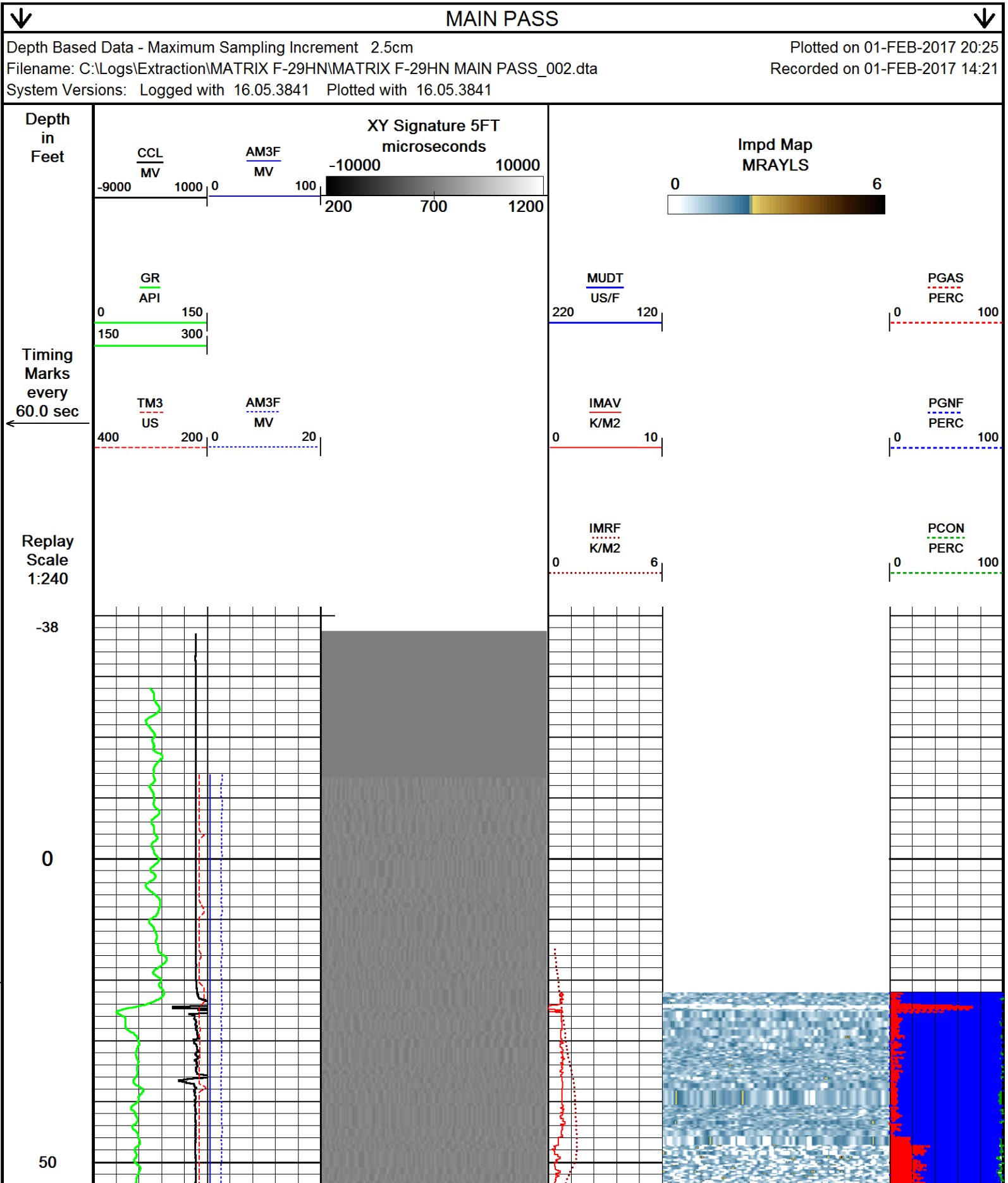
 Weatherford®			SECUREVIEW ULTRAVIEW/BONDVIEW CEMENT ANALYSIS				
COMPANY WELL FIELD PROVINCE/COUNTY COUNTRY/STATE LOCATION			EXTRACTION OIL & GAS MATRIX F-29HN GREELEY WELD USA / COLORADO				
SEC 29	TWP 6N	RGE 65W	Other Services			Elevations: KB 4916.00 DF 4916.00 GL 4888.00	
Latitude Longitude API Number			Permanent Datum GROUND LEVEL, Elevation 4888 feet Log Measured From KB, 28 feet above Permanent Datum Drilling Measured From KB @ 28'				
Date	1-FEB-2017	PERFORATION RECORD					
Run Number	ONE	Shot	Number	Depth From	Depth To		
Service Order	173194862	Density	of Shots	feet	feet		
Type Log	URS/CBT						
Depth Driller	12000.00						
Depth Logger	6550.00						
Top Log Interval	0.00						
Bottom Log Interval	6550.00						
Hole Fluid Type	WATER						
Hole Fluid Level	0.00						
Restriction ID	4.767	Gun Type					
Max Recorded Temp		Gun Size					
Well Head Pressure	0.00	psi	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	12000.00		
Unit	14333						
Equipment Name	WSSE						
Base	CASPER						
Recorded By	P. MAZUR						
Witnessed By	NOT WITNESSED						

CASING / TUBING RECORD						
Type	Grade	TypeJoint	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
	P 110		5.500	0.00	12000.00	20.00

REMARKS
ULTRASONIC RADIAL SCANNER LOG CORRELATED TO RIG KB @ 28 FT ABOVE GROUND LEVEL
BELOW SURFACE CASING THE TOOL HAD MANY AREAS WHERE IT EXPERIENCED DECENTRALIZATION DUE TO DEVIATION AND DOG LEGS IN THE CASING. IT SHOULD BE NOTED THAT THIS DECENTRALIZATION OF THE TOOL GREATLY AFFECTS THE READINGS RECORDED OVER THESE INTERVALS
ECCENTERICITY IS IN TRACK 1 AND REFLECTED BY FOUR STRIPES ALTERNATING LIGHT AND DARK IN THE AMPLITUDE AND IMPDEANCE MAPS. AT THESE POINTS THE READS ARE INVALID.
ALSO THE CASING SHOWED SIGNS OF BEING IN DIRCT CONTACT WITH THE FORMATION WHICH LEADS TO SPIKING IN THE THICKNESS CURVES
THE DEPTH OF LOGGING WAS STARTED AT THE POINT AT WHICH THE TOOL WAS NOT DEVIATED ENOUGH THAT IT CAUSE THE HEAD ON THE ULTRASONIC TOOL TO STOP ROTATING

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.

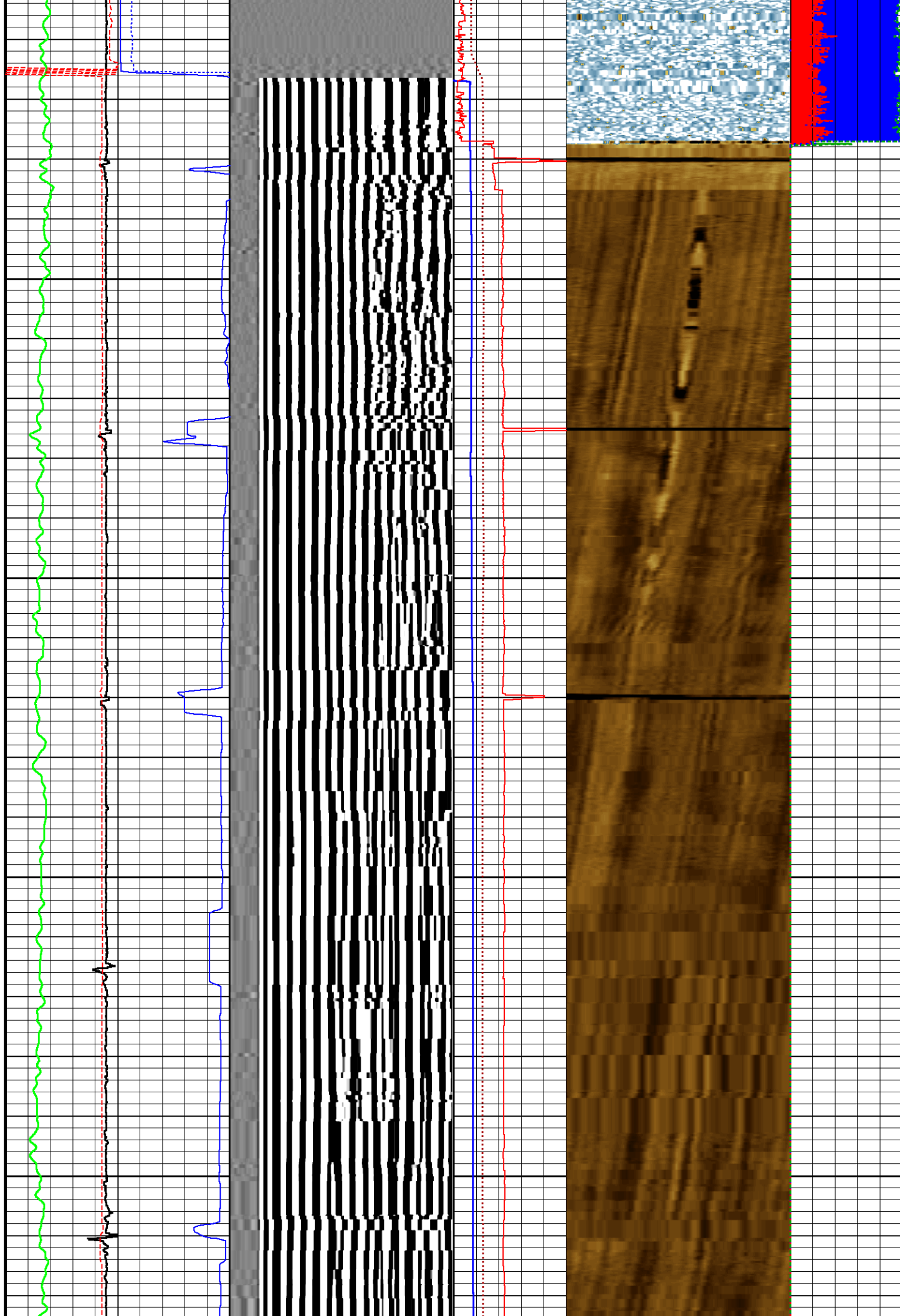


100

150

200

250

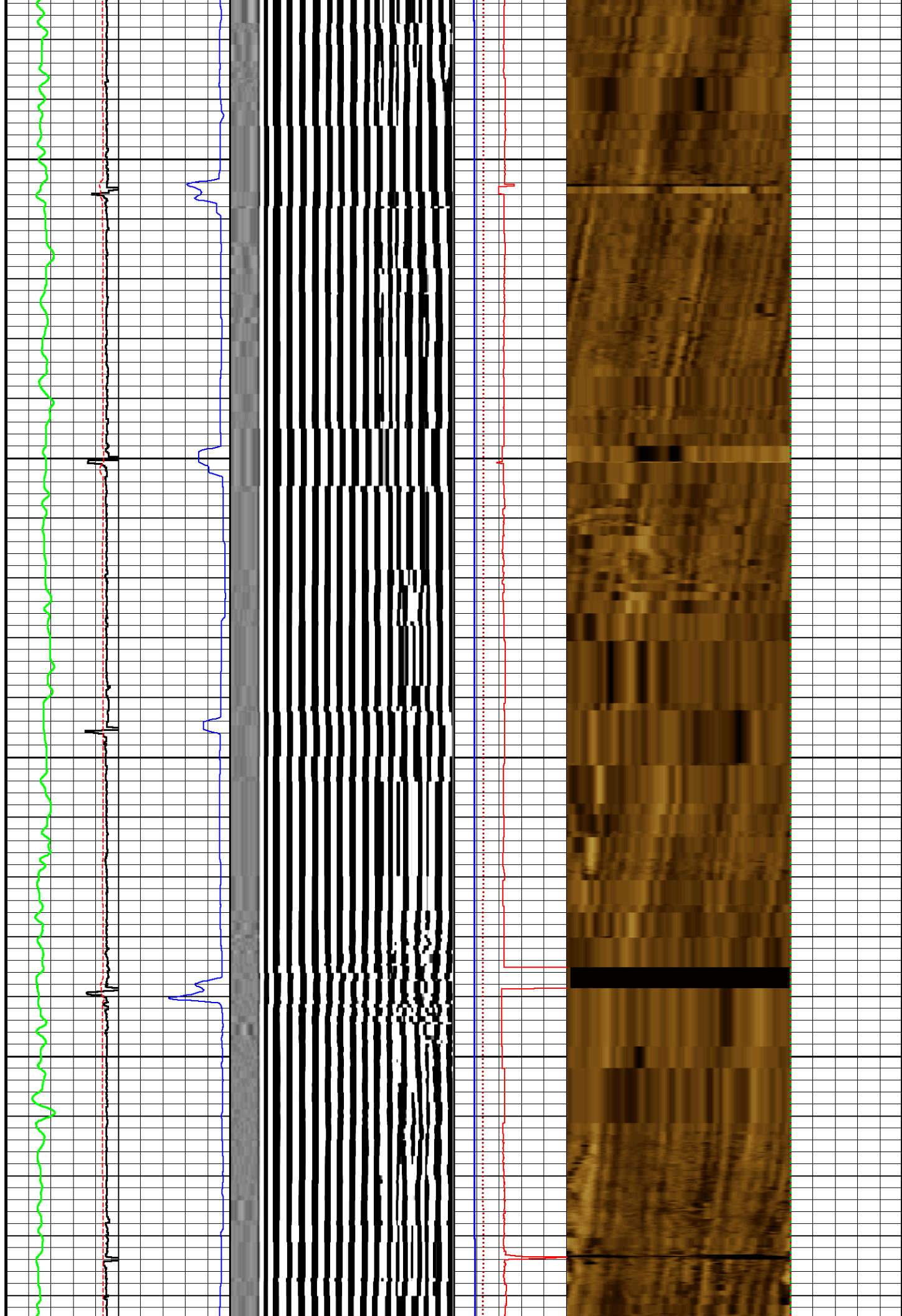


300

350

400

450



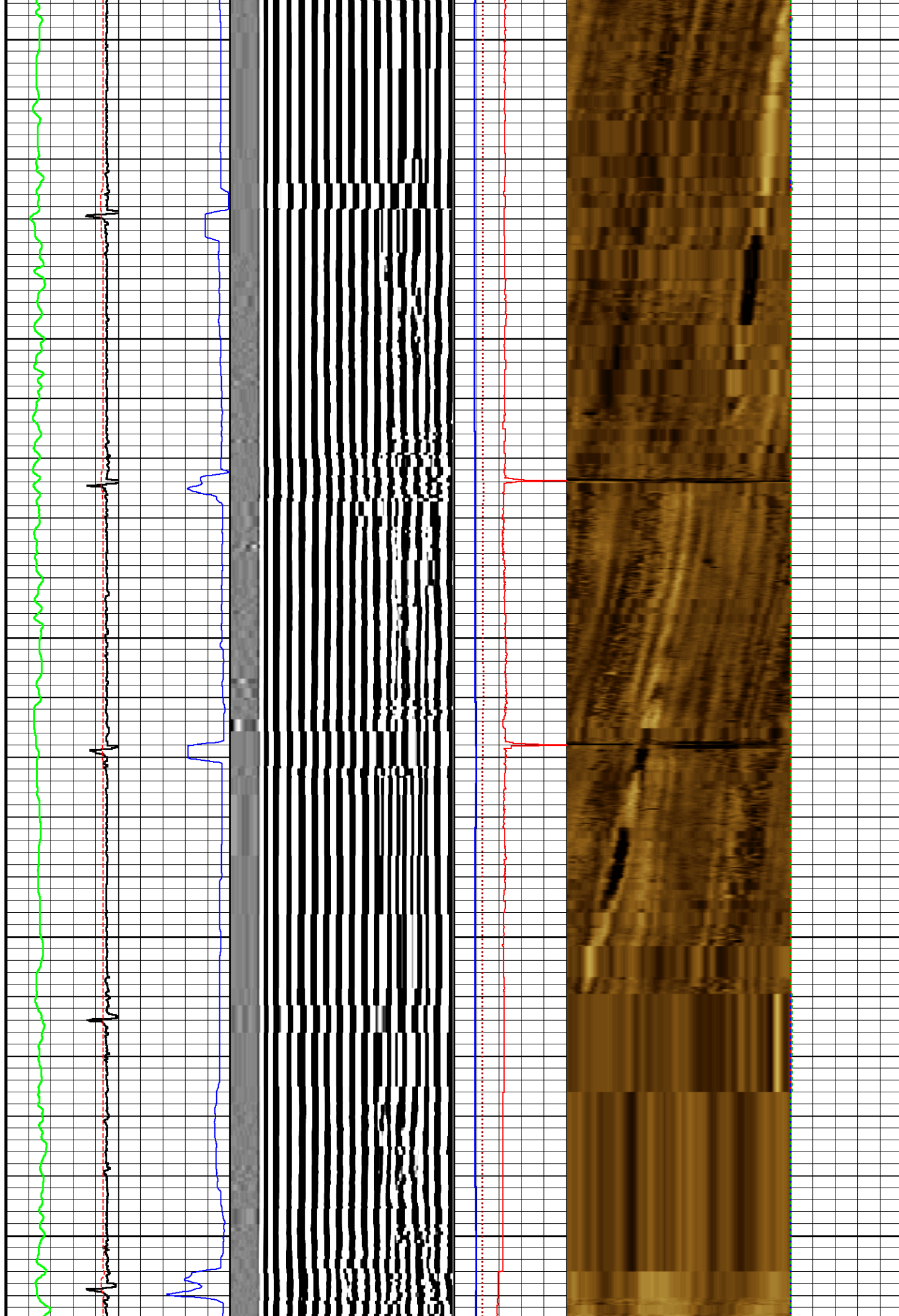
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550

