



Weatherford®

SECUREVIEW

ULTRAVIEW / BONDVIEW

COMPANY

BONANZA CREEK ENERGY

WELL ANTELOPE FEDERAL 44-20-17 XRLNC

FIELD WATTENBERA

PROVINCE/COUNTY WELD

COUNTRY/STATE

USACOLORADO

LOCATION

SEC 20 TWP 5N RGE 62W

Latitude Longitude

API Number

Permanent Datum GL, Elevation 4657 feet

Log Measured From KB, 17.00 feet above Permanent Datum

Drilling Measured From KB

Date

Run Number

Service Order

Type Log

Depth Driller

Depth Logger

Top Log Interval

Bottom Log Interval

Hole Fluid Type

Hole Fluid Level

Restriction ID

Max Recorded Temp

Well Head Pressure

Well Head Equipment

Time Well Ready

Time Logger Bottom

Unit

Equipment Name

Base

Recorded By

Witnessed By

Other Services
CALVIEW

05-123-49090

Elevations:
KB 4674.00
DF 4674.00
GL 4657.00

PERFORATION RECORD

| | | | | | |
|------------------|---------|------------------------|------------|------------|----------|
| 17-JUN-2019 | ONE | Shot | Number | Depth From | Depth To |
| 18188-248018100 | Density | of Shots | feet | feet | feet |
| URS/CBL | | | | | |
| 17163.00 | feet | | | | |
| 6490.00 | feet | | | | |
| 0.00 | feet | | | | |
| 6490.00 | feet | | | | |
| WATER | | | | | |
| 0.00 | feet | | | | |
| 4.892 | inches | Gun Type | | | |
| 192.00 | deg F | Gun Size | | | |
| 0.00 | | CASING / TUBING RECORD | | | |
| N/A | Size | Weight | Depth From | Depth To | |
| R.O.A. | inches | pounds/ft | feet | feet | |
| SEE LOG | 5.500 | 17.00 | 0.00 | 17163.00 | |
| 14166 | | | | | |
| WSS-E | | | | | |
| CASPER | | | | | |
| BASHEER AL-KAFAF | | | | | |
| KURT DODGE | | | | | |

CASING / TUBING RECORD

| Type | Grade | TypeJoint | Size inches | Depth From feet | Shoe Depth feet | Weight pounds/ft |
|--------|-------|-----------|----------------|--------------------|--------------------|---------------------|
| CASING | P-110 | LT&C | 5.500 | 0.00 | 17163.00 | 17.00 |

REMARKS

-DEPTH CONTROL SYSTEM BENCHMARK, Z-CHART
-LOGGING WAS CORRELATED TO RIG KB @ 17' ABOVE GROUND LEVEL.
-100% STANDARD FREE PIPE AMPLITUDE IN CASING 5.5" 17 PPF IS 72 MV.
-MAX RECORDED TEMPERATURE 192 F
-TOC ESTIMATED @ 1677'
-CREW: AARON BITTLESTON, JAMES HAYCOCK
-WEATHERFORD WIRELINE SERVICES!

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



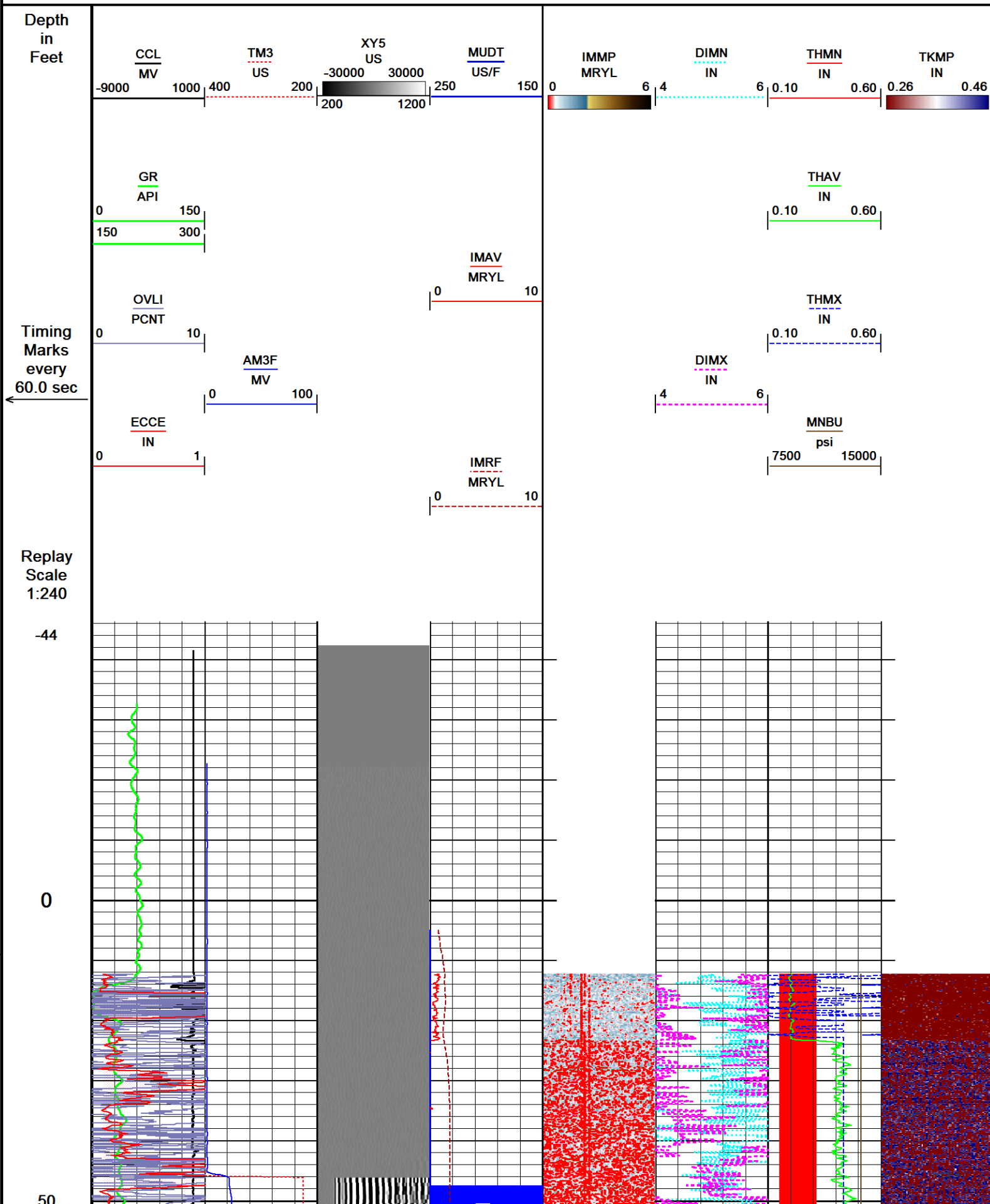
Depth Based Data - Maximum Sampling Increment 2.5cm

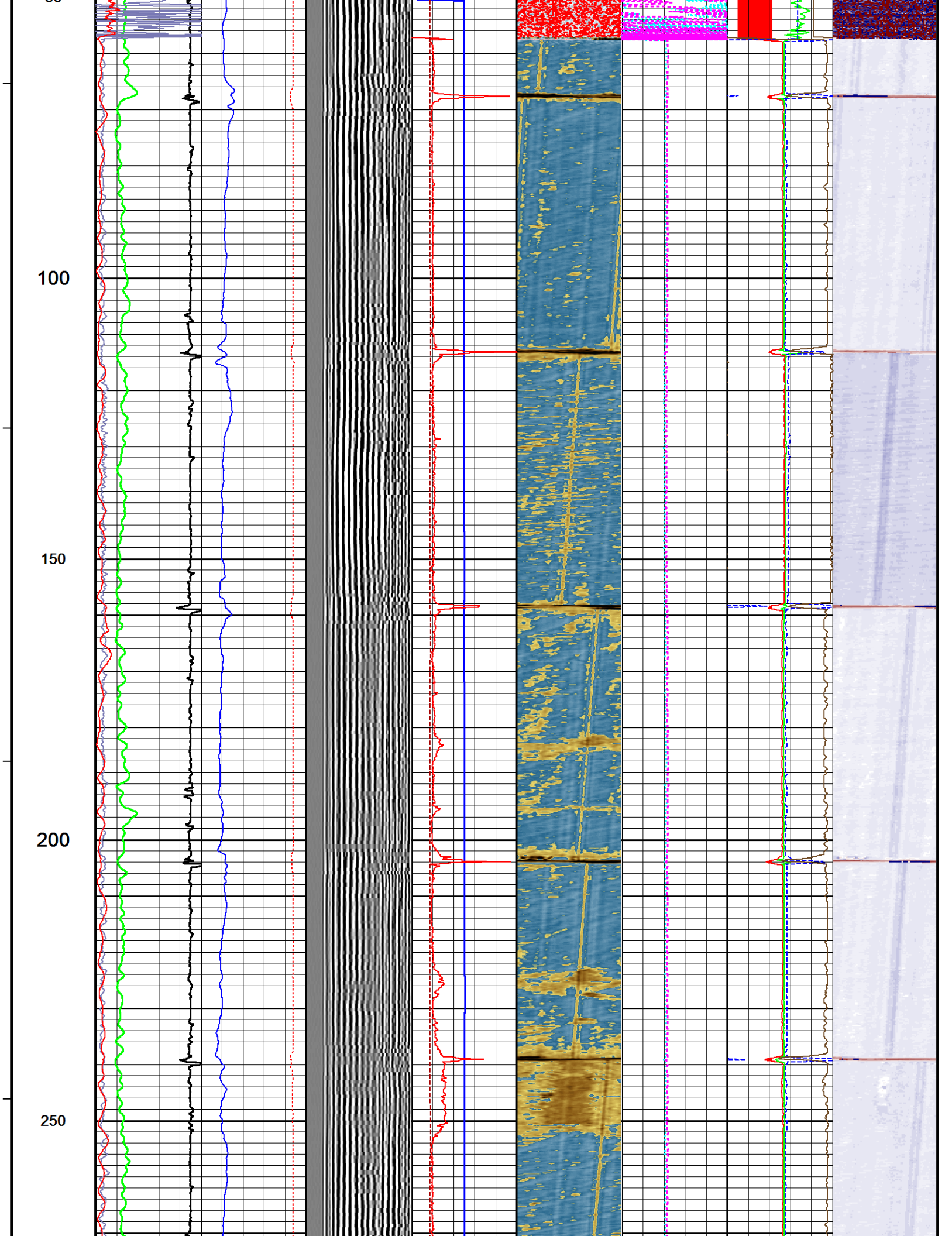
Plotted on 18-JUN-2019 09:07

Filename: C:\WLS\Bonanza creek\ANTELOPE FEDERAL 44-20-17XRLNC\SPLICE 5.dta

Recorded on 17-JUN-2019 16:42

System Versions: Processed with 19.01.8879 Plotted with 19.01.8879



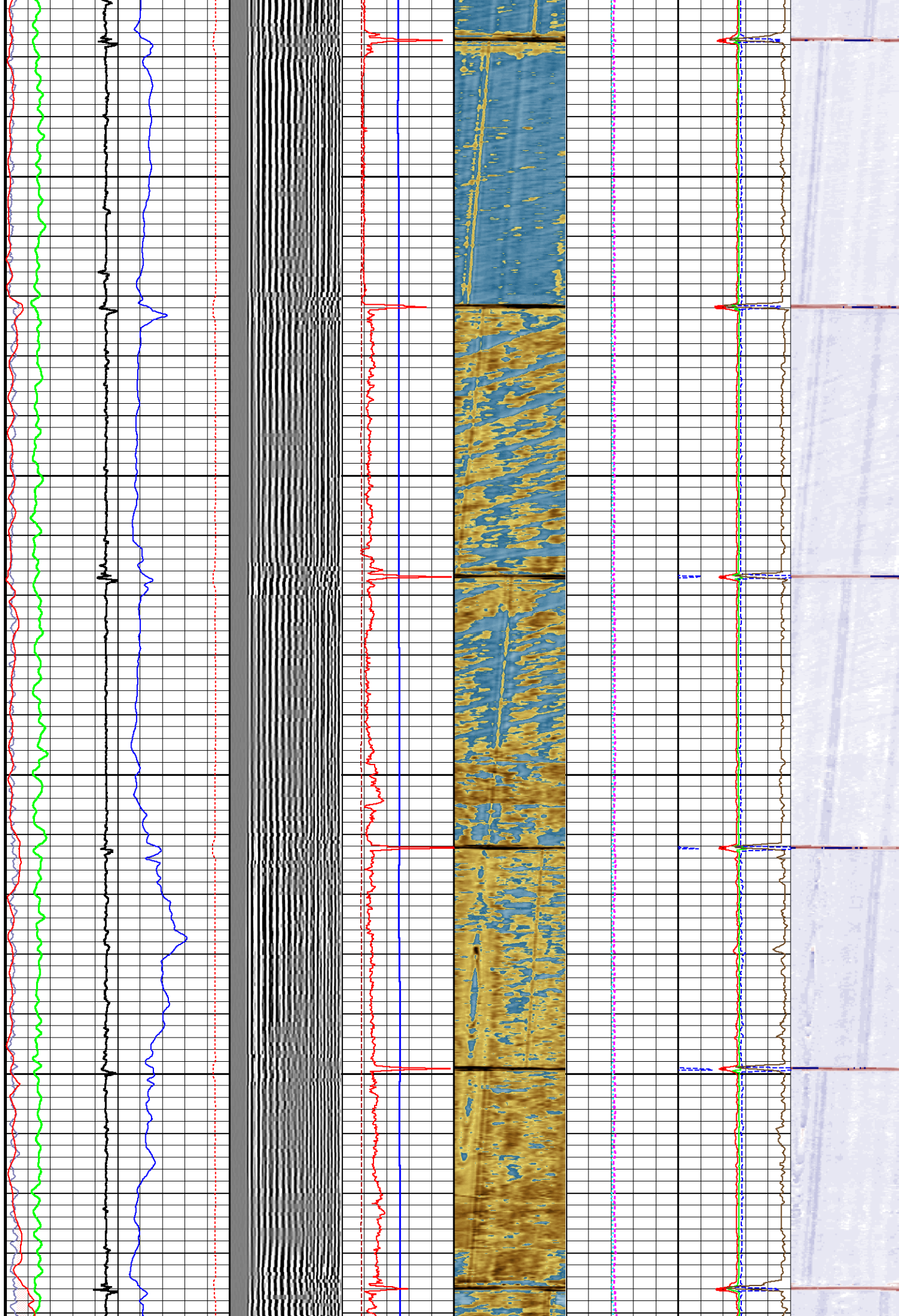


300

350

400

450



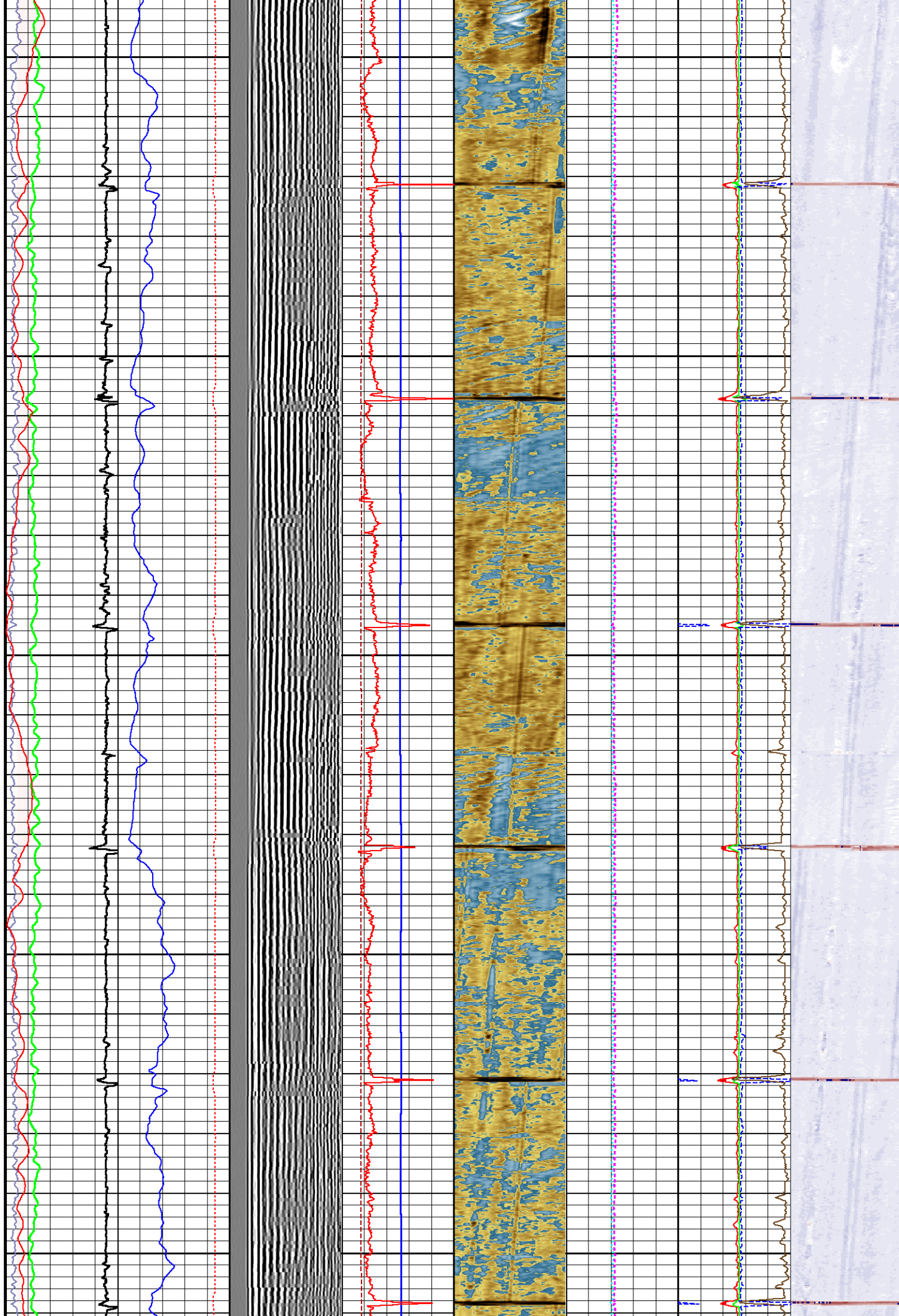
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550

