



Radial Cement Bond
Gamma Ray
Casing Collar Log

Company TEP Rocky Mountain LLC		Company TEP Rocky Mountain LLC	
Well Federal WMC 431-20		Well Federal WMC 431-20	
Field Rulison		Field Rulison	
County Garfield		County Garfield	
State Colorado		State Colorado	
Location:		API # : 05-045-24499	
SEC 17 TWP 7S RGE 93W		Other Services	
Permanent Datum Ground Level Elevation 8868 FT		Elevation	
Log Measured From Kelly Bushing		K.B. 8898 FT	
Drilling Measured From Kelly Bushing		D.F. 8898 FT	
Date		G.L. 8868 FT	
Run Number		04-JAN-2023	
Depth Driller		One	
Depth Logger		11015 FT	
Bottom Logged Interval		10904 FT	
Top Log Interval		10896 FT	
Open Hole Size		Surface	
Type Fluid		8.75"	
Density / Viscosity		Water	
Max. Recorded Temp.		8.34 Lb/Gal	
Estimated Cement Top		252°F	
Time Well Ready		See Log	
Time Logger on Bottom		ROA	
Equipment Number		10:00	
Location		8045	
Recorded By		Grand Junction	
Witnessed By		P. Edwards	
Run Number		D. Welsh	
Borehole Record		Tubing Record	
Bit From To Size Weight From To			
Casing Record		Size Wgt/Ft Top Bottom	
Surface String		9-5/8" 36 Surface 1132 FT	
Prot. String			
Production String		4-1-2" 11.6 Surface 11019 FT	
Liner			

<<< Fold Here >>>

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

Log is correlated to 30' K.B.
Marker joint logged @ 6246 FT - 6256 FT
Log ran with 0 PSI at surface

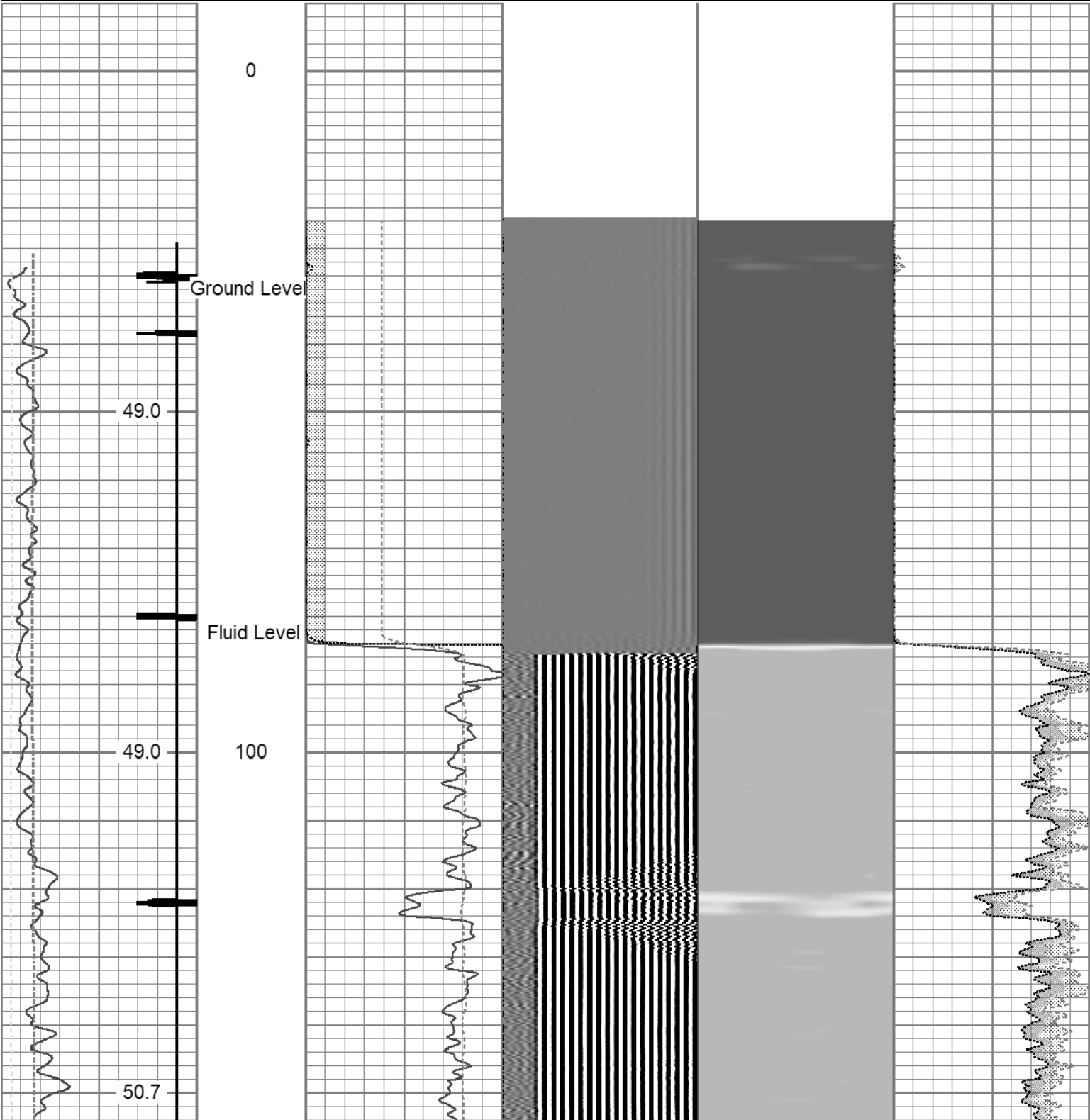
Thank you for choosing The Wireline Group!

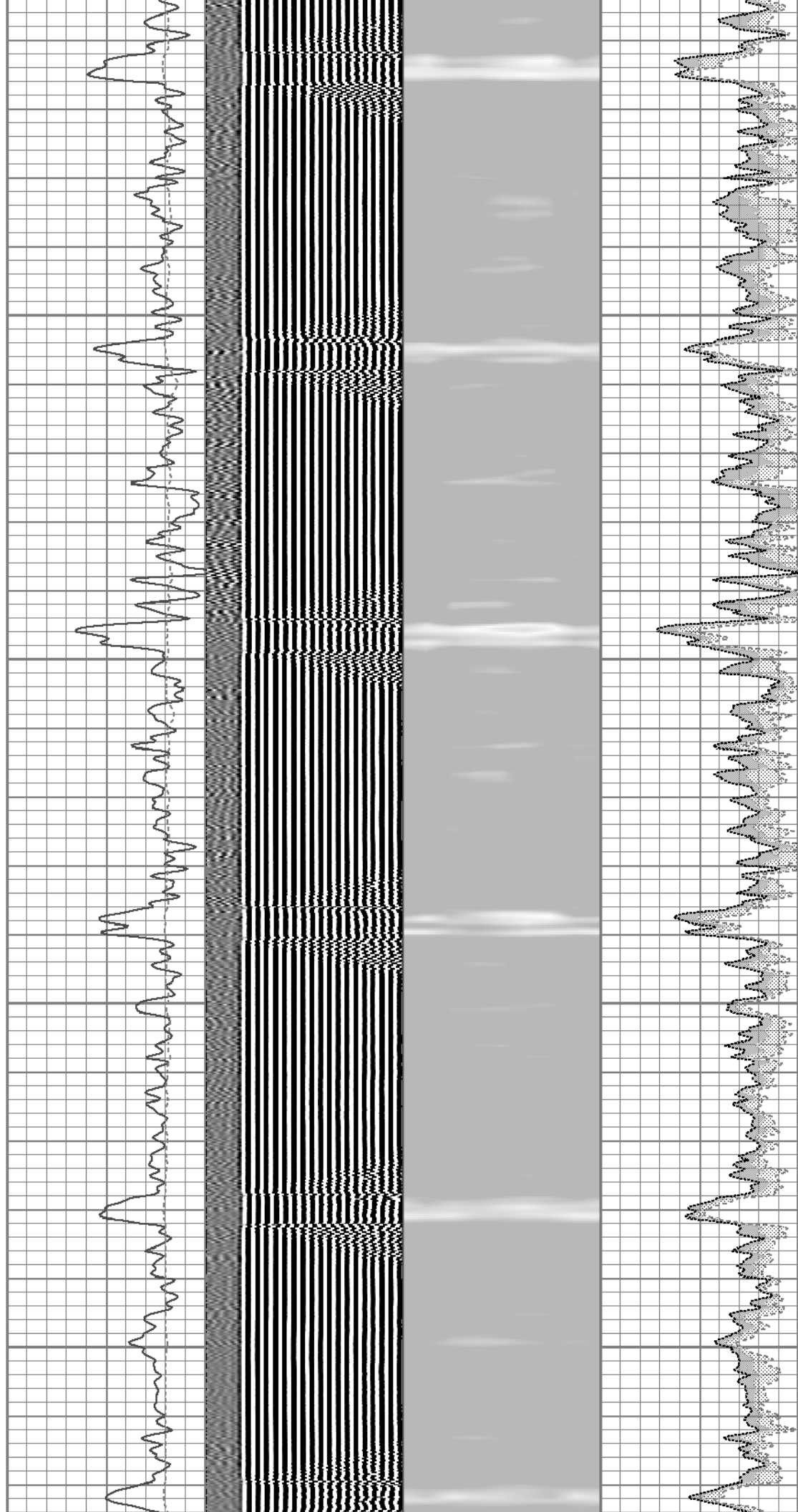
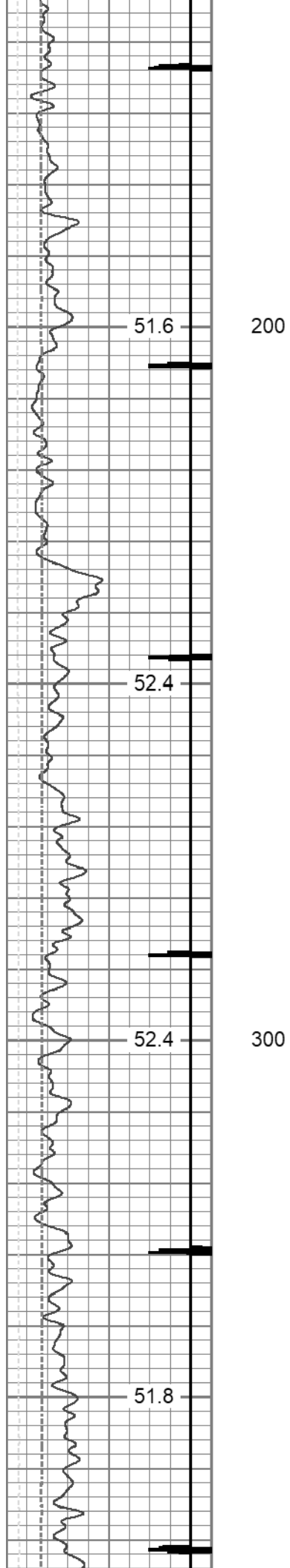


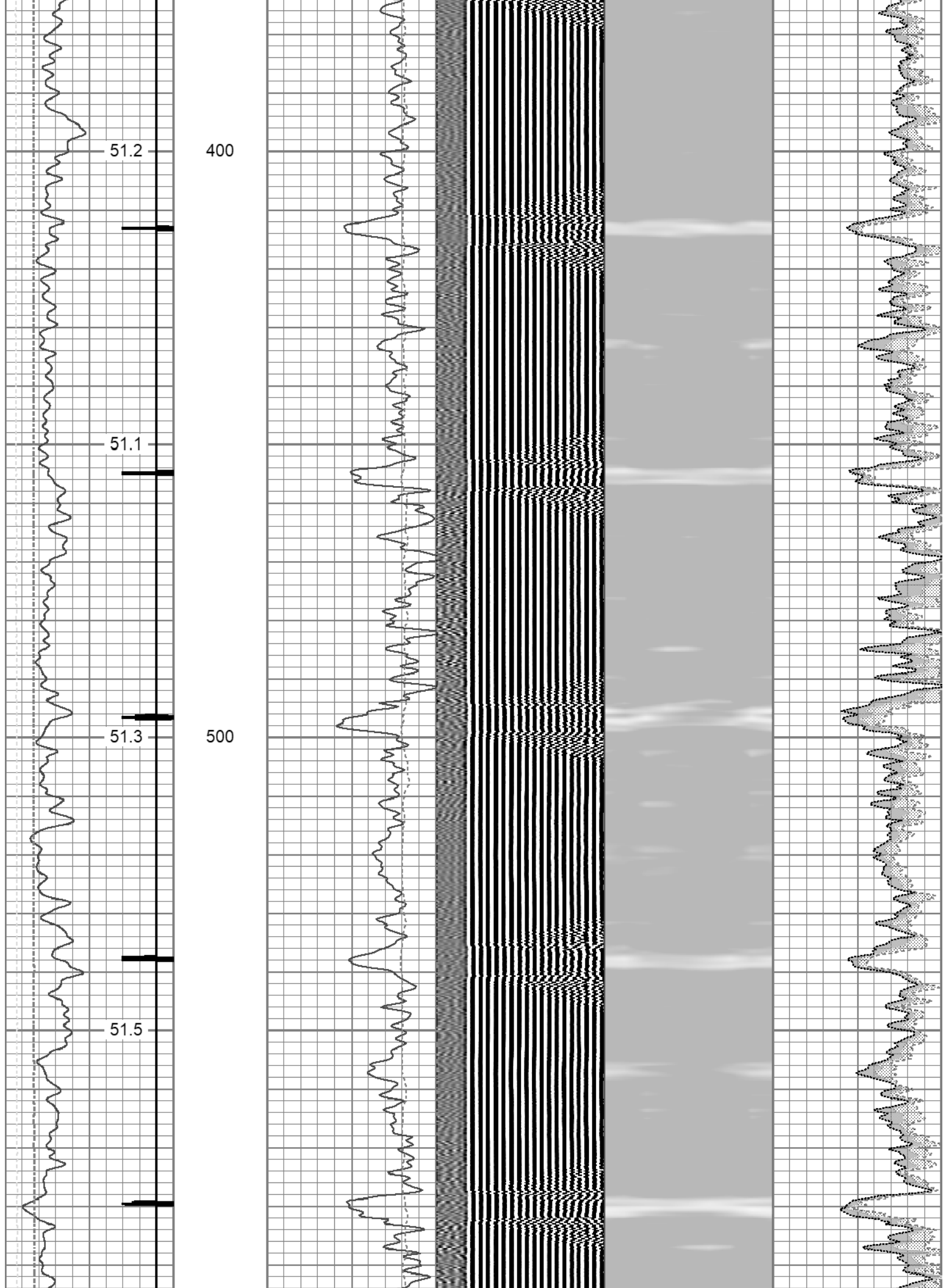
Main Pass 5" = 100'

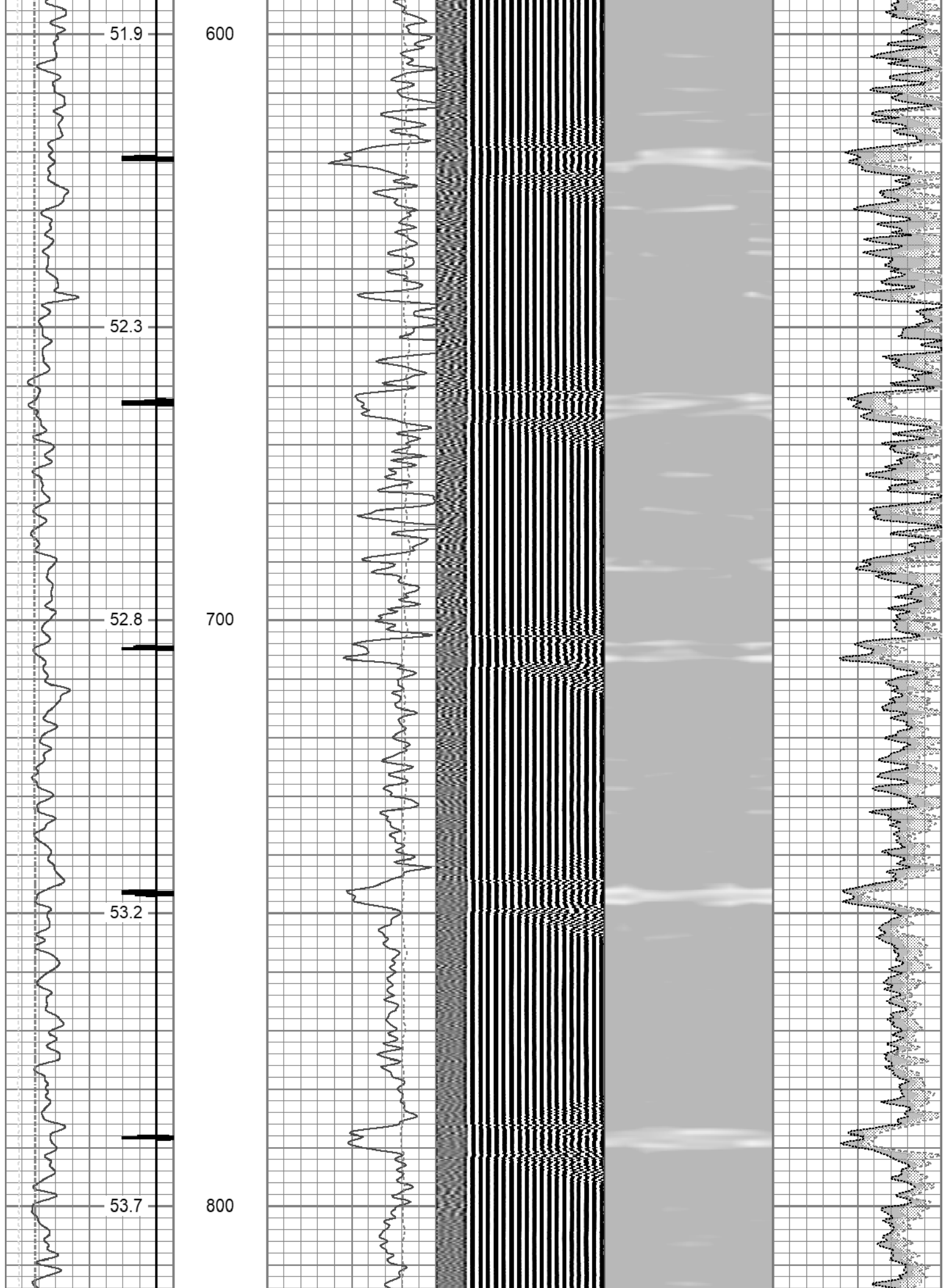
Database File	tep_wmc fed 431-20_rcbl_1-4-2023.db
Dataset Pathname	main
Presentation Format	twgrcbl
Dataset Creation	Wed Jan 04 09:58:37 2023
Charted by	Depth in Feet scaled 1:240

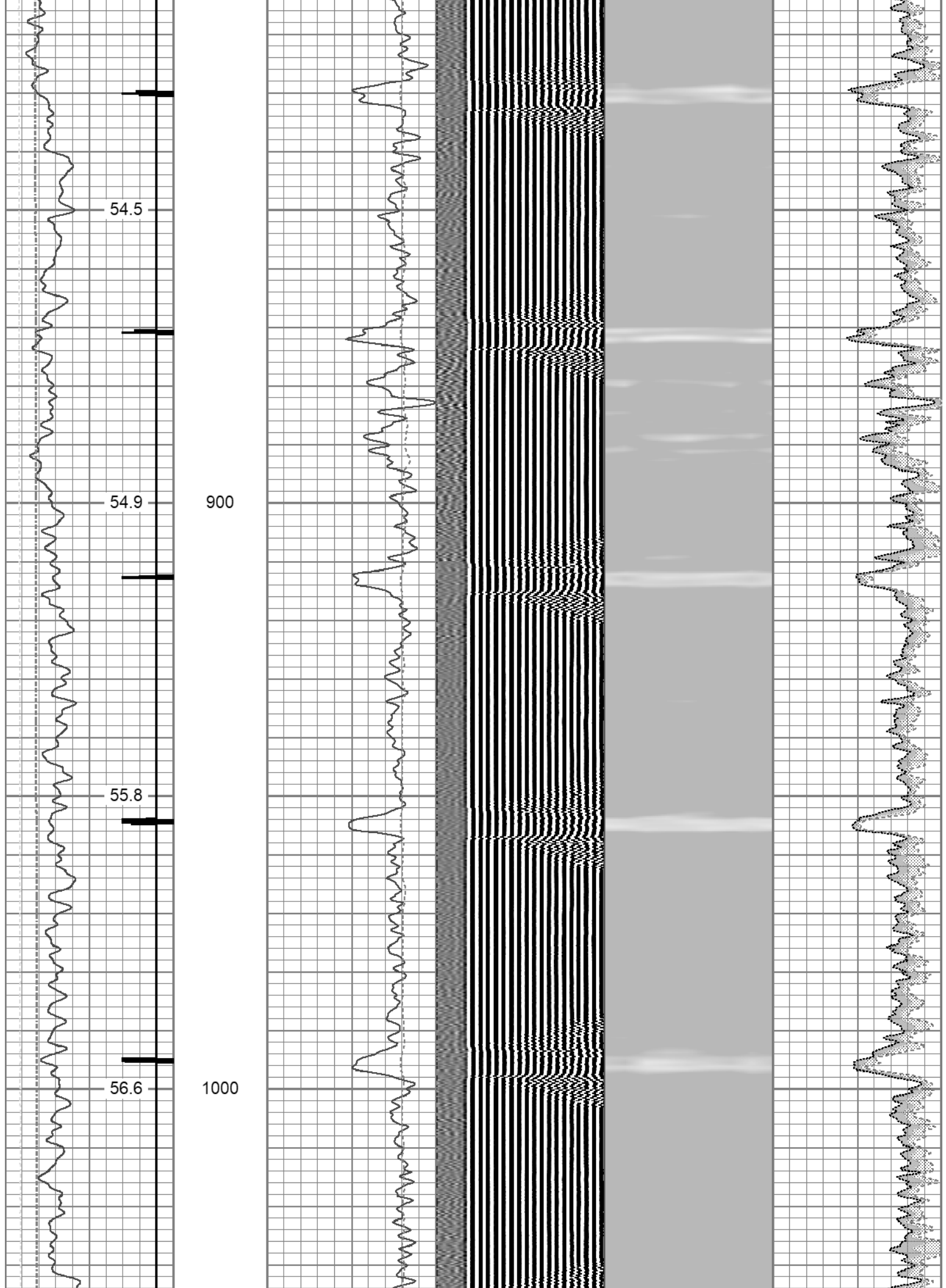
Gamma Ray		3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 200		0 (mV) 100	200 (usec) 1200		0 120
Line Tension		3' Amplitude x 5			Minimum Amplitude
0 (lb) 4000		0 (mV) 20			0 120
-9 CCL 1		3' Travel Time			Maximum Amplitude
0 Temp (degF) 300		650 (usec) 150			0 120

