				<div>SECUREVIEW</div> <div>ULTRAVIEW / BONDVIEW</div> <div>LOG</div>			
COMPANY				BONANZA CREEK ENERGY			
WELL				P41-T44-28 HNB			
FIELD				WATTENBERG			
PROVINCE/COUNTY				WELD			
COUNTRY/STATE				USA / COLORADO			
LOCATION							
SEC 28	TWP 5N	RGE 63W	Other Services				
Latitude		Longitude		CALVIEW			
API Number		05-123-46920					
Permanent Datum KB, Elevation 4548 feet				Elevations:			
Log Measured From KB, 17.00 feet above Permanent Datum				KB 4565.00			
Drilling Measured From KB				DF 4565.00			
				GL 4548.00			
Date	04-NOV-2018		PERFORATION RECORD				
Run Number	ONE		Shot	Number	Depth From	Depth To	
Service Order	18200-228528023		Density	of Shots	feet	feet	
Type Log	URS/CBT						
Depth Driller	11602.00						
Depth Logger	6211.00						
Top Log Interval	0.00						
Bottom Log Interval	6211.00						
Hole Fluid Type	WATER						
Hole Fluid Level	53.00						
Restriction ID	4.892		Gun Type				
Max Recorded Temp	204.00		Gun Size				
Well Head Pressure	0.00		CASING / TUBING RECORD				
Well Head Equipment	7 1/16" 5K		Size	Weight	Depth From	Depth To	
Time Well Ready	ROA		inches	pounds/ft	feet	feet	
Time Logger Bottom	SEE LOG		9.625	36.00	0.00	1641.00	
Unit	14122		5.500	17.00	0.00	11592.00	
Equipment Name	WSS-E						
Base	CASPER						
Recorded By	A LITTLE						
Witnessed By	K DODGE						

CASING / TUBING RECORD						
Type	Grade	TypeJoint	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	J-55	LTC	9.625	0.00	1641.00	36.00
PRODUCTION	P-110	LTC	5.500	0.00	11592.00	17.00

REMARKS
LOG CORRELATED TO RIG KB @ 17' ABOVE GL
STANDARD FREE PIPE AMPLITUDE IN 5.5" 17# CASING IS 72mV
BURST PRESSURE CALCULATED USING 5.5" 17# P-110 CASING

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



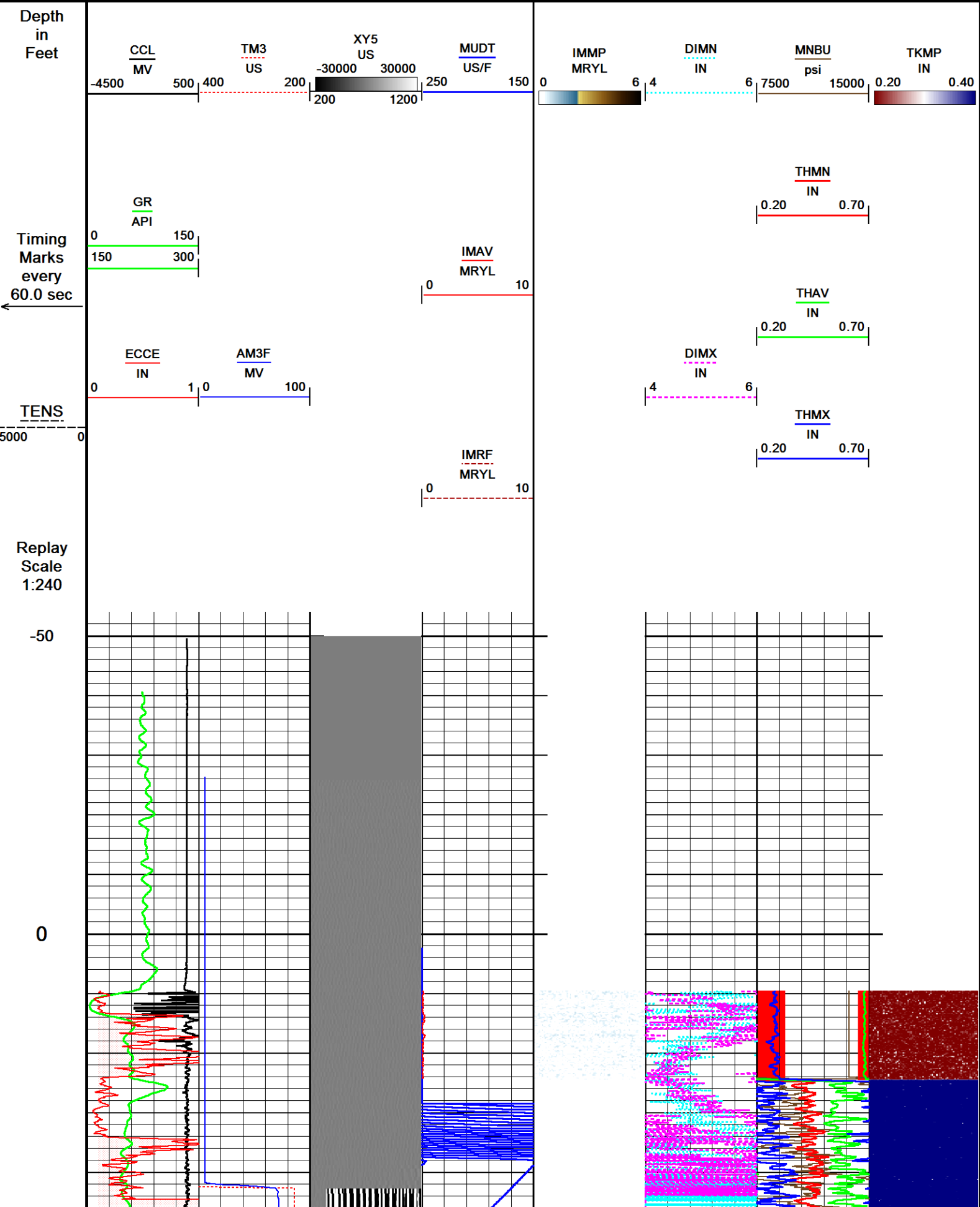
Depth Based Data - Maximum Sampling Increment 2.5cm

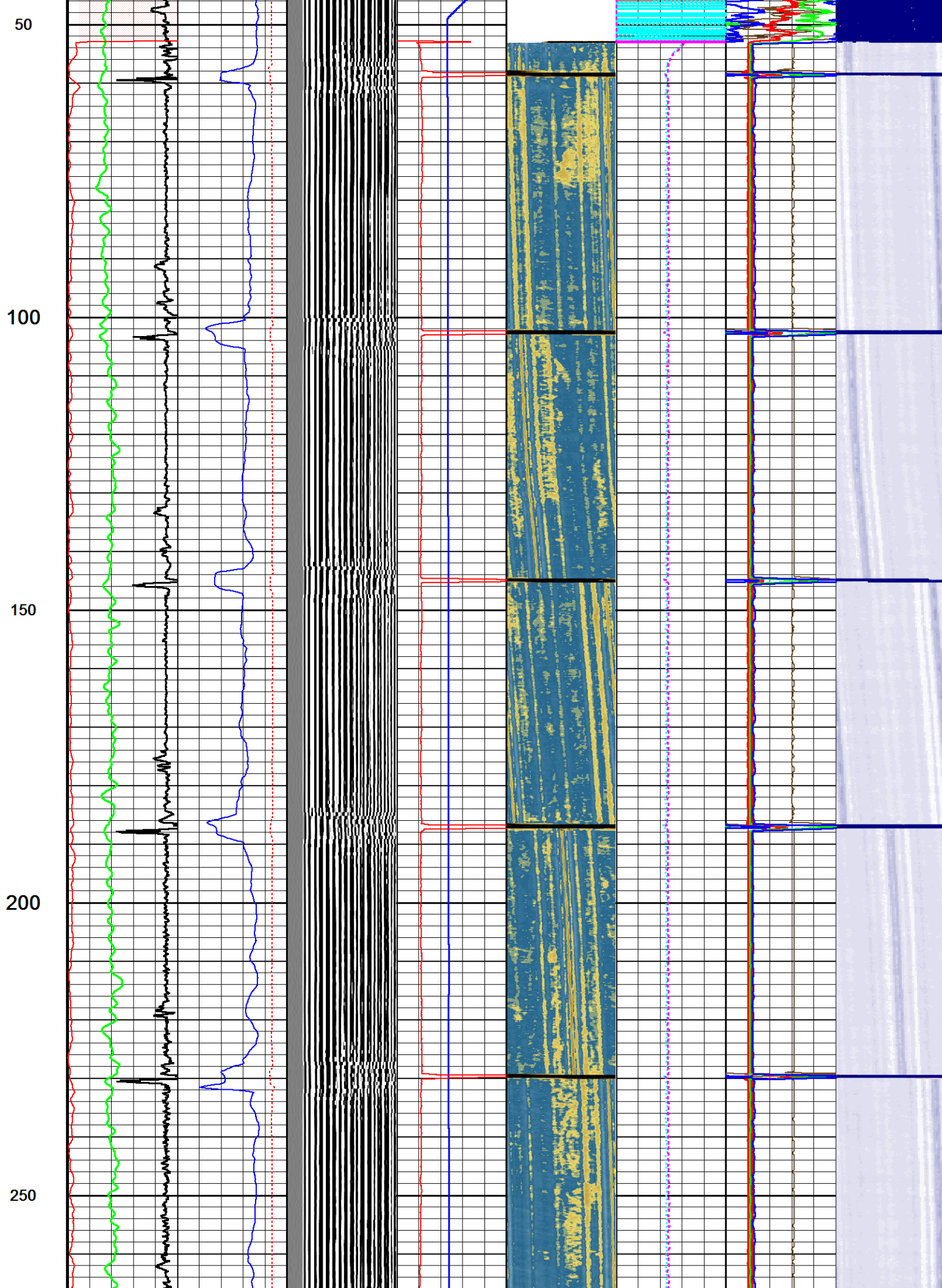
Plotted on 04-NOV-2018 21:22

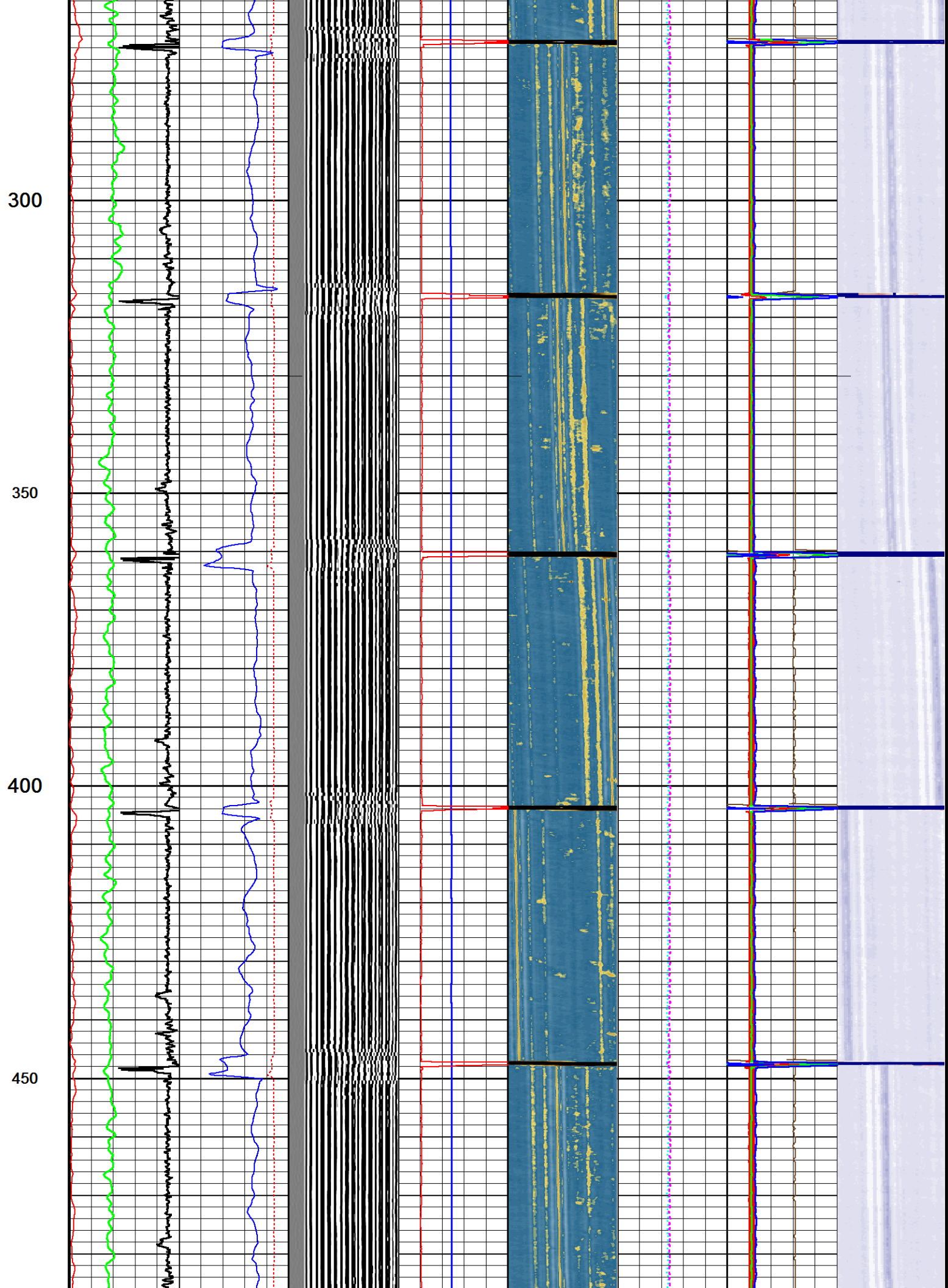
Filename: C:\LOGS\BONANZA CREEK\9 WELL PAD\11-4-2018\NORTH PLAT...\MAIN PASS\_001.dta

Recorded on 04-NOV-2018 10:30

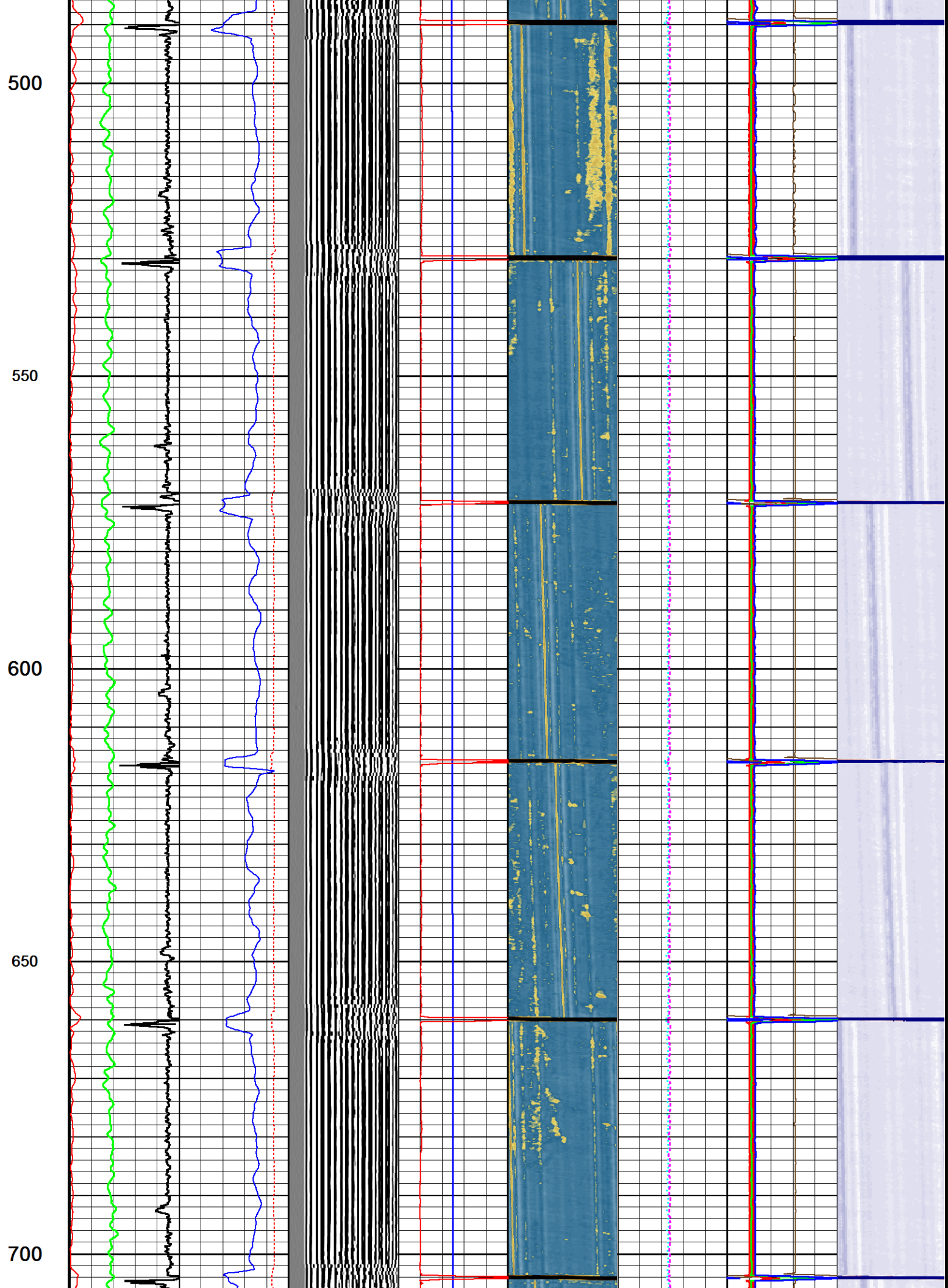
System Versions: Logged with 18.03.8633 Processed with 18.03.8633 Plotted with 18.03.8633









