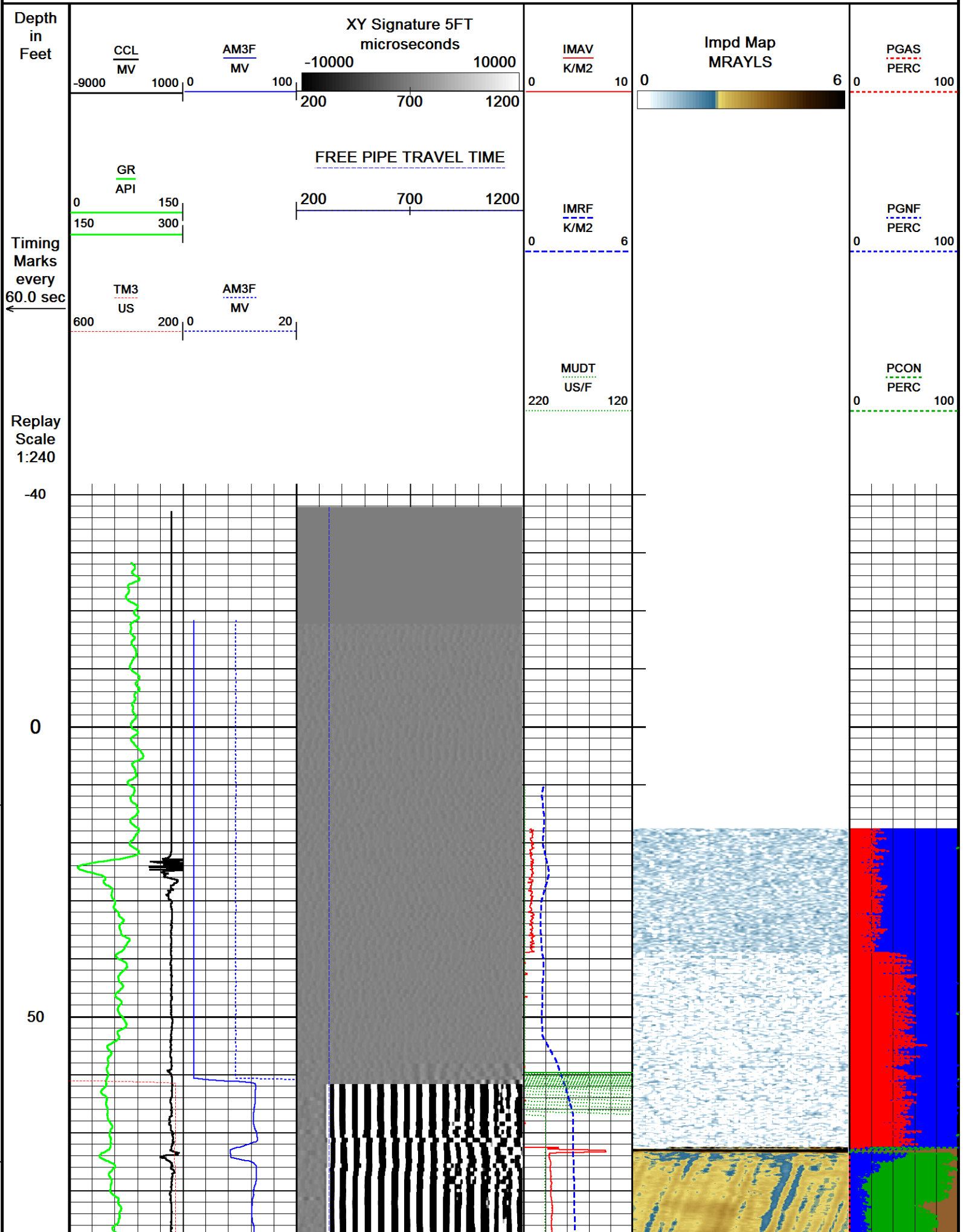
										<div>SECUREVIEW</div> <div>ULTRAVIEW / BONDVIEW</div> <div>CEMENT ANALYSIS LOG</div>									
COMPANY										EXTRACTION OIL & GAS									
WELL										HFE #5									
FIELD										WATTENBERG									
PROVINCE/COUNTY										WELD									
COUNTRY/STATE										UNITED STATES / COLORADO									
LOCATION										SWSW S22 T4N R68W									
SEC 22		TWP 4N		RGE 68W		Other Services													
Latitude																			
Longitude																			
API Number		05-123-4477200																	
Permanent Datum GL, Elevation 4918 feet										Elevations:									
Log Measured From KB, 28.00 feet above Permanent Datum										KB 4946.00									
Drilling Measured From KB										DF GL 4918.00									
Date										07-SEP-2017									
Run Number										ONE									
Service Order										7145-191997603									
Type Log										URS / CBT									
Depth Driller																			
Depth Logger										6500.00 feet									
Top Log Interval										0.00 feet									
Bottom Log Interval										6500.00 feet									
Hole Fluid Type										WATER BASED									
Hole Fluid Level										100.00 feet									
Restriction ID										4.778 inches									
Max Recorded Temp										185.00 deg F									
Well Head Pressure										0.00 psi									
Well Head Equipment										N/A									
Time Well Ready										ON ARRIVAL									
Time Logger Bottom										18:00									
Unit										14122									
Equipment Name										WSS-E									
Base										CASPER									
Recorded By										K. HUSETH									
Witnessed By										NOT WITNESSED									

CASING / TUBING RECORD						
Type	Grade	TypeJoint	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
PRODUCTION	P-110		5.500	0.00	16000.00	20.00

REMARKS
SECUREVIEW ULTRAVIEW BONDVIEW LOG CORRELATED TO RIG KB @ 28 FT ABOVE GROUND LEVEL
100% STANDARD FREE PIPE AMPLITUDE IN 5.5 INCH CASING IS 72 mV

In interpreting, communicating or providing information and/or making recommendations, either written or oral, as to logs or test or other data, type or amount of material, or Work or other service to be furnished, or manner of performance, or in predicting results to be obtained, the Contractor will give the Company the benefit of the Contractor's best judgment based on its experience and will perform all such Work in a good and workmanlike manner. Any interpretation of test or other data, and any recommendation or reservoir description based upon such interpretations, are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and assumptions are not infallible, and with respect to which professional engineers and analysts may differ. ACCORDINGLY ANY INTERPRETATION OR RECOMMENDATION RESULTING FROM THE SERVICES WILL BE AT THE SOLE RISK OF THE COMPANY, AND THE CONTRACTOR CANNOT AND DOES NOT WARRANT THE ACCURACY, CORRECTNESS OR COMPLETENESS OF ANY SUCH INTERPRETATION OR RECOMMENDATION, WHICH INTERPRETATIONS AND RECOMMENDATIONS SHOULD NOT, THEREFORE, UNDER ANY CIRCUMSTANCES BE RELIED UPON AS THE SOLE OR MAIN BASIS FOR ANY DRILLING, COMPLETION, WELL TREATMENT, PRODUCTION OR FINANCIAL DECISION, OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING ACTIVITY, DRILLING RIG OR ITS CREW OR ANY OTHER INDIVIDUAL. THE COMPANY HAS FULL RESPONSIBILITY FOR ALL DECISIONS CONCERNING THE SERVICES.



Timing  
Marks  
every  
60.0 sec

←

TM3  
US

600

200

0

20

AM3F  
MV

MUDT  
US/F

220

120

PCON  
PERC

0

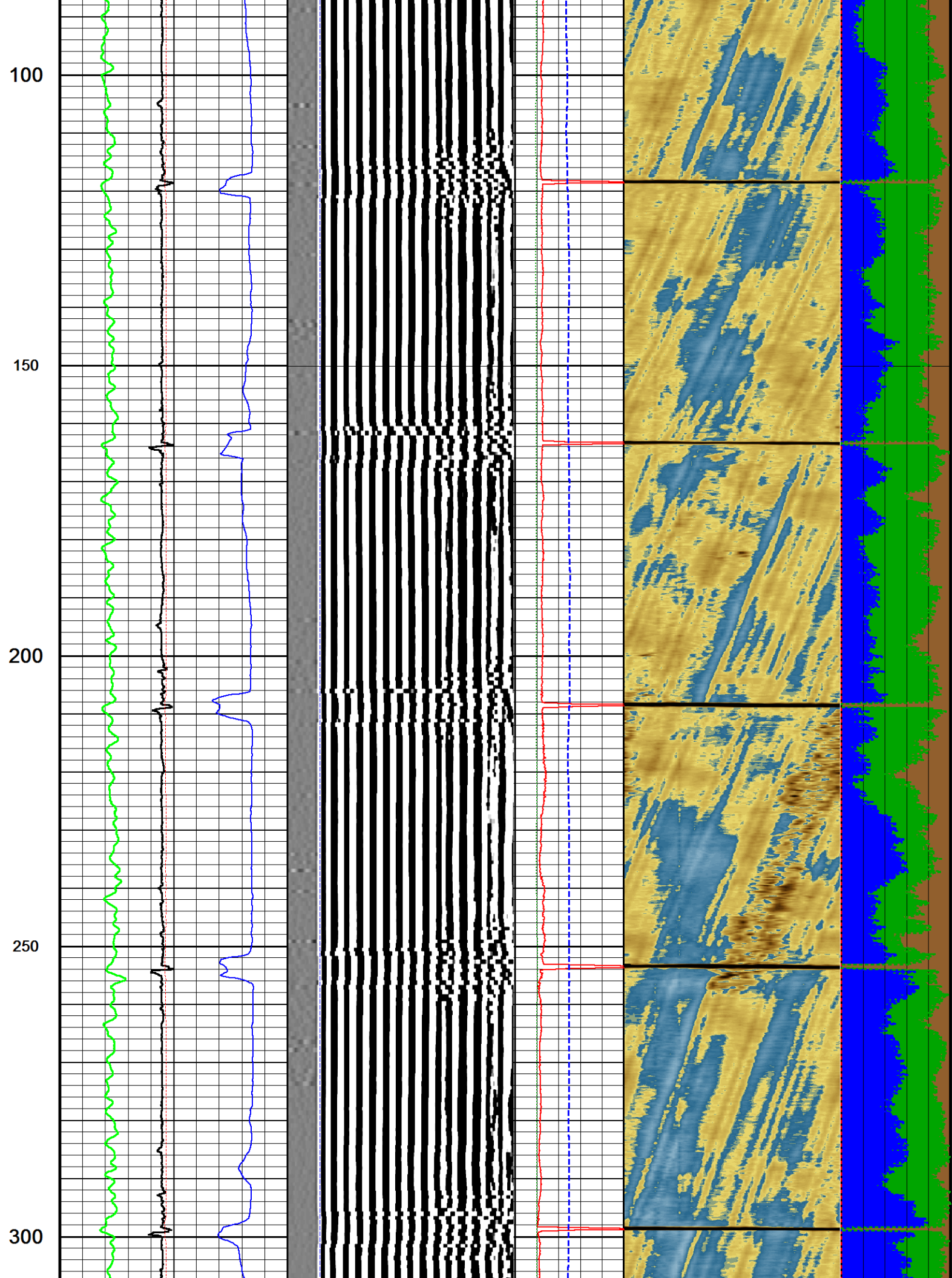
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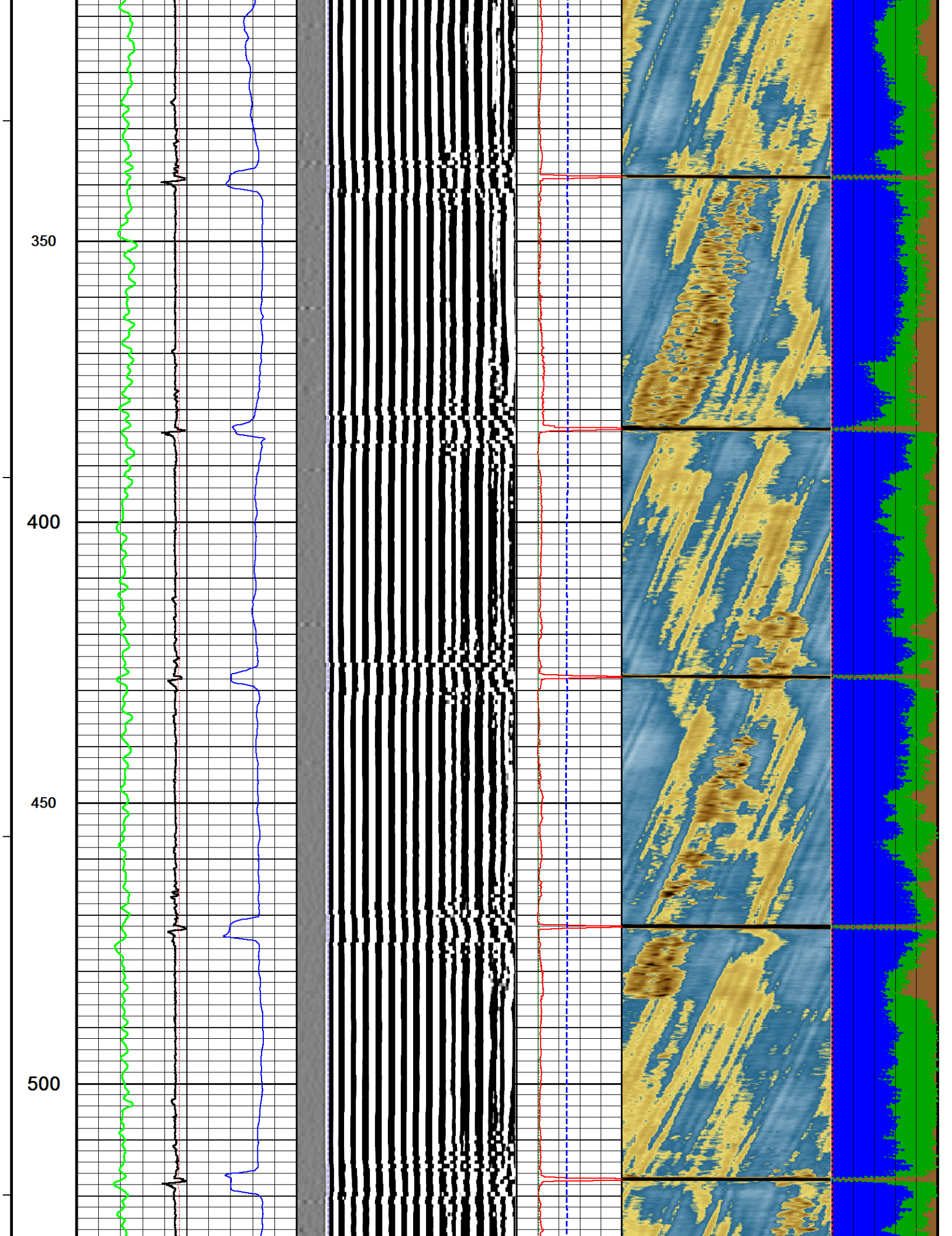
Replay  
Scale  
1:240

