



**Weatherford**

**SECUREVIEW**

**ULTRAVIEW / BONDVIEW**

**LOG**

|  |                          |                        |                           |
|--|--------------------------|------------------------|---------------------------|
| COMPANY  | BONANZA CREEK ENERGY     |                        |                           |
| WELL   | ANTELOPE T34-19-18 MRLNB |                        |                           |
| FIELD  | WATTENBERG               |                        |                           |
| PROVINCE/COUNTY  | WELD                     |                        |                           |
| COUNTRY/STATE  | UNITED STATES / COLORADO |                        |                           |
| LOCATION   | 225' FSL & 1228' FEL     |                        |                           |
| SEC 19   | TWP 5N                   | RGE 62W                | Other Services<br>CALVIEW |
| Latitude   |                          |                        |                           |
| Longitude  |                          |                        |                           |
| API Number   | 05-123-48259             |                        |                           |
| Permanent Datum GL, Elevation                          | 4657 feet                |                        | Elevations:               |
| Log Measured From KB, 17.00 feet above Permanent Datum |                          |                        | KB 4674.00                |
| Drilling Measured From KB                              |                          |                        | DF 4657.00                |
|  |                          |                        | GL                        |
| Date   | 22-MAY-2019              | PERFORATION RECORD     |                           |
| Run Number   | ONE                      | Shot                   | Number                    |
| Service Order  | 7145-245651532           | Density                | of Shots                  |
| Type Log   | URS / CBT                |                        | Depth From                |
| Depth Driller  |                          |                        | Depth To                  |
| Depth Logger   | 6180.00                  |                        |                           |
| Top Log Interval                                       | 0.00                     |                        |                           |
| Bottom Log Interval                                    | 6180.00                  |                        |                           |
| Hole Fluid Type  | WATER BASED              |                        |                           |
| Hole Fluid Level                                       | 57.00                    |                        |                           |
| Restriction ID   | 4.653                    | Gun Type               |                           |
| Max Recorded Temp                                      | 200.00                   | 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                                     | 12:30                    | 9.625                  | 36.00                     |
| Unit   | 14166                    | 5.500                  | 20.00                     |
| 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            | 1607.00         | 36.00            |
| PRODUCTION | P-110 |           | 5.500       | 0.00            | 11606.00        | 20.00            |

**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 TOP OF CEMENT AT 1193 FT

TOOL EXPERIENCED DECENTRALIZATION DUE TO THE DEVIATION IN THE WELL THAT CAUSED SOME DIAMETER AND THICKNESS MEASUREMENTS TO BE AFFECTED

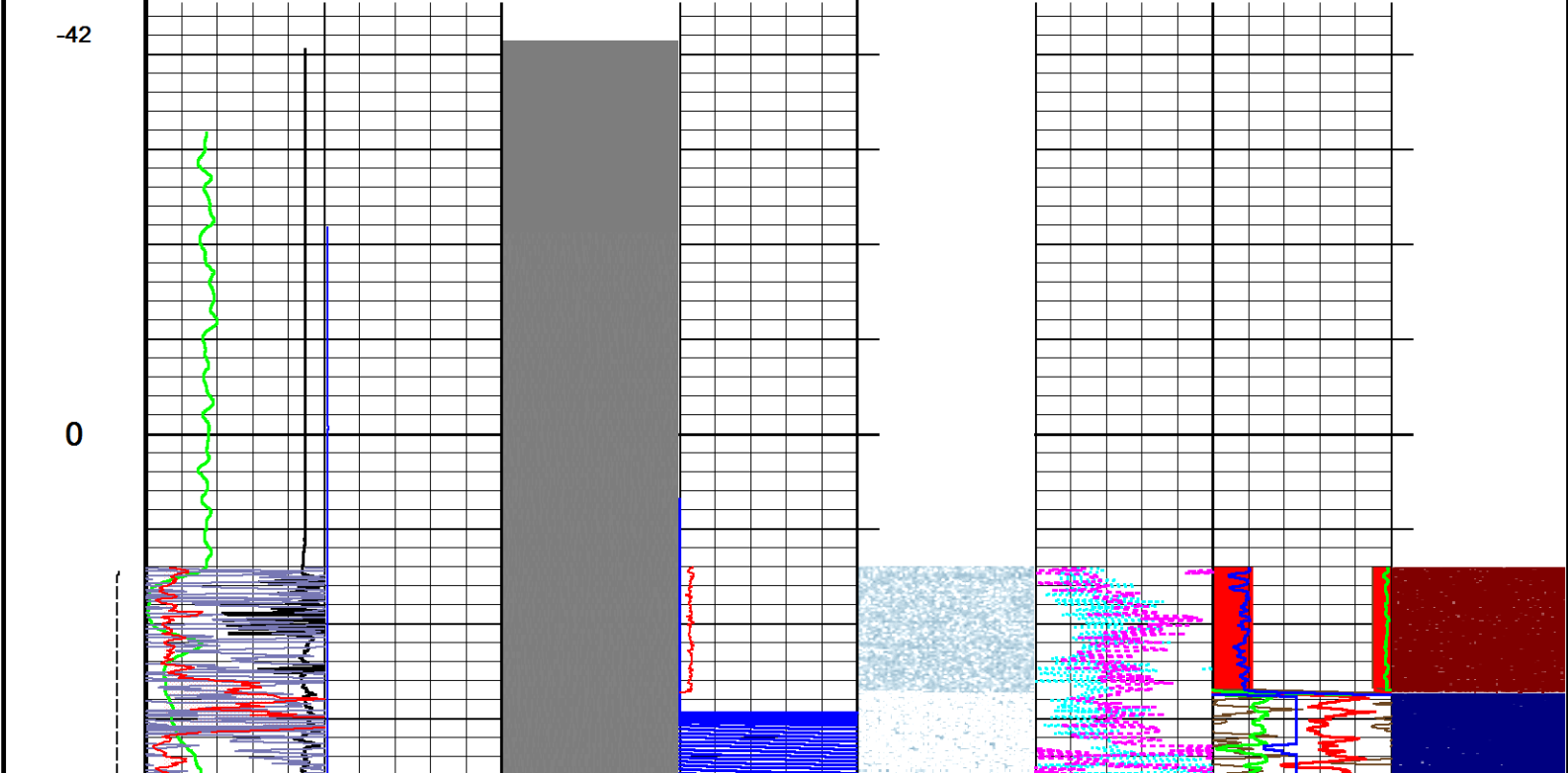
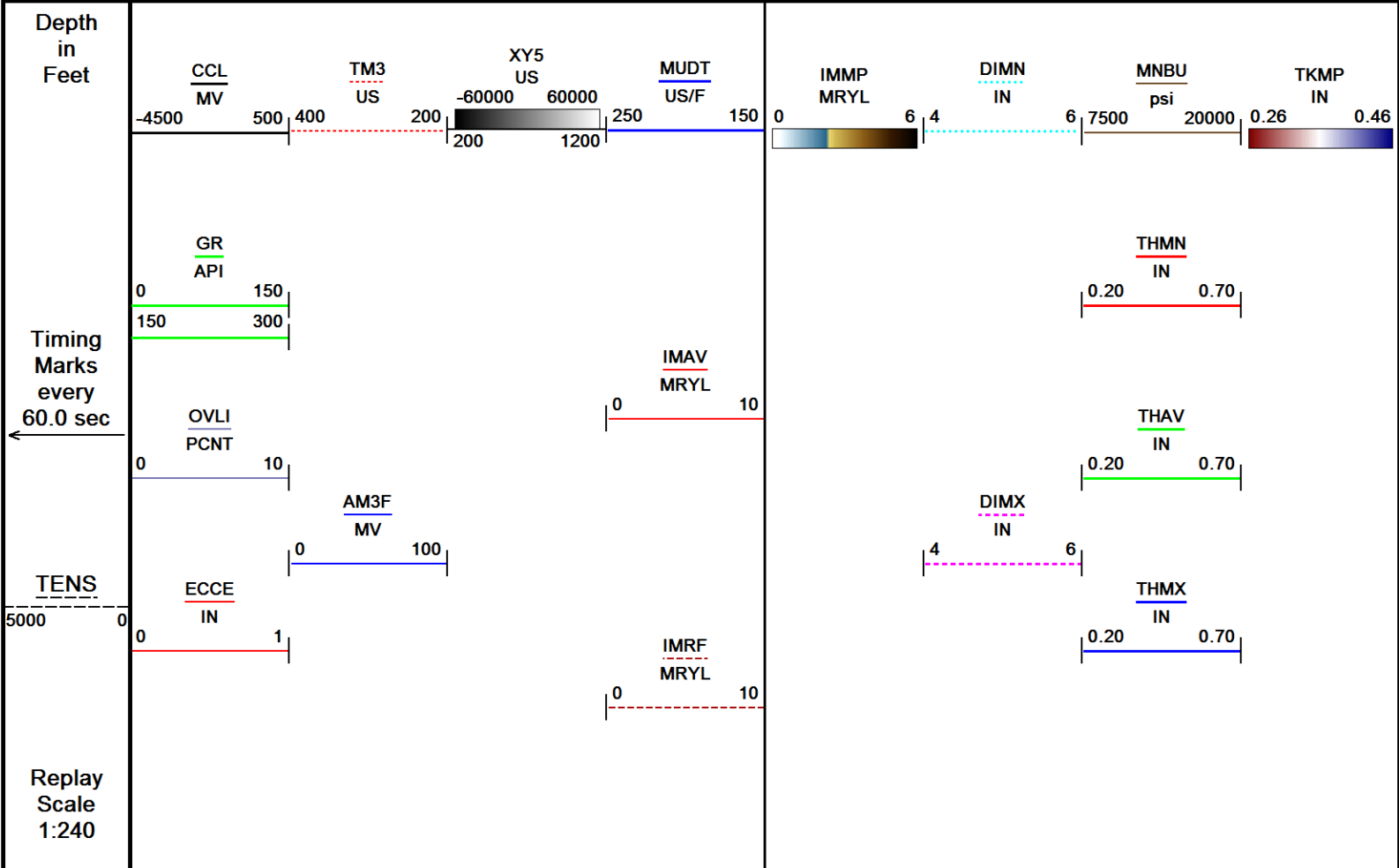
A CALVIEW LOG WAS PERFORMED OVER THESE AREAS TO VERIFY CASING INTEGRITY

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

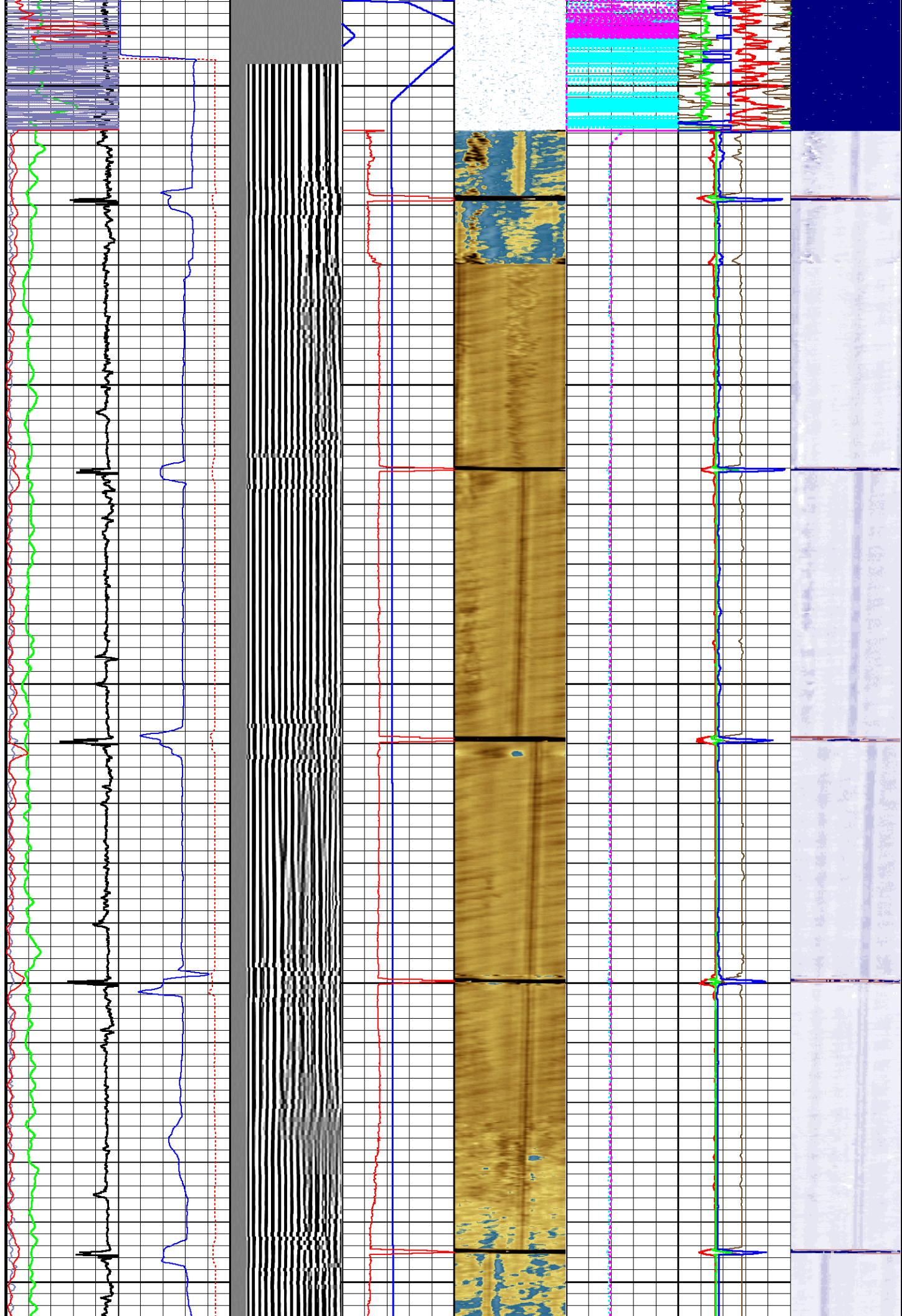
INTERPRETATION OR RECOMMENDATION, WHICH INTERPRETATIONS AND RECOMMENDATIONS SHOULD NOT, THEREFORE, UNDER ANY CIRCUMSTANCES BE RELIED UPON AS THE SOLE OR MAIN BASIS FOR ANY DRILLING, COMPLETION, WELL TREATMENT, PRODUCTION OR FINANCIAL DECISION, OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY 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 22-MAY-2019 19:07  
 Filename: C:\Users\197426\Desktop\LOGS\BONANZA CREEK\ANTELOP...MAIN PASS SPLICE.dta  
 Recorded on 22-MAY-2019 16:58  
 System Versions: Plotted with 18.05.7089



