



SECUREVIEW
ULTRAVIEW/BONDVIEW
CEMENT ANALYSIS

COMPANY	EXTRACTION OIL & GAS			
WELL	LEONARD 2N			
FIELD	WATTENBERG			
PROVINCE/COUNTY	WELD			
COUNTRY/STATE	USA / COLORADO	LOCATION		
SEC 21	TWP 2N	RGE 67W	Other Services	
Latitude				
Longitude				
API Number				
Permanent Datum	GROUND LEVEL	Elevation 5004 feet		
Log Measured From	KB, 28 feet above Permanent Datum			
Drilling Measured From	KB			
Date	07-OCT-2017	PERFORATION RECORD		
Run Number	ONE	Shot Number	Depth From feet	
Service Order	TBD	Density of Shots	Depth To feet	
Type Log	URS/ICBT			
Depth Driller	12231.00	feet		
Depth Logger	6800.00	feet		
Top Log Interval	0.00	feet		
Bottom Log Interval	6800.00	feet		
Hole Fluid Type	WATER			
Hole Fluid Level	0.00	feet		
Restriction ID	4.653	inches	Gun Type	
Max Recorded Temp			Gun Size	
Well Head Pressure	0.00	psi	CASING / TUBING RECORD	
Well Head Equipment			Size	Weight
Time Well Ready	ROA		inches	pounds/ft
Time Logger Bottom	SEE LOG		feet	feet
Unit	14115		5.500	20.00
Equipment Name	WSS-E		0.00	12231.00
Base	CASPER			
Recorded By	P. MAZUR			
Witnessed By				

CASING / TUBING RECORD

Type	Grade	TypeJoint	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
CASING	P 110	LTC	5.500	0.00	12231.00	20.00

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.

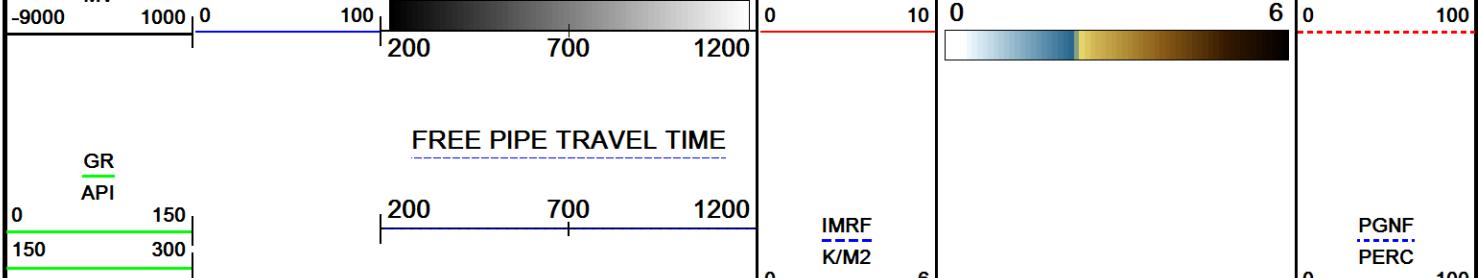
MAIN PASS 1:240

Depth Based Data - Maximum Sampling Increment 2.5cm
 Filename: C:\Logs\Extraction\LEONARD 2N\LEONARD 2N MAIN URS FINAL.dta
 System Versions: Logged with 16.05.3841 Plotted with 16.05.3841

Plotted on 08-OCT-2017 13:07

Recorded on 08-OCT-2017 12:48

Depth in Feet	CCL MV	AM3F MV	XY Signature 5FT microseconds	10000	IMAV K/M2	Impd Map MRAYLS	PGAS PERC
			-10000				



Timing Marks every 60.0 sec
 ←

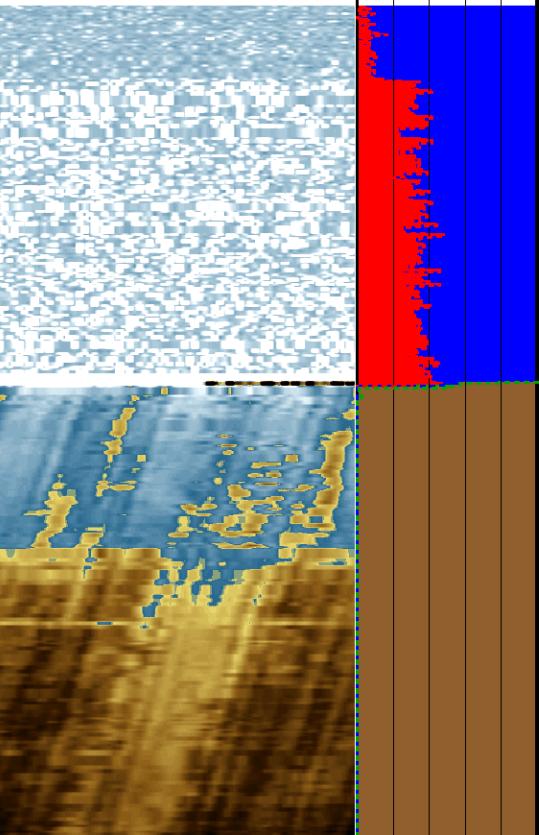
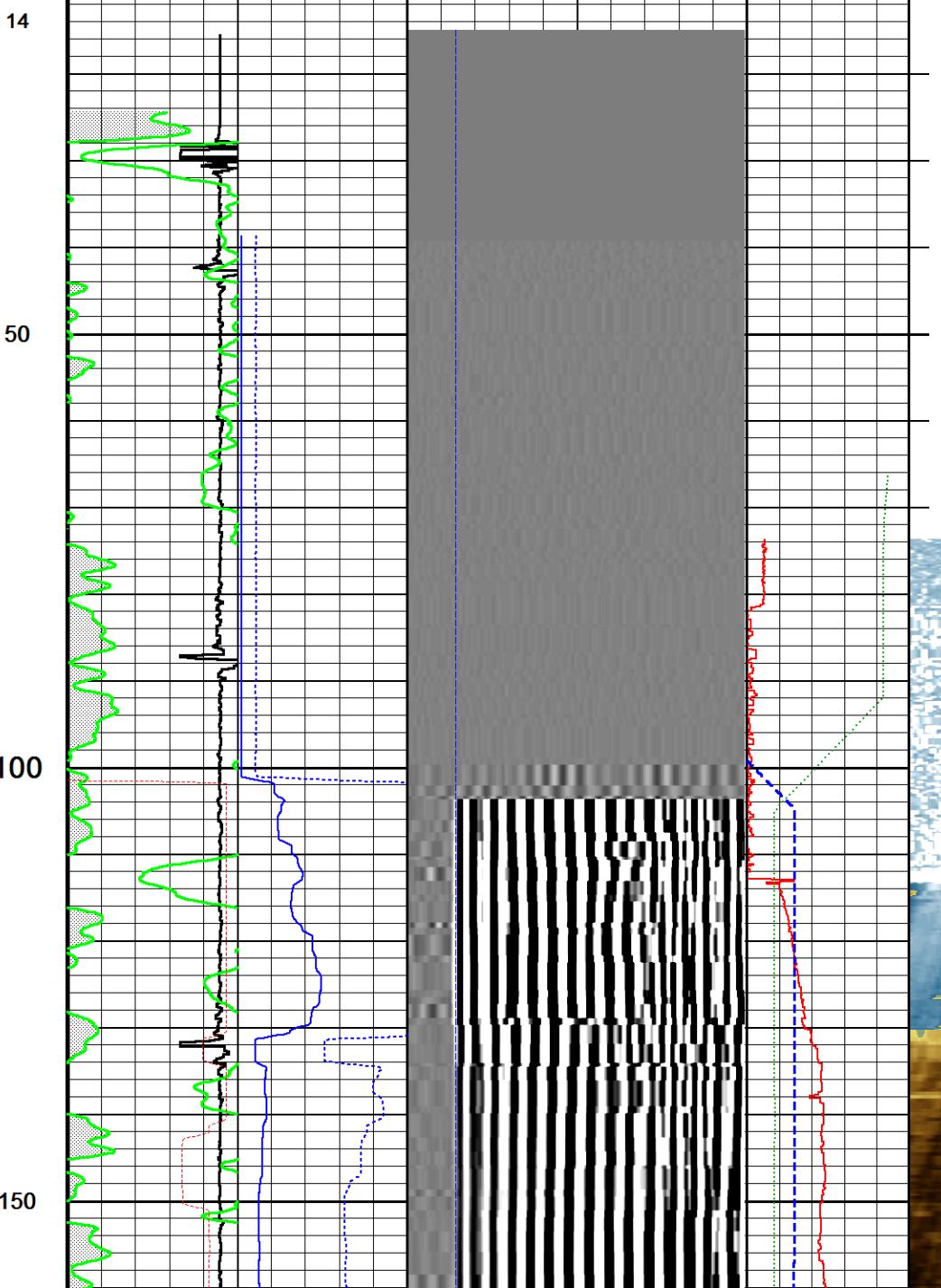
TM3 US
 600 200 0 20

