



Radial Cement Bond  
Gamma Ray  
Casing Collar Log

Company Noble Energy Inc  
Well Reveille A34-714  
Field Wattenberg  
County Weld State Colorado

Location: API #: 05-123-50800  
SEC 35 TWP 6N RGE 64W  
Permanent Datum Ground Level Elevation 4649'  
Log Measured From Kelly Bushing 30 FT  
Drilling Measured From Kelly Bushing  
Other Services ---  
Elevation  
K.B. 4679'  
D.F. ---  
G.L. 4649'

Company Noble Energy Inc  
Well Reveille A34-714  
Field Wattenberg  
County Weld  
State Colorado

Date	06-FEB-2021									
Run Number	One									
Depth Driller	17015 FT									
Depth Logger	7061 FT									
Bottom Logged Interval	7046 FT									
Top Log Interval	Surface									
Open Hole Size	8.5"									
Type Fluid	Water									
Density / Viscosity	8.34 lb/gal									
Max. Recorded Temp.	239°F									
E. Estimated Cement Top	See Log									
Time Well Ready	ROA									
Time Logger on Bottom	15:30									
Equipment Number	HD-0325									
Location	Platteville, CO									
Recorded By	Matt Steinman									
Witnessed By	Sheldon Kelly									
<div><div>Borehole Record</div><div>Tubing Record</div></div>										
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	1934.7 FT					
Intermediate #1	5 1/2	17	P-110CY	Surface	16998.1 FT					
Intermediate #2										
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

Log ran as per customer request  
Depth referenced to Casing Tally reported Marker Joint at 6042.6 FT  
Adjusted -15 FT to correlate with Marker Joint  
Log ran with 2200 PSI Surface Induced Pressure  
Logging tools were clean and free of debris upon completion of operations  
Thank you for choosing Reliance Oilfield Services, LLC!!

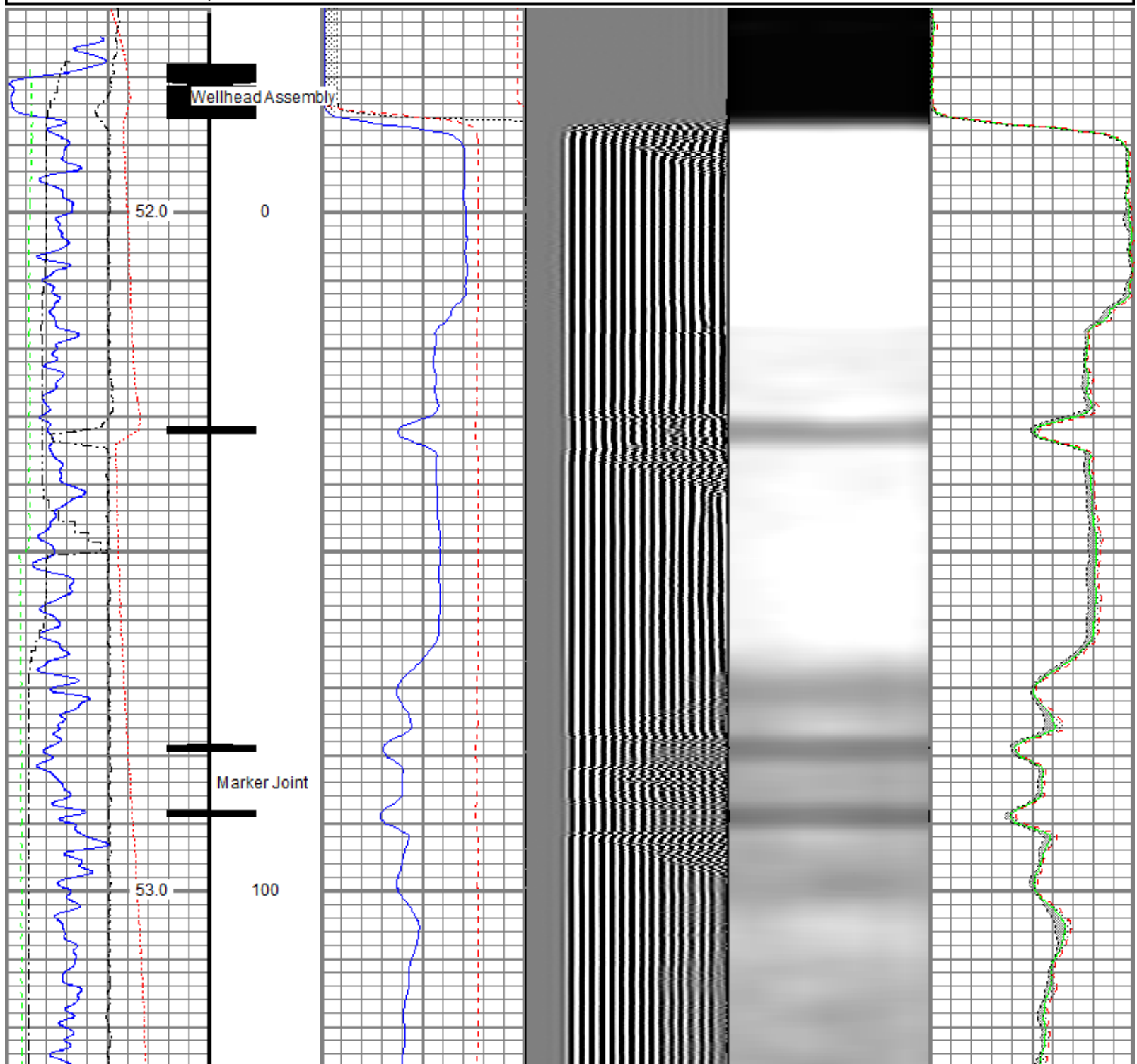
Main Pass

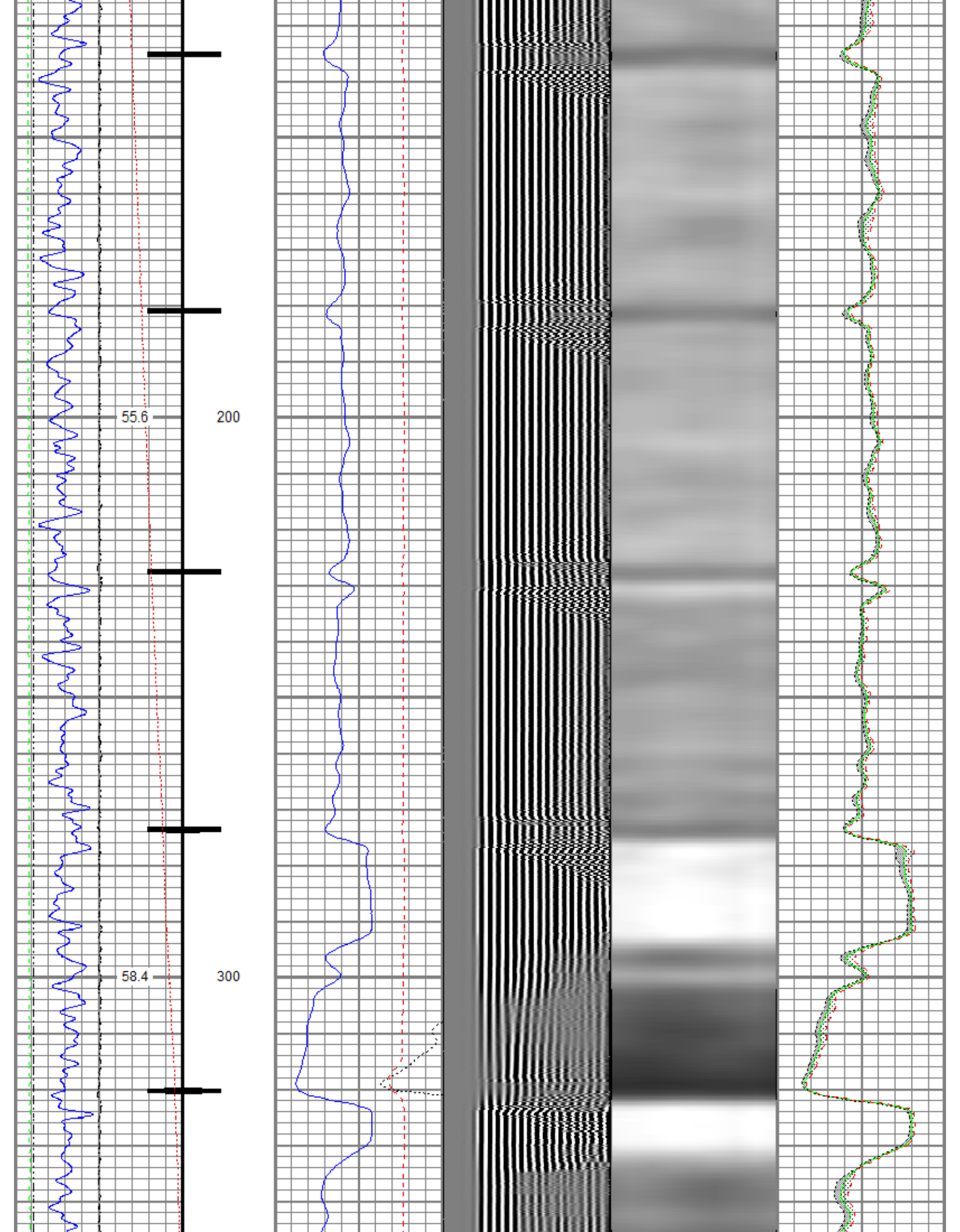


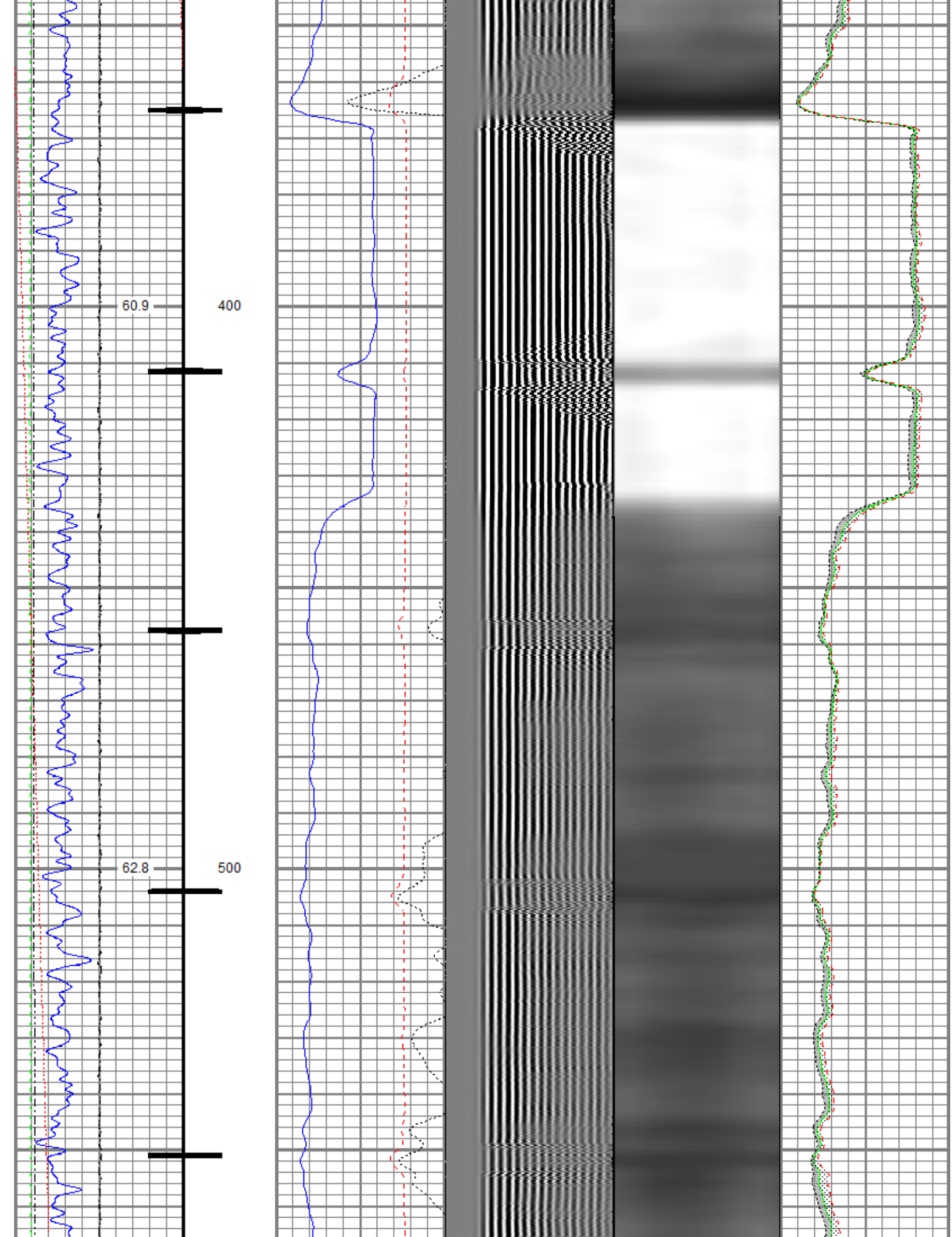
Recorded With 2200 PSI Surface Induced Pressure

Database File	noble\noble_reveille a34-714_rbl_02-06-21\noble_reveille a34-714_rbl_02-06-21.db
Dataset Pathname	main/pass1.1
Presentation Format	ros_radri_noble
Dataset Creation	Sat Feb 06 16:51:17 2021
Charted by	Depth in Feet scaled 1:240

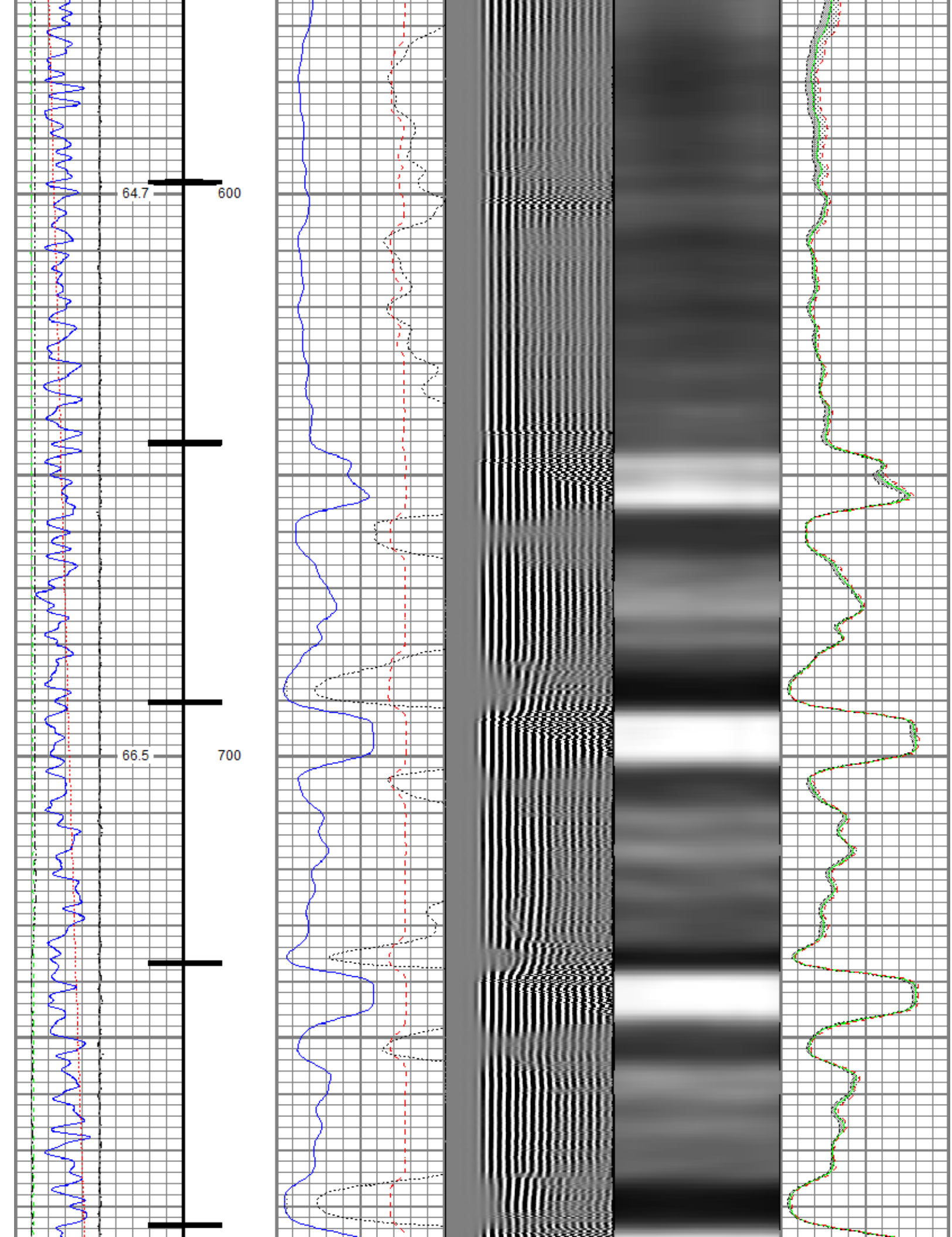
Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 100
(GAPI) 120		3' Amplitude x 5	200 (usec) 1200			Minimum Amplitude
Casing Collar Log	0	(mV) 20			0	100
Temperature (degF) 20		3' Travel Time				Maximum Amplitude
Line Speed	650	(usec) 150			0	100
(ft/min) 150	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

