



Radial Cement Bond  
Gamma Ray  
Casing Collar Log

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

Well Windsock 21-7HZ

Field Wattenberg

County Weld State Colorado

Location: API #: 05-123-50629

SEC 21 TWP 1N RGE 68W

Permanent Datum Ground Level Elevation 5222'

Log Measured From Kelly Bushing 20 FT

Drilling Measured From Kelly Bushing

Other Services  
GR/JB  
RBP

Elevation  
K.B. 5242'  
D.F. ---  
G.L. 5222'

Date 15-MAR-2020

Run Number Three

Depth Driller 13510 FT

Depth Logger 7106 FT

Bottom Logged Interval 7091 FT

Top Log Interval Surface

Open Hole Size 7.875"

Type Fluid Water

Density / Viscosity 8.34 lb/gal

Max. Recorded Temp. 222°F

Estimated Cement Top See Log

Time Well Ready ROA

Time Logger on Bottom 14:45

Equipment Number HD-363

Location Plateville, CO

Recorded By M. Hayes

Witnessed By John McCarthy

Run Number Bit From To Size Weight From To

Casing Record Size (in) Wgt (lbs/ft) Grade Top Bottom

Surface Casing 9.5/8 36 J-55 Surface 1894 FT

Intermediate #1 5 1/2 17 HC P110 Surface 13500 FT

Intermediate #2

Inner

Log ran as per customer request

Depth referenced to casing Tally reported Marker Joint at 7002 FT

Adjusted -3 FT to correlate with Marker Joint

Gauge Ring/Junk Basket ran to 8116 FT

Retrievable Bridge Plug set at 7180 FT

Log ran with 0 PSI Surface Induced Pressure

Logging tools were clean and free of debris upon completion of operations

Thank you for choosing Reliance Oilfield Services, LLC!!

Comments

Log ran as per customer request

Depth referenced to casing Tally reported Marker Joint at 7002 FT

Adjusted -3 FT to correlate with Marker Joint

Gauge Ring/Junk Basket ran to 8116 FT

Retrievable Bridge Plug set at 7180 FT

Log ran with 0 PSI Surface Induced Pressure

Logging tools were clean and free of debris upon completion of operations

Thank you for choosing Reliance Oilfield Services, LLC!!

Main Pass

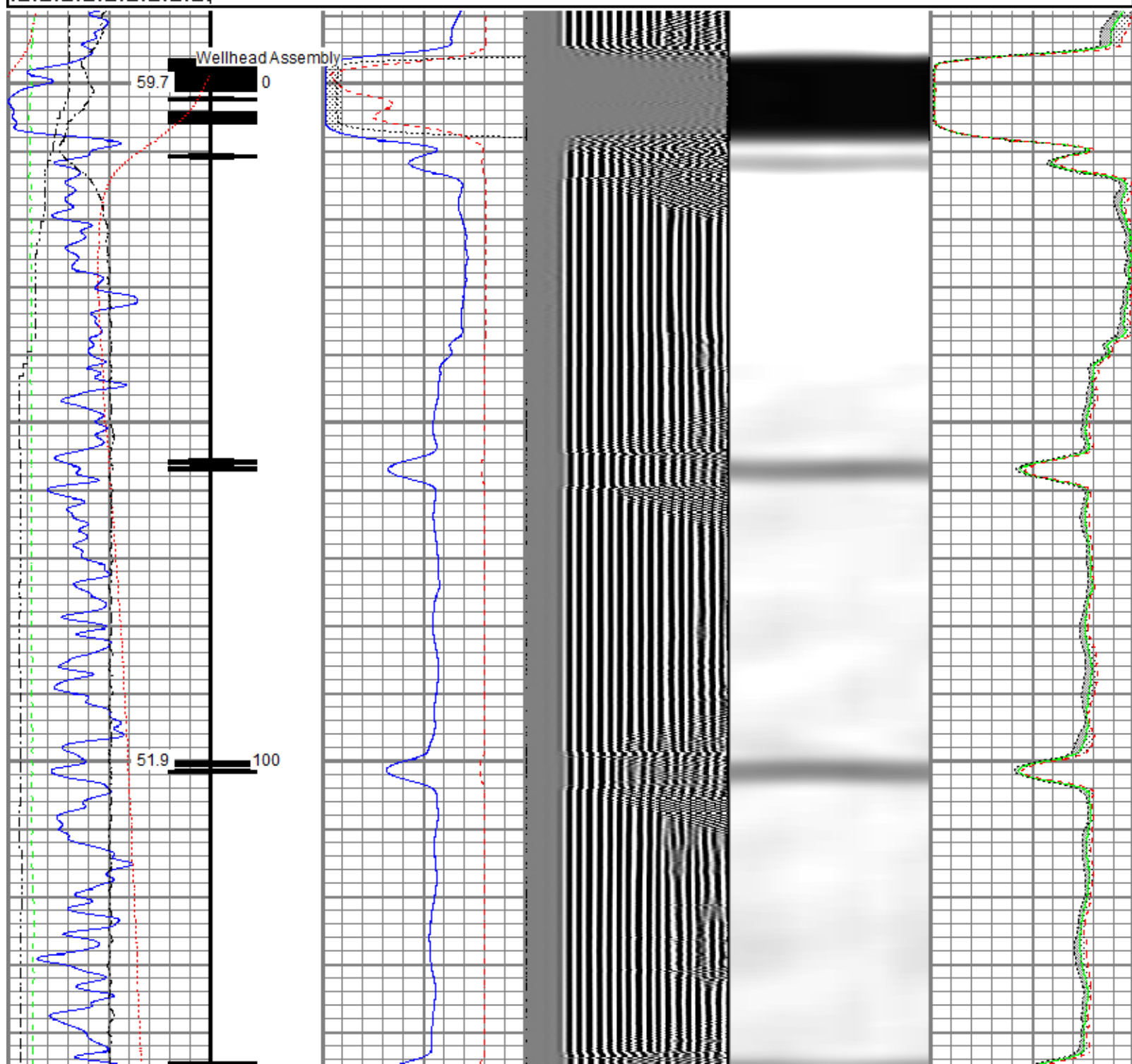
Recorded With 0 PSI Surface Induced Pressure

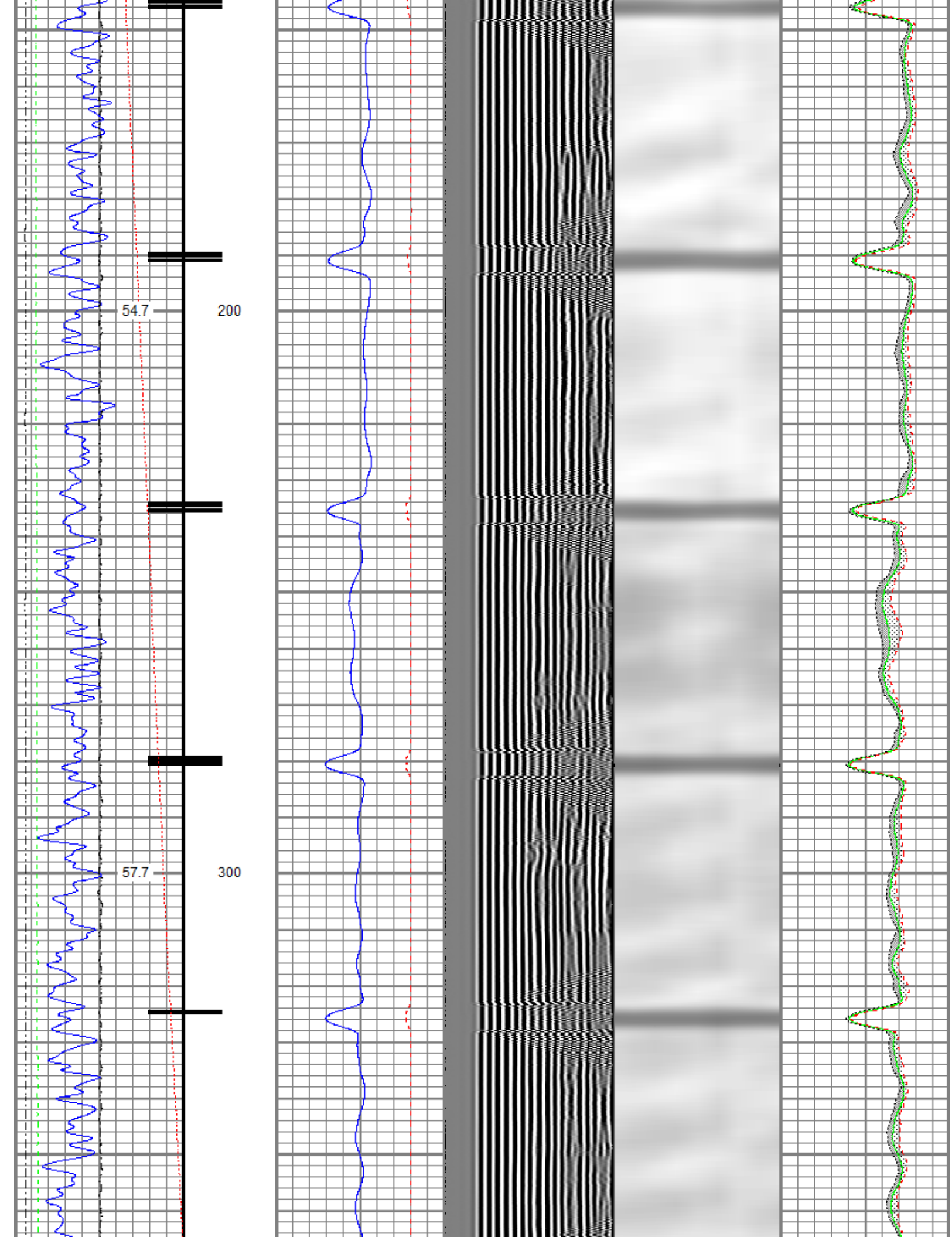
Reliance Oilfield Services

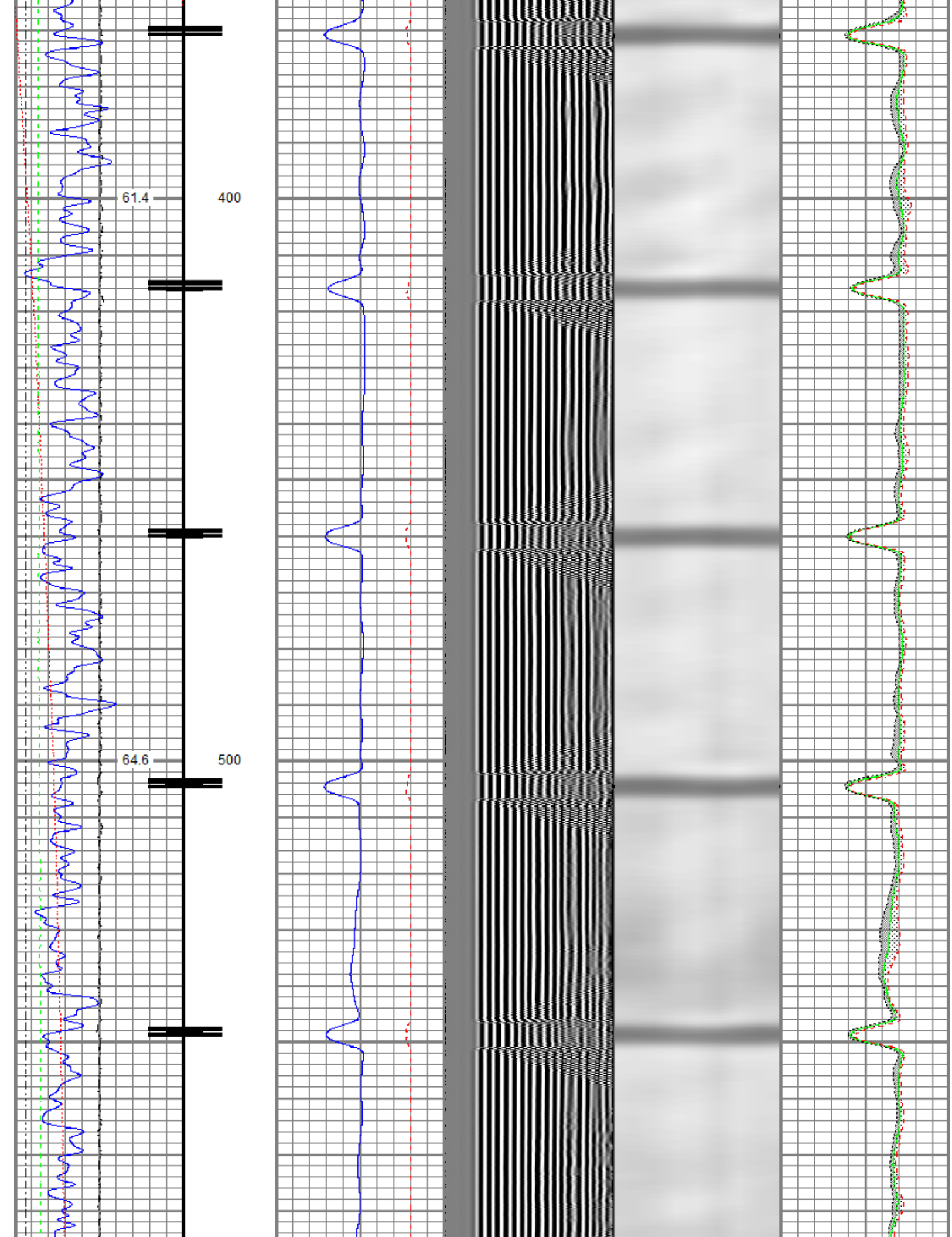
Oilfield Services

Database File 0512350629\_oxy\_windsock 21-7hz\_rbl\_03-15-20\0512350629\_oxy\_windsock 21-7hz\_rbl\_03-15-20.db  
 Dataset Pathname pass4.1  
 Presentation Format ros\_radri  
 Dataset Creation Sun Mar 15 15:46:02 2020  
 Charted by Depth in Feet scaled 1:240

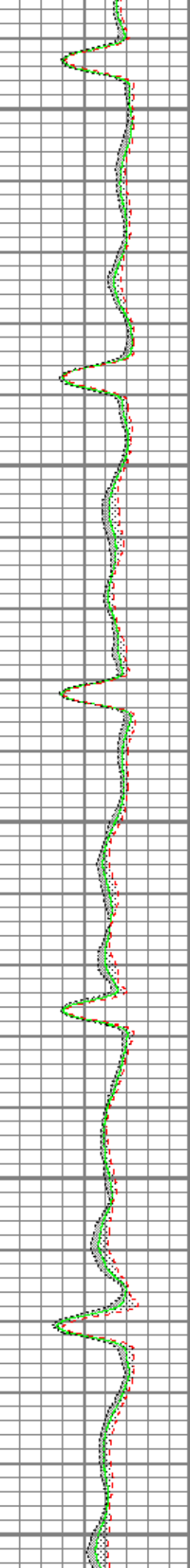
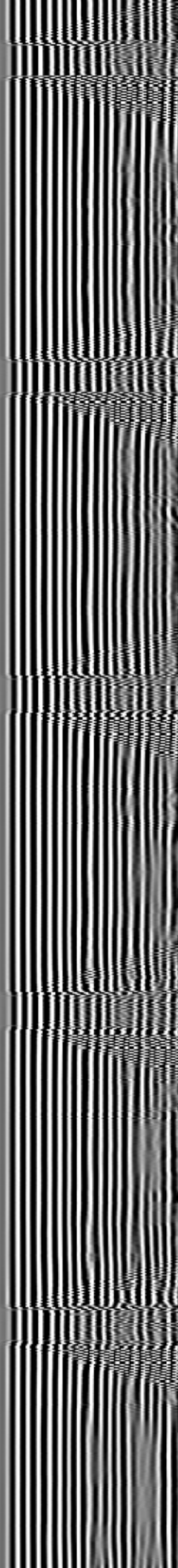
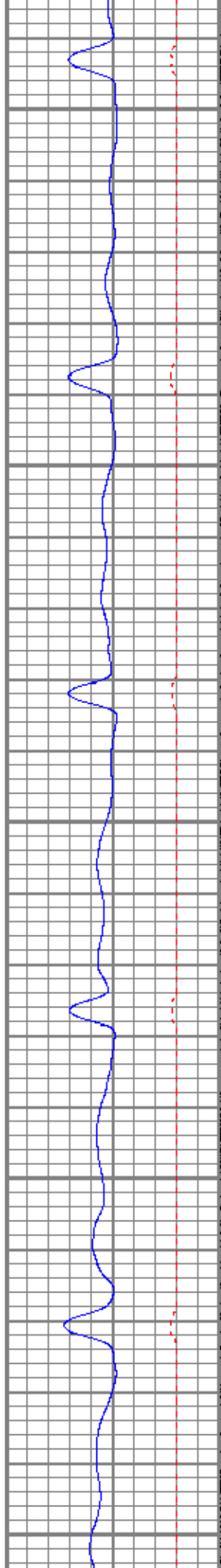
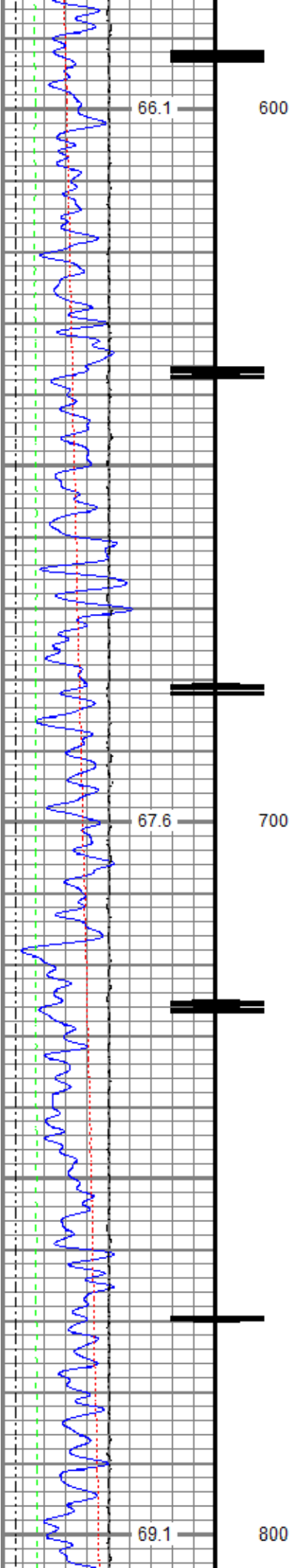
Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 100
(GAPI) 120		3' Amplitude x 5	200 (usec) 1200			Minimum Amplitude
Casing Collar Locator	0	(mV) 20			0	100
Temperature (degF) 20		3' Travel Time				Maximum Amplitude
Line Speed	650	(usec) 150			0	100
-150 (ft/min)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

