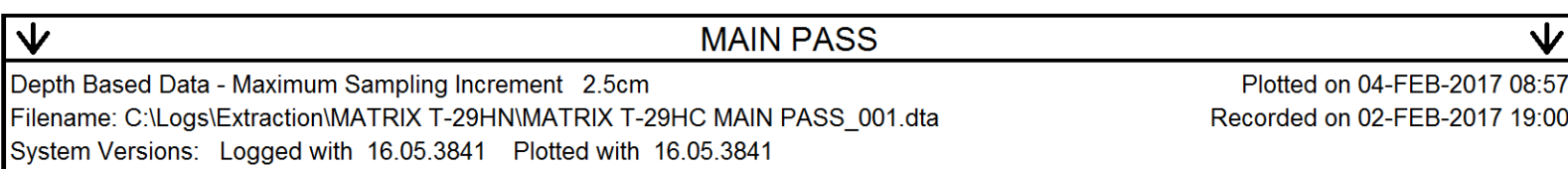
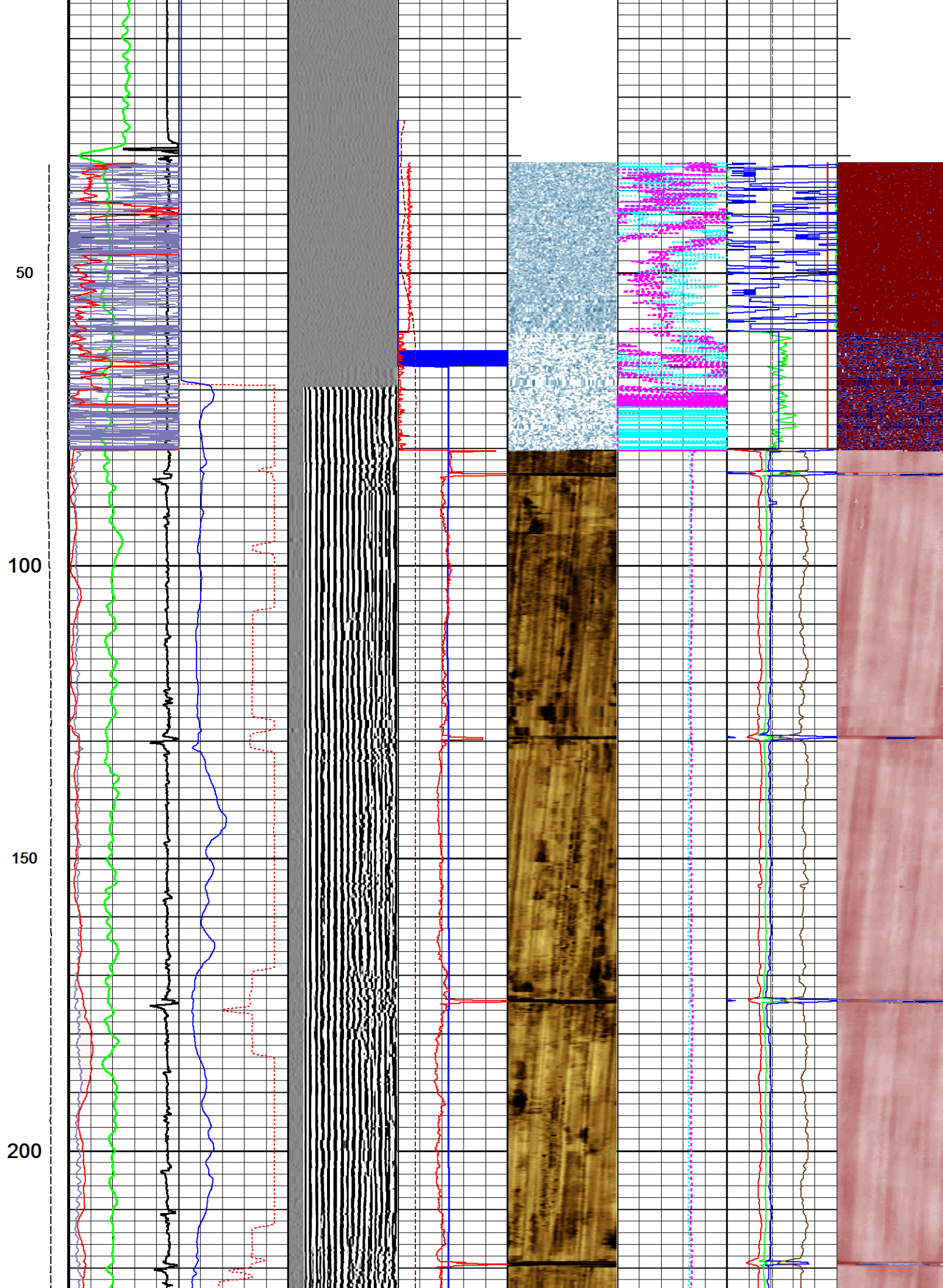
 Weatherford®			SECUREVIEW ULTRAVIEW/BONDVIEW CEMENT ANALYSIS		
COMPANY WELL FIELD PROVINCE/COUNTY COUNTRY/STATE LOCATION			EXTRACTION OIL & GAS MATRIX T-29HN GREELEY WELD USA / COLORADO		
SEC 29		TWP 6N	RGE 65W	Other Services	
Latitude		Longitude		API Number	
Permanent Datum GROUND LEVEL, Elevation 4888 feet Log Measured From KB, 28 feet above Permanent Datum Drilling Measured From KB @ 28'				Elevations: KB 4916.00 DF 4916.00 GL 4888.00	
Date	2-FEB-2017	PERFORATION RECORD			
Run Number	ONE	Shot	Number	Depth From	Depth To
Service Order	173251231	Density	of Shots	feet	feet
Type Log	URS/CBT				
Depth Driller	12000.00				
Depth Logger	6550.00				
Top Log Interval	0.00				
Bottom Log Interval	6550.00				
Hole Fluid Type	WATER				
Hole Fluid Level	0.00				
Restriction ID	4.767	Gun Type			
Max Recorded Temp		Gun Size			
Well Head Pressure	0.00	psi	CASING / TUBING RECORD		
Well Head Equipment		Size	Weight	Depth From	Depth To
Time Well Ready	ROA	inches	pounds/ft	feet	feet
Time Logger Bottom	SEE LOG	5.500	20.00	0.00	12000.00
Unit	14333				
Equipment Name	WSSE				
Base	CASPER				
Recorded By	P. MAZUR				
Witnessed By	NOT WITNESSED				

CASING / TUBING RECORD						
Type	Grade	TypeJoint	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
	P 110		5.500	0.00	12000.00	20.00

REMARKS
ULTRASONIC RADIAL SCANNER LOG CORRELATED TO RIG KB @ 28 FT ABOVE GROUND LEVEL
BELOW SURFACE CASING THE TOOL HAD MANY AREAS WHERE IT EXPERIENCED DECENTRALIZATION DUE TO DEVIATION AND DOG LEGS IN THE CASING. IT SHOULD BE NOTED THAT THIS DECENTRALIZATION OF THE TOOL GREATLY AFFECTS THE READINGS RECORDED OVER THESE INTERVALS
ECCENTERICITY IS IN TRACK 1 AND REFLECTED BY FOUR STRIPES ALTERNATING LIGHT AND DARK IN THE AMPLITUDE AND IMPDEANCE MAPS. AT THESE POINTS THE READS ARE INVALID.
ALSO THE CASING SHOWED SIGNS OF BEING IN DIRCT CONTACT WITH THE FORMATION WHICH LEADS TO SPIKING IN THE THICKNESS CURVES
THE DEPTH OF LOGGING WAS STARTED AT THE POINT AT WHICH THE TOOL WAS NOT DEVIATED ENOUGH THAT IT CAUSE THE HEAD ON THE ULTRASONIC TOOL TO STOP ROTATING