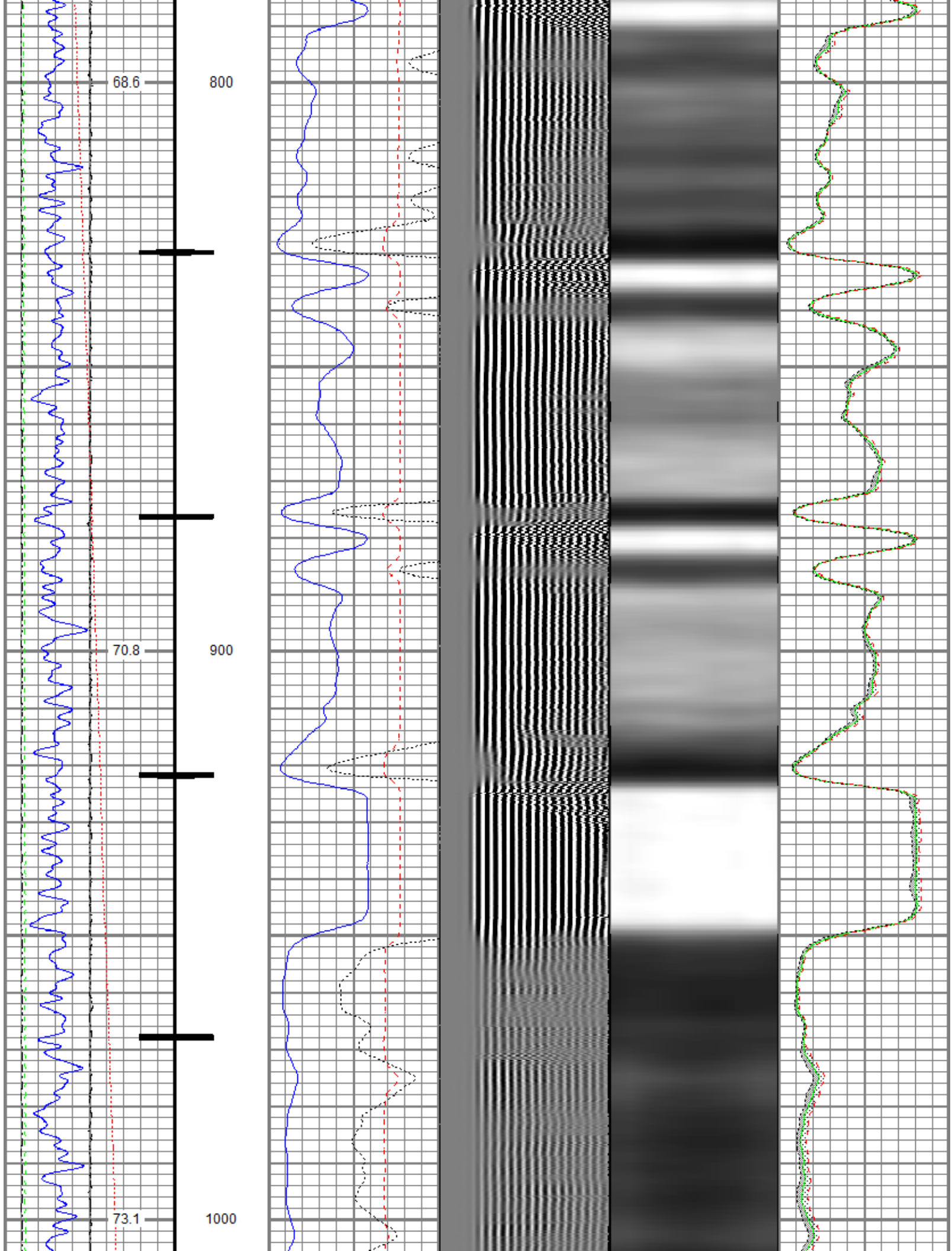


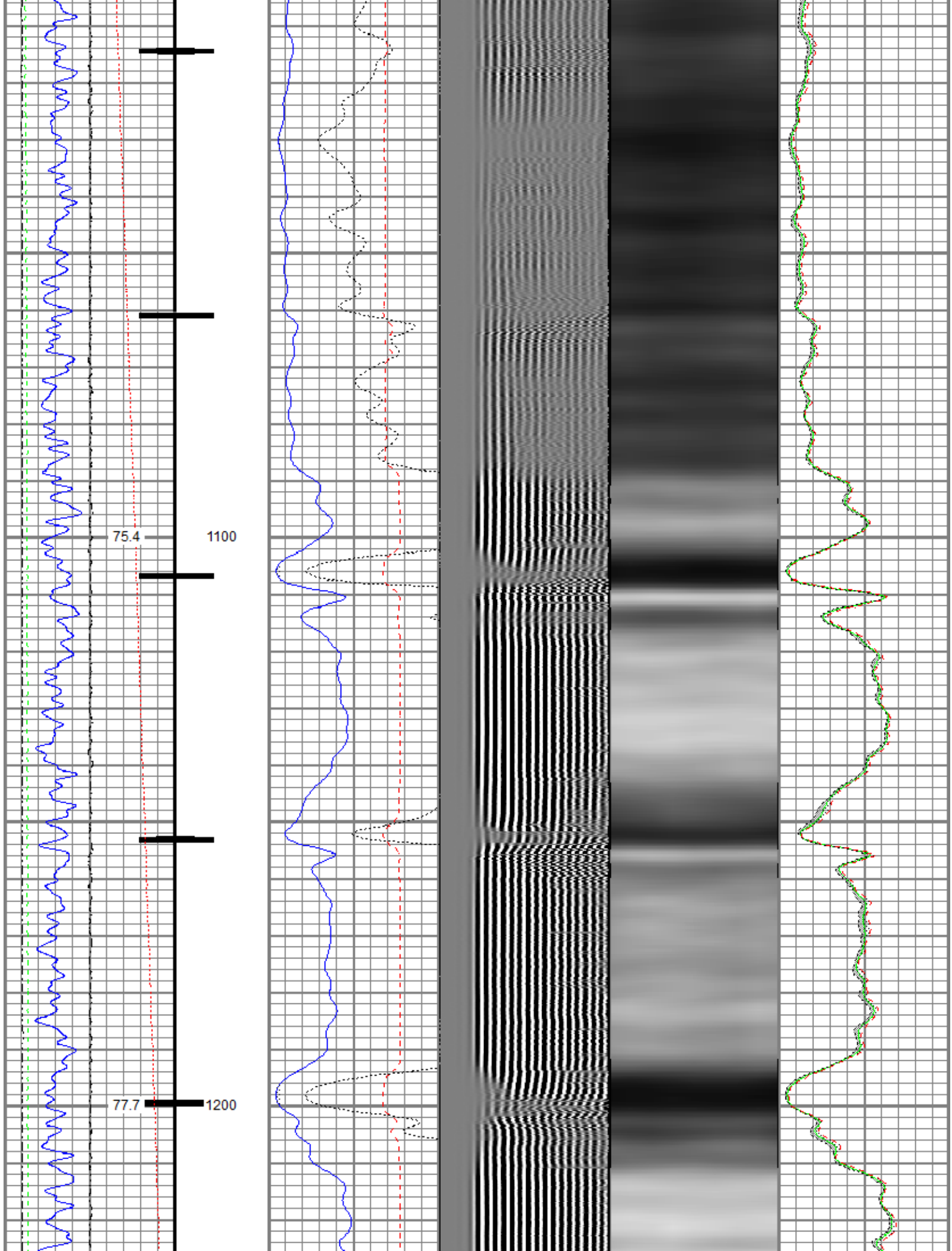




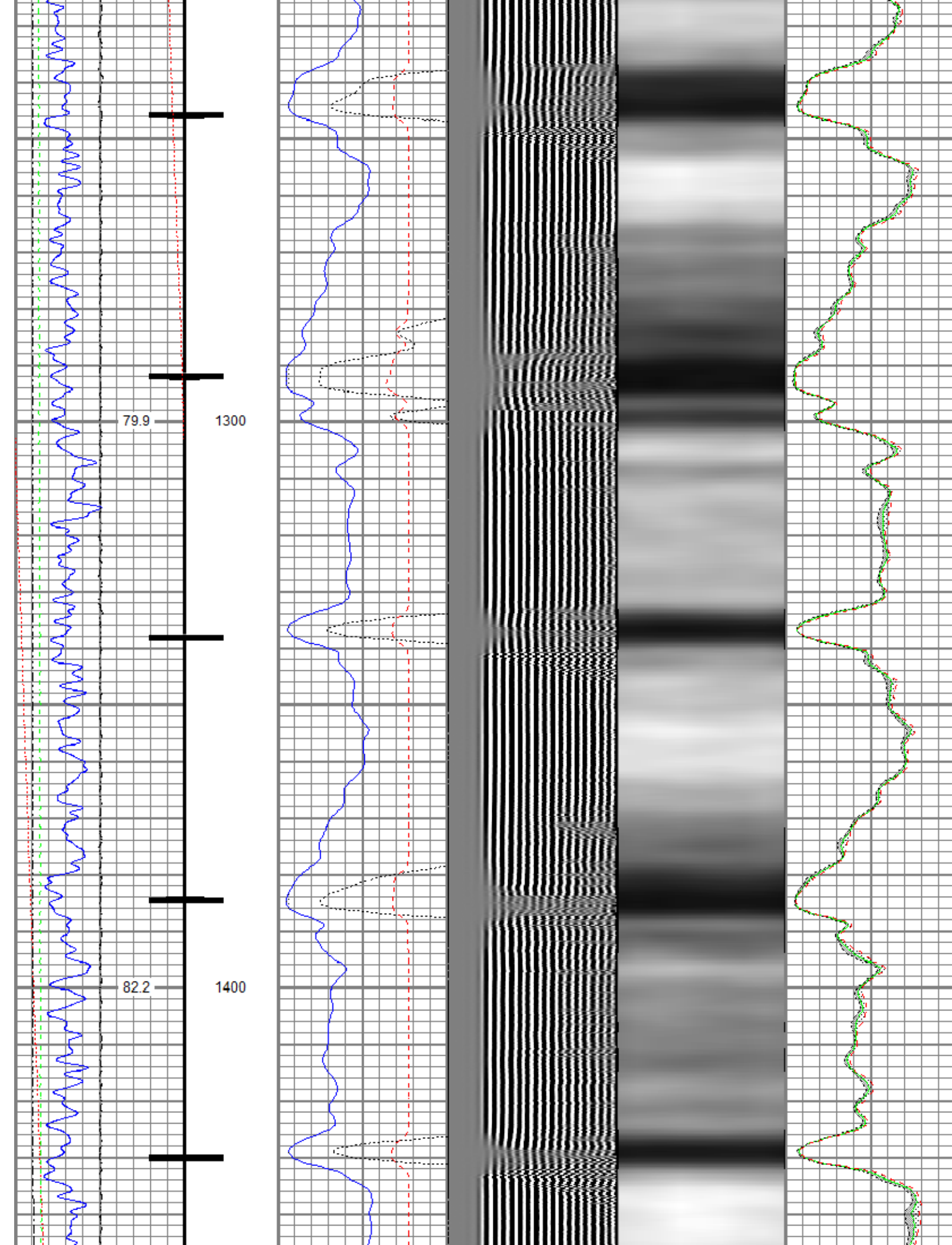




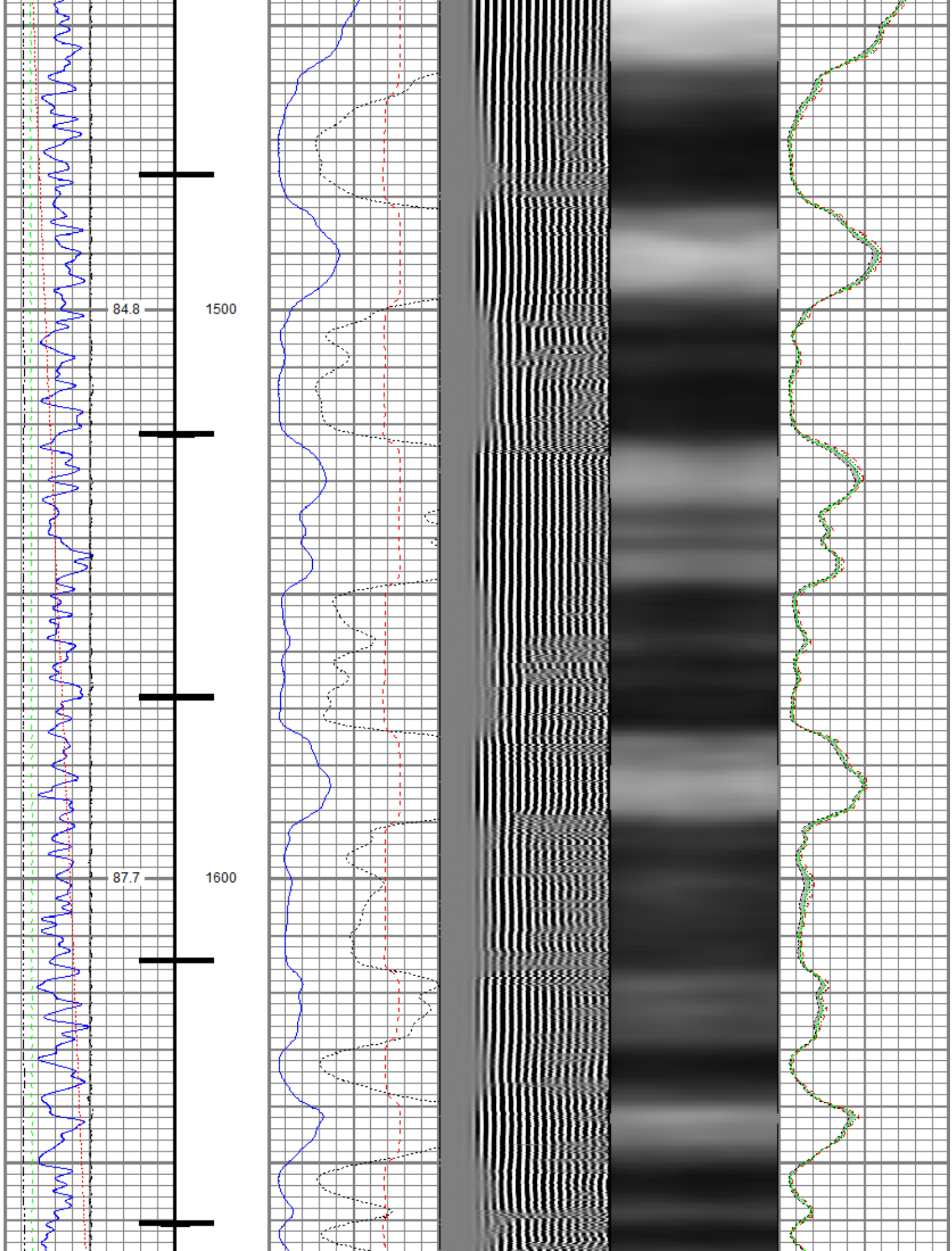


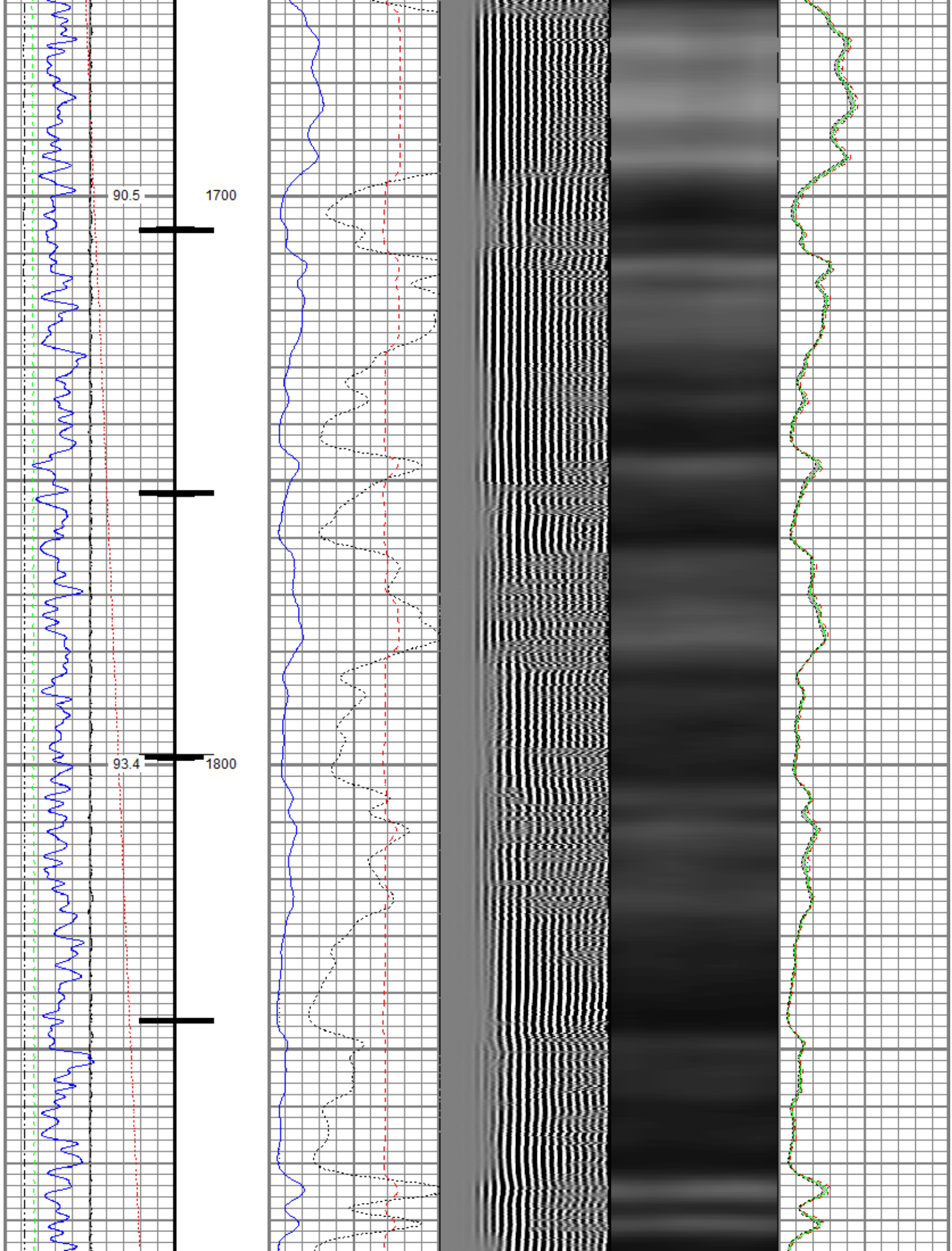


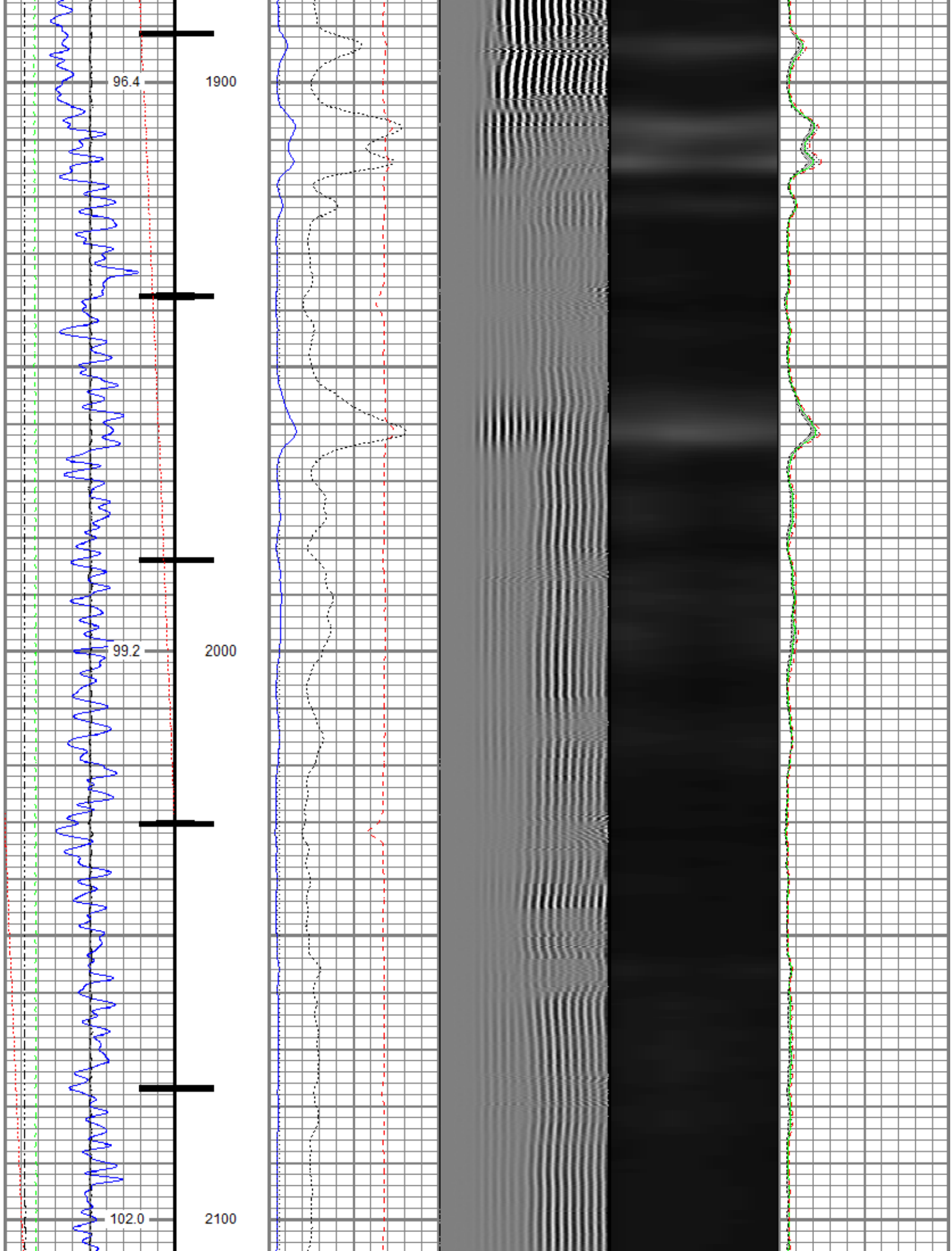


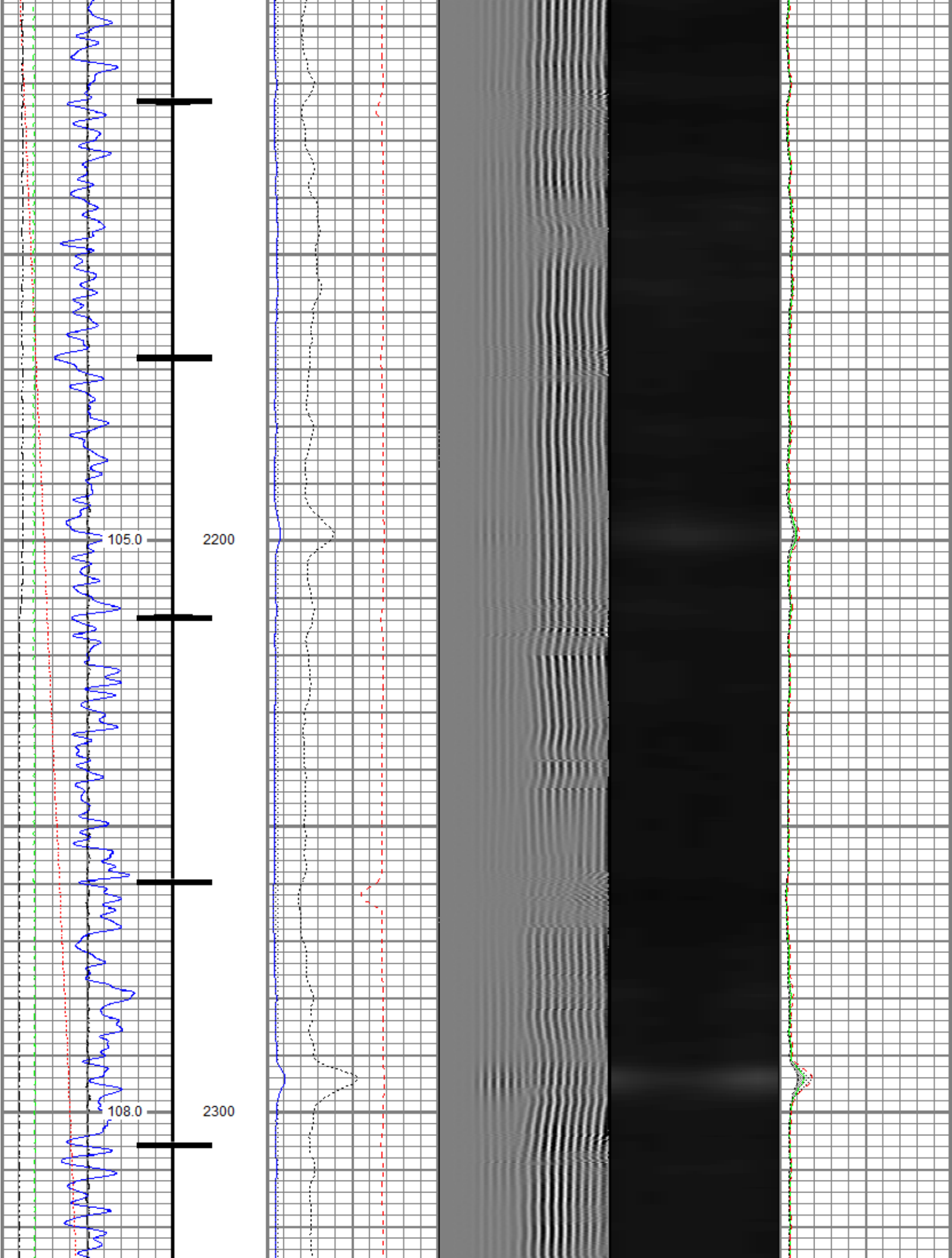




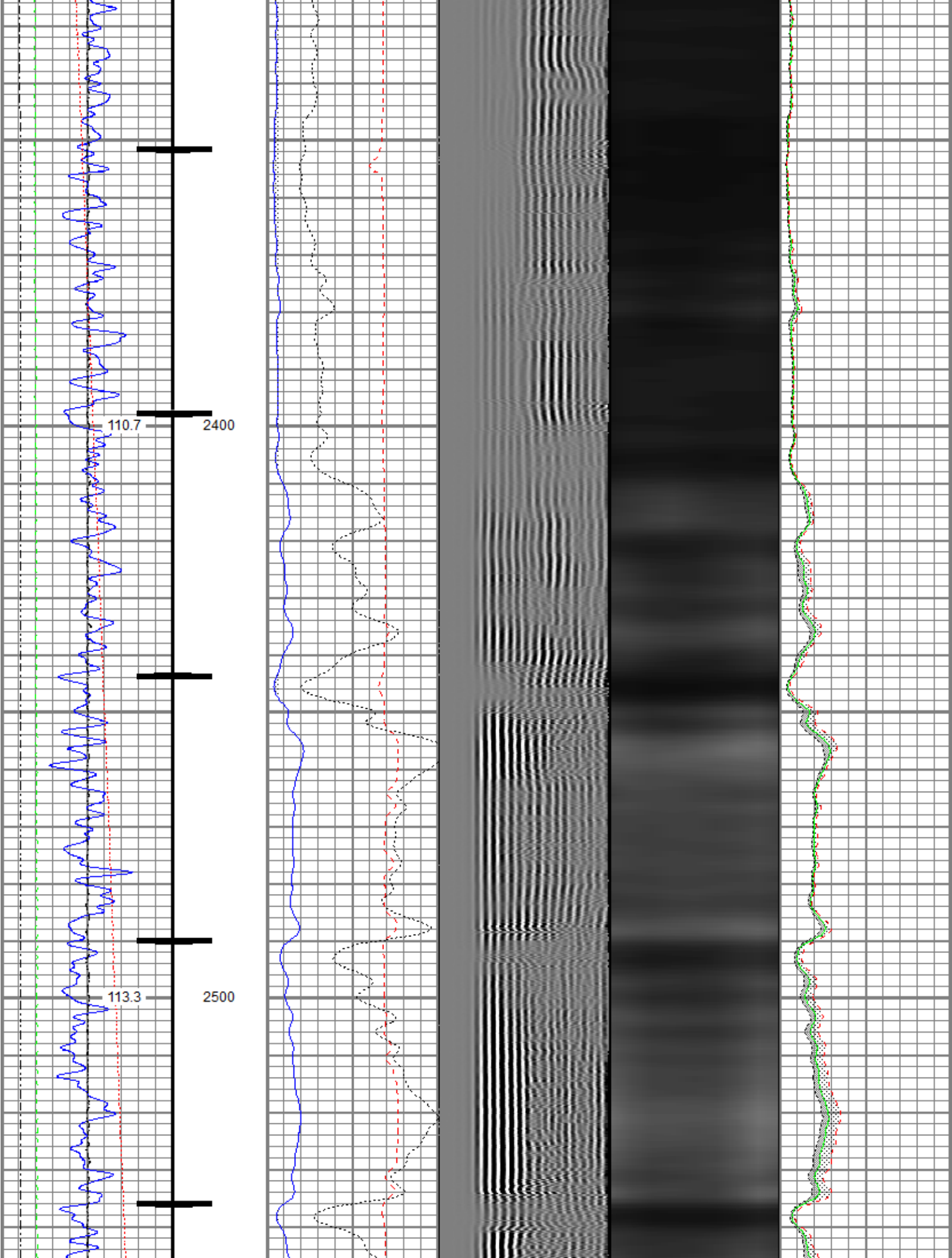


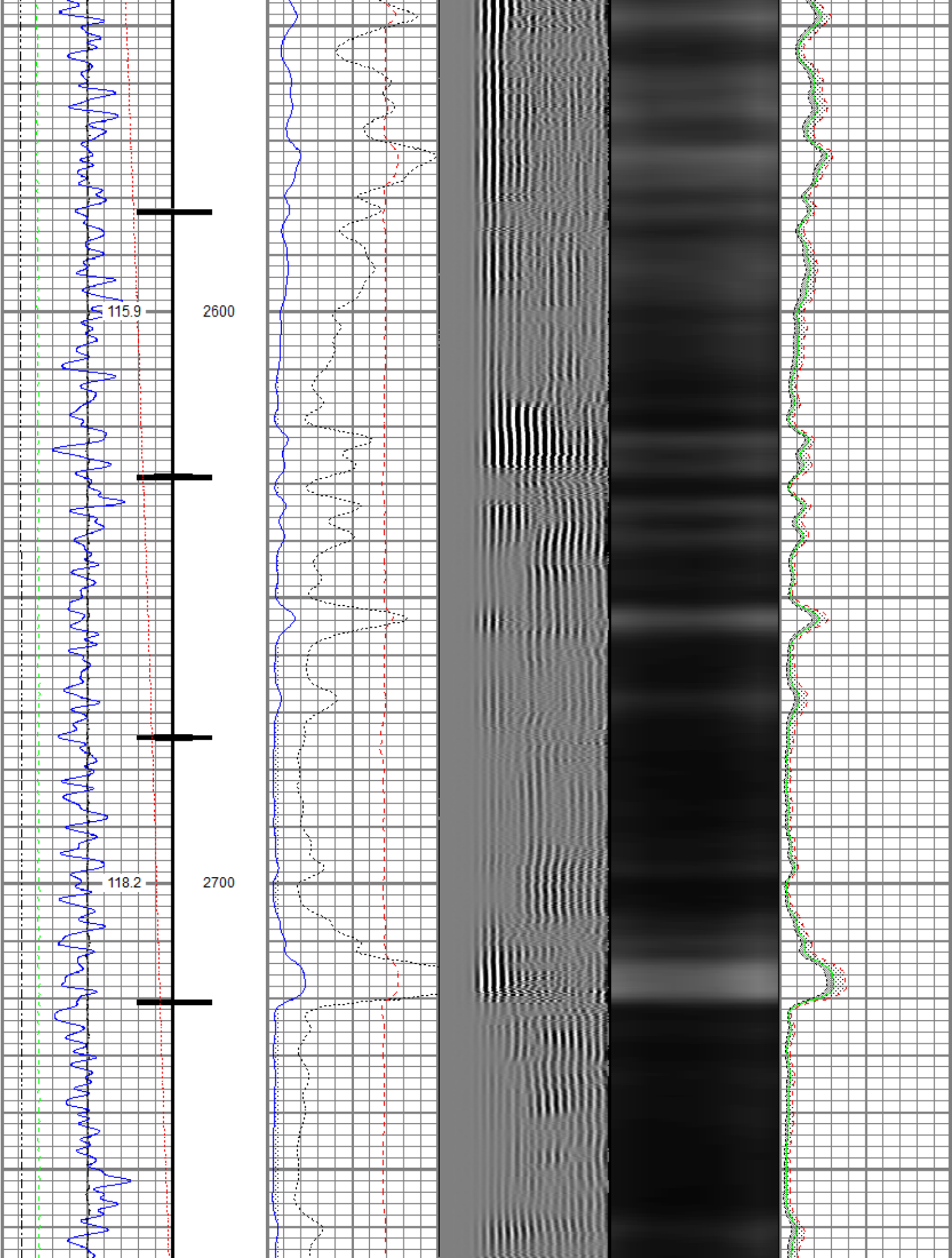


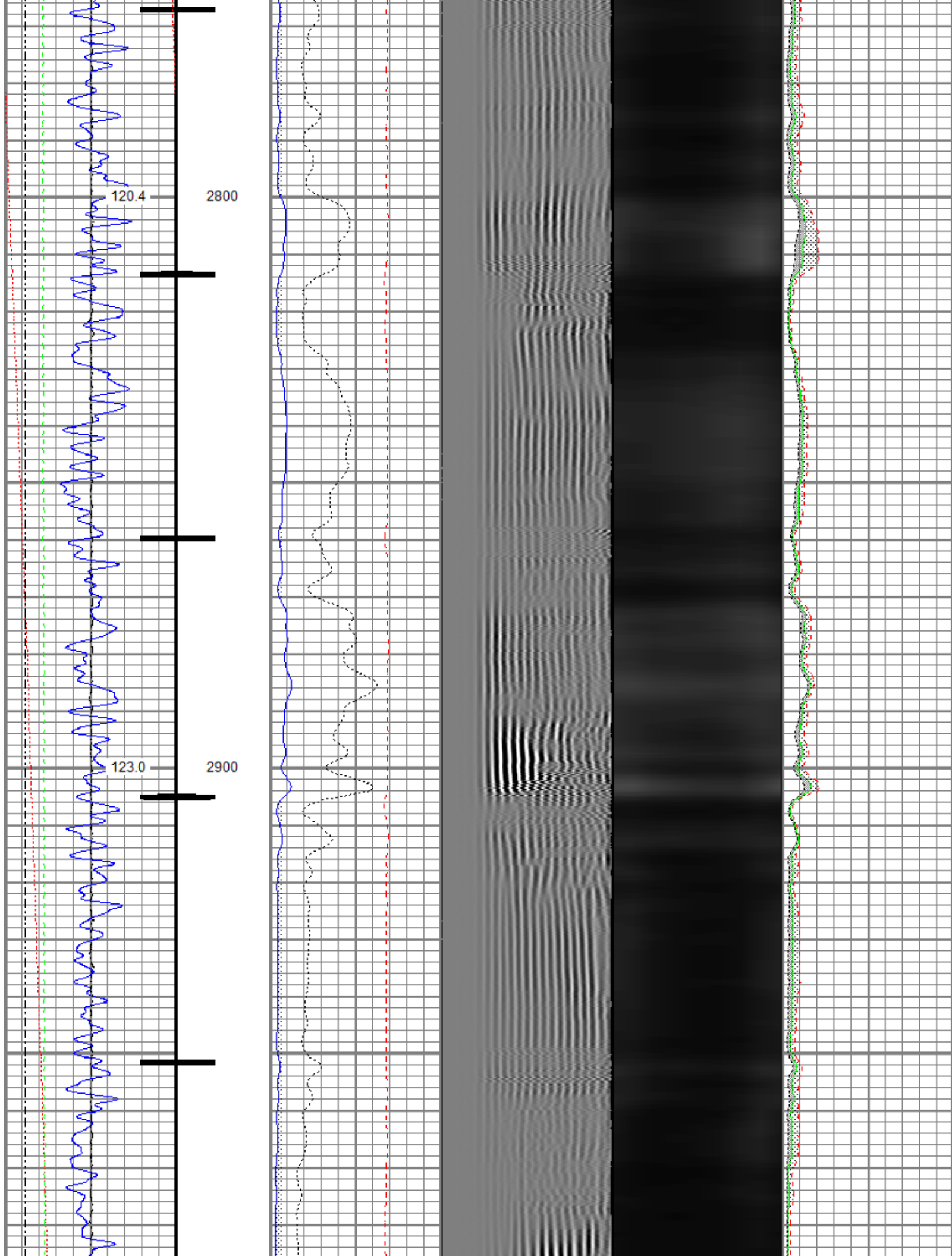


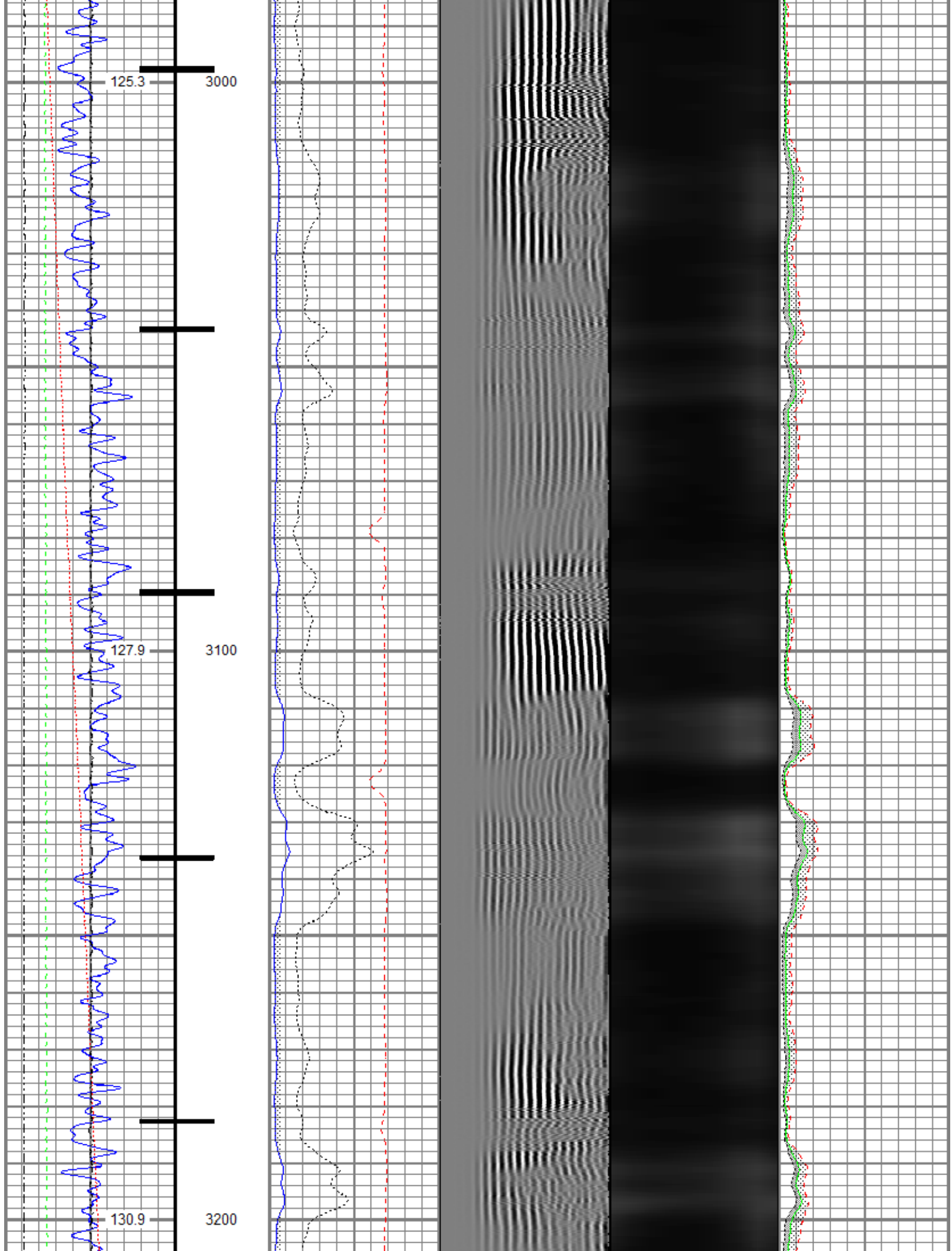




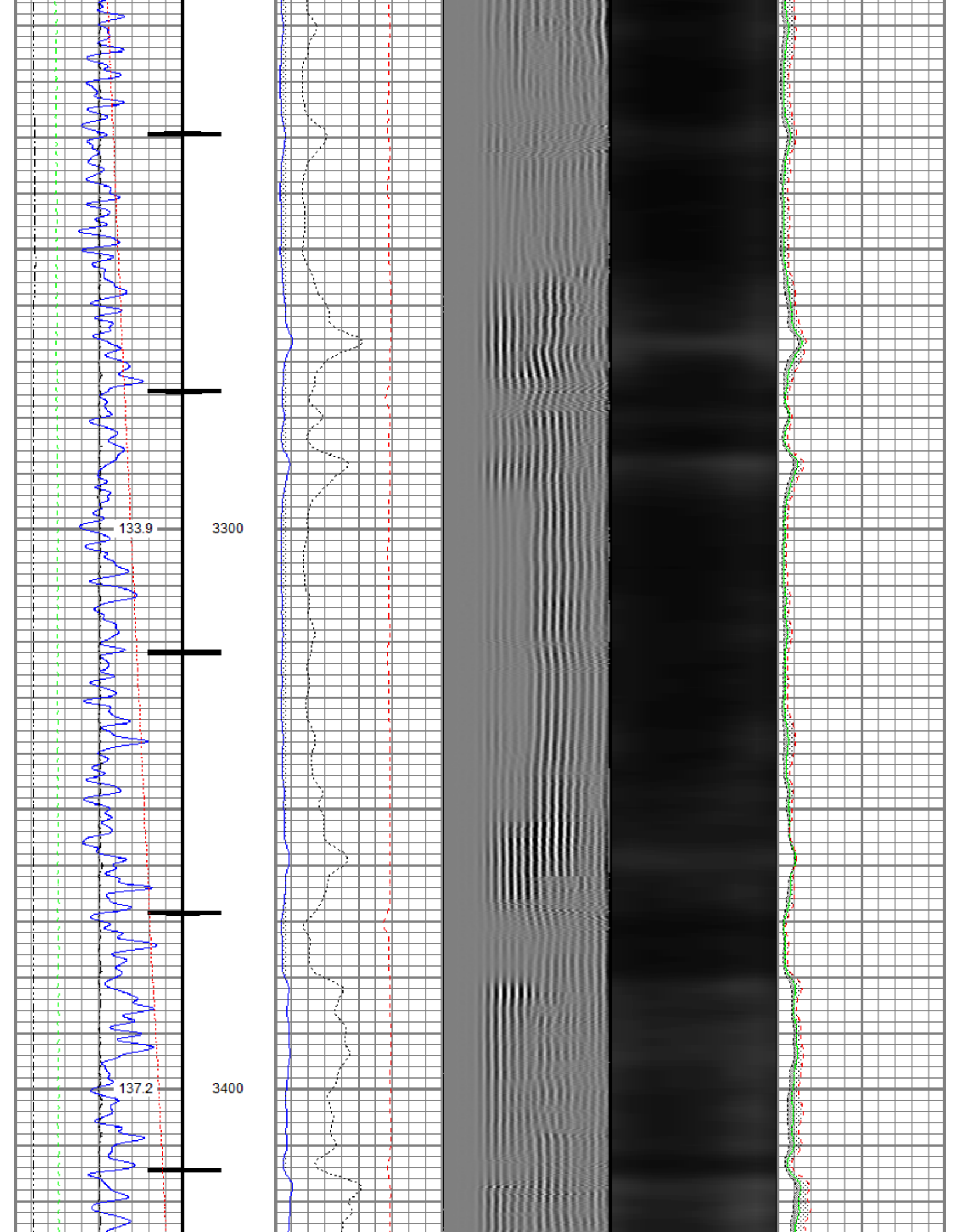


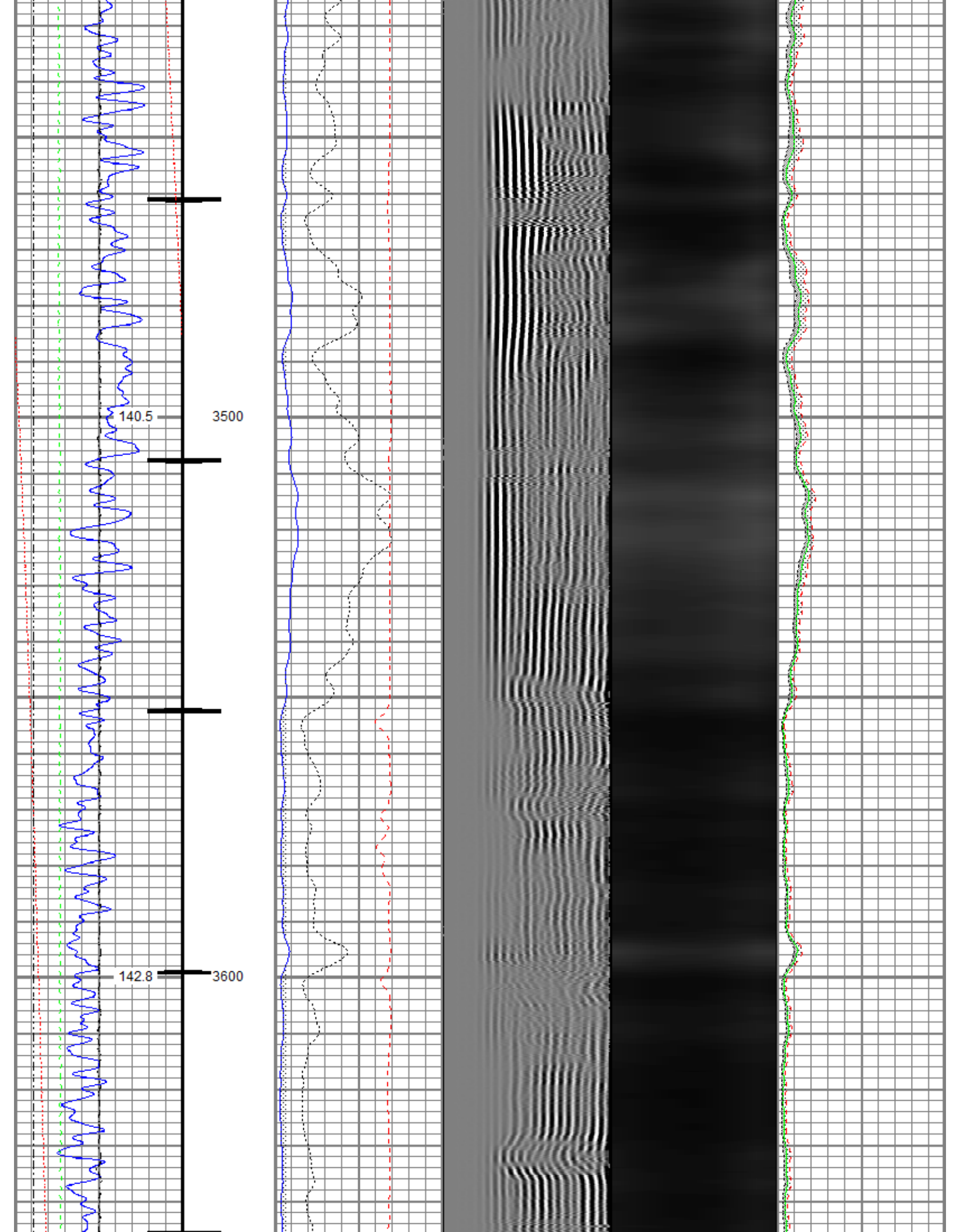


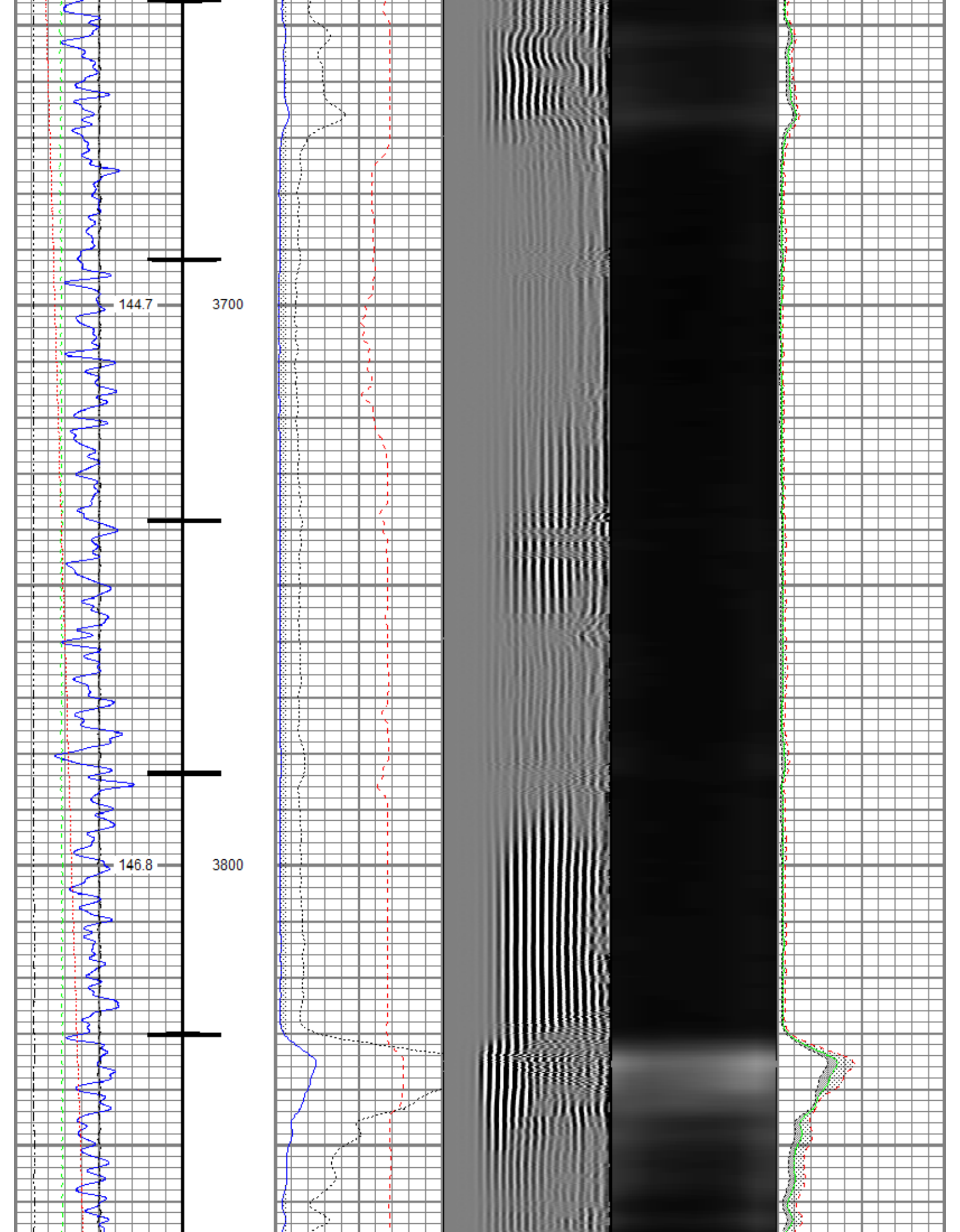


