 <b>Weatherford®</b>				<b>SECUREVIEW</b> <b>ULTRAVIEW / BONDVIEW</b> <b>CEMENT ANALYSIS</b>				
COMPANY		EXTRACTION OIL AND GAS						
WELL		MICKEY #2						
FIELD		WATTENBERG						
PROVINCE/COUNTY		WELD						
COUNTRY/STATE		UNITED STATES / COLORADO						
LOCATION		SW NE 5-6N-67W						
SEC 5	TWP 6N	RGE 67W	Other Services					
Latitude		Permanent Datum GL, Elevation feet Log Measured From KB Drilling Measured From KB				Elevations:		feet
Longitude						KB		
API Number						DF		
05-123-43850						GL		
Date	22-FEB-2017	PERFORATION RECORD						
Run Number	ONE	Shot	Number	Depth From	Depth To			
Service Order	7145-174900022	Density	of Shots	feet	feet			
Type Log	URS / CBT							
Depth Driller								
Depth Logger	6650.00	feet						
Top Log Interval	0.00	feet						
Bottom Log Interval	6650.00	feet						
Hole Fluid Type	WATER BASED							
Hole Fluid Level	75.00	feet						
Restriction ID	4.653	inches	Gun Type					
Max Recorded Temp	187.00	deg F	Gun Size					
Well Head Pressure	0.00	psi	CASING / TUBING RECORD					
Well Head Equipment	NONE	Size	Weight	Depth From	Depth To			
Time Well Ready	ON ARRIVAL	inches	pounds/ft	feet	feet			
Time Logger Bottom	11:00	9.625	36.00	0.00	1565.00			
Unit	14329	5.500	20.00	0.00	17360.00			
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
SURFACE			9.625	0.00	1565.00	36.00
PRODUCTION			5.500	0.00	17360.00	20.00

REMARKS
SECUREVIEW ULTRAVIEW LOG CORRELATED TO RIB KB AT 25 FT ABOVE GROUND LEVEL
LOGGING INTERVAL WAS STARTED AT ROUGHLY 50 FT ABOVE THE KICK OFF POINT
TOOL EXPERIENCED DECENTRALIZATION AT SEVERAL POINTS THROUGHOUT THE LOG CAUSING THE RADIUS MEASUREMENTS AND IMPEDANCE VALUES TO BE GREATLY AFFECTED. THESE VALUES SHOULD BE CONSIDERED INVALID OVER THESE AREAS

<p>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.</p>
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## MAIN PASS 1:240



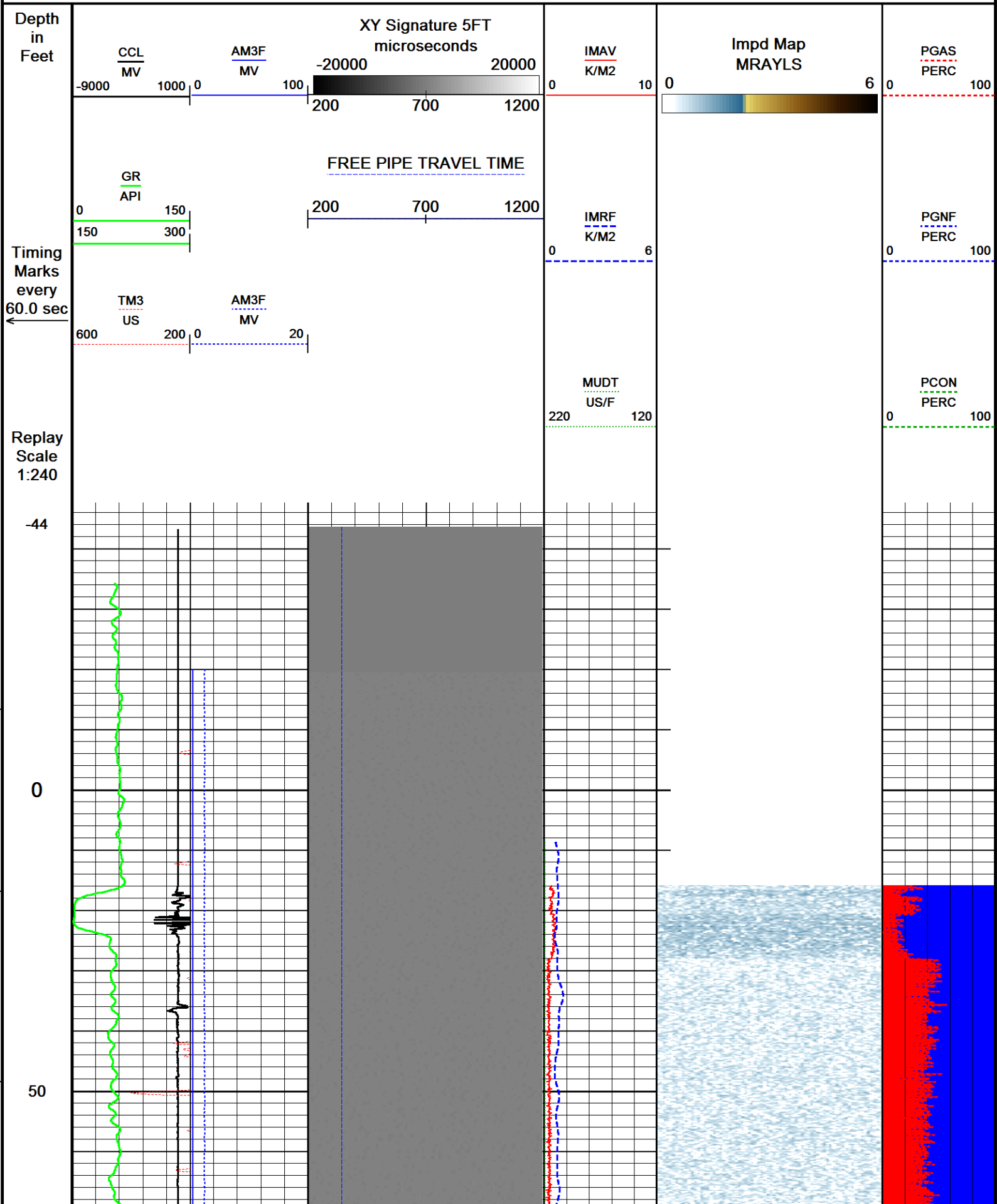
Depth Based Data - Maximum Sampling Increment 2.5cm

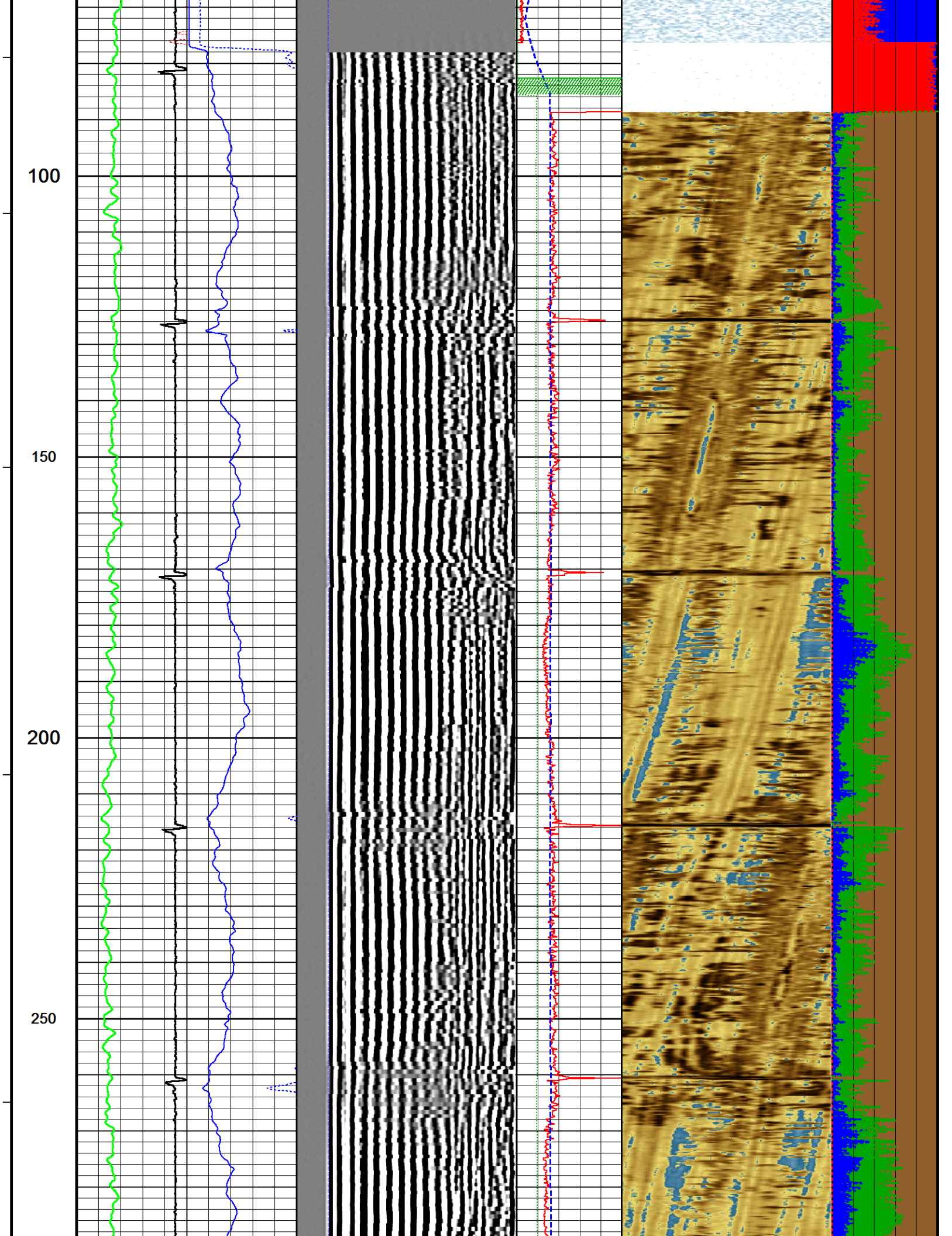
Plotted on 24-FEB-2017 07:28

Filename: C:\Users\le197426\Desktop\EXTRACTION\MICKEY #2\MICKEY # MAIN PASS\_001.dta

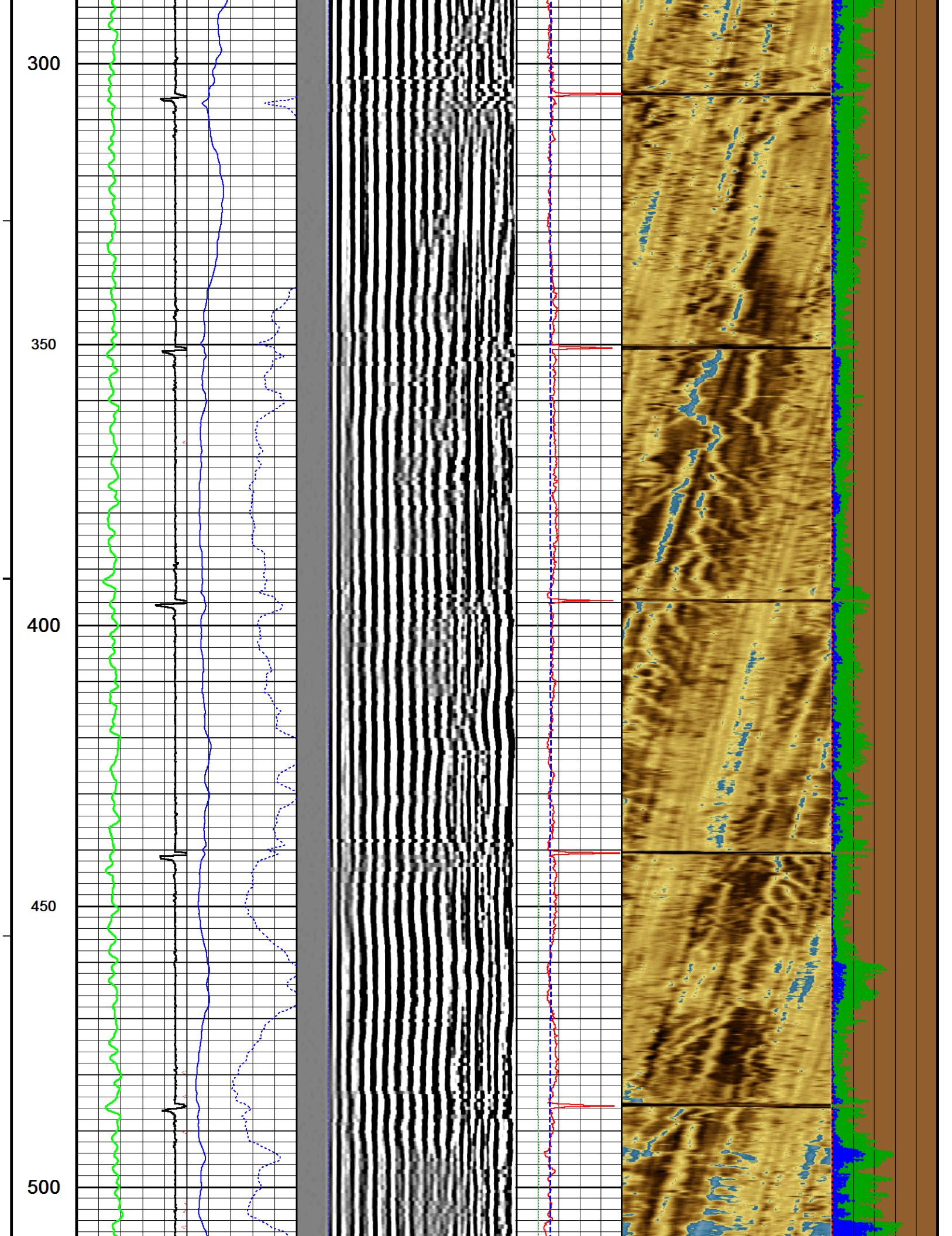
Recorded on 22-FEB-2017 14:05

System Versions: Logged with 16.05.3841 Processed with 16.05.3841 Plotted with 16.05.3841

