



County Weld State Colorado

K.B.	4917"
D.F.	---
G.L.	4900"

1111

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11

1000

1000

11

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Bottom

8082 FT

1000

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.

Log ran as per customer request
Log measured from Kelly Bushing at 17 FT
Depth referenced to Casing Tally reported Marker Joint at 6772 FT
Adjusted +8 FT to correlate with Marker Joint
Ran JB/GR down to 7909 FT
Log ran with 2800 PSI Surface Induced Pressure
Logging tools were clean and free of any debris upon completion of operations

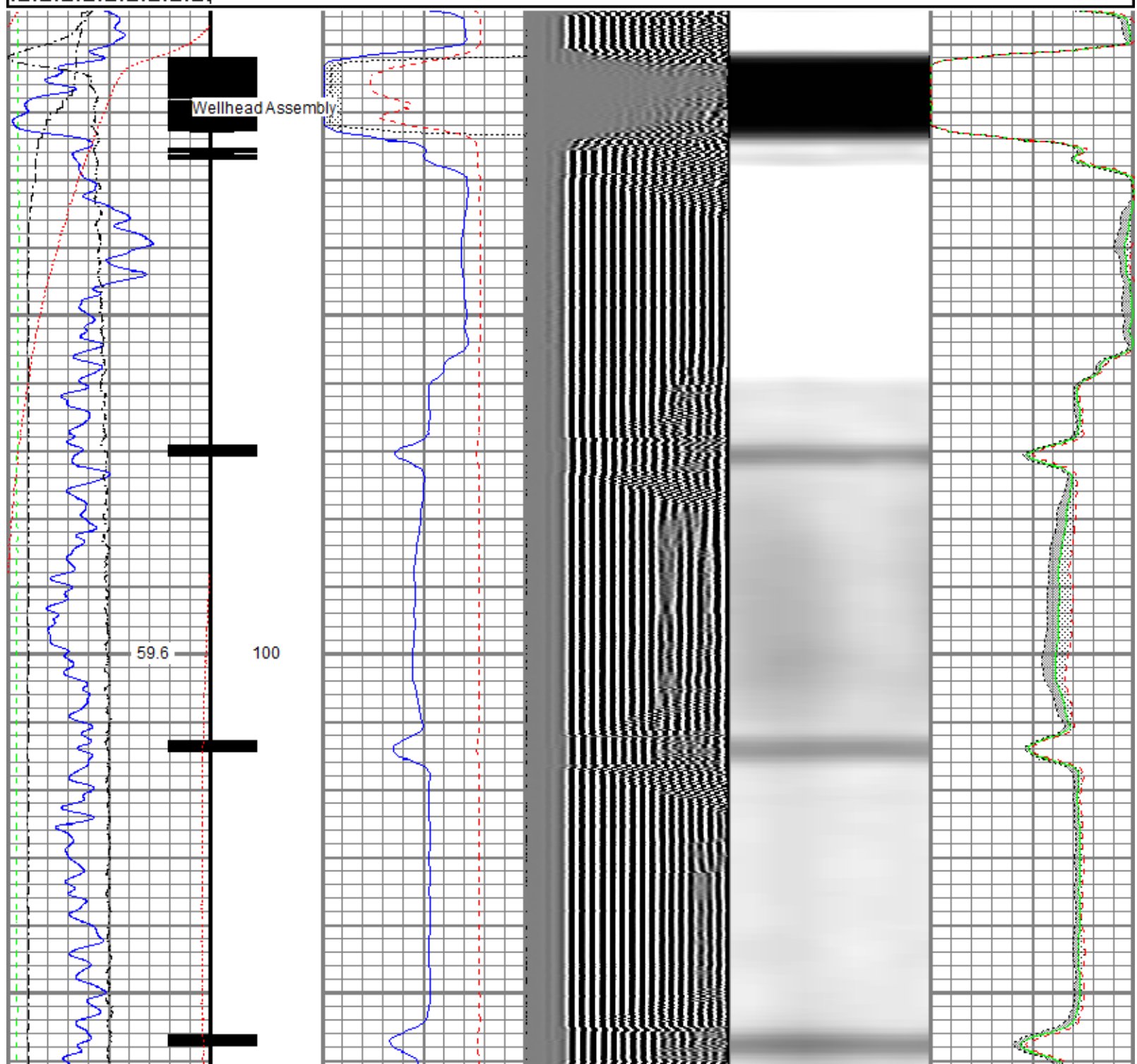
Thank you for choosing Reliance Oilfield Services, LLC!!

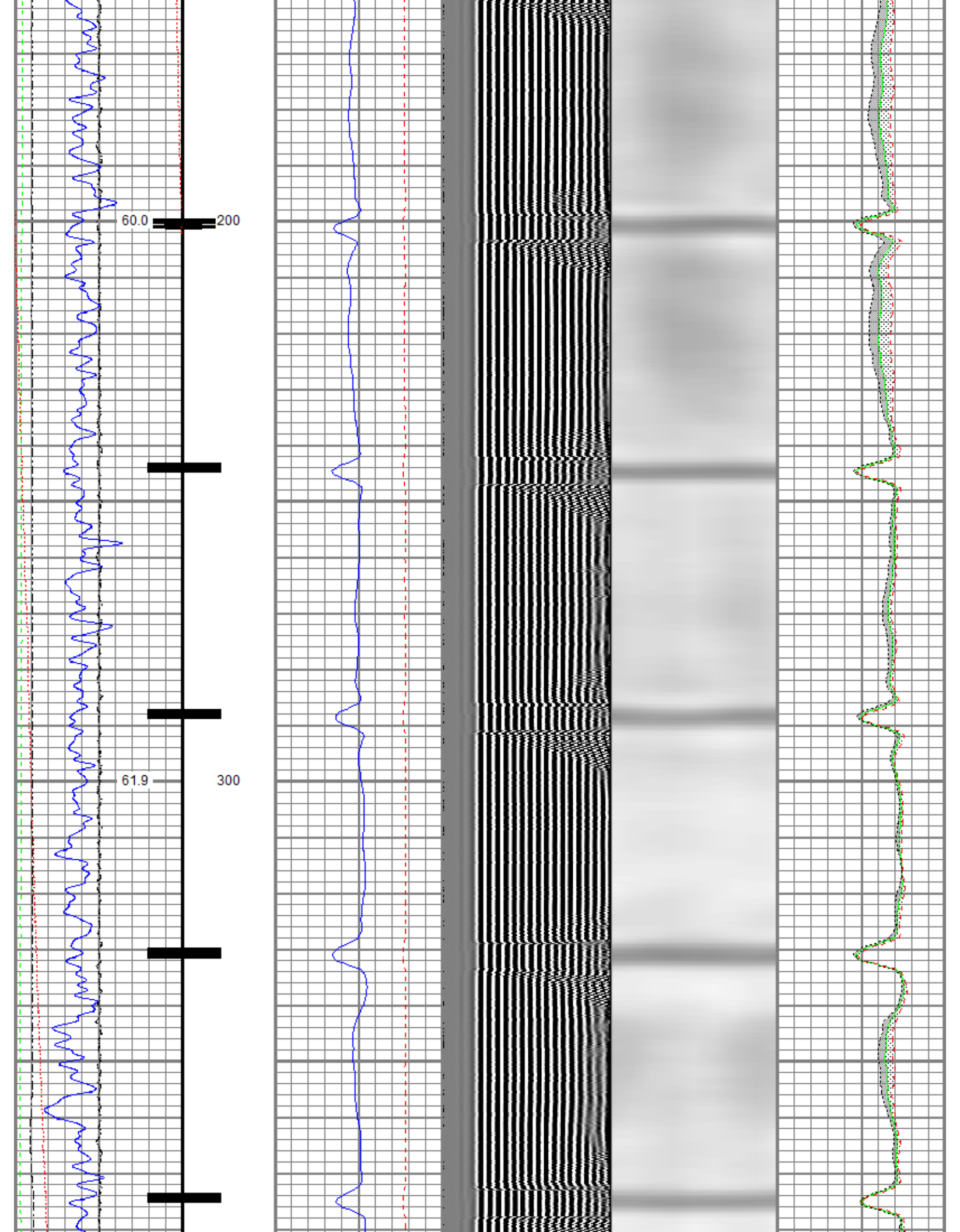
Main Pass

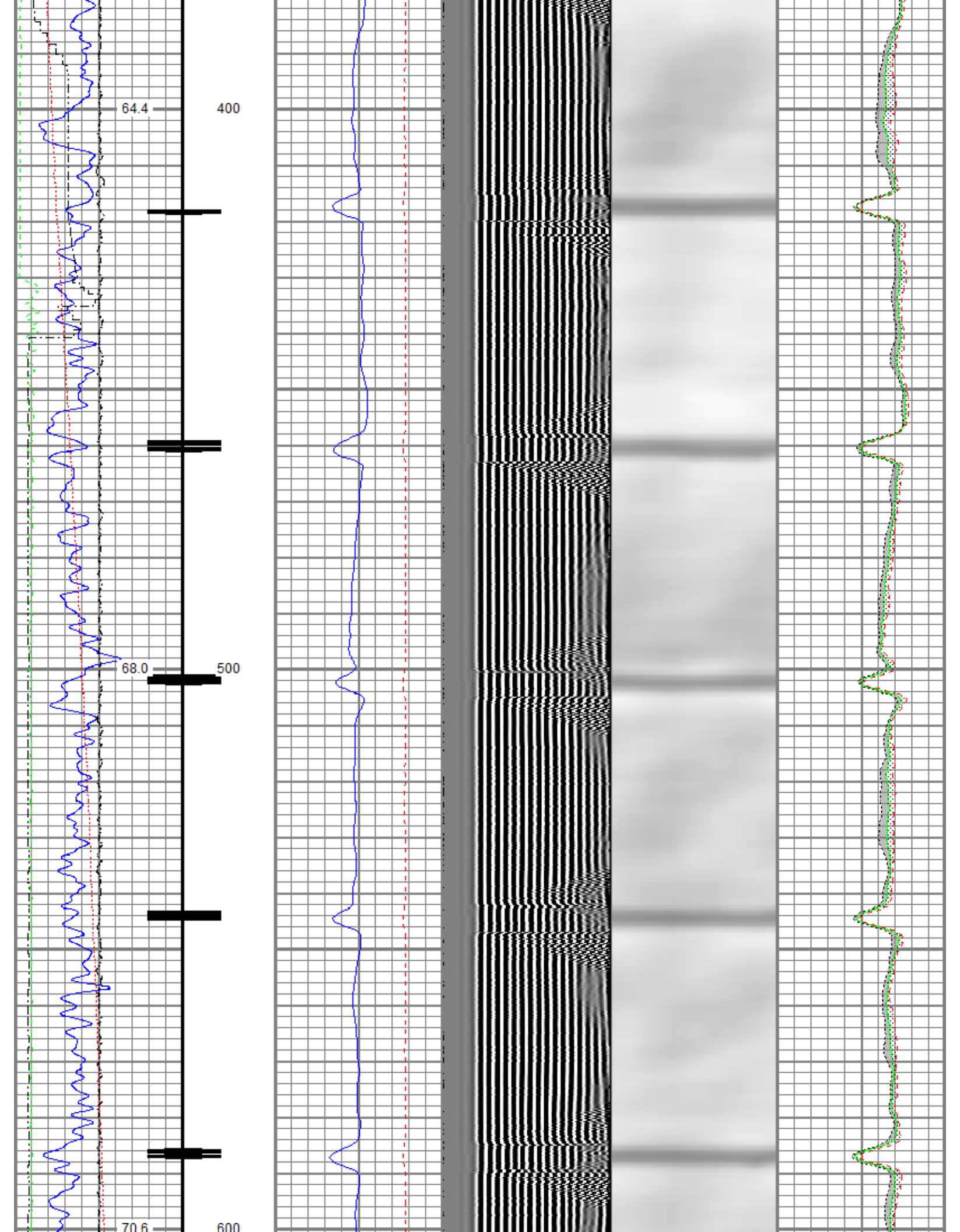


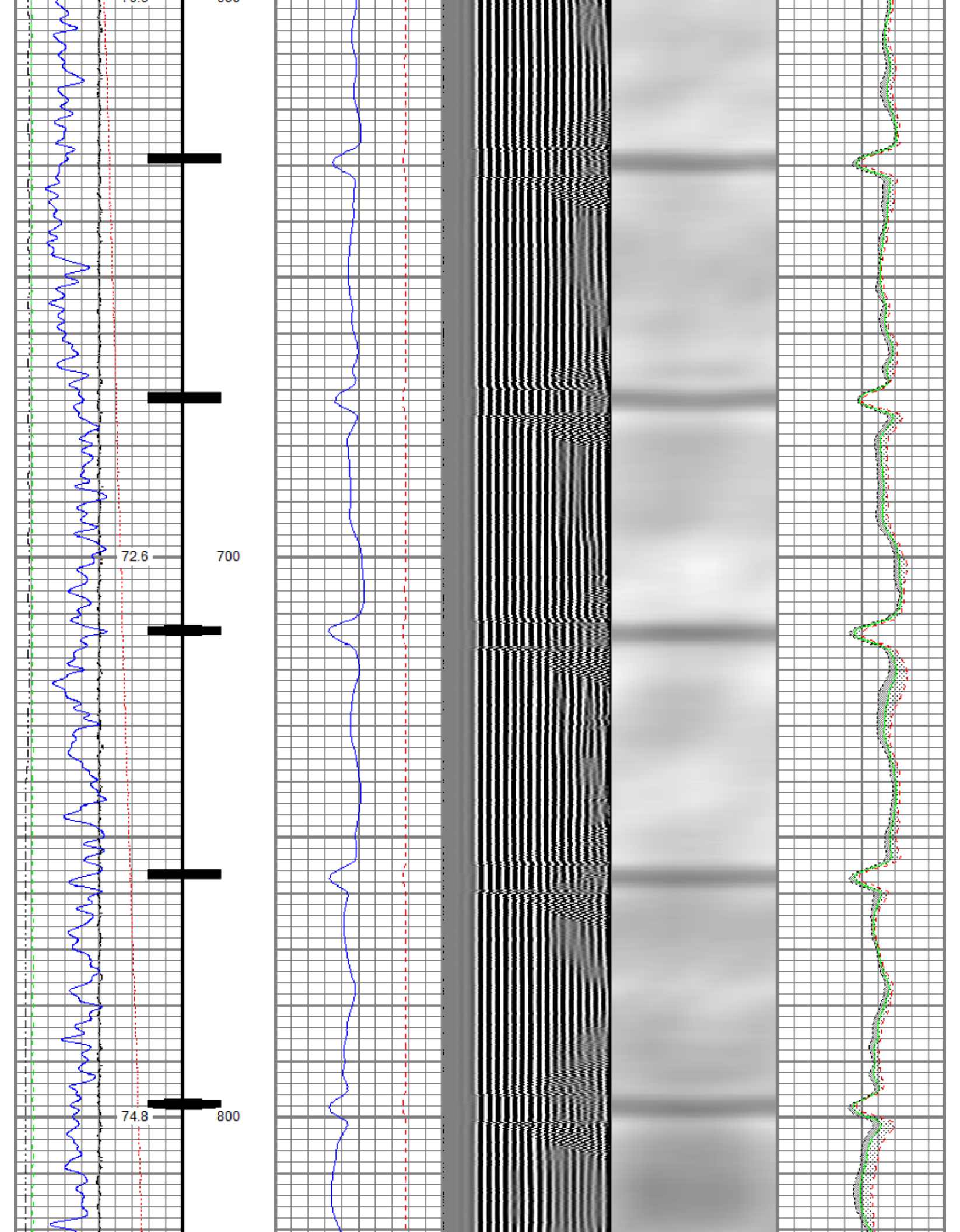
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Dataset Pathname	Main.3
Presentation Format	ros_radri
Dataset Creation	Tue Aug 14 09:58:33 2018
Charted by	Depth in Feet scaled 1:240

