



Radial Cement Bond
Gamma Ray
Casing Collar Log

Company Kerr-McGee Oil & Gas Onshore, L.P.

Well JDB 15-8HZ

Field Wattenberg

County Weld State Colorado

Location: API #: 05-123-49216

SEC 15 TWP 1N RGE 66W

Permanent Datum Ground Level Elevation 5153'

Log Measured From Ground Level

Drilling Measured From Kelly Bushing

Other Services
GR/JB
RBP

Elevation
K.B. 5170'
D.F. ---
G.L. 5153'

Date

31-JUL-2019

Run Number

Three

Depth Driller

13874 FT

Depth Logger

7429 FT

Bottom Logged Interval

7415 FT

Top Log Interval

Surface

Open Hole Size

7.875"

Type Fluid

Water

Density / Viscosity

8.34 lb/gal

Max. Recorded Temp.

223°F

Estimated Cement Top

See Log

Time Well Ready

ROA

Time Logger on Bottom

17.10

Equipment Number

HD-0363

Location

Platteville, CO

Recorded By

C. Sisneros

Witnessed By

John McCarthy

Borehole Record

Bit

From

To

Size

Weight

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Tubing Record

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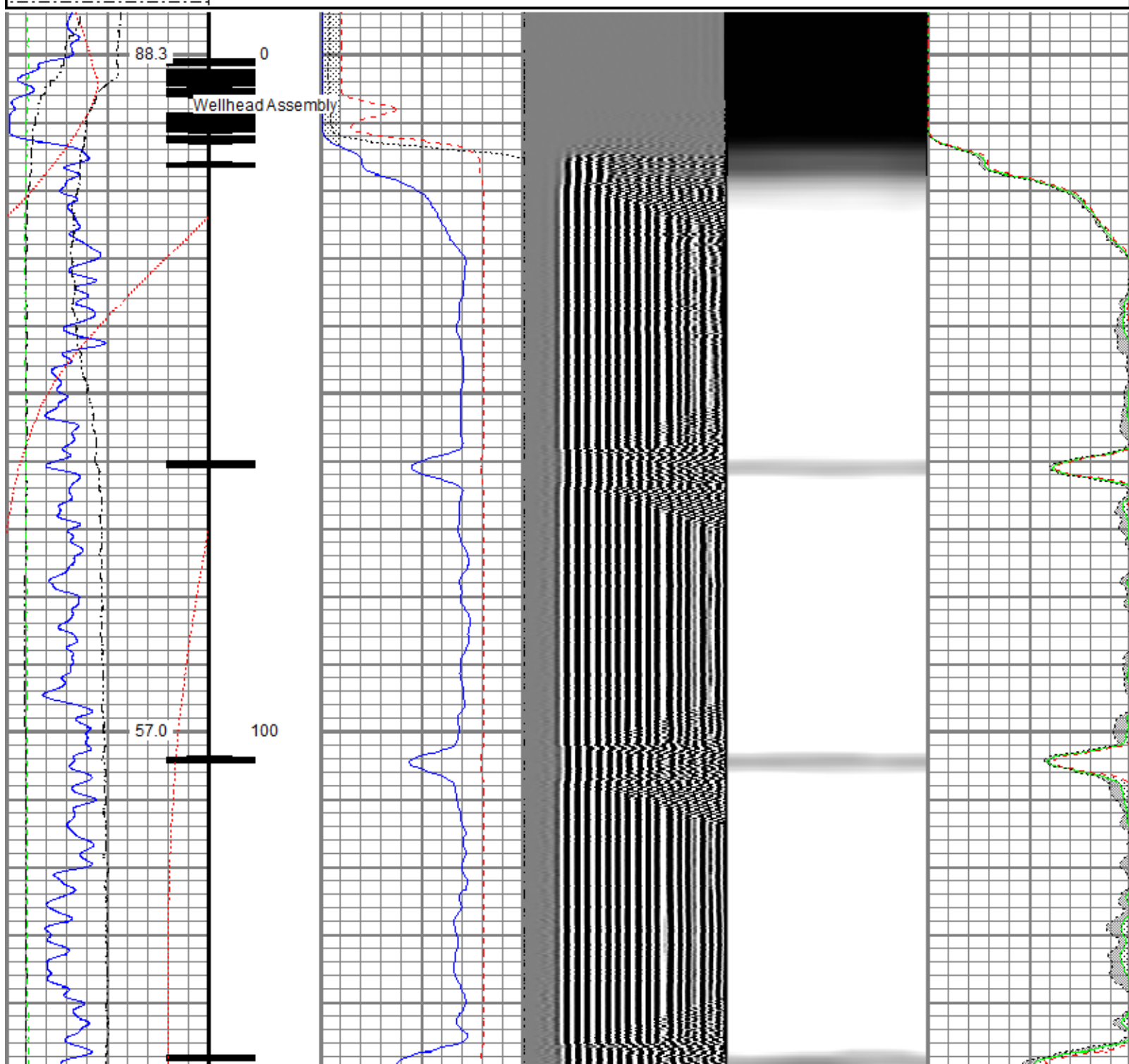
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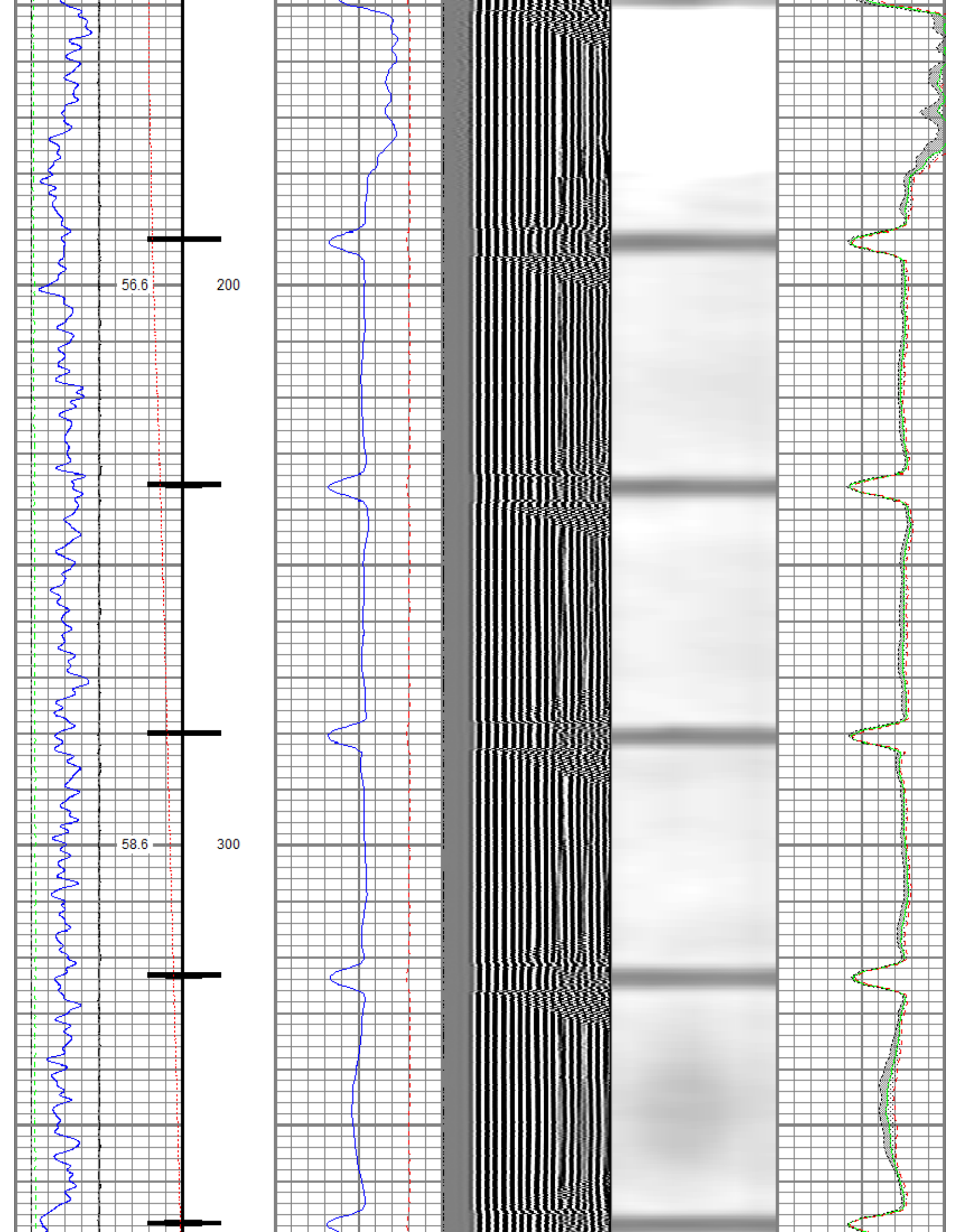
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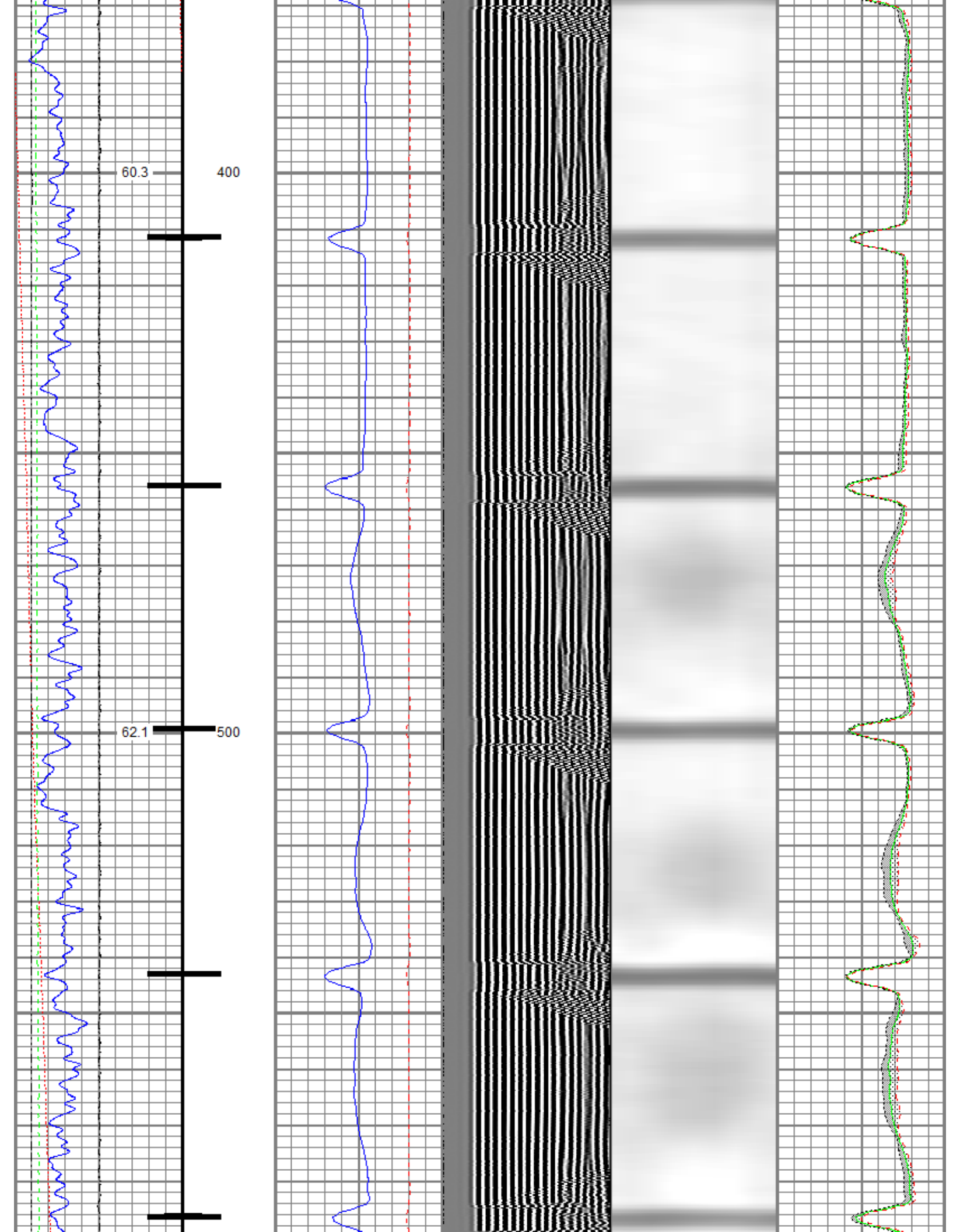
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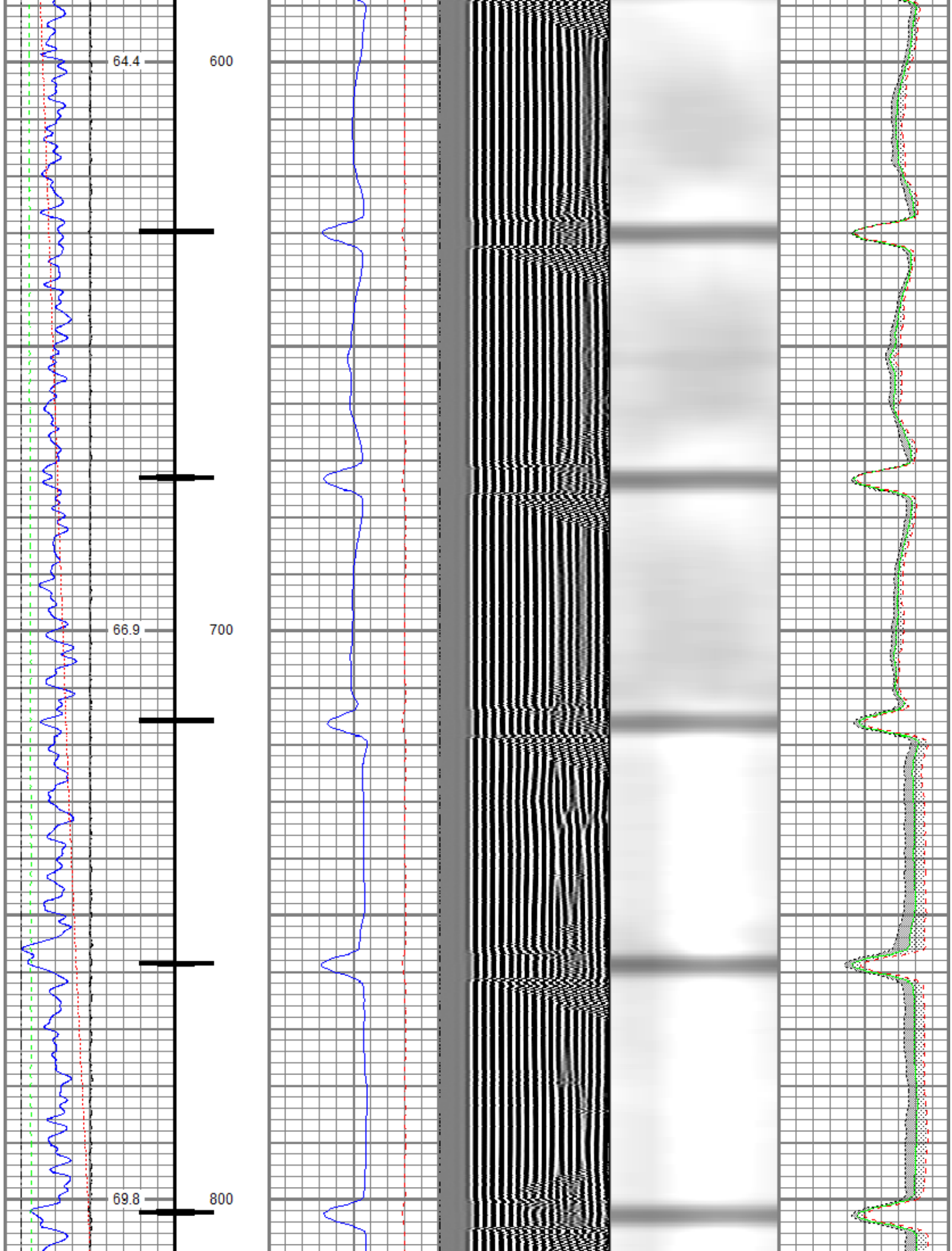
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Dataset Pathname	main.18
Presentation Format	ros_radri
Dataset Creation	Fri Aug 02 15:35:57 2019
Charted by	Depth in Feet scaled 1:240