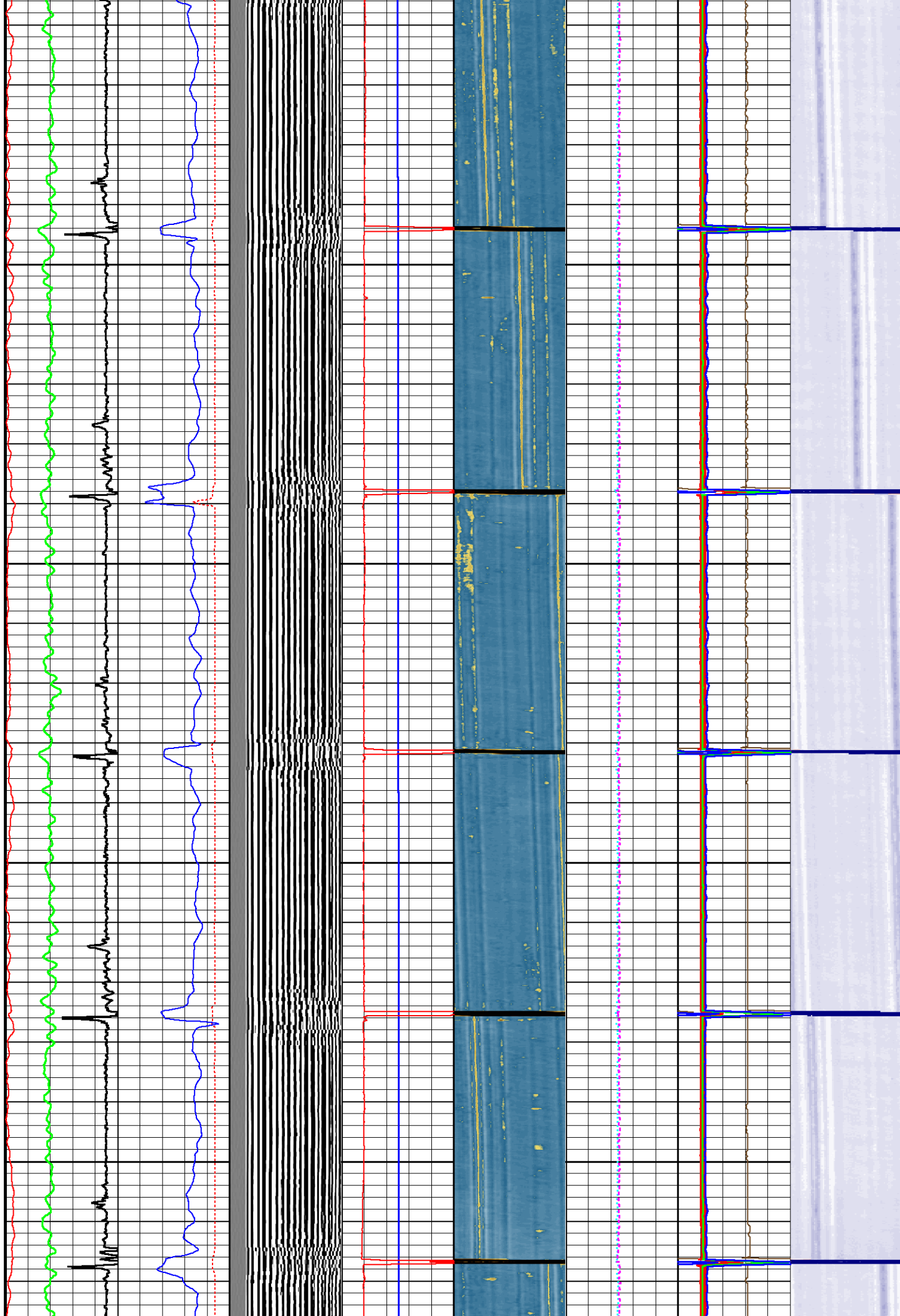


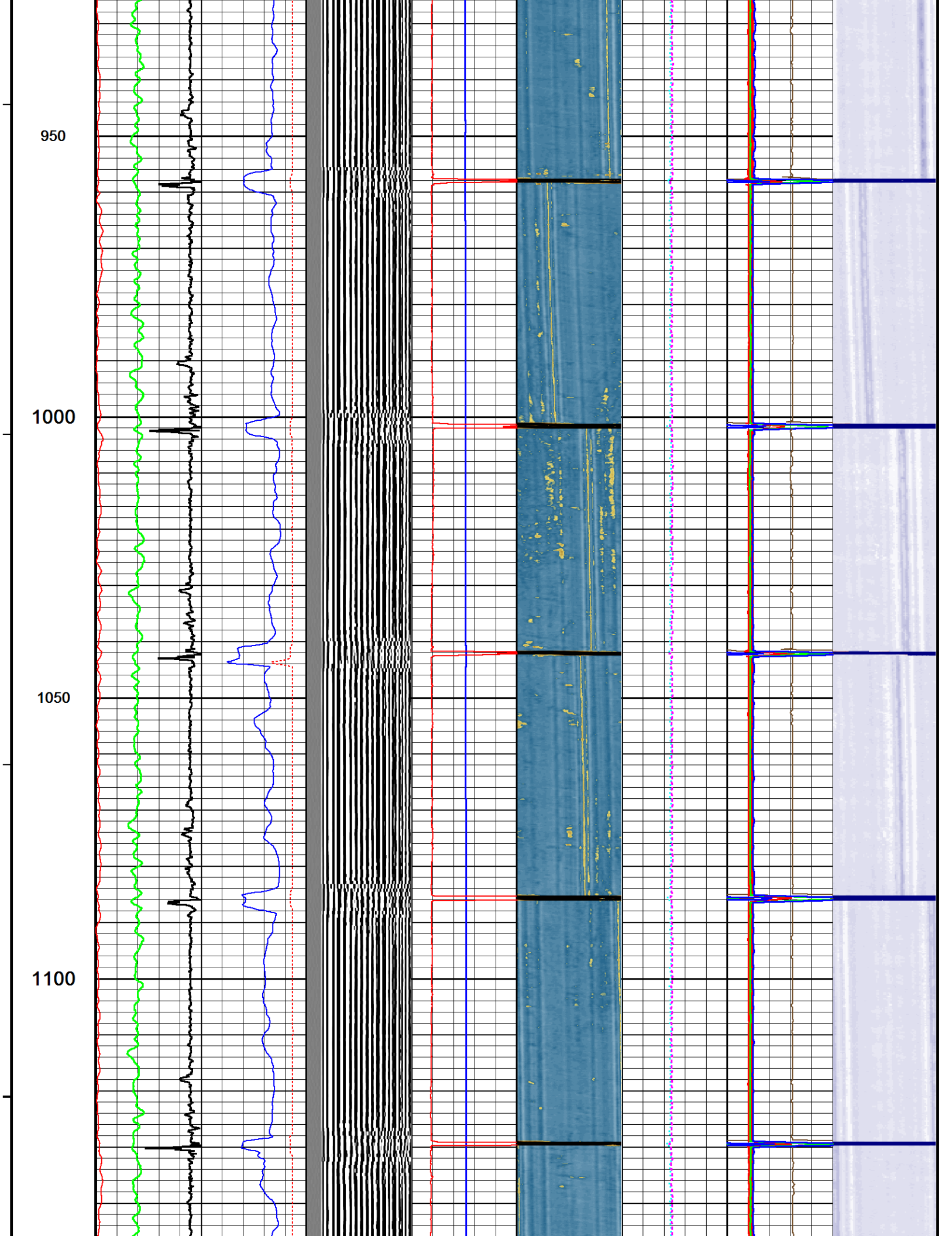
750

800

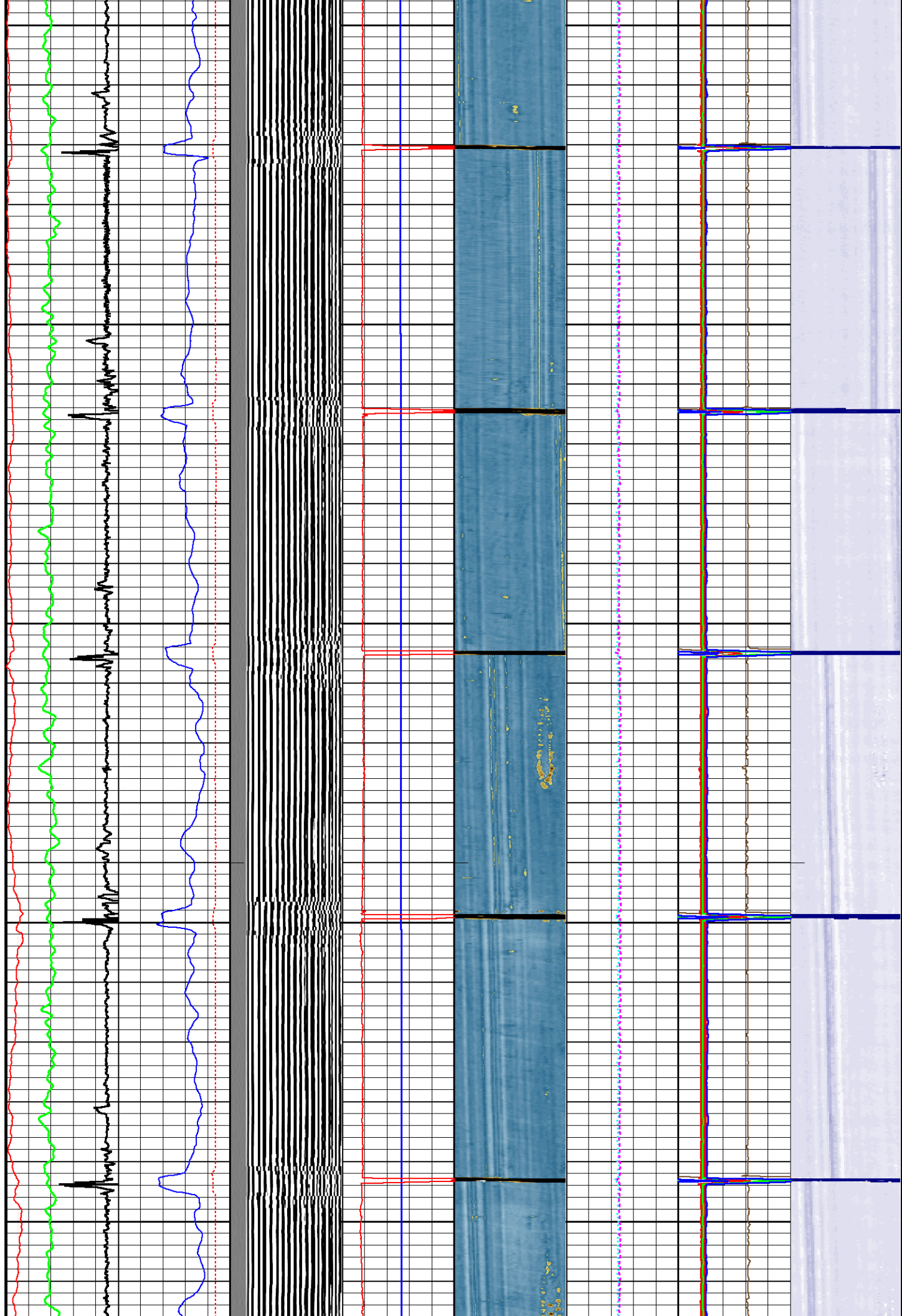
850

900





1150  
1200  
1250  
1300  
1350



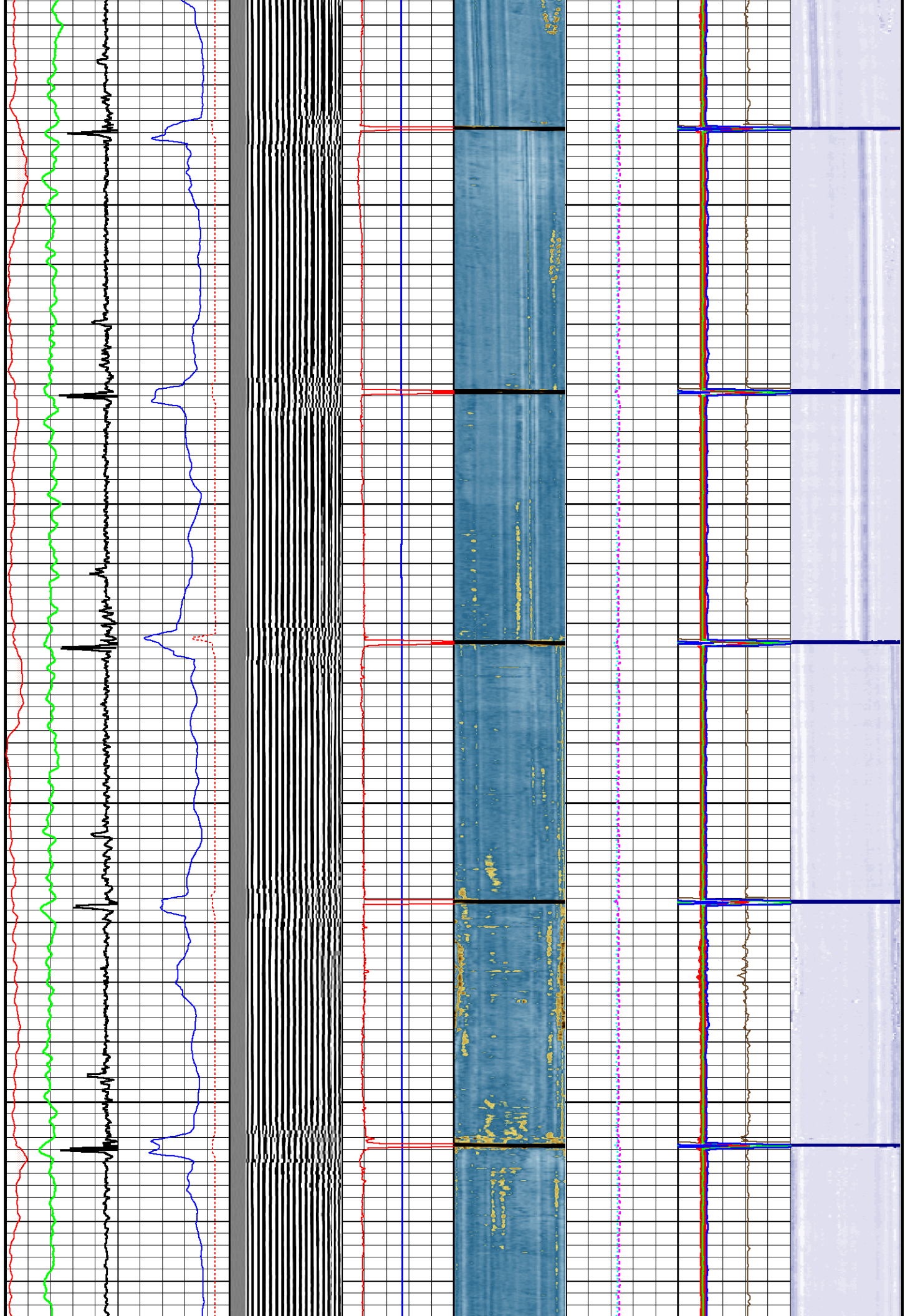


1400

1450

1500

1550



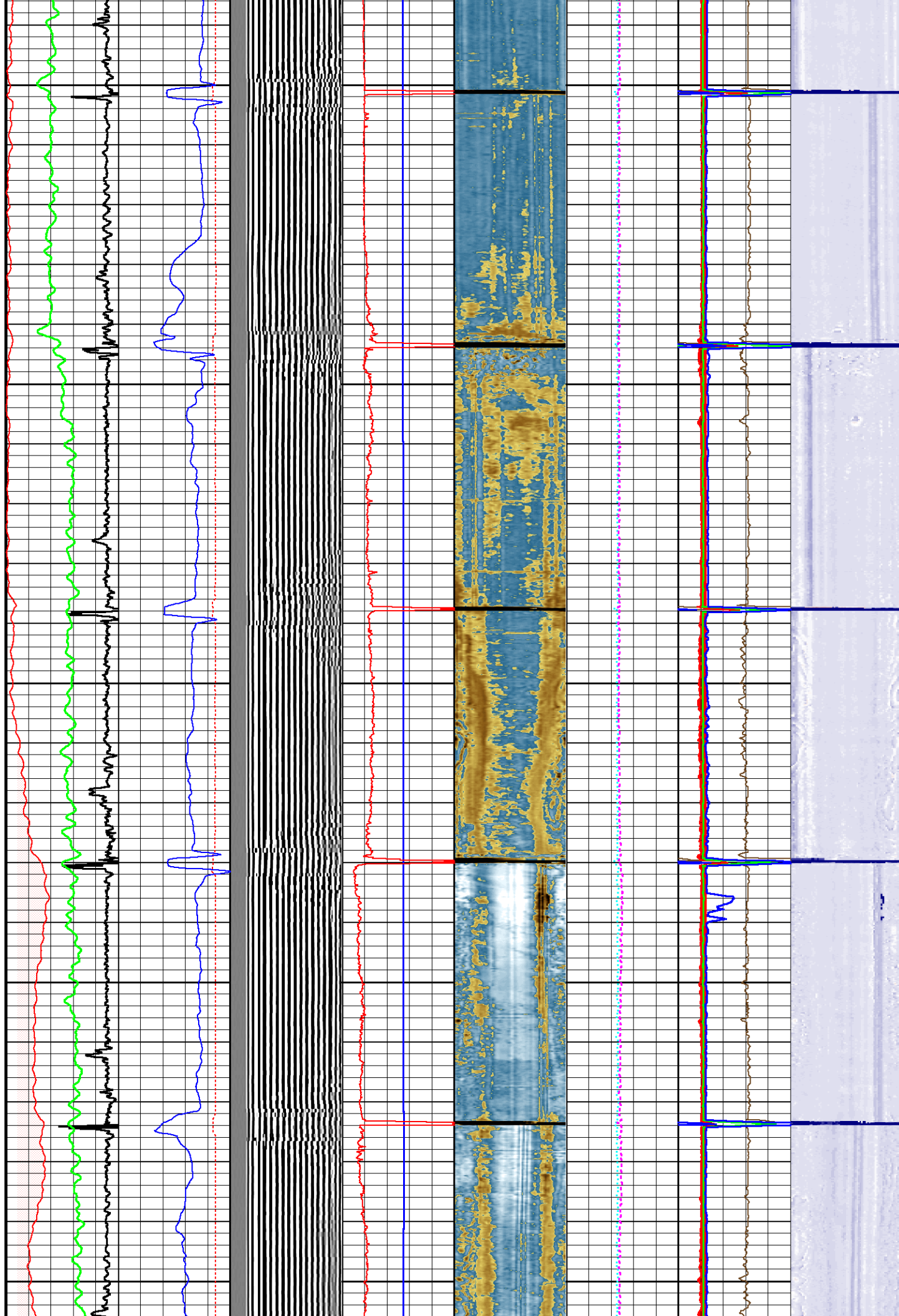