600

650

700

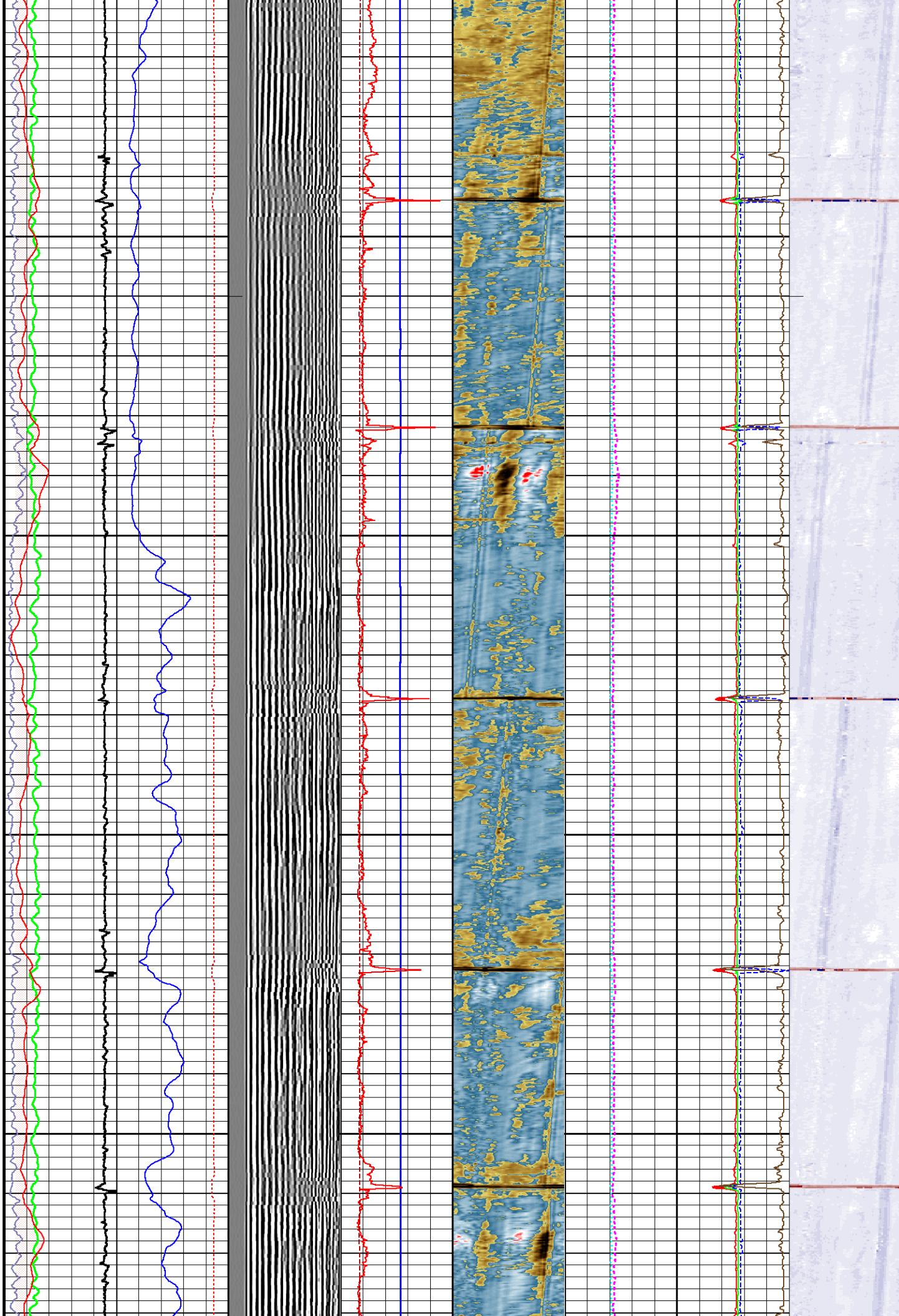


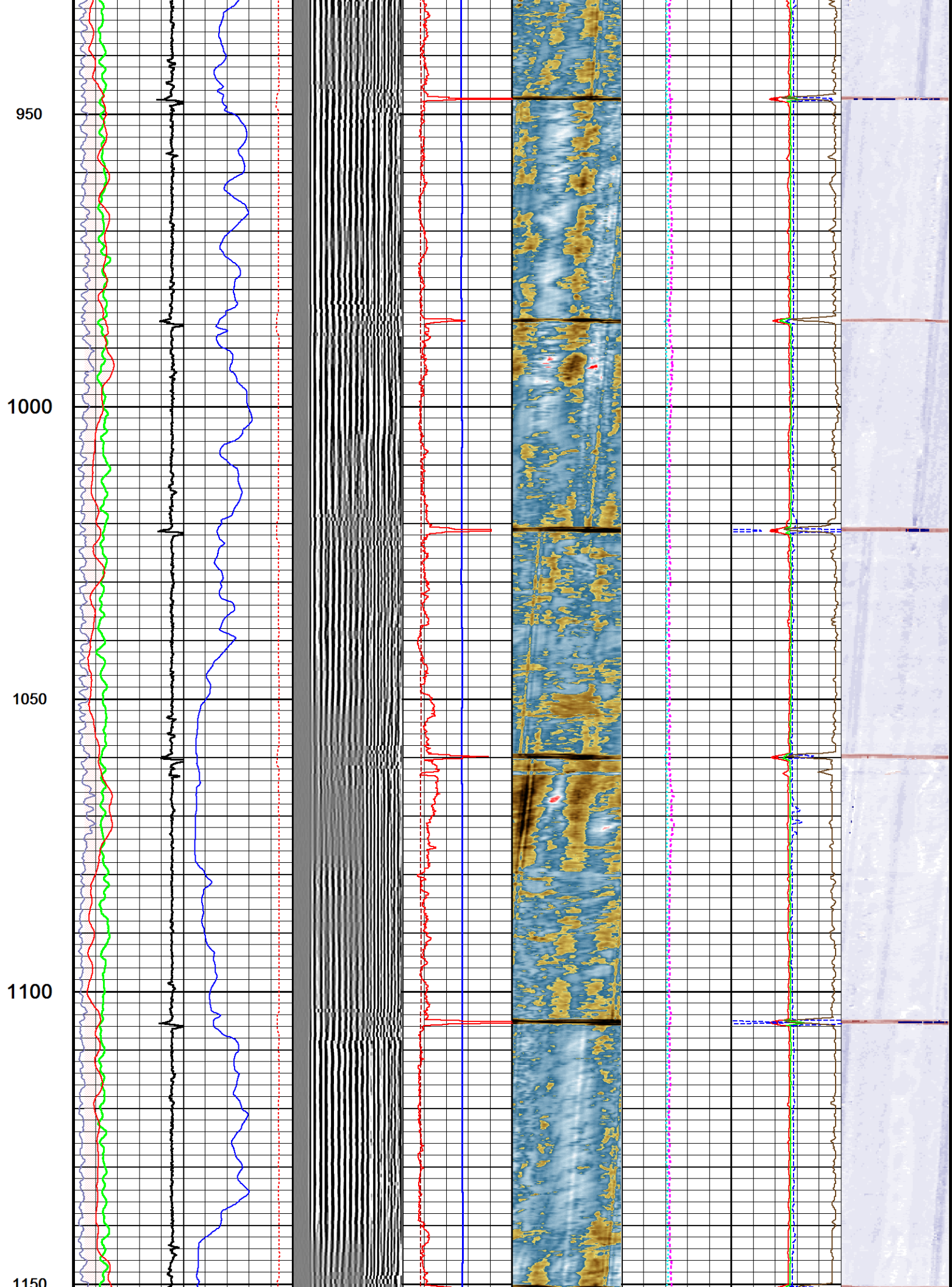
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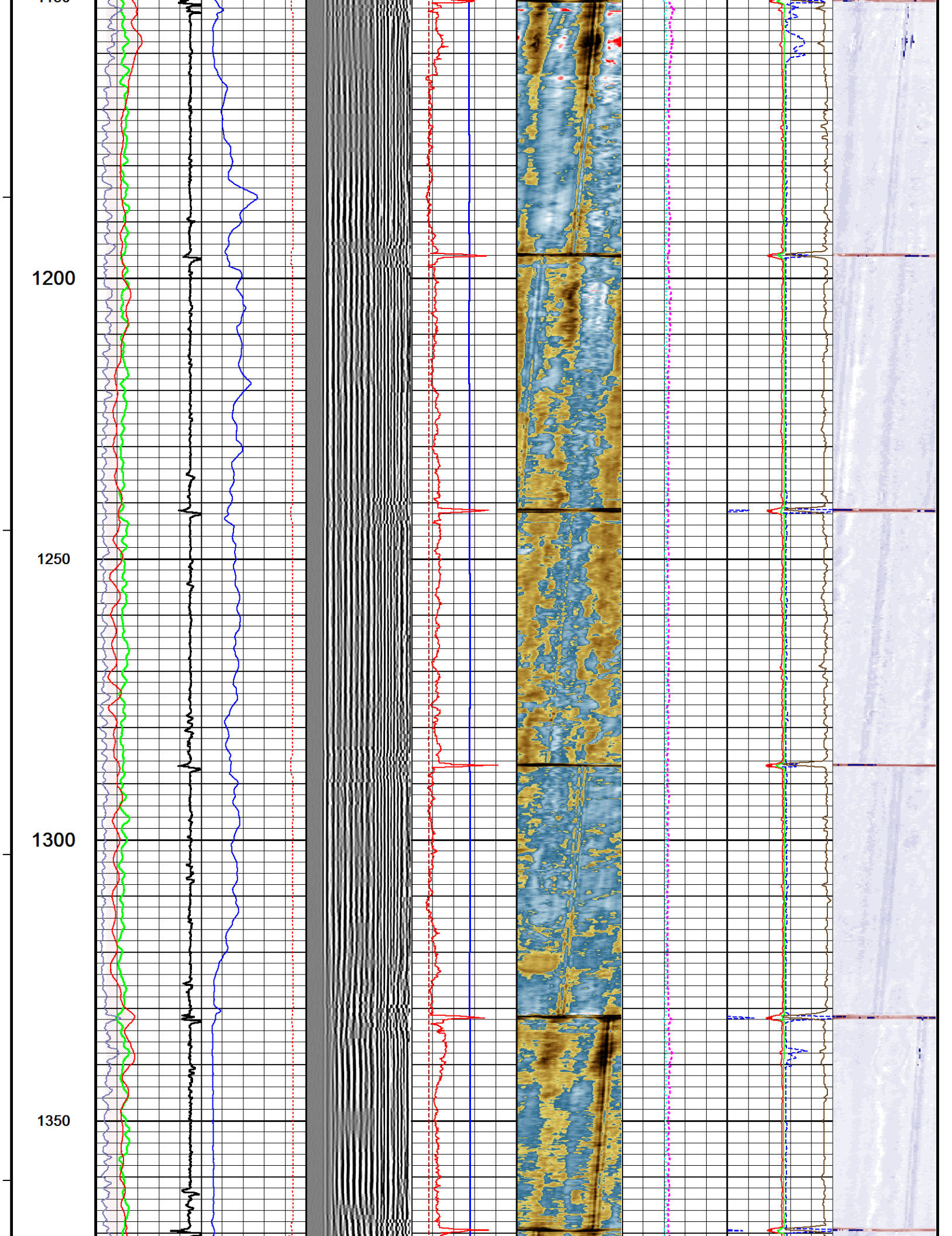
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850

