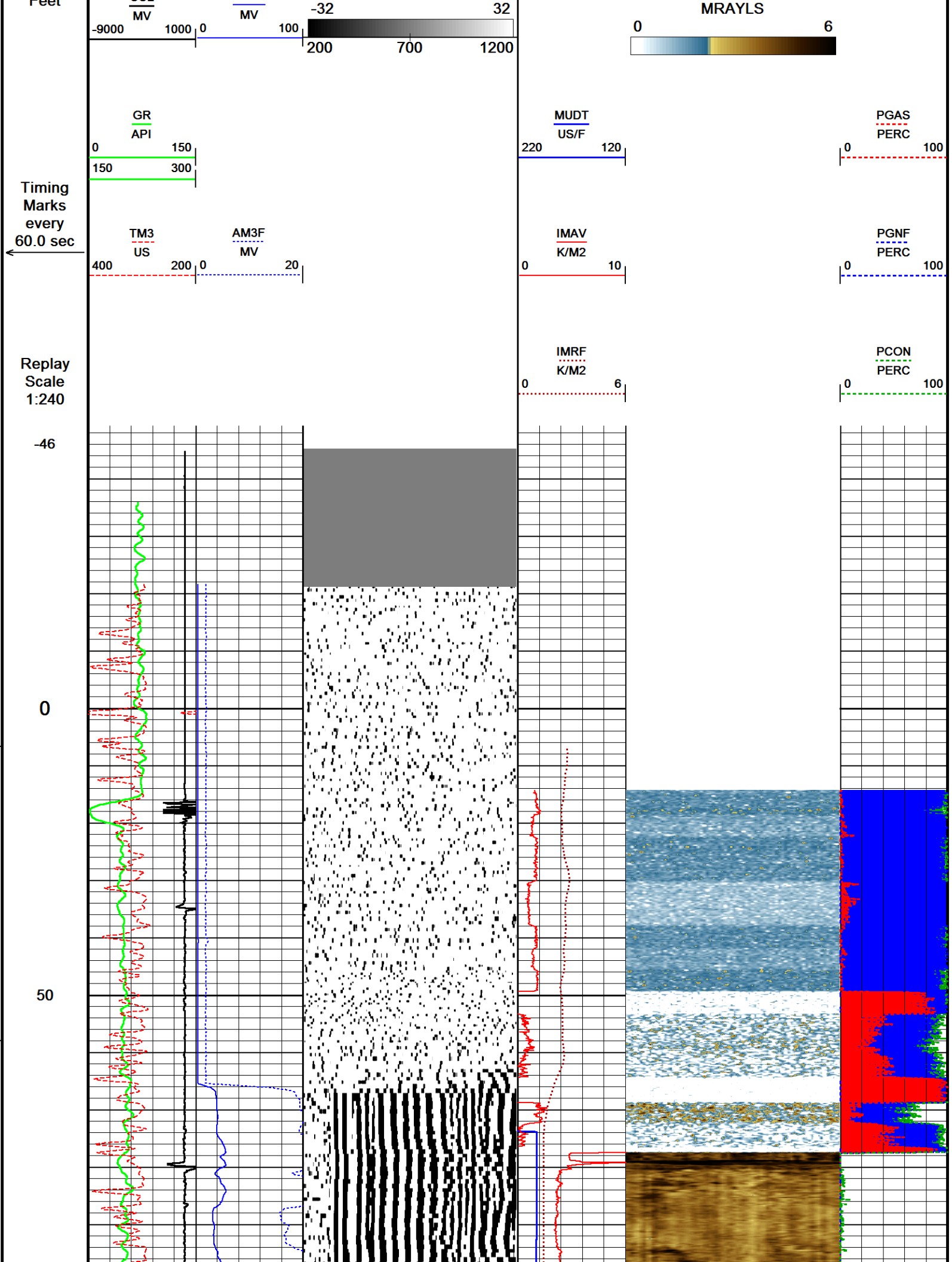
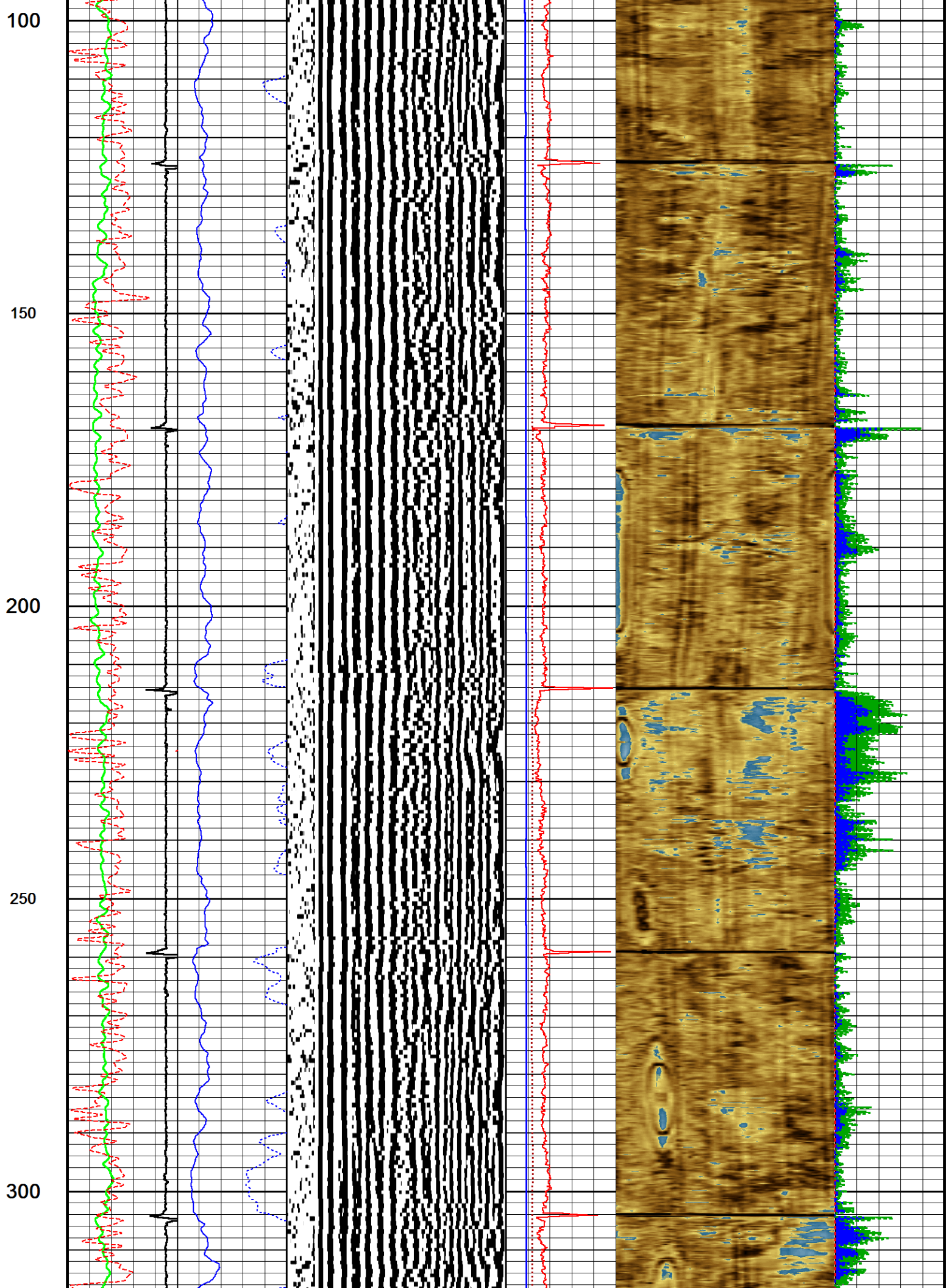
				SECUREVIEW			
Weatherford®				ULTRAVIEW/BONDVIEW			
				CEMENT ANALYSIS			
COMPANY				EXTRACTION OIL & GAS			
WELL				VARRA 5			
FIELD				WATTENBERG			
PROVINCE/COUNTY				WELD			
COUNTRY/STATE				USA / COLORADO			
LOCATION							
SEC 5	TWP 6N	RGE 67W	Other Services				
Latitude			Permanent Datum GROUND LEVEL, Elevation 4899 feet Log Measured From KB, 25 feet above Permanent Datum Drilling Measured From KB @ 25'				
Longitude							
API Number							
05 123 39985 00							
Date			04-DEC-2016	Elevations: KB 4924.00 DF 4924.00 GL 4899.00			
Run Number			ONE	PERFORATION RECORD			
Service Order			168098336	Shot	Number	Depth From	Depth To
Type Log			URS/CBT	Density	of Shots	feet	feet
Depth Driller			16900.00				
Depth Logger			6475.00				
Top Log Interval			0.00				
Bottom Log Interval			6475.00				
Hole Fluid Type			WATER				
Hole Fluid Level			0.00				
Restriction ID			4.767	inches			
Max Recorded Temp				Gun Type			
Well Head Pressure			0.00	psi			
Well Head Equipment				CASING / TUBING RECORD			
Time Well Ready			ROA	Size	Weight	Depth From	Depth To
Time Logger Bottom			SEE LOG	inches	pounds/ft	feet	feet
Unit			14338	9.625	36.00	0.00	1610.00
Equipment Name			WSSE	5.500	20.00	0.00	16900.00
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
SURFACE			9.625	0.00	1610.00	36.00
PRODUCTION			5.500	0.00	16900.00	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		↓	
Depth Based Data - Maximum Sampling Increment 2.5cm				Plotted on 04-DEC-2016 20:47	
Filename: C:\Logs\Extraction\VARRA 5\VARRA 5 MAIN PASS.dta				Recorded on 04-DEC-2016 15:31	
System Versions: Logged with 16.05.3841 Plotted with 16.05.3841					
Depth in Feet	CC1	AM3F	XY Signature 5FT microseconds	Impd Map	





