



Radial Cement Bond
Gamma Ray
Casing Collar Log

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

Well MAE J 8-8HZ

Field Wattenberg

County Weld State Colorado

Location: API #: 05-123-50509

SEC 8 TWP 1N RGE 68W

Permanent Datum Ground Level Elevation 5083'

Log Measured From Ground Level 0 FT

Drilling Measured From Kelly Bushing

Other Services
JBGR
RBP

Elevation
K.B. 5103'
D.F. ---
G.L. 5083'

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Well MAE J 8-8HZ
Field Wattenberg
County Weld
State Colorado

Date	21-MAY-2020
Run Number	Three
Depth Driller	13896 FT
Depth Logger	6616 FT
Bottom Logged Interval	6604 FT
Top Log Interval	Surface
Open Hole Size	7.875"
Type Fluid	Water
Density / Viscosity	8.34 lb/gal
Max. Recorded Temp.	200°F
Estimated Cement Top	See Log
Time Well Ready	ROA
Time Logger on Bottom	12.01
Equipment Number	HD-361
Location	Platteville, CO
Recorded By	W. Wacker
Witnessed By	Kyle Carver
Borehole Record	
Run Number	Bit From To
Size (in)	Size Weight From To
Wgt (lbs/ft)	
Casing Record	
Surface Casing	9 5/8 36 J-55 Surface 1918 FT
Intermediate #1	5 1/2 17 HCP-110 Surface 13244 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 6567 FT
Adjusted -8 FT to correlate with Marker Joint
Gauge Ring/Junk Basket ran to 8520 FT
Retrievable Bridge Plug set at 6657 FT
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!!

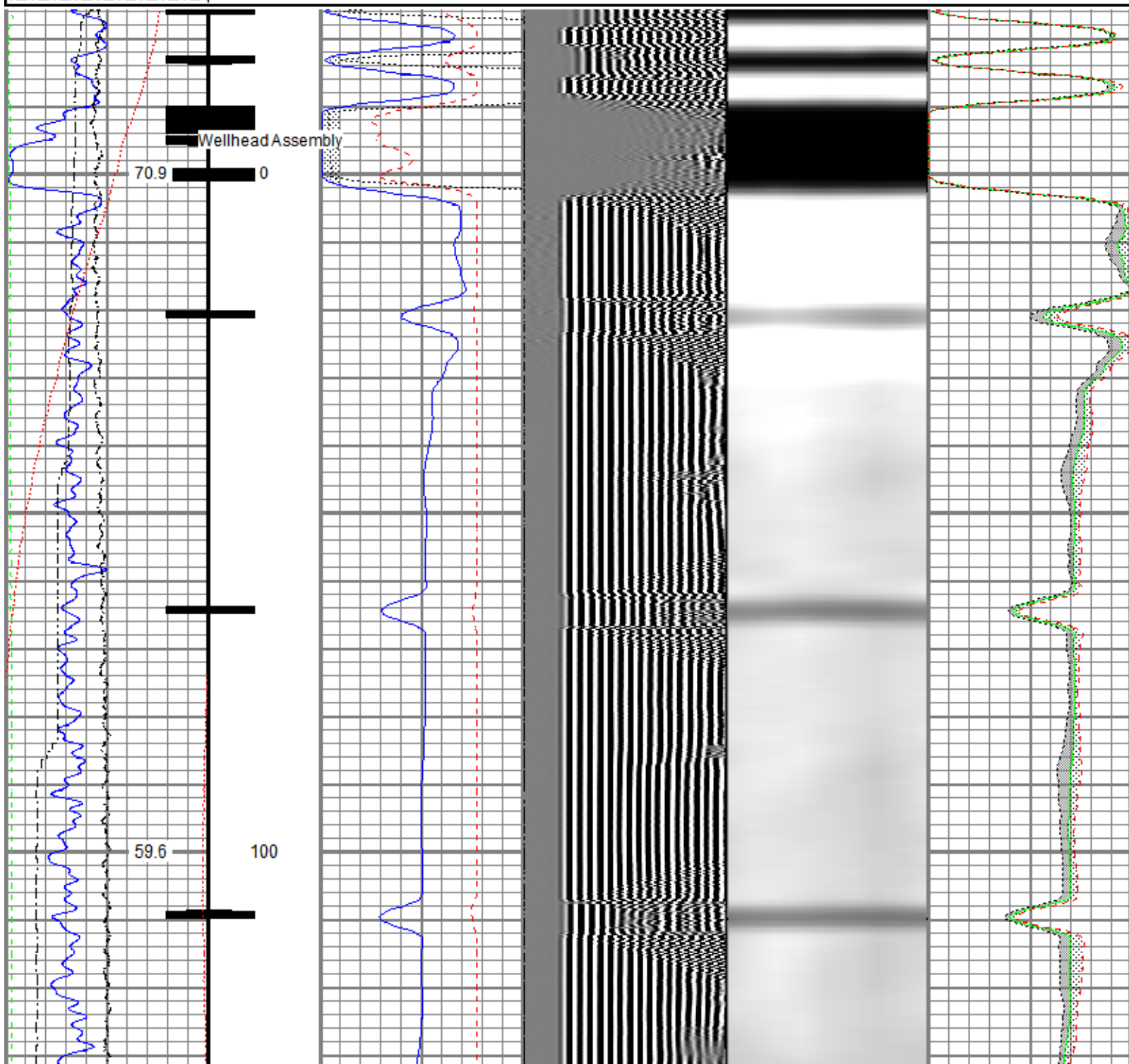
Main Pass

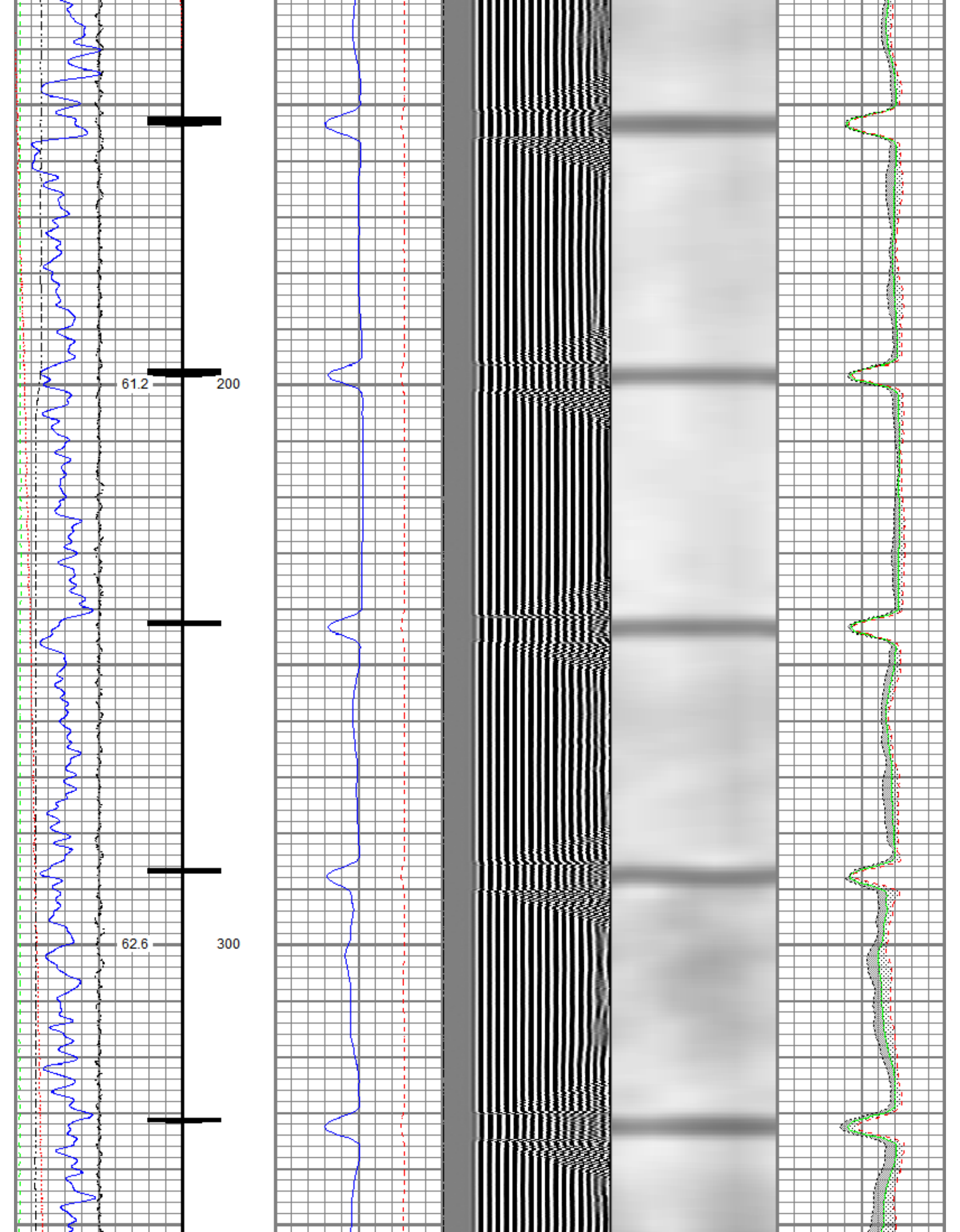


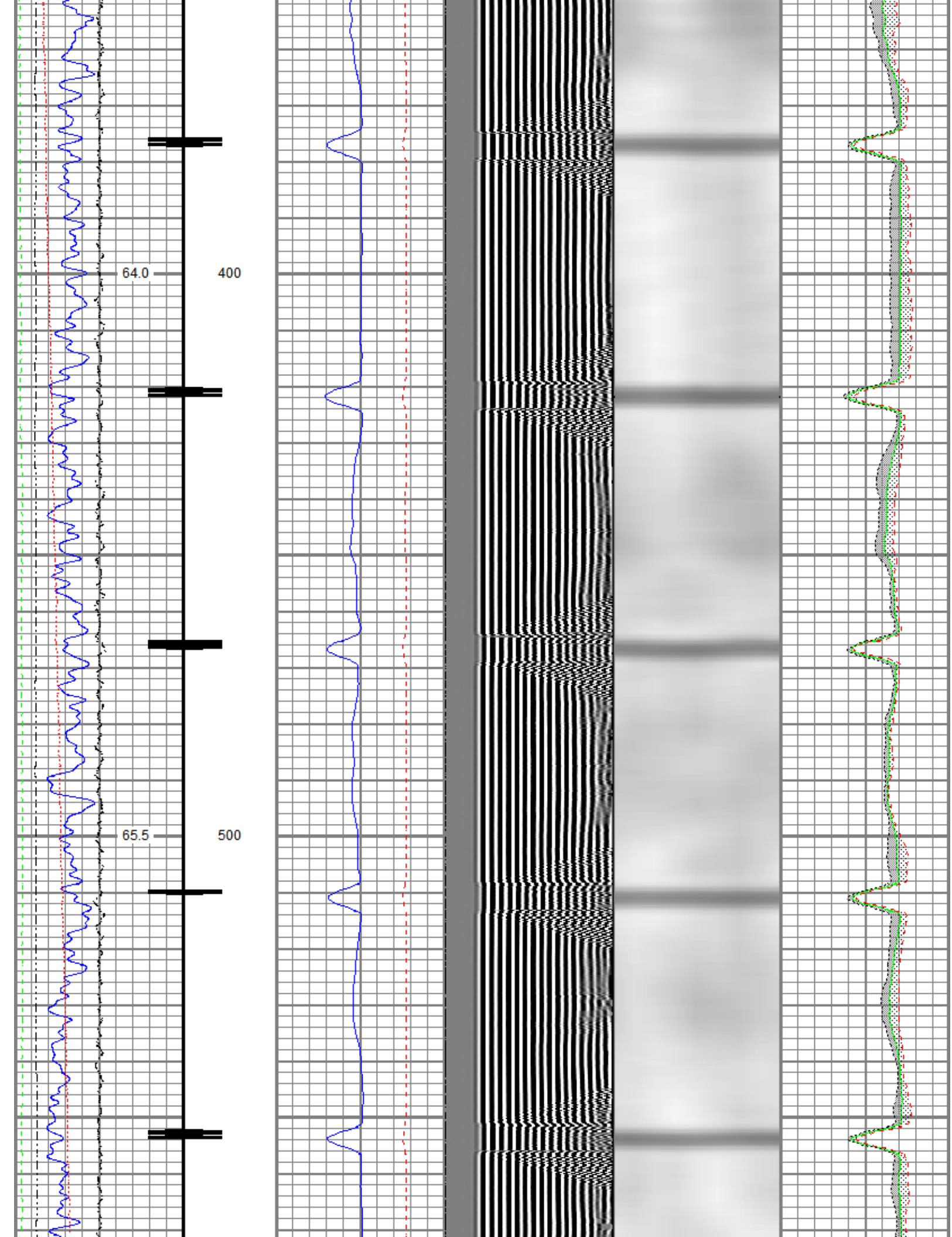
Recorded With 2800 PSI Surface Induced Pressure

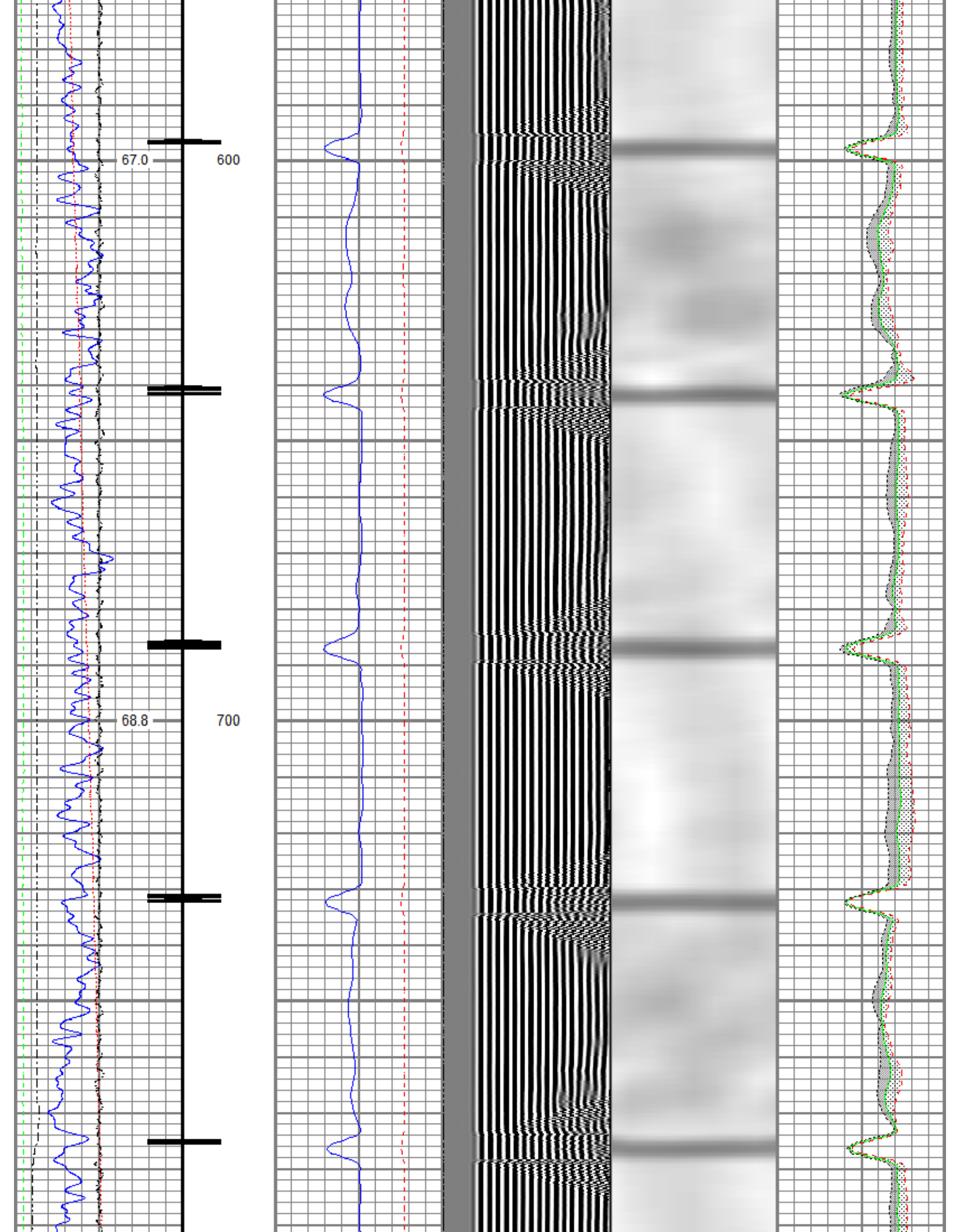
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 Dataset Pathname main.2
 Presentation Format ros_radri
 Dataset Creation Fri May 22 09:41:09 2020
 Charted by Depth in Feet scaled 1:240

