

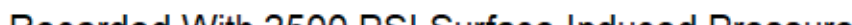
Rate		01-SE P-ZU20			
Run Number		One			
Depth Driller		17290 FT			
Depth Logger		6835 FT			
Bottom Logged Interval		6823 FT			
Top Log Interval		Surface			
Open Hole Size		8 5"			
Type Fluid		Water			
Density / Viscosity		8.34 lb/gal			
Max. Recorded Temp.		224°F			
E estimated Cement Top		See Log			
Time Well Ready		ROA			
Time Logger on Bottom		08:45			
E equipment Number		HD-361			
Location		Platteville, CO			
Recorded By		G. Lueck			
Witnessed By		Andy Dawkins			
Borehole Record					
Run Number	Bit	From	To	Size	Tubing Record Weight From To
Casing Record	Size (in)	Wgt (lbs/ft)	Grade	Top	Bottom
Surface Casing	9 5/8	36	J-55	Surface	1933 FT
Intermediate #1	5 1/2	17	P-110 CYHP	Surface	17269 FT
Intermediate #2					
Liner					

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
Depth referenced to Casing Tally reported Marker Joint at 6161.6 FT
Adjusted -33 FT to correlate to Marker Joint
Log ran with 2500 PSI Surface Induced Pressure
Logging tools were clean and free of debris upon completion of operations

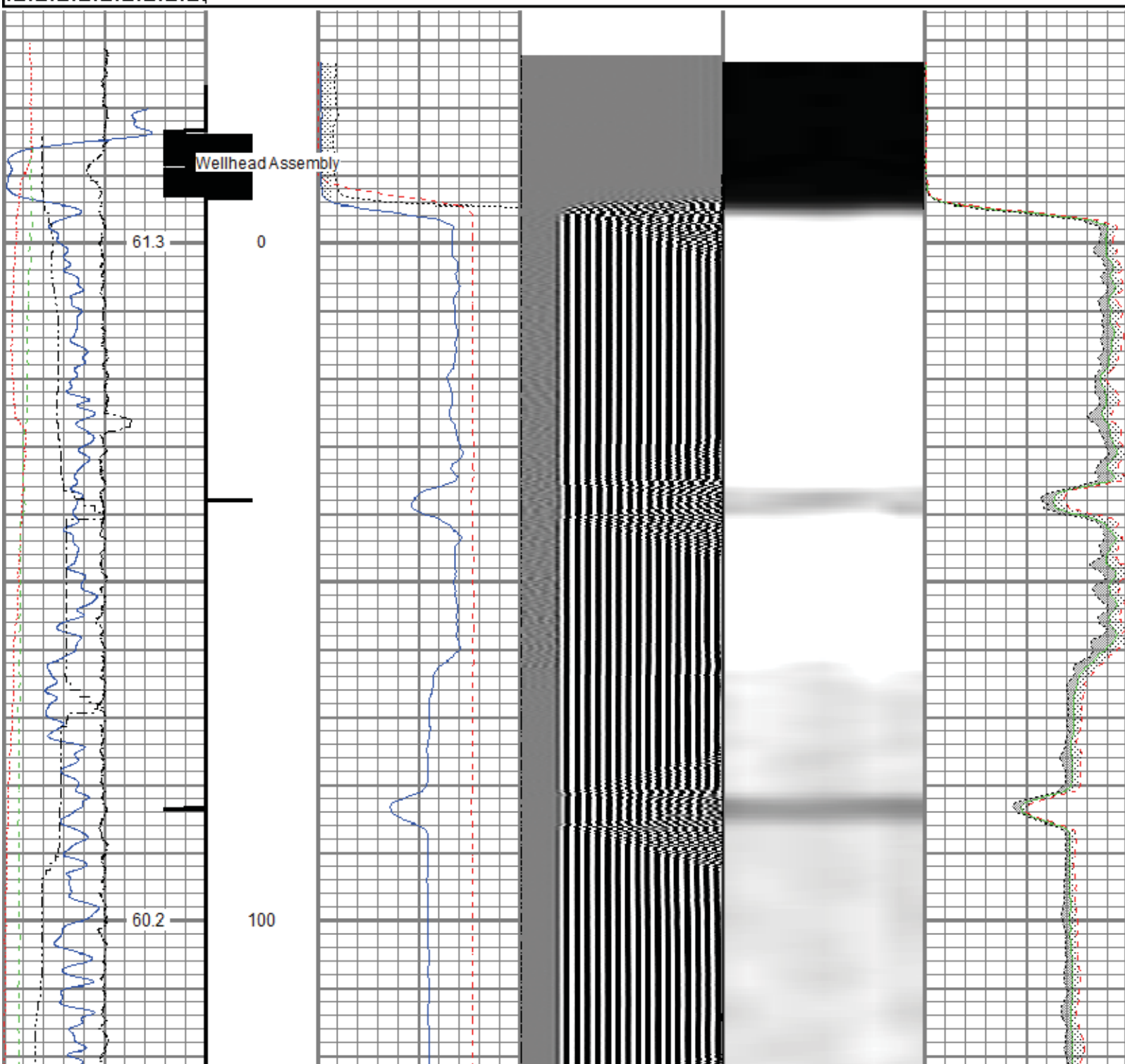
Thank you for choosing Reliance Oilfield Services, LLC!!

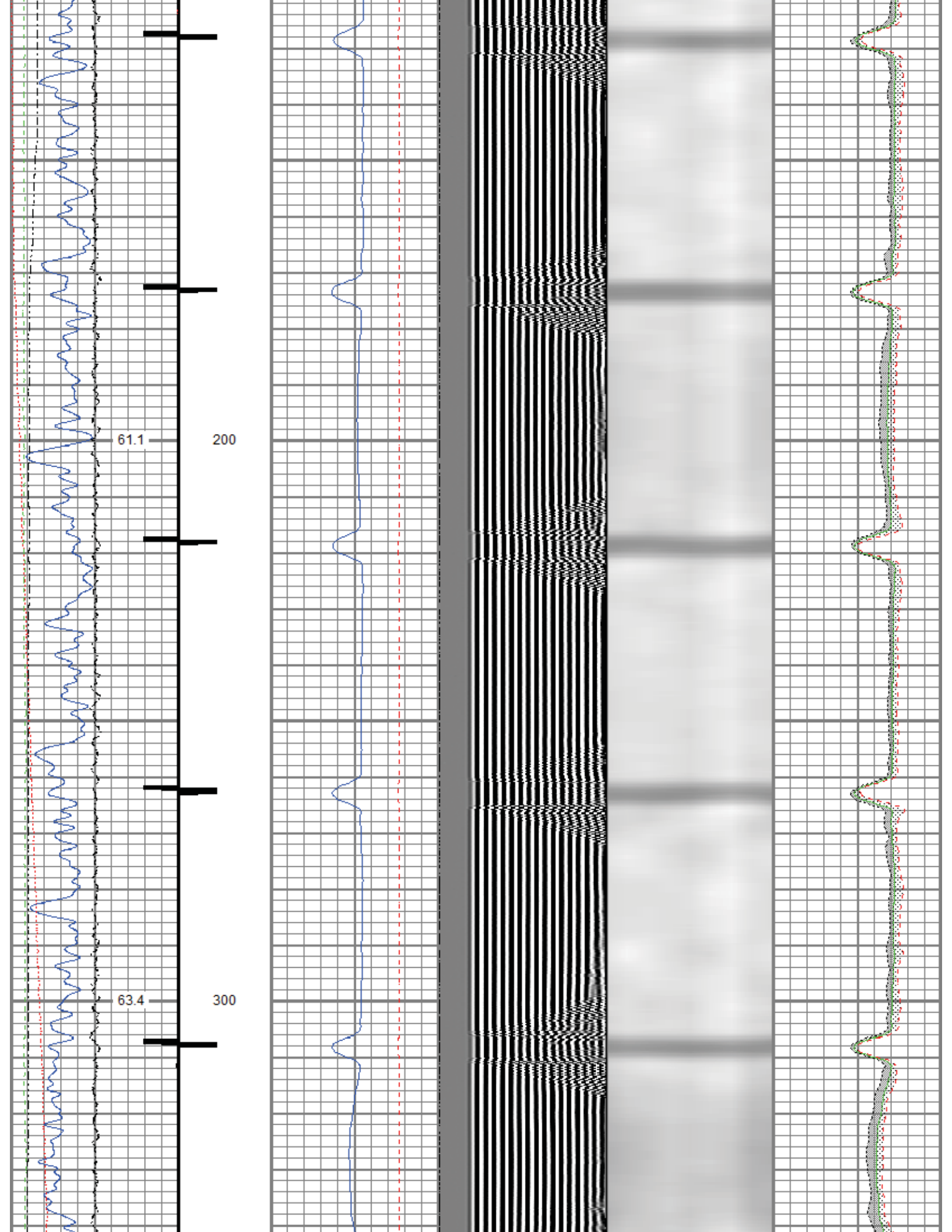
Main Pass

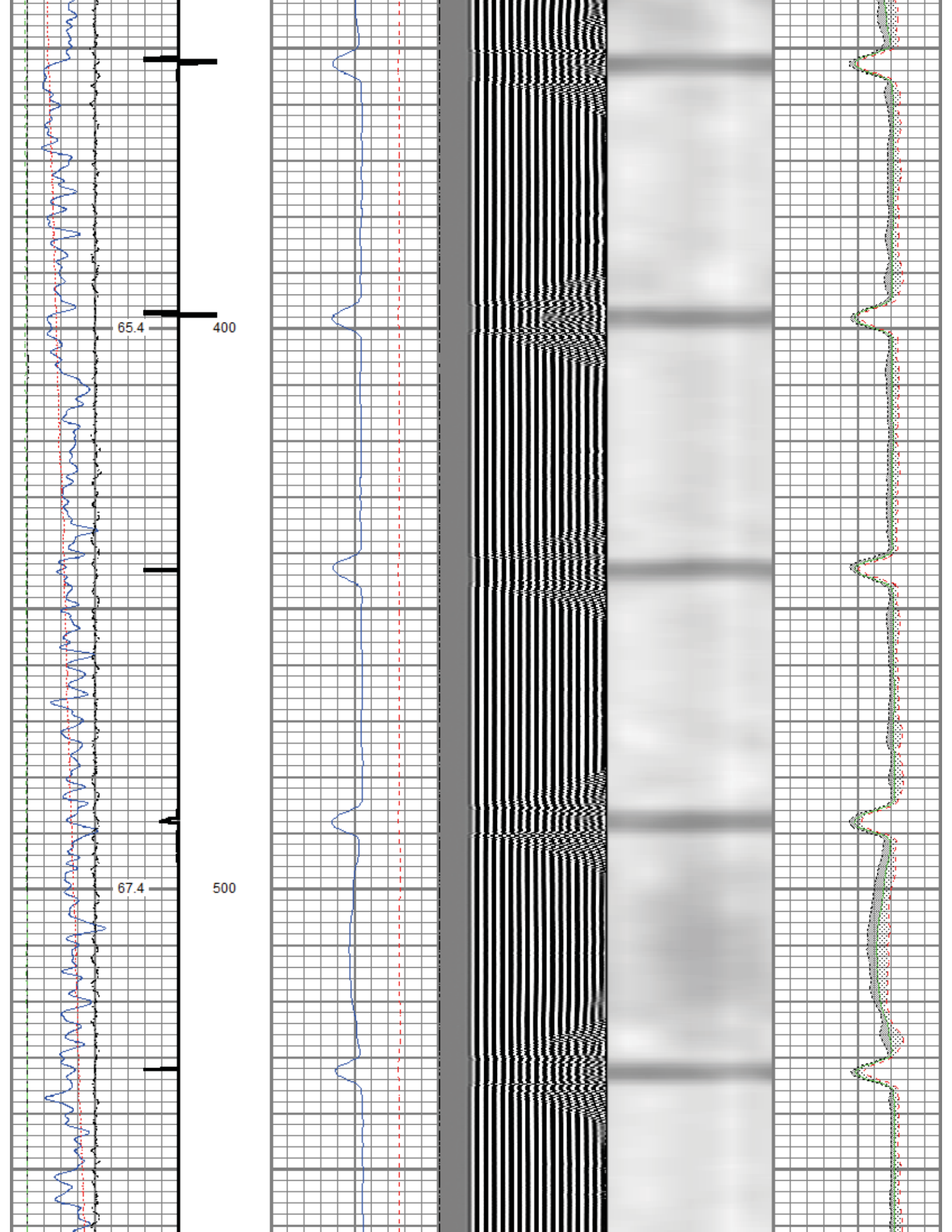


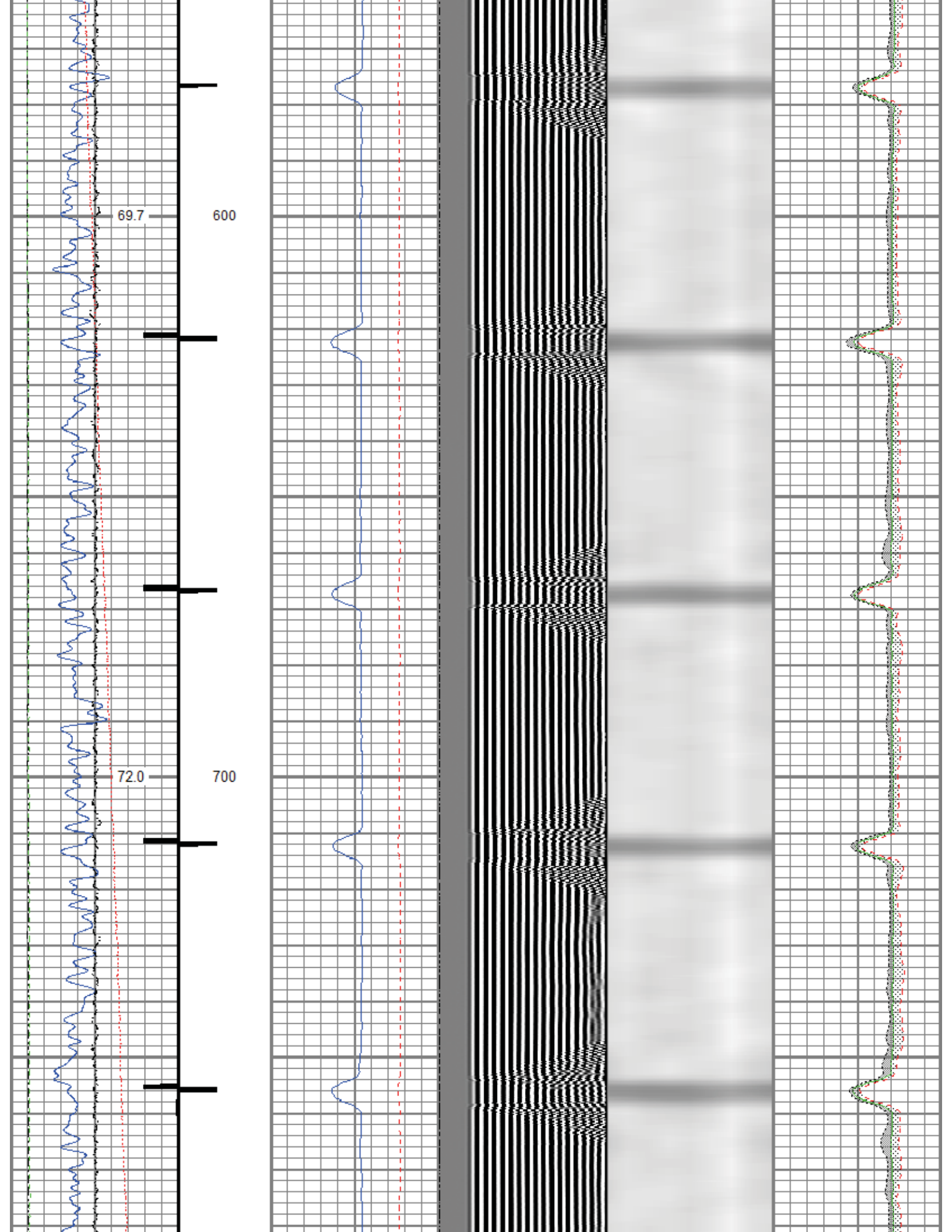
Database File noble\noble_guttersen yy06-756_rbl_09-01-20\processed_noble_guttersen yy06-756_rbl_09-01-20.db
 Dataset Pathname pass7.1
 Presentation Format ros_radri_noble
 Dataset Creation Tue Sep 01 10:03:23 2020
 Charted by Depth in Feet scaled 1:240

