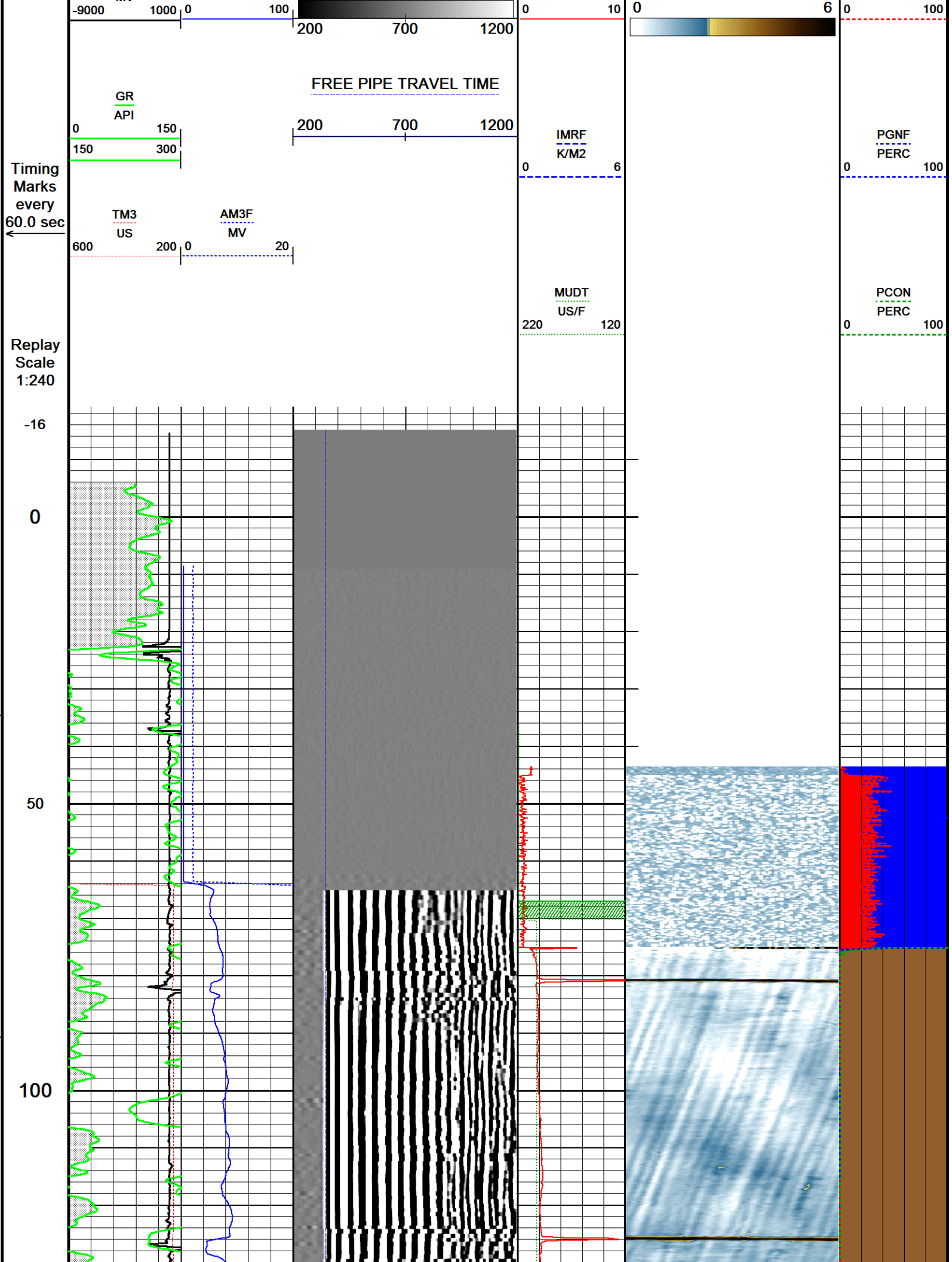
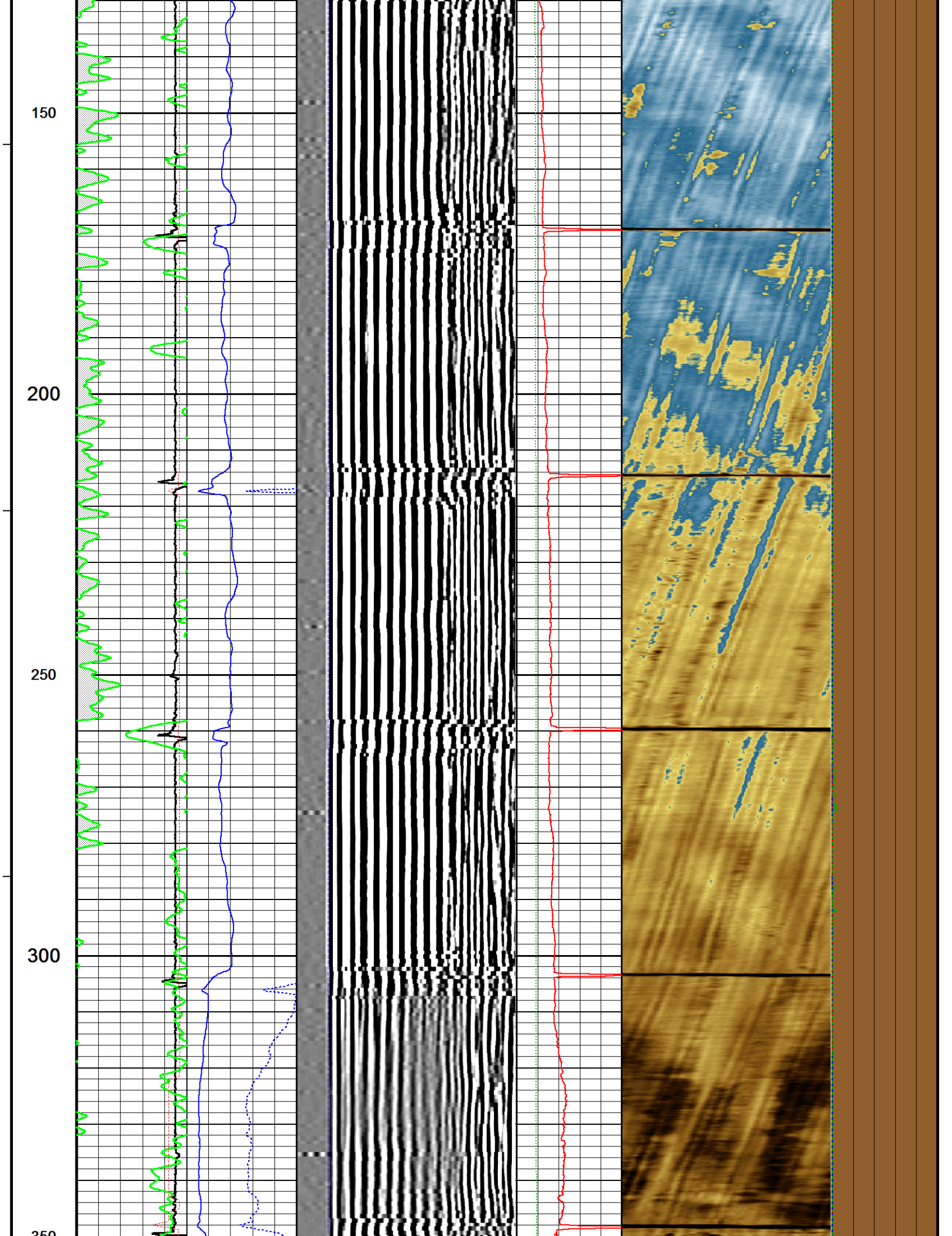
				<div>SECUREVIEW</div> <div>ULTRAVIEW/BONDVIEW</div> <div>CEMENT ANALYSIS</div>			
COMPANY				EXTRACTION OIL & GAS			
WELL				LEONARD 7N			
FIELD				WATTENBERG			
PROVINCE/COUNTY				WELD			
COUNTRY/STATE				USA / COLORADO			
LOCATION							
SEC 21		TWP 2N		RGE 67W		Other Services	
Latitude							
Longitude							
API Number		051234505200					
Permanent Datum GROUND LEVEL, Elevation 5004 feet						Elevations:	
Log Measured From KB, 28 feet above Permanent Datum						KB 5032.00	
Drilling Measured From KB						DF 5032.00	
						GL 5004.00	
Date		07-OCT-2017		PERFORATION RECORD			
Run Number		ONE		Shot	Number	Depth From	Depth To
Service Order		TBD		Density	of Shots	feet	feet
Type Log		URS/CBT					
Depth Driller		12184.00					
Depth Logger		6900.00					
Top Log Interval		0.00					
Bottom Log Interval		6900.00					
Hole Fluid Type		WATER					
Hole Fluid Level		0.00					
Restriction ID		4.653		Gun Type			
Max Recorded Temp				Gun Size			
Well Head Pressure		0.00		CASING / TUBING RECORD			
Well Head Equipment				Size	Weight	Depth From	Depth To
Time Well Ready		ROA		inches	pounds/ft	feet	feet
Time Logger Bottom		SEE LOG		5.500	20.00	0.00	12184.00
Unit		14115					
Equipment Name		WSS-E					
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	12184.00	20.00

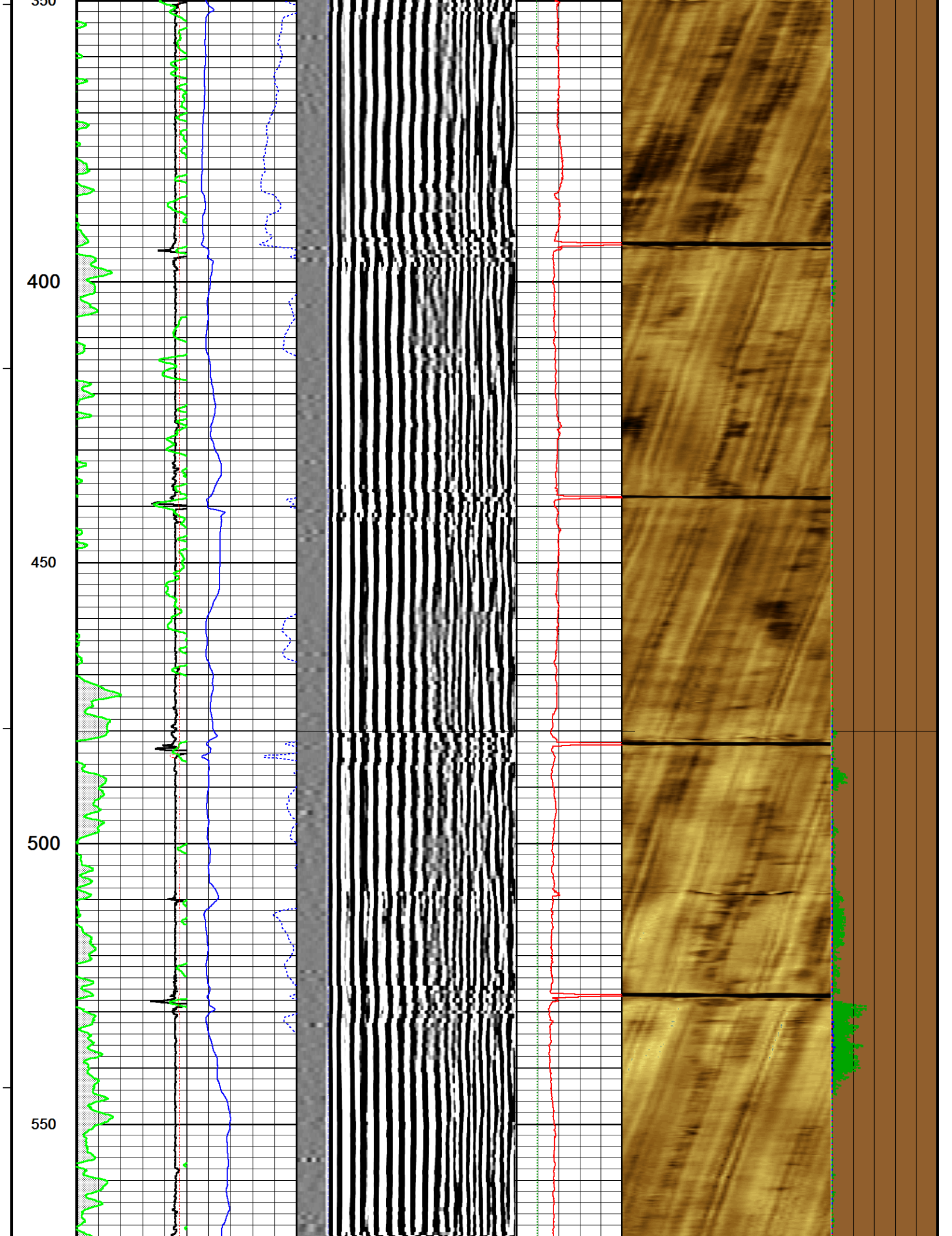
In interpreting, communicating or providing information and/or making recommendations, either written or oral, as to logs or test or other data, type or amount of material, or Work or other service to be furnished, or manner of performance, or in predicting results to be obtained, the Contractor will 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					Plotted on 07-OCT-2017 08:48	
Filename: C:\Logs\Extraction\LEONARD 7N\LEONARD 7N MAIN URS FINAL.dta					Recorded on 07-OCT-2017 08:13	
System Versions: Logged with 16.05.3841 Plotted with 16.05.3841						
Depth in Feet	XY Signature 5FT microseconds			IMAV K/M2	Impd Map MRAYLS	PGAS PERC
	CCL MV	AM3F MV	-10000 10000			

