



Radial Cement Bond
Gamma Ray
Casing Collar Log

Company Kerr-McGee Oil & Gas Onshore, L.P.

Well JDB 15-3HZX

Field Wattenberg

County Weld State Colorado

Location: API #: 05-123-49219

SEC 15 TWP 1N RGE 66W

Permanent Datum Ground Level Elevation 5153'

Log Measured From Ground Level 0 FT

Drilling Measured From Kelly Bushing

Other Services
JBGR
RBP

Elevation
K.B. 5170'
D.F. ---
G.L. 5153'

Date

31-JUL-2019

Run Number

Three

Depth Driller

13721 FT

Depth Logger

7106 FT

Bottom Logged Interval

7091 FT

Top Log Interval

Surface

Open Hole Size

7.875"

Type Fluid

Water

Density / Viscosity

8.34 lb/gal

Max. Recorded Temp.

217°F

Estimated Cement Top

See Log

Time Well Ready

ROA

Time Logger on Bottom

11:10

Equipment Number

HD-361

Location

Platteville, CO

Recorded By

G. Lueck

Witnessed By

J. McMillan

Run Number

Bit

From

To

Size

Weight

From

To

Size (in)

Wgt (lbs/ft)

Grade

Top

Bottom

1921 FT

13710 FT

Surface

Surface

Surface

Surface

Surface

Surface

Surface

Surface

Surface

Surface

Surface

Surface

<<< Fold Here >>>

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 7036 FT
Adjusted -3 FT to correlate with Marker Joint
Gauge Ring/Junk Basket ran to 8112 FT
Retrievable Bridge Plug set at 7136 FT
Log ran with 0 PSI Surface Induced Pressure
Logging tools were clean and free of debris upon completion of operations
Thank you for choosing Reliance Oilfield Services, LLC!!

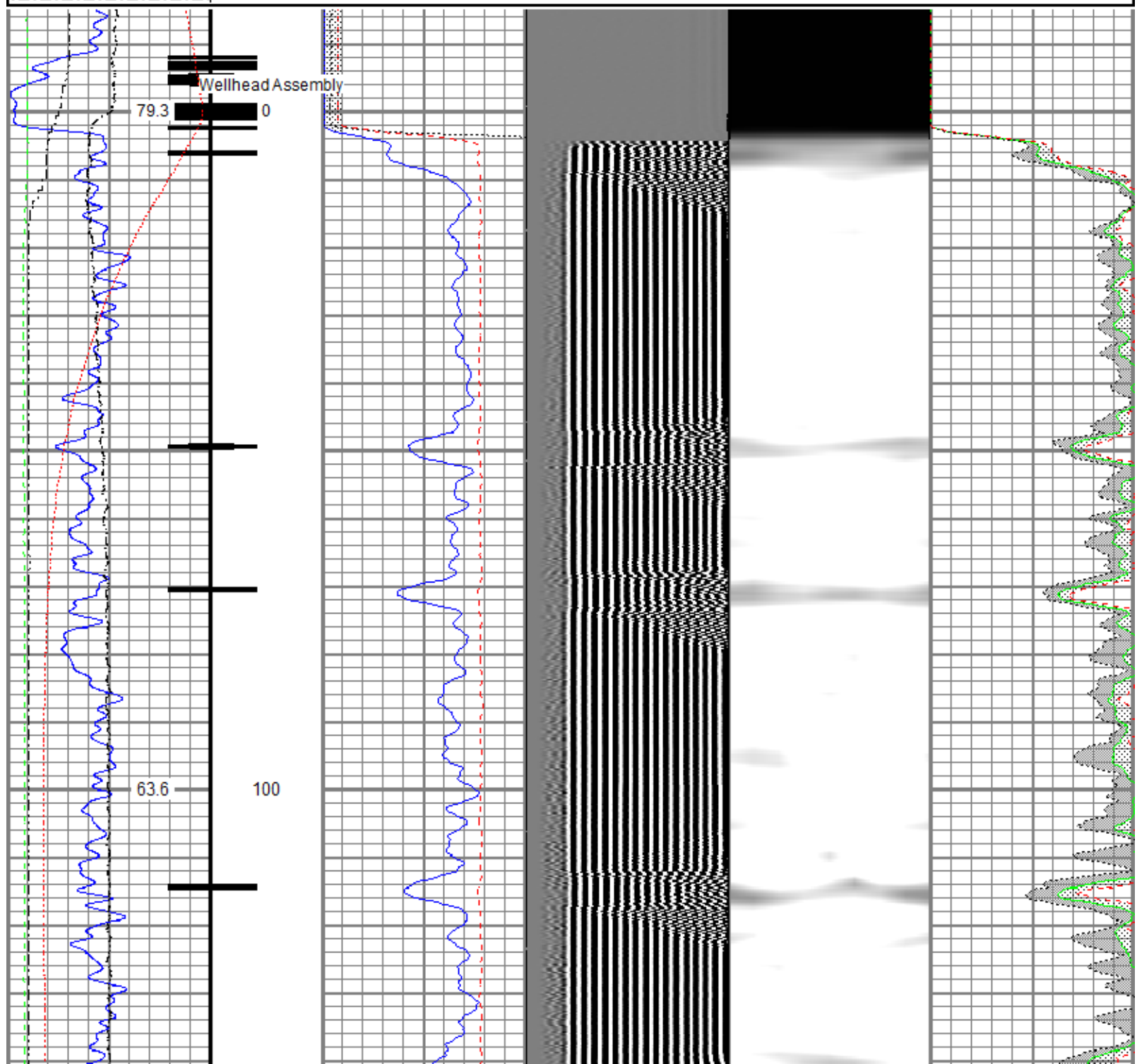
Main Pass

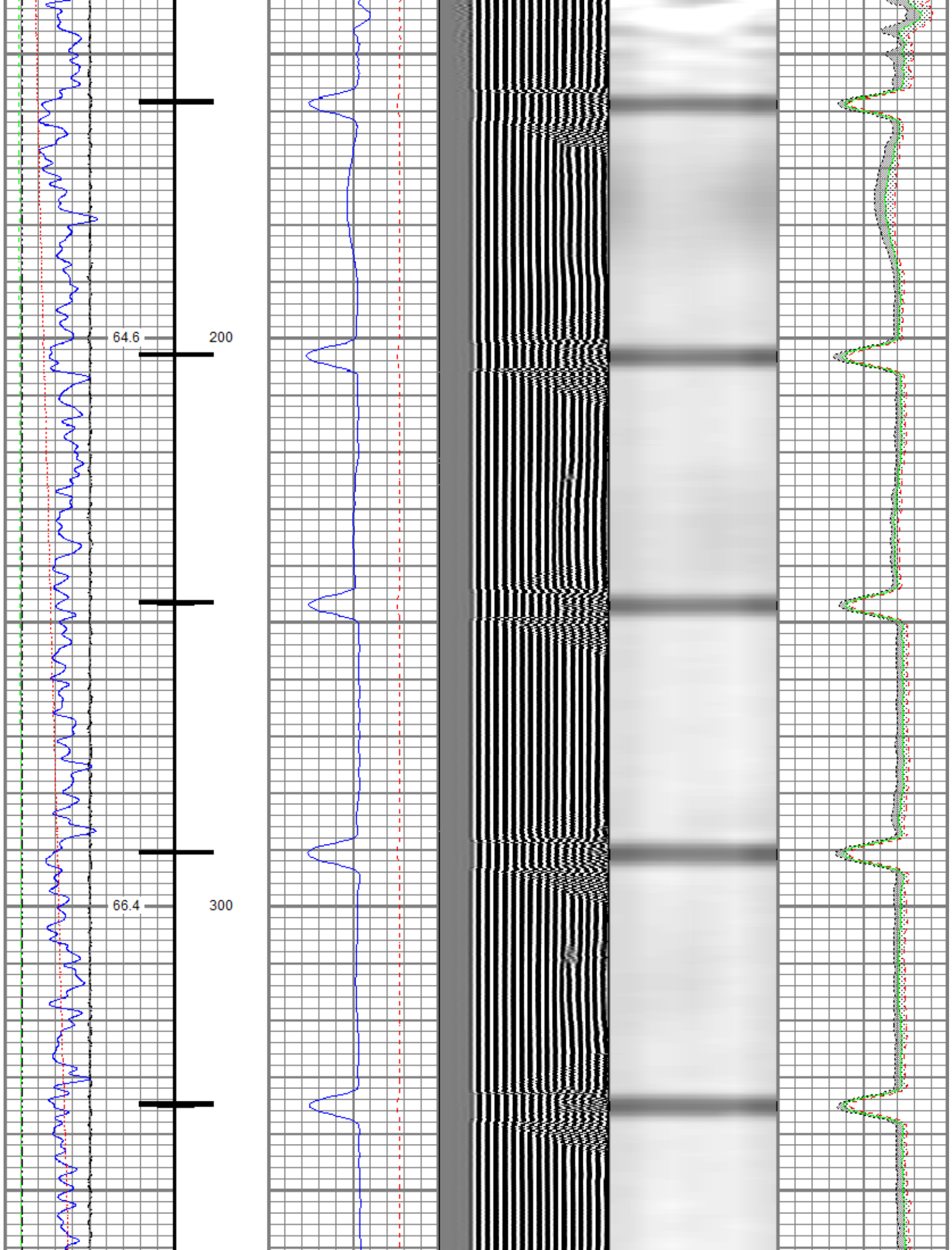


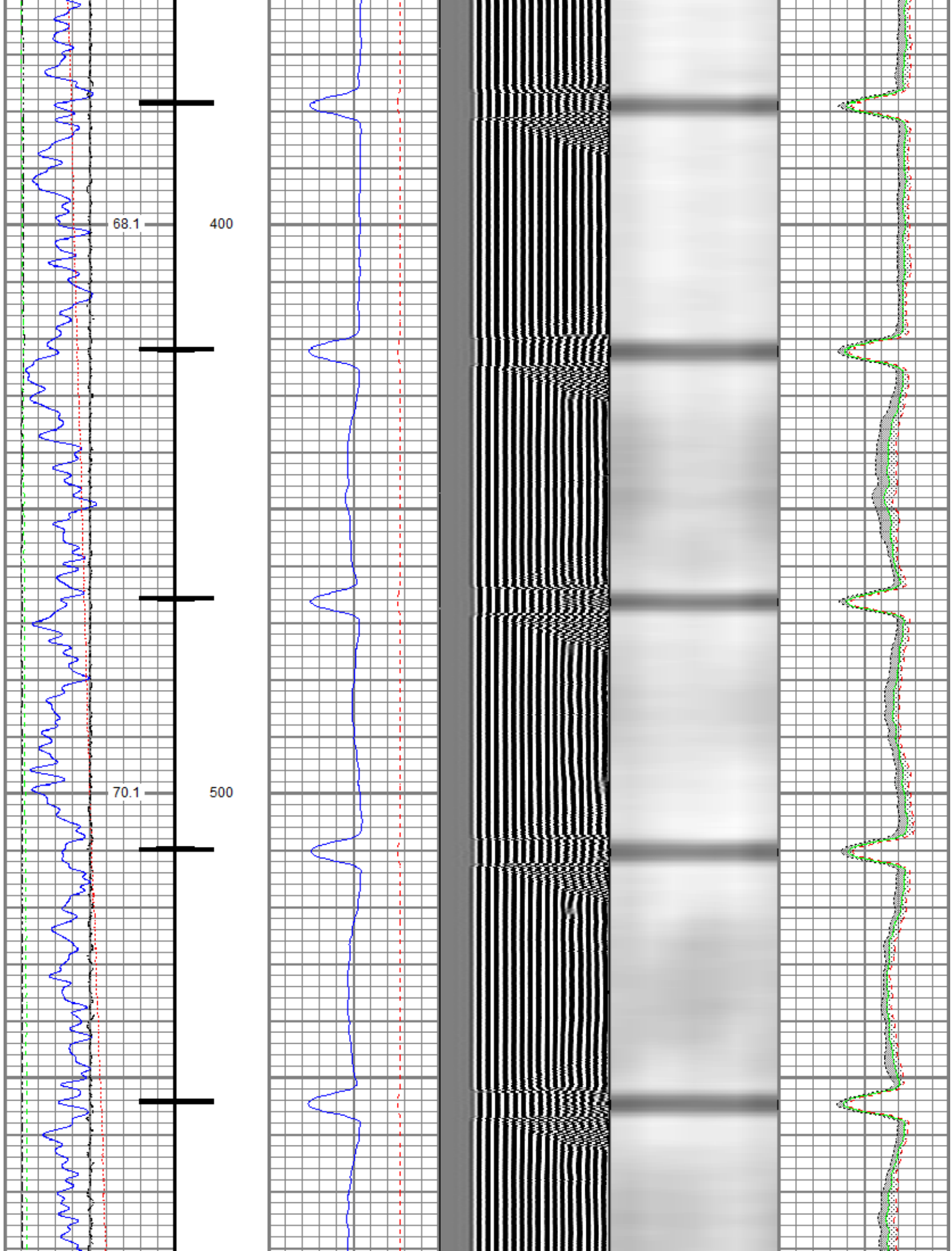
Recorded With 0 PSI Surface Induced Pressure

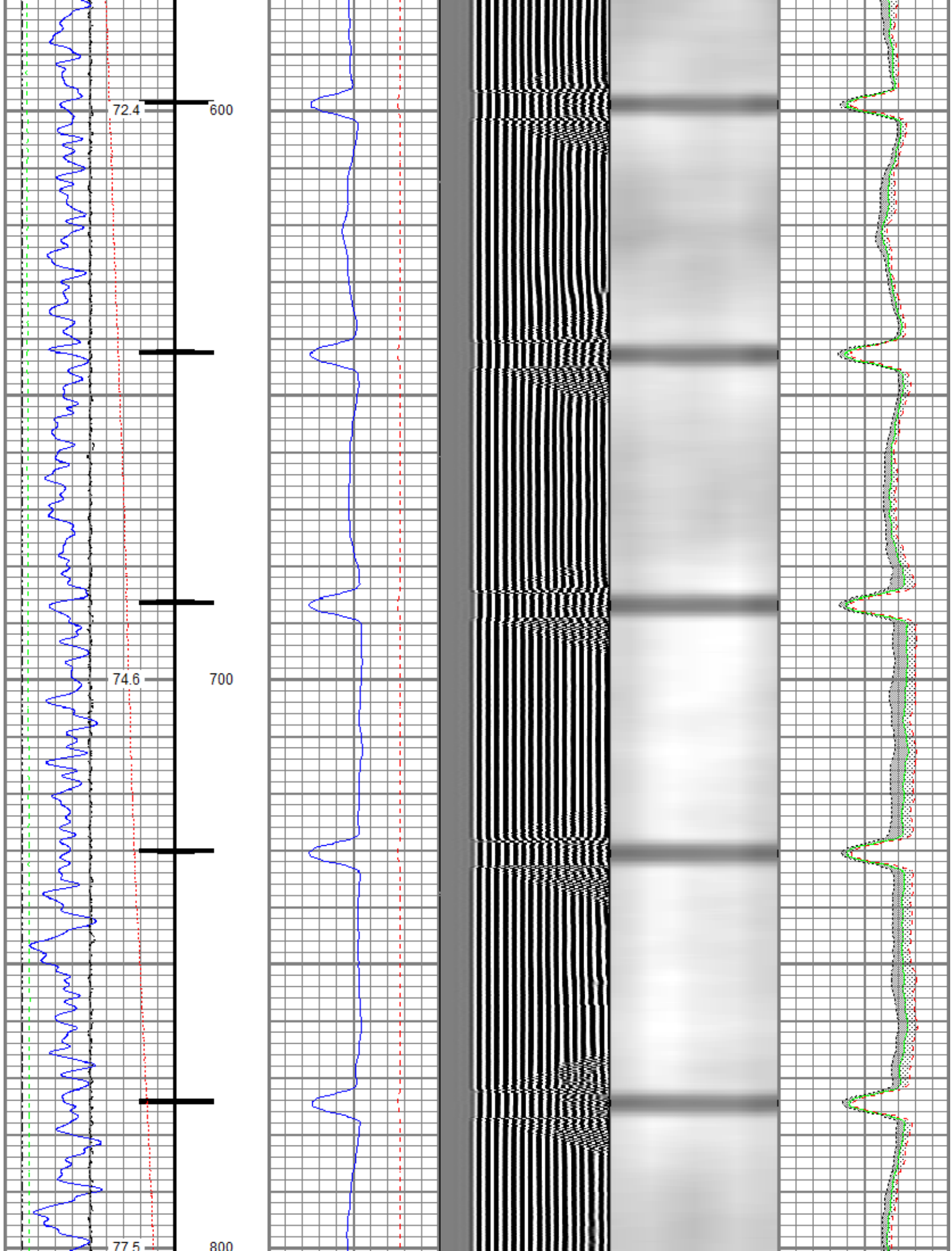
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Dataset Pathname	0rbl/pass17.3
Presentation Format	ros_radri
Dataset Creation	Thu Aug 01 12:51:06 2019
Charted by	Depth in Feet scaled 1:240

