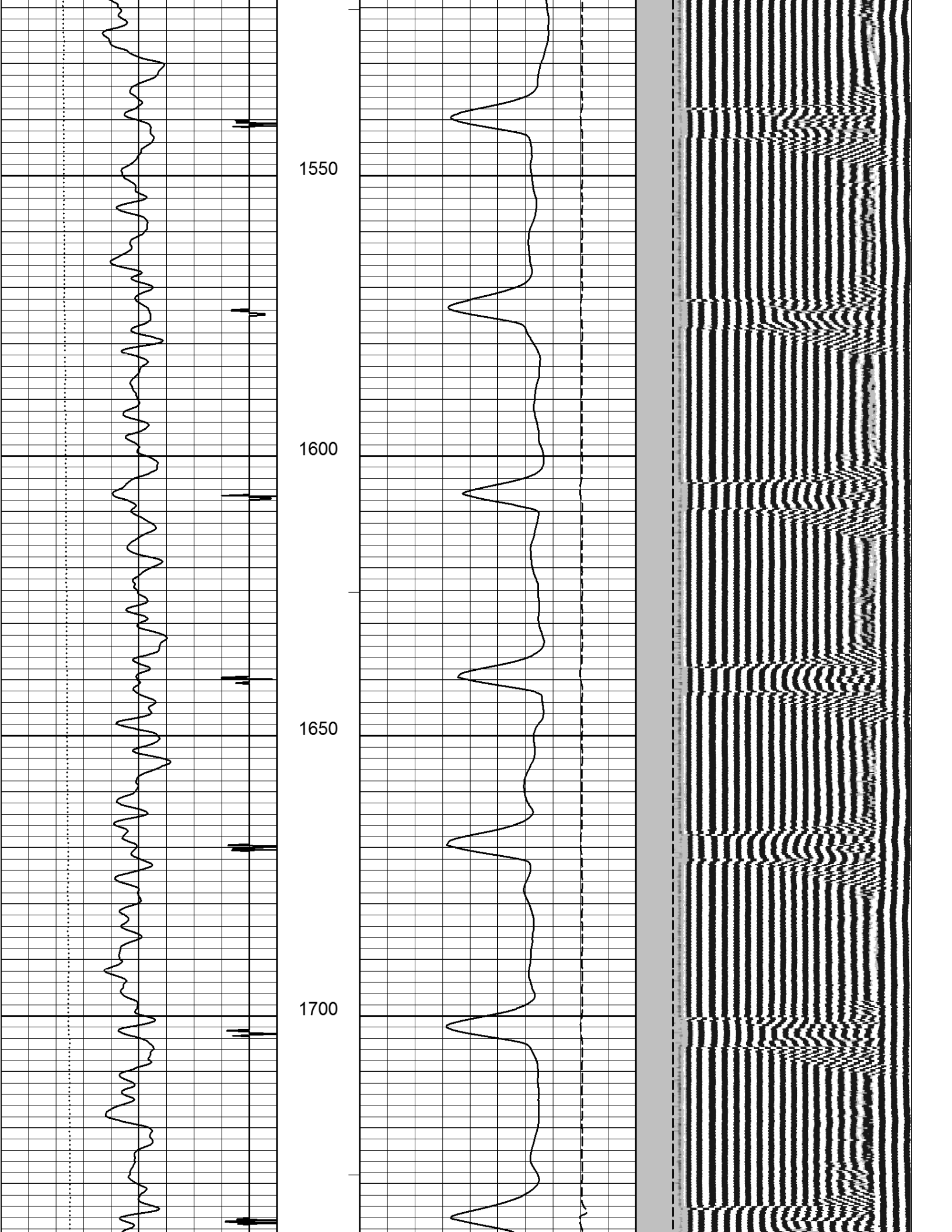
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