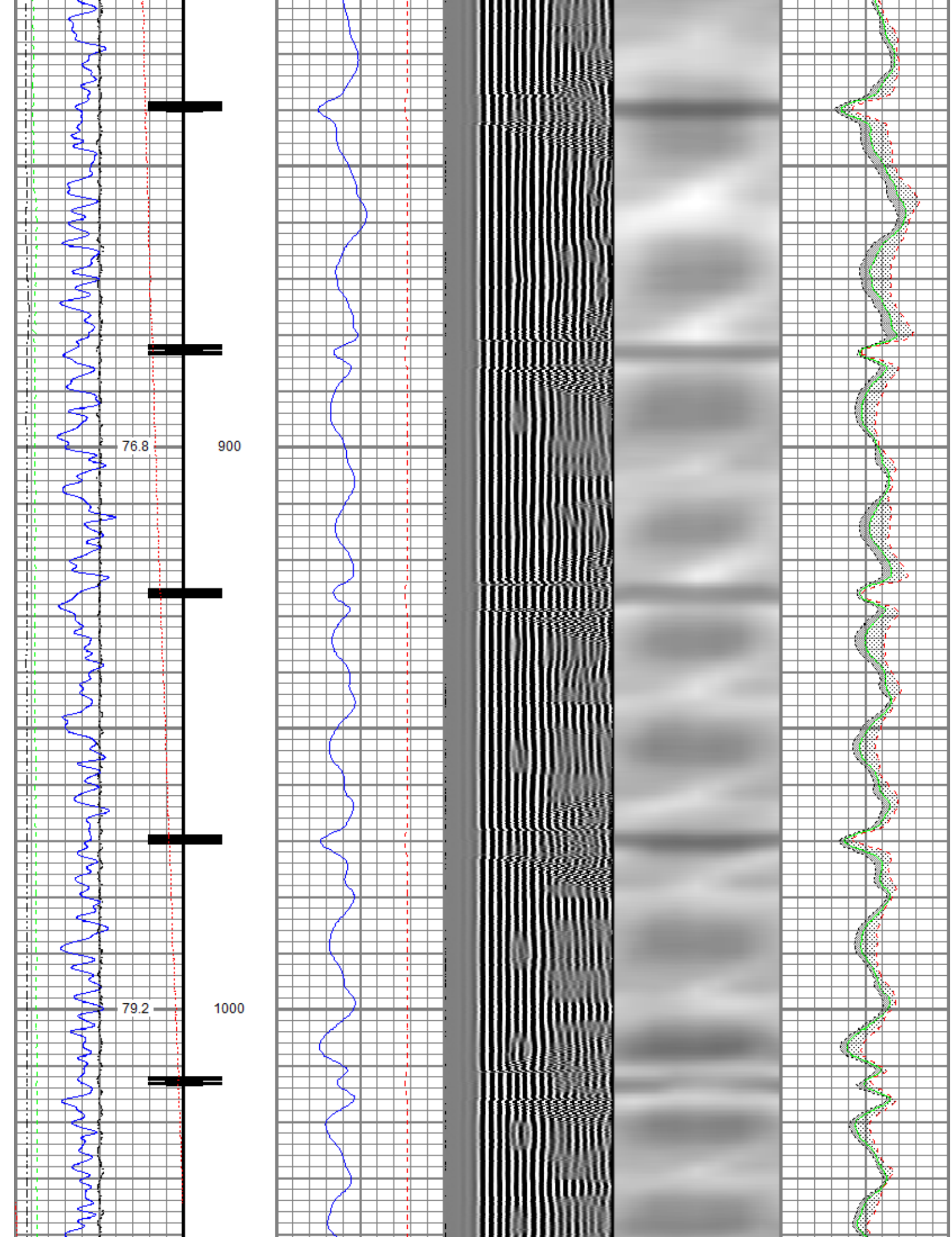
Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 100
(GAPI) 120		3' Amplitude x 5	200			Minimum Amplitude
Casing Collar Locator	0	(mV) 20			0	100
Temperature (degF) 20		3' Travel Time				Maximum Amplitude
Line Speed	650	(usec) 150			0	100
(ft/min) 150						
Line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

