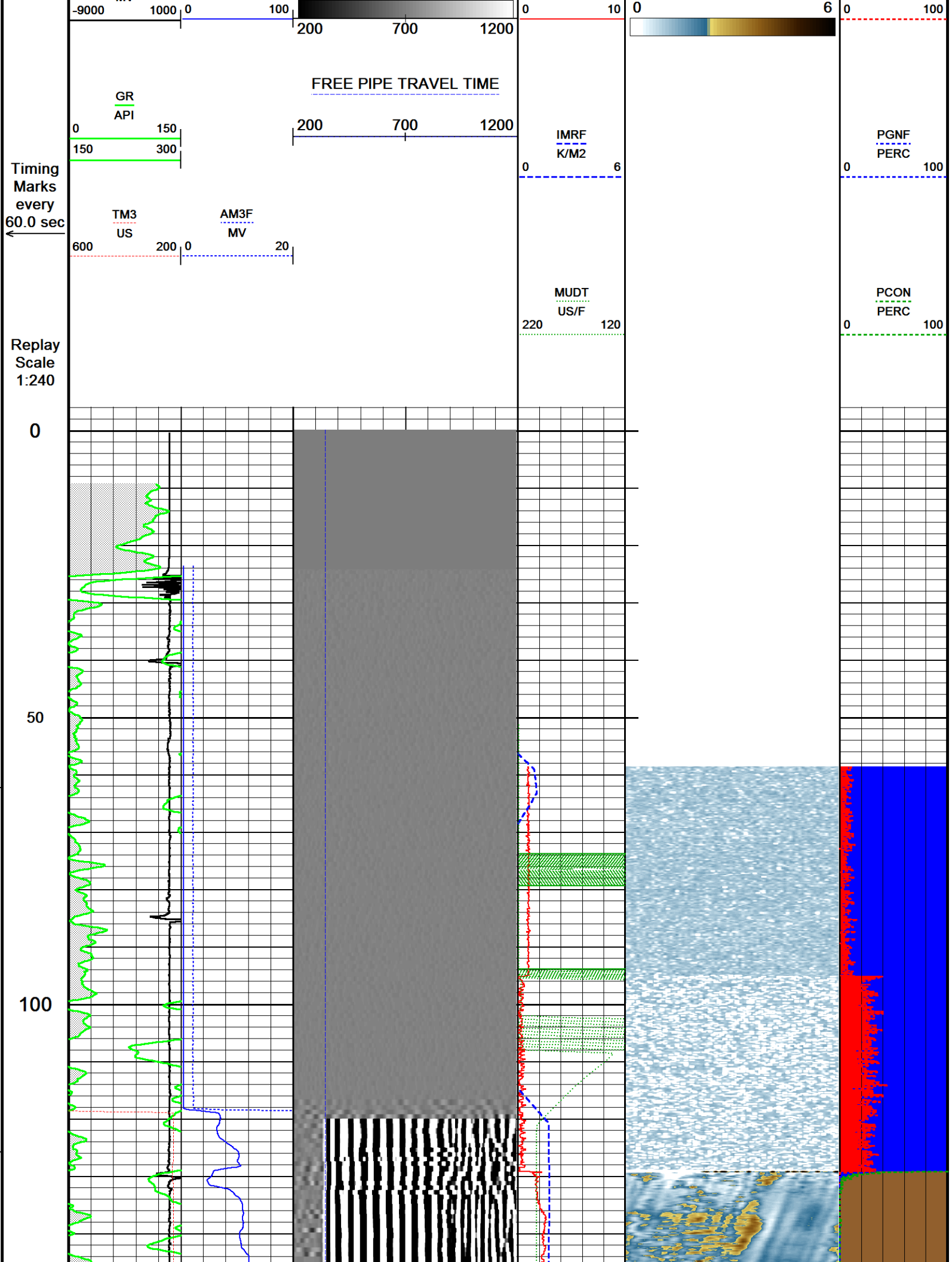
 Weatherford®				SECUREVIEW ULTRAVIEW/BONDVIEW CEMENT ANALYSIS							
COMPANY WELL FIELD PROVINCE/COUNTY COUNTRY/STATE LOCATION				EXTRACTION OIL & GAS LEONARD 5C WATTENBERG WELD USA / COLORADO							
SEC 21		TWP 2N	RGE 67W	Other Services							
Latitude				Permanent Datum GROUND LEVEL, Elevation 5004 feet Log Measured From KB, 28 feet above Permanent Datum Drilling Measured From KB							
Longitude											
API Number											
Date		07-OCT-2017									
Run Number		ONE		PERFORATION RECORD							
Service Order		TBD		Shot Density		Number of Shots		Depth From		Depth To	
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		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		Depth From	
Time Well Ready		ROA				inches		pounds/ft		feet	
Time Logger Bottom		SEE LOG				5.500		20.00		0.00	
Unit		14115								12184.00	
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 17:06		
Filename: C:\Logs\Extraction\LEONARD 5C\LEONARD 5C MAIN URS FINAL.dta					Recorded on 07-OCT-2017 15:09		
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			



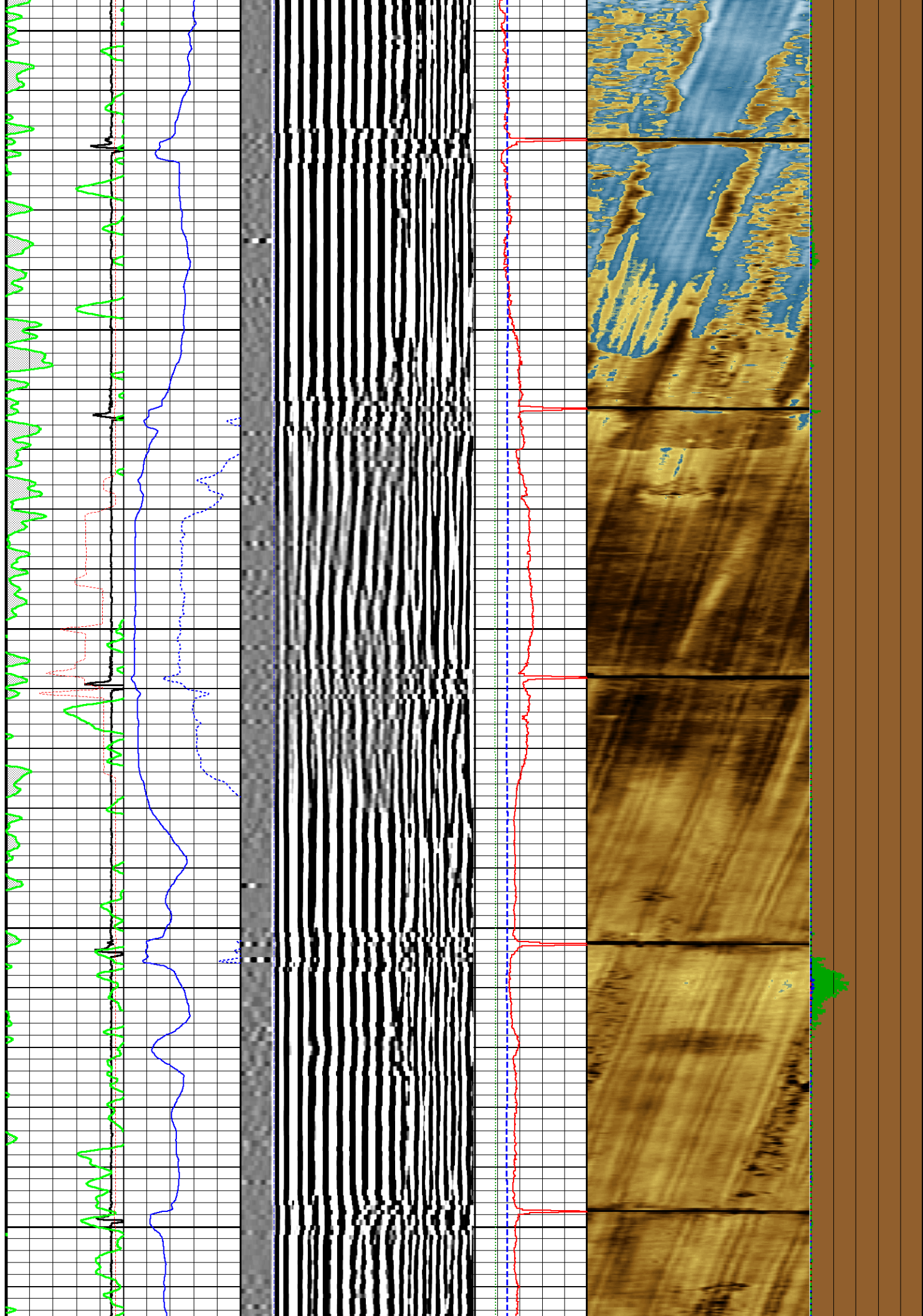
150

200

250

300

350

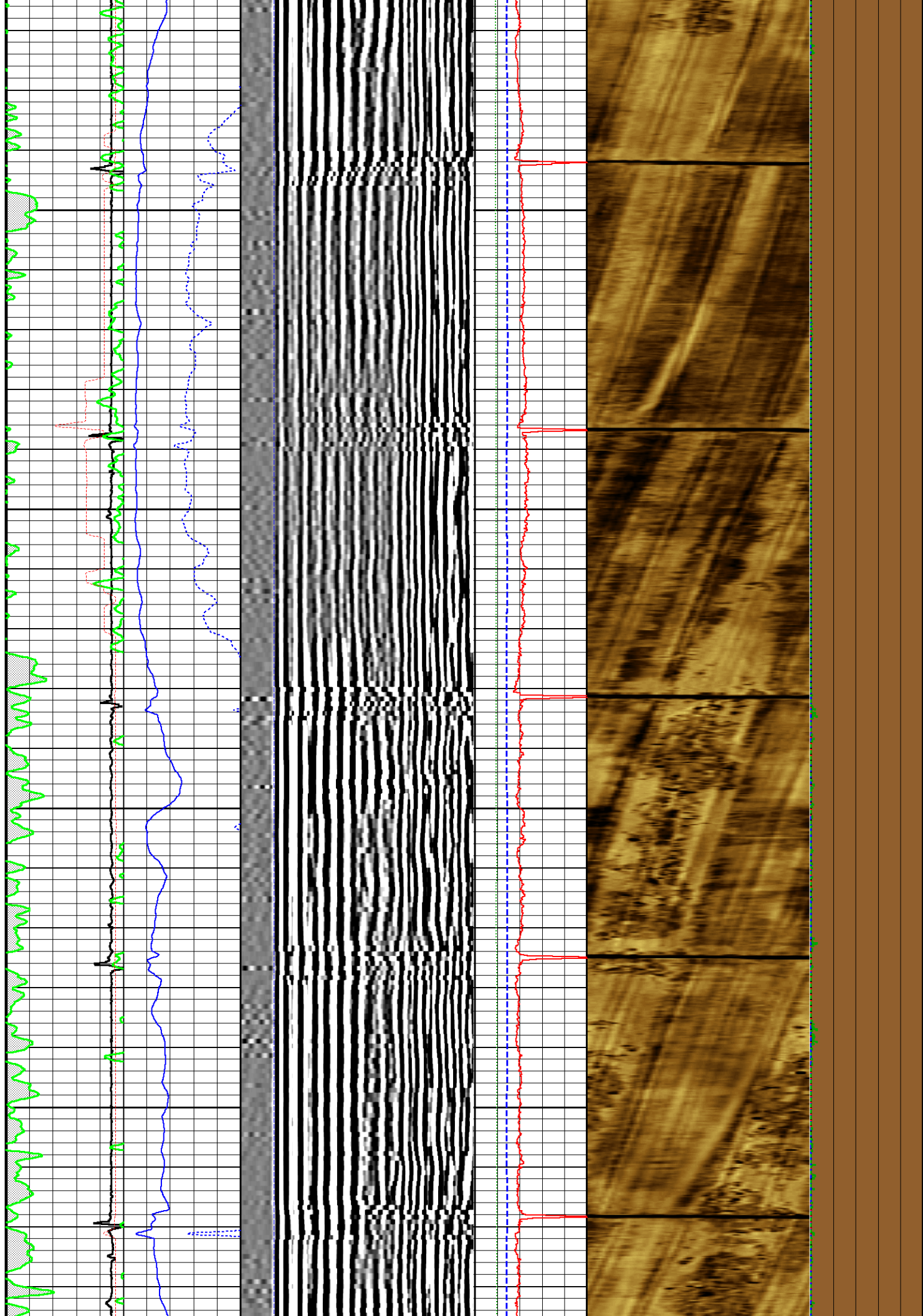


400

450

500

550



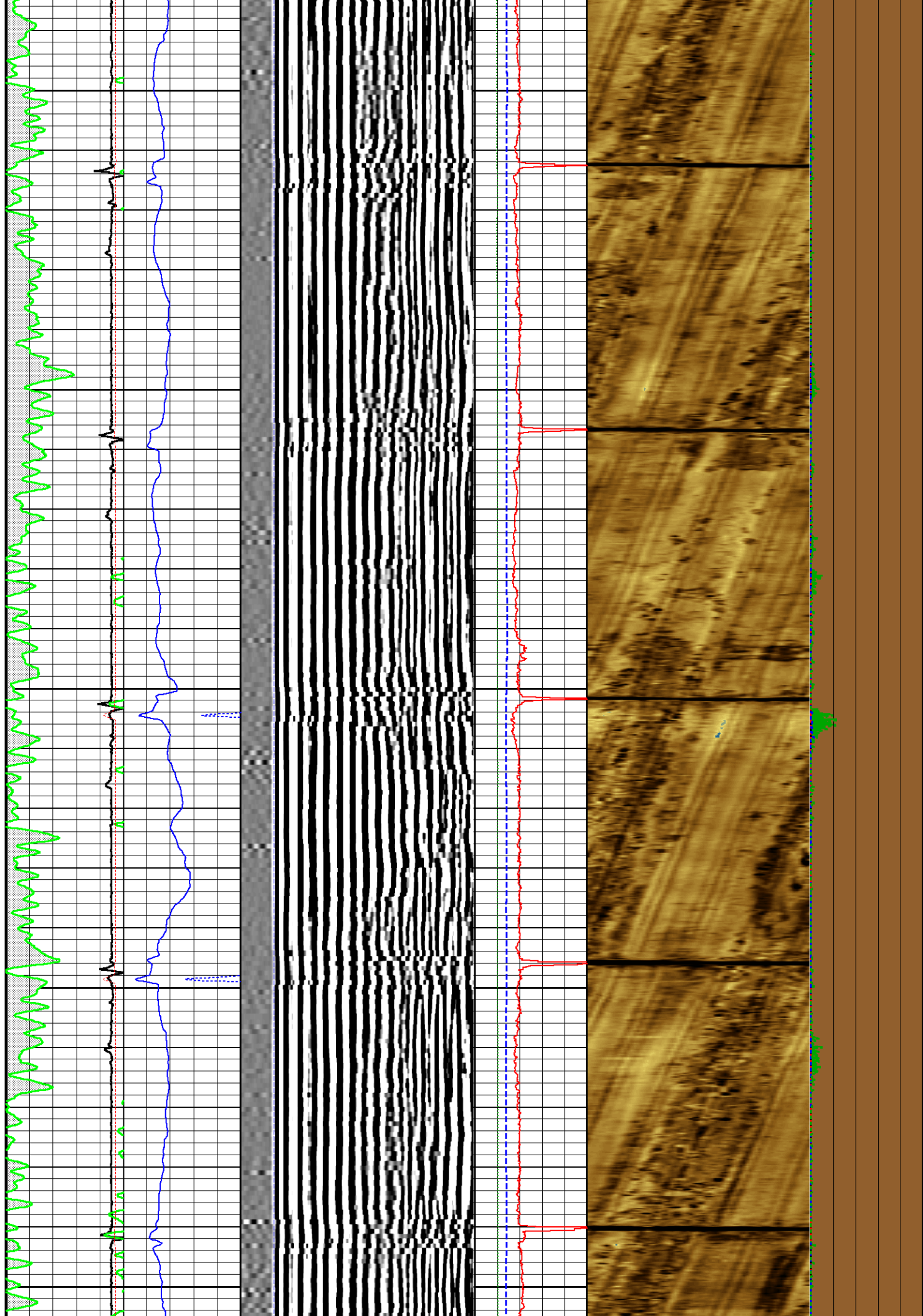
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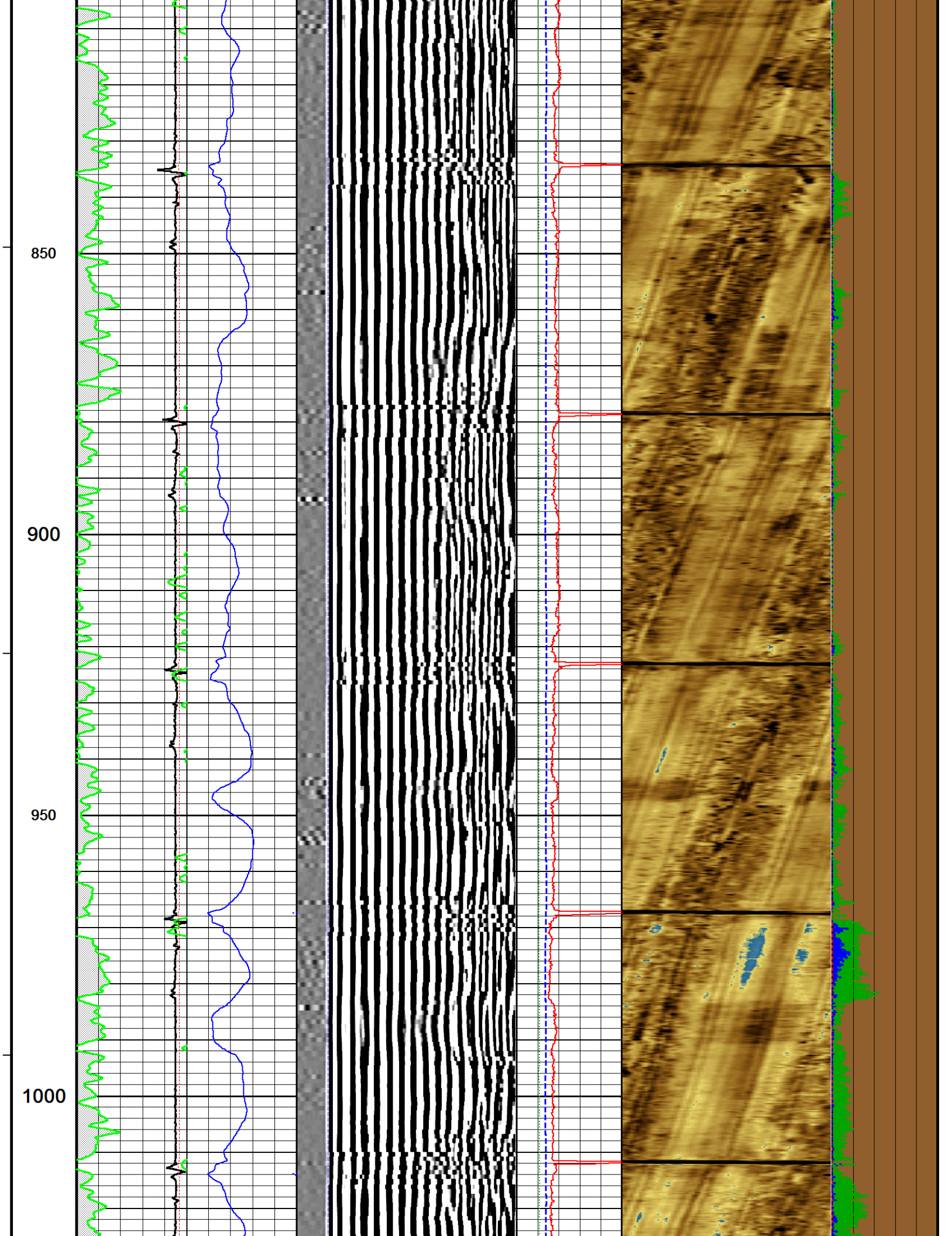
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700