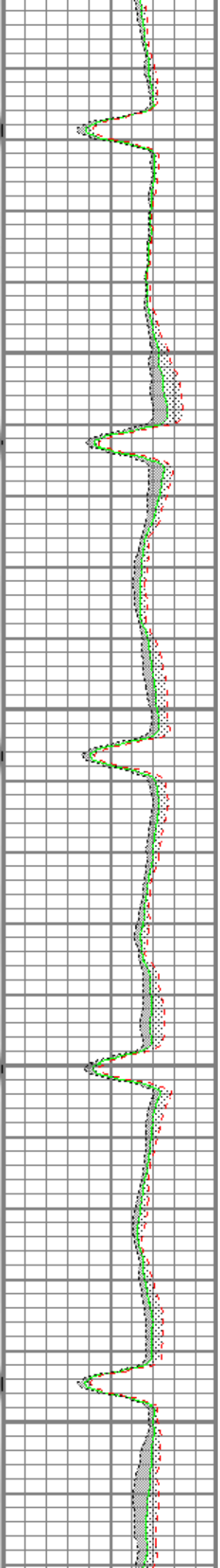
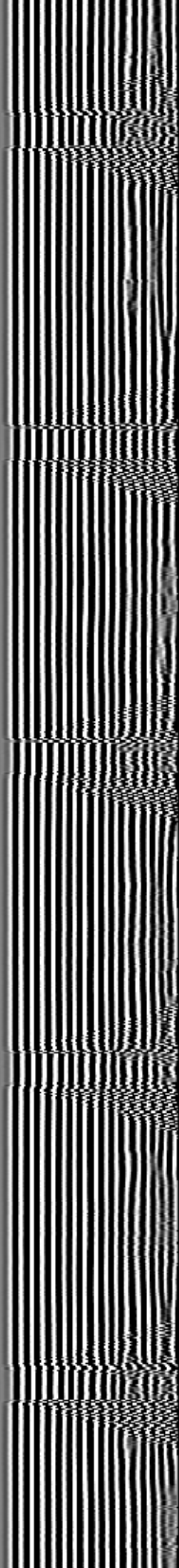
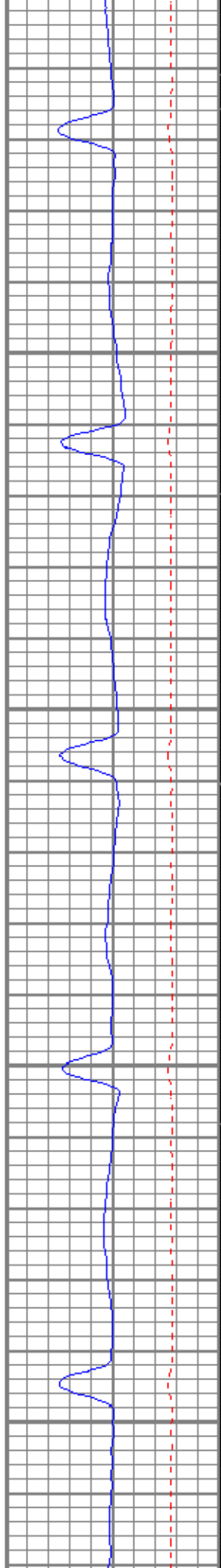
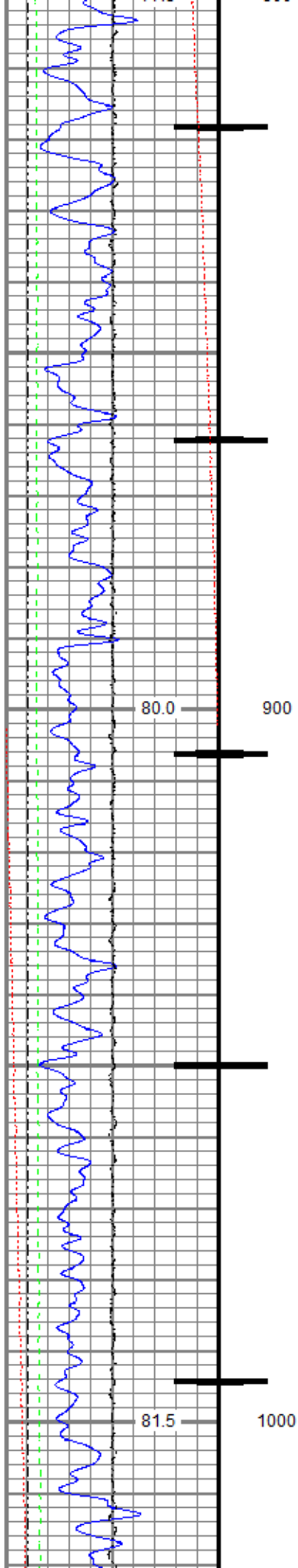
Gamma Ray	0	3' Amplitude (mV)	100	5' Variable Density Log	Sector Map	0	Average Amplitude 100
(GAPI)	120	3' Amplitude x 5	200	(usec)	1200		Minimum Amplitude
Casing Collar Locator		0	(mV)	20		0	100
0 Temperature (degF)	20	3' Travel Time					Maximum Amplitude
Line Speed		650	(usec)	150		0	100
-150 (ft/min)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