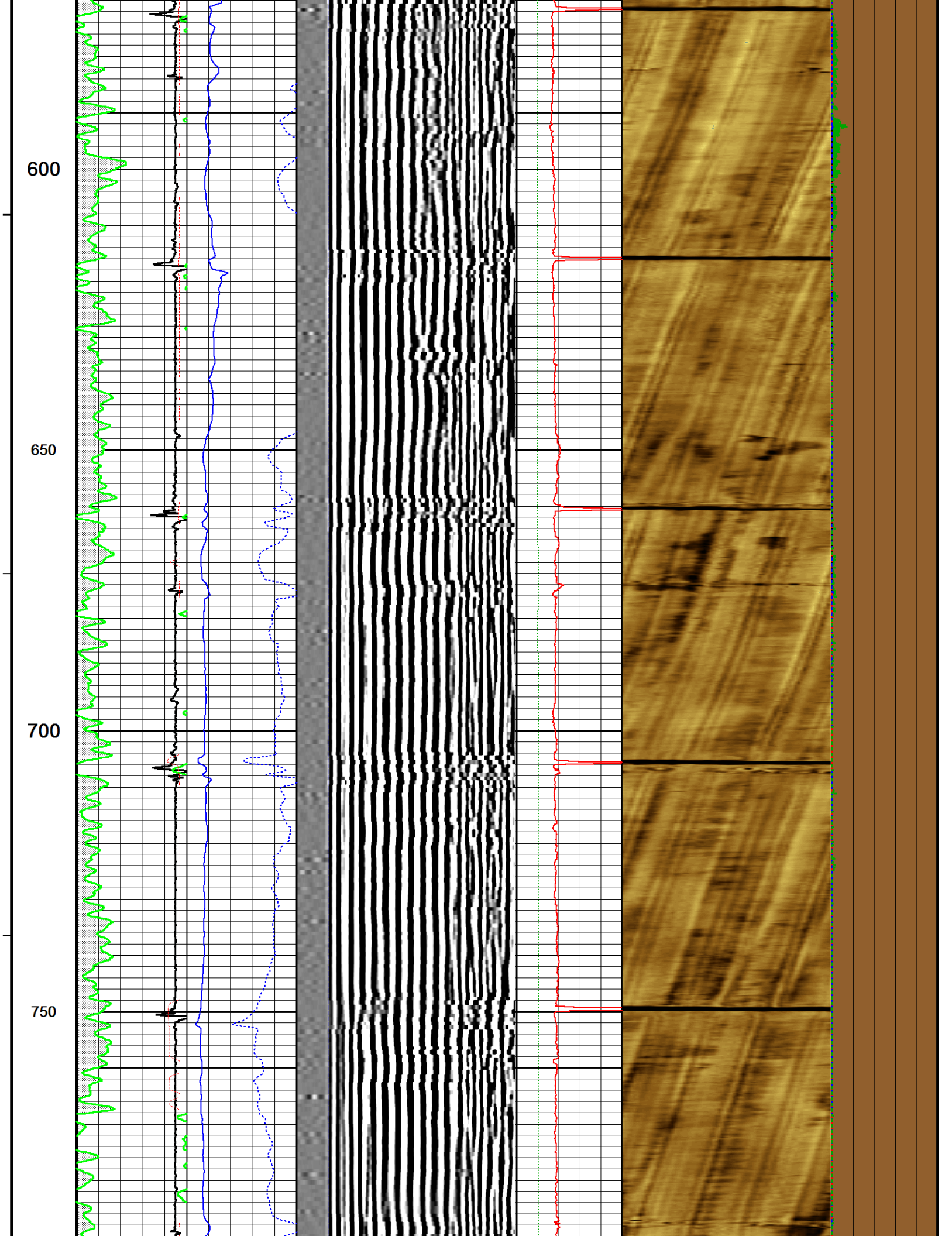


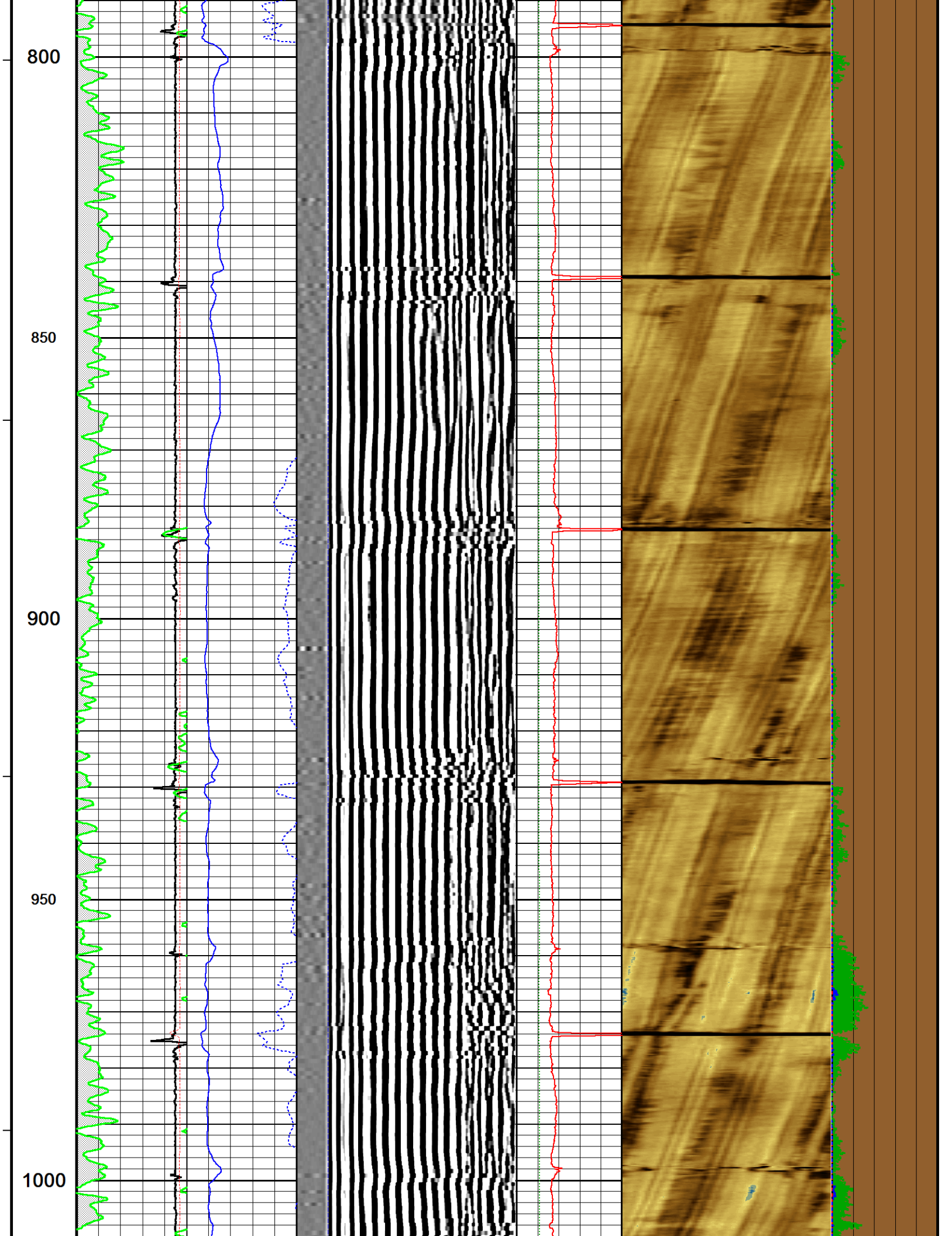




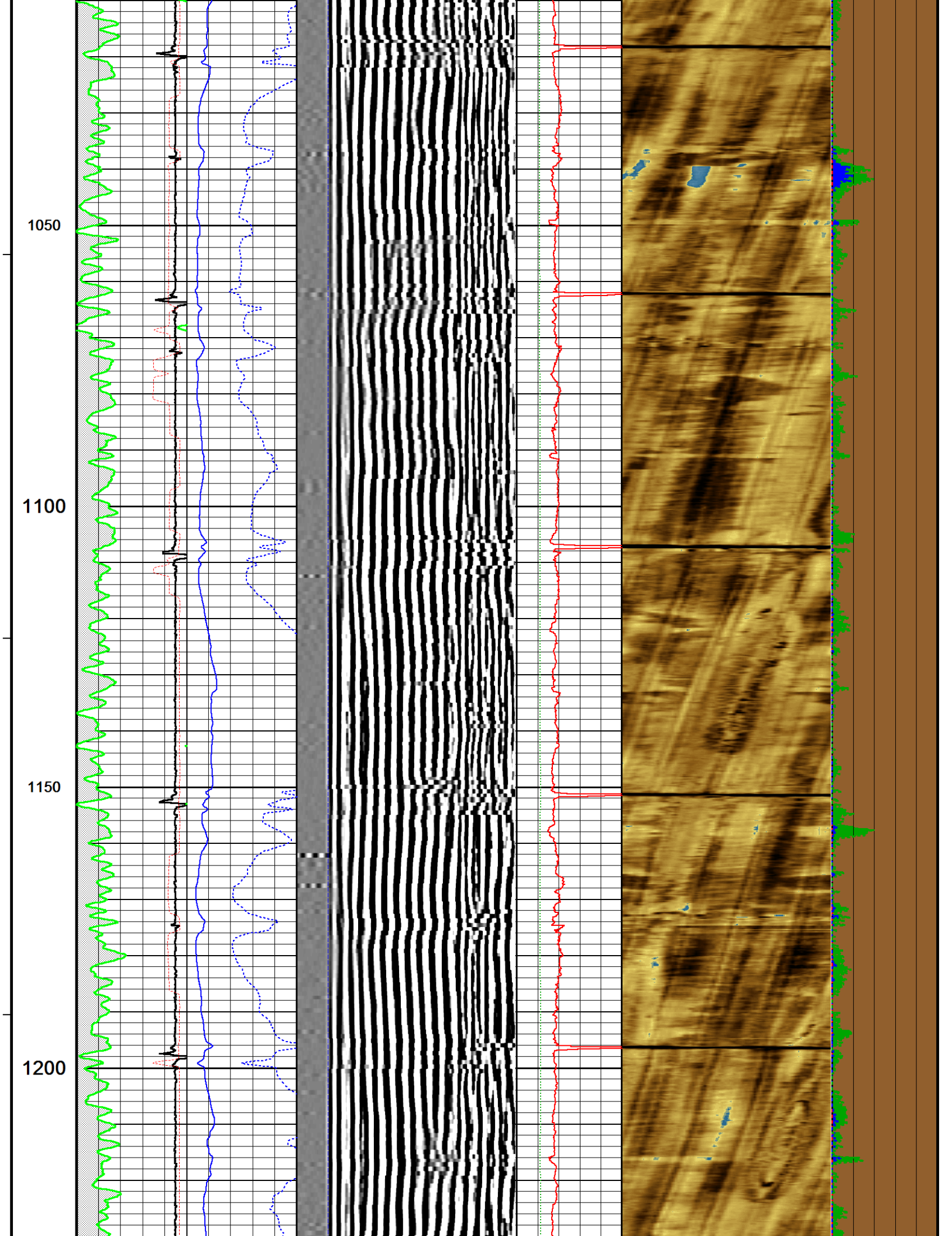




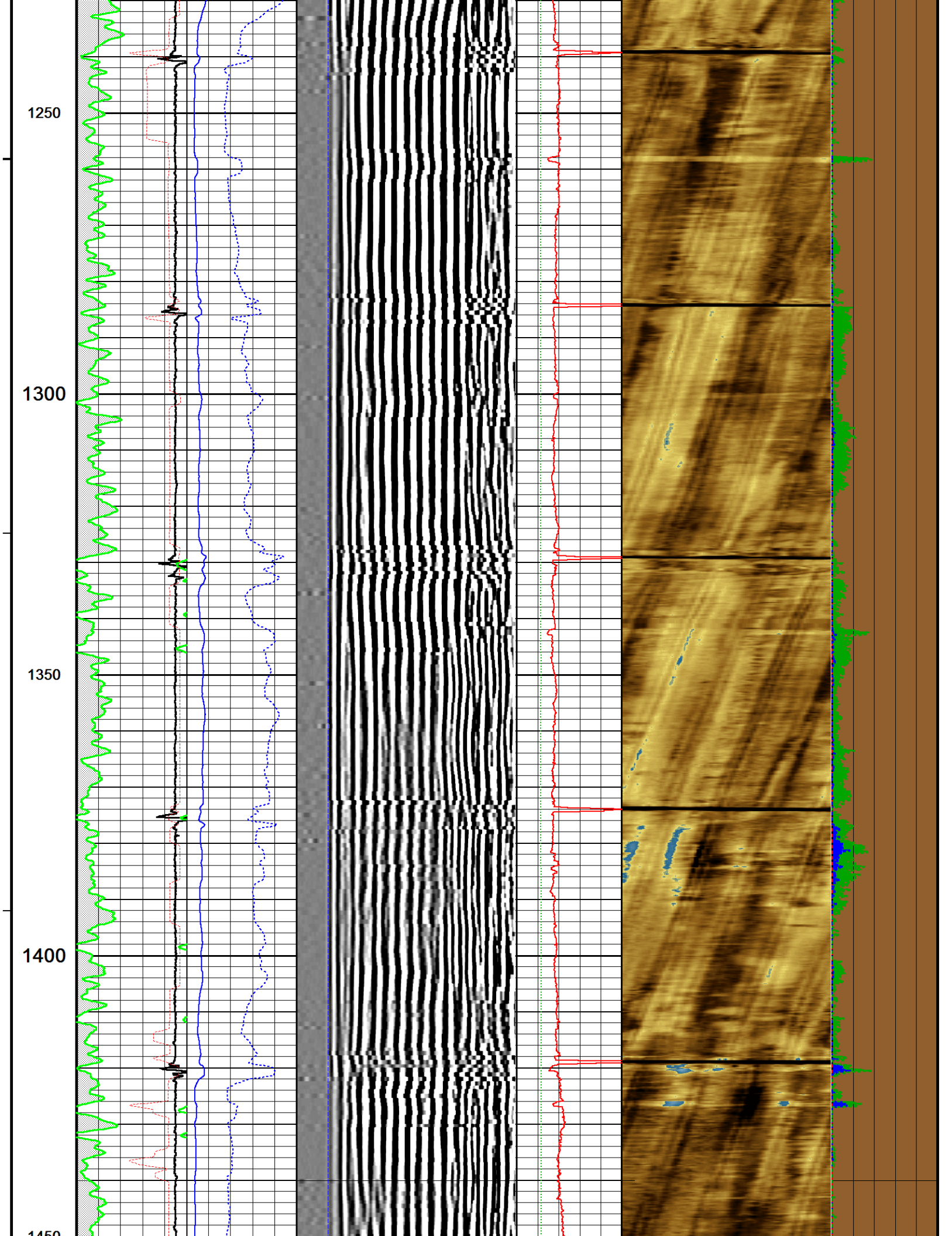


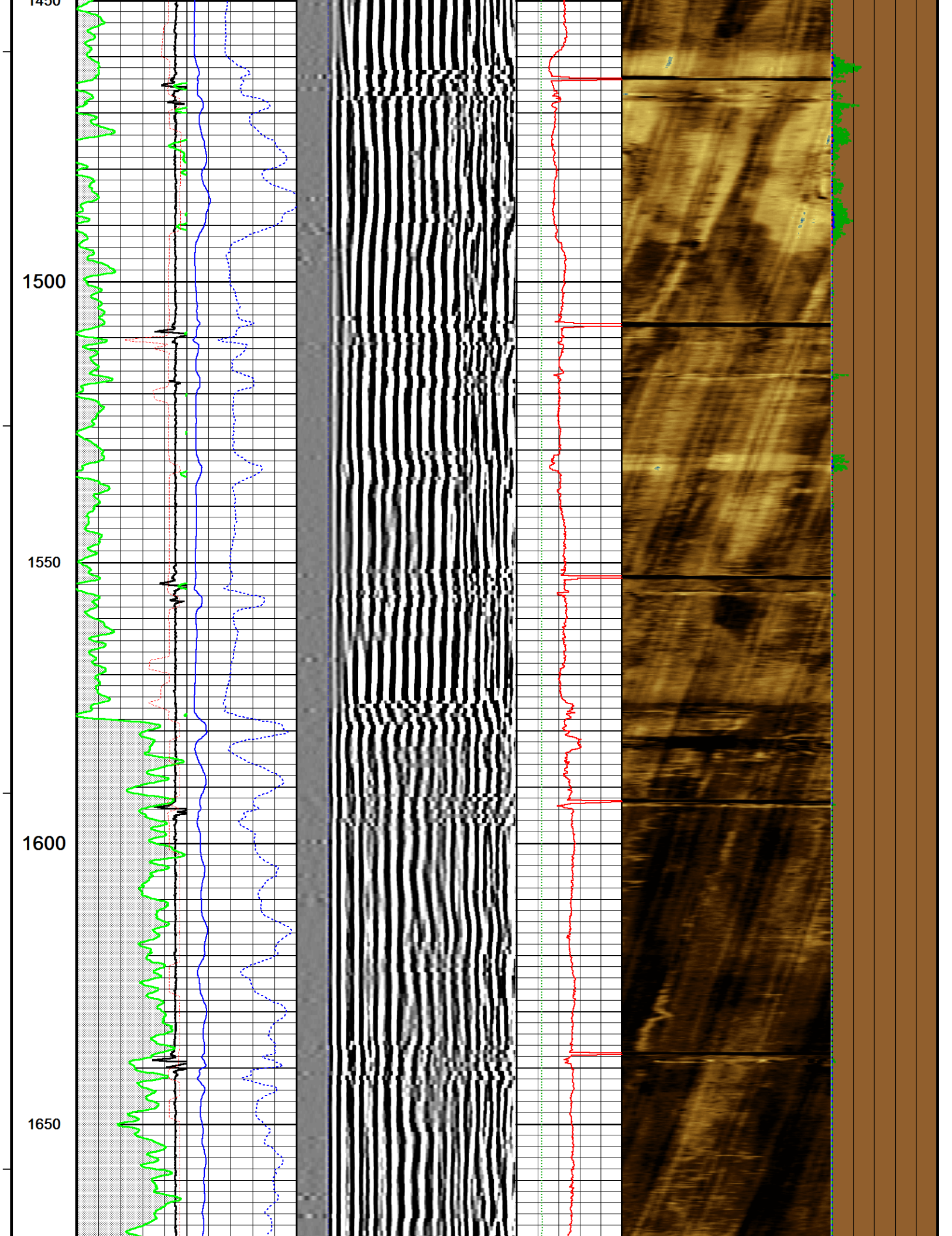




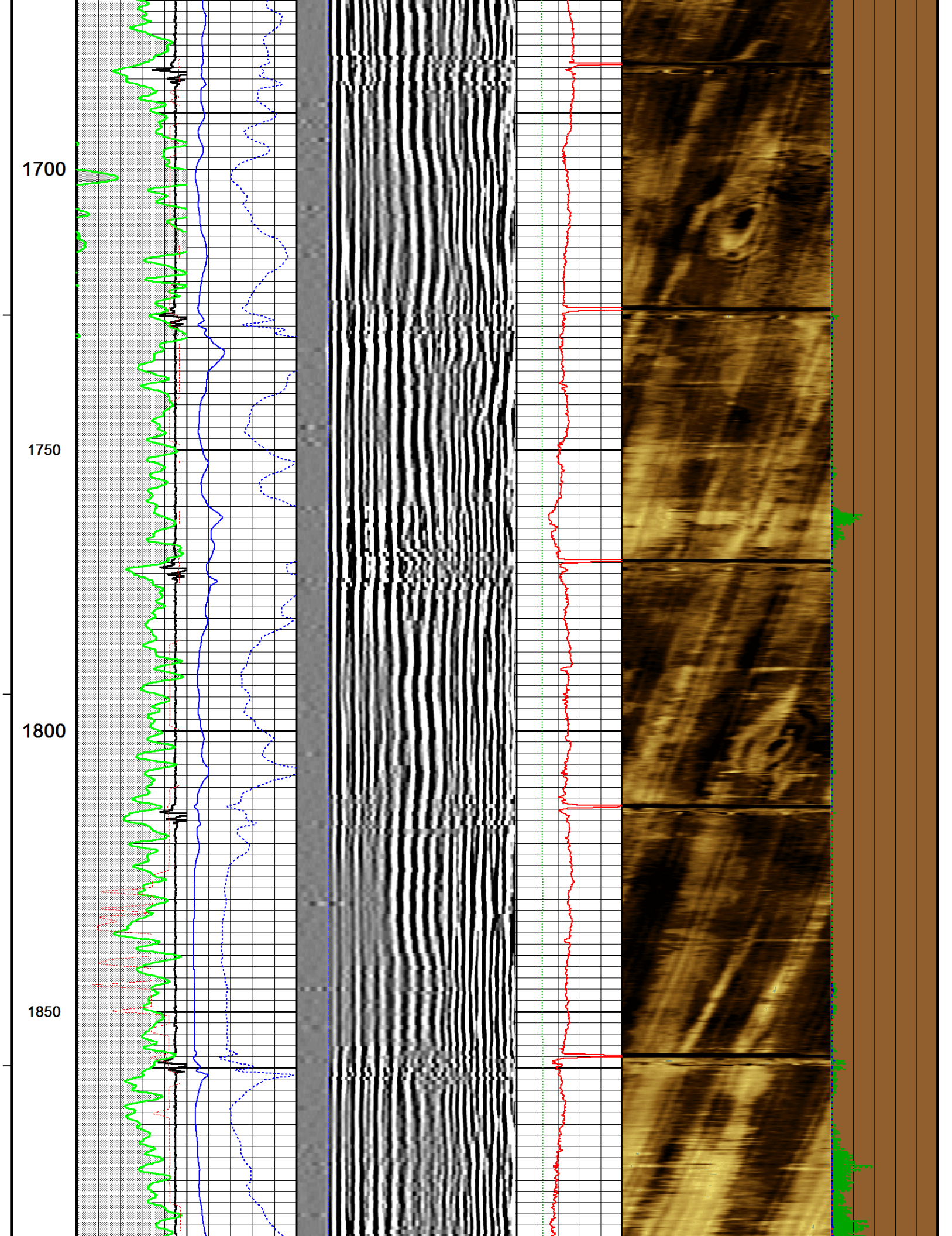




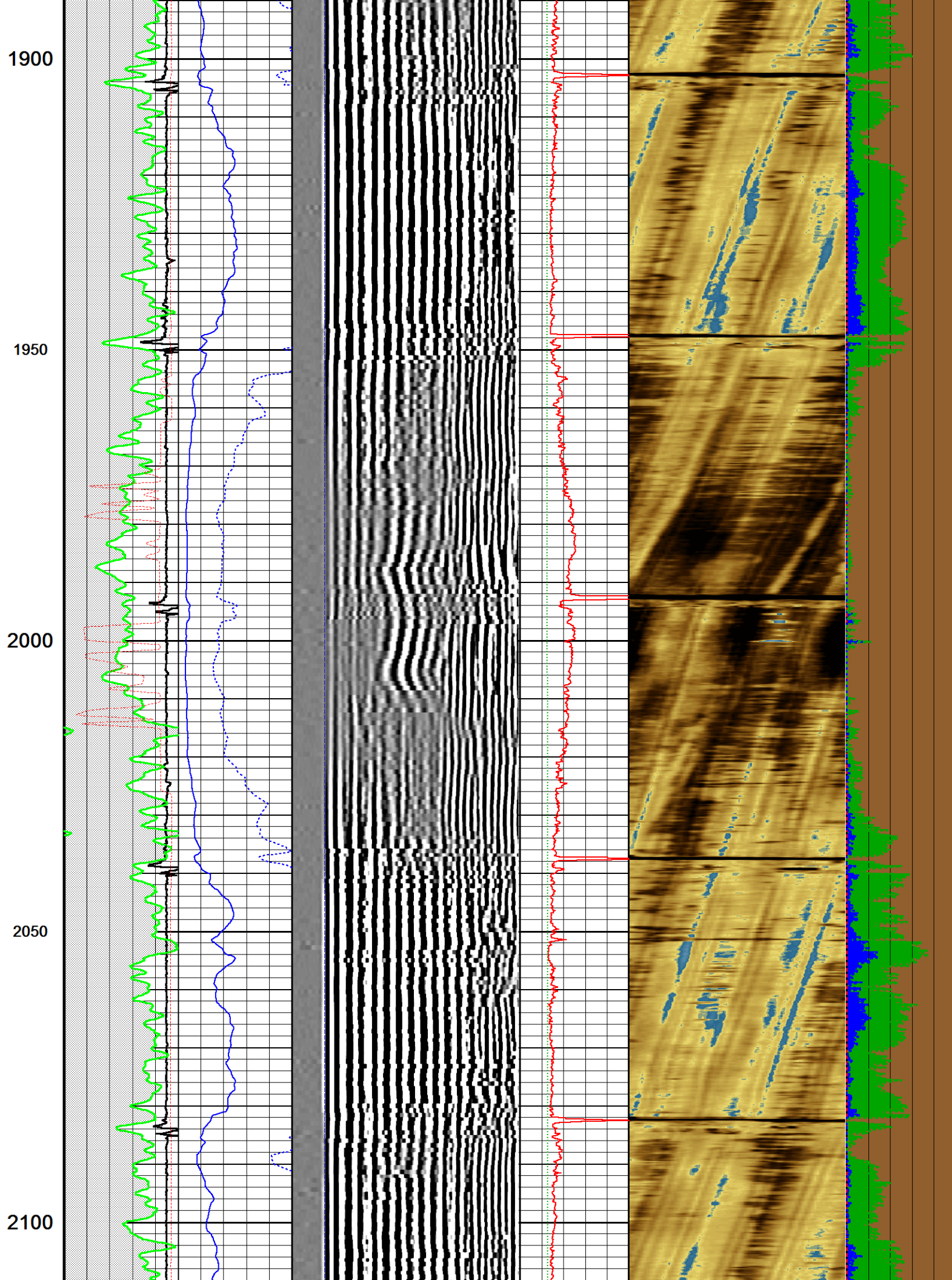