750

800



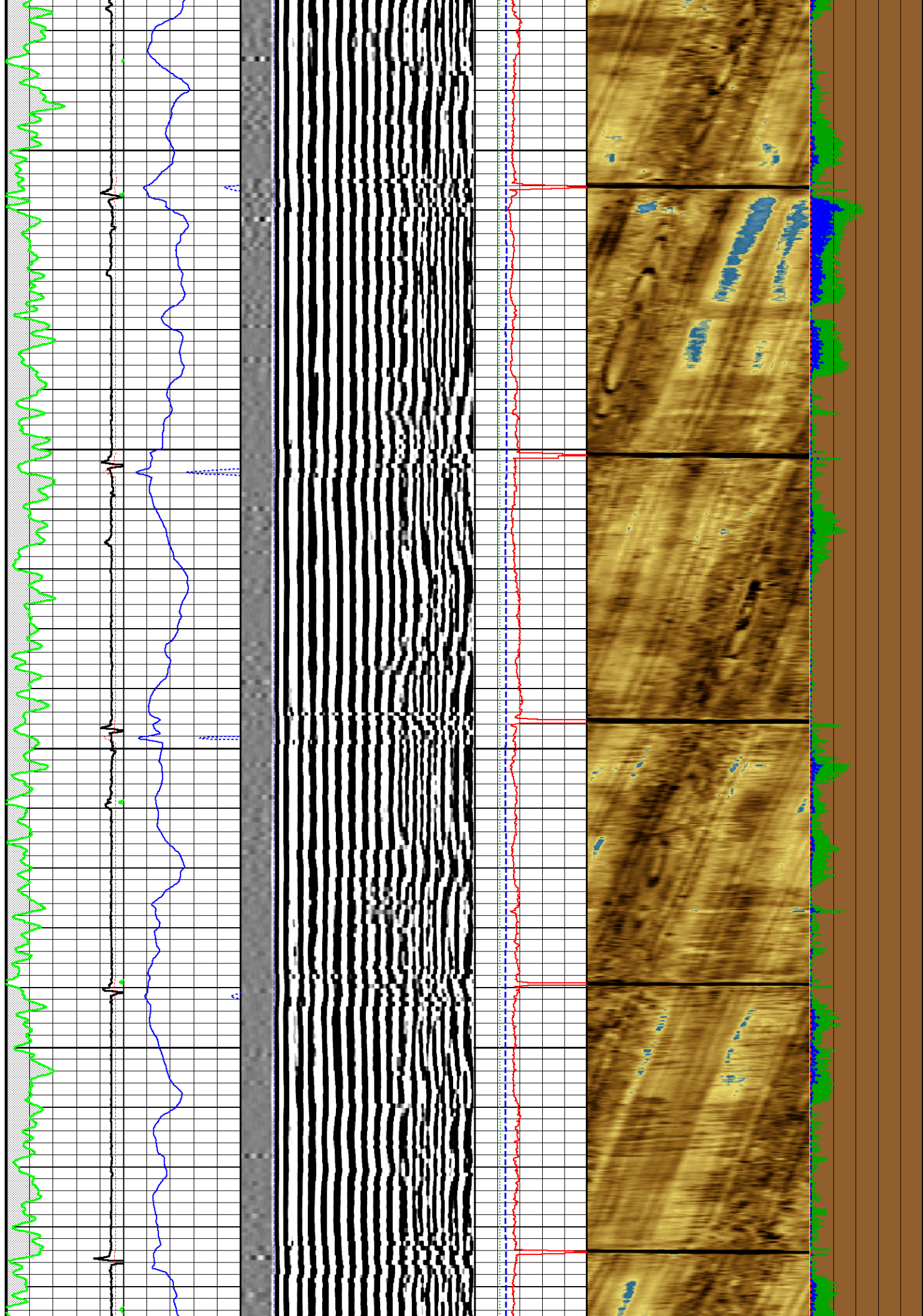


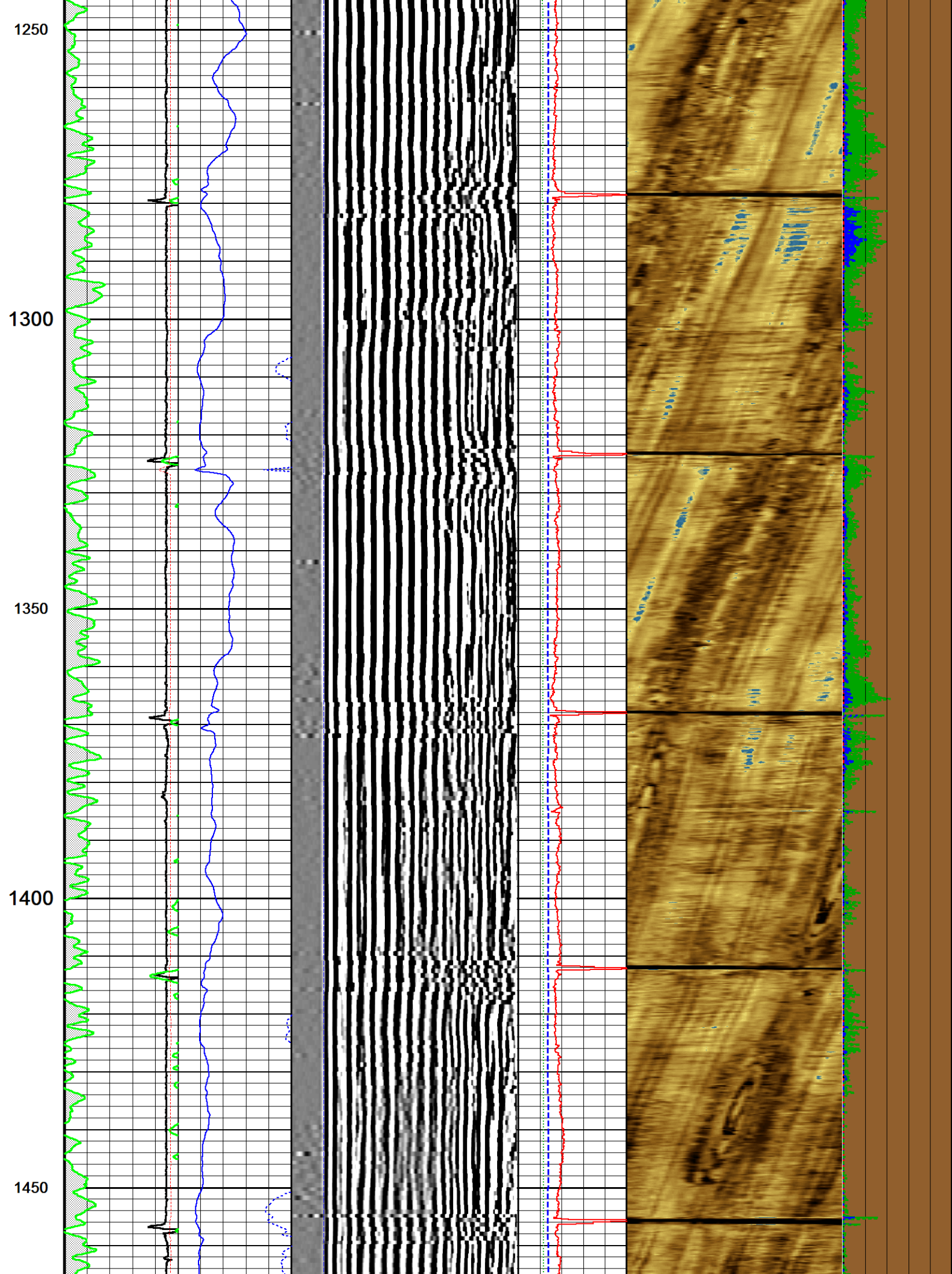
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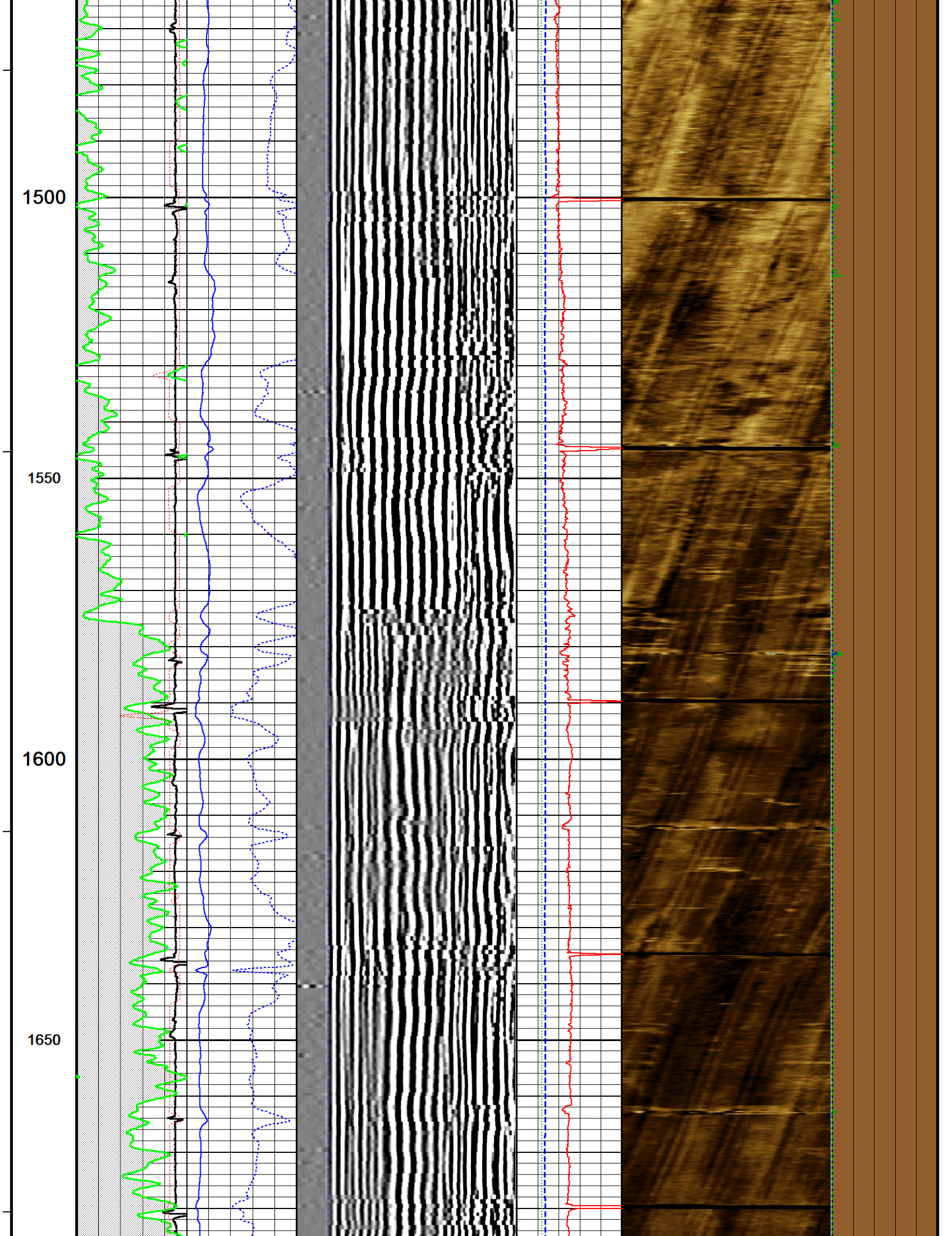
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1150

