



County Weld State Colorado

K.B.	4927
D.F.	---
G.L.	4895

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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 Marker Joint from Casing Tally at 6495 FT
Adjusted +3.5 FT to correlate with Marker Joint
Gauge Ring/Junk Basket ran to 7575 FT with no debris
Log ran from 40 FT above RBP
Log ran with 2800 PSI Surface Induced Pressure
Logging tools were clean and free of debris upon completion of operations

Thank you for choosing Reliance Oilfield Services, LLC!!

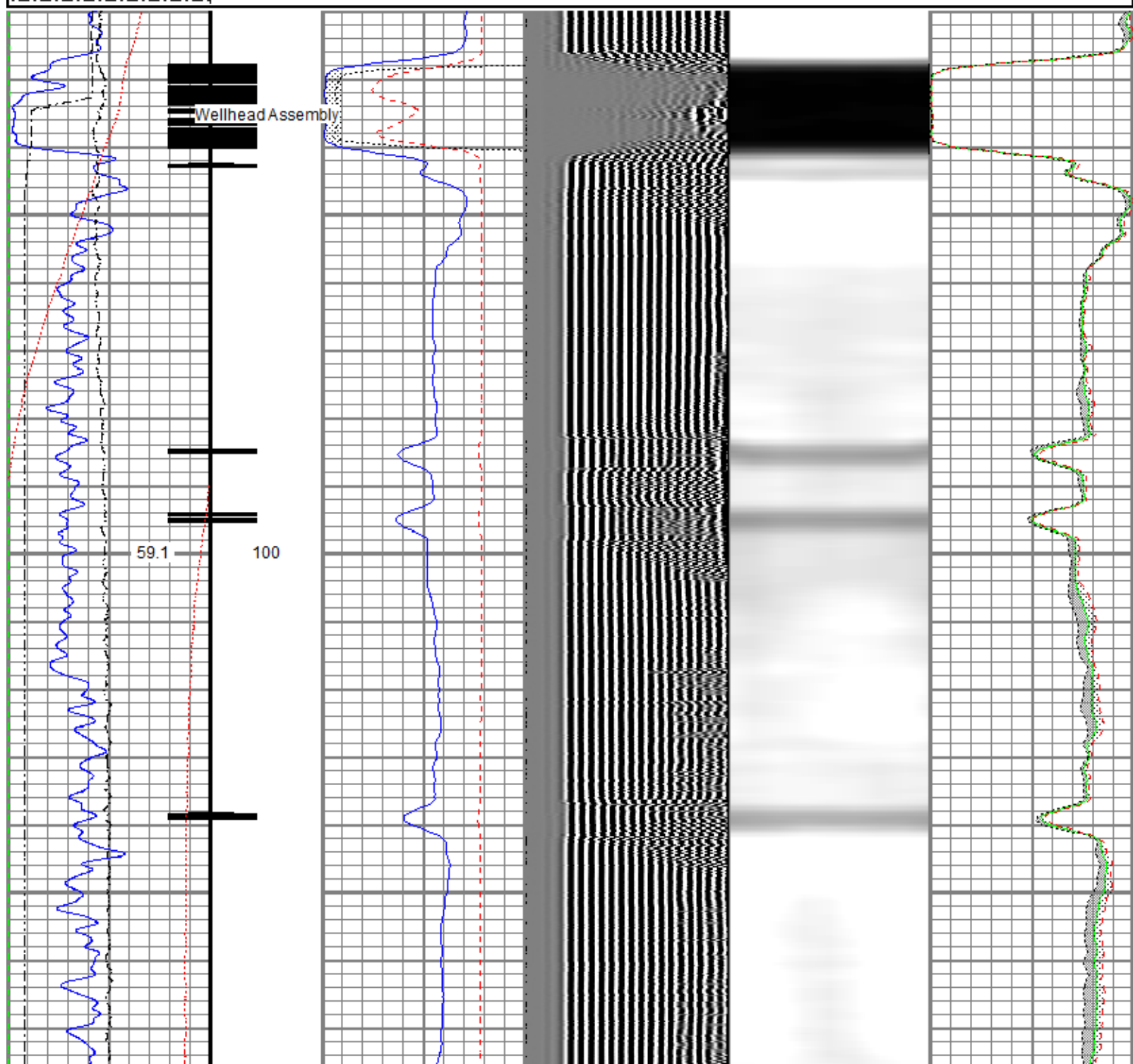
Main Pass

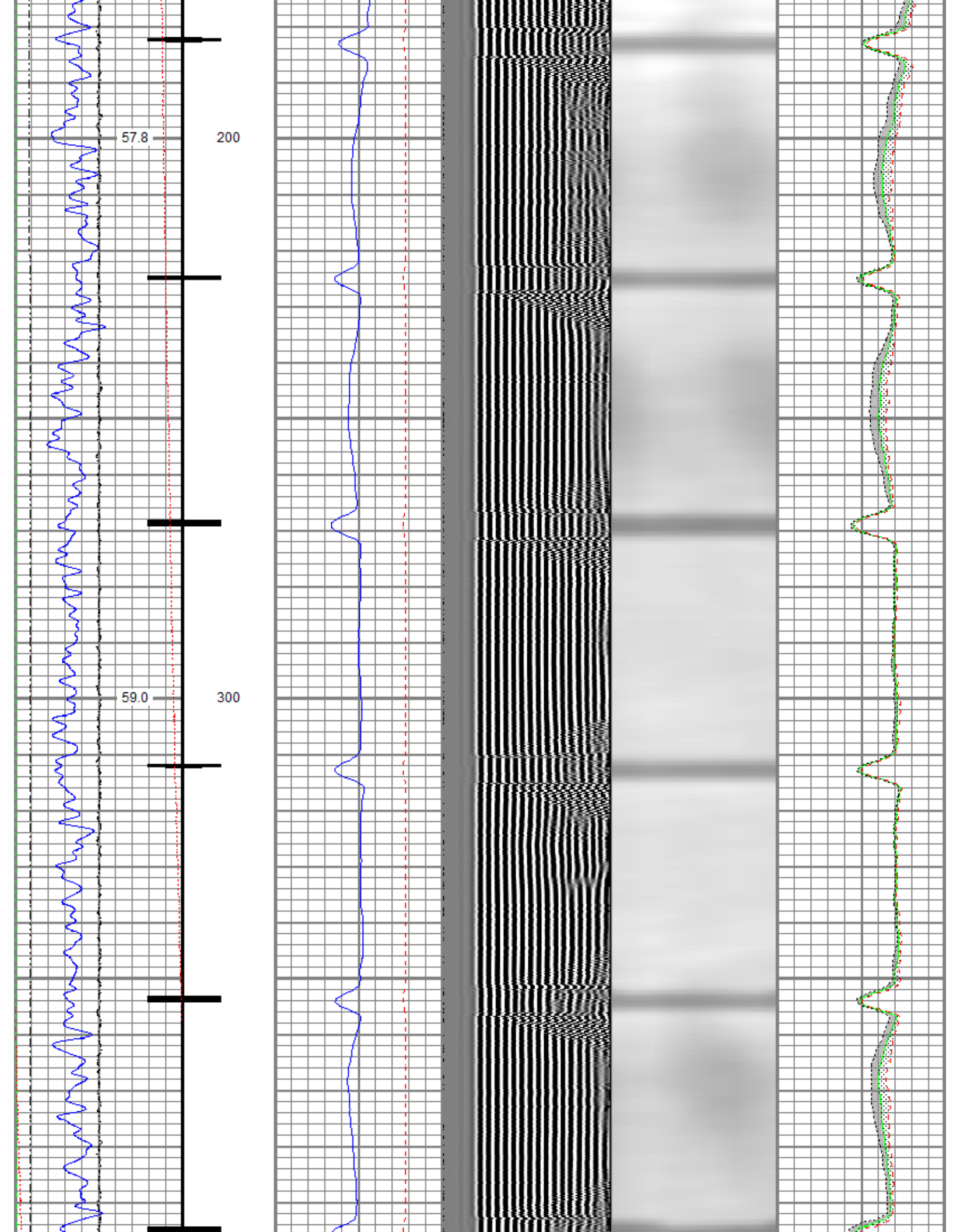


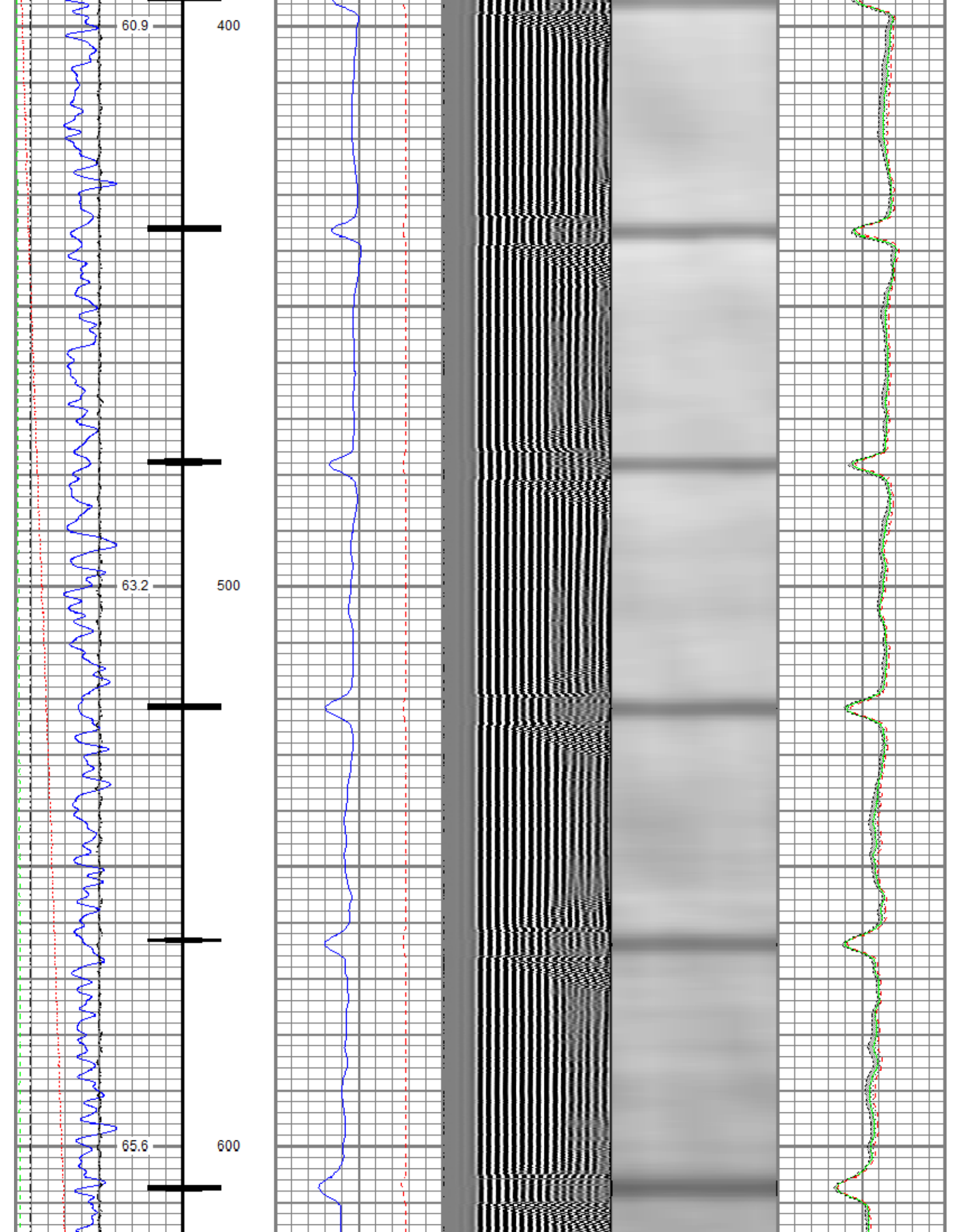
Recorded With 2000 PSI Surface-Induced Pressure

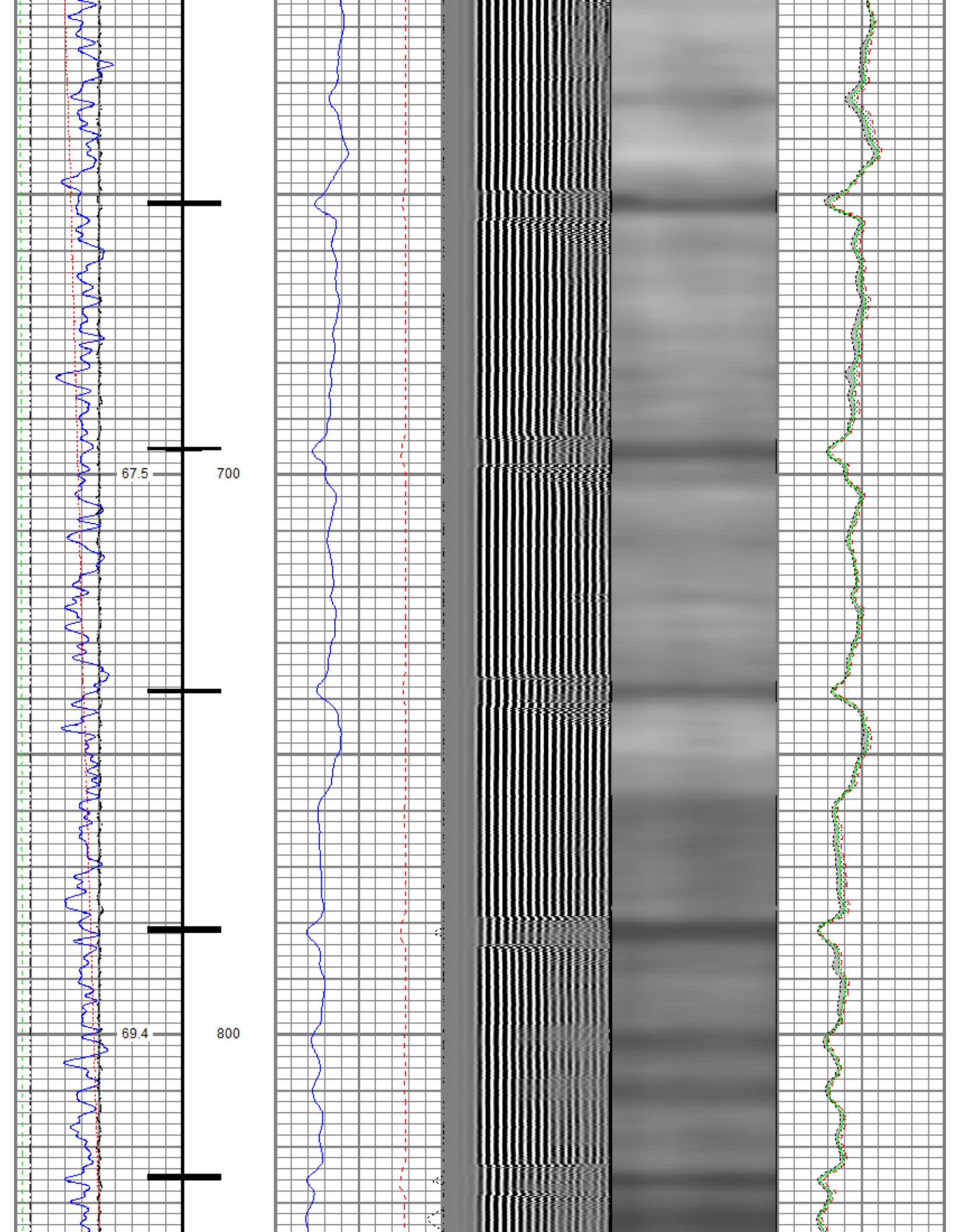
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 Dataset Pathname RBL/pass4.1
 Presentation Format ros_radri
 Dataset Creation Wed Mar 14 16:09:15 2018
 Charted by Depth in Feet scaled 1:240

