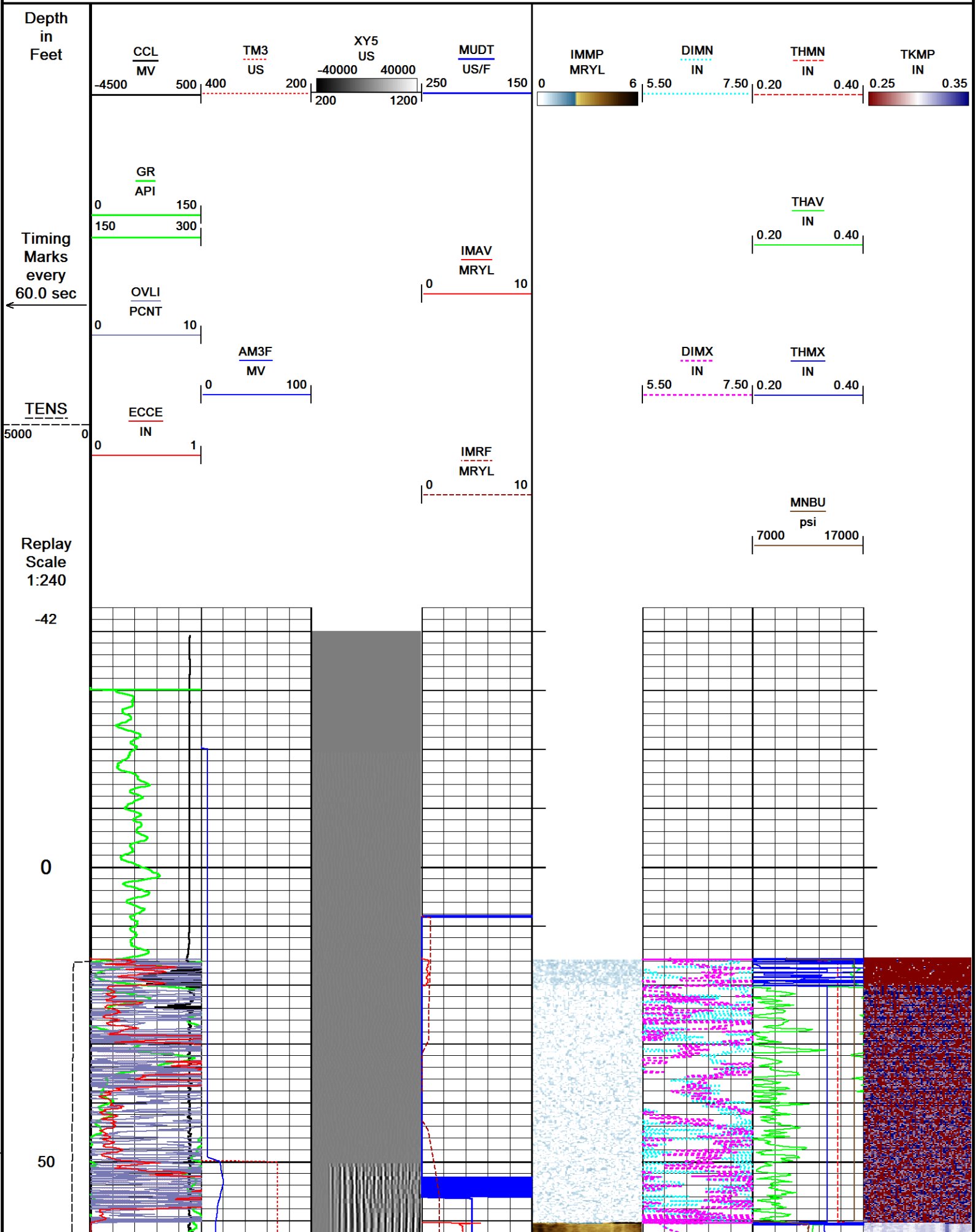
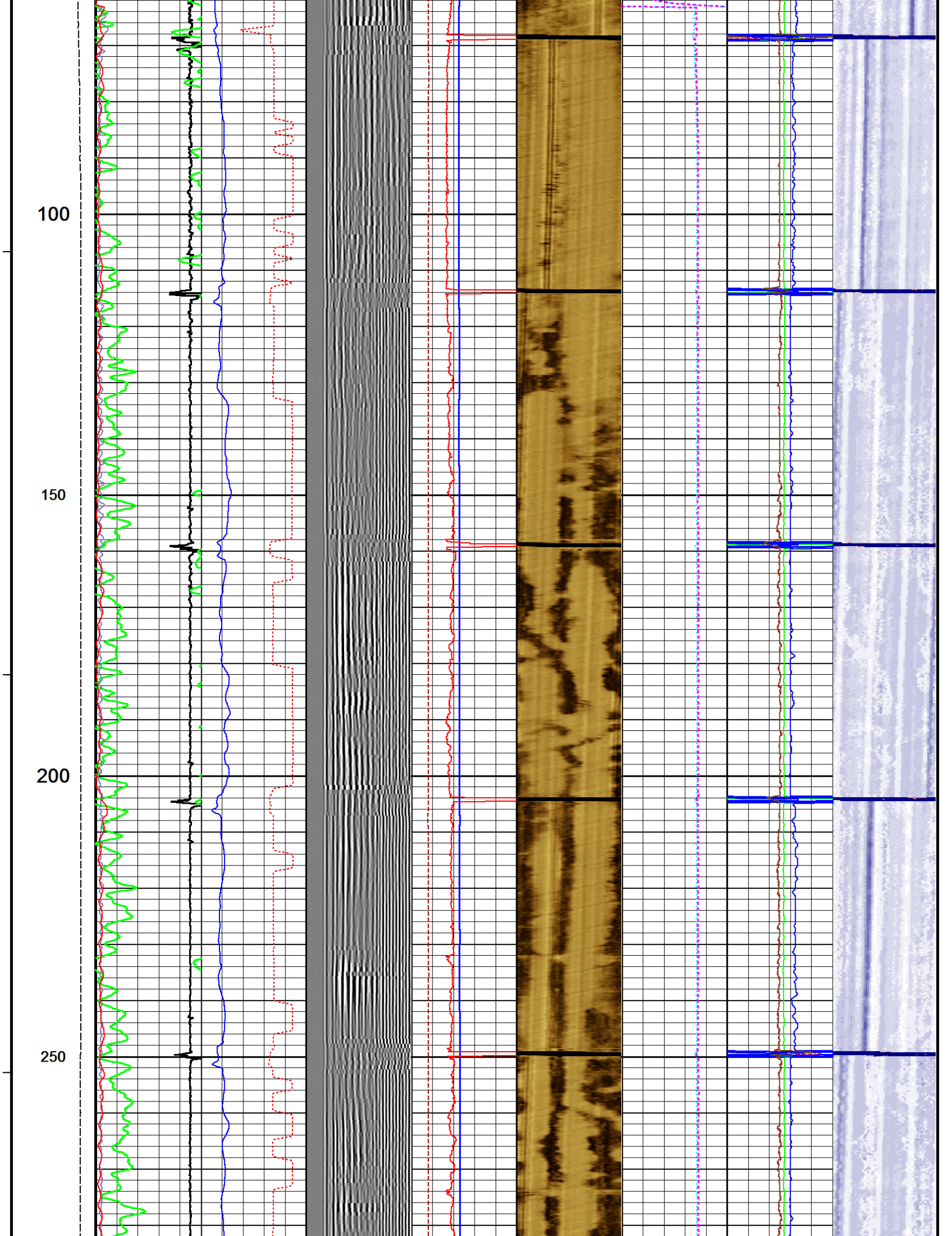
				SECUREVIEW			
Weatherford®				ULTRAVIEW / BONDVIEW			
				COMPOSITE			
COMPANY				BONANZA CREEK ENERGY			
WELL				NORTH PLATTE 21-24-28 HNC			
FIELD				WATTENBERG			
PROVINCE/COUNTY				WELD			
COUNTRY/STATE				US / COLORADO			
LOCATION				1424' FSL 1463' FWL			
SEC	TWP	RGE	Other Services				
Latitude		CALVIEW					
Longitude		CASING ANALYSIS LOG					
API Number		05-123-47009					
Permanent Datum GL, Elevation 4553 feet				Elevations:			
Log Measured From KB, 17.00 feet above Permanent Datum				KB 4570.00			
Drilling Measured From KB				DF 4570.00			
				GL 4553.00			
Date	18-OCT-2018			PERFORATION RECORD			
Run Number	ONE			Shot	Number	Depth From	Depth To
Service Order	18188-227112020			Density	of Shots	feet	feet
Type Log	URS/CBT						
Depth Driller	11657.00						
Depth Logger	6100.00						
Top Log Interval	0.00						
Bottom Log Interval	6100.00						
Hole Fluid Type	WATER						
Hole Fluid Level	0.00						
Restriction ID	4.892						
Max Recorded Temp	187.00			inches </td <td>Gun Type</td> <td></td> <td></td>	Gun Type		
Well Head Pressure	0.00			deg F	Gun Size		
Well Head Equipment	N/A			CASING / TUBING RECORD			
Time Well Ready	R.O.A.			Size	Weight	Depth From	Depth To
Time Logger Bottom	SEE LOG			inches	pounds/ft	feet	feet
Unit	14166			9.625	36.00	0.00	1629.00
Equipment Name	WSS-E			5.500	17.00	0.00	11680.00
Base	CASPER						
Recorded By	BASHEER A.						
Witnessed By	KURT D.						

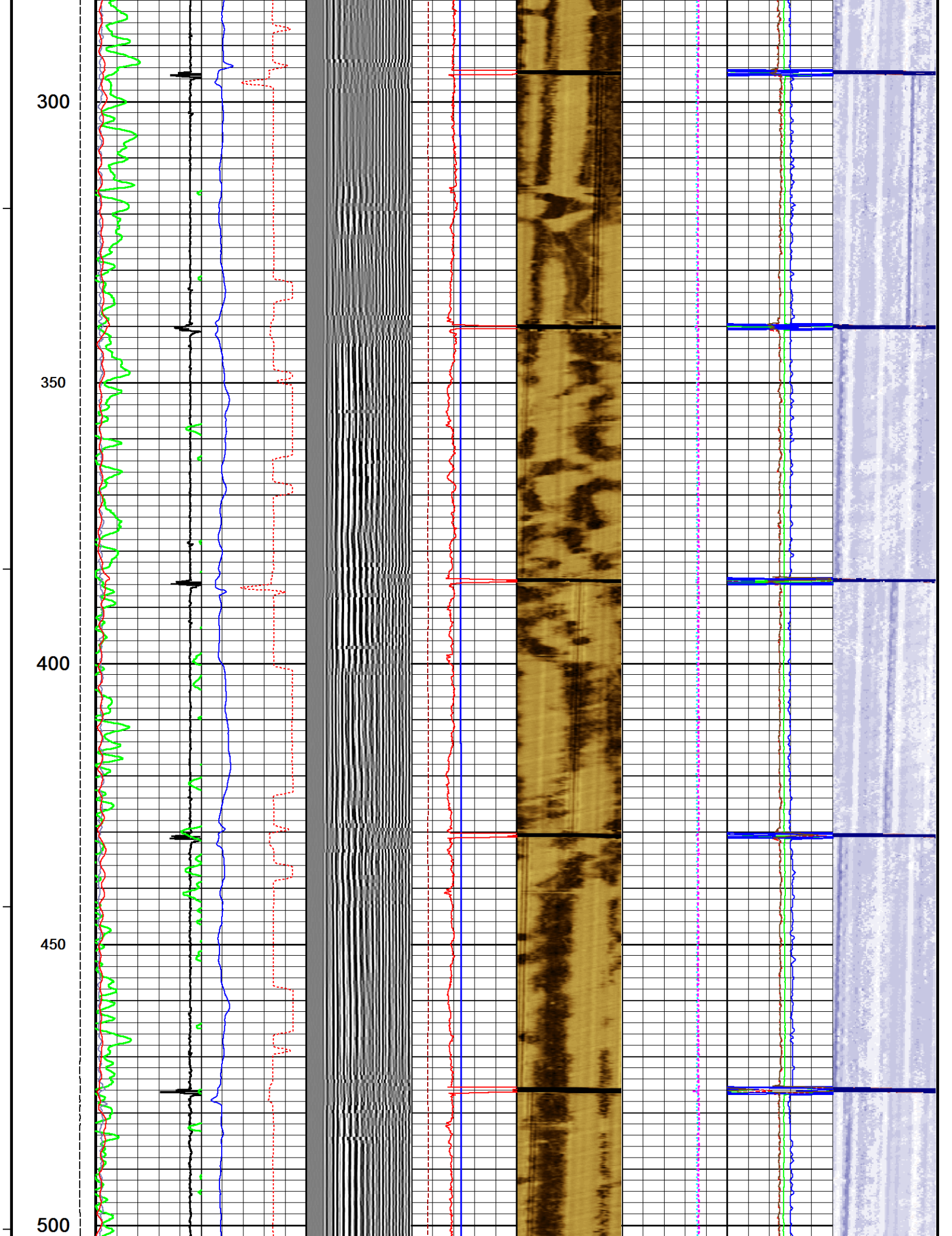
CASING / TUBING RECORD						
Type	Grade	TypeJoint	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
CASING	J-55	LT&C	9.625	0.00	1629.00	36.00
CASING	P-110	LT&C	5.500	0.00	11680.00	17.00

REMARKS
- SECUREVIEW ULTRAVIEW BONDVIEW LOG CORRELATED TO RIG KB @17.0 FT ABOVE GROUND LEVEL.
- 100% STANDARD FREE PIPE AMPLITUDE IN 5.5 INCH CASING IS 72 mV

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.