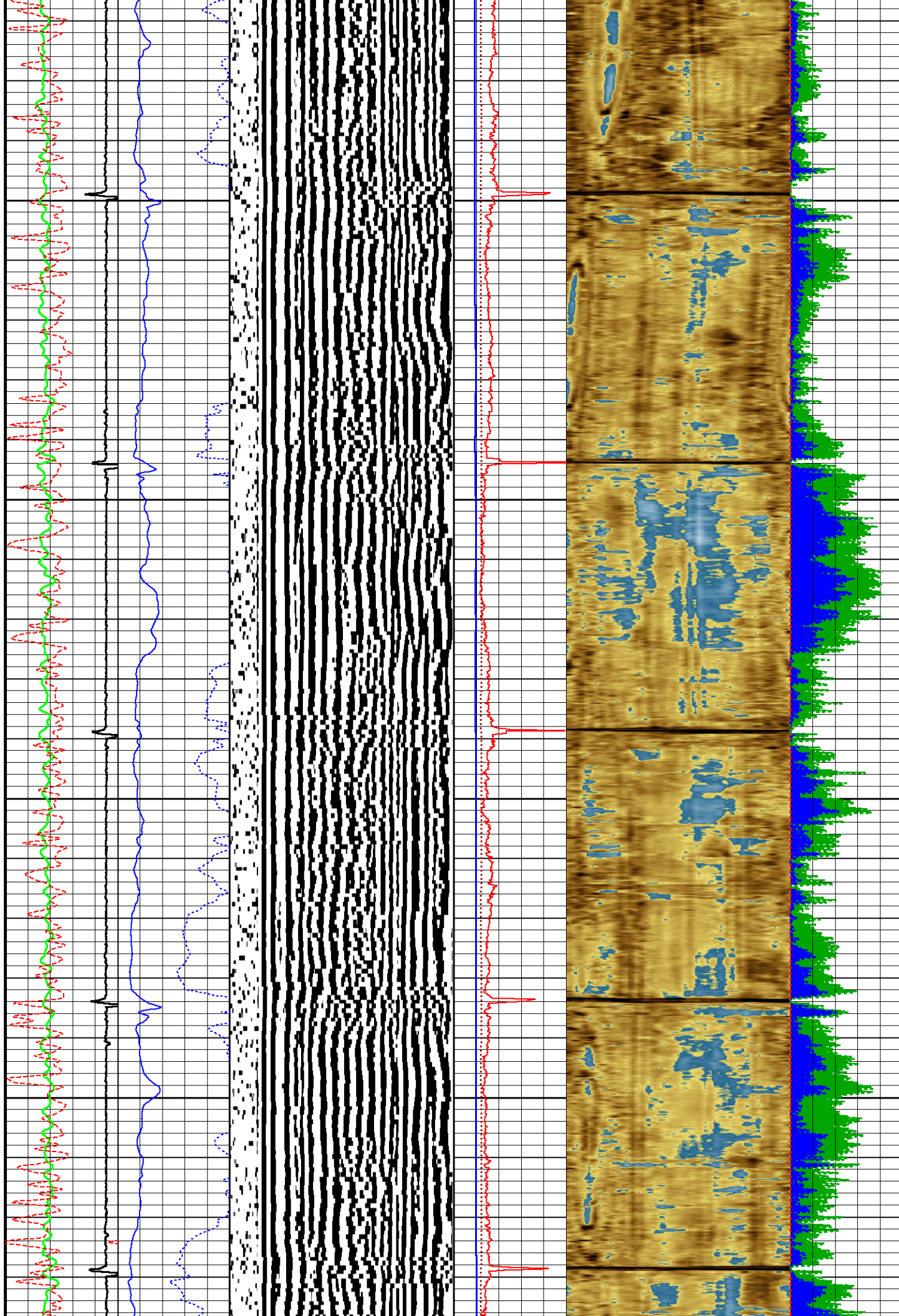


350

400

450

500





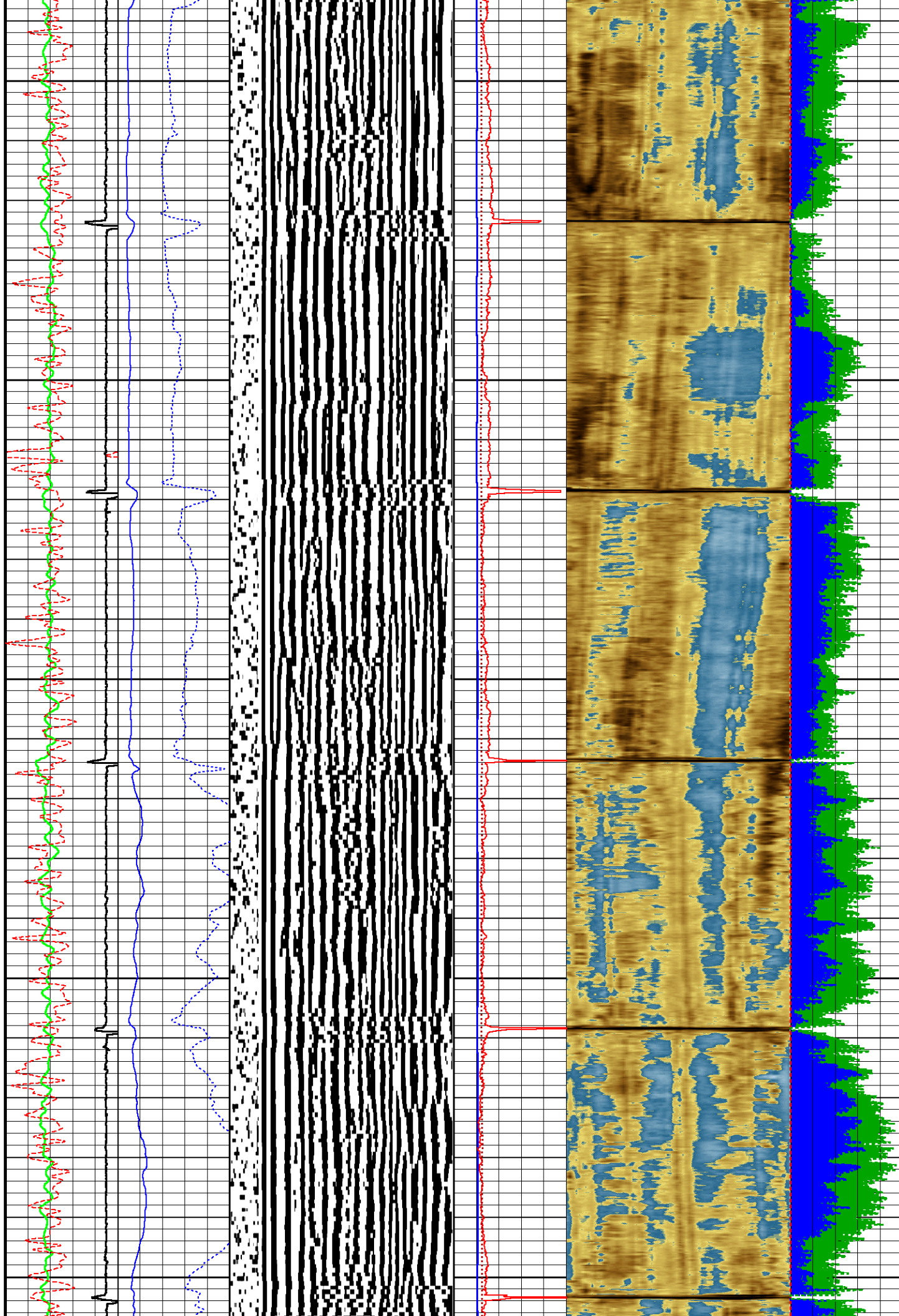
550

600

650

700

750

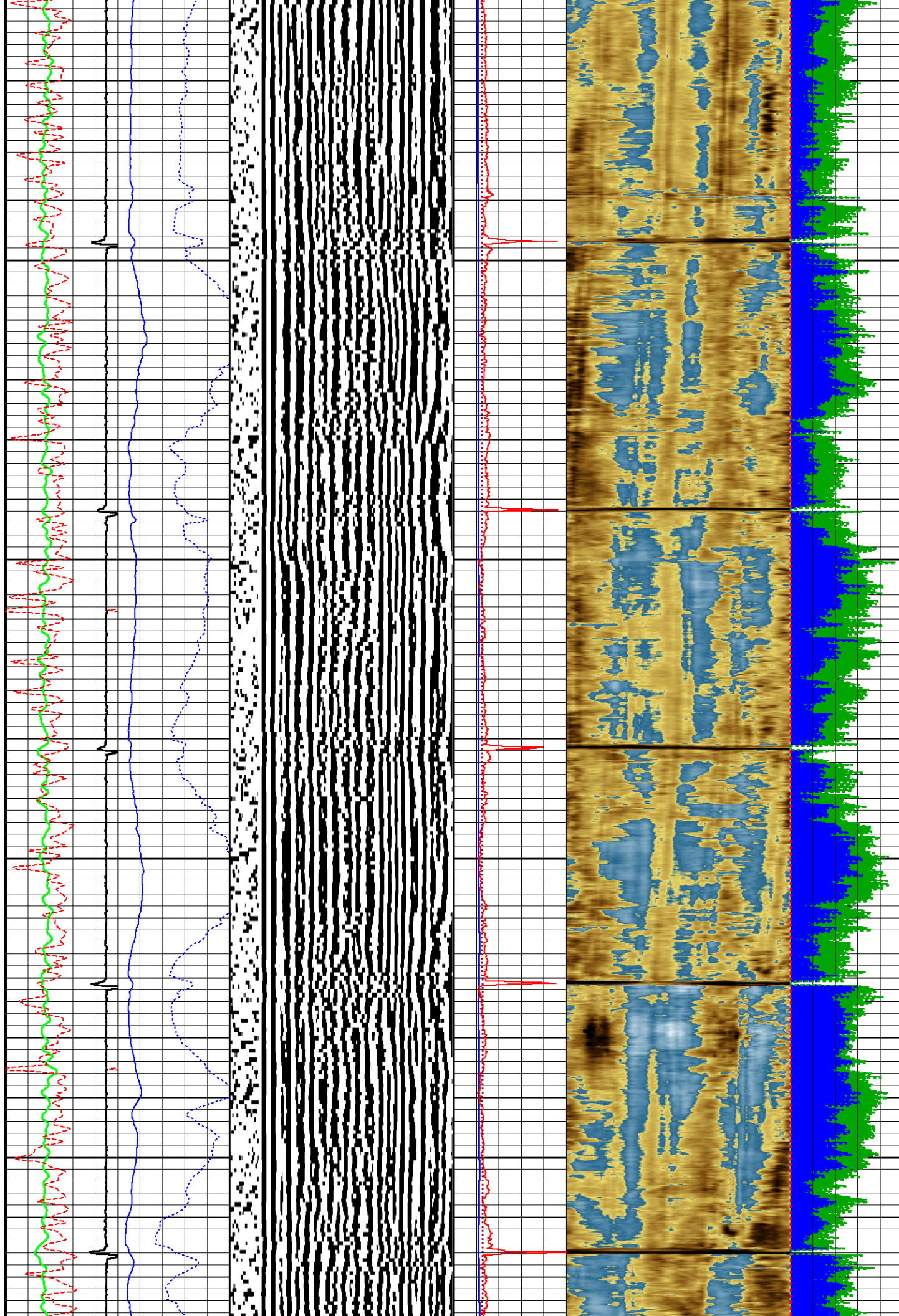


800

850

900

950



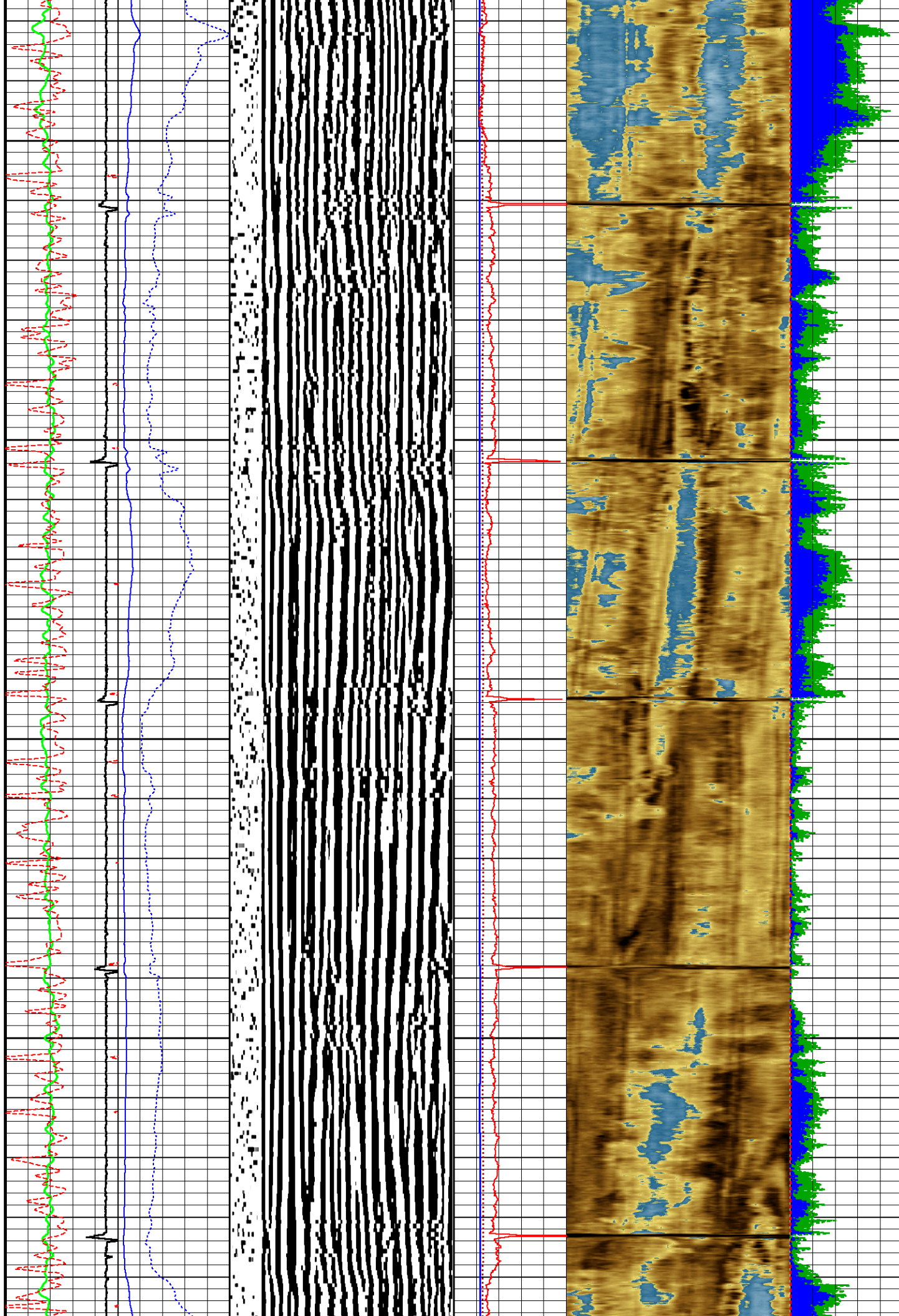


1000

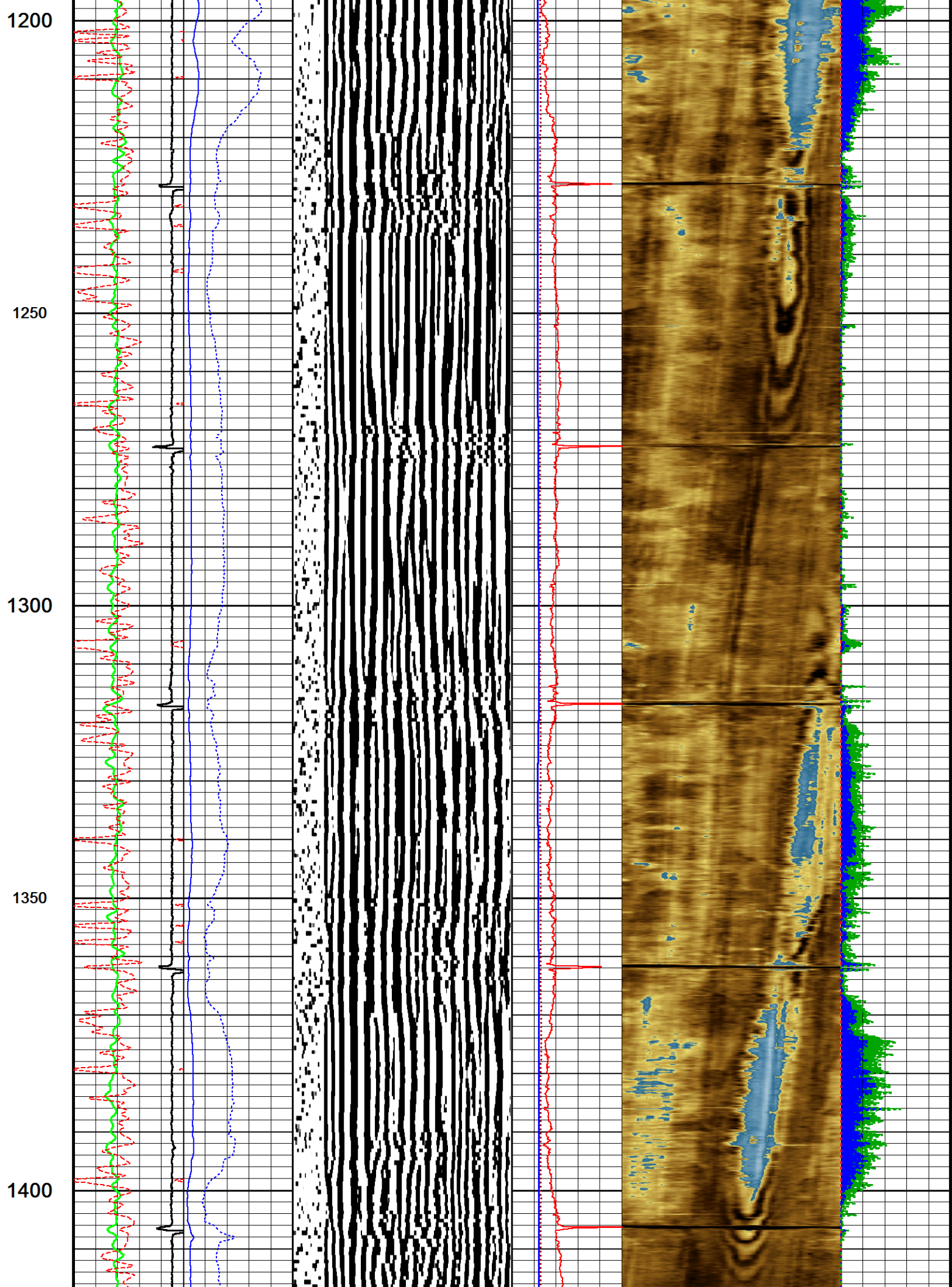
1050

1100