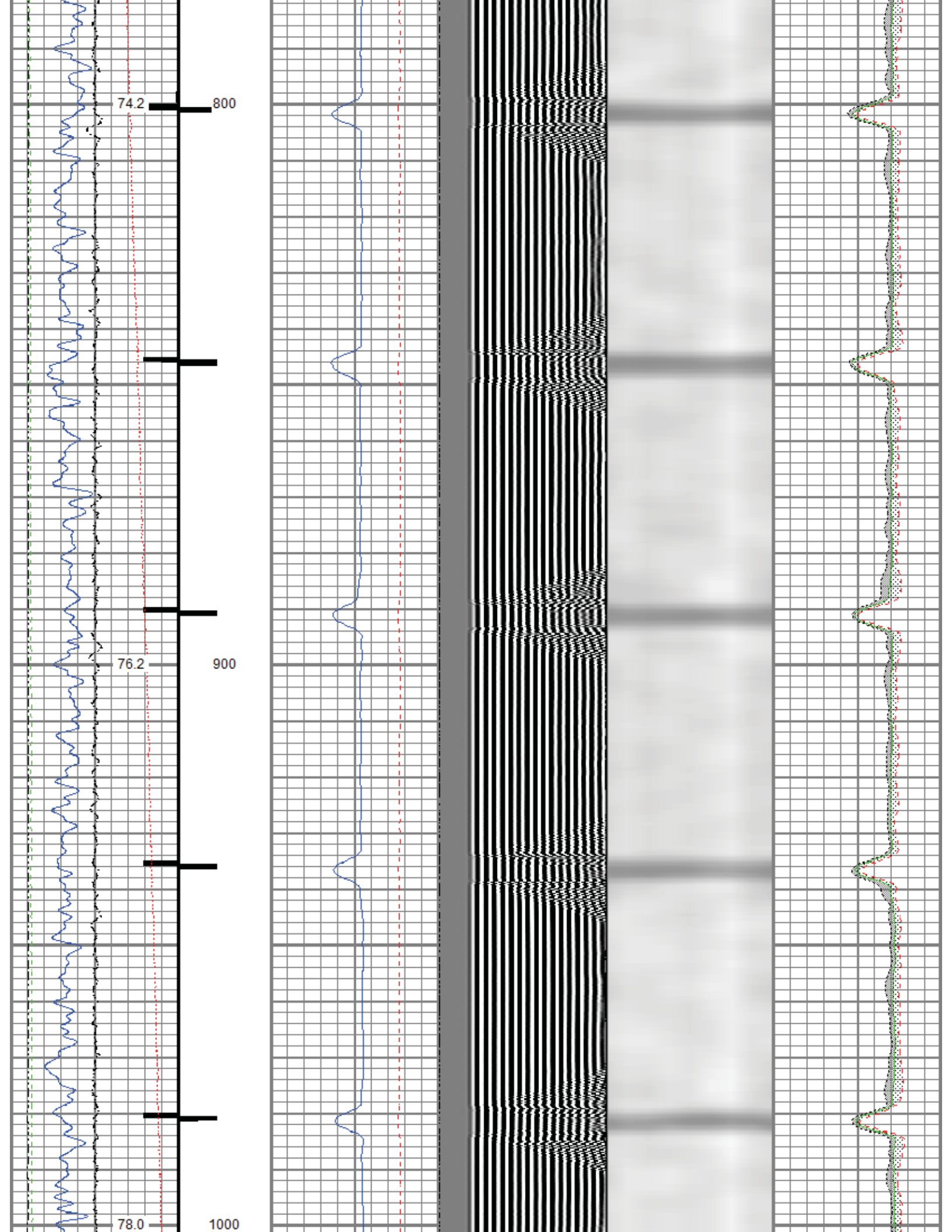
Gamma Ray	0	3' Amplitude (mV)	100	5' Variable Density Log	Sector Map	0	Average Amplitude	100
(GAPI)	120	3' Amplitude x 5	200	(usec)	1200		Minimum Amplitude	
Casing Collar Locator		0	(mV)	20		0	100	
Temperature (degF)	20	3' Travel Time					Maximum Amplitude	
Line Speed		650	(usec)	150		0	100	
(ft/min)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