900





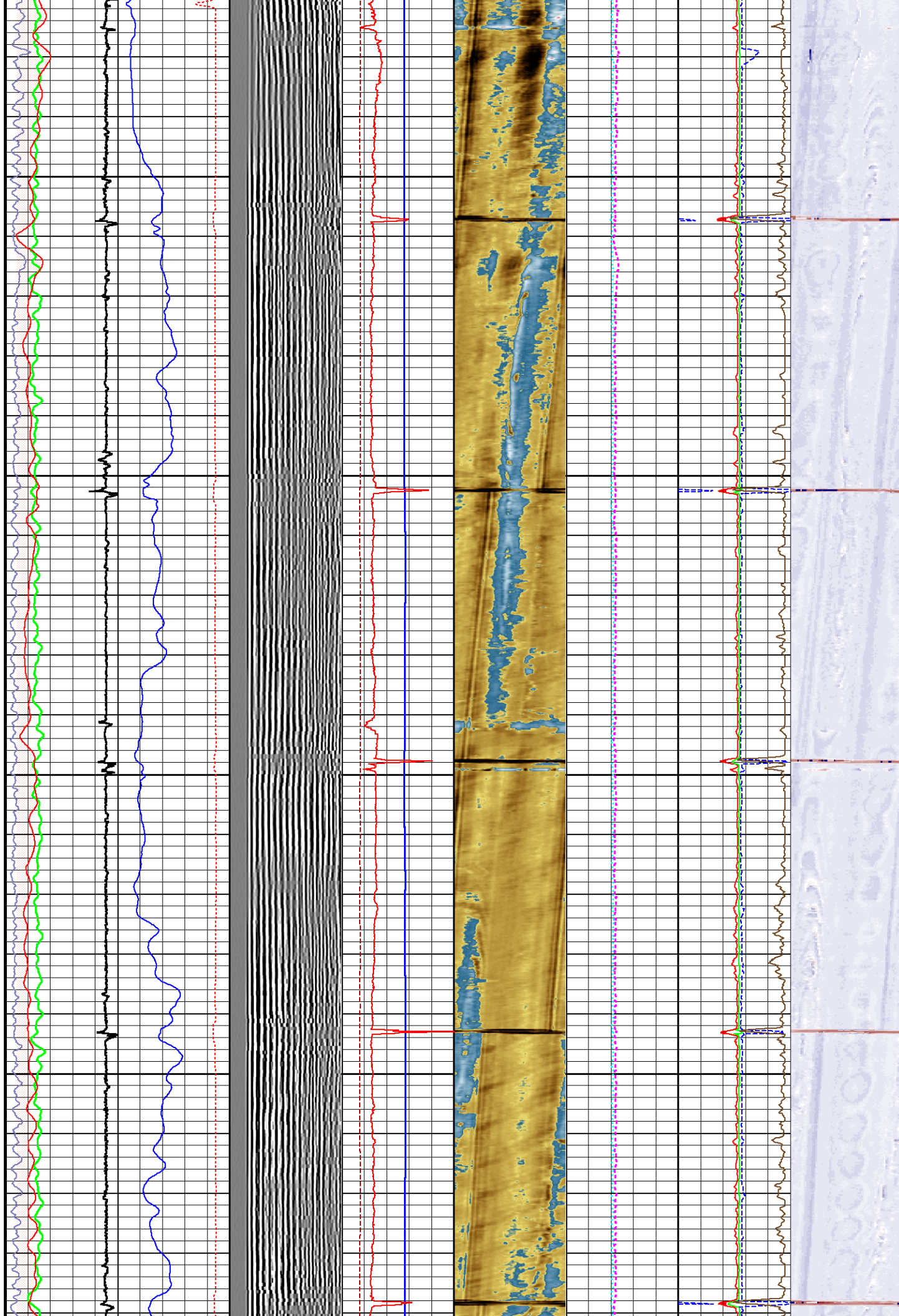


1400

1450

1500

1550



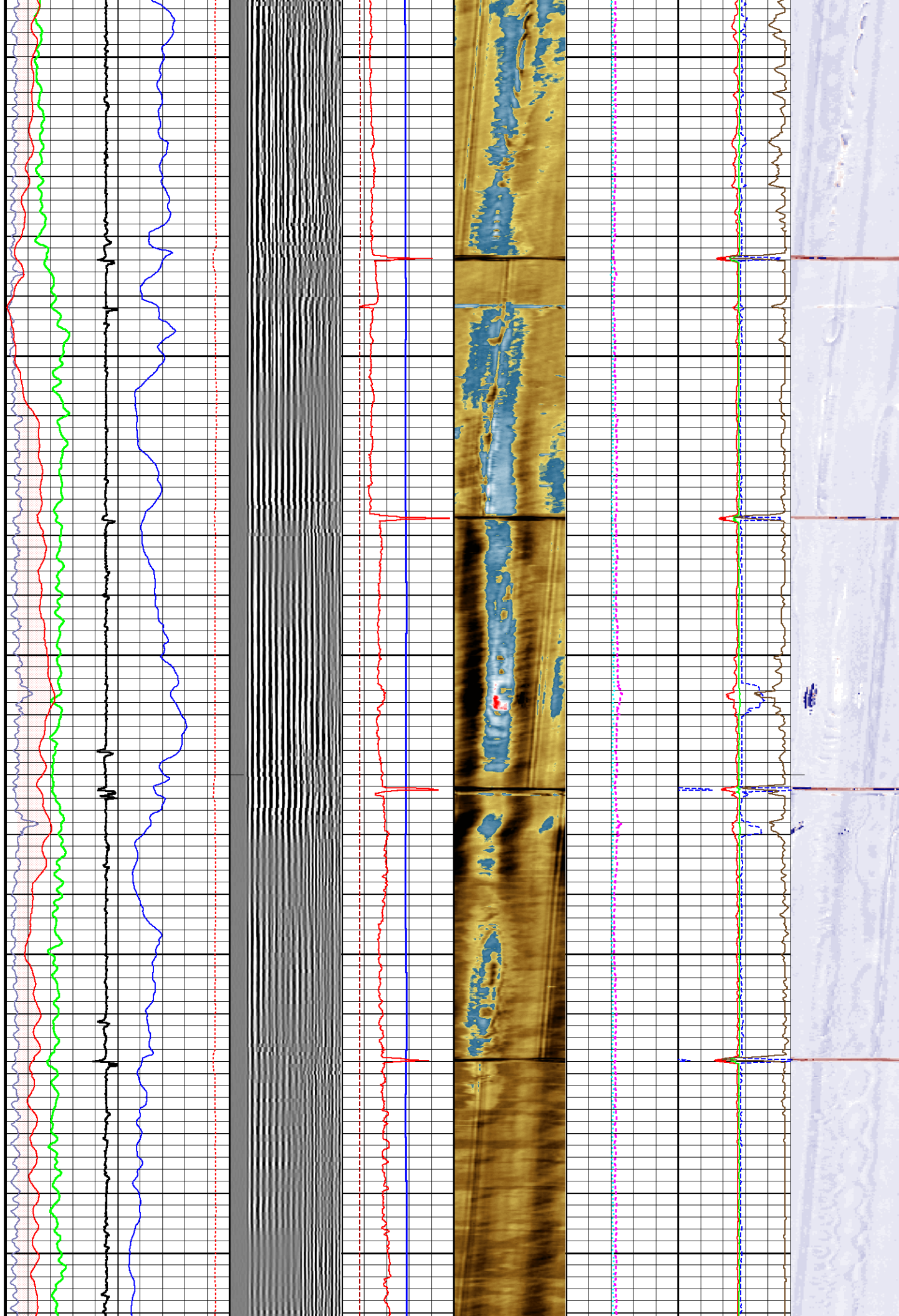
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1650

1700

1750

1800

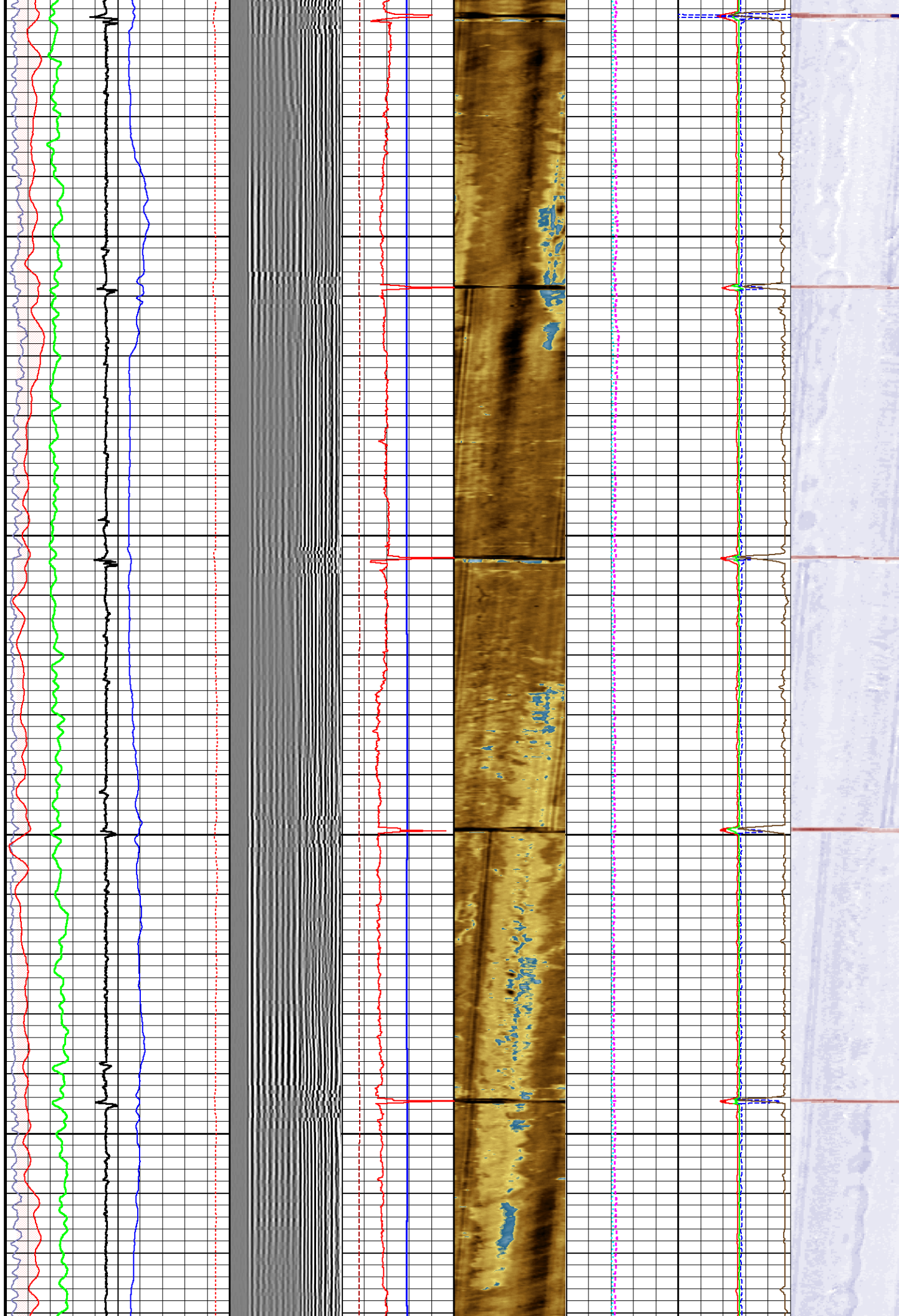


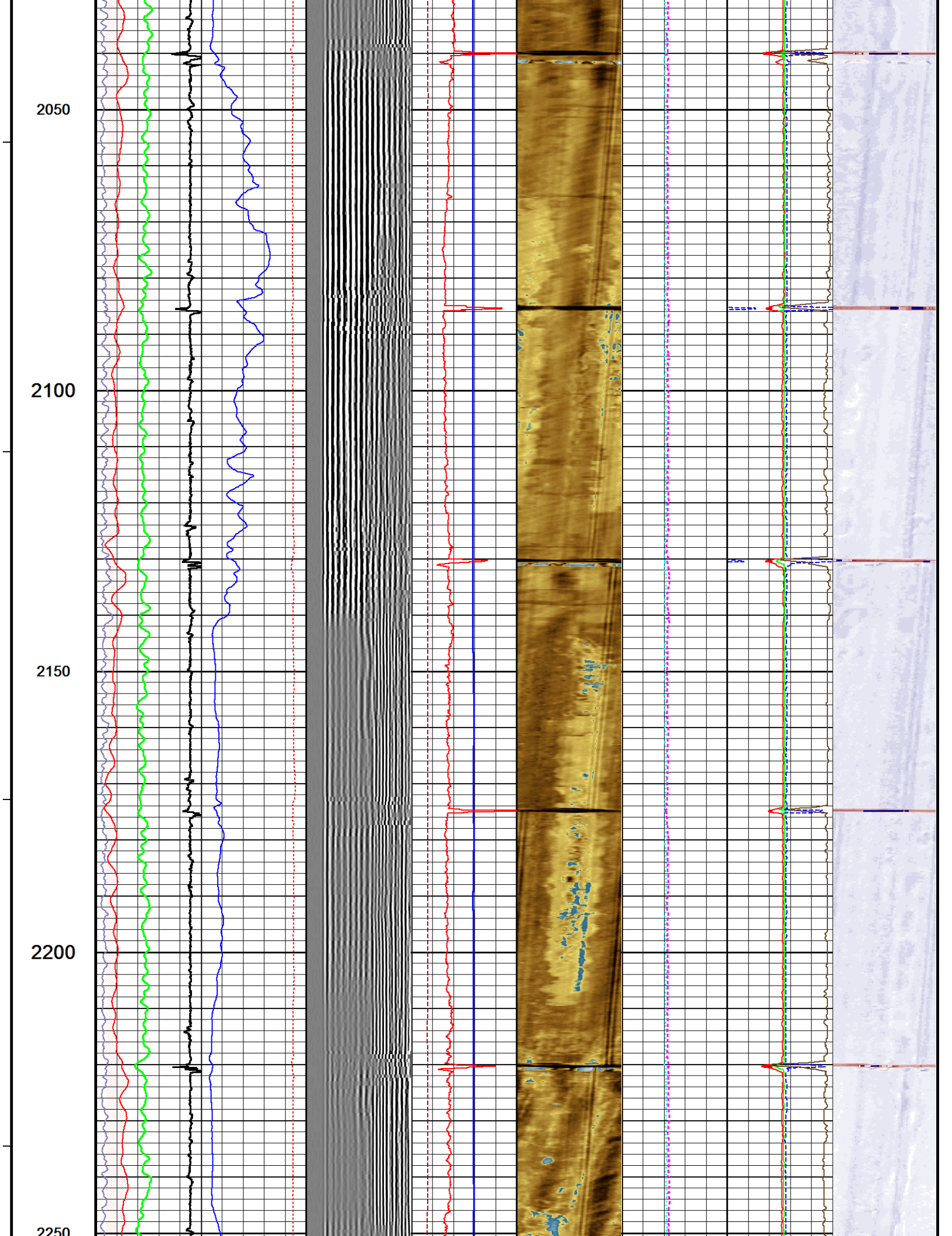
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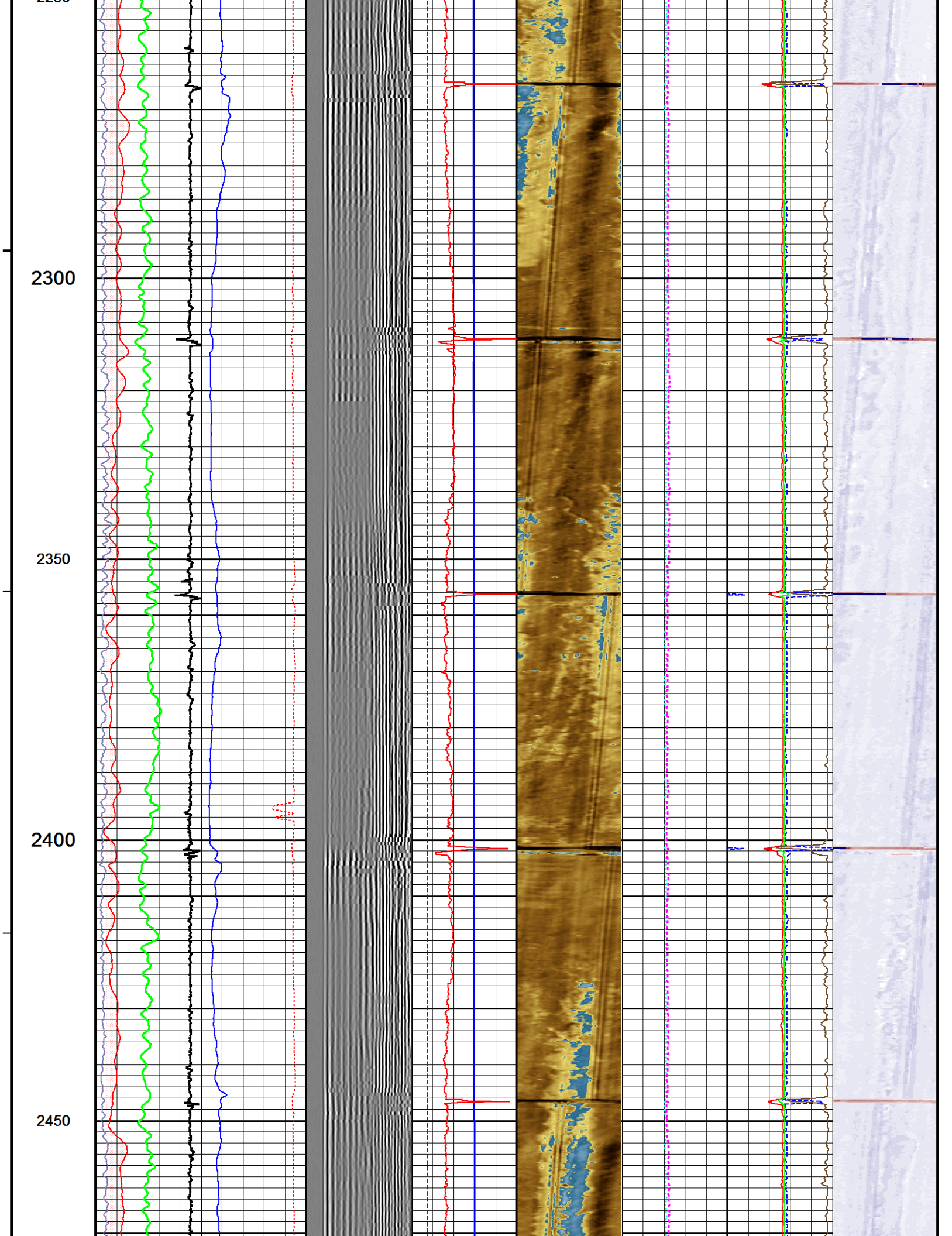
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1950