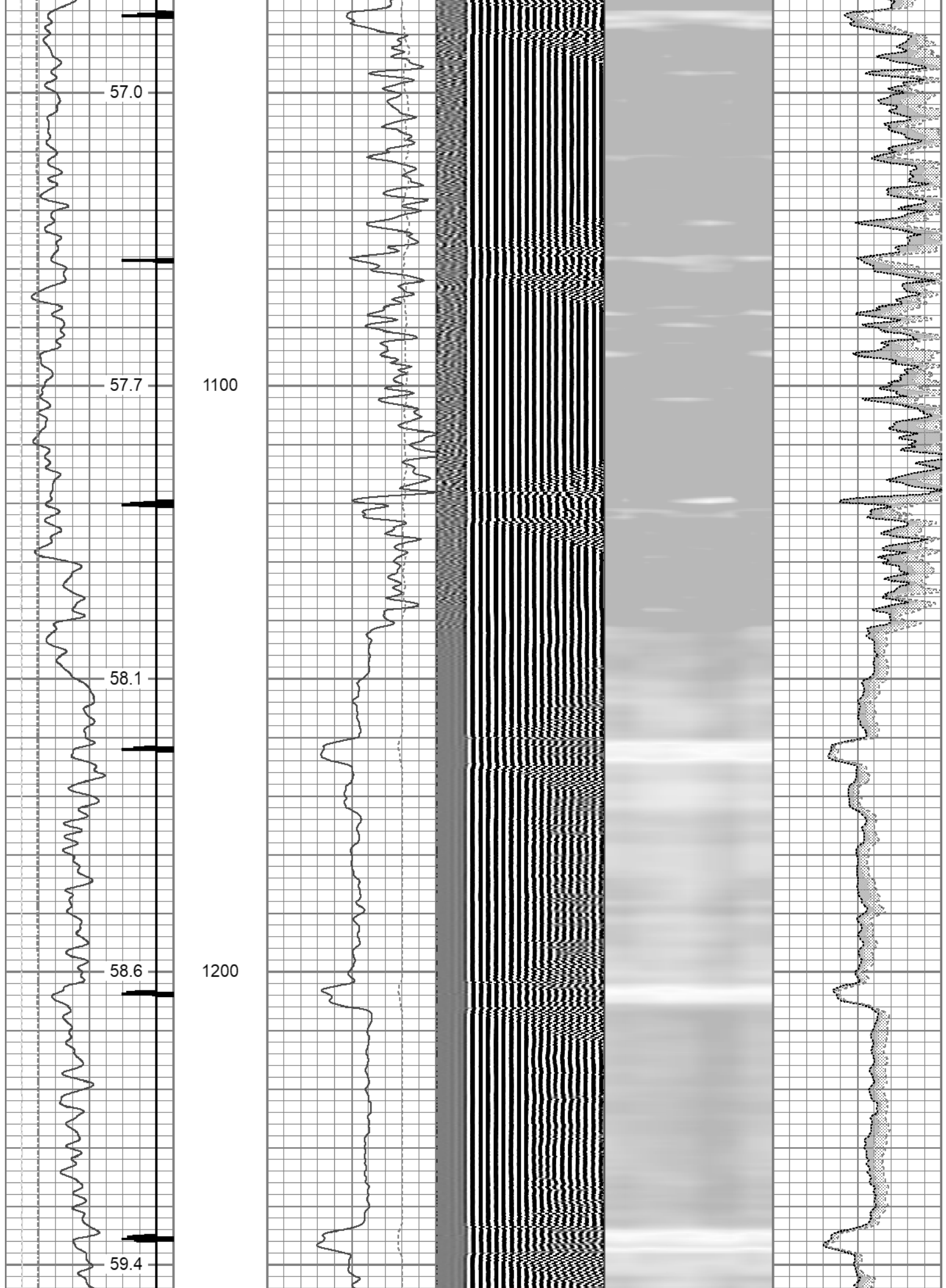


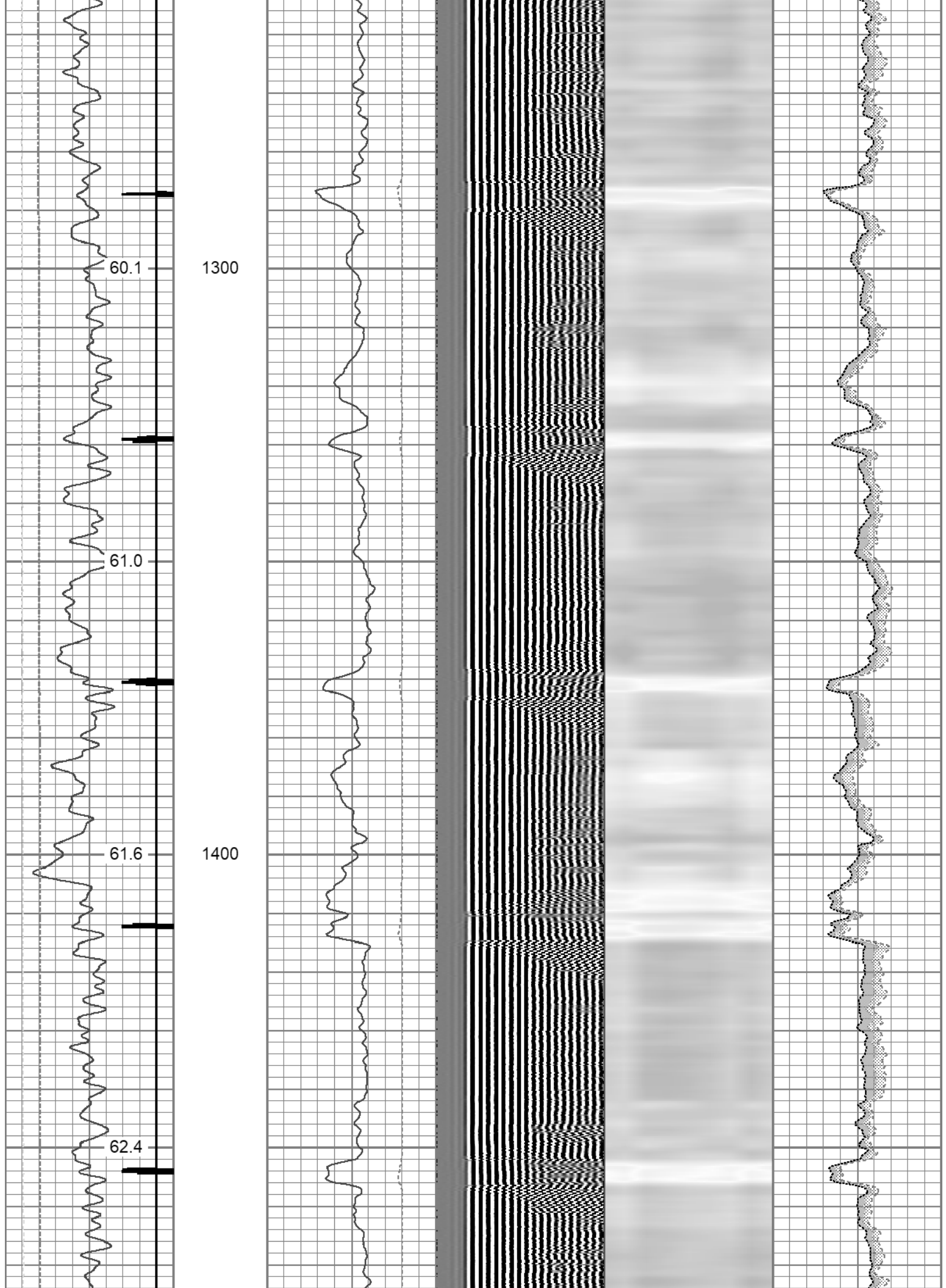


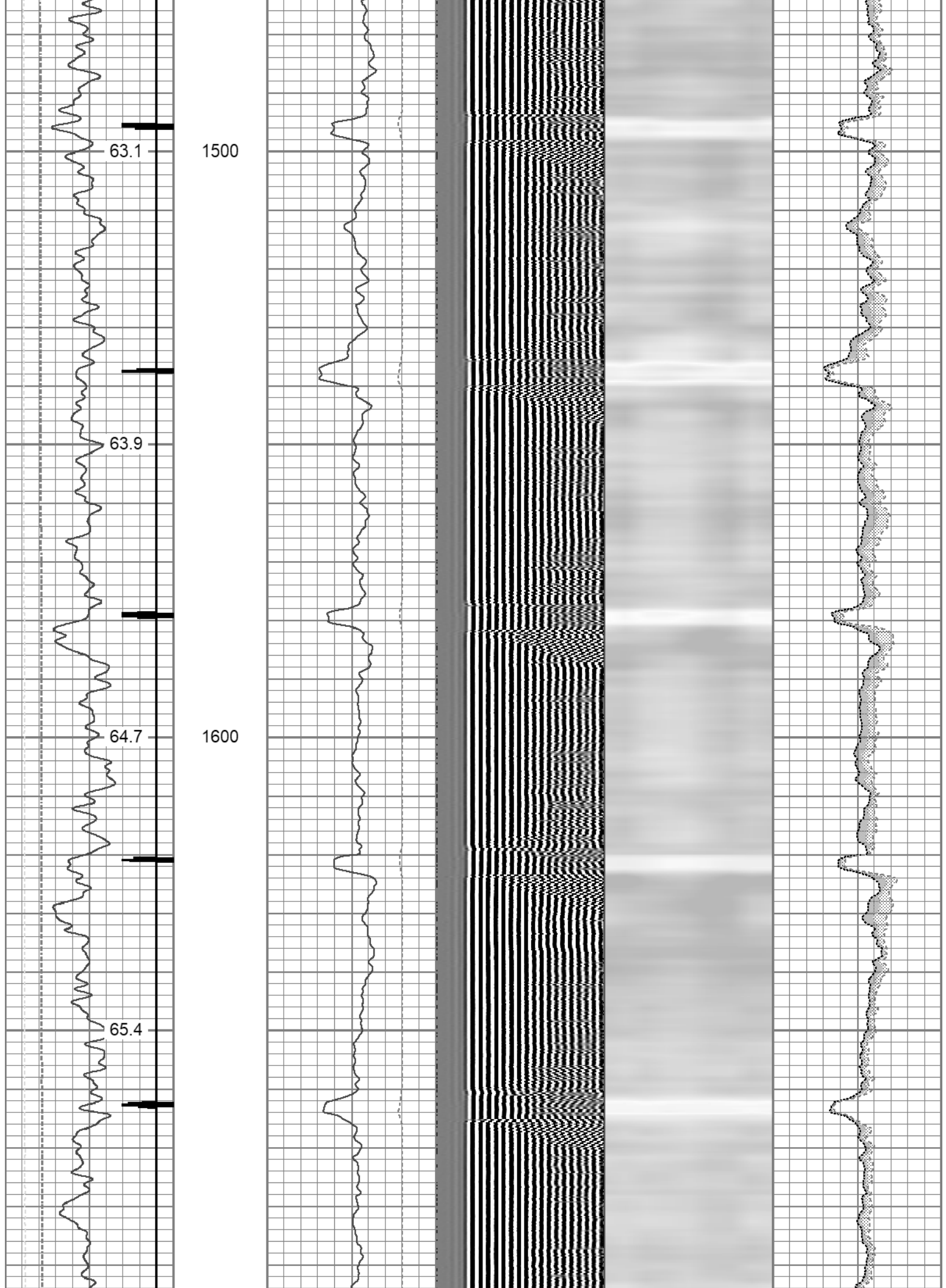






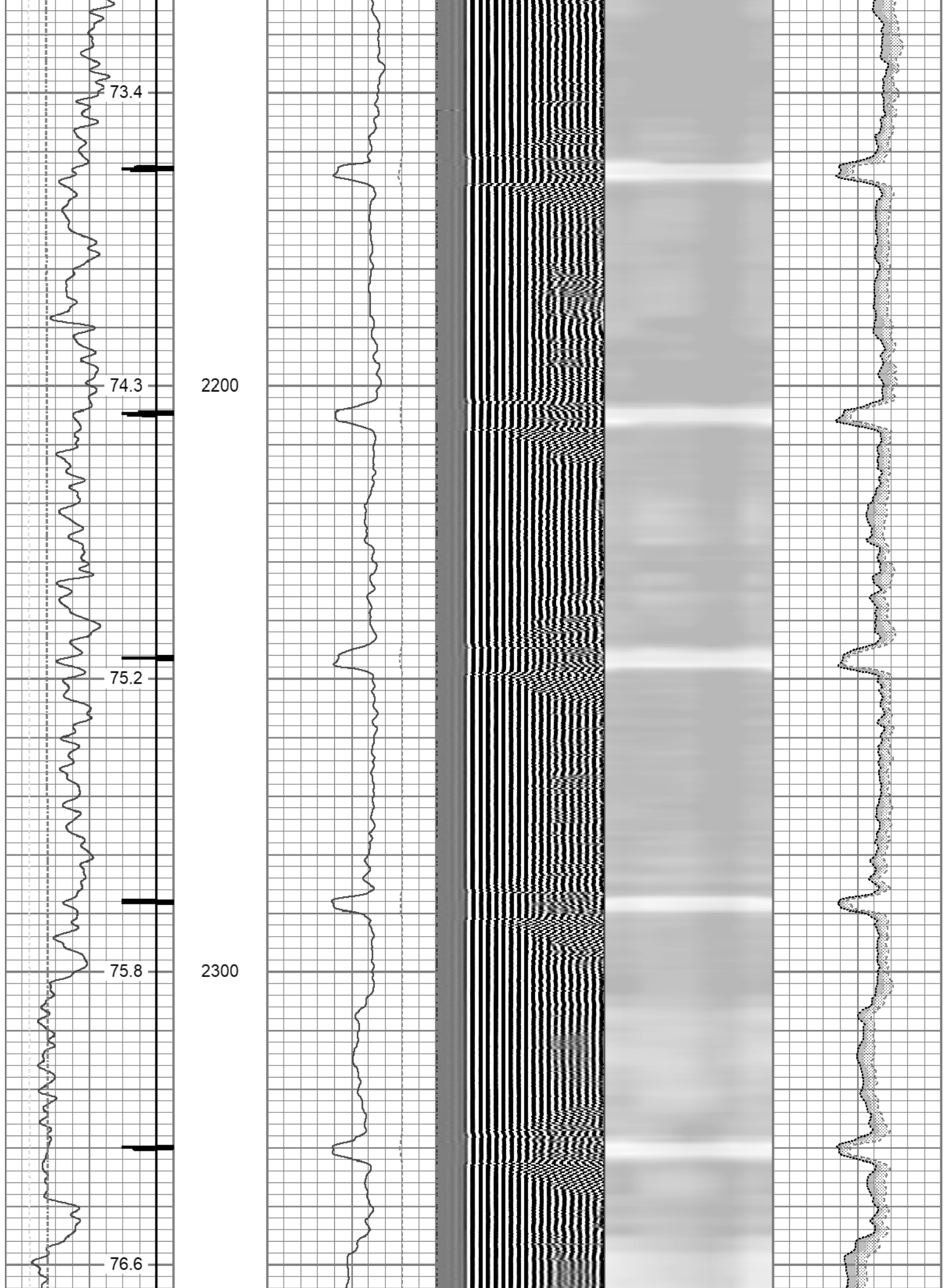


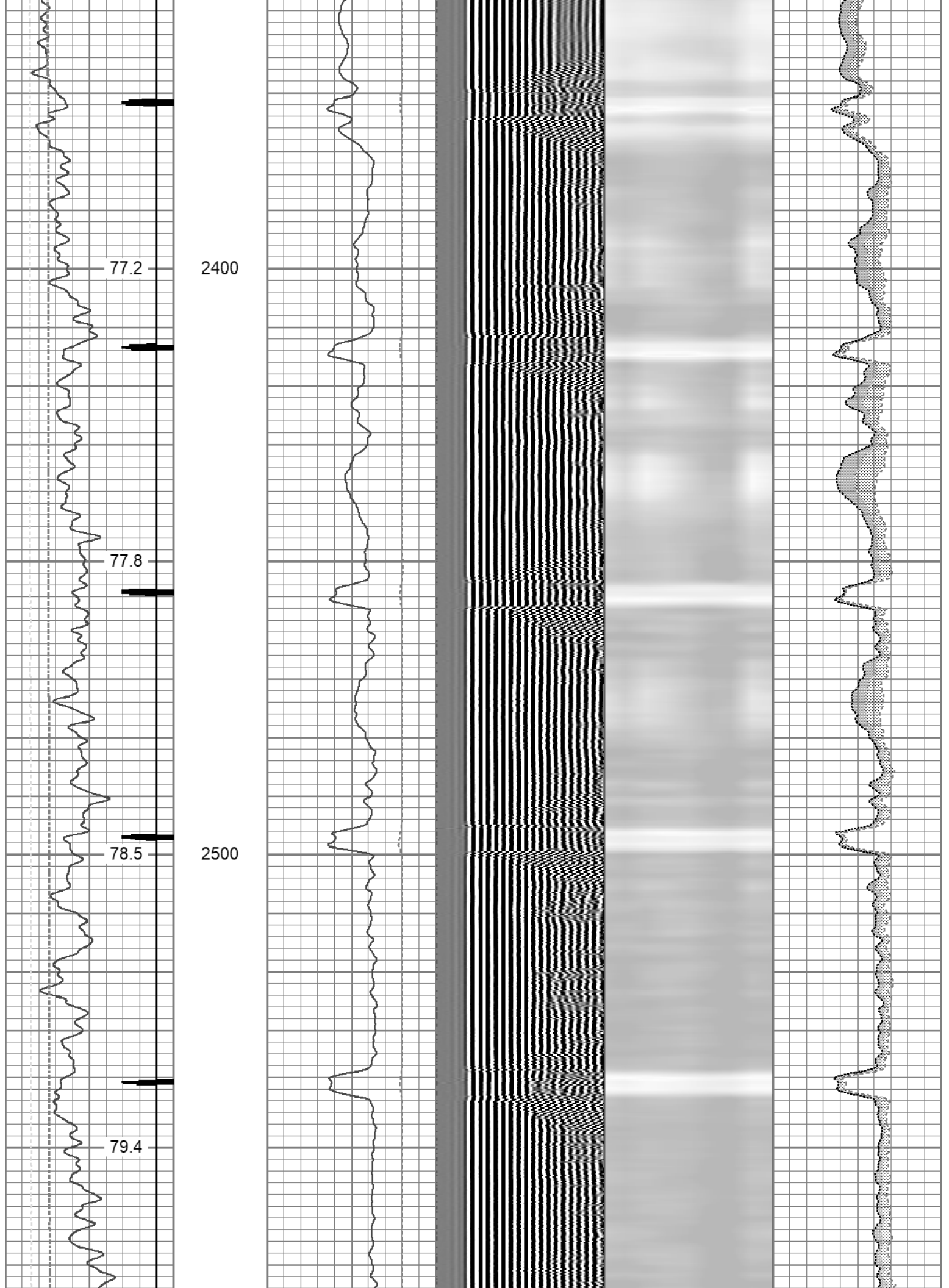


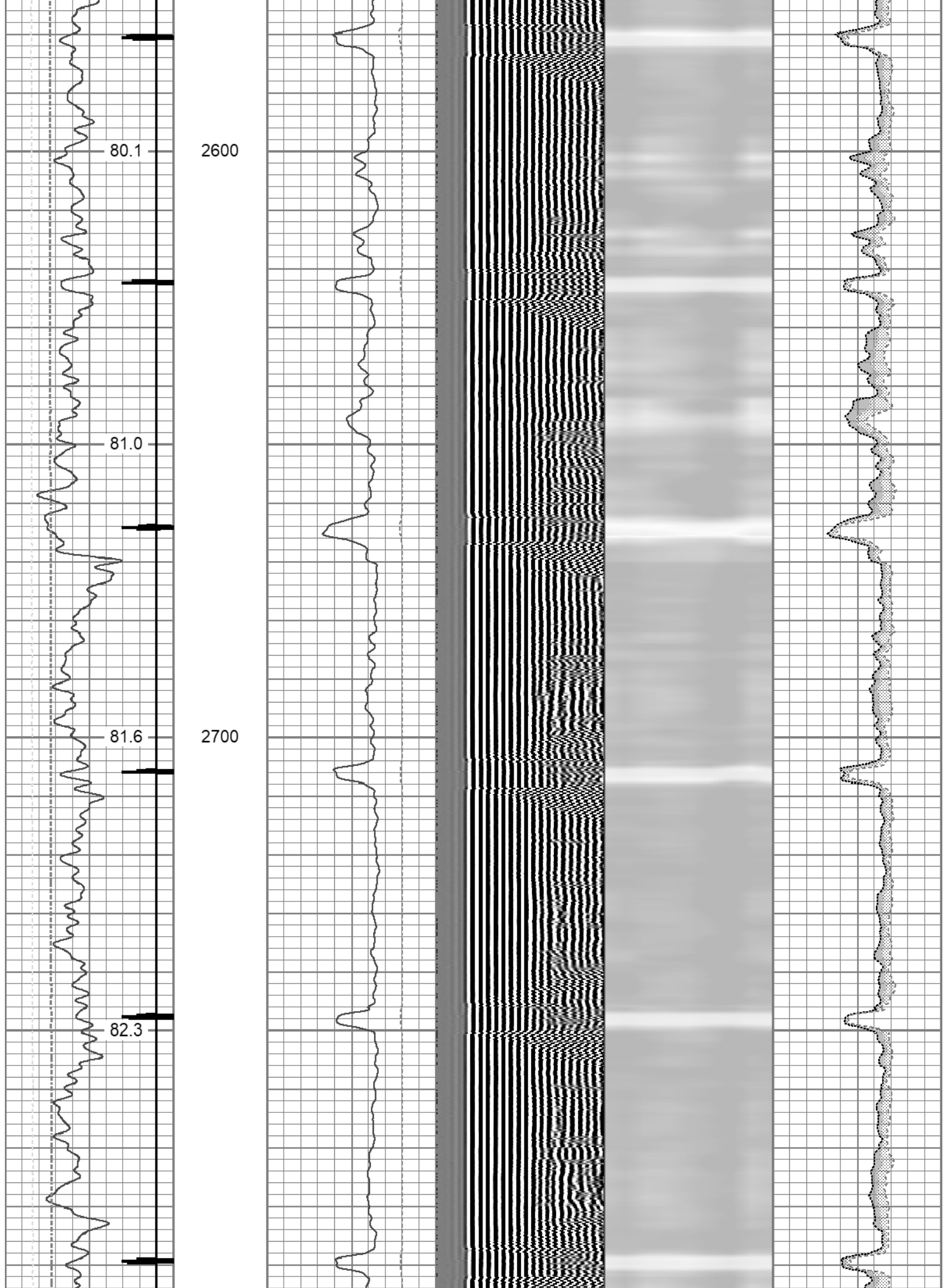


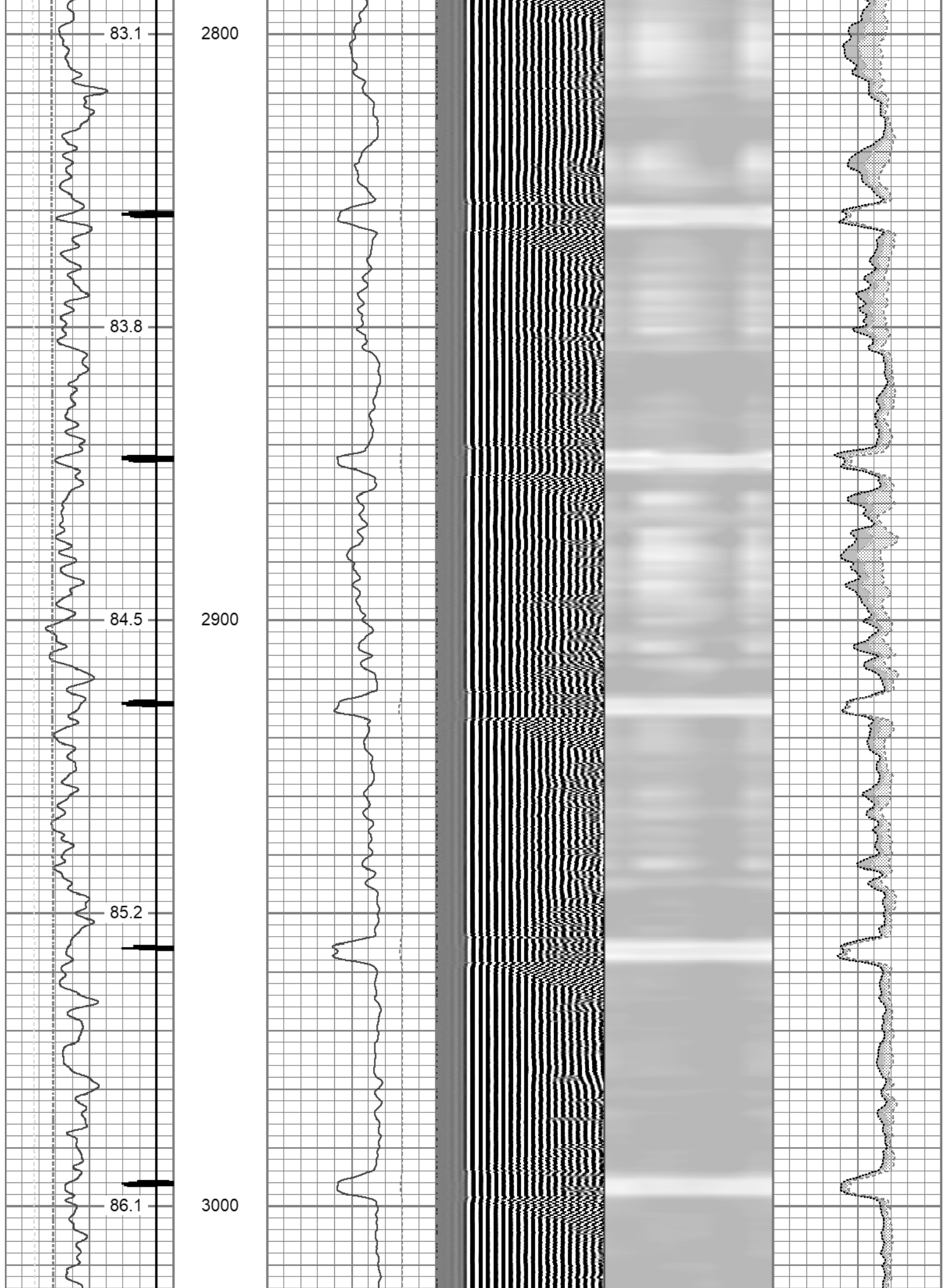


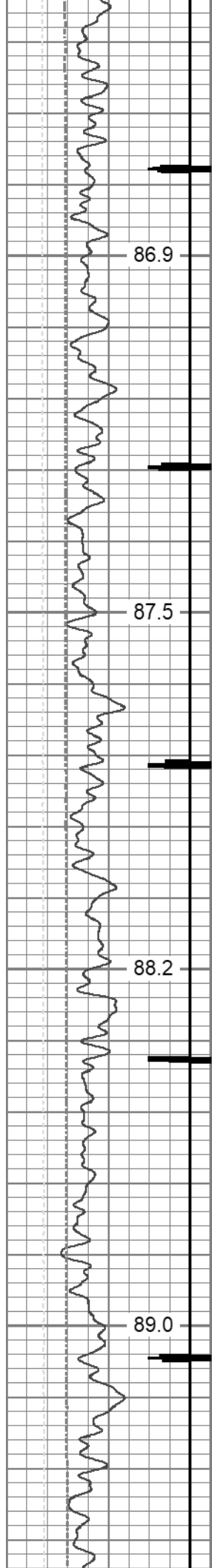






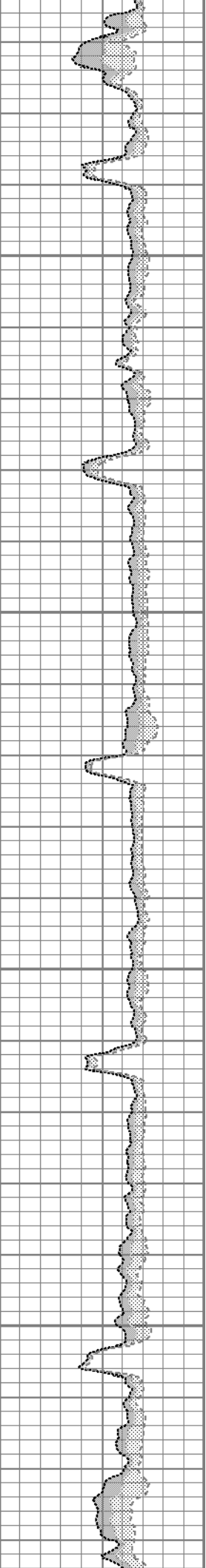
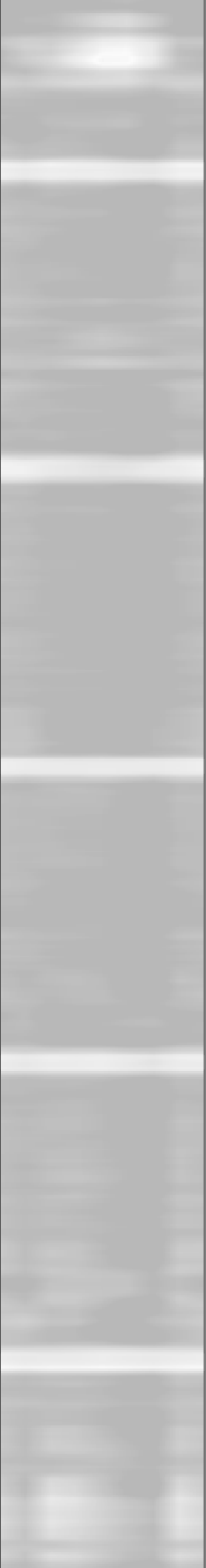
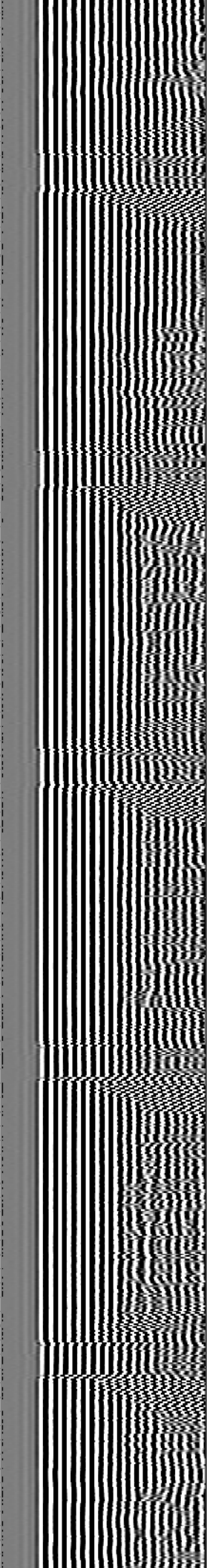
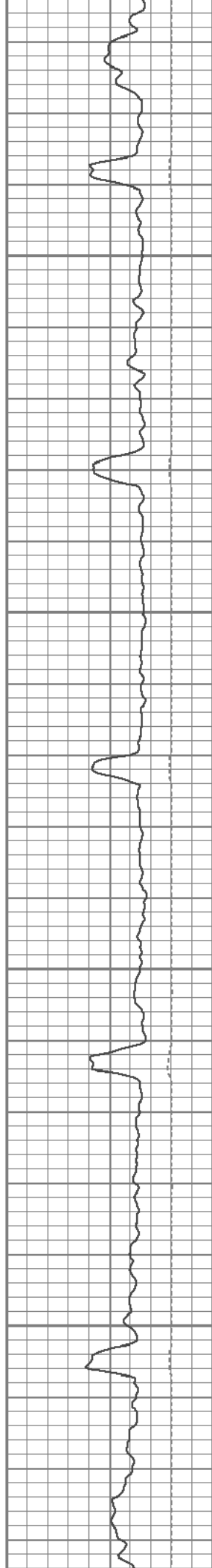