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



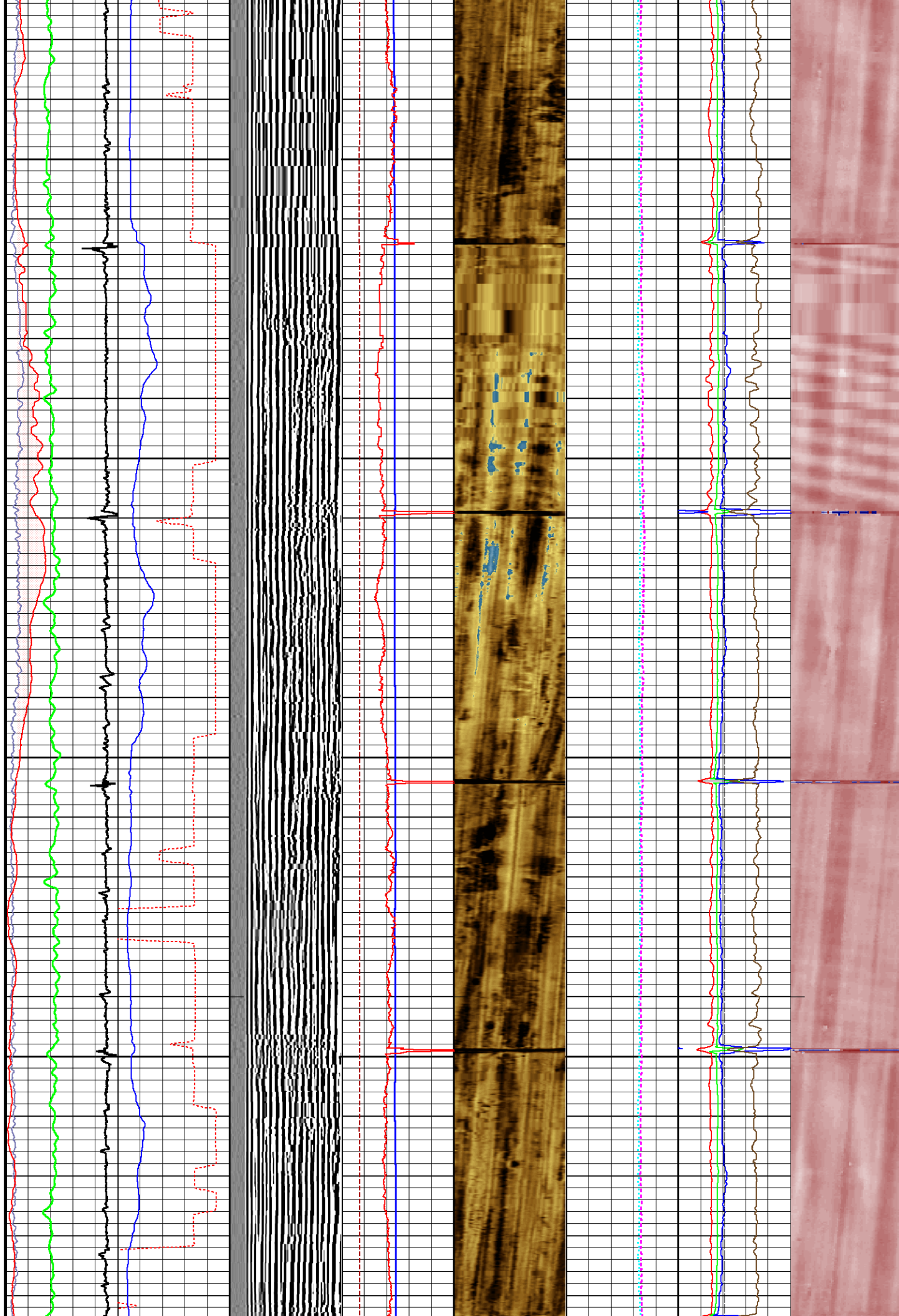


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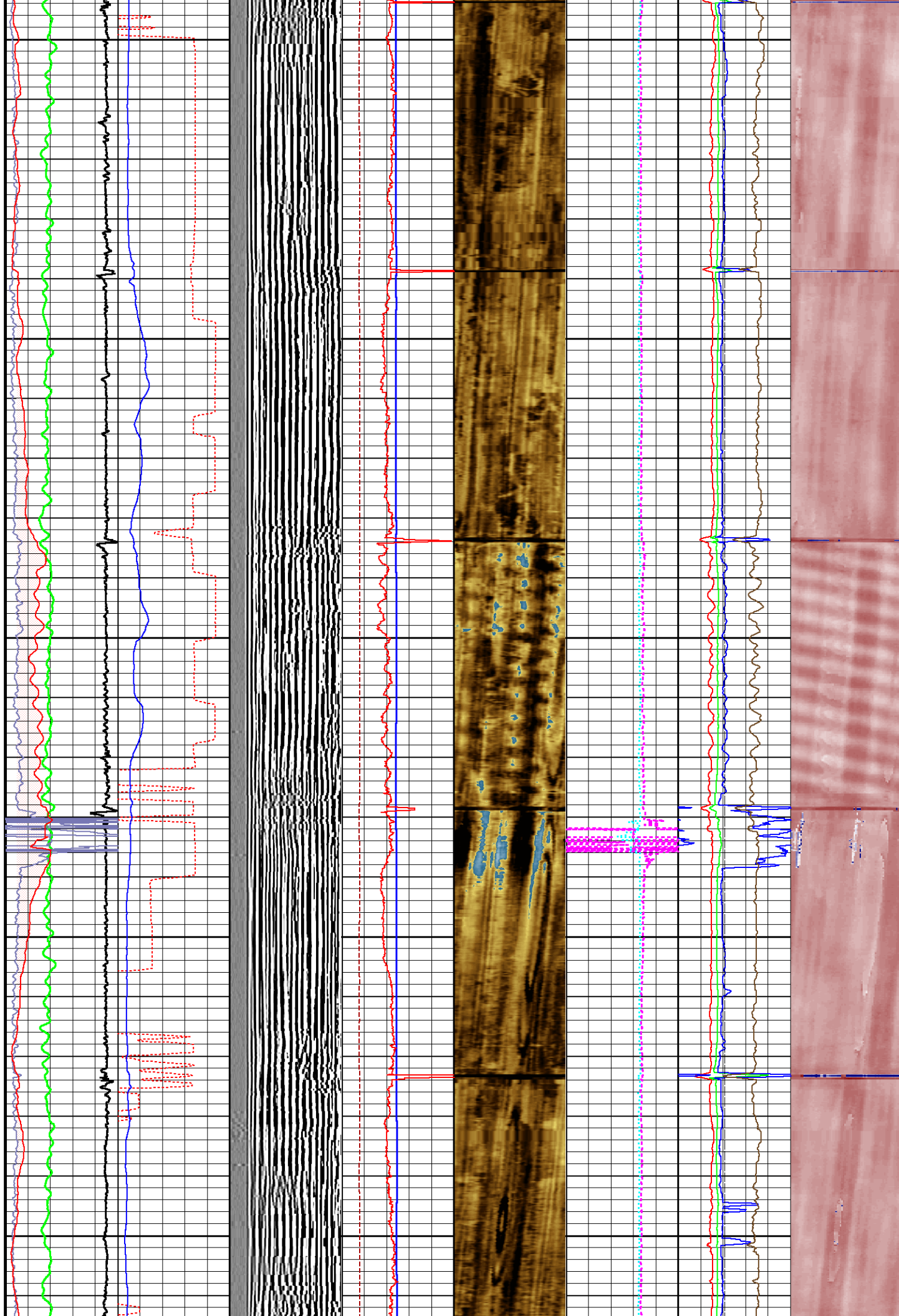
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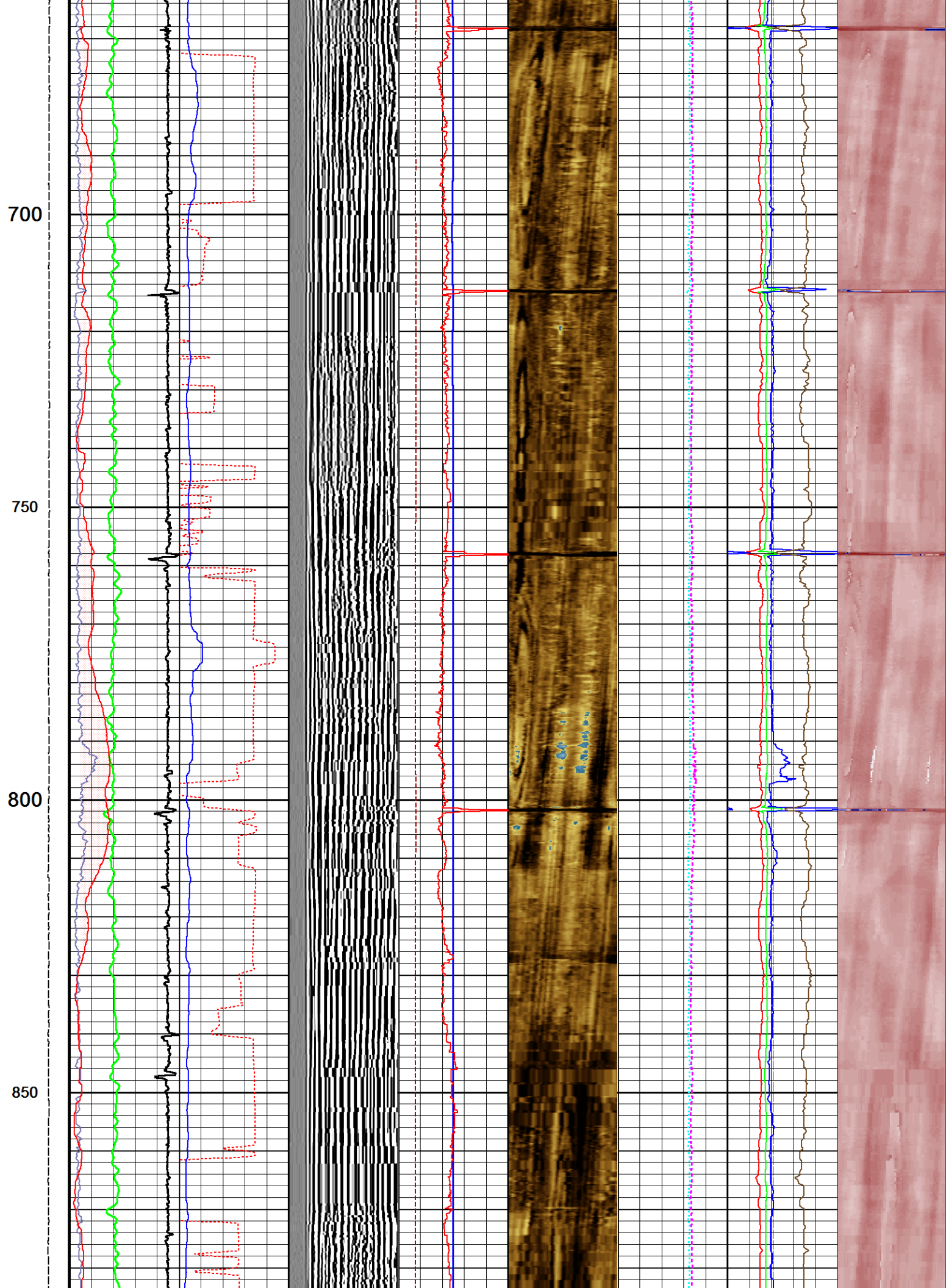
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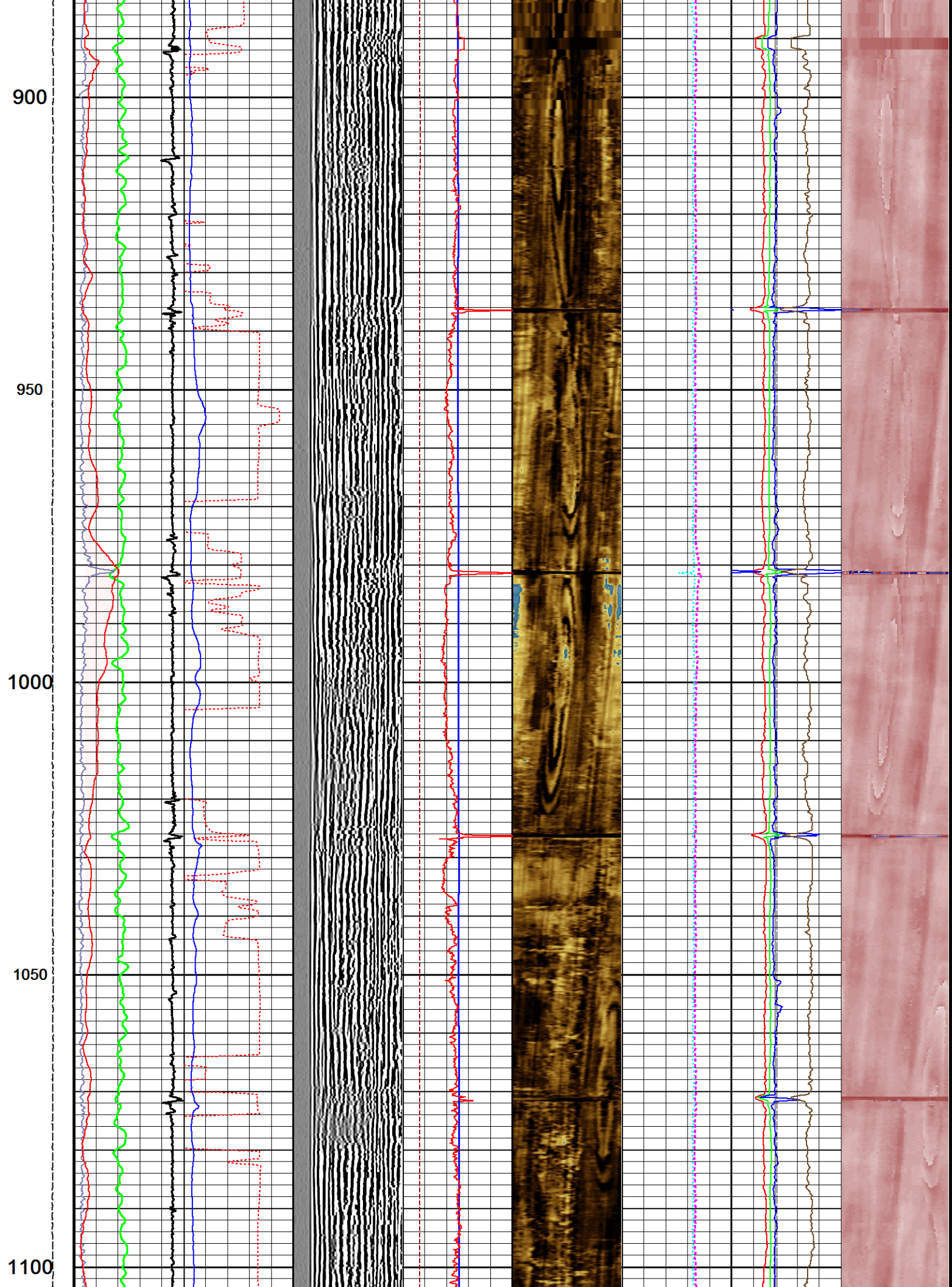
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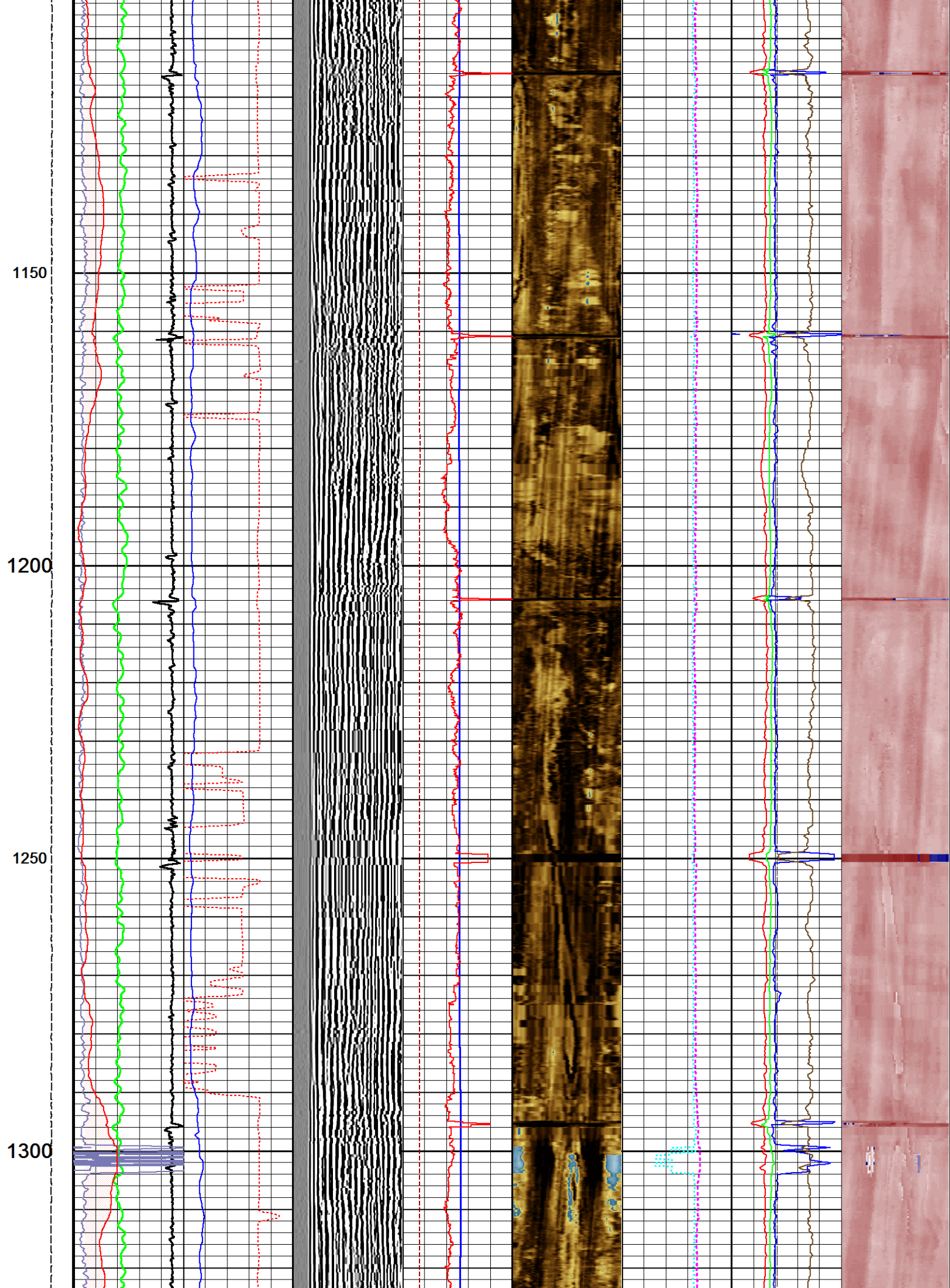


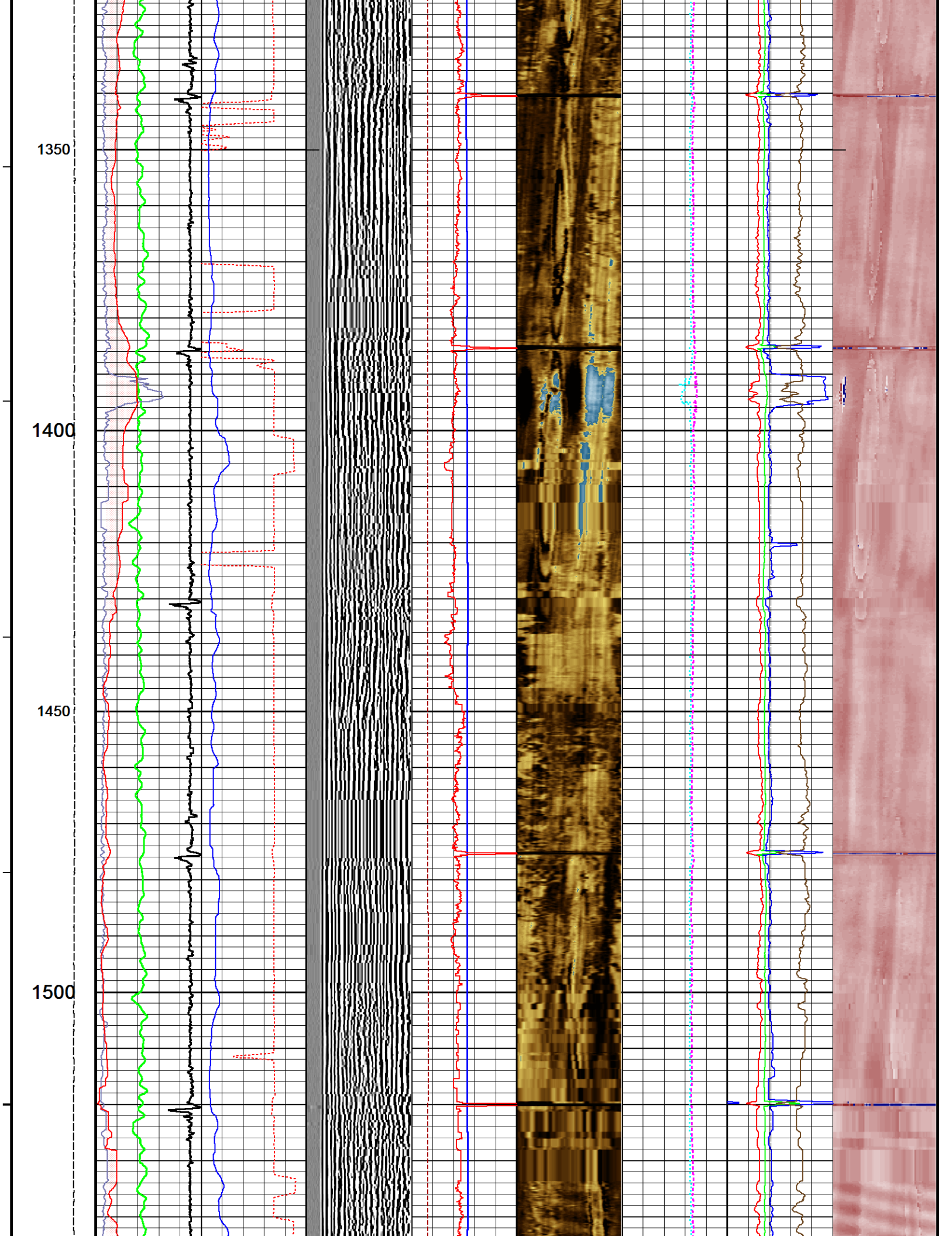
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500
550
600
650