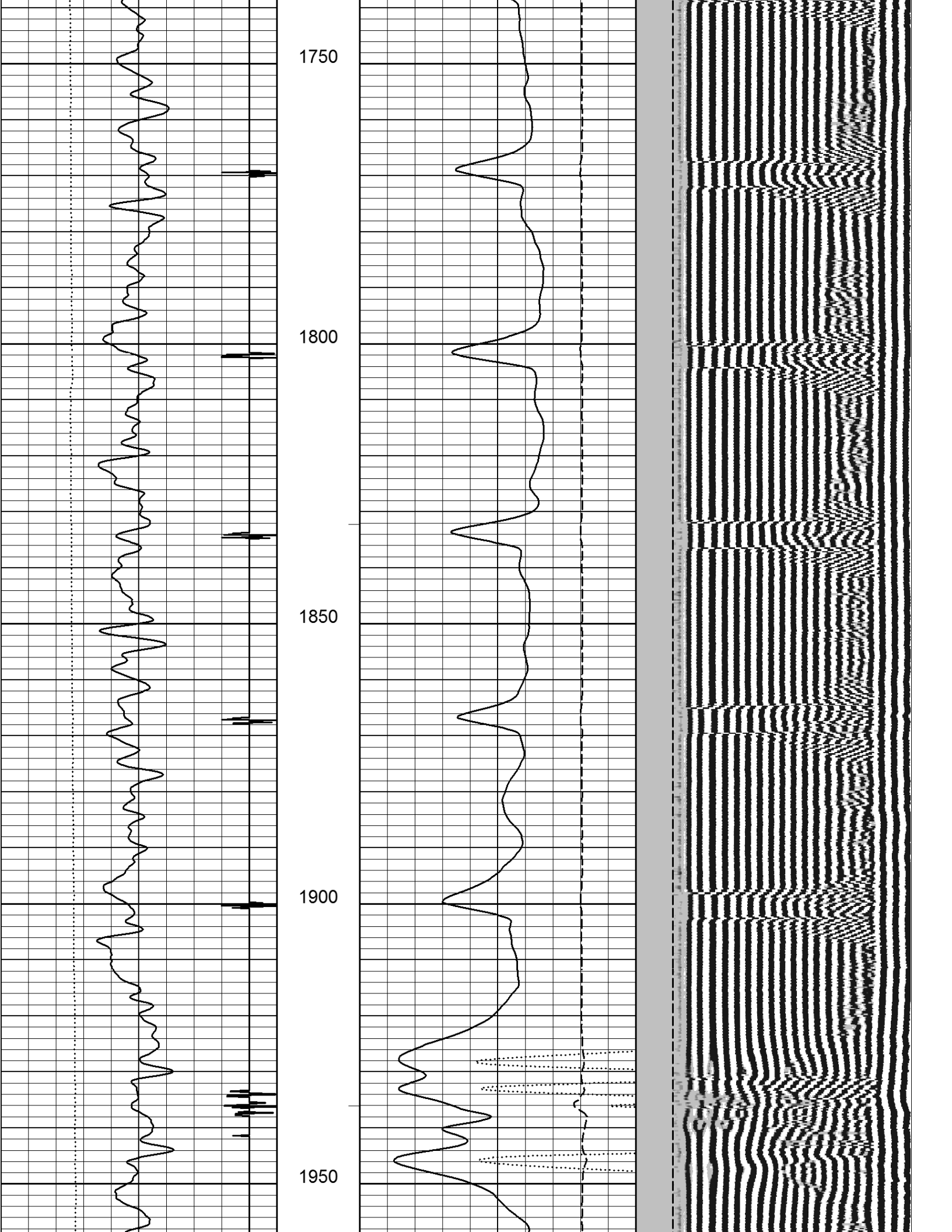


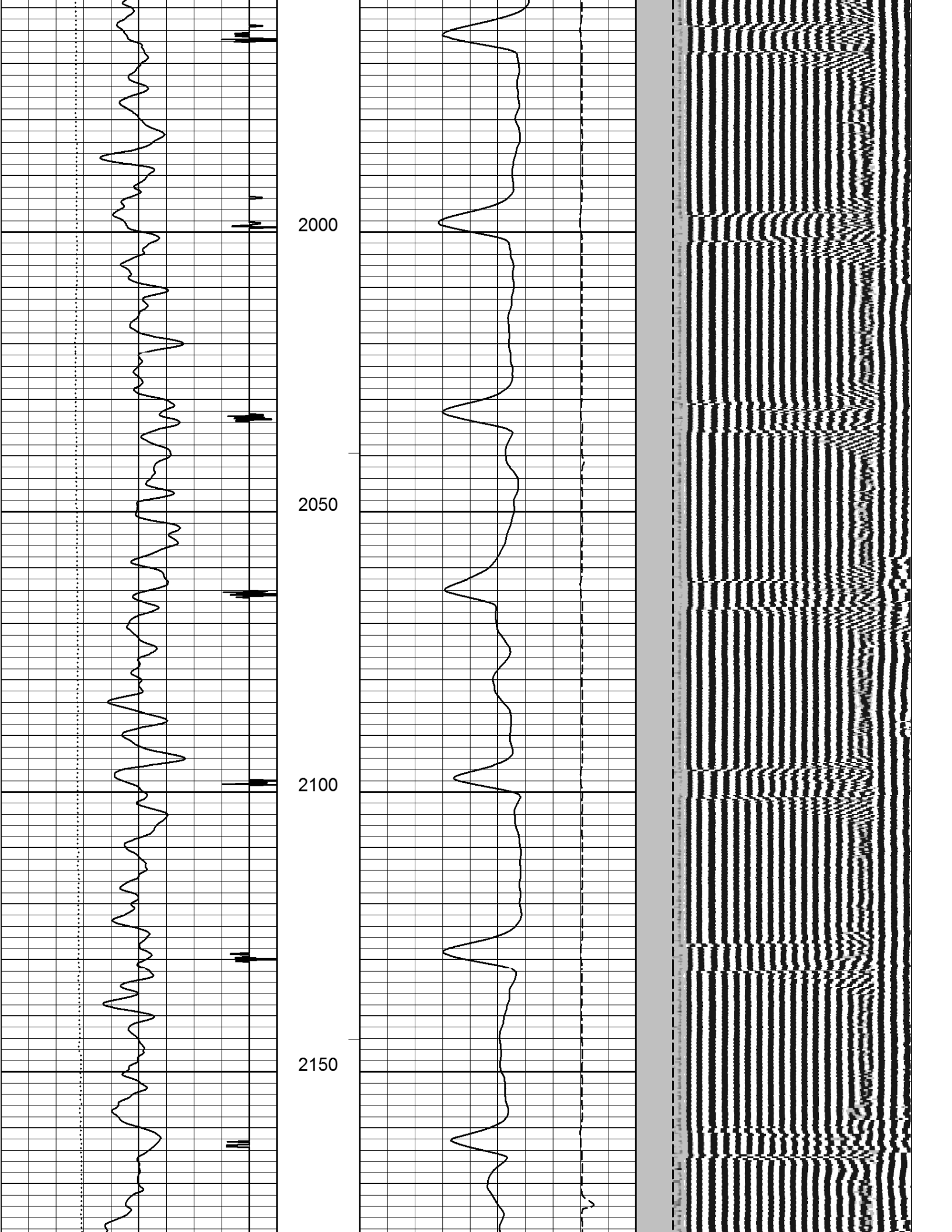


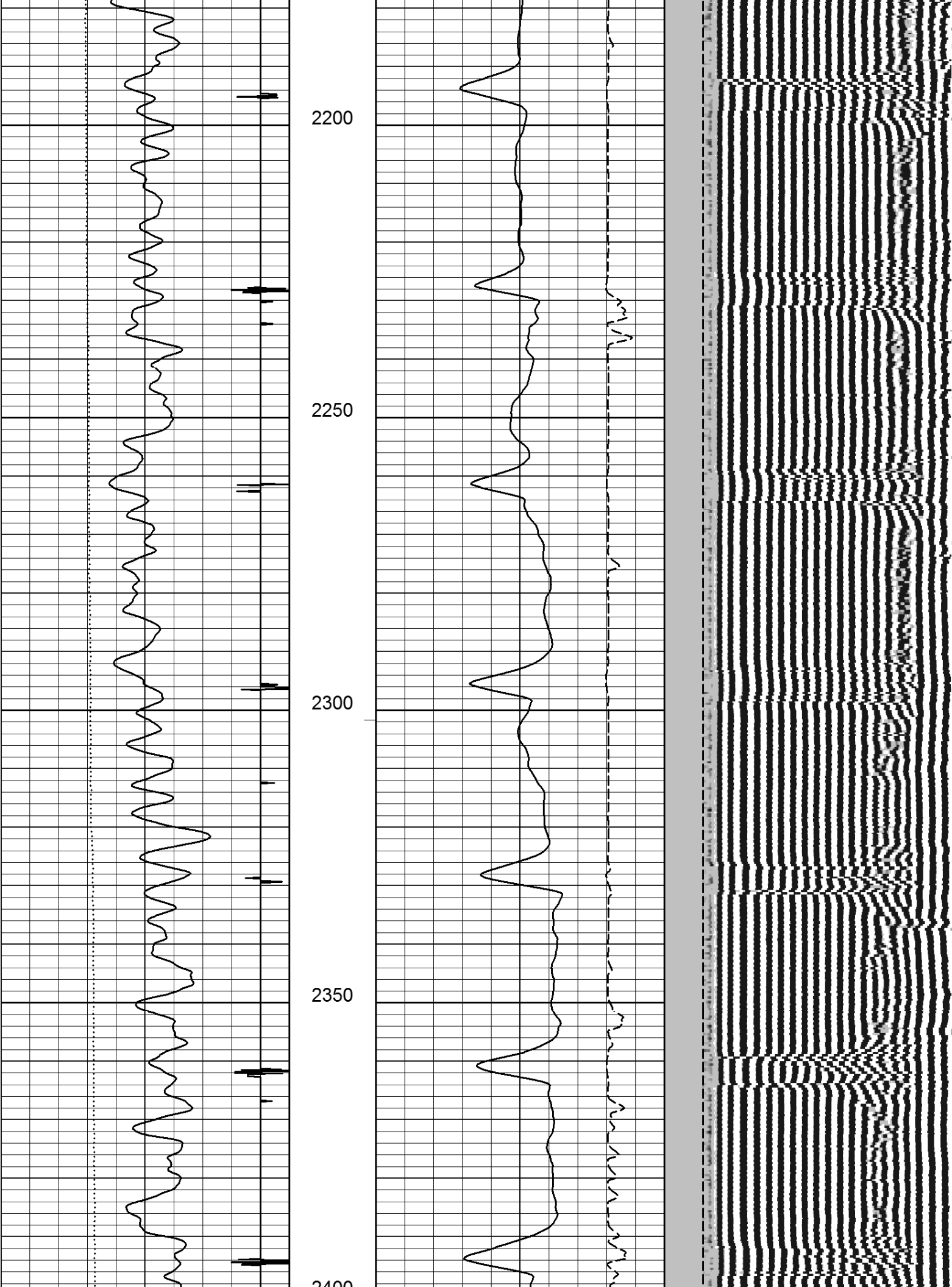


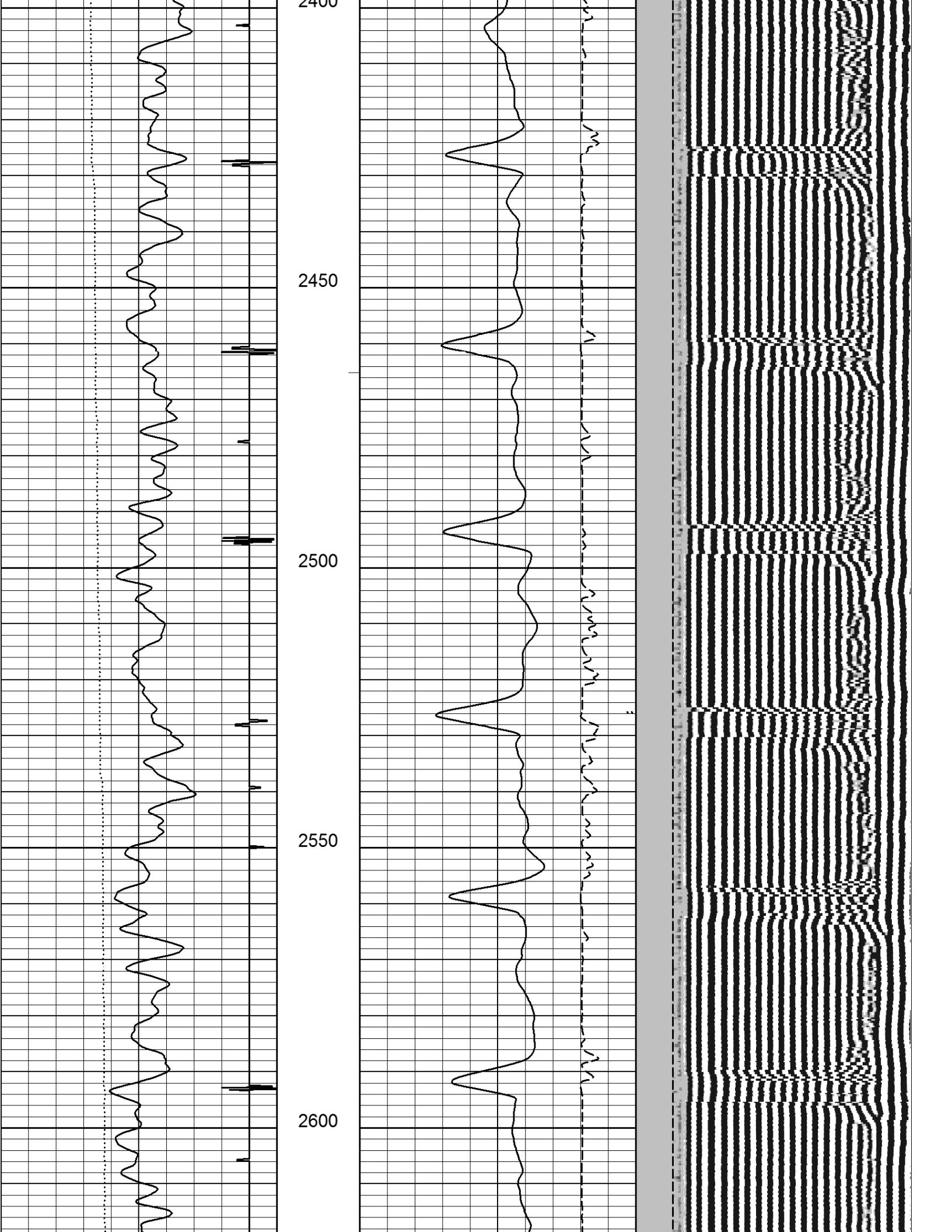