600

650

700

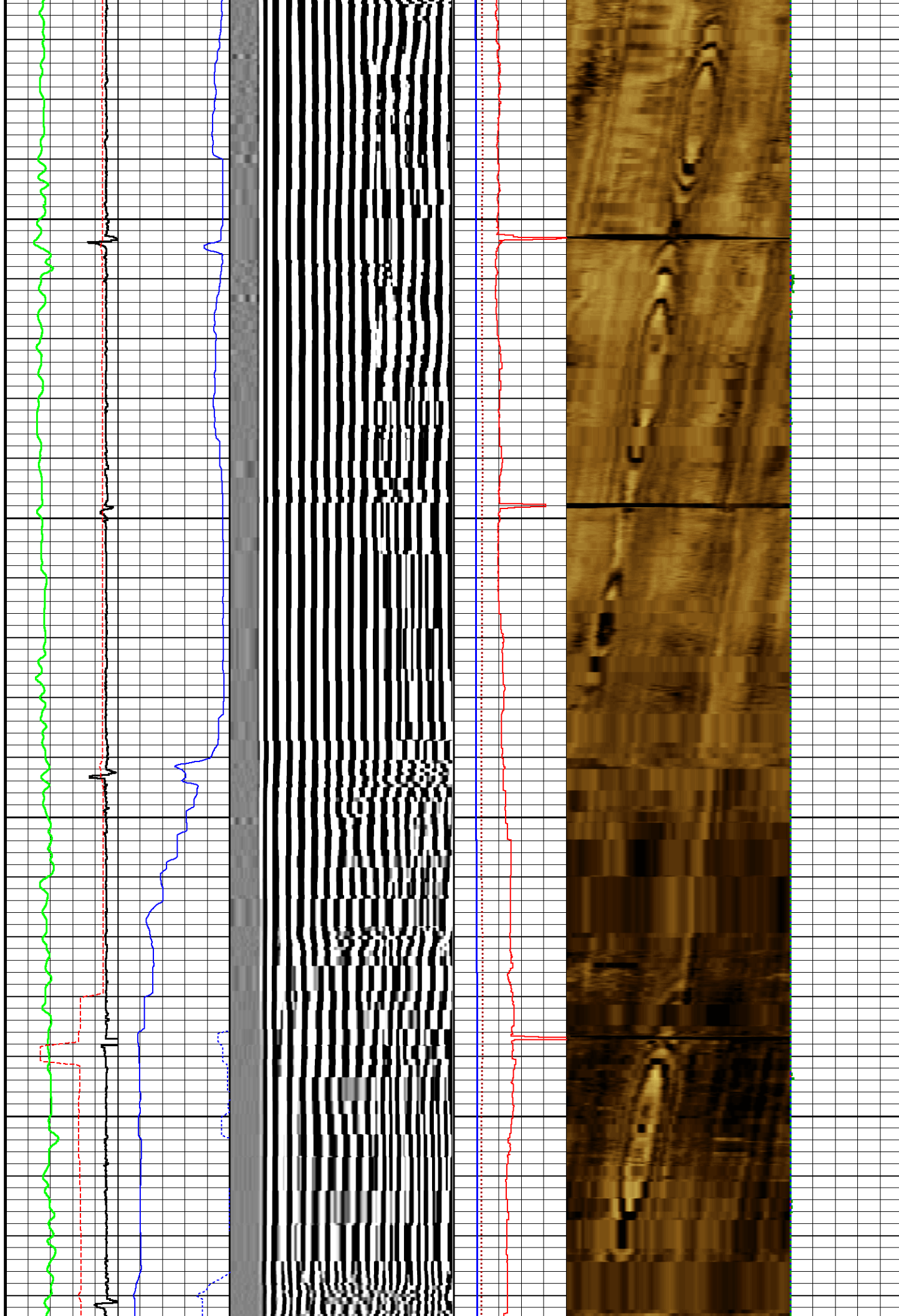


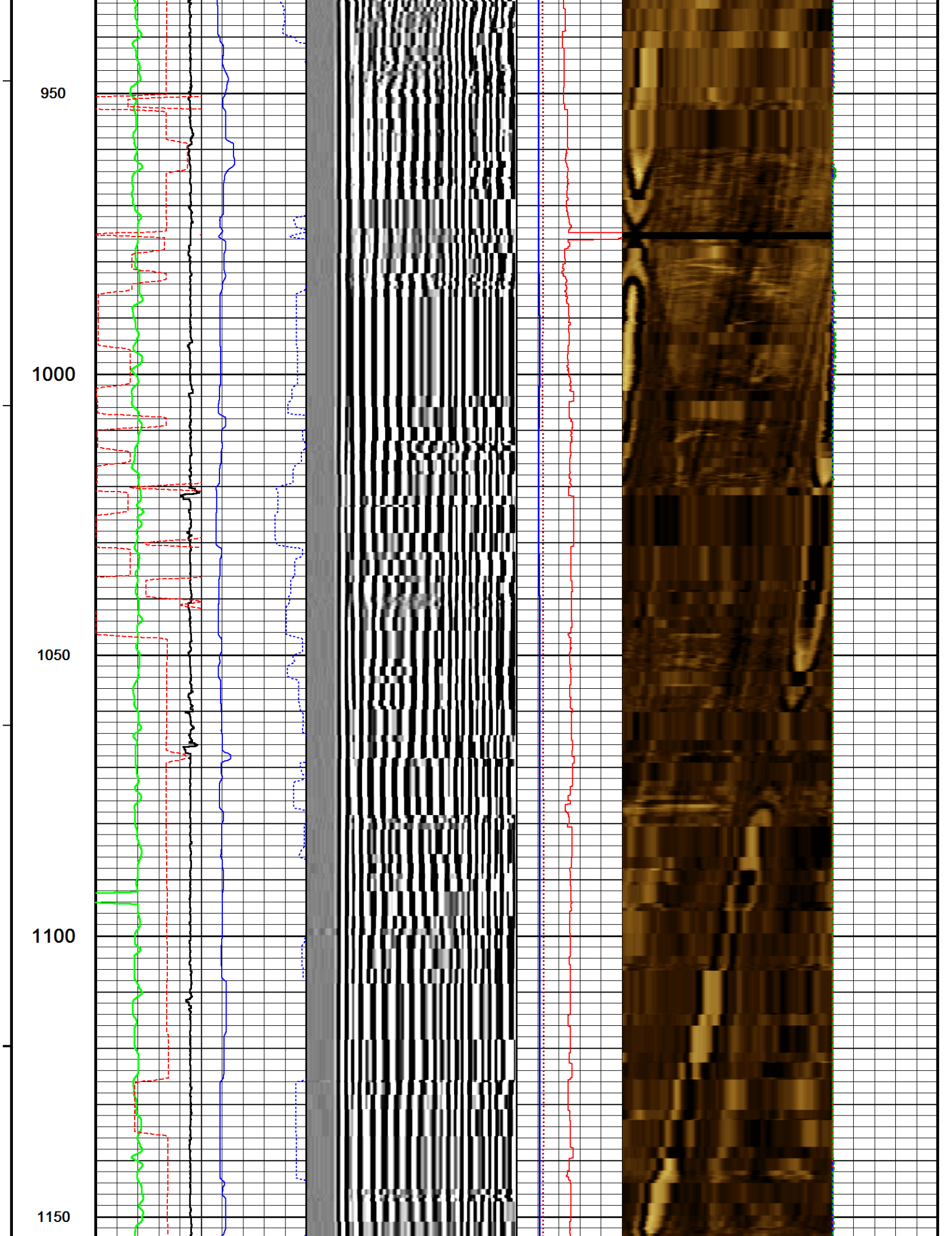
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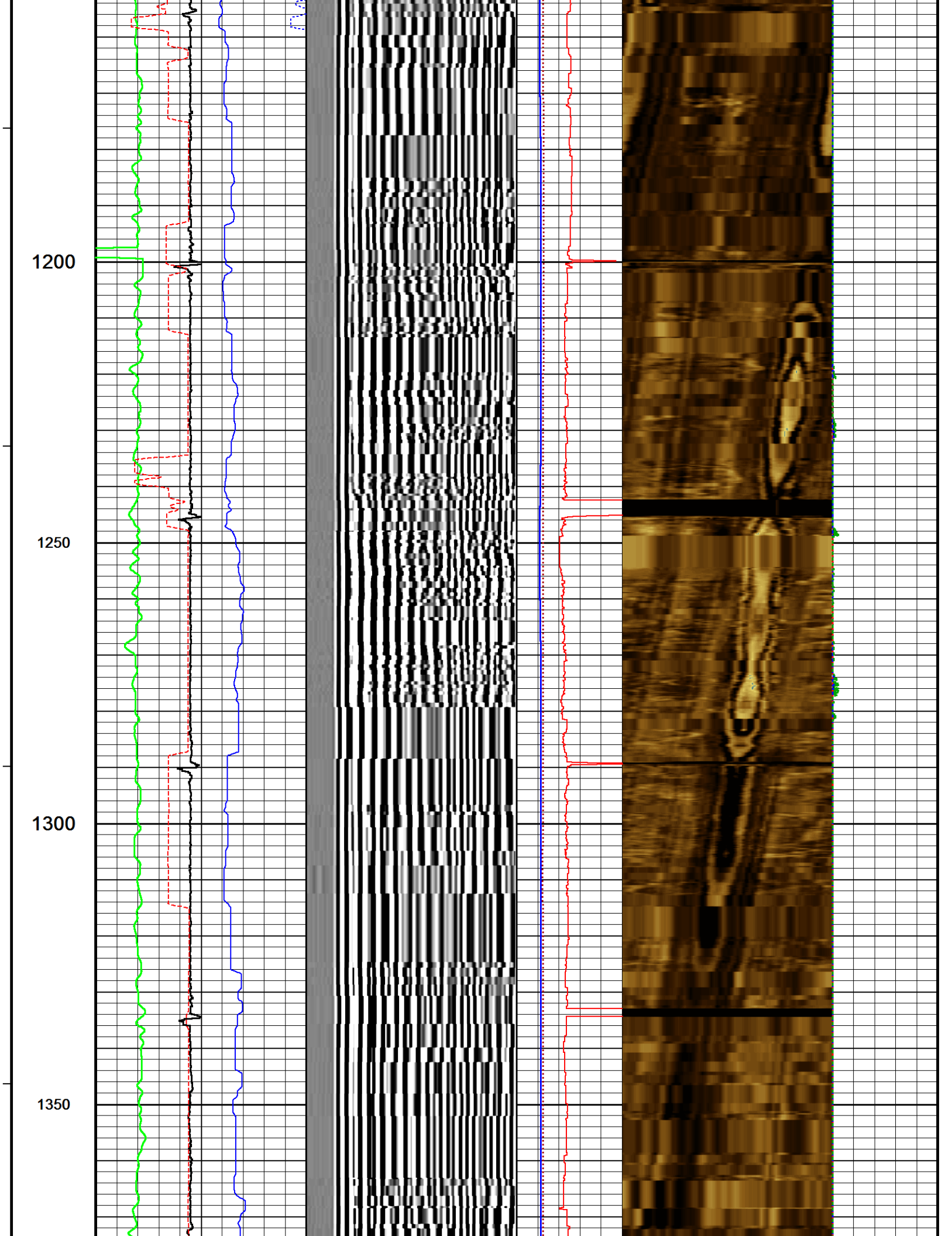
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850