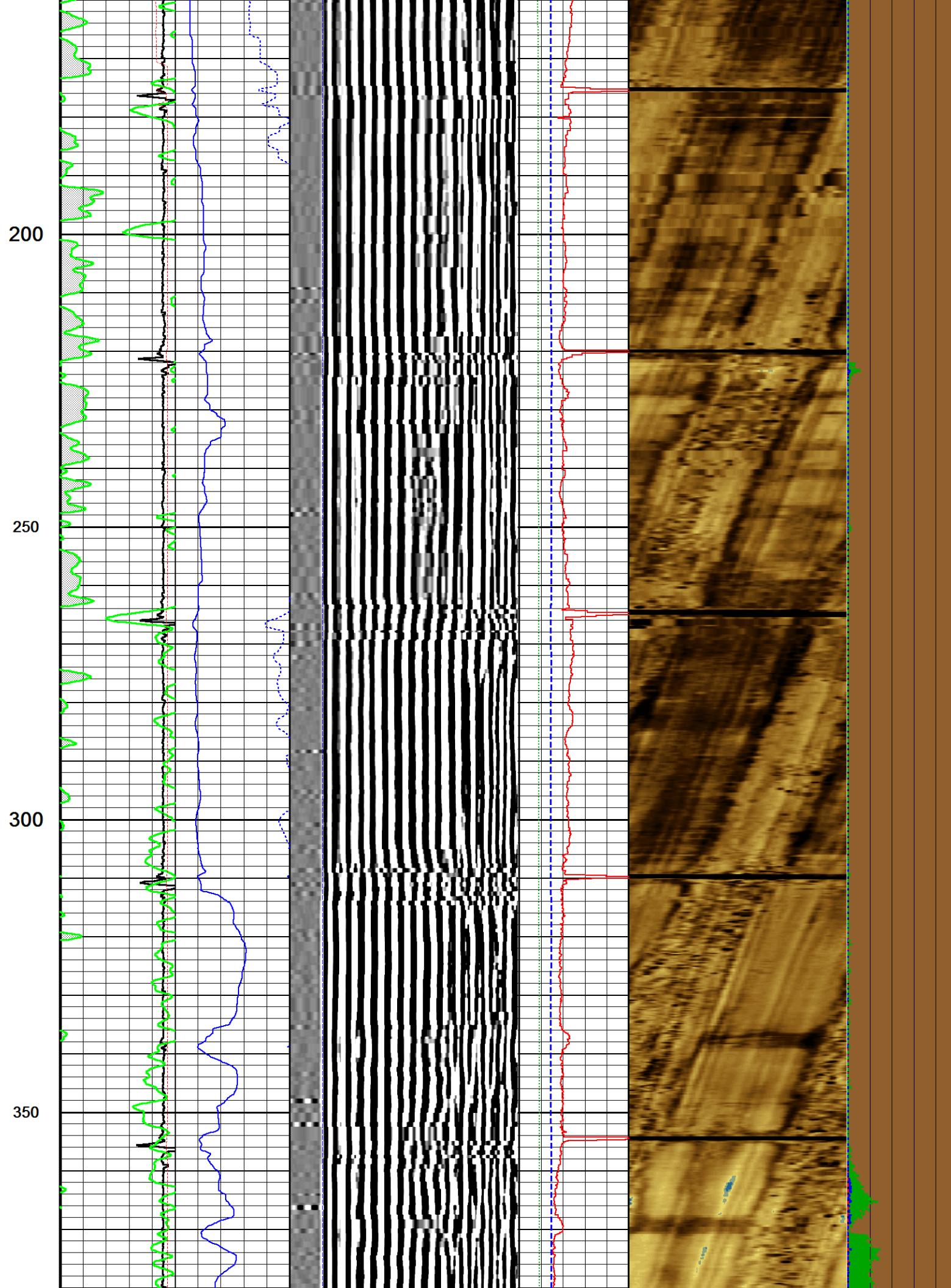
AM3F MV
 200 700 1200

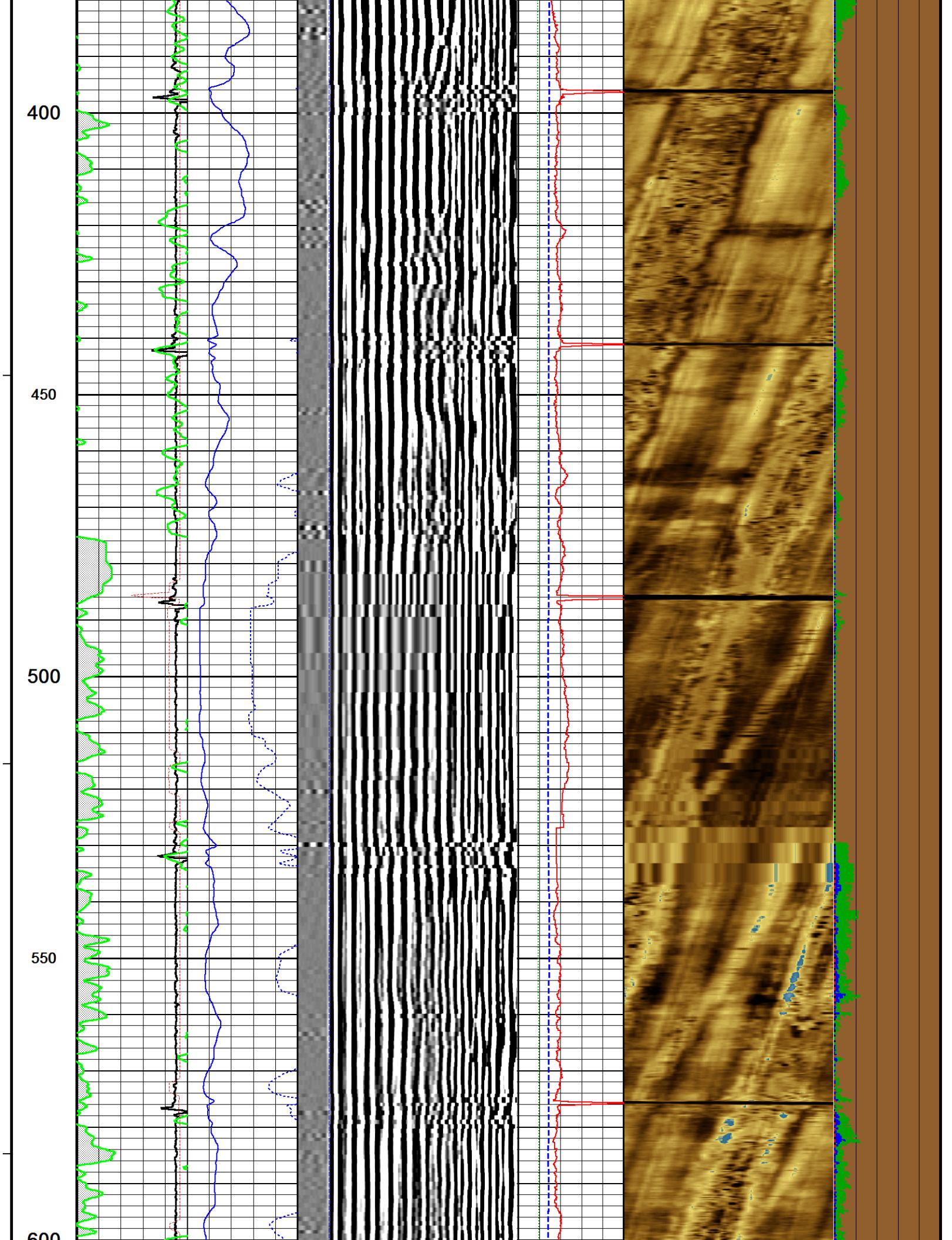
MUDT US/F
 220 120

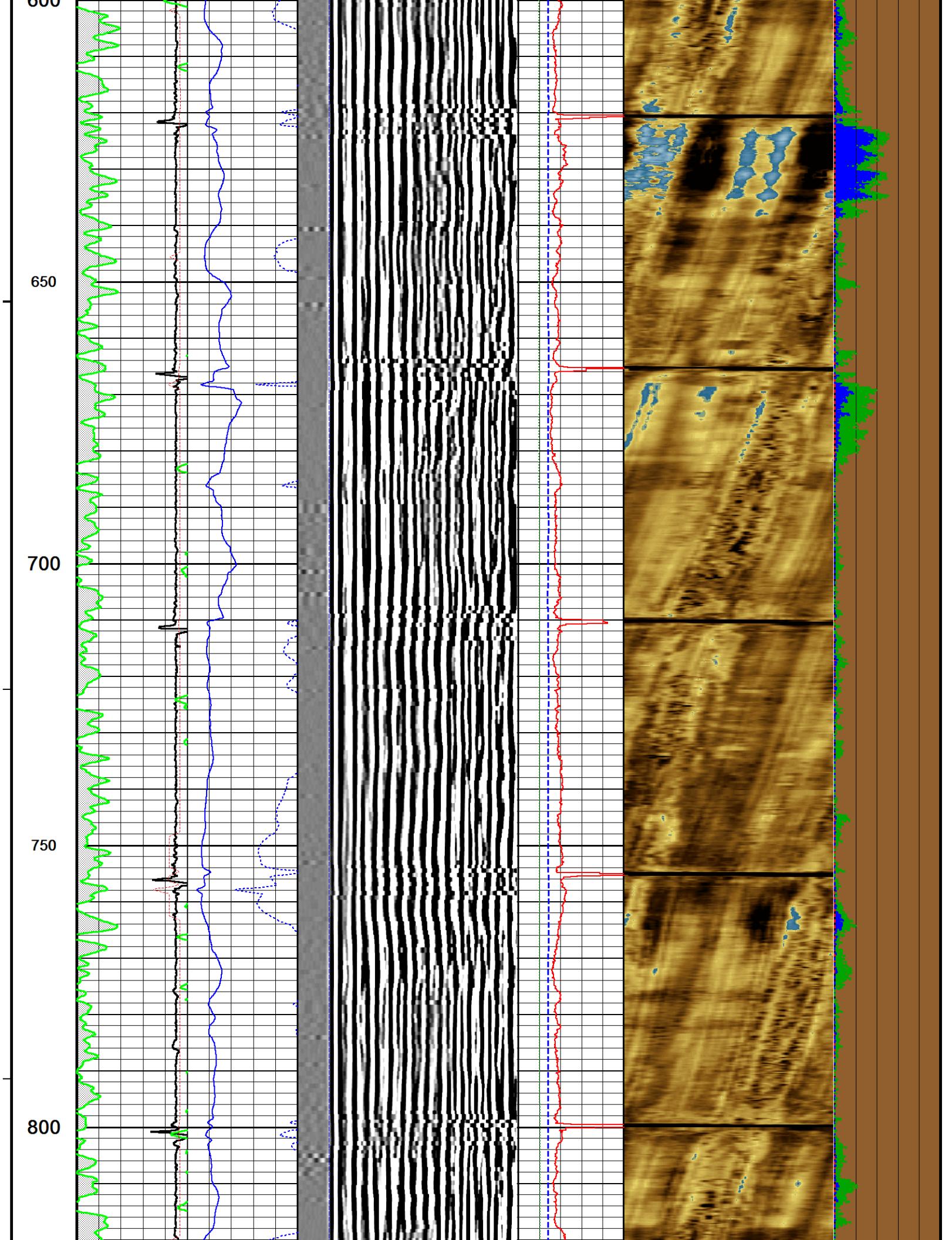
PCON PERC
 0 100

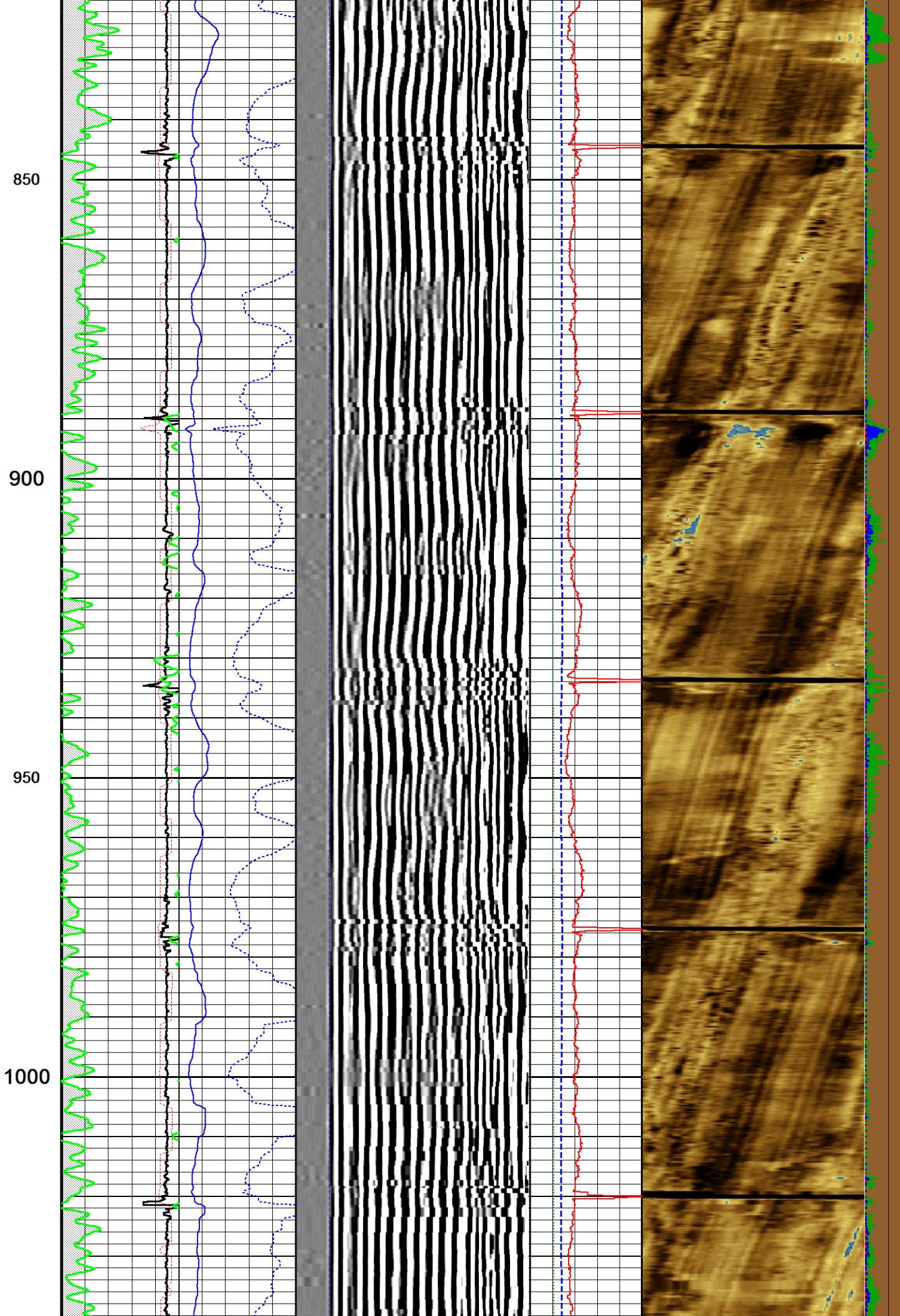
Replay Scale 1:240











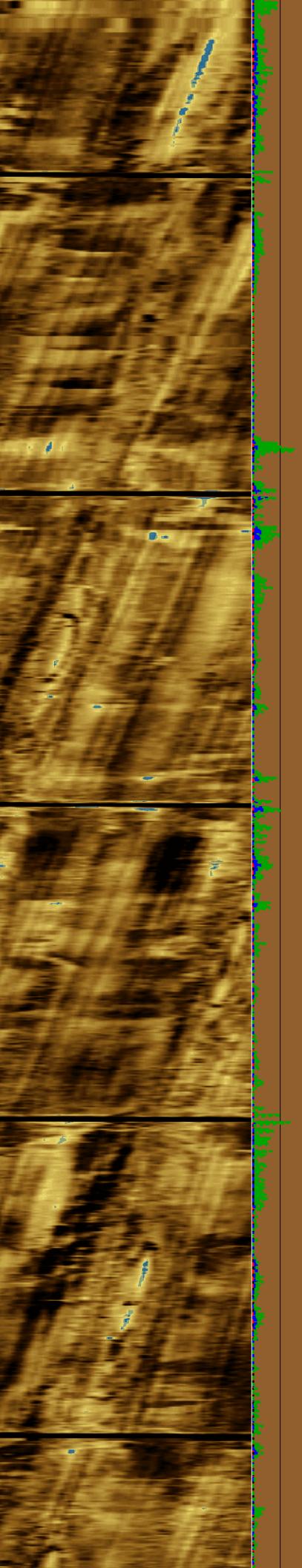
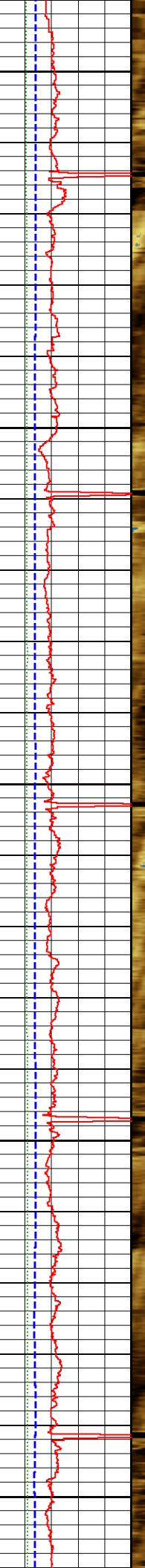
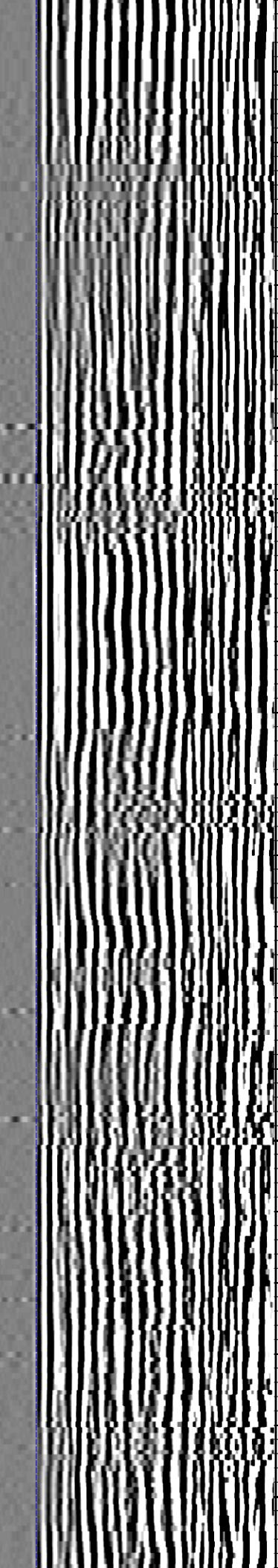
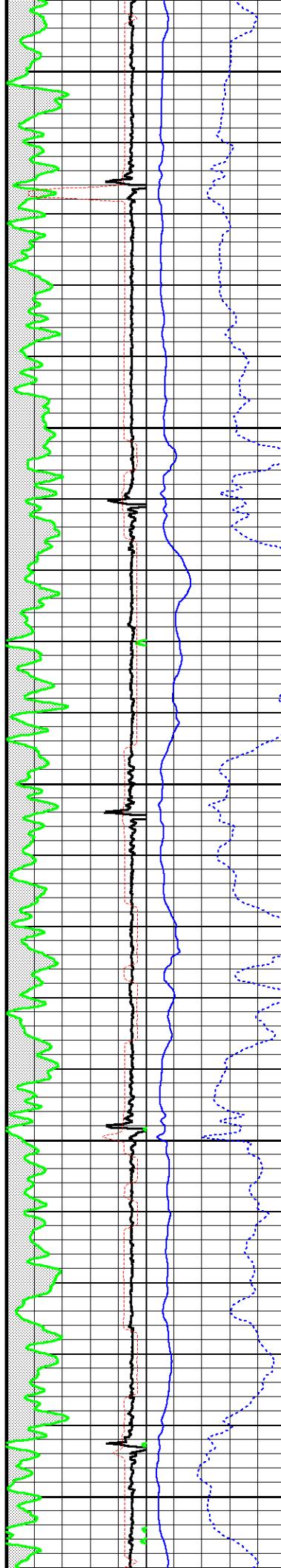
