



**Weatherford**

**SECUREVIEW  
ULTRAVIEW / BONDVIEW  
LOG**

COMPANY	BONANZA CREEK ENERGY		
WELL	PRONGHORN 24-8-5 XRLNB		
FIELD	WATTENBERG		
PROVINCE/COUNTY	WELD		
COUNTRY/STATE	UNITED STATES / COLORADO		
LOCATION	407' FSL & 1335' FWL		
SEC 8	TWP 5N	RGE 61W	Other Services
Latitude			
Longitude			
API Number	05-123-45068		
Permanent Datum GL, Elevation	4607 feet		Elevations: KB 4624.00
Log Measured From KB, 17.00 feet above Permanent Datum			DF 4607.00
Drilling Measured From KB			
Date	06-FEB-2019	PERFORATION RECORD	
Run Number	ONE	Shot	Number
Service Order	7145-236671604	Density	of Shots
Type Log	URS / CBT		Depth From
Depth Driller			Depth To
Depth Logger	5909.00		
Top Log Interval	12.00		
Bottom Log Interval	5909.00		
Hole Fluid Type	WATER BASED		
Hole Fluid Level	130.00		
Restriction ID	4.767	Gun Type	
Max Recorded Temp	198.00	Gun Size	
Well Head Pressure	0.00	CASING / TUBING RECORD	
Well Head Equipment	NONE	Size	Weight
Time Well Ready	ON ARRIVAL	inches	pounds/ft
Time Logger Bottom	11:30	9.625	36.00
Unit	14166	5.500	17.00
Equipment Name	WSS-E		
Base	CASPER		
Recorded By	K. HUSETH		
Witnessed By	K. DODGE		

CASING / TUBING RECORD						
Type	Grade	TypeJoint	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	J-55		9.625	0.00	1604.00	36.00
PRODUCTION	P-110		5.500	0.00	16144.00	17.00

**REMARKS**

SECUREVIEW ULTRAVIEW BONDVIEW LOG CORRELATED TO RIG KB @ 17 FT ABOVE GROUND LEVEL

100% STANDARD FREE PIPE AMPLITUDE IN 5.5 INCH CASING IS 72 mV

ESTIMATED TOC IS AT OR ABOVE TOP OF LOGGING INTERVAL AT 130 FT

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

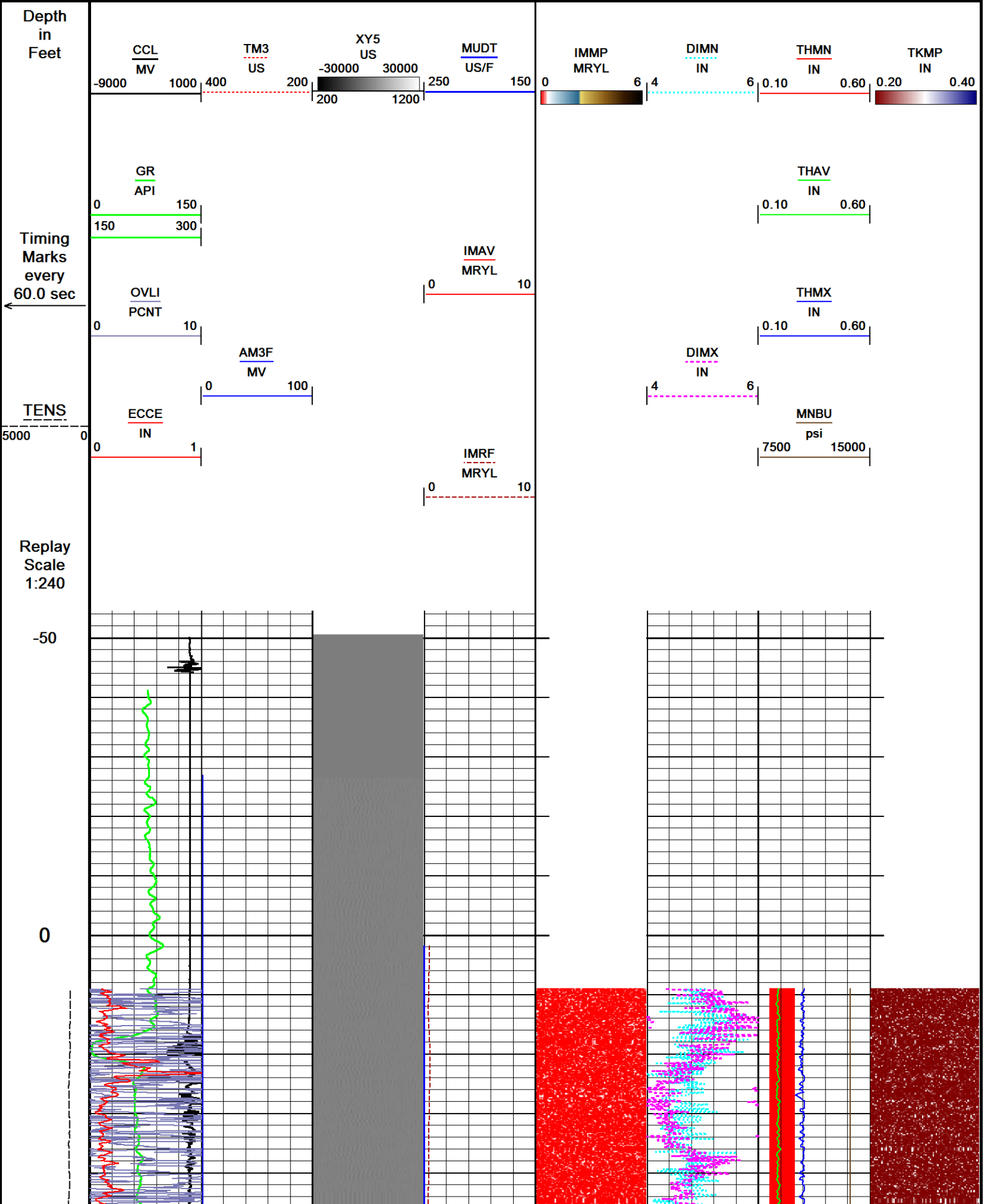
Depth Based Data - Maximum Sampling Increment 2.5cm

Plotted on 15-FEB-2019 07:51

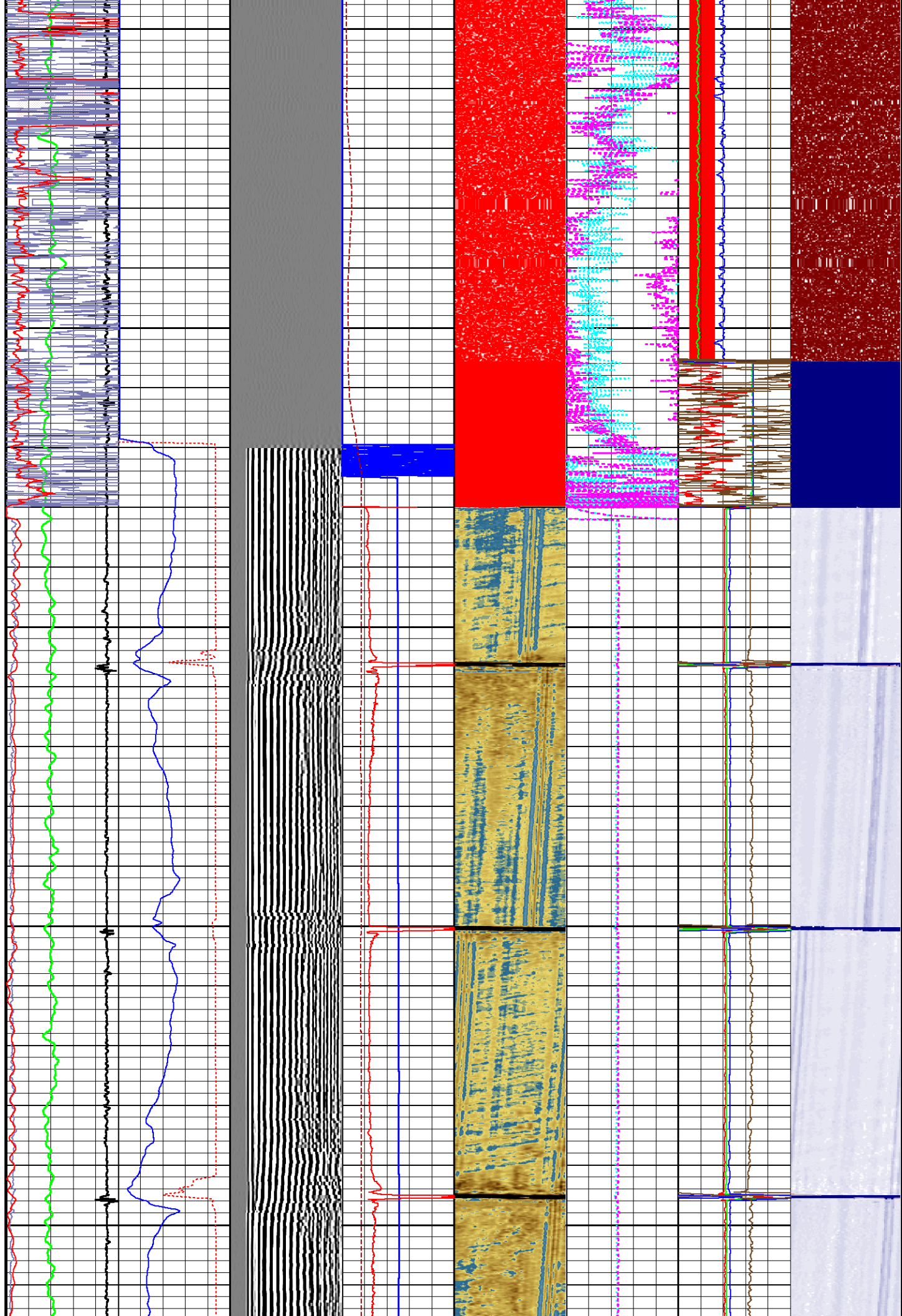
Filename: C:\Users\le197426\Desktop\LOGS\BONANZA CREEK\PRONGHORN...MAIN PASS\_002.dta

Recorded on 06-FEB-2019 19:15

System Versions: Logged with 18.05.7089 Processed with 18.05.7089 Plotted with 18.05.7089