1150





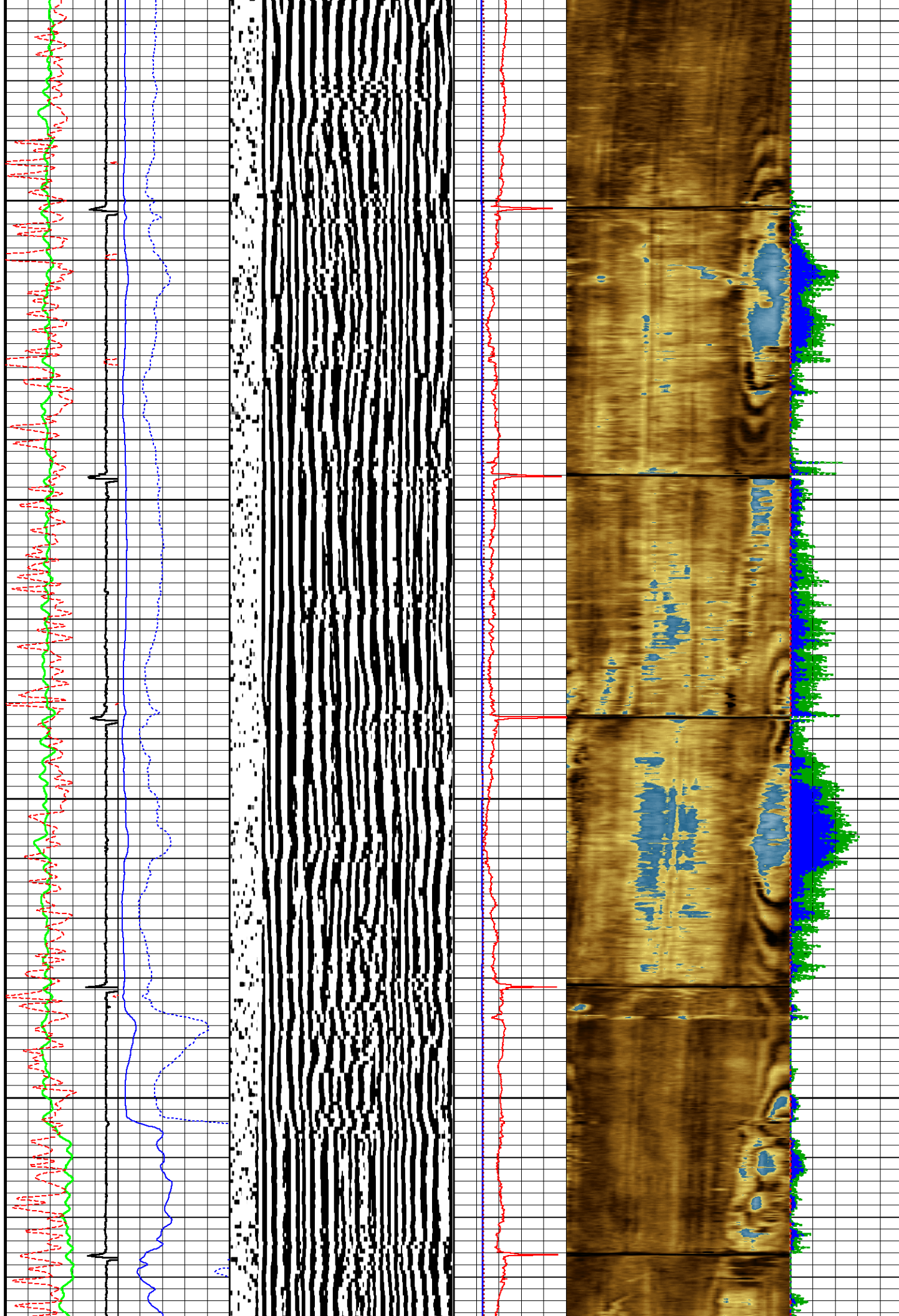


1450

1500

1550

1600





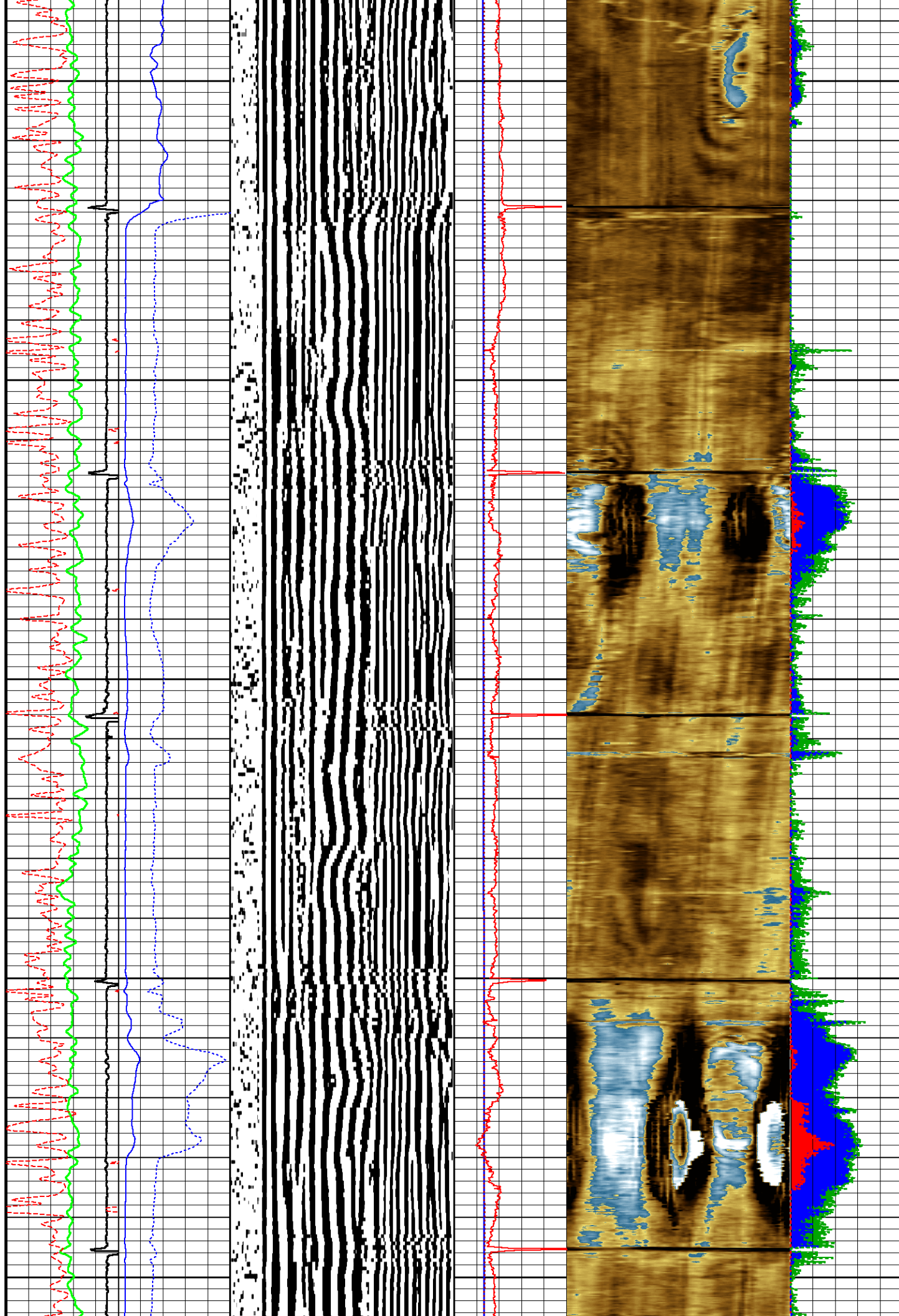
1650

1700

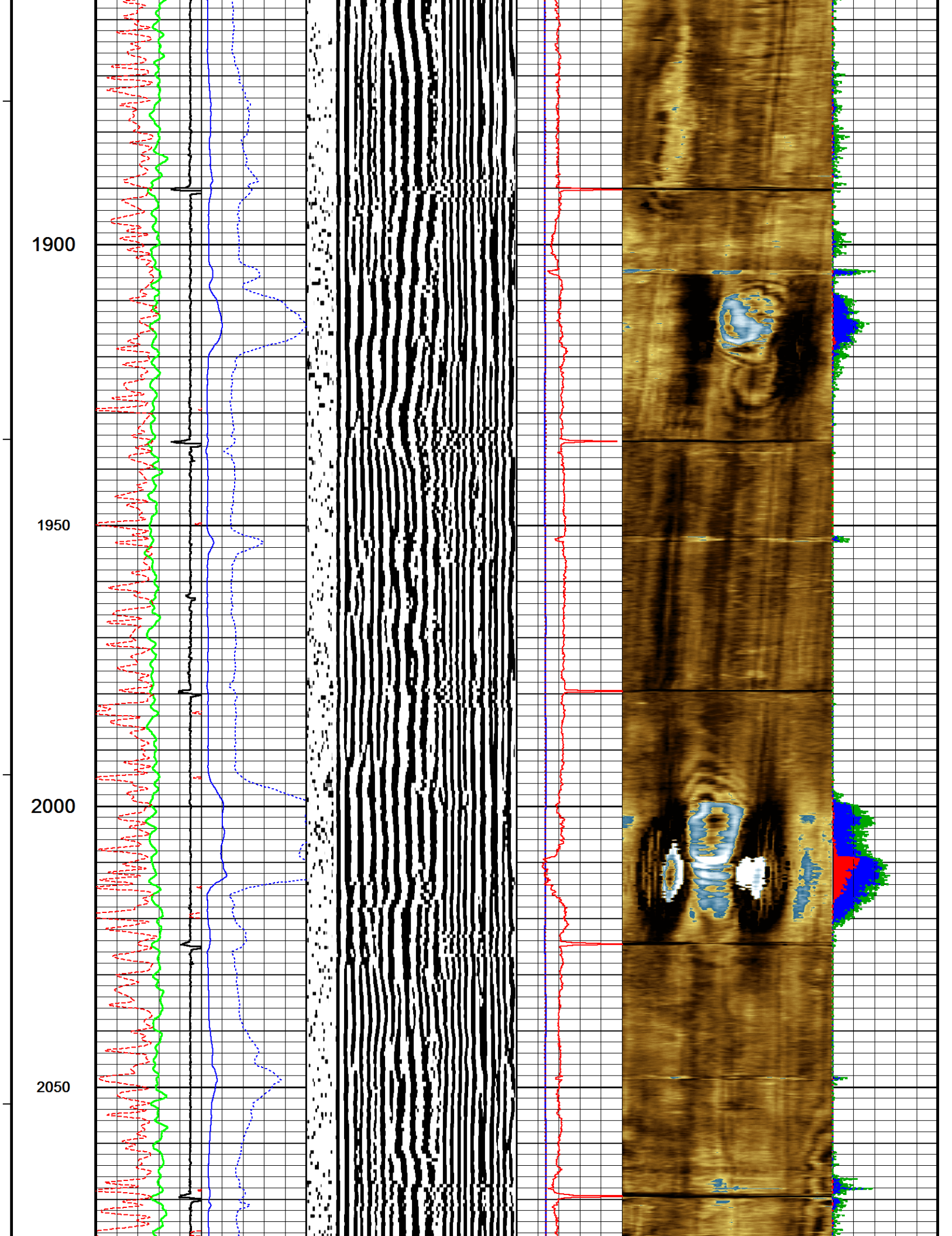
1750

1800

1850





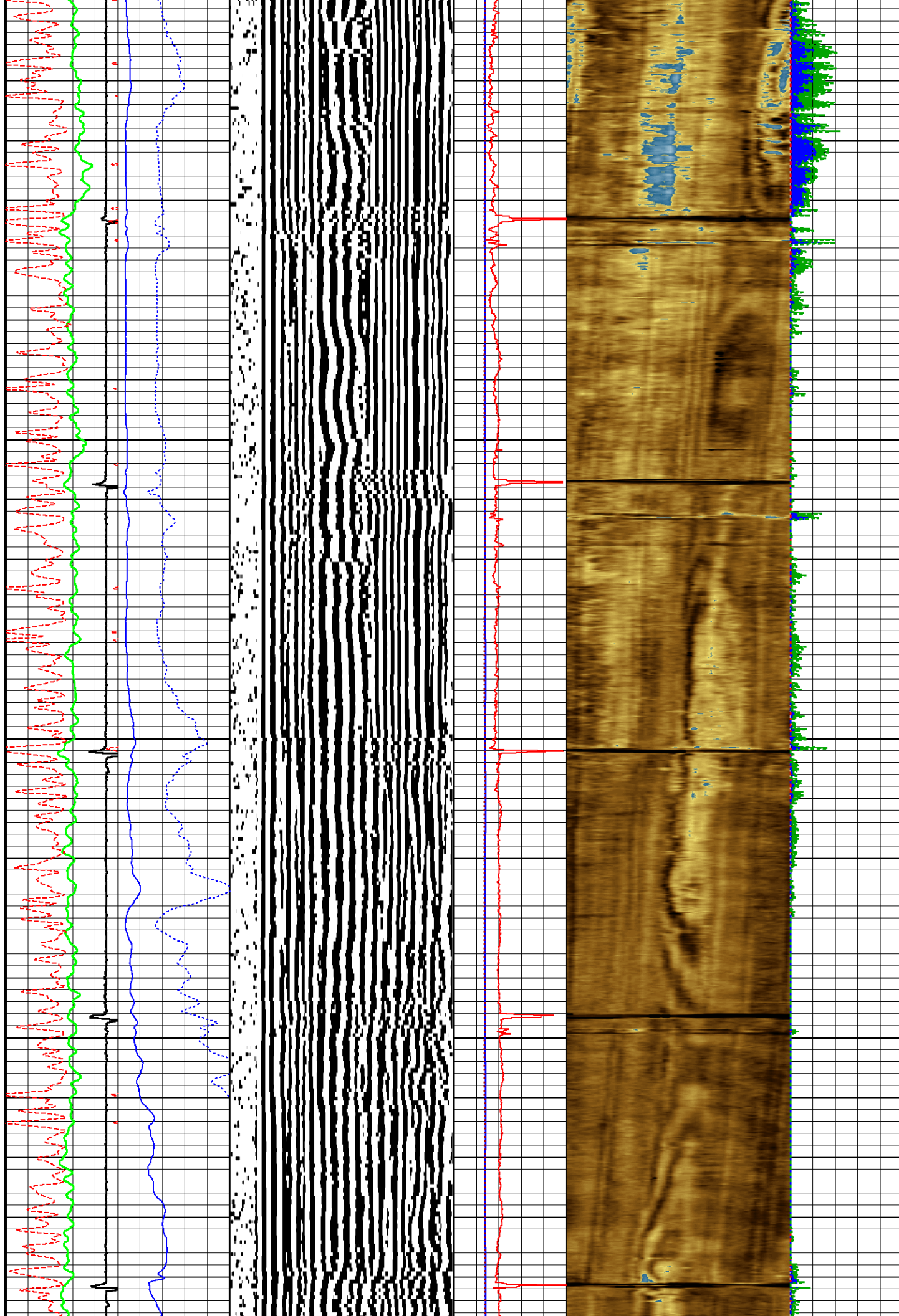


2100

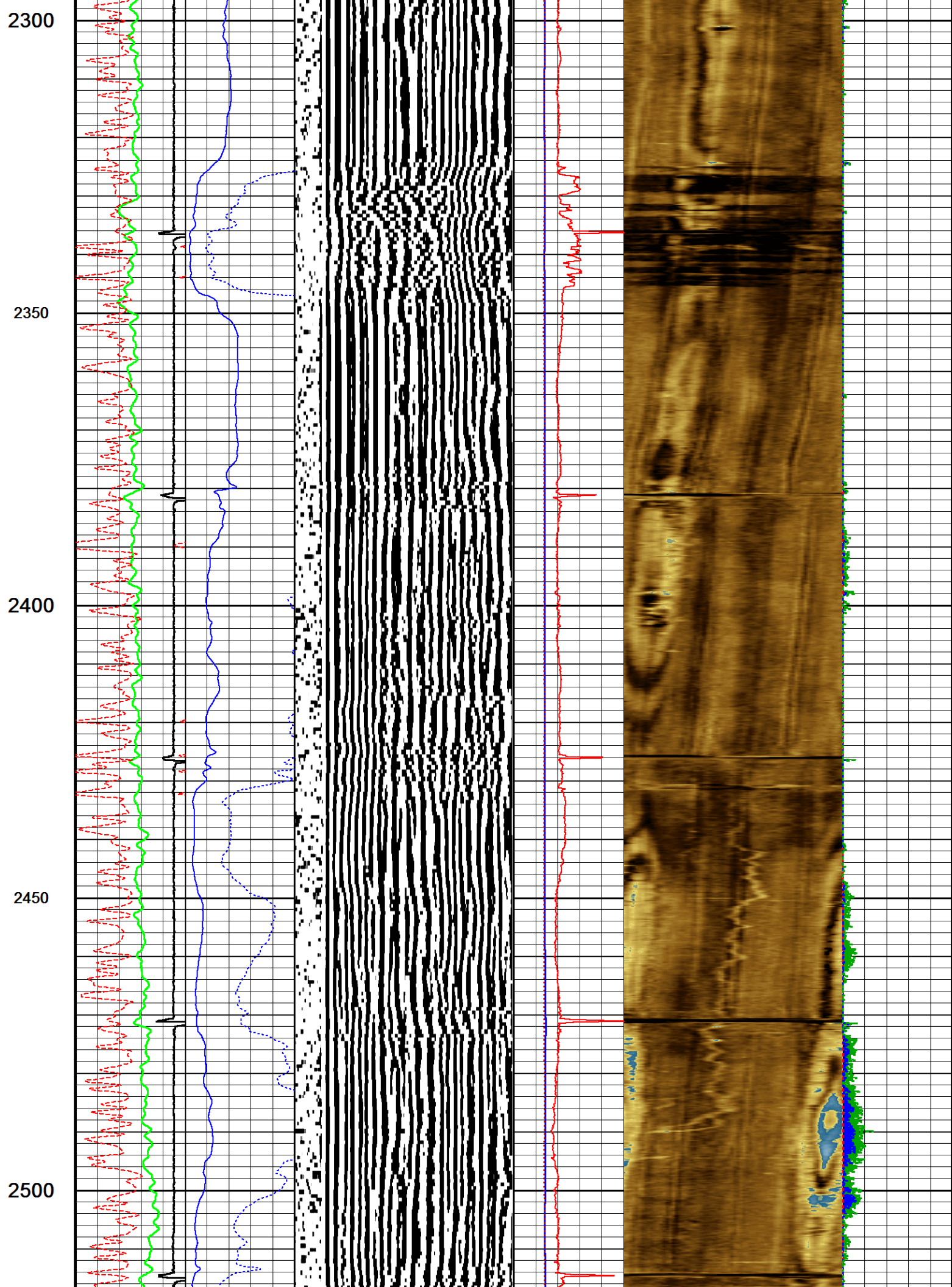
2150

2200

2250