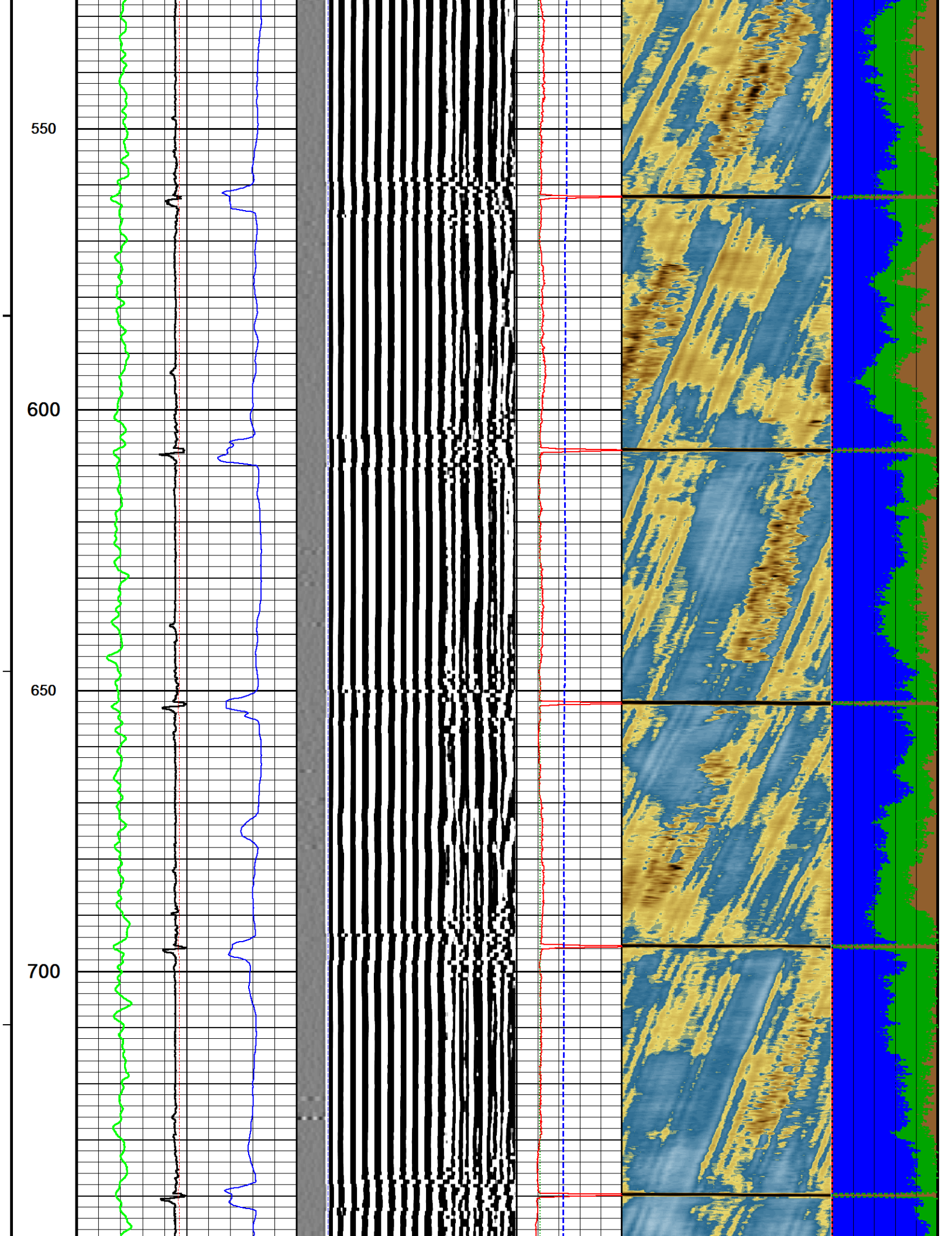
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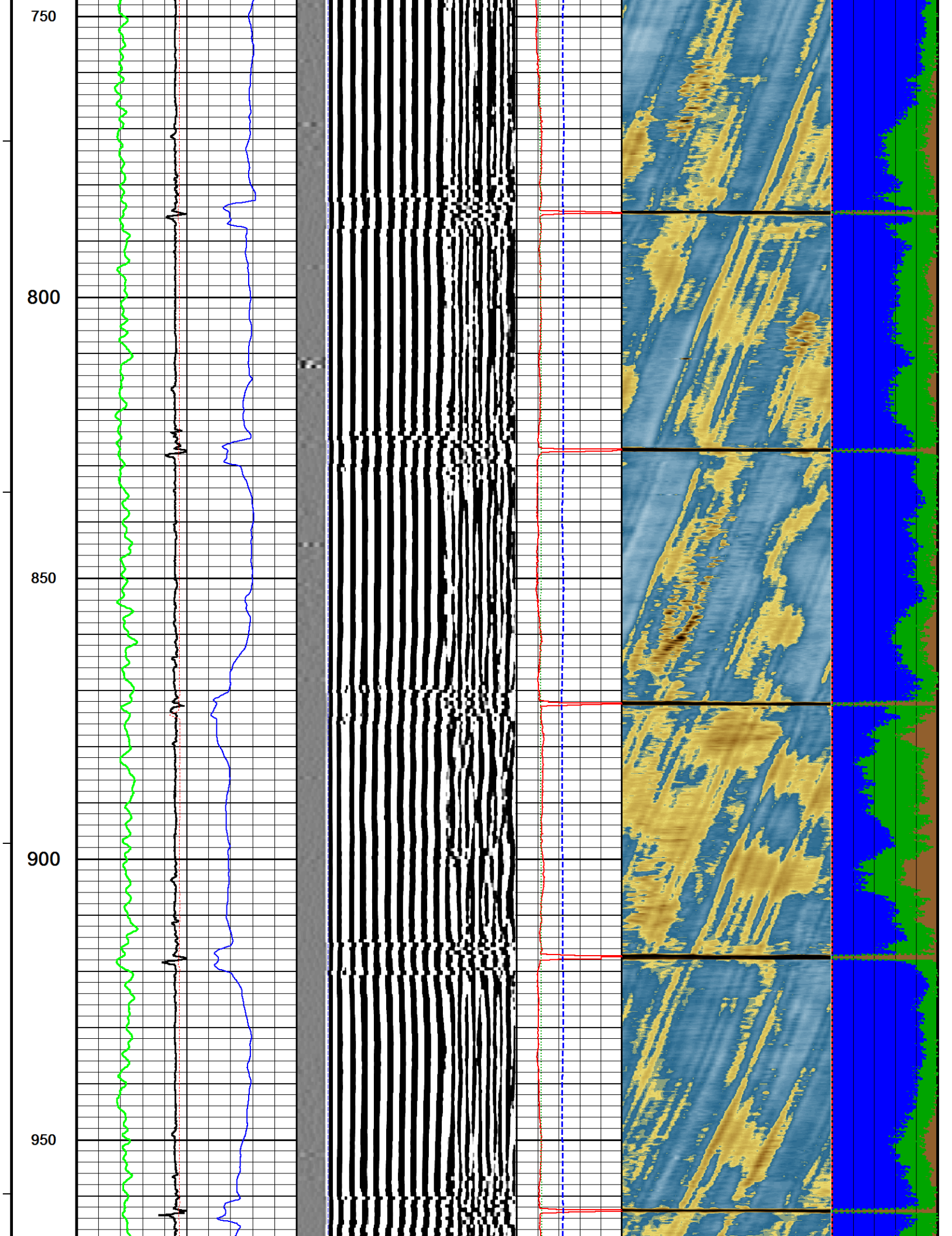
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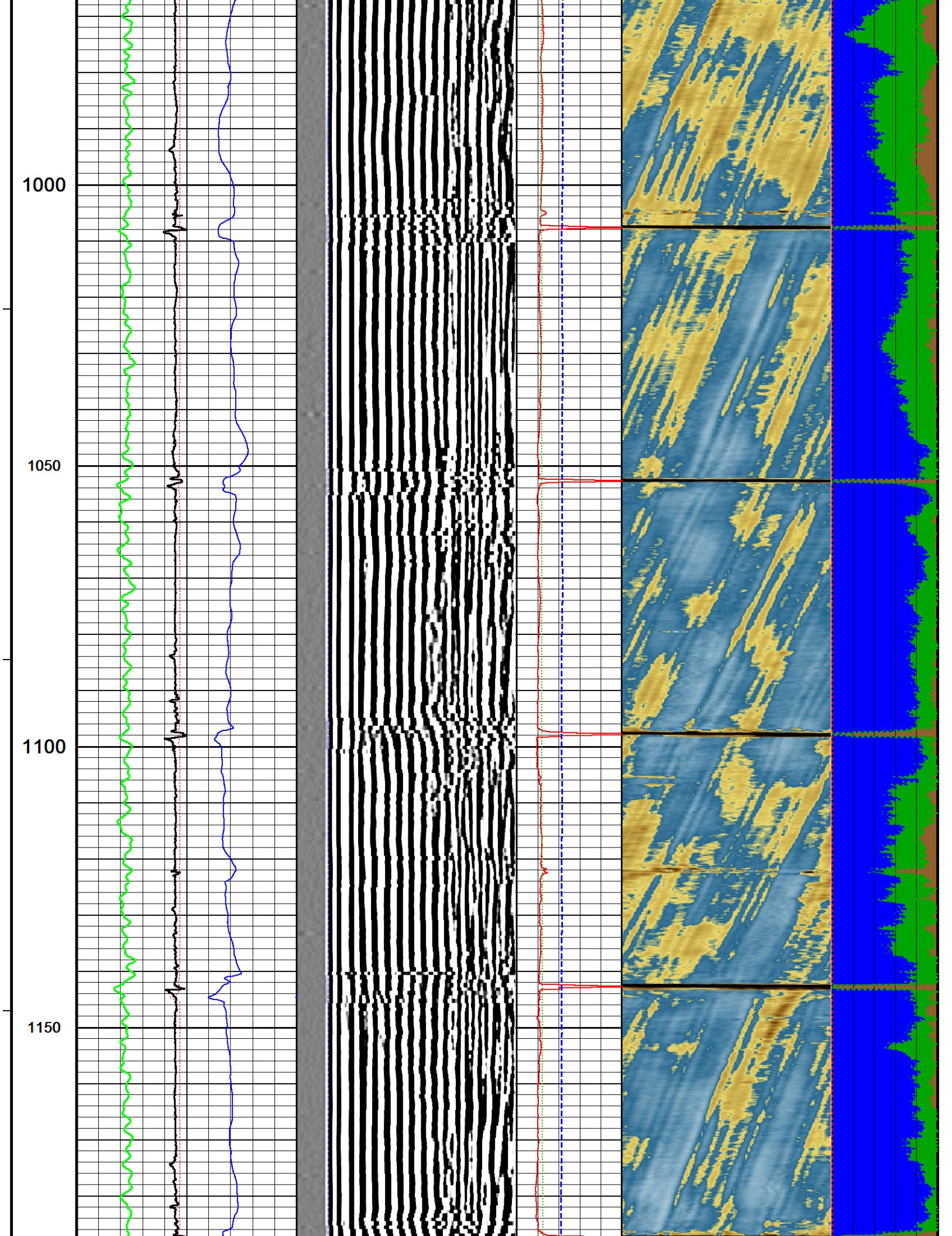
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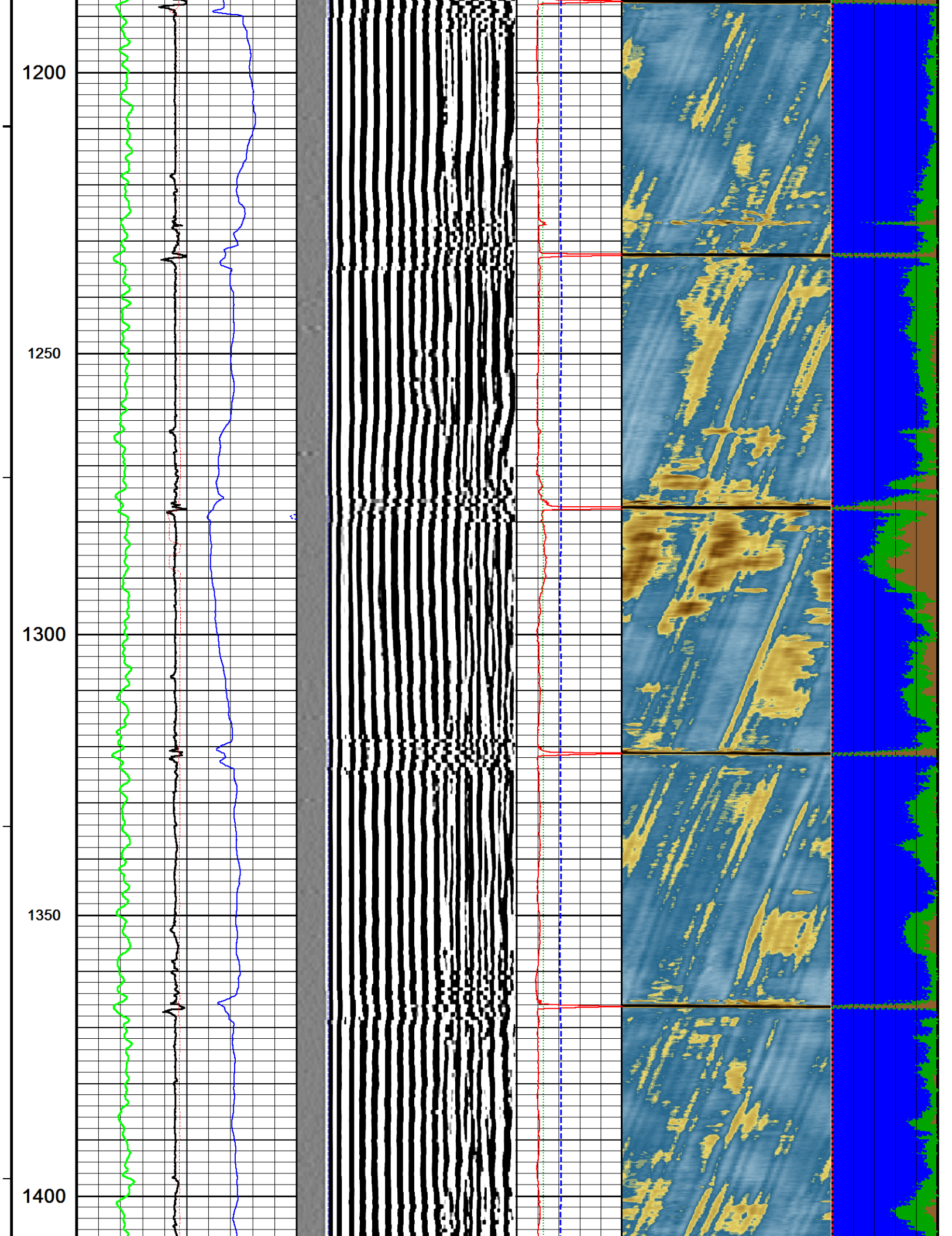