900





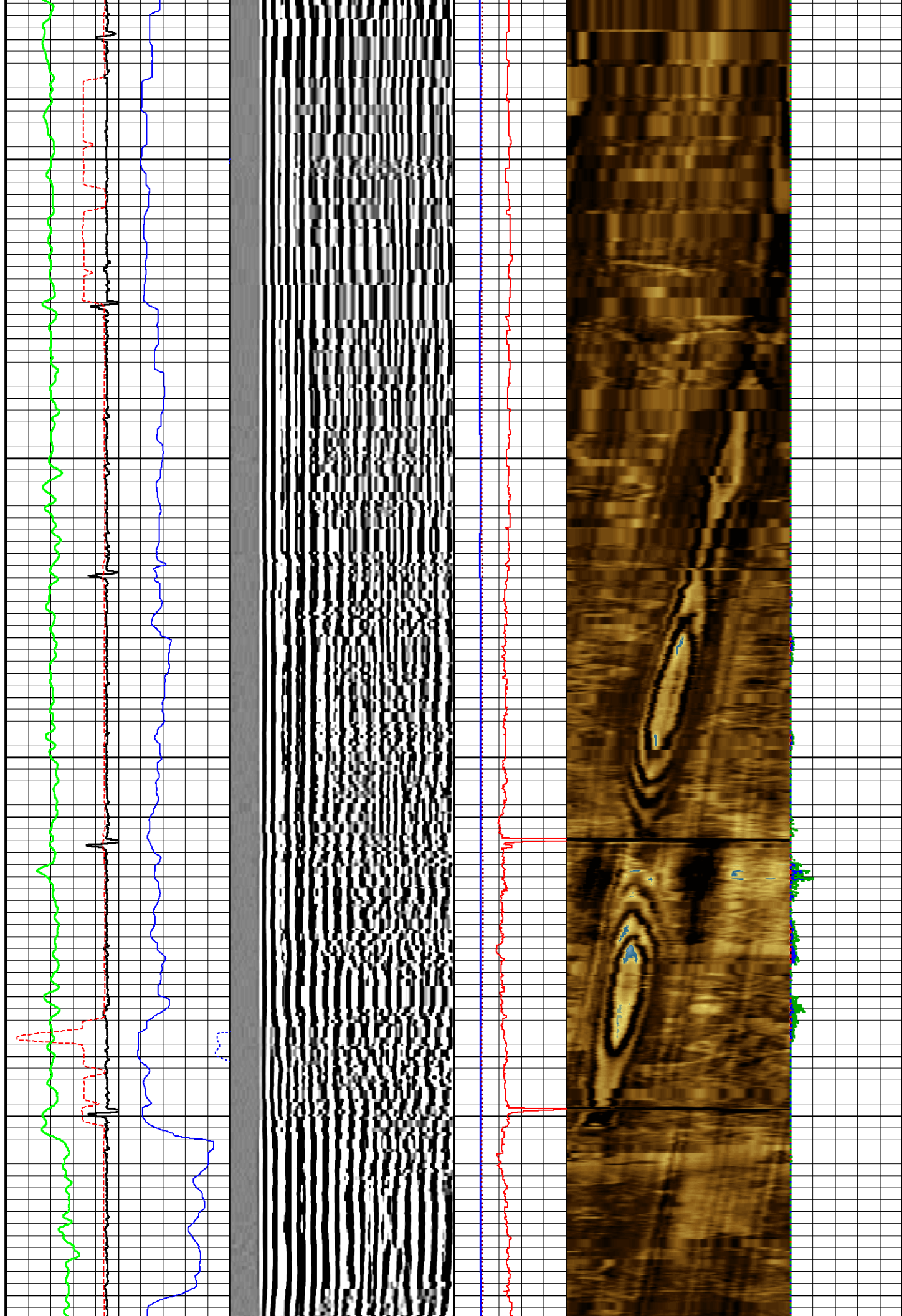


1400

1450

1500

1550



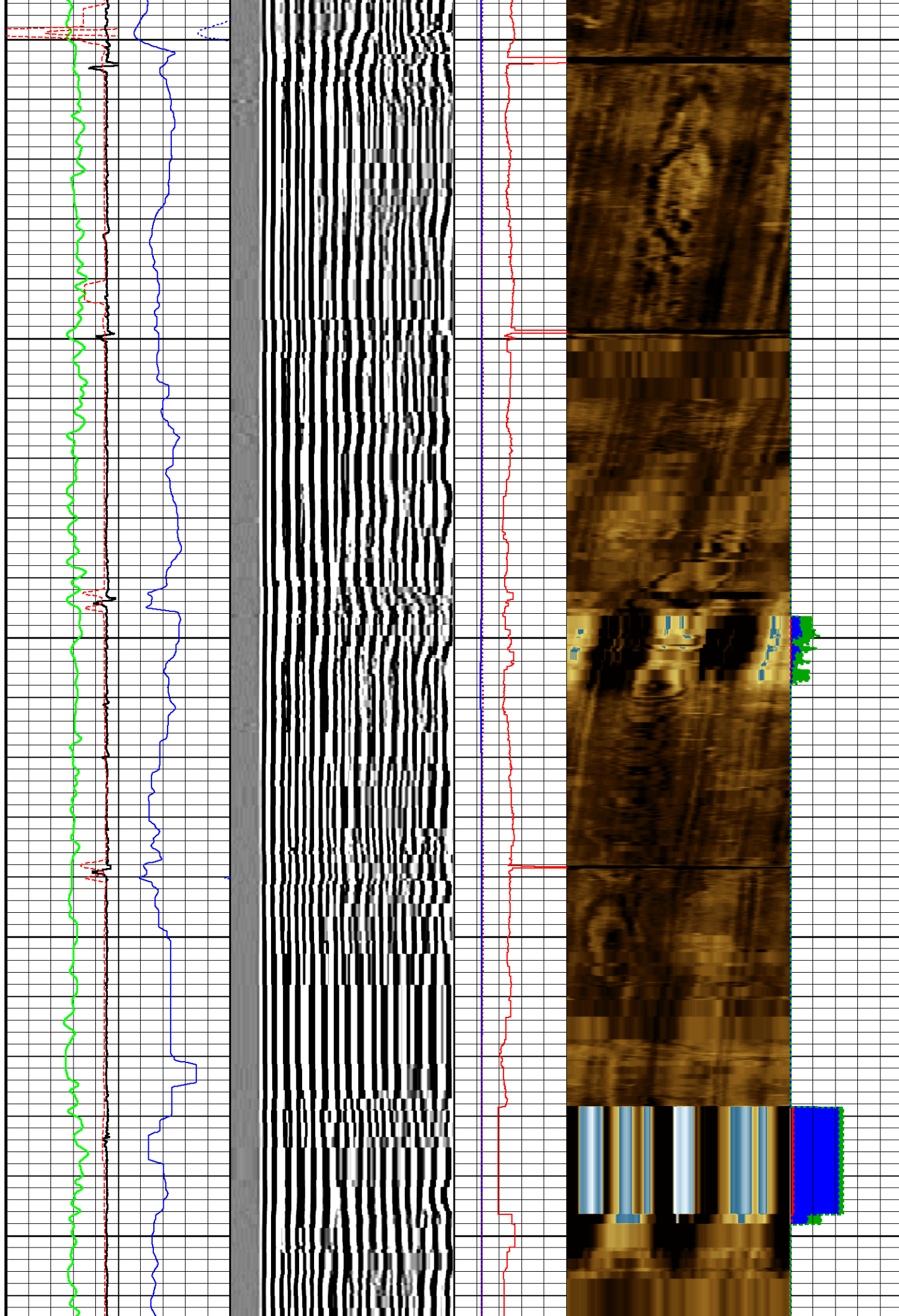
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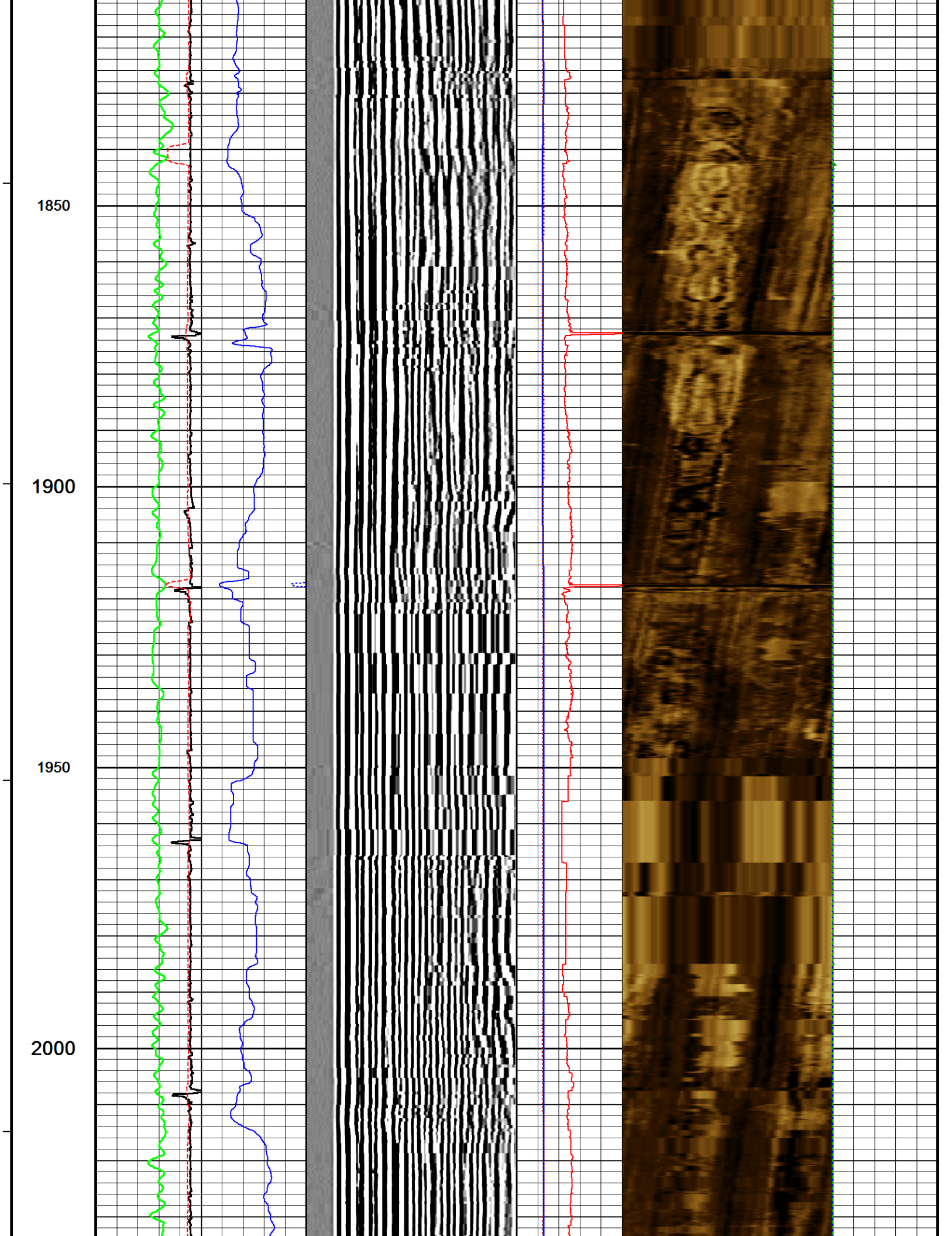
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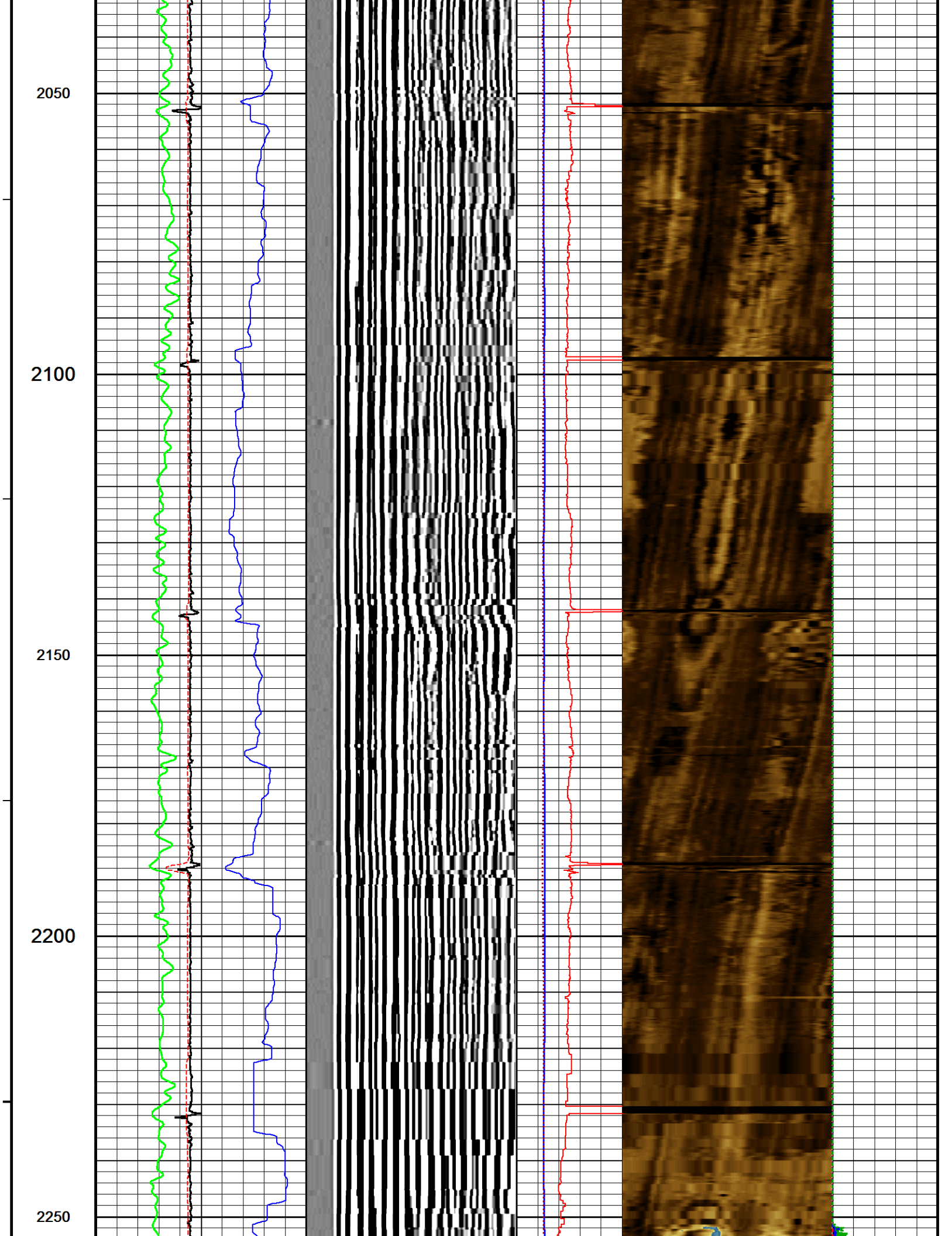
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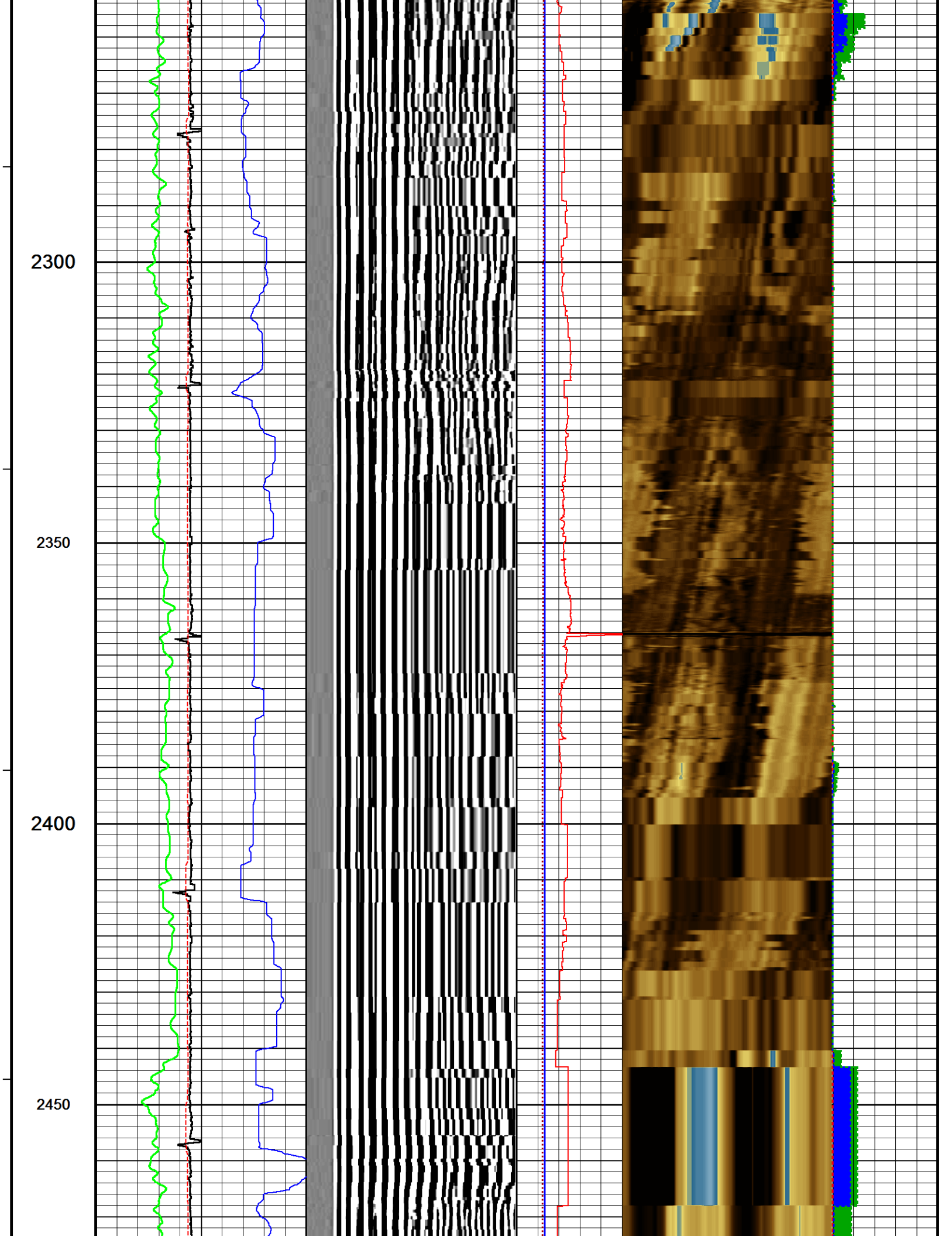
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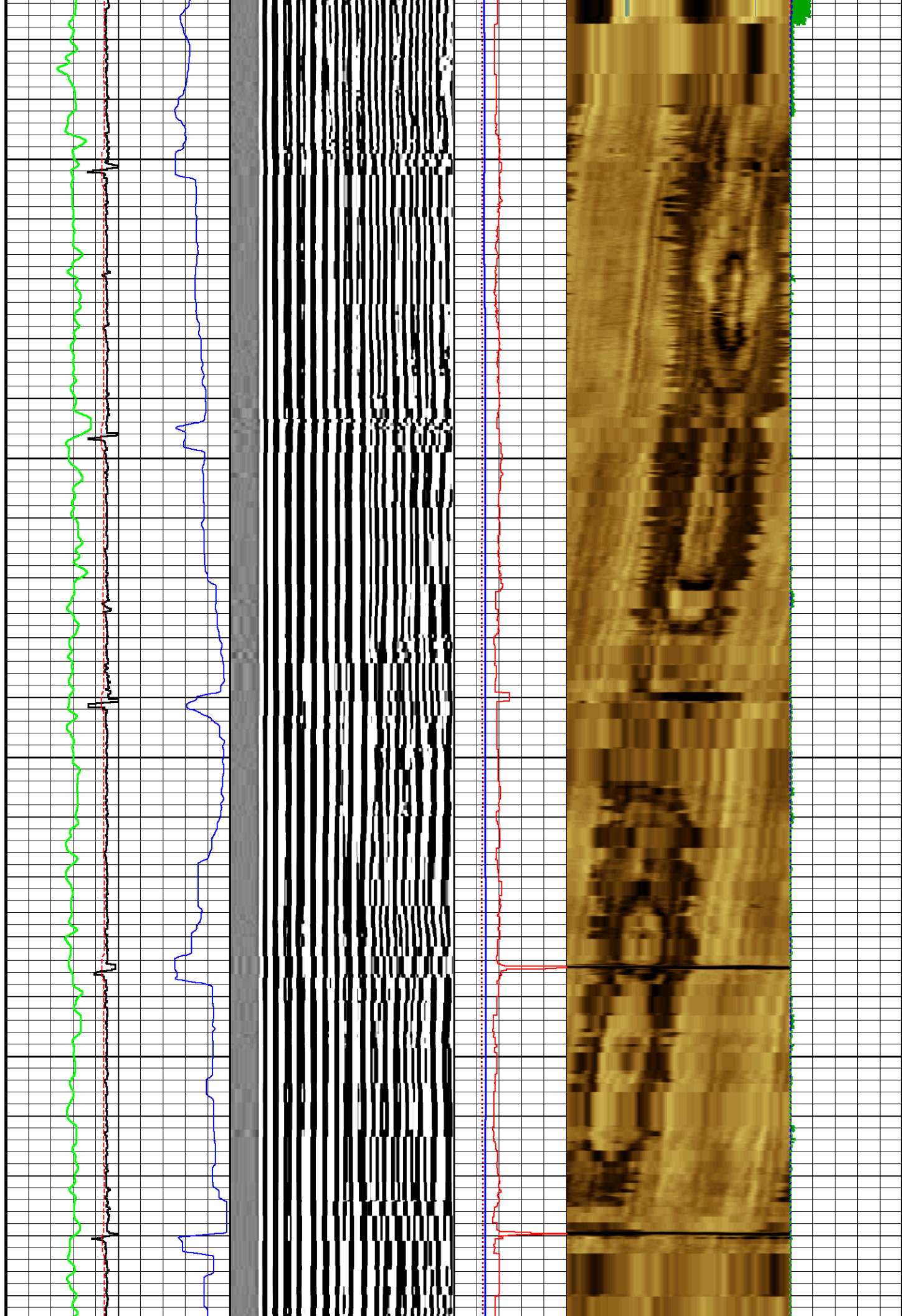