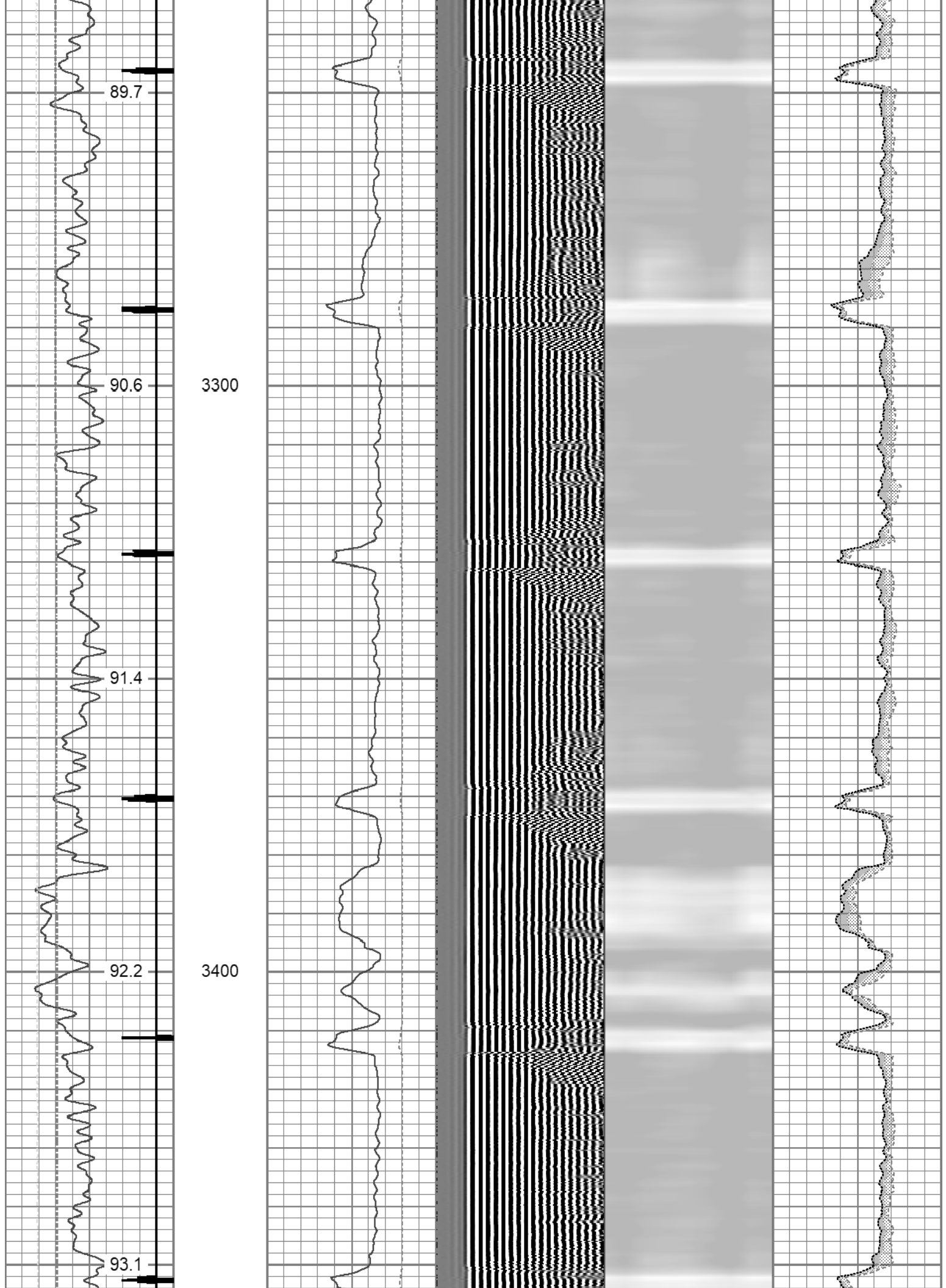


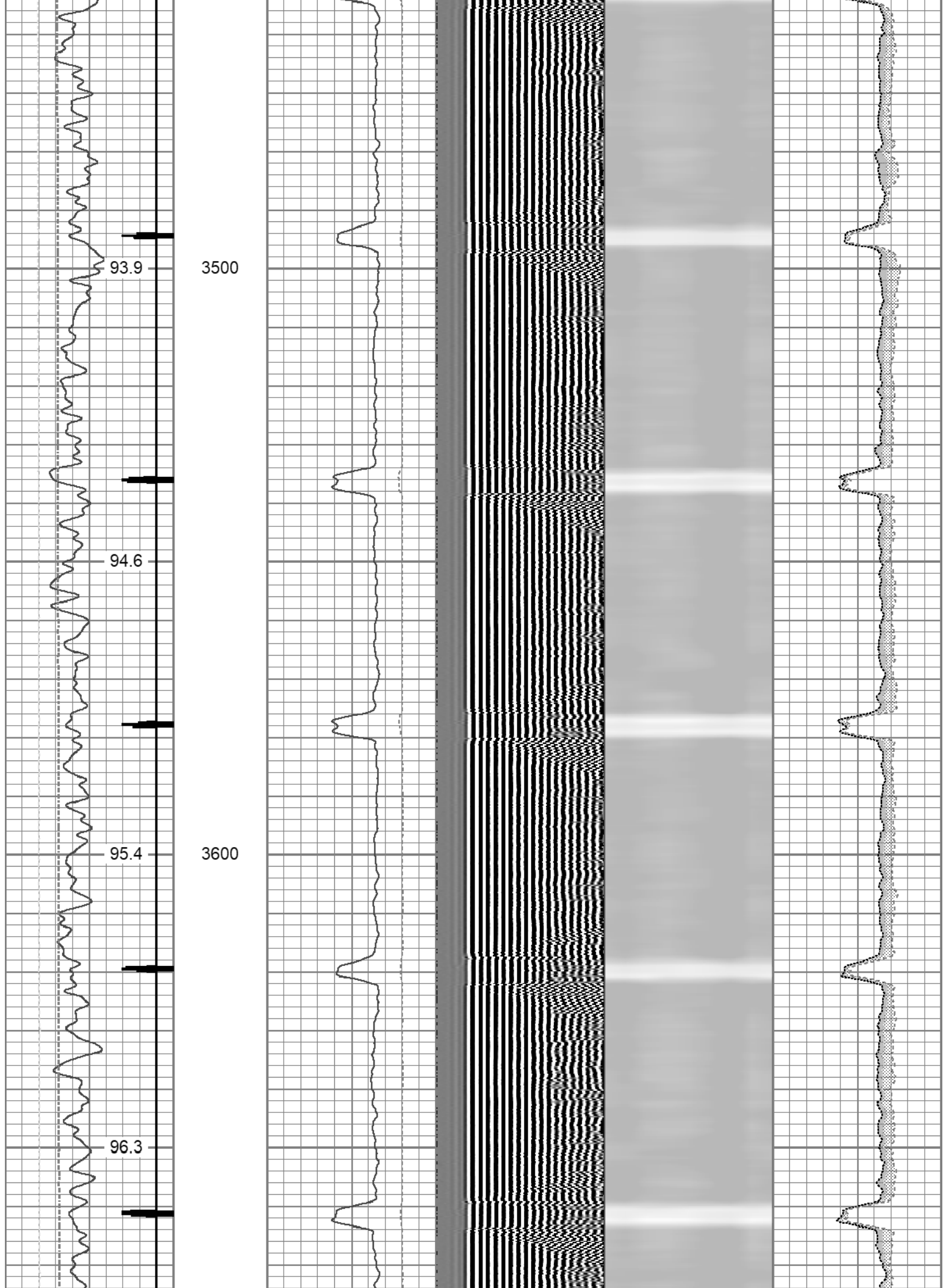


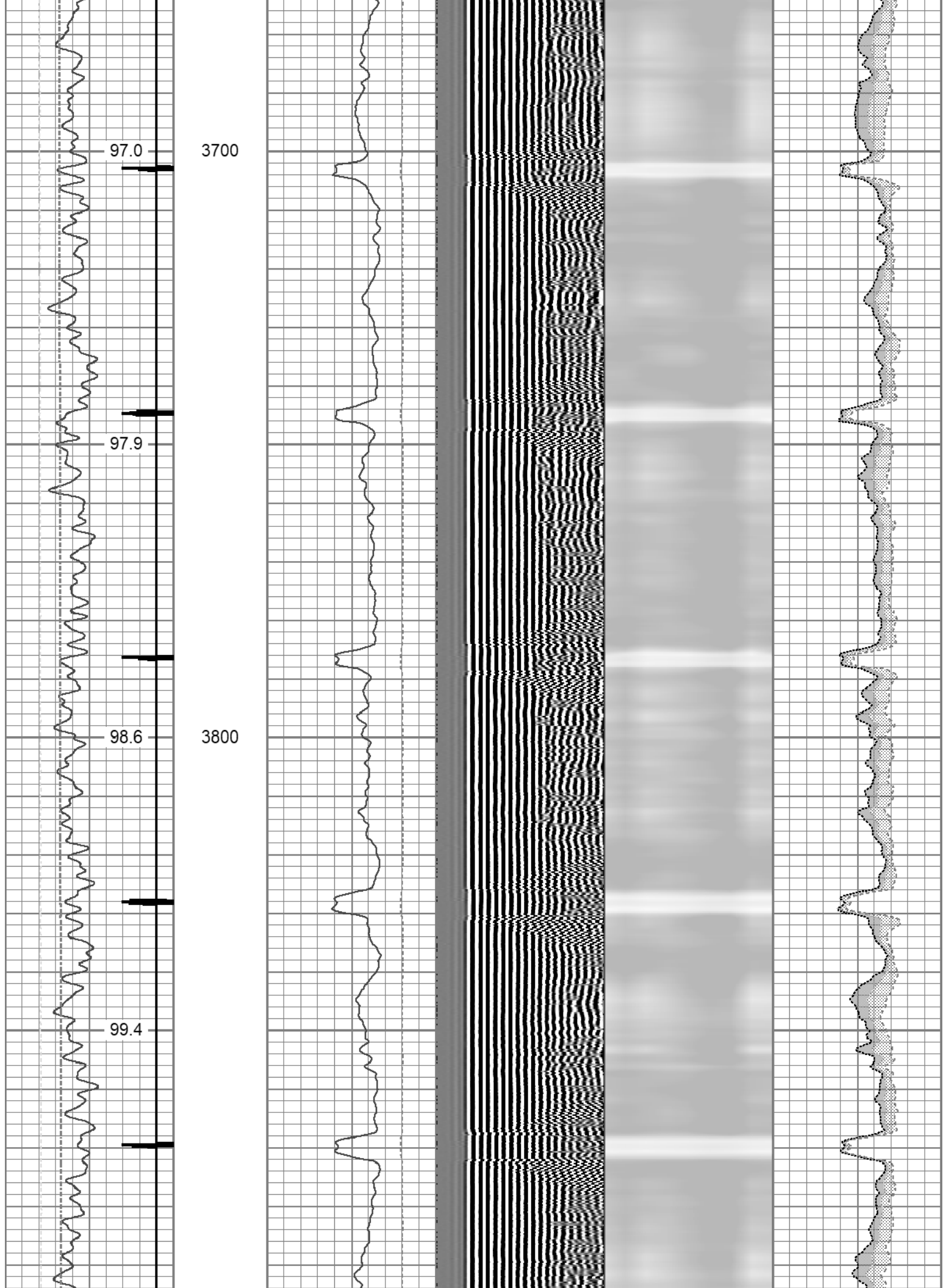
3100

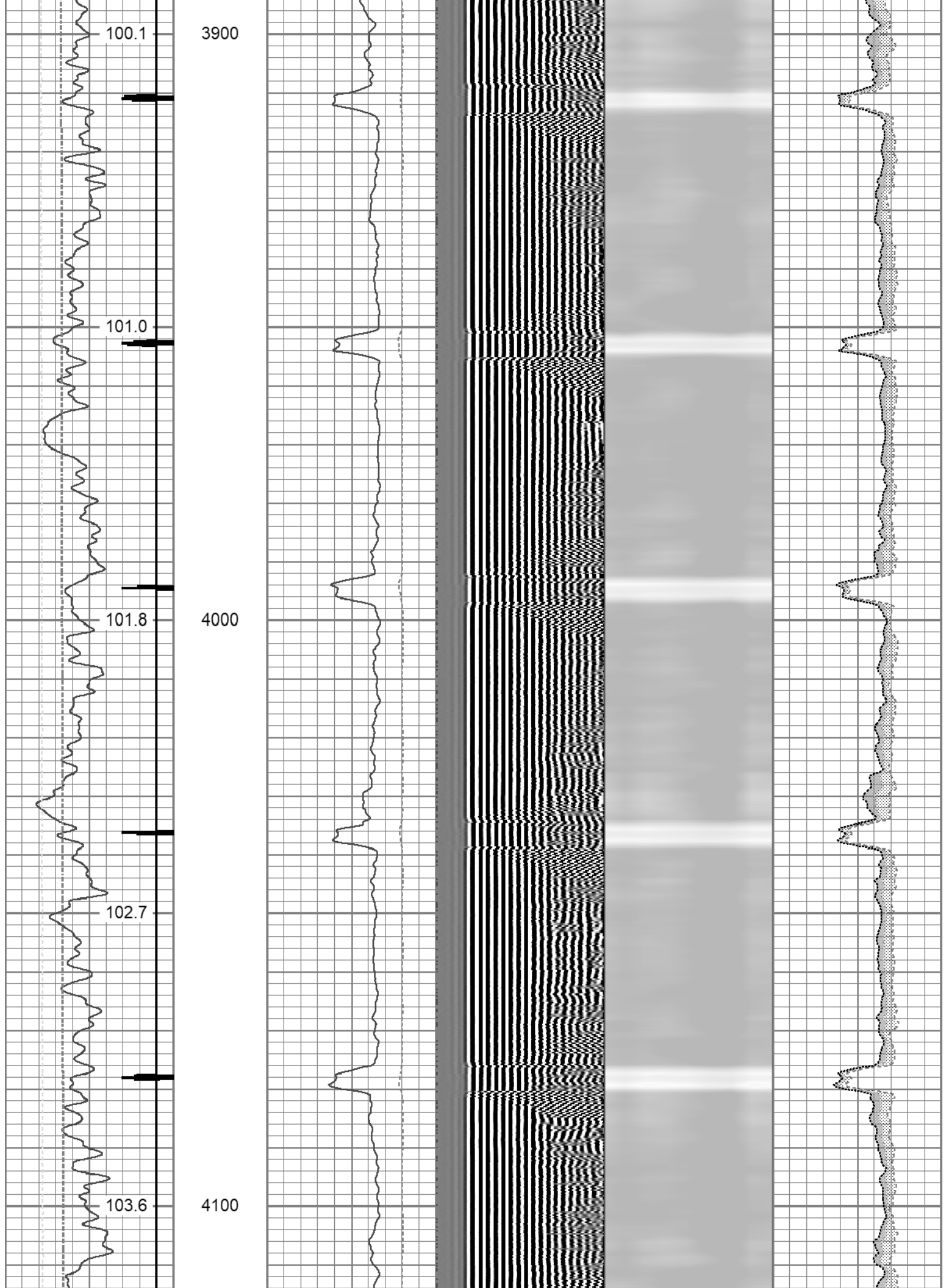
3200

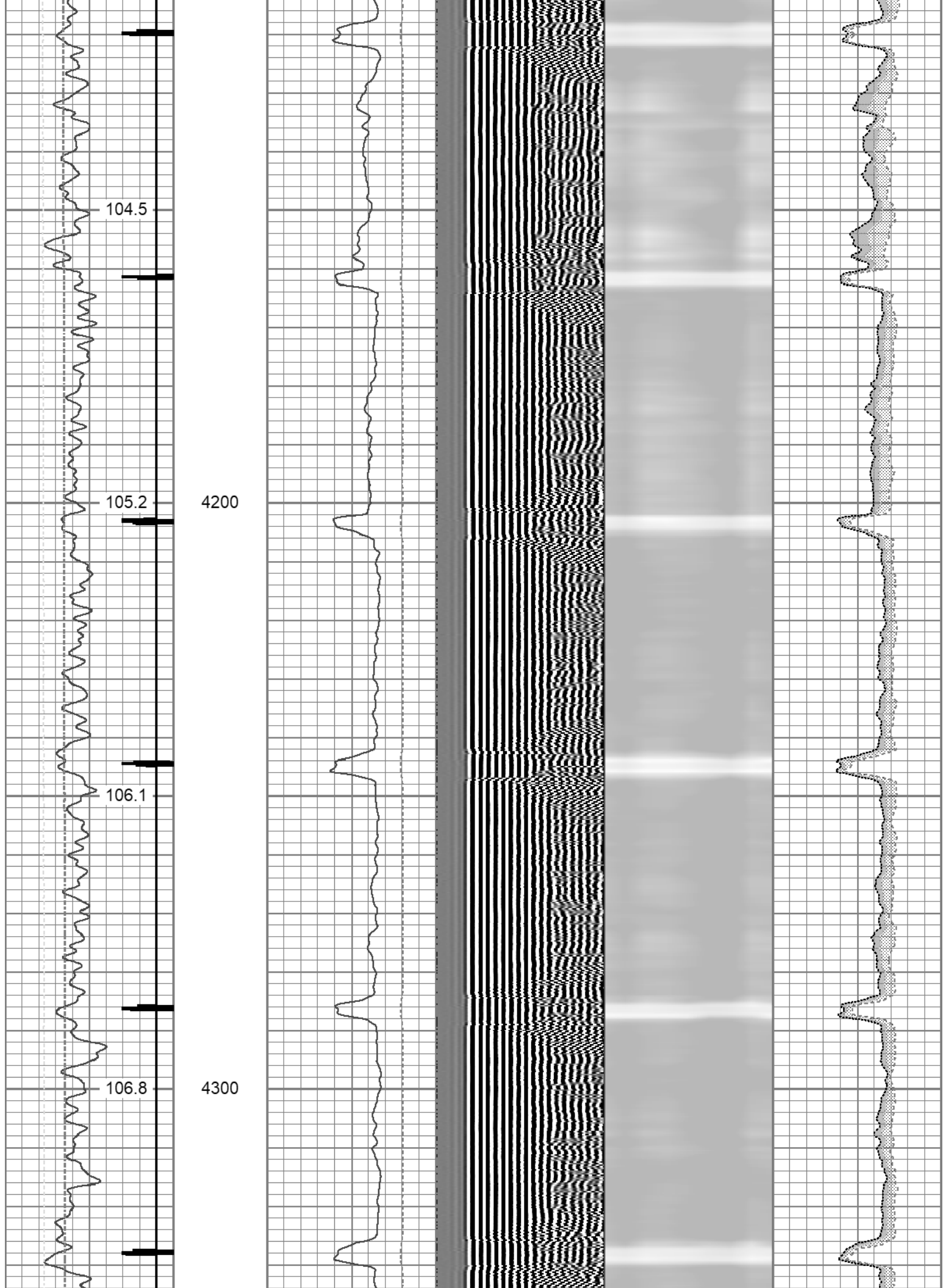


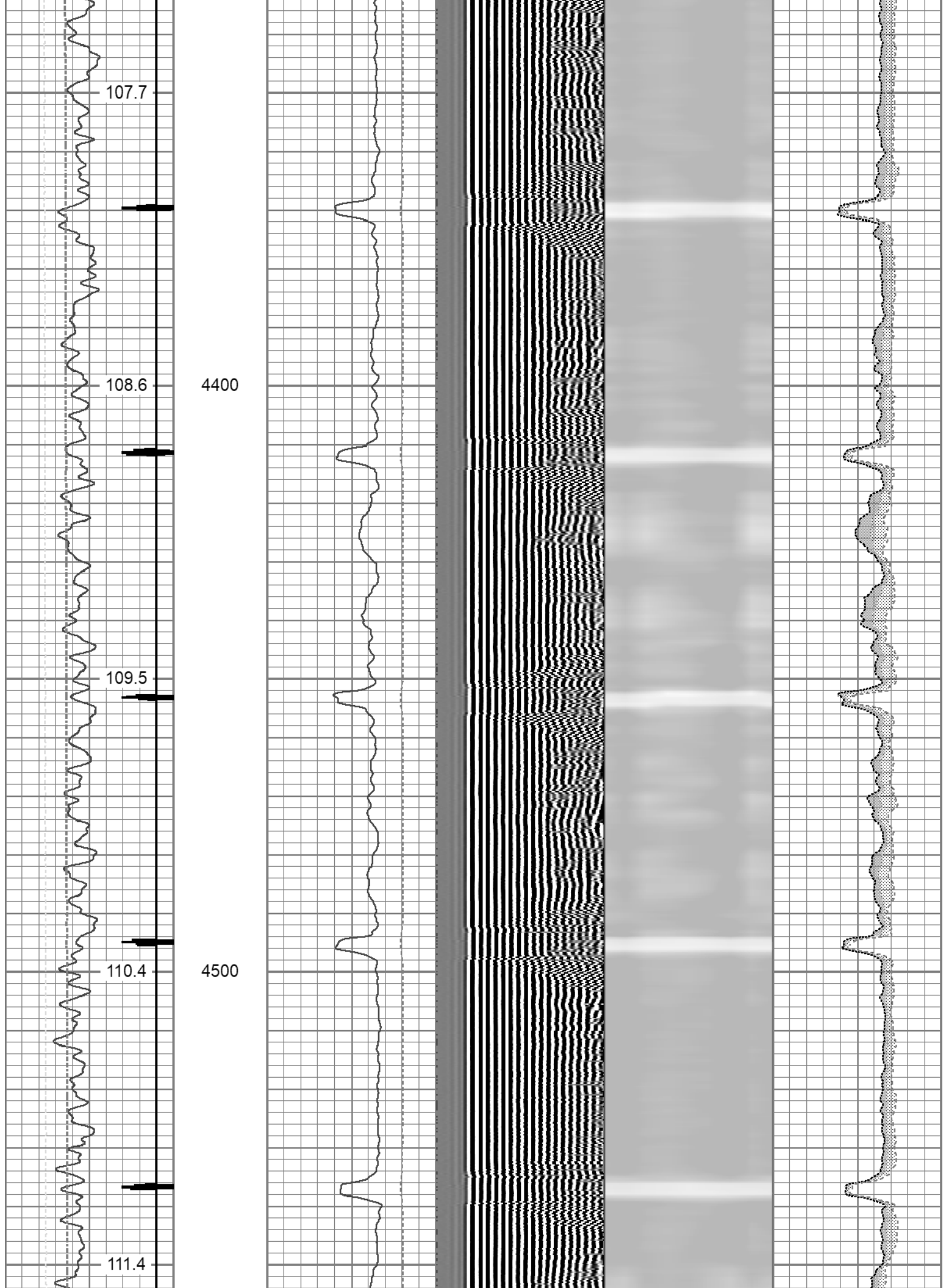






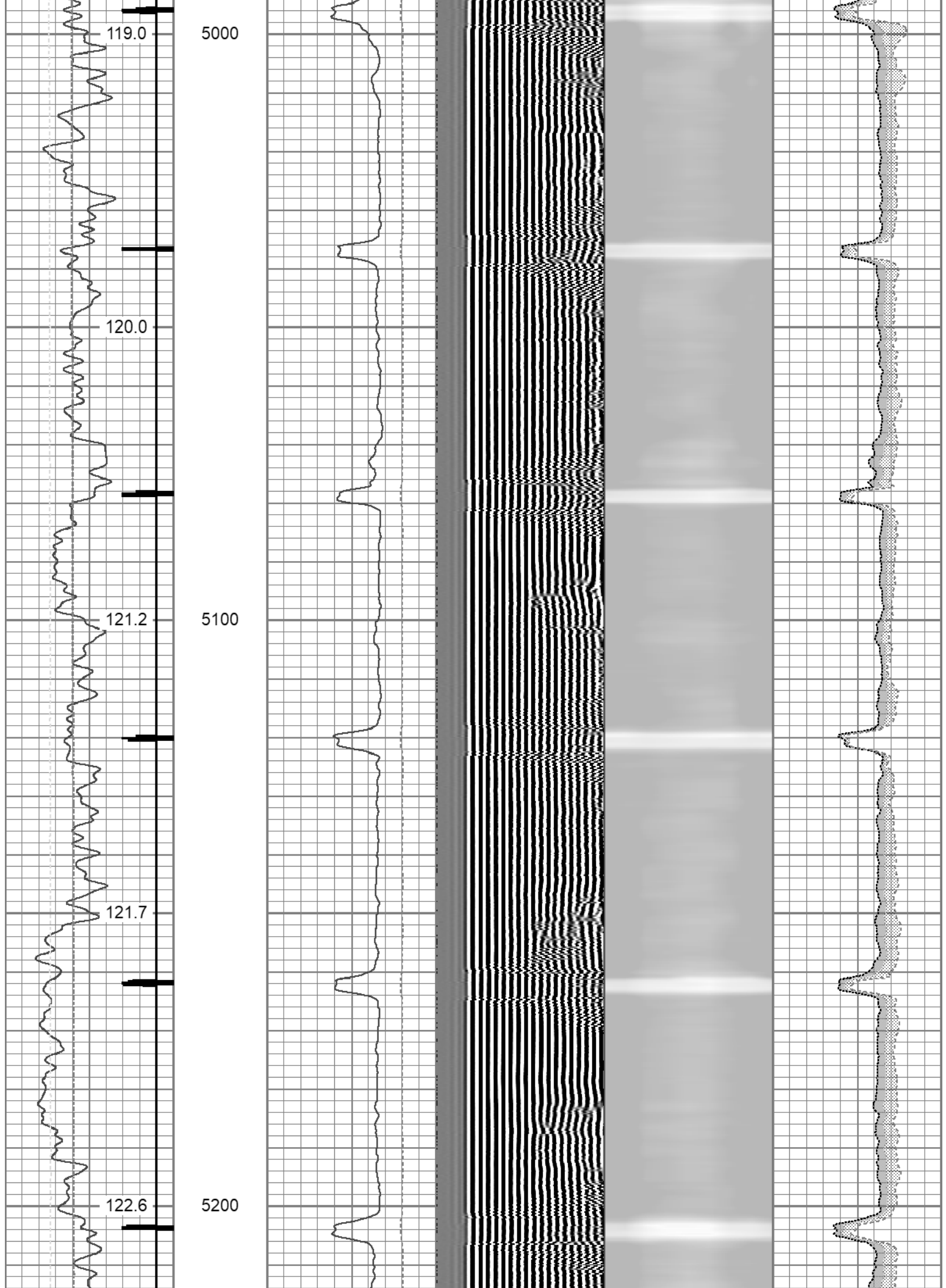


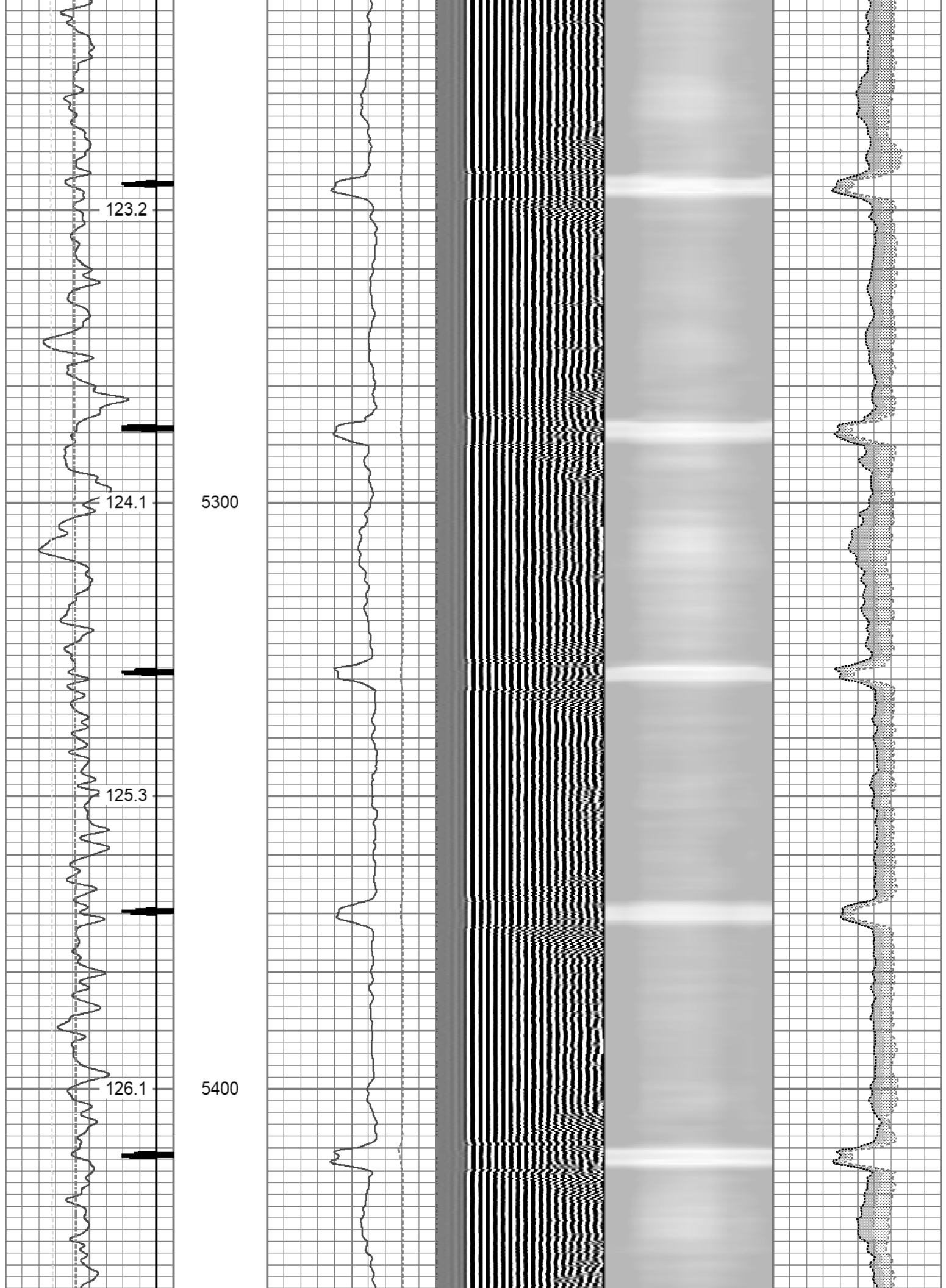


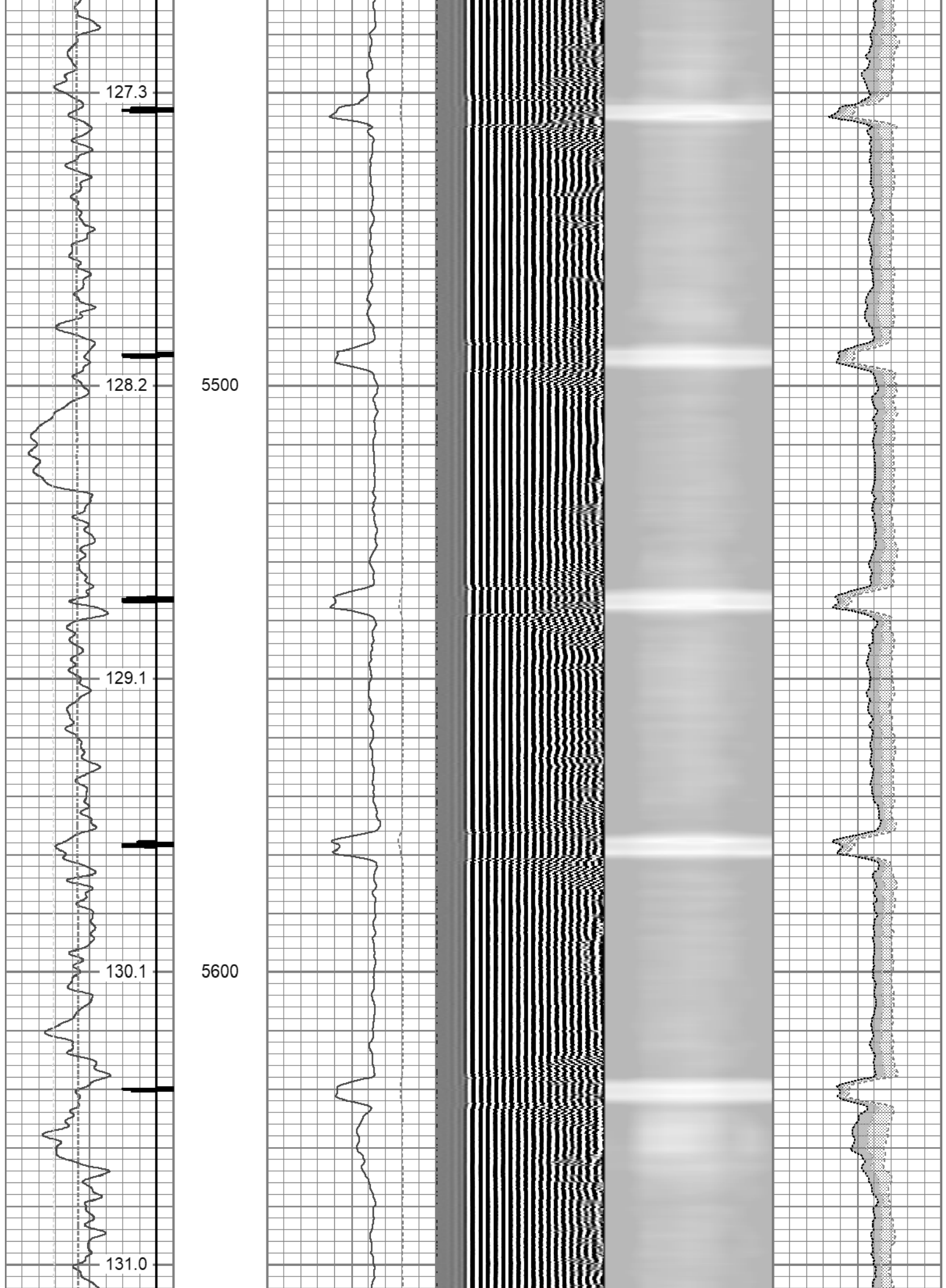


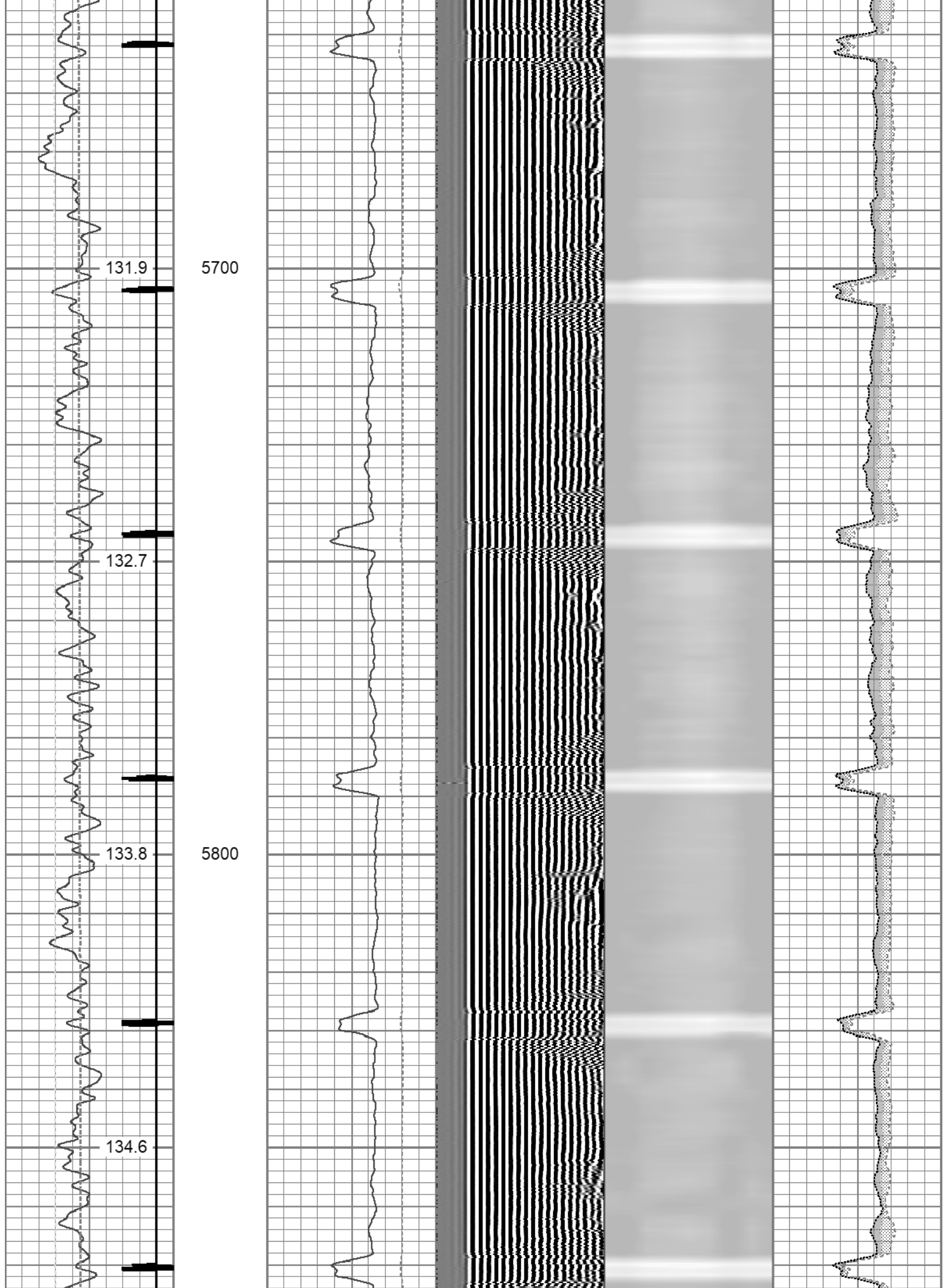




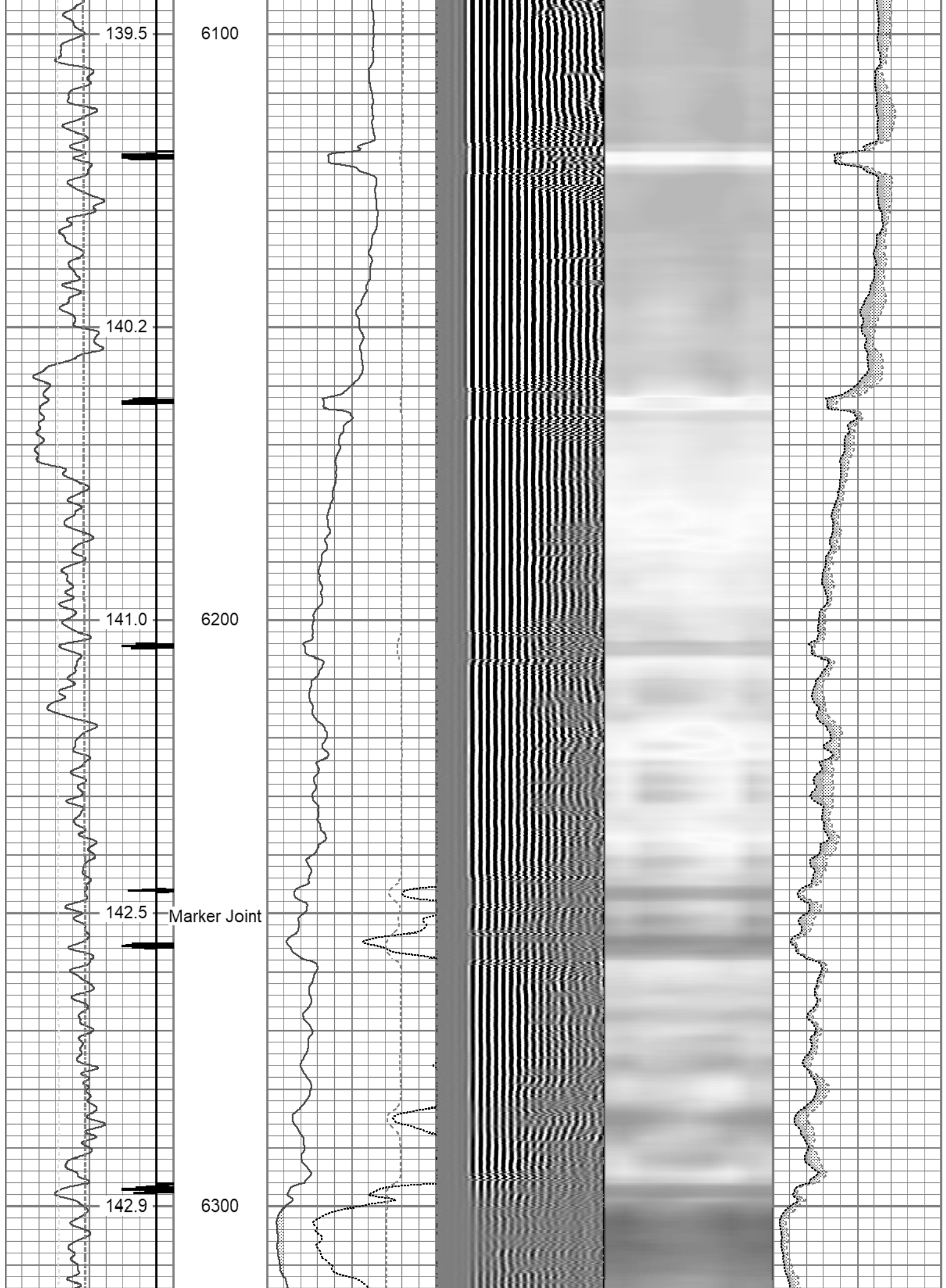


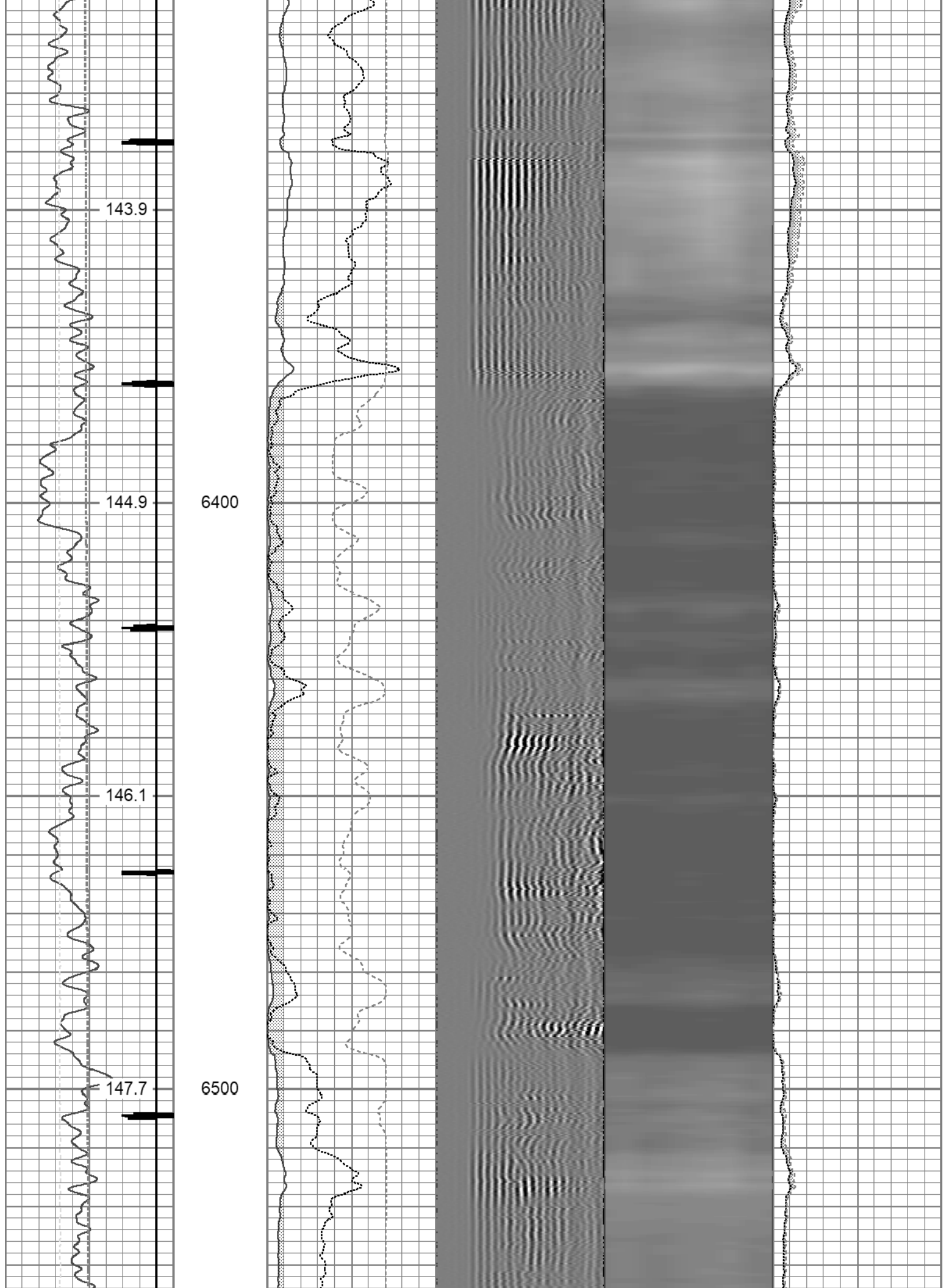


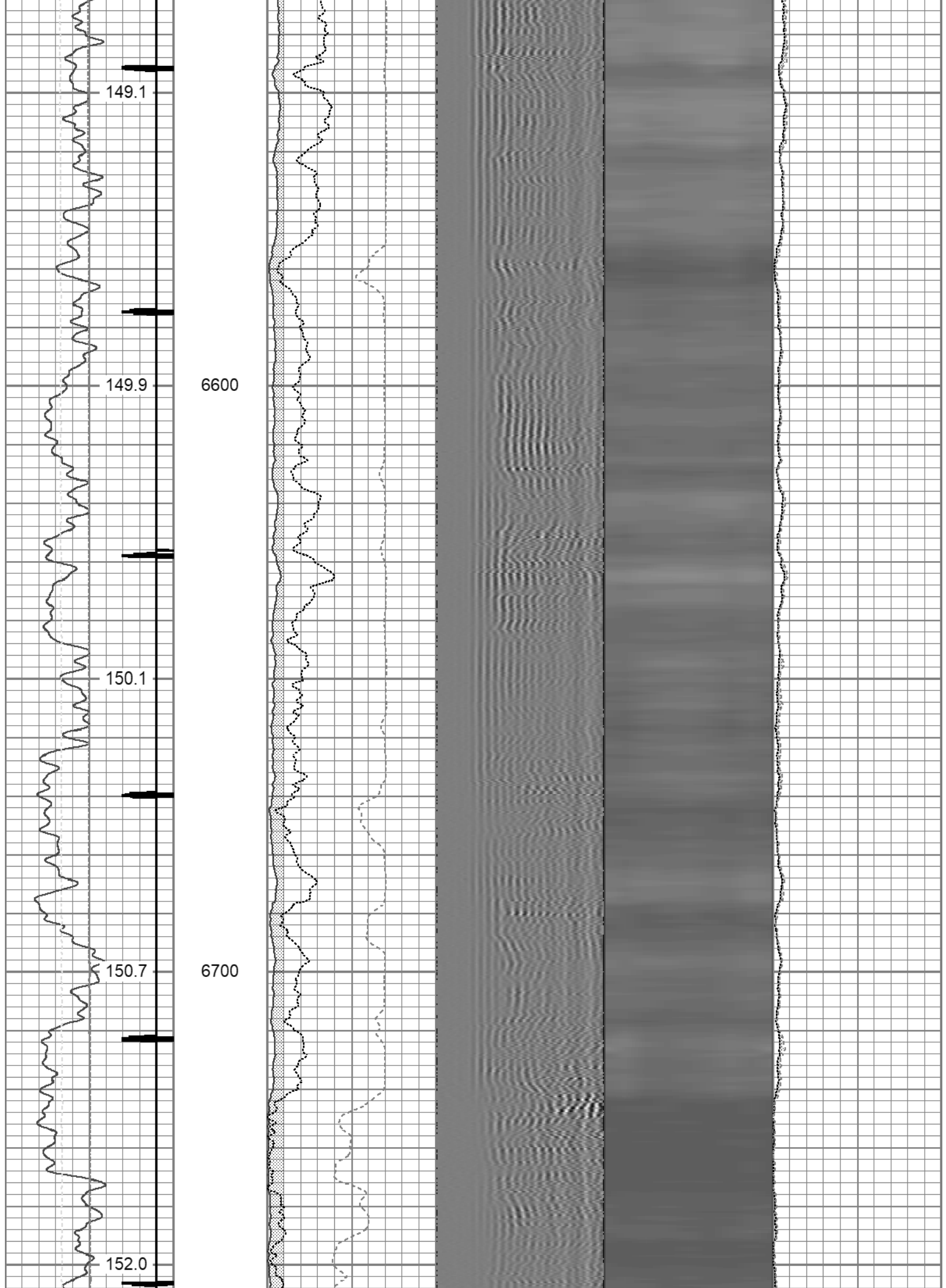


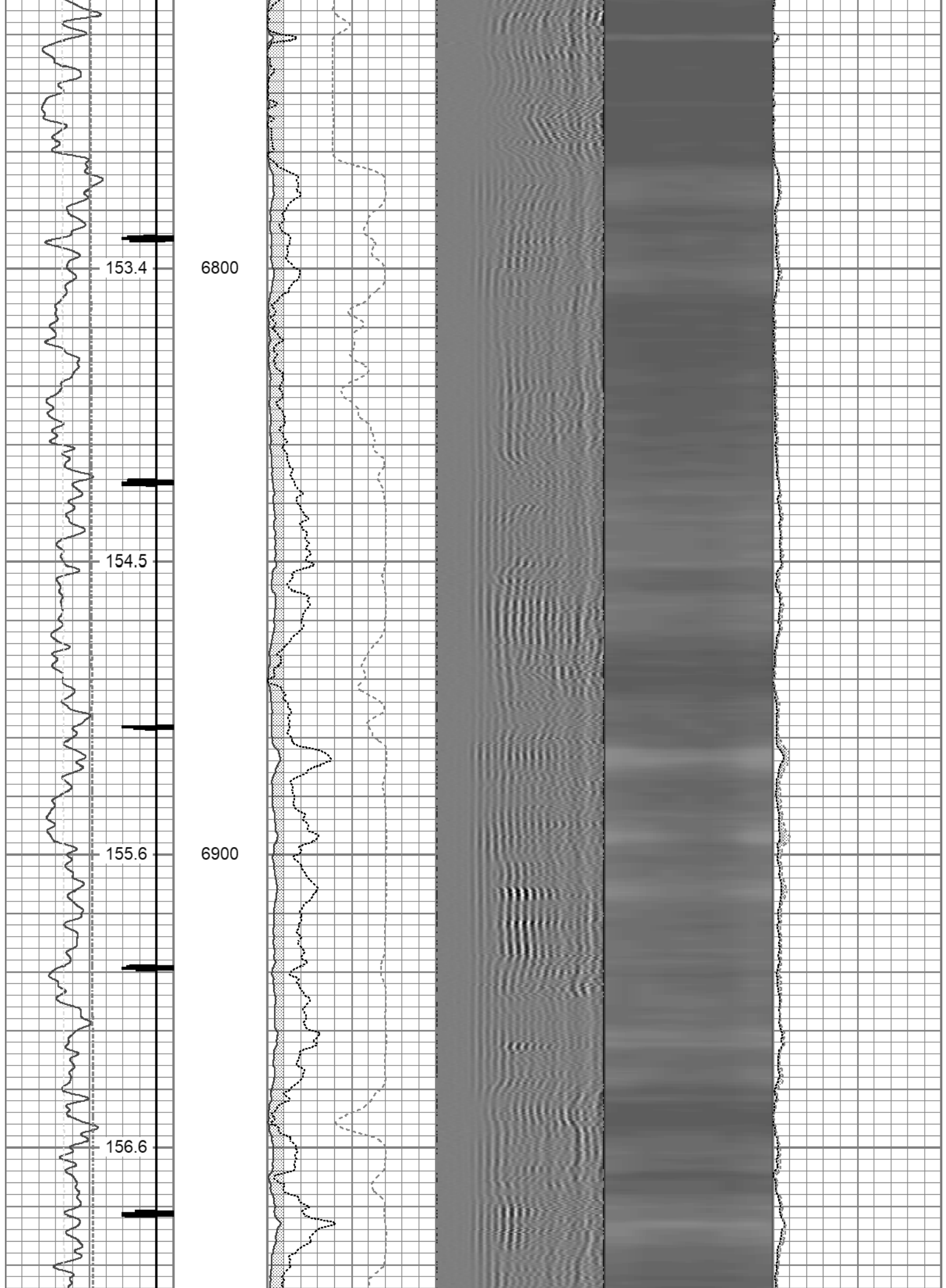




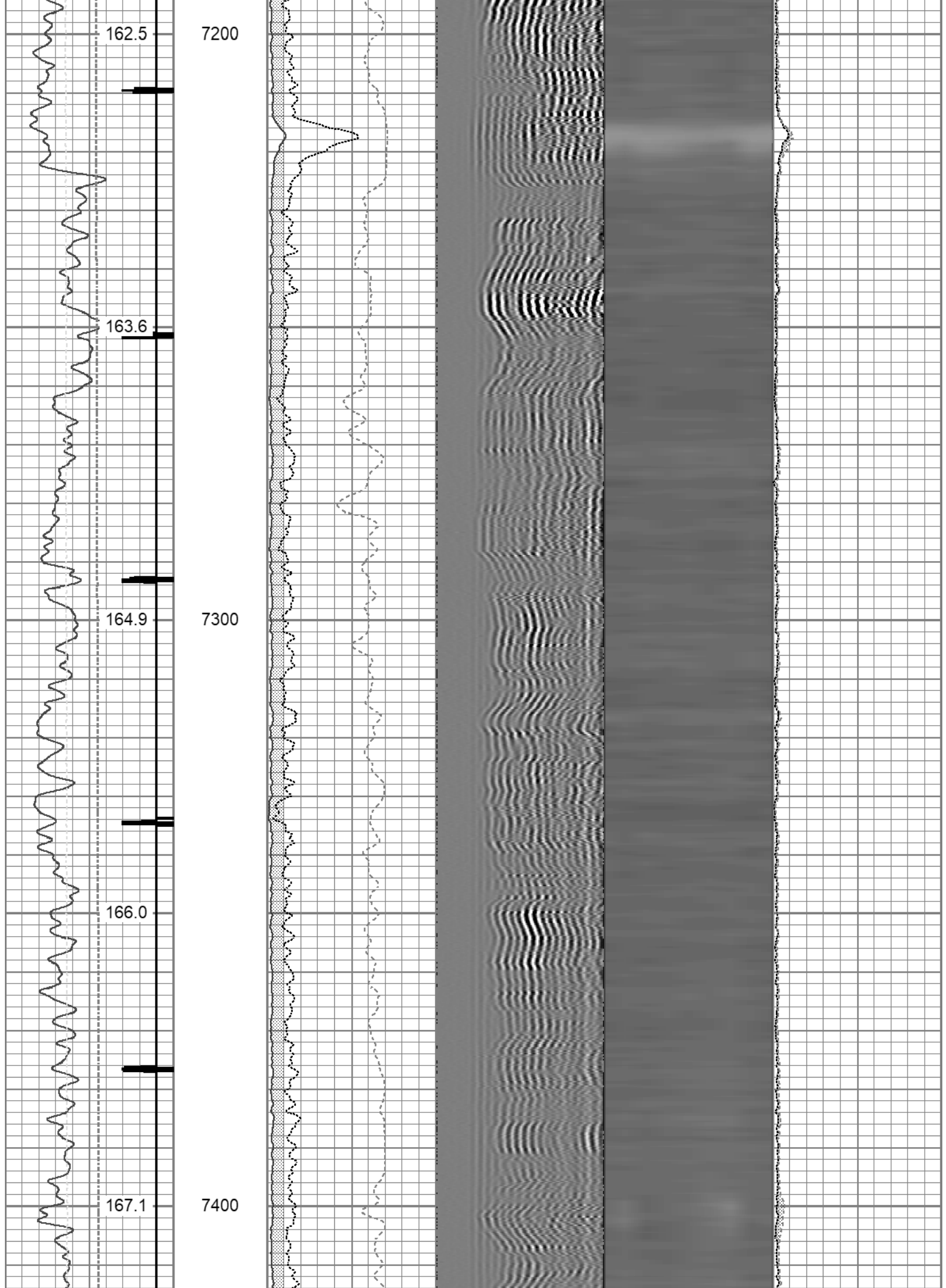


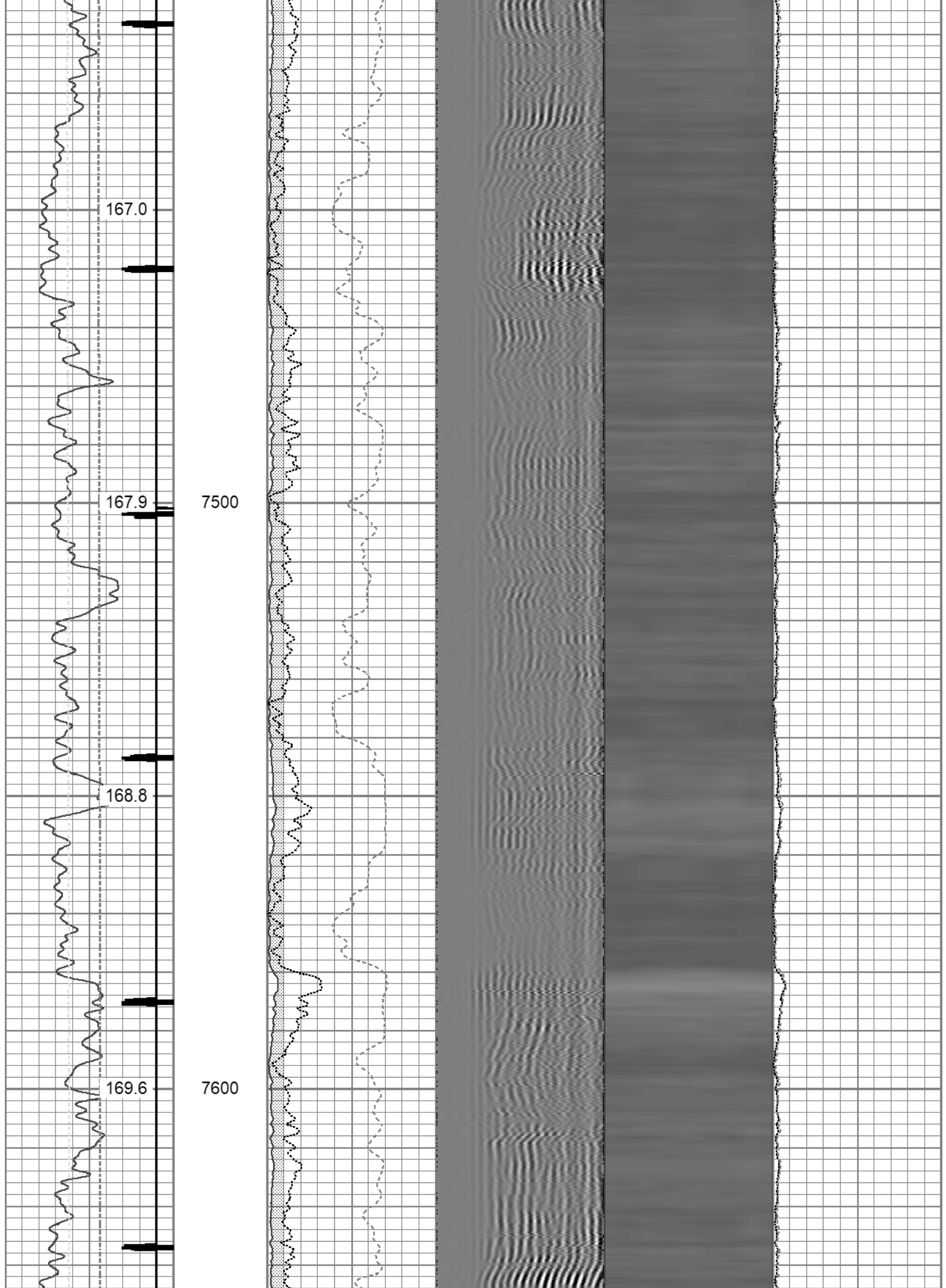


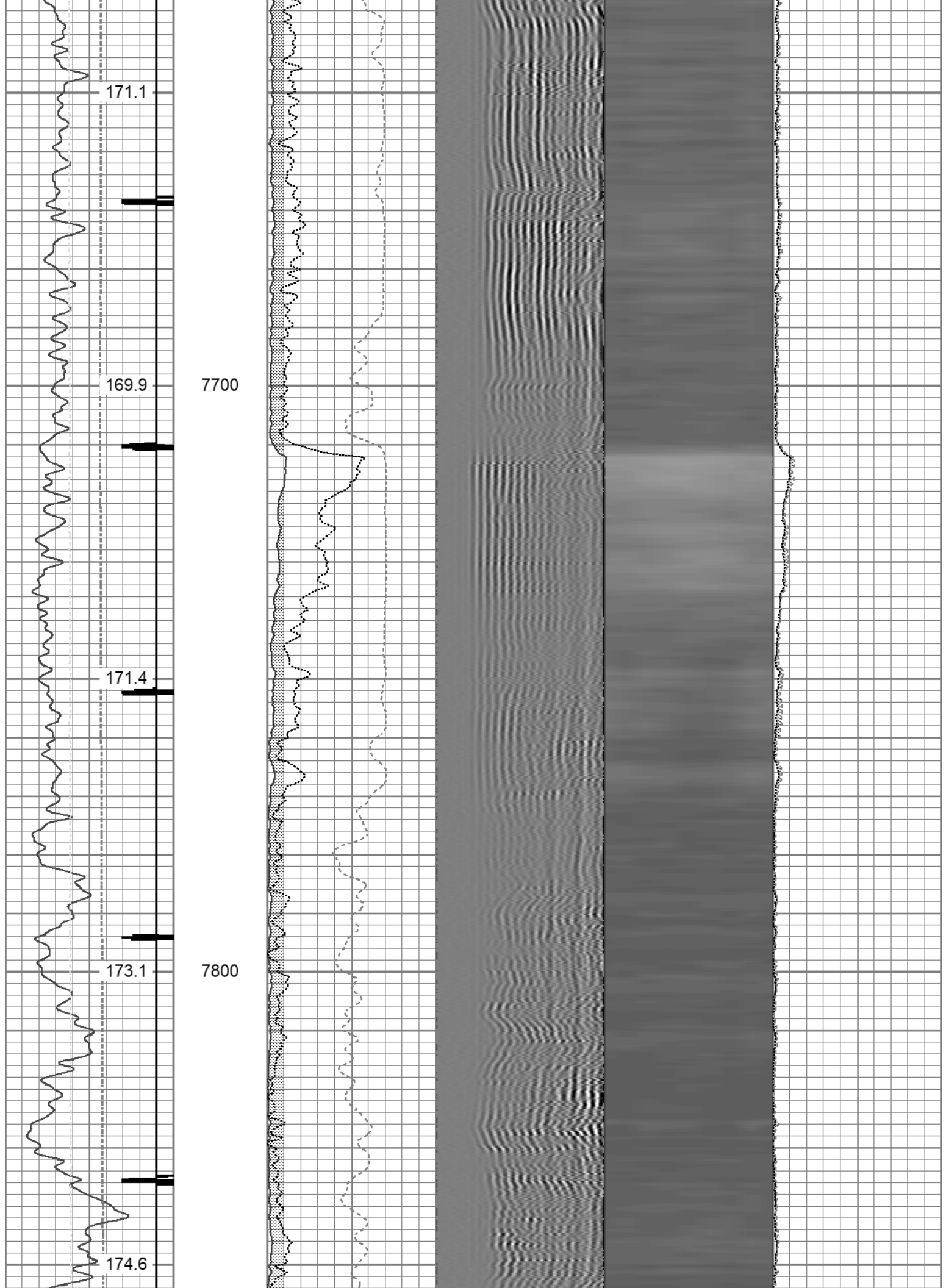


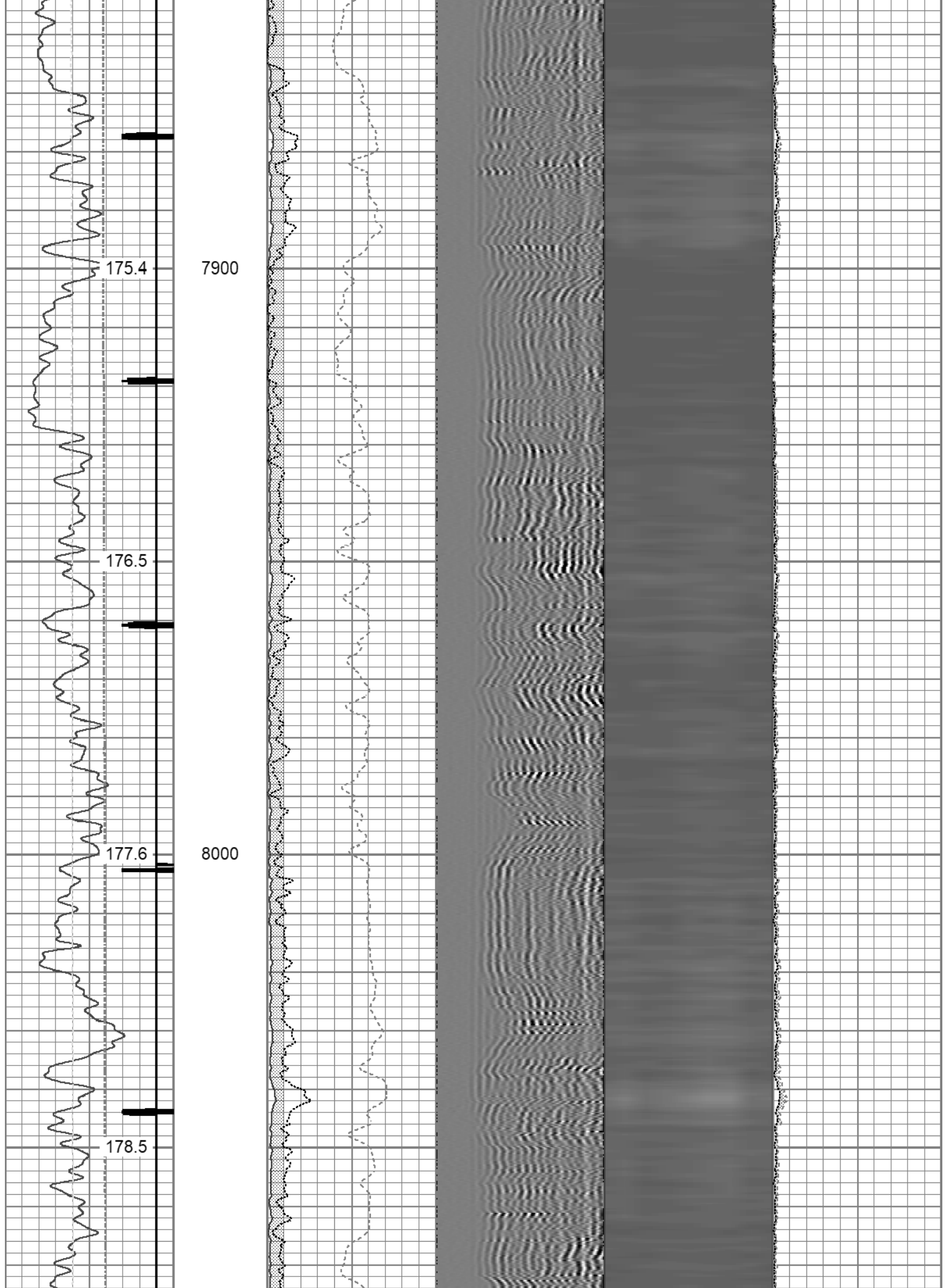


