



Radial Cement Bond
Gamma Ray
Casing Collar Log

Company TEP Rocky Mountain LLC									
Well Federal WMC 13-20									
Field Rulison									
County Garfield									
State Colorado									
Location: API # : 05-045-24496									
Other Services									
SEC 17 TWP 7S RGE 93W									
Elevation									
Permanent Datum Ground Level Elevation 8869									
Log Measured From Kelly Bushing									
Drilling Measured From Kelly Bushing									
K.B. 8899 FT									
D.F. 8898 FT									
G.L. 8869 FT									
Date 03-JAN-2023									
Run Number One									
Depth Driller 11591 FT									
Depth Logger 11497 FT									
Bottom Logged Interval 11489 FT									
Top Log Interval Surface									
Open Hole Size 8.75"									
Type Fluid Water									
Density / Viscosity 8.34 Lb/Gal									
Max. Recorded Temp. 260 °F									
Estimated Cement Top See Log									
Time Well Ready ROA									
Time Logger on Bottom 8:00									
Equipment Number 8045									
Location Grand Junction									
Recorded By P. Edwards									
Witnessed By D. Welsh									
Borehole Record									
Tubing Record									
Run Number Bit From To Size Weight From To									

<<< 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 is correlated to 30' K.B.
Marker joint logged @ 7318 FT - 7328 FT
Log ran with 0 PSI at surface

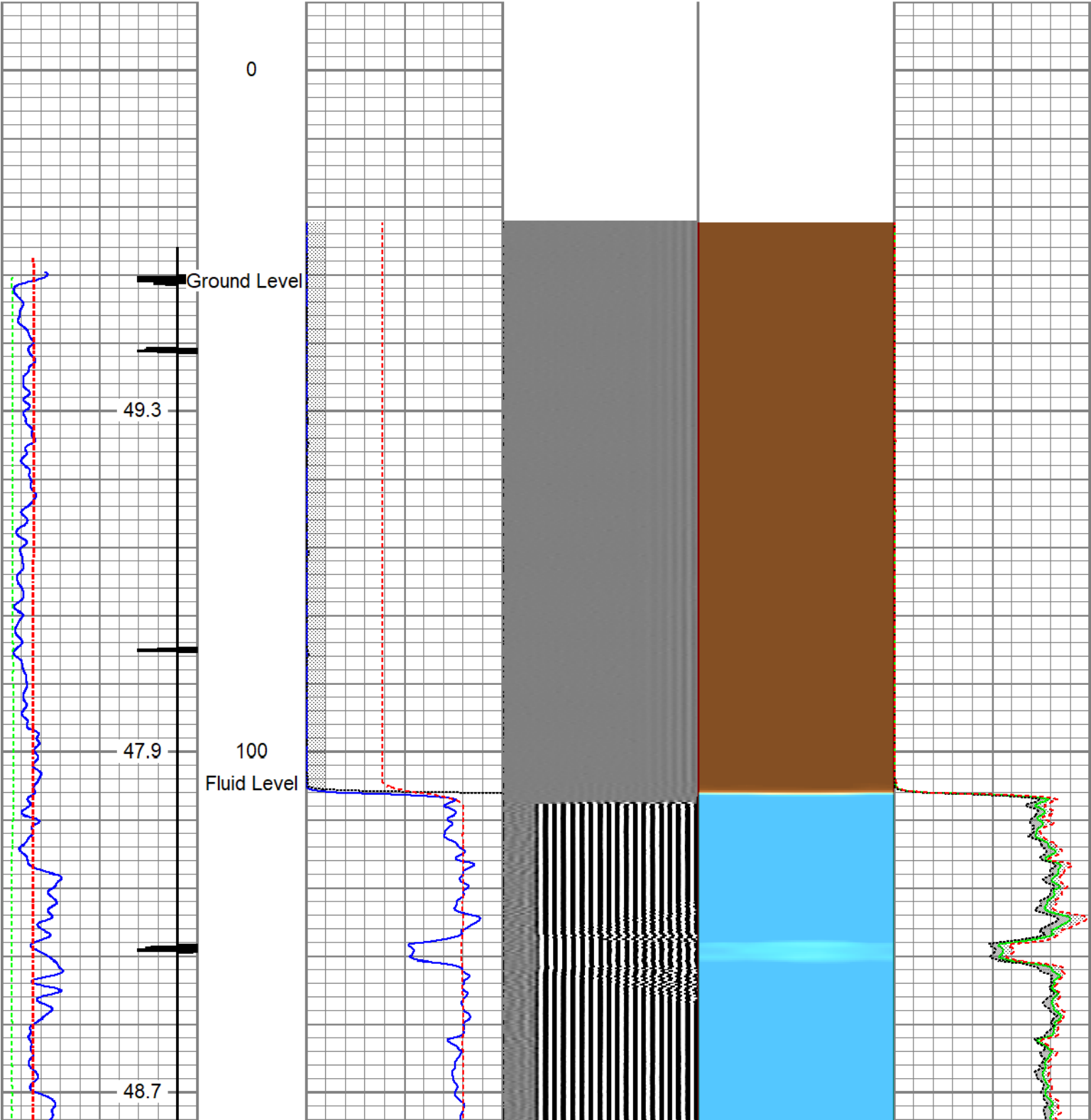
Thank you for choosing The Wireline Group!

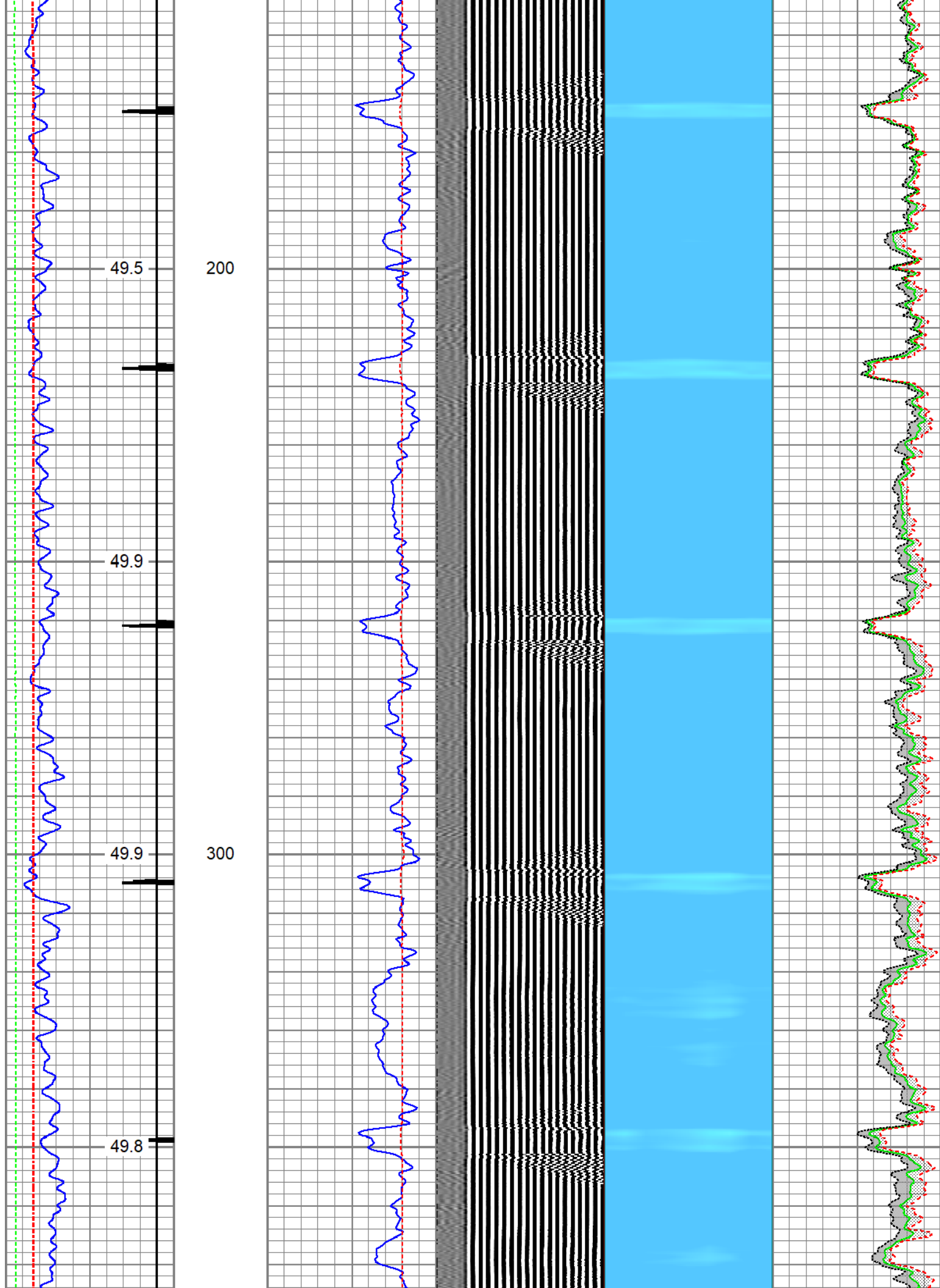


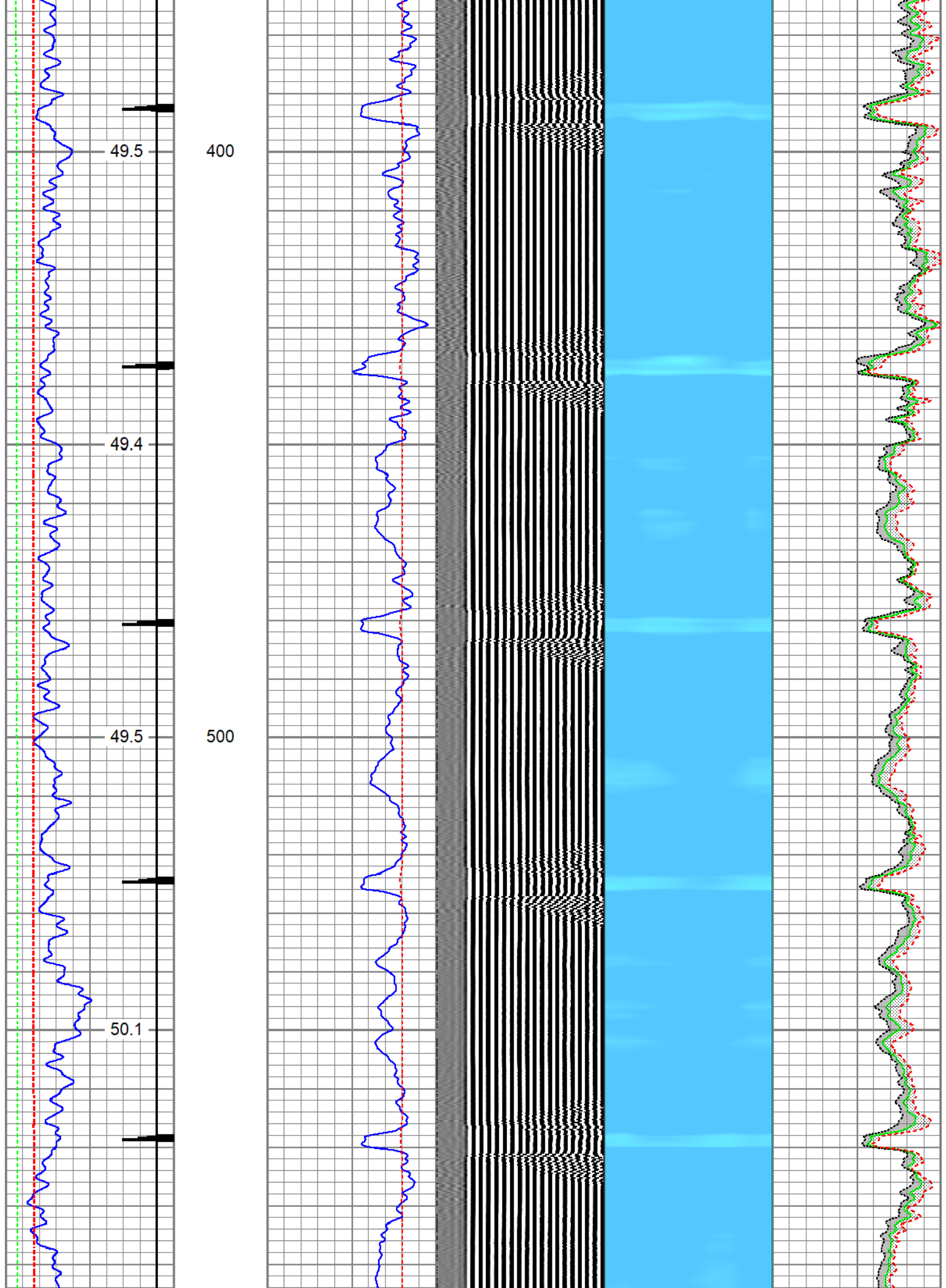
Main Pass 5" = 100'

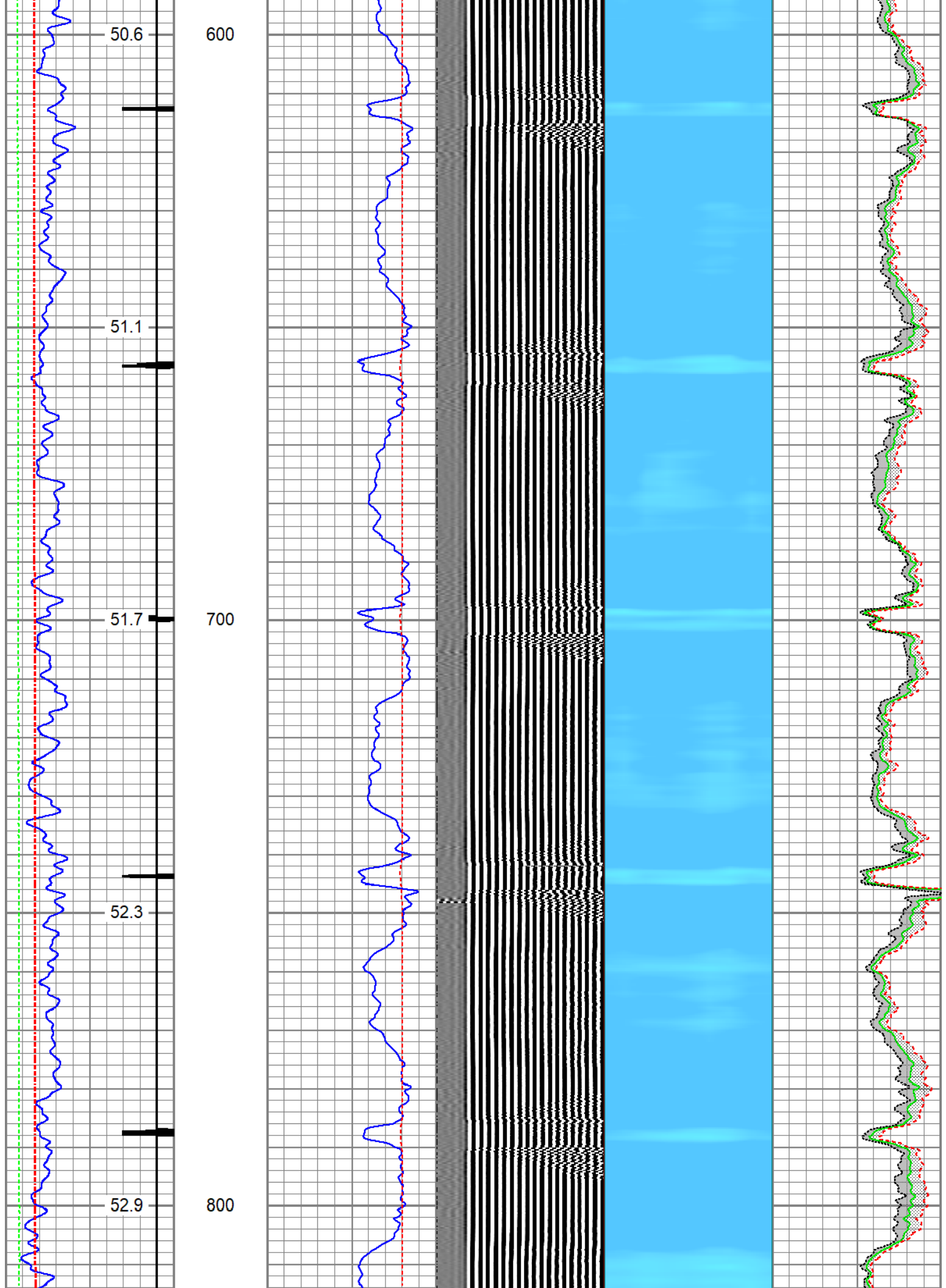
Database File	tep_wmc fed 13-20_rcbl_1-3-2023.db
Dataset Pathname	main
Presentation Format	twgrcbl
Dataset Creation	Tue Jan 03 08:04:41 2023
Charted by	Depth in Feet scaled 1:240

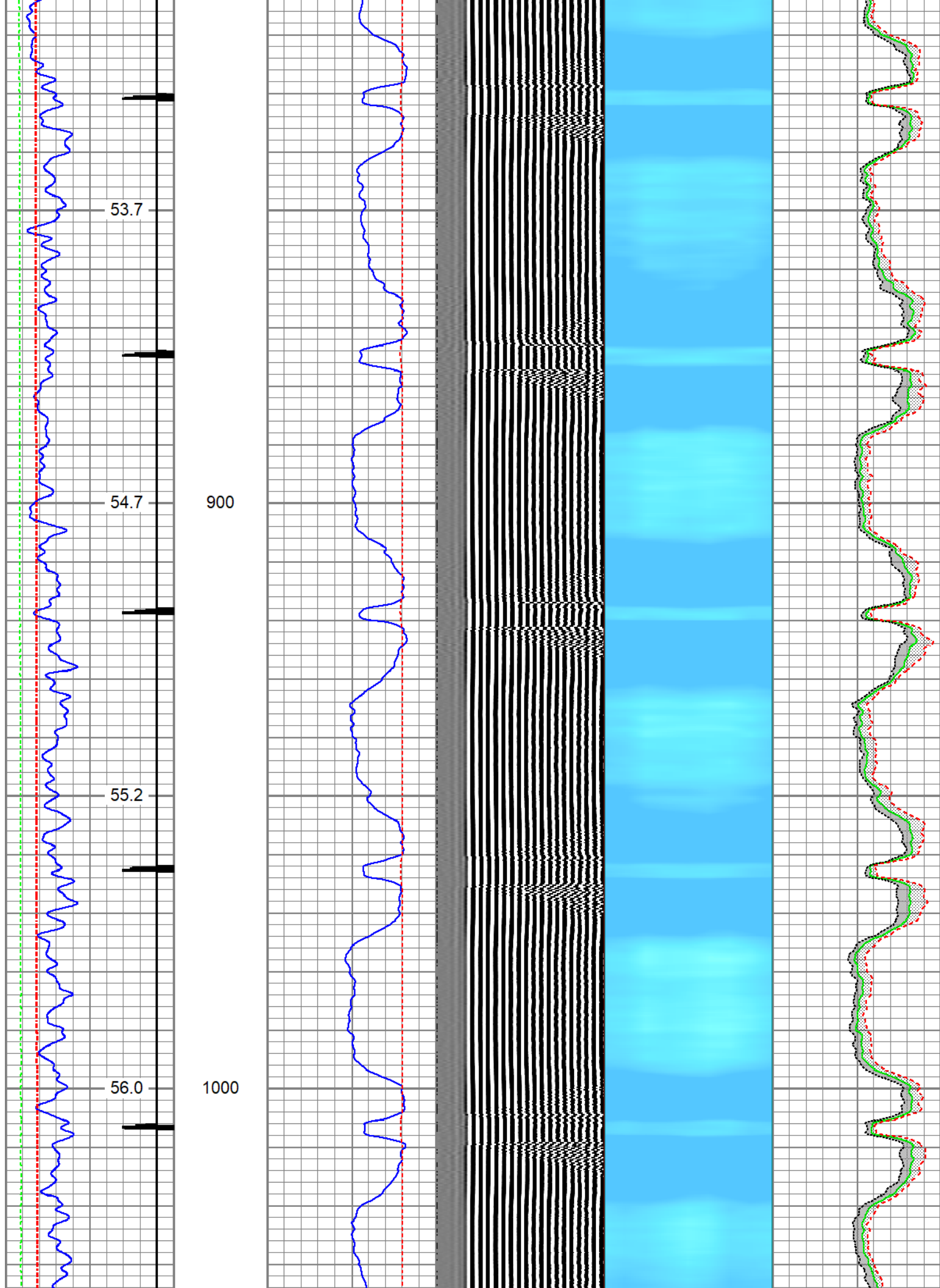
Gamma Ray		3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 200		0 (mV) 100	200 (usec) 1200		0 120
Line Tension		3' Amplitude x 5			Minimum Amplitude
0 (lb) 4000		0 (mV) 20			0 120
-9 CCL 1		3' Travel Time			Maximum Amplitude
0 Temp (degF) 300		650 (usec) 150			0 120