1600

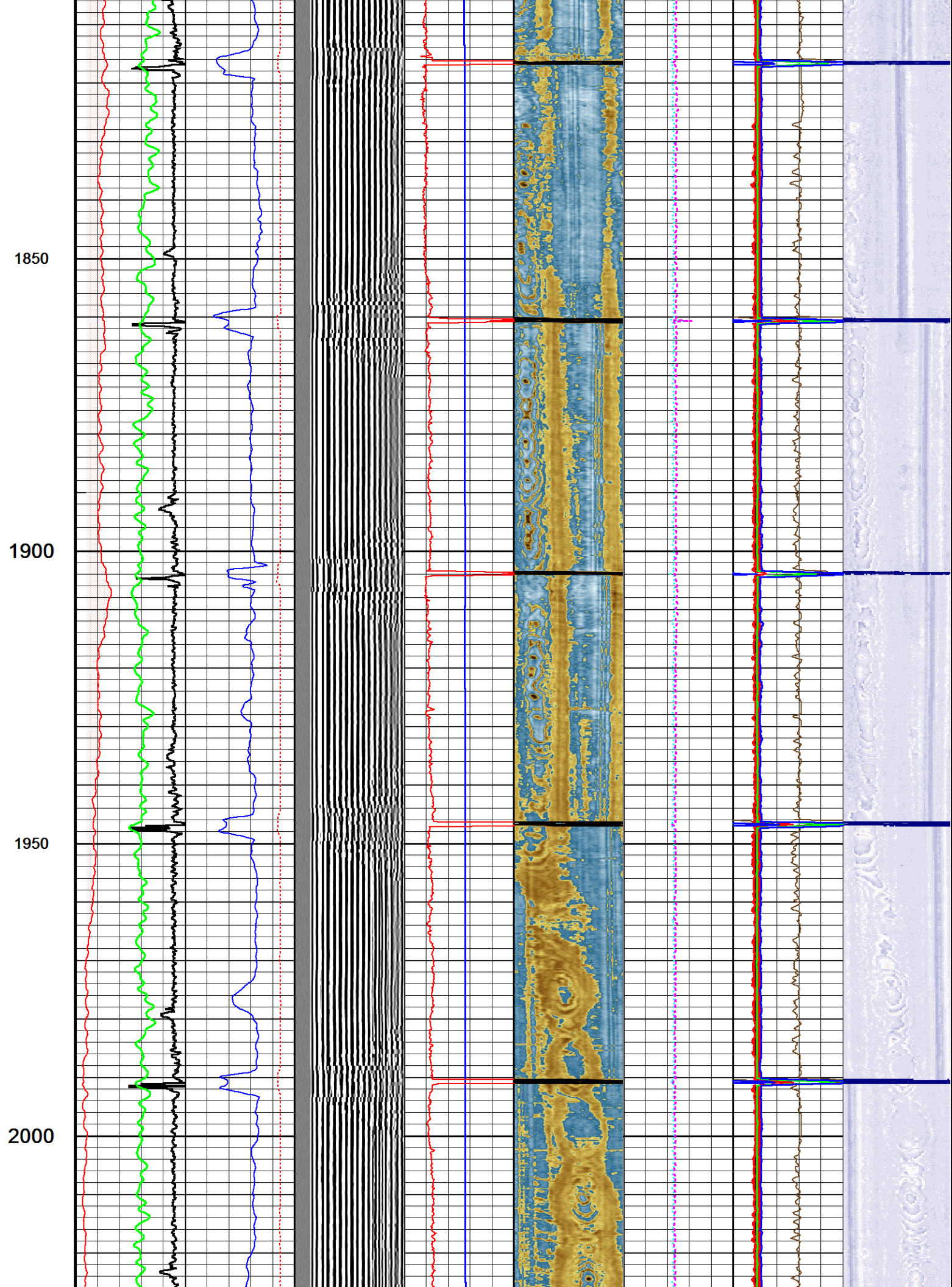
1650

1700

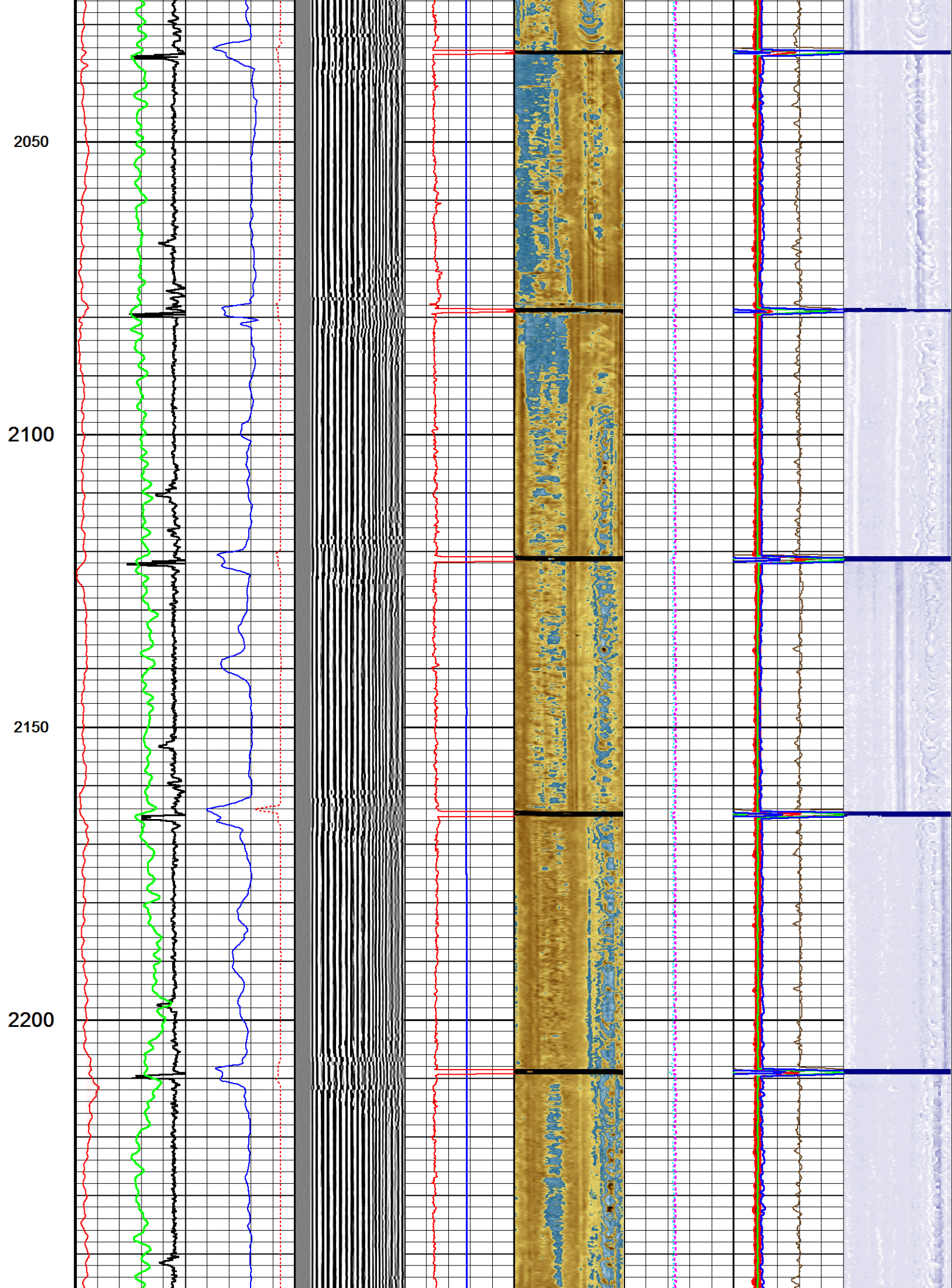
1750

1800

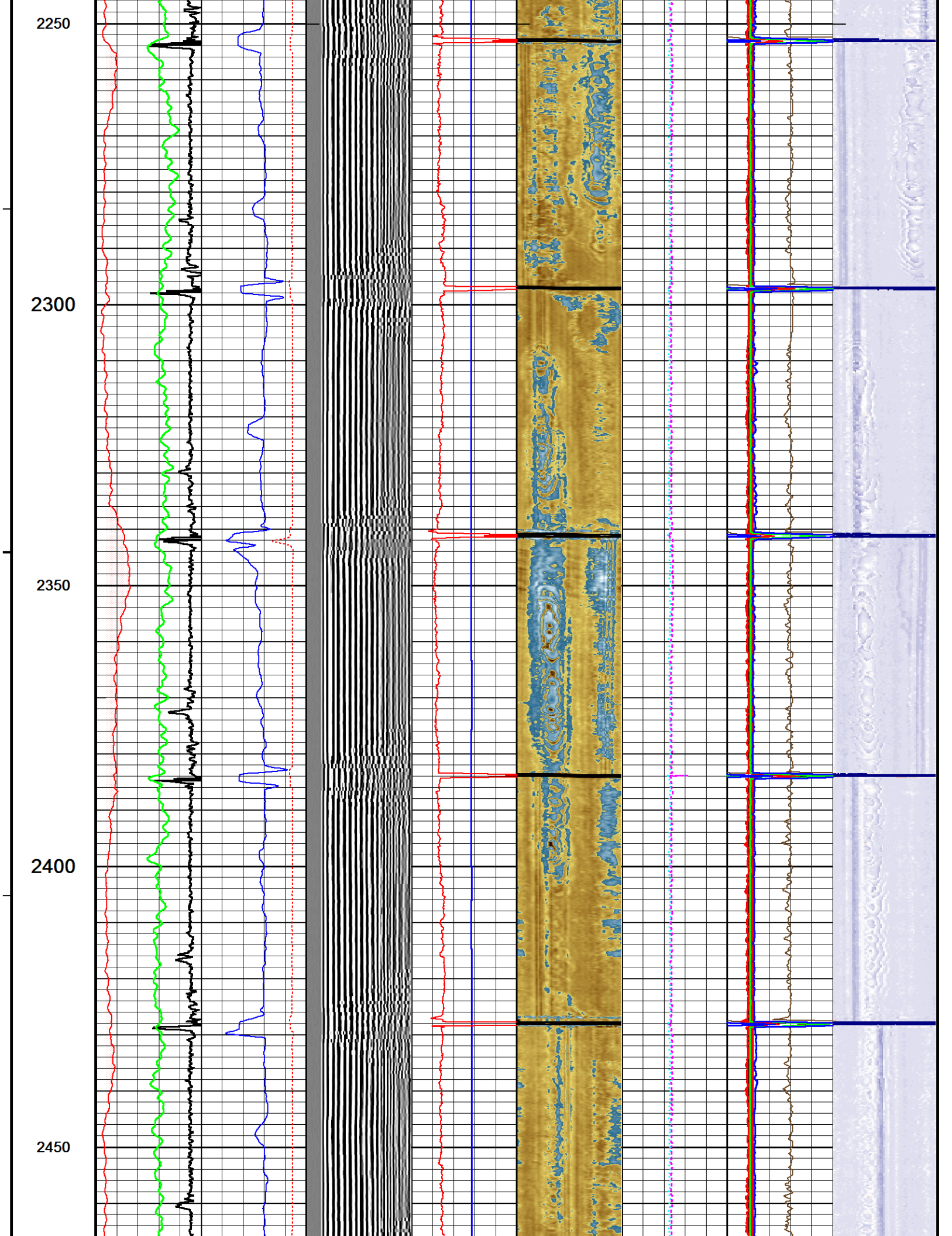










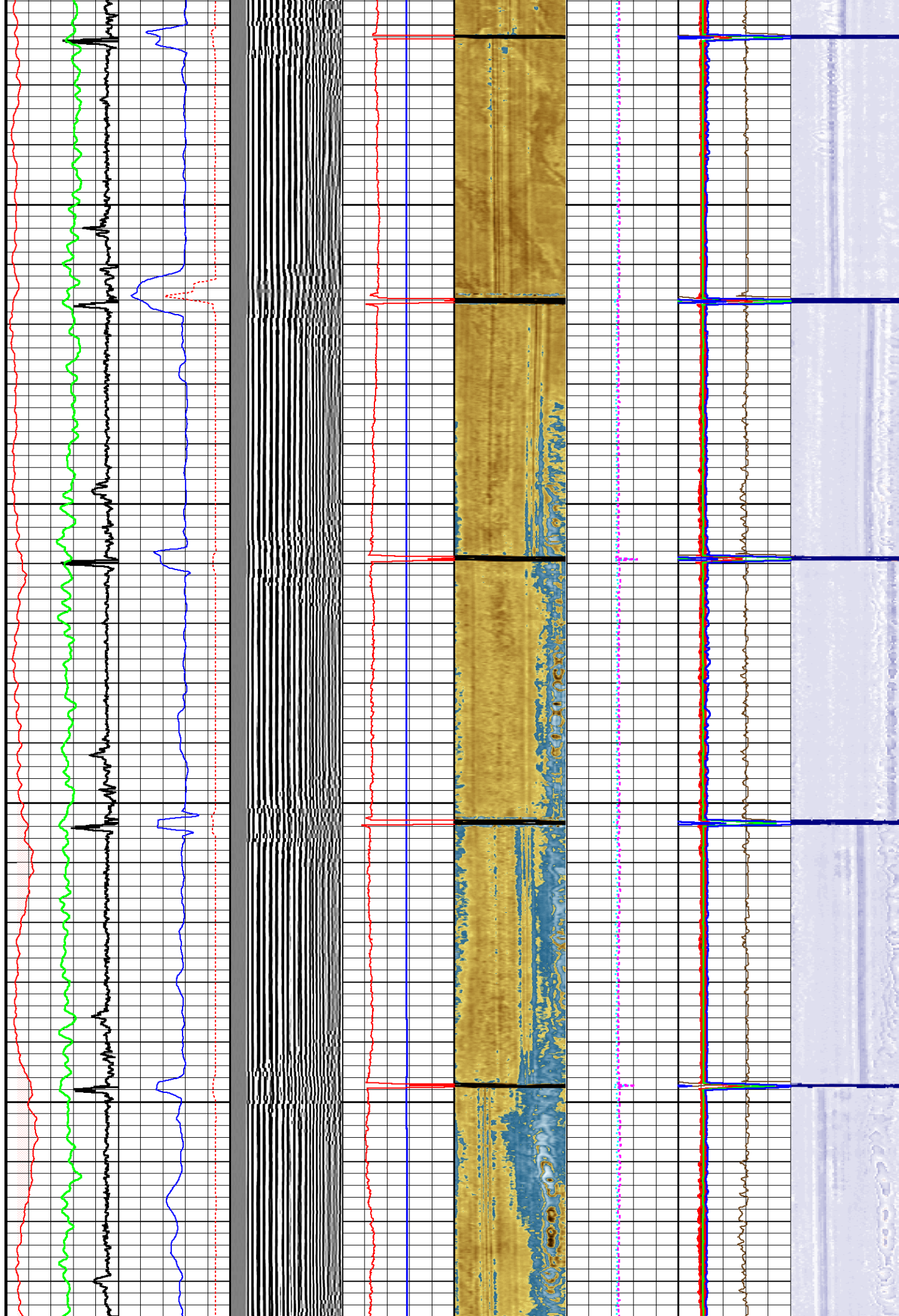


2500

2550

2600

2650





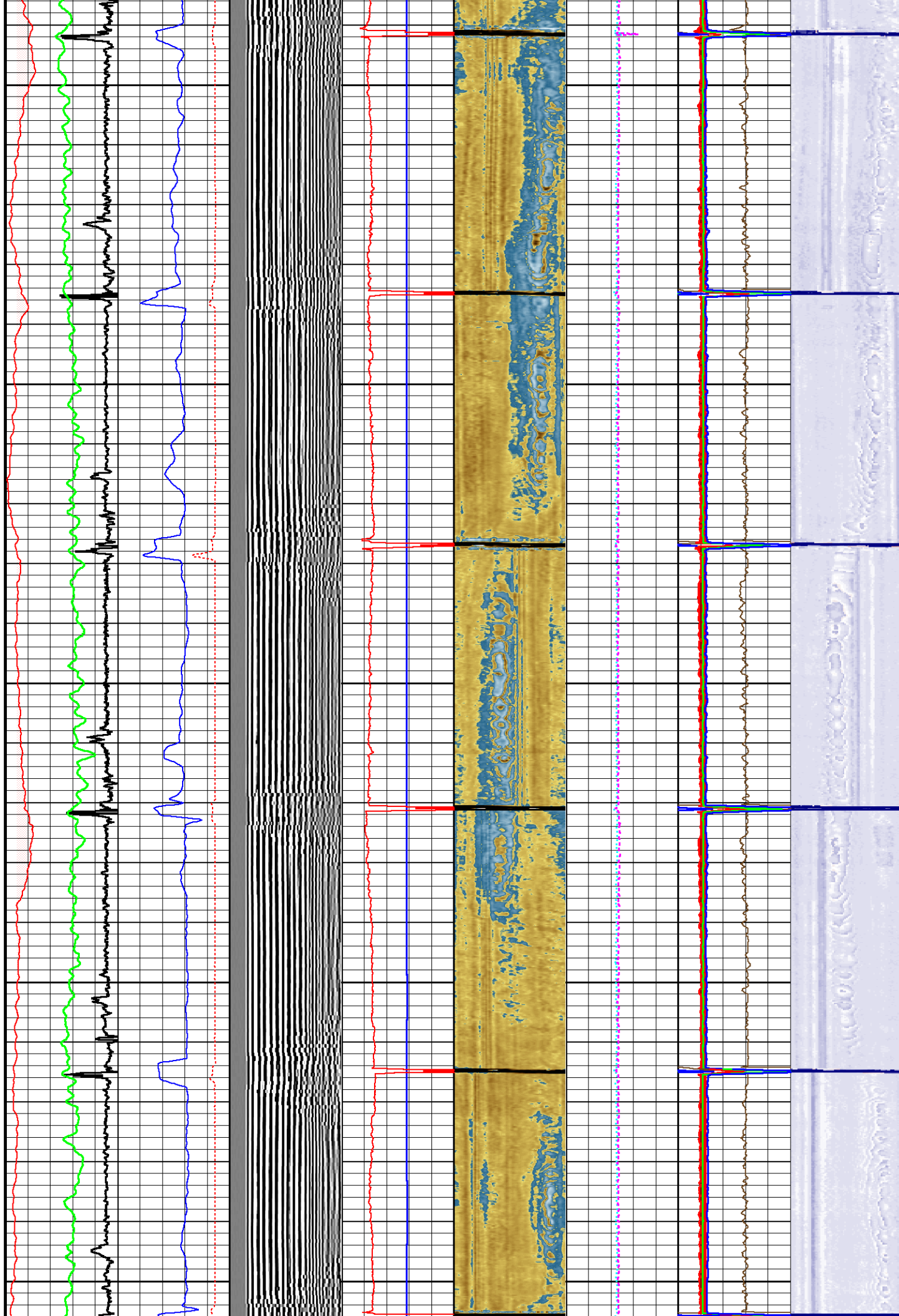