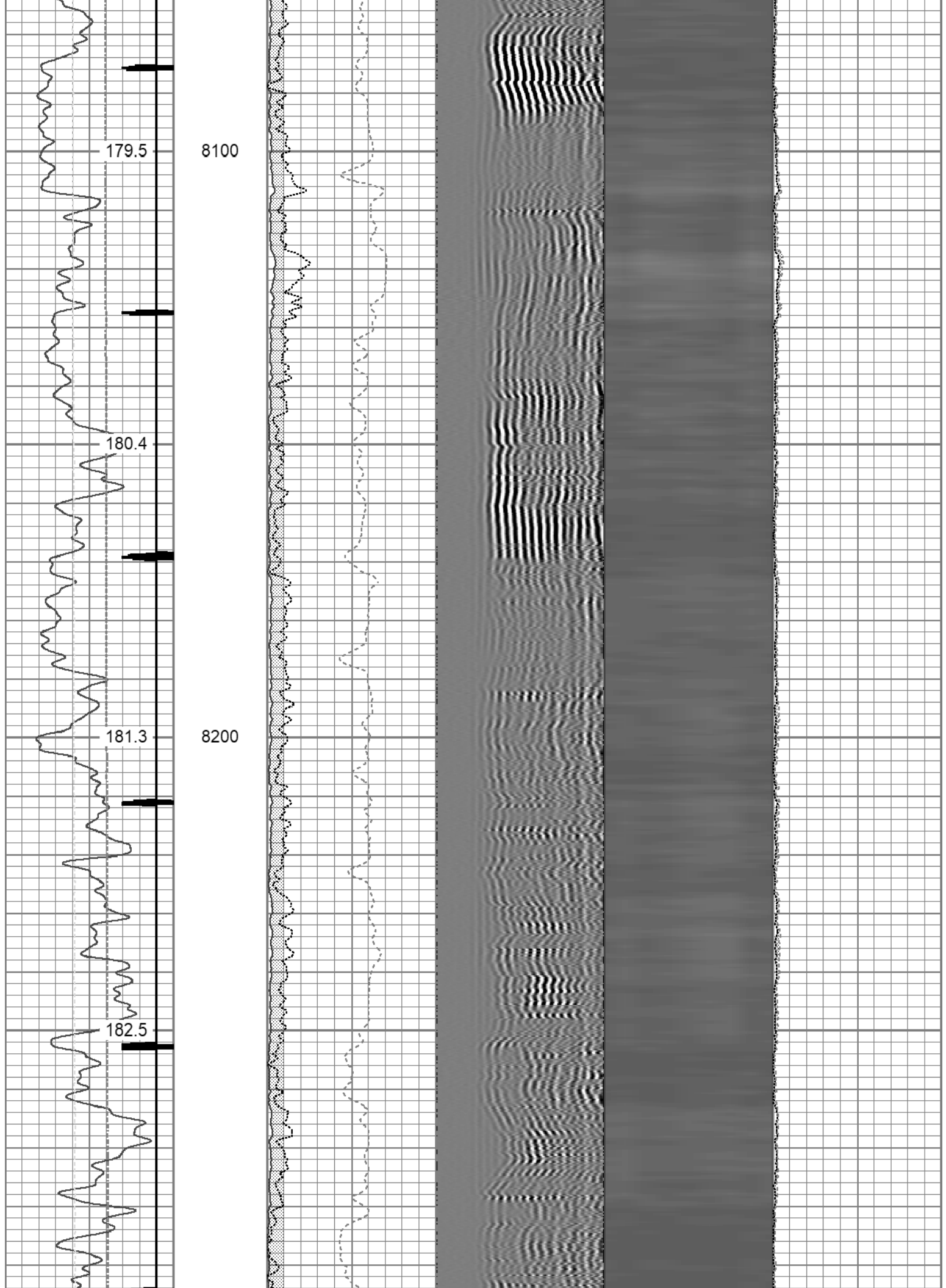


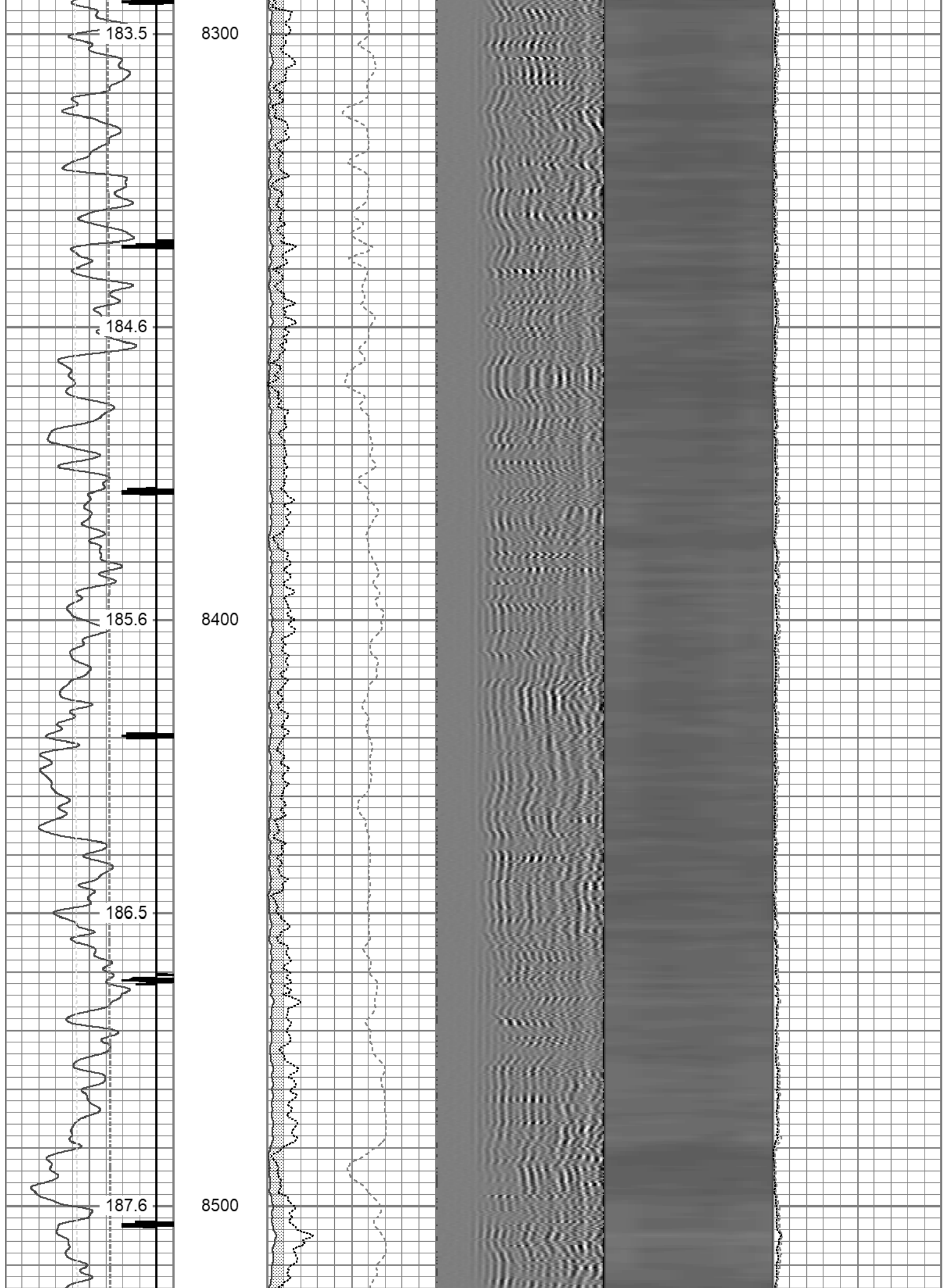


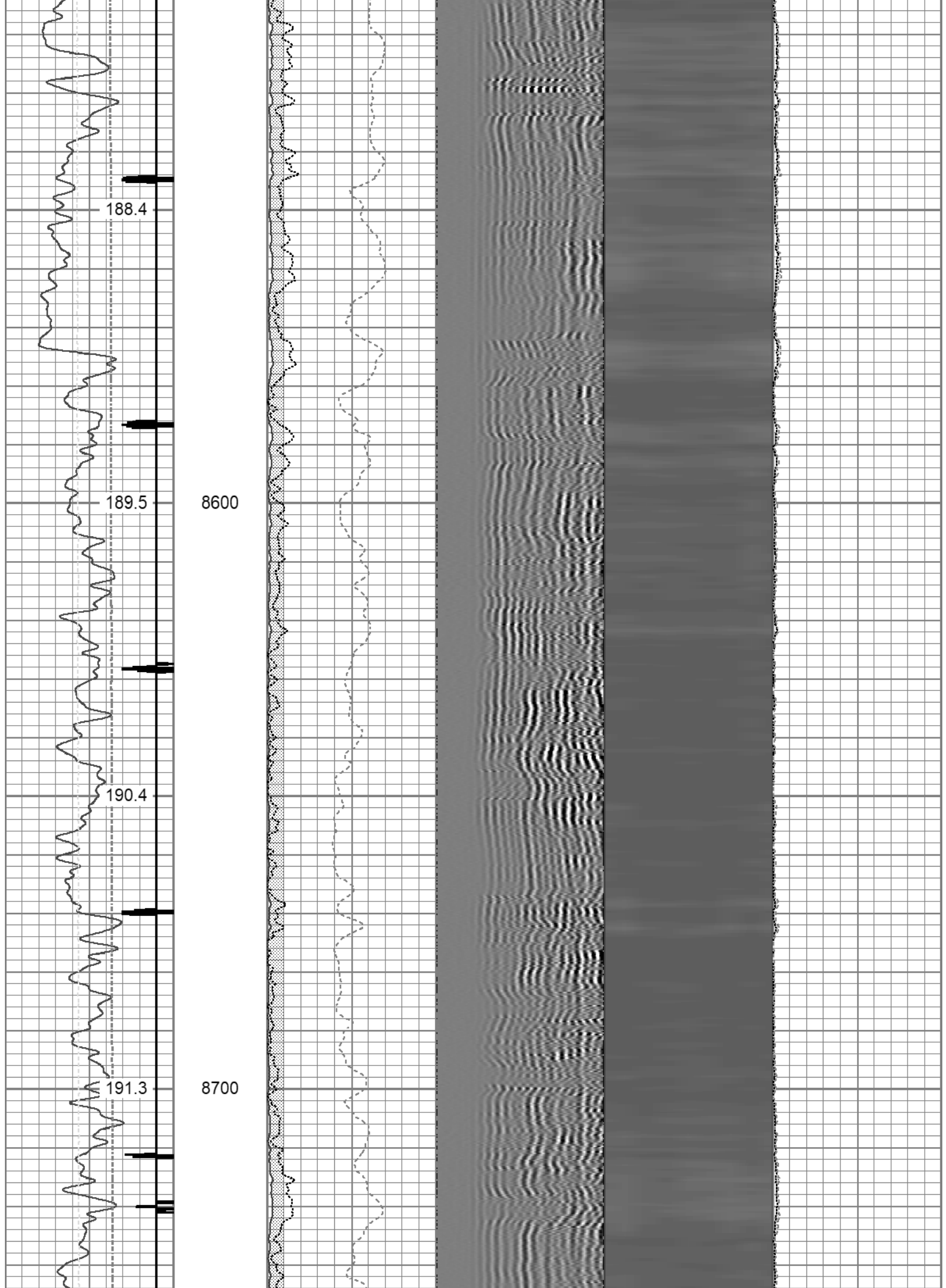


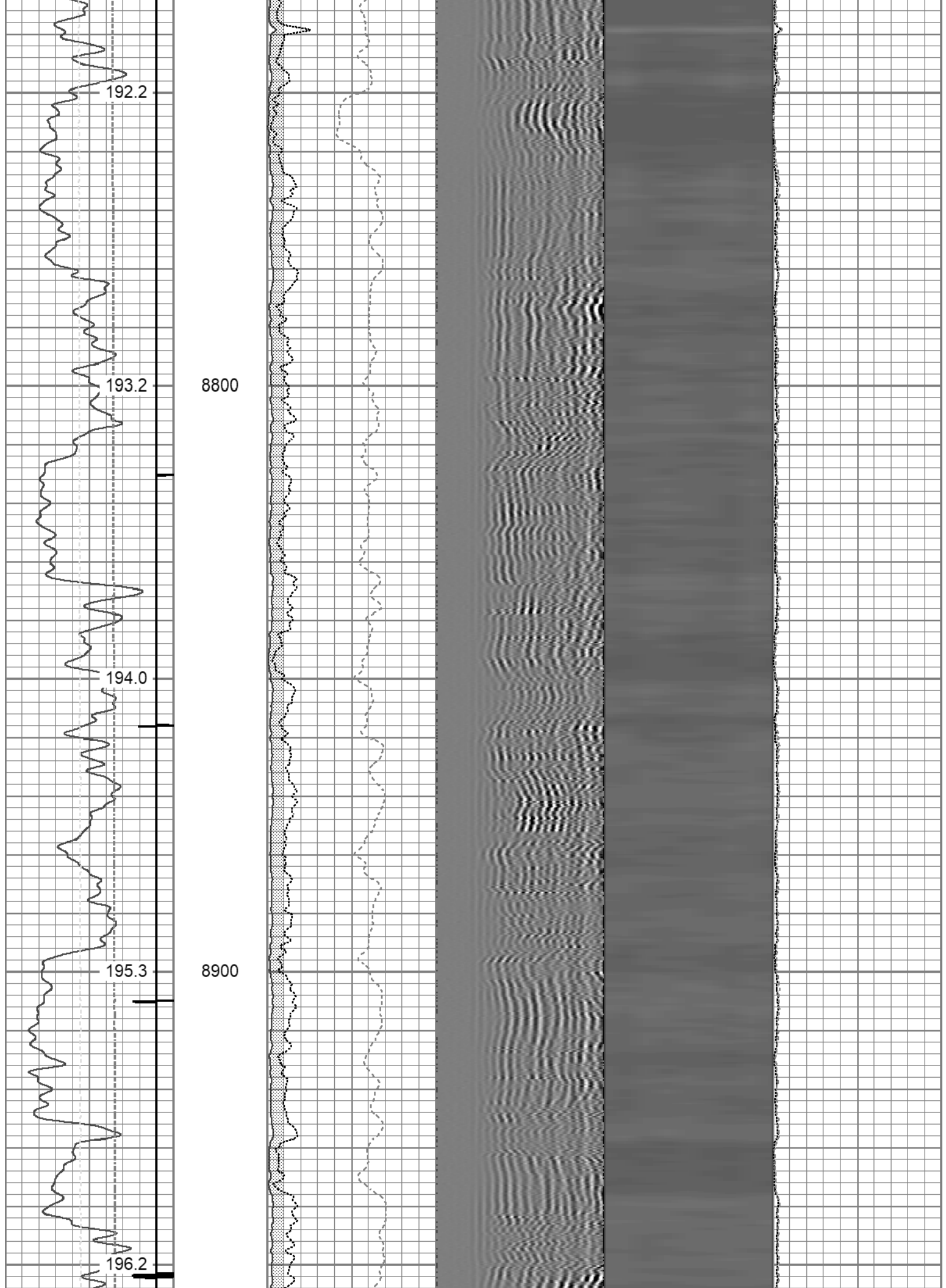


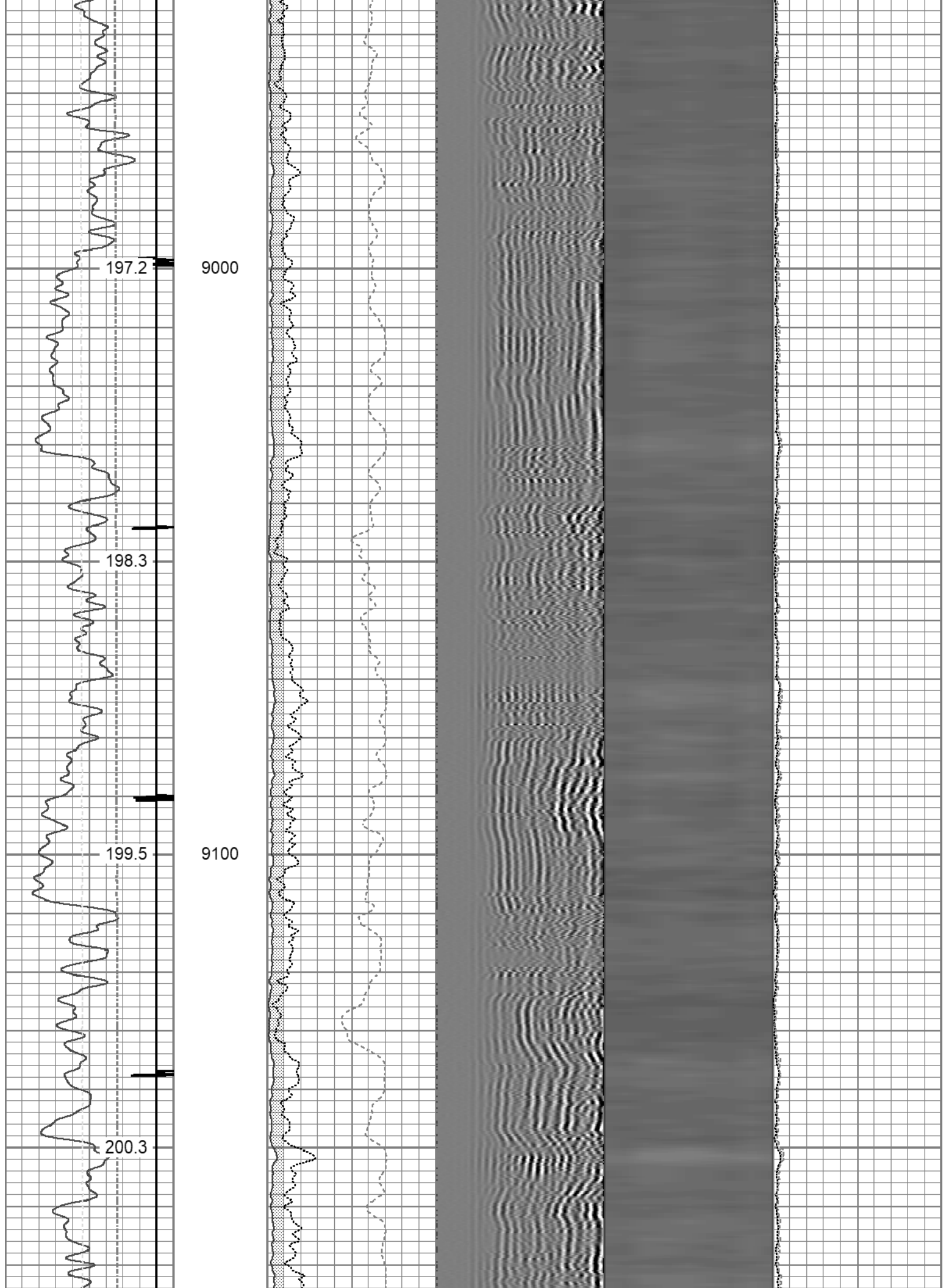


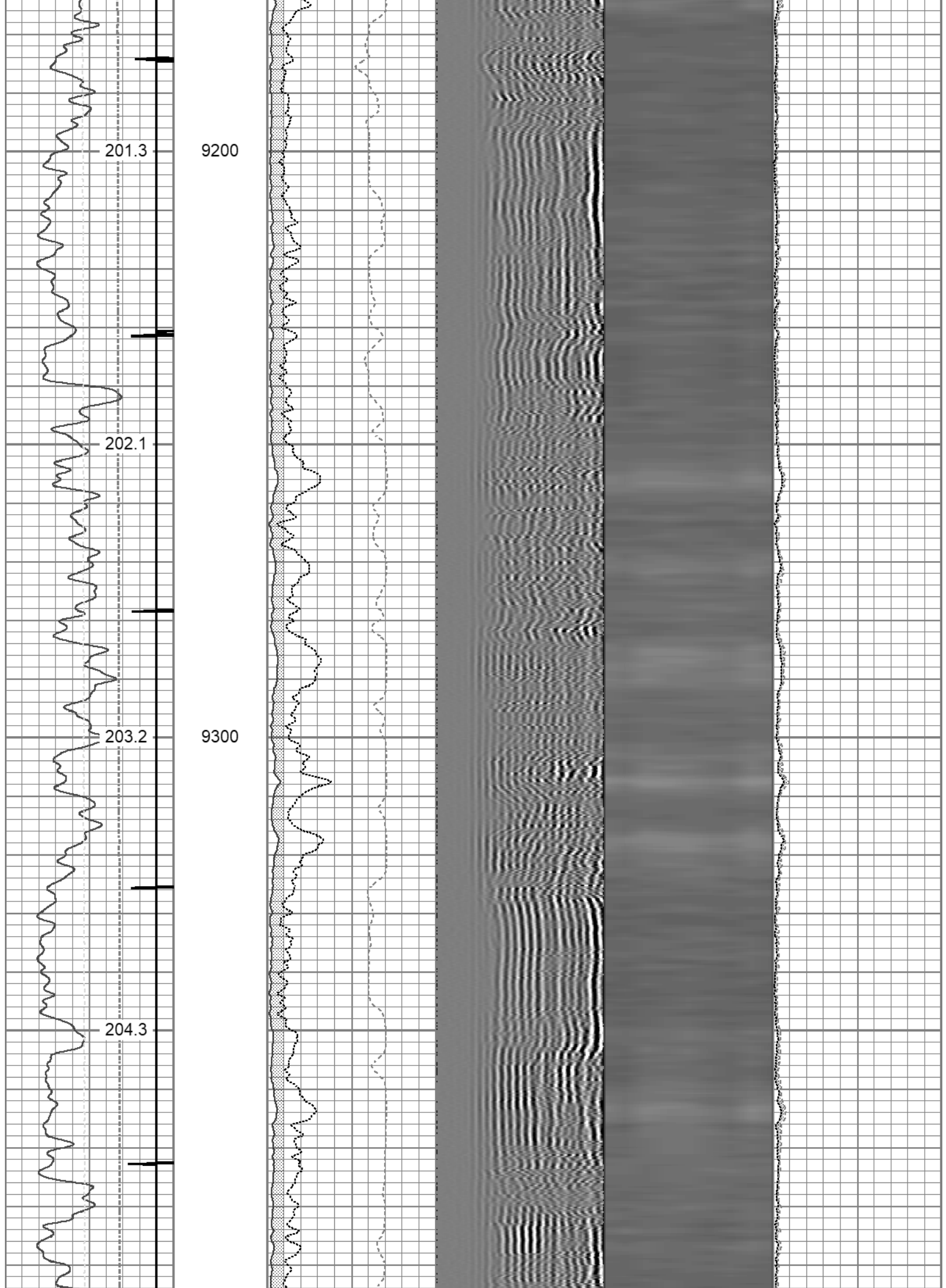


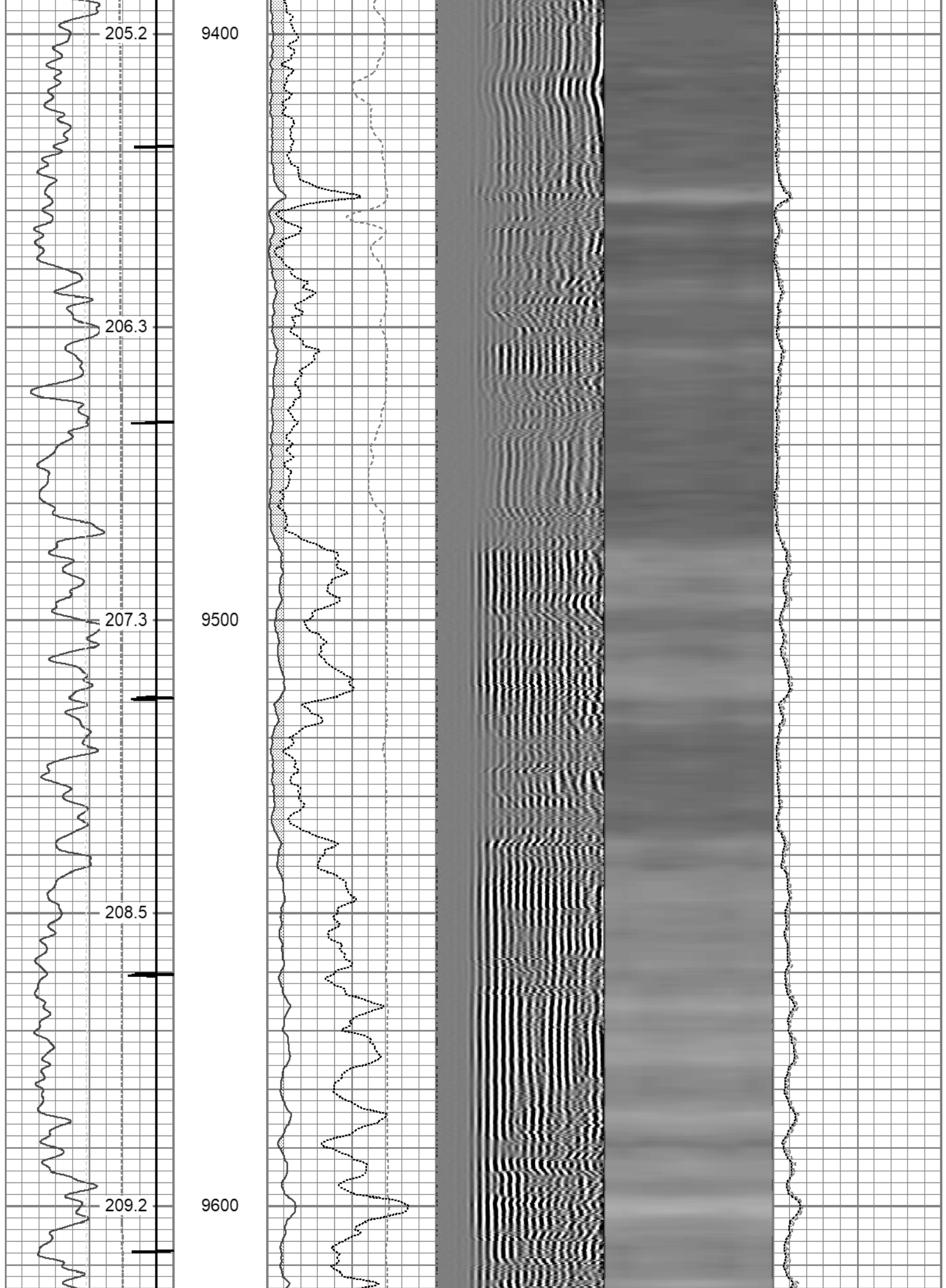


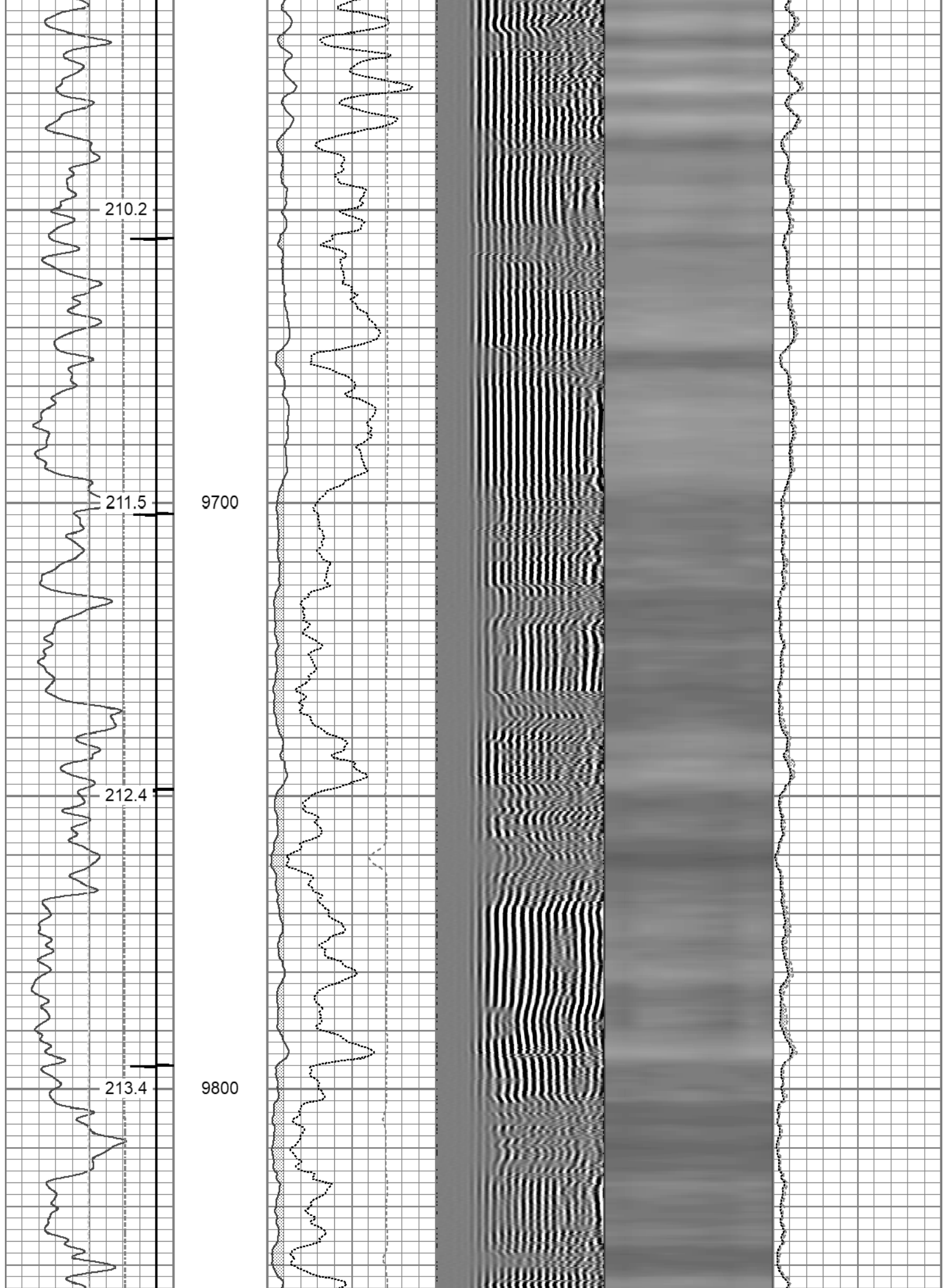


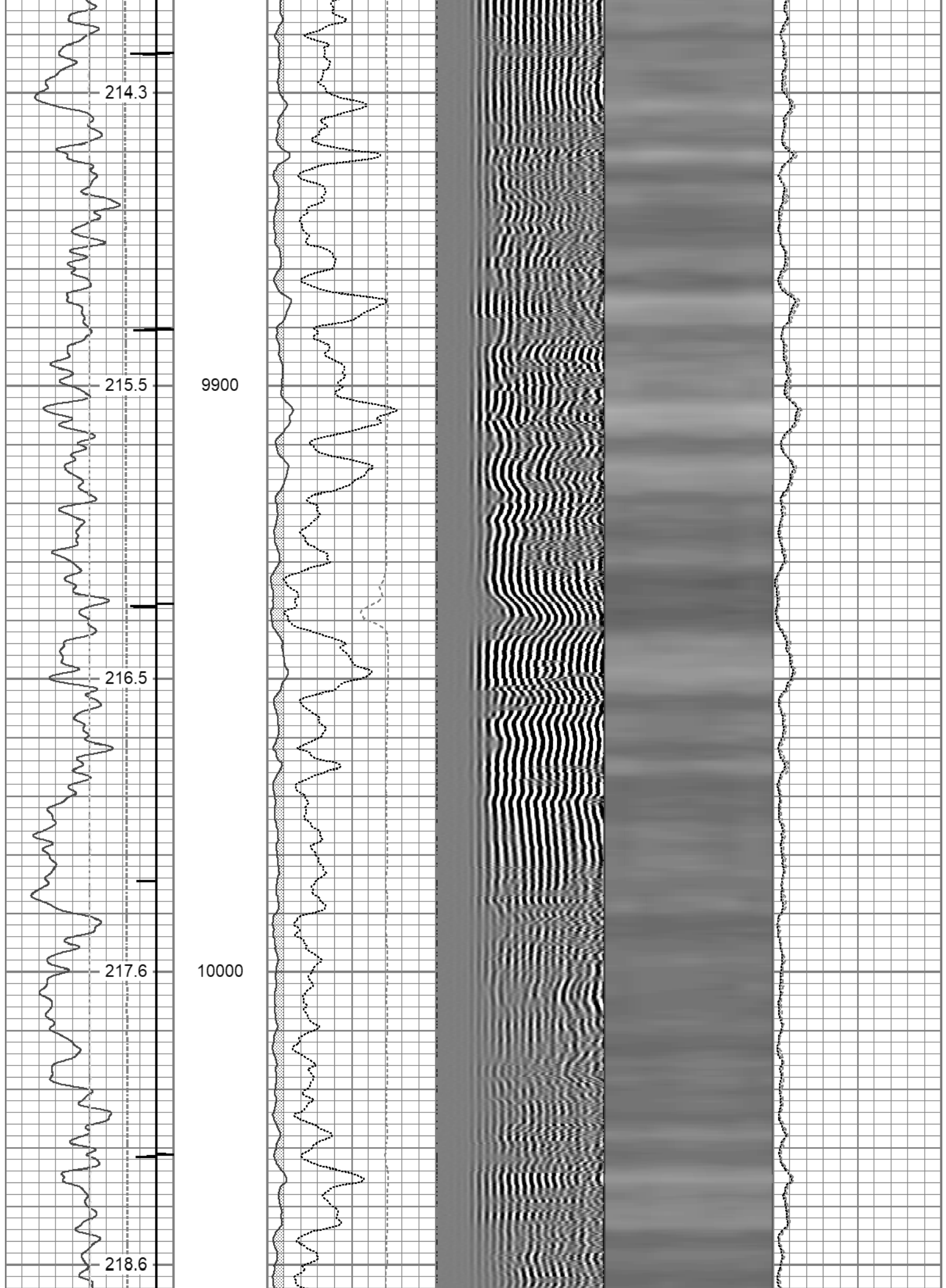


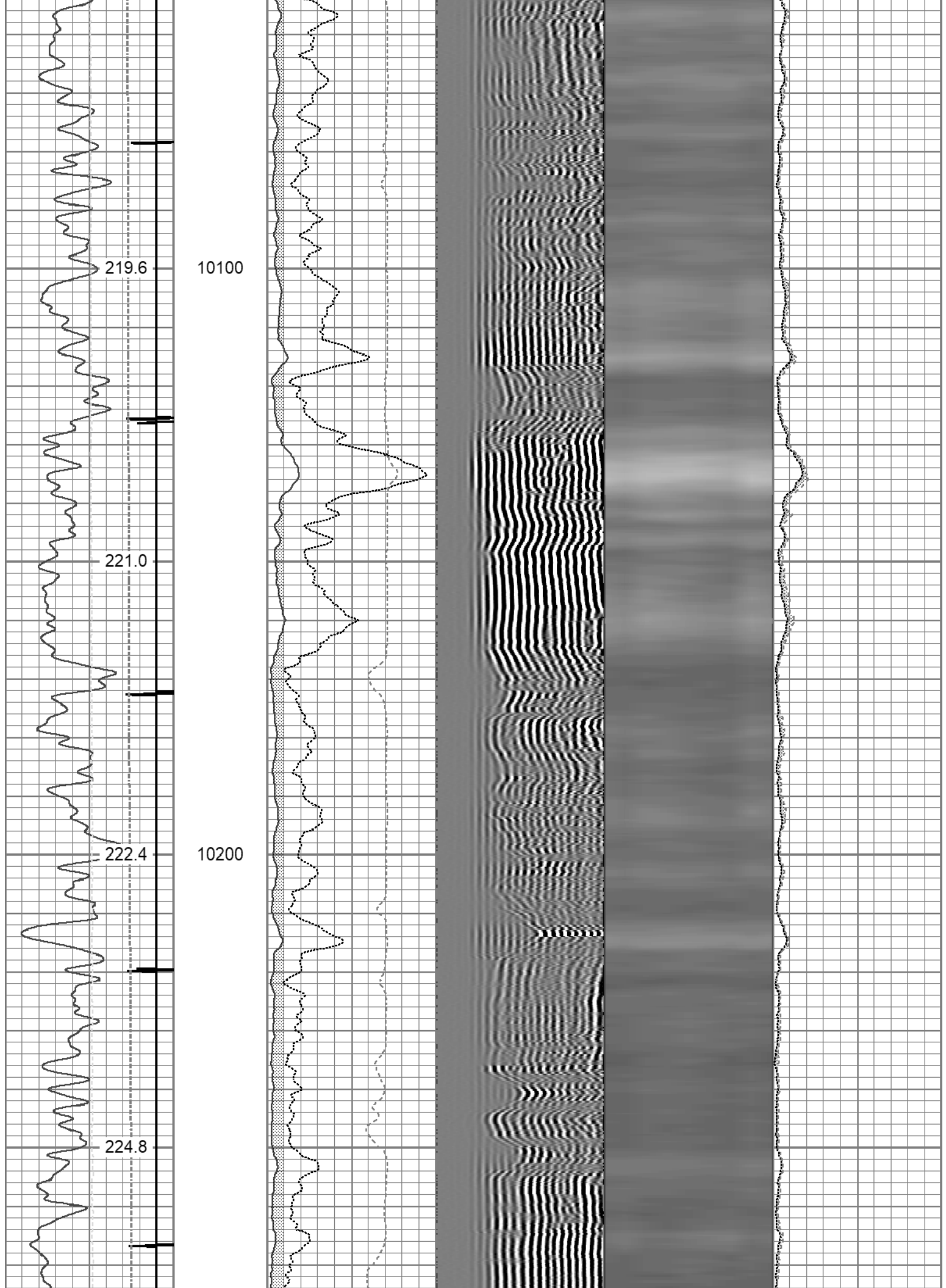


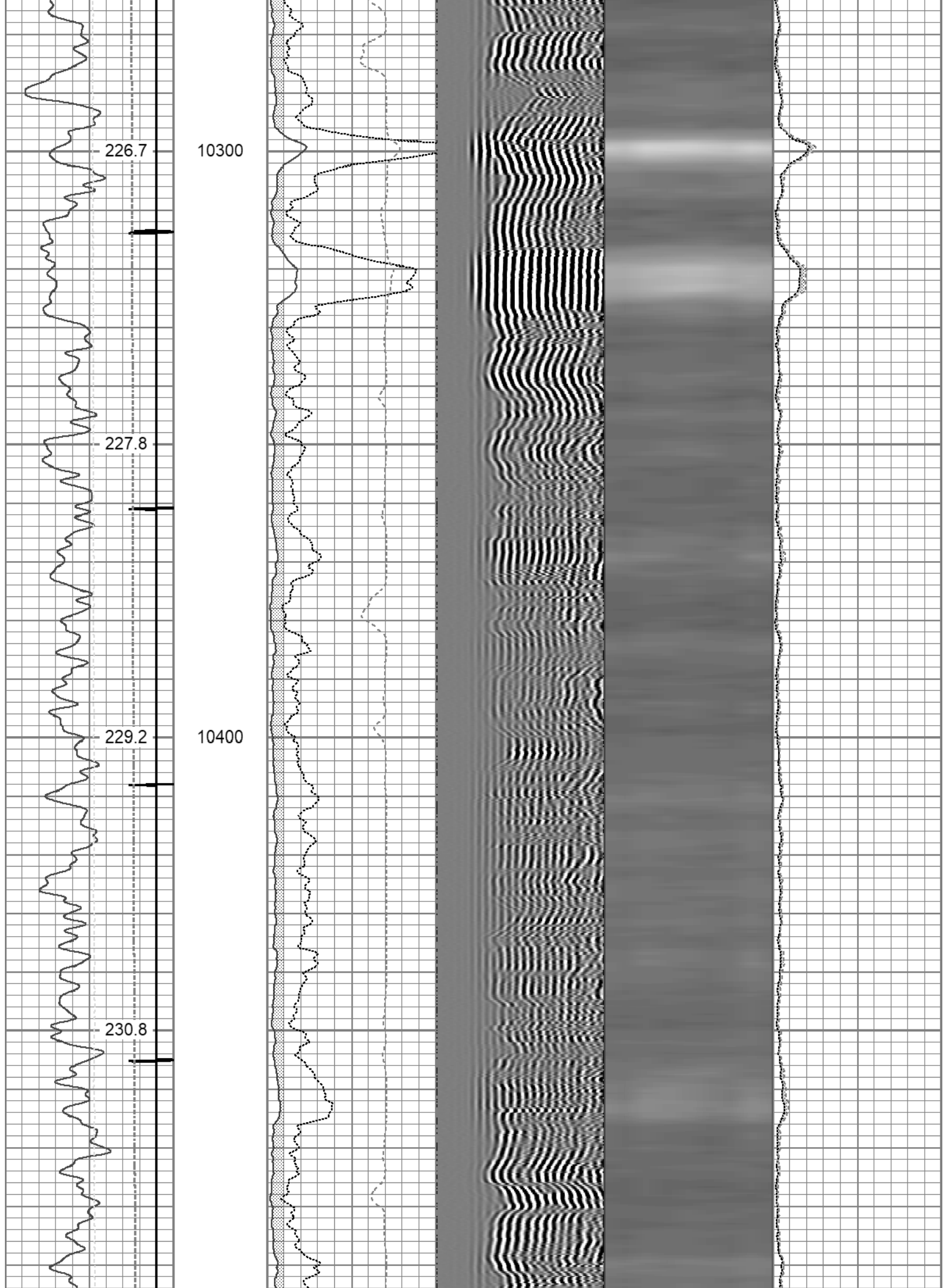


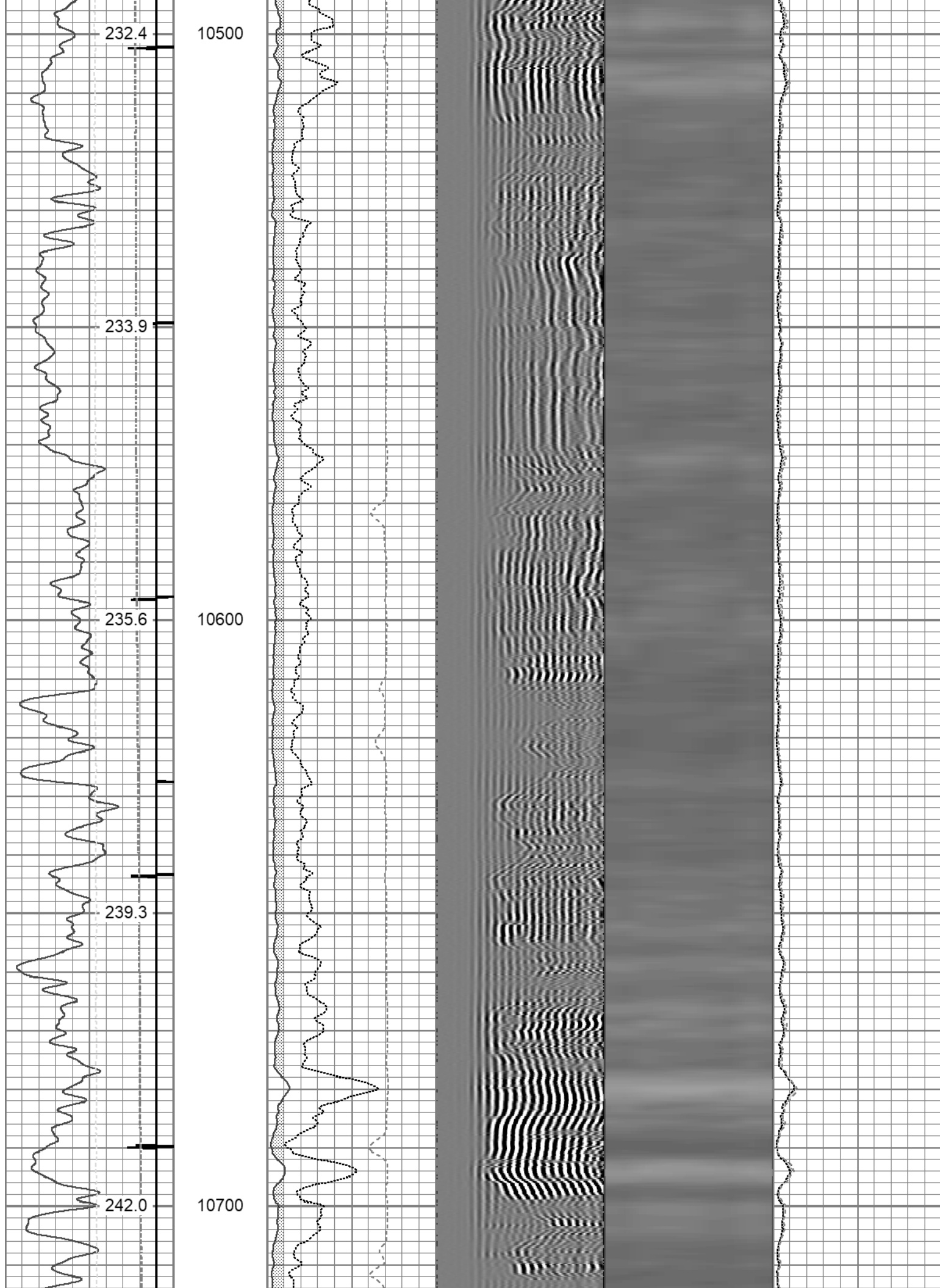


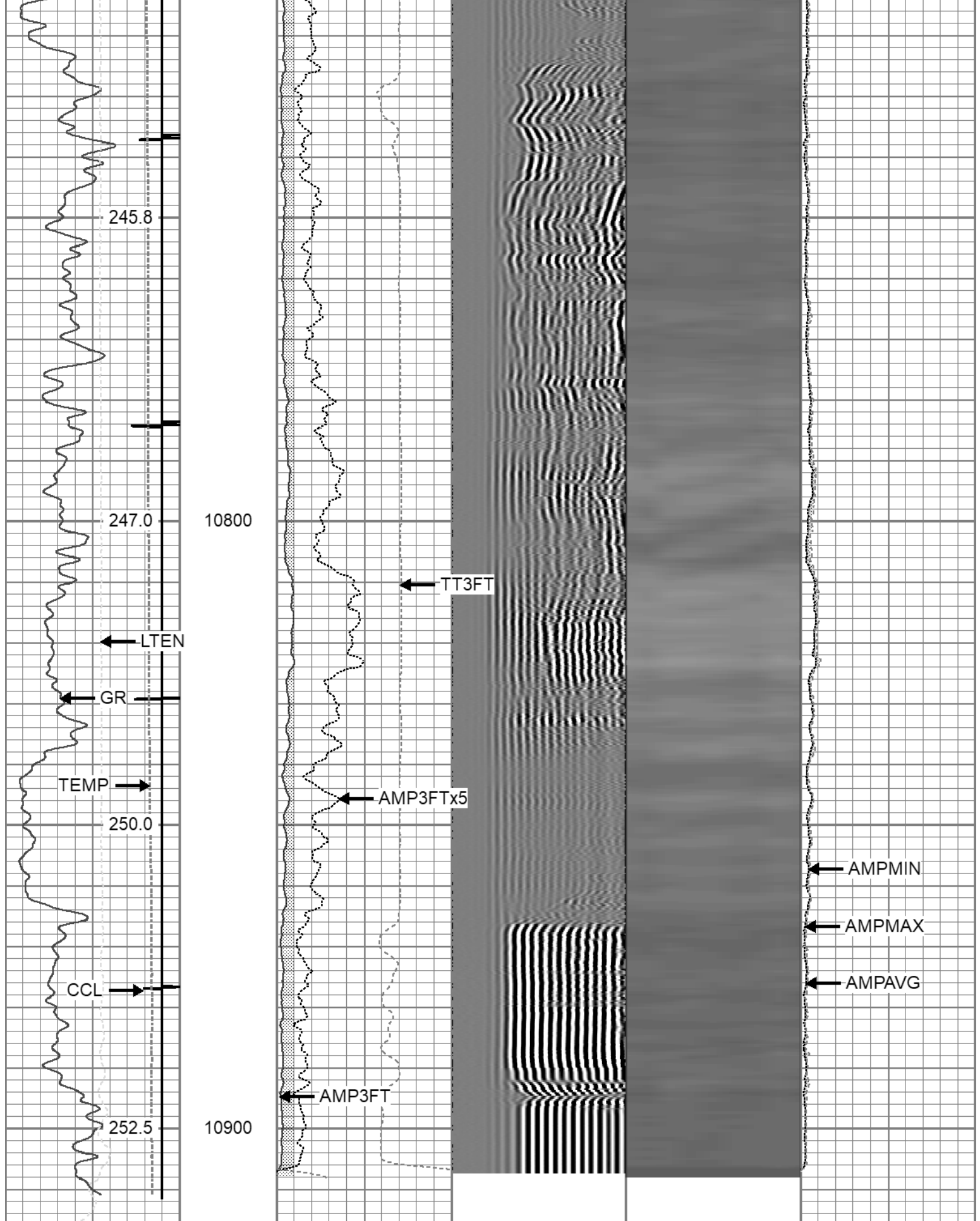












Gamma Ray (GAPI)	3' Amplitude (mV)	5' Variable Density Log (usec)	Sector Map	Average Amplitude (mV)
0 200	0 100	200 1200		0 120
Line Tension (lb)	3' Amplitude x 5 (mV)			Minimum Amplitude (mV)
0 4000	0 20			0 120

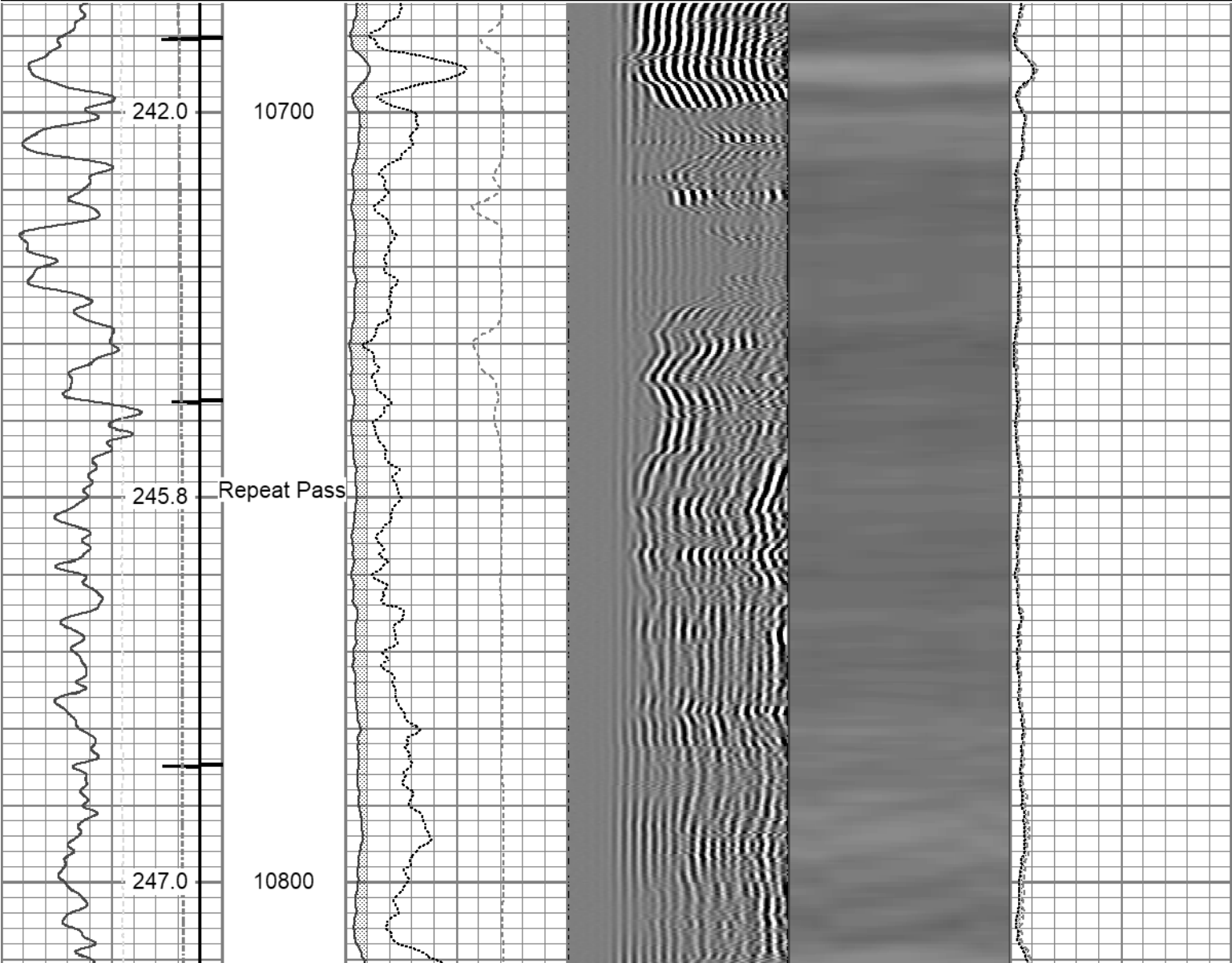