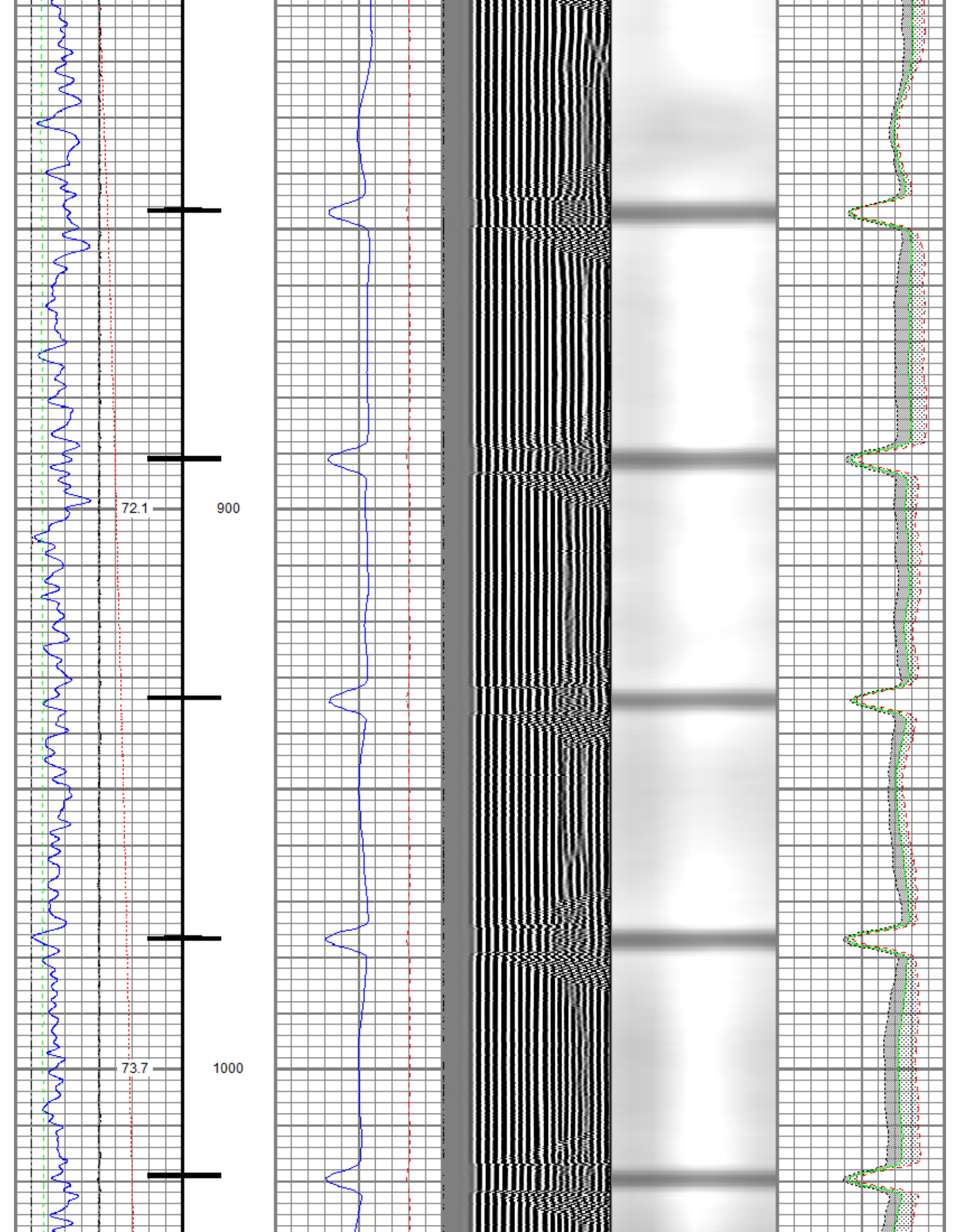
Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 100
(GAPI) 120		3' Amplitude x 5	200 (usec) 1200			Minimum Amplitude
Casing Collar Locator	0	(mV) 20			0	100
Temperature (degF) 20		3' Travel Time				Maximum Amplitude
Line Speed	650	(usec) 150			0	100
(ft/min) 150						
Line Tension (lb) 2000						
Differential Temperature						
(degF) 2						

