

Company: Noble Energy Inc

Well: Wells Ranch AE30-64-1BHNA
Field: Wattenberg
County: Weld State: CO

| | | | |
|---|----------------|----------------|---|
| County: Weld | | | |
| Field: Wattenberg | | | |
| Location: SWSW Sec. 29 T6N R62W | | | |
| Well: Wells Ranch AE30-64-1BHNA | | | |
| Company: Noble Energy Inc | | | |
| USI-LITE | | | |
| | | | |
| Permanent Datum: Log Measured From: Drilling Measured From: | | GL KB KB | Elev: K.B. 4777.0 F G.L. 4753.0 F D.F. 4776.0 F |
| API Serial No. 05-123-38688-0000 | | Section 29 | Township 6N |
| Range 62W | | | |
| Logging Date | 11-Jul-2014 | | |
| Run Number | Run 1 | | |
| Depth Driller | 11901.0 F | | |
| Schlumberger Depth | 11901.0 F | | |
| Bottom Log Interval | 6668.0 F | | |
| Top Log Interval | -999.2 F | | |
| Casing Fluid Level | 0.0 F | | |
| Salinity | | | |
| Density | 8.40 LB/G | | |
| Fluid Level | 0.0 F | | |
| BIT/CASING/TUBING STRING | | | |
| Bit Size | 8.750 IN | | |
| From | -999.2 F | | |
| To | 11901.0 F | | |
| Casing Size | 7.00 IN | | |
| Weight | 26.00 LB/F | | |
| Grade | P110 | | |
| From | 0.0 F | | |
| To | 6608.0 F | | |
| Max Recorded Temp | 225.0 | | |
| Logger on bottom (date) | 11-Jul-2014 | | |
| Location | Fort Morgan CO | | |
| Recorded By | Nolan Welsh | | |
| Witnessed By | Bill Mansfield | | |

DEPTH SUMMARY LISTING

DEPTH SYSTEM EQUIPMENT

| Depth Measuring Device | Tension Device | Logging Cable |
|---|--|---------------------------------------|
| Type: Serial Number: Calibration Date: Calibration Cable Type: Wheel Correction 1: Wheel Correction 2: | Type: Serial Number: 1109 Calibration Date: Calibrator Serial Number: Number Of Calibration Points: Calibration RMS: Calibration Peak Error: | Serial Number: Length: 12000.00000 |

DISCLAIMER

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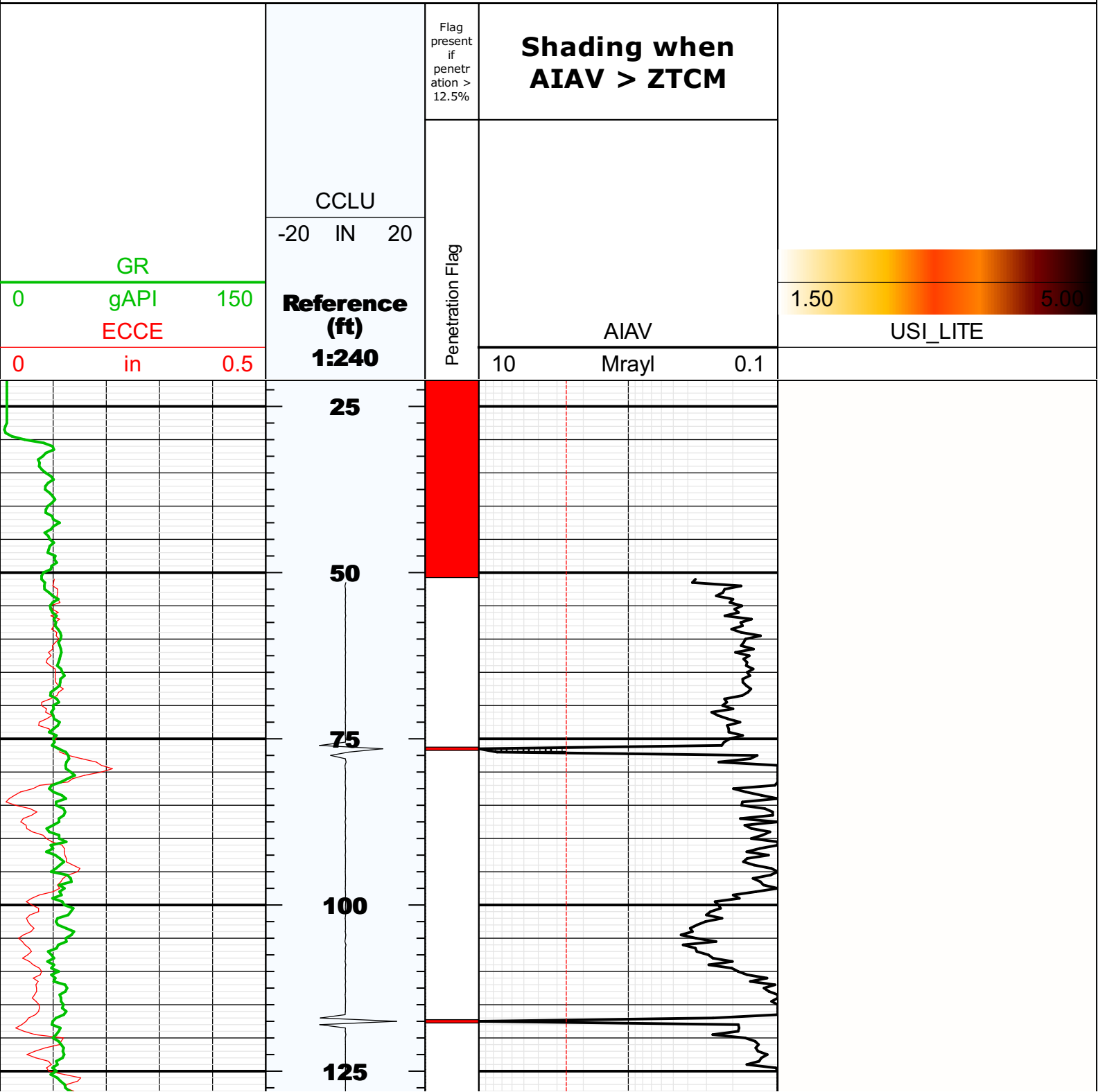
Toolstring run as per tool sketch
12.5 ppg lead cement
13.8 ppg tail cement
0 PSI Repeat Pass
2500 PSI Main Pass