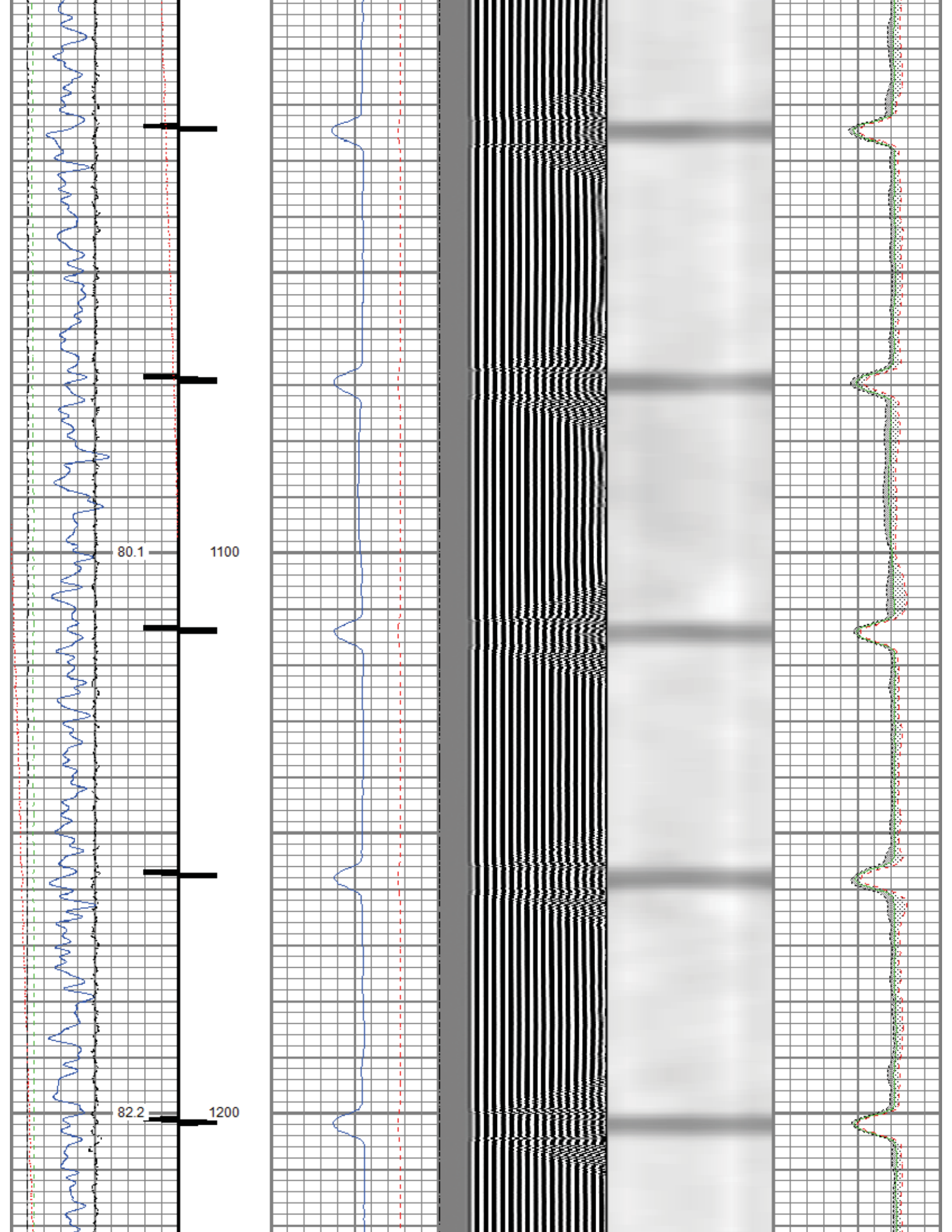


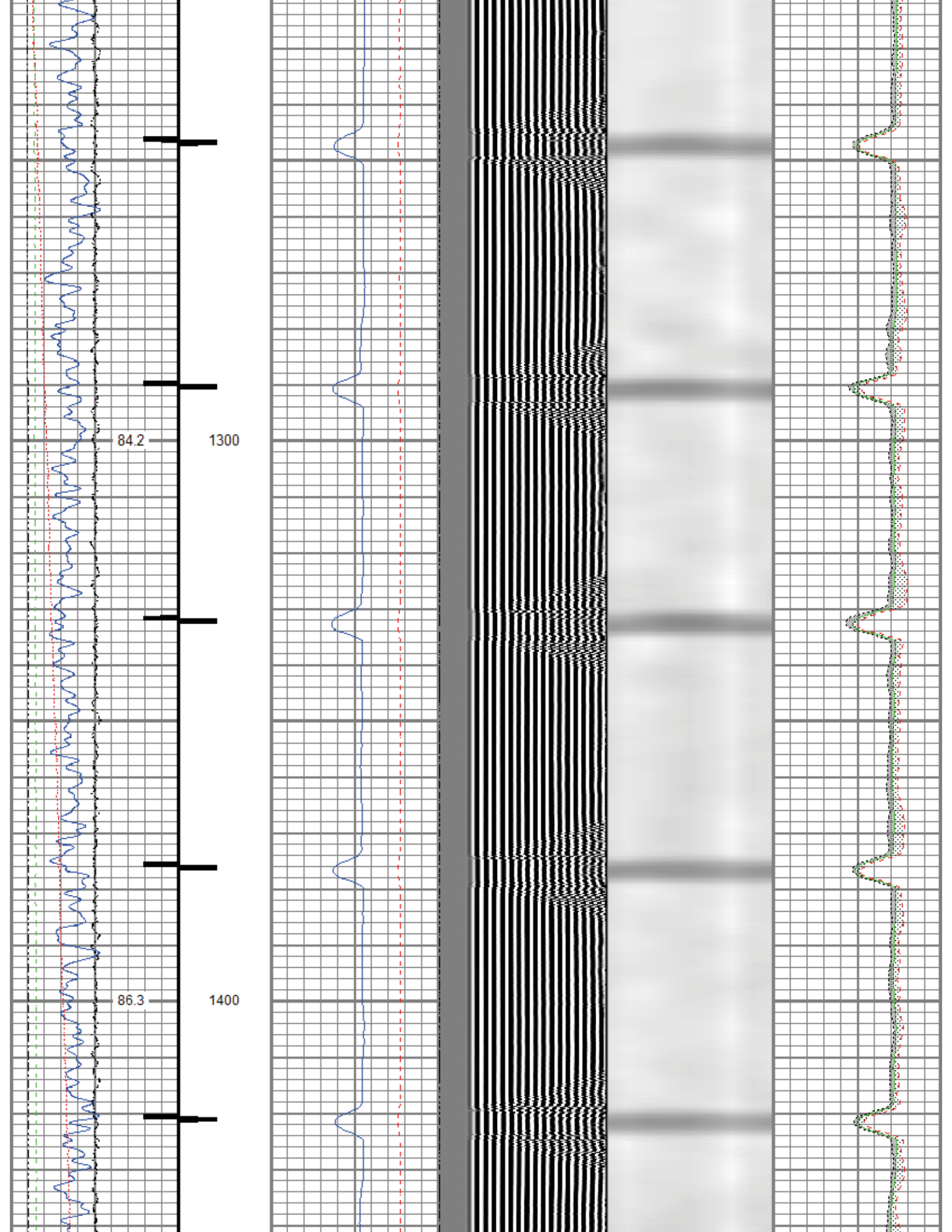


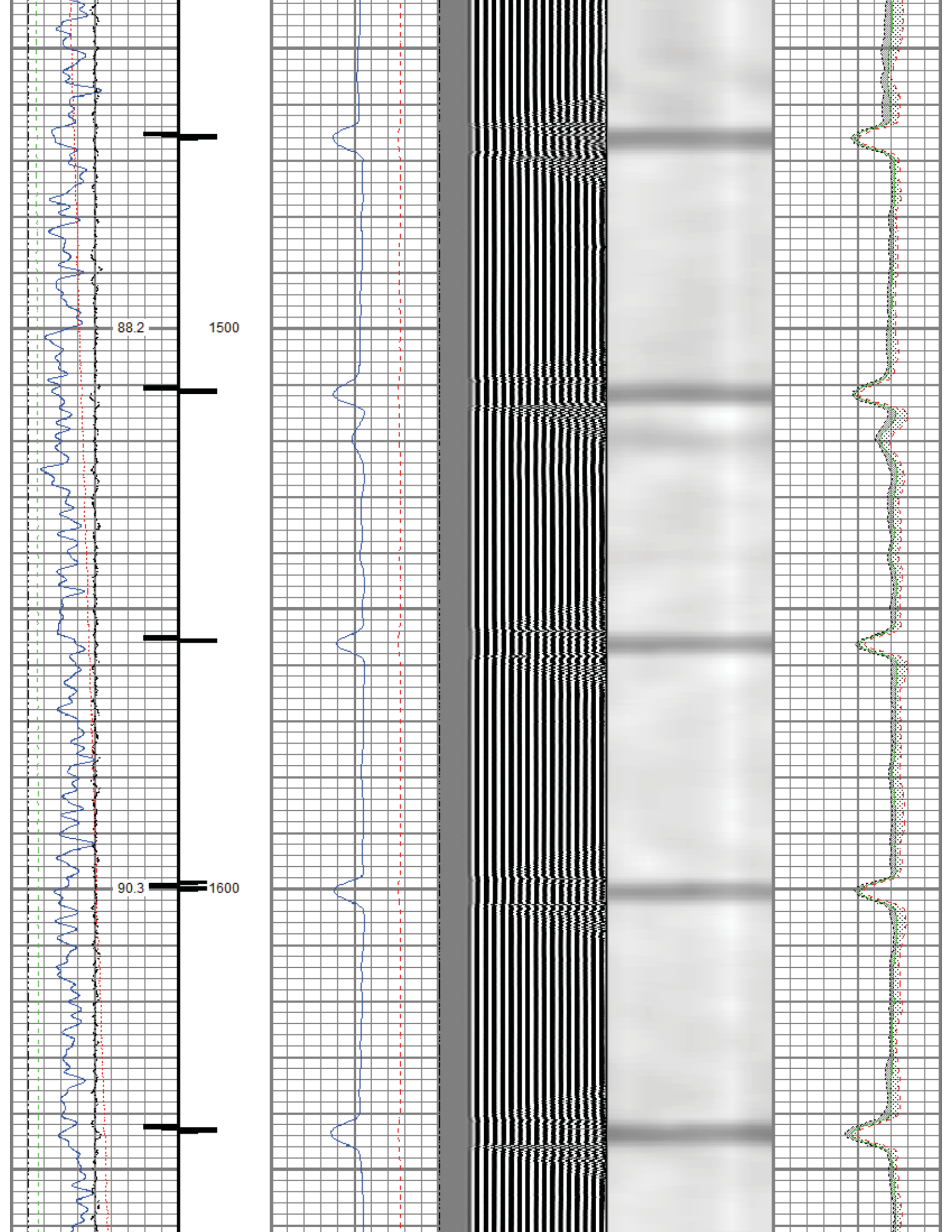


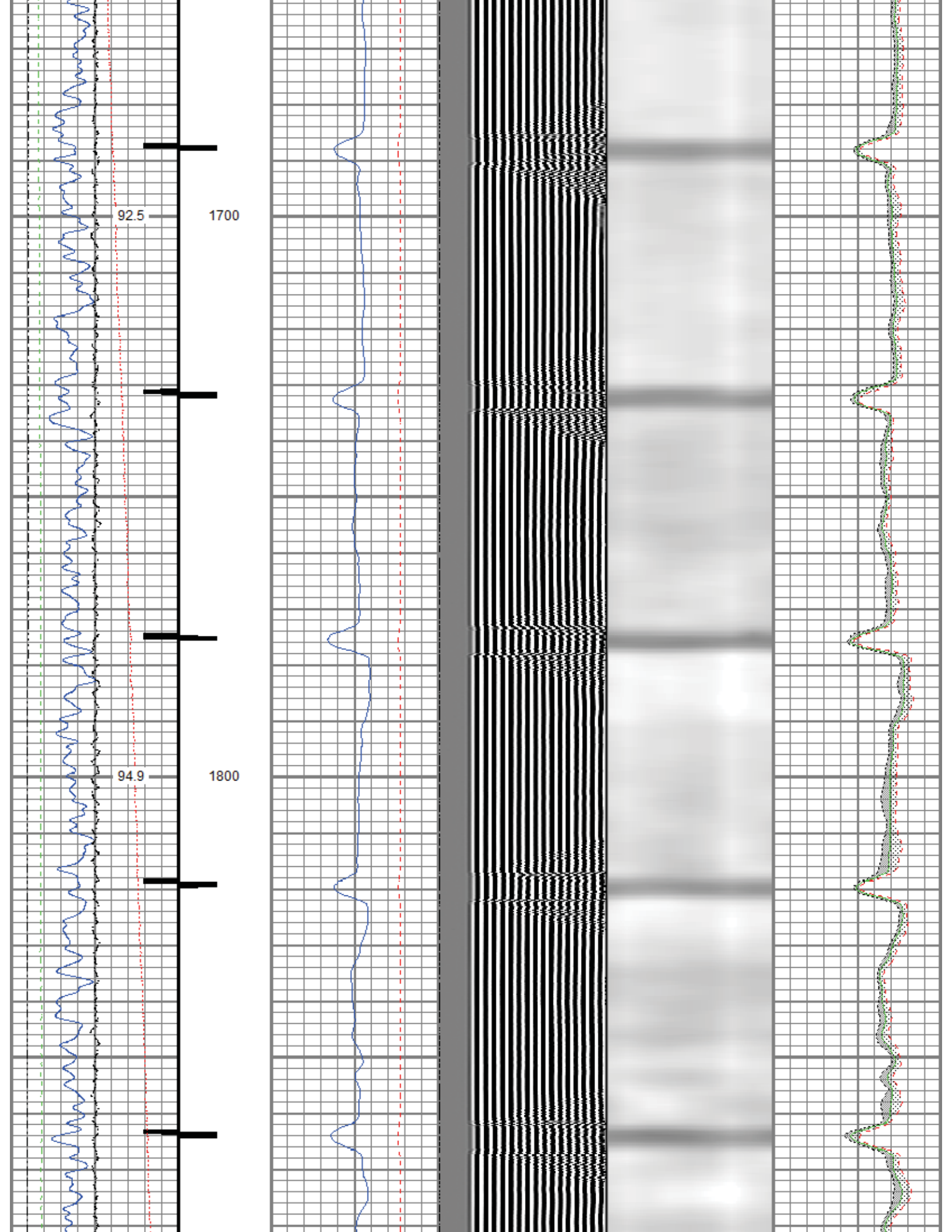


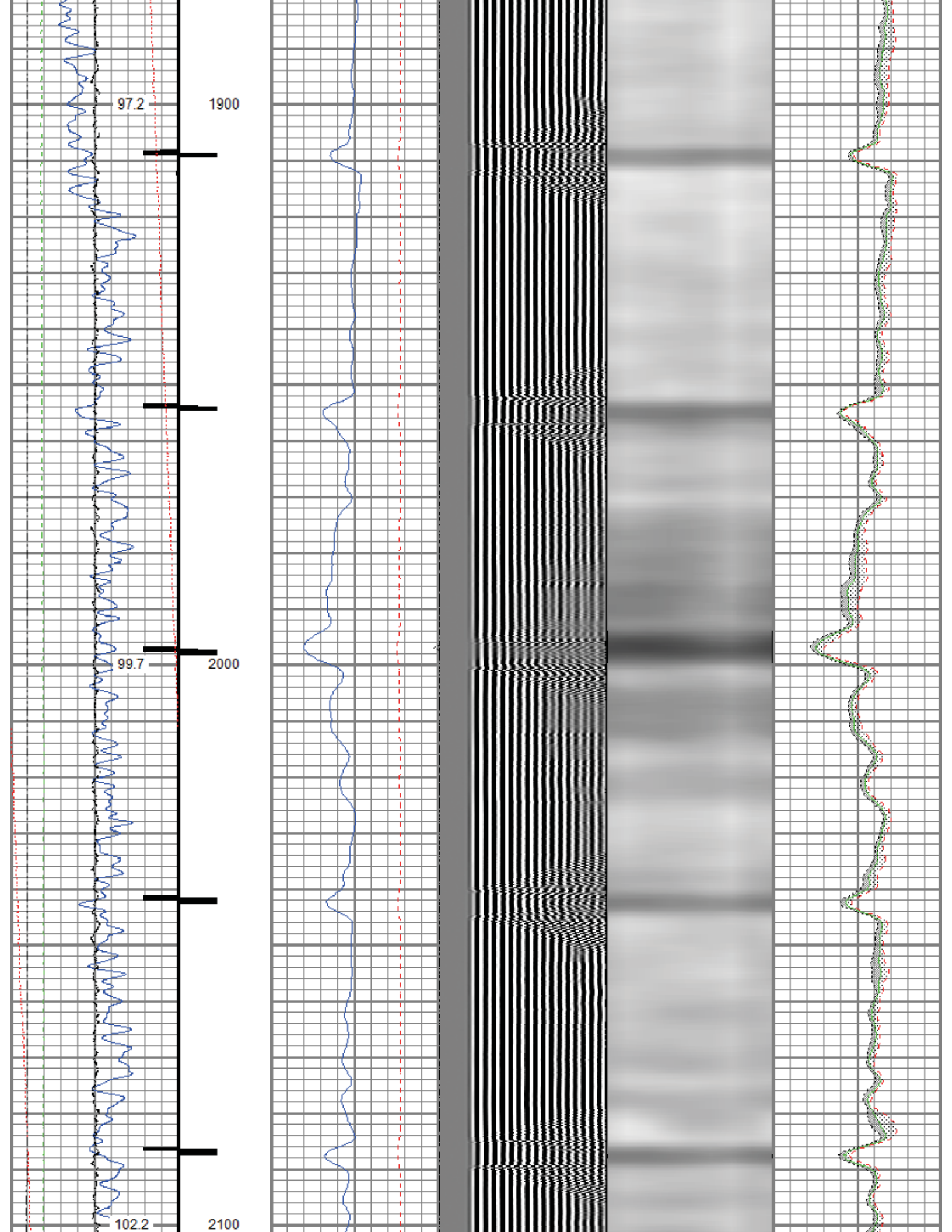


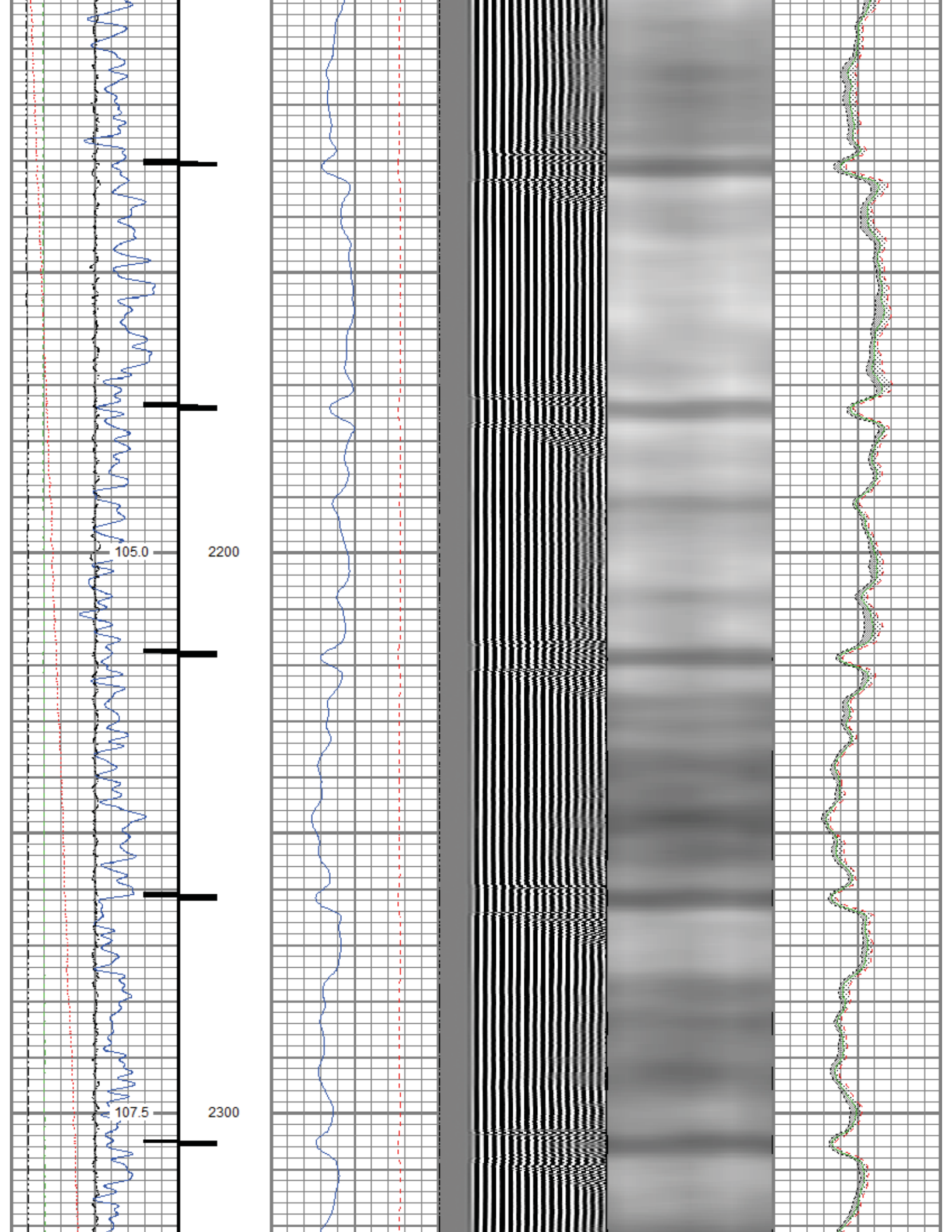


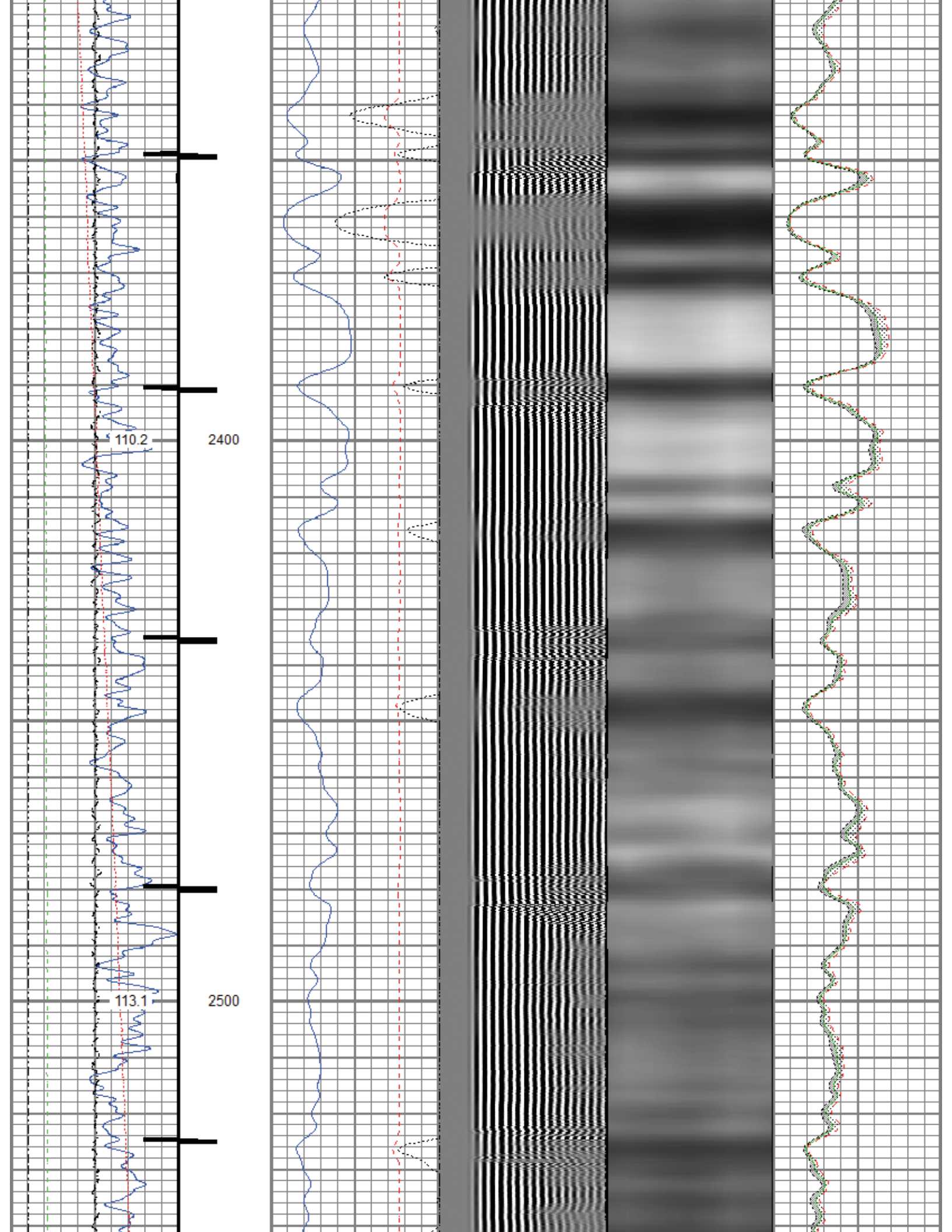


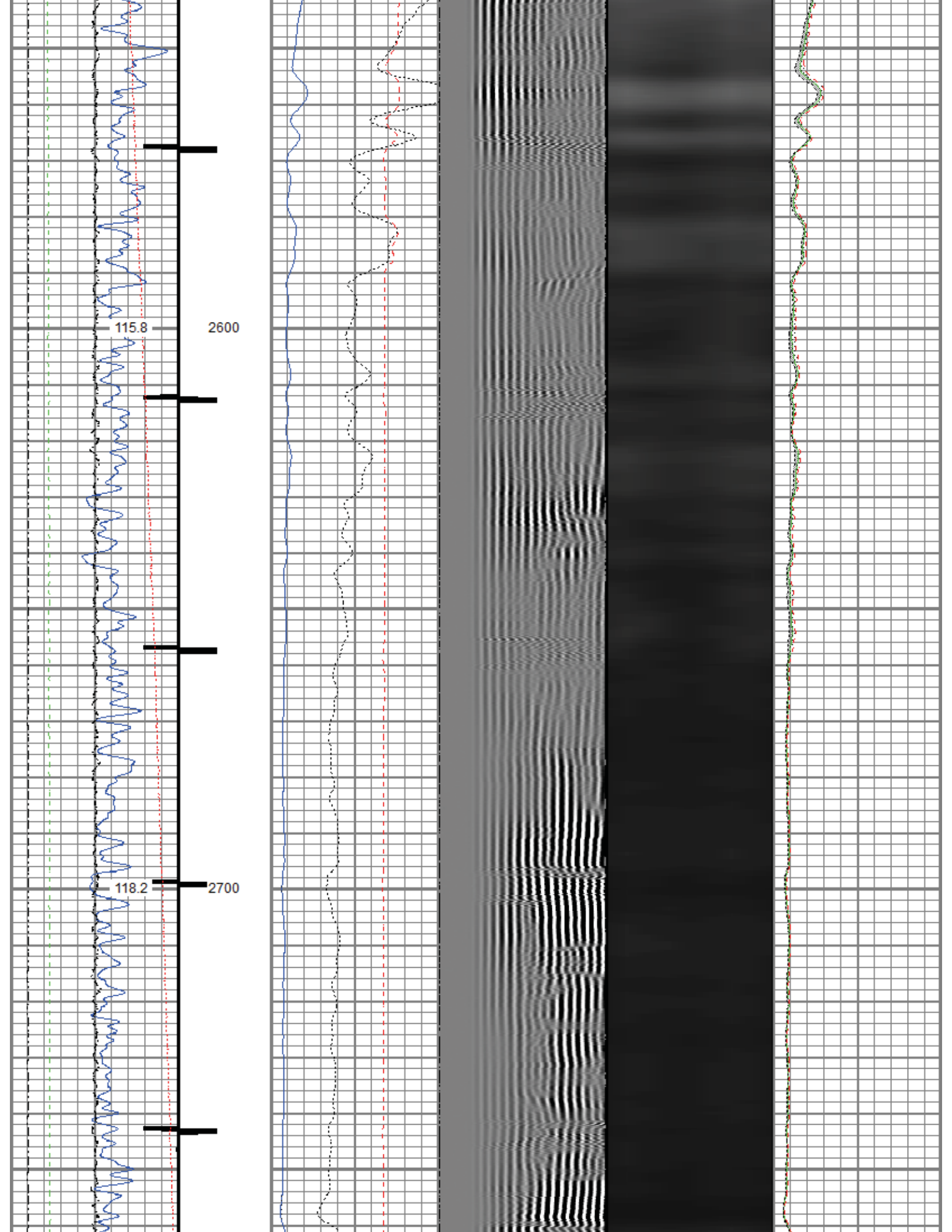


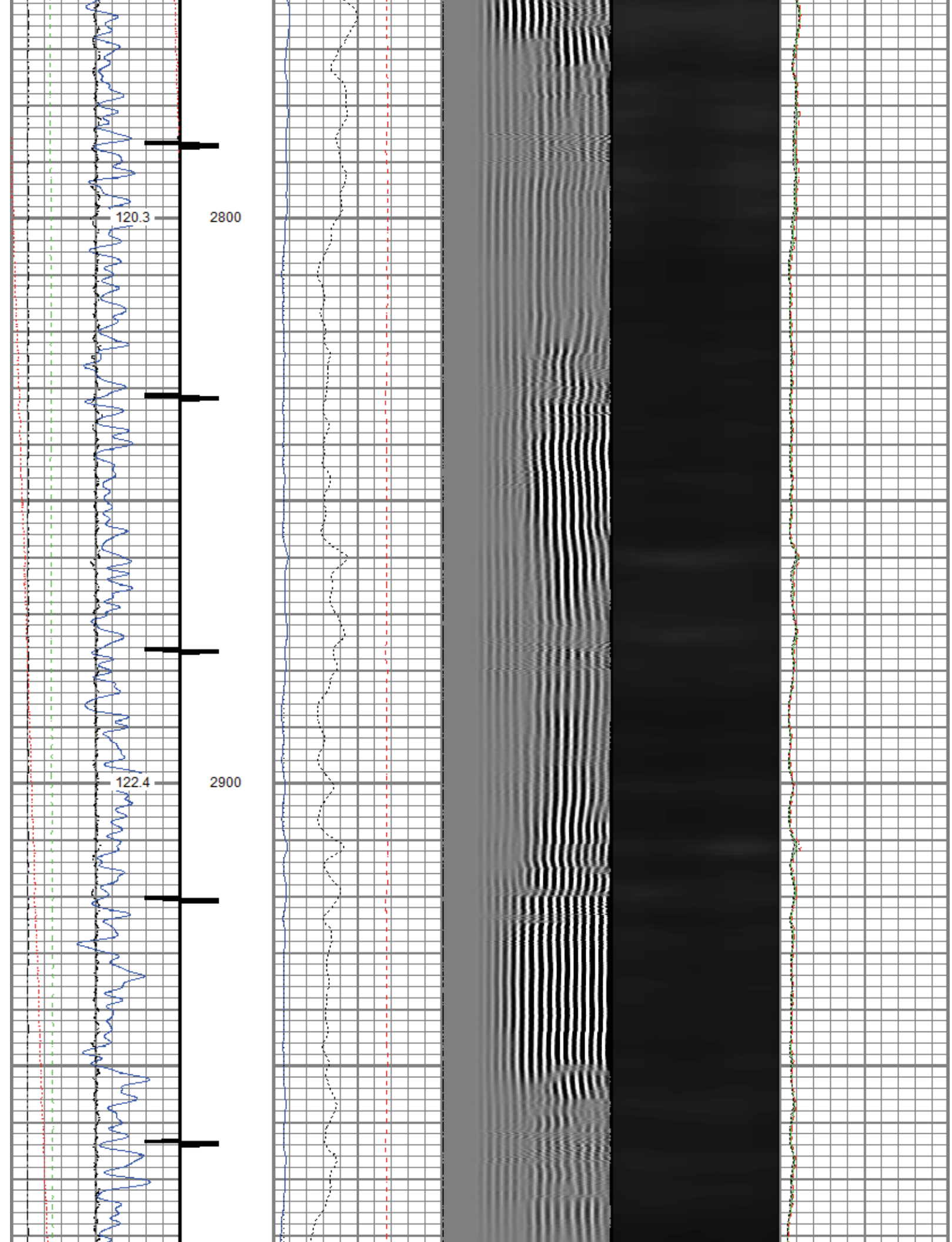


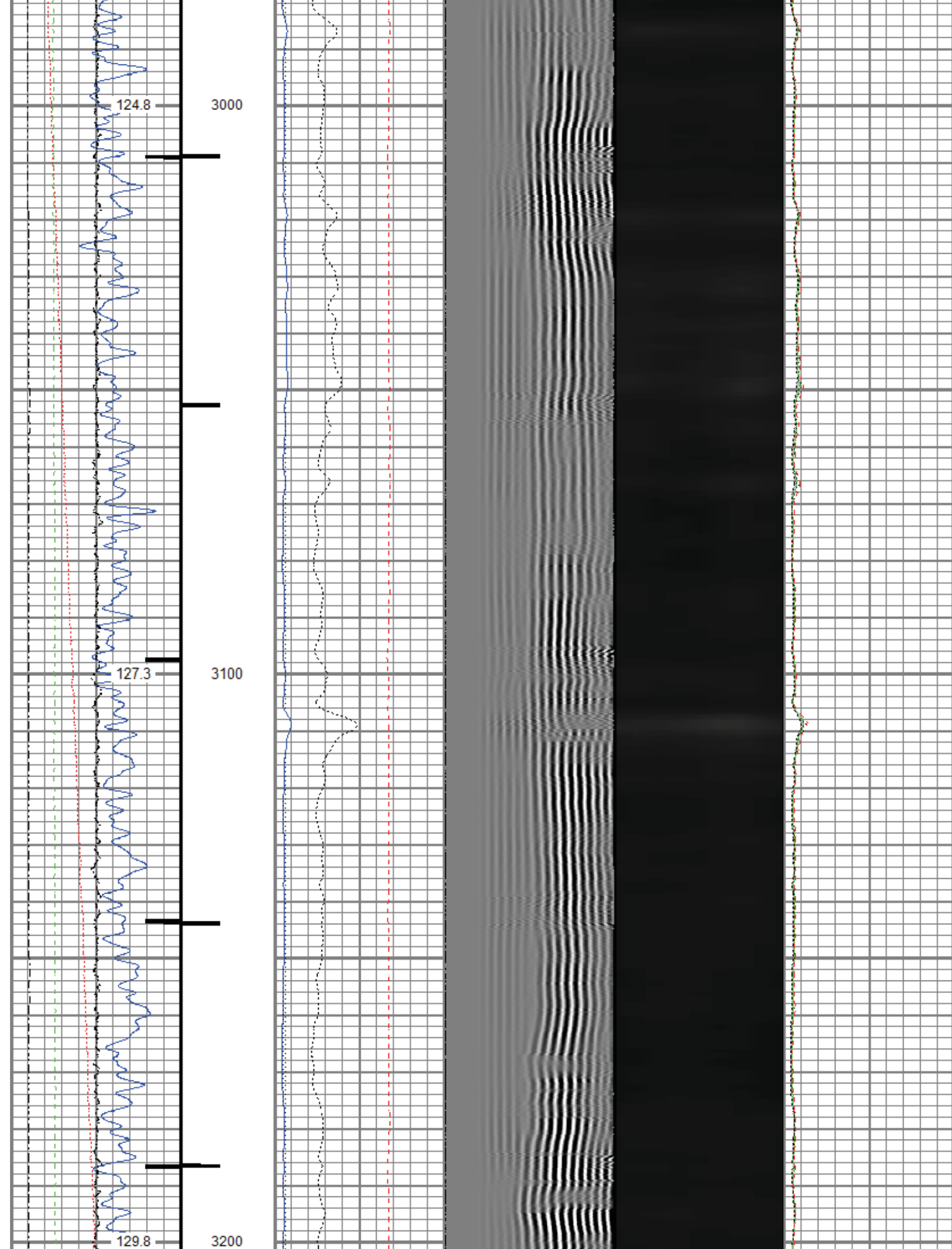


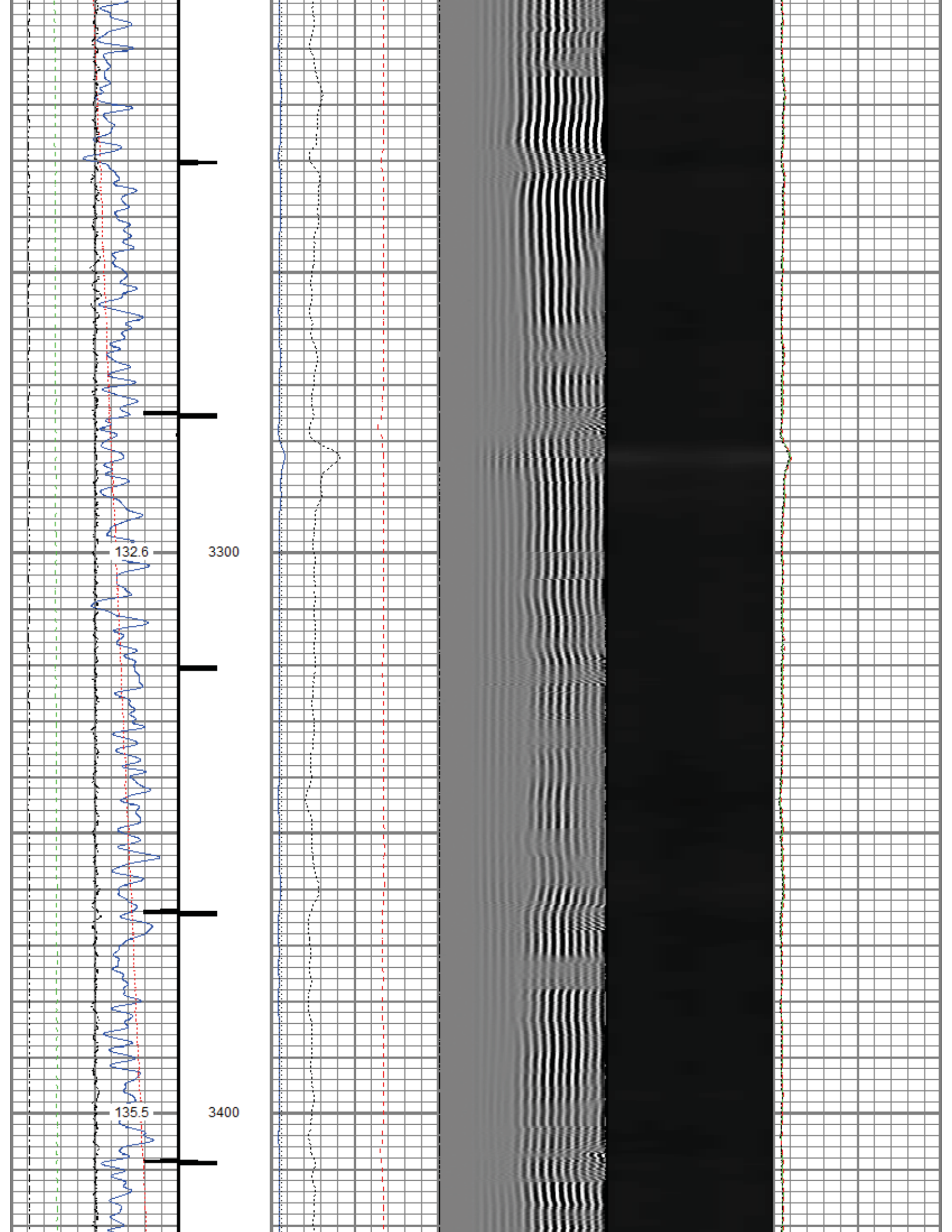


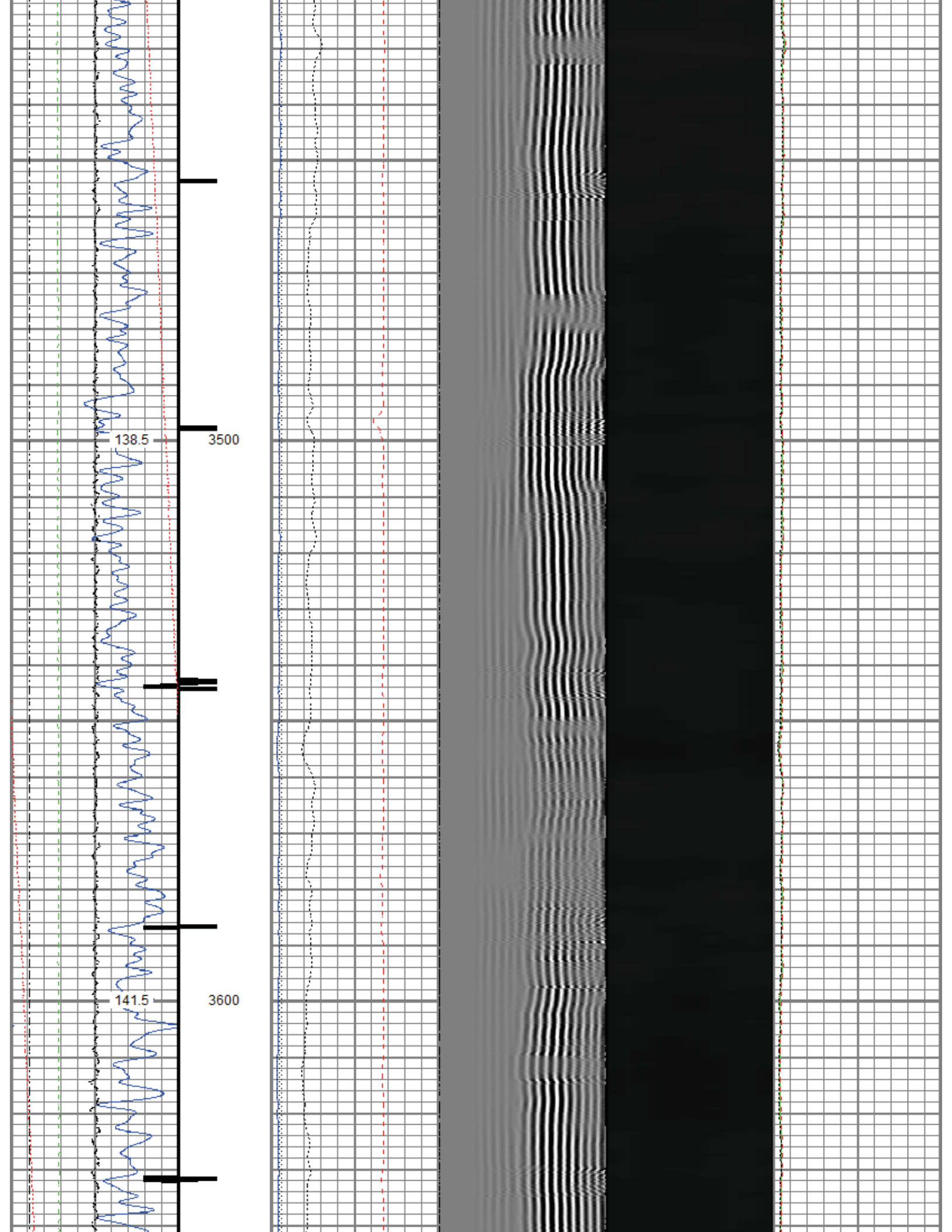


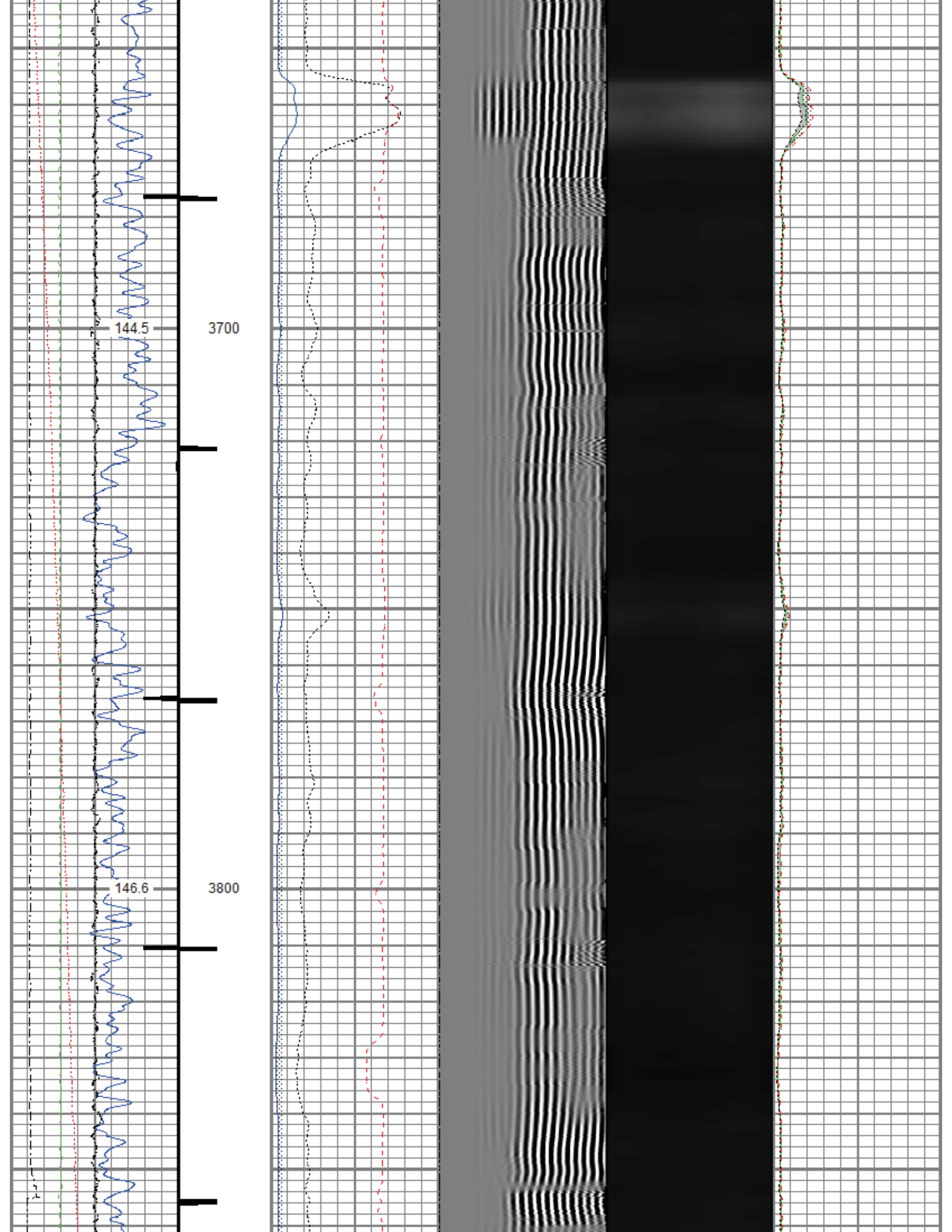


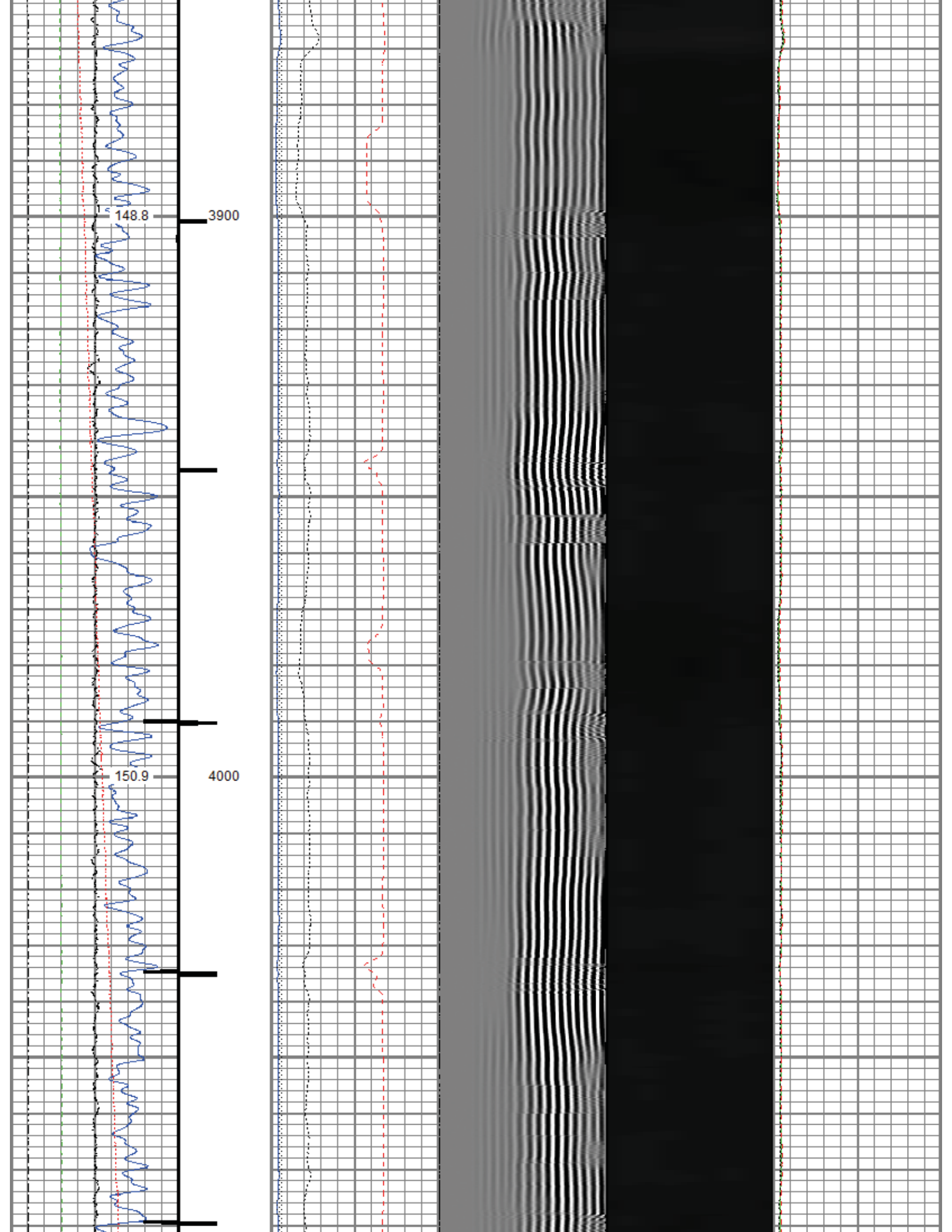


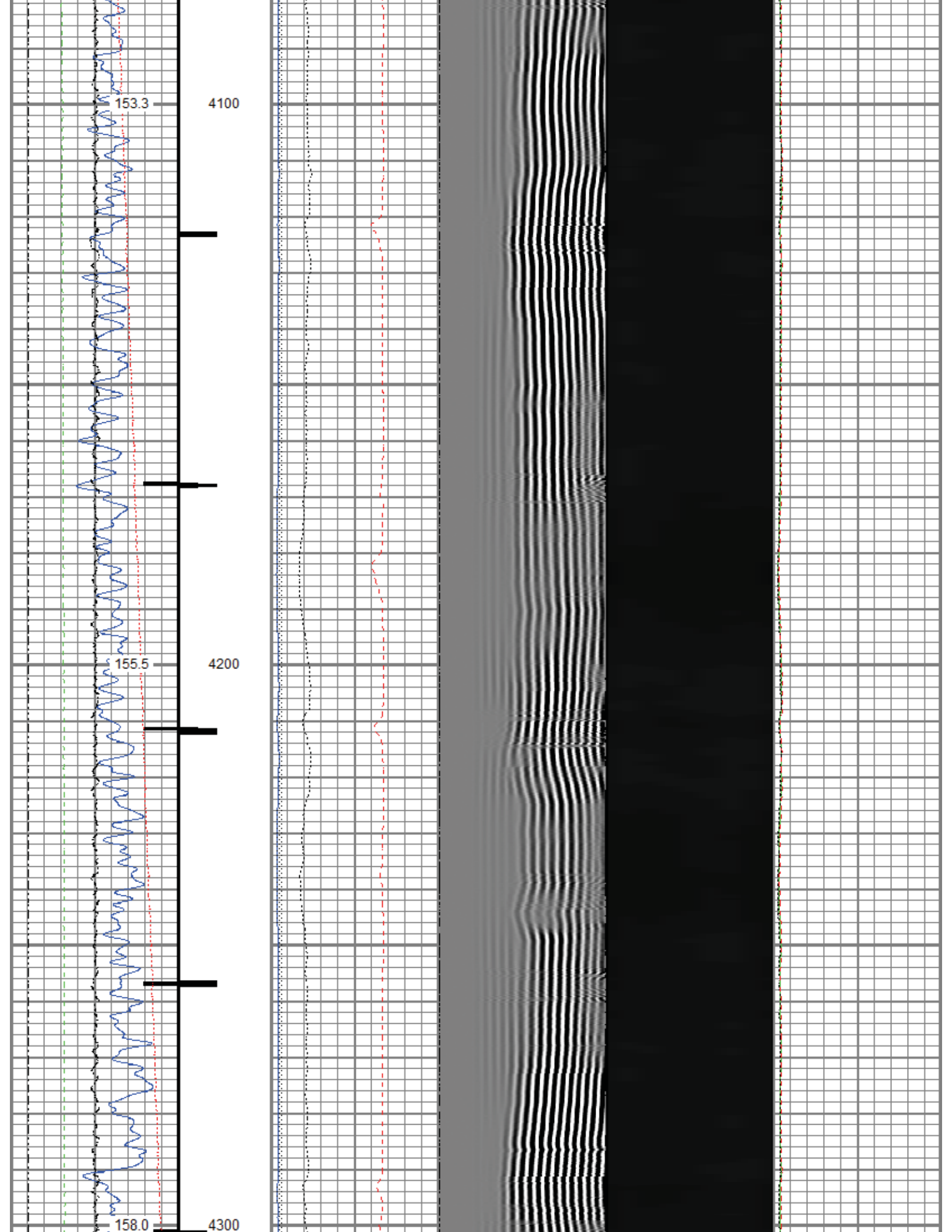


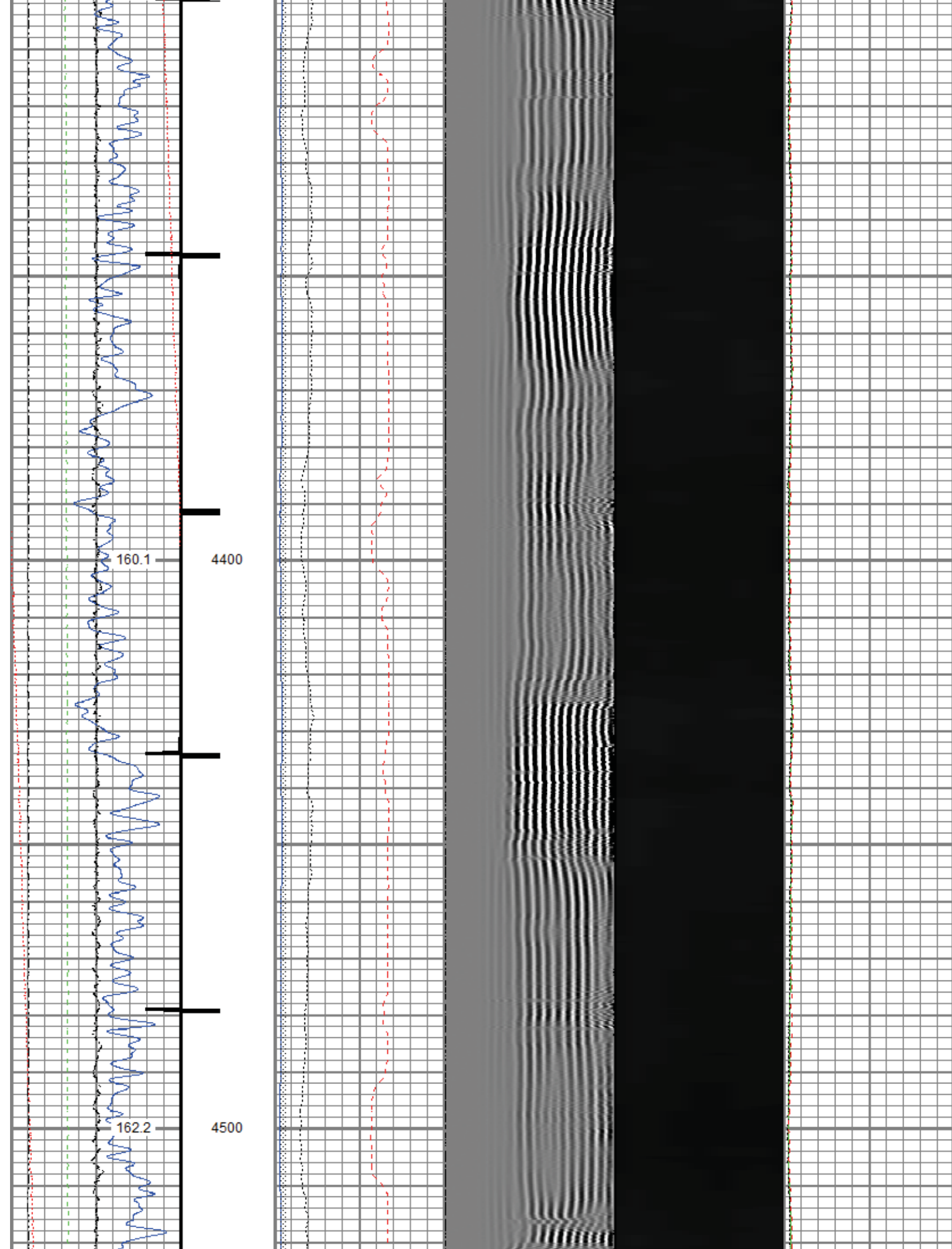


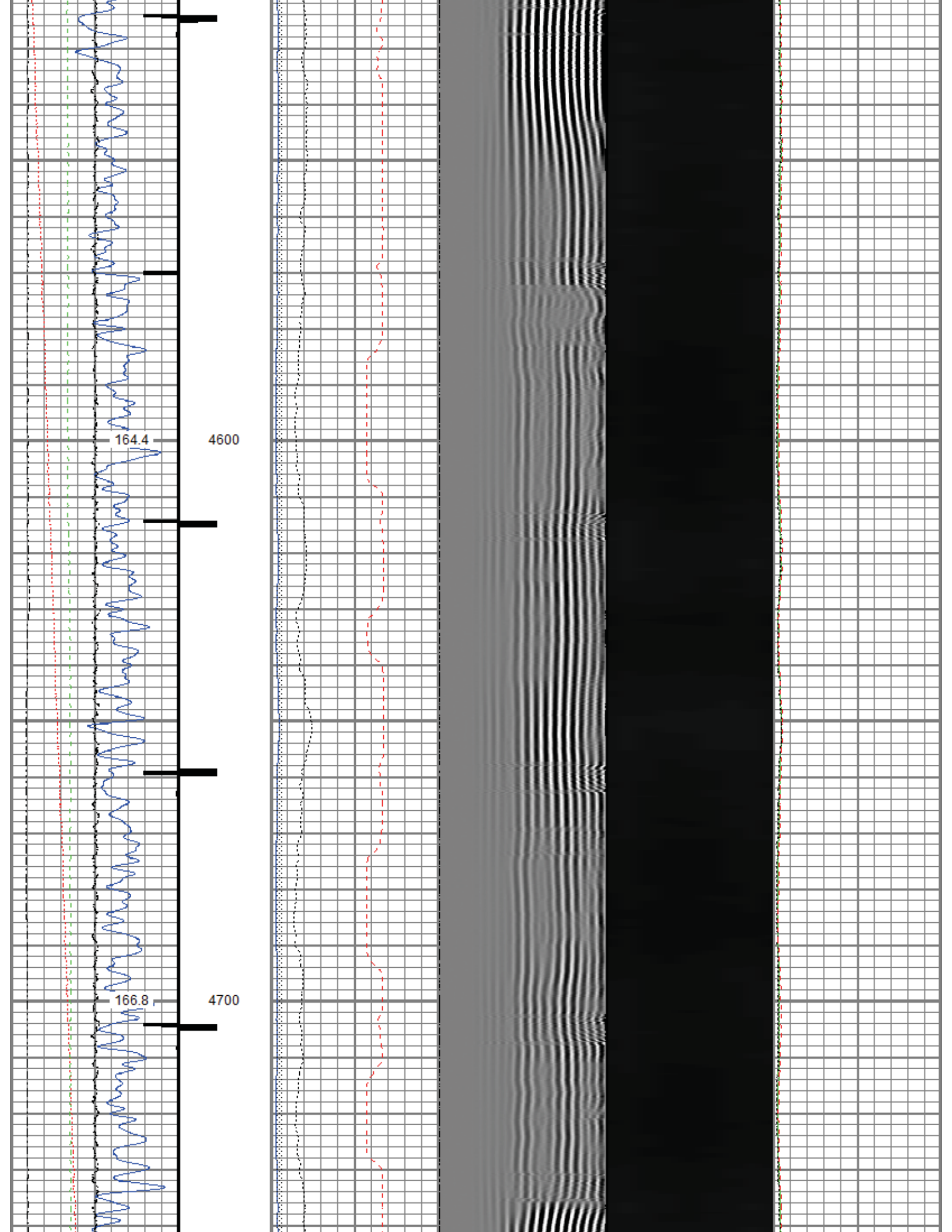