2000





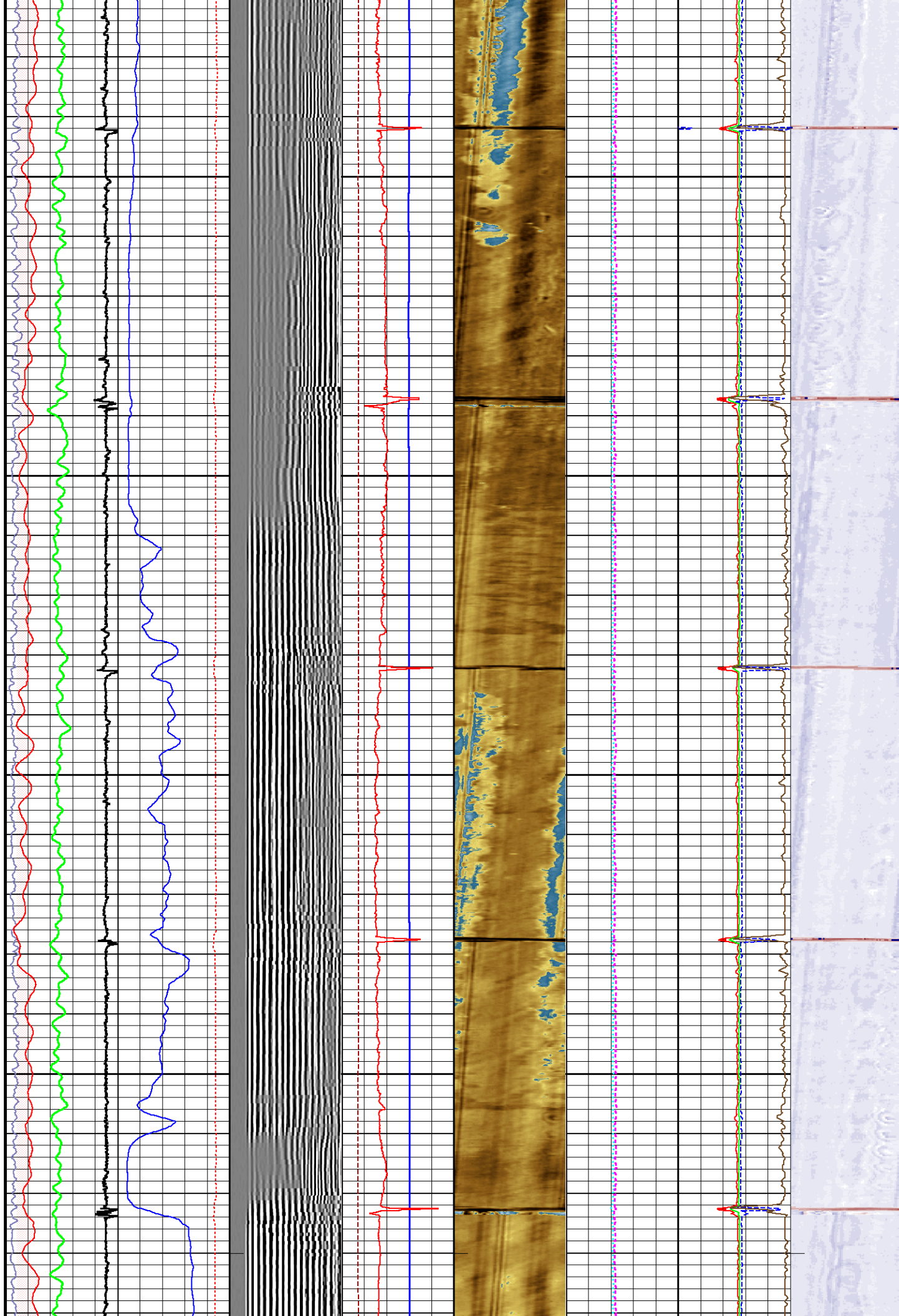


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2550

2600

2650



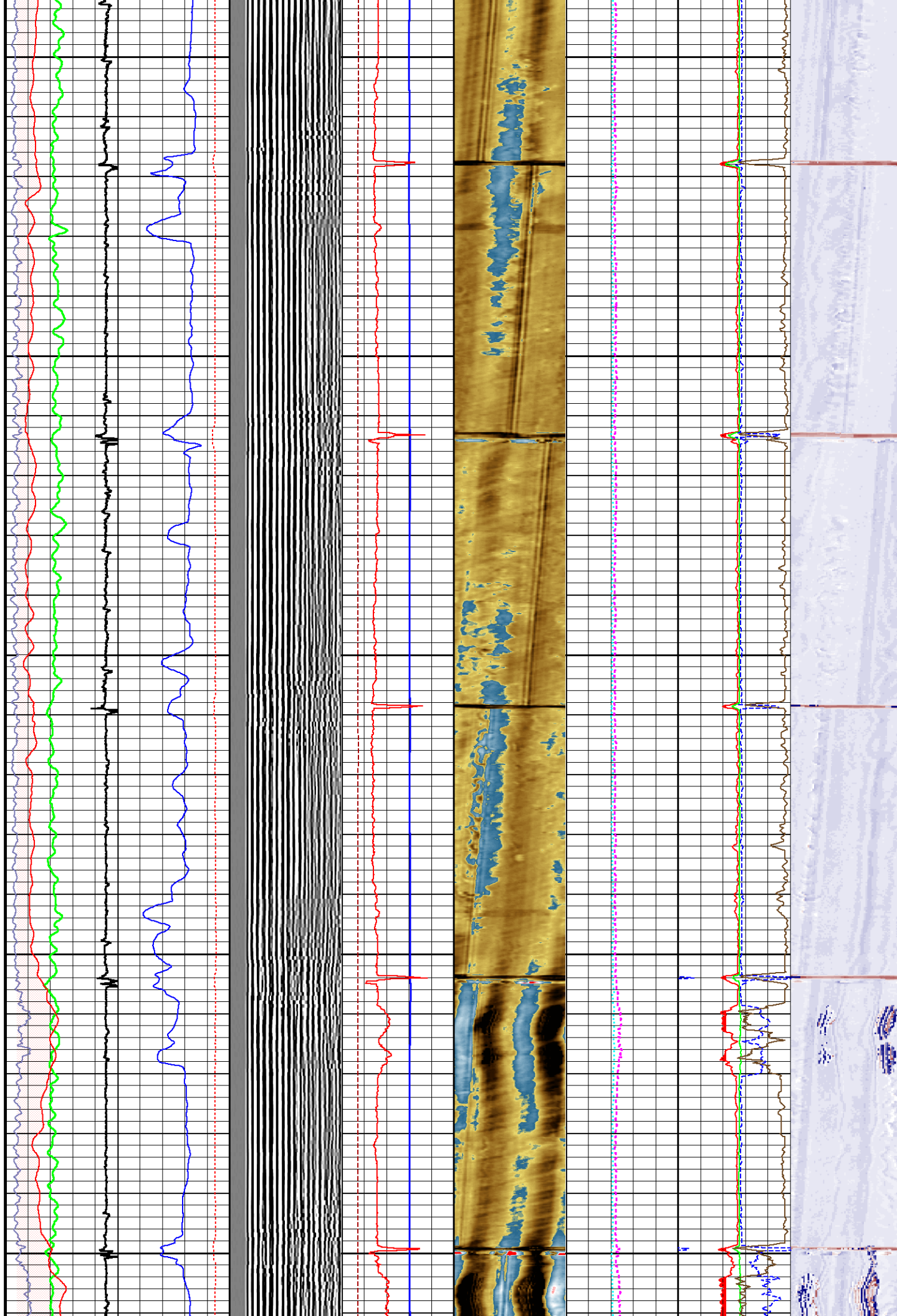
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2750

2800

2850

2900

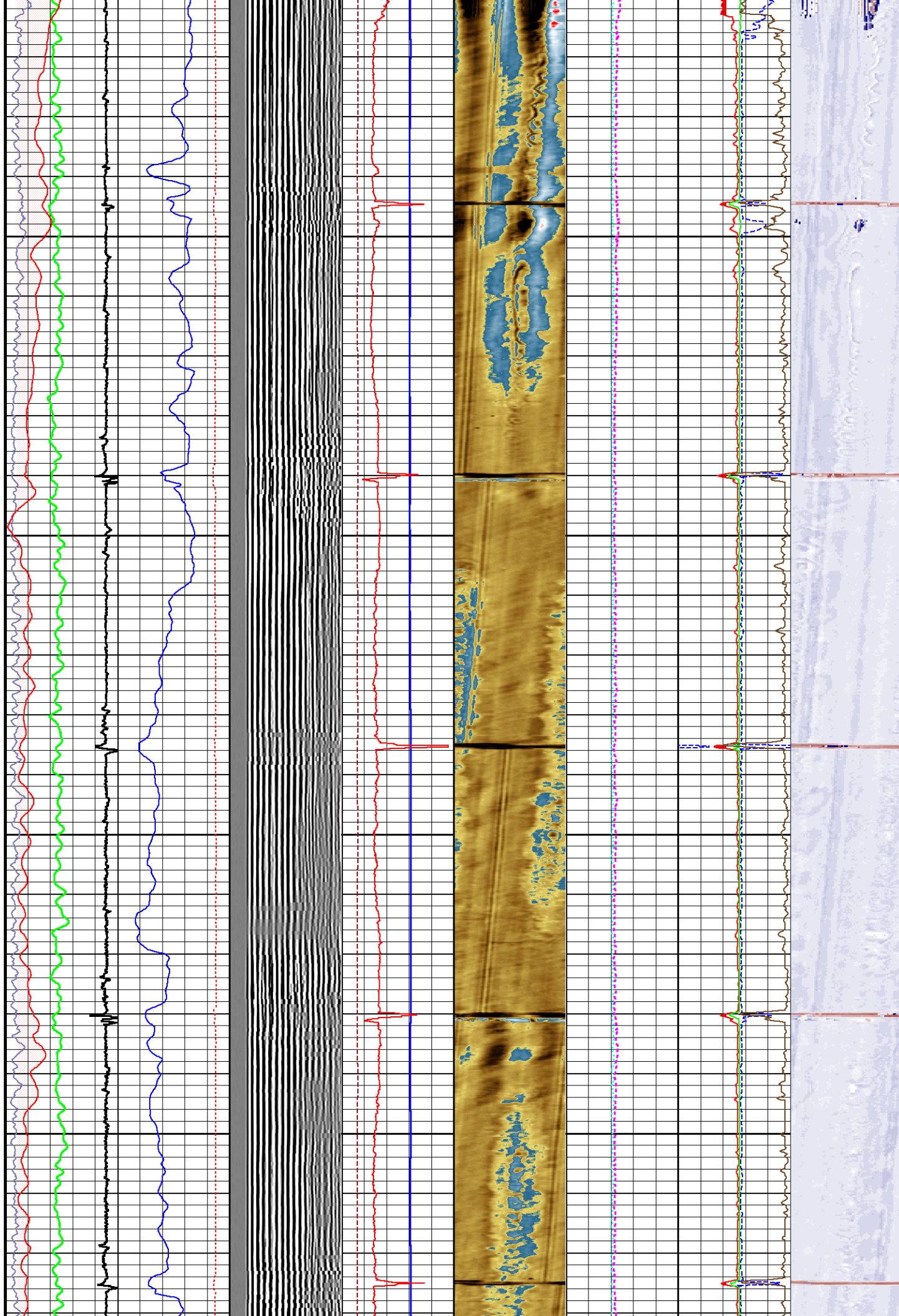


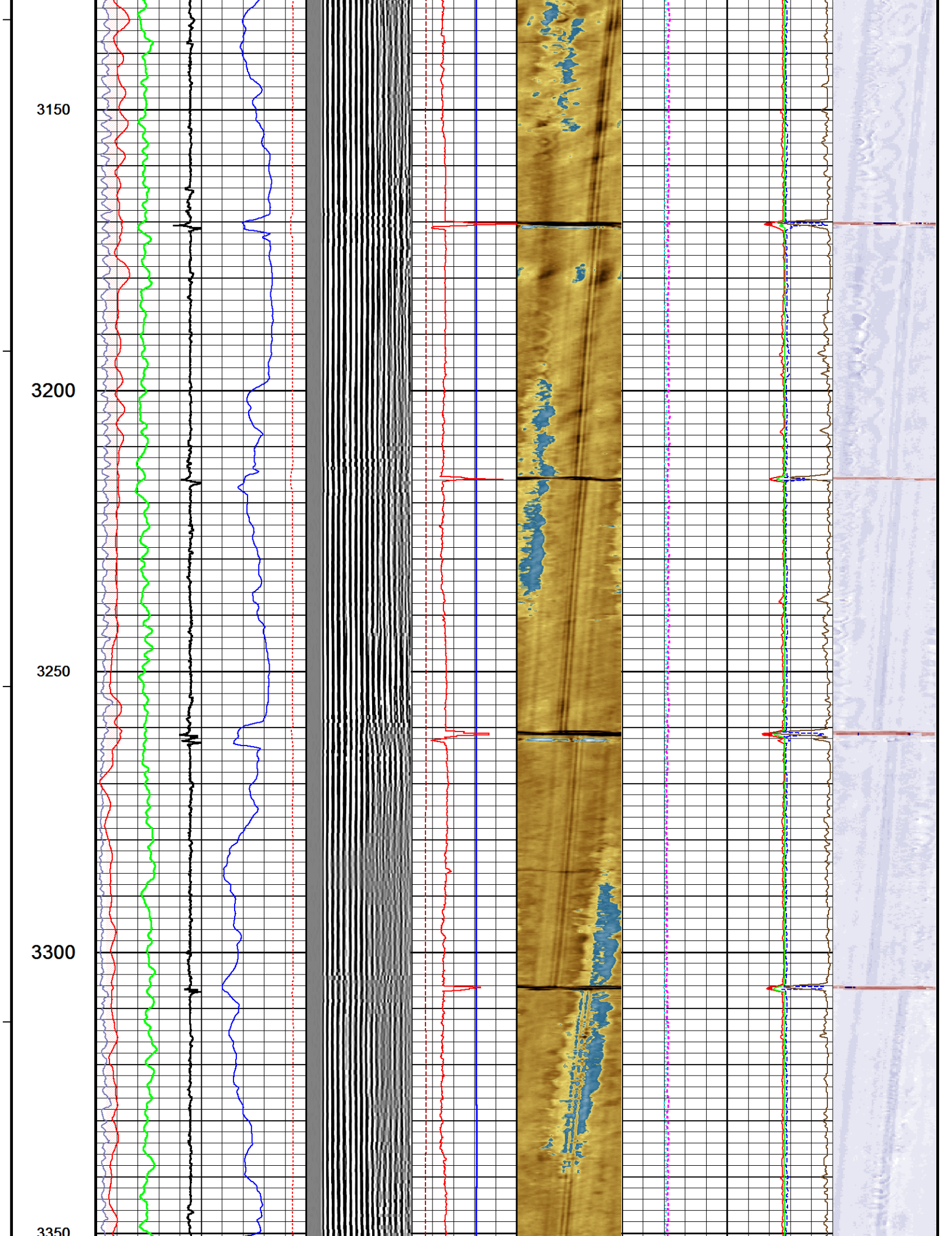
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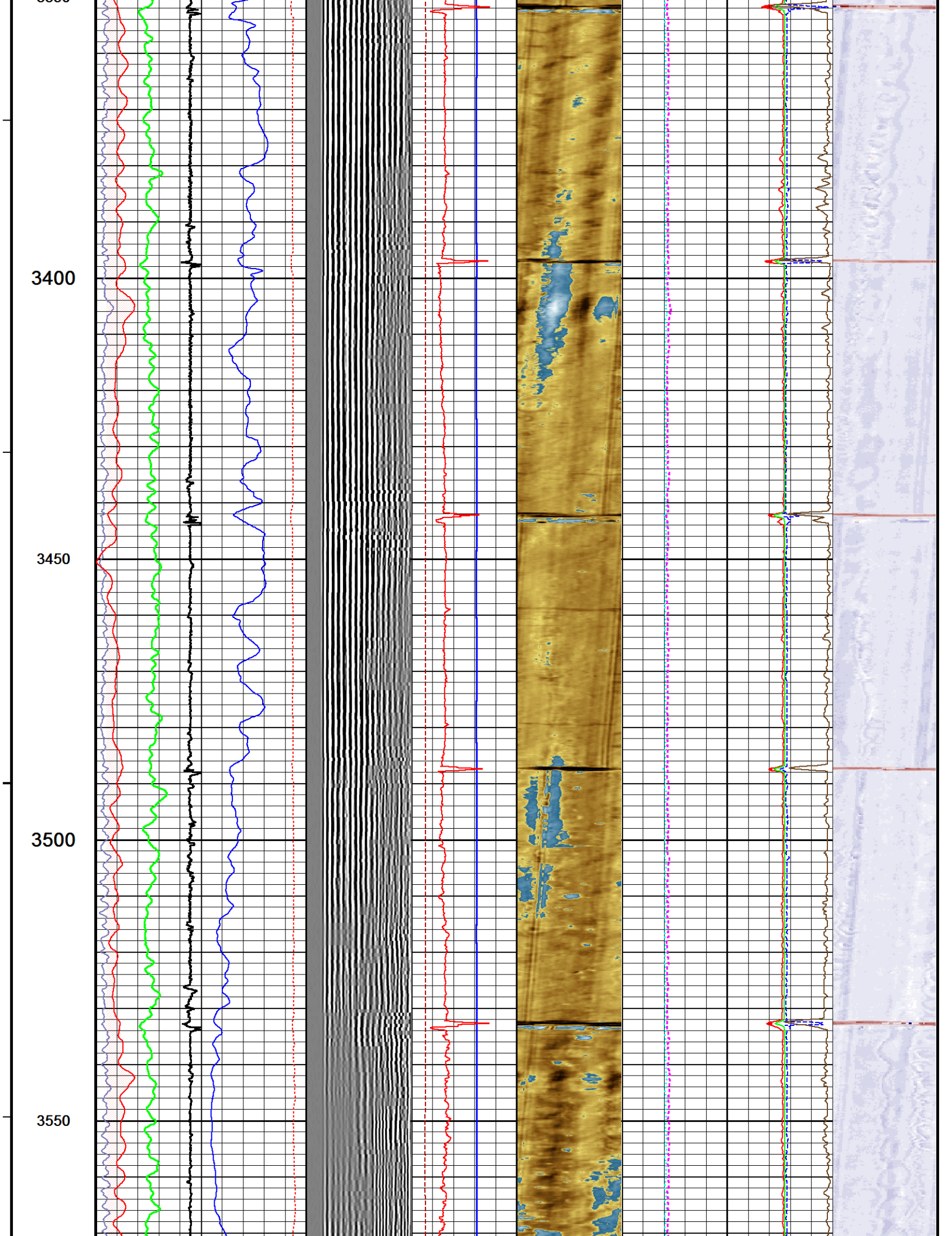
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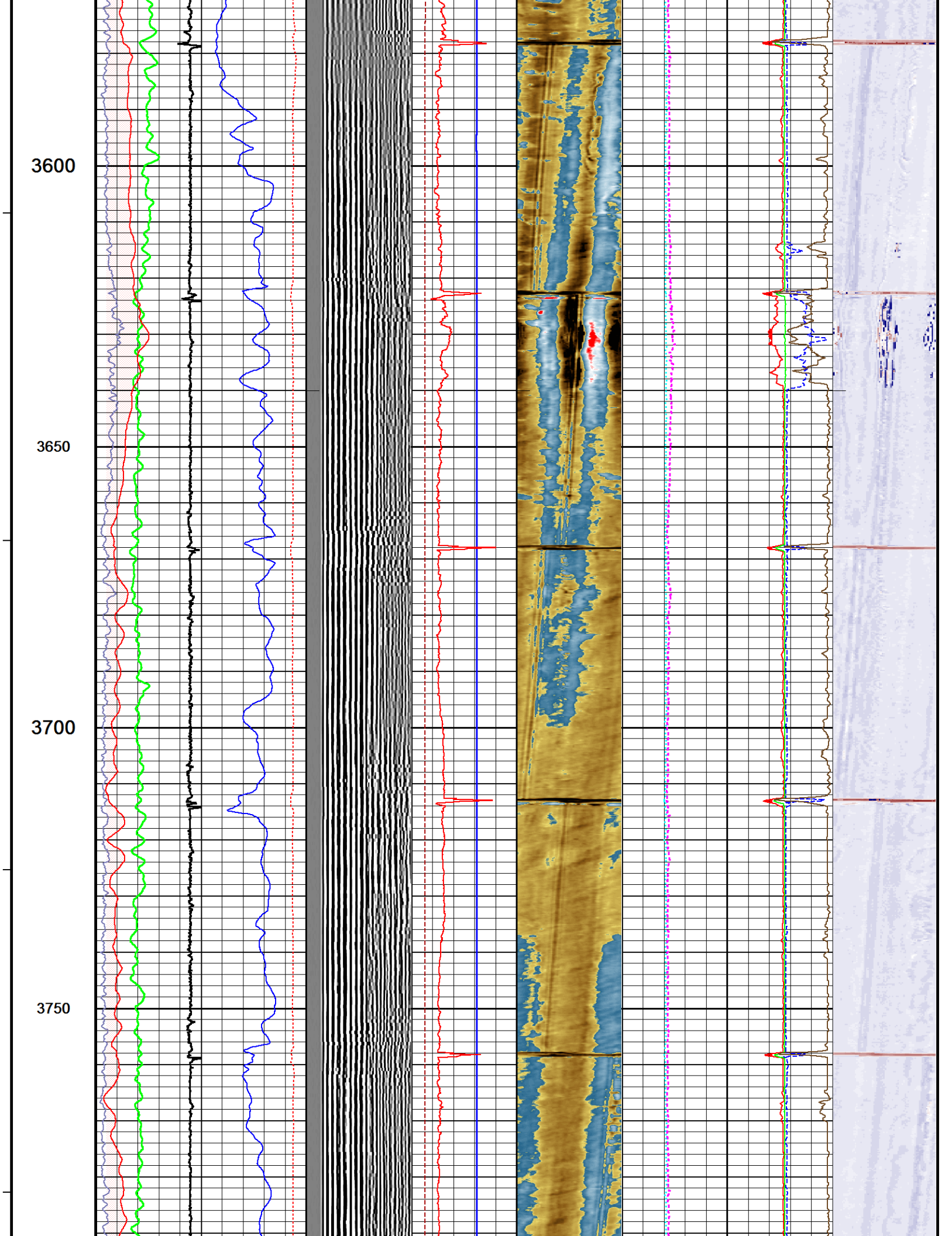
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3100