1200







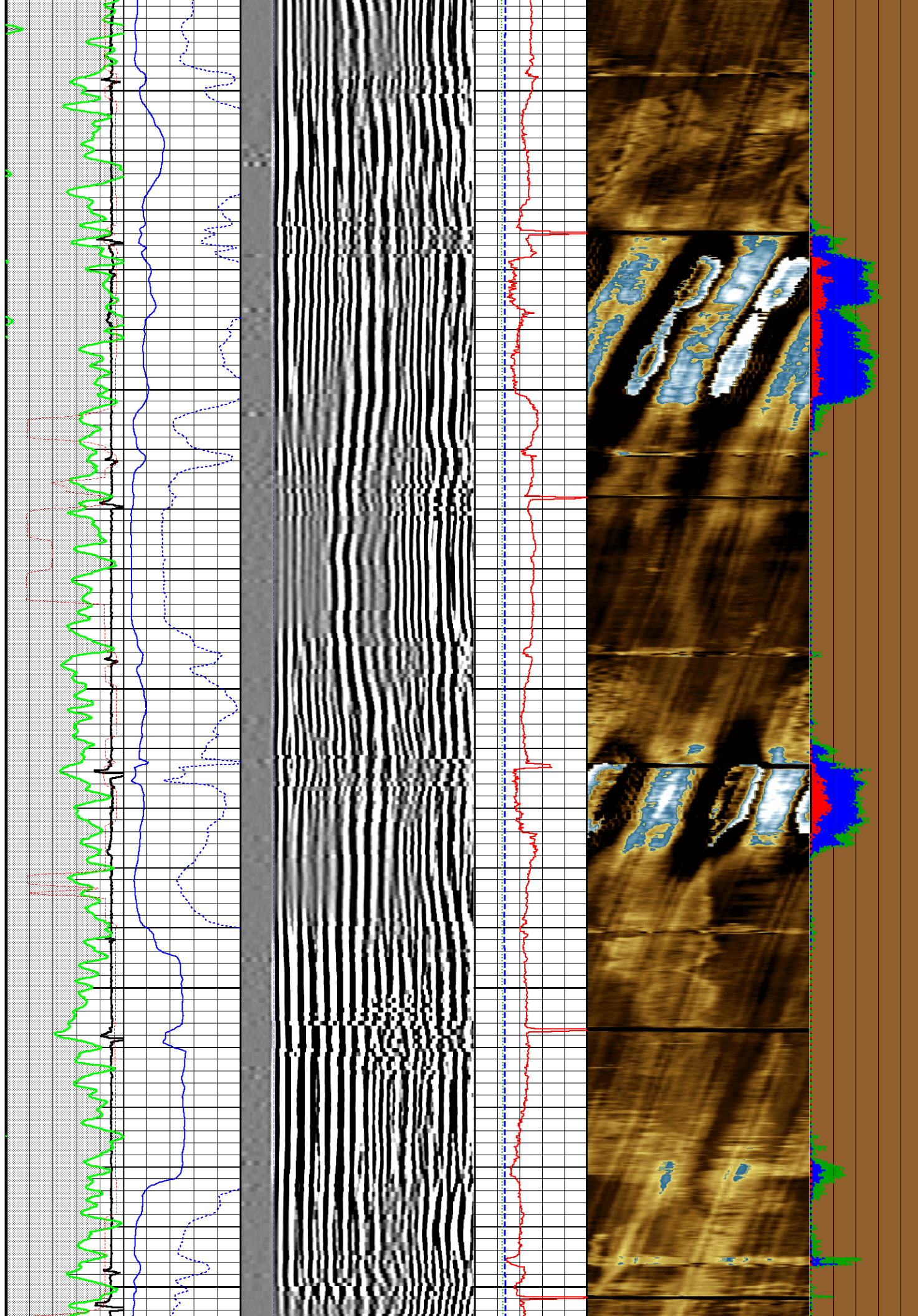
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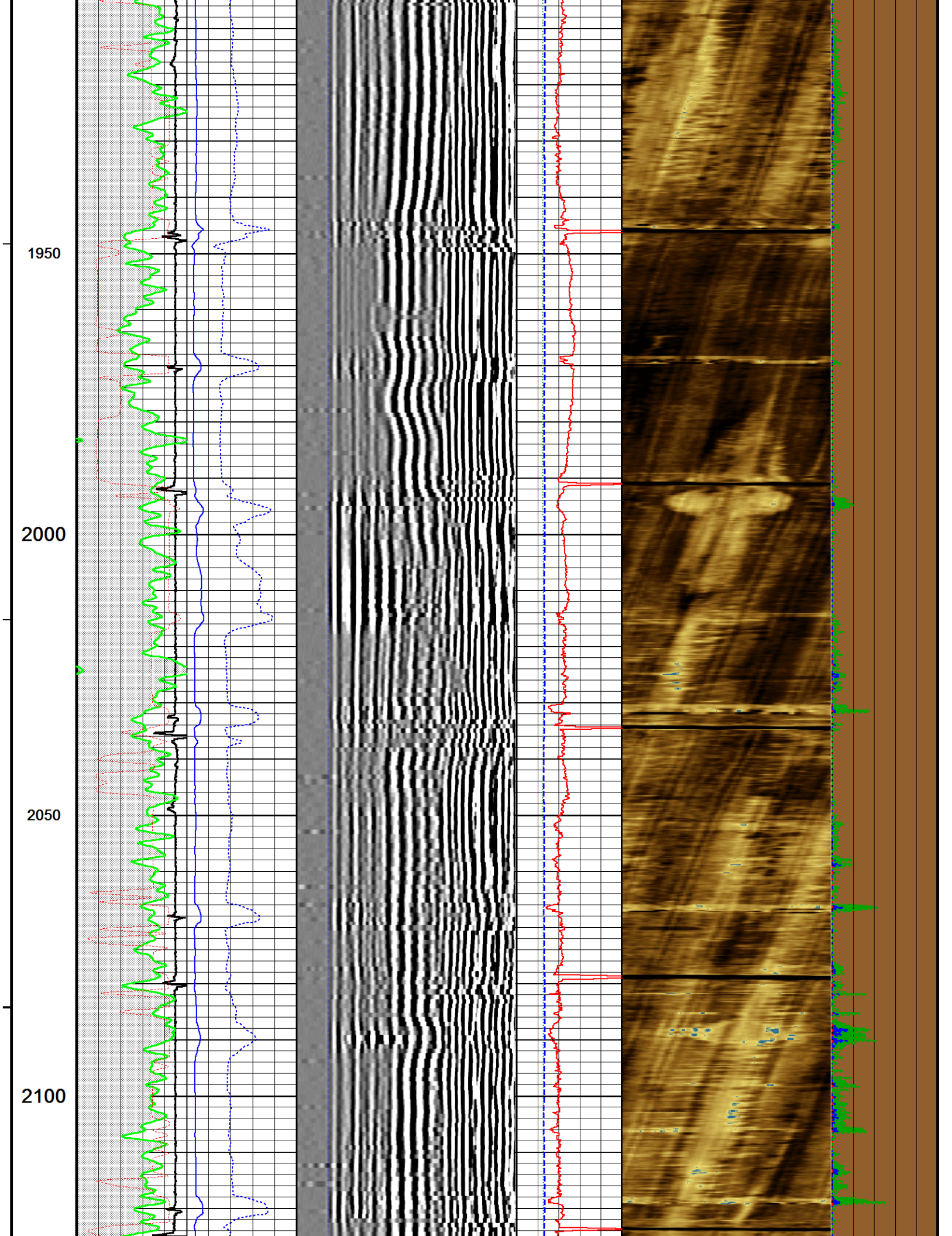
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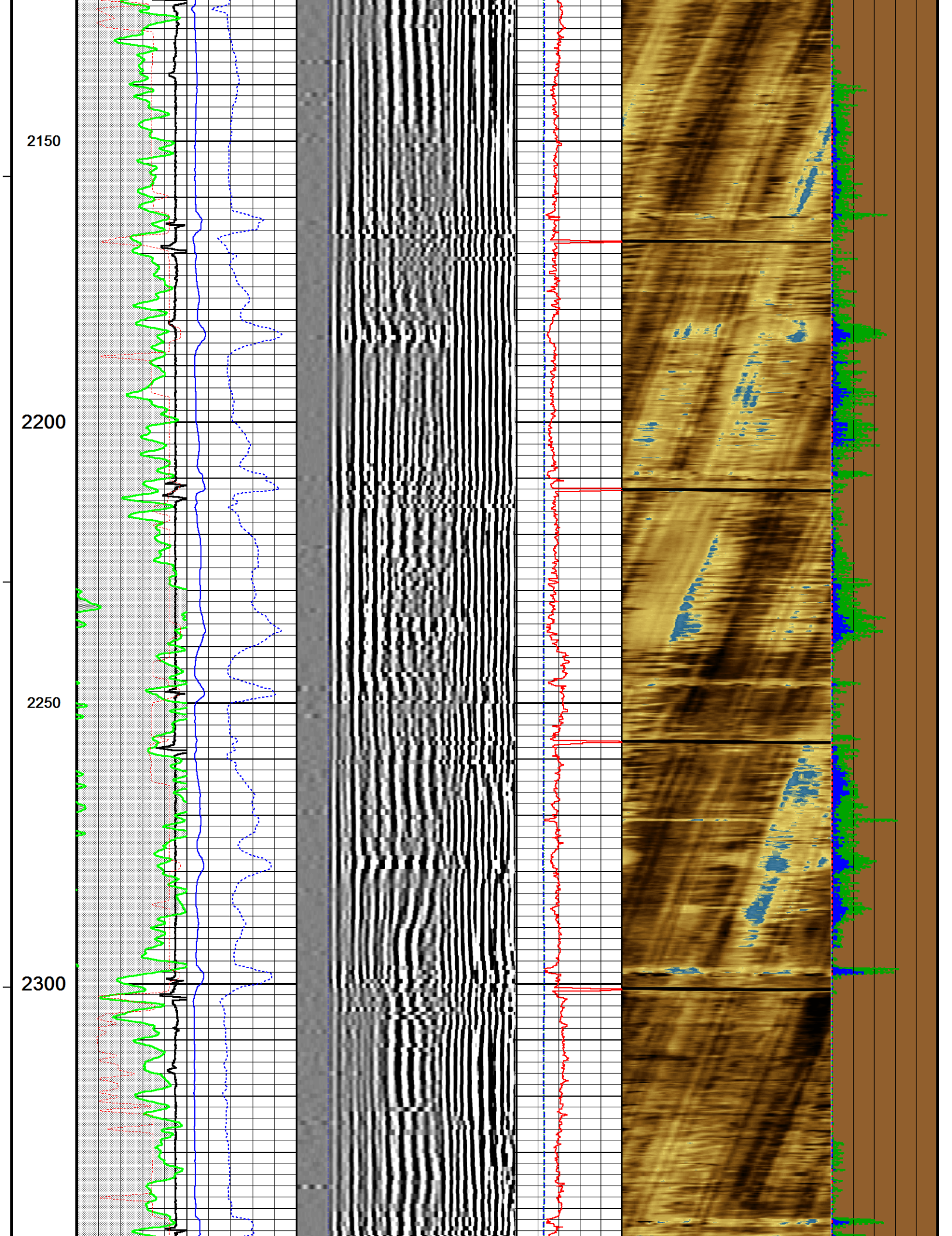
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1850

1900







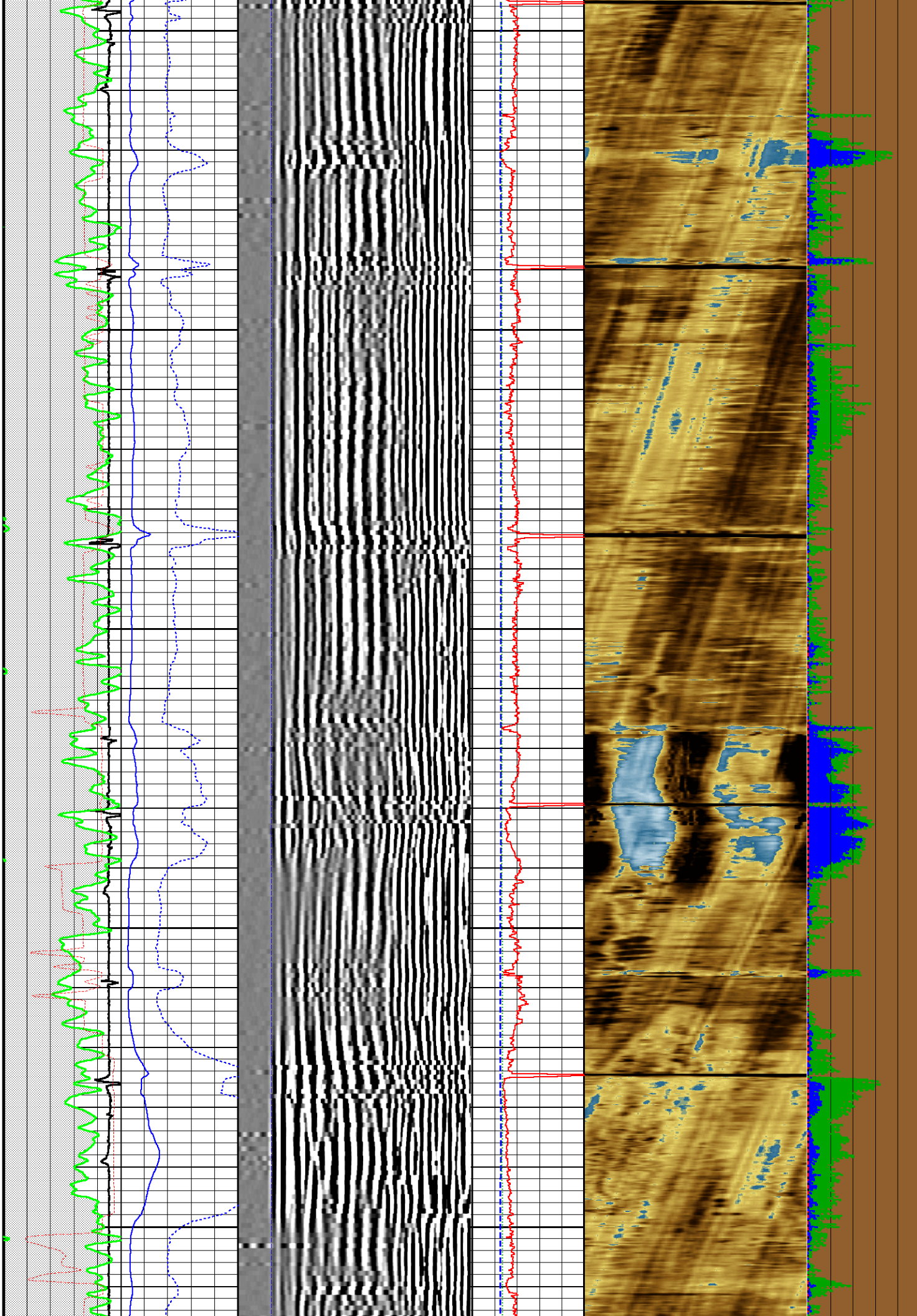
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2400

2450

2500

2550

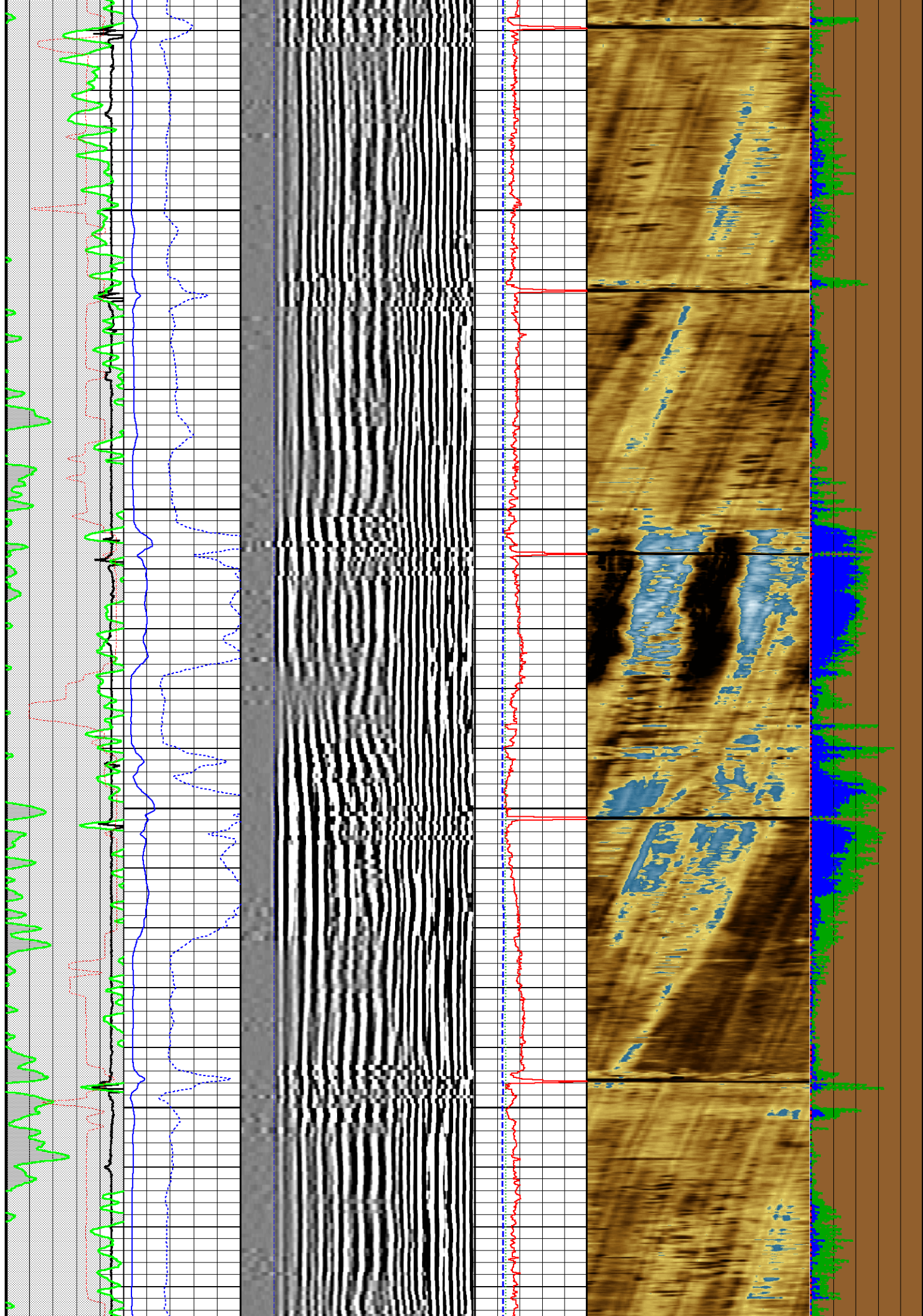


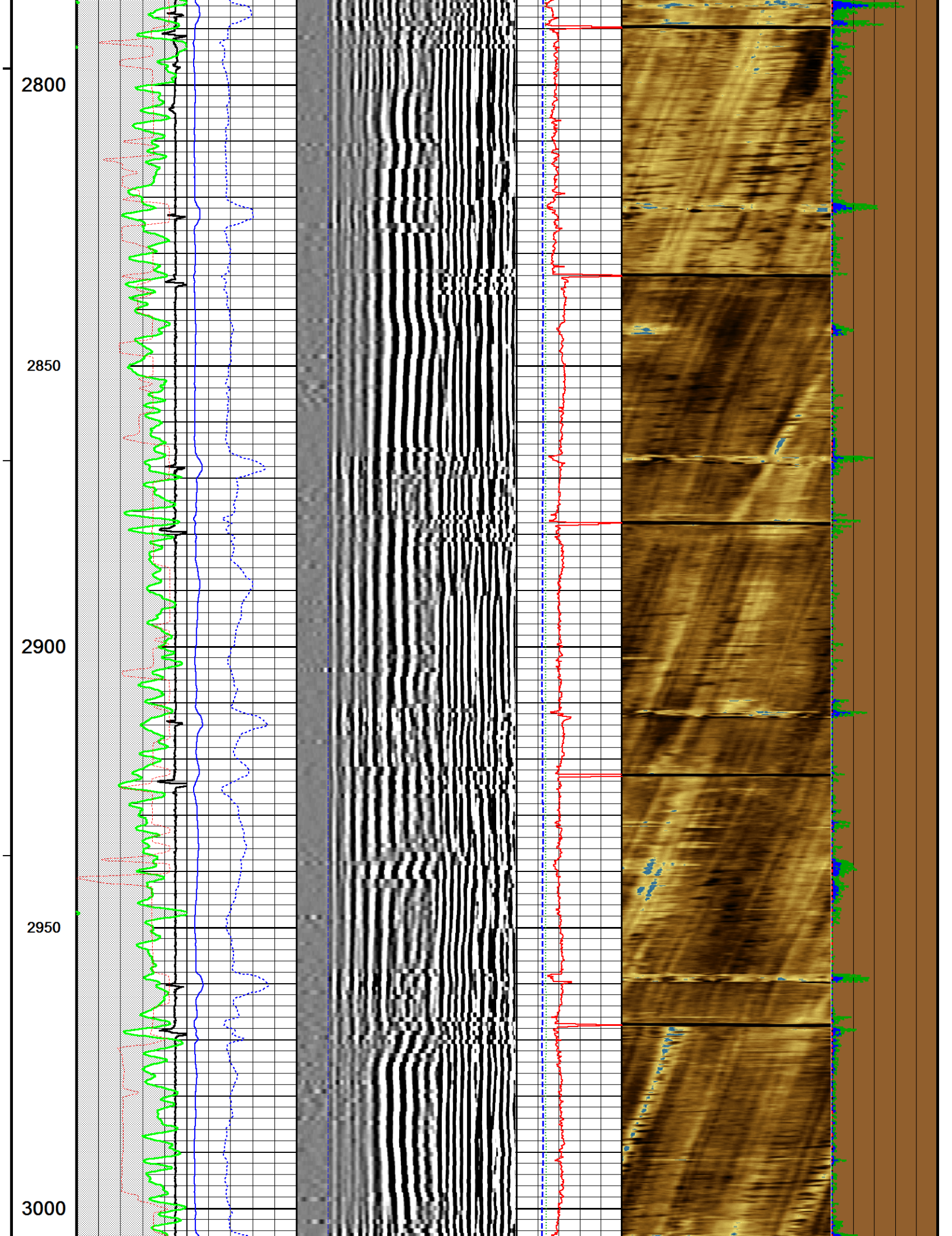
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2650