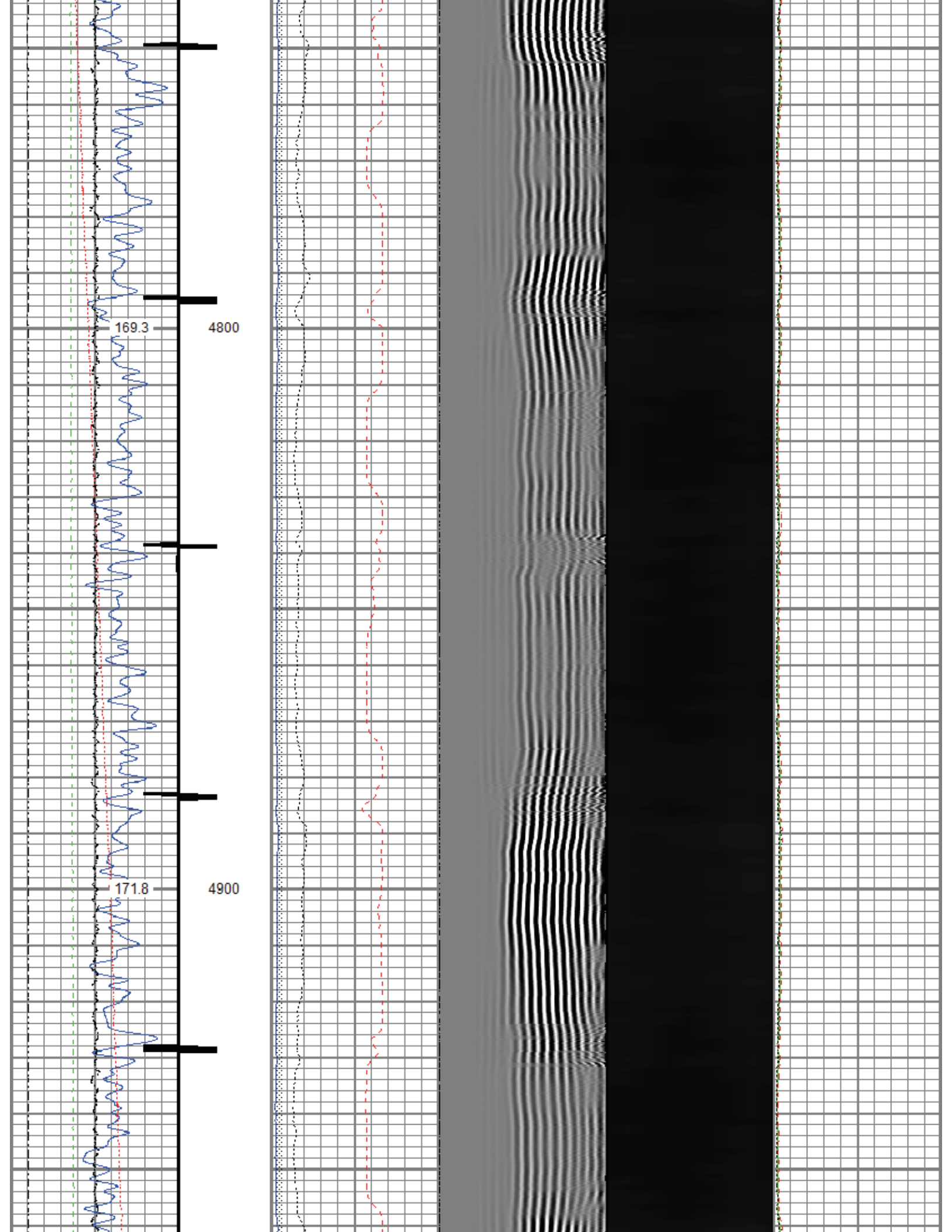


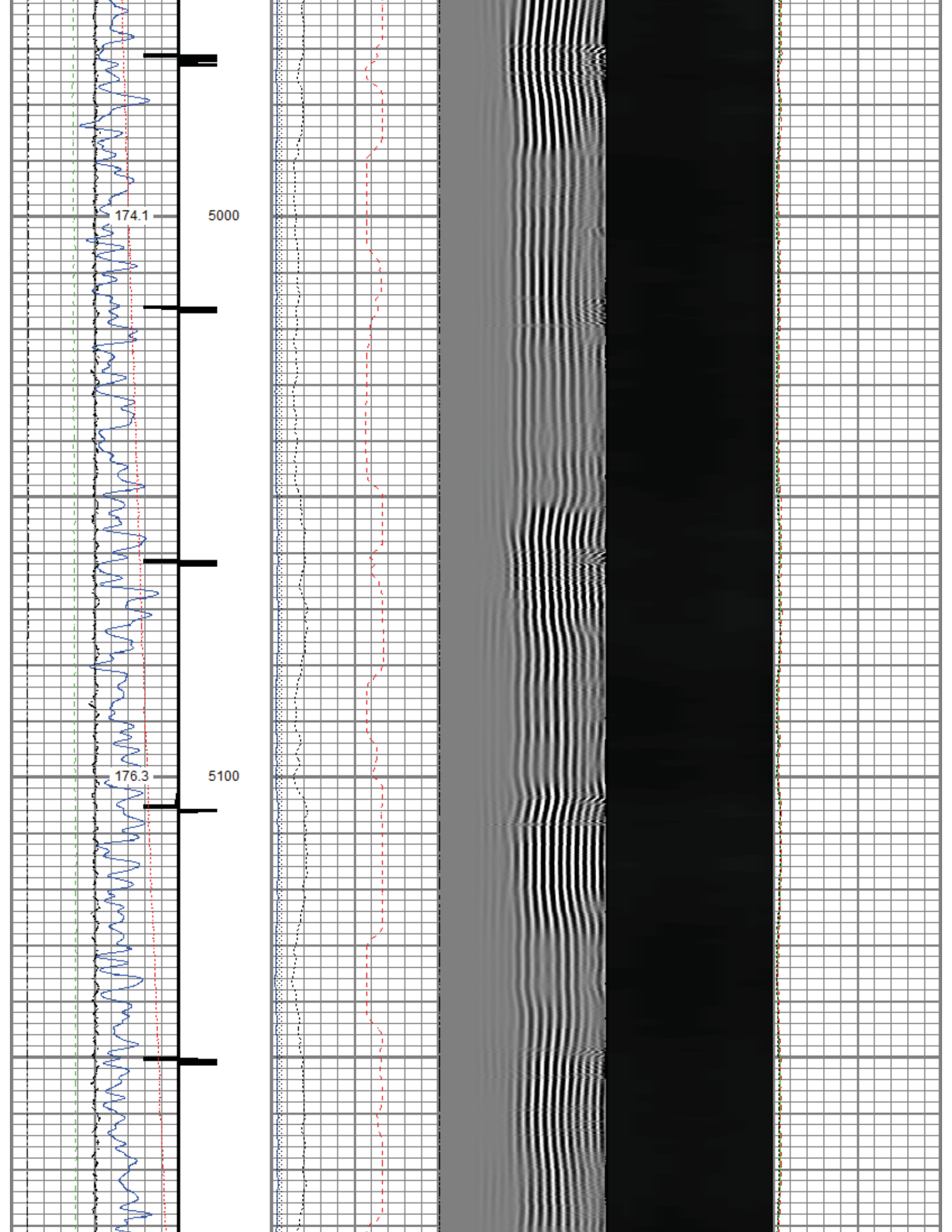


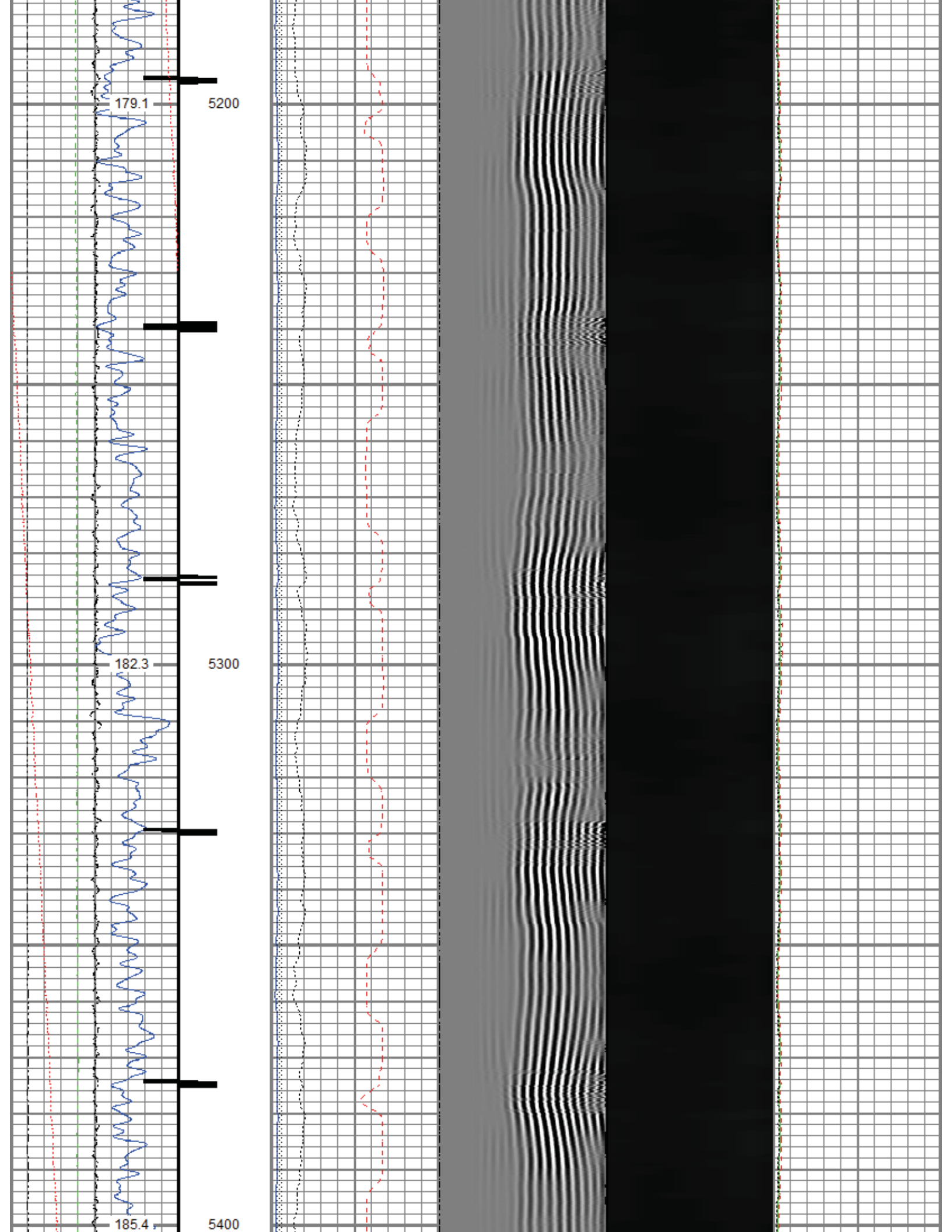


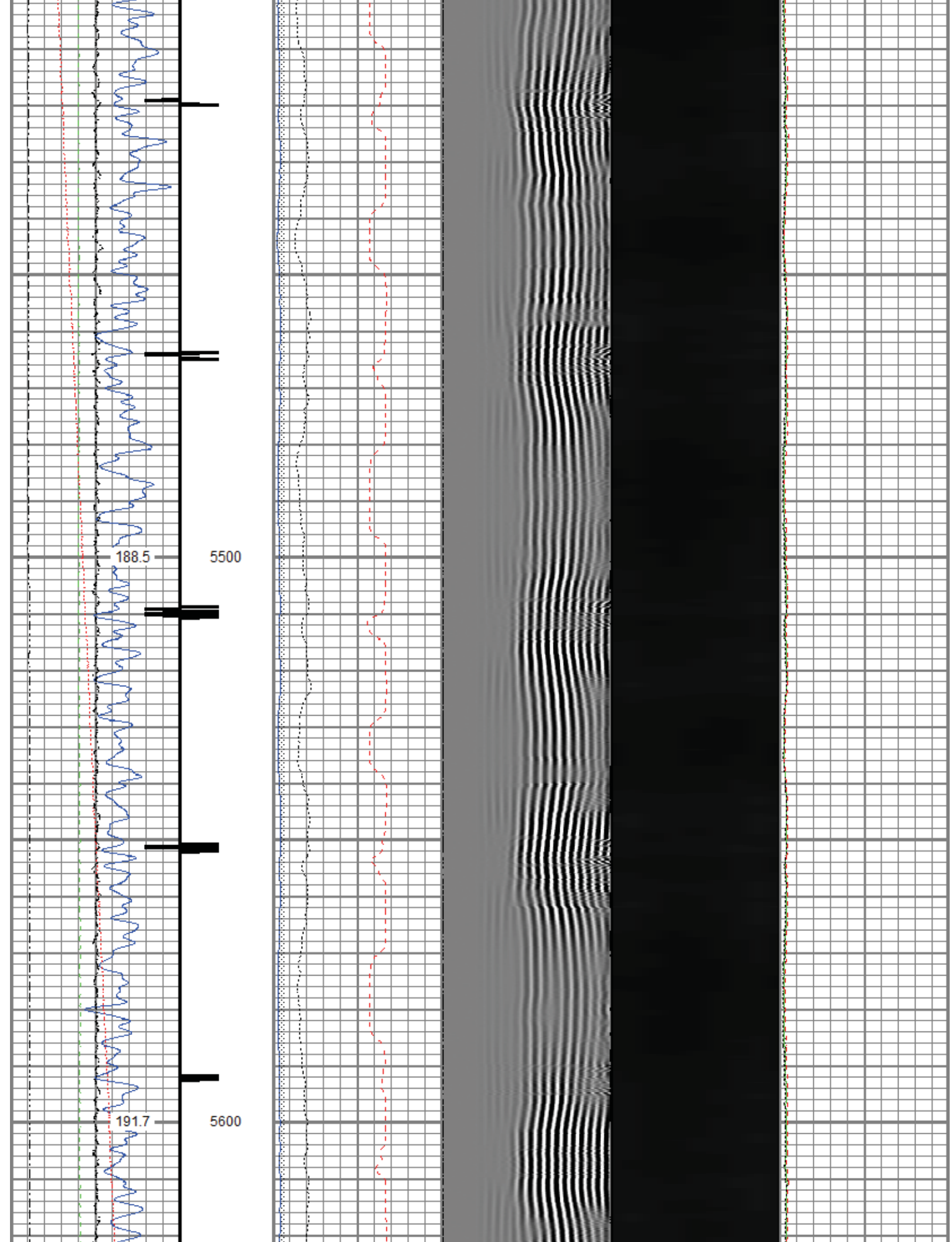


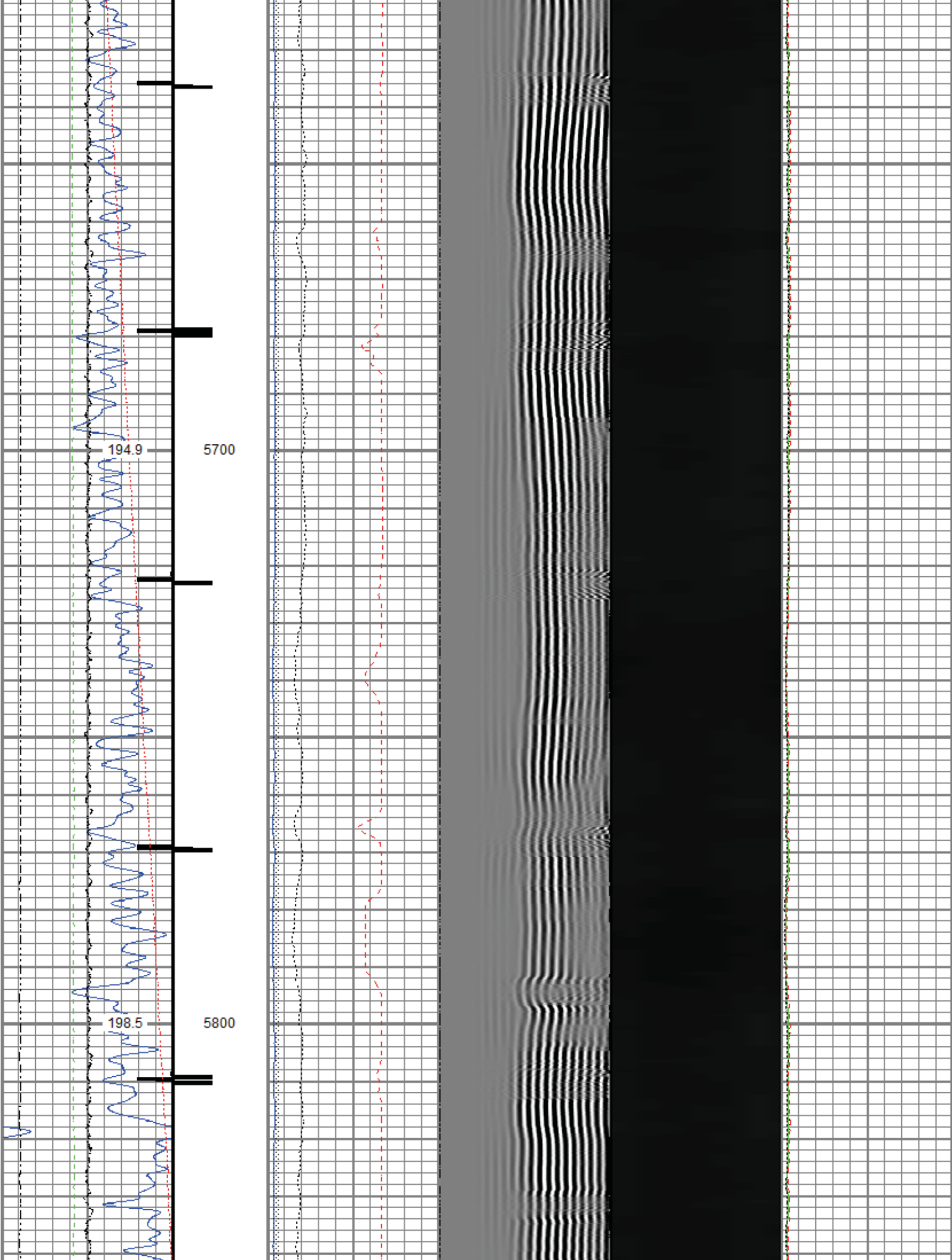


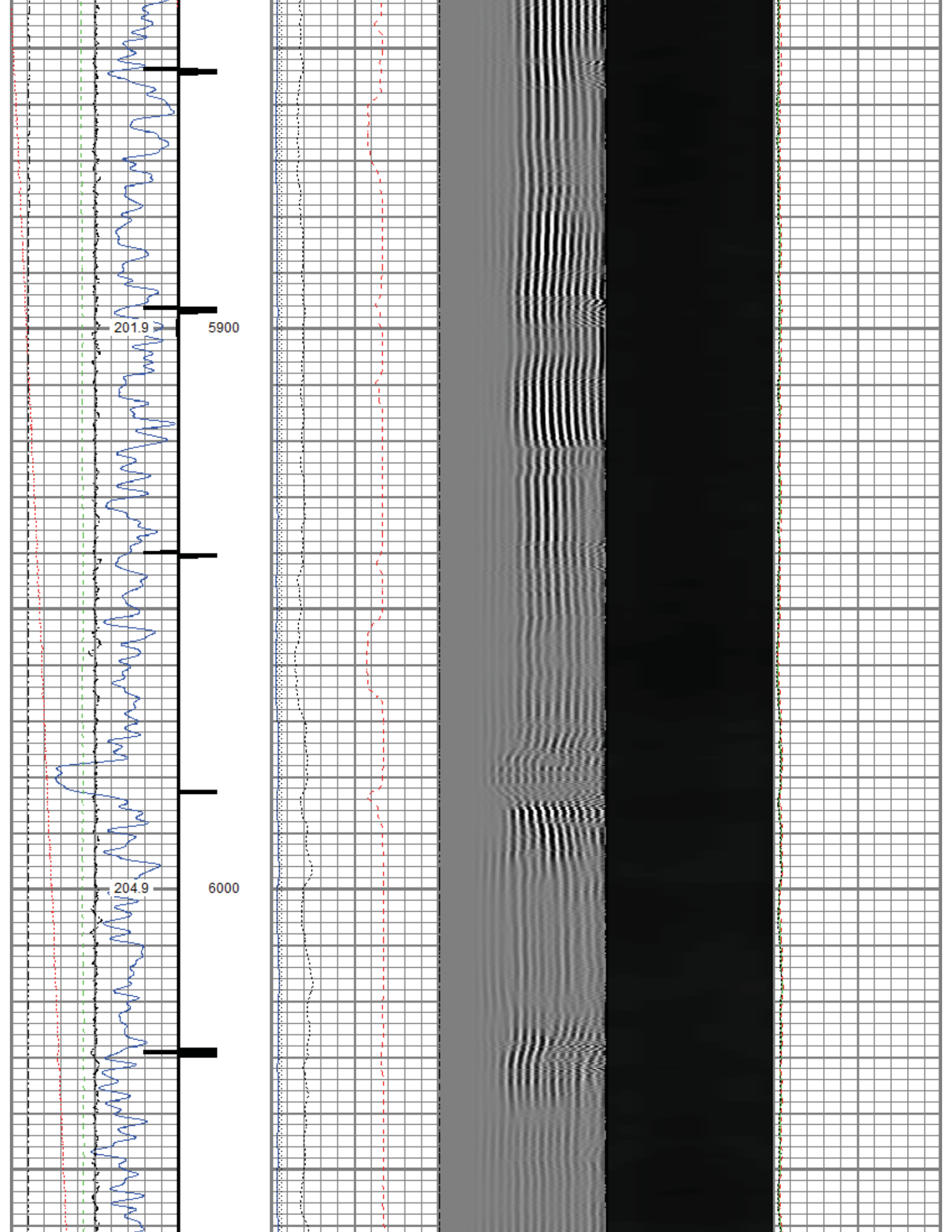


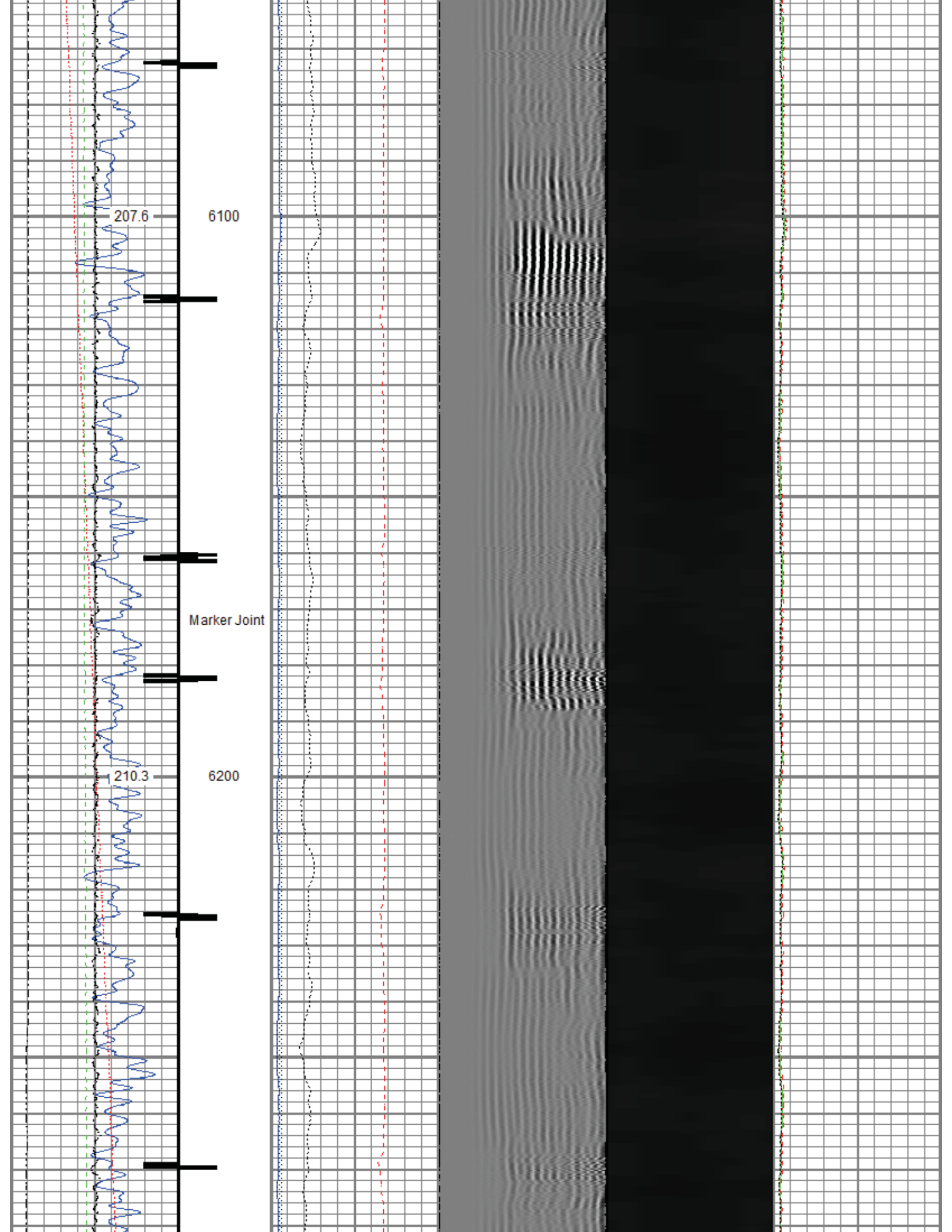


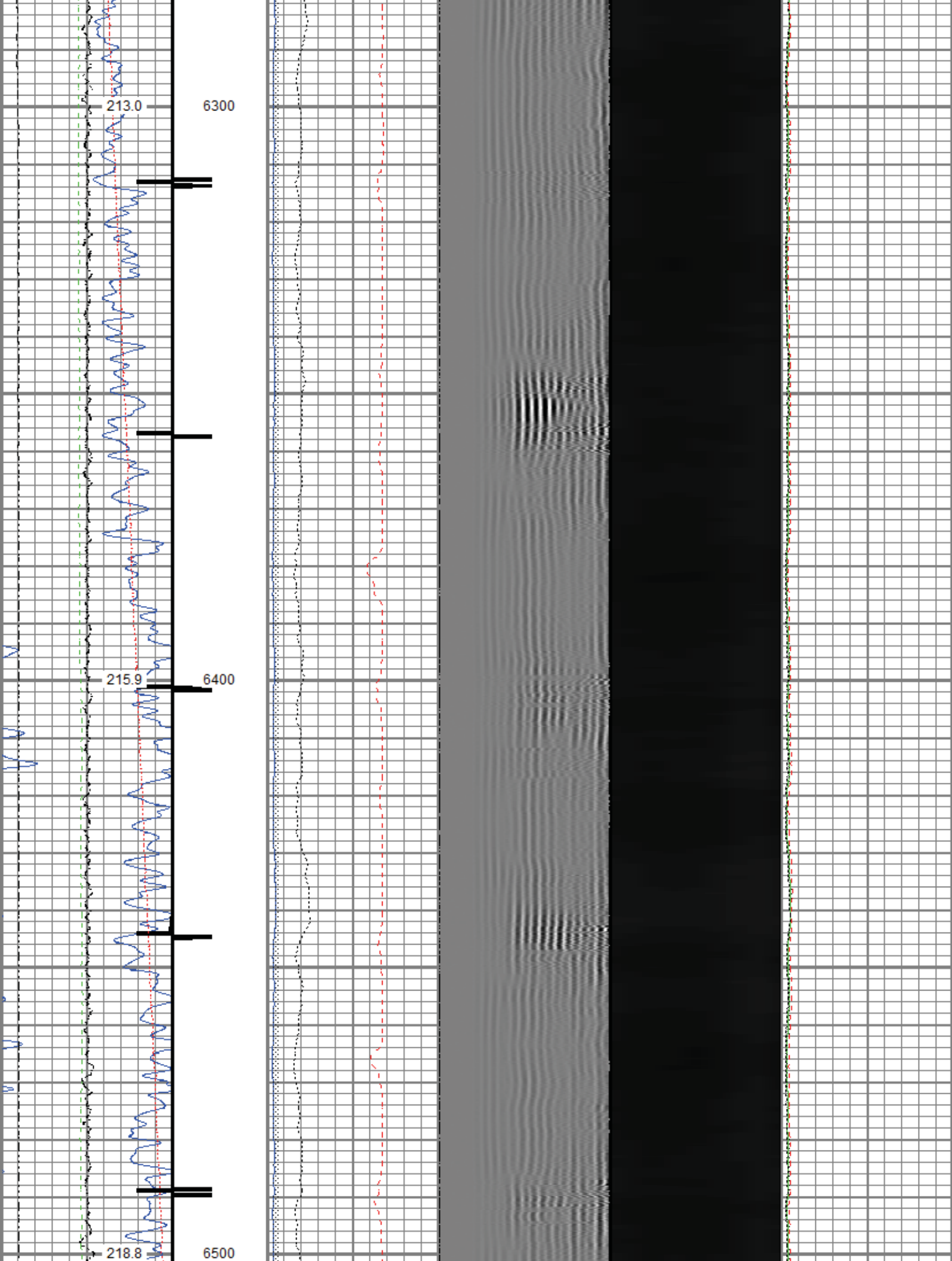


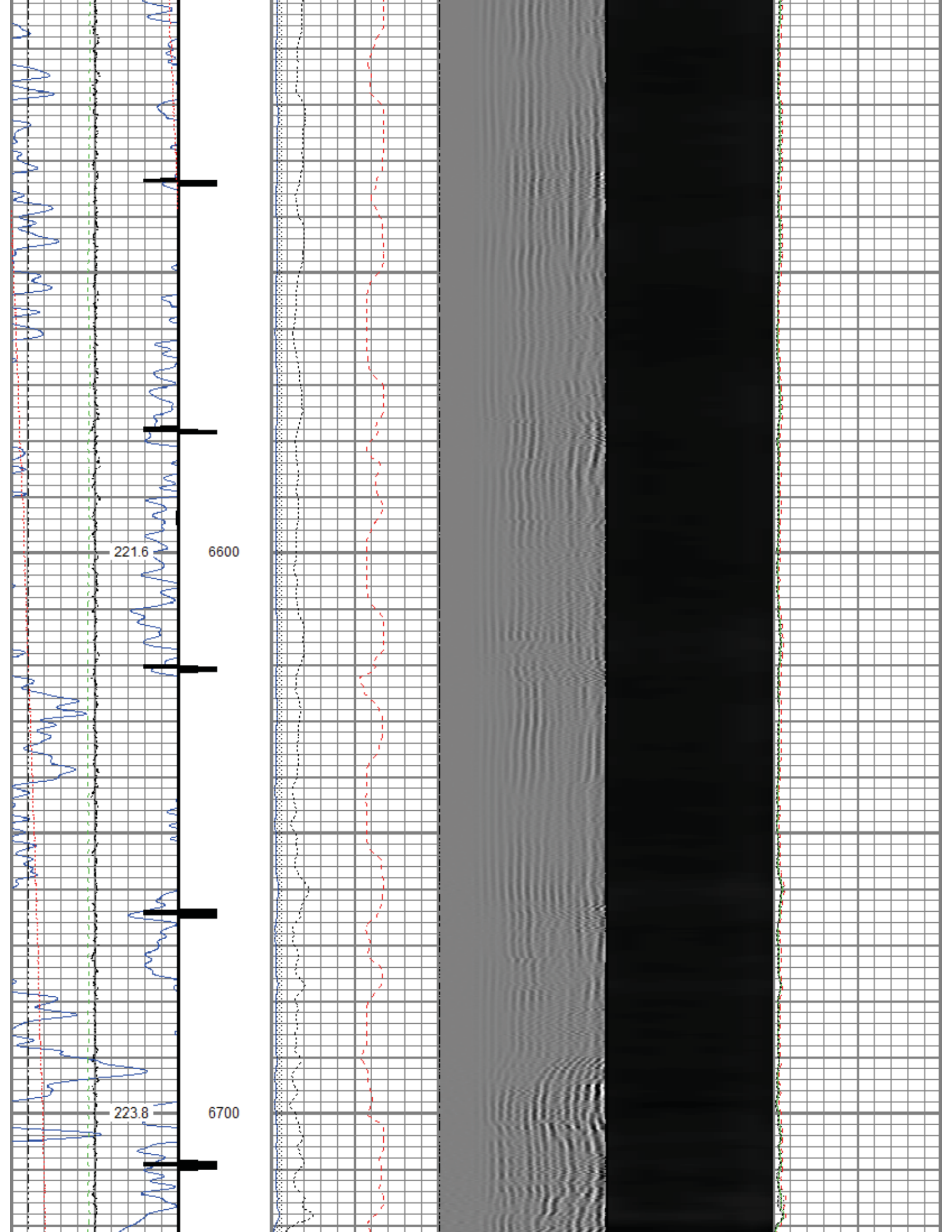




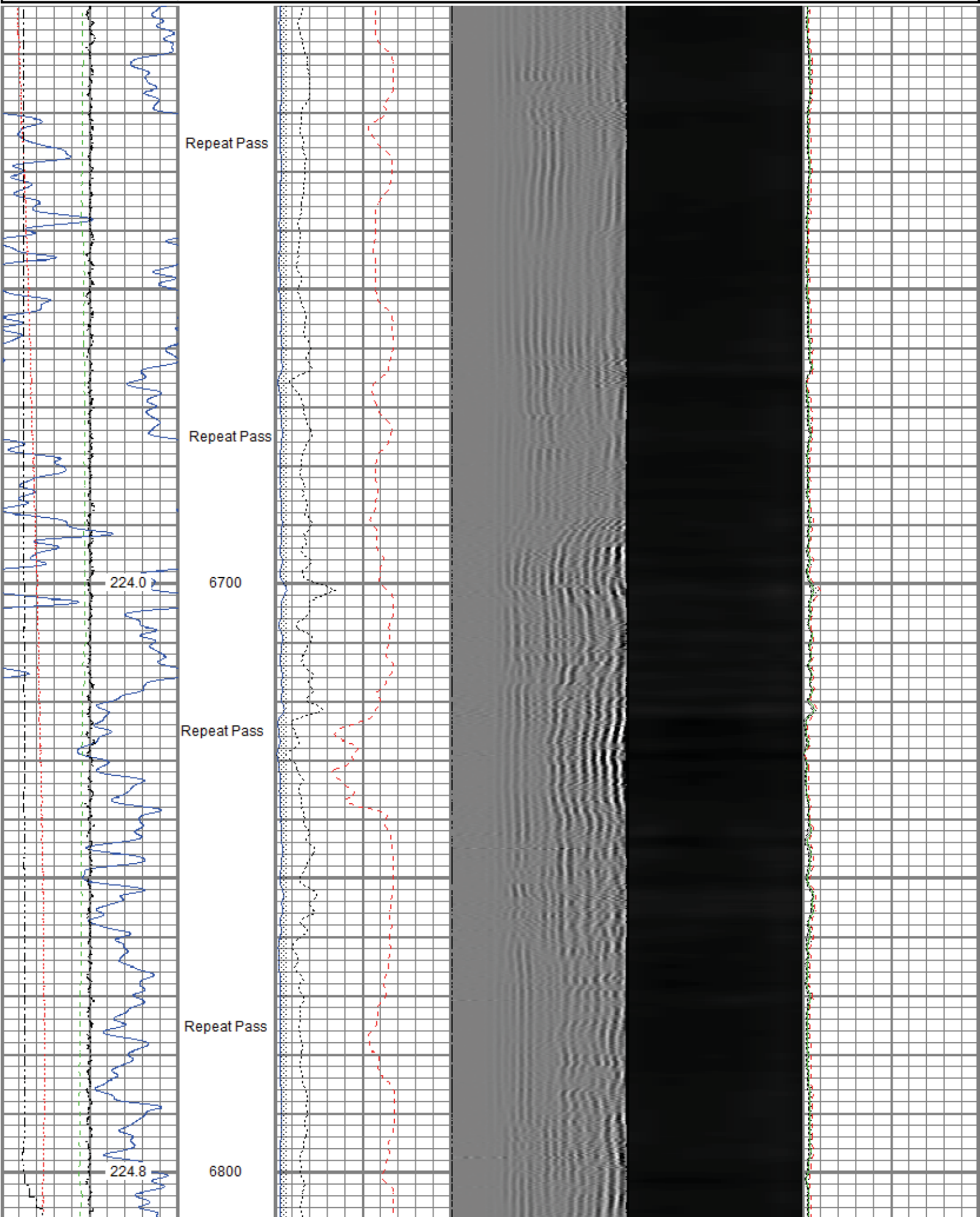


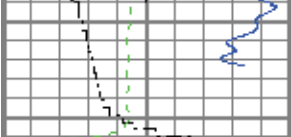
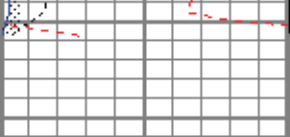
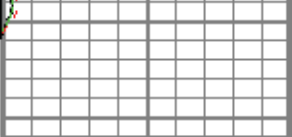






0 Line Tension (lb)2000
Differential Temperature
-2 (degF) 2

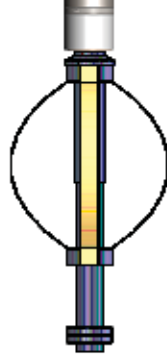


				
Gamma Ray	0 3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0 Average Amplitude 100