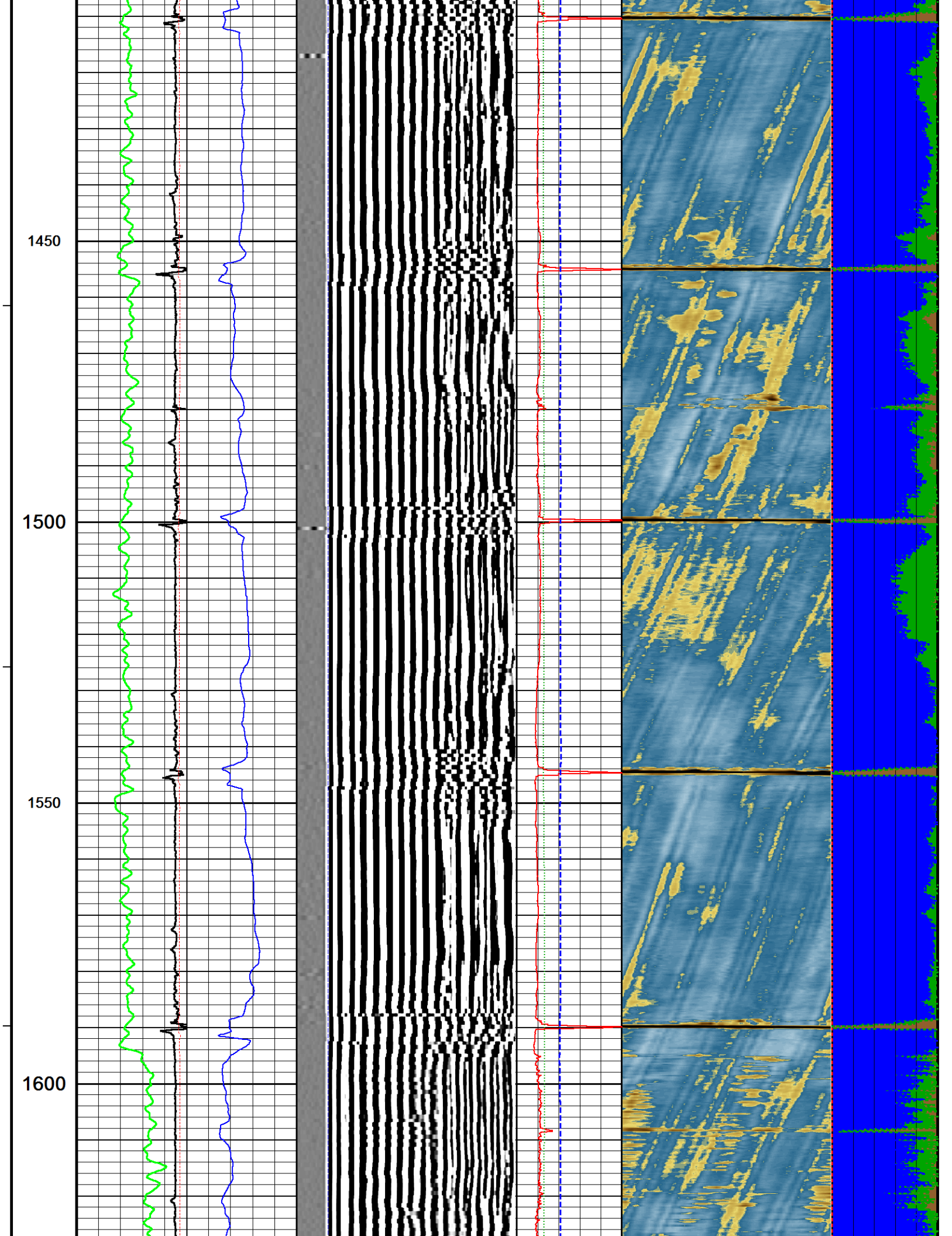


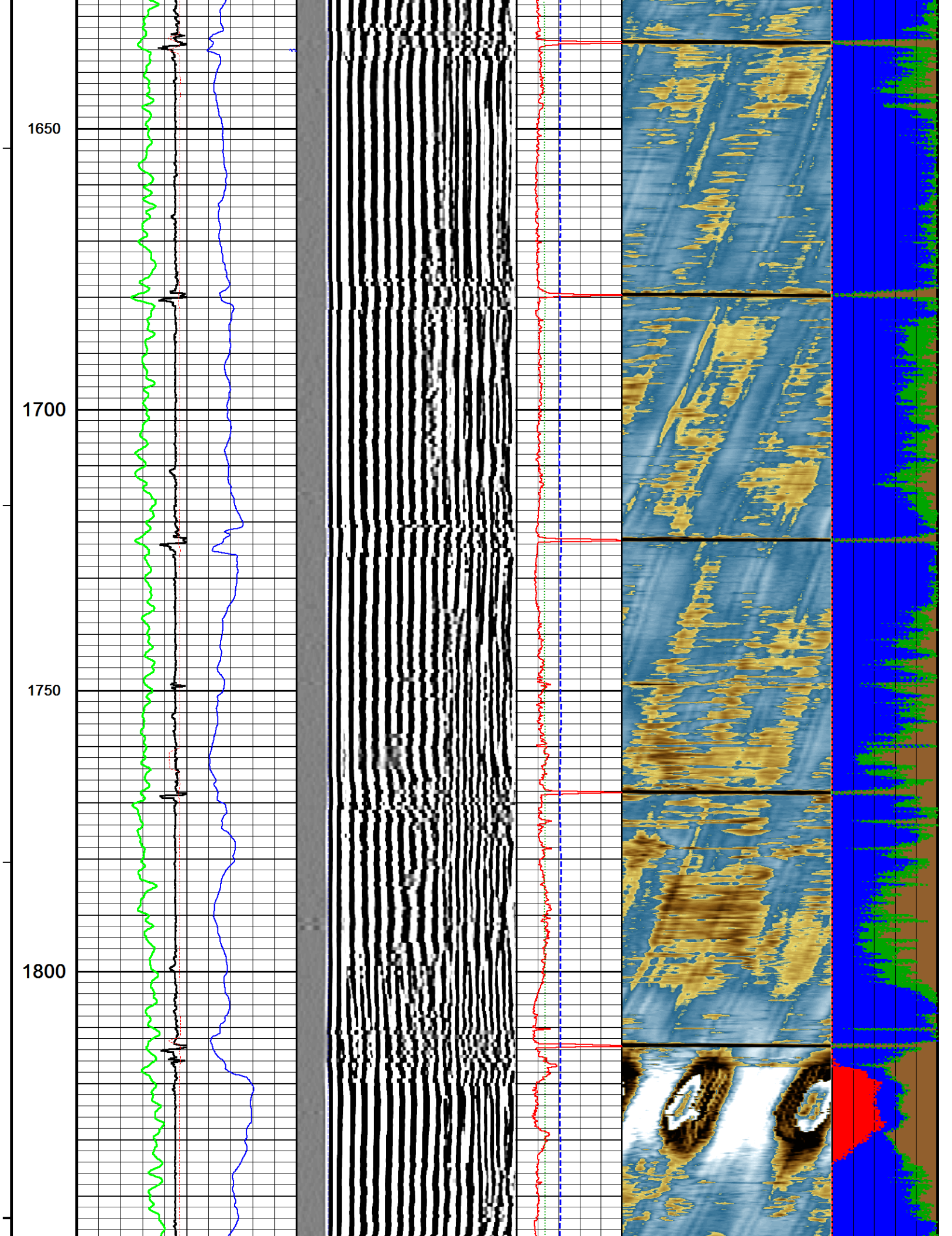


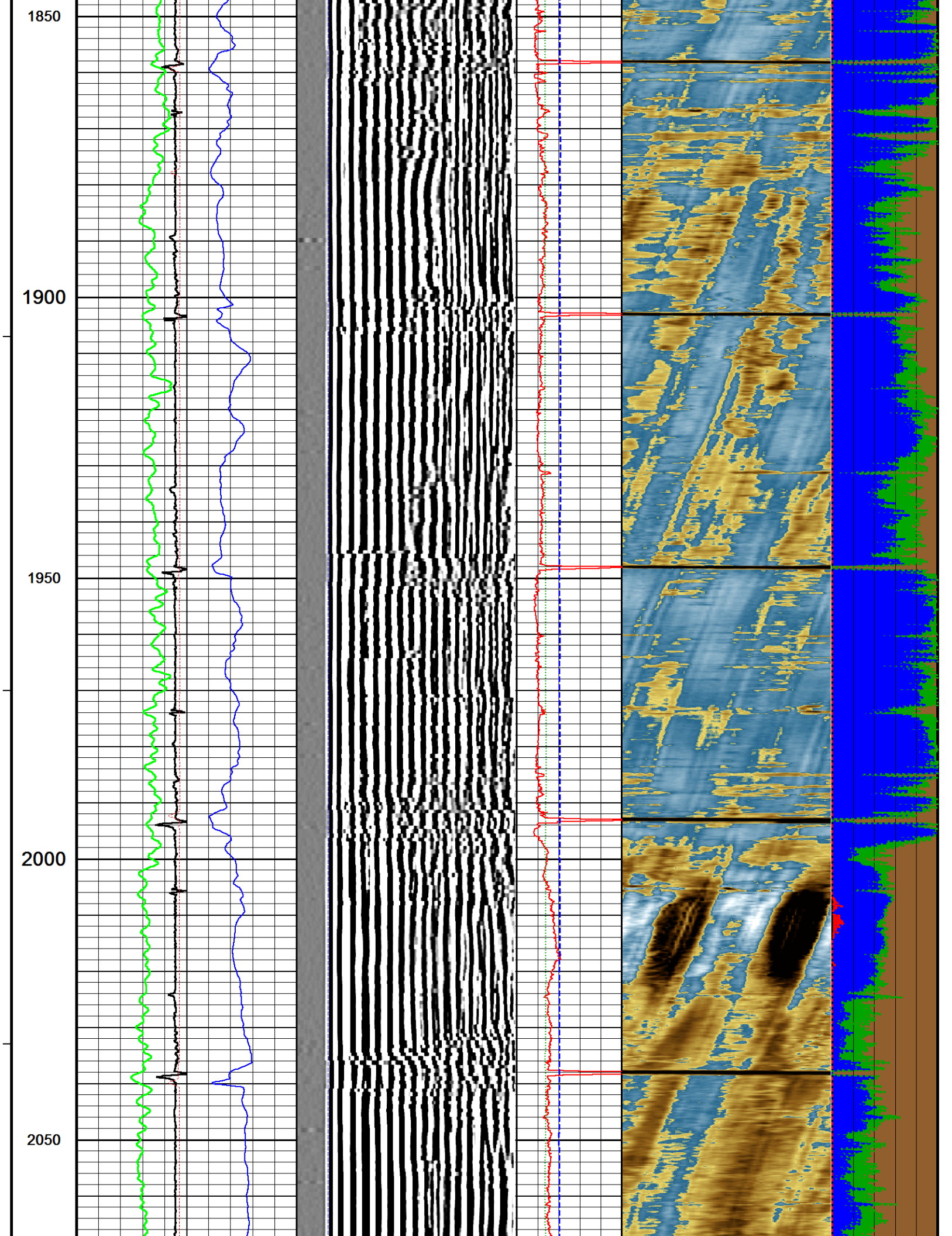


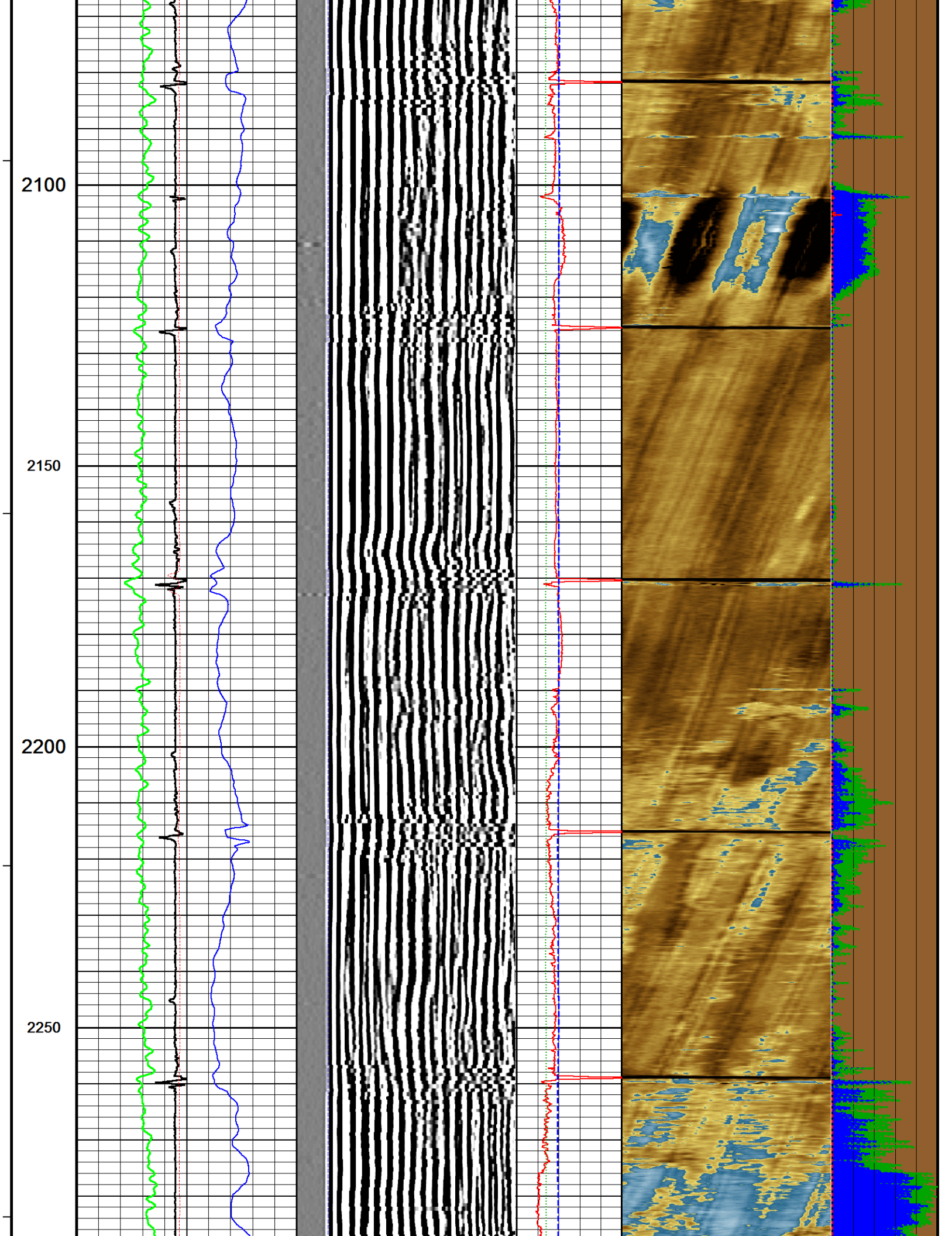












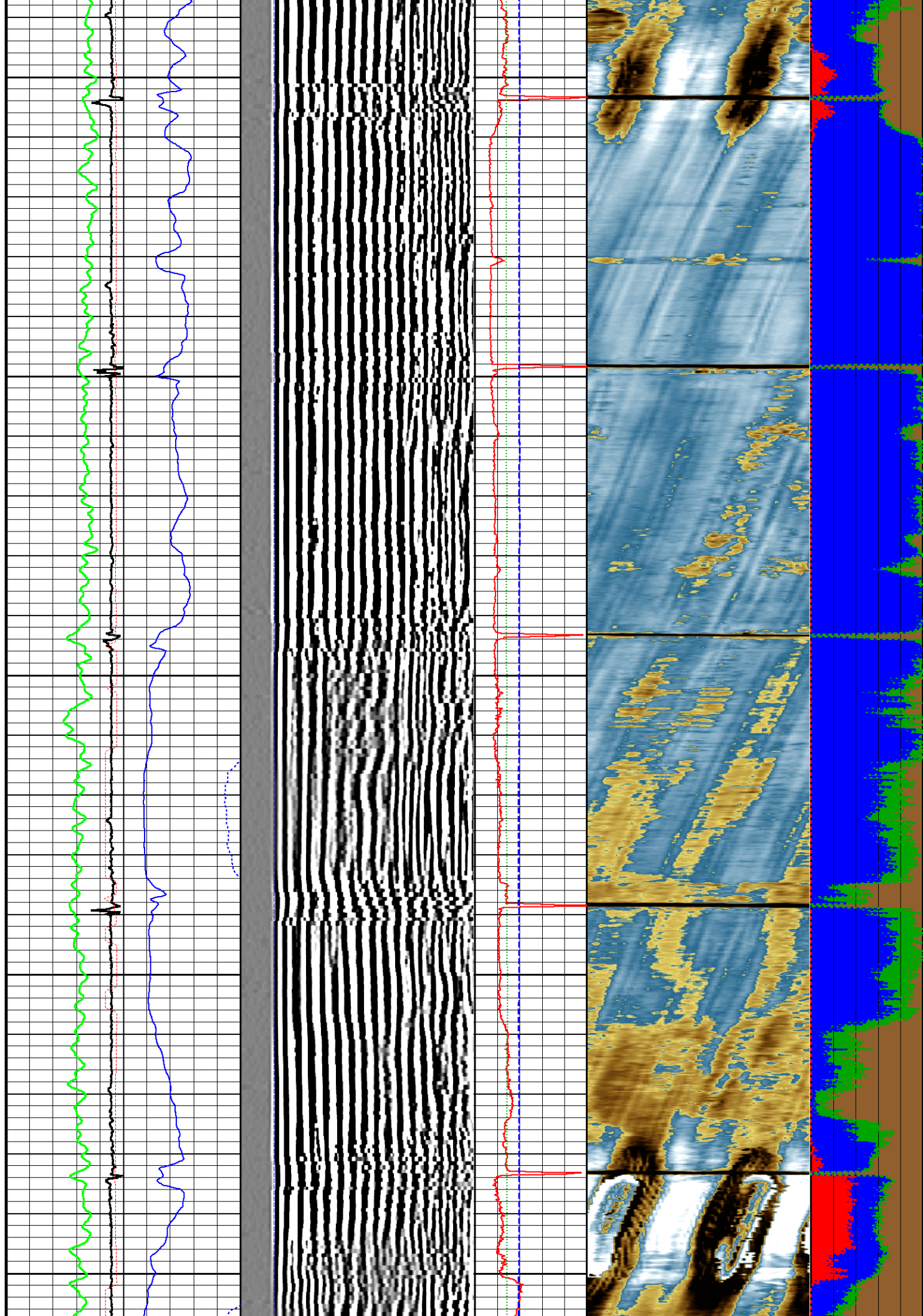
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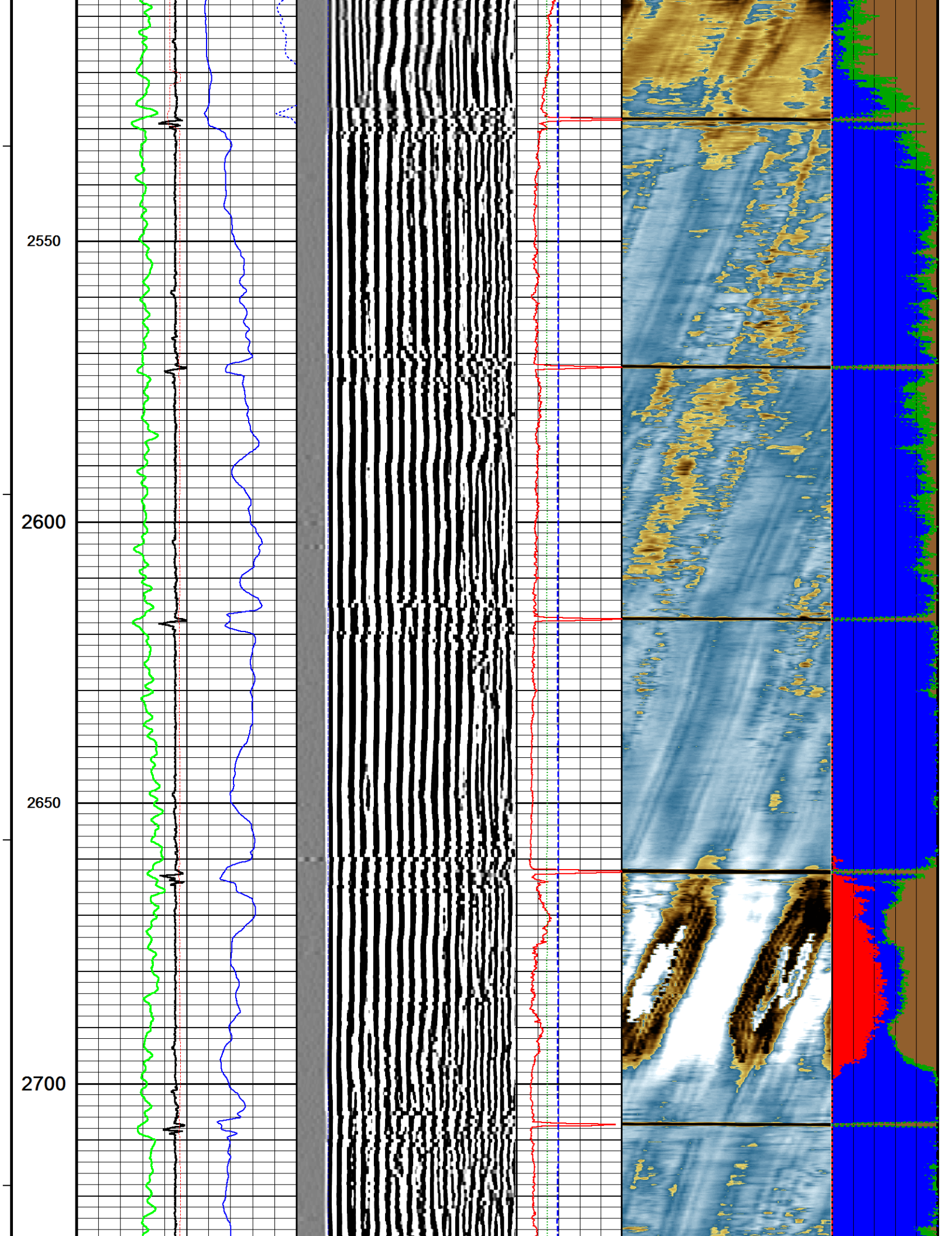