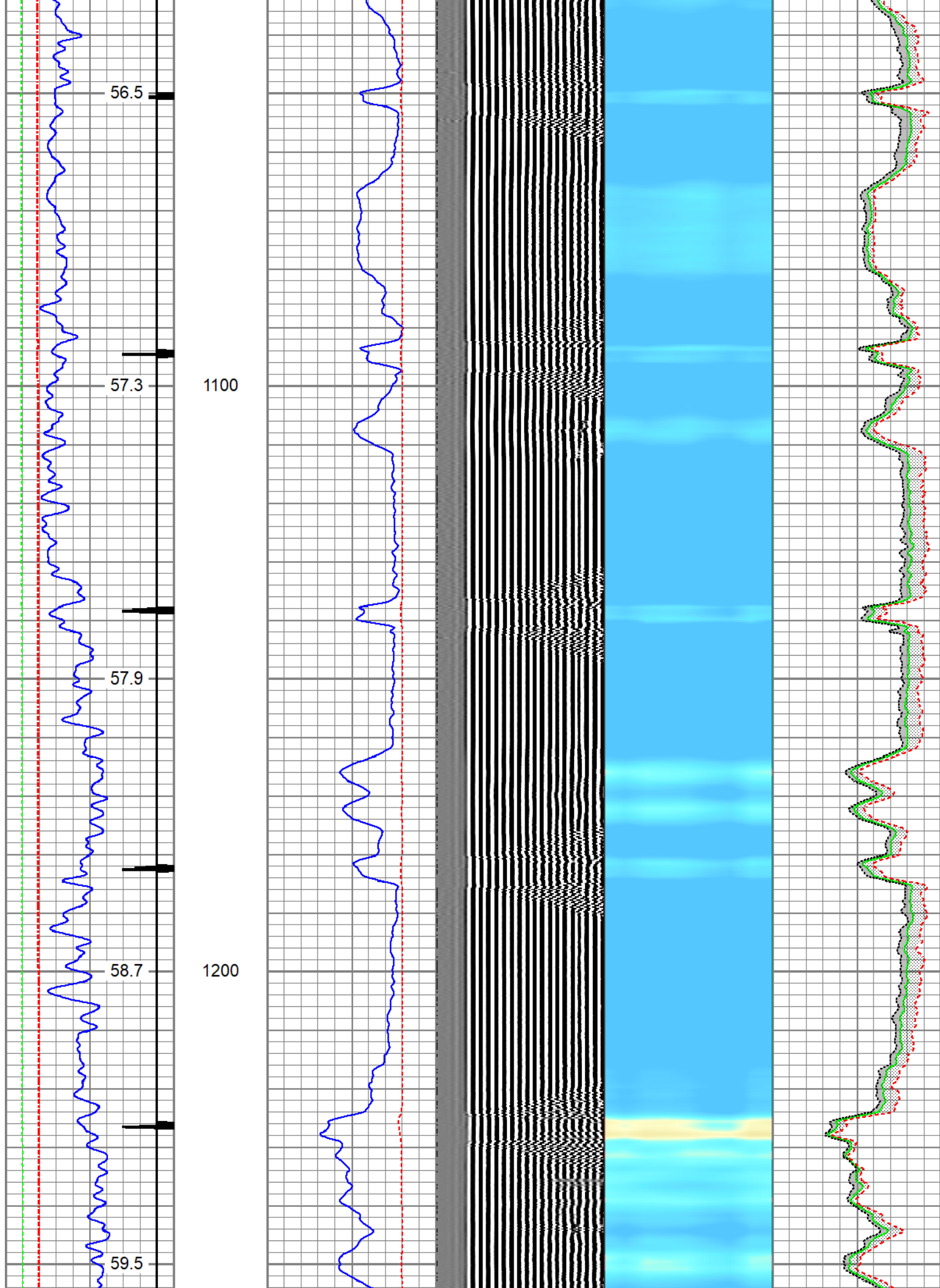


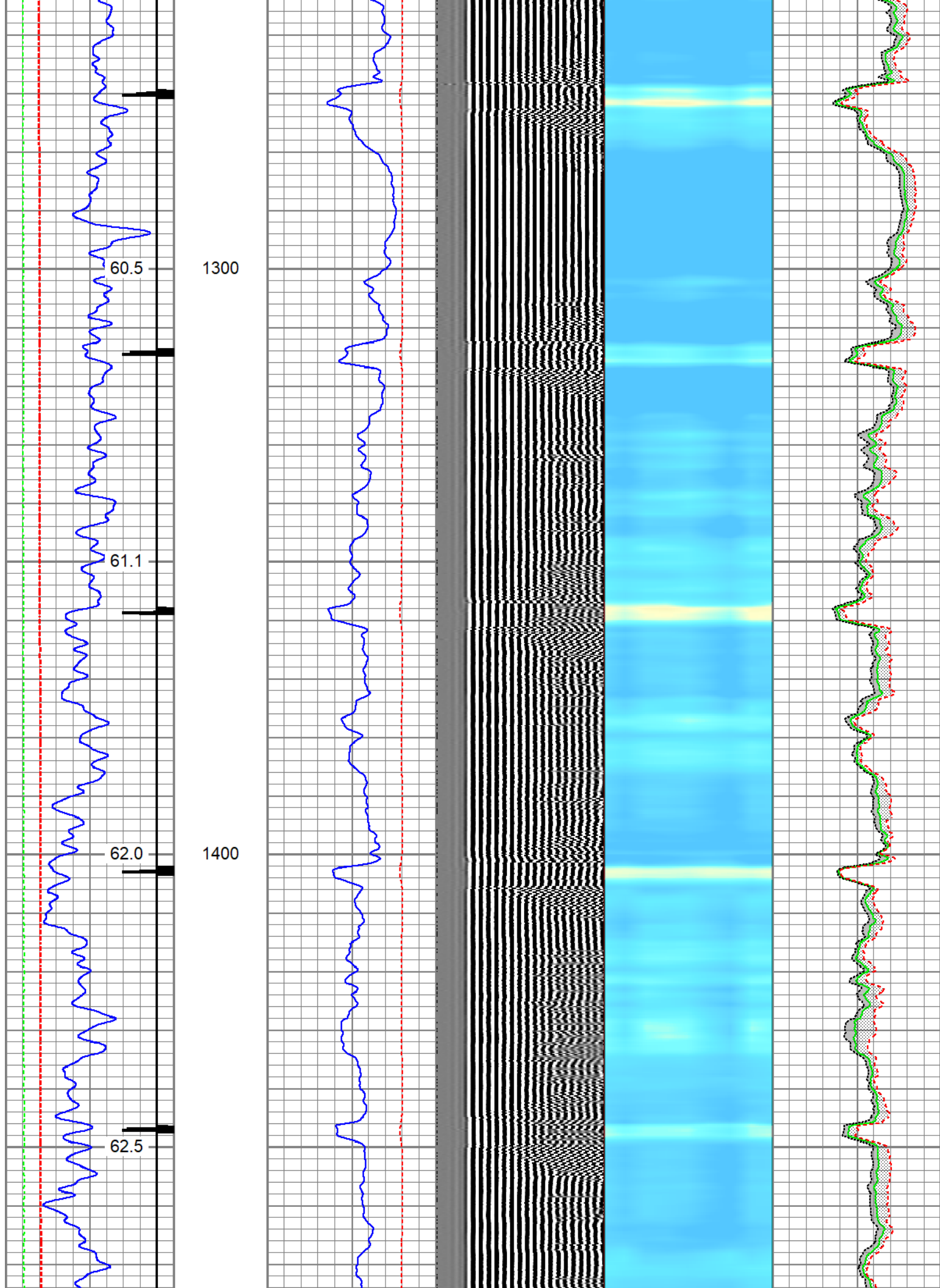


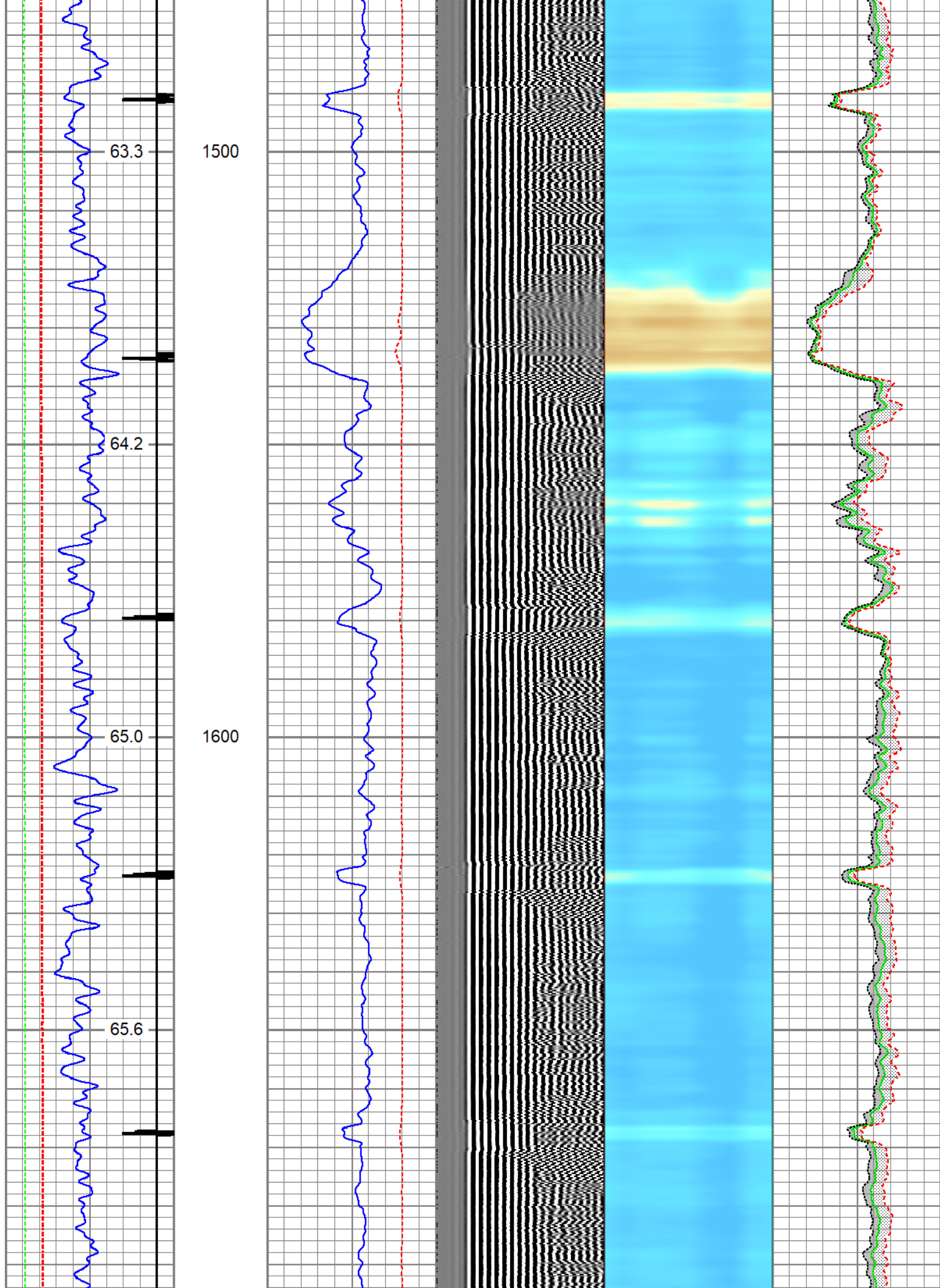


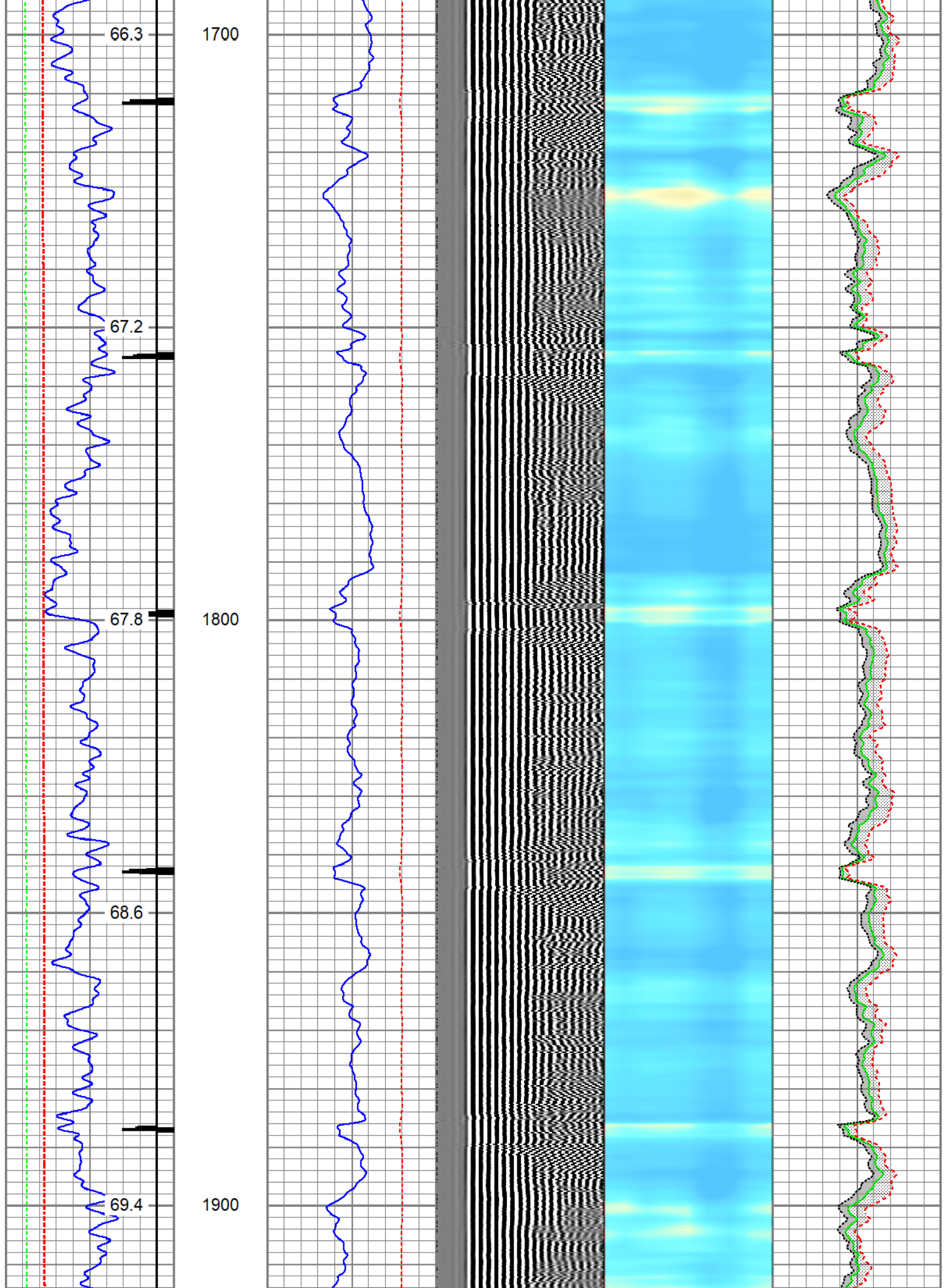


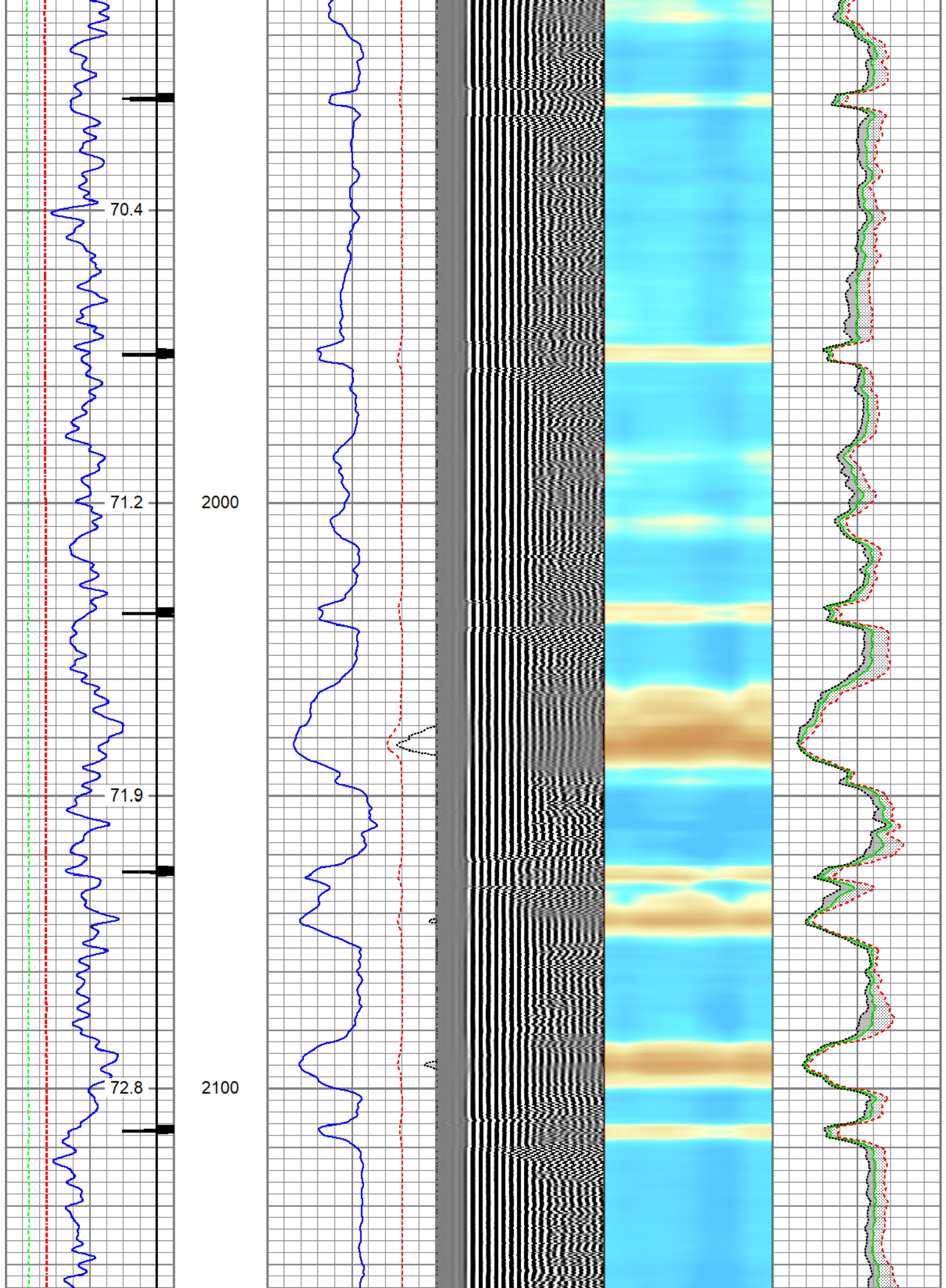


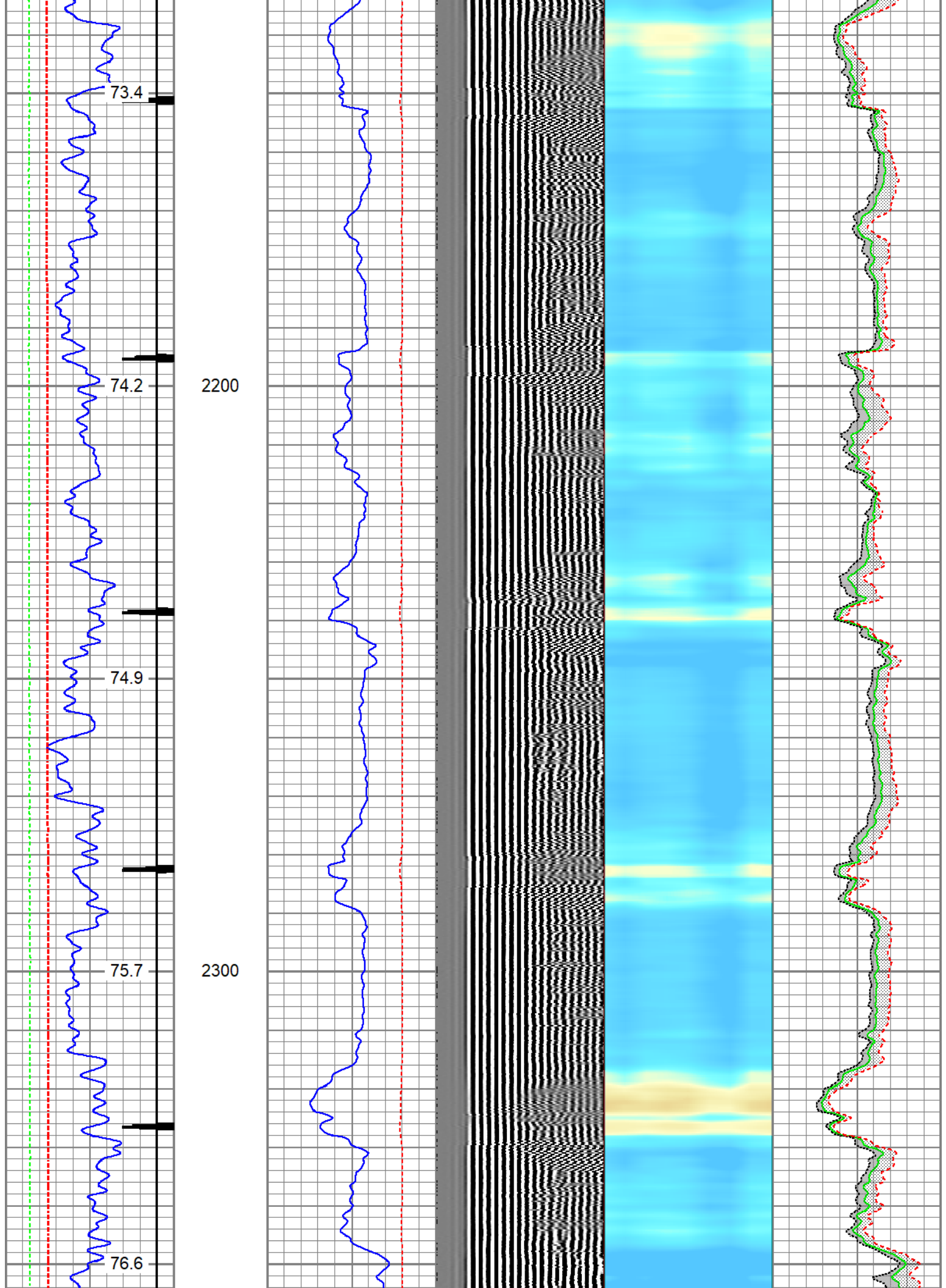


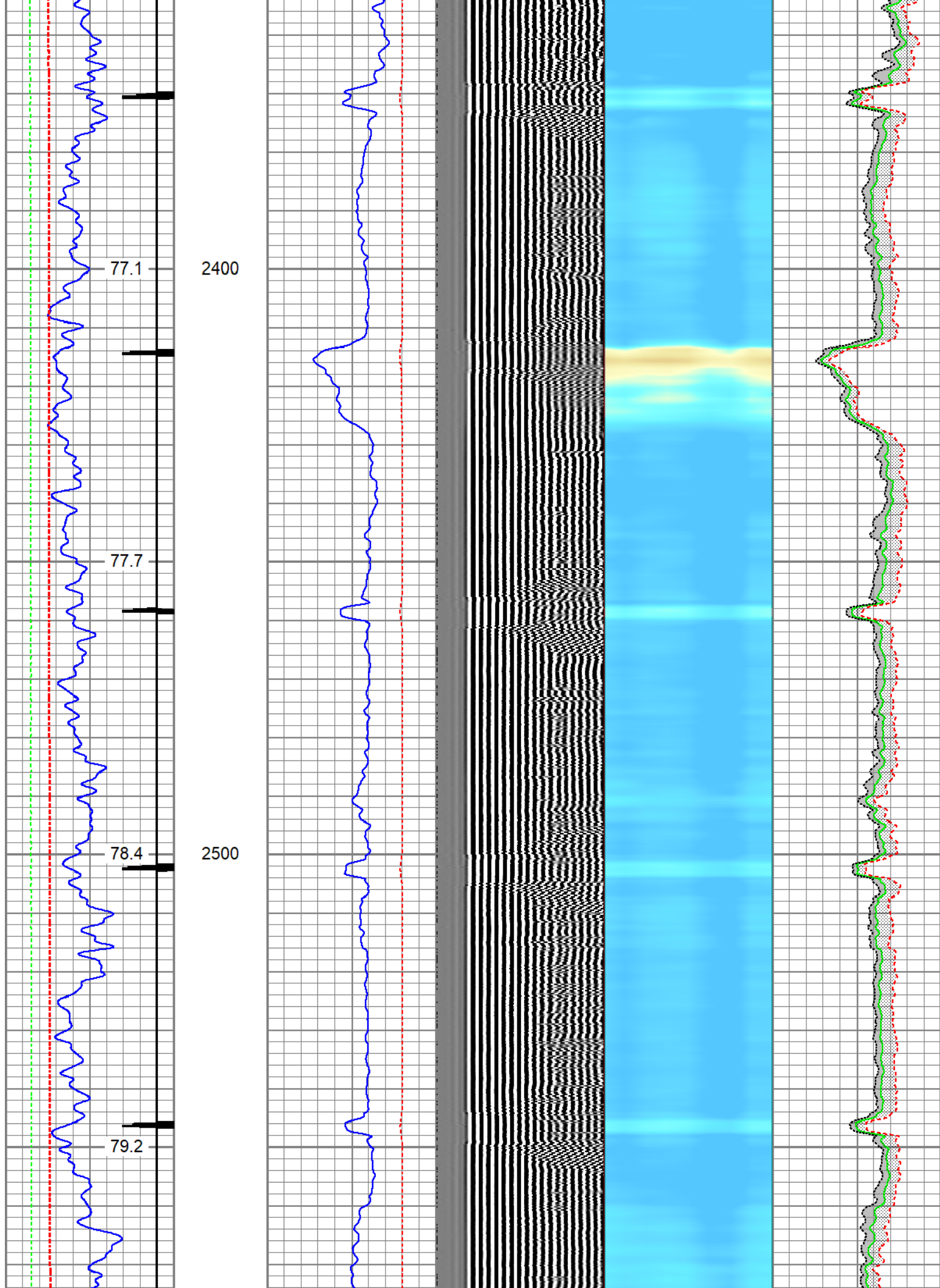


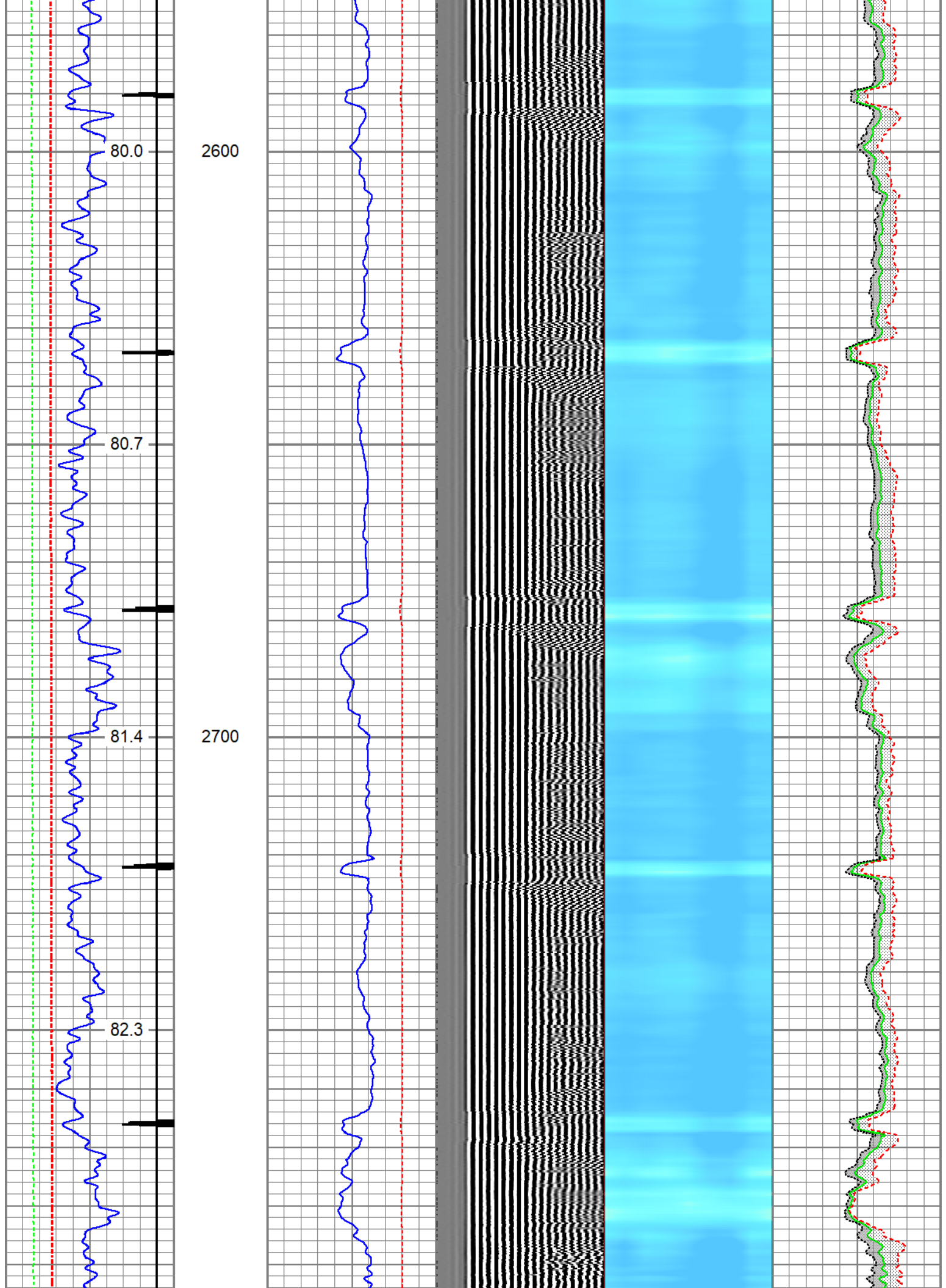


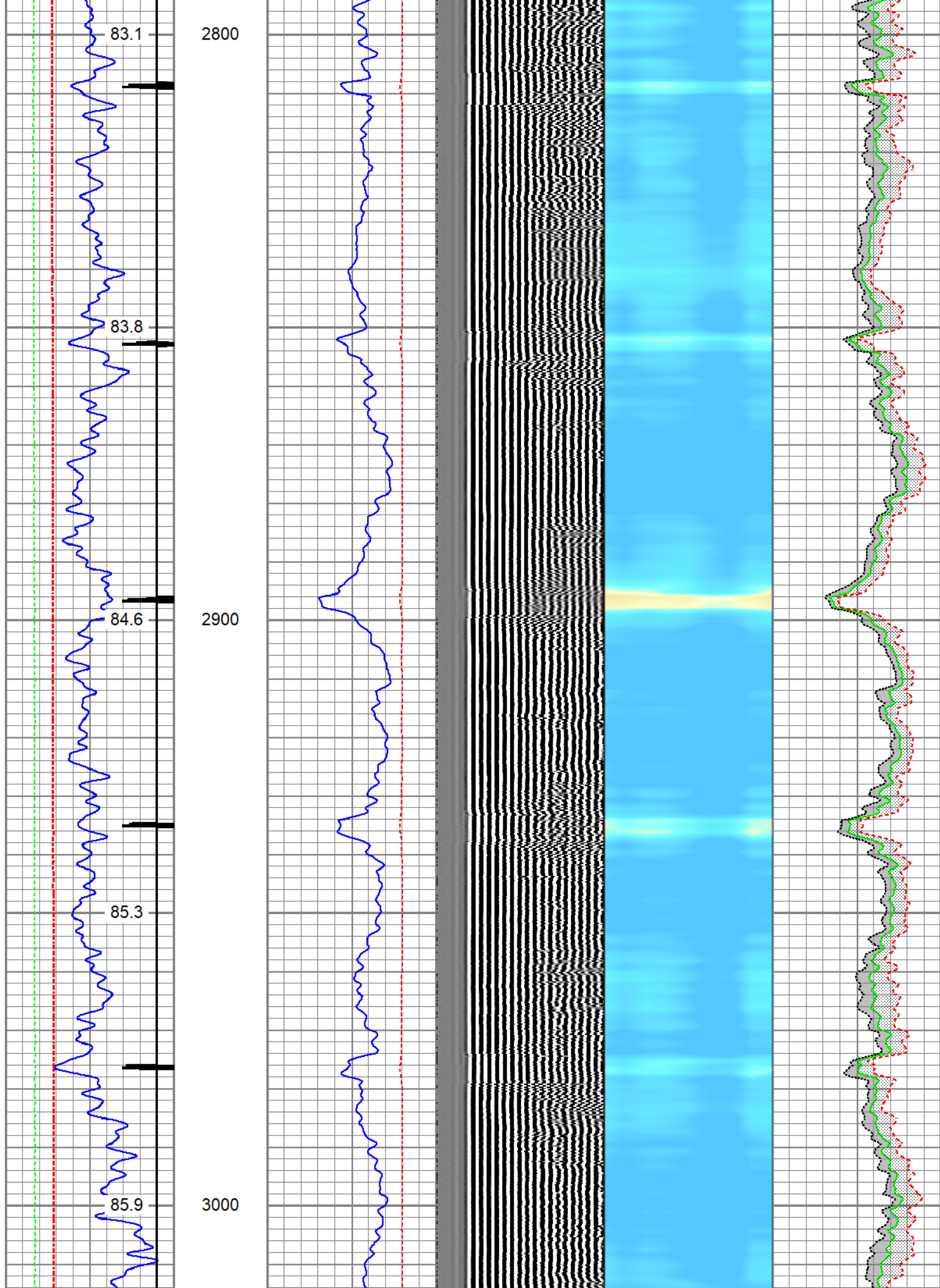


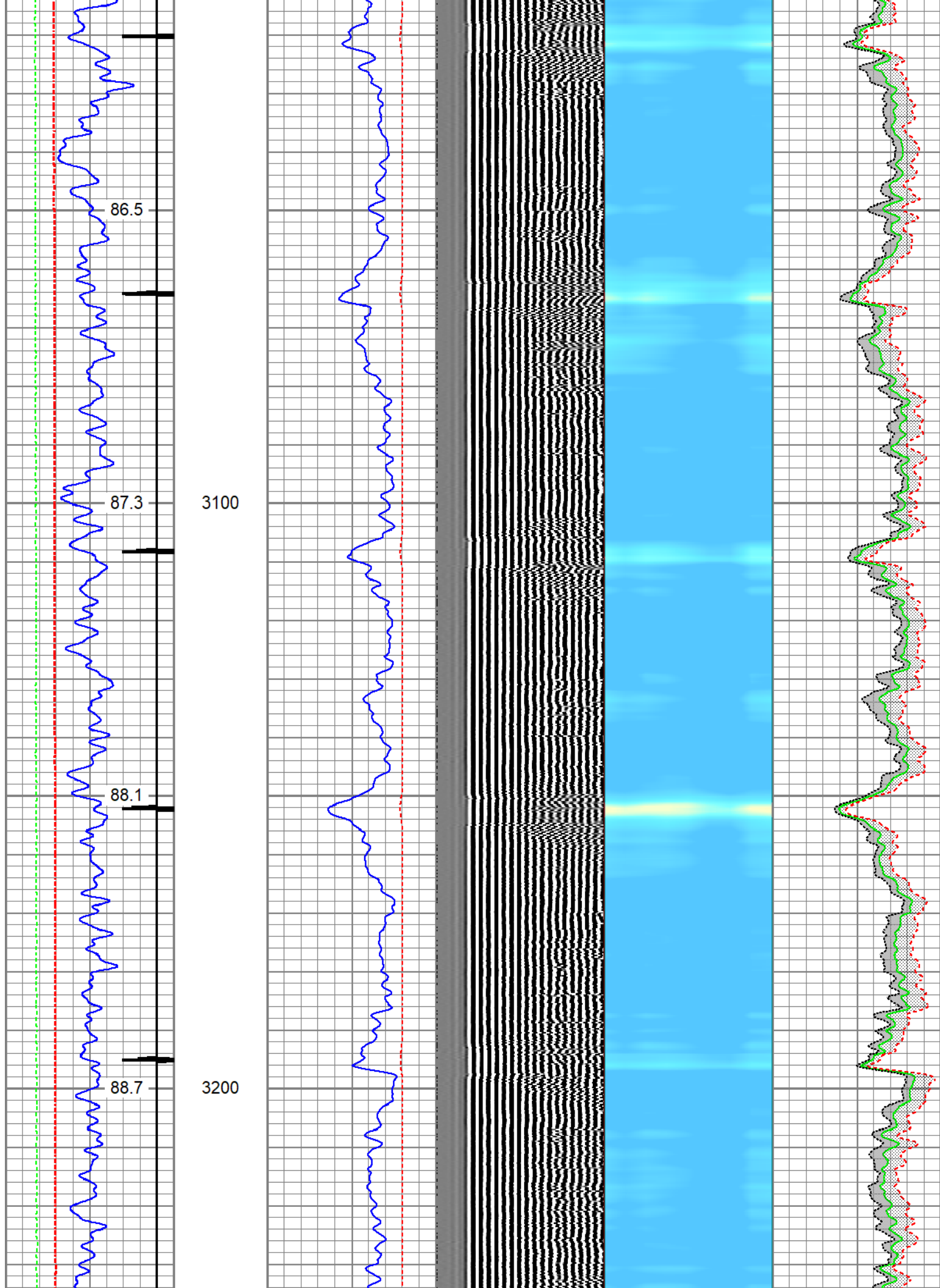


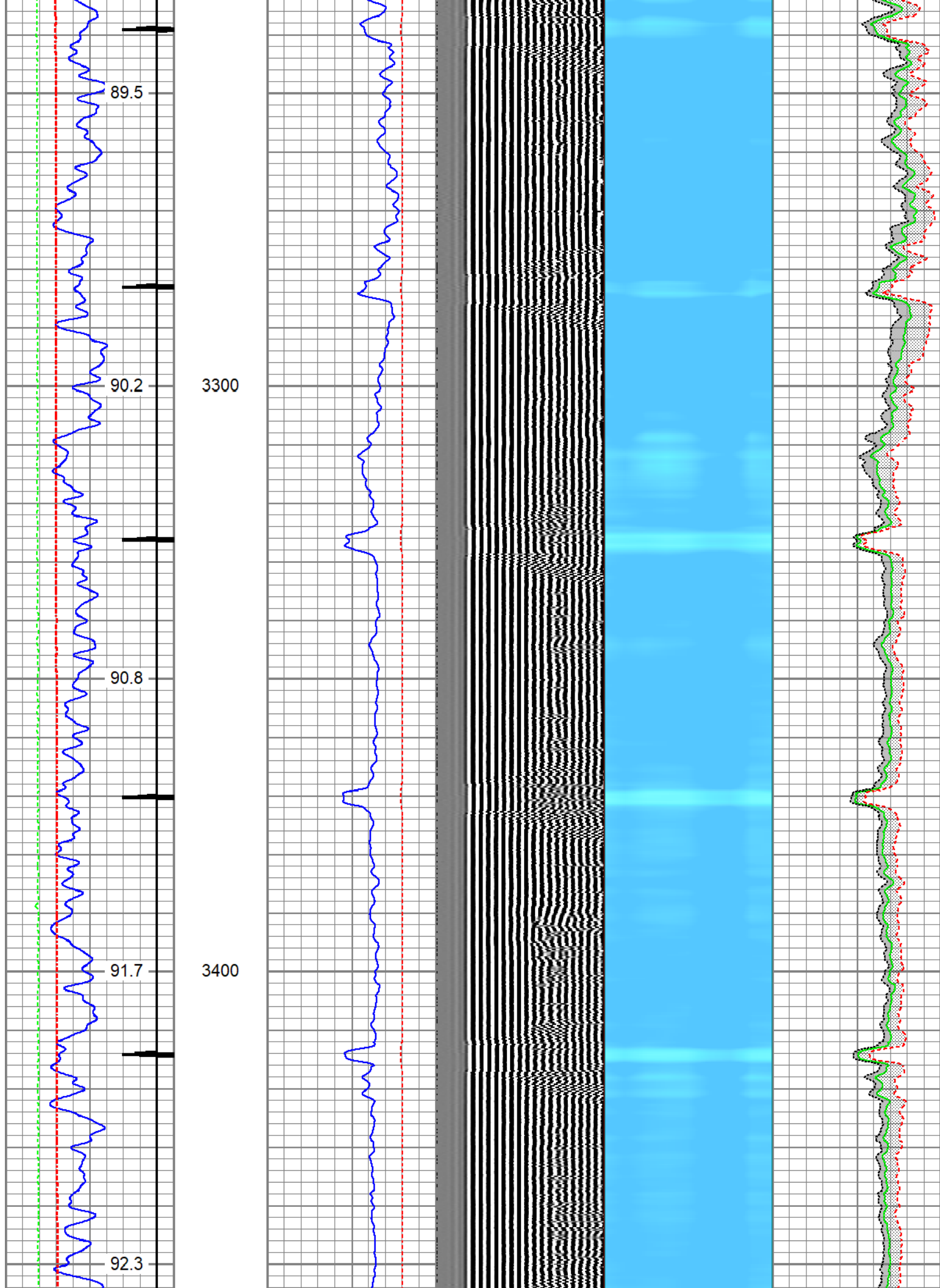


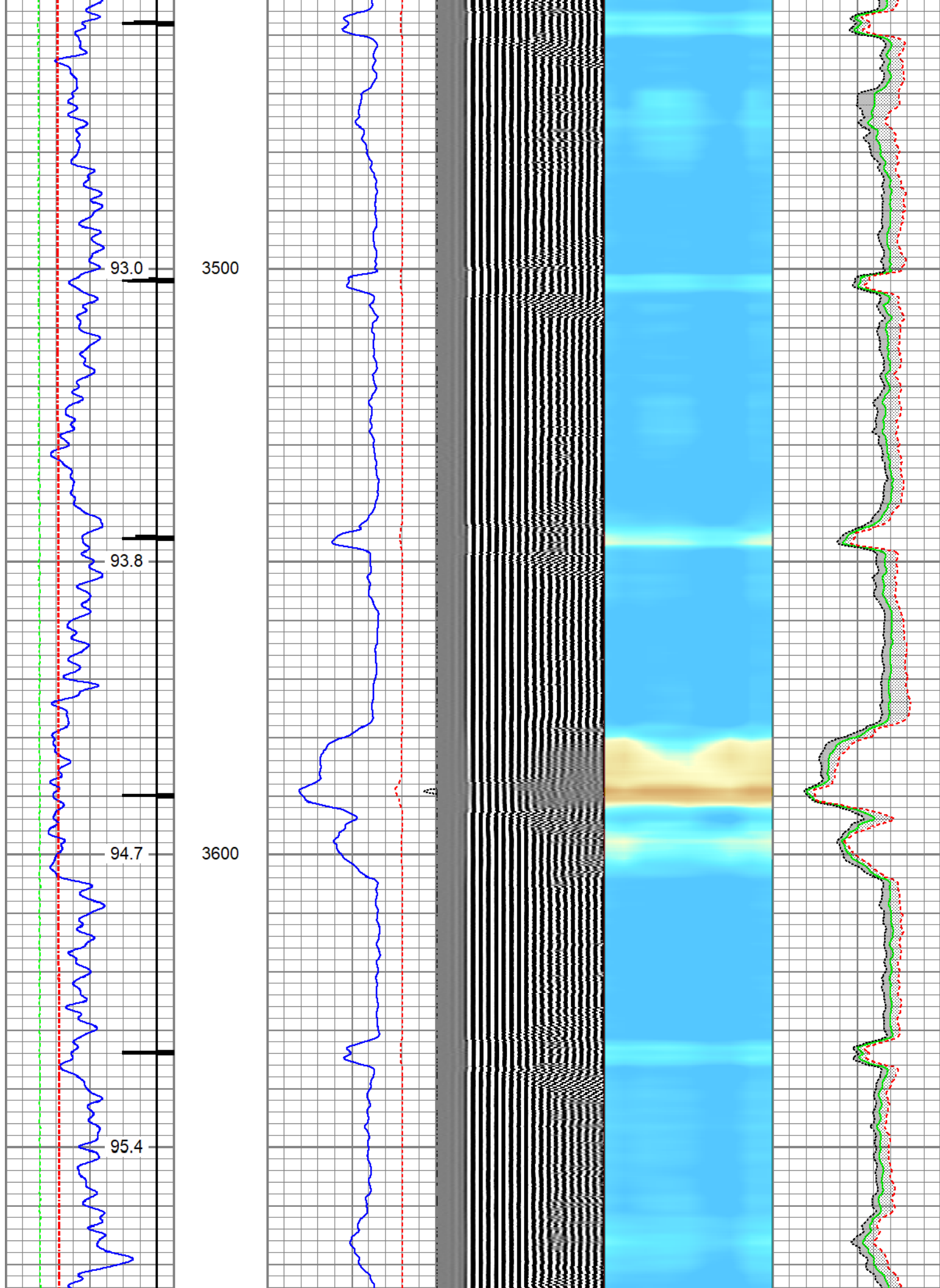


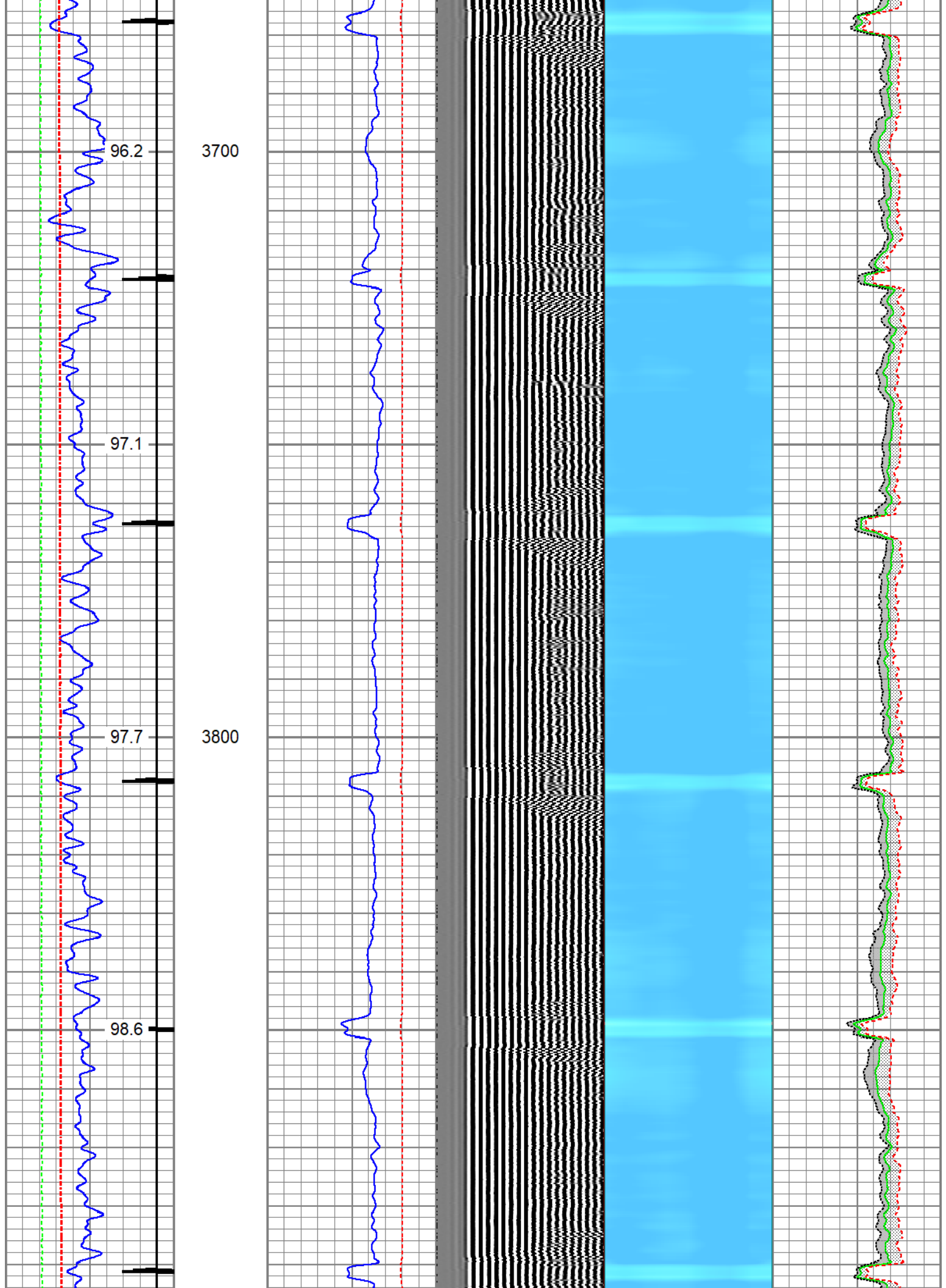


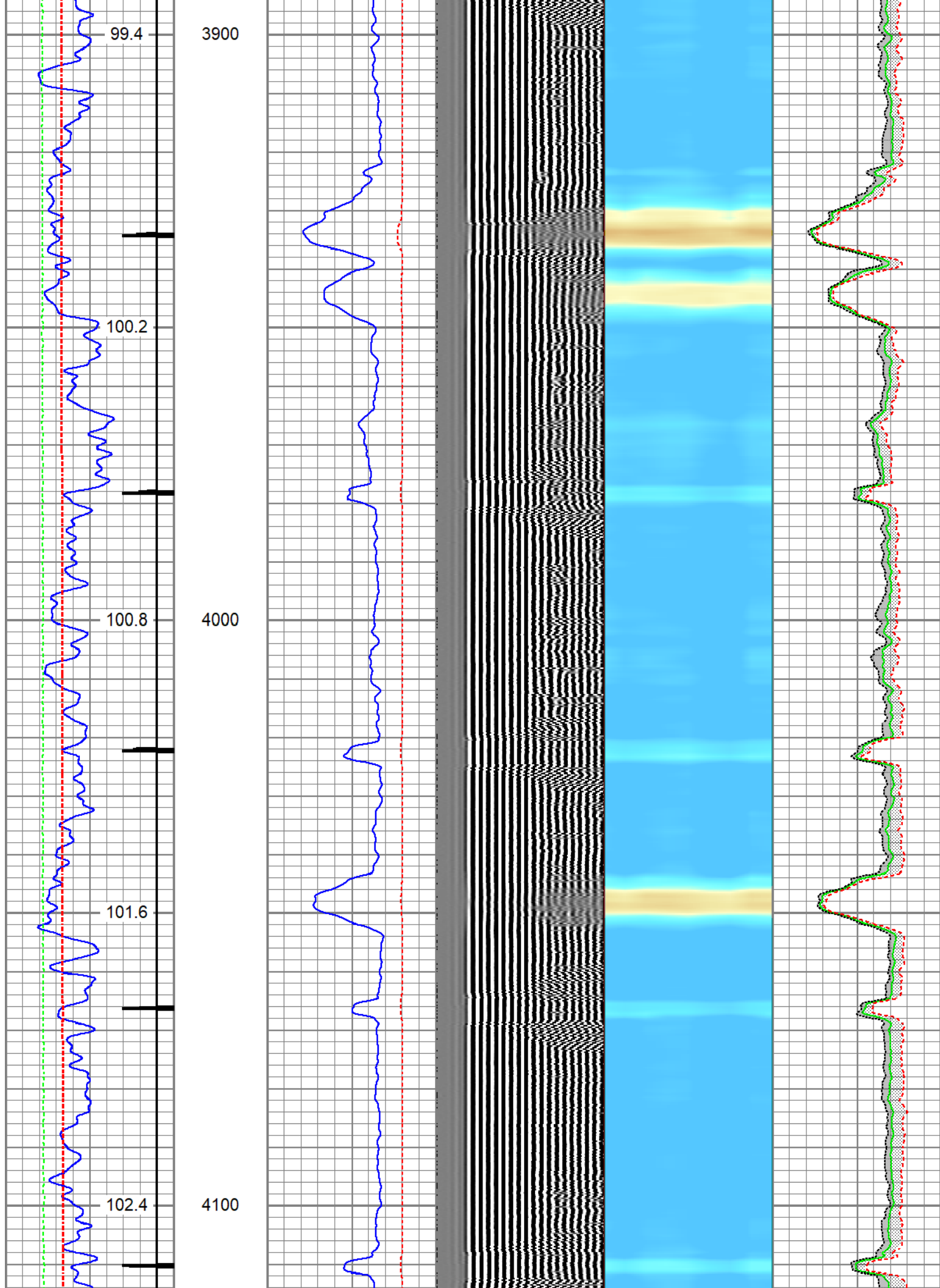


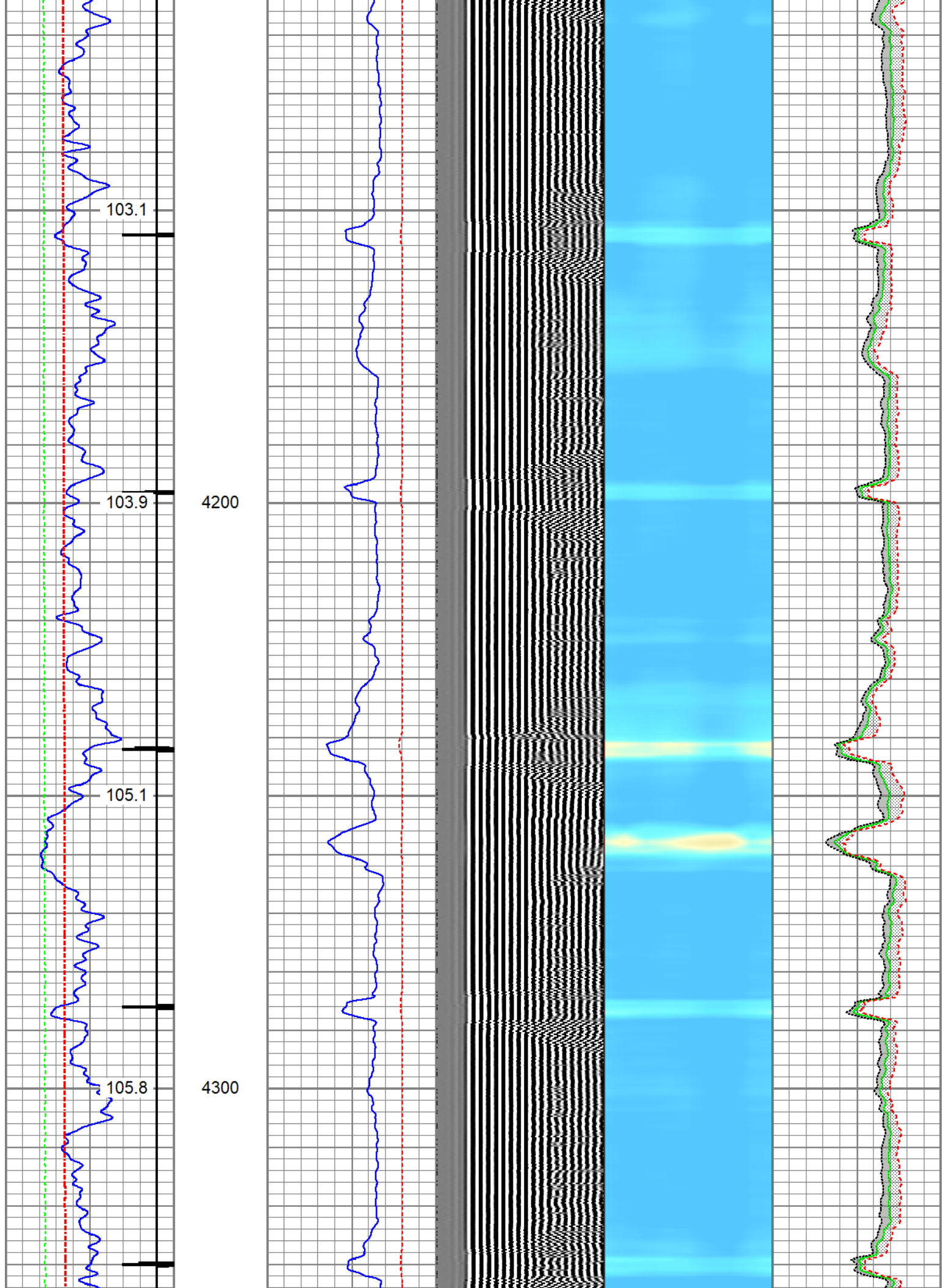


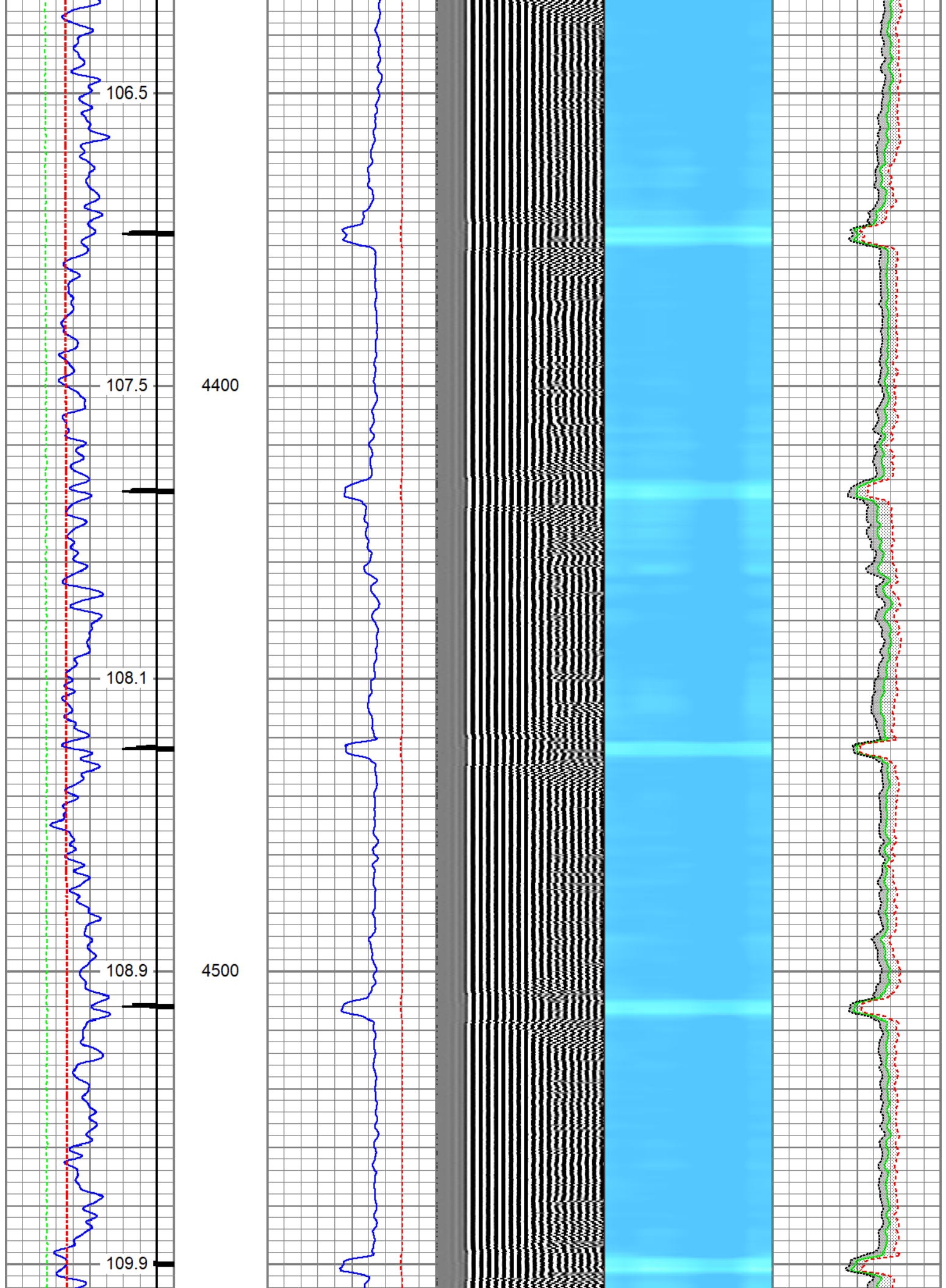


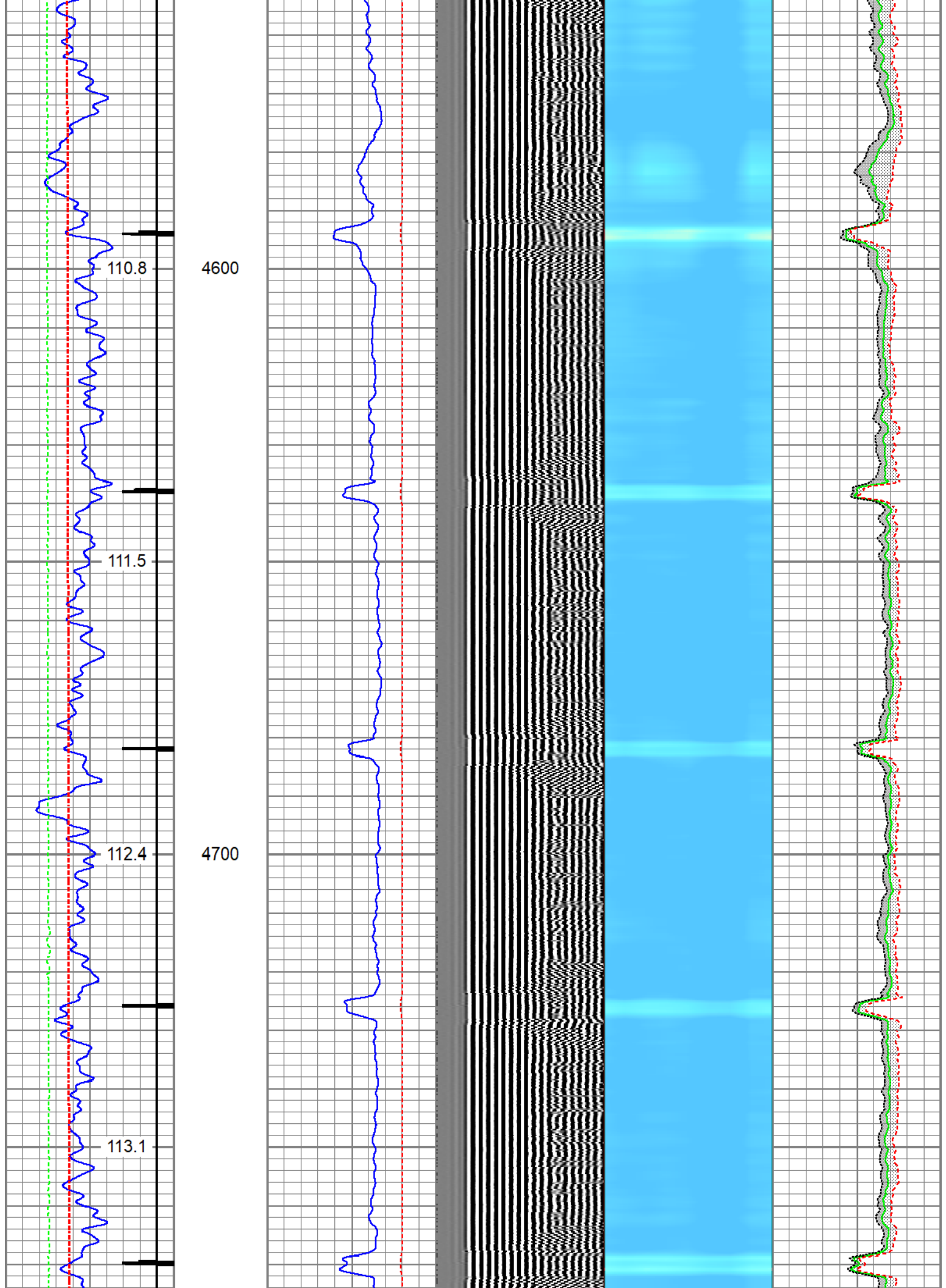


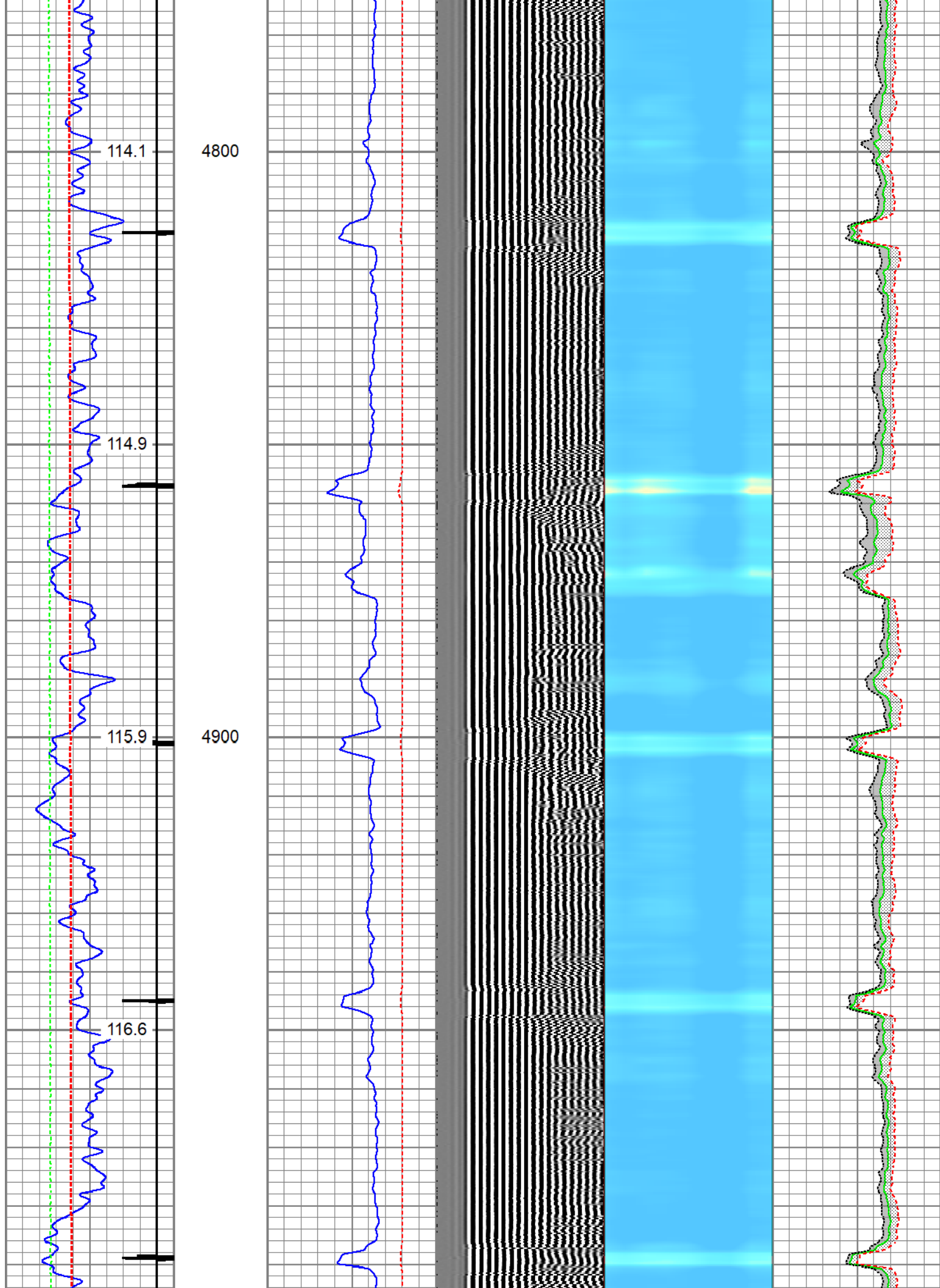


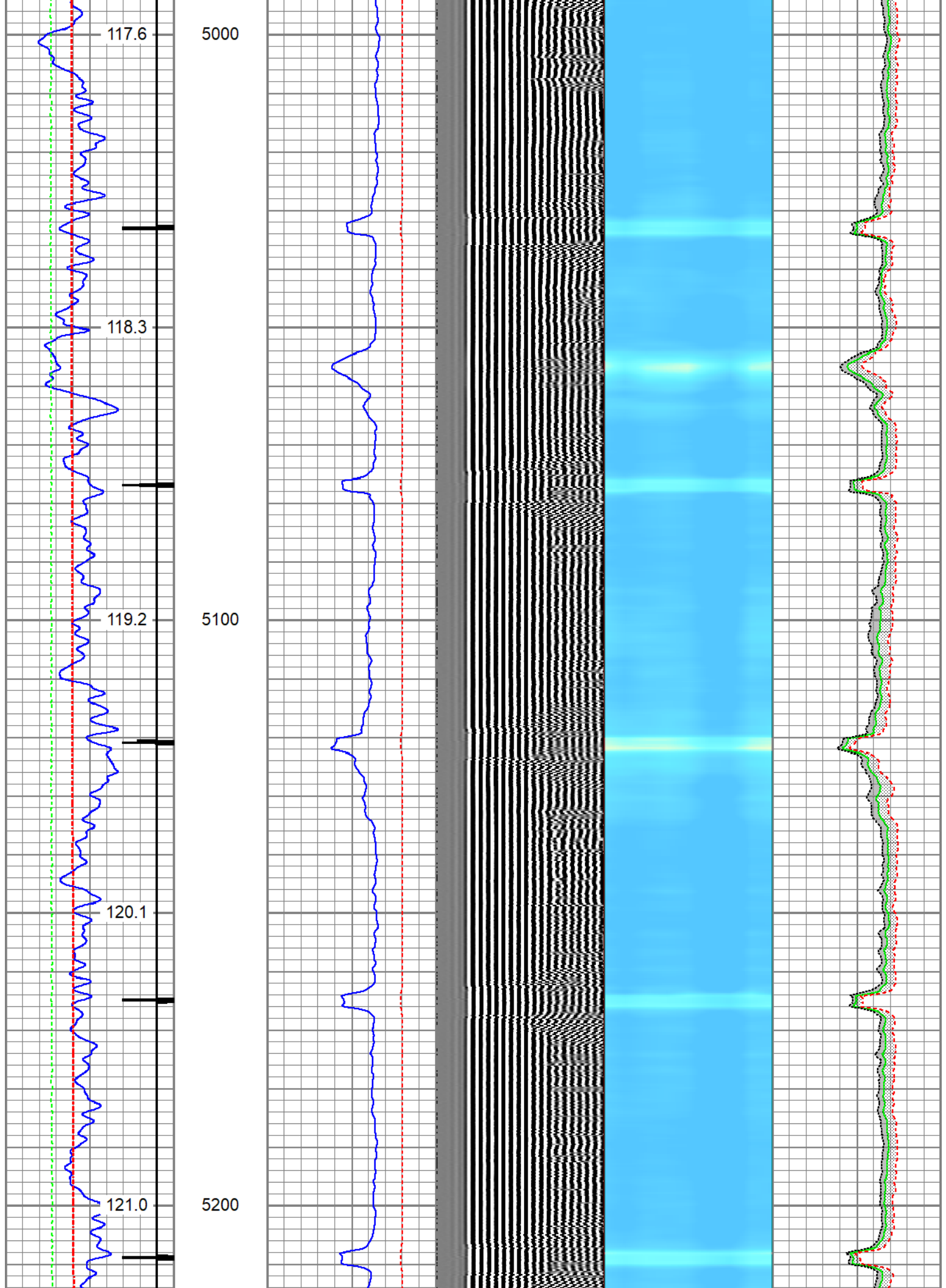


