



Radial Cement Bond  
Gamma Ray  
Casing Collar Log

Company Noble Energy Inc.

Well Reveille A34-788

Field Wattenberg

County Weld State Colorado

Location: API #: 05-123-50794

Other Services

SEC 34 TWP 6N RGE 64W

Elevation

Permanent Datum Ground Level Elevation 4631'

Log Measured From Kelly Bushing 30 FT

Drilling Measured From Kelly Bushing

K.B. 4661'

D.F. ---

G.L. 4631'

Date 20-MAR-2021

Run Number One

Depth Driller 17284 FT

Depth Logger 7380 FT

Bottom Logged Interval 7365 FT

Top Log Interval Surface

Open Hole Size ---

Type Fluid Water

Density / Viscosity 8.34 lb/gal

Max. Recorded Temp. 239°F

E. Estimated Cement Top See Log

Time Well Ready R.O.A.

Time Logger on Bottom 14:56

E. Equipment Number HD-0361

Location Plataville, CO

Recorded By M. Steinman

Witnessed By Charlie Schendzielos

Run Number

Bit From To

Size

Weight

From To

Top

Bottom

Casing Record	Size (in)	Wgt (lbs/ft)	Grade	Top	Bottom
Surface Casing	9 5/8	36	J-55	Surface	1927 FT
Intermediate #1	5 1/2	17	P-110CY	Surface	17266 FT
Intermediate #2					
Inner					

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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 6291.9 FT  
Adjusted +2 FT to correlate with Marker Joint  
Log ran with 2000 PSI Surface Induced Pressure  
Logging tools were clean and free of debris upon completion of operations  
Thank you for choosing Reliance Oilfield Services, LLC!!

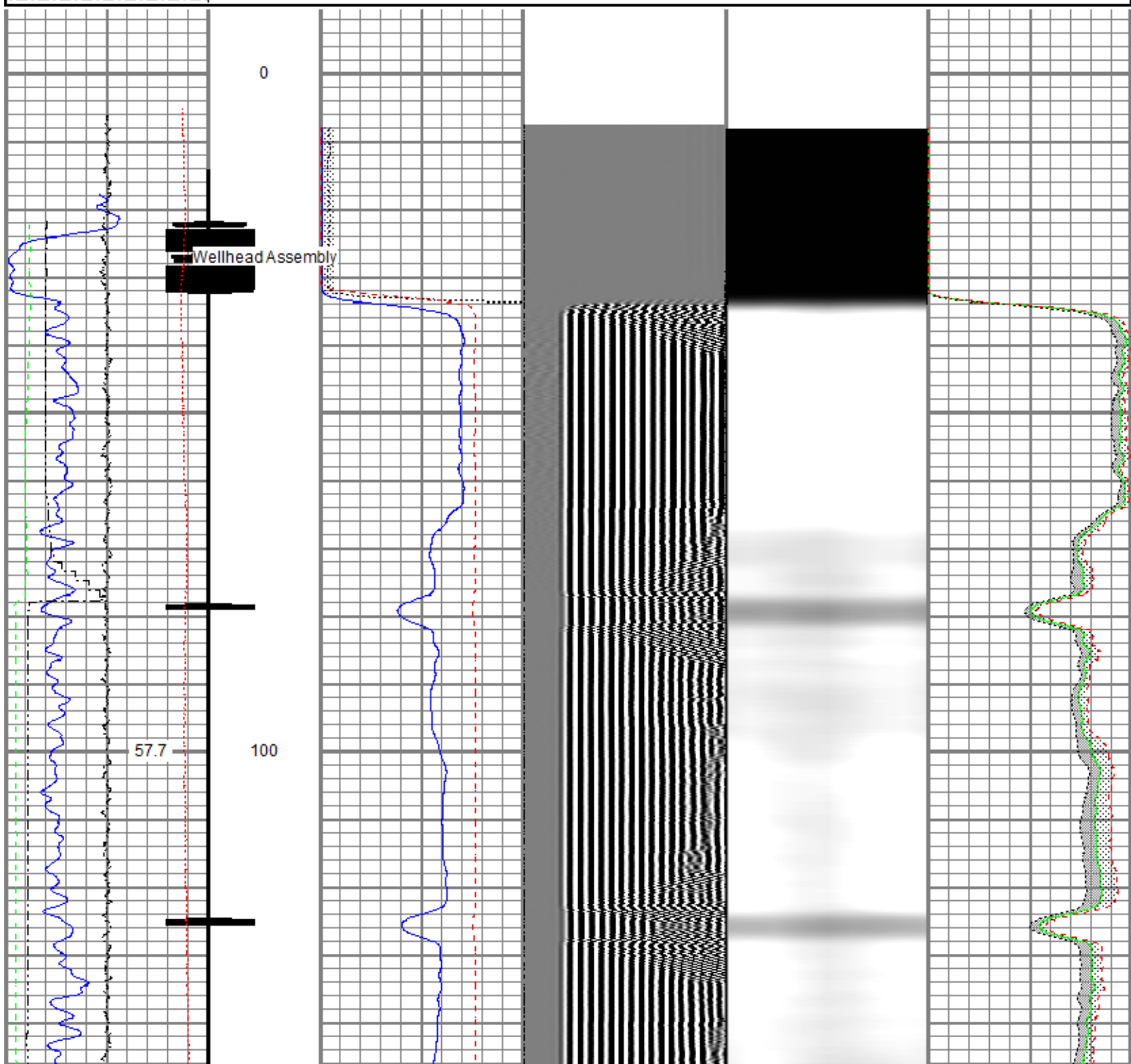
Main Pass

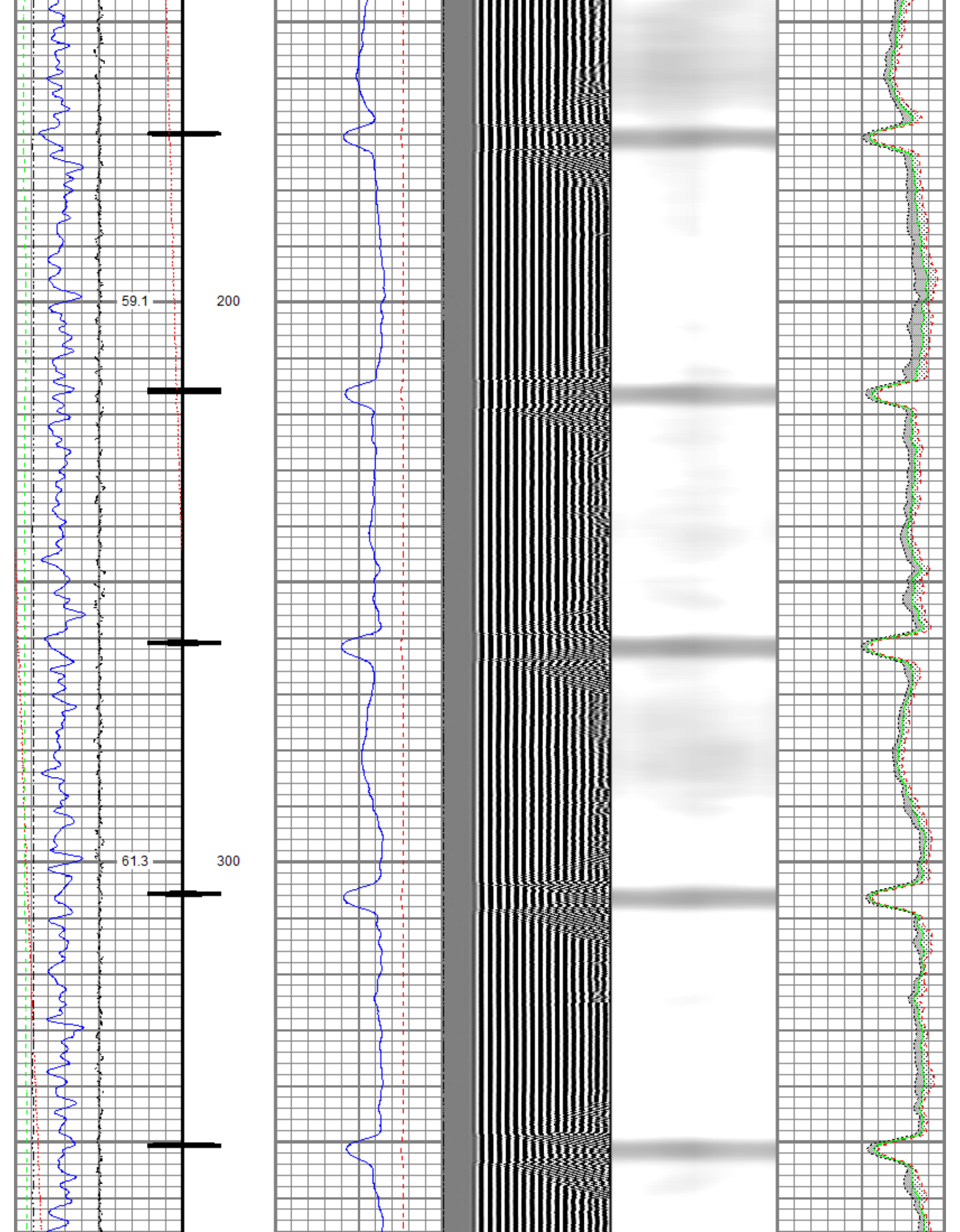


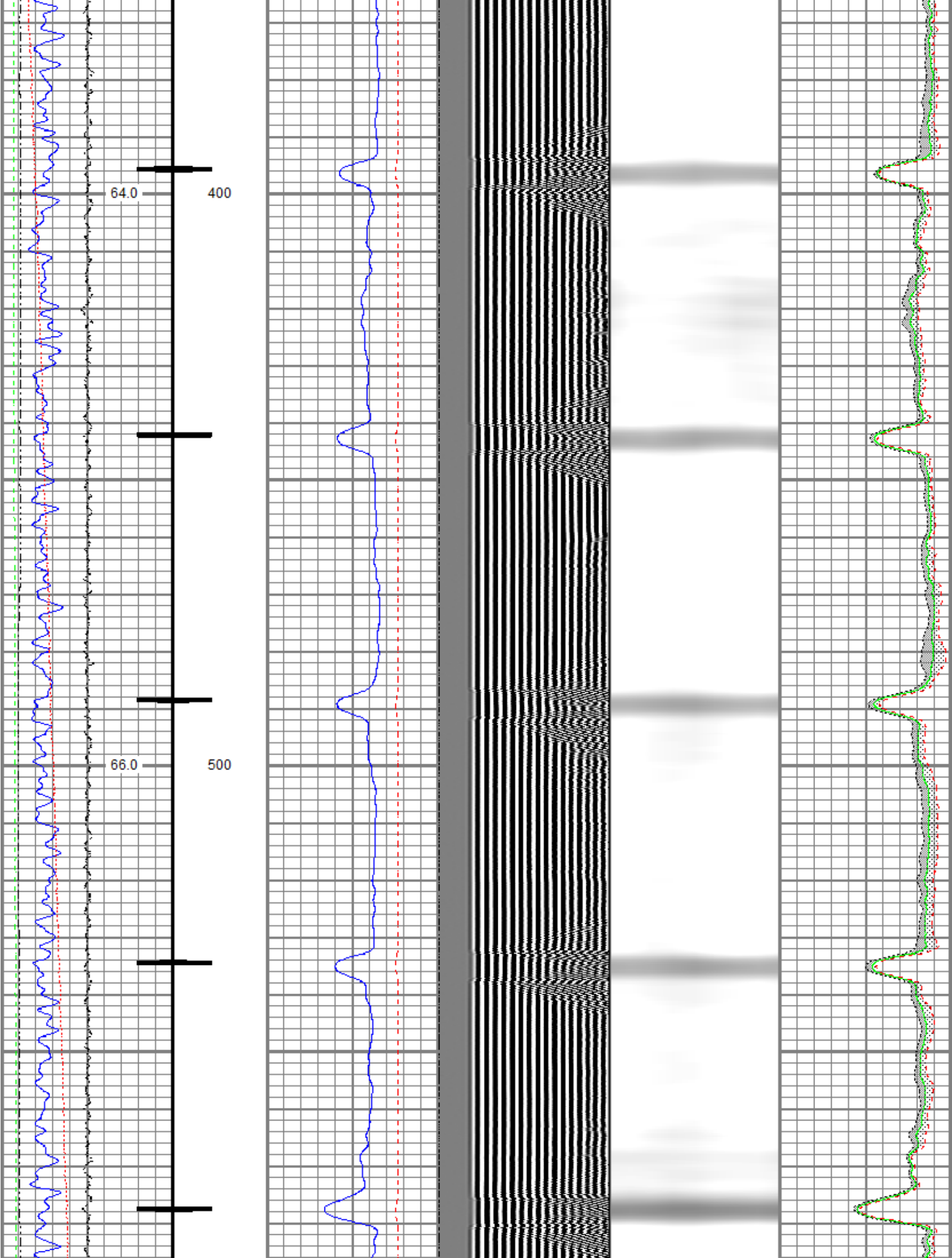
Recorded With 2000 PSI Surface Induced Pressure

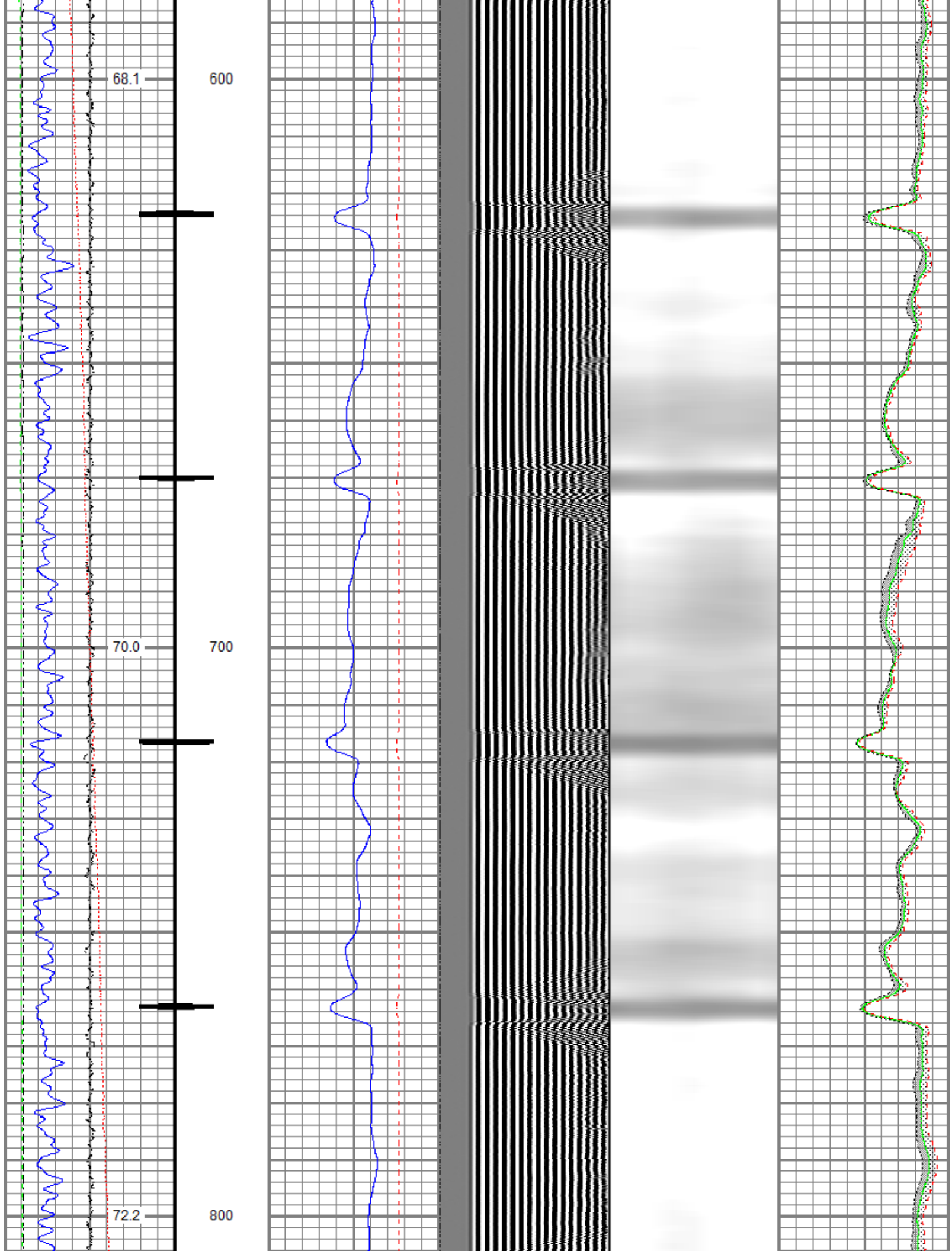
Database File noble\noble\_reveille a34-788\_rbl\_03-20-21\noble\_reveille a34-788\_rbl\_03-20-21.db  
 Dataset Pathname main/pass1  
 Presentation Format ros\_radri\_noble  
 Dataset Creation Sat Mar 20 14:59:58 2021  
 Charted by Depth in Feet scaled 1:240