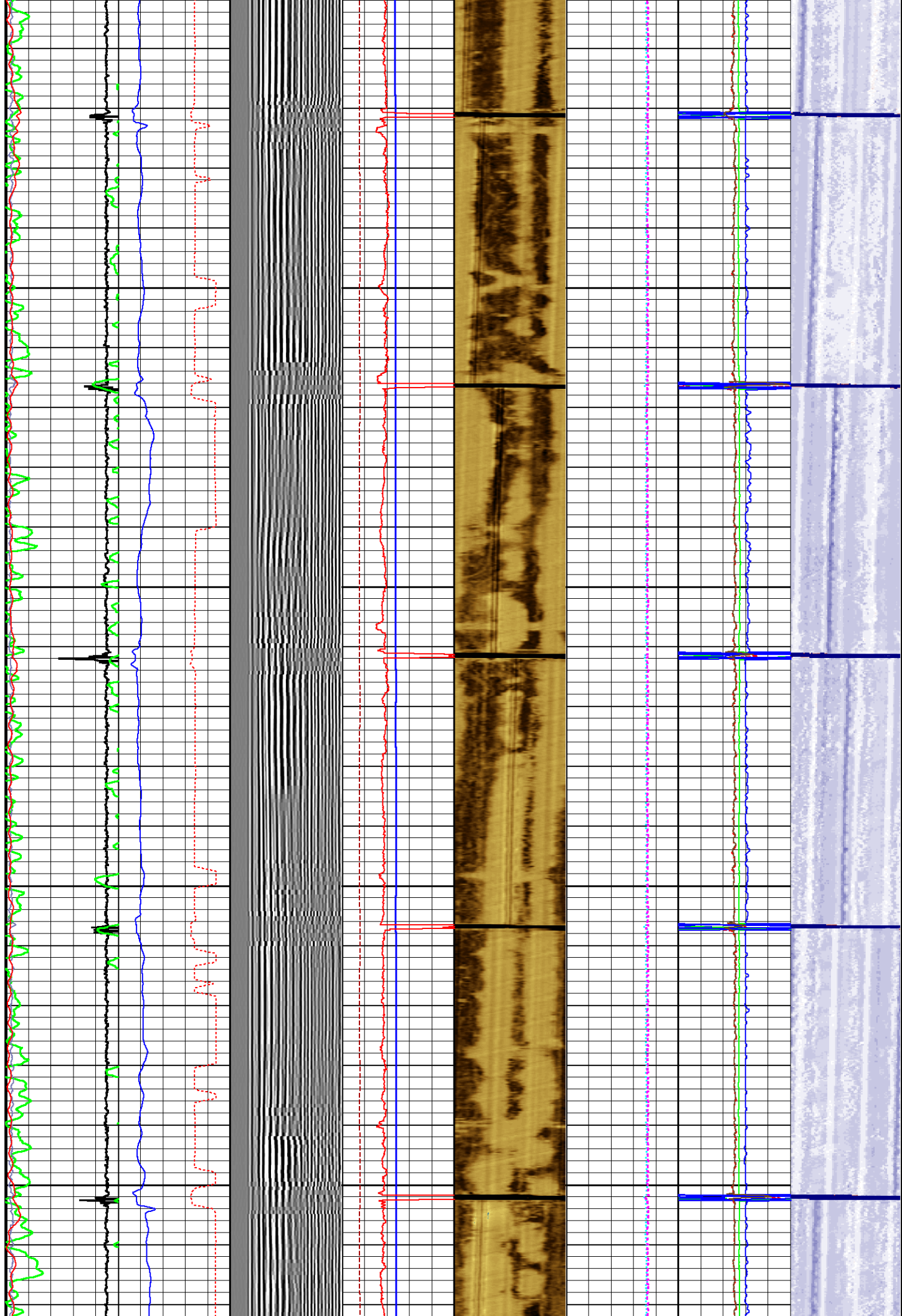


550

600

650

700

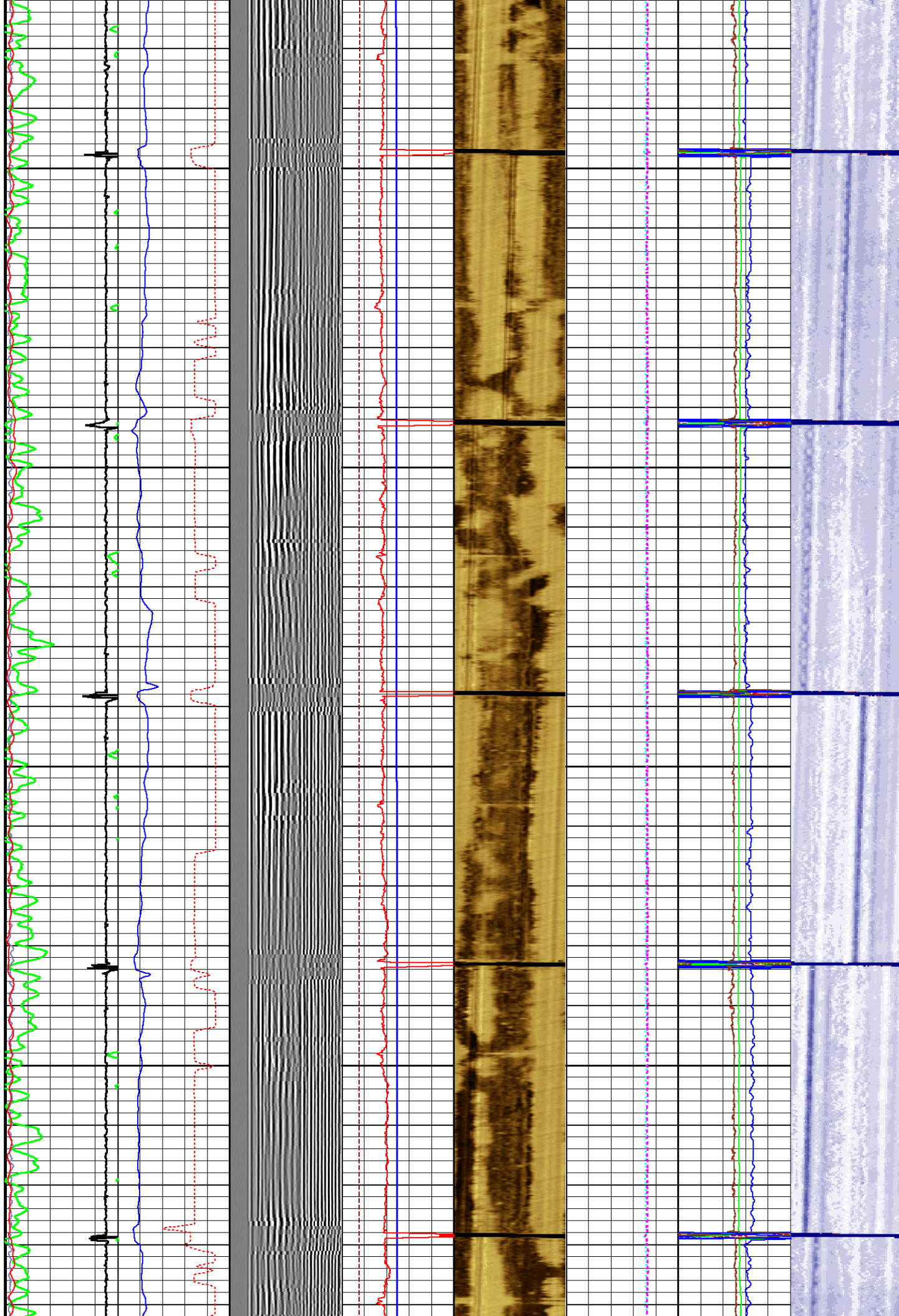


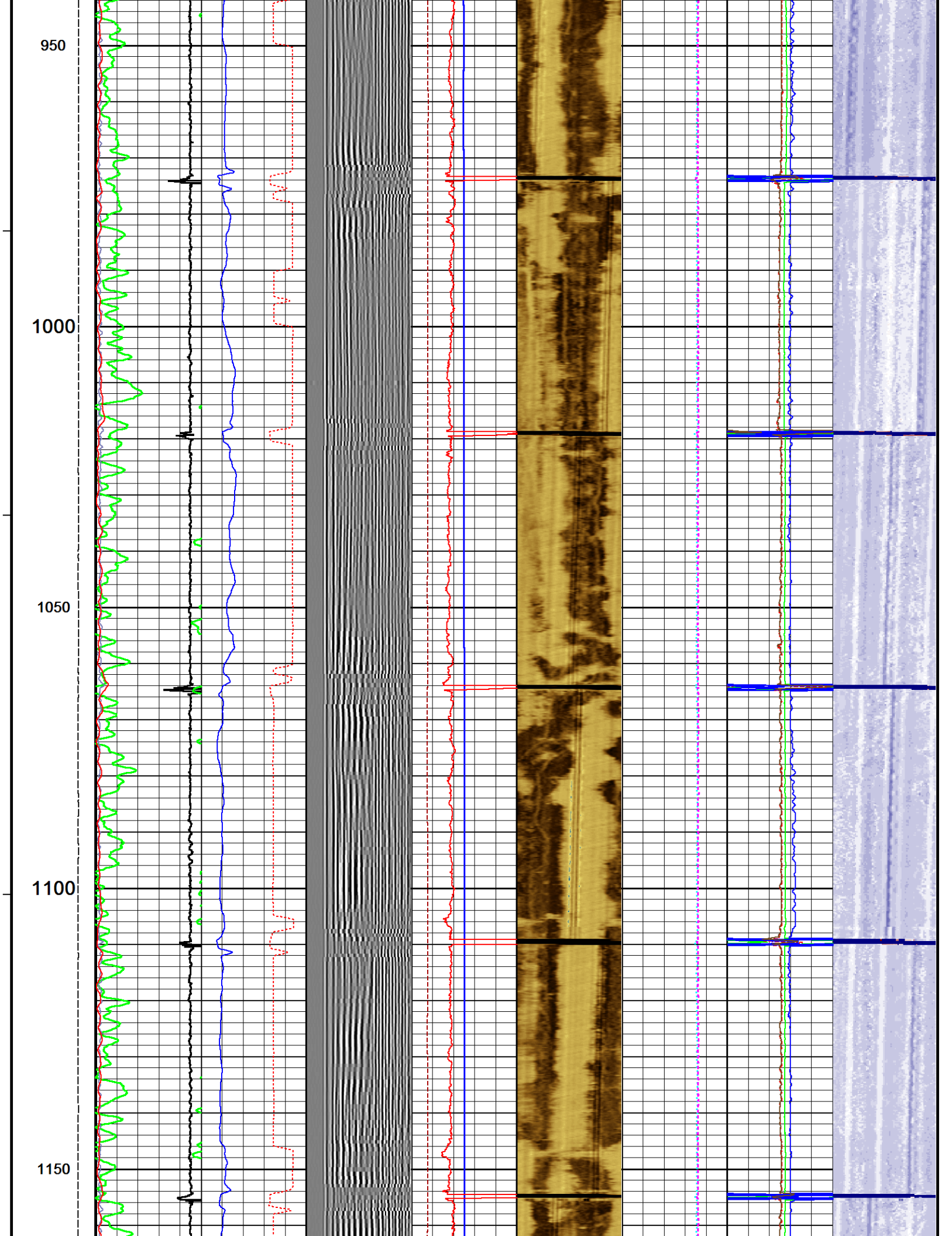
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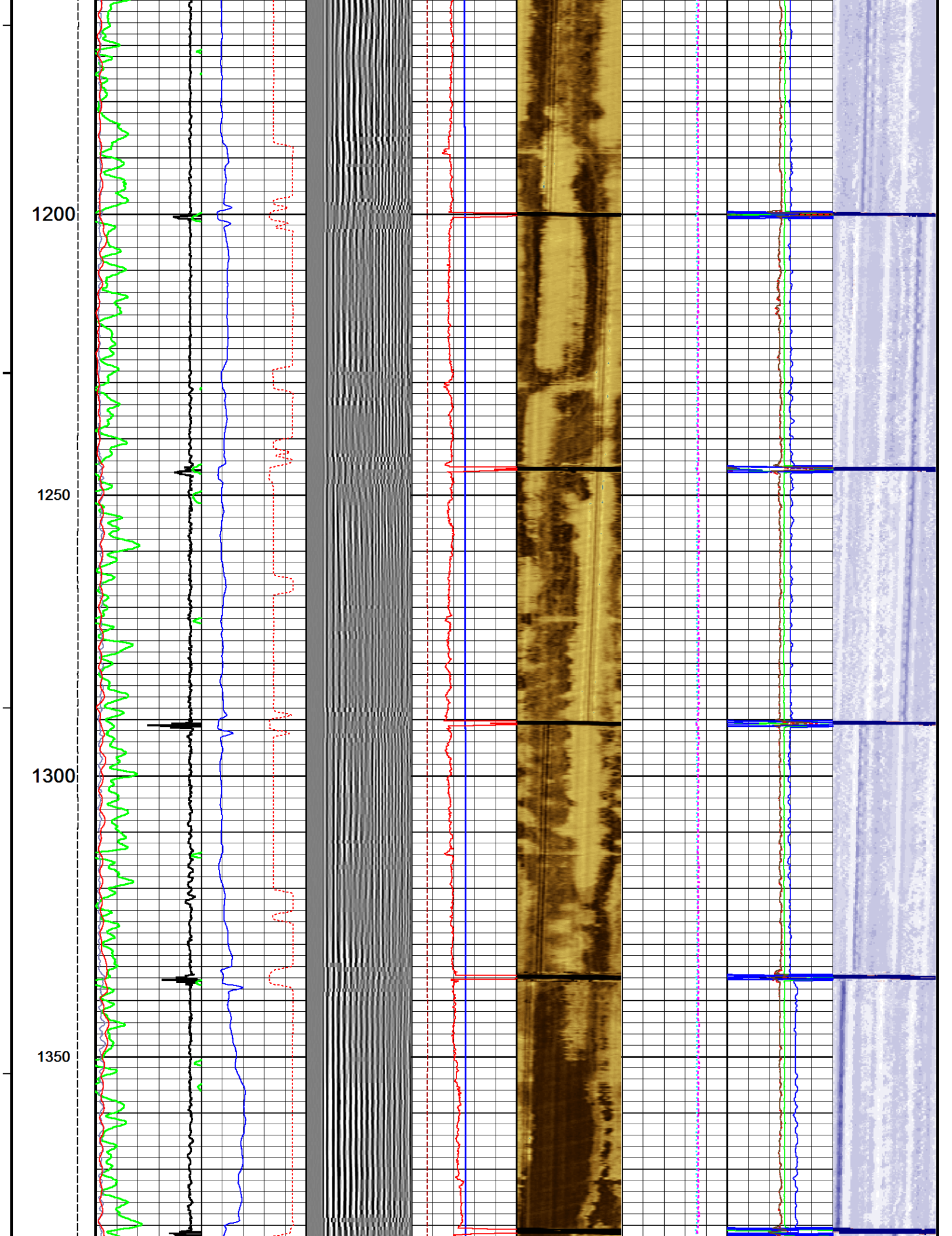