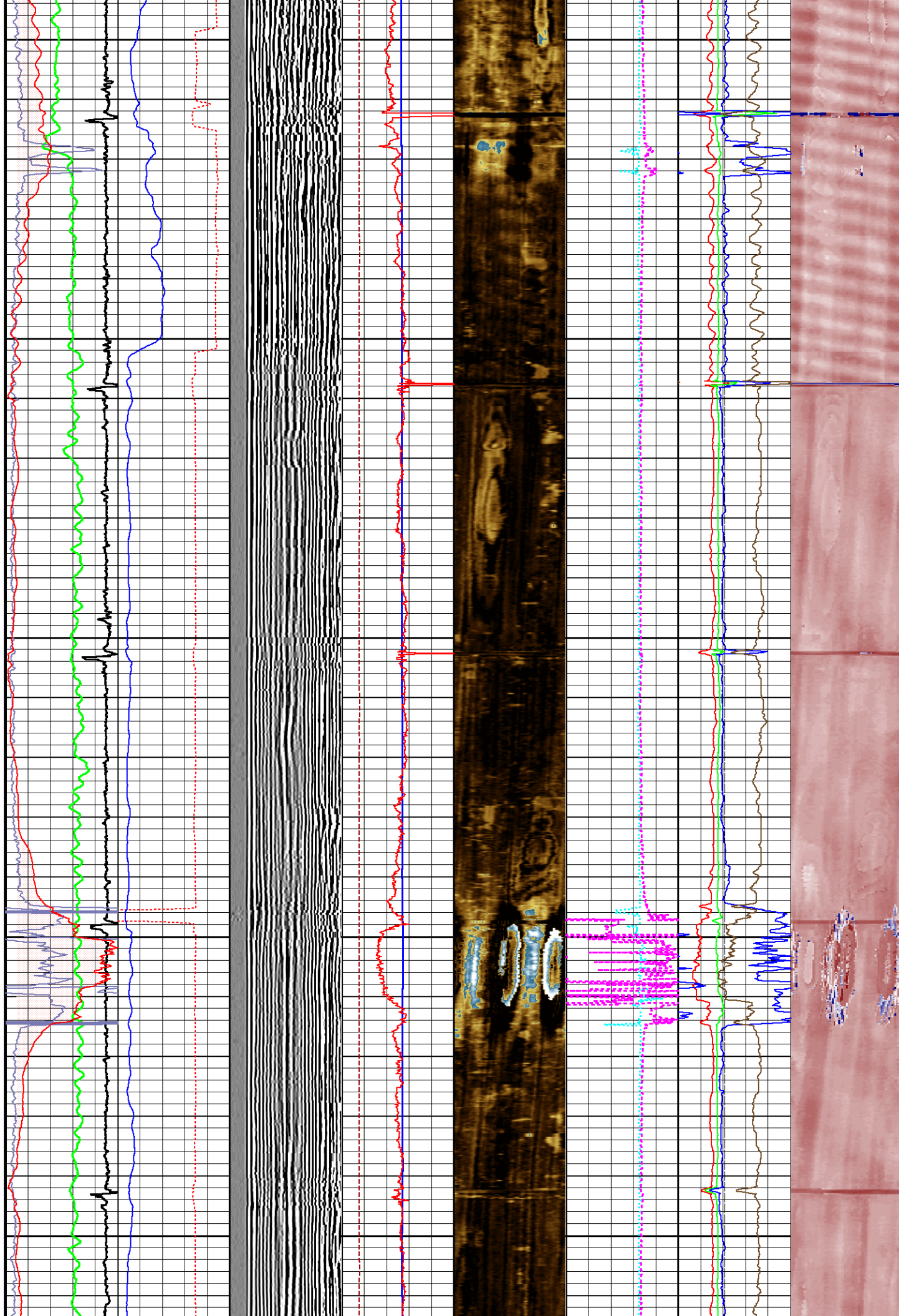


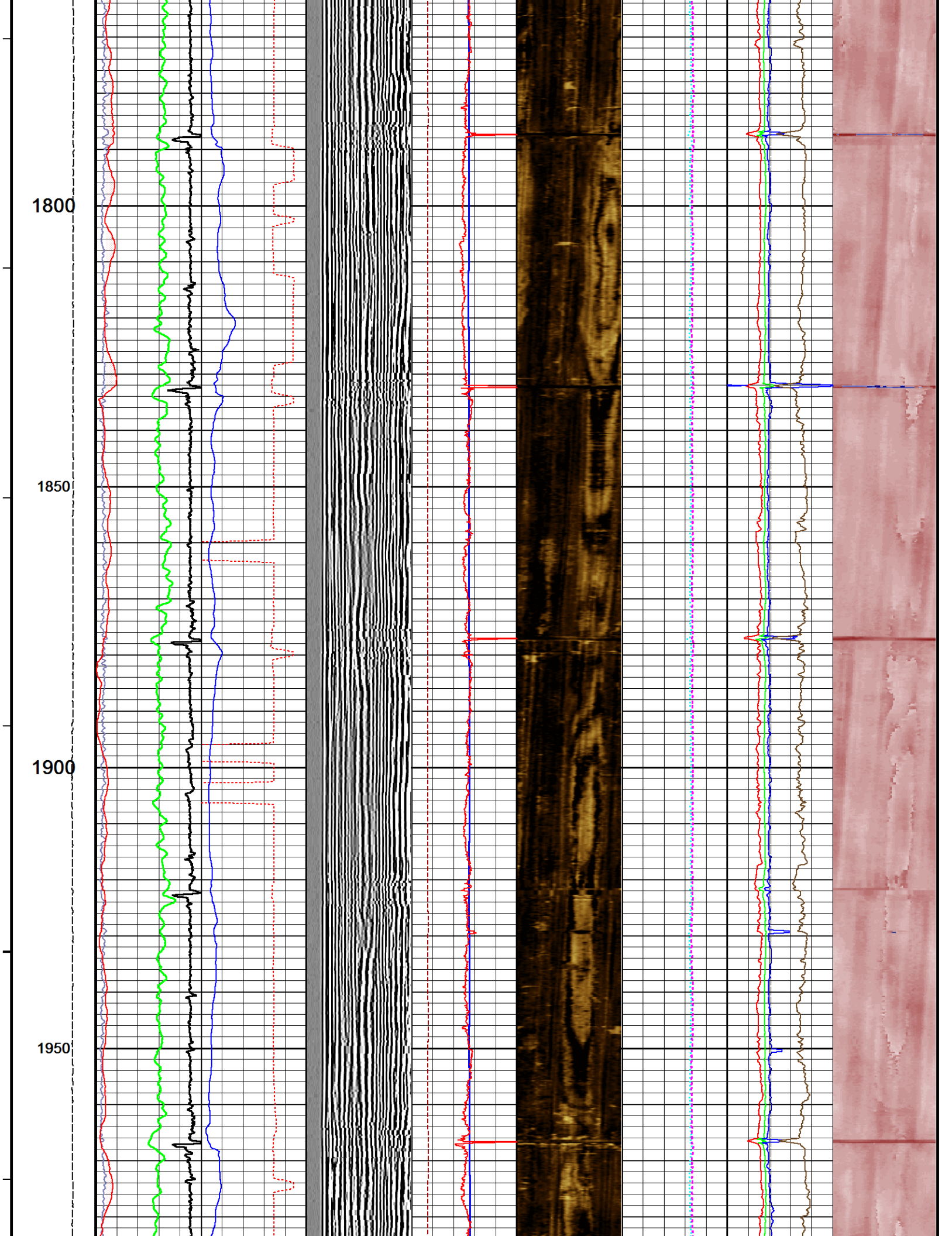


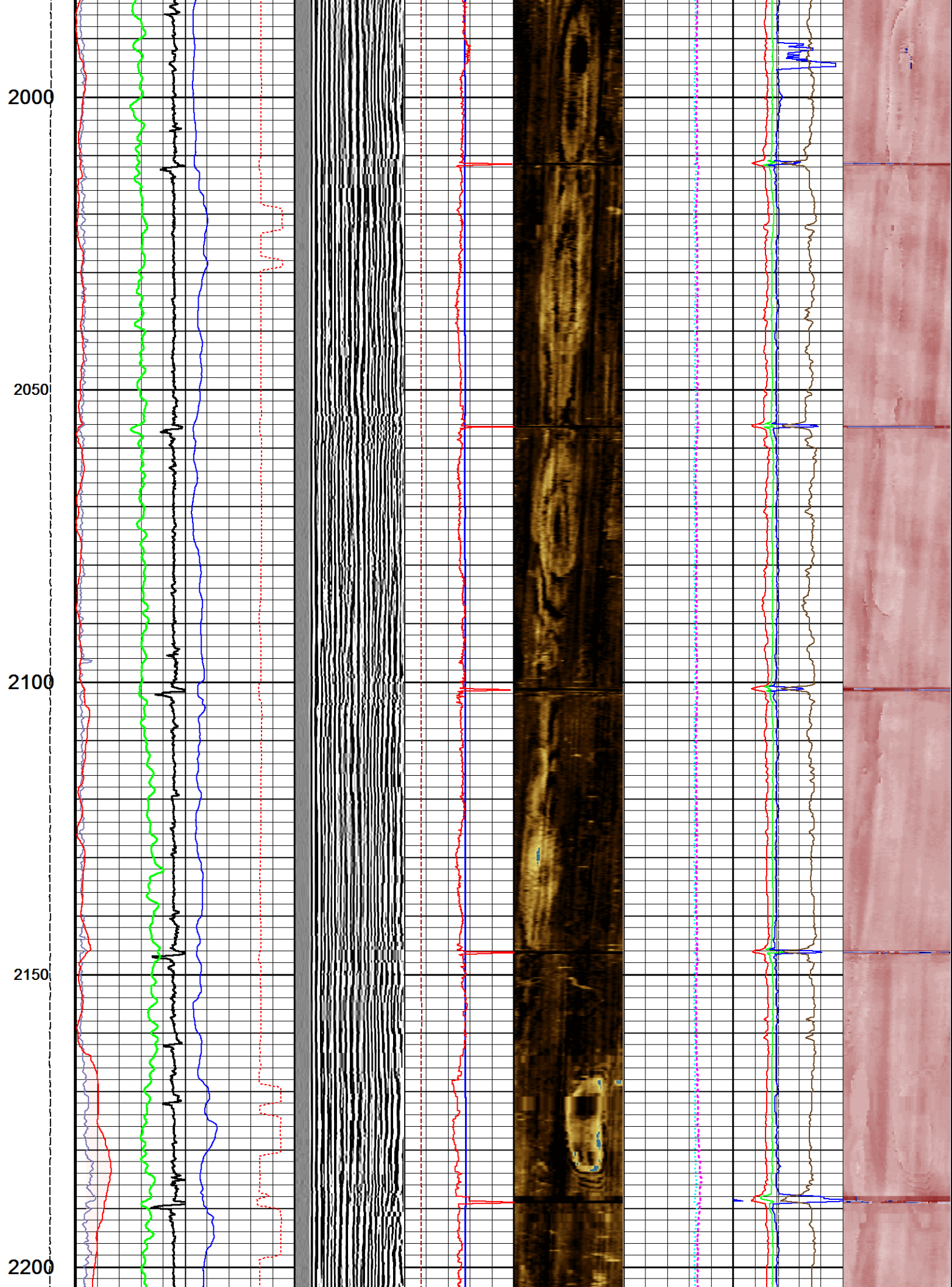


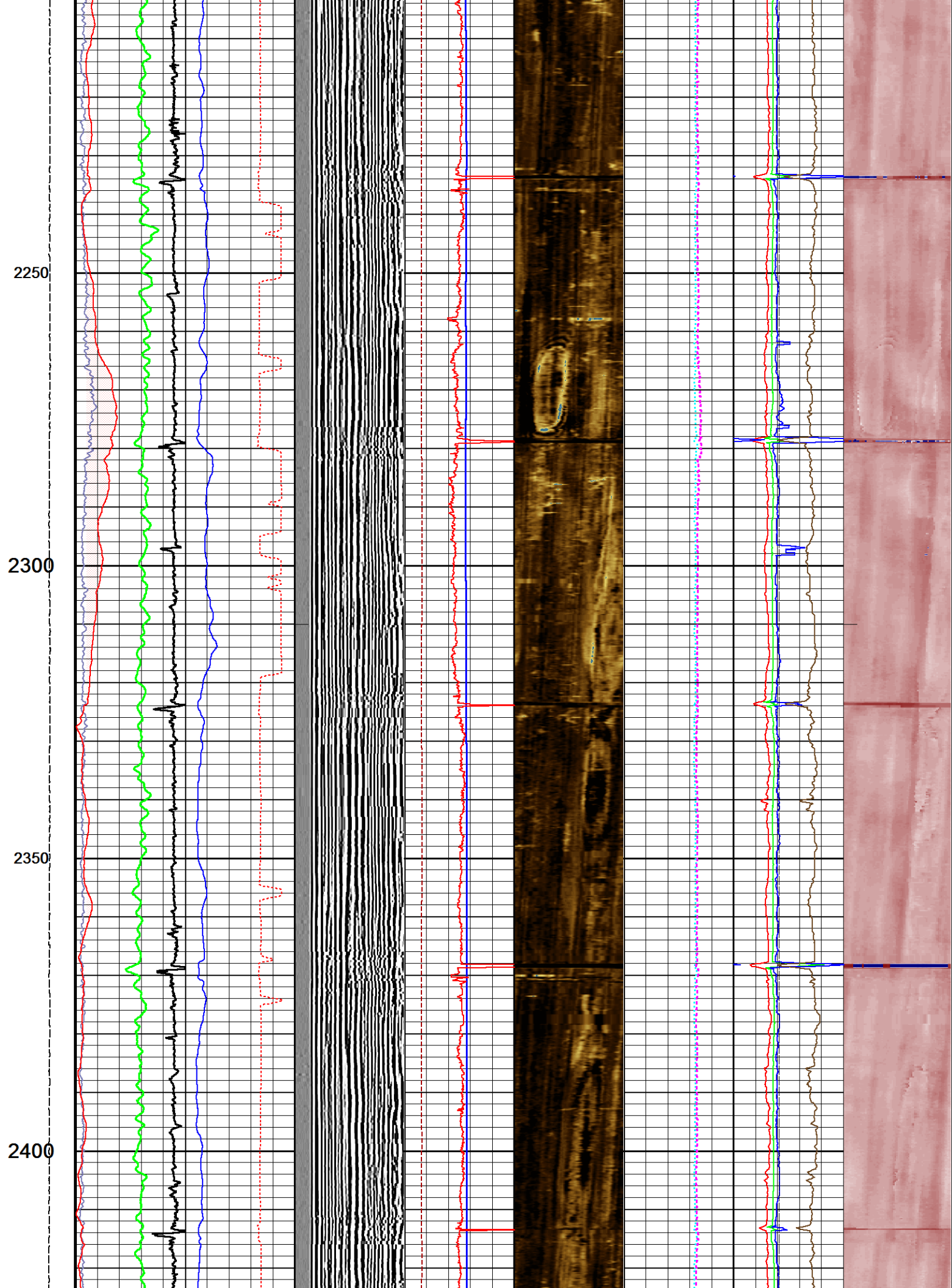


1550
1600
1650
1700
1750







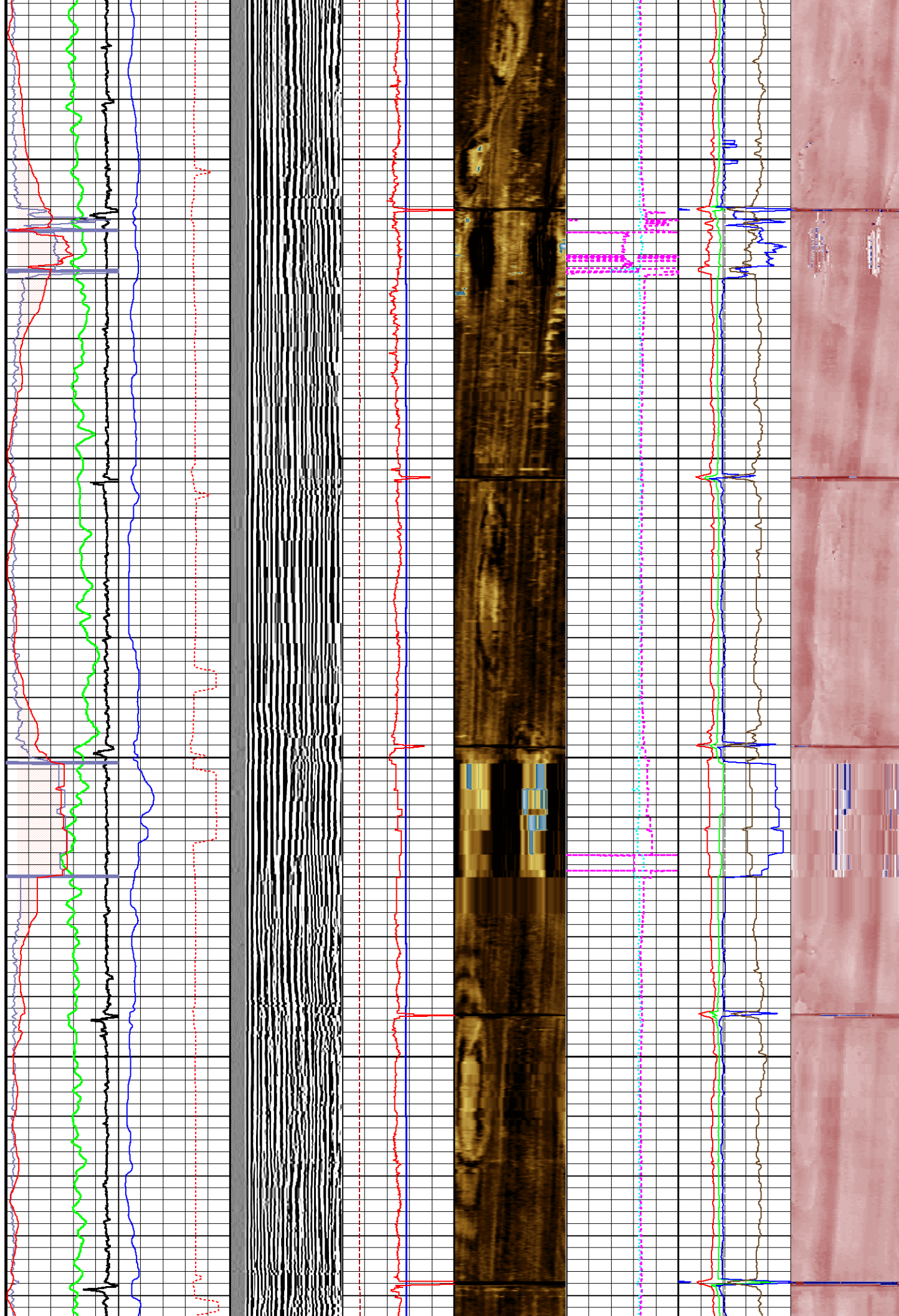


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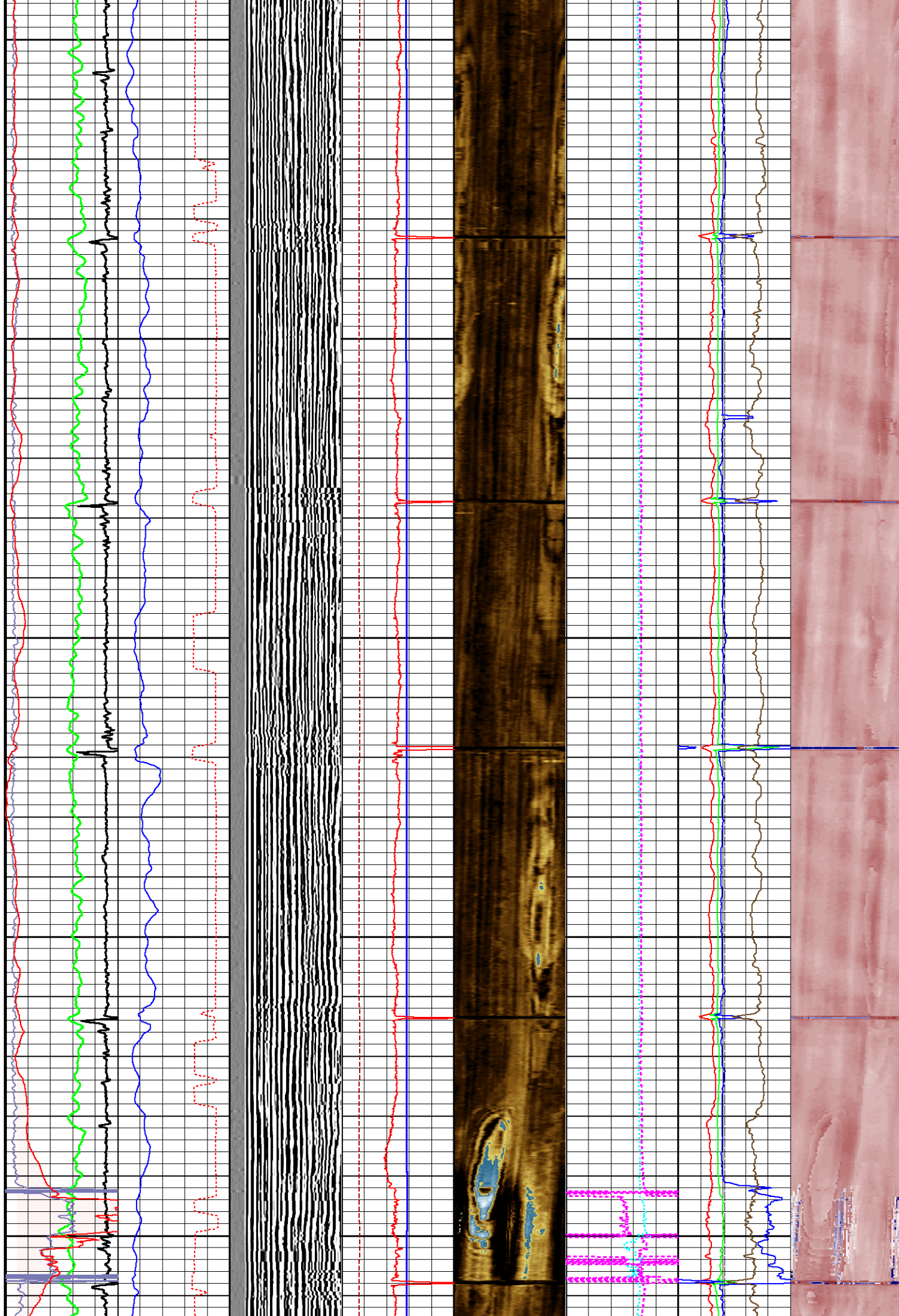
2500