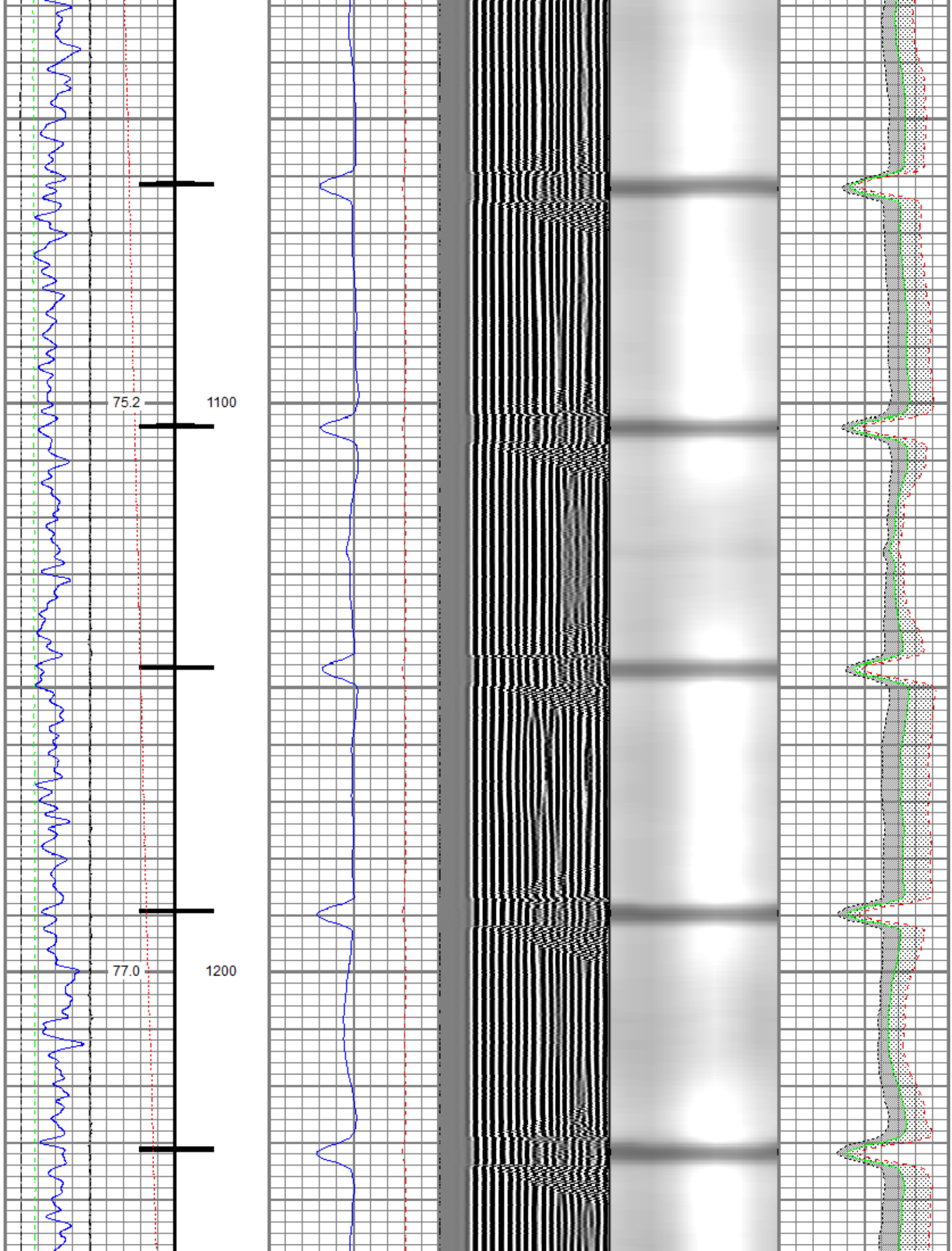


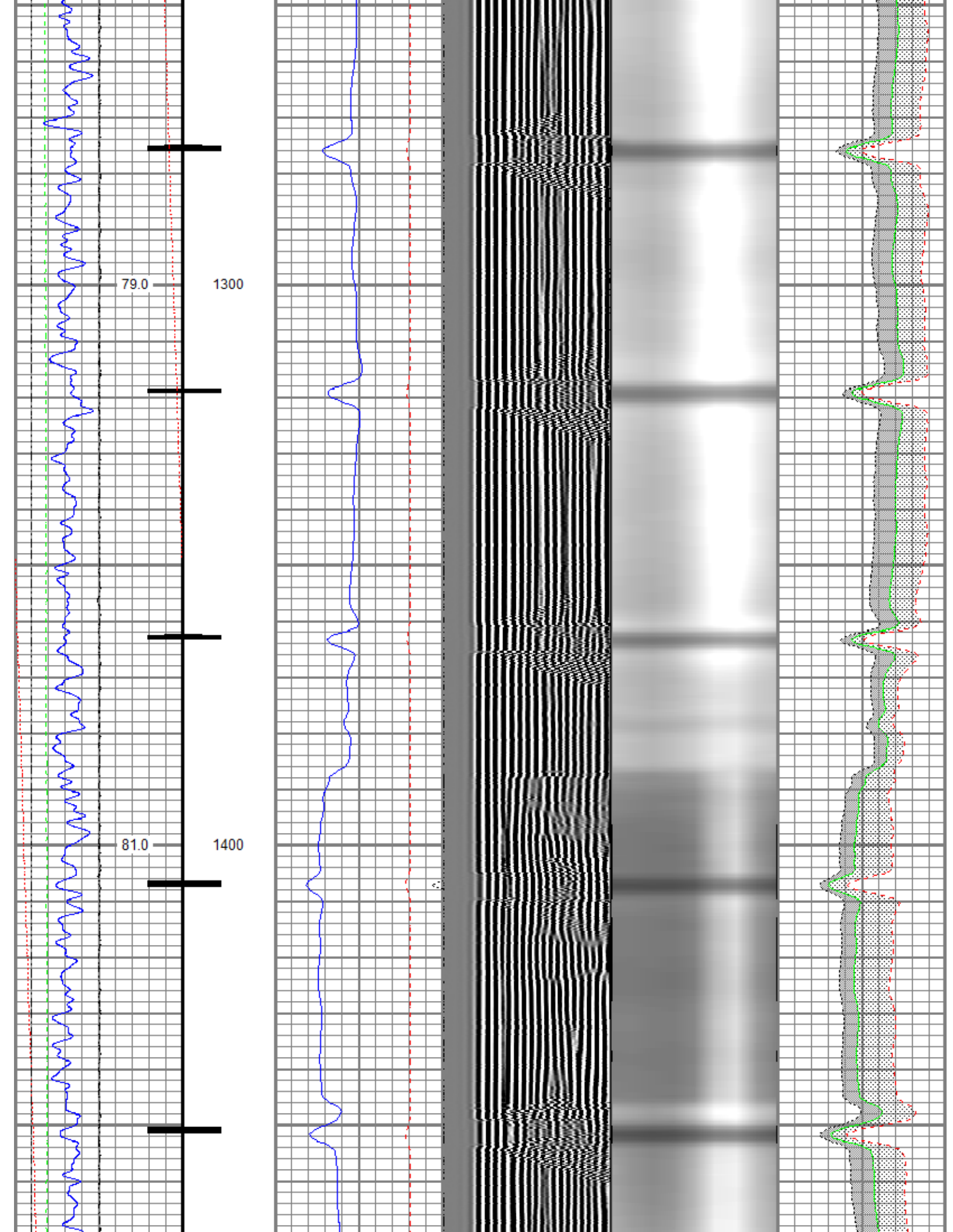


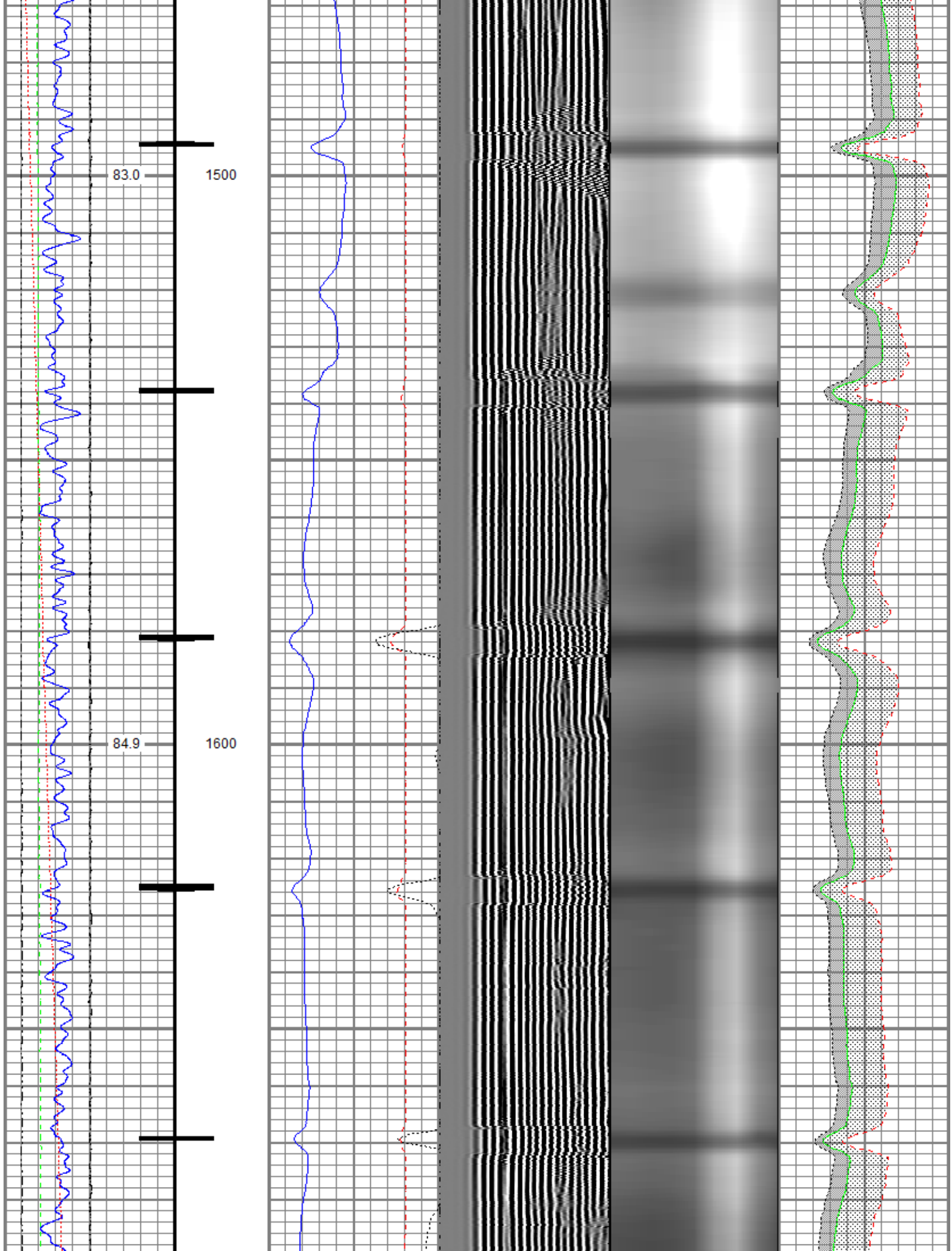


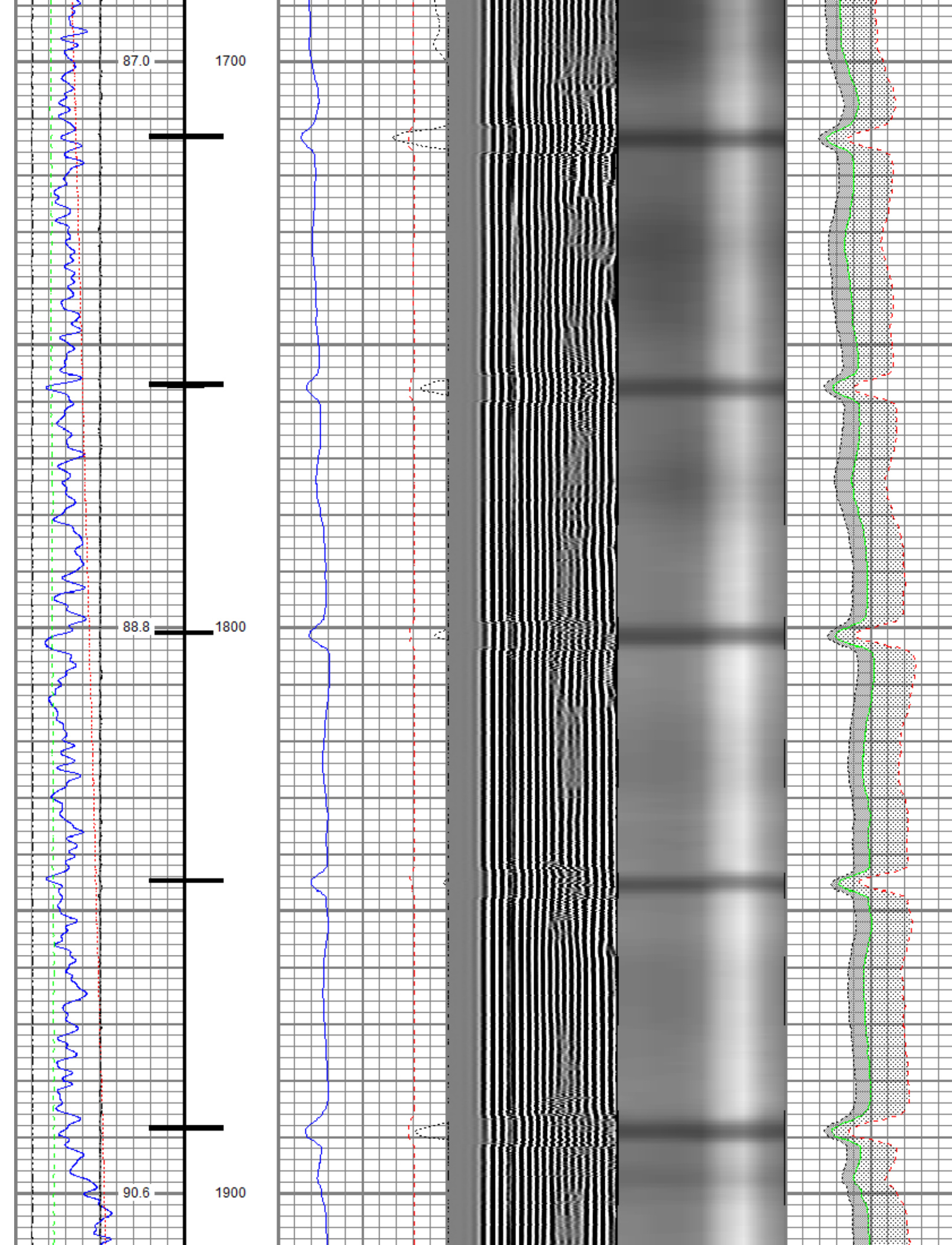


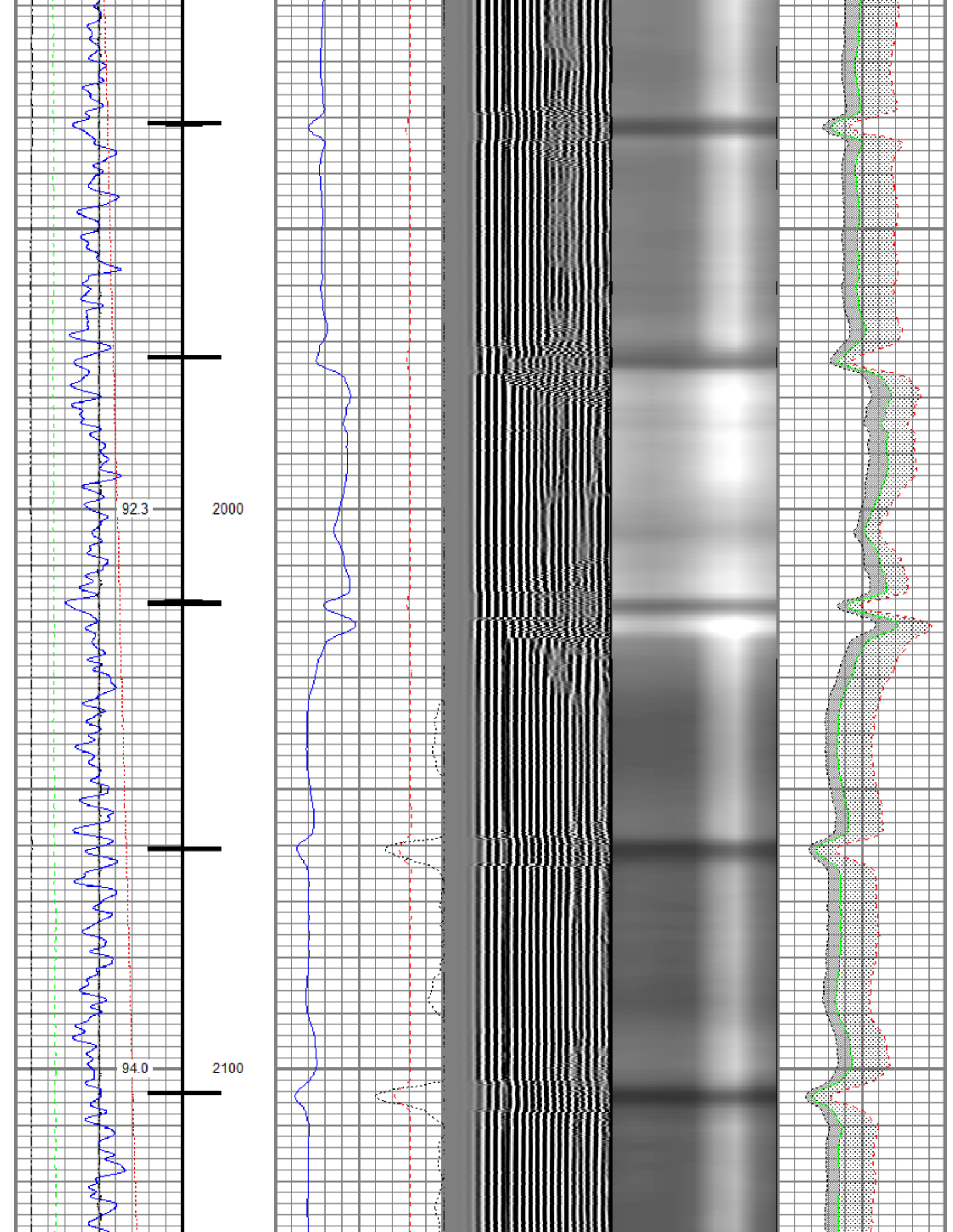


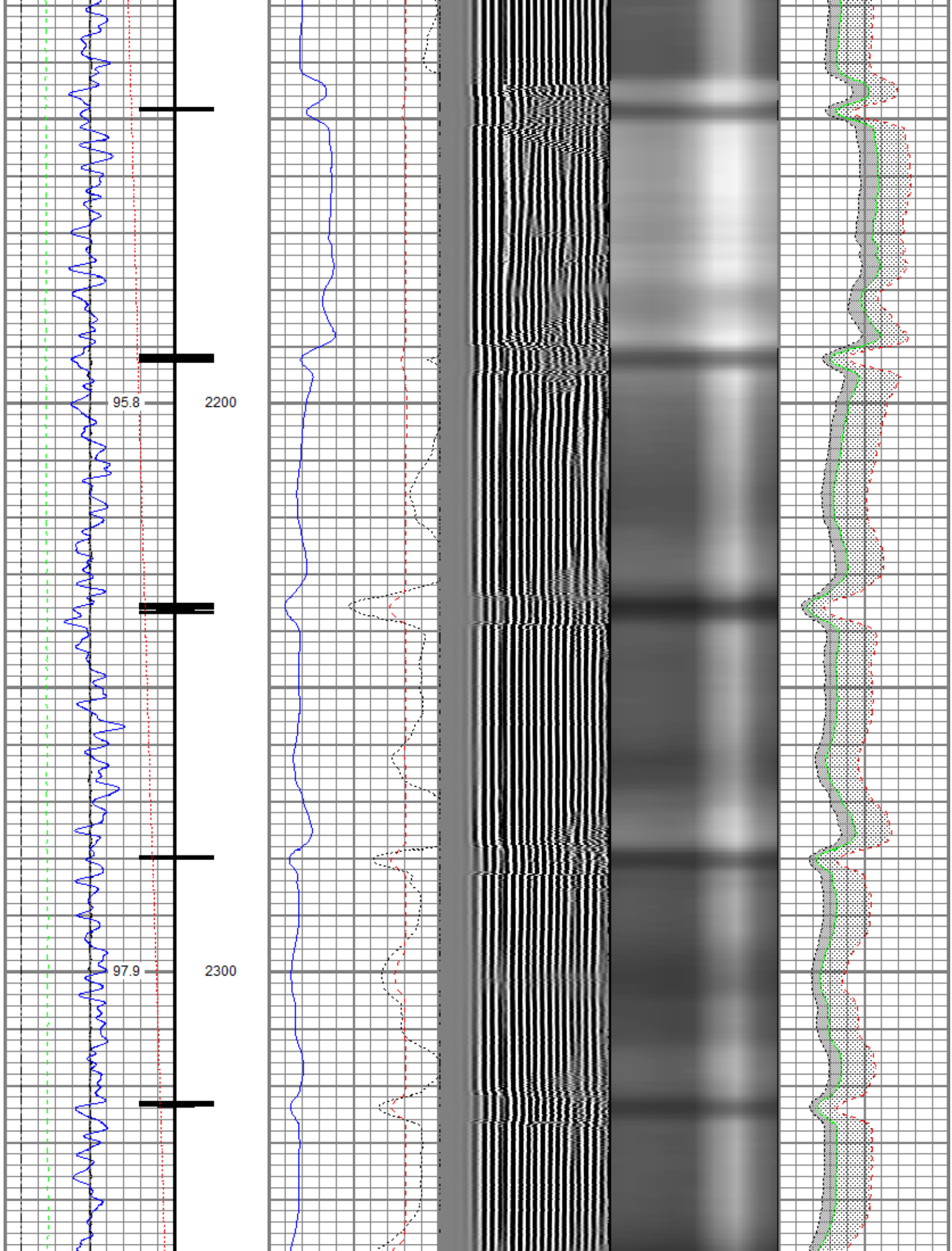


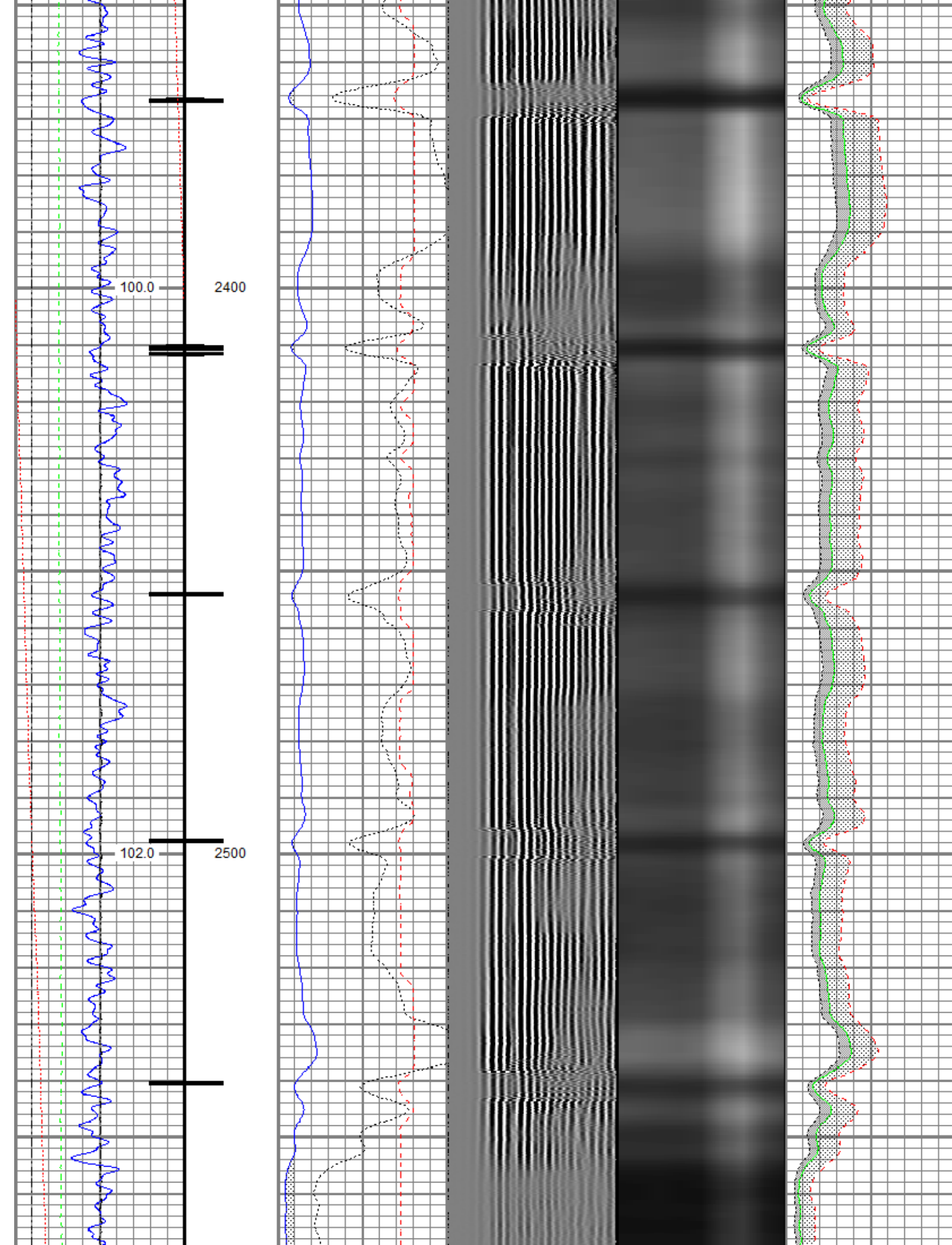


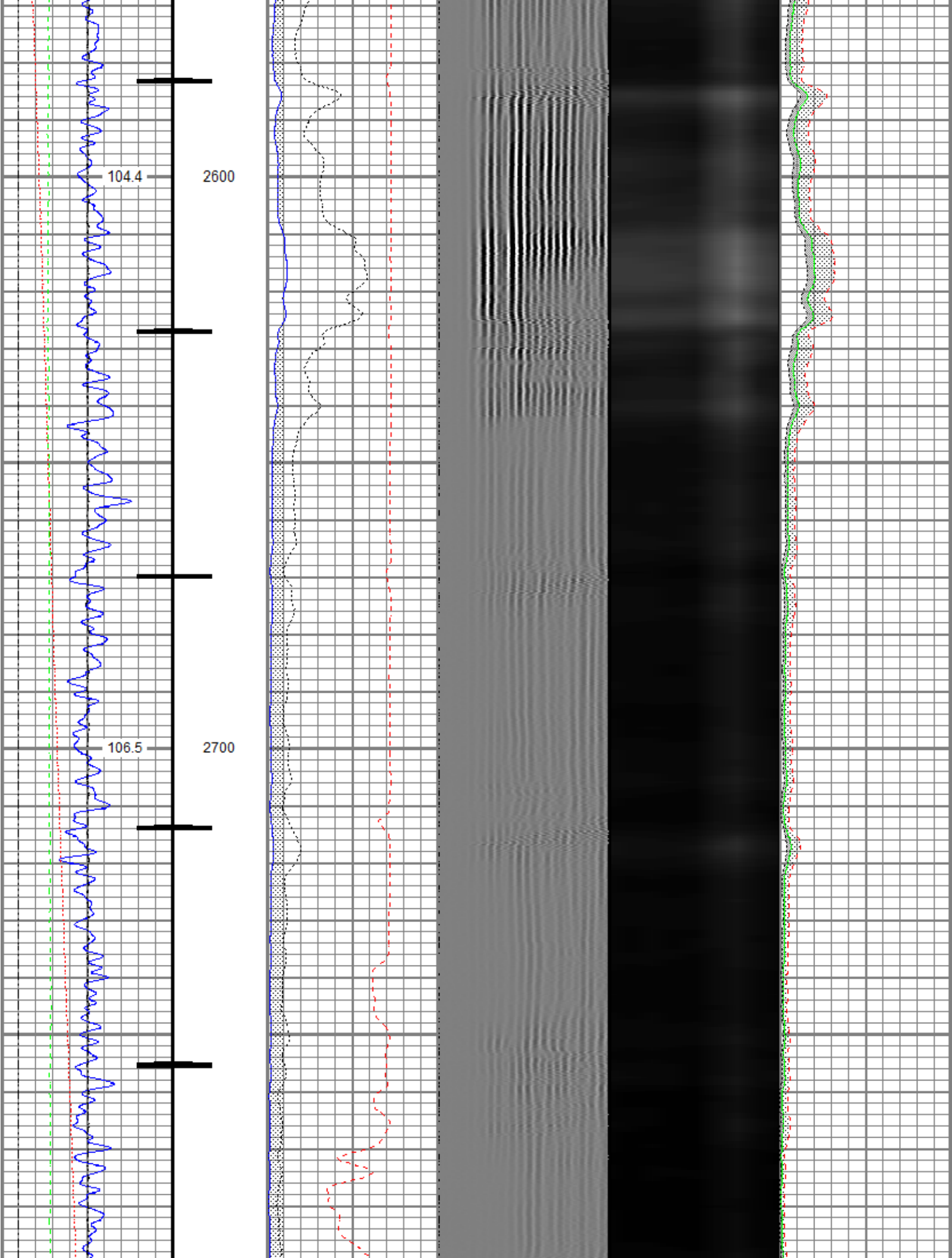


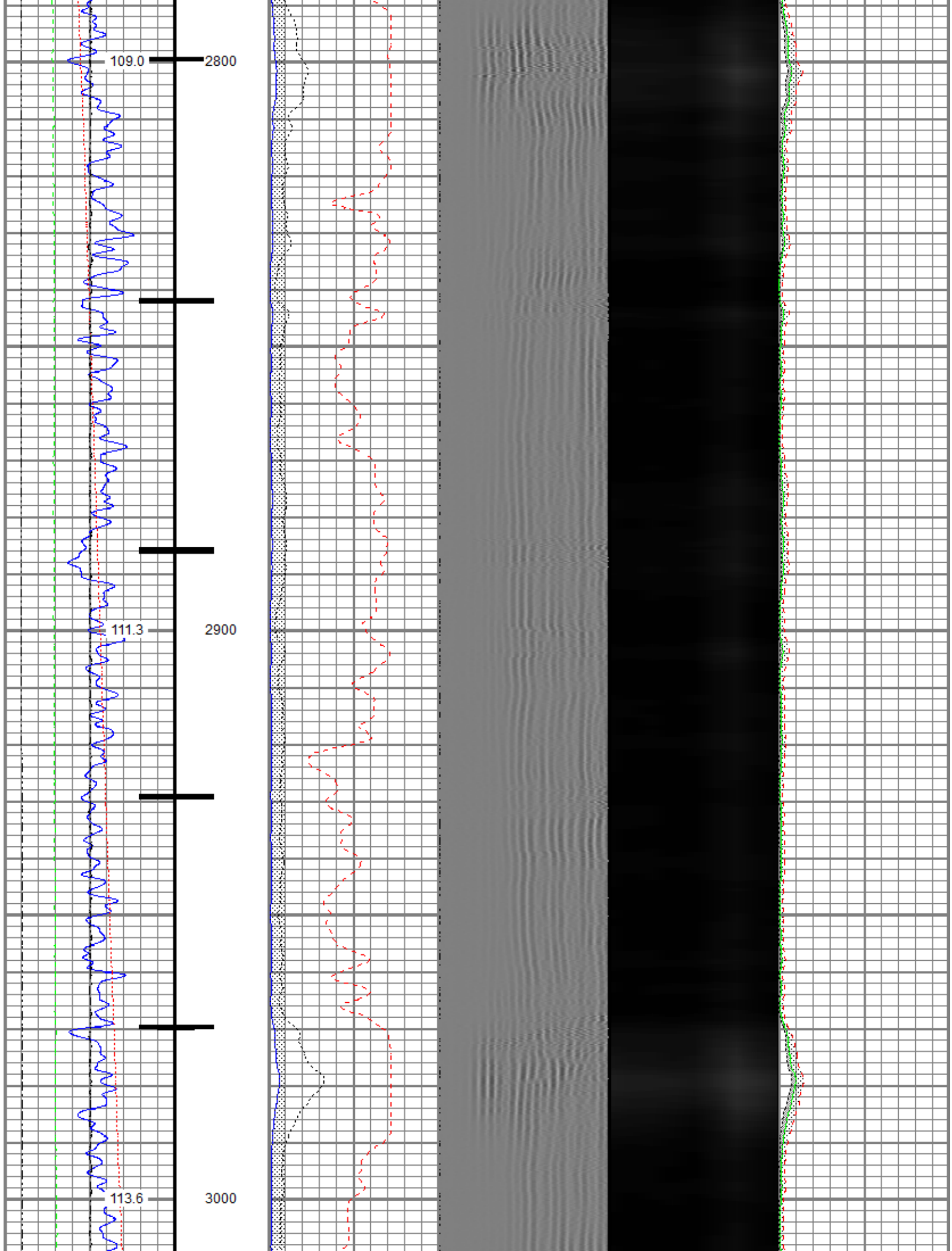


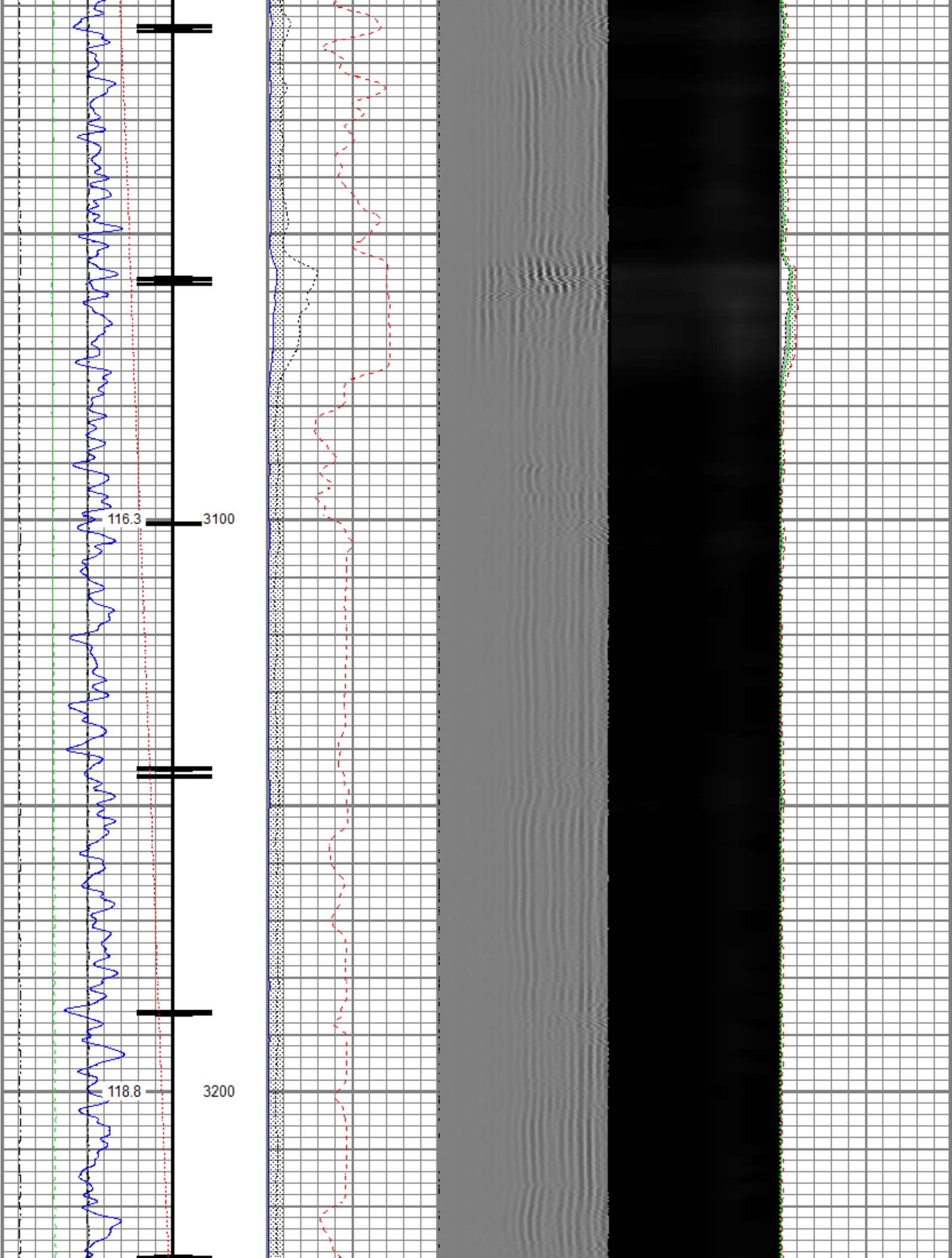


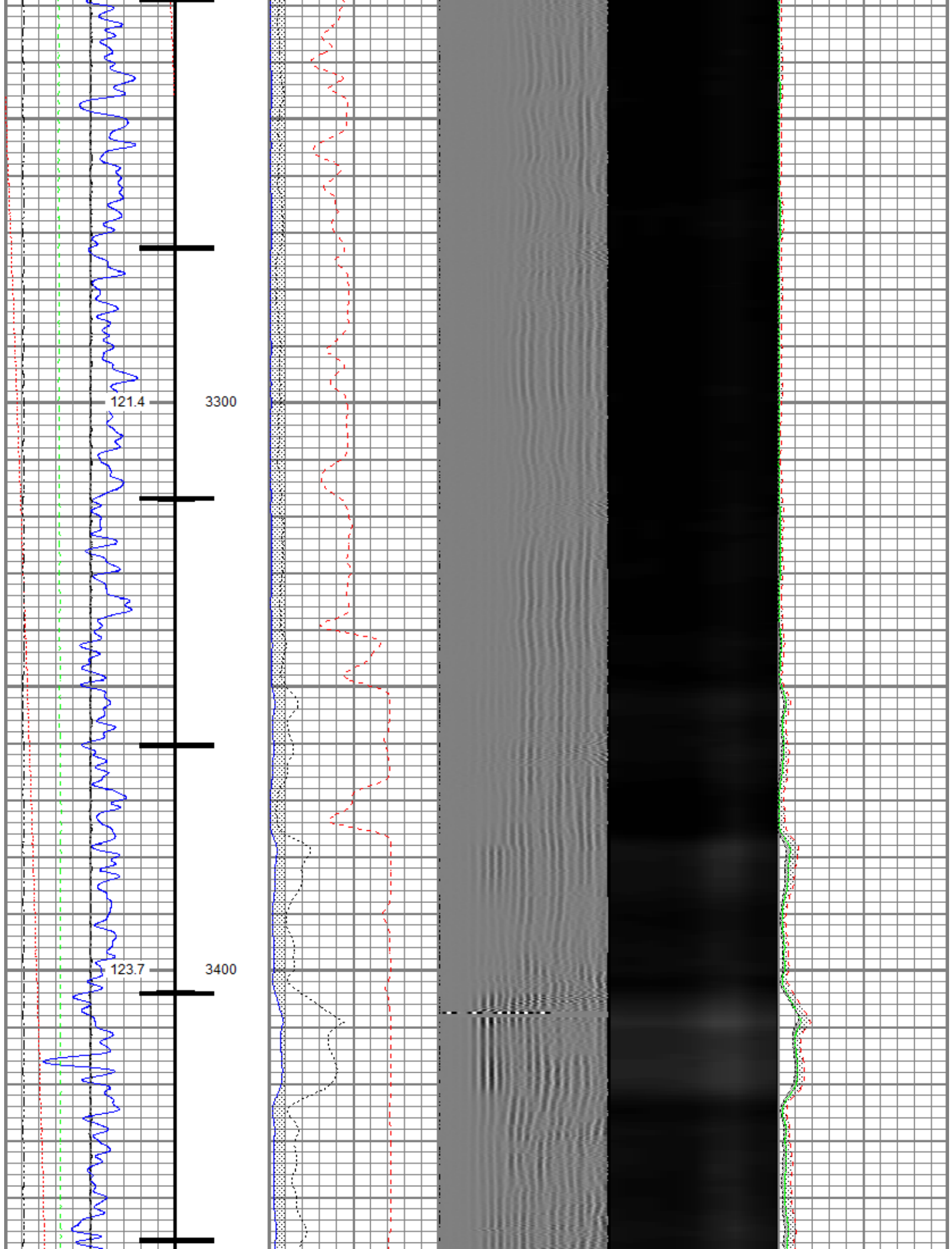


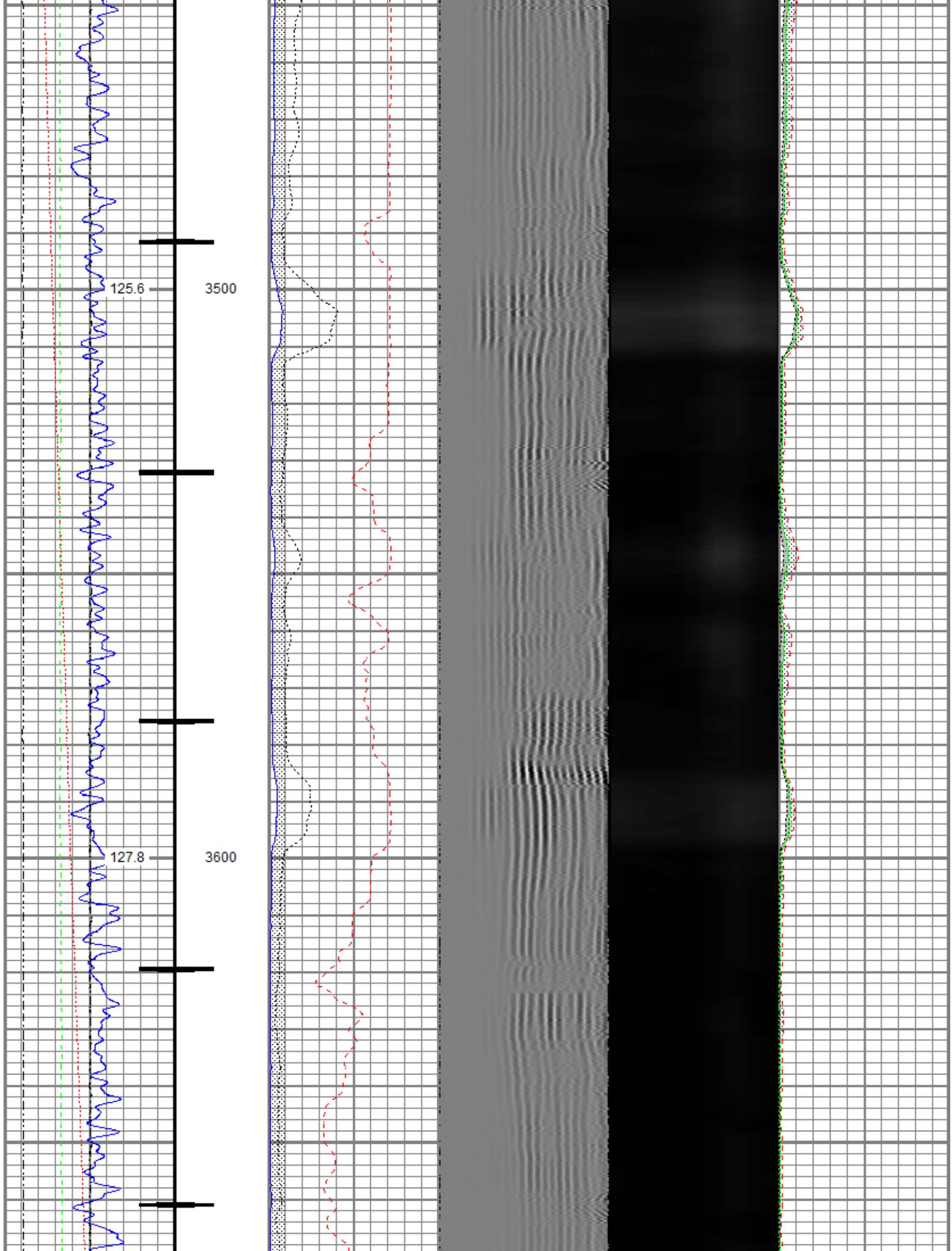


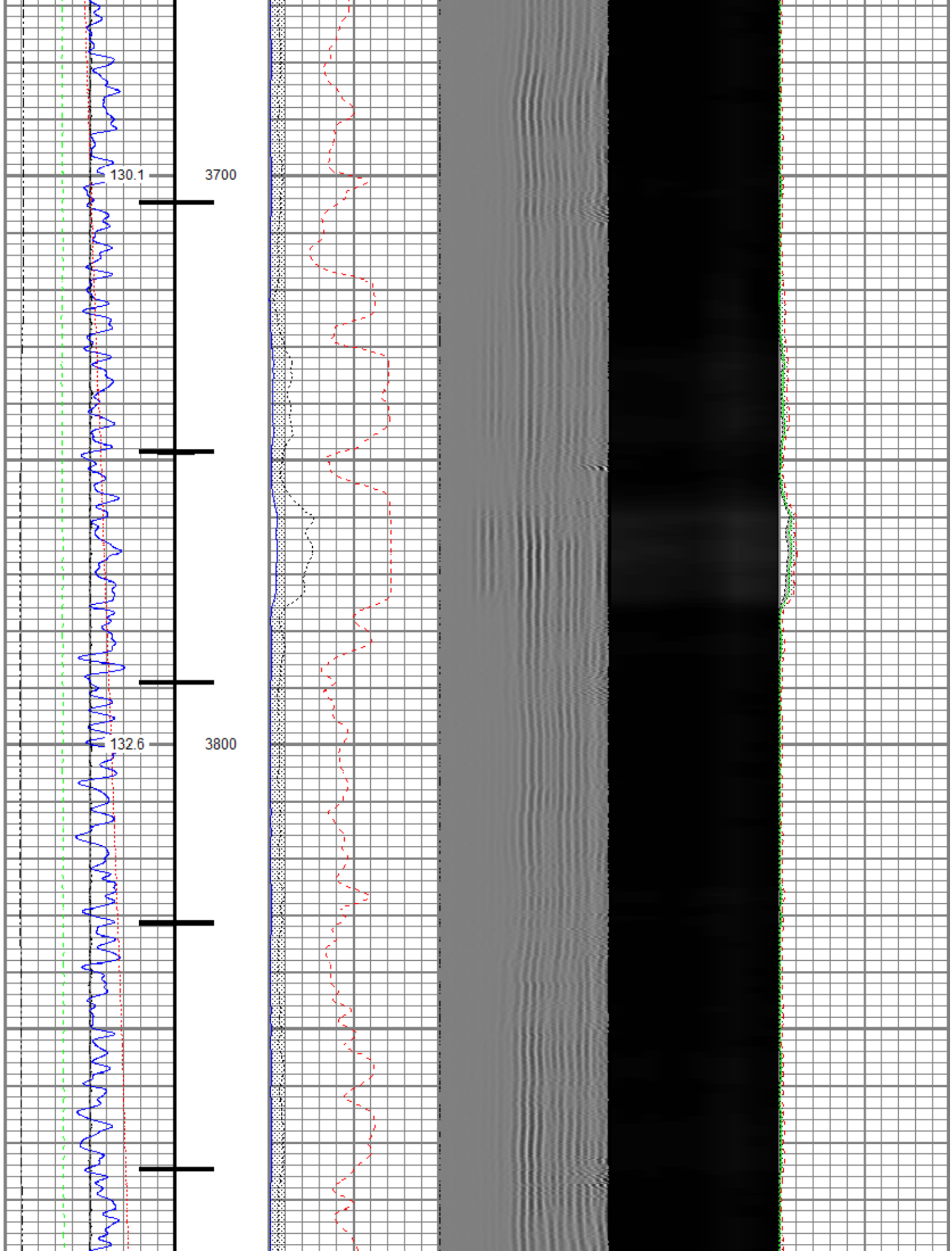


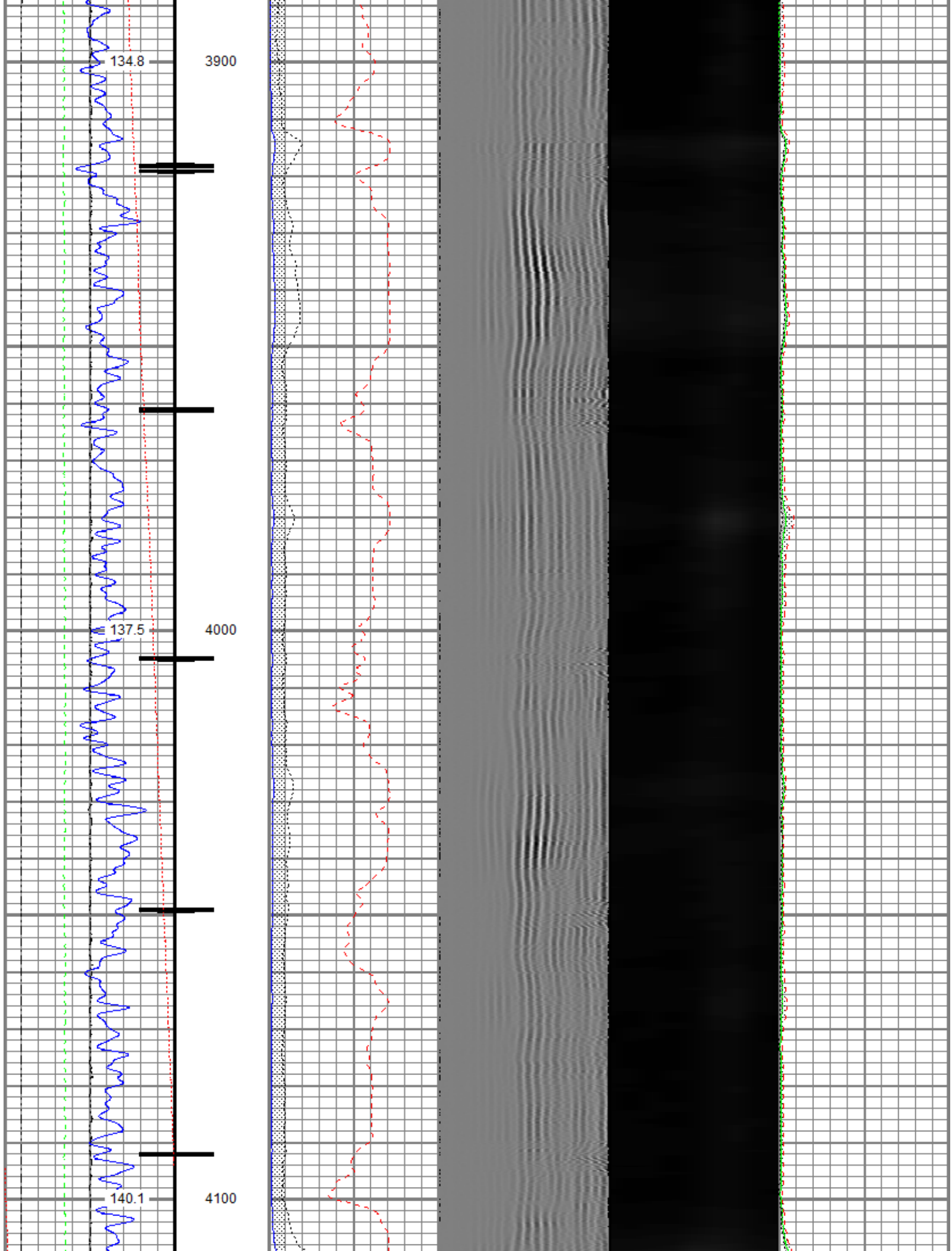


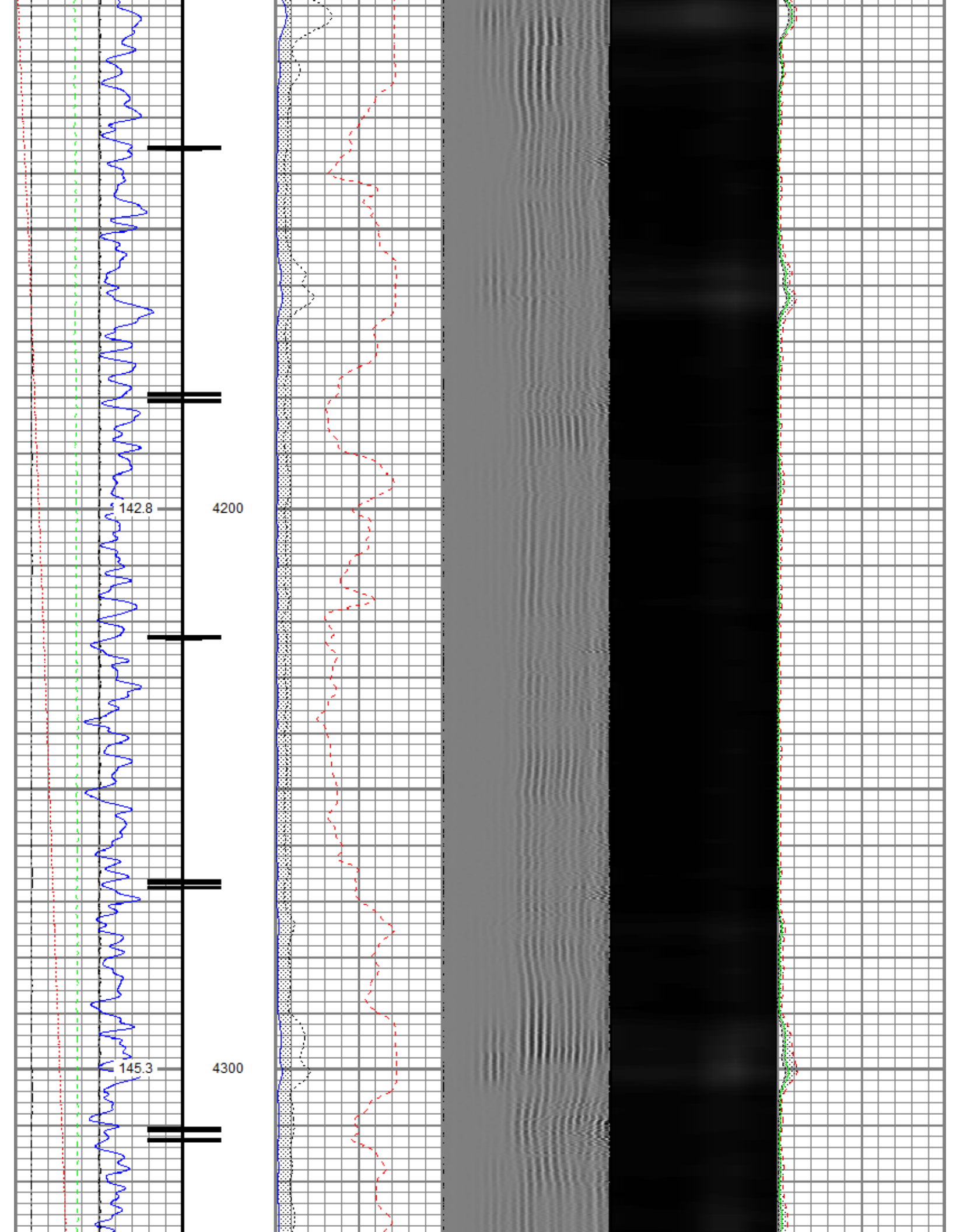


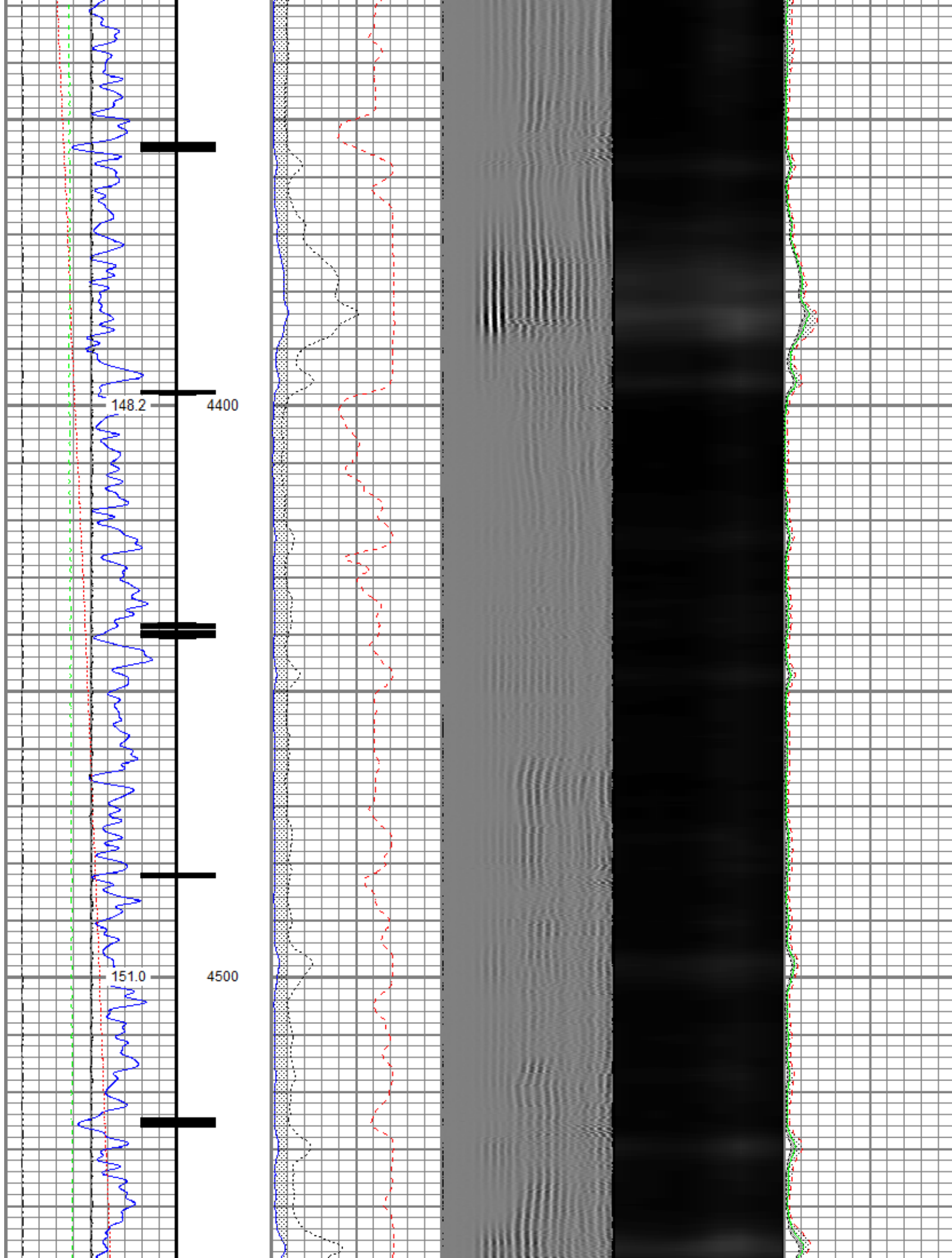


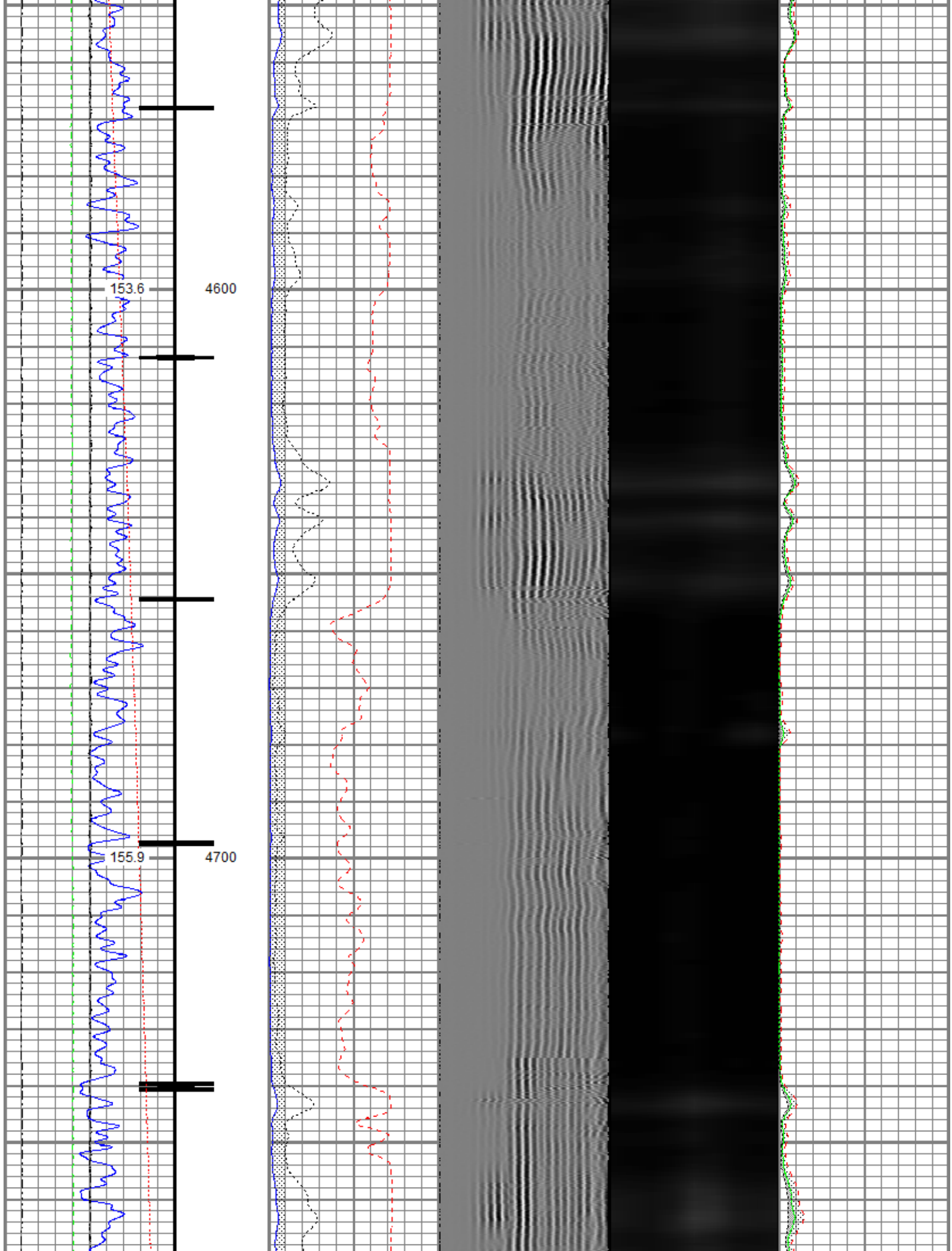


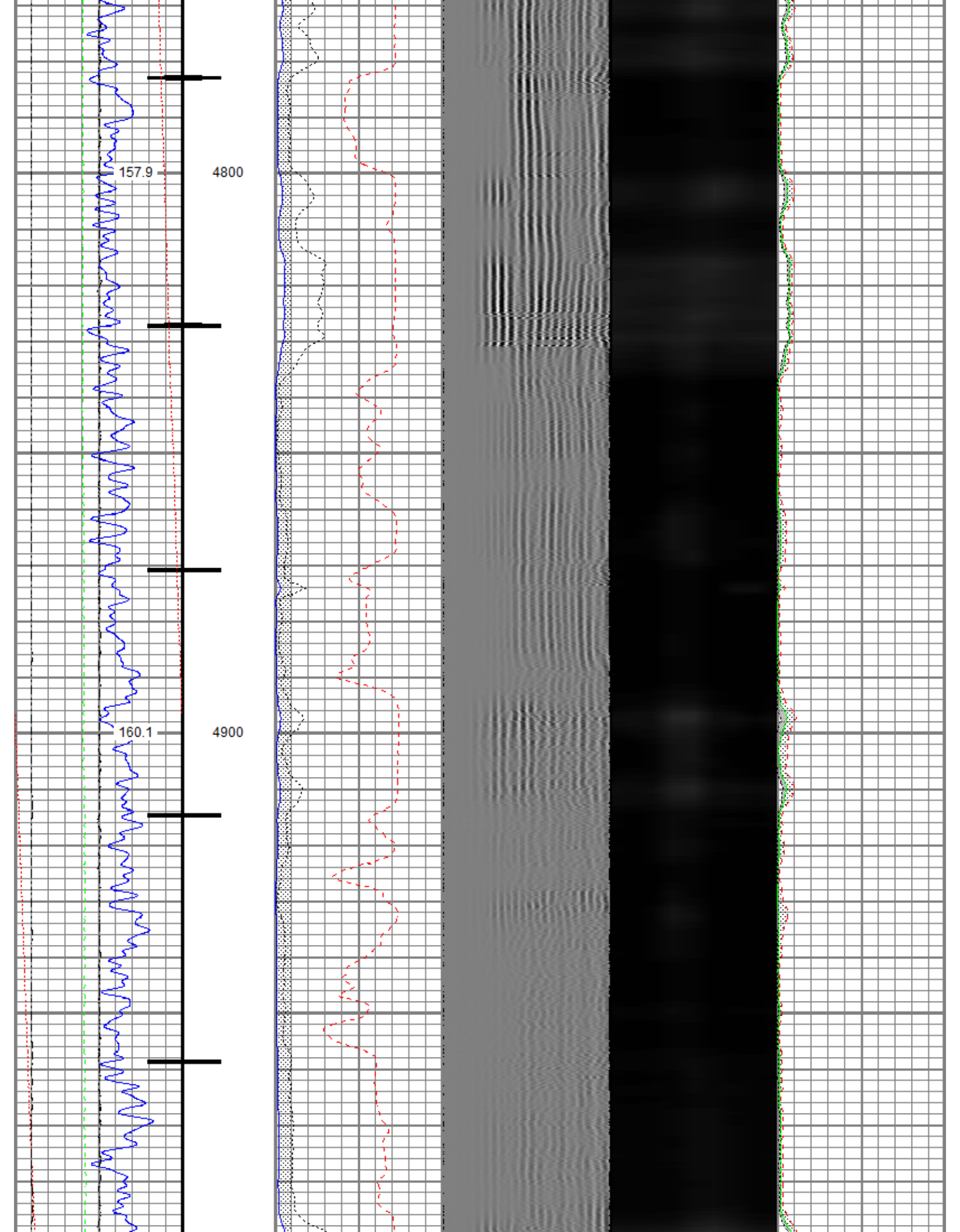