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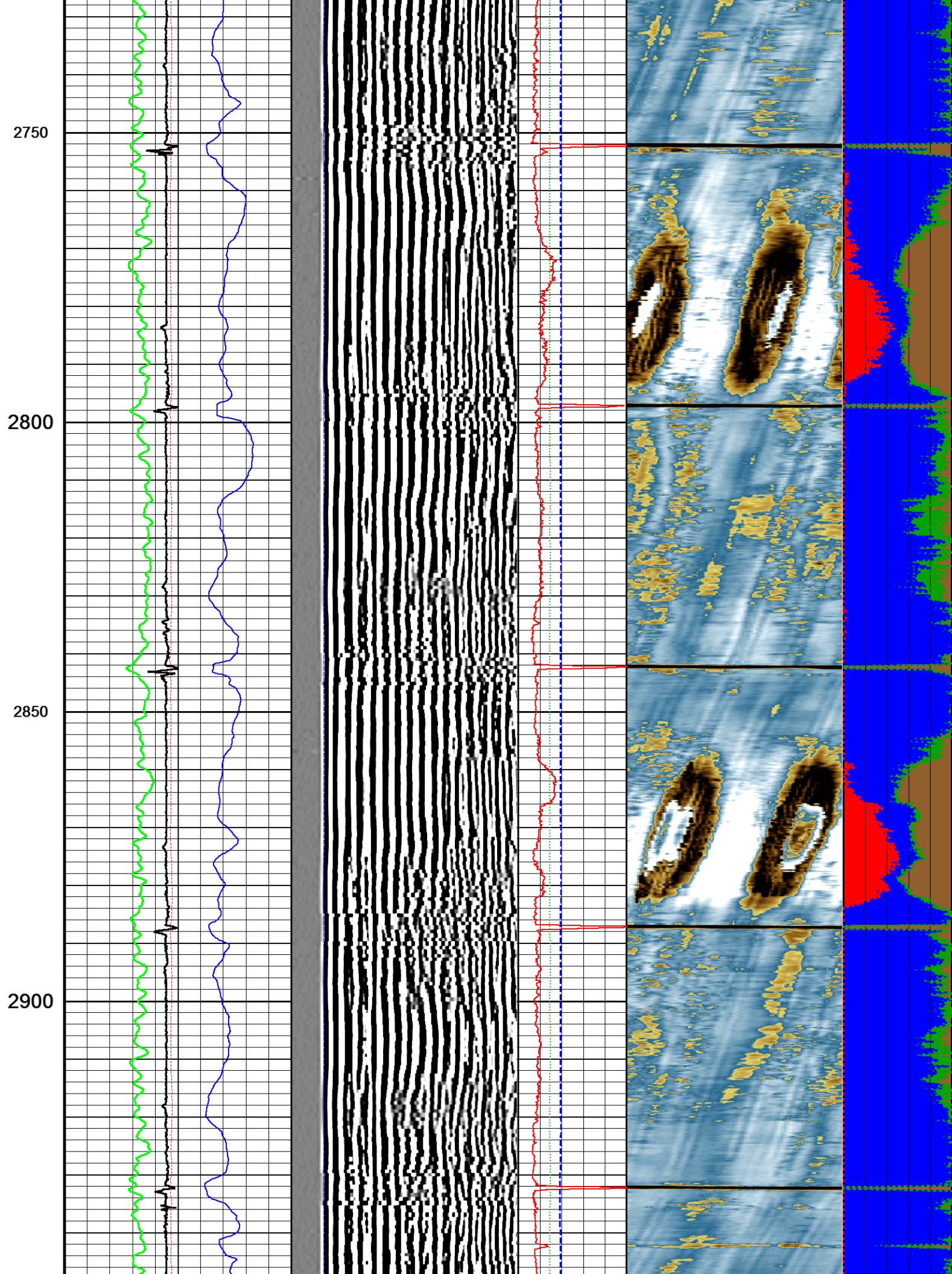
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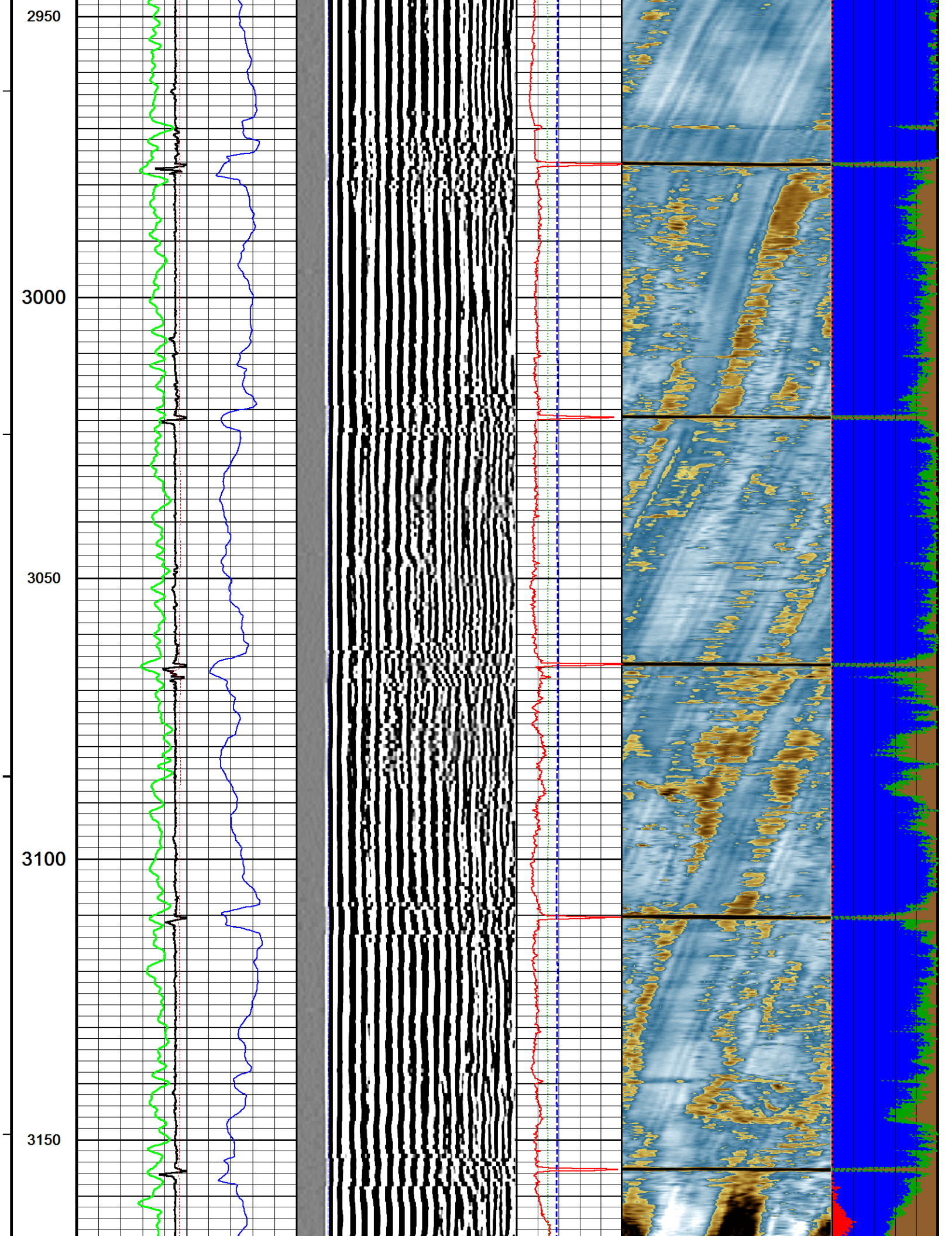
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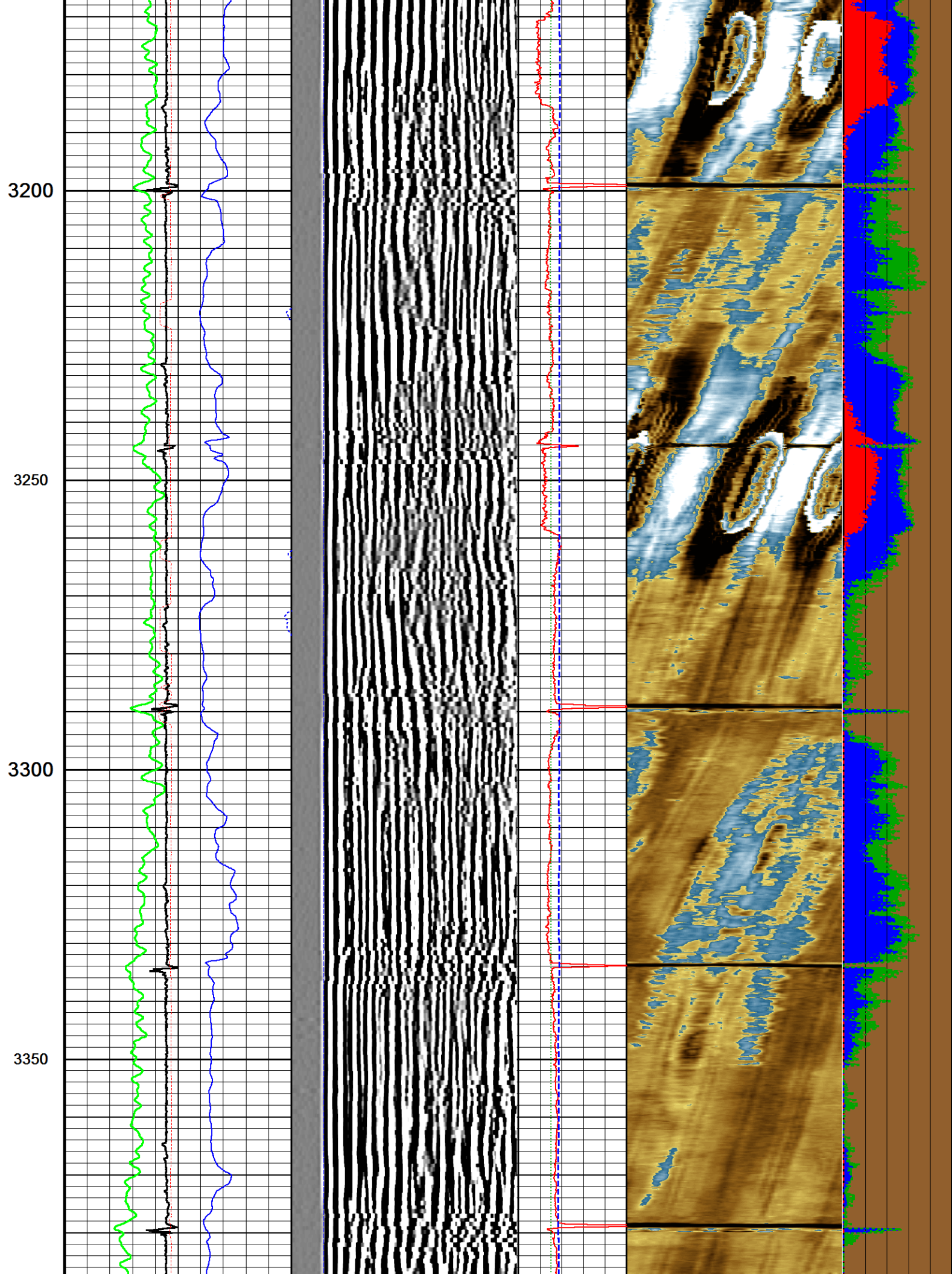
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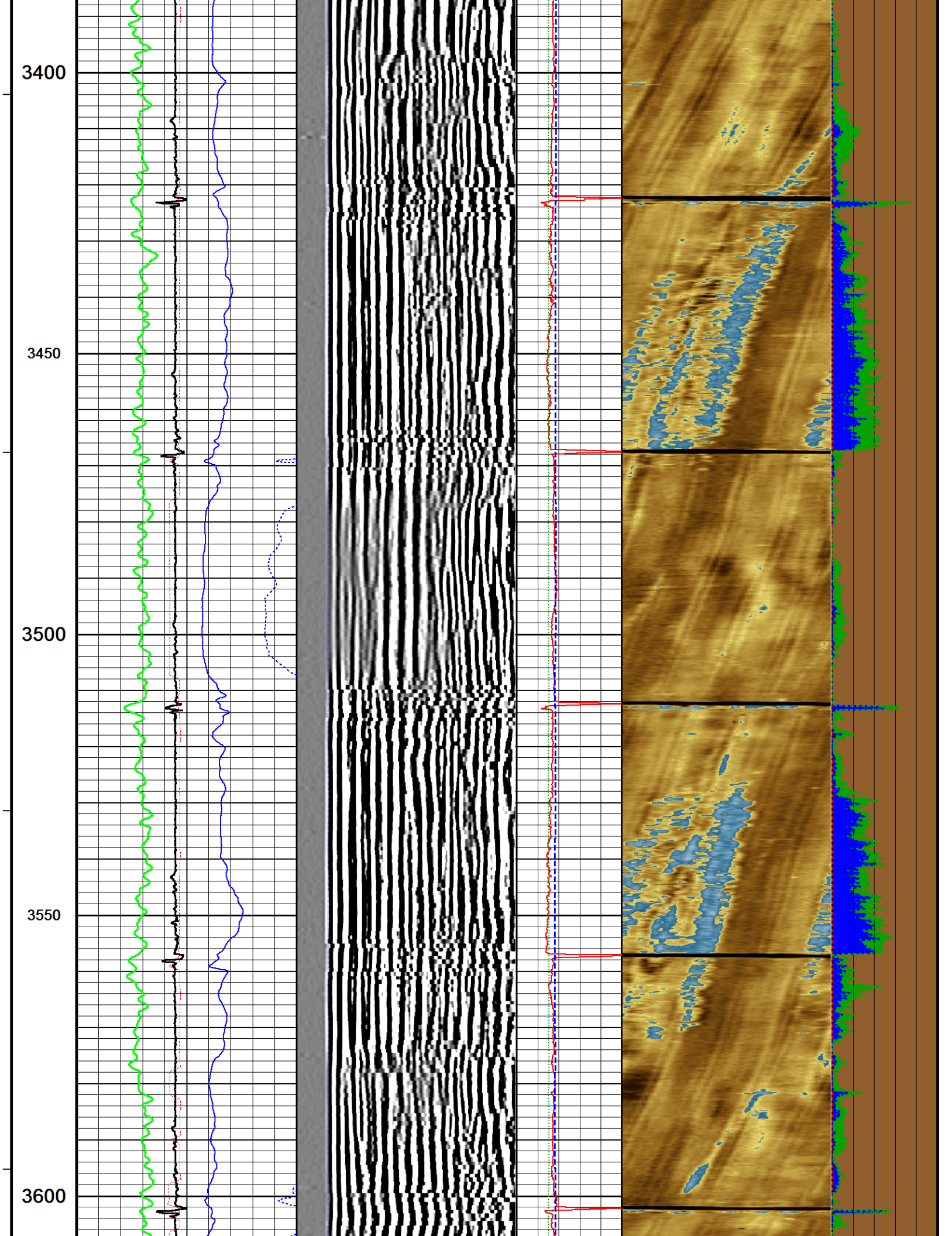