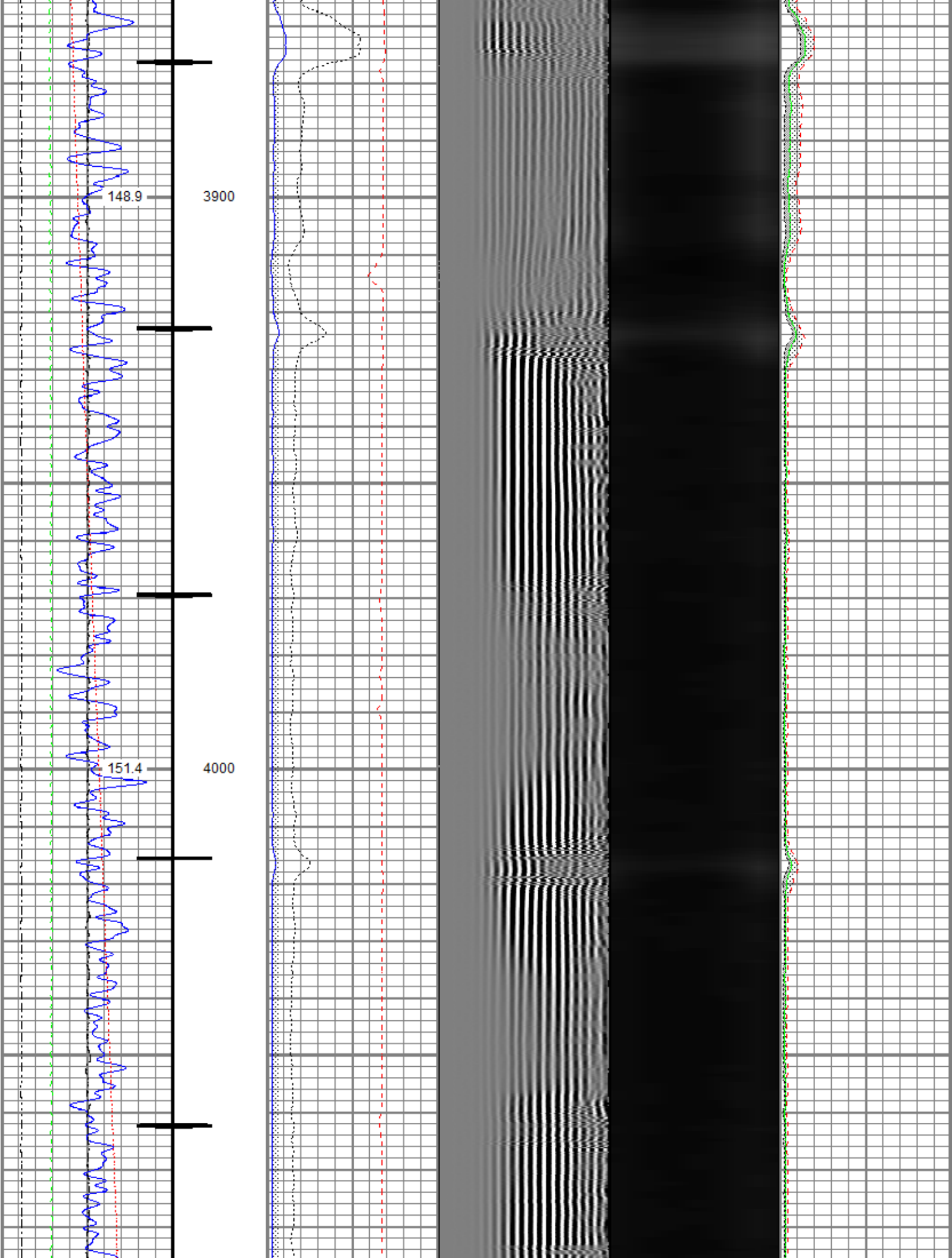




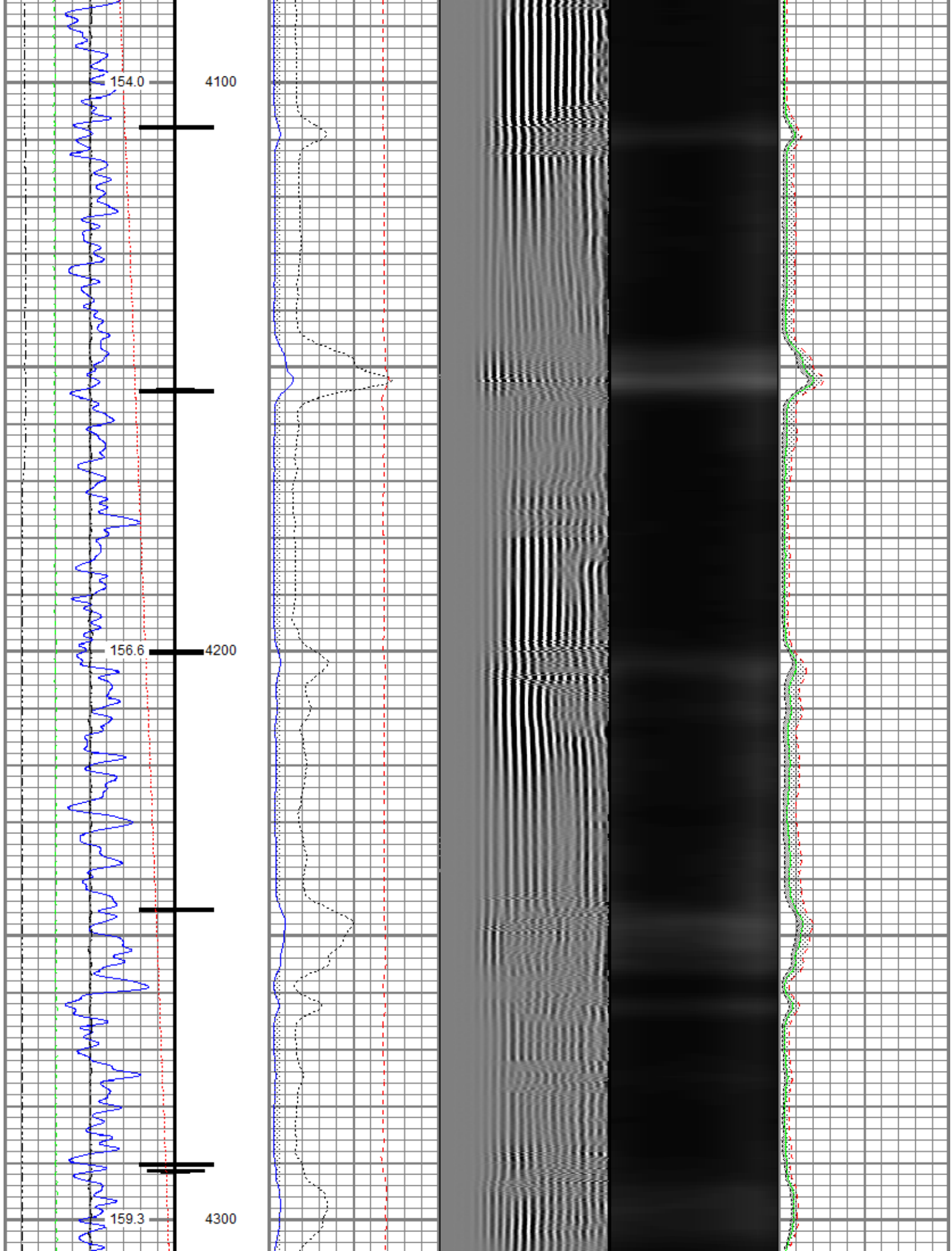


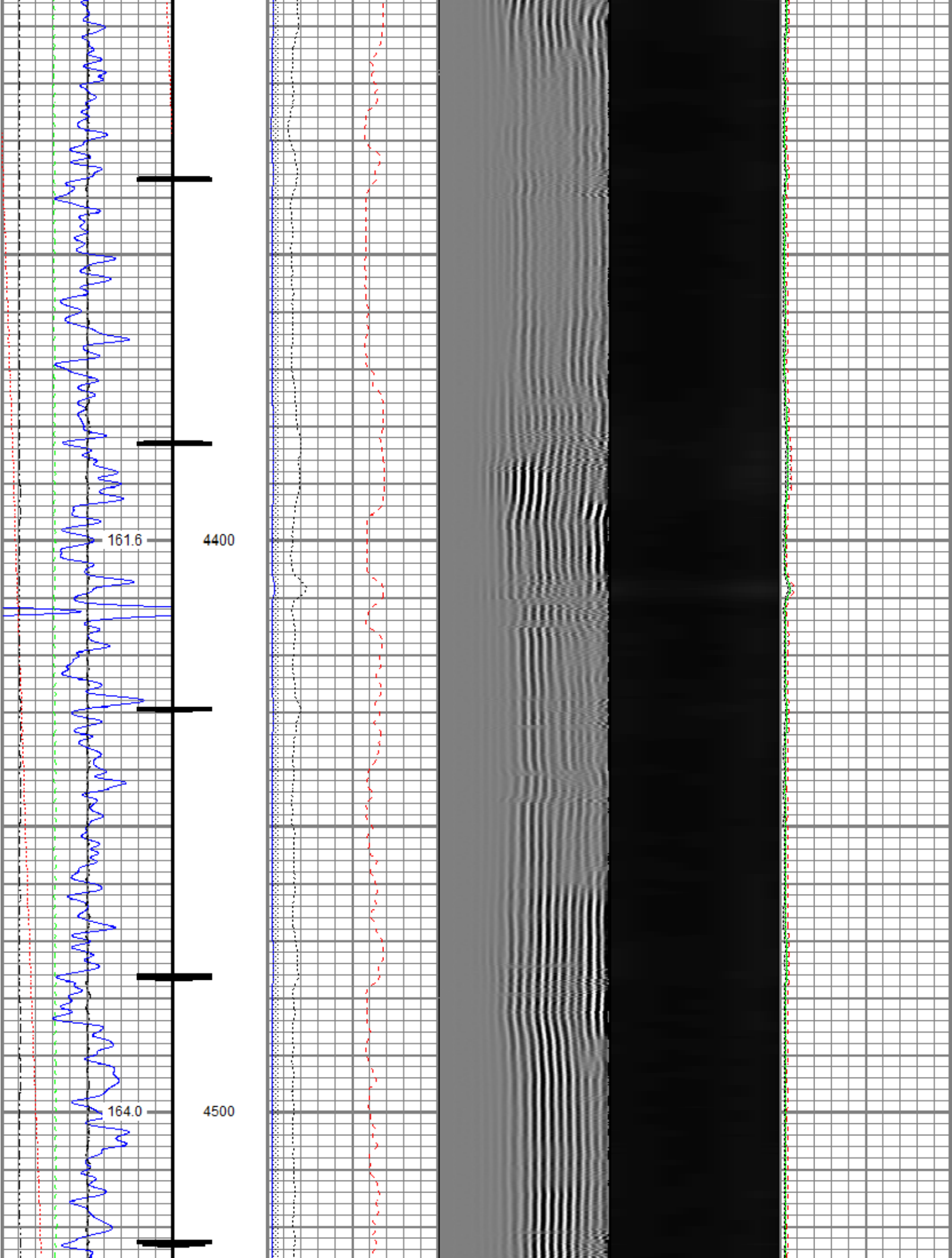


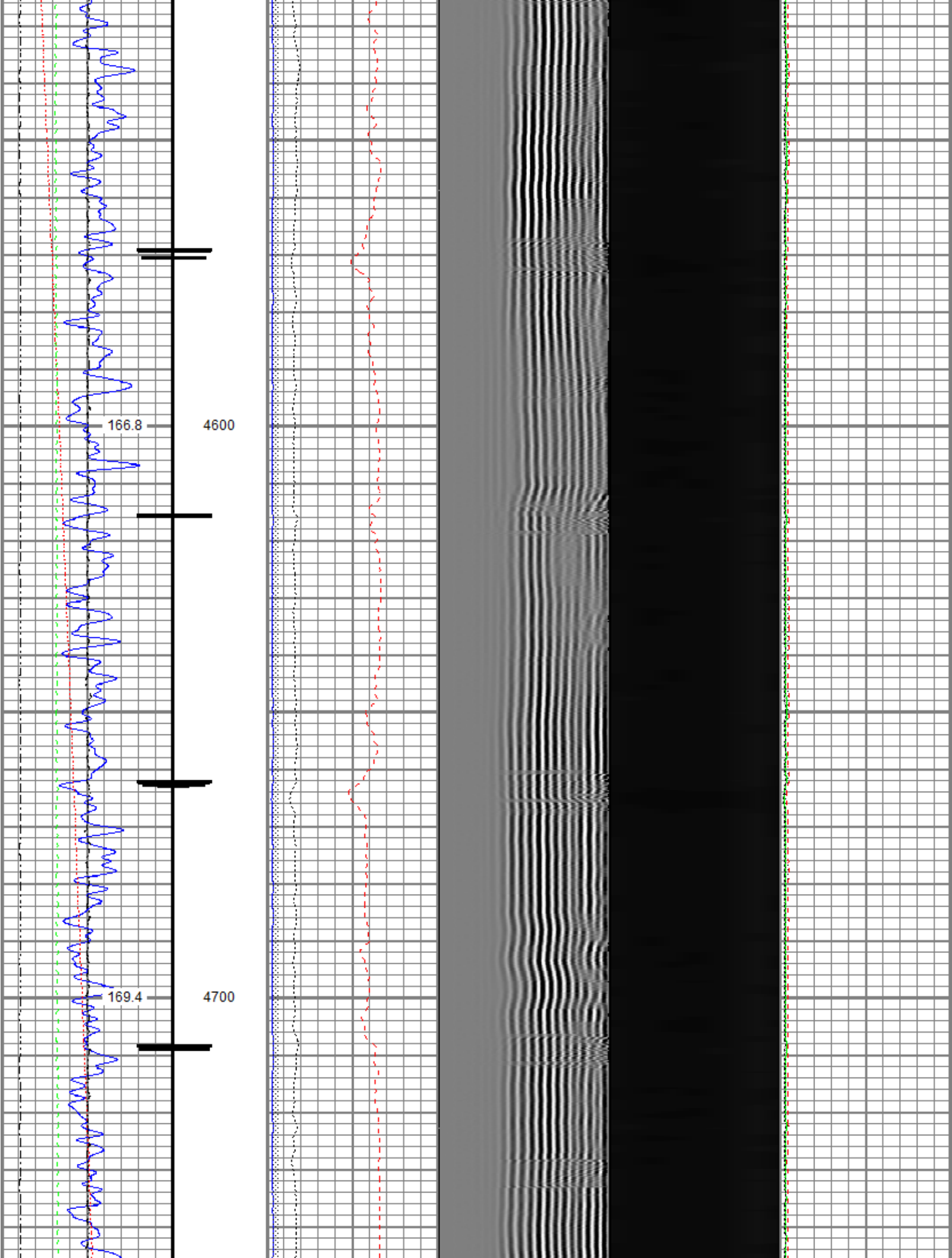


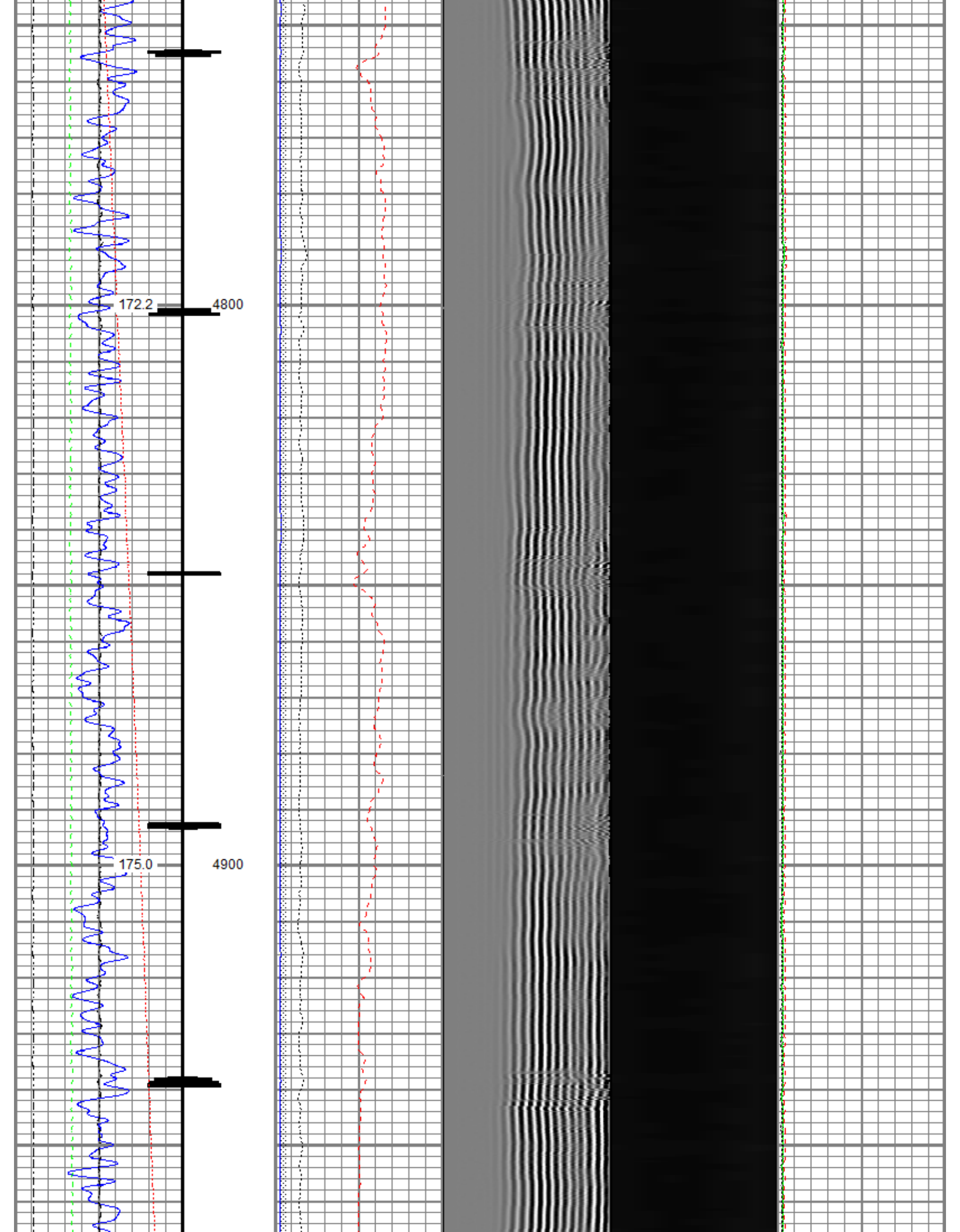




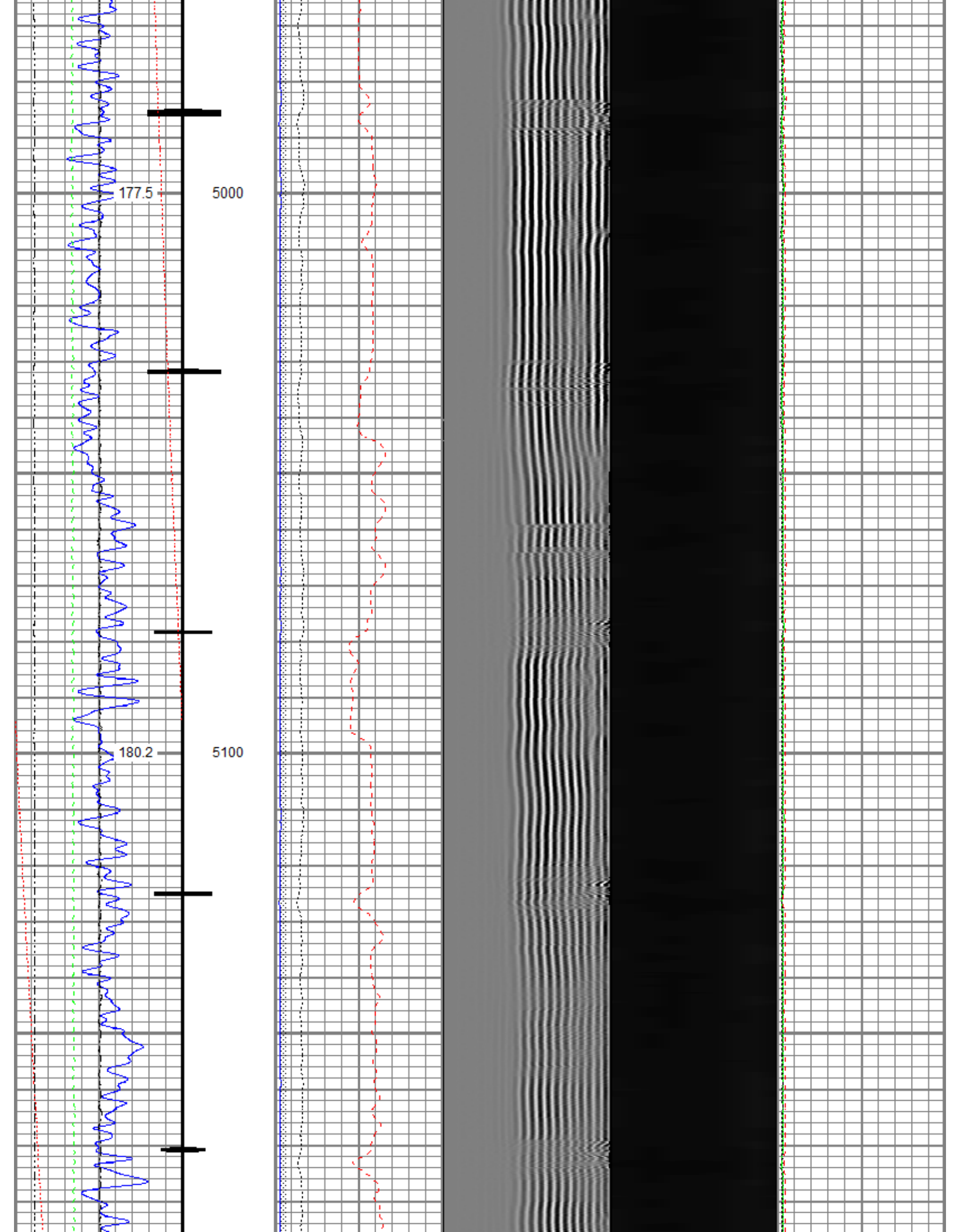


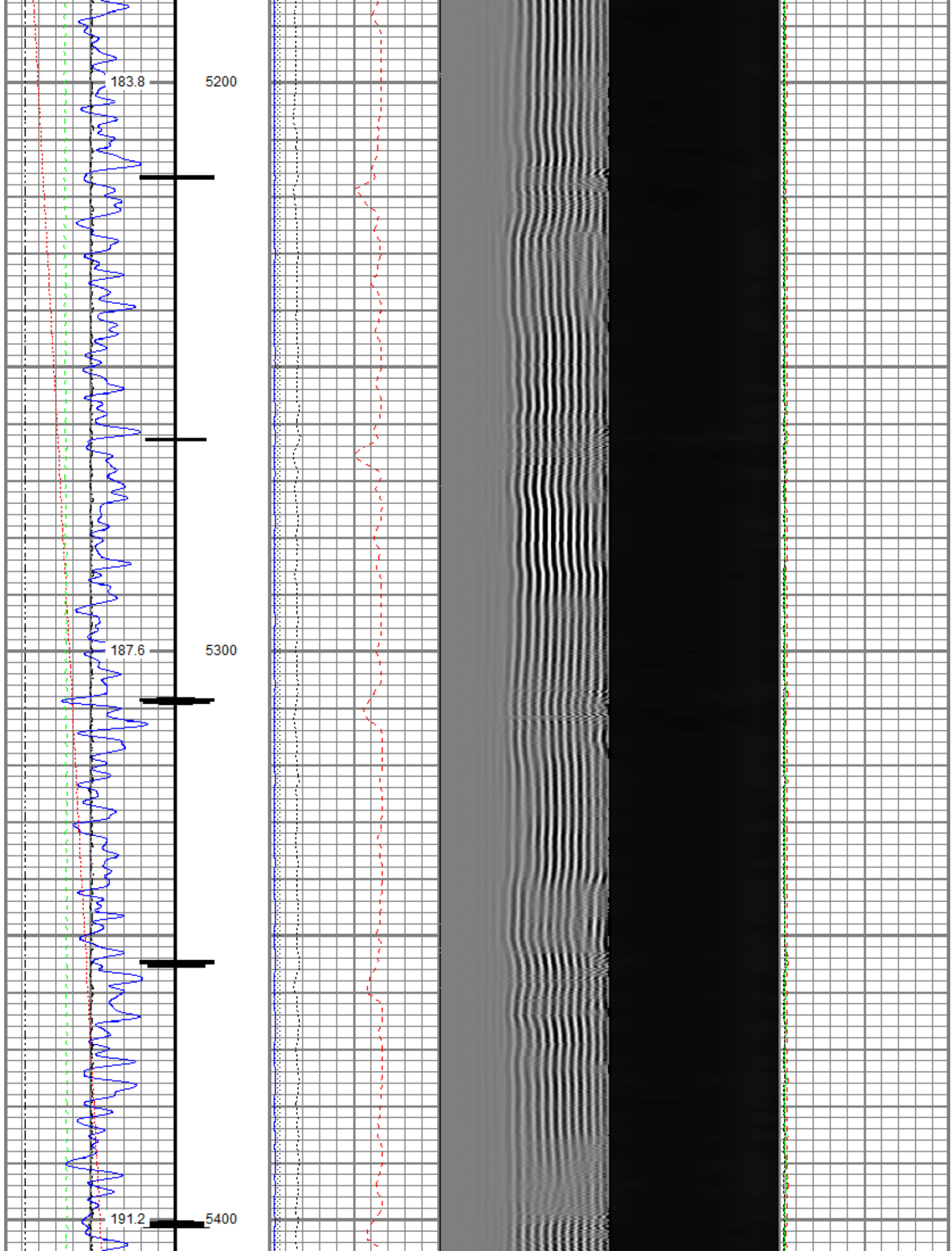


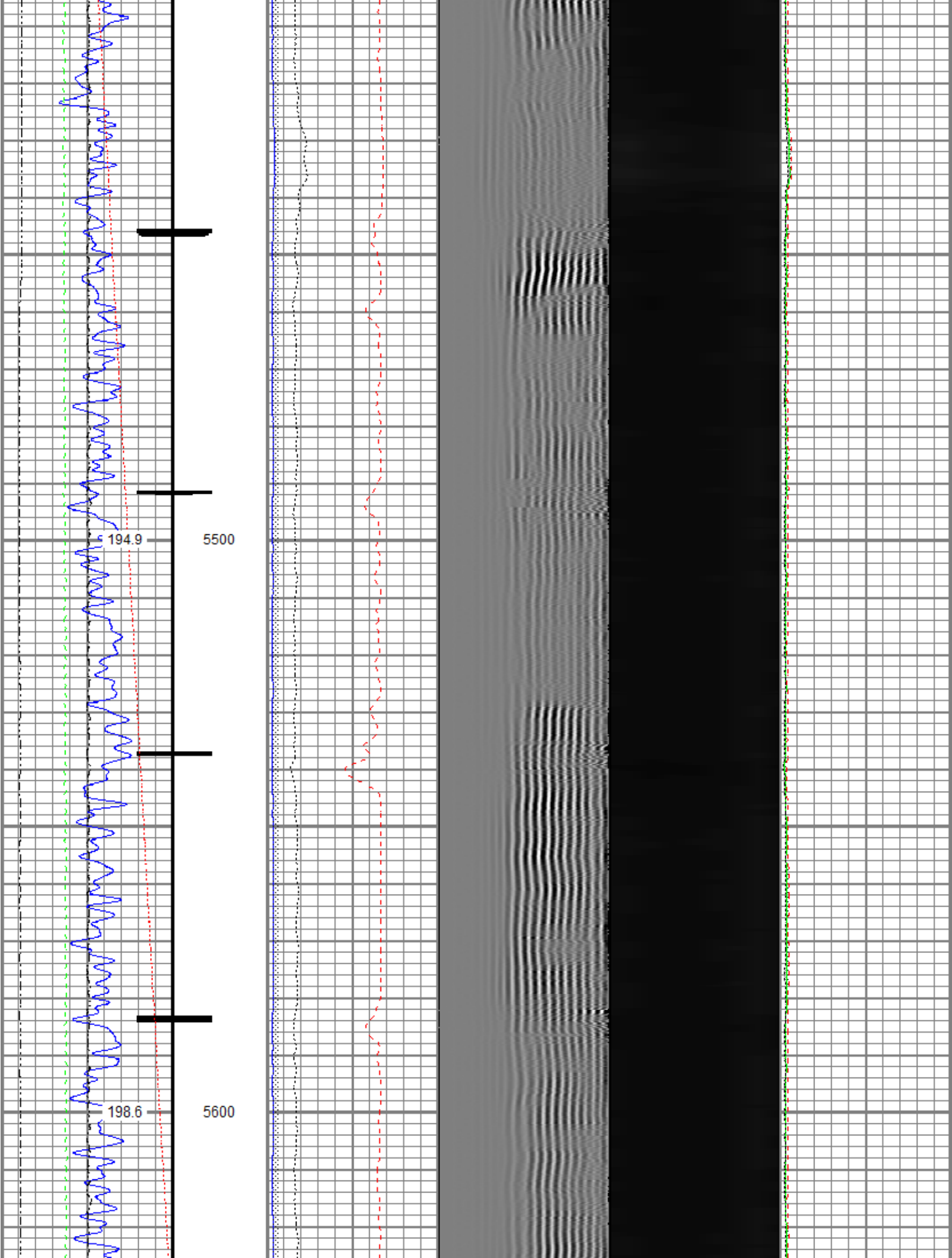


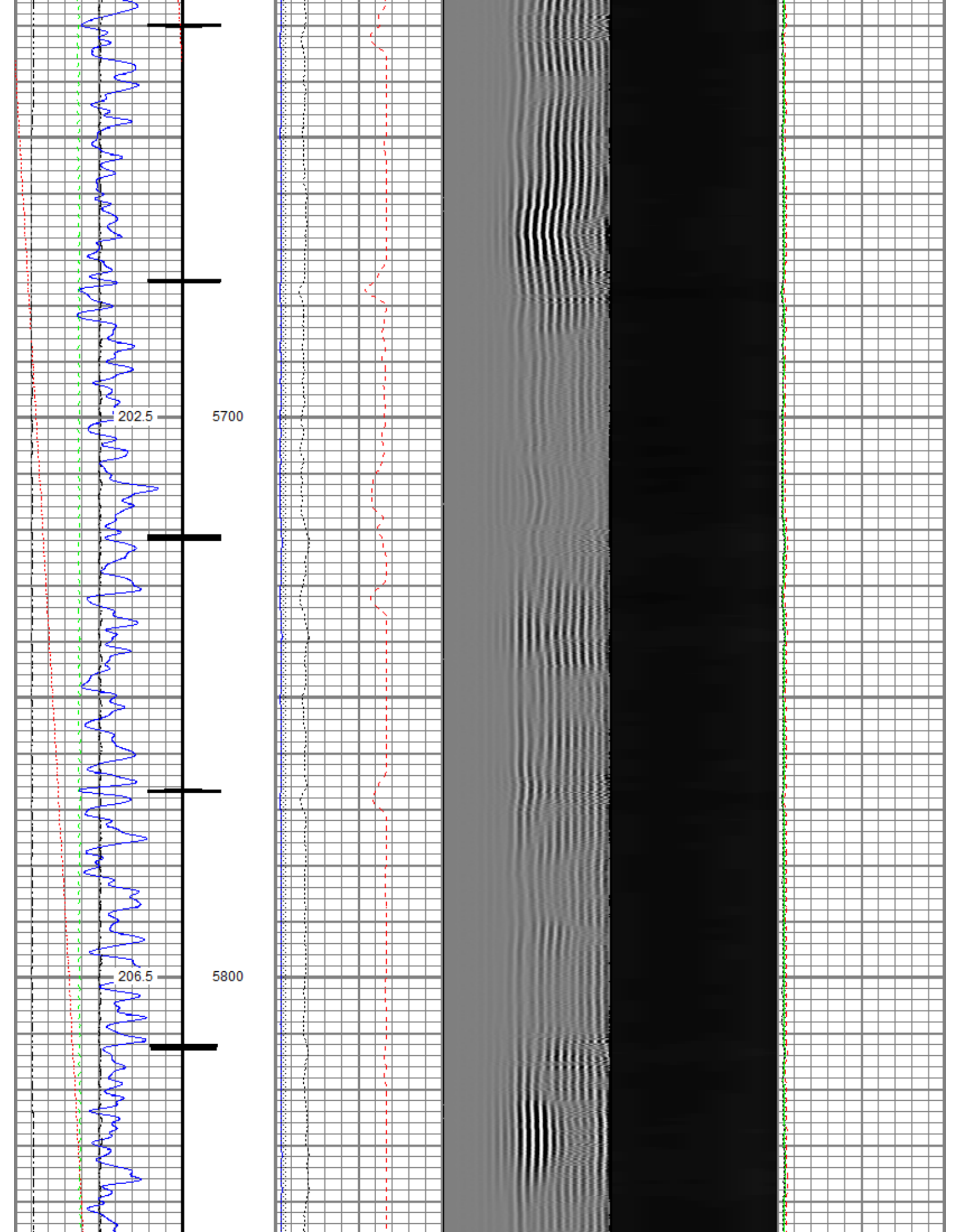




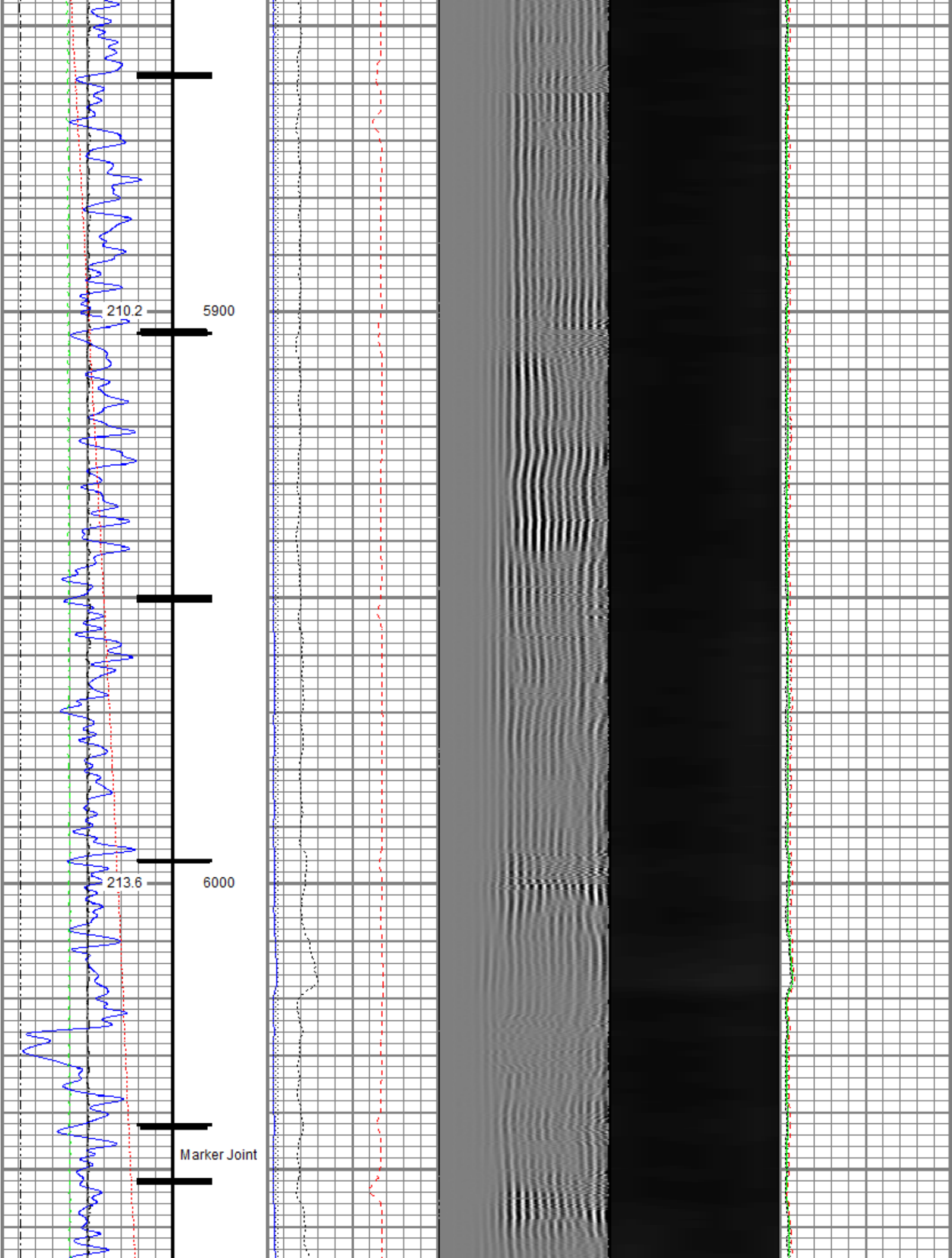


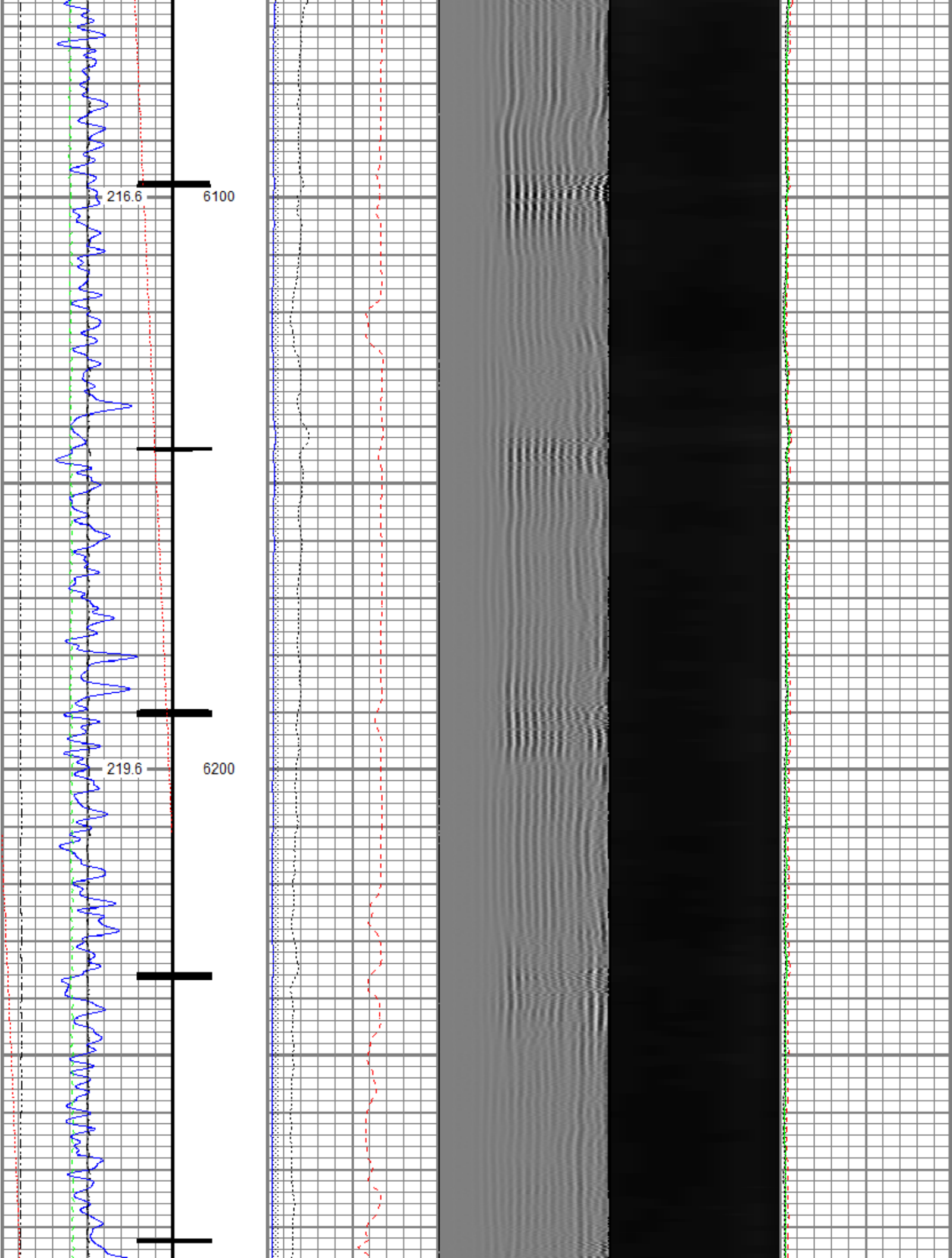


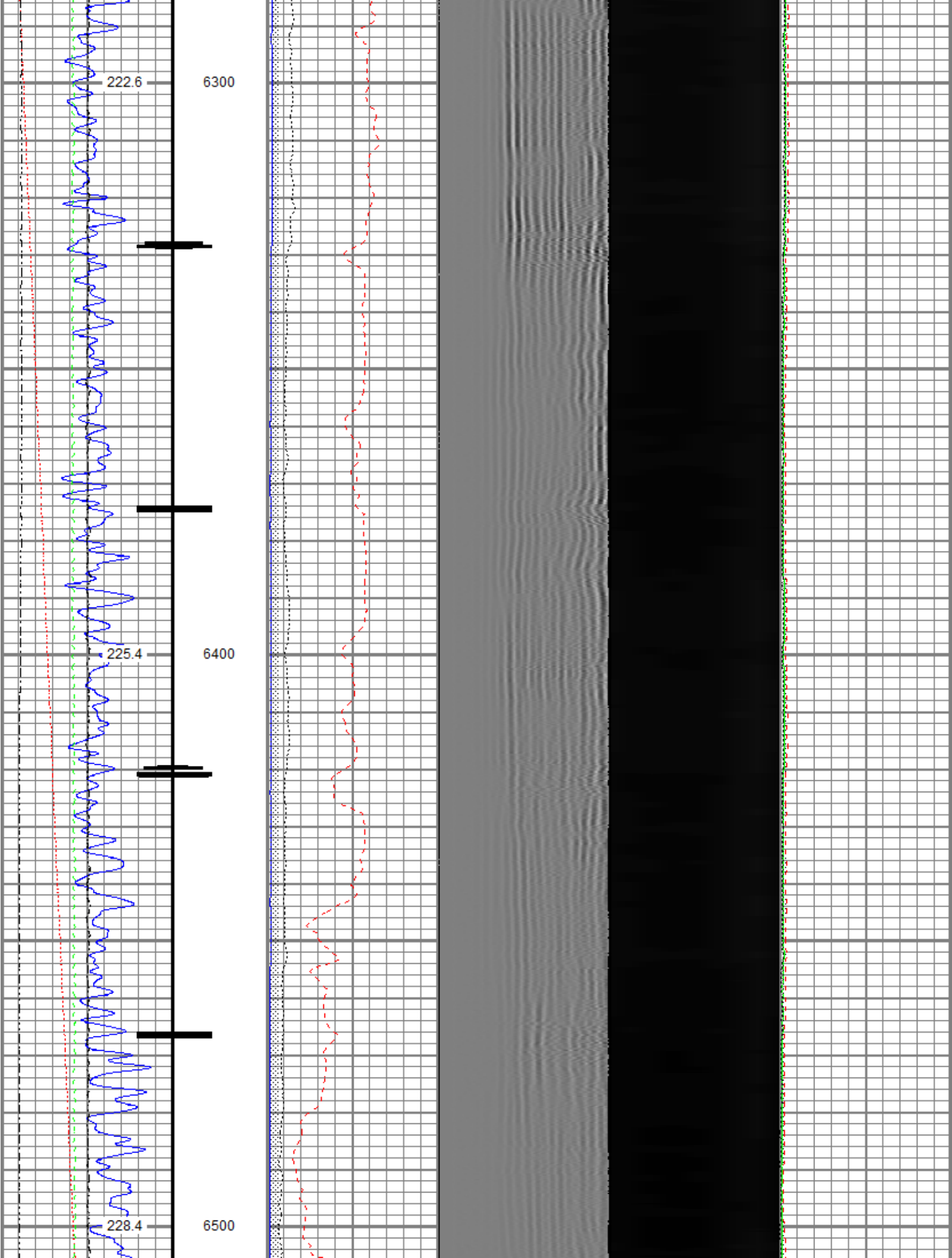


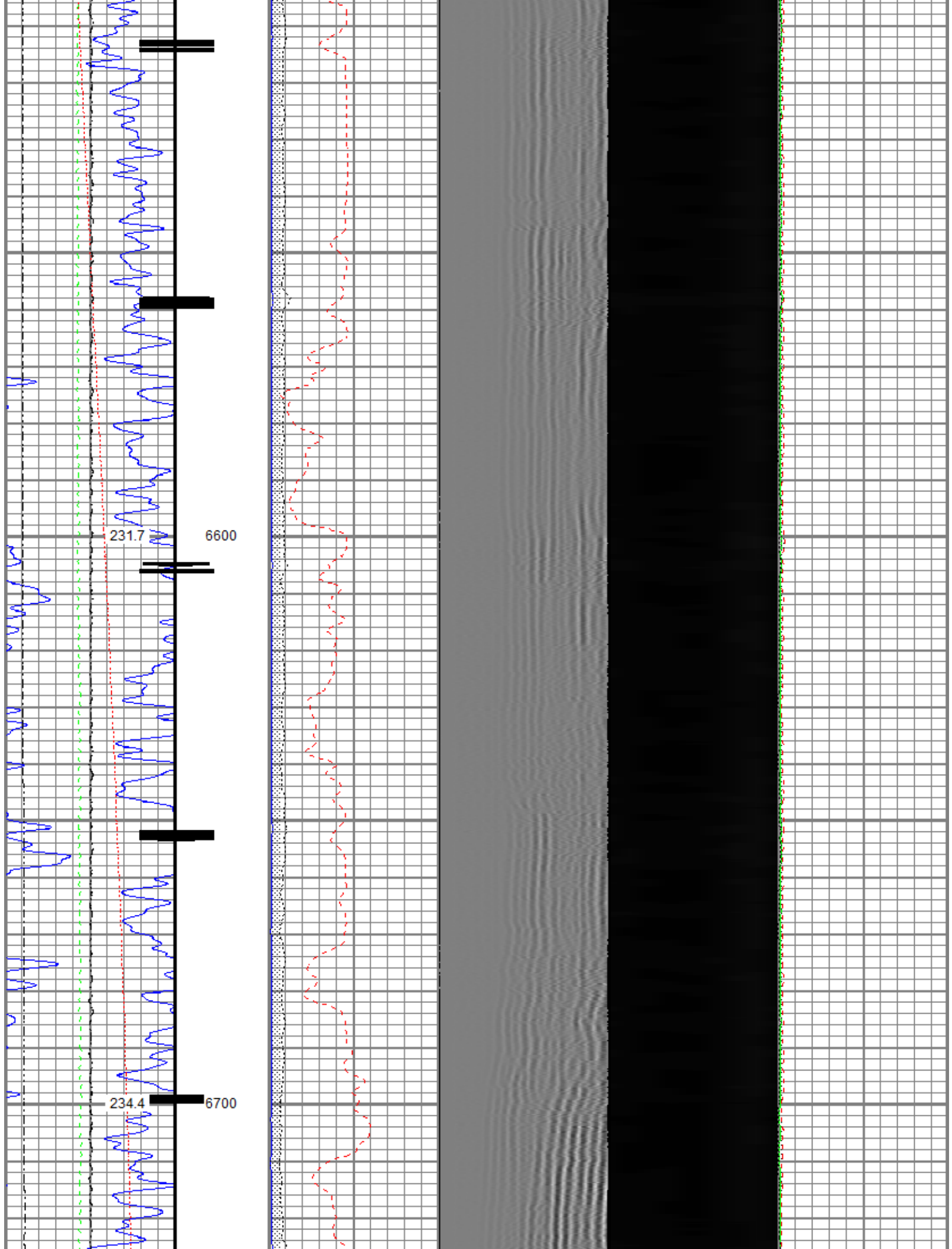




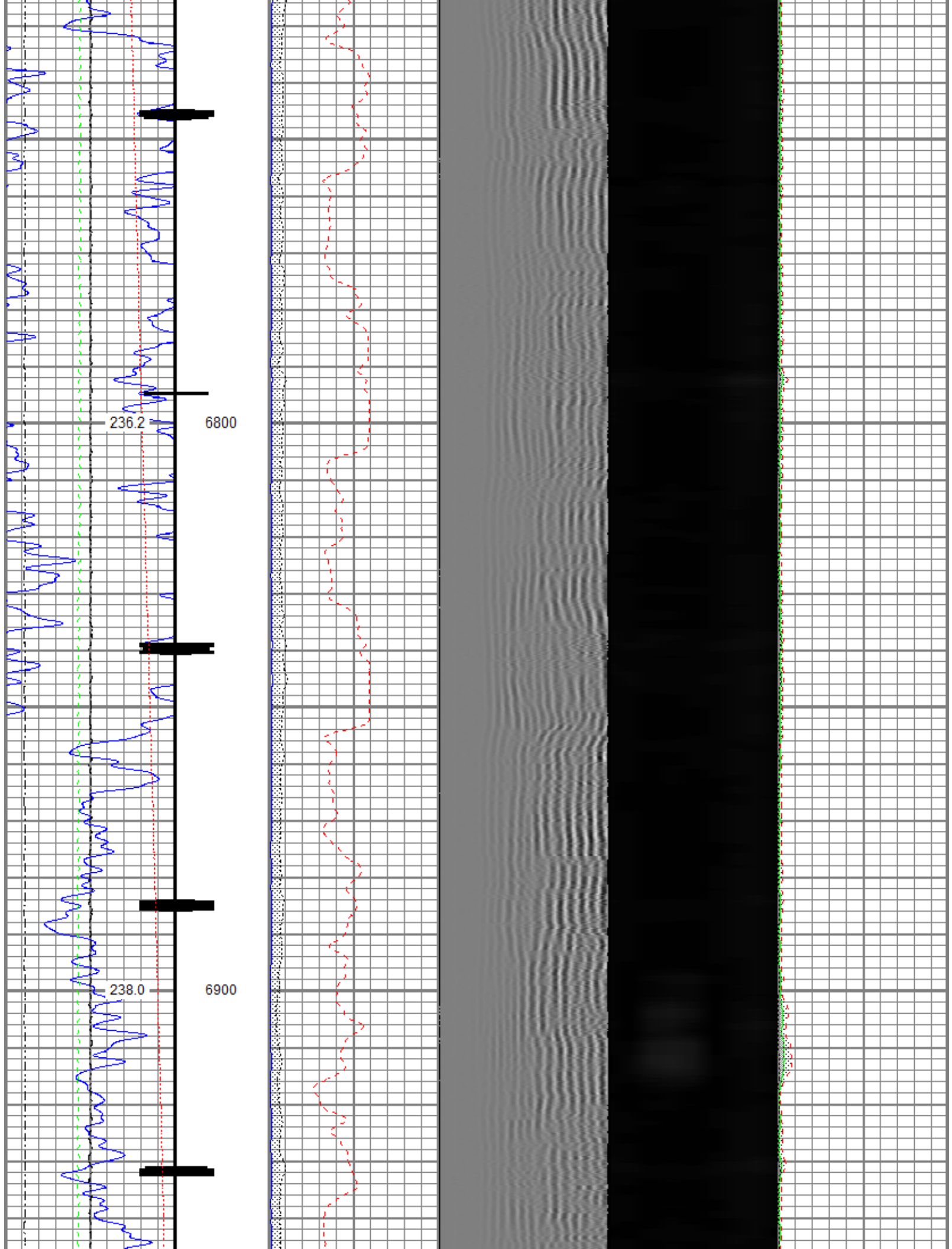