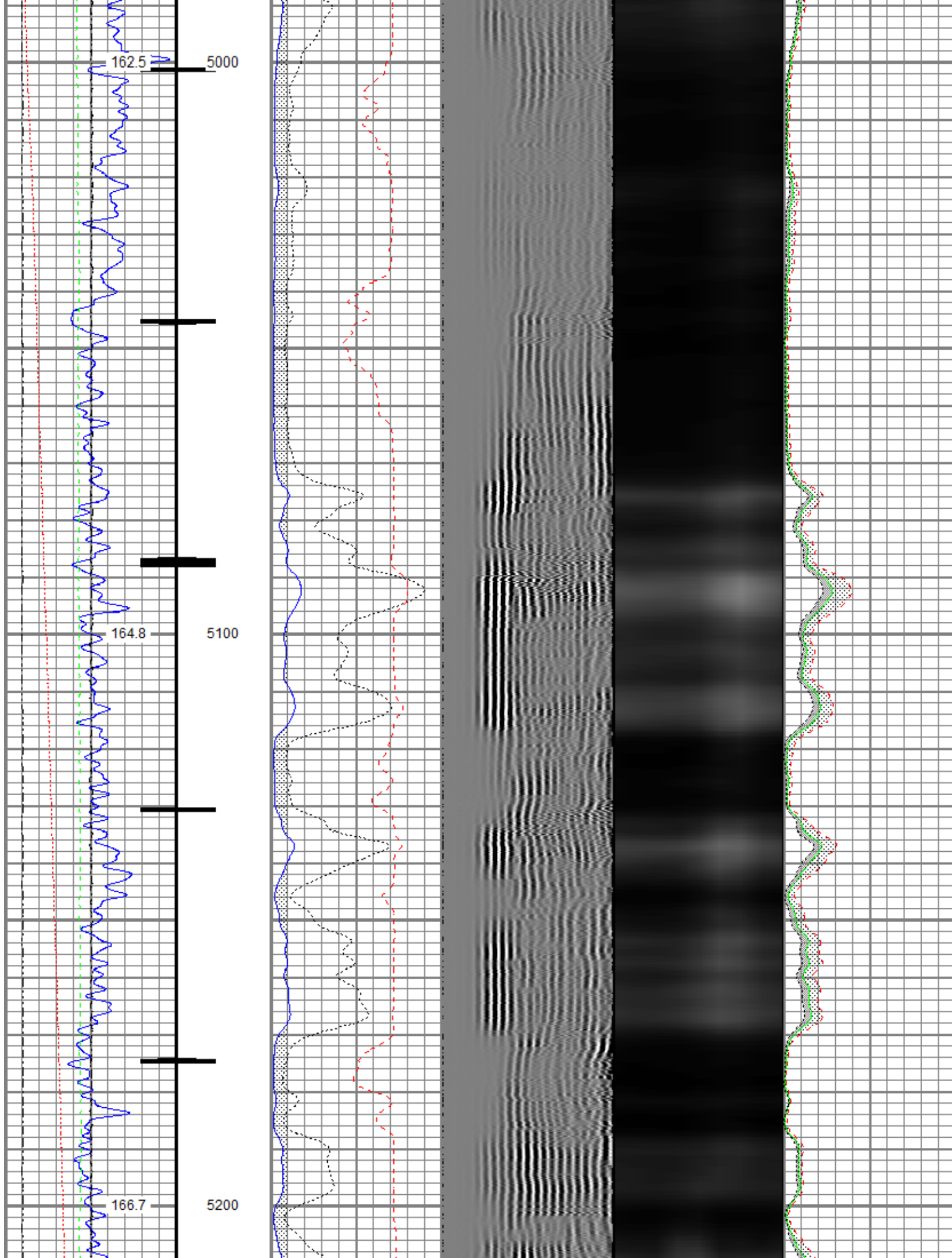


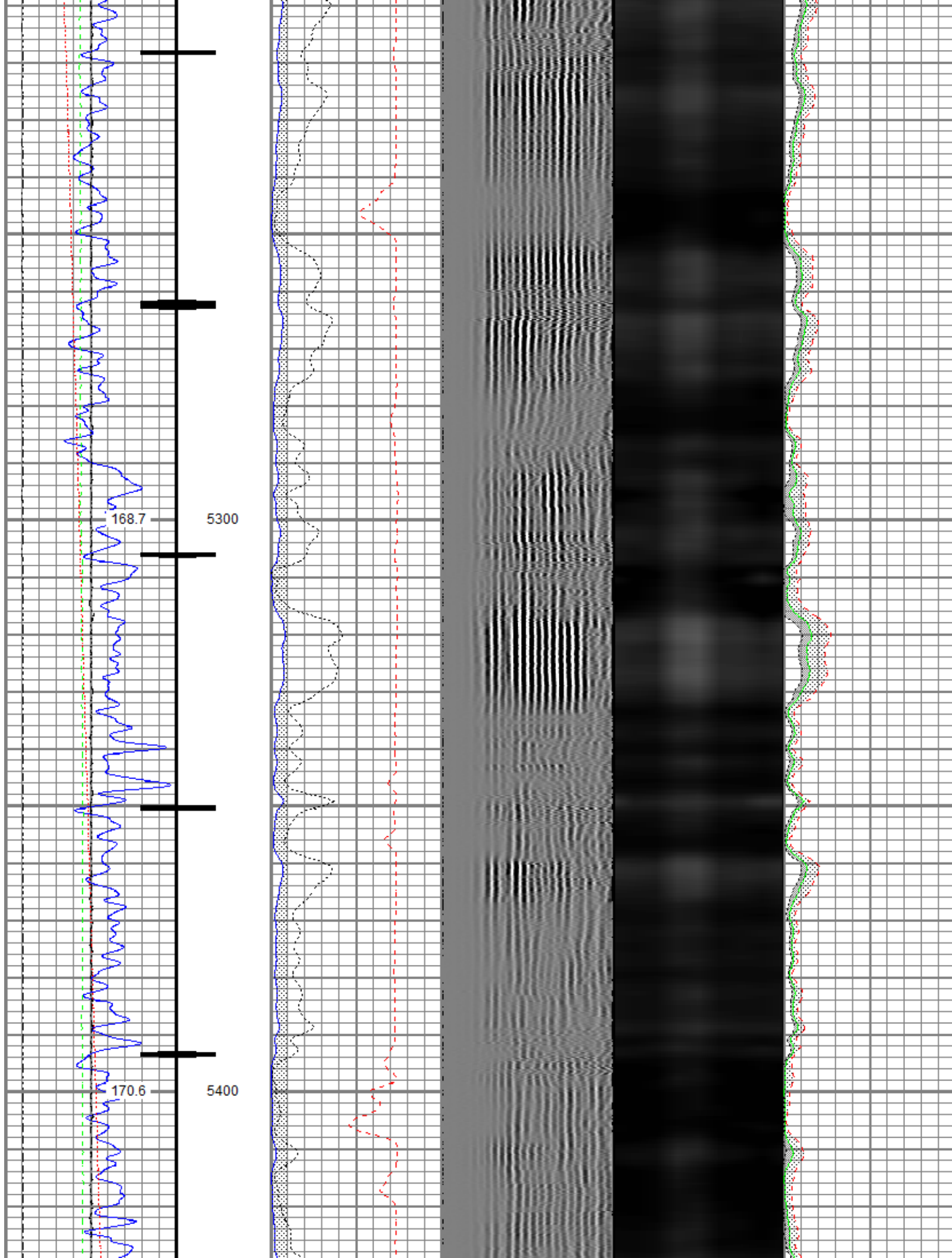


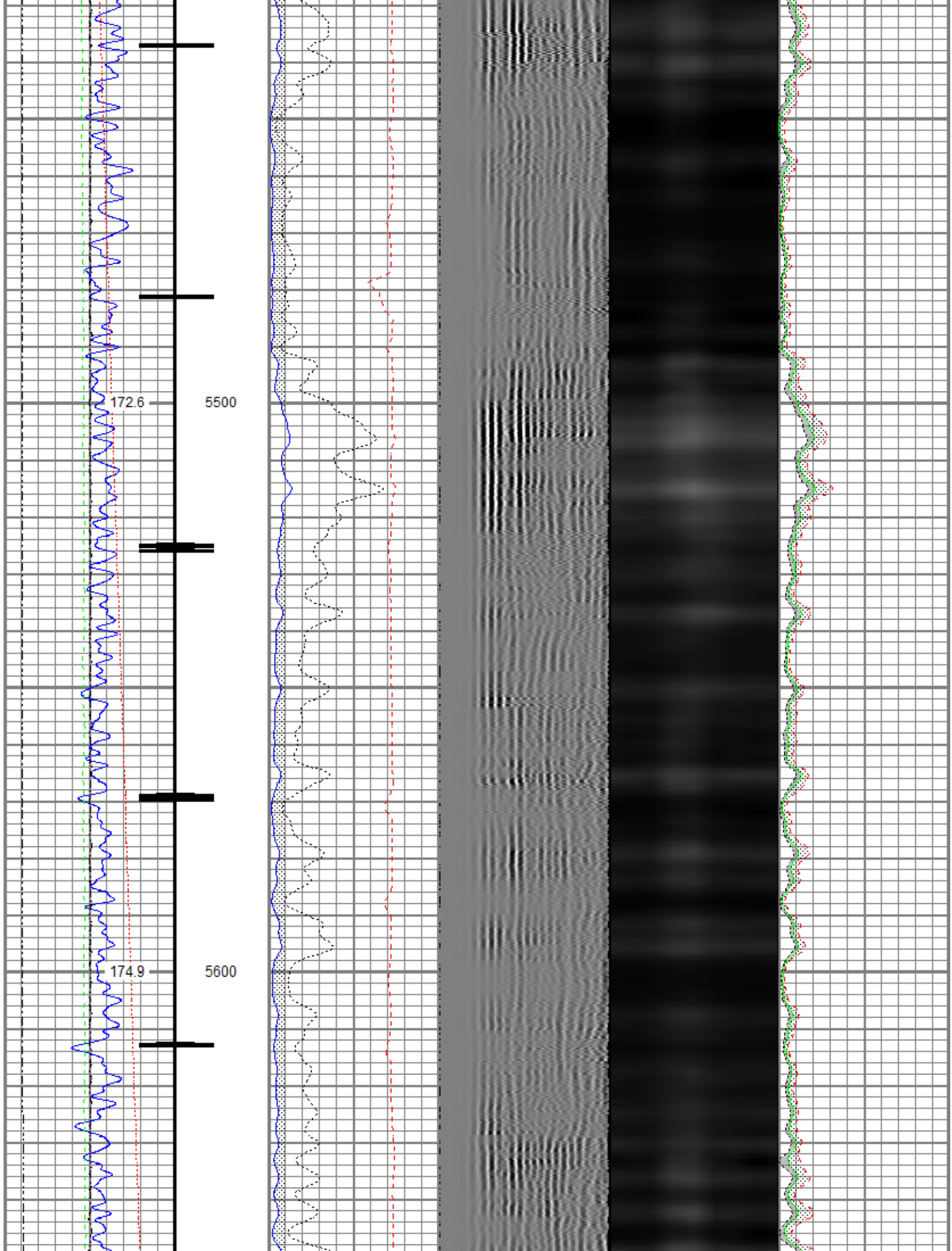


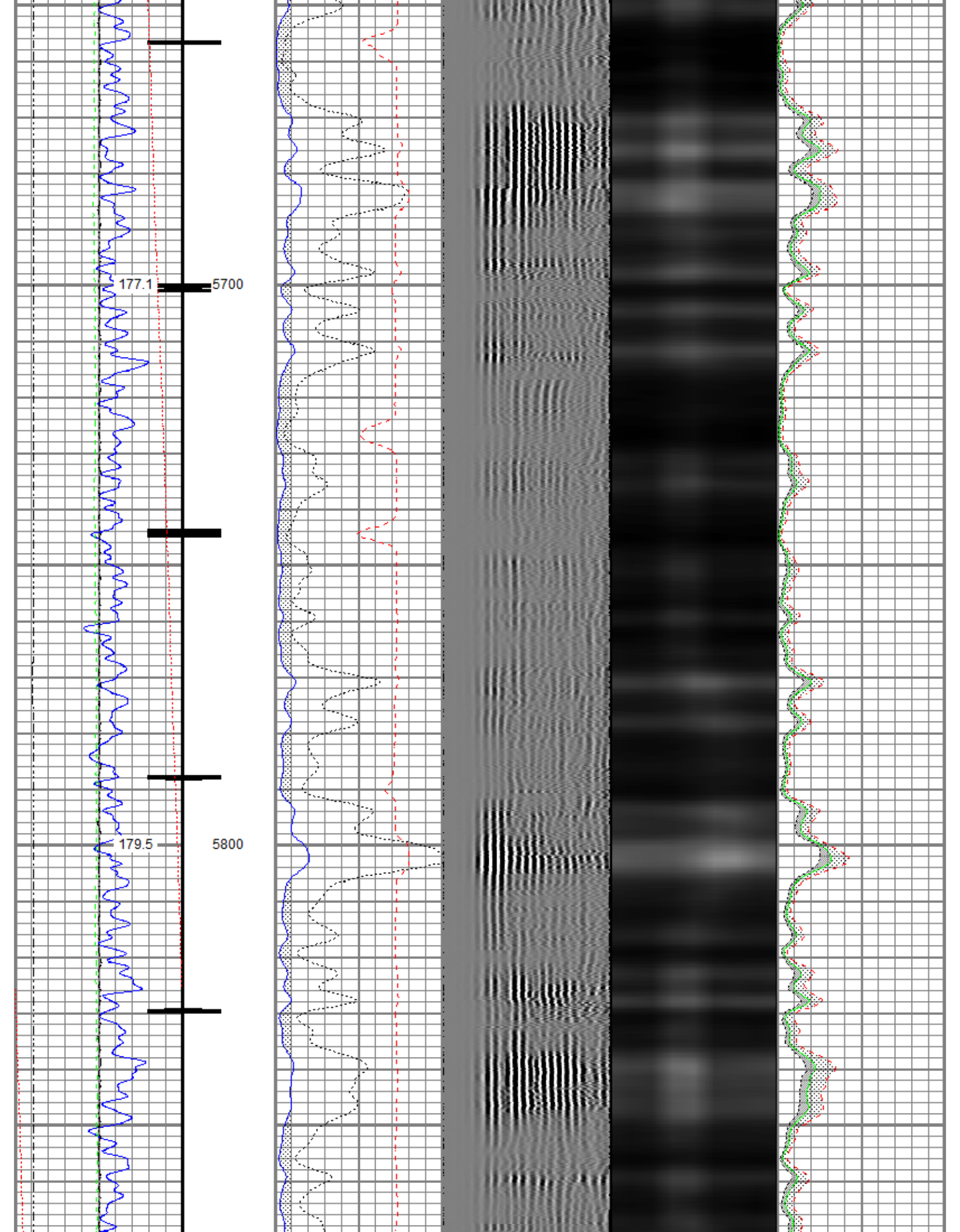


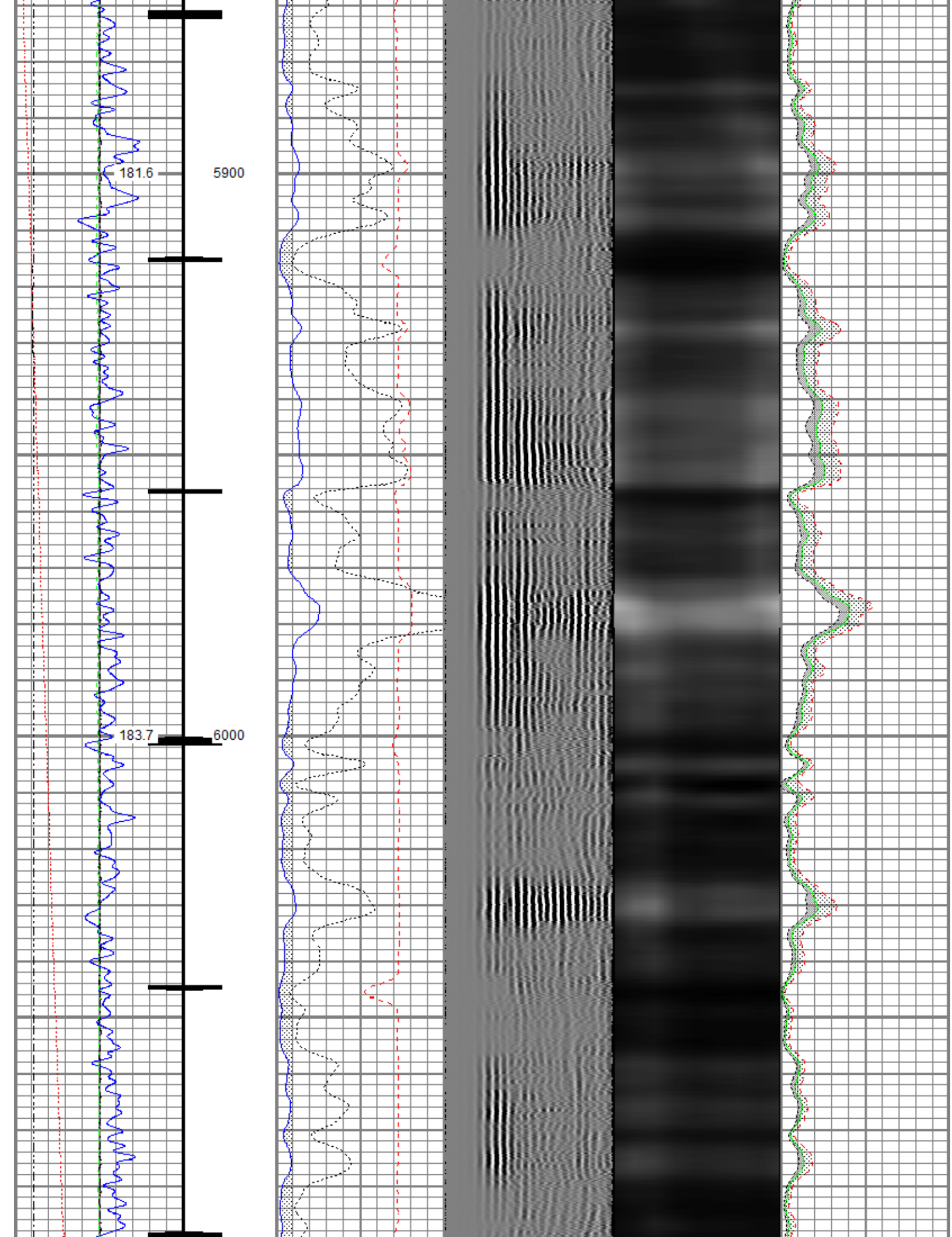


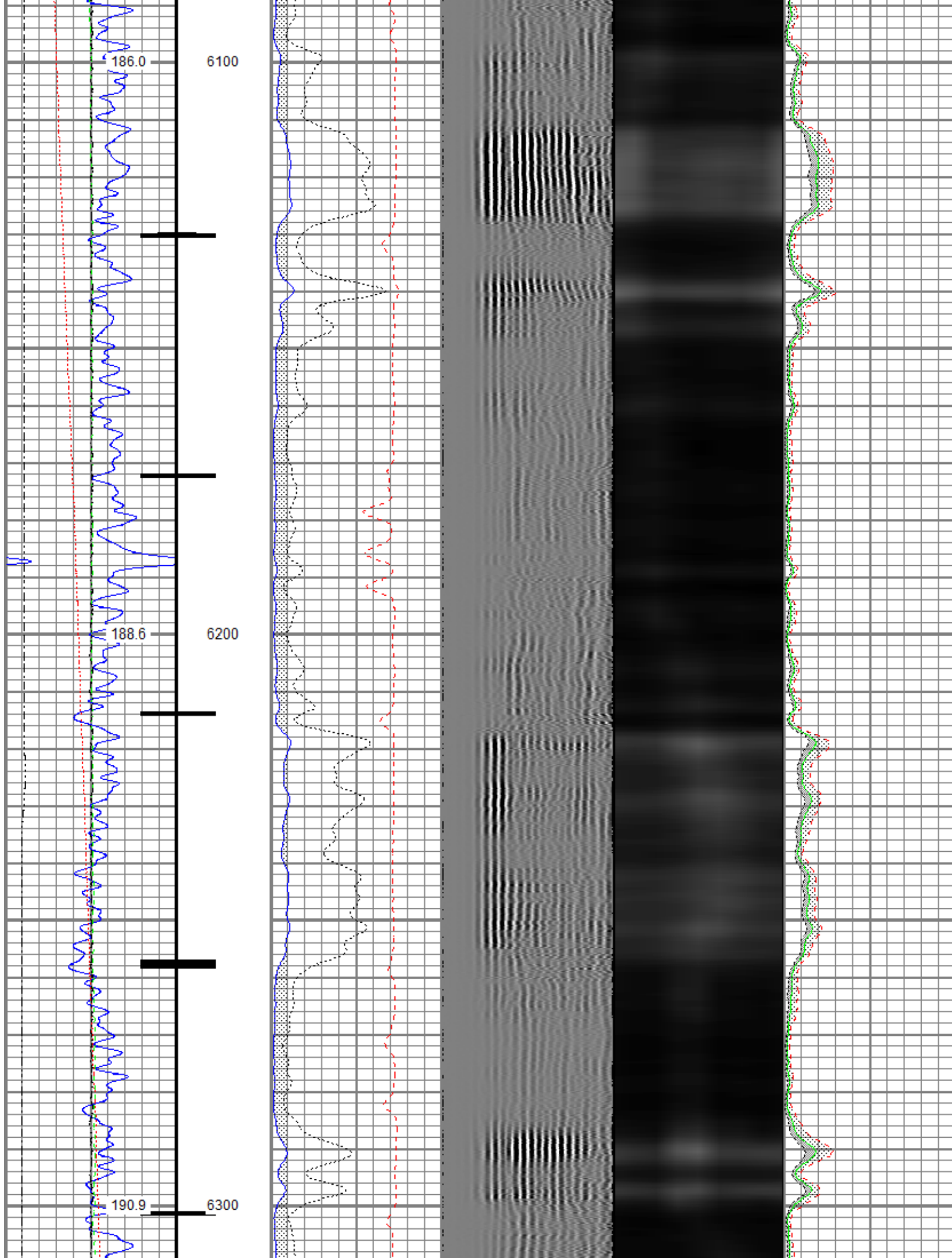


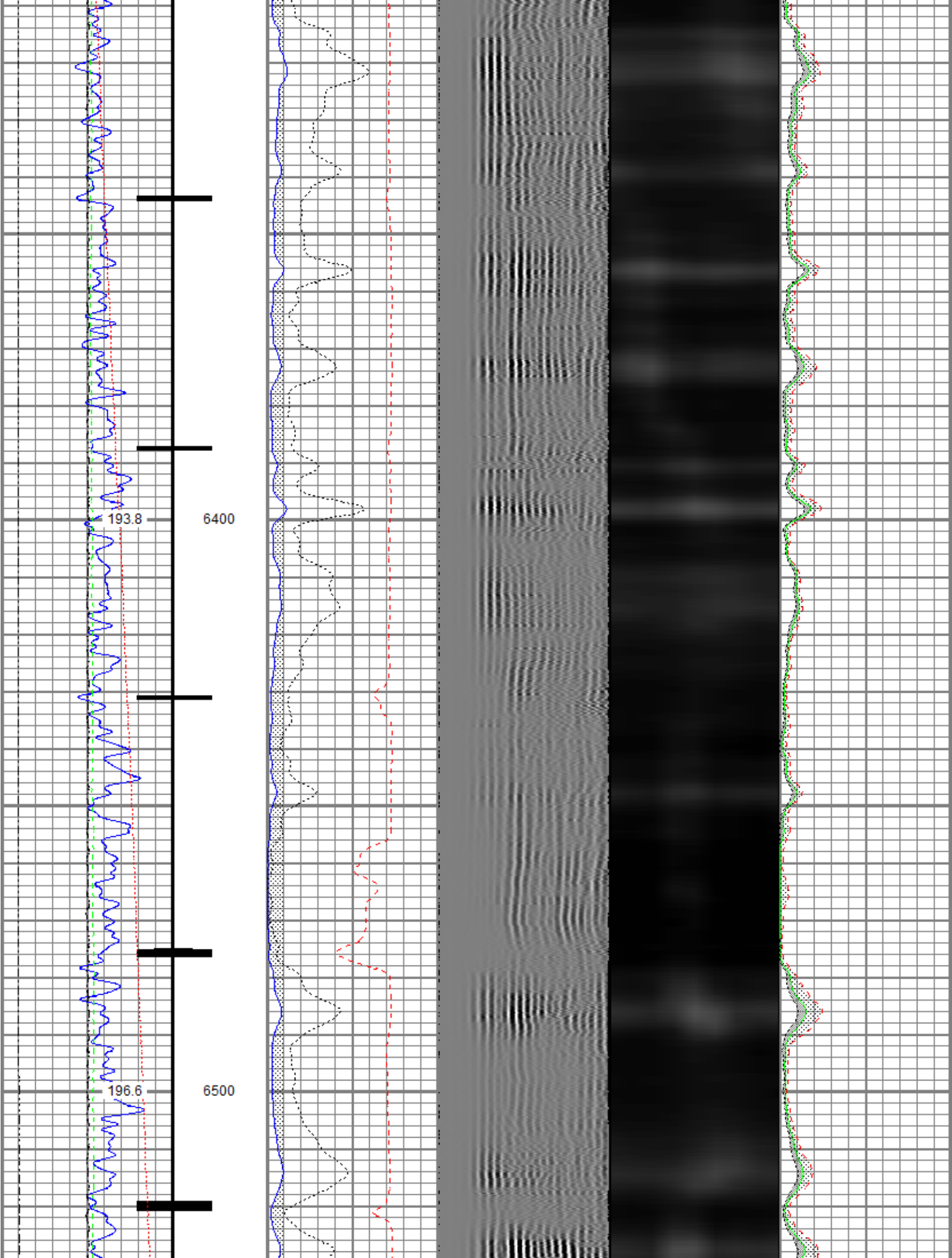


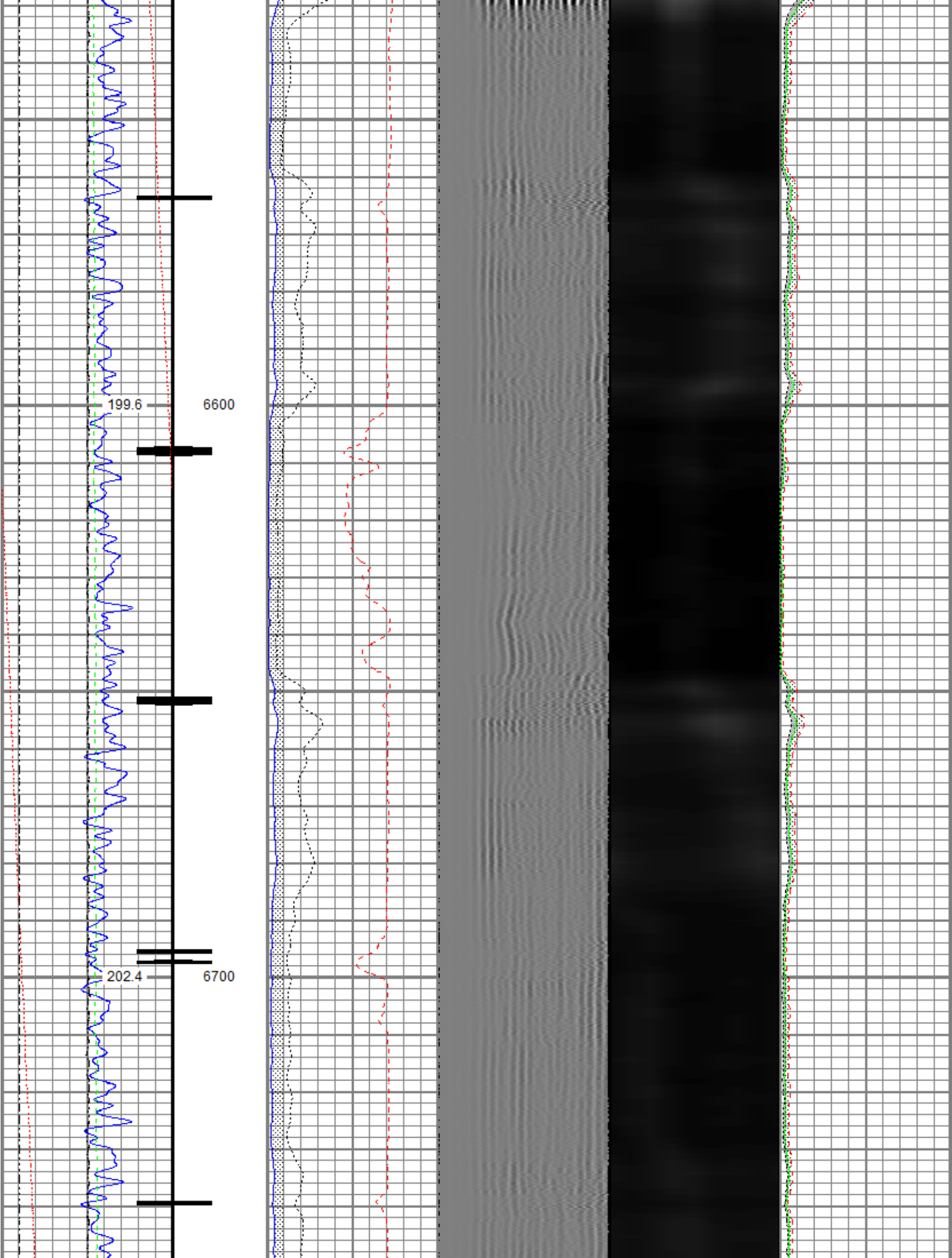


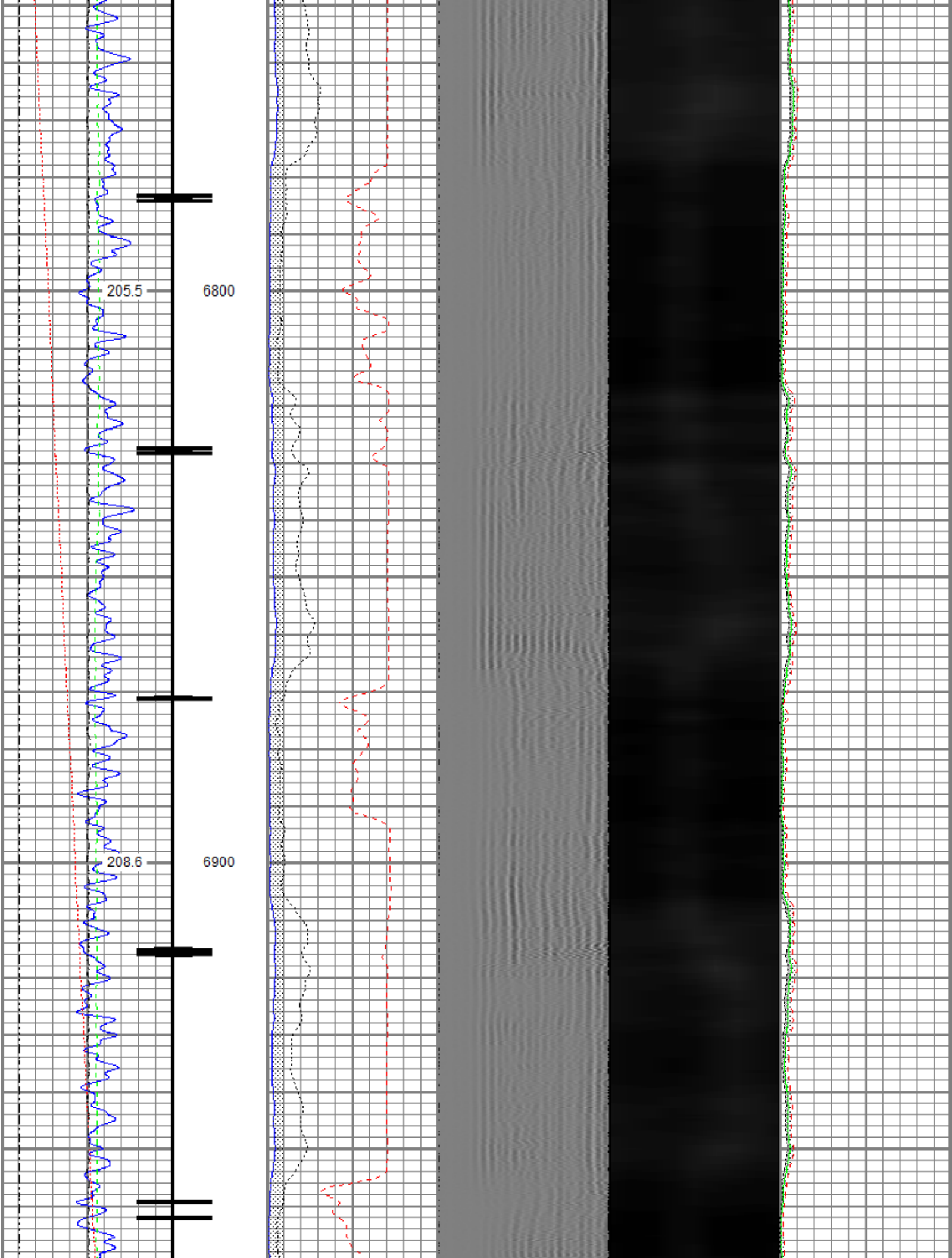


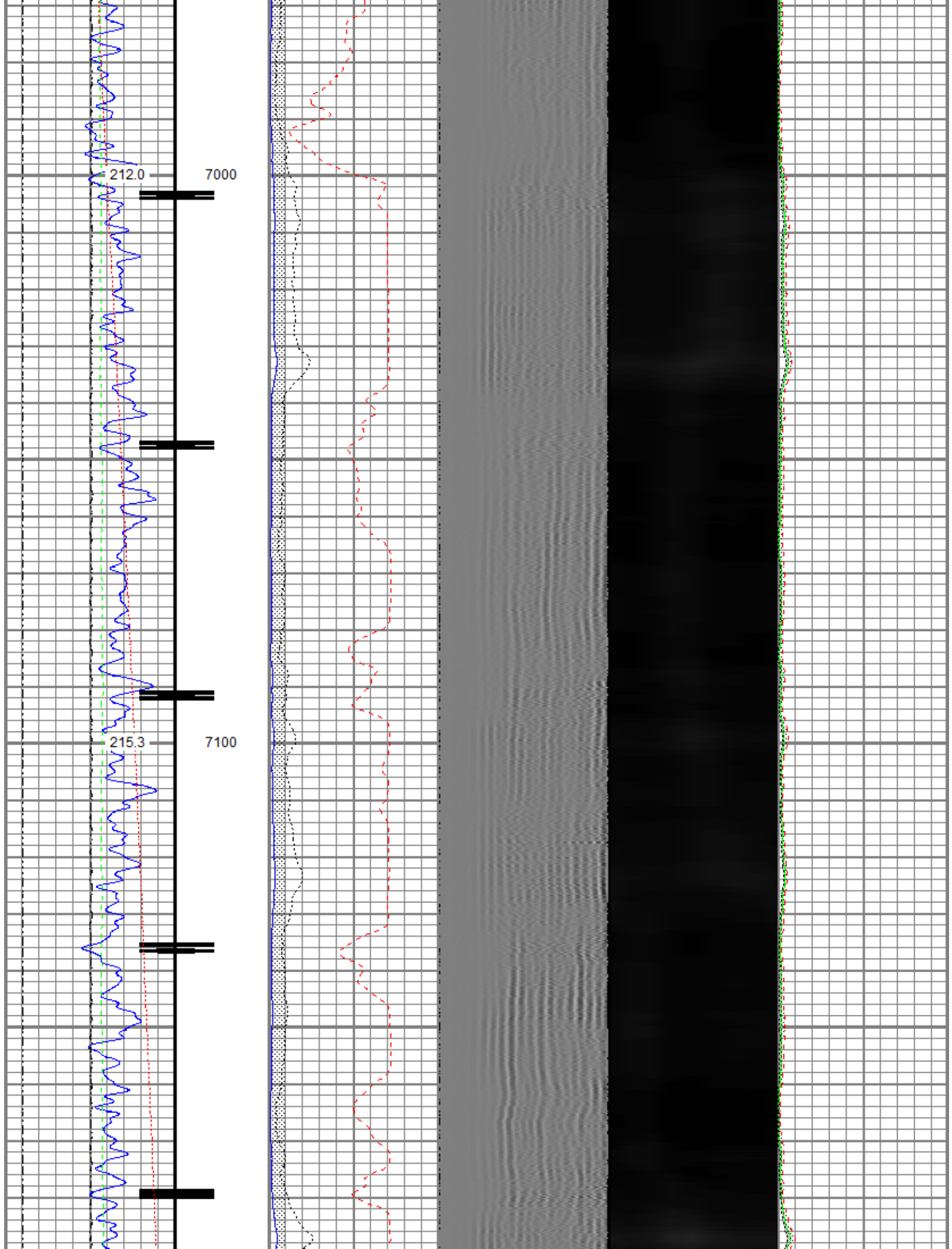


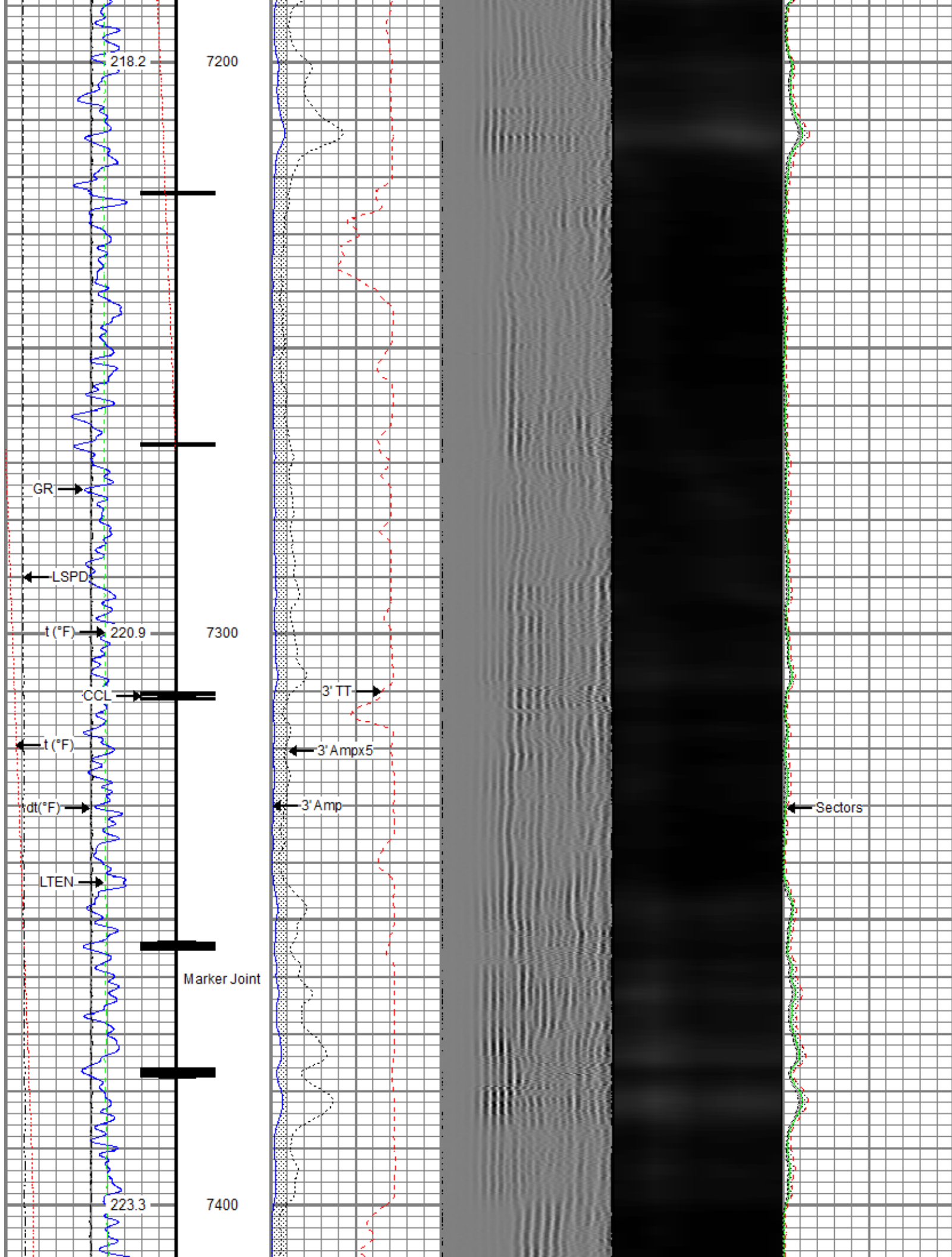


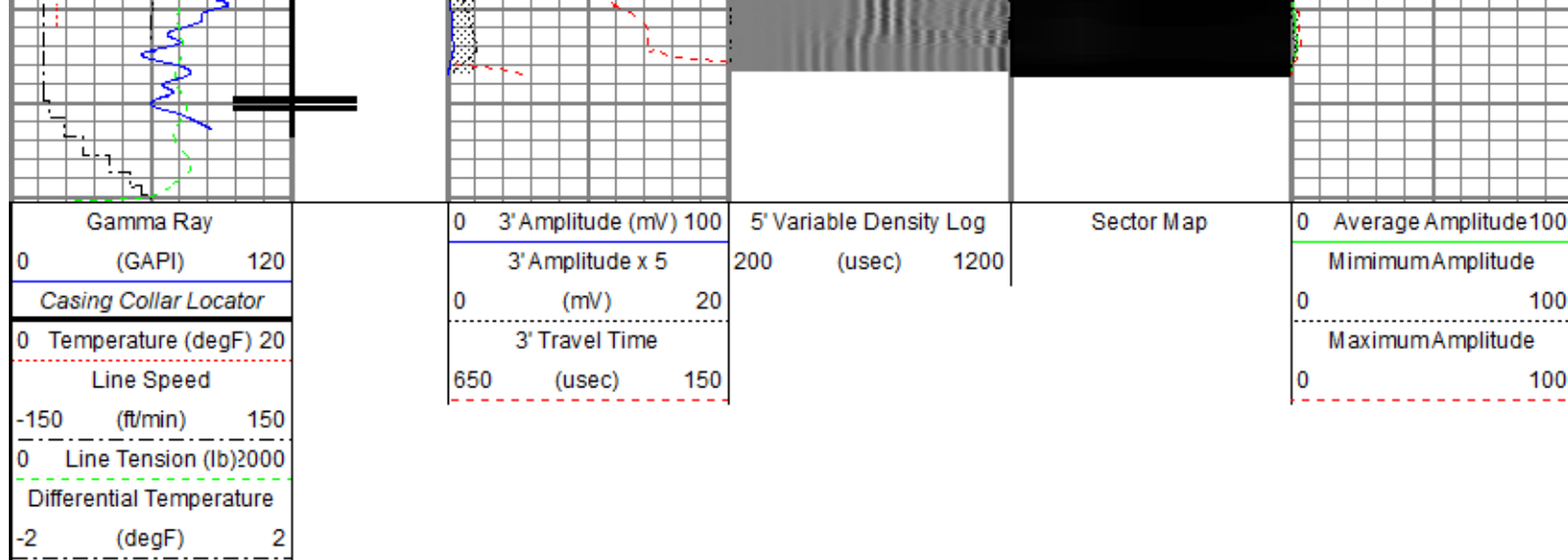








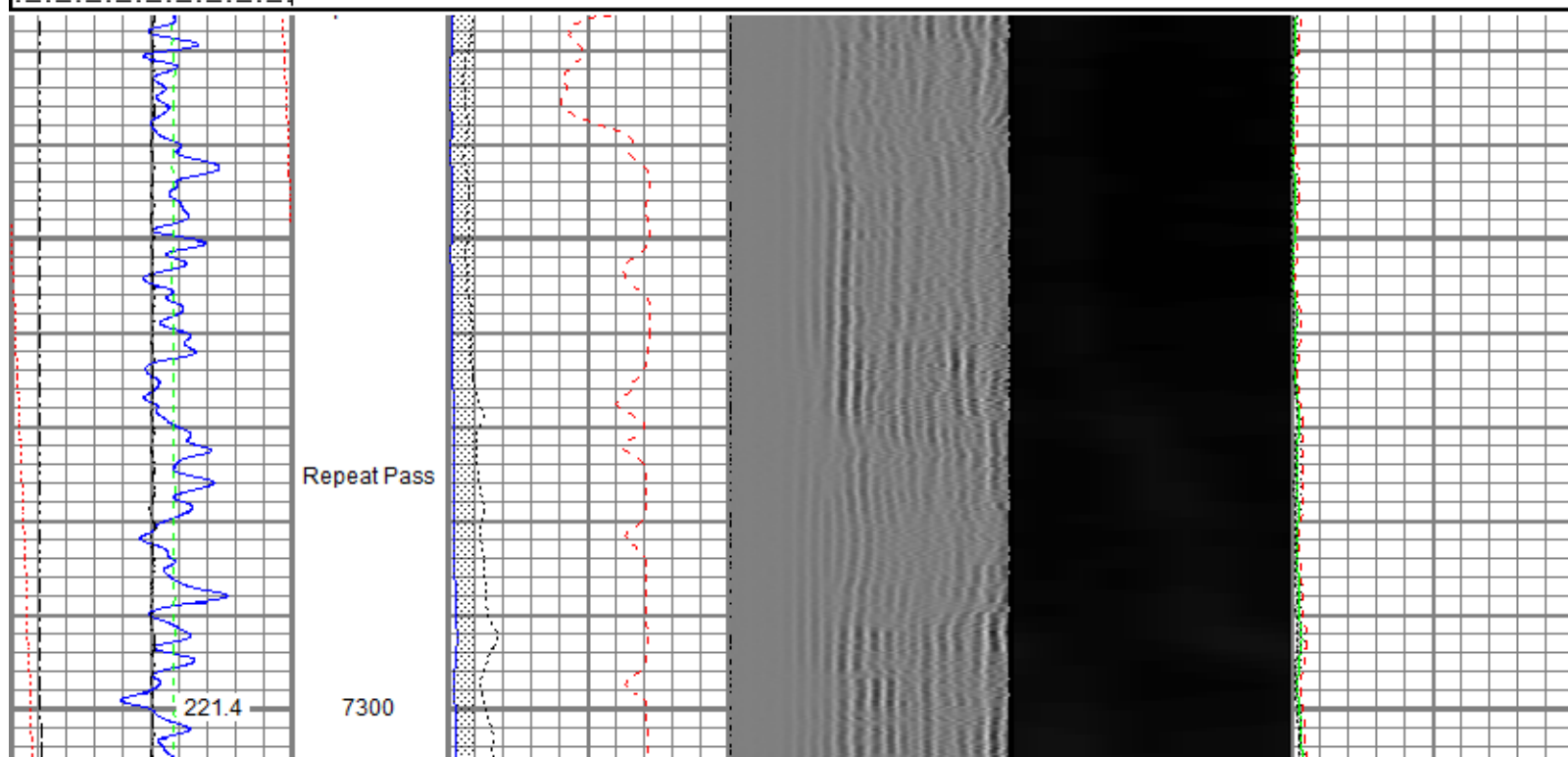
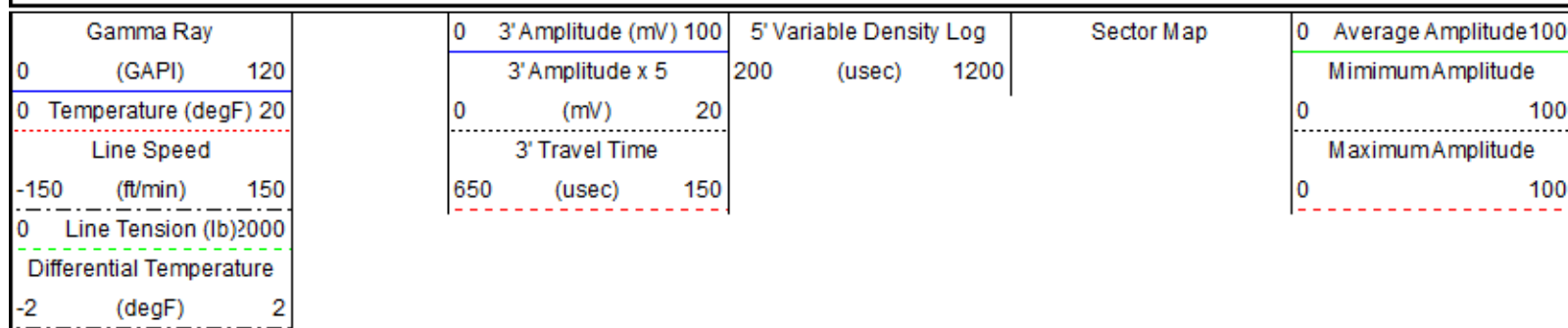


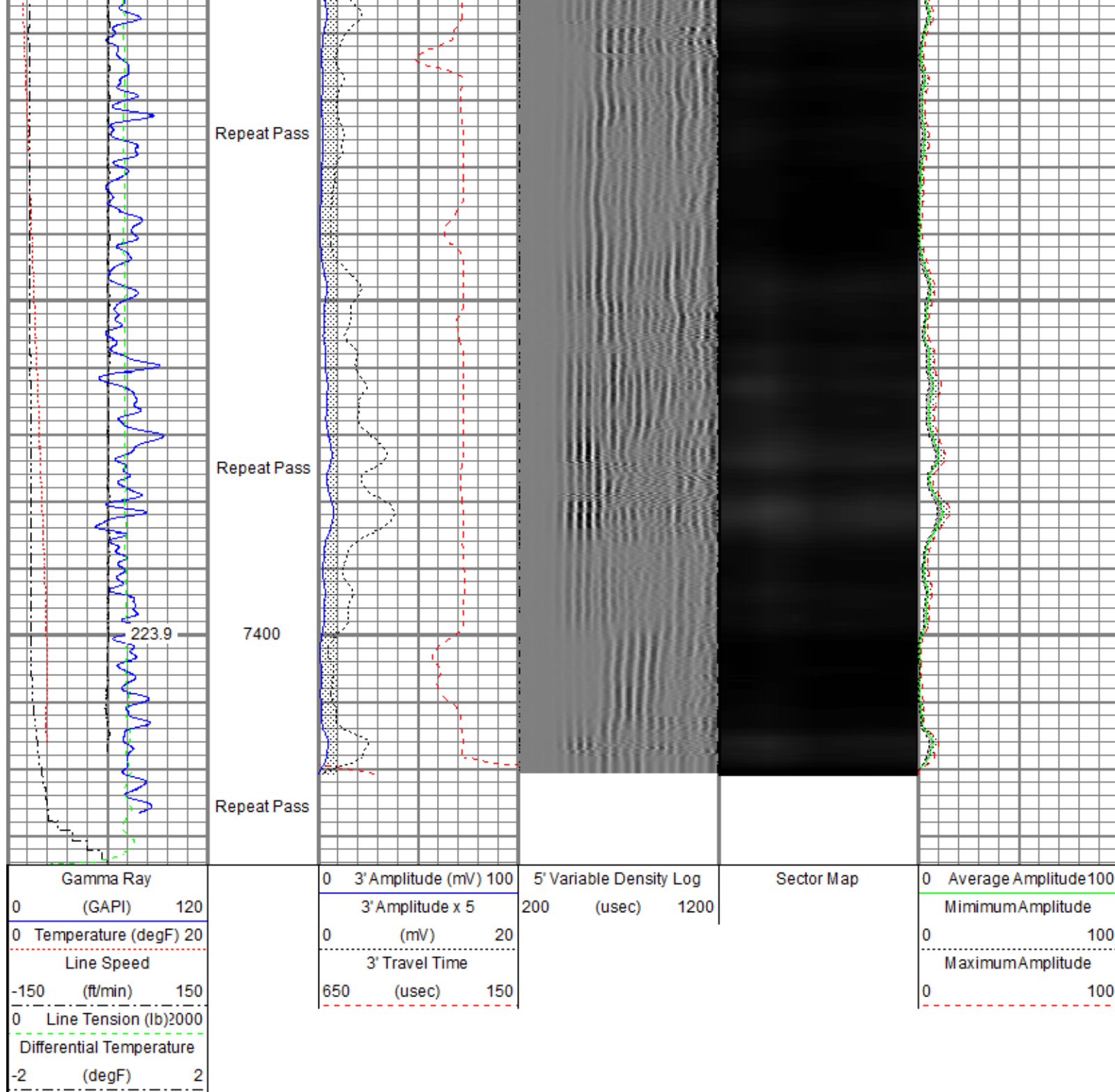


Repeat Pass

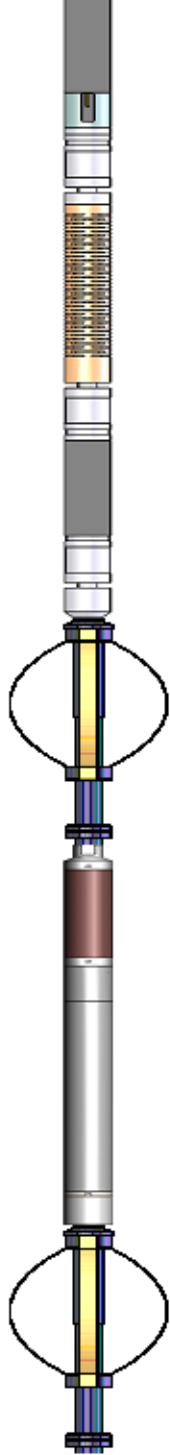
Recorded With 0 PSI Surface Induced Pressure