50  
100  
150  
200  
250

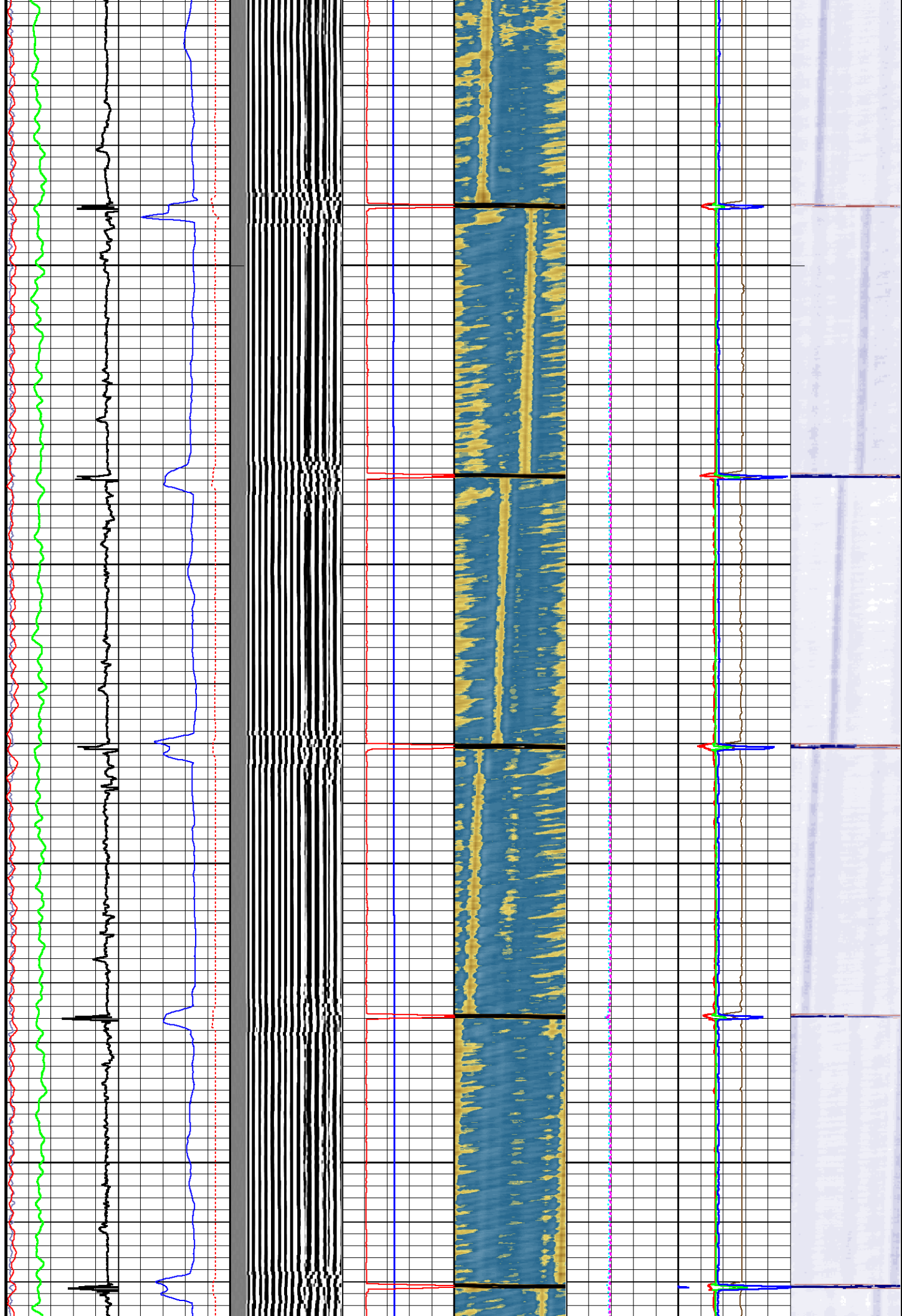


300

350

400

450

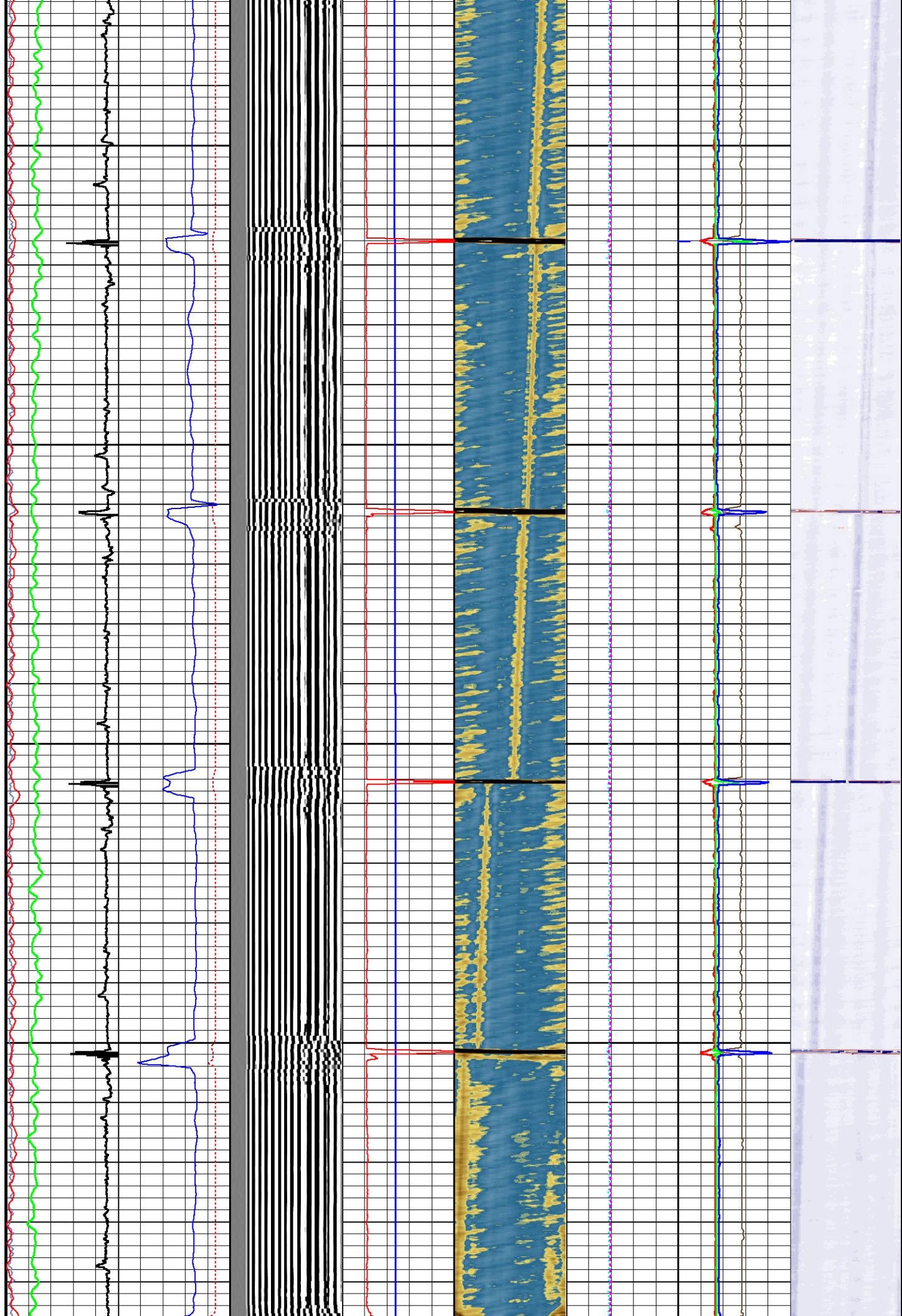


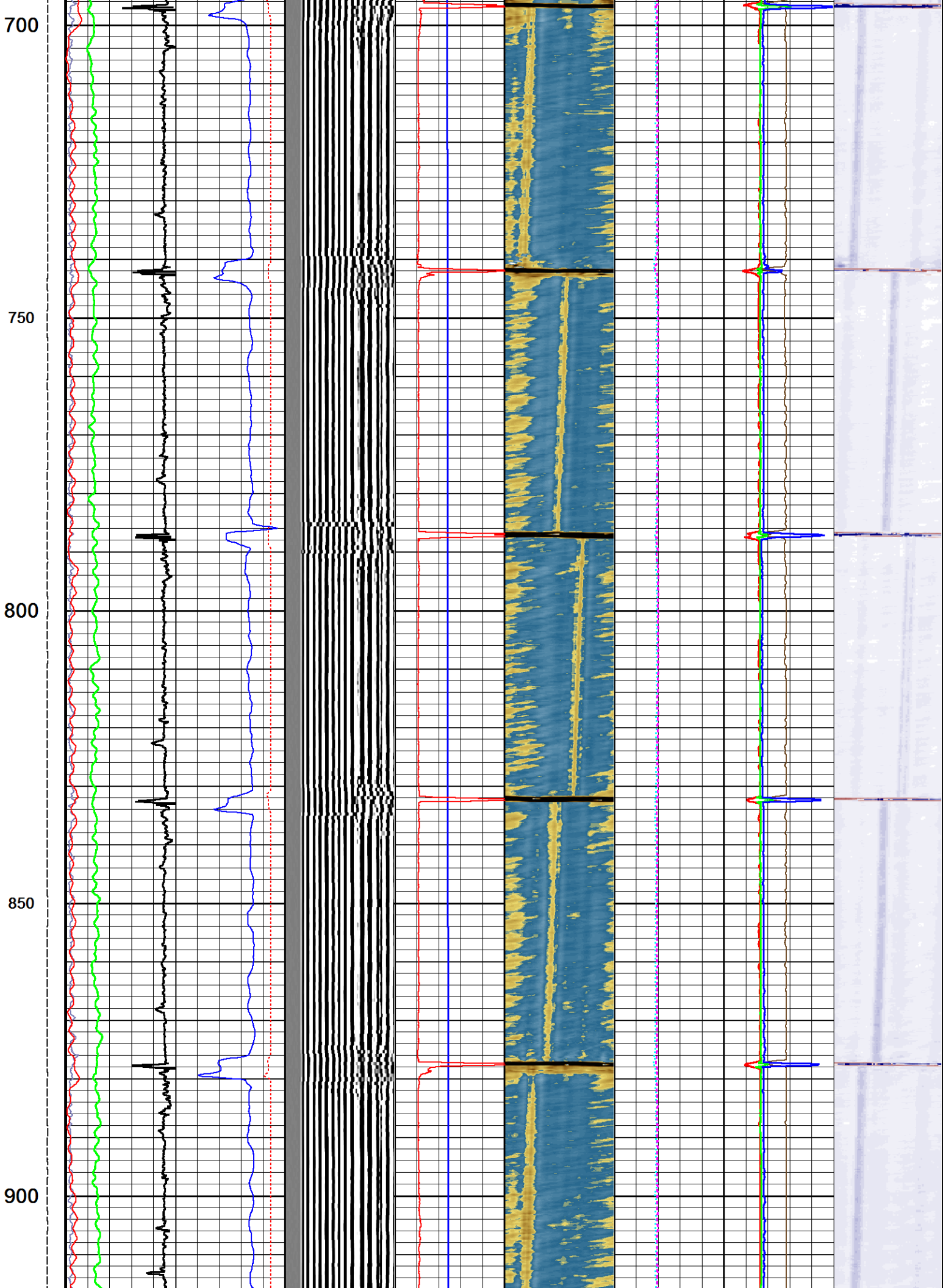
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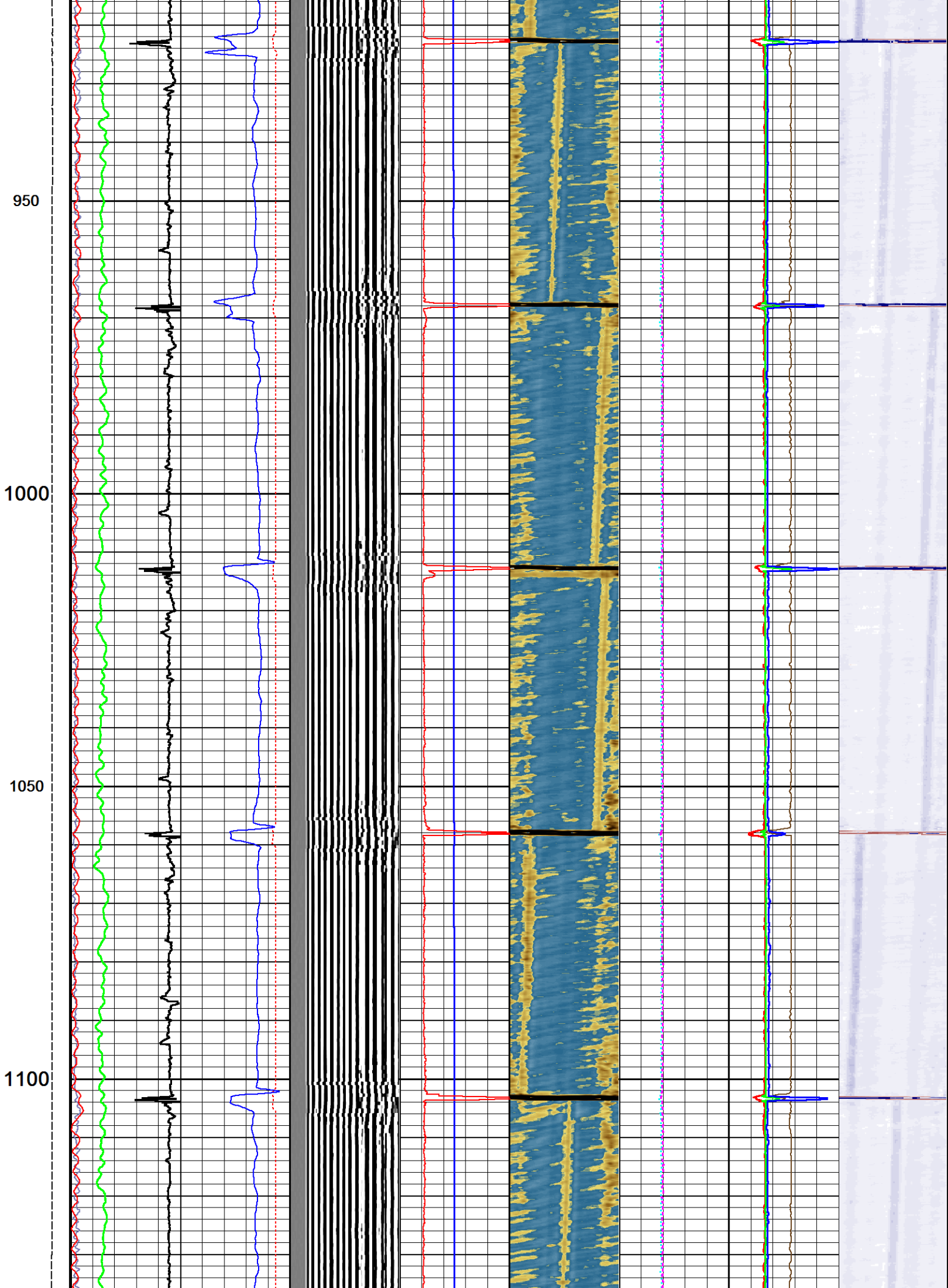