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2550

2600

2650



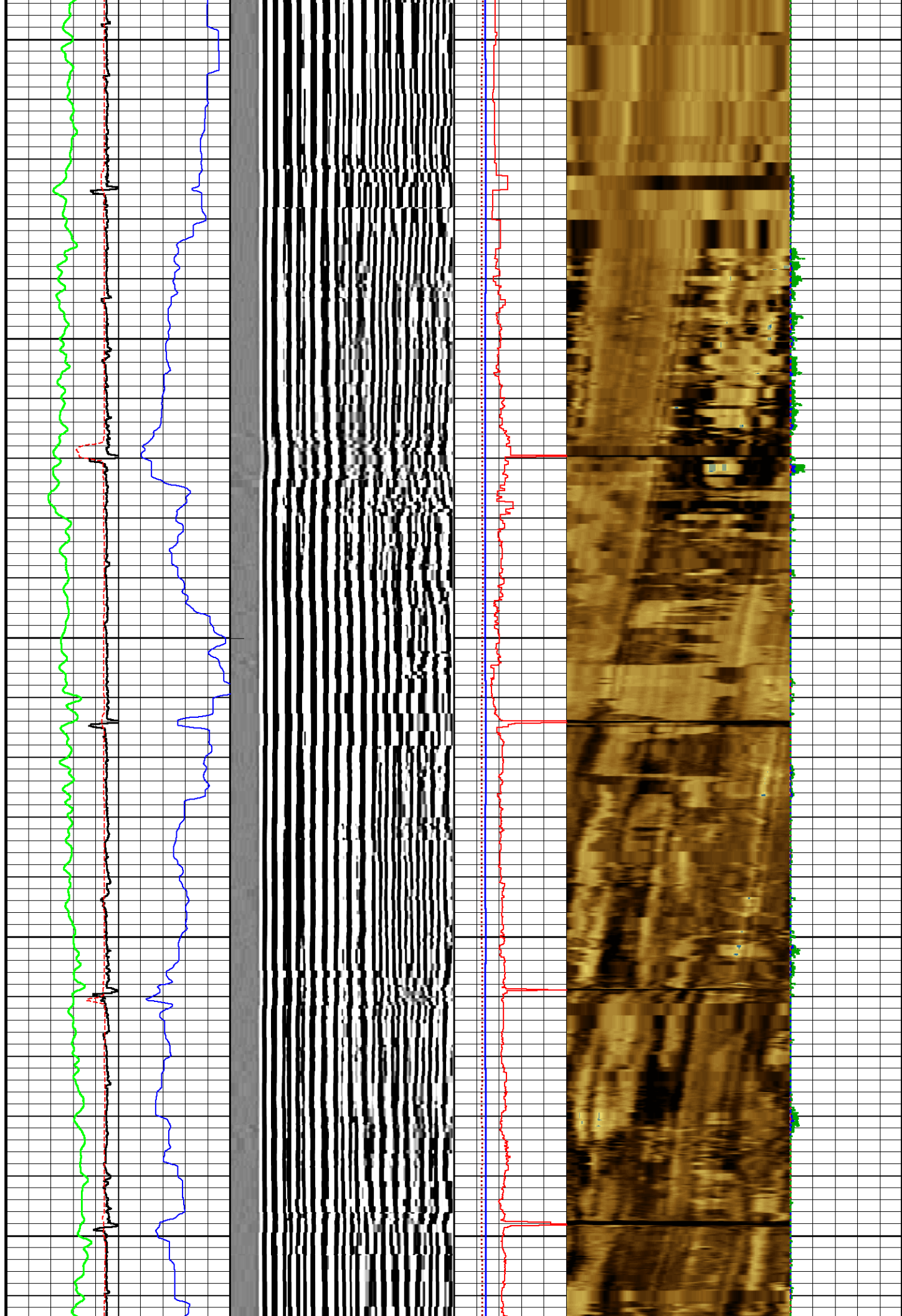
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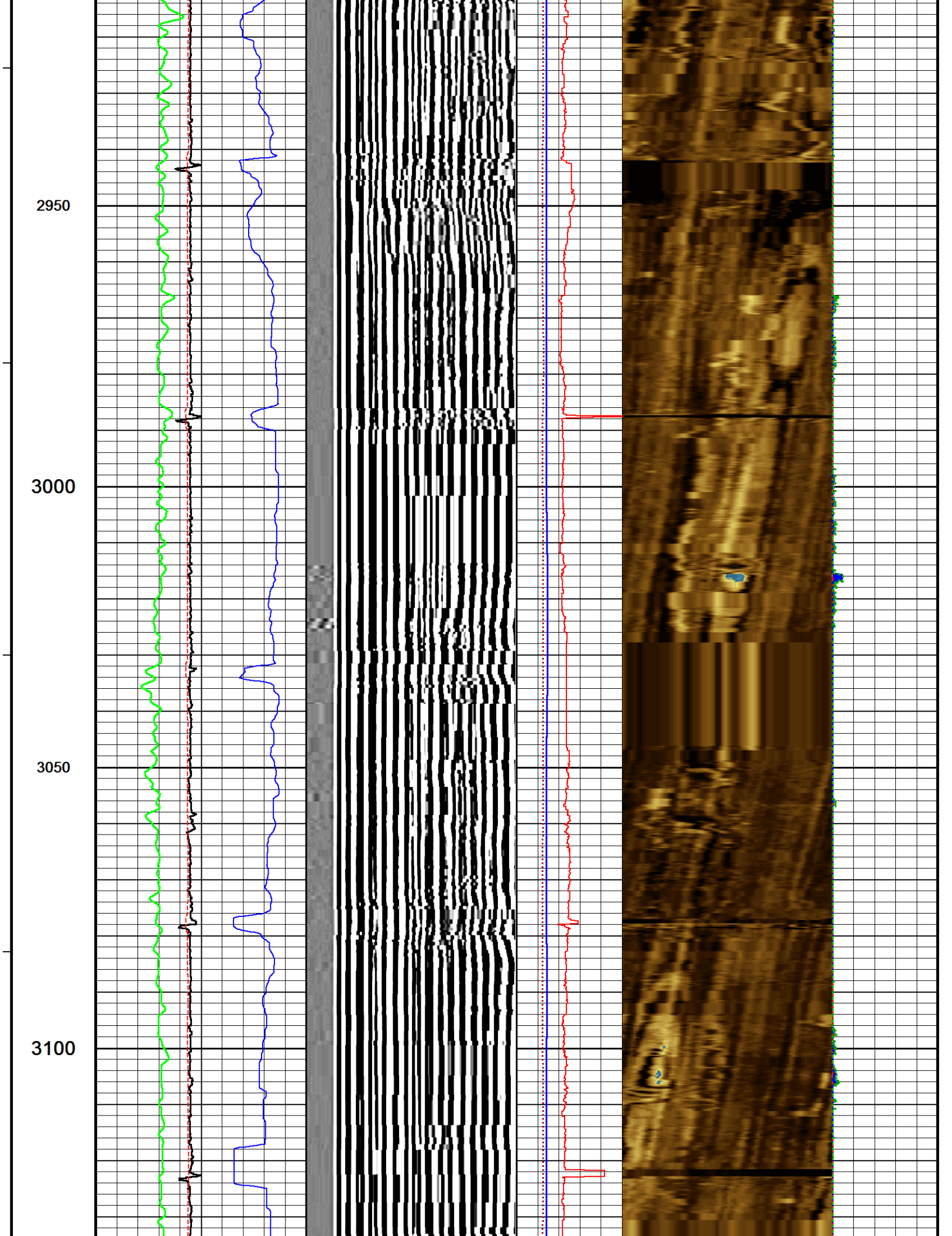
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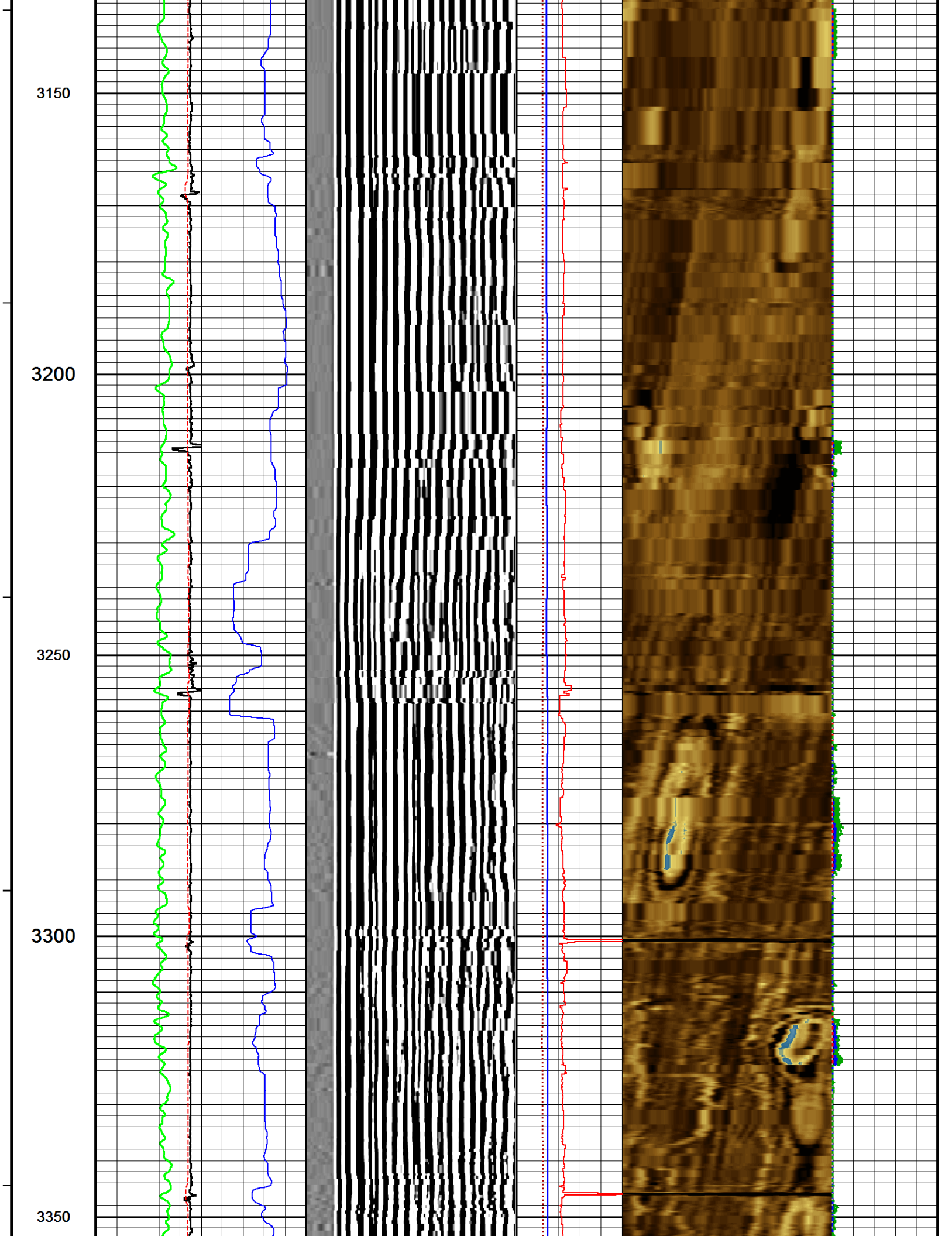
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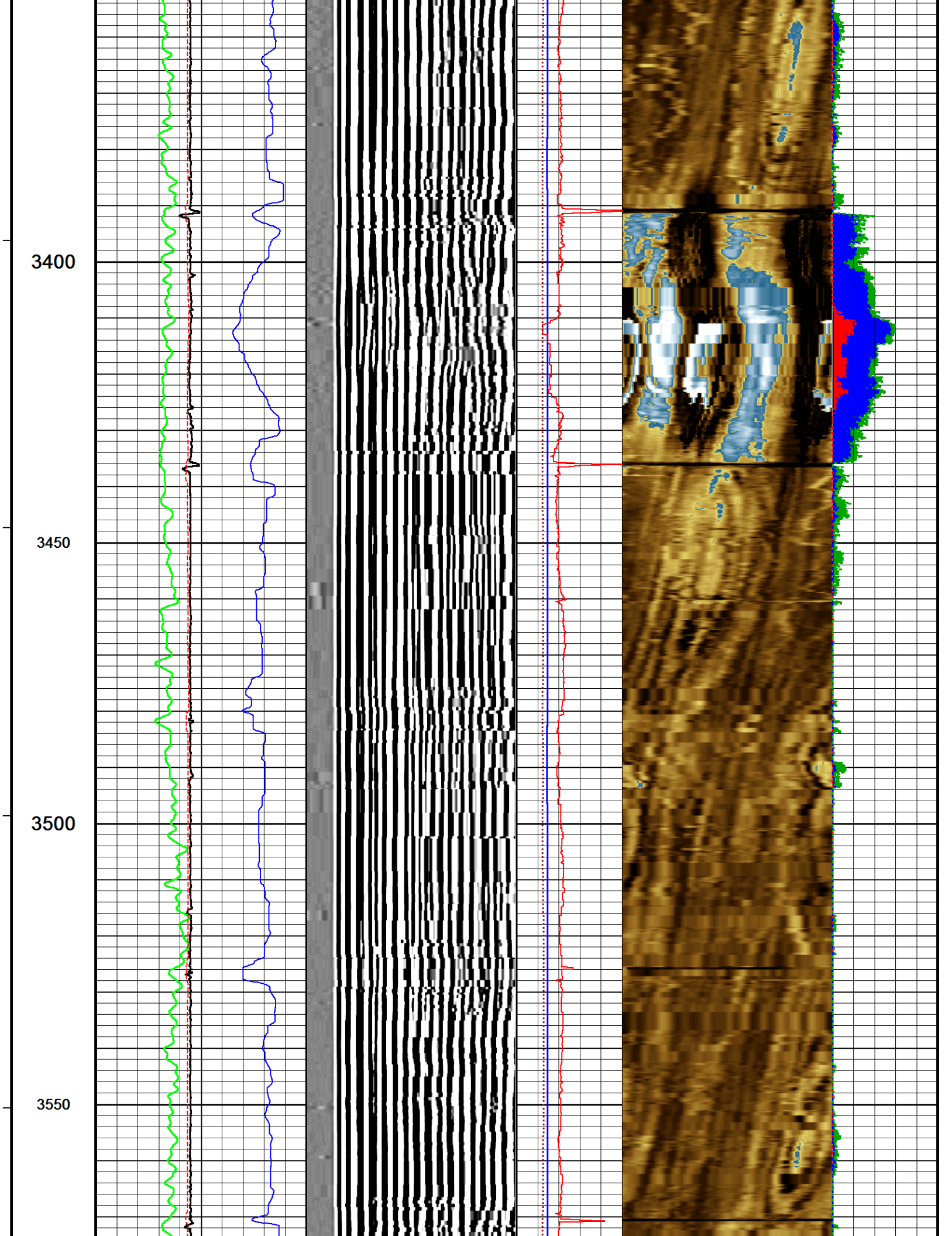
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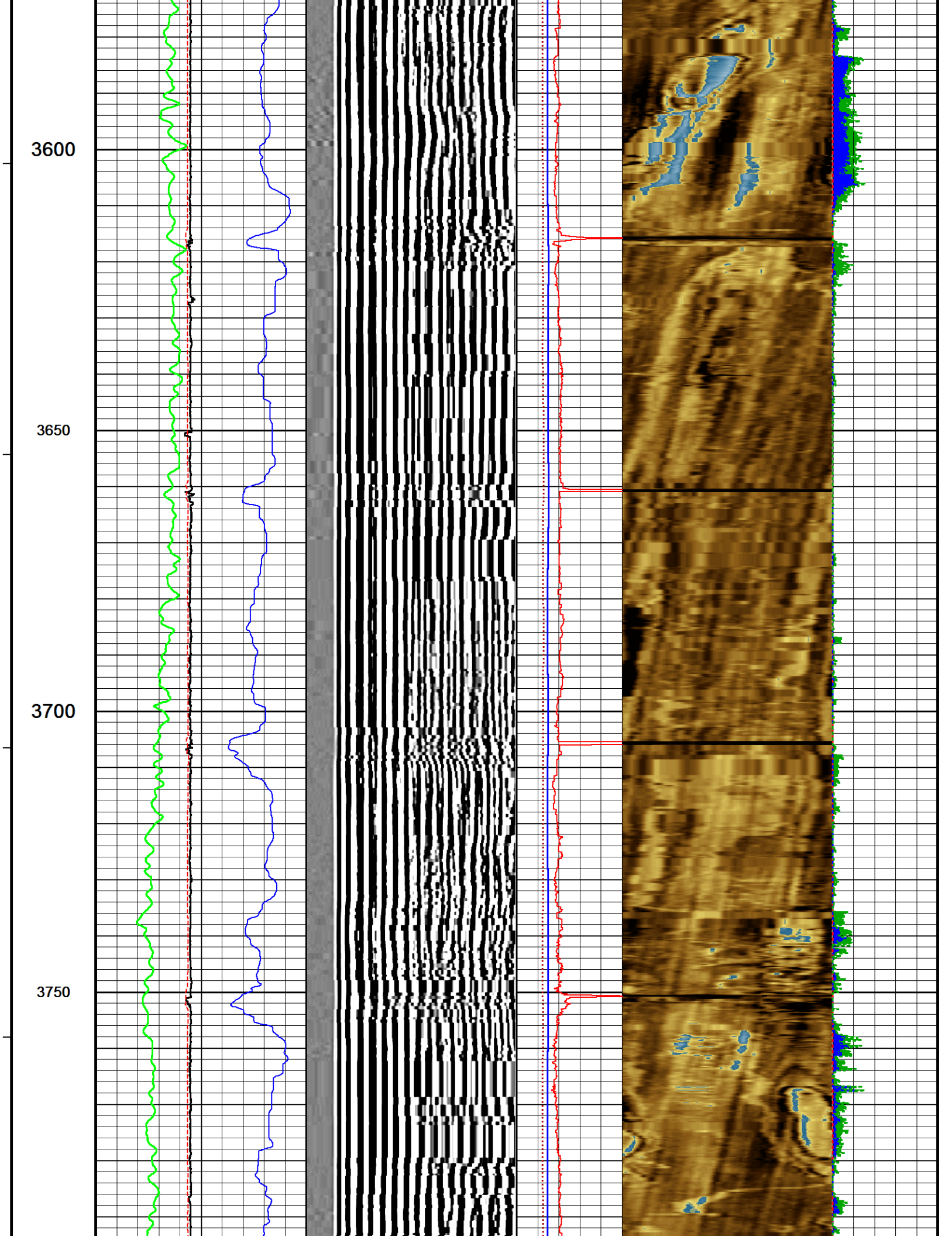
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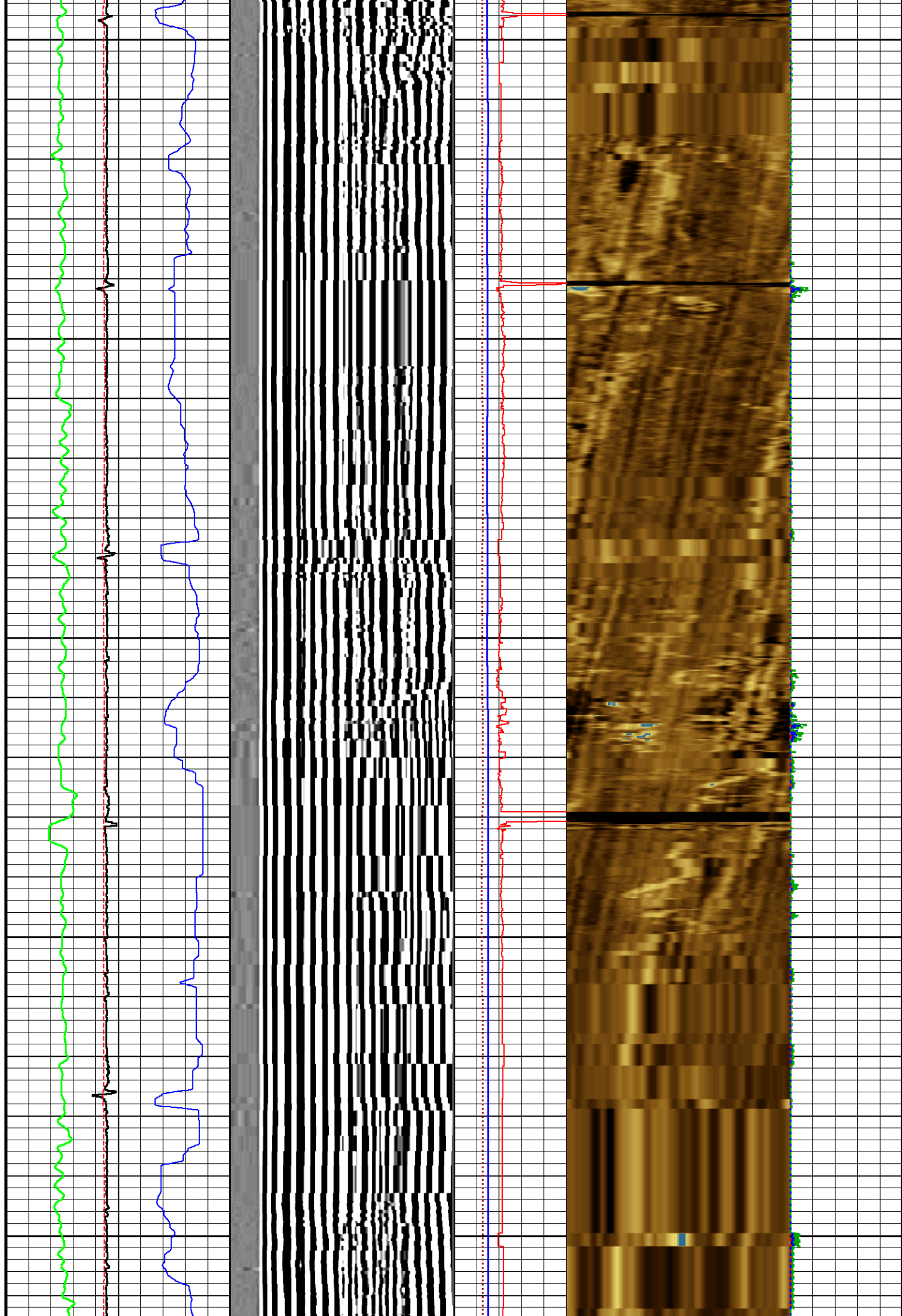
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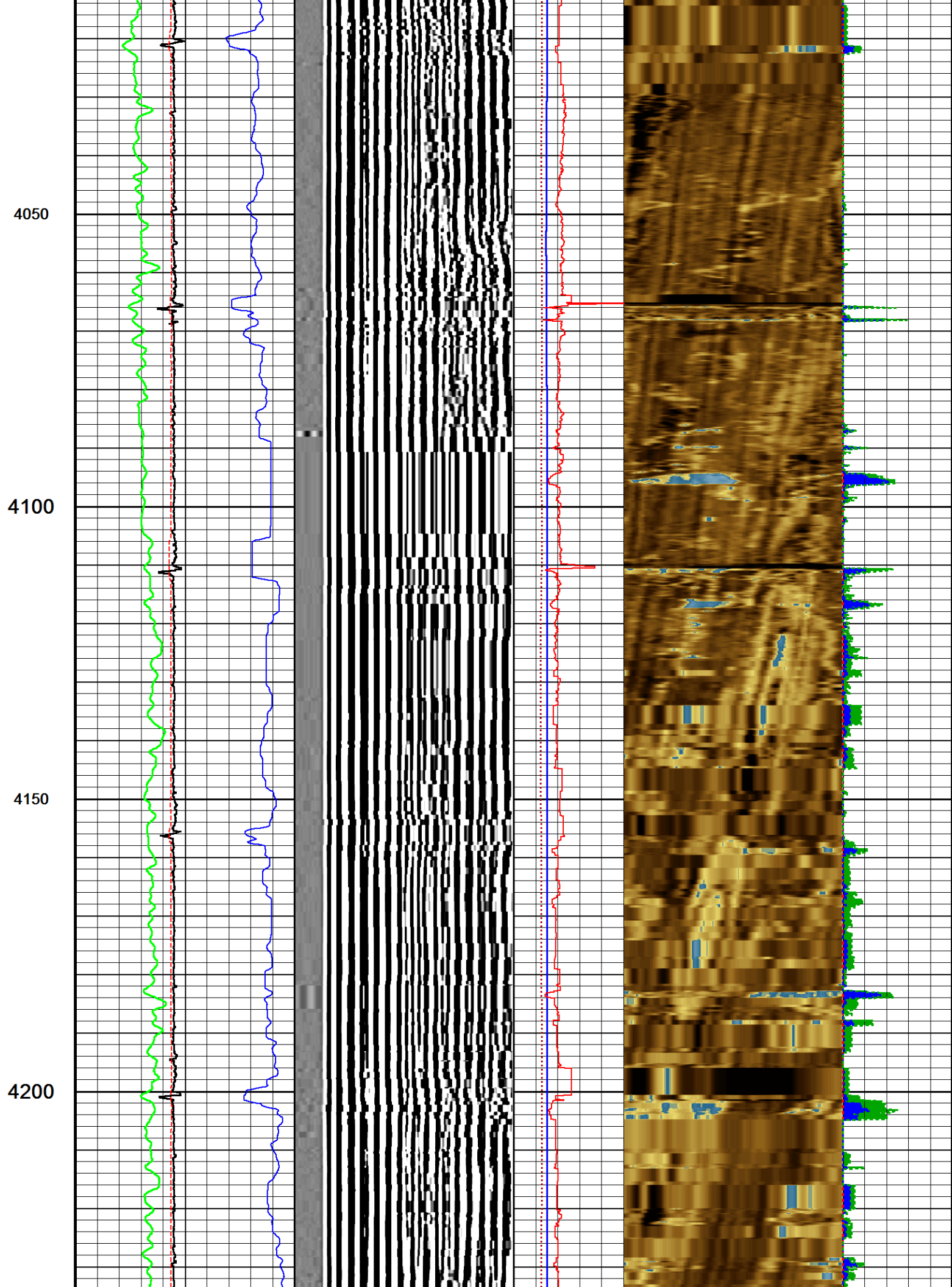