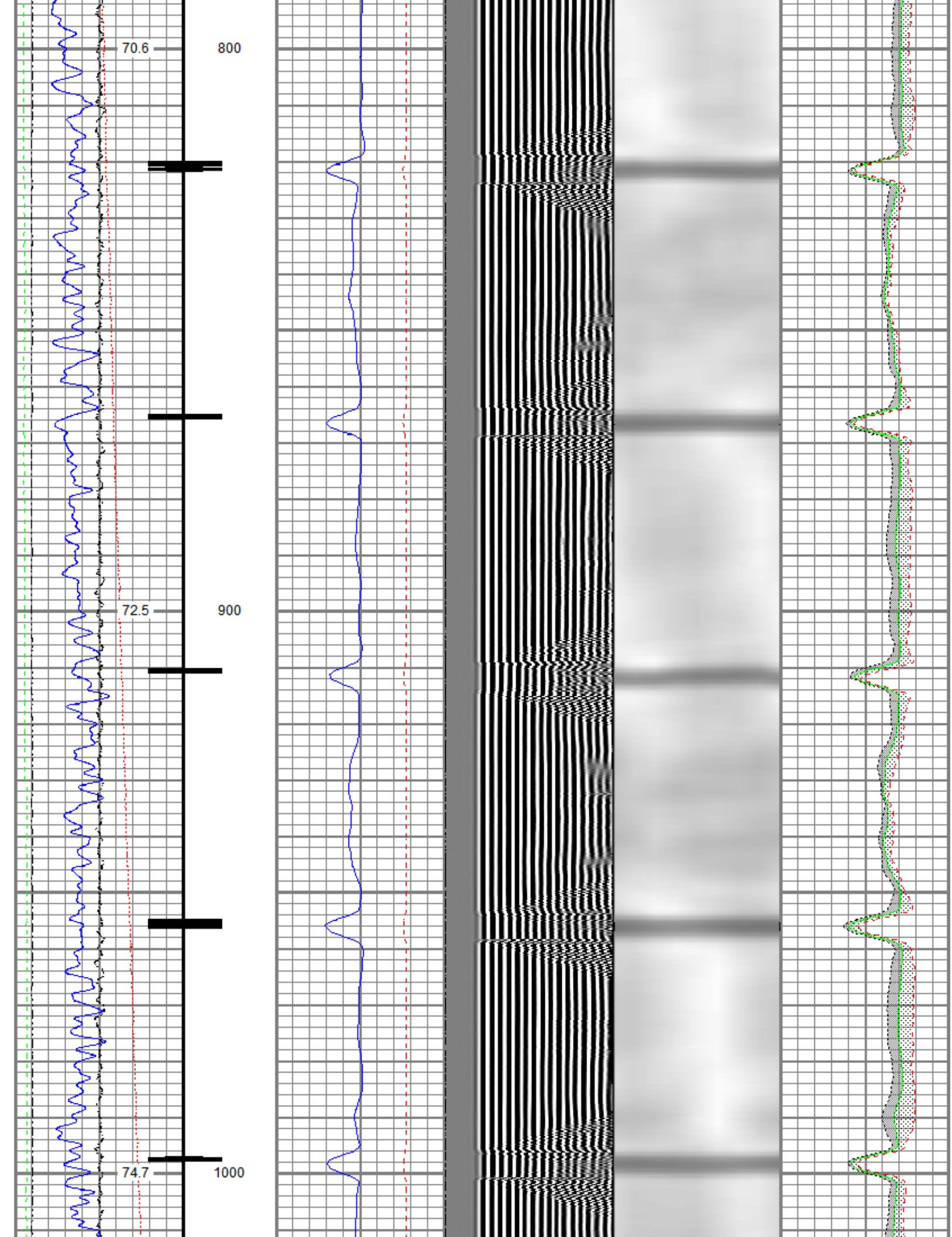
Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 100
(GAPI) 120		3' Amplitude x 5	200 (usec) 1200			Minimum Amplitude
Casing Collar Locator	0	(mV) 20			0	100
Temperature (degF) 20		3' Travel Time				Maximum Amplitude
Line Speed	650	(usec) 150			0	100
-150 (ft/min)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