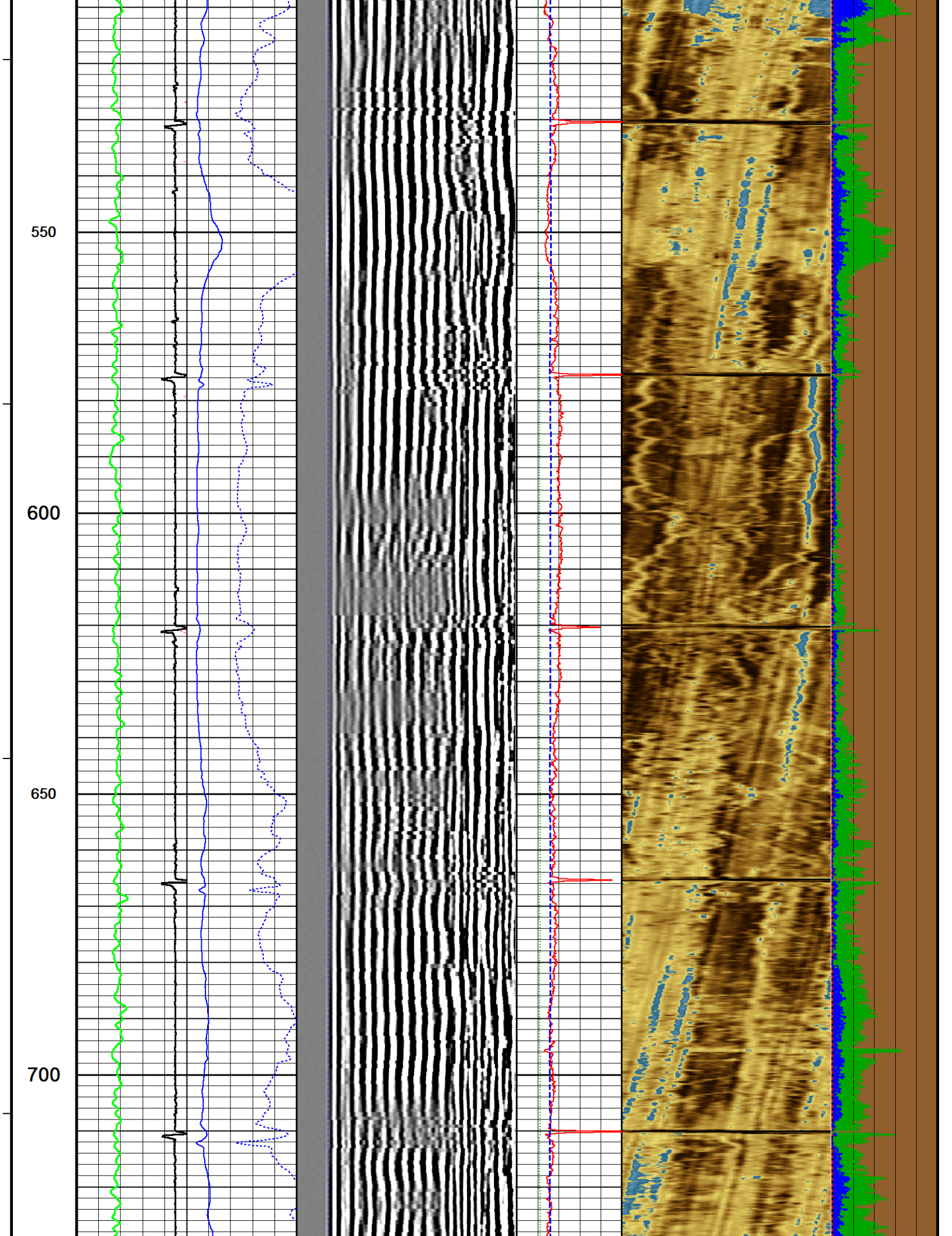


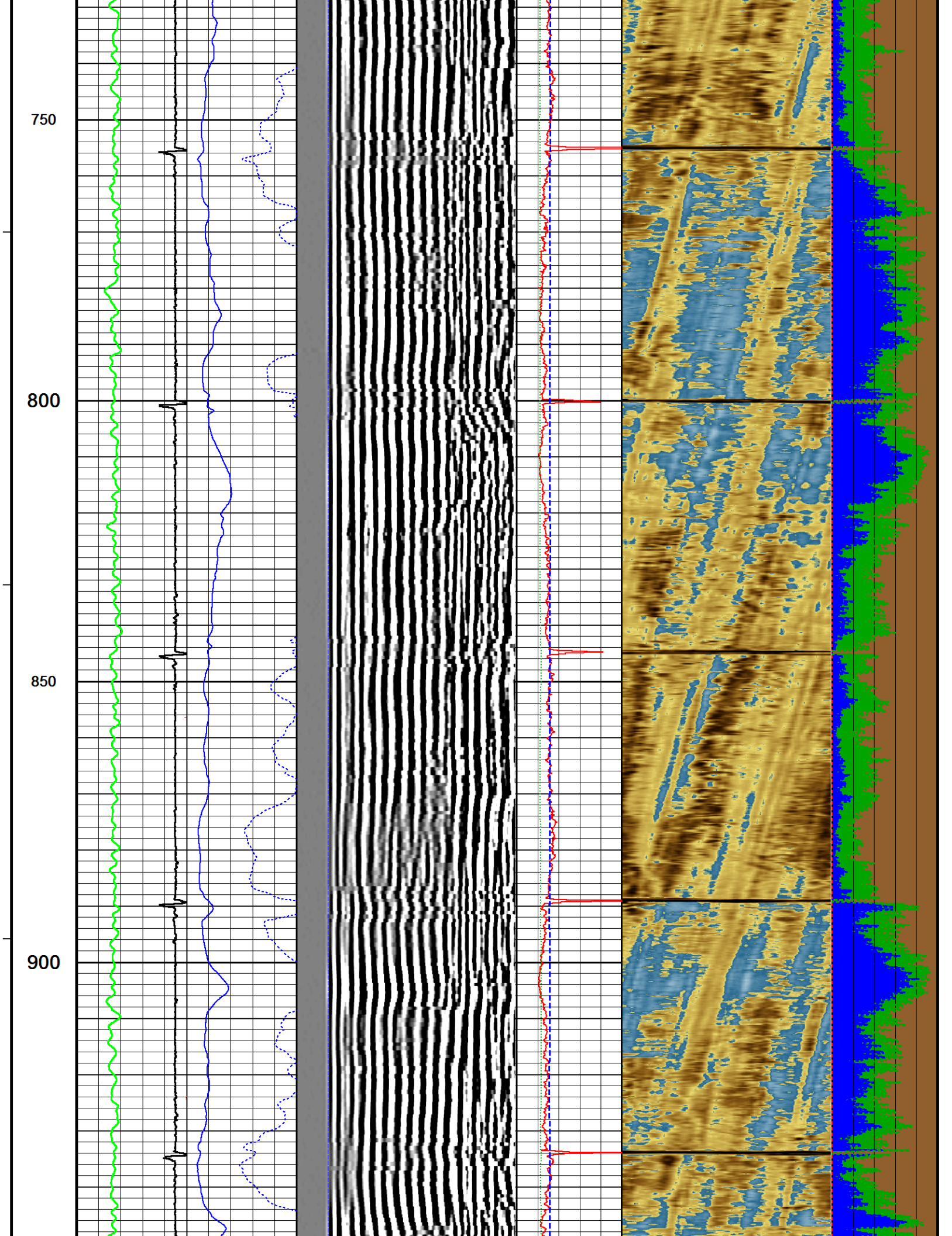




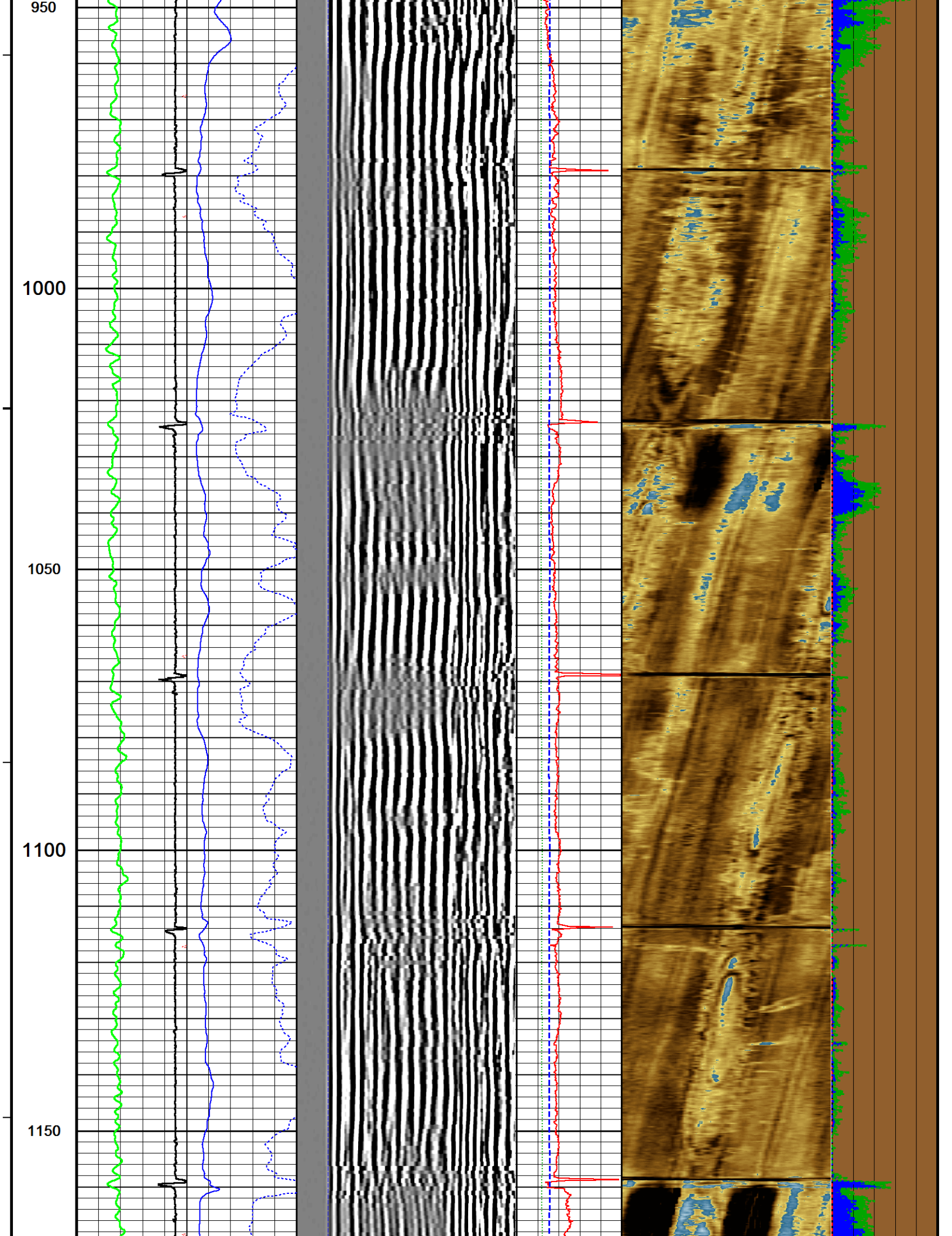




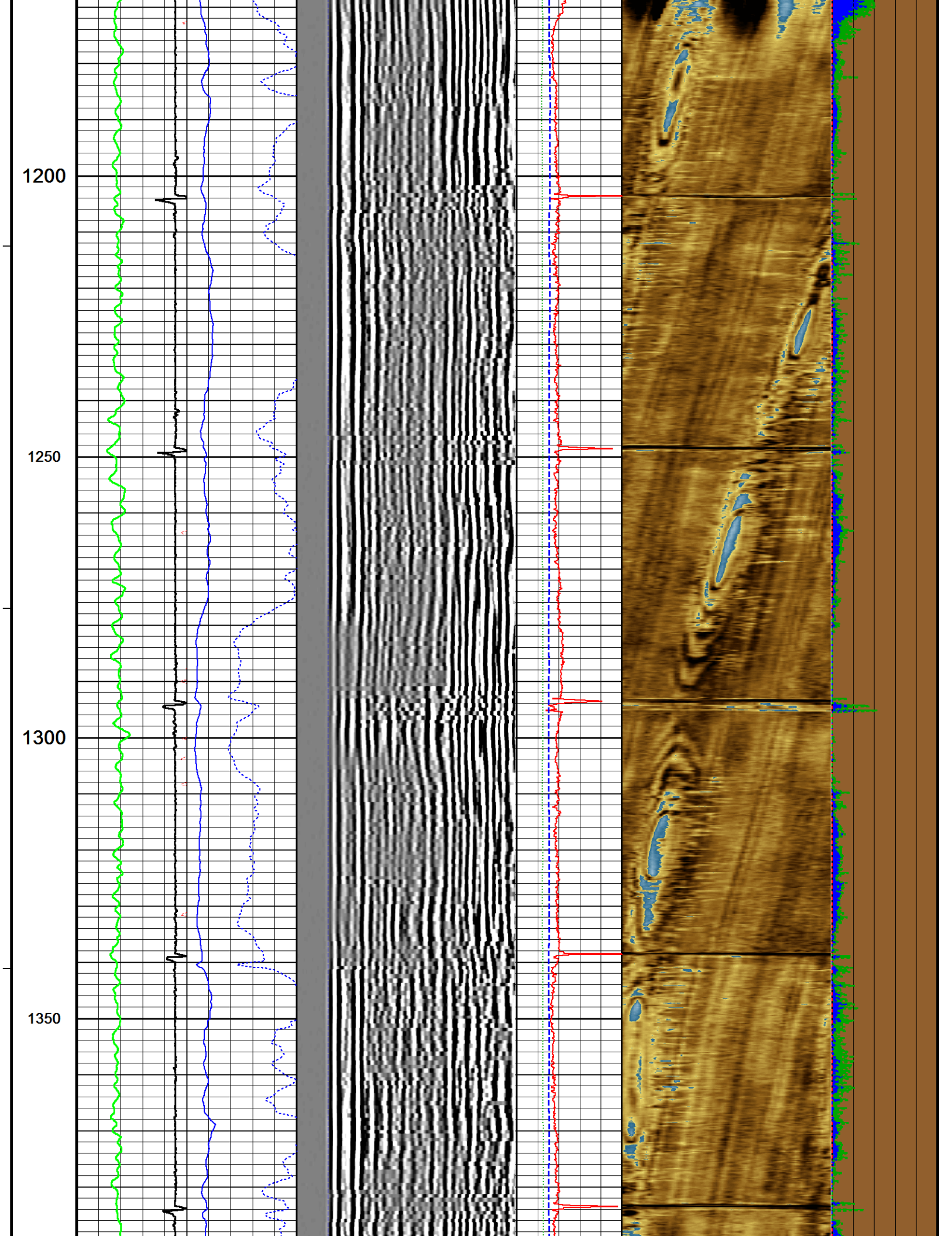


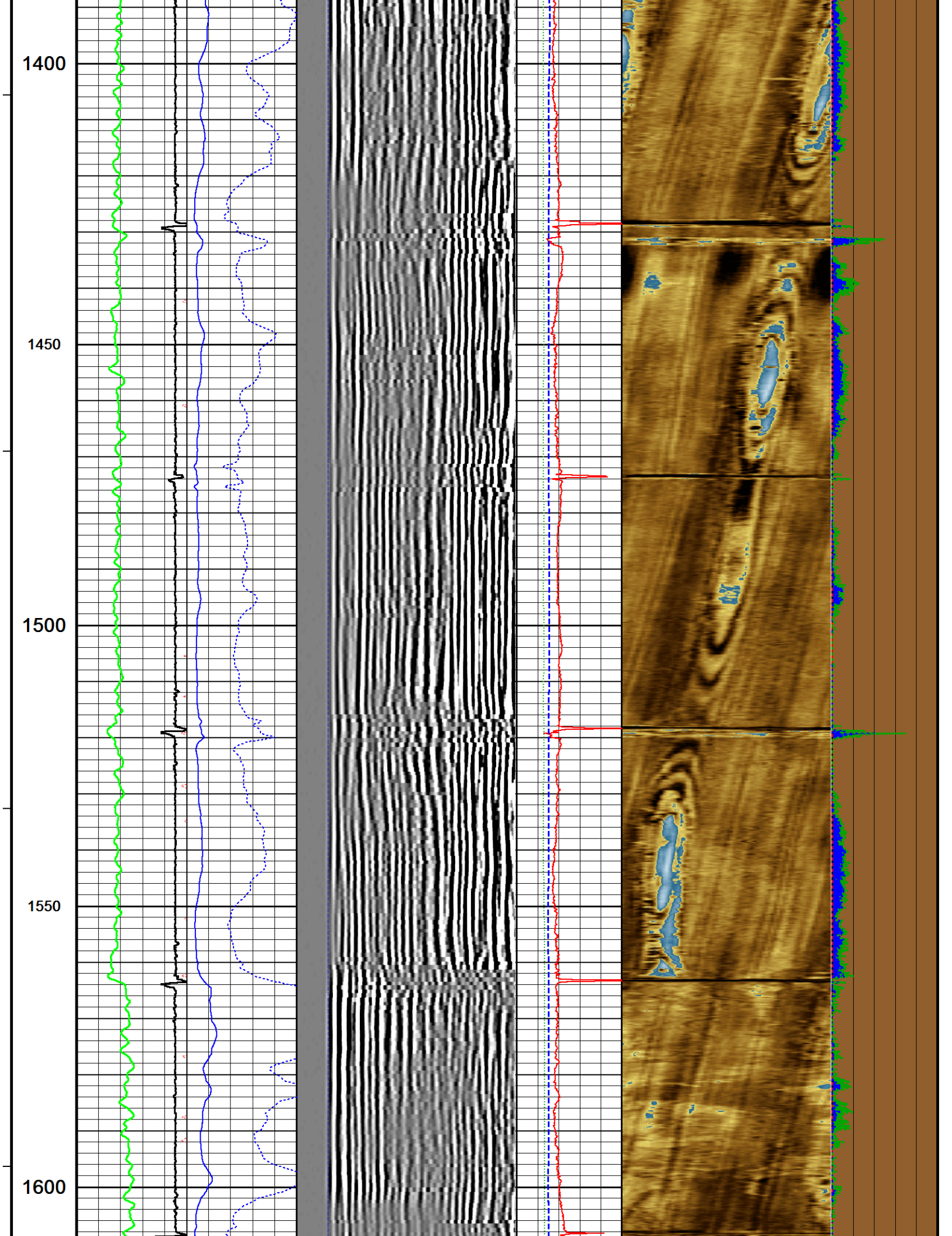




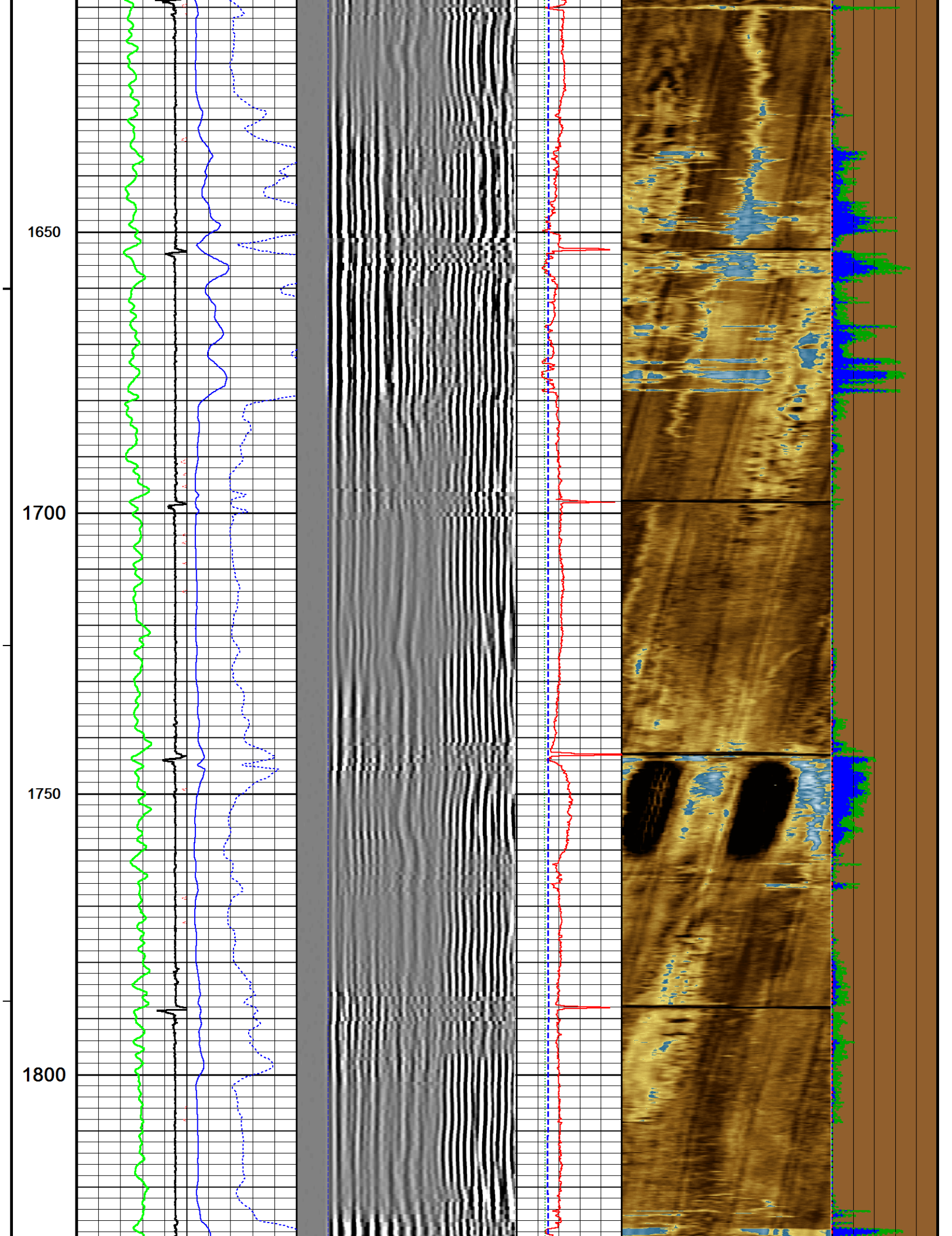