-9	CCL	1	3' Travel Time	Maximum Amplitude
0	Temp (degF)	300	650 (usec) 150	0 120

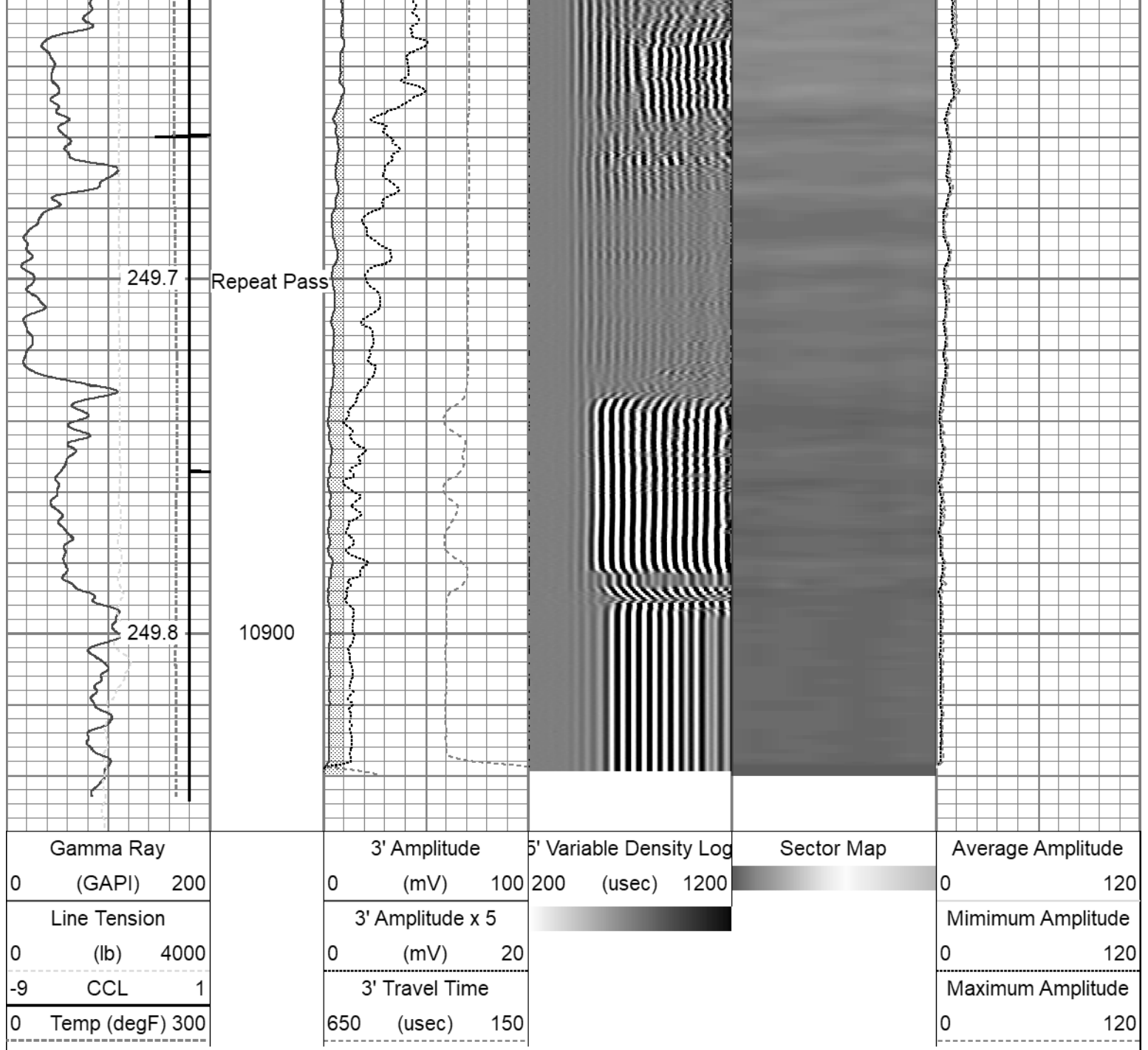


Repeat Pass 5" = 100'

Database File	tep_wmc fed 431-20_rcbl_1-4-2023.db
Dataset Pathname	repeat
Presentation Format	twgrcbl
Dataset Creation	Wed Jan 04 09:54:09 2023
Charted by	Depth in Feet scaled 1:240

Gamma Ray		3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 200		0 (mV) 100	200 (usec) 1200		0 120
Line Tension		3' Amplitude x 5			Minimum Amplitude
0 (lb) 4000		0 (mV) 20			0 120
-9 CCL 1		3' Travel Time			Maximum Amplitude
0 Temp (degF) 300		650 (usec) 150			0 120





Calibration Report		
Database File	tep_wmc fed 431-20_rcbl_1-4-2023.db	
Dataset Pathname	main	
Dataset Creation	Wed Jan 04 09:58:37 2023	
Gamma Ray Calibration Report		