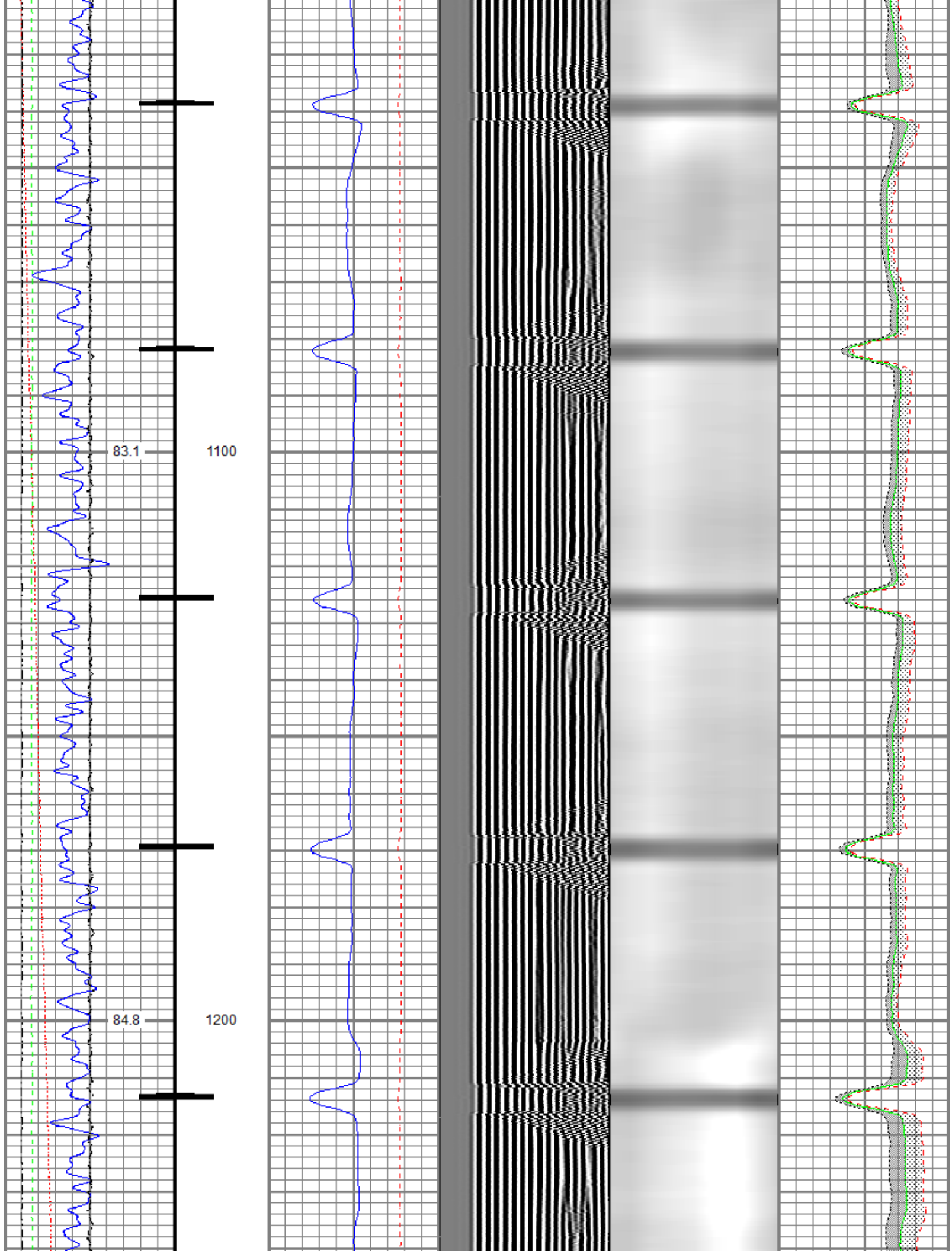


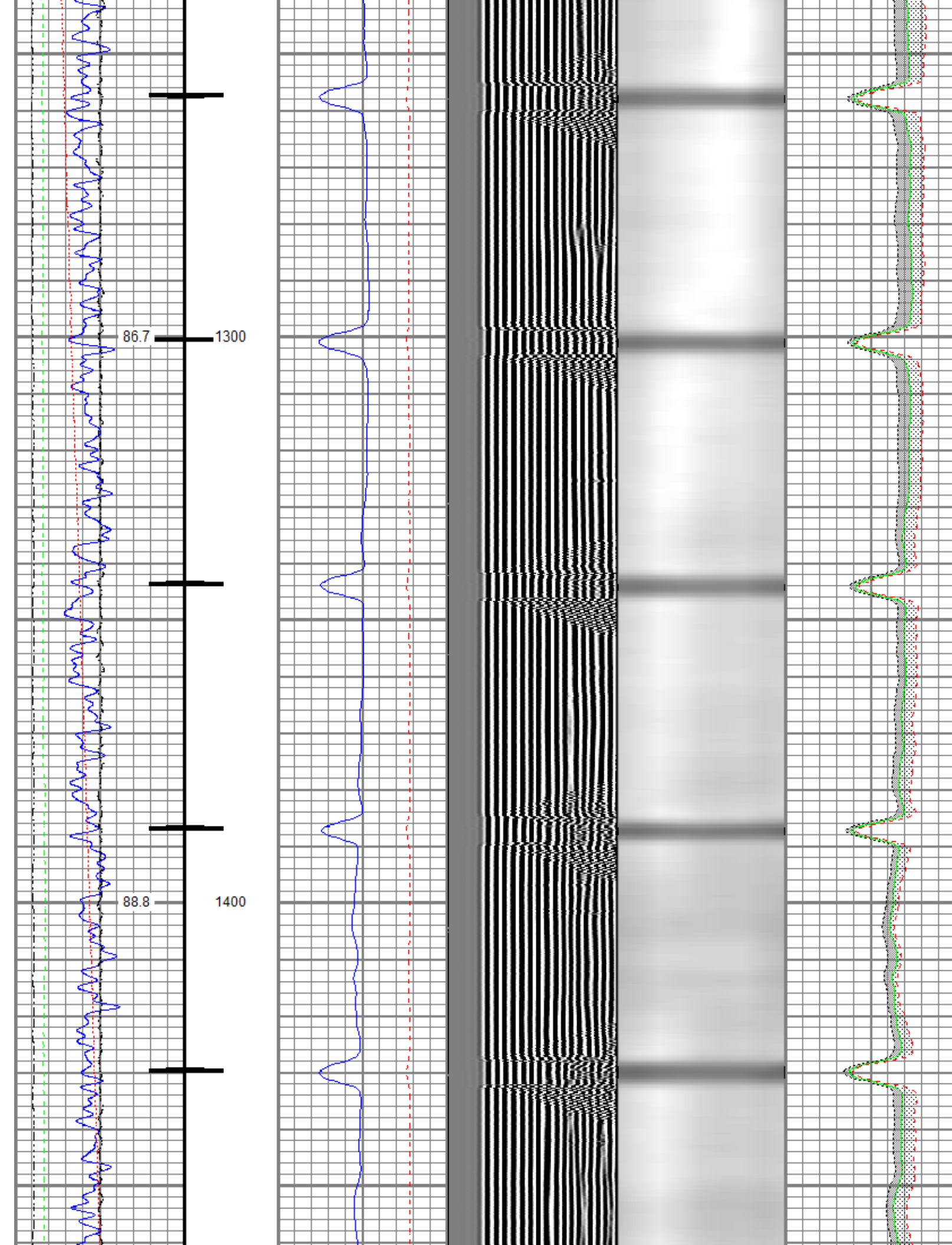


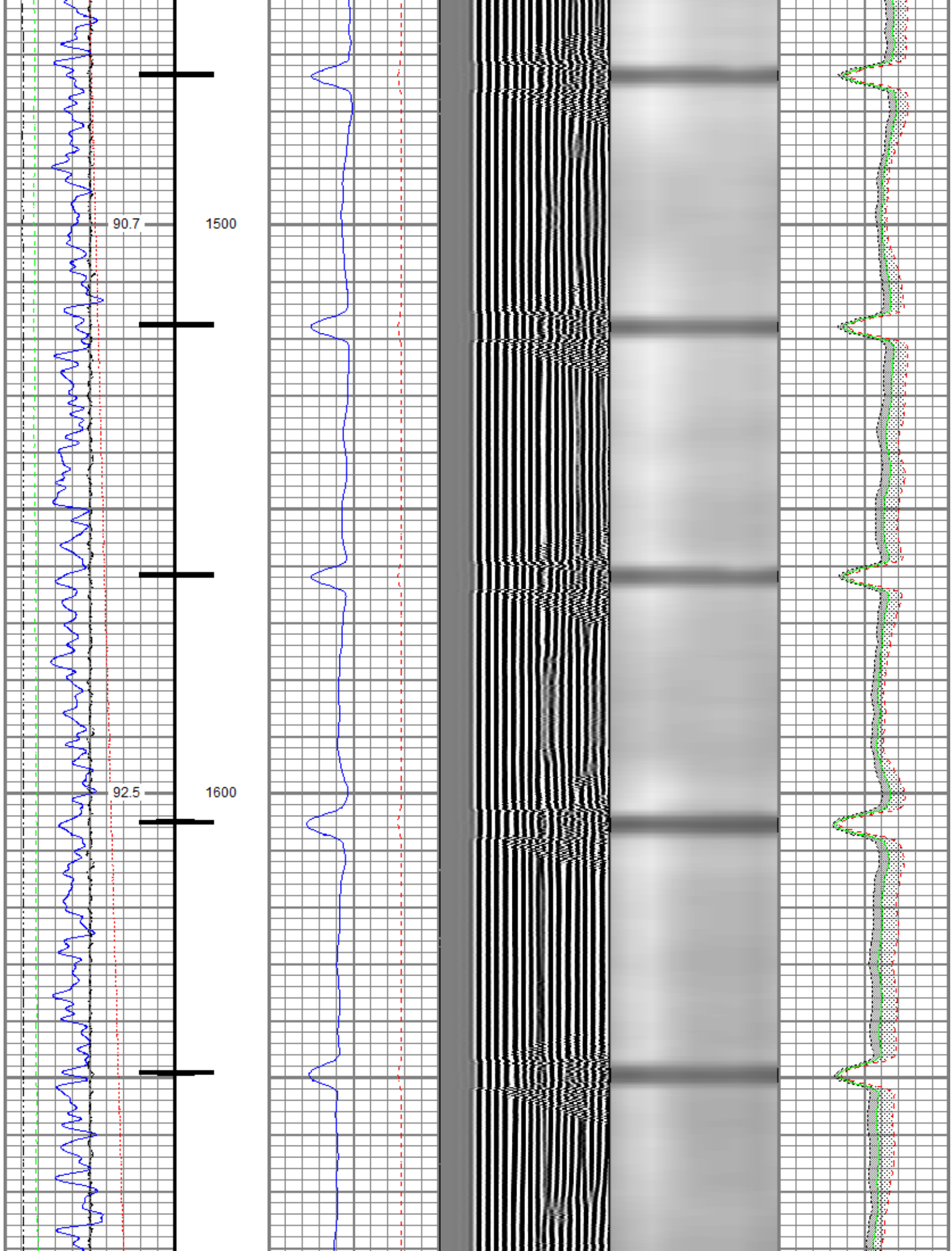


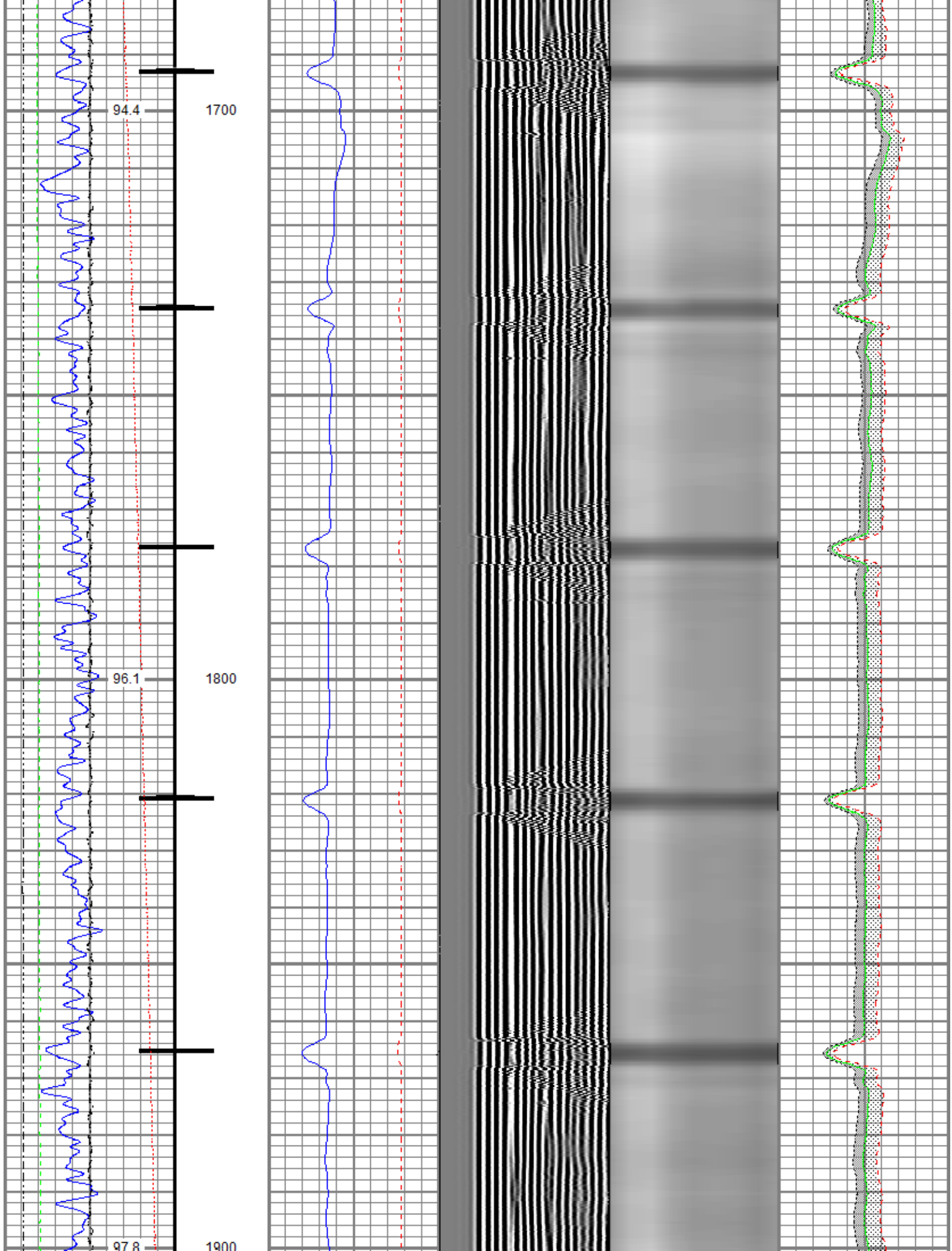


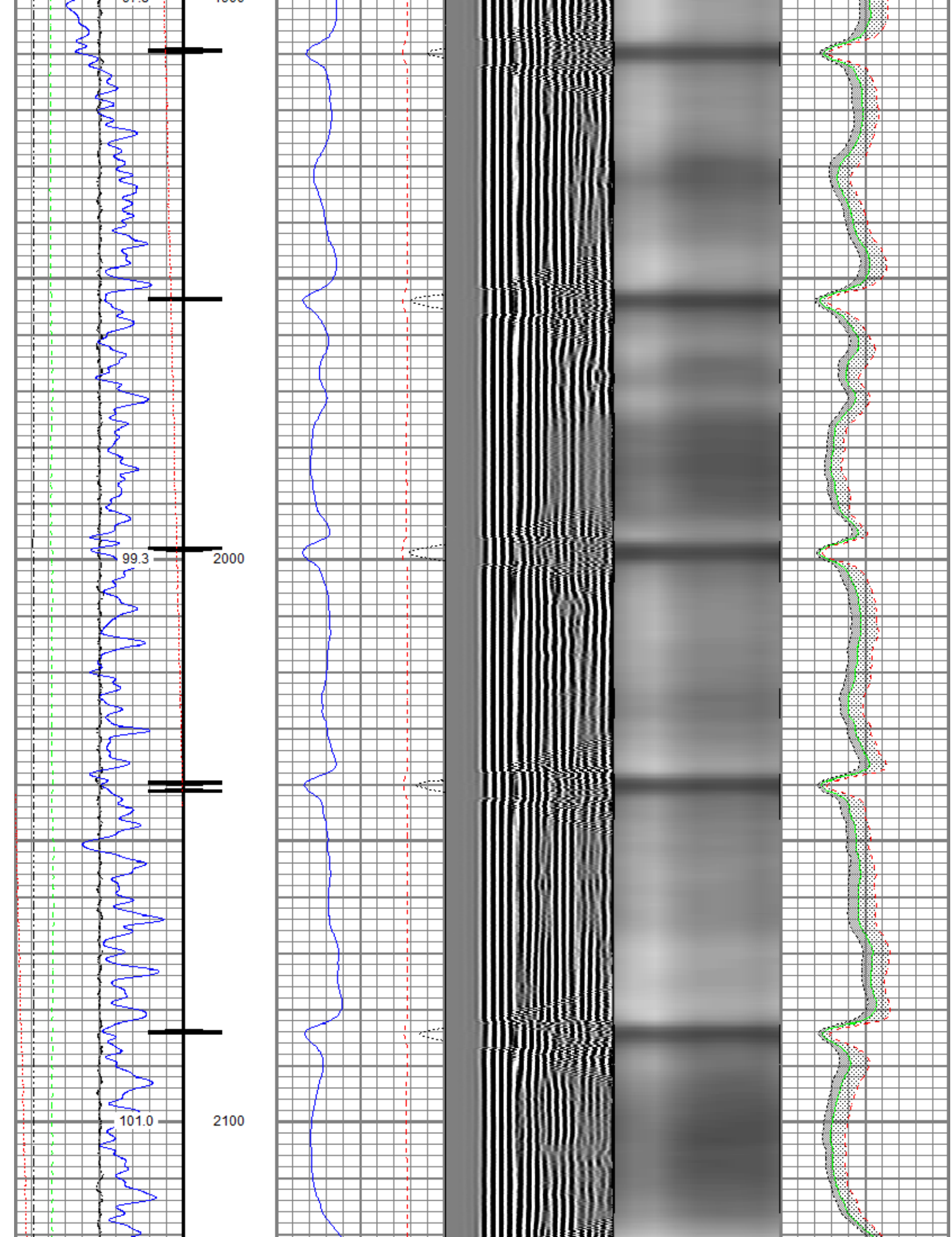


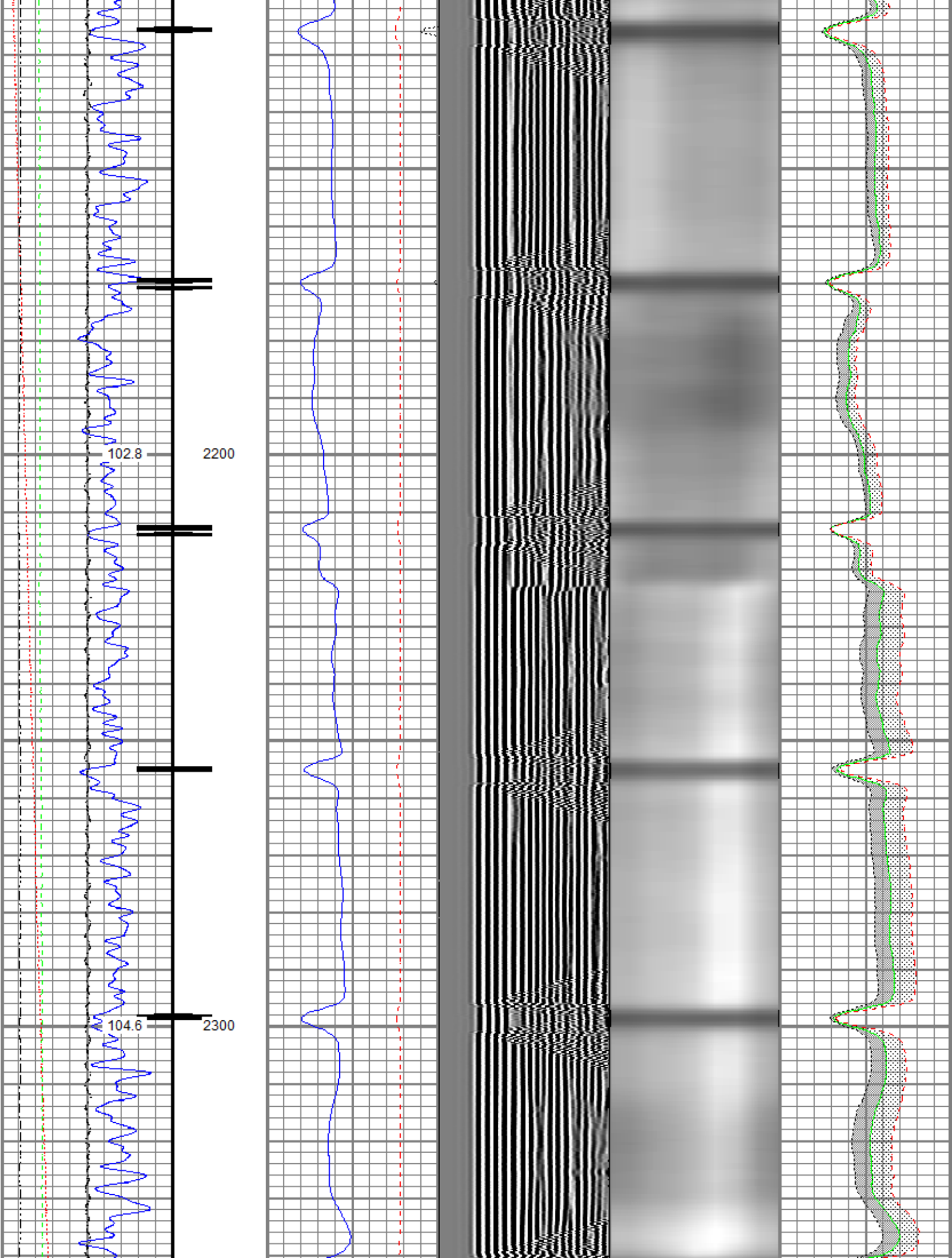


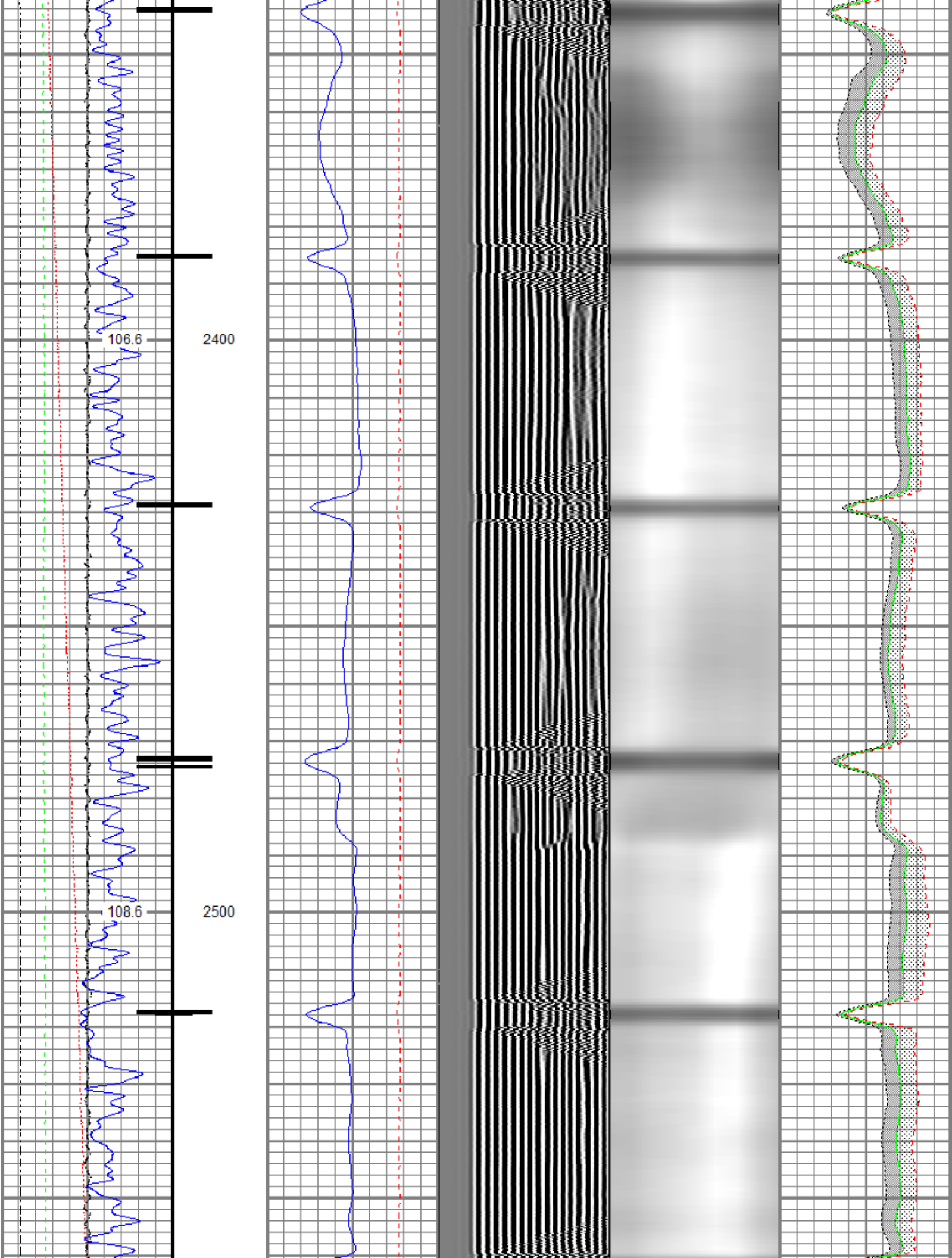


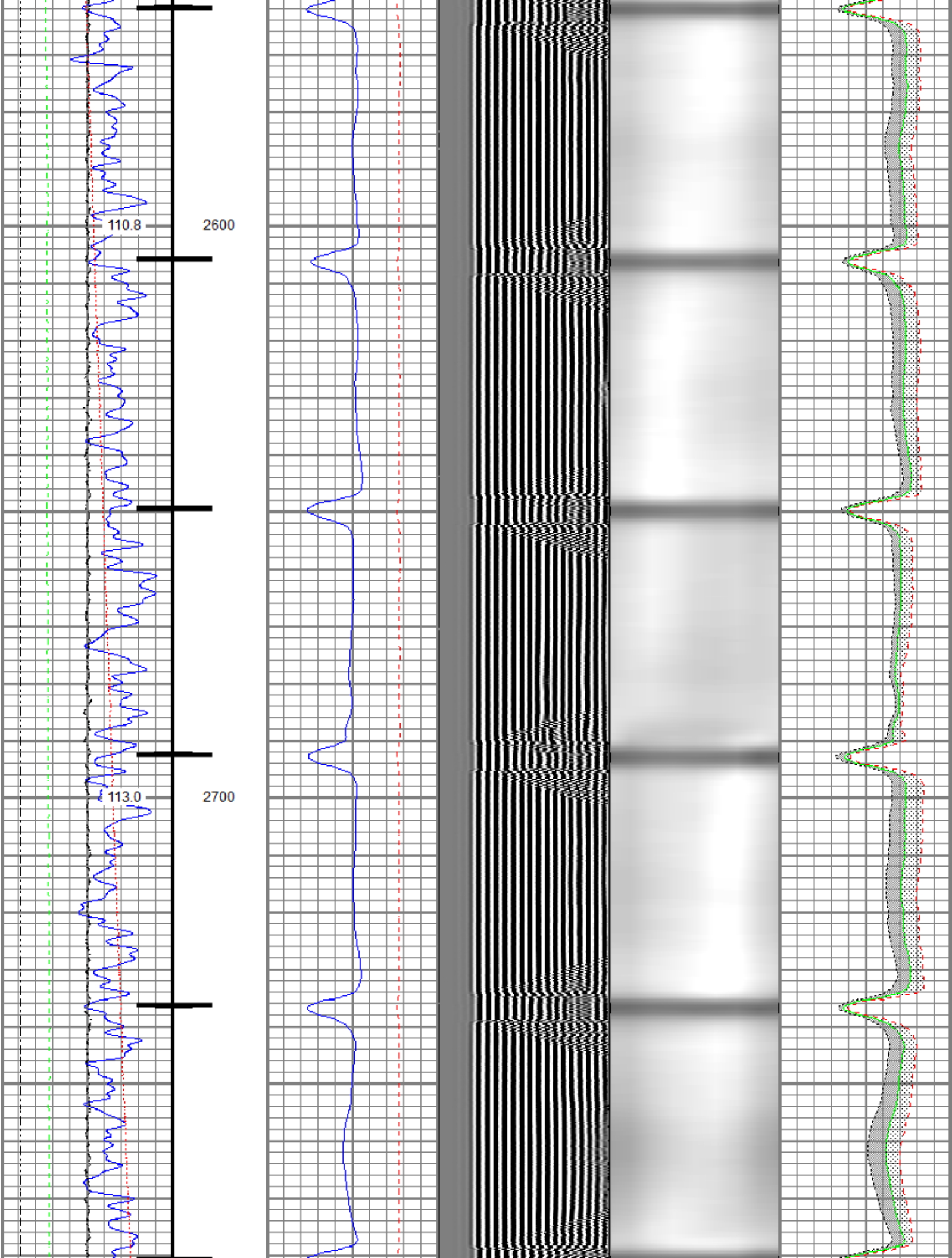


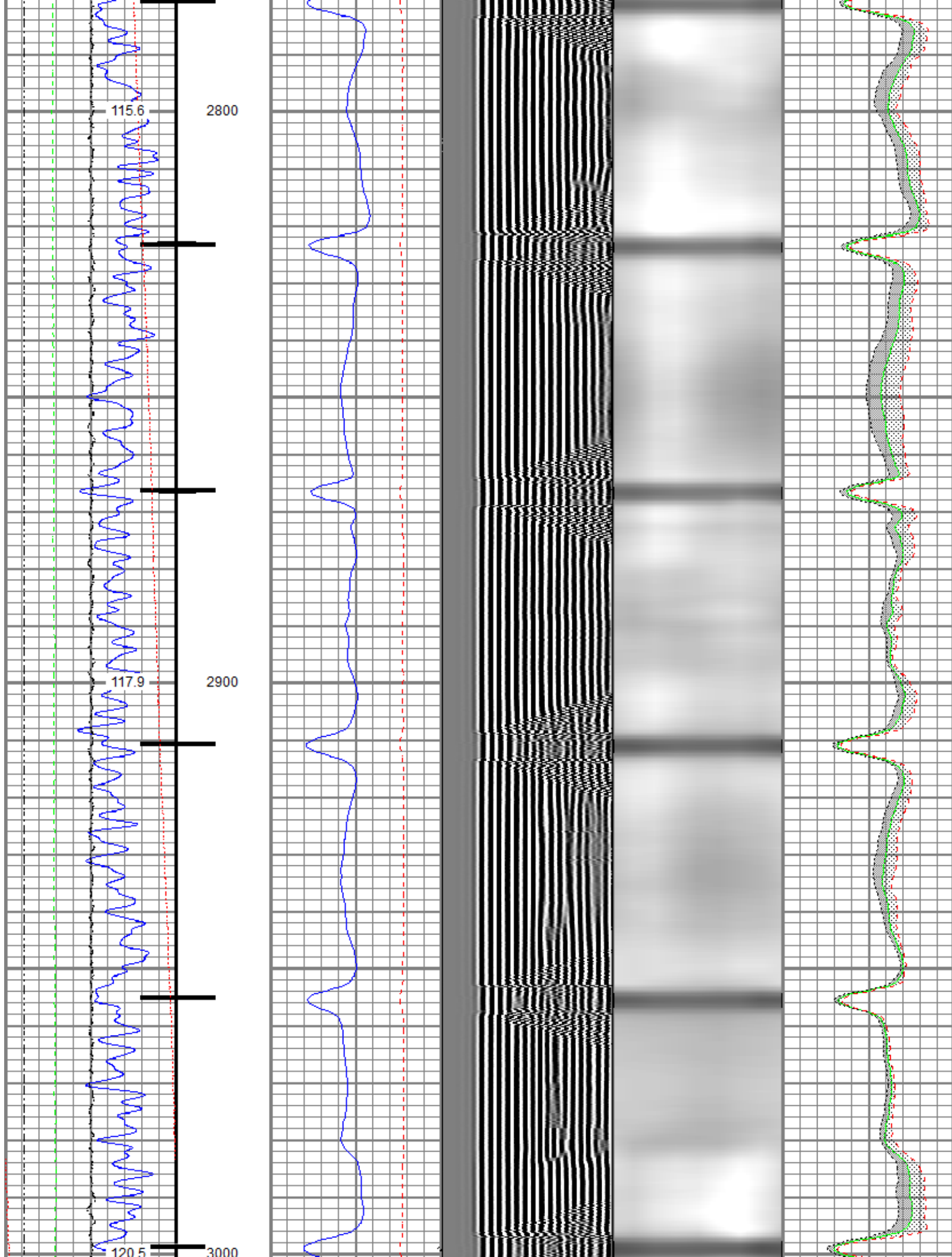


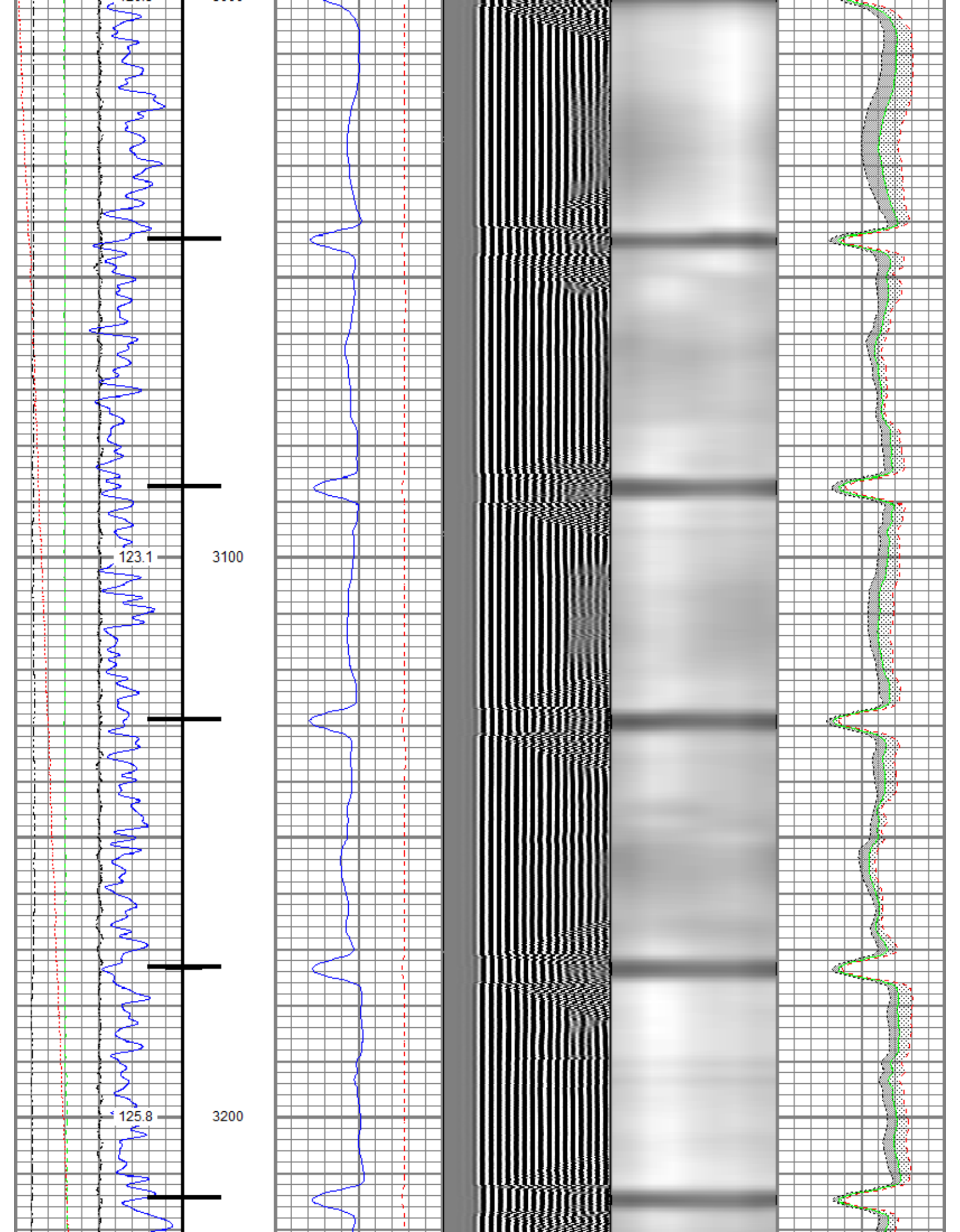


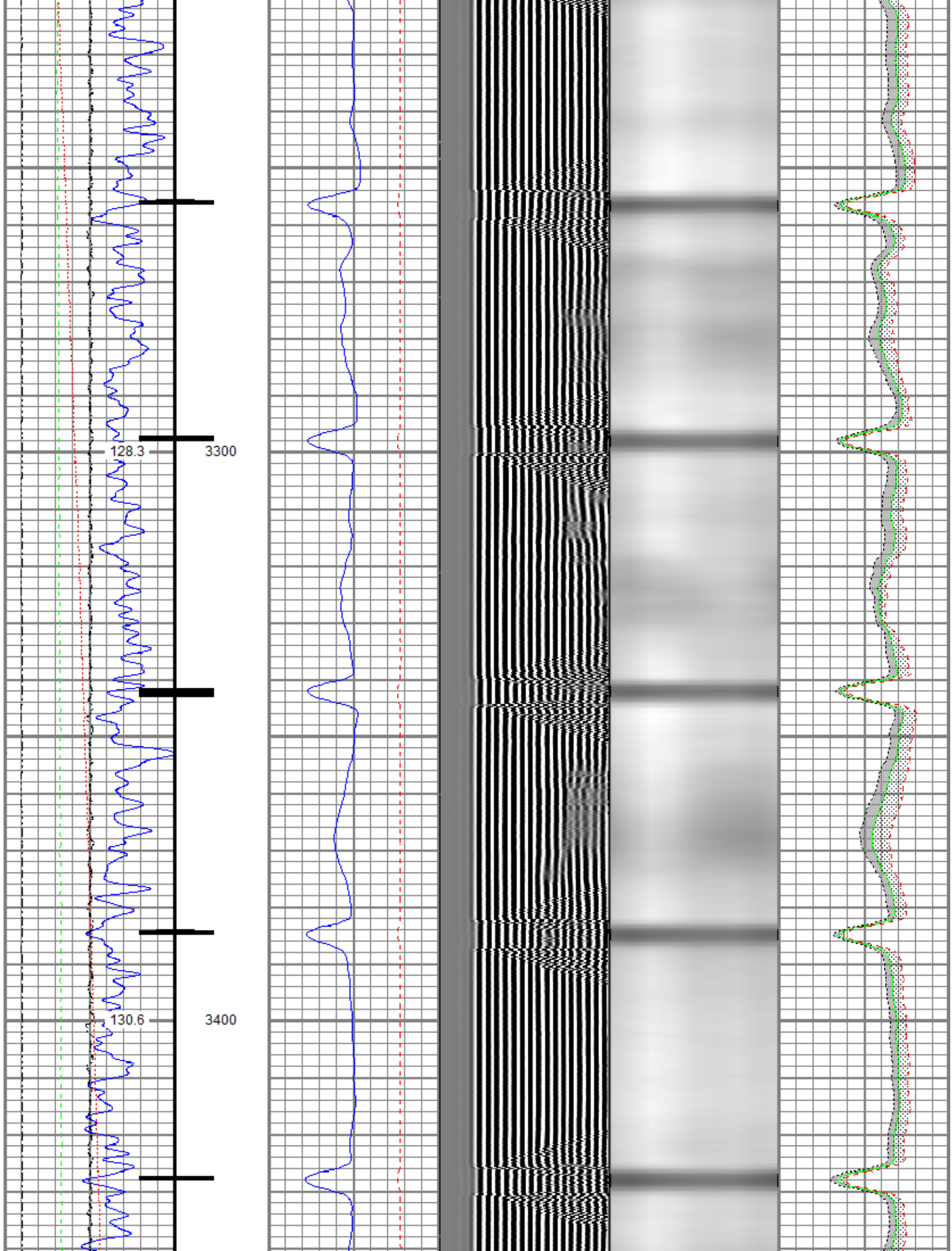


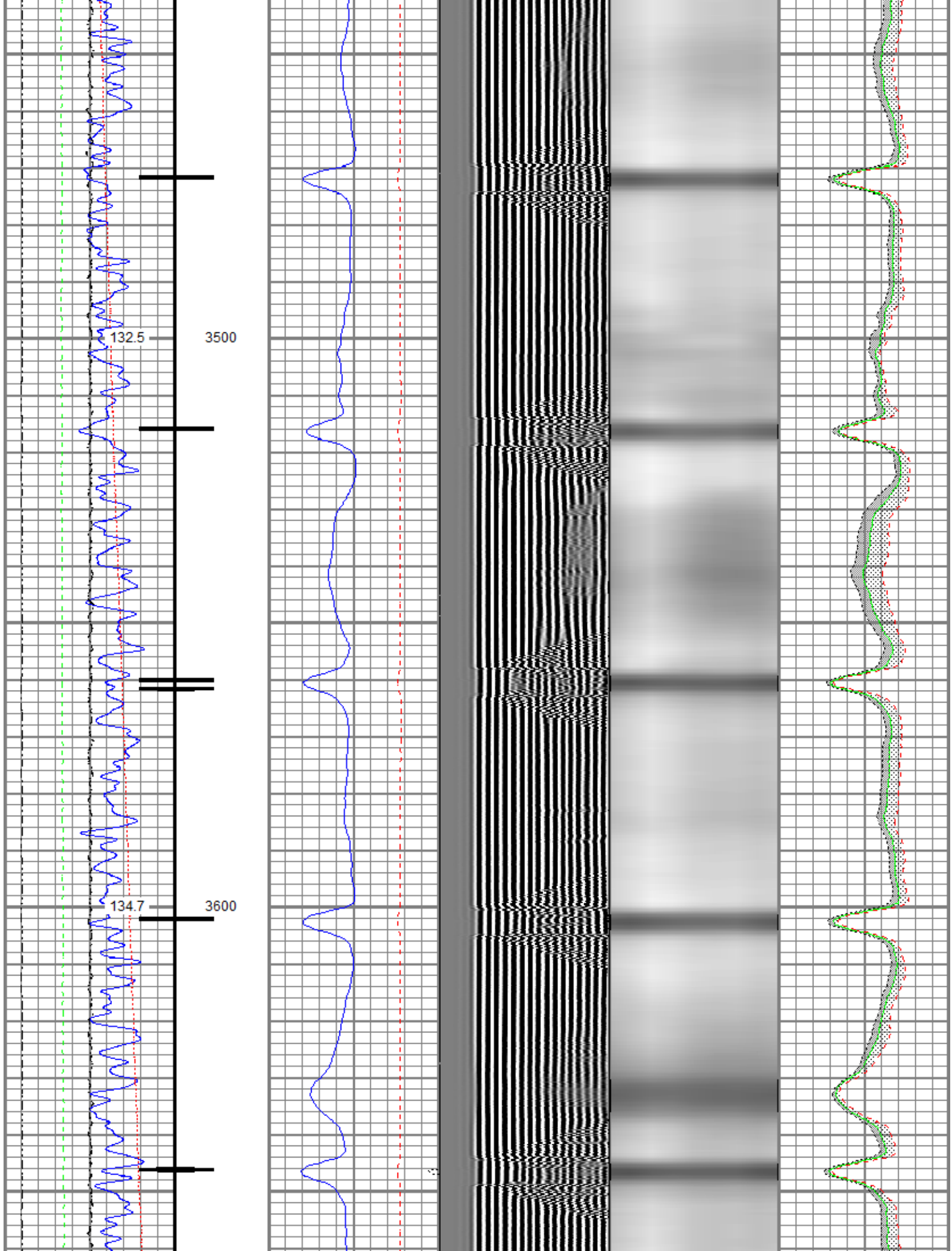


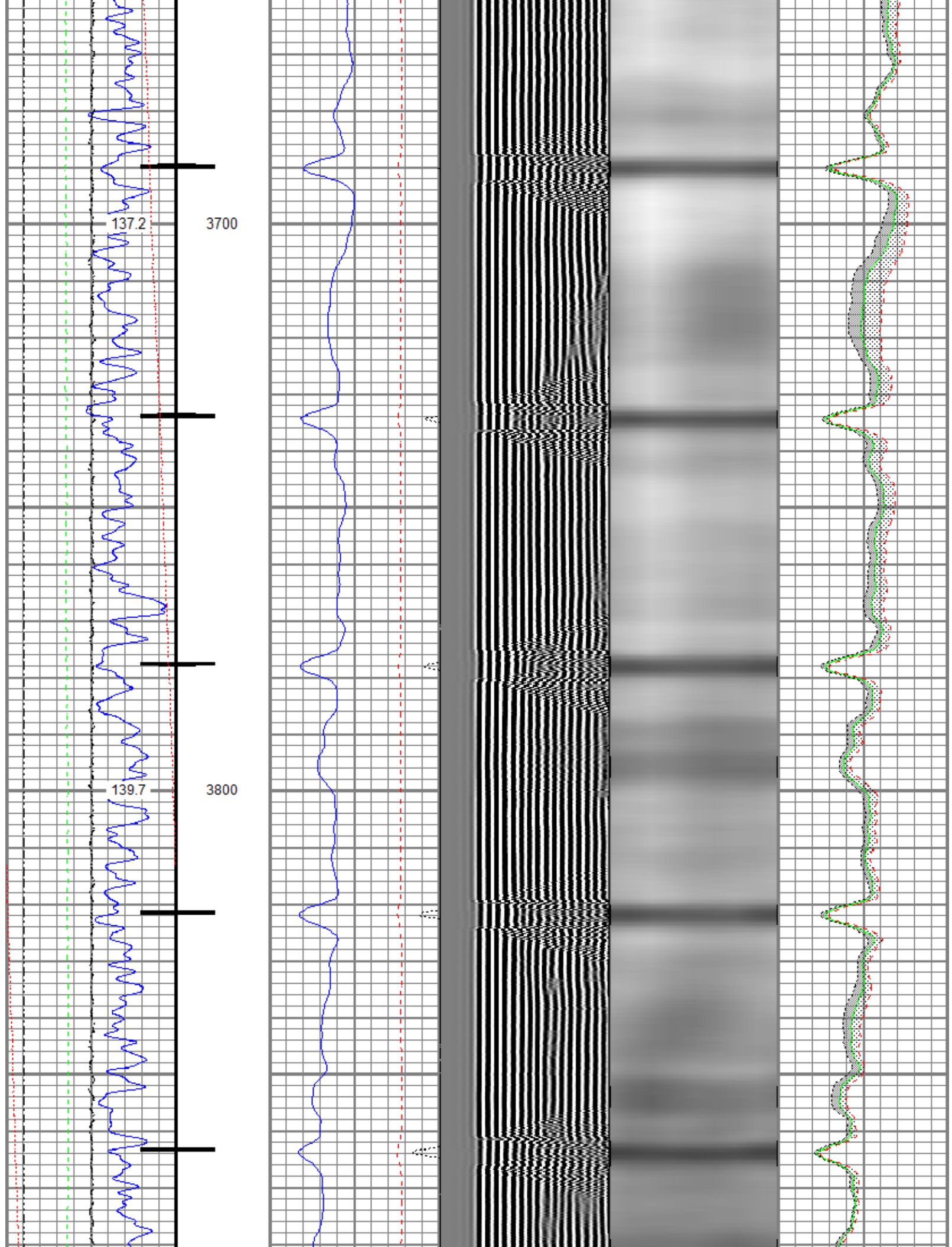


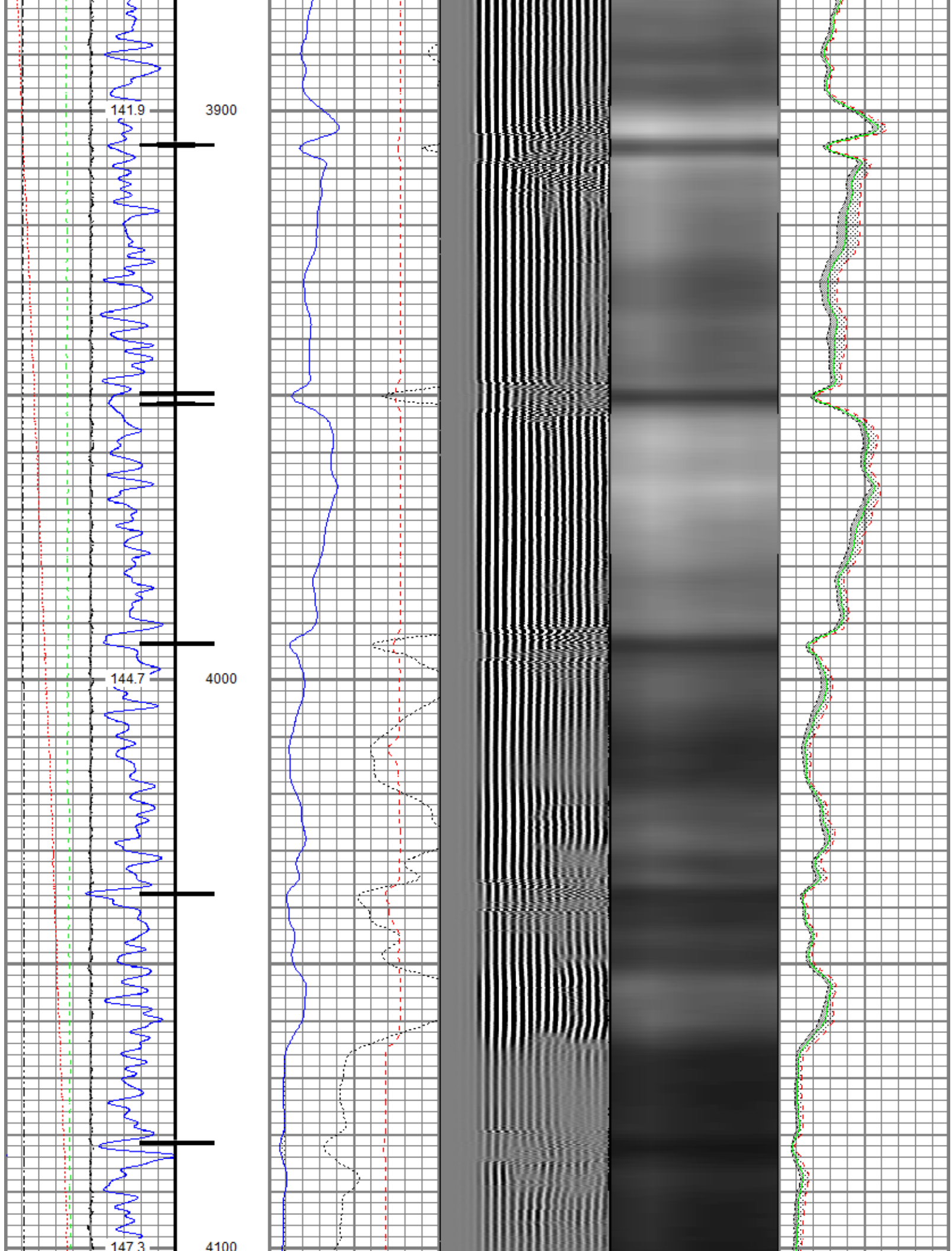