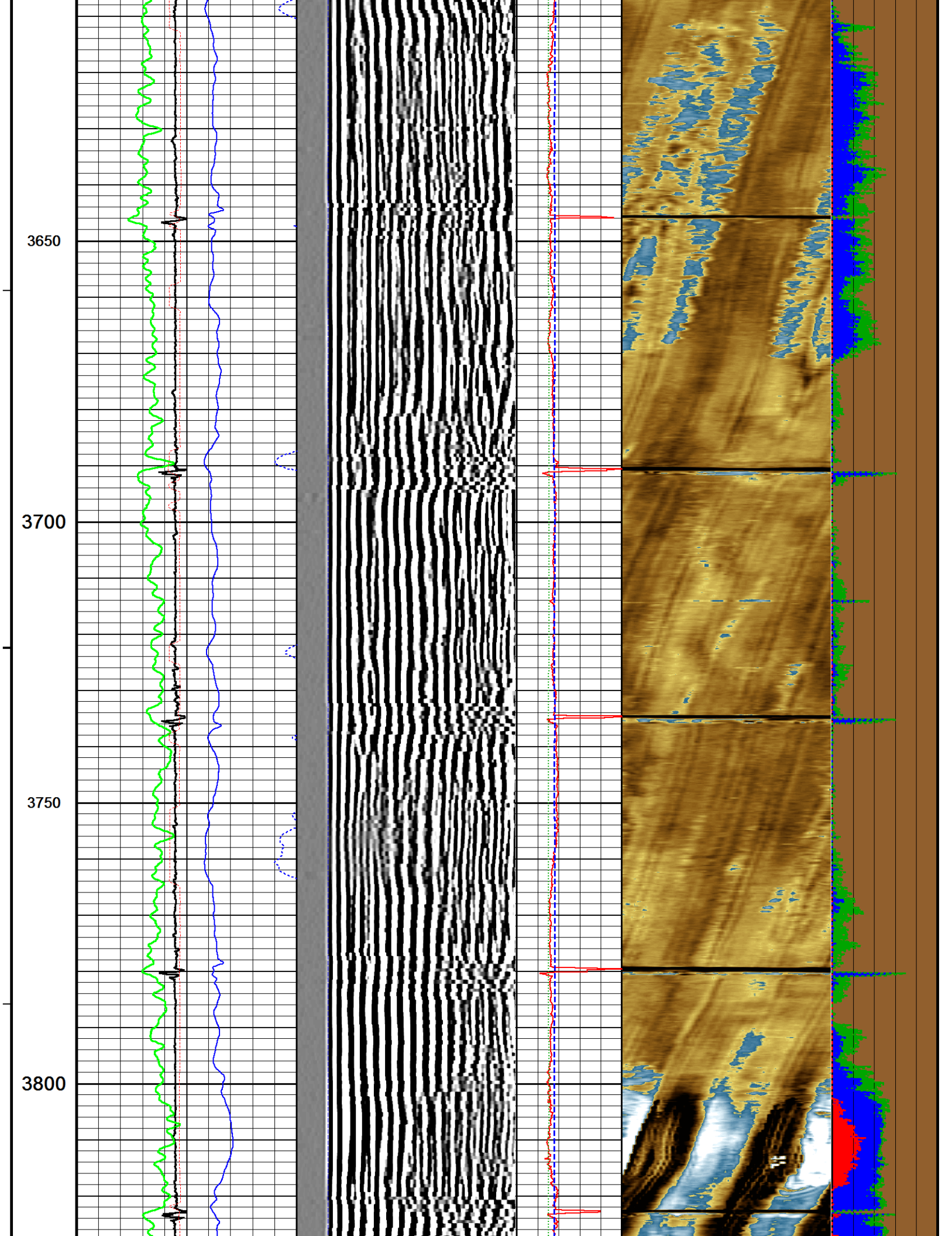


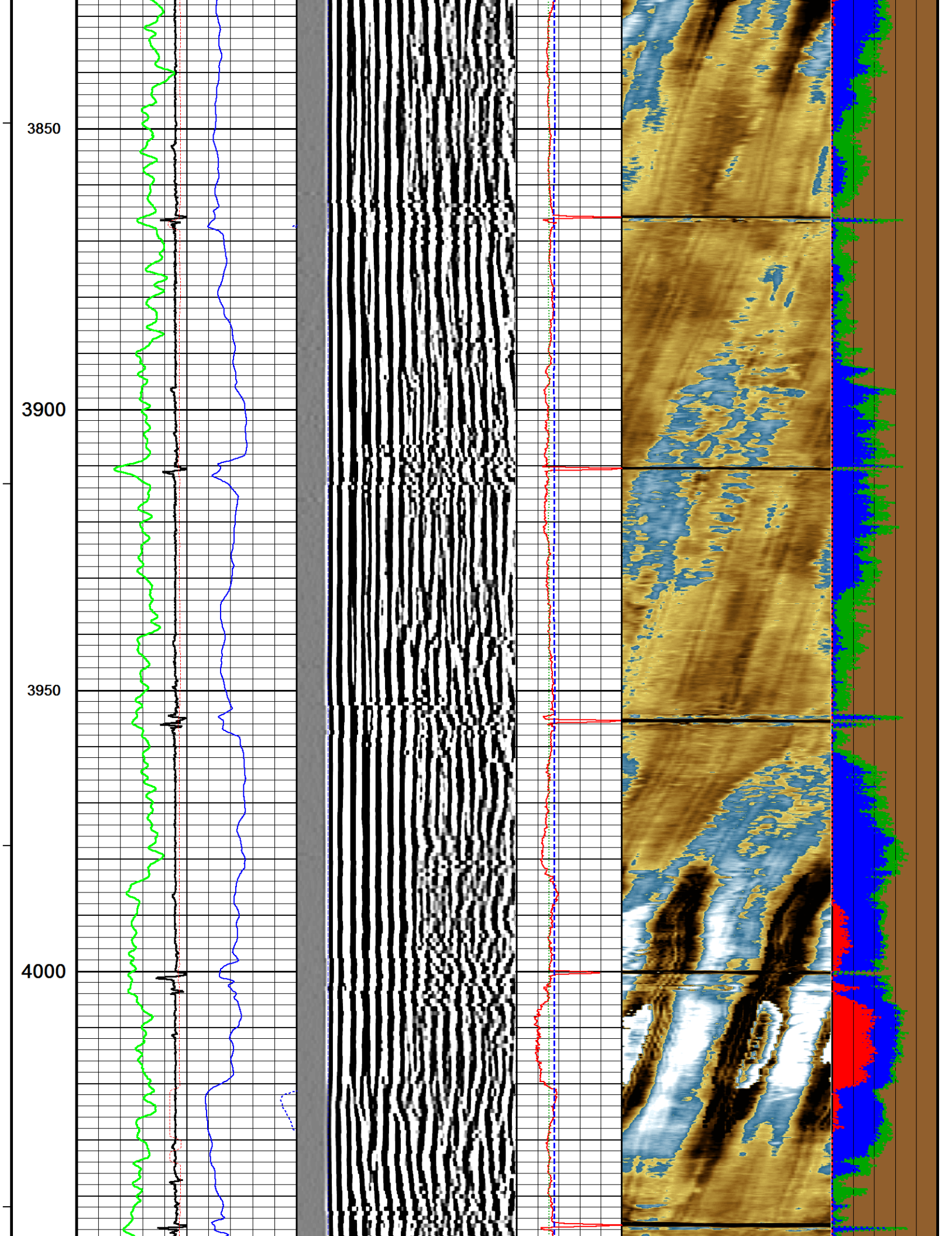


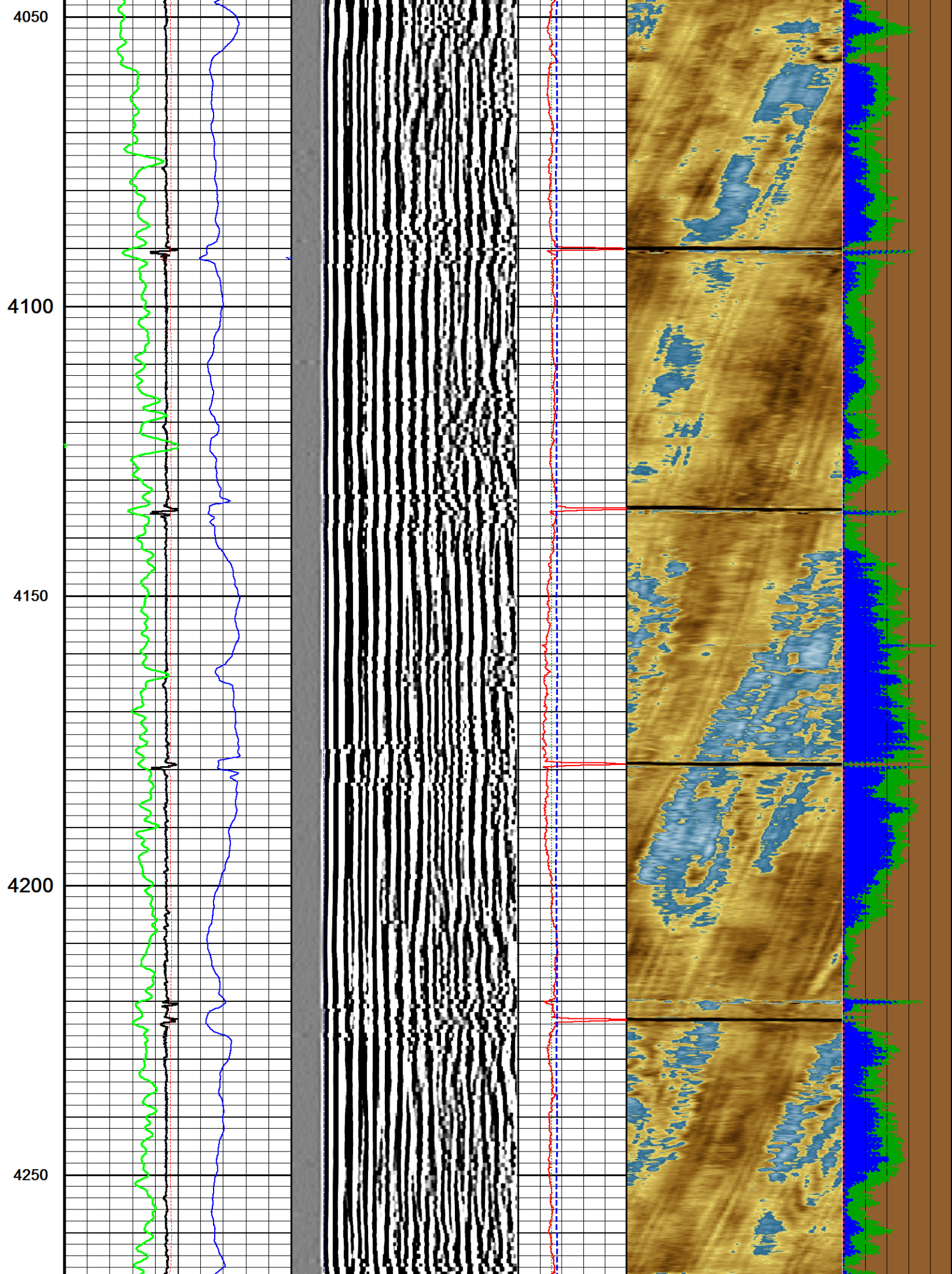


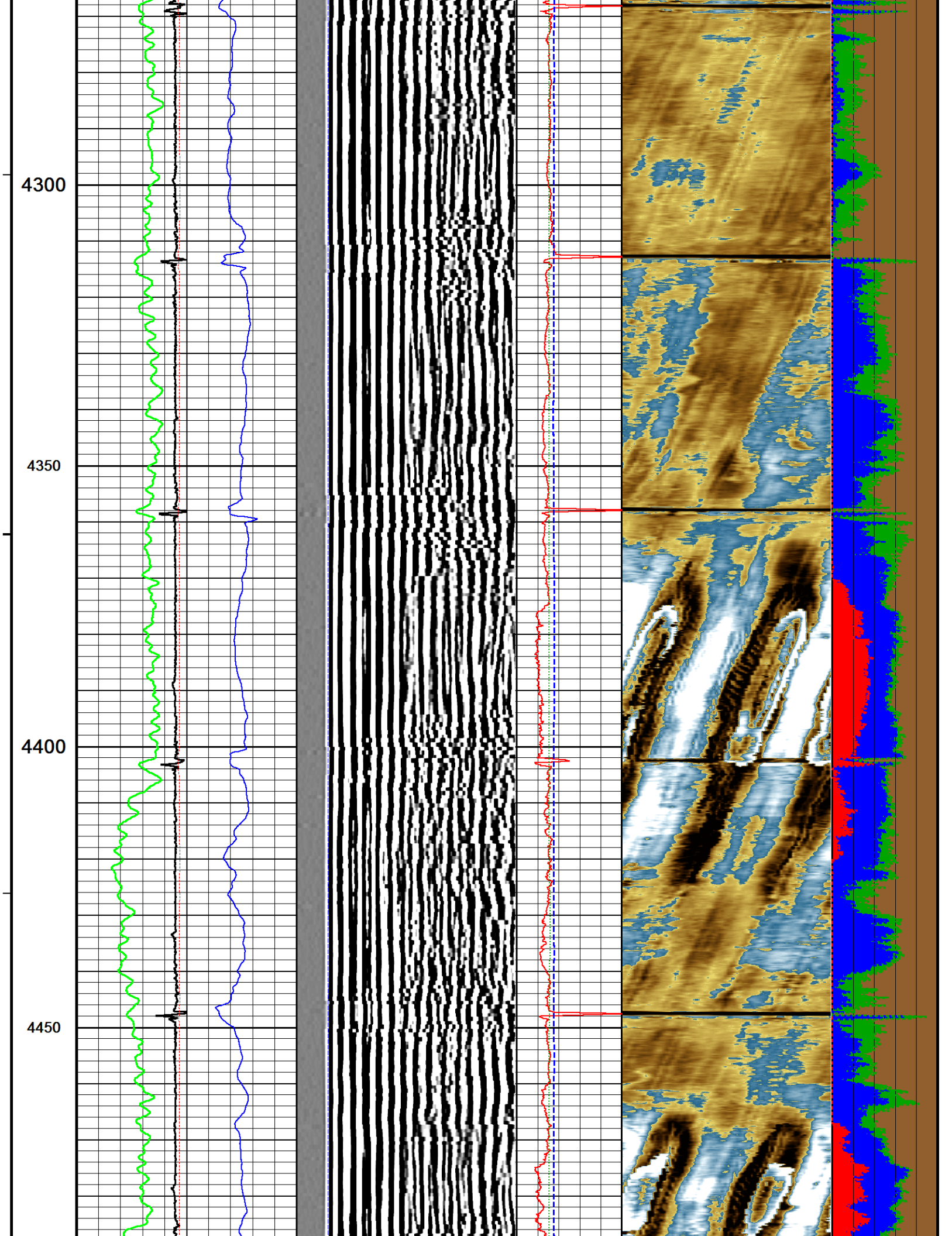


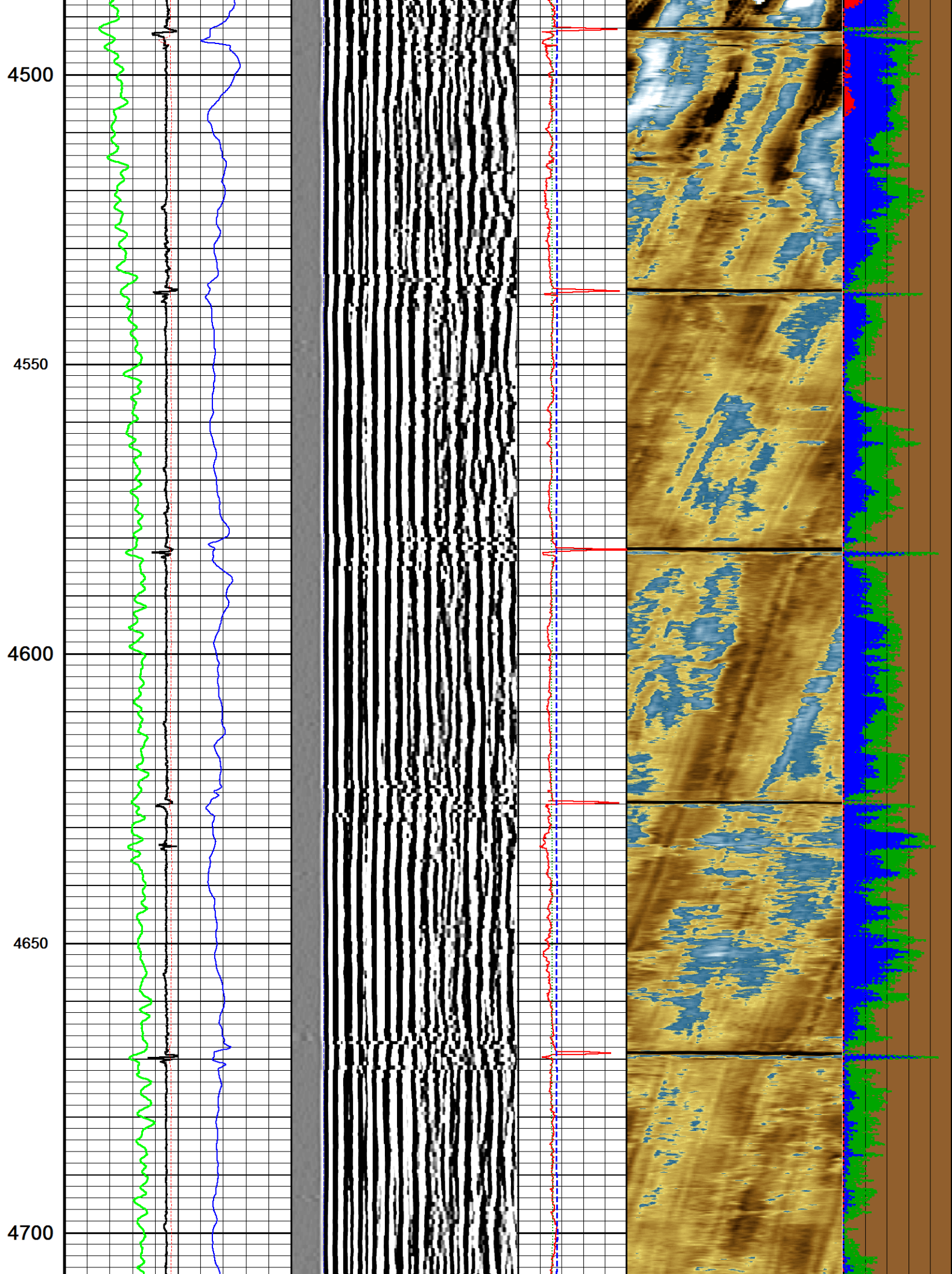


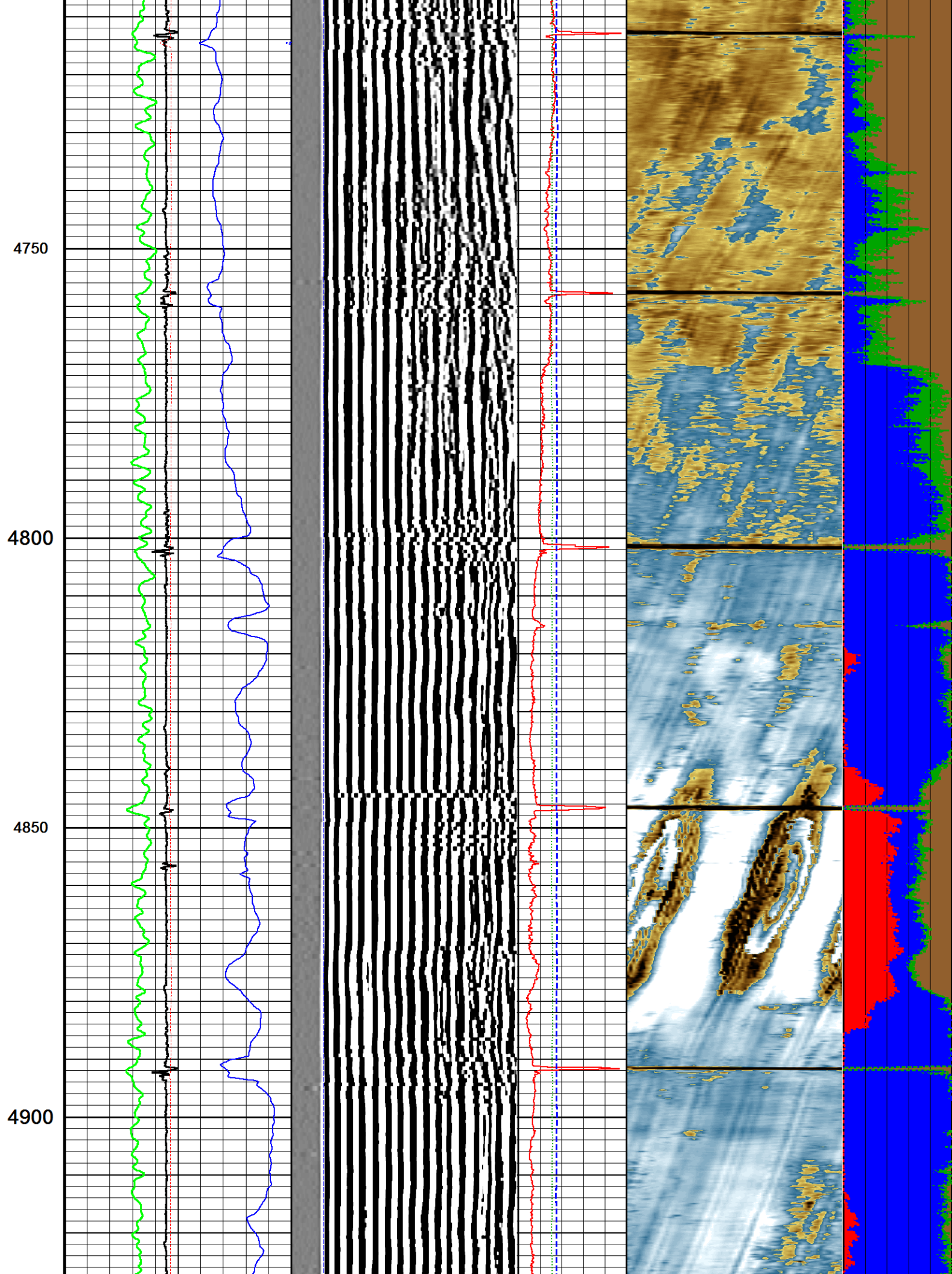


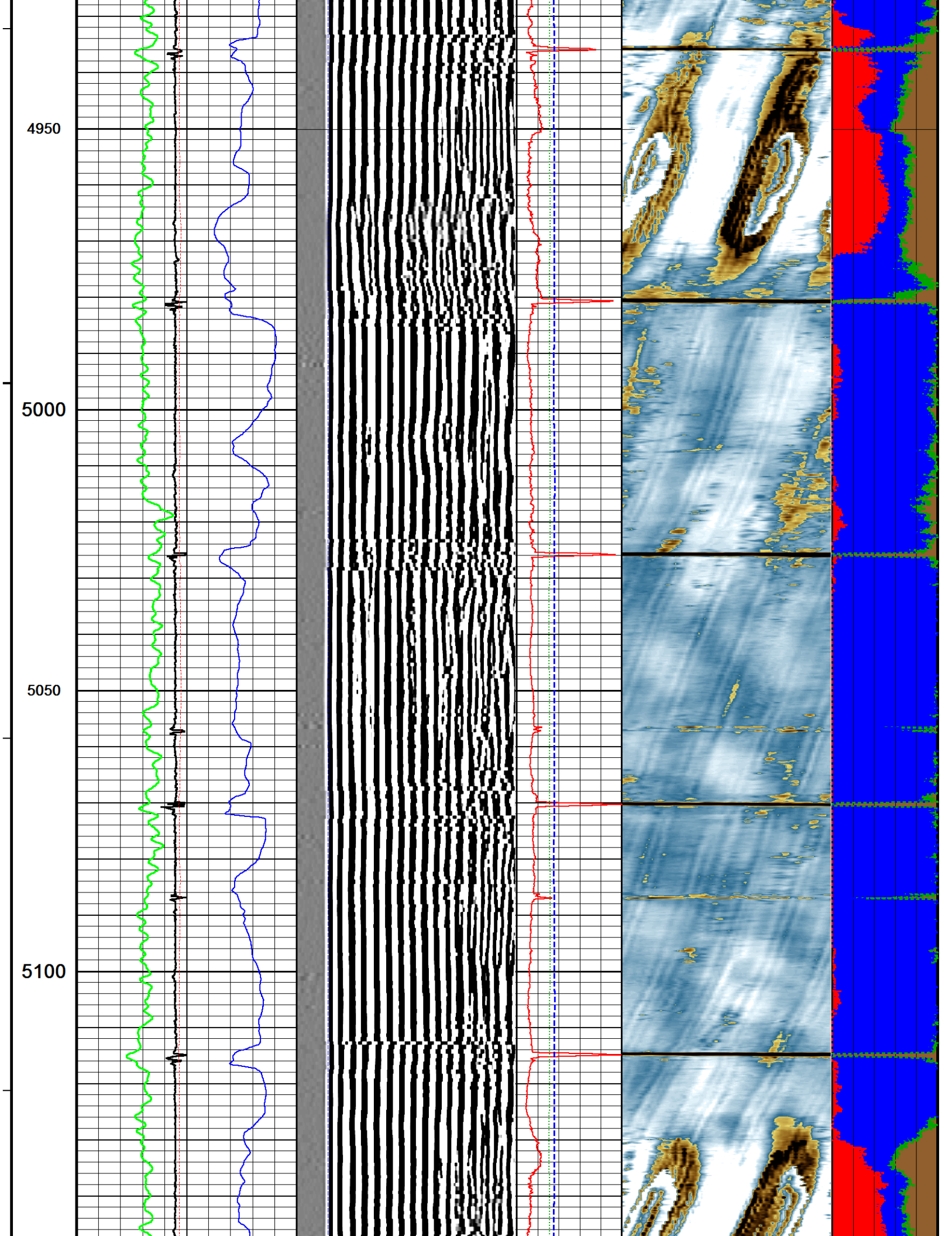


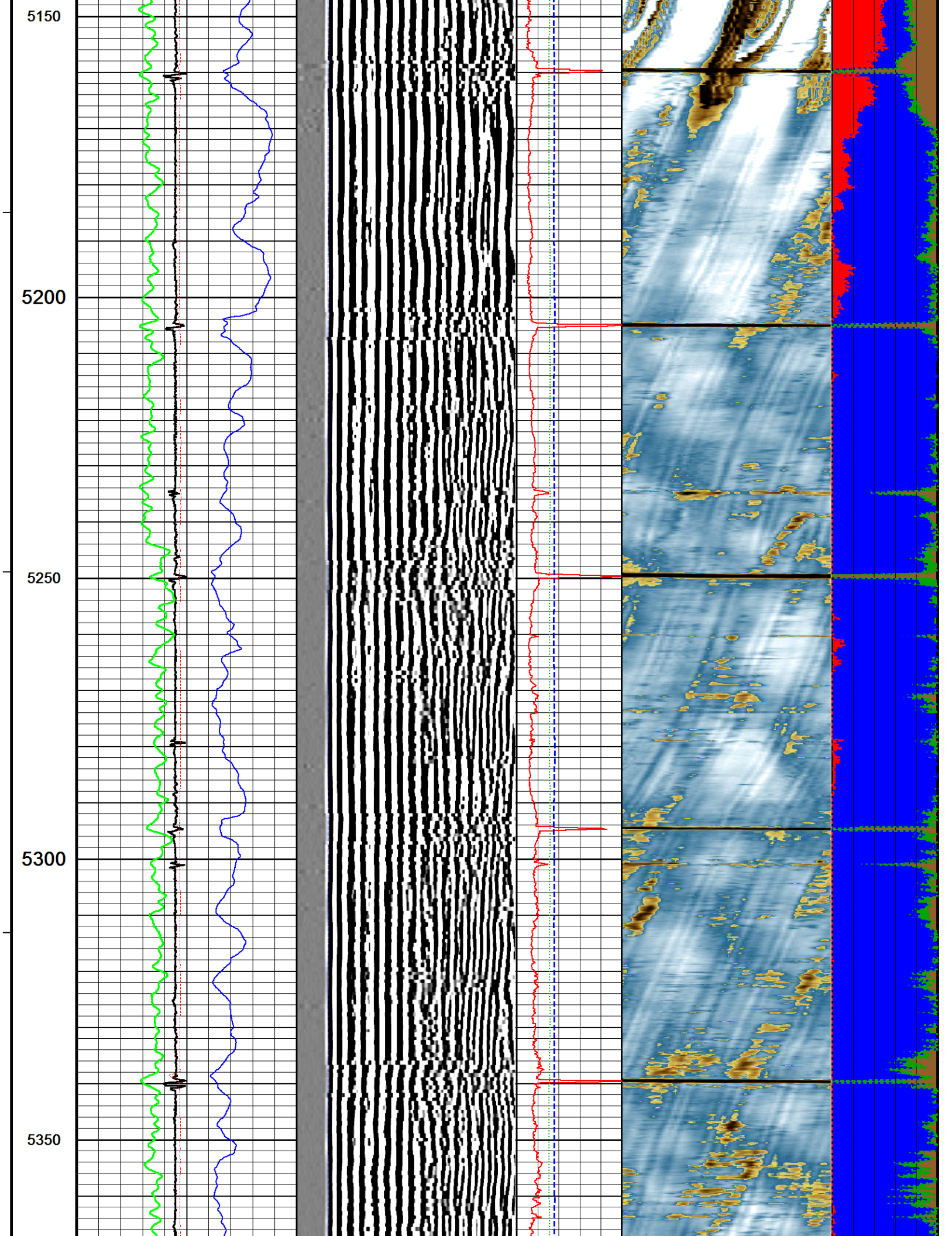


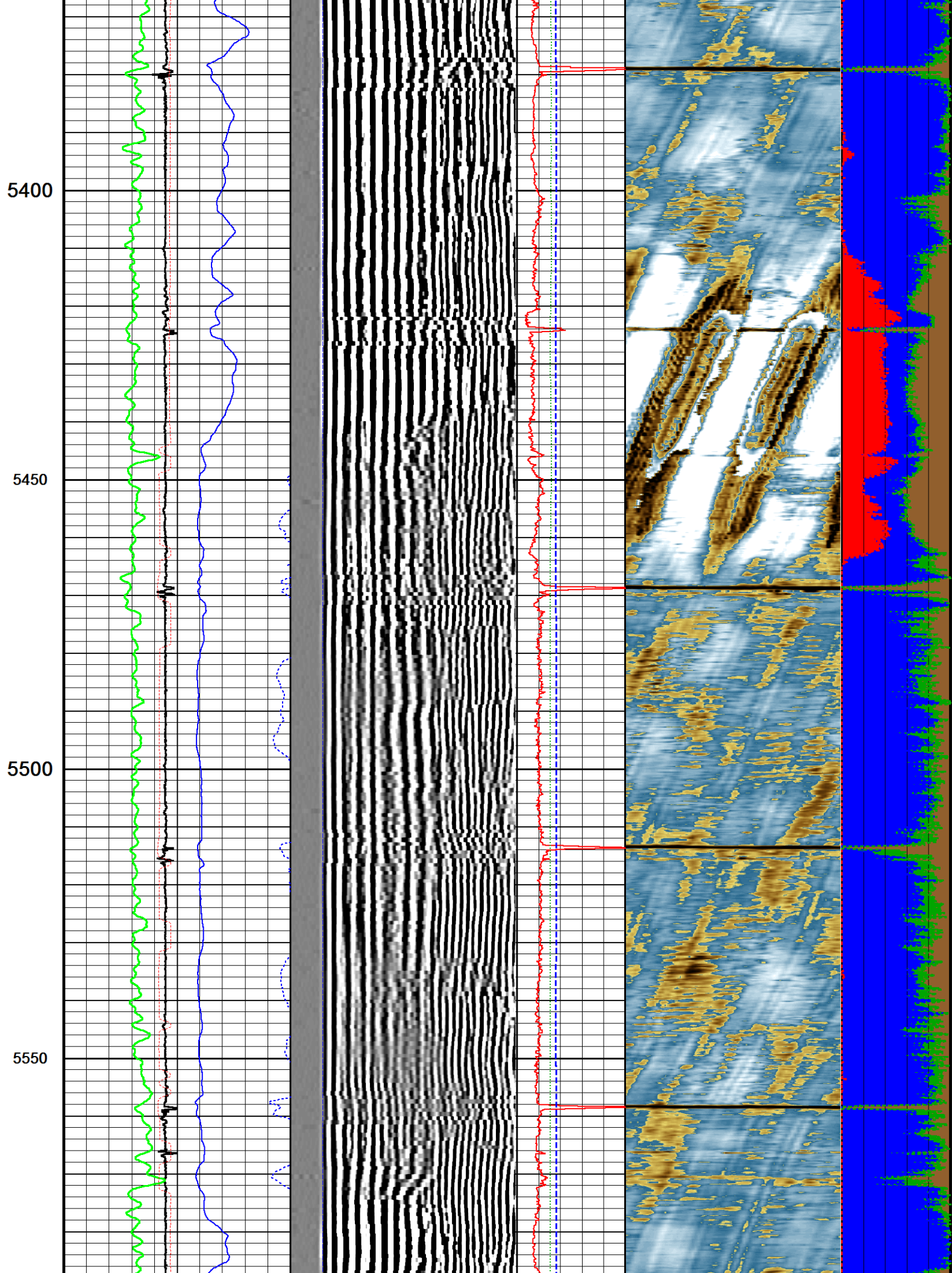


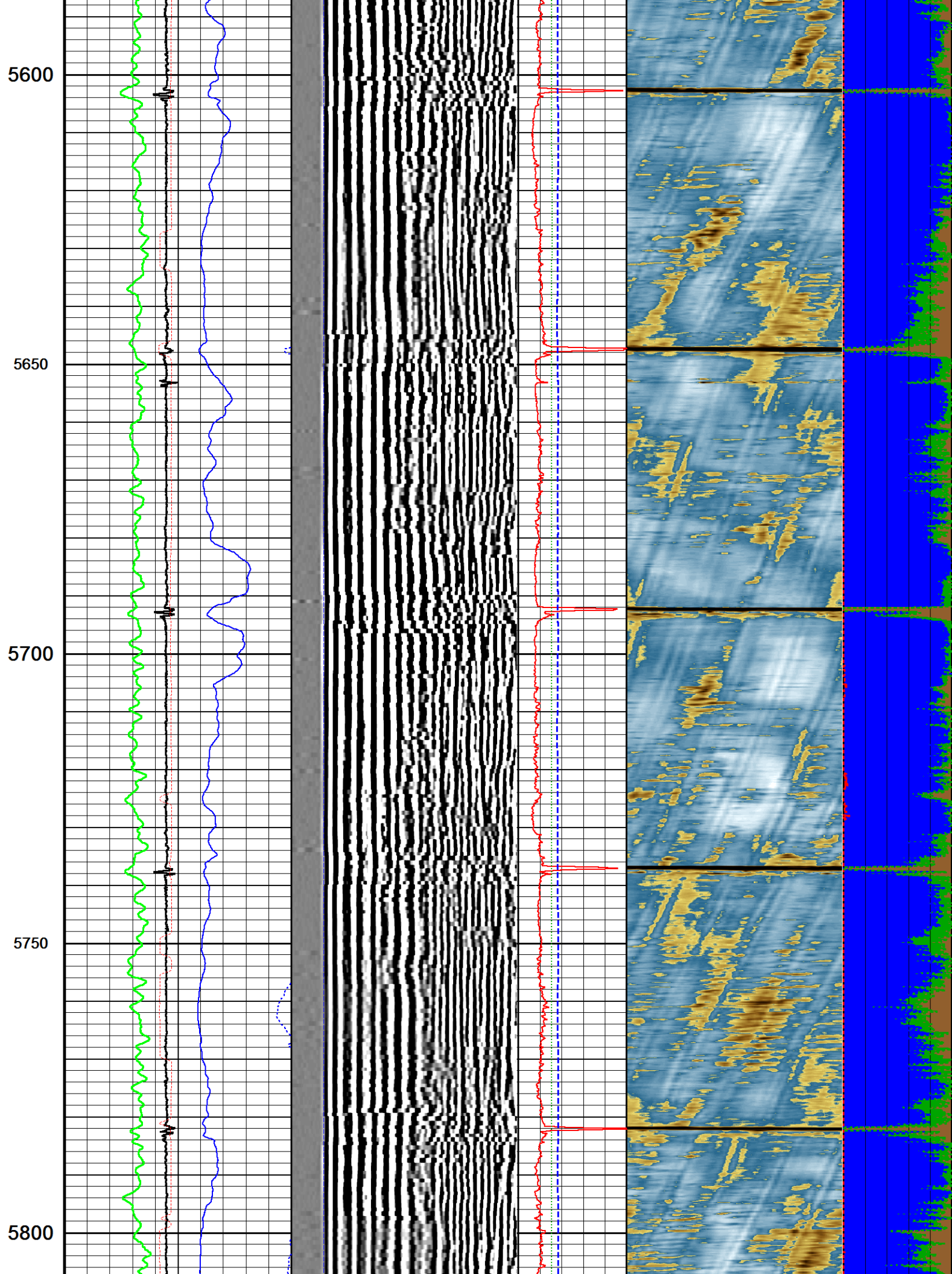


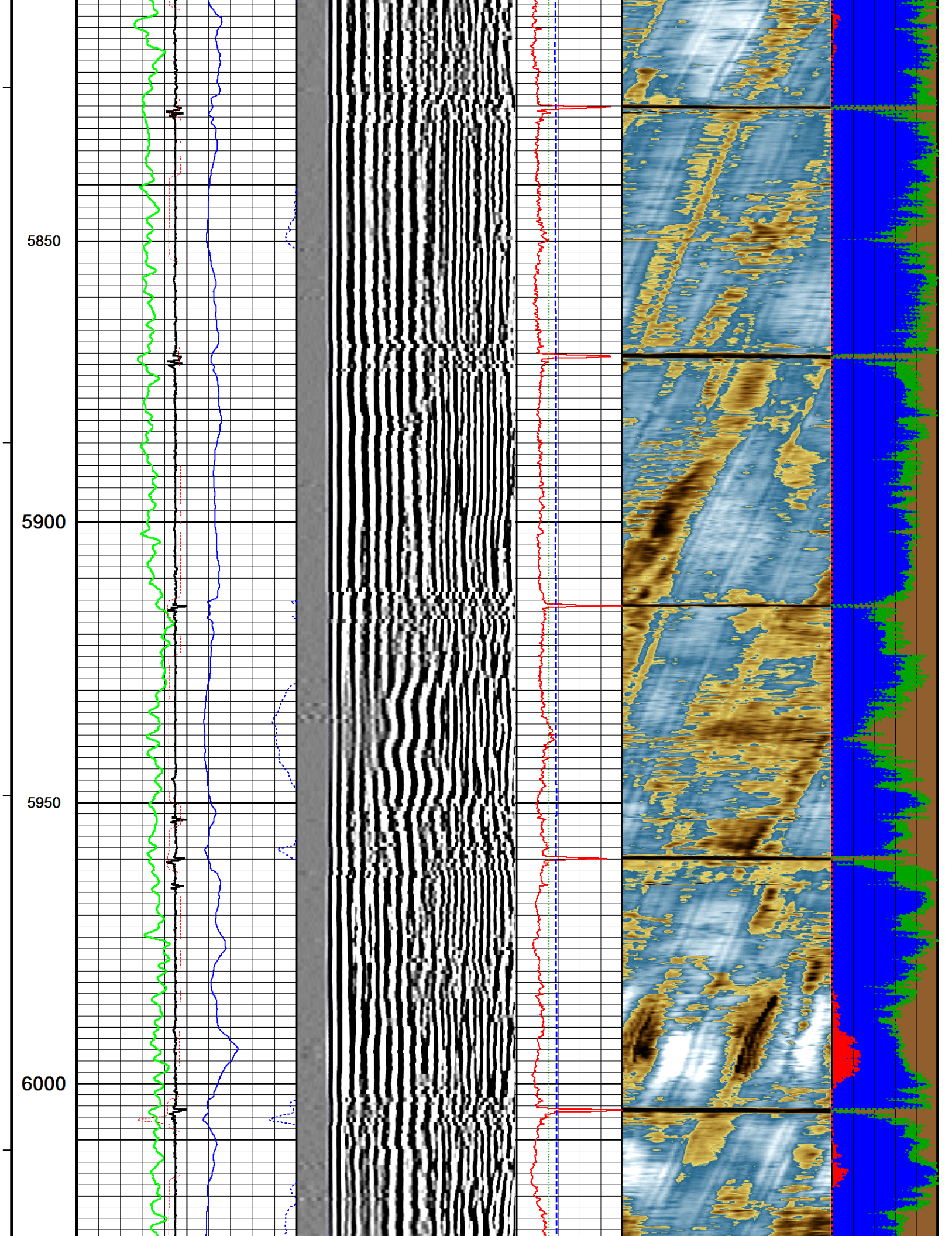


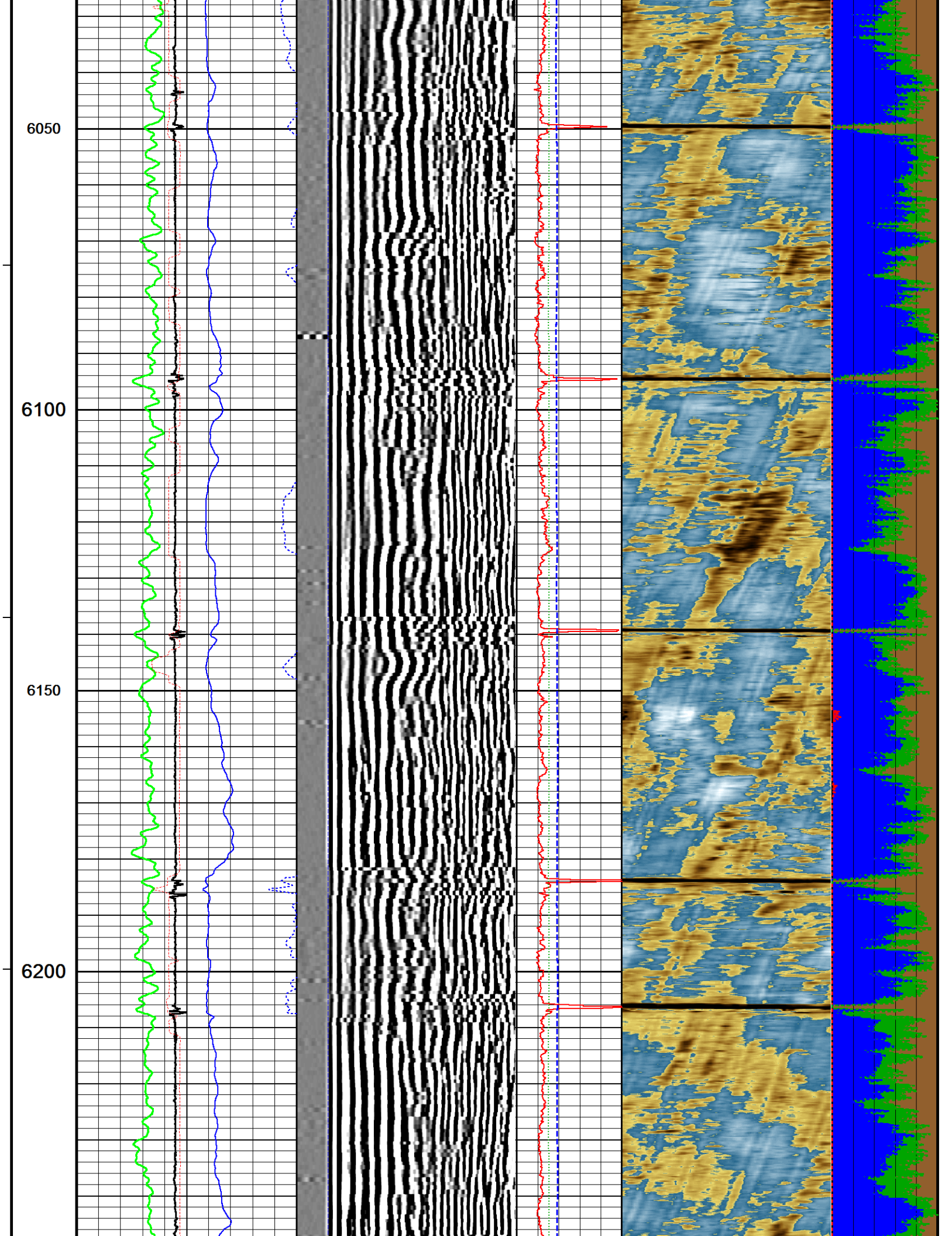


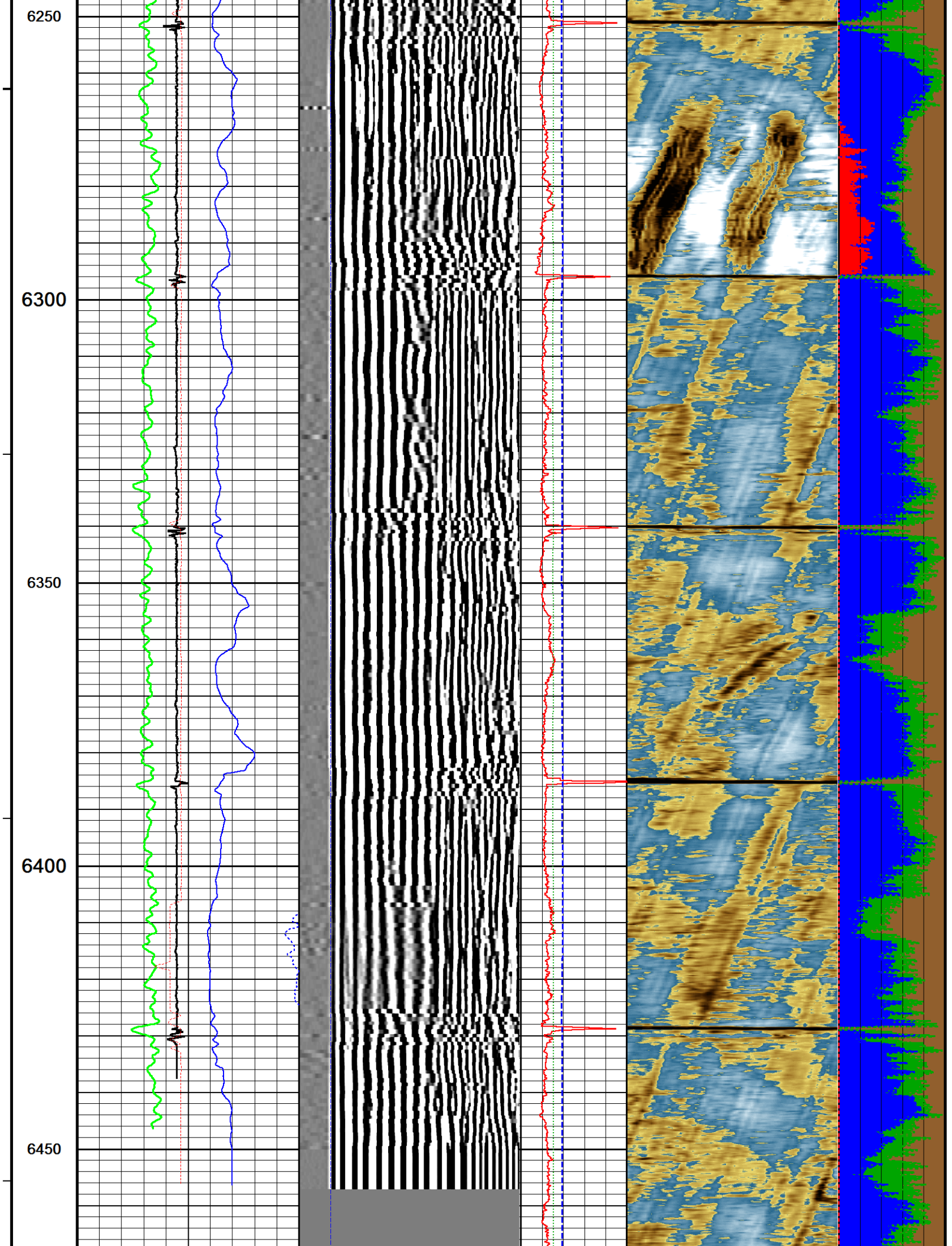














Replay  
Scale  
1:240

MUDT  
US/F  
220 120

PCON  
PERC  
0 100

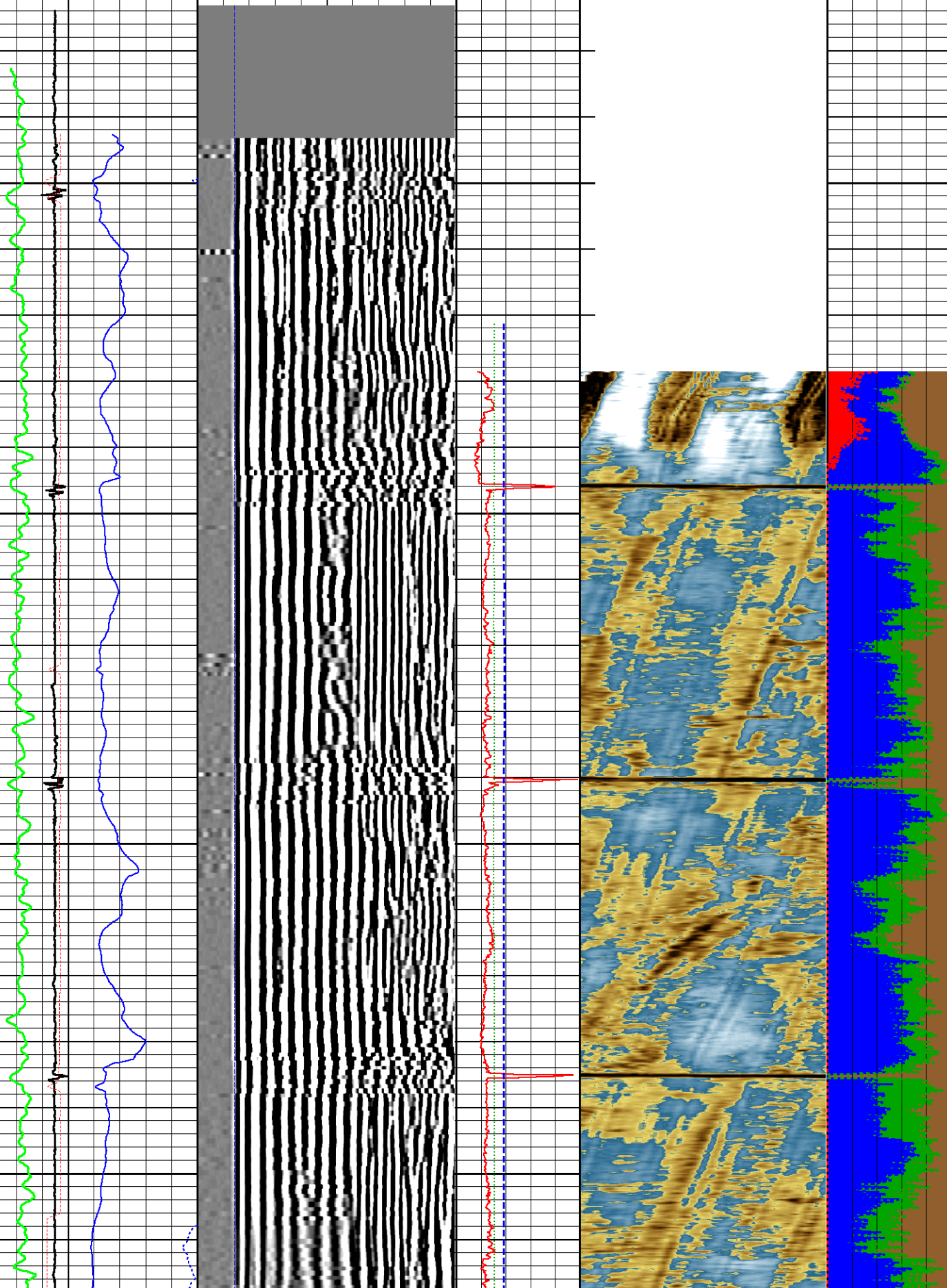
6222

6250

6300

6350

6400





# Gamma Ray Field Survey Calibration

Tool Type: UGR-JD  
Calibrator No:

Serial No: 118

Background	Calibrator	Standard	Units
0.0	389.0	140.0	CPS

Delta Counts Per Sec: 389.0      CPS/API = 2.779

## CBT Field Calibration CBT-AA 116

Field calibration on 00-JAN-1988 00:00