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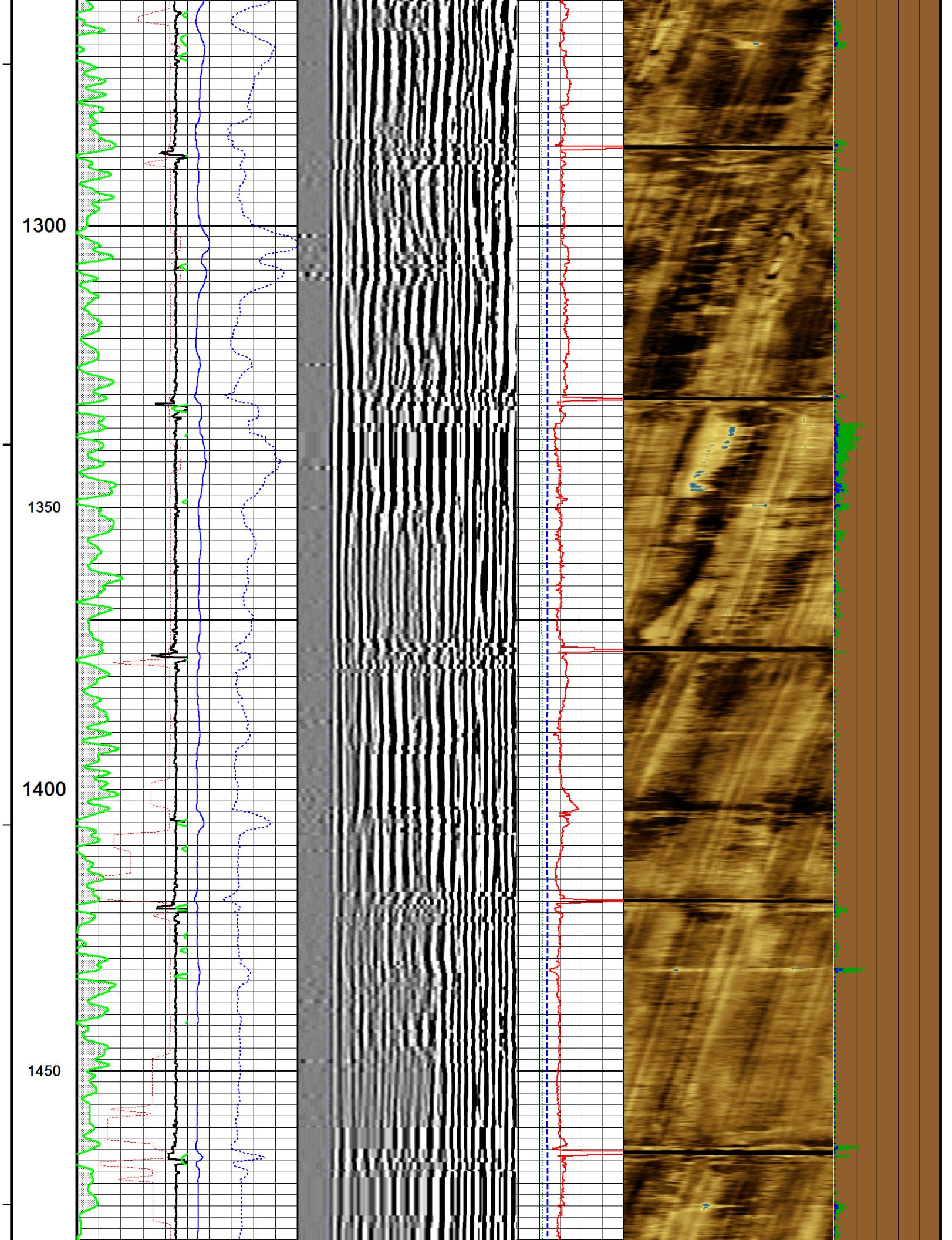
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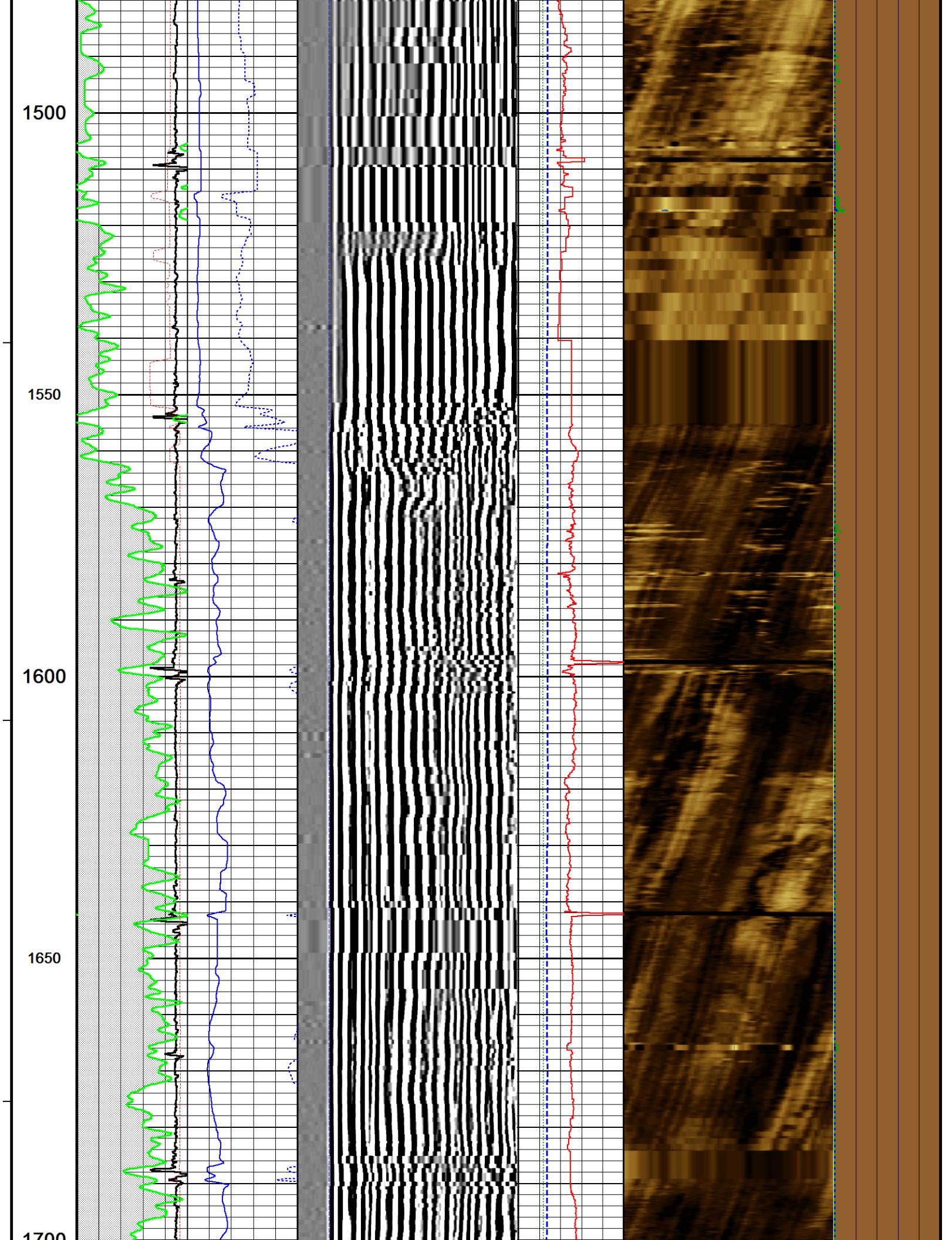
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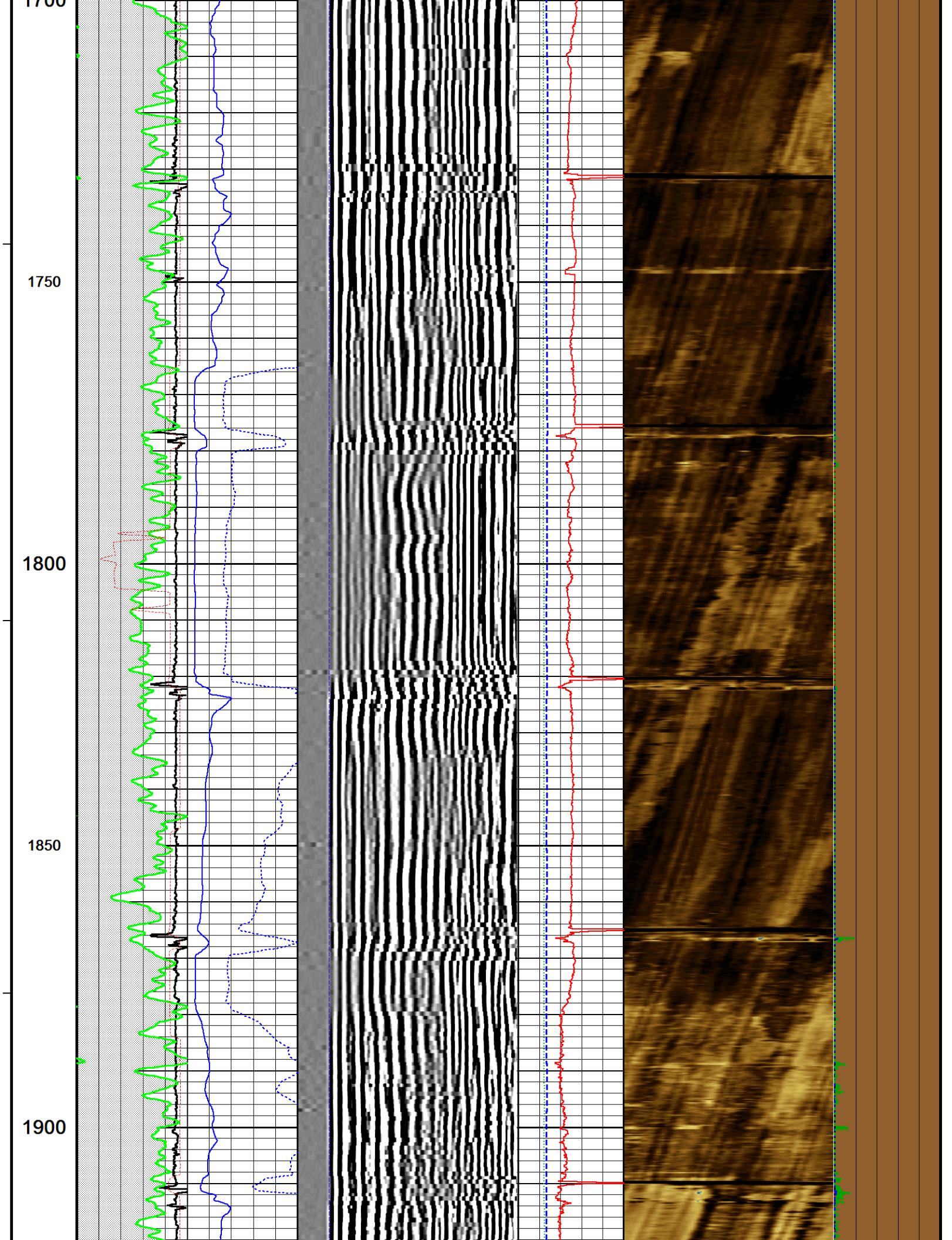
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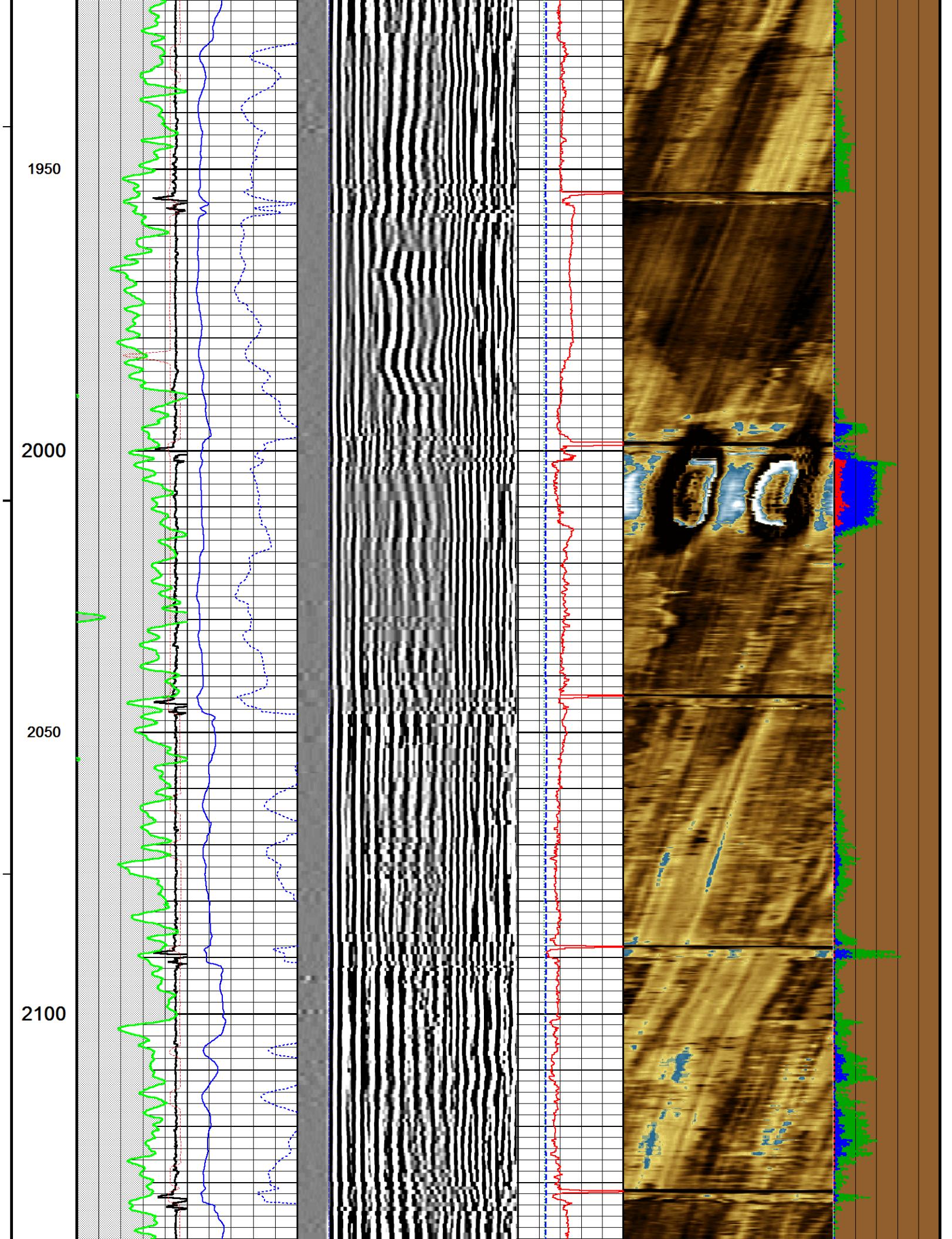
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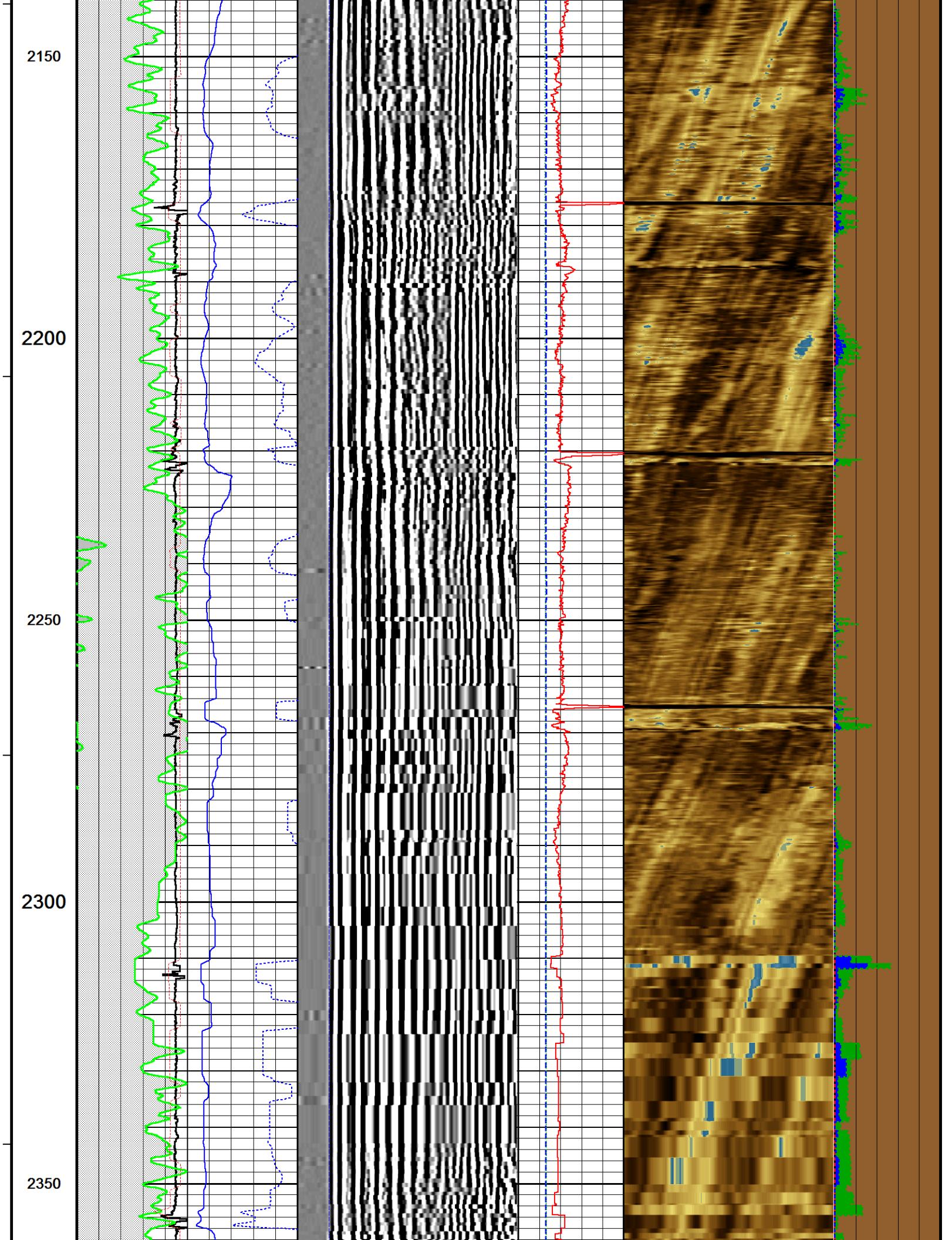