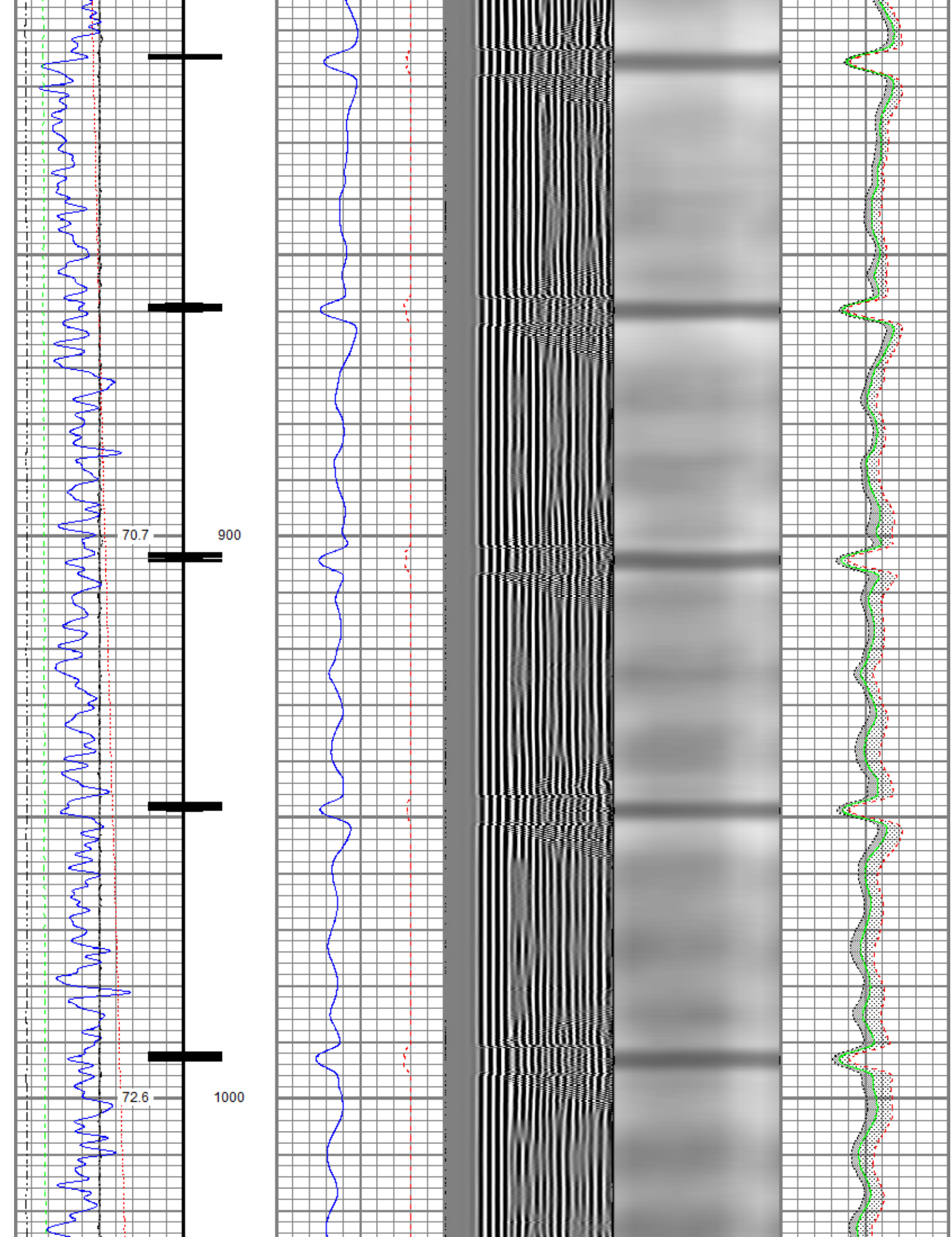


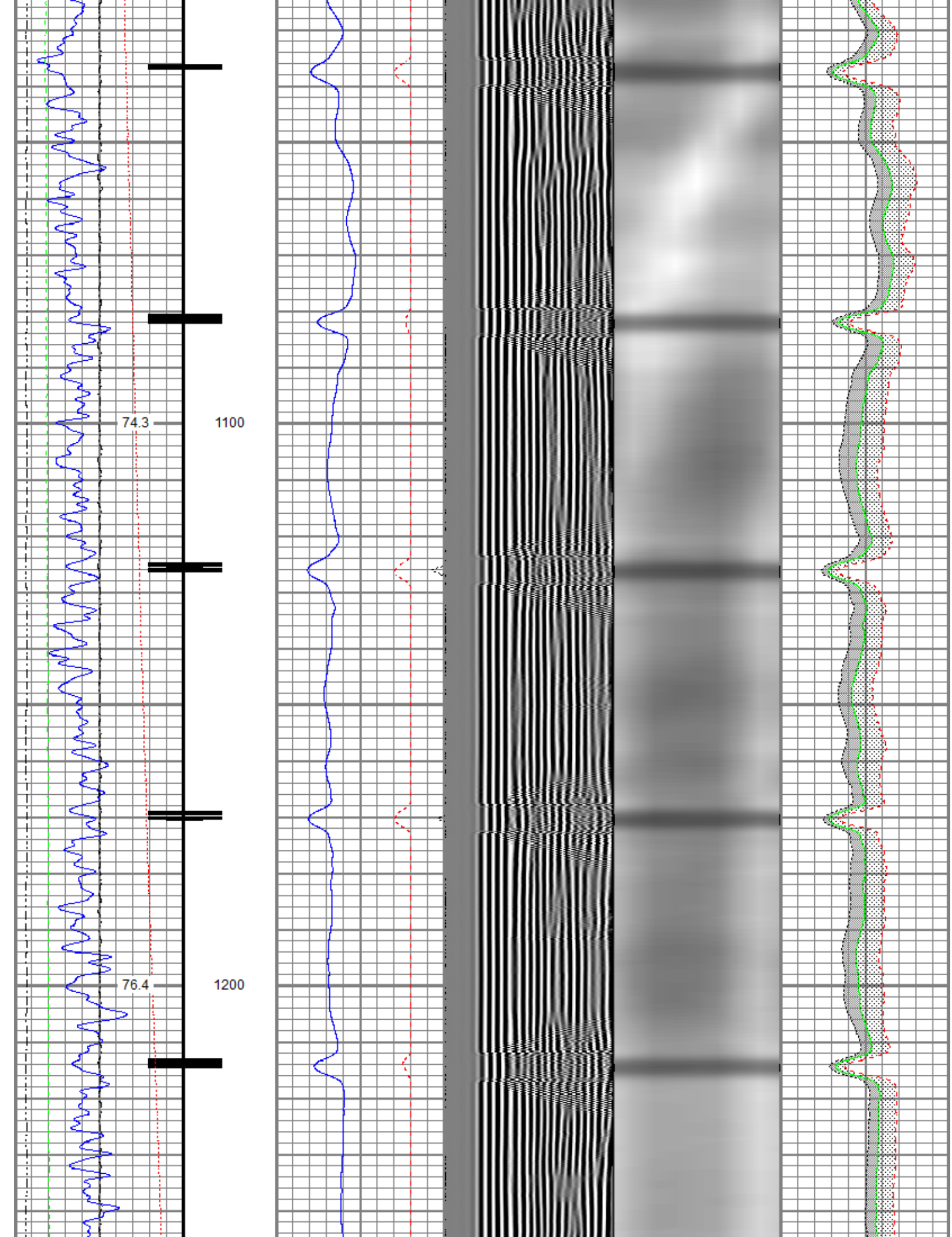




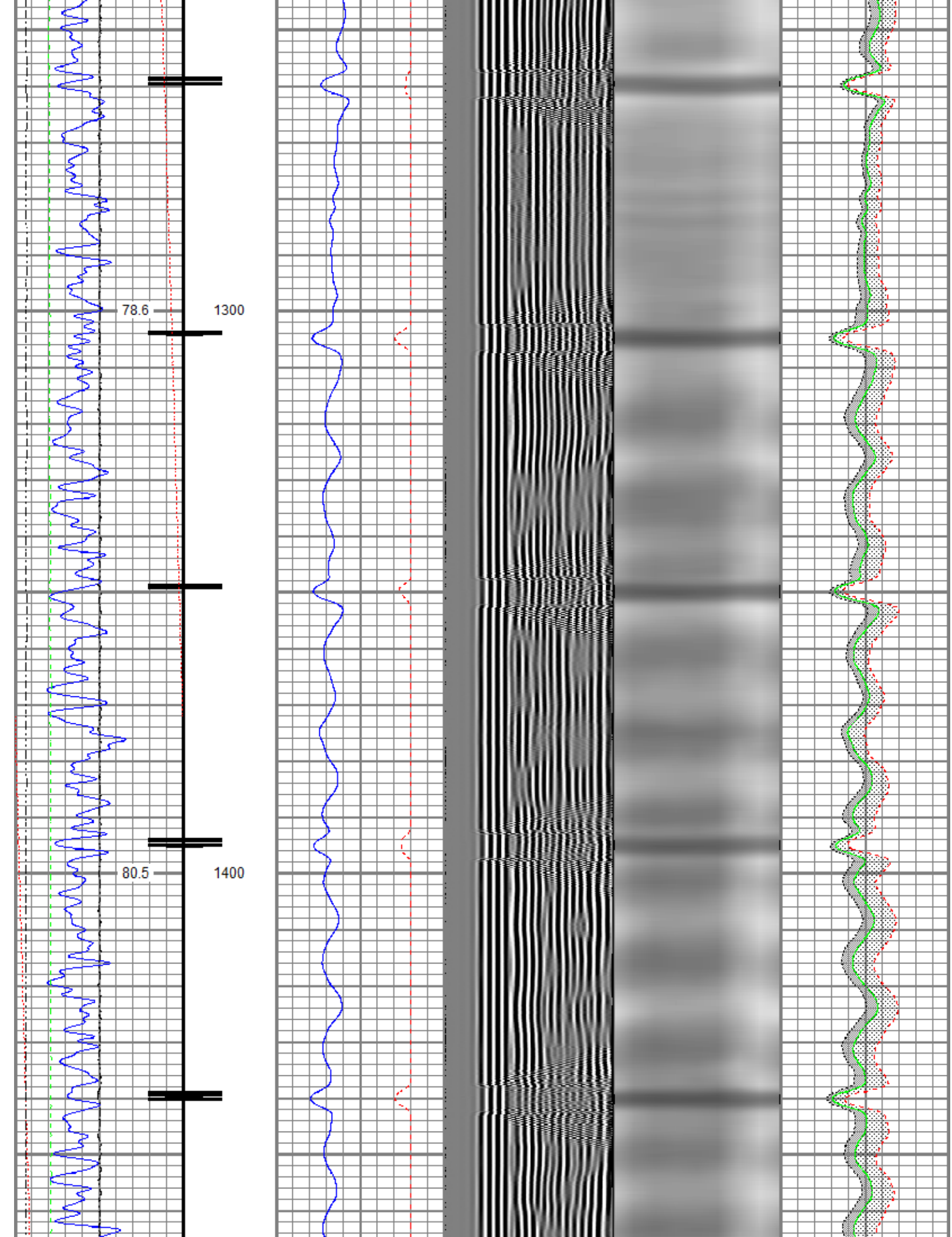




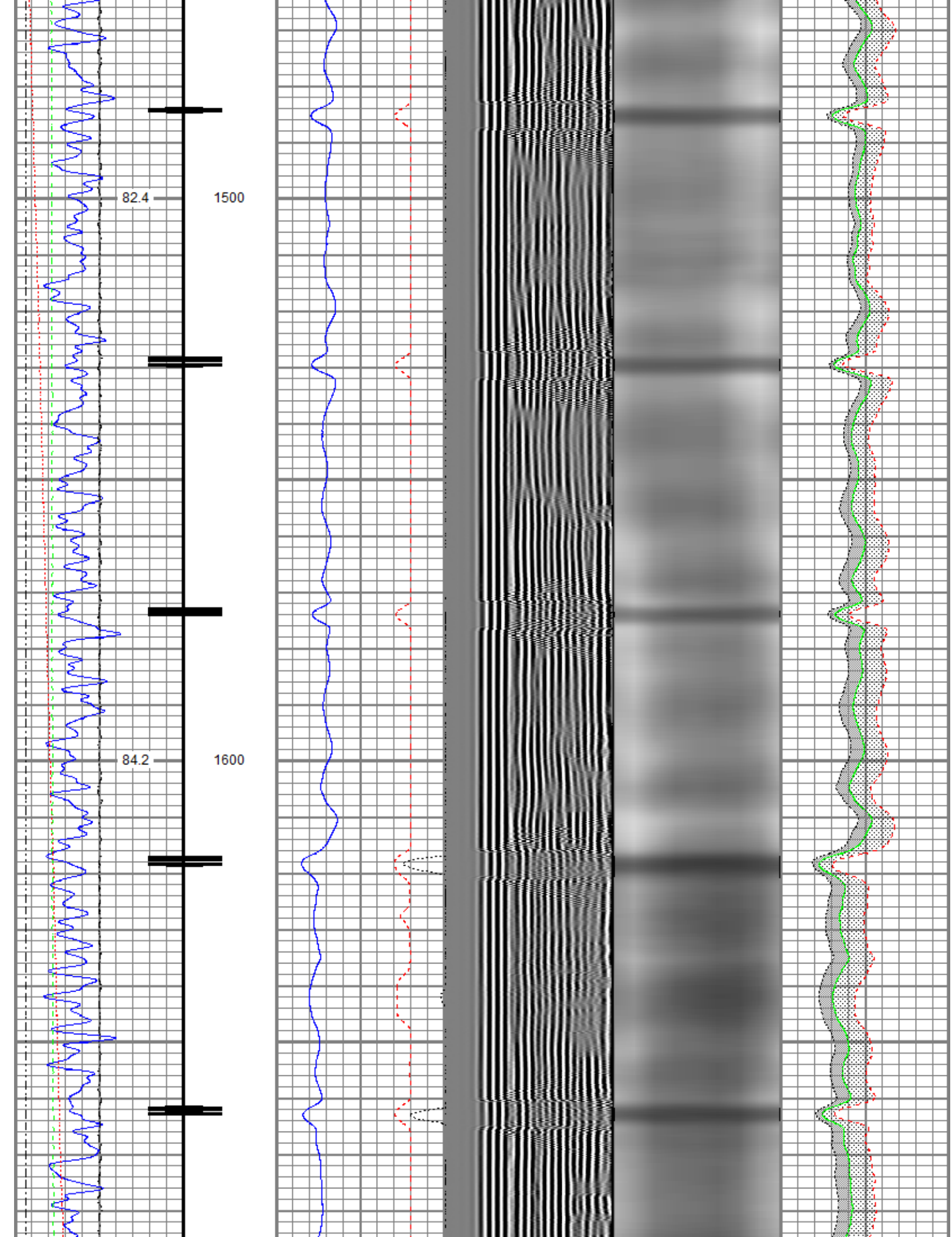


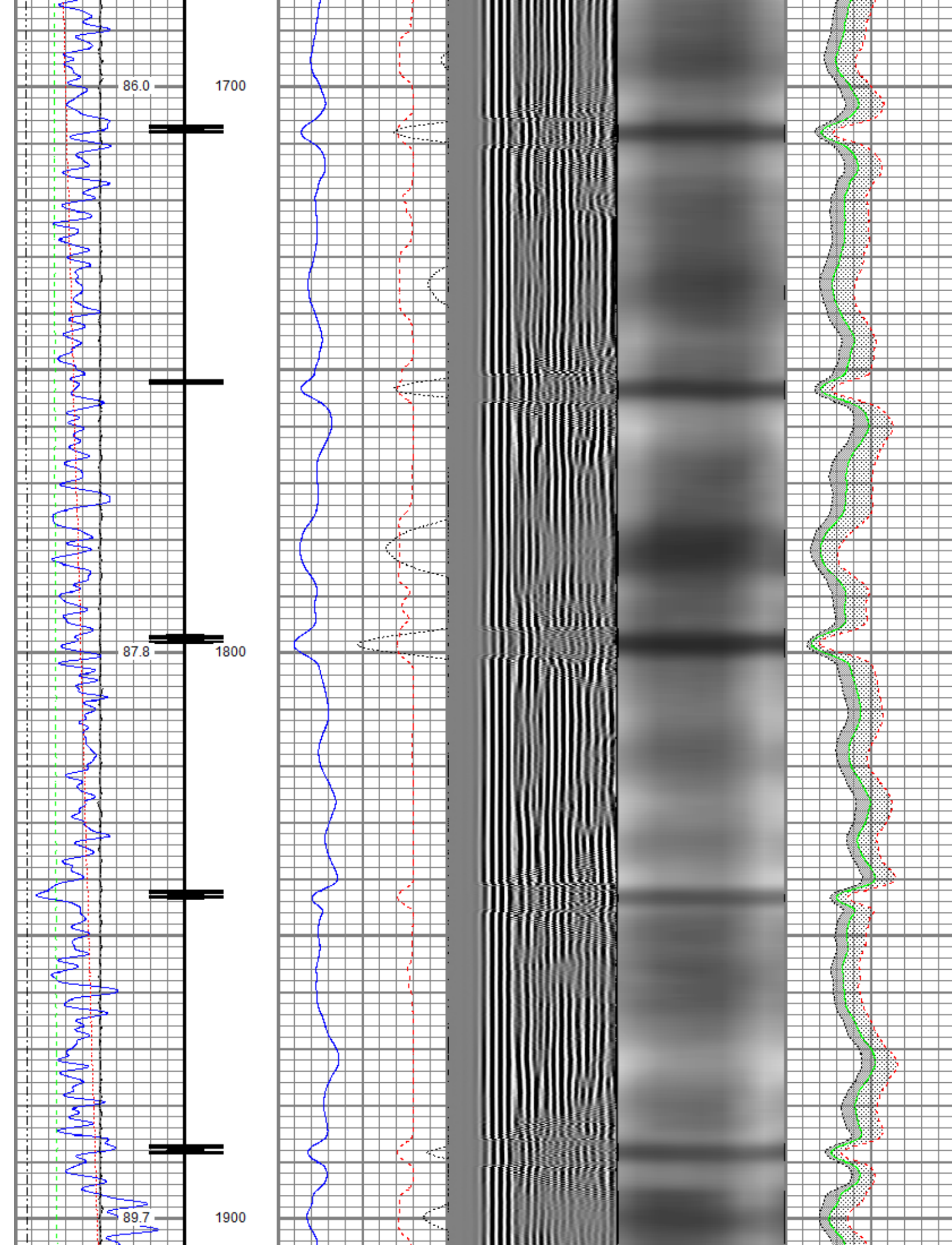


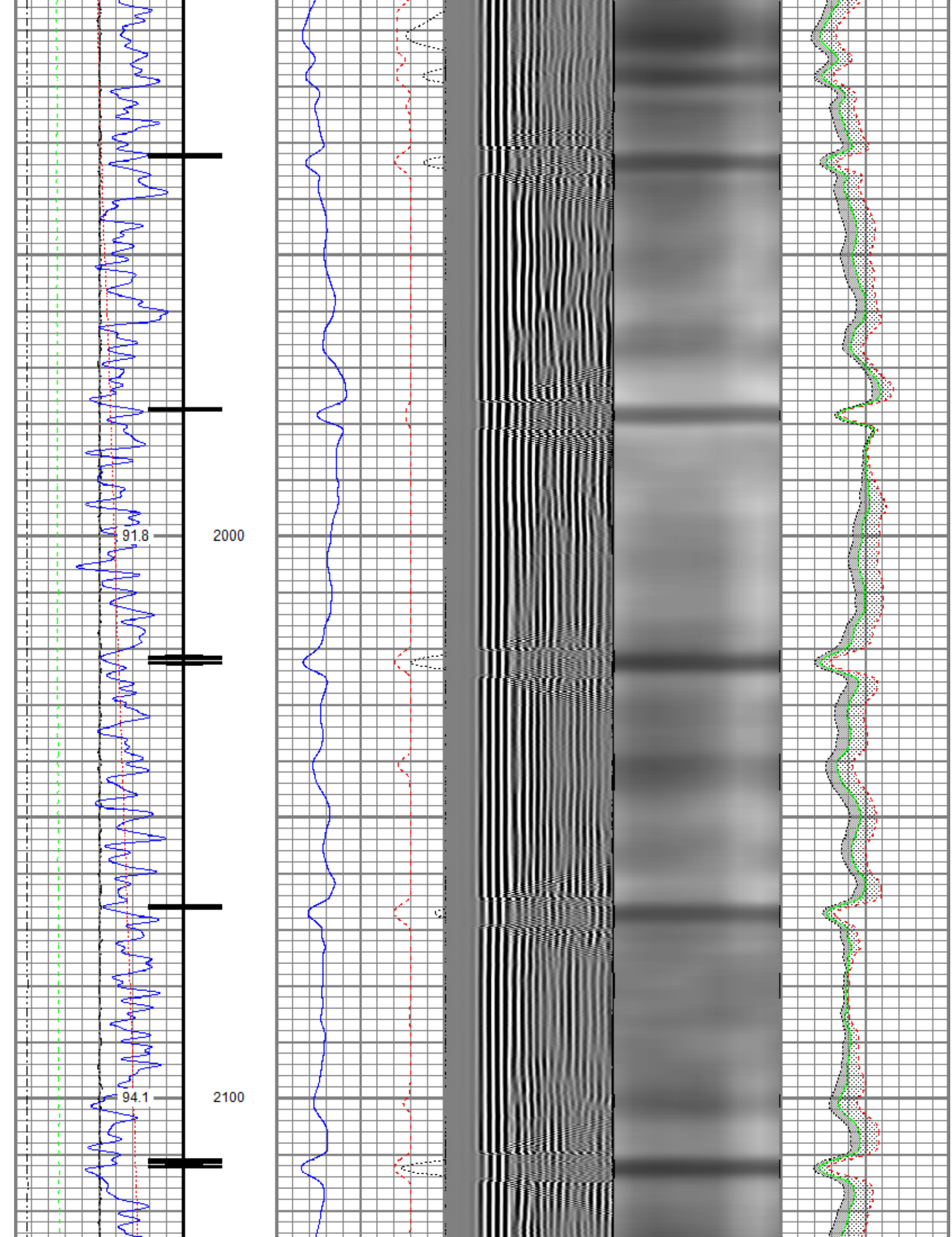




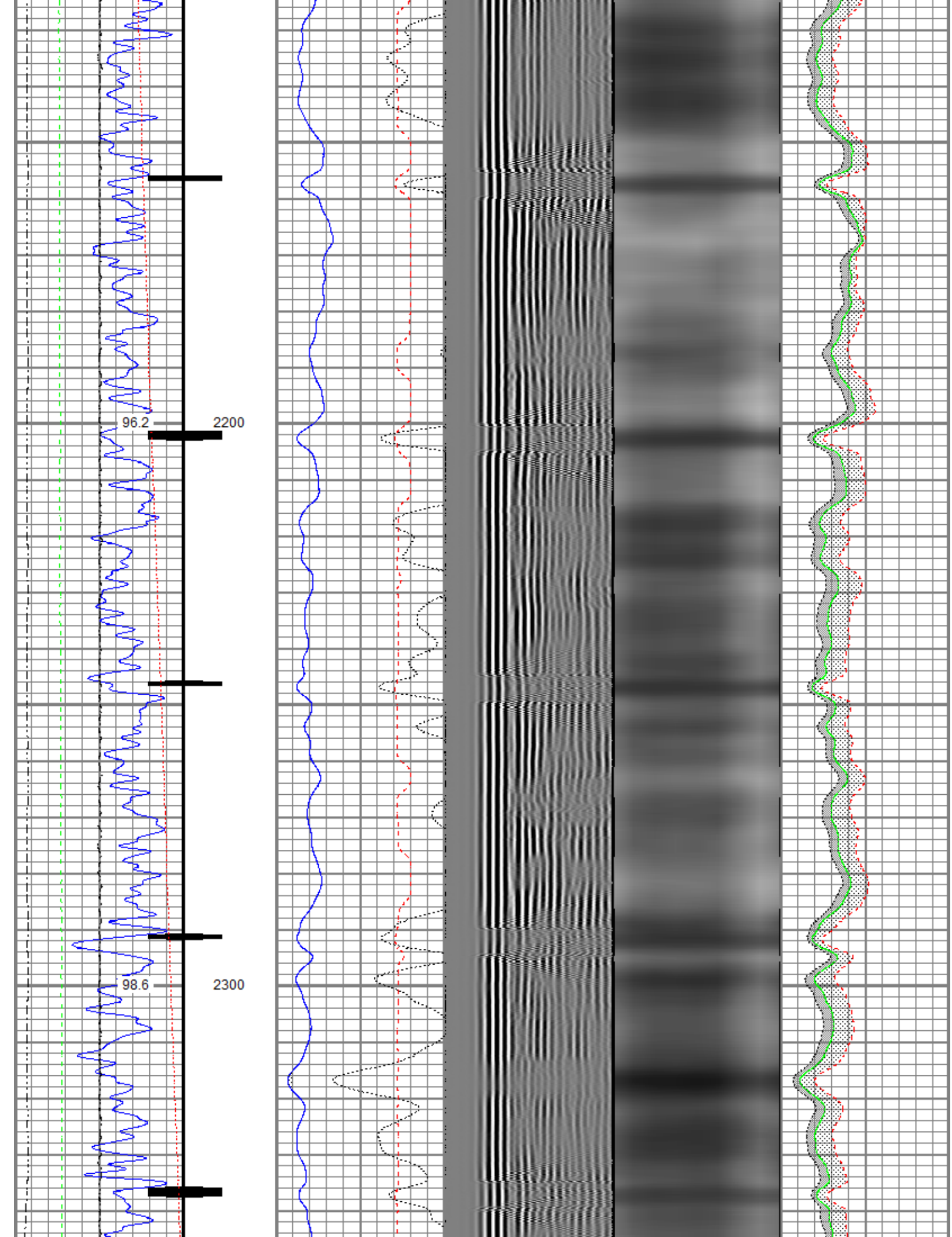




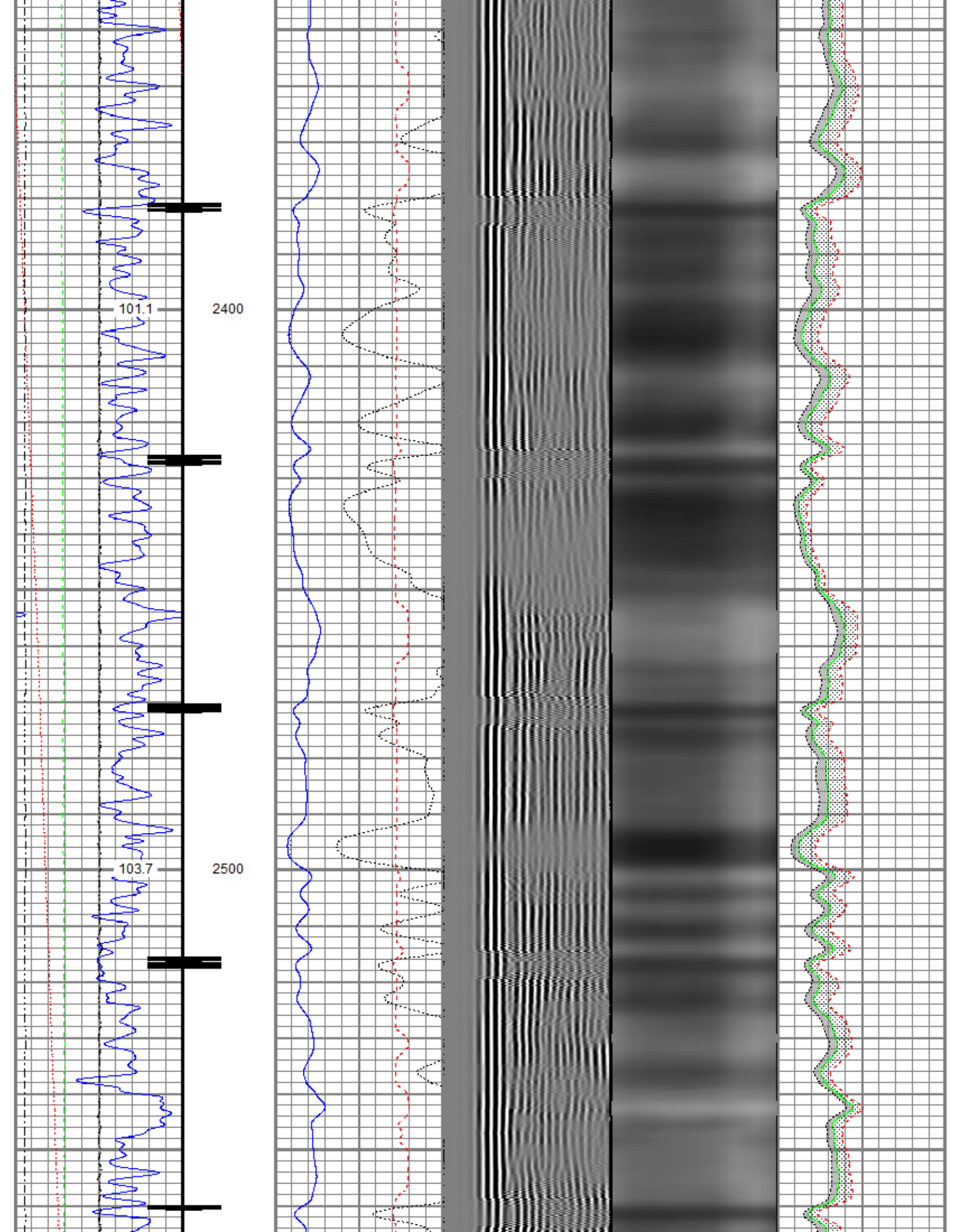


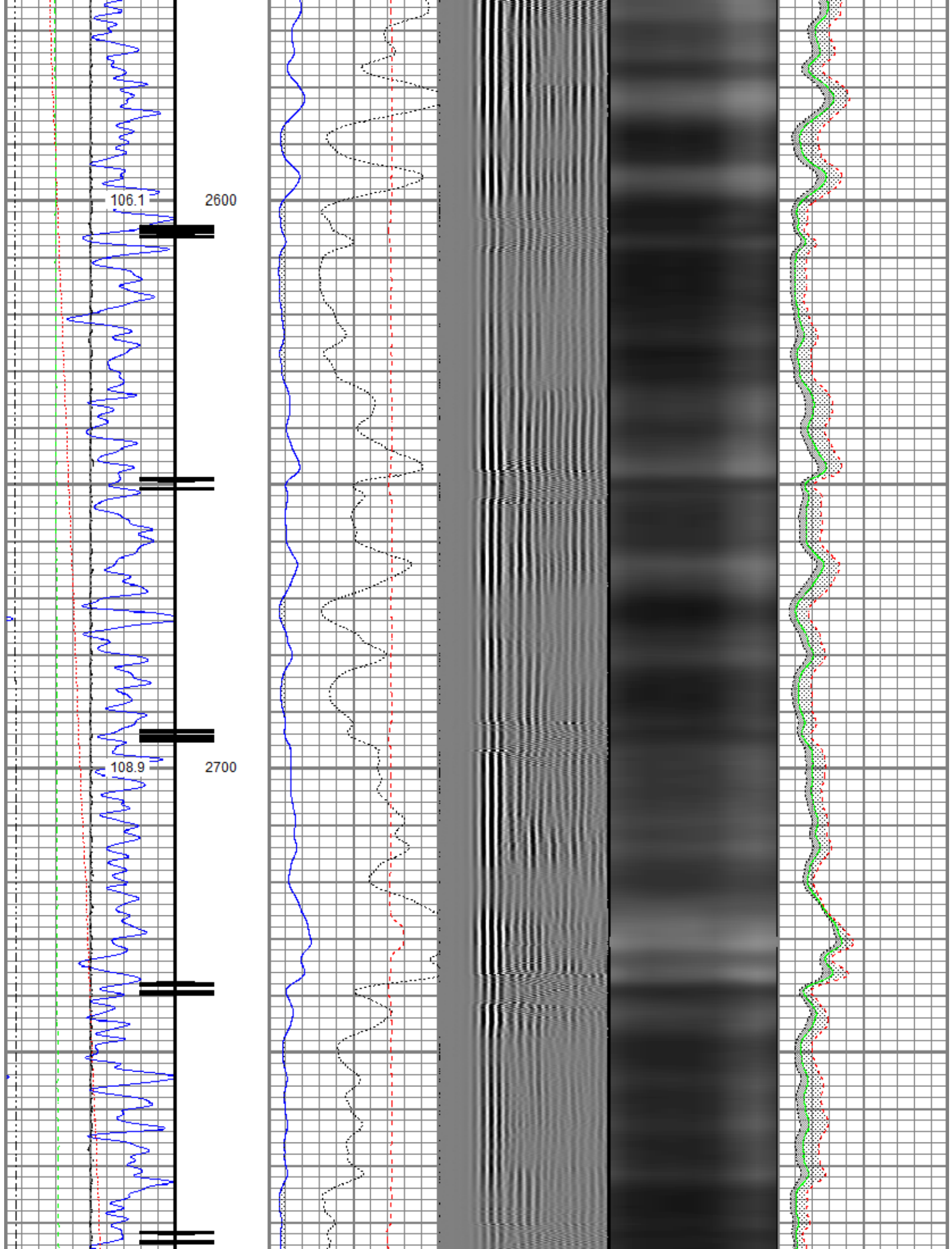


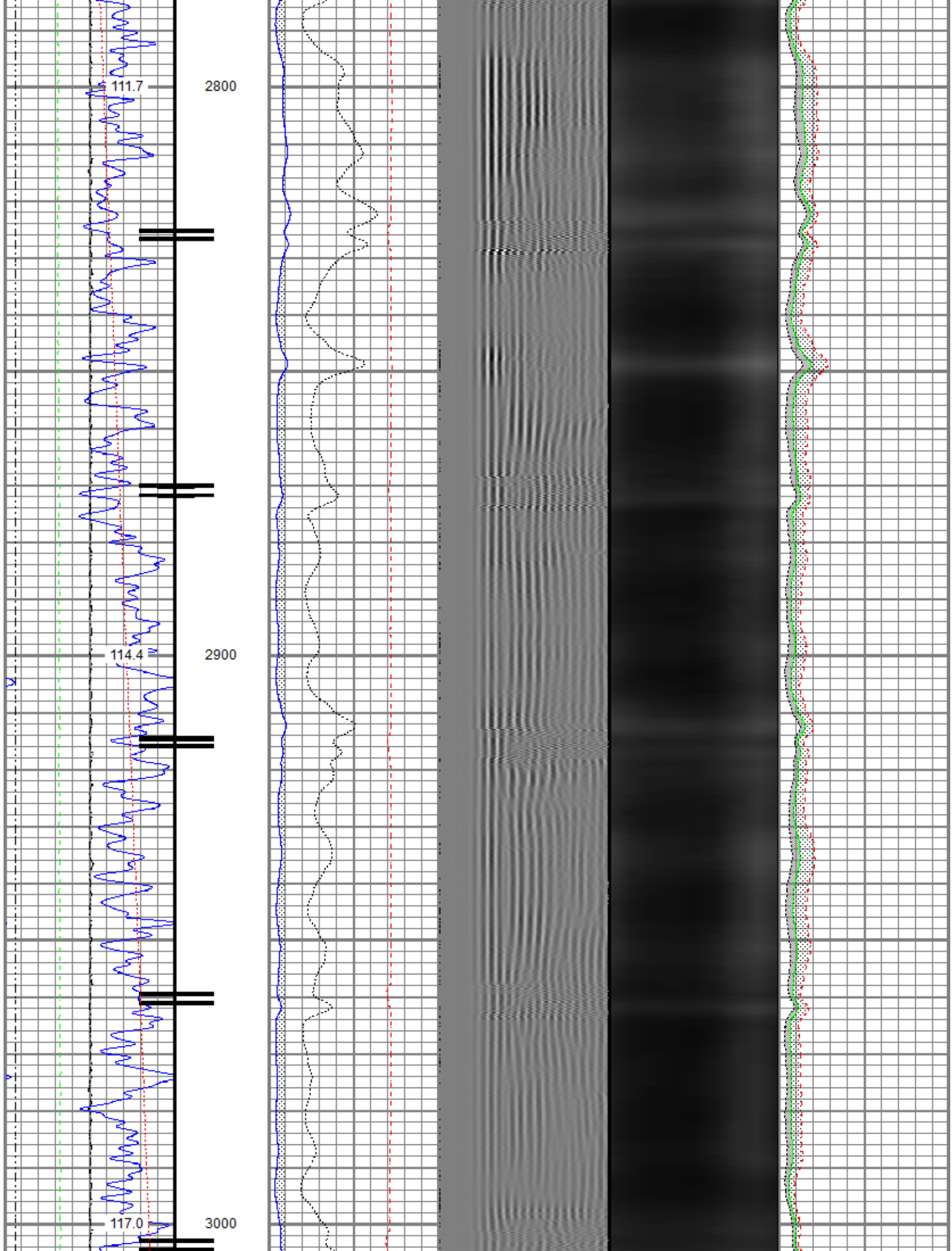