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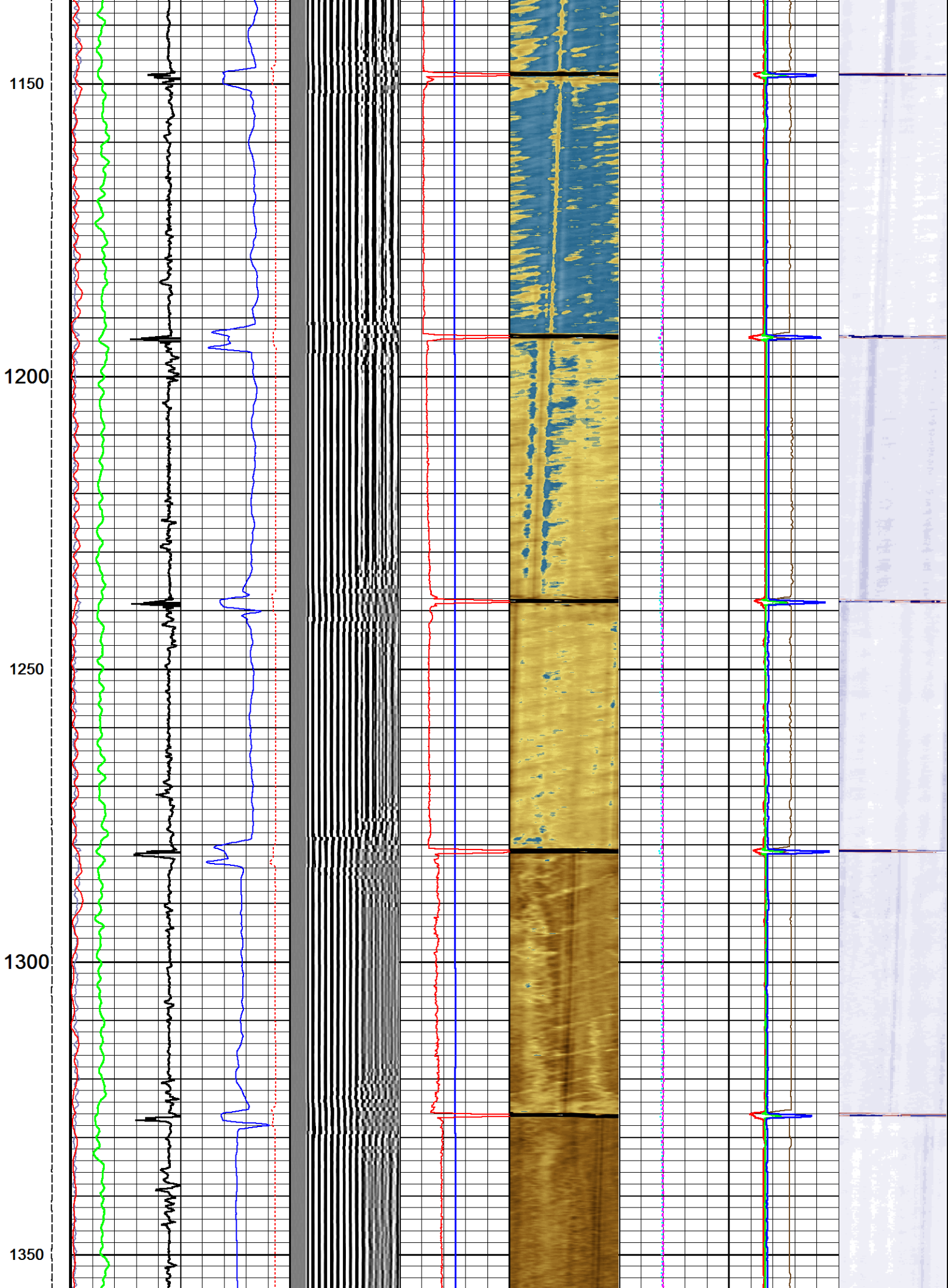
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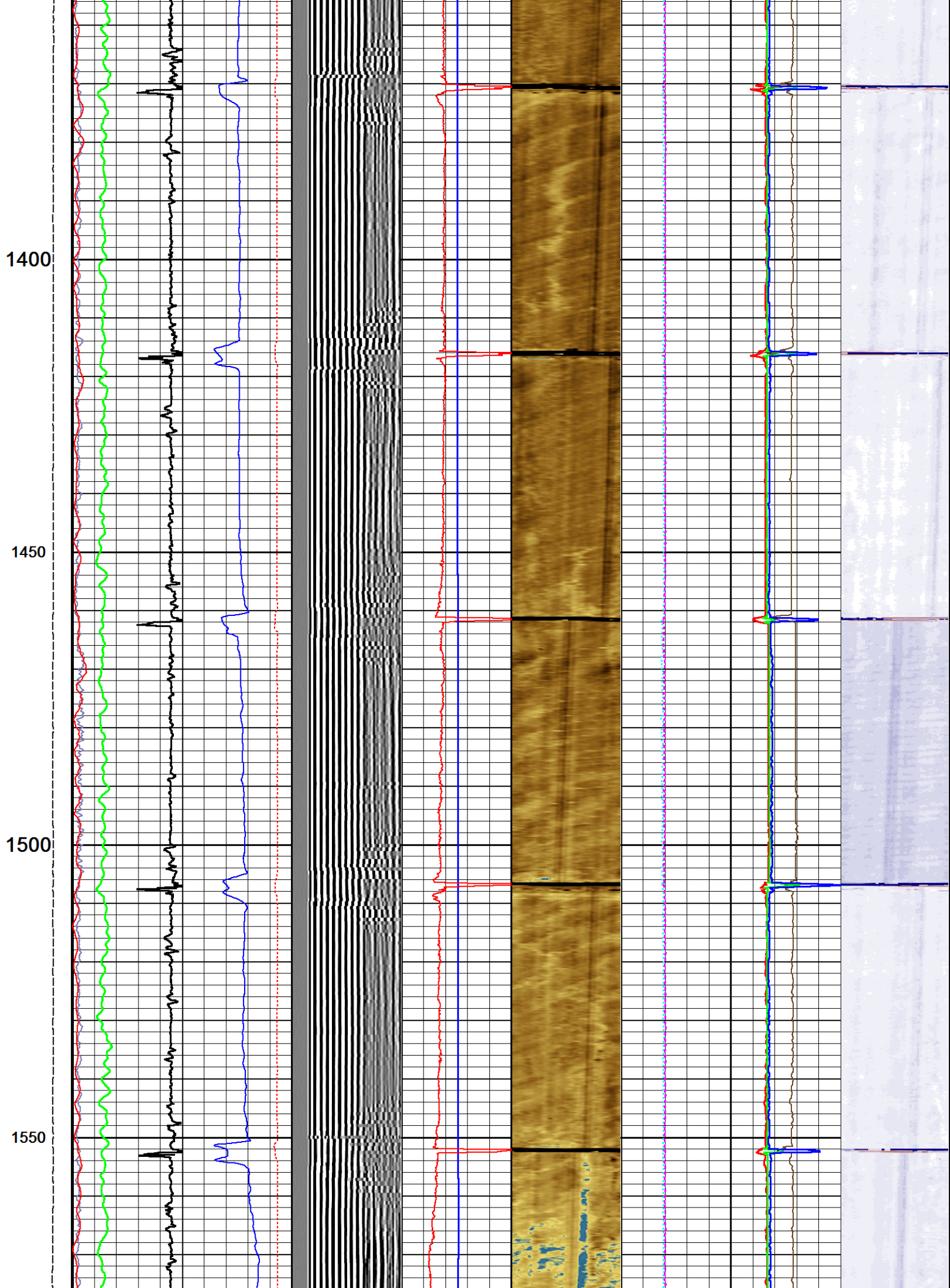
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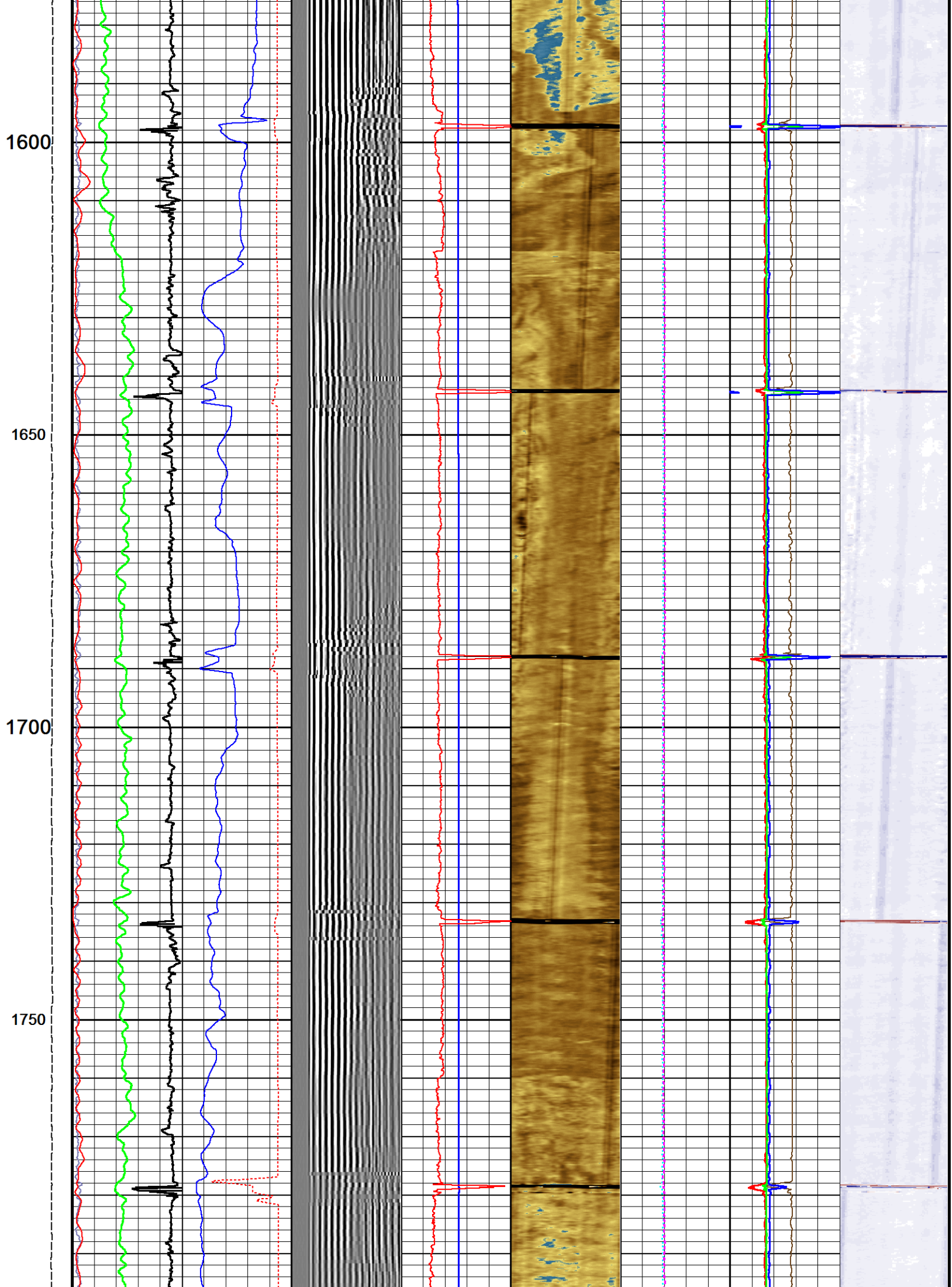