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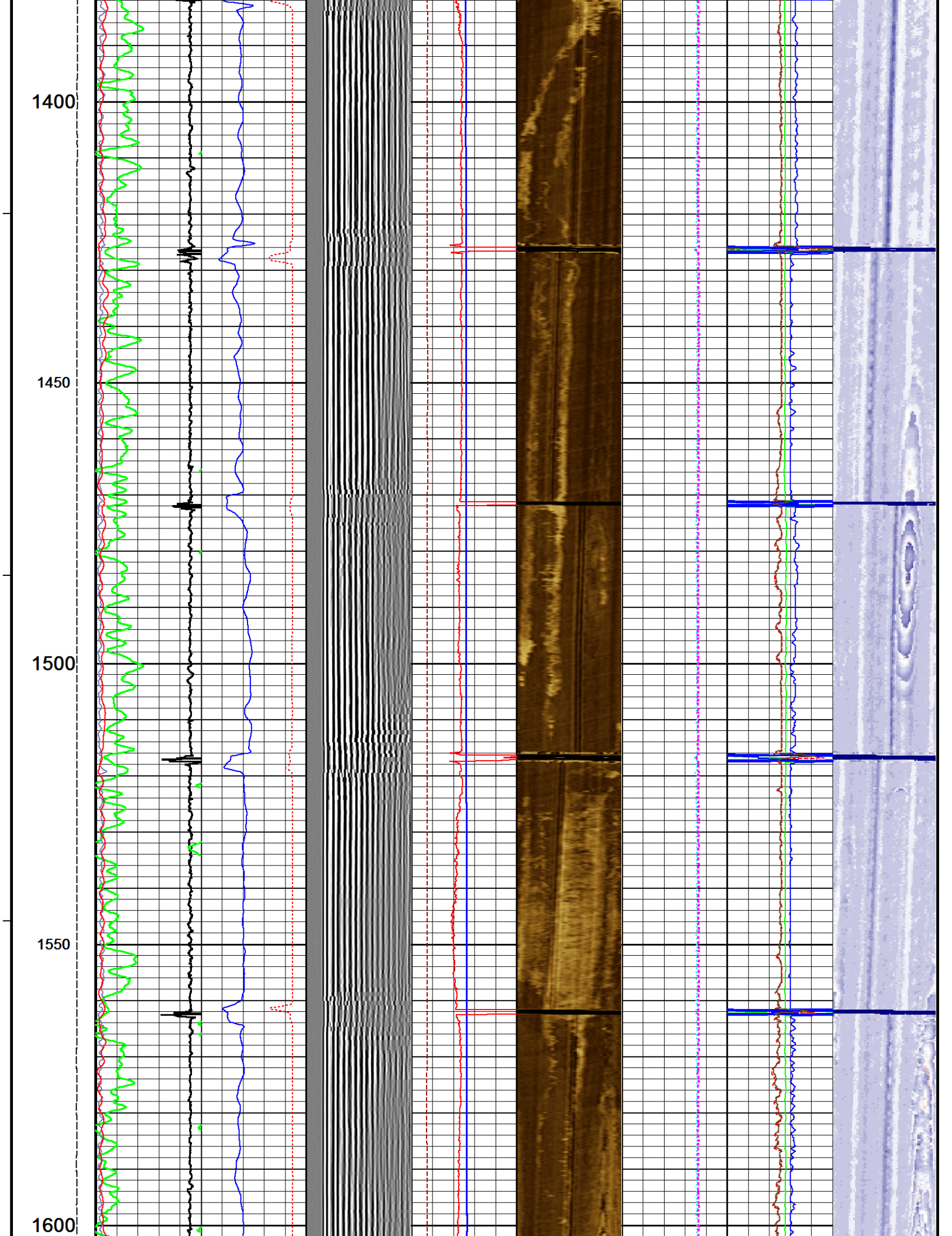
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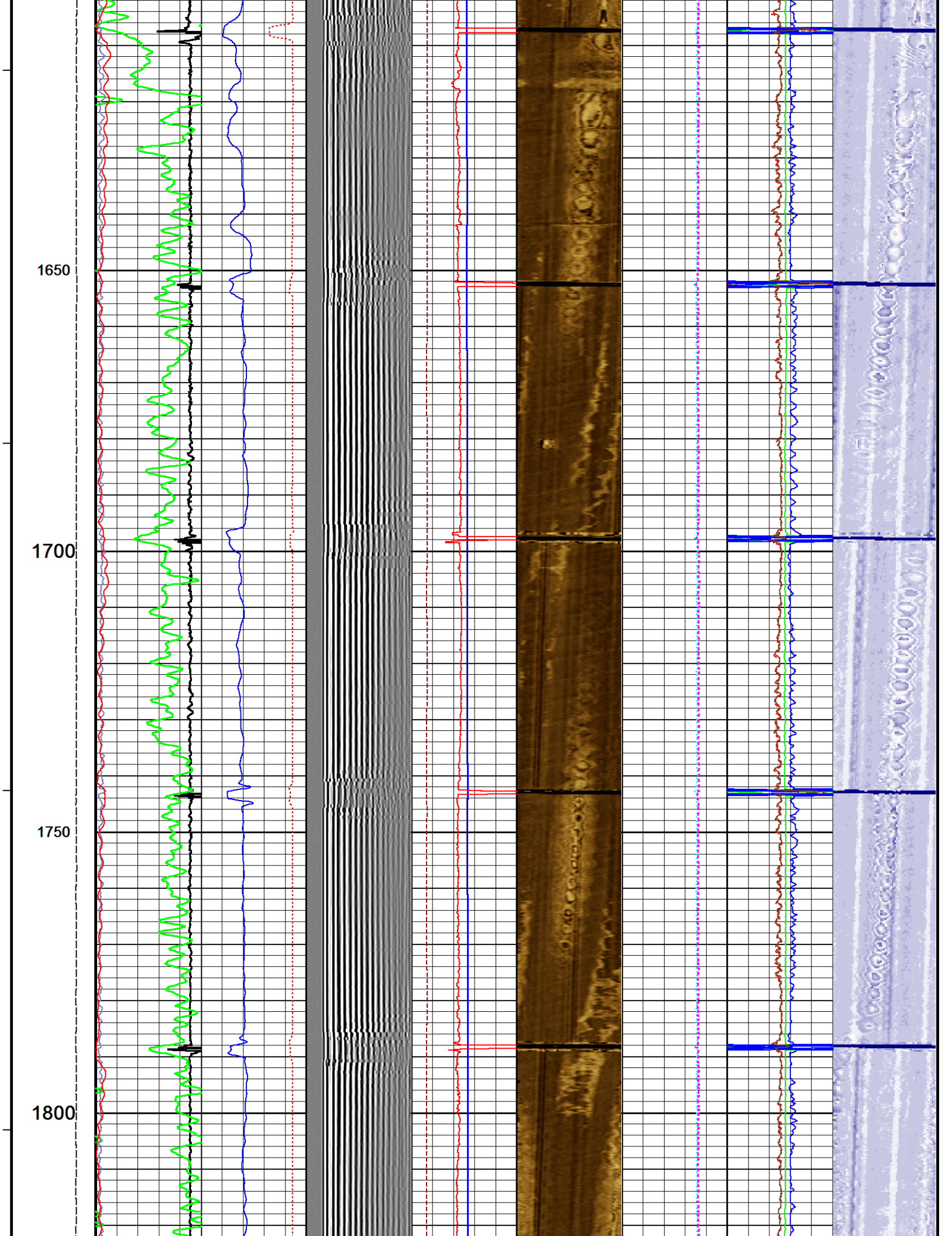
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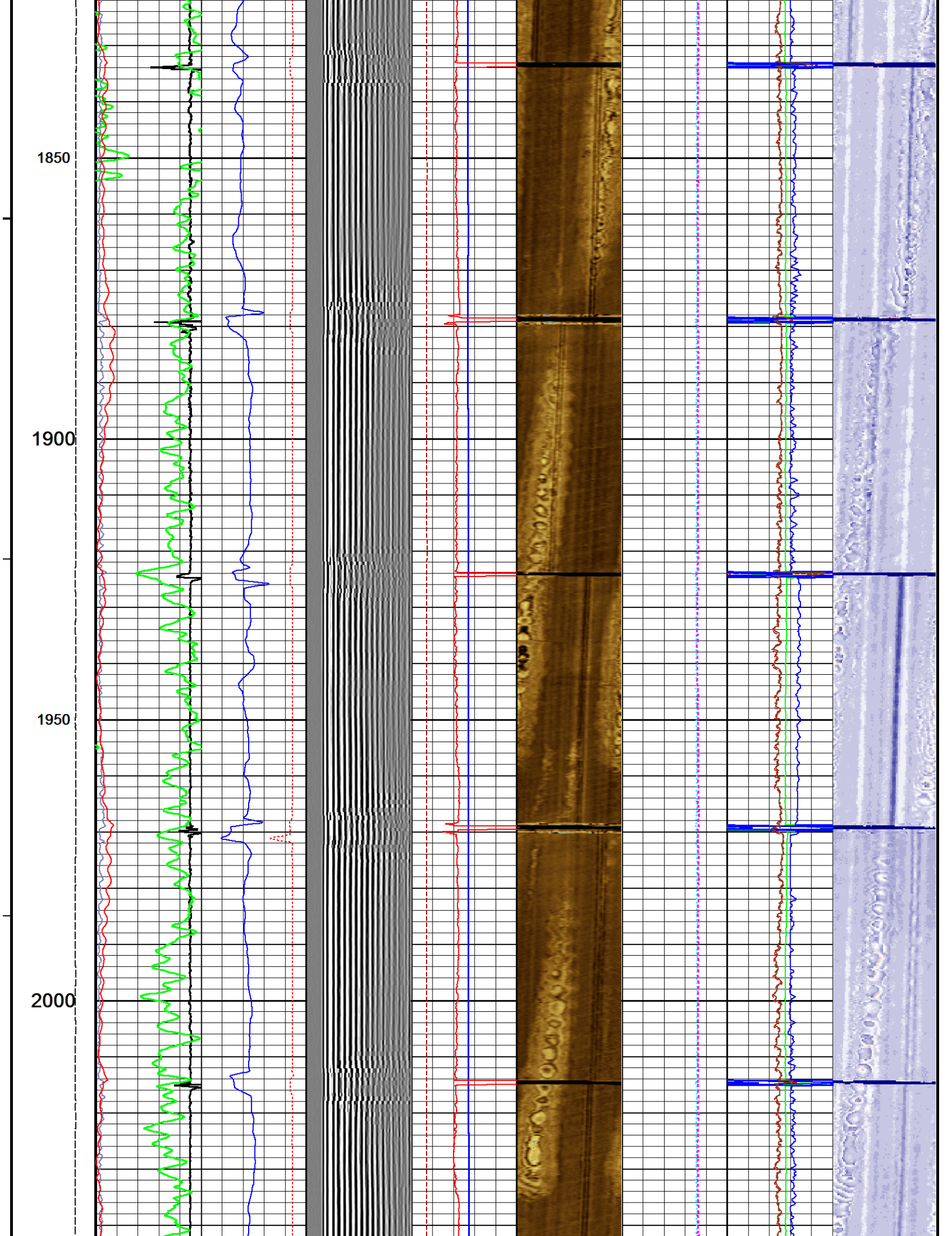