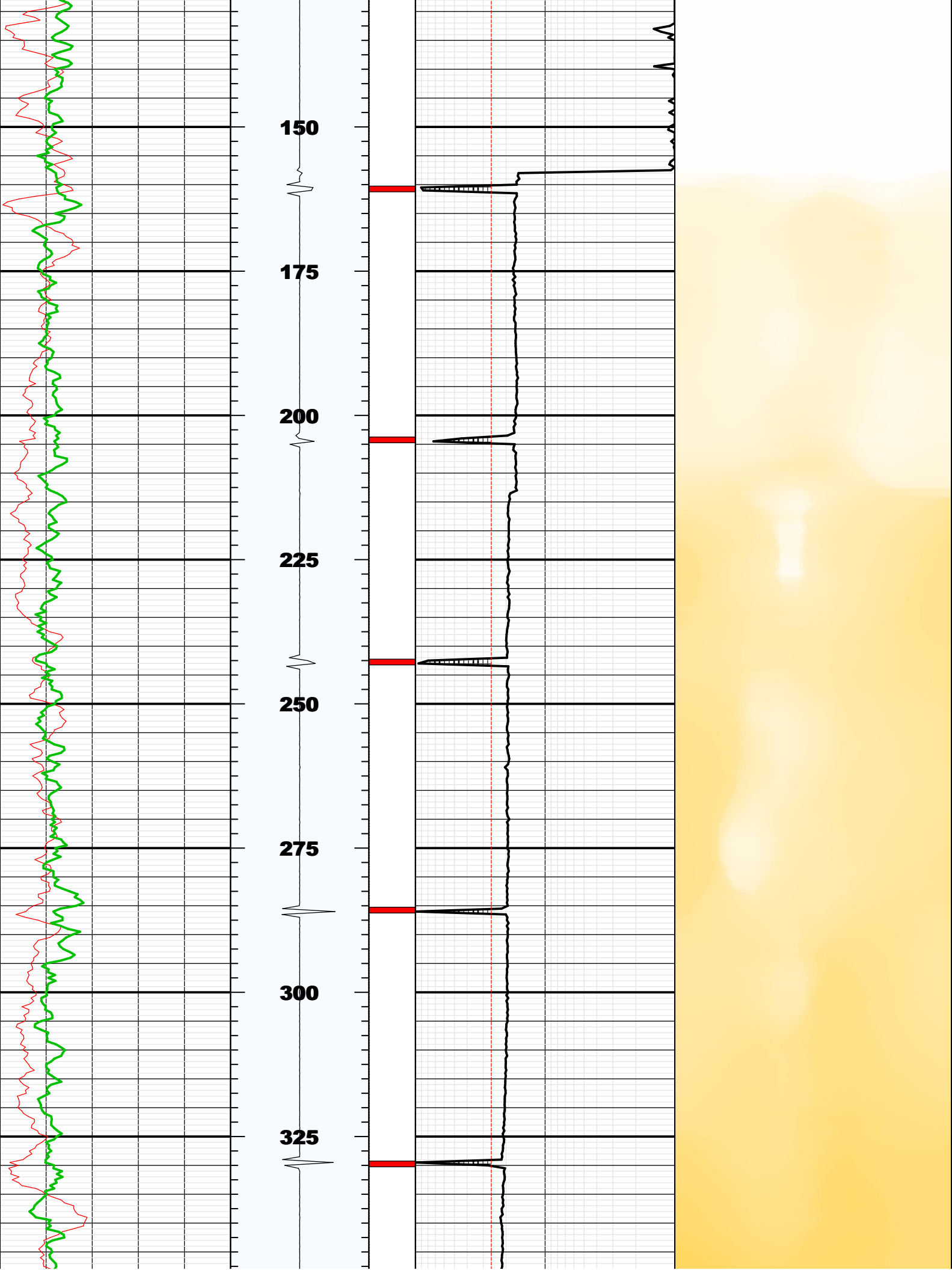
Bottom Log Temperature 225 degF
Top of Cement 415ft.