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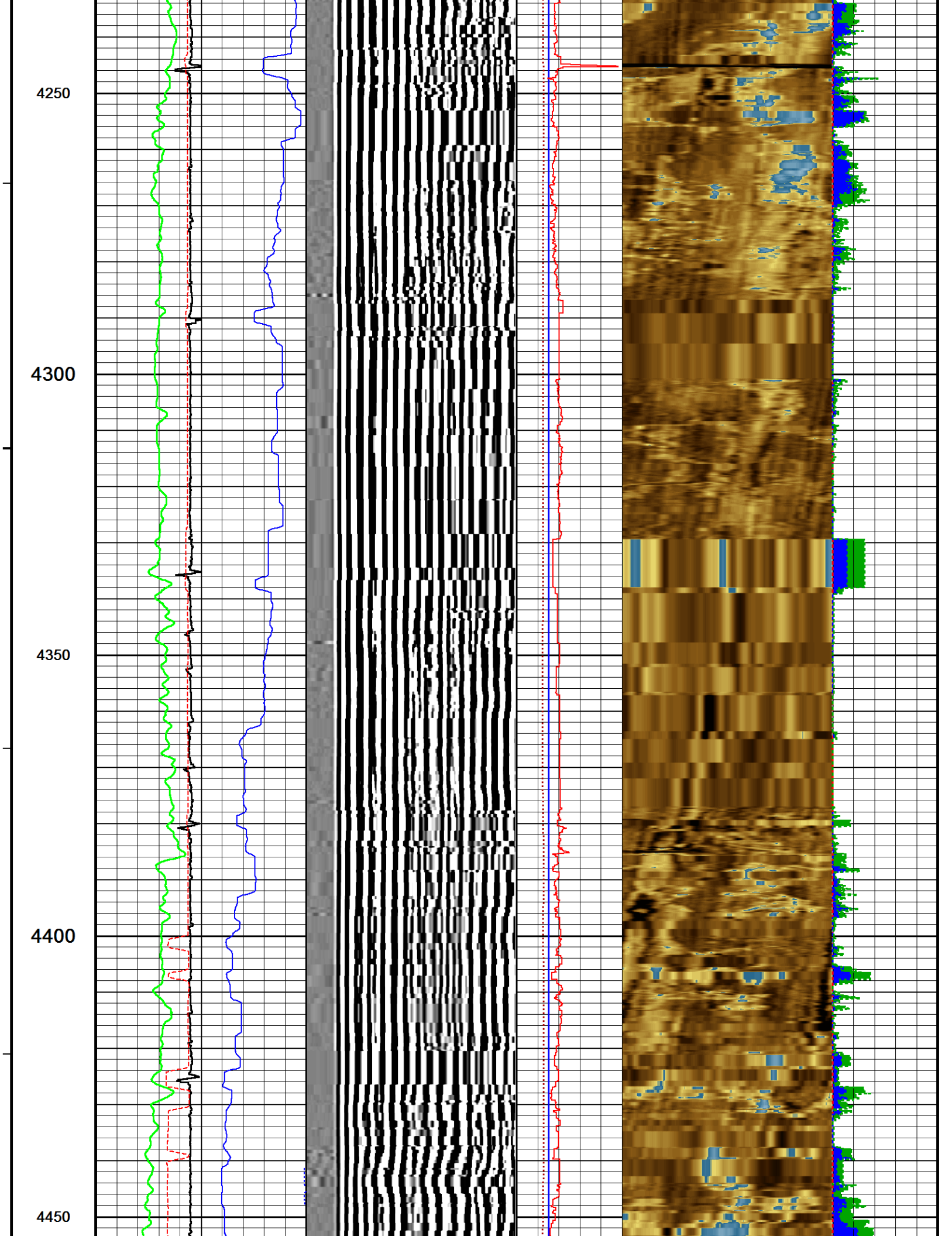
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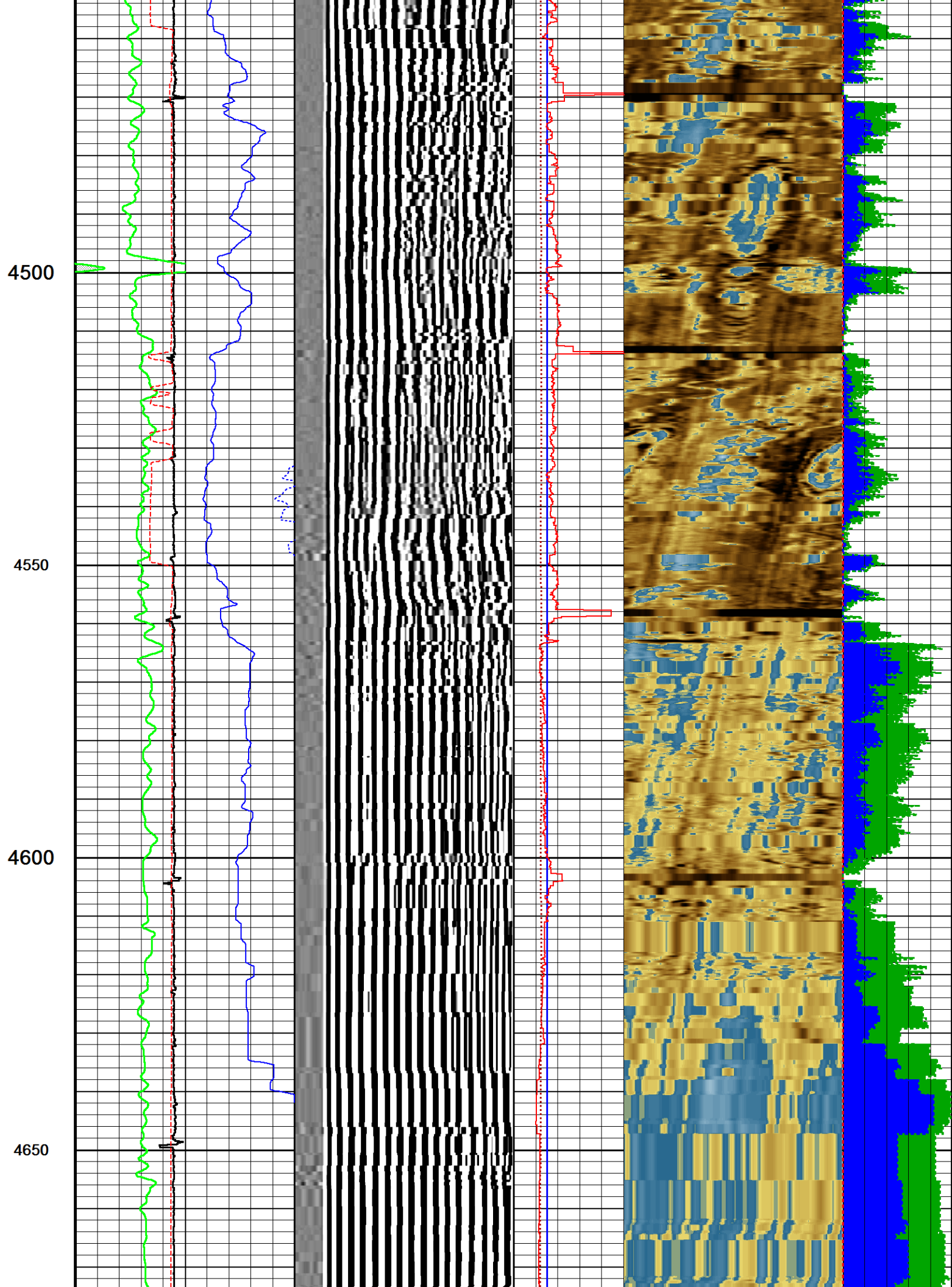
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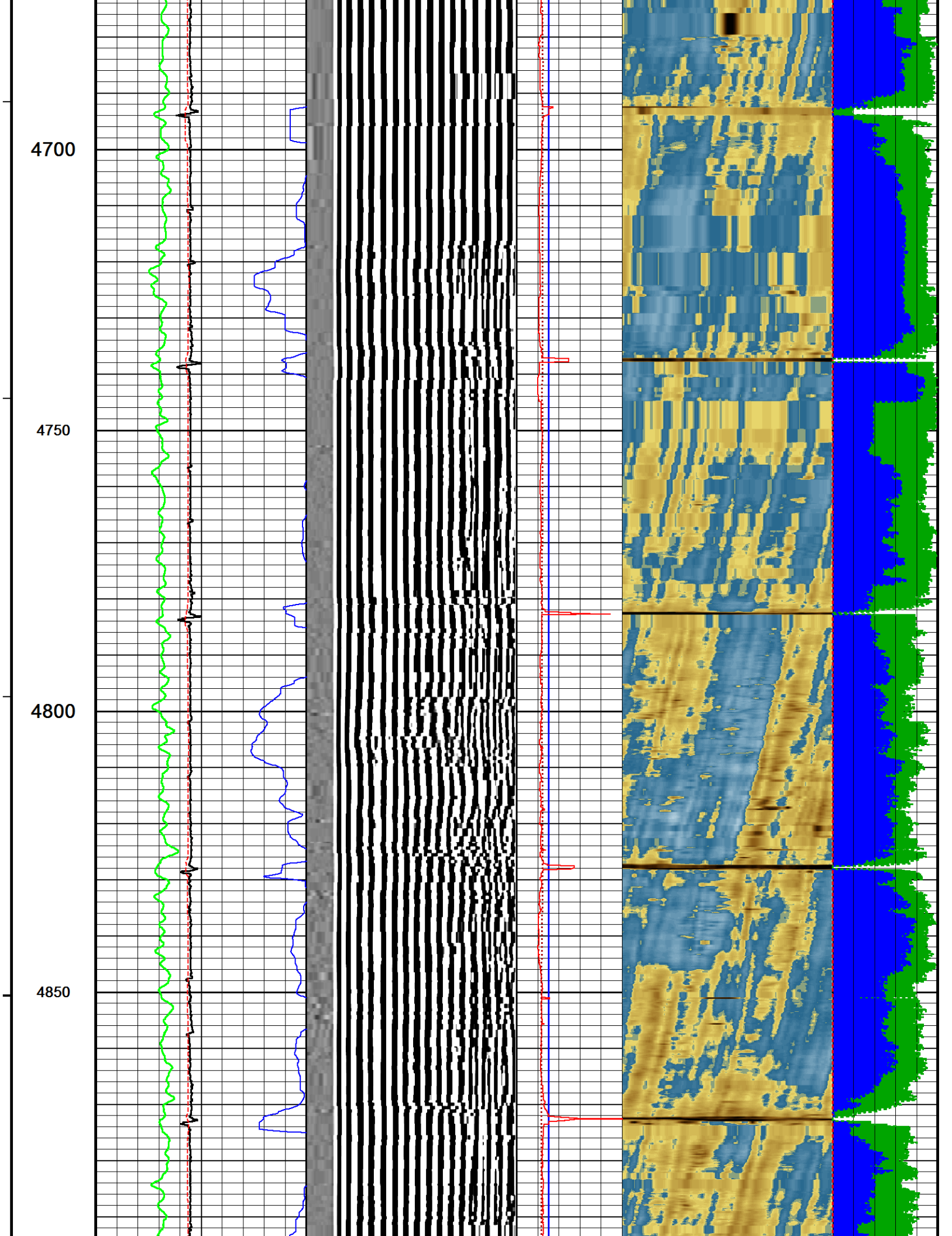
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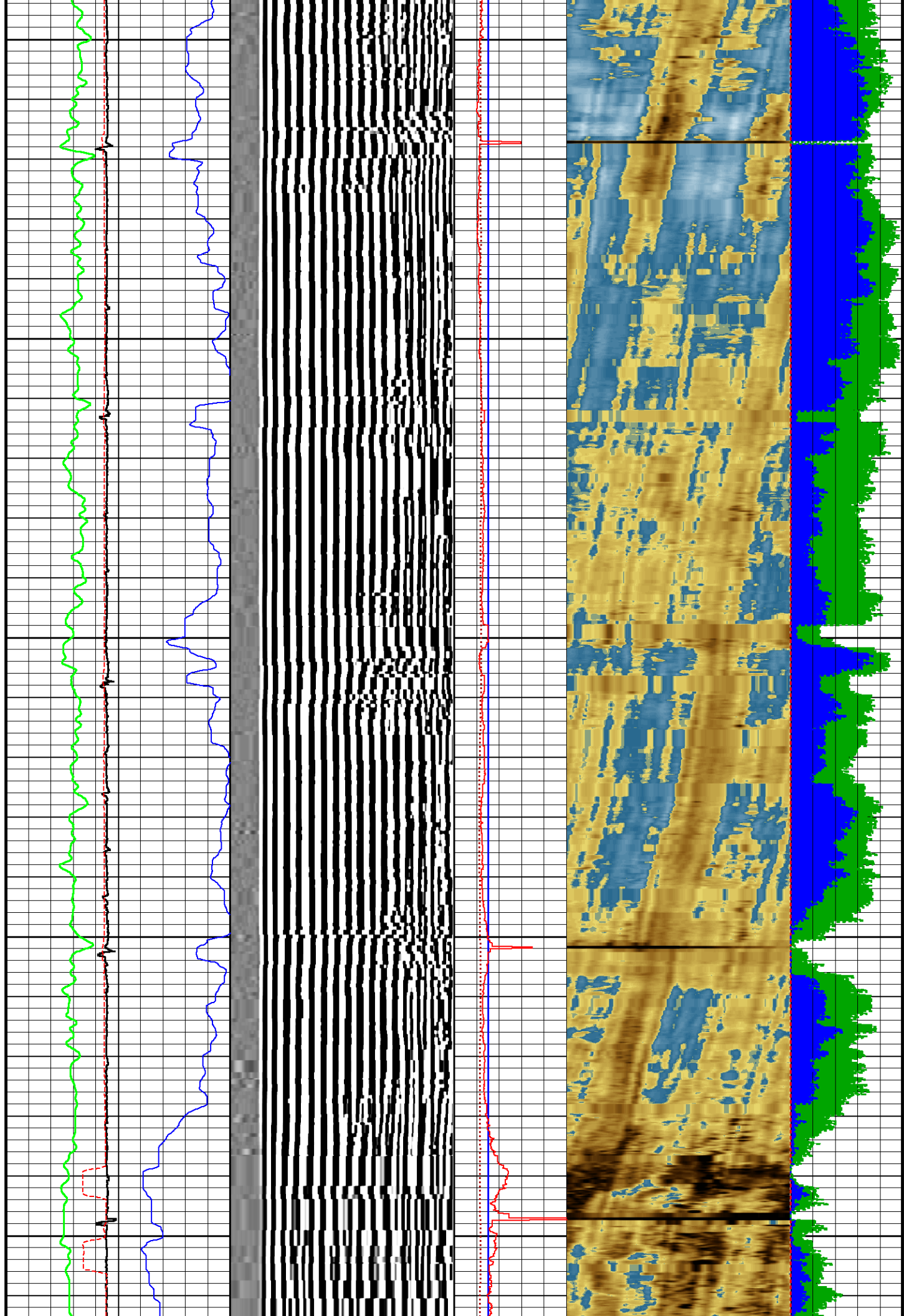
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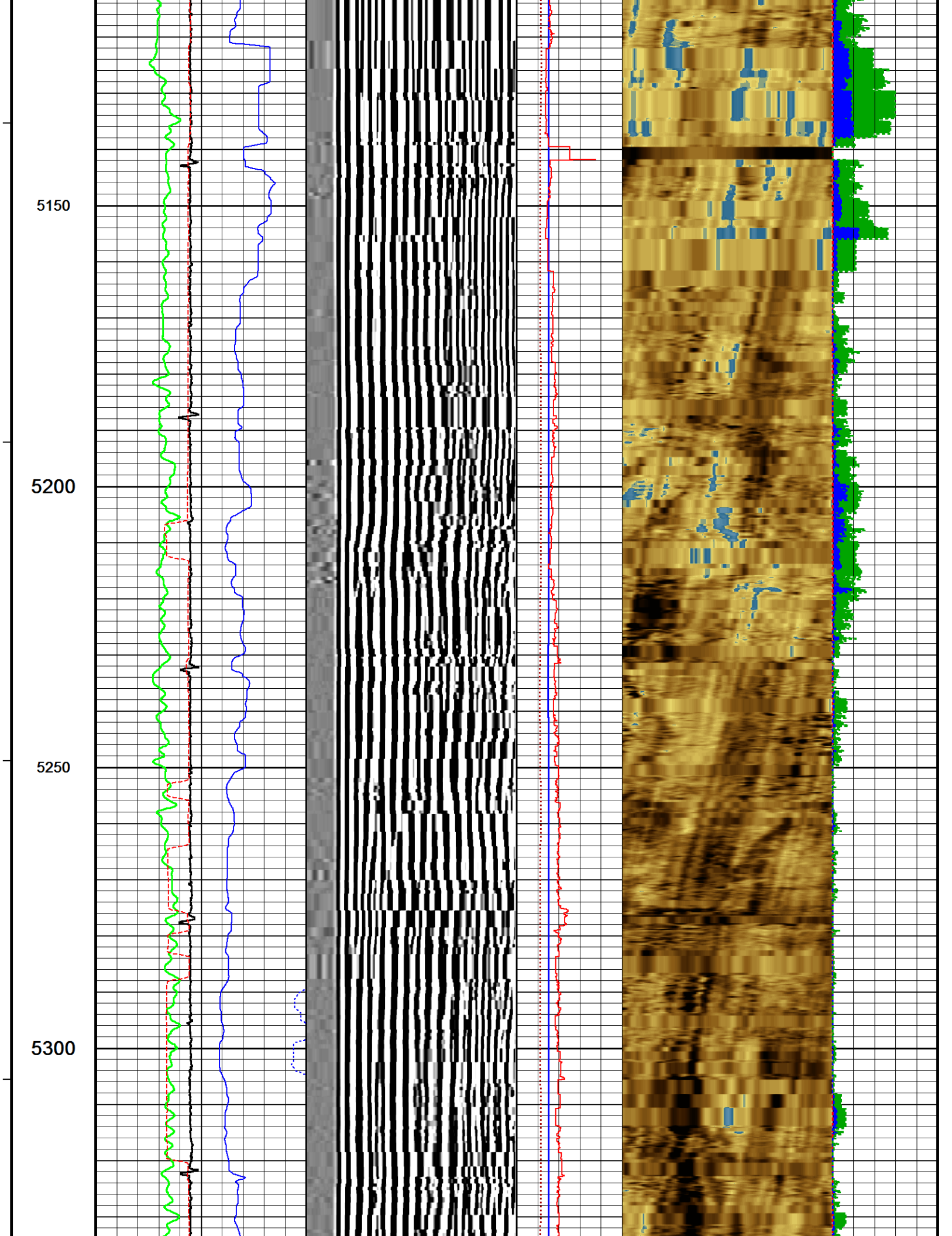
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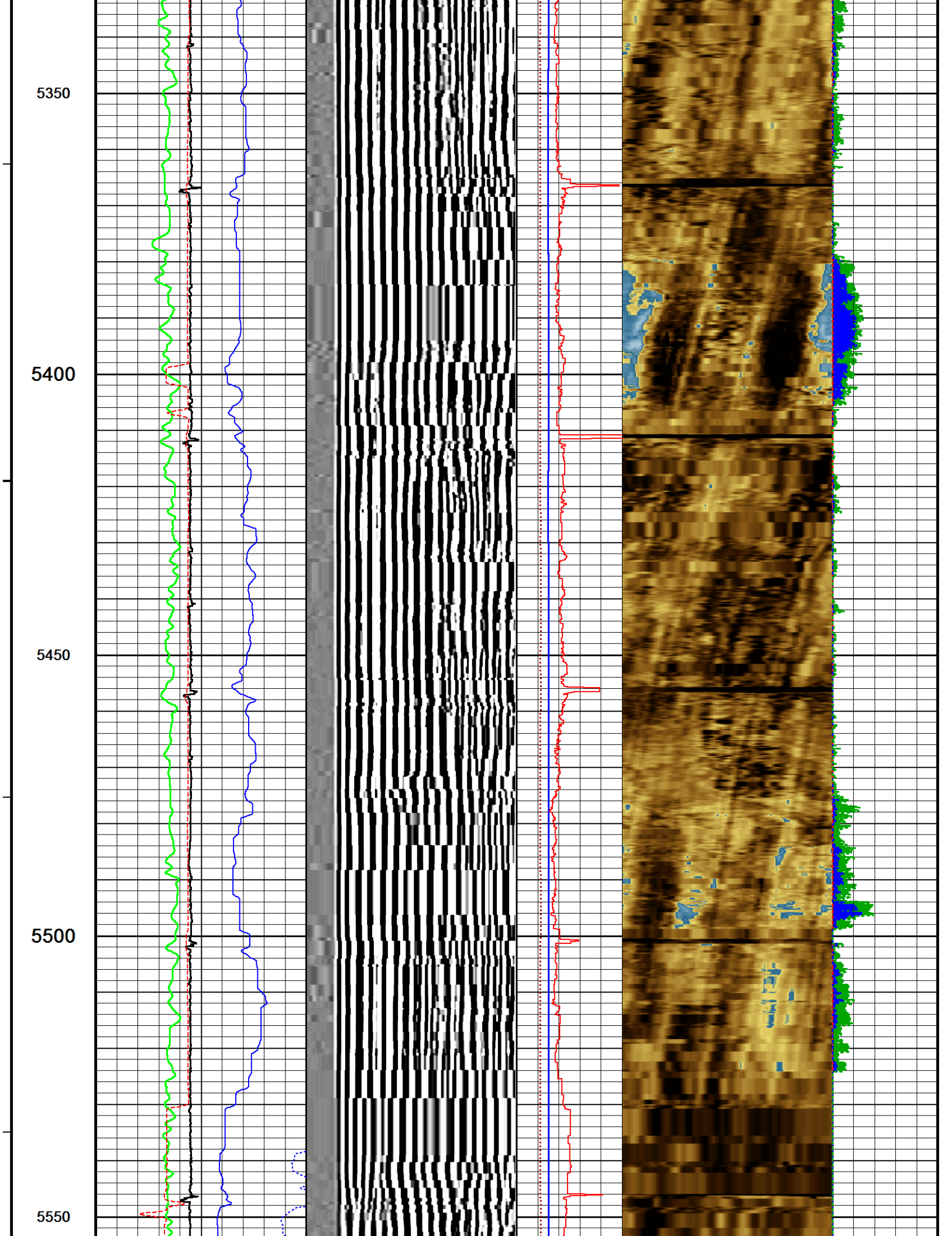
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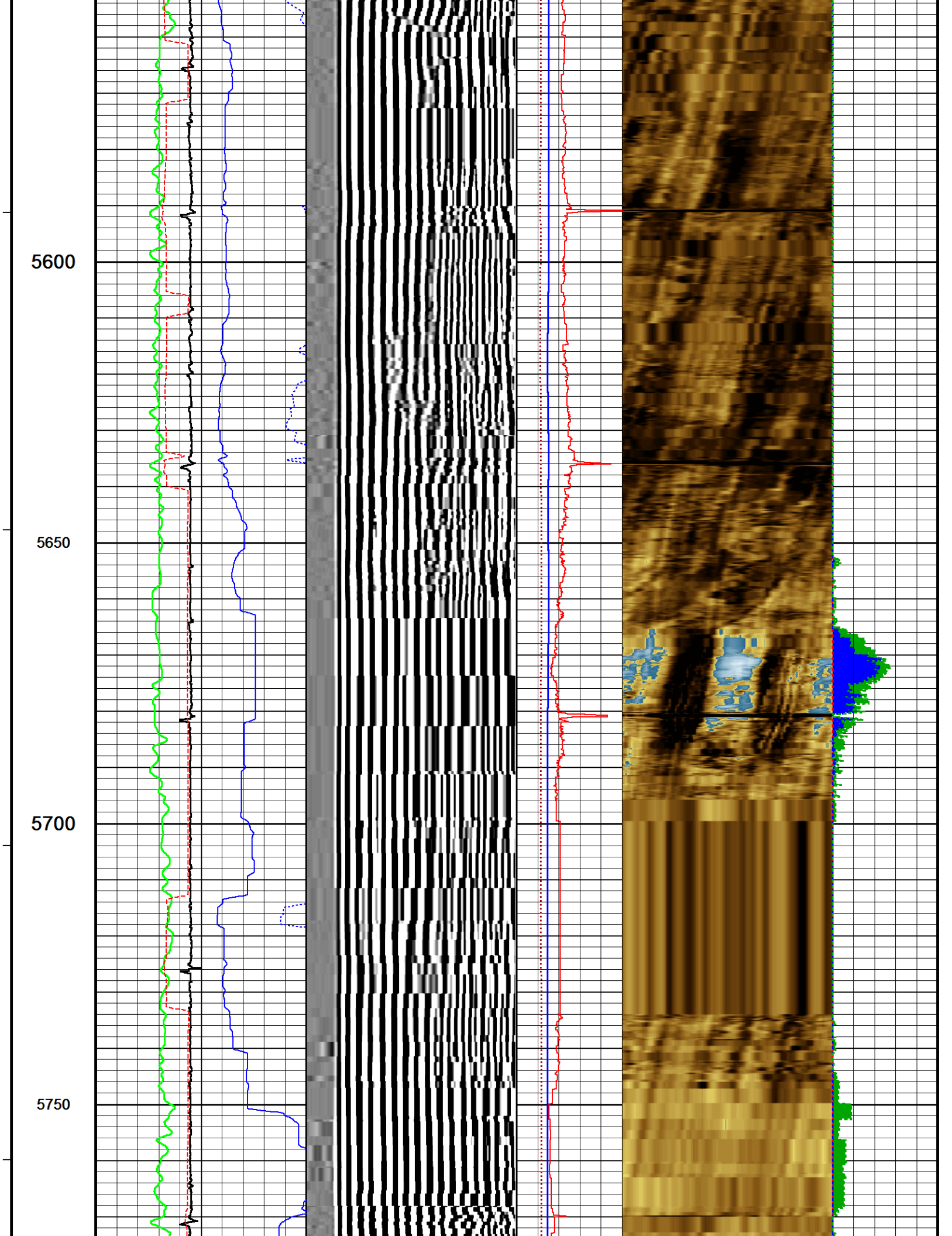
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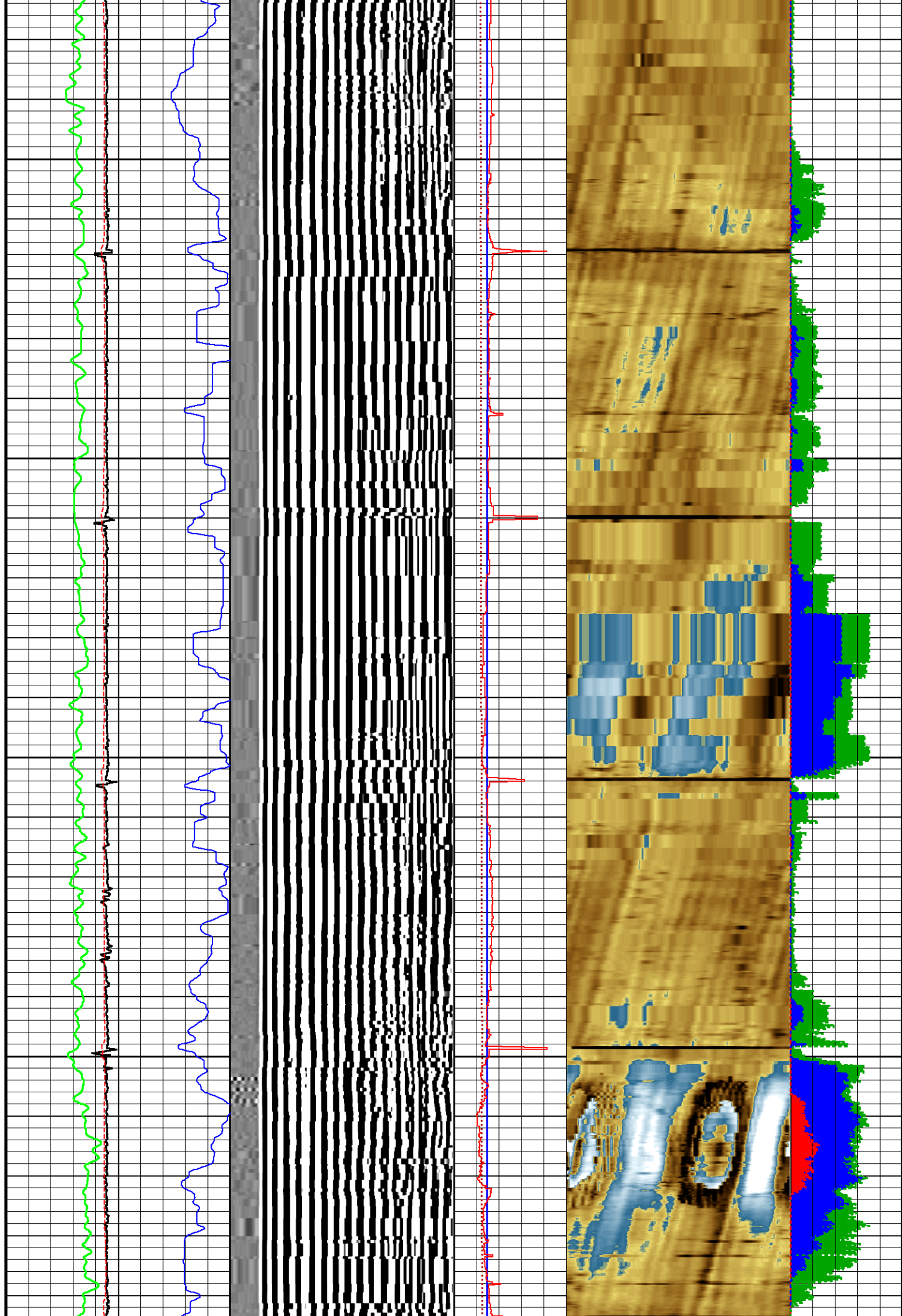