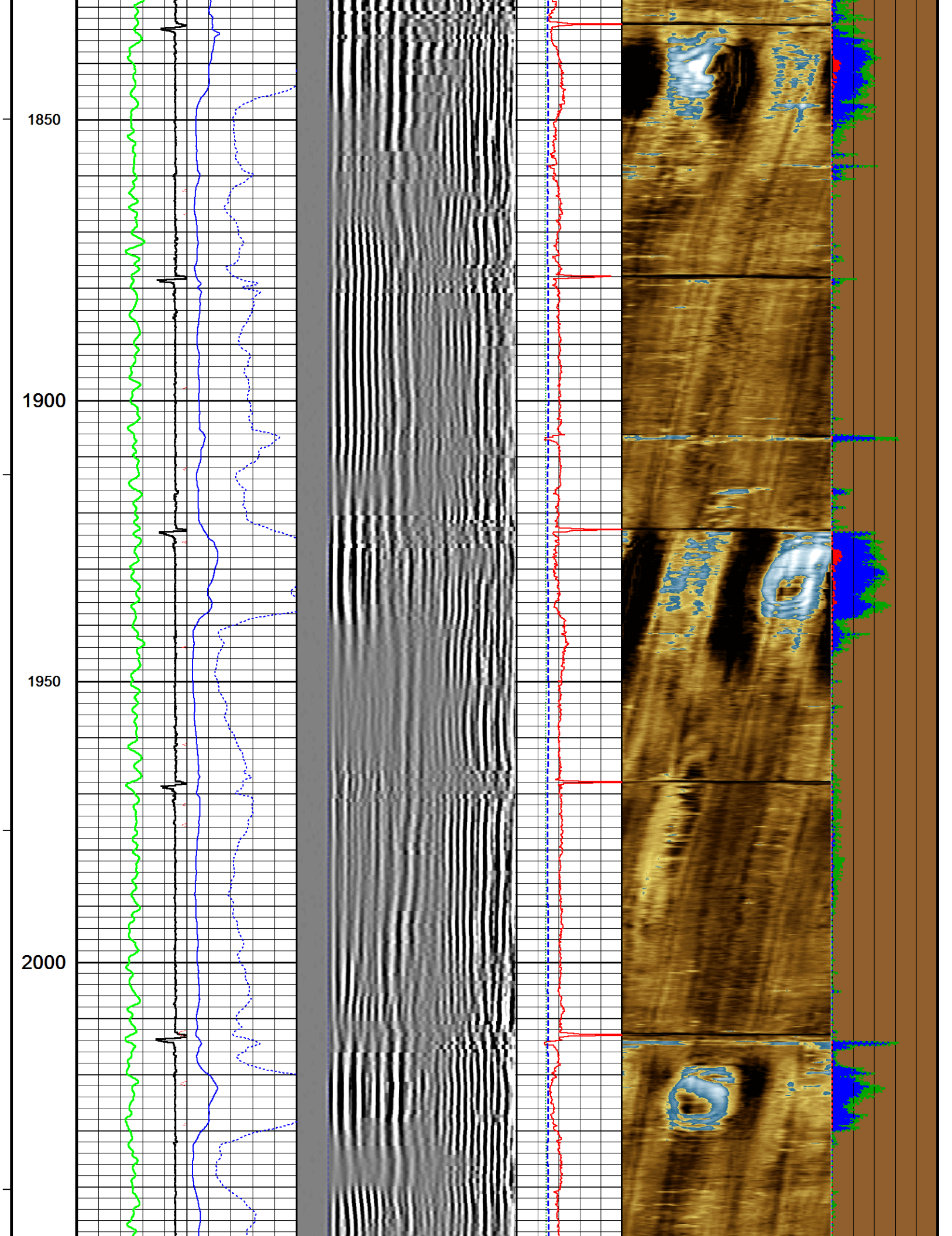


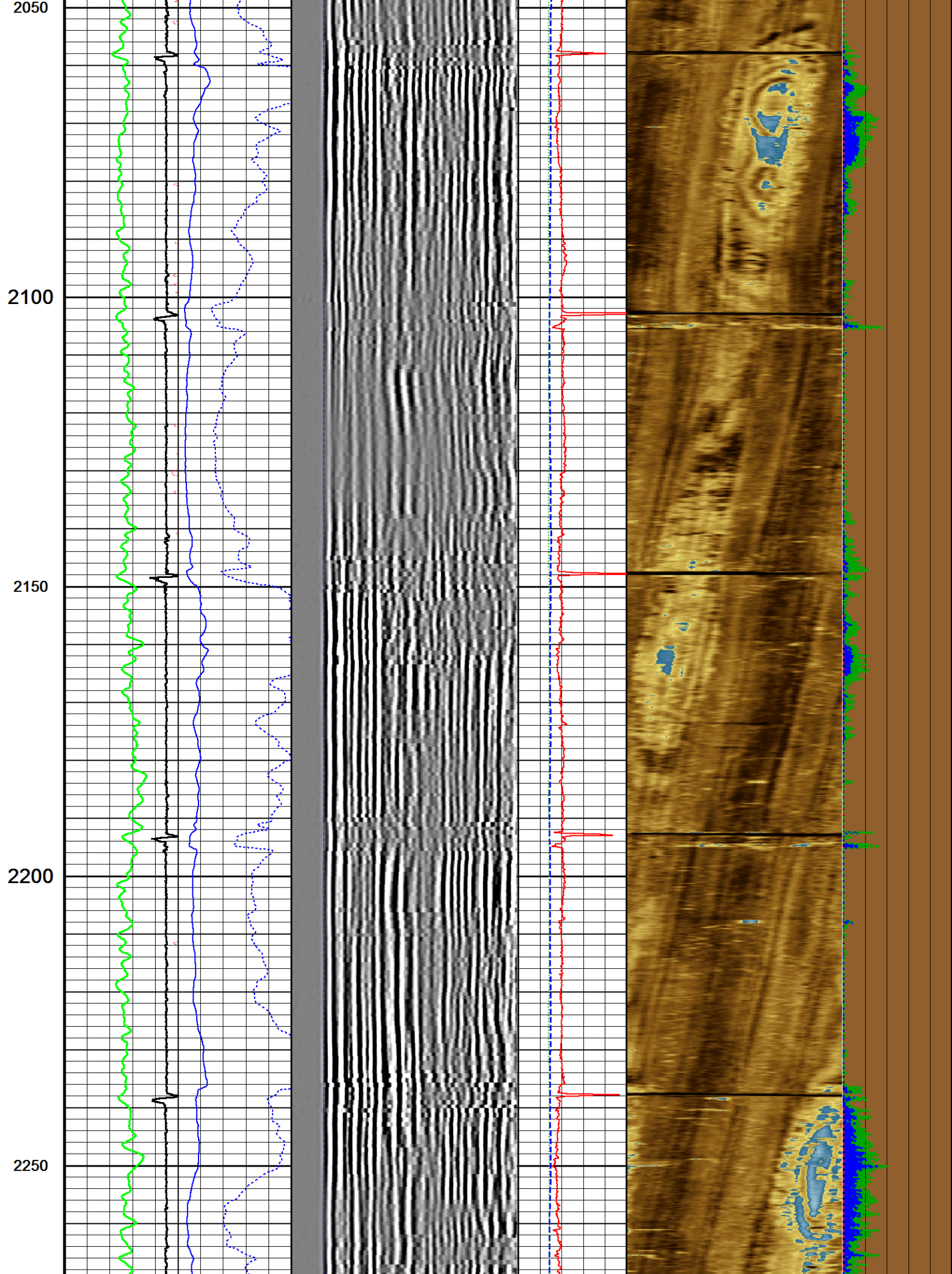




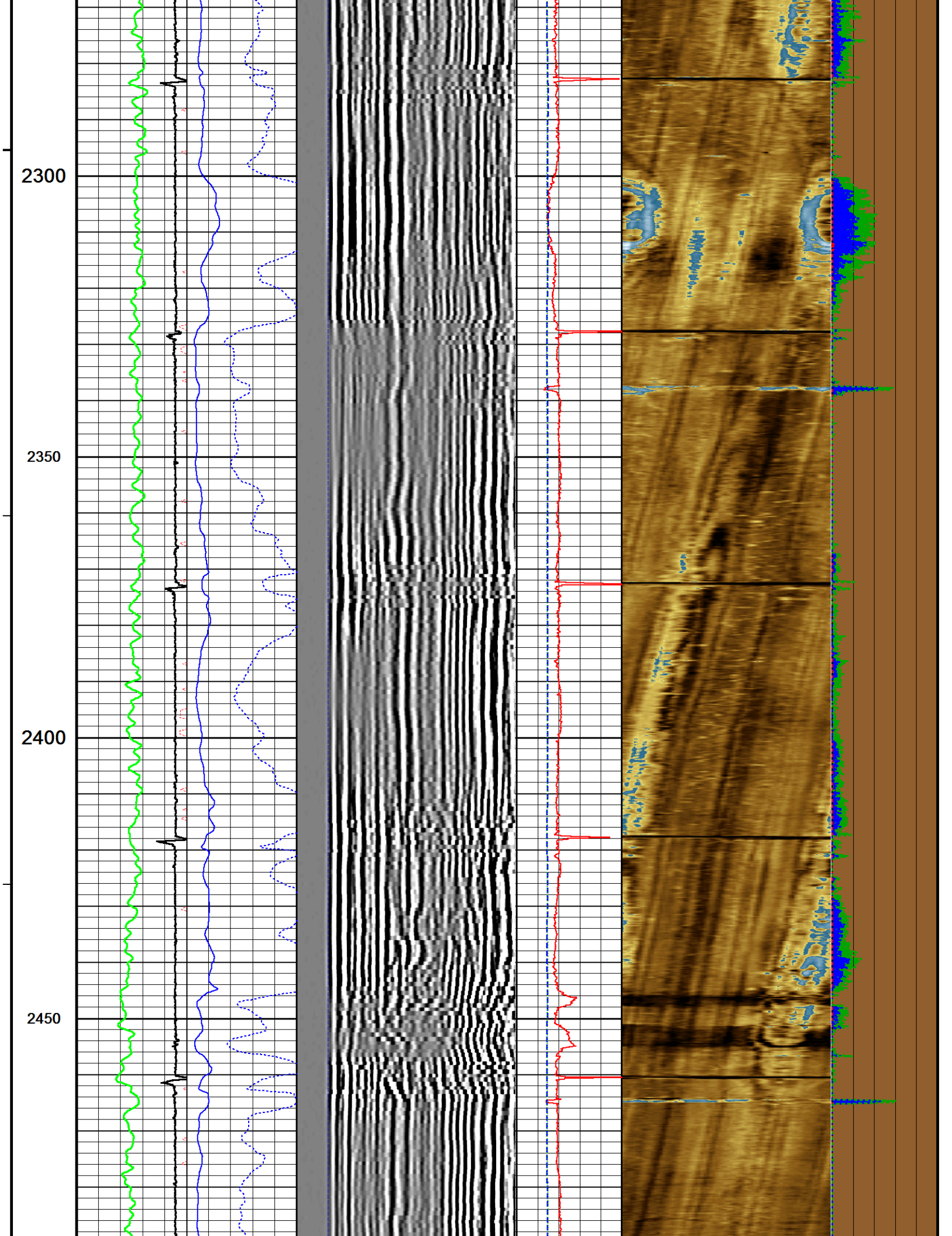




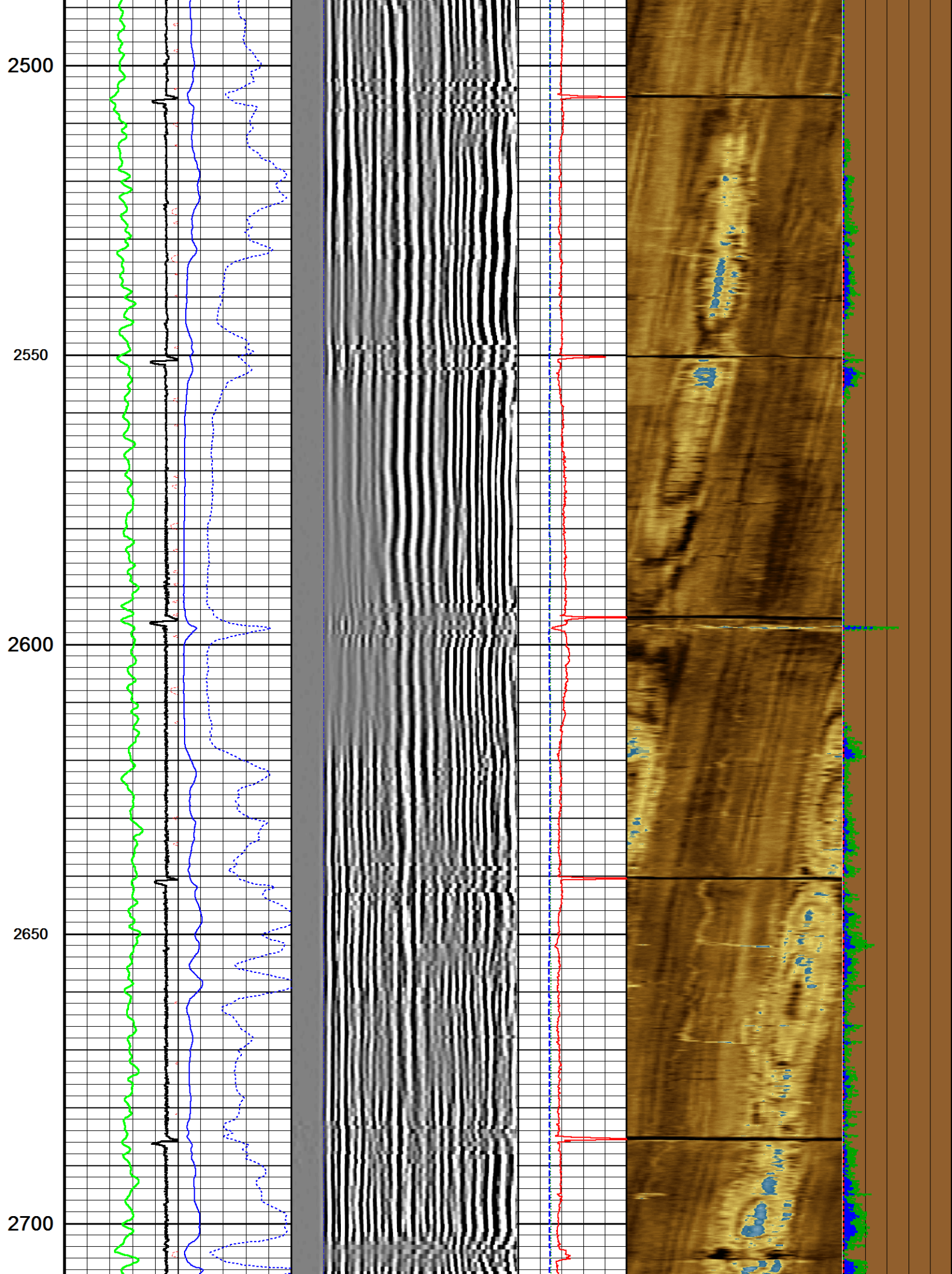


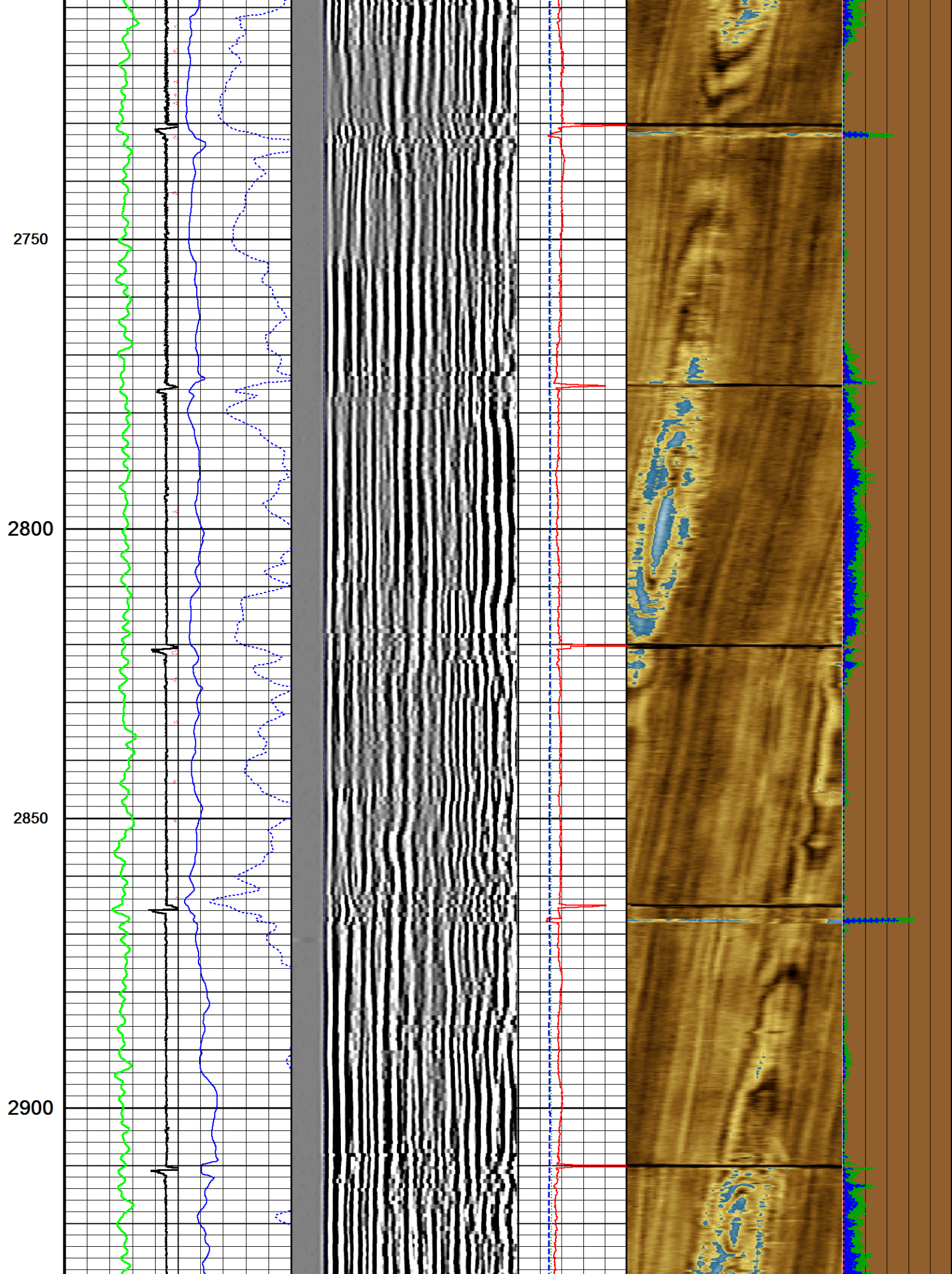




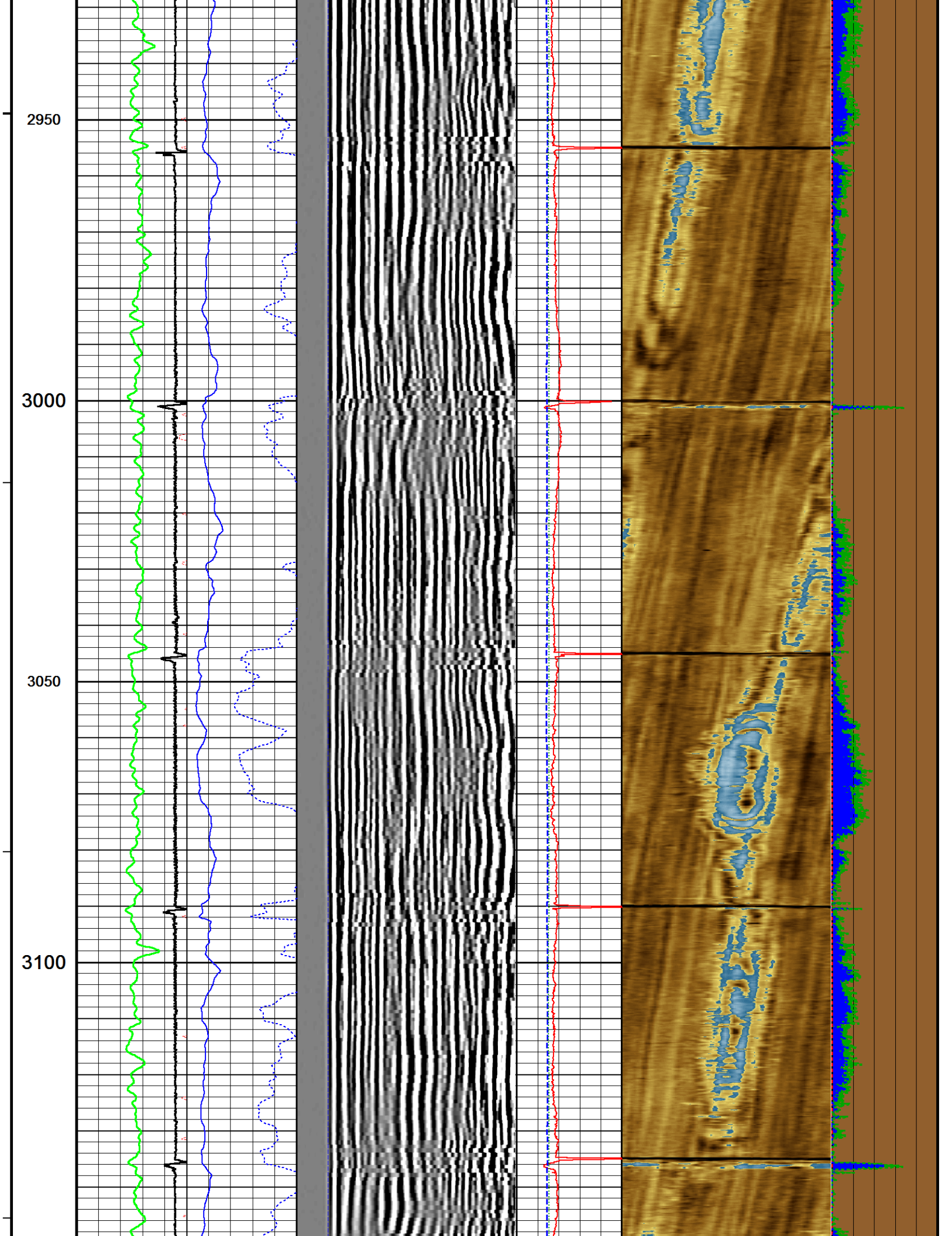




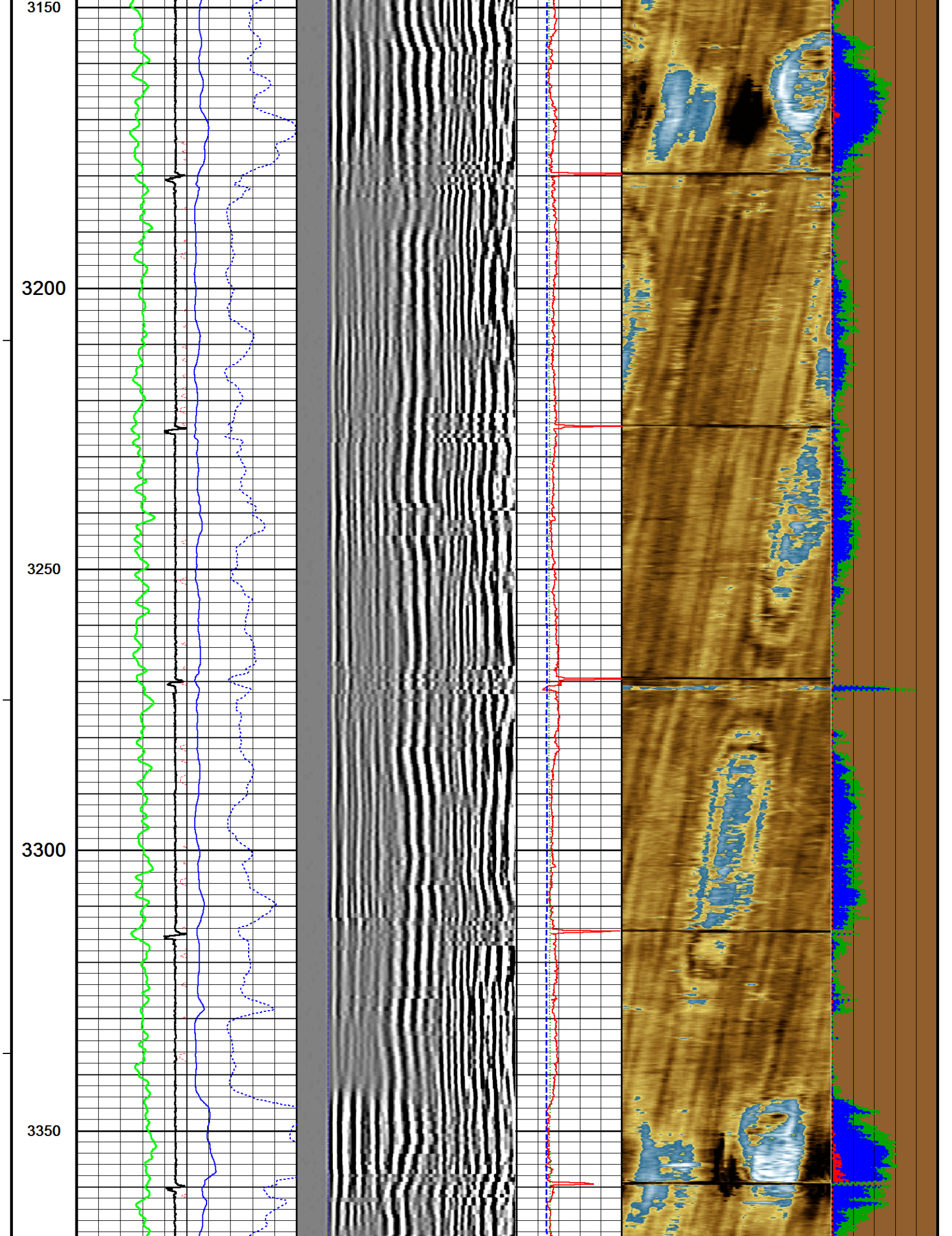