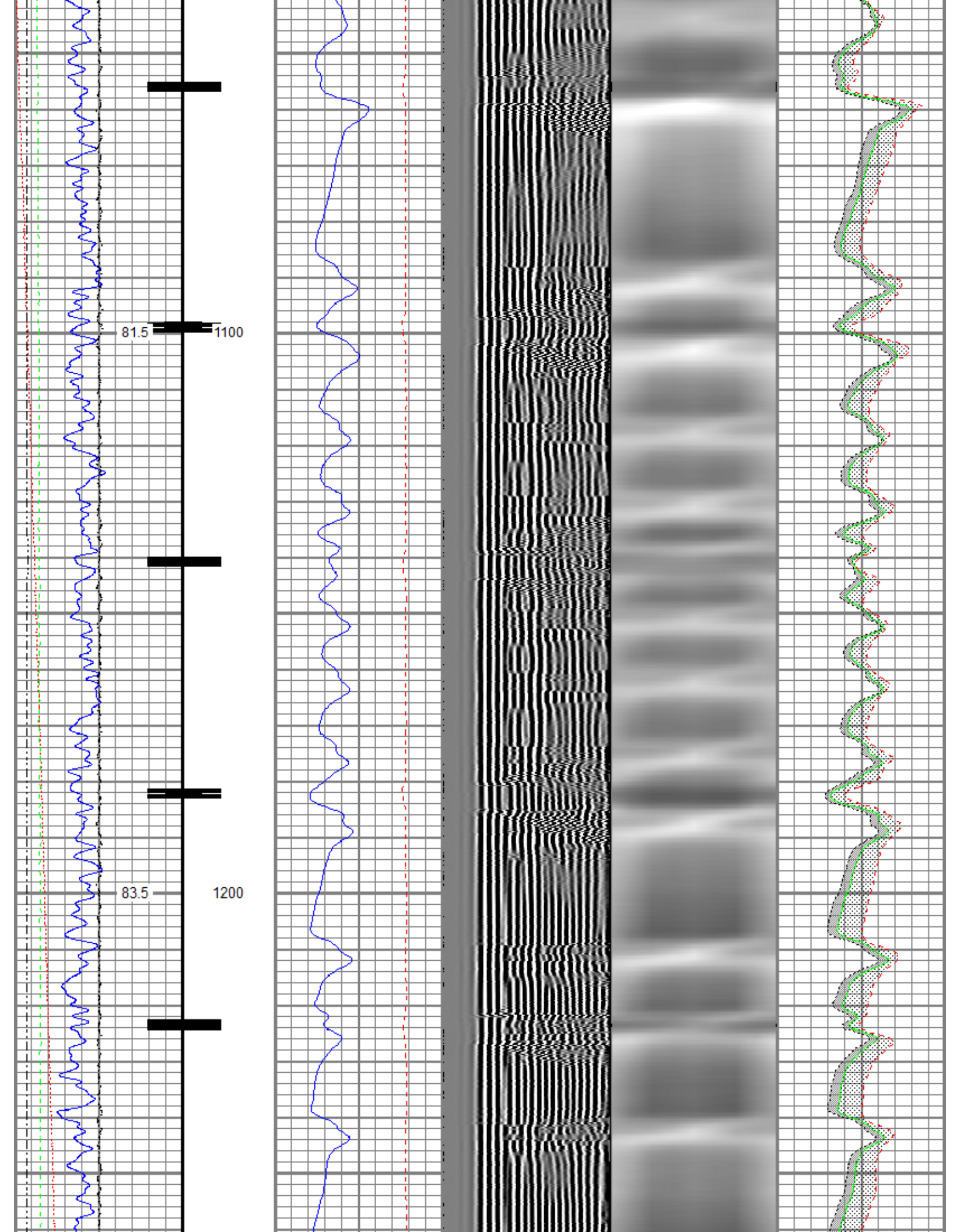


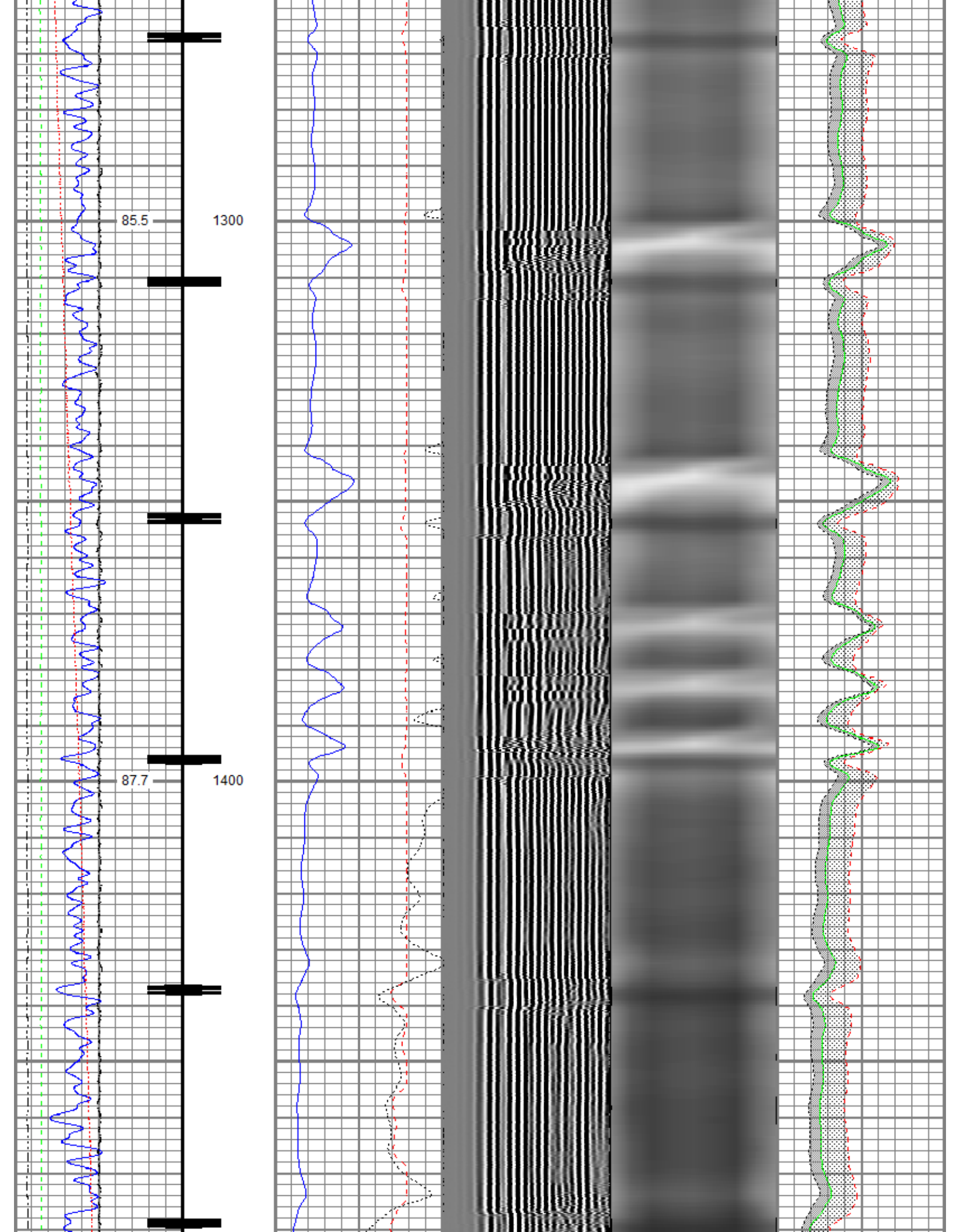


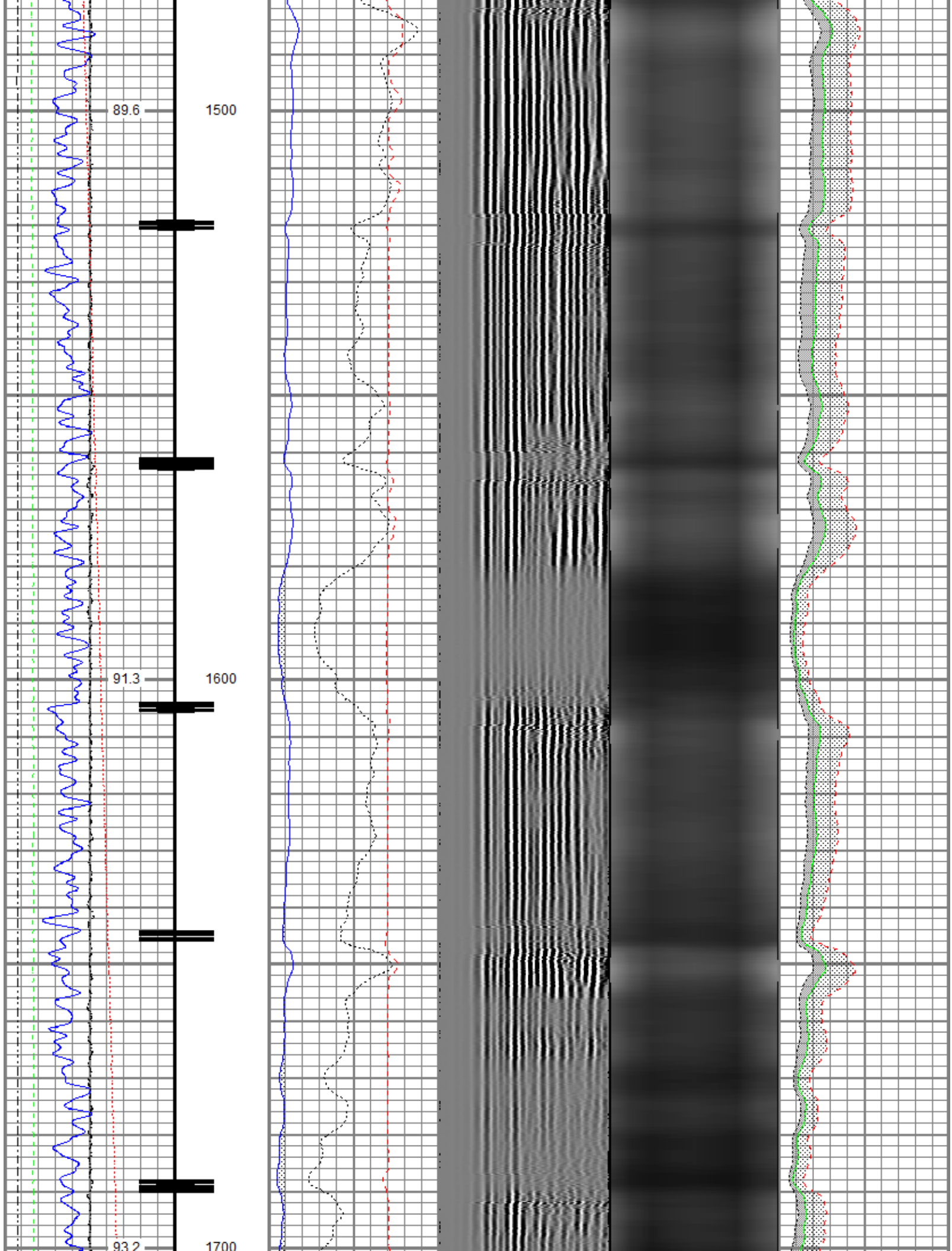


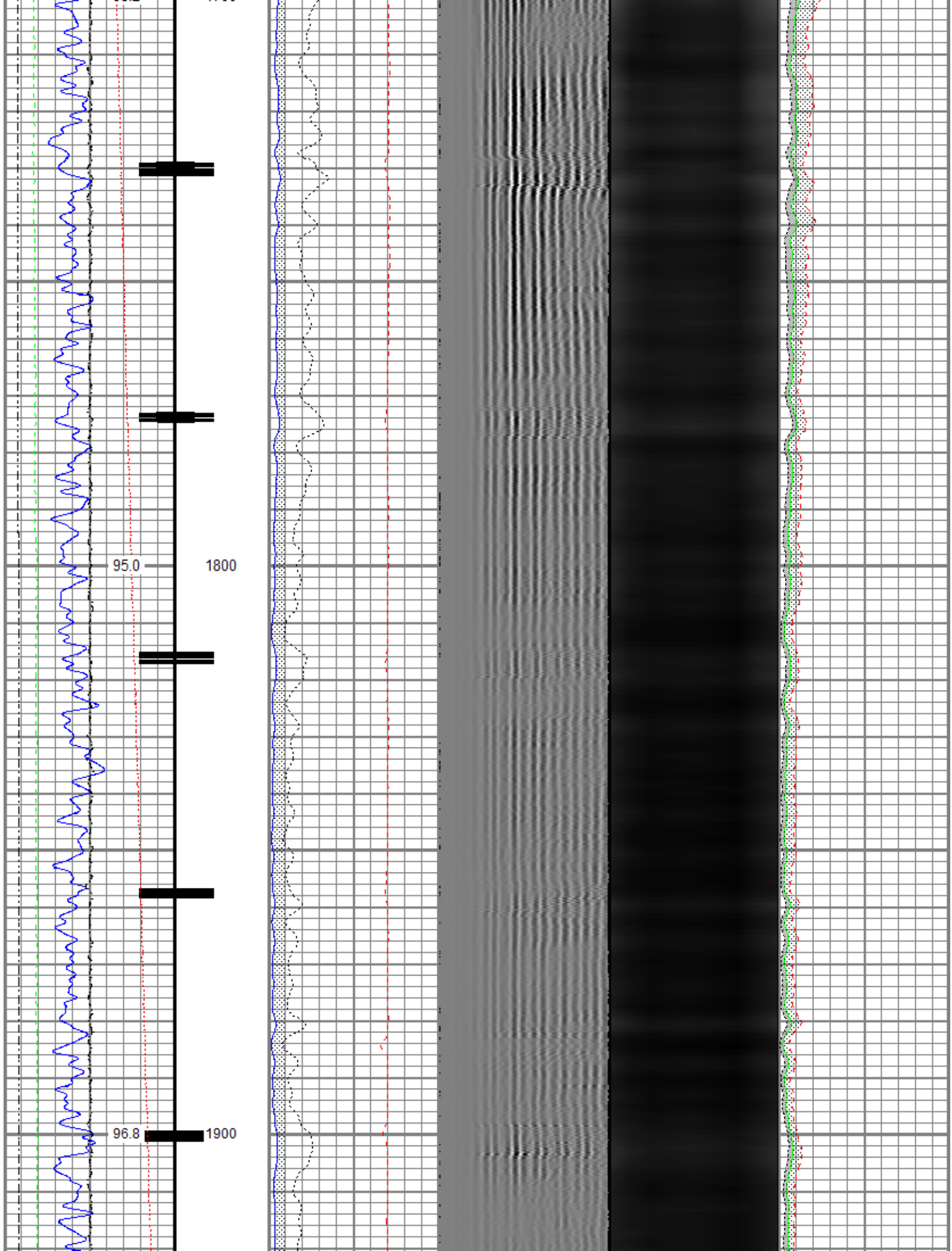


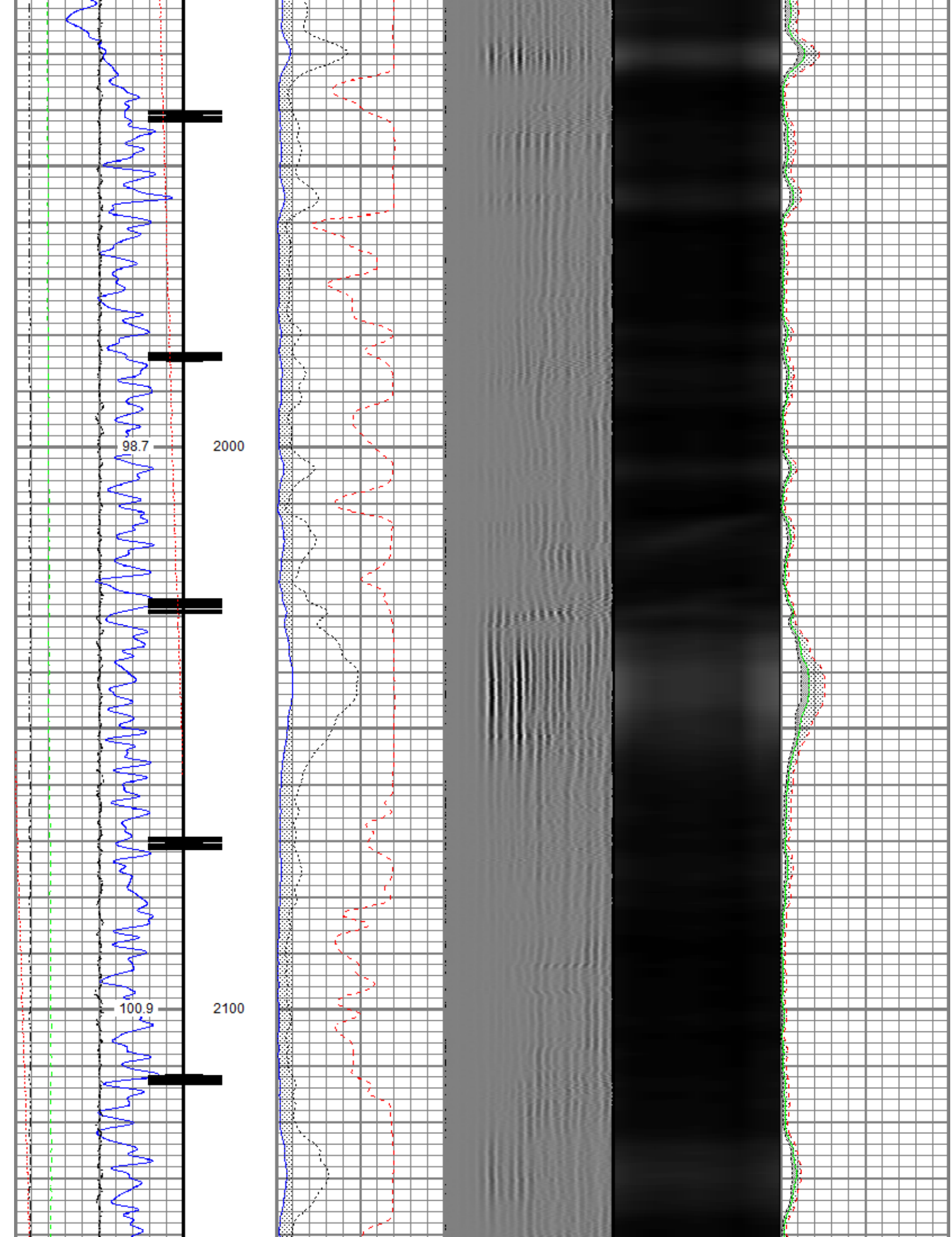


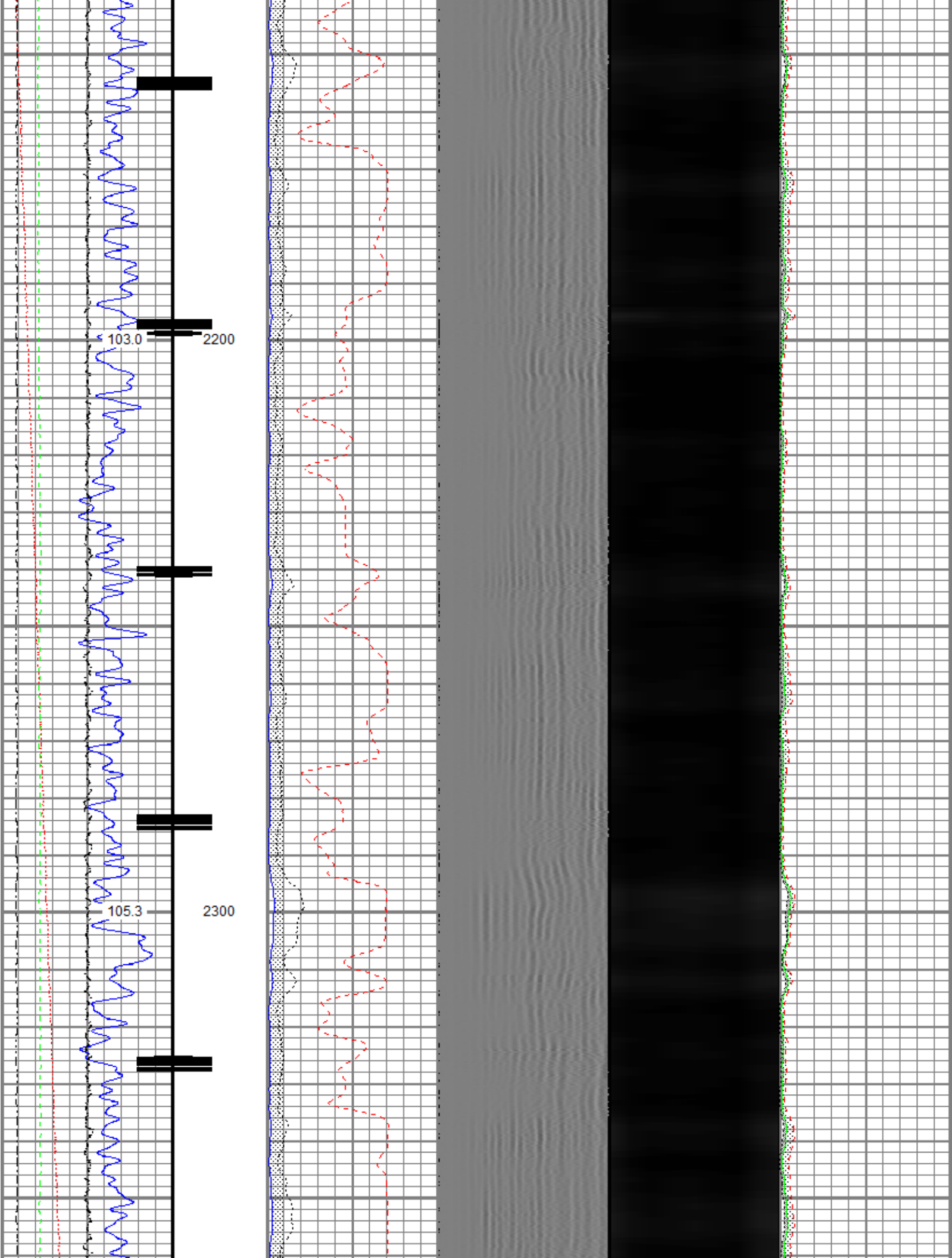


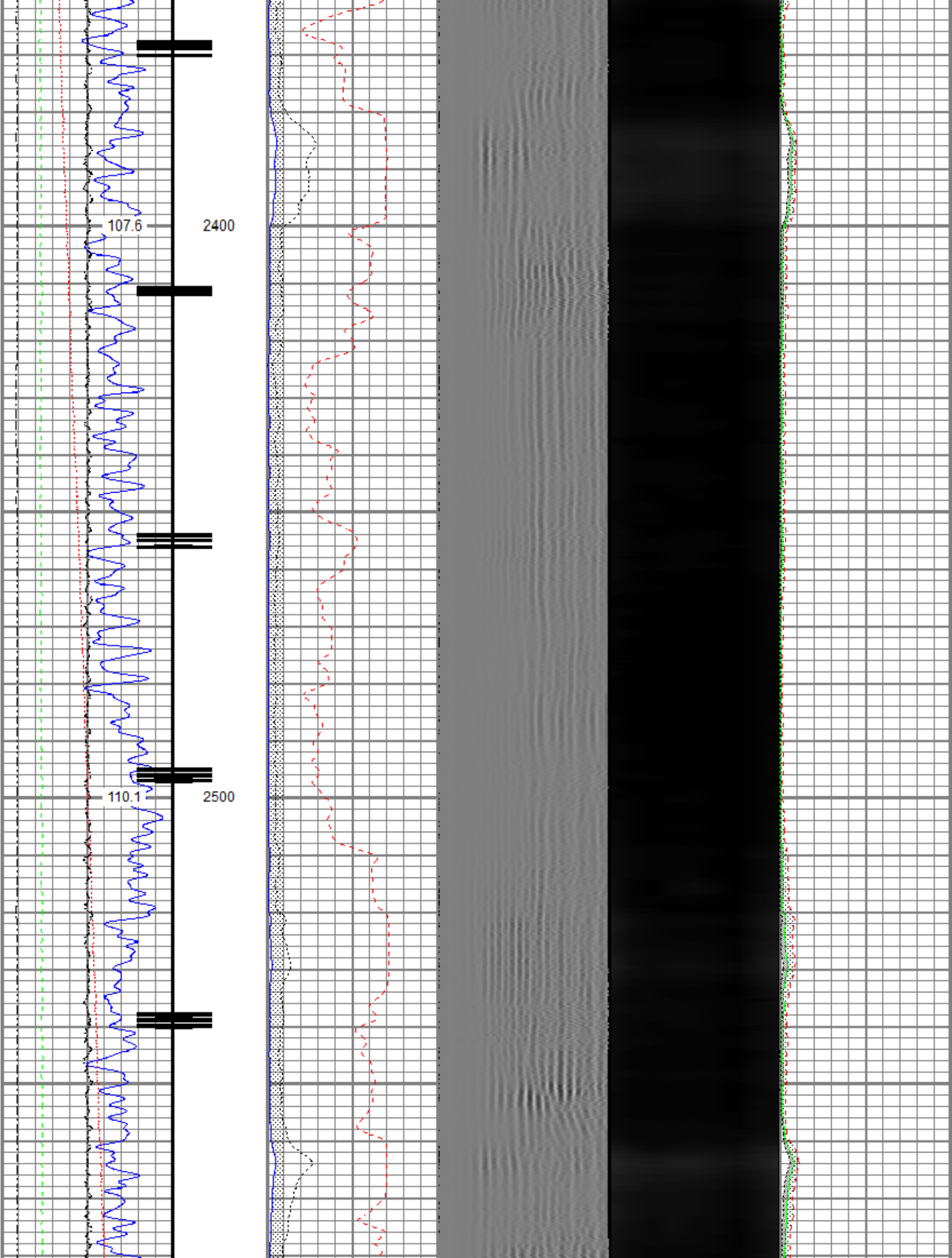


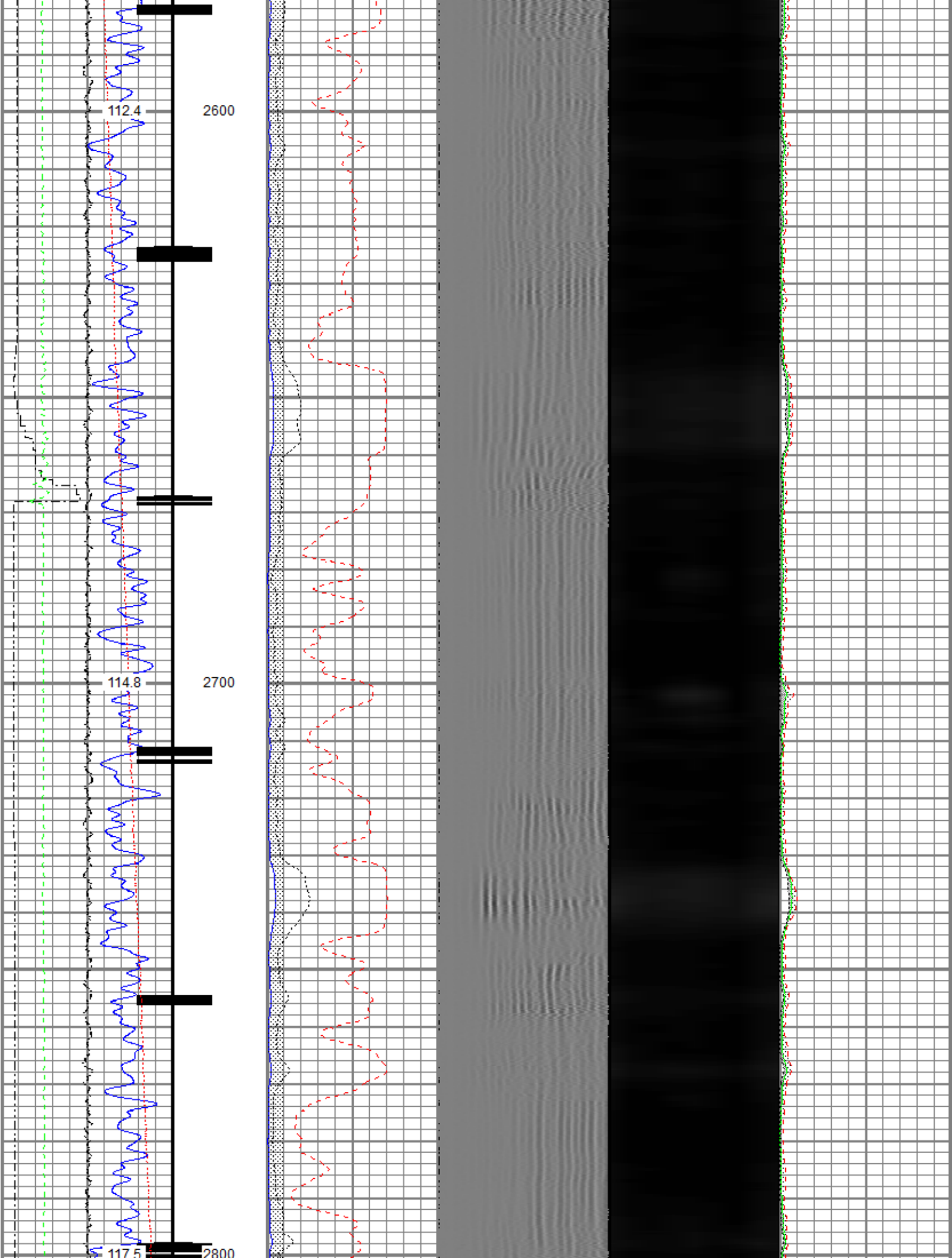


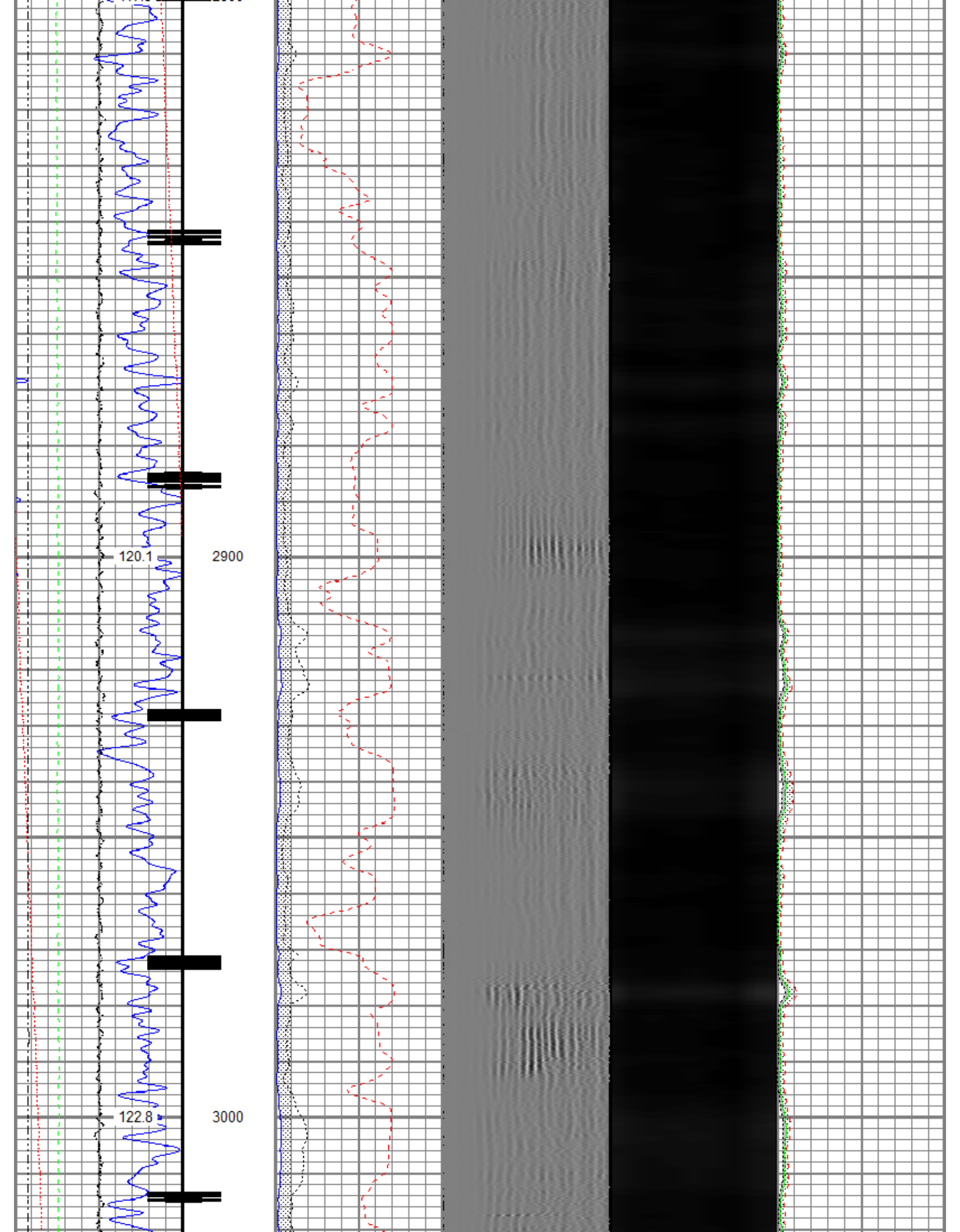


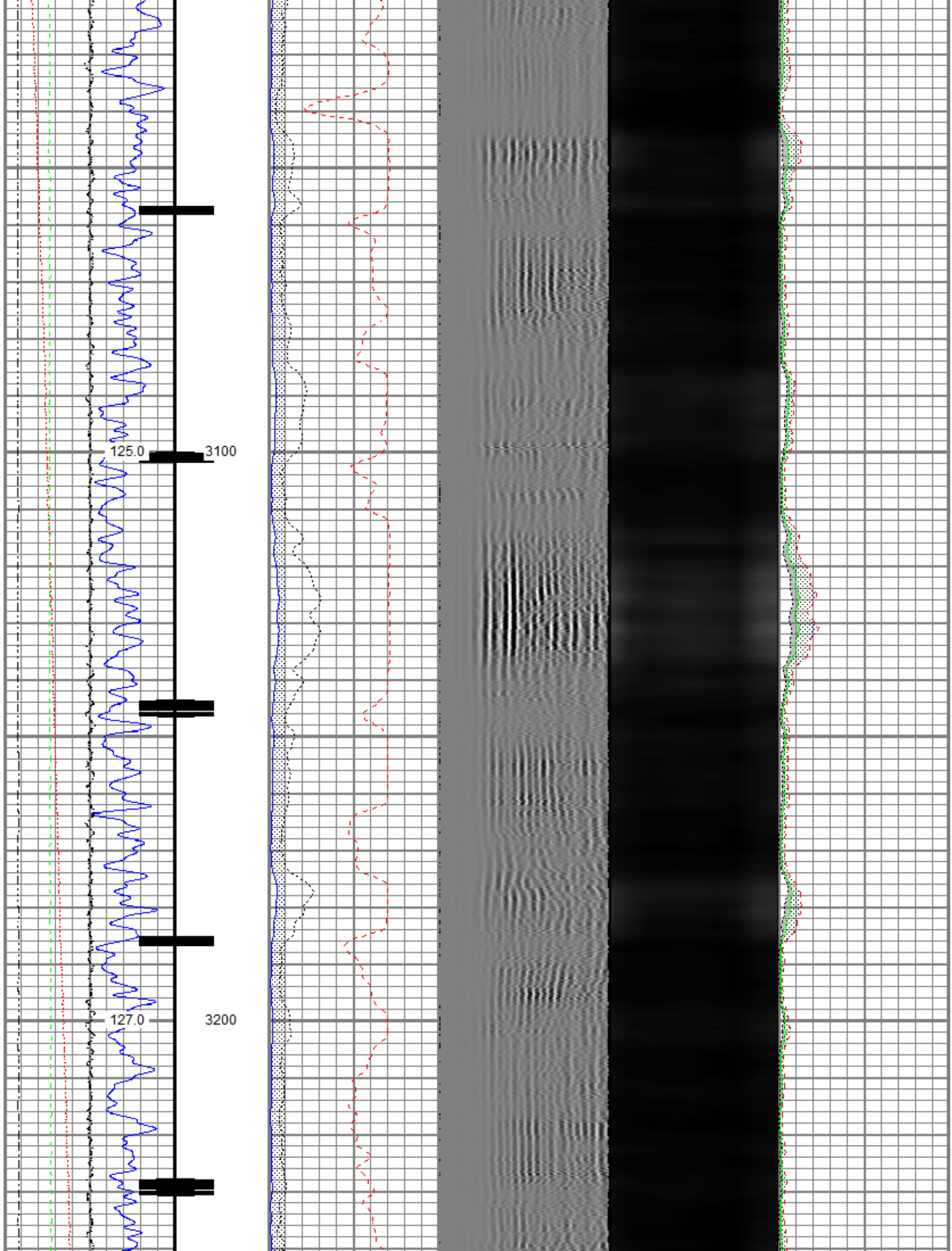


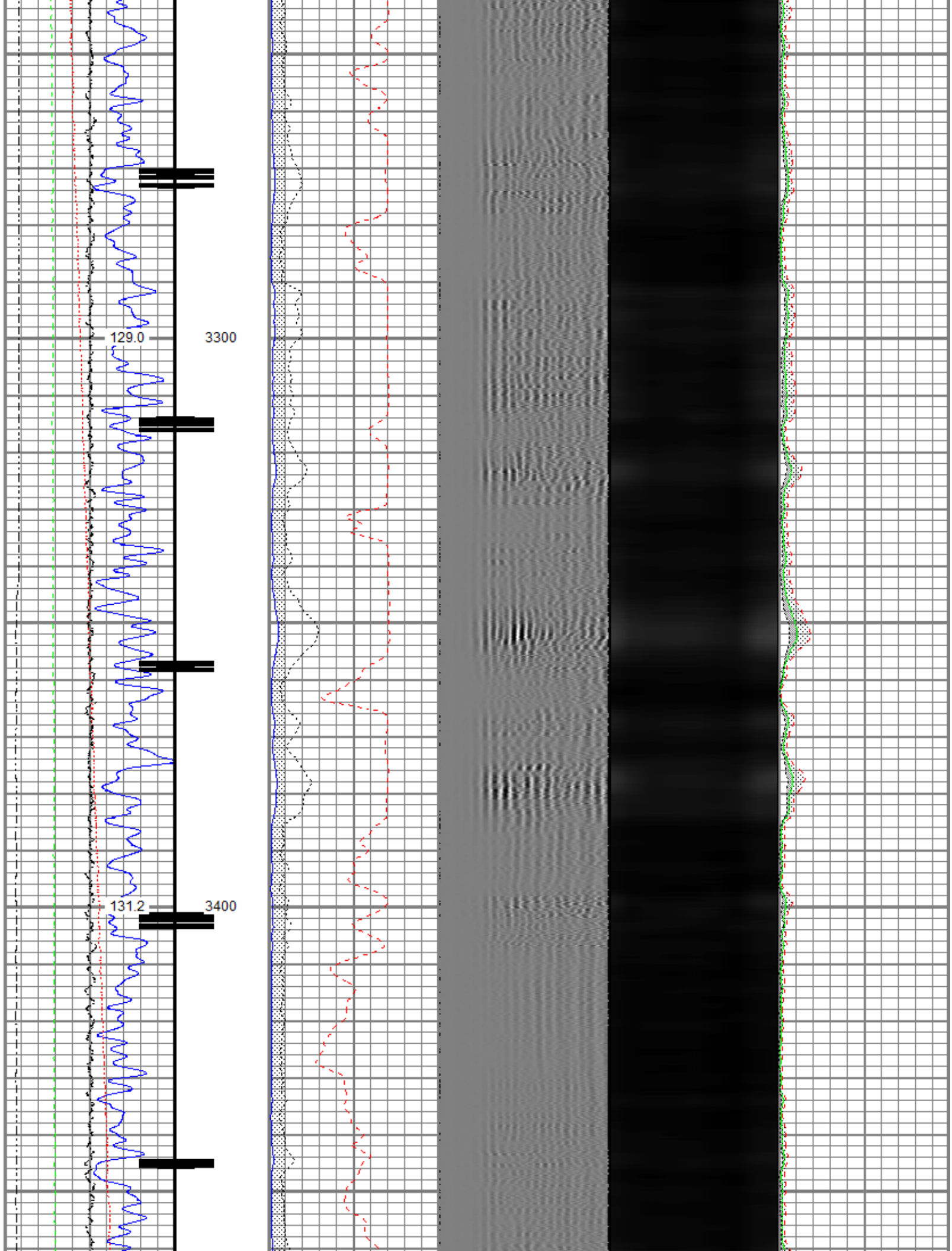


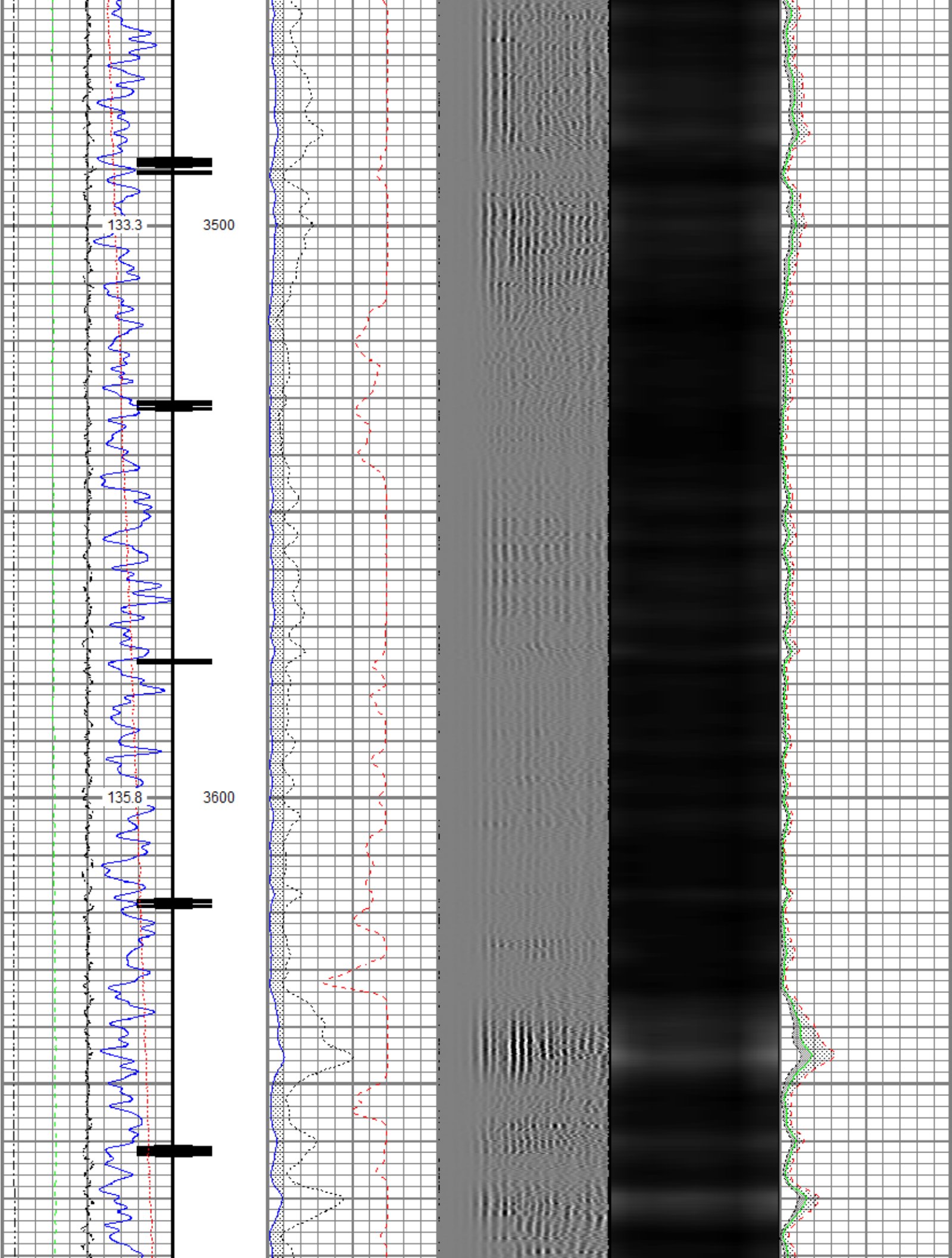


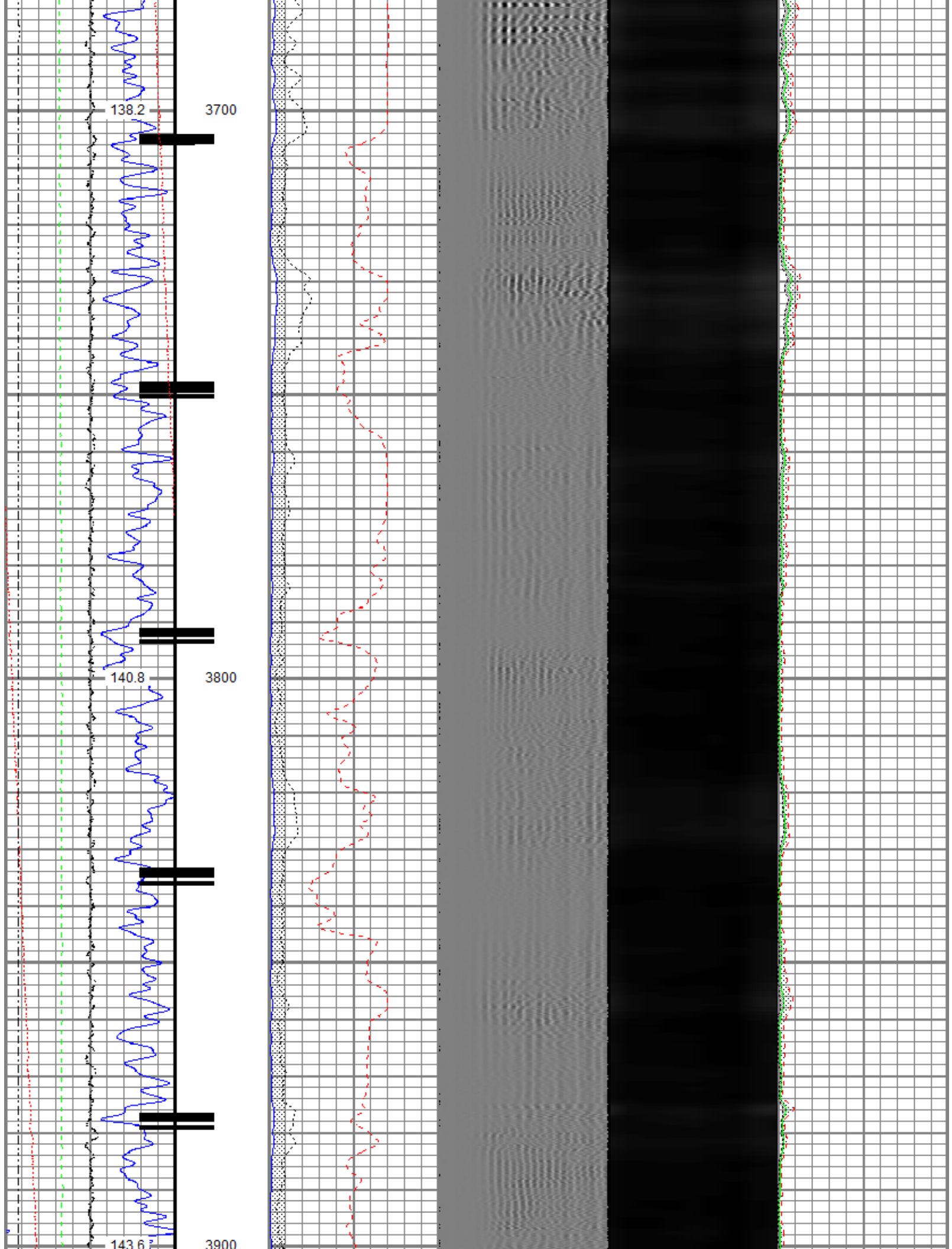


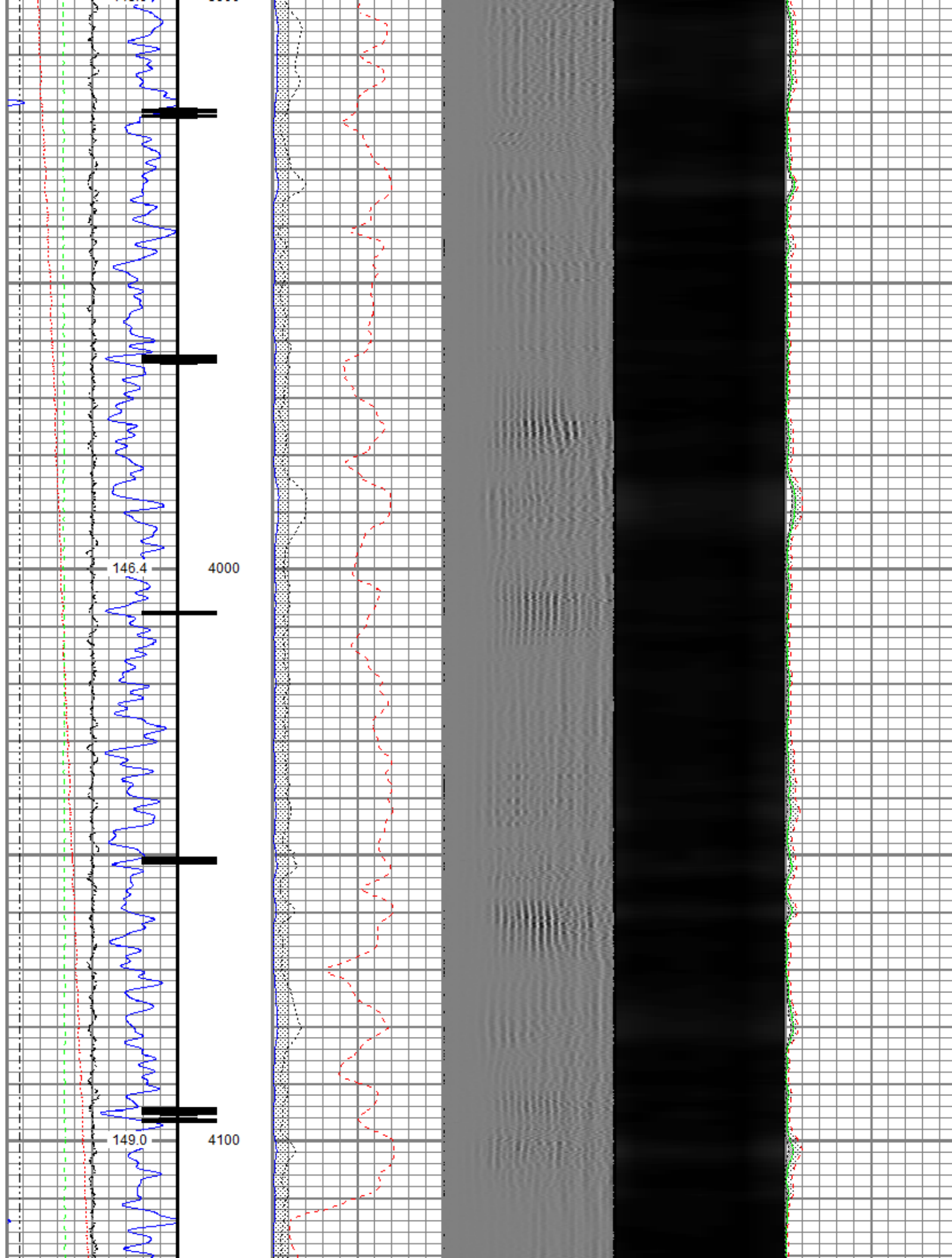


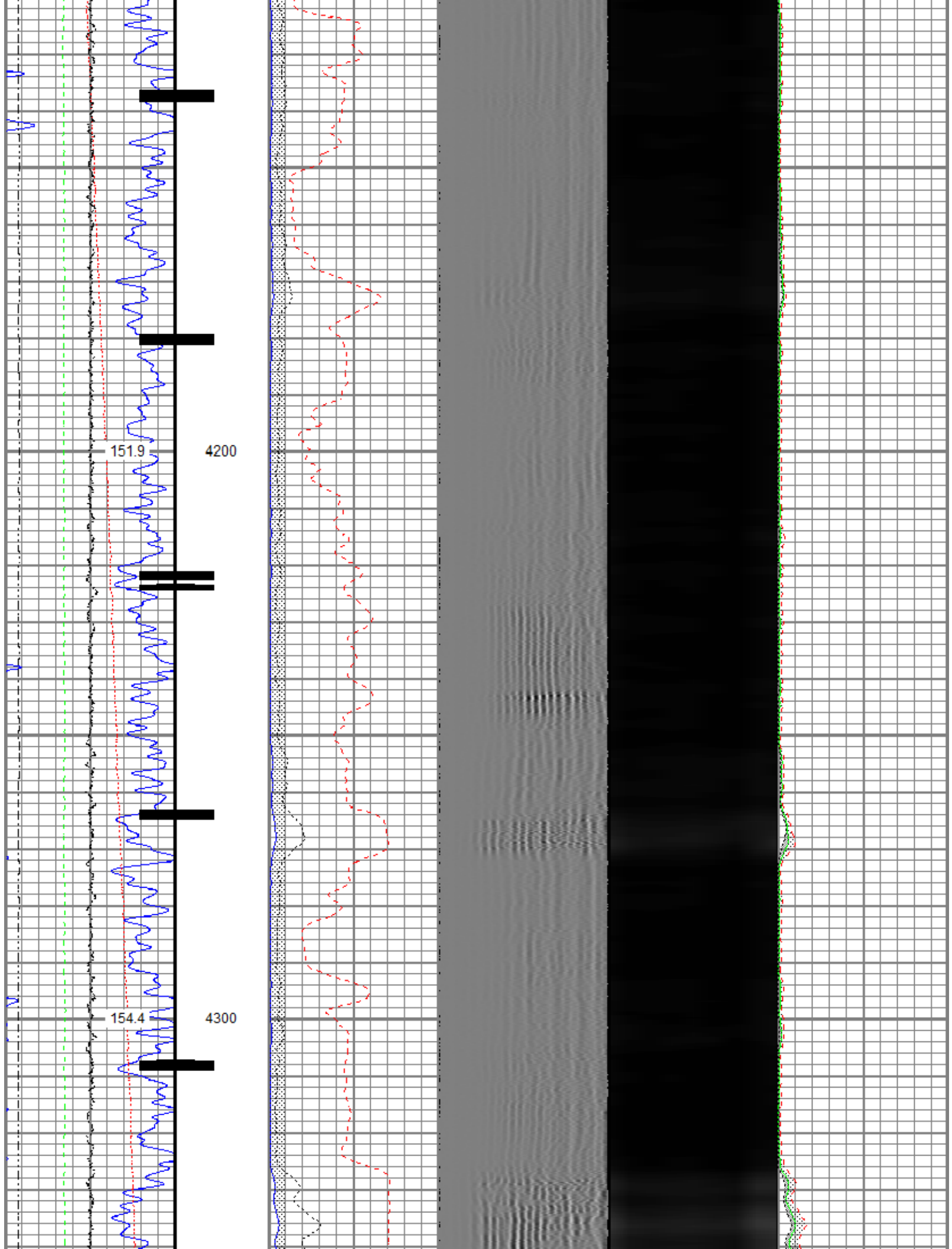


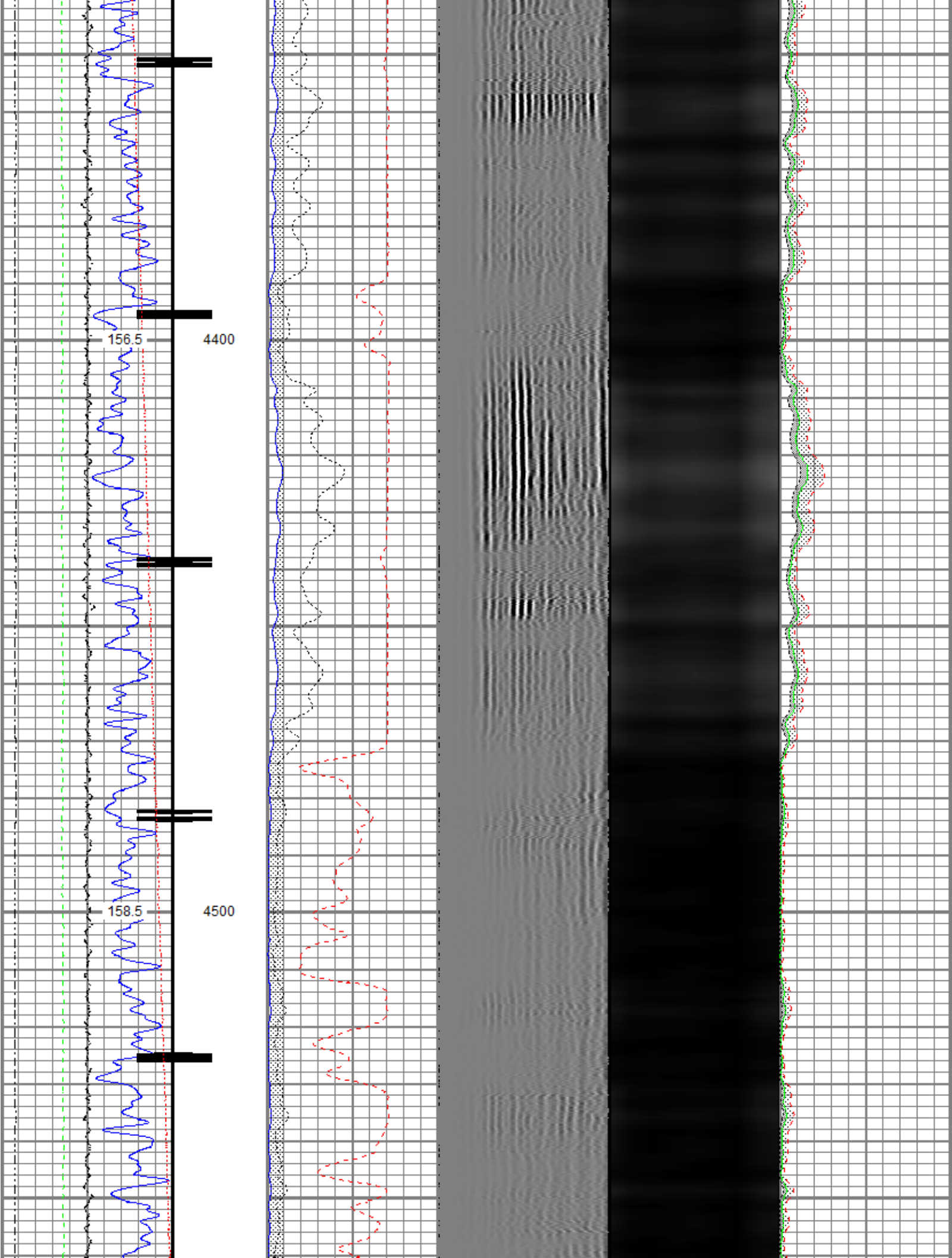


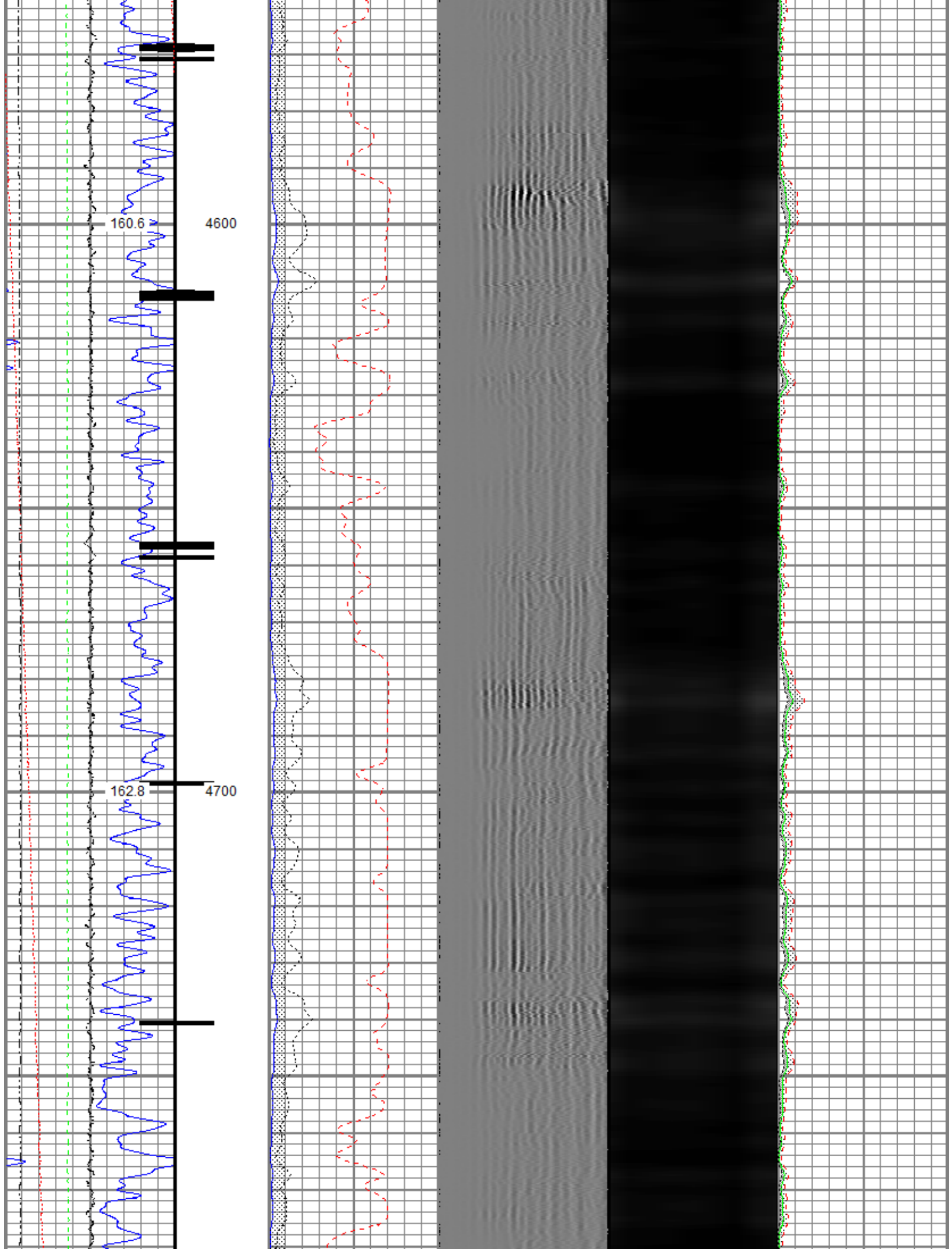


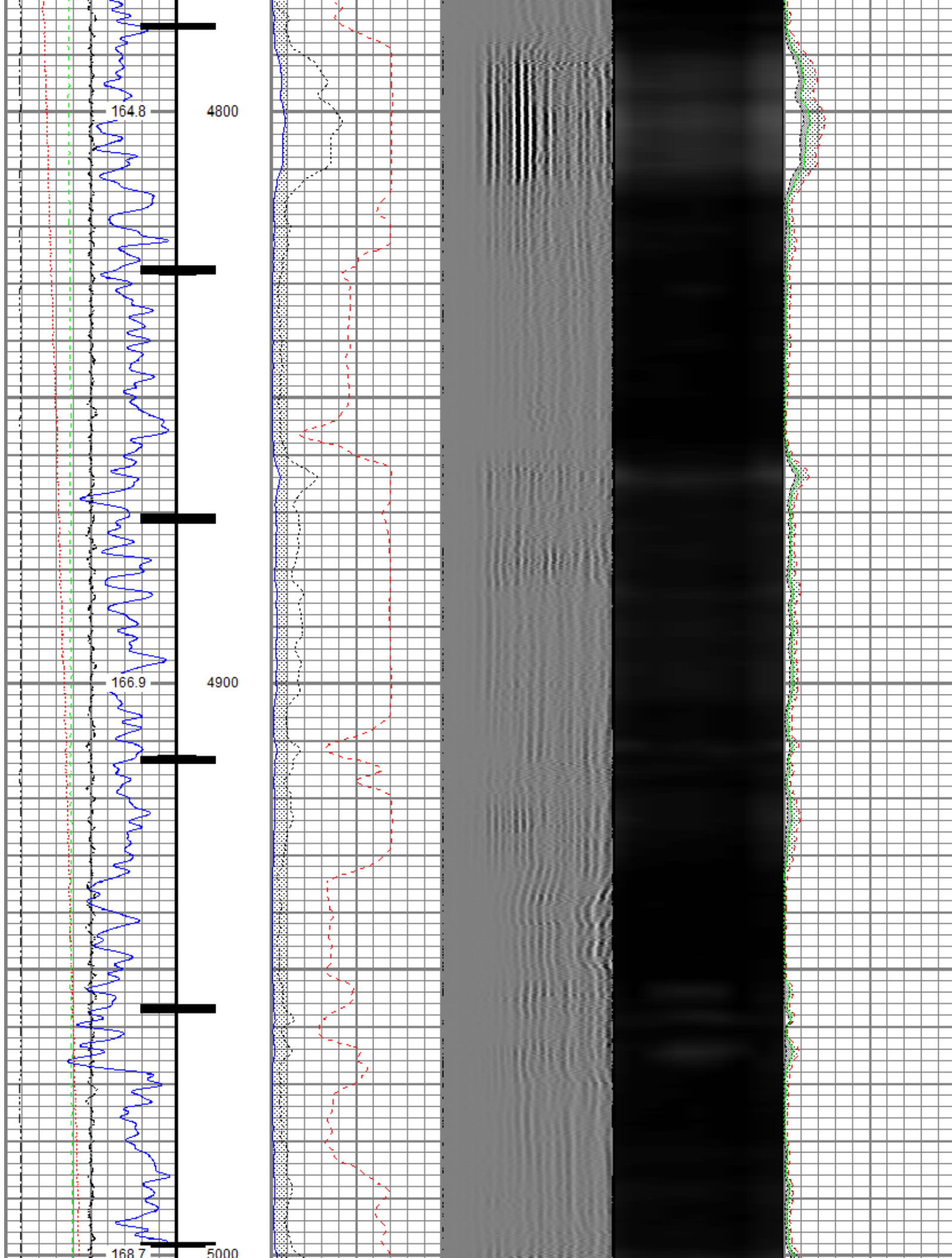


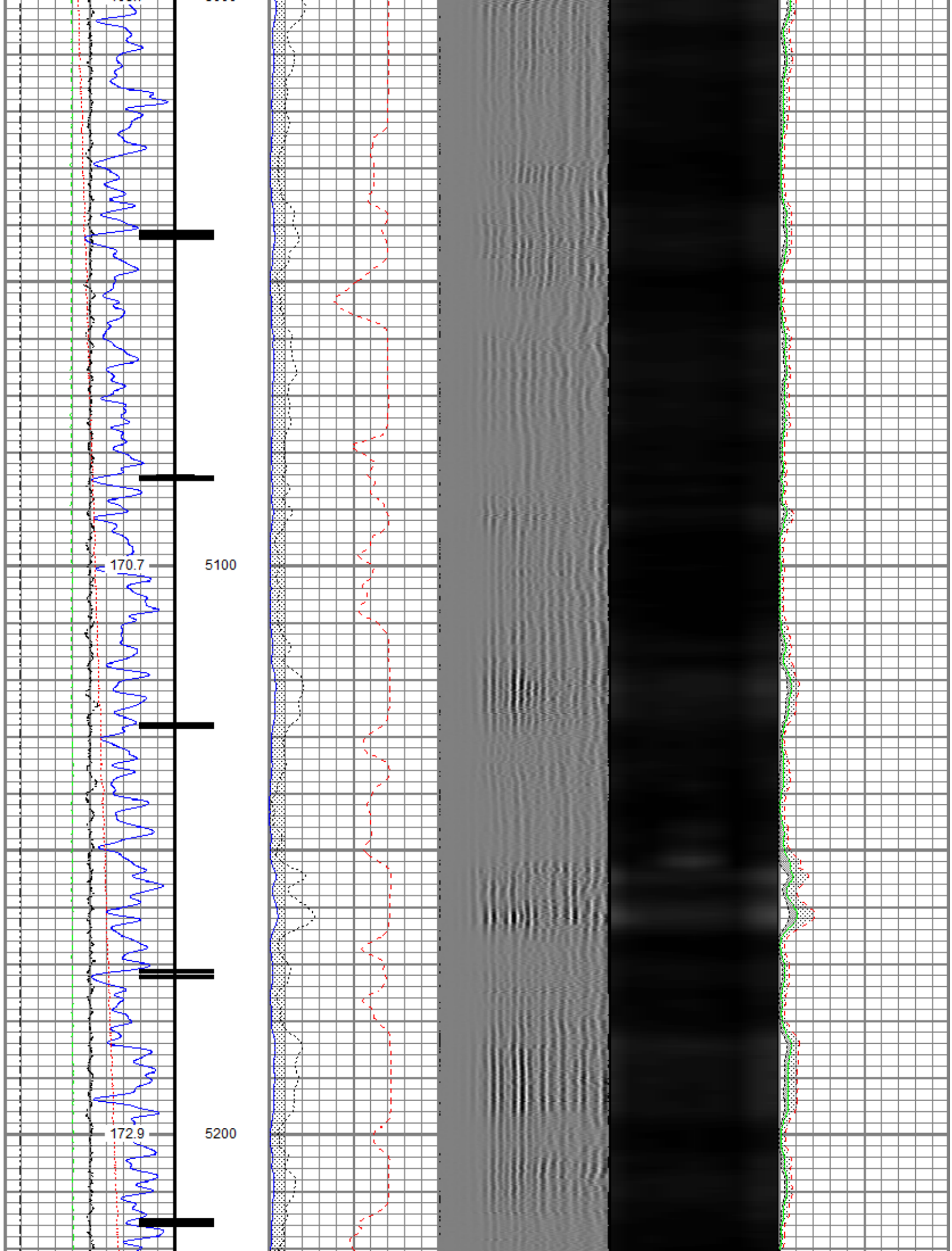


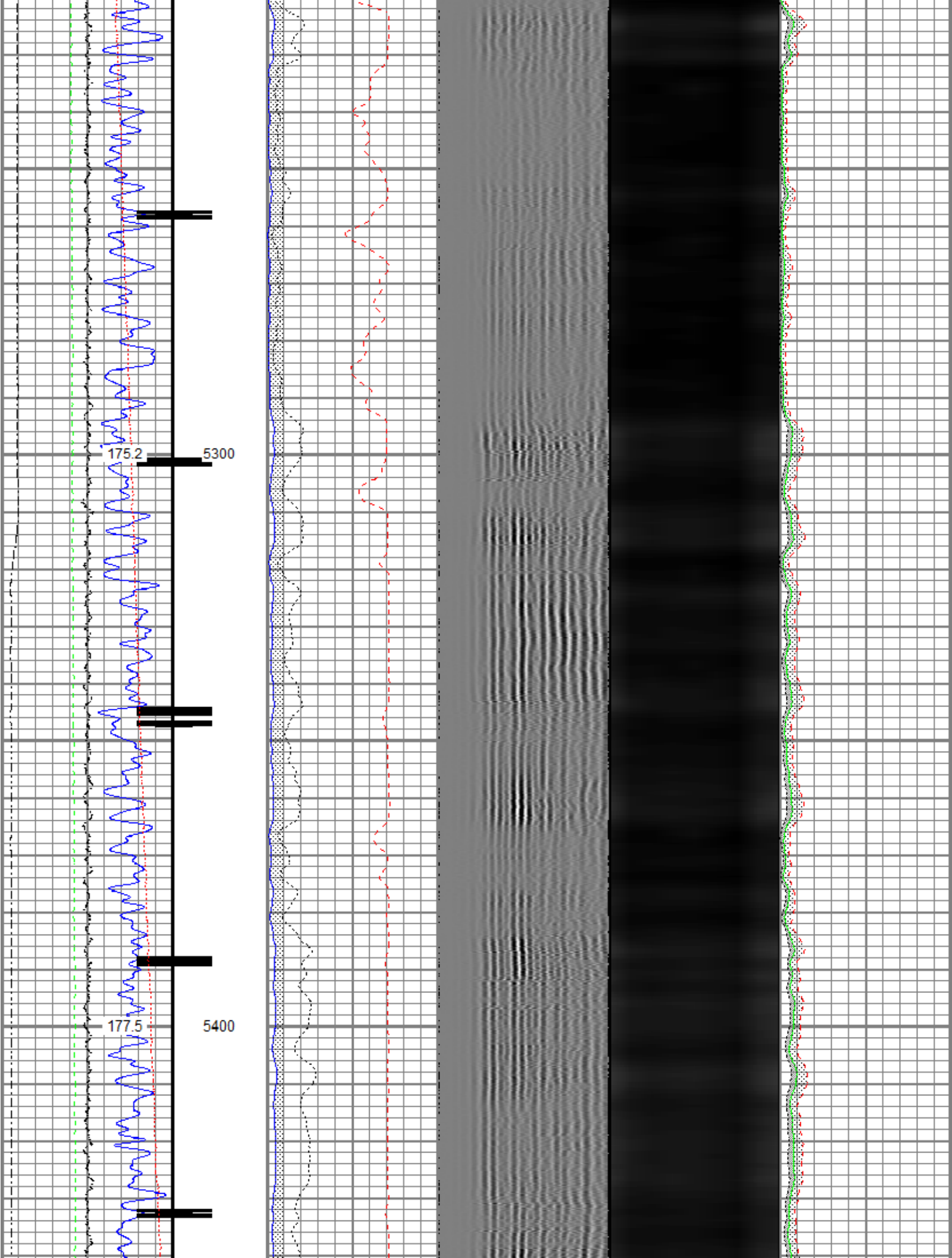