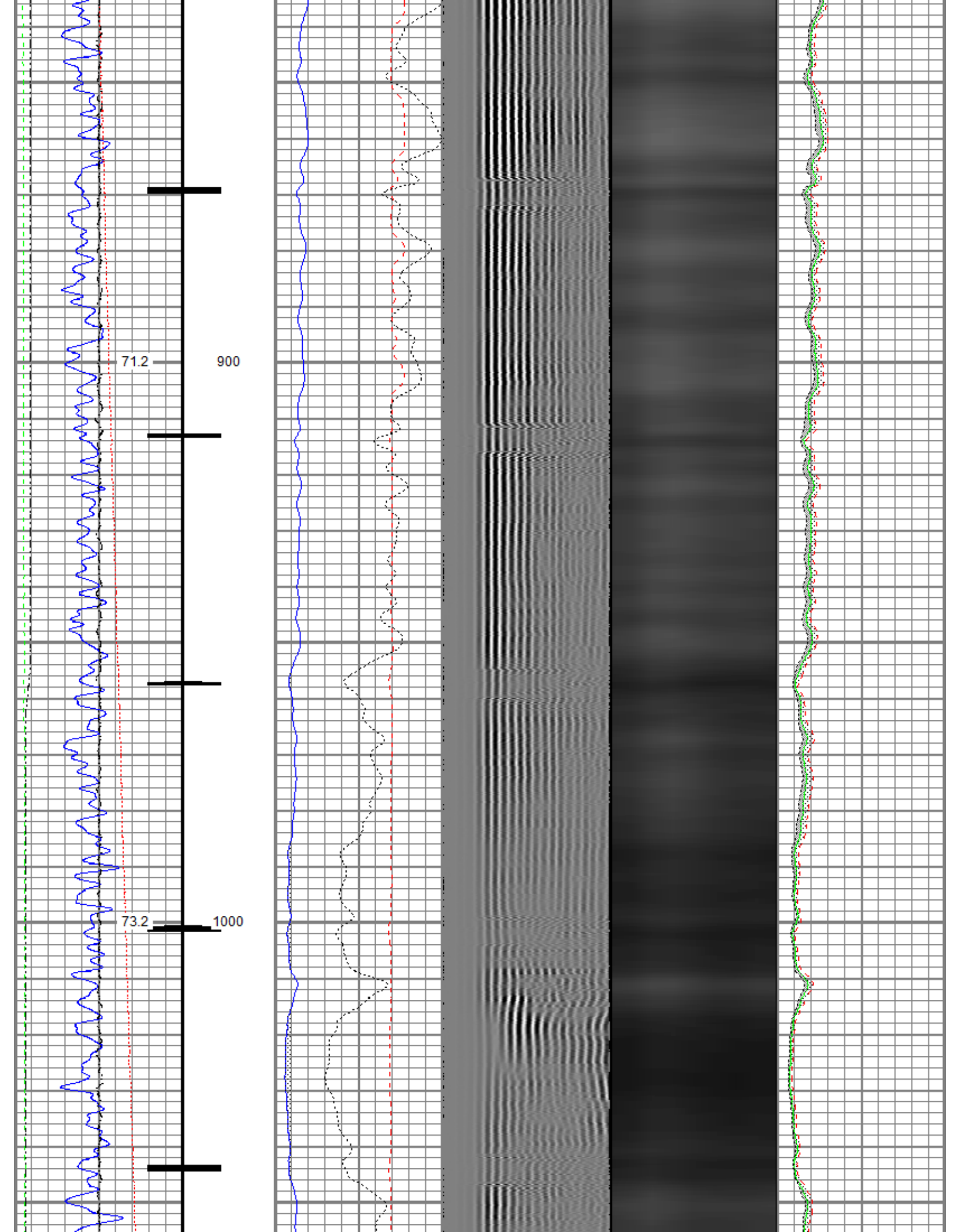
Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 100
(GAPI) 120		3' Amplitude x 5	200 (usec) 1200			Minimum Amplitude
Casing Collar Locator	0	(mV) 20			0	100
Temperature (degF) 20		3' Travel Time				Maximum Amplitude
Line Speed	650	(usec) 150			0	100
-150 (ft/min)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