2700

2750



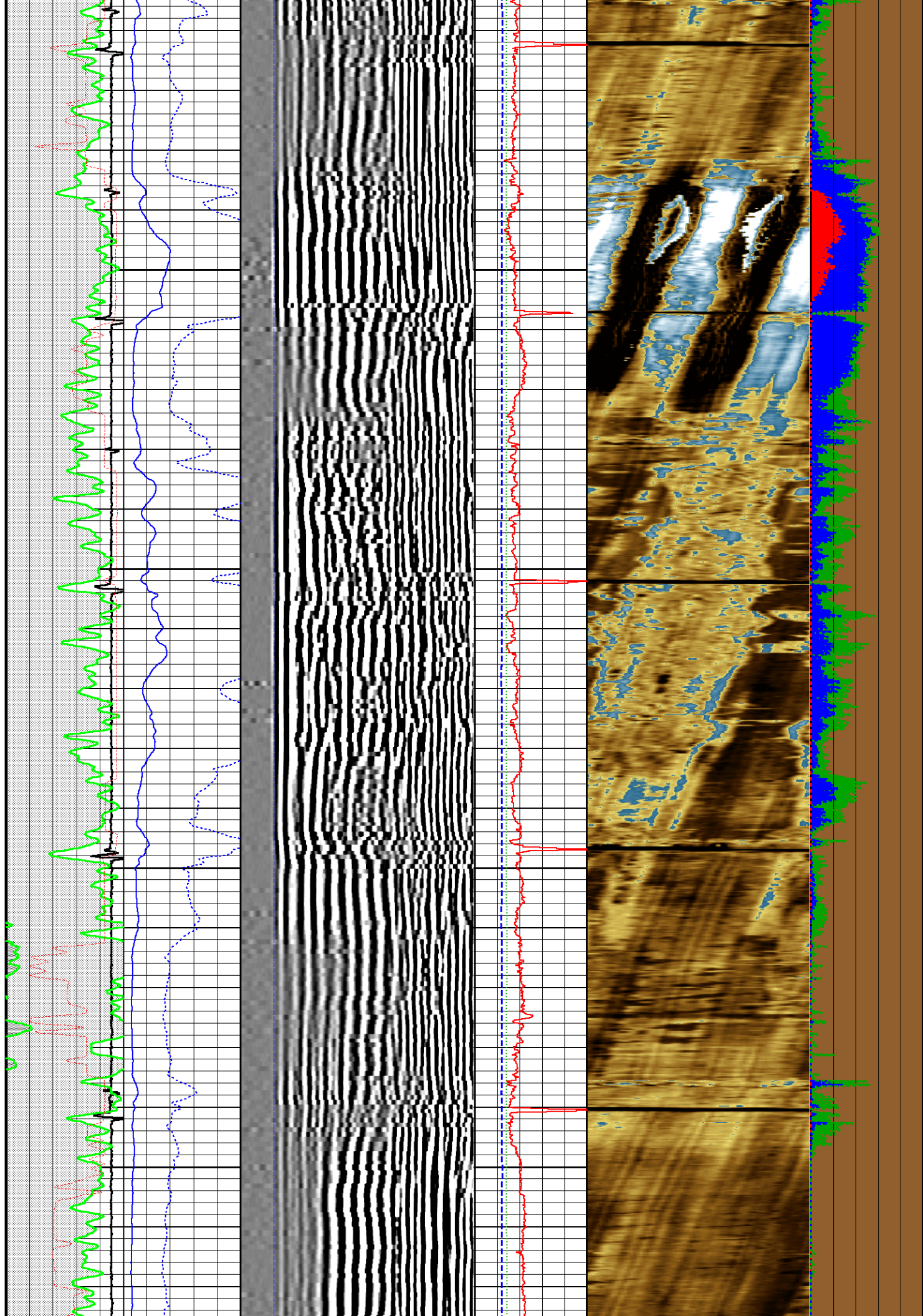


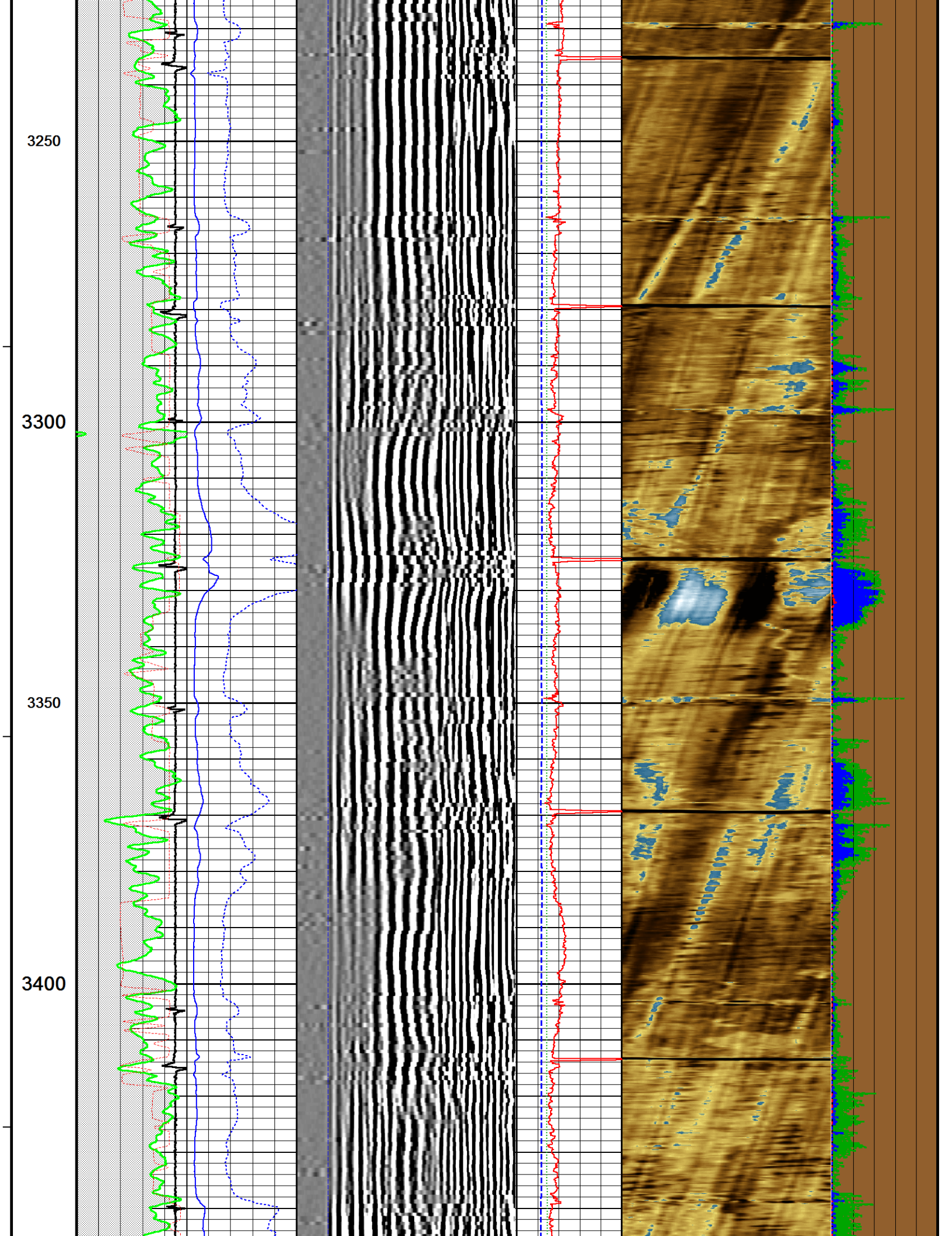
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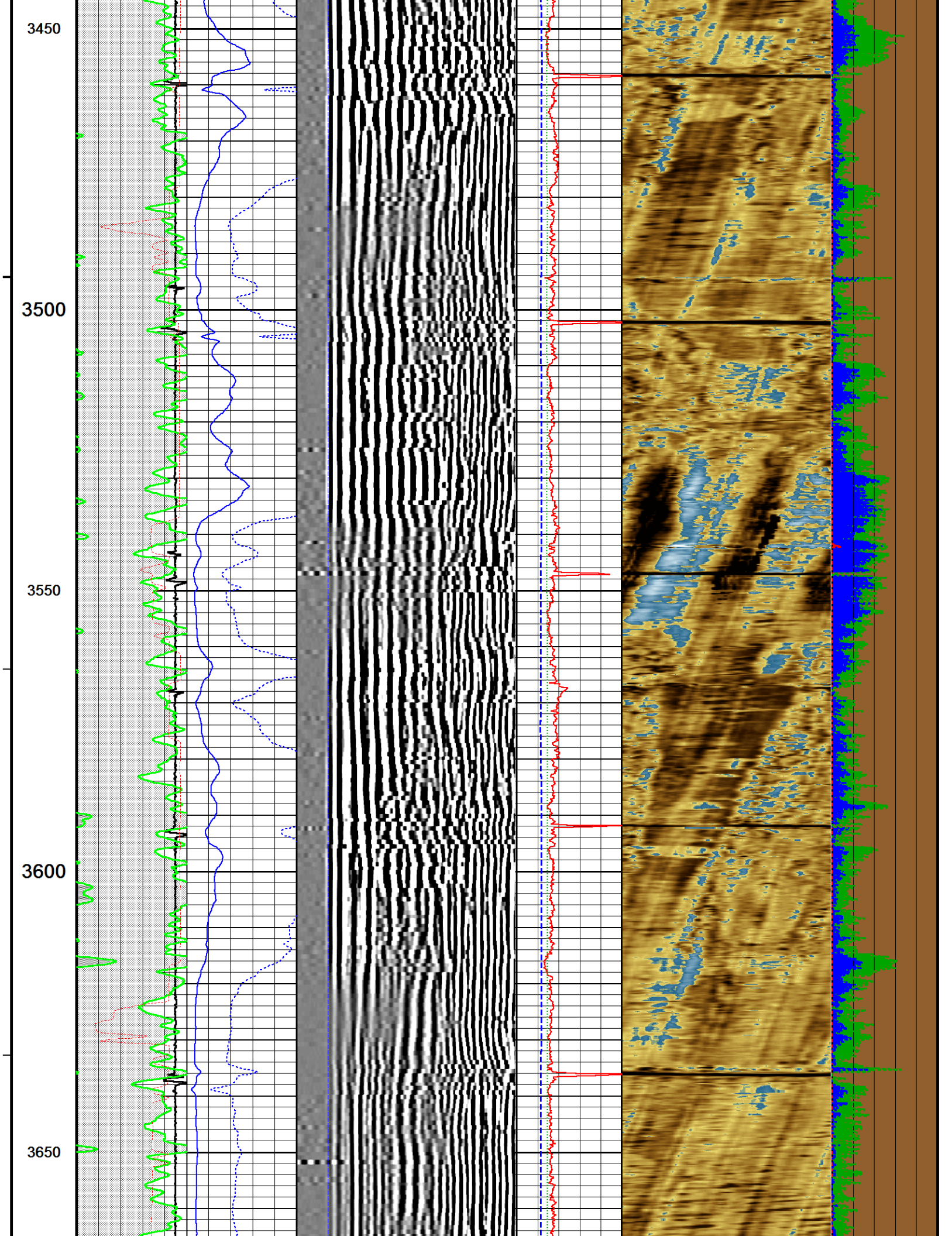
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