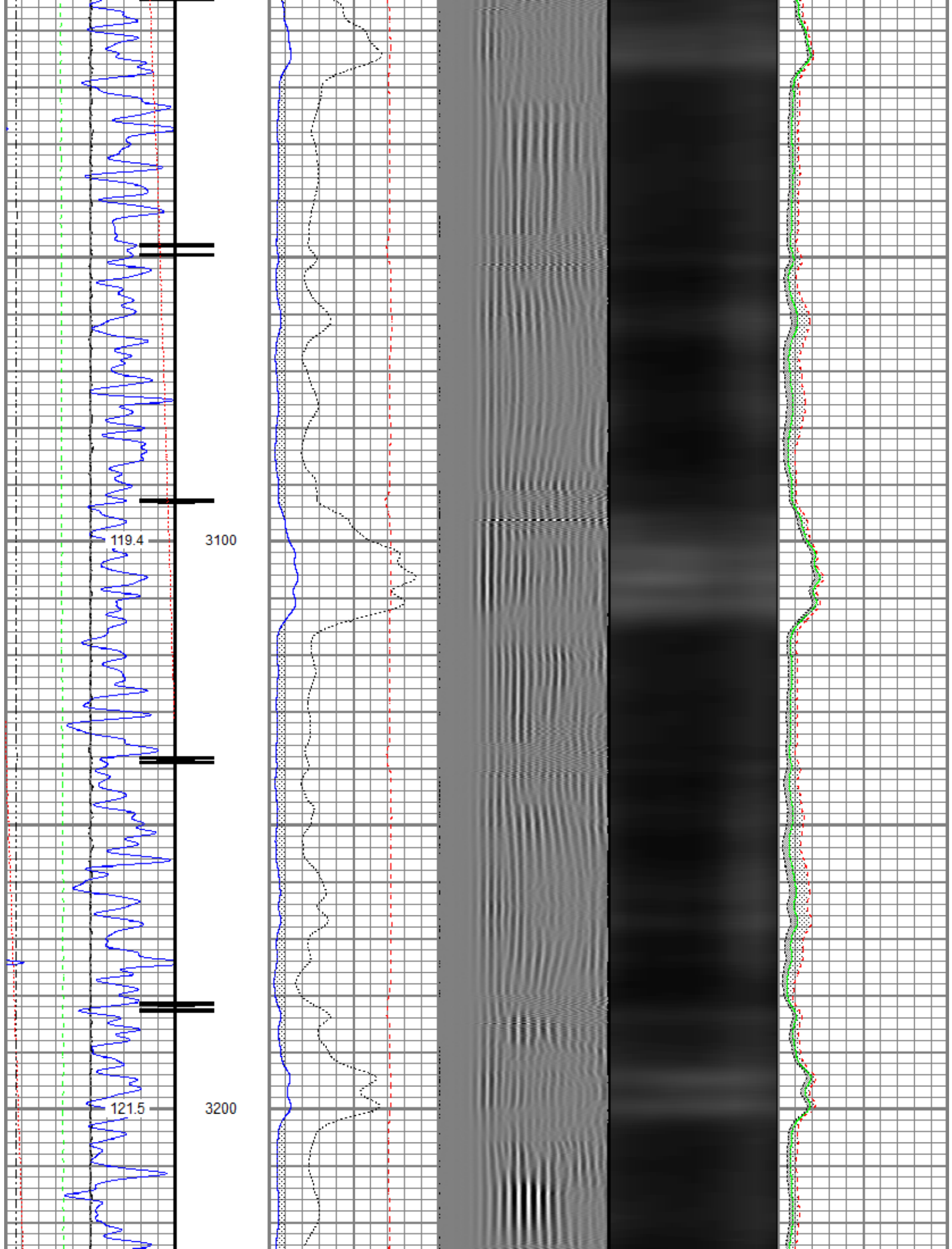




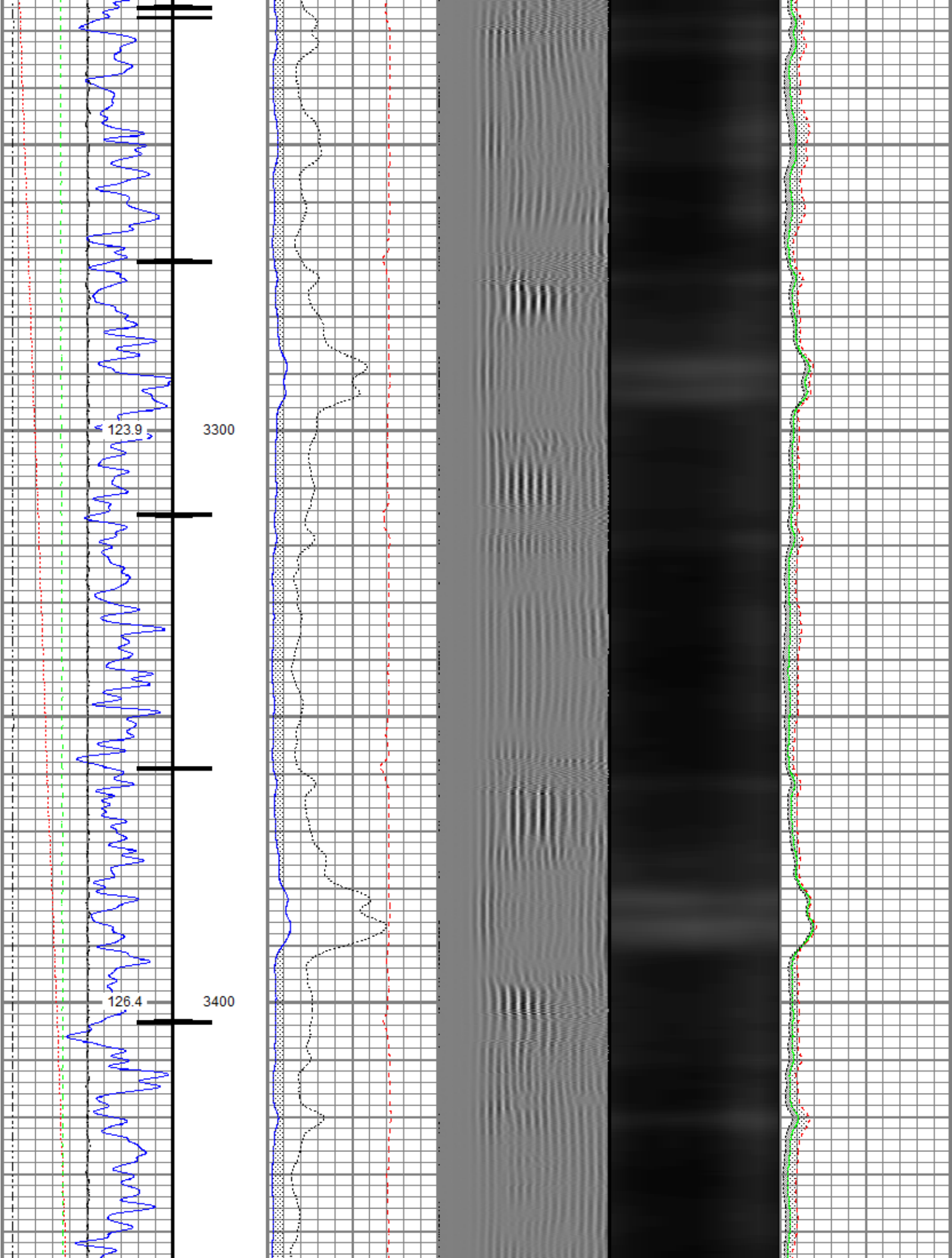


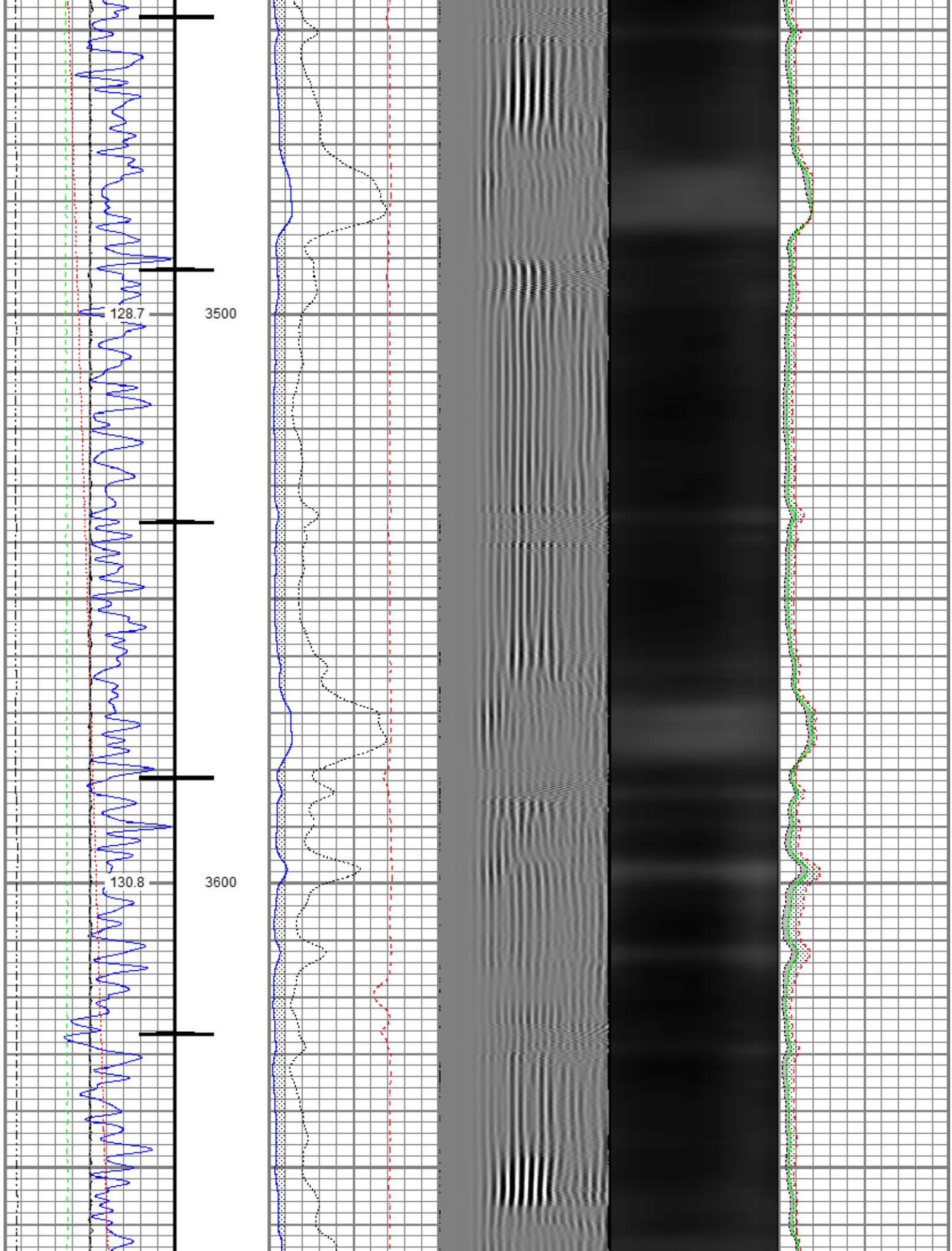


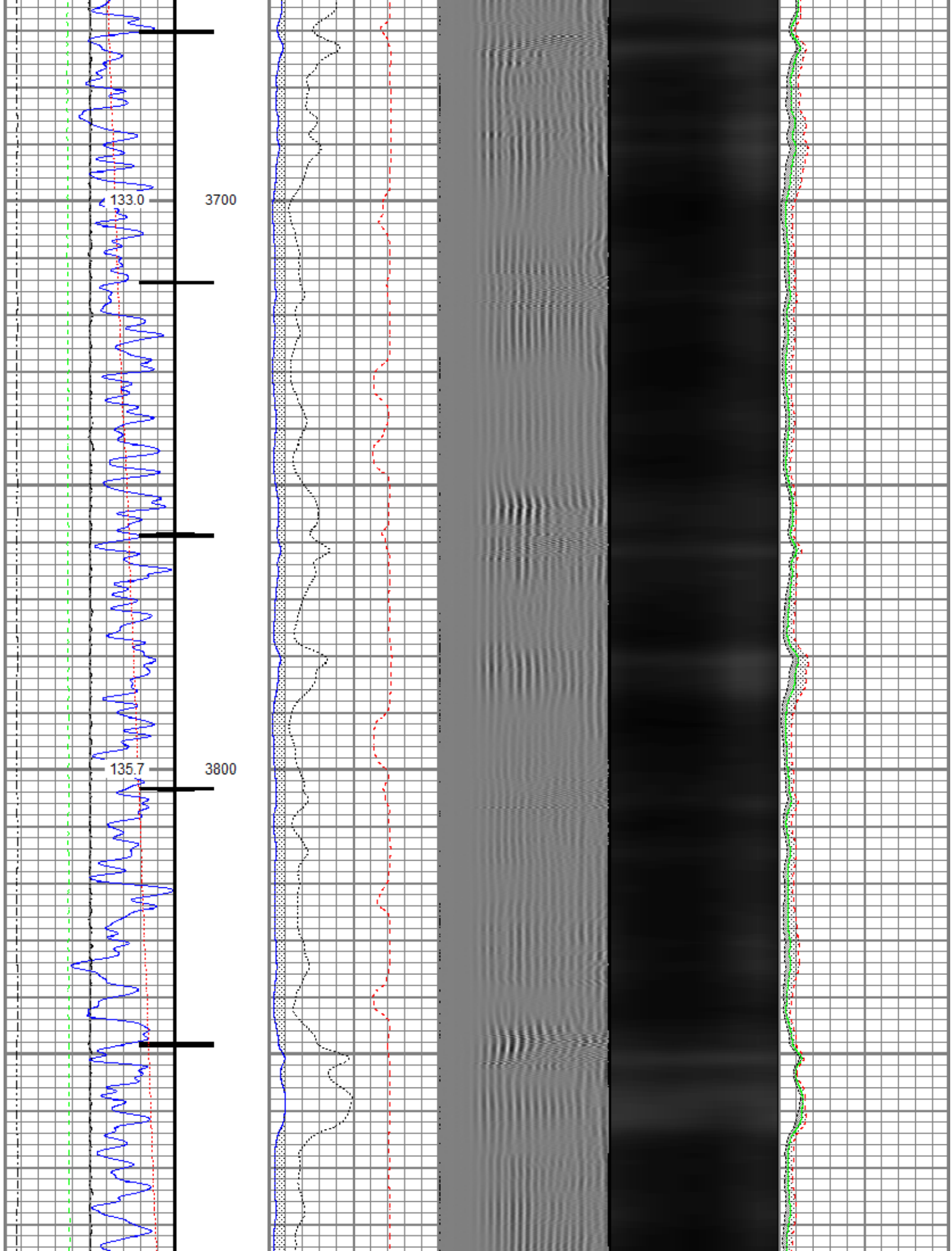


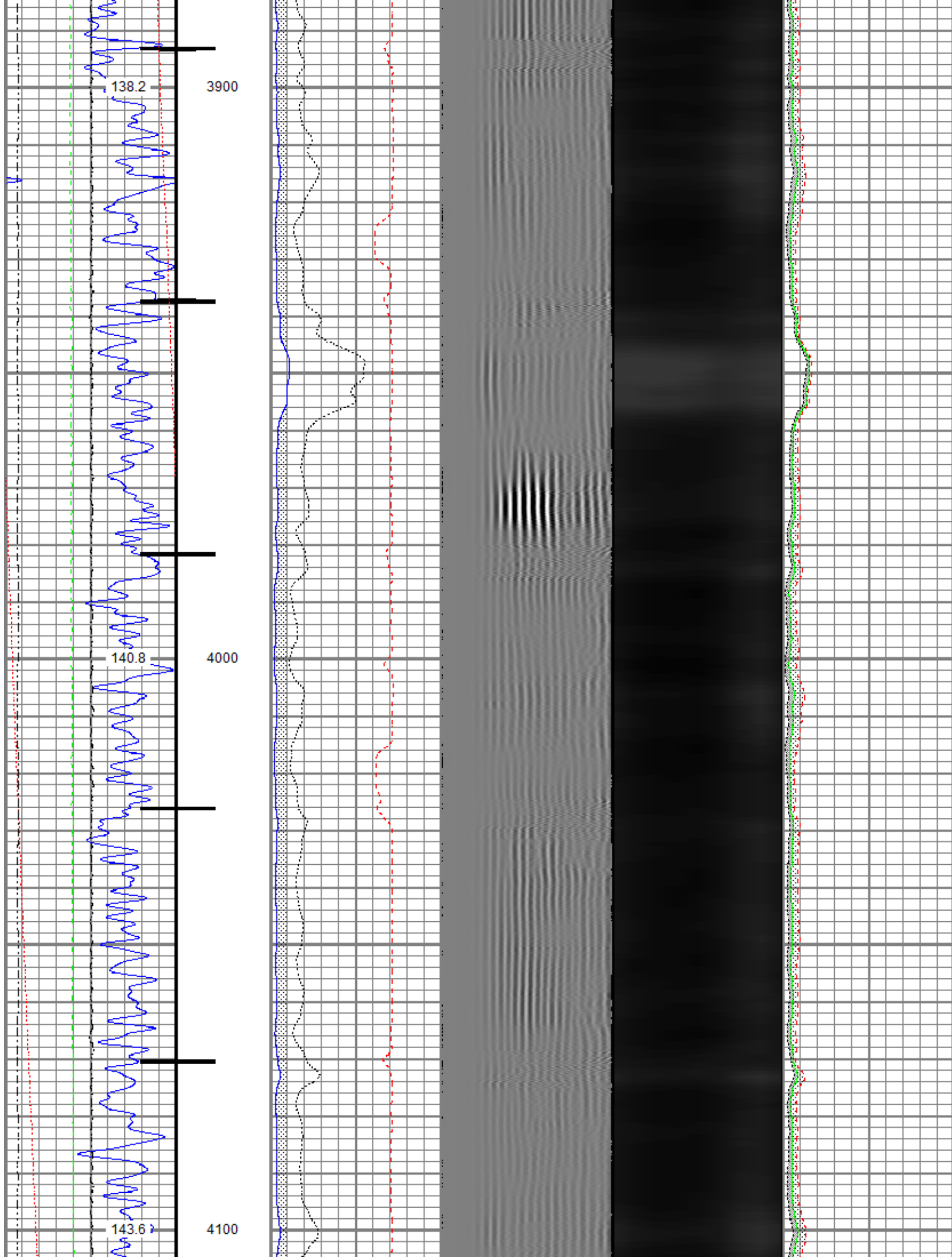




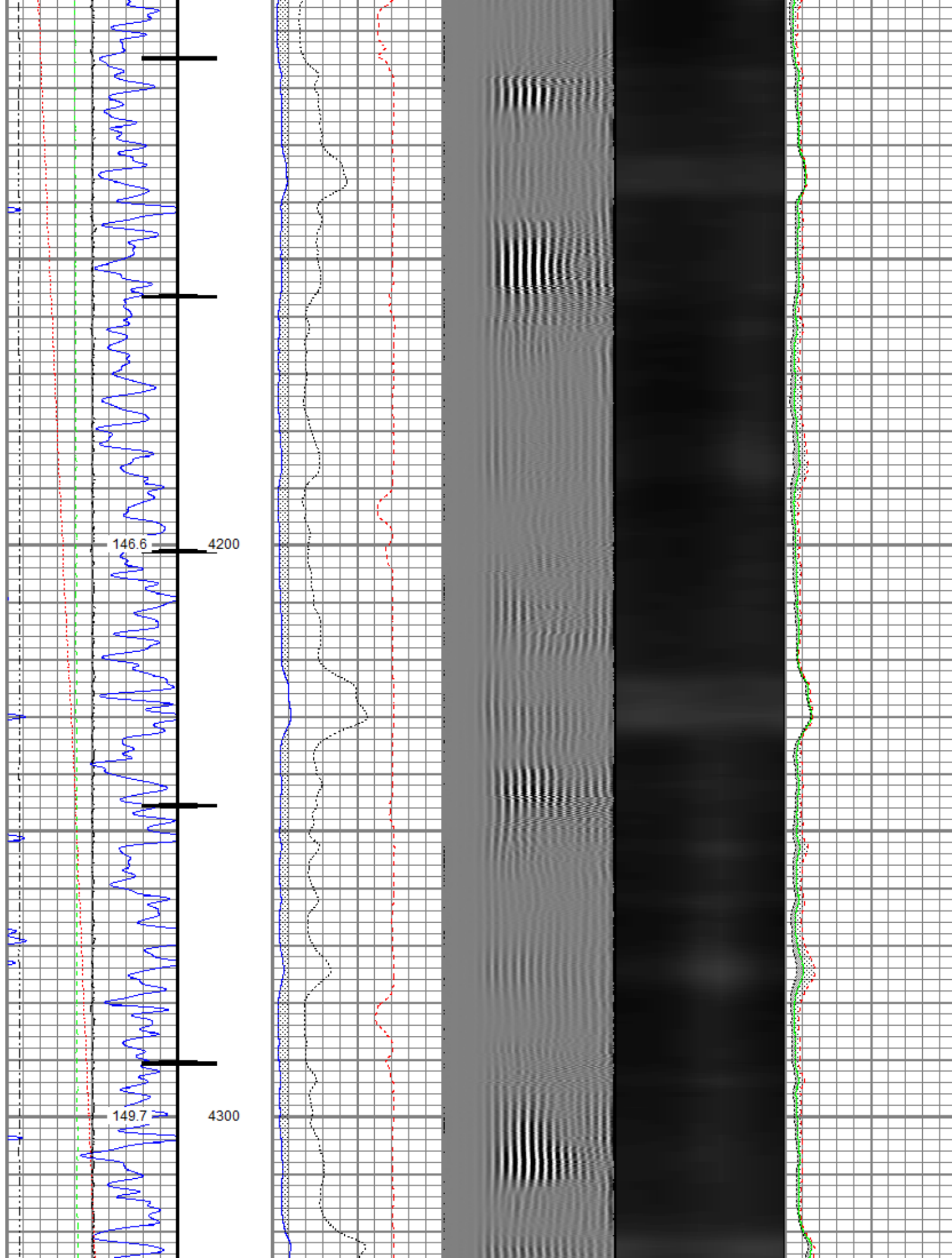


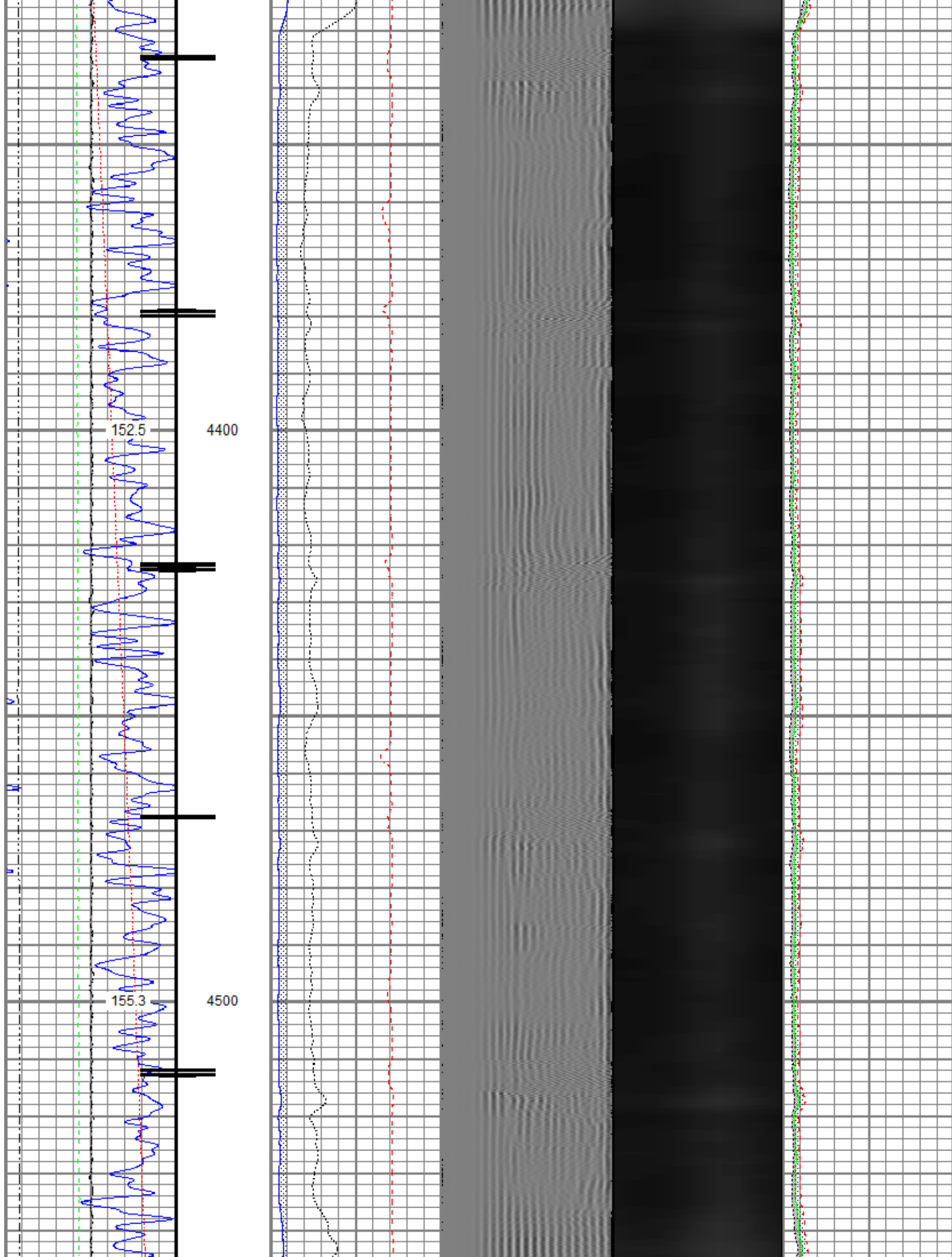


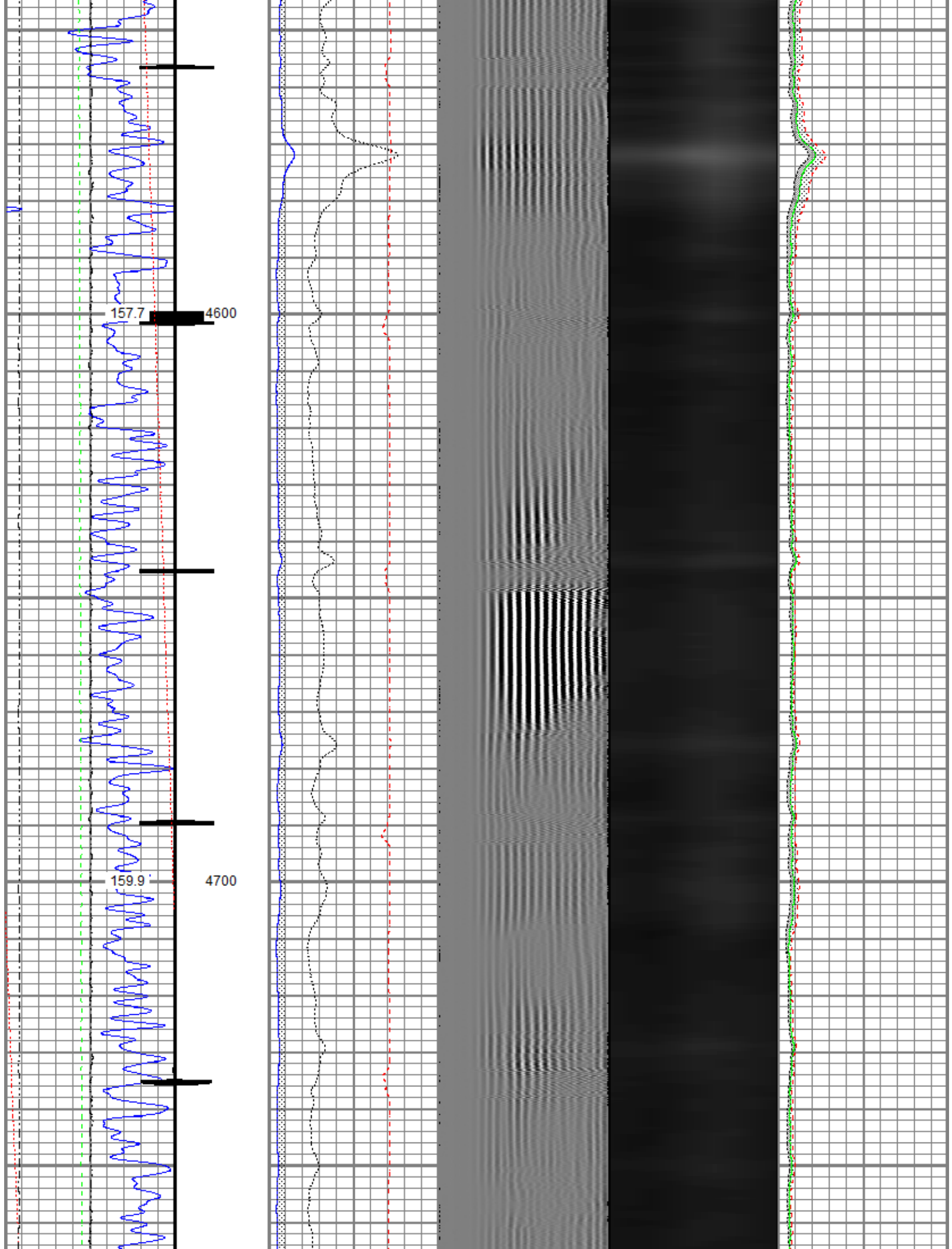


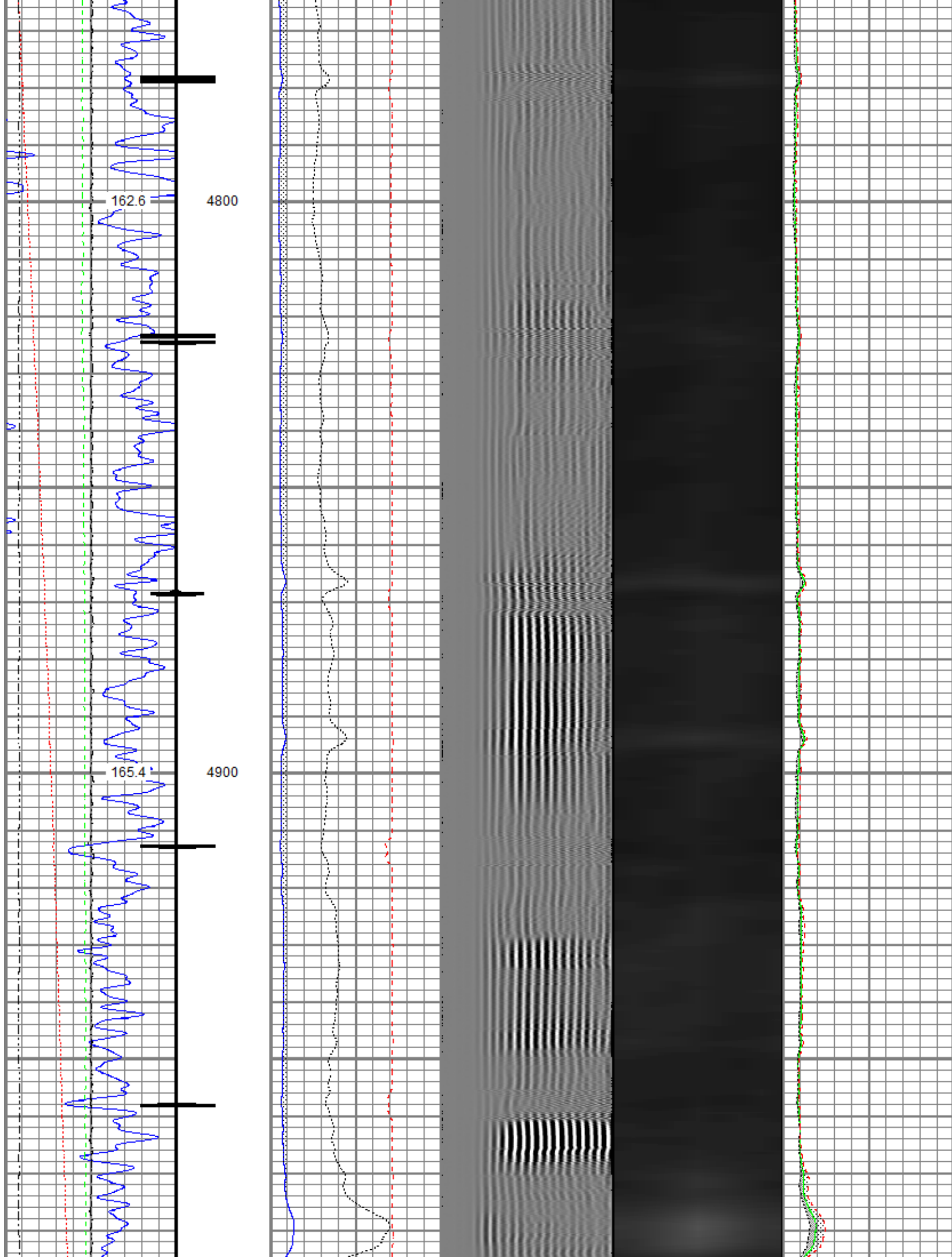




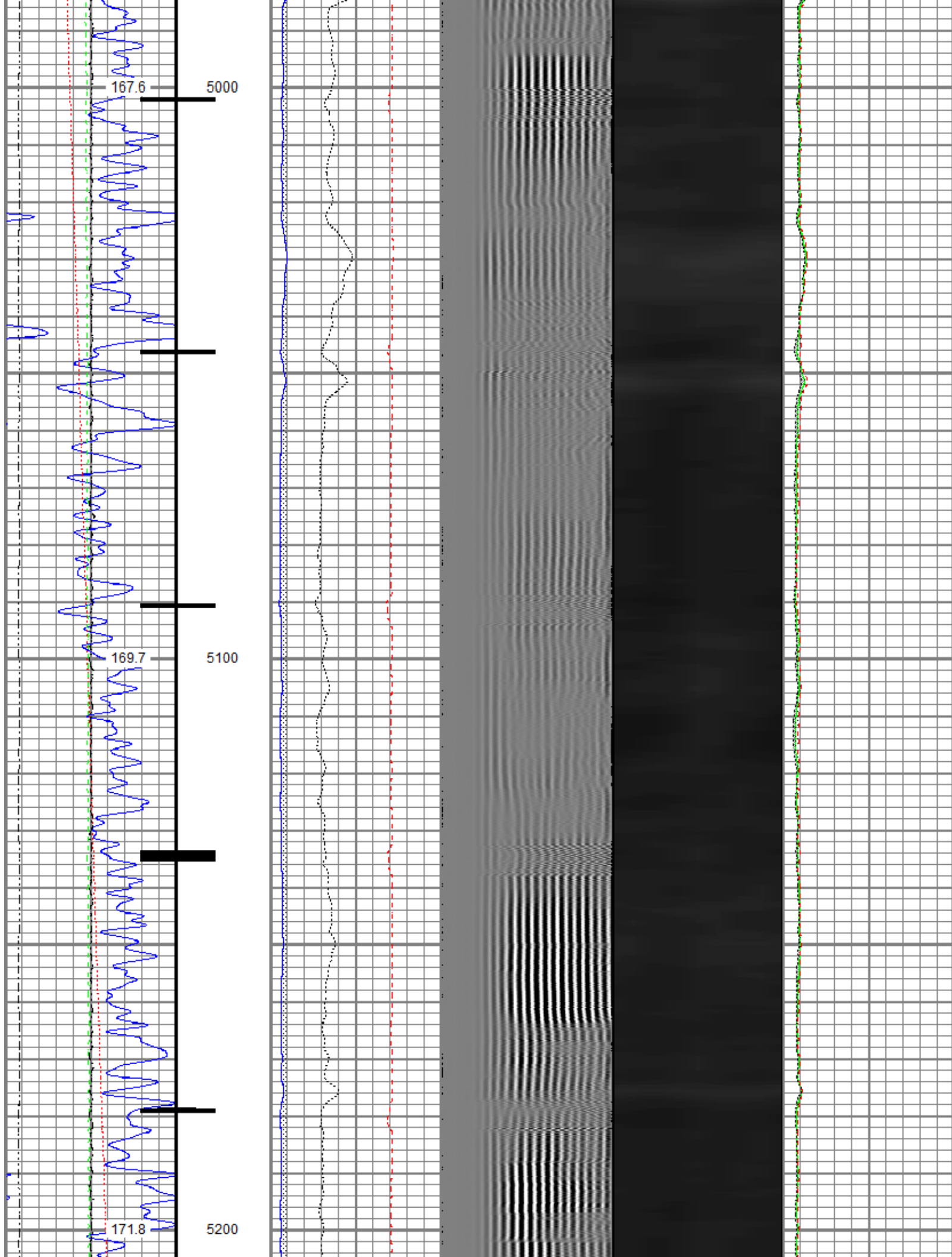