50  
100  
150  
200  
250

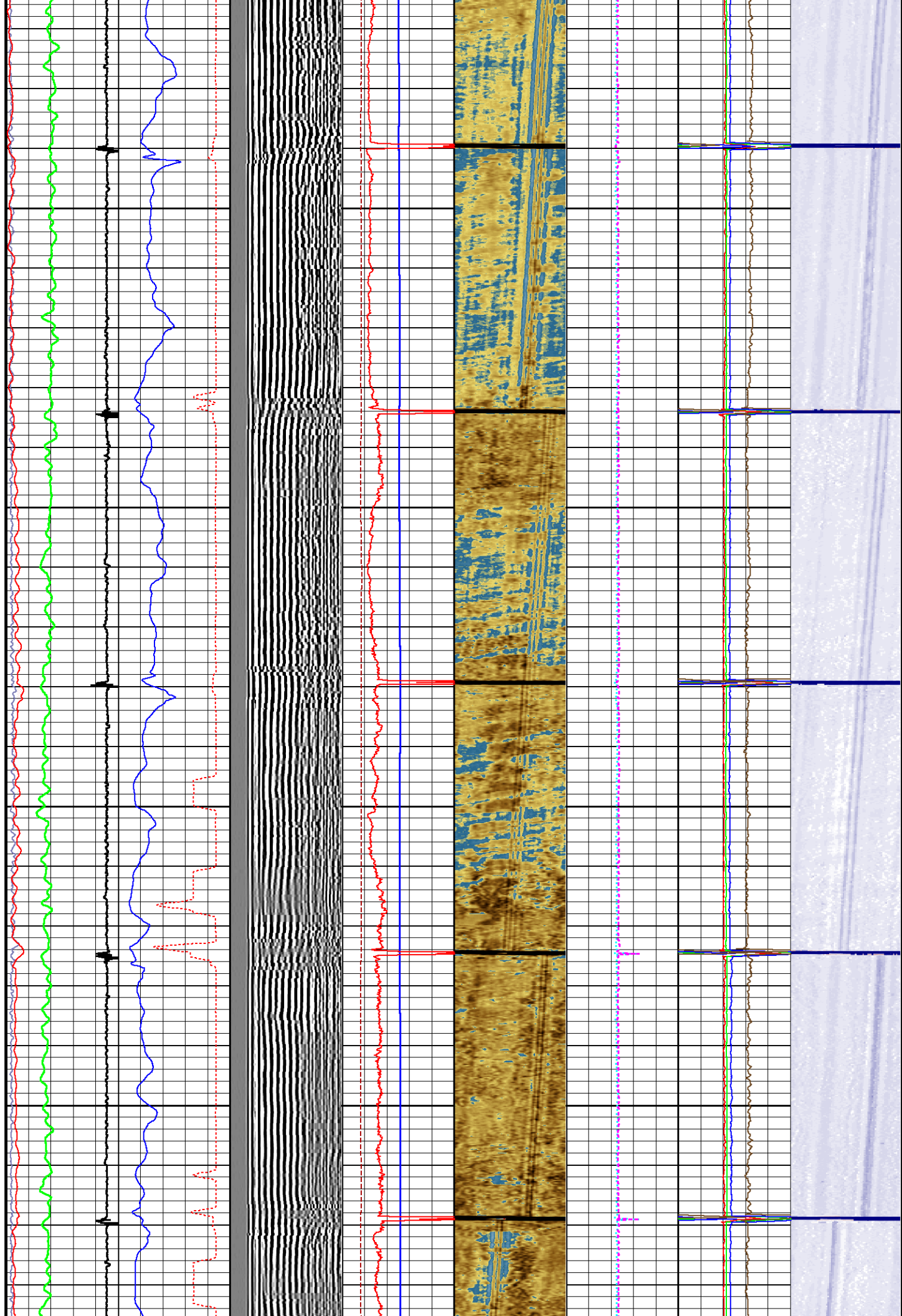


300

350

400

450



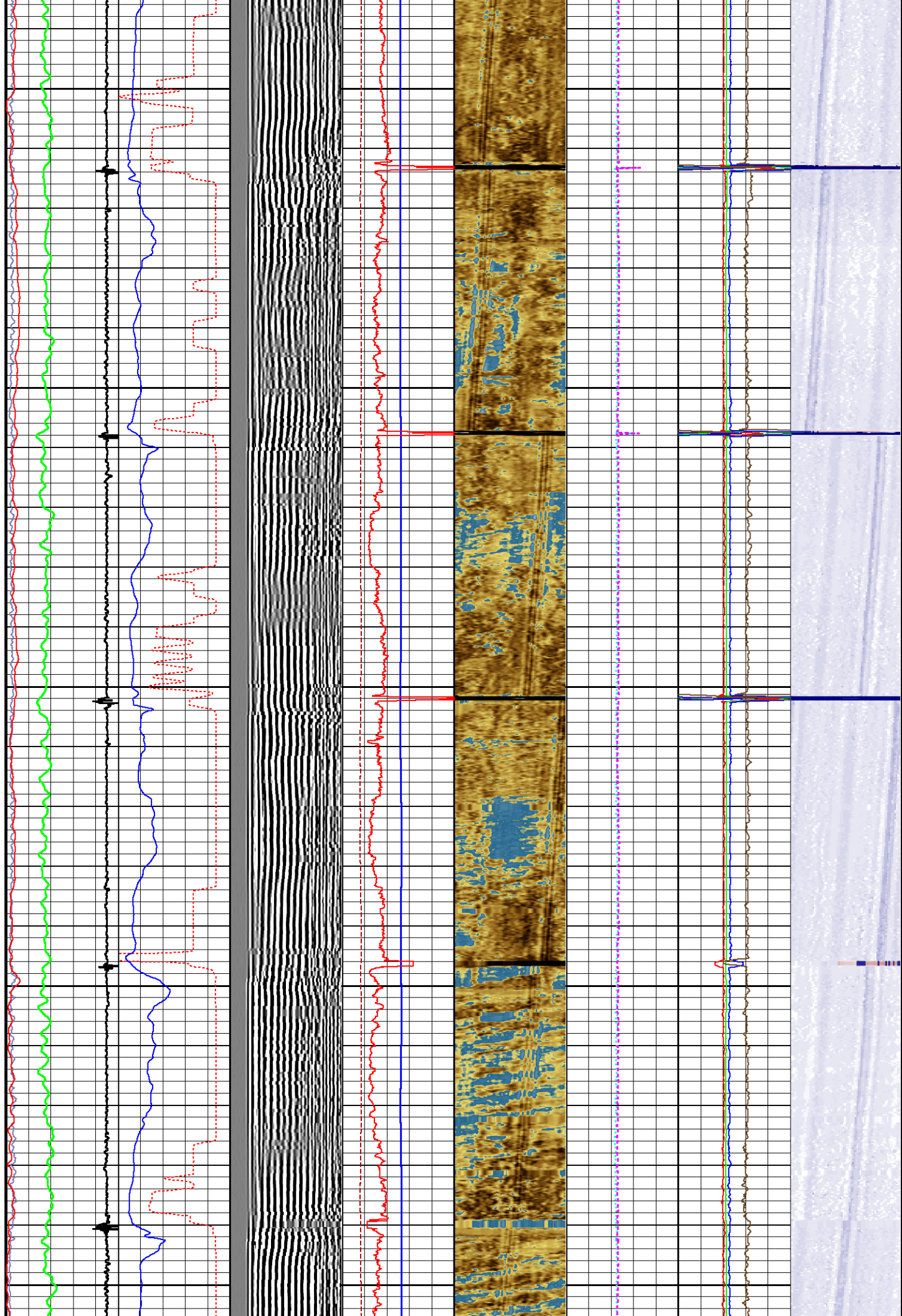
500

550

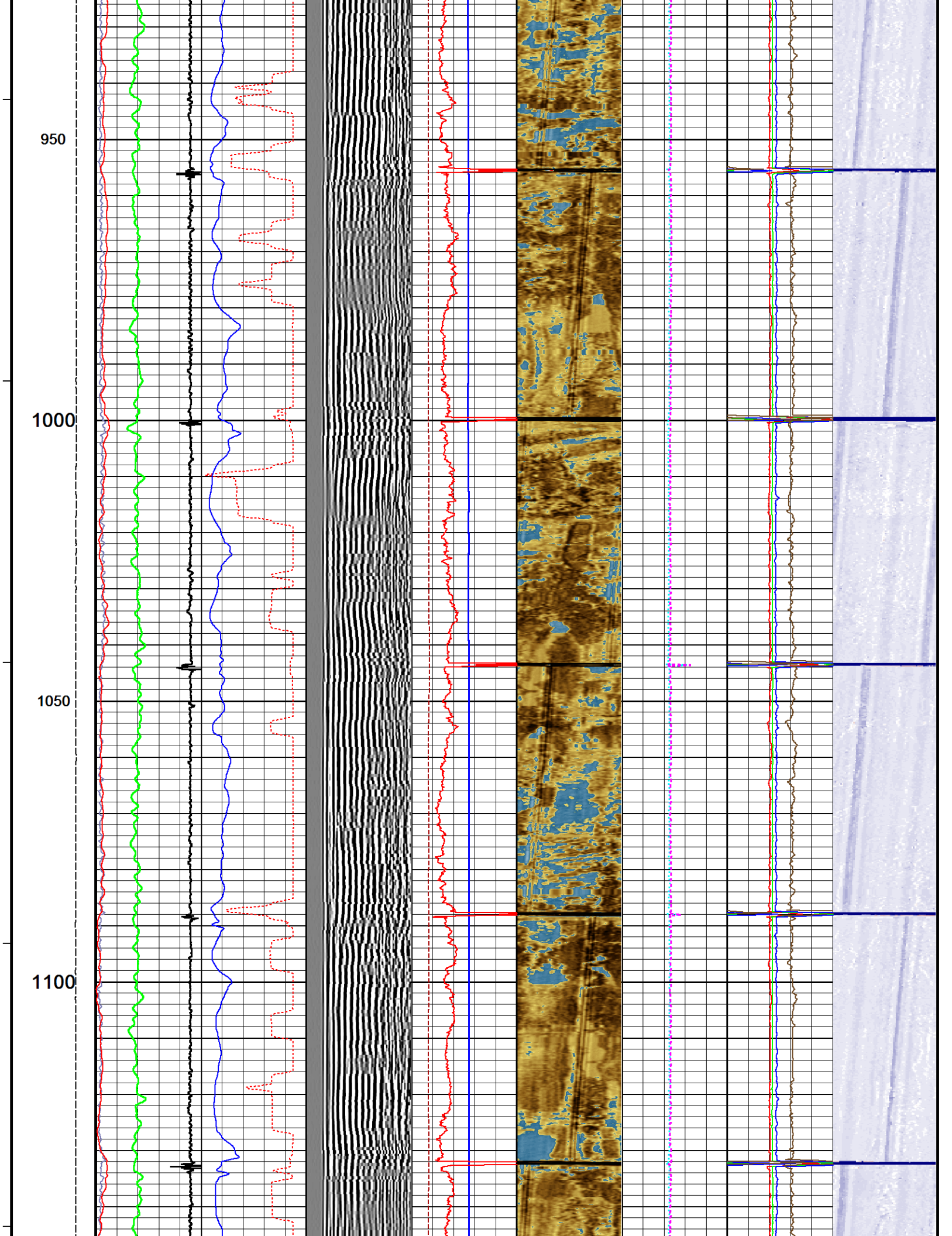
600

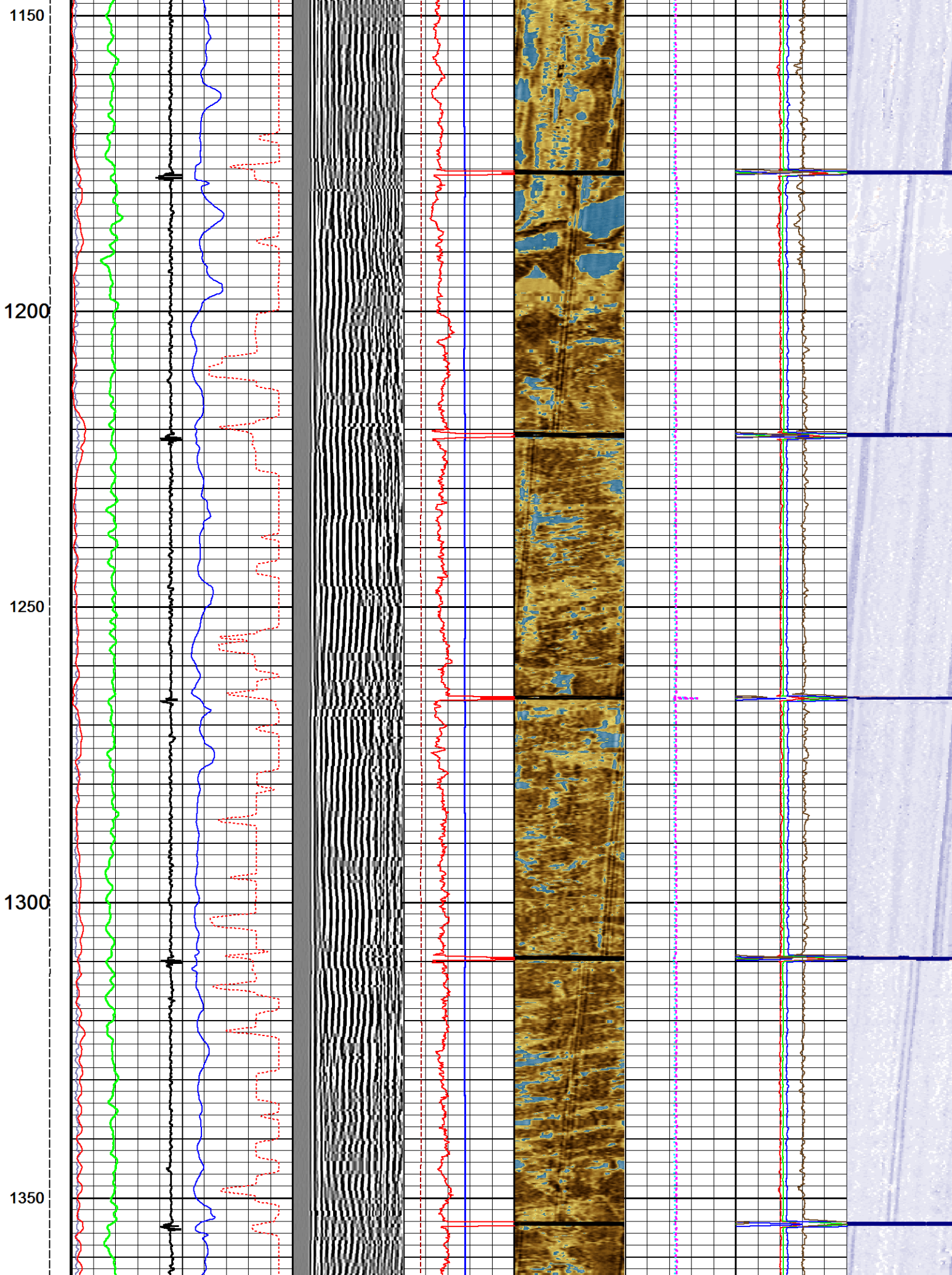
650

700







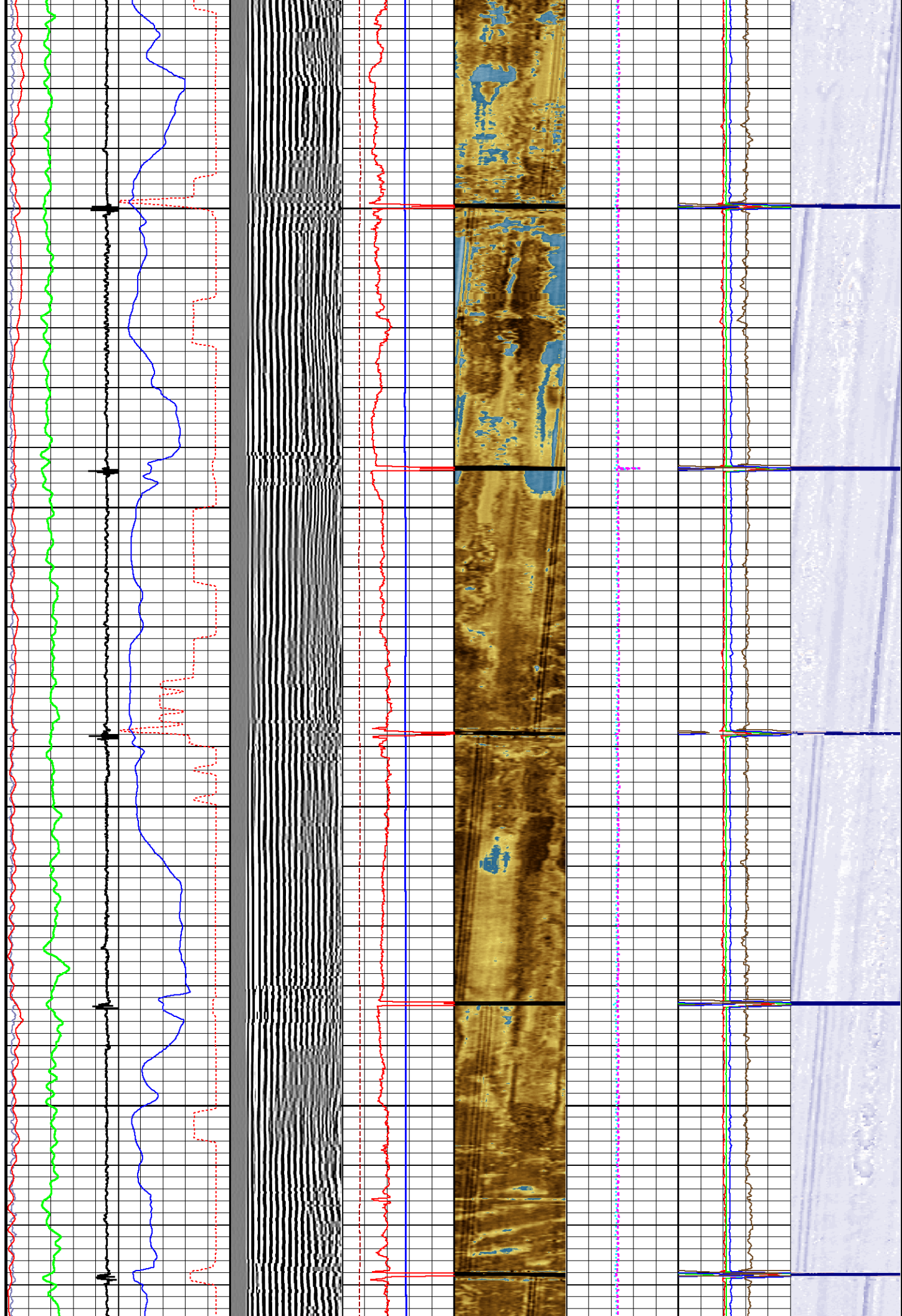