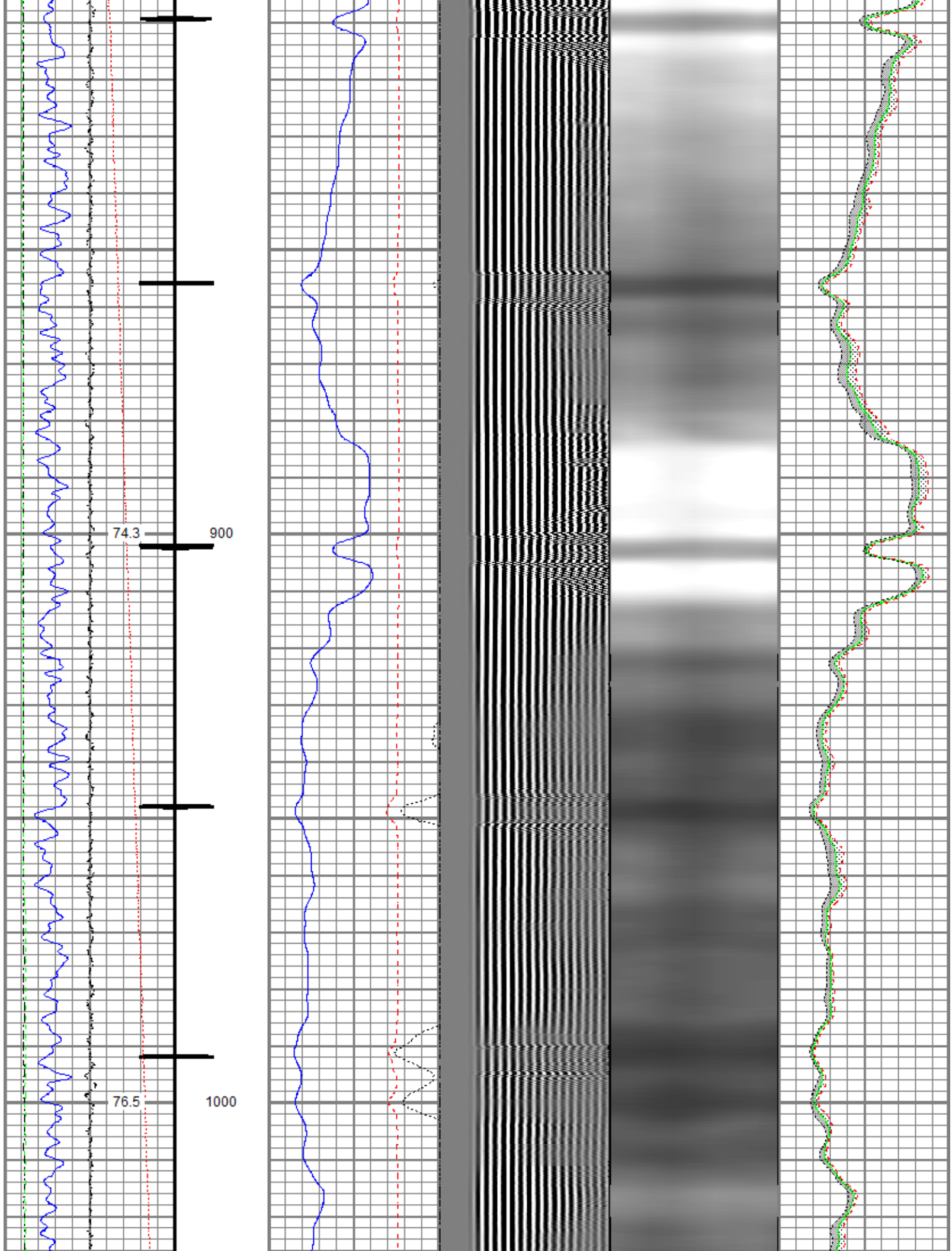
Gamma Ray	0	3' Amplitude (mV)	100	5' Variable Density Log	Sector Map	0	Average Amplitude	100
(GAPI)	120	3' Amplitude x 5	200	(u sec)	1200		Minimum Amplitude	
Casing Collar Locator		0	(mV)	20		0		100
0 Temperature (degF)	20	3' Travel Time					Maximum Amplitude	
Line Speed		650	(u sec)	150		0		100
-150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