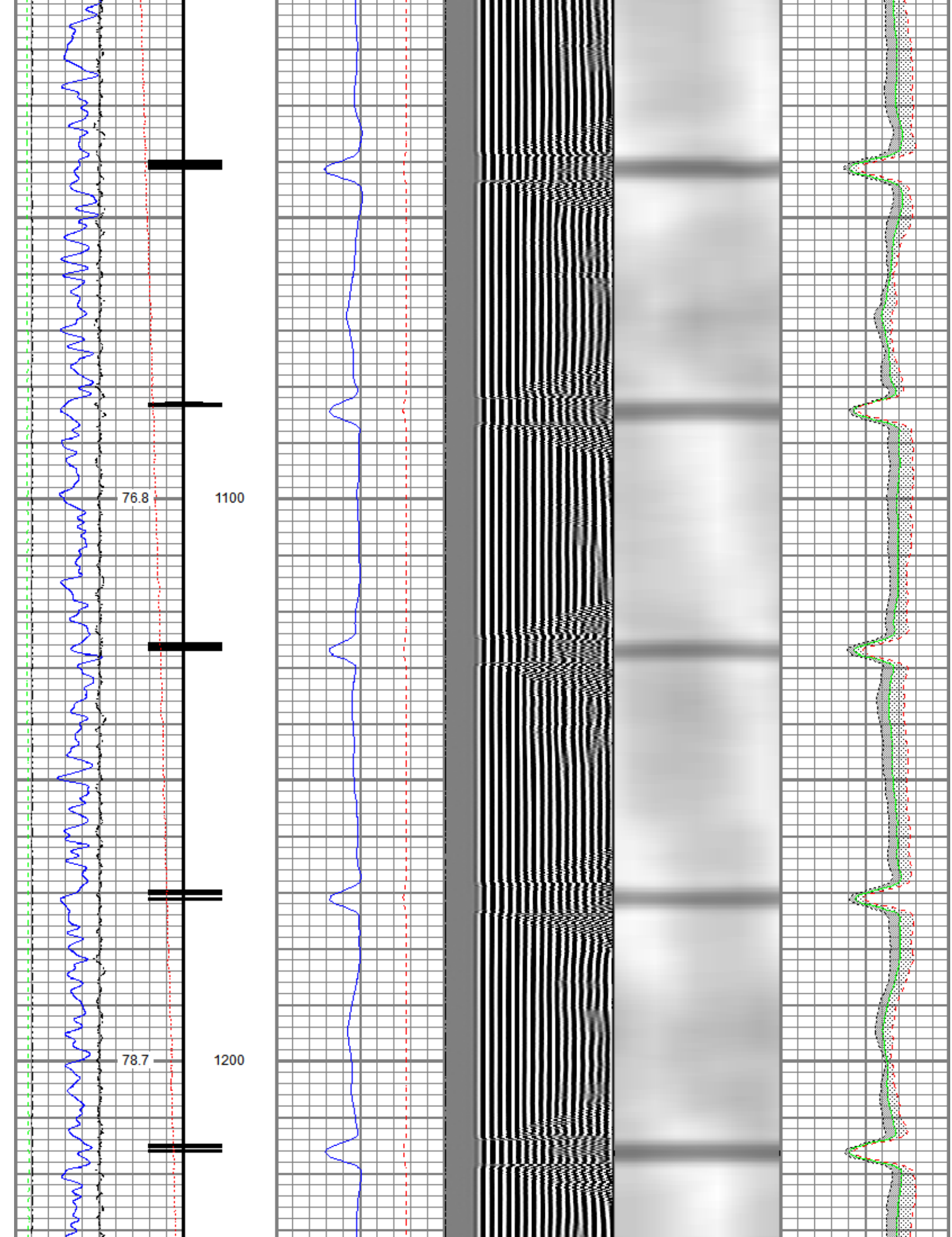


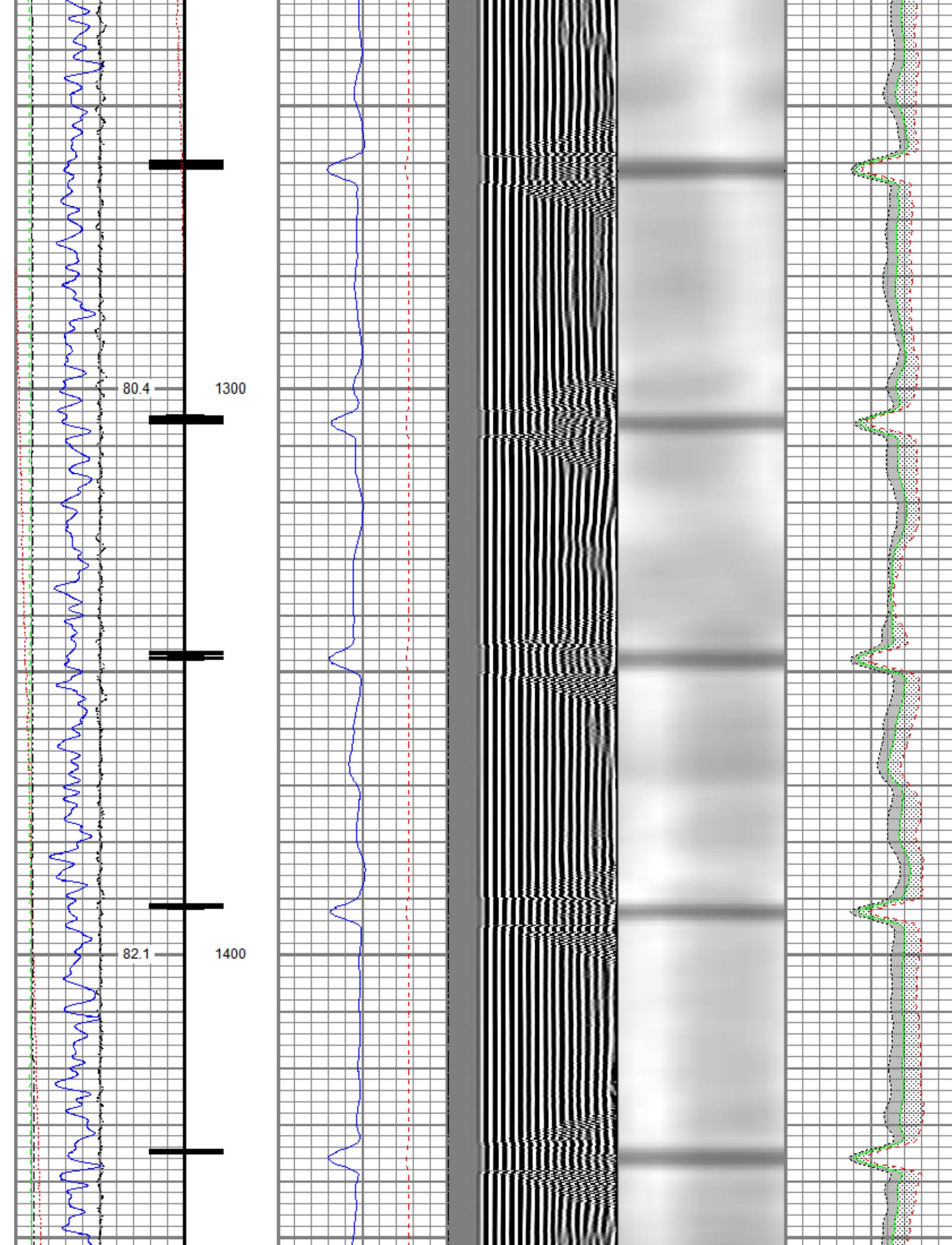


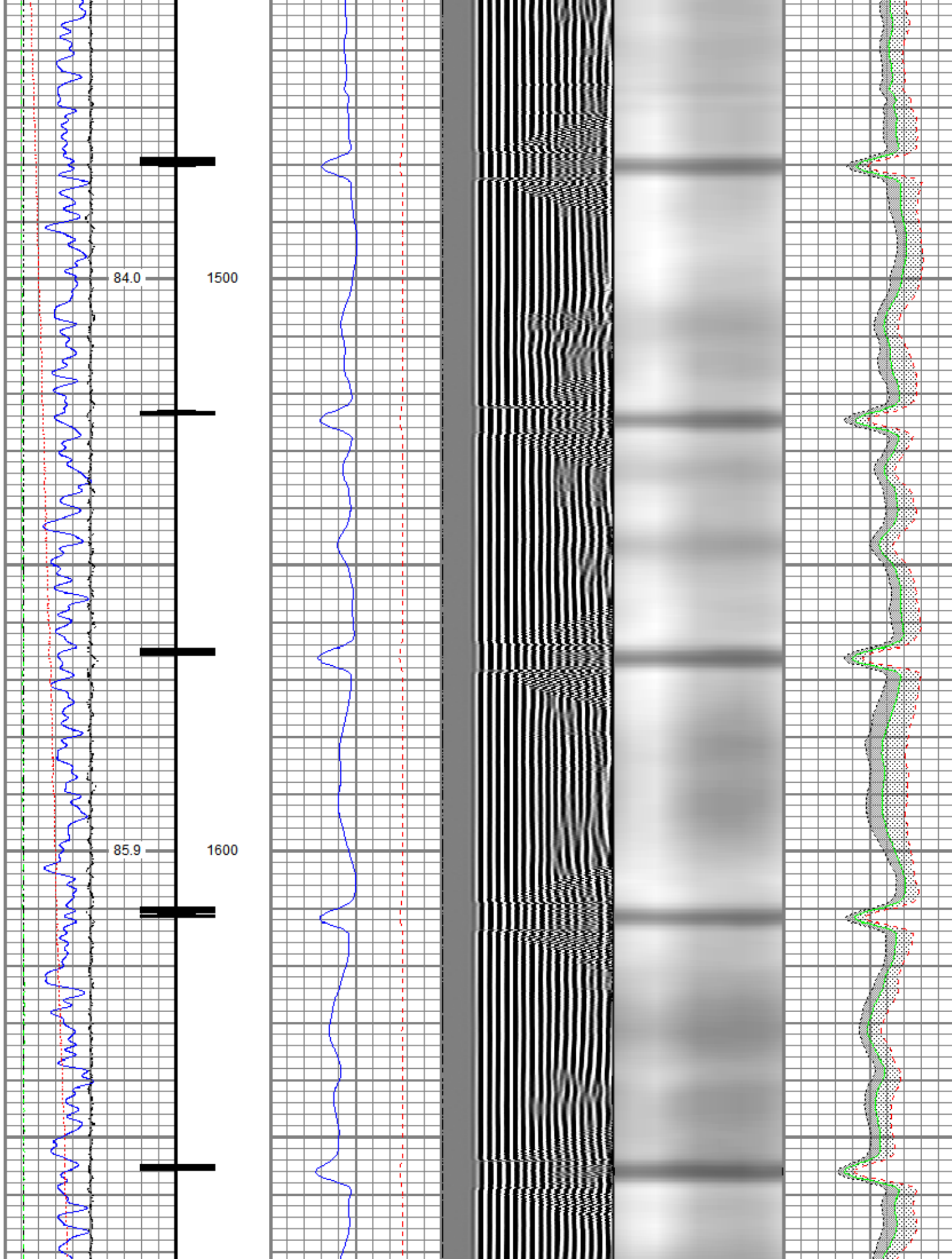


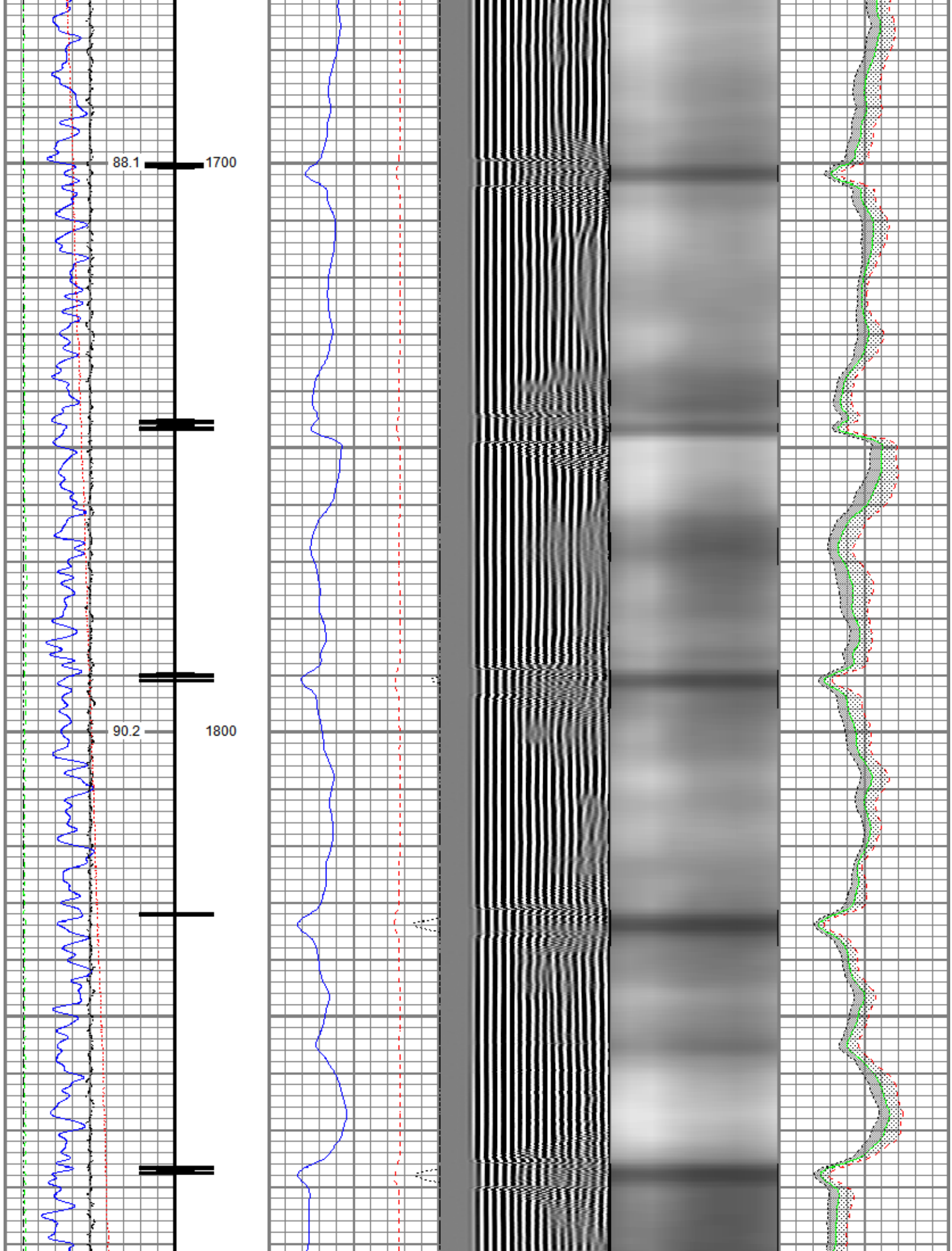


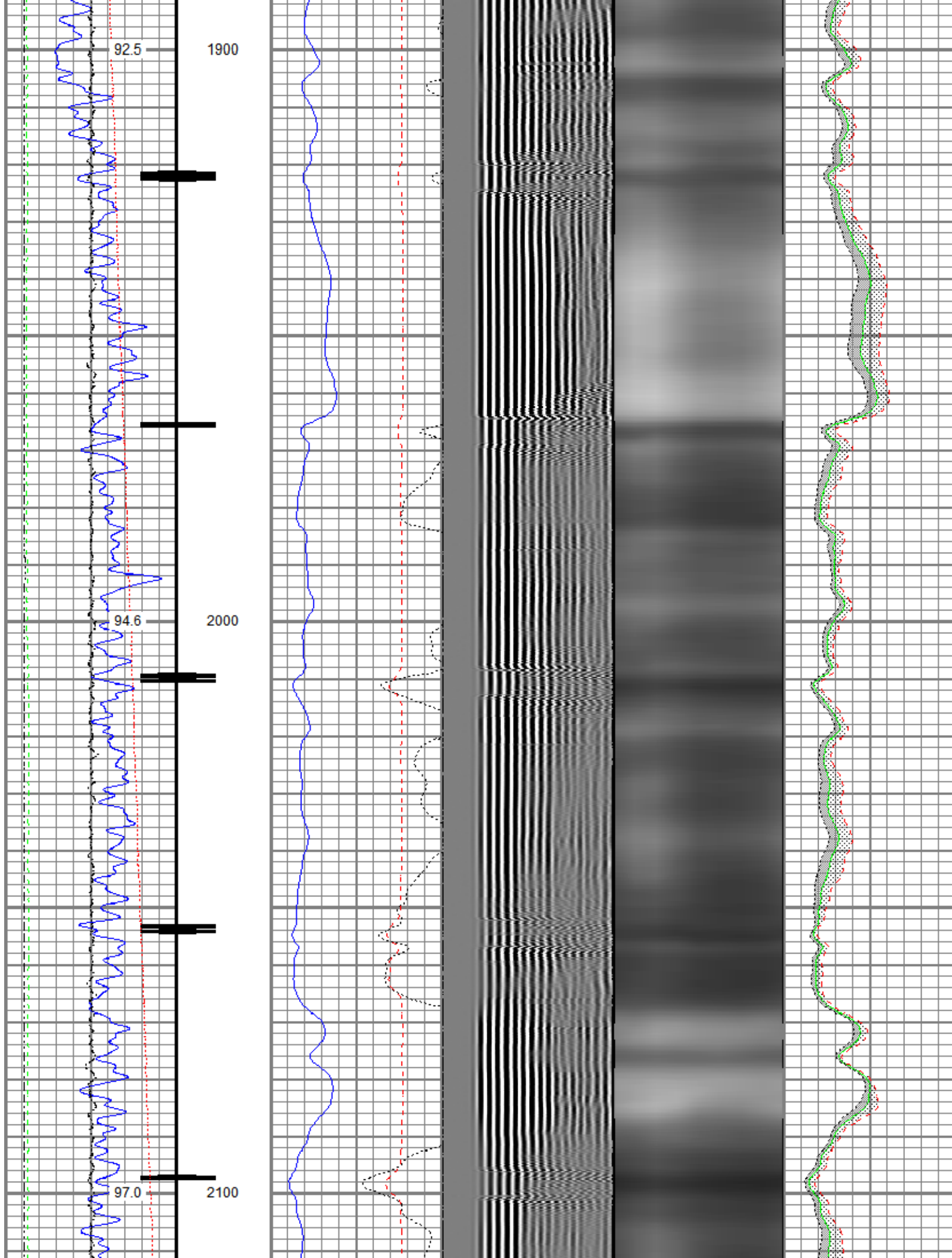


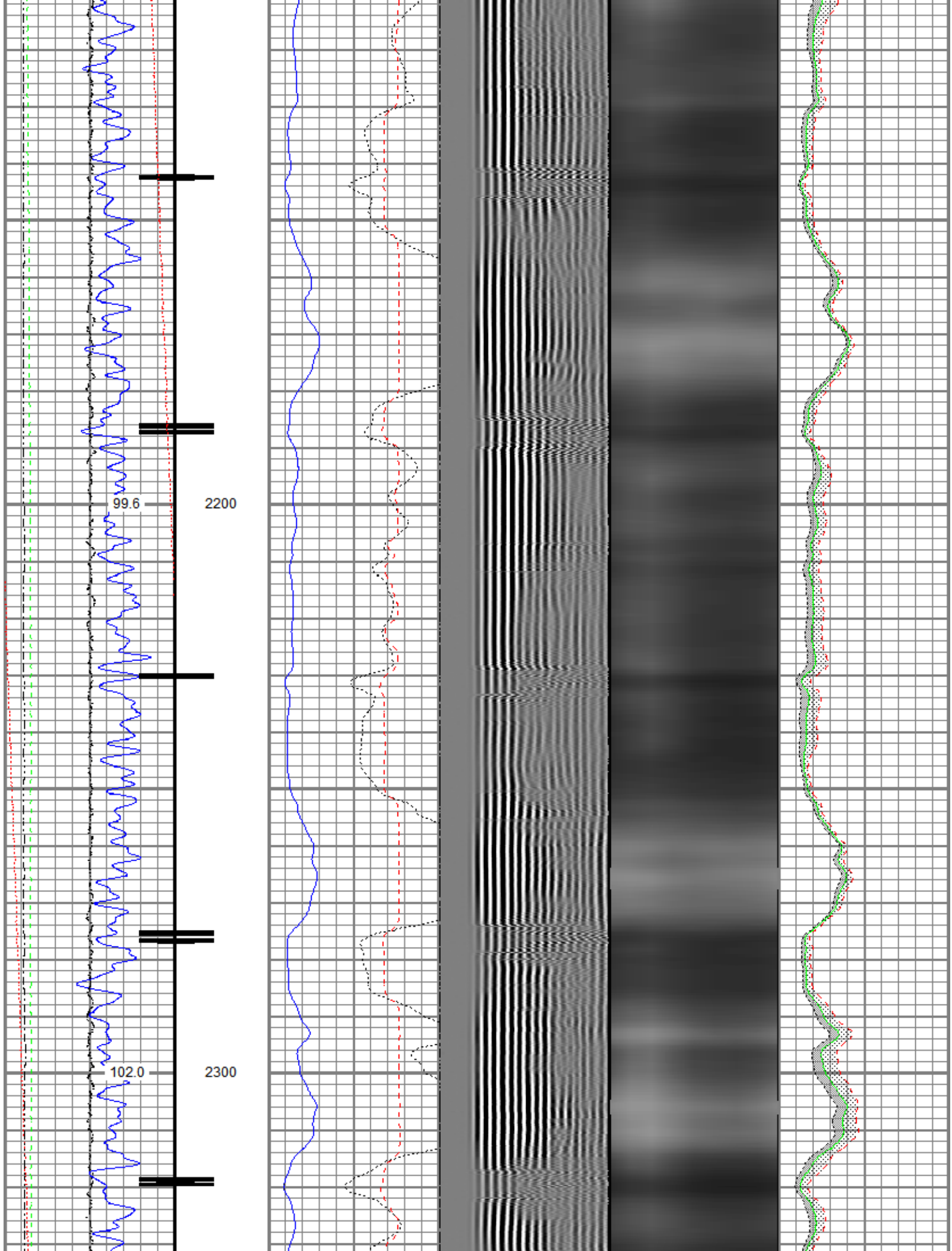


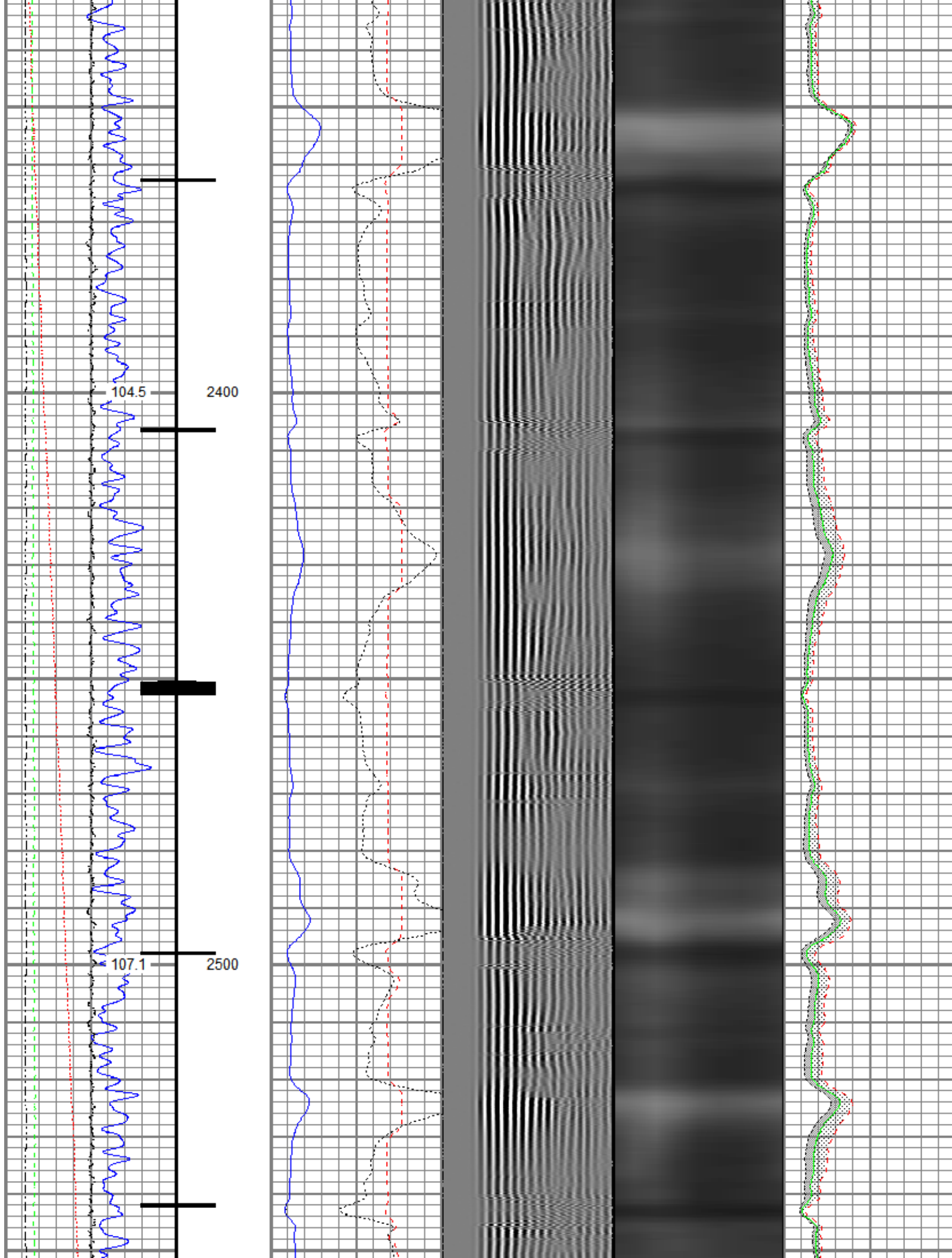


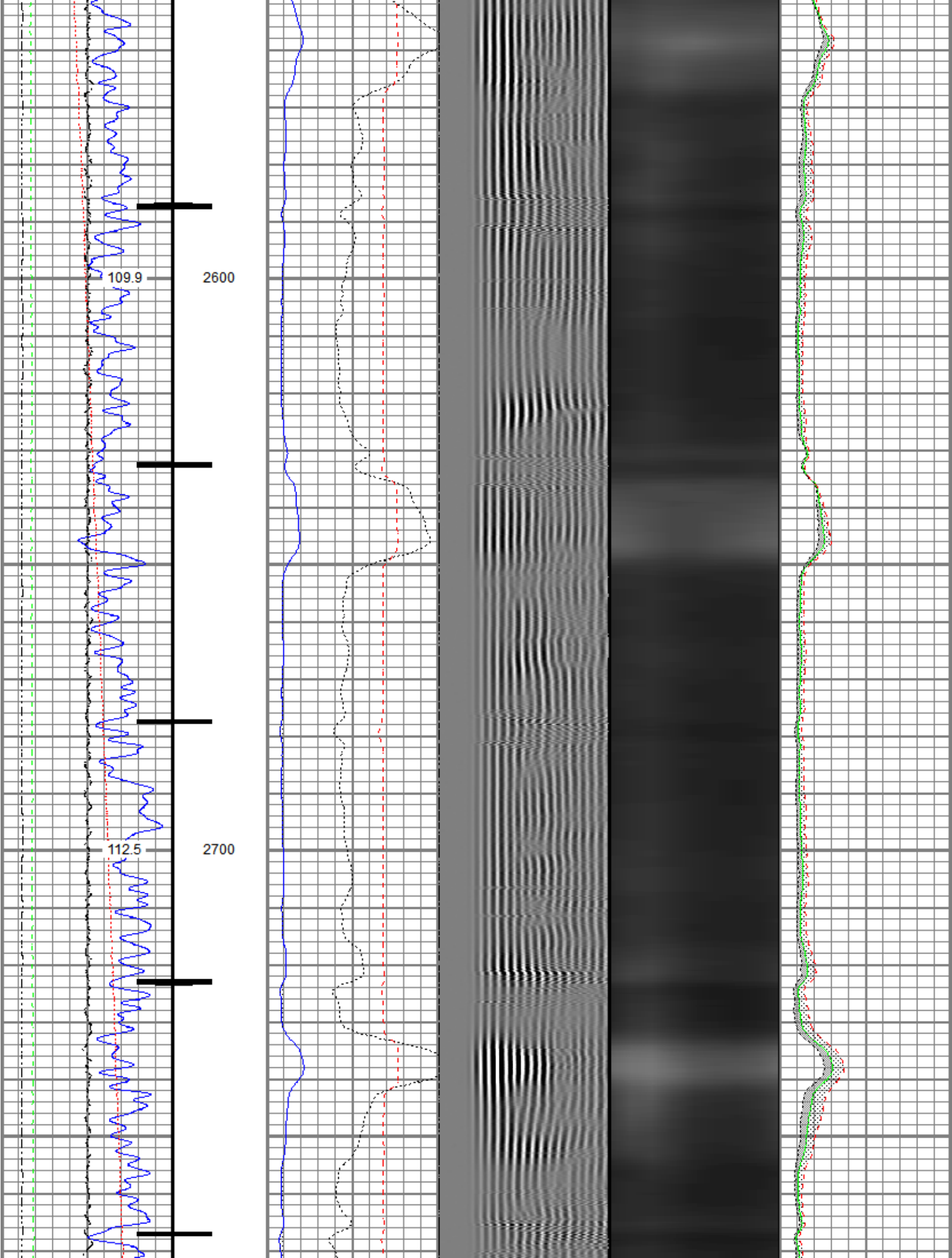


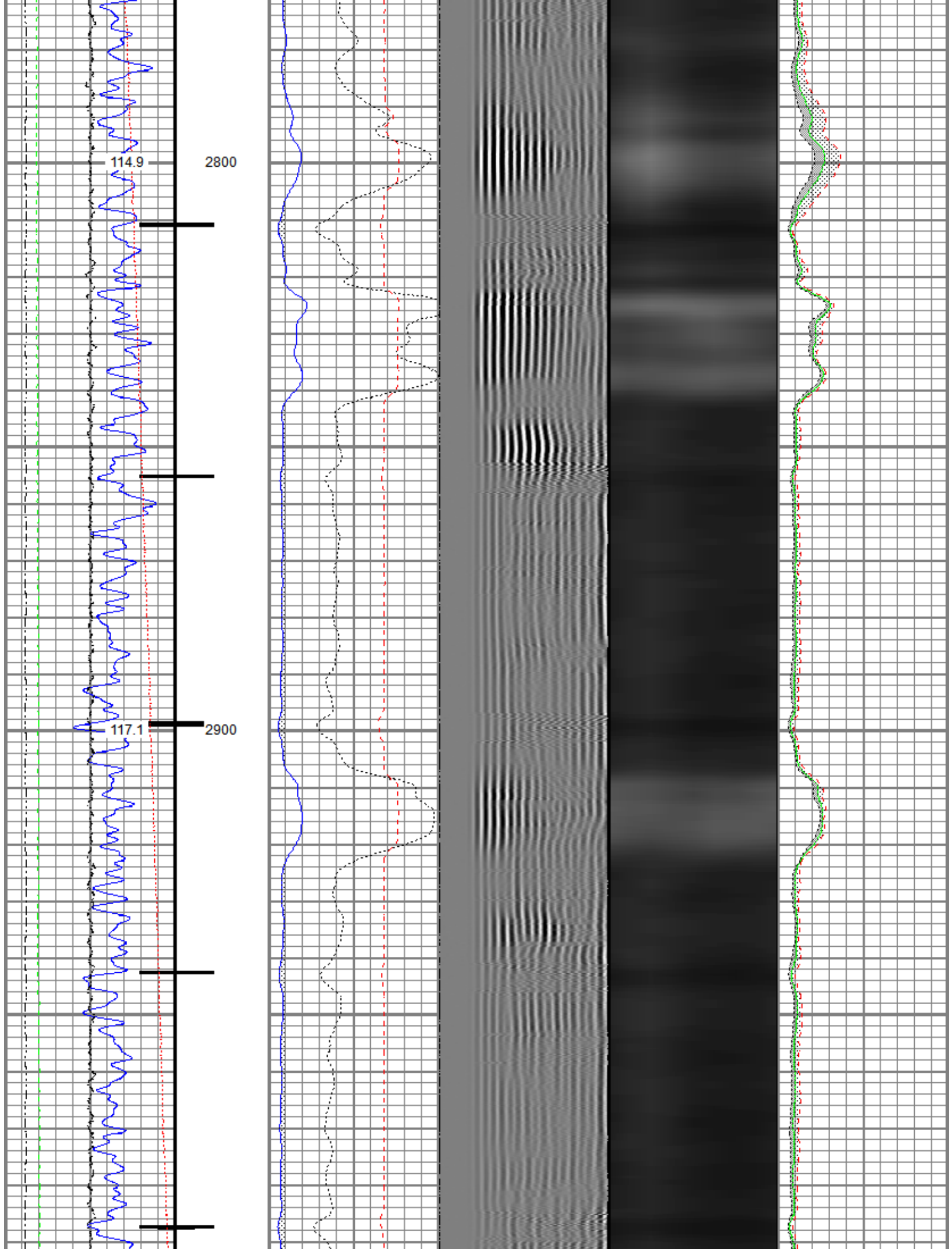


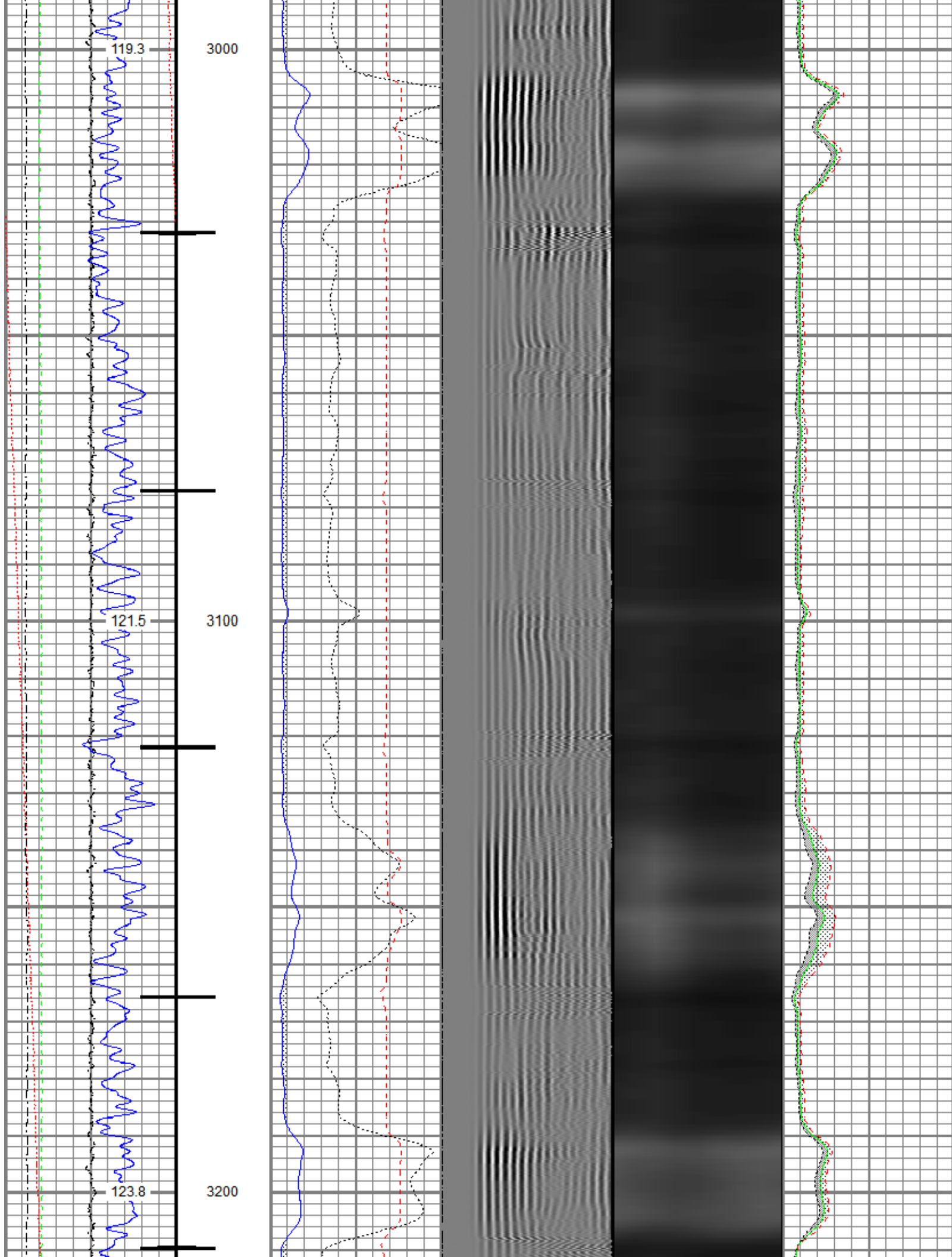


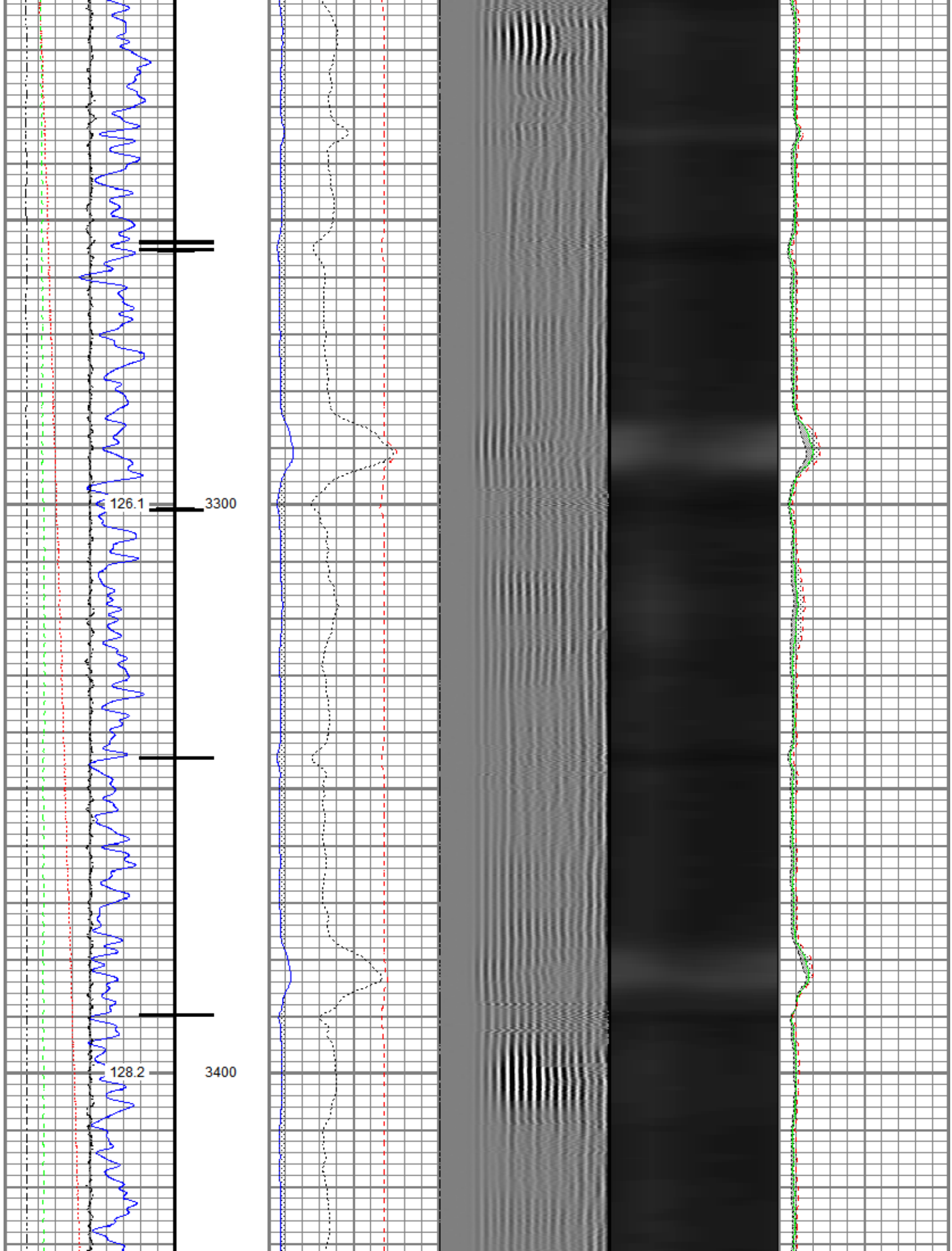


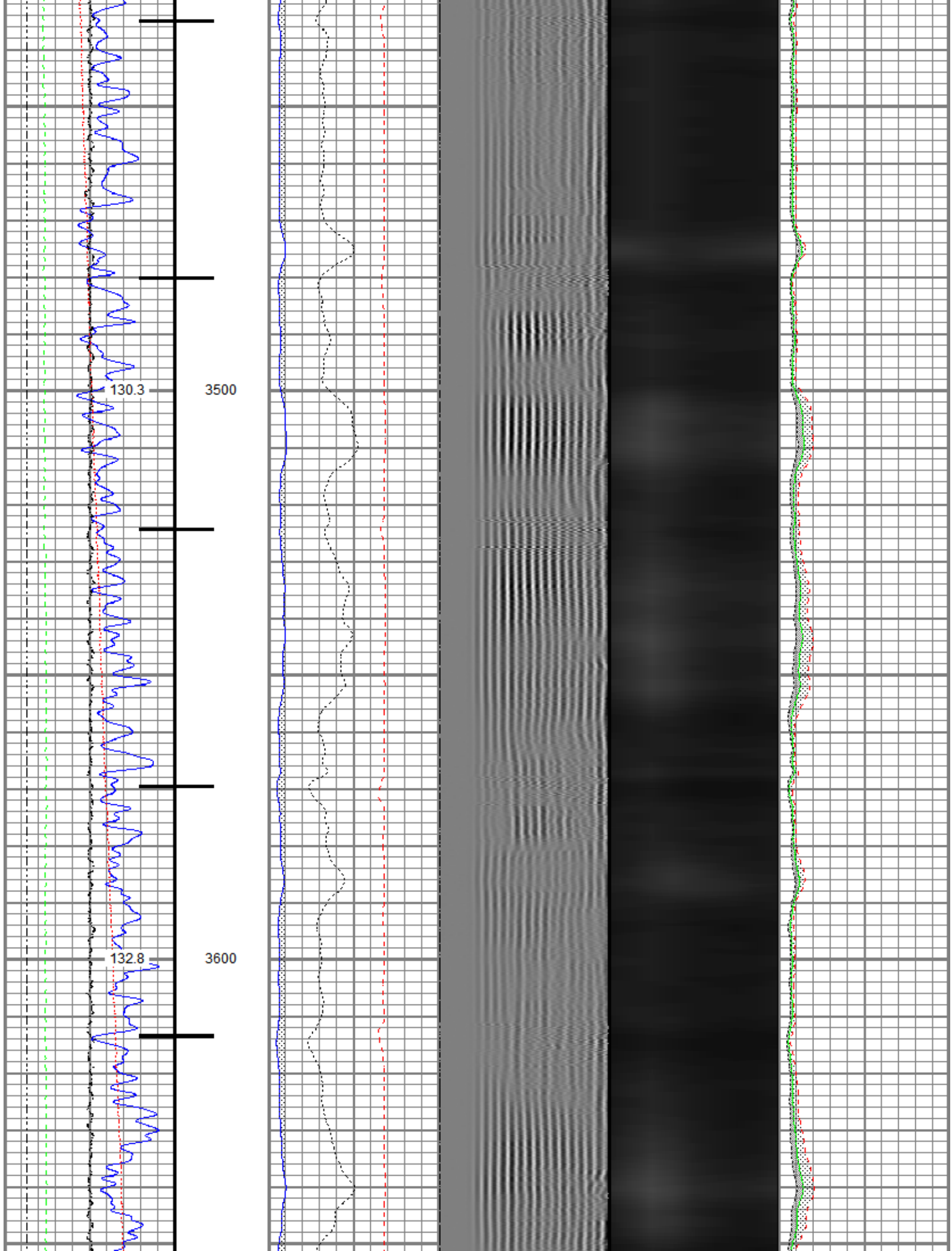


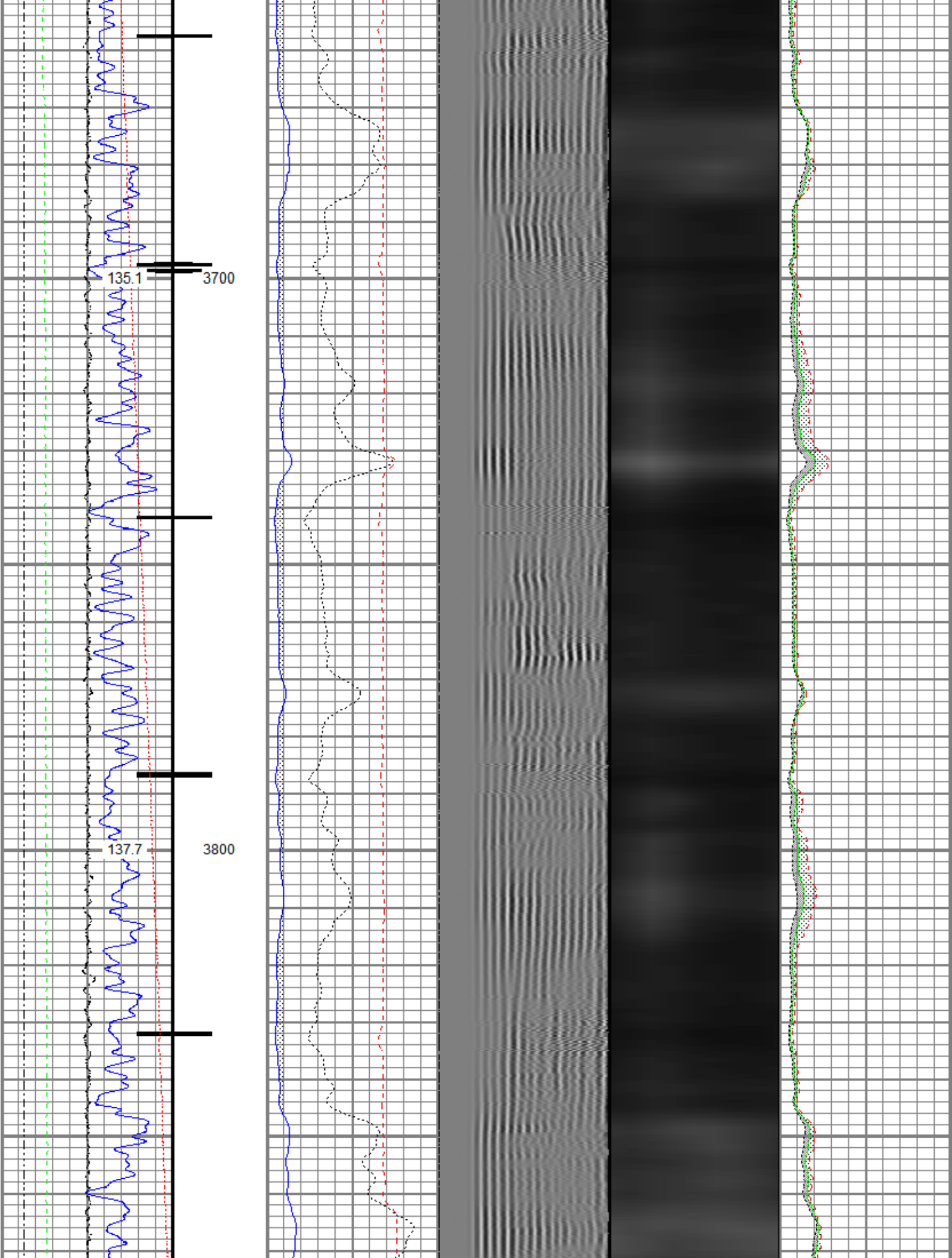