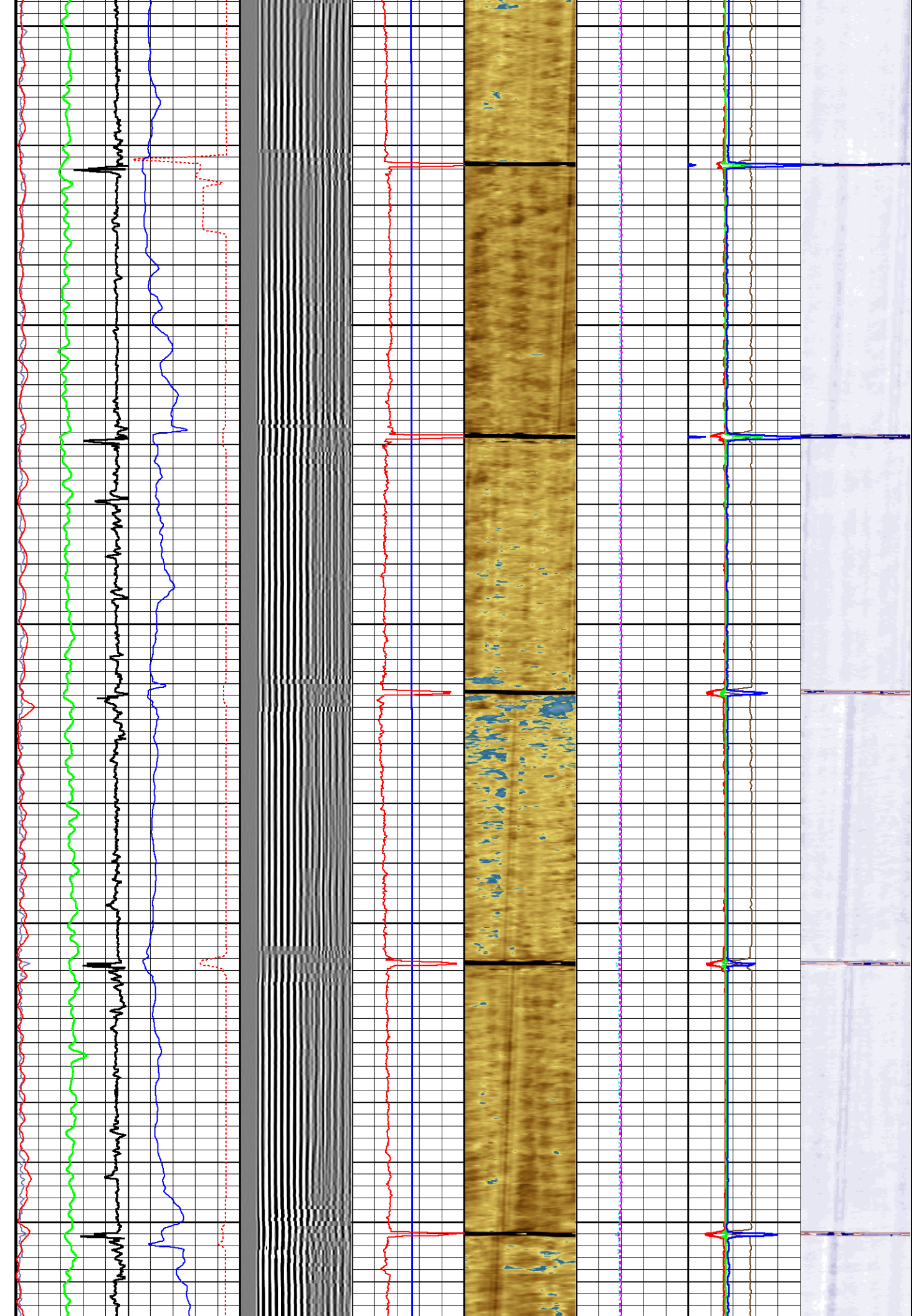


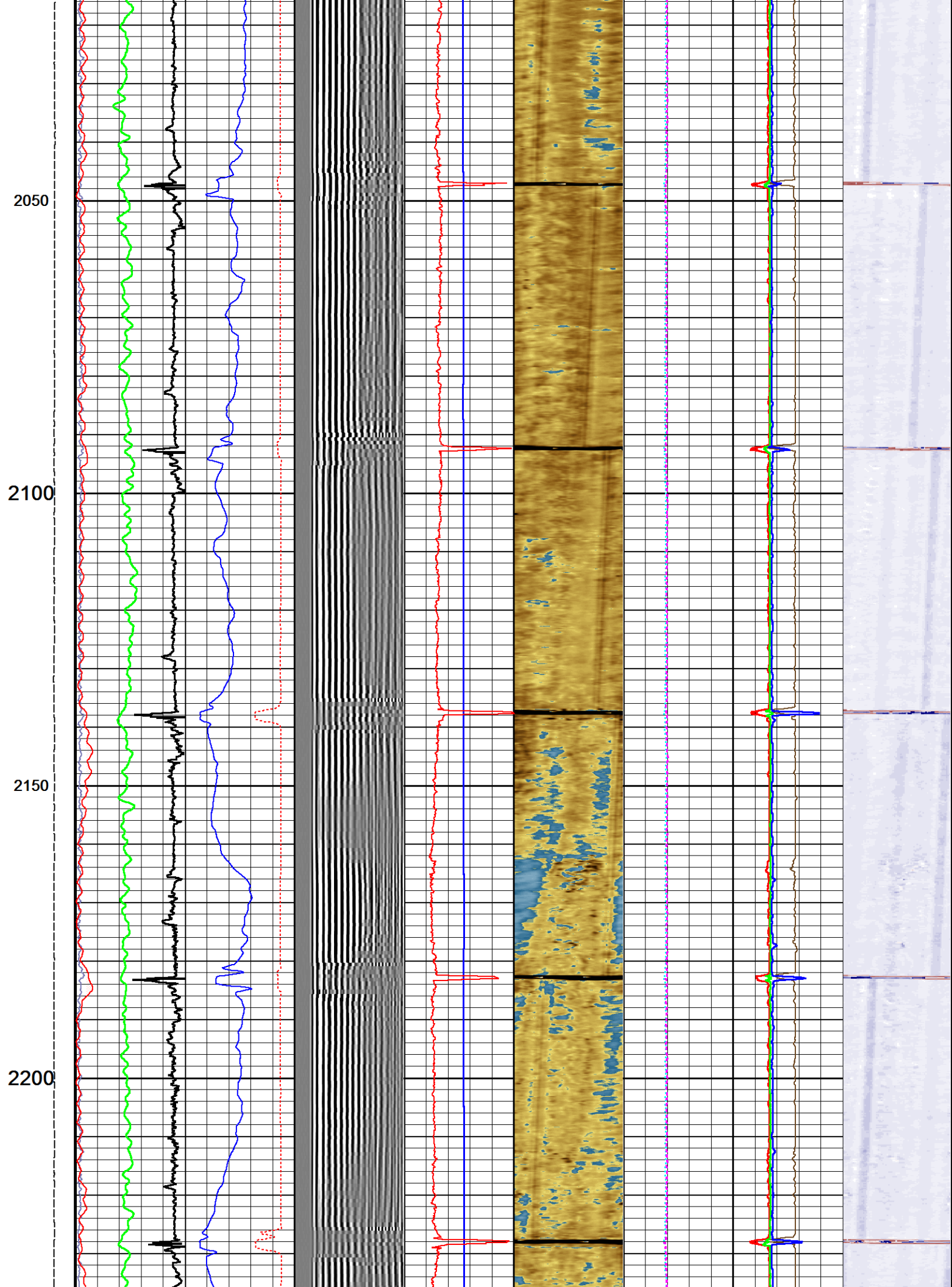


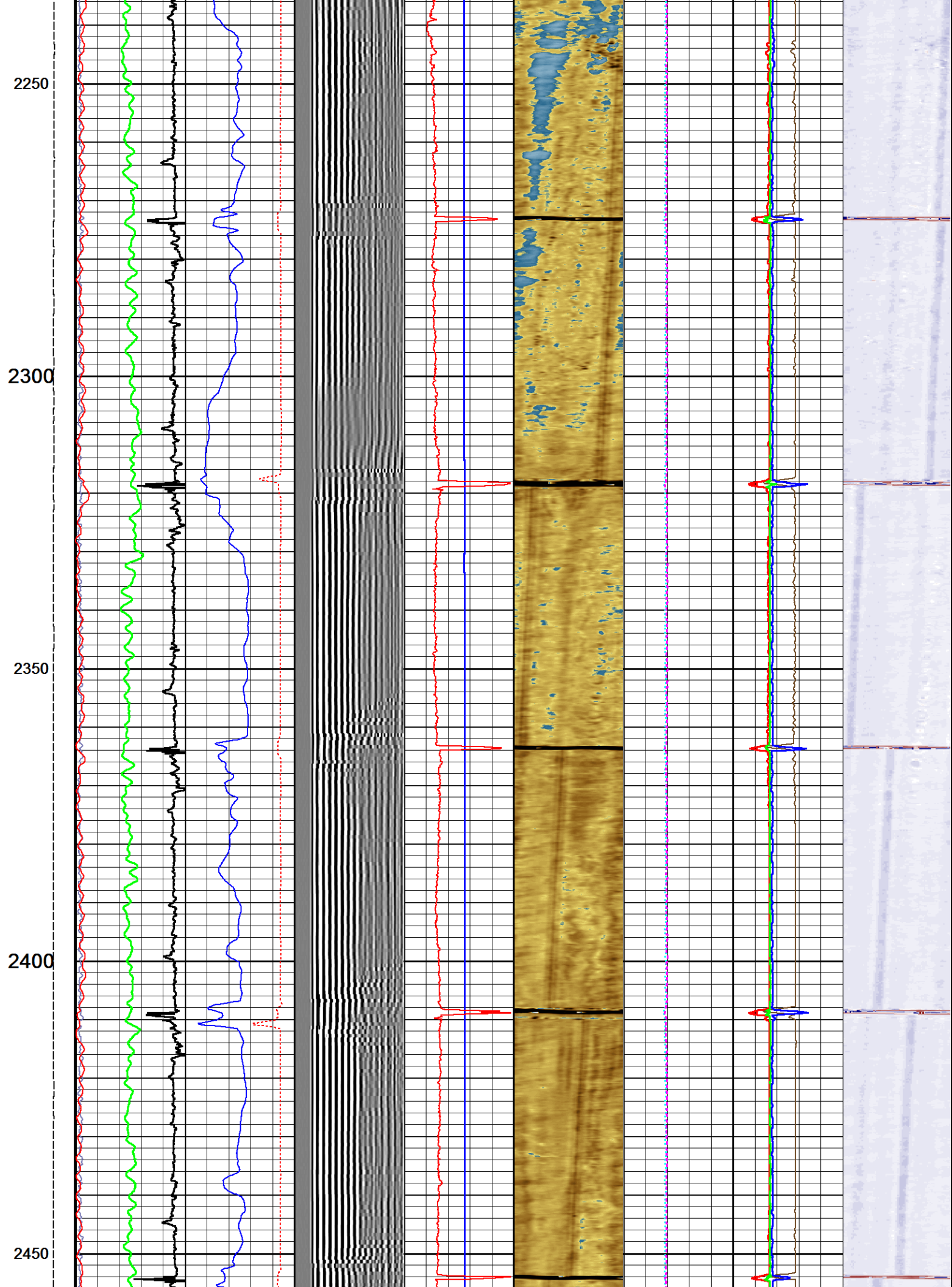


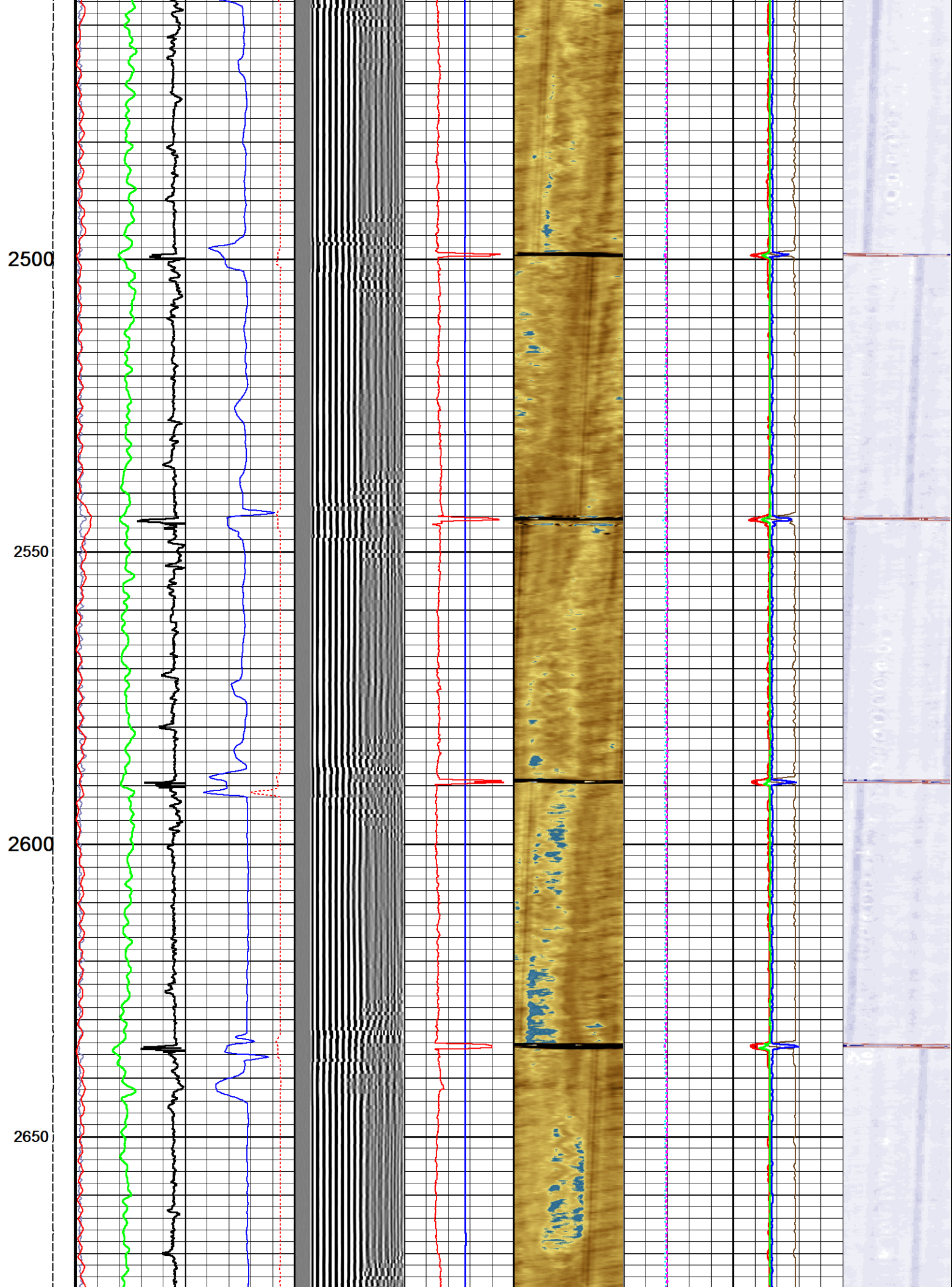


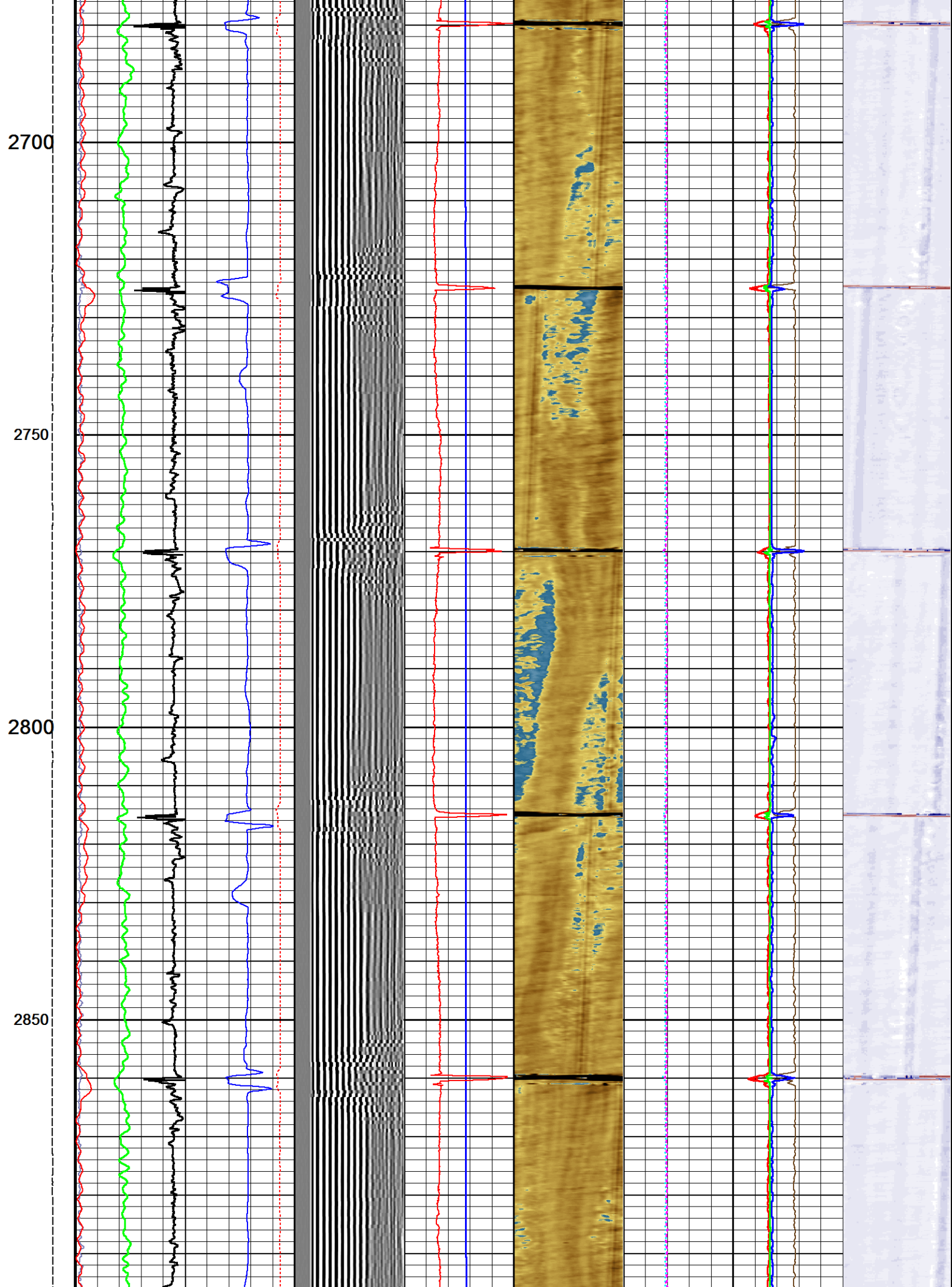
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1850  
1900  
1950  
2000