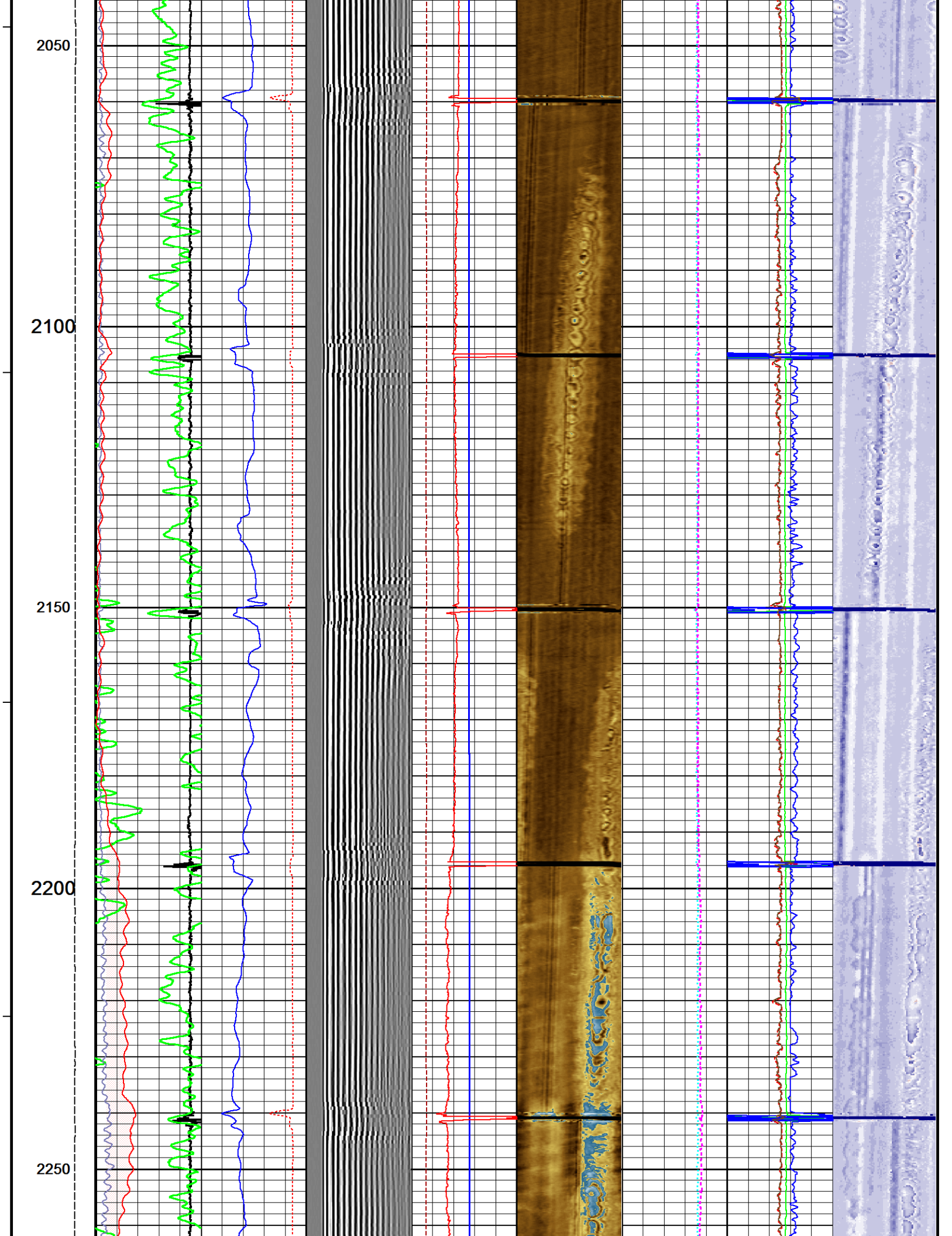


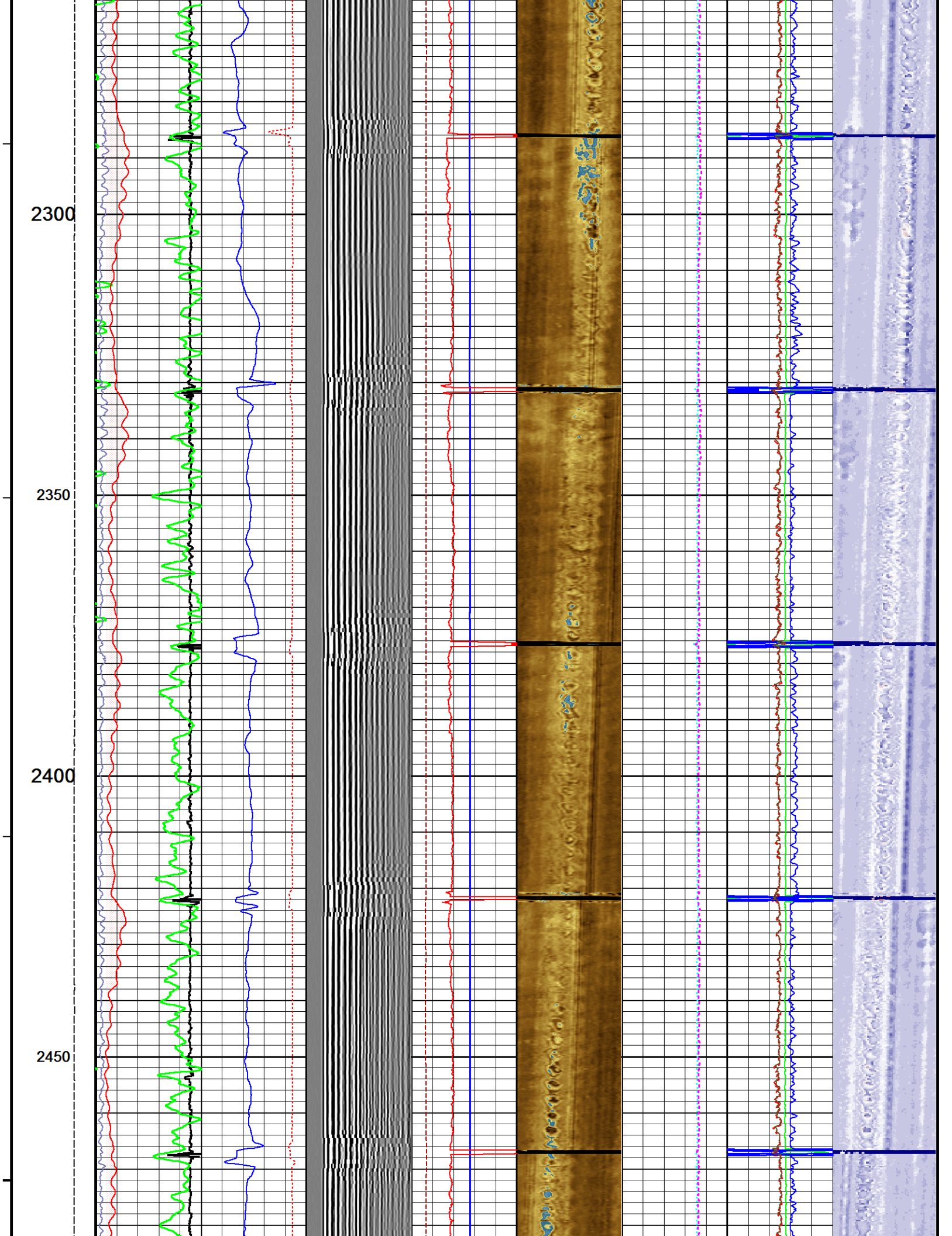


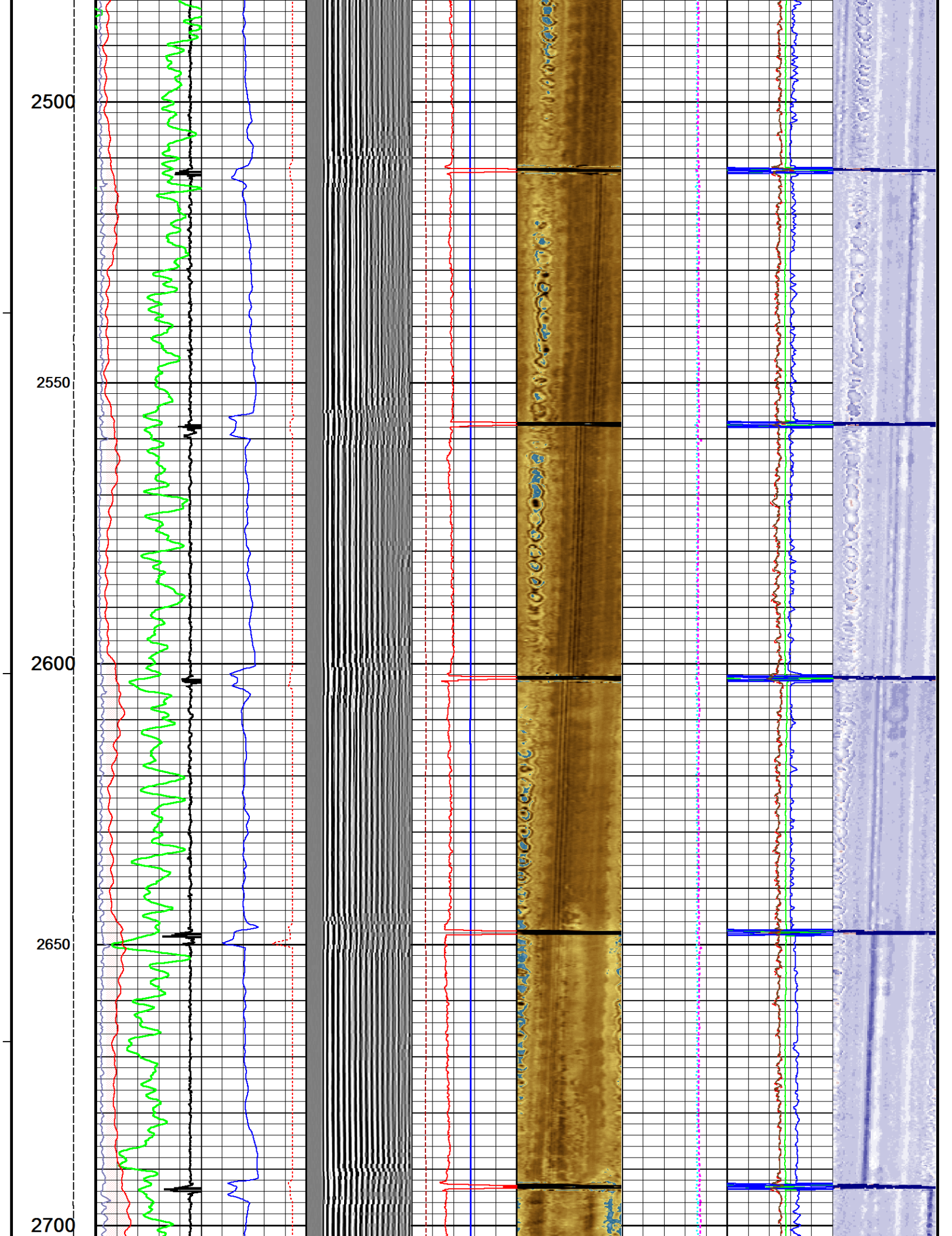


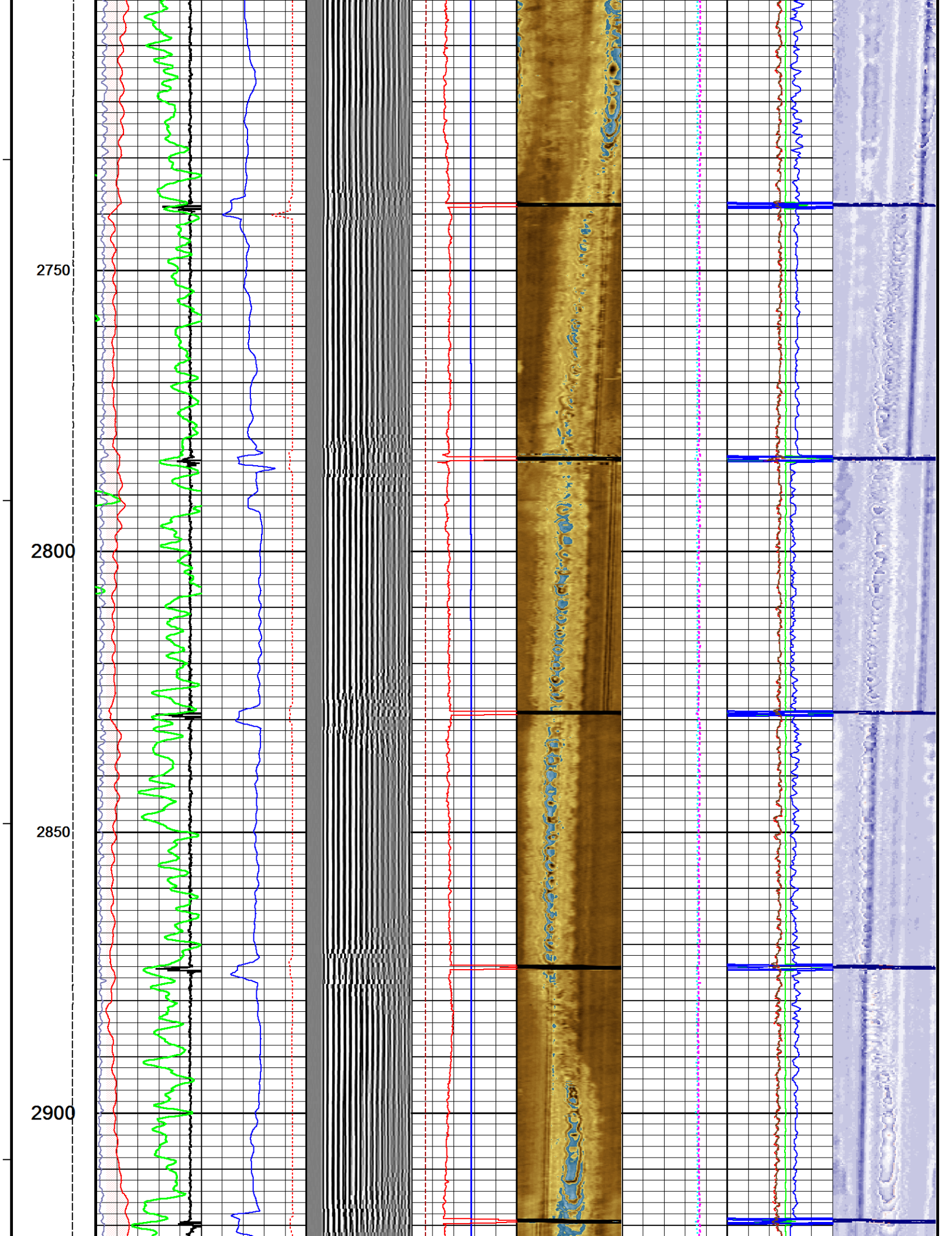


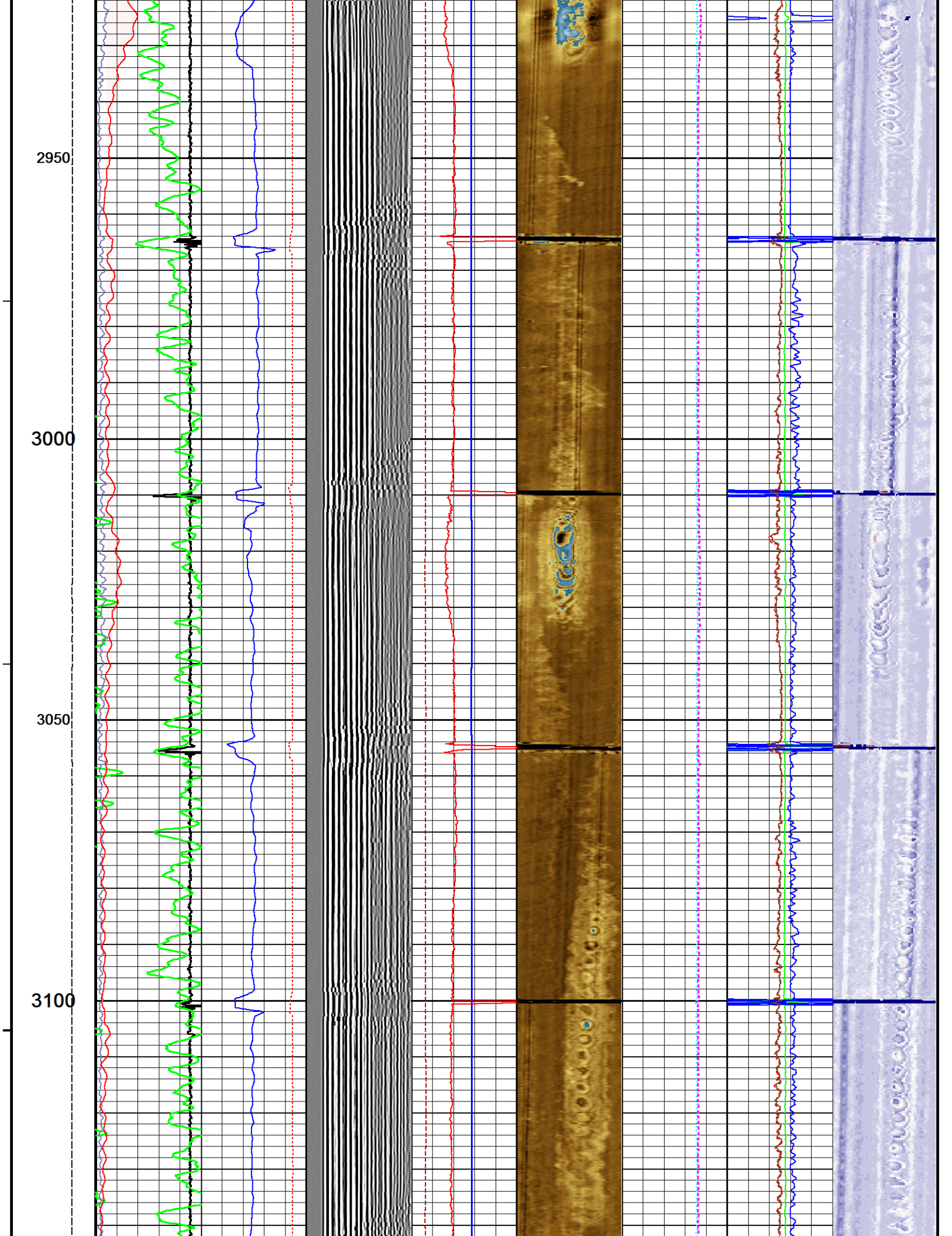