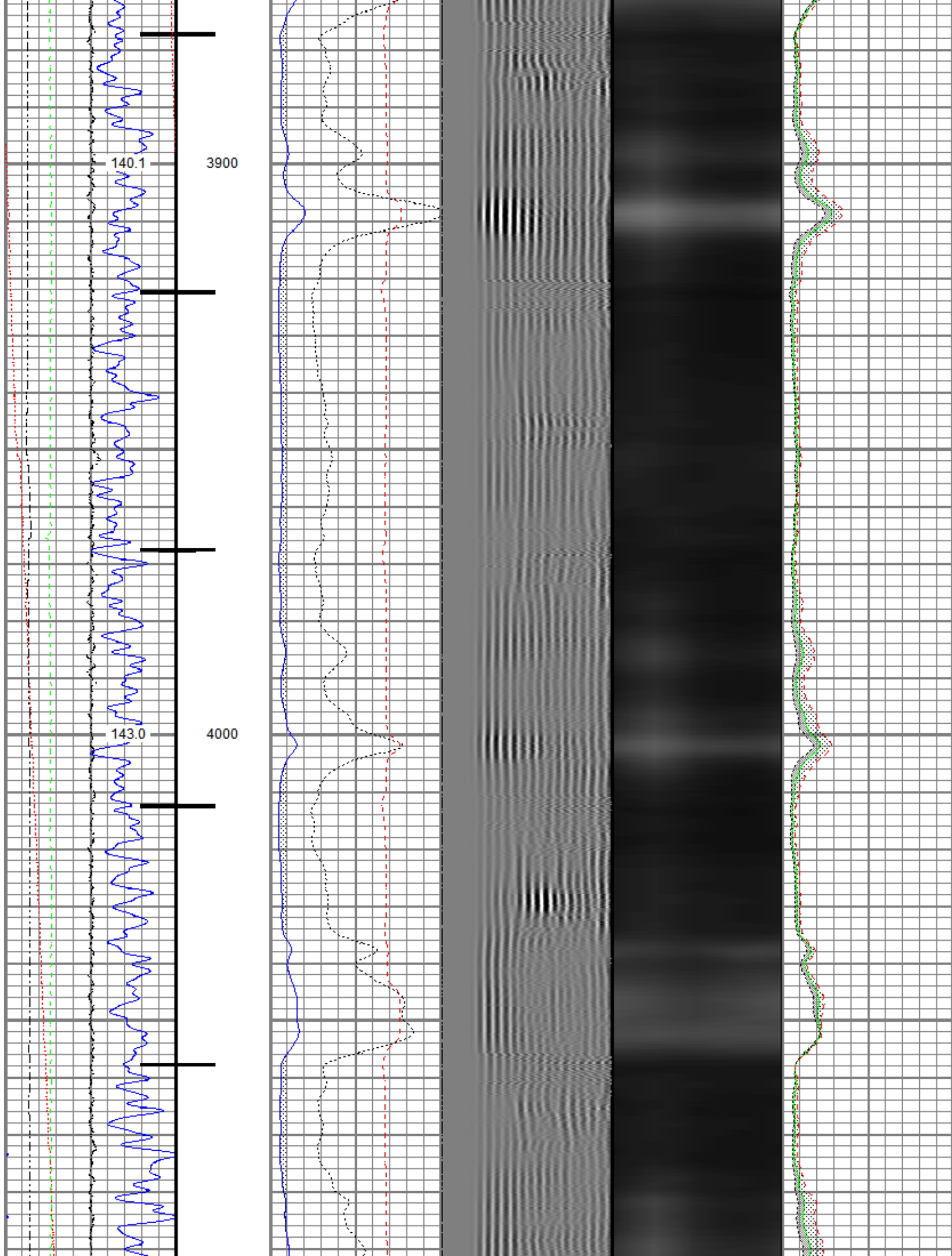


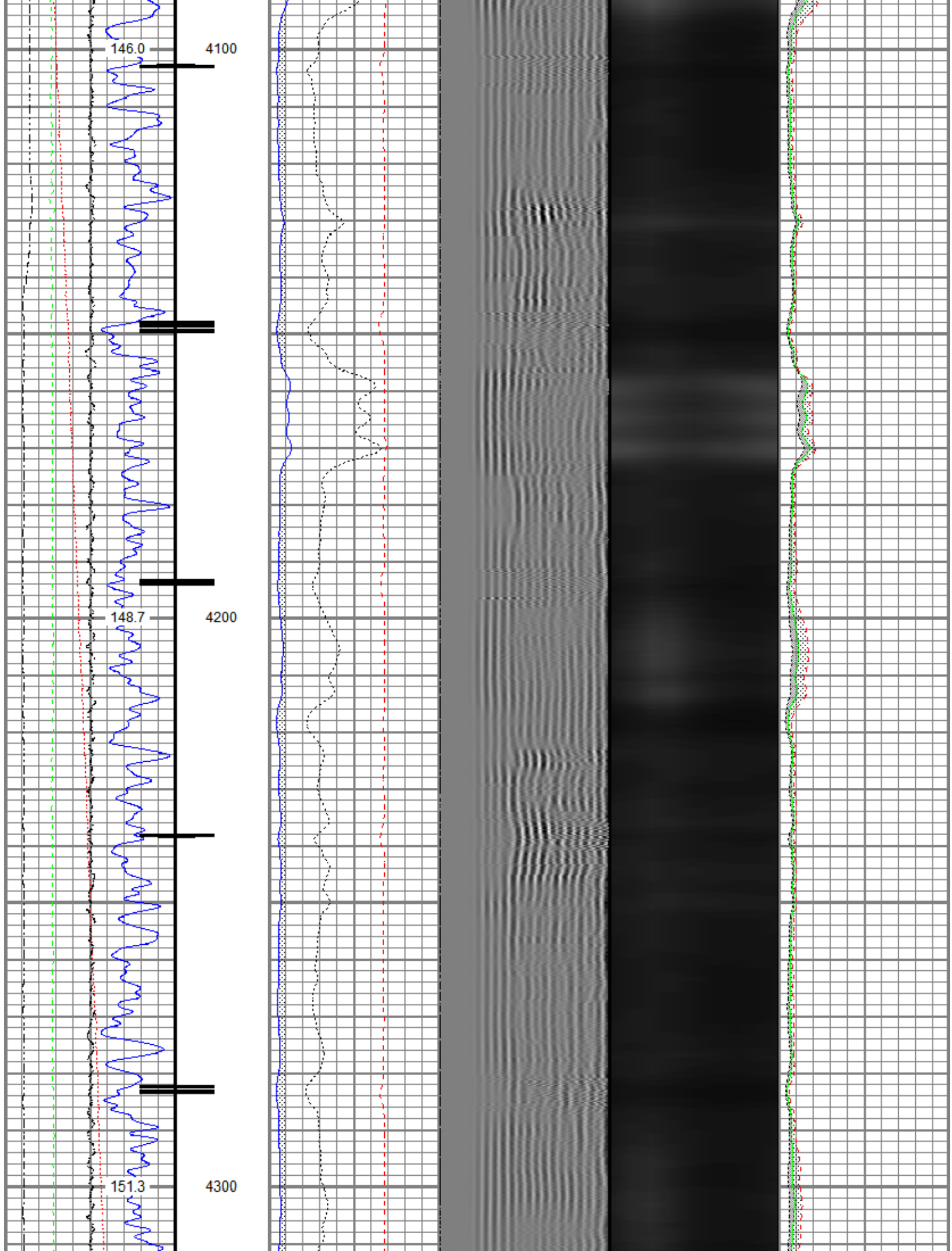


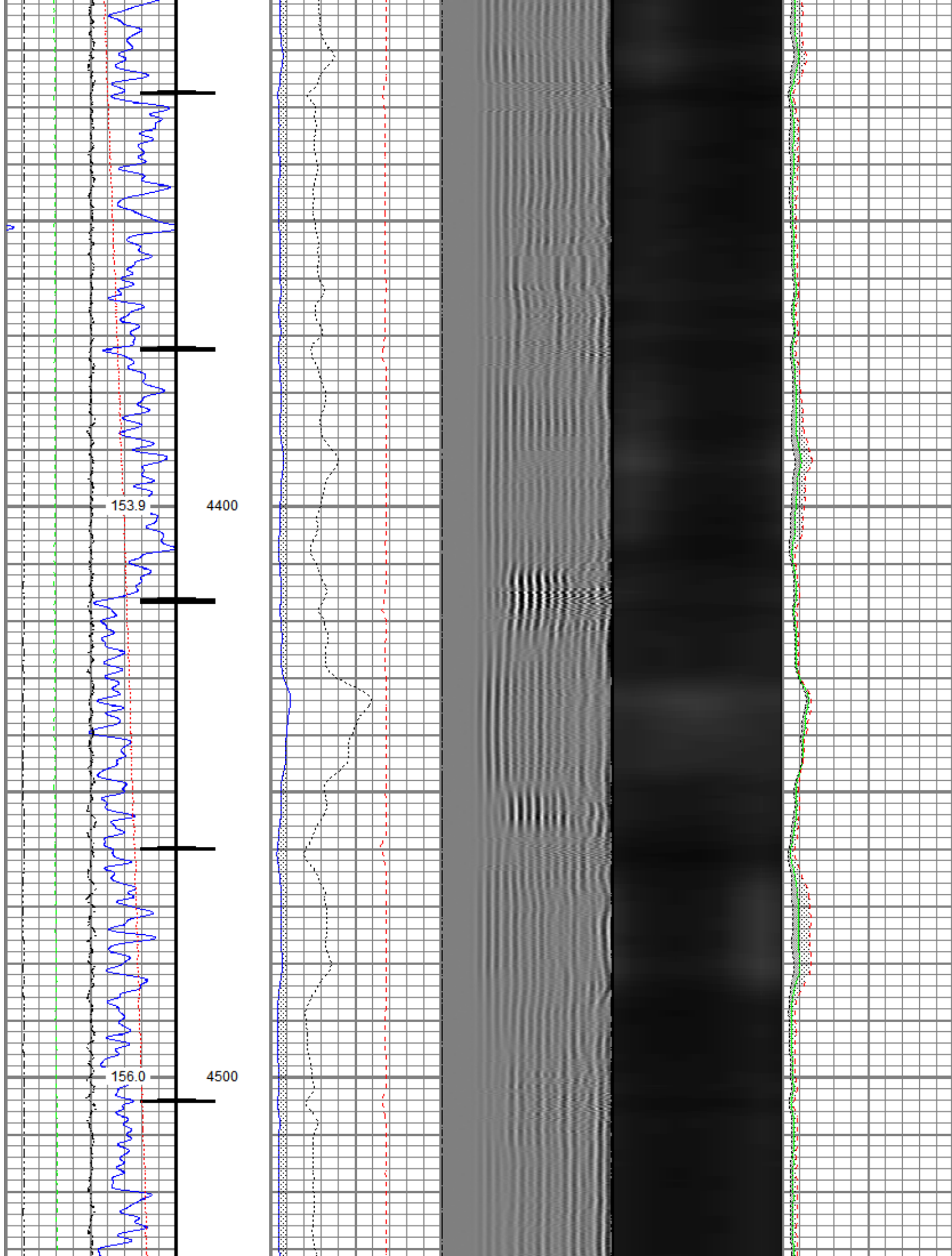


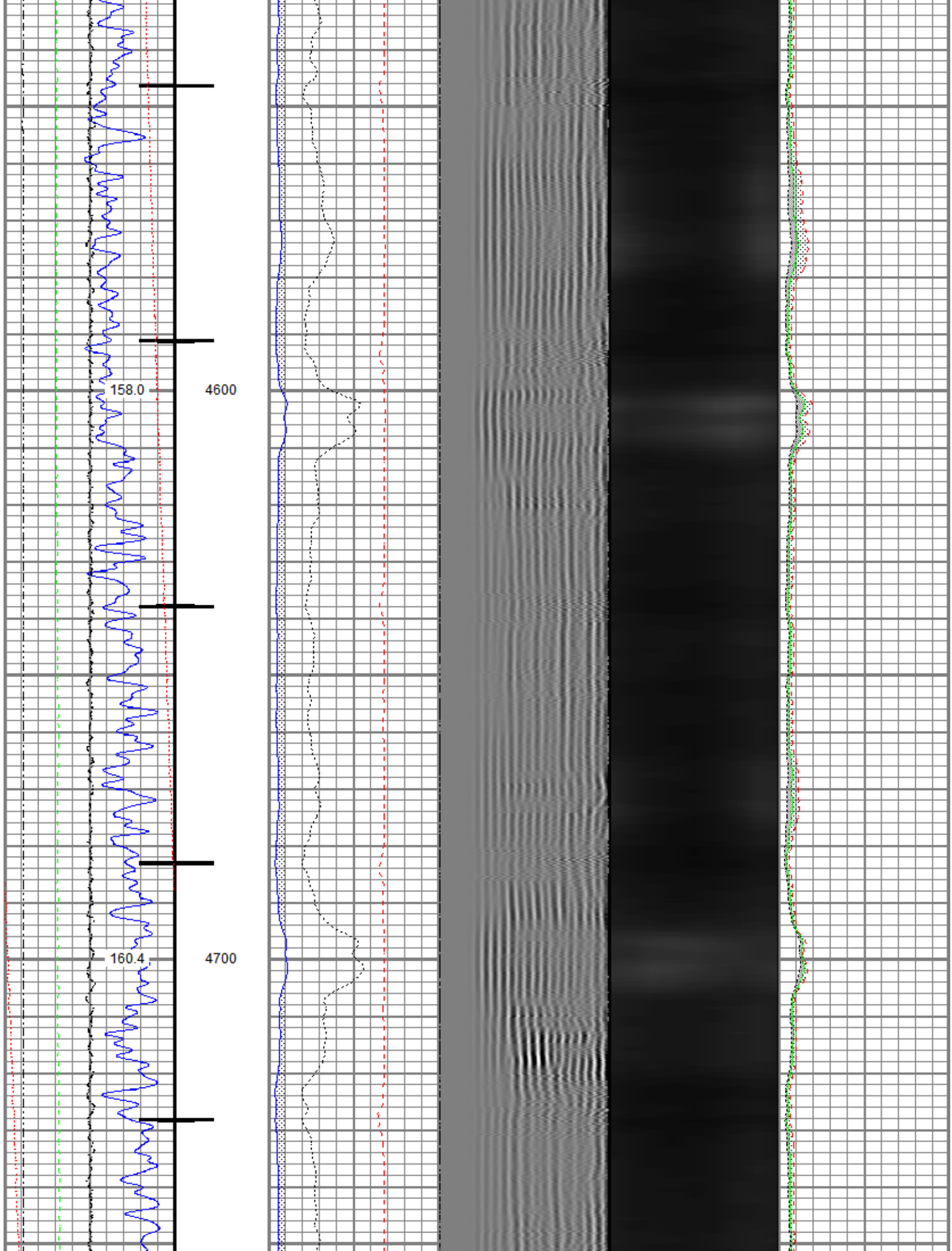


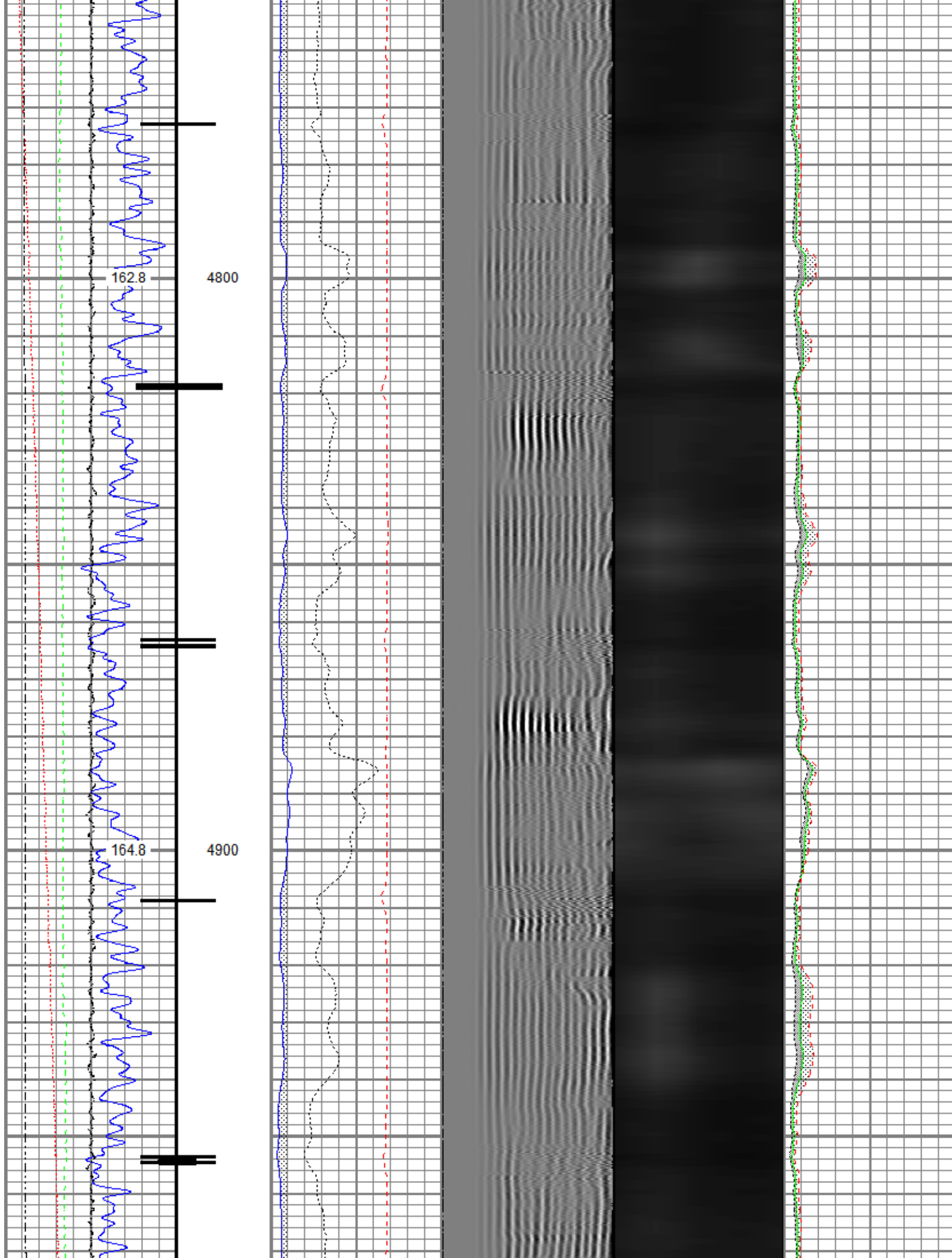


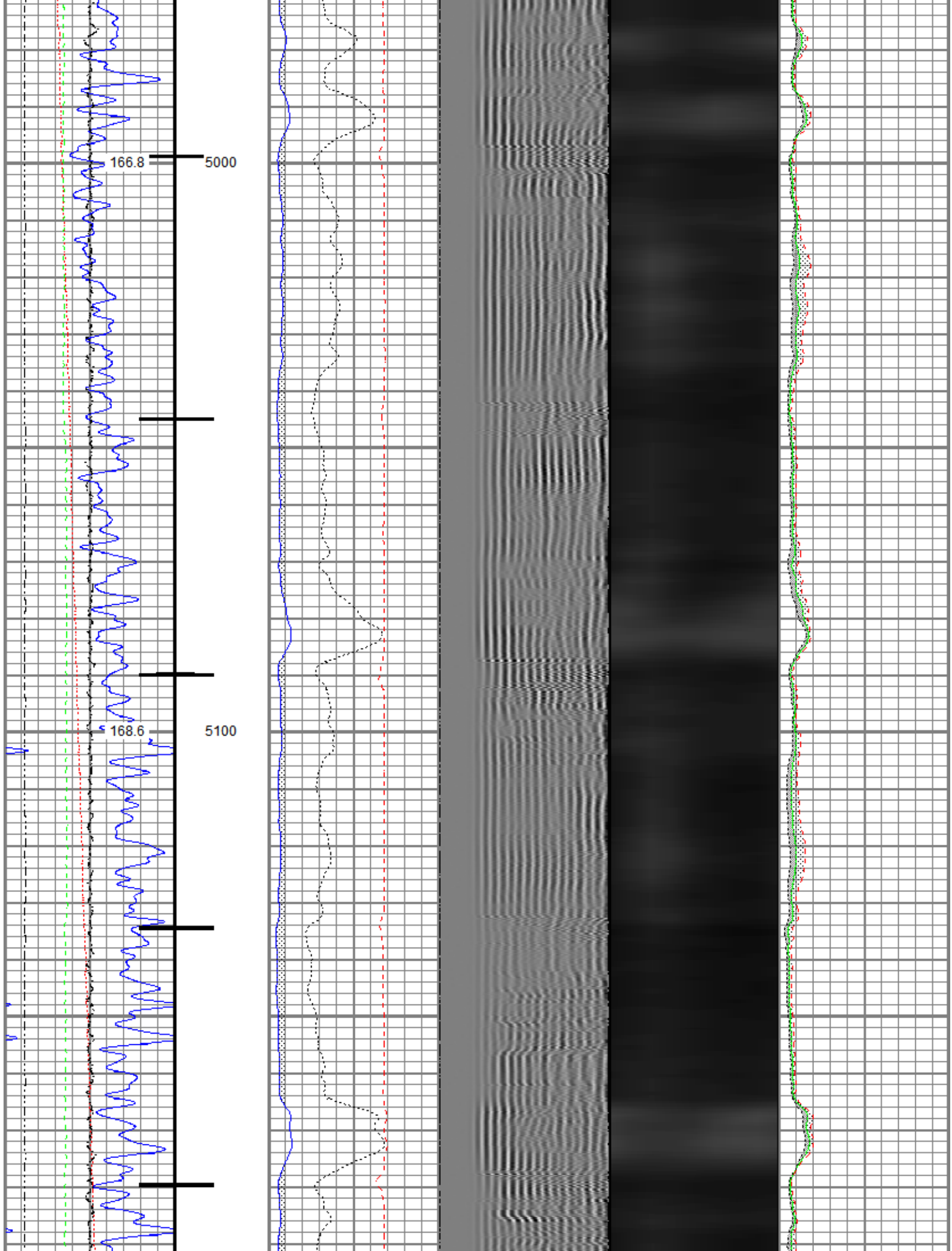


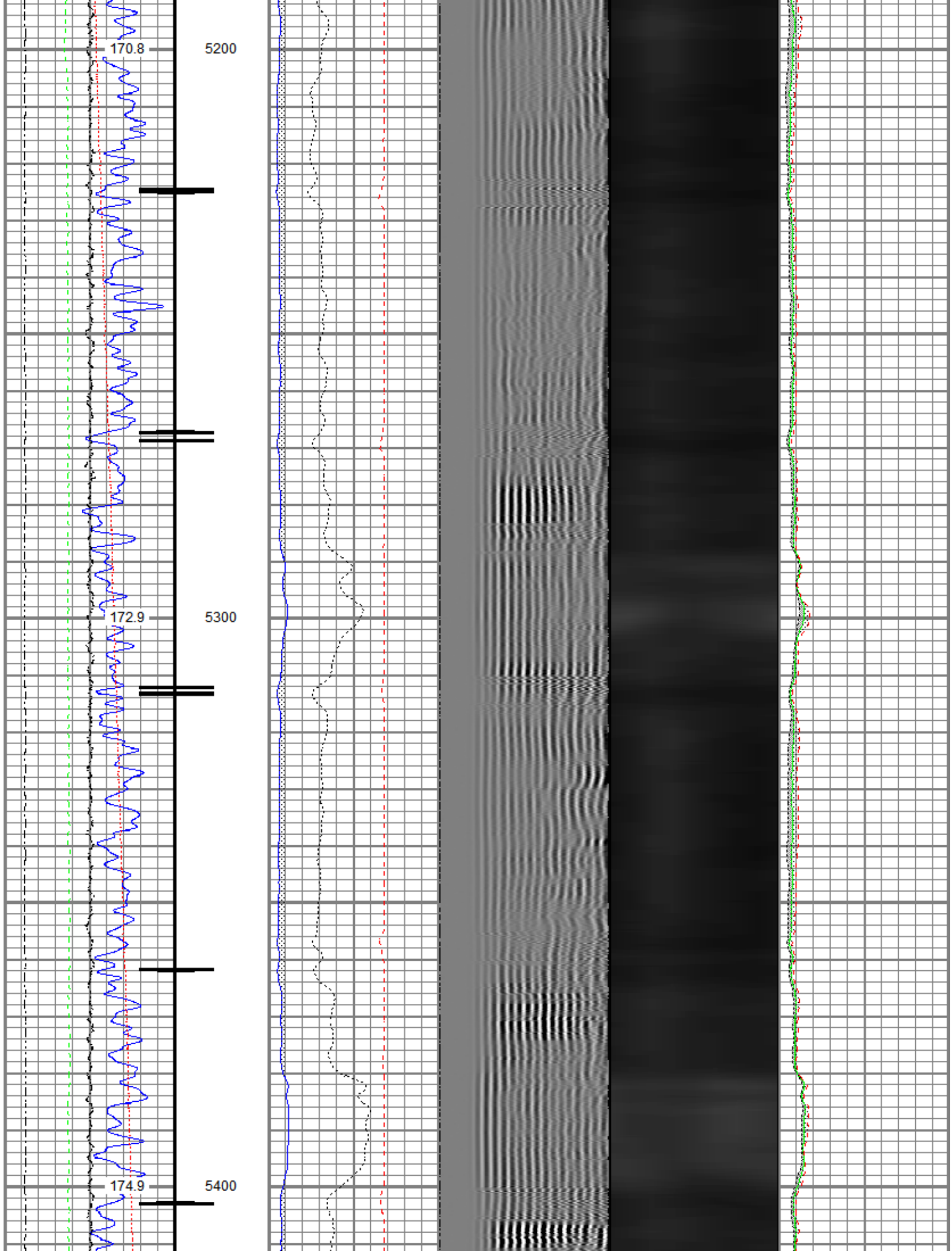


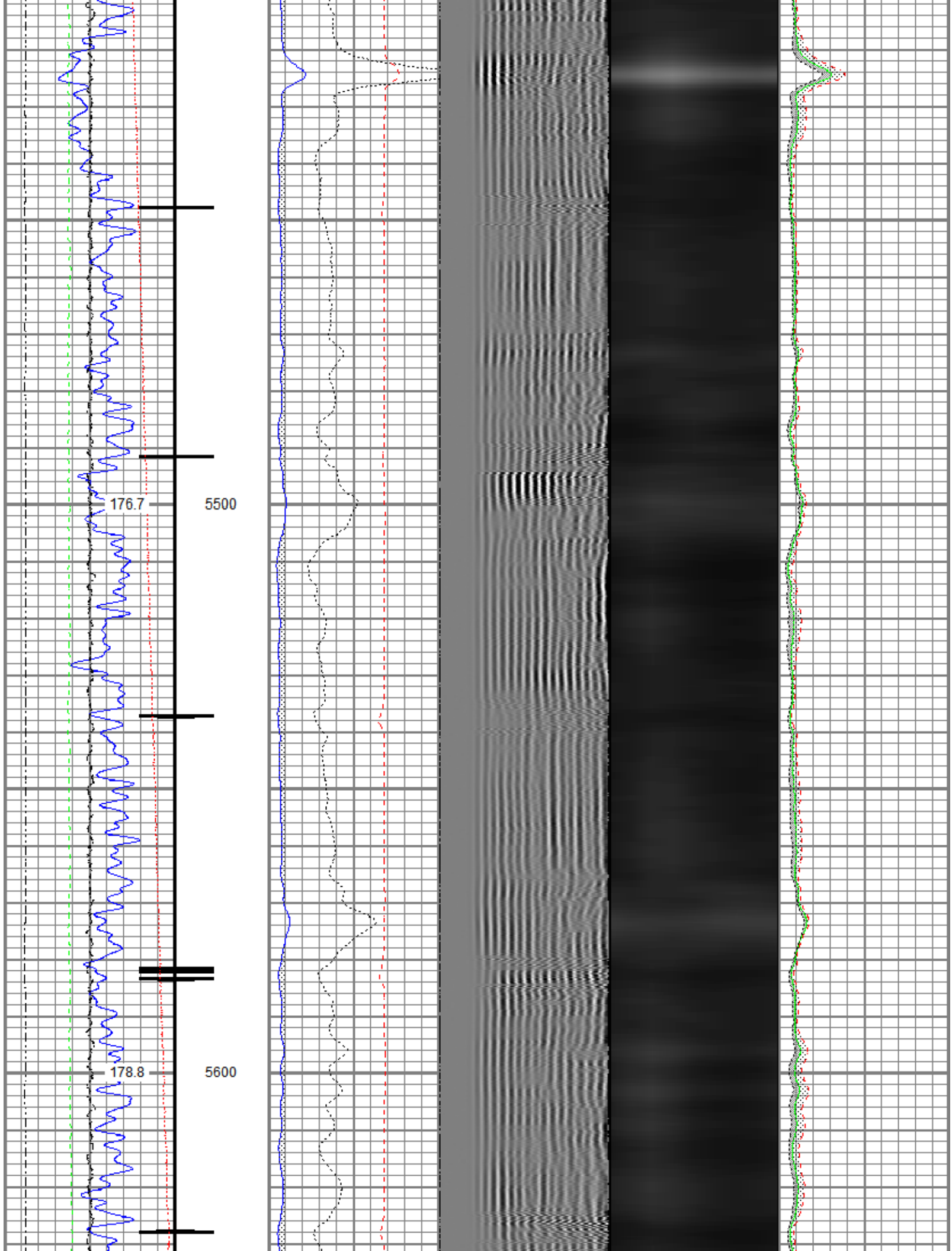


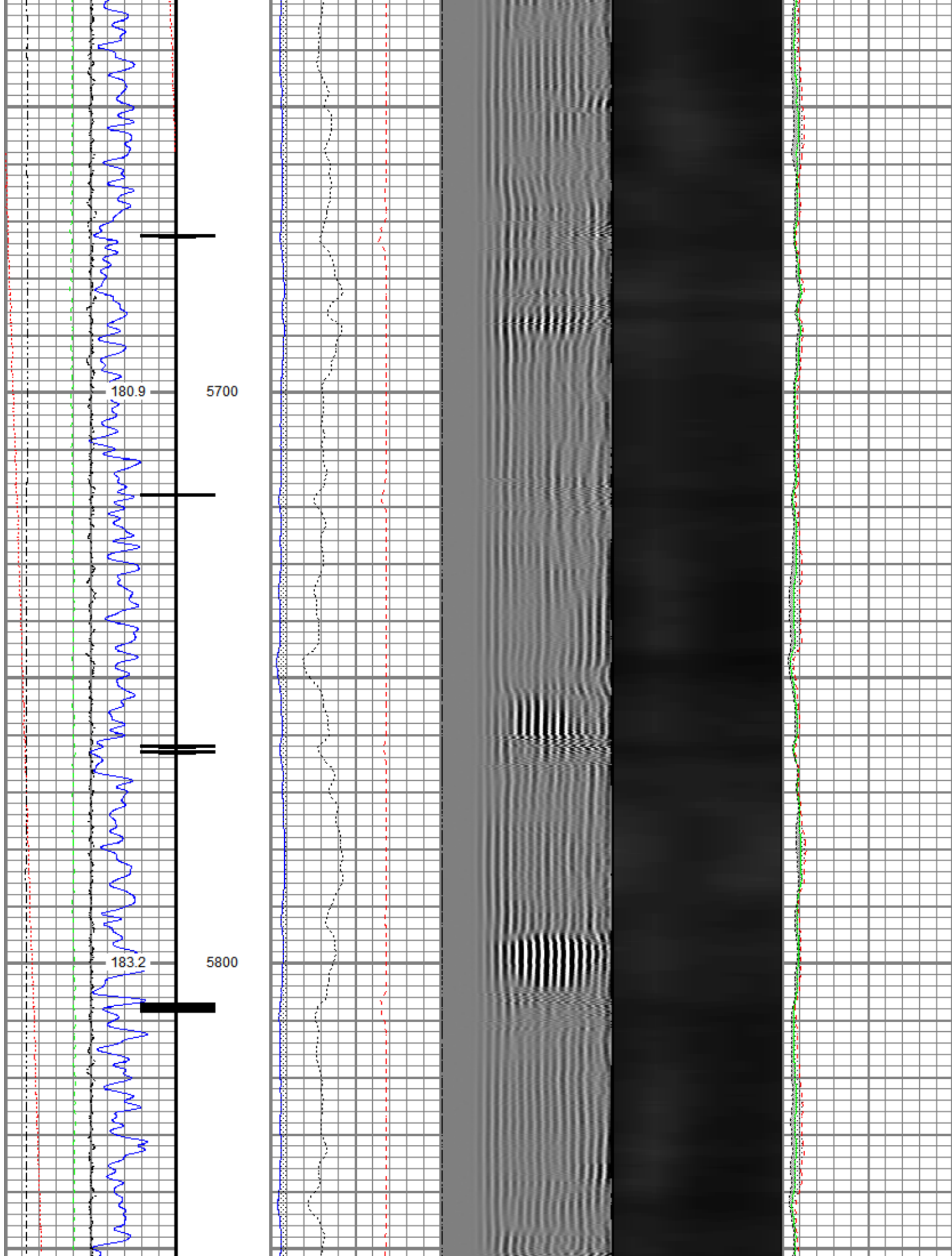


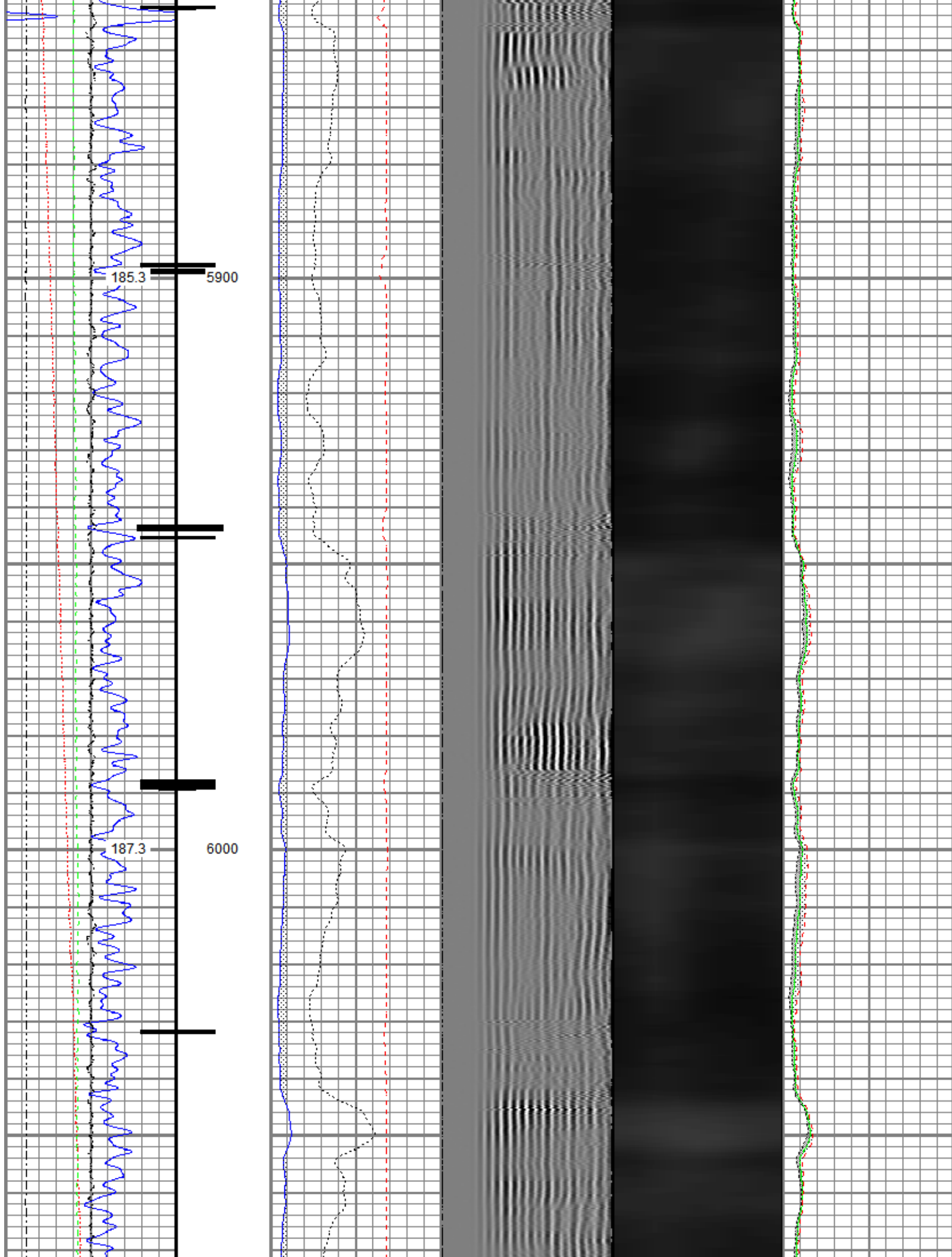


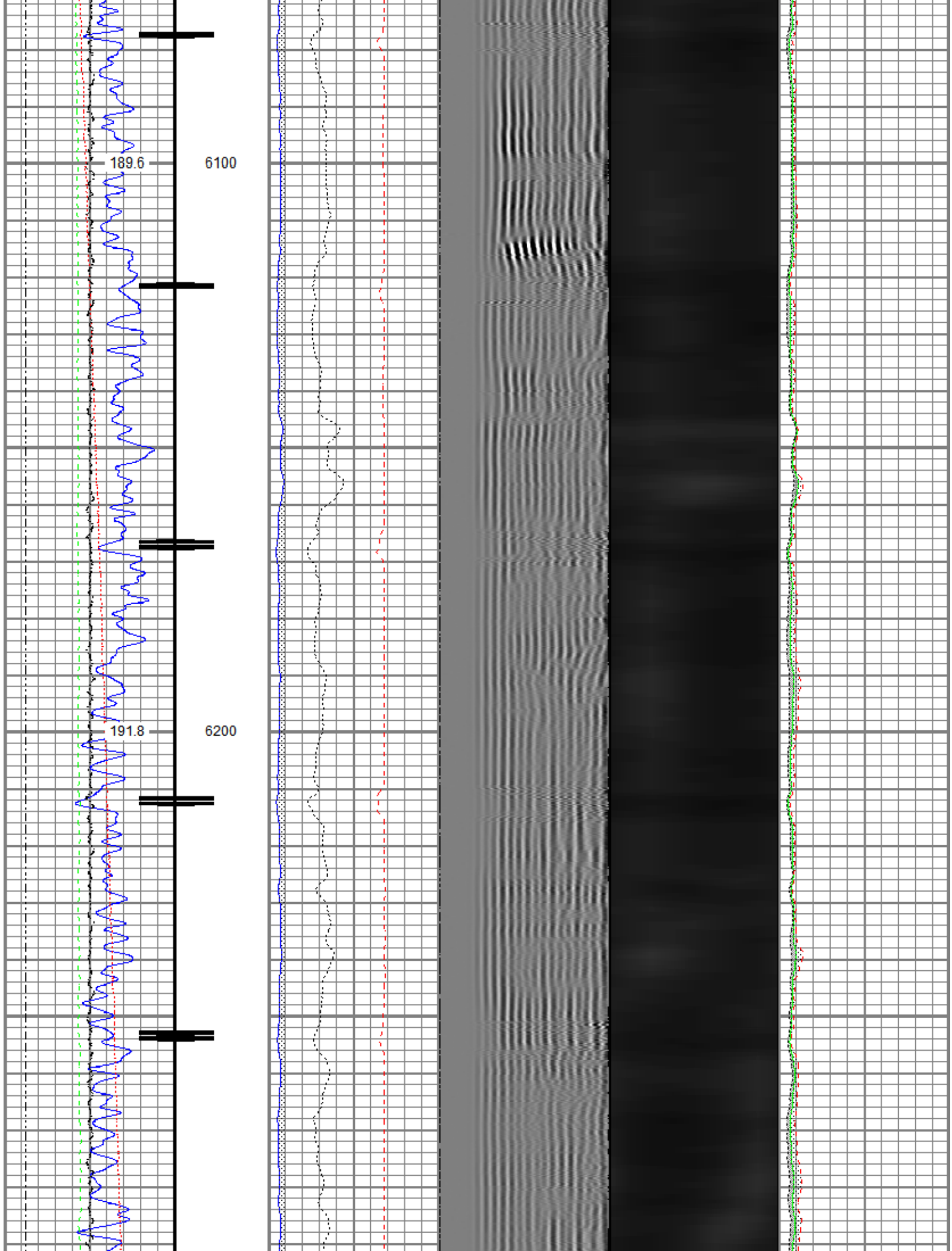


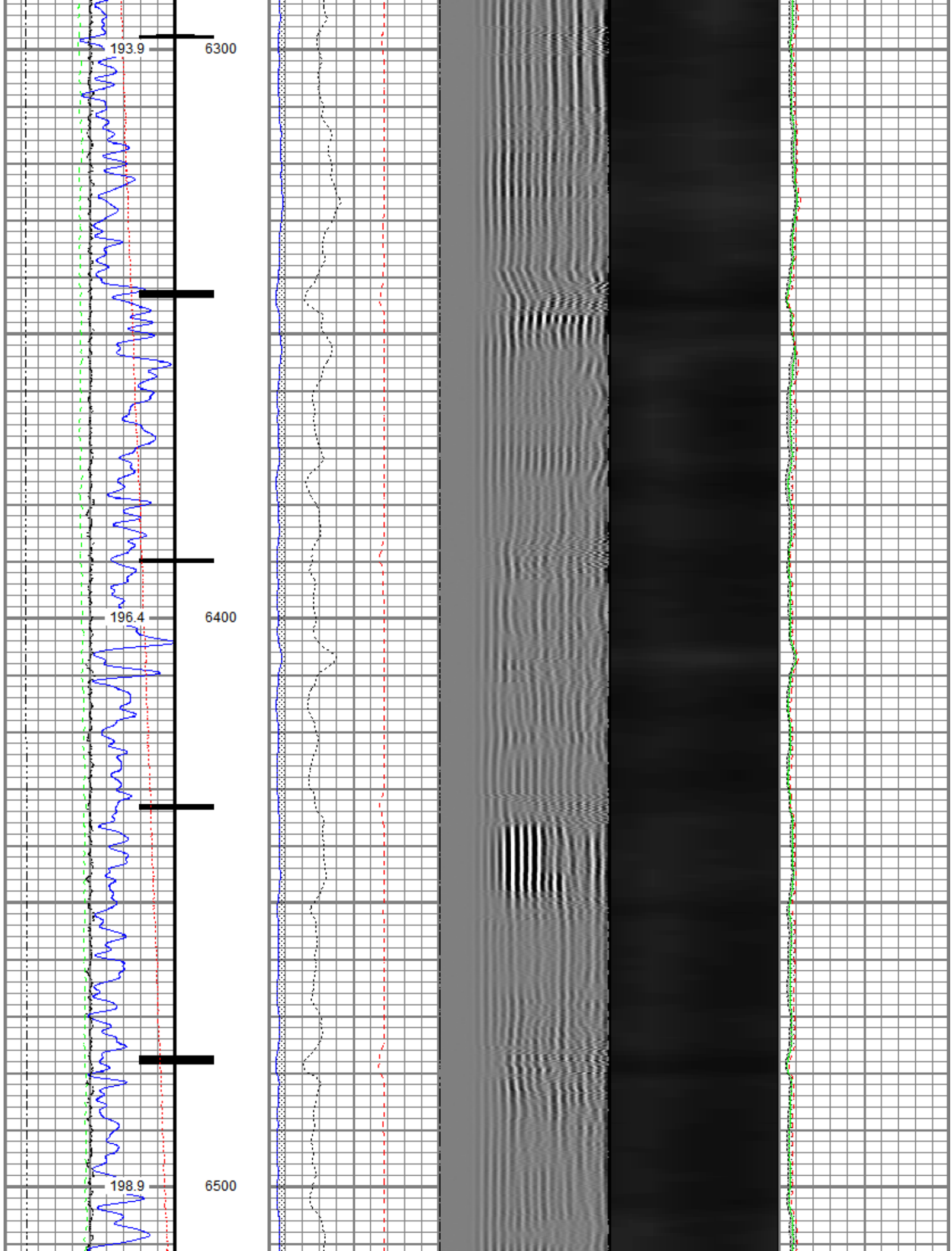


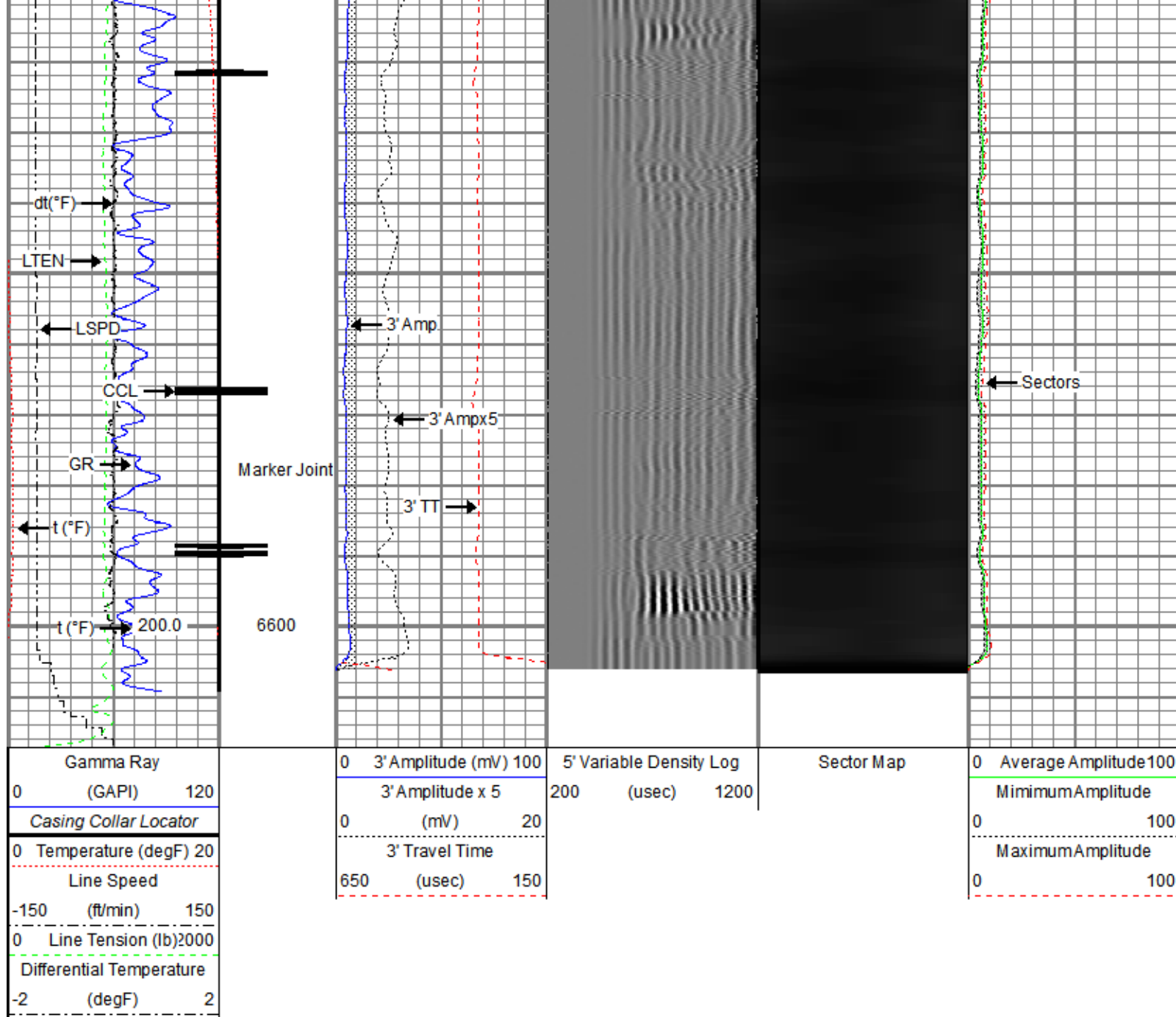