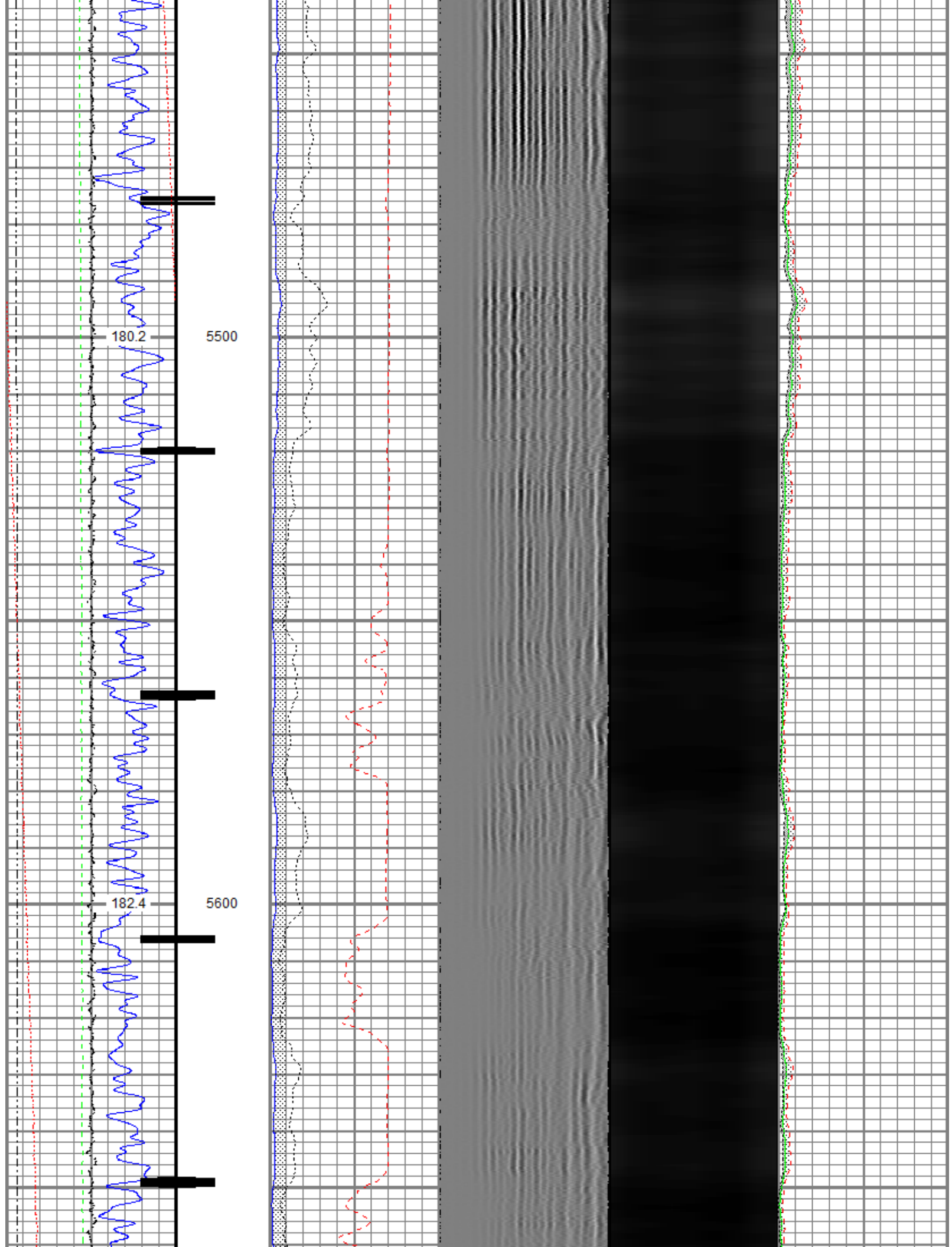


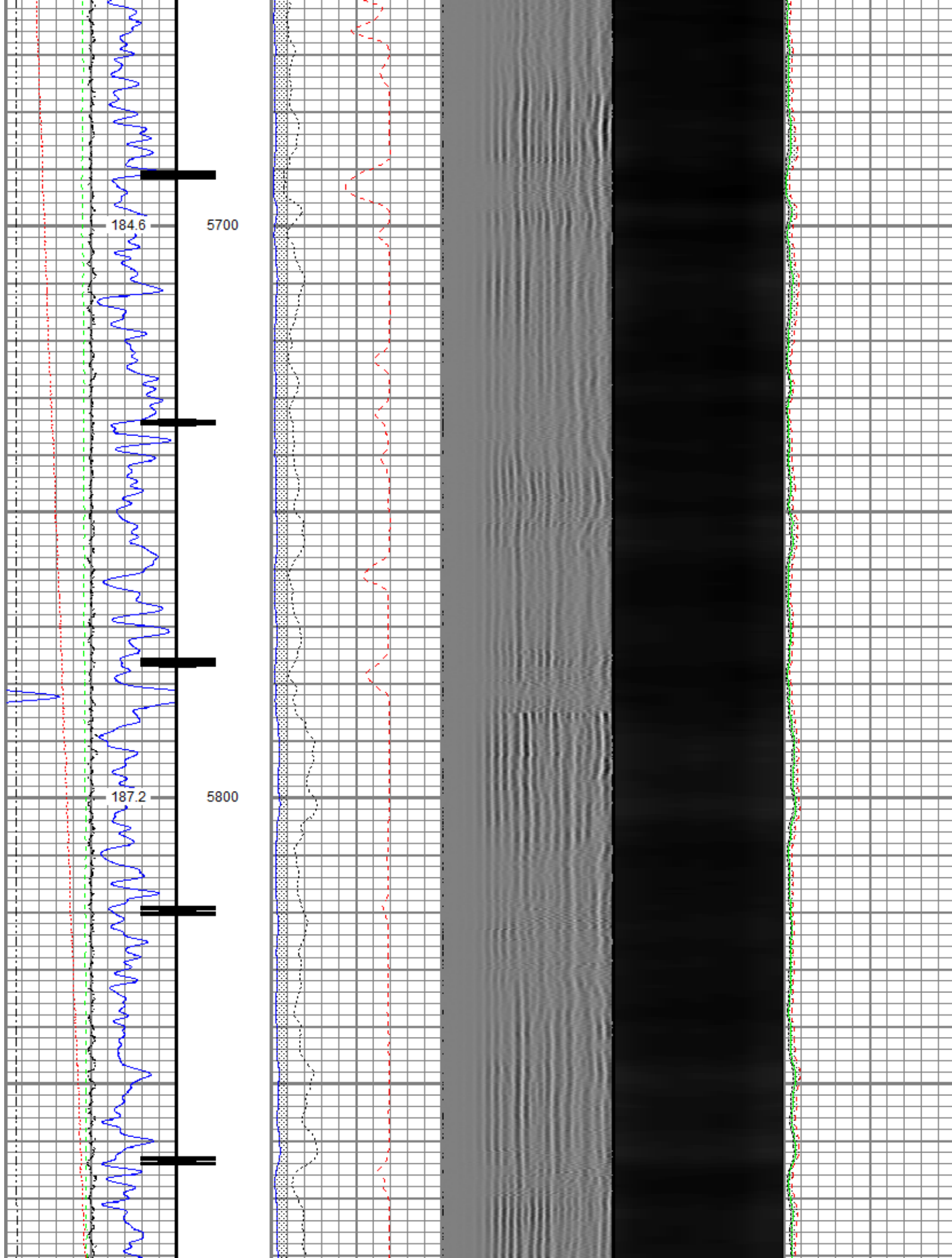


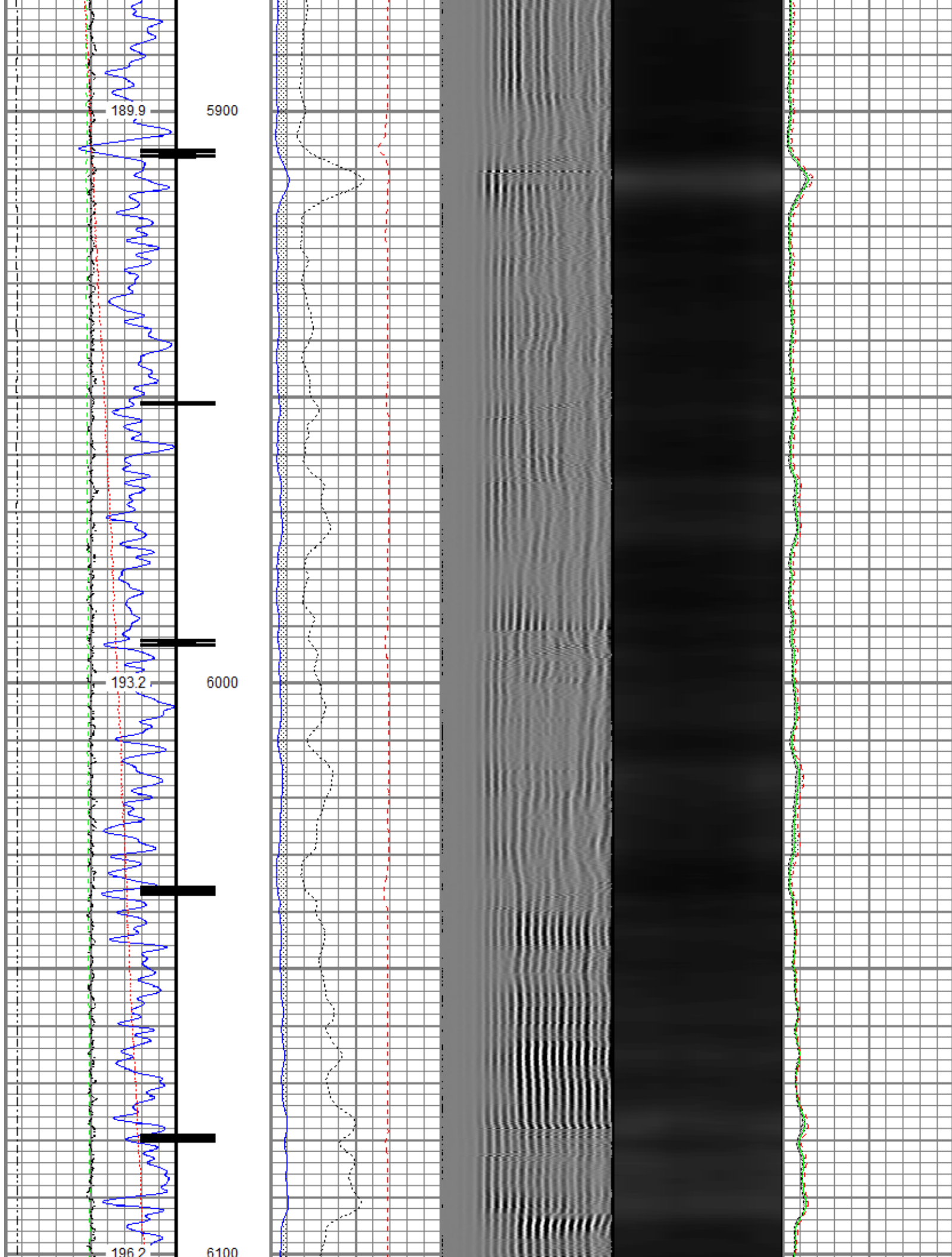


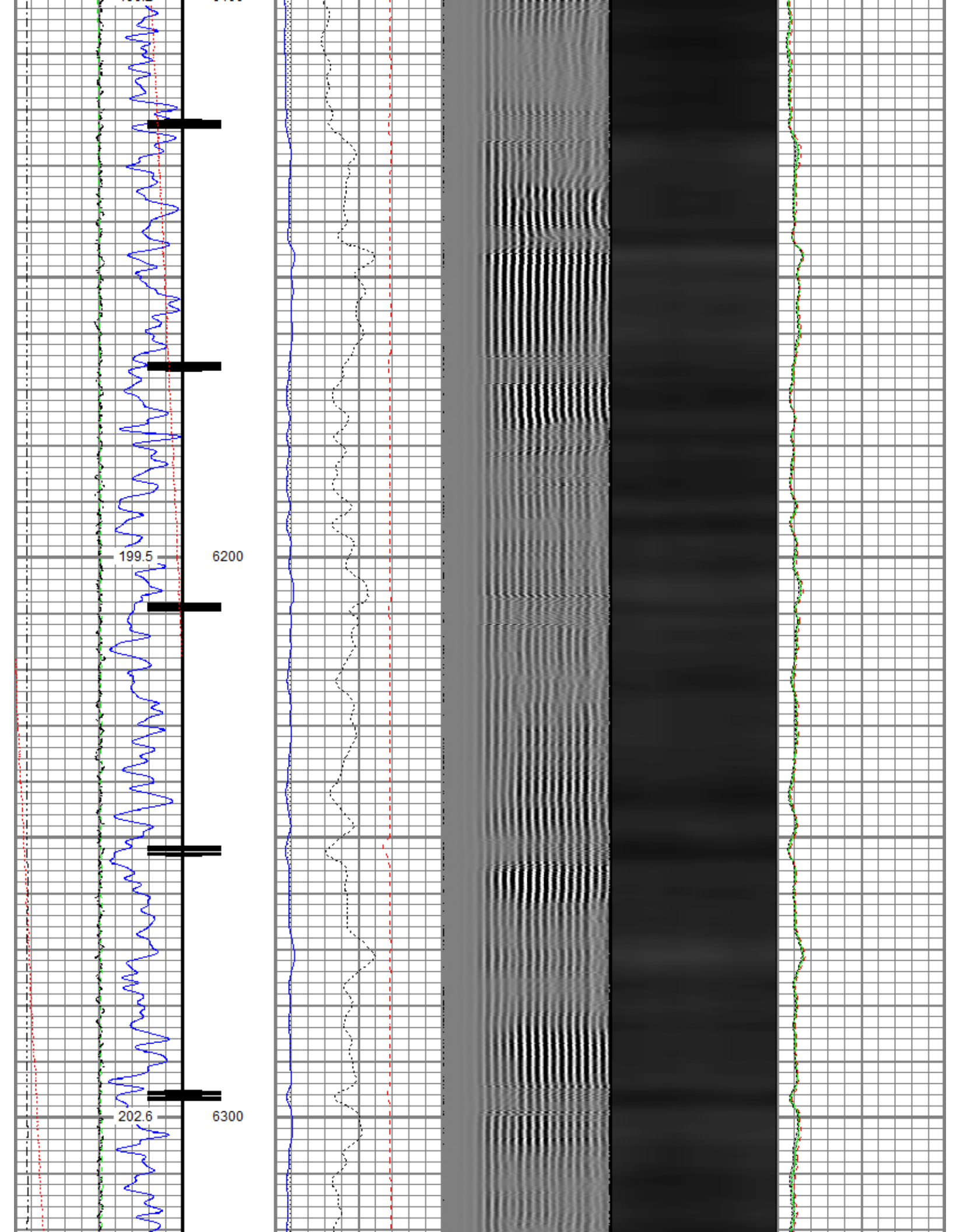


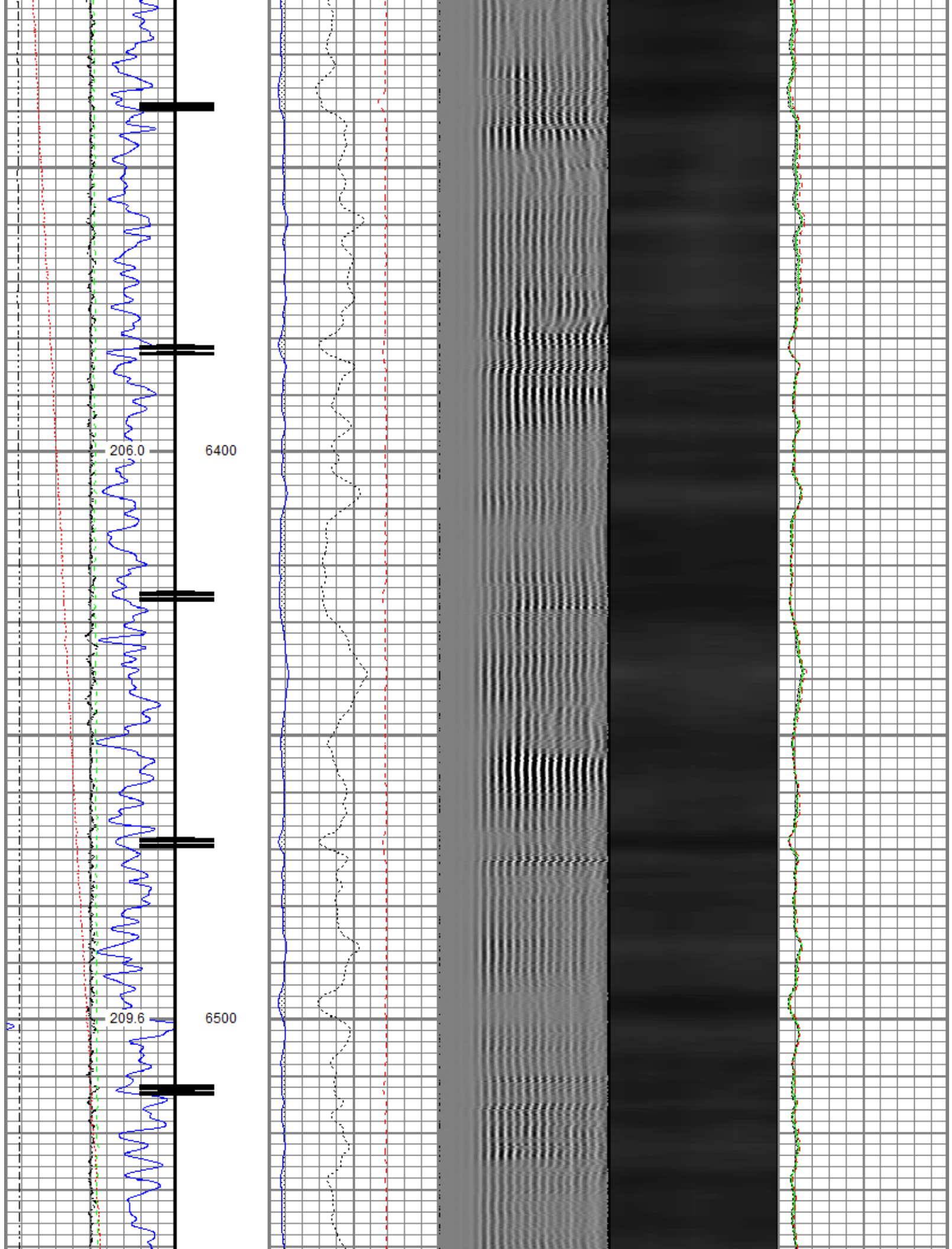


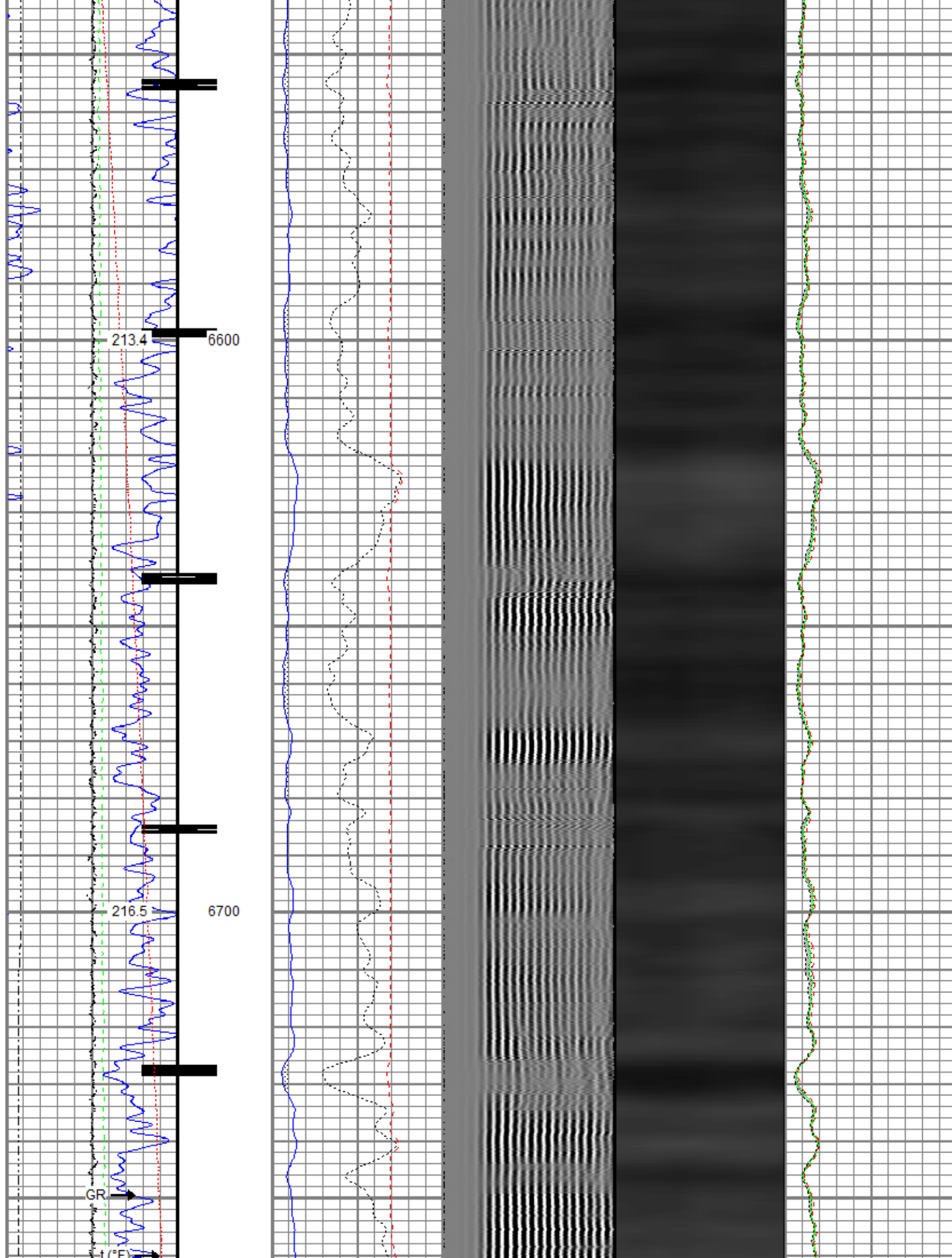


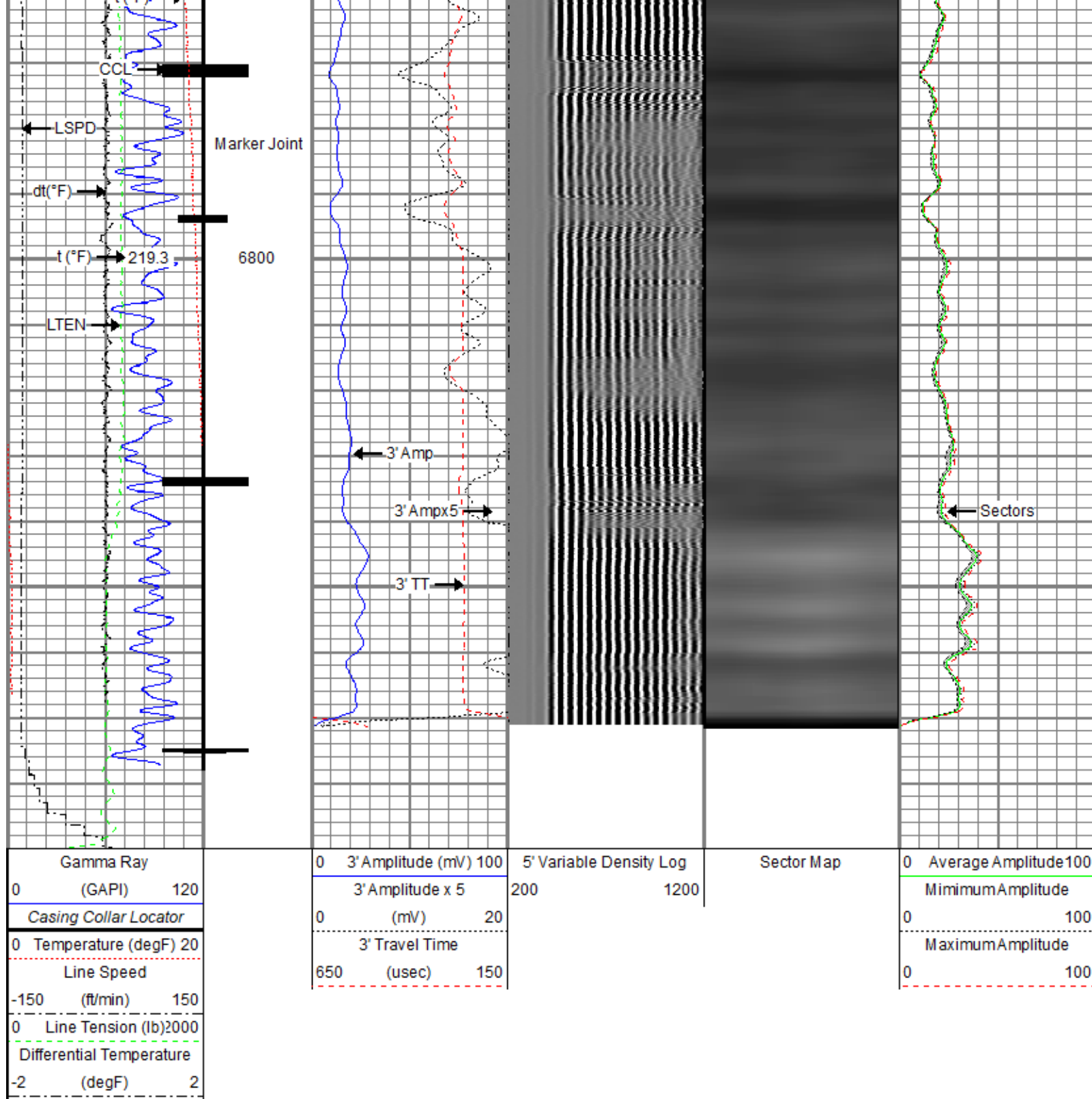








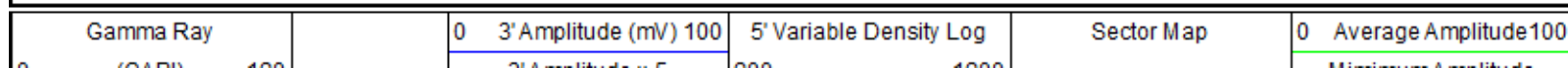




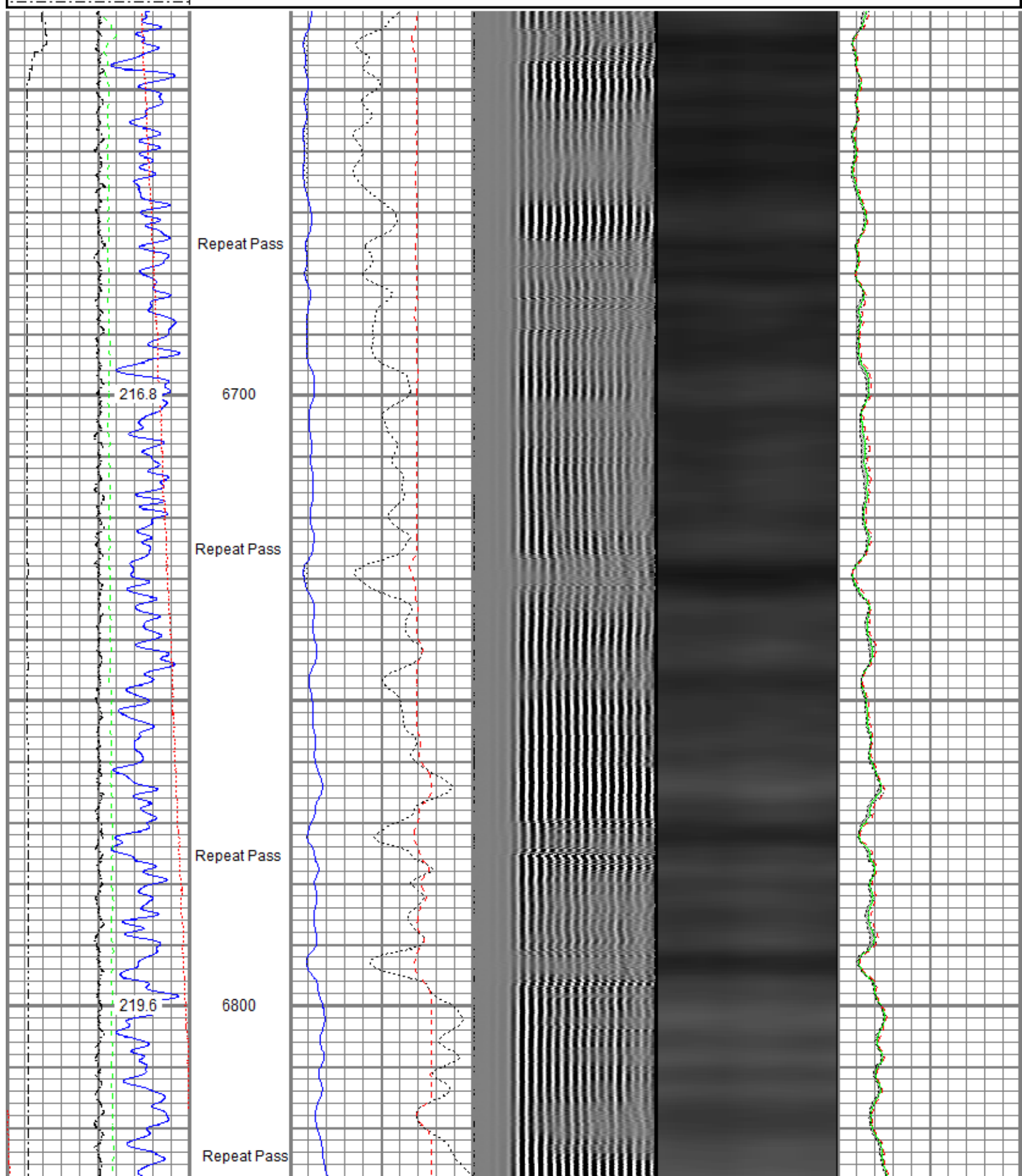
Repeat Pass

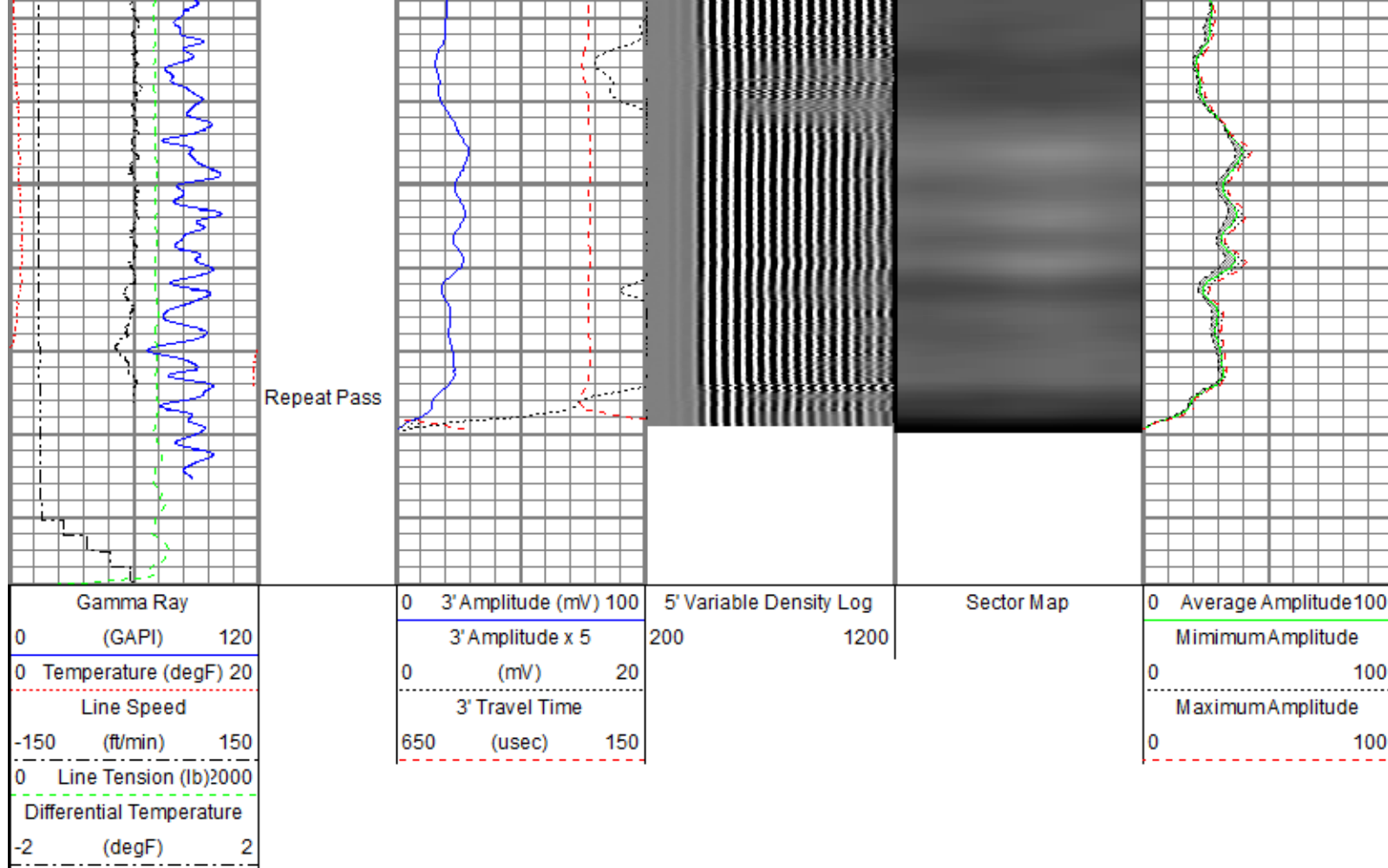
Recorded with 2800 PSI Surface Induced Pressure

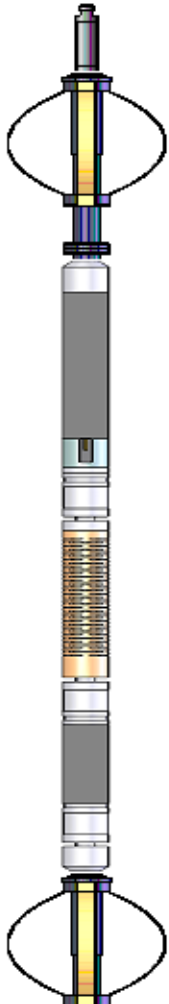
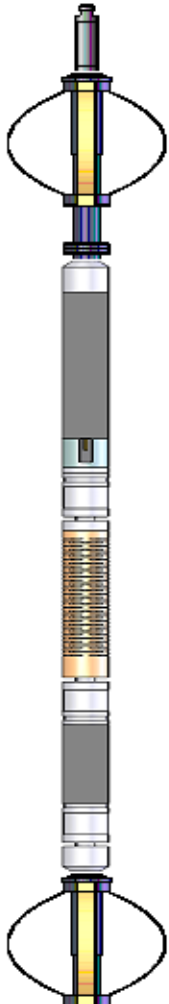
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 Dataset Pathname Repeat.2
 Presentation Format ros_radrii
 Dataset Creation Tue Aug 14 10:11:18 2018
 Charted by Depth in Feet scaled 1:240



(GAP)			3 Amplitude x 5			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)