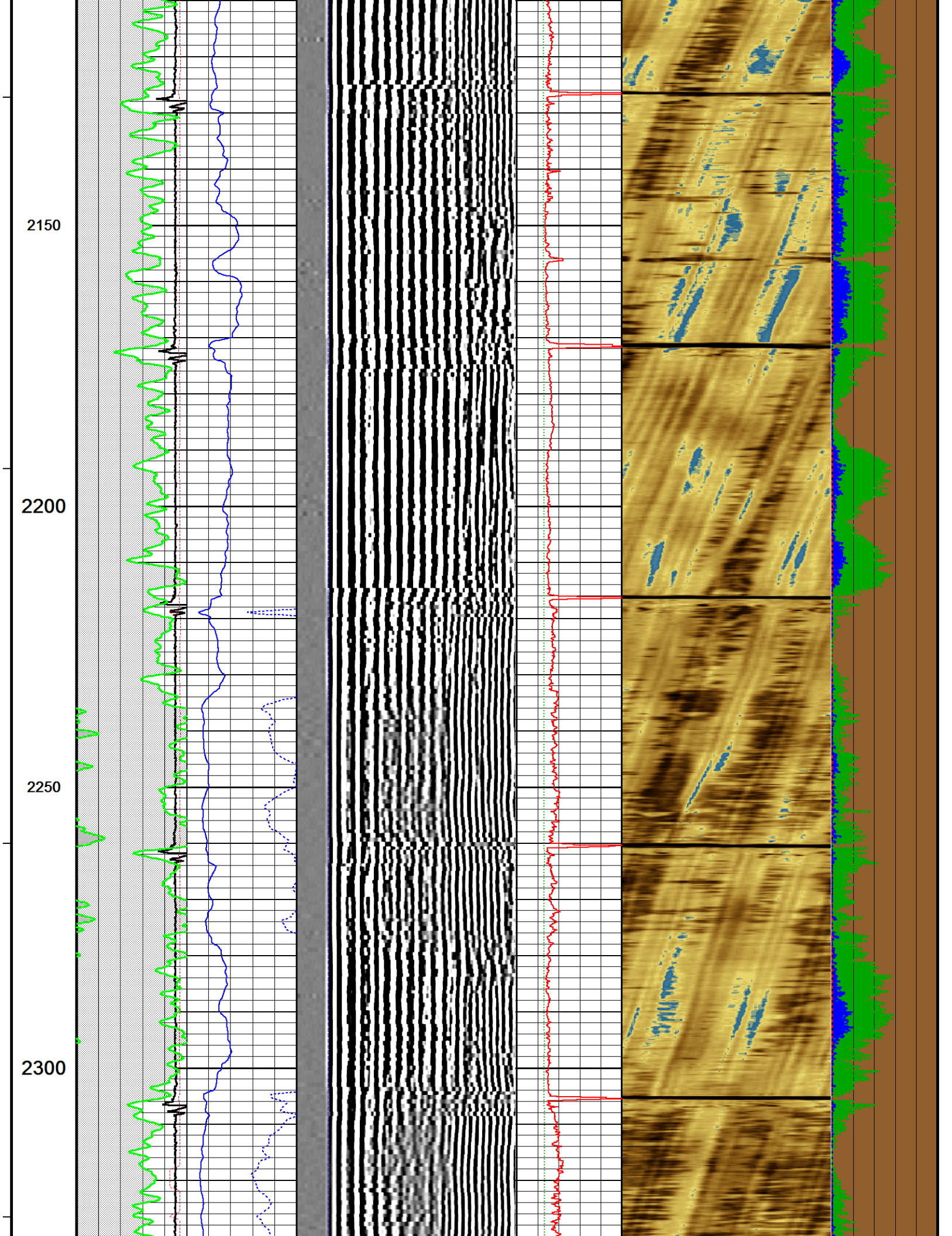




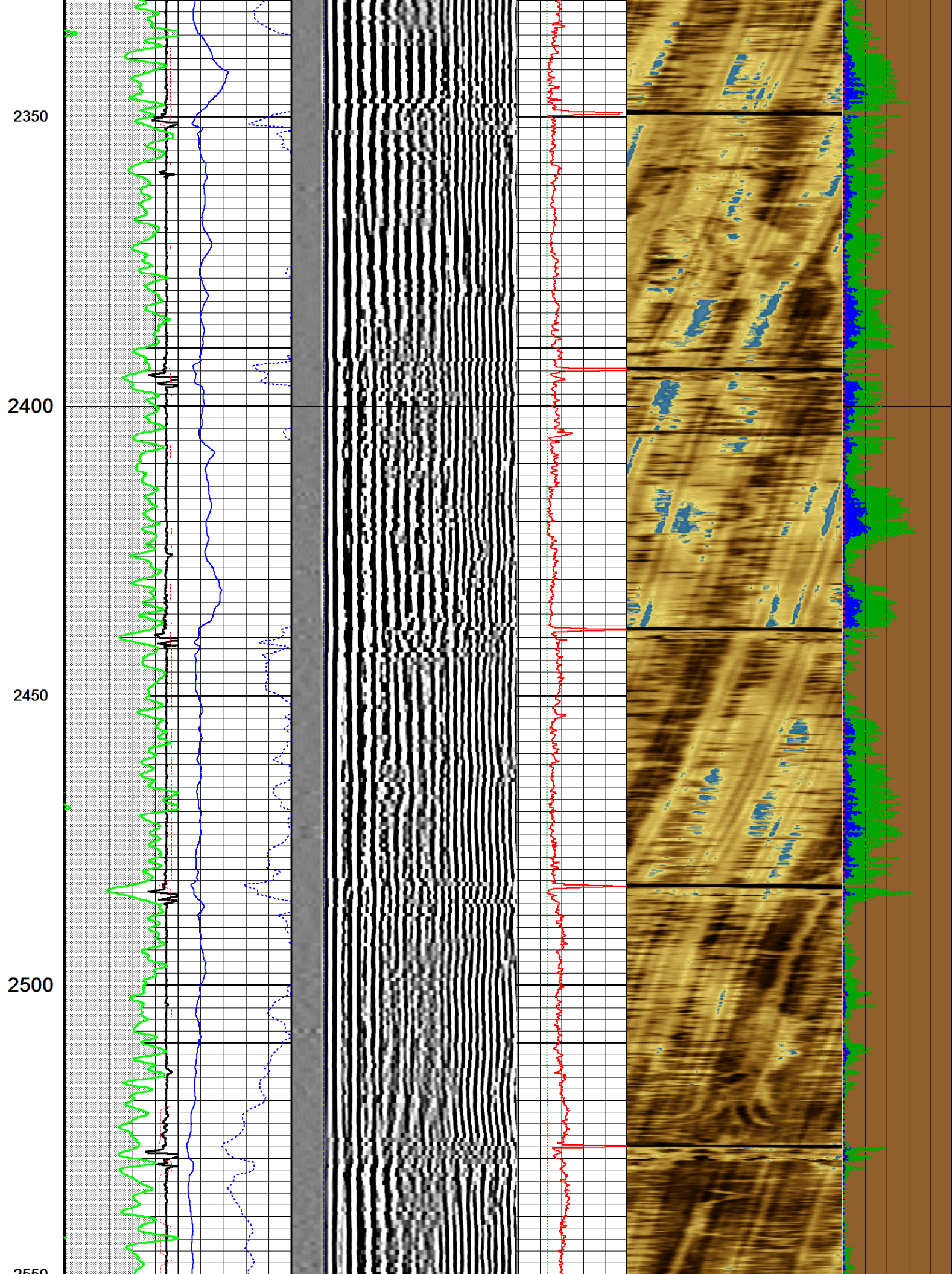




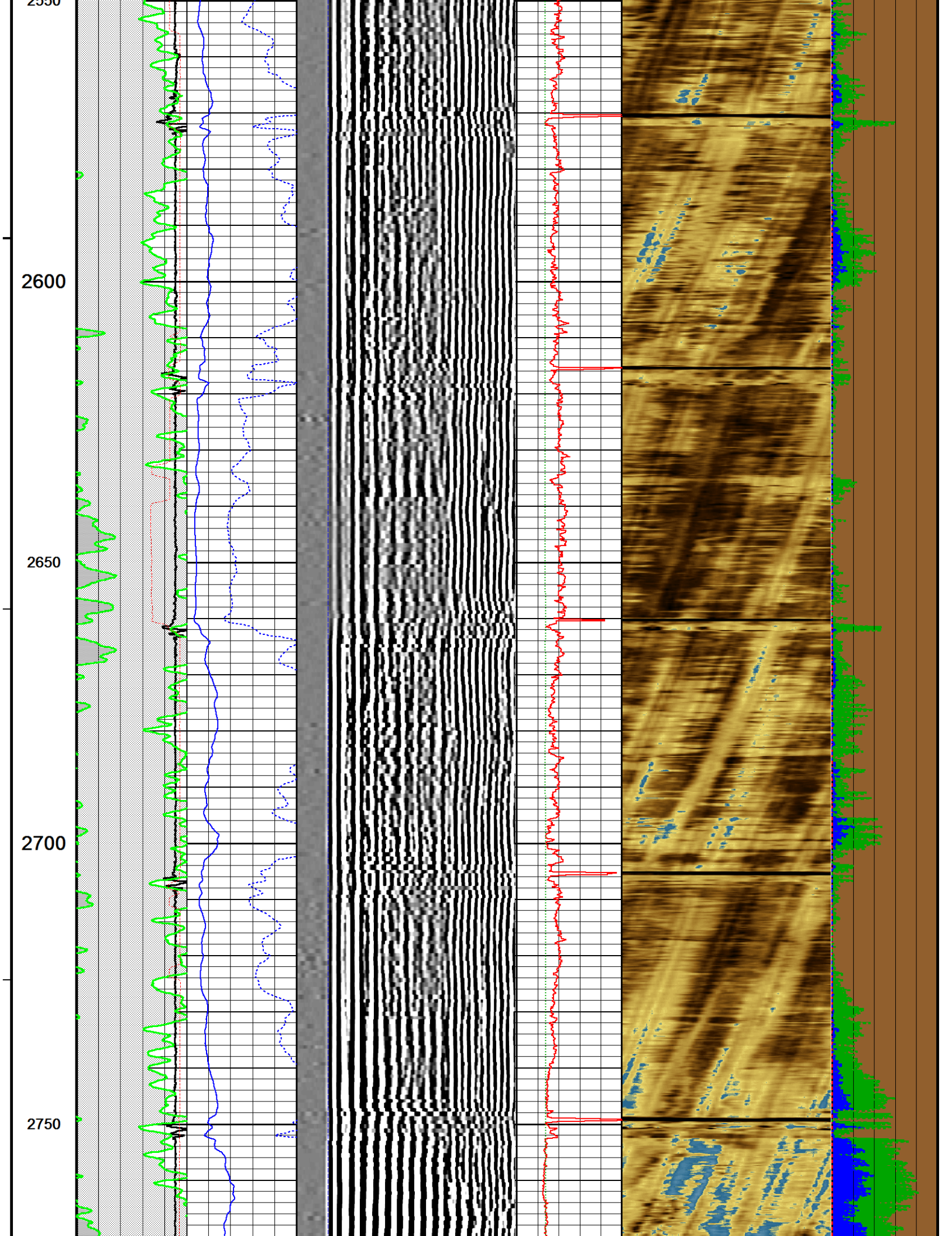




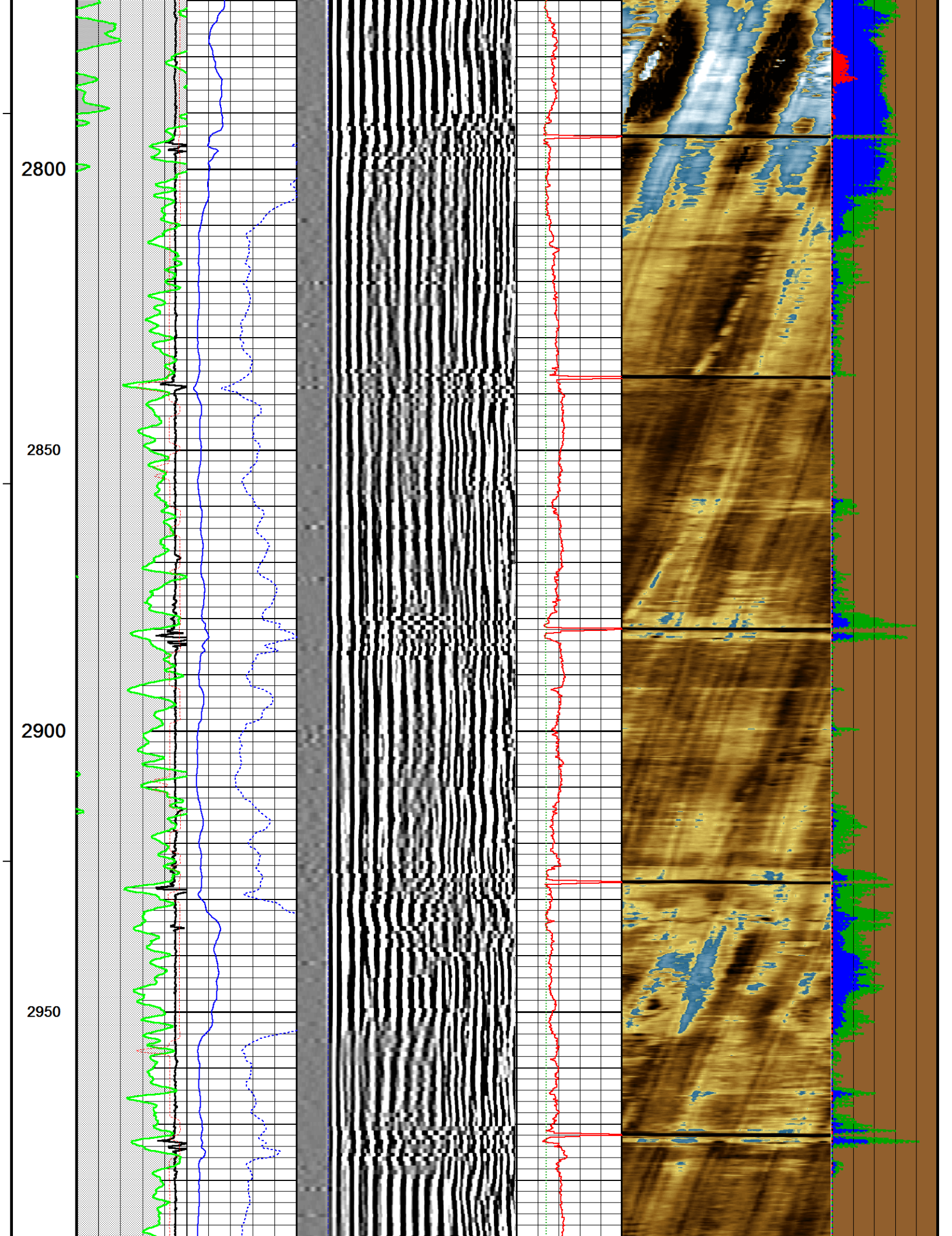














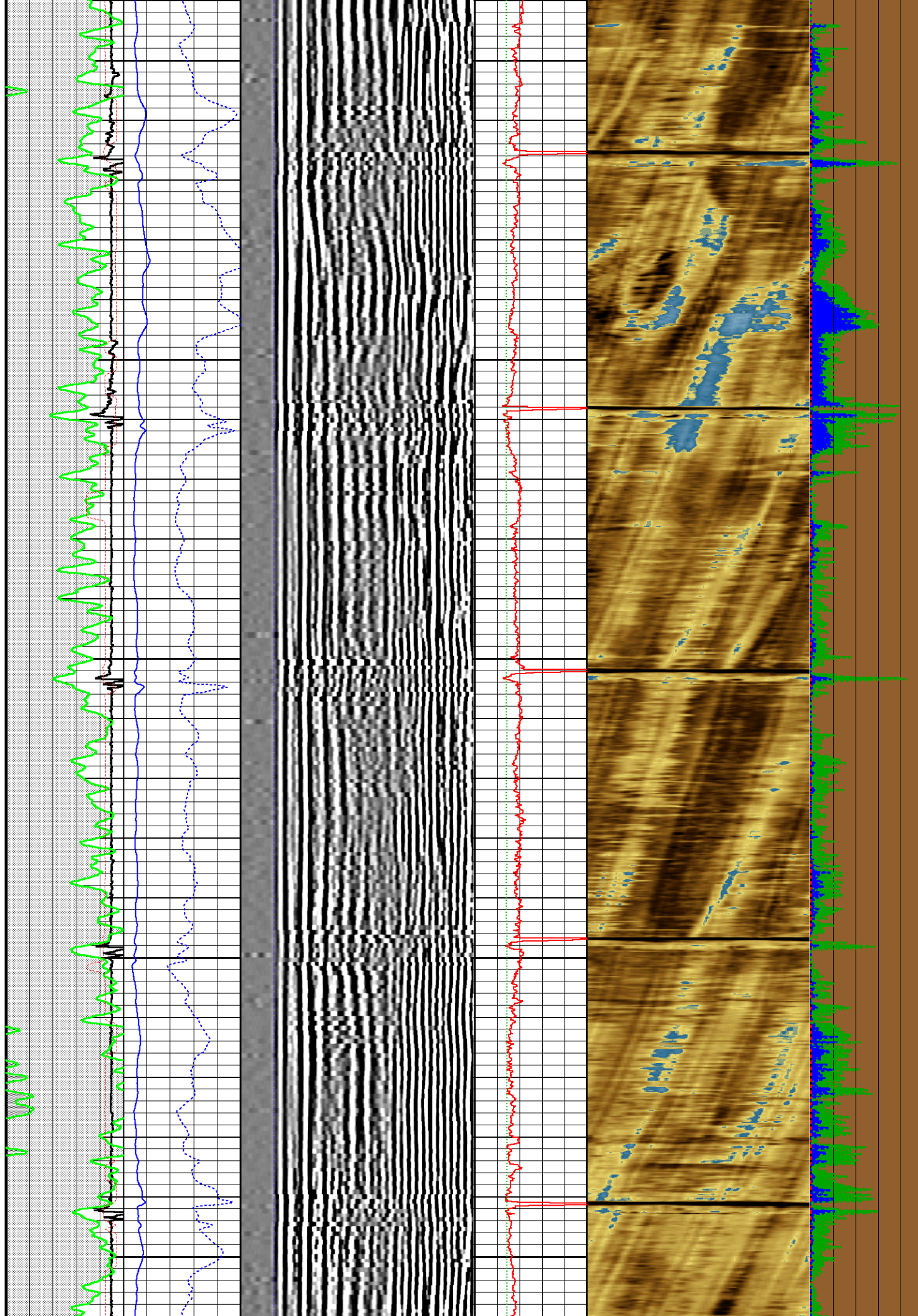
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3050