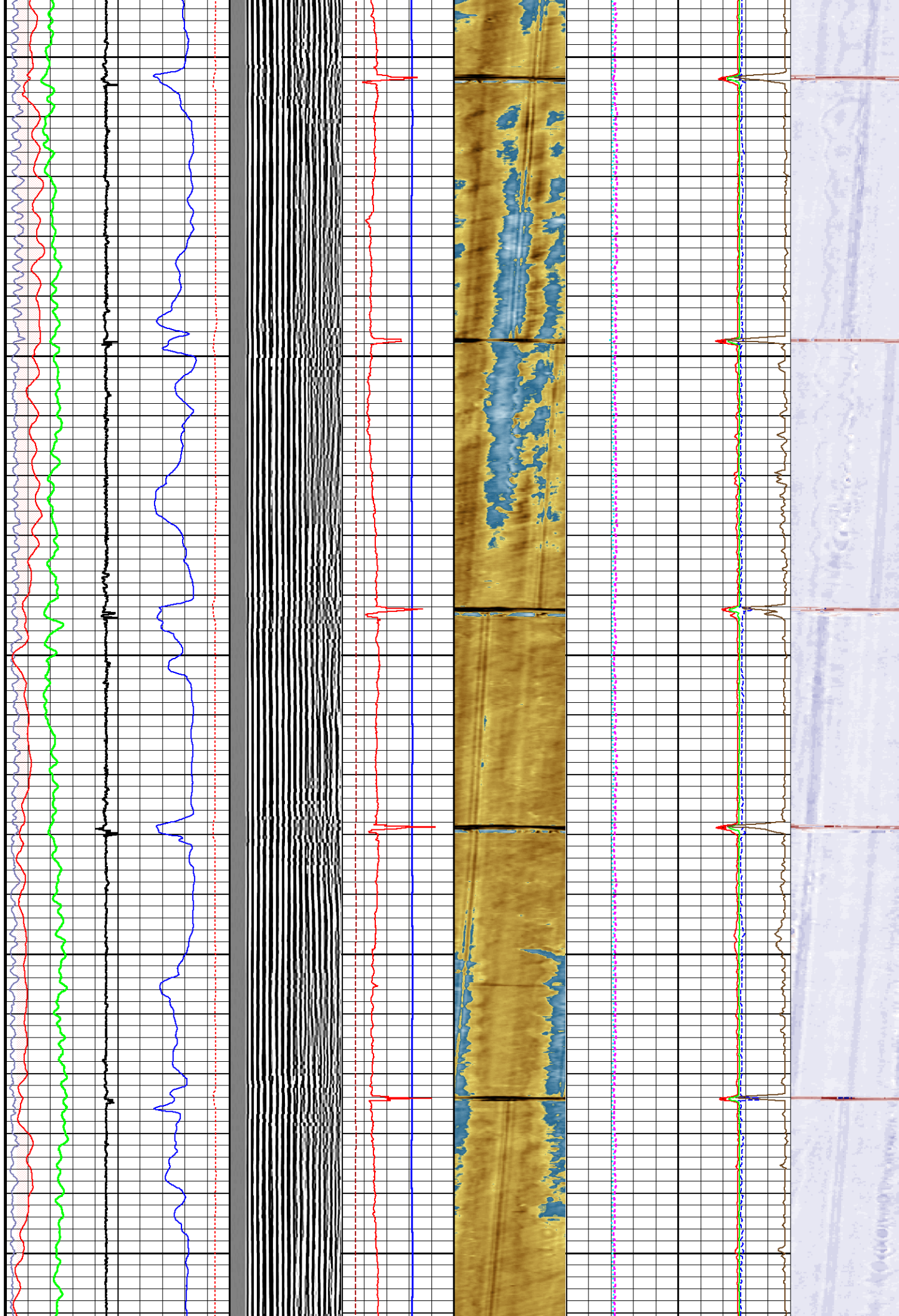
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3850

3900

3950

4000

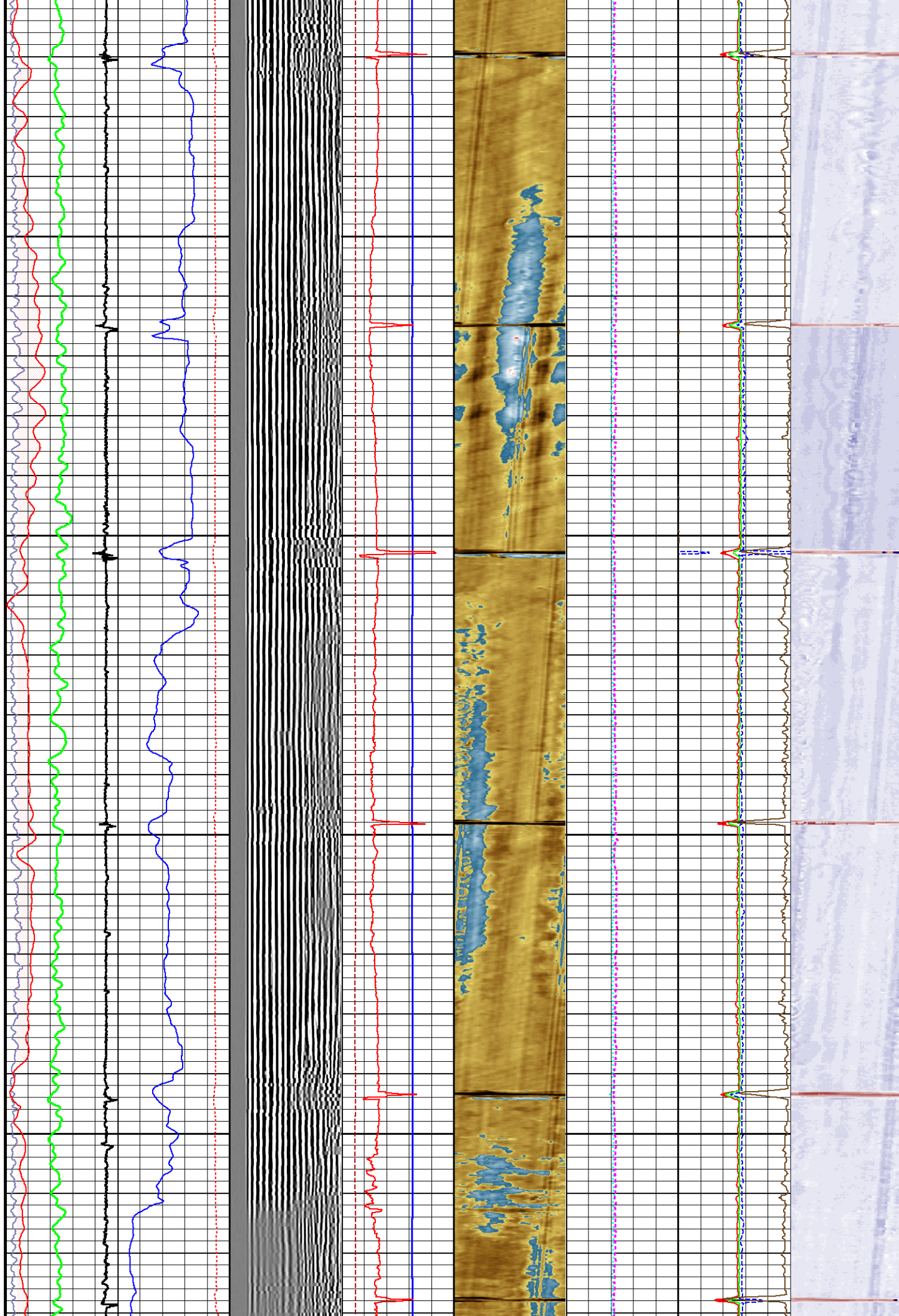


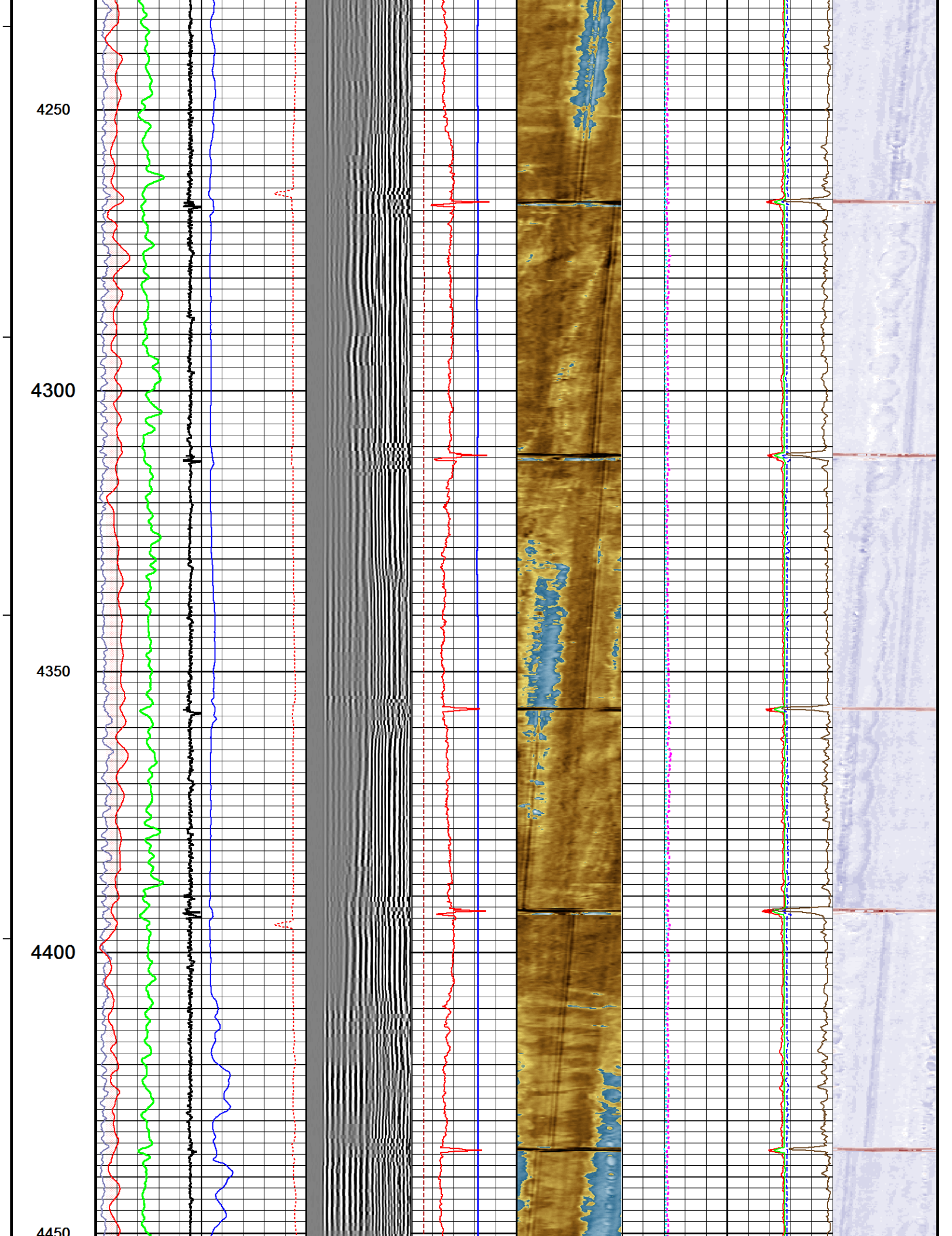
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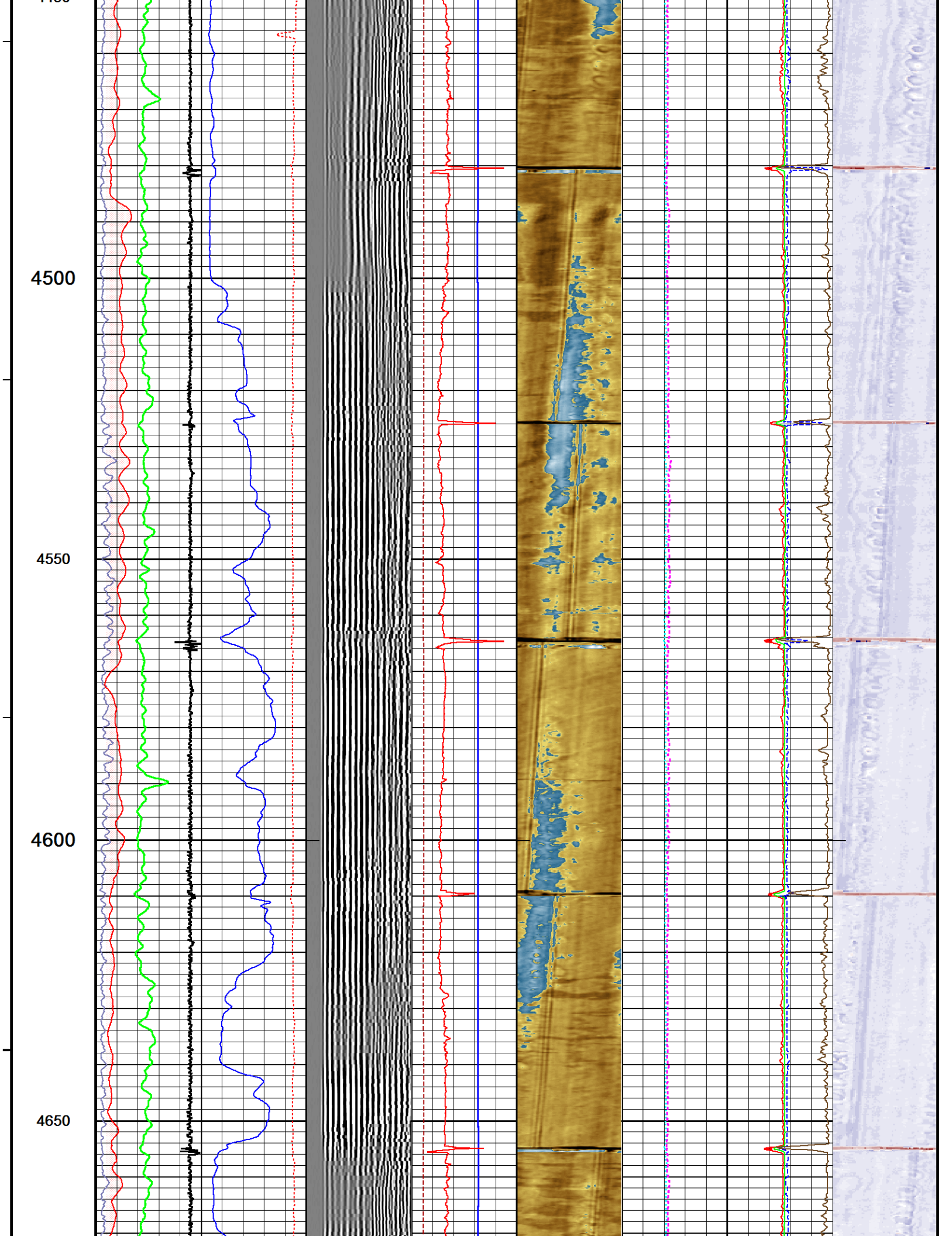
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4150