Database File 0512349216_anadarko_jdb 15-8hz_rbl_07-31-19\0512349216_anadarko_jdb 15-8hz_rbl_07-31-19.db
 Dataset Pathname repeat.2
 Presentation Format ros_radri
 Dataset Creation Fri Aug 02 15:40:44 2019
 Charted by Depth in Feet scaled 1:240





Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Titan CHD-14375 GO Titan 1-7/16" Assembled Electric Cable Head w/ 1" Fishing Neck	1.03	1.44	3.60
			Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00

TEMP	17.04					
WVFS8	14.81		Probe Radii-2750 RBT (120855) Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub	9.39	2.75	105.00
WVFS7	14.81					
WVFS6	14.81					
WVFS5	14.81					
WVFS4	14.81					
WVFS3	14.81					
WVFS2	14.81					
WVFS1	14.81					
WVFCAL	14.81					
WVF3FT	14.81					
WVF5FT	13.81					
CCL\$2	6.80	Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00	
CCL\$1	6.80					
GR	5.46	Probe GR-CCL-2750 6PB (FW1810-044) Probe 2-3/4" rev.1 Digital Scintillation Gamma Ray/CCL Combined with 6 Pin Bottom for CNT	4.80	2.75	55.00	
		Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00	
<div>Dataset: 0512349216_anadarko_jdb 15-8hz_rbl_07-31-19.db: field/well/run1/main.18</div> <div>Total length: 23.86 ft</div> <div>Total weight: 223.60 lb</div> <div>O.D.: 2.75 in</div>						

Calibration Report		
Database File	c:\programdata\warrior\data\0512349216_anadarko_jdb 15-8hz_rbl_07-31-19\0512349216_anadarko_jdb 15-8hz_rbl_07-31-19	
Dataset Pathname	main.18	
Dataset Creation	Fri Aug 02 15:35:57 2019	
Gamma Ray Calibration Report		
Serial Number:	FW1810-044	
Tool Model:	2750 6PB	
Performed:	Sat Nov 10 12:23:27 2018	
Calibrator Value:	637.0	GAPI