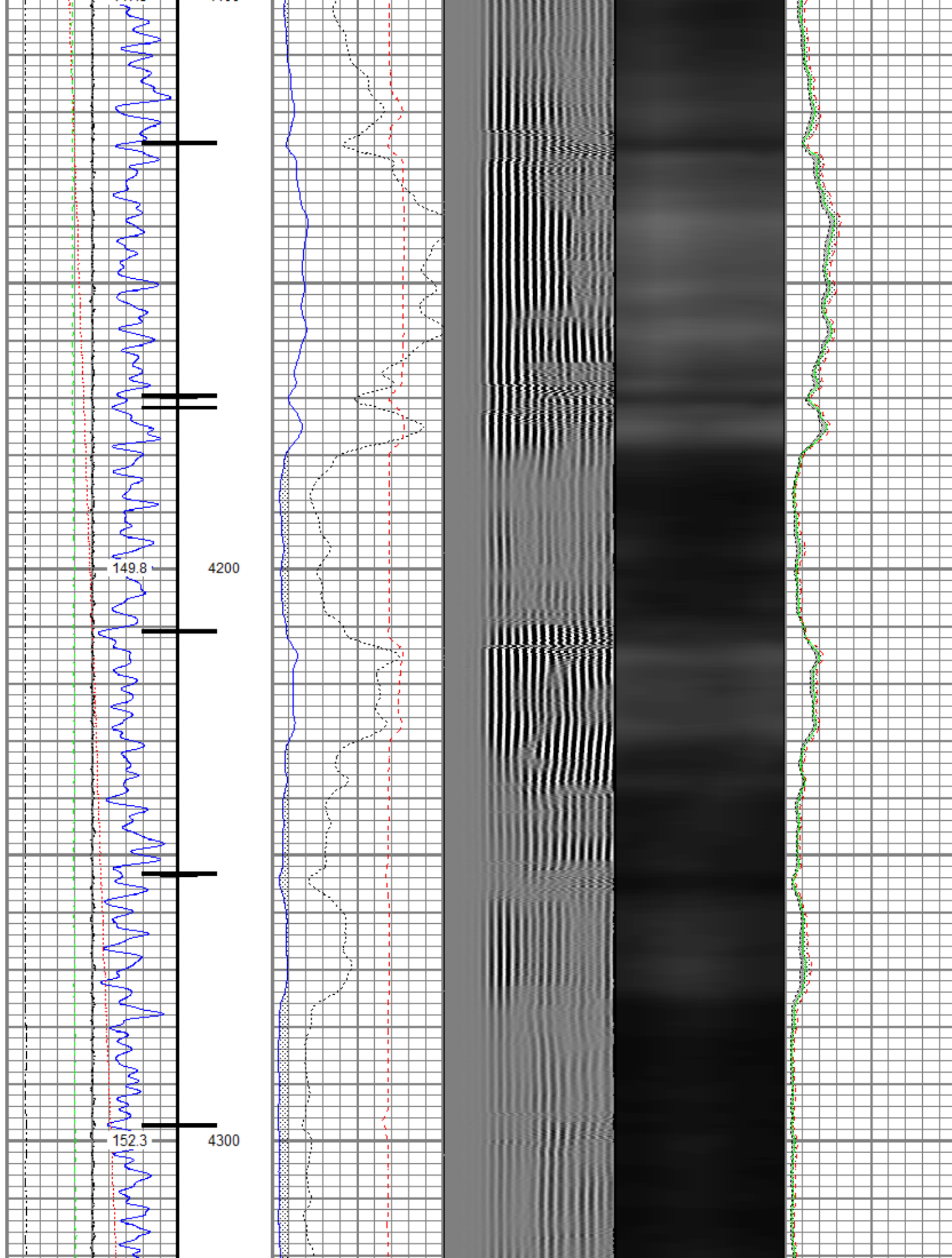


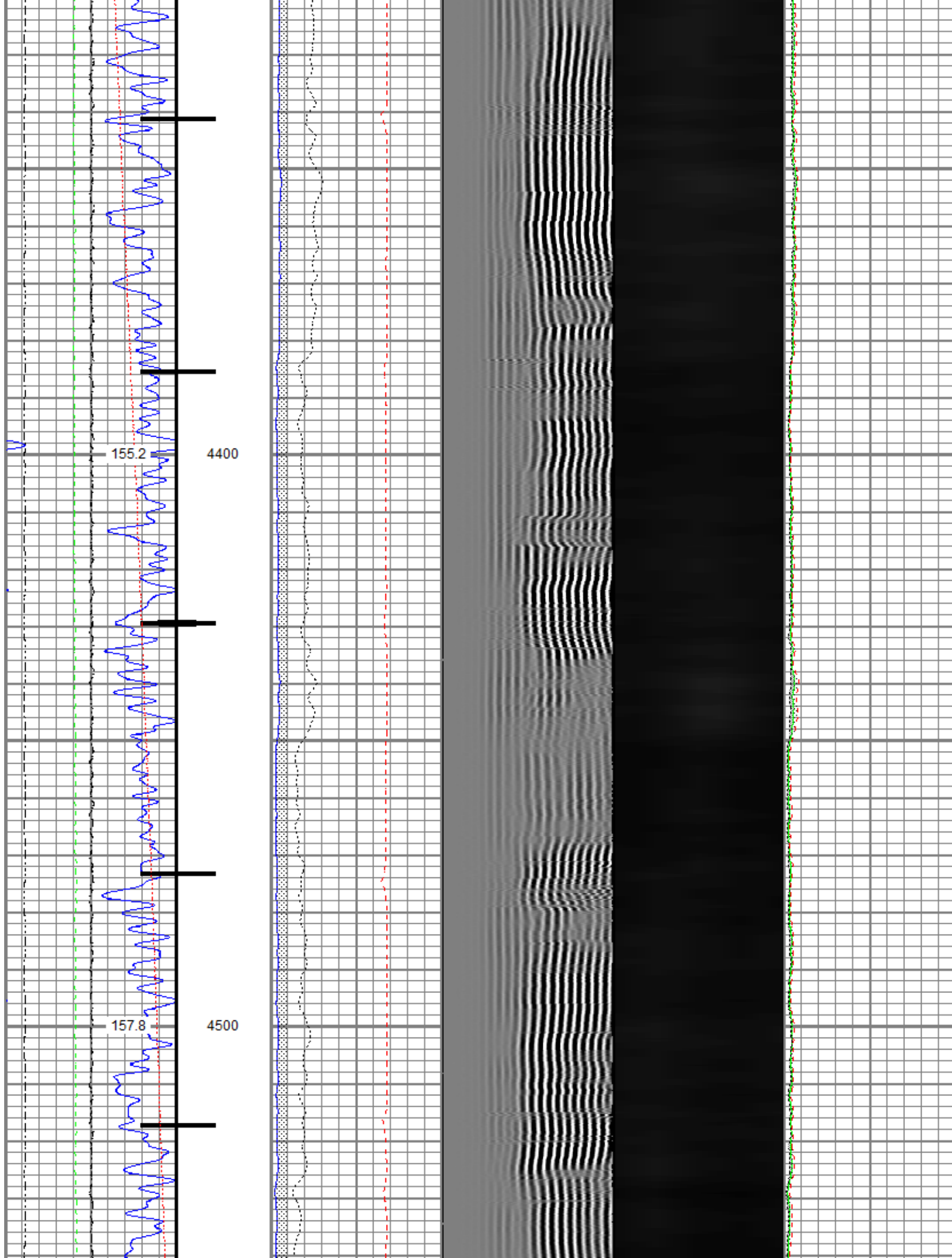


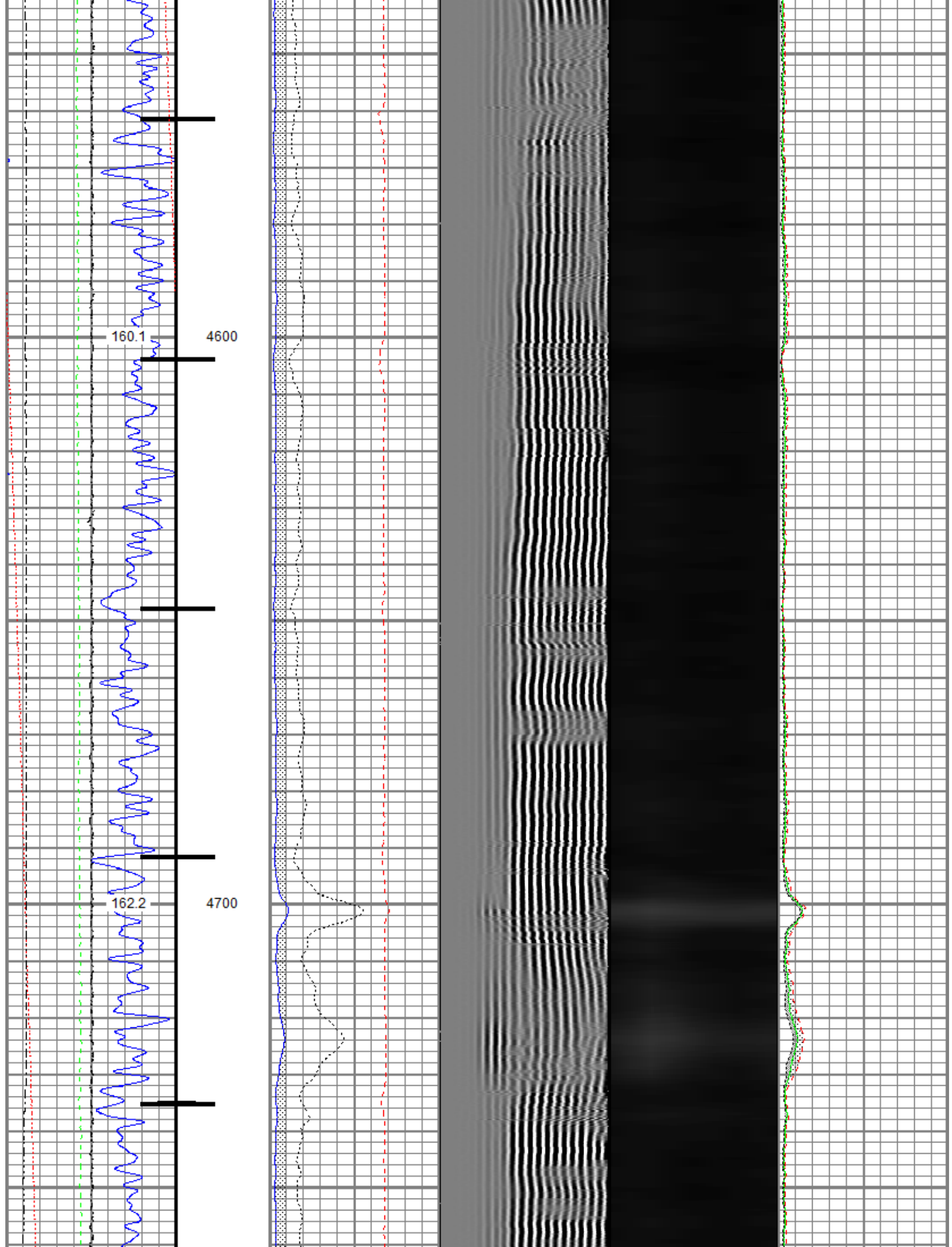


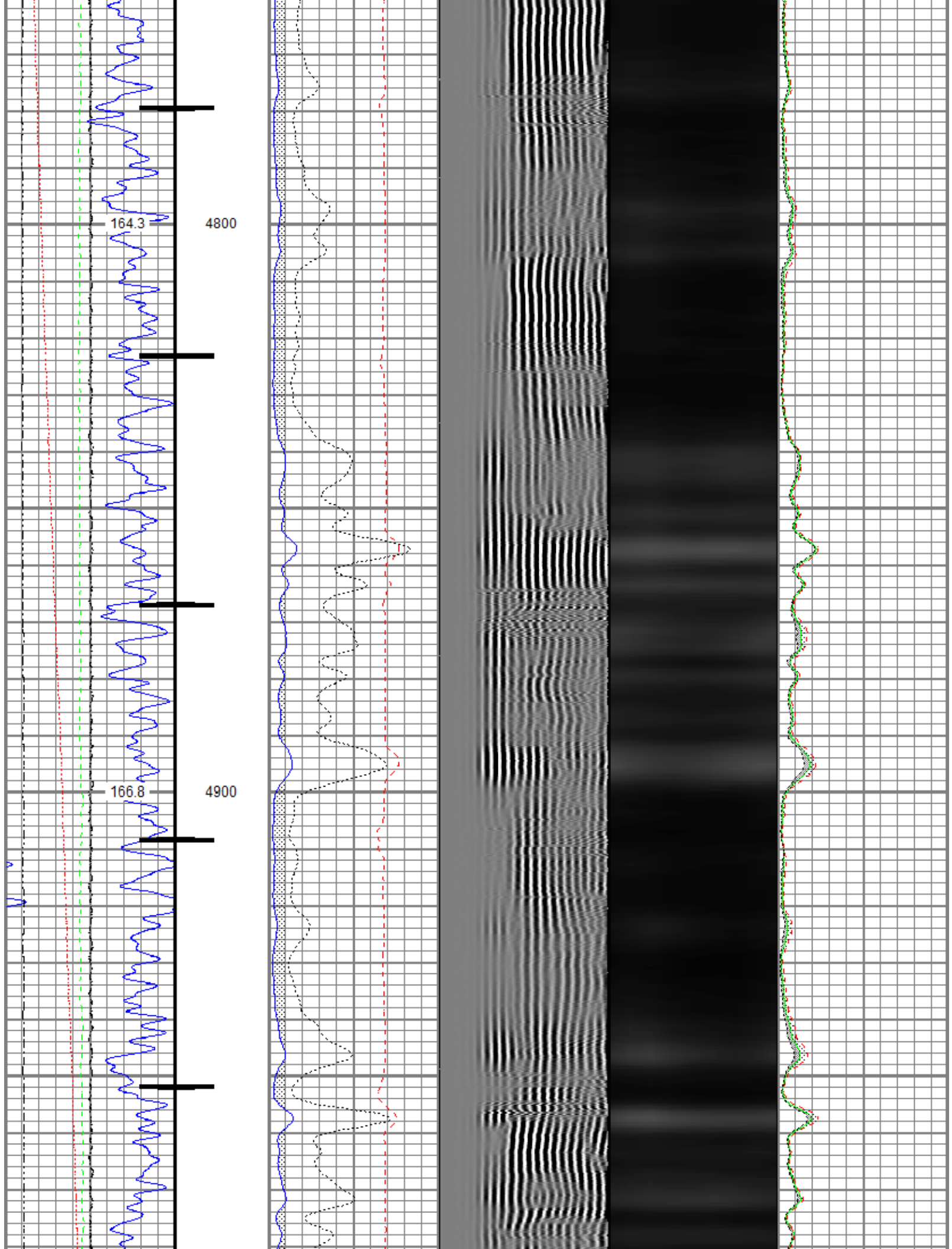


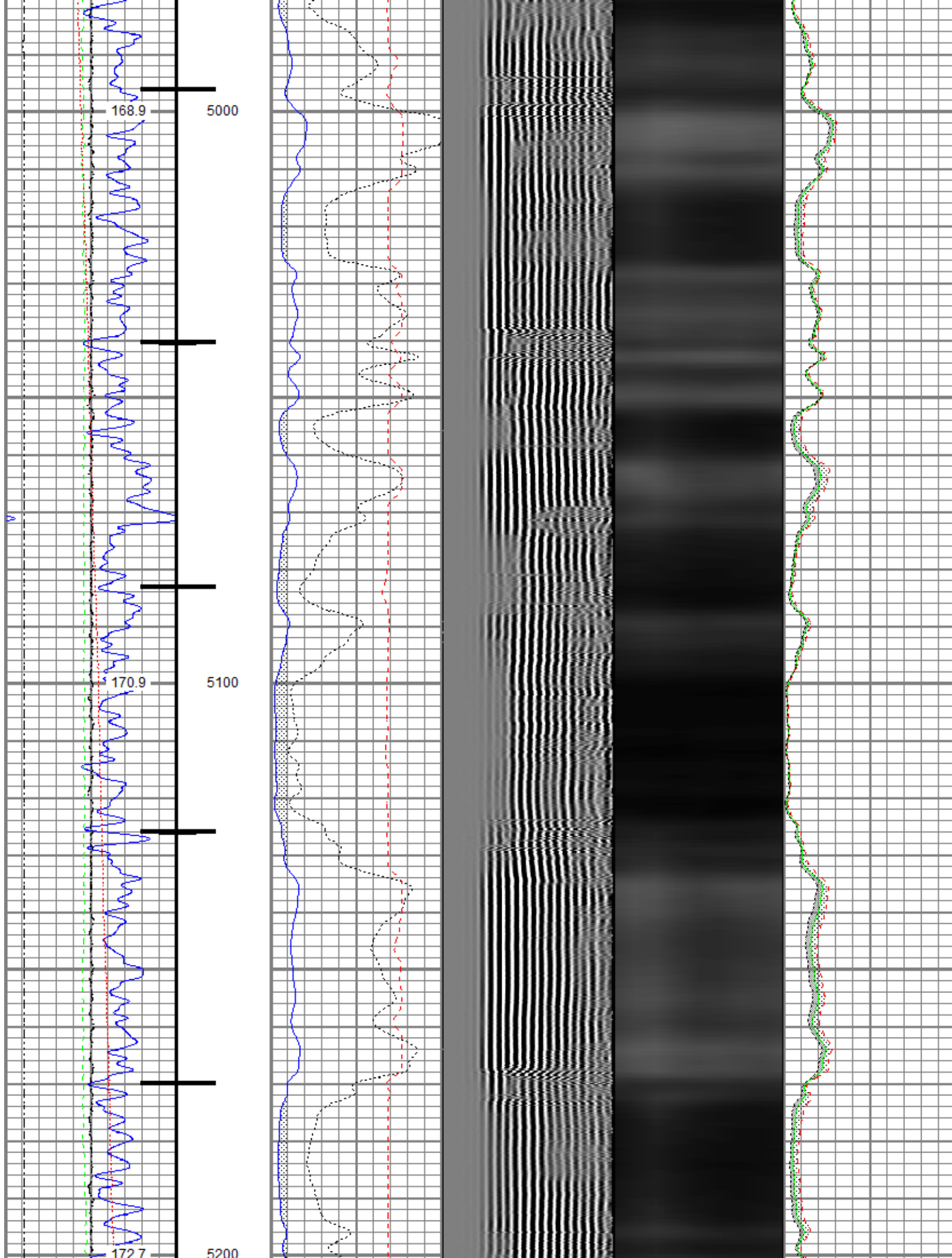


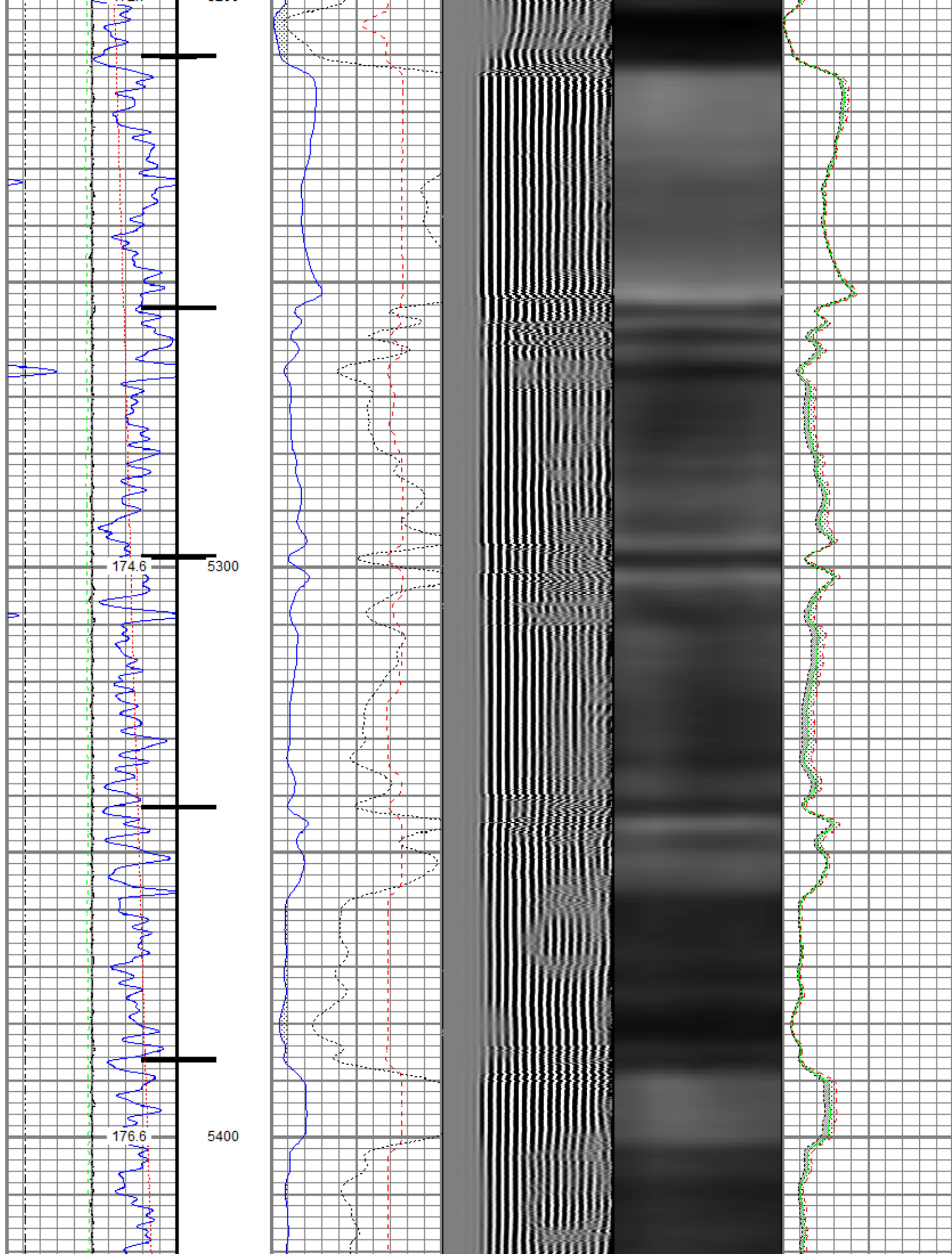


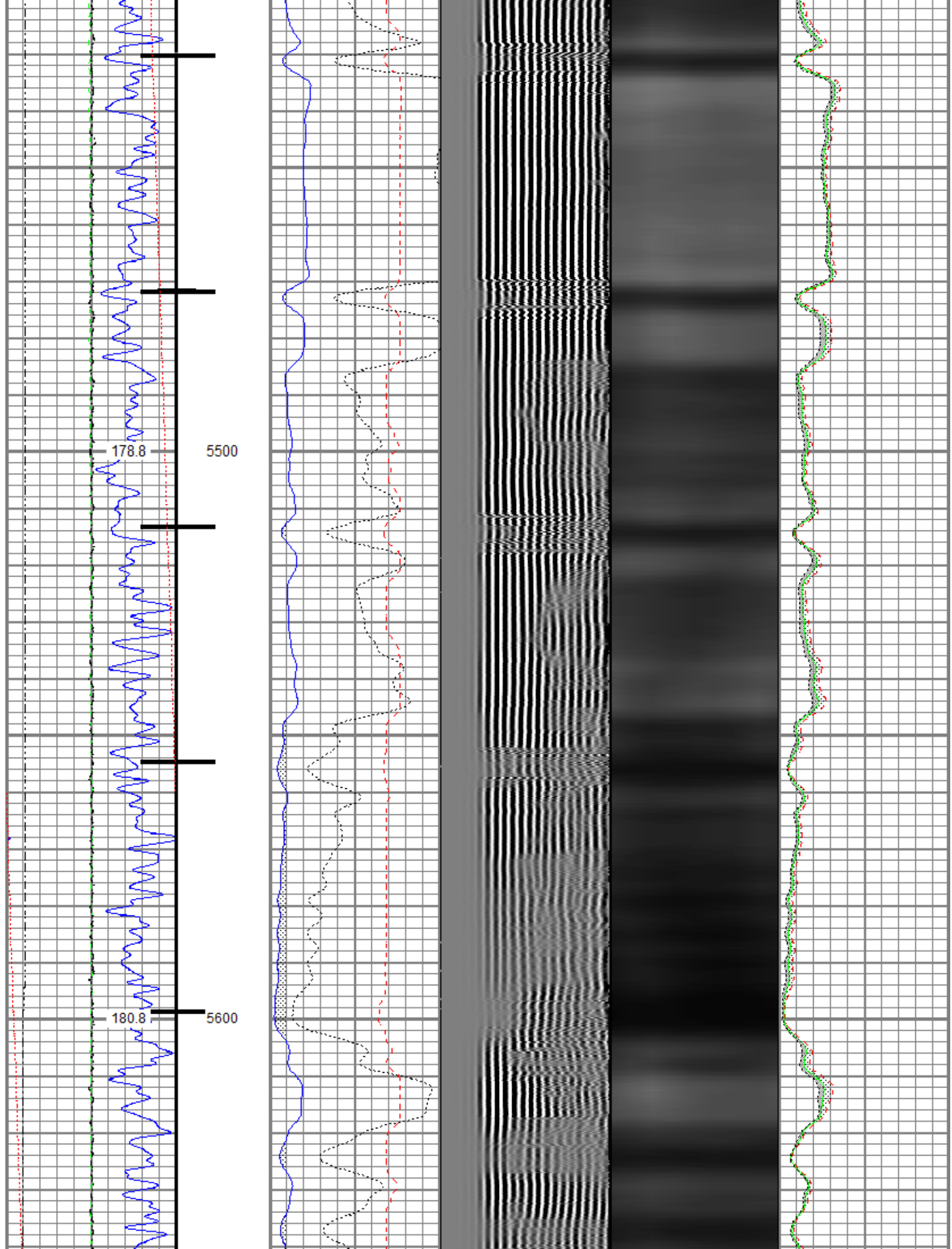


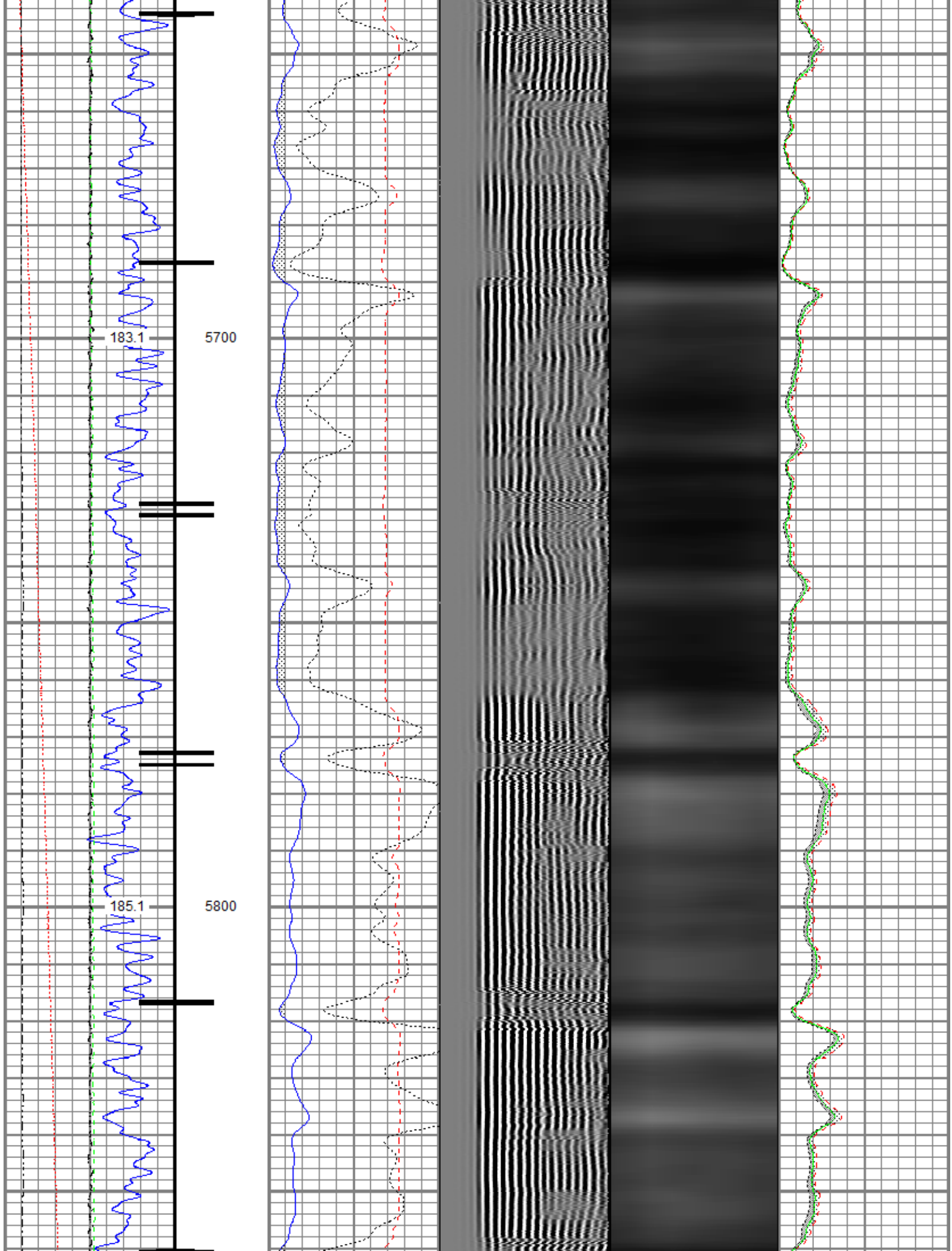


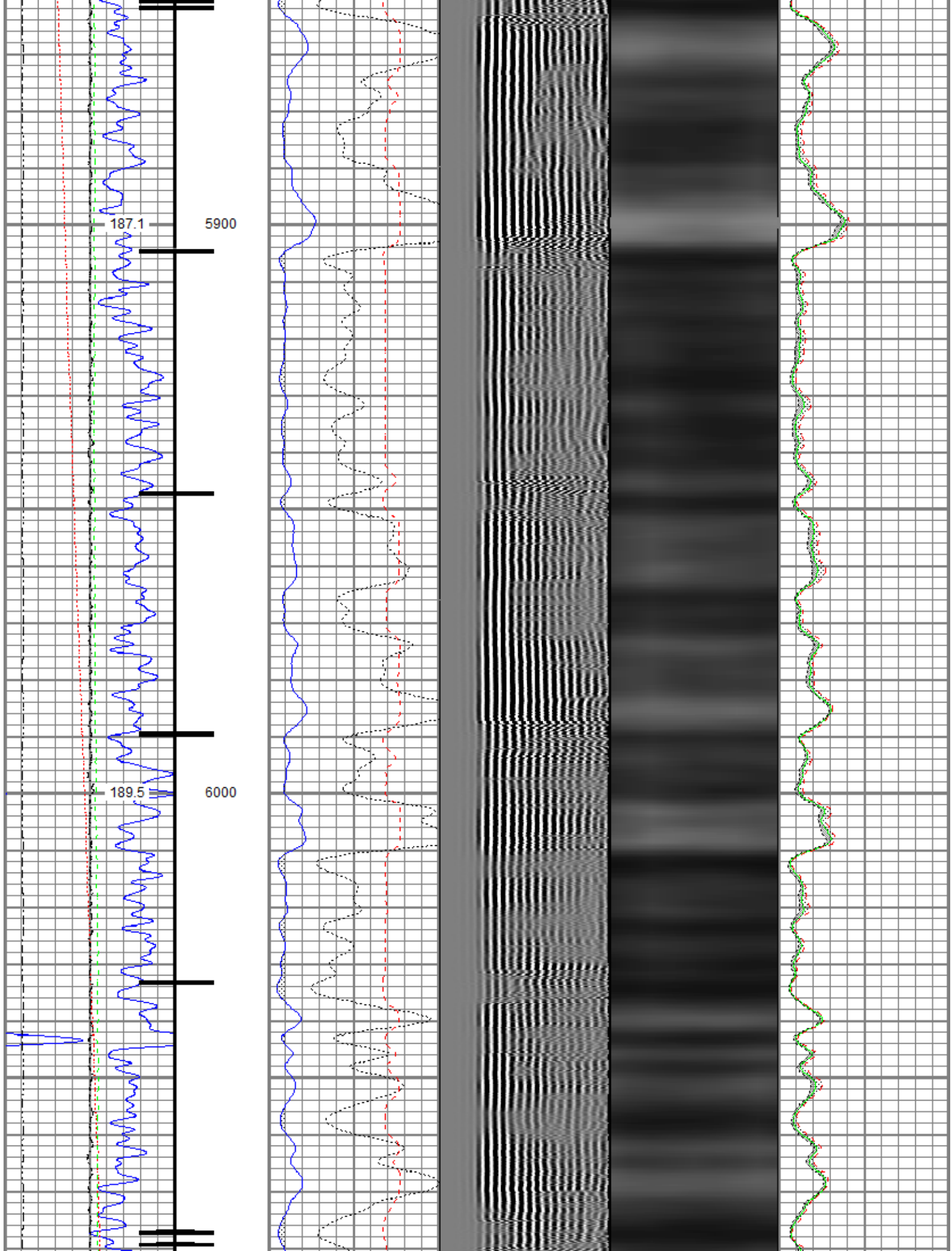


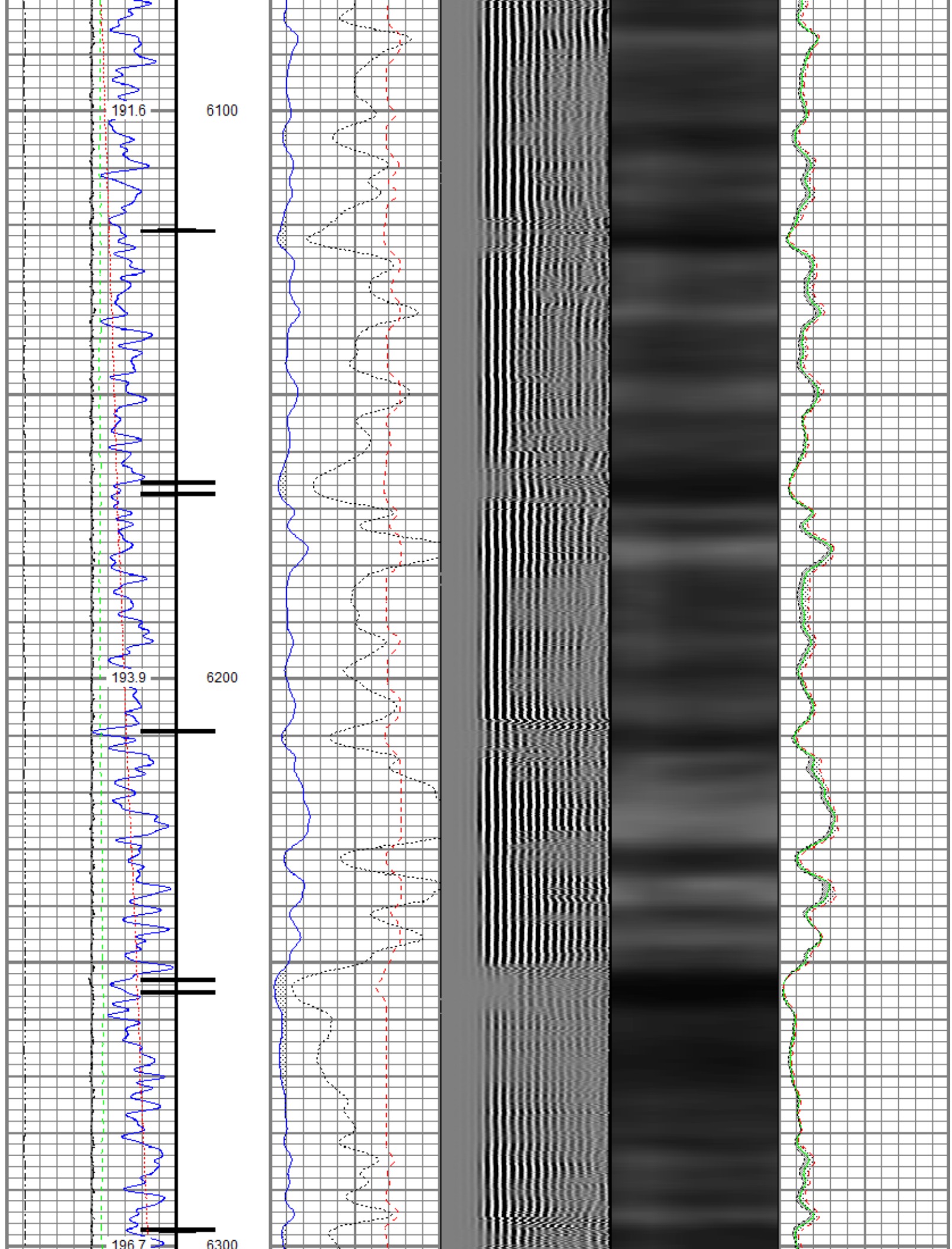


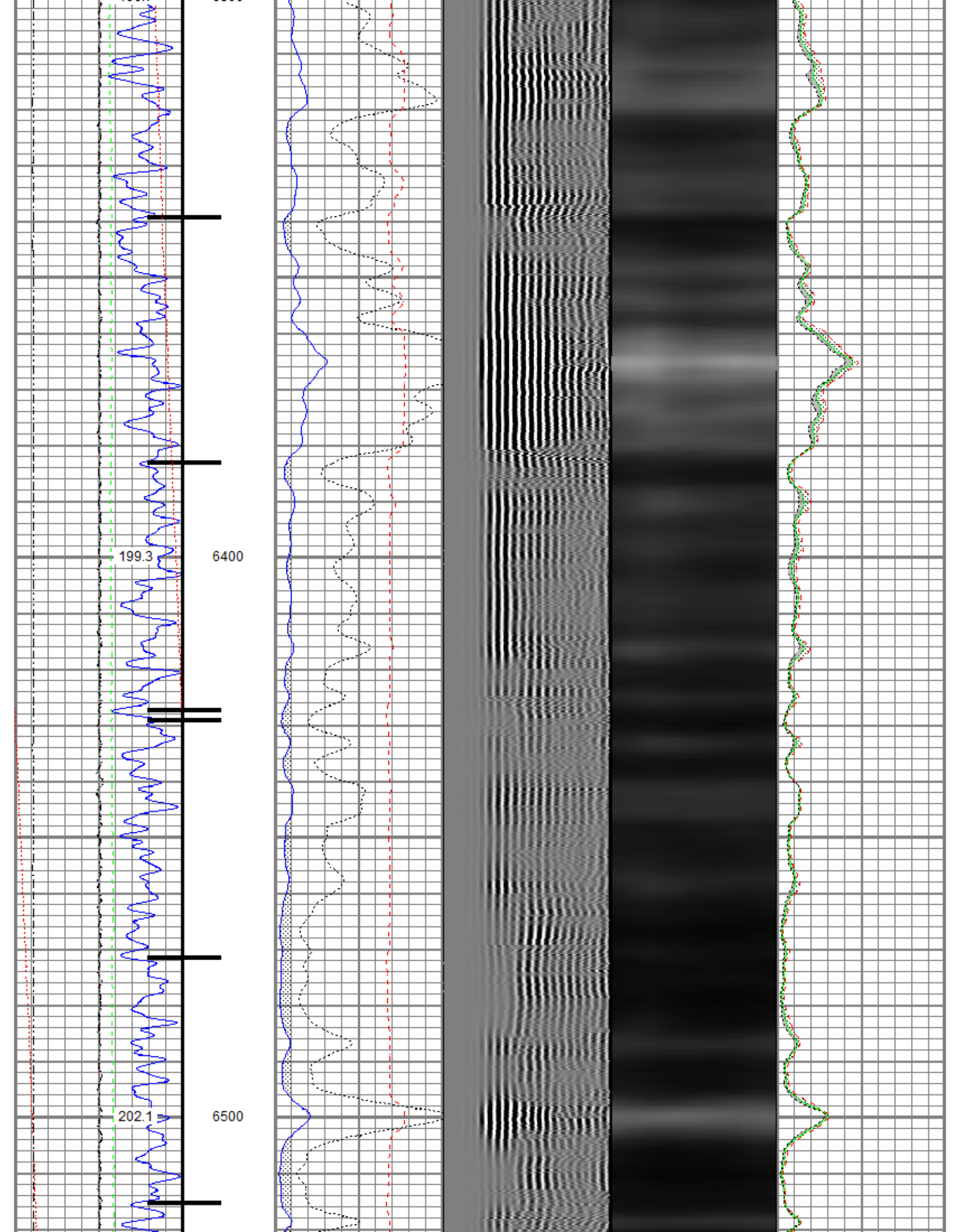


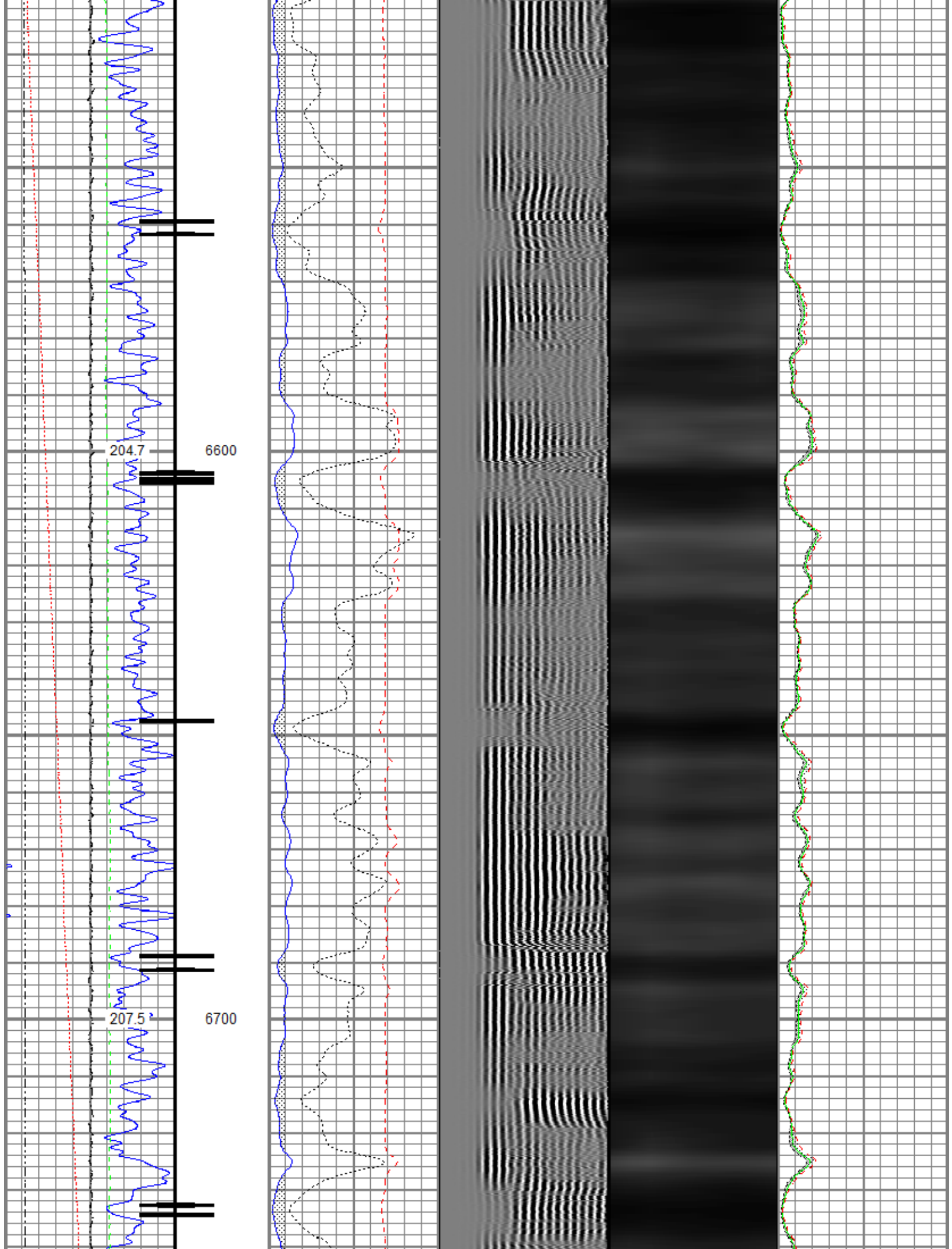


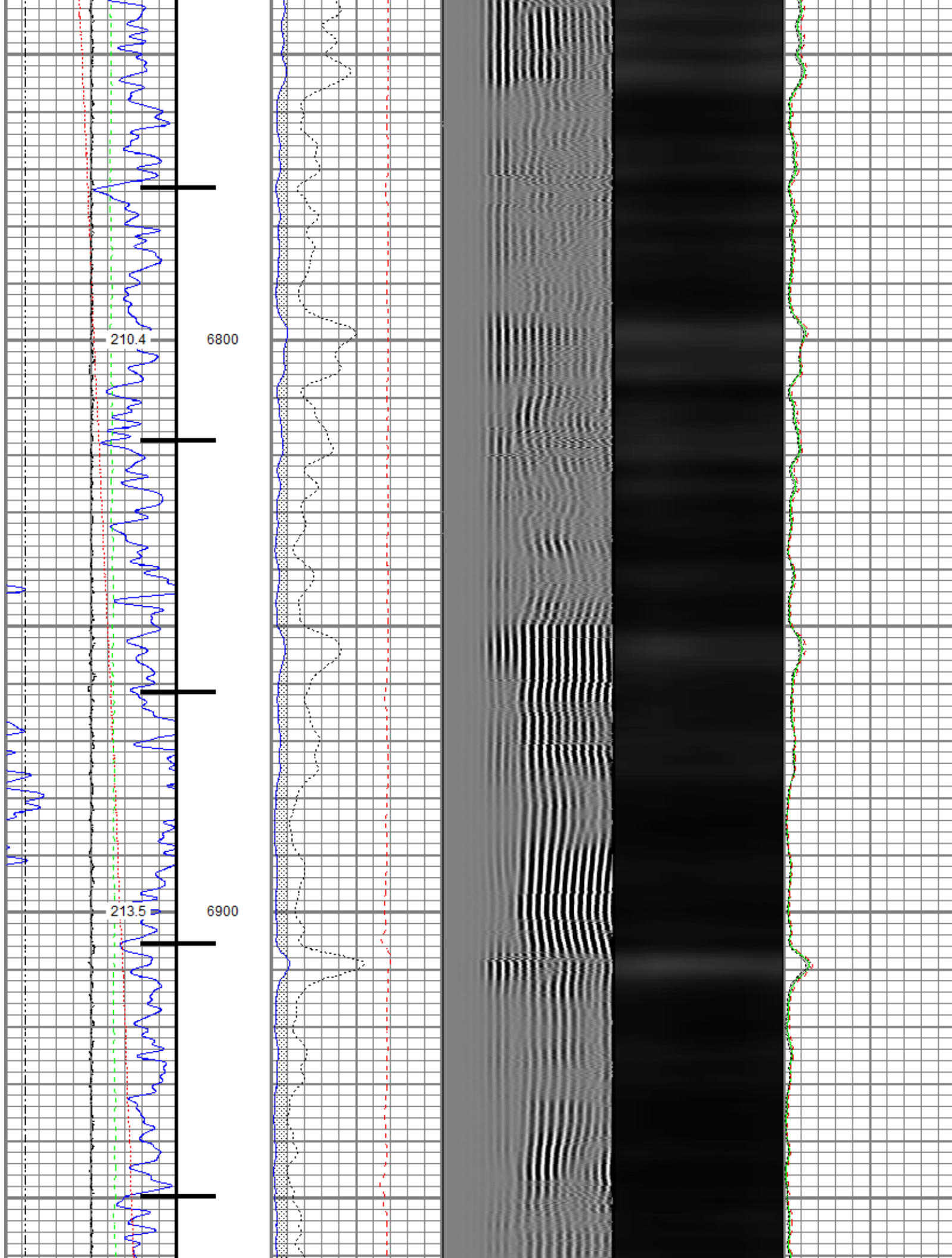


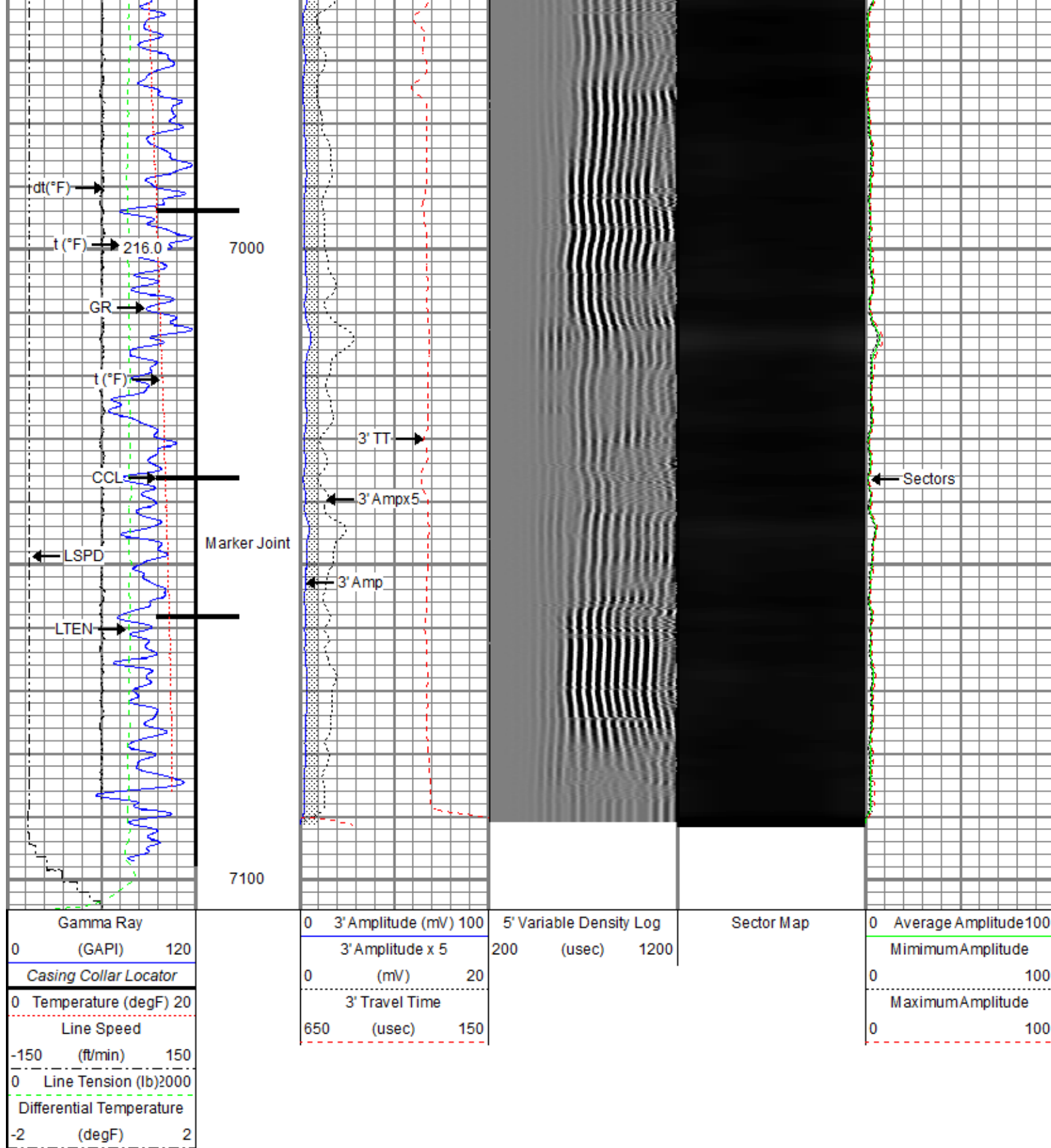








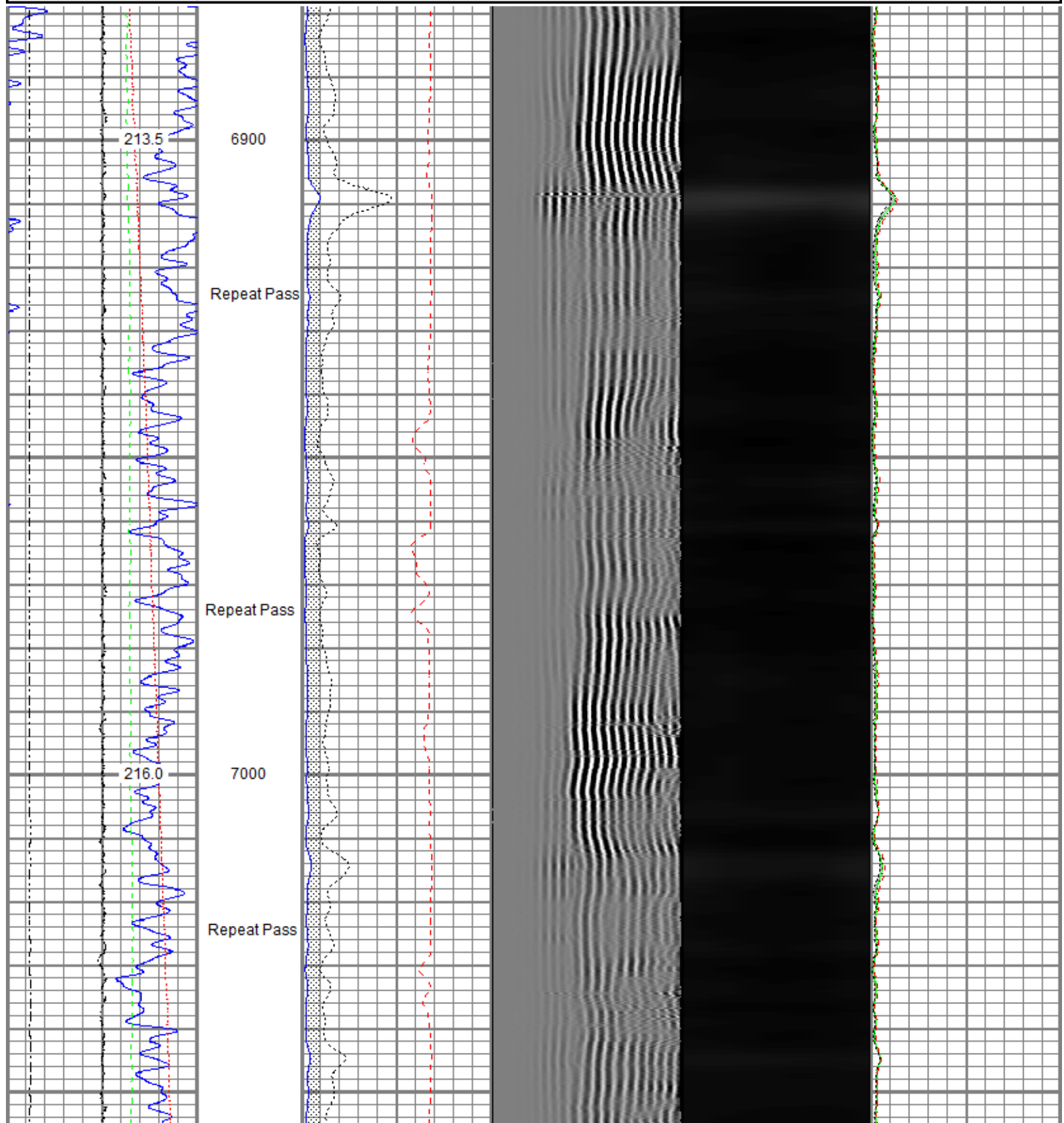