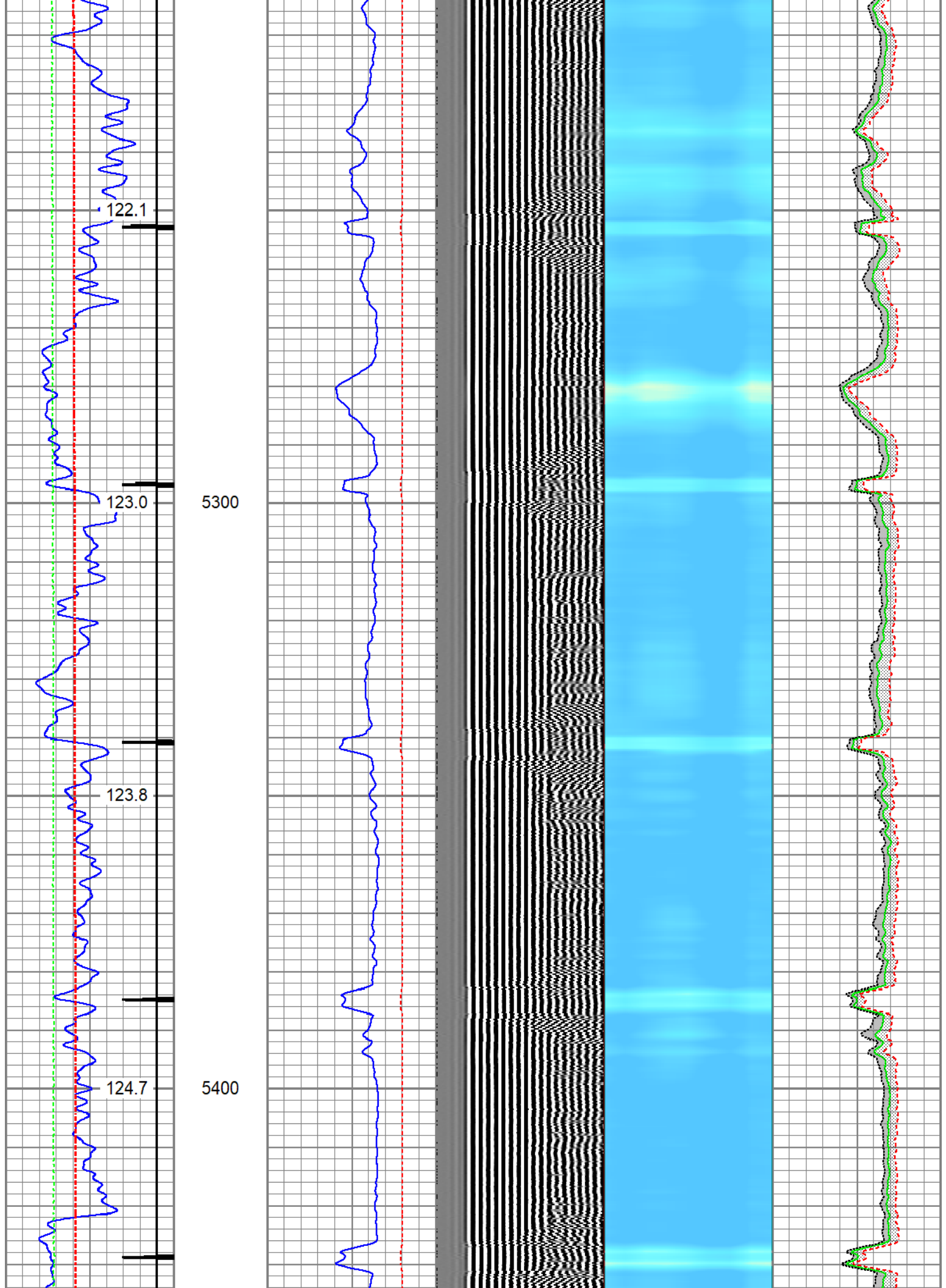


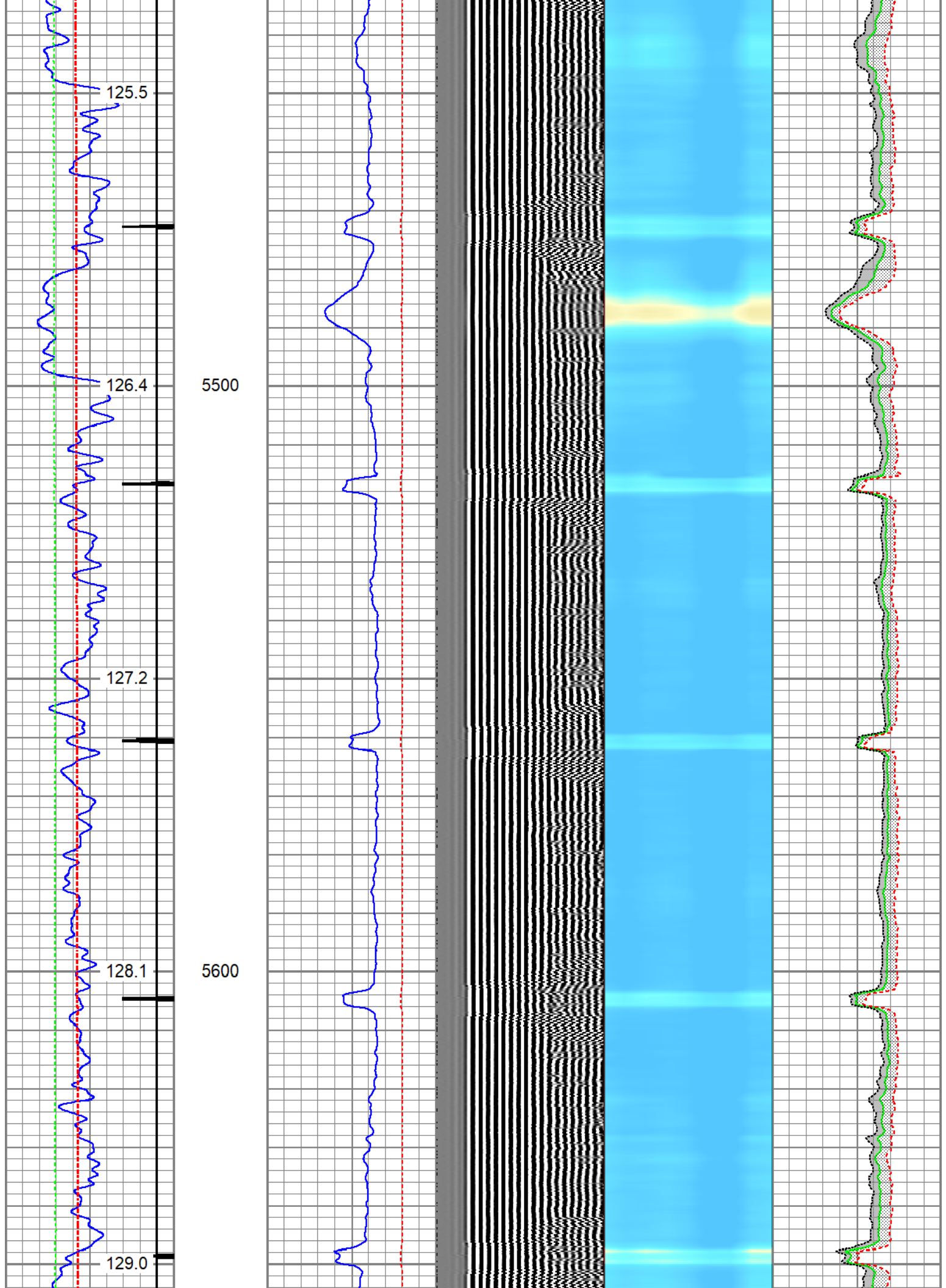


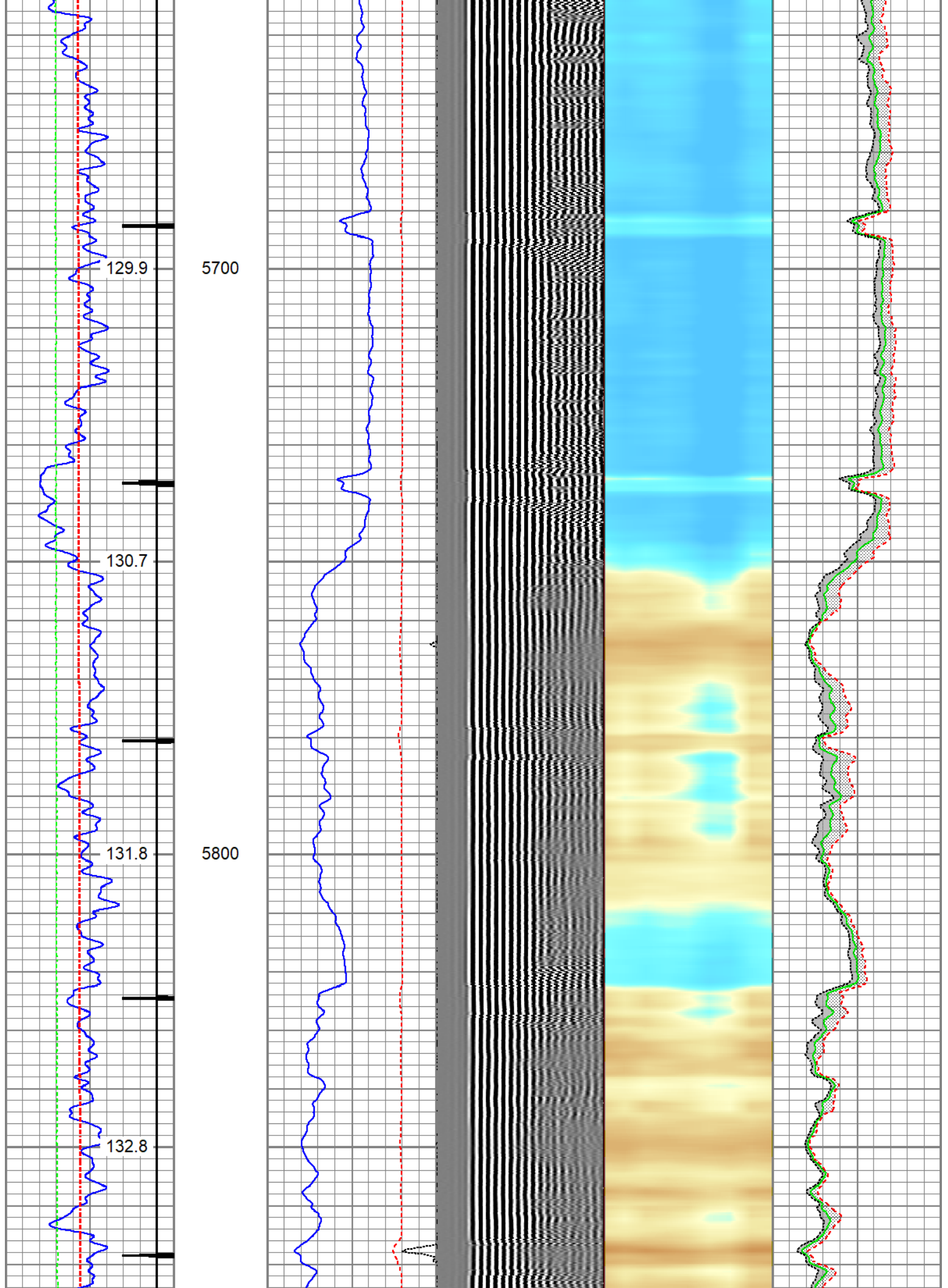


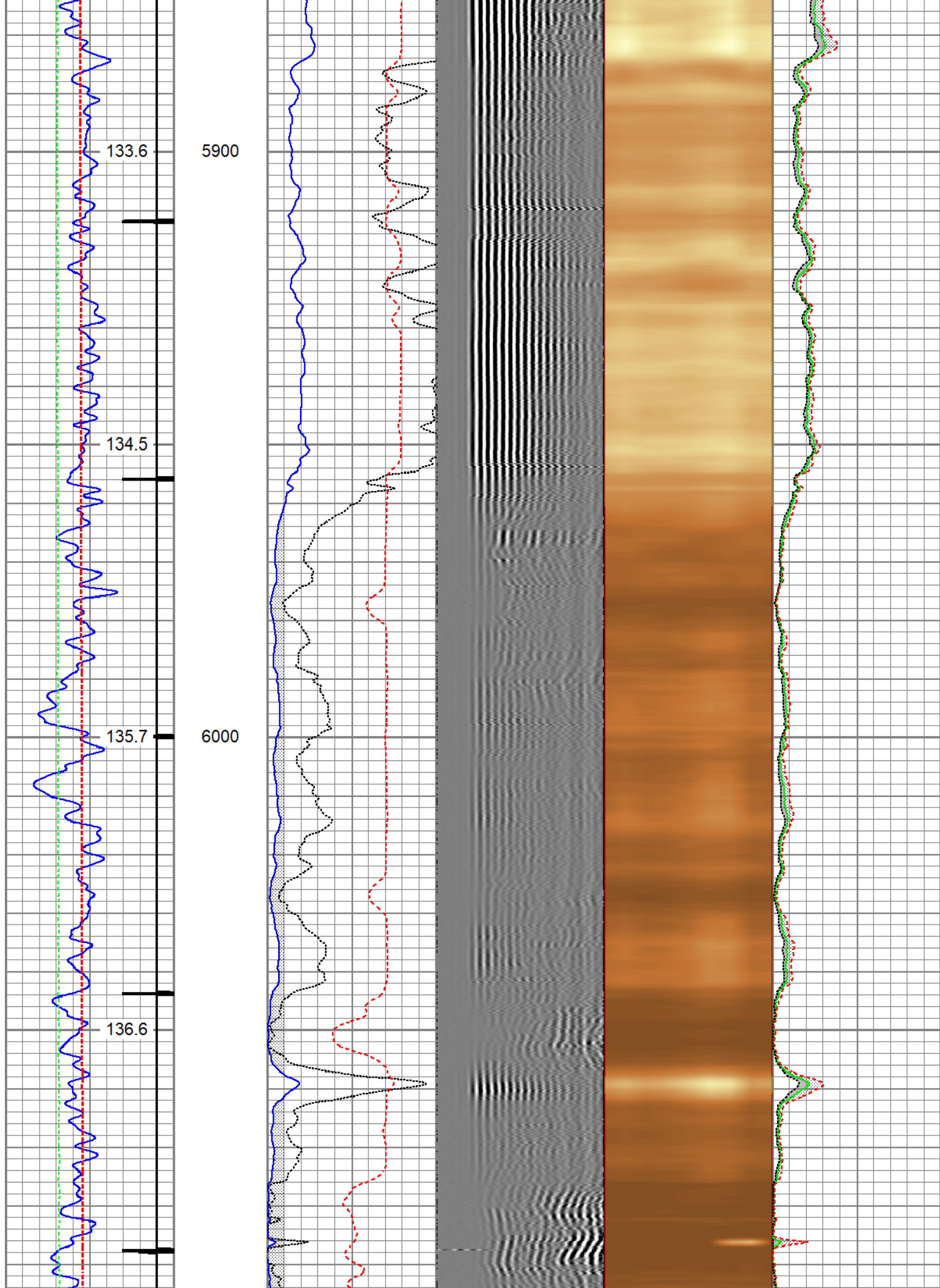


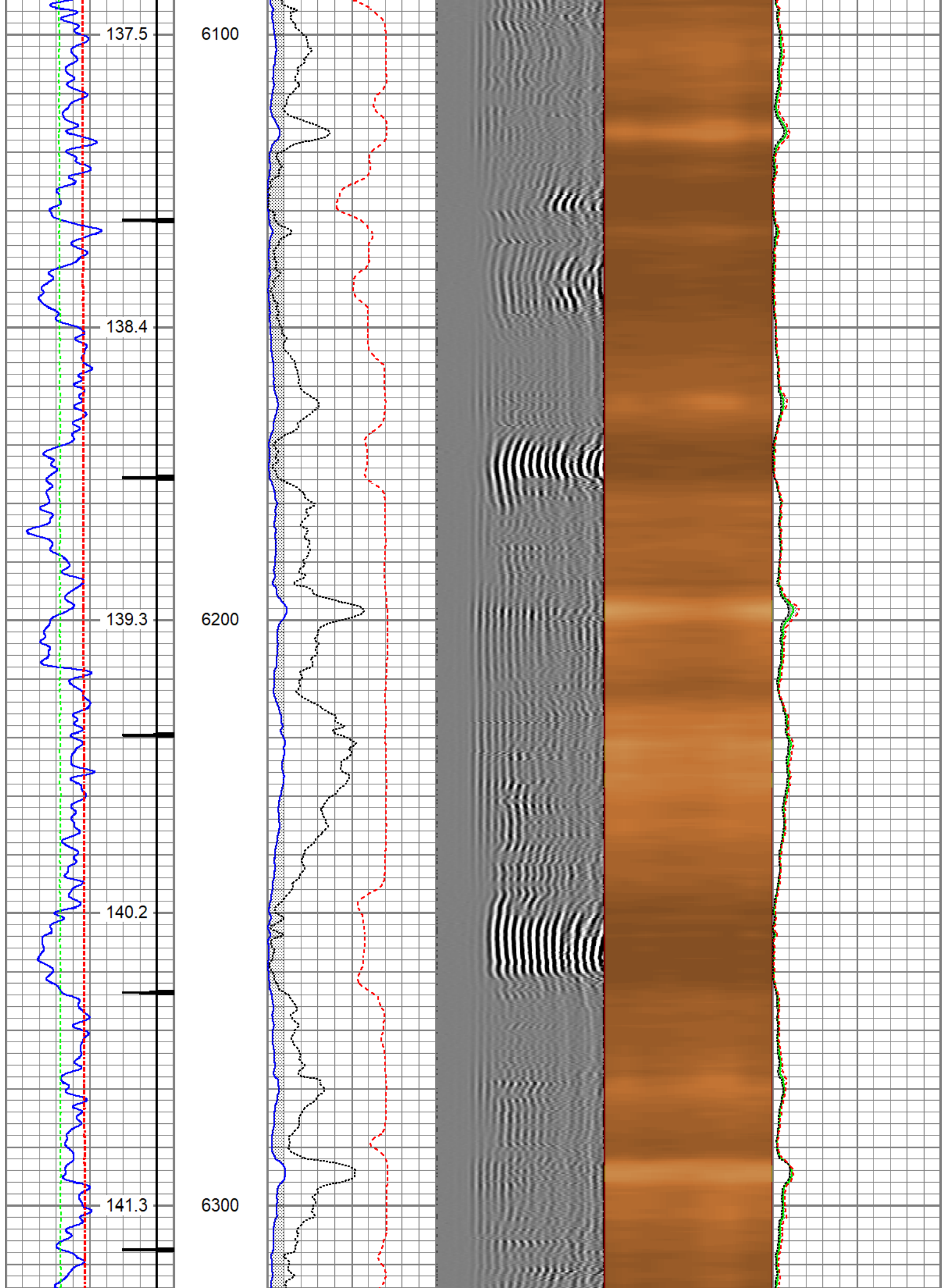


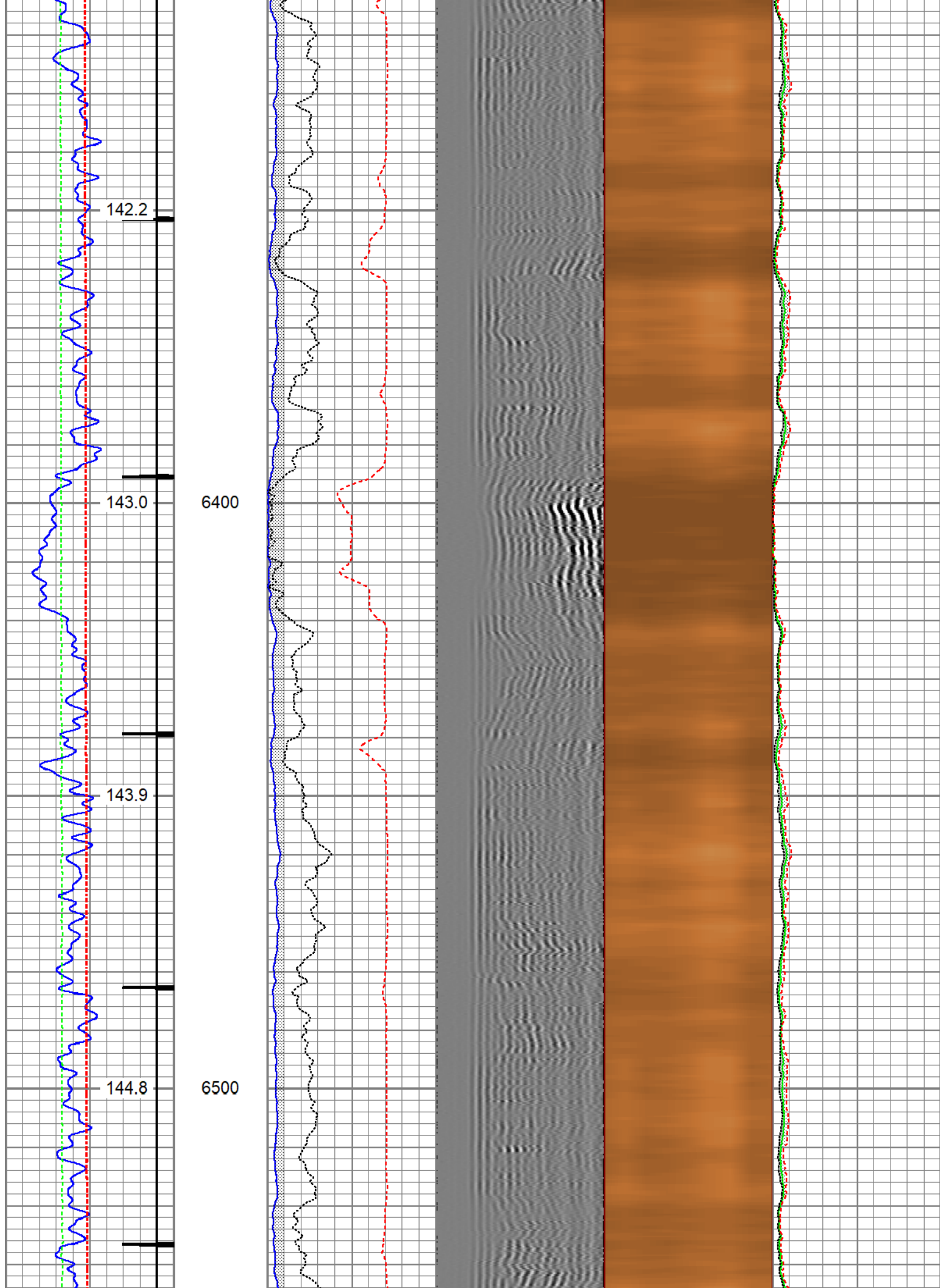


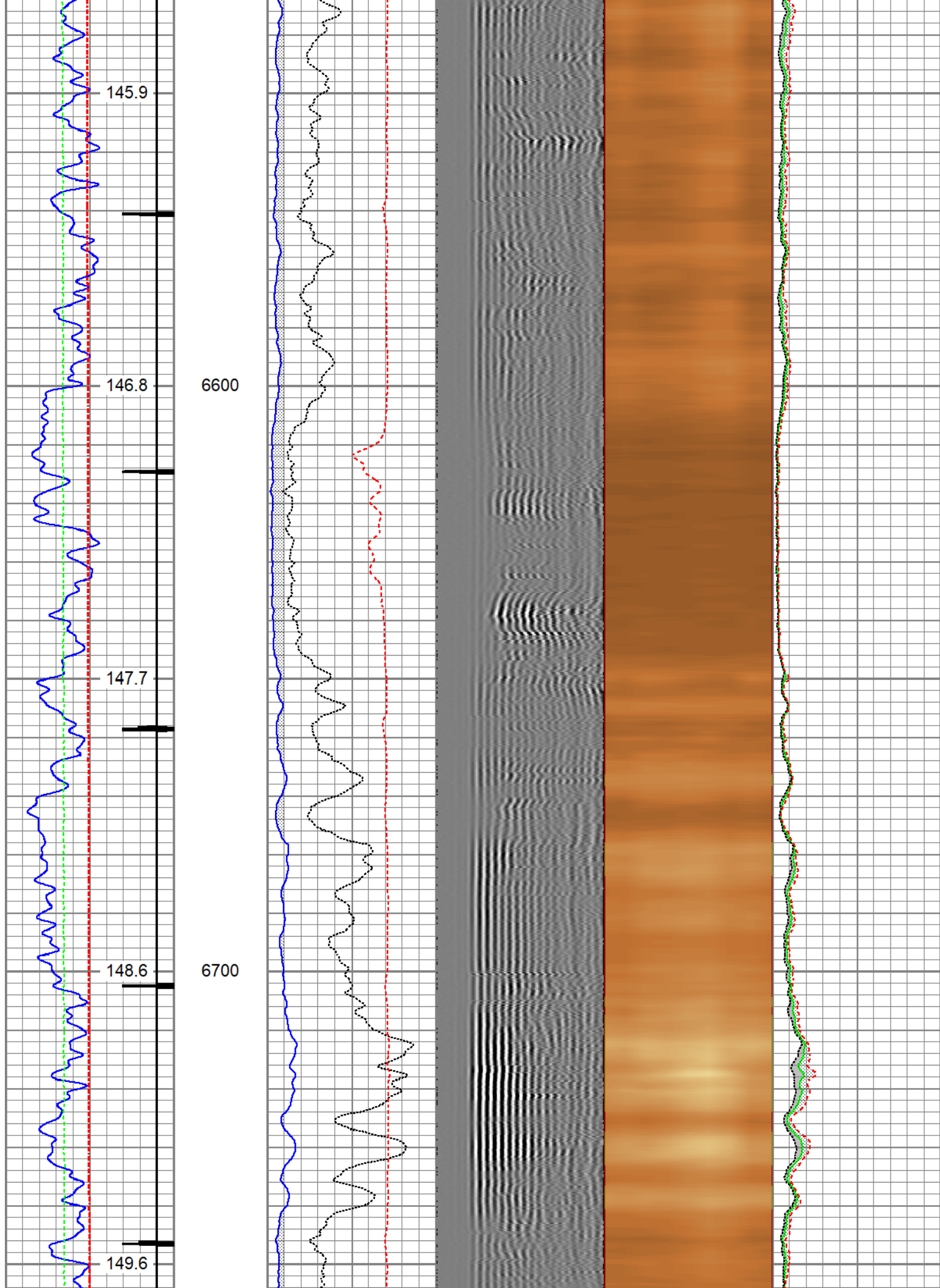


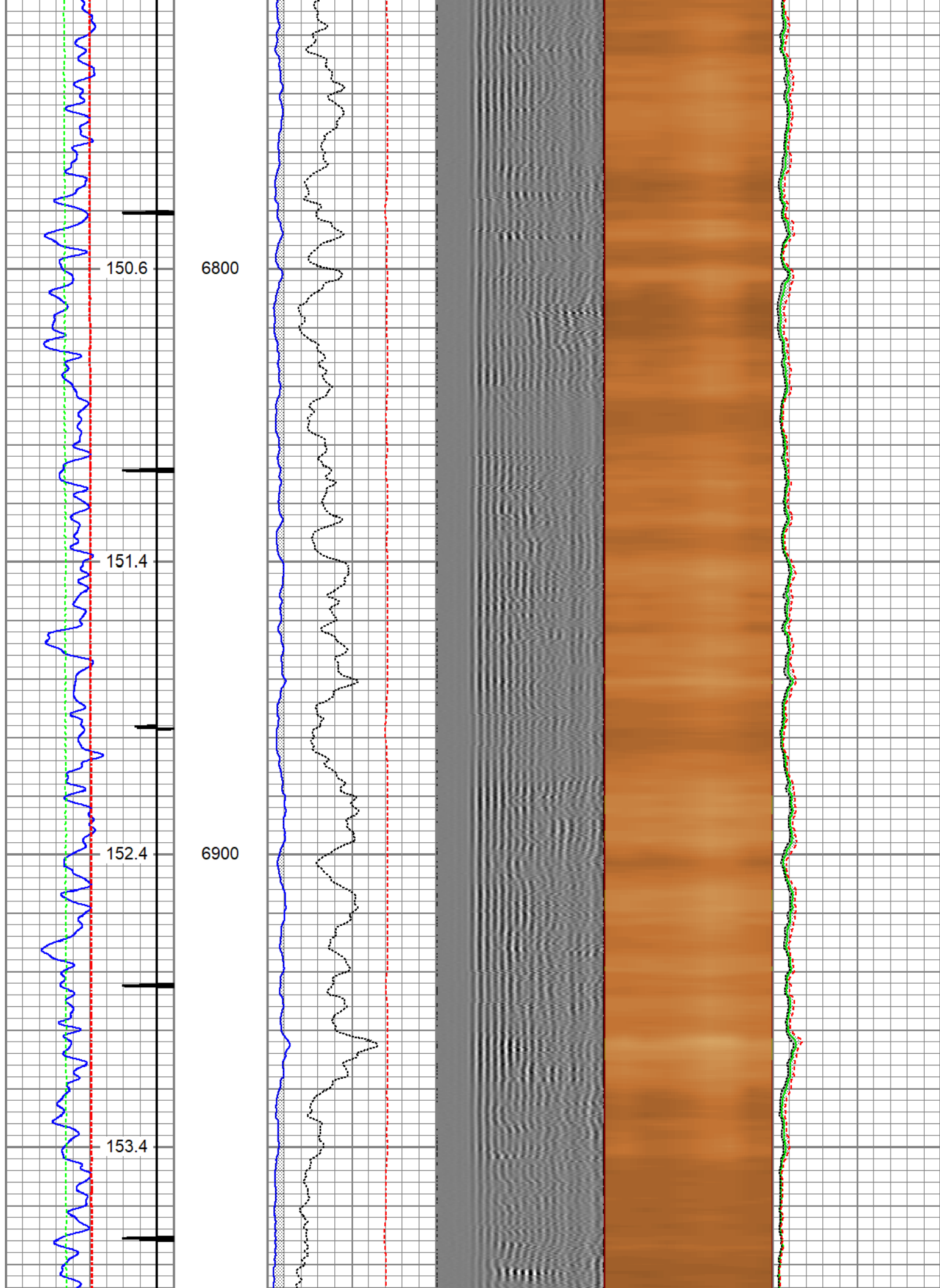


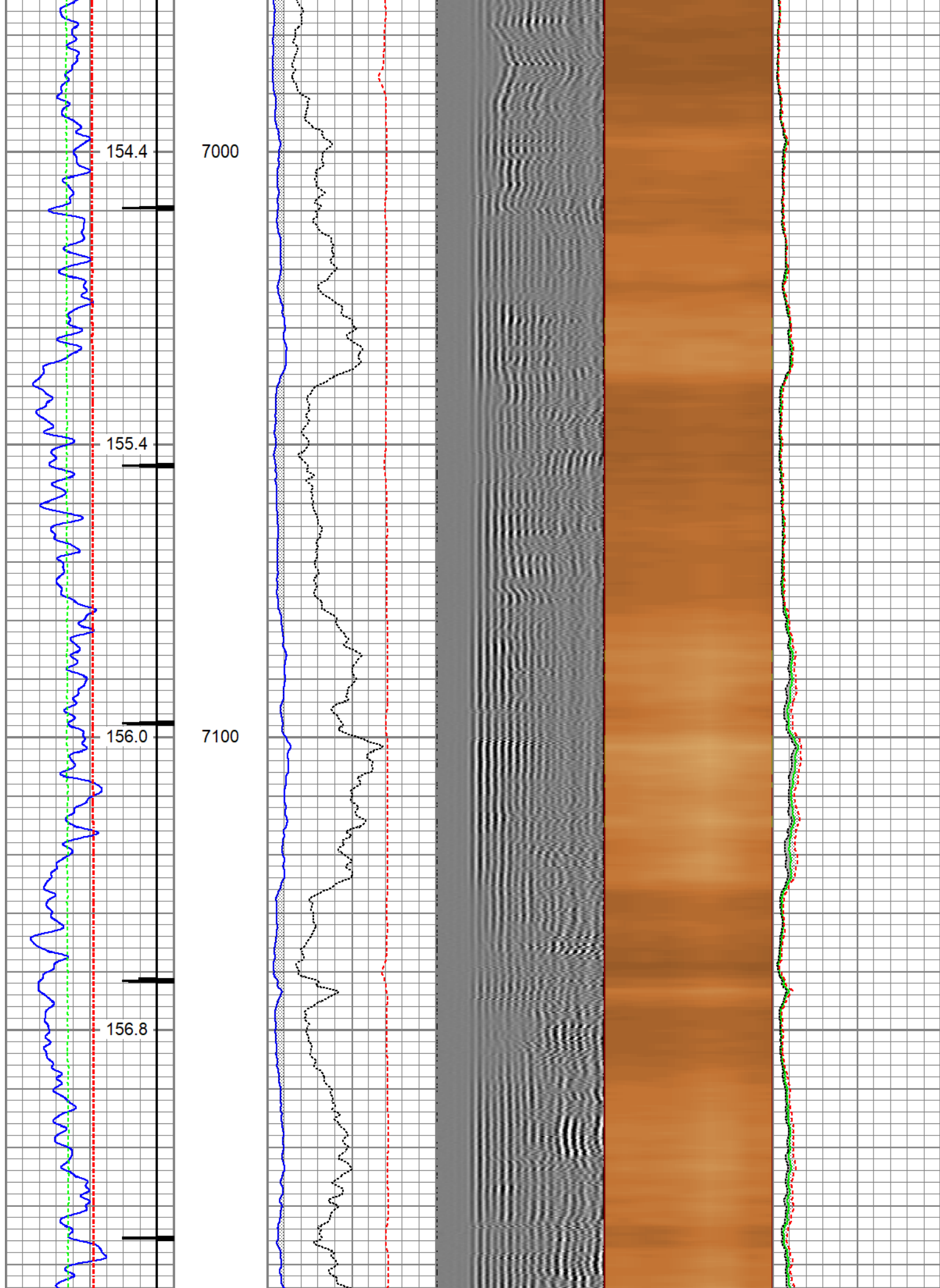


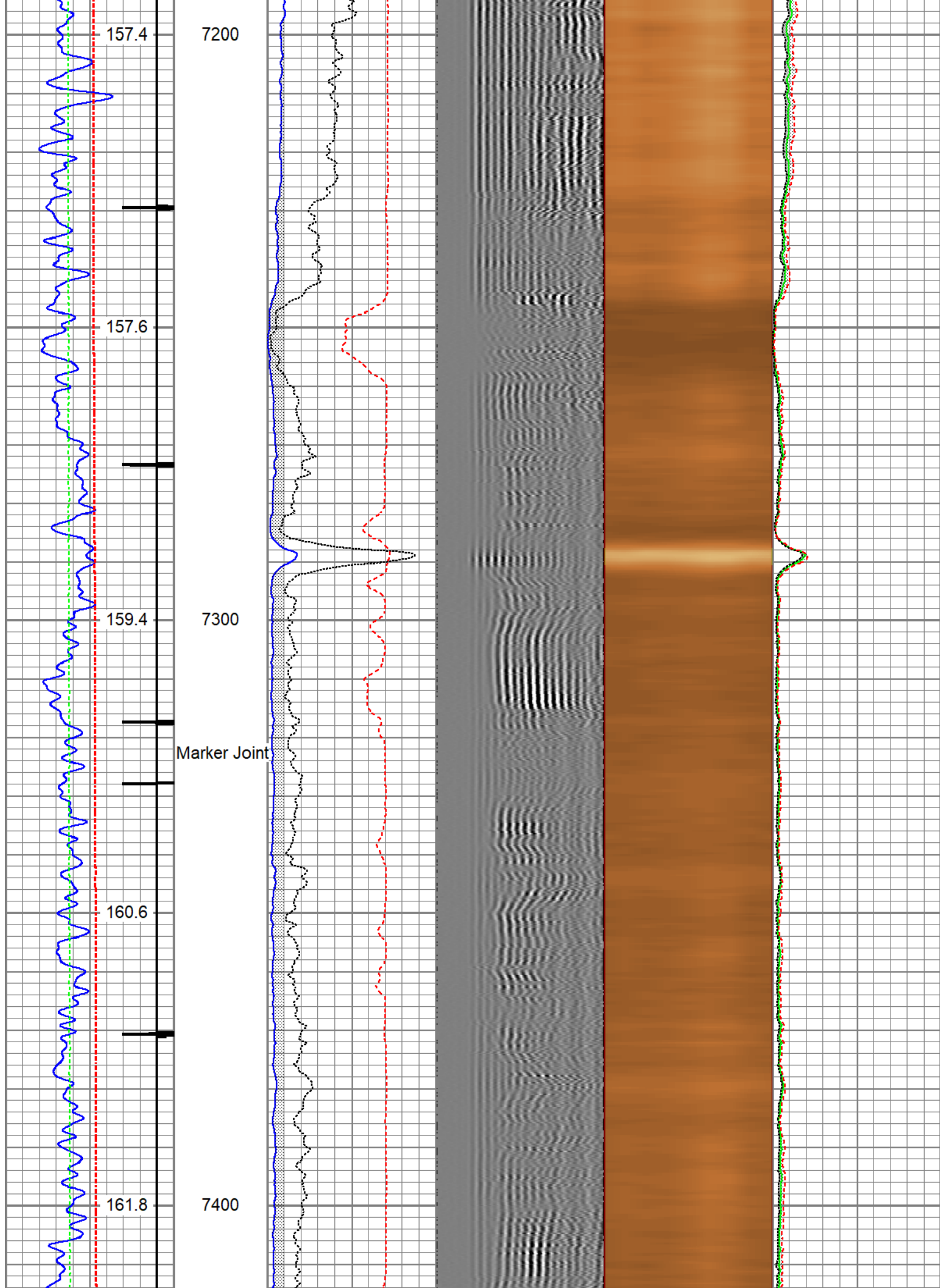


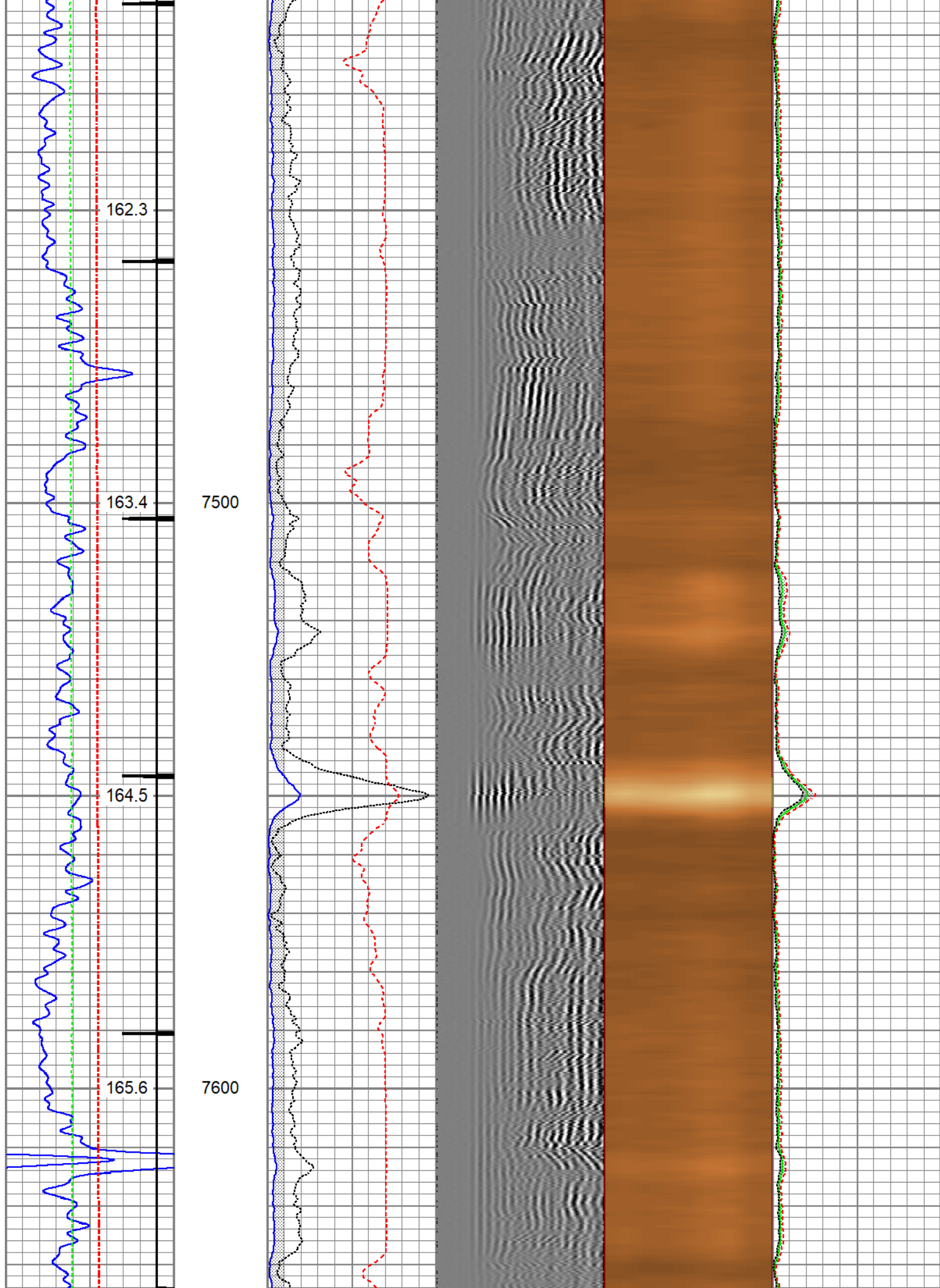


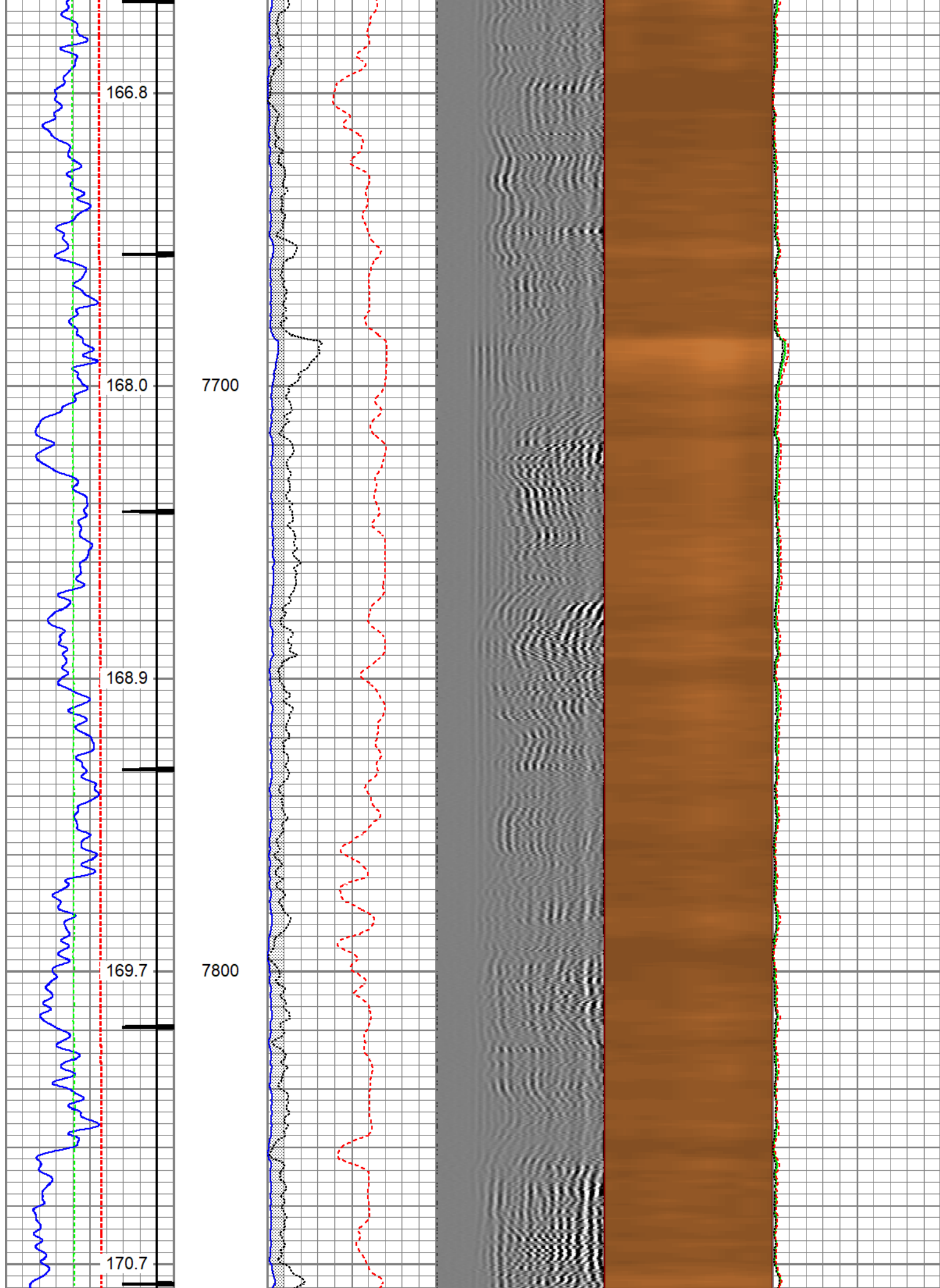


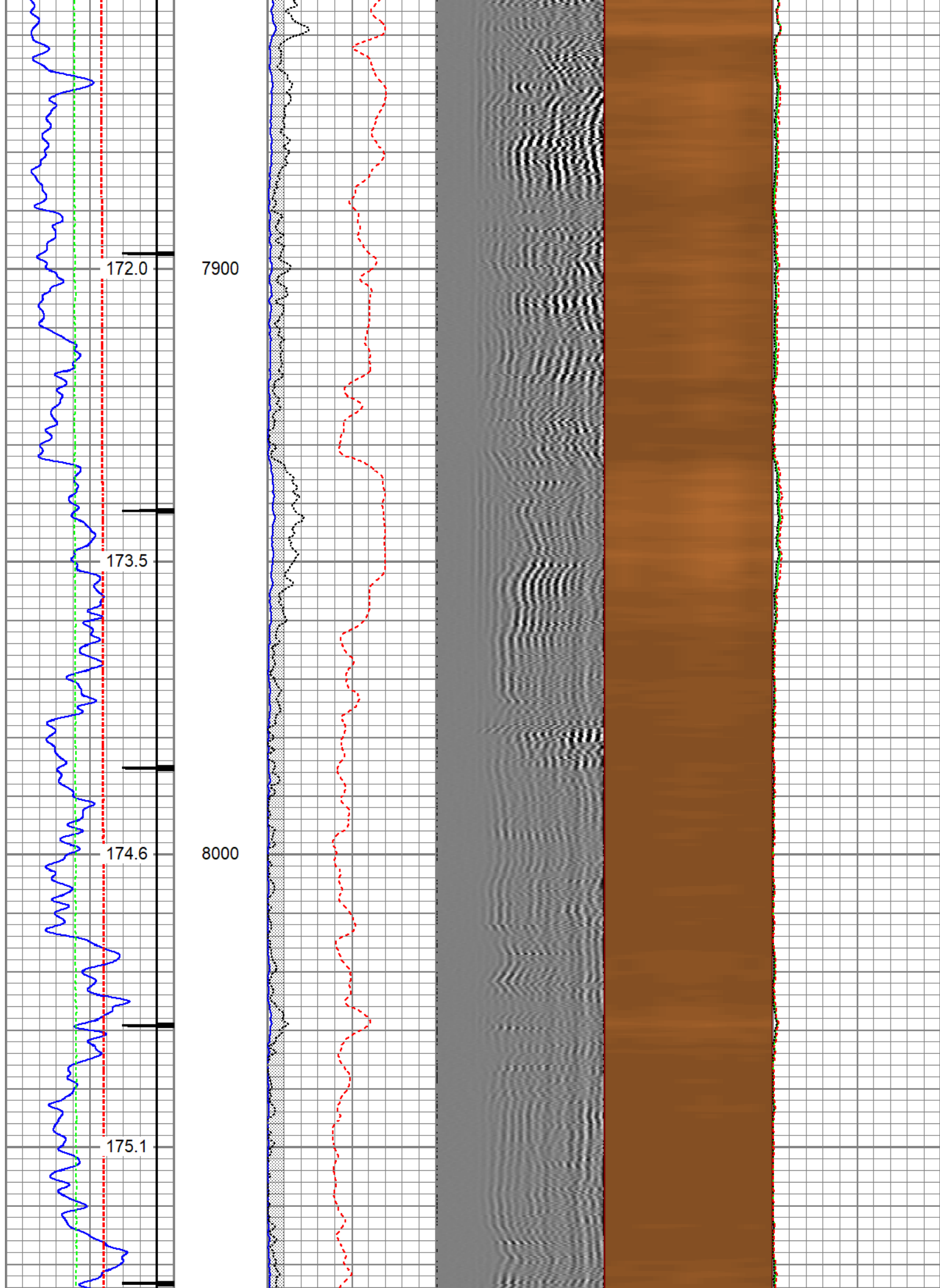


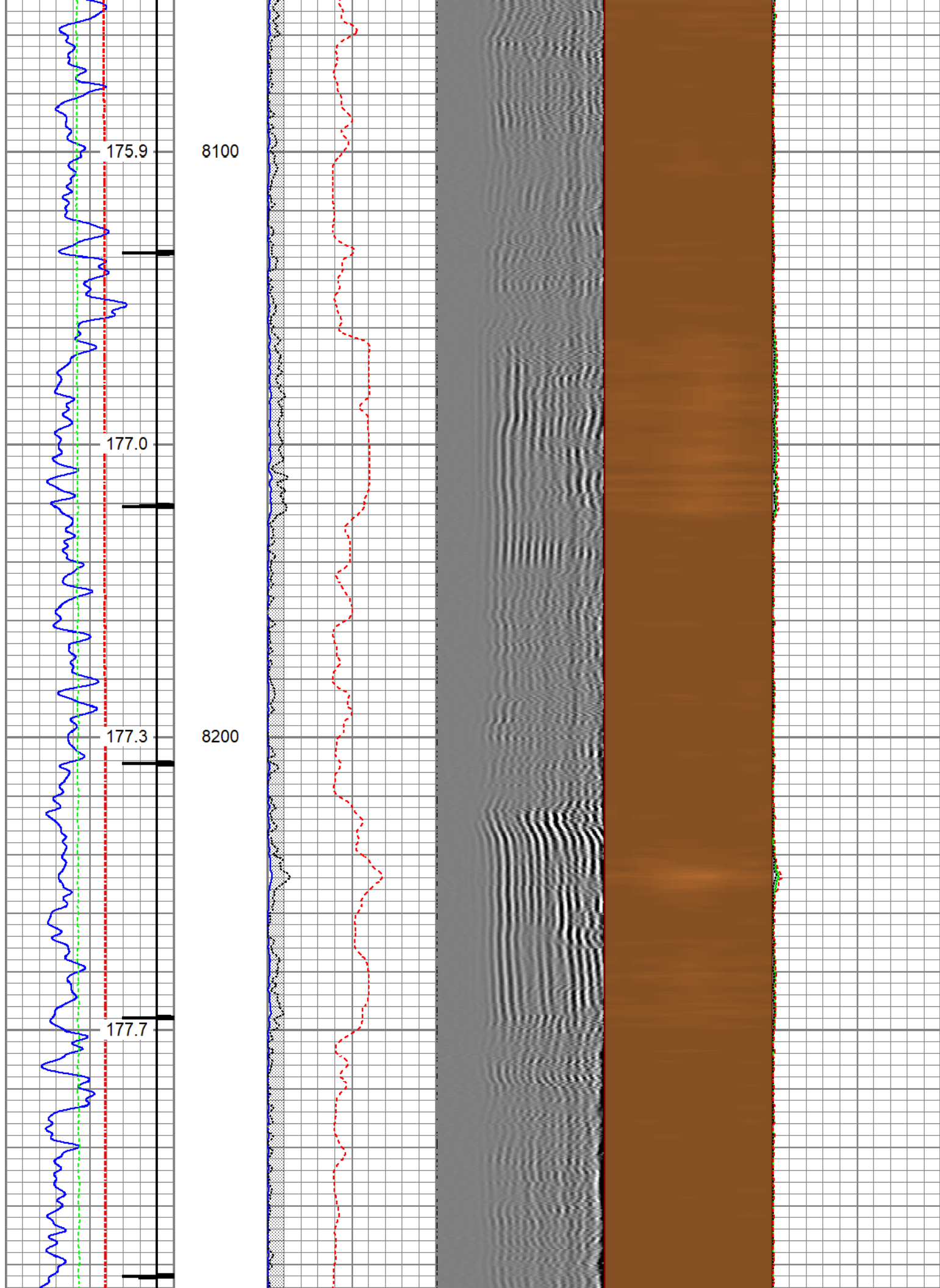


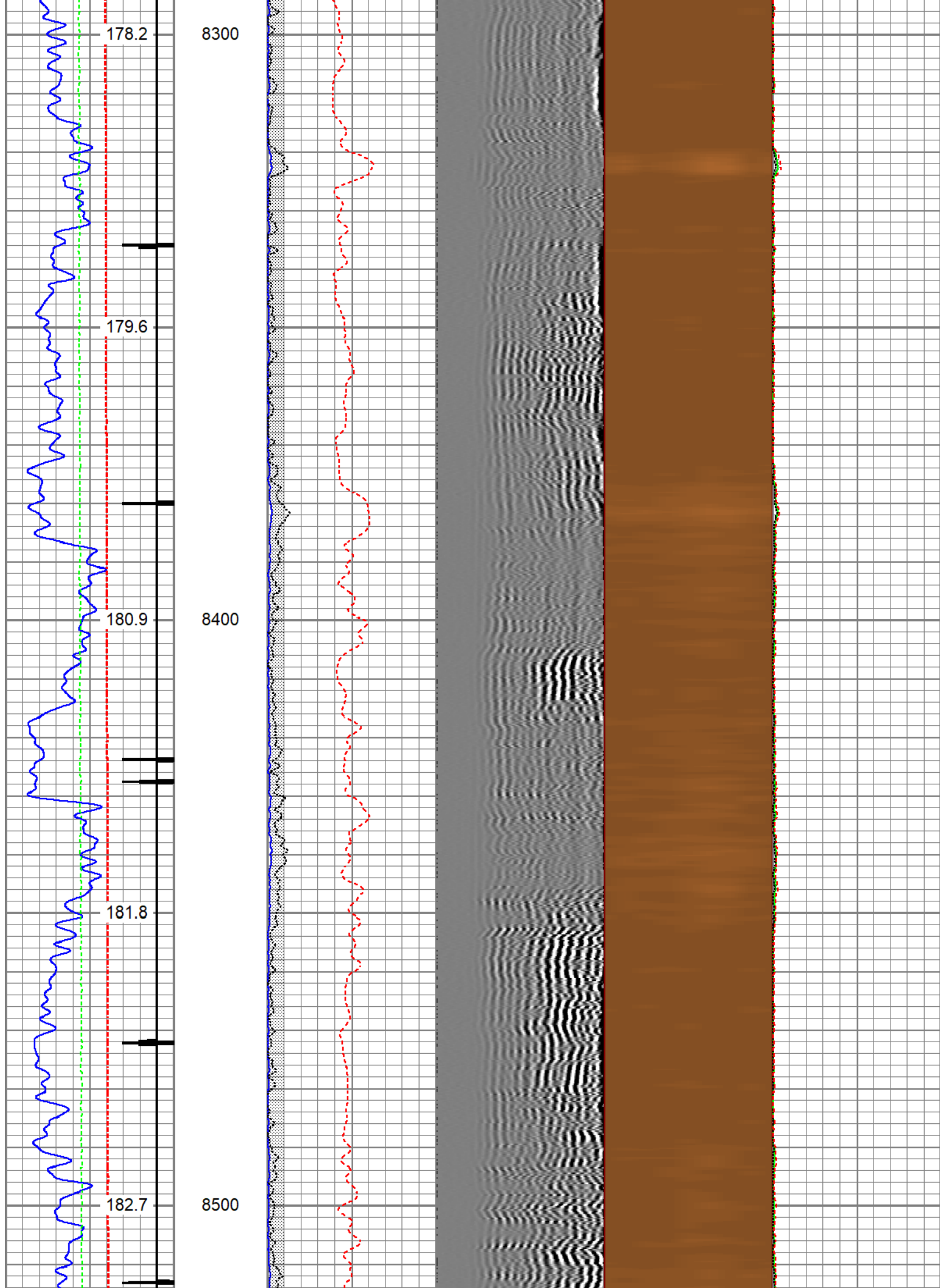


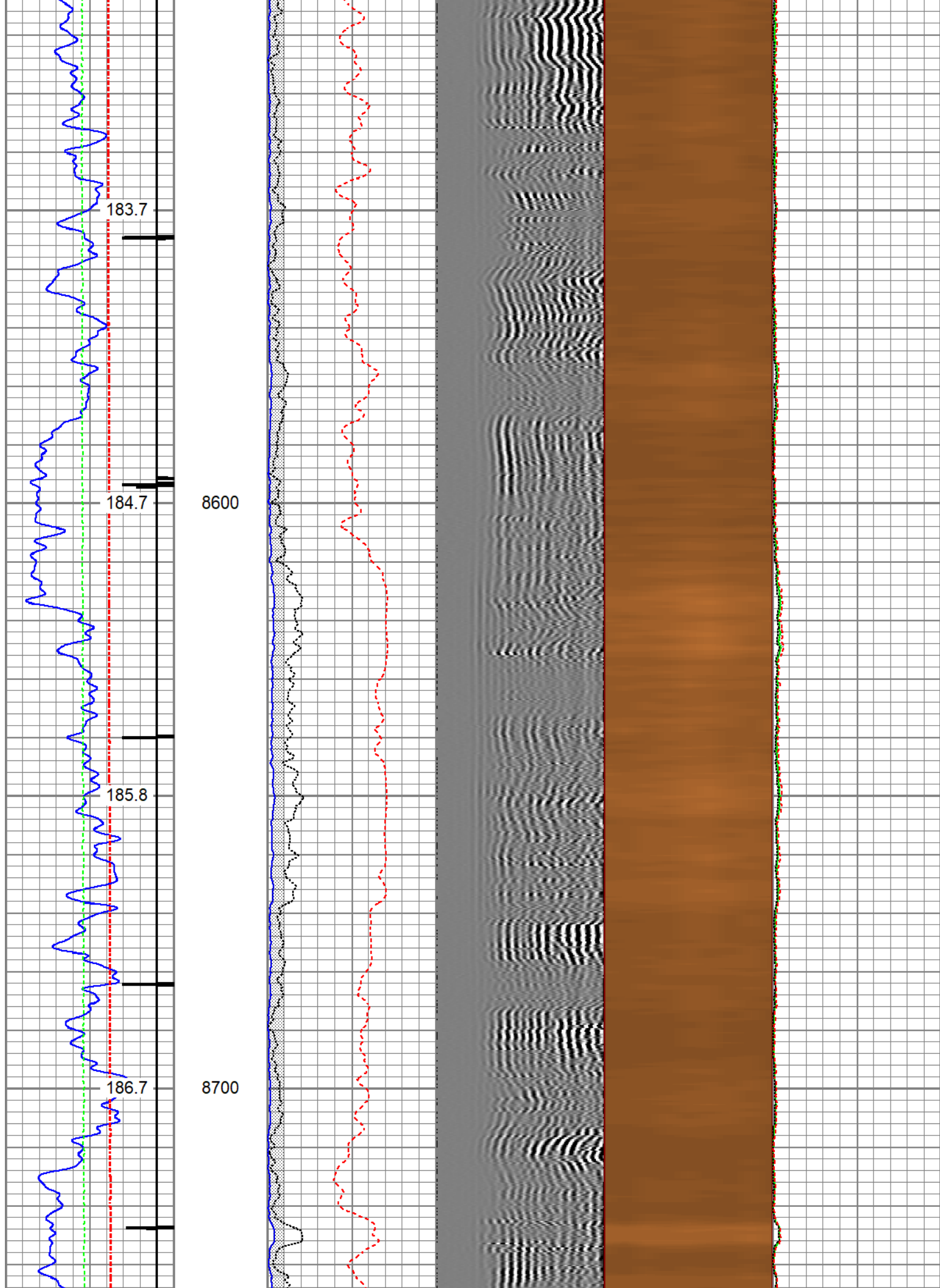


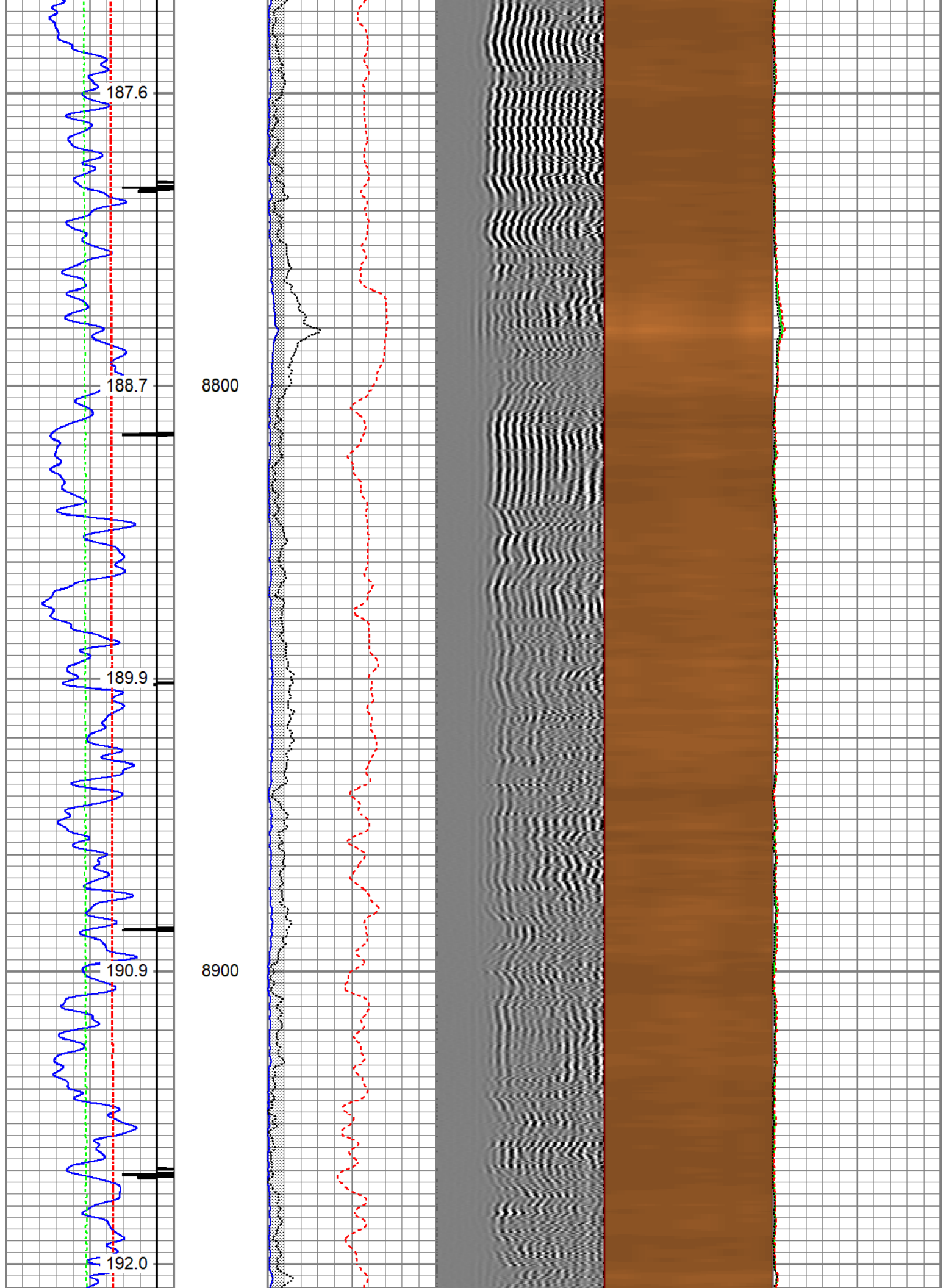


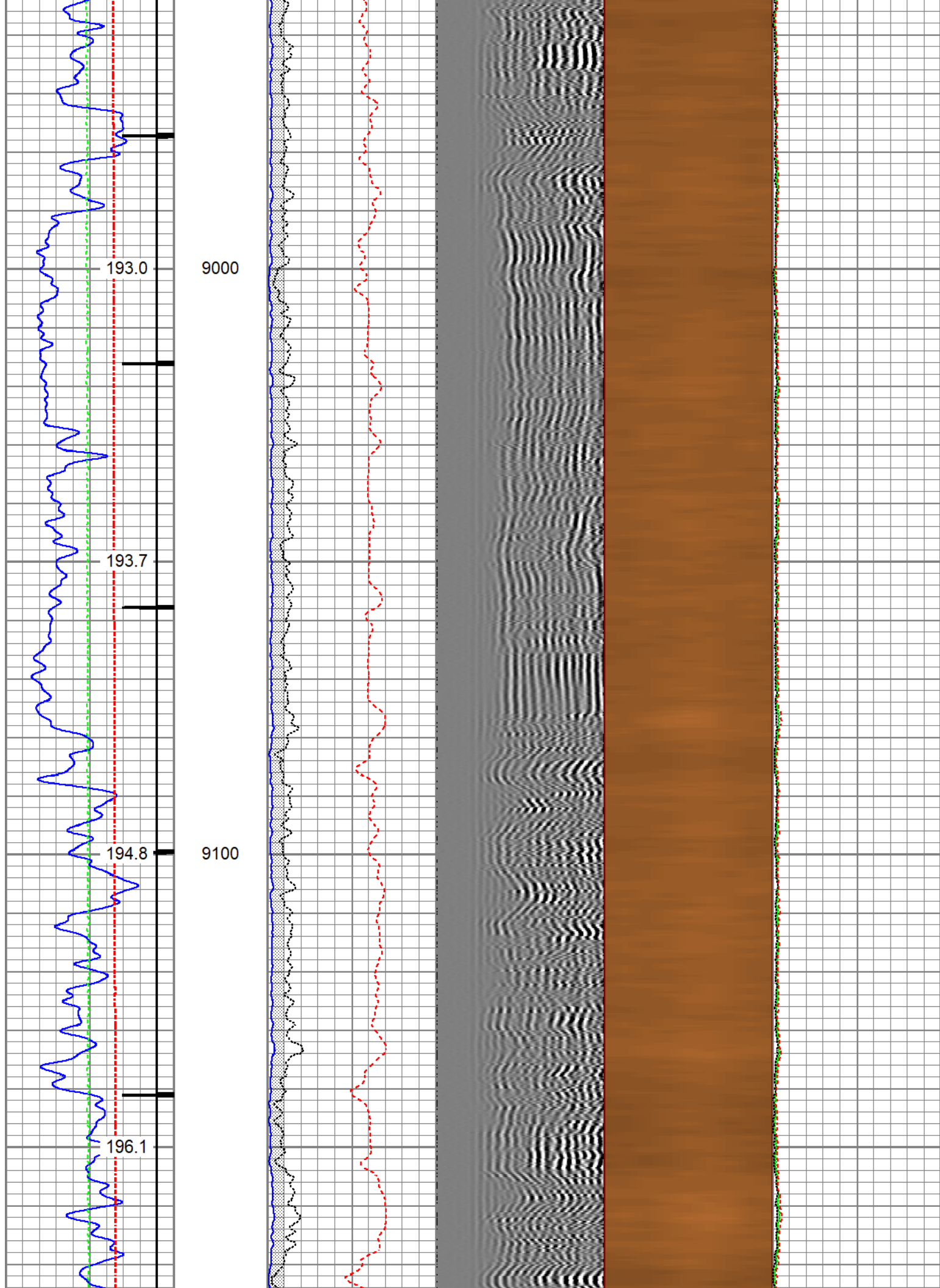


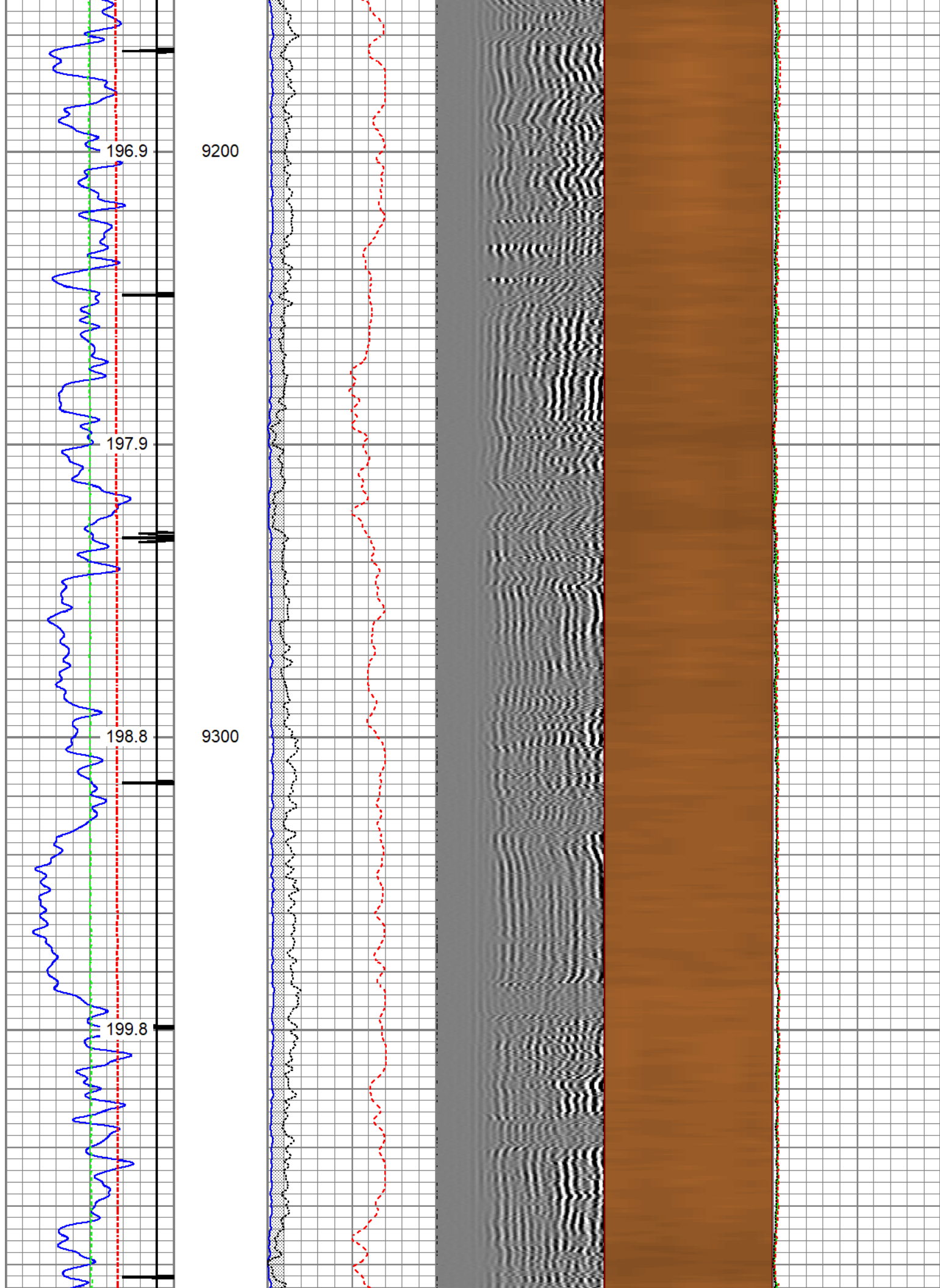