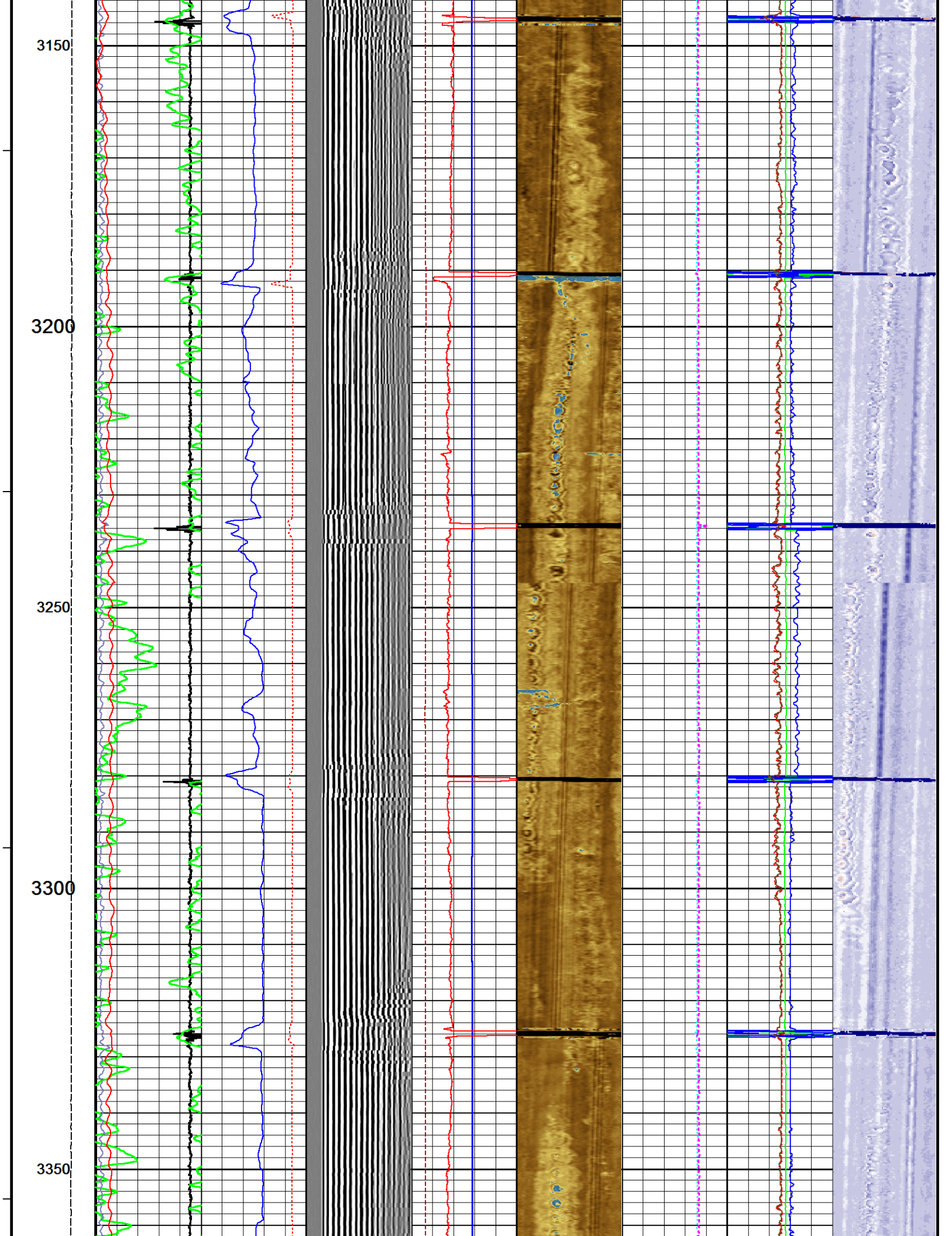


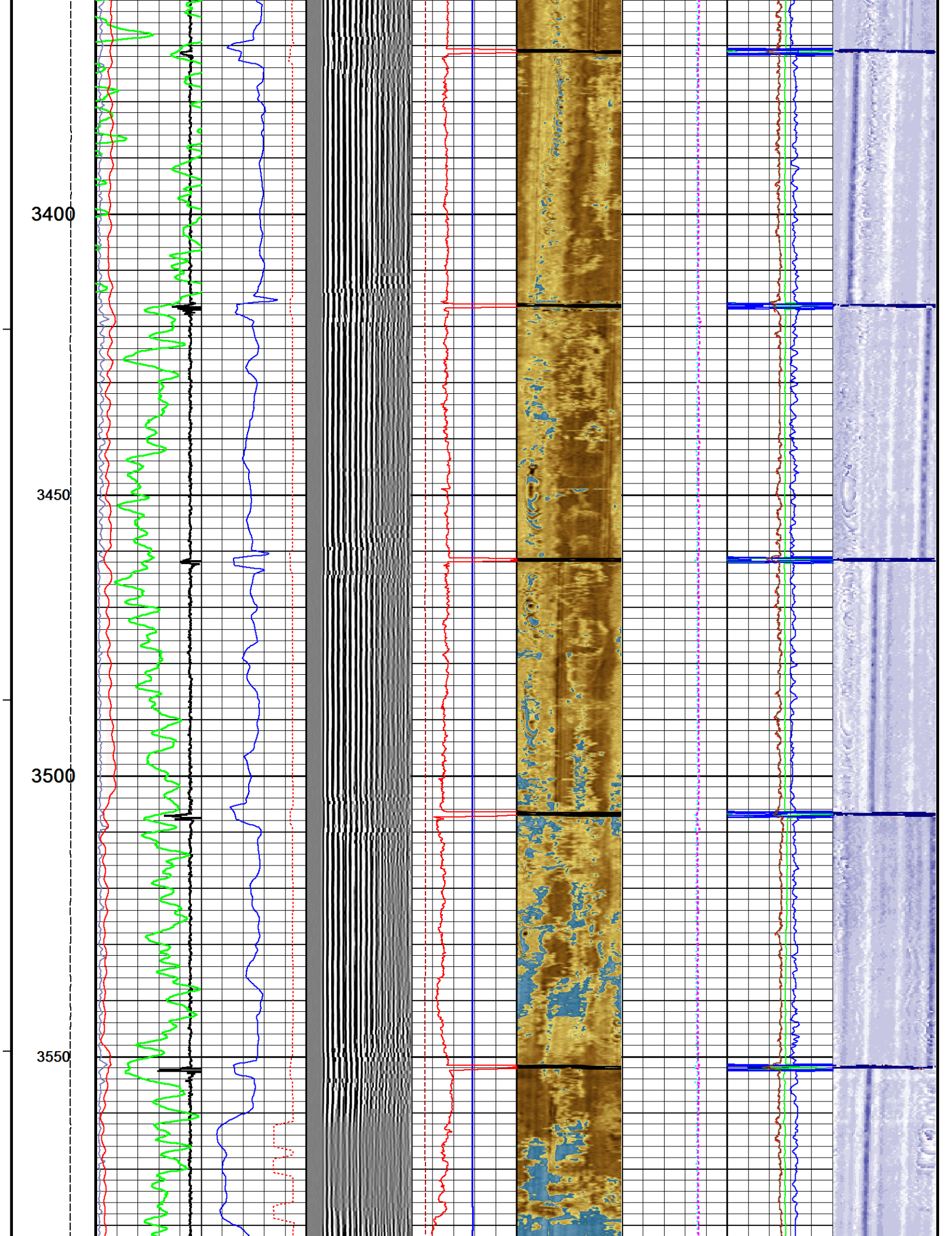


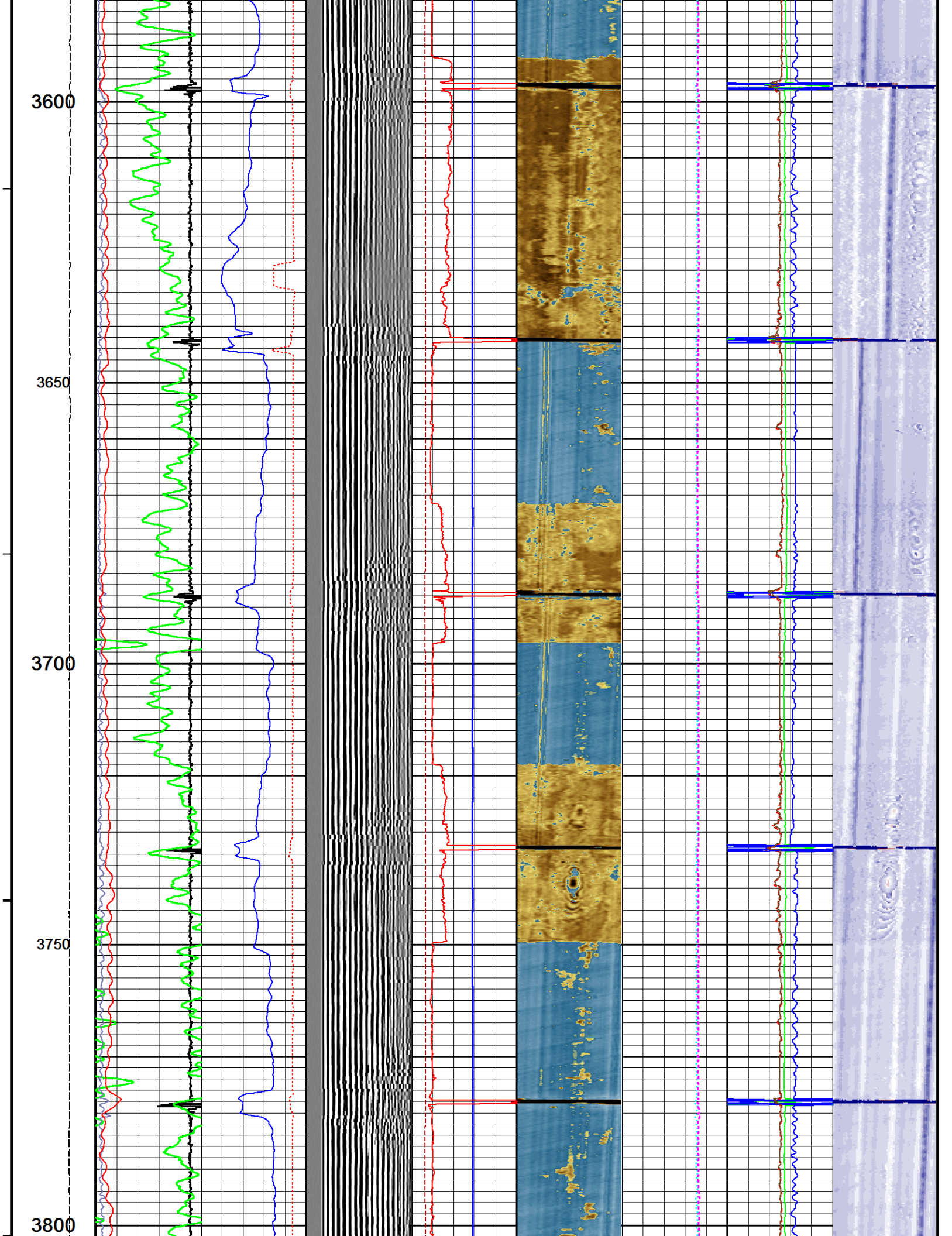


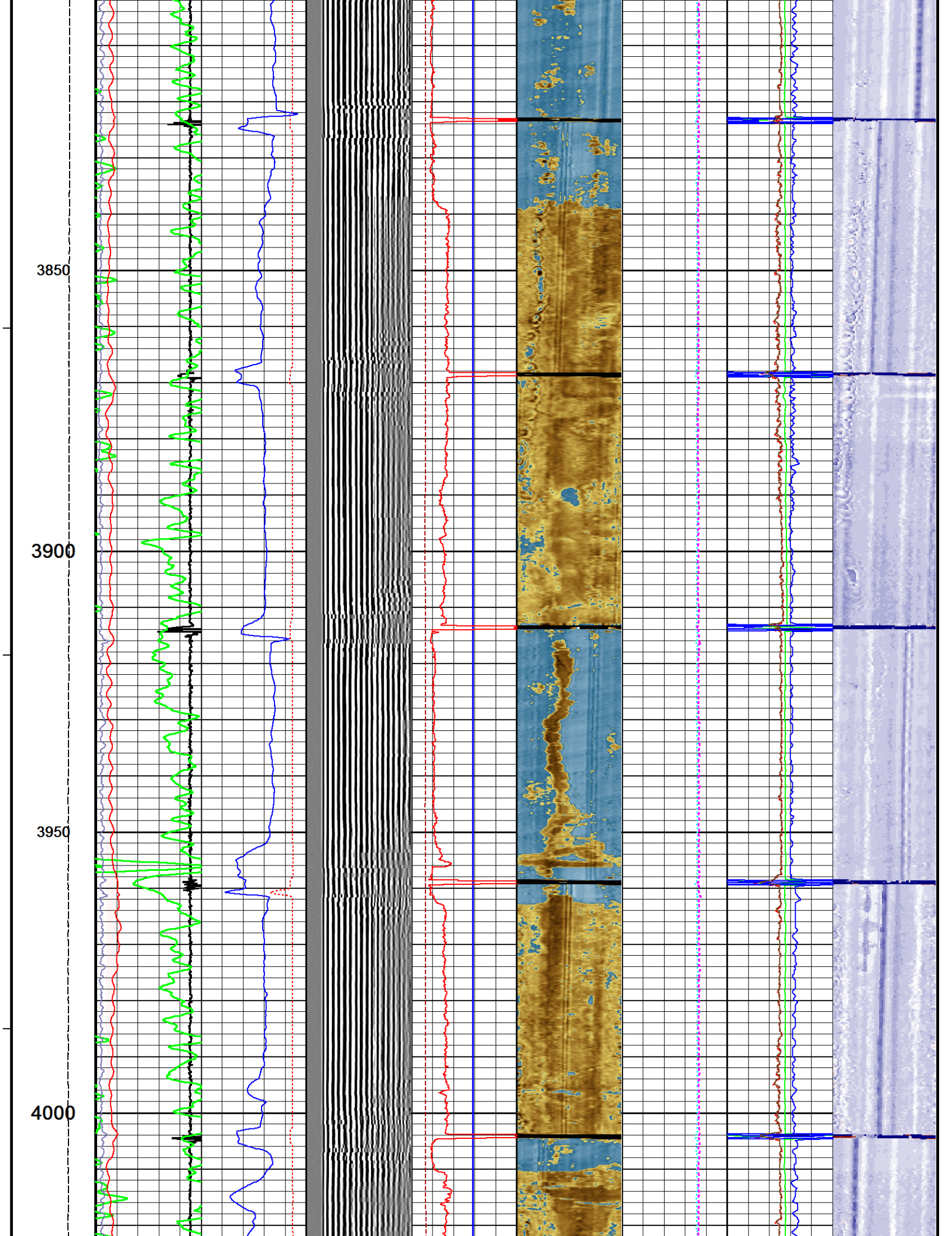


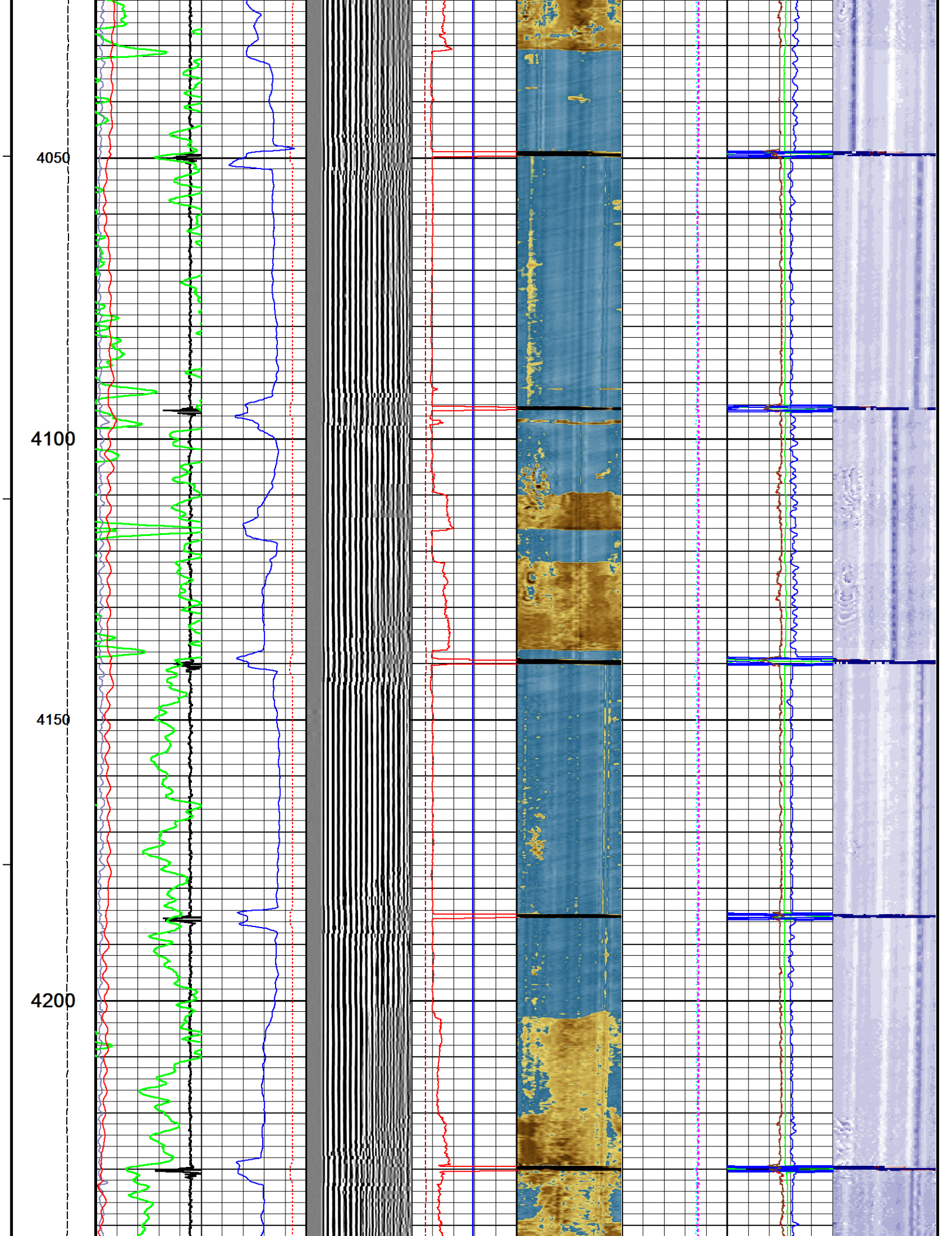