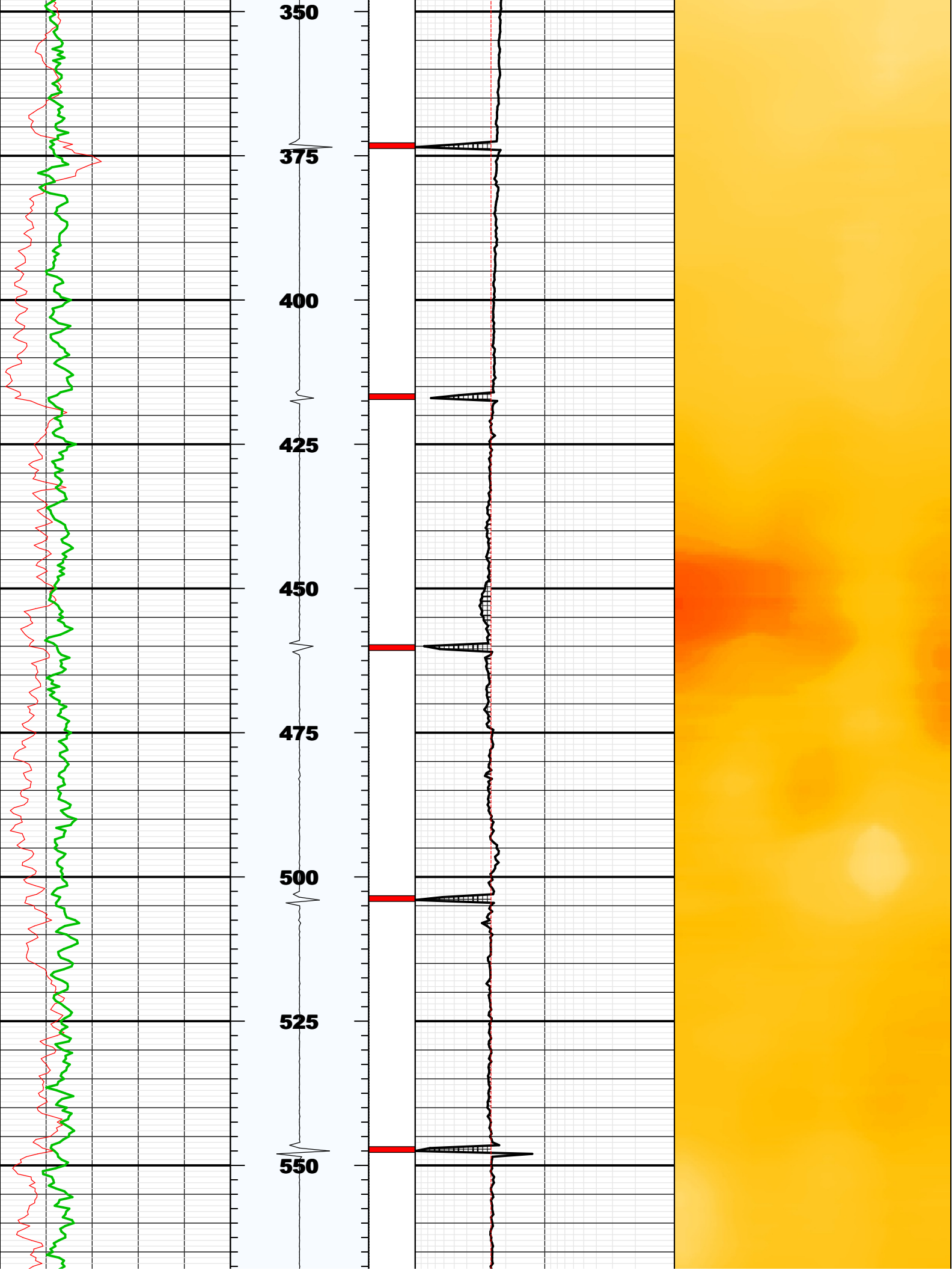
Crew Jay Musgrave Troy Ocanas Tim Hoffman