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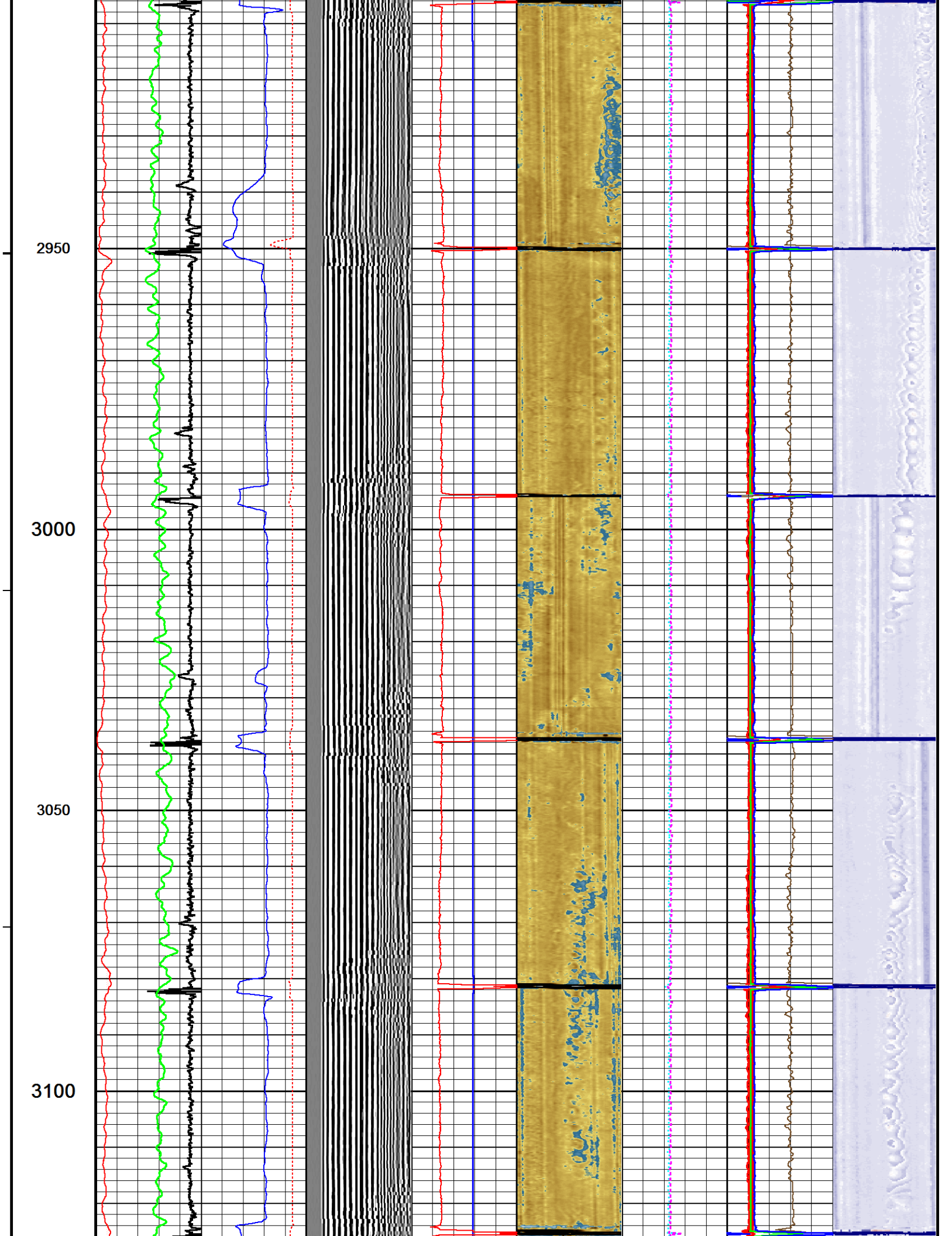
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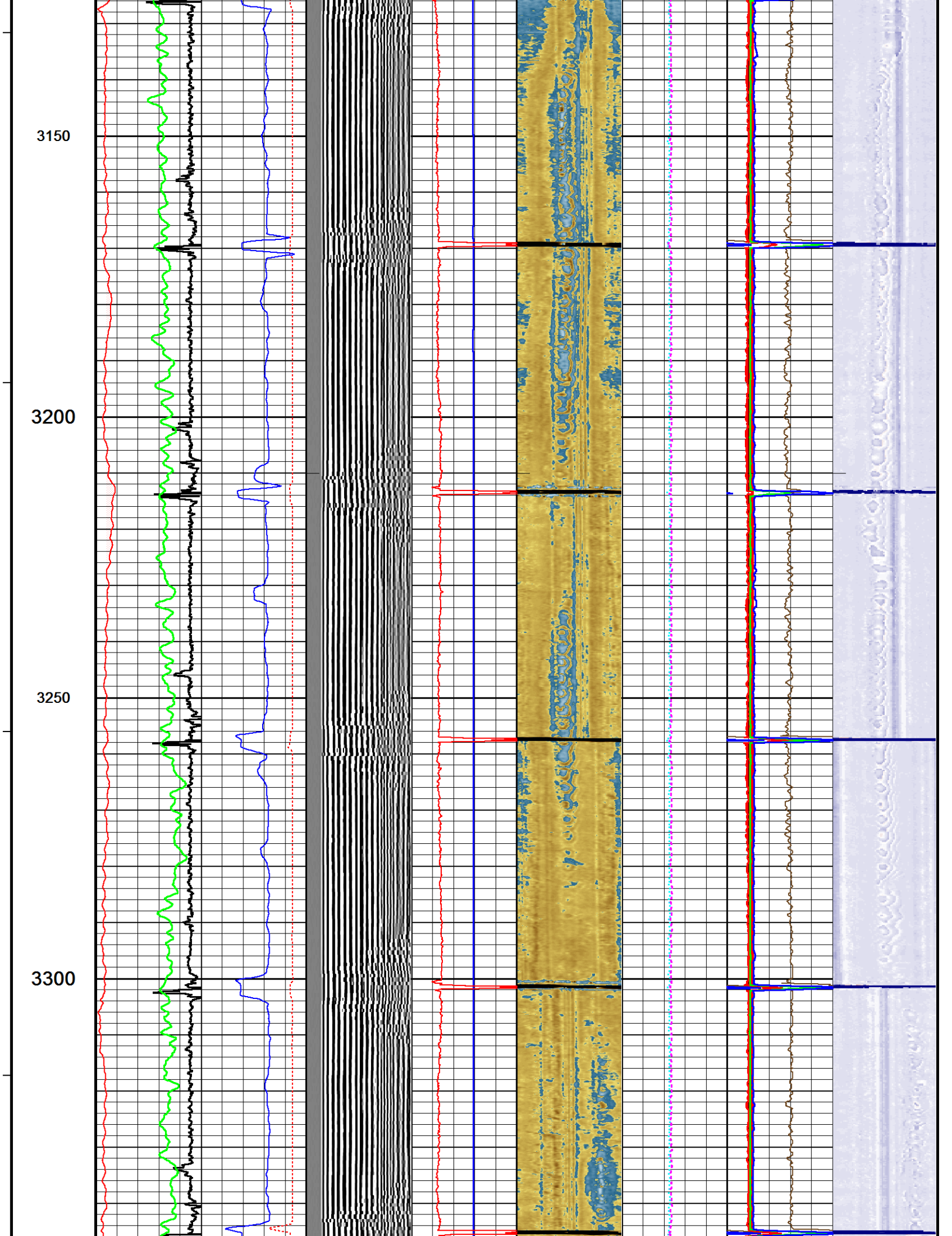
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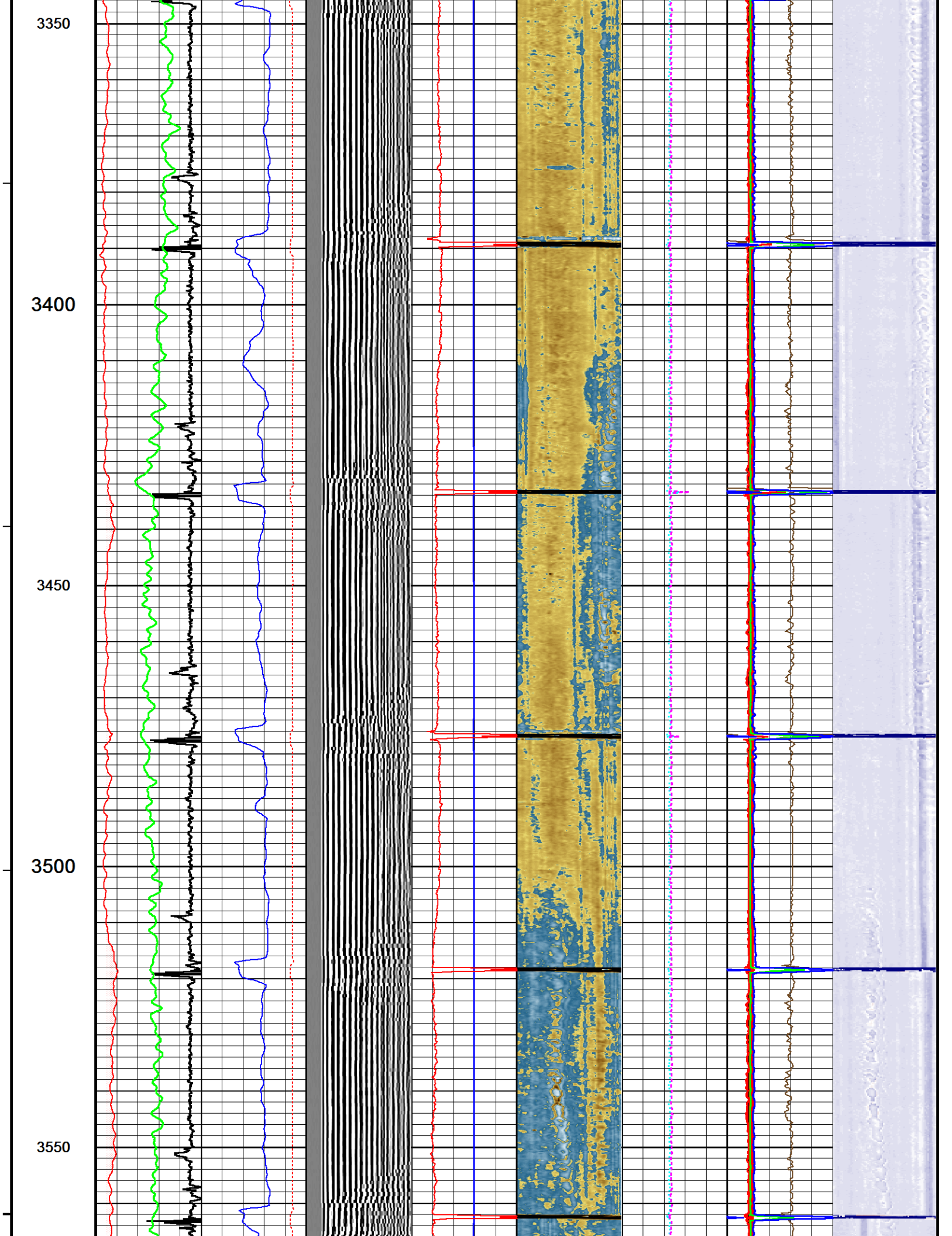
2900