TEMP	22.08		Titan CHD-14375 GO	1.03	1.44	3.60
			Titan 1-7/16" Assembled Electric Cable Head w/ 1" Fishing Neck			
			Probe CENT-2750	2.88	2.75	20.00
			Probe 2-3/4" Electric Inline Bowspring Centralizer			
			Probe Radii-2750 RBT (FW1308-089)	9.39	2.75	105.00
			Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub			
			Probe CENT-2750	2.88	2.75	20.00
			Probe 2-3/4" Electric Inline Bowspring Centralizer			
WVFS8	19.84					
WVFS7	19.84					
WVFS6	19.84					
WVFS5	19.84					
WVFS4	19.84					
WVFS3	19.84					
WVFS2	19.84					
WVFS1	19.84					
WVFCAL	19.84					
WVF3FT	19.84					
WVF5FT	18.84					

HEADVOLT	15.59						
CCL\$2	11.83						
CCL\$1	11.83						
GR	10.50						

Calibration Report						
Database File	c:\programdata\warrior\data\anadarko\0512346332_anadarko_george 25-3hz_rbl_cnl_08-12-18\0512346331_anadarko_george					
Dataset Pathname	Main.3					
Dataset Creation	Tue Aug 14 09:58:33 2018					
Compensated Neutron Calibration Report						
		Serial Number:		FW1308-020_A1483		
		Tool Model:		2750 BL		
CALIBRATION		Wed Oct 11 09:42:11 2017				
	Detector	Readings		Target		Normalization
	Short Space	3241.60	cps	0.00	cps	1.0000
	Long Space	452.04	cps	0.00	cps	1.0000
PRE-SURVEY VERIFICATION						
	Detector	Readings		Measured		Target
1)	Short Space		cps			
	Long Space		cps	pu		pu
2)	Short Space		cps			
	Long Space		cps	pu		
3)	Short Space		cps			
	Long Space		cps	pu		
POST-SURVEY VERIFICATION						
	Detector	Readings		Measured		Target

1)	Short Space Long Space	cps cps	pu pu	pu
2)	Short Space Long Space	cps cps	pu pu	pu
3)	Short Space Long Space	cps cps	pu pu	pu

Gamma Ray Calibration Report				
Serial Number:	101001			
Tool Model:	2750 6PB			