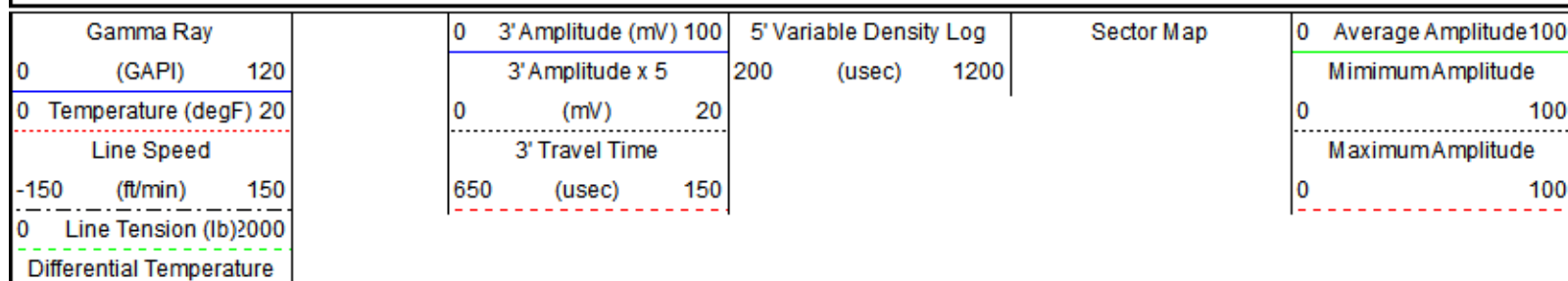


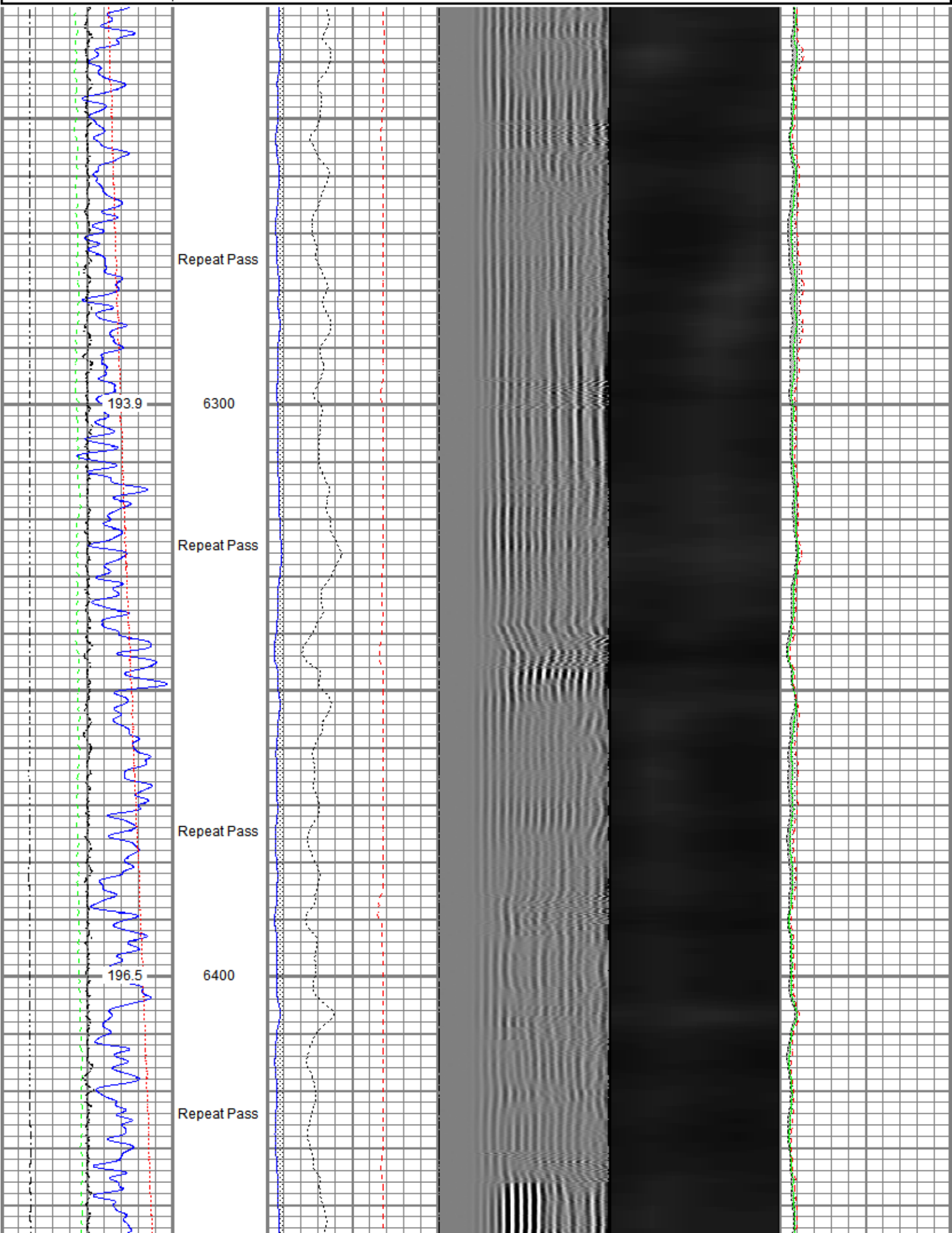


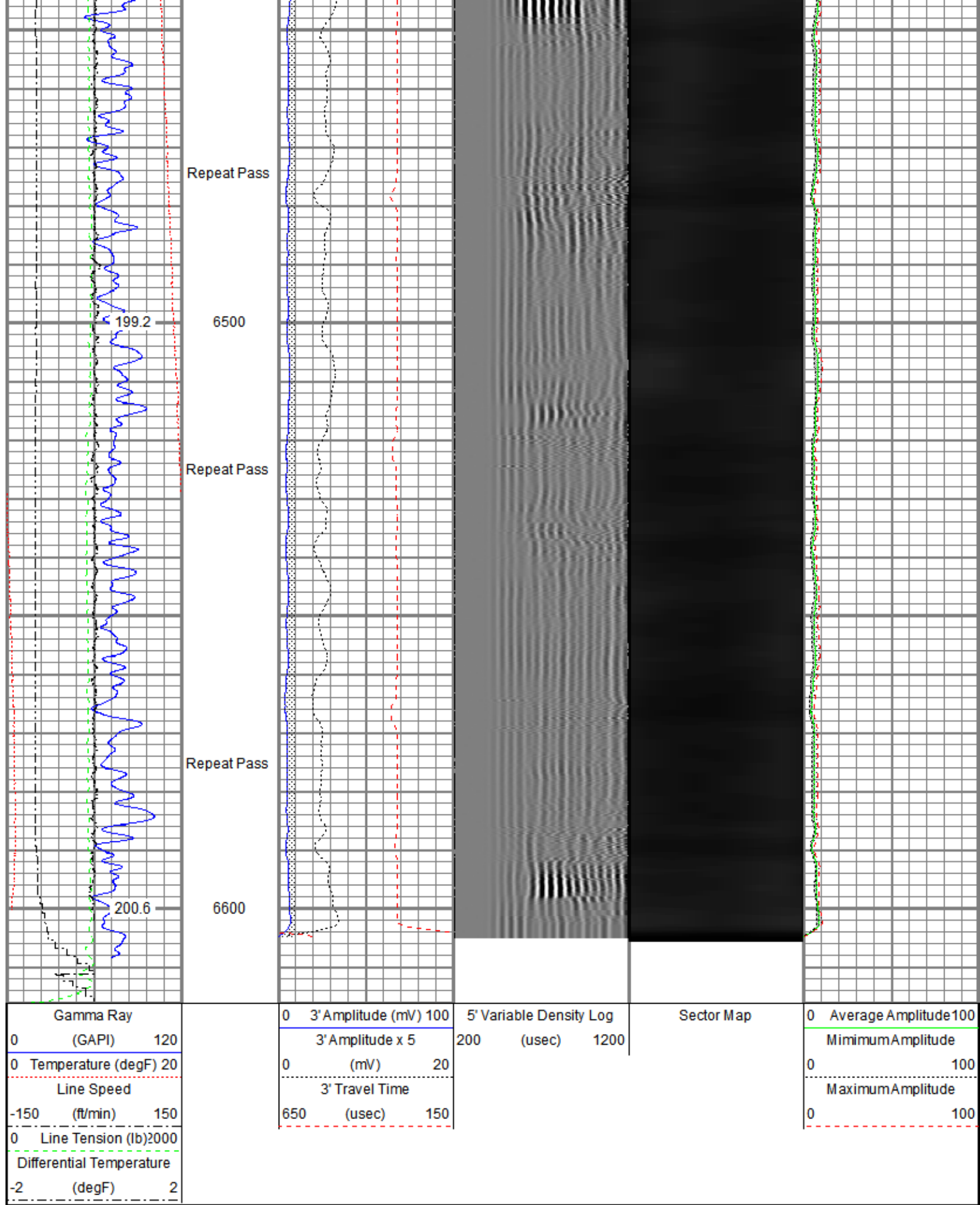
Repeat Pass

Recorded With 2800 PSI Surface Induced Pressure

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 Dataset Pathname repeat.2
 Presentation Format ros_radrii
 Dataset Creation Fri May 22 09:52:50 2020
 Charted by Depth in Feet scaled 1:240







Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
ErrCt	18.10					

RBT_HV	17.07		Titan CHD-16875 GO Titan 1-11/16" Assembled Electric Cable Head with 1" Fishing Neck	1.03	1.69	5.40