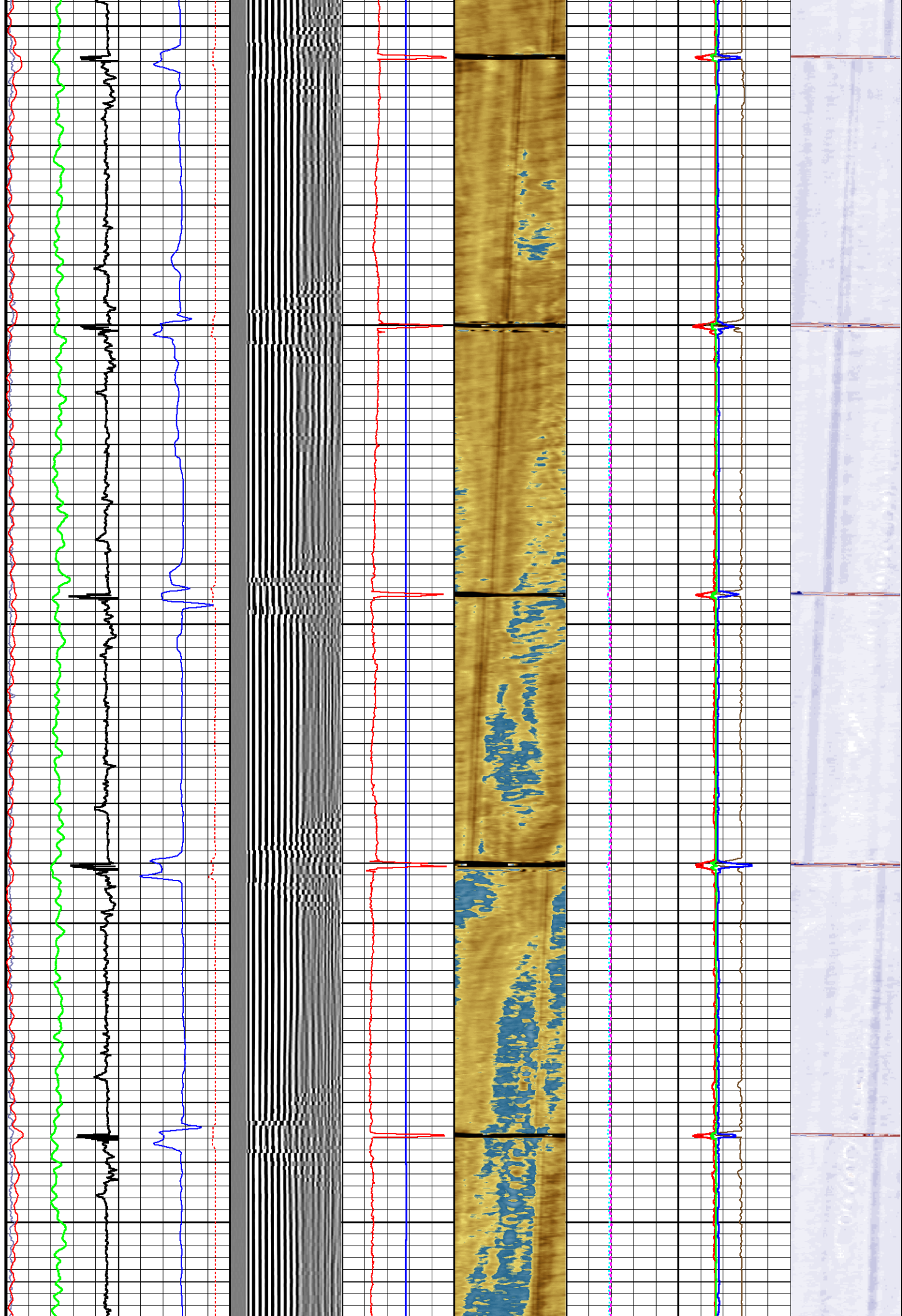








2900  
2950  
3000  
3050  
3100

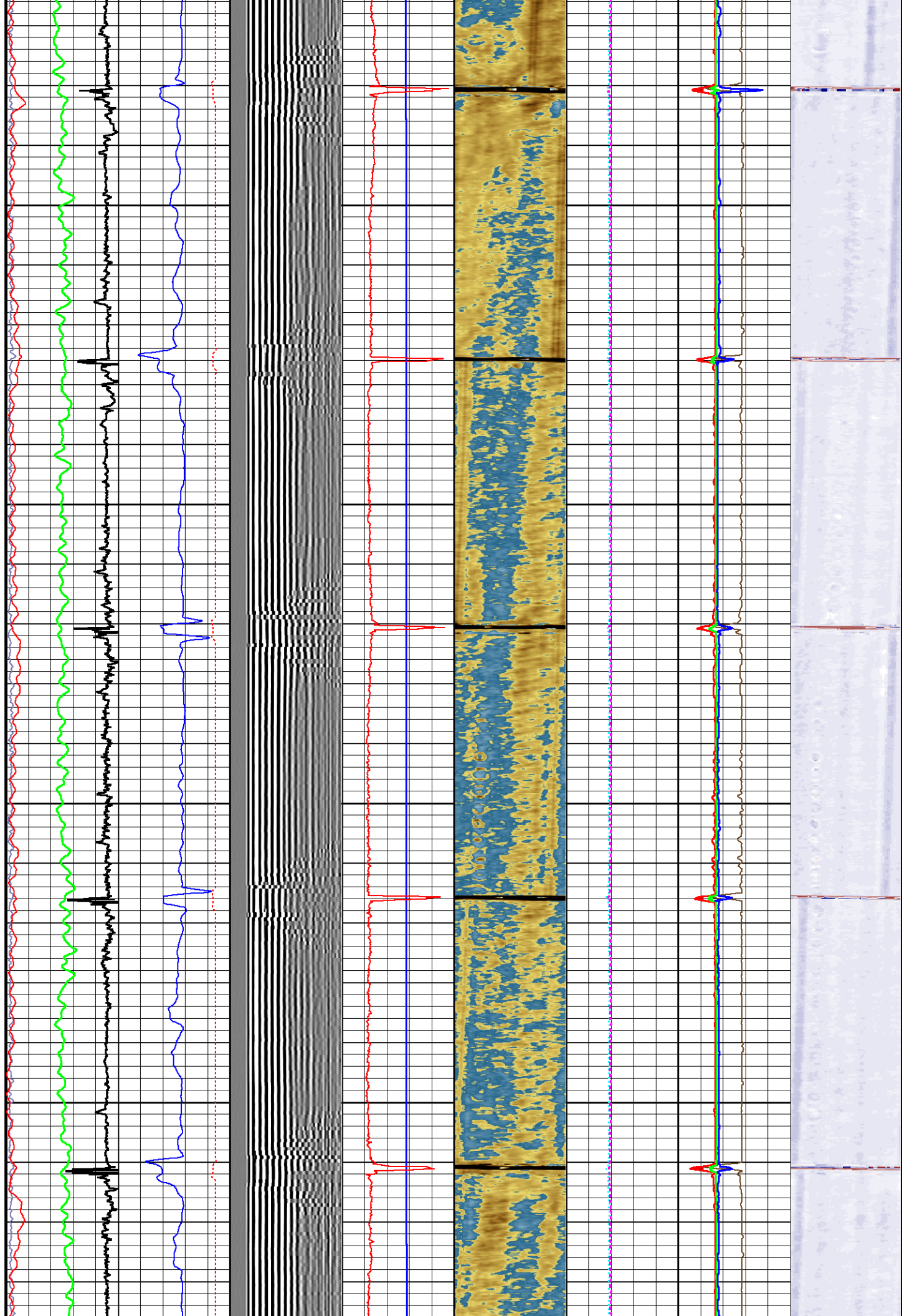


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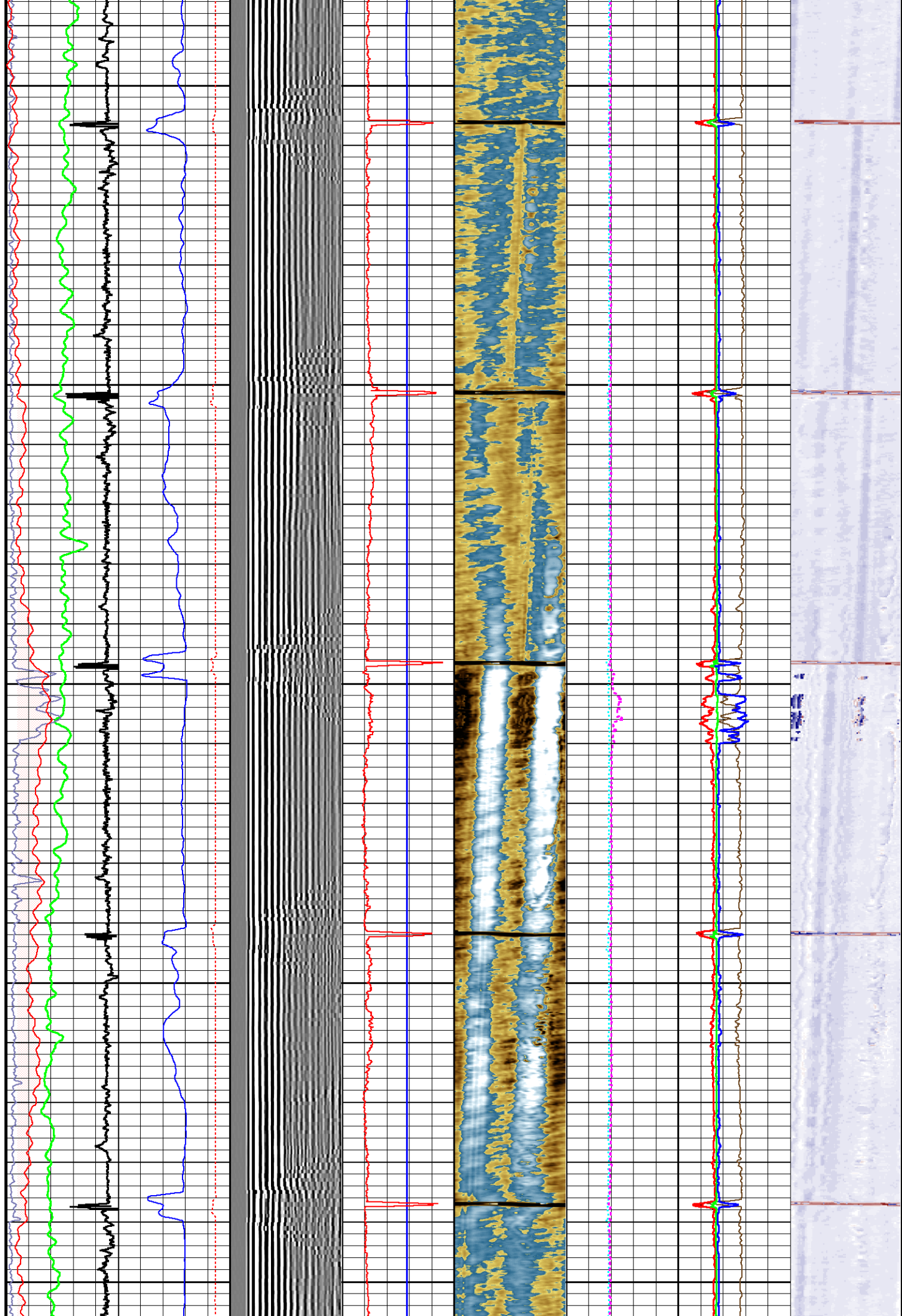
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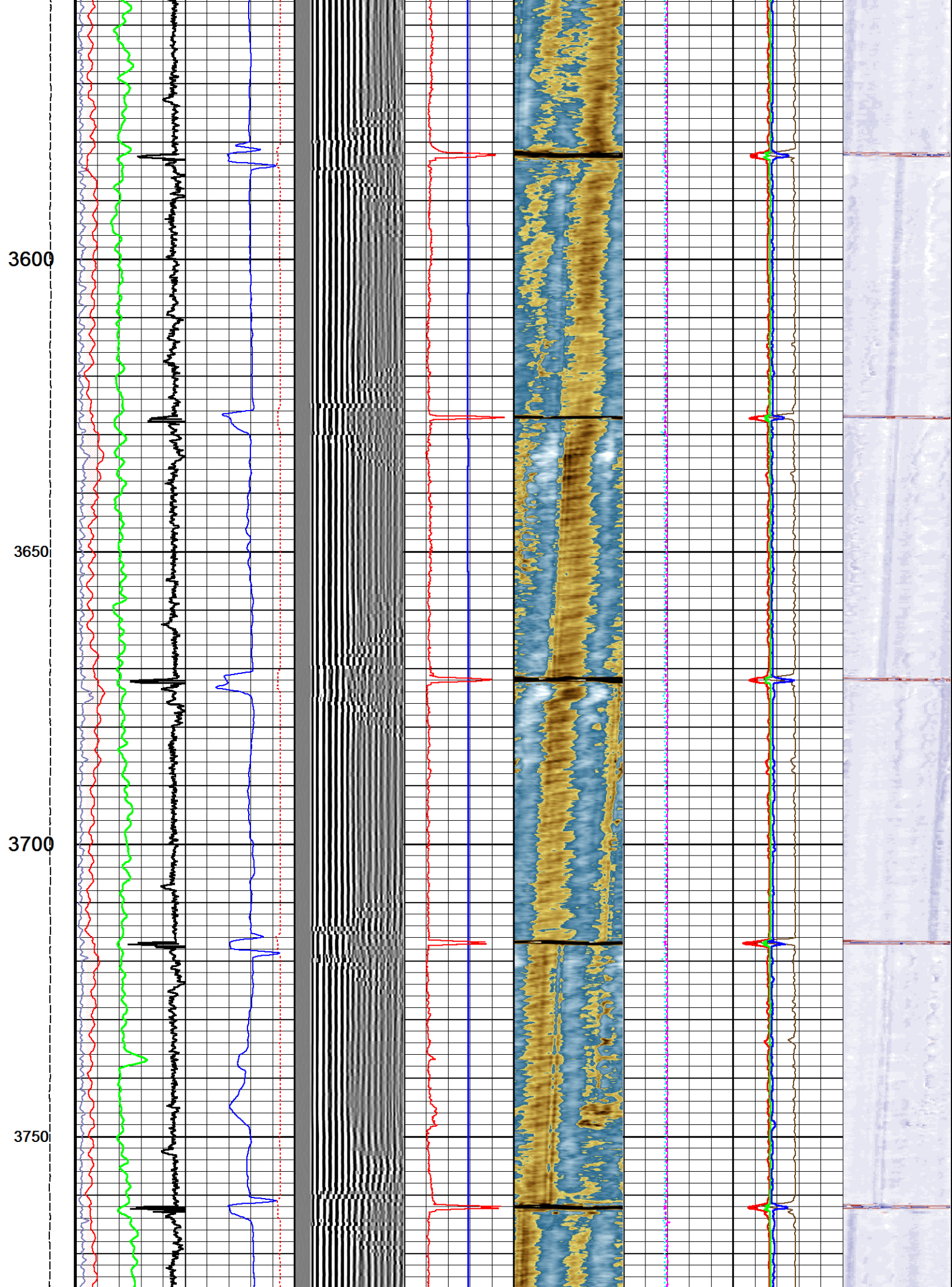
3250

3300



3350  
3400  
3450  
3500  
3550



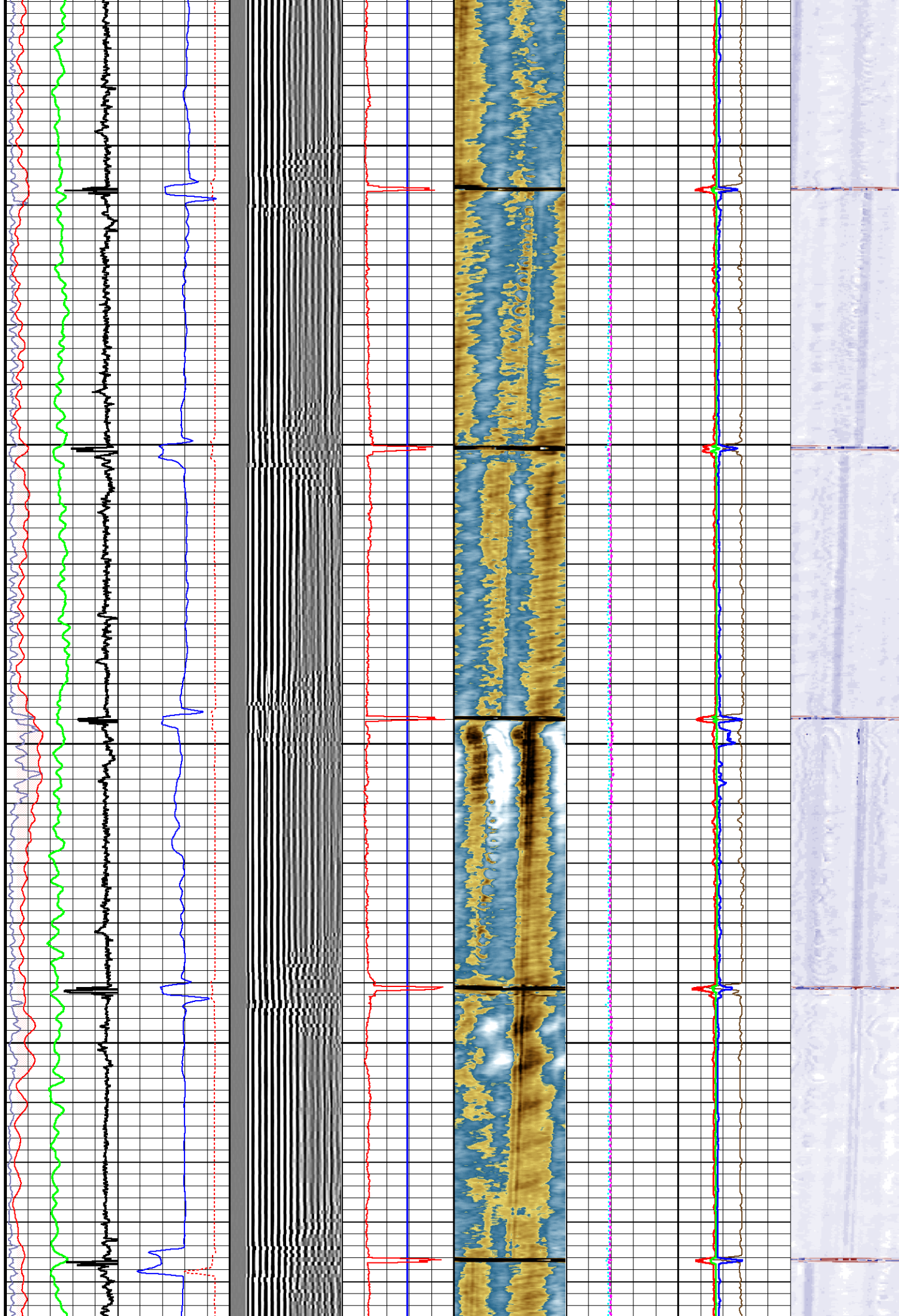