2550

2600



2650
2700
2750
2800
2850

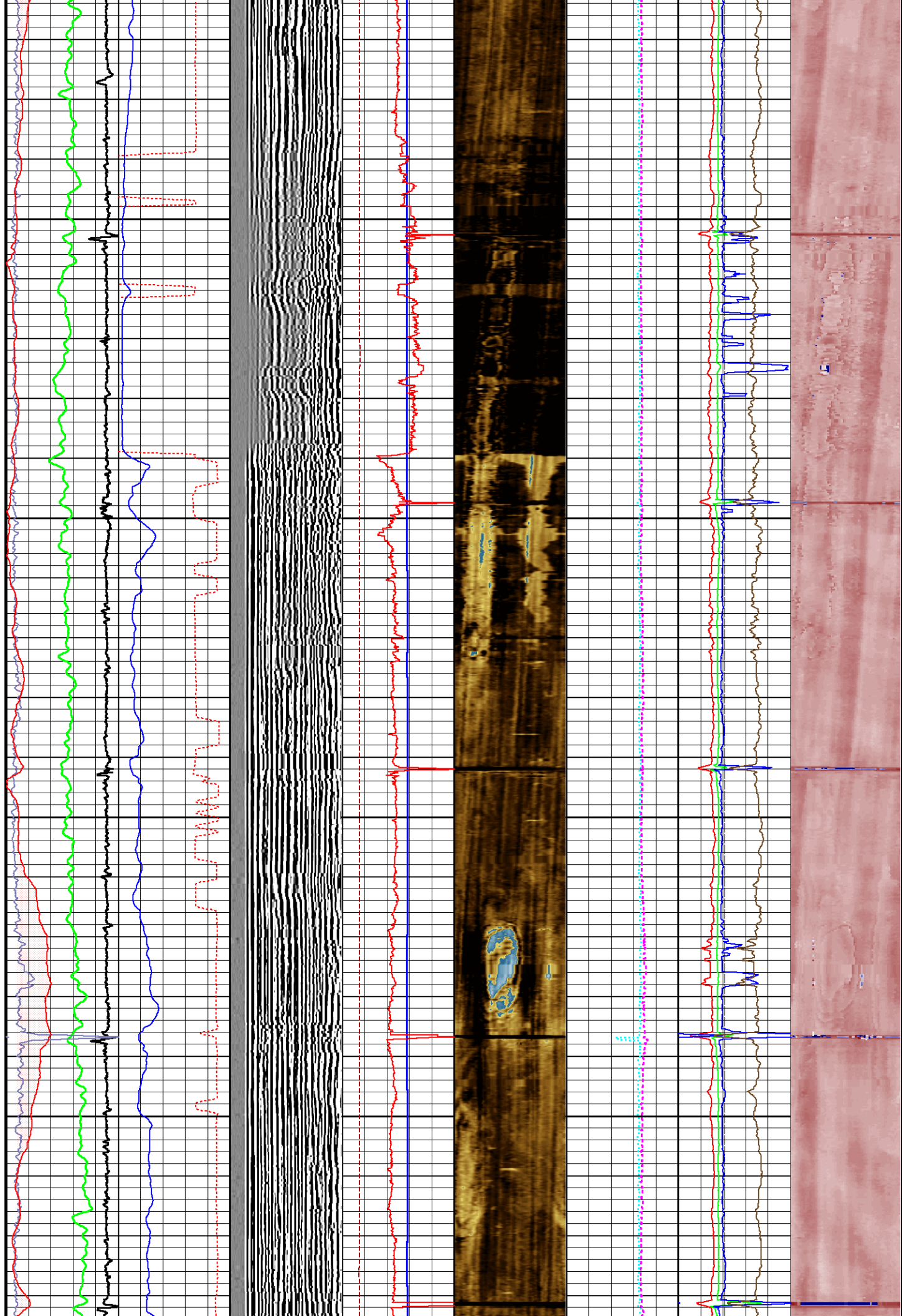


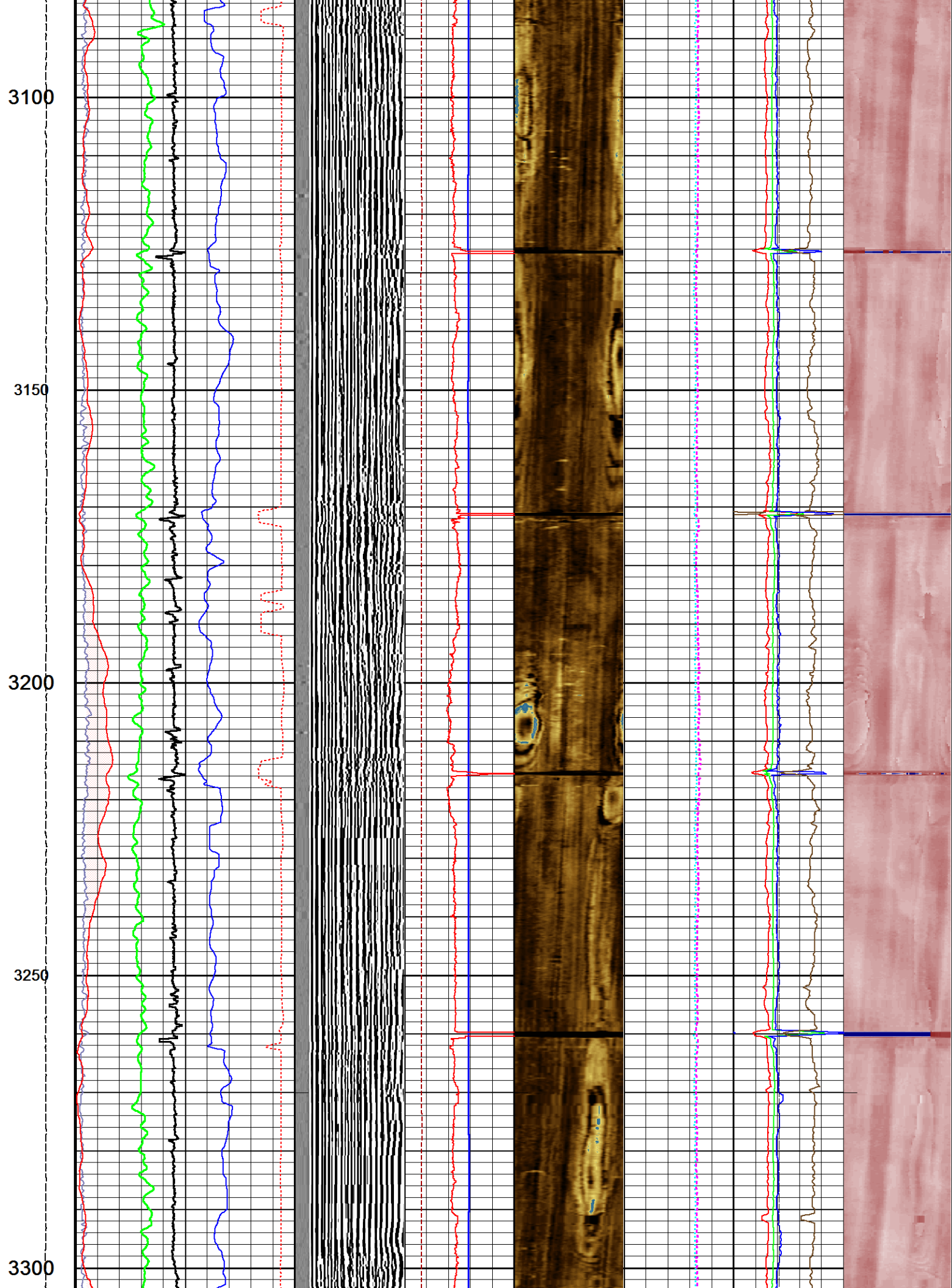
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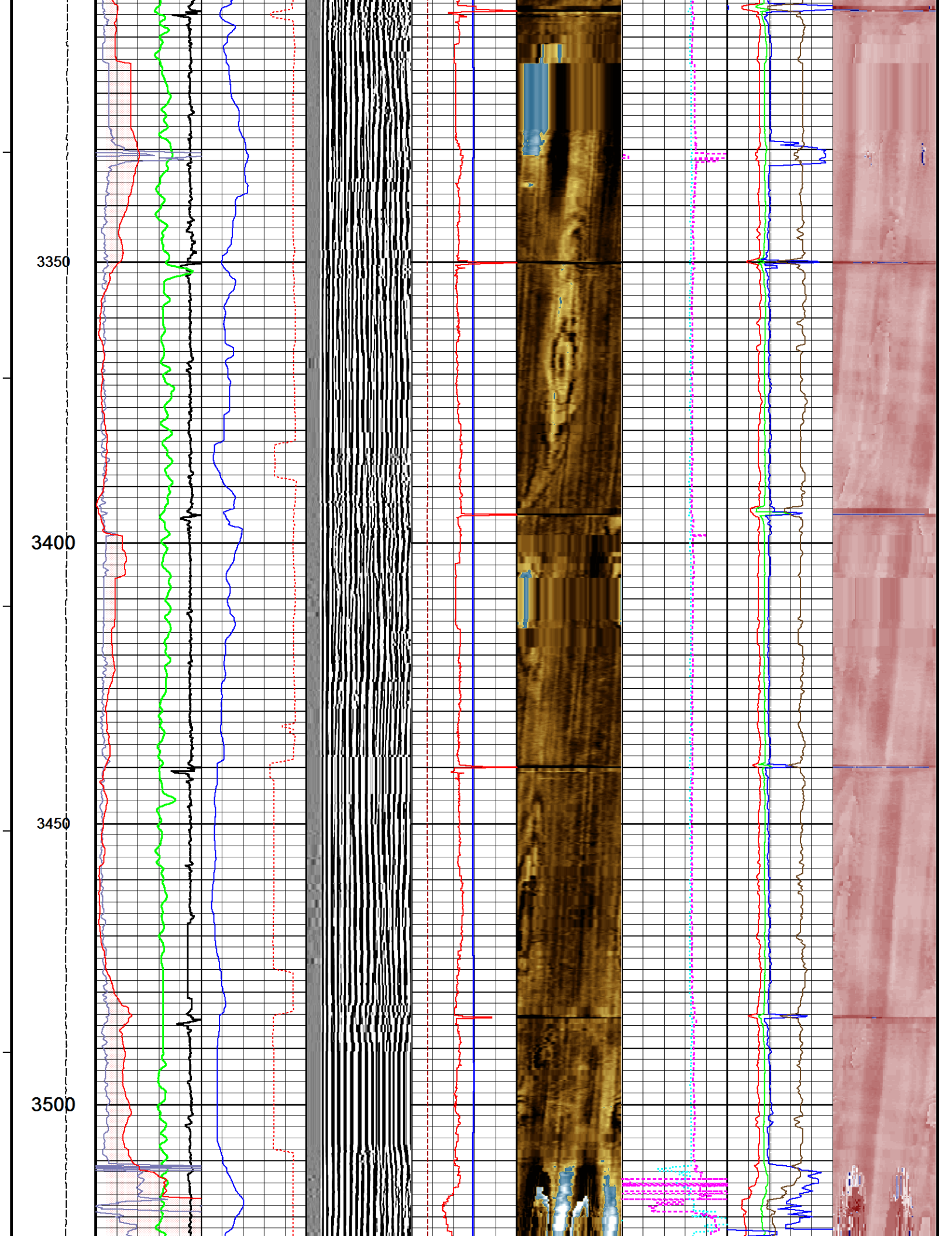
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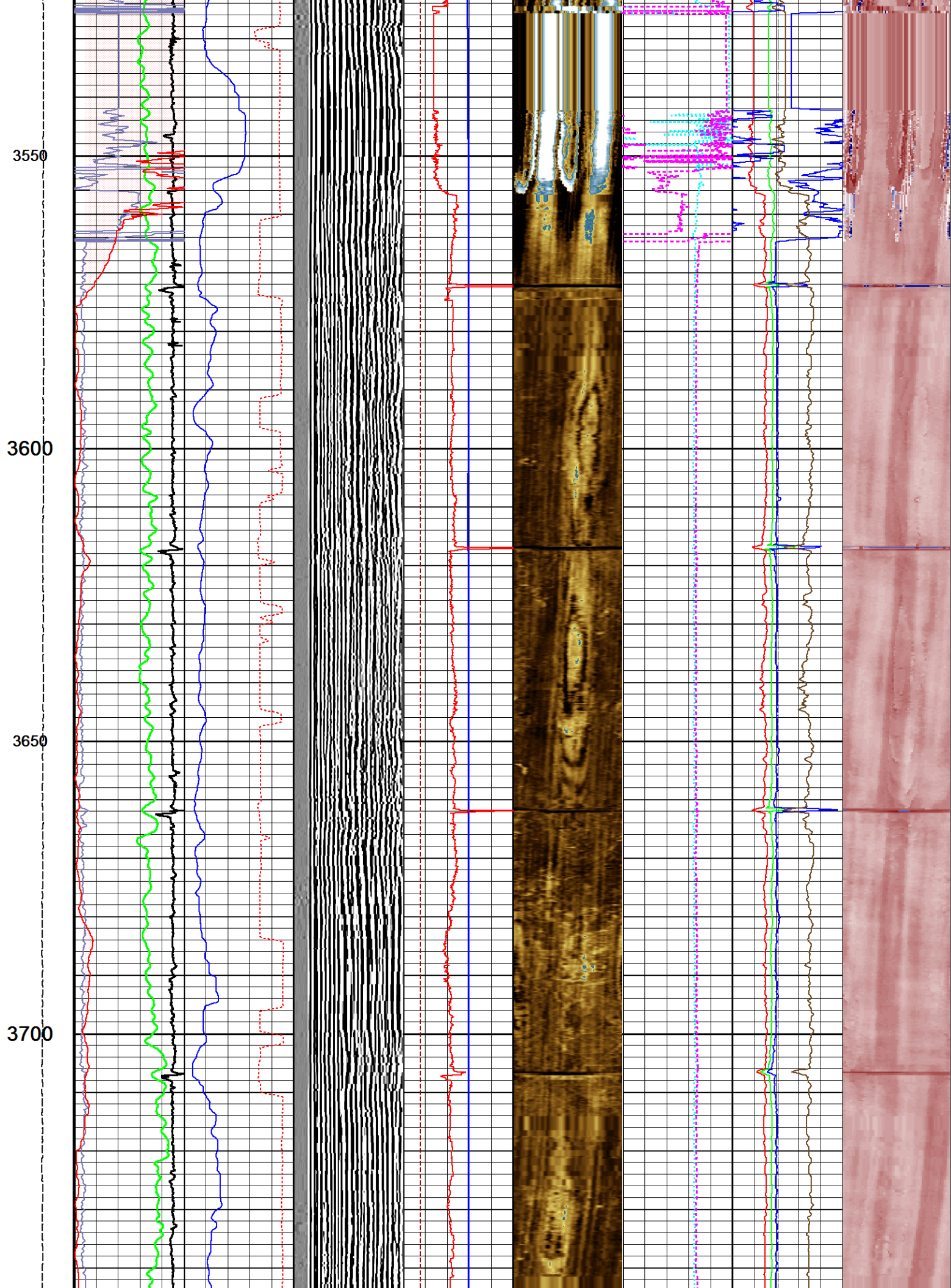
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3050