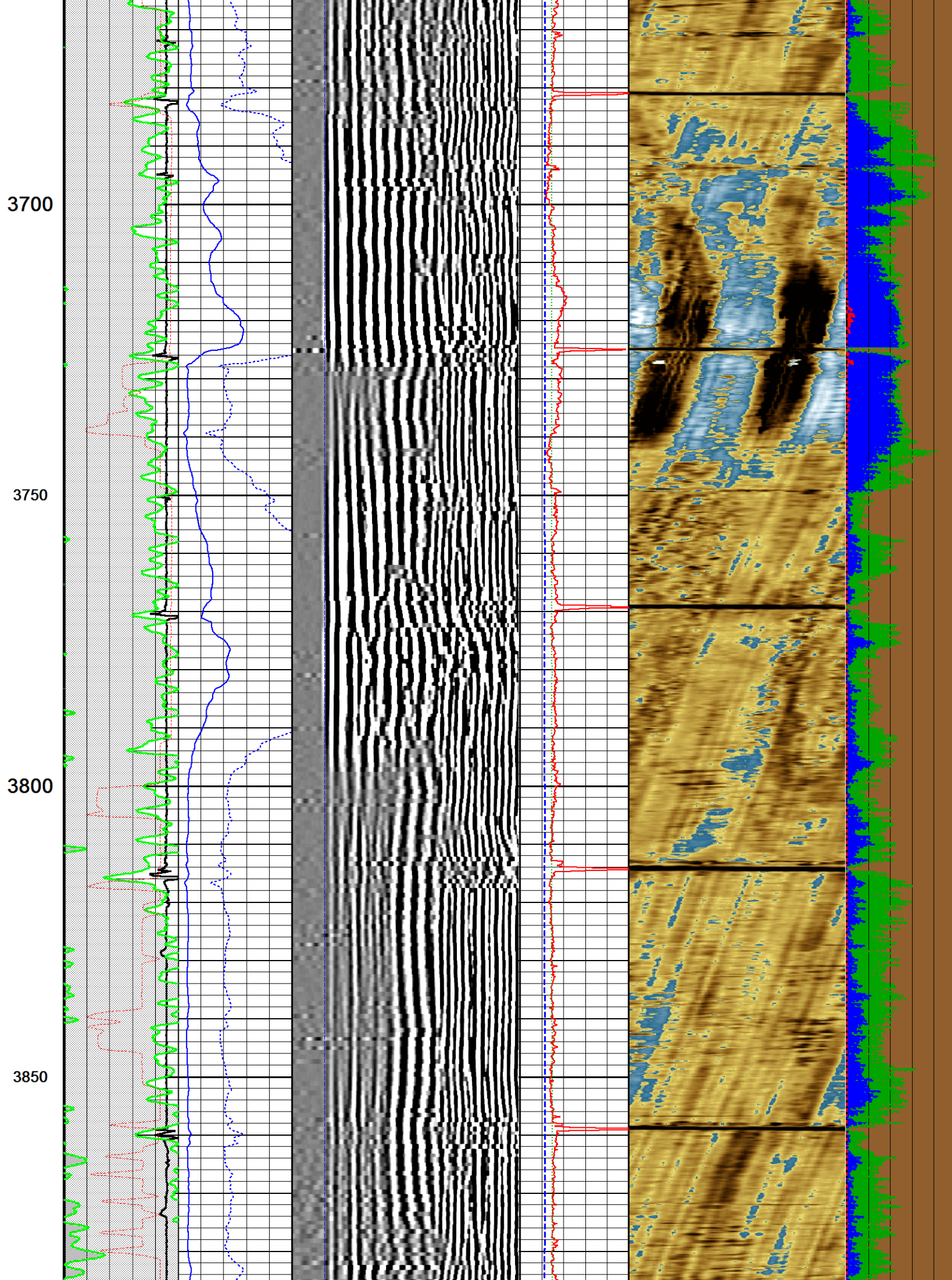
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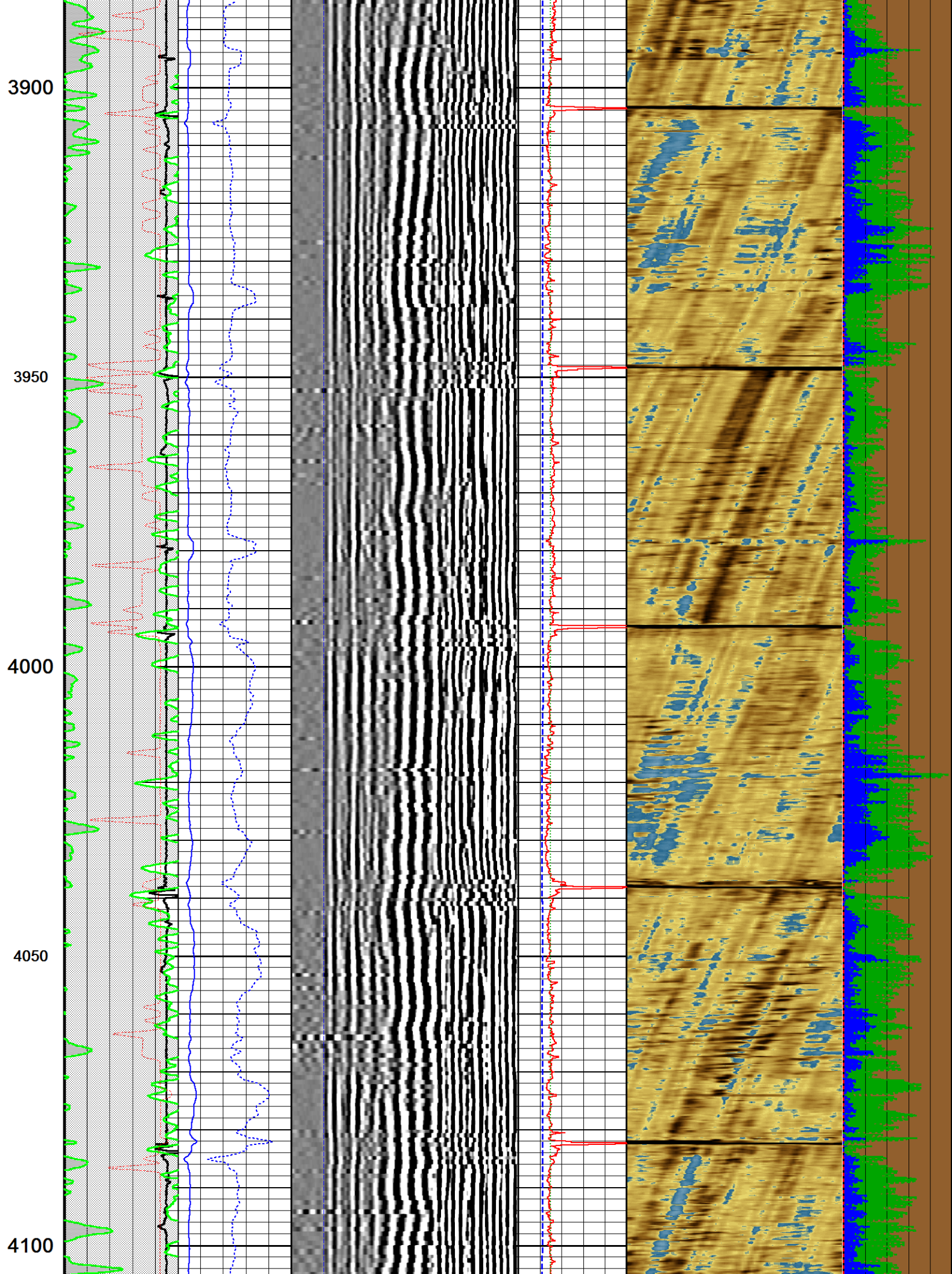
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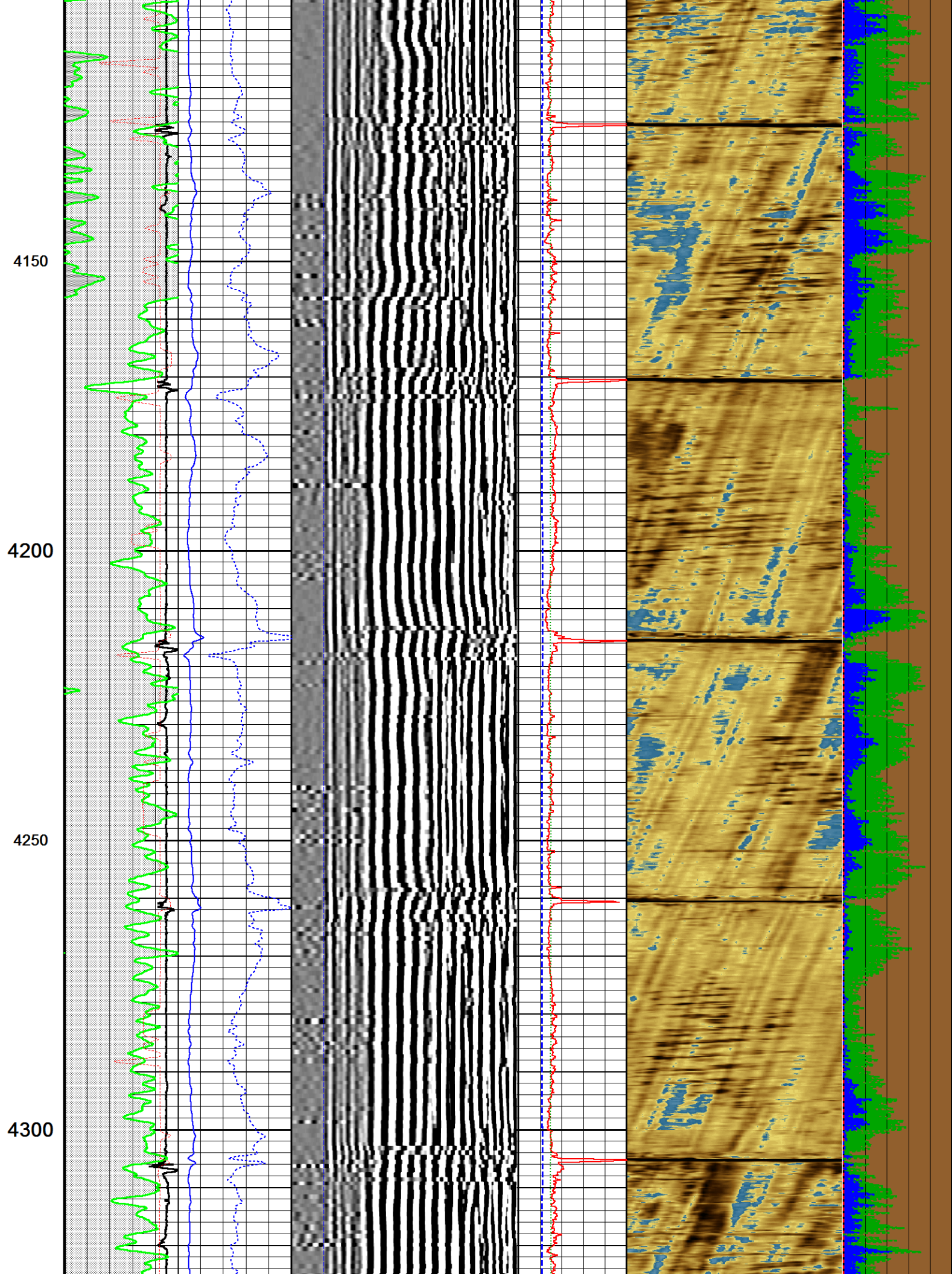