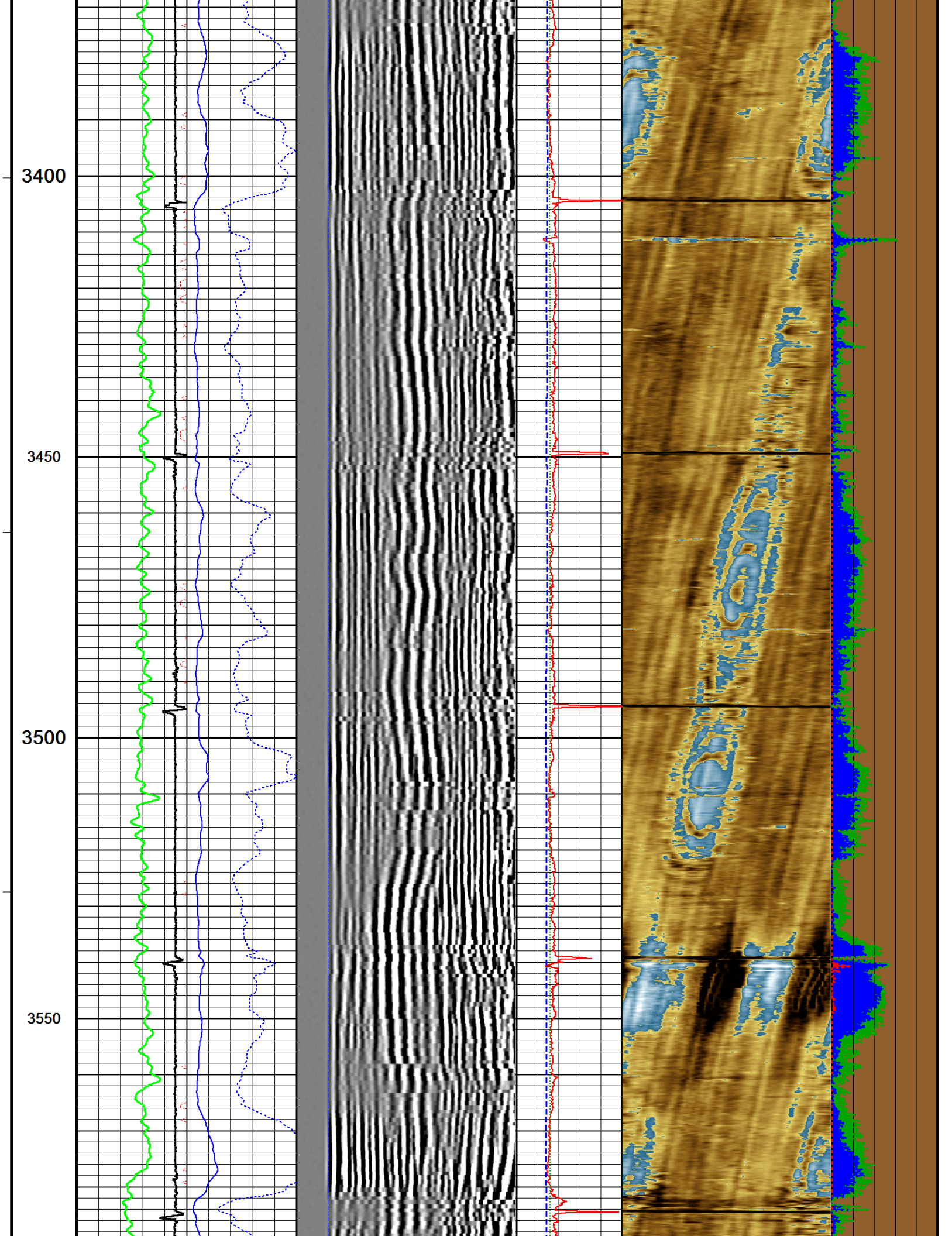




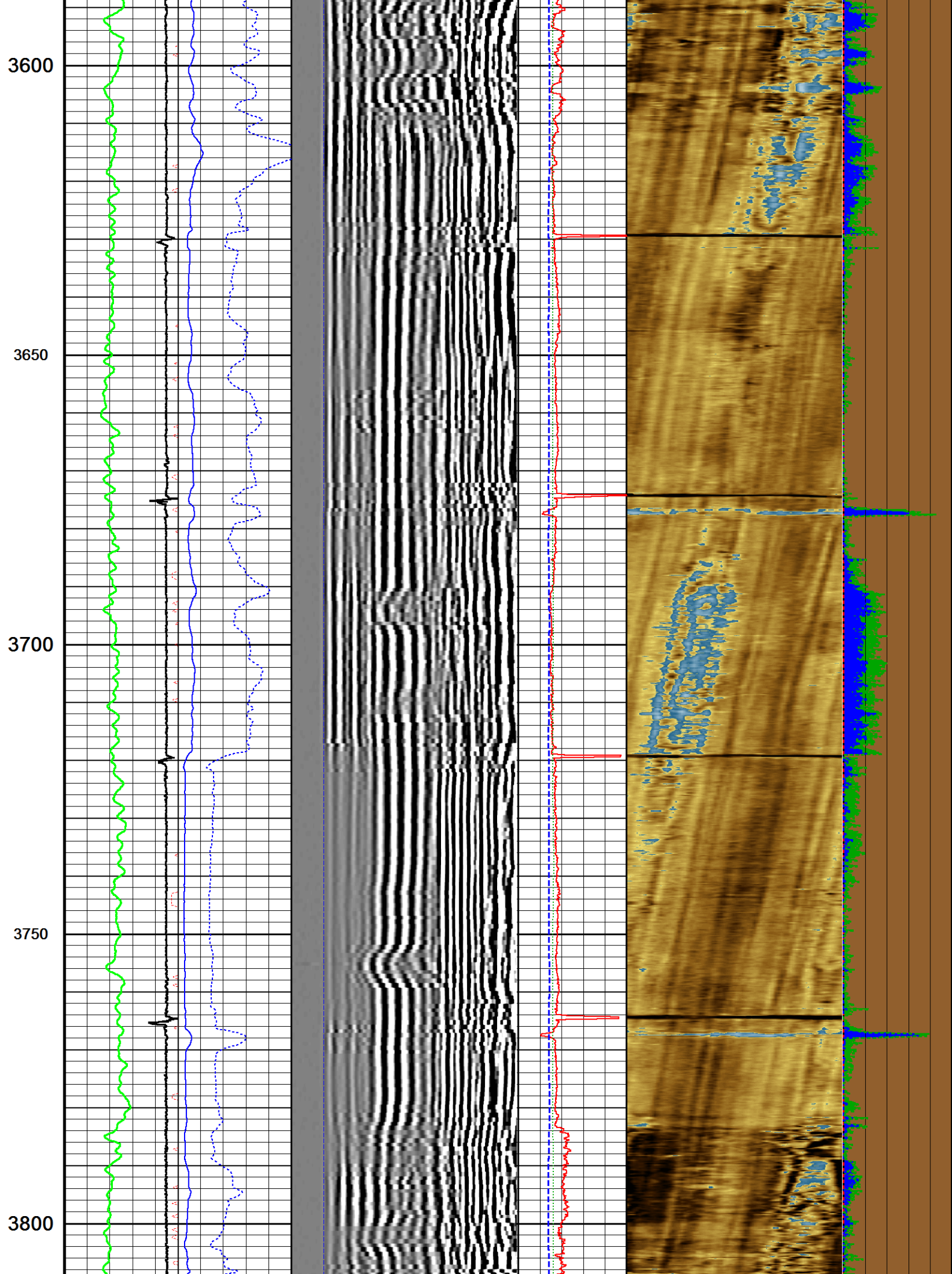


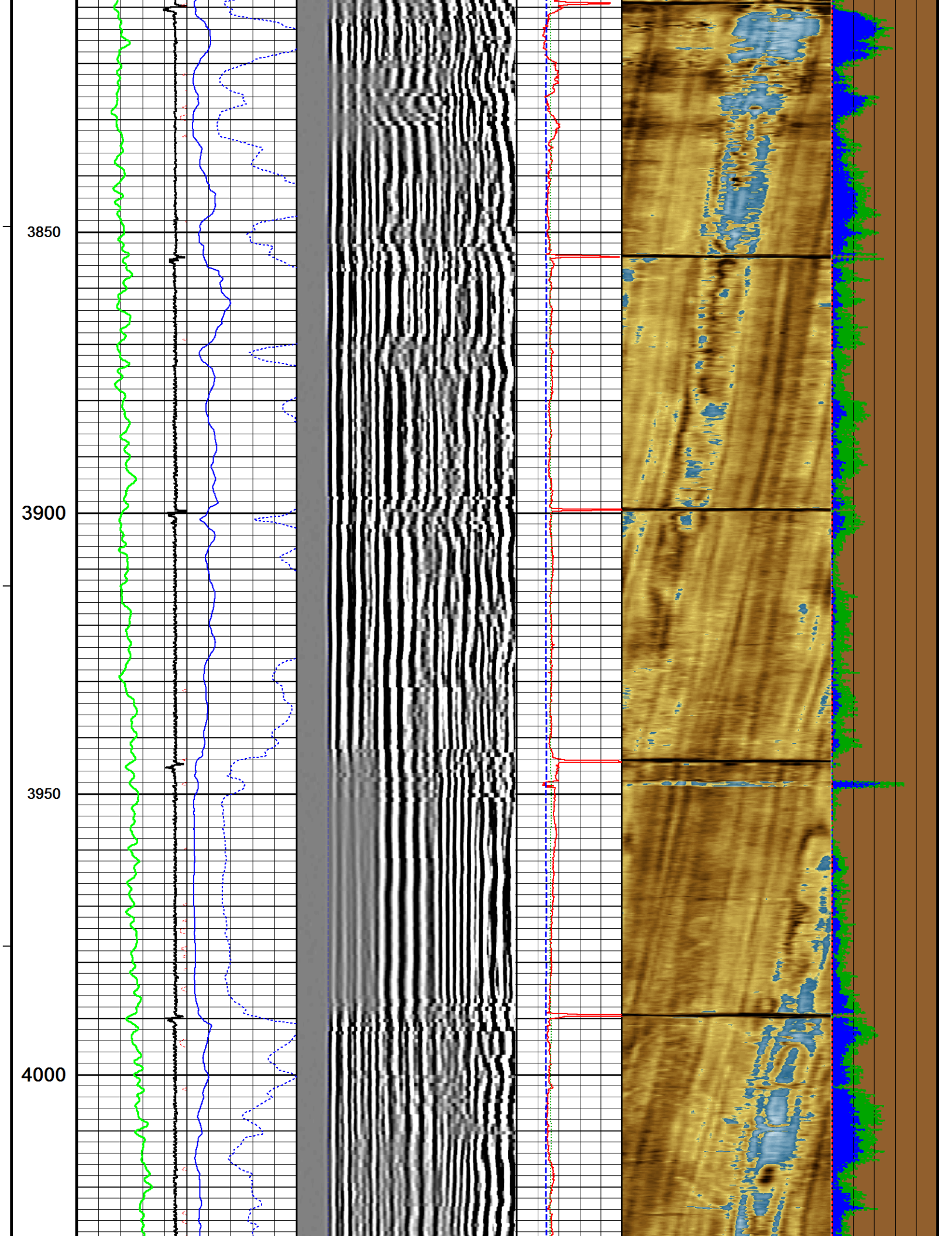




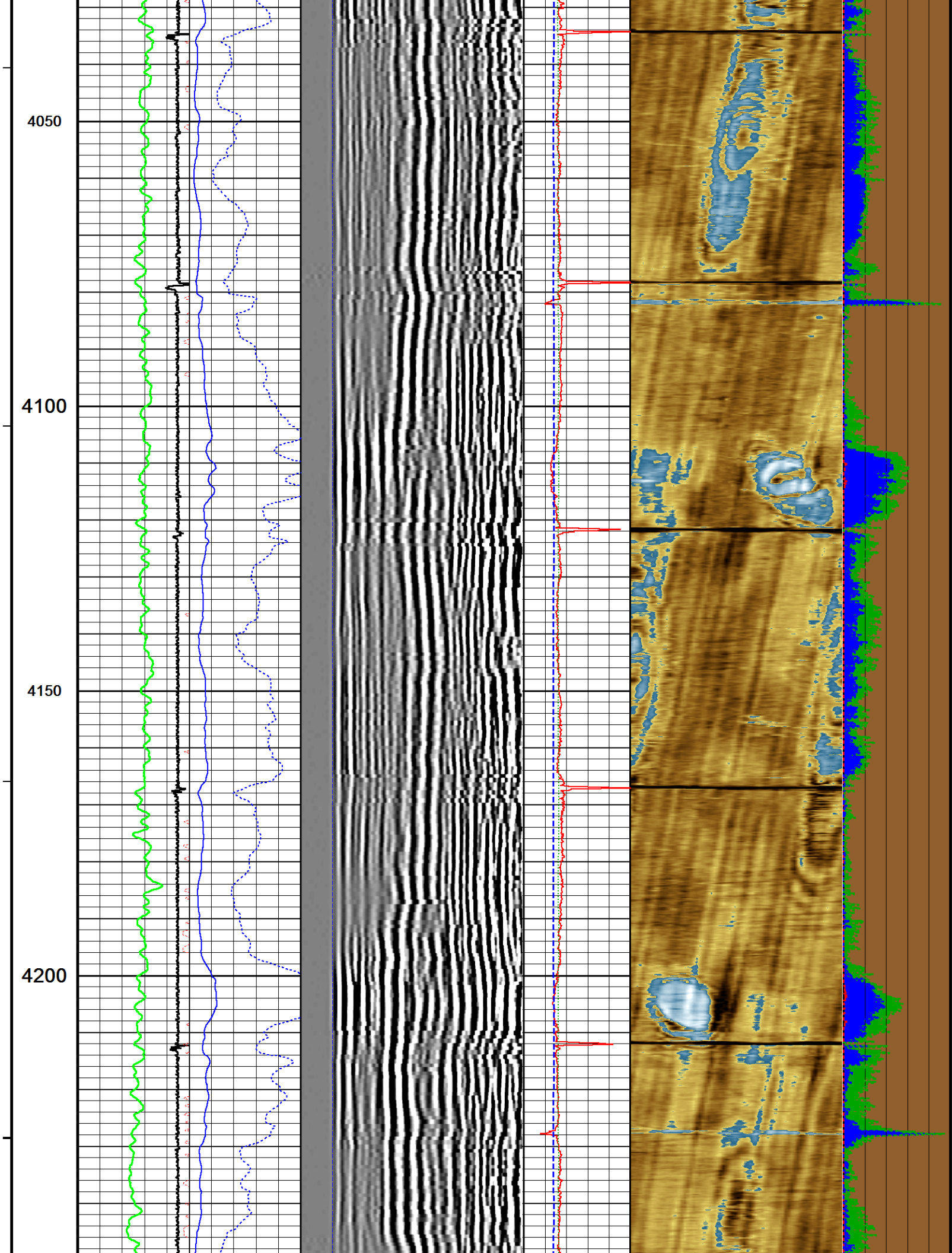


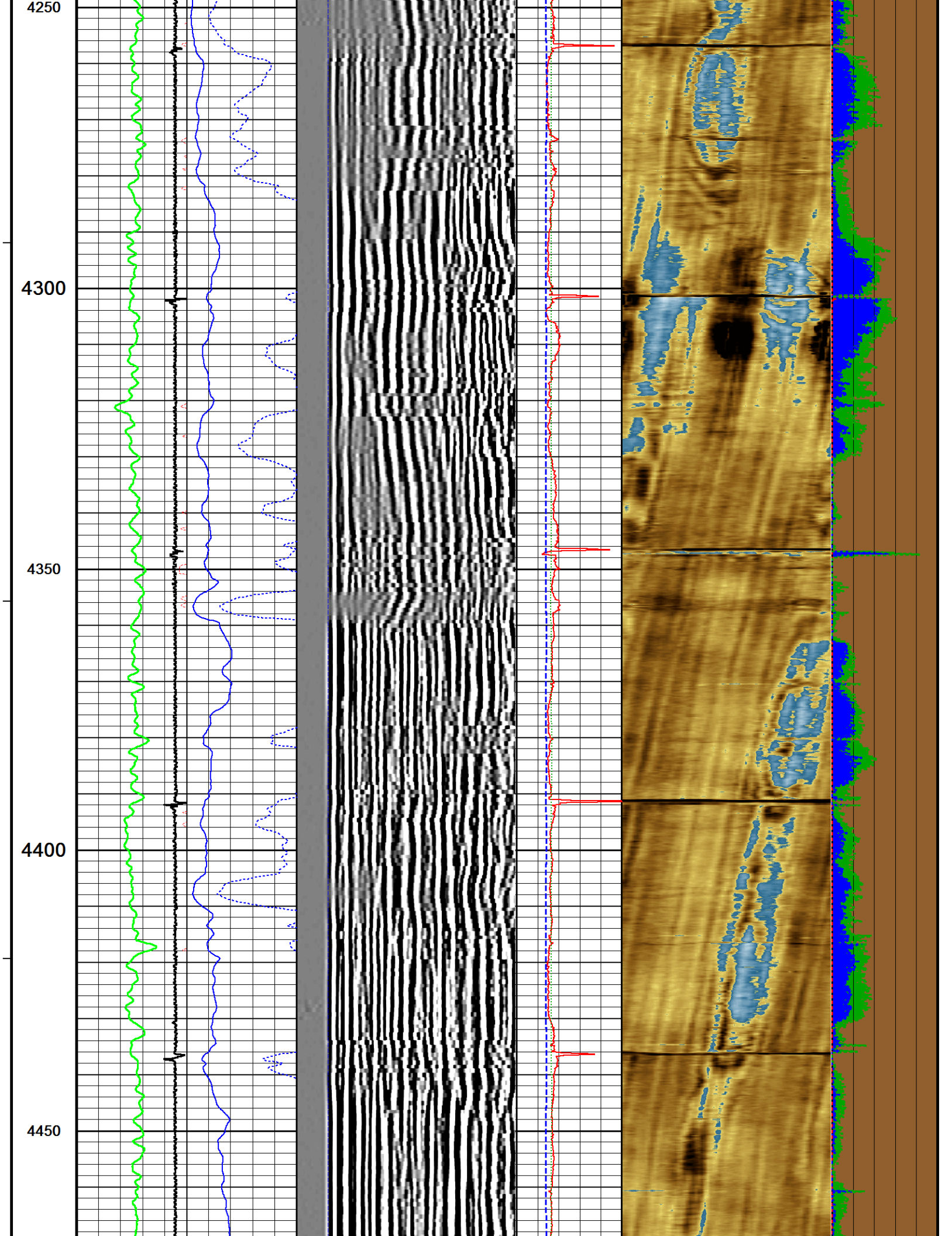




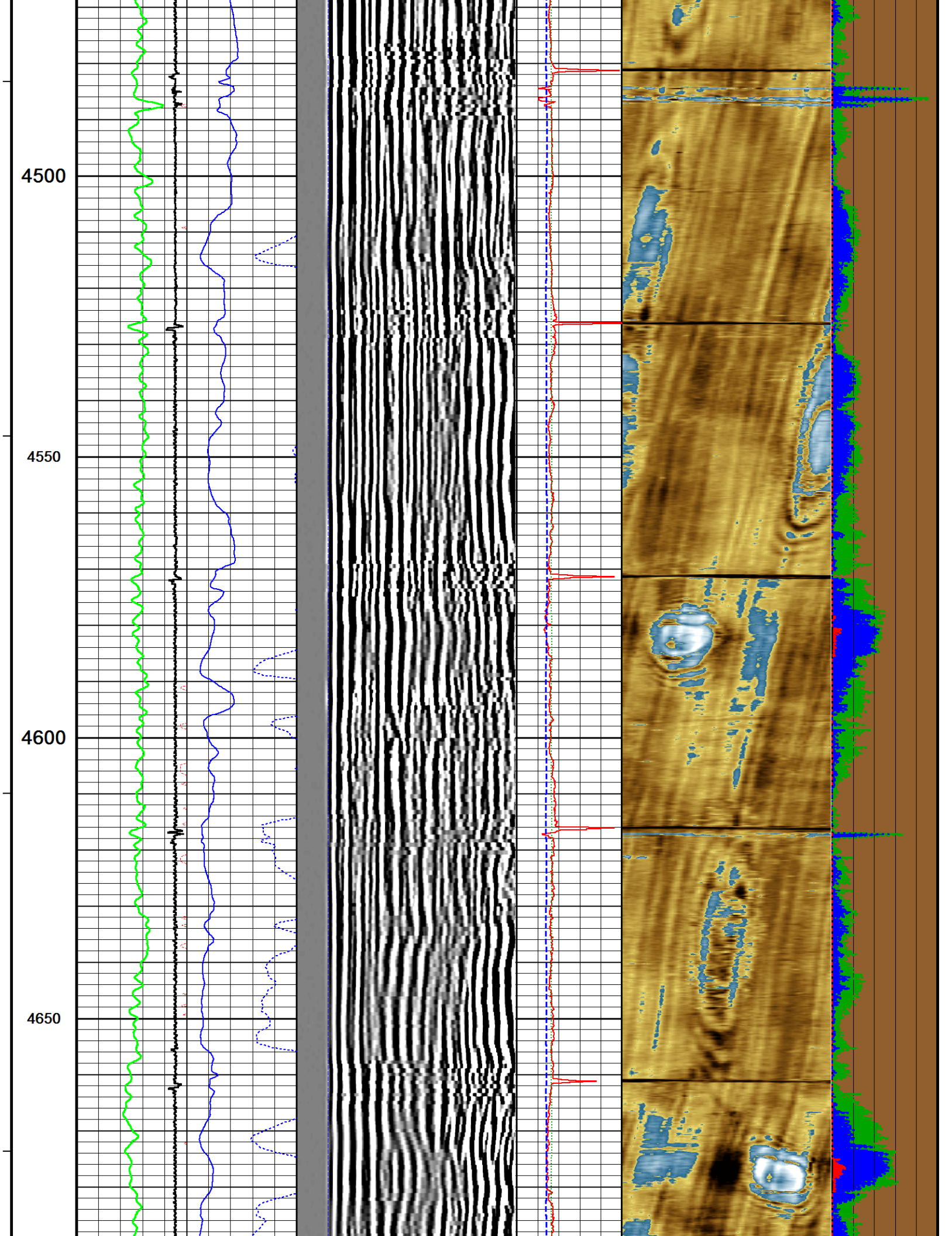