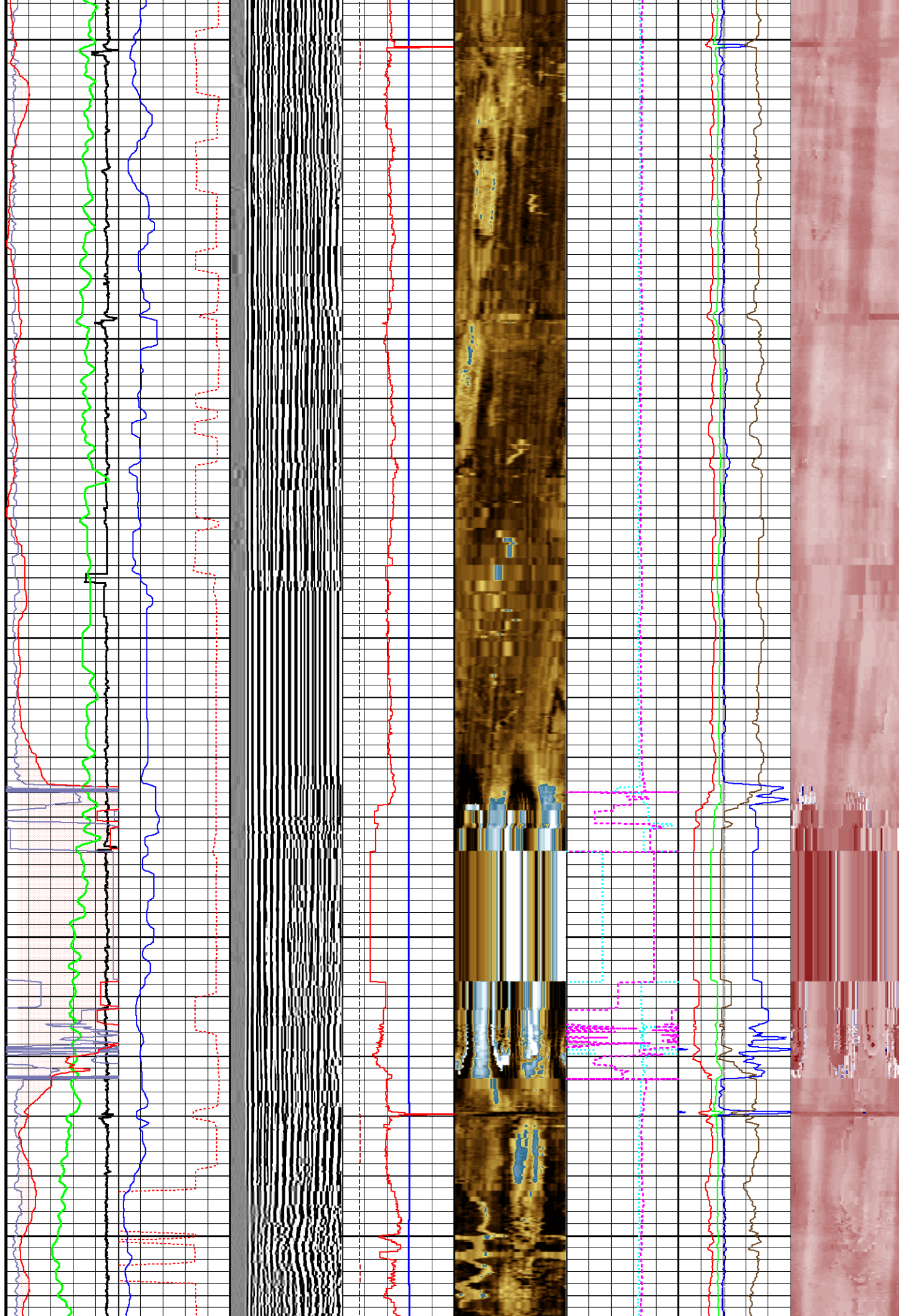
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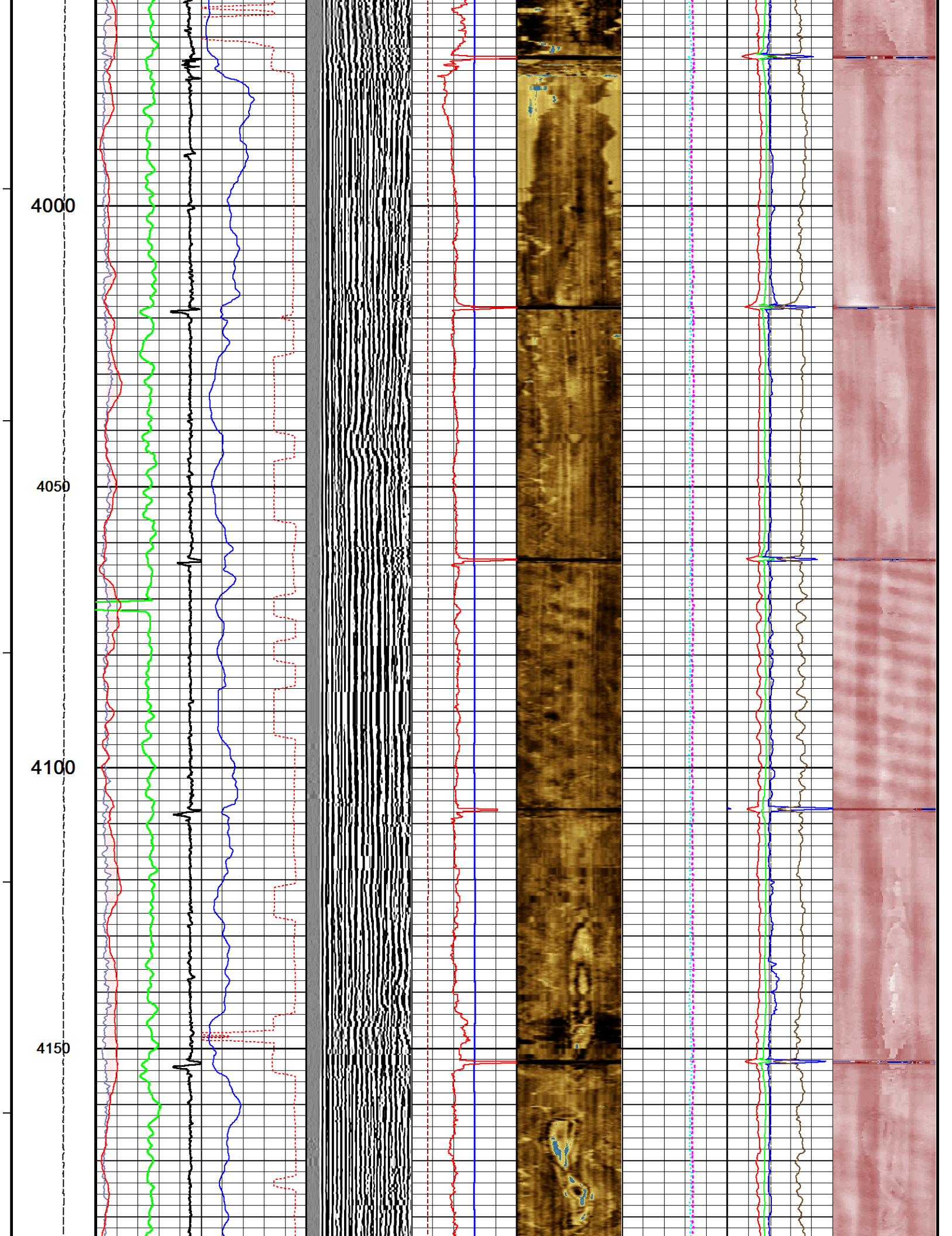
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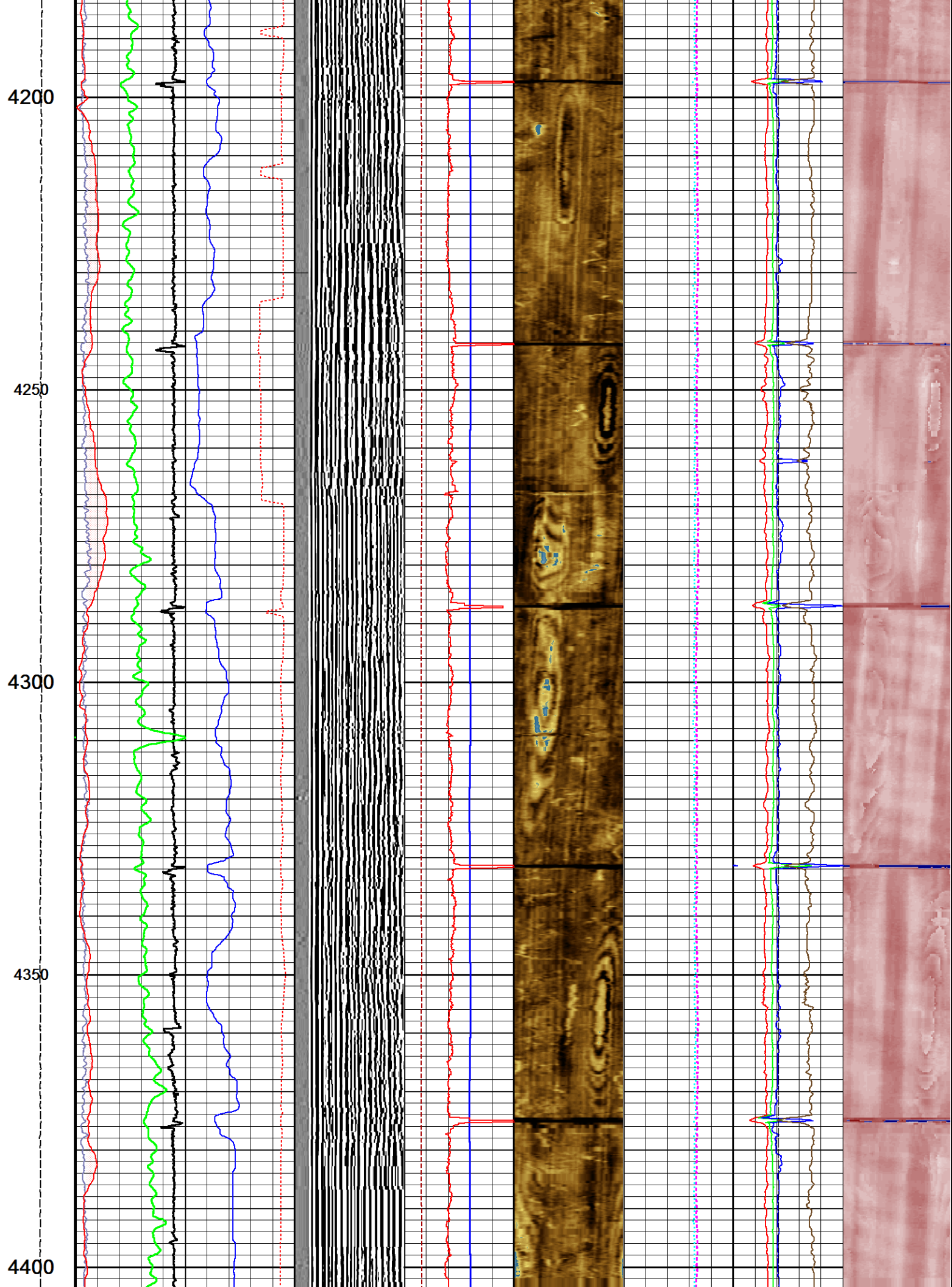
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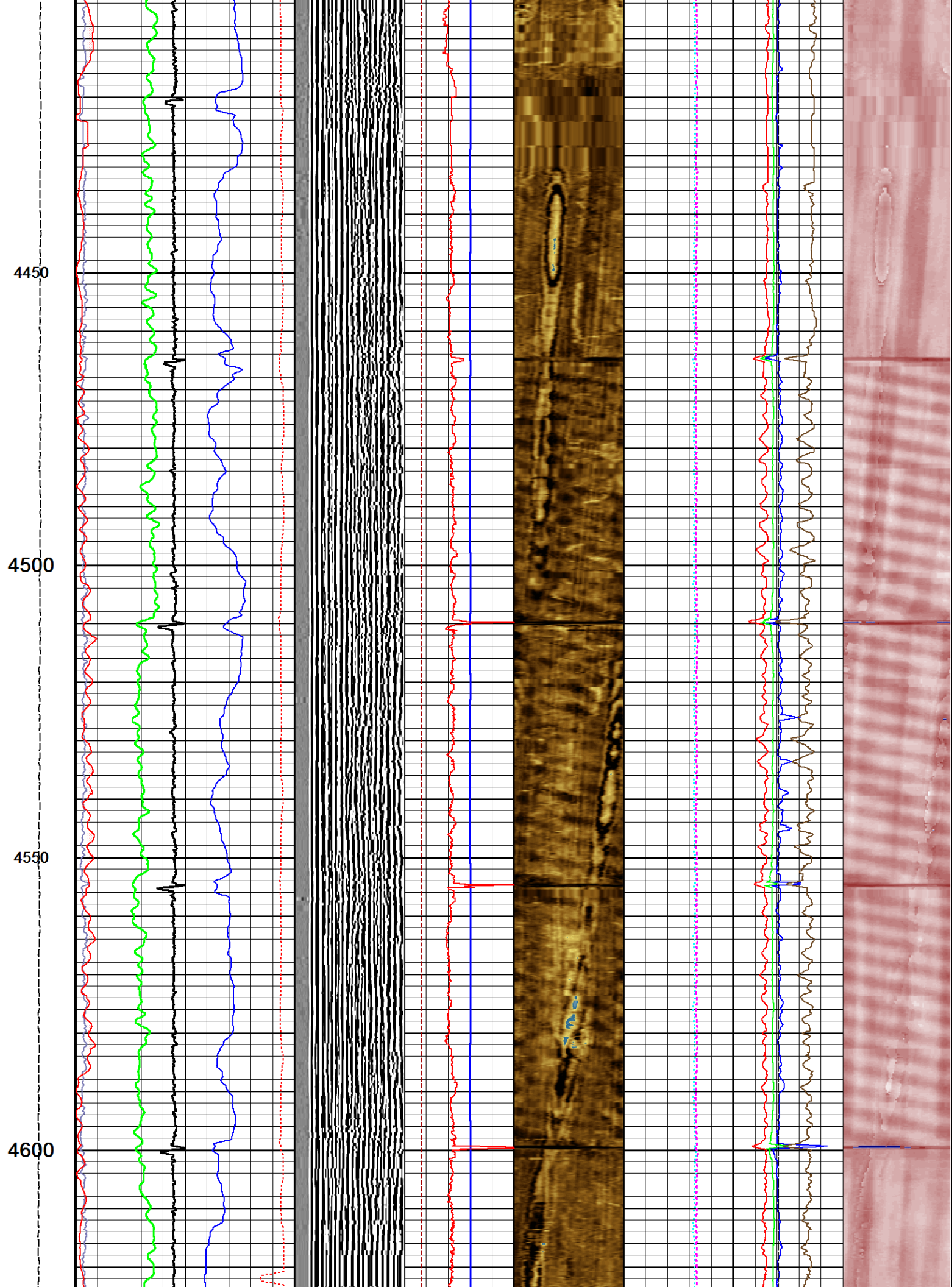
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3950