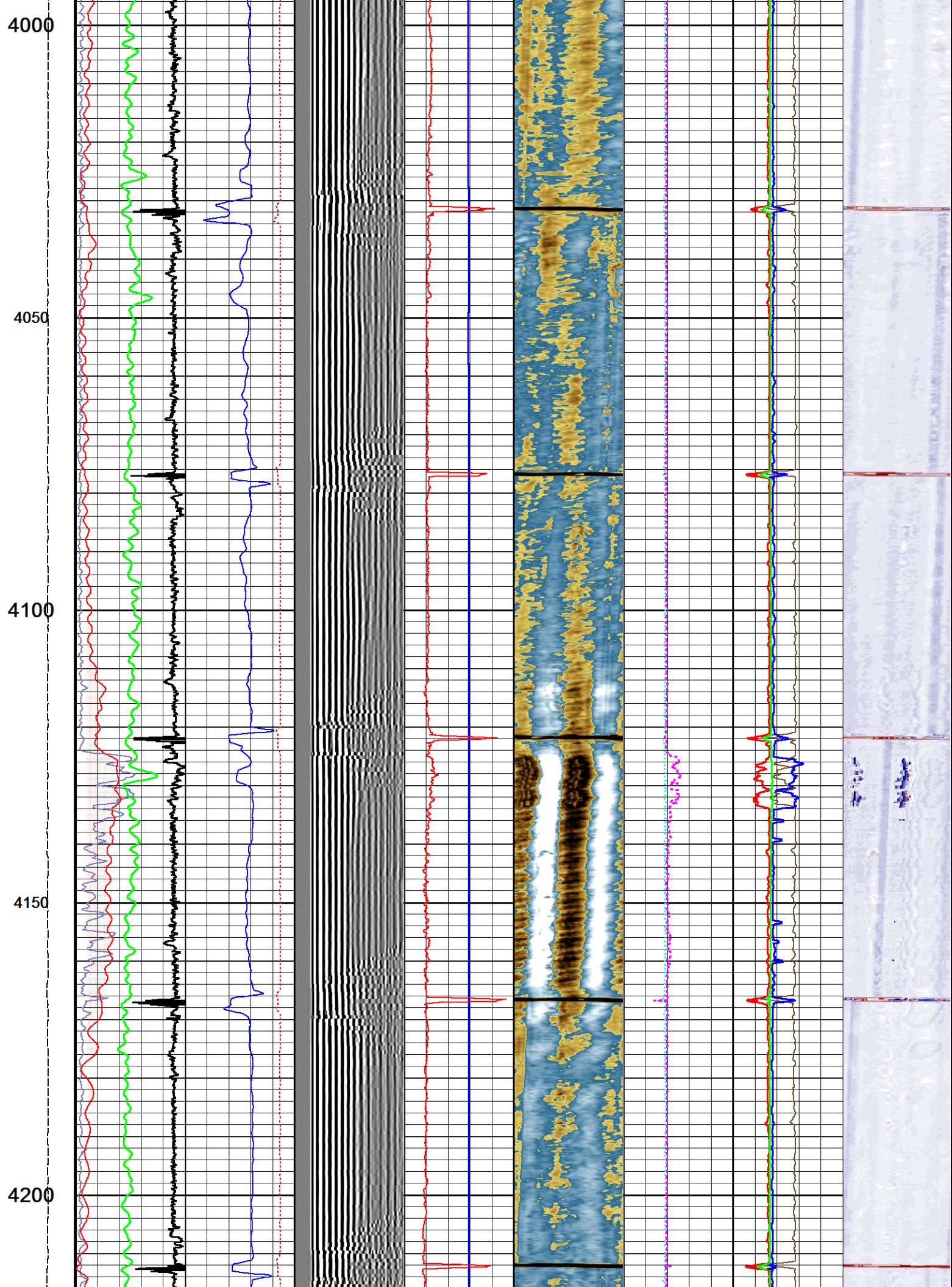
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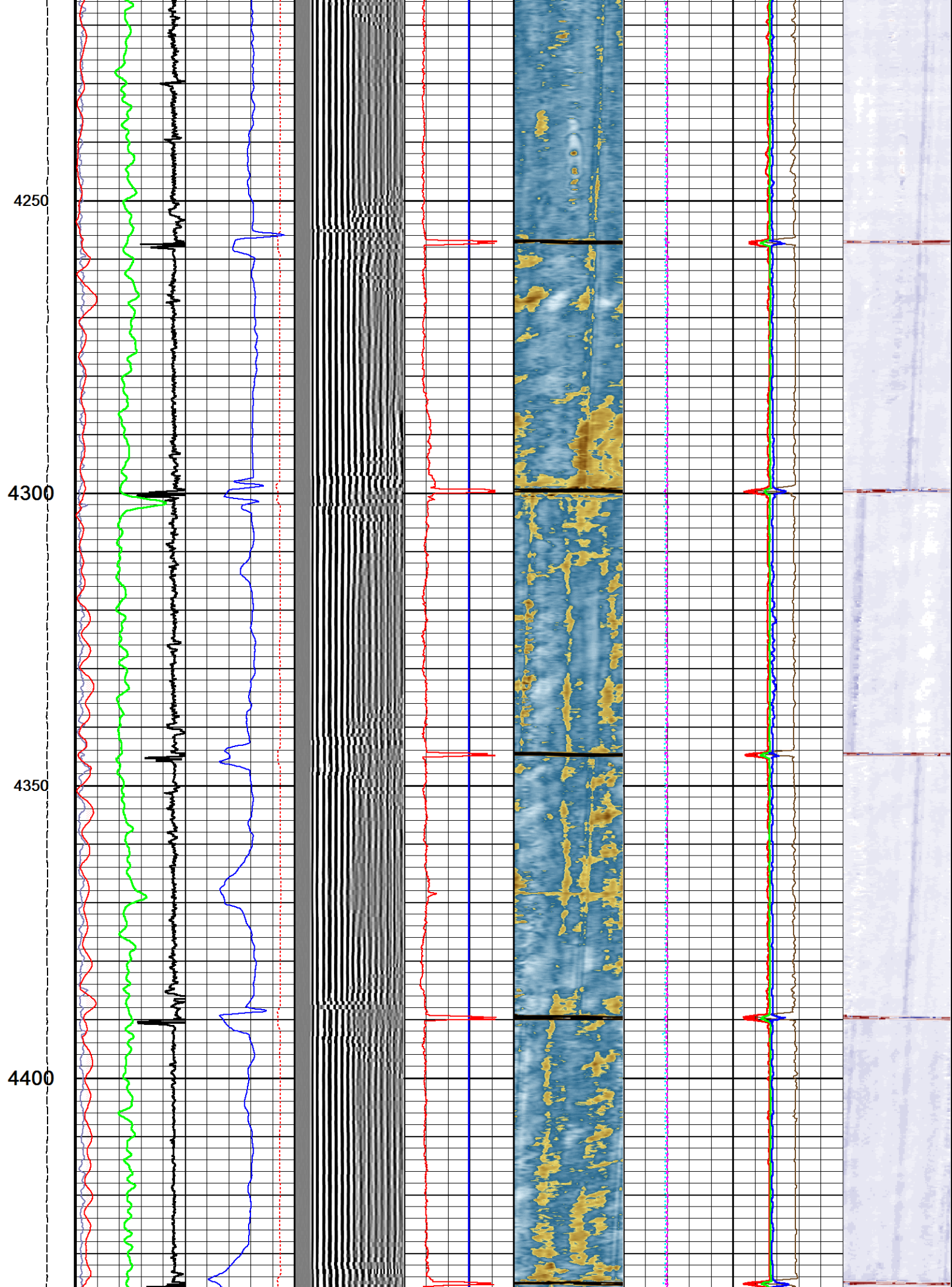
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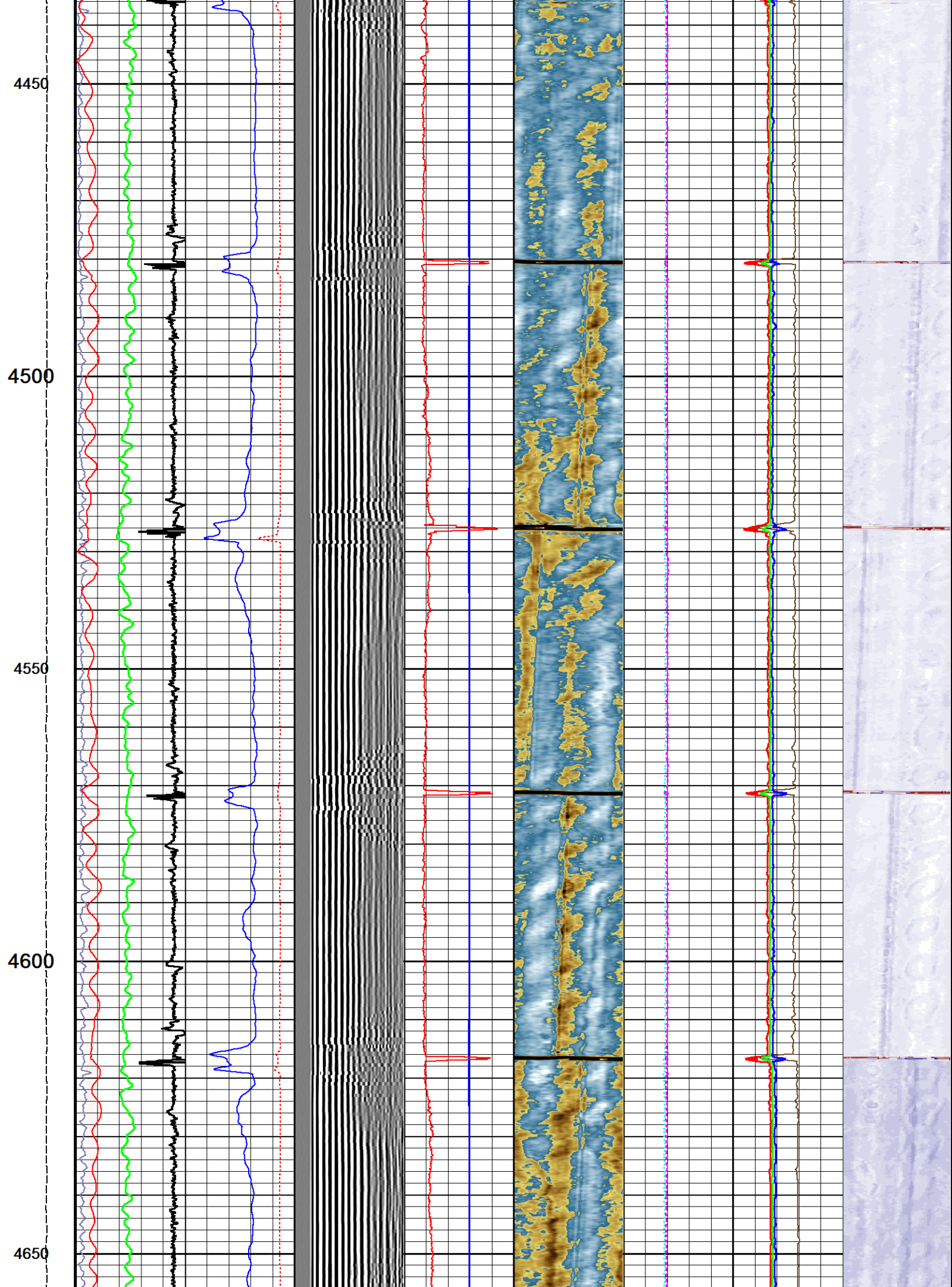
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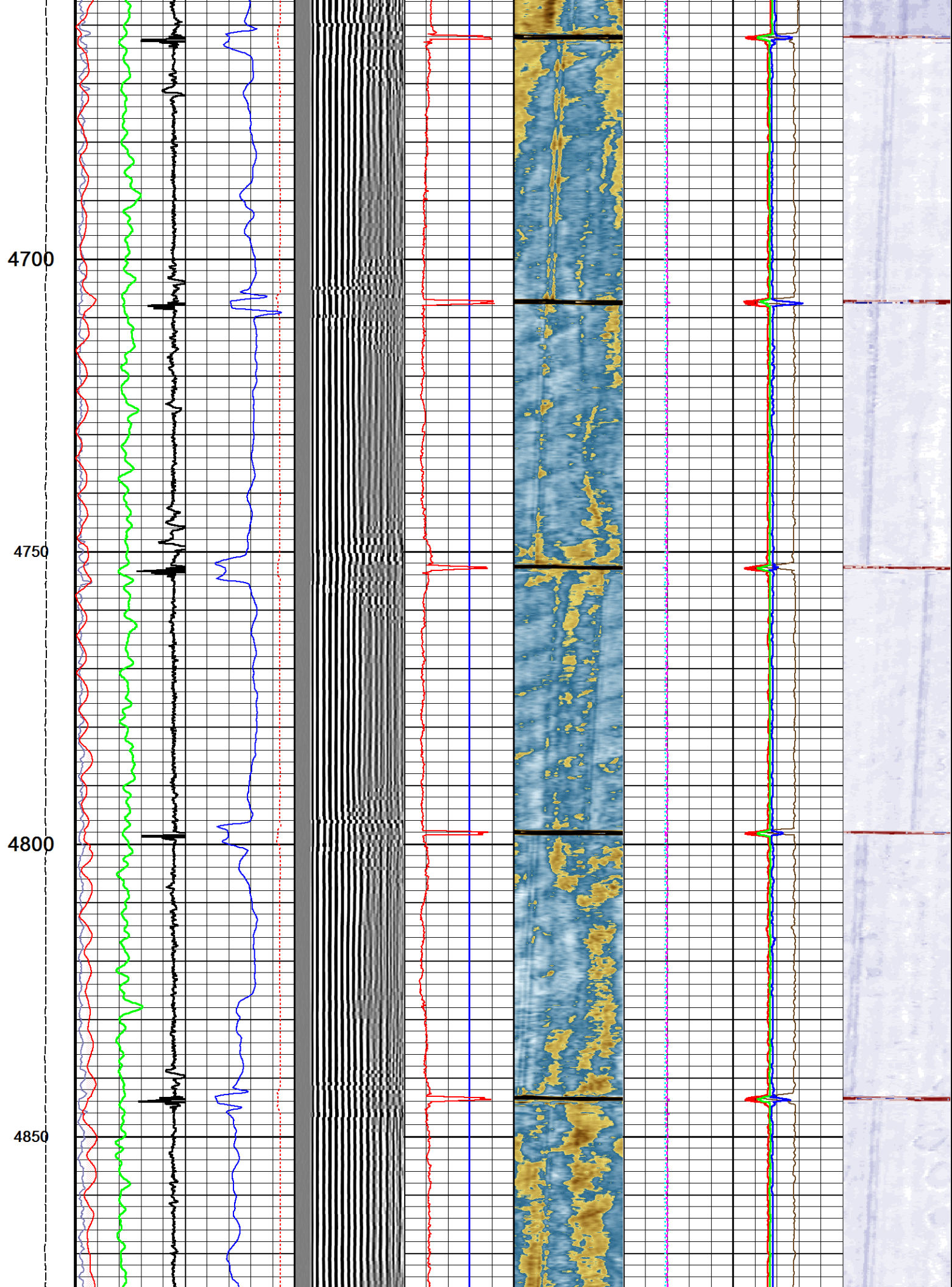
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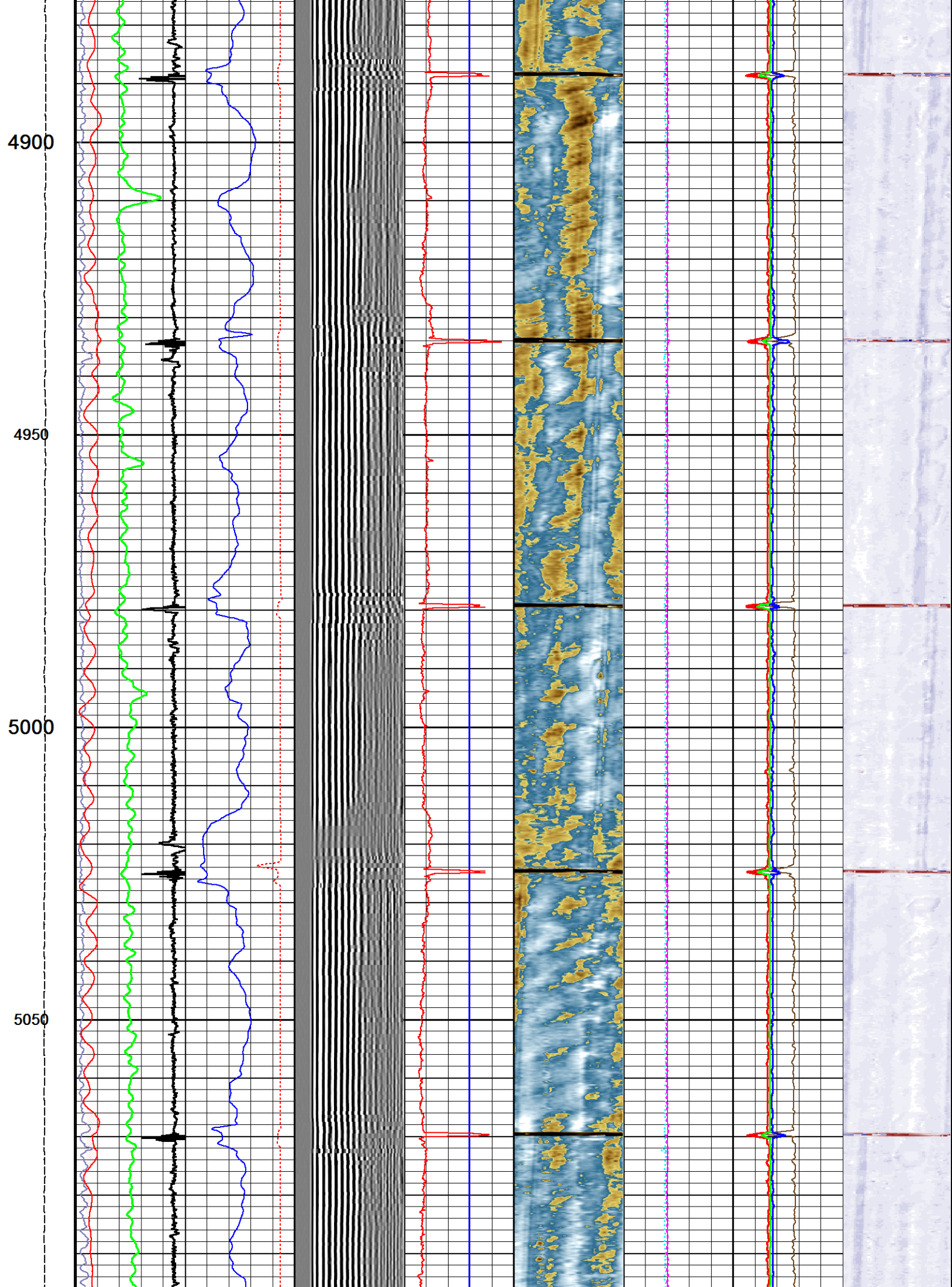