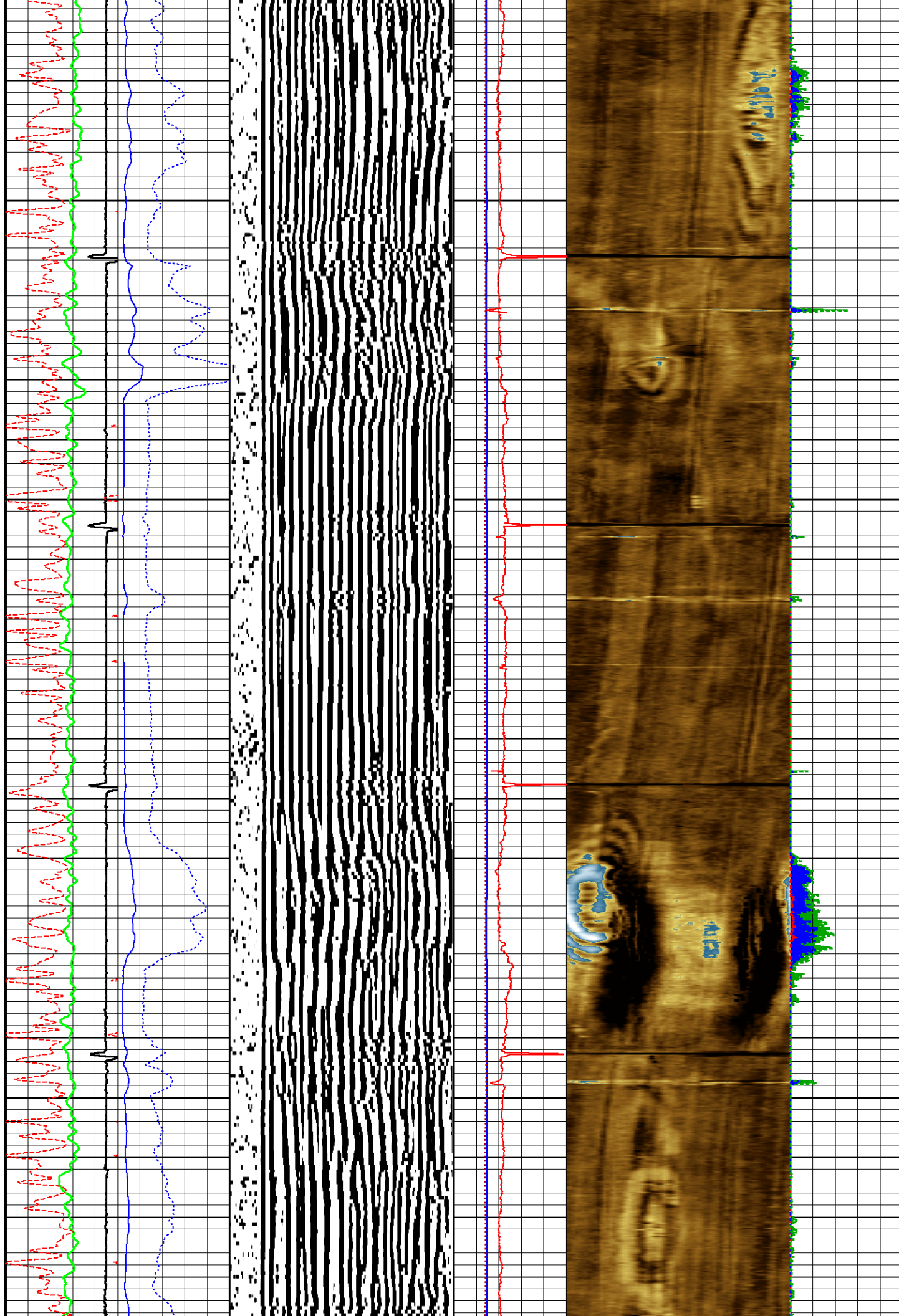


2550

2600

2650

2700



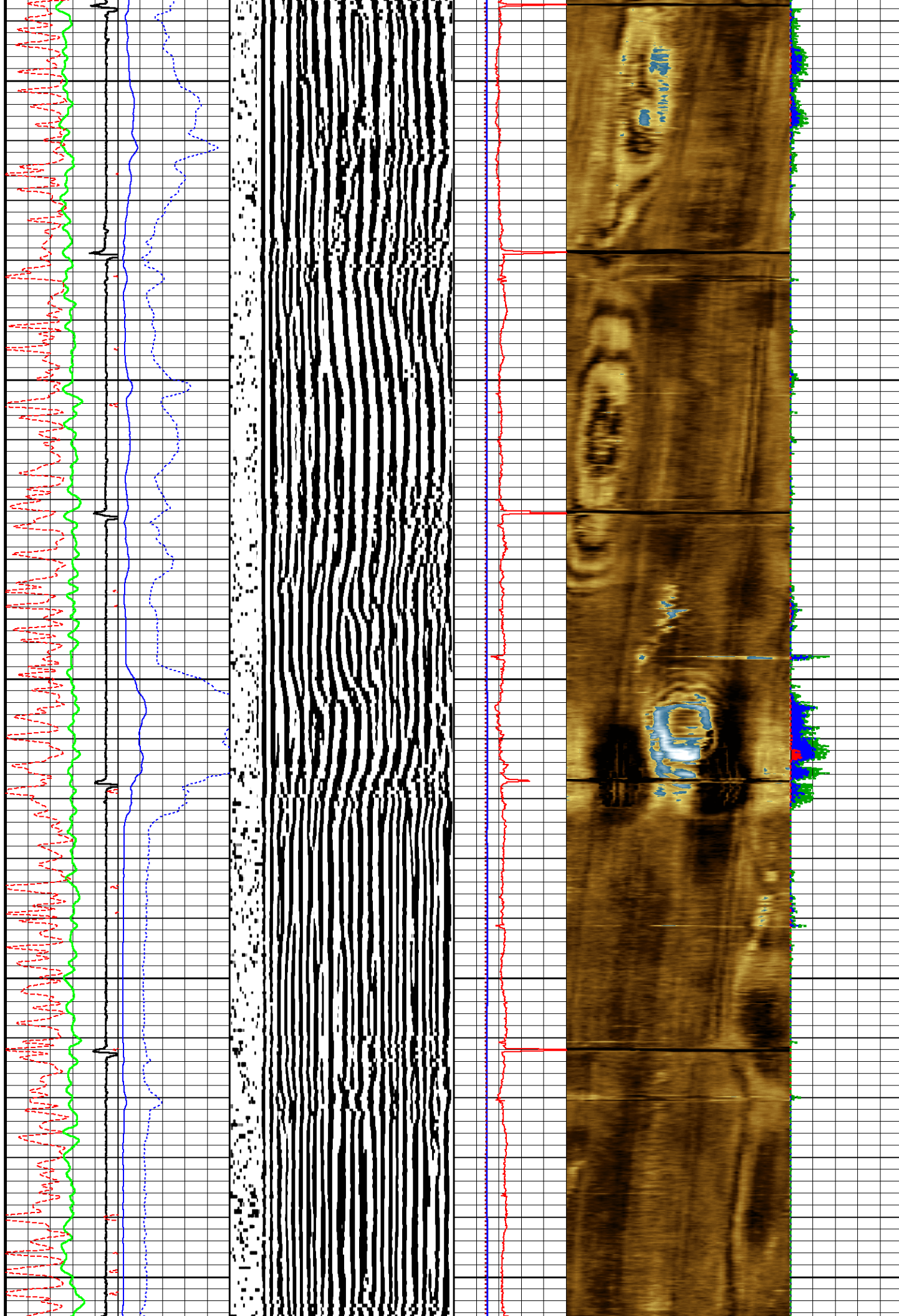
2750

2800

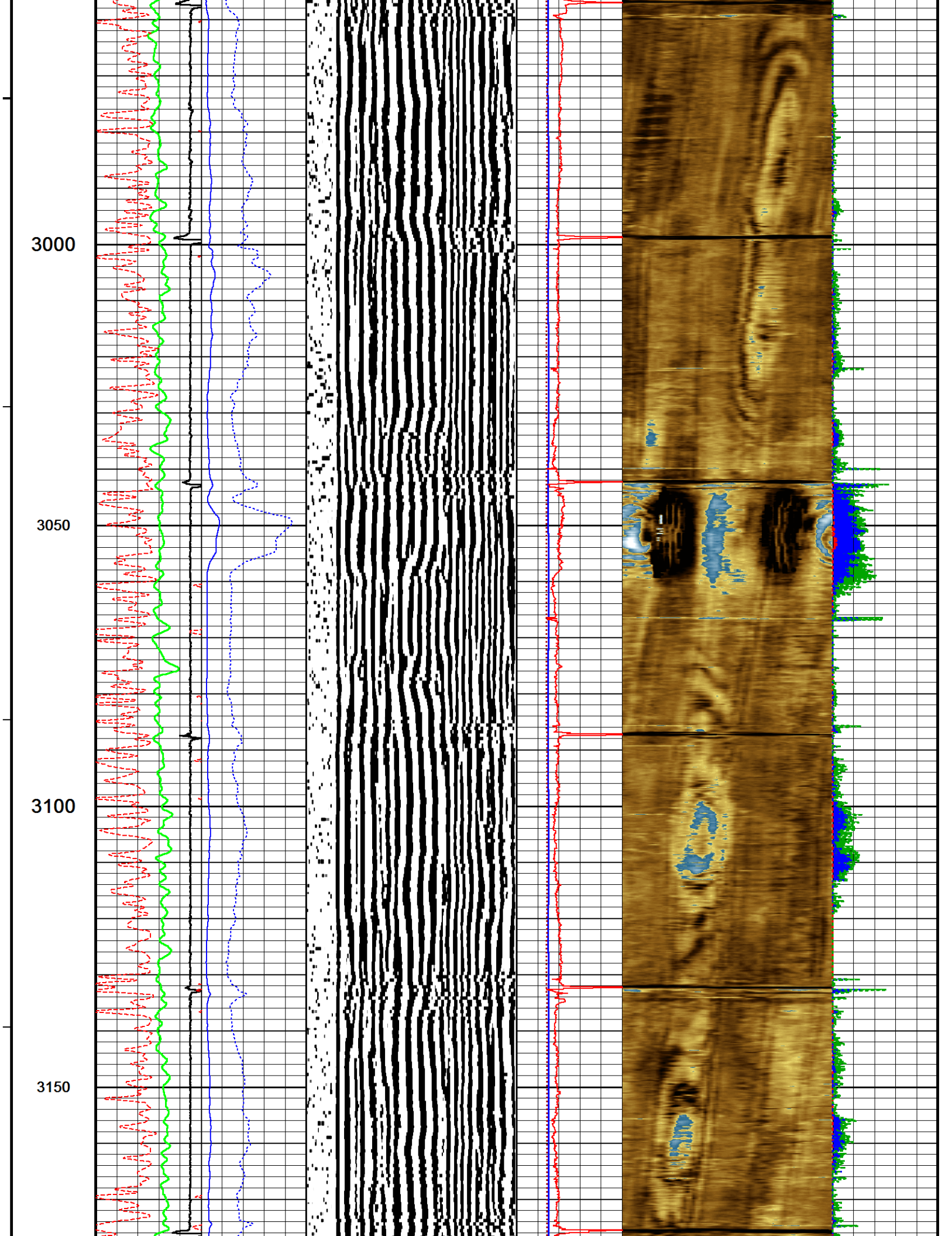
2850

2900

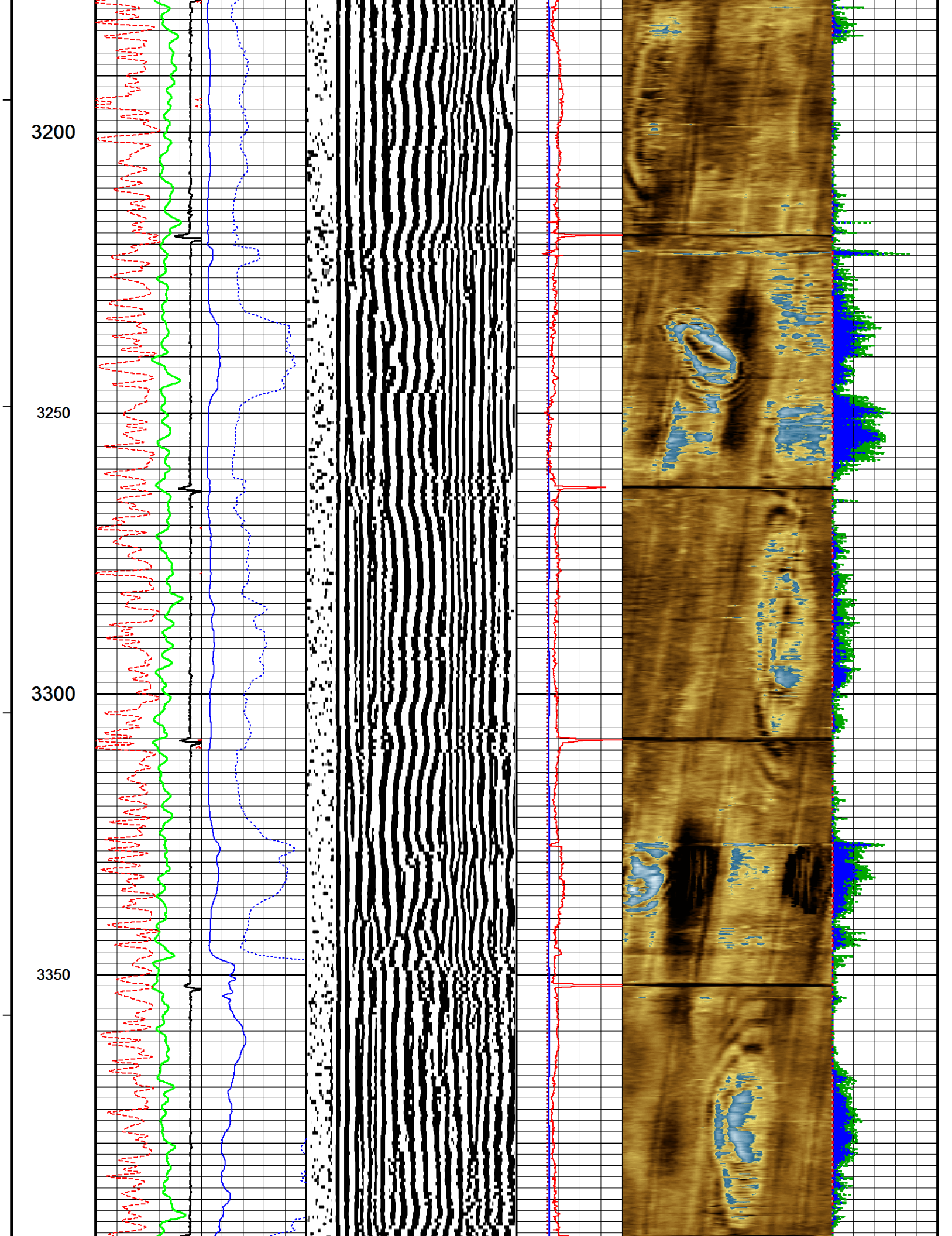
2950

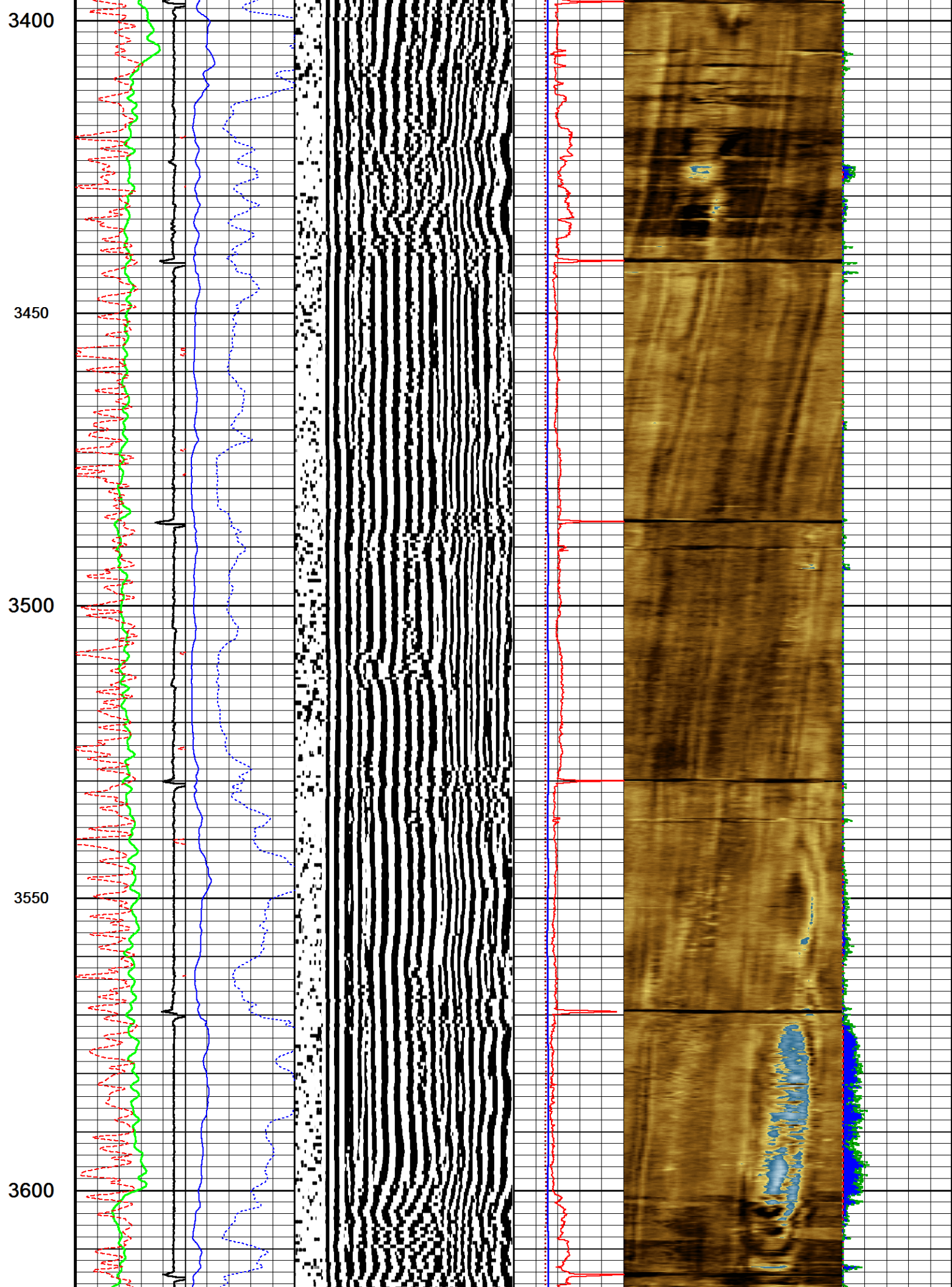












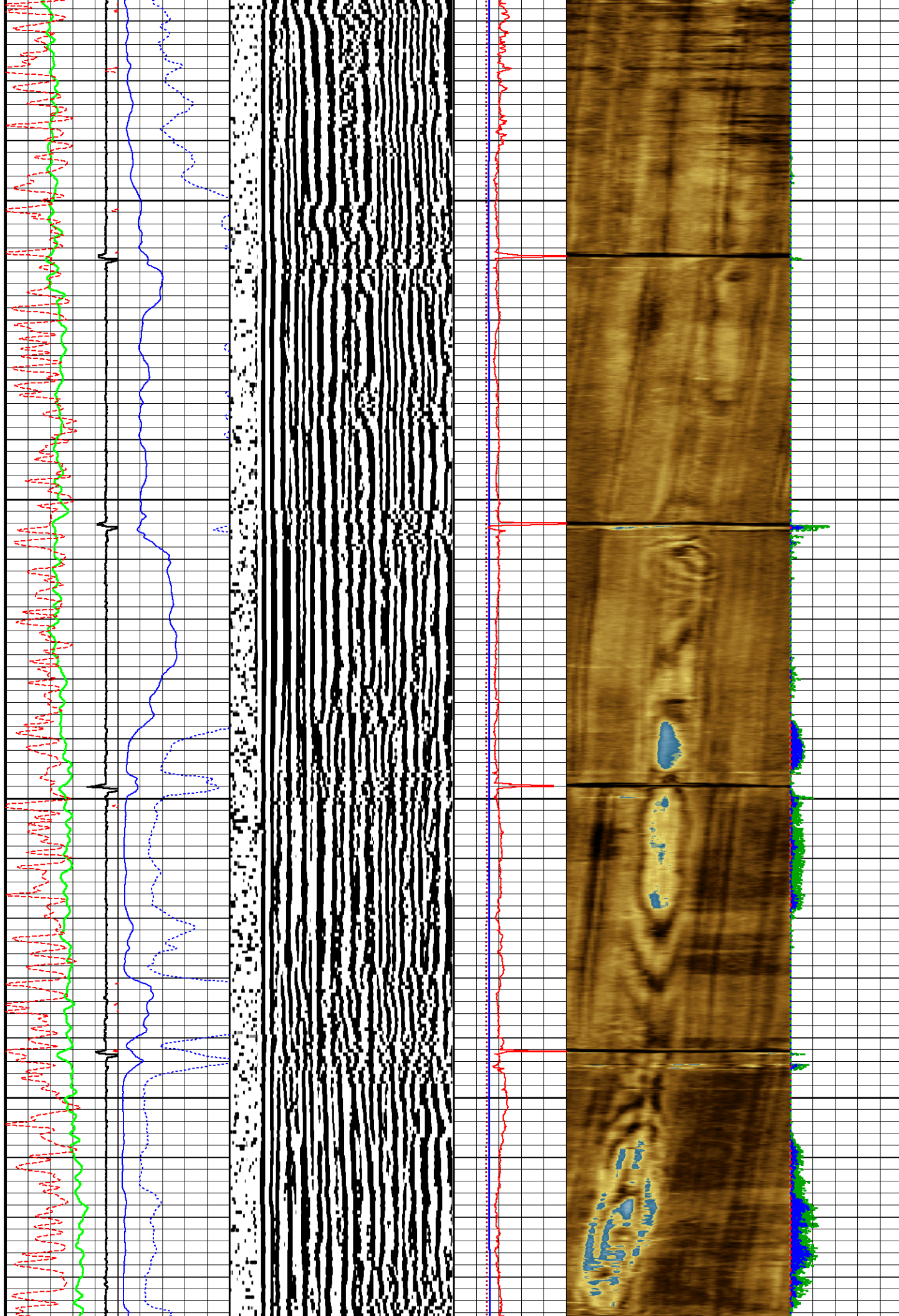