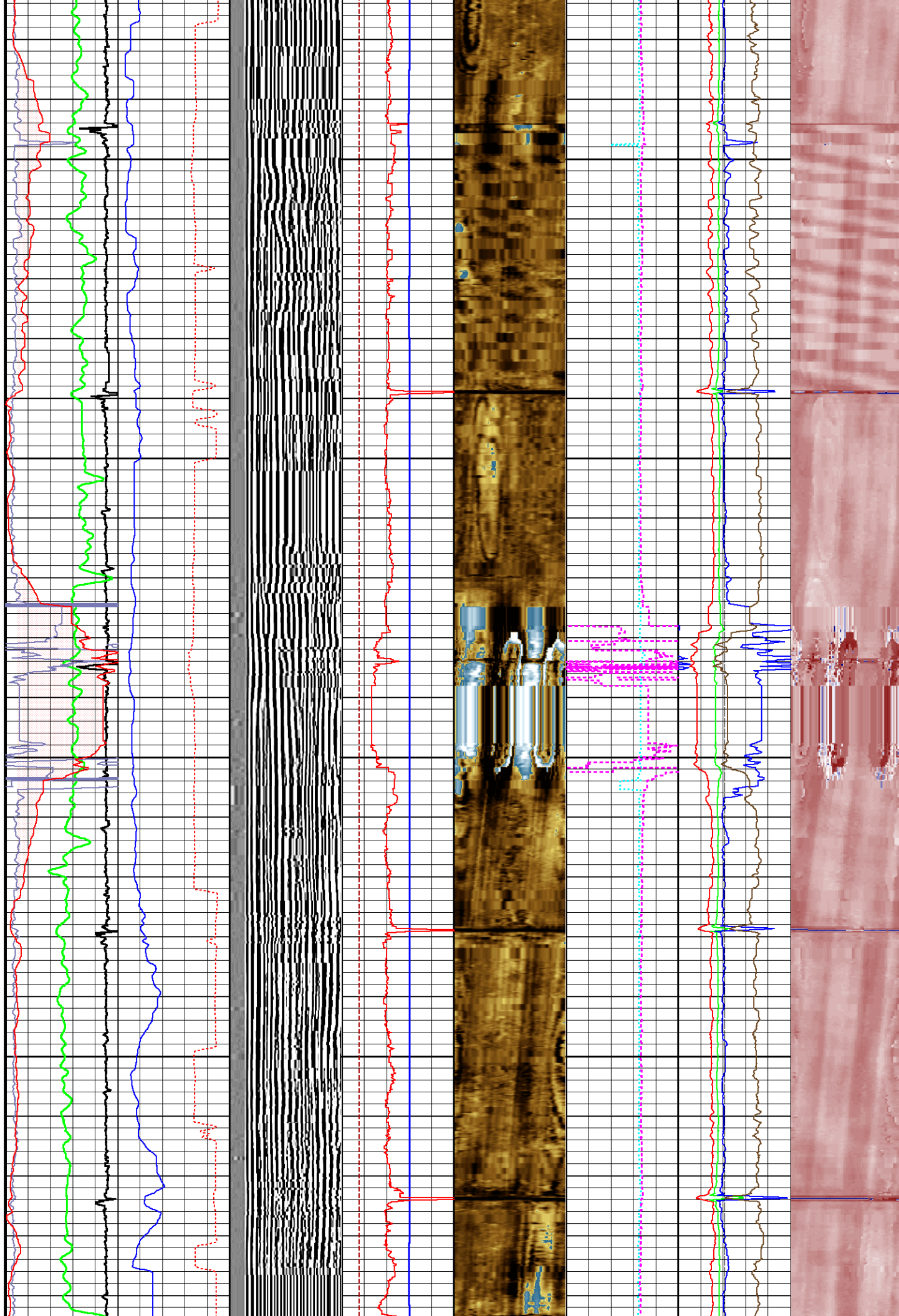


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4700

4750

4800



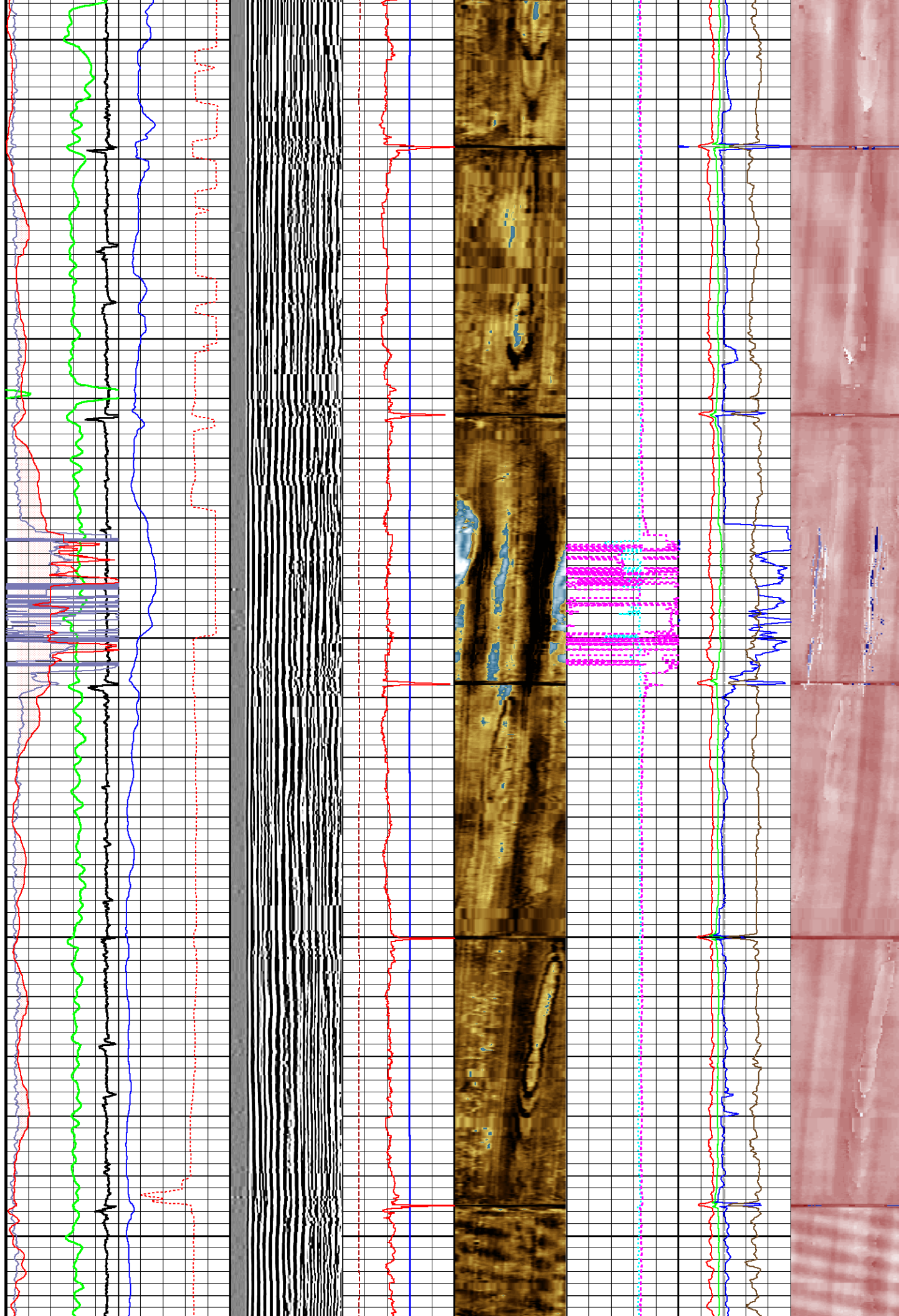
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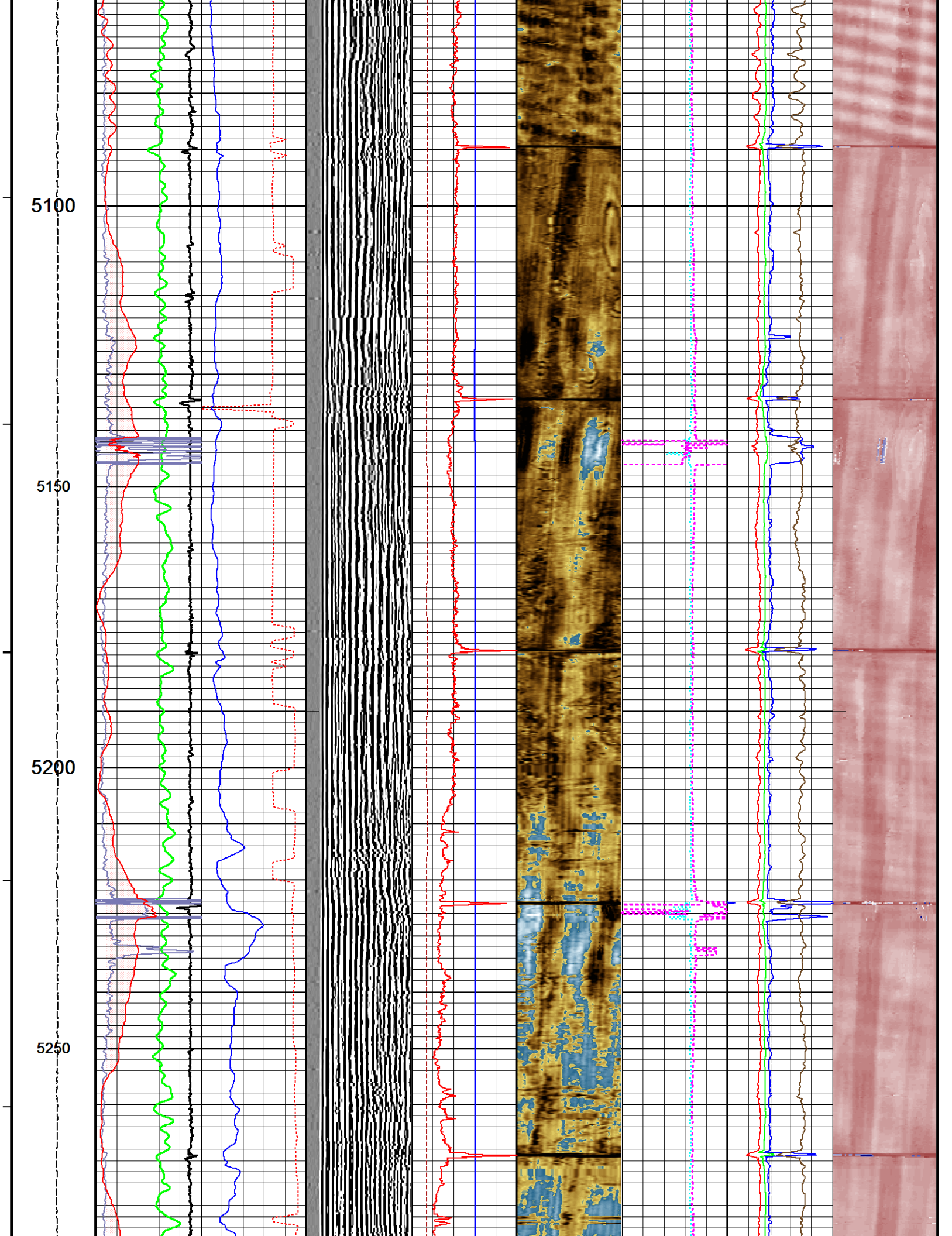
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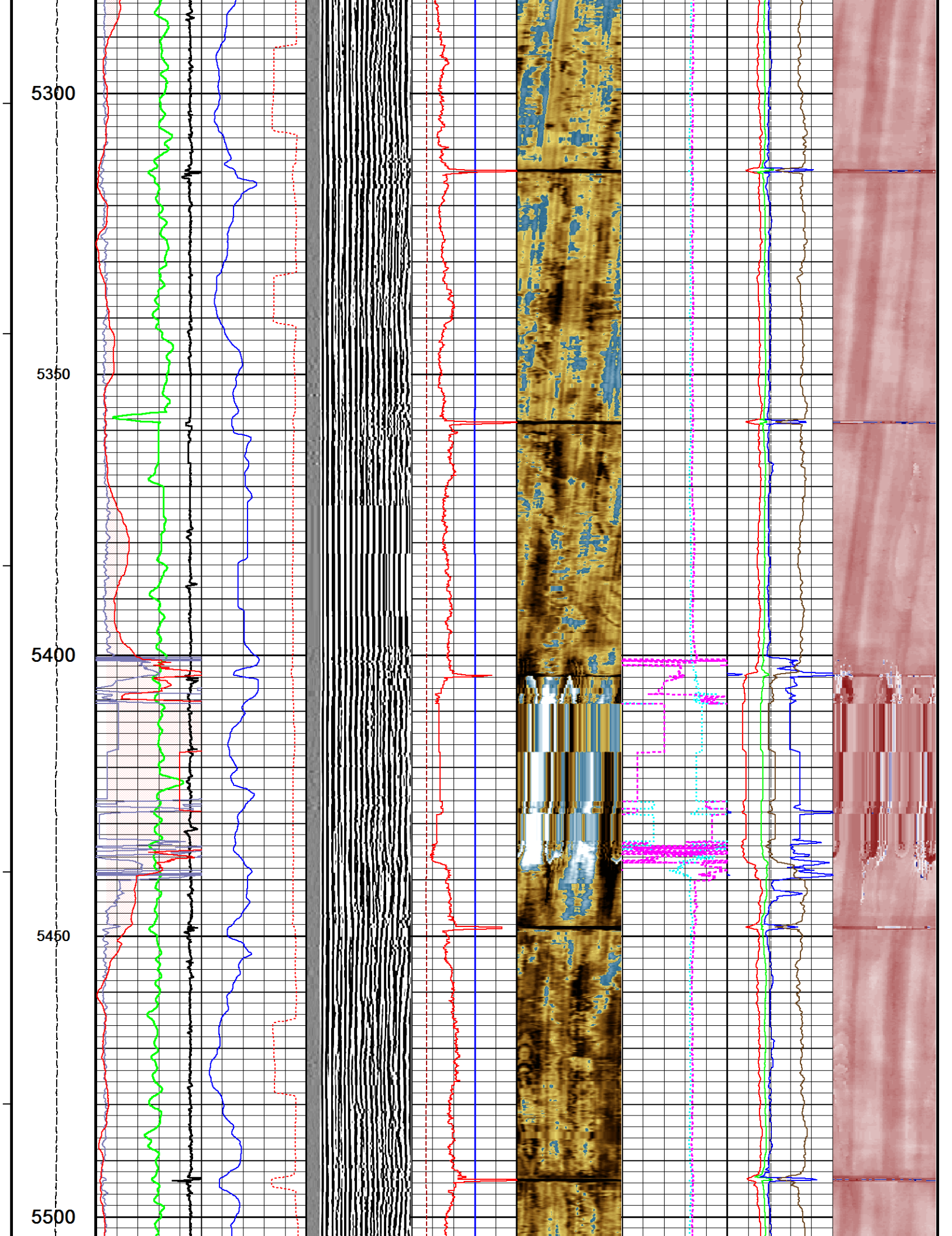
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5000