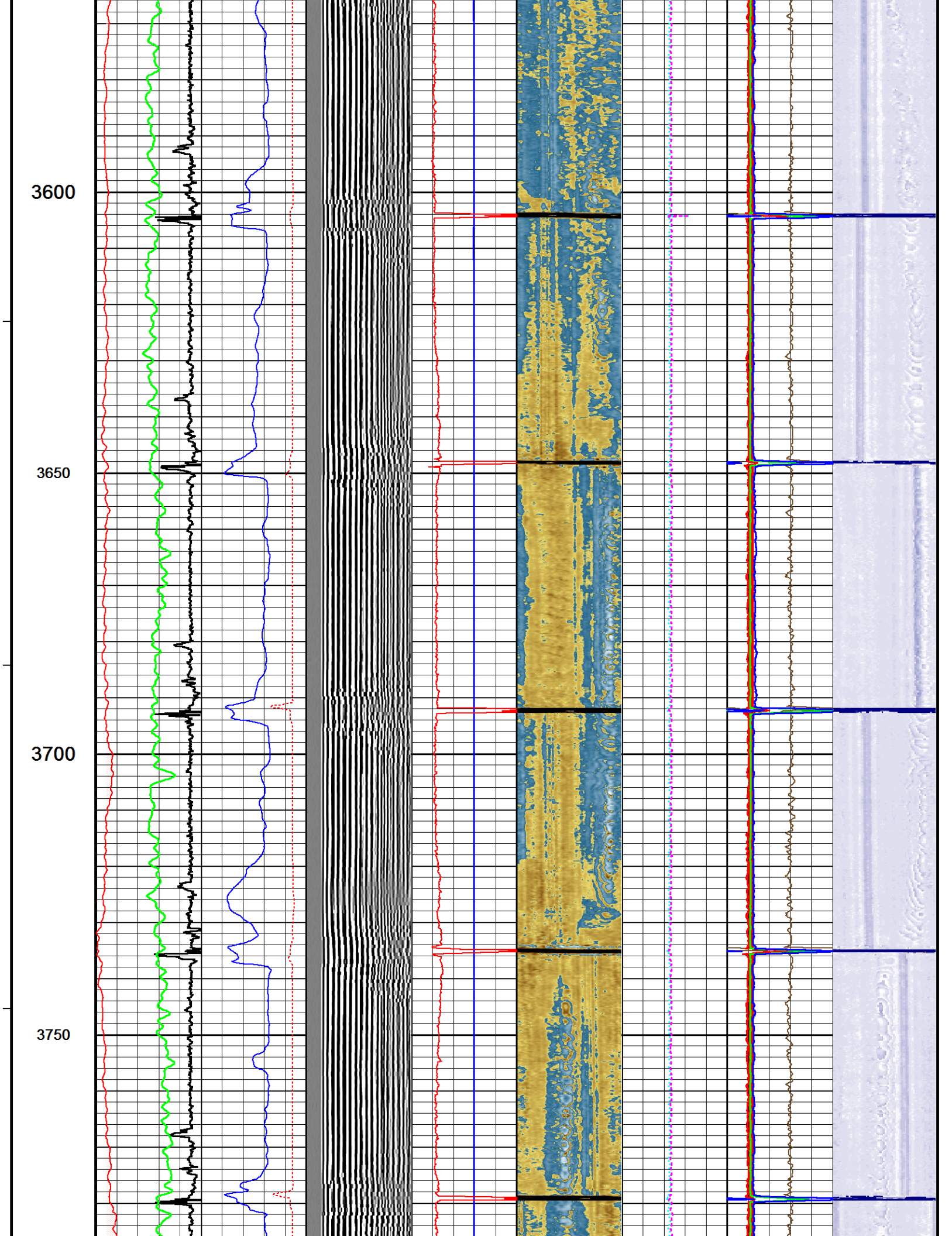


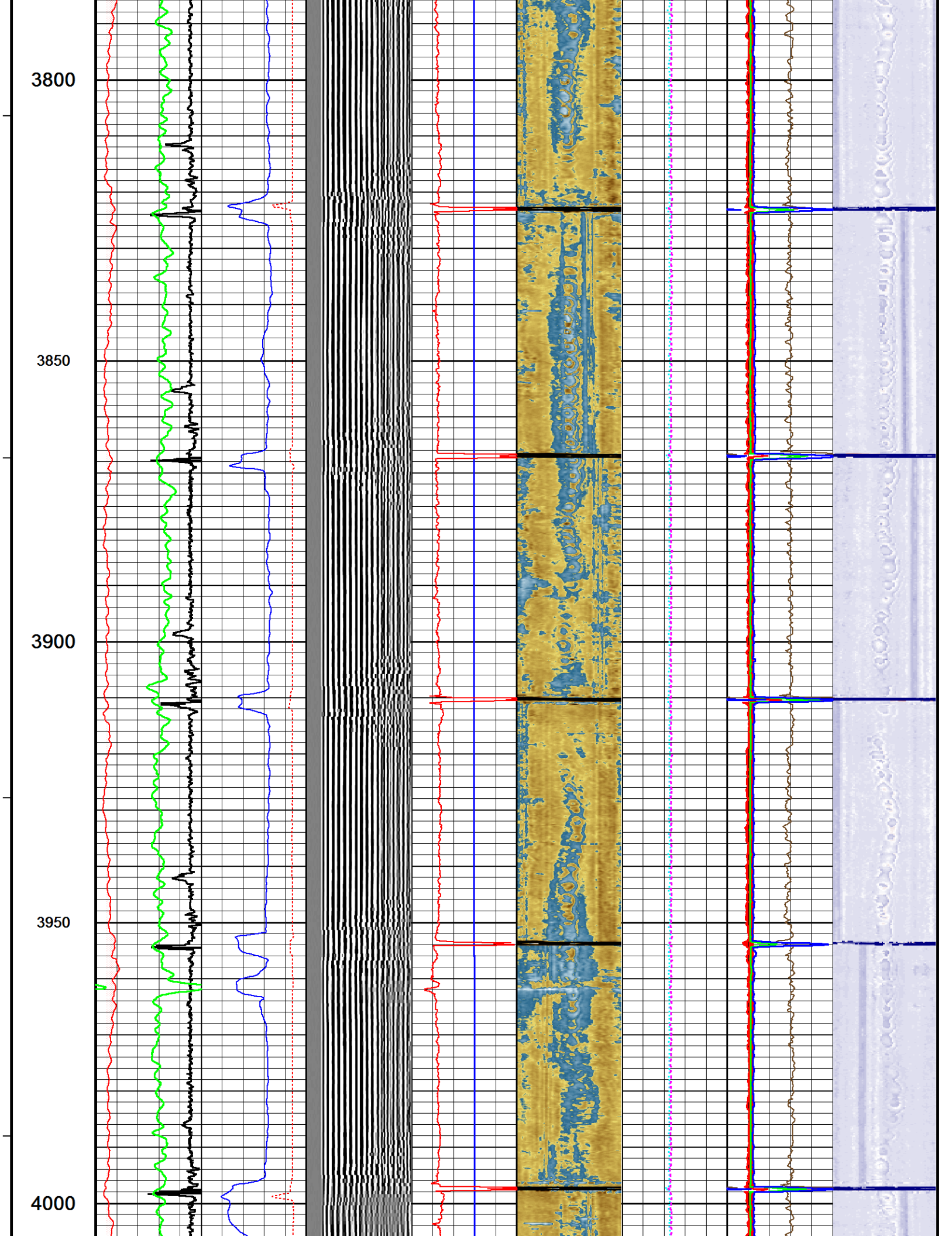




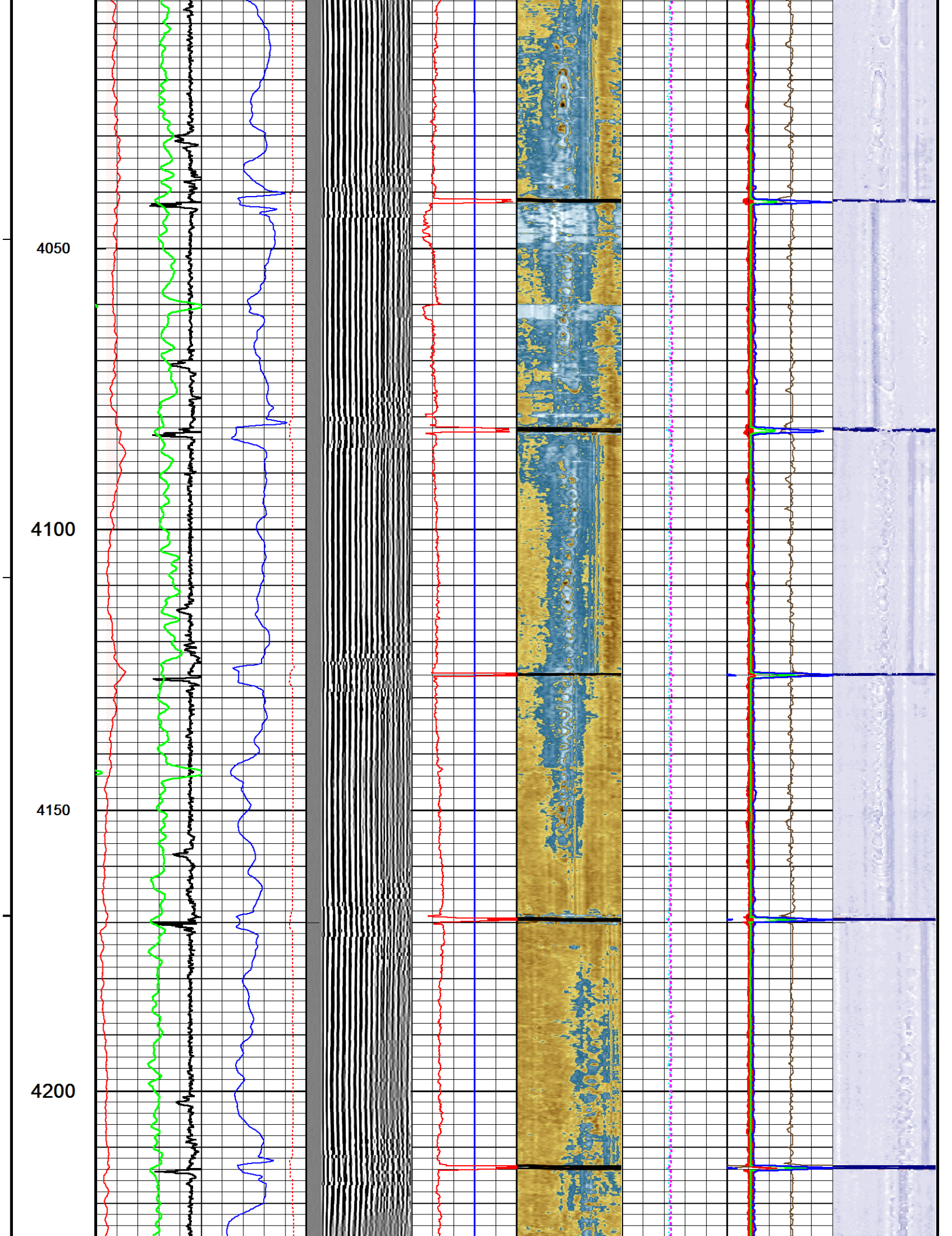


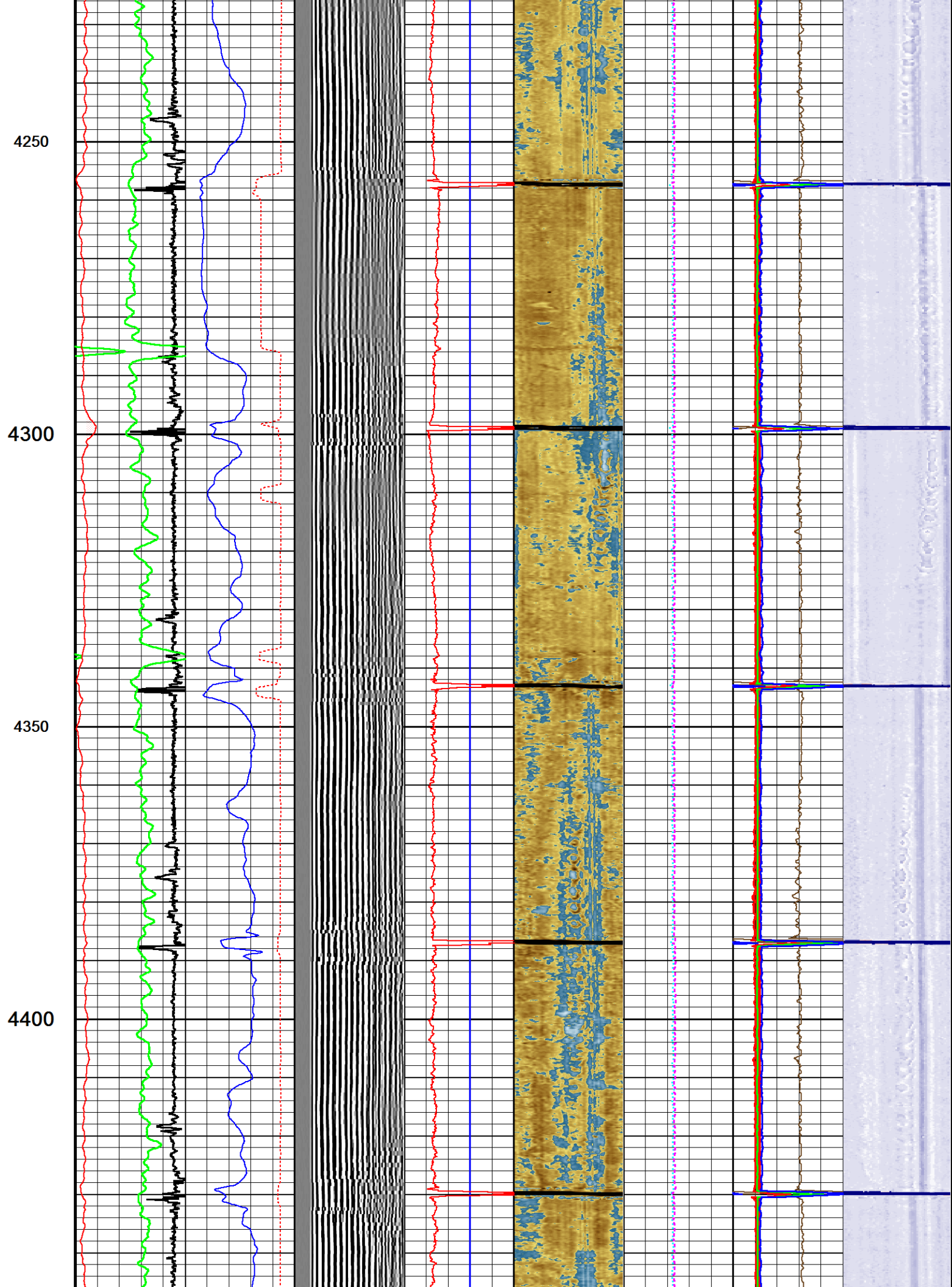




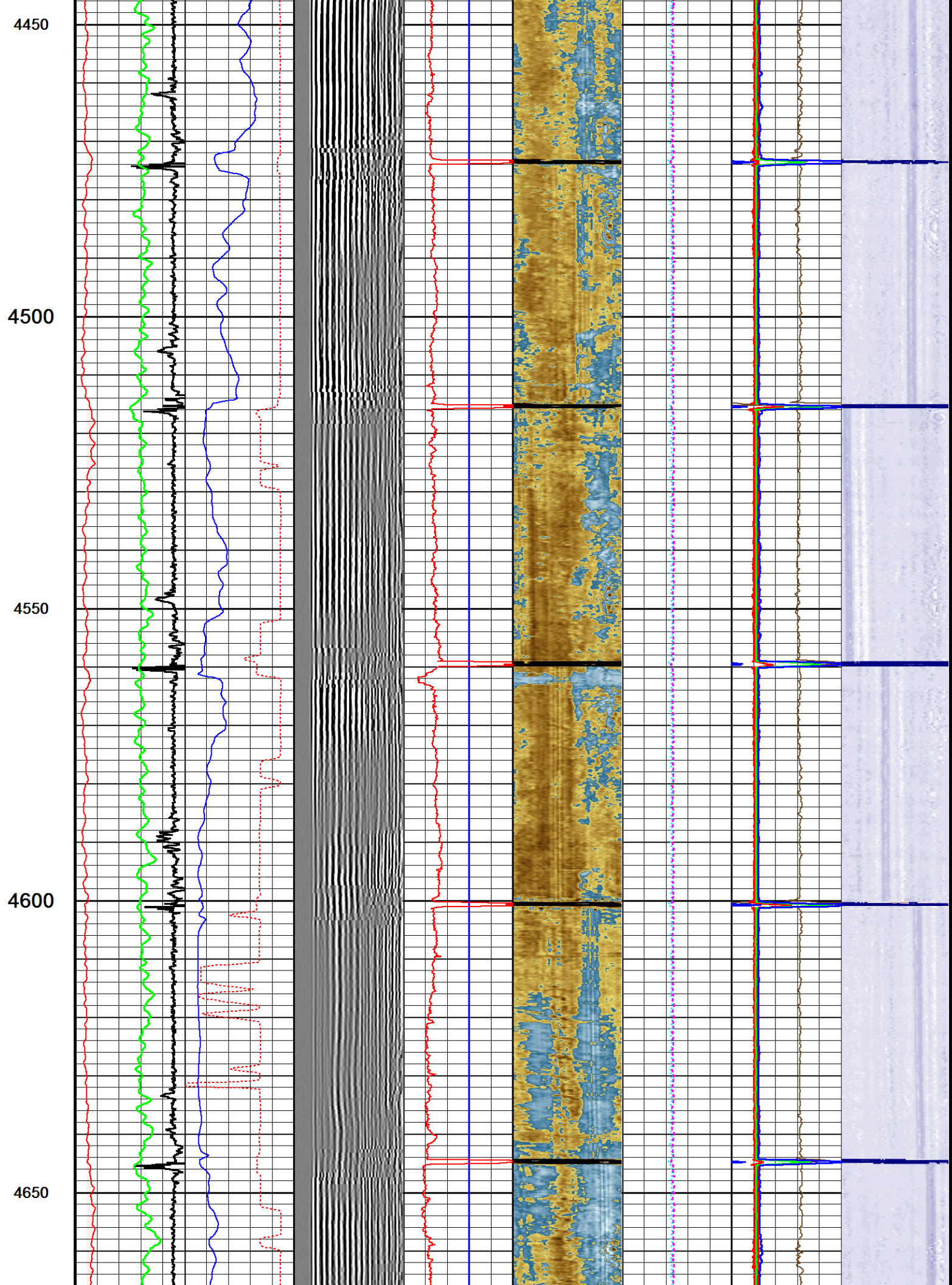




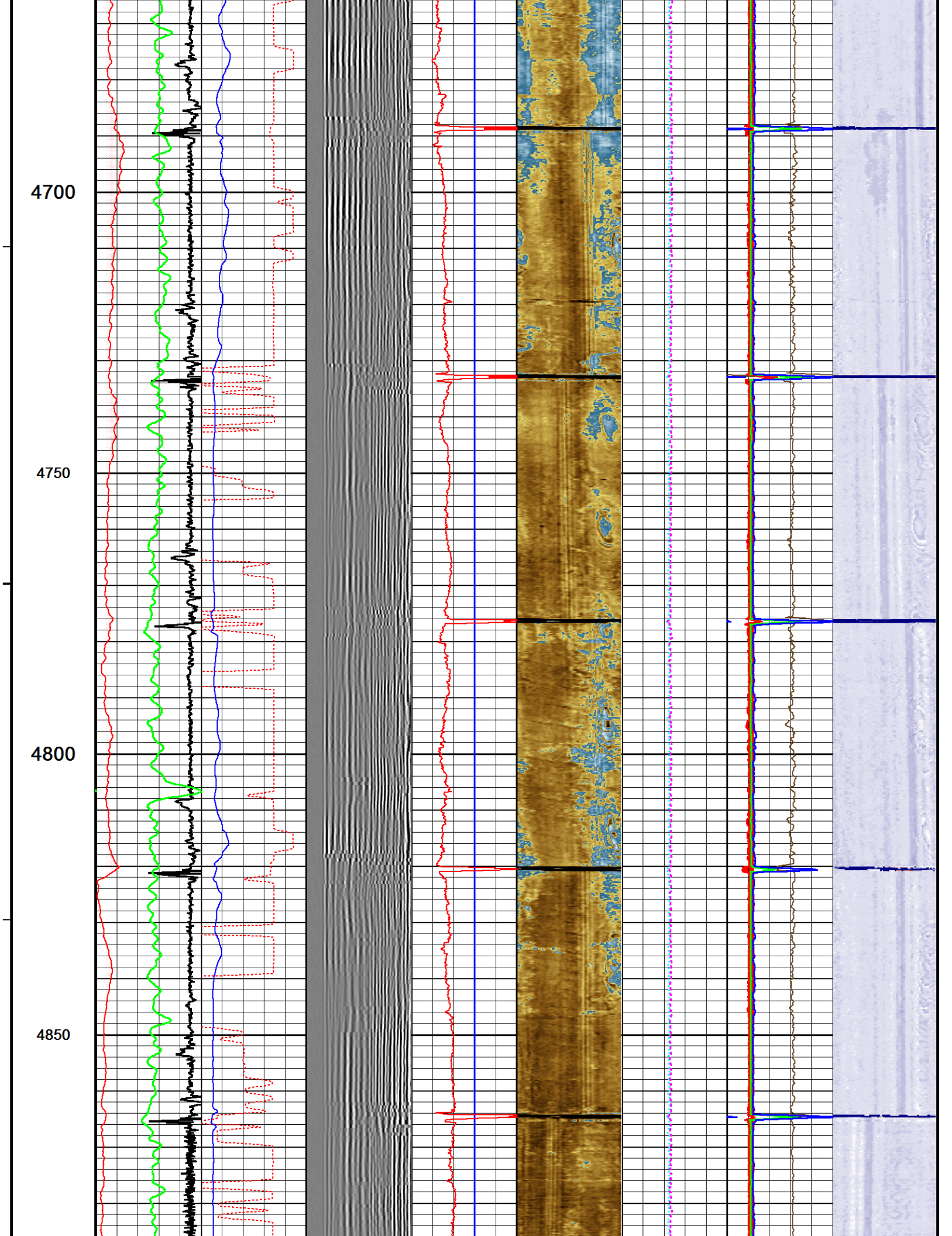












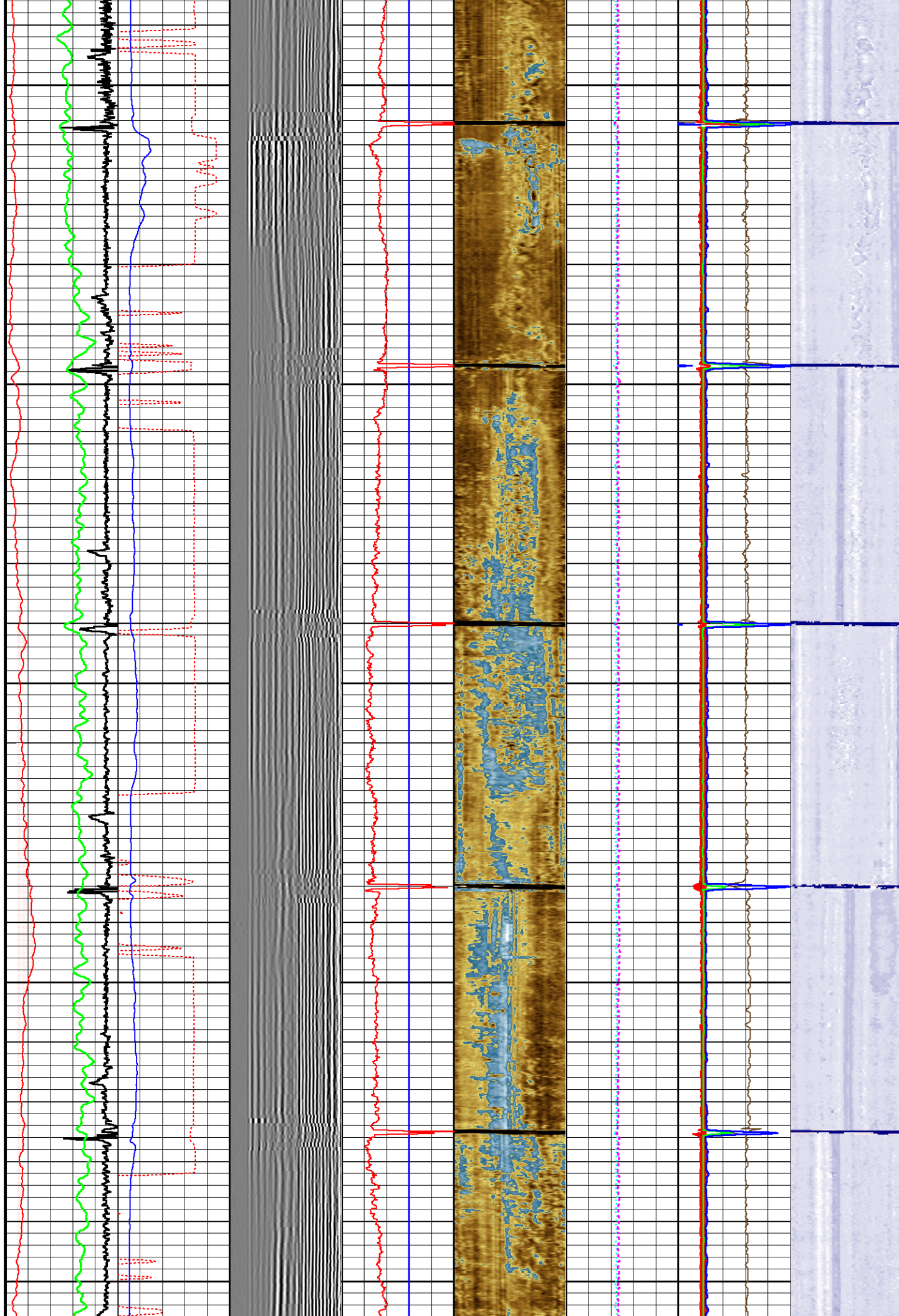
4900

4950

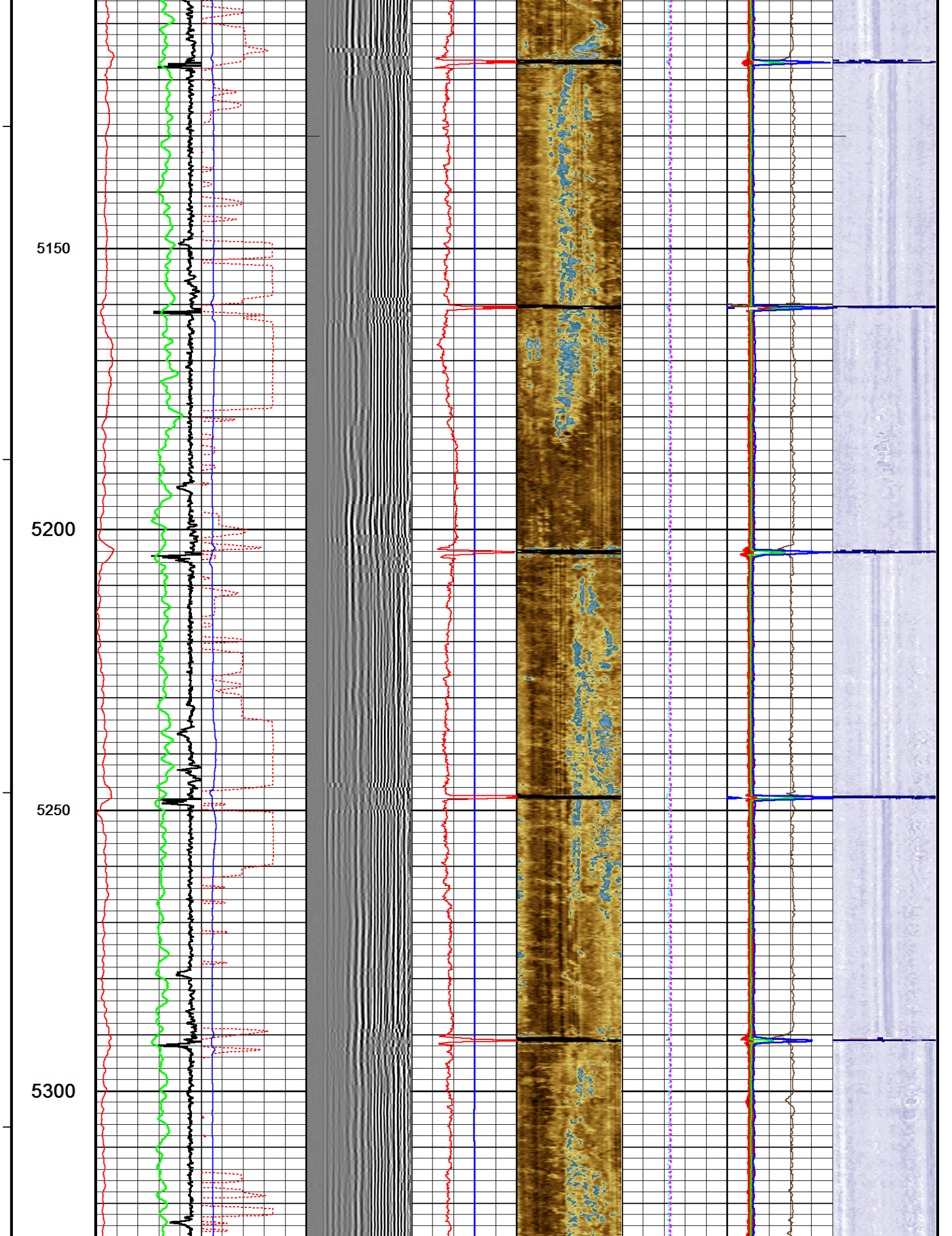
5000

5050

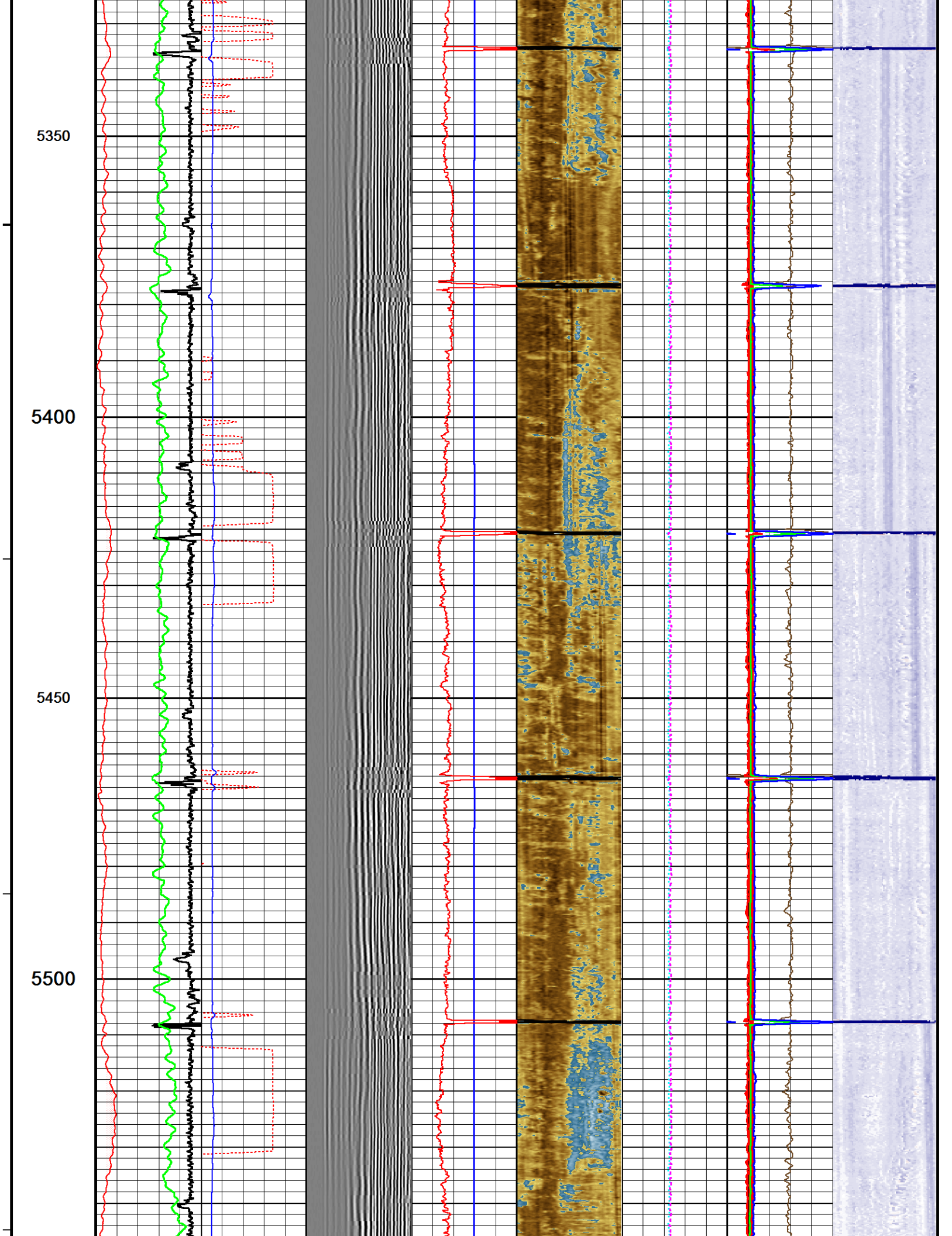
5100

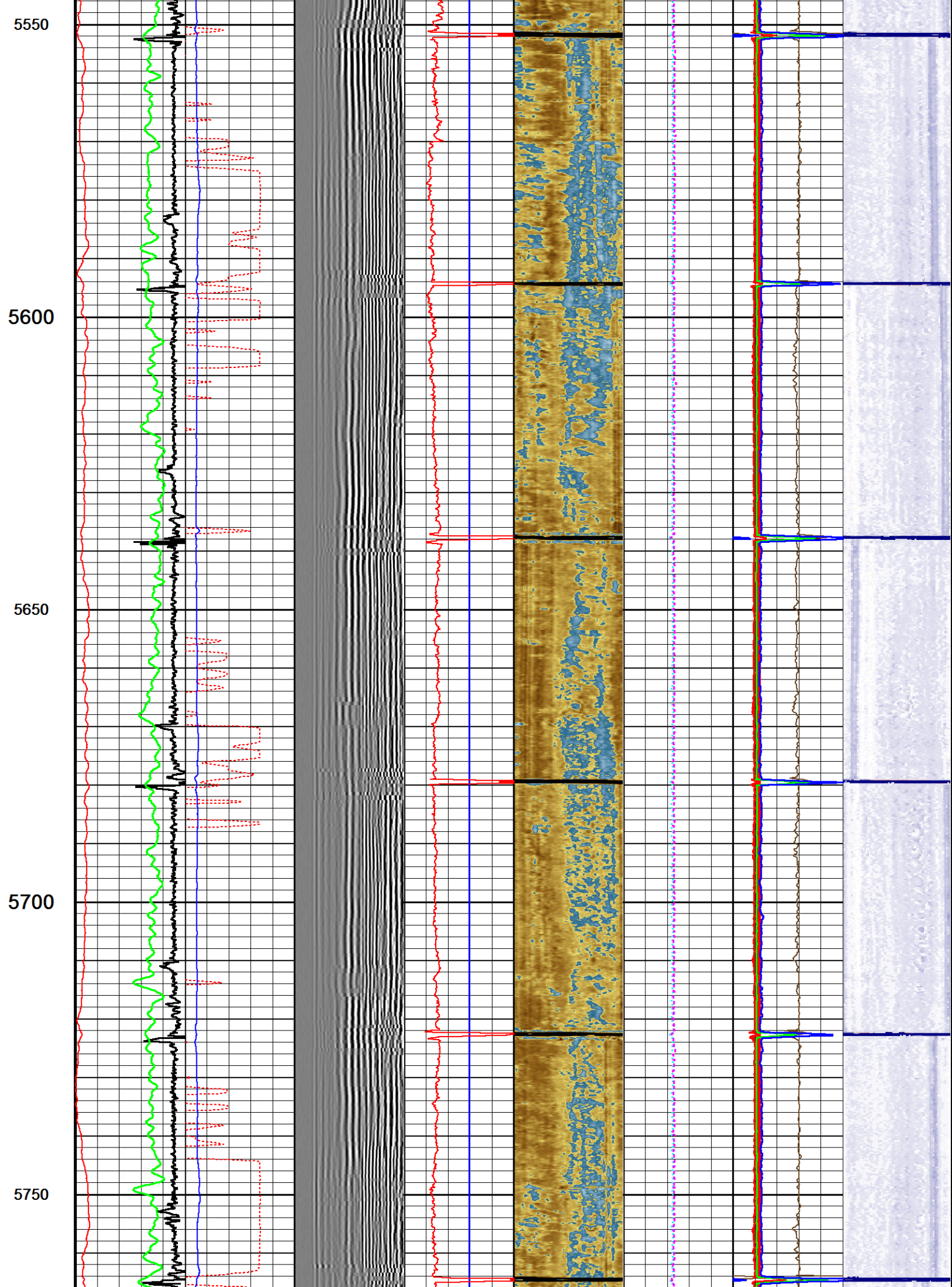




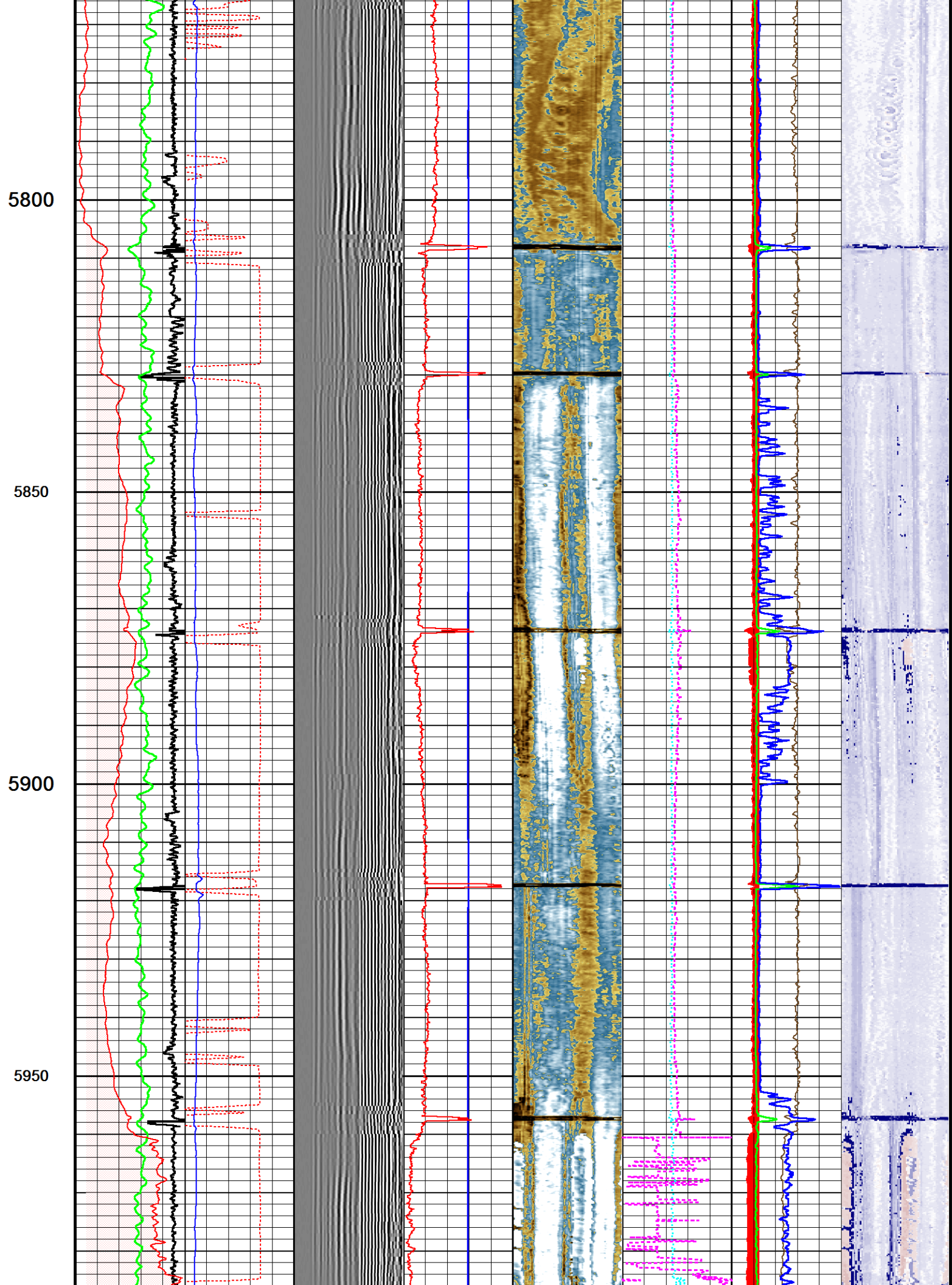




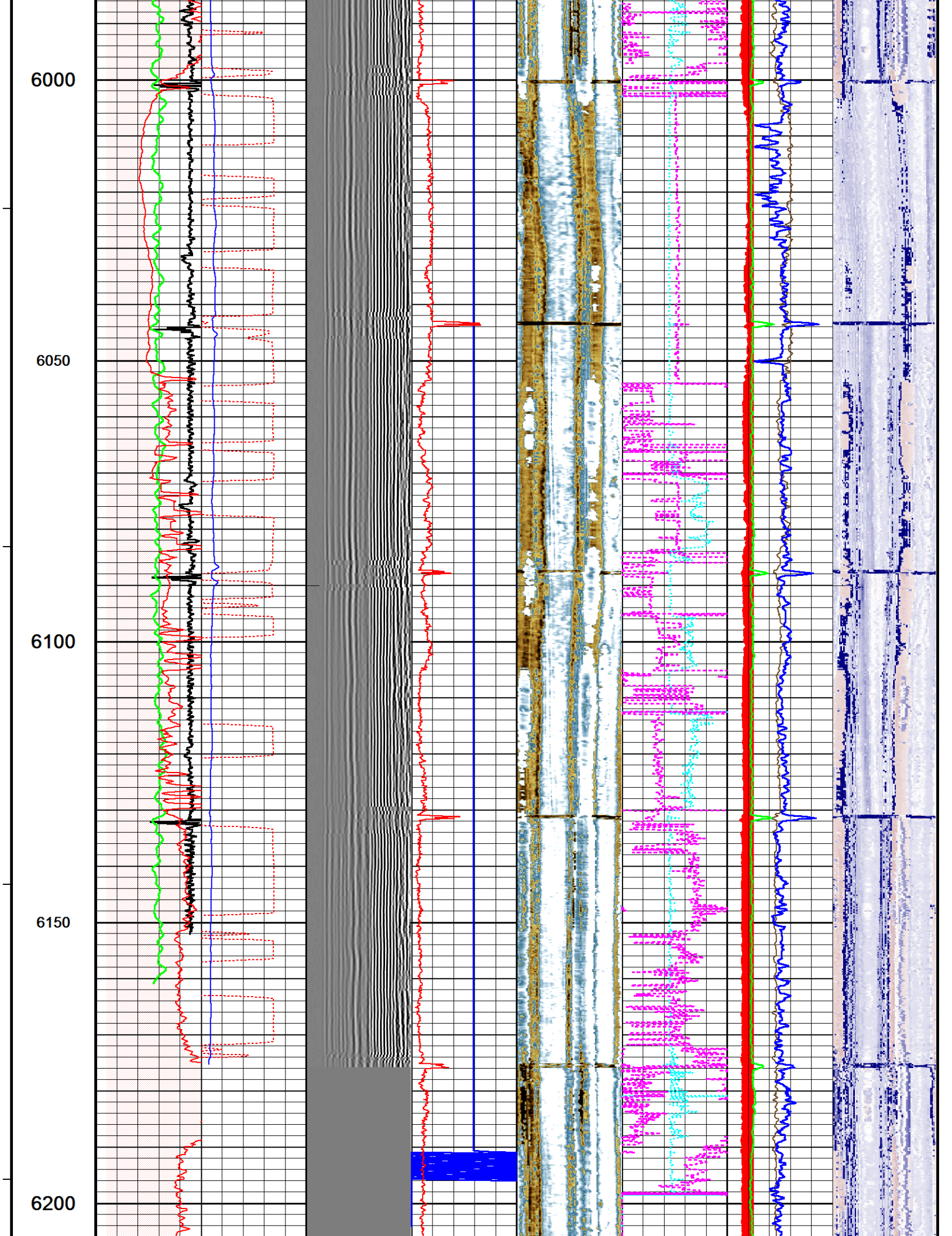


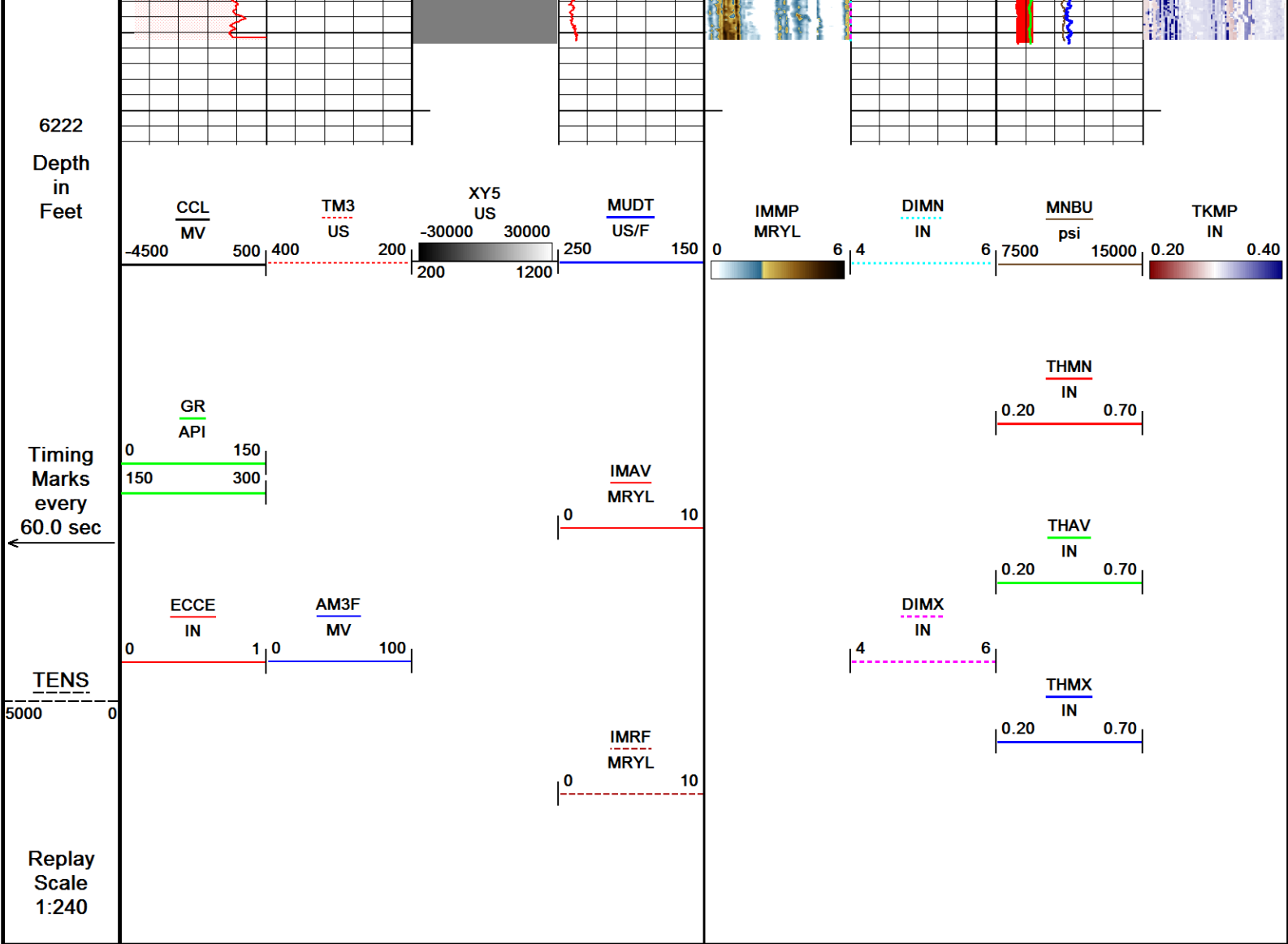






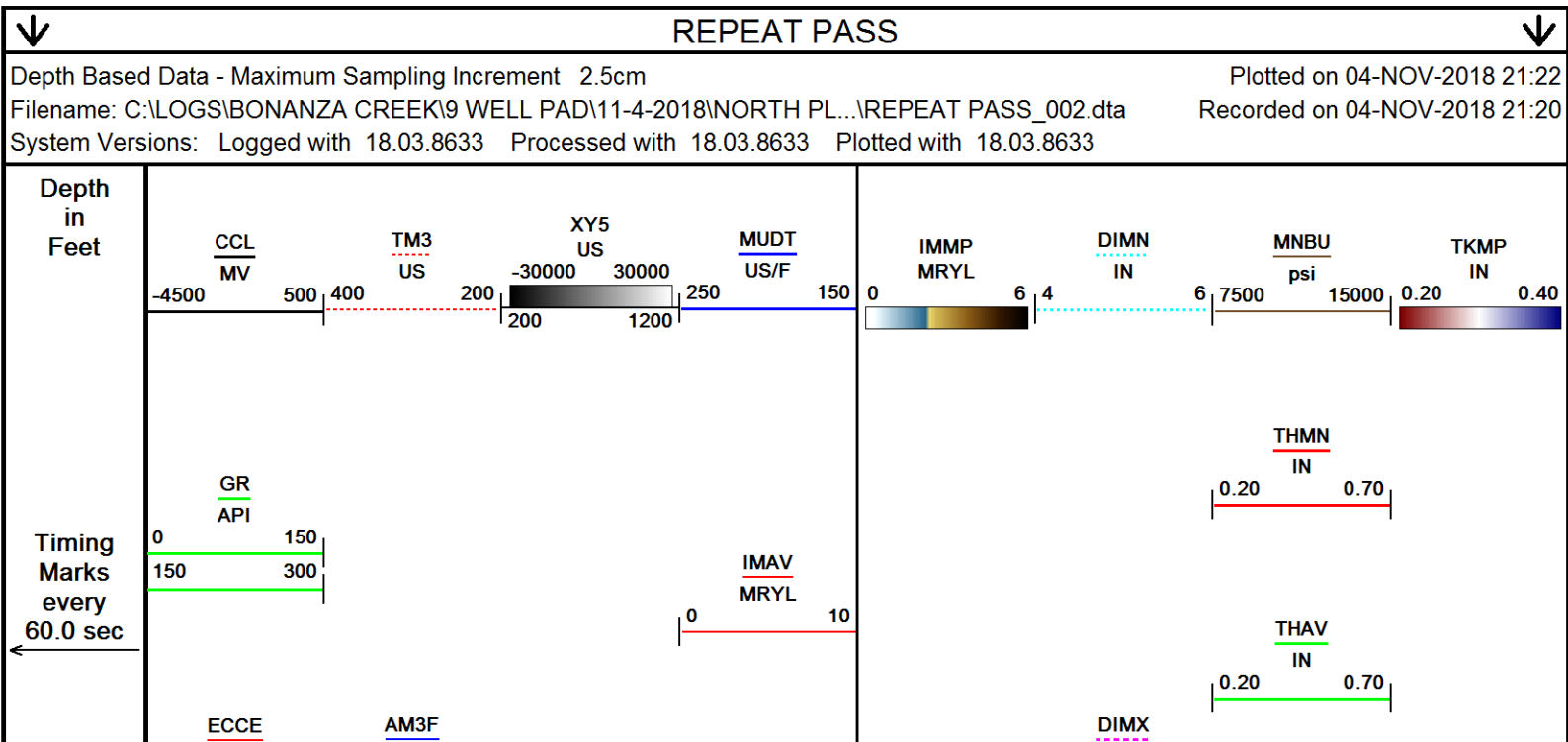




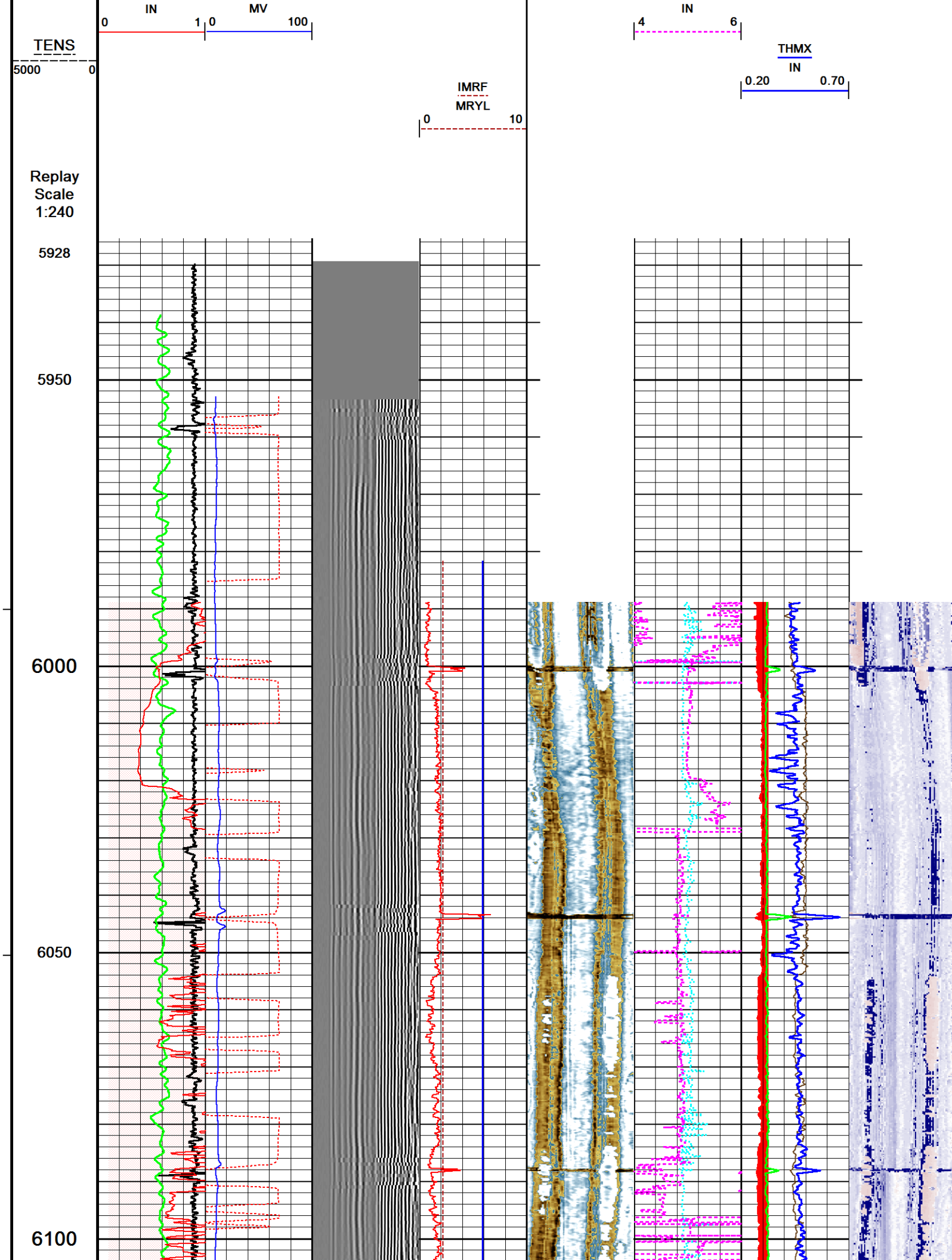


Depth Based Data - Maximum Sampling Increment 2.5cm  
Filename: C:\LOGS\BONANZA CREEK\9 WELL PAD\11-4-2018\NORTH PLAT...\MAIN PASS\_001.dta  
System Versions: Logged with 18.03.8633 Processed with 18.03.8633 Plotted with 18.03.8633  
Plotted on 04-NOV-2018 21:22  
Recorded on 04-NOV-2018 10:30

MAIN PASS



Depth Based Data - Maximum Sampling Increment 2.5cm  
Filename: C:\LOGS\BONANZA CREEK\9 WELL PAD\11-4-2018\NORTH PL...\REPEAT PASS\_002.dta  
System Versions: Logged with 18.03.8633 Processed with 18.03.8633 Plotted with 18.03.8633  