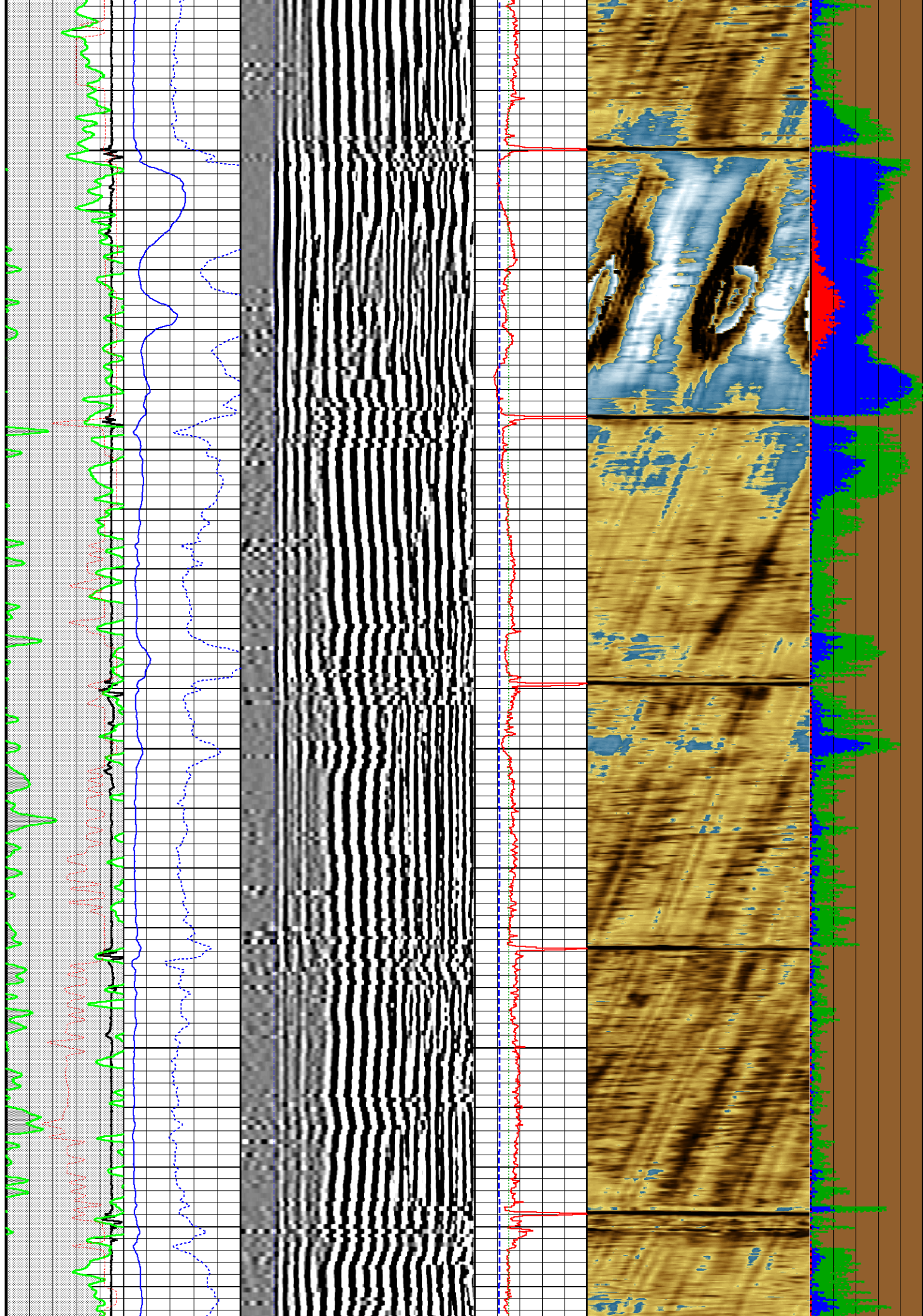


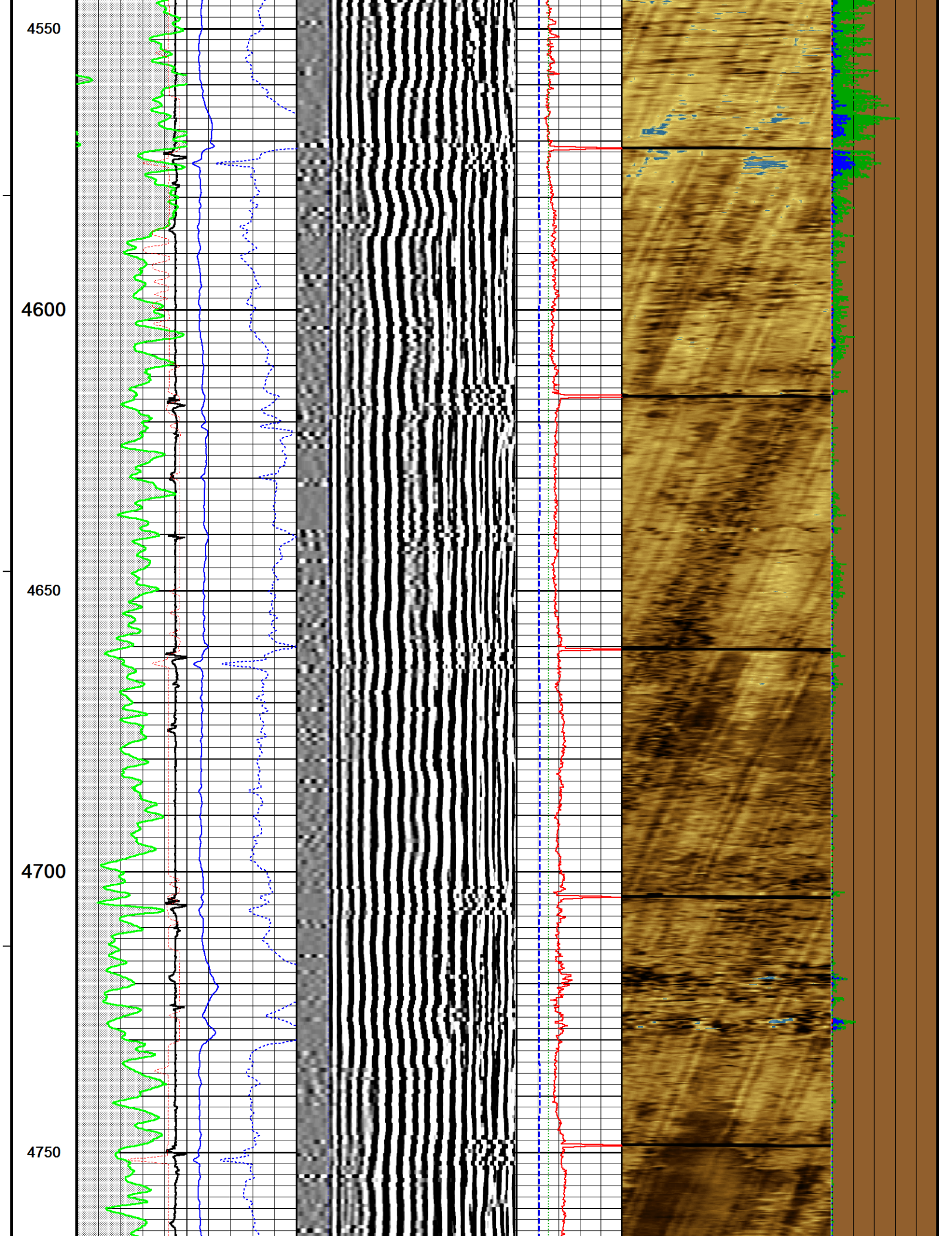
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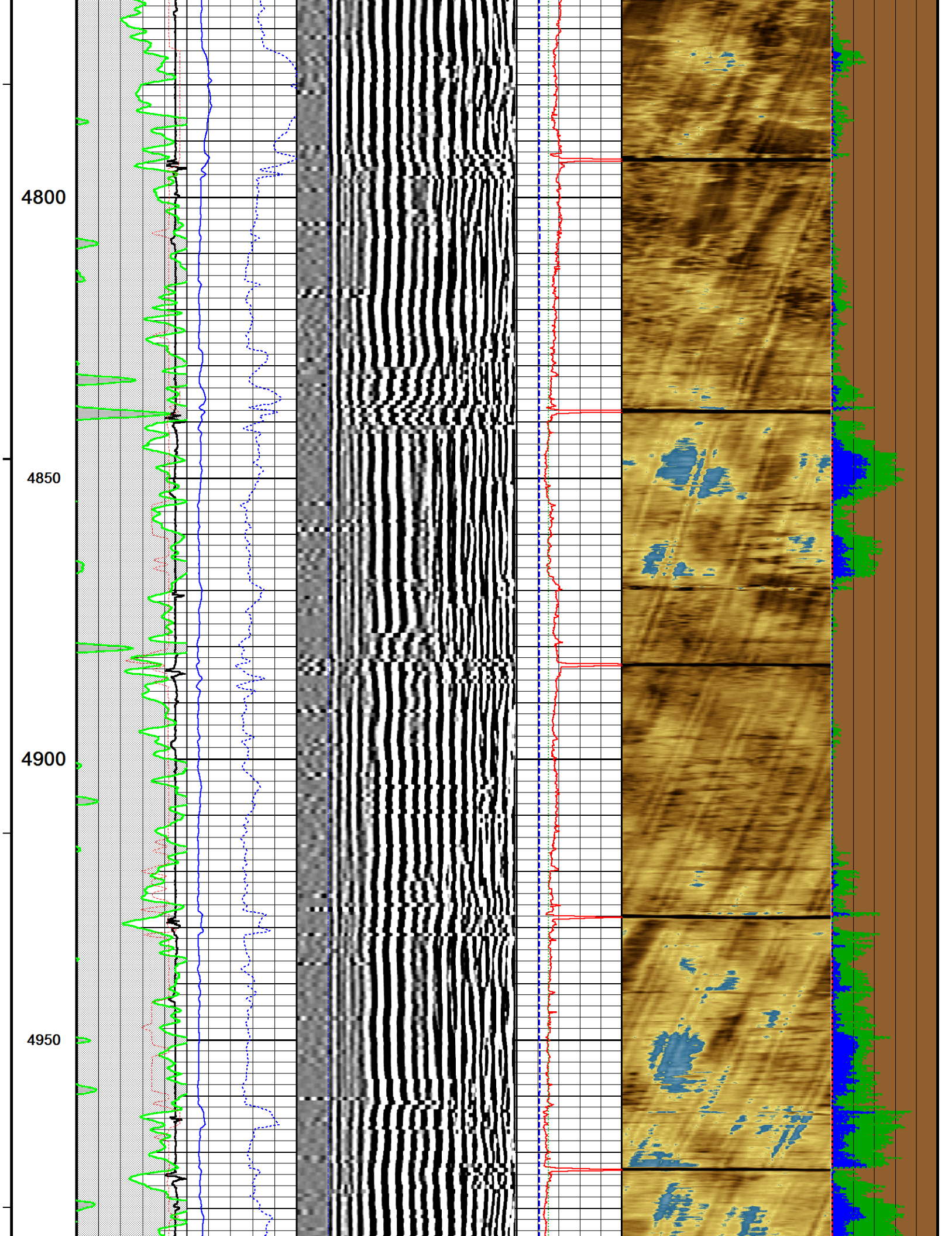
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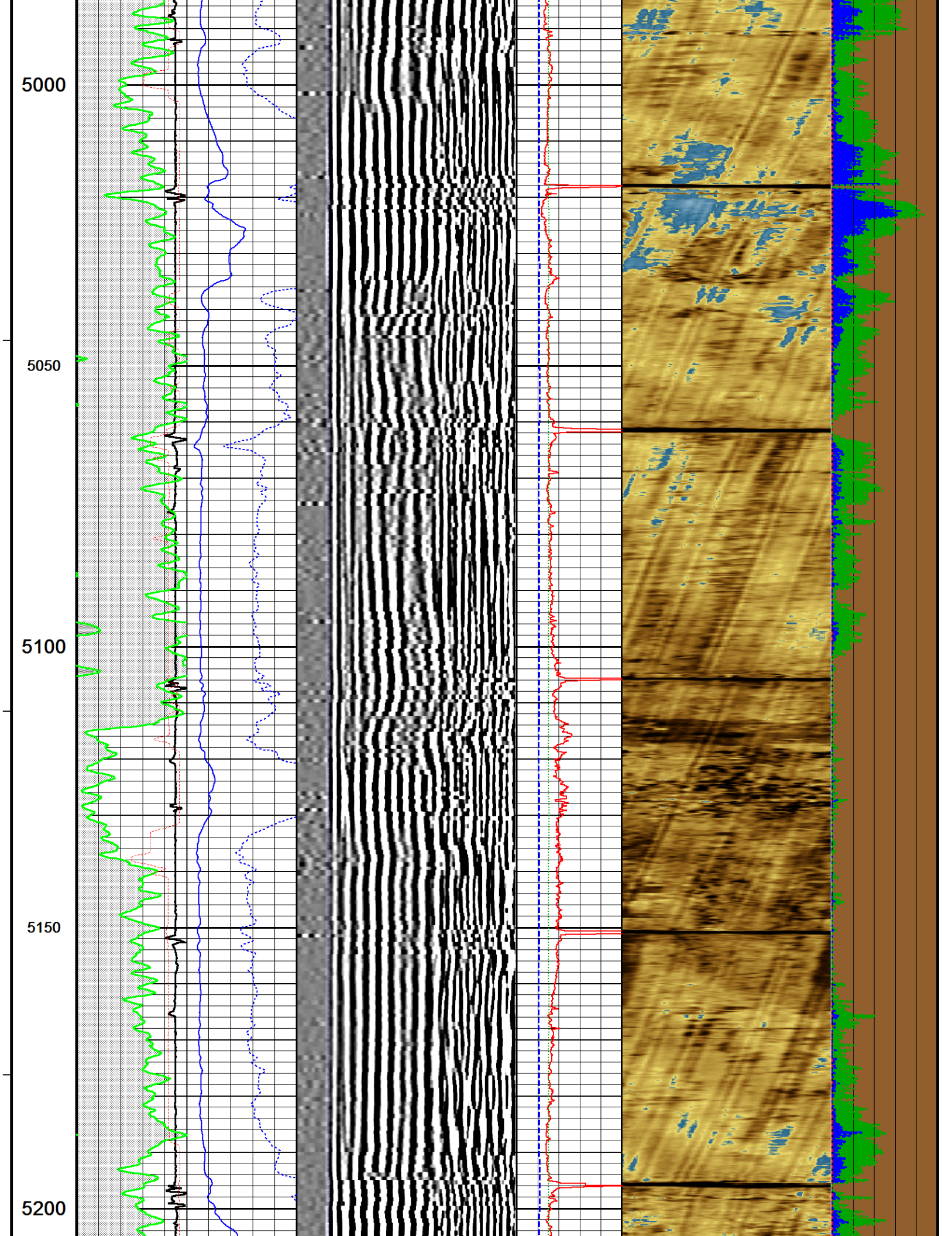
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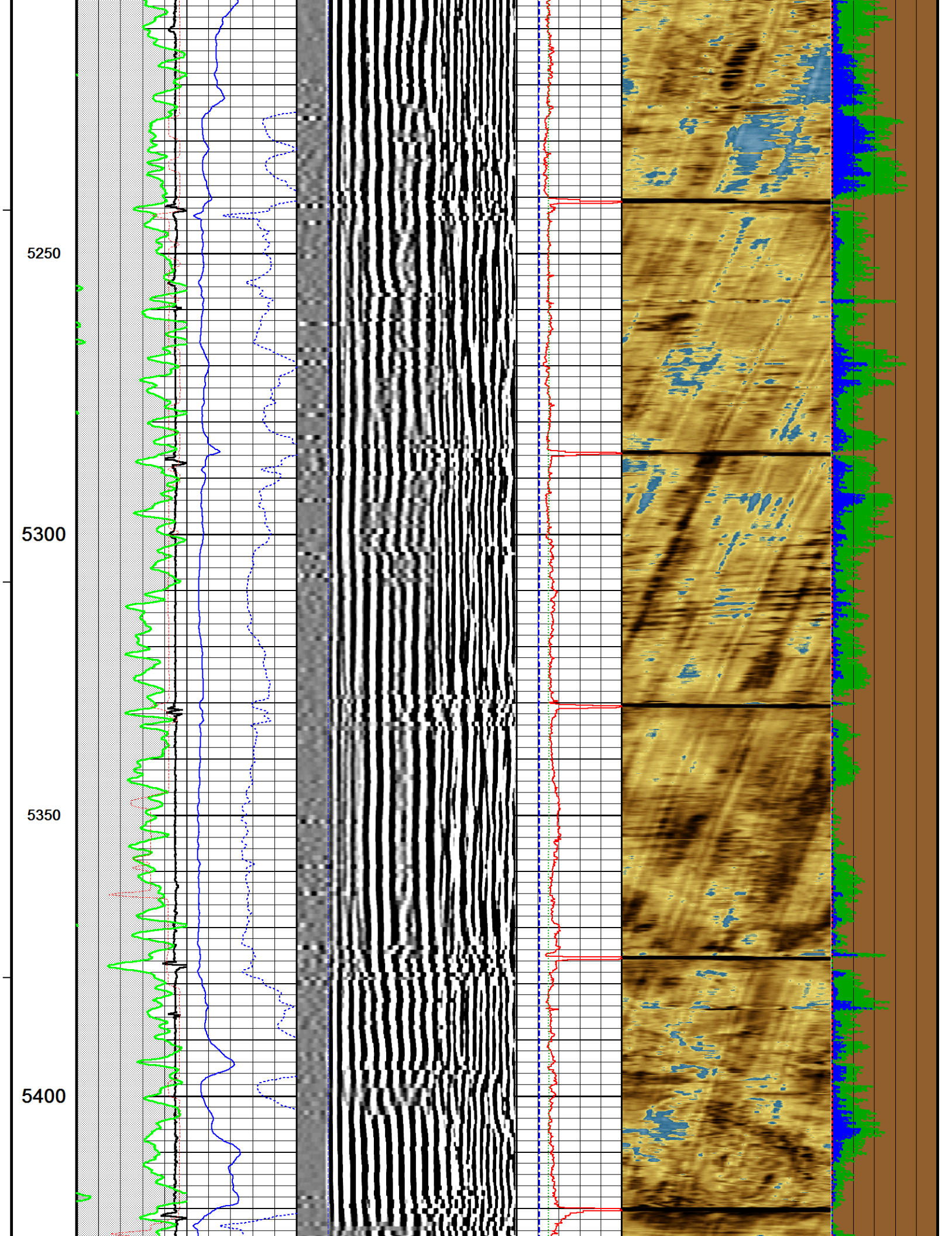
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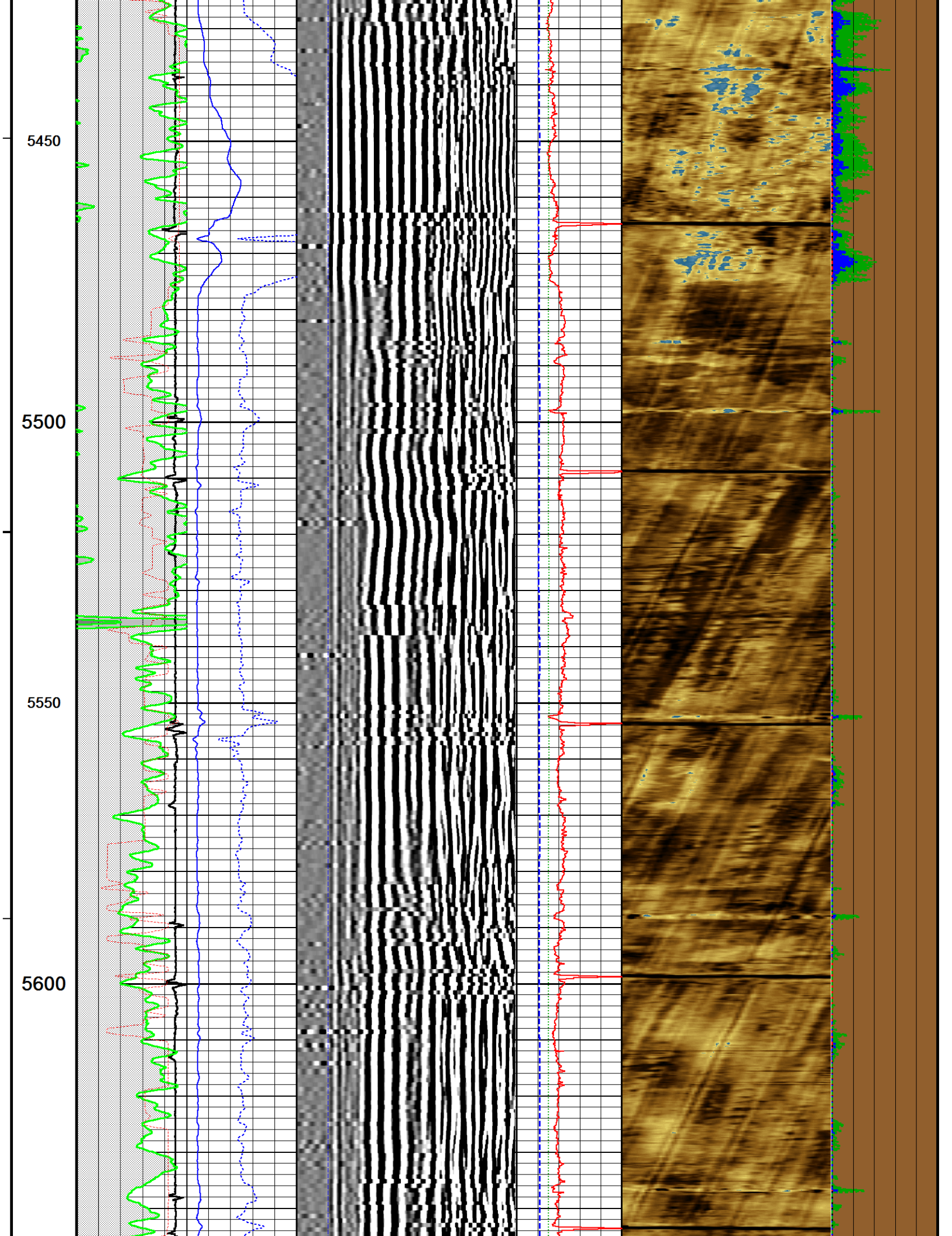