5050





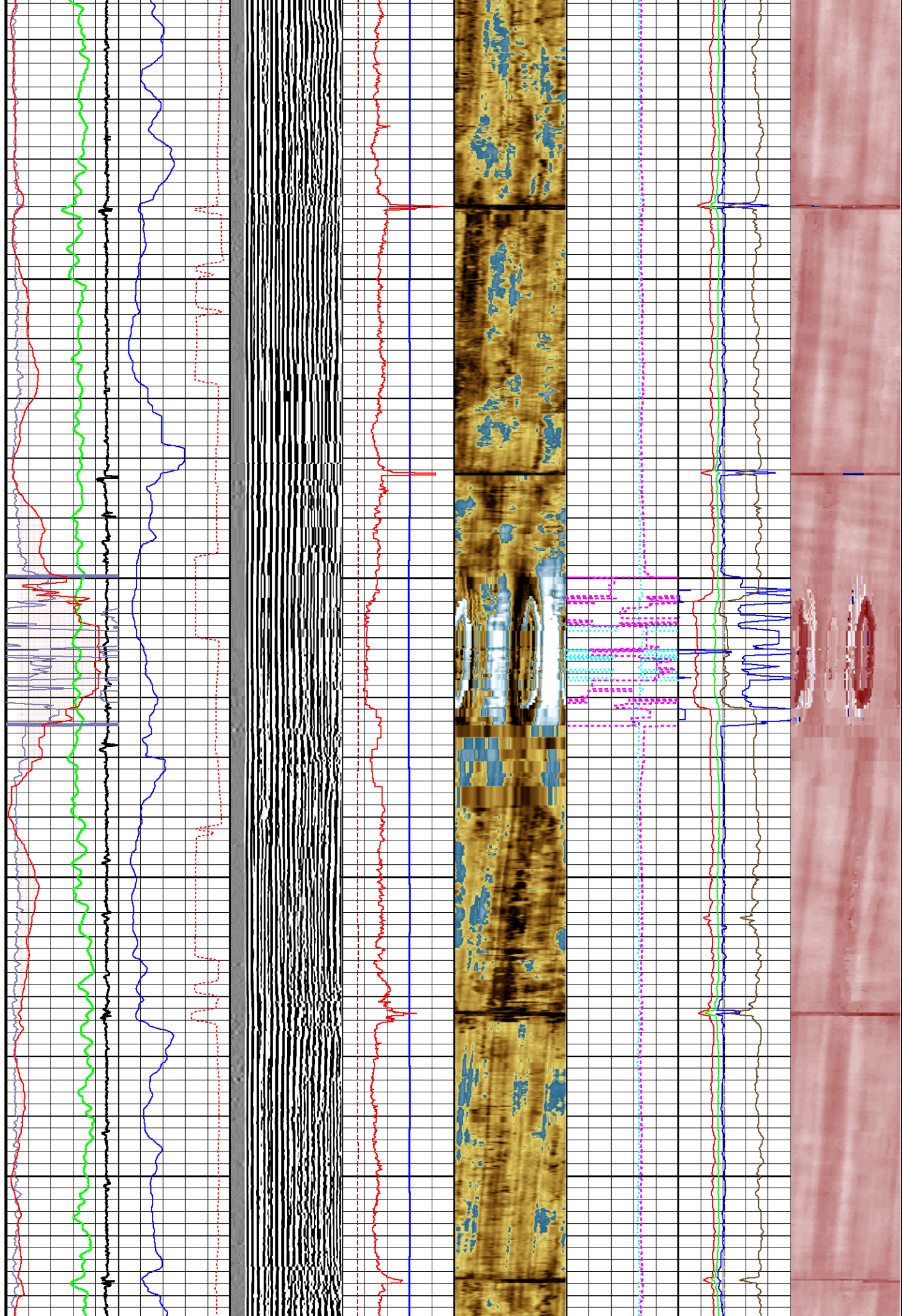


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5600

5650

5700

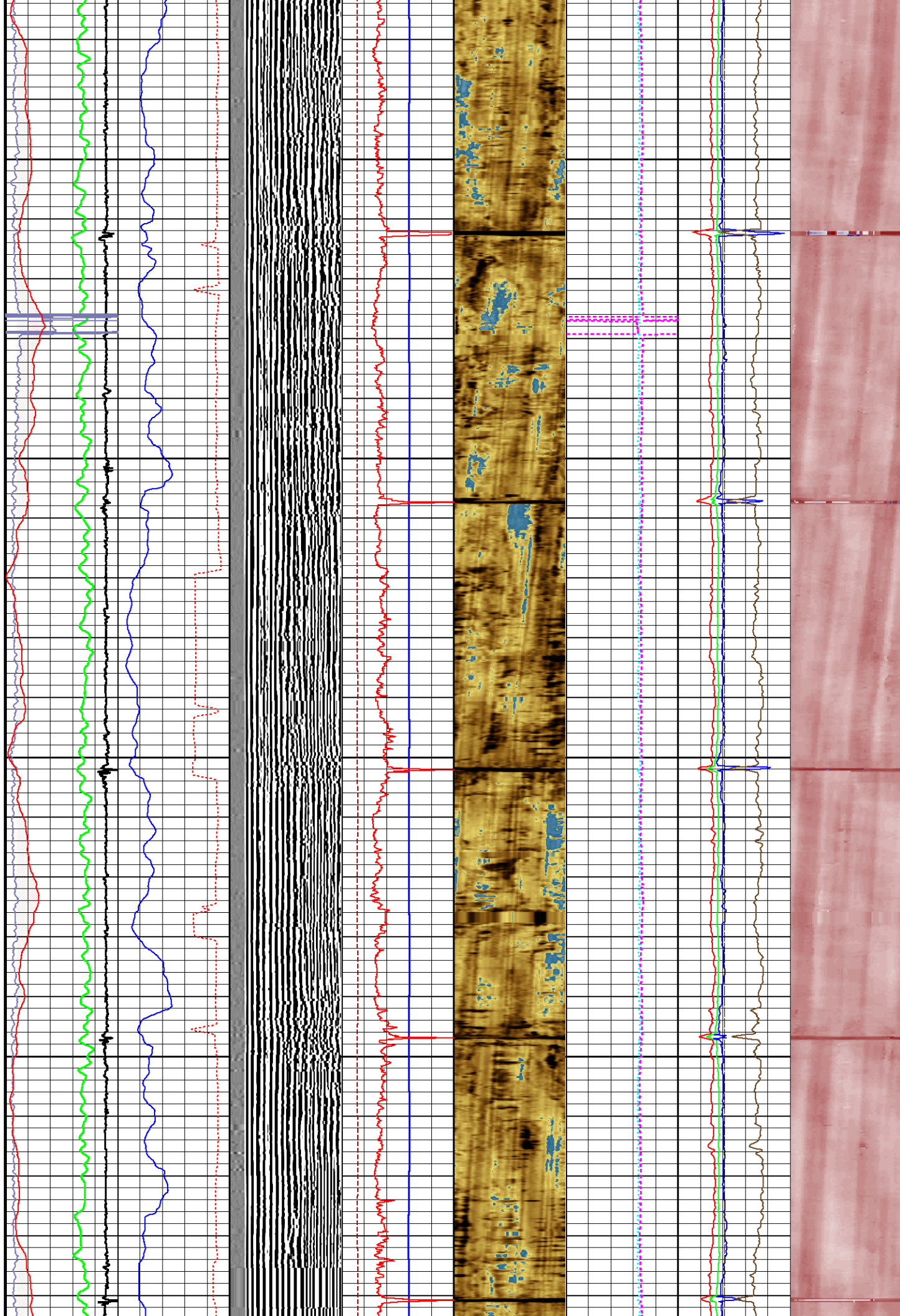


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5800

5850

5900



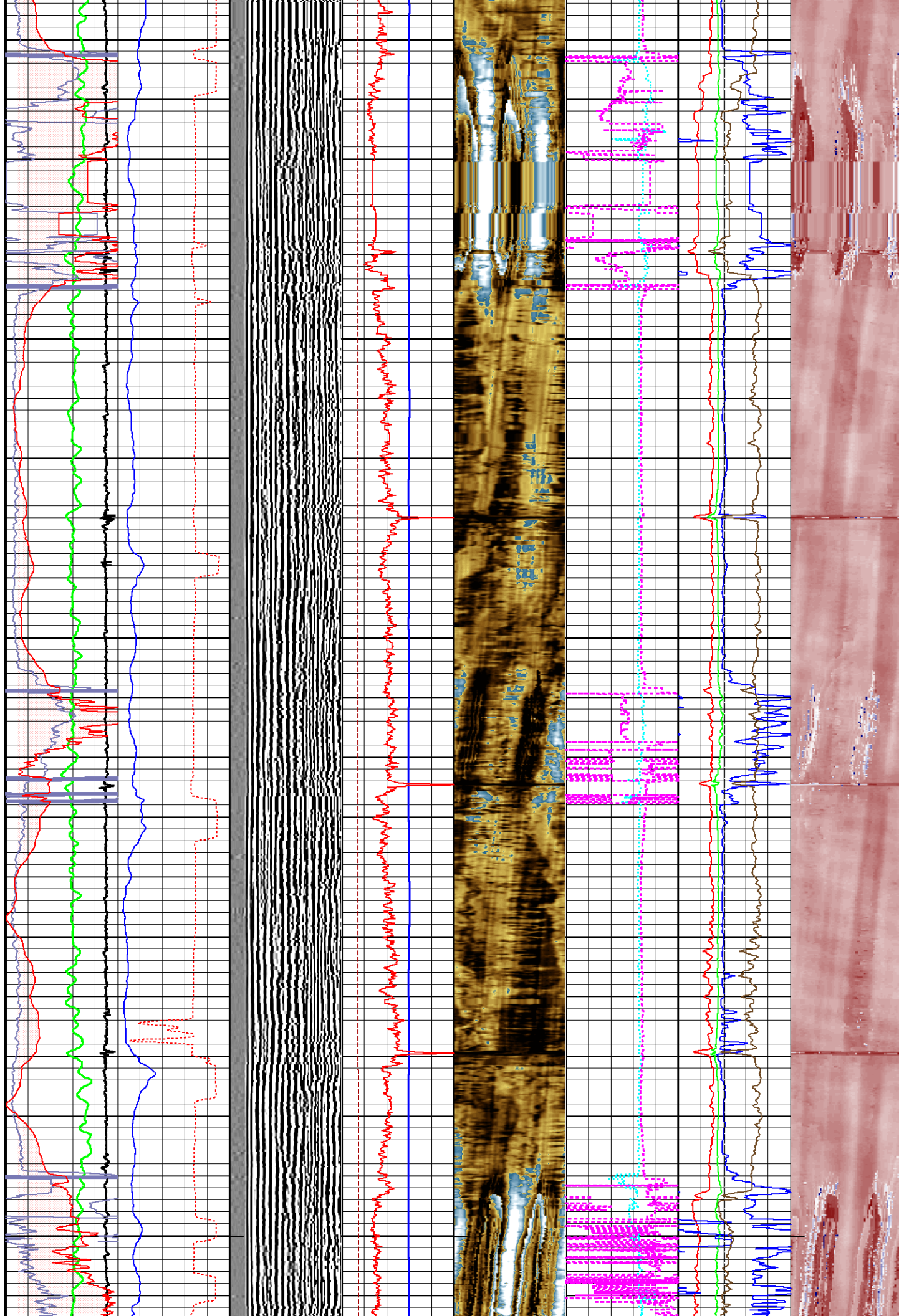
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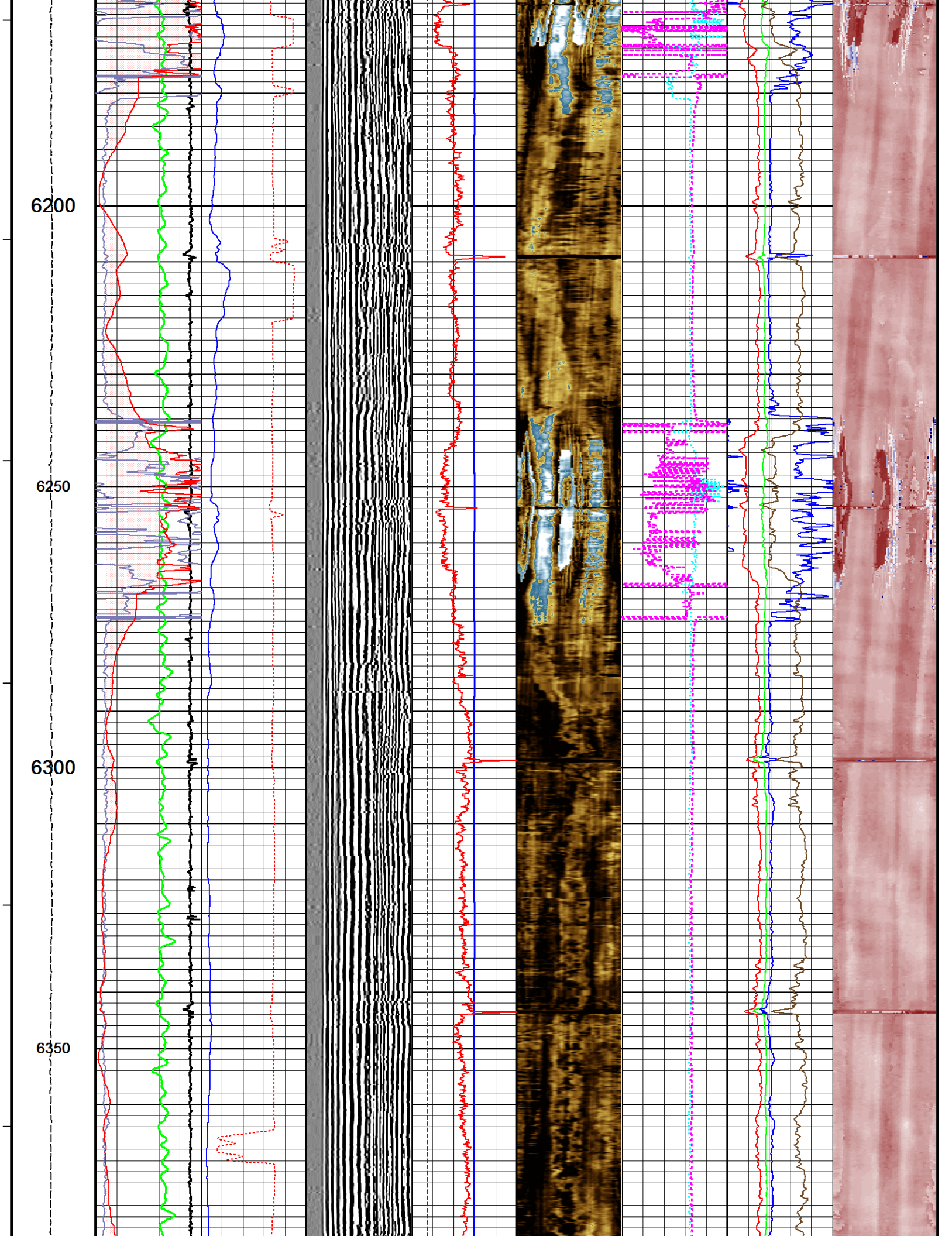
6000

6050

6100

6150





6400

6450

6500

6550

6560

Depth
in
Feet

CCL
MV

TM3
US

XY5
US

MUDT
US/F

IMMP
K/M2

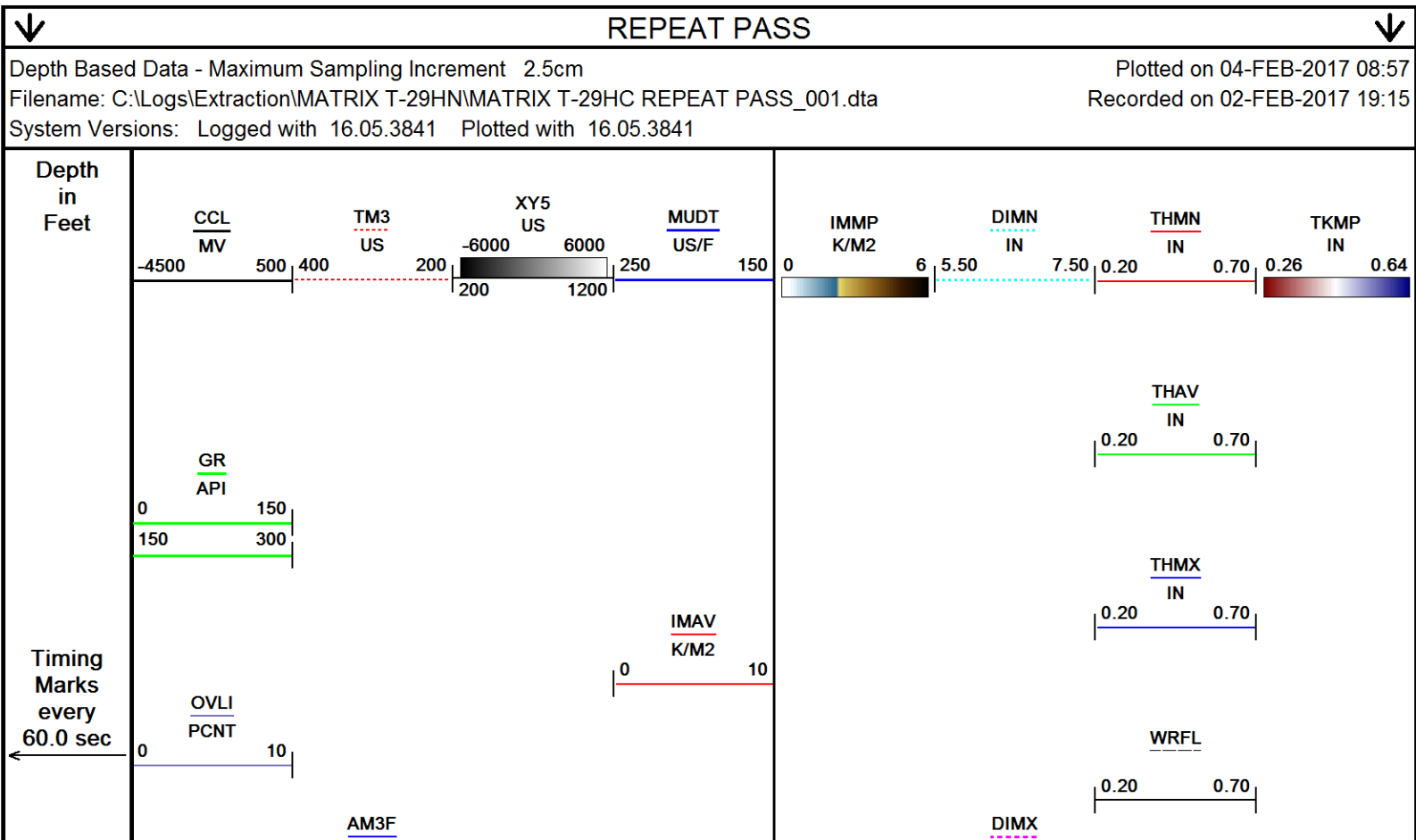
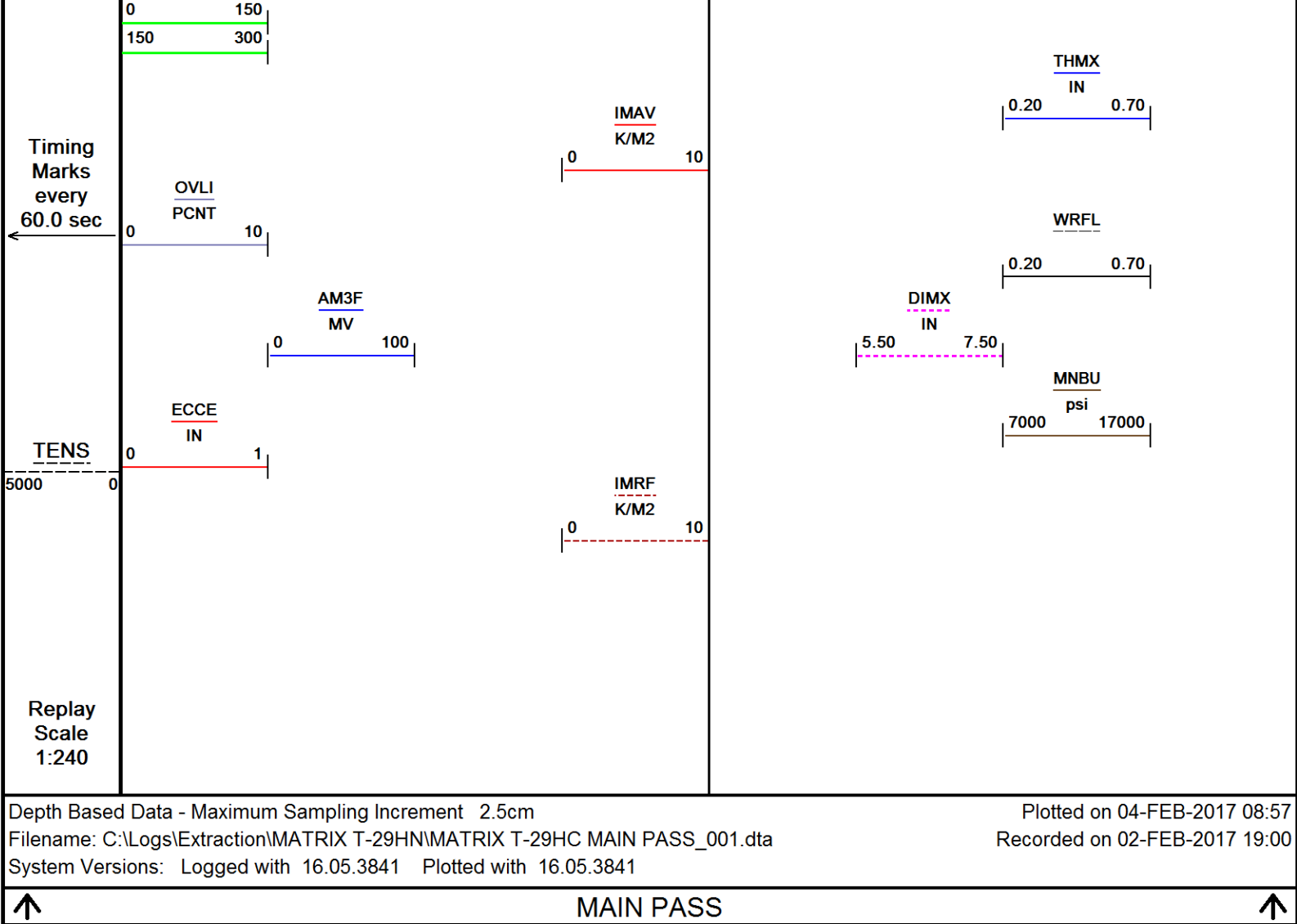
DIMN
IN