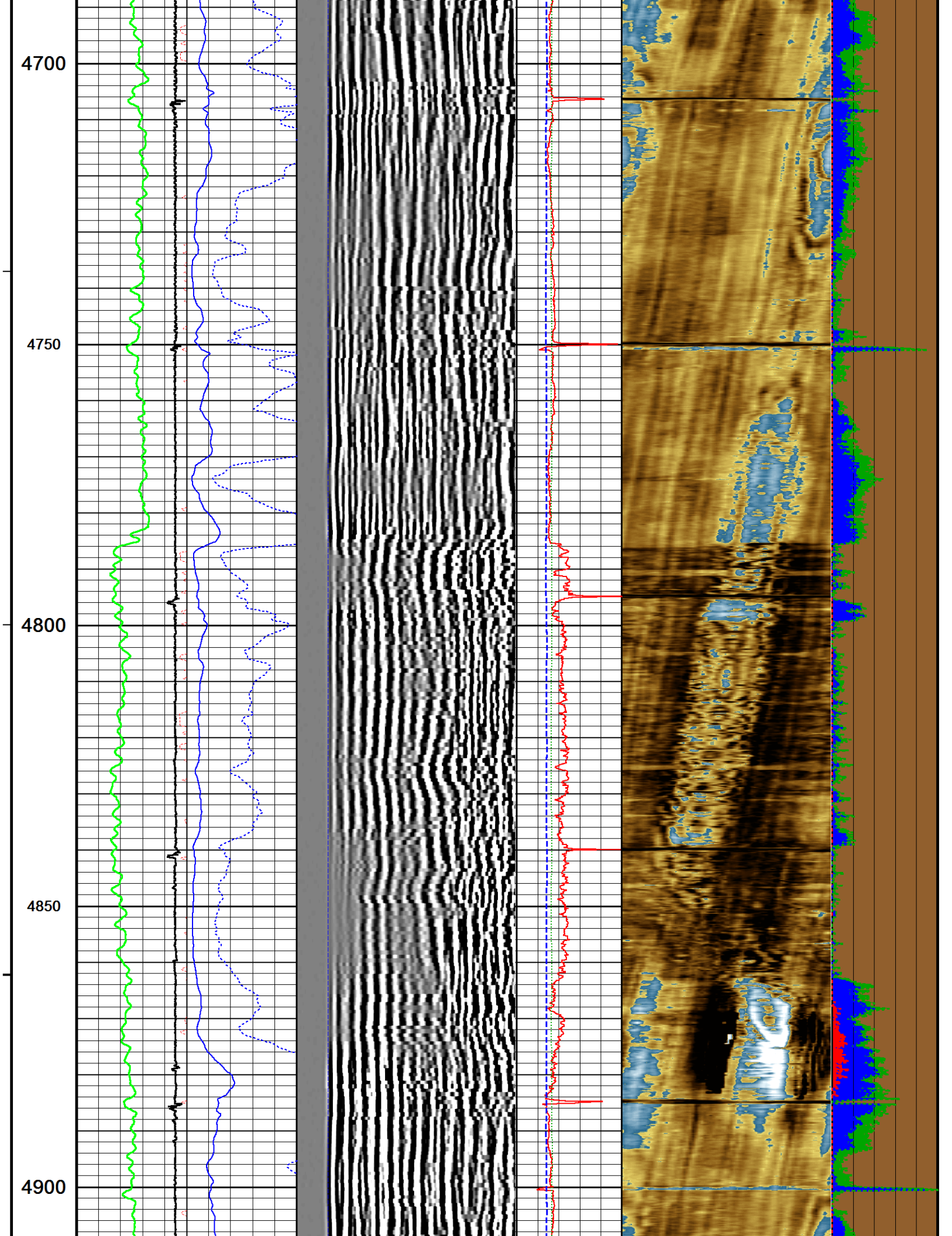




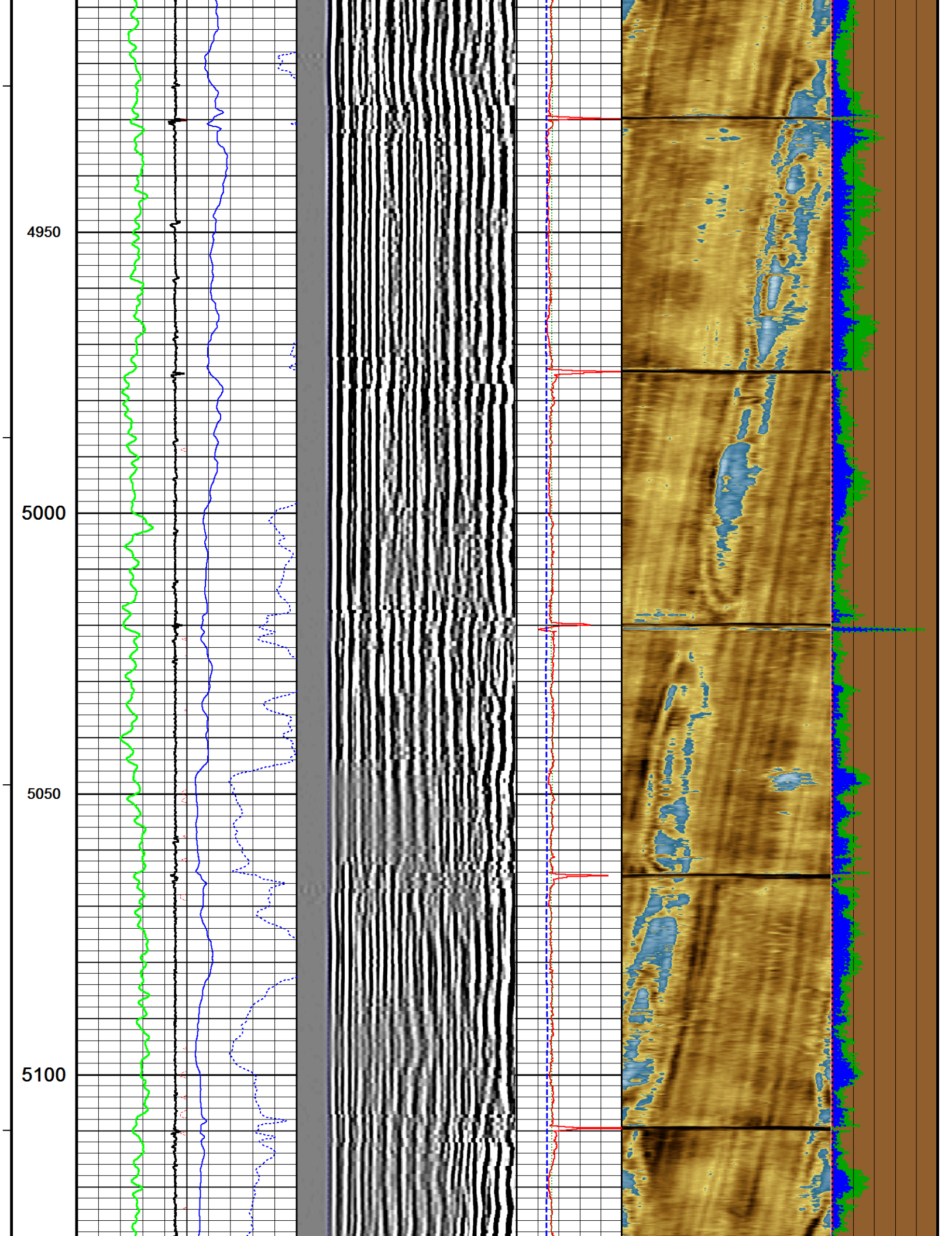


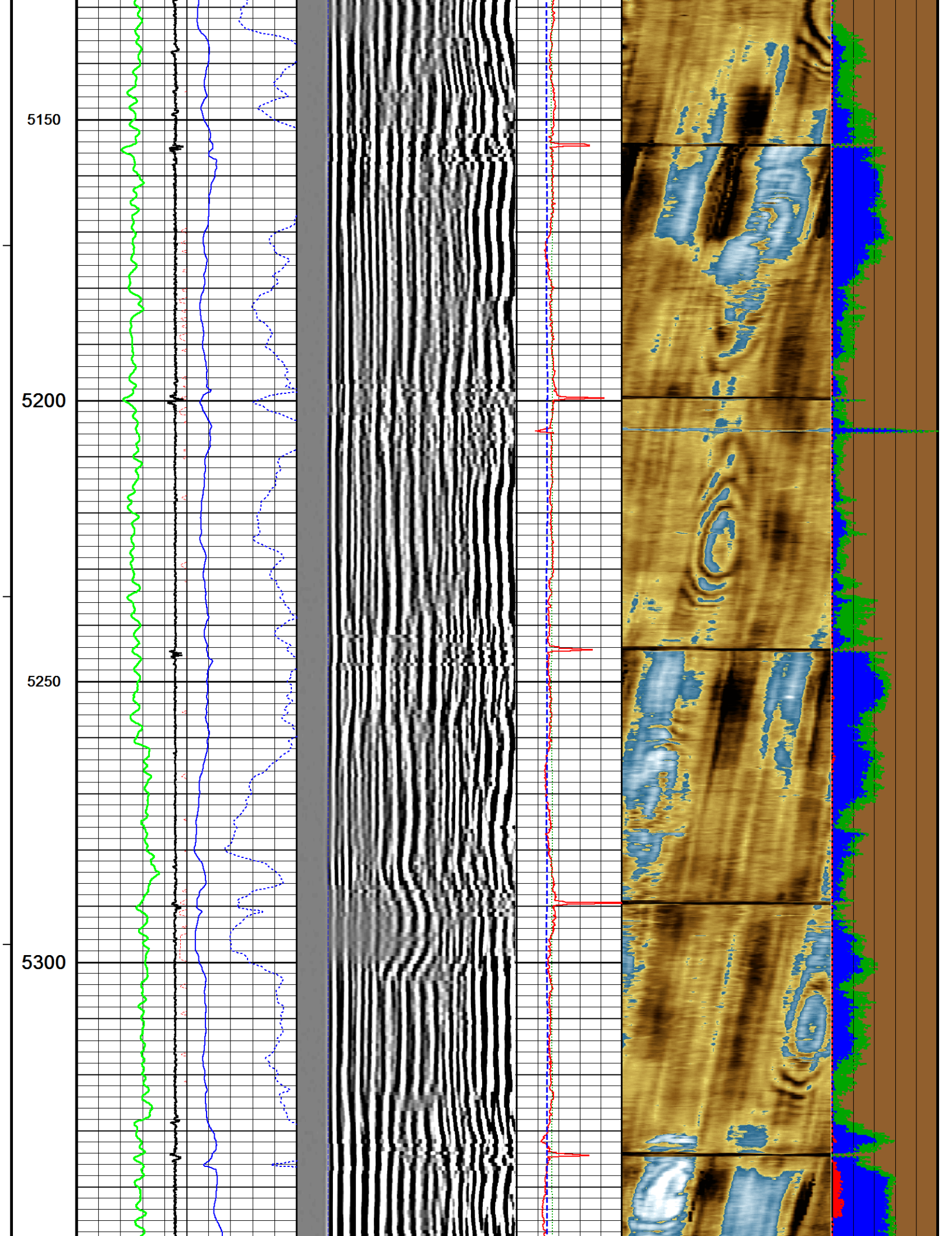




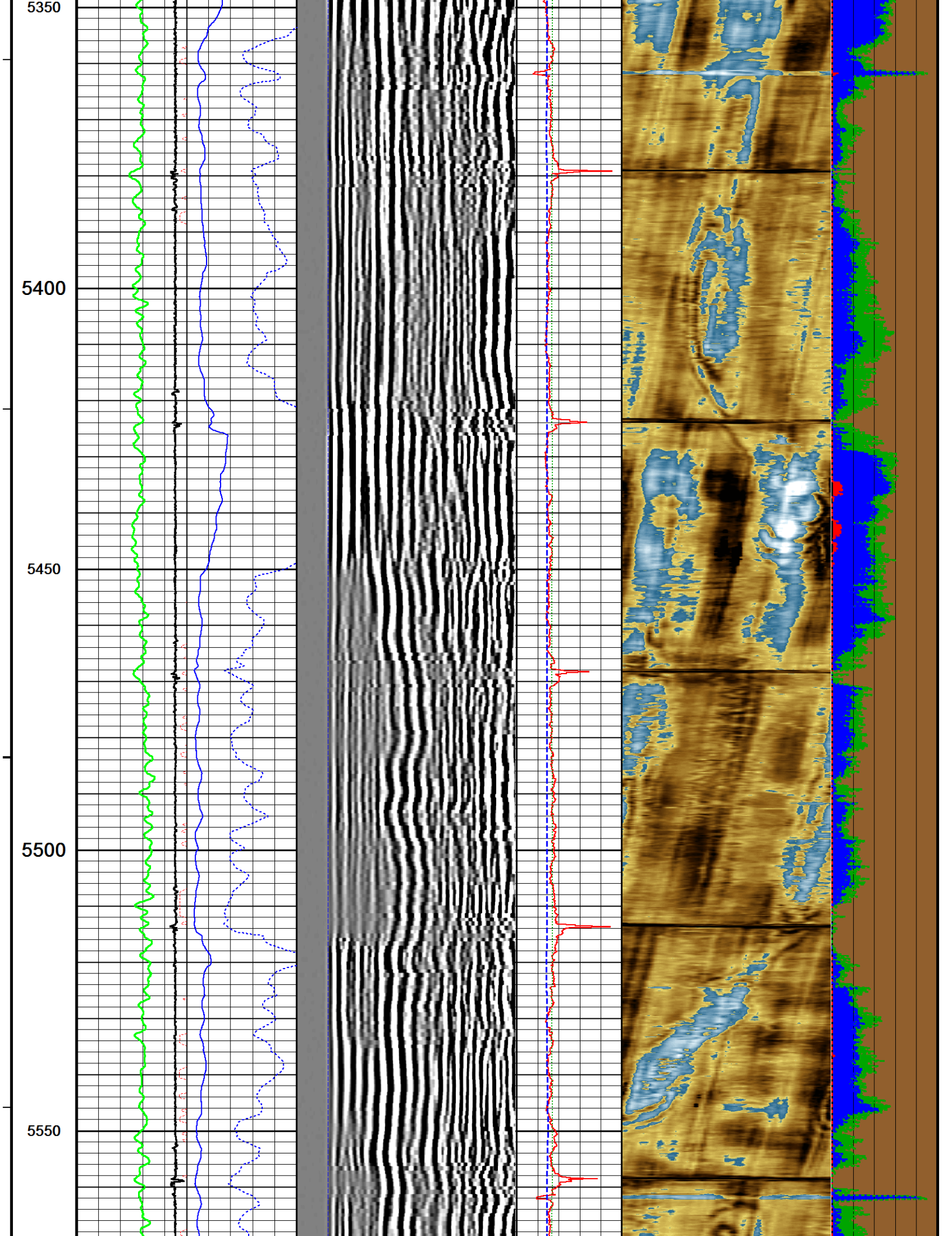


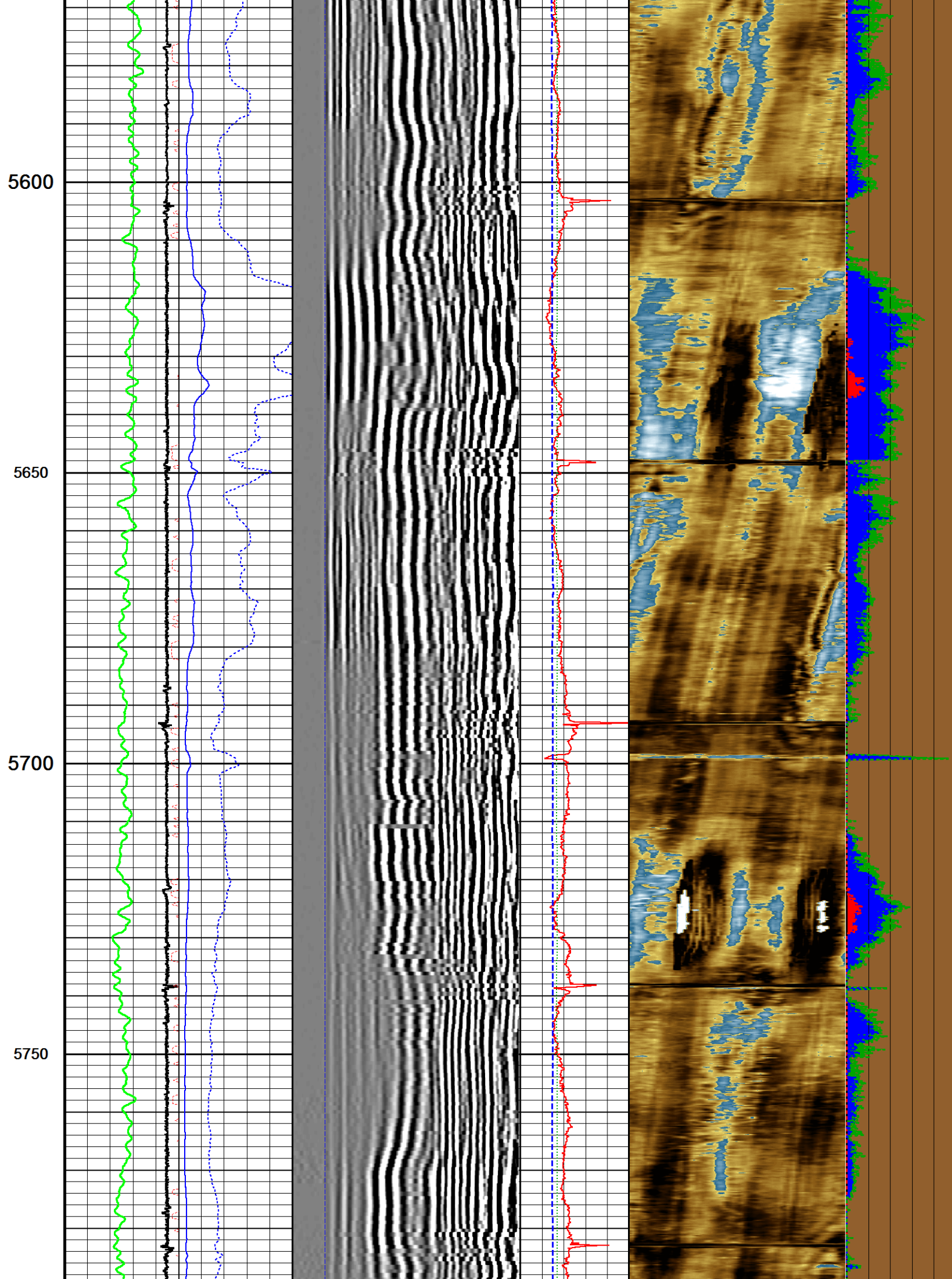




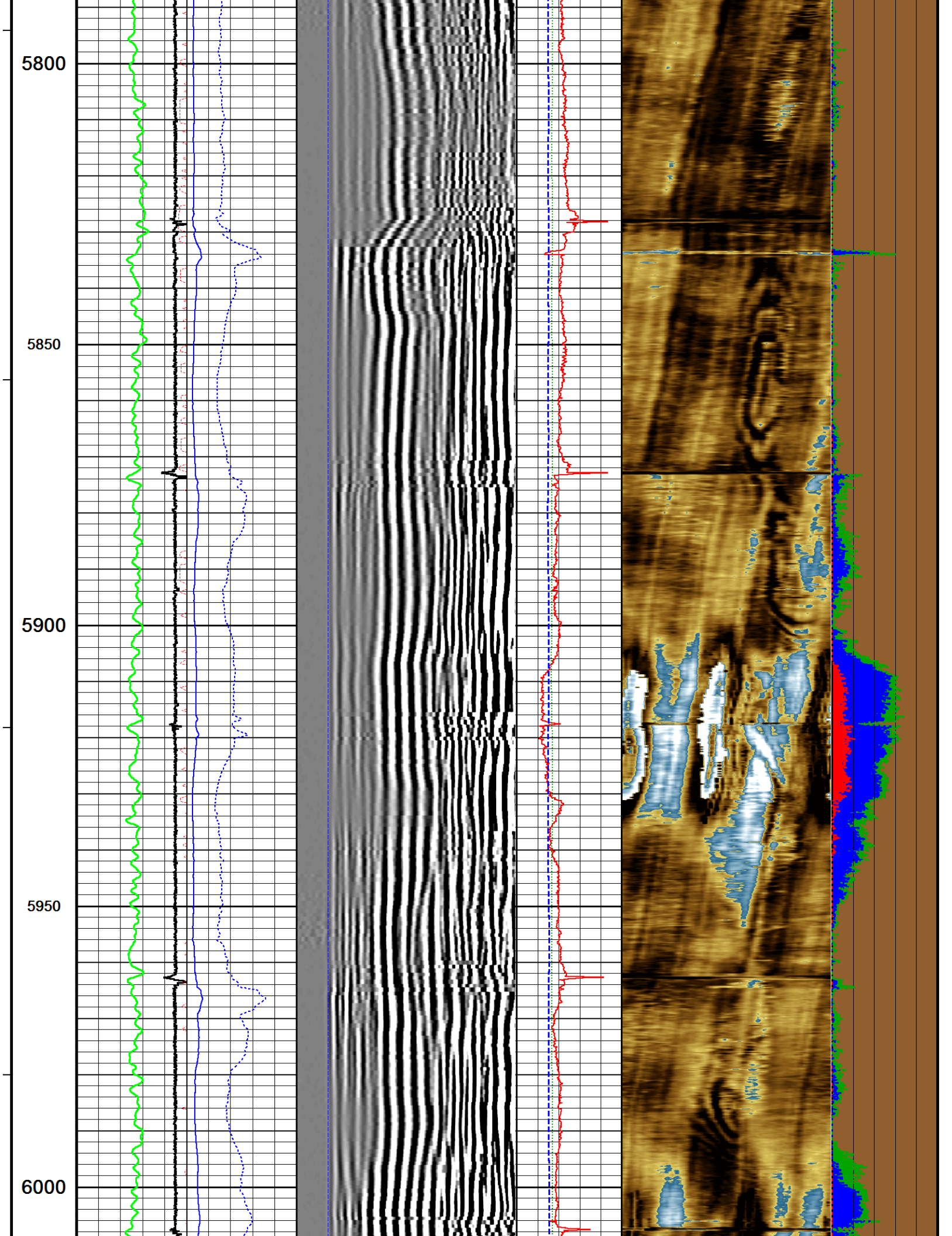


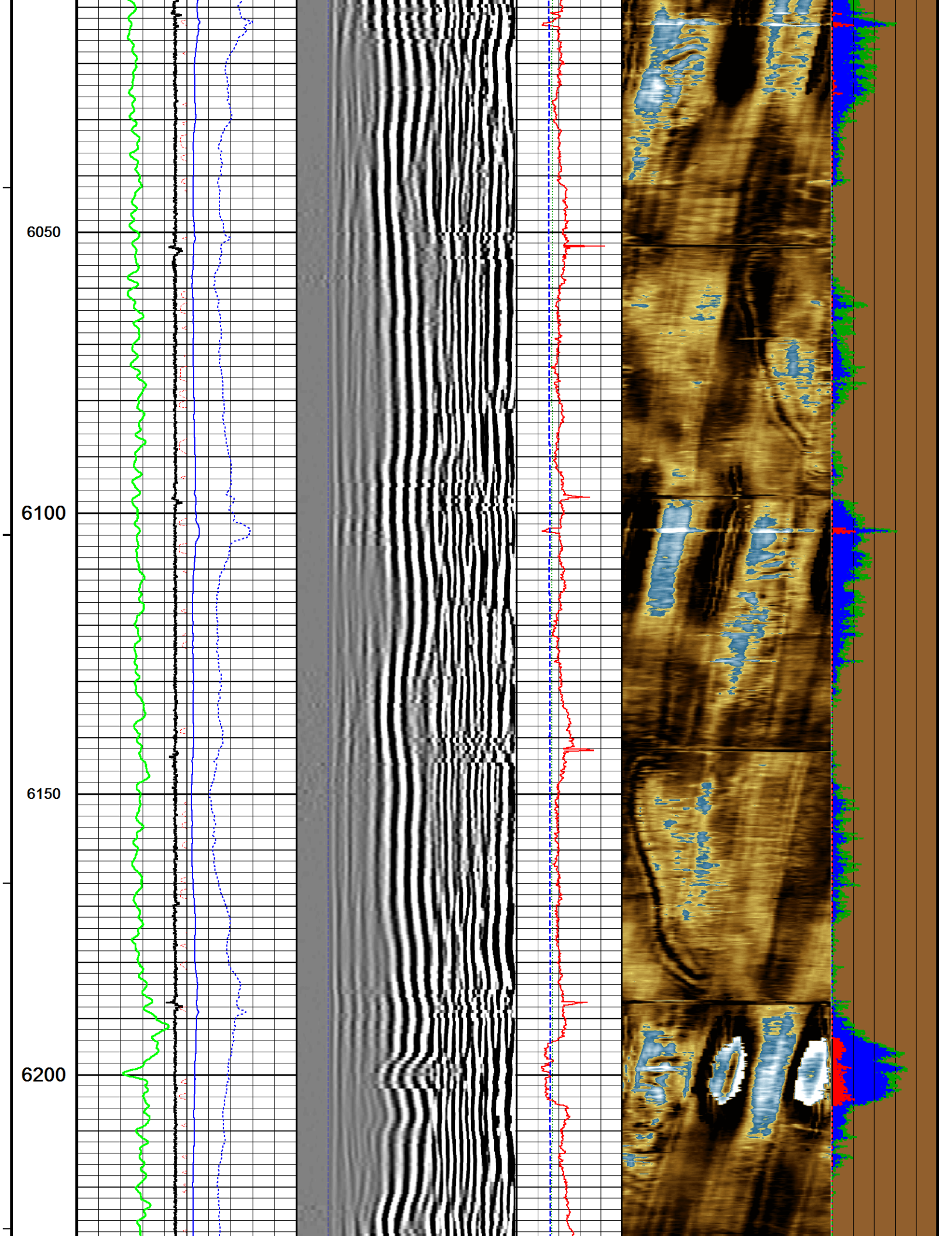