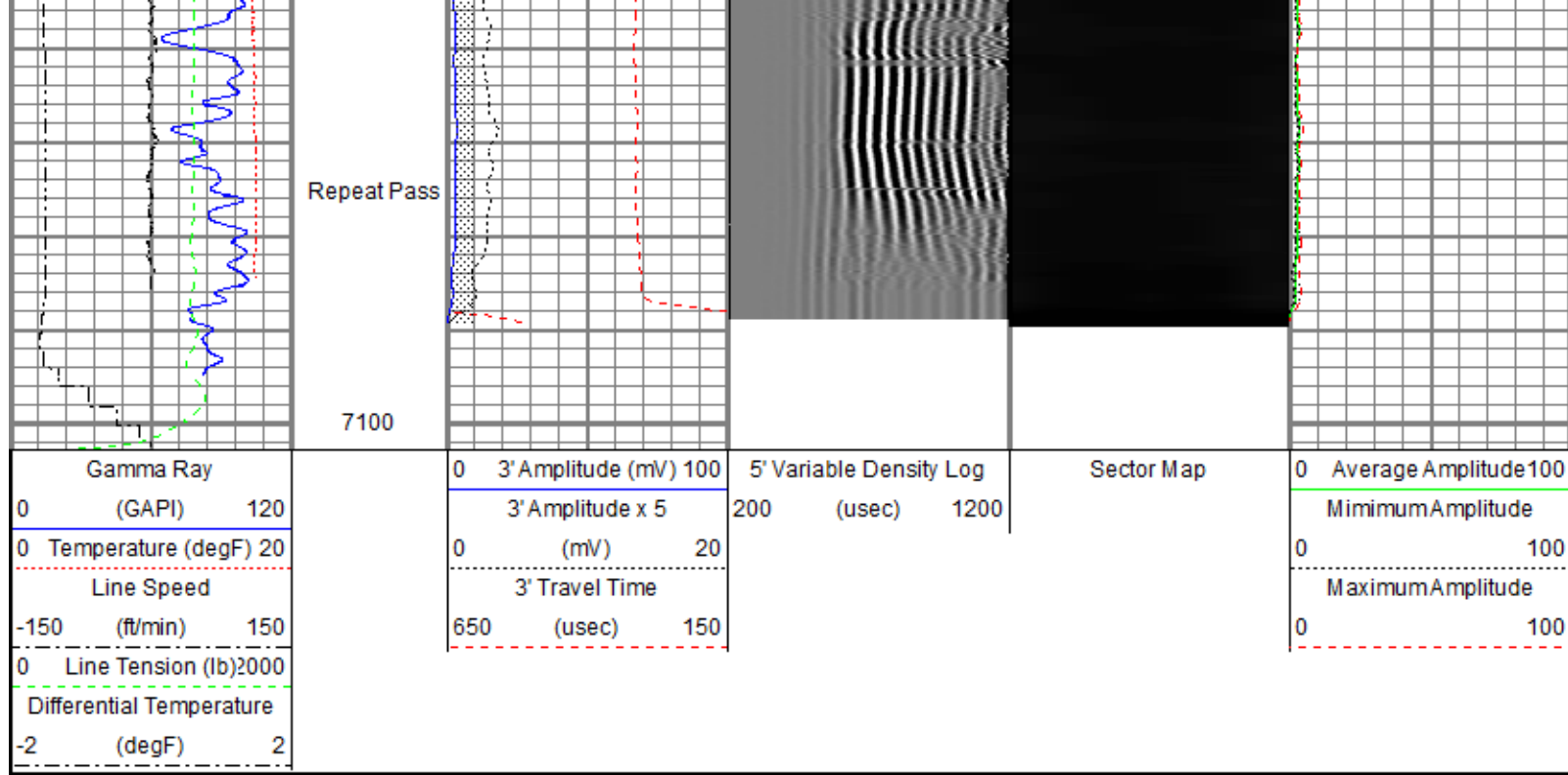


Repeat Pass


Recorded With 0 PSI Surface Induced Pressure

Gamma Ray			3' Amplitude (mV) 100			5' Variable Density Log			Sector Map			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 with 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 Radii-2750 RBT (FW0712-020) 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		Probe GR-CCL-2750 6PB (101001) Probe 2-3/4" rev.1 Digital Scintillation Gamma Ray/CCL Combined with 6 Pin Bottom for CNT			4.80	2.75	55.00
CCL\$1	6.80							
GR	5.46							
			Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer			2.88	2.75	20.00