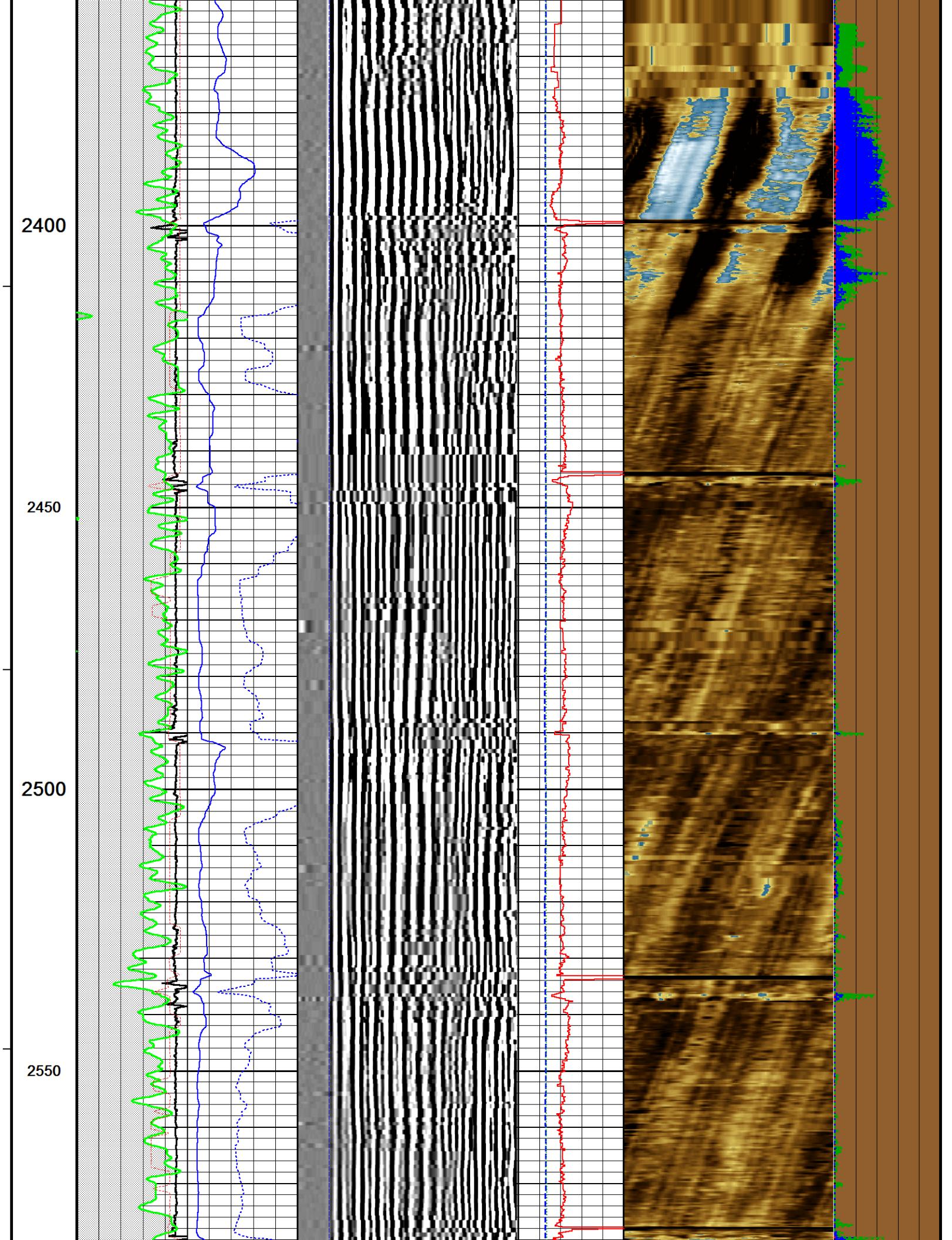


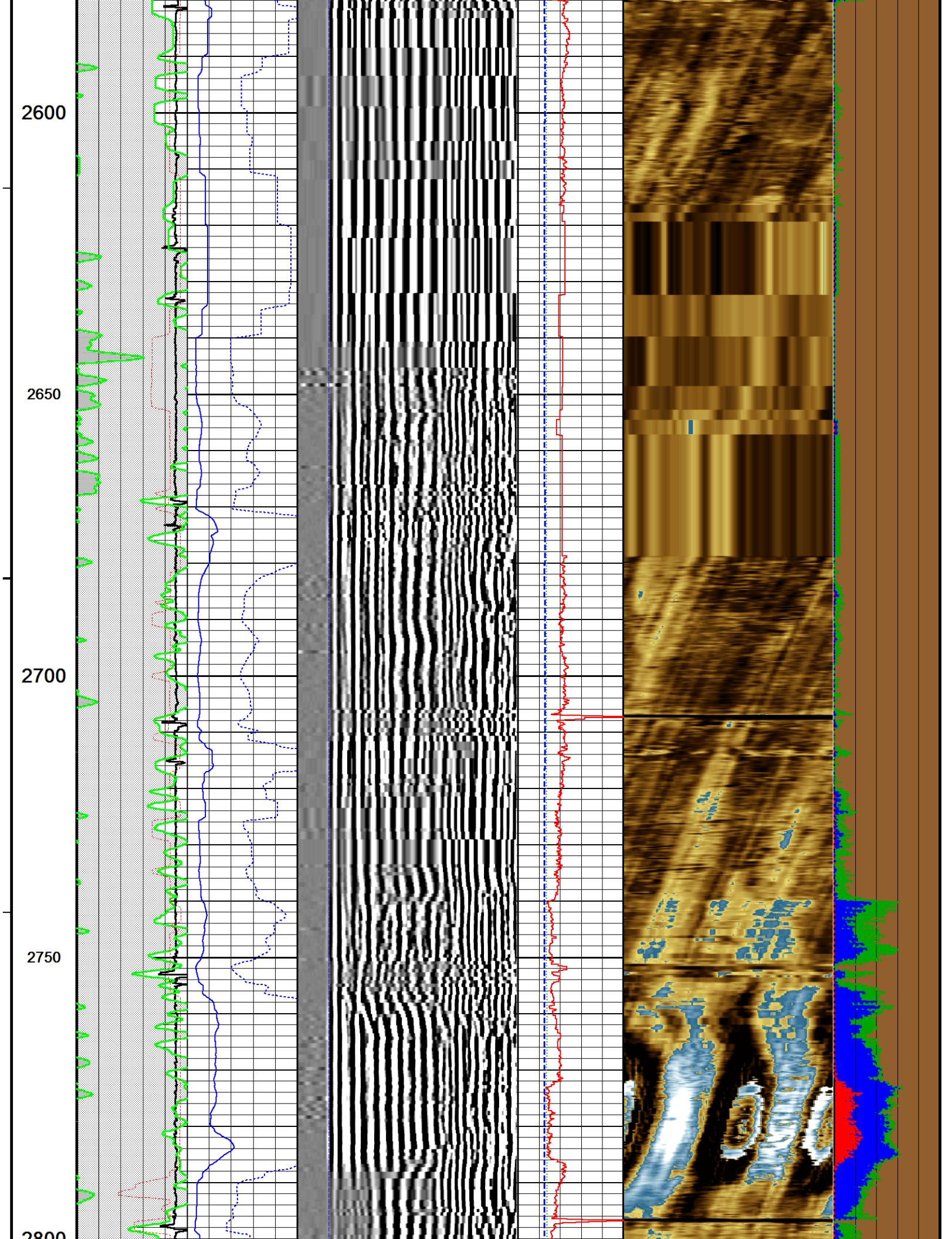


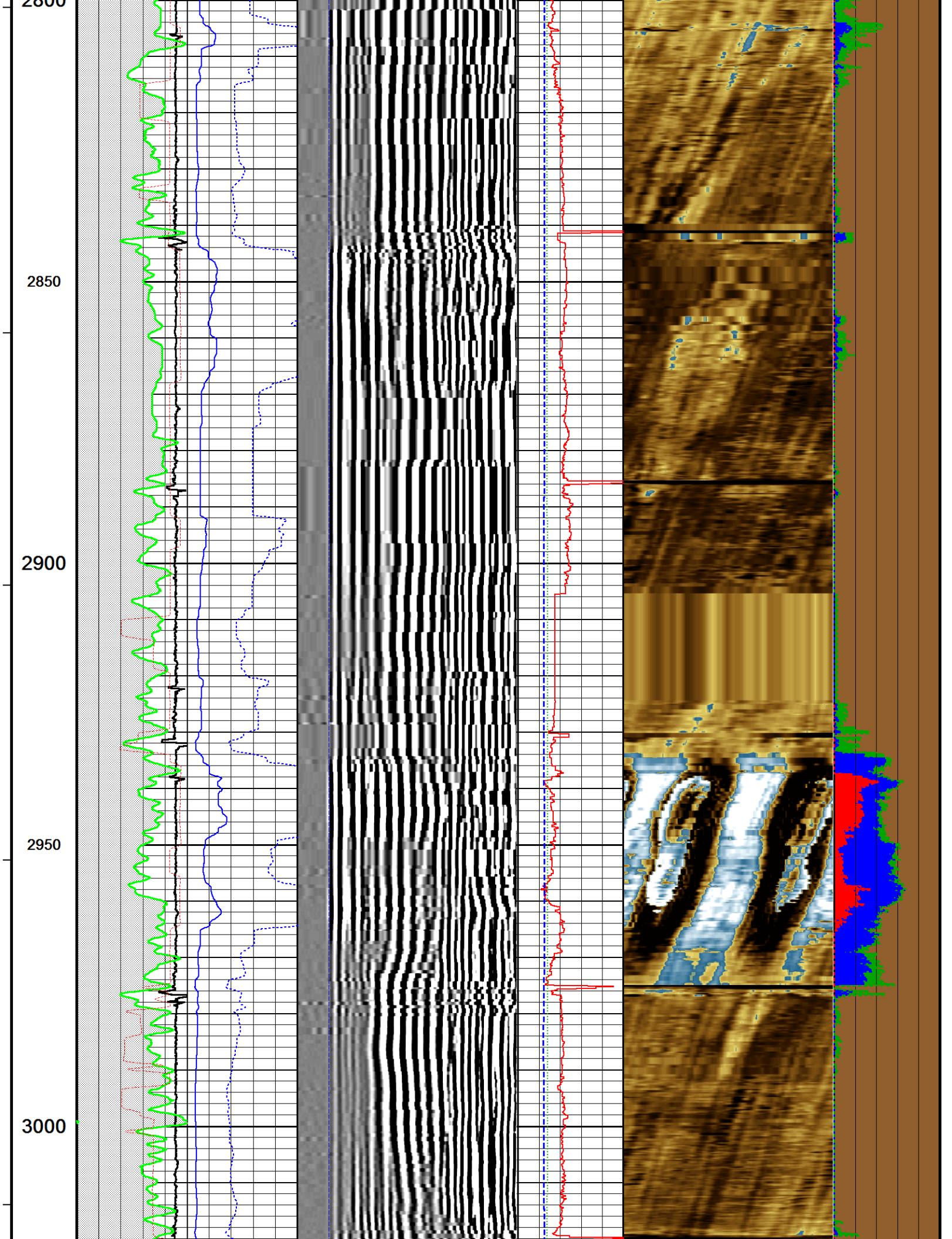


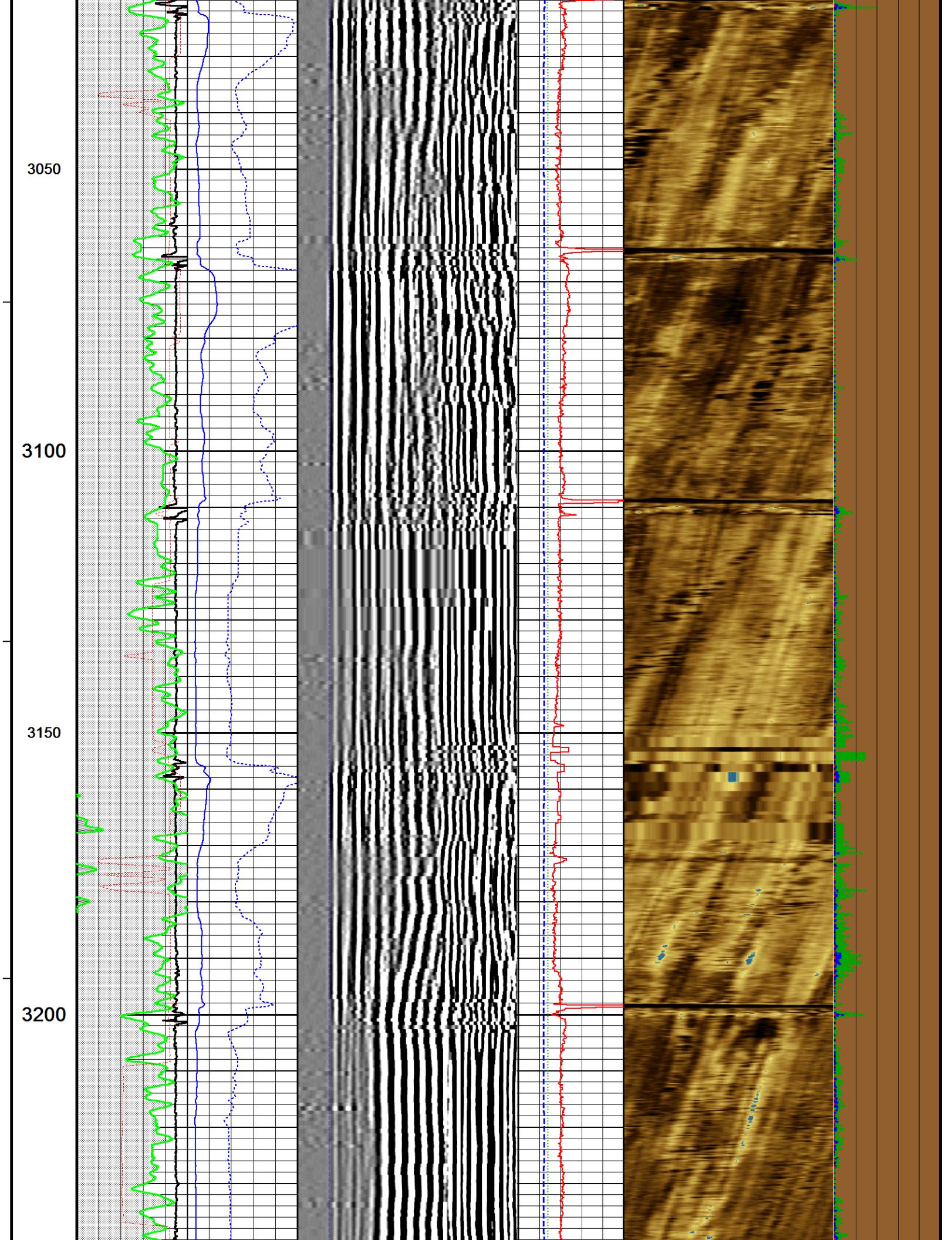


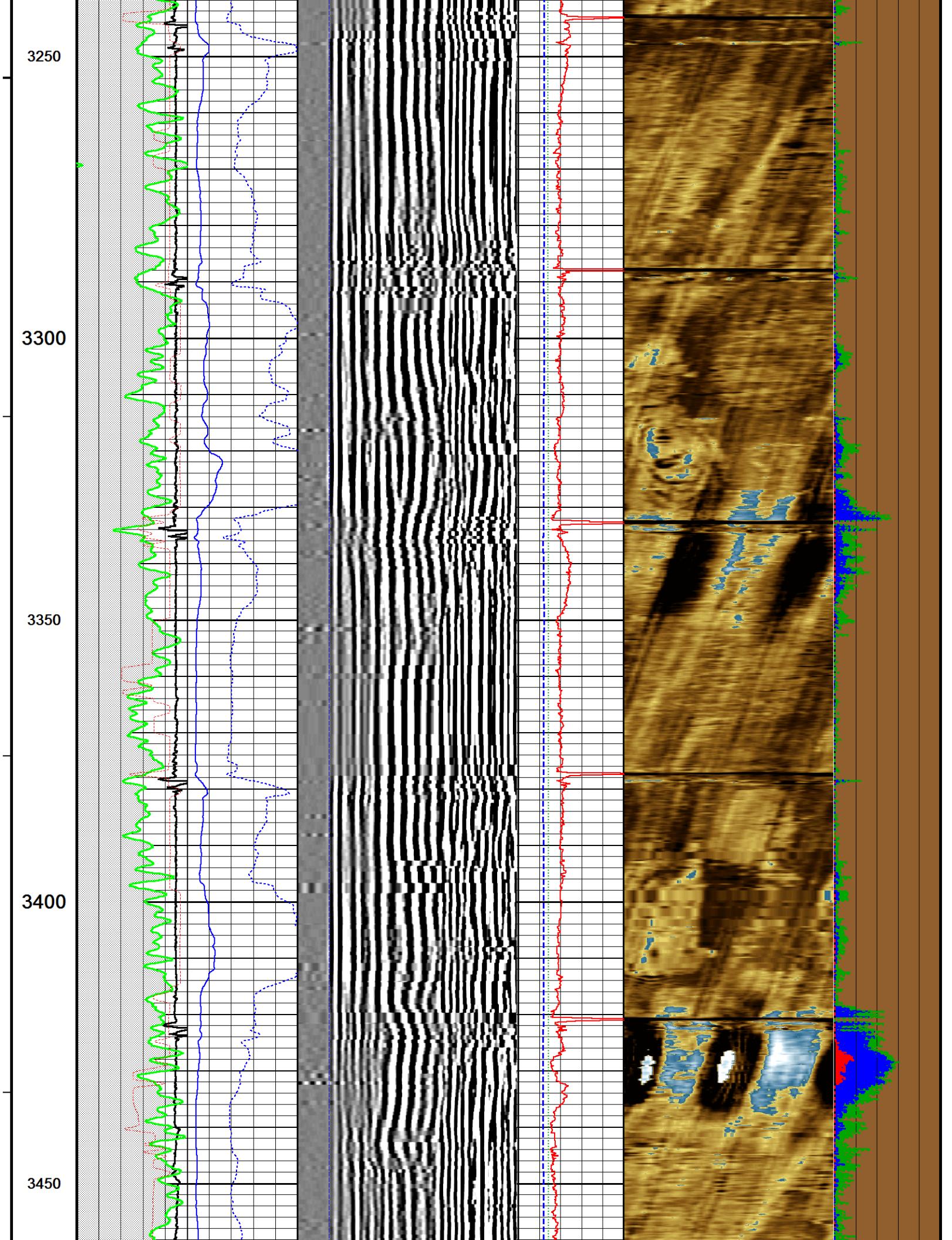


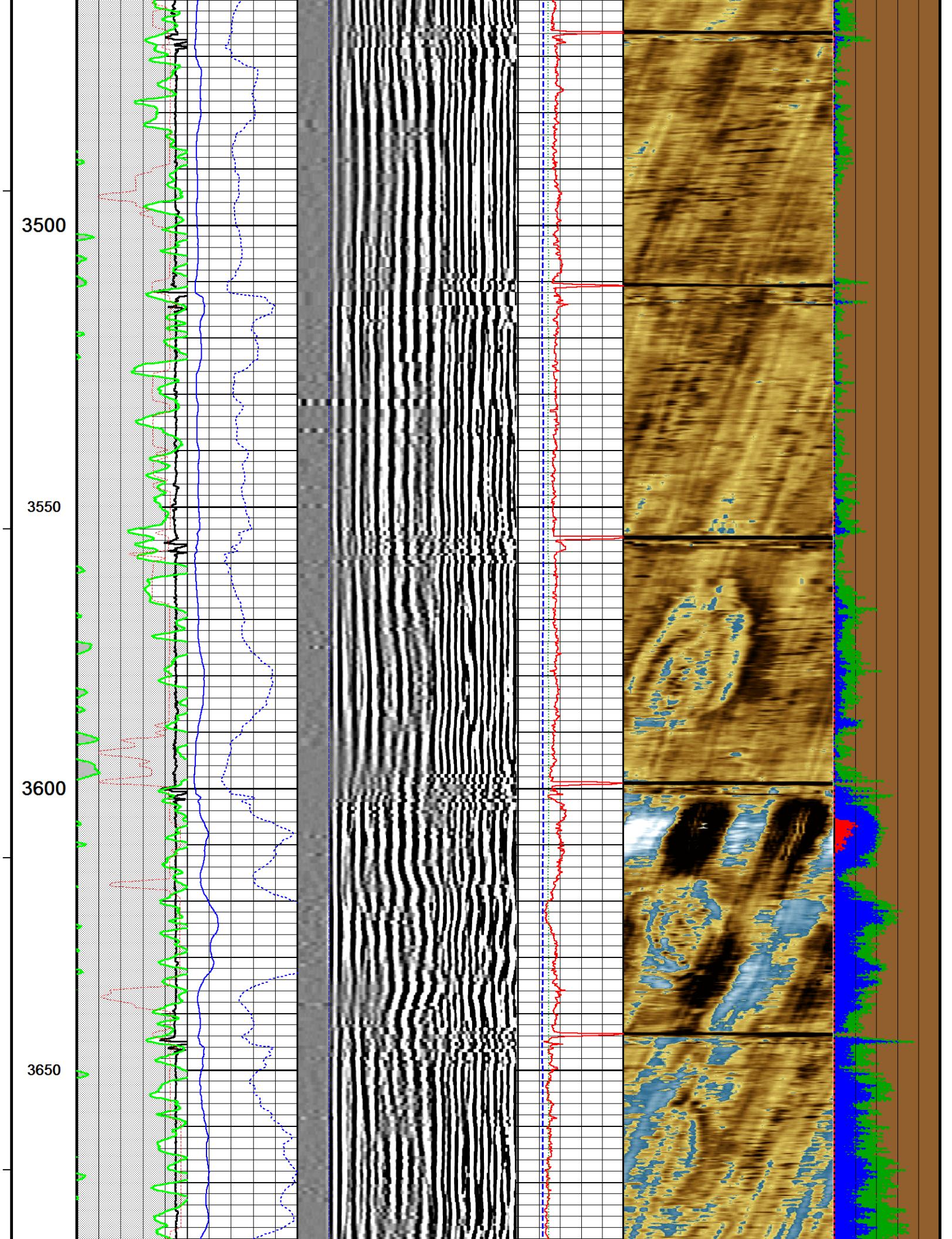


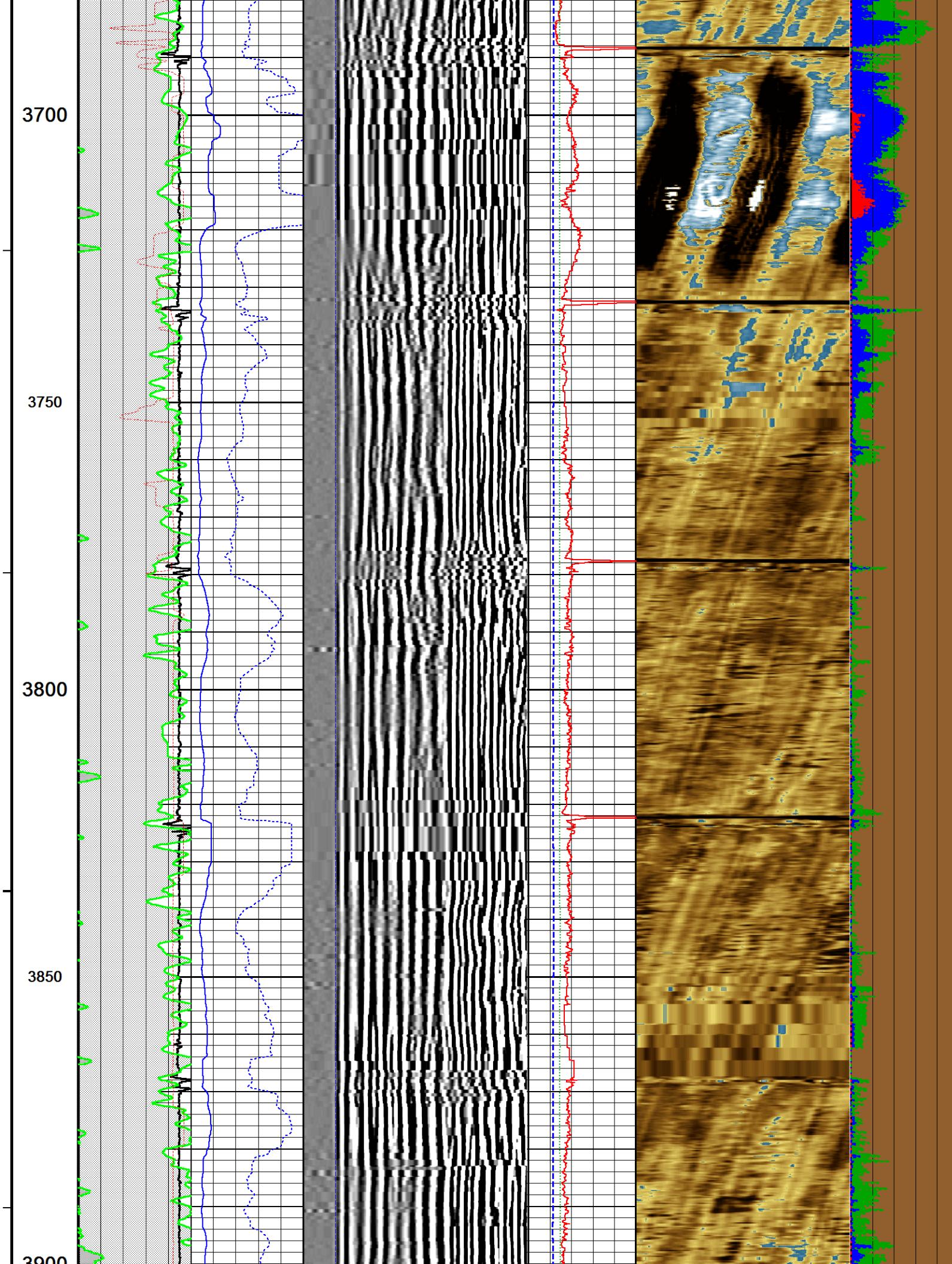


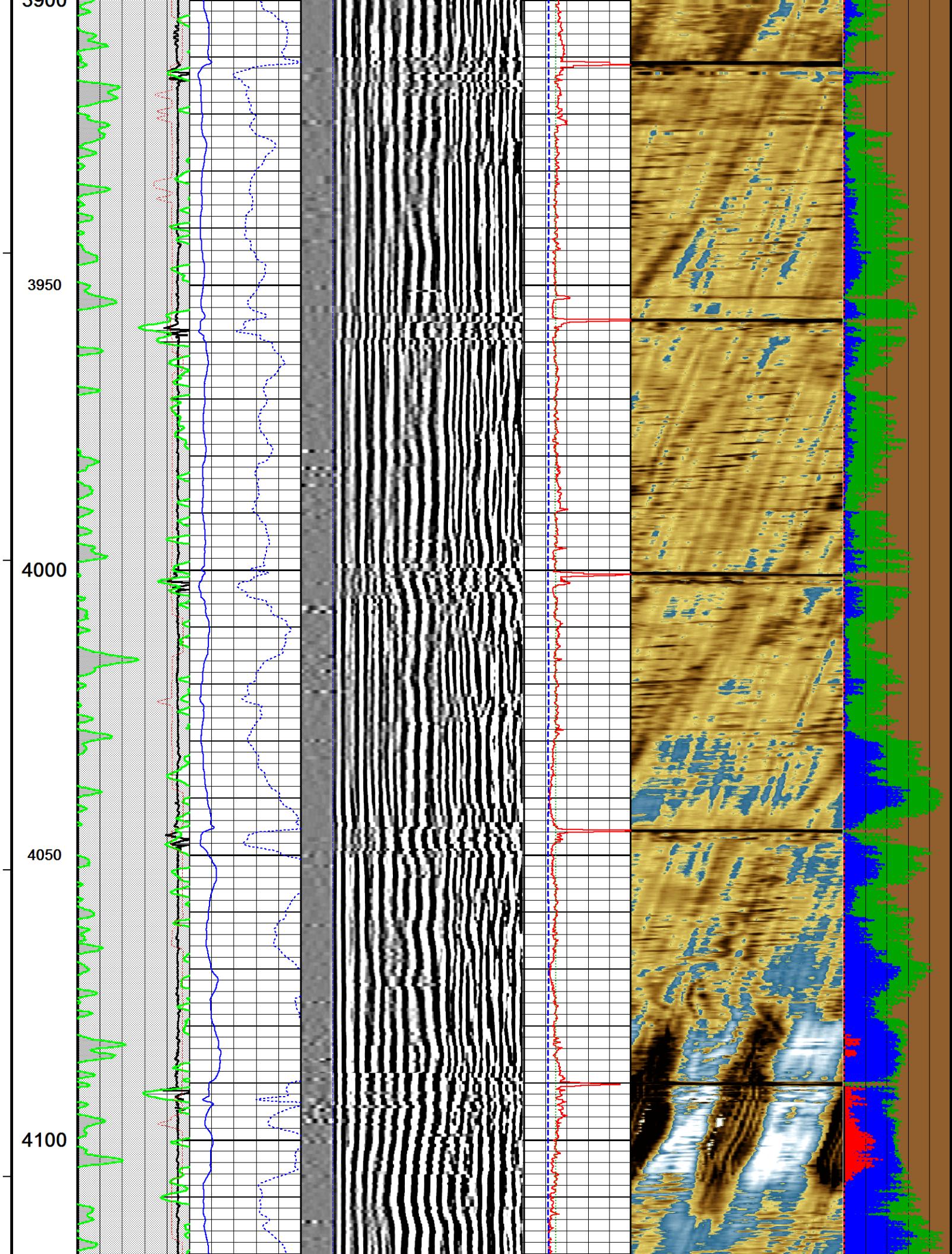


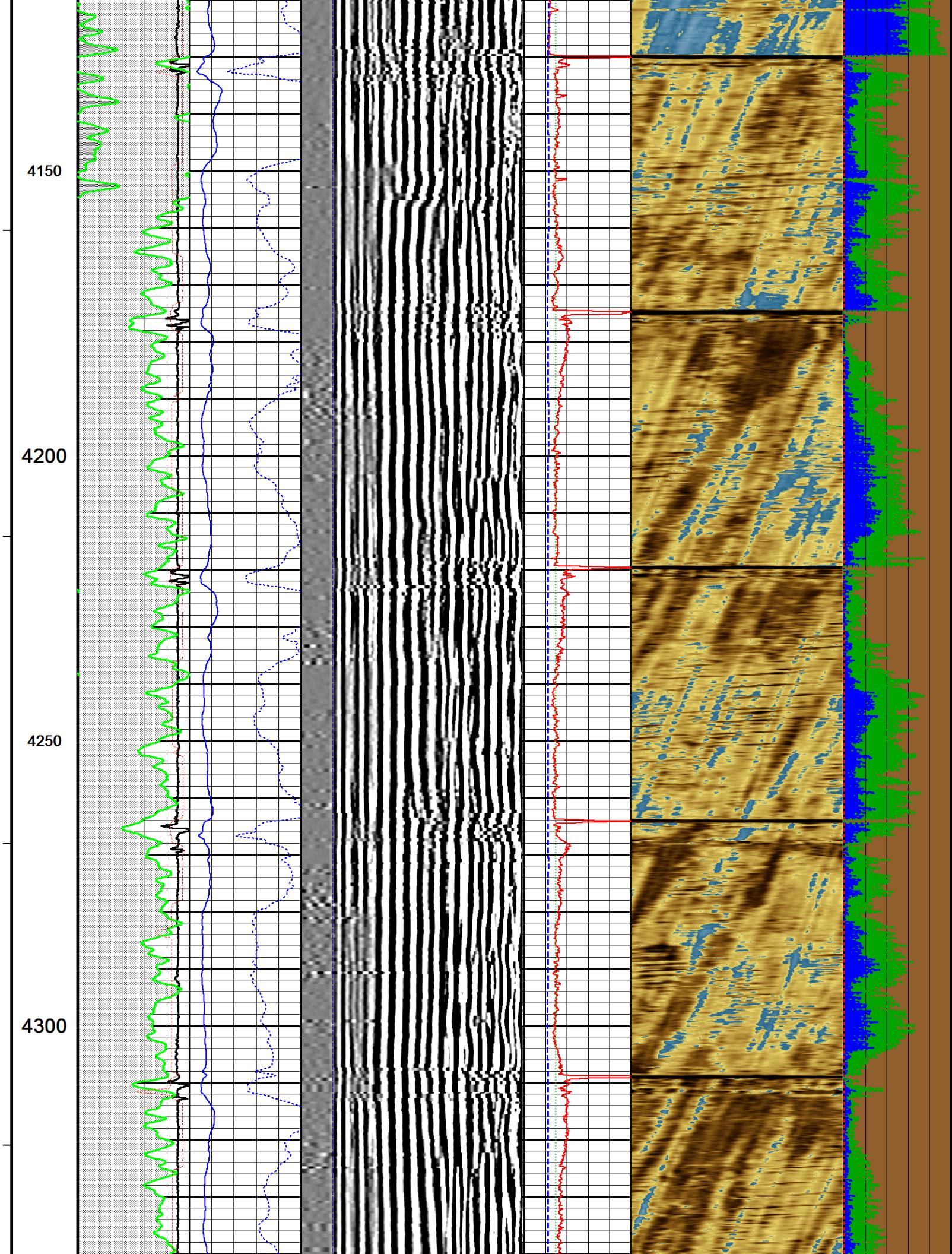


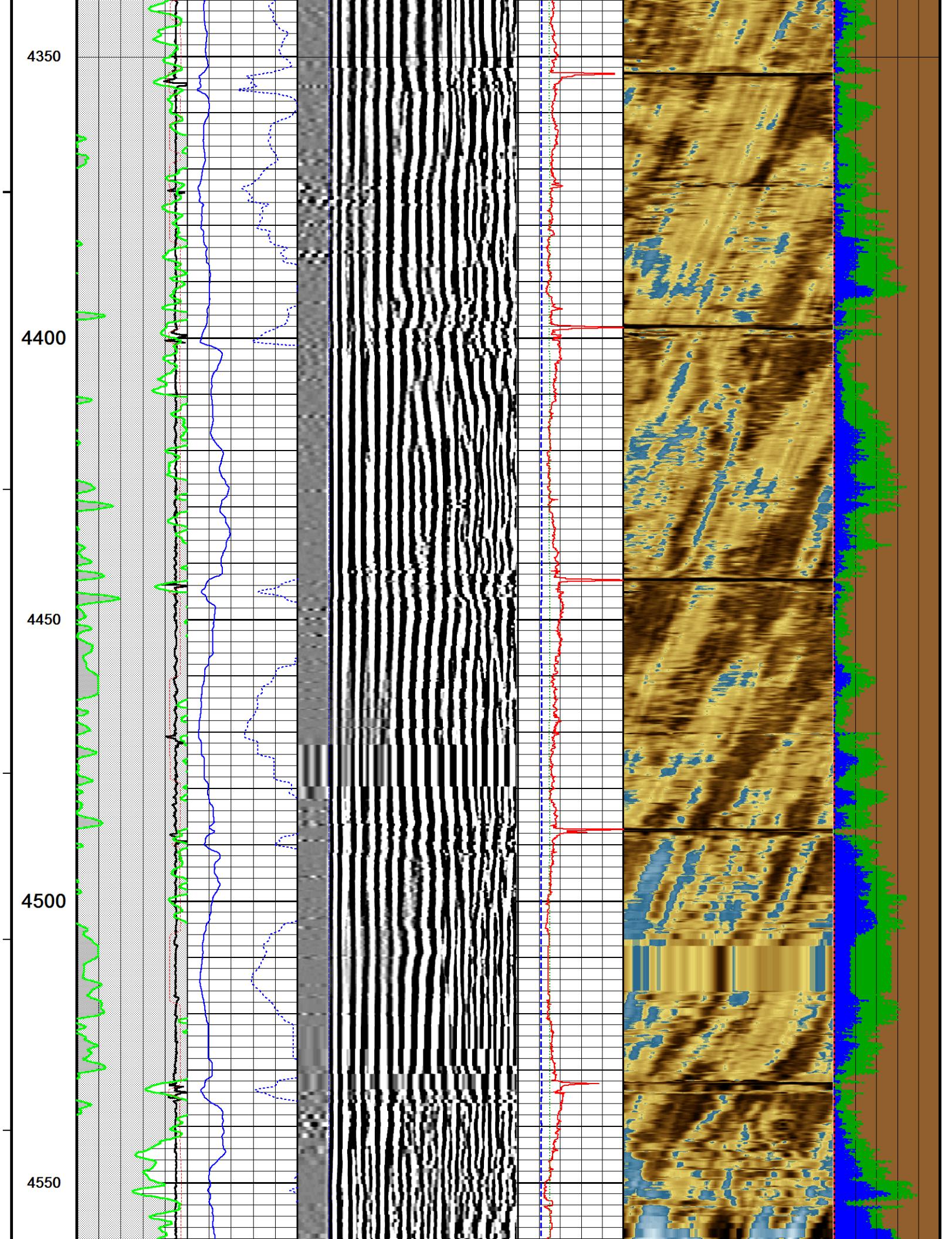


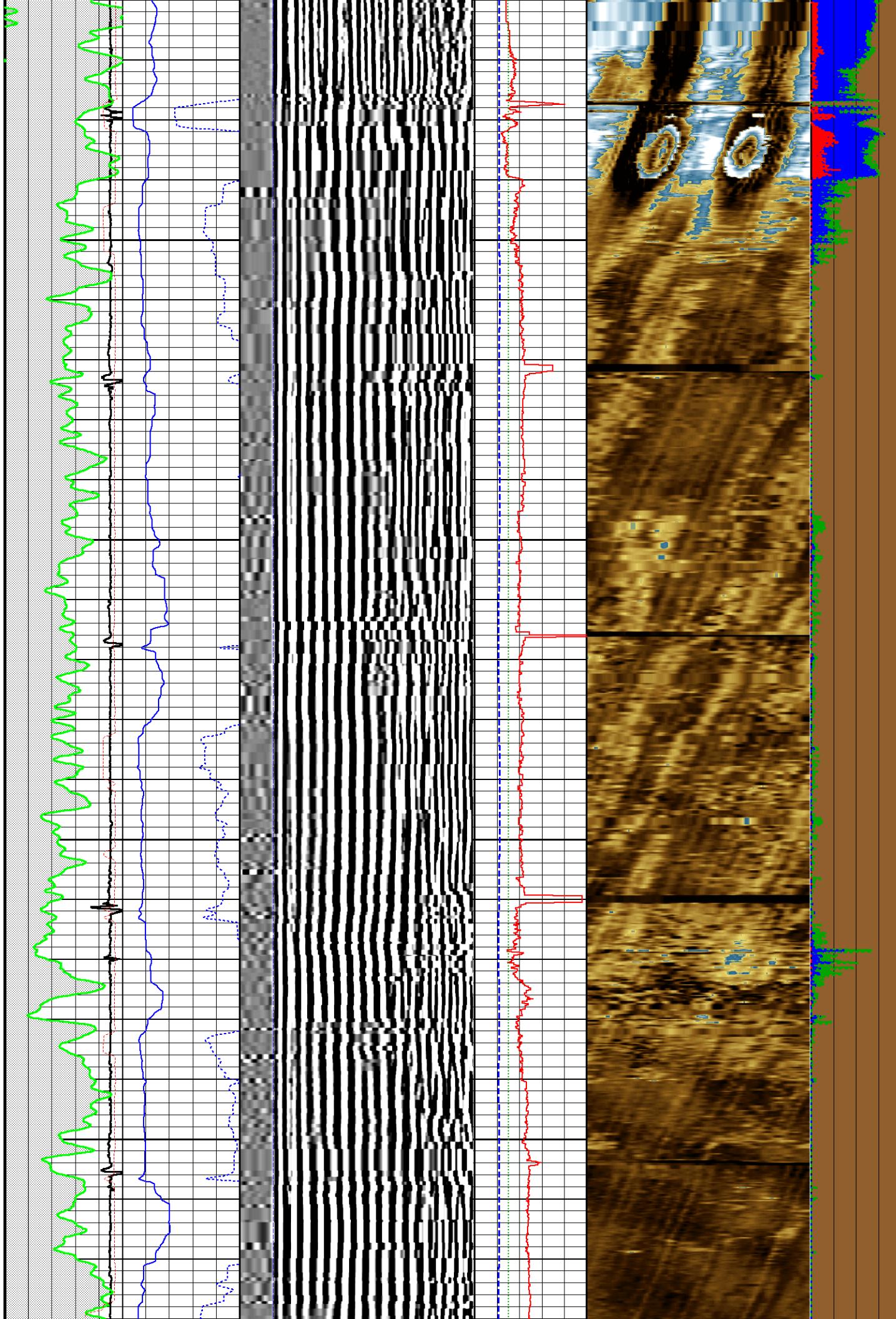


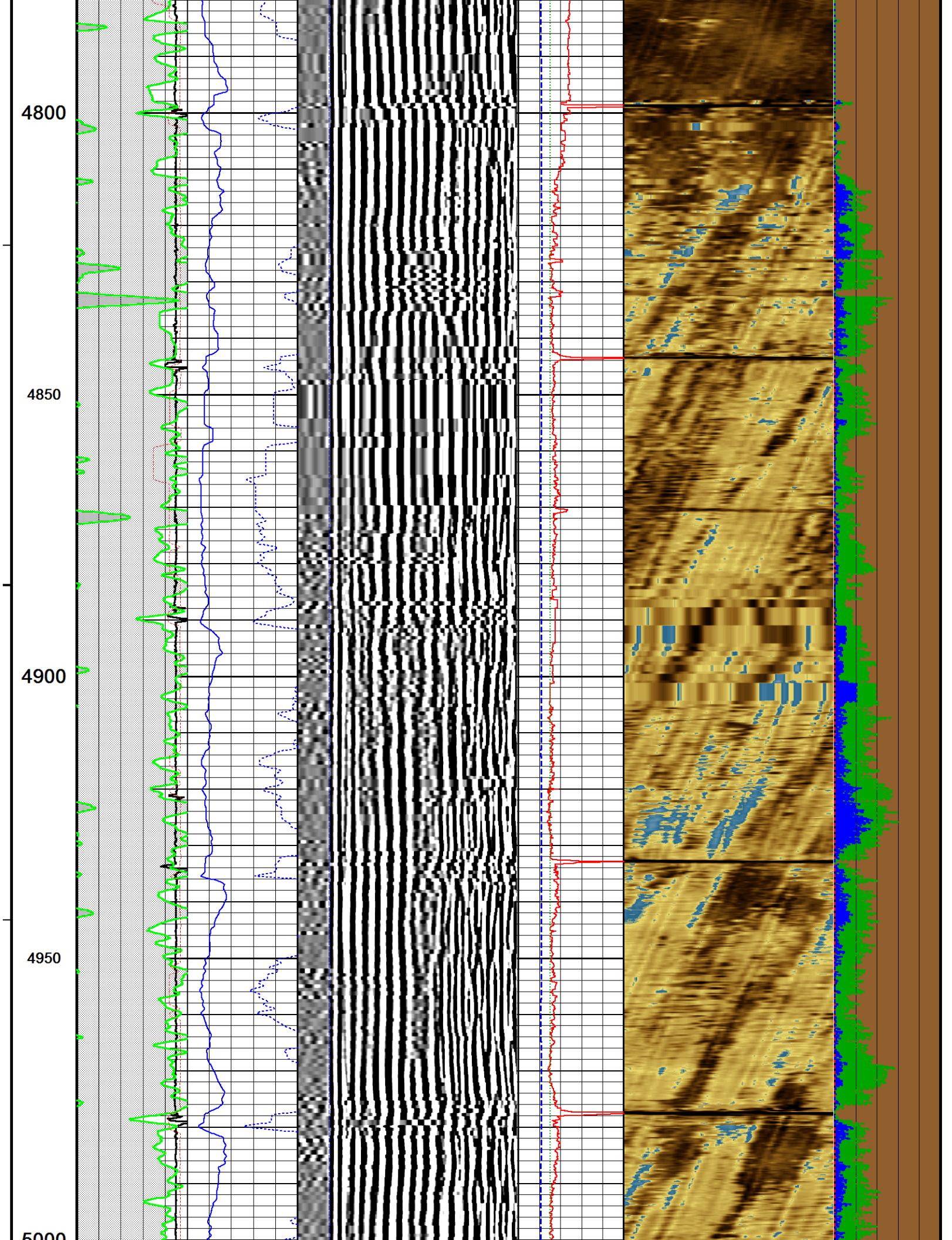


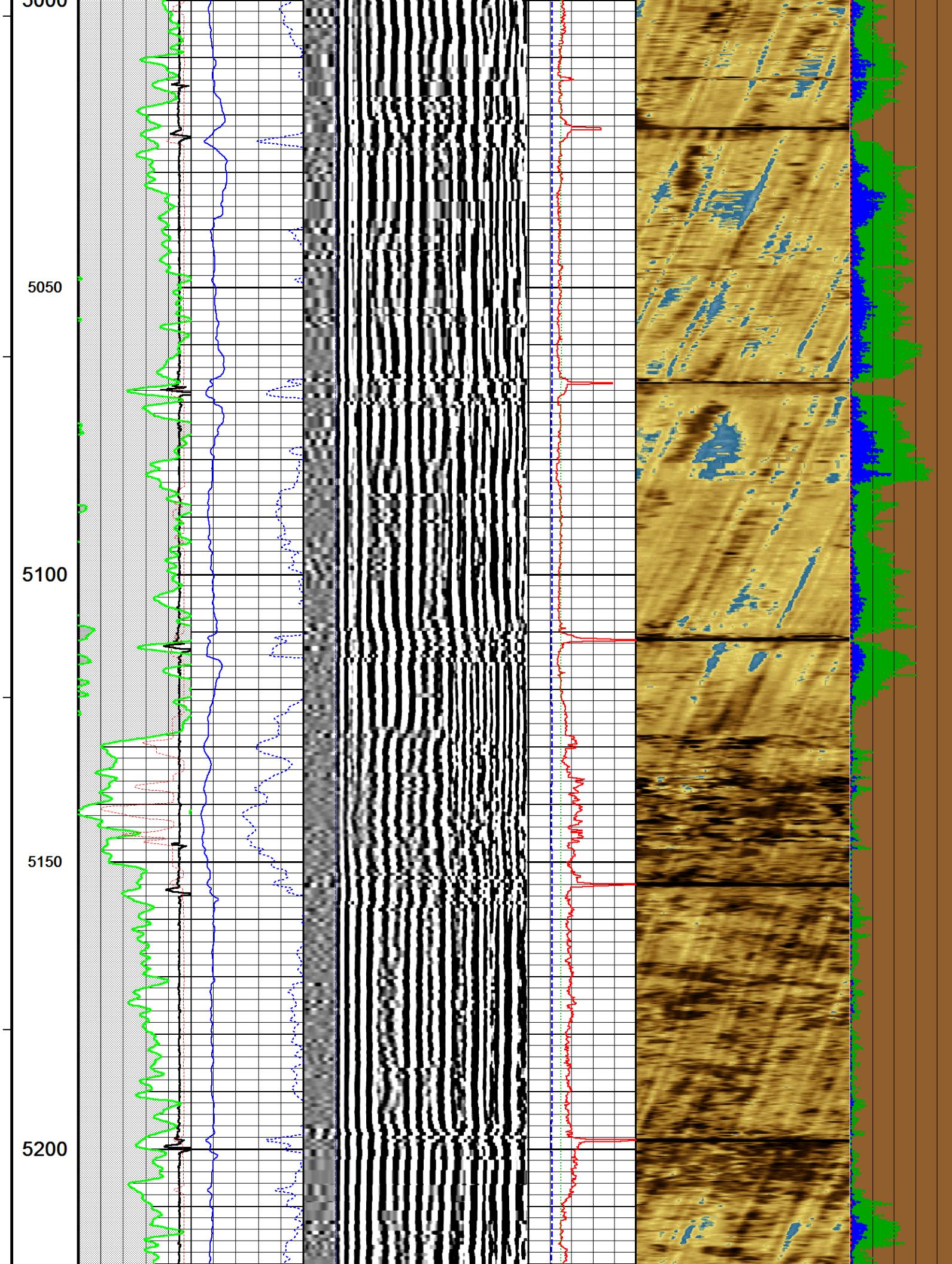


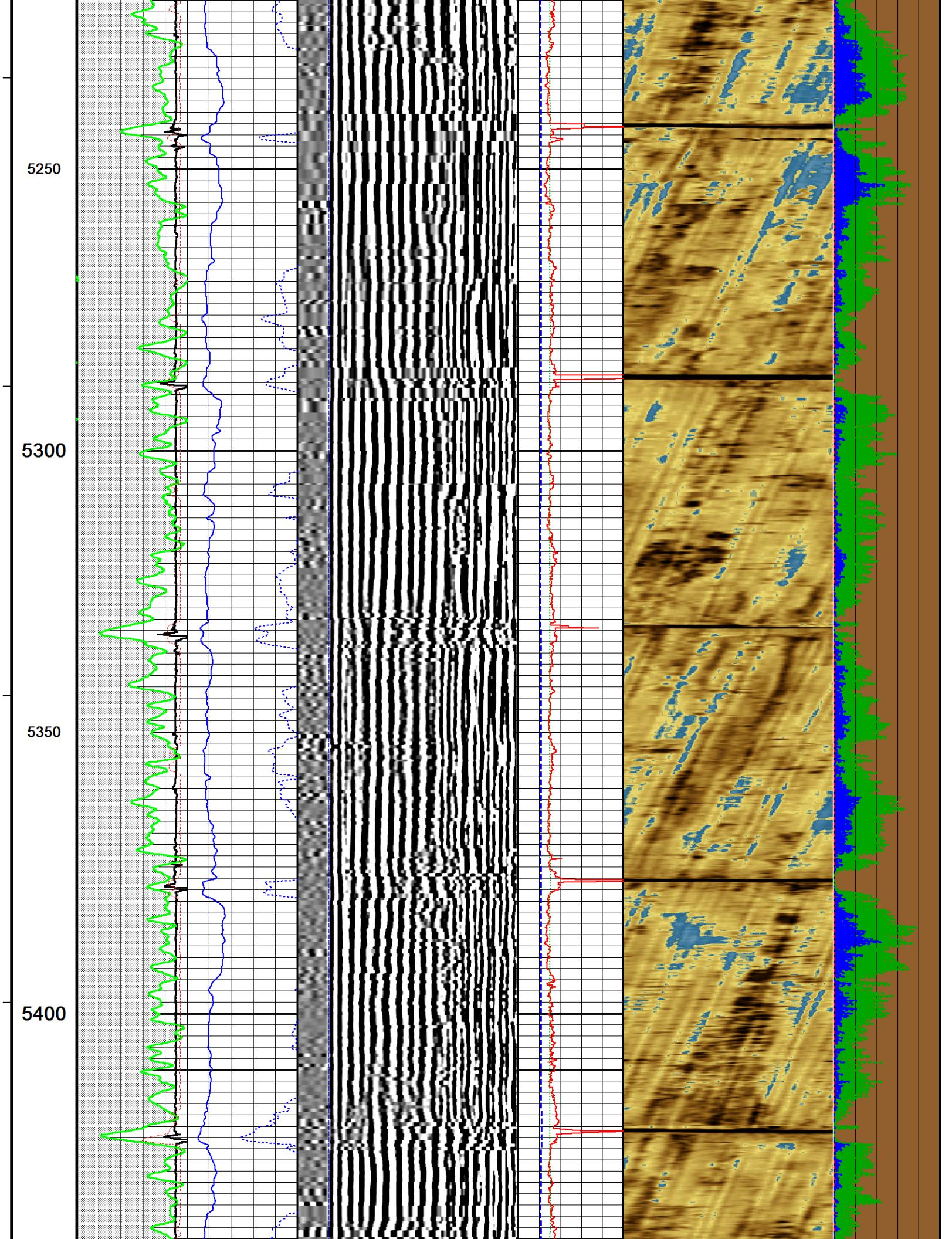


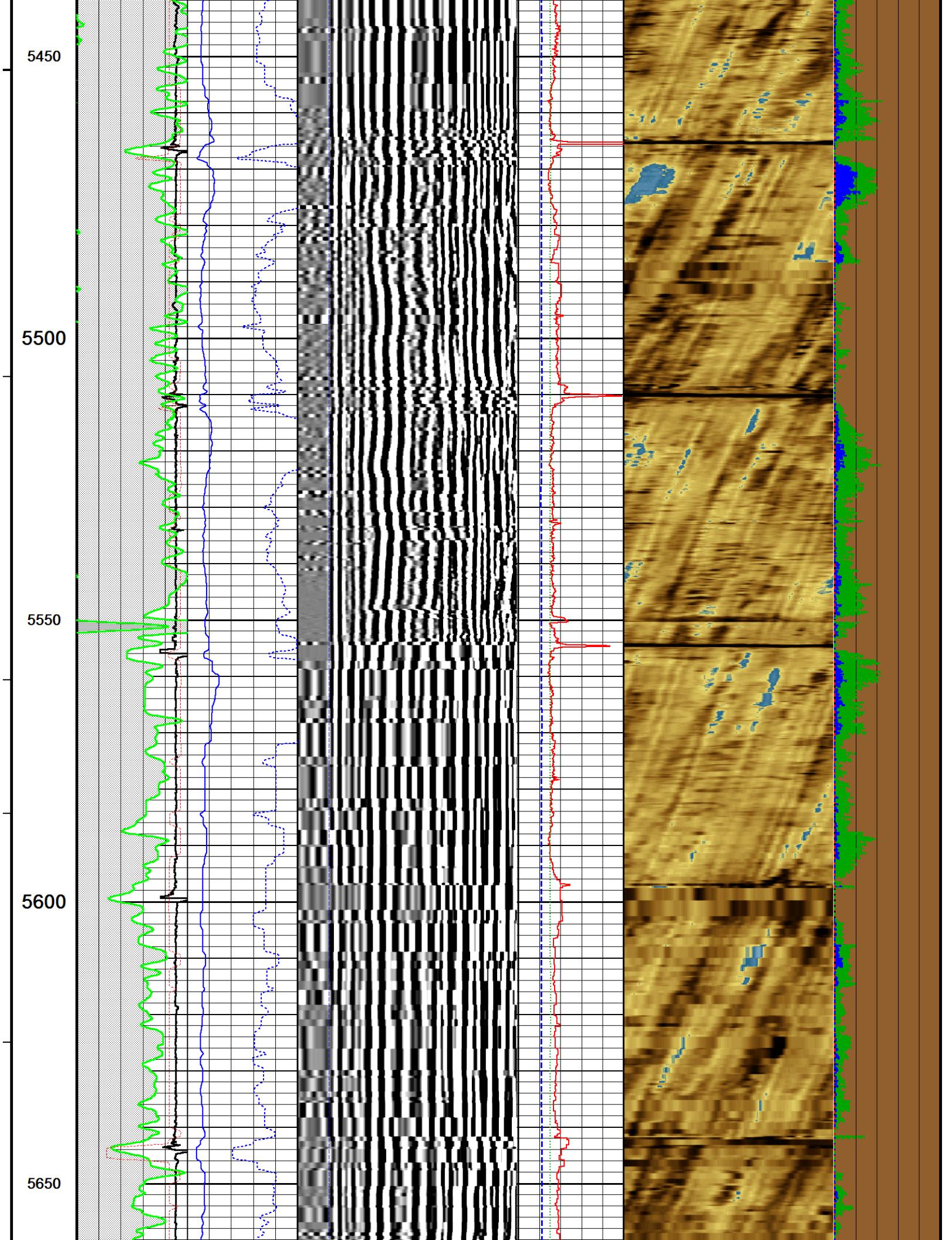


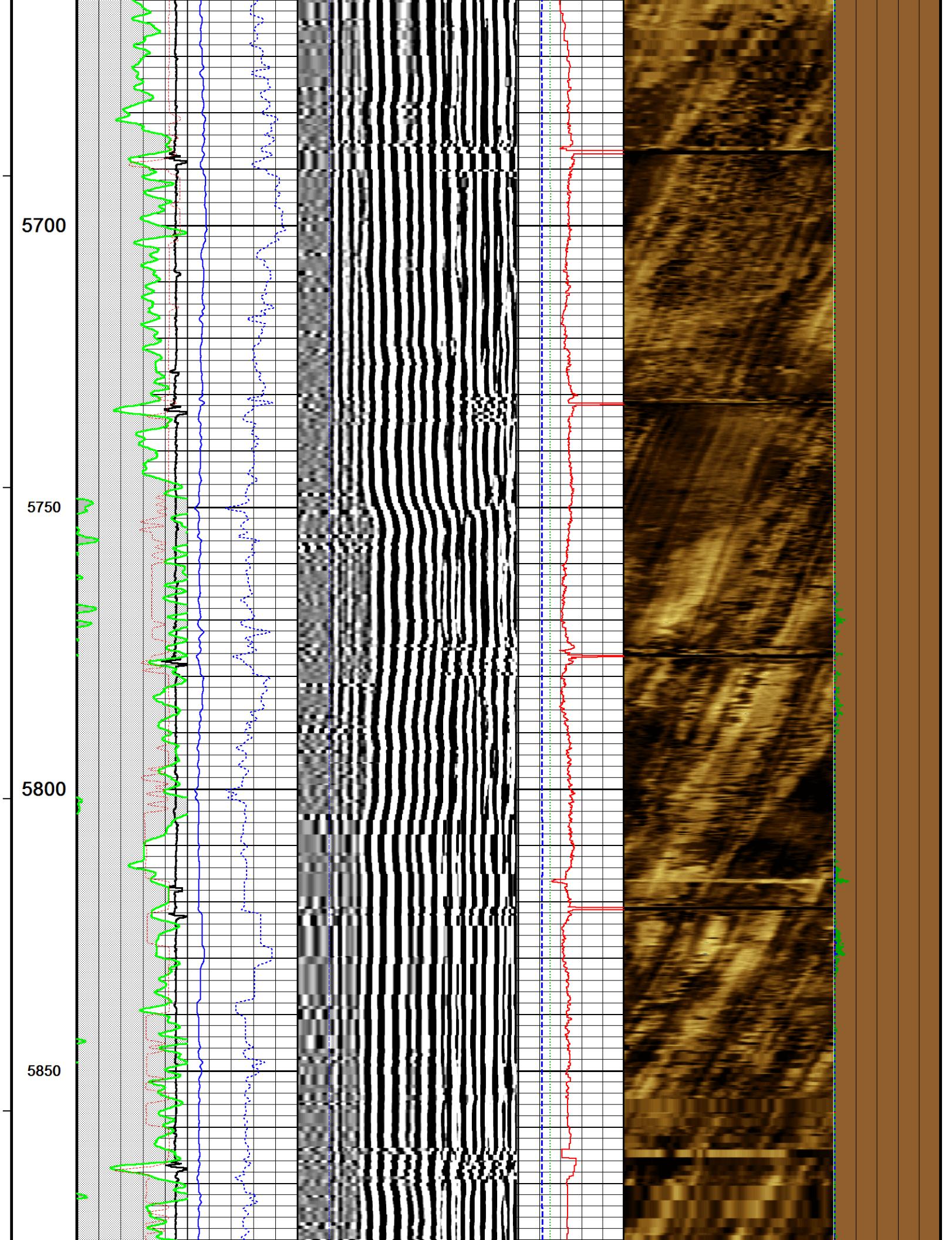


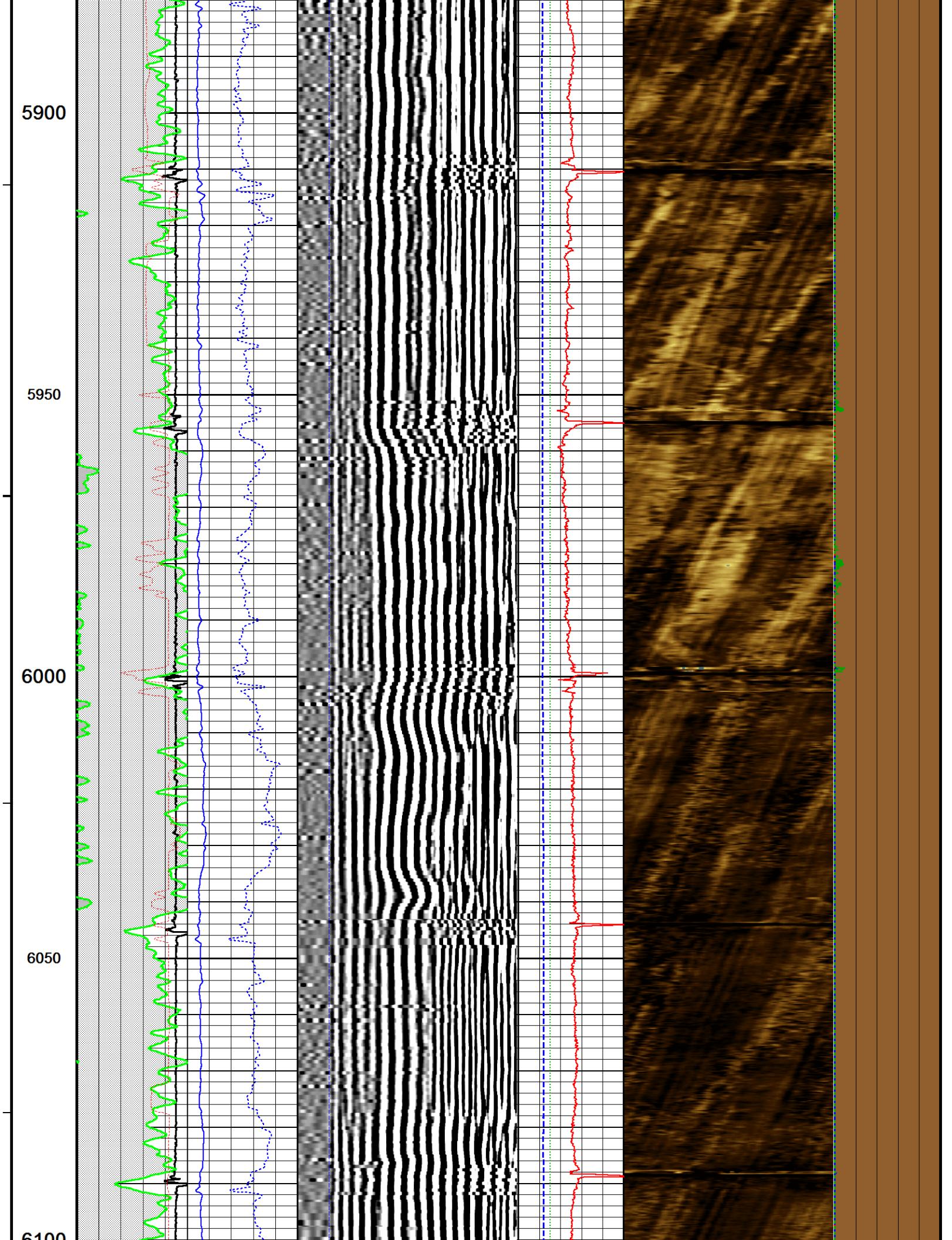


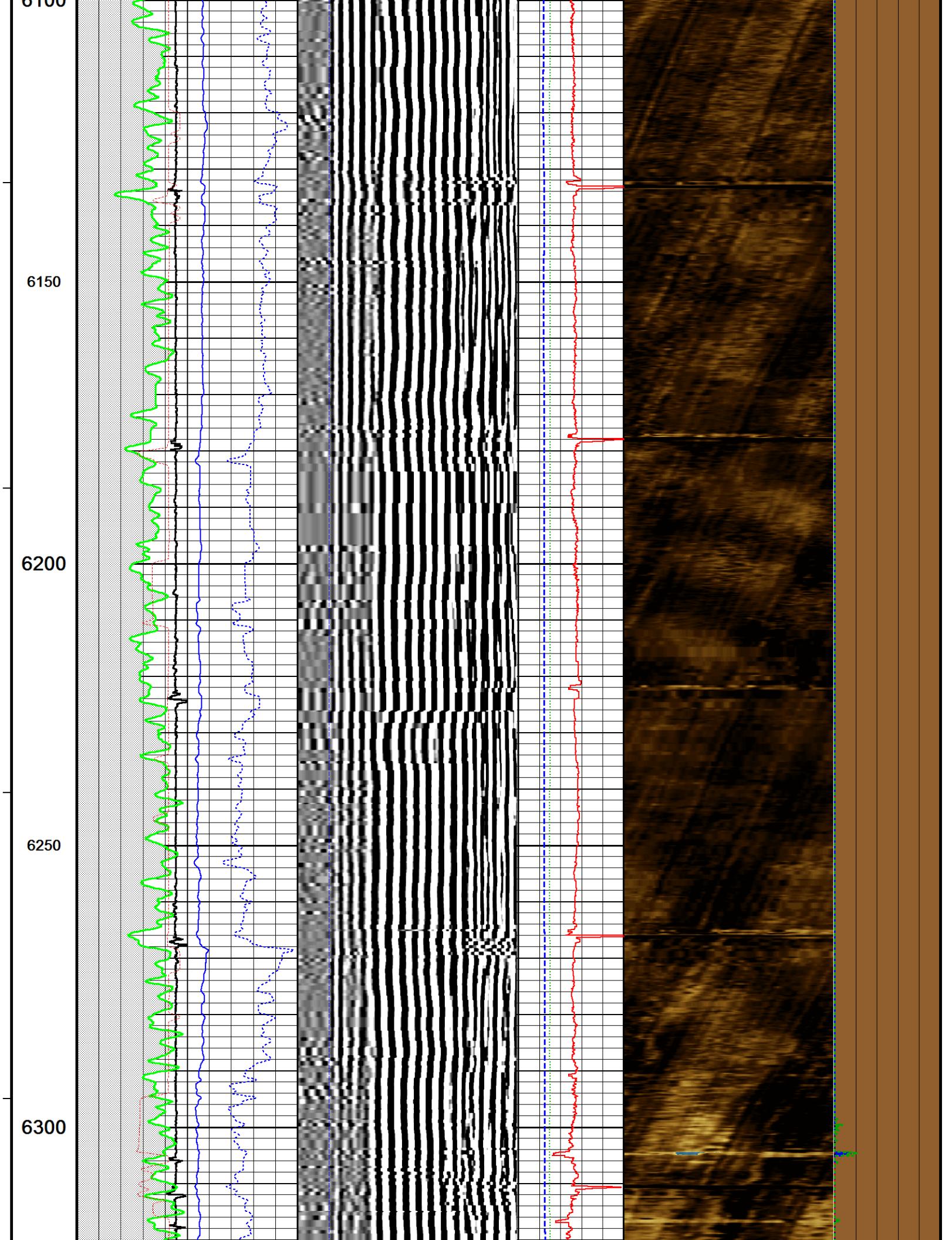


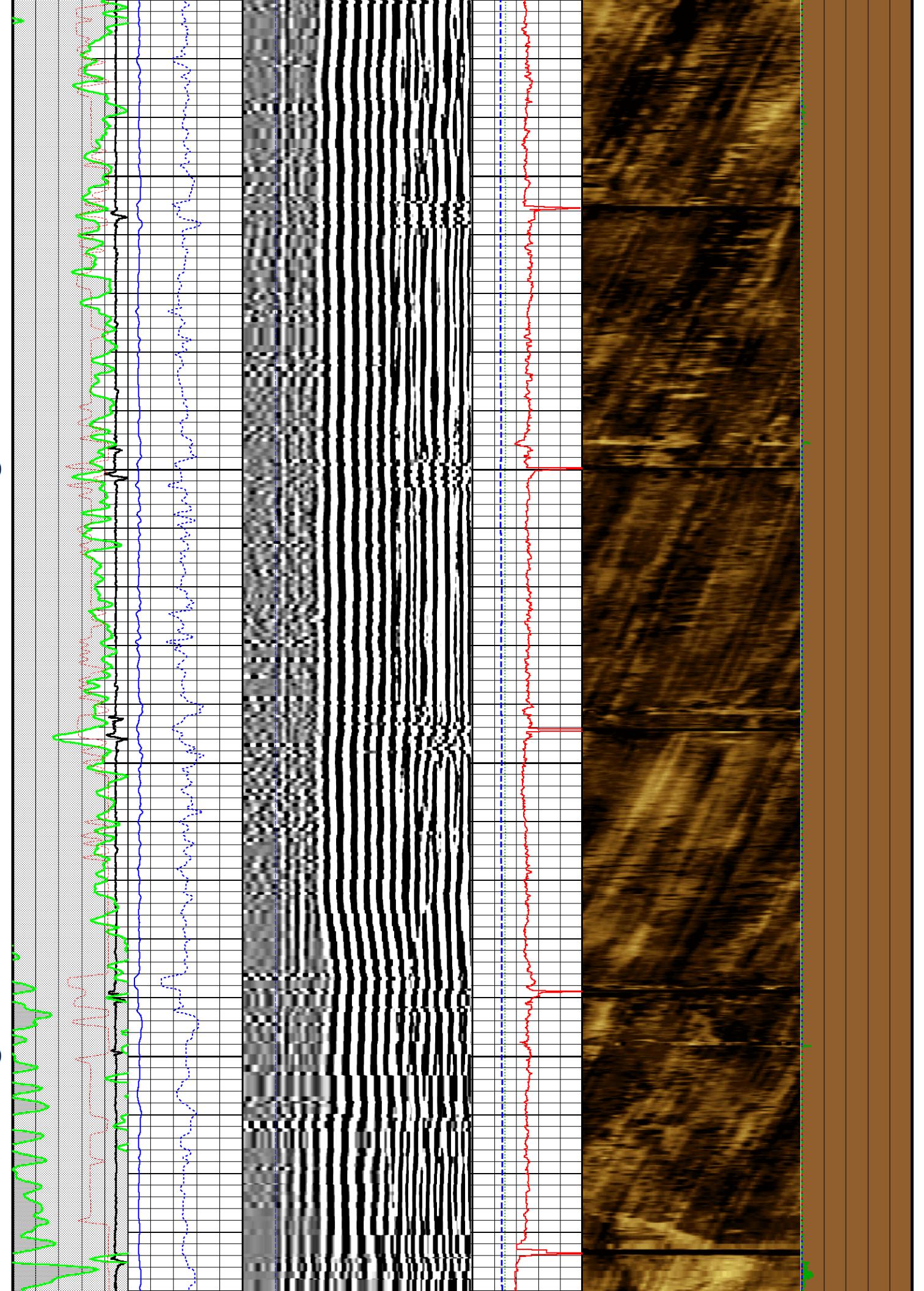


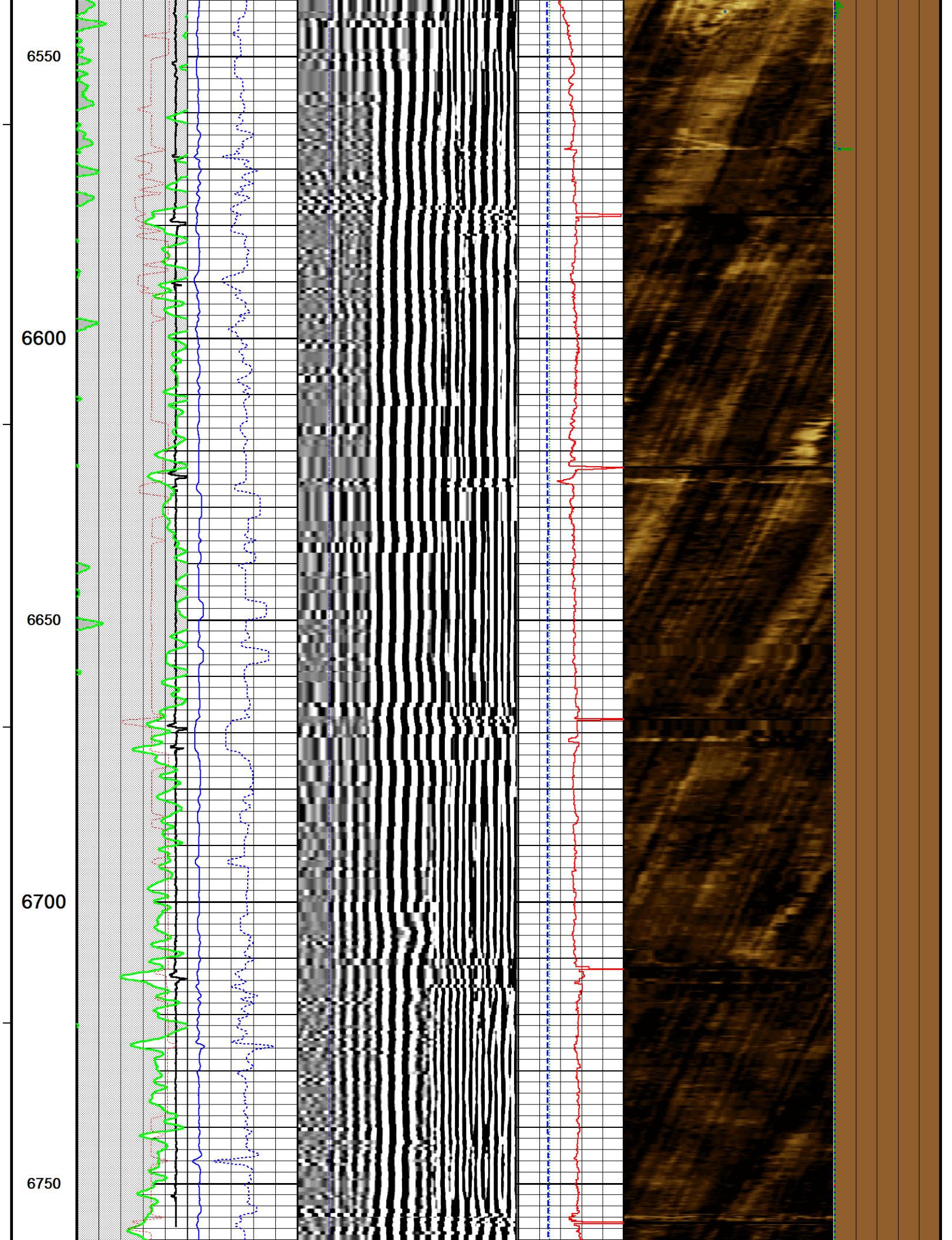