0 (GAPI) 120	3' Amplitude x 5	200 (usec) 1200		Minimum Amplitude
0 Temperature (degF) 20	0 (mV) 20			0 100
Line Speed	3' Travel Time			Maximum Amplitude
-150 (ft/min) 150	650 (usec) 150			0 100
0 Line Tension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

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
ErrCt	18.10		Titan CHD-16875 GO	1.03	1.69	5.40
RBT_HV	17.07		Titan 1-11/16" Assembled Electric Cable Head with 1" Fishing Neck			
			SO BS CENT-2750-5500	1.50	3.25	11.00
			Slip Over 2-3/4" I.D. for 5-1/2" O.D. Casing Bow Spring Centralizer			
TEMP	14.16					
			Probe Radii ACC-2750 RBTa (FW1302-002)	9.39	2.75	105.00
RBT_ACCZ	11.93		Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub and Accelerometer			
RBT_ACCY	11.93					
RBT_ACCX	11.93					
WVFSYNC	11.93					
WVFS8	11.93					
WVFS7	11.93					
WVFS6	11.93					
WVFS5	11.93					
WVFS4	11.93					
WVFS3	11.93					
WVFS2	11.93					
WVFS1	11.93					
WVFCAL	11.93					
WVF3FT	11.93					
WVF5FT	10.93					
CCL\$2	6.80		SO BS CENT-2750-5500	1.50	3.25	11.00
CCL\$1	6.80		Slip Over 2-3/4" I.D. for 5-1/2" O.D. Casing Bow Spring Centralizer			
GR	5.46		Probe GR-CCL-2750 6PB (101001)	4.80	2.75	55.00
			Probe 2-3/4" rev.1 Digital Scintillation Gamma Ray/CCL Combined with 6 Pin Bottom for CNT			

LOCTIM
UTCTIM

0.00
0.00



Probe CENT-2750
Probe 2-3/4" Electric Inline Bowspring Centralizer

2.88

2.75

20.00