1400

1450

1500

1550



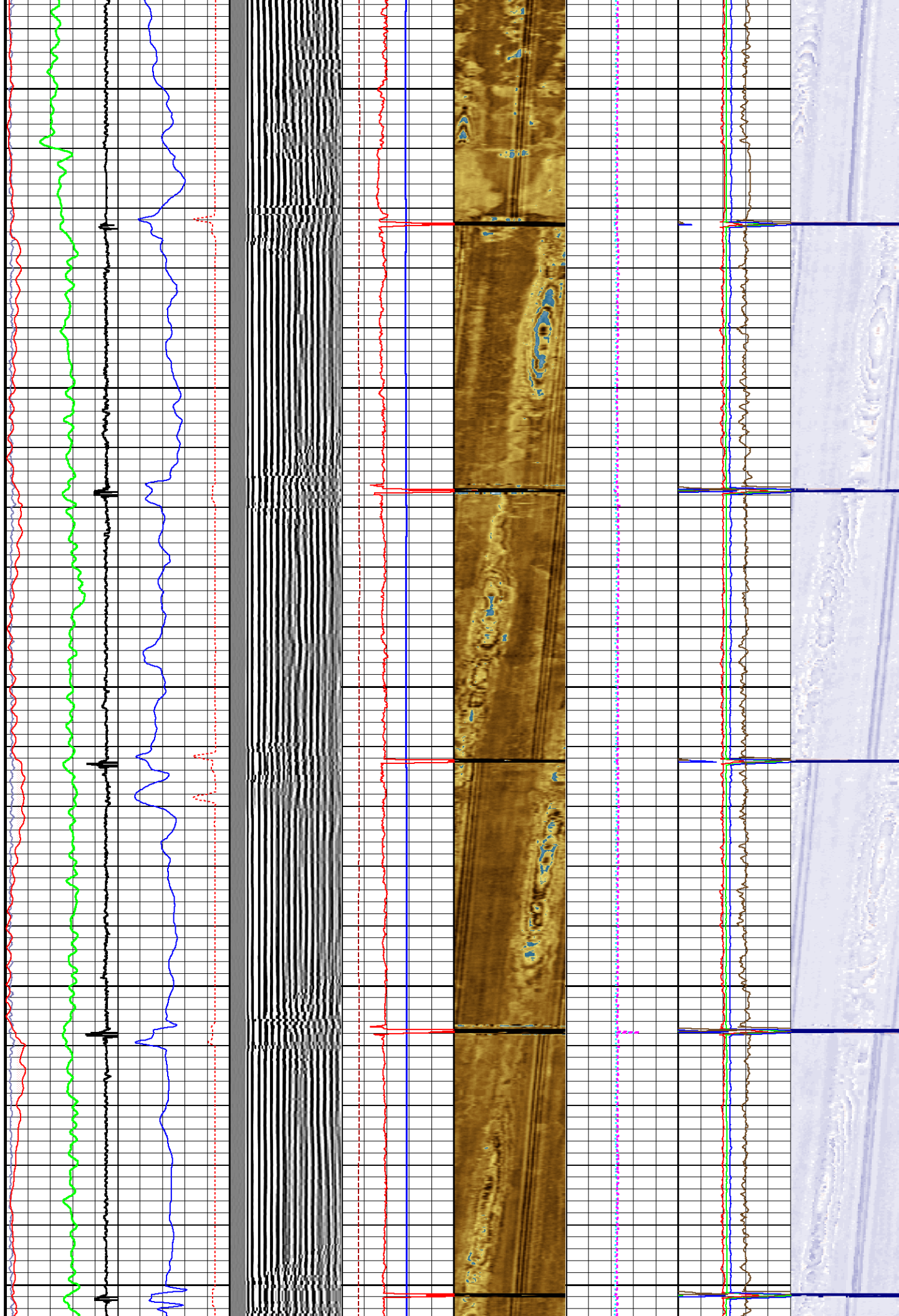
1600

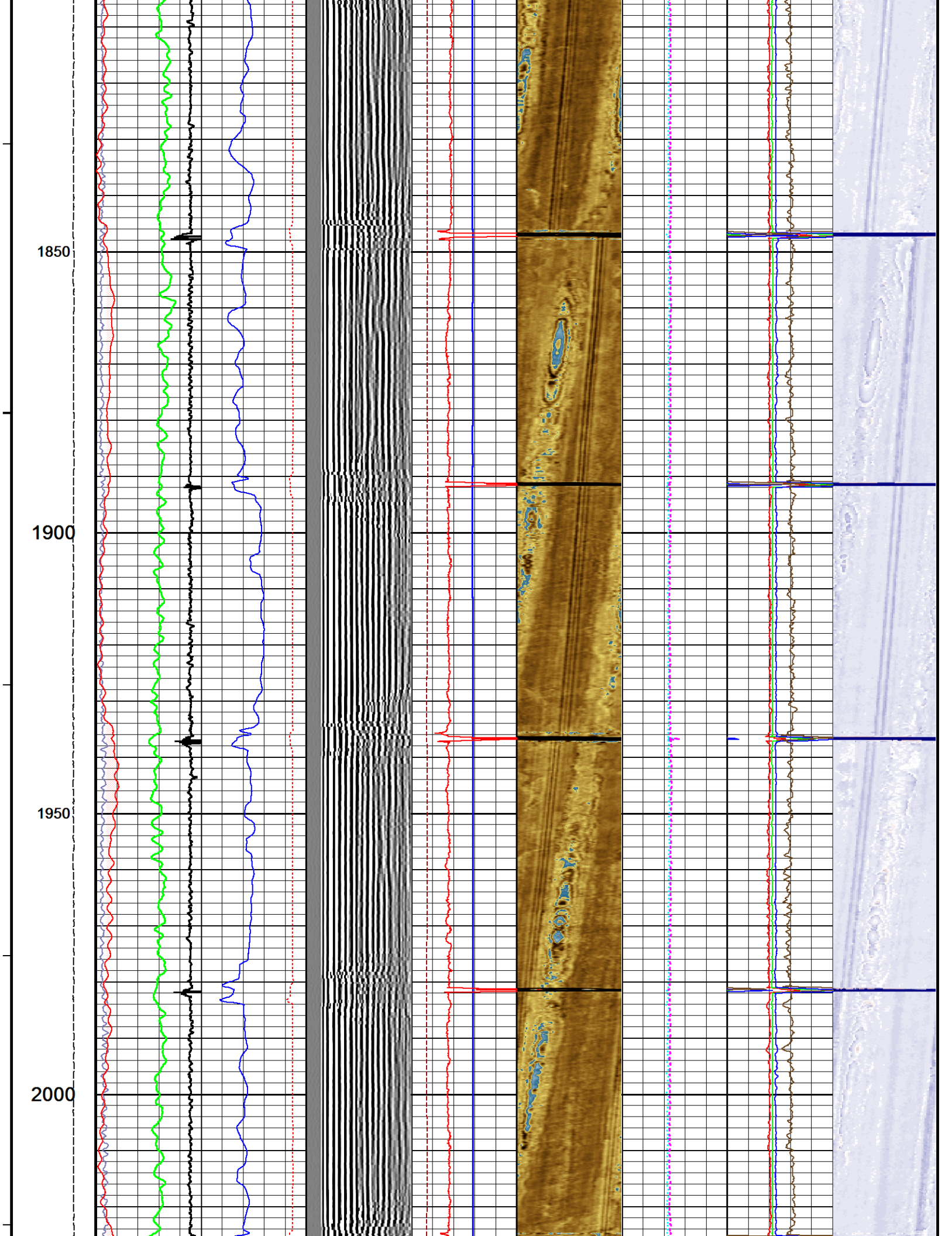
1650

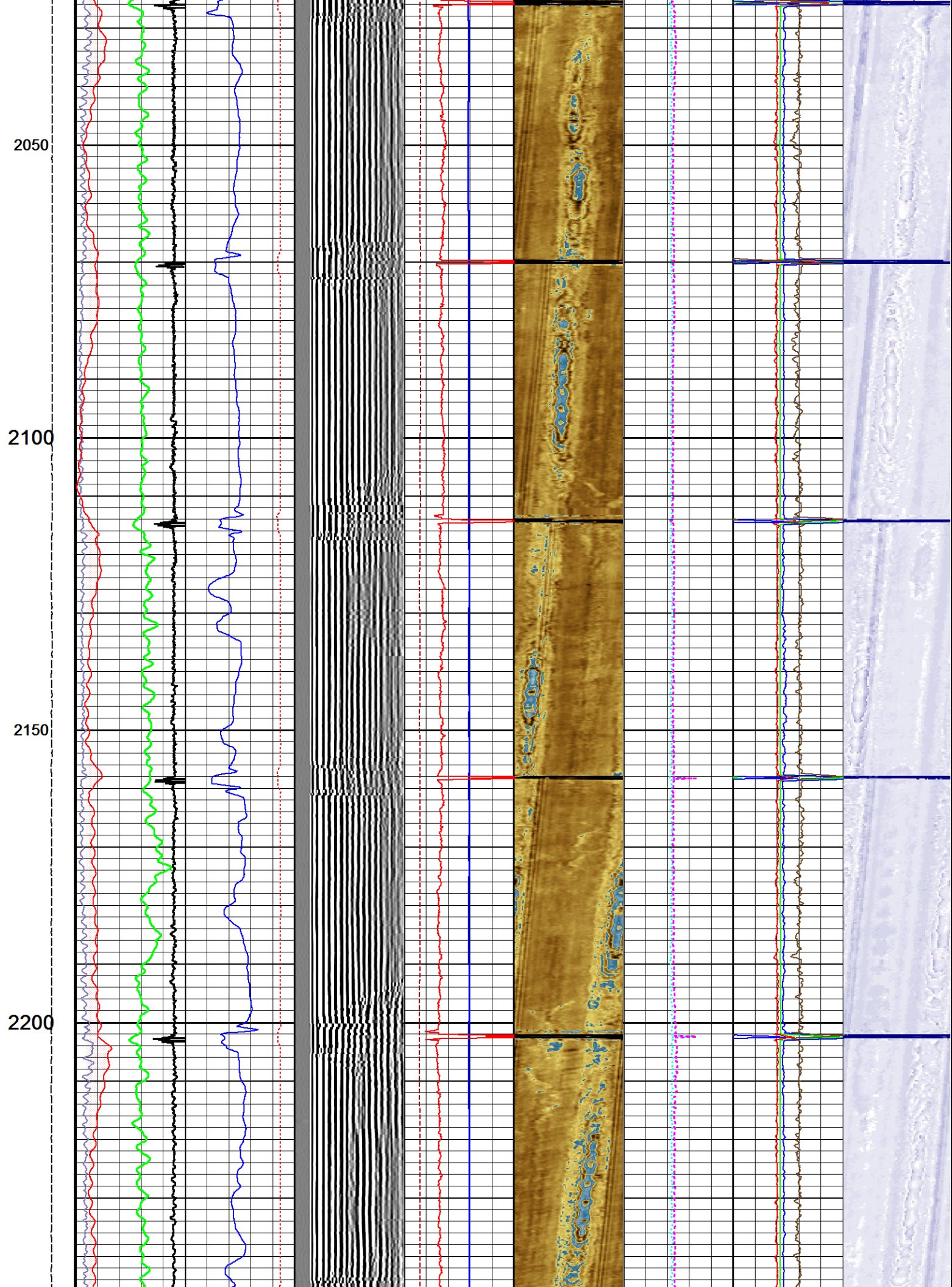
1700

1750

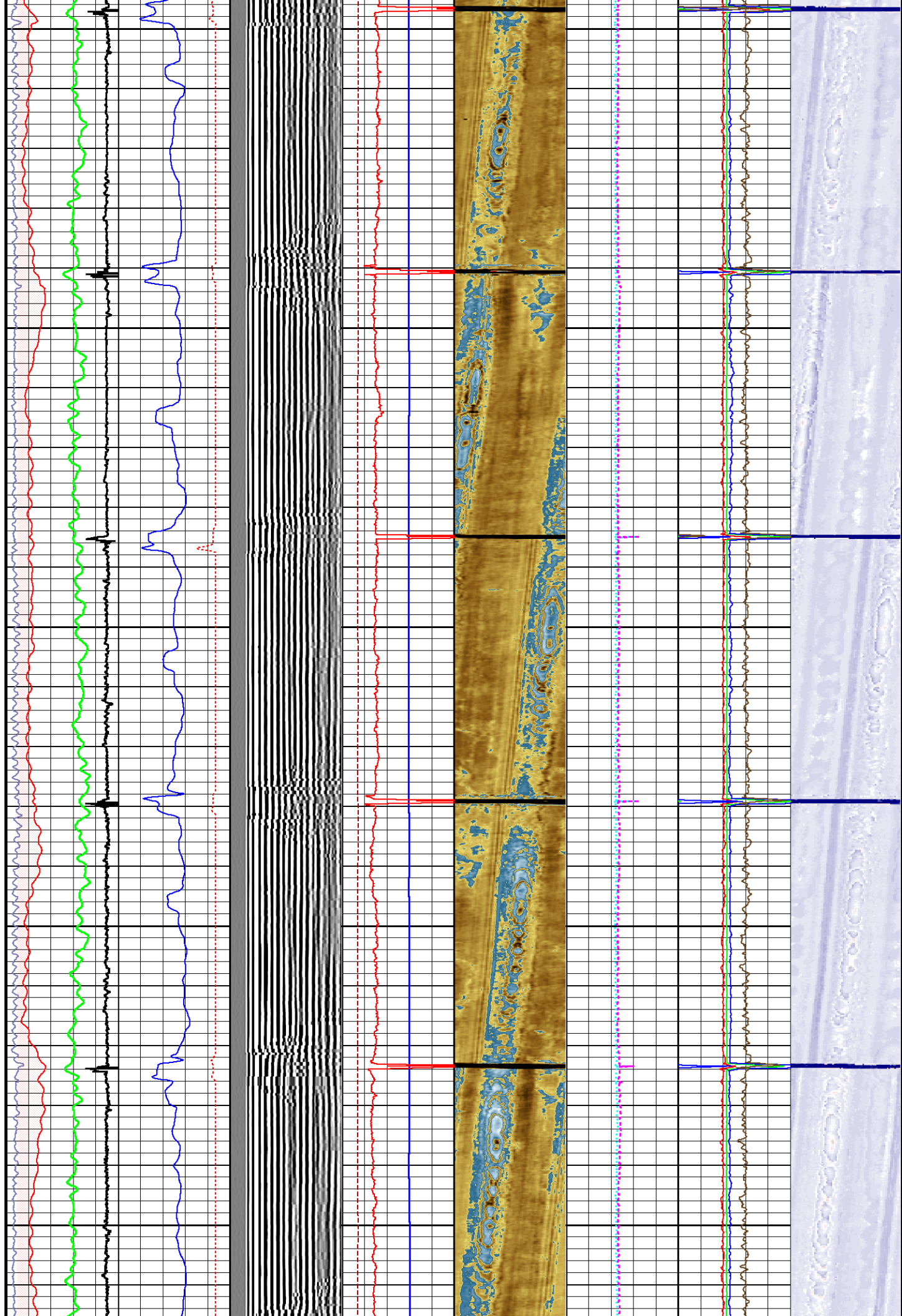
1800

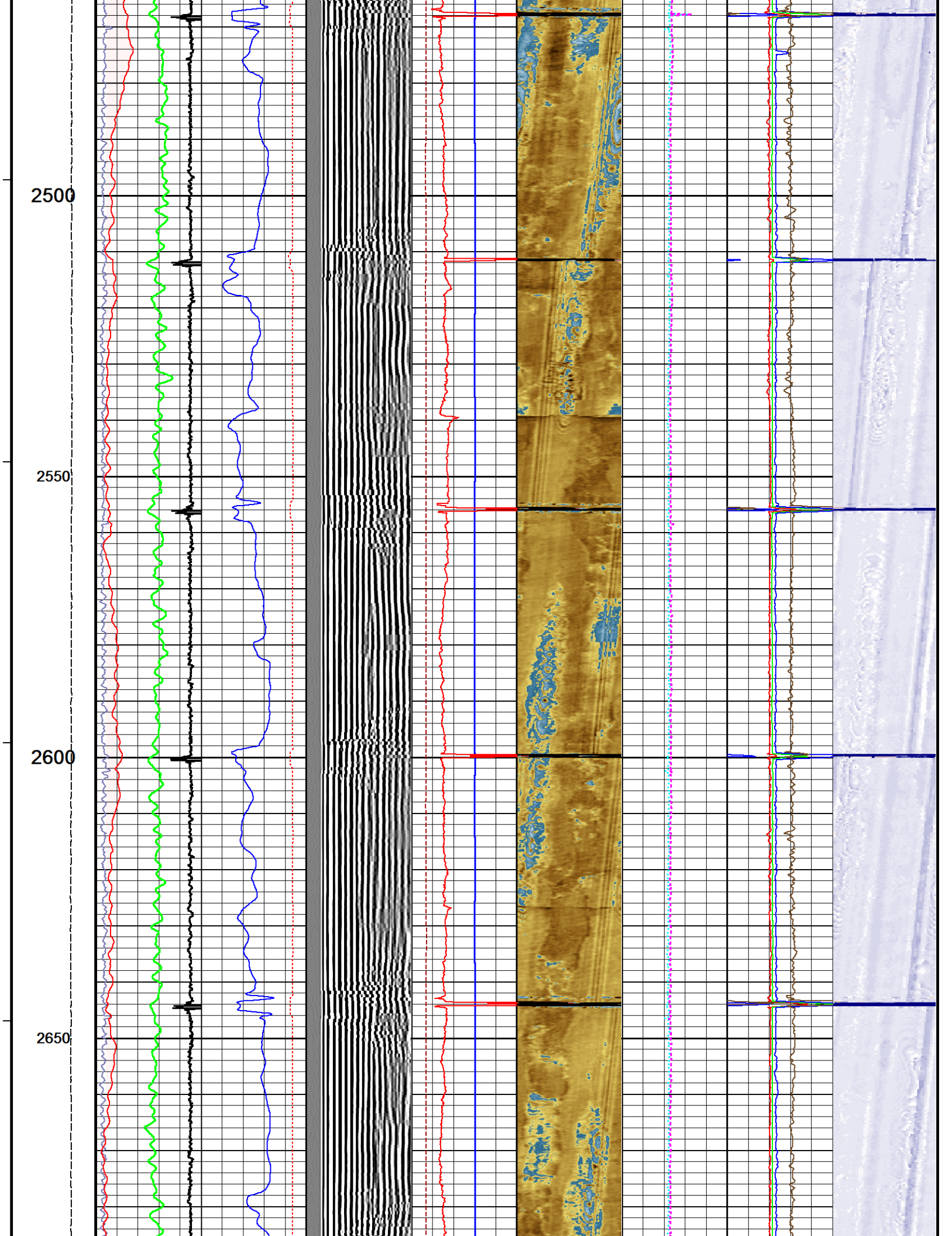