### Cement Bond Tool Amplitude Field Calibration

Tool Type      CBT-AA      Serial No      116

Free Pipe Depth

Sensor	Description	Standard(mv)	Measured(mv)
AMP 3 FT	100 % Bond	9.20	0.00
	Free Pipe	72.00	736.50
AMP 5 FT	100 % Bond	2.00	0.00
	Free Pipe	48.00	549.60

## CBT Constants CBT-AA 116

Last Edited on 07-SEP-2017 17:43

Min Ampl 100% Bond	9.20 MV
Max Ampl 0% Bond	72.00 MV
Cement Cmpr Strength	580 PSI
Casing Size	5.50 IN
Casing Weight	20.0 LB/F
Casing Velocity	57.00 US/F
DT Fluid	200.0 US/F
Maximum Attenuation	12.00 DB/F
3' TT Correction	-999.3 US
Cement Weight	0.00 LB/G

## DOWNHOLE EQUIPMENT

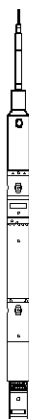
C:\Users\le197426\Desktop\EXTRACTION\HFE 5\HFE 5 MAIN PASS.dta

Mono-Cablehead  
MCH-AA 0 LG: 1.03 ft WT: 2.2 lb OD: 1.457 in

Crossover 1-pin to 55-pin for WCC-D  
XOV-WC 128 LG: 1.05 ft WT: 15.4 lb OD: 3.386 in

Swivel Head 55 pin  
SWH-CC 173 LG: 2.72 ft WT: 77.2 lb OD: 3.346 in

Casing Collar Locator, 55 pin



CCL-WA 197 LG: 3.01 ft WT: 19.8 lb OD: 2.756 in

Communication Cartridge 55pin 3-3/8in  