Background Reading:	105.3	cps
Calibrator Reading:	1221.0	cps

Calibrator Reading: 1221.0 cps
Sensitivity: 0.5709 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: 120855
Tool Model: 2750 RBT
Calibration Casing Diameter: 5.500 in
Calibration Depth: 11.466 ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.004	0.663	0.800	71.921	108.069	0.317
CAL	0.749	0.750				
5'	0.007	0.585	0.800	71.921	123.075	-0.093
SUM						
S1	0.004	0.639	0.000	100.000	157.384	-0.616
S2	0.007	0.672	0.000	100.000	150.228	-1.027
S3	0.005	0.707	0.000	100.000	142.459	-0.741
S4	0.006	0.698	0.000	100.000	144.391	-0.828
S5	0.007	0.669	0.000	100.000	150.922	-1.037
S6	0.006	0.641	0.000	100.000	157.613	-0.959
S7	0.006	0.627	0.000	100.000	160.962	-0.893
S8	0.004	0.634	0.000	100.000	158.898	-0.687

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.749	0.750	1.000	0.000

Air Zero Calibration, performed Wed Jul 31 16:42:33 2019:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.005		0.000		-0.000	
5'	0.007		0.000		0.000	
SUM						
S1	0.003		0.000		0.000	
S2	0.005		0.000		0.000	
S3	0.005		0.000		0.000	
S4	0.005		0.000		0.000	
S5	0.005		0.000		0.000	
S6	0.005		0.000		0.000	
S7	0.005		0.000		0.000	
S8	0.006		0.000		-0.000	

Temperature Calibration Report

Serial Number: 120855
Tool Model: 2750 RBT
Performed: Mon Oct 01 11:32:15 2018

	Reference	Reading
Low Reference:	100.00 degF	112.30 degF
High Reference:	350.00 degF	394.75 degF

Gain: 0.89
Offset: 0.60
Delta Spacing: 1



Company	Kerr-McGee Oil & Gas Onshore, L.P.
Well	JDB 15-8HZ
Field	Wattenberg
County	Weld
State	Colorado