Dataset: PROCESSED_Noble_Guttersen YY06-756_RBL_09-01-20.db: field/well/run1/pass7.1
Total length: 18.10 ft
Total weight: 229.40 lb
O.D.: 3.25 in

Calibration Report

Database File C:\ProgramData\Warrior\Data\Noble\Noble_Guttersen YY06-756_RBL_09-01-20\PROCESSED_Noble_Guttersen YY06-756_RBL_09-01-20
Dataset Pathname pass7.1
Dataset Creation Tue Sep 01 10:03:23 2020

Gamma Ray Calibration Report

Serial Number: 101001
Tool Model: 2750 6PB
Performed: Tue Dec 03 09:24:53 2019

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: FW1302-002
Tool Model: 2750 RBTa

Calibration Casing Diameter: 5.500 in
Calibration Depth: 5.882 ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	0.698	0.800	71.921	101.977	0.762
CAL	0.006	0.667				
5'	0.000	0.697	0.800	71.921	102.090	0.782
SUM						
S1	0.001	0.730	0.000	100.000	137.009	-0.079
S2	0.000	0.746	0.000	100.000	134.187	-0.060
S3	0.000	0.792	0.000	100.000	126.400	-0.054
S4	0.000	0.784	0.000	100.000	127.670	-0.060
S5	0.000	0.766	0.000	100.000	130.645	-0.055
S6	0.000	0.720	0.000	100.000	138.920	-0.052
S7	0.000	0.680	0.000	100.000	147.181	-0.066
S8	0.001	0.711	0.000	100.000	140.721	-0.095

Air Zero Calibration, performed Mon Aug 31 10:03:14 2020:

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: Tue Dec 03 09:24:53 2019

	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: Tue Dec 03 09:24:53 2019

	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 Guttersen YY06-756
Field Wattenberg
County Weld
State Colorado