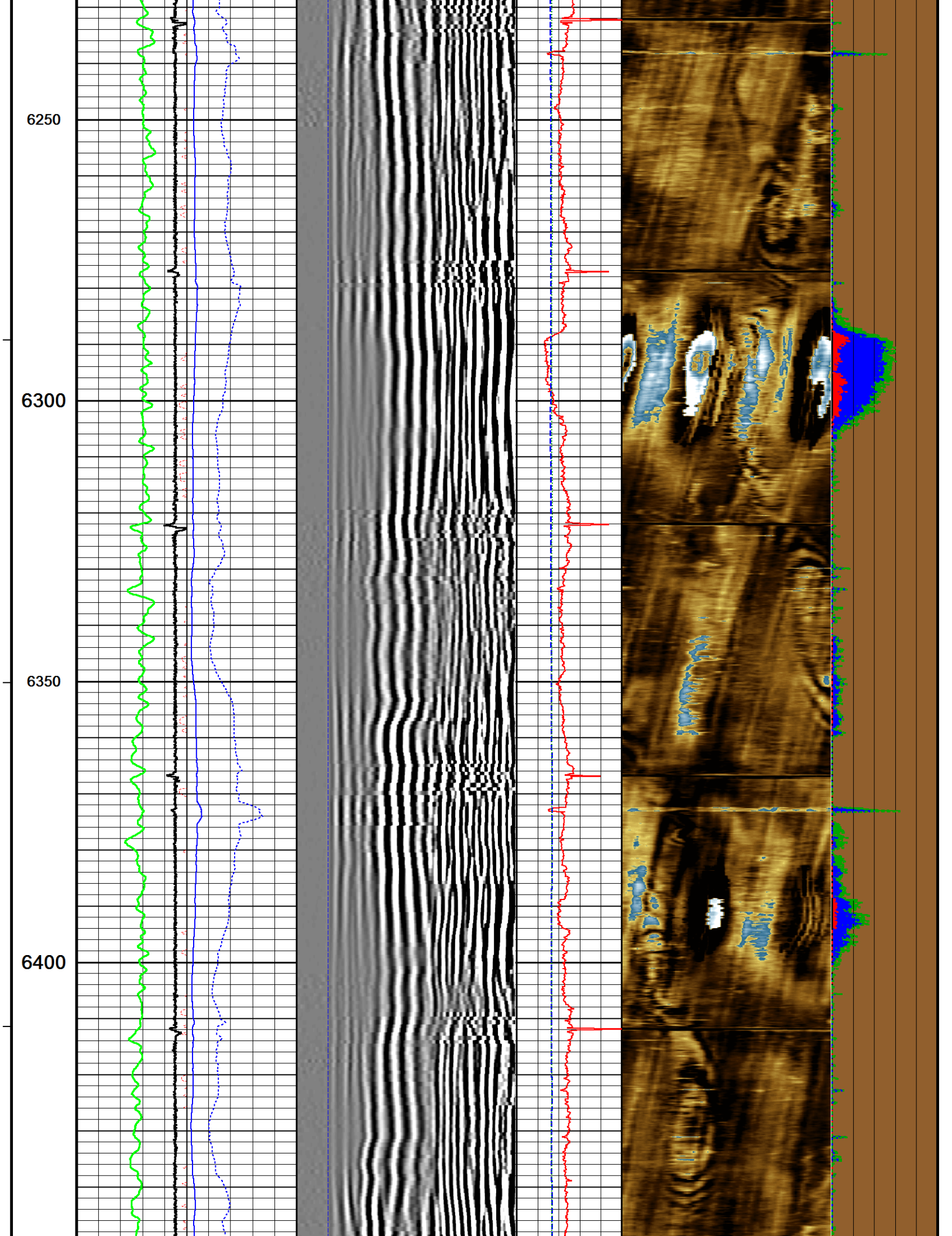


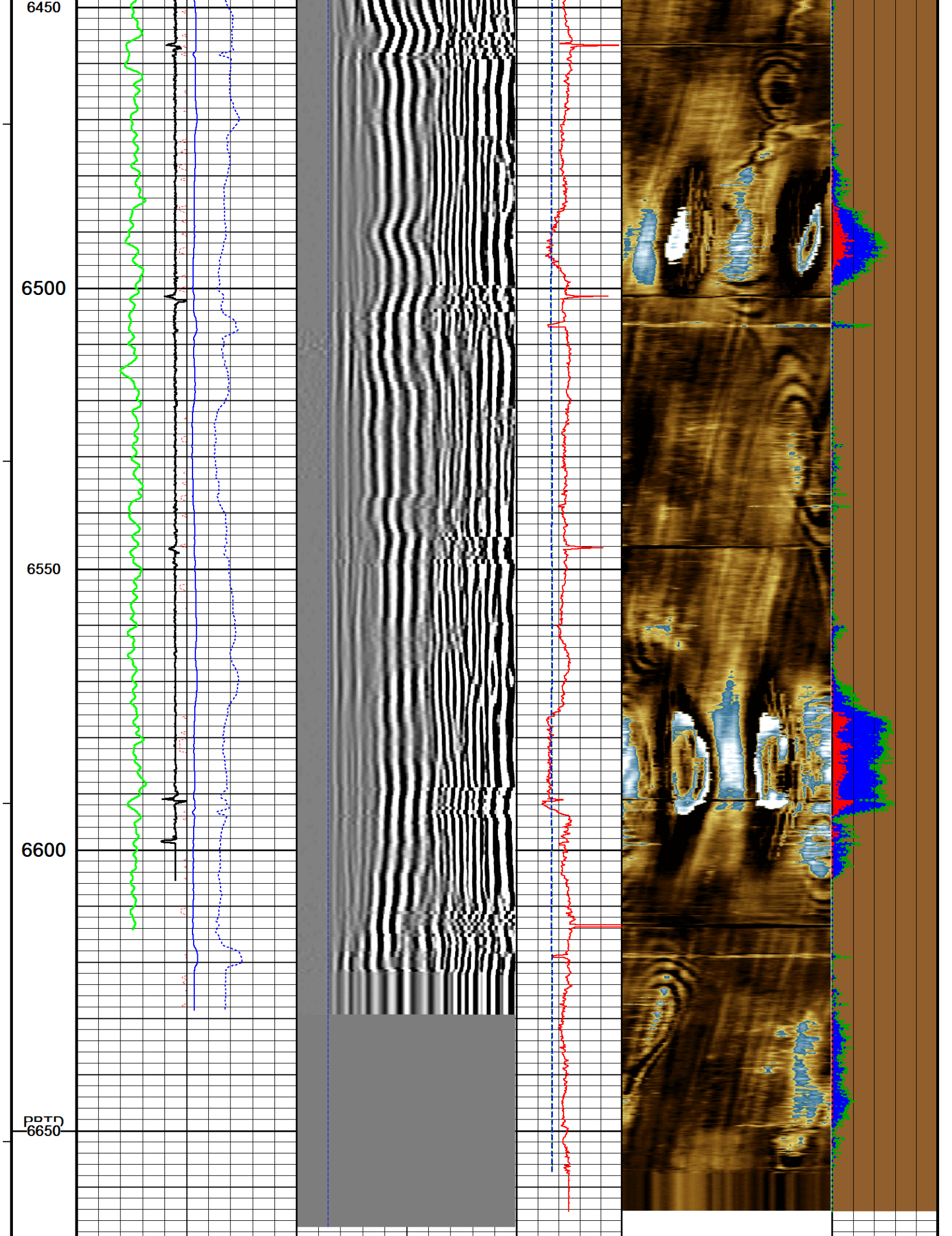




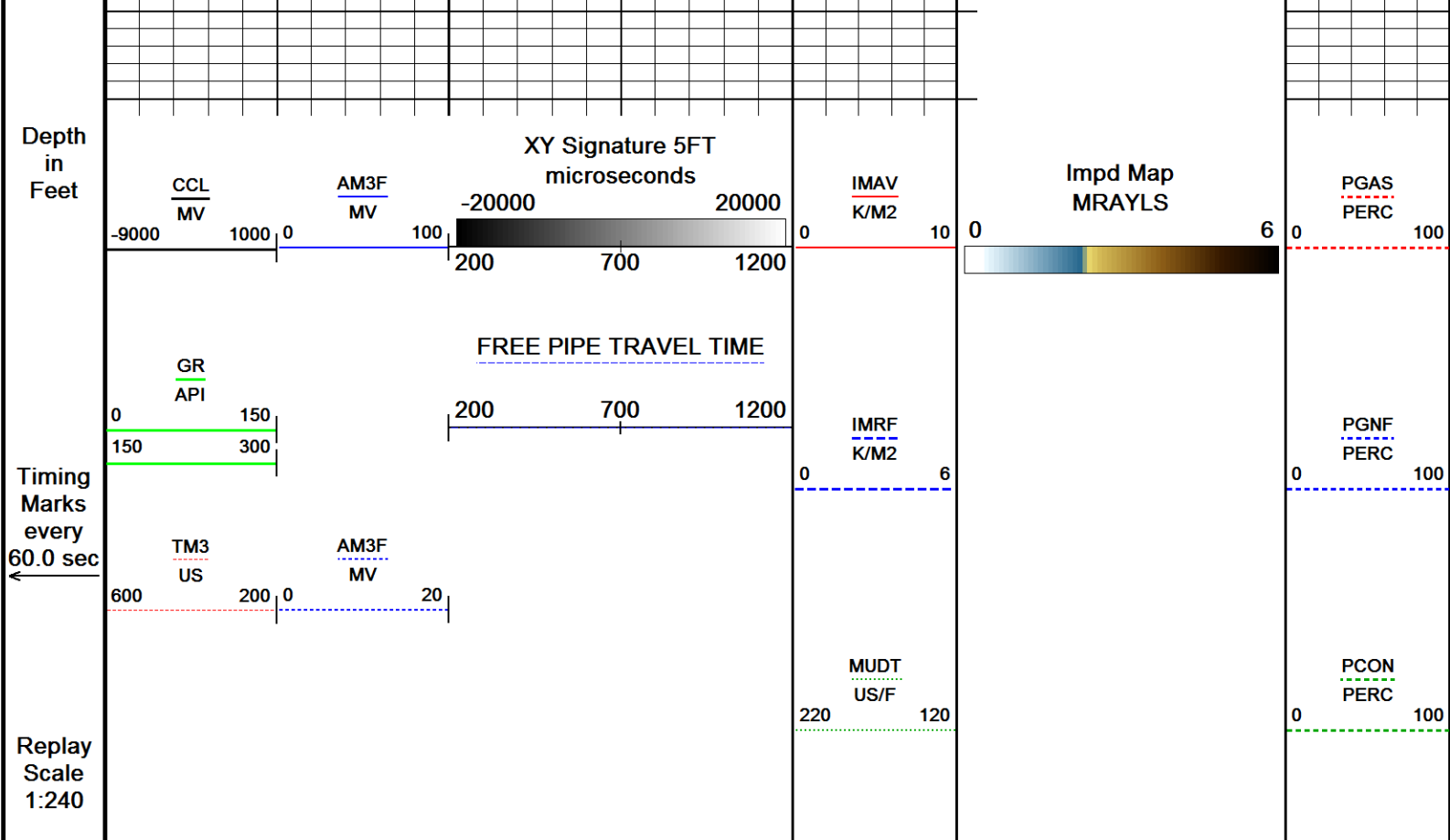












Depth Based Data - Maximum Sampling Increment 2.5cm

Plotted on 24-FEB-2017 07:28

Filename: C:\Users\197426\Desktop\EXTRACTION\MICKEY #2\MICKEY # MAIN PASS\_001.dta