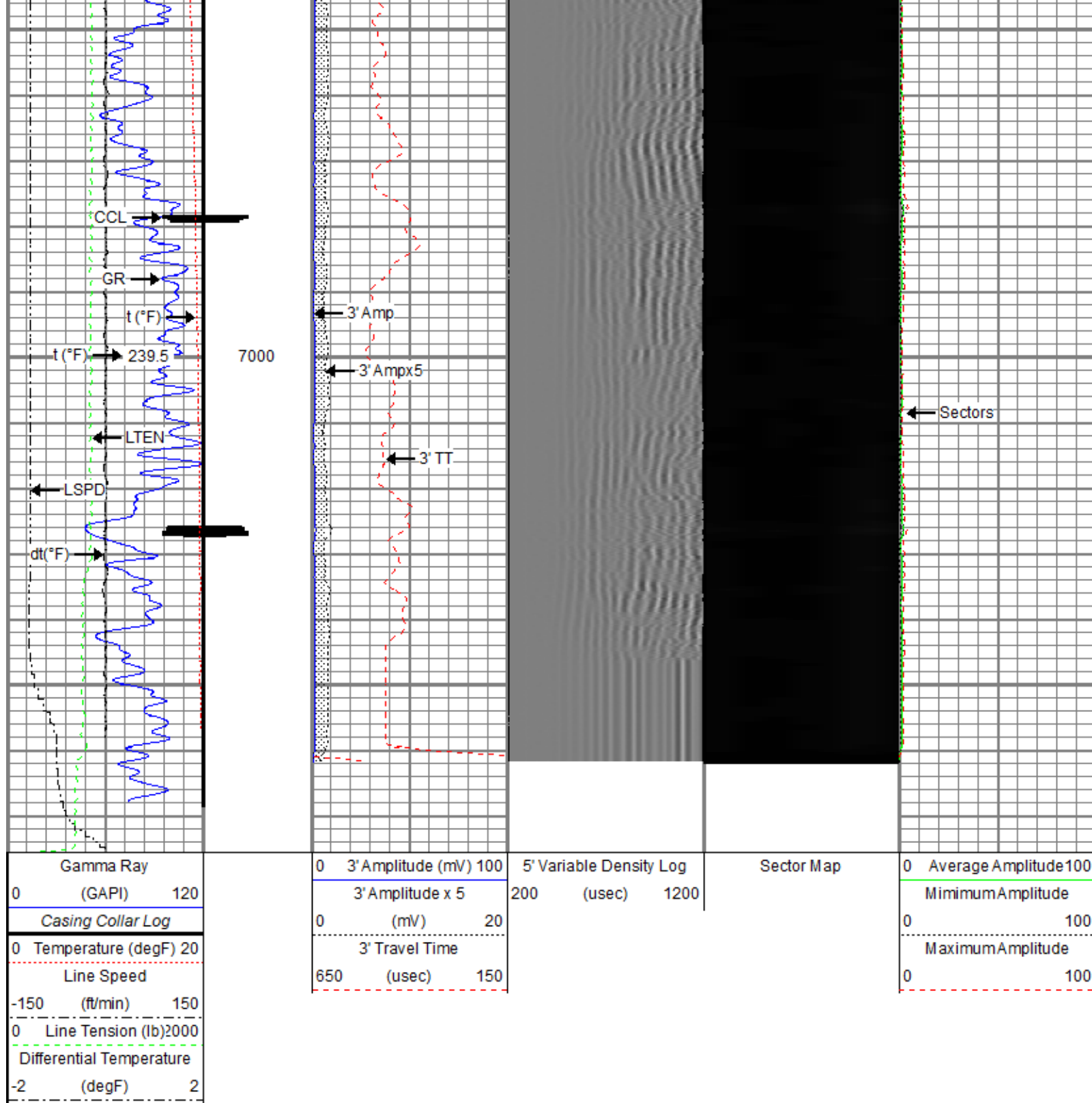








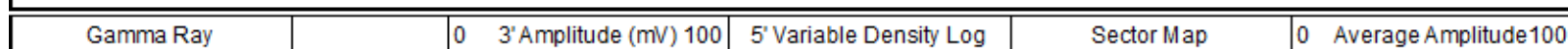




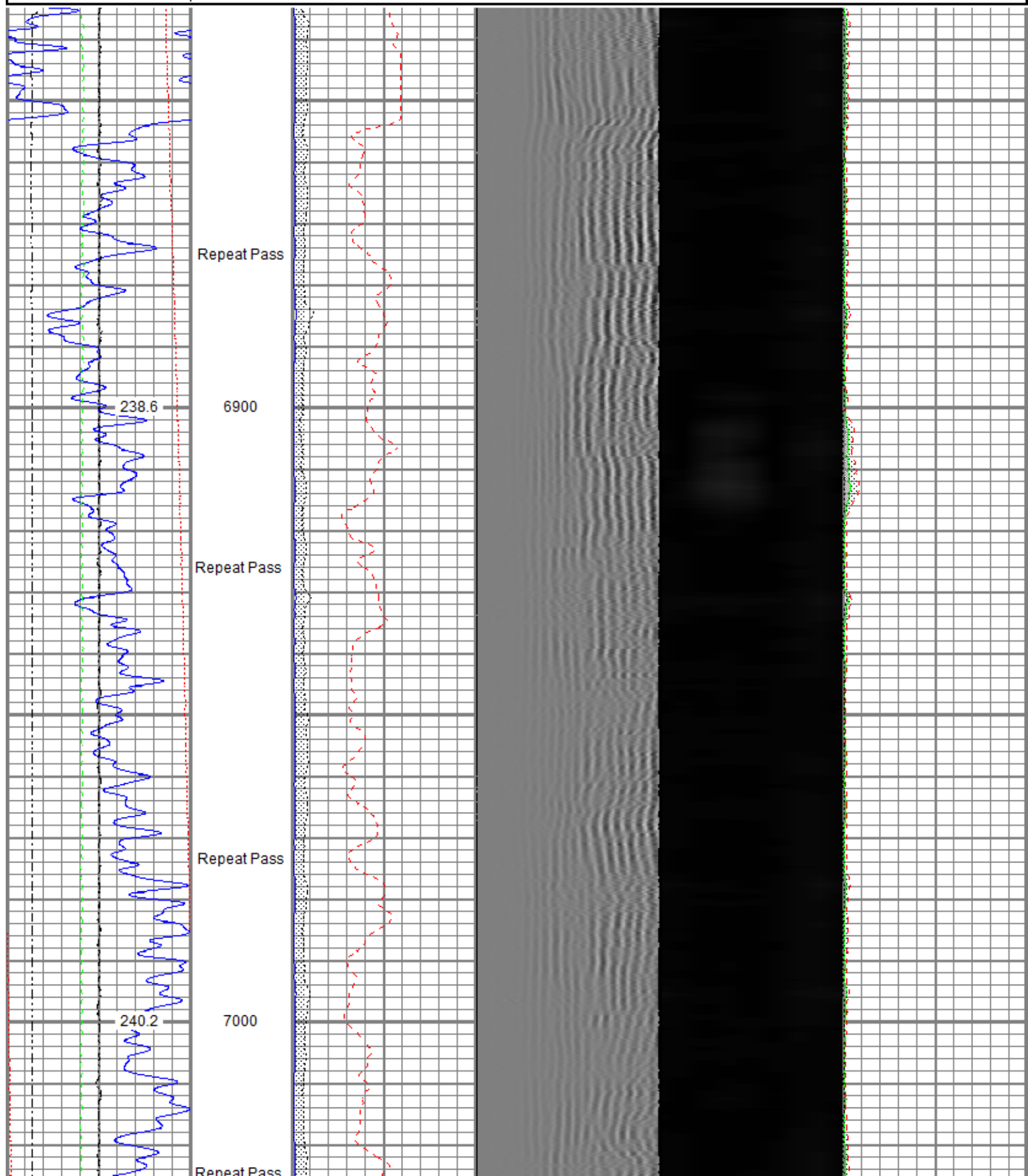
## Repeat Pass

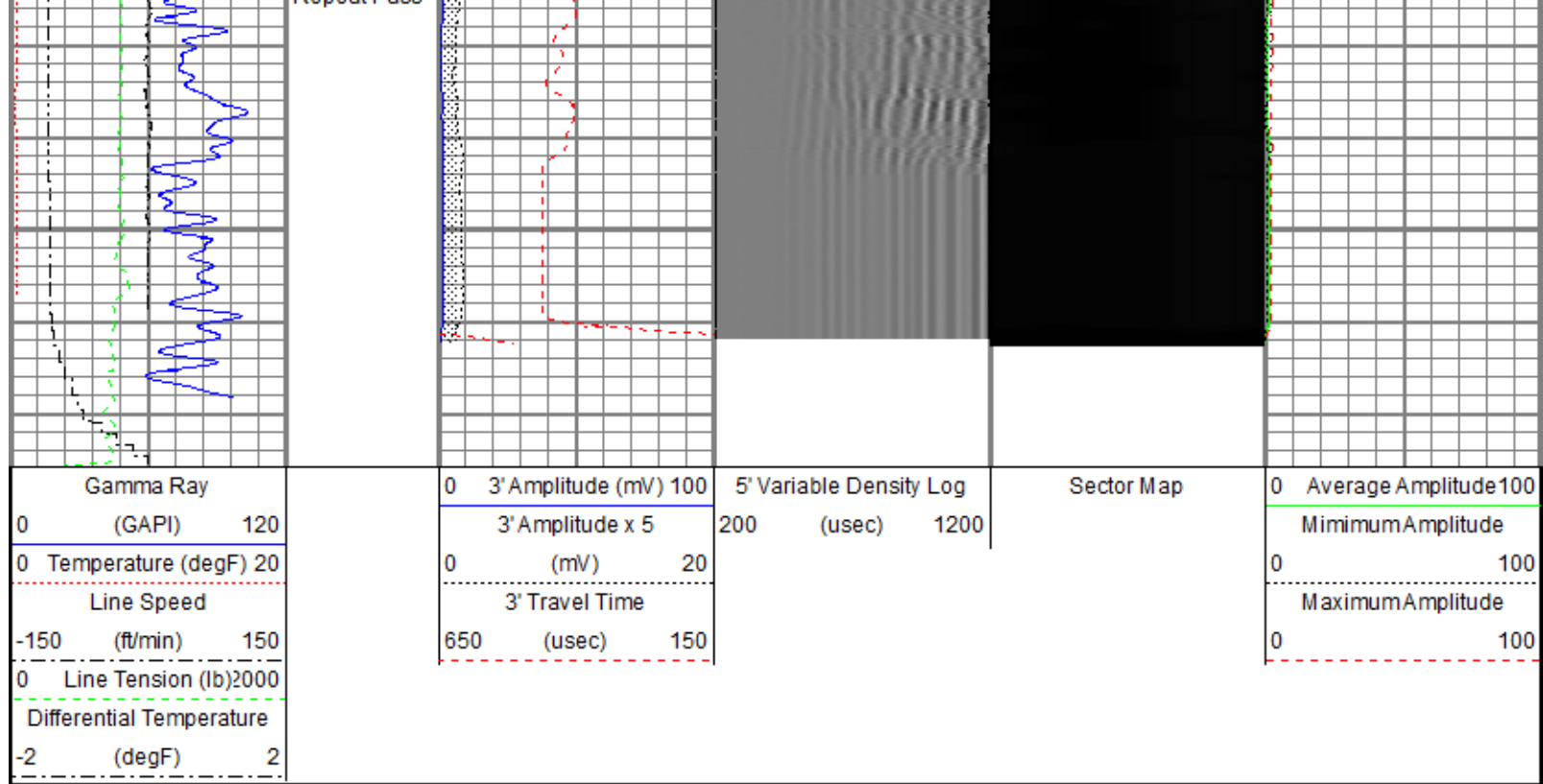
Recorded With 2200 PSI Surface Induced Pressure

Database File noble\noble\_reveille a34-714\_rbl\_02-06-21\noble\_reveille a34-714\_rbl\_02-06-21.db  
 Dataset Pathname repeat/pass1.3  
 Presentation Format ros\_radri\_noble  
 Dataset Creation Sun Feb 07 13:47:45 2021  
 Charted by Depth in Feet scaled 1:240




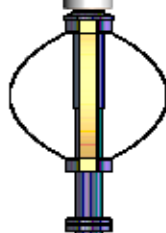
0	(GAPI)	120	3' Amplitude x 5	200	(usec)	1200	MinimumAmplitude