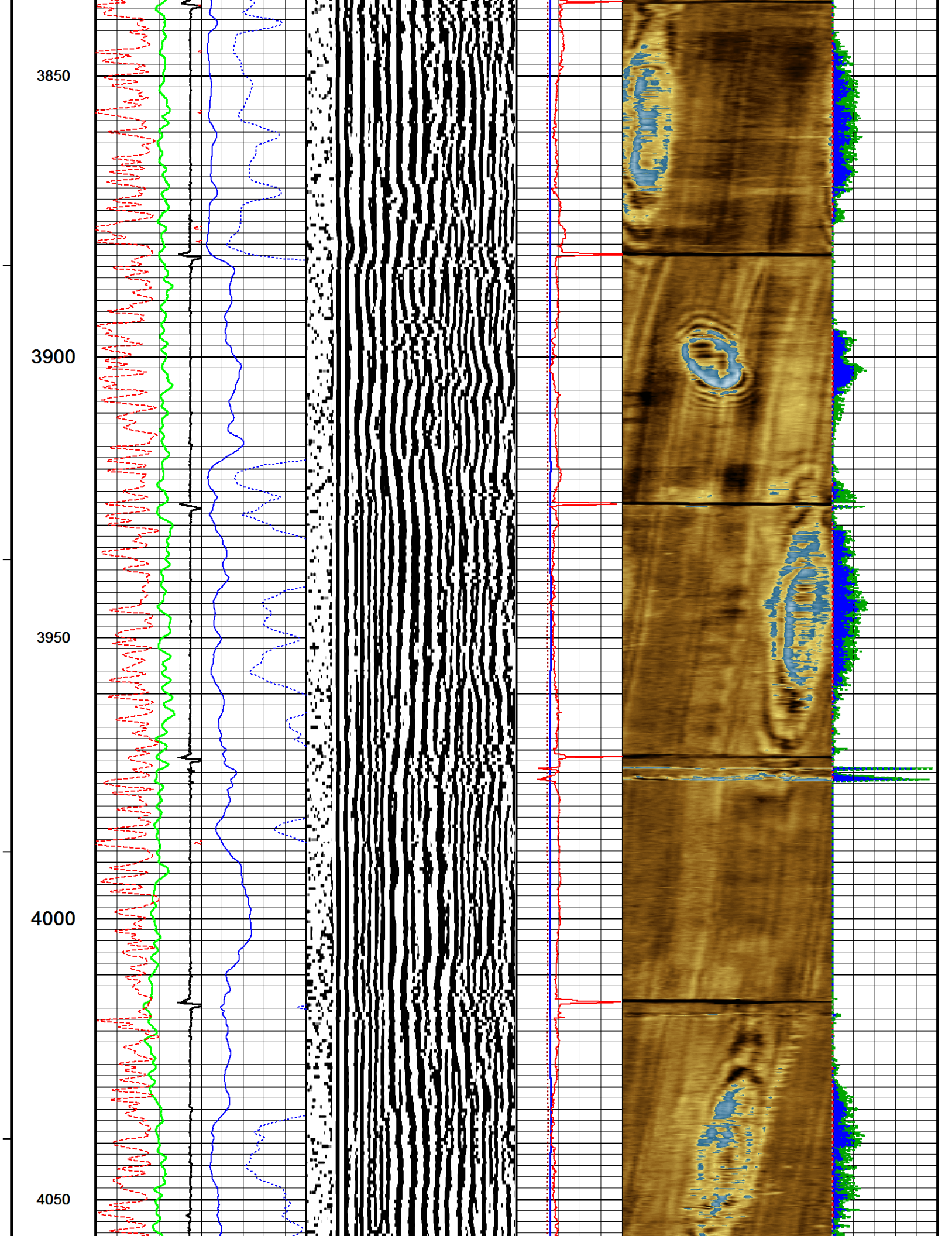
3650

3700

3750

3800





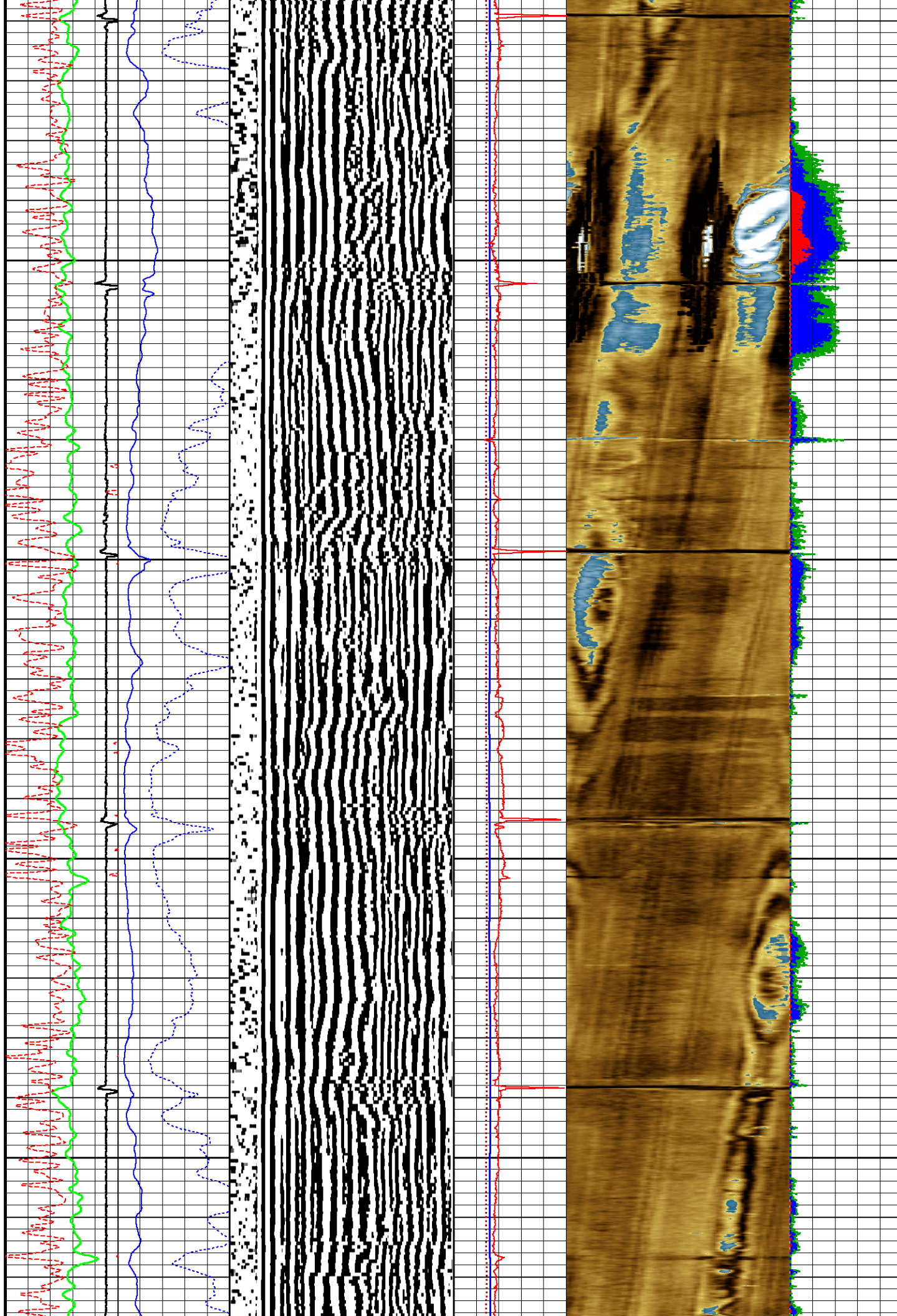


4100

4150

4200

4250

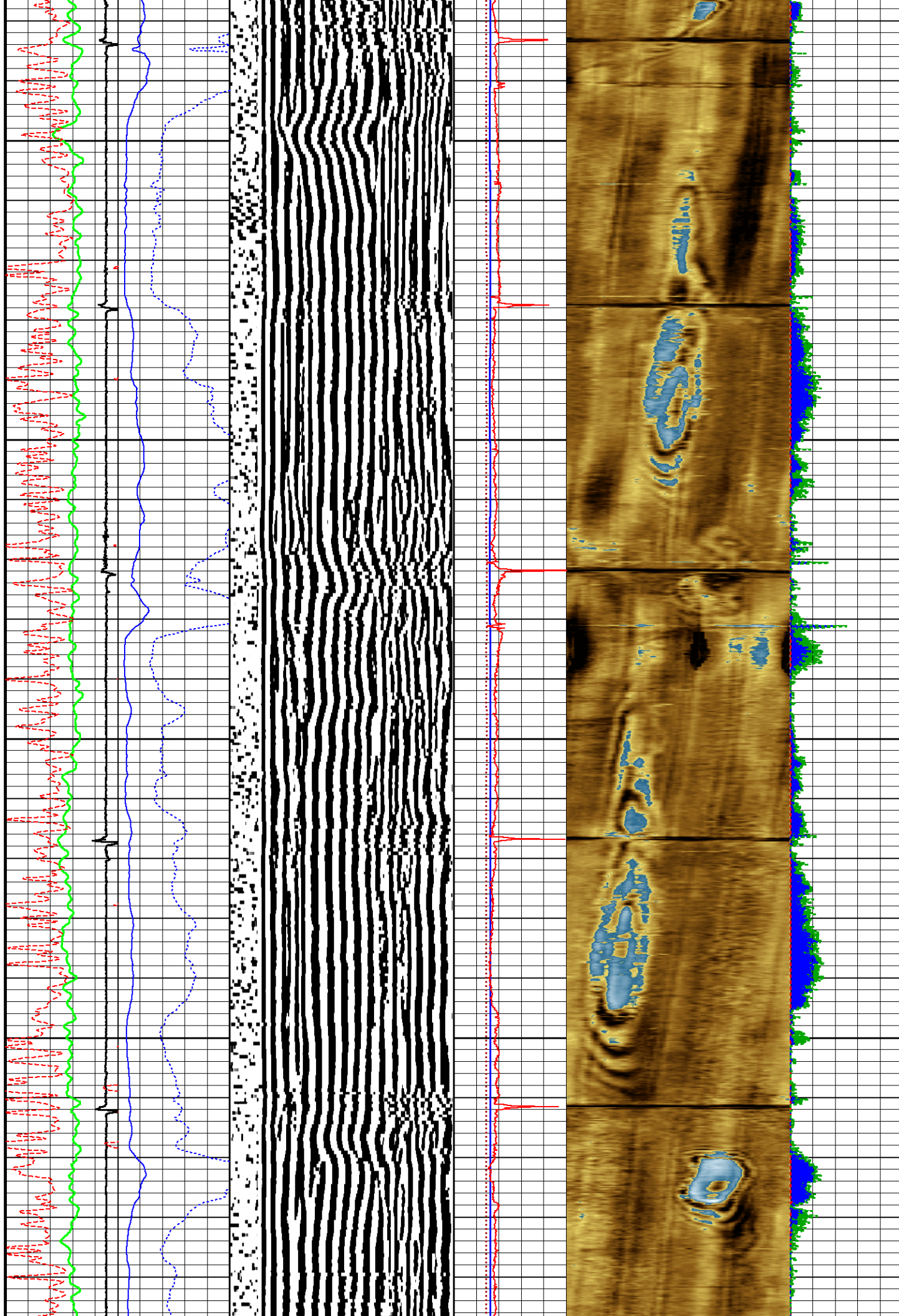


4300

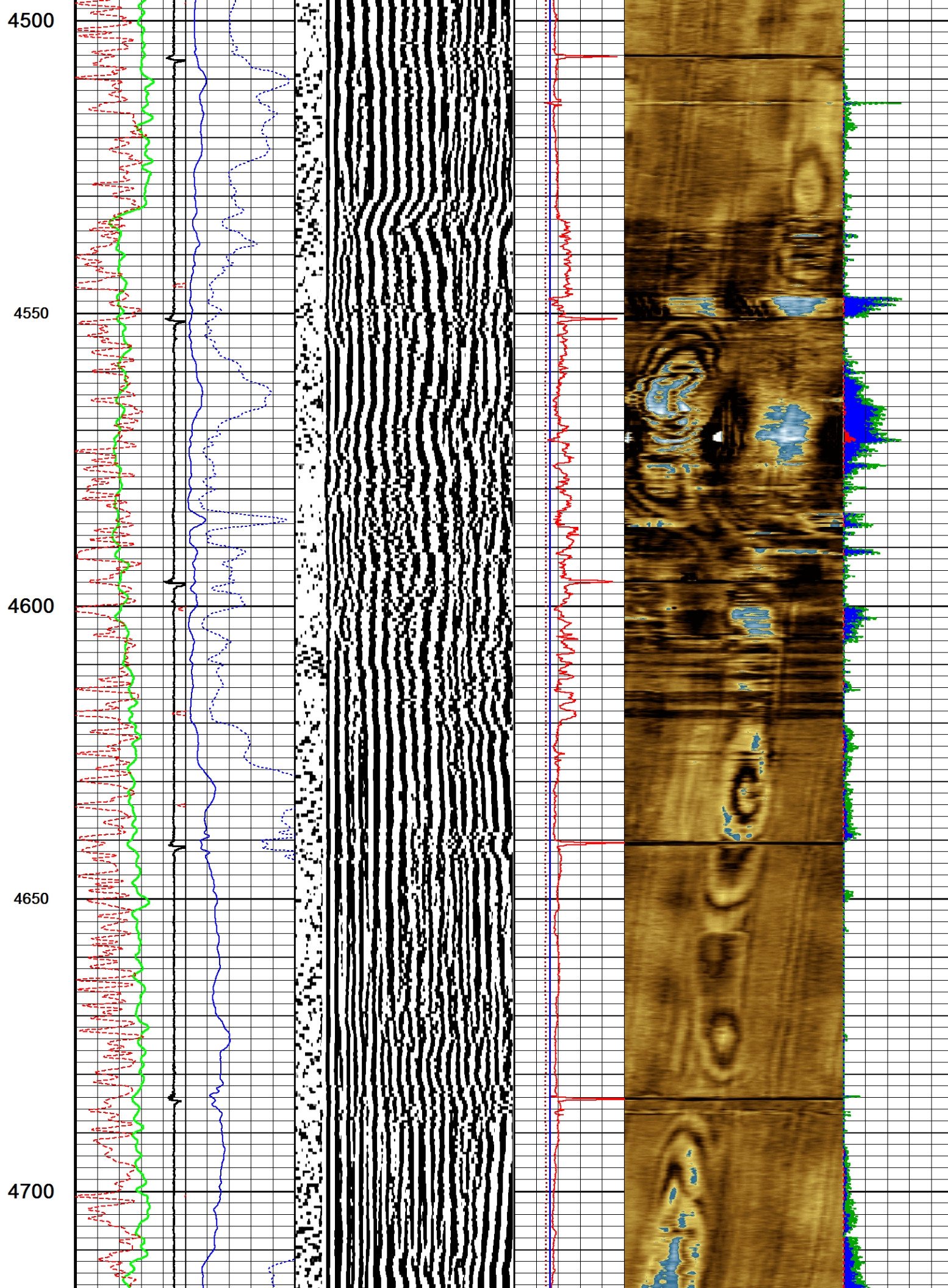
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4400