			SO BS CENT-2750-5500 Slip Over 2-3/4" I.D. for 5-1/2" O.D. Casing Bow Spring Centralizer	1.50	3.25	11.00
TEMP	14.16					
			Probe Radii ACC-2750 RBTa (FW1302-002) Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub and Accelerometer	9.39	2.75	105.00
RBT_ACCZ	11.93					
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					
CCL\$1	6.80					
GR	5.46		SO BS CENT-2750-5500 Slip Over 2-3/4" I.D. for 5-1/2" O.D. Casing Bow Spring Centralizer	1.50	3.25	11.00
			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
			Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
LOCTIM	0.00					
UTCTIM	0.00					
Dataset: processed_0512350509_oxy_mae j 8-8hz_rbl_05-21-20.db: field/well/run1/main.2						
Total length: 18.10 ft						
Total weight: 218.40 lb						
O.D.: 3.25 in						

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:	-18.384	ft			

Master Calibration, performed (Derived):						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.010	0.662	0.800	71.921	109.101	-0.260
CAL	0.623	0.637				
5'	0.009	0.583	0.800	71.921	124.086	-0.359
SUM						
S1	0.006	0.640	0.000	100.000	157.811	-0.924
S2	0.008	0.674	0.000	100.000	150.210	-1.257
S3	0.008	0.696	0.000	100.000	145.422	-1.163
S4	0.009	0.693	0.000	100.000	146.120	-1.249
S5	0.009	0.691	0.000	100.000	146.574	-1.311
S6	0.008	0.673	0.000	100.000	150.470	-1.248
S7	0.008	0.668	0.000	100.000	151.520	-1.151
S8	0.008	0.653	0.000	100.000	155.007	-1.220

Air Zero Calibration, performed Wed May 20 16:00:24 2020:			
	Raw (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	



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Well	MAE J 8-8HZ
Field	Wattenberg
County	Weld
State	Colorado