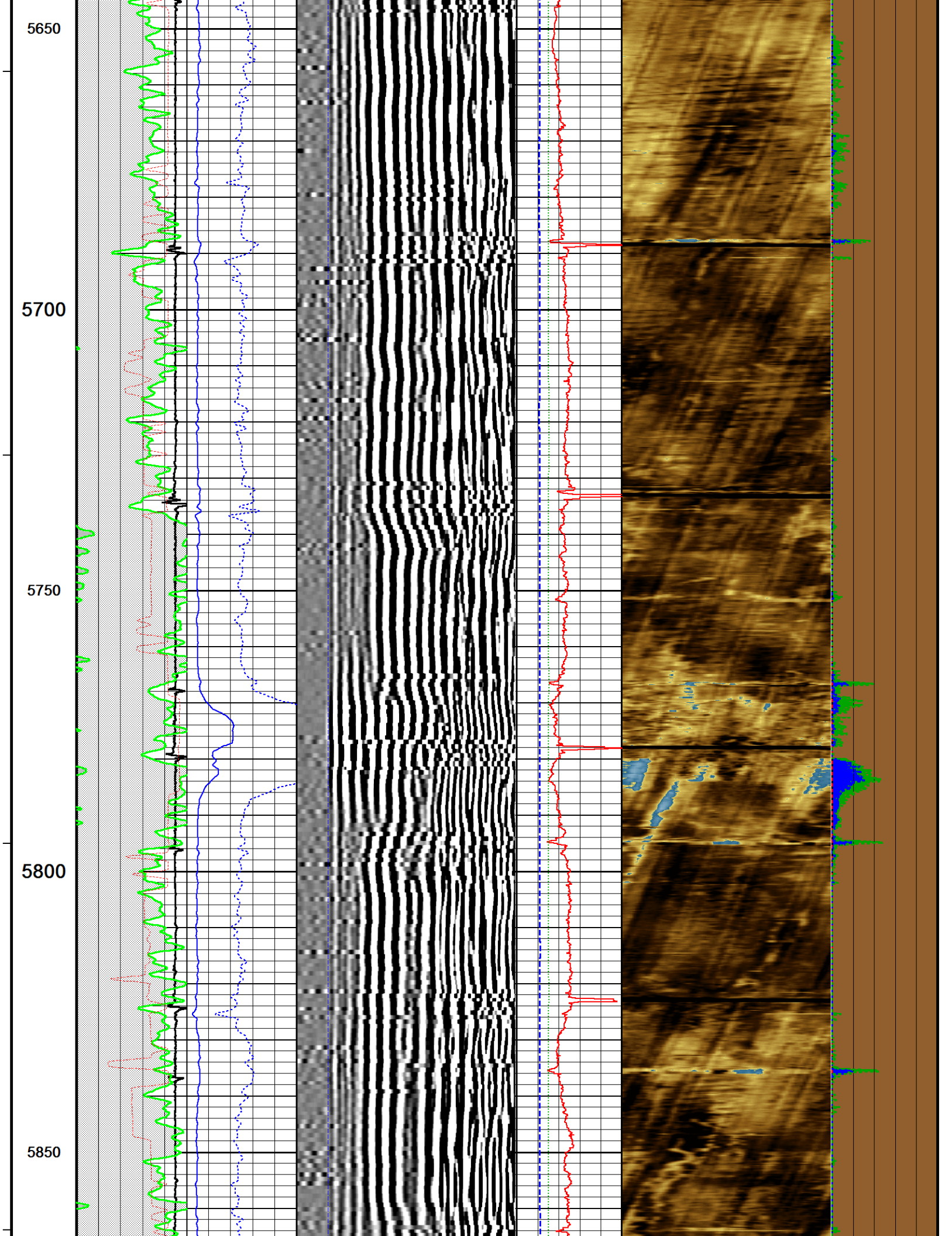


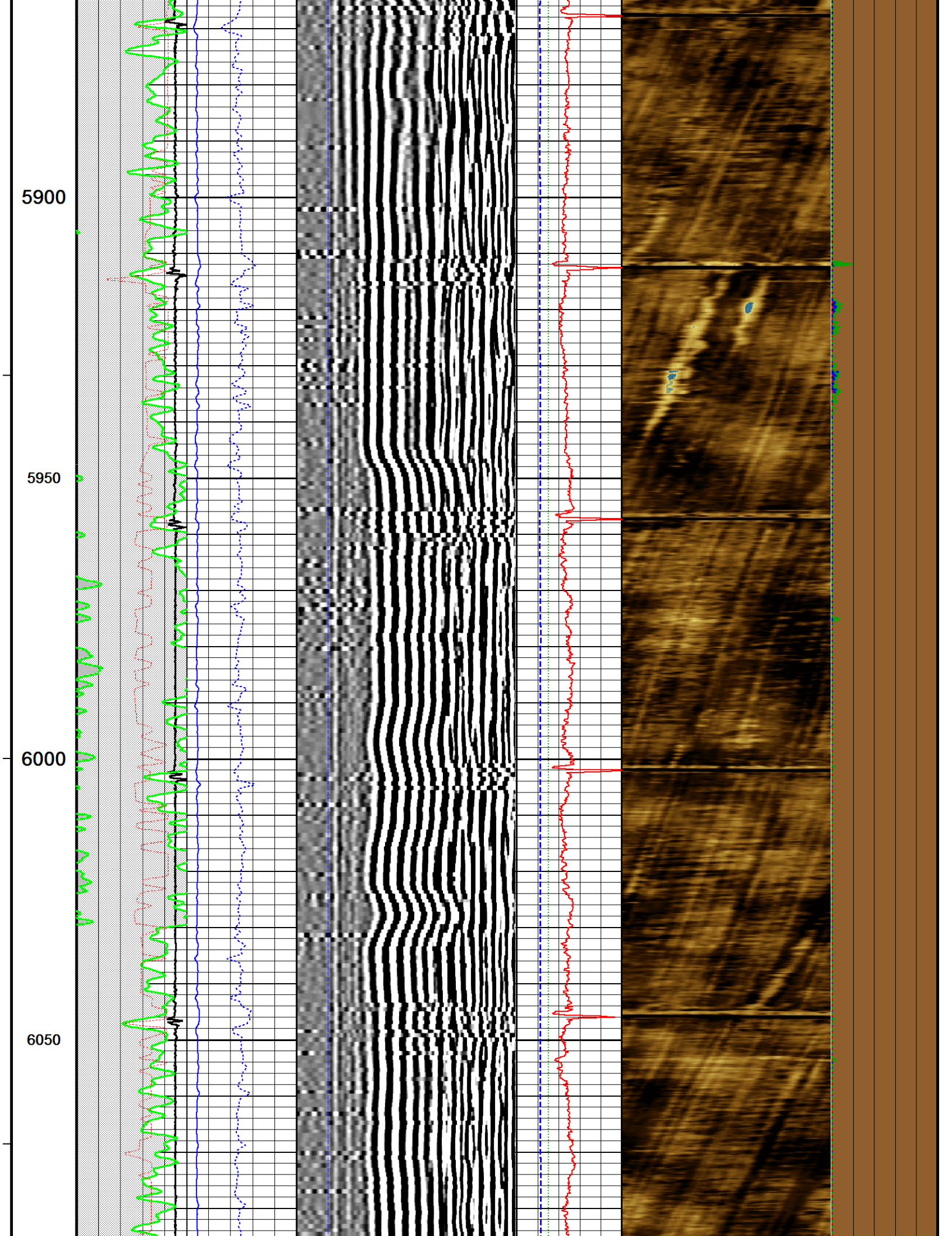












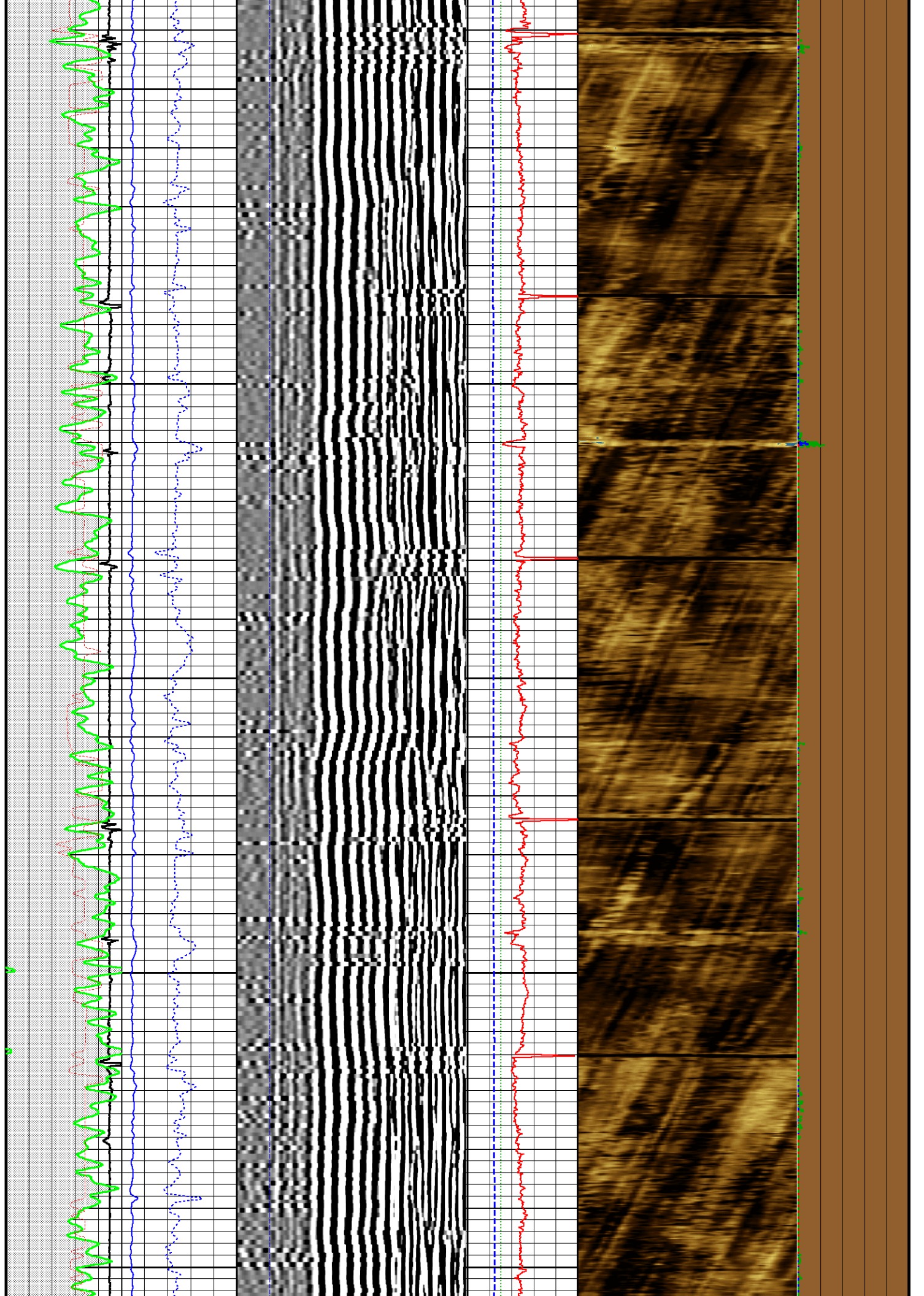
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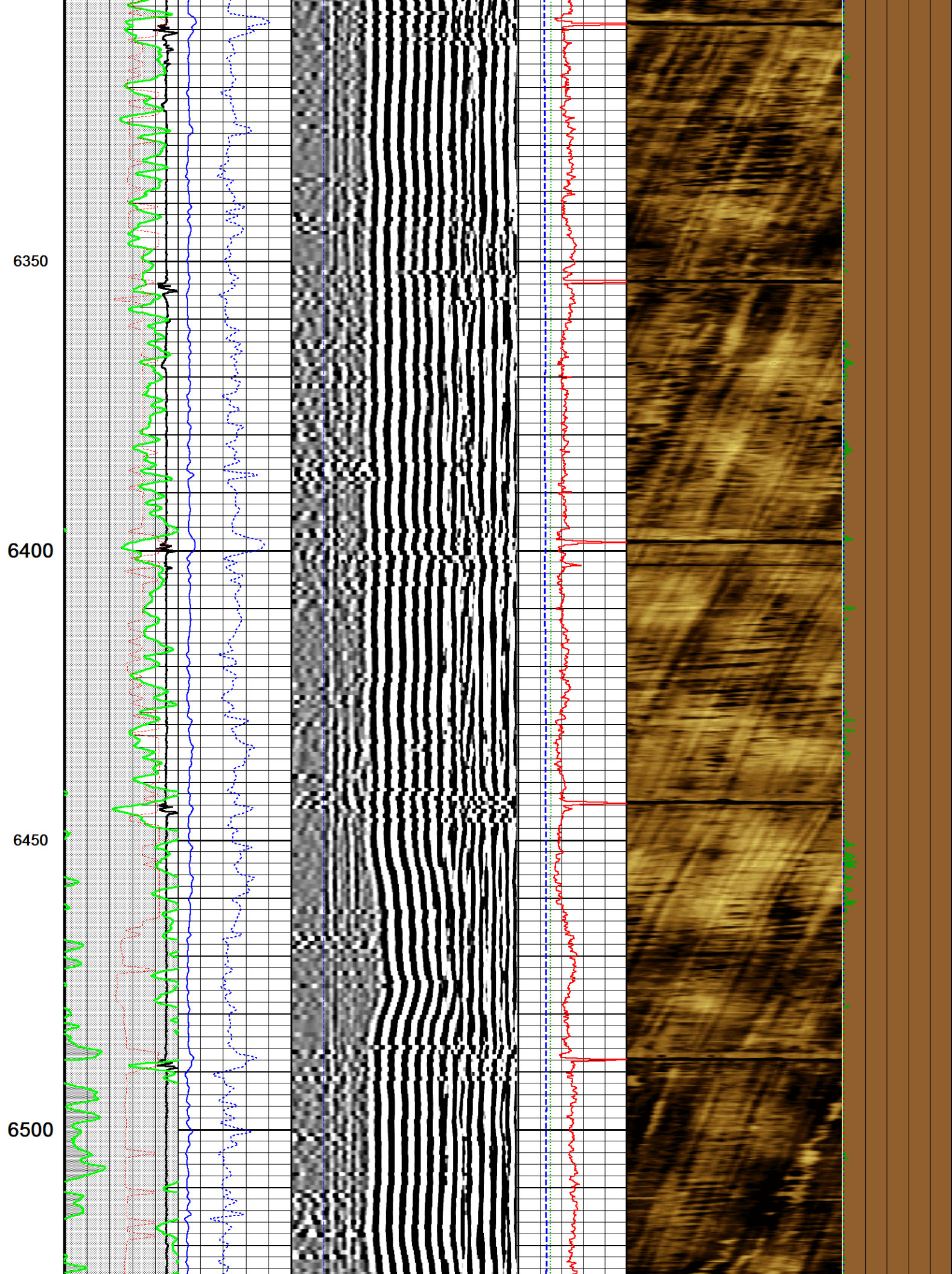
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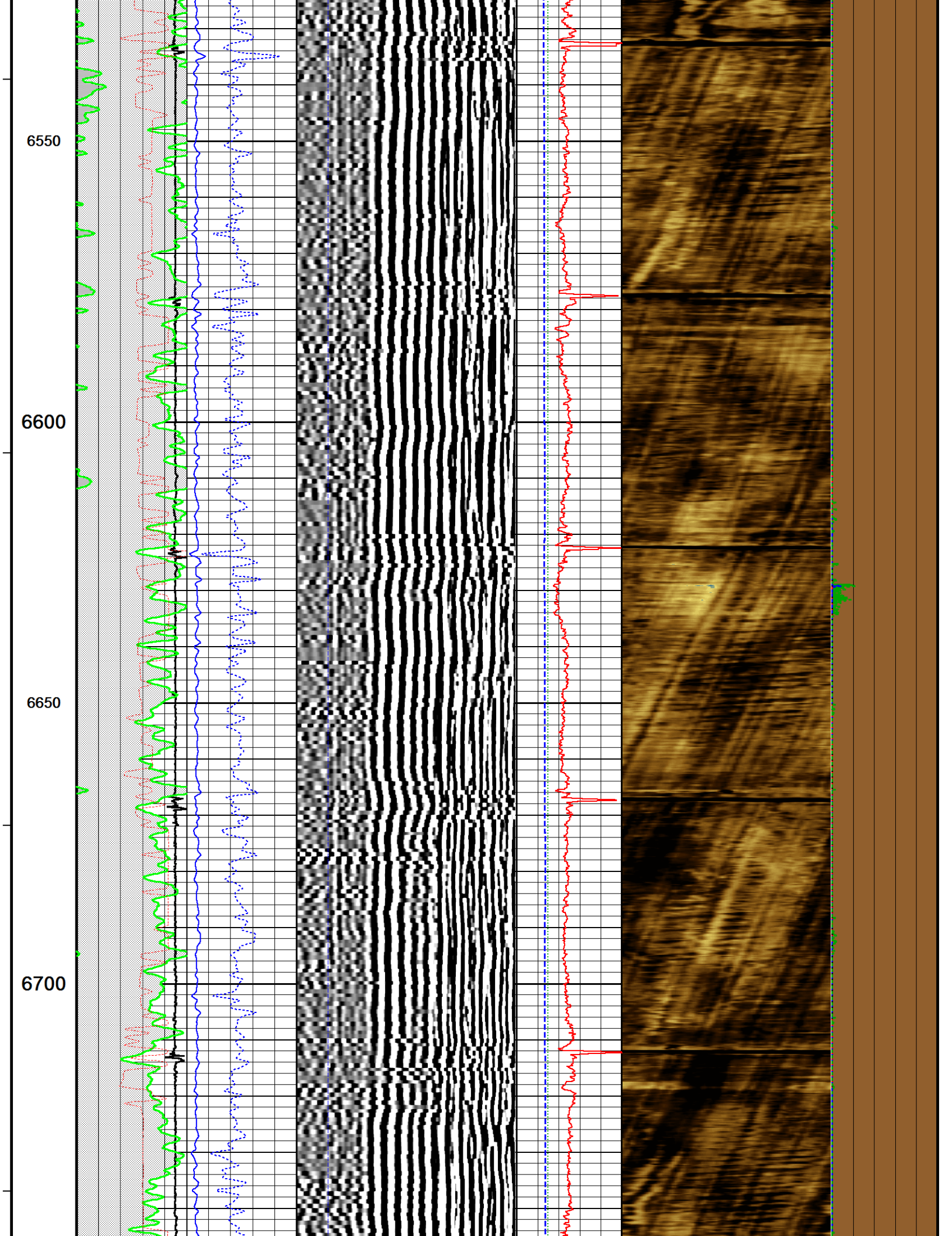
6200

6250

6300







6750

6800

6850

6900

Depth
in
Feet

CCL
MV

AM3F
MV

XY Signature 5FT
microseconds

IMAV
K/M2

Impd Map
MRAYLS

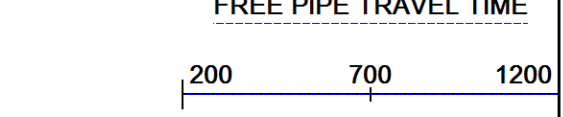
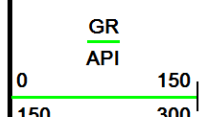
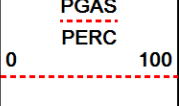
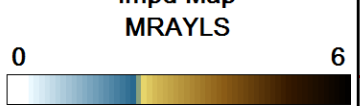
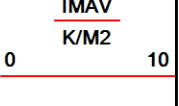
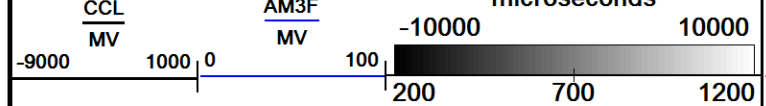
PGAS
PERC

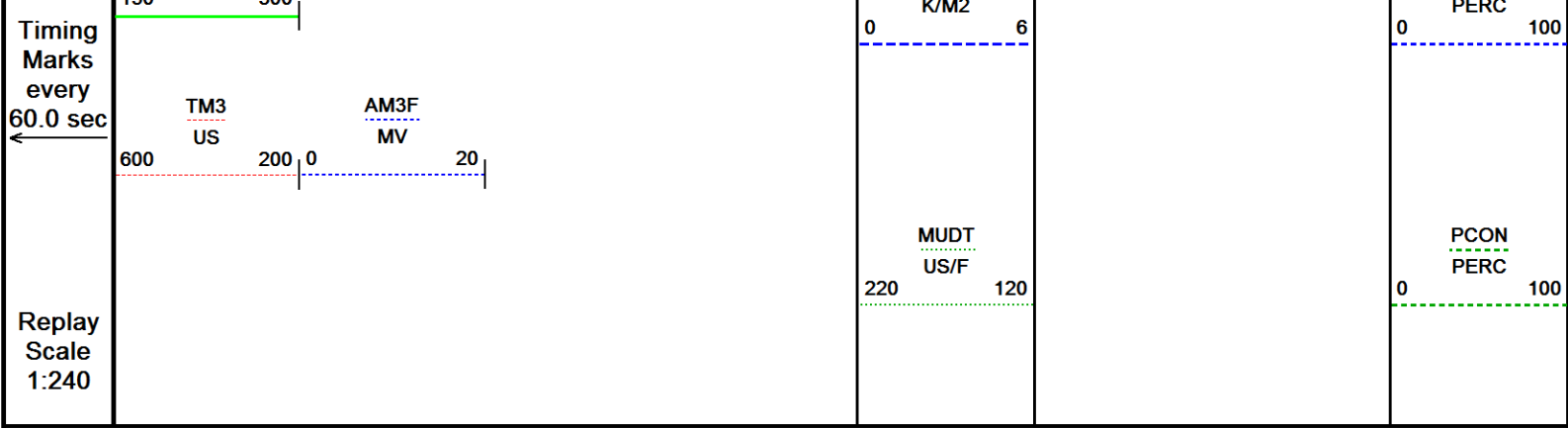
GR
API

FREE PIPE TRAVEL TIME

IMRF

PGNF





Depth Based Data - Maximum Sampling Increment 2.5cm
Filename: C:\Logs\Extraction\LEONARD 5C\LEONARD 5C MAIN URS FINAL.dta
System Versions: Logged with 16.05.3841 Plotted with 16.05.3841