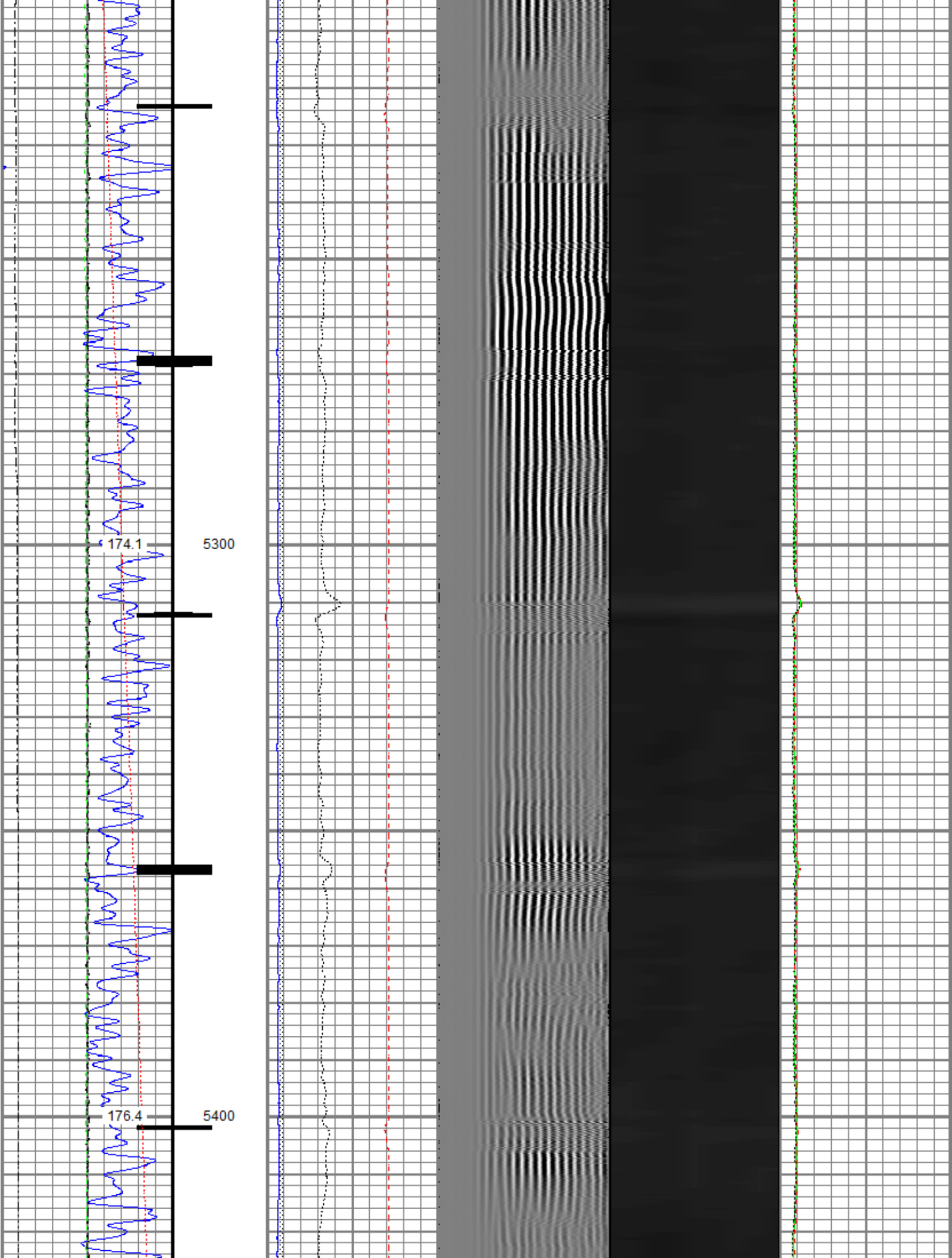


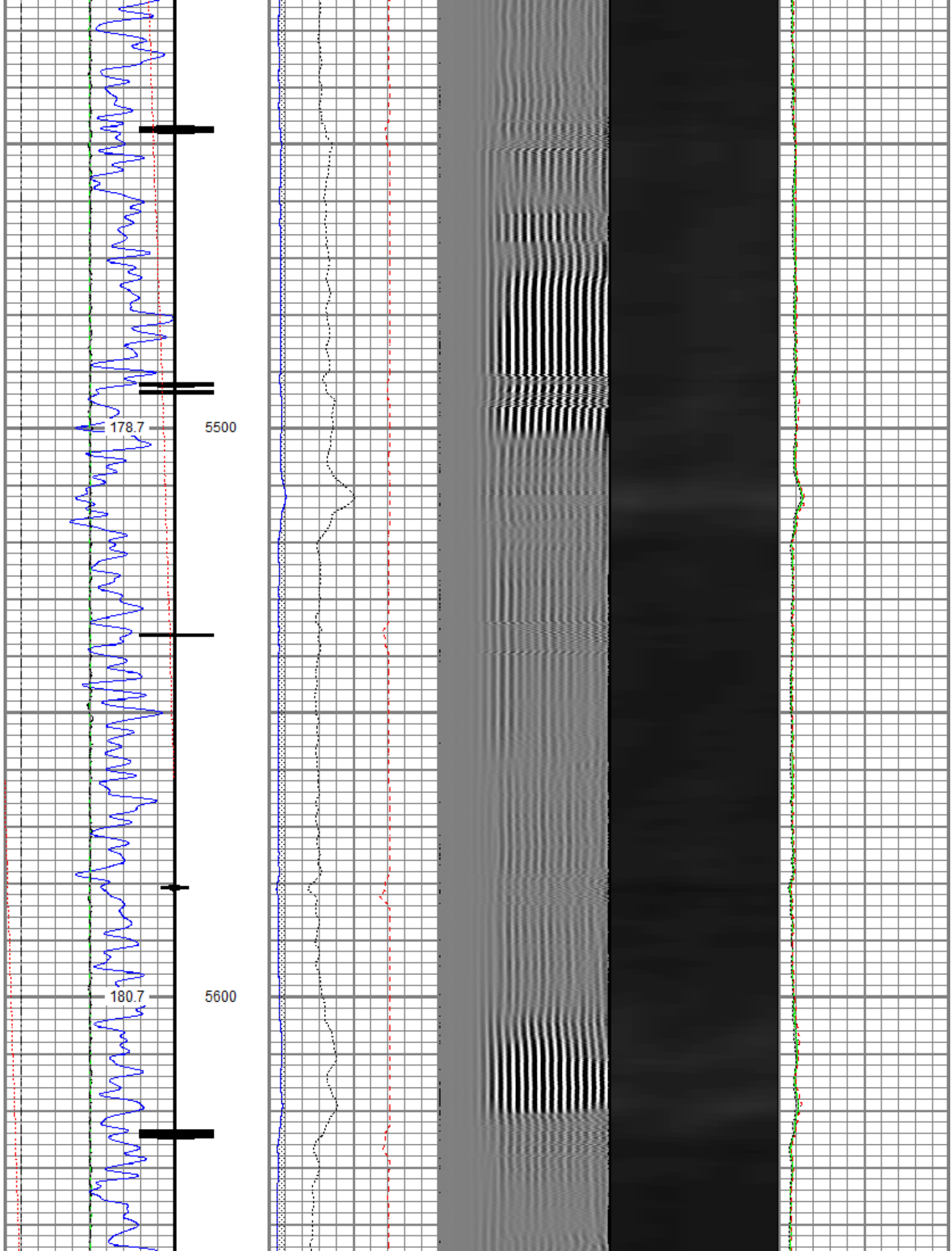




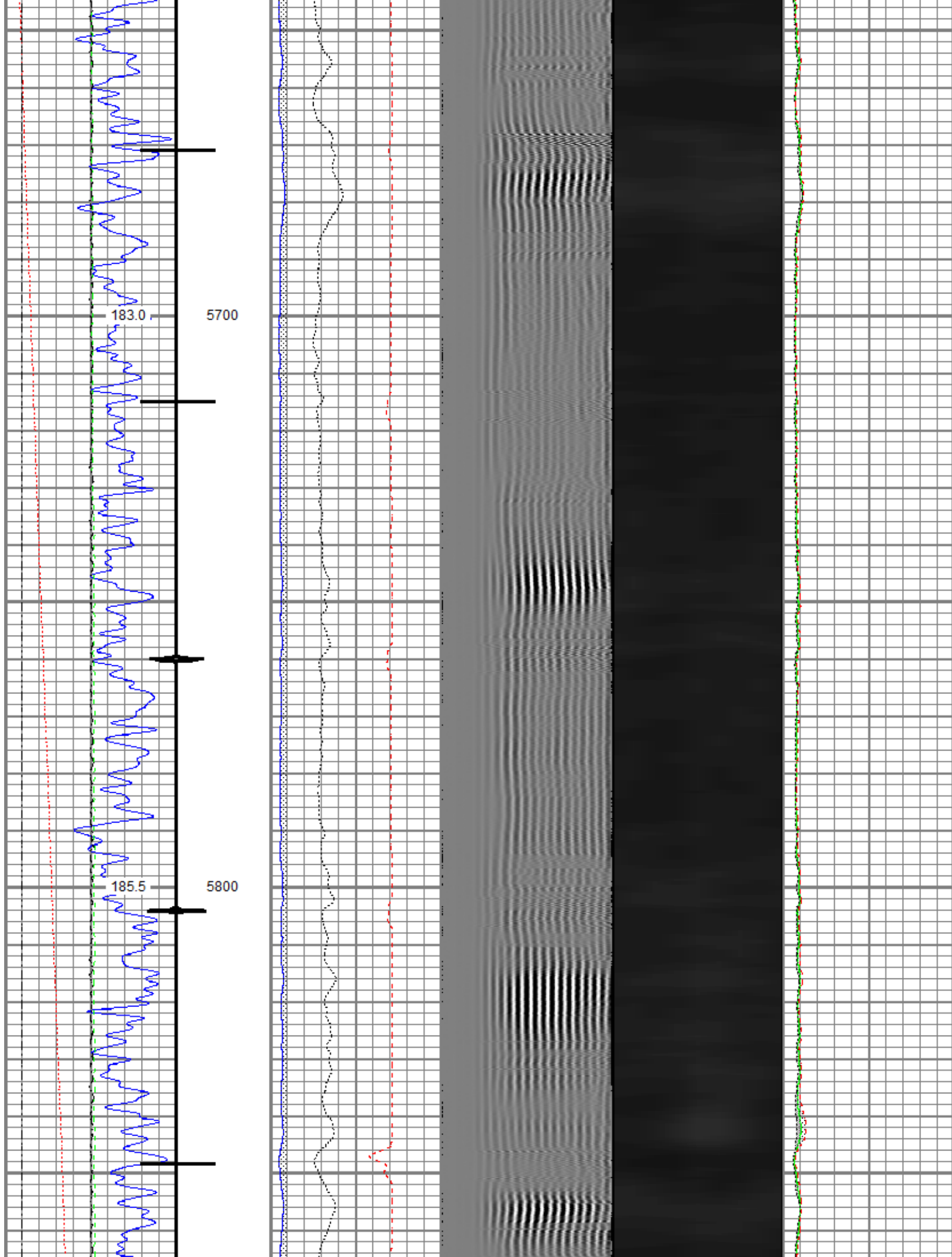


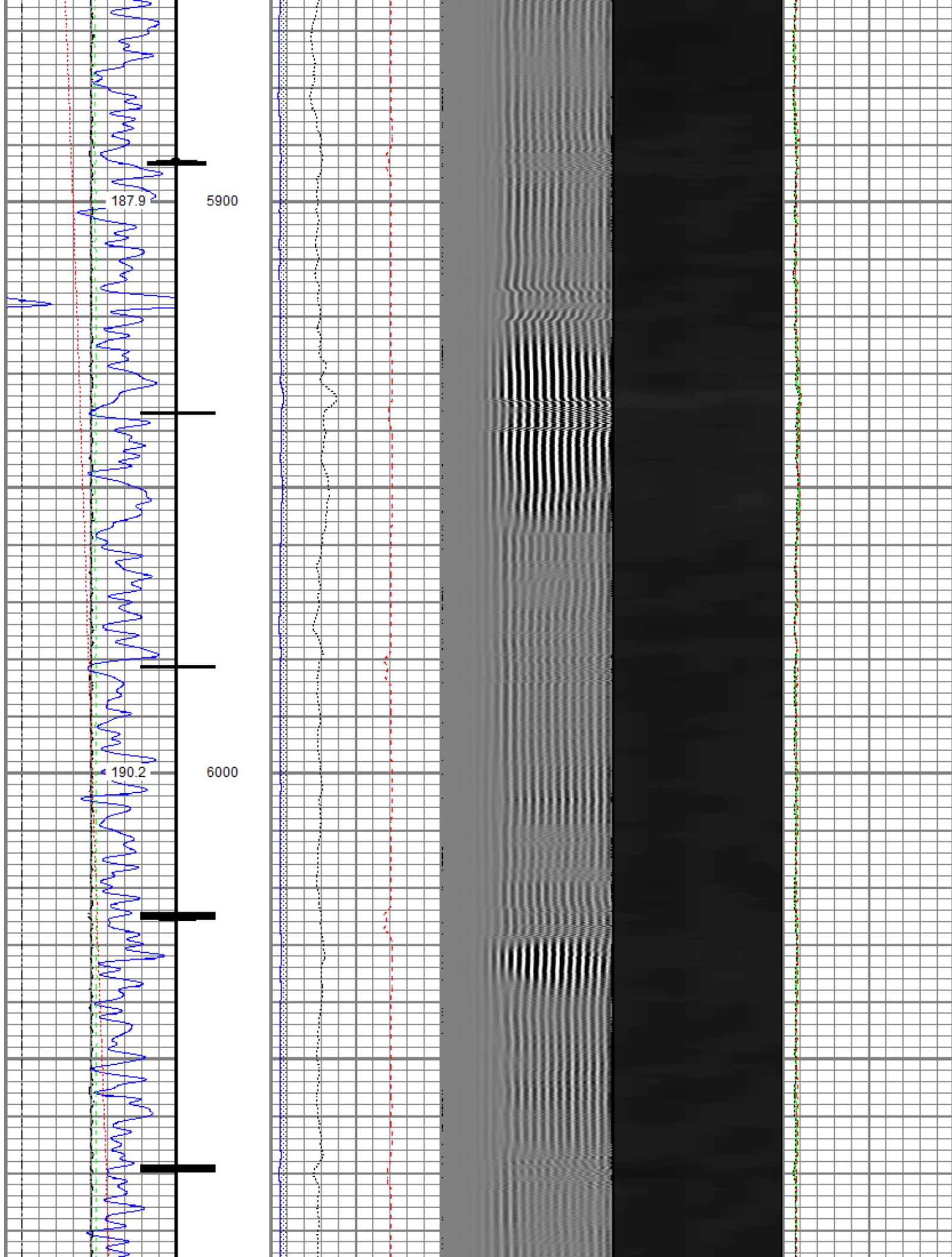


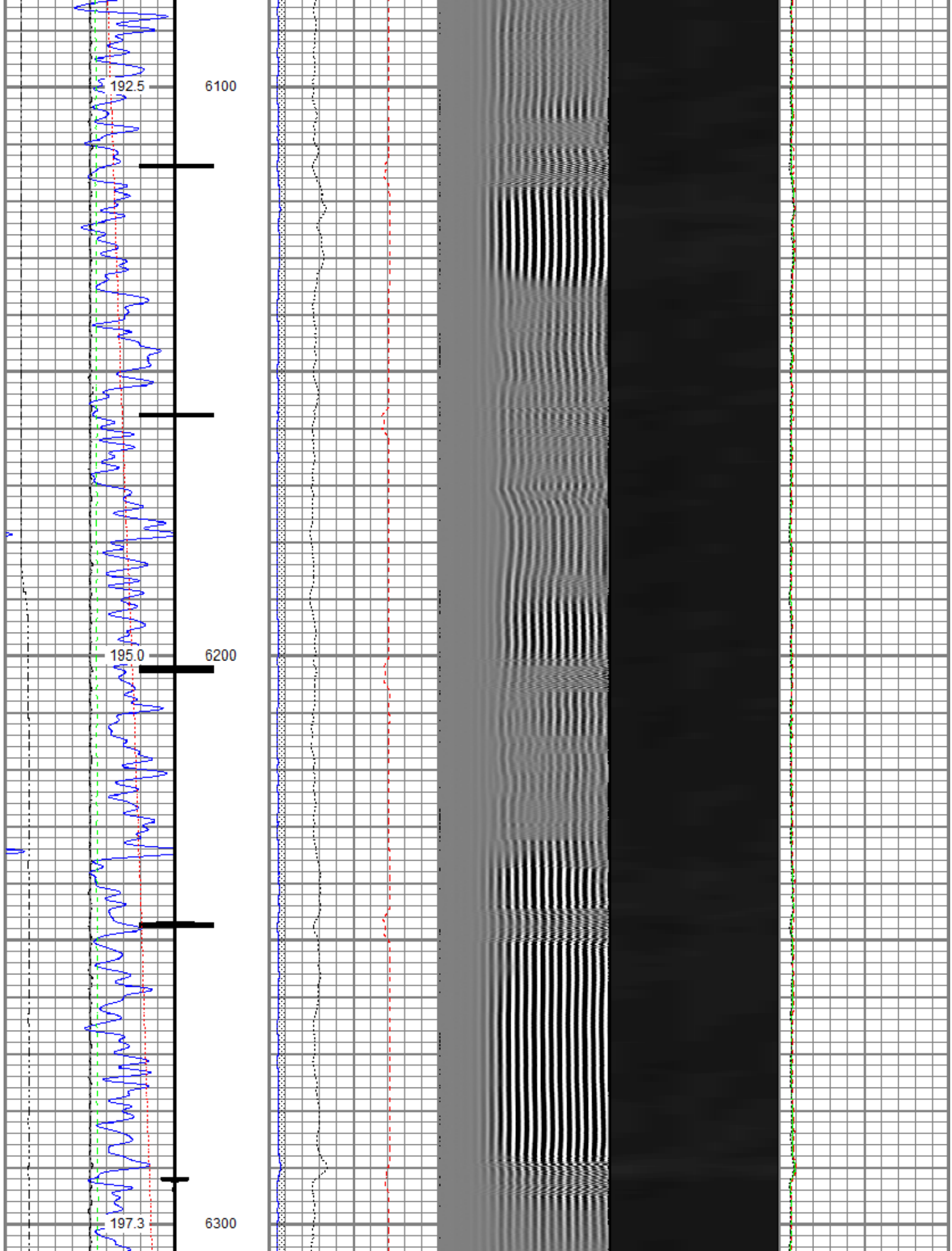




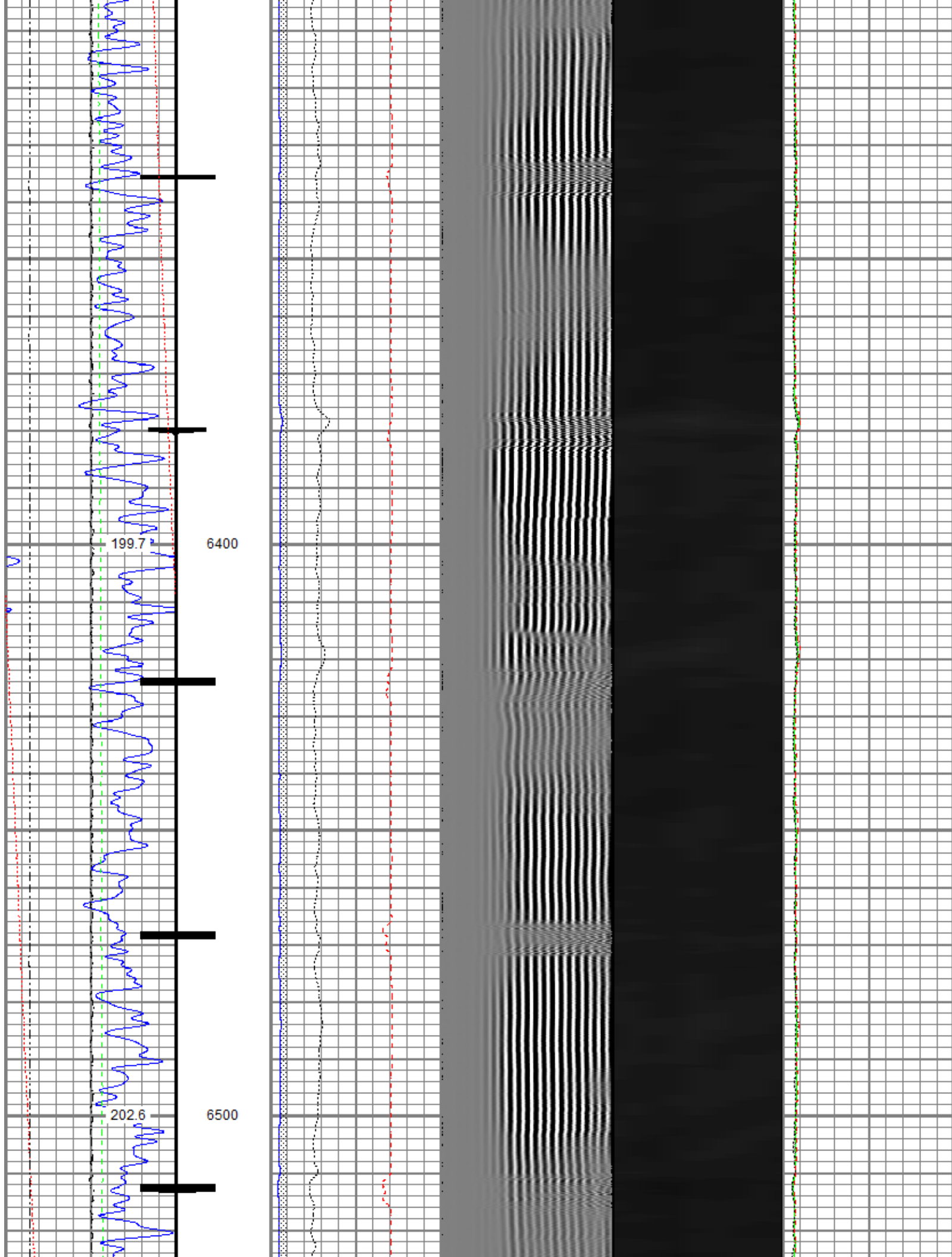


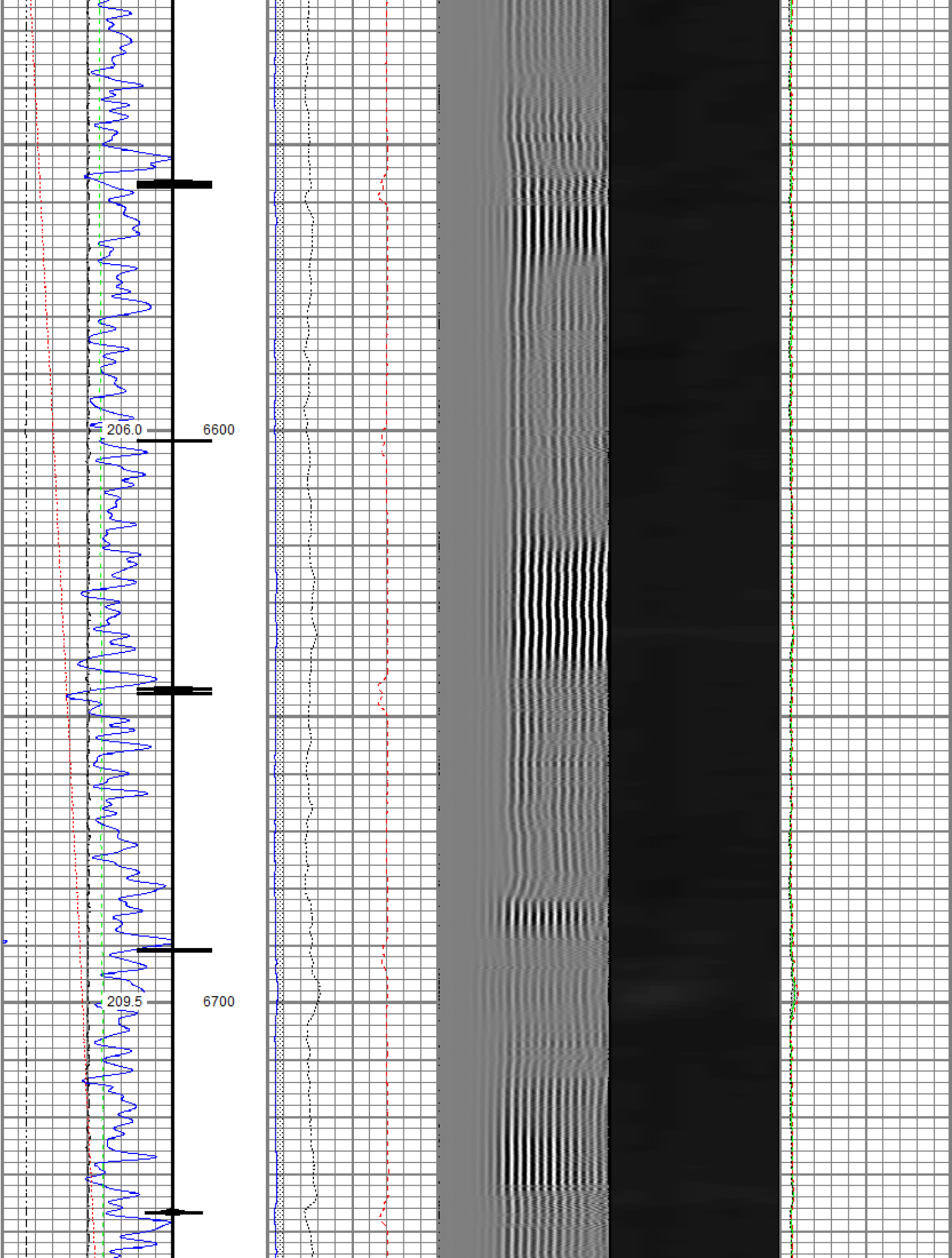


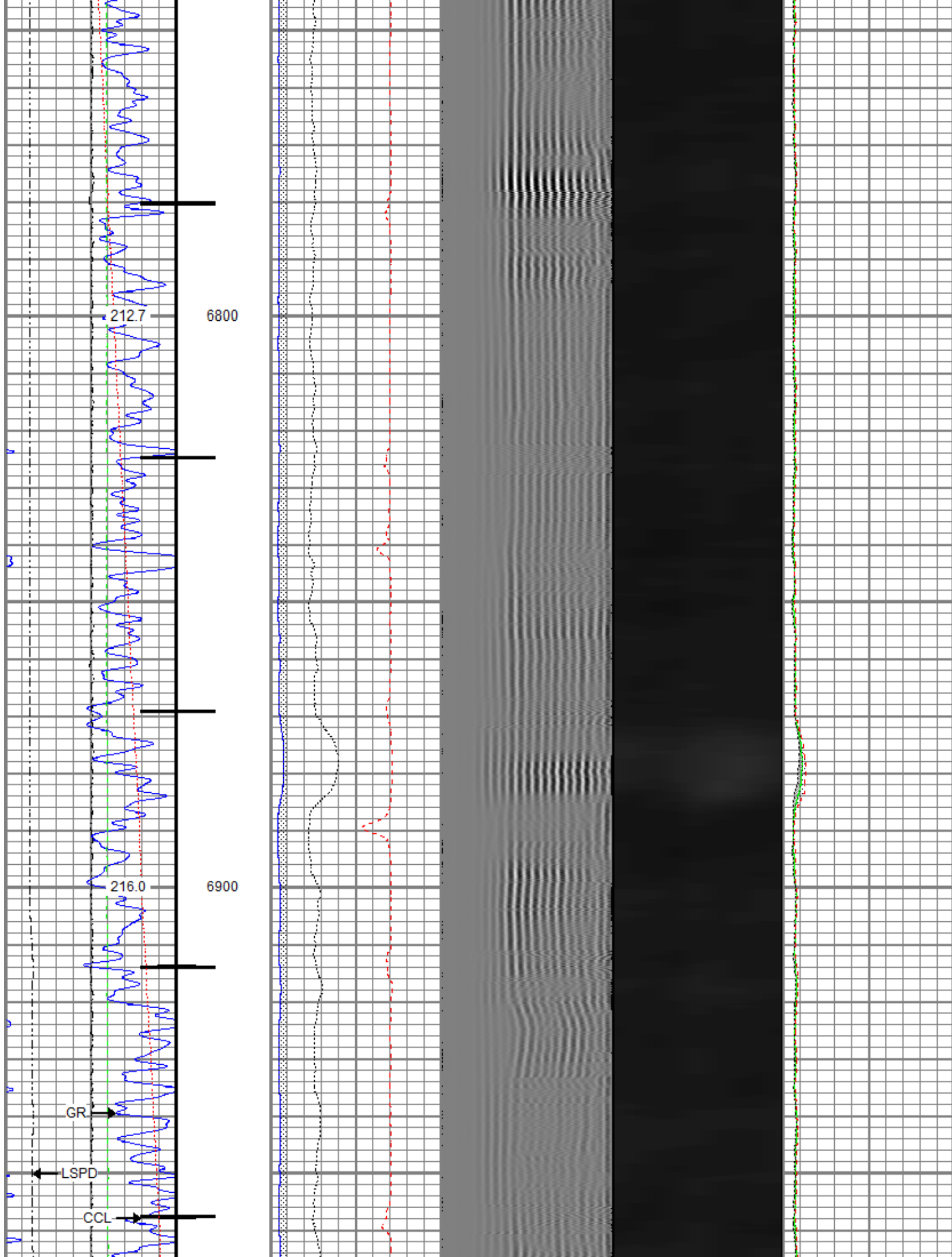




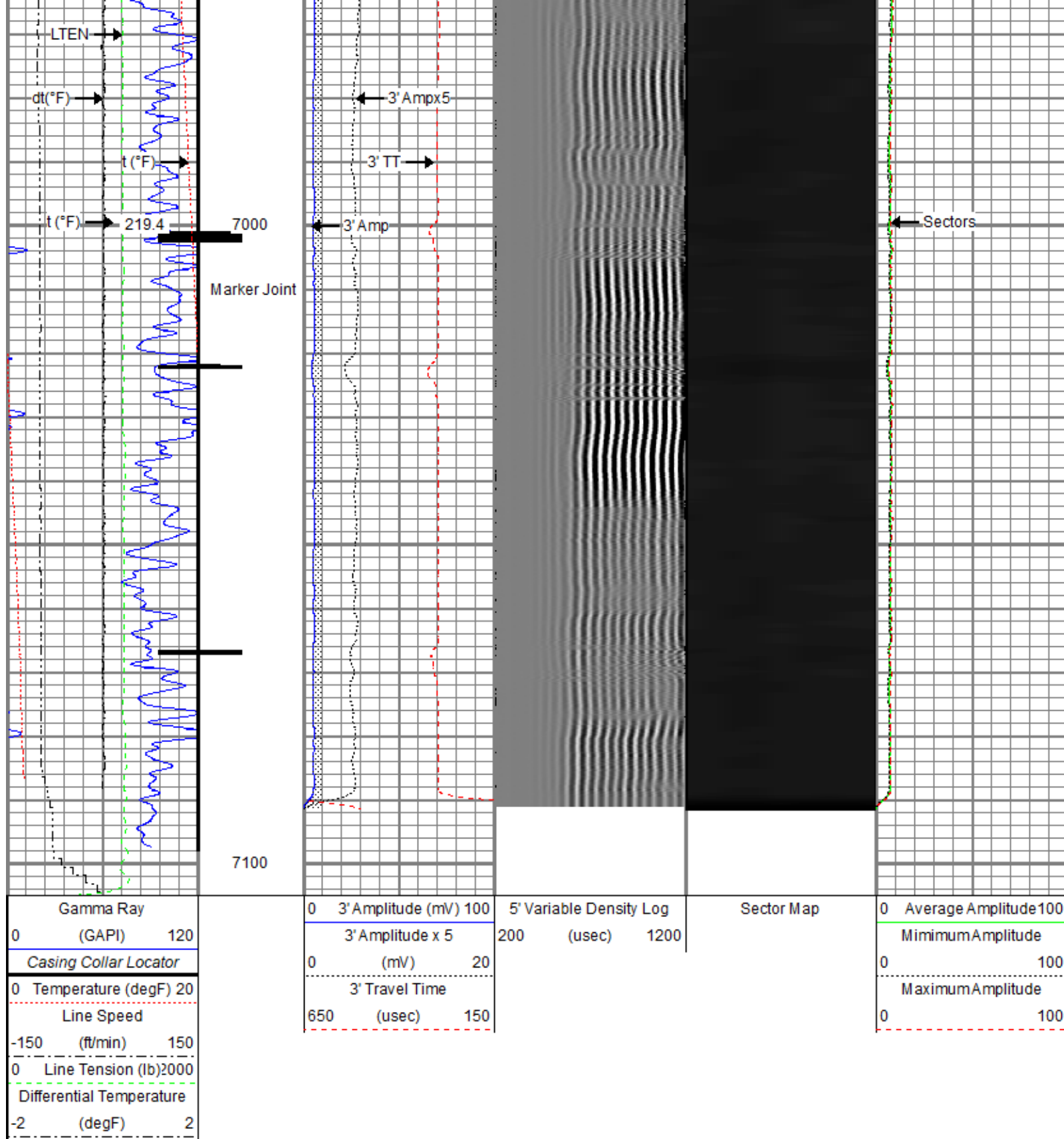