4200





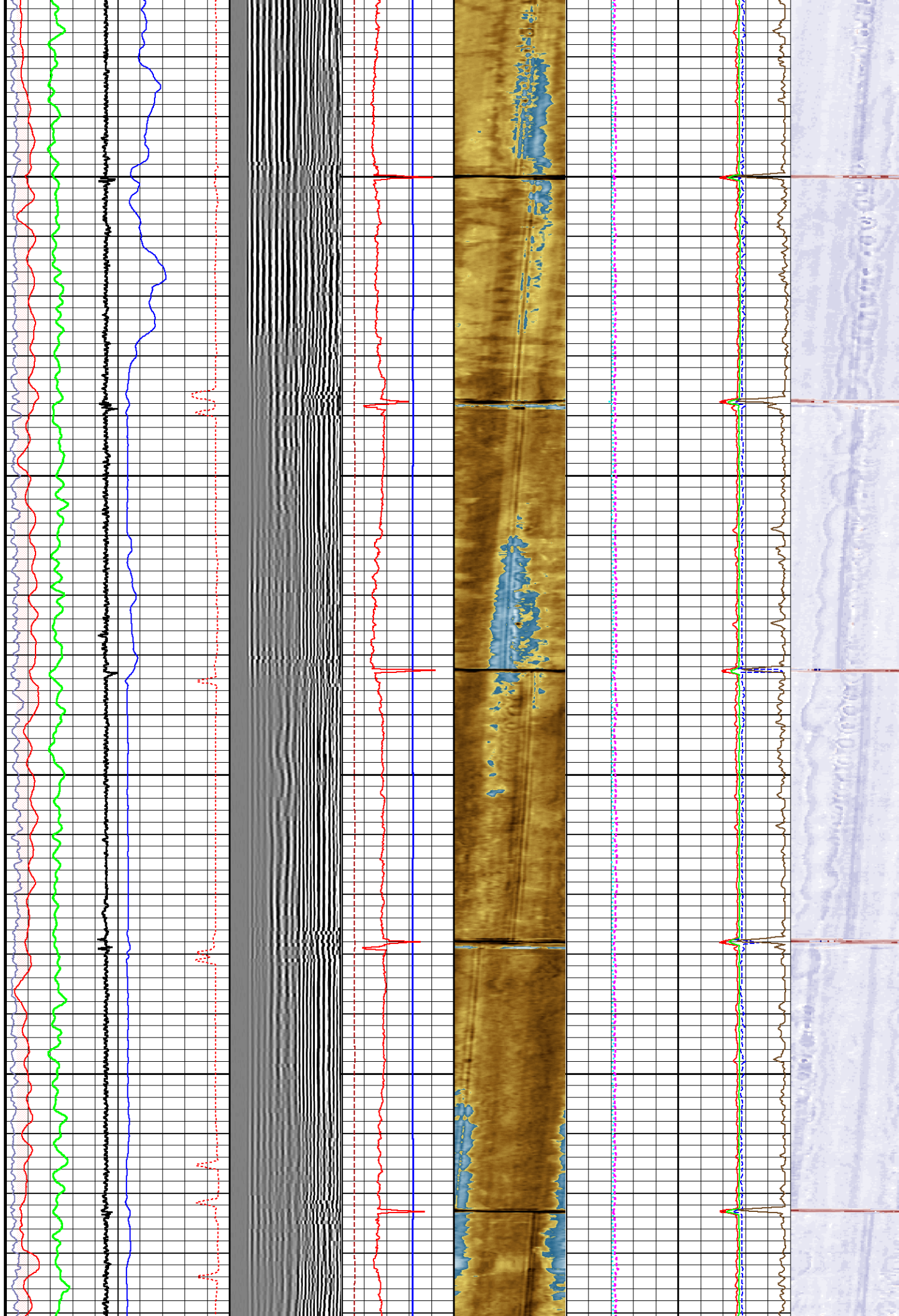


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4750

4800

4850



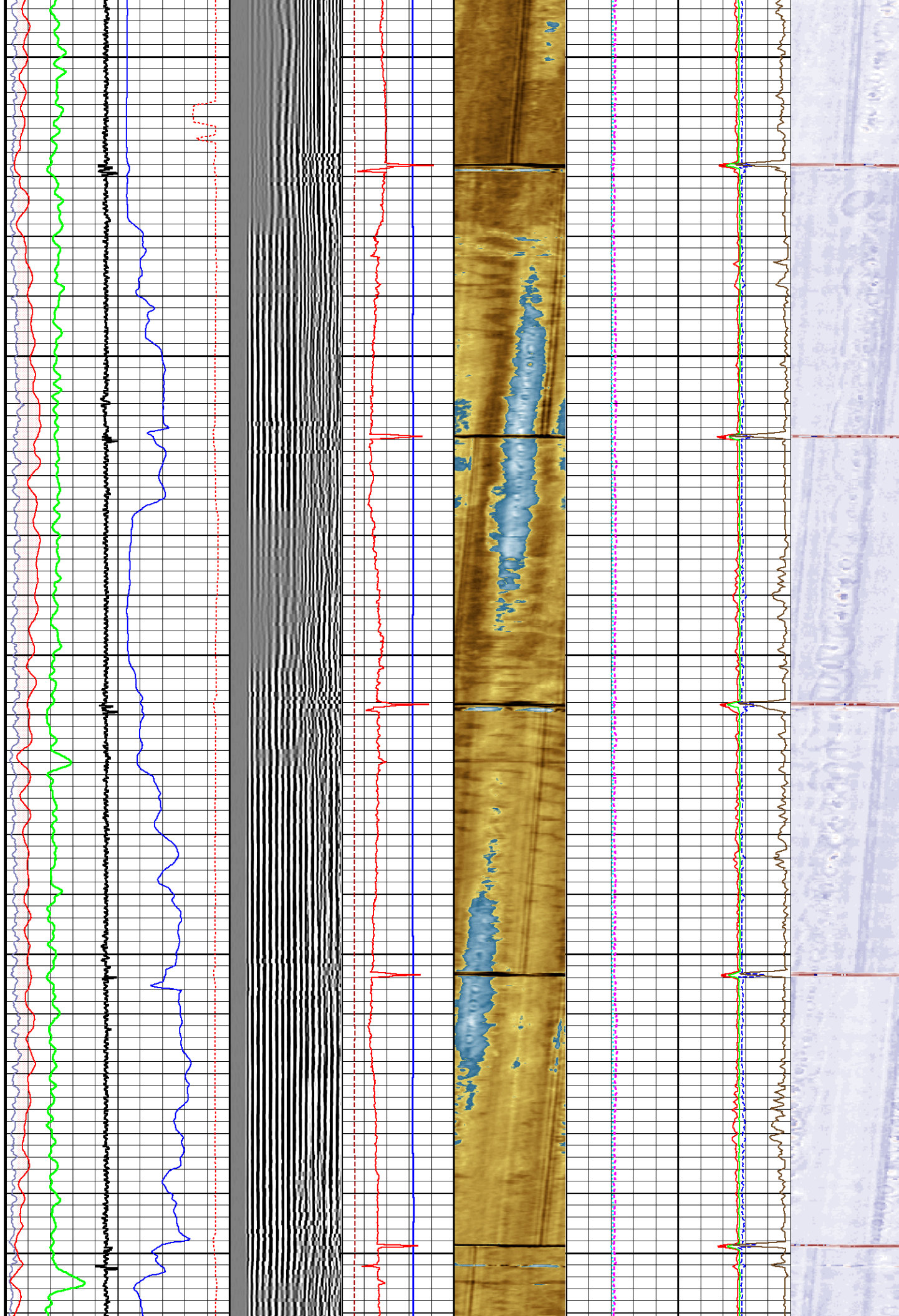
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4950