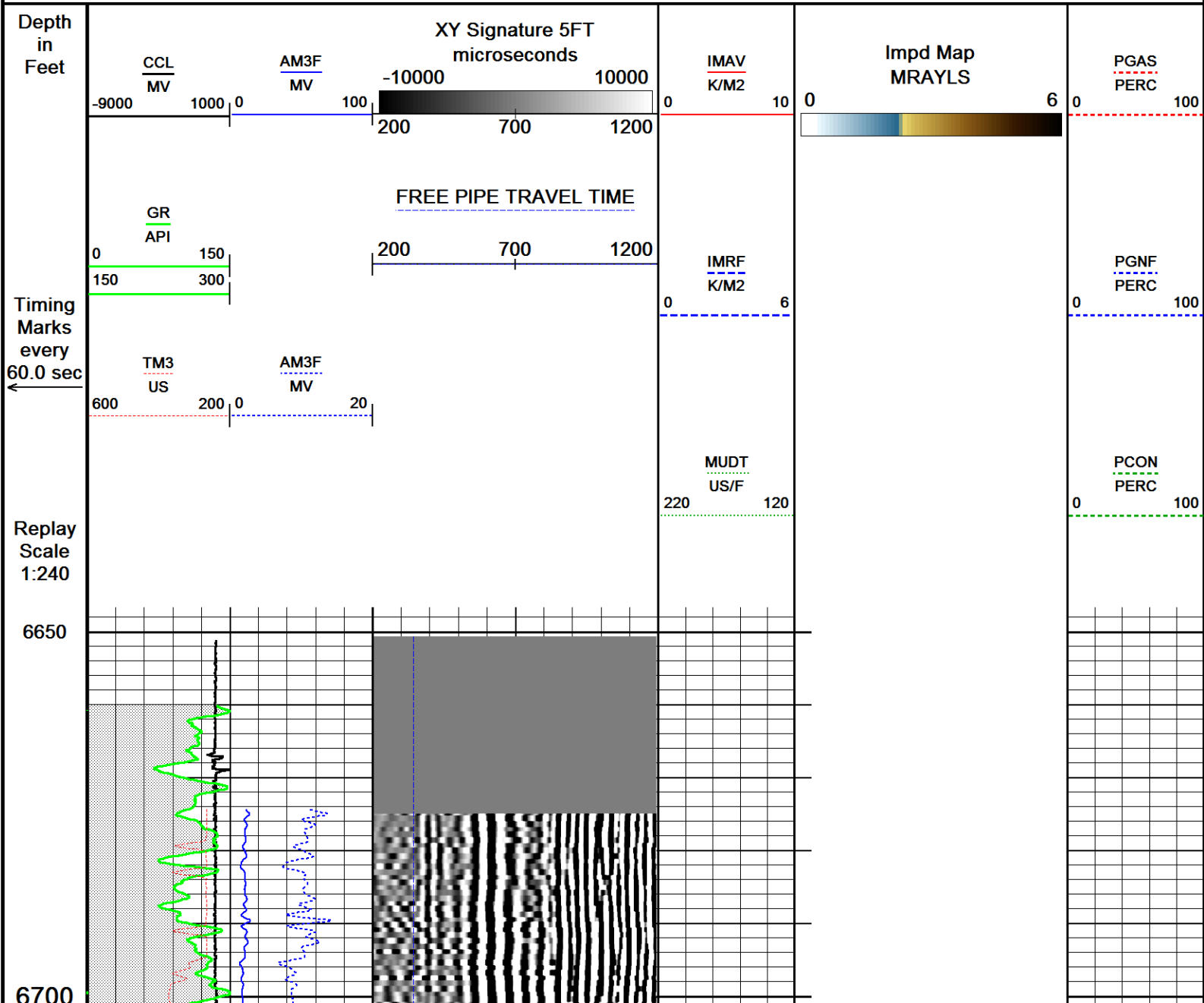
Plotted on 07-OCT-2017 17:06
Recorded on 07-OCT-2017 15:09

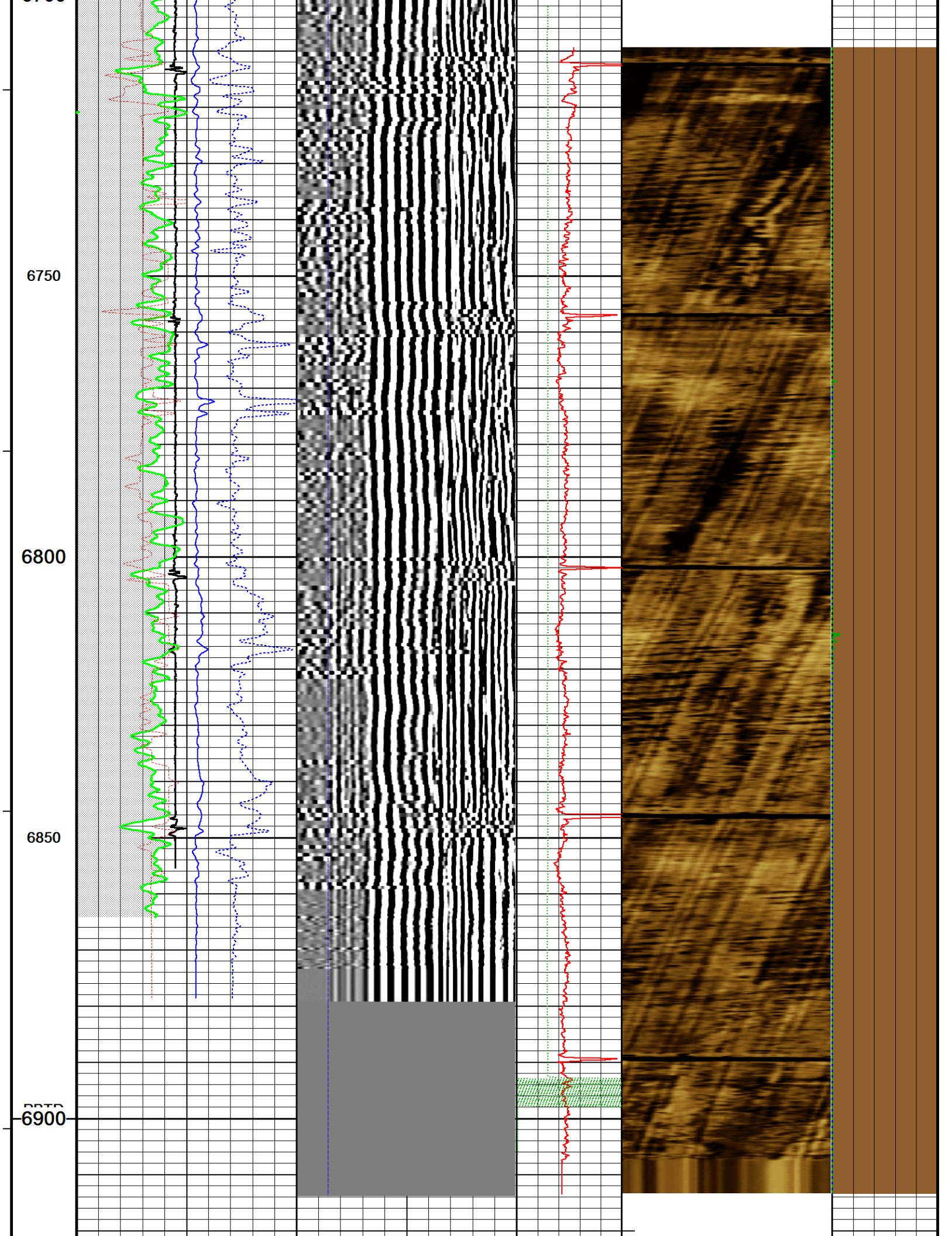
↑ MAIN PASS 1:240 ↑

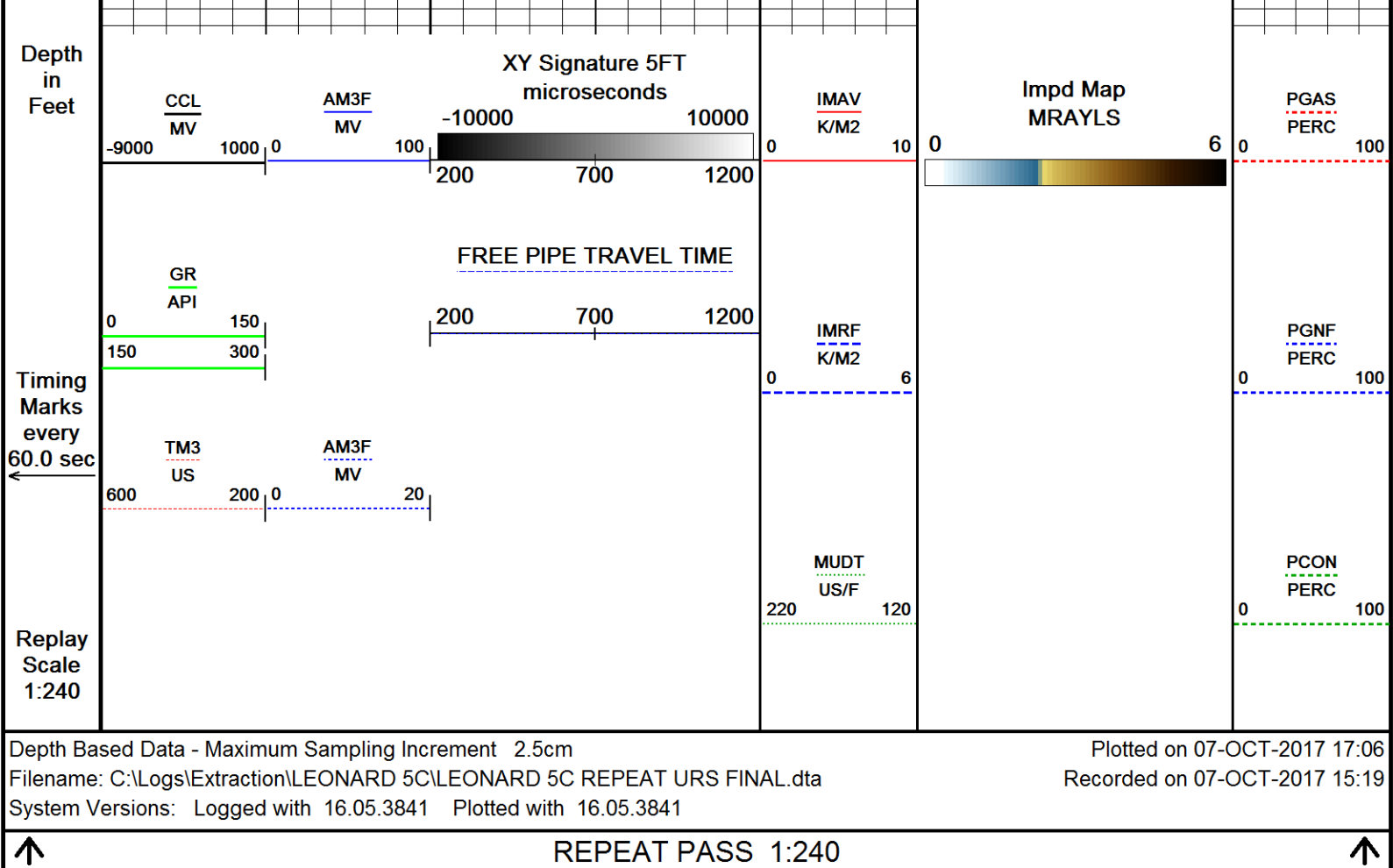
↓ REPEAT PASS 1:240 ↓

Depth Based Data - Maximum Sampling Increment 2.5cm
Filename: C:\Logs\Extraction\LEONARD 5C\LEONARD 5C REPEAT URS FINAL.dta
System Versions: Logged with 16.05.3841 Plotted with 16.05.3841

Plotted on 07-OCT-2017 17:06
Recorded on 07-OCT-2017 15:19







SHOP AND FIELD CALIBRATIONS

C:\Logs\Extraction\LEONARD 5C\LEONARD 5C 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
Calibrator No:

Serial No: 118

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	685.10

AMP 5 FT	100 % Bond	1.40	0.00
	Free Pipe	41.00	635.30

CBT Constants CBT-AA 109

Last Edited on 07-OCT-2017 15:09

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 15:09

*** 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	12184.00	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

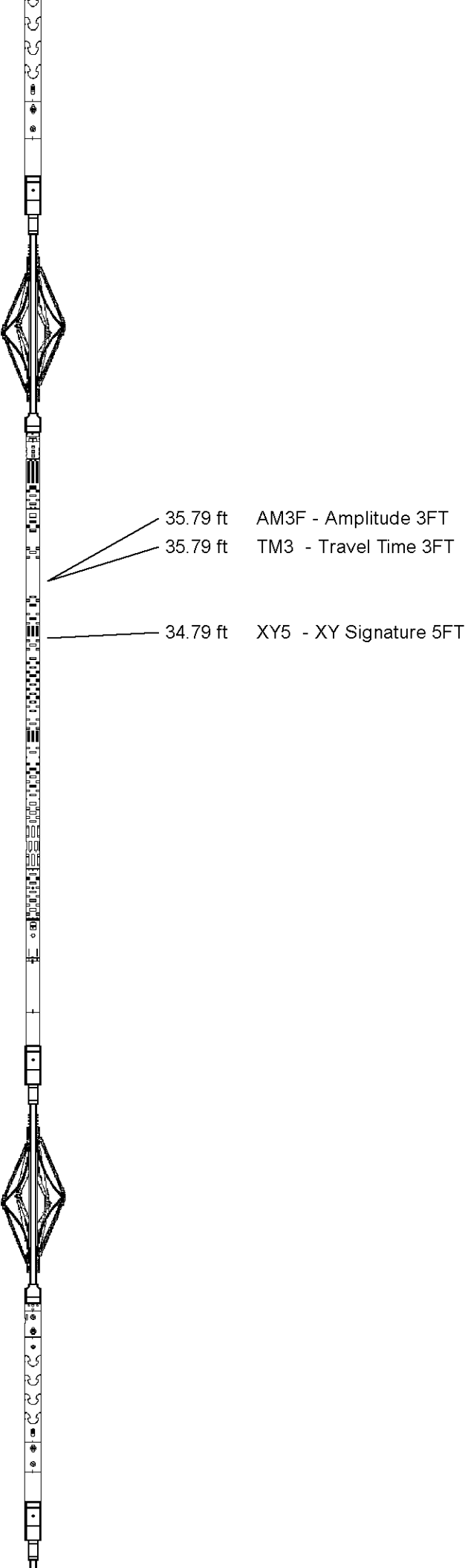
55 pin Roller Centralizer
CEN-XA 213 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

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

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

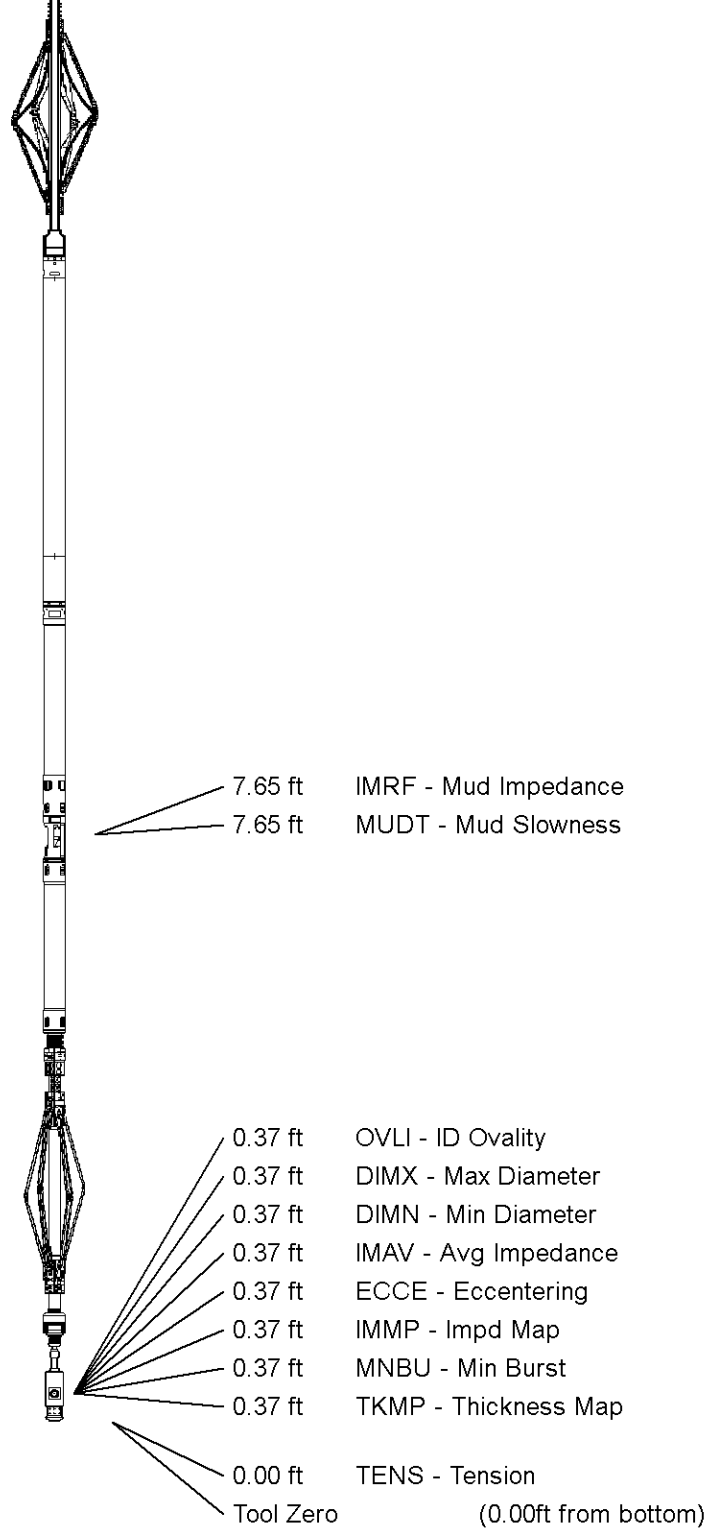


URS Electronics Cartridge
UCC-AA 132 LG: 4.51 ft WT: 79.4 lb OD: 3.386 in

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 5C
FIELD	WATTENBERG
PROVINCE/COUNTY	WELD
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



SECUREVIEW