Serial Number:	FW1311-93	
Tool Model:	GCT275-0000	
Performed:	Thu Dec 29 18:15:38 2022	
Calibrator Value:	168.0	GAPI
Background Reading:	69.0	cps
Calibrator Reading:	299.3	cps
Sensitivity:	0.7294	GAPI/cps

Serial Number:FW1312-30

Tool Model:Probe275acc

Calibration Casing Diameter:4.500in

Calibration Depth:278.924ft

Master Calibration, performed Tue Jan 3 07:14:00 2023:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.004	0.511	0.000	81.196	147.744	-0.671
CAL	0.003	0.764				
5'	0.013	0.470	0.000	81.196	189.928	-2.321
SUM						
S1	0.005	0.516	0.000	100.000	185.992	-1.072
S2	0.007	0.547	0.000	100.000	179.809	-1.220
S3	0.004	0.492	0.000	100.000	179.337	-0.921
S4	0.005	0.532	0.000	100.000	175.506	-0.867
S5	0.004	0.528	0.000	100.000	172.552	-0.669
S6	0.005	0.528	0.000	100.000	172.189	-0.946
S7	0.006	0.551	0.000	100.000	176.780	-1.127
S8	0.004	0.486	0.000	100.000	186.883	-0.747

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.003	0.764	1.000	0.000

Air Zero Calibration, performed Mon Jan 2 11:33:52 2023:

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

Inclinometer Calibration Report

Performed:	Thu Jul 28 15:46:49 2022				
	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	-931.00	904.00	-1.00	1.00	gee
Y Accelerometer	-899.00	884.00	-1.00	1.00	gee

Z Accelerometer




1.47

886.18


0.00

1.00

gee

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GCT_FMWR	13.85			1.33	3.25	10.00
mSec_Count	13.85					
RBT_Status	13.85					
Error_Ct	13.85					
WVFS8	9.35		RBT8acc-Probe275acc (FW1312-30) 2.75" Radial Corrosion with accelerometer	8.75	2.75	110.00