2250  
2300  
2350  
2400  
2450



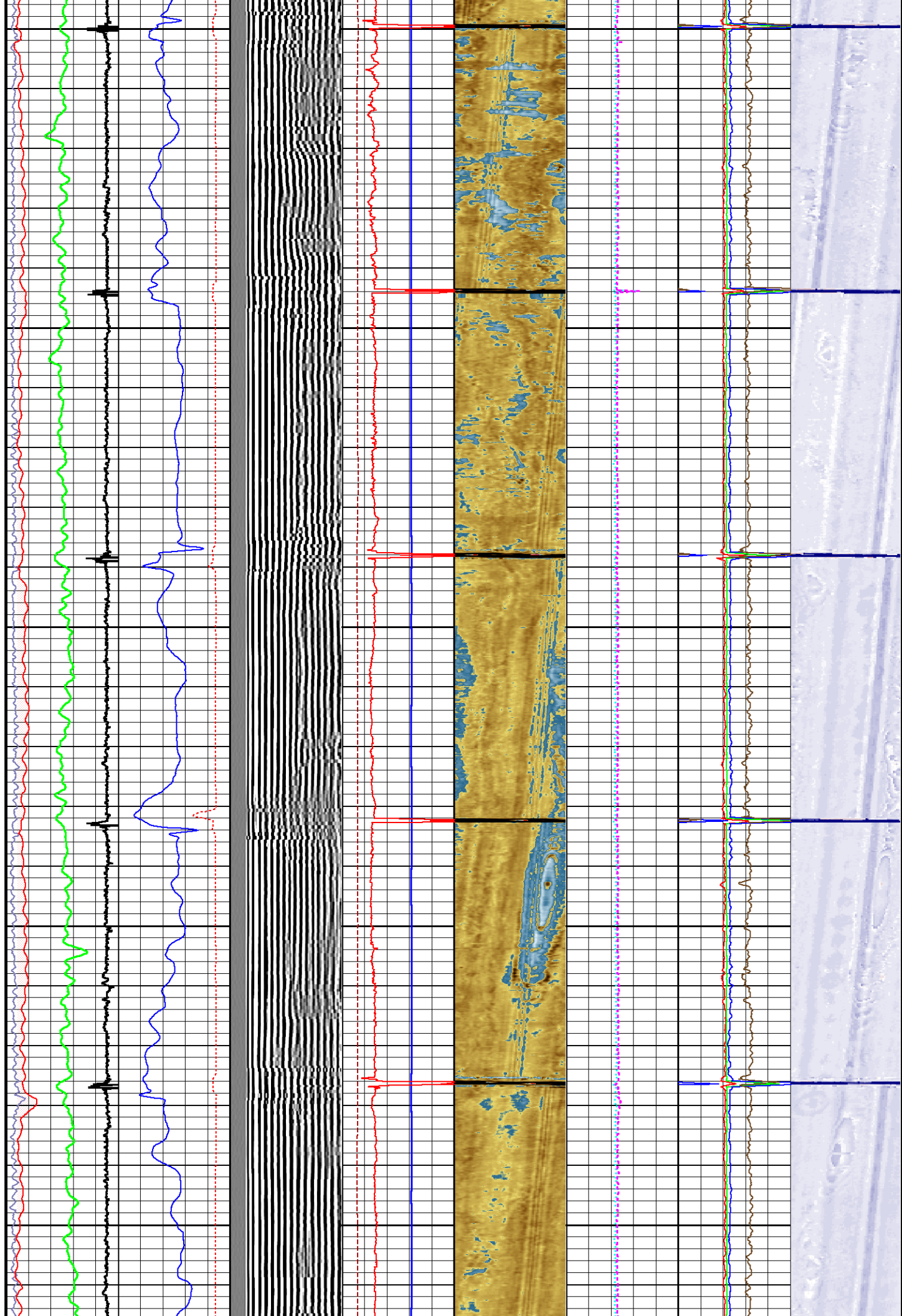








3350  
3400  
3450  
3500  
3550

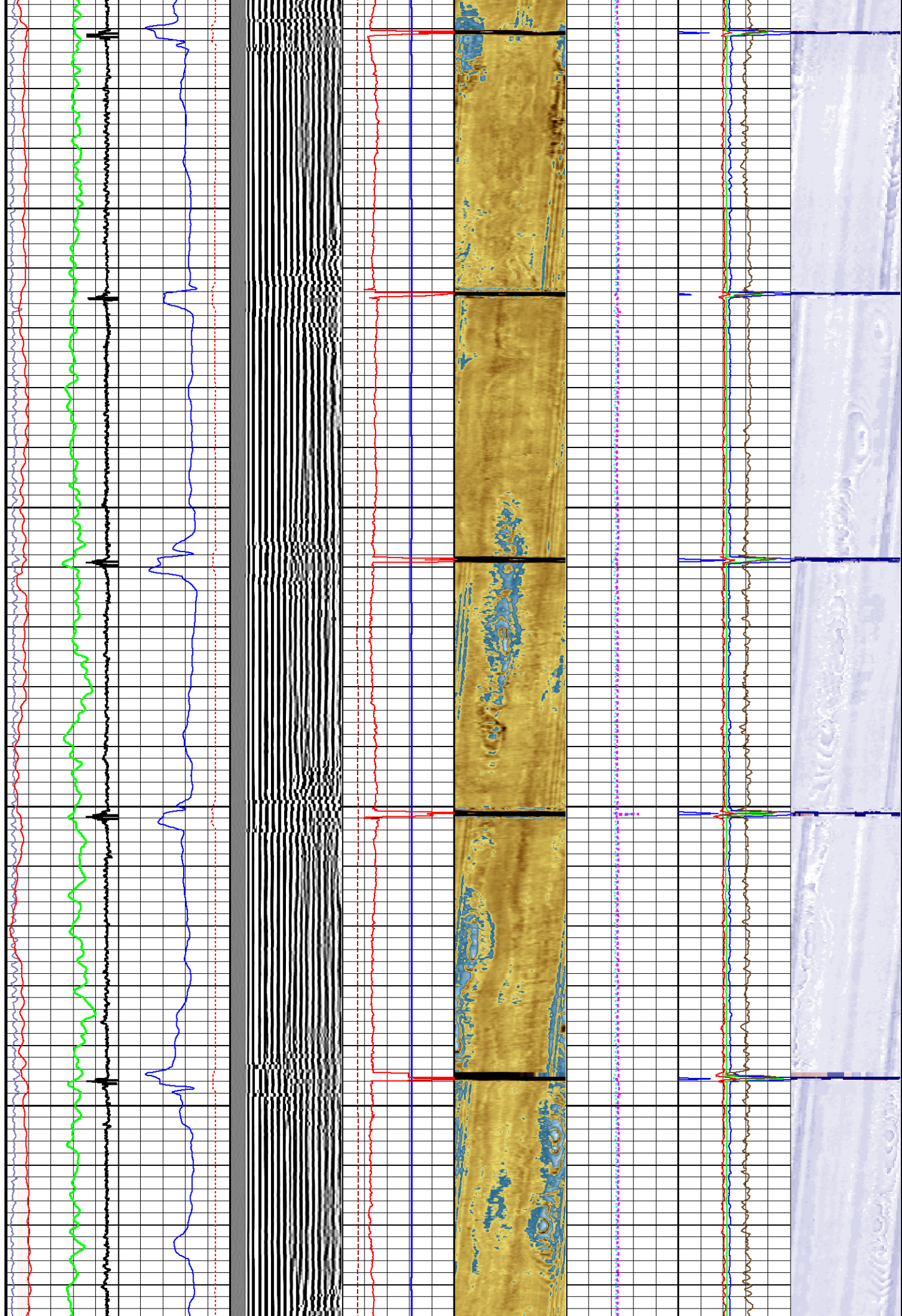


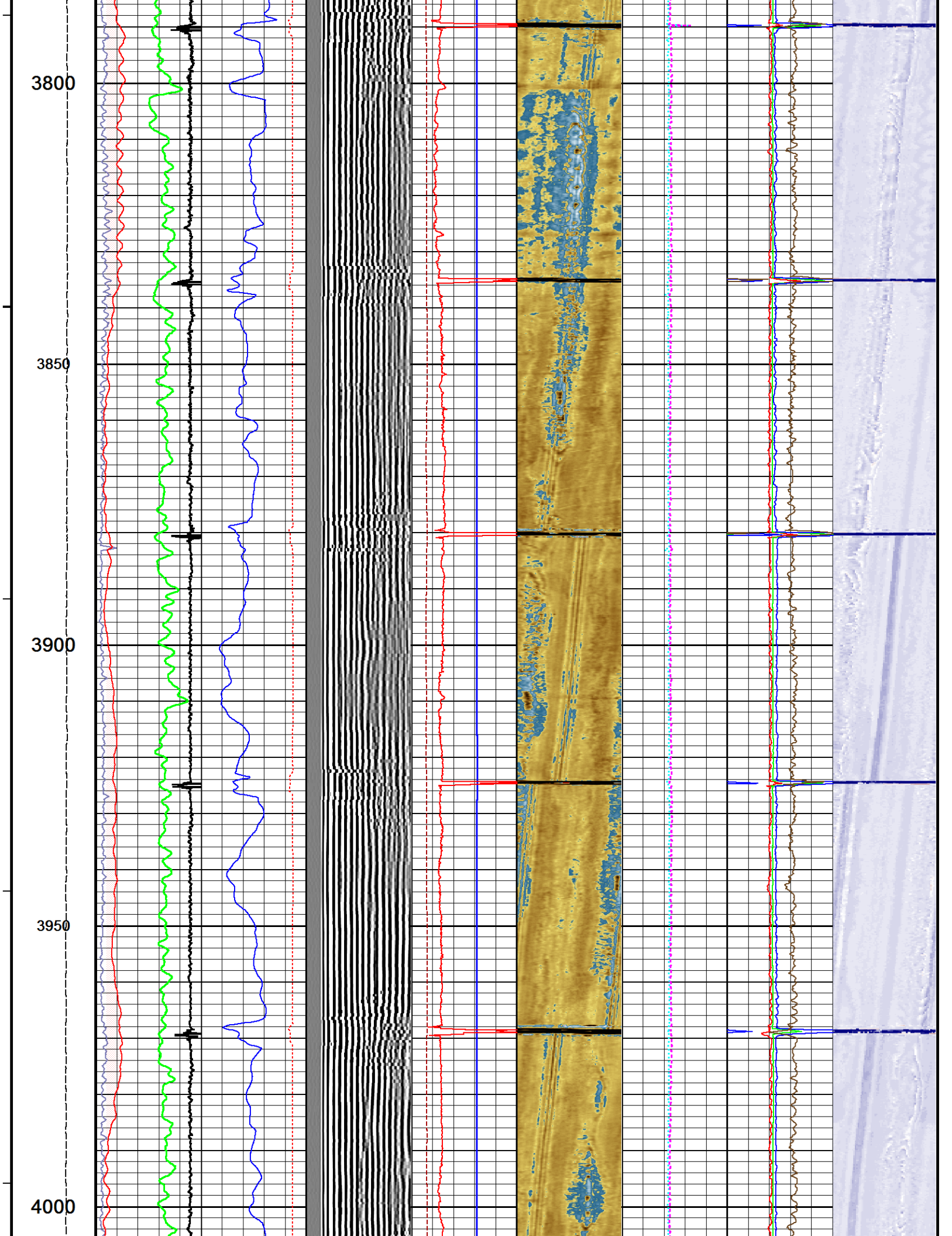
3600

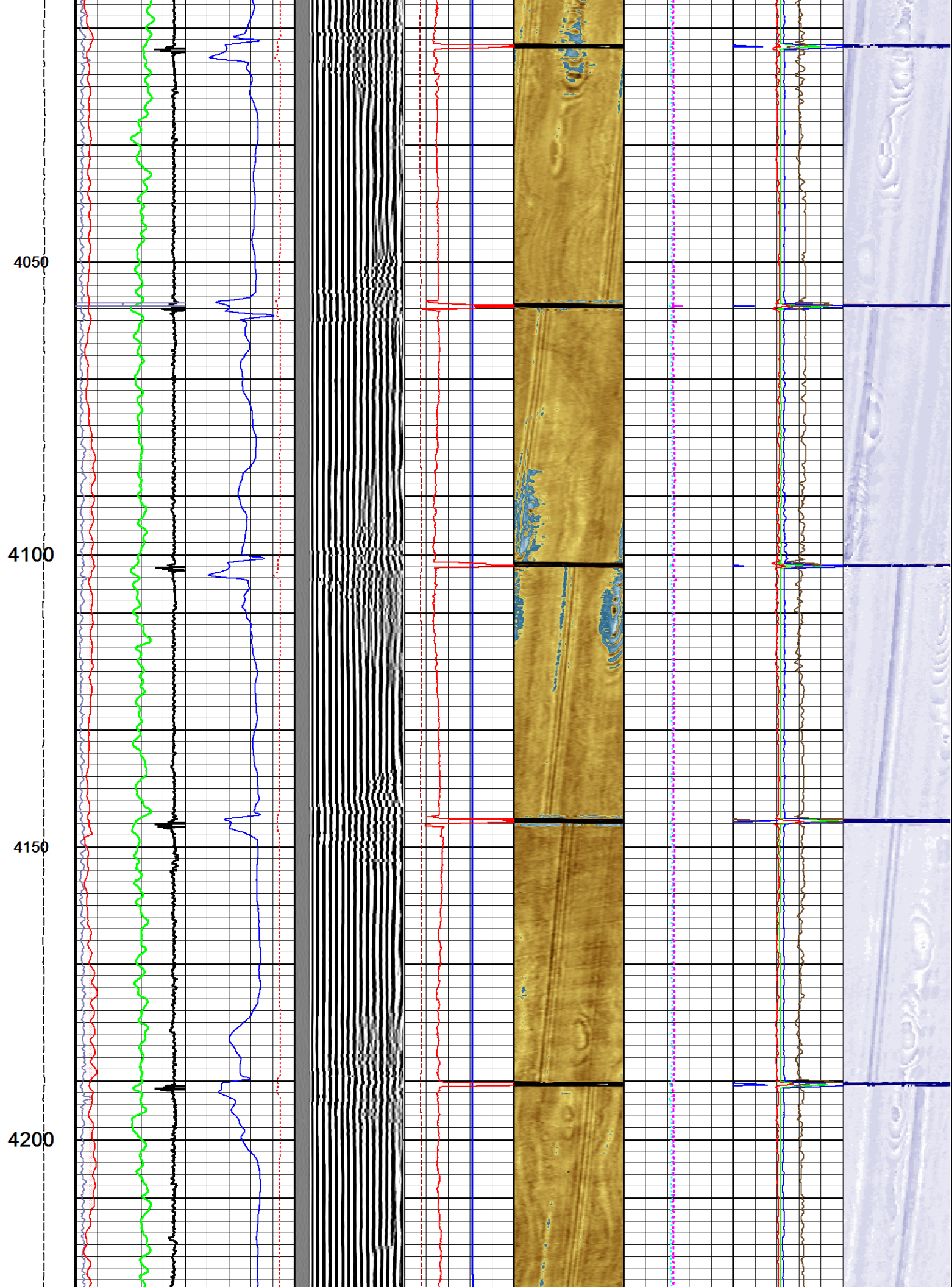
3650