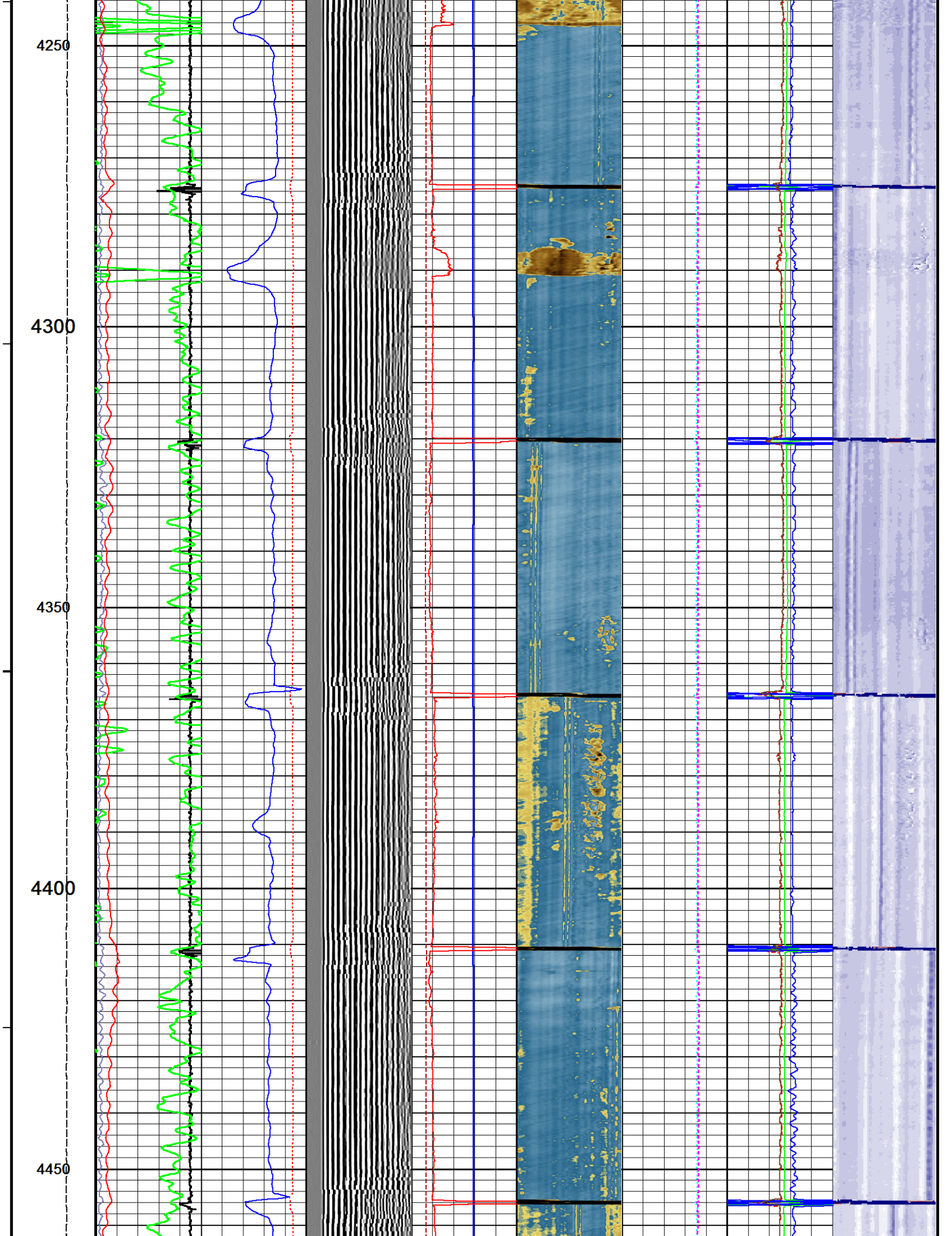


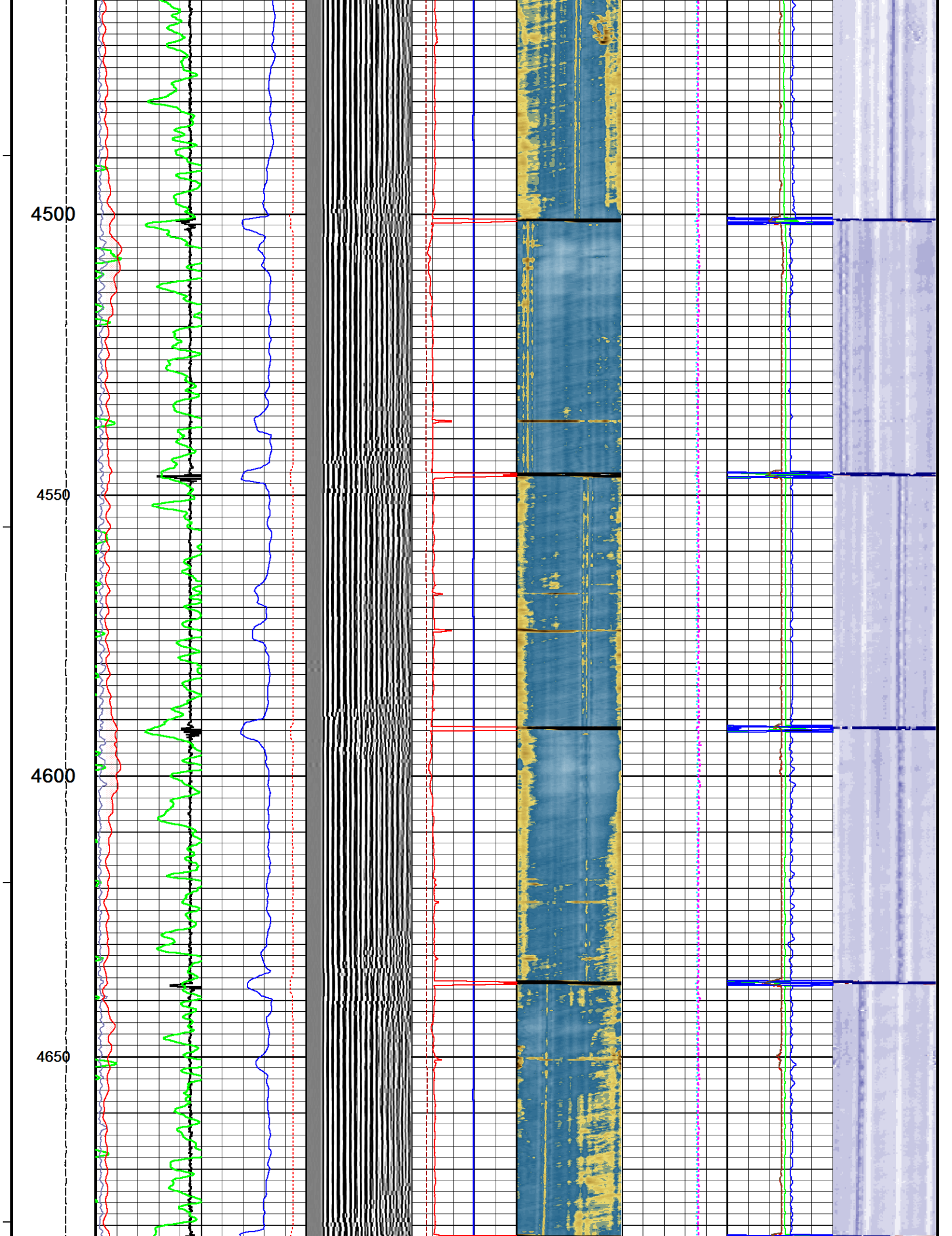


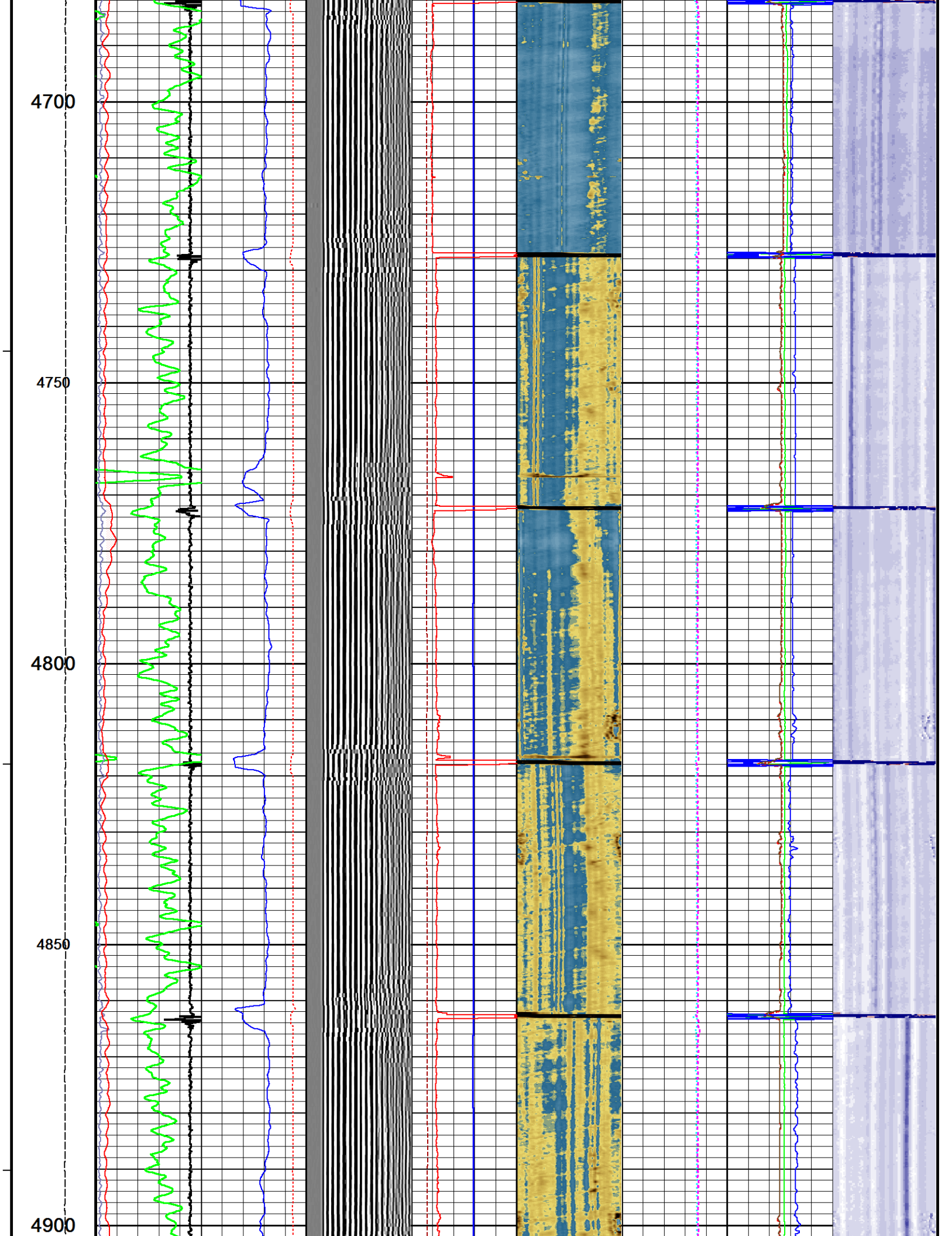


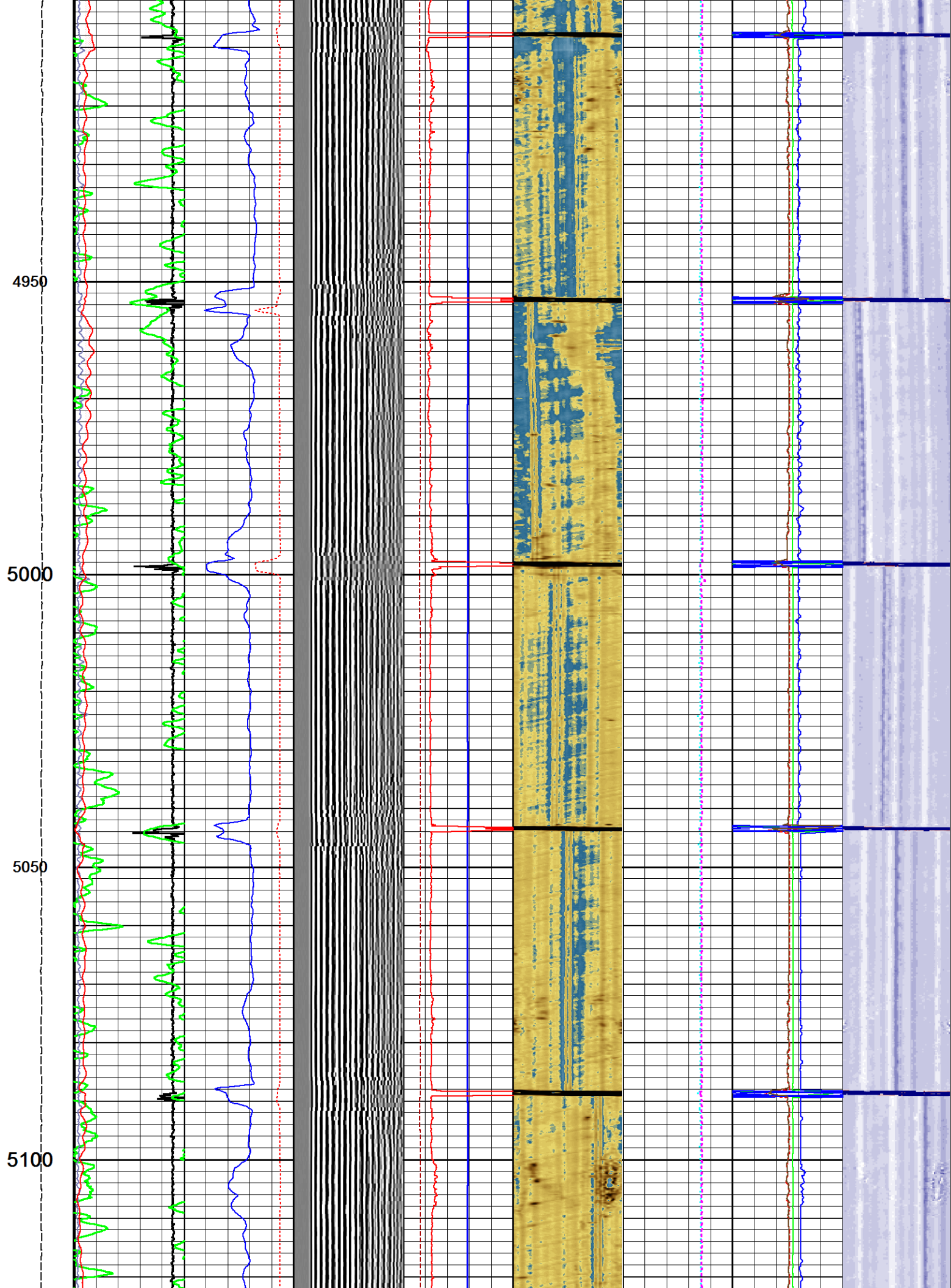


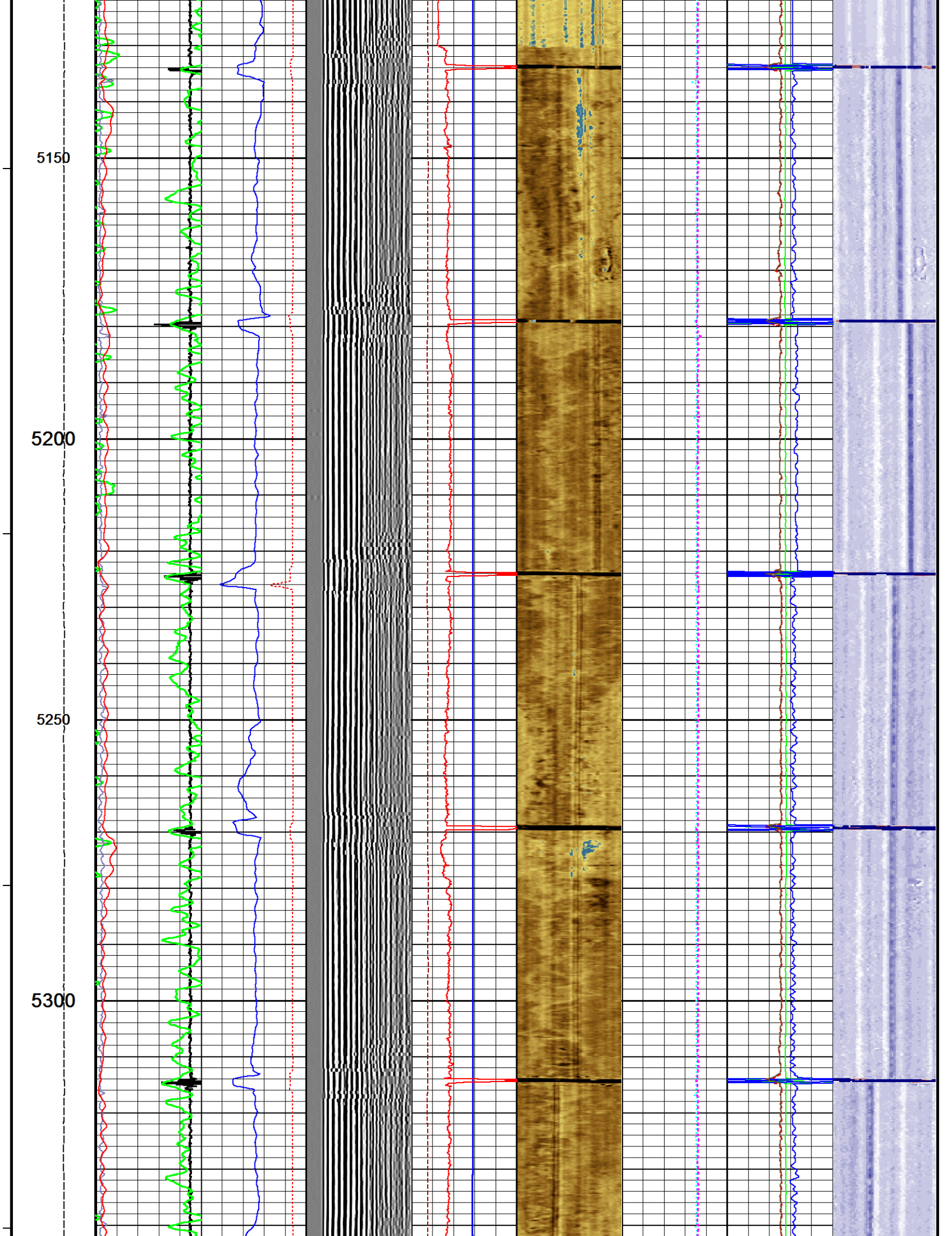