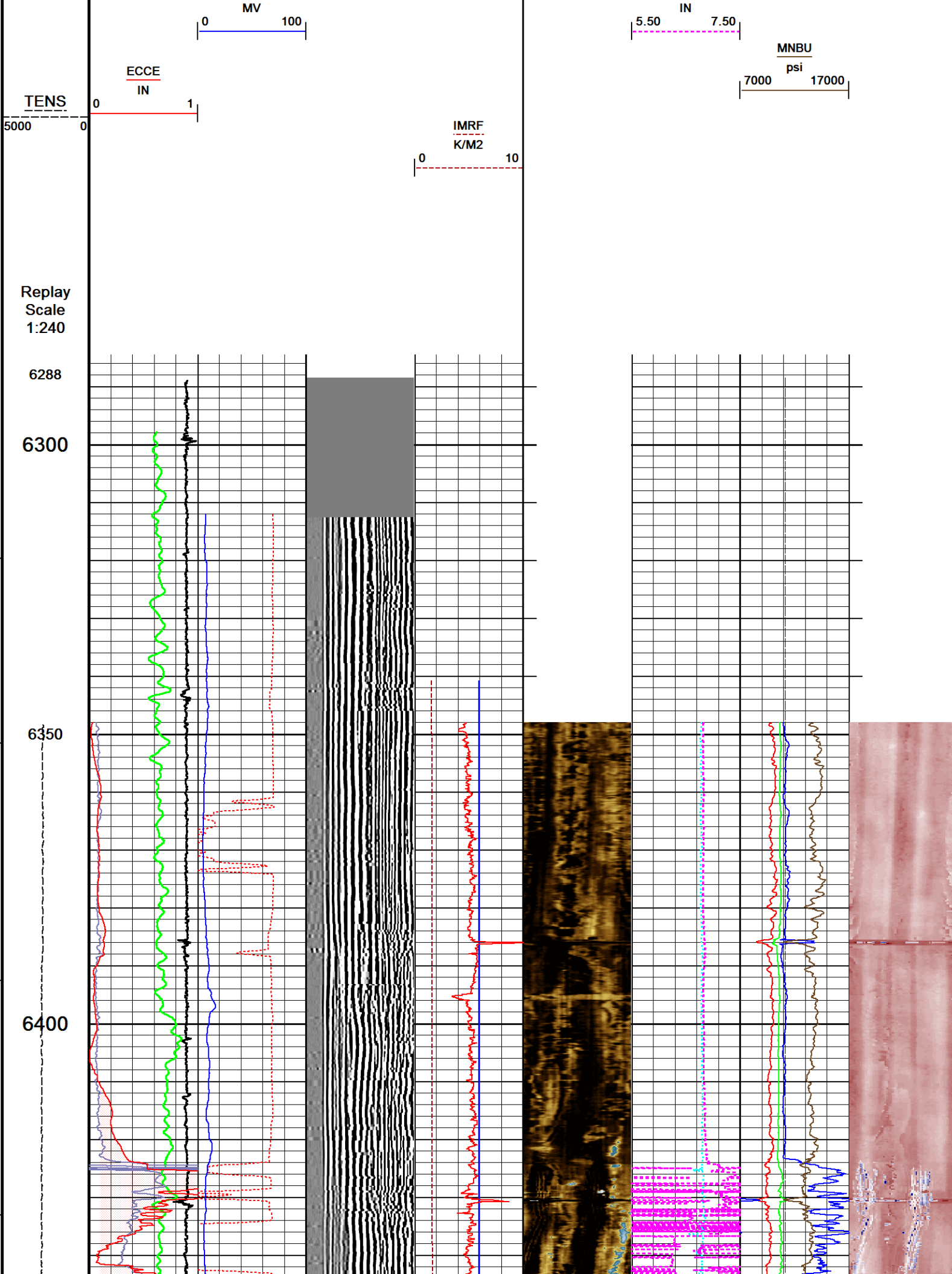
THMN
IN

TKMP
IN

GR
API

THAV
IN





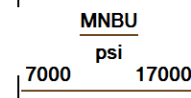
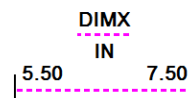
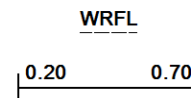
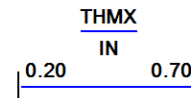
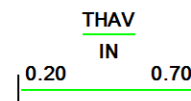
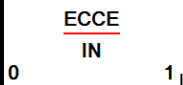
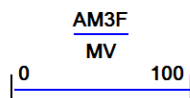
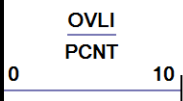
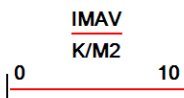
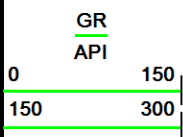
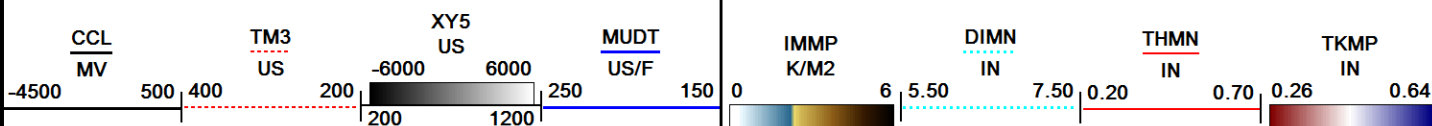
6450

6500

6550

6560

Depth
in
Feet



Timing
Marks
every
60.0 sec

TENS

5000

0

IMRF

K/M2

0

10

Replay

Scale

1:240

Depth Based Data - Maximum Sampling Increment 2.5cm

Plotted on 04-FEB-2017 08:57

Filename: C:\Logs\Extraction\MATRIX T-29HN\MATRIX T-29HC REPEAT PASS_001.dta

Recorded on 02-FEB-2017 19:15

System Versions: Logged with 16.05.3841 Plotted with 16.05.3841

↑

REPEAT PASS

↑

SHOP AND FIELD CALIBRATIONS

C:\Logs\Extraction\MATRIX T-29HN\MATRIX T-29HC MAIN PASS_001.dta

UGR Field Survey Cal

UGR-JD 223

Field calibration on 00-JAN-1988 00:00

Gamma Ray Field Survey Calibration

Tool Type: UGR-JD

Serial No: 223

Calibrator No:

Background	Calibrator	Standard	Units
102.2	492.8	140.0	CPS

Delta Counts Per Sec: 390.6

CPS/API = 2.790

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	2.40	0.00
	Free Pipe	72.00	644.54
AMP 5 FT	100 % Bond	1.60	0.00
	Free Pipe	48.00	408.30

CBT Constants

CBT-AA 101

Last Edited on 02-FEB-2017 19:00

Min Ampl 100% Bond	2.00 MV
Max Ampl 0% Bond	72.00 MV
Cement Cmpr Strength	580 PSI
Casing Size	5.50 IN
Casing Weight	20.0 LB/F
Casing Velocity	57.00 US/F

Casing Velocity	37.00 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 31-JAN-2017 11:09

Ultrasonic Radial Scanner Before Calibration

Tool Type USH-AB Serial No 136

	Measured	Minimum	Maximum	
Free Pipe	-999.250	0.000	0.000	K/M2
Mud Impedance	1.500	0.000	0.000	K/M2

URS Constants USH-AB 136

Last Edited on 02-FEB-2017 19:00

*** 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	4.30
ZMud Cal Area Ratio	3.39

** 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	12000.00	5.50	20.00	3.53	3.73	0.36	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 K/M2
Z_mud Outside	1.75 K/M2
Gas Impedance Cutoff	0.38 K/M2
Fluid Impedance Cutoff	2.30 K/M2
Contam Impedance Cutoff	2.70 K/M2

Relative Bearing Rotate	OFF
RB Offset Angle	0.00 DEG

Cement Density	14.00 LB/G
----------------	------------

DOWNHOLE EQUIPMENT

C:\Logs\Extraction\MATRIX T-29HN\MATRIX T-29HC MAIN 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 121 LG: 1.05 ft WT: 15.4 lb OD: 3.386 in

Swivel Head 55 pin

SWH-CB 137 LG: 2.72 ft WT: 77.2 lb OD: 3.346 in

Casing Collar Locator, 55 pin

CCL-WA 197 LG: 3.01 ft WT: 19.8 lb OD: 2.756 in

Communication Cartridge 55pin 3-3/8in

WCC-DA 123 LG: 4.60 ft WT: 63.9 lb OD: 3.386 in

Gamma Ray

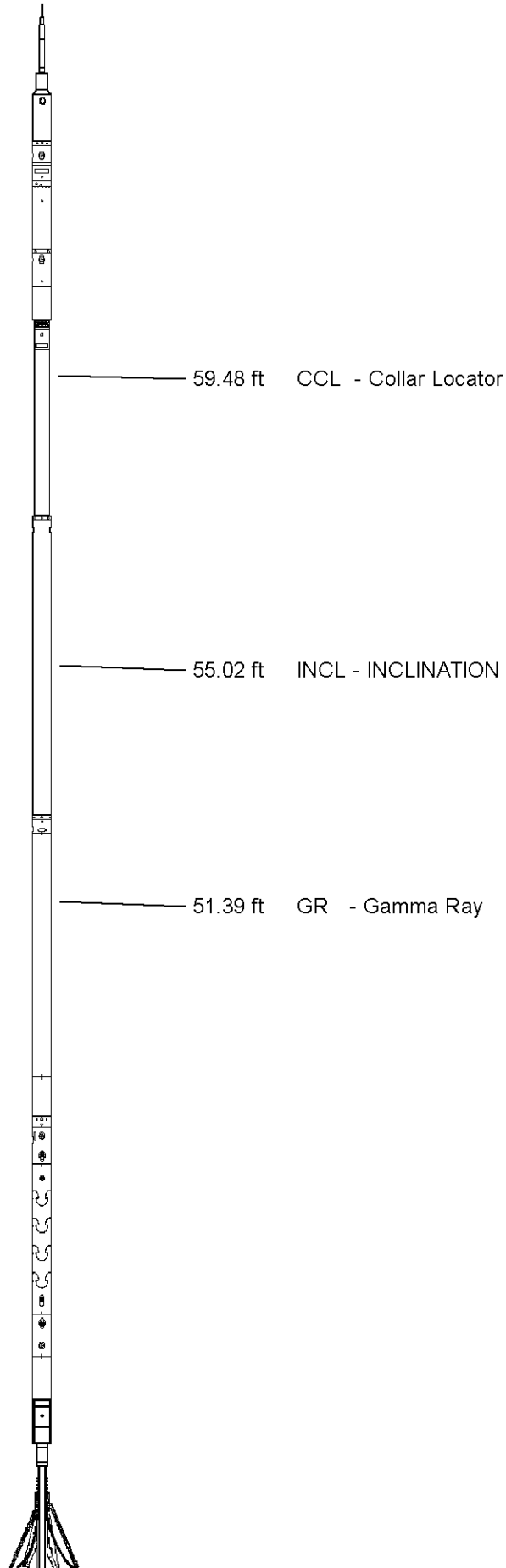
UGR-JD 223 LG: 4.60 ft WT: 81.6 lb OD: 3.386 in

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 221 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

36.70 ft AM3F - Amplitude 3FT
36.70 ft TM3 - Travel Time 3FT

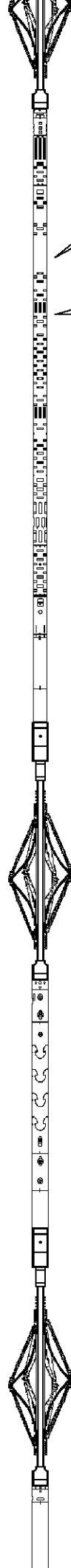
35.70 ft TM5 - Travel Time 5FT
35.70 ft XY5 - XY Signature 5FT

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 131 LG: 4.35 ft WT: 90.4 lb OD: 3.386 in

55 pin Roller Centralizer
CEN-XA 185 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



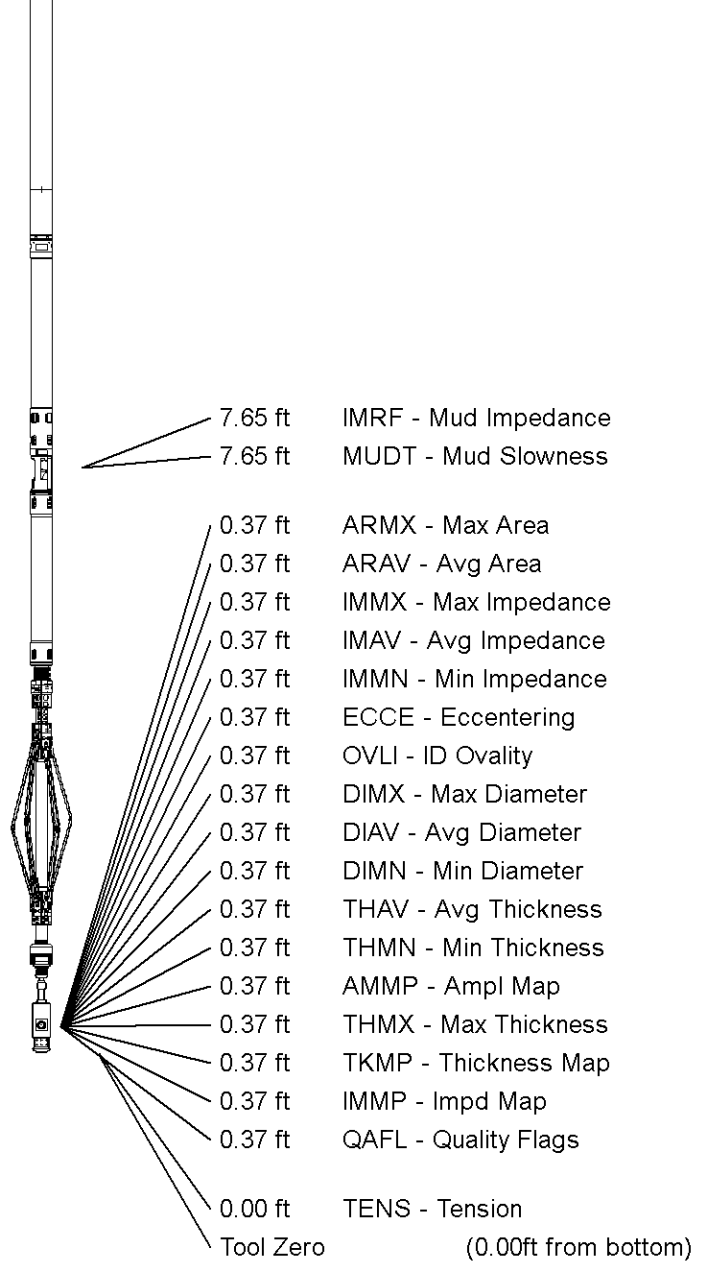
URS Sonde Section

USS-AB 190 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: 65.13 ft Weight: 1122.2 lb



All measurements relative to tool zero.

COMPANY EXTRACTION OIL & GAS
WELL MATRIX T-29HN
FIELD GREELEY
PROVINCE/COUNTY WELD
COUNTRY/STATE USA / COLORADO

Elevation Kelly Bushing	4916	feet	Bottom Log Interval	6550.00	feet
Elevation Drill Floor	4916	feet	Depth Driller	12000.00	feet
Elevation Ground Level	4888	feet	Depth Logger	6550.00	feet



Weatherford®

SECUREVIEW
ULTRAVIEW/BONDVIEW
CEMENT ANALYSIS