0	Temperature (degF)	20	0	(mV)	20		0 100
Line Speed			3' Travel Time				MaximumAmplitude
-150	(ft/min)	150	650	(usec)	150		0 100
0	Line Tension (lb)	2000					
Differential Temperature							
-2	(degF)	2					





Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Titan CHD-14375 GO	1.03	1.44	3.60
			Titan 1-7/16" Assembled Electric Cable Head with 1" Fishing Neck			
			Probe CENT-2750	2.88	2.75	20.00
			Probe 2-3/4" Electric Inline Bowspring Centralizer			
			Probe Radii-2750 RBT (120855)	9.39	2.75	105.00
			Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub			
TEMP	17.04					
WVFS8	14.81					
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					
			Probe CENT-2750	2.88	2.75	20.00
			Probe 2-3/4" Electric Inline Bowspring Centralizer			



CCL\$2	6.80		Probe 2-3/4" Electric inline Bowspring Centralizer			
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
LOCTIM	0.00					
UTCTIM	0.00					
Dataset: Noble_Reveille A34-714_RBL_02-06-21.db: field/well/main/pass1.1 Total length: 23.86 ft Total weight: 223.60 lb O.D.: 2.75 in						

Calibration Report		
Database File	C:\ProgramData\Warrior\Data\Noble\Noble_Reveille A34-714_RBL_02-06-21\Noble_Reveille A34-714_RBL_02-06-21.db	