3700

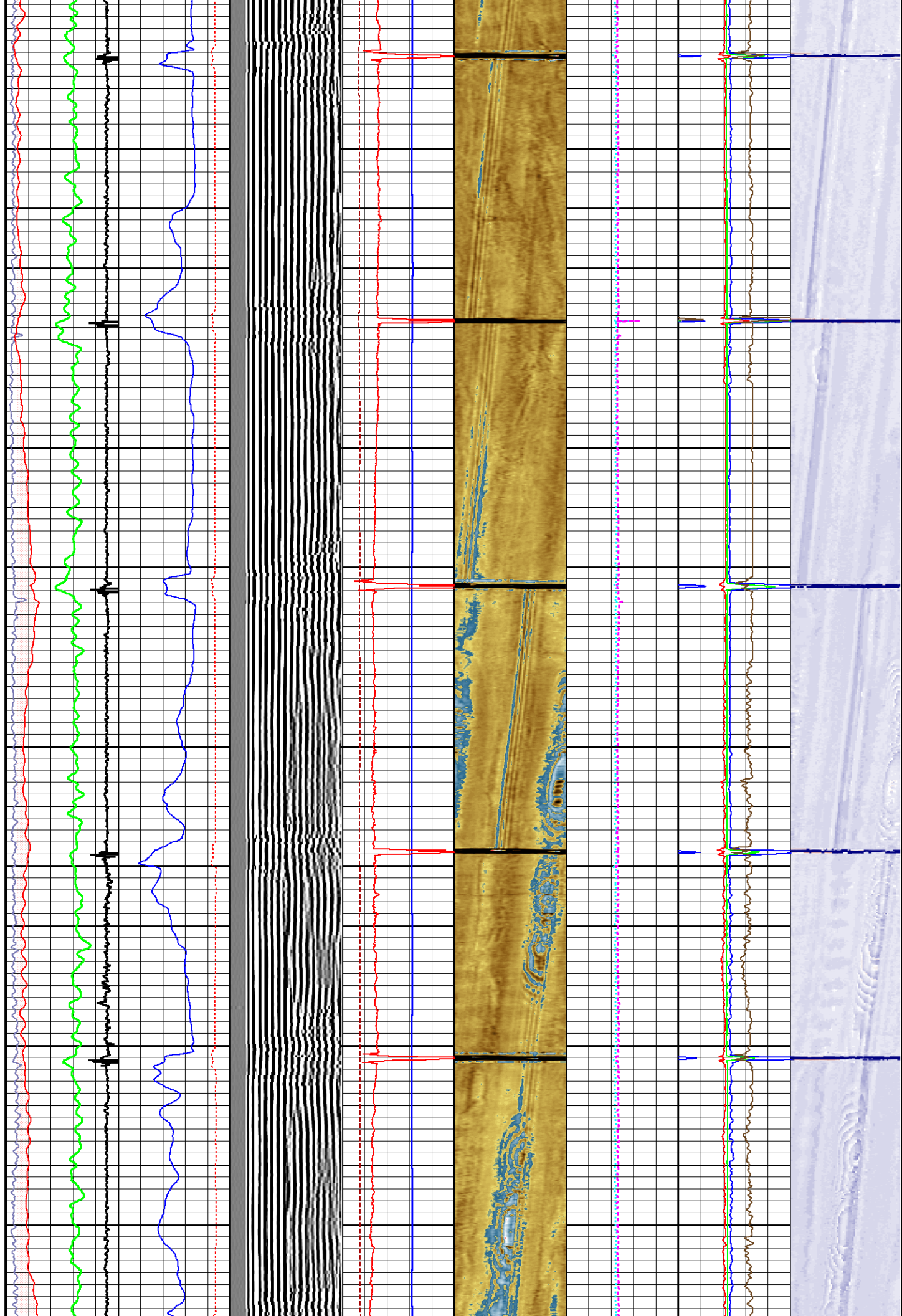
3750



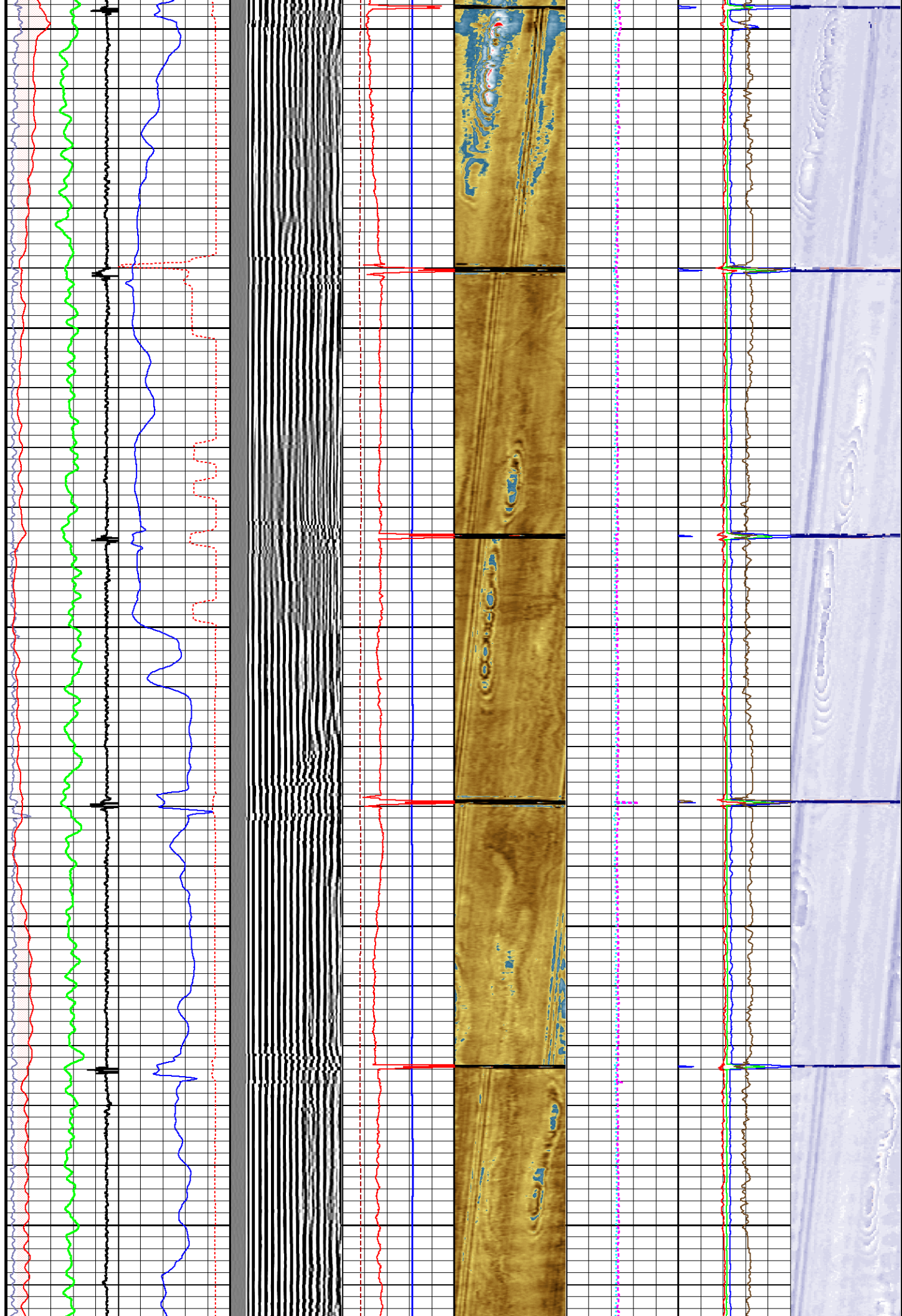




4250  
4300  
4350  
4400



4450  
4500  
4550  
4600  
4650

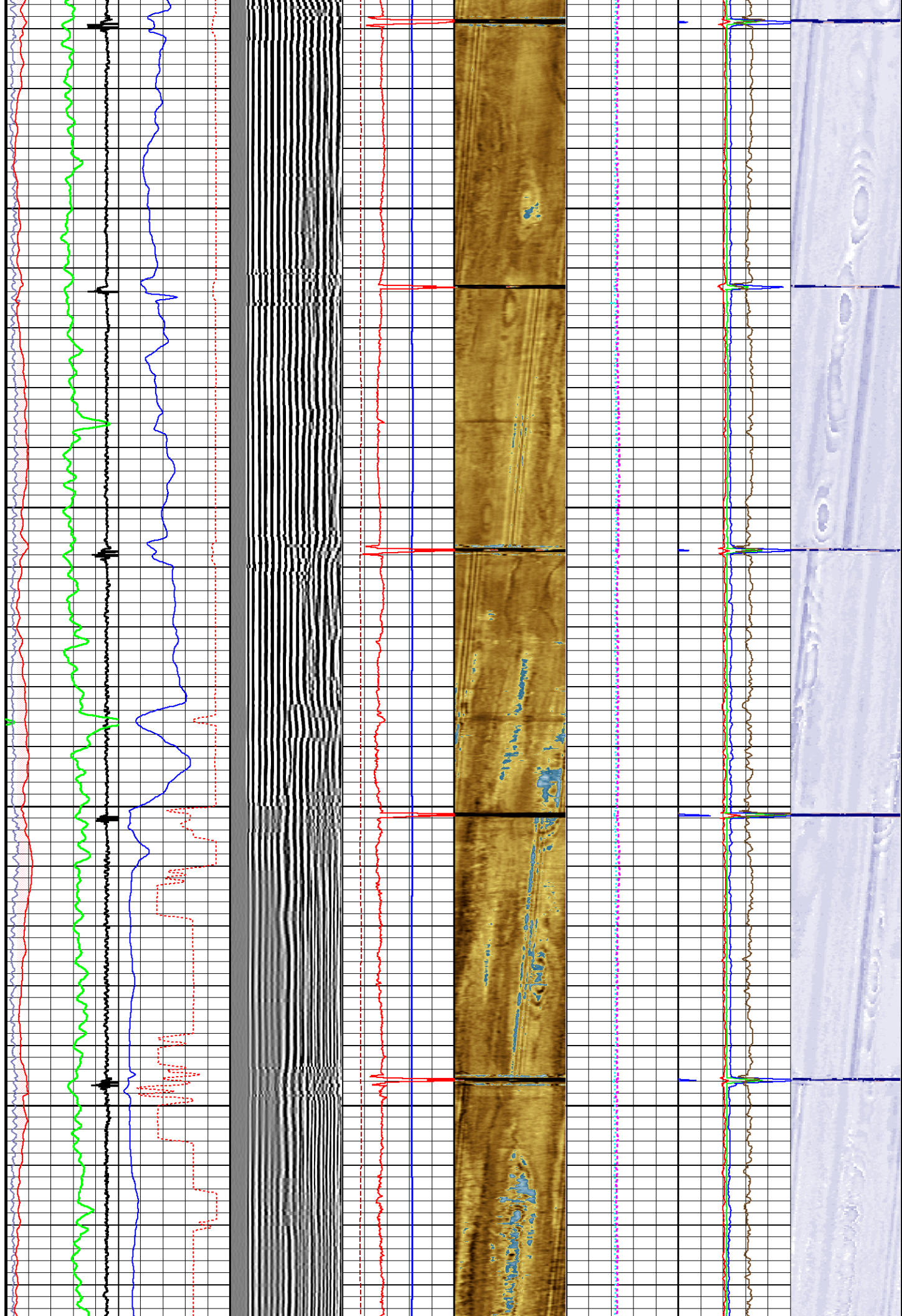


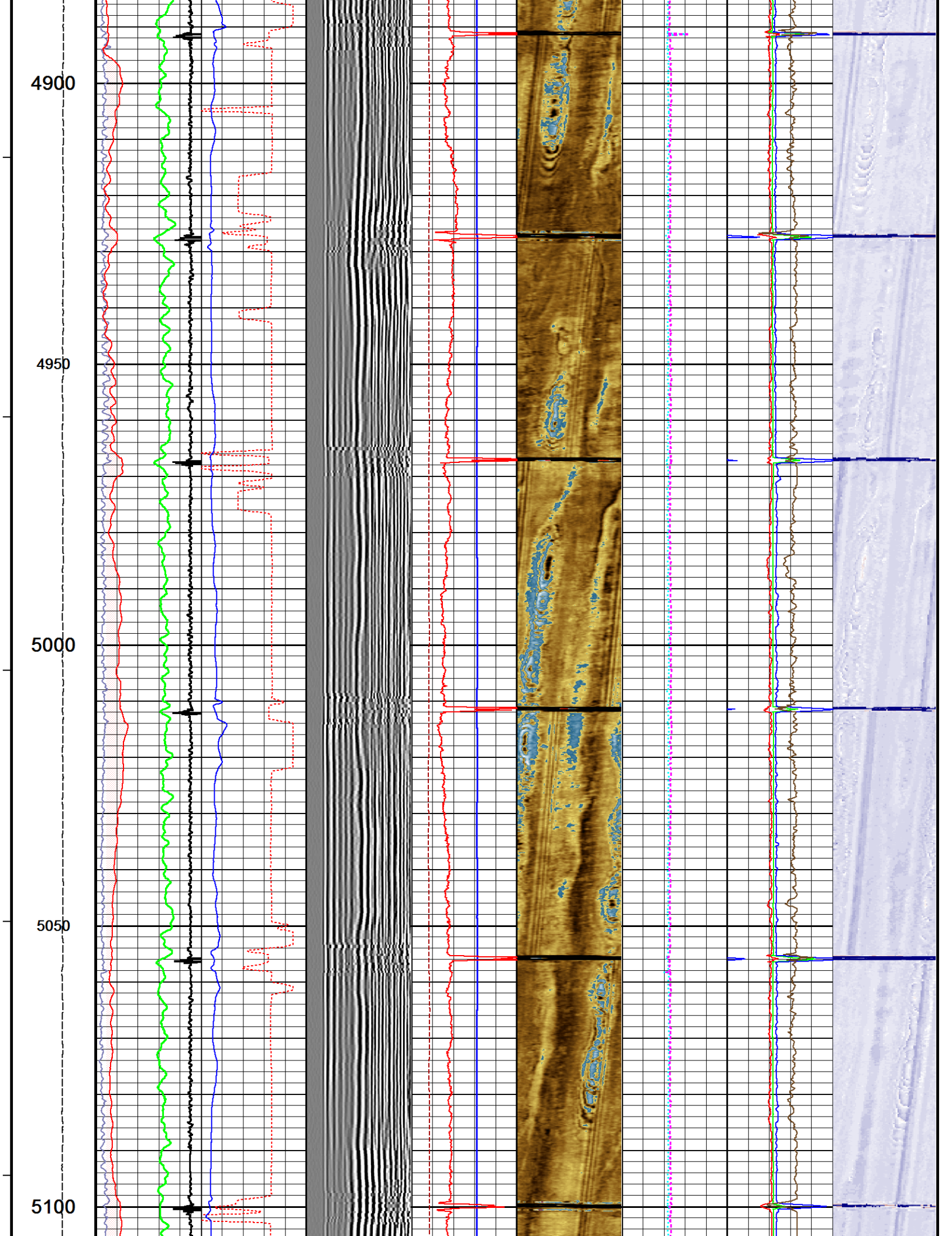
4700