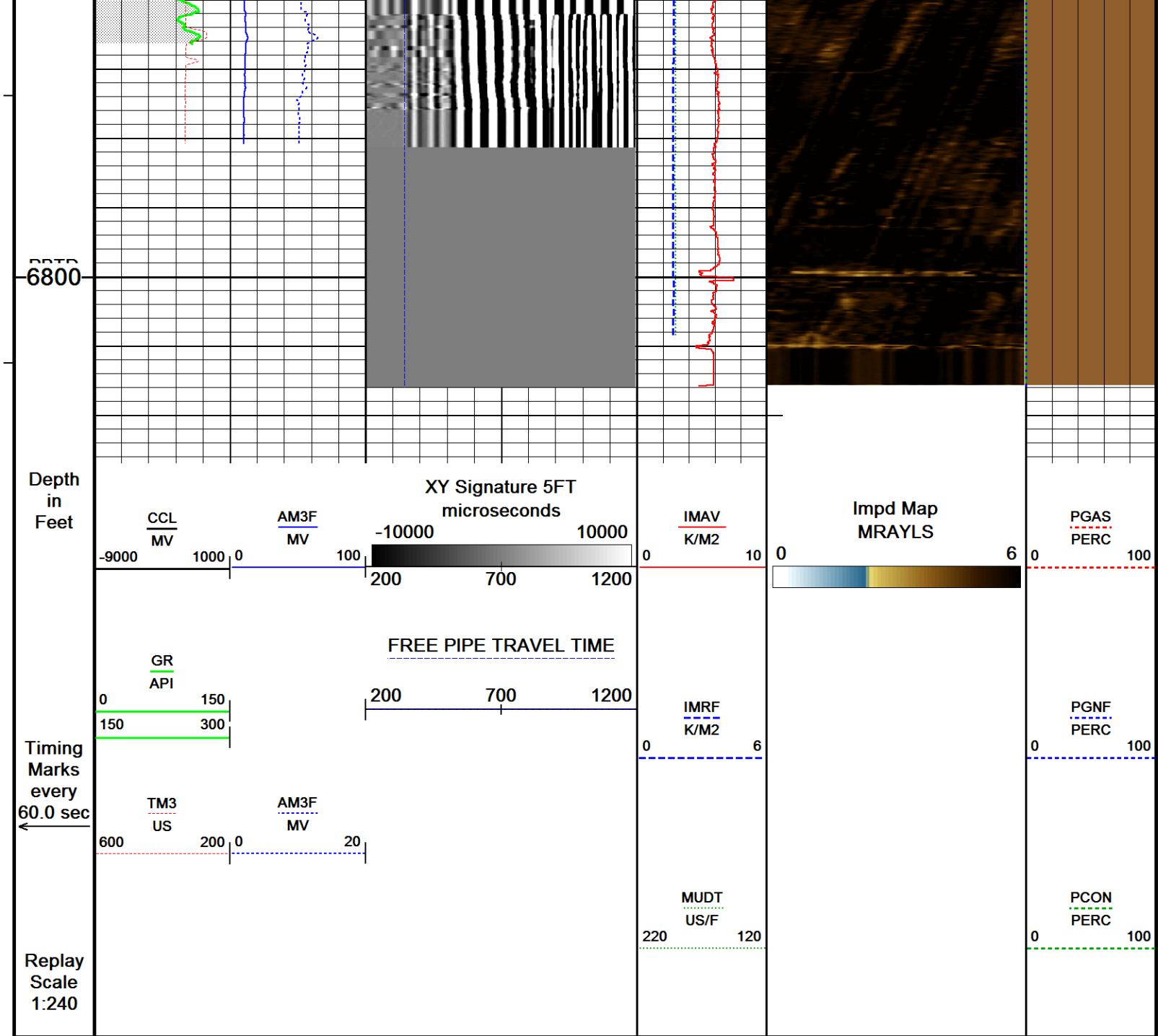












Depth Based Data - Maximum Sampling Increment 2.5cm

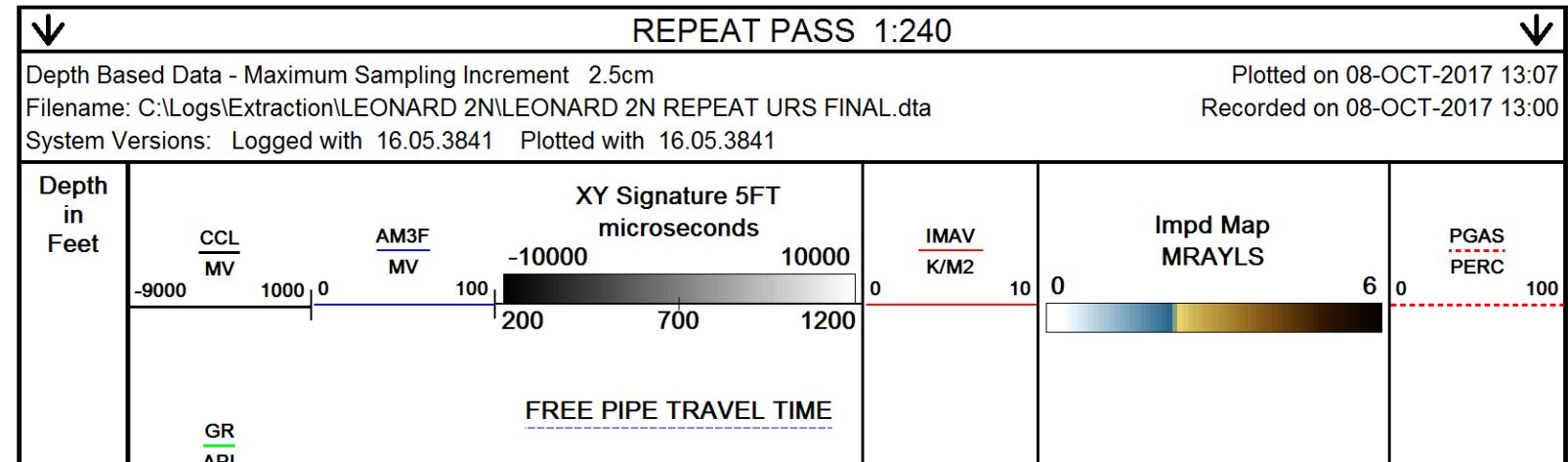
Plotted on 08-OCT-2017 13:07

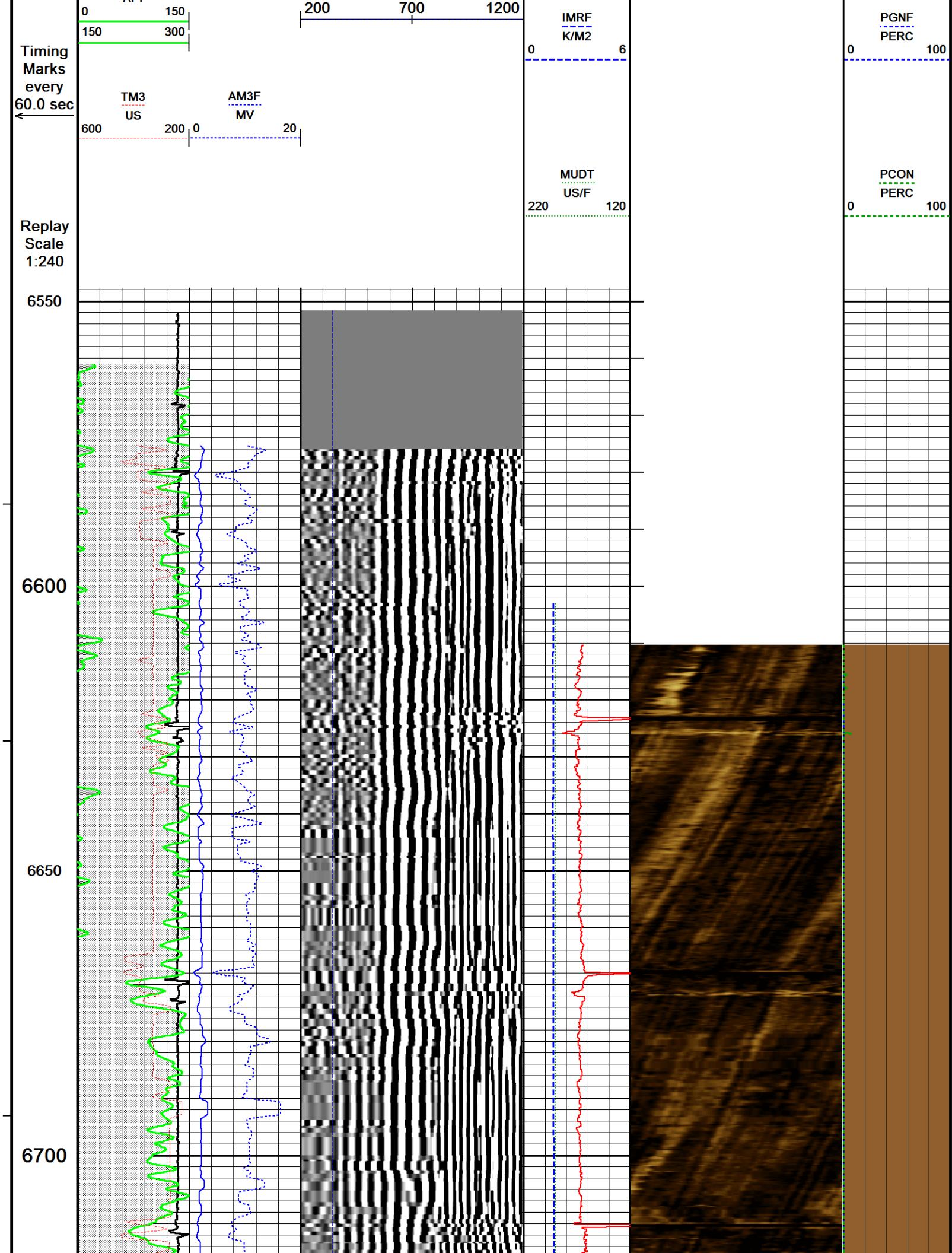
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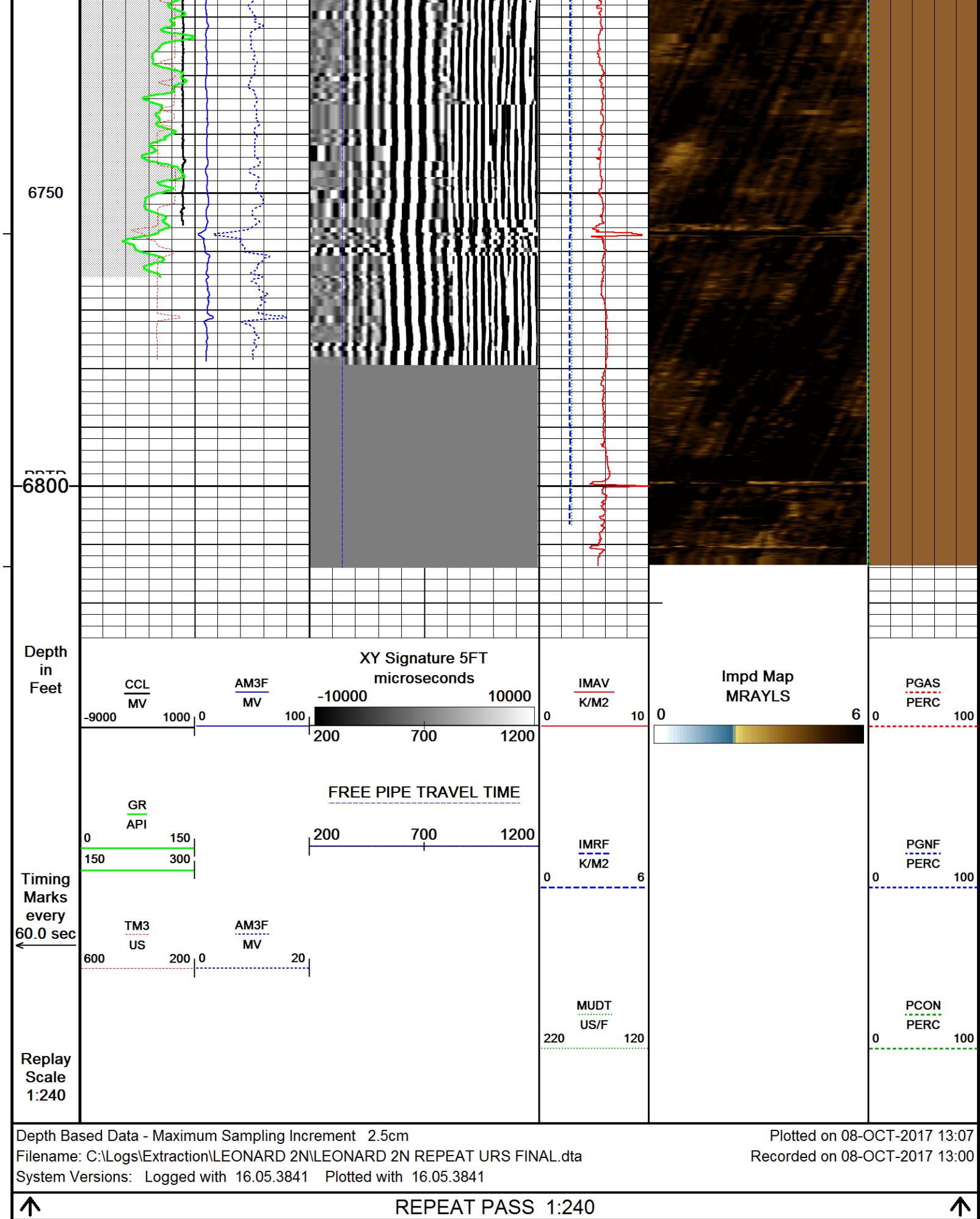
Recorded on 08-OCT-2017 12:48

System Versions: Logged with 16.05.3841 Plotted with 16.05.3841

MAIN PASS 1:240







UGR Field Survey Cal UGR-JD 118

Field calibration on 00-1AN-1988 00:00

Gamma Ray Field Survey Calibration

Background calibrator standard units

0.0 140.0 140.0 CPS

Delta Counts Per Sec: 140.0 CPS/API = 1.000

CBT Field calibration CBT-AA 109

Field calibration on 17-JAN-2017 08:32

Cement Bond Tool Amplitude Field calibration

Tool Type CBT-AA **Serial No 109**

Free Pipe Depth

Sensor	Description	Standard(mV)	Measured(mV)
AMP 3 FT	100 % Bond	2.10	0.00