WCC-DA 141 LG: 4.60 ft WT: 63.9 lb OD: 3.386 in

Gamma Ray  
UGR-JD 118 LG: 4.60 ft WT: 81.6 lb OD: 3.386 in

55 pin Roller Centralizer  
CEN-XA 185 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

Cement Bond Tool  
CBT-AA 116 LG: 10.75 ft WT: 163.1 lb OD: 3.386 in

55 pin Roller Centralizer  
CEN-XA 185 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

55.14 ft CCL - Collar Locator

50.67 ft INCL - INCLINATION

47.05 ft GR - Gamma Ray

36.70 ft AM3F - Amplitude 3FT

36.70 ft TM3 - Travel Time 3FT

35.70 ft TM5 - Travel Time 5FT

35.70 ft XY5 - XY Signature 5FT

CEN-XA 186 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

Flexible Joint, URS, 55 Pin

FTP-FA 131 LG: 4.35 ft WT: 90.4 lb OD: 3.386 in

55 pin Roller Centralizer

CEN-XA 222 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

URS Electronics Cartridge

UCC-AA 191 LG: 4.51 ft WT: 79.4 lb OD: 3.386 in

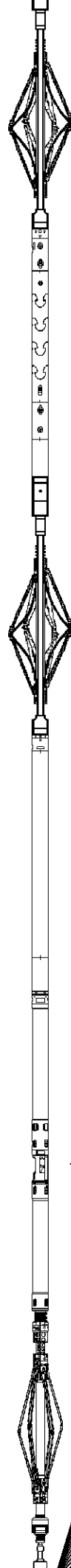
URS Sonde Section

USS-AB 173 LG: 9.65 ft WT: 167.6 lb OD: 3.386 in