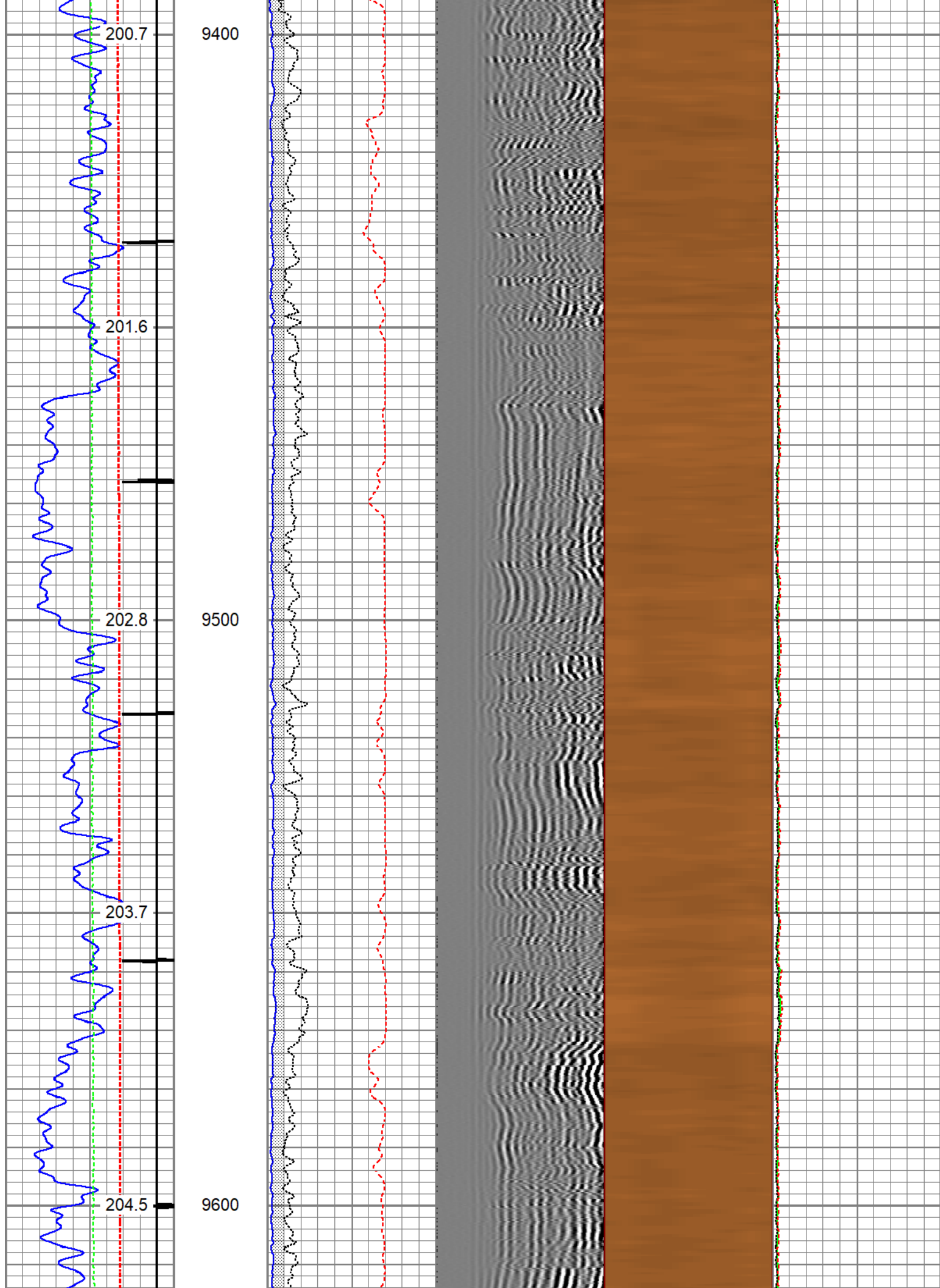


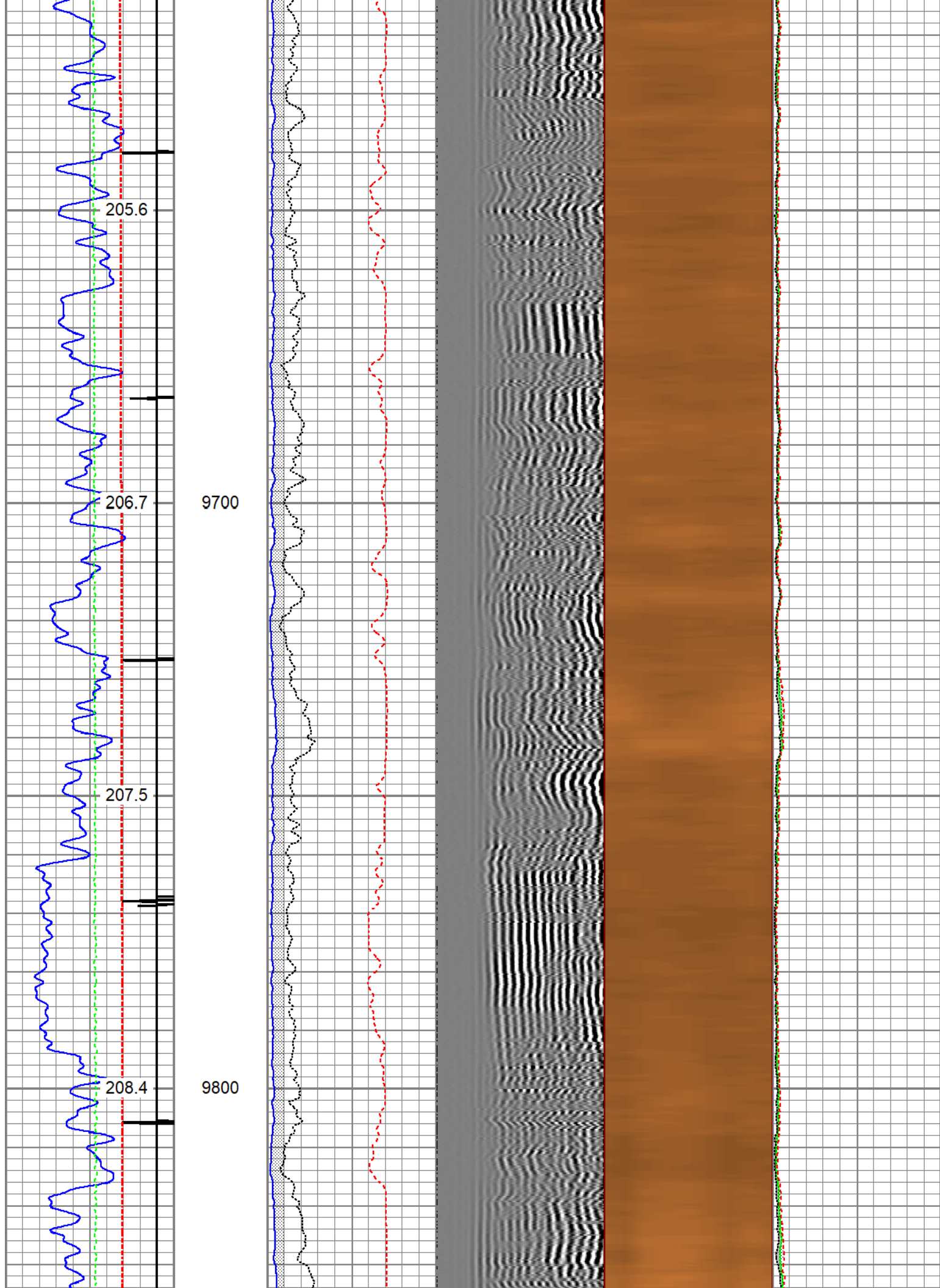


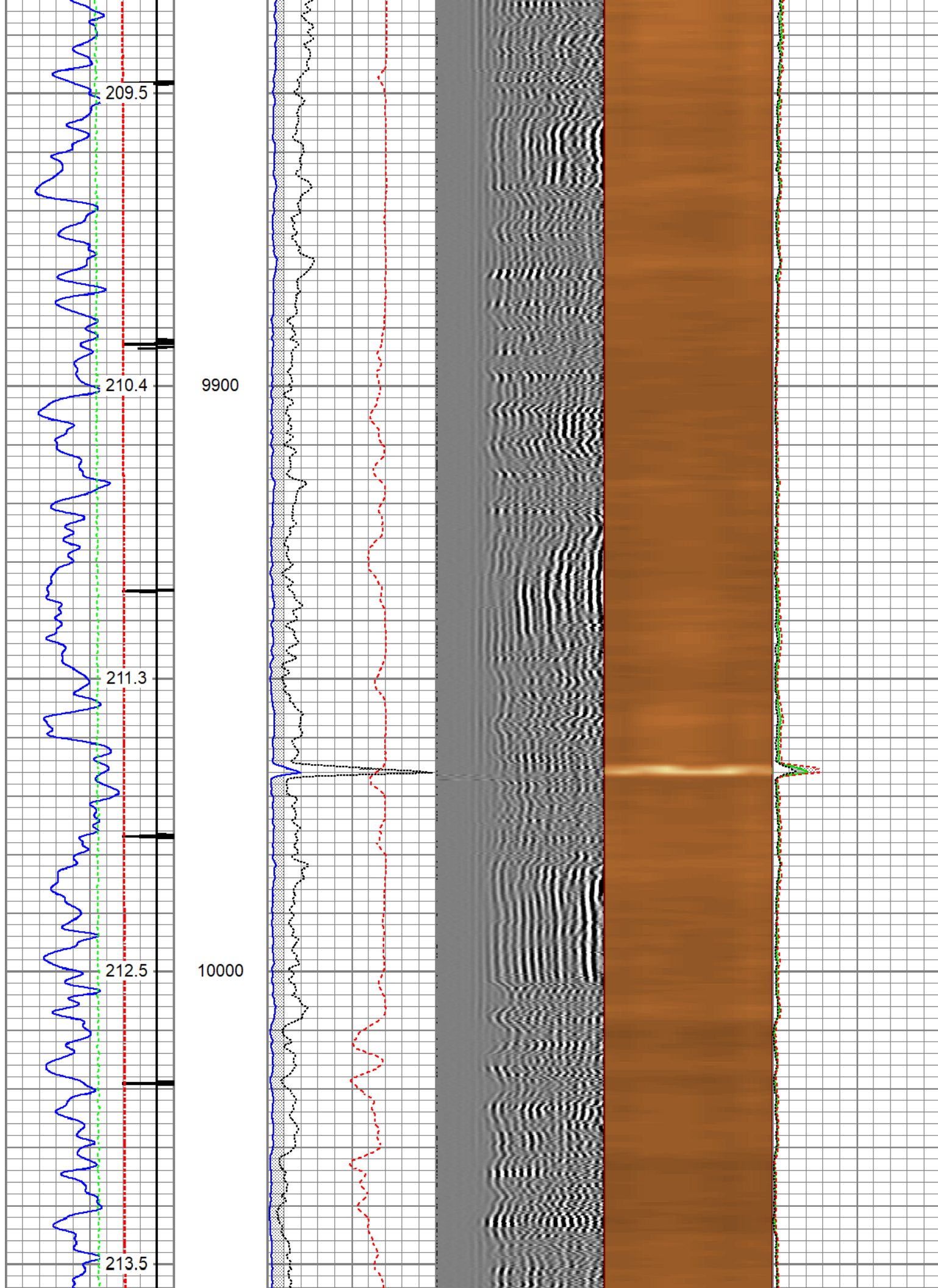


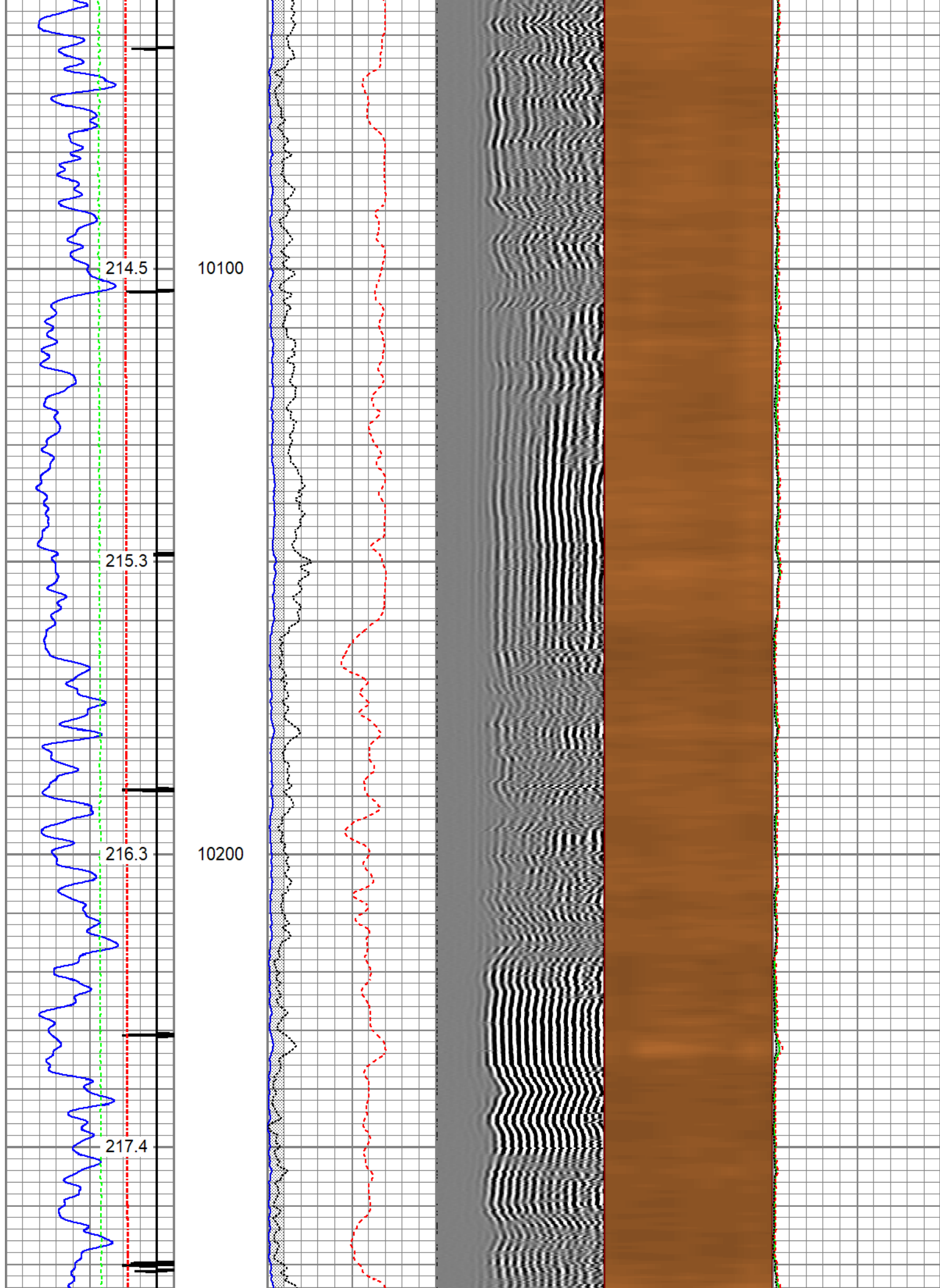


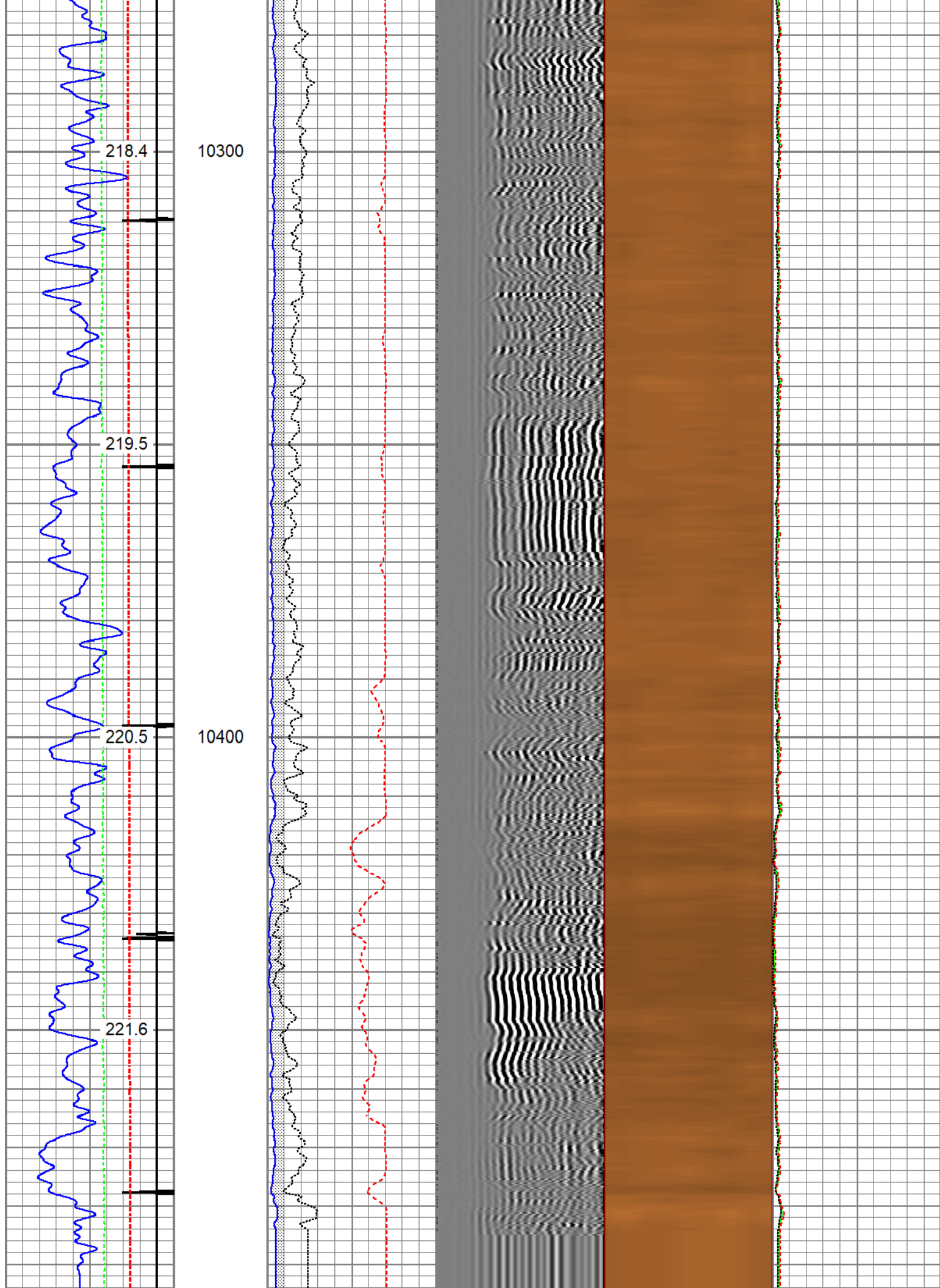


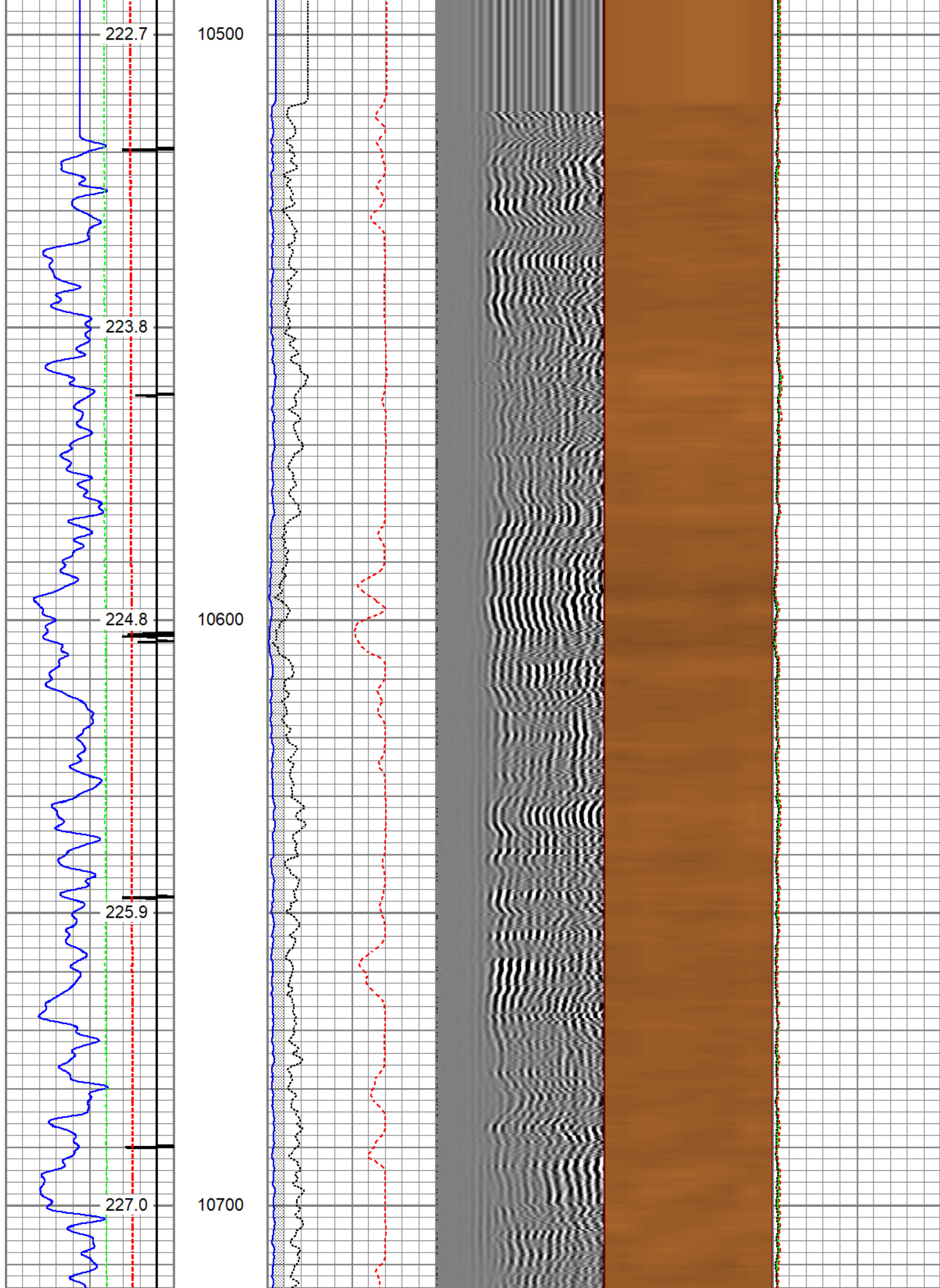


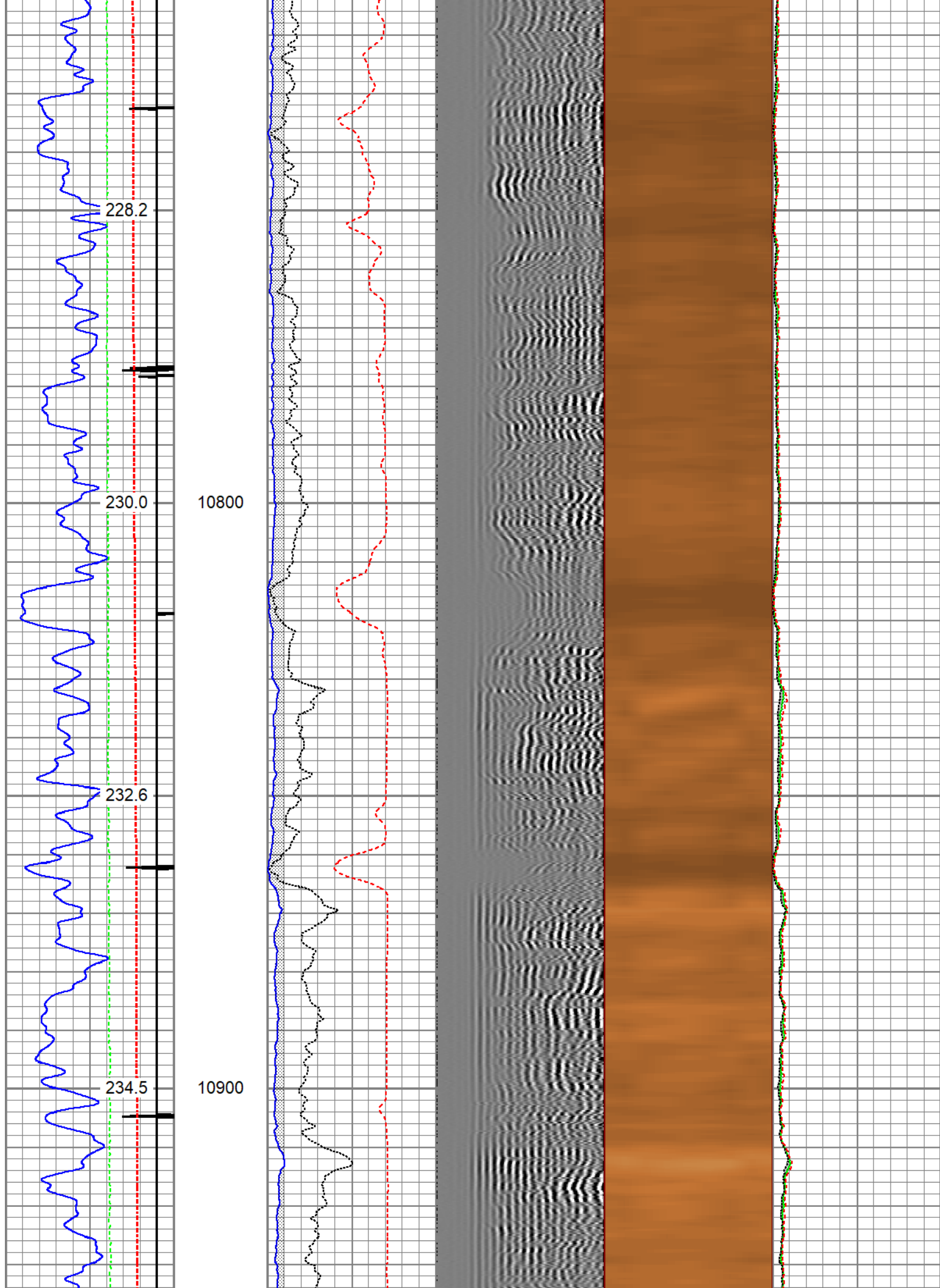


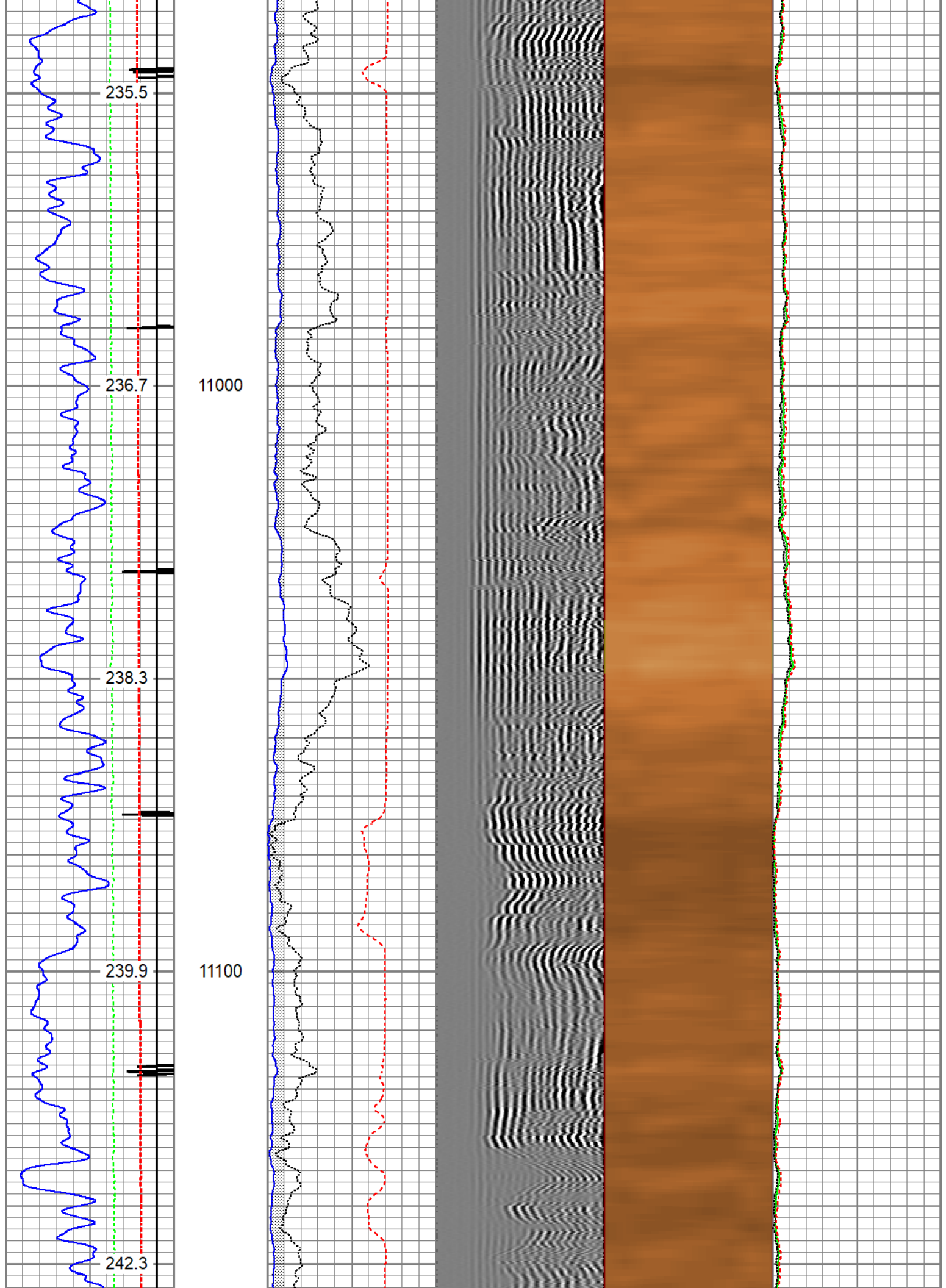


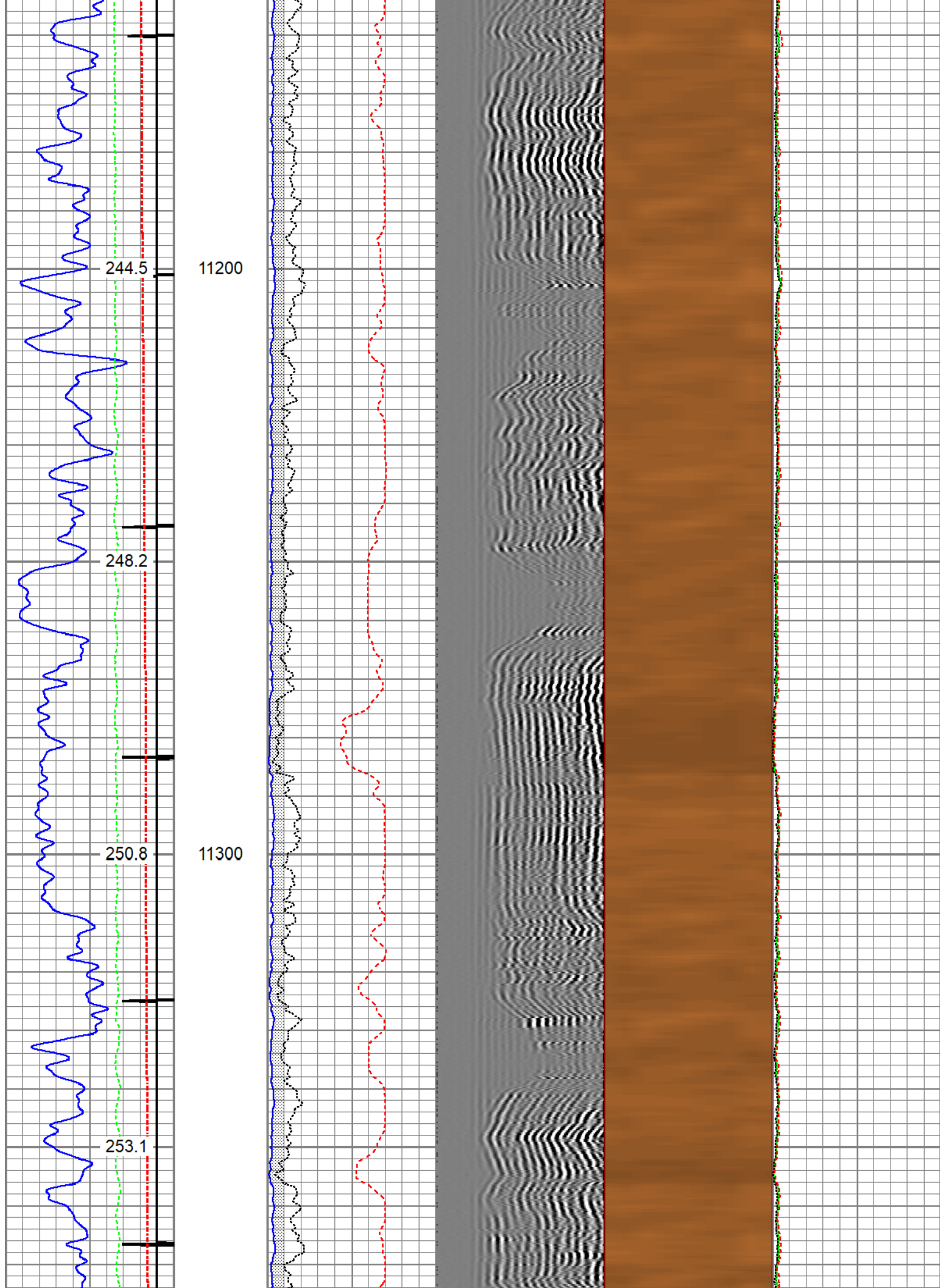


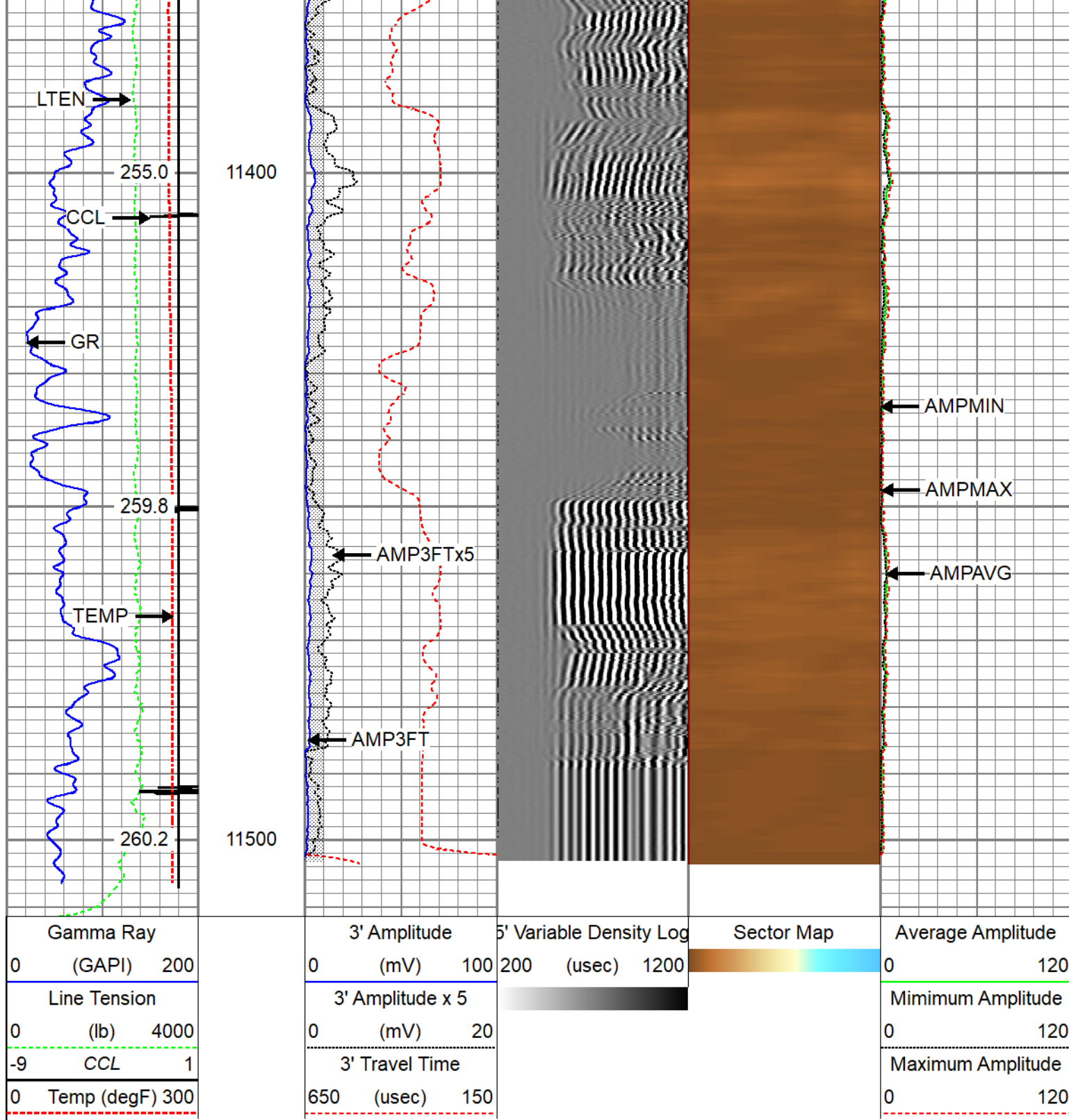










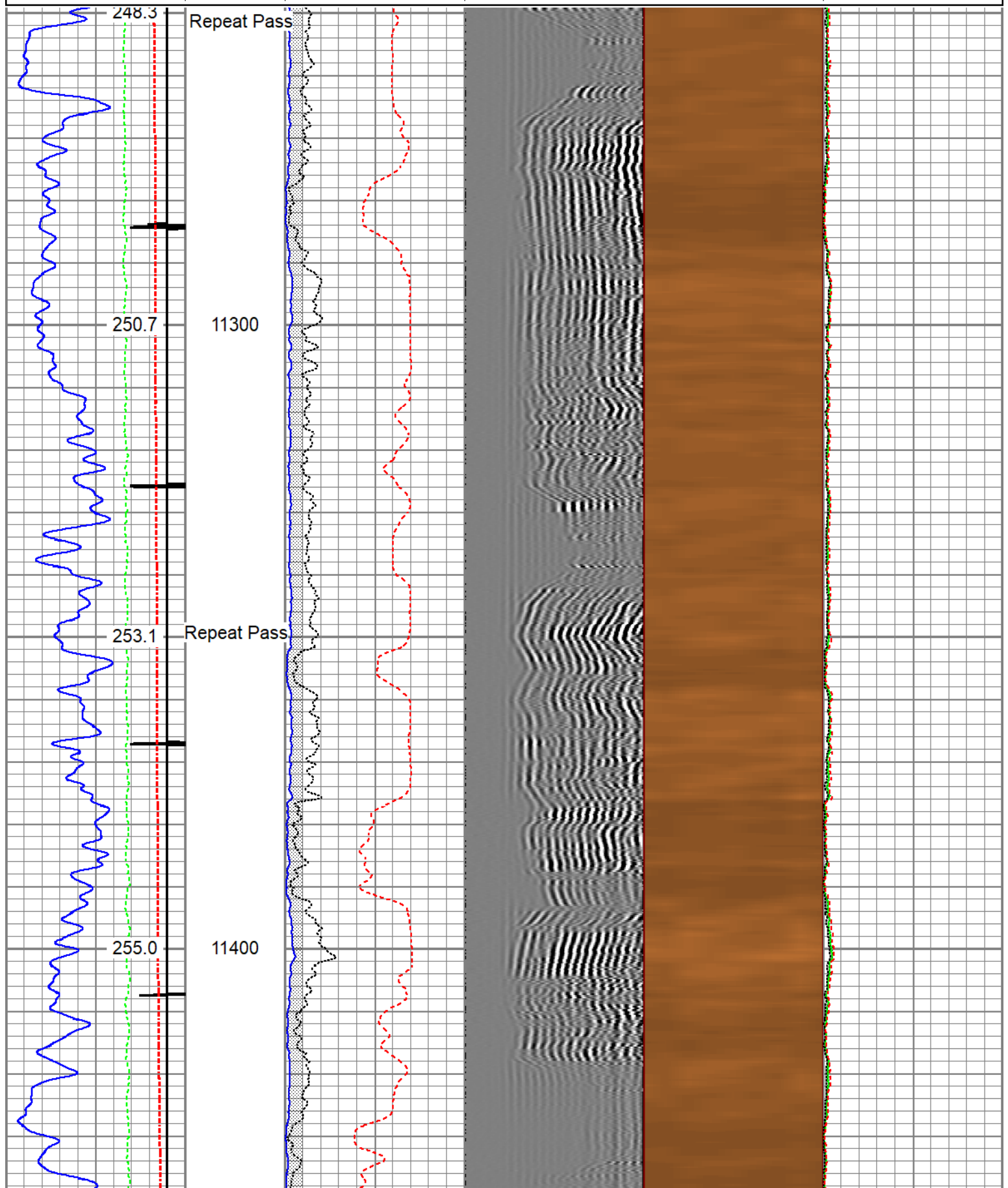


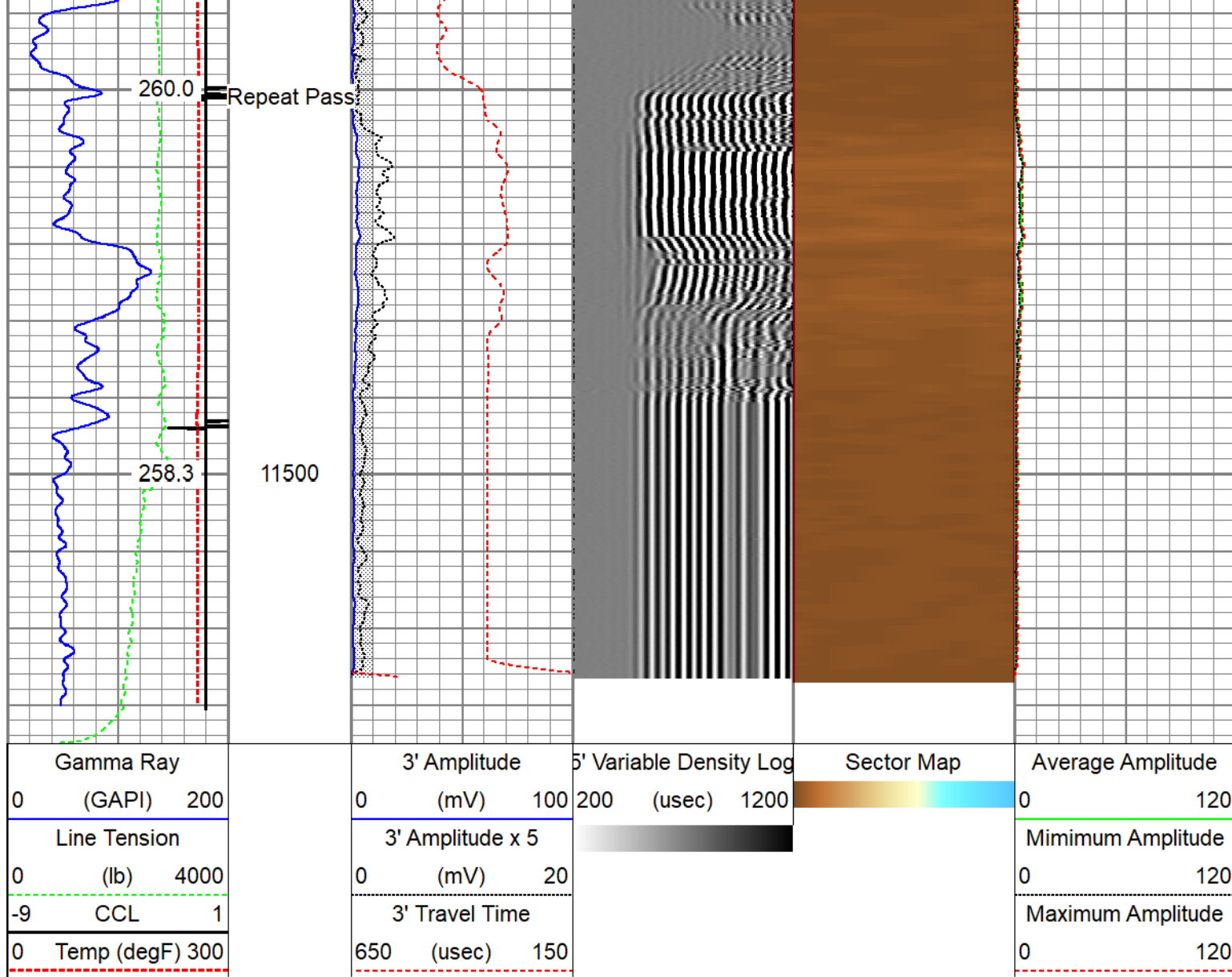


Repeat Pass 5" = 100'

Database File tep_wmc fed 13-20_rcbl_1-3-2023.db
 Dataset Pathname repeat
 Presentation Format twgrcbl
 Dataset Creation Tue Jan 03 07:58:10 2023
 Charted by Depth in Feet scaled 1:240

Gamma Ray			3' Amplitude			5' Variable Density Log			Sector Map			Average Amplitude		