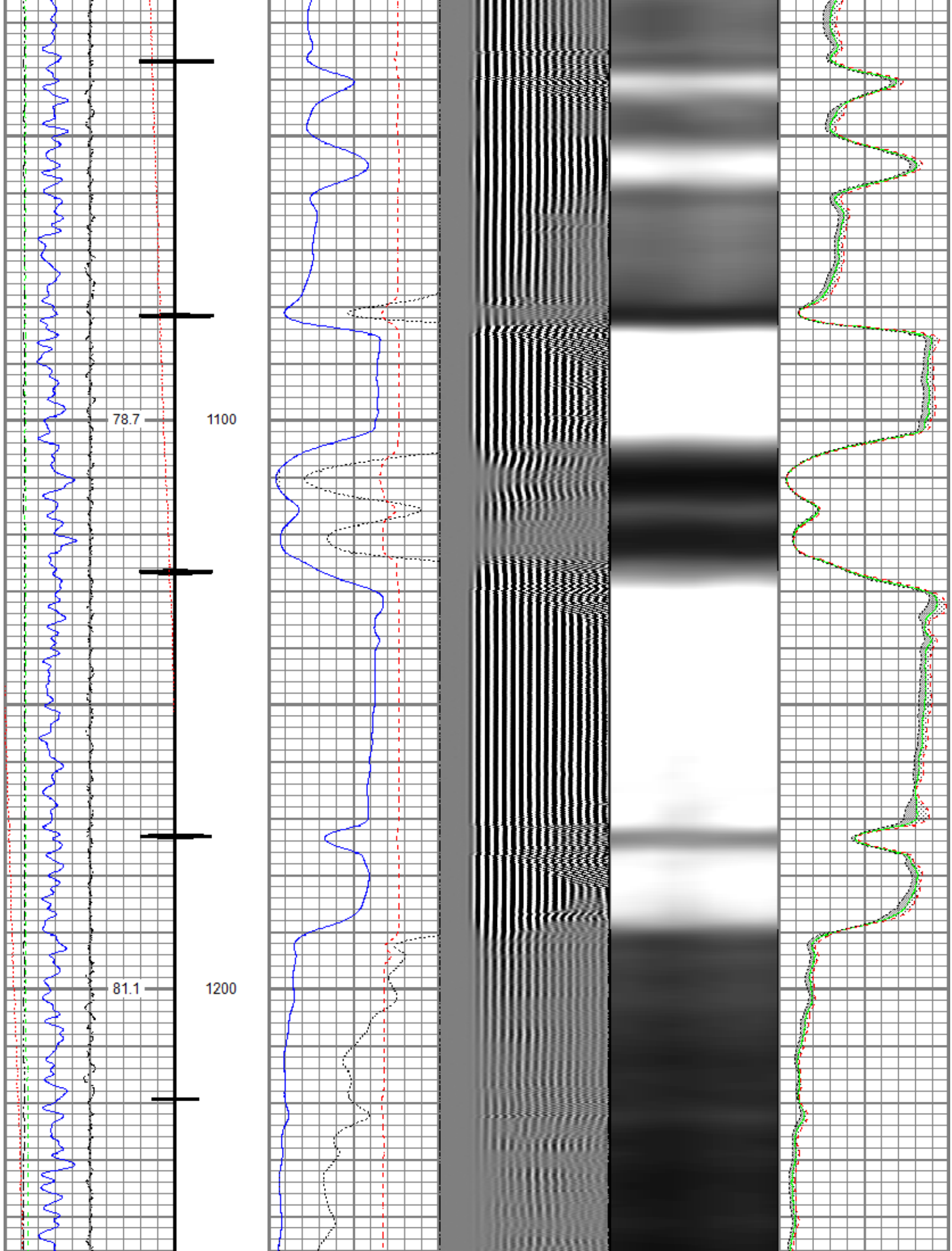


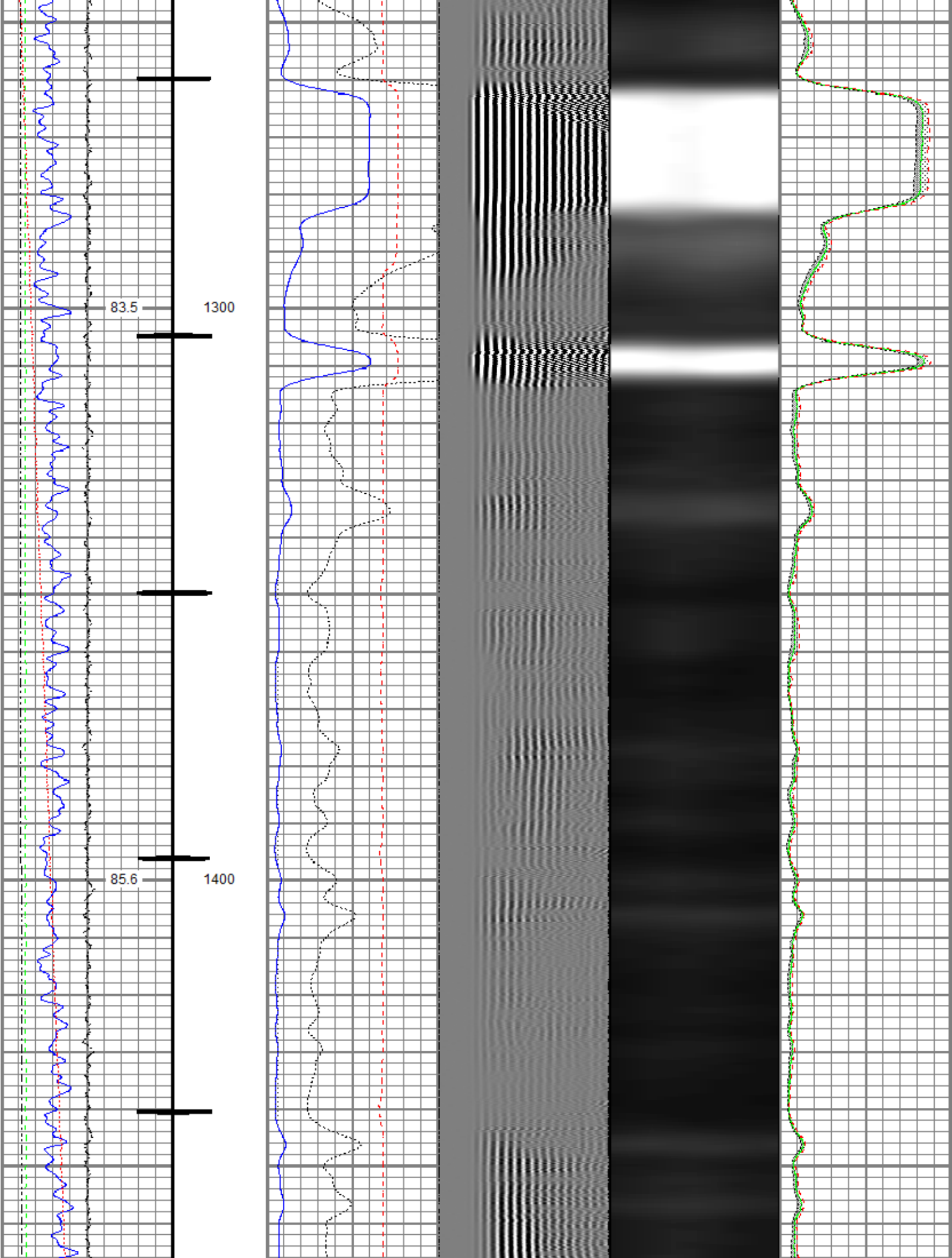


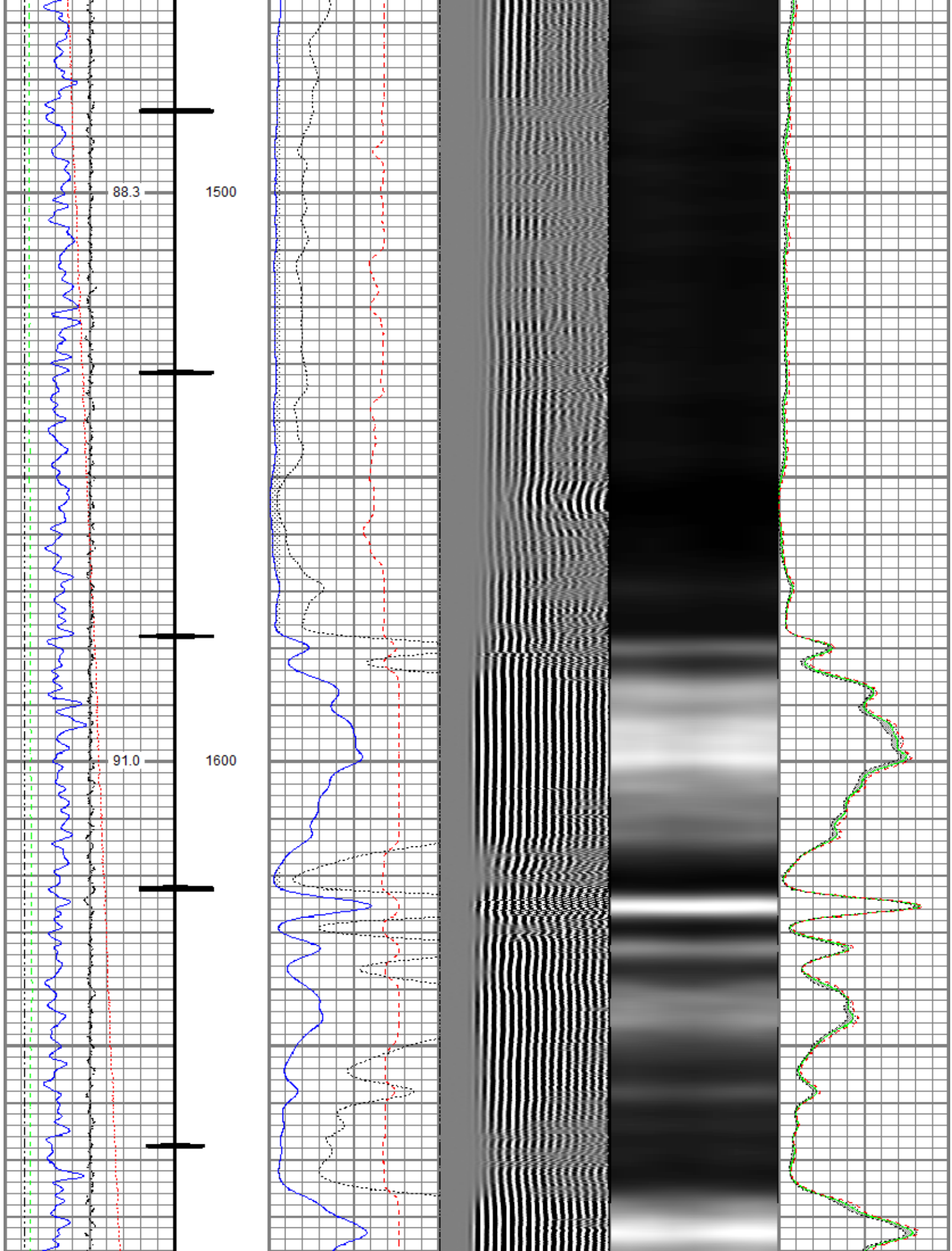


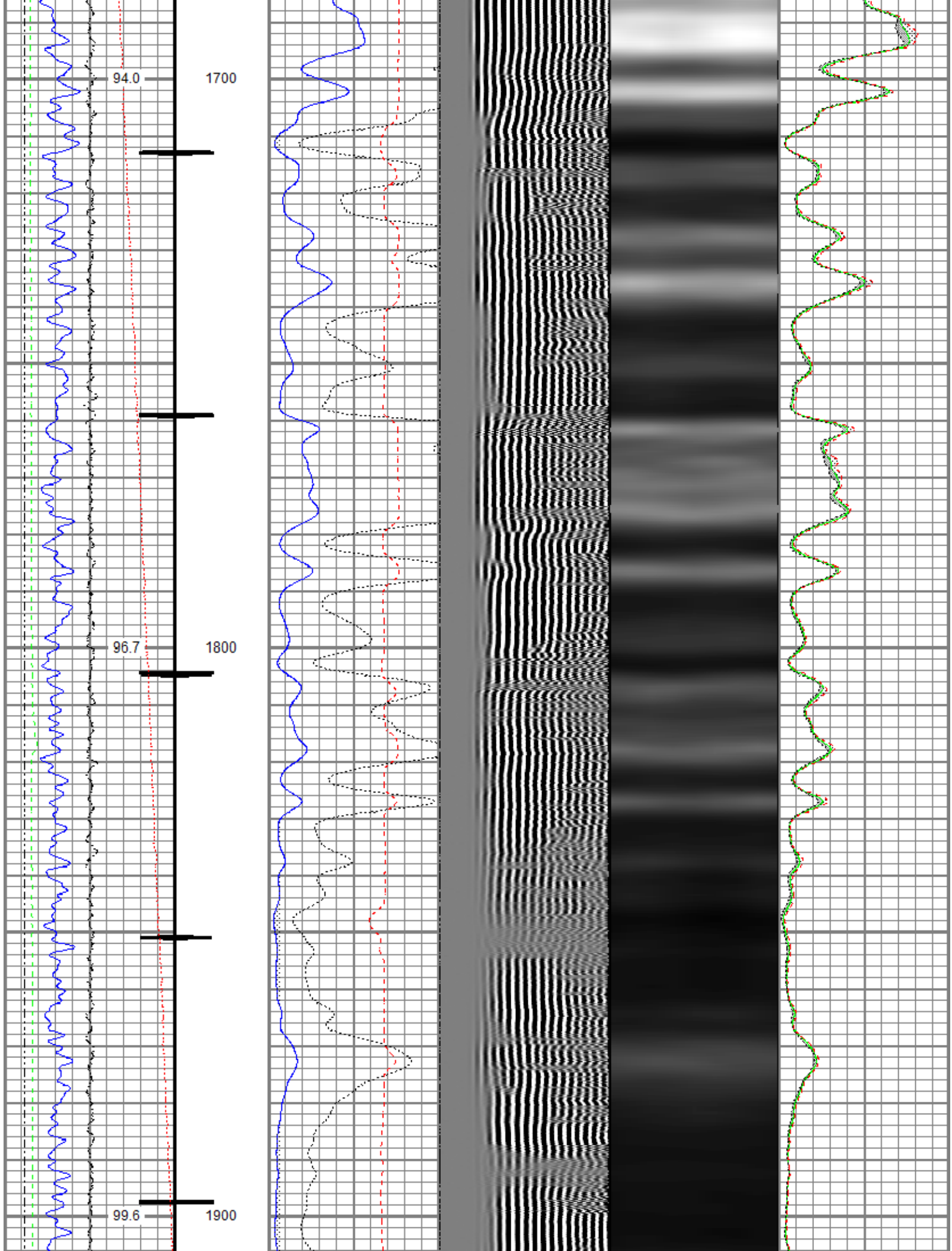


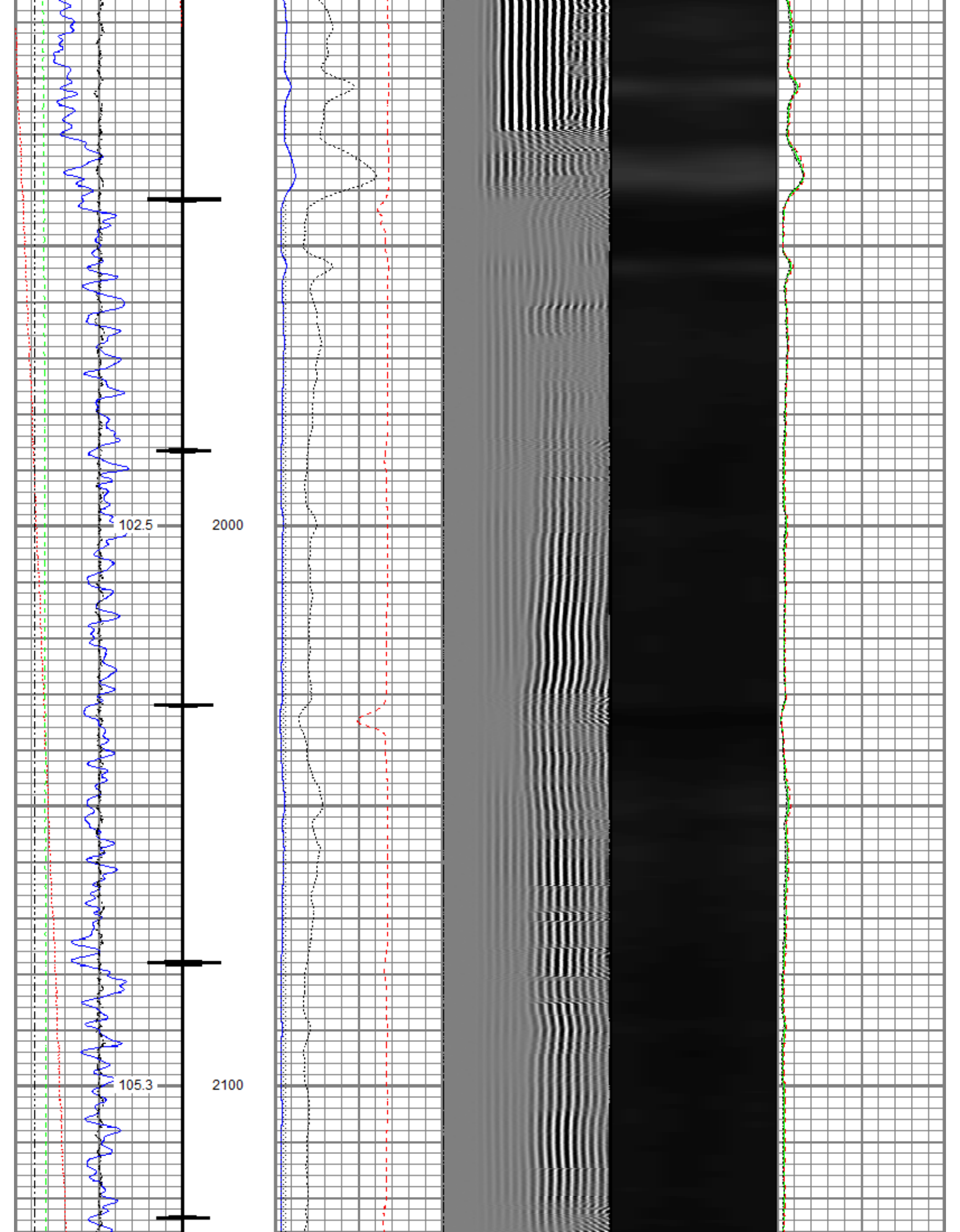


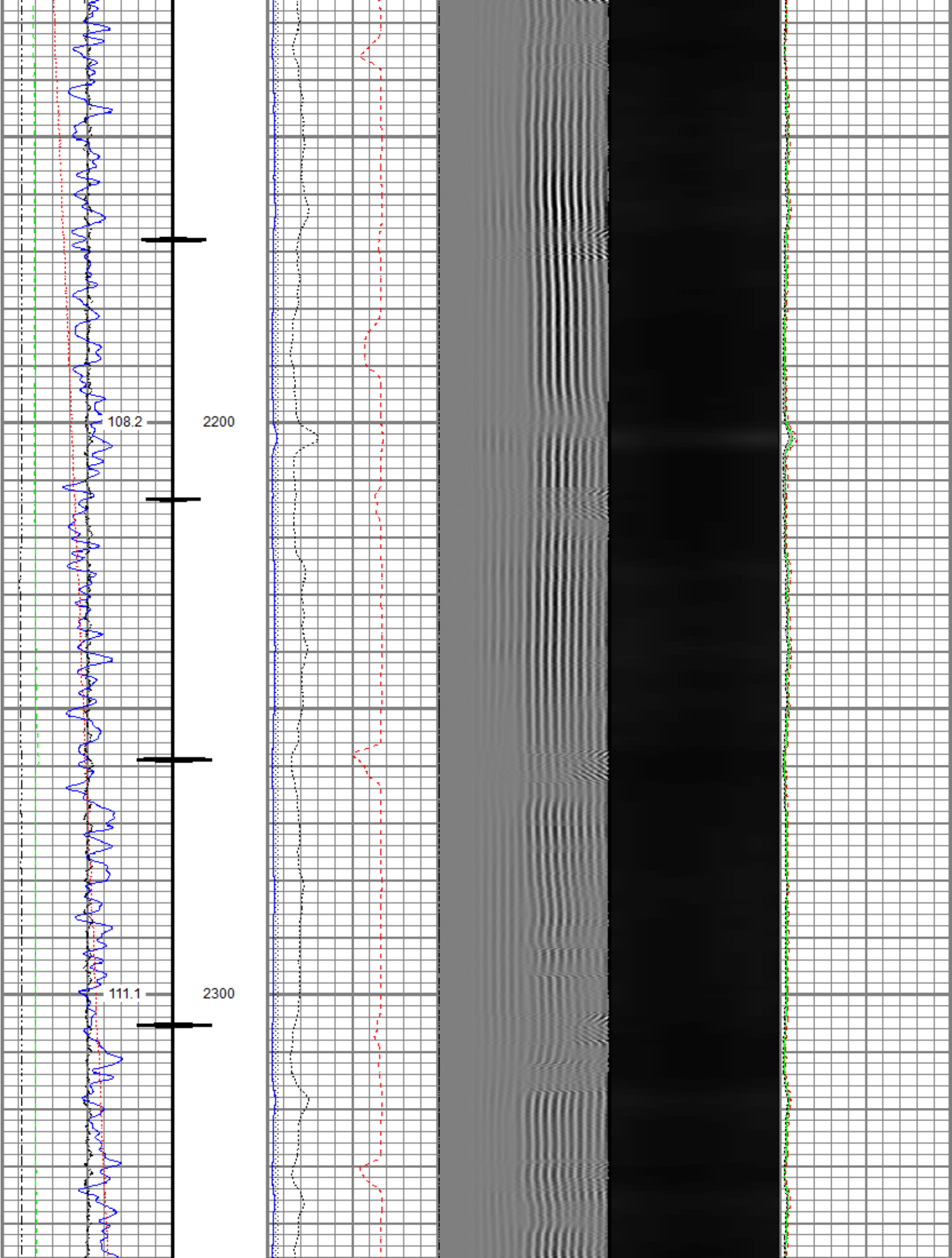


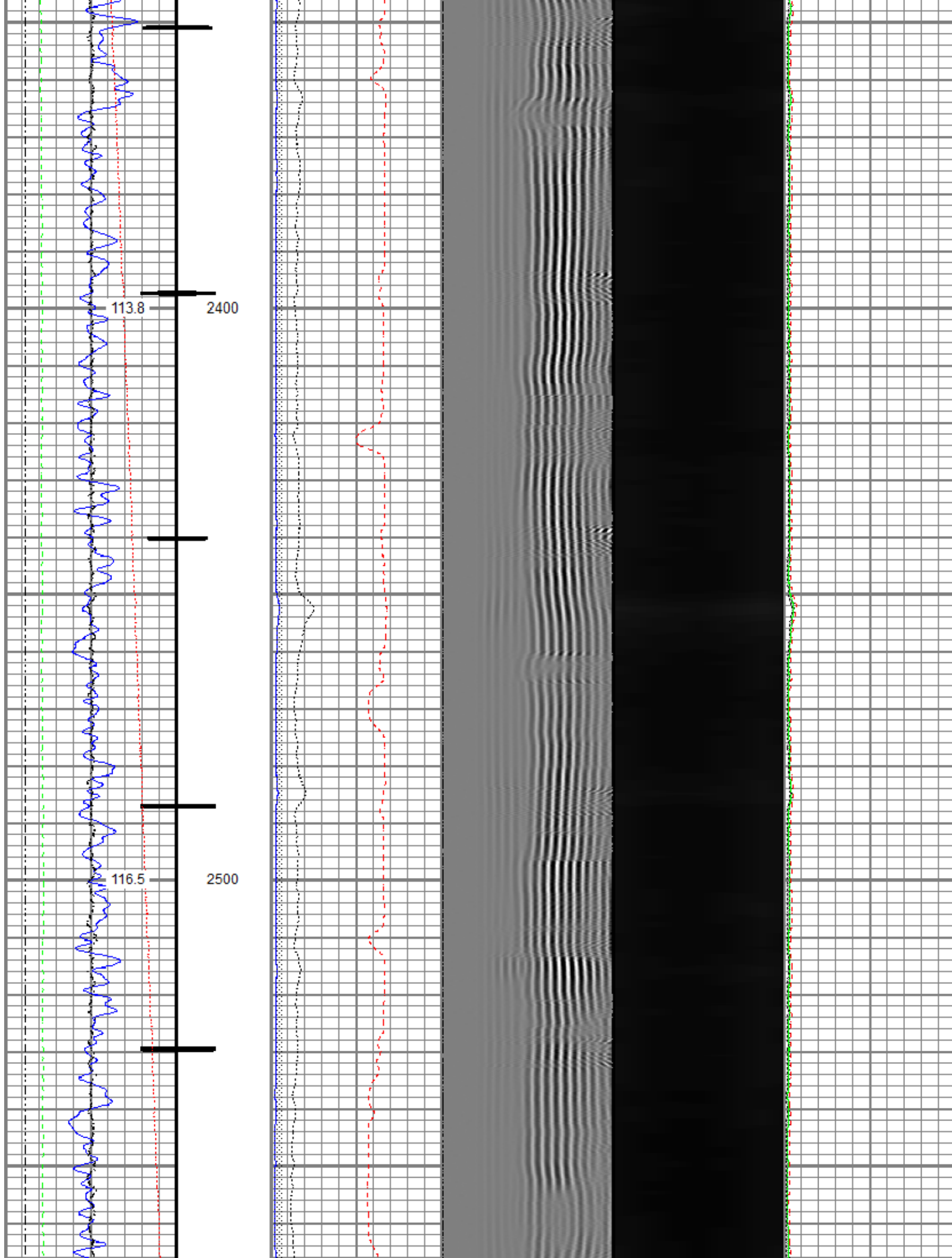


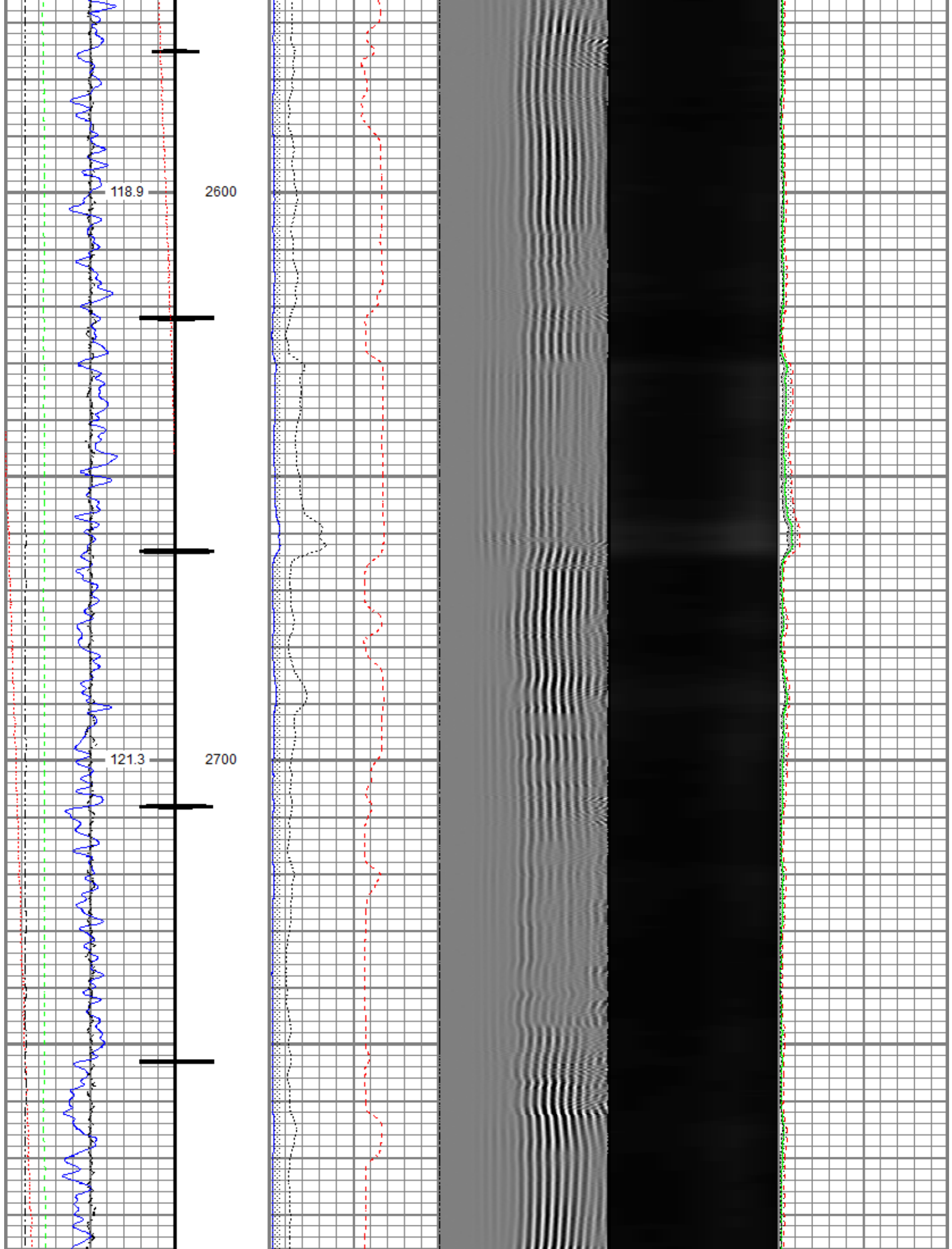


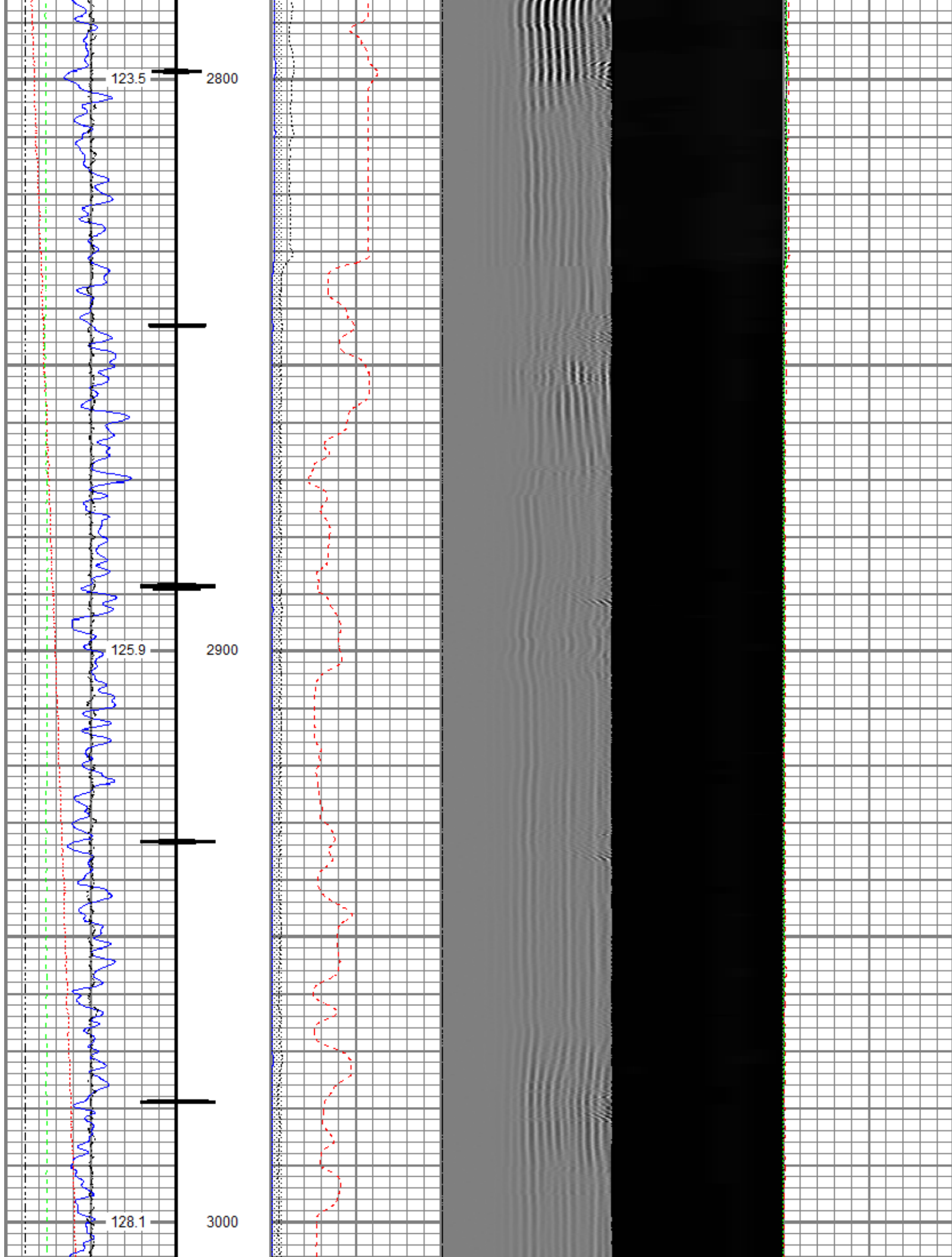


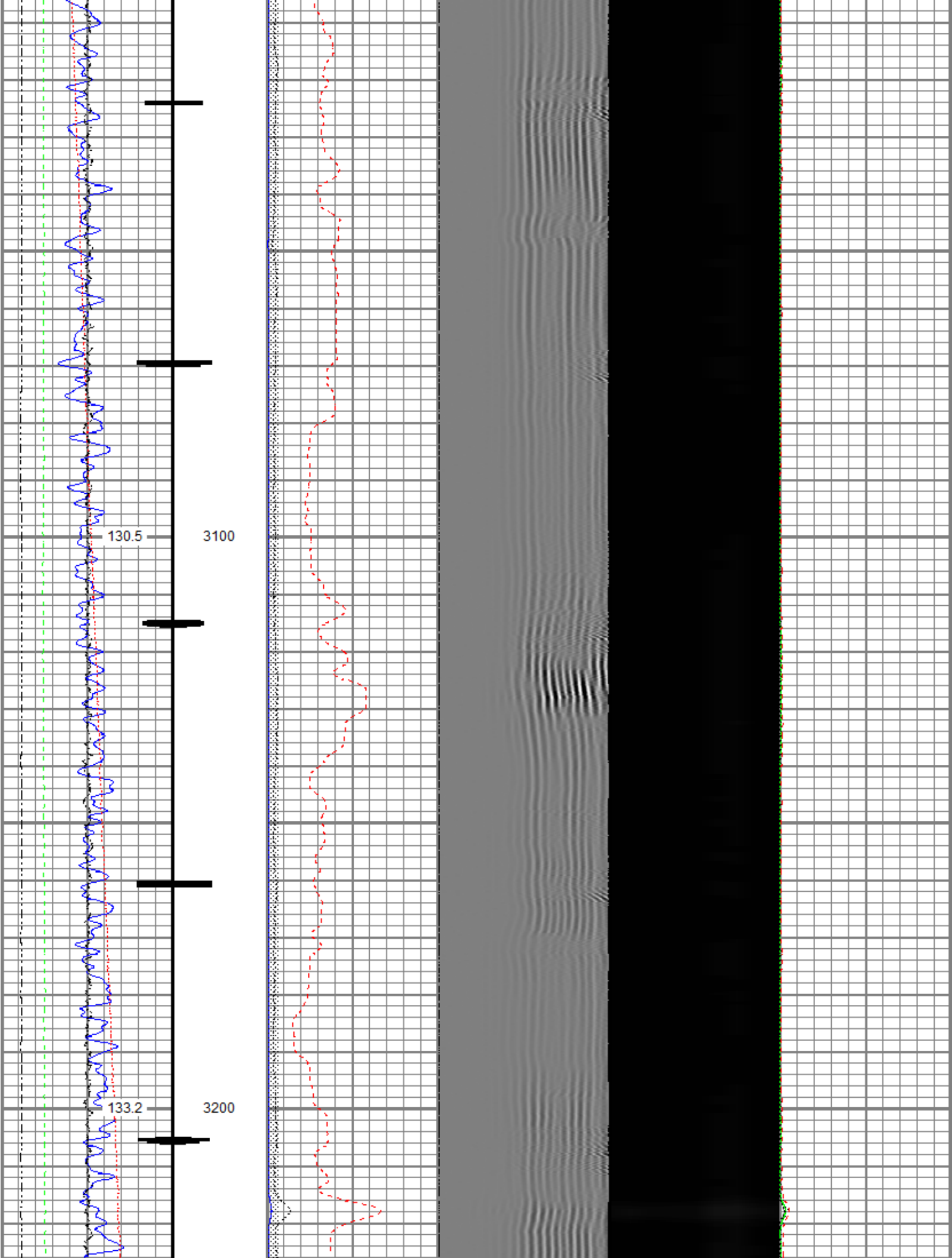


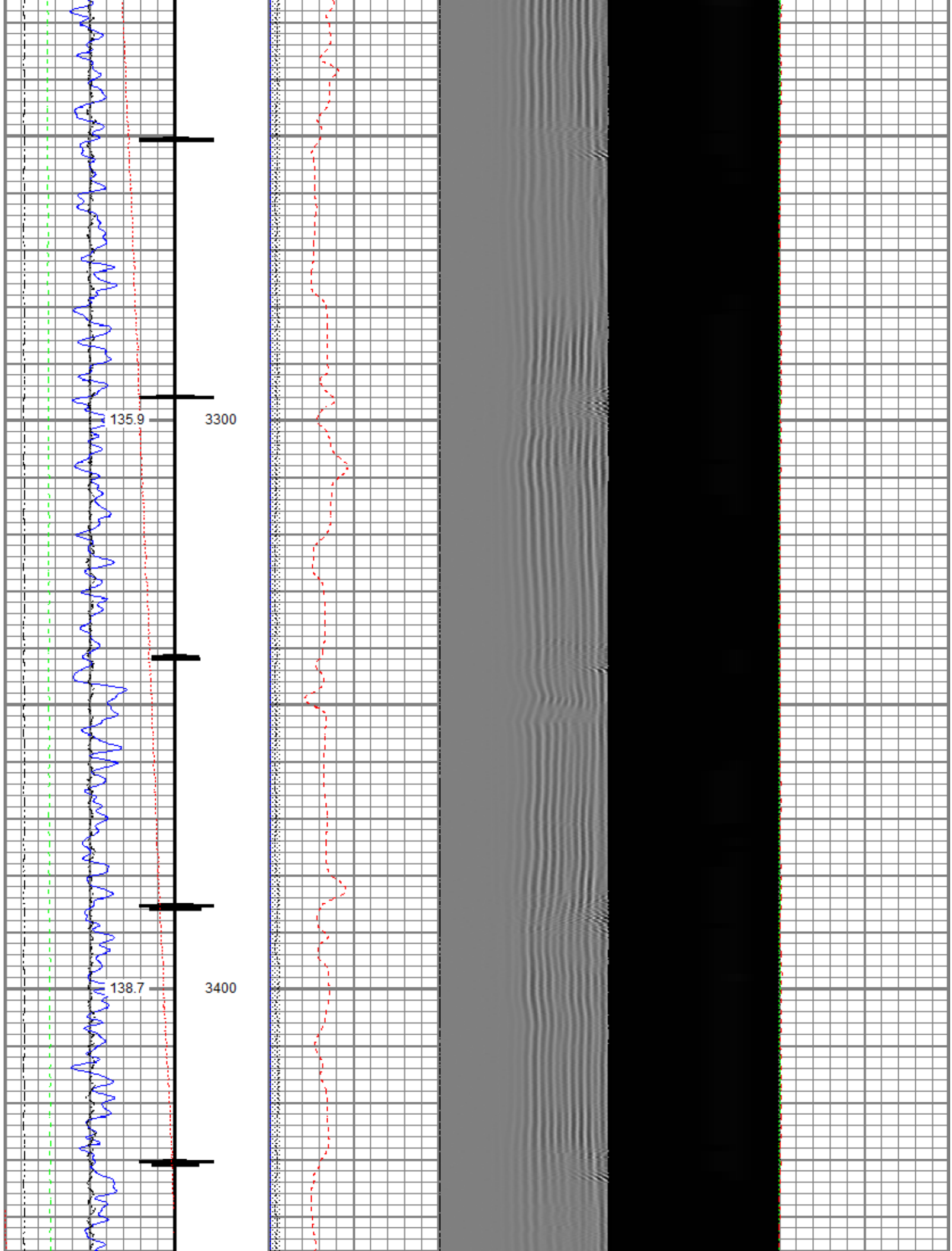


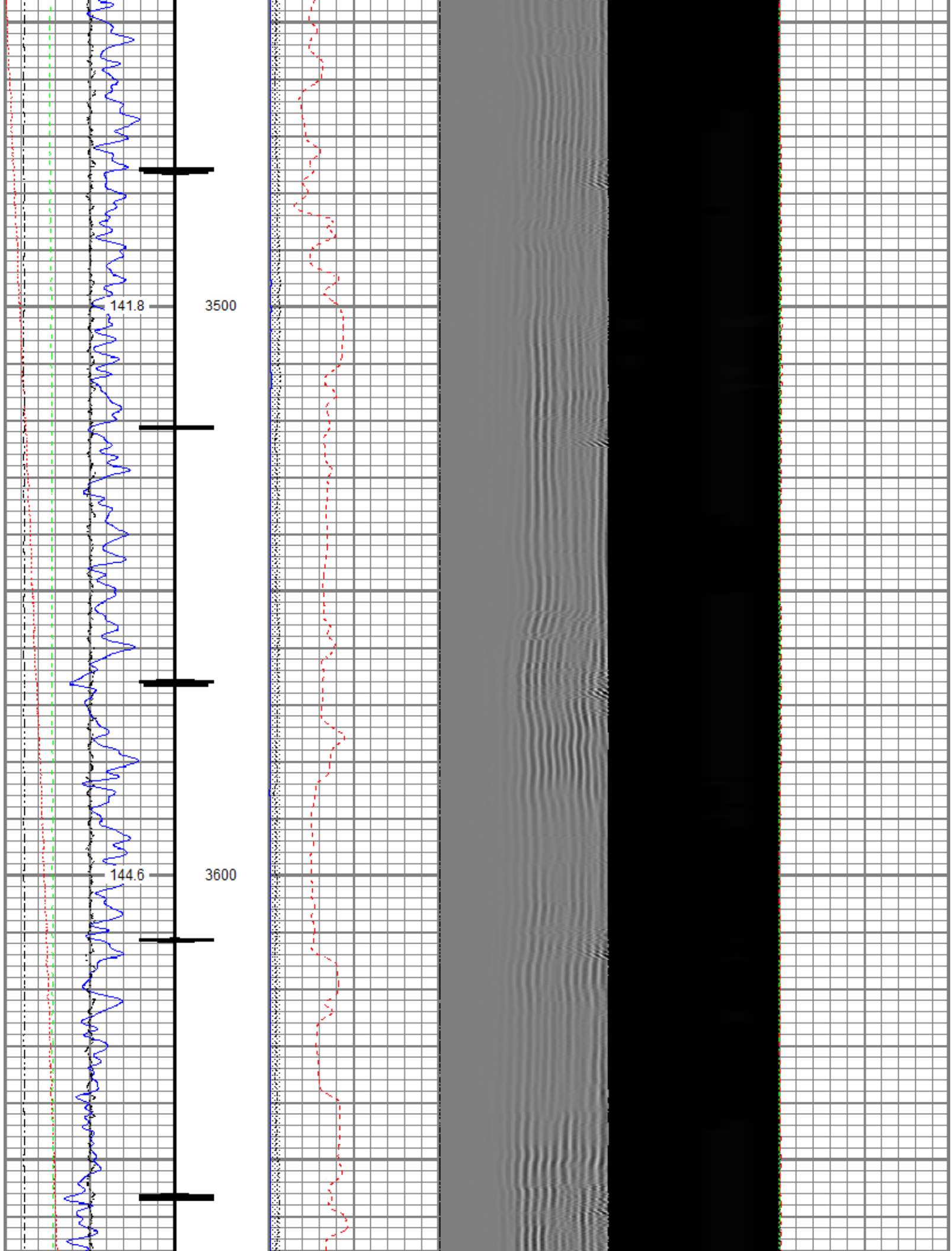


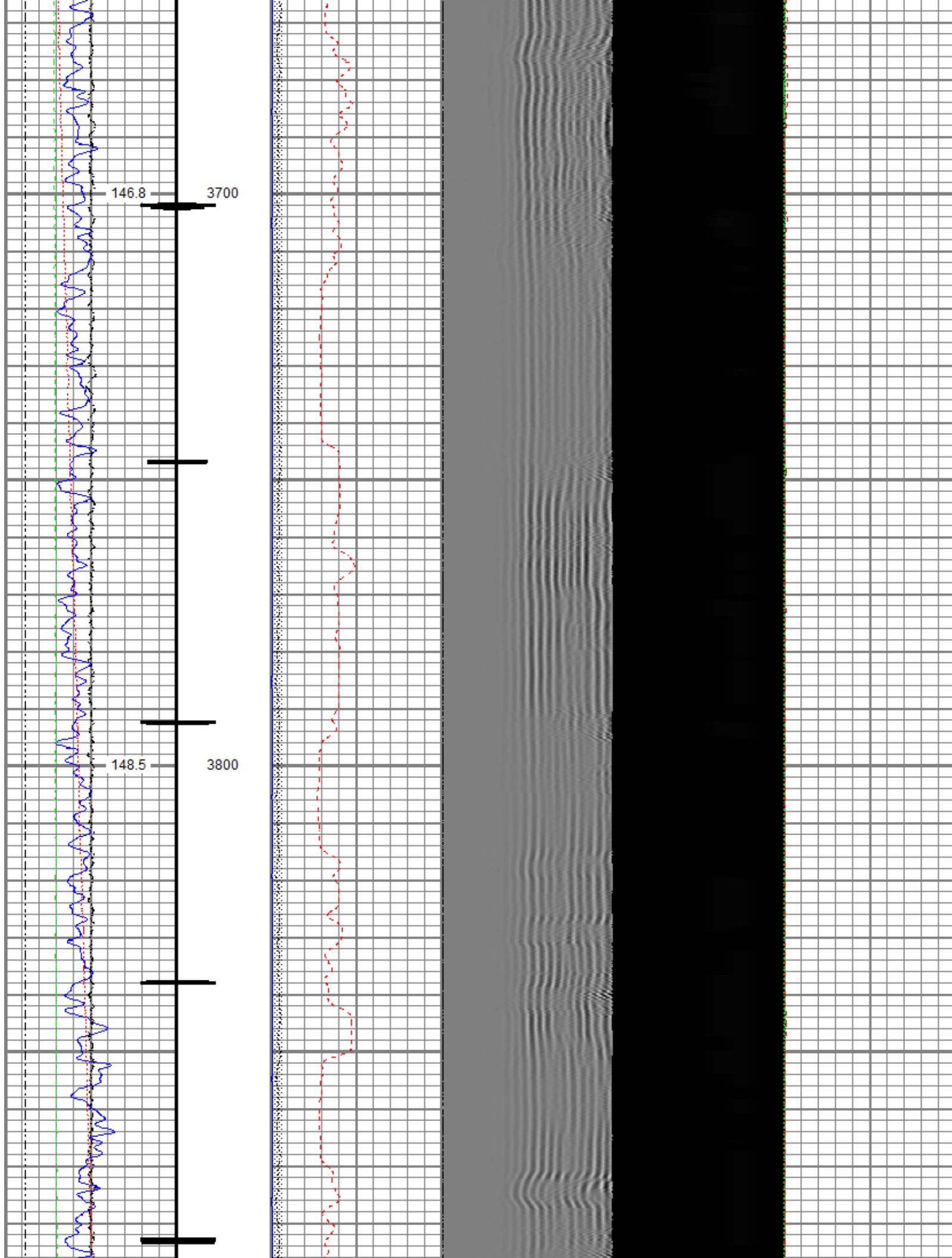


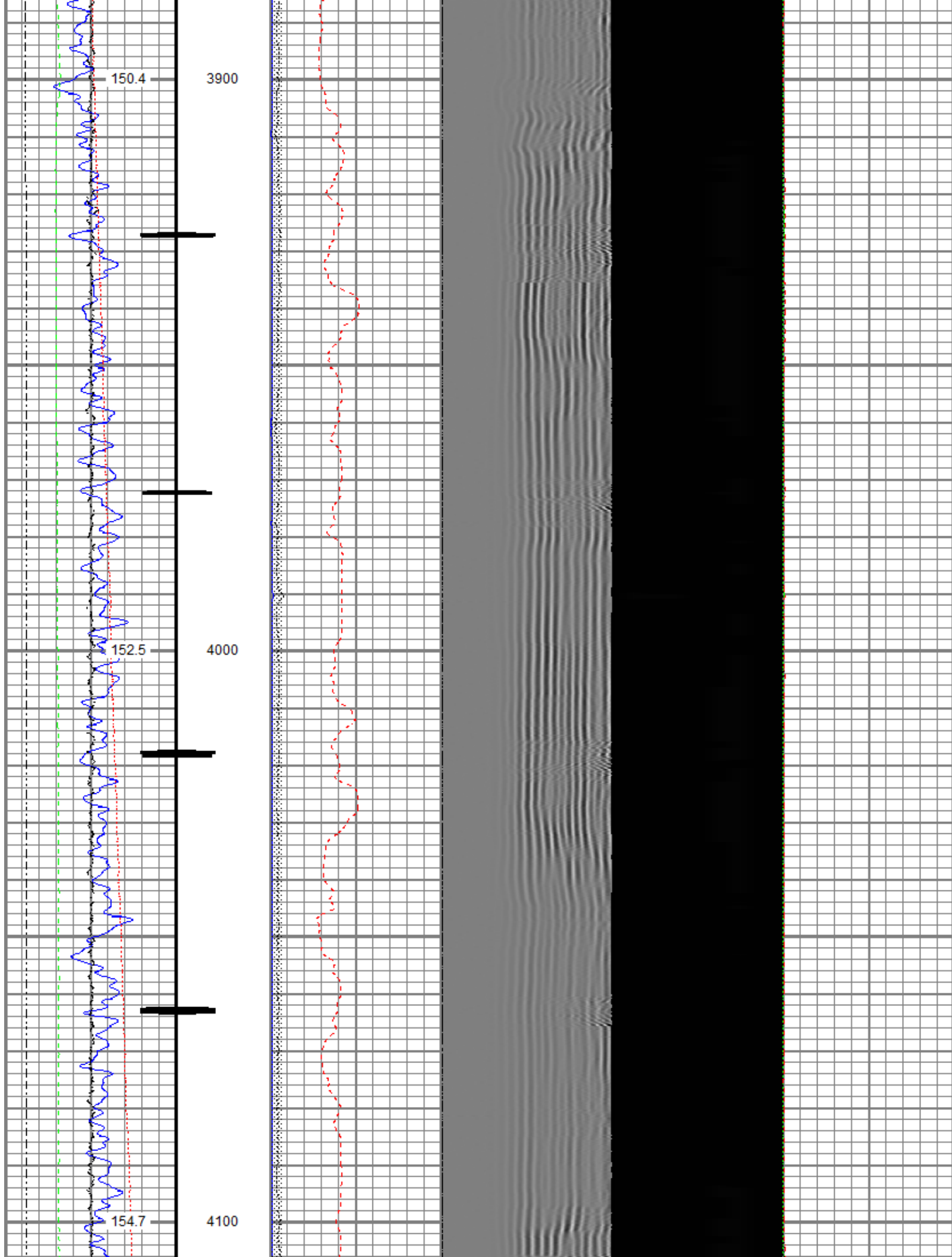


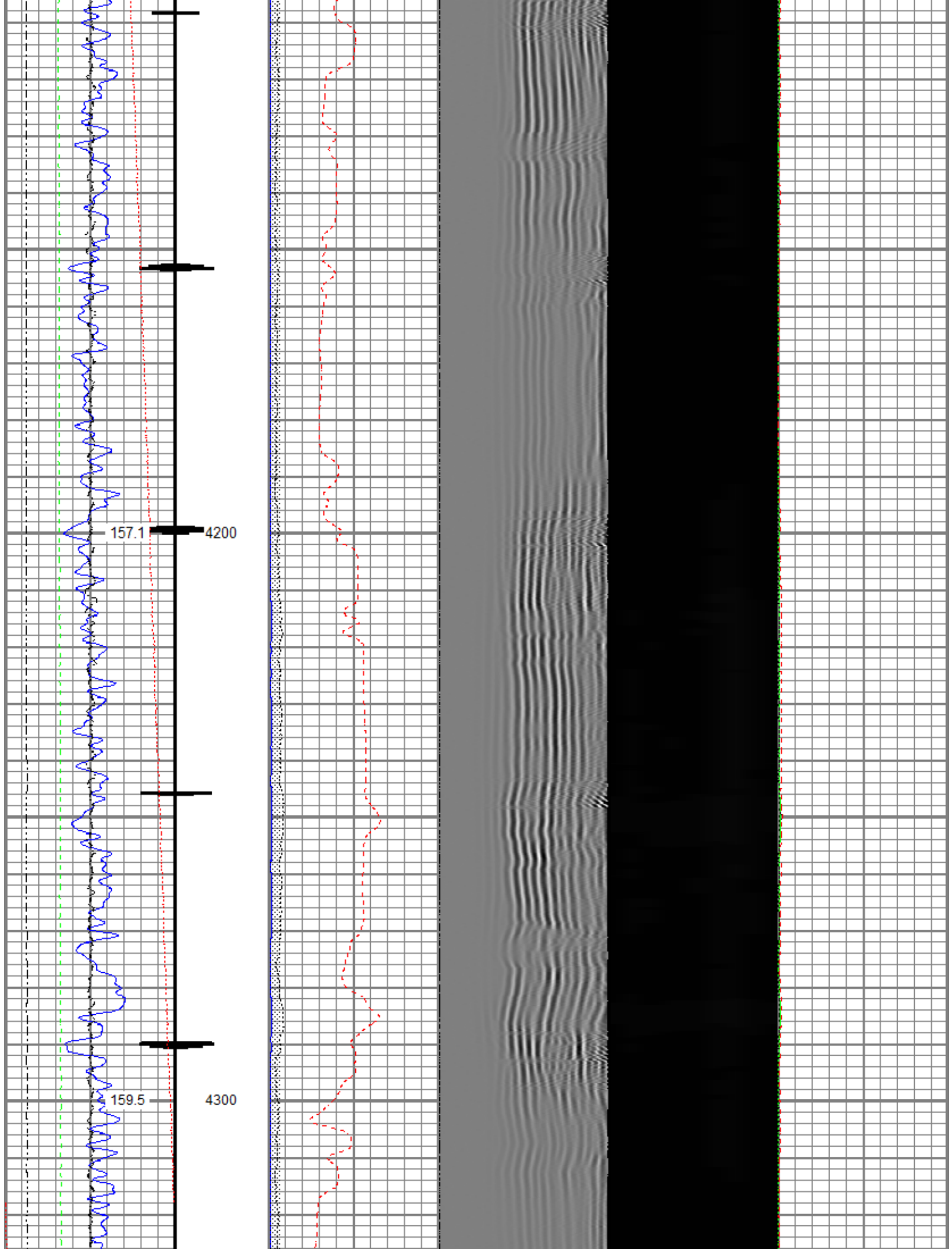


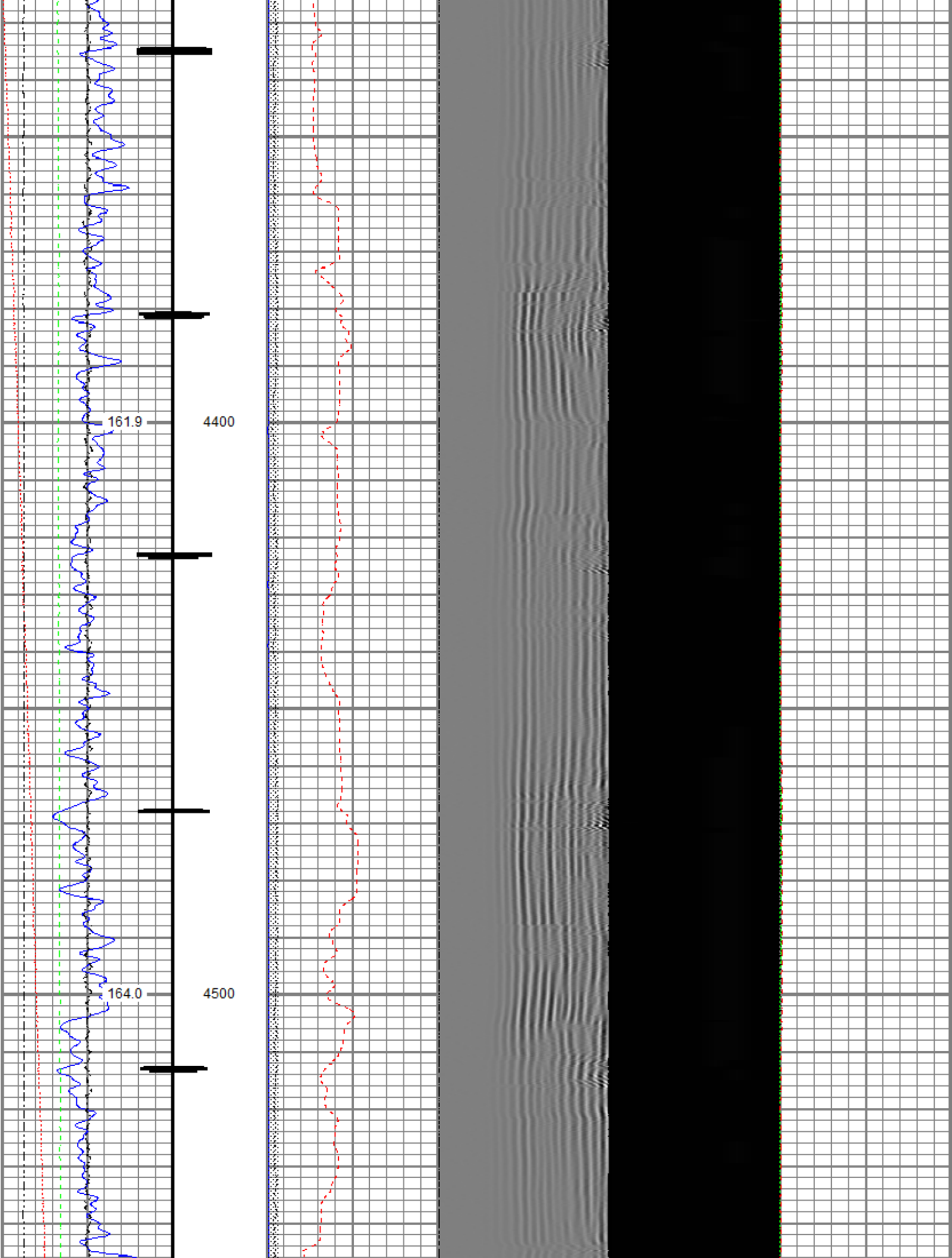


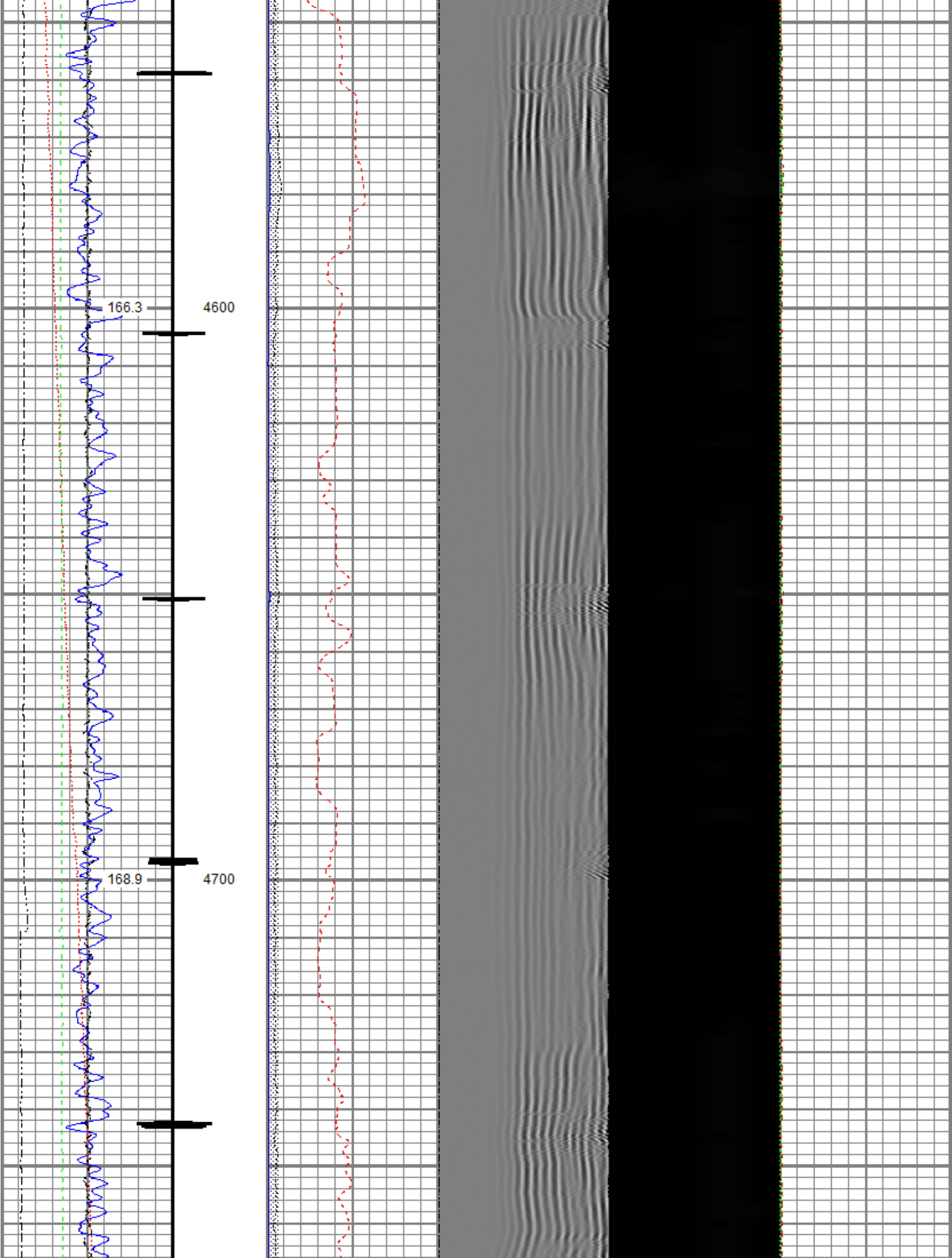


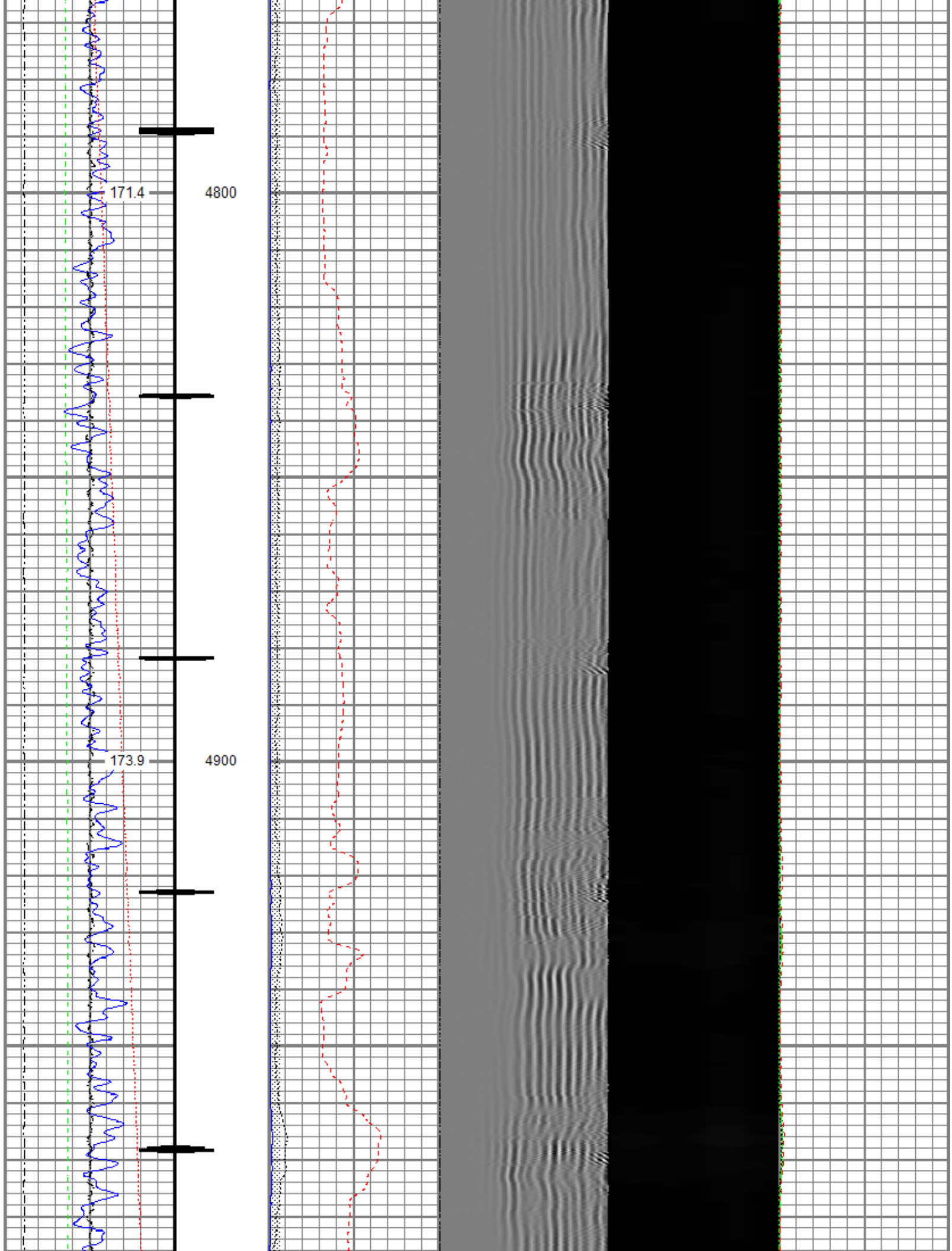


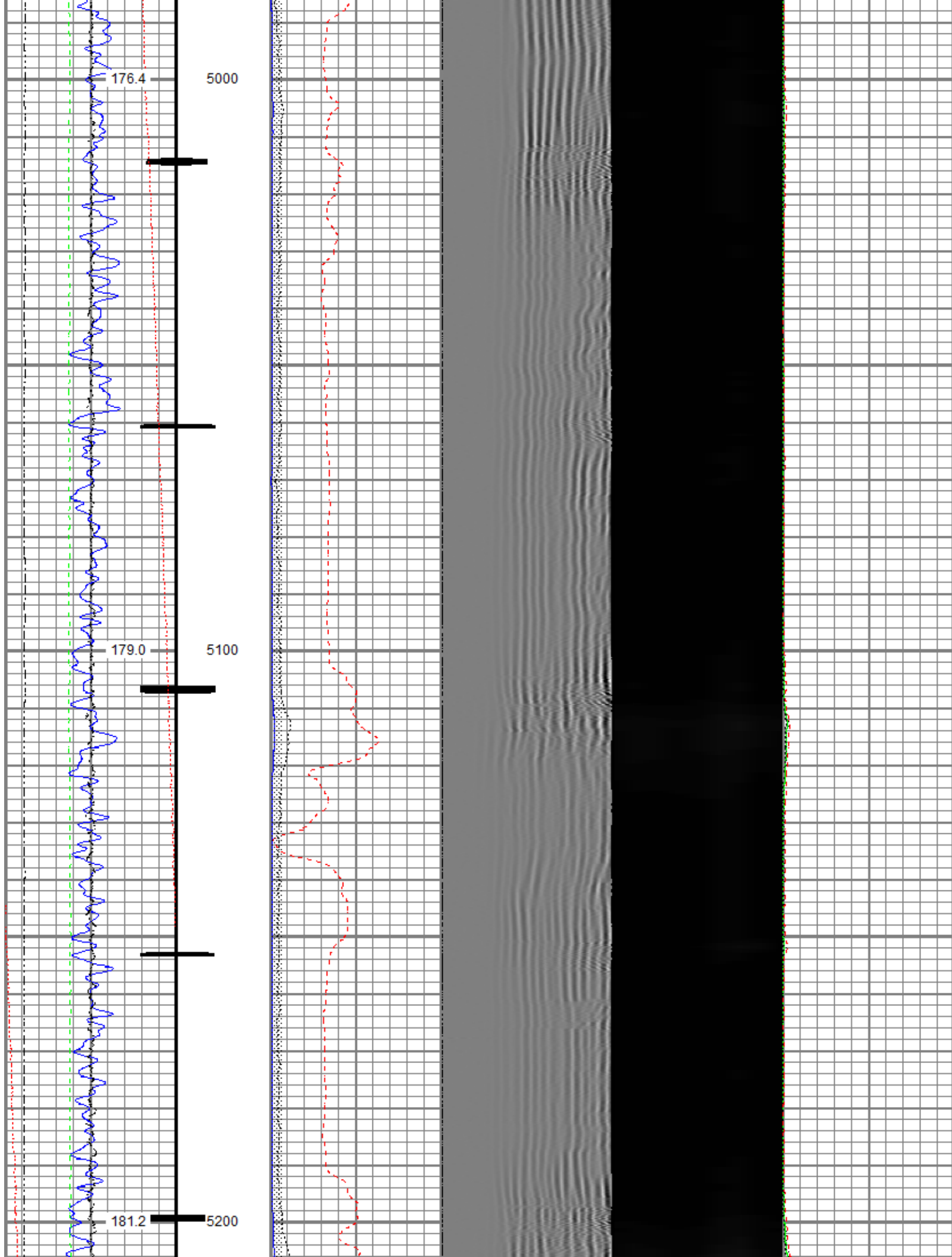


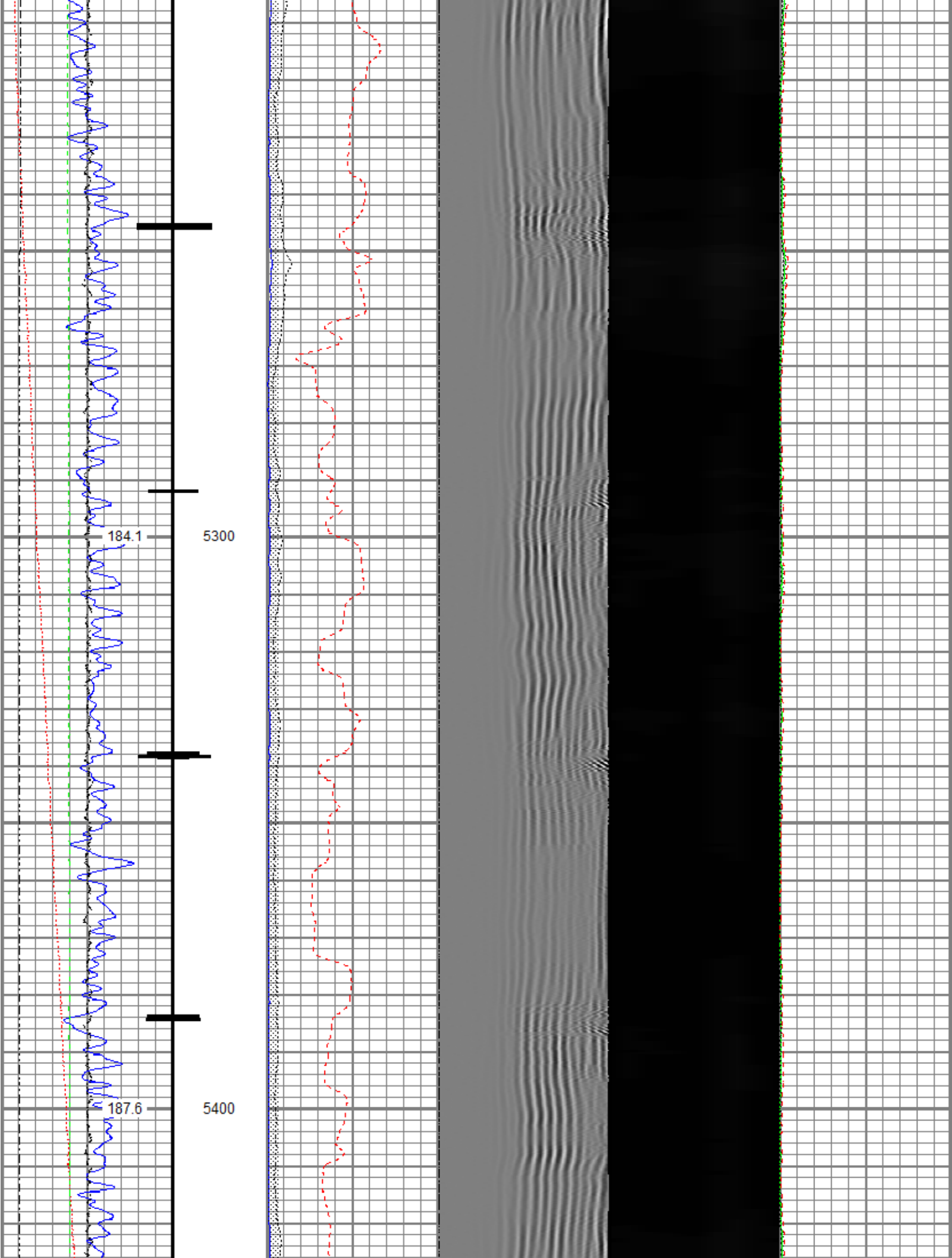