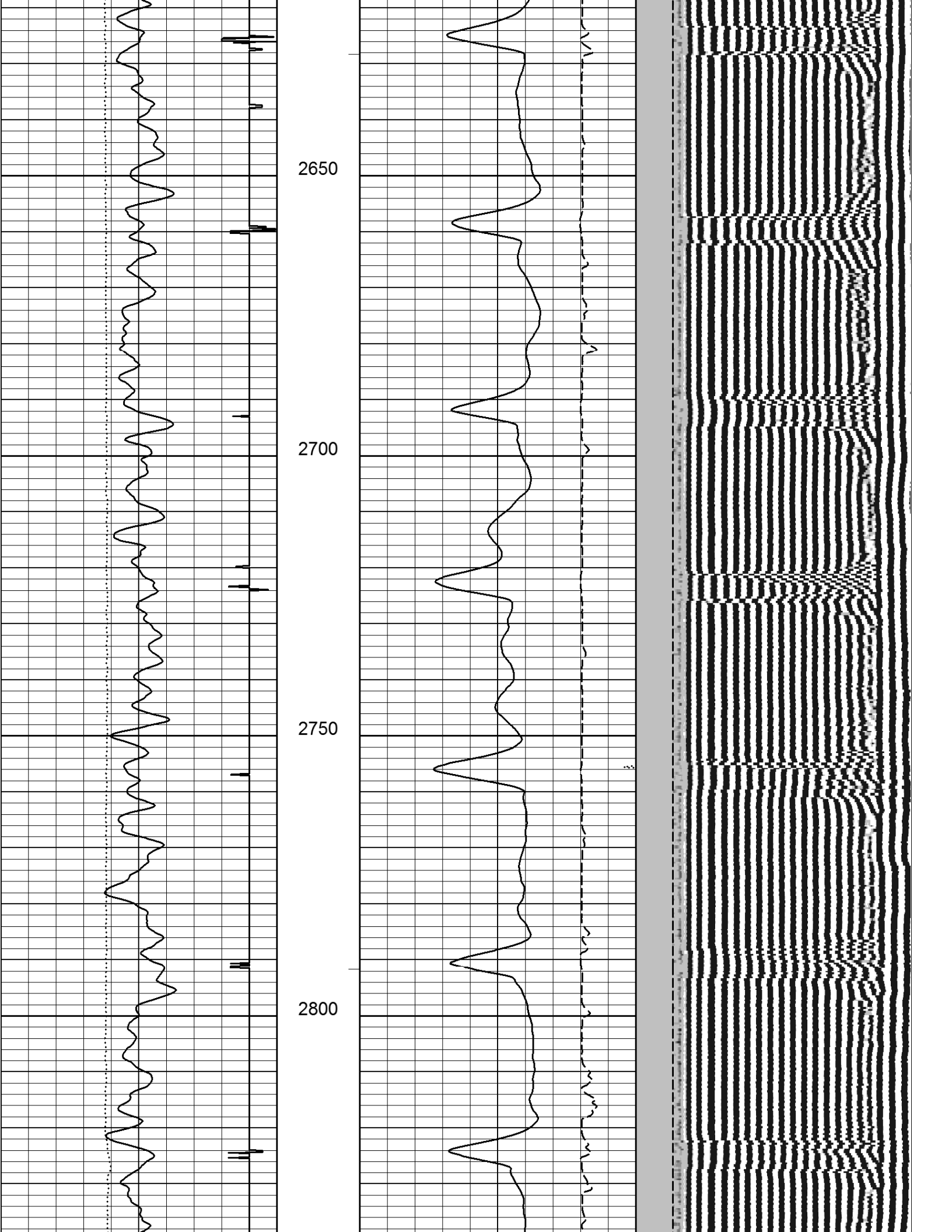


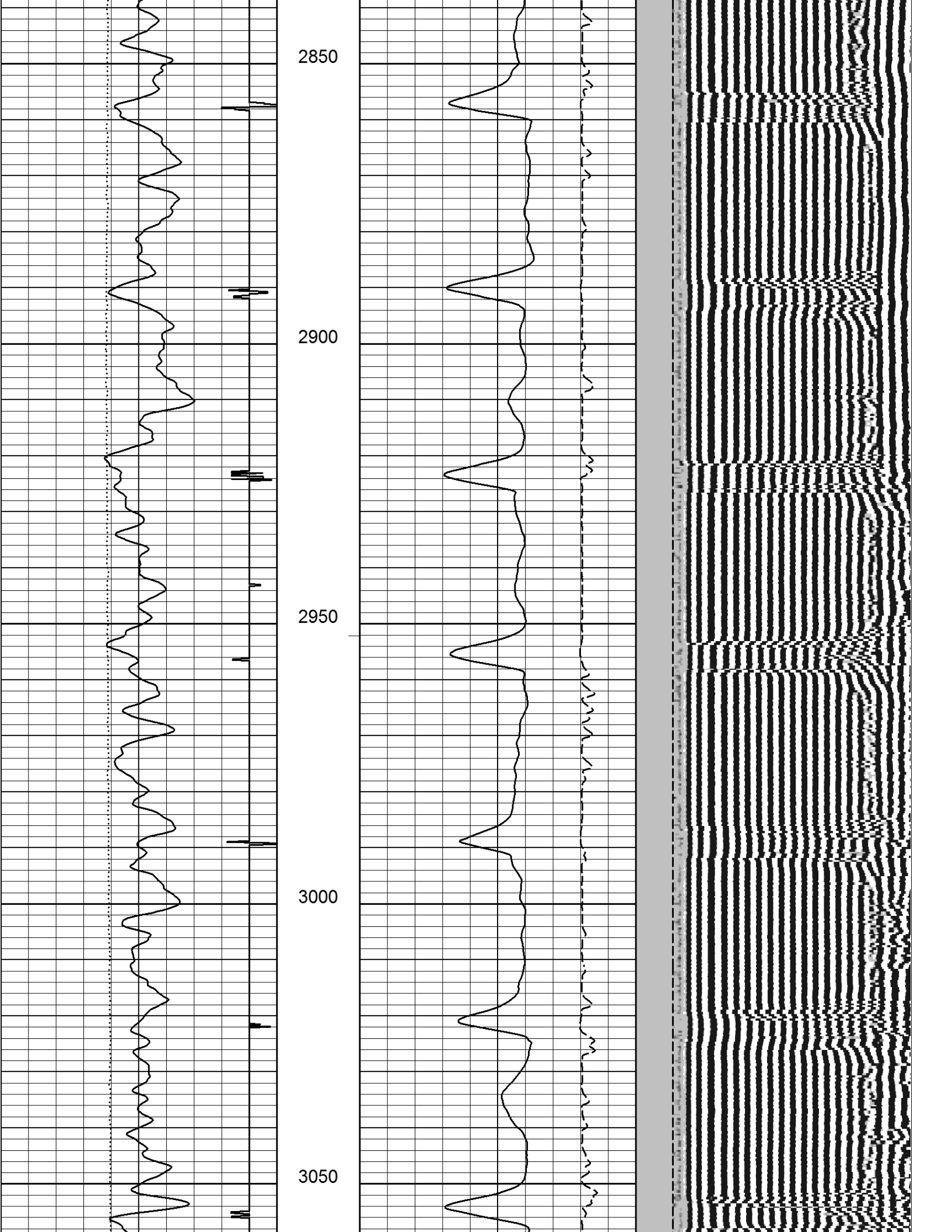


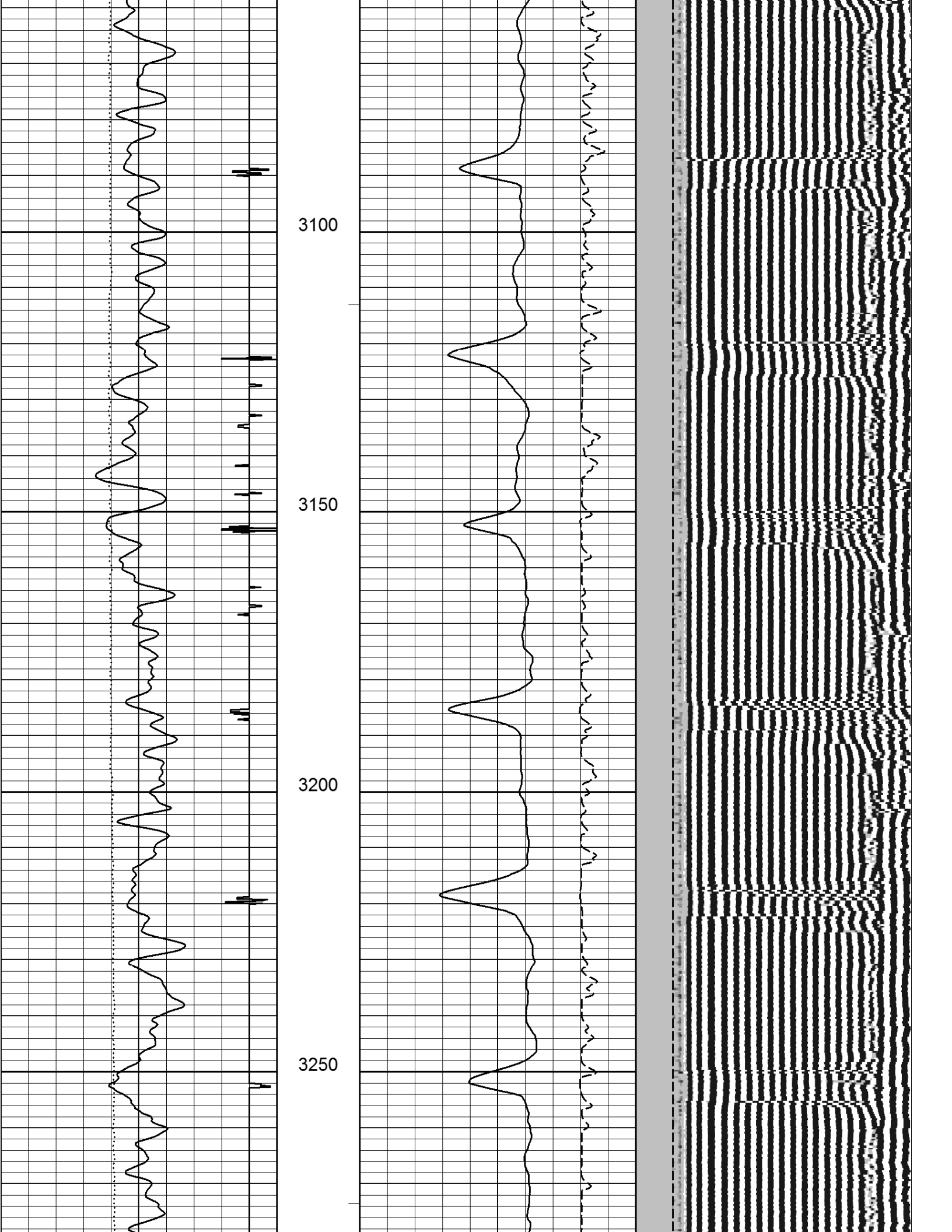