0	(GAPI)	200	0	(mV)	100	200	(usec)	1200				0		120
Line Tension			3' Amplitude x 5									Minimum Amplitude		
0	(lb)	4000	0	(mV)	20							0		120
-9	CCL	1	3' Travel Time									Maximum Amplitude		
0	Temp (degF)	300	650	(usec)	150							0		120





Calibration Report		
Database File	tep_wmc fed 13-20_rcbl_1-3-2023.db	
Dataset Pathname	main	
Dataset Creation	Tue Jan 03 08:04:41 2023	

Gamma Ray Calibration Report		
Serial Number:	FW1311-93	
Tool Model:	GCT275-0000	
Performed:	Thu Dec 29 18:15:38 2022	
Calibrator Value:	168.0	GAPI
Background Reading:	69.0	cps
Calibrator Reading:	299.3	cps
Sensitivity:	0.7294	GAPI/cps

Segmented Cement Bond Log Calibration Report		
Serial Number:	FW1312-30	
Tool Model:	Probe275acc	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	278.924	ft

Master Calibration, performed Tue Jan 3 07:14:00 2023:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.004	0.511	0.000	81.196	147.744	-0.671
CAL	0.003	0.764				
5'	0.013	0.470	0.000	81.196	189.928	-2.321
SUM						
S1	0.005	0.516	0.000	100.000	185.992	-1.072
S2	0.007	0.547	0.000	100.000	179.809	-1.220
S3	0.004	0.492	0.000	100.000	179.337	-0.921
S4	0.005	0.532	0.000	100.000	175.506	-0.867
S5	0.004	0.528	0.000	100.000	172.552	-0.669
S6	0.005	0.528	0.000	100.000	172.189	-0.946
S7	0.006	0.551	0.000	100.000	176.780	-1.127
S8	0.004	0.486	0.000	100.000	186.883	-0.747

Internal Reference Calibration, performed (Not Performed):

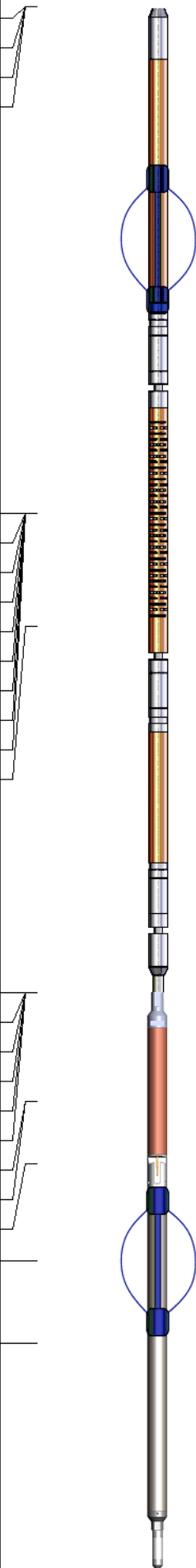
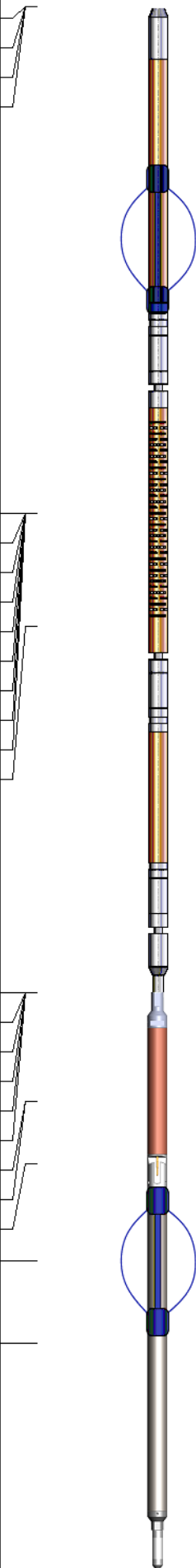
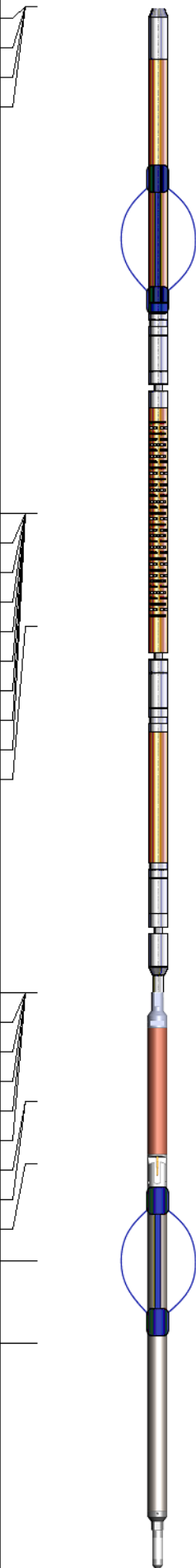
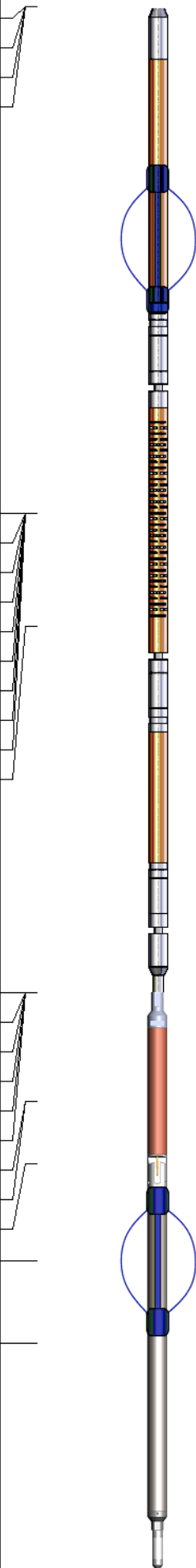
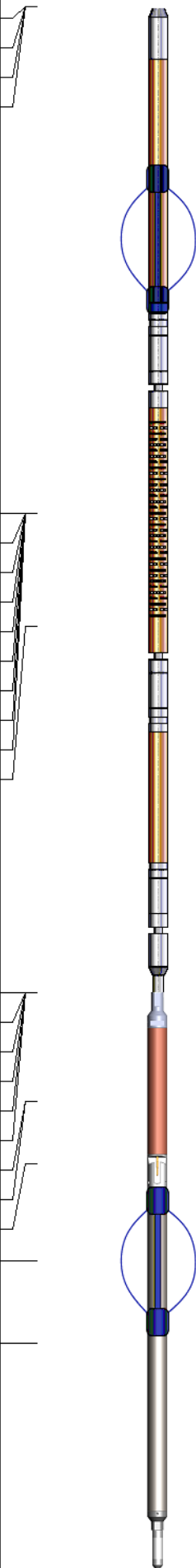