5000

5050

5100

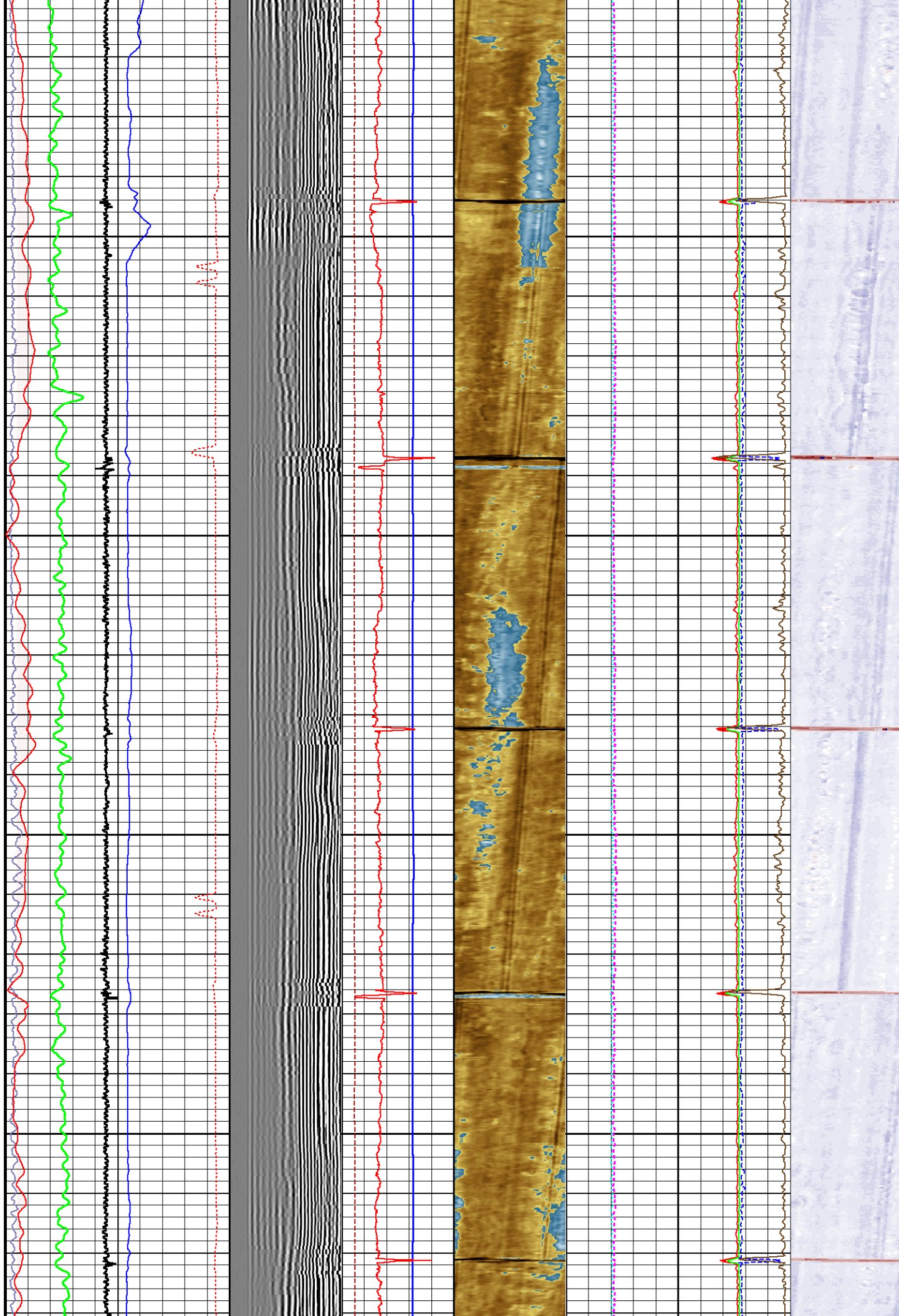


5150

5200

5250

5300



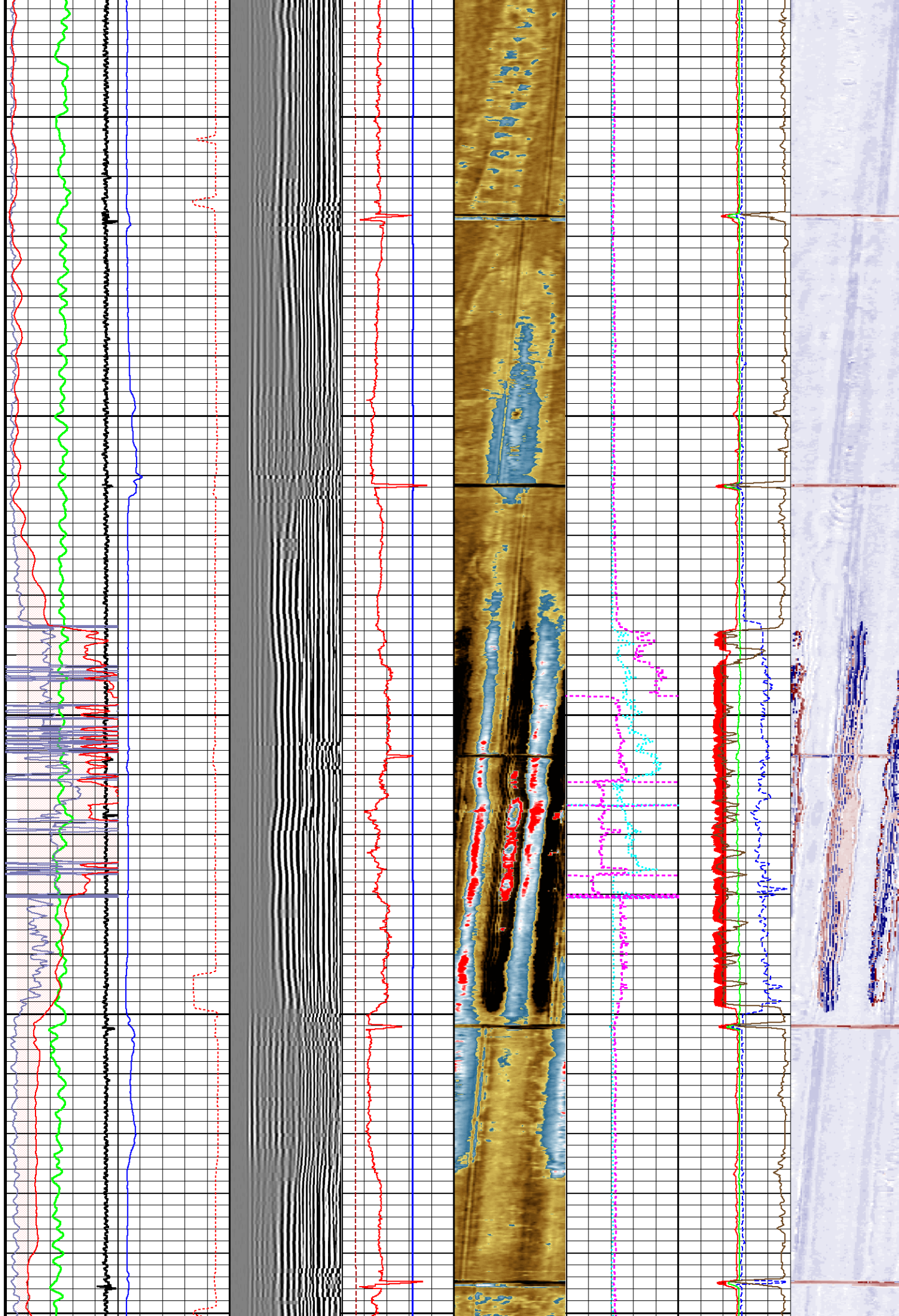
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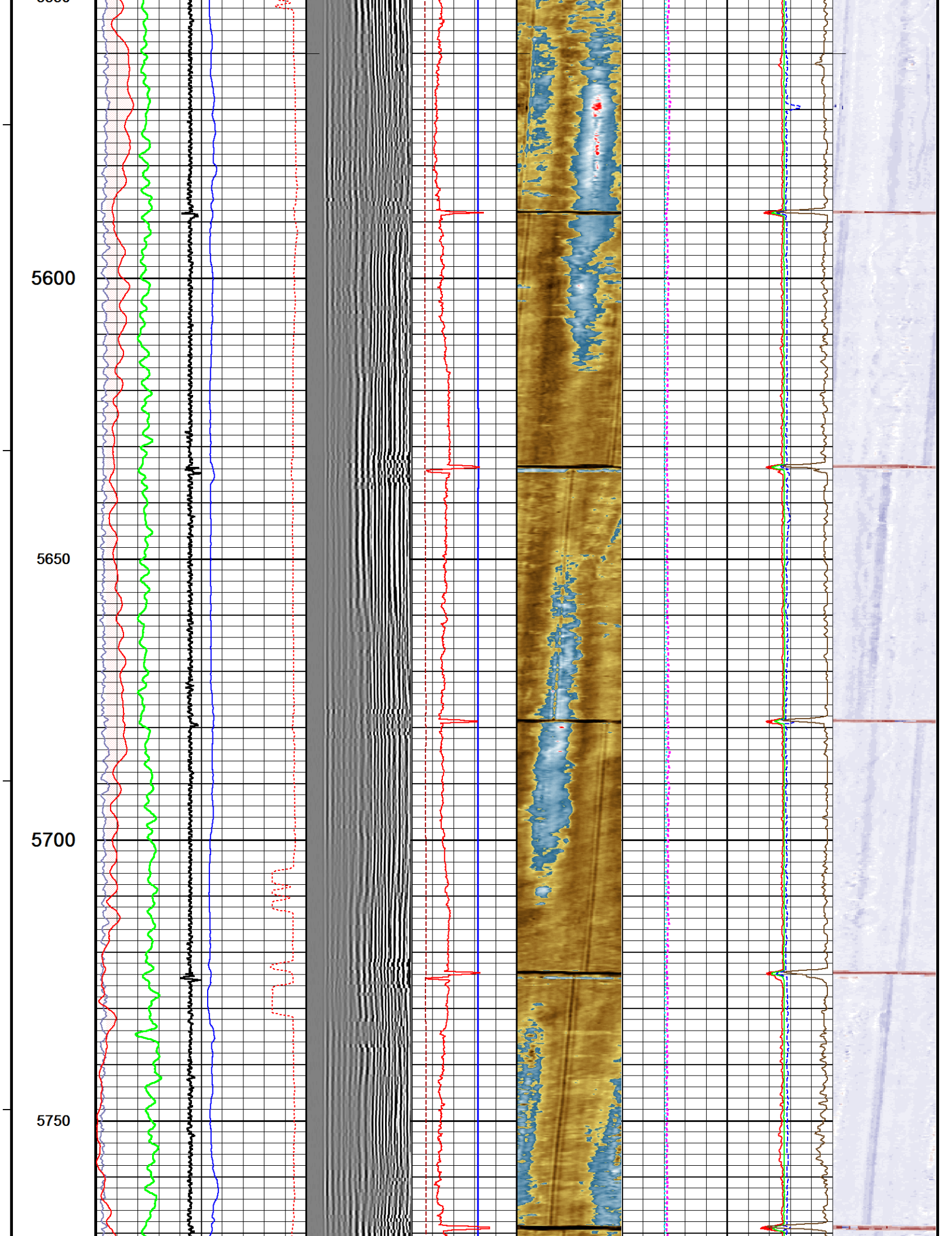
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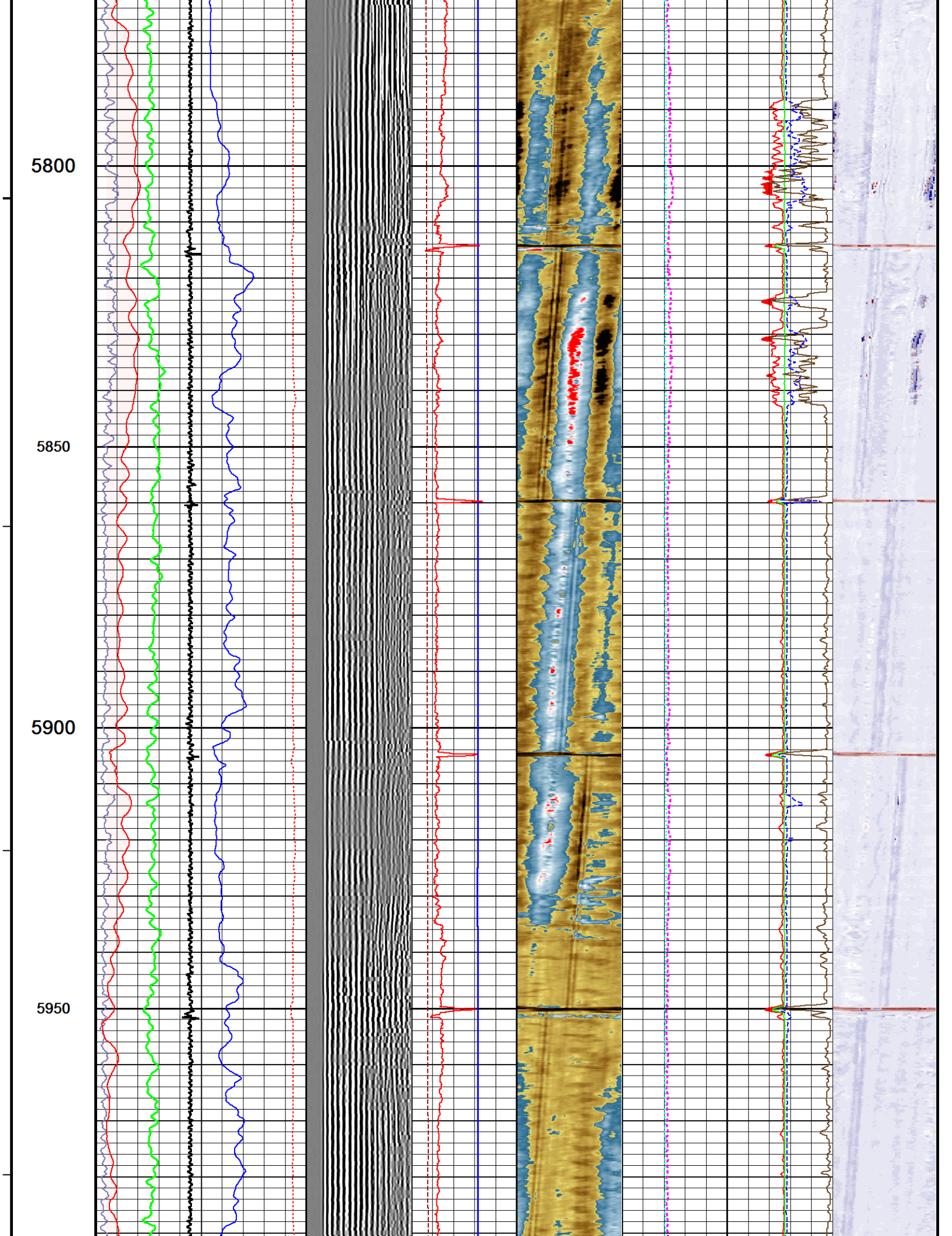
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5500

5550







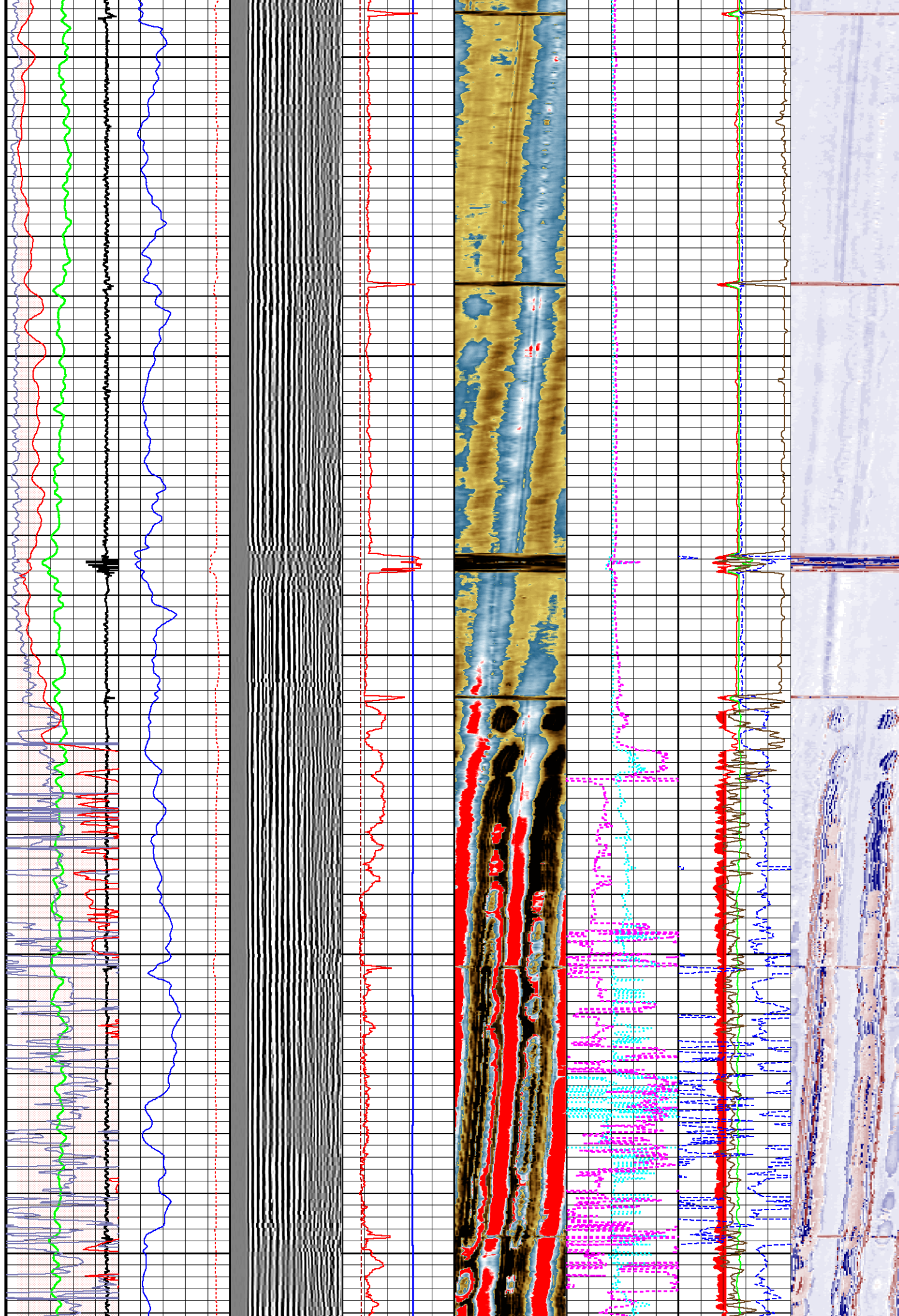
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6050

6100

6150

6200

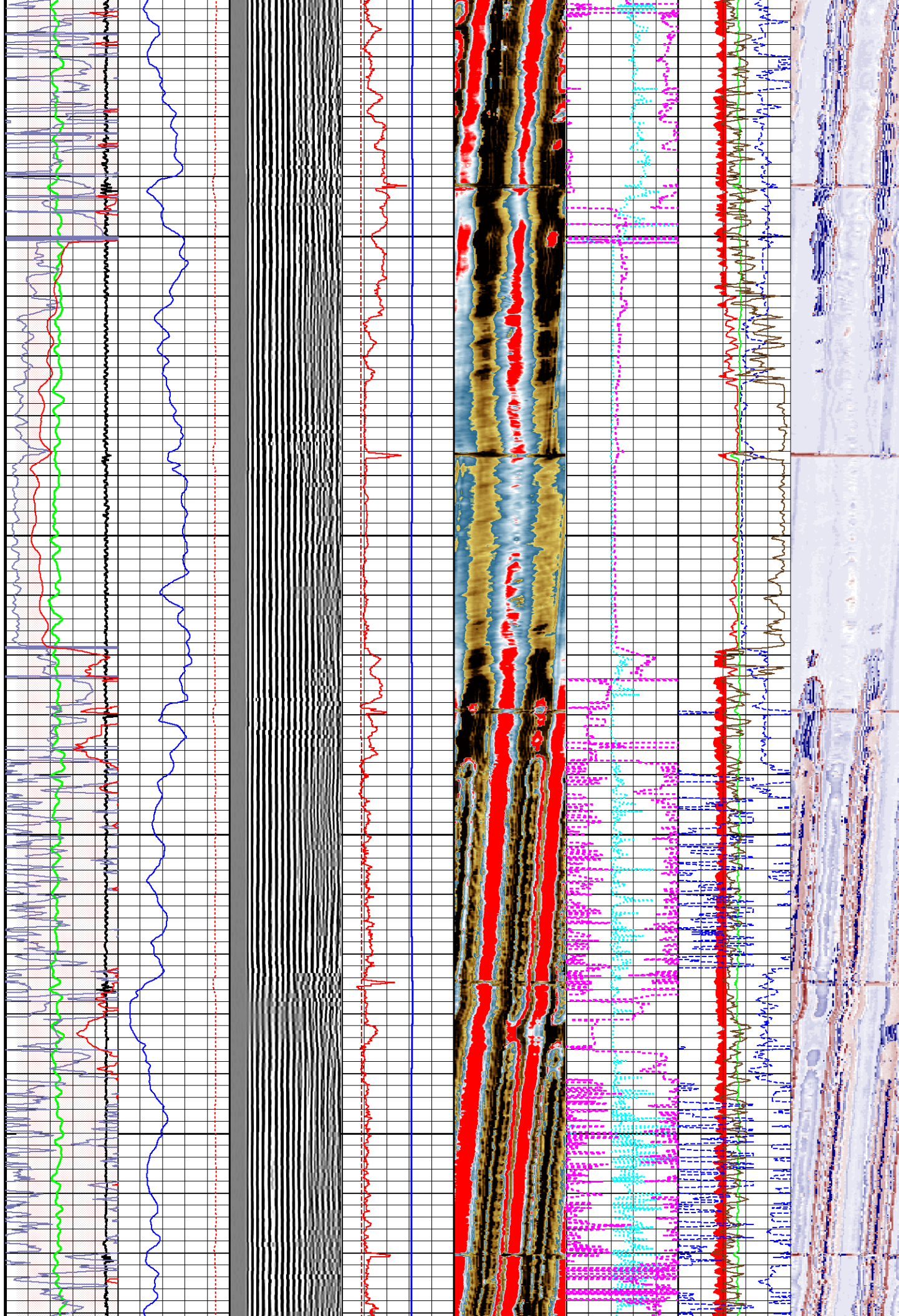


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6300

6350

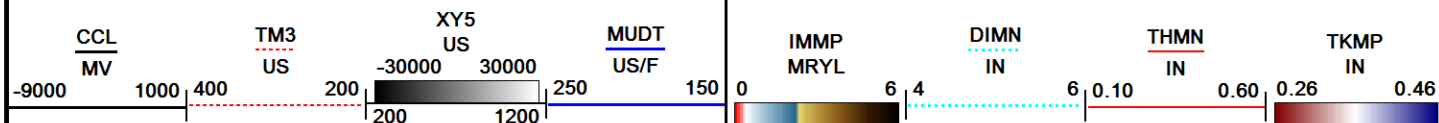
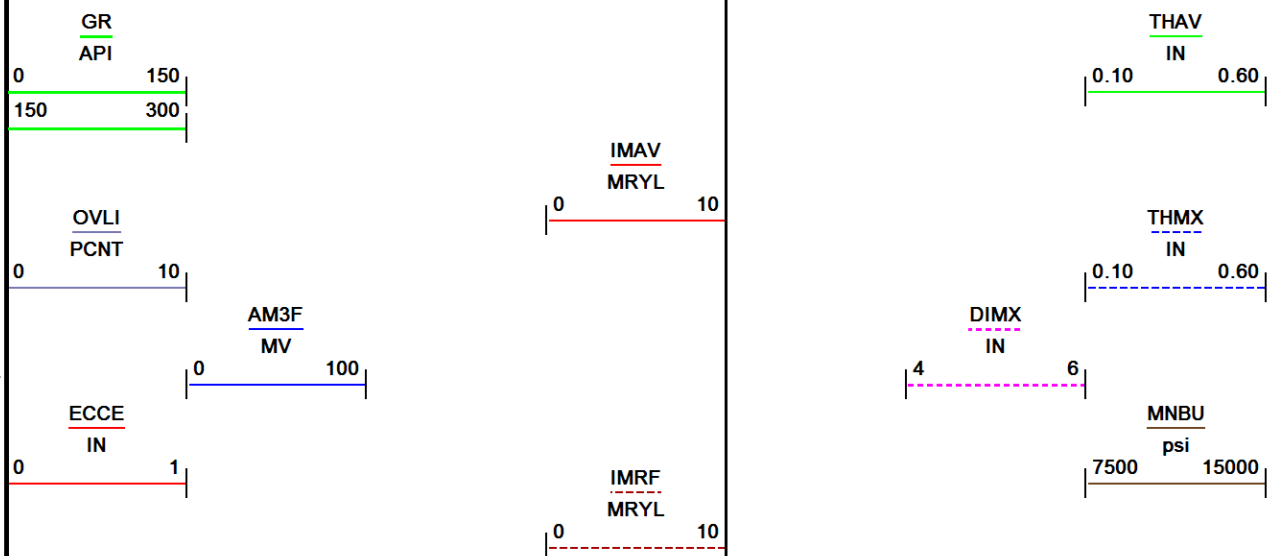
6400