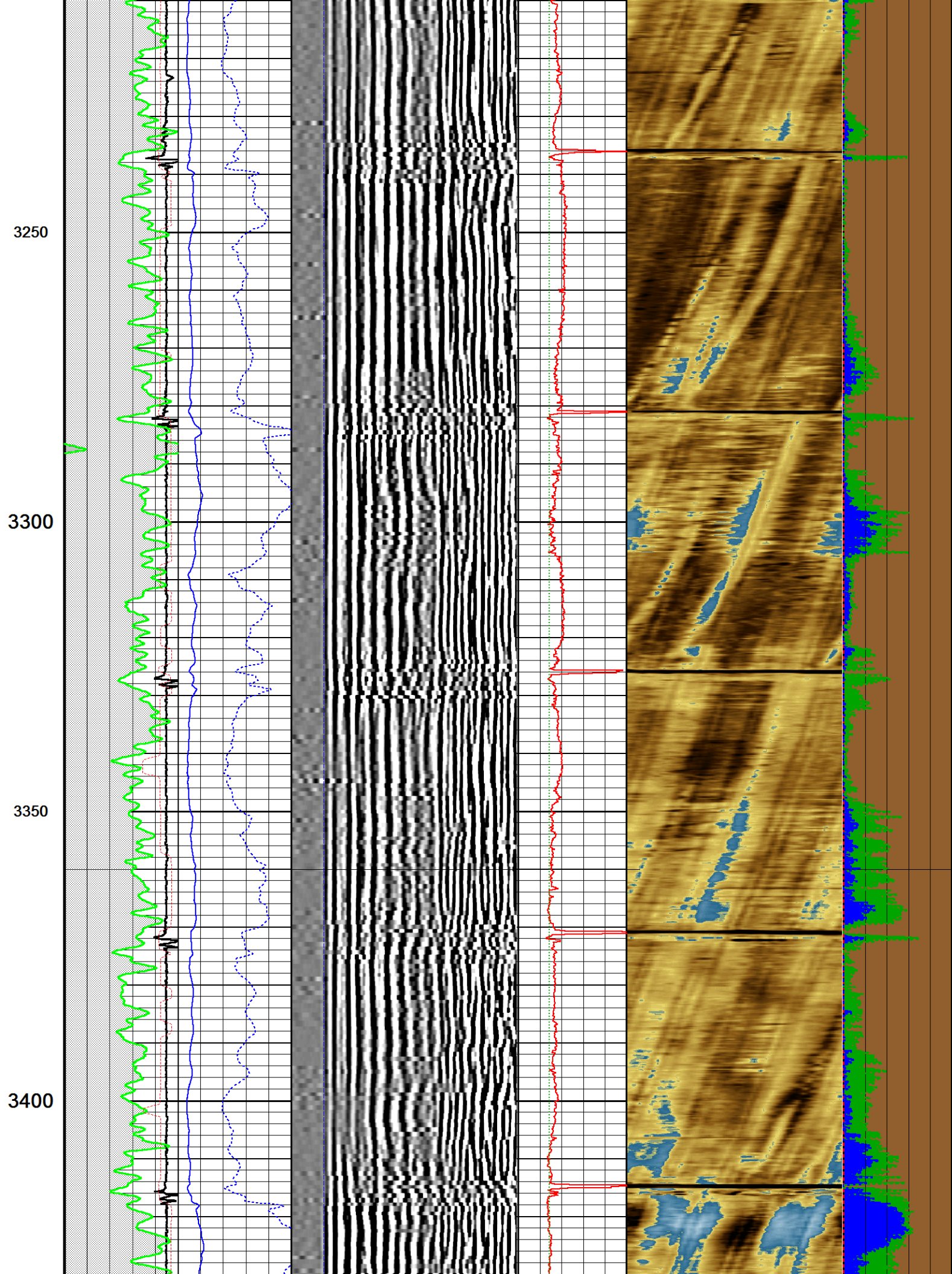
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3150

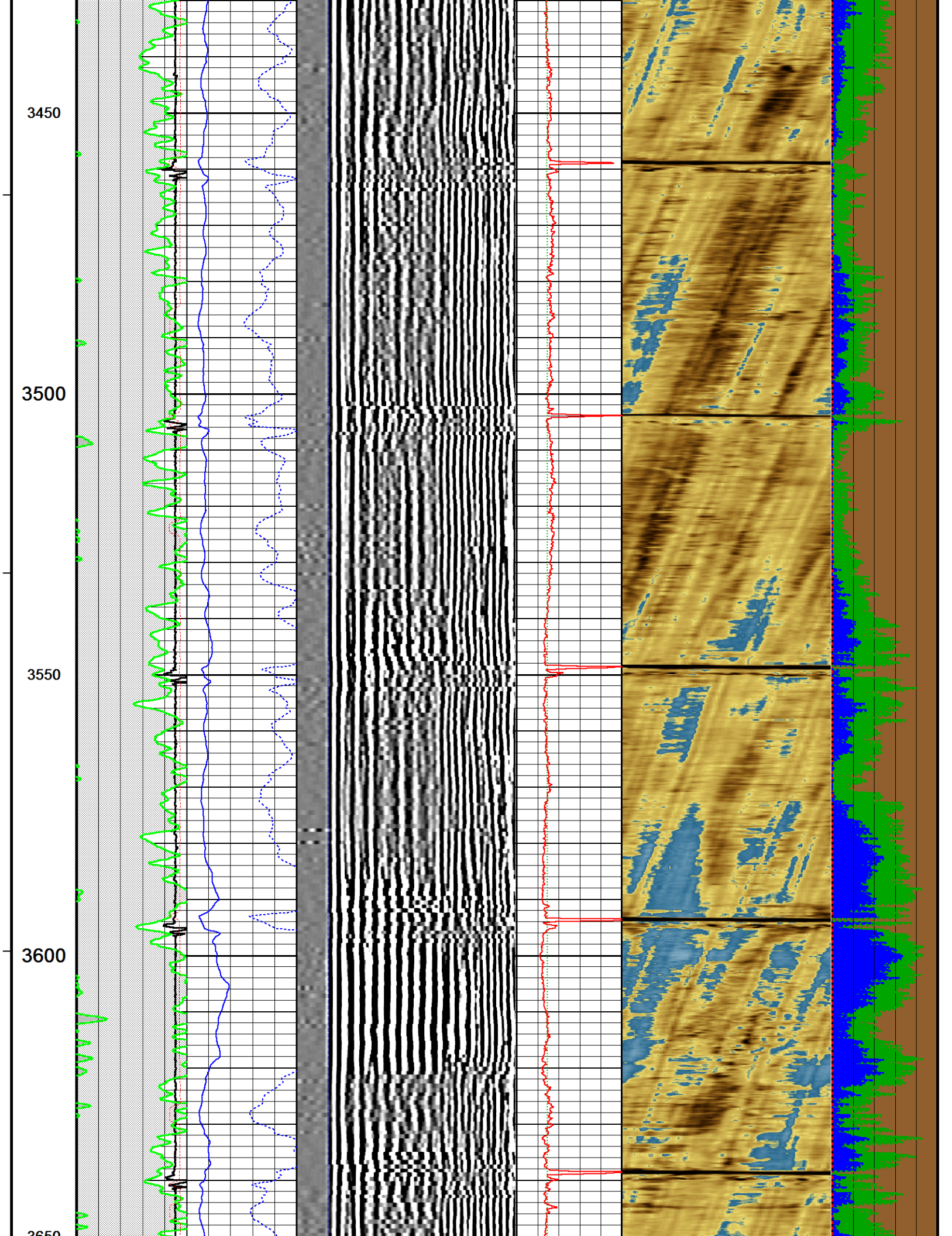
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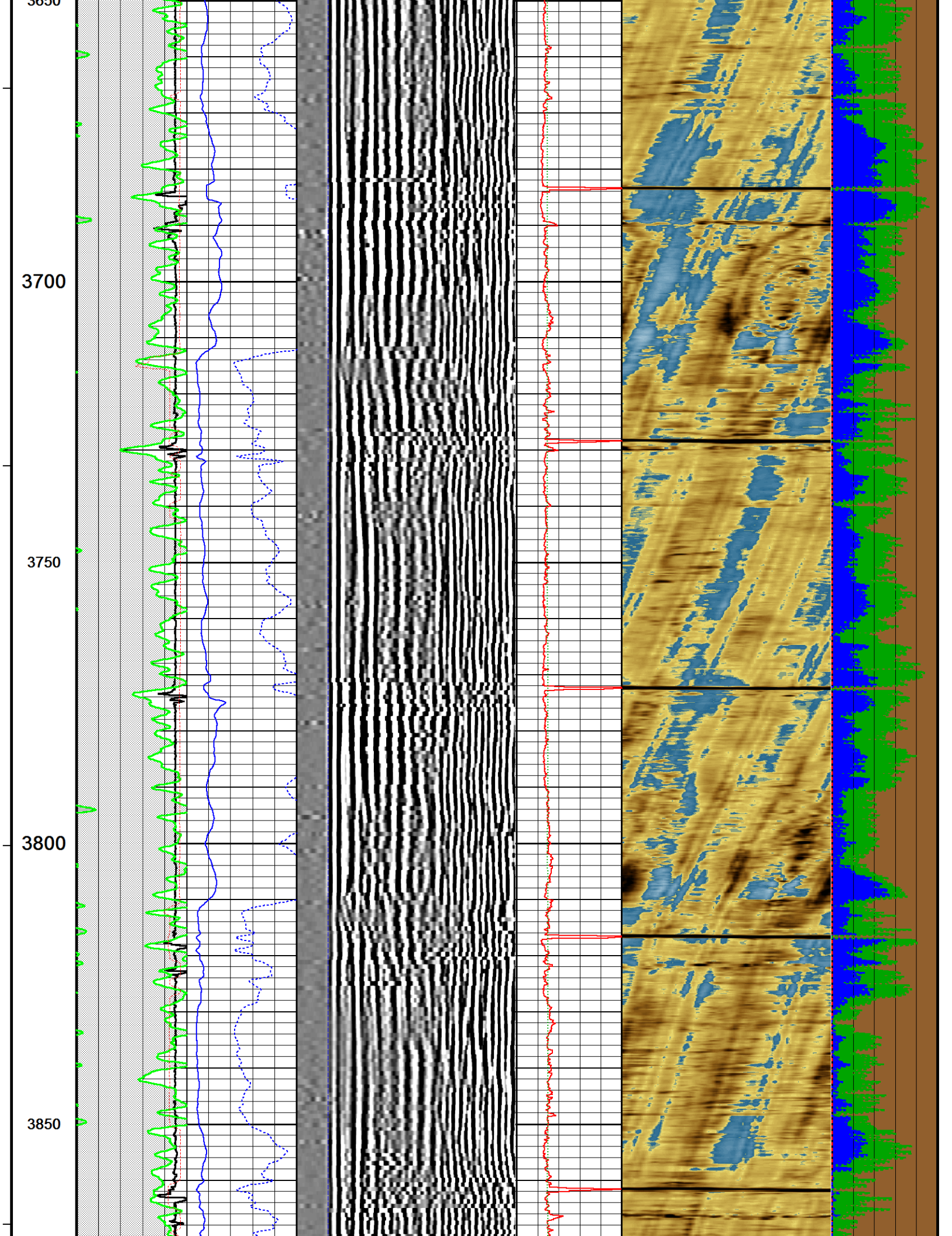