Recorded on 22-FEB-2017 14:05

System Versions: Logged with 16.05.3841 Processed with 16.05.3841 Plotted with 16.05.3841

MAIN PASS 1:240

REPEAT PASS 1:240

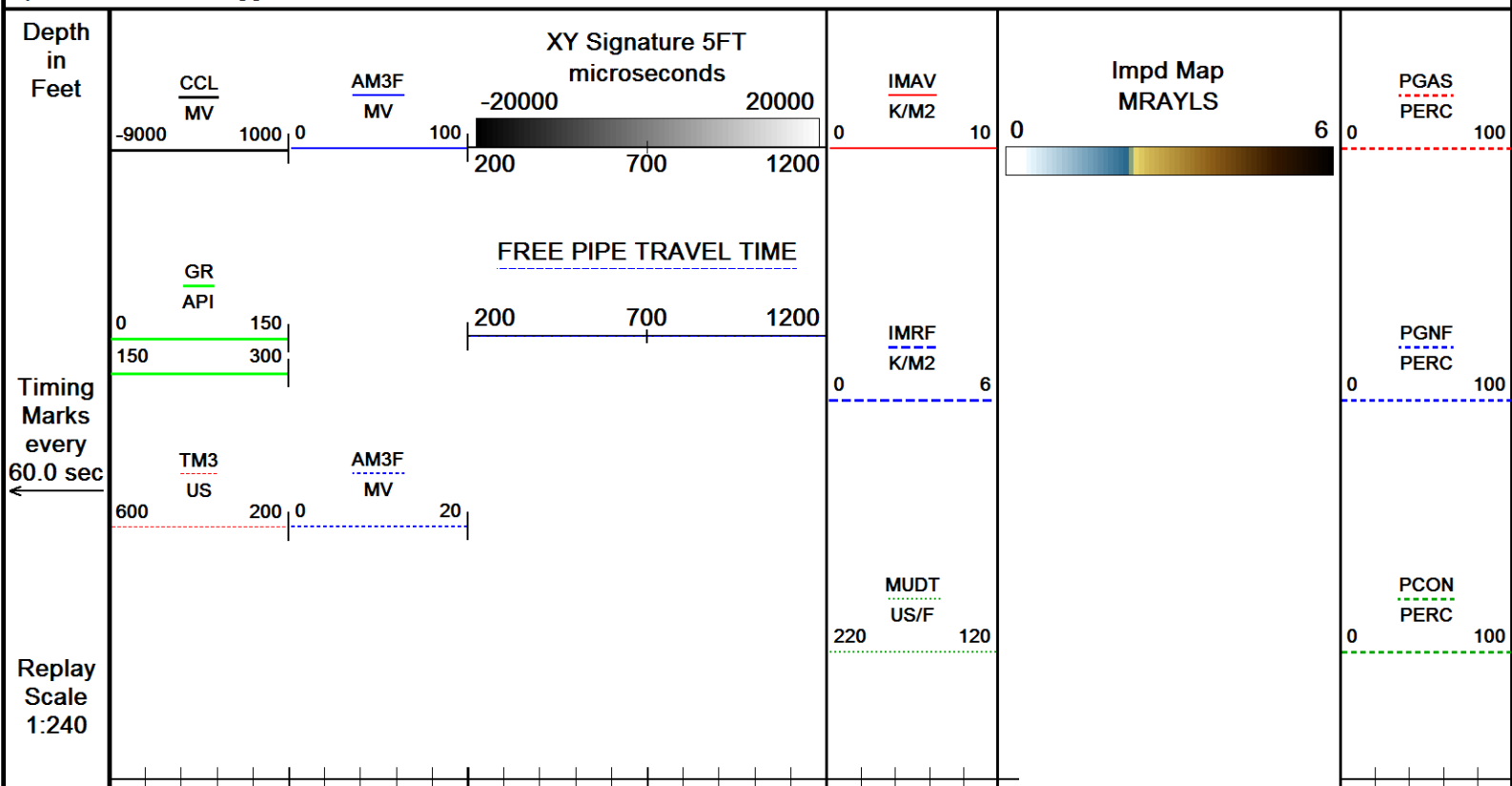
Depth Based Data - Maximum Sampling Increment 2.5cm