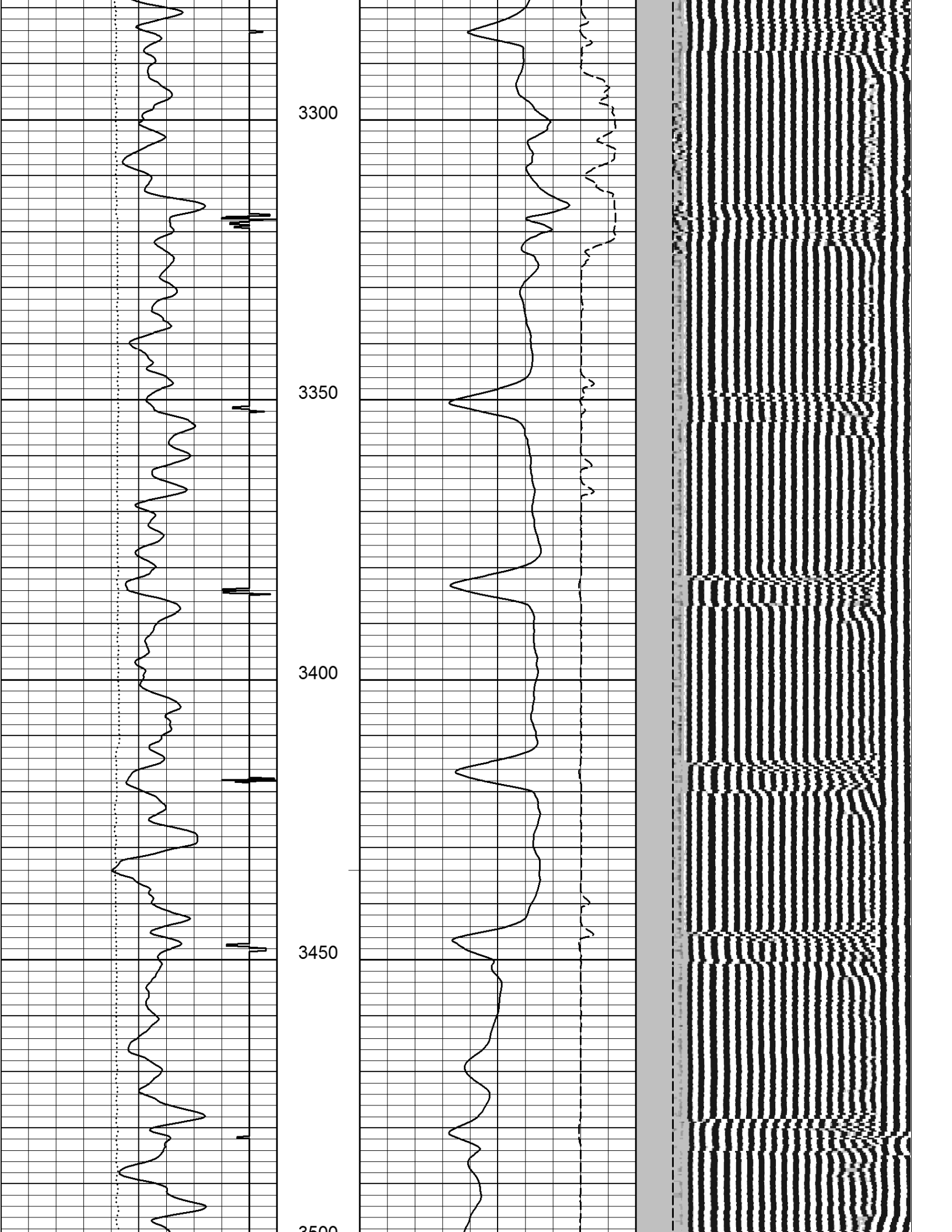


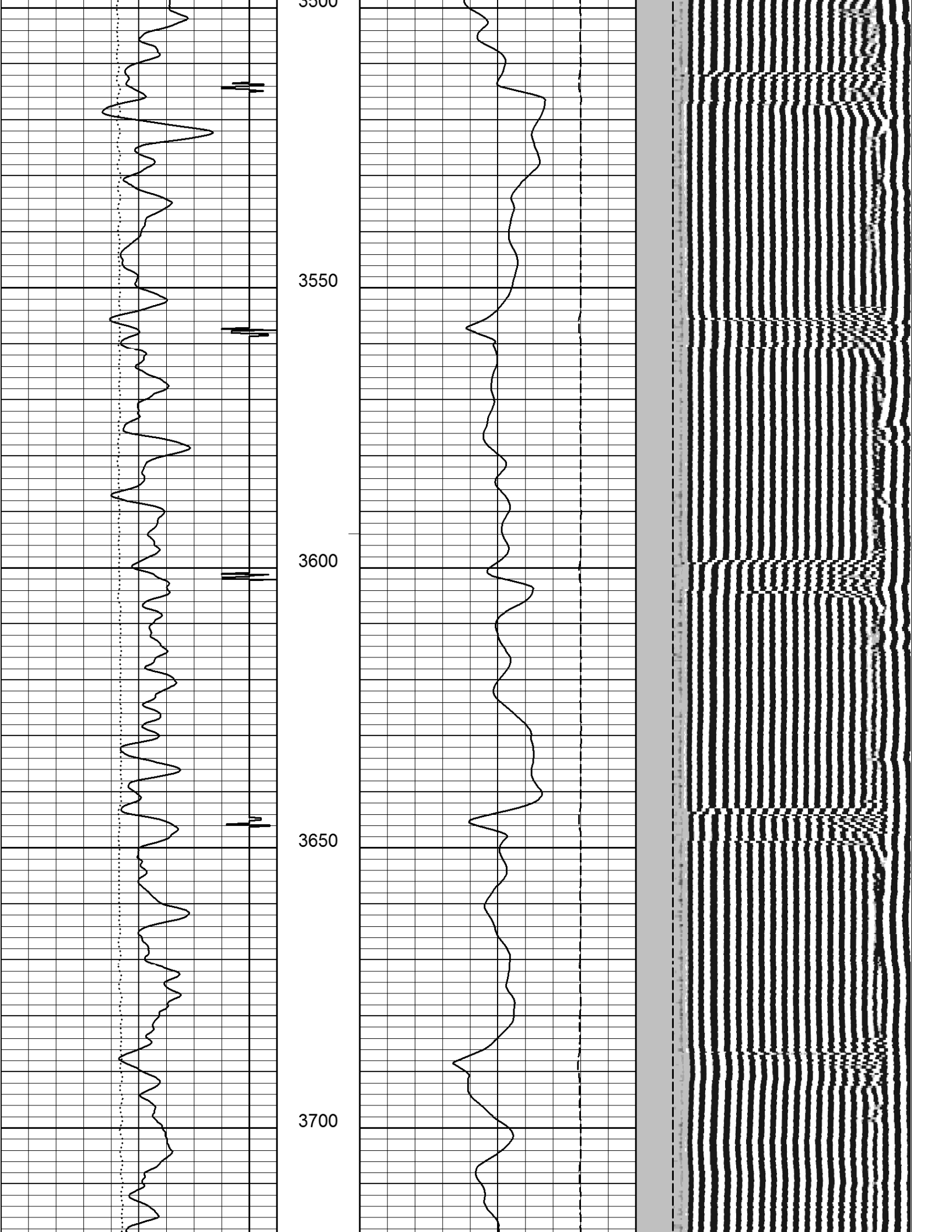


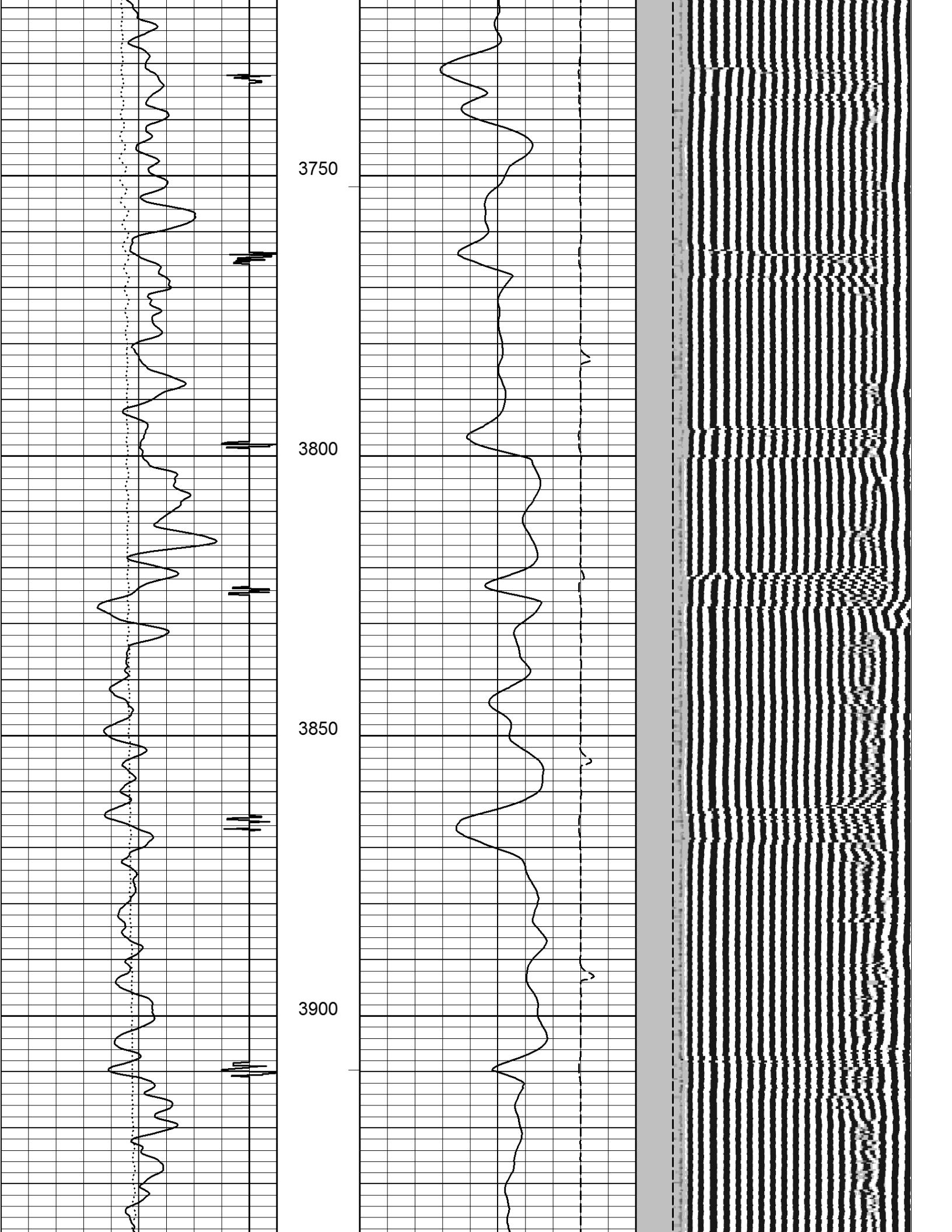


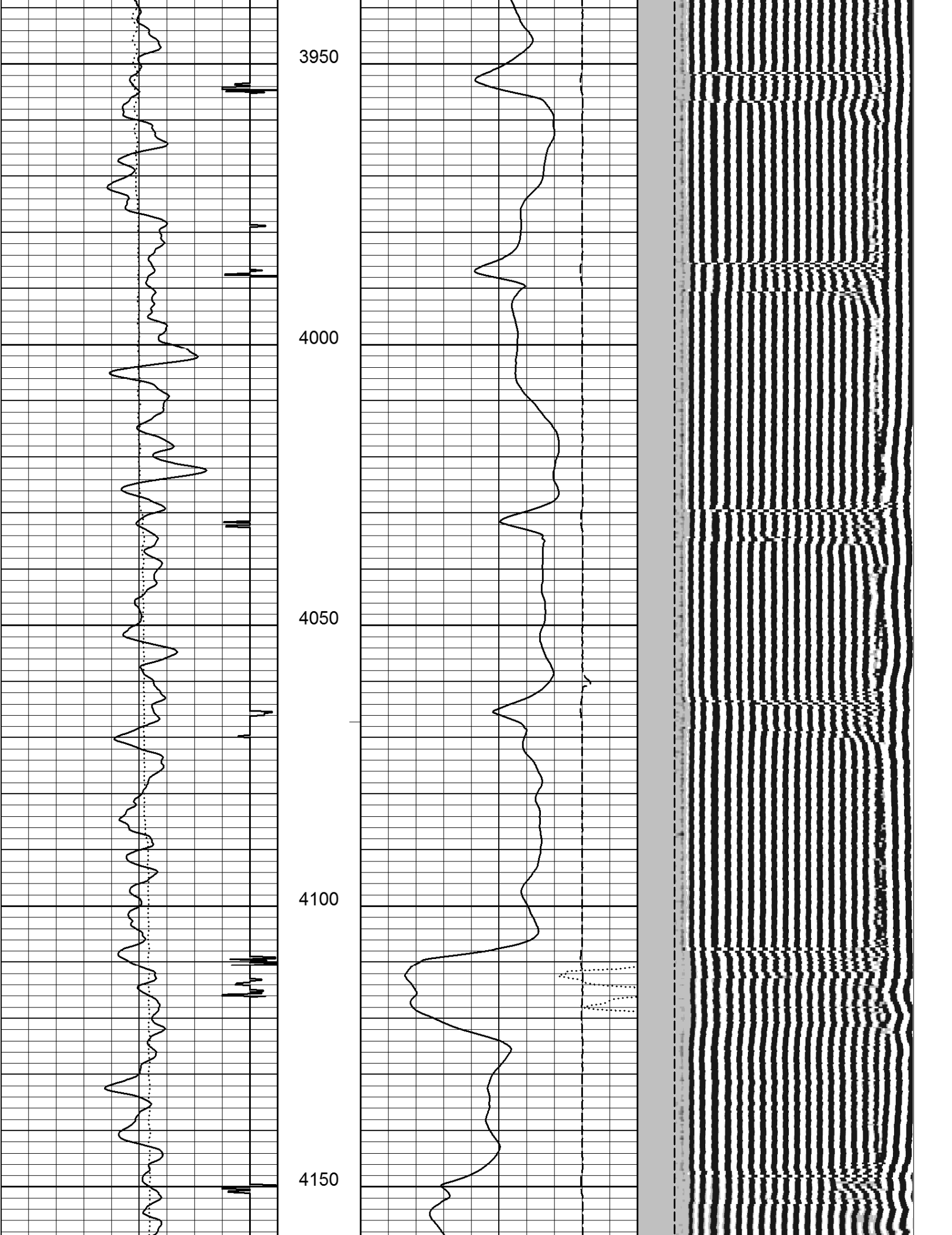