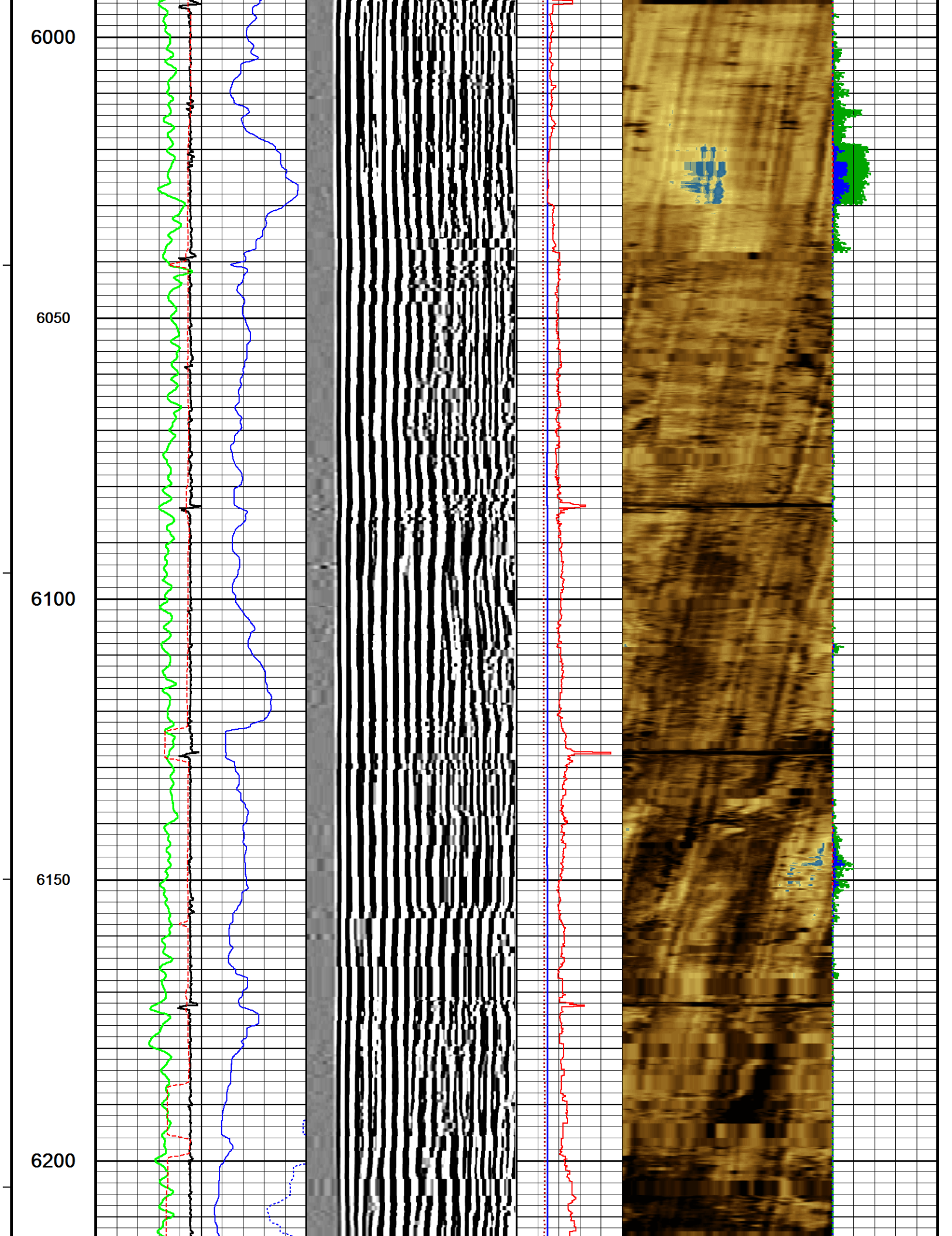
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5950