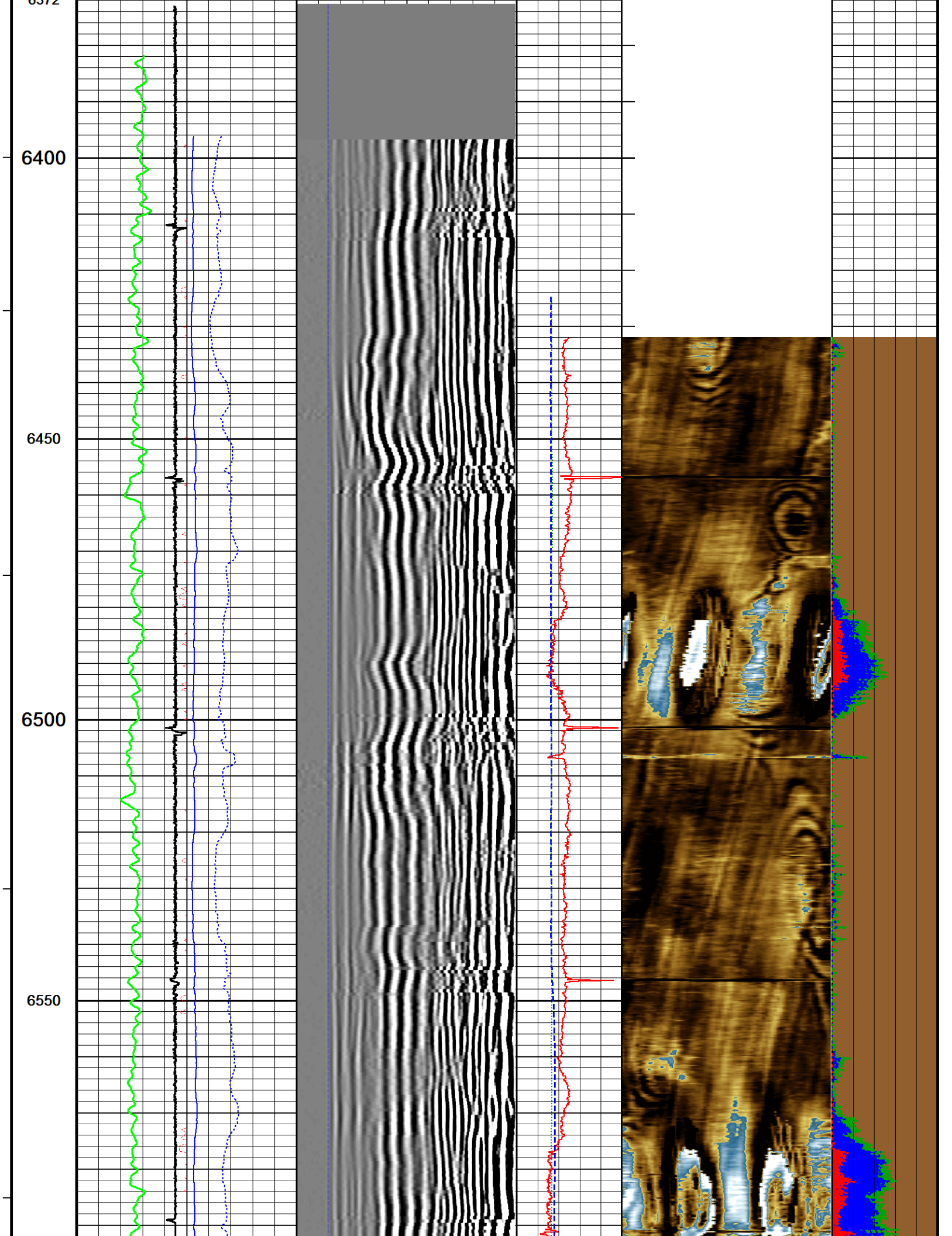
Plotted on 24-FEB-2017 07:28

Filename: C:\Users\197426\Desktop\EXTRACTION\MICKEY #2\MICKEY # REPEAT PASS\_001.dta

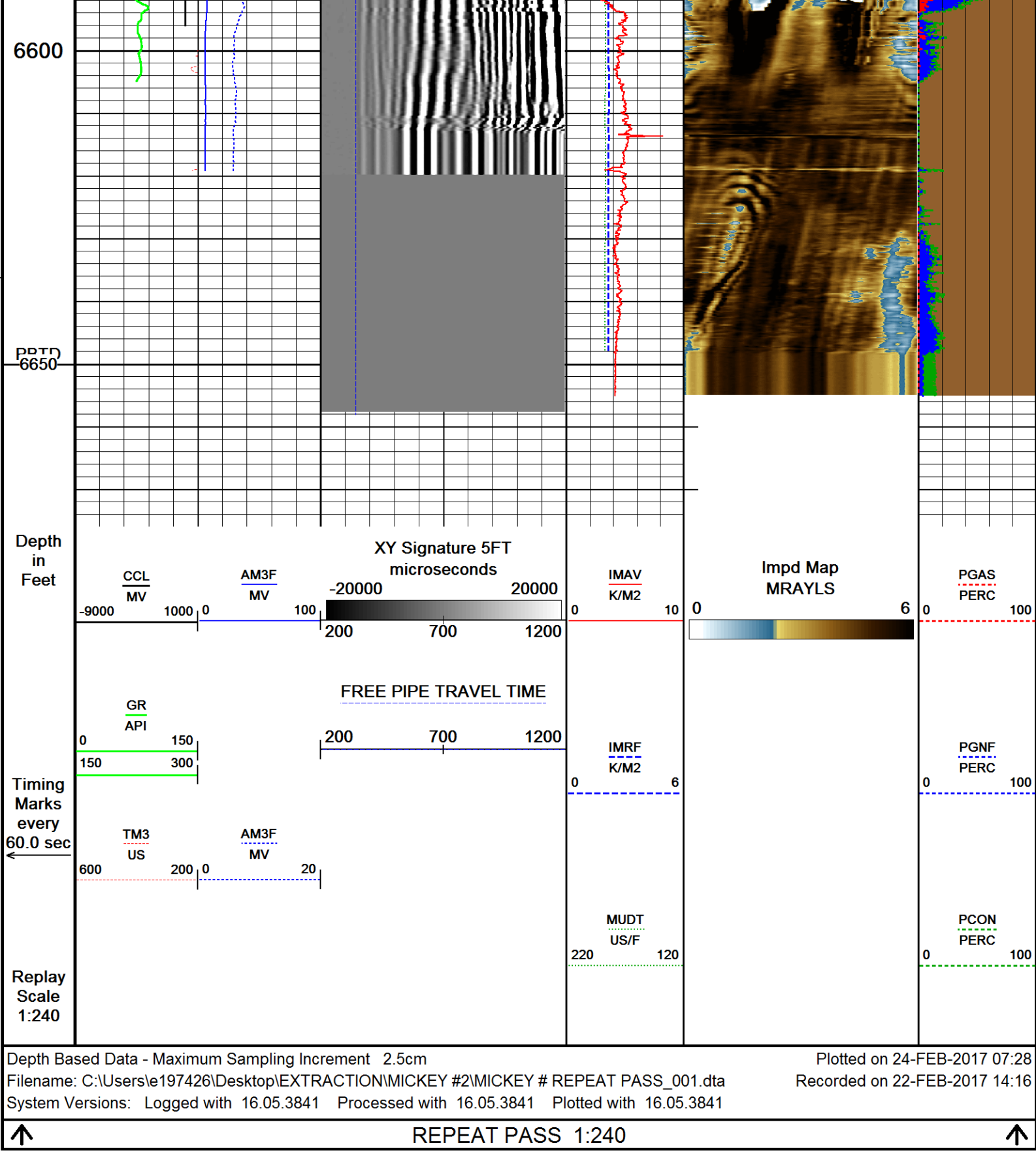
Recorded on 22-FEB-2017 14:16

System Versions: Logged with 16.05.3841 Processed with 16.05.3841 Plotted with 16.05.3841









SHOP AND FIELD CALIBRATIONS

C:\Users\197426\Desktop\EXTRACTION\MICKEY #2\MICKEY # MAIN PASS\_001.dta

UGR Field Survey cal UGR-JD 223

Field calibration on 08-FEB-2017 09:03

Gamma Ray Field Survey Calibration

Tool Type: UGR-JD  
Calibrator No: TH-57

Serial No: 223

Background      Calibrator      Standard      Units

107.7              589.0              151.0      CPS

Delta Counts Per Sec: 481.3              CPS/API = 3.187

## CBT Field Calibration    CBT-AA 114

Field Calibration on 08-FEB-2017 14:41

### Cement Bond Tool Amplitude Field Calibration

Tool Type      CBT-AA                      Serial No              114

Free Pipe Depth

Sensor	Description	Standard(mV)	Measured(mV)
AMP 3 FT	100 % Bond	2.40	0.00
	Free Pipe	72.00	790.20
AMP 5 FT	100 % Bond	1.60	0.00
	Free Pipe	48.00	549.00

## CBT Constants    CBT-AA 114

Last Edited on 22-FEB-2017 14:05

Min Ampl 100% Bond	2.00 MV
Max Ampl 0% Bond	90.00 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	190.0 US/F
Maximum Attenuation	12.00 DB/F
3' TT Correction	0.0 US
Cement Weight	0.00 LB/G

## Ultrasonic Radial Scanner Before Cal    USH-AB 136

Field Calibration on 00-JAN-1988 00:00

### Ultrasonic Radial Scanner Before Calibration

Tool Type USH-AB              Serial No    136

	Measured	Minimum	Maximum	
Free Pipe	-999.250	0.000	0.000	K/M2
Mud Impedance	1.500	0.000	0.000	K/M2

## URS Constants    USH-AB 136

Last Edited on 22-FEB-2017 14:05

\*\*\* Well Information \*\*\*



\*\* NOTE \*\*

If `Use General Settings` is set to `OFF`, the `ZHead cal` and `ZMud cal` values will be obtained from `Depth Specific Settings` entry

\*\* General Settings \*\*

Use General Settings

ON

ZHead Cal Area Ratio

3.70

ZMud Cal Area Ratio

4.00

\*\* Depth Specific Settings \*\*

Dpth Intvl Min(F)	Dpth Intvl Max(F)	Cs Sz (IN)	Cs WT (LB/G)	ZHd Cal ARatio	ZMd Cal ARatio	Thk (IN)	Harmnc K Factor
0.00	1565.00	5.50	36.00	1.50	1.50	0.36	1.00
0.00	17360.00	5.50	20.00	1.50	1.50	0.36	1.00

\*\* Constants \*\*

Thickness calculated from

Tool

Radius Offset

0.00

Mud slowness Offset

0.00 US/F

Mud Chamber Equation

Mud Plate

Z\_mud at Calibration

1.75 K/M2

Z\_mud Outside

1.75 K/M2

Gas Impedance Cutoff

0.38 K/M2

Fluid Impedance Cutoff

2.30 K/M2

Contam Impedance Cutoff

2.70 K/M2

Relative Bearing Rotate

OFF

RB Offset Angle

0.00 DEG

Cement Density

14.00 LB/G

DOWNHOLE EQUIPMENT

C:\Users\le197426\Desktop\EXTRACTION\MICKEY #2\MICKEY # MAIN PASS\_001.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

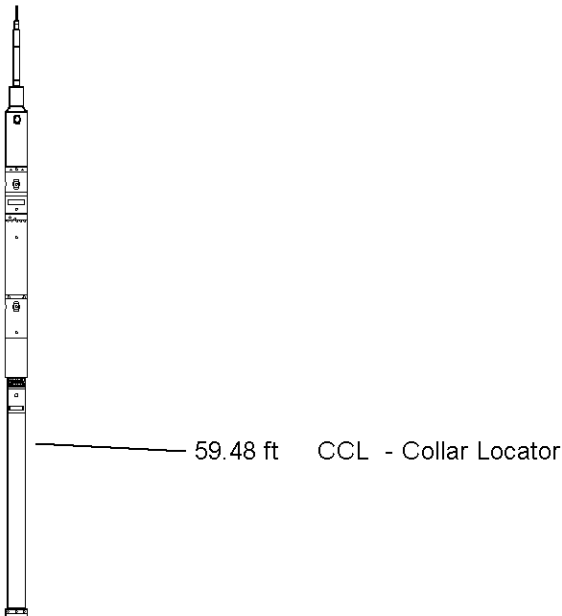
XOV-WC 121 LG: 1.05 ft WT: 15.4 lb OD: 3.386 in

Swivel Head 55 pin

SWH-CC 163 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



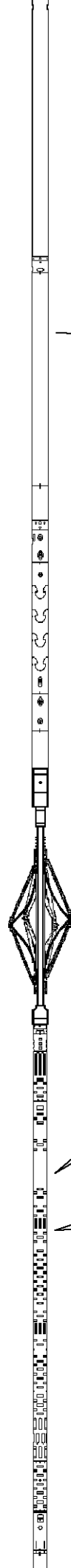
Communication Cartridge 55pin 3-3/8in  
WCC-DA 141 LG: 4.60 ft WT: 63.9 lb OD: 3.386 in

Gamma Ray  
UGR-JD 223 LG: 4.60 ft WT: 81.6 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 132 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

Cement Bond Tool  
CBT-AA 114 LG: 10.75 ft WT: 163.1 lb OD: 3.386 in



51.39 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



55 pin Roller Centralizer  
CEN-XA 142 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

Flexible Joint, URS, 55 Pin  
FTP-FA 132 LG: 4.35 ft WT: 90.4 lb OD: 3.386 in

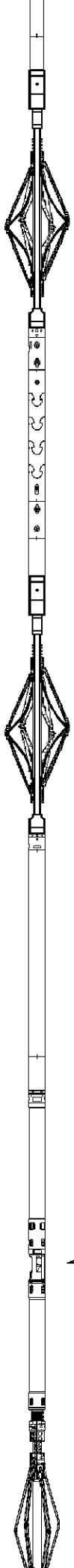
55 pin Roller Centralizer  
CEN-XA 197 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

URS Electronics Cartridge  
UCC-AA 195 LG: 4.51 ft WT: 79.4 lb OD: 3.386 in

URS Sonde Section  
USS-AB 127 LG: 9.65 ft WT: 167.6 lb OD: 3.386 in

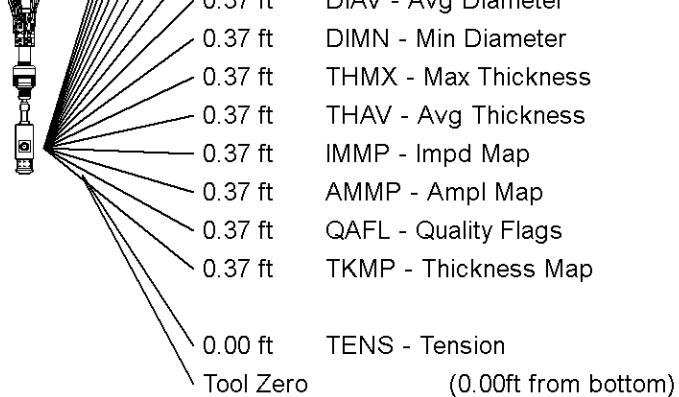
Ultrasonic Radial Scanner Head A  
USH-AB 136 LG: 1.03 ft WT: 13.2 lb OD: 3.386 in

Total Length: 65.13 ft Weight: 1122.2 lb



7.65 ft IMRF - Mud Impedance  
7.65 ft MUDT - Mud Slowness

0.37 ft THMN - Min Thickness  
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 DIAV - Avg Diameter



All measurements relative to tool zero.

COMPANY EXTRACTION OIL AND GAS  
 WELL MICKEY #2  
 FIELD WATTENBERG  
 PROVINCE/COUNTY WELD  
 COUNTRY/STATE UNITED STATES / COLORADO

Elevation Kelly Bushing	feet	Bottom Log Interval	6650.00	feet
Elevation Drill Floor	feet	Depth Driller		feet
Elevation Ground Level	feet	Depth Logger	6650.00	feet



SECUREVIEW  
 ULTRAVIEW / BONDVIEW  
 CEMENT ANALYSIS

**Weatherford®**