Performed:	Sun Nov 12 11:25:32 2017			
Calibrator Value:	637.0	GAPI		
Background Reading:	100.6	cps		
Calibrator Reading:	981.1	cps		
Sensitivity:	0.7235	GAPI/cps		

Segmented Cement Bond Log Calibration Report				
Serial Number:	FW1308-089			
Tool Model:	2750 RBT			
Calibration Casing Diameter:	5.500	in		
Calibration Depth:	18.044	ft		

Master Calibration, performed (Derived):						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.006	0.640	0.800	71.921	112.210	0.155
CAL	0.728	0.729				
5'	0.010	0.546	0.800	71.921	132.685	-0.533
SUM						
S1	0.005	0.620	0.000	100.000	162.790	-0.867
S2	0.007	0.640	0.000	100.000	157.948	-1.128
S3	0.005	0.659	0.000	100.000	152.859	-0.760
S4	0.006	0.661	0.000	100.000	152.731	-0.988
S5	0.005	0.657	0.000	100.000	153.262	-0.740
S6	0.006	0.649	0.000	100.000	155.422	-0.888
S7	0.007	0.633	0.000	100.000	159.853	-1.122
S8	0.006	0.637	0.000	100.000	158.428	-0.874

Internal Reference Calibration, performed (Not Performed):						
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.728	0.729	1.000	0.000

Air Zero Calibration, performed Mon Aug 13 11:22:02 2018:			
	Raw (v)		Results
	Zero	Zero	Offset
3'	0.004	0.000	0.001
5'	0.008	0.000	-0.000
SUM			
S1	0.004	0.000	-0.000
S2	0.005	0.000	0.000
S3	0.004	0.000	-0.001
S4	0.004	0.000	0.000
S5	0.004	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	-0.001

Temperature Calibration Report

Serial Number: FW1308-089
Tool Model: 2750 RBT
Performed: Sun Nov 12 13:49:09 2017

	Reference	Reading
Low Reference:	100.00 degF	106.47 degF
High Reference:	350.00 degF	395.10 degF
Gain:	0.87	
Offset:	7.78	
Delta Spacing	1	



Company Kerr-McGee Oil & Gas Onshore, L.P.
Well George 25-3HZ
Field Wattenberg
County Weld
State Colorado