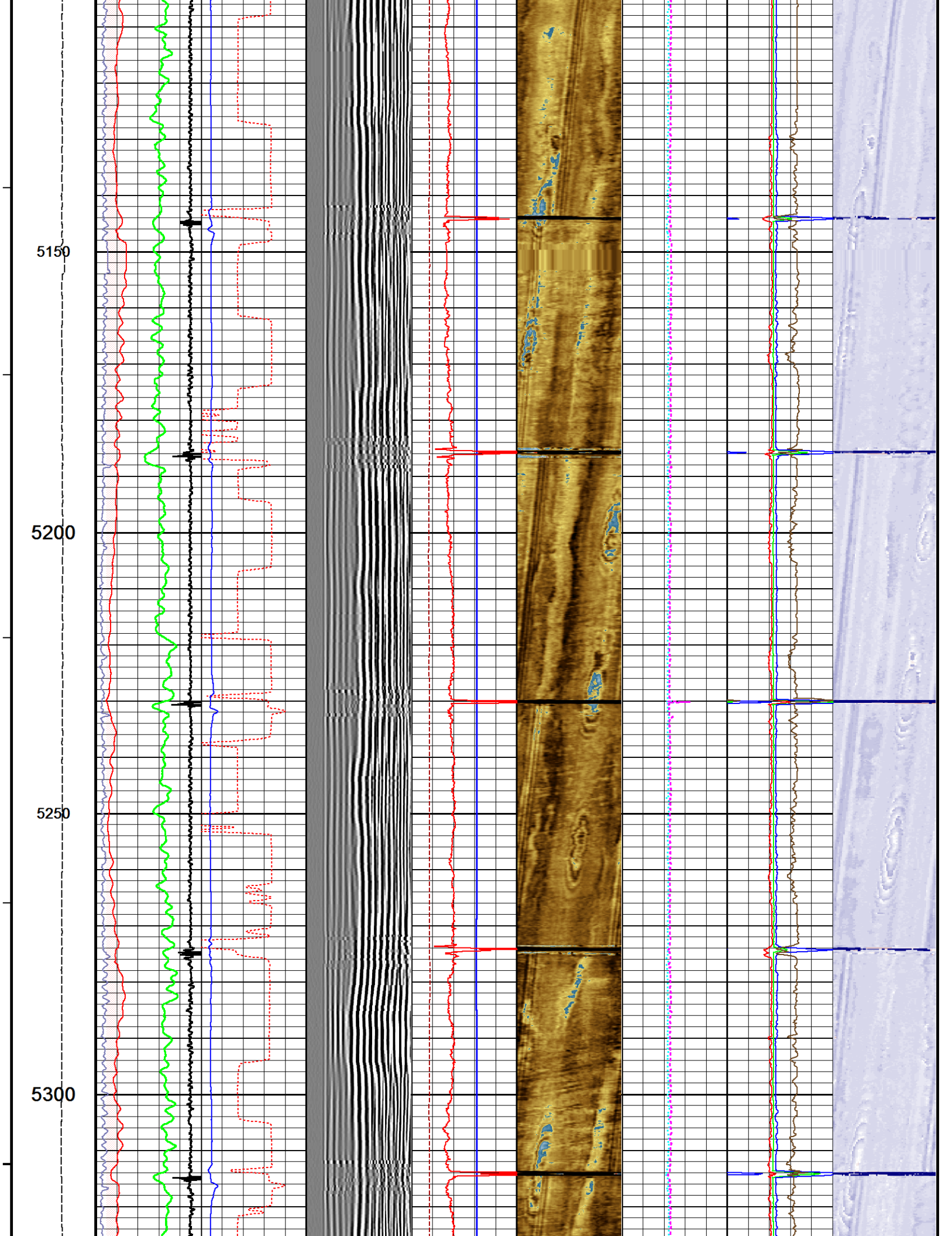
4750

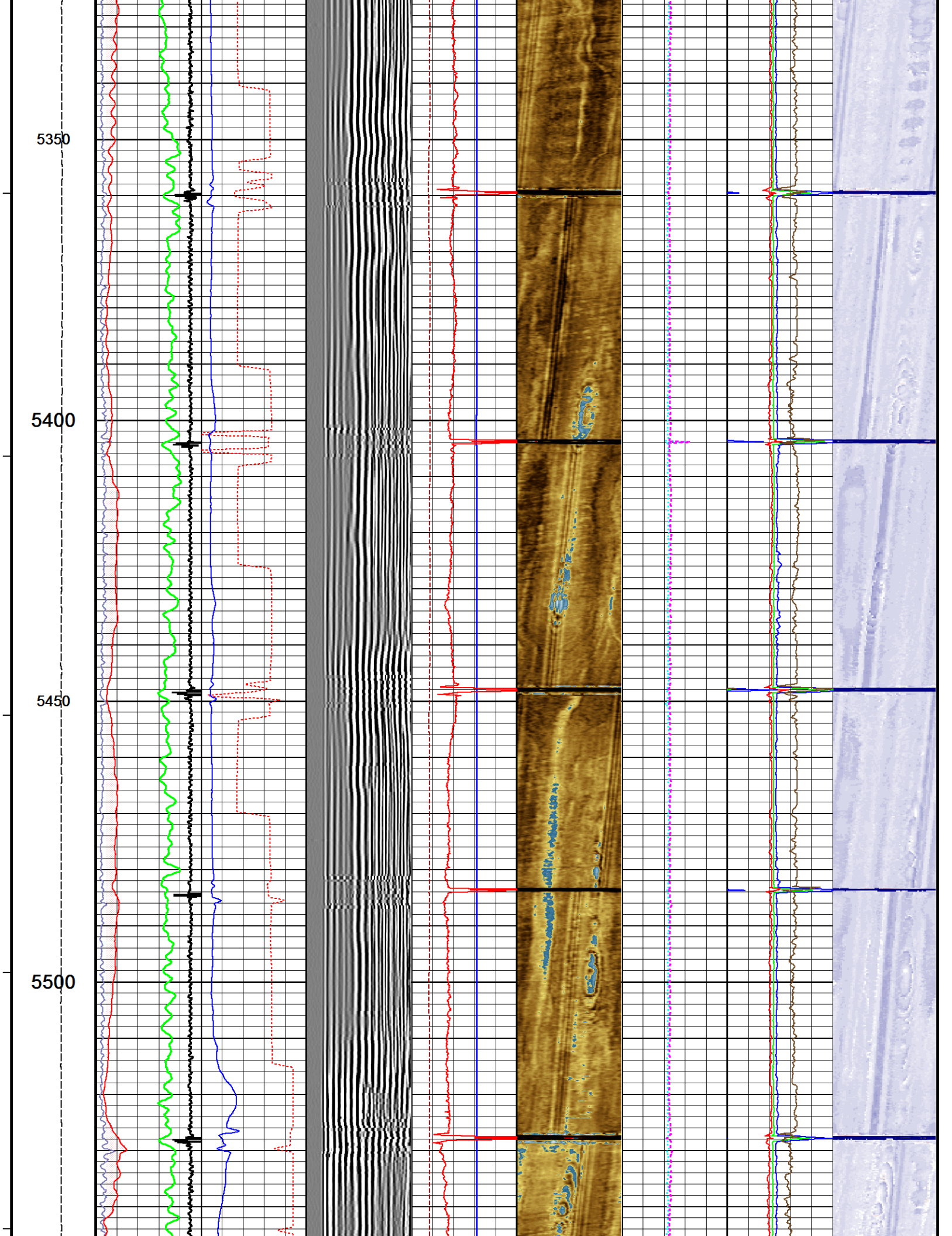
4800

4850

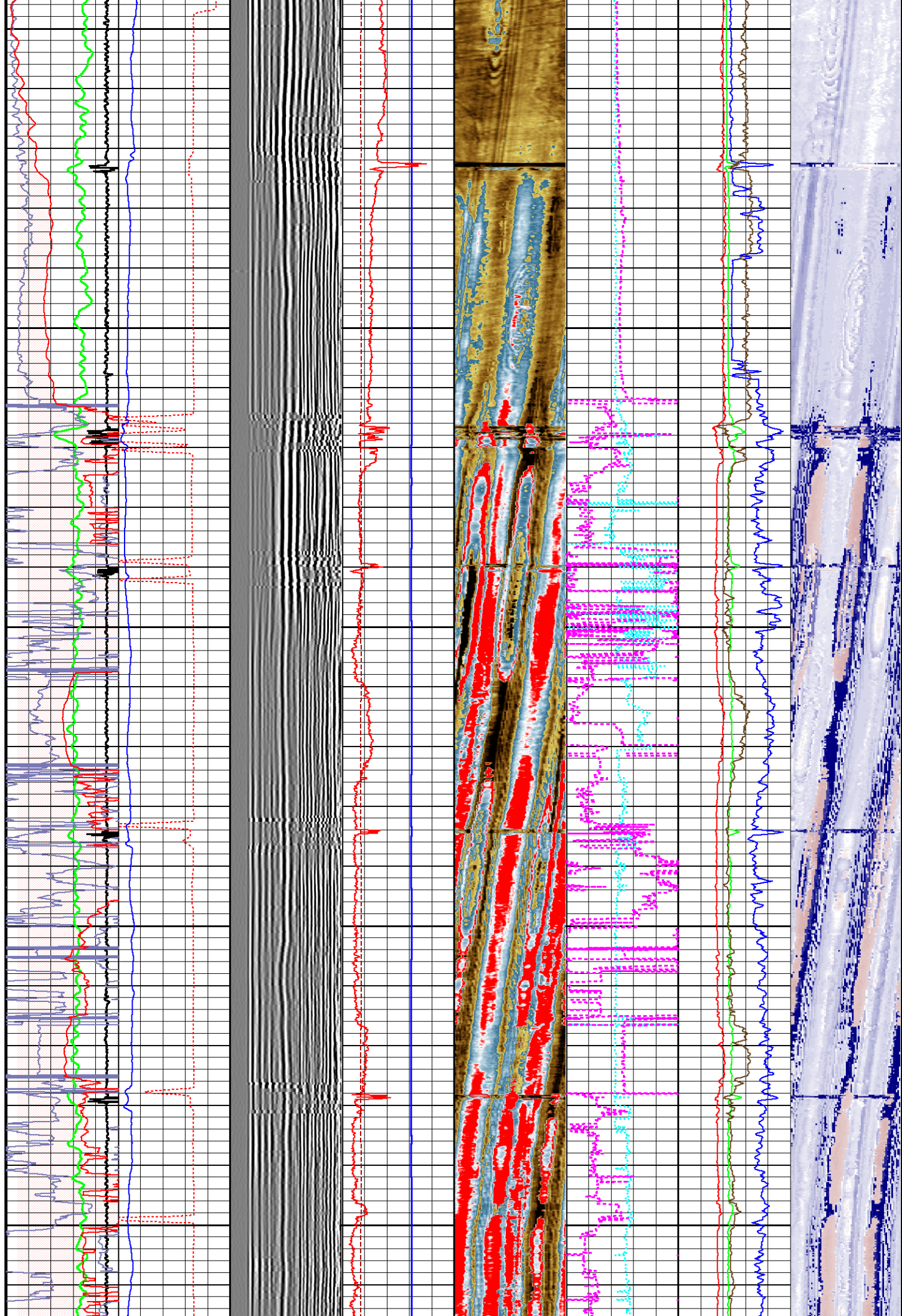








5550  
5600  
5650  
5700  
5750

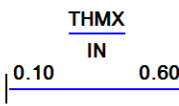
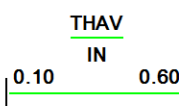
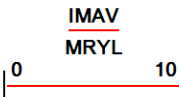