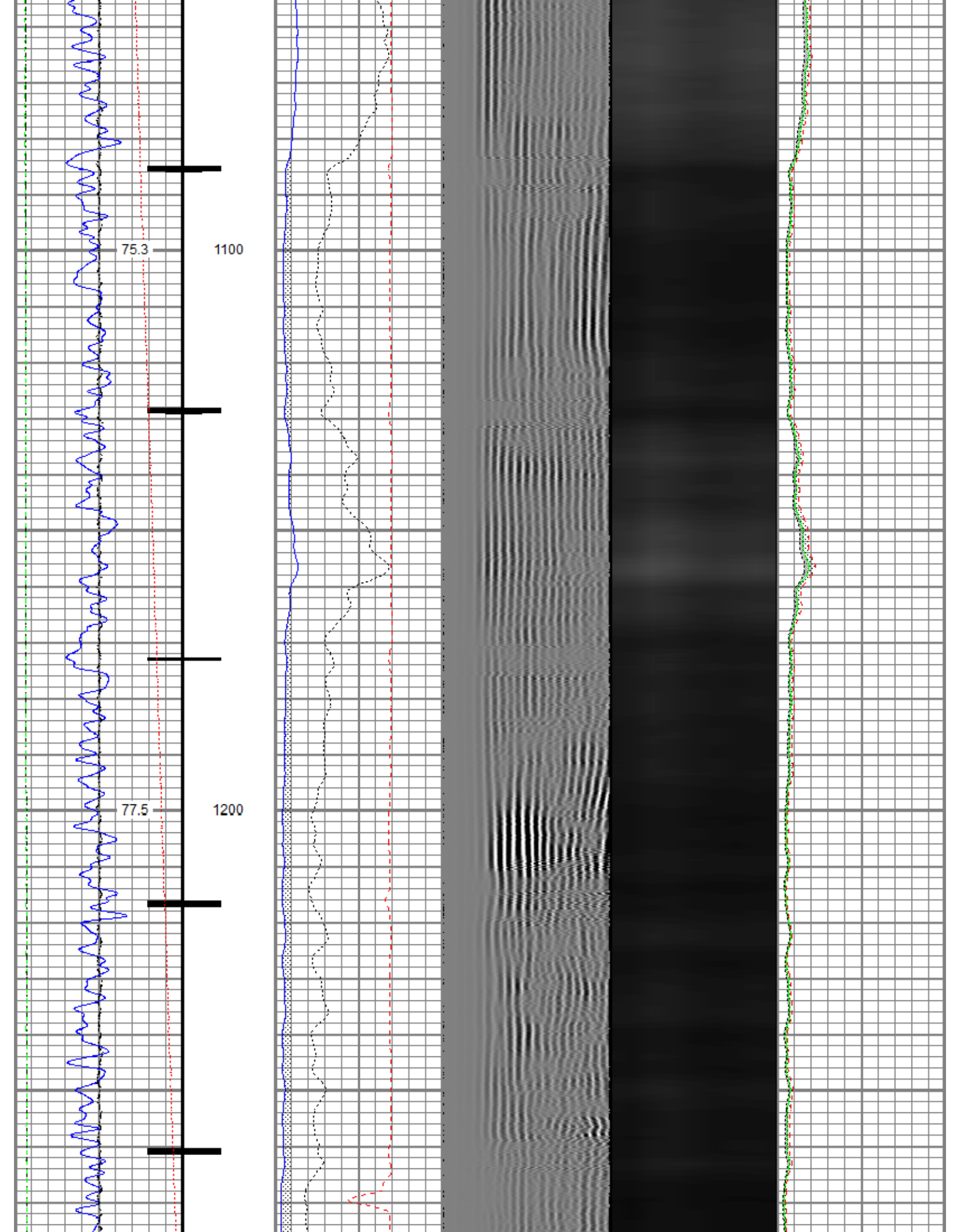


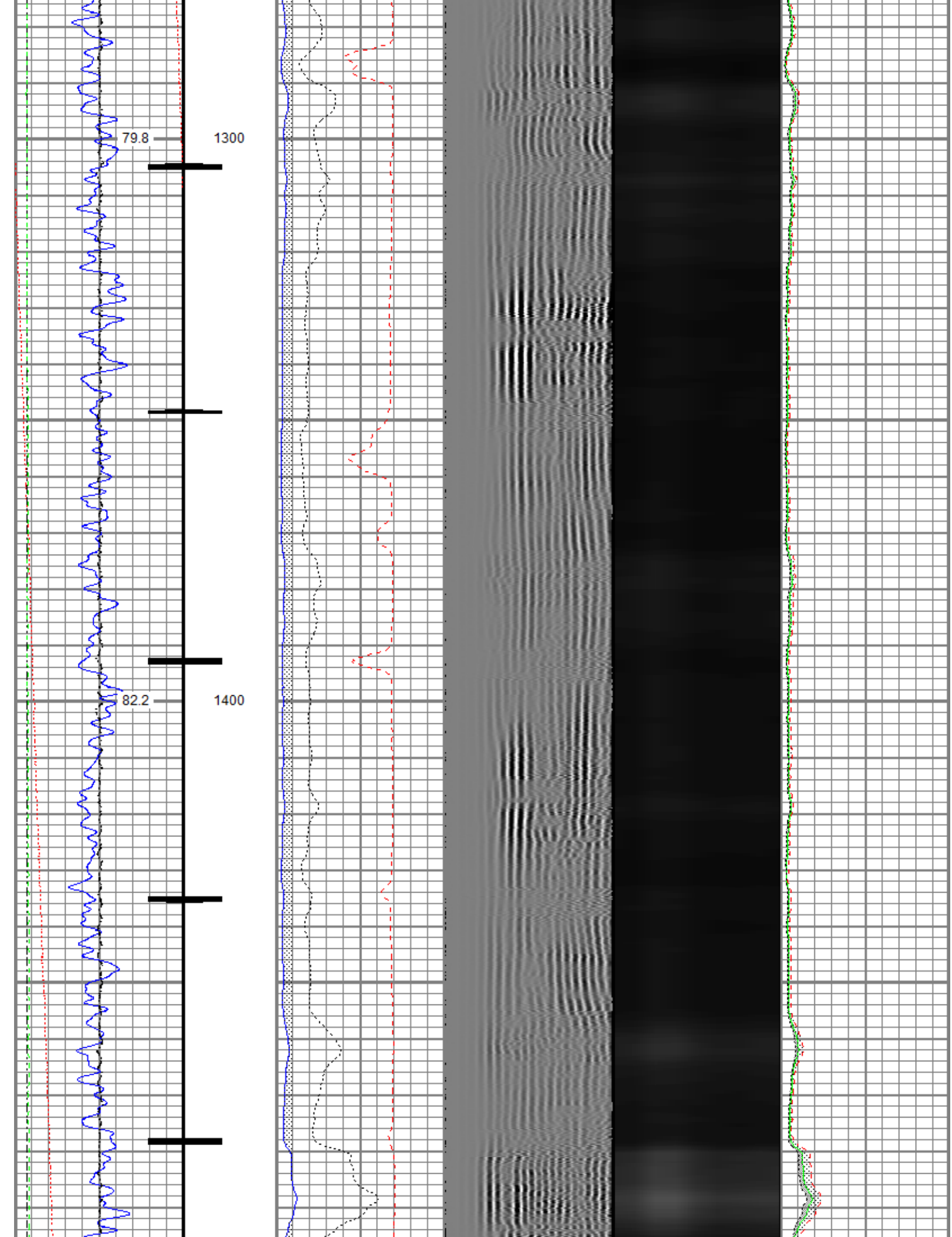


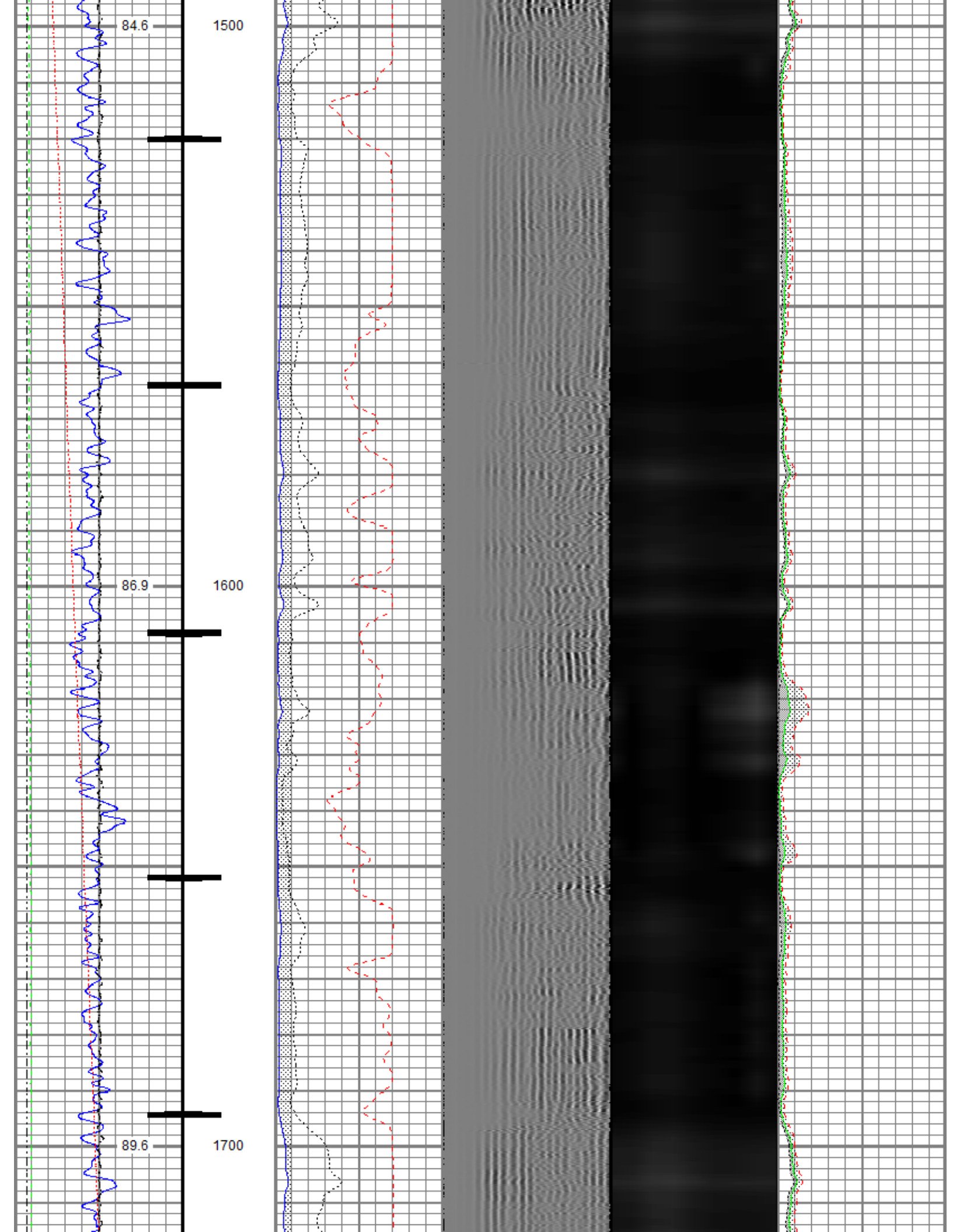


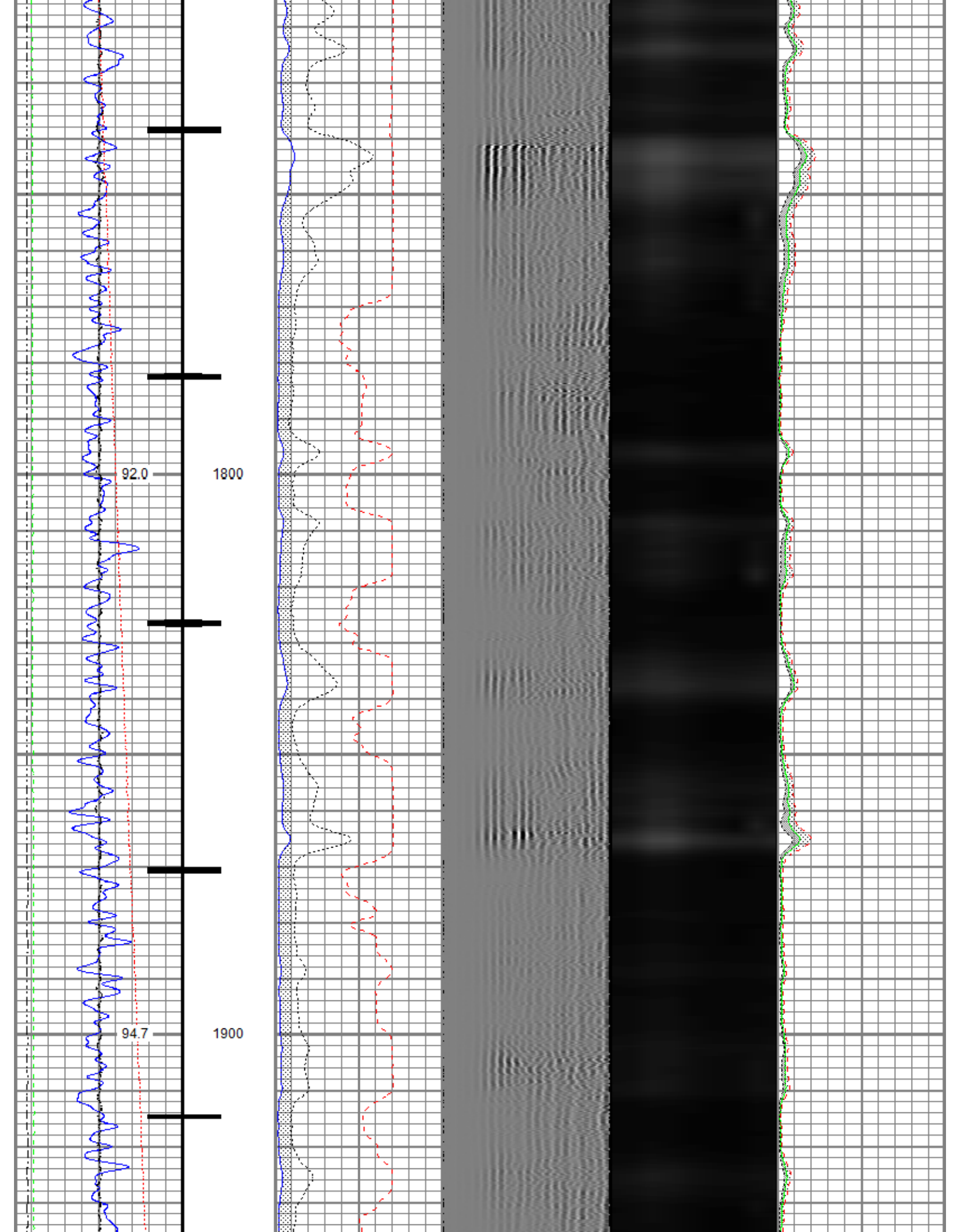


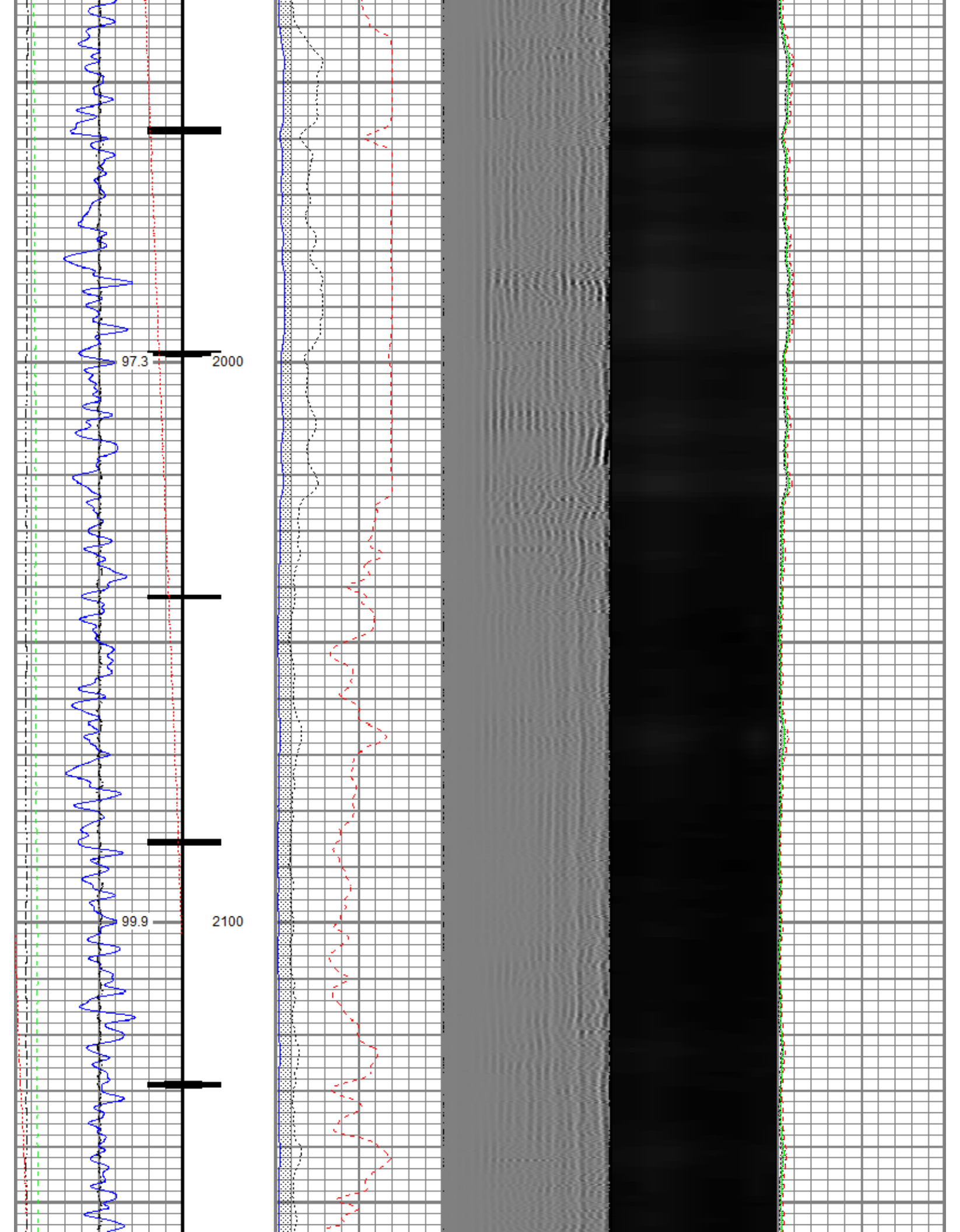