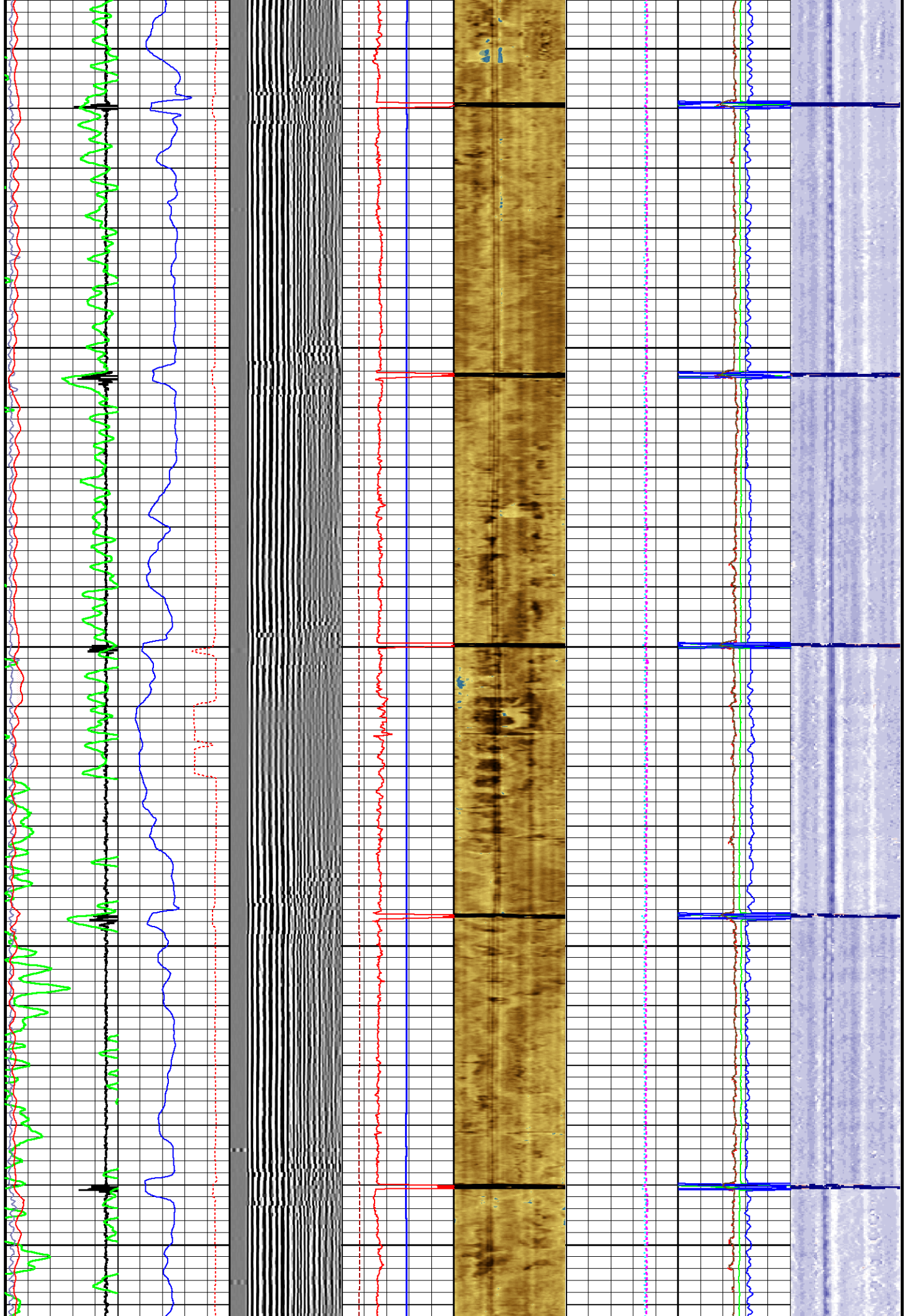
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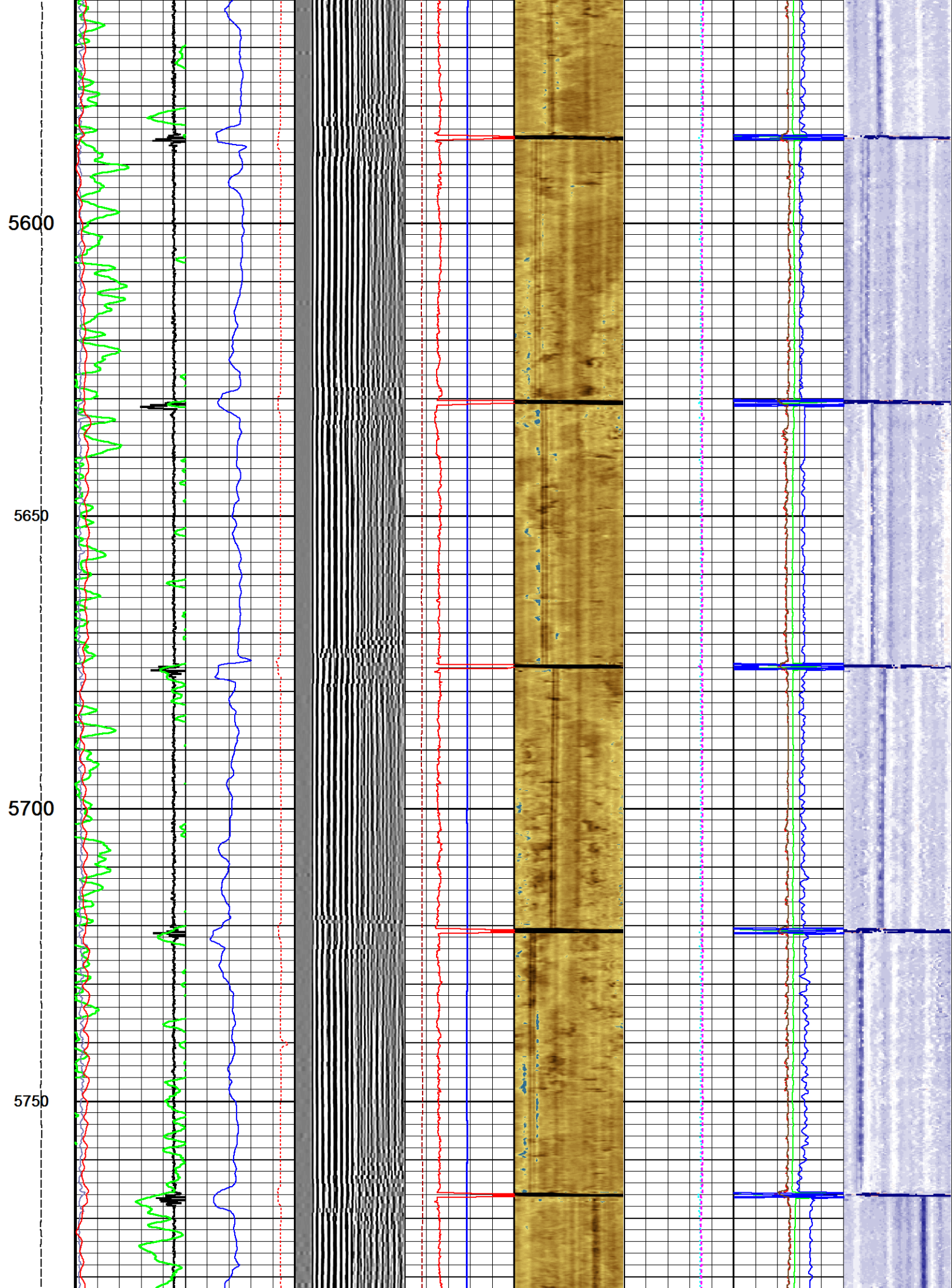
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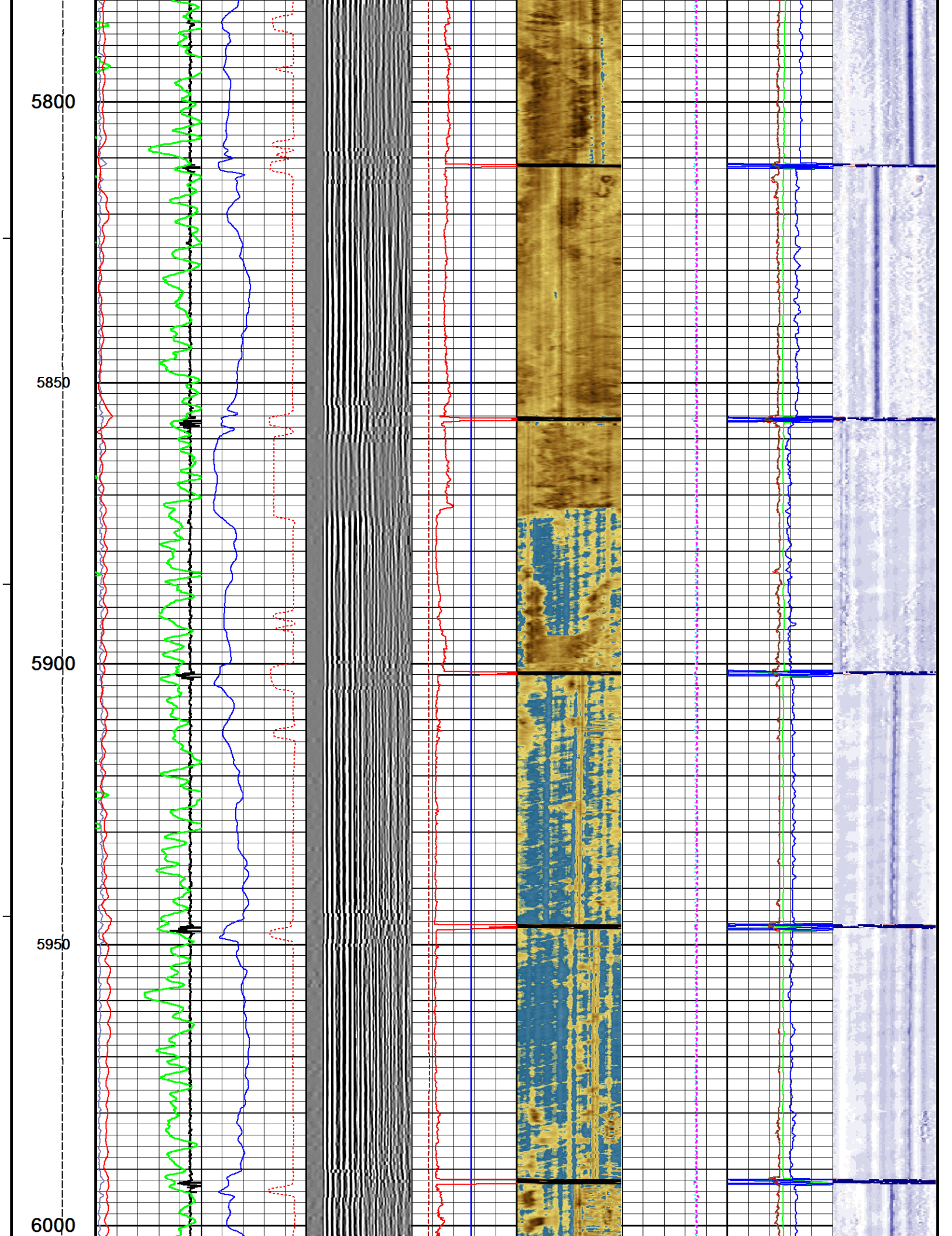
5450