Plotted on 04-NOV-2018 21:22  
Recorded on 04-NOV-2018 21:20





6150

6200

6220

Depth  
in  
Feet

CCL  
MV

TM3  
US

XY5  
US

MUDT  
US/F

IMMP  
MRYL

DIMN  
IN

MNBU  
psi

TKMP  
IN

-4500 500

400 200

-30000 30000  
200 1200

250 150

0 6 4

6 7500

15000

0.20 0.40

Timing  
Marks  
every  
60.0 sec

GR  
API

0 150  
150 300

IMAV  
MRYL

0 10

ECCE  
IN

0 1

AM3F  
MV

0 100

TENS

5000 0

IMRF  
MRYL

0 10

THMN  
IN

0.20 0.70

THAV  
IN

0.20 0.70

DIMX  
IN

4 6

THMX  
IN

0.20 0.70

Replay  
Scale  
1:240

SHOP AND FIELD CALIBRATIONS				
C:\LOGS\BONANZA CREEK\9 WELL PAD\11-4-2018\NORTH PLATTE P41-T44-28 HNB\URS\MAIN PASS_001.dta				
UGR Field Survey Cal    UGR-JD 135				
Field Calibration on 00-JAN-1988 00:00				
Gamma Ray Field Survey Calibration				
Tool Type: UGR-JD		Serial No: 135		
Calibrator No:				
Background	Calibrator	Standard	Units	
0.0	412.0	140.0	CPS	
Delta Counts Per Sec: 412.0		CPS/API = 2.943		

CBT Field Calibration    CBT-AA 115				
Field Calibration on 04-NOV-2018 07:21				
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	1.46	
	Free Pipe	72.00	562.54	
AMP 5 FT	100 % Bond	0.90	1.48	
	Free Pipe	48.00	558.34	