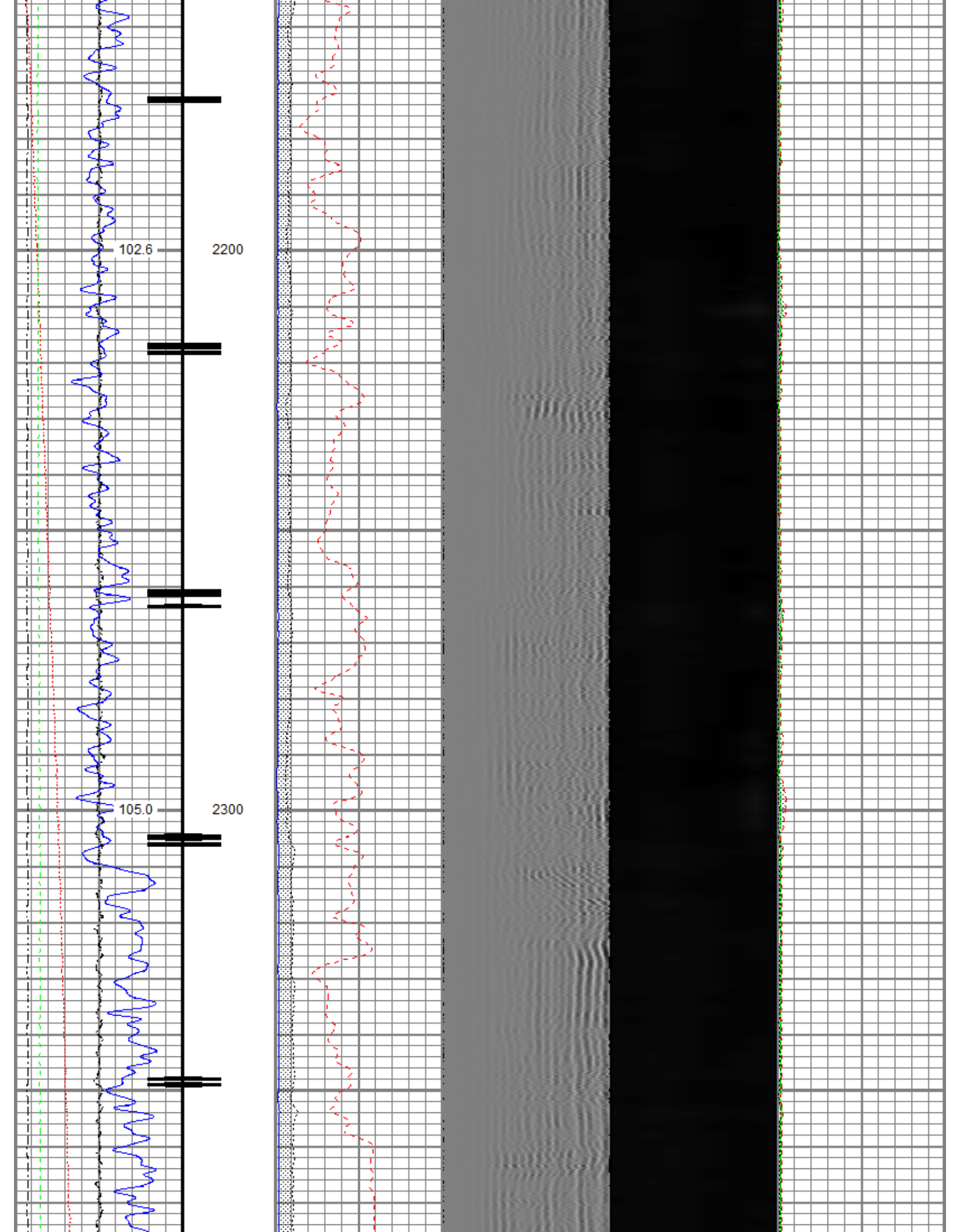


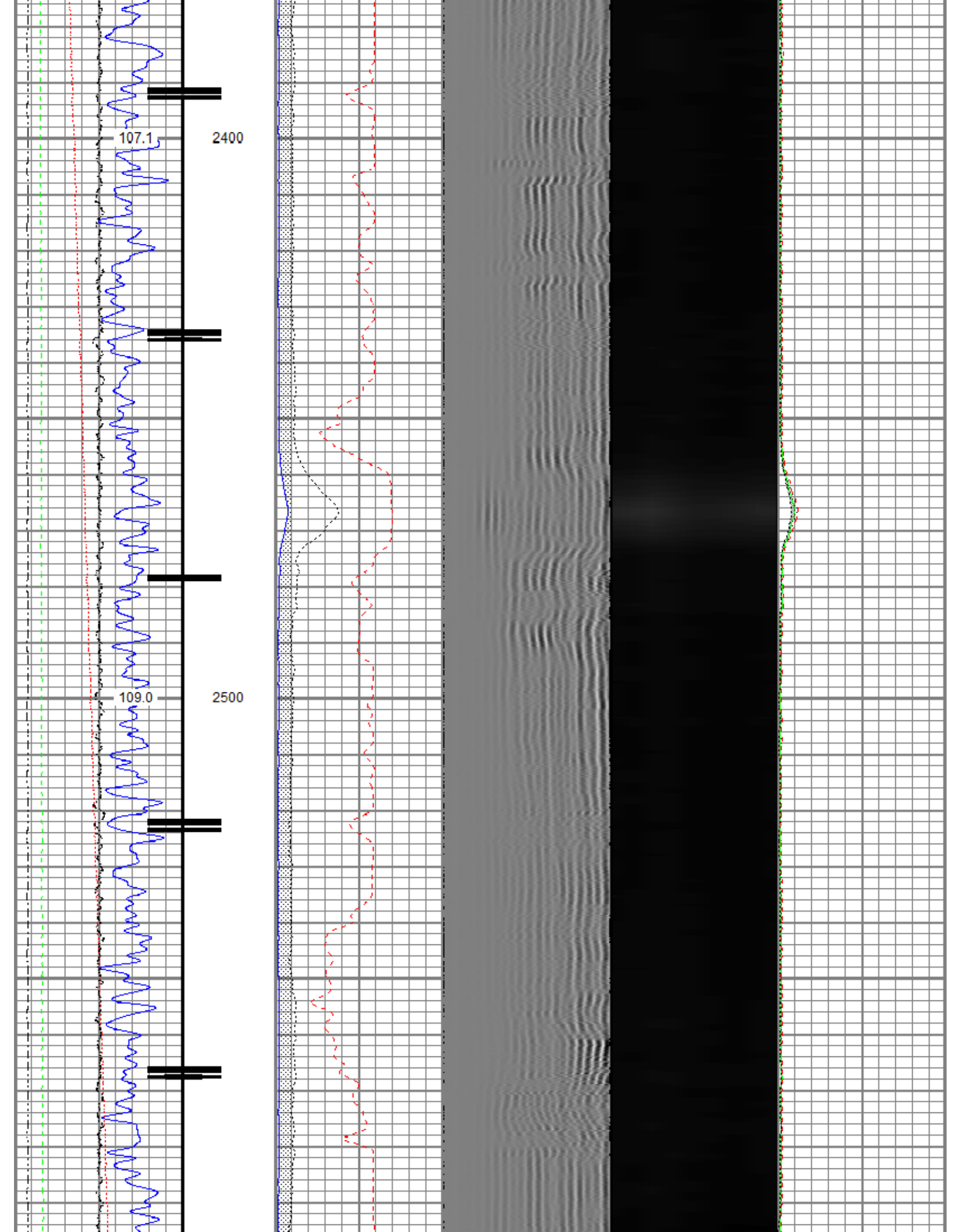


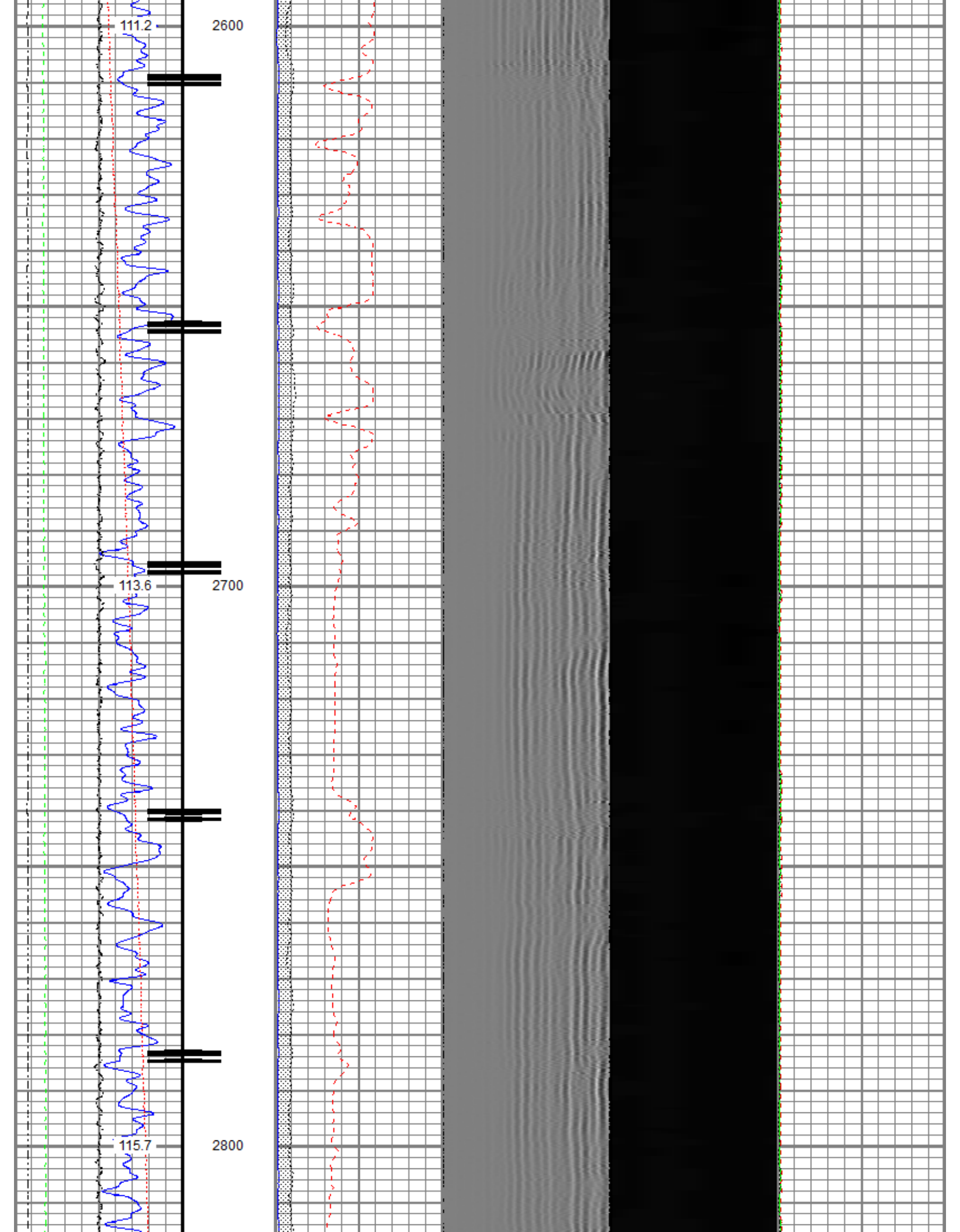


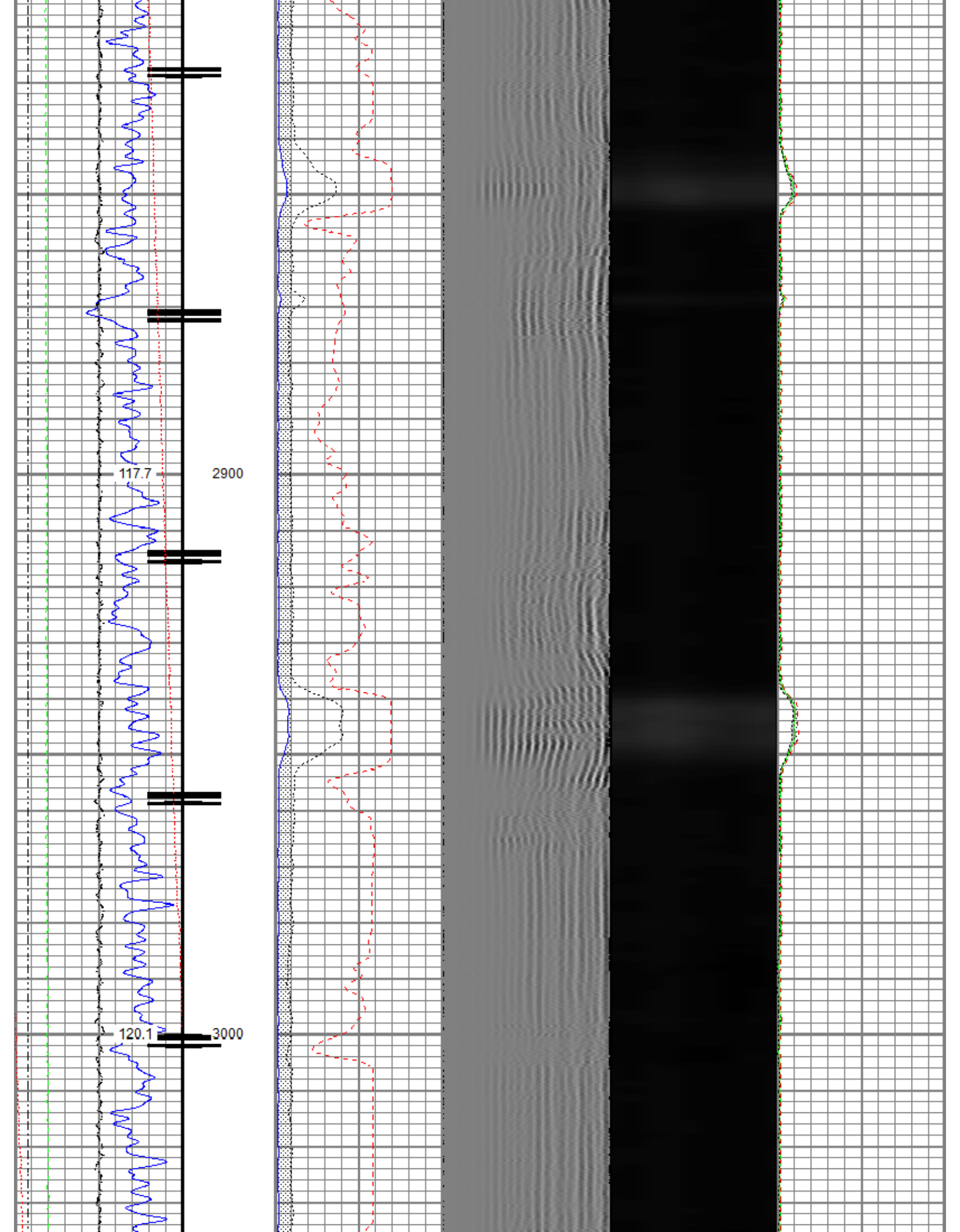