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.003	0.764	1.000	0.000

Air Zero Calibration, performed Mon Jan 2 11:33:52 2023:

	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:	Thu Jul 28 15:46:49 2022				
	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	-931.00	904.00	-1.00	1.00	gee
Y Accelerometer	-899.00	884.00	-1.00	1.00	gee
Z Accelerometer	1.47	886.18	0.00	1.00	gee


Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GCT_FMWR	13.85		SO BS CENT-2750-4500 Slip Over 2-3/4" I.D. for 4-1/2" O.D. Casing Bow Spring Centralizer	1.33	3.25	10.00
mSec_Count	13.85					
RBT_Status	13.85					
Error_Ct	13.85					
WVFS8	9.35		RBT8acc-Probe275acc (FW1312-30) 2.75" Radial Corrosion with accelerometer	8.75	2.75	110.00
WVFS7	9.35					
WVFS6	9.35					
WVFS5	9.35					
WVFS4	9.35					
WVFS3	9.35					
WVFS2	9.35					
WVFS1	9.35					
WVF3FT	9.35					
WVF5FT	8.35					
			SO BS CENT-2750-4500 Slip Over 2-3/4" I.D. for 4-1/2" O.D. Casing Bow Spring Centralizer	1.33	3.25	10.00
RBT_ACCZ	5.10					
RBT_ACCY	5.10					
RBT_ACCX	5.10					
GCT_HV	5.10					
WVFSYNC	5.10					
WVFCAL	5.10					
CCL\$2	4.14					
CCL\$1	4.14					
GCT_Temp	3.59					
GR	2.72					
			GC-GCT275-0000 (FW1311-93) Probe 2.75" Gamma Ray - CCL w/ Temp	4.77	2.75	55.00
GCT_IntTemp	2.00					
			Plug-FA108-0000 1.38" Bull Plug	0.33	1.38	1.00

Dataset: tep_wmc fed 13-20_rcbl_1-3-2023.db: field/well/run1/main

Total length: 13.85 ft

Total weight: 186.00 lb

O.D.: 3.25 in

Company	TEP Rocky Mountain LLC		
Well	Federal WMC 13-20		
Field	Rulison		
County	Garfield	State	Colorado
		Radial Cement Bond Gamma Ray Casing Collar Log	