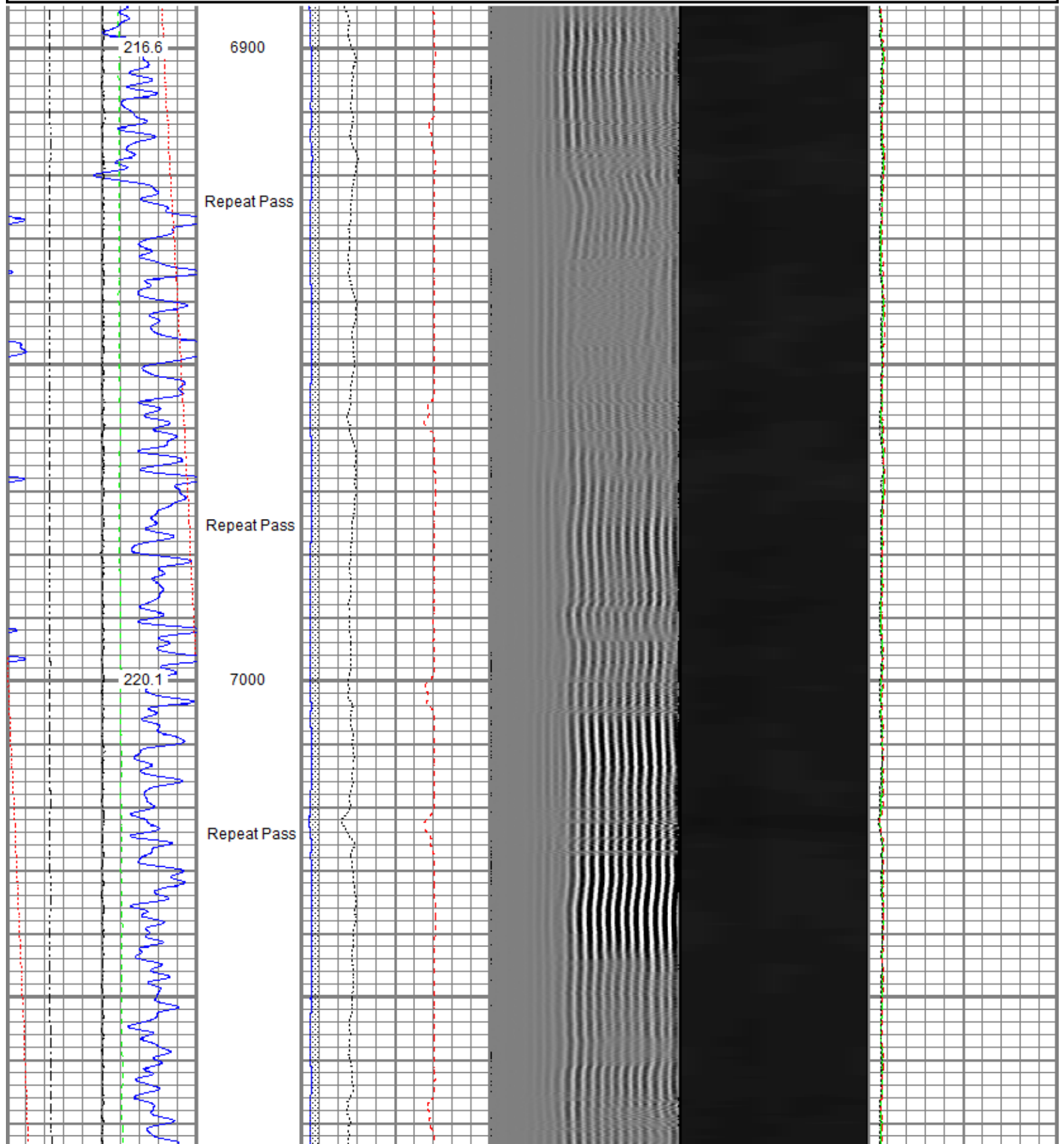


Repeat Pass

Recorded With 0 PSI Surface Induced Pressure

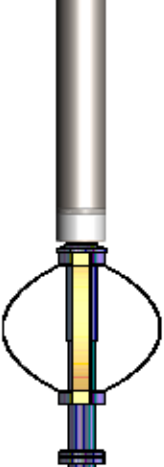
Database File 0512350629\_oxy\_windsock 21-7hz\_rbl\_03-15-20\0512350629\_oxy\_windsock 21-7hz\_rbl\_03-15-20.db  
 Dataset Pathname pass2.1  
 Presentation Format ros\_radii  
 Dataset Creation Tue Mar 17 12:22:44 2020  
 Created By 0512350629\_oxy\_windsock 21-7hz\_rbl\_03-15-20