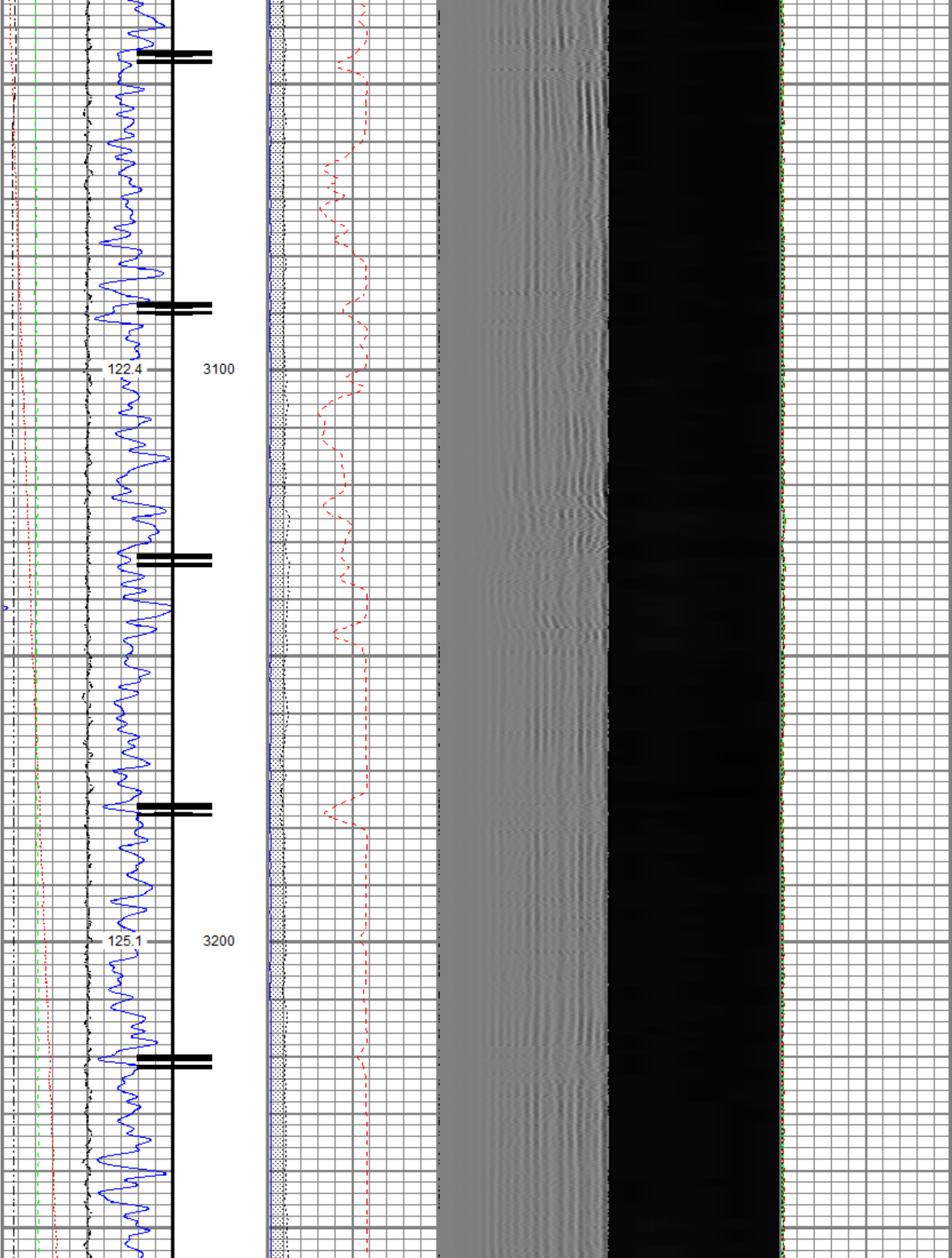


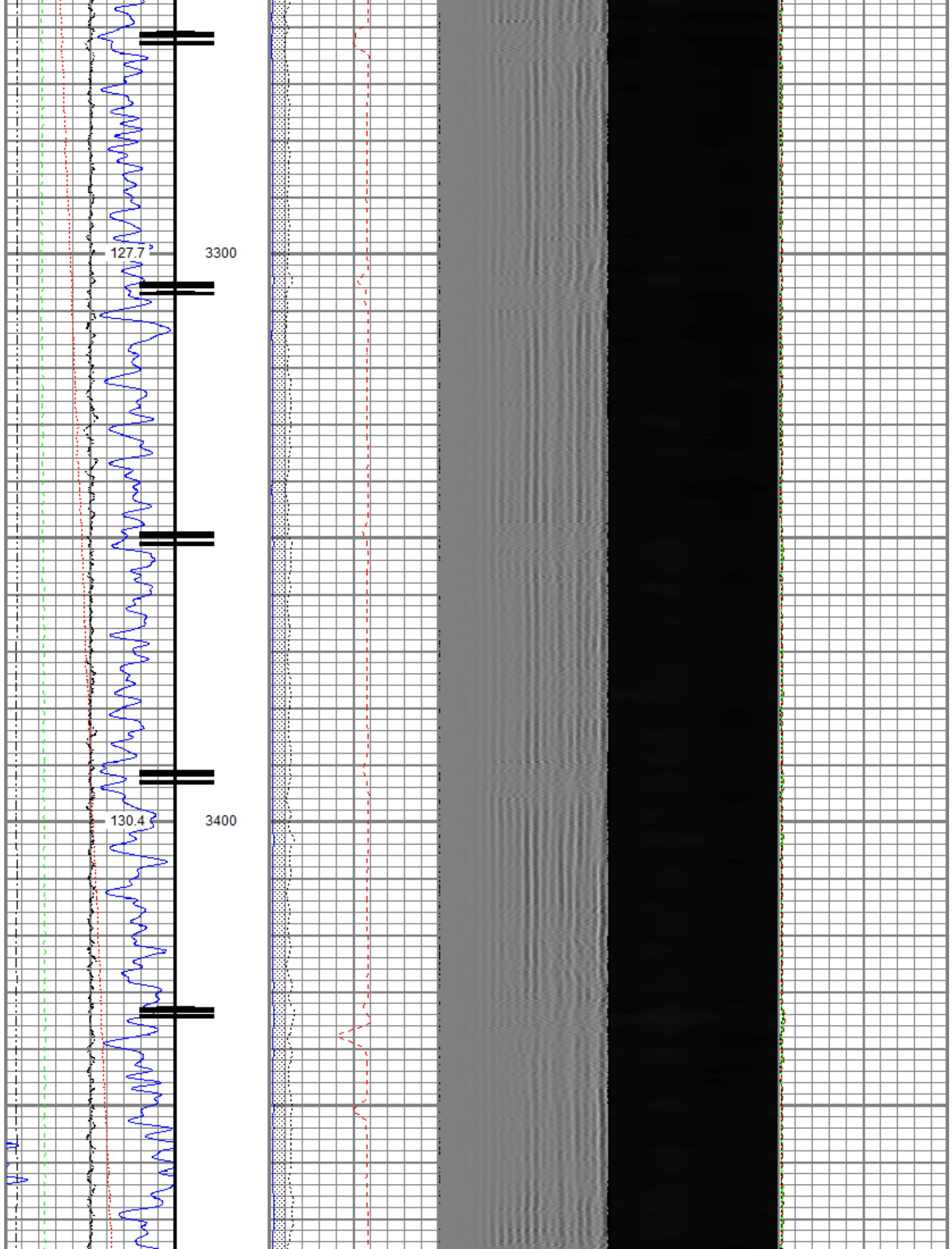


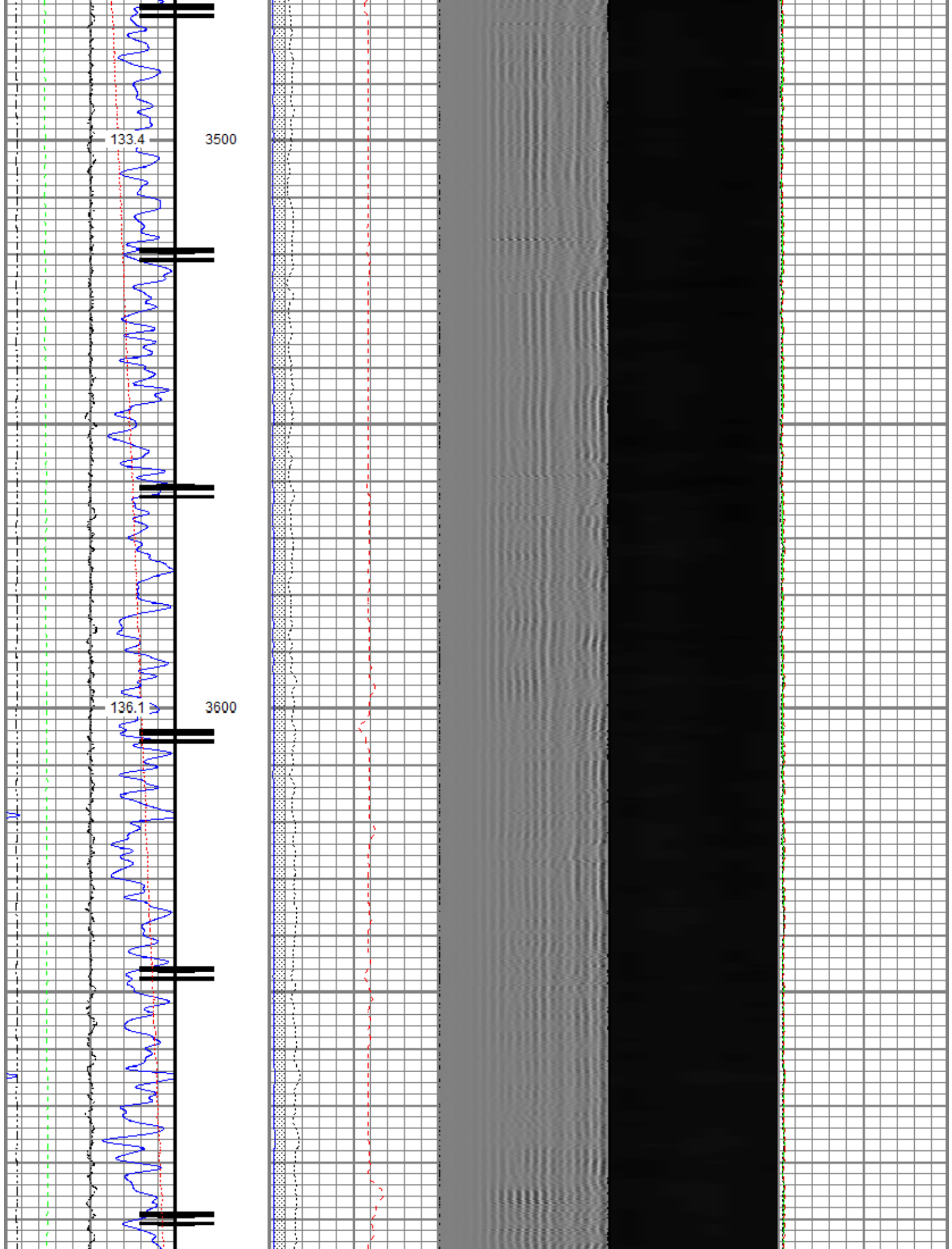


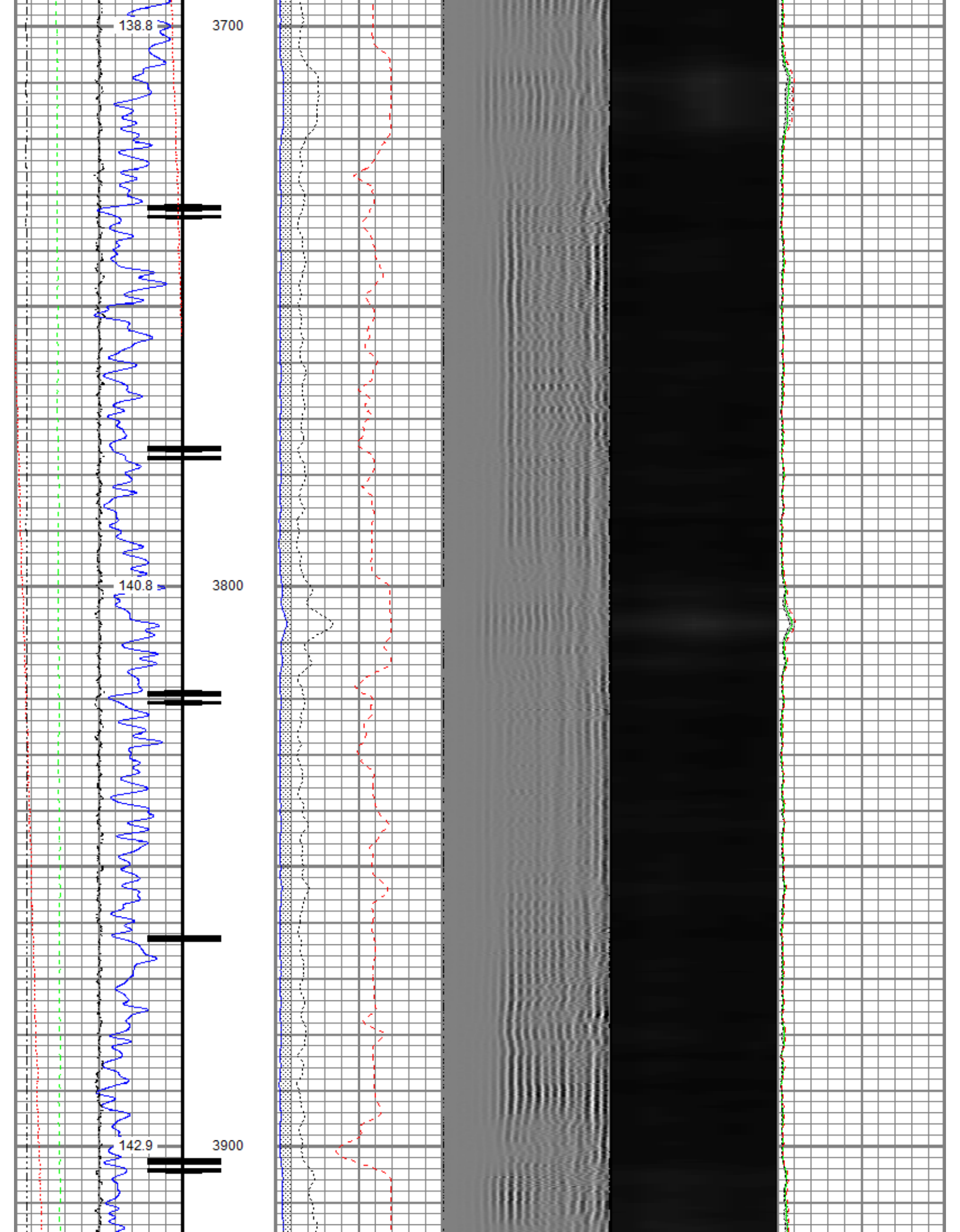


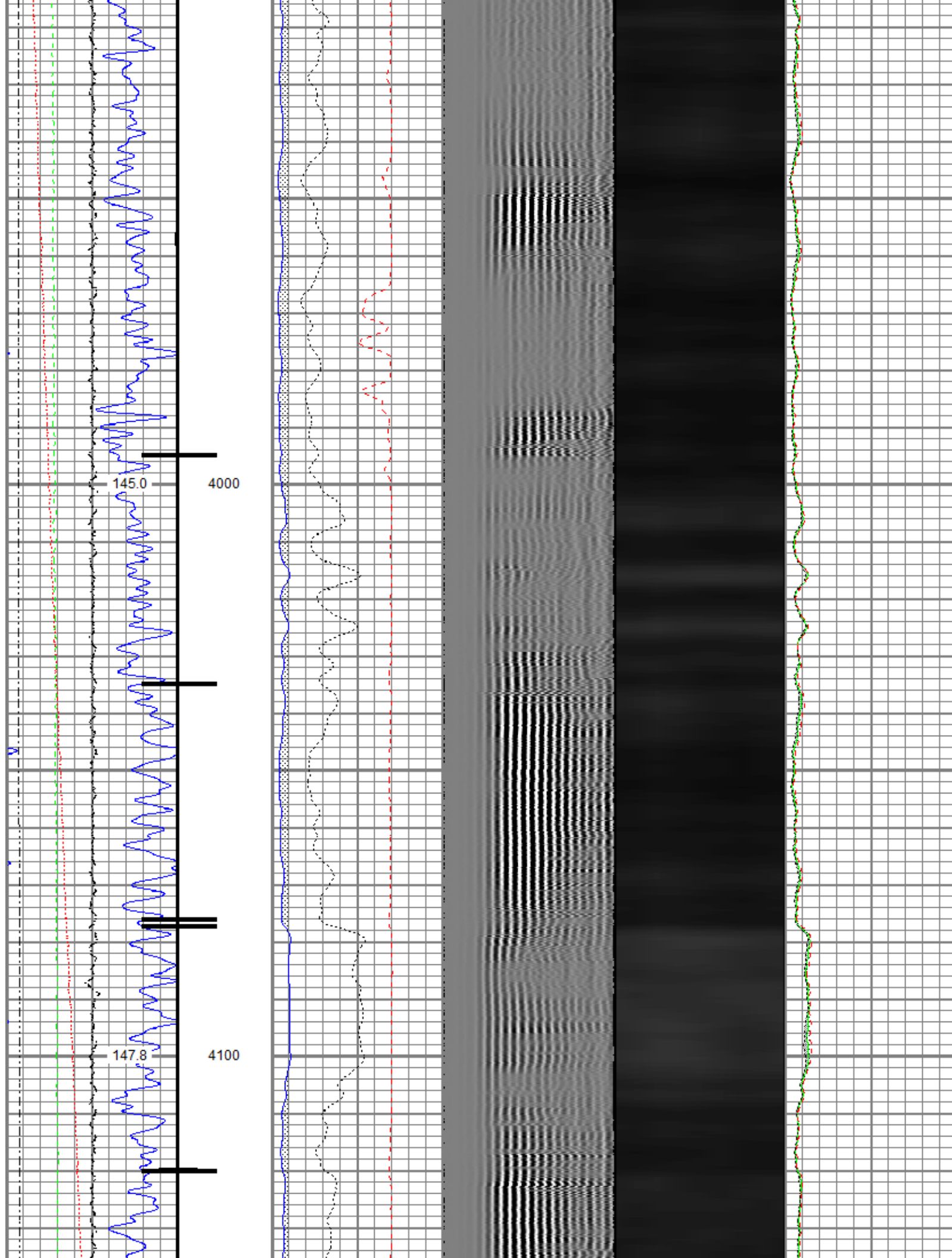