6450

6500

6518

Depth
in
FeetTiming
Marks
every
60.0 secReplay
Scale
1:240

Depth Based Data - Maximum Sampling Increment 2.5cm
Filename: C:\WLS\Bonanza creek\ANTELOPE FEDERAL 44-20-17XRLNC\SPLICE 5.dta
System Versions: Processed with 19.01.8879 Plotted with 19.01.8879

Plotted on 18-JUN-2019 09:07
Recorded on 17-JUN-2019 16:42

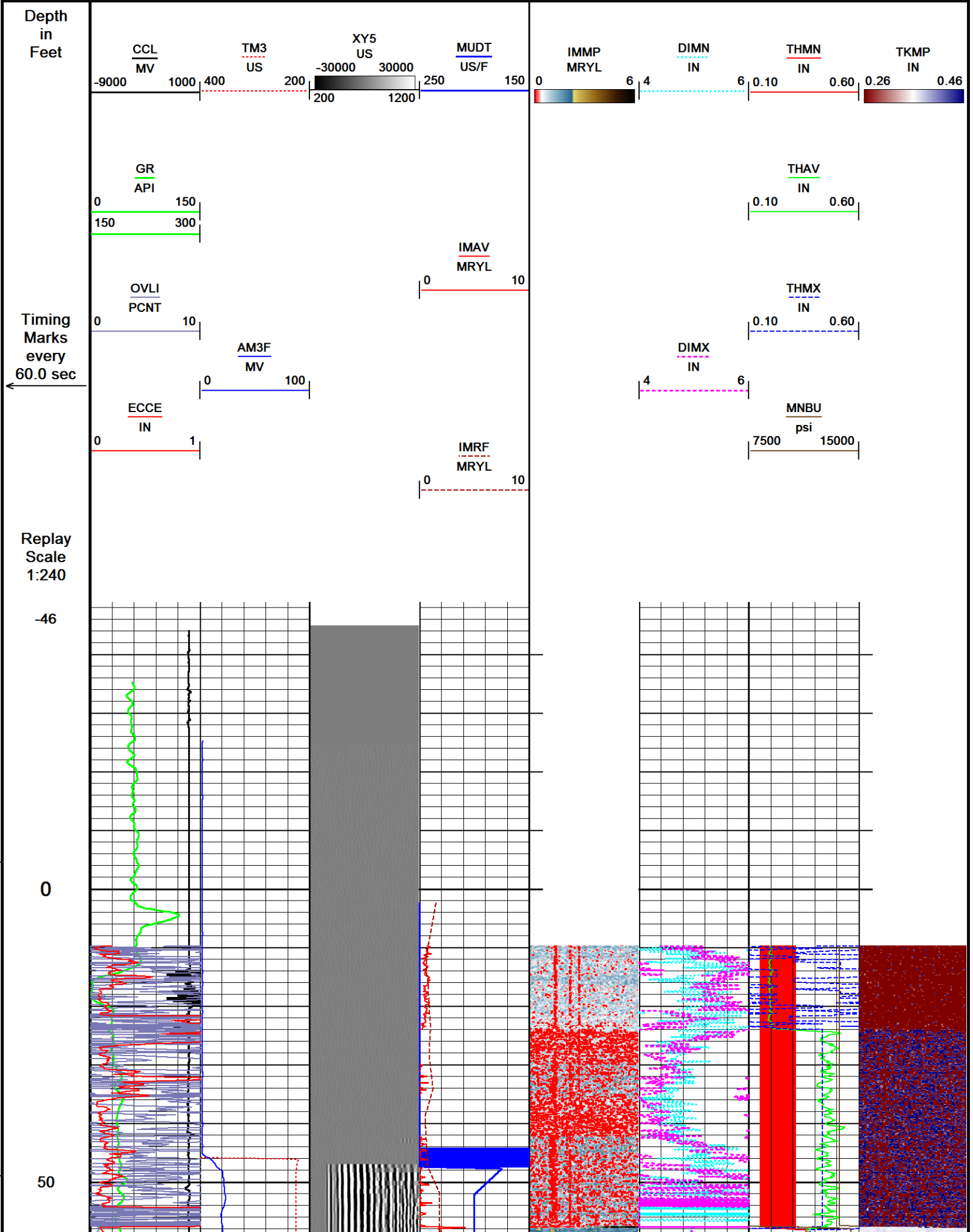


MAIN PASS



REPEAT PASS



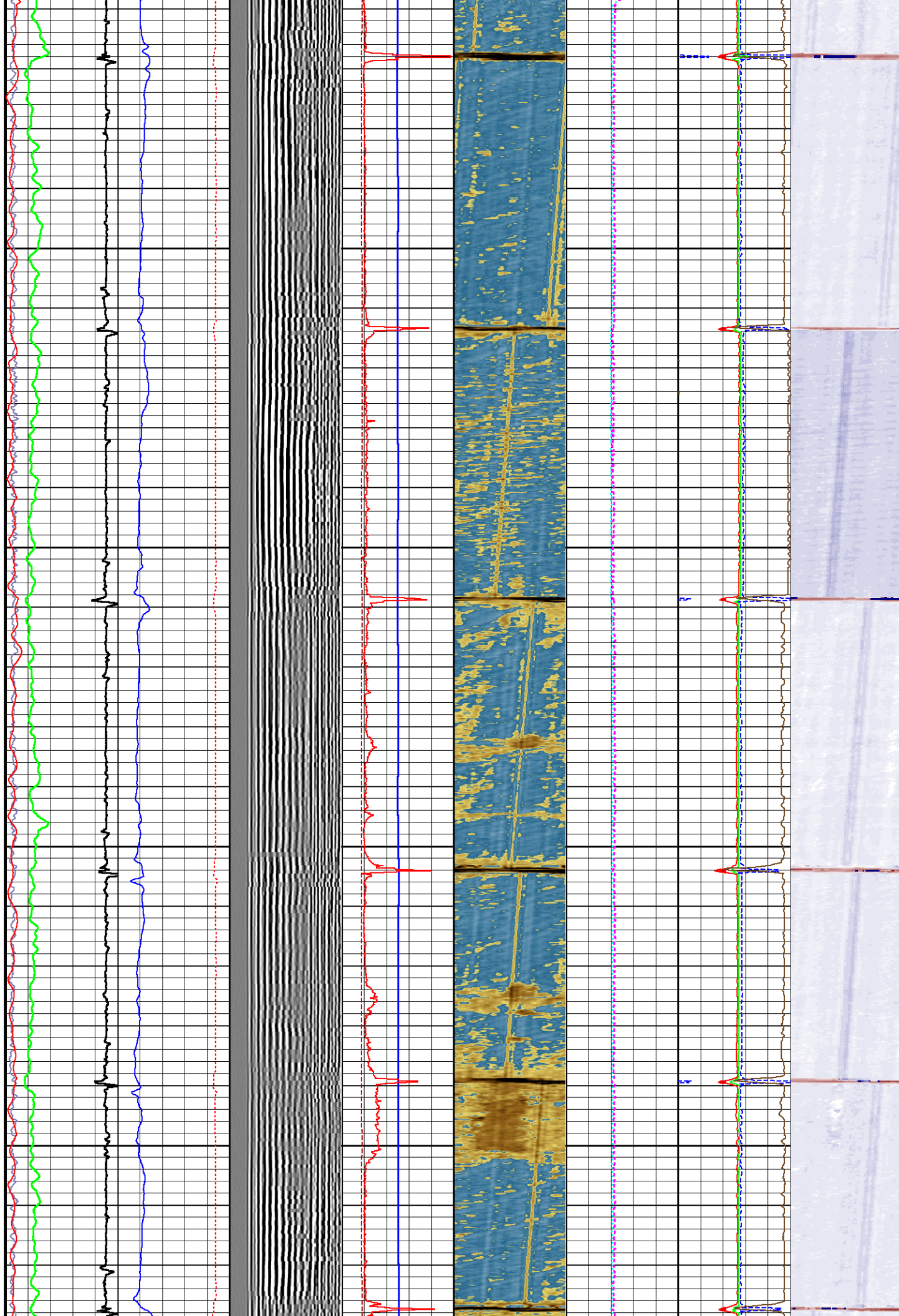


100

150

200

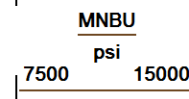
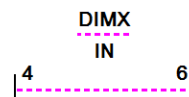
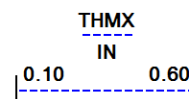
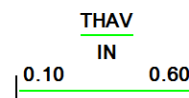
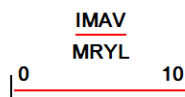
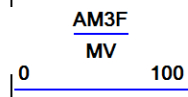
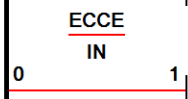
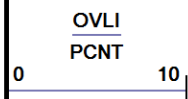
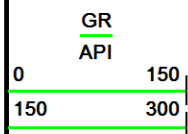
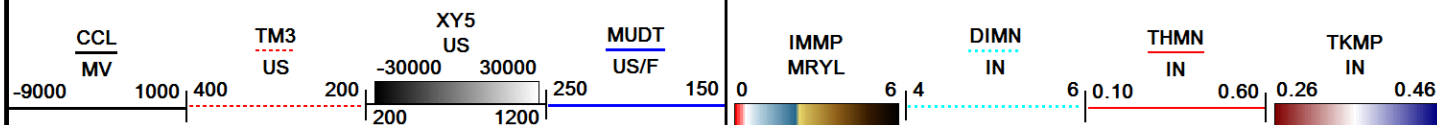
250



300

350

370

Depth
in
FeetTiming
Marks
every
60.0 secReplay
Scale
1:240

Depth Based Data - Maximum Sampling Increment 2.5cm

Filename: C:\WLS\Bonanza creek\...ANTELOPE FEDERAL 44-20-17XRLNC_REPEAT PASS_002.dta

System Versions: Logged with 19.01.8879 Plotted with 19.01.8879

Plotted on 18-JUN-2019 09:07

Recorded on 18-JUN-2019 09:06



REPEAT PASS



DOWNHOLE EQUIPMENT

C:\WLS\Bonanza creek\ANTELOPE FEDERAL 44-20-17XRLNC\SPLICE 5.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 120 LG: 1.05 ft WT: 15.4 lb OD: 3.386 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 141 LG: 4.60 ft WT: 63.9 lb OD: 3.386 in

Gamma Ray

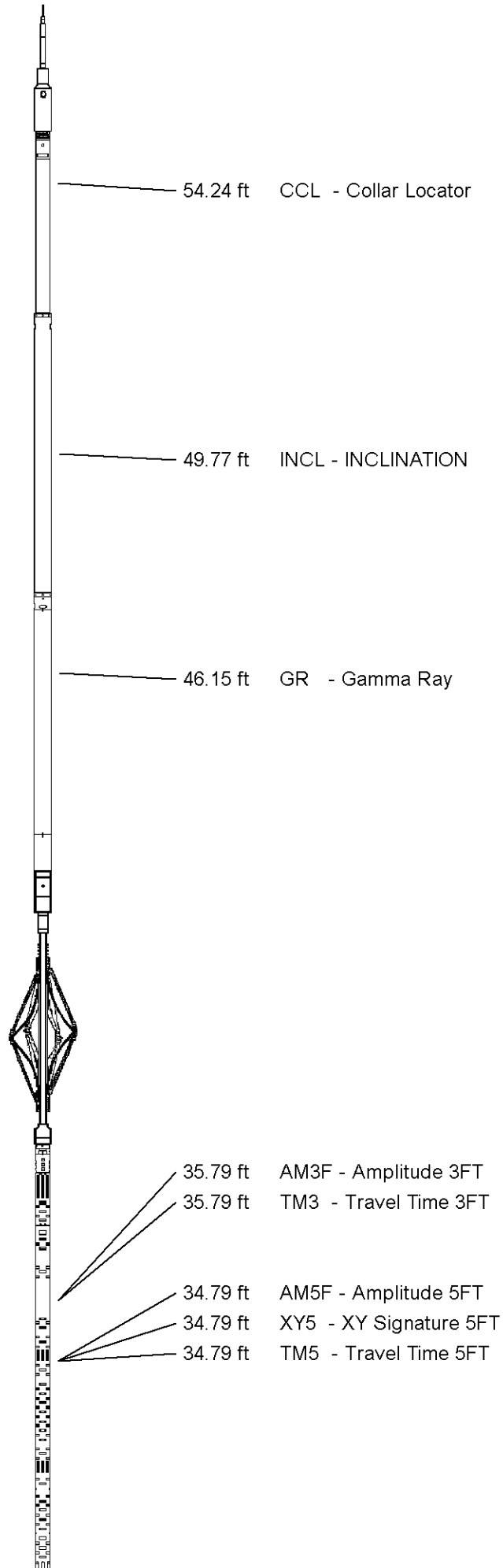
UGR-JD 108 LG: 4.60 ft WT: 81.6 lb OD: 3.386 in

55 pin Roller Centralizer

CEN-XA 185 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 203 LG: 4.49 ft WT: 86.0 lb OD: 3.386 in

Flexible Joint, 55 Pin
FTP-AA 159 LG: 3.44 ft WT: 77.2 lb OD: 3.346 in

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

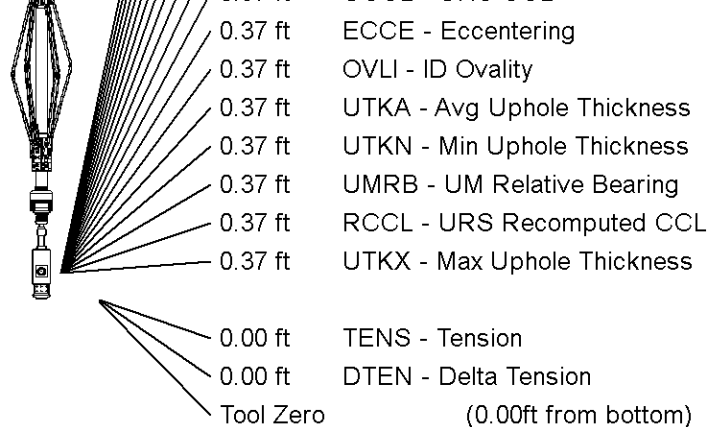
URS Electronics Cartridge
UCC-AA 191 LG: 4.51 ft WT: 79.4 lb OD: 3.386 in

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 125 LG: 1.03 ft WT: 13.2 lb OD: 3.386 in

Total Length: 57.16 ft Weight: 941.4 lb

0.37 ft IMMP - Impd Map
0.37 ft AMMP - Ampl Map
0.37 ft AMMX - Max Ampl
0.37 ft AMAV - Avg Ampl
0.37 ft AMMN - Min Ampl
0.37 ft THMX - Max Thickness
0.37 ft THAV - Avg Thickness
0.37 ft THMN - Min Thickness
0.37 ft IMMX - Max Impedance
0.37 ft IMAV - Avg Impedance
0.37 ft IMMN - Min Impedance
0.37 ft UCCL - URS CCL



All measurements relative to tool zero.

SHOP AND FIELD CALIBRATIONS

C:\WLS\Bonanza creek\ANTELOPE FEDERAL 44-20-17XRLNC\SPLICE 5.dta

UGR Field Survey Cal UGR-JD 108

Field calibration on 00-JAN-1988 00:00

Gamma Ray Field Survey Calibration

Tool Type: UGR-JD
 Calibrator No:

Serial No: 108

| Background | Calibrator | Standard | Units |
|------------|------------|----------|-------|
| 0.0 | 490.0 | 140.0 | CPS |

Delta Counts Per Sec: 490.0 CPS/API = 3.500

CBT Field Calibration CBT-AA 115

Field calibration on 17-JUN-2019 09:16

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 | 2.00 | 1.55 |
| | Free Pipe | 72.00 | 461.00 |
| AMP 5 FT | 100 % Bond | 0.20 | 1.06 |
| | Free Pipe | 48.00 | 504.00 |

CBT Constants CBT-AA 115

Last Edited on 17-JUN-2019 16:42

| | |
|----------------------|------------|
| Min Ampl 100% Bond | 2.00 MV |
| Max Ampl 0% Bond | 72.00 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 17-JUN-2019 09:22

Ultrasonic Radial Scanner Before Calibration

Tool Type USH-AB Serial No 125

| | | | | |
|---------------|----------|---------|---------|------|
| | 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 125

Last Edited on 17-JUN-2019 16:42

*** 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 | 4.50 |

** 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 | 17163.00 | 5.50 | 17.00 | 2.64 | 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 | 1.50 MRYL |
| Z_mud Outside | 1.90 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 | ANTELOPE FEDERAL 44-20-17 XRLNC | | |
| FIELD | WATTENBERA | | |
| PROVINCE/COUNTY | WELD | | |
| COUNTRY/STATE | USA/COLORADO | | |

| | | | | | |
|-------------------------|------|------|---------------------|----------|------|
| Elevation Kelly Bushing | 4674 | feet | Bottom Log Interval | 6490.00 | feet |
| Elevation Drill Floor | 4674 | feet | Depth Driller | 17163.00 | feet |
| Elevation Ground Level | 4657 | feet | Depth Logger | 6490.00 | feet |


Weatherford[®]

SECUREVIEW
ULTRAVIEW / BONDVIEW