CBT Constants    CBT-AA 115				
Last Edited on 04-NOV-2018 07:06				
Min Ampl 100% Bond	5.60 MV			
Max Ampl 0% Bond	72.00 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 04-NOV-2018 07:23				

# 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	4.360	0.000	0.000	MRYL

URS Constants USH-AB 136

Last Edited on 04-NOV-2018 07:06

## \*\*\* 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	2.76
ZMud Cal Area Ratio	5.20

### \*\* 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	1641.00	5.50	36.00	1.50	1.50	0.30	1.00
0.00	11592.00	5.50	17.00	2.76	4.36	0.30	1.00

### \*\* Constants \*\*

Thickness Calculated from	Tool
Radius Offset	-0.51
Mud Slowness Offset	0.00 US/F
Mud Chamber Equation	Mud Plate
Z_mud at Calibration	1.60 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

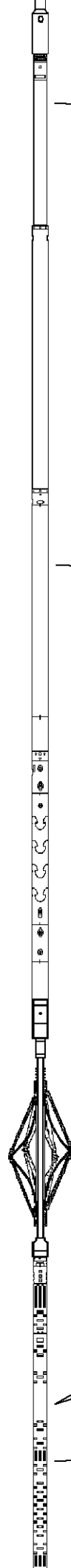
## DOWNHOLE EQUIPMENT

C:\LOGS\BONANZA CREEK\9 WELL PAD\11-4-2018\NORTH PLATTE P41-T44-28 HNB\URS\MAIN PASS.dta

Mono-Cablehead  
MCH-AA 777 LG: 1.03 ft WT: 2.2 lb OD: 1.460 in







59.48 ft CCL - Collar Locator

51.39 ft GR - Gamma Ray

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

36.70 ft AM3F - Amplitude 3FT

36.70 ft TM3 - Travel Time 3FT

35.70 ft XY5 - XY Signature 5FT