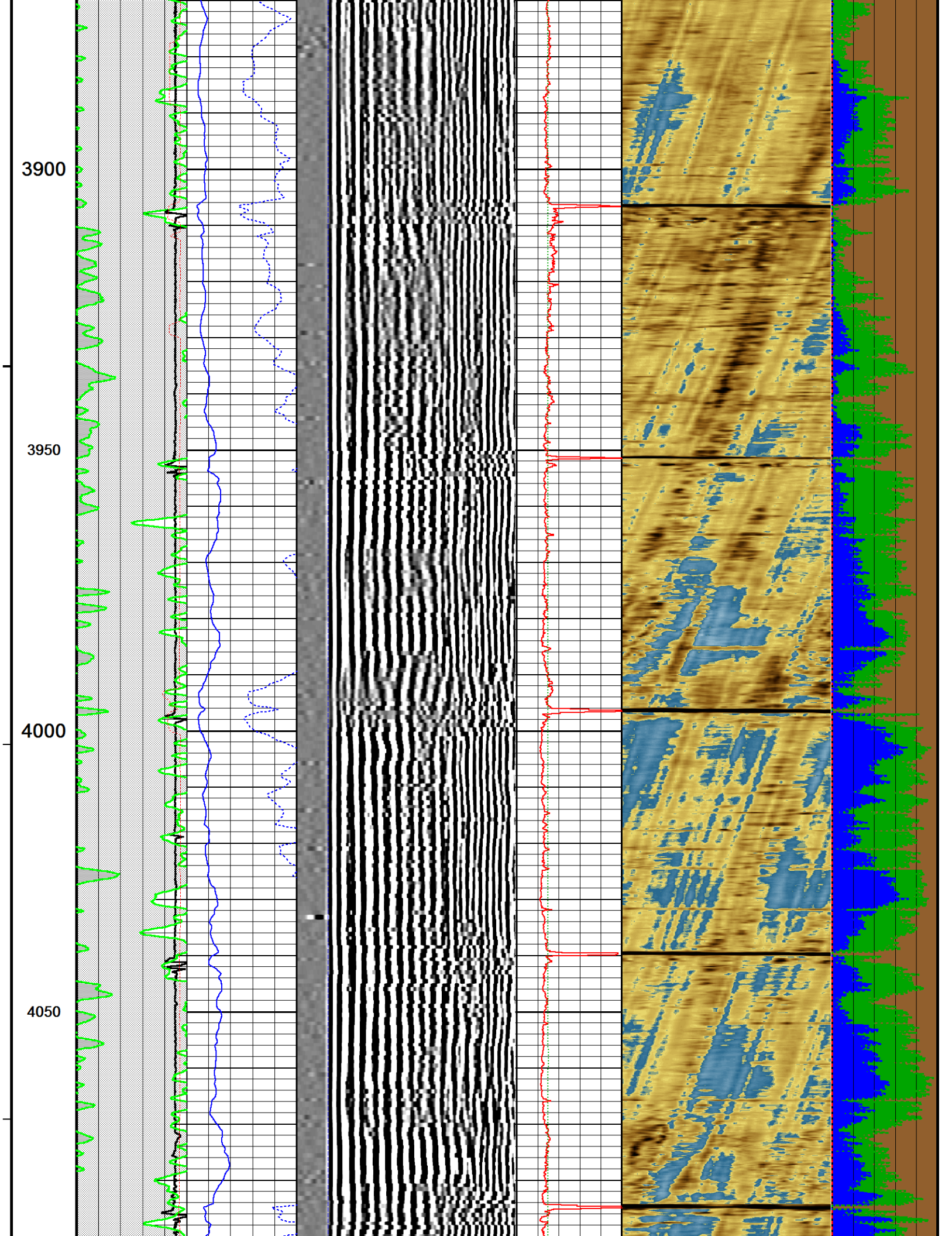




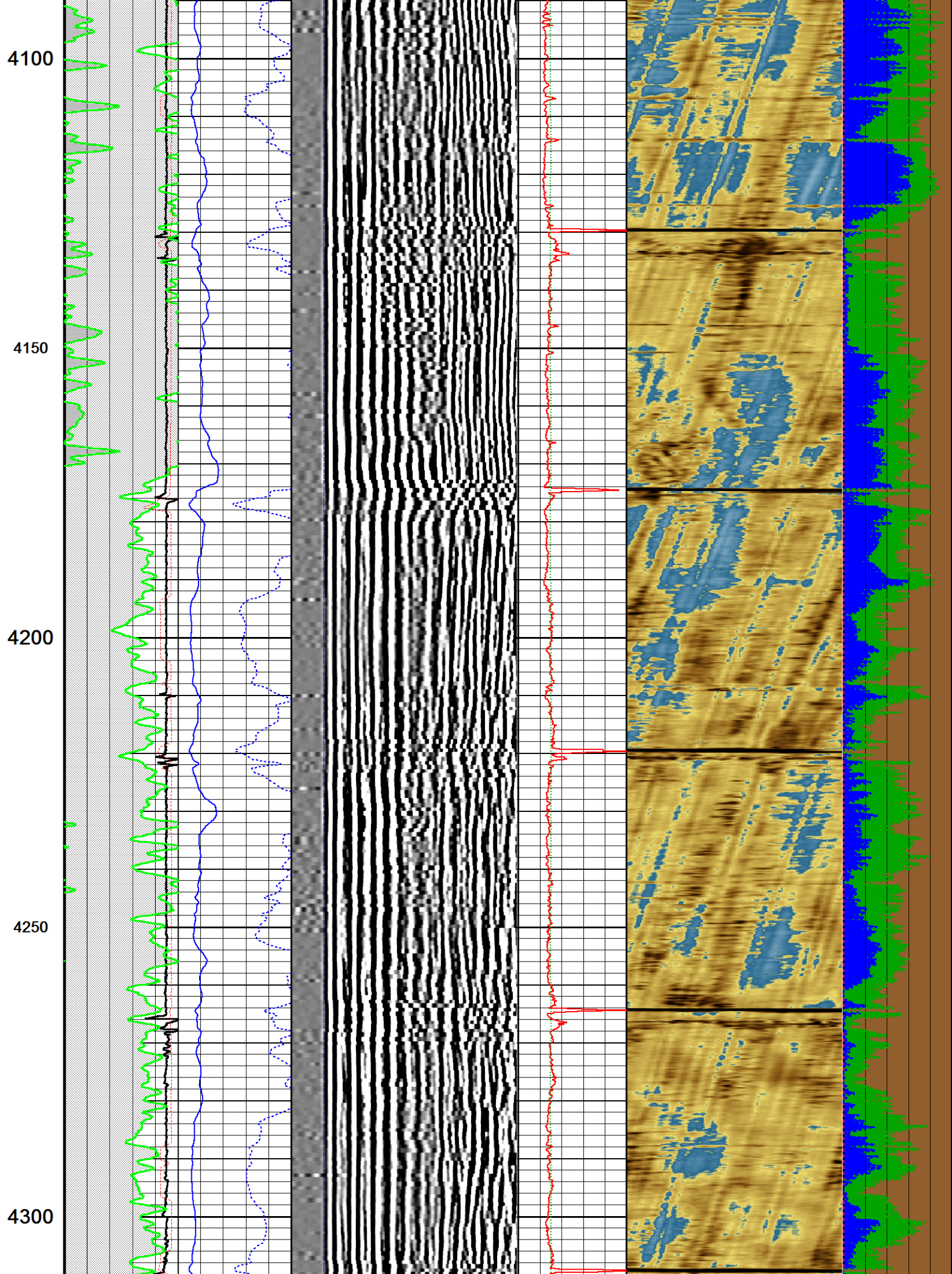












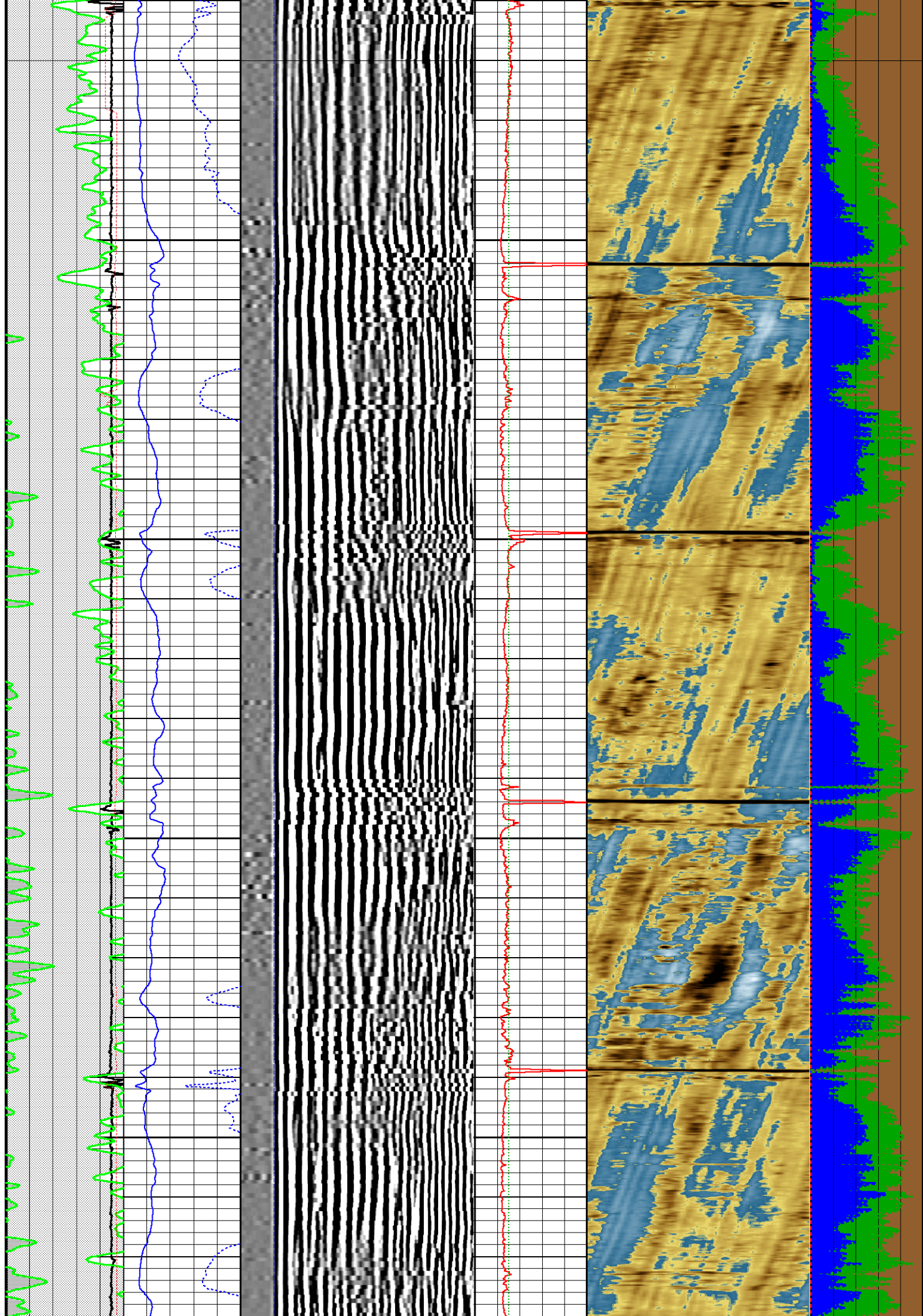


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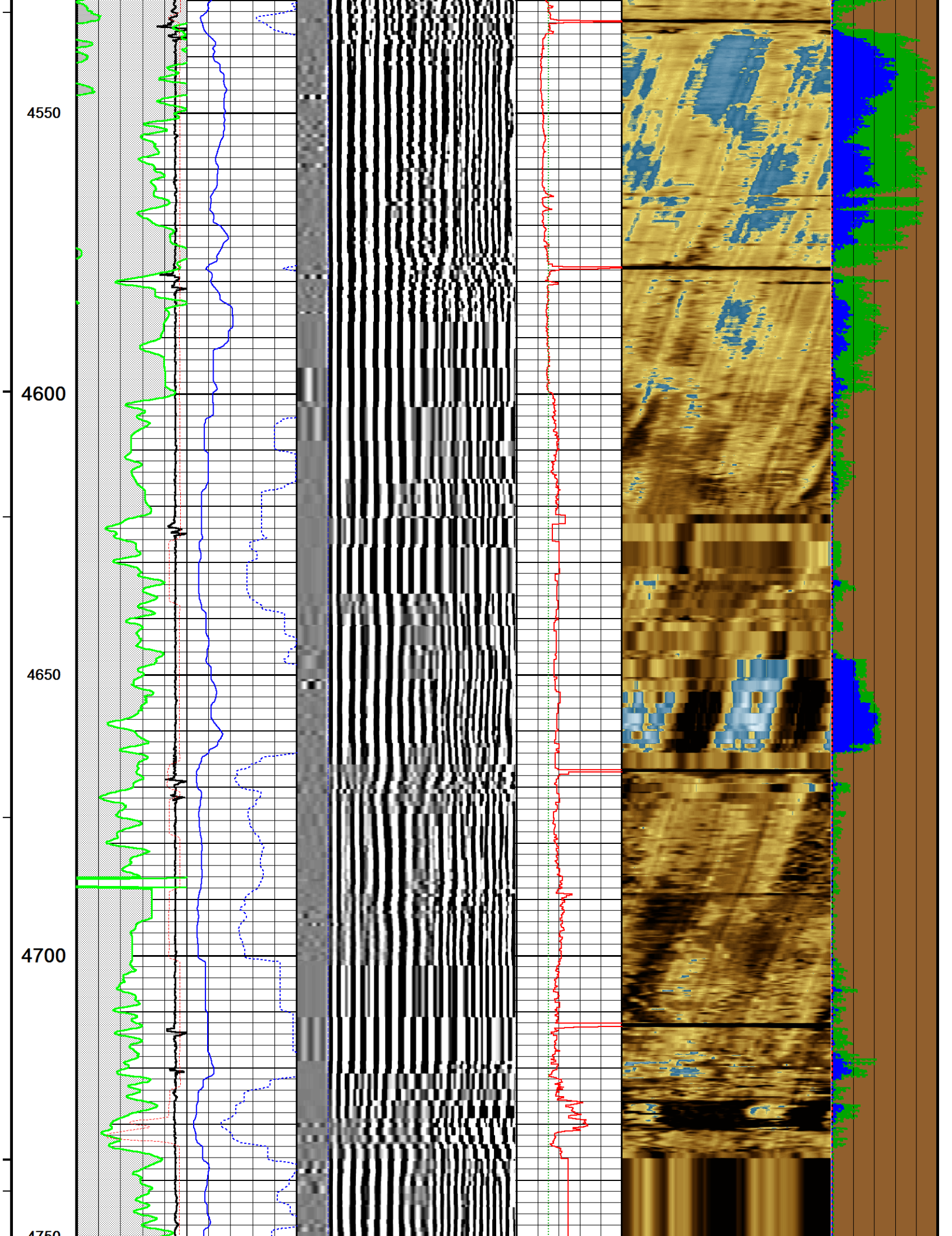
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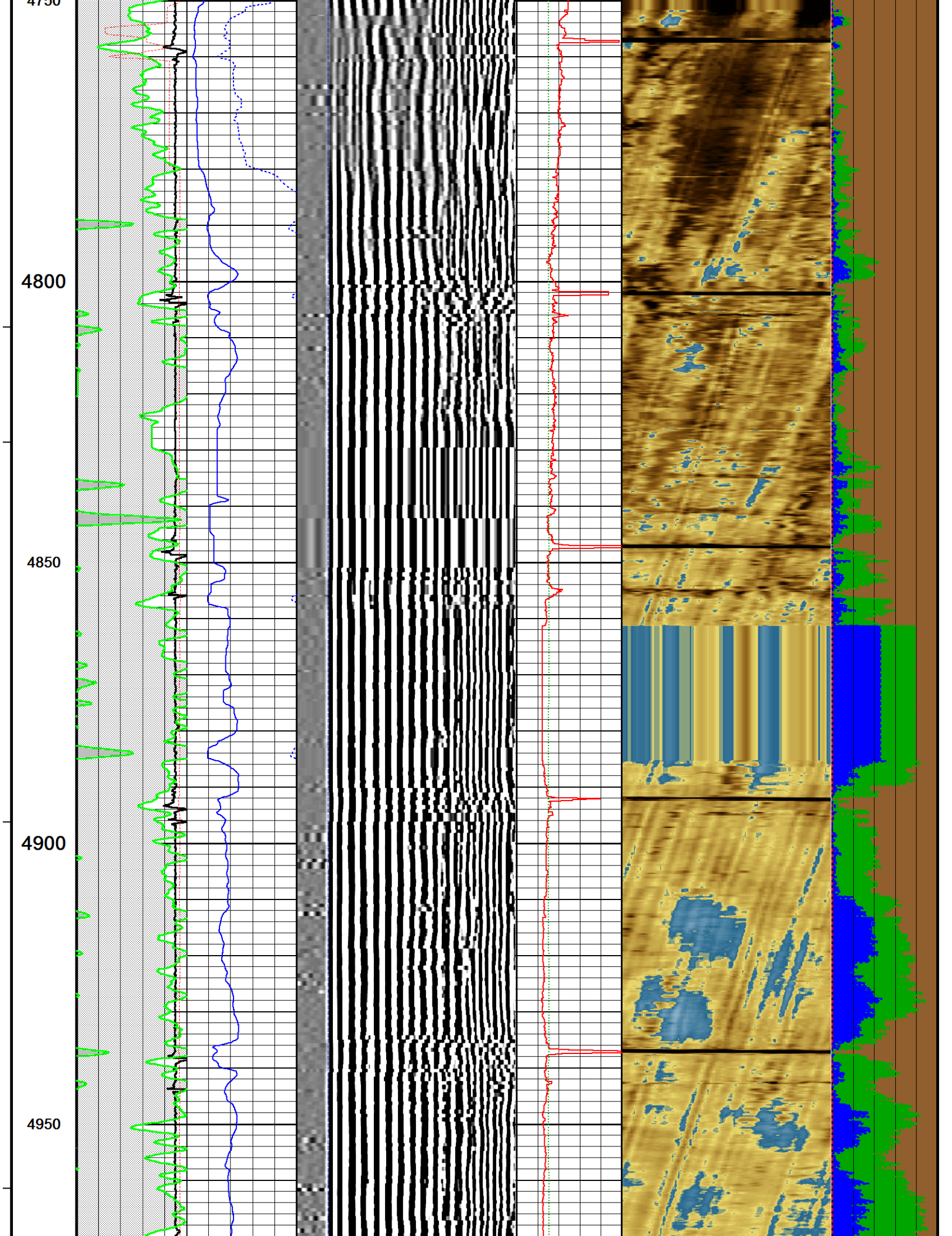
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4500