4450





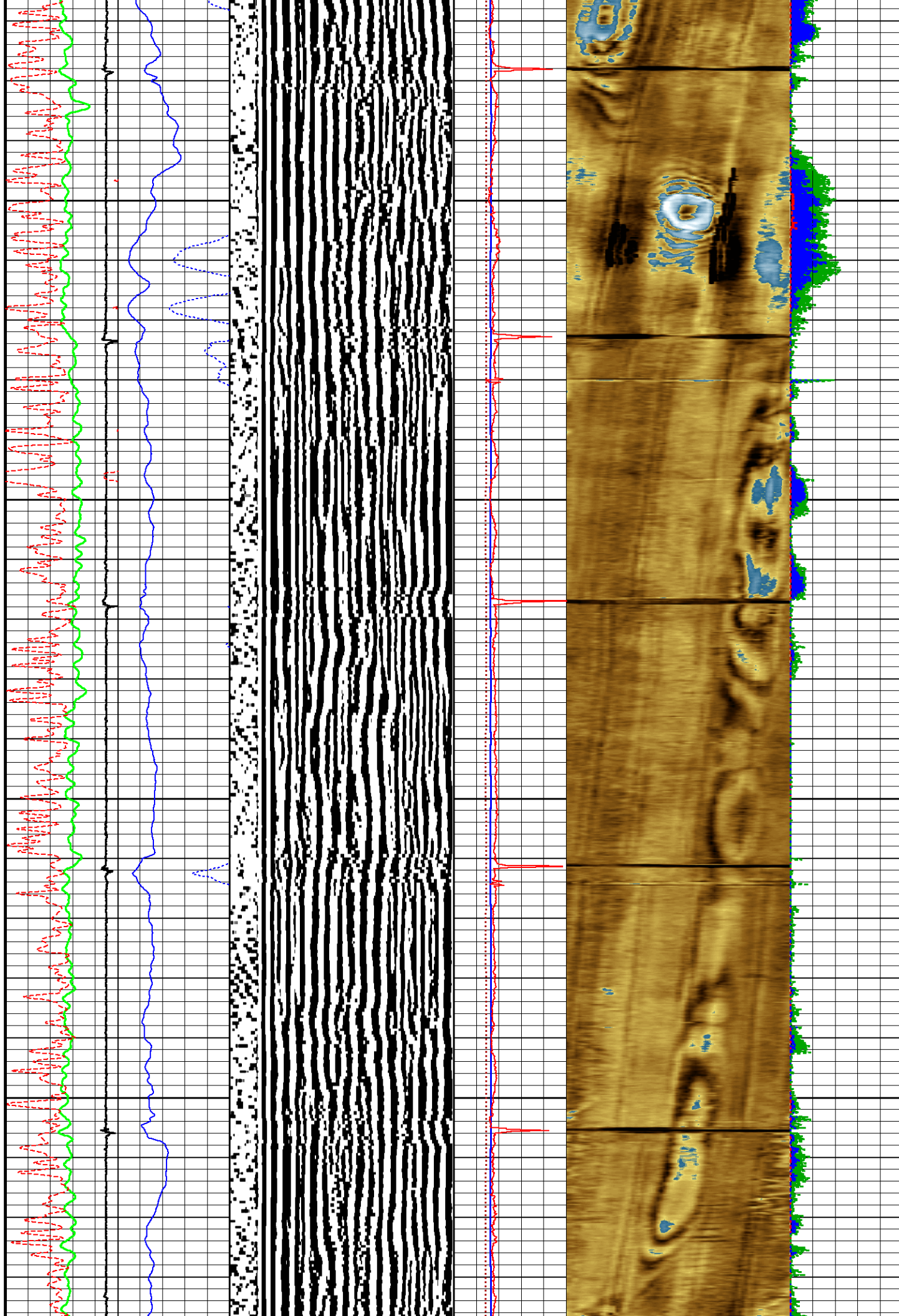


4750

4800

4850

4900





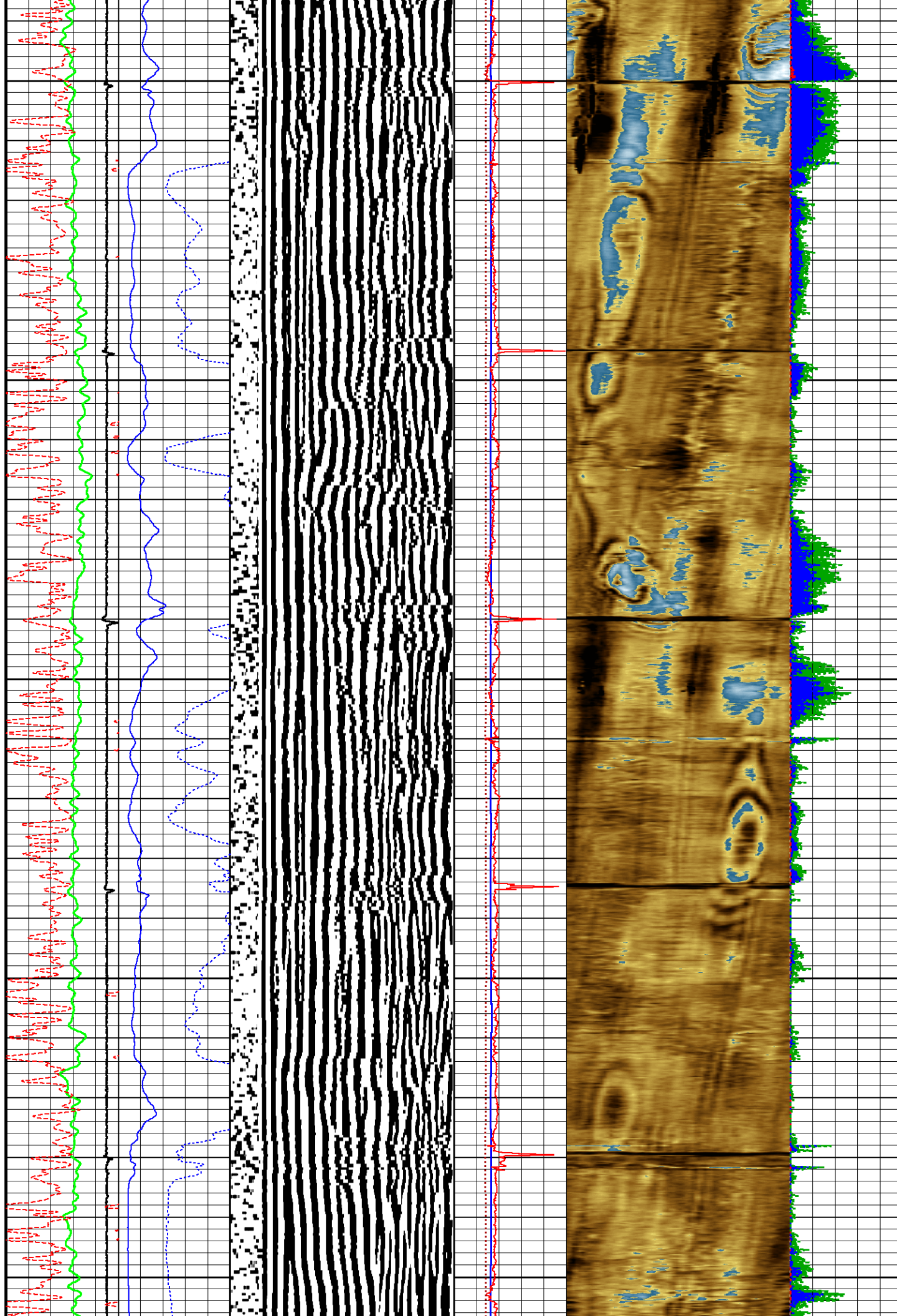
4950

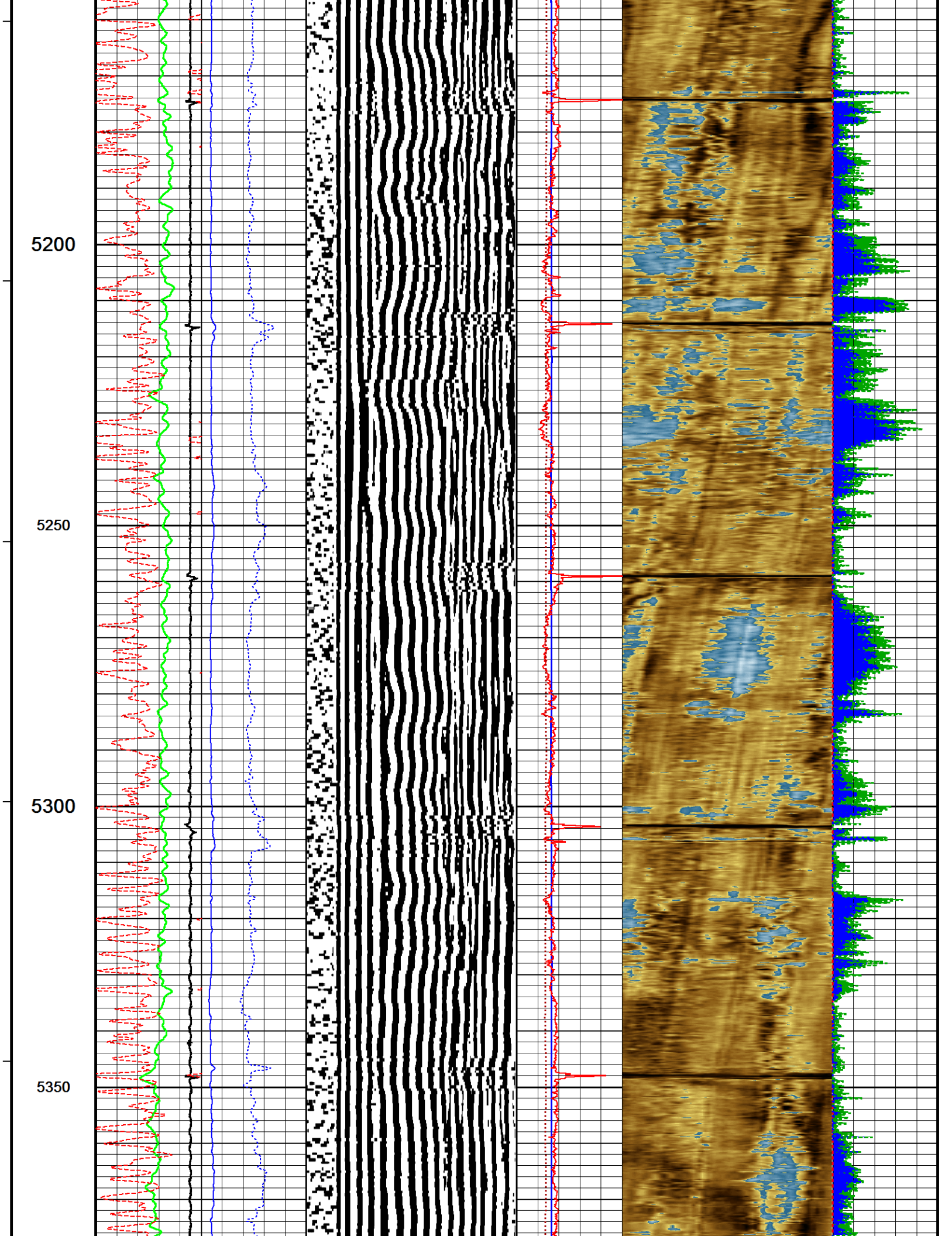
5000

5050

5100

5150





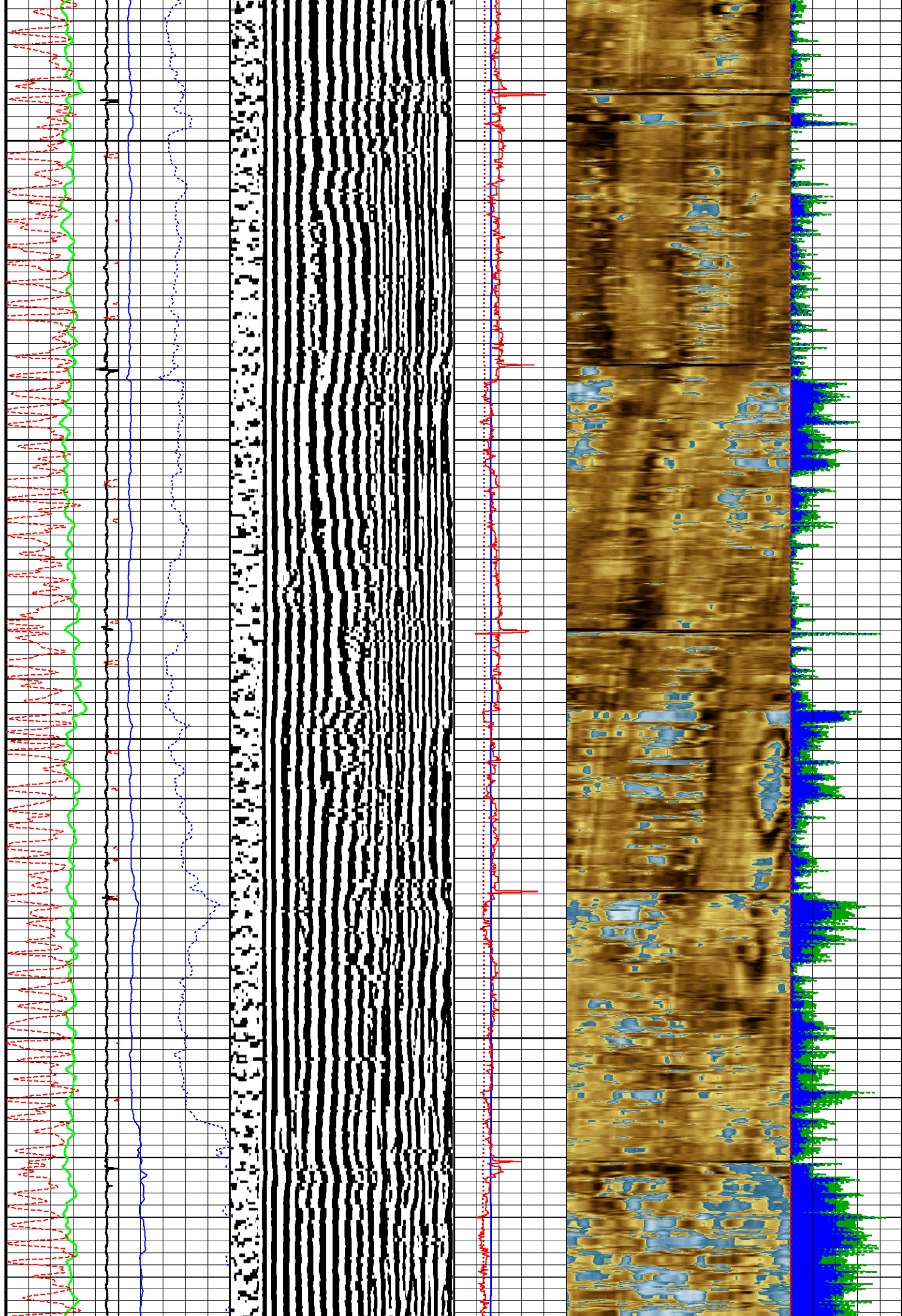


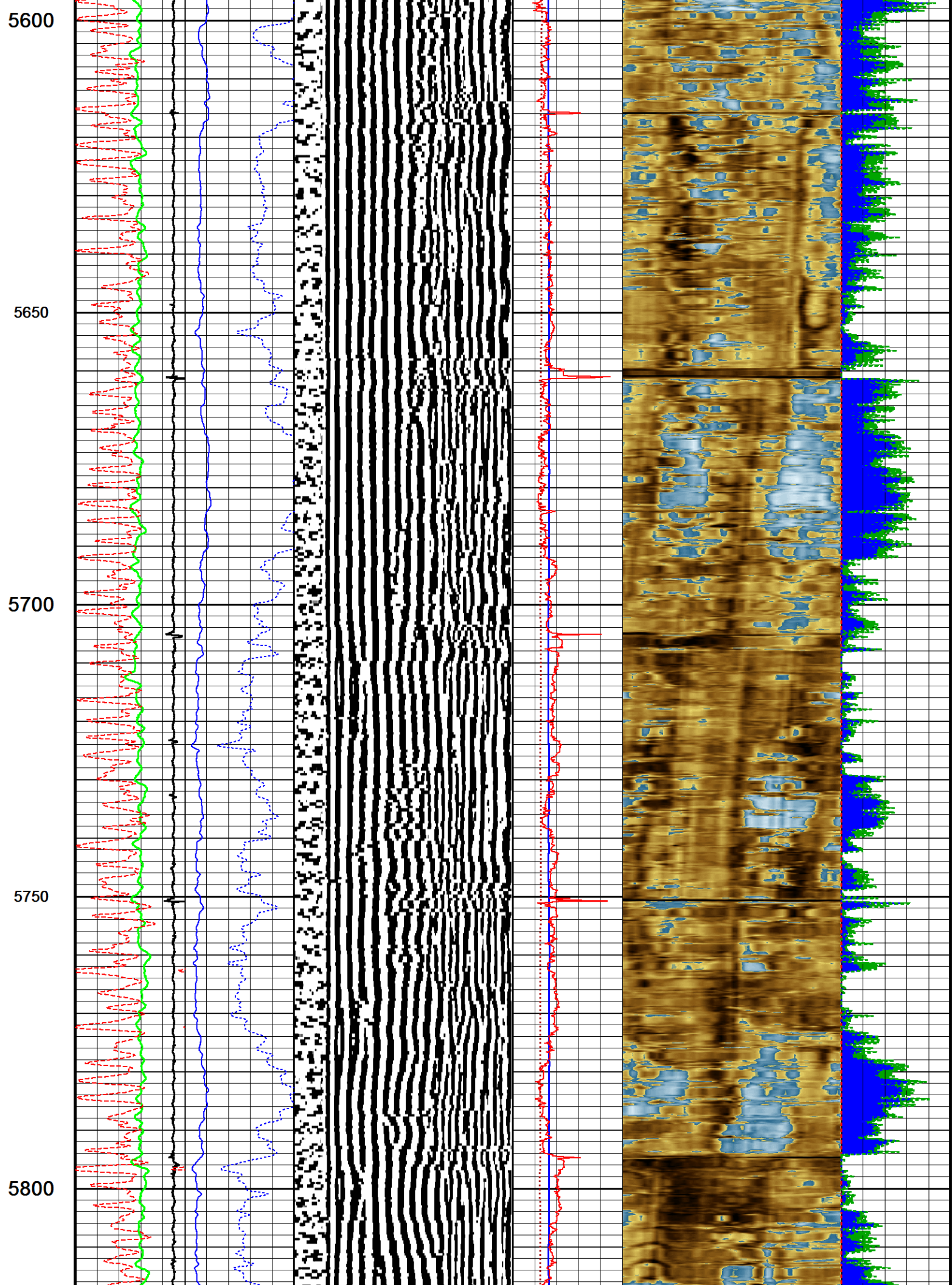
5400

5450

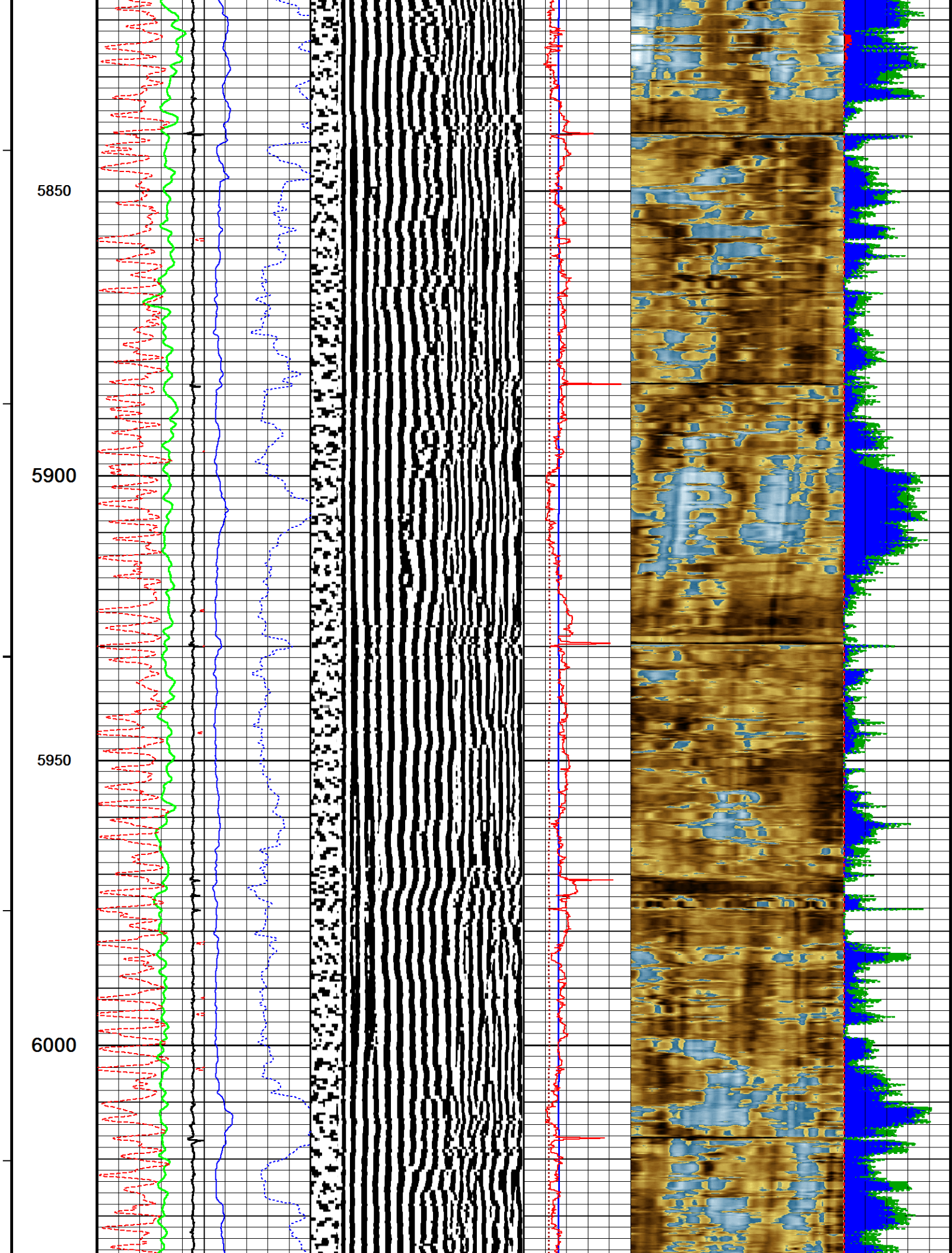
5500

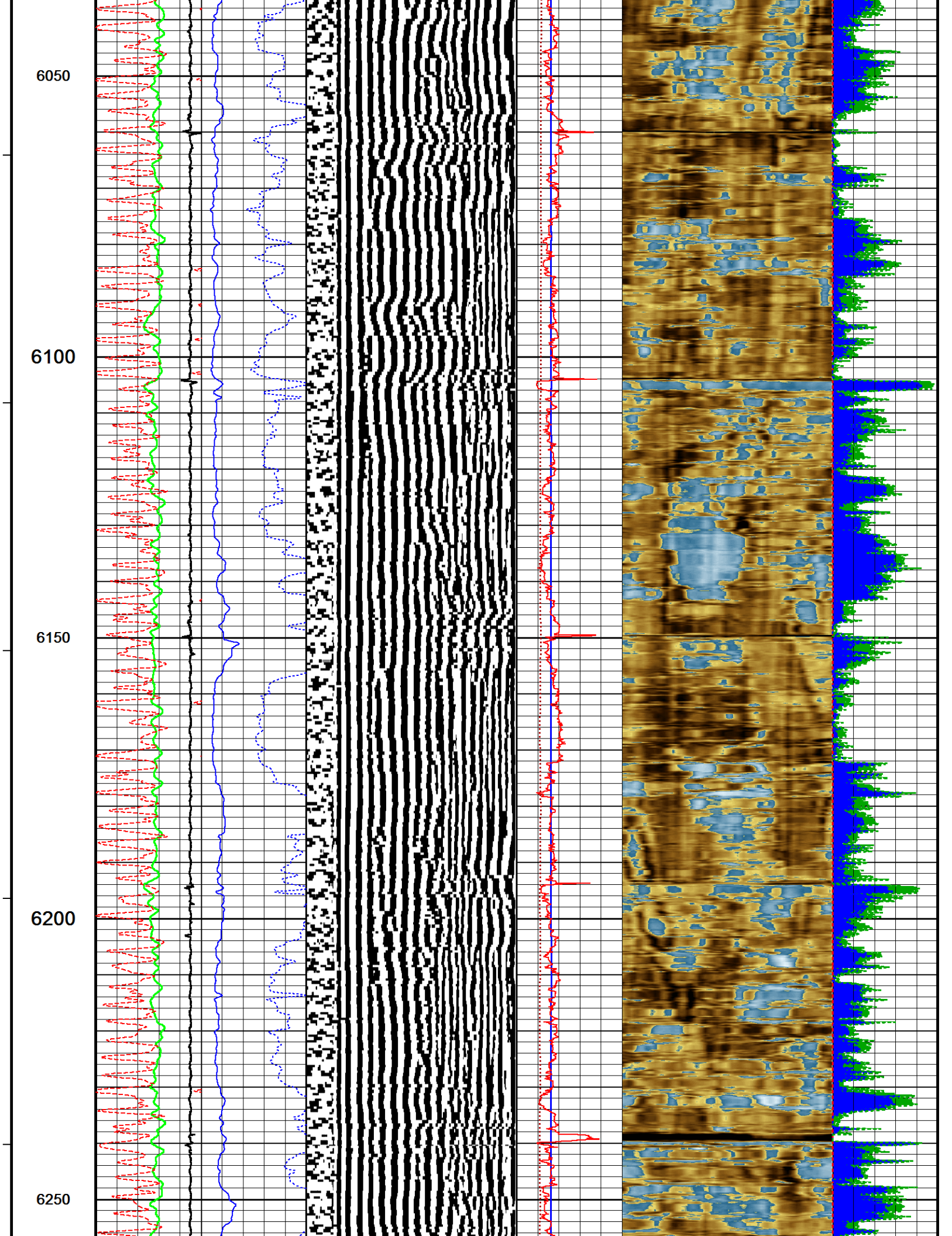
5550



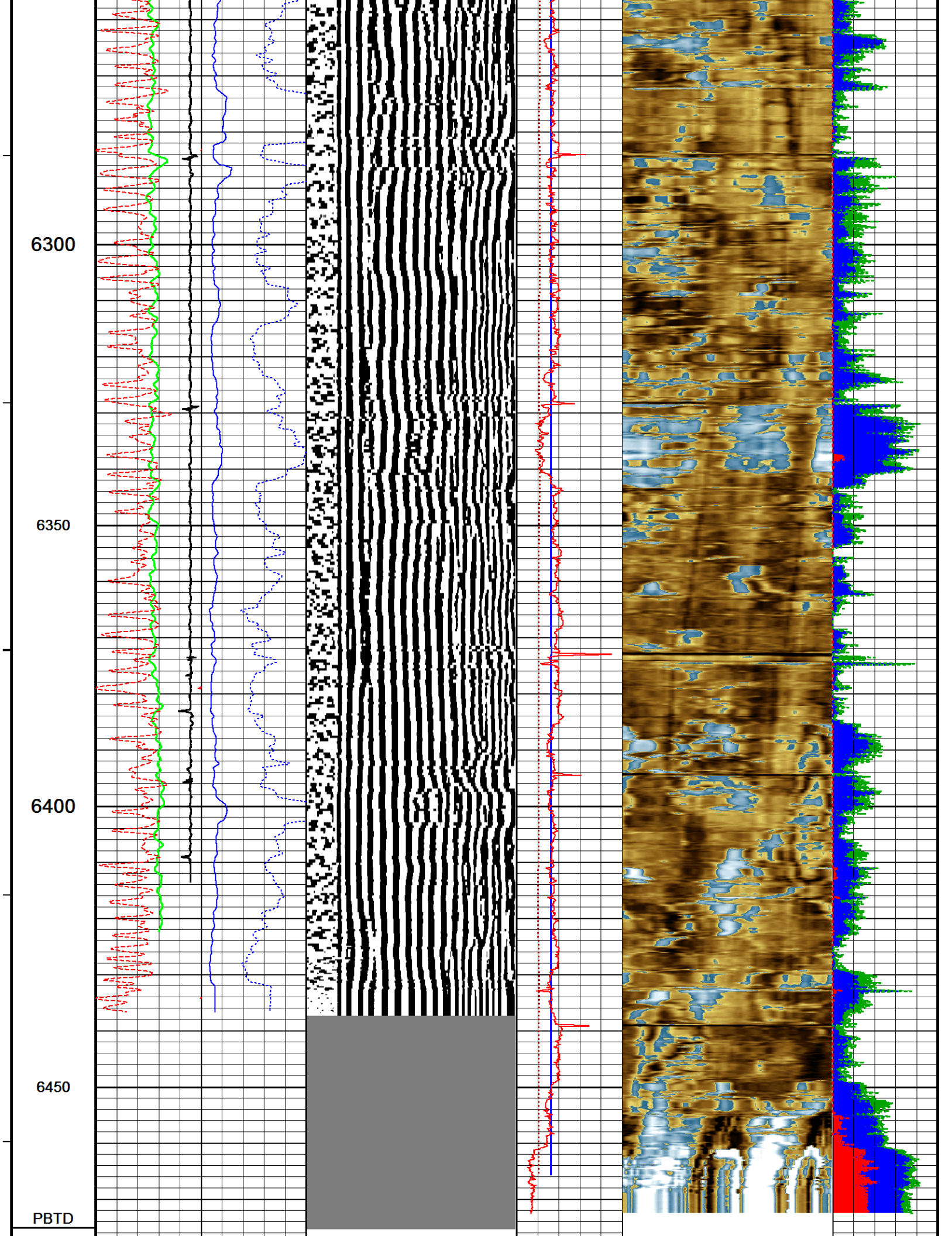


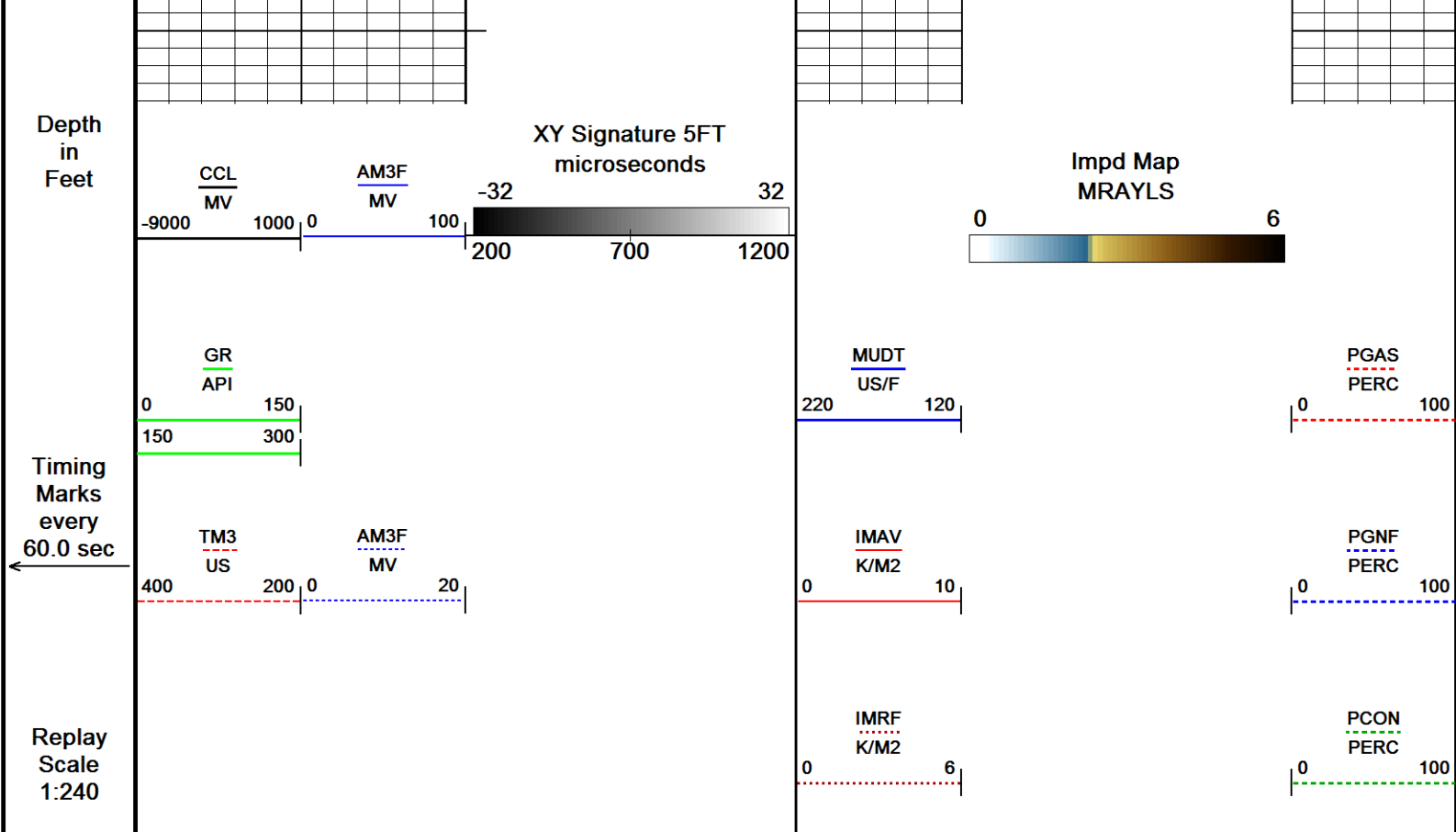












Depth Based Data - Maximum Sampling Increment 2.5cm

Filename: C:\Logs\Extraction\VARRA 5\VARRA 5 MAIN PASS.dta

System Versions: Logged with 16.05.3841 Plotted with 16.05.3841

Plotted on 04-DEC-2016 20:47

Recorded on 04-DEC-2016 15:31

↑ MAIN PASS ↑

↓ REPEAT PASS ↓

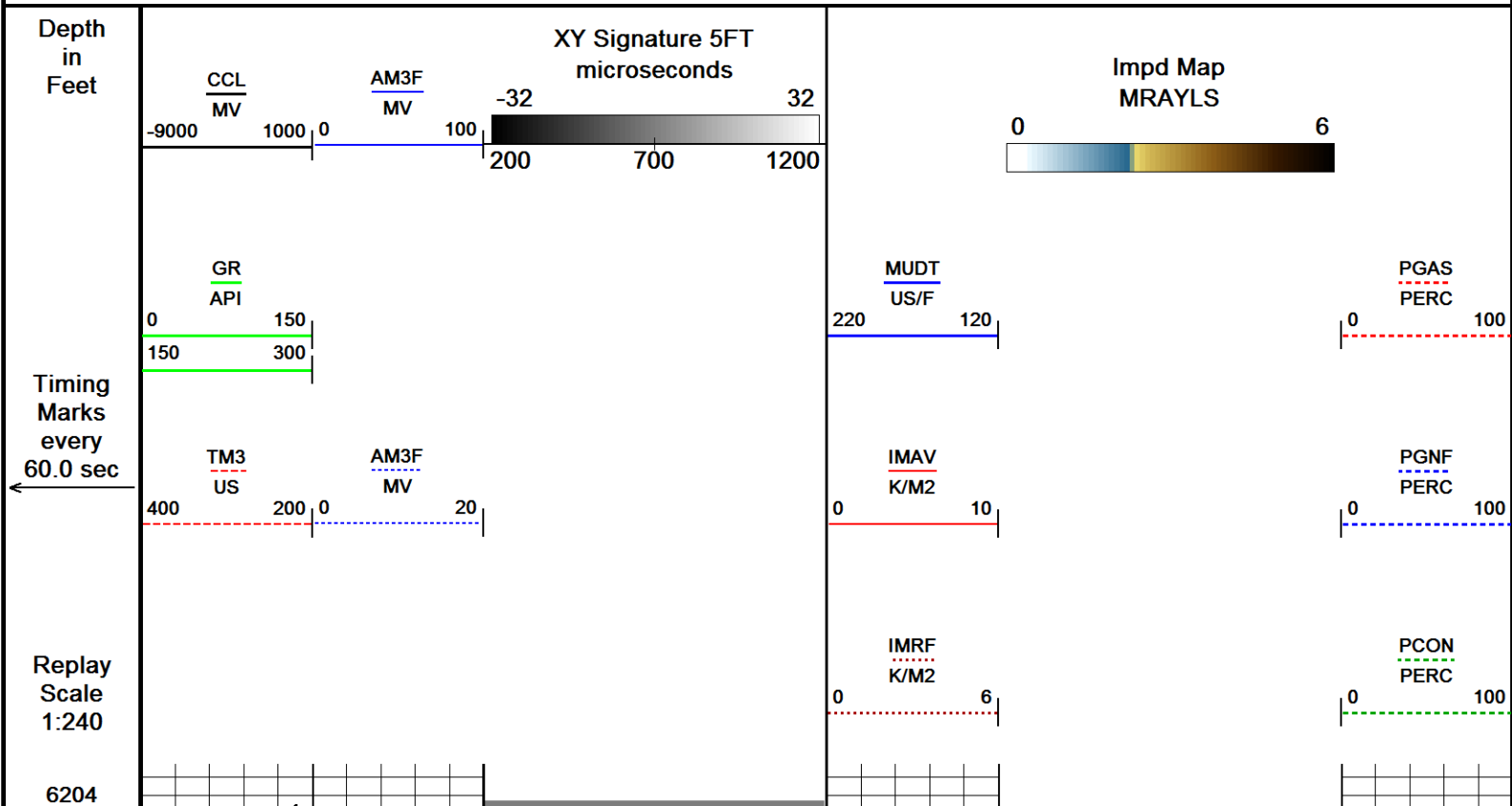
Depth Based Data - Maximum Sampling Increment 2.5cm

Filename: C:\Logs\Extraction\VARRA 5\VARRA 5 REPEAT PASS.dta

System Versions: Logged with 16.05.3841 Plotted with 16.05.3841

Plotted on 04-DEC-2016 20:47

Recorded on 04-DEC-2016 15:20



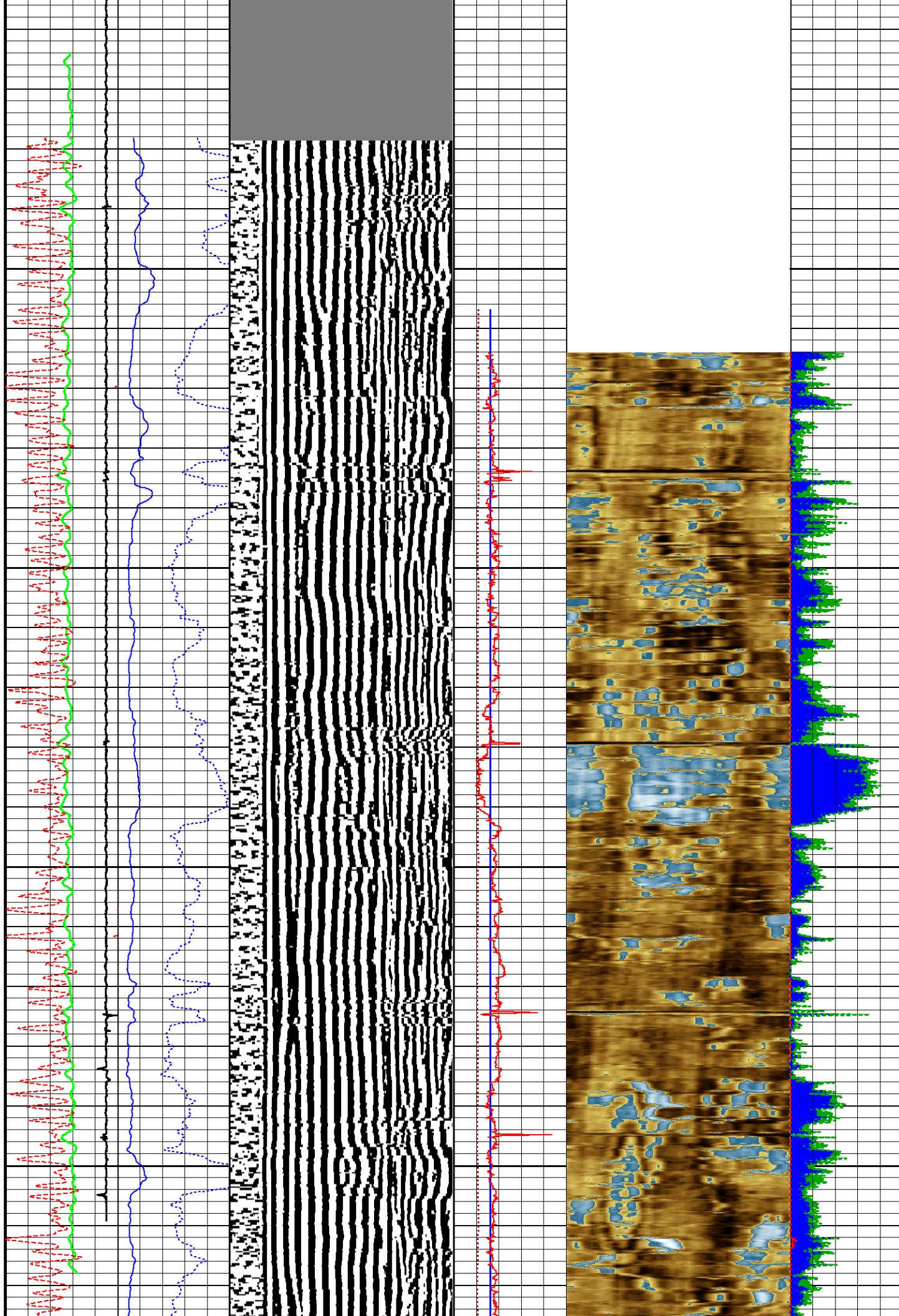


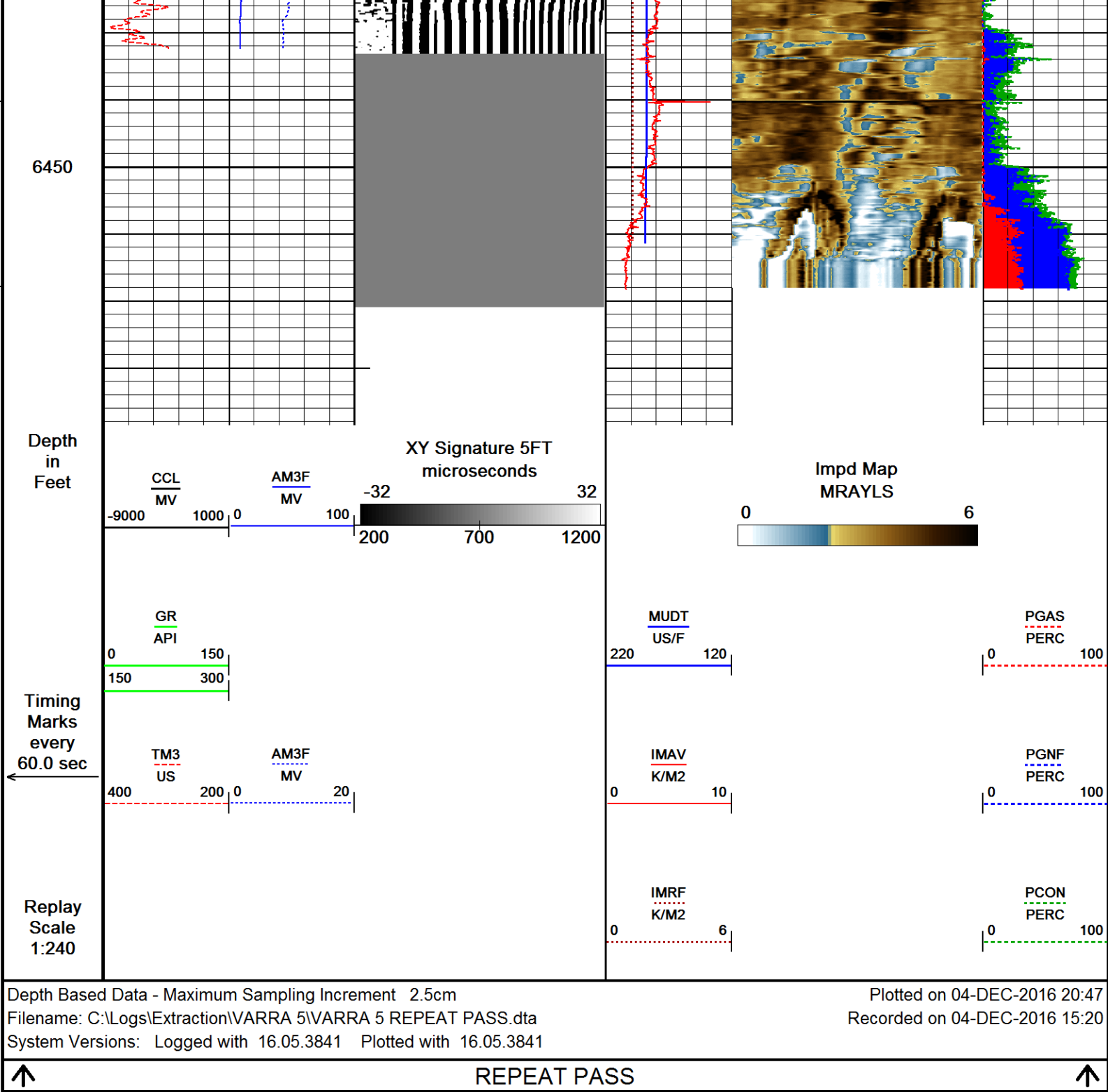
6250

6300

6350

6400





## DOWNHOLE EQUIPMENT

C:\Logs\Extraction\VARRA 5\VARRA 5 REPEAT PASS.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 128 LG: 1.05 ft WT: 15.4 lb OD: 3.386 in

Swivel Head 55 pin  