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

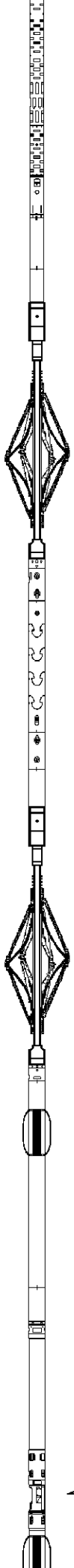
Flexible Joint, URS, 55 Pin  
FTP-FA 132 LG: 4.35 ft WT: 90.4 lb OD: 3.386 in

55 pin Roller Centralizer  
CEN-XA 225 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  
URSH-AB 136 LG: 1.03 ft WT: 13.2 lb OD: 3.386 in



7.65 ft IMRF - Mud Impedance  
7.65 ft MUdT - Mud Slowness

Total Length: 62.40 ft Weight: 1045.0 lb



- 0.37 ft IMMP - Impd Map
- 0.37 ft IMAV - Avg Impedance
- 0.37 ft ECCE - Eccentering
- 0.37 ft DIMX - Max Diameter
- 0.37 ft DIMN - Min Diameter
- 0.37 ft MNBU - Min Burst
- 0.37 ft TKMP - Thickness Map
- 0.37 ft THMN - Min Thickness
- 0.37 ft THMX - Max Thickness
- 0.37 ft THAV - Avg Thickness
- 0.00 ft TENS - Tension
- Tool Zero (0.00ft from bottom)

All measurements relative to tool zero.

COMPANY	BONANZA CREEK ENERGY
WELL	P41-T44-28 HNB
FIELD	WATTENBERG
PROVINCE/COUNTY	WELD
COUNTRY/STATE	USA / COLORADO

Elevation Kelly Bushing	4565	feet	Bottom Log Interval	6211.00	feet
Elevation Drill Floor	4565	feet	Depth Driller	11602.00	feet
Elevation Ground Level	4548	feet	Depth Logger	6211.00	feet



SECUREVIEW  
ULTRAVIEW / BONDVIEW  
LOG

**Weatherford**<sup>®</sup>