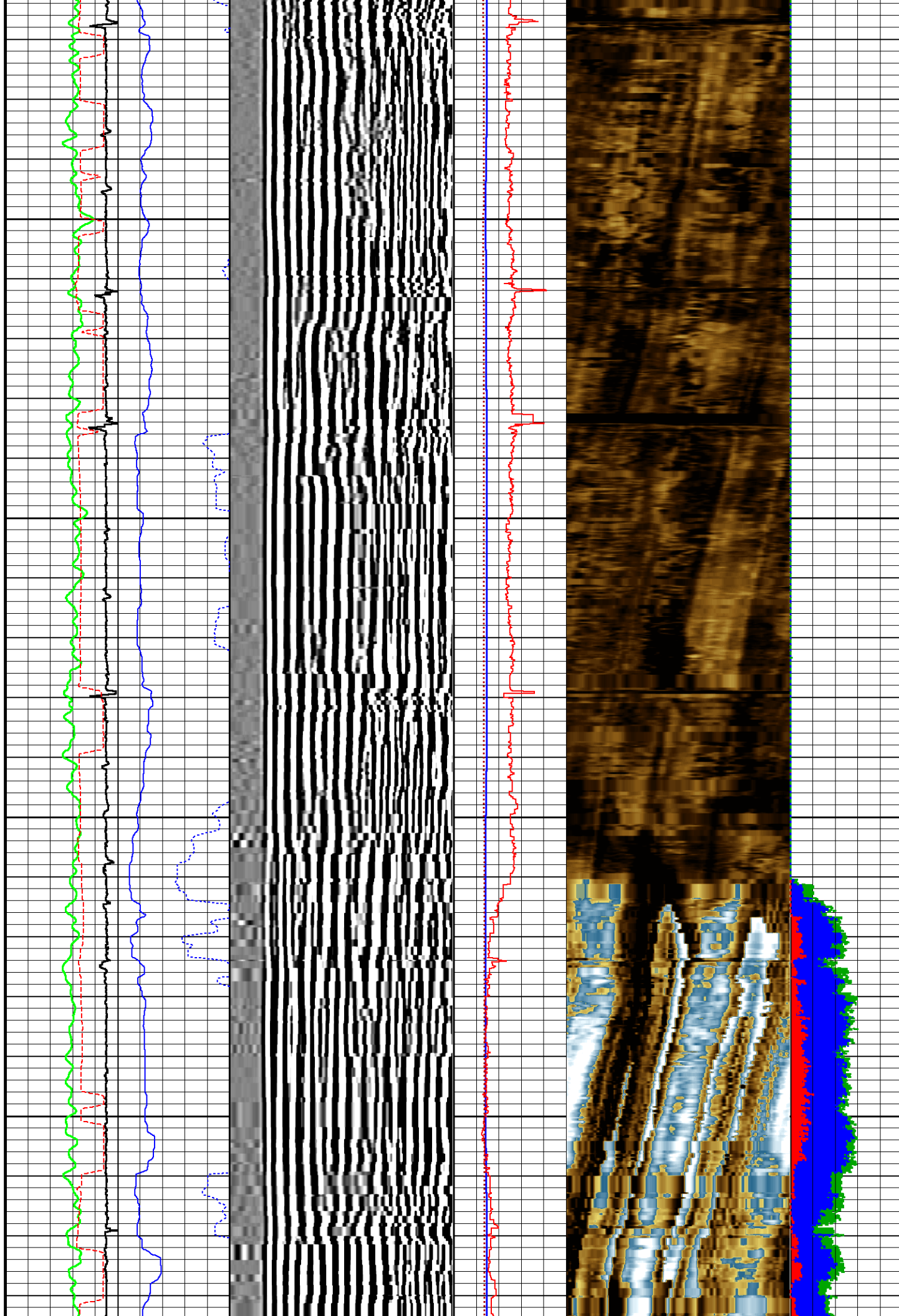


6250

6300

6350

6400



6450

6500

PBTD
6550

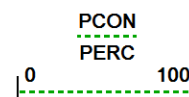
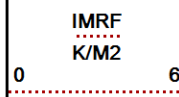
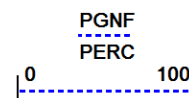
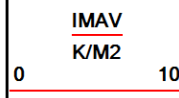
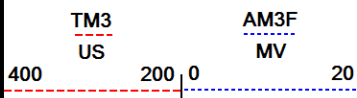
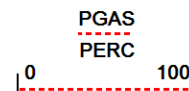
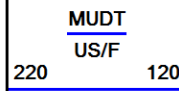
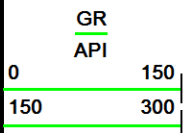
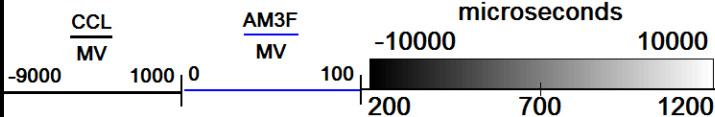
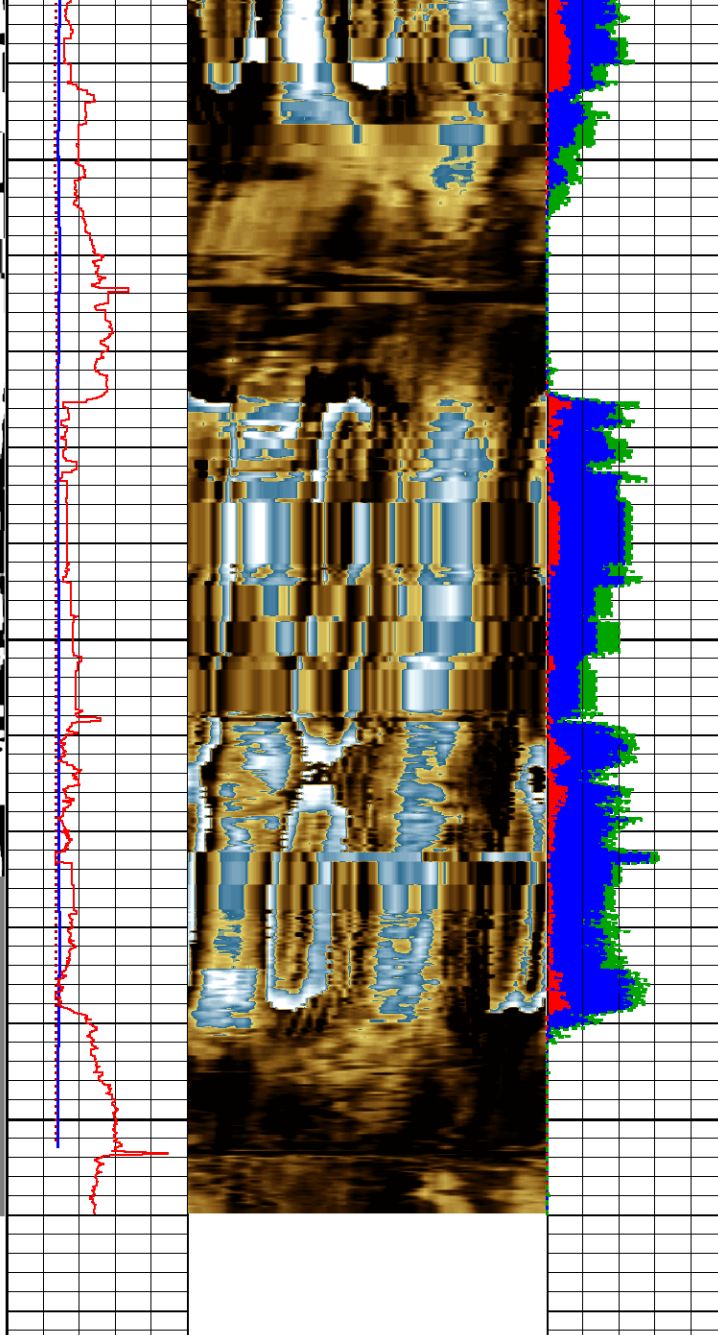
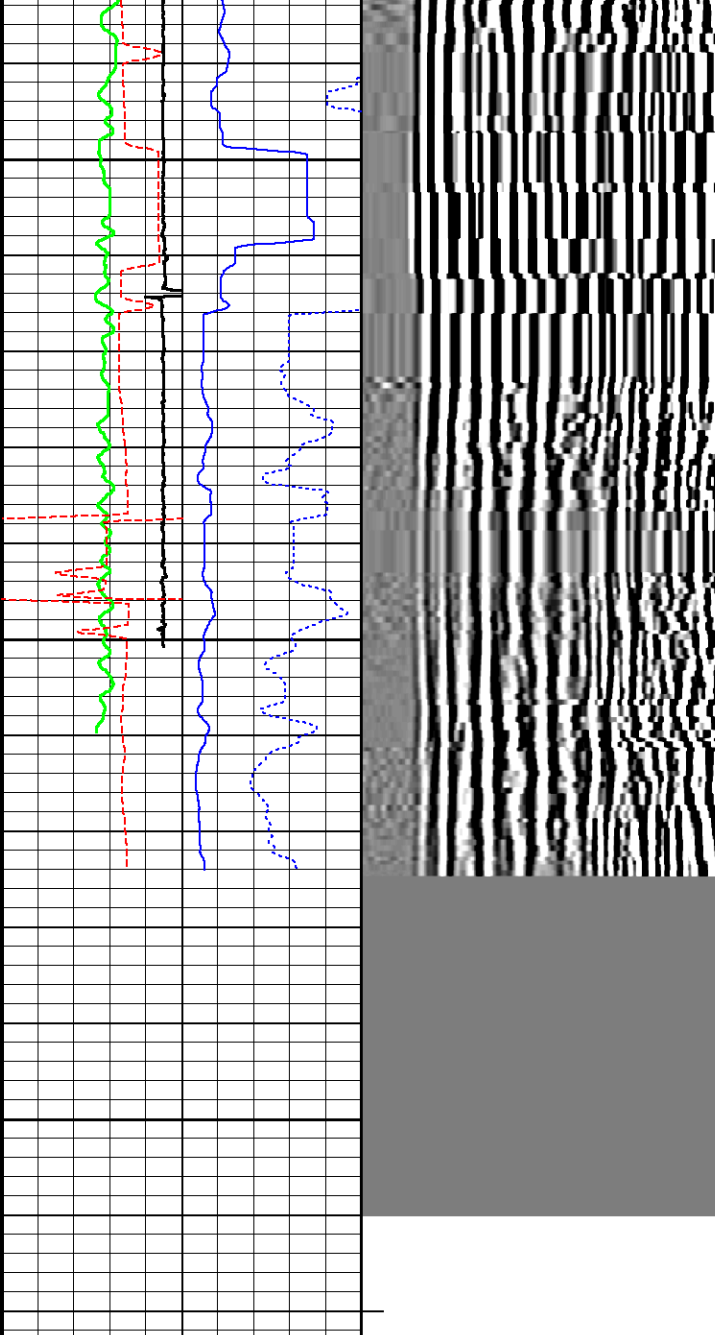
Depth
in
Feet

XY Signature 5FT
microseconds

Impd Map
MRAYLS

Timing
Marks
every
60.0 sec

Replay
Scale
1:240



↑

MAIN PASS

↑

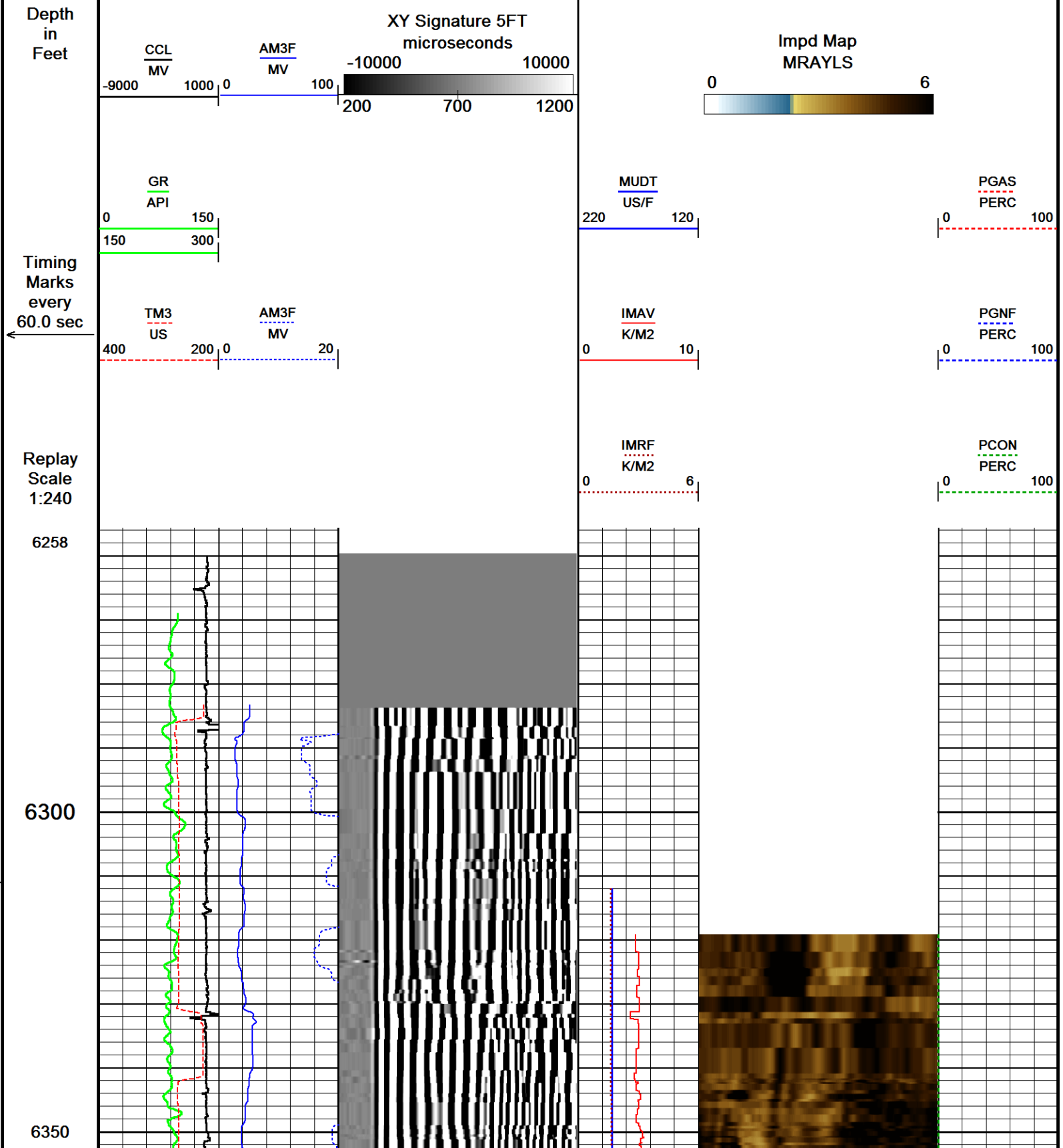
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REPEAT PASS