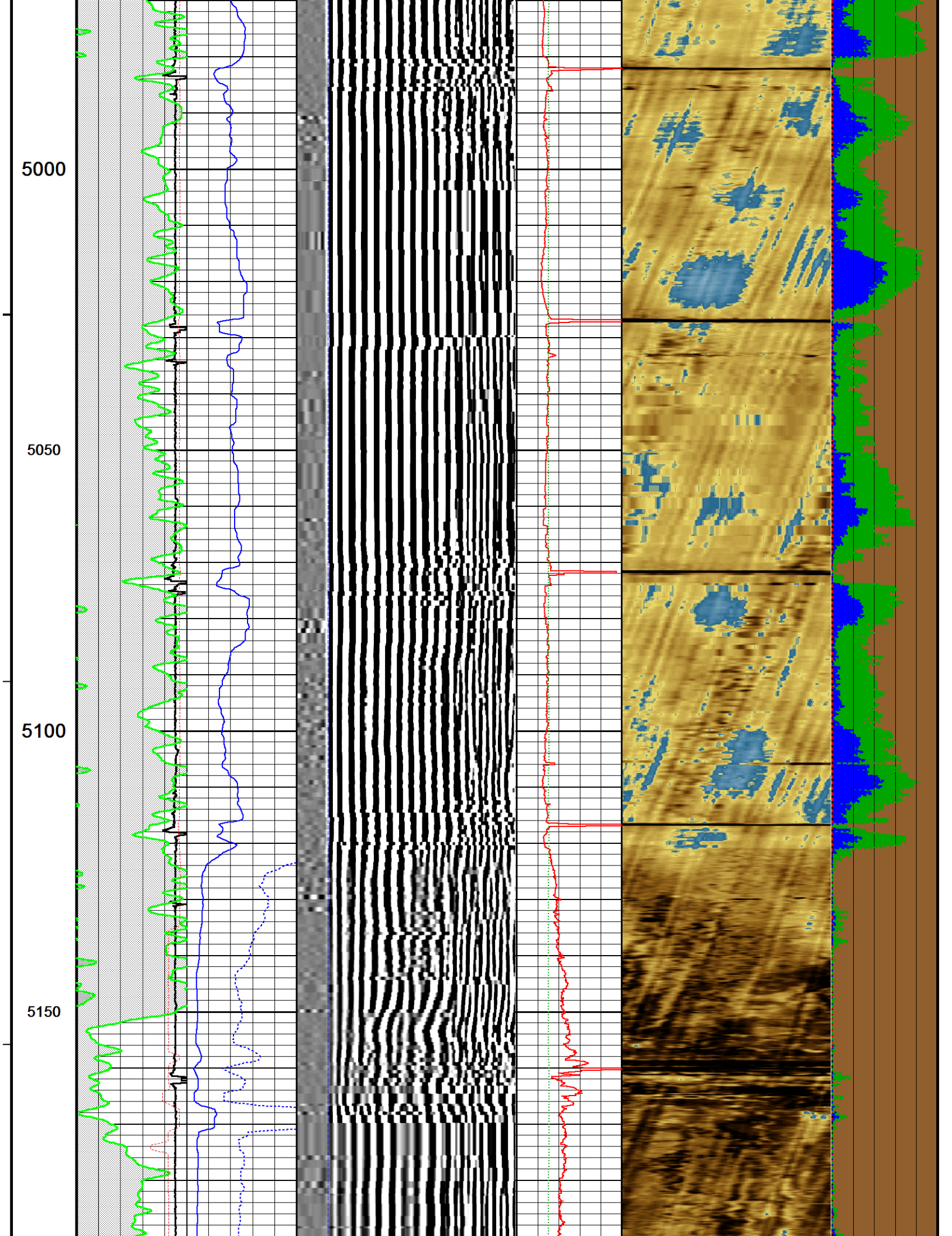












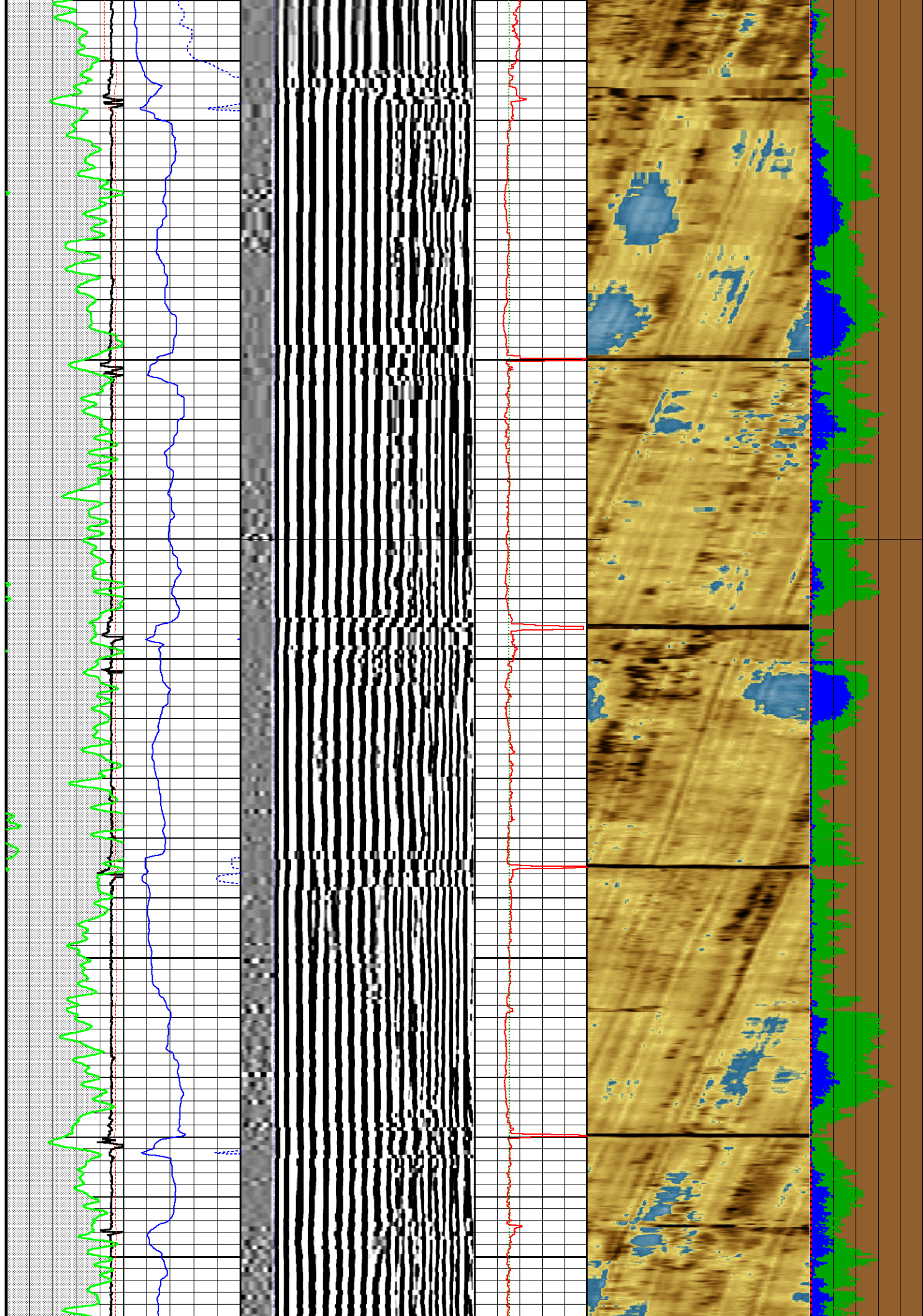
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5250

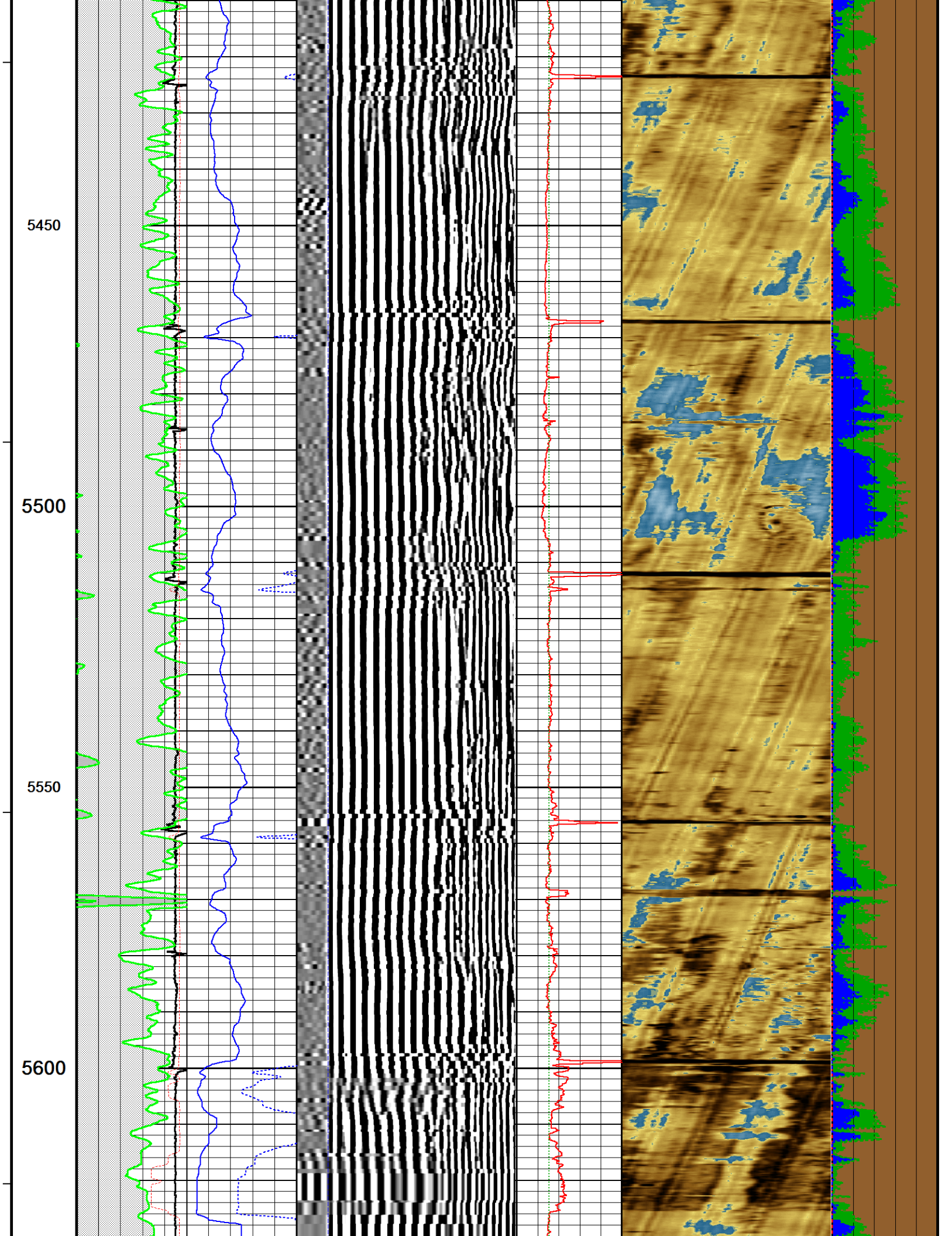
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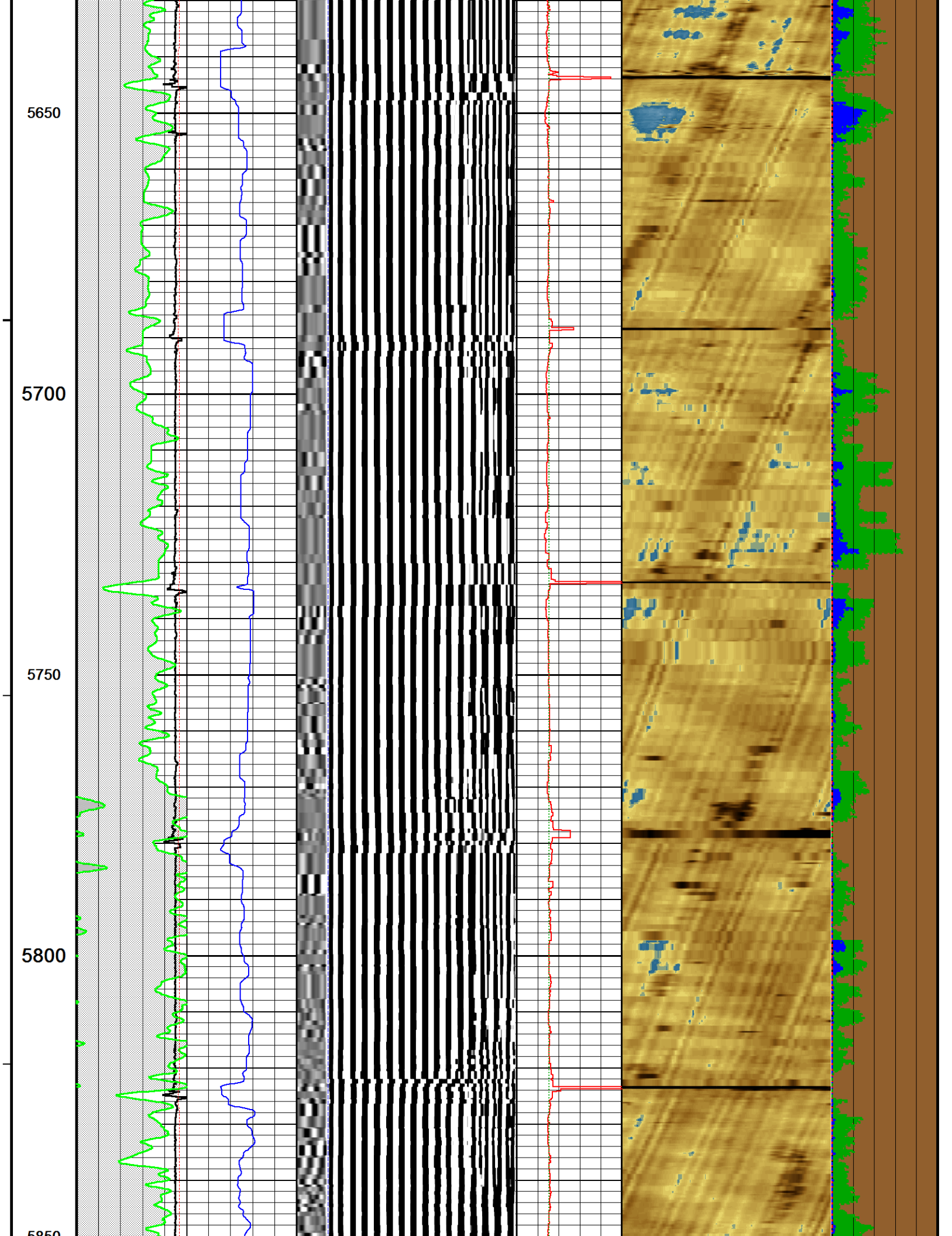
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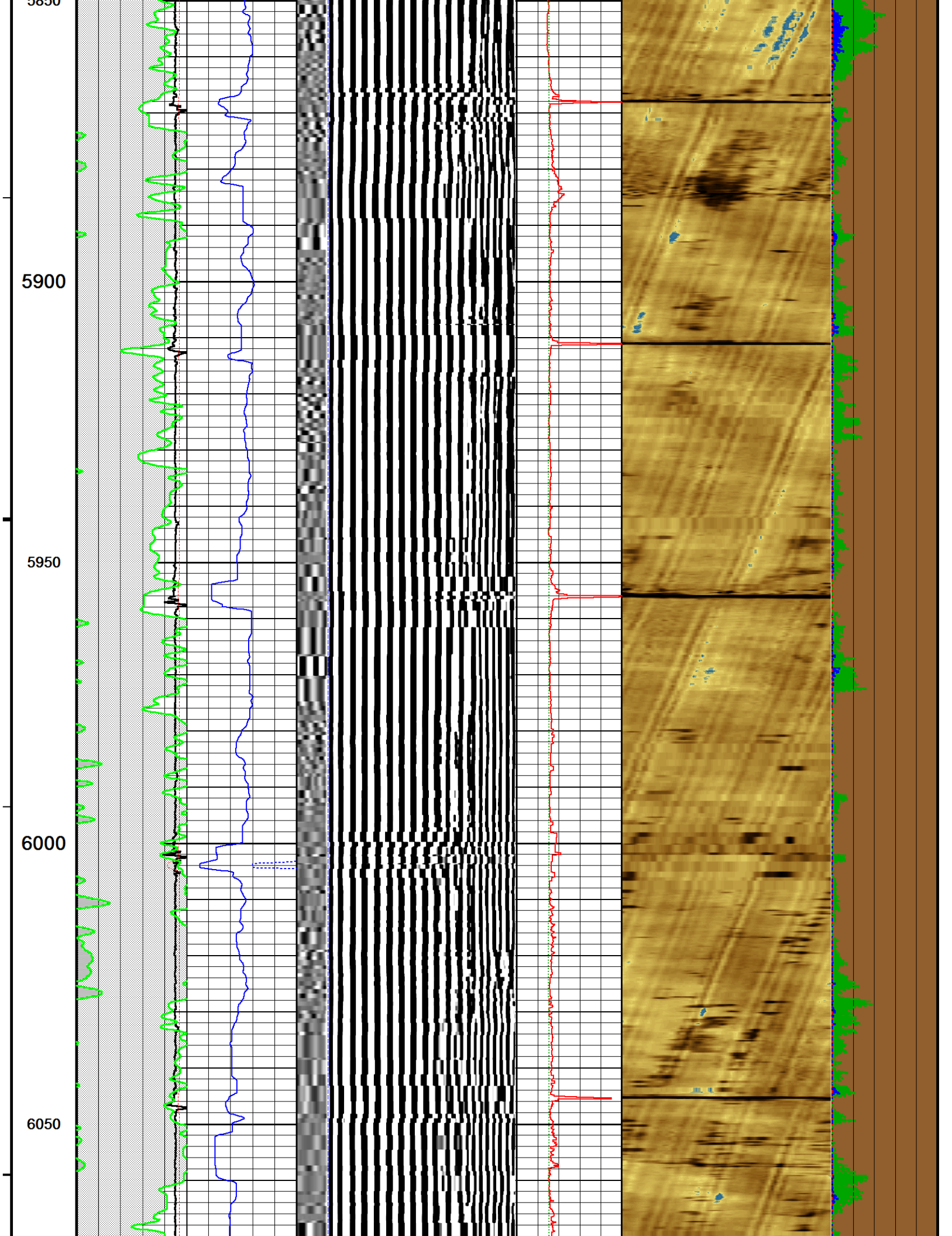