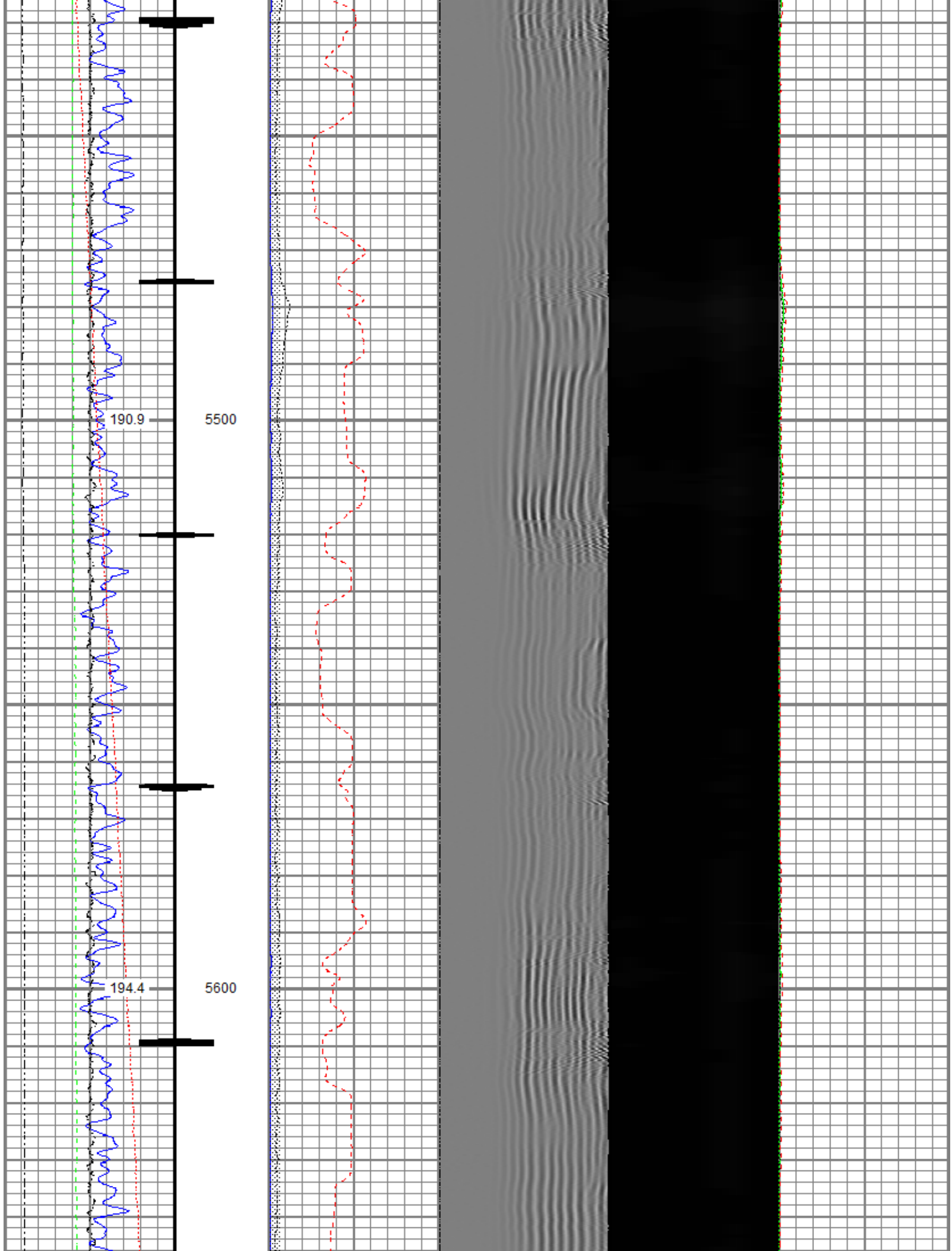


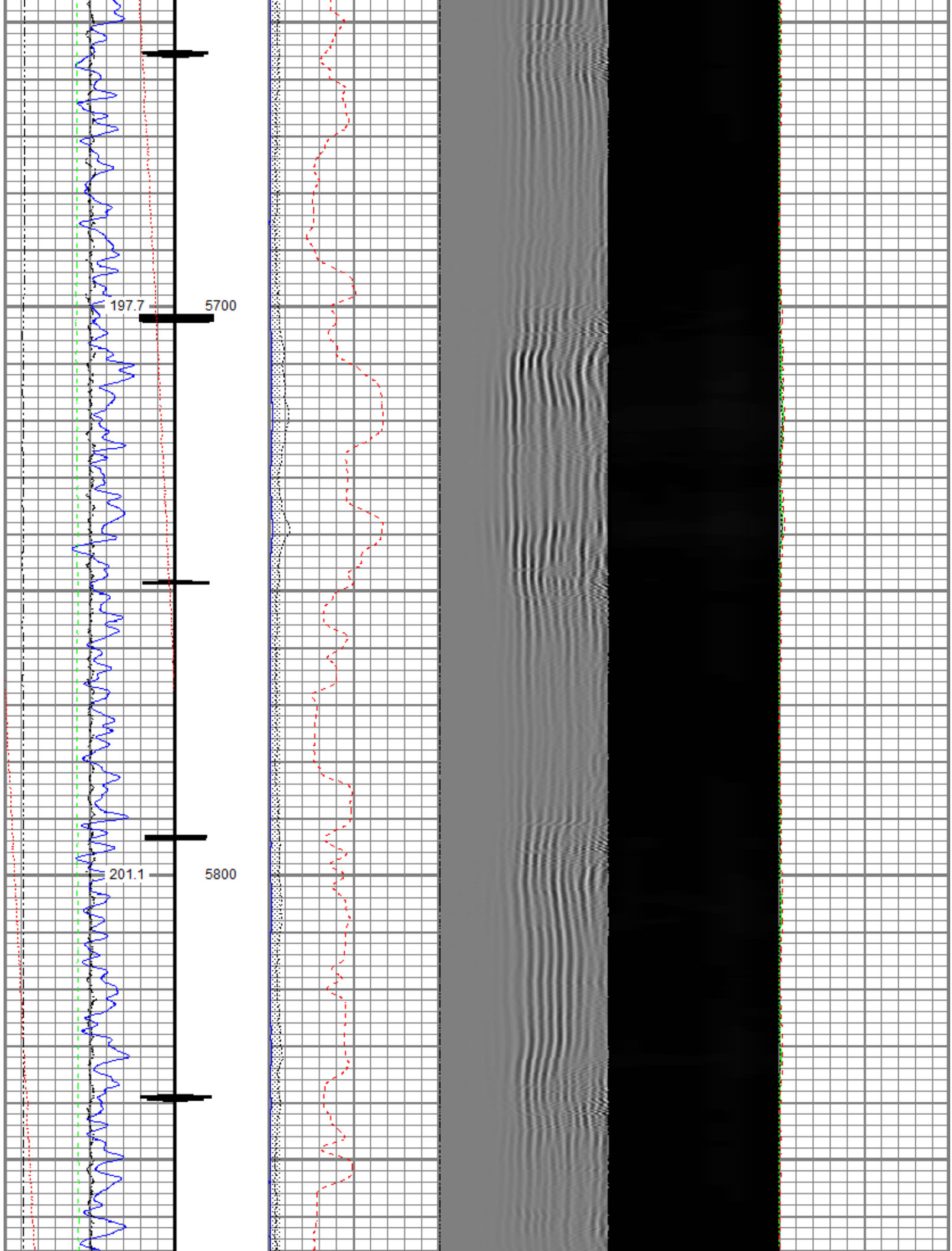


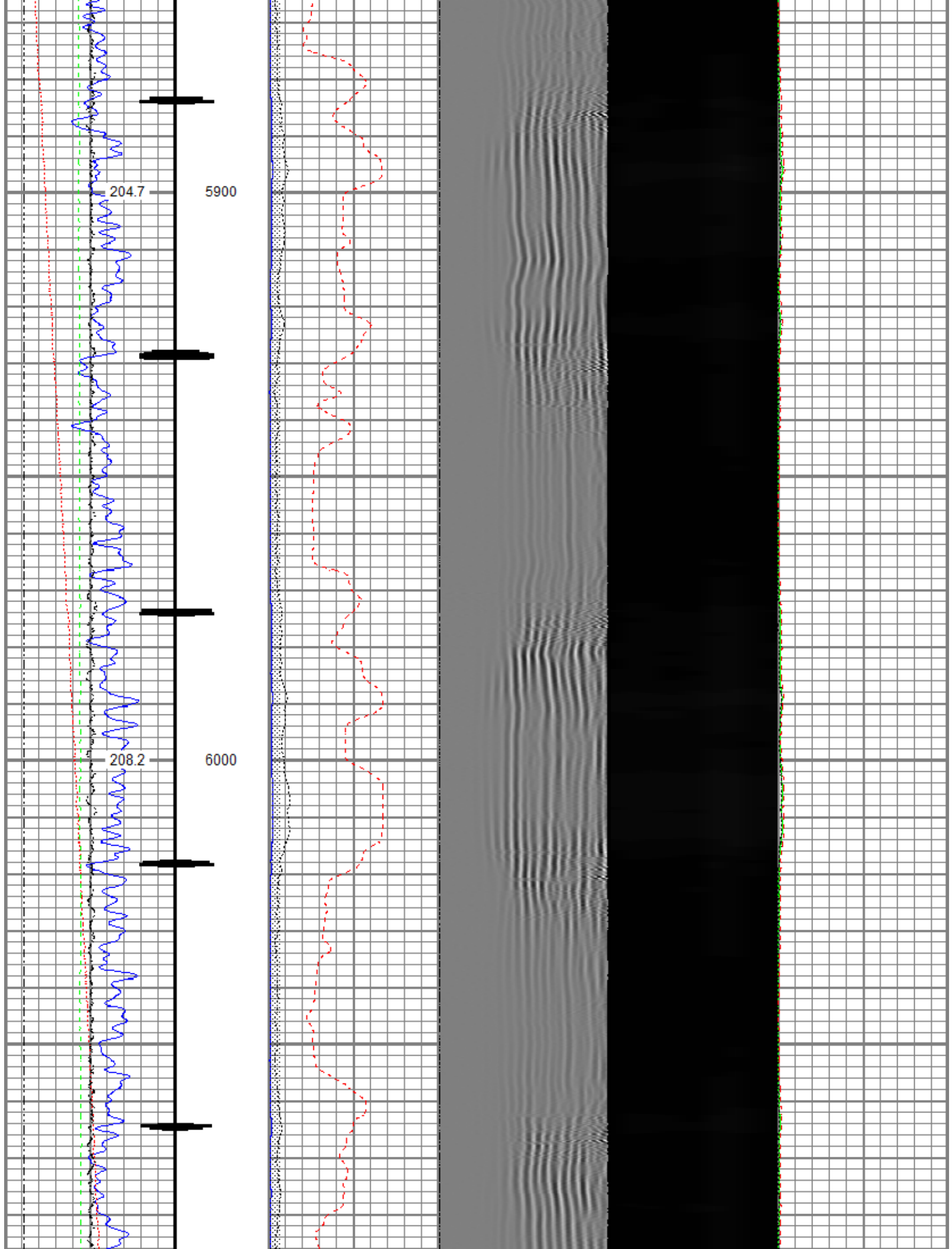


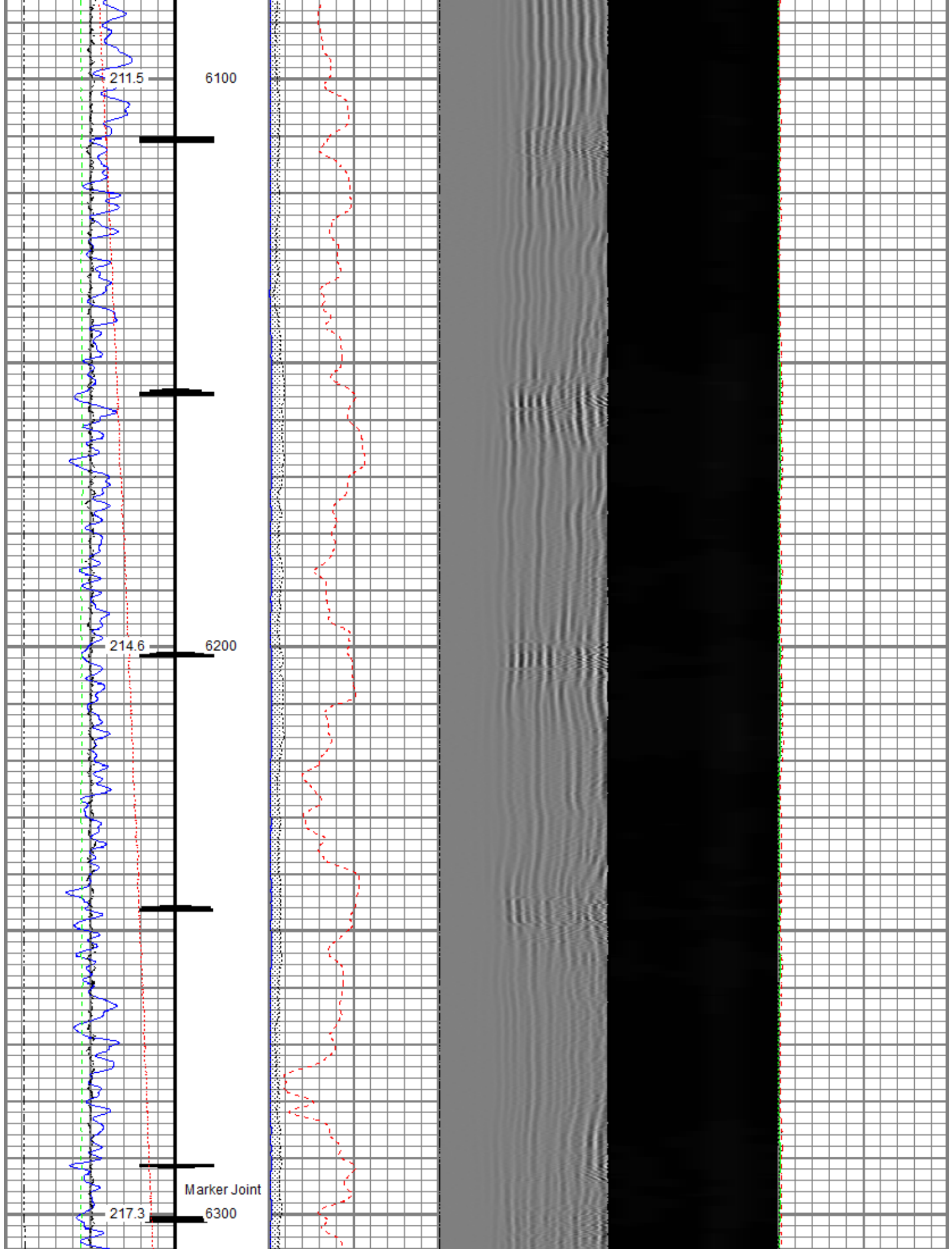


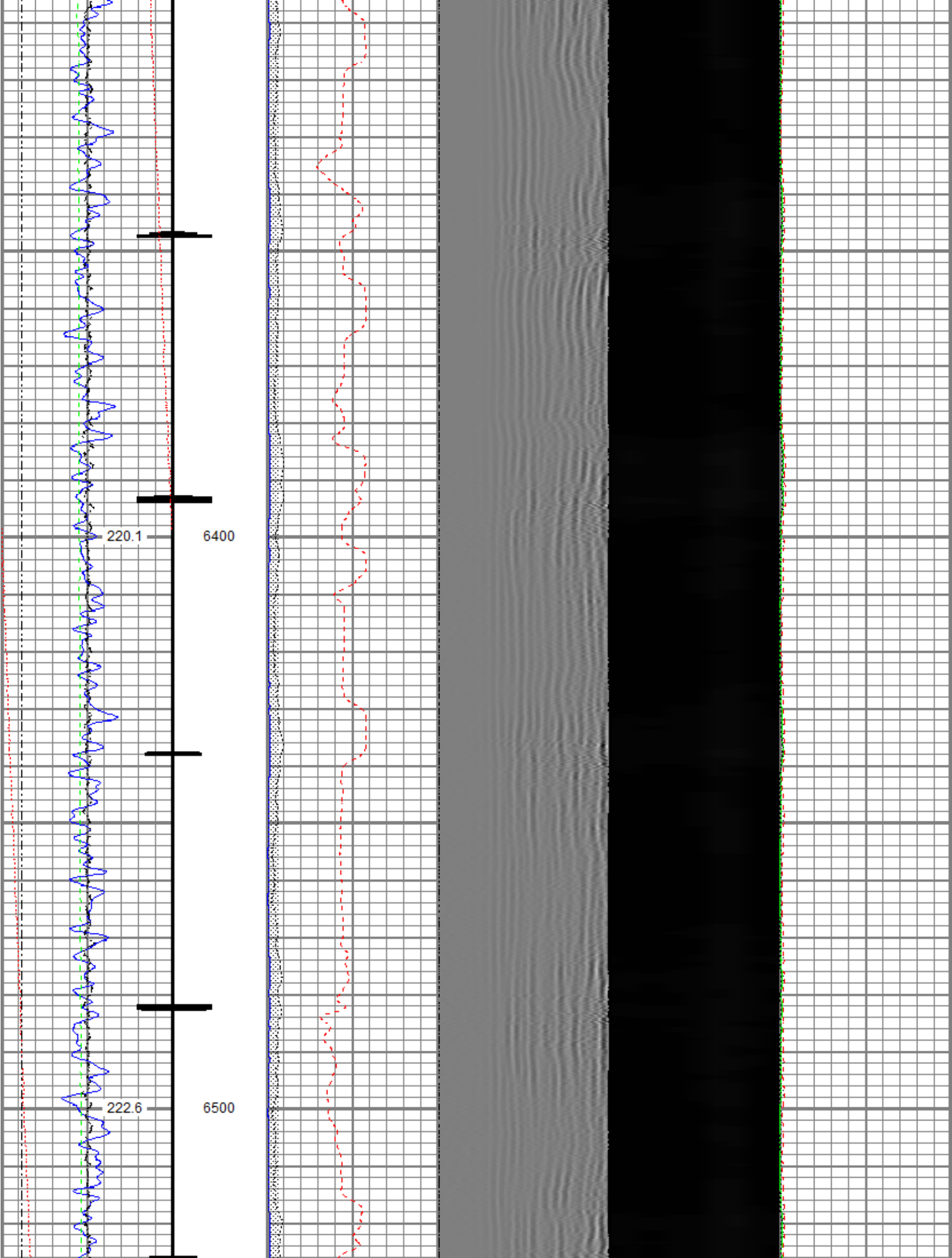


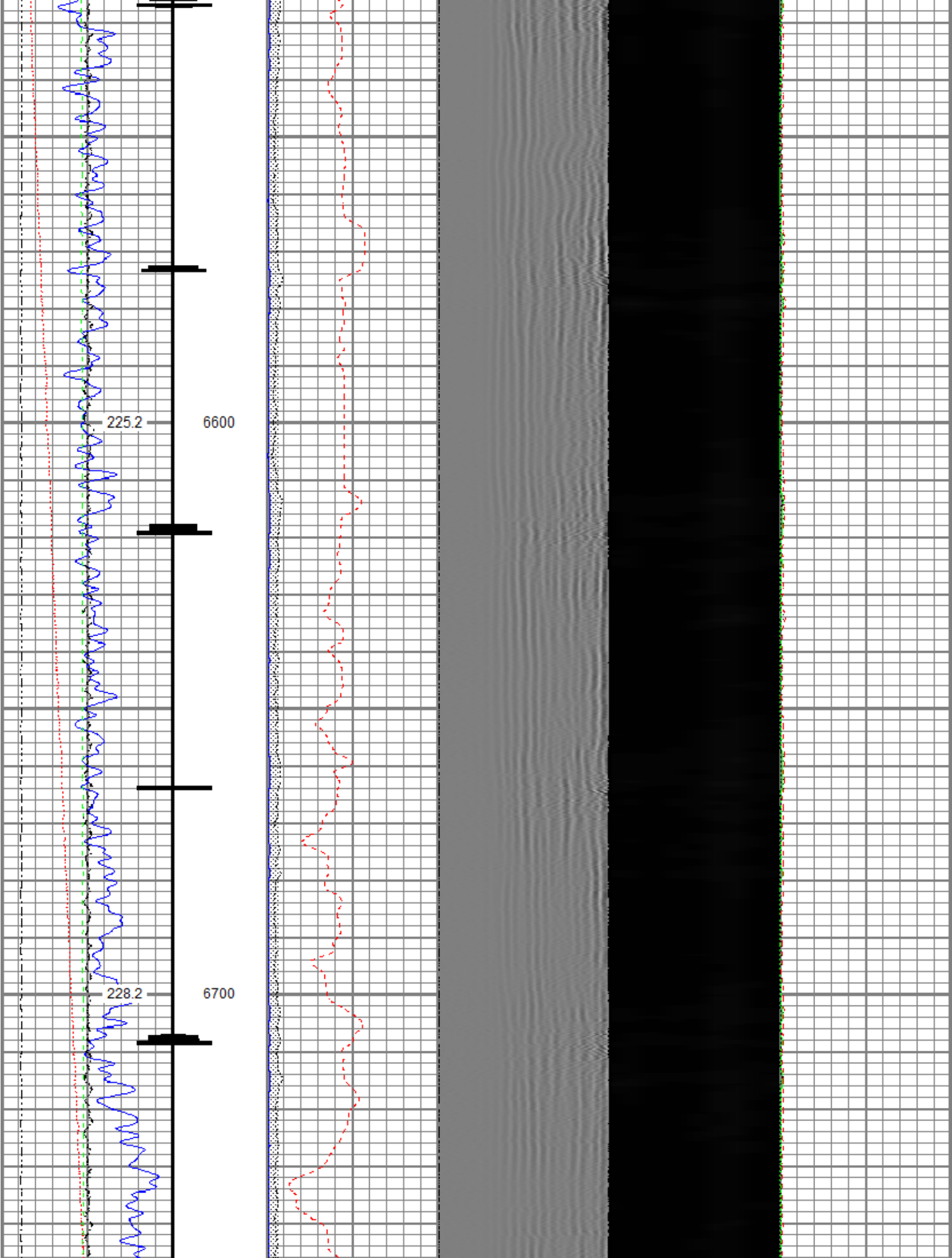


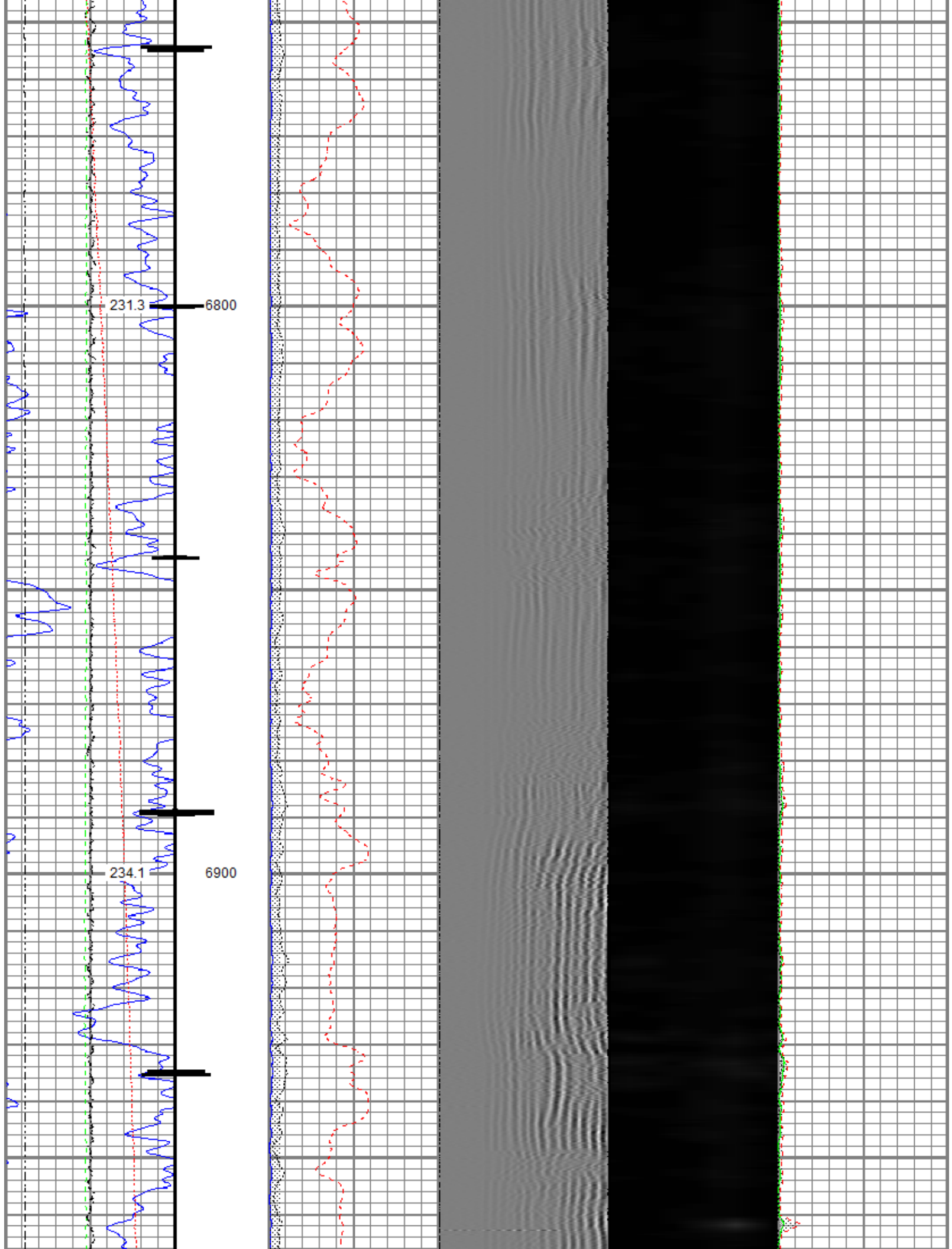


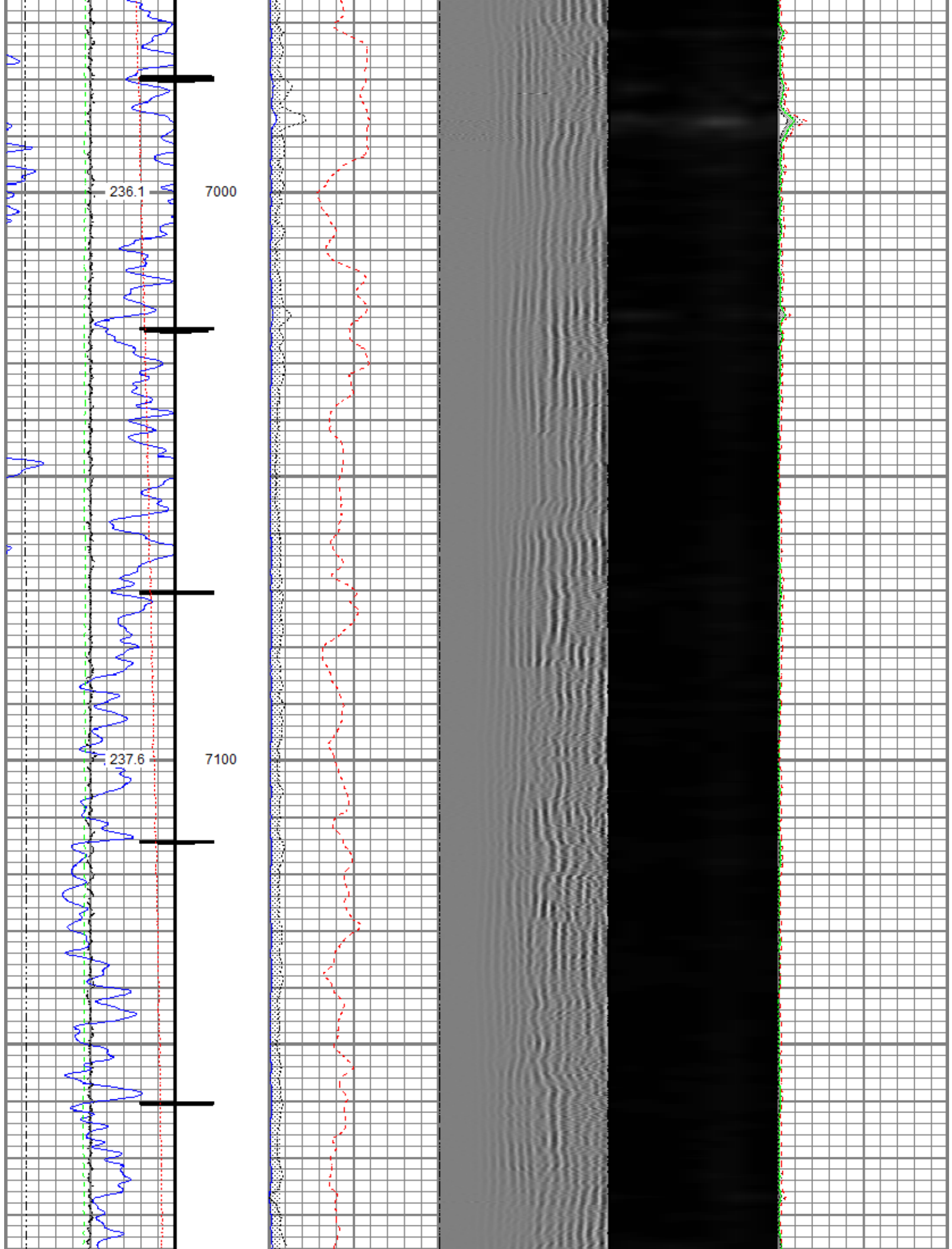


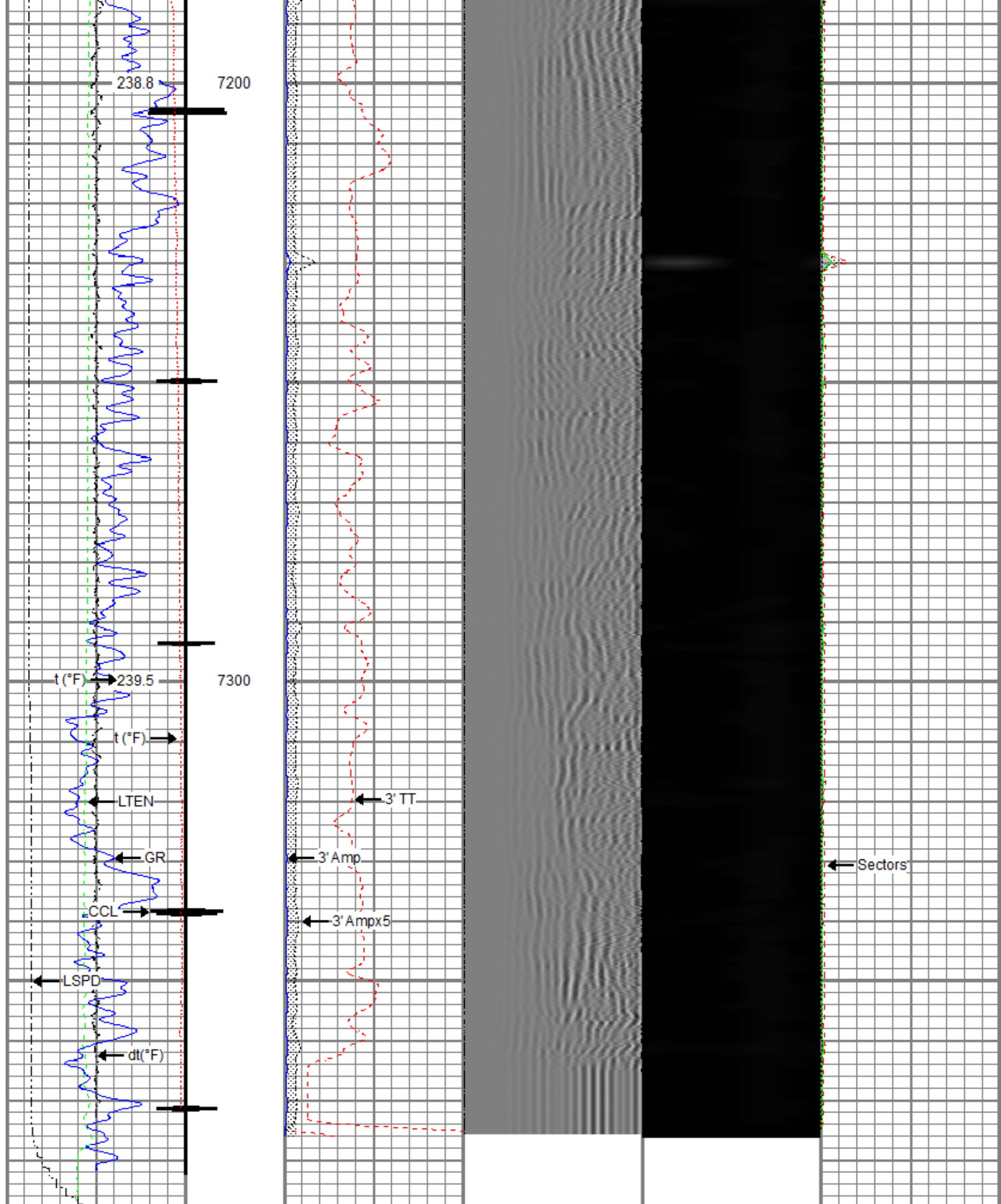












Gamma Ray	0	3' Amplitude (mV)	100	5' Variable Density Log	Sector Map	0	Average Amplitude	100
(GAPI)	120	3' Amplitude x 5	200	(usec)			Minimum Amplitude	
Casing Collar Locator		(mV)	20					100
0 Temperature (degF)	20	3' Travel Time					Maximum Amplitude	
Line Speed		(usec)	150					100

Line Speed		650	(usec)	150		0		100
-150	(ft/min)	150						
0	Line Tension (lb)	2000						
	Differential Temperature							
-2	(degF)	2						

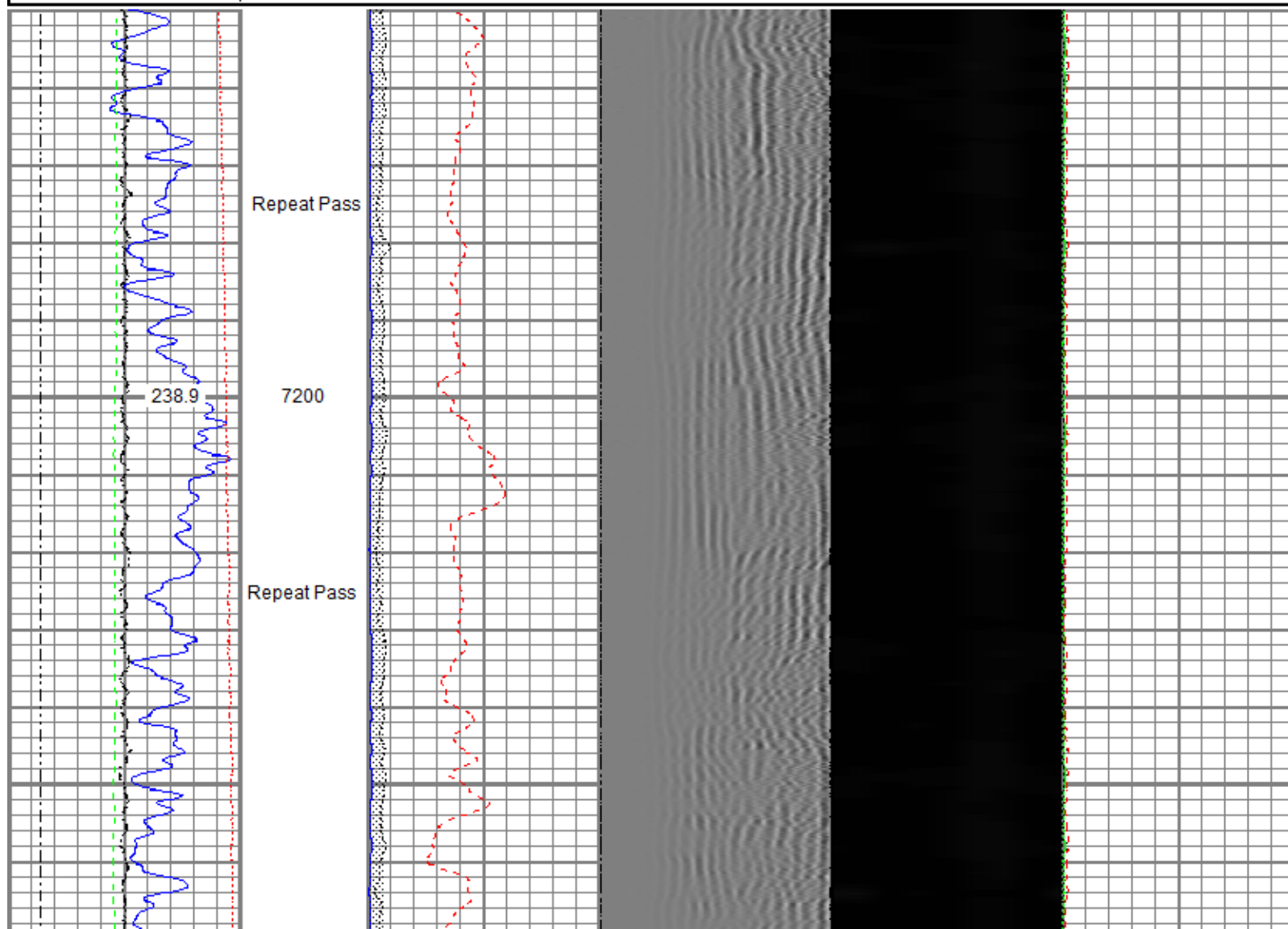