Dataset Pathname	main/pass1.1	
Dataset Creation	Sat Feb 06 16:51:17 2021	
Gamma Ray Calibration Report		
Serial Number:	FW1810-044	
Tool Model:	2750 6PB	
Performed:	Tue Dec 03 09:24:53 2019	
Calibrator Value:	637.0	GAPI
Background Reading:	105.3	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:	0.000	ft

Master Calibration, performed (Derived):						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	0.597	0.800	71.921	119.231	0.782
CAL	0.660	0.642				
5'	0.000	0.566	0.800	71.921	125.609	0.784
SUM						
S1	0.000	0.621	0.000	100.000	161.201	-0.032
S2	-0.001	0.644	0.000	100.000	155.242	0.101
S3	0.000	0.640	0.000	100.000	156.342	-0.012
S4	-0.002	0.614	0.000	100.000	162.401	0.340

S4	0.002	0.514	0.000	100.000	162.461	0.346
S5	-0.002	0.589	0.000	100.000	169.428	0.291
S6	0.000	0.569	0.000	100.000	175.841	-0.035
S7	0.000	0.565	0.000	100.000	176.926	-0.044
S8	0.000	0.573	0.000	100.000	174.449	-0.043

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.660	0.642	1.000	0.000

Air Zero Calibration, performed Sat Feb 06 14:54:56 2021:

	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

#### 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



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