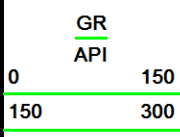
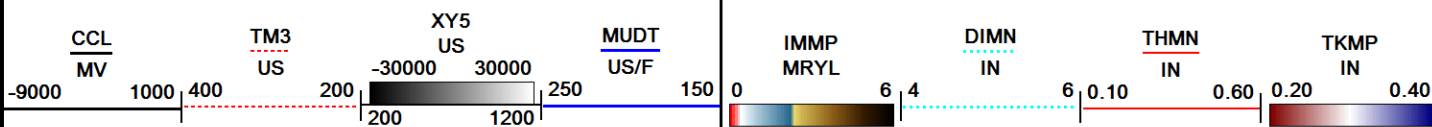
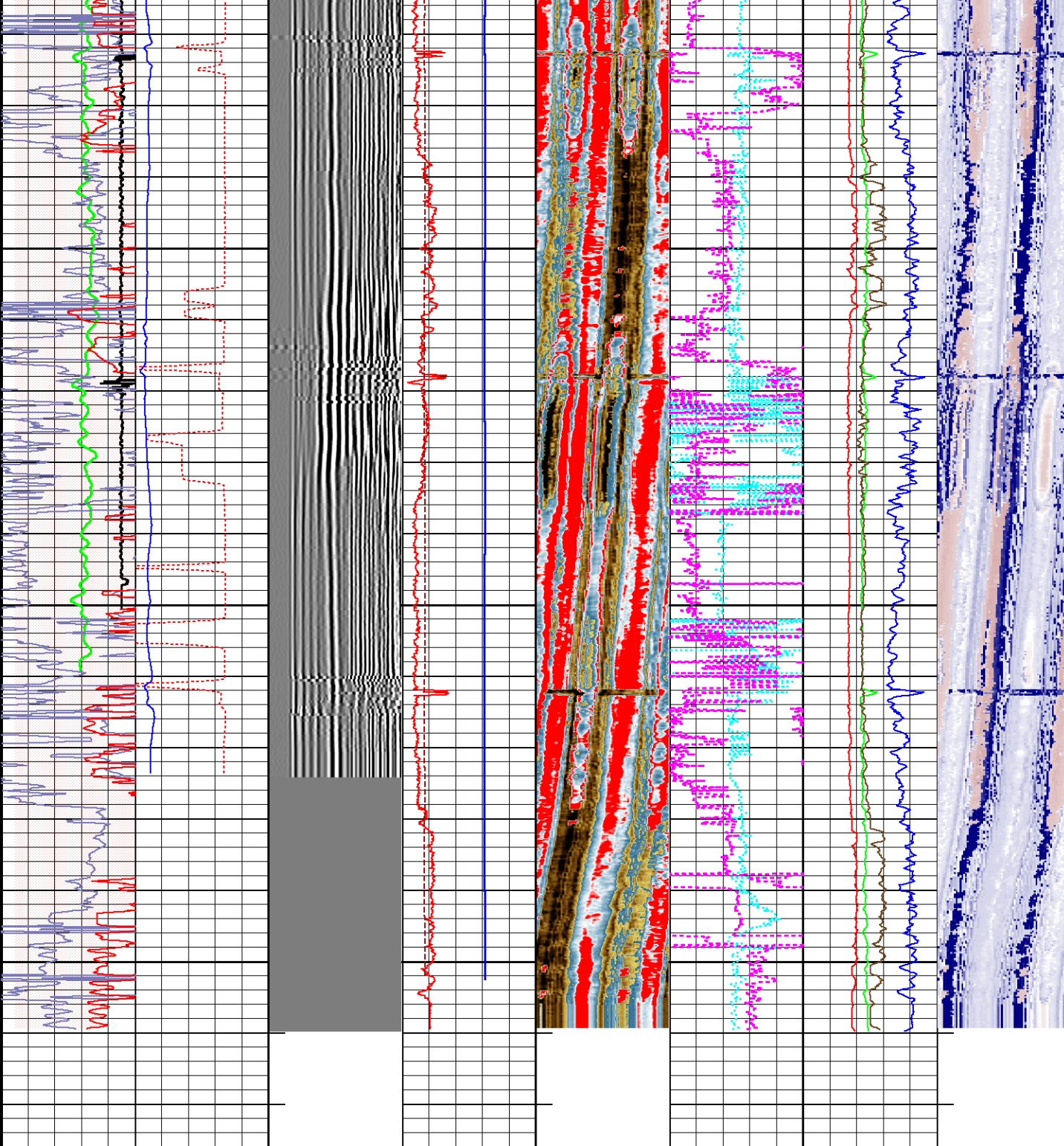


5800

5850

5900

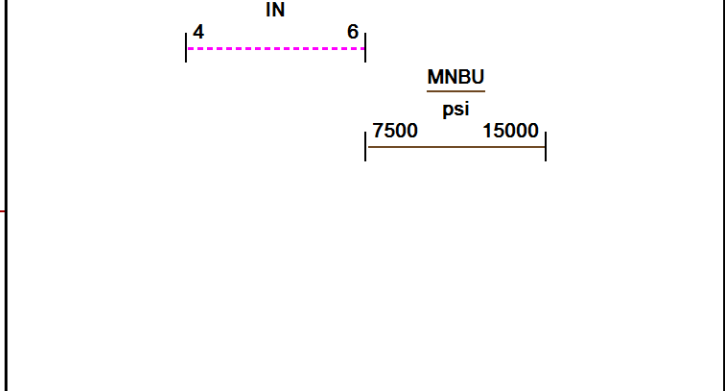
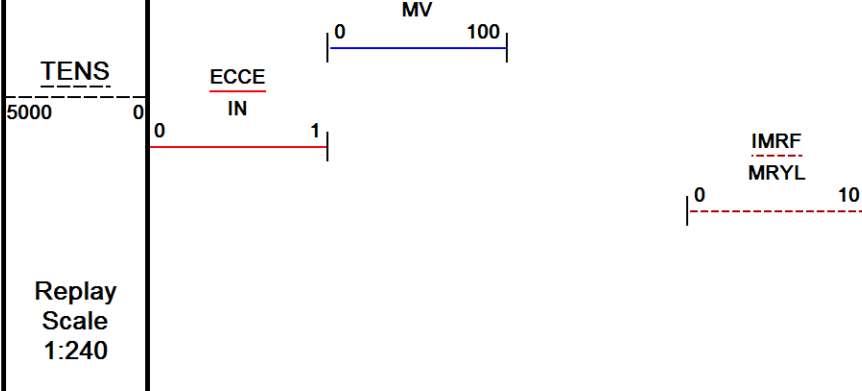
5924  
Depth  
in  
Feet