SWH-CC 173 LG: 2.72 ft WT: 77.2 lb OD: 3.346 in





Casing Collar Locator, 55 pin  
CCL-WA 142 LG: 3.01 ft WT: 19.8 lb OD: 2.756 in

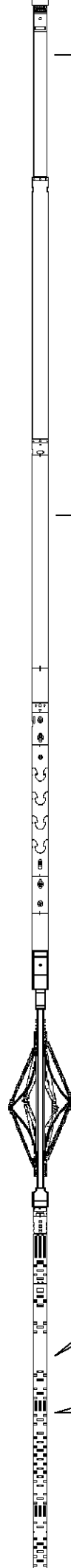
Communication Cartridge 55pin 3-3/8in  
WCC-DA 125 LG: 4.60 ft WT: 63.9 lb OD: 3.386 in

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

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

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



59.48 ft CCL - Collar Locator

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

Flexible Joint, URS, 55 Pin  
FTP-FA 182 LG: 4.35 ft WT: 90.4 lb OD: 3.390 in

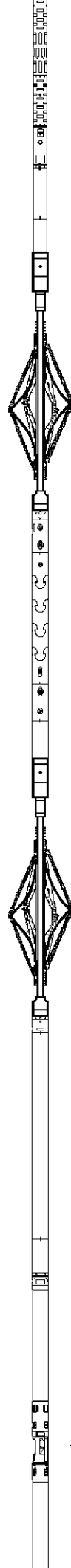
55 pin Roller Centralizer  
CEN-XA 221 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

URS Electronics Cartridge  
UCC-AA 194 LG: 4.51 ft WT: 79.4 lb OD: 3.386 in

URS Sonde Section  
USS-AB 178 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

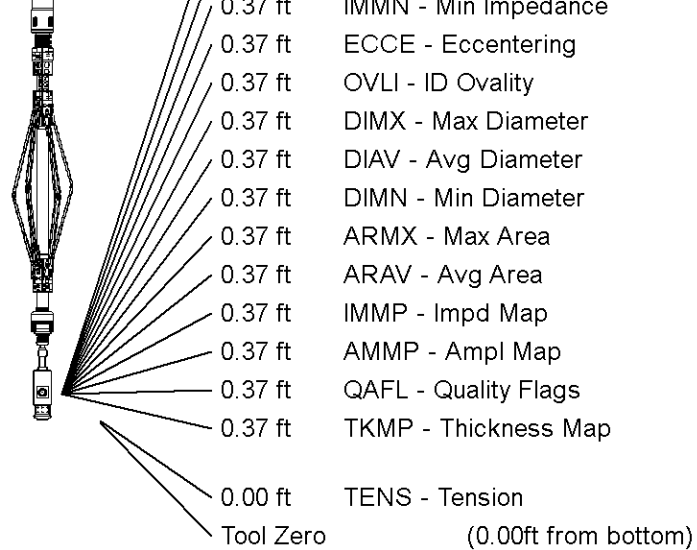
7.65 ft MUdT - Mud Slowness

0.37 ft IMMX - Max Impedance

0.37 ft IMAV - Avg Impedance

0.37 ft IMIN - Min Impedance





All measurements relative to tool zero.

## SHOP AND FIELD CALIBRATIONS

C:\Logs\Extraction\VARRA 5\VARRA 5 MAIN PASS.dta

UGR Field Survey Cal UGR-JD 223

Field calibration on 03-NOV-2016 11:17

### Gamma Ray Field Survey Calibration

Tool Type: UGR-JD  
 Calibrator No: TH 047

Serial No: 223

Background	Calibrator	Standard	Units