↓

Depth Based Data - Maximum Sampling Increment 2.5cm
Filename: C:\Logs\Extraction\MATRIX F-29HN\MATRIX F-29HN REPEAT PASS.dta
System Versions: Logged with 16.05.3841 Plotted with 16.05.3841

Plotted on 01-FEB-2017 20:25
Recorded on 01-FEB-2017 12:21



6400

6450

6500

6550

Depth
in
Feet

CCL

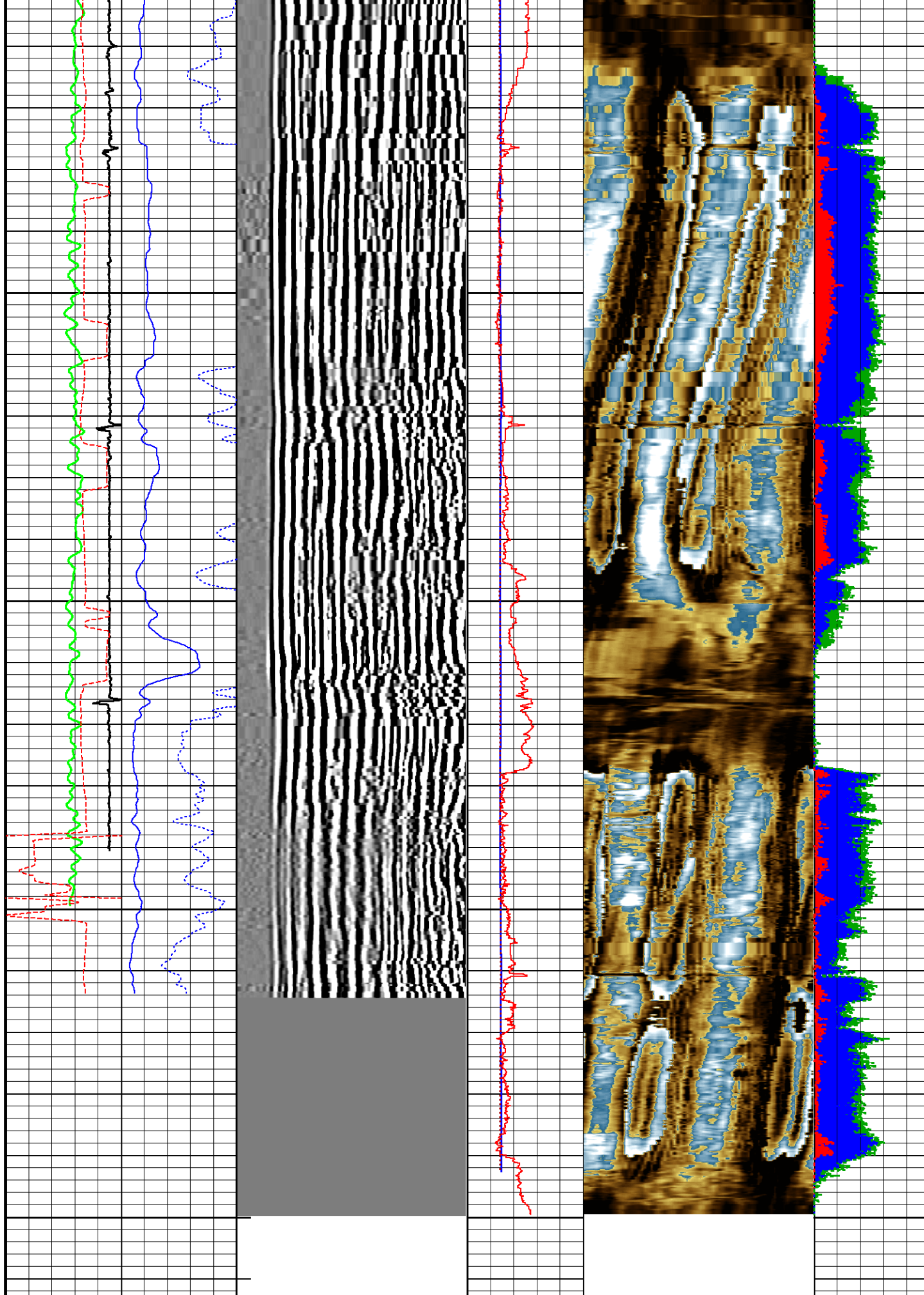
AM3F

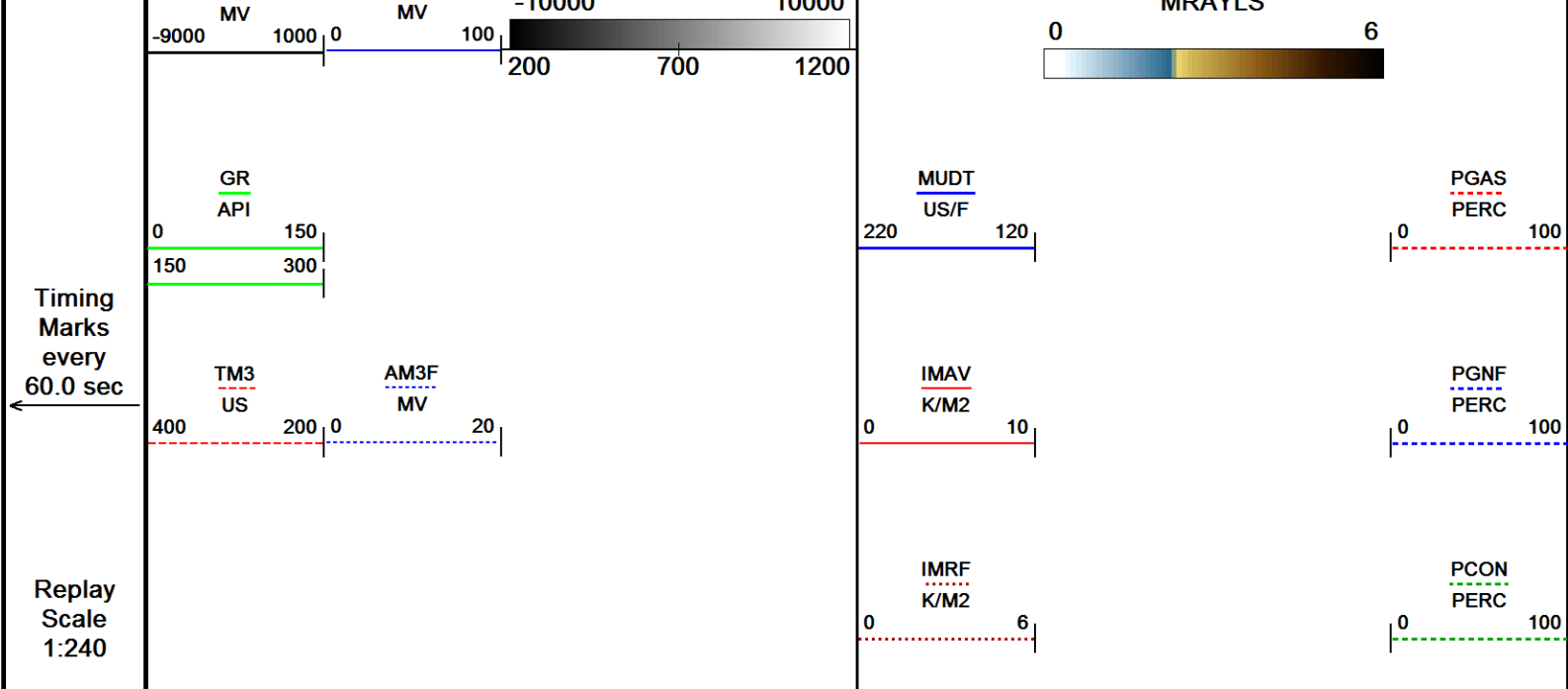
XY Signature 5FT
microseconds

10000

10000

Impd Map
MPAYLS





Depth Based Data - Maximum Sampling Increment 2.5cm
Filename: C:\Logs\Extraction\MATRIX F-29HN\MATRIX F-29HN REPEAT PASS.dta
System Versions: Logged with 16.05.3841 Plotted with 16.05.3841

Plotted on 01-FEB-2017 20:25
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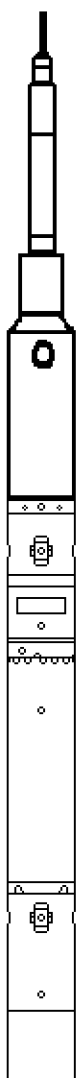
↑ REPEAT PASS ↑

DOWNHOLE EQUIPMENT
C:\Logs\Extraction\MATRIX F-29HN\MATRIX F-29HN MAIN PASS_002.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-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 125 LG: 4.60 ft WT: 63.9 lb OD: 3.386 in

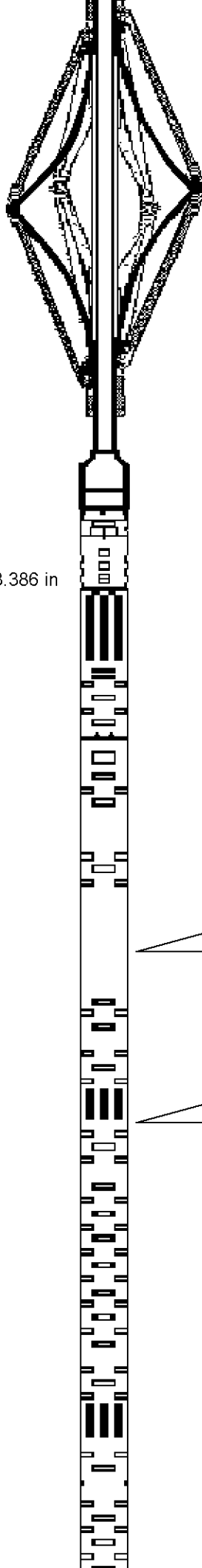
Gamma Ray
UGR-JD 223 LG: 4.60 ft WT: 81.6 lb OD: 3.386 in



59.48 ft CCL - Collar Locator

55.02 ft INCL - INCLINATION

51.39 ft GR - Gamma Ray

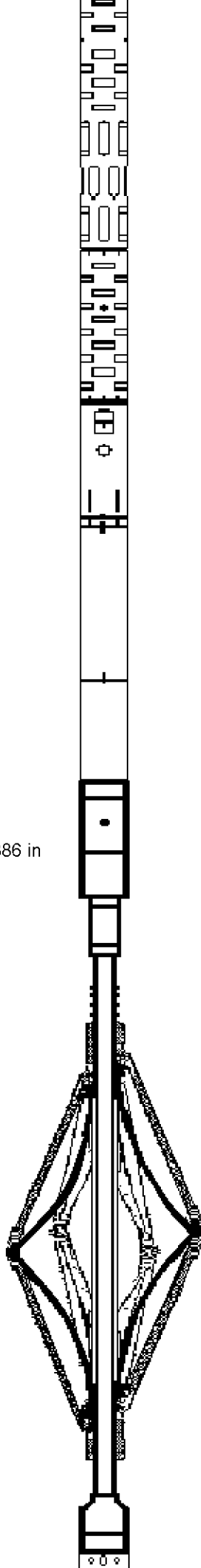


Cement Bond Tool
CBT-AA 101 LG: 10.75 ft WT: 163.1 lb OD: 3.386 in

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

35.70 ft XY5 - XY Signature 5FT
35.70 ft TM5 - Travel Time 5FT

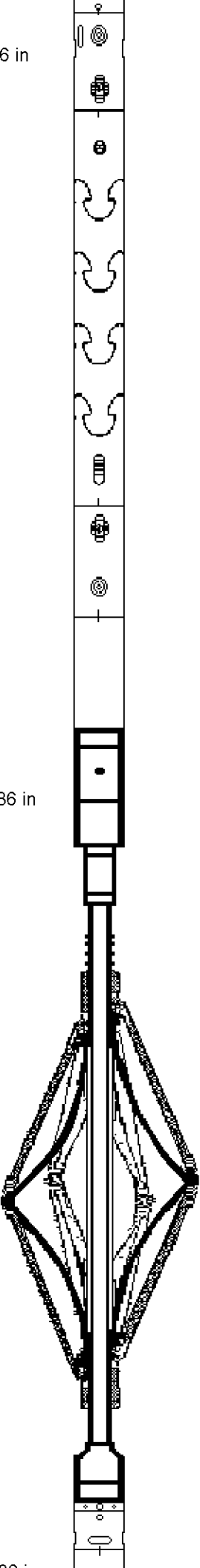
55 pin Roller Centralizer
CEN-XA 203 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in



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 185 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

URS Electronics Cartridge
HCC-AA-101 LG: 1.51 ft WT: 70.4 lb OD: 3.386 in



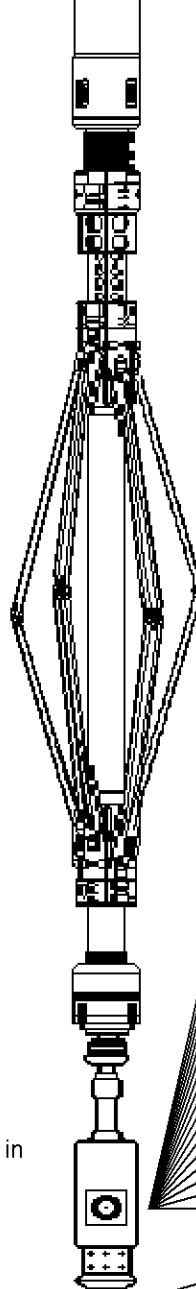
UCC-AA 191 LG: 4.51 ft WT: 79.4 lb OD: 3.386 in

URS Sonde Section

USS-AB 190 LG: 9.65 ft WT: 167.6 lb OD: 3.386 in



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



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

- 0.37 ft DIMN - Min Diameter
- 0.37 ft DIAV - Avg Diameter
- 0.37 ft DIMX - Max Diameter
- 0.37 ft OVLI - ID Ovality
- 0.37 ft ECCE - Eccentering
- 0.37 ft IMMN - Min Impedance
- 0.37 ft IMAV - Avg Impedance
- 0.37 ft IMMIX - Max Impedance
- 0.37 ft ARAV - Avg Area
- 0.37 ft ARMX - Max Area
- 0.37 ft THMN - Min Thickness
- 0.37 ft THAV - Avg Thickness
- 0.37 ft THMX - Max Thickness
- 0.37 ft AMMP - Ampl Map
- 0.37 ft IMMP - Impd Map
- 0.37 ft TKMP - Thickness Map
- 0.37 ft QAFL - Quality Flags
- 0.00 ft TENS - Tension
- Tool Zero (0.00ft from bottom)

Total Length: 65.13 ft Weight: 1122.2 lb All measurements relative to tool zero.

SHOP AND FIELD CALIBRATIONS

C:\Logs\Extraction\MATRIX F-29HN\MATRIX F-29HN MAIN PASS_002.dta

UGR Field Survey cal UGR-JD 223

Field calibration on 00-JAN-1988 00:00

Gamma Ray Field Survey Calibration

Tool Type: UGR-JD Serial No: 223
calibrator No:

Background	calibrator	Standard	Units
102.2	492.8	140.0	CPS

Delta Counts Per Sec: 390.6 CPS/API = 2.790

CBT Field calibration CBT-AA 101

Cement Bond Tool Amplitude Field Calibration

Tool Type CBT-AA

Serial No 101

Free Pipe Depth

Sensor	Description	Standard(mV)	Measured(mV)
AMP 3 FT	100 % Bond	2.40	0.00
	Free Pipe	72.00	444.54
AMP 5 FT	100 % Bond	1.60	0.00
	Free Pipe	48.00	408.30

CBT Constants CBT-AA 101

Last Edited on 01-FEB-2017 14:21

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

COMPANY EXTRACTION OIL & GAS

WELL MATRIX F-29HN

FIELD GREELEY

PROVINCE/COUNTY WELD

COUNTRY/STATE USA / COLORADO

Elevation Kelly Bushing	4916	feet	Bottom Log Interval	6550.00	feet
Elevation Drill Floor	4916	feet	Depth Driller	12000.00	feet
Elevation Ground Level	4888	feet	Depth Logger	6550.00	feet



SECUREVIEW

ULTRAVIEW/BONDVIEW

CEMENT ANALYSIS

Weatherford®