Timing  
Marks  
every  
60.0 sec

AM3E

DIMY

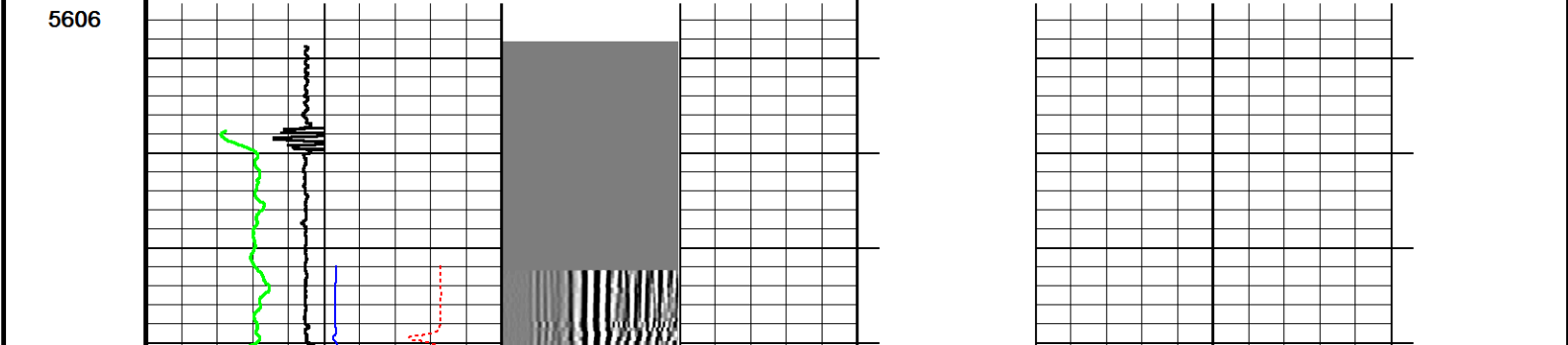
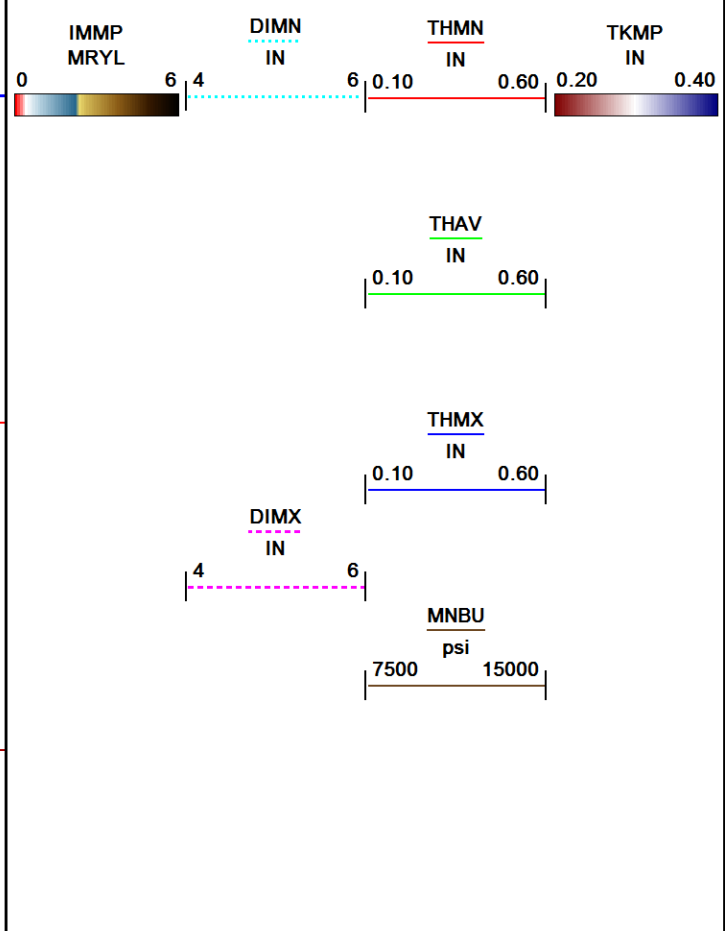
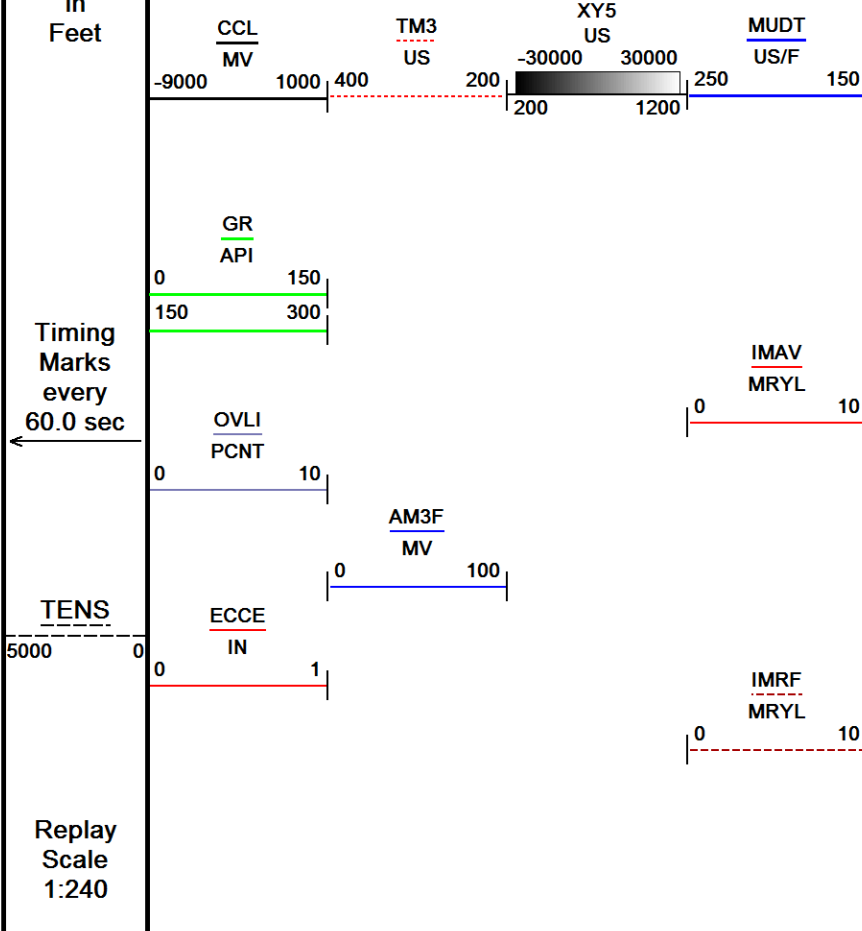


Depth Based Data - Maximum Sampling Increment 2.5cm  
 Plotted on 15-FEB-2019 07:52  
 Filename: C:\Users\197426\Desktop\LOGS\BONANZA CREEK\PRONGHORN...MAIN PASS\_002.dta  
 Recorded on 06-FEB-2019 19:15  
 System Versions: Logged with 18.05.7089 Processed with 18.05.7089 Plotted with 18.05.7089

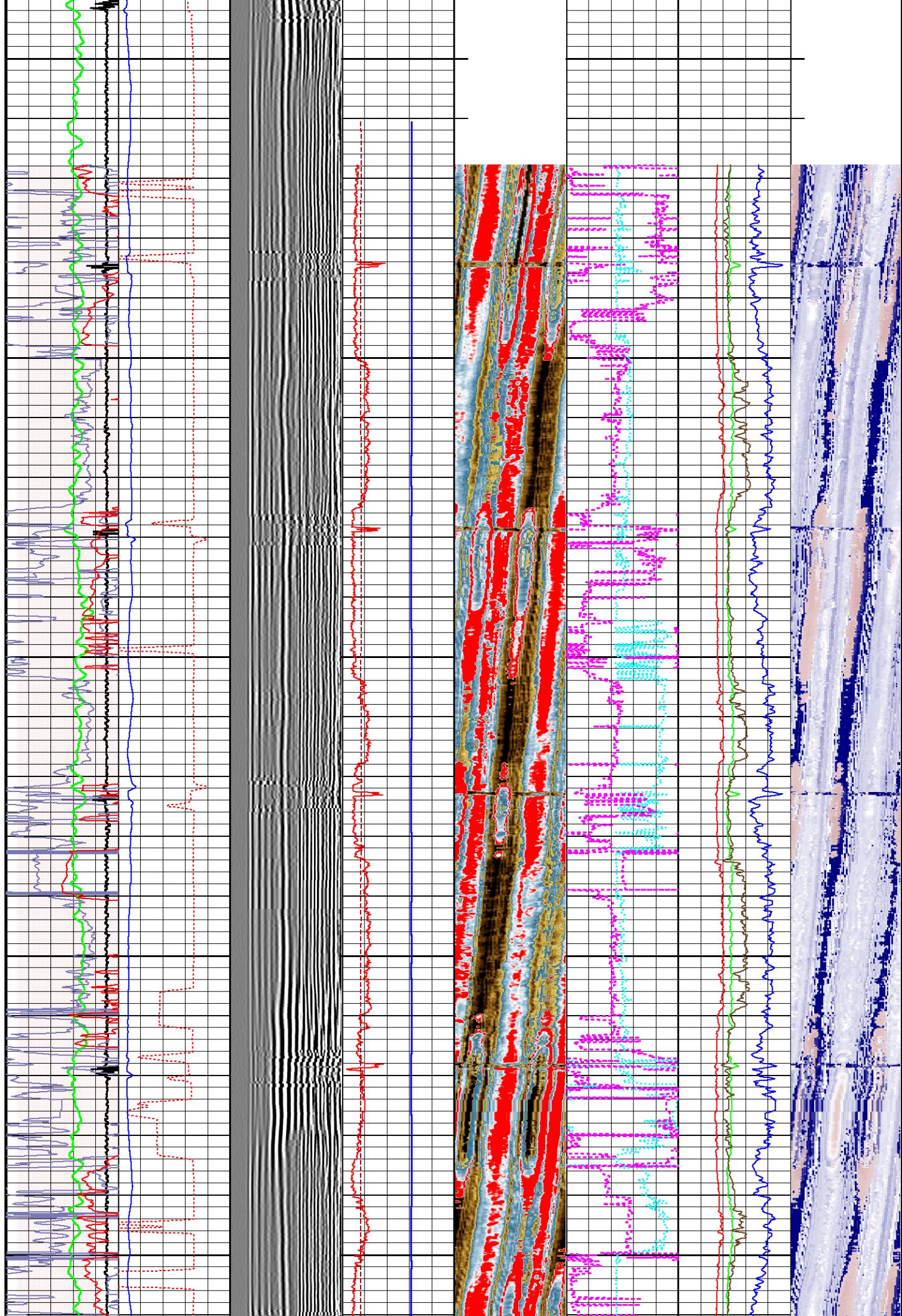
MAIN PASS

Depth Based Data - Maximum Sampling Increment 2.5cm  
 Plotted on 15-FEB-2019 07:52  
 Filename: C:\Users\197426\Desktop\LOGS\BONANZA CREEK\PRONGHO...REPEAT PASS\_001.dta  
 Recorded on 06-FEB-2019 19:21  
 System Versions: Logged with 18.05.7089 Processed with 18.05.7089 Plotted with 18.05.7089

REPEAT PASS



5650  
5700  
5750  
5800  
5850





Gamma Ray Field Survey Calibration

Tool Type: UGR-JD                      Serial No: 108  
 Calibrator No:

Background	Calibrator	Standard	Units
0.0	392.0	140.0	CPS

Delta Counts Per Sec: 392.0                      CPS/API = 2.800

CBT Field Calibration    CBT-AA 109

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	5.60	45.60
	Free Pipe	72.00	728.48
AMP 5 FT	100 % Bond	0.90	0.00
	Free Pipe	48.00	329.78

CBT Constants    CBT-AA 109

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	204.0 US/F
Maximum Attenuation	12.00 DB/F
3' TT Correction	0.0 US
Cement Weight	10.00 LB/G

Ultrasonic Radial Scanner Before Cal    USH-AB 136

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	1.500	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                3.00  
 ZMud Cal Area Ratio                 4.10

\*\* 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	1605.00	5.50	36.00	1.50	1.50	0.30	1.00
0.00	10985.00	5.50	17.00	1.50	1.50	0.30	1.00

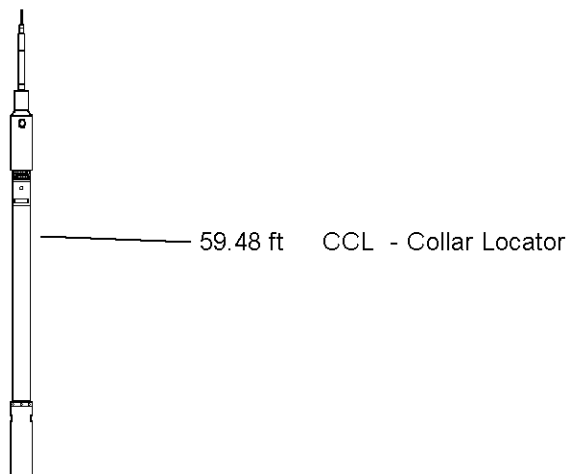
\*\* Constants \*\*

Thickness Calculated from                Tool  
       Radius Offset                        0.00  
       Mud Slowness Offset                0.00 US/F  
       Mud Chamber Equation              Mud Plate  
       Z\_mud at Calibration                1.60 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:\Users\le197426\Desktop\LOGS\BONANZA CREEK\PRONGHORN 24-8-5 XRLNB\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 119 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

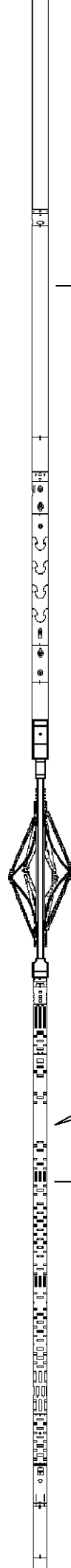
Communication Cartridge 55pin 3-3/8in  
WCC-DA 151 LG: 4.60 ft WT: 63.9 lb OD: 3.386 in

Gamma Ray  
UGR-JD 108 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 225 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



51.39 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 203 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

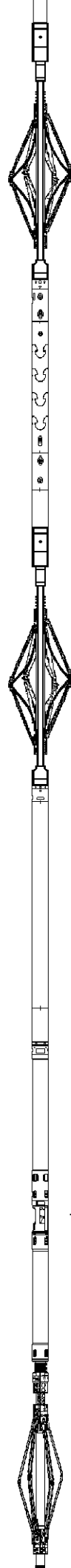
55 pin Roller Centralizer  
CEN-XA 215 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

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

URS Sonde Section  
USS-AB 127 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: 62.40 ft Weight: 1045.0 lb



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

0.37 ft THMN - Min Thickness  
0.37 ft IMAV - Avg Impedance  
0.37 ft ECCE - Eccentering  
0.37 ft OVLI - ID Ovality  
0.37 ft DIMX - Max Diameter  
0.37 ft DIMN - Min Diameter  
0.37 ft THMX - Max Thickness  
0.37 ft THAV - Avg Thickness



All measurements relative to tool zero.

COMPANY BONANZA CREEK ENERGY  
 WELL PRONGHORN 24-8-5 XRLNB  
 FIELD WATTENBERG  
 PROVINCE/COUNTY WELD  
 COUNTRY/STATE UNITED STATES / COLORADO

Elevation Kelly Bushing	4624	feet	Bottom Log Interval	5909.00	feet
Elevation Drill Floor		feet	Depth Driller		feet
Elevation Ground Level	4607	feet	Depth Logger	5909.00	feet



**Weatherford**<sup>®</sup>

SECUREVIEW  
 ULTRAVIEW / BONDVIEW  
 LOG