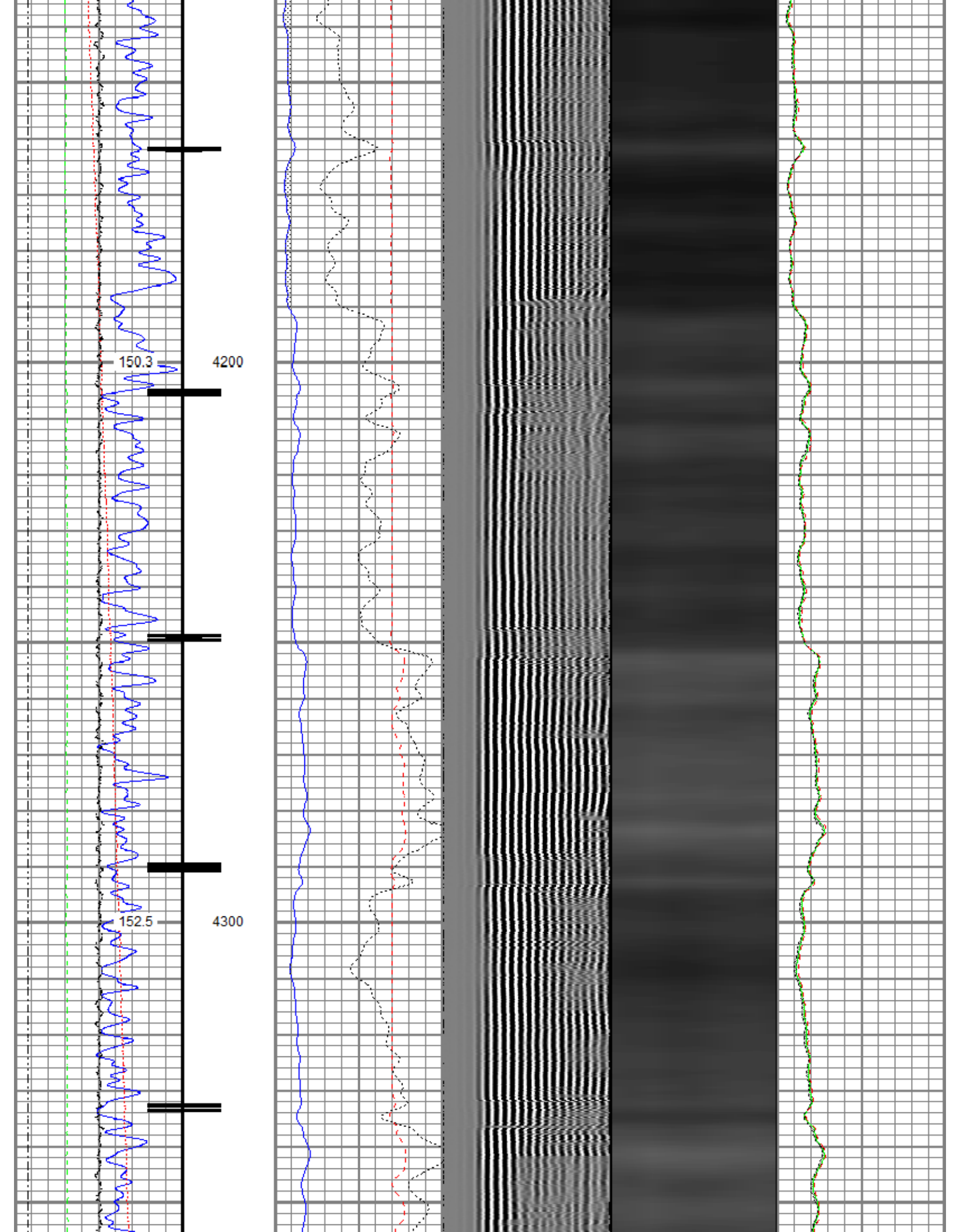


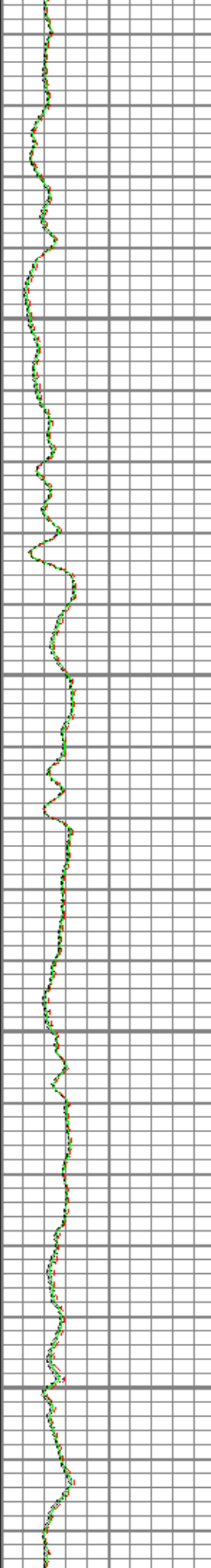
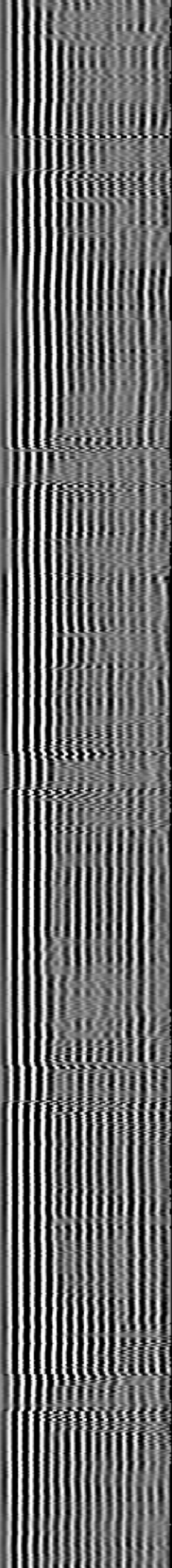
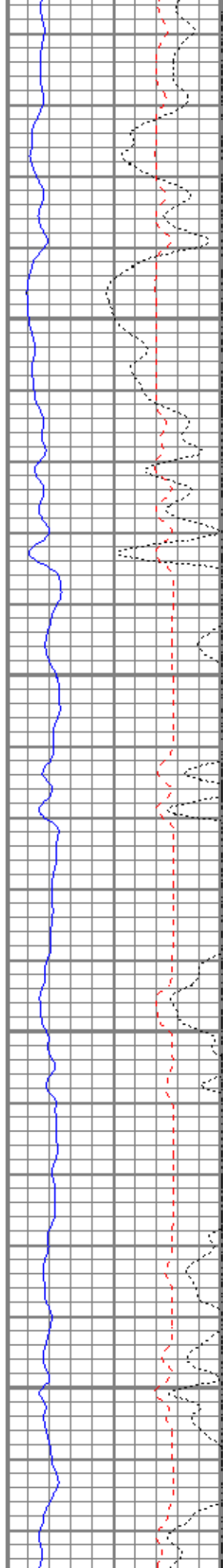
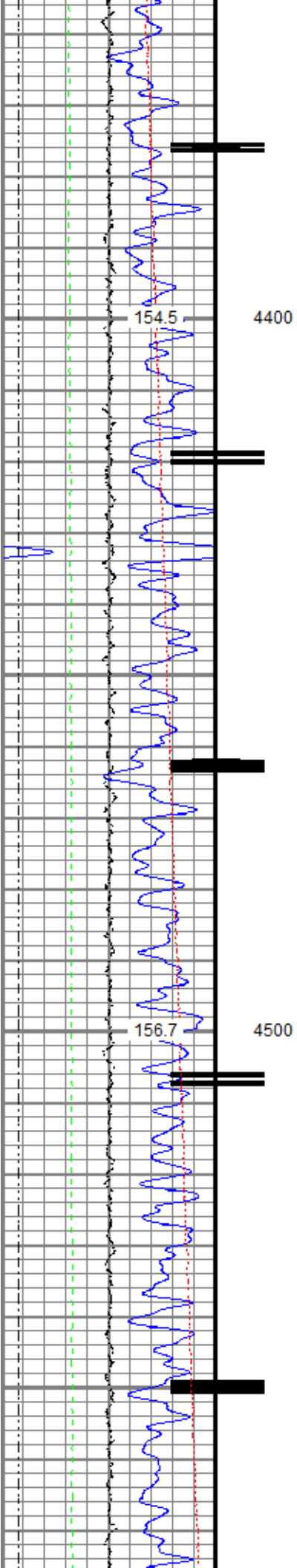