5500

5550







6050

6100

6146

Depth
in
Feet

CCL
MV

TM3
US

XY5
US

MUDT
US/F

IMMP
MRYL

DIMN
IN

THMN
IN

TKMP
IN

-4500 500

400 200

-40000 40000

250 150

0 6

5.50 7.50

0.20 0.40

0.25 0.35

GR
API

0 150
150 300

OVLI
PCNT

0 10

AM3F
MV

0 100

IMAV
MRYL

0 10

THAV
IN

0.20 0.40

DIMX
IN

5.50 7.50

THMX
IN

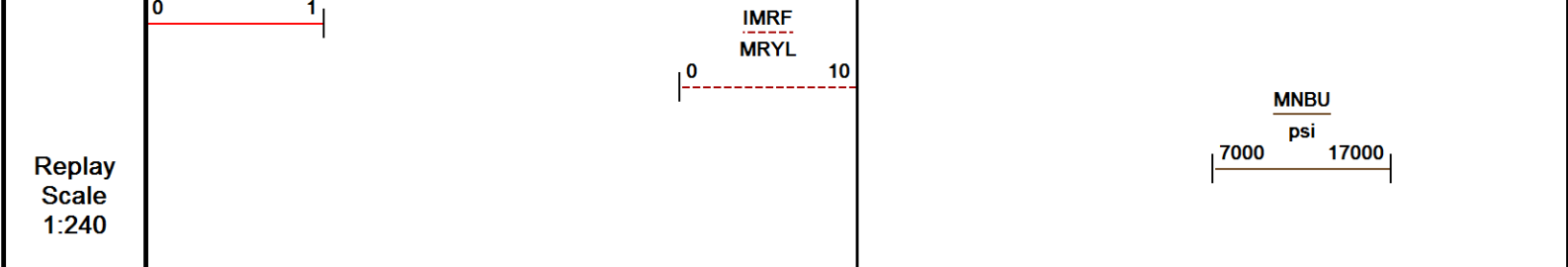
0.20 0.40

Timing
Marks
every
60.0 sec
←

TENS

ECCE
IN

5000 0



Depth Based Data - Maximum Sampling Increment 2.5cm

Plotted on 22-OCT-2018 13:50

Filename: C:\WLS\BONANZA CREEK\NORTH PLATTE 21-24-28 HNC\MAIN PASS FINAL.dta

Recorded on 18-OCT-2018 14:54

System Versions: Processed with 18.03.9328 Plotted with 18.03.9328

↑

MAIN PASS

↑

↓

REPEAT PASS

↓

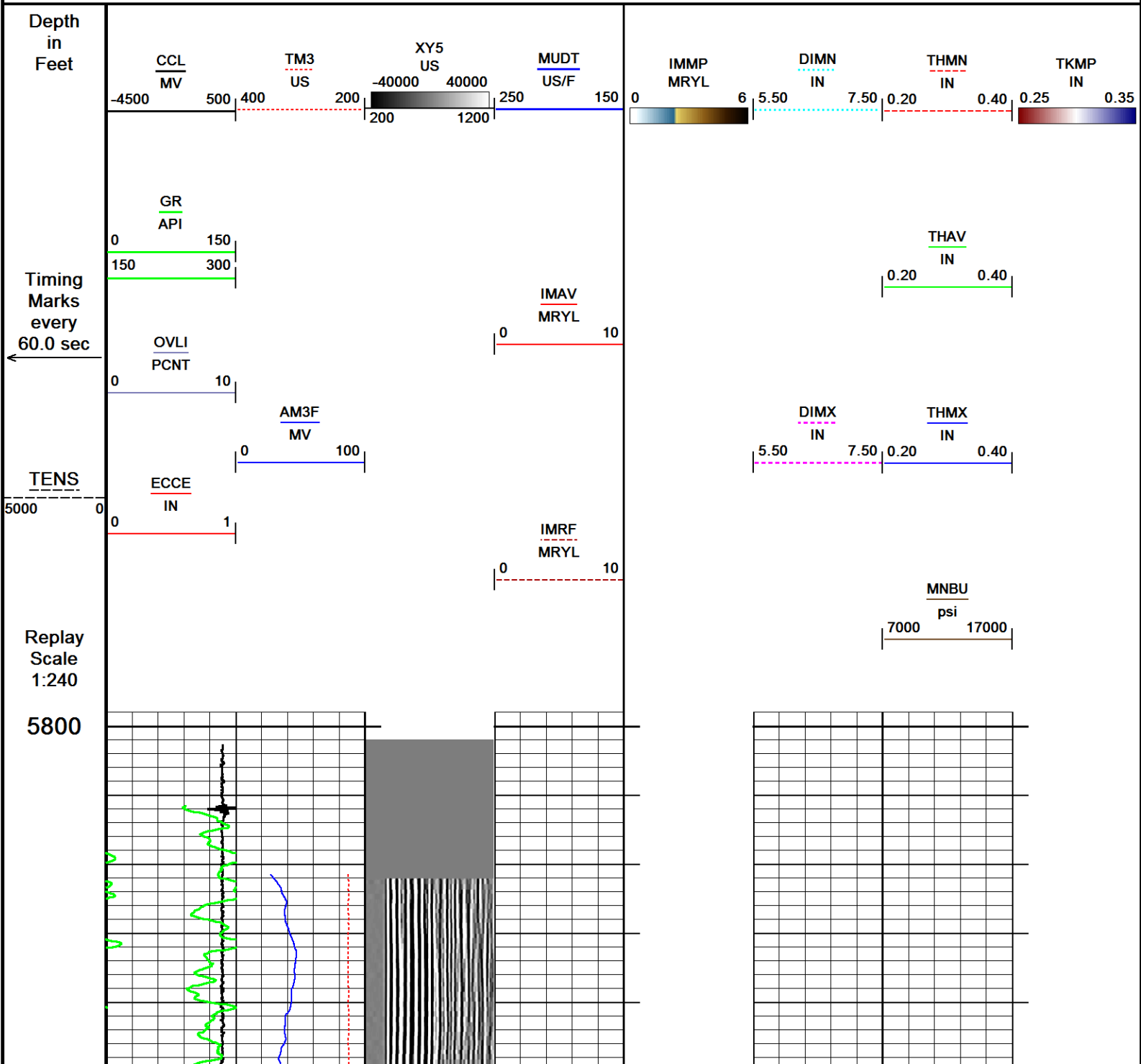
Depth Based Data - Maximum Sampling Increment 2.5cm

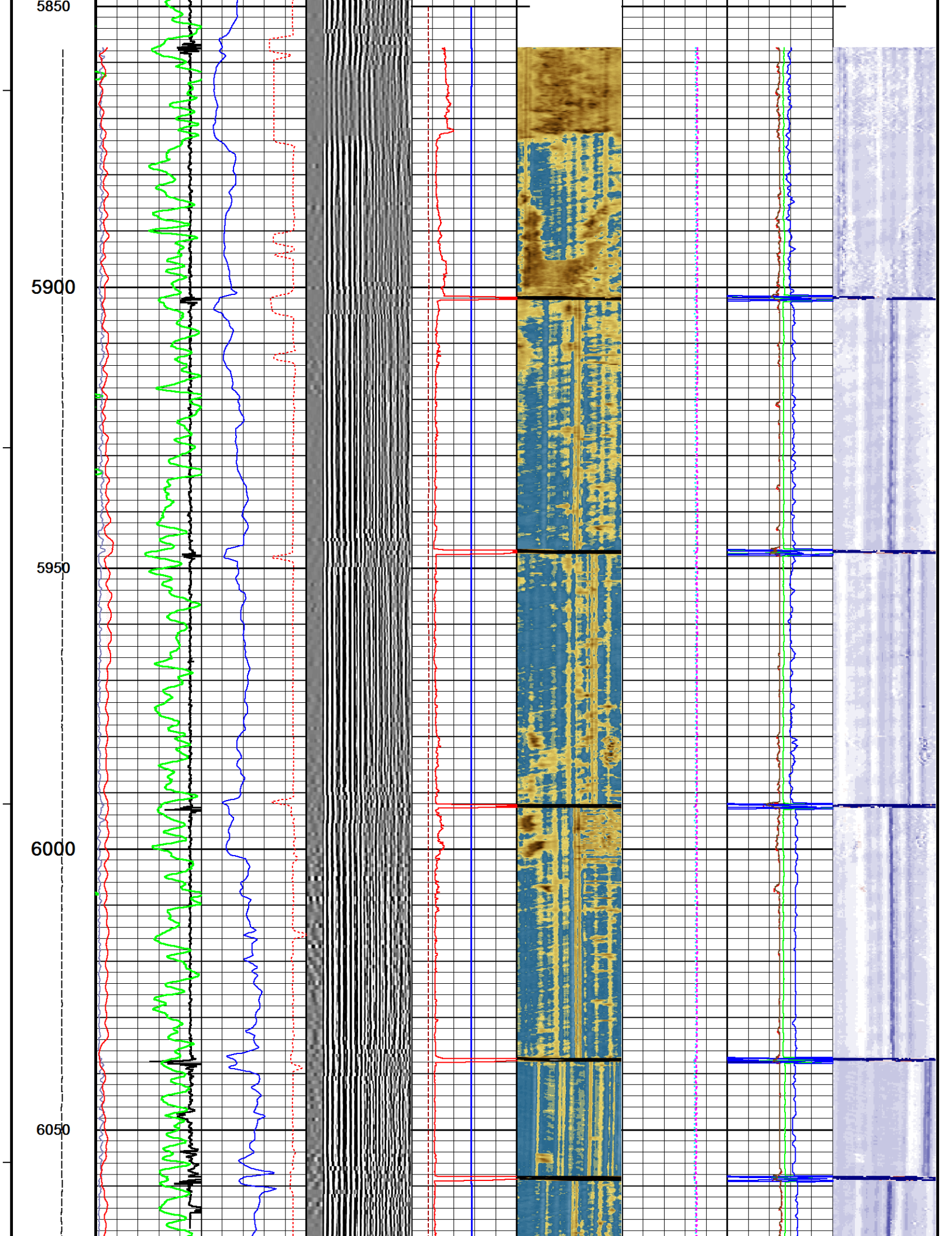
Plotted on 22-OCT-2018 13:50

Filename: C:\WLS\BONANZA CRE...\NORTH PLATEE 21-24-28 HNC - URS_ REPEAT PASS_001.dta

Recorded on 18-OCT-2018 23:09

System Versions: Logged with 18.03.9328 Plotted with 18.03.9328





Depth Based Data - Maximum Sampling Increment 2.5cm		Plotted on 22-OCT-2018 13:50
Filename: C:\WLS\BONANZA CRE...\NORTH PLATEE 21-24-28 HNC - URS_ REPEAT PASS_001.dta		Recorded on 18-OCT-2018 23:09
System Versions: Logged with 18.03.9328 Plotted with 18.03.9328		
↑	REPEAT PASS	↑

DOWNHOLE EQUIPMENT

C:\WLS\BONANZA CREEK\NORTH PLATTE 21-24-28 HNC\NORTH PLATTEE 21-24-28 HNC - URS 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 125 LG: 1.05 ft WT: 15.4 lb OD: 3.386 in

Casing Collar Locator, 55 pin
CCL-WA 198 LG: 3.01 ft WT: 19.8 lb OD: 2.756 in

Communication Cartridge 55pin 3-3/8in
WCC-DA 119 LG: 4.60 ft WT: 63.9 lb OD: 3.386 in

Gamma Ray
UGR-JD 135 LG: 4.60 ft WT: 81.6 lb OD: 3.386 in

55 pin Roller Centralizer
CEN-XA 196 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

Cement Bond Tool
CBT-AA 115 LG: 10.75 ft WT: 163.1 lb OD: 3.386 in

55.14 ft CCL - Collar Locator

47.05 ft GR - Gamma Ray

36.70 ft AM3F - Amplitude 3FT

36.70 ft TM3 - Travel Time 3FT

35.70 ft XY5 - XY Signature 5FT

55 pin Roller Centralizer
CEN-XA 225 LG: 4.49 ft WT: 86.0 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

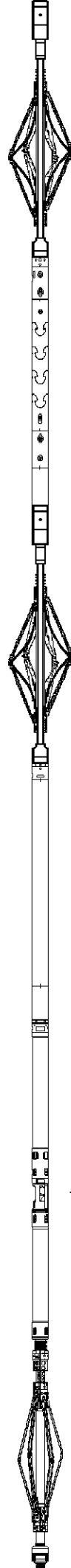
55 pin Roller Centralizer
CEN-XA 213 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

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

URS Sonde Section
USS-AB 189 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: 58.06 ft Weight: 954.6 lb



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

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 MNDL - Min Diameter



All measurements relative to tool zero.

SHOP AND FIELD CALIBRATIONS

C:\WLS\BONANZA CREEK\NORTH PLATTE 21-24-28 HNC\MAIN PASS FINAL.dta

CBT Field Calibration CBT-AA 115

Field calibration on 18-OCT-2018 13:24

Cement Bond Tool Amplitude Field Calibration

Tool Type CBT-AA Serial No 115
Free Pipe Depth

Sensor	Description	Standard(mv)	Measured(mv)
AMP 3 FT	100 % Bond	5.60	1.28
	Free Pipe	72.00	632.00
AMP 5 FT	100 % Bond	0.90	1.80
	Free Pipe	48.00	740.00

CBT Constants CBT-AA 115

Last Edited on 18-OCT-2018 14:01

Min Ampl 100% Bond 5.63 MV
Max Ampl 0% Bond 71.77 MV
Cement Cmpr Strength 580 PSI
Casing Size 5.50 IN
Casing Weight 17.0 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 17-OCT-2018 13:00

Ultrasonic Radial Scanner Before Calibration

Tool Type USH-AB Serial No 136

	Measured	Minimum	Maximum	
Free Pipe	-999.250	0.000	0.000	MRYL
Mud Impedance	4.060	0.000	0.000	MRYL

URS Constants USH-AB 136

*** 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	3.50
ZMud Cal Area Ratio	3.60

** 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	1629.00	5.50	36.00	1.50	1.50	0.30	1.00
0.00	11680.00	5.50	17.00	5.41	4.06	0.30	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 MRYL
Z_mud Outside	1.70 MRYL
Gas Impedance Cutoff	0.38 MRYL
Fluid Impedance Cutoff	2.30 MRYL
Contam Impedance Cutoff	2.70 MRYL
Relative Bearing Rotate	OFF
RB Offset Angle	0.00 DEG
Cement Density	14.00 LB/G

COMPANY	BONANZA CREEK ENERGY
WELL	NORTH PLATTE 21-24-28 HNC
FIELD	WATTENBERG
PROVINCE/COUNTY	WELD
COUNTRY/STATE	US / COLORADO

Elevation Kelly Bushing	4570	feet	Bottom Log Interval	6100.00	feet
Elevation Drill Floor	4570	feet	Depth Driller	11657.00	feet
Elevation Ground Level	4553	feet	Depth Logger	6100.00	feet



SECUREVIEW

ULTRAVIEW / BONDVIEW

COMPOSITE

Weatherford®