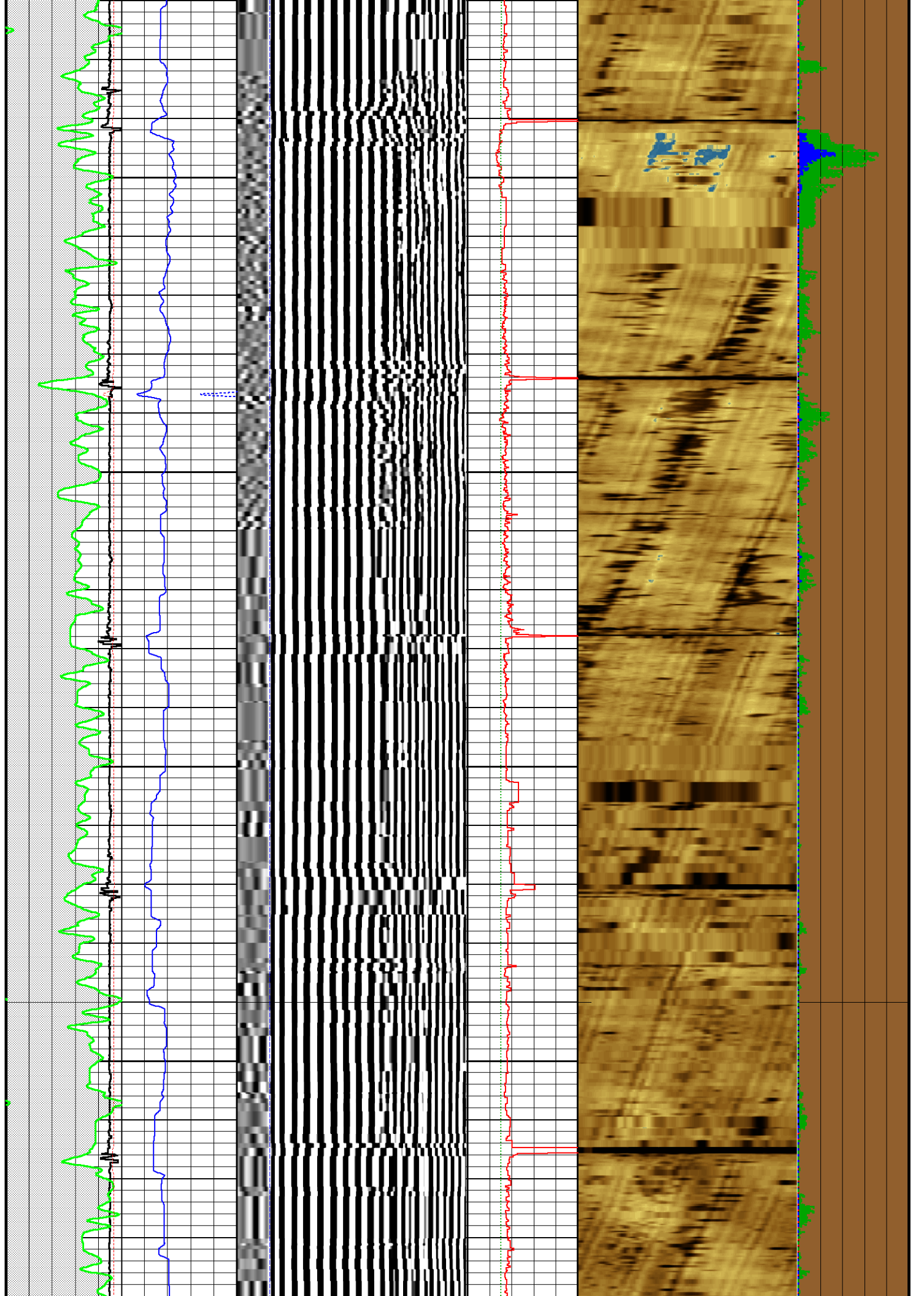


6100

6150

6200

6250





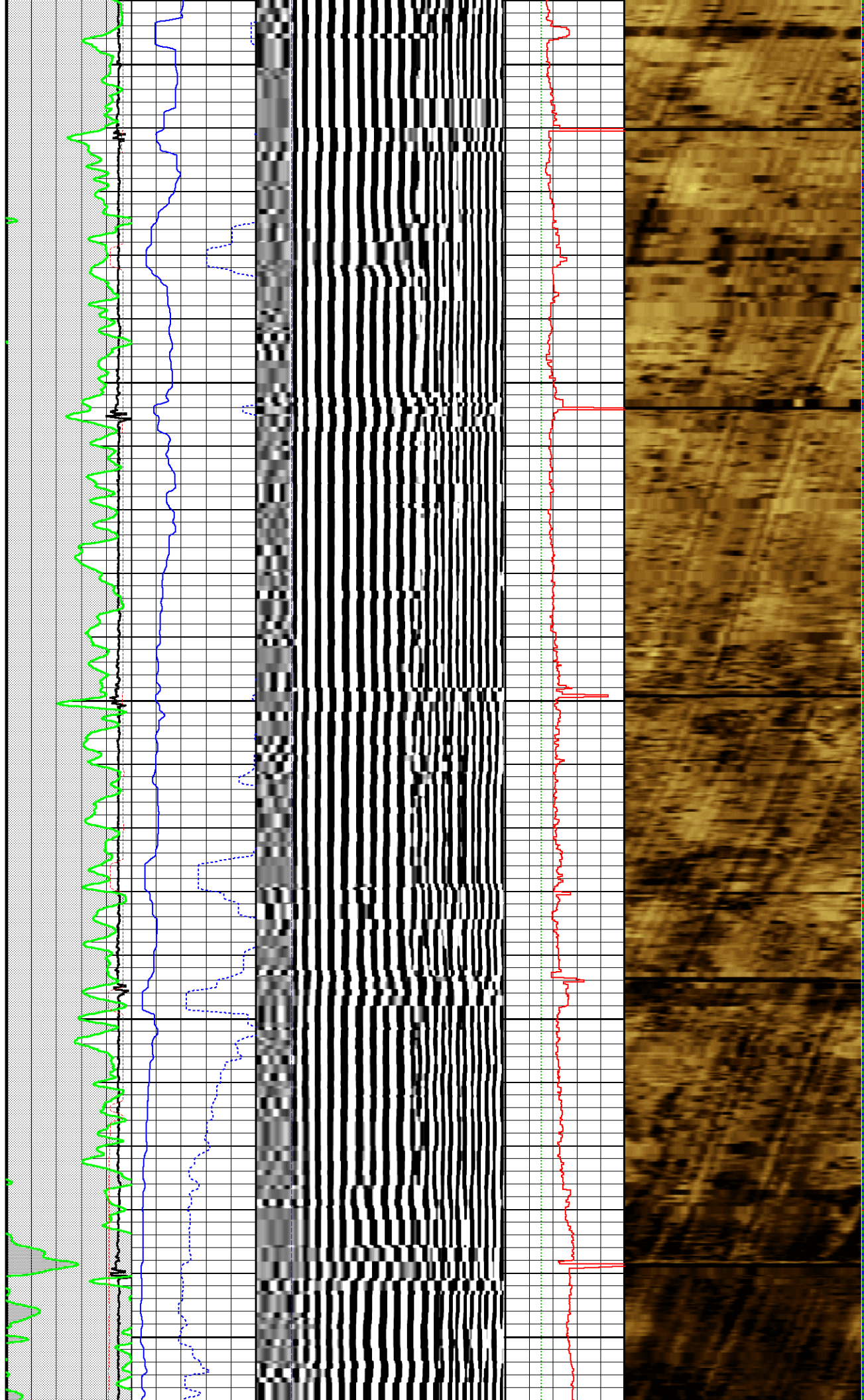
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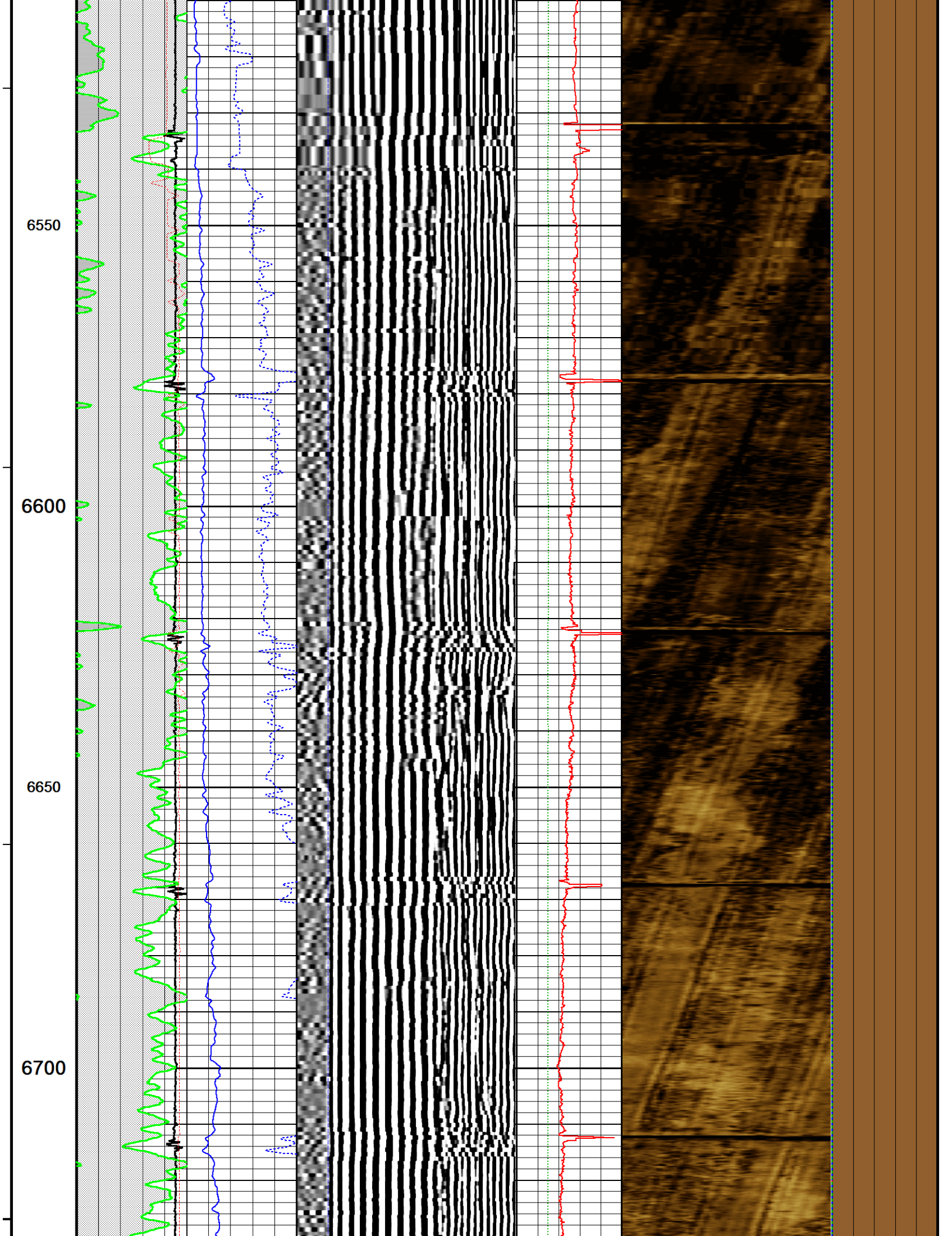
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6400

6450

6500







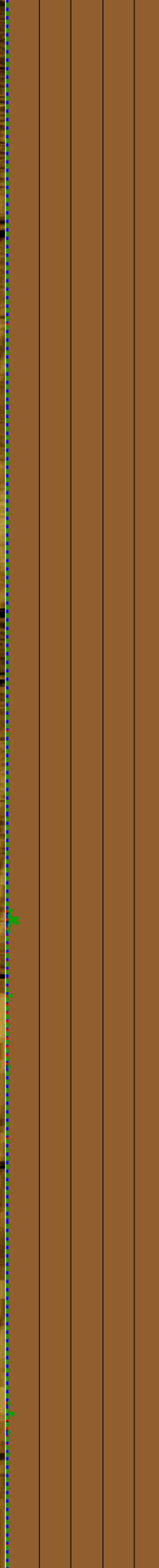
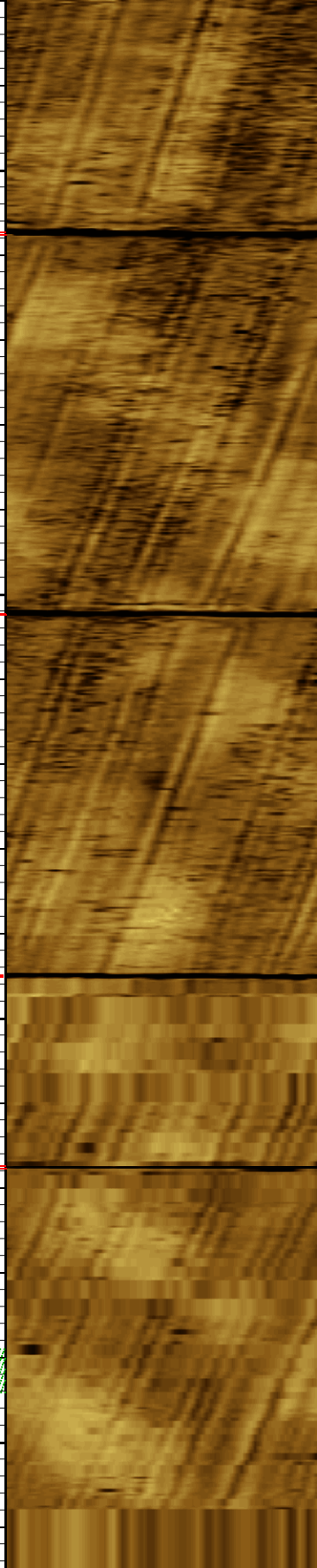
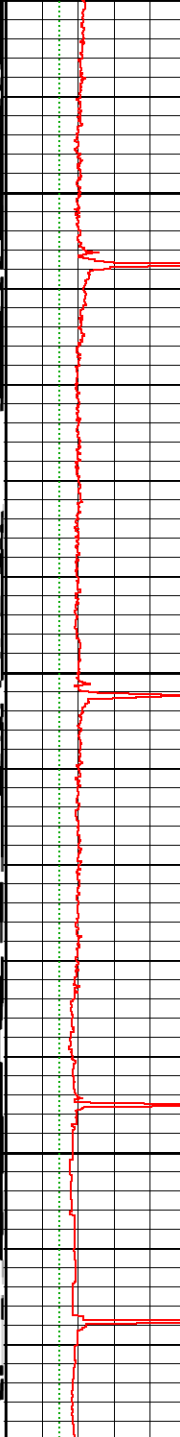
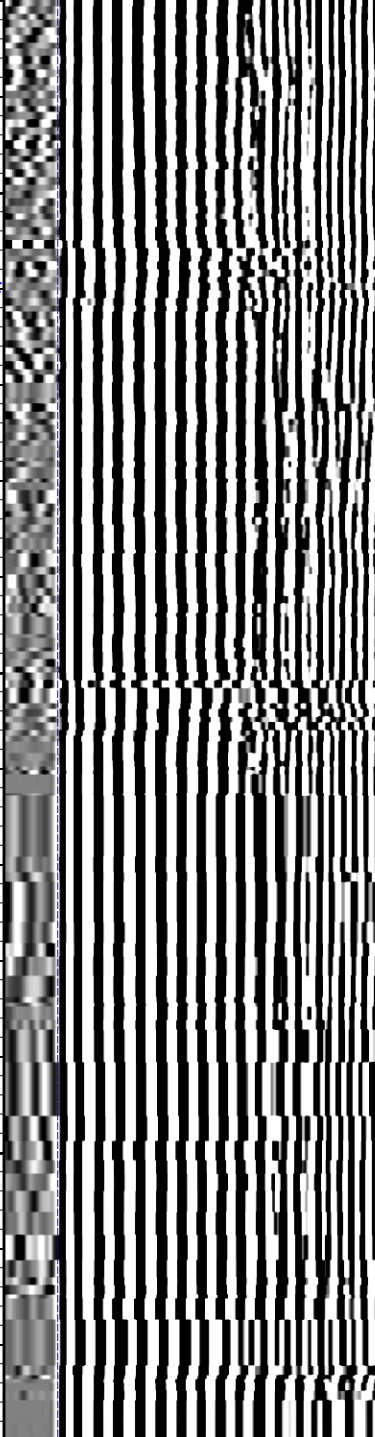
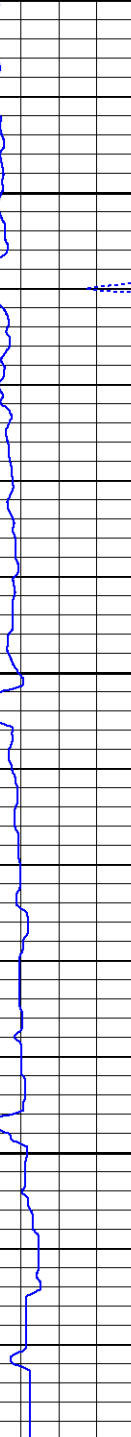
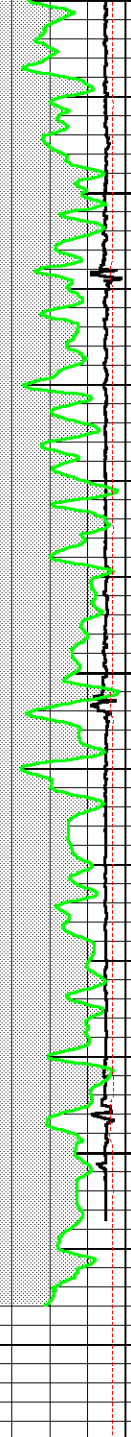
6750

6800

6850

6900

Depth  
in  
Feet



$\frac{CCL}{MV}$

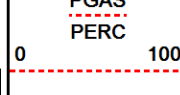
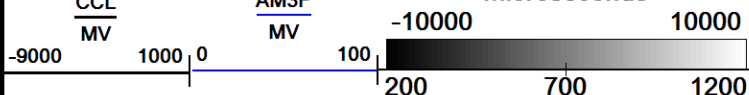
$\frac{AM3F}{MV}$

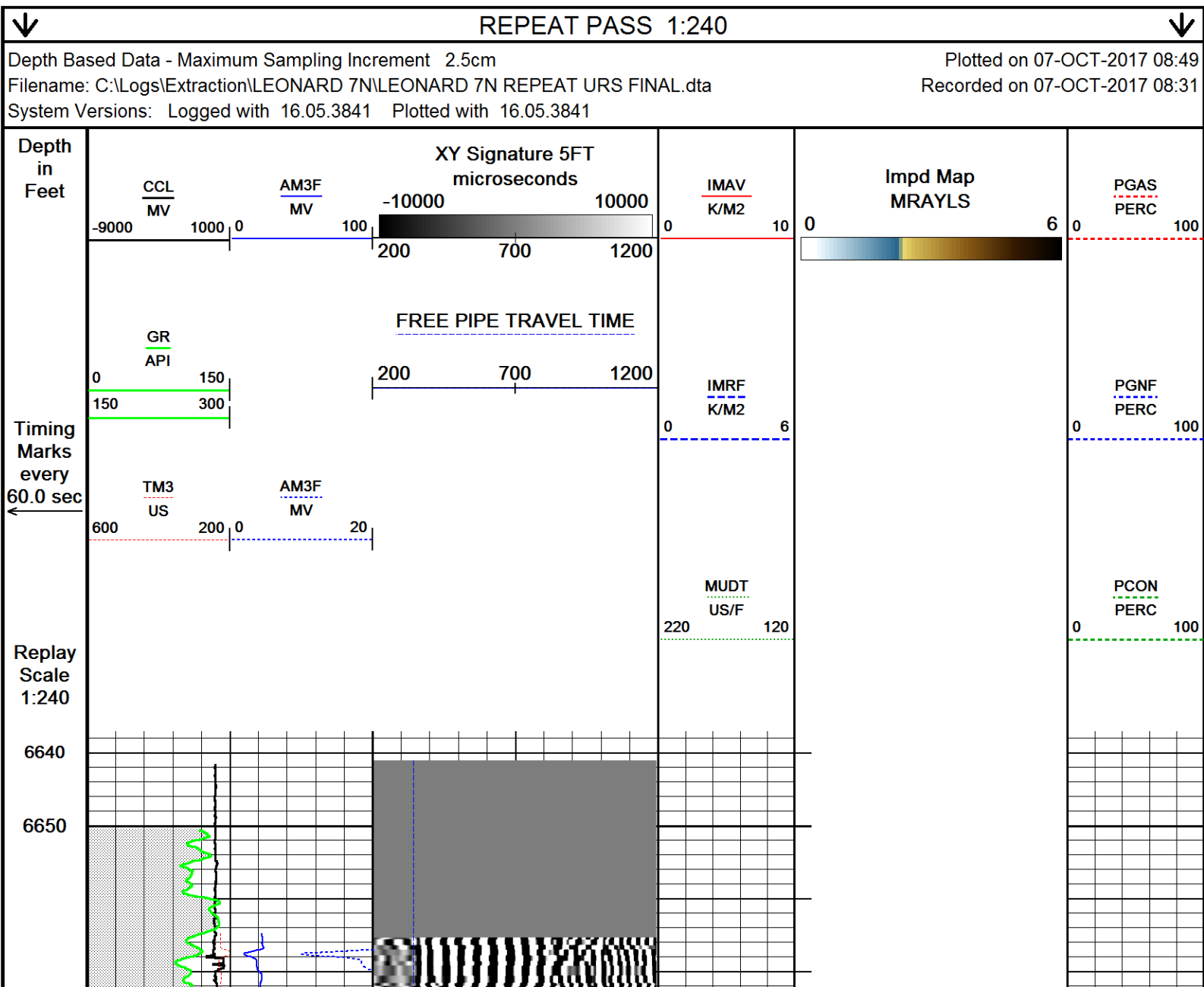
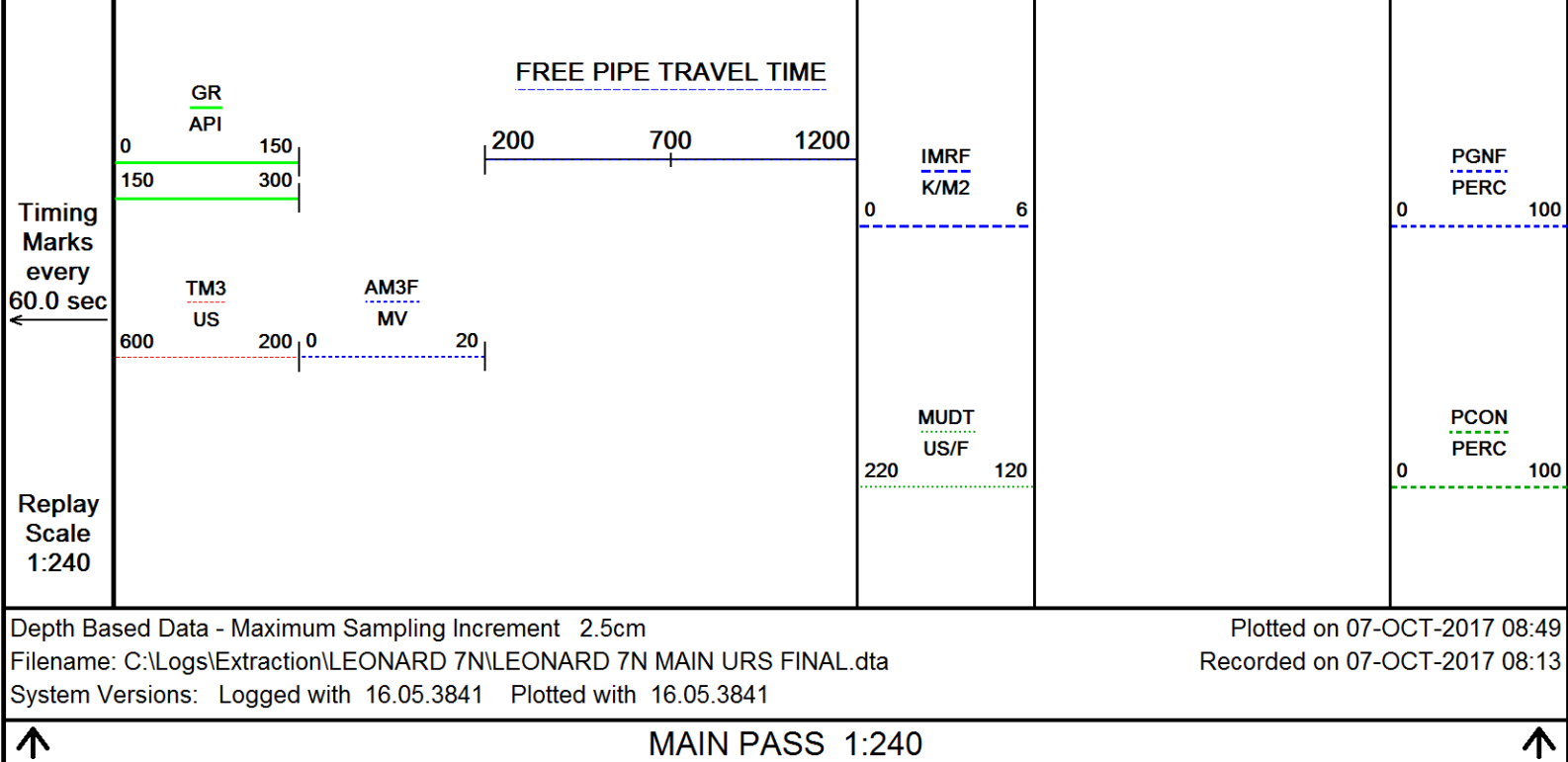
XY Signature 5FT  
microseconds