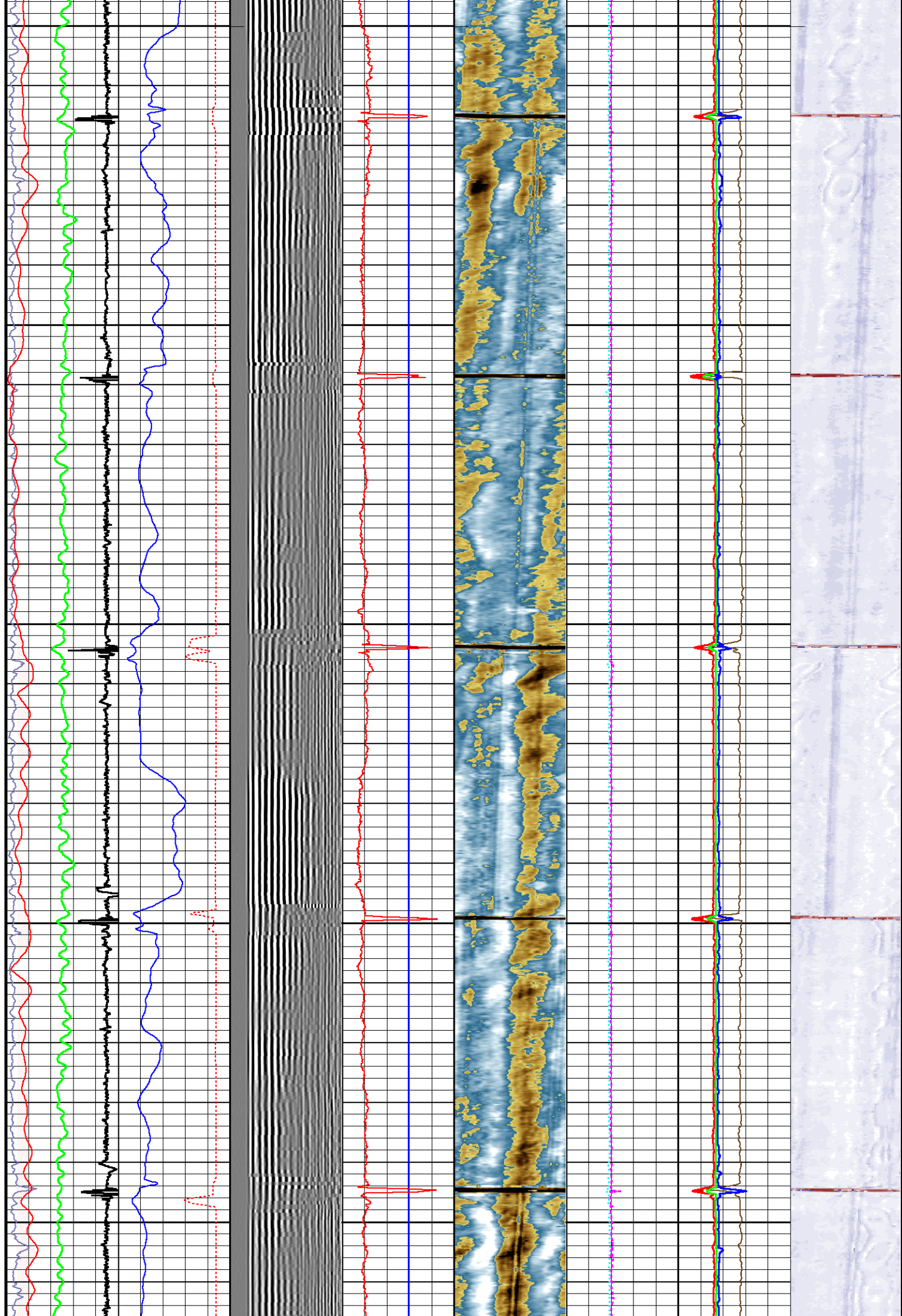


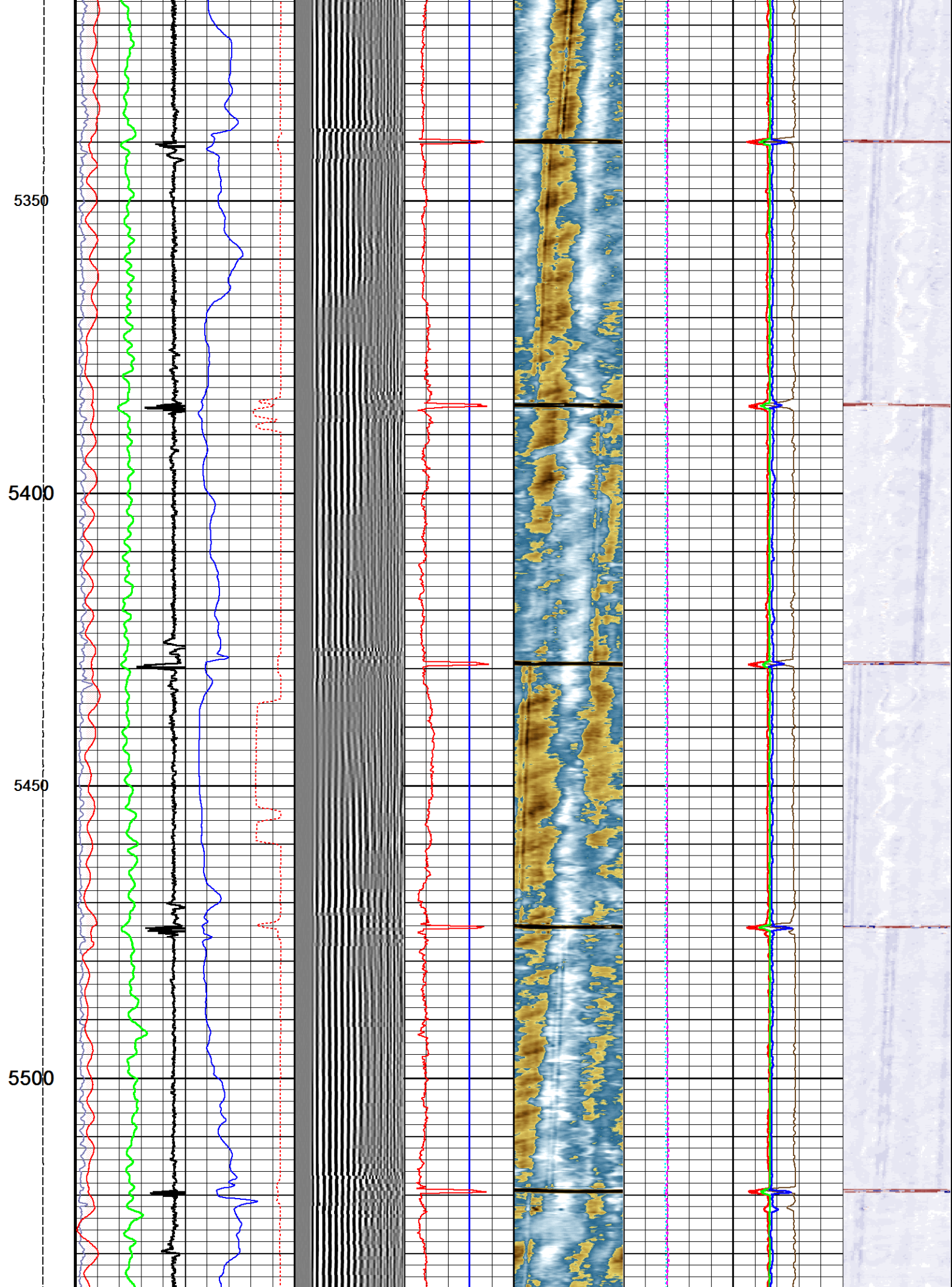




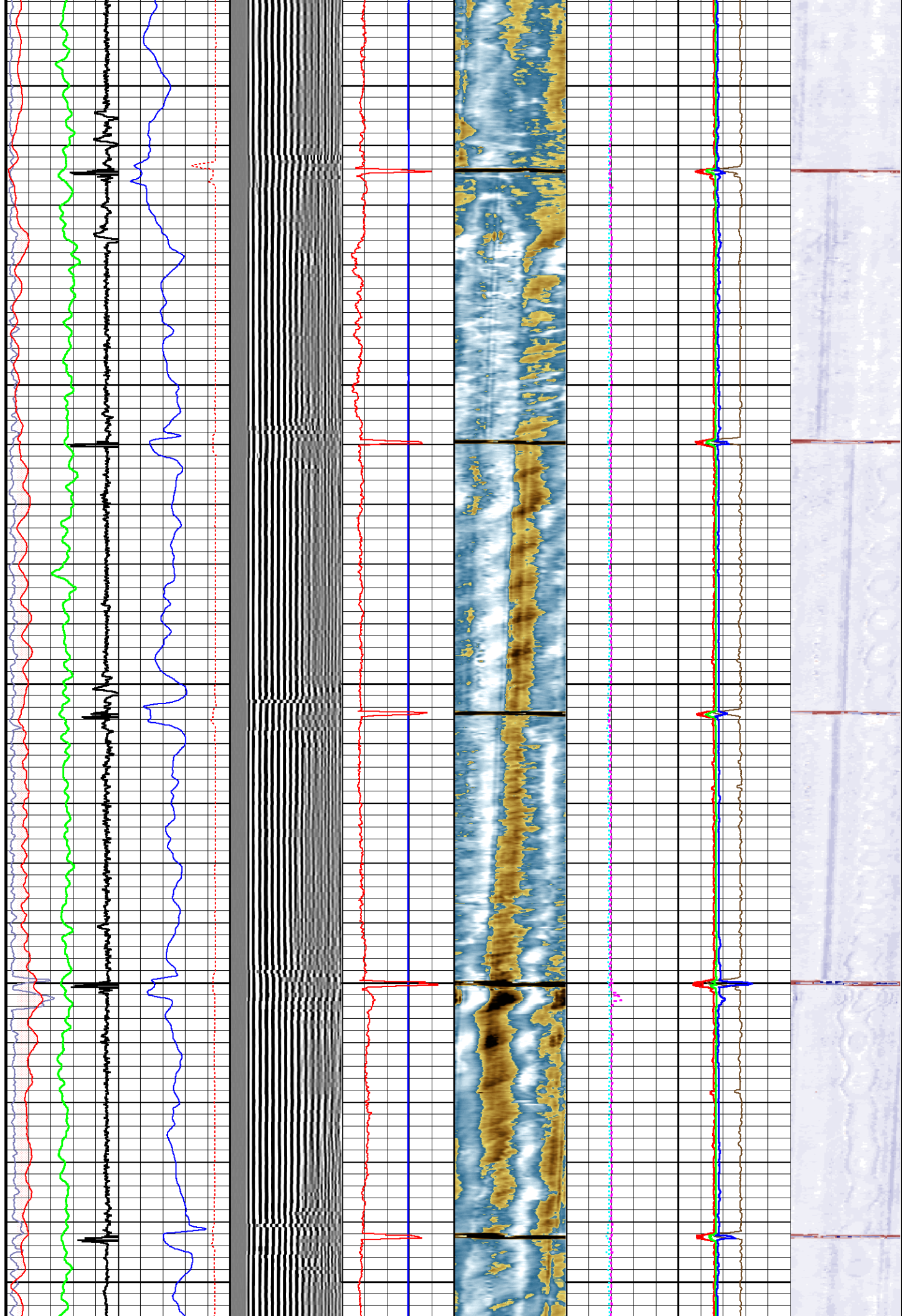


5100  
5150  
5200  
5250  
5300





5550  
5600  
5650  
5700  
5750

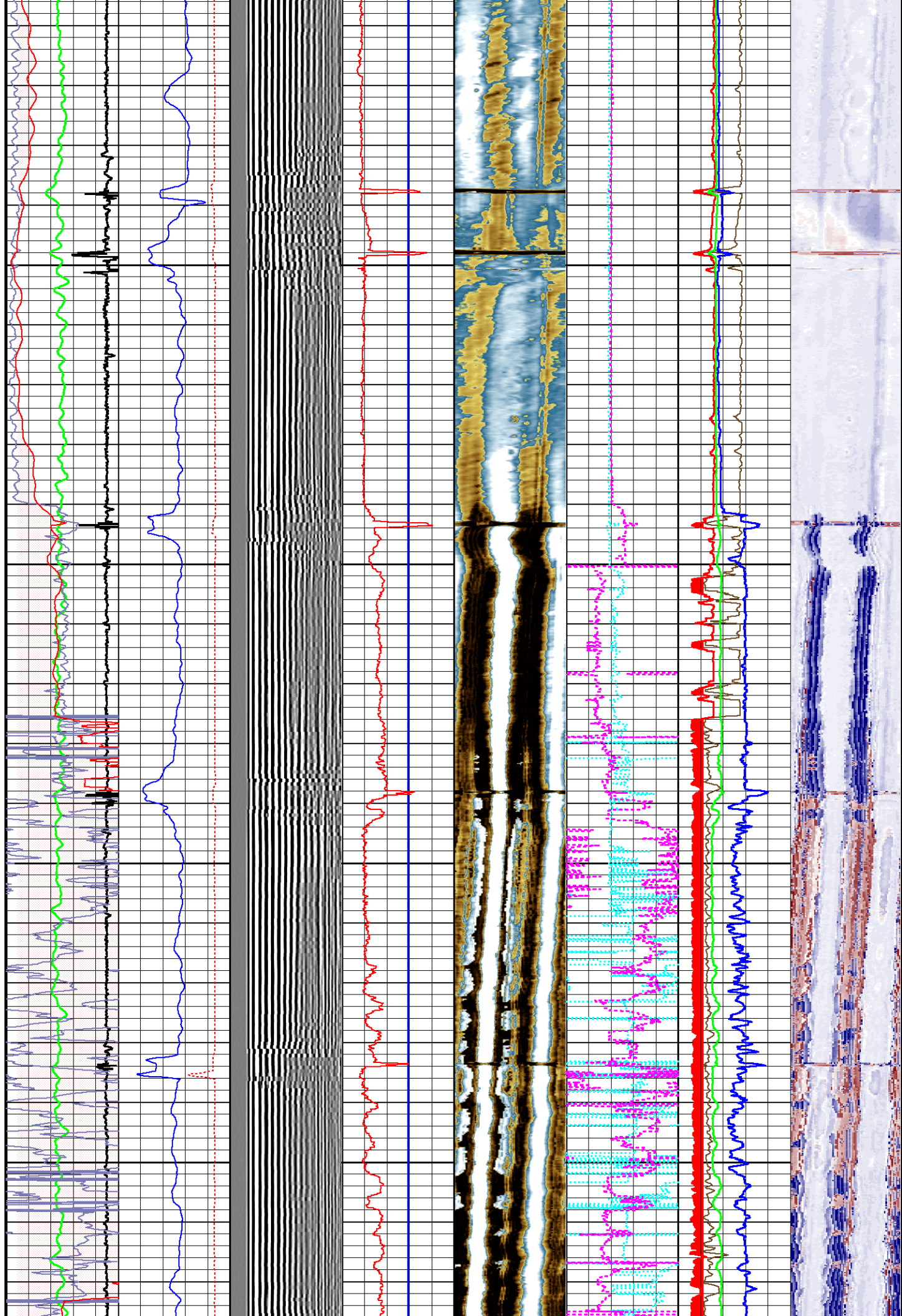


5800

5850

5900

5950



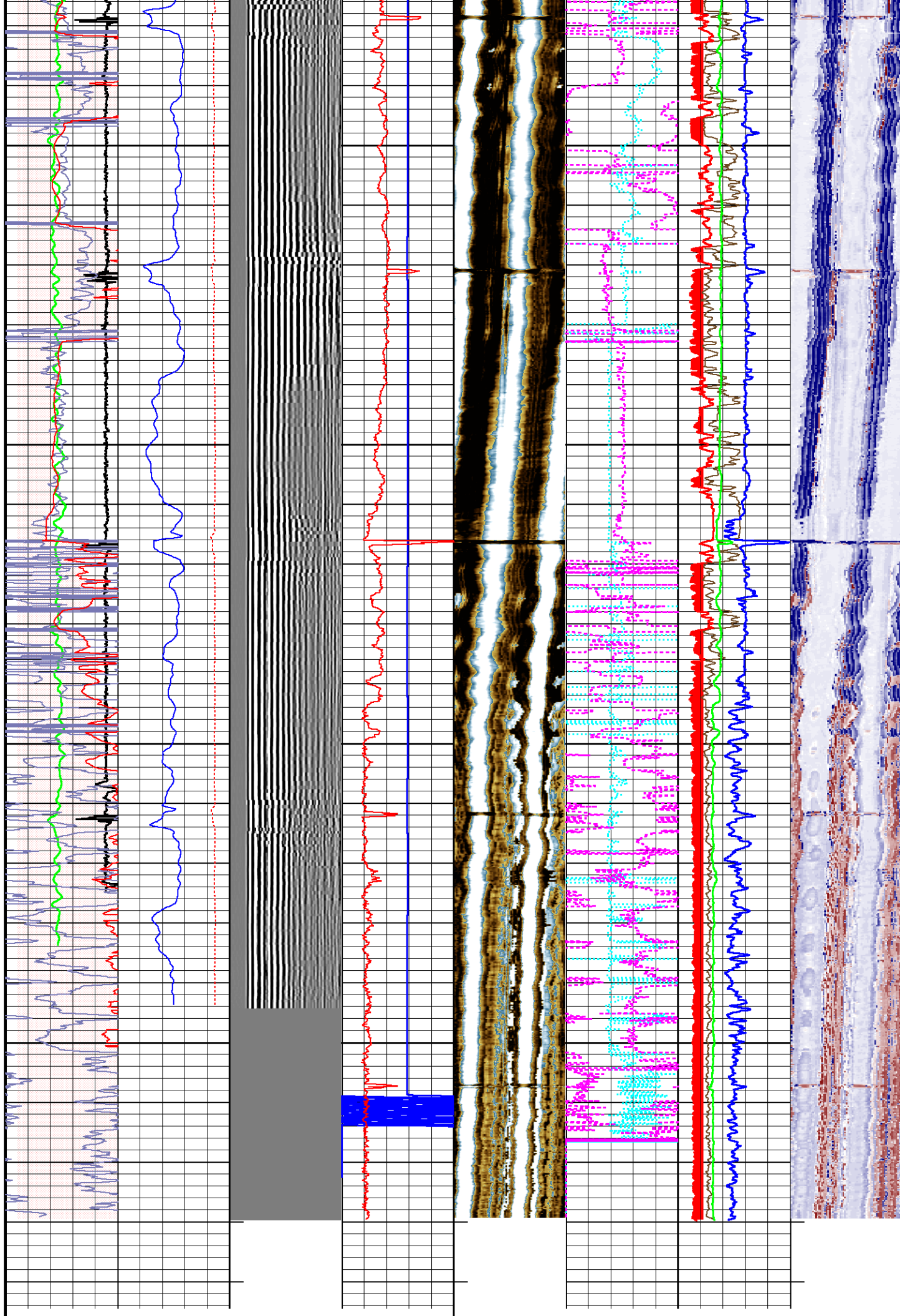
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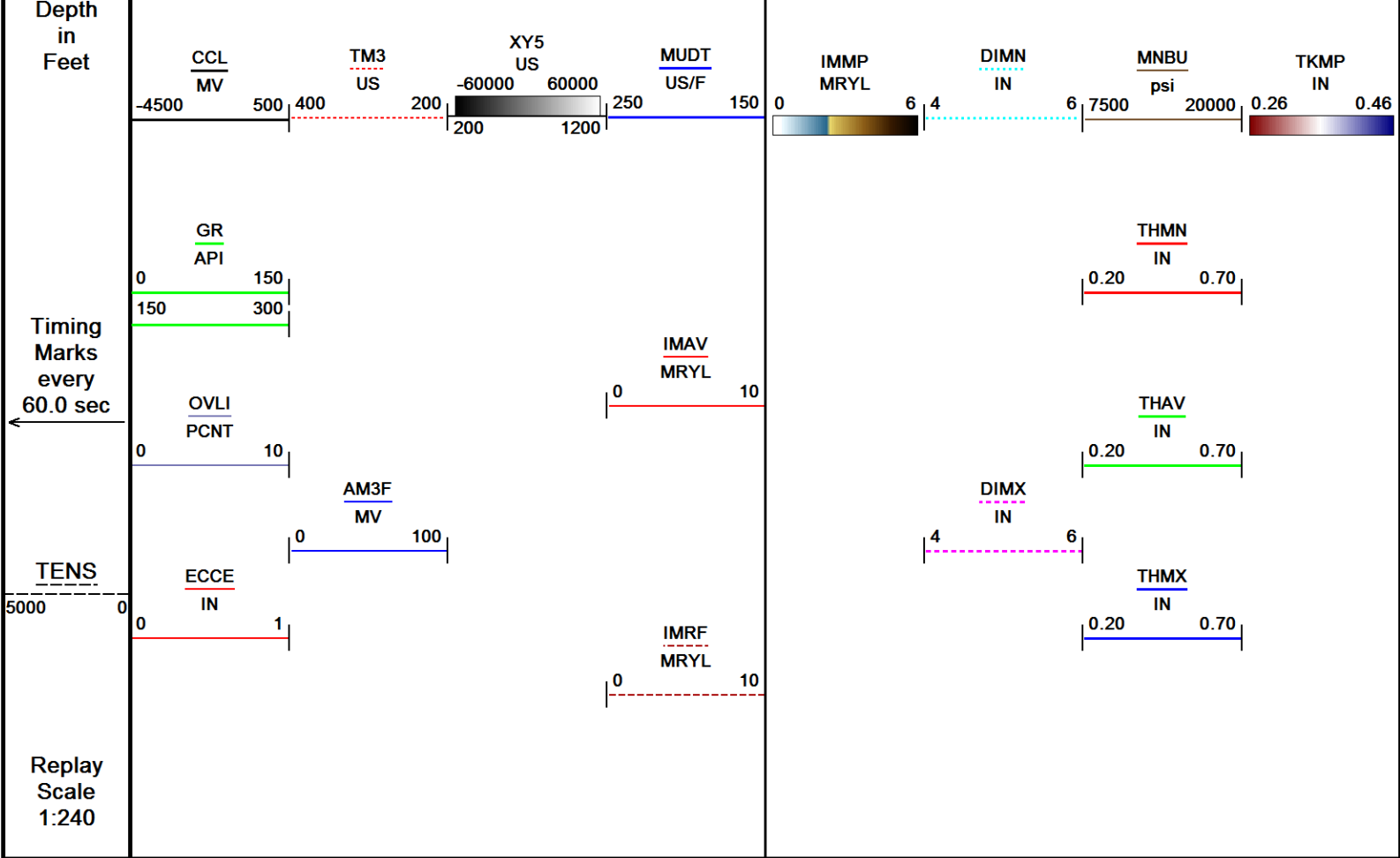
6050