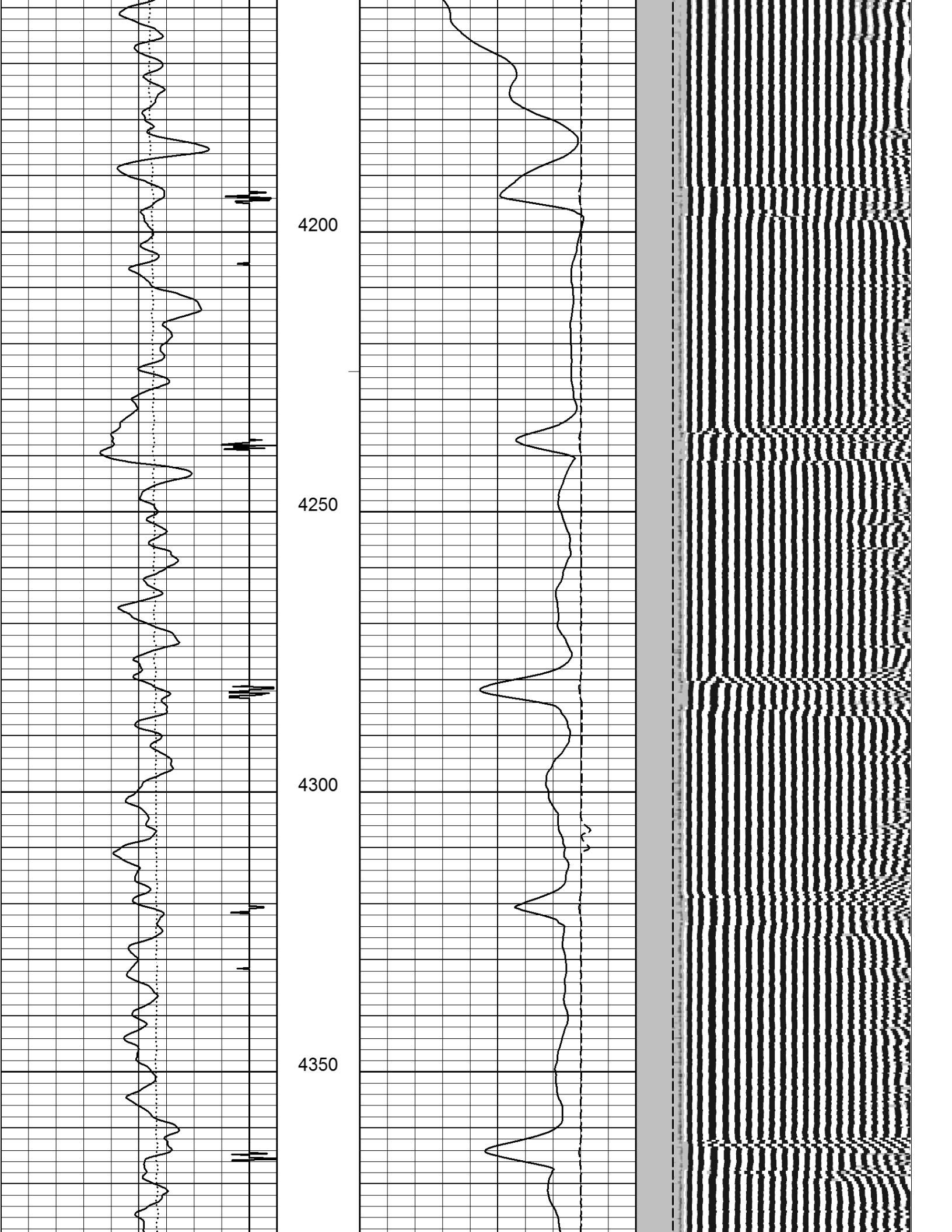


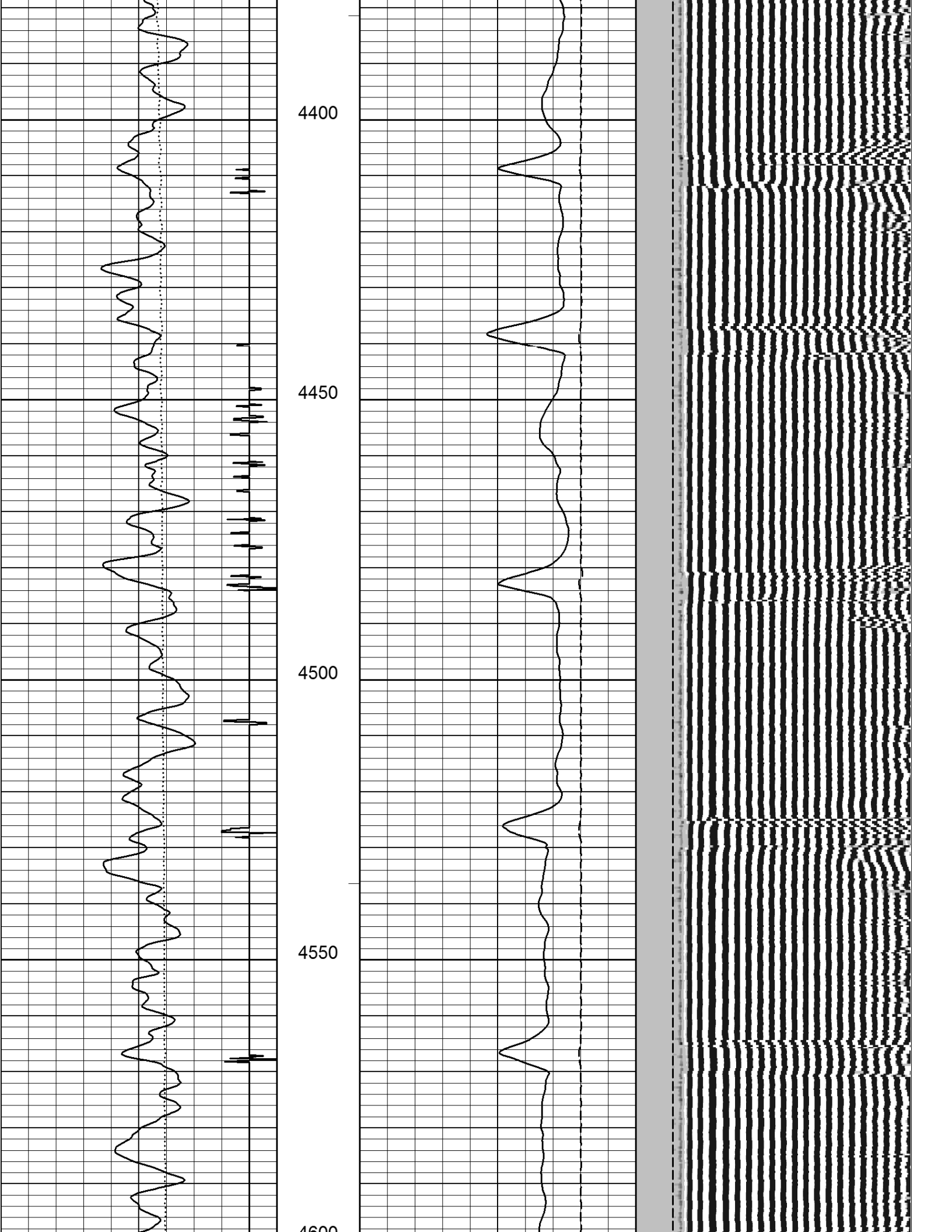


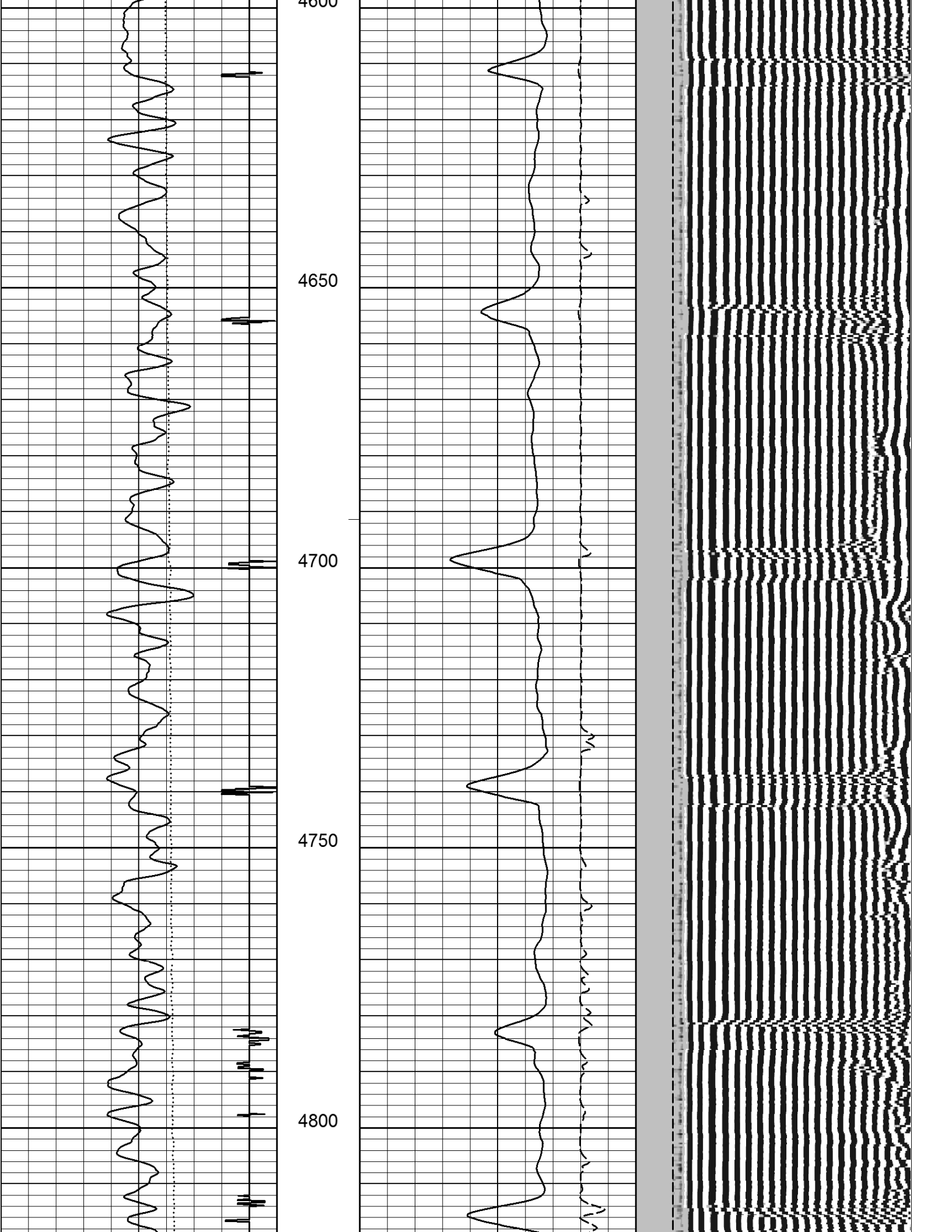


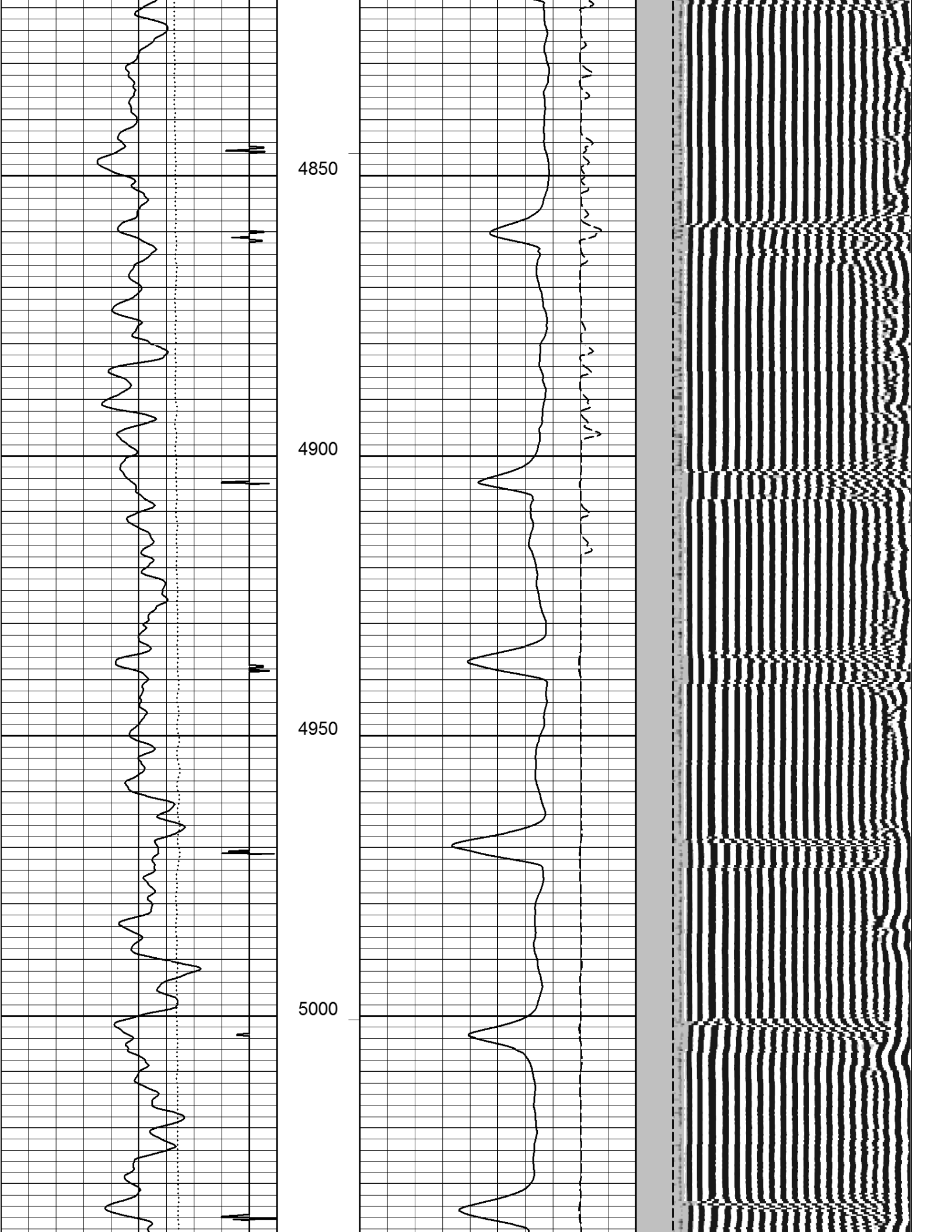