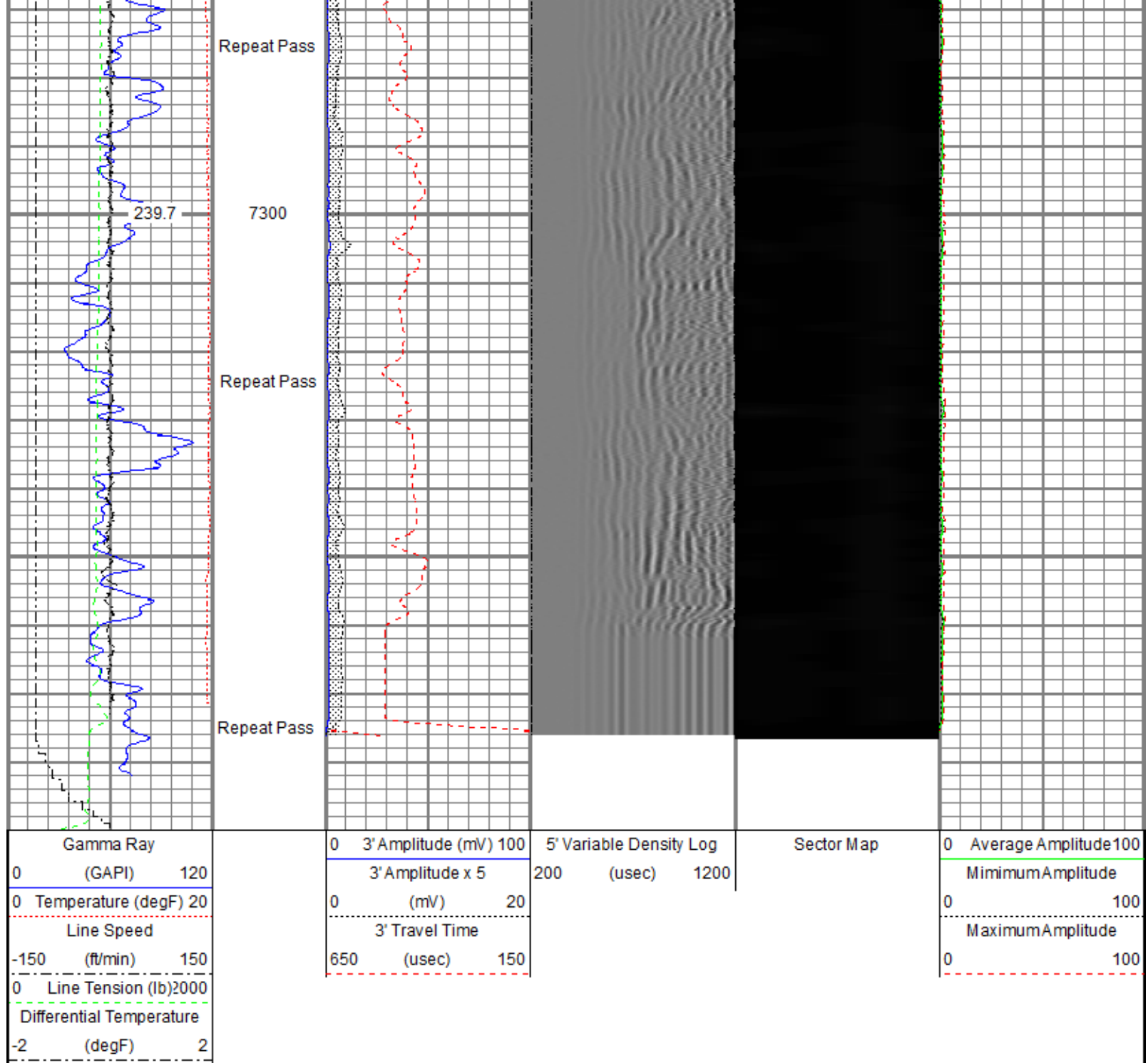
# Repeat Pass

Recorded With 2000 PSI Surface Induced Pressure

Database File	noble\noble_reveille a34-788_rbl_03-20-21\noble_reveille a34-788_rbl_03-20-21.db
Dataset Pathname	repeat/pass1
Presentation Format	ros_radil_noble
Dataset Creation	Sat Mar 20 14:56:02 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
0	(GAPI)	120		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							





Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
ErrCt	23.86		Titan CHD-16875 GO	1.03	1.69	5.40
			Titan 1-11/16" Assembled Electric Cable Head with 1" Fishing Neck			
			Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
RBT_HV	19.95					

TEMP	17.04				
RBT_ACCZ	14.81		Probe Radii ACC-2750 RBTa (FW1302-002)	9.39	2.75
RBT_ACCY	14.81		Probe 2-3/4" Radial Cement Bond Tool with Integral		