6100

6150

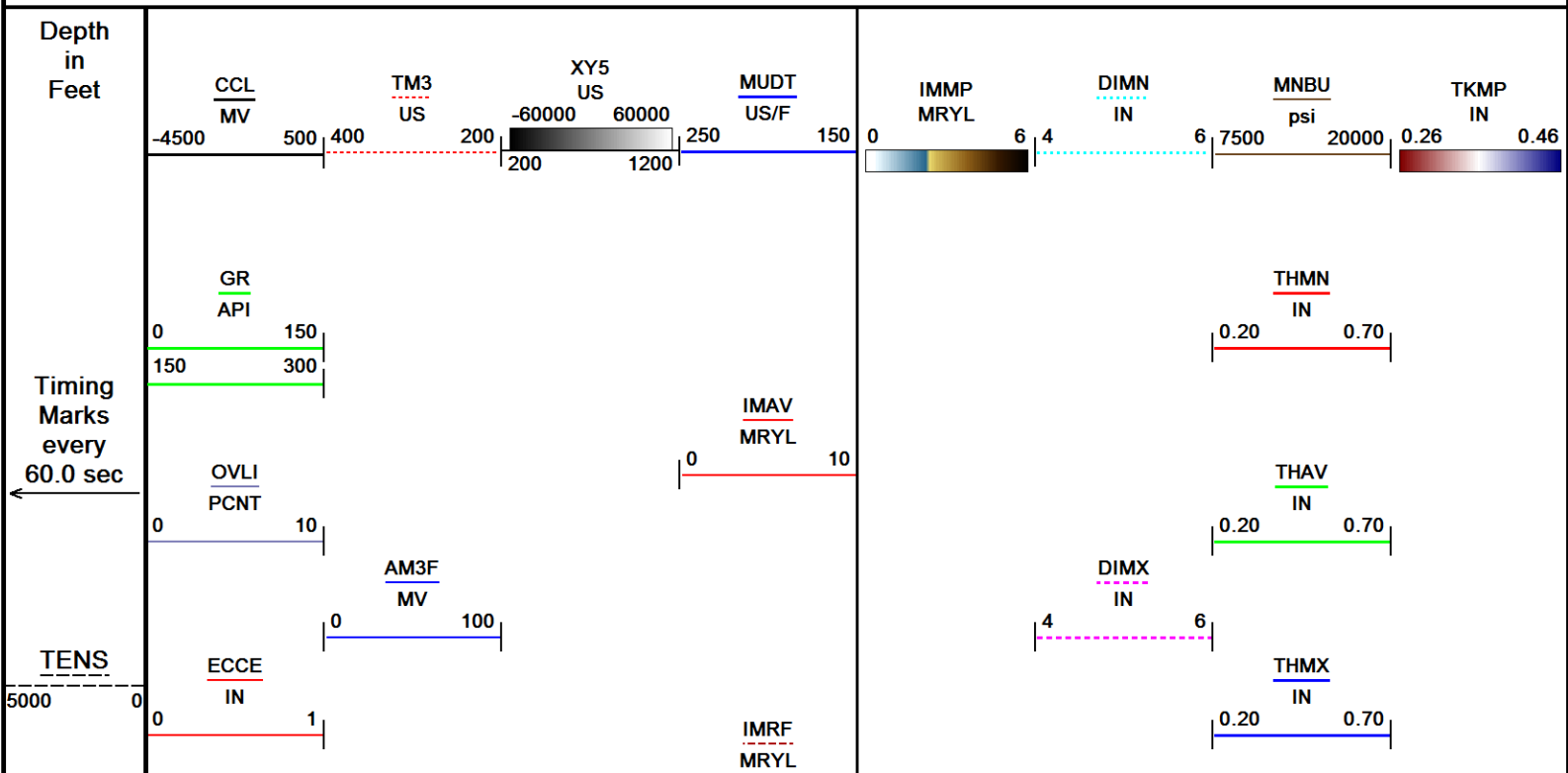
6192





MAIN PASS

REPEAT PASS



Replay  
Scale  
1:240

5908

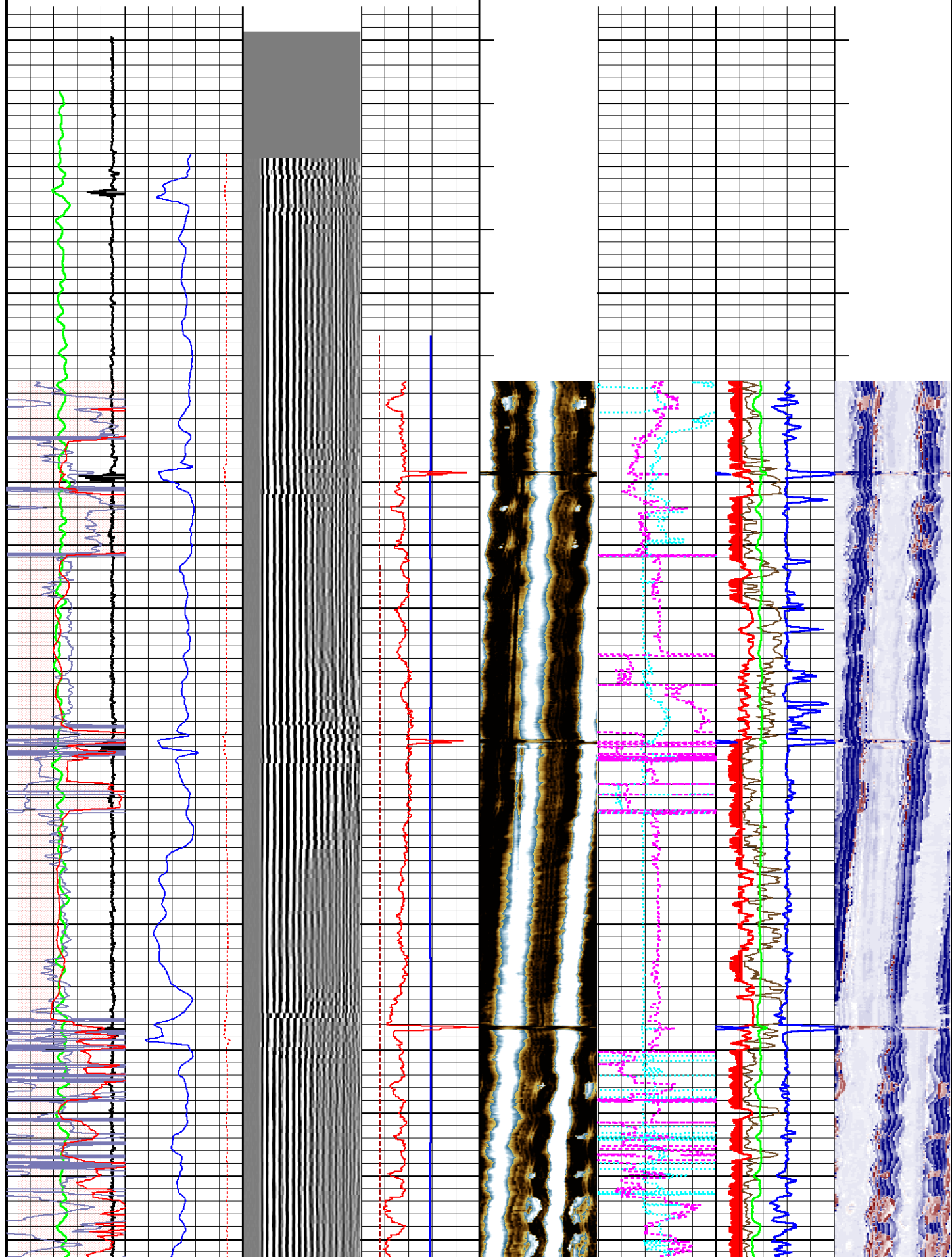
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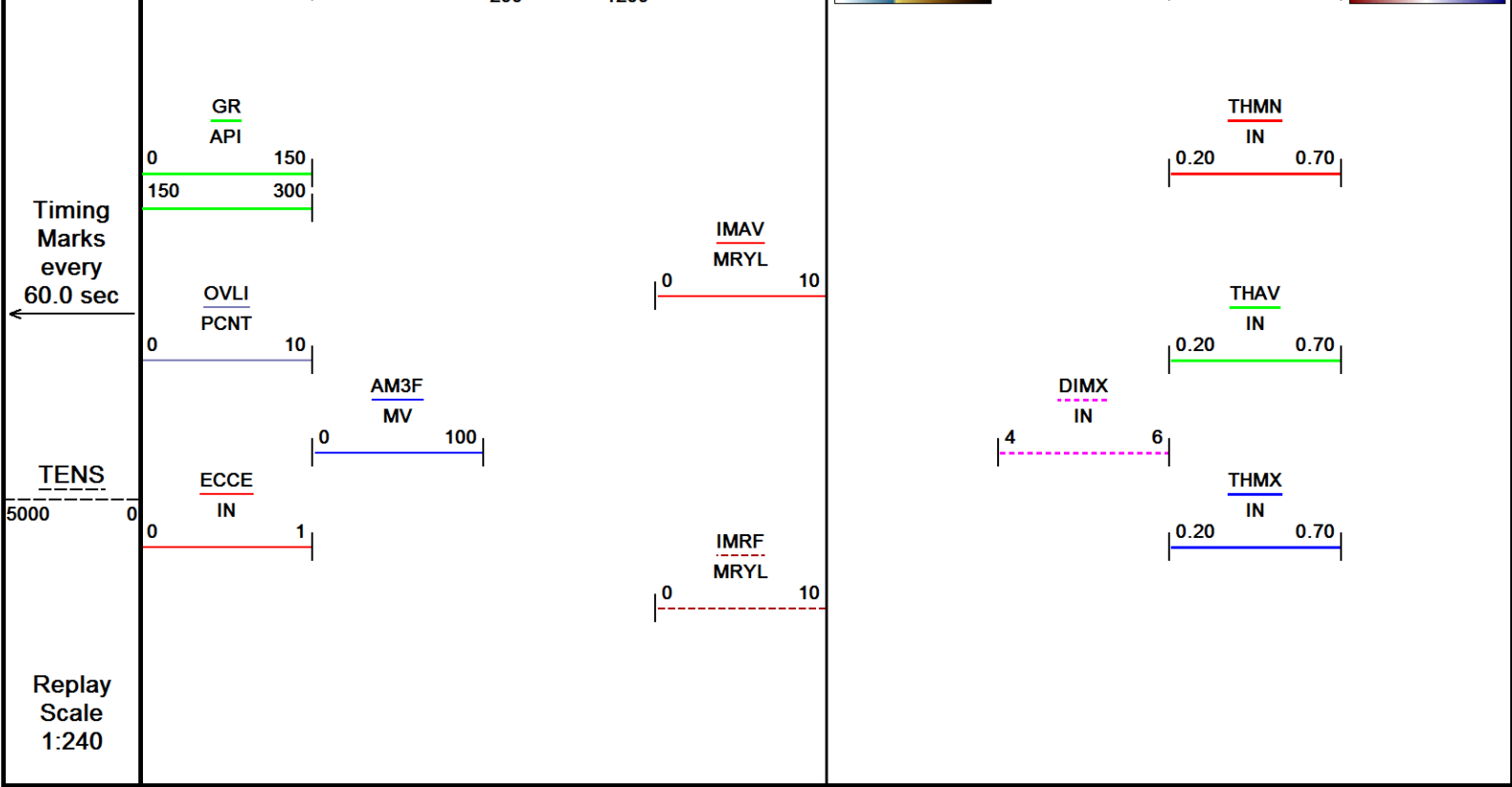
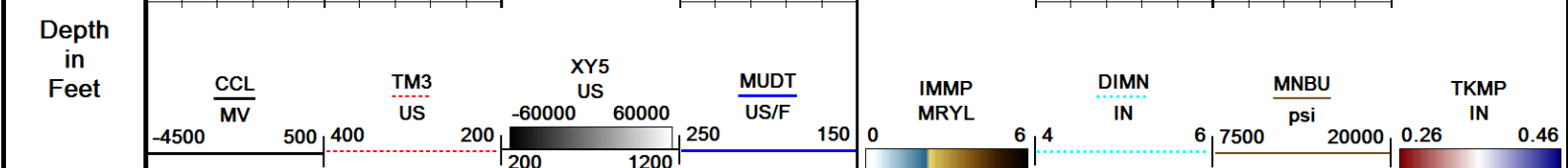
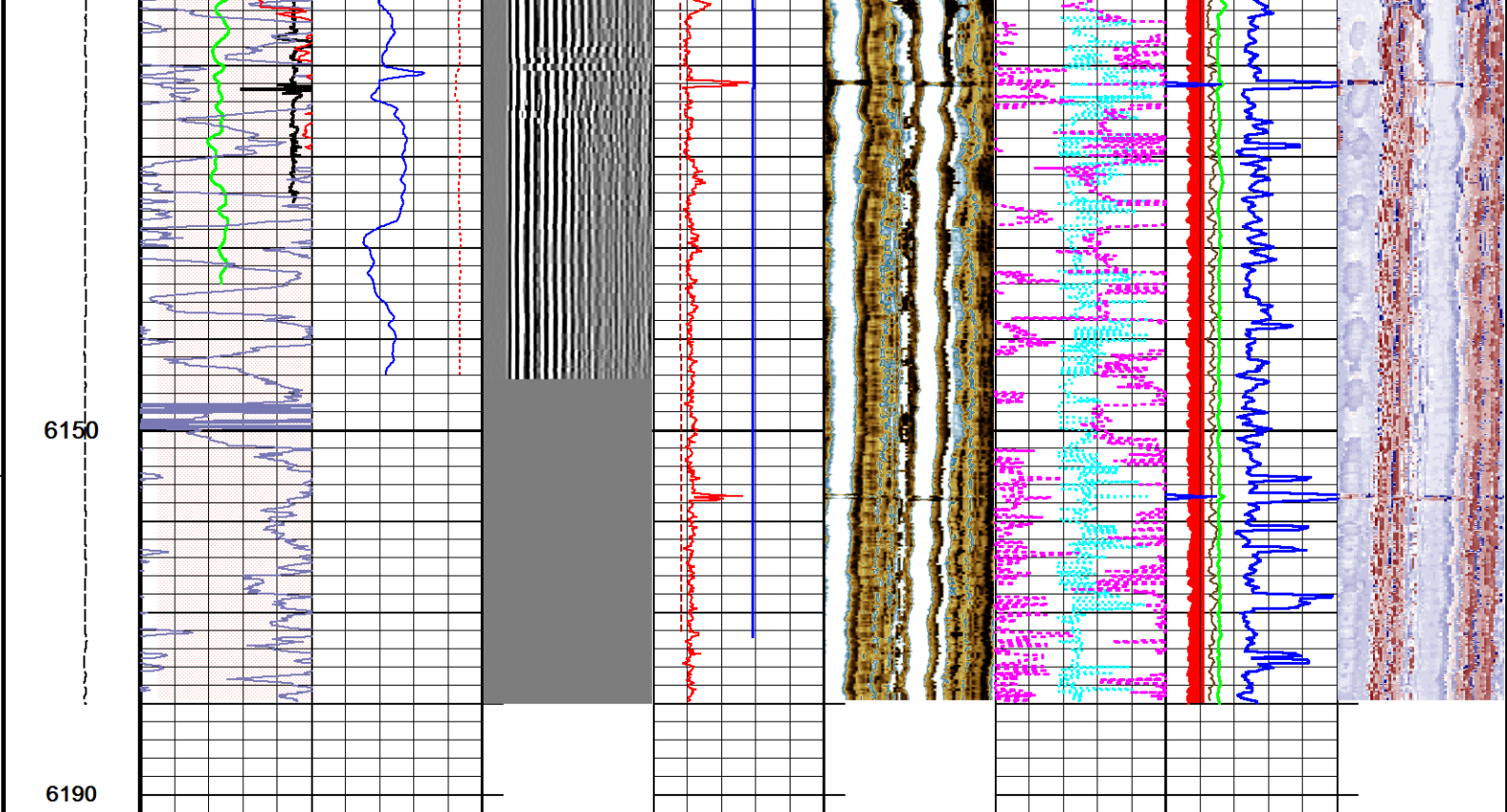
6000

6050

6100

0 10





Depth Based Data - Maximum Sampling Increment 2.5cm

Plotted on 22-MAY-2019 19:07

Filename: C:\Users\le197426\Desktop\LOGS\BONANZA CREEK\ANTELOP...REPEAT PASS\_001.dta

Recorded on 22-MAY-2019 19:04

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

↑ REPEAT PASS ↑

SHOP AND FIELD CALIBRATIONS

UGR Field Survey Cal UGR-JD 104

Field Calibration on 25-APR-2019 09:23

Gamma Ray Field Survey Calibration

Tool Type: UGR-JD Serial No: 104  
 Calibrator No: TH38

|            |            |          |       |
|------------|------------|----------|-------|
| Background | Calibrator | Standard | Units |
| 85.4       | 574.3      | 140.0    | CPS   |

Delta Counts Per Sec: 488.9 CPS/API = 3.492

CBT Field Calibration CBT-AA 101

Field Calibration on 00-JAN-1988 00:00

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  | 2.00         | 0.00         |
|          | Free Pipe   | 72.00        | 767.20       |
| AMP 5 FT | 100 % Bond  | 0.20         | 0.00         |
|          | Free Pipe   | 48.00        | 540.60       |

CBT Constants CBT-AA 101

Last Edited on 22-MAY-2019 16:47

|                      |            |
|----------------------|------------|
| Min Ampl 100% Bond   | 2.01 MV    |
| Max Ampl 0% Bond     | 71.77 MV   |
| Cement Cmpr Strength | 1500 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 125

Field Calibration on 00-JAN-1988 00:00

Ultrasonic Radial Scanner Before Calibration

Tool Type USH-AB Serial No 125

|           |          |         |         |      |
|-----------|----------|---------|---------|------|
| Free Pipe | Measured | Minimum | Maximum | MRYL |
|           | -999.250 | 0.000   | 0.000   |      |

URS Constants USH-AB 125

Last Edited on 22-MAY-2019 16:47

\*\*\* 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 4.40  
 ZMud Cal Area Ratio 4.70

\*\* 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              | 1607.00           | 5.50       | 36.00        | 1.50           | 1.50           | 0.36     | 1.00            |
| 0.00              | 11606.00          | 5.50       | 20.00        | 1.50           | 1.50           | 0.36     | 1.00            |

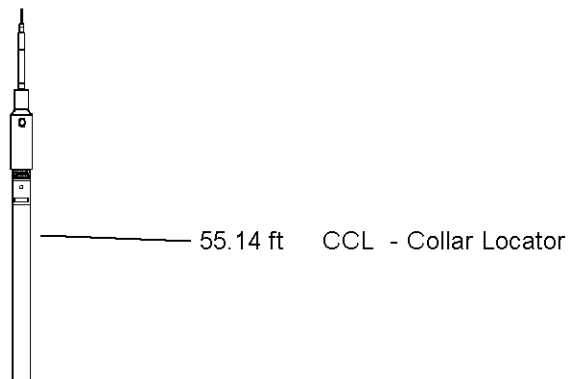
\*\* Constants \*\*

Thickness calculated from Tool  
 Radius Offset -0.51  
 Mud slowness Offset 0.00 US/F  
 Mud Chamber Equation Mud Plate  
 Z\_mud at Calibration 1.65 MRYL  
 Z\_mud Outside 1.75 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\ANTELOPE T34-19-18 MRLNBIREPEAT PASS\_001.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

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

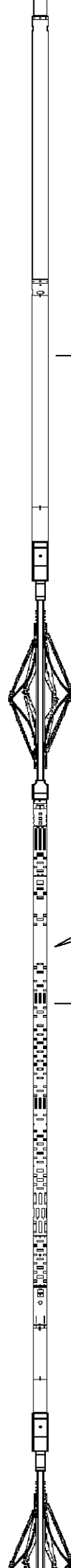
Communication Cartridge 55pin 3-3/8in  
WCC-DA 119 LG: 4.60 ft WT: 63.9 lb OD: 3.386 in

Gamma Ray  
UGR-JD 104 LG: 4.60 ft WT: 81.6 lb OD: 3.386 in

55 pin Roller Centralizer  
CEN-XA 185 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

55 pin Roller Centralizer  
CEN-XA 222 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in



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

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

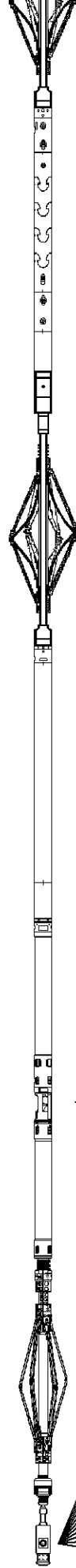
55 pin Roller Centralizer  
 CEN-XA 218 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

URS Electronics Cartridge  
 UCC-AA 192 LG: 4.51 ft WT: 79.4 lb OD: 3.386 in

URS Sonde Section  
 USS-AB 192 LG: 9.65 ft WT: 167.6 lb OD: 3.386 in

Ultrasonic Radial Scanner Head A  
 USH-AB 125 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 IMMP - Impd Map  
 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 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)

|                 |                          |
|-----------------|--------------------------|
| COMPANY         | BONANZA CREEK ENERGY     |
| WELL            | ANTELOPE T34-19-18 MRLNB |
| FIELD           | WATTENBERG               |
| PROVINCE/COUNTY | WELD                     |
| COUNTRY/STATE   | UNITED STATES / COLORADO |

|                         |      |      |                     |         |      |
|-------------------------|------|------|---------------------|---------|------|
| Elevation Kelly Bushing | 4674 | feet | Bottom Log Interval | 6180.00 | feet |
| Elevation Drill Floor   |      | feet | Depth Driller       |         | feet |
| Elevation Ground Level  | 4657 | feet | Depth Logger        | 6180.00 | feet |



SECUREVIEW  
ULTRAVIEW / BONDVIEW  
LOG

**Weatherford**<sup>®</sup>