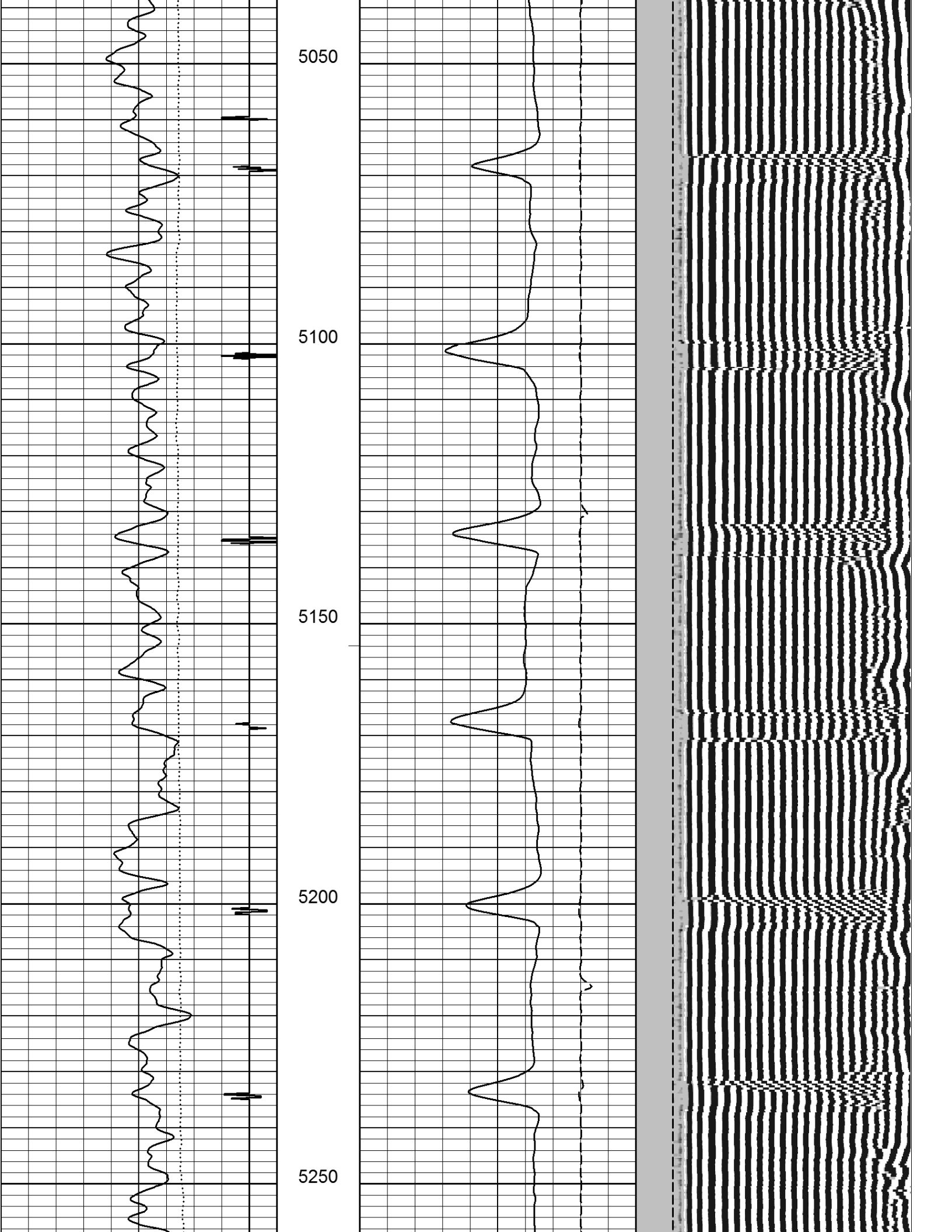


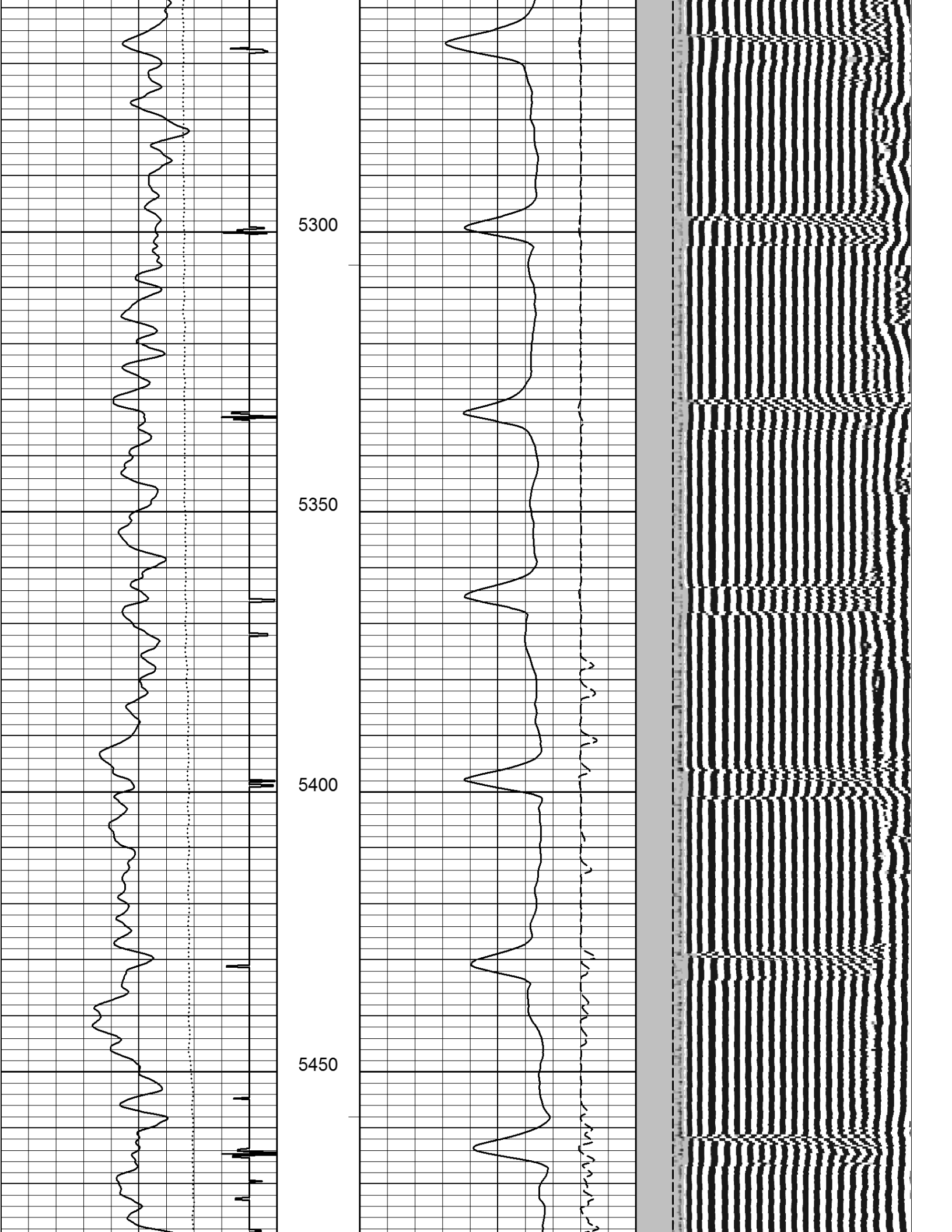


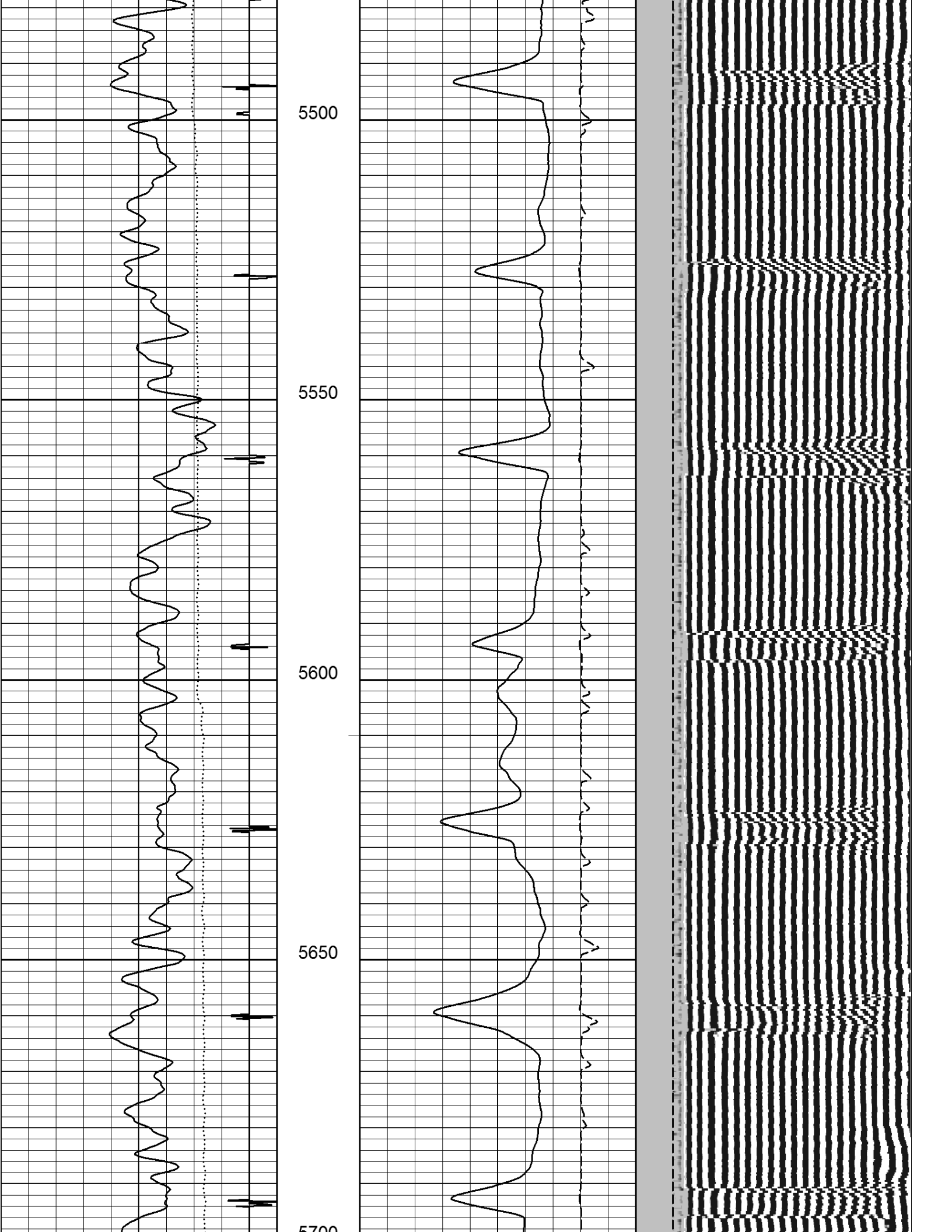