RBT_ACCX	14.81		Temperature Sub and Accelerometer		105.00
WVFSYNC	14.81				
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		Probe CENT-2750	2.88	2.75
WVF3FT	14.81		Probe 2-3/4" Electric Inline Bowspring Centralizer		20.00
WVF5FT	13.81				
CCL\$2	6.80				
CCL\$1	6.80				
GR	5.46		Probe GR-CCL-2750 6PB (FW1810-044)	4.80	2.75
			Probe 2-3/4" rev.1 Digital Scintillation Gamma		55.00
			Ray/CCL Combined with 6 Pin Bottom for CNT		
			Probe CENT-2750	2.88	2.75
			Probe 2-3/4" Electric Inline Bowspring Centralizer		20.00
LOCTIM	0.00				
UTCTIM	0.00				

Dataset: Noble\_Reveille A34-788\_RBL\_03-20-21.db: field/well/main/pass1  
 Total length: 23.86 ft  
 Total weight: 225.40 lb  
 O.D.: 2.75 in

#### Calibration Report

Database File C:\ProgramData\Warrior\Data\Noble\Noble\_Reveille A34-788\_RBL\_03-20-21\Noble\_Reveille A34-788\_RBL\_03-20-21.db  
 Dataset Pathname main/pass1  
 Dataset Creation Sat Mar 20 14:59:58 2021

#### Gamma Ray Calibration Report

Serial Number: FW1810-044  
 Tool Model: 2750 6PB  
 Performed: Mon Oct 19 14:19:51 2020  
 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:	FW1302-002					
Tool Model:	2750 RBTa					
Calibration Casing Diameter:	5.500	in				
Calibration Depth:	30.000	ft				
Master Calibration, performed Sat Mar 20 14:23:37 2021:						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.009	0.579	0.800	71.921	124.760	-0.275
CAL	0.605	0.608				
5'	0.008	0.578	0.800	71.921	124.653	-0.181
SUM						
S1	0.006	0.549	0.000	100.000	184.181	-1.167
S2	0.008	0.583	0.000	100.000	174.035	-1.449
S3	0.008	0.638	0.000	100.000	158.963	-1.349
S4	0.008	0.662	0.000	100.000	153.033	-1.272
S5	0.009	0.654	0.000	100.000	154.989	-1.338
S6	0.008	0.606	0.000	100.000	167.406	-1.406
S7	0.008	0.561	0.000	100.000	180.919	-1.473
S8	0.008	0.541	0.000	100.000	187.519	-1.529
Air Zero Calibration, performed Sat Mar 20 14:23:18 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	
Inclinometer Calibration Report						
Performed:	Mon Oct 19 14:19:51 2020					
	Low Read.	High Read.	Low Ref.	High Ref.		
X Accelerometer	-891.00	891.00	-1.00	1.00	gee	
Y Accelerometer	-899.00	877.00	-1.00	1.00	gee	
Z Accelerometer	-7.47	873.36	0.00	1.00	gee	
Temperature Calibration Report						
Serial Number:	FW1302-002					
Tool Model:	2750 RBTa					
Performed:	Mon Oct 19 14:19:51 2020					
	Reference	Reading				
Low Reference:	100.00 degF	110.72 degF				

High Reference: 350.00 degF 409.18 degF

Gain: 0.84  
Offset: 7.26  
Delta Spacing 1



Company	Noble Energy Inc.
Well	Reveille A34-788
Field	Wattenberg
County	Weld
State	Colorado