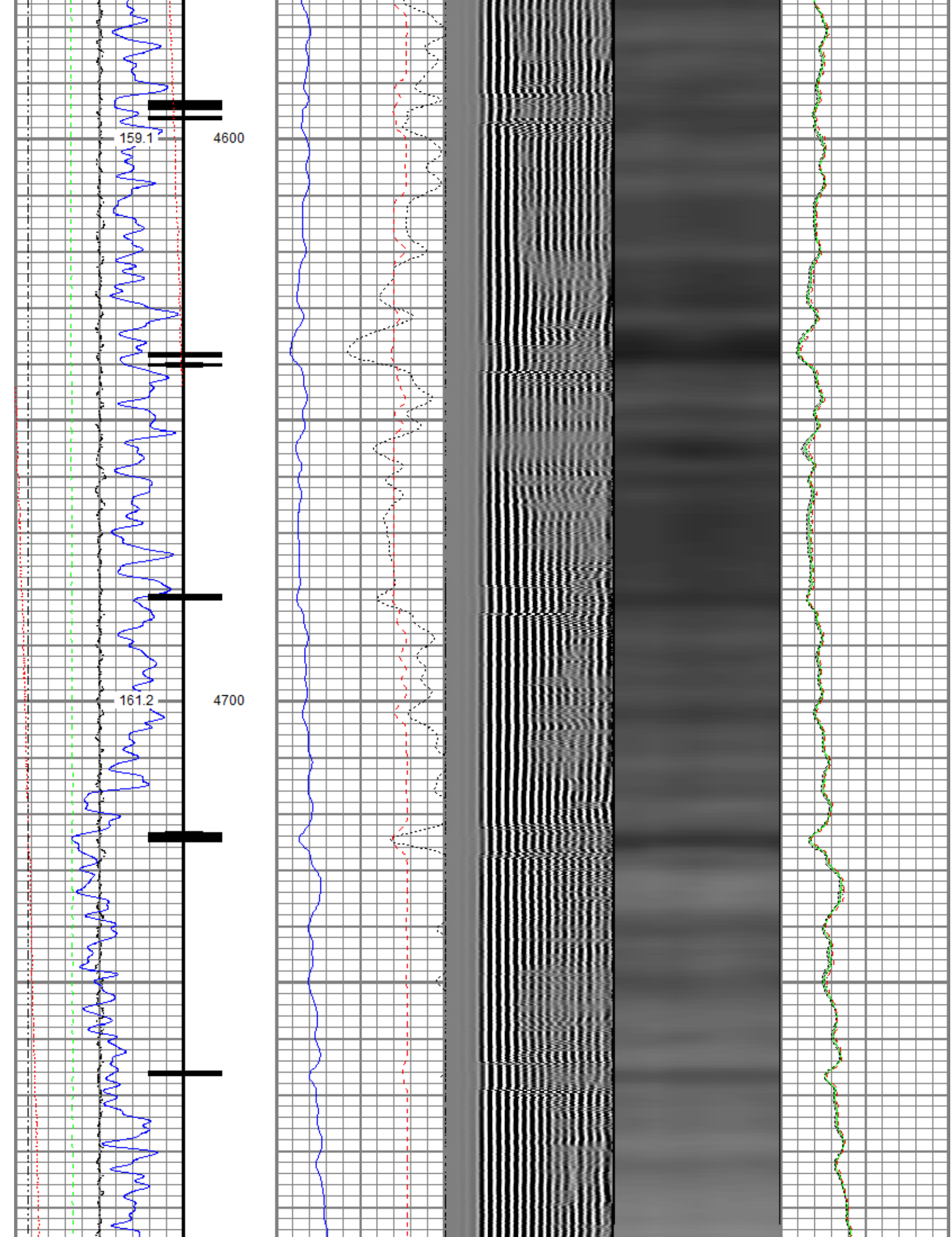


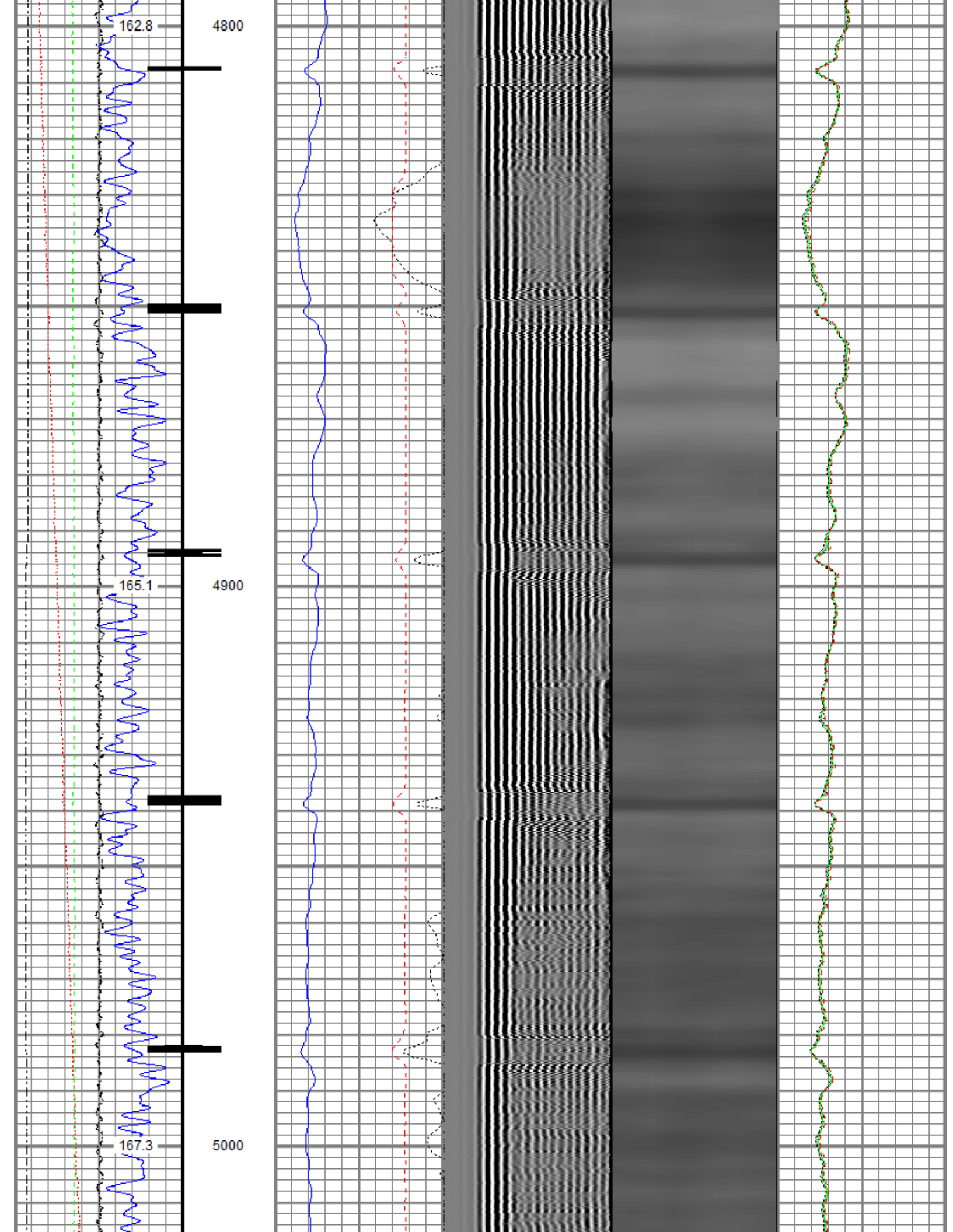


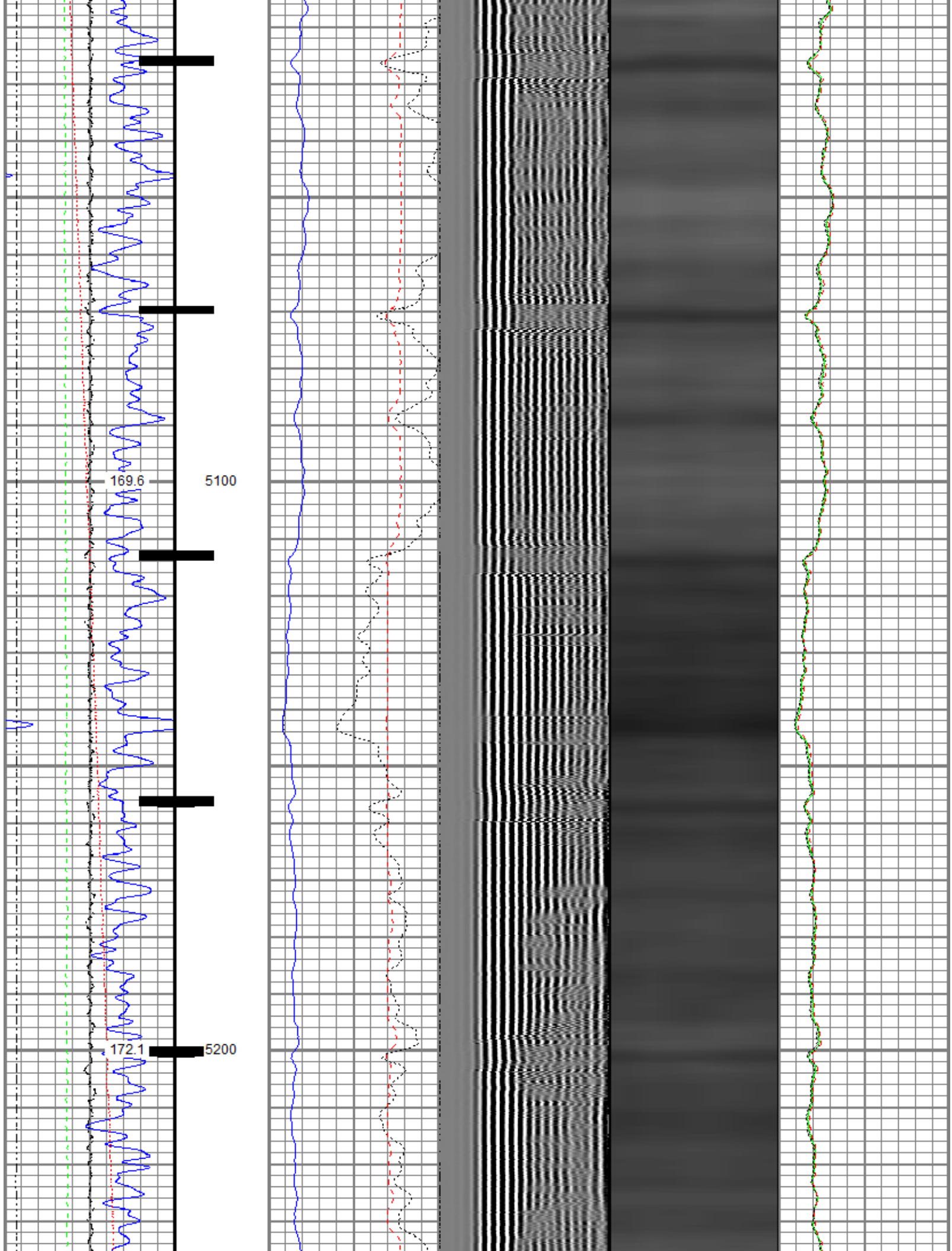


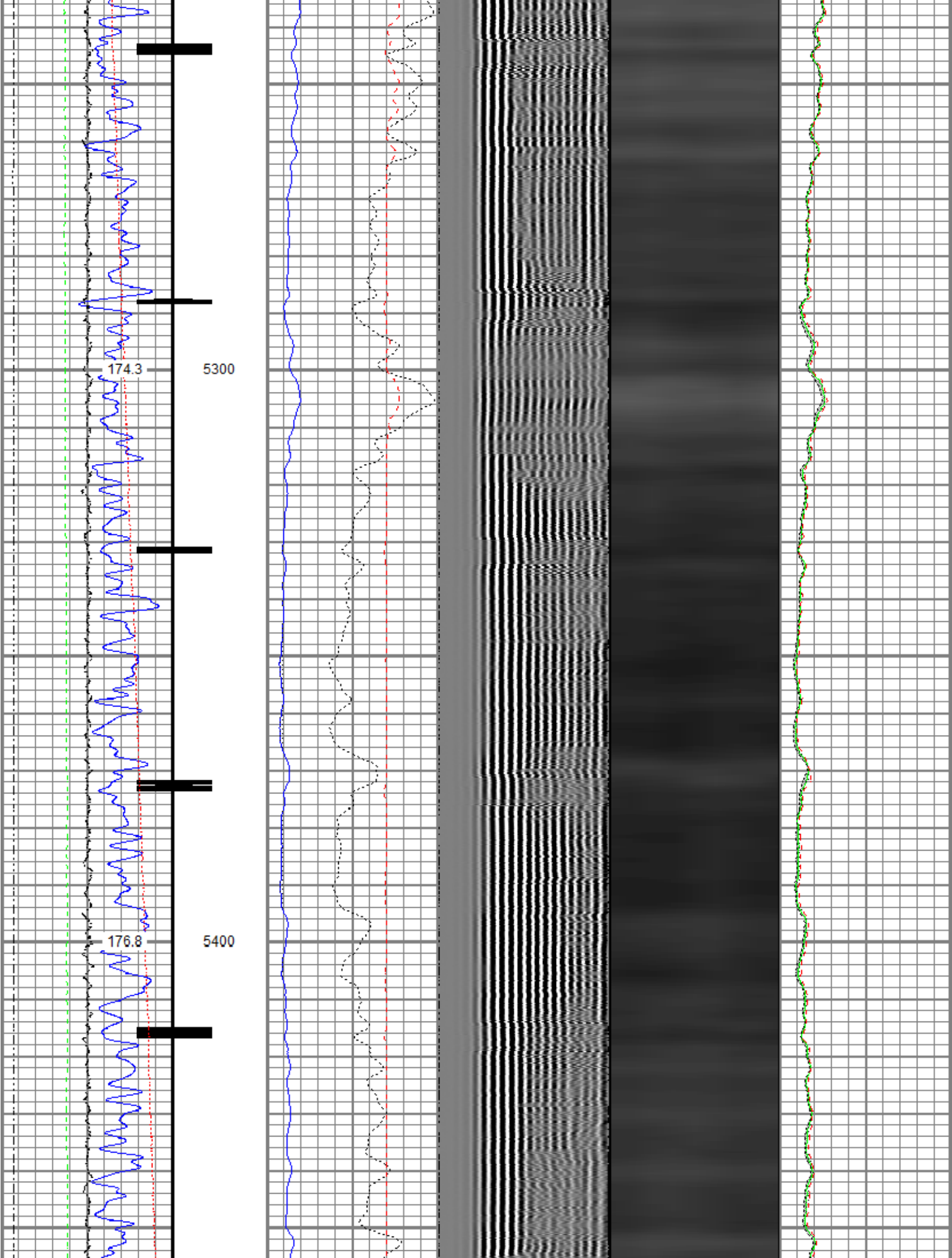


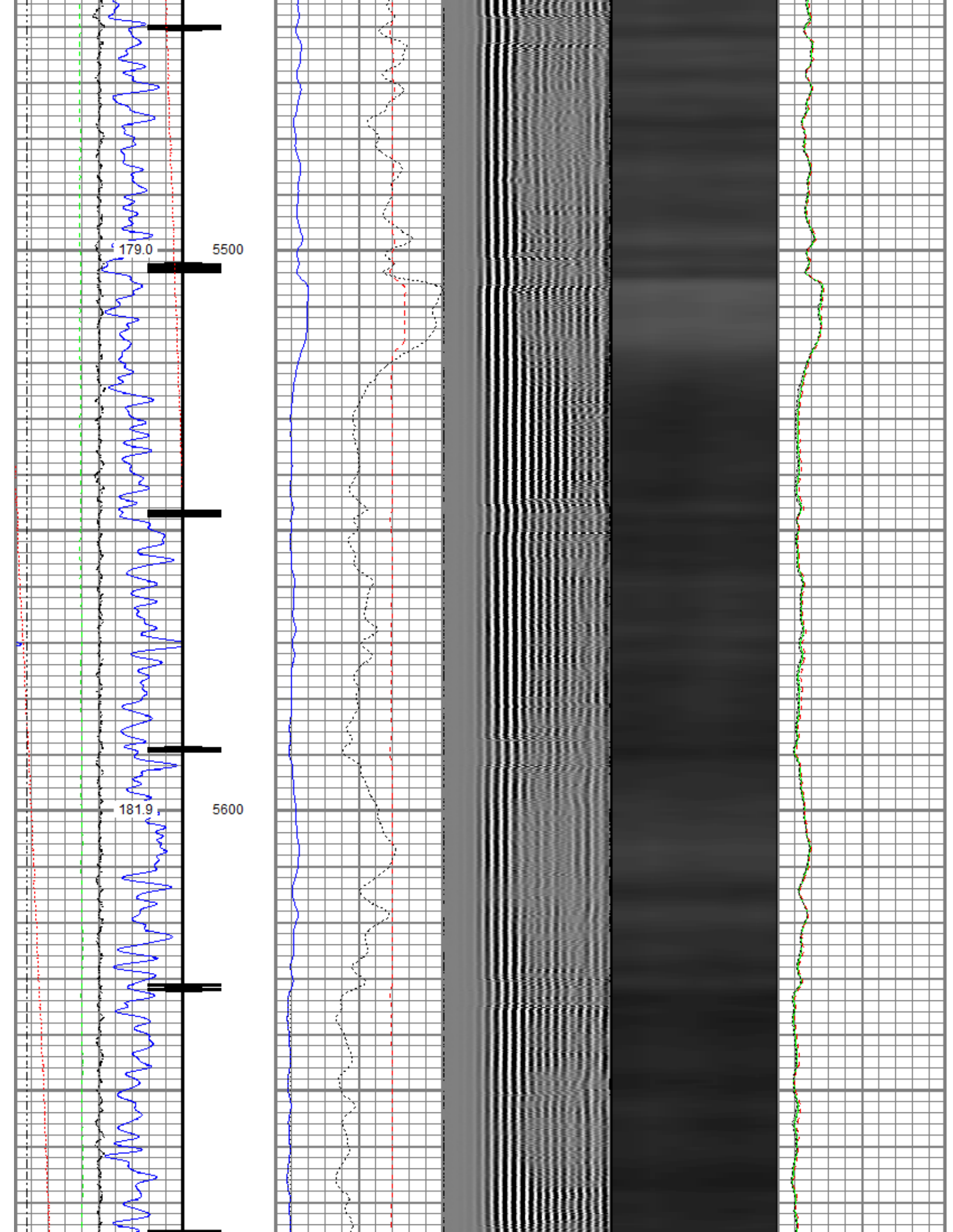


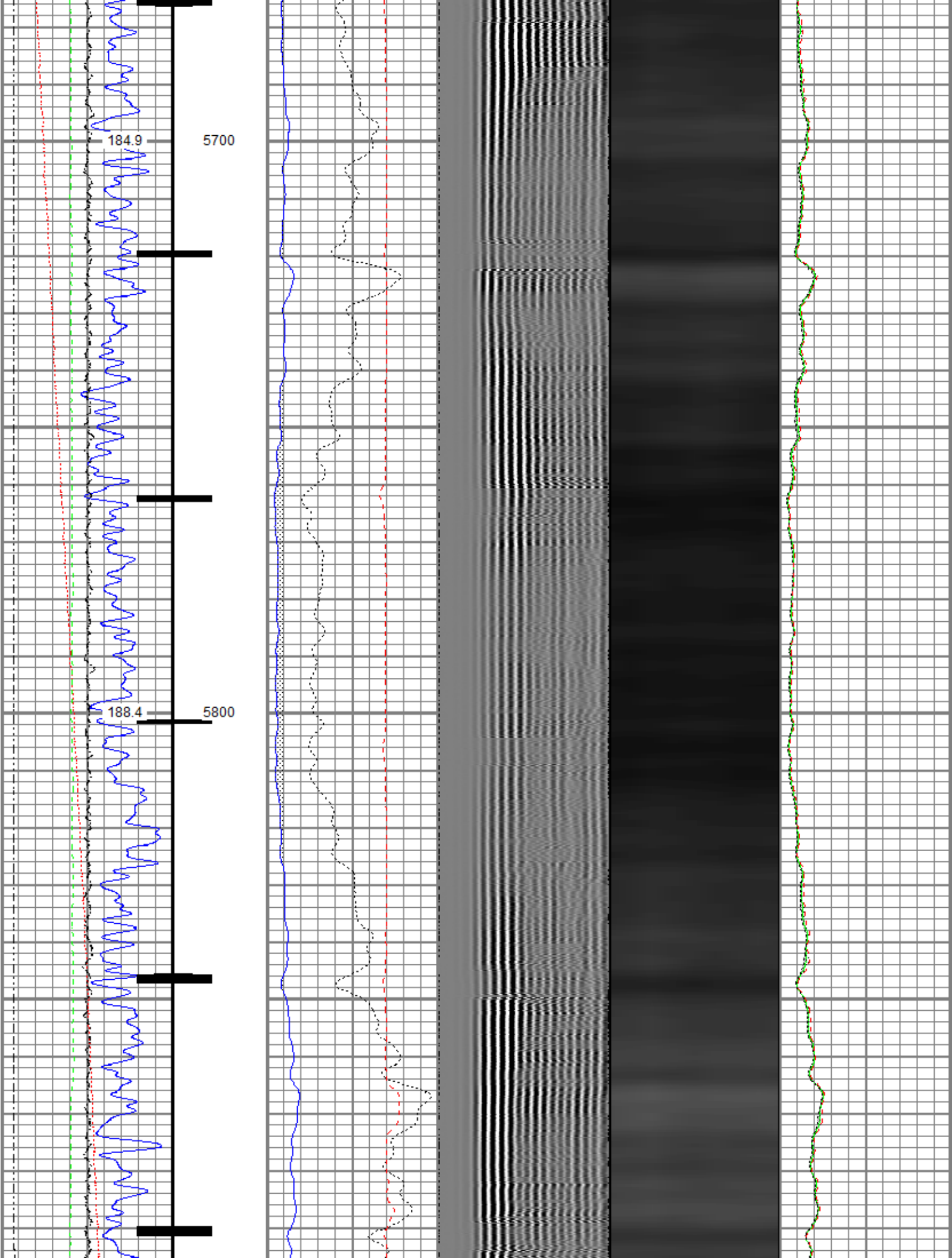


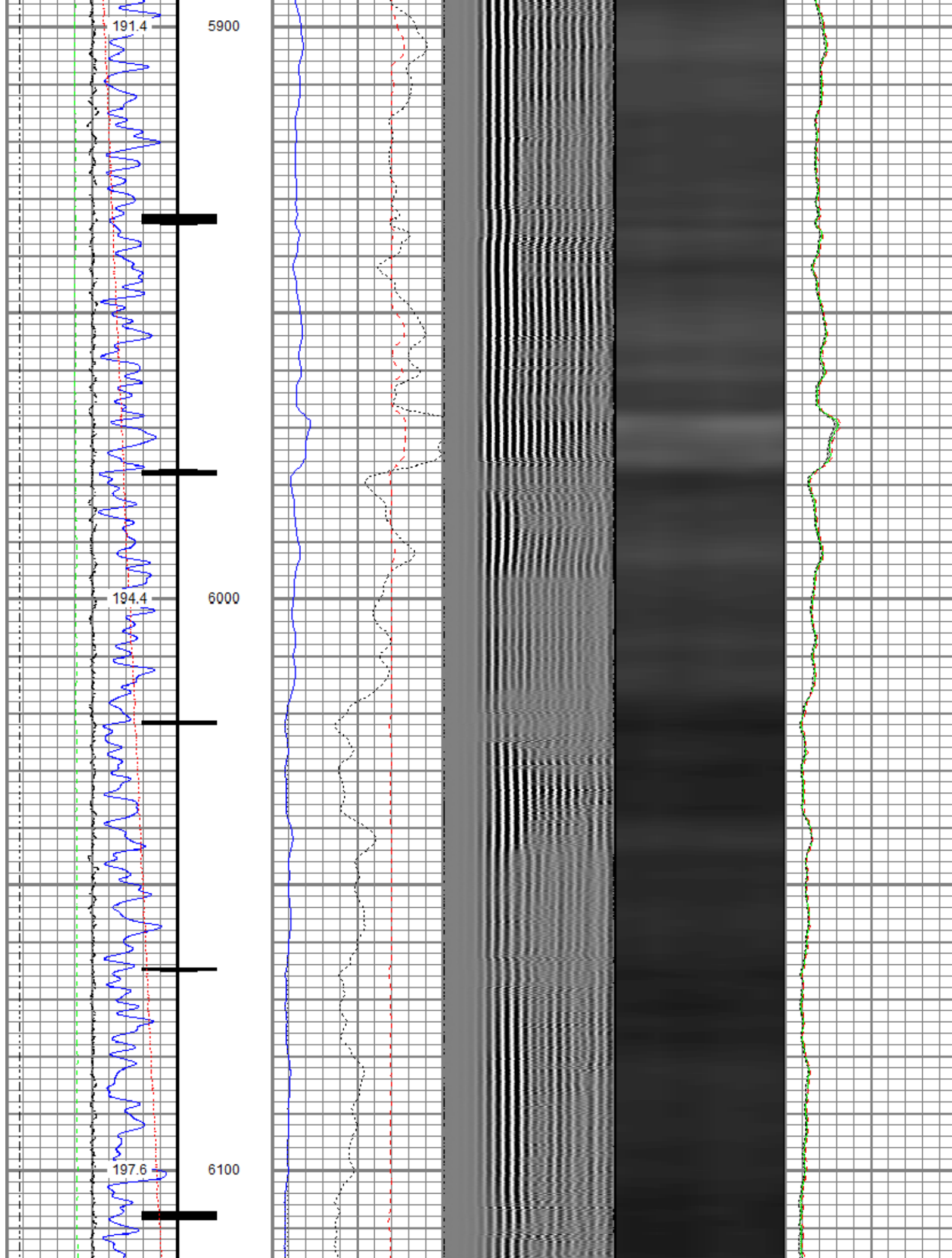


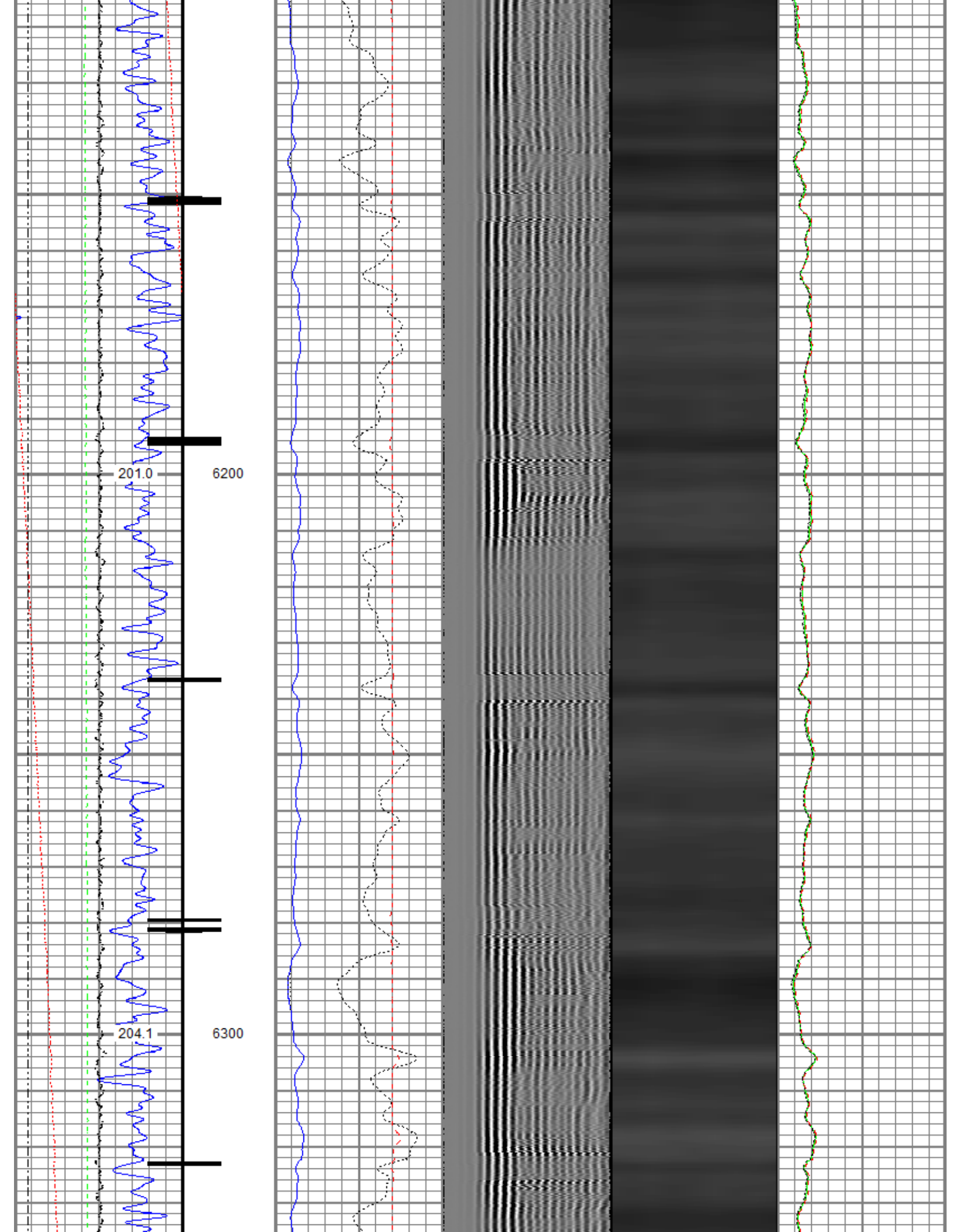


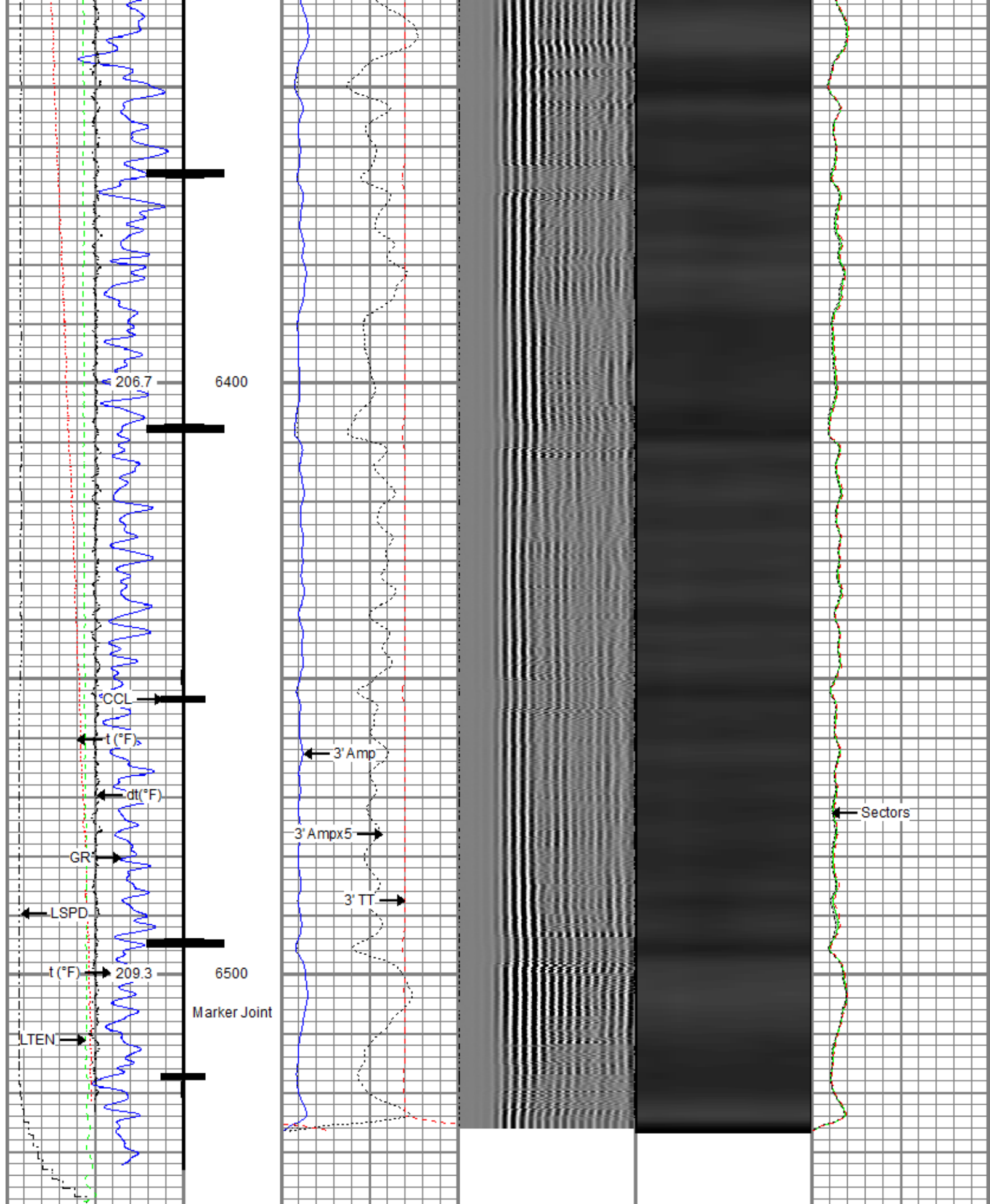












Gamma Ray	0	3' Amplitude (mV)	100	5' Variable Density Log	Sector Map	0	Average Amplitude	100
(GAPI)	120	3' Amplitude x 5	200	(usec)			Minimum Amplitude	
Casing Collar Locator		(mV)	20				0	100
Temperature (degF)	20	3' Travel Time					Maximum Amplitude	

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

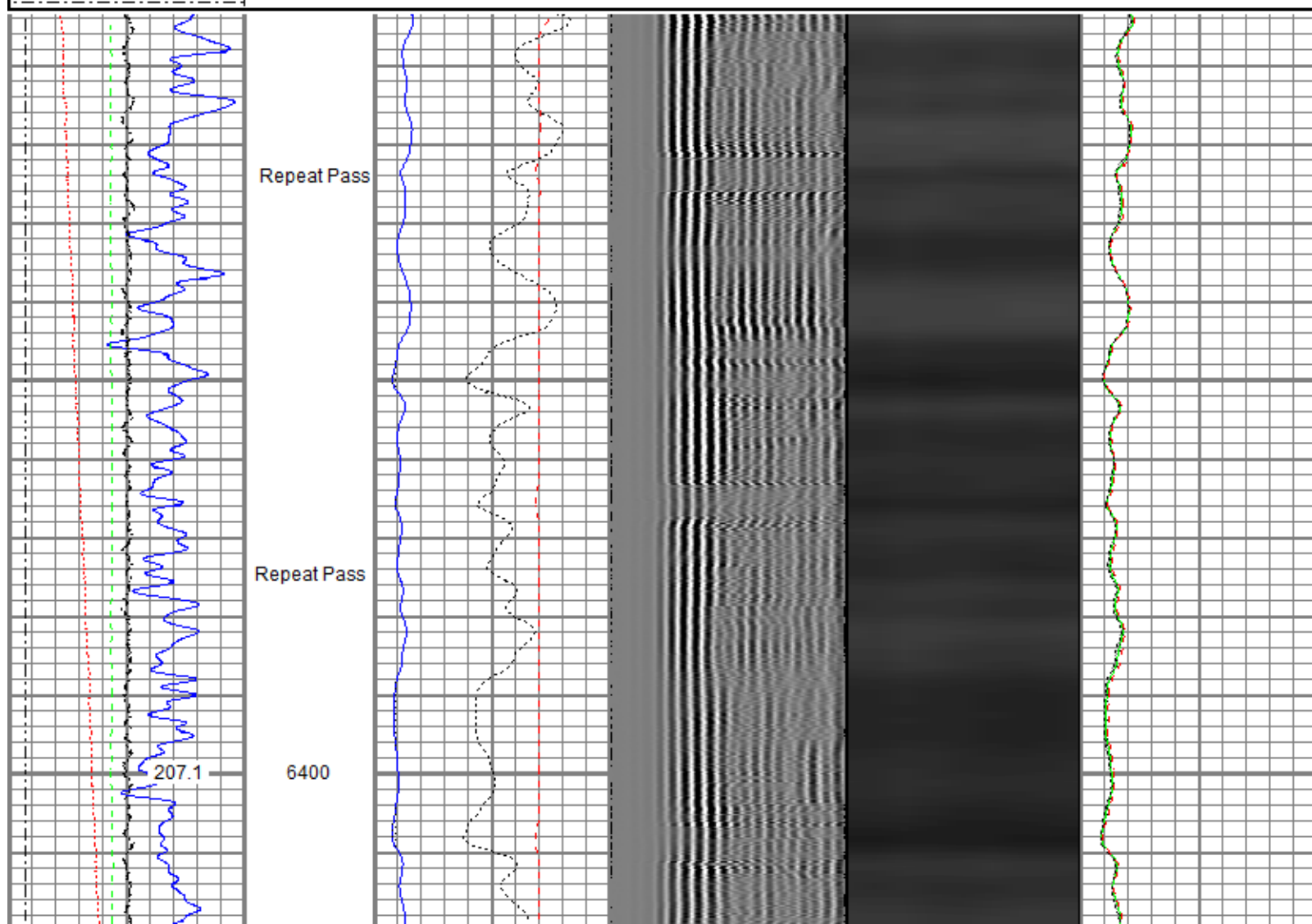


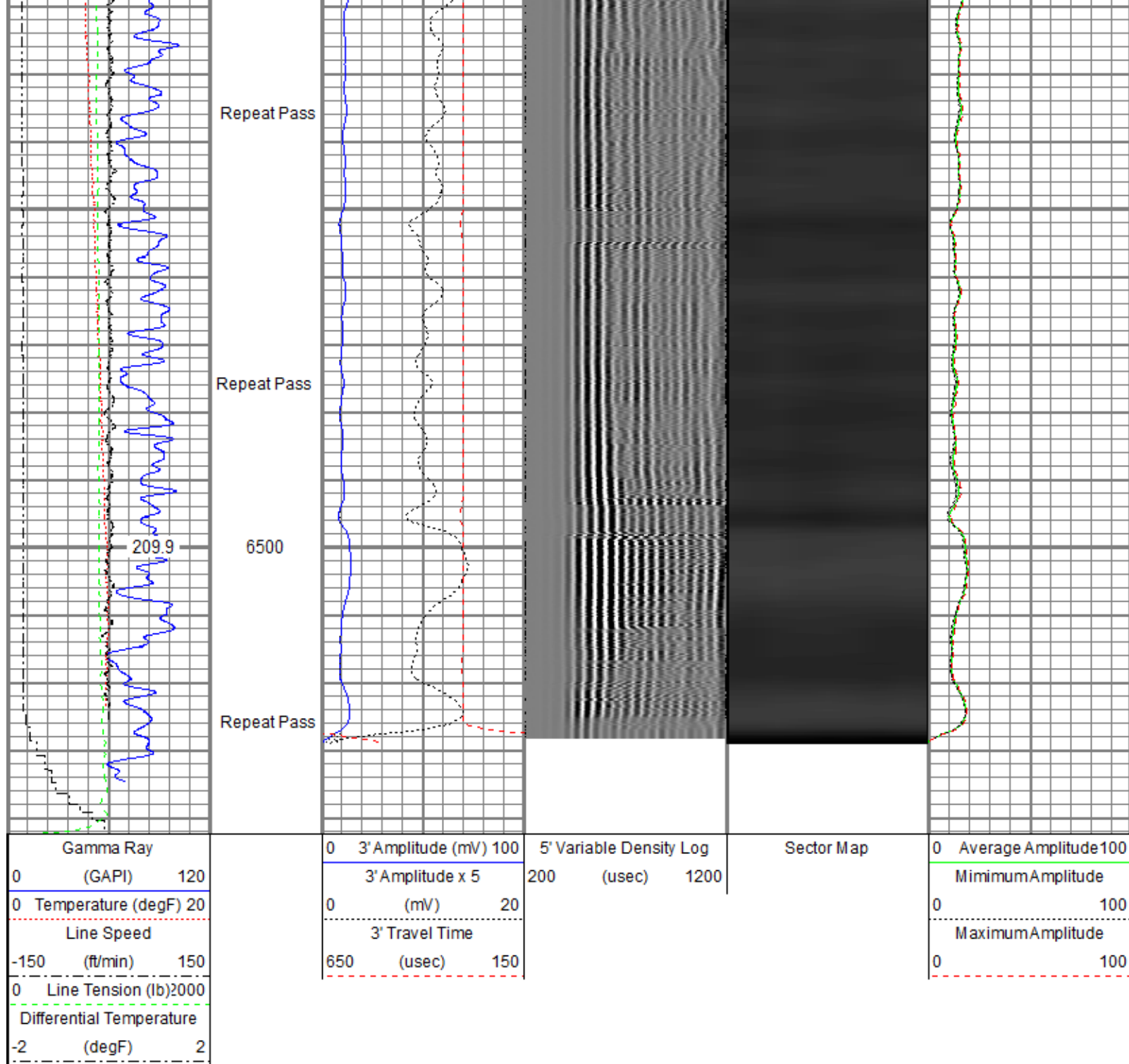
Repeat Pass

Recorded With 2800 PSI Surface Induced Pressure


Database File anadarko\newby state 16n-4hz\0512345088_anadarko_newby state 16n-4hz_rbl_03-13-18.db
Dataset Pathname RBL/pass2.2
Presentation Format ros_radrii
Dataset Creation Thu Mar 15 09:37:04 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
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							





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 Raddi-2750 RBT (FW1308-091) 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					
			Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
CCL\$2	6.80					
CCL\$1	6.80					
GR	5.46	Probe GR-CCL-2750 6PB (FW1304-132) 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	
Dataset: 0512345088_Anadarko_Newby State 16N-4HZ_RBL_03-13-18.db: field/well/RBL/pass4.1						
Total length: 23.86 ft						
Total weight: 223.60 lb						
O.D.: 2.75 in						