Dataset:		processed_0512349219_anadarko_jdb 15-3hxx_rbl_07-31-19.db: field/well/0rbl/pass17.3						
Total length:		23.86 ft						
Total weight:		223.60 lb						
O.D.:		2.75 in						

Calibration Report						
Database File	c:\programdata\warrior\data\anadarko\0512349219_anadarko_jdb 15-3hzx_rbl_07-31-19\processed_0512349219_anadarko_jd					
Dataset Pathname	0rbl/pass17.3					
Dataset Creation	Thu Aug 01 12:51:06 2019					
Gamma Ray Calibration Report						
Serial Number:	101001					
Tool Model:	2750 6PB					
Performed:	Mon Oct 01 11:32:32 2018					
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:	FW0712-020					
Tool Model:	2750 RBT					
Calibration Casing Diameter:	5.500	in				
Calibration Depth:	103.526	ft				
Master Calibration, performed (Derived):						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.008	0.741	0.800	71.921	96.995	0.005
CAL	0.006	0.615				
5'	0.007	0.602	0.800	71.921	119.655	-0.064
SUM						
S1	0.008	0.765	0.000	100.000	132.095	-1.040
S2	0.008	0.769	0.000	100.000	131.428	-1.090
S3	0.008	0.739	0.000	100.000	136.845	-1.145
S4	0.009	0.747	0.000	100.000	135.473	-1.232
S5	0.009	0.760	0.000	100.000	133.198	-1.198

S5	0.009	0.700	0.000	100.000	133.190	-1.190
S6	0.009	0.733	0.000	100.000	138.250	-1.281
S7	0.010	0.705	0.000	100.000	143.925	-1.474
S8	0.008	0.723	0.000	100.000	139.830	-1.115

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.006	0.615	1.000	0.000

Air Zero Calibration, performed (Not Performed):

	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: FW0712-020
Tool Model: 2750 RBT
Performed: Mon Oct 01 11:32:14 2018

	Reference	Reading
Low Reference:	100.00 degF	109.43 degF
High Reference:	350.00 degF	405.87 degF

Gain: 0.84
Offset: 7.72
Delta Spacing: 1



Company Kerr-McGee Oil & Gas Onshore, L.P.
Well JDB 15-3HZX
Field Wattenberg
County Weld
State Colorado