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







GR	5.46		Probe GR-CCL-2750 6PB (101001) Probe 2-3/4" rev.1 Digital Scintillation Gamma Ray/CCL Combined with 6 Pin Bottom for CNT	4.80	2.75	55.00
LOCTIM UTCTIM	0.00 0.00		Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
Dataset: 0512350629_Oxy_Windsock 21-7HZ_RBL_03-15-20.db: field/well/run1/pass4.1 Total length: 23.86 ft Total weight: 223.60 lb O.D.: 2.75 in						

Segmented Cement Bond Log Calibration Report			
Serial Number:	120855		
Tool Model:	2750 RBT		
Calibration Casing Diameter:	5.500	in	
Calibration Depth:	12.980	ft	

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.003	0.401	1.000	0.000

Air Zero Calibration, performed Sun Mar 15 10:54:24 2020:

	Raw (v)		Calibrated (v)		Results
	Zero		Zero		Offset
3'	0.004		0.000		-0.000
5'	0.004		0.000		-0.000
SUM					
S1	0.004		0.000		-0.000
S2	0.004		0.000		0.000
S3	0.004		0.000		-0.000
S4	0.003		0.000		0.000
S5	0.004		0.000		0.000
S6	0.004		0.000		0.000
S7	0.004		0.000		0.000
S8	0.004		0.000		0.000

#### Temperature Calibration Report

Serial Number: 120855  
 Tool Model: 2750 RBT  
 Performed: Wed Dec 18 13:34:18 2019

	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** Windsock 21-7HZ  
**Field** Wattenberg  
**County** Weld  
**State** Colorado