Calibration Report			
Database File	C:\ProgramData\Warrior\Data\Anadarko\Newby State 16N-4HZ\0512345088_Anadarko_Newby State 16N-4HZ_RBL_03-13-18.d		
Dataset Pathname	RBL/pass4.1		
Dataset Creation	Wed Mar 14 16:09:15 2018		
Gamma Ray Calibration Report			
Serial Number:	FW1304-132		
Tool Model:	2750 6PB		
Performed:	Tue Nov 28 11:17:11 2017		
Calibrator Value:	637.0	GAPI	
Background Reading:	109.1	cps	
Calibrator Reading:	1009.7	cps	
Sensitivity:	0.7072	CAPI/cps	

Segmented Cement Bond Log Calibration Report

Serial Number: FW1308-091
 Tool Model: 2750 RBT
 Calibration Casing Diameter: 5.500 in
 Calibration Depth: 72.493 ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.002	0.545	0.800	71.921	131.083	0.513
CAL	0.004	0.604				
5'	0.001	0.469	0.800	71.921	151.765	0.671
SUM						
S1	0.002	0.517	0.000	100.000	194.349	-0.407
S2	0.002	0.532	0.000	100.000	188.711	-0.390
S3	0.002	0.552	0.000	100.000	181.822	-0.408
S4	0.002	0.585	0.000	100.000	171.747	-0.406
S5	0.002	0.606	0.000	100.000	165.761	-0.413
S6	0.002	0.579	0.000	100.000	173.252	-0.276
S7	0.002	0.537	0.000	100.000	187.145	-0.410
S8	0.002	0.522	0.000	100.000	192.199	-0.407

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.004	0.604	1.000	0.000

Air Zero Calibration, performed Mon Mar 12 09:05:11 2018:

	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: FW1308-091
 Tool Model: 2750 RBT
 Performed: Sun Nov 12 13:50:54 2017

	Reference	Reading
Low Reference:	100.00 degF	104.72 degF
High Reference:	350.00 degF	392.24 degF
Gain:	0.87	
Offset:	8.94	
Delta Spacing	1	



Company	Kerr-McGee Oil & Gas Onshore, L.P.
Well	Newby State 16N-4HZ
Field	Wattenberg
County	Weld
State	Colorado