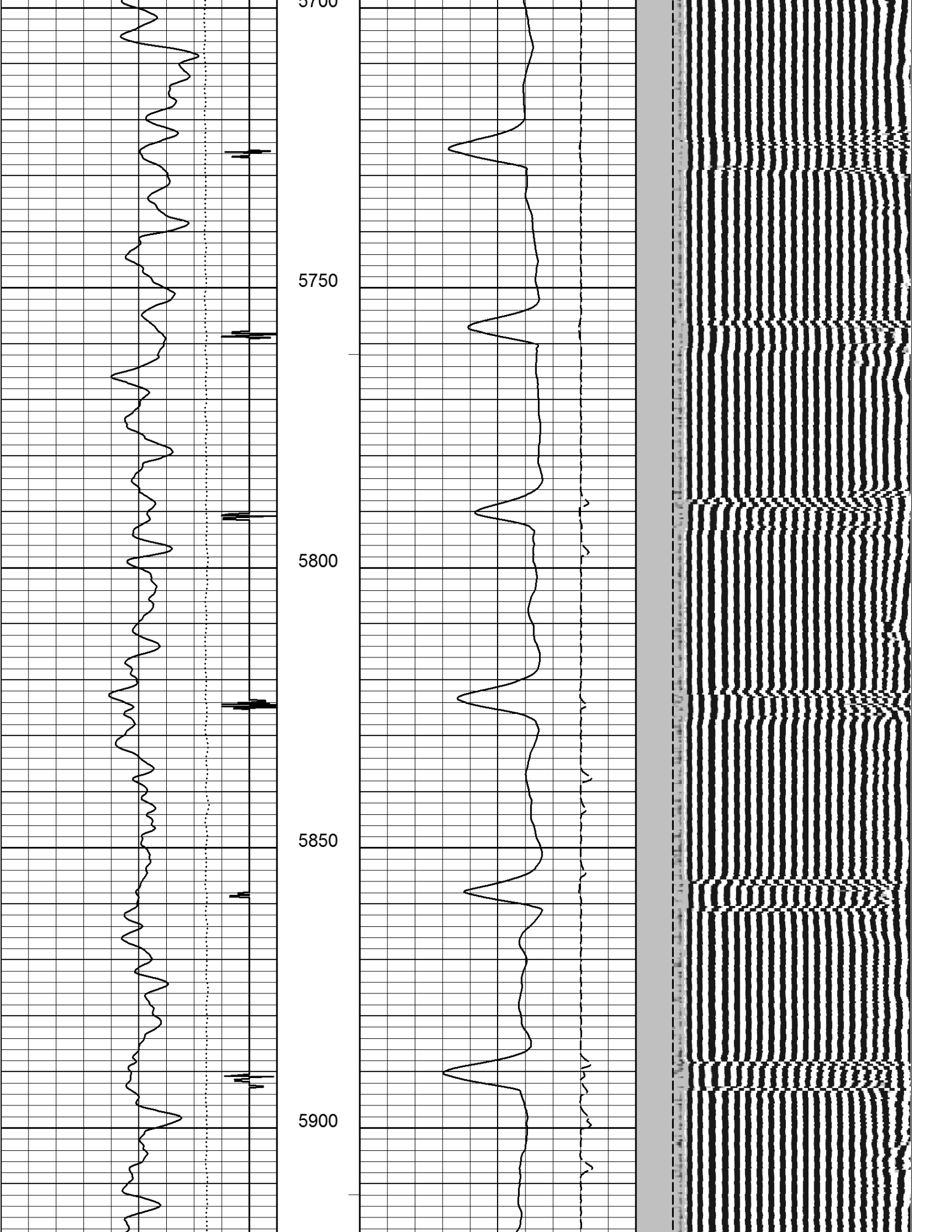


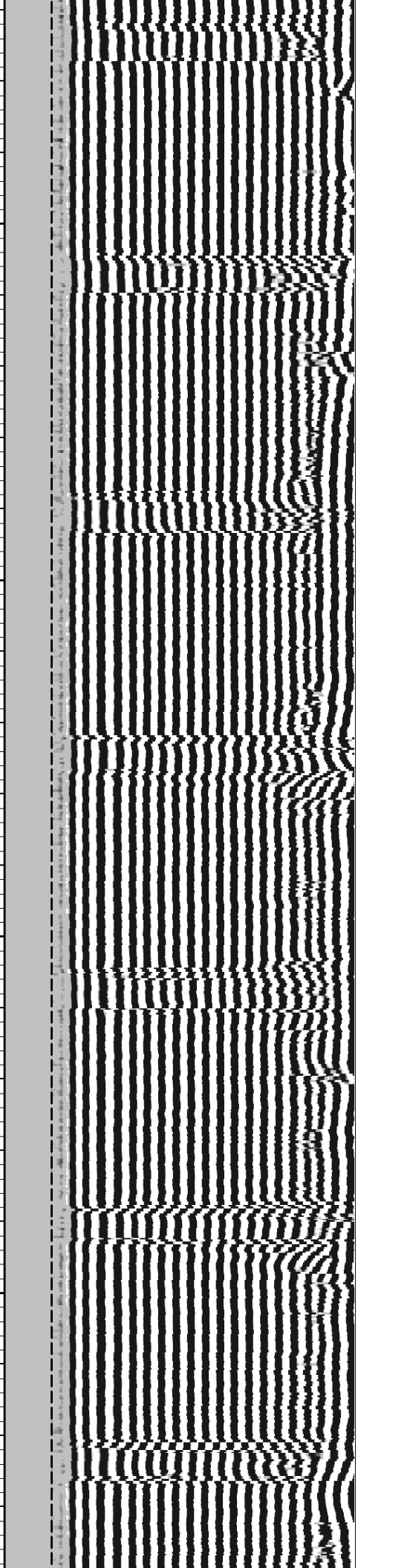
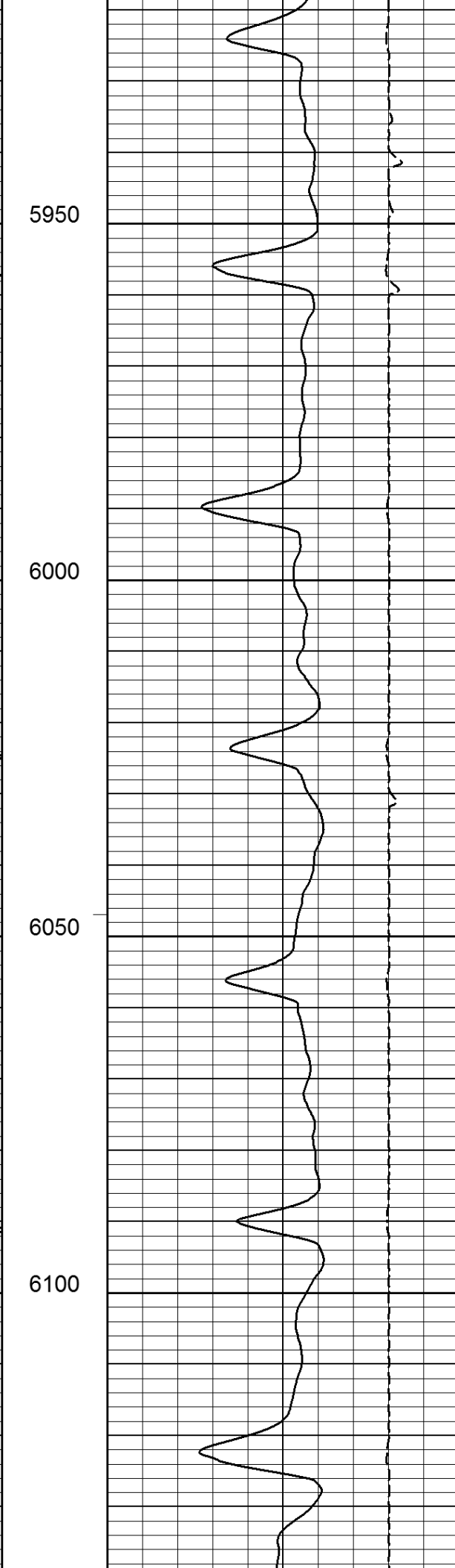
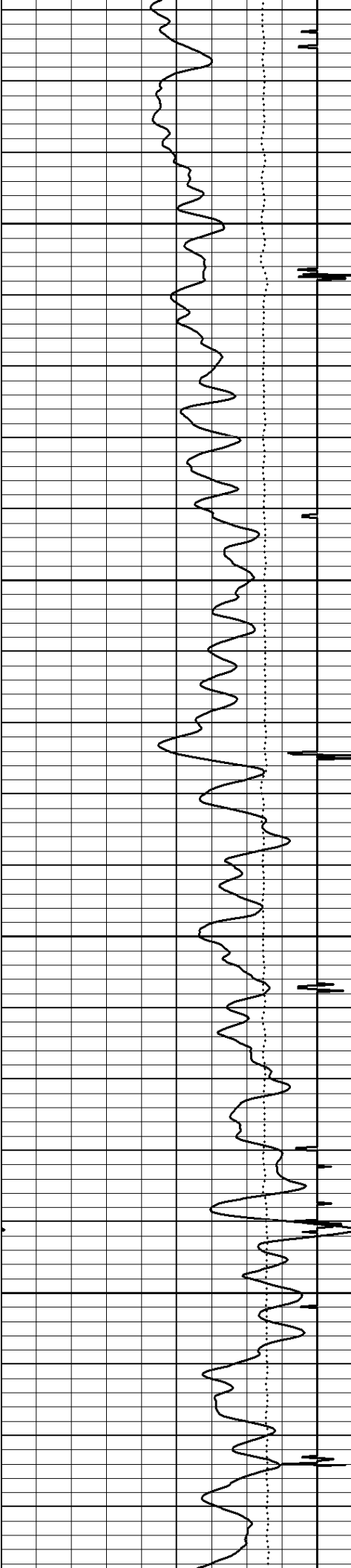