Ultrasonic Radial Scanner Head A

USH-AB 136 LG: 1.03 ft WT: 13.2 lb OD: 3.386 in

Total Length: 60.78 ft Weight: 1031.8 lb



7.65 ft

IMRF - Mud Impedance

7.65 ft

MUDT - Mud Slowness

0.37 ft

ARMX - Max Area

0.37 ft

ARAV - Avg Area

0.37 ft

IMMX - Max Impedance

0.37 ft

IMAV - Avg Impedance

0.37 ft

IMMN - Min Impedance

0.37 ft

ECCE - Eccentering

0.37 ft

OVLI - ID Ovality

0.37 ft

DIMX - Max Diameter

0.37 ft

DIAM - Avg Diameter

0.37 ft

DIMN - Min Diameter

0.37 ft

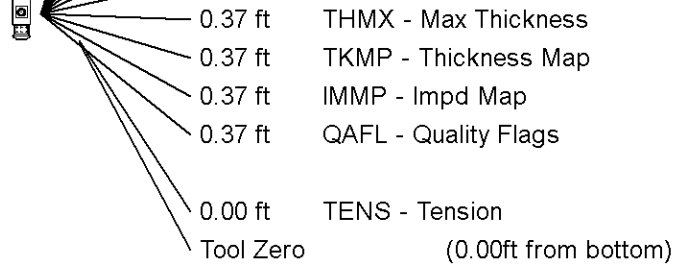
THAV - Avg Thickness

0.37 ft

THMN - Min Thickness

0.37 ft

AMMP - Ampl Map



All measurements relative to tool zero.

COMPANY	EXTRACTION OIL & GAS
WELL	HFE #5
FIELD	WATTENBERG
PROVINCE/COUNTY	WELD
COUNTRY/STATE	UNITED STATES / COLORADO

Elevation Kelly Bushing	4946	feet	Bottom Log Interval	6500.00	feet
Elevation Drill Floor		feet	Depth Driller		feet
Elevation Ground Level	4918	feet	Depth Logger	6500.00	feet



SECUREVIEW  
ULTRAVIEW / BONDVIEW  
CEMENT ANALYSIS LOG

**Weatherford®**