$\frac{IMAV}{K/M2}$

Impd Map  
MRAYLS

$\frac{PGAS}{PERC}$





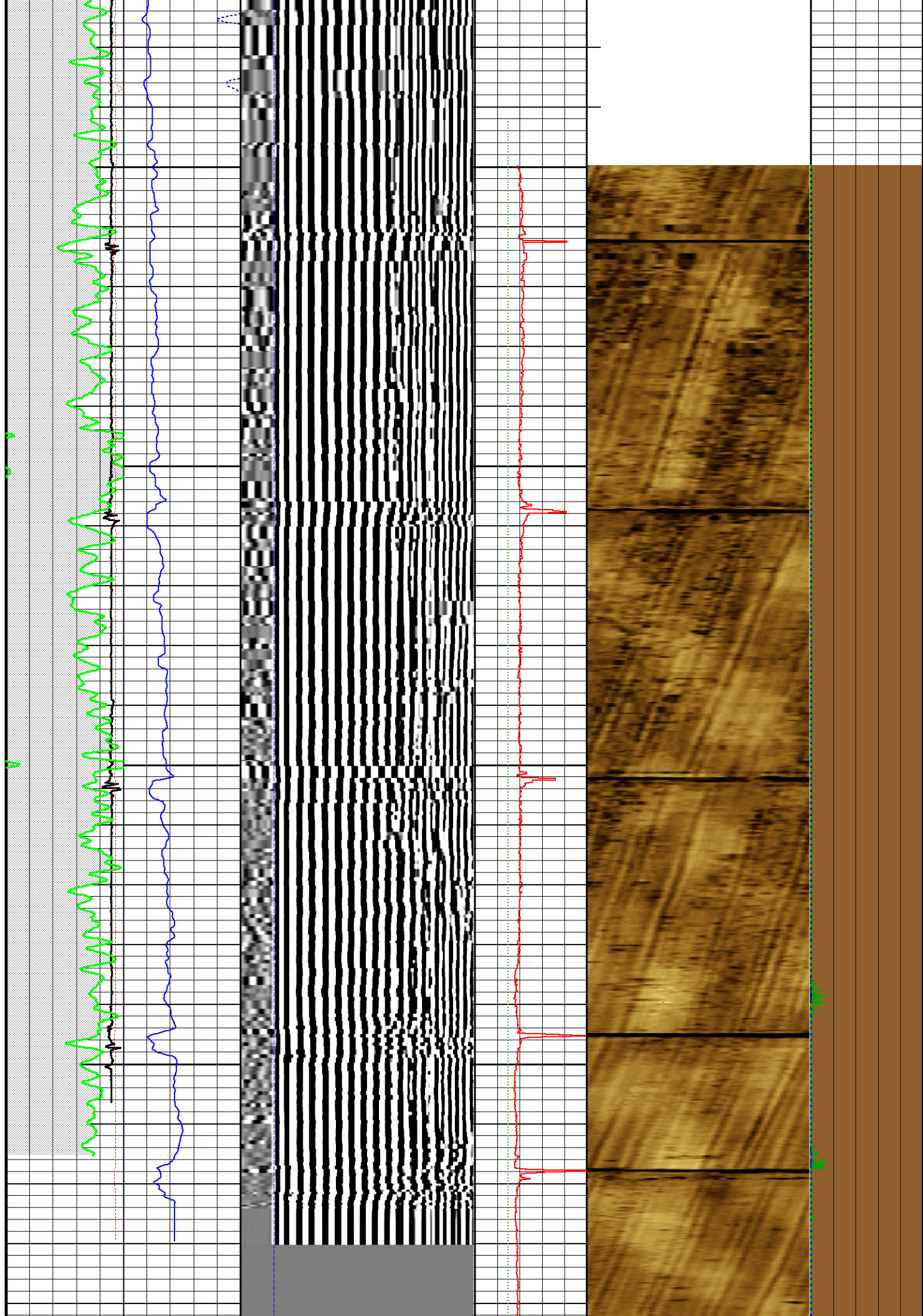


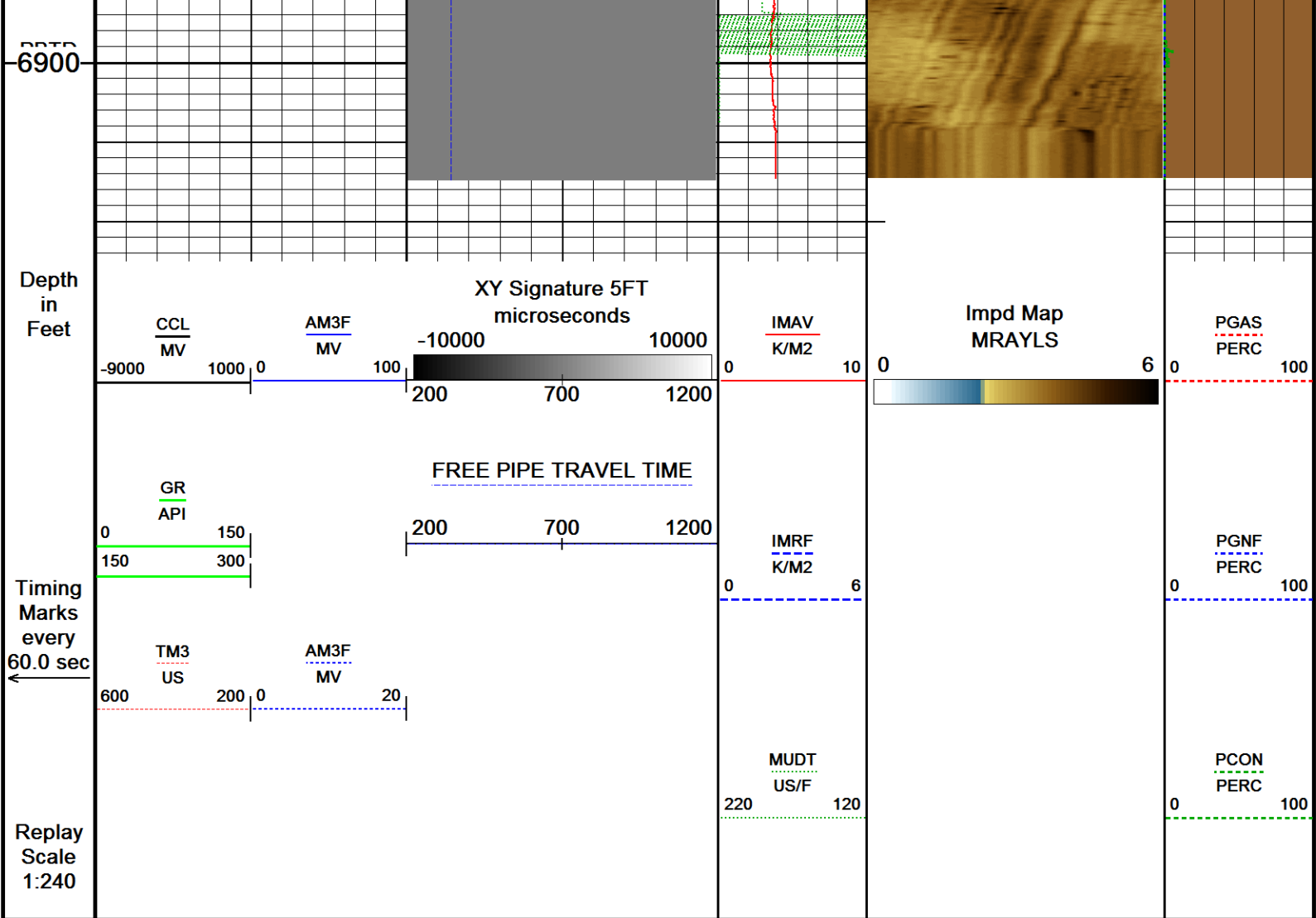
6700

6750

6800

6850





Depth Based Data - Maximum Sampling Increment 2.5cm  
Filename: C:\Logs\Extraction\LEONARD 7N\LEONARD 7N REPEAT URS FINAL.dta  
System Versions: Logged with 16.05.3841 Plotted with 16.05.3841

Plotted on 07-OCT-2017 08:49  
Recorded on 07-OCT-2017 08:31

↑ REPEAT PASS 1:240 ↑

SHOP AND FIELD CALIBRATIONS  
C:\Logs\Extraction\LEONARD 7N\LEONARD 7N MAIN URS FINAL.dta

UGR Field Survey Cal UGR-JD 118

Field calibration on 00-JAN-1988 00:00

Gamma Ray Field Survey Calibration

Tool Type: UGR-JD Serial No: 118  
Calibrator No:

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	819.90
AMP 5 FT	100 % Bond	1.40	0.00
	Free Pipe	41.00	774.60

CBT Constants    CBT-AA 109

Last Edited on 07-OCT-2017 08:12

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

	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 07-OCT-2017 08:12

\*\*\* 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	4.60
ZMud Cal Area Ratio	4.00

\*\* Depth Specific Settings \*\*

Dpth Intvl	Dpth Intvl	Cs Sz	Cs WT	ZHd Cal	ZMd Cal	Thk	Harmnc K
Min(F)	Max(F)	(IN)	(LB/G)	ARatio	ARatio	(IN)	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 7N\LEONARD 7N MAIN URS FINAL.dta

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

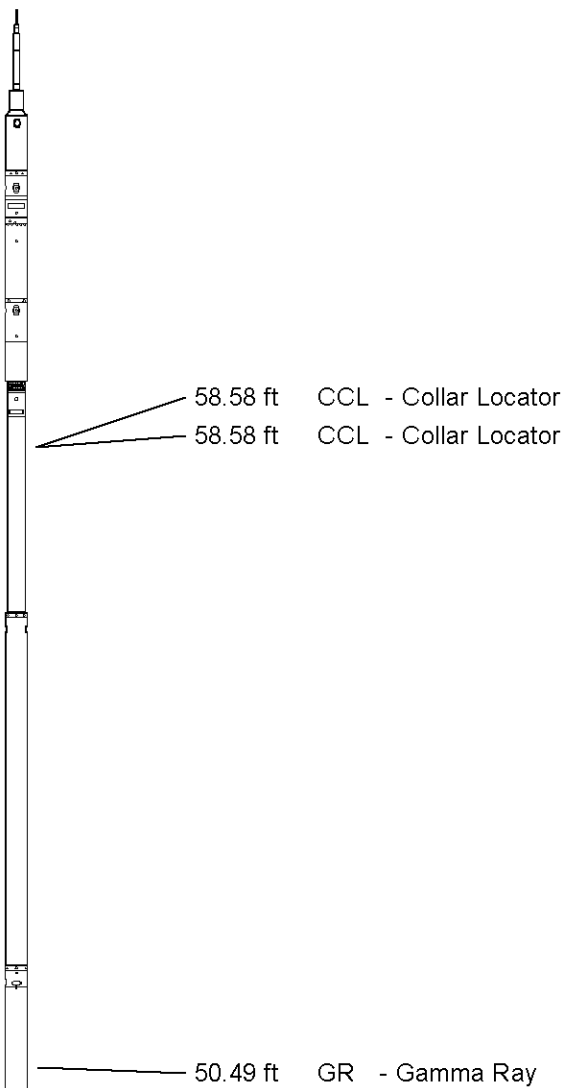
Crossover 1-pin to 55-pin for WCC-D  
XOV-WC 119 LG: 1.05 ft WT: 15.4 lb OD: 3.386 in

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

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

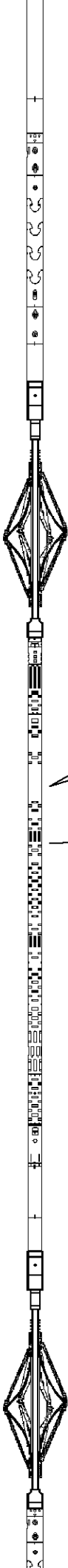




Flexible Joint, URS, 55 Pin  
FTP-FA 132 LG: 4.35 ft WT: 90.4 lb OD: 3.386 in

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

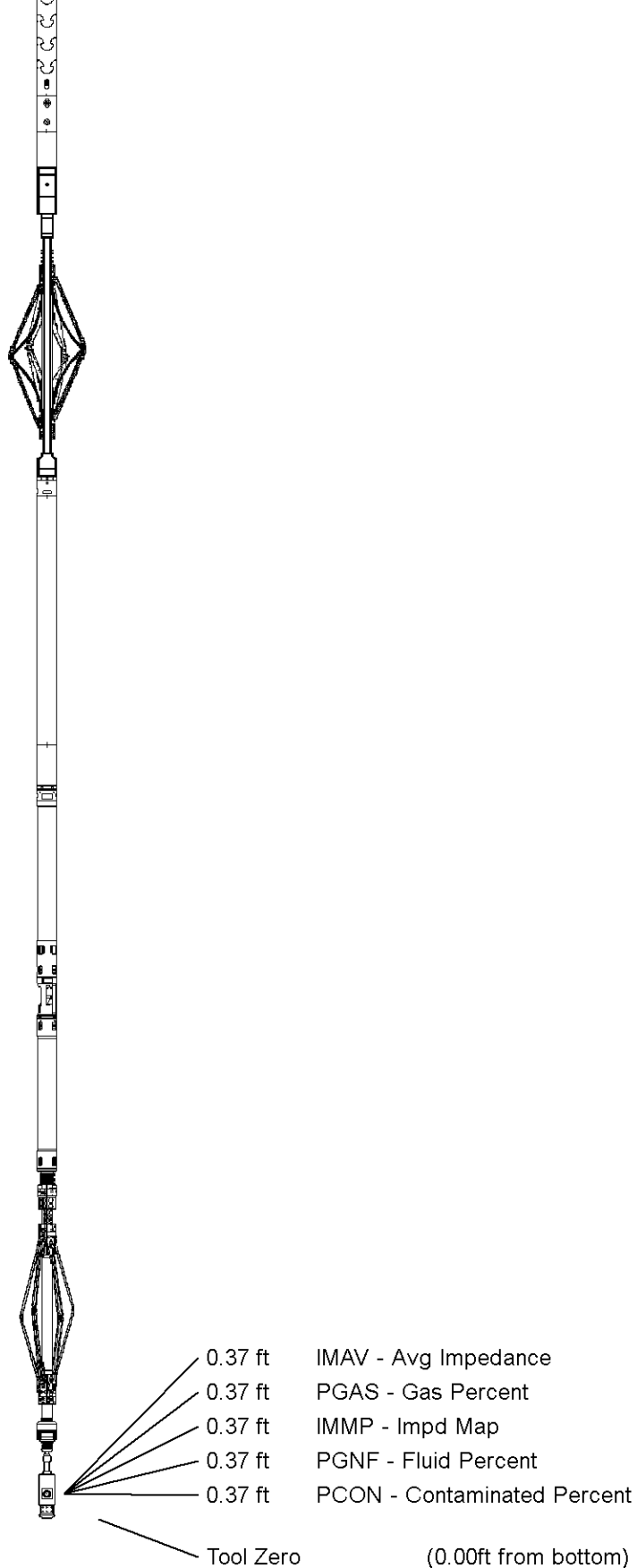
55 pin Roller Centralizer  
CEN-XA 221 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

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

Total Length: 64.23 ft Weight: 1108.9 lb



All measurements relative to tool zero.

COMPANY	EXTRACTION OIL & GAS
WELL	LEONARD 7N
FIELD	WATTENBERG
PROVINCE/COUNTY	WELD
COUNTRY/STATE	USA / COLORADO



COUNTRY/STATE			USA / COLORADO		
Elevation Kelly Bushing	5032	feet	Bottom Log Interval	6900.00	feet
Elevation Drill Floor	5032	feet	Depth Driller	12184.00	feet
Elevation Ground Level	5004	feet	Depth Logger	6900.00	feet



**Weatherford®**

SECUREVIEW  
ULTRAVIEW/BONDVIEW  
CEMENT ANALYSIS