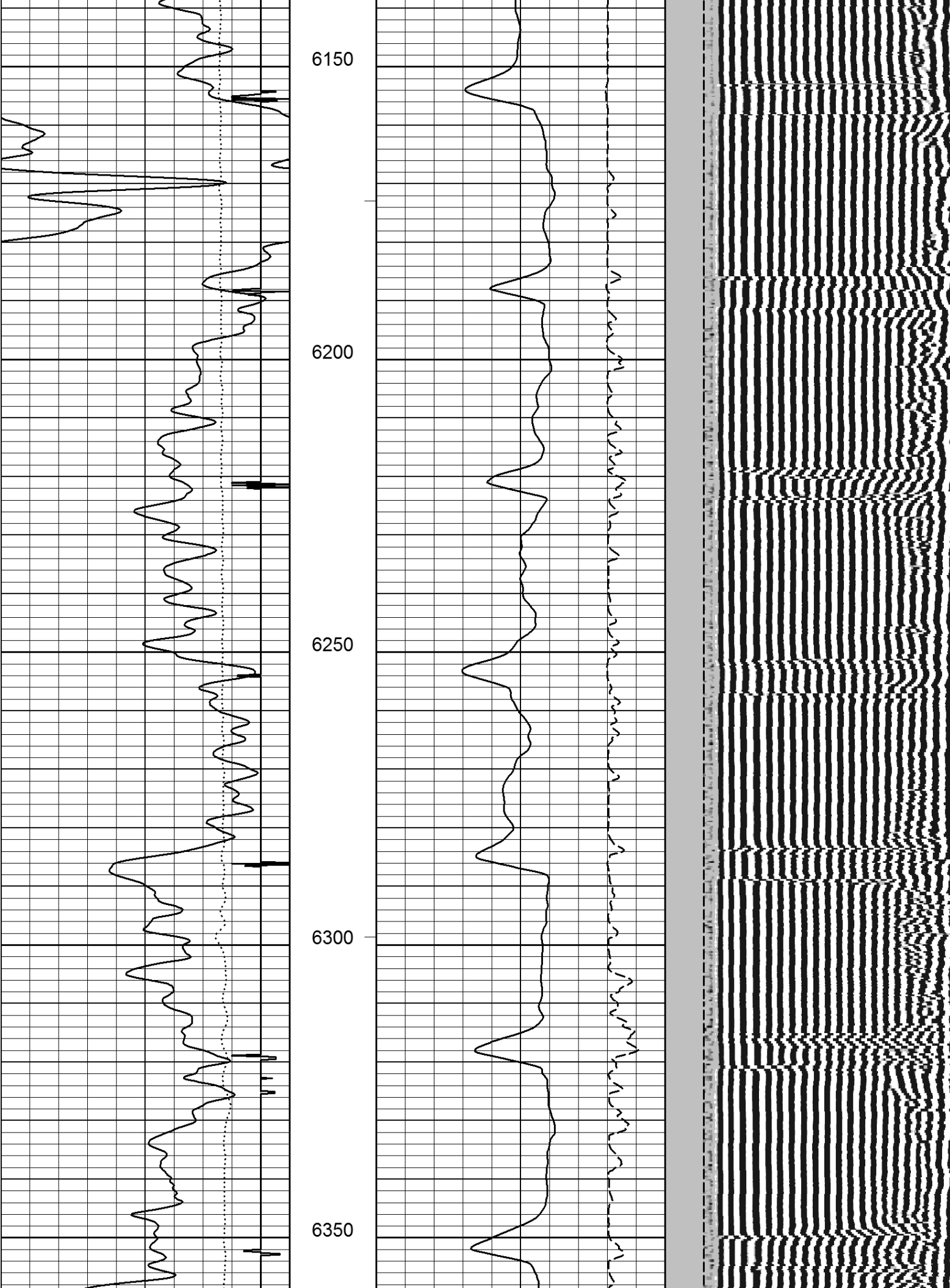


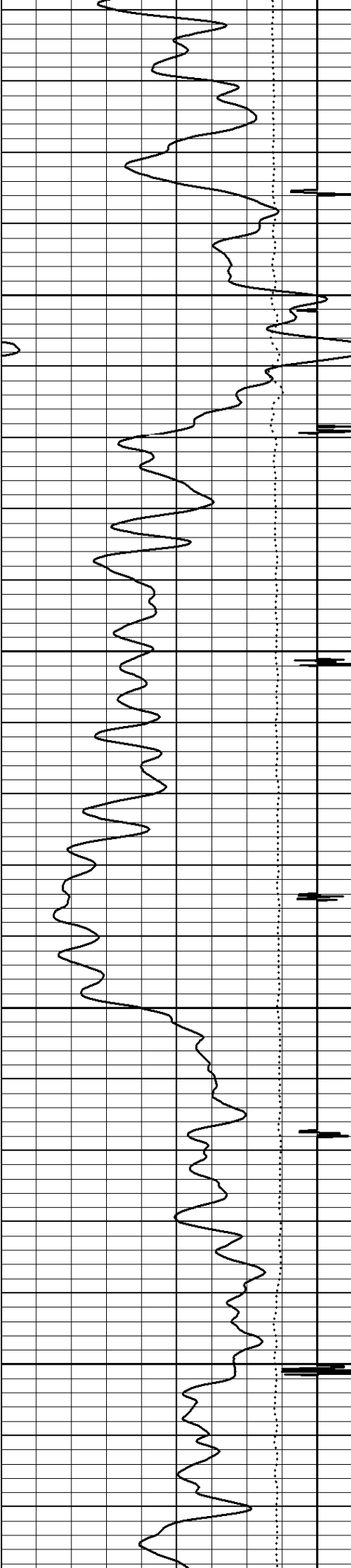










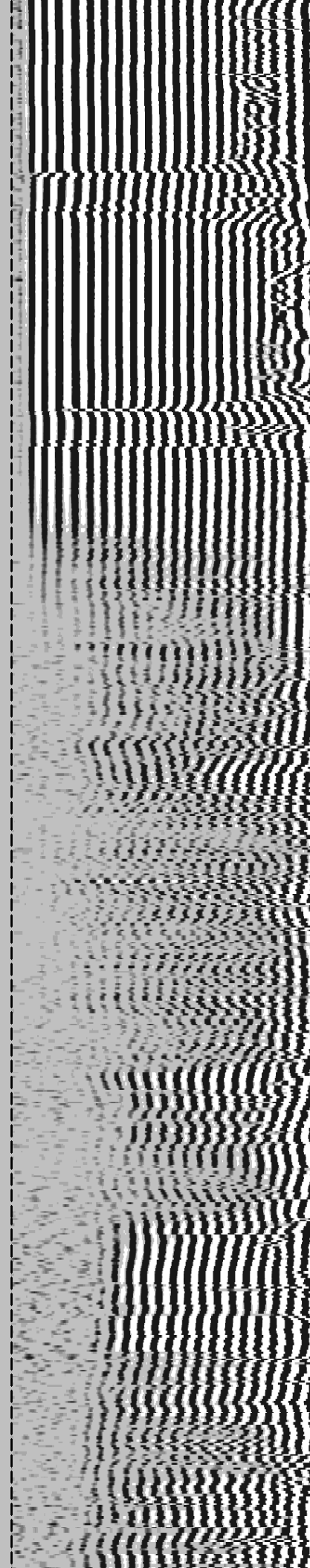
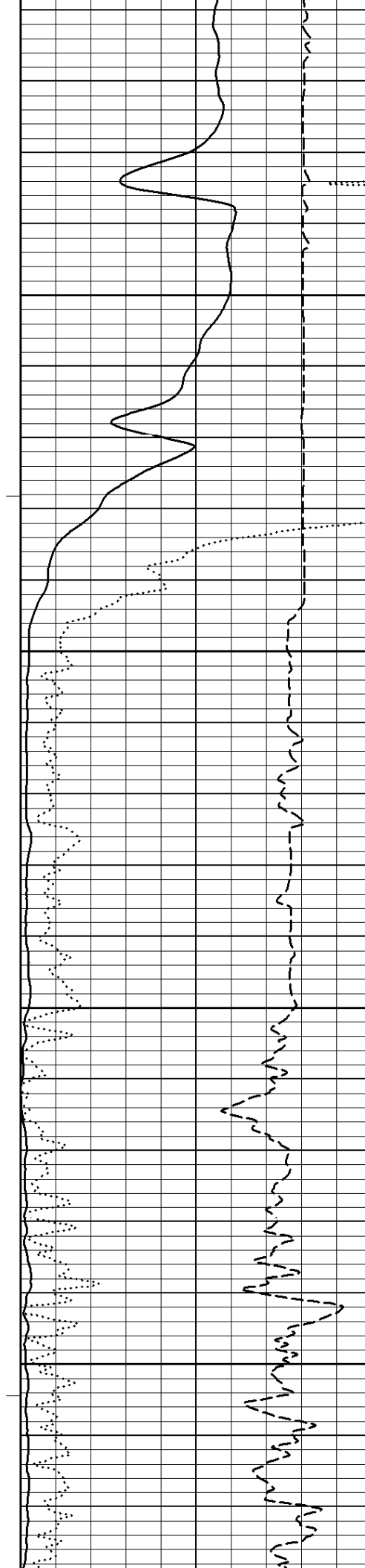


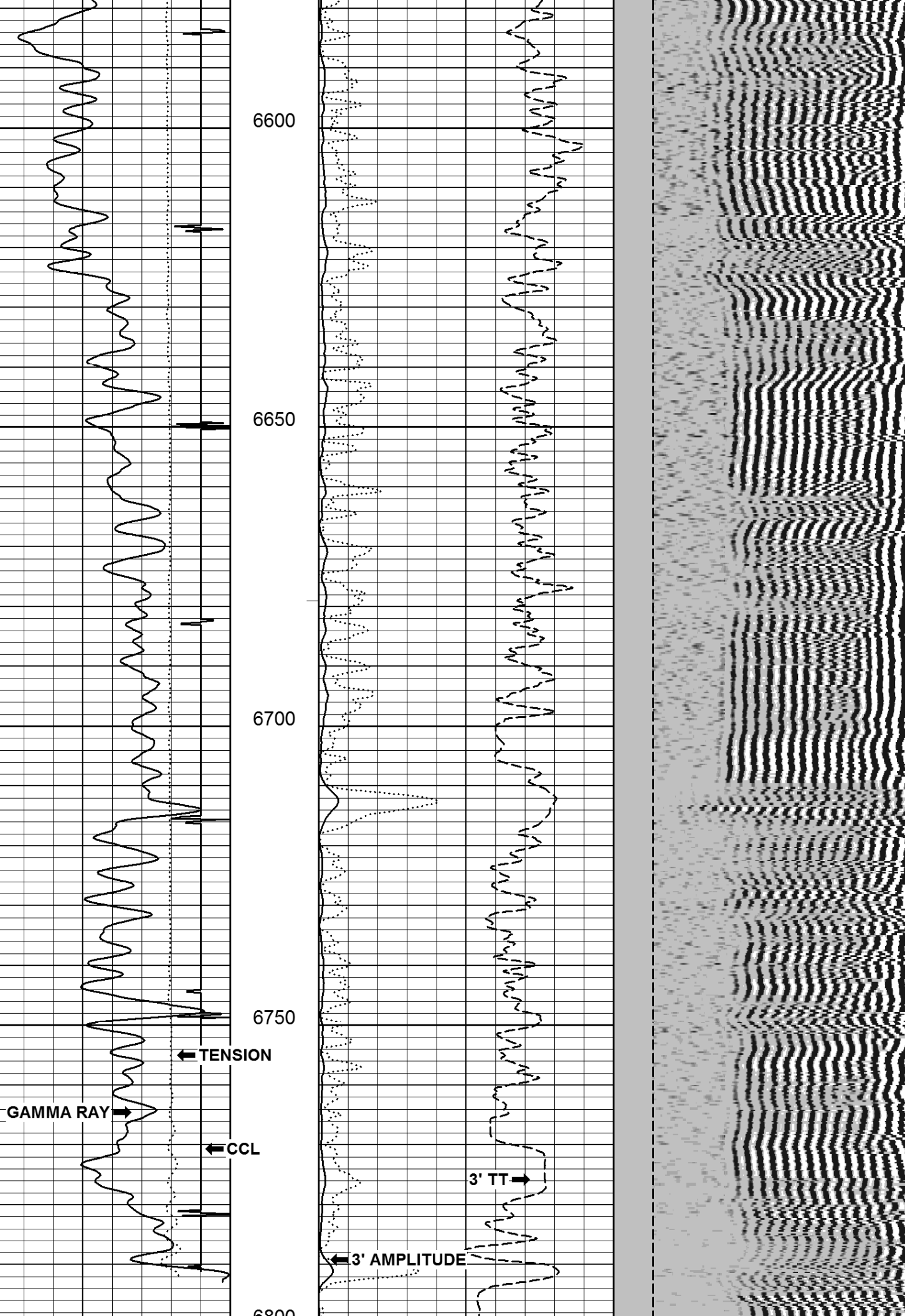
6400

6450

6500

6550





2016-02-15 20:54	6800.04	3' AMPLITUDE (mV)	FREE PIPE TIME (μs)
Tension (lbF)		0.0 100.0	200.0 1200.0
0.00 1200.00		AMPLITUDE X 5 (mV)	5' VARIABLE DENSITY (μs)
COLLAR LOCATOR		0.0 20.0	200.00 1200.00
0.0 10.0		3' TRAVEL TIME (μs)	
GAMMA RAY		800.0 150.0	
0.0 150.0		Logging Up	File FINAL.pre
Pass No. 3	FEET	Shutin	111006
	1:240		



Company HRM RESOURCES LLC

Well WELD 1

Field ROGGEN

County WELD State COLORADO

1/4'S SESW SEC. 20 TWP. 2N RGE. 62W