89.3	548.2	155.0	CPS

Delta Counts Per Sec: 458.9

CPS/API = 2.961

CBT Field Calibration CBT-AA 101

Field calibration on 08-NOV-2016 08:11

### 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	1.80	0.00
	Free Pipe	55.00	444.52
AMP 5 FT	100 % Bond	1.20	0.00
	Free Pipe	36.00	408.30

CBT Constants CBT-AA 101

Last Edited on 04-DEC-2016 15:31

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 Size	5.50 IN
Casing Weight	20.0 LB/F
Casing Velocity	57.00 US/F
DT Fluid	187.0 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 15-NOV-2016 08:41

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 04-DEC-2016 15:31

\*\*\* 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	3.75
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	1610.00	5.50	36.00	1.50	1.50	0.36	1.00
0.00	16900.00	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	Titanium Air Backed
Z_mud at Calibration	1.60 K/M2
Z_mud Outside	1.70 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

COMPANY	EXTRACTION OIL & GAS
WELL	VARRA 5
FIELD	WATTENBERG
PROVINCE/COUNTY	WELD
COUNTRY/STATE	USA / COLORADO

Elevation Kelly Bushing	4924	feet	Bottom Log Interval	6475.00	feet
Elevation Drill Floor	4924	feet	Depth Driller	16900.00	feet
Elevation Ground Level	4899	feet	Depth Logger	6475.00	feet



SECUREVIEW  
ULTRAVIEW/BONDVIEW  
CEMENT ANALYSIS

**Weatherford®**