	Free Pipe	62.00	655.30
AMP 5 FT	100 % Bond	1.40	0.00
	Free Pipe	41.00	594.10

CBT Constants CBT-AA 109

Last Edited on 08-OCT-2017 12:48

Min Ampl 100% Bond	2.00	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	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

Free Pipe **Measured** -999.250 **Minimum** 0.000 **Maximum** 0.000 **K/M2**

Mud Impedance 1.500 0.000 0.000 K/M2

URS Constants USH-AB 136

Last Edited on 08-OCT-2017 12:48

*** 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	4.40
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	17120.00	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	1.70 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:\Logs\Extraction\LEONARD 2N\LEONARD 2N MAIN URS FINAL.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 119 LG: 1.05 ft WT: 15.4 lb OD: 3.386 in

Swivel Head 55 pin
SWH-CB 137 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

58.58 ft CCL - Collar Locator

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

50.49 ft GR - Gamma Ray

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

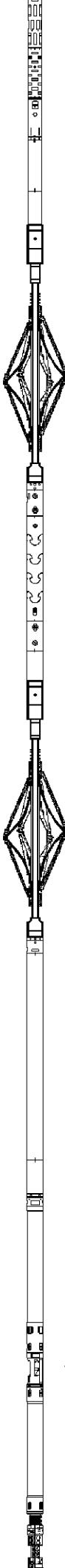
55 pin Roller Centralizer
CEN-XA 213 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

Cement Bond Tool
CBT-AA 109 LG: 10.75 ft WT: 163.1 lb OD: 3.386 in

35.79 ft AM3F - Amplitude 3FT
35.79 ft TM3 - Travel Time 3FT

34.79 ft XY5 - XY Signature 5FT

55 pin Roller Centralizer
CEN-XA 132 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in



Flexible Joint, 55 Pin
FTP-AA 134 LG: 3.44 ft WT: 77.2 lb OD: 3.346 in

55 pin Roller Centralizer
CEN-XA 221 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

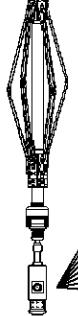
URS Electronics Cartridge
UCC-AA 132 LG: 4.51 ft WT: 79.4 lb OD: 3.386 in

URS Sonde Section
USS-AB 179 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

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

Total Length: 64.23 ft Weight: 1108.9 lb



0.37 ft	OVLI - ID Ovality
0.37 ft	DIMX - Max Diameter
0.37 ft	DIMN - Min Diameter
0.37 ft	IMAV - Avg Impedance
0.37 ft	ECCE - Eccentering
0.37 ft	IMMP - Impd Map
0.37 ft	MNBU - Min Burst
0.37 ft	TKMP - Thickness Map
0.00 ft	TENS - Tension
Tool Zero	(0.00ft from bottom)

All measurements relative to tool zero.

COMPANY EXTRATION OIL & GAS
WELL LEONARD 2N
FIELD WATTENBERG
PROVINCE/COUNTY WELD
COUNTRY/STATE USA / COLORADO

Elevation Kelly Bushing	5032	feet	Bottom Log Interval	6800.00	feet
Elevation Drill Floor	5032	feet	Depth Driller	12231.00	feet
Elevation Ground Level	5004	feet	Depth Logger	6800.00	feet



Weatherford®

SECUREVIEW
ULTRAVIEW/BONDVIEW
CEMENT ANALYSIS