WVFS7	9.35					
WVFS6	9.35					
WVFS5	9.35					
WVFS4	9.35					
WVFS3	9.35					
WVFS2	9.35					
WVFS1	9.35					
WVF3FT	9.35					
WVF5FT	8.35					
RBT_ACCZ	5.10			1.33	3.25	10.00
RBT_ACCY	5.10					
RBT_ACCX	5.10					
GCT_HV	5.10					
WVFSYNC	5.10					
WVFCAL	5.10					
CCL\$2	4.14					
CCL\$1	4.14					
GCT_Temp	3.59					
GR	2.72					
GCT_IntTemp	2.00		GC-GCT275-0000 (FW1311-93) Probe 2.75" Gamma Ray - CCL w/ Temp	4.77	2.75	55.00
			Plug-FA108-0000	0.33	1.38	1.00

			1.38" Bull Plug	0.00	1.00	1.00
Dataset: tep_wmc fed 431-20_rcbl_1-4-2023.db: field/well/run1/main Total length: 13.85 ft Total weight: 186.00 lb O.D.: 3.25 in						

Company	TEP Rocky Mountain LLC				
Well	Federal WMC 431-20				
Field	Rulison				
County	Garfield		State	Colorado	
			Radial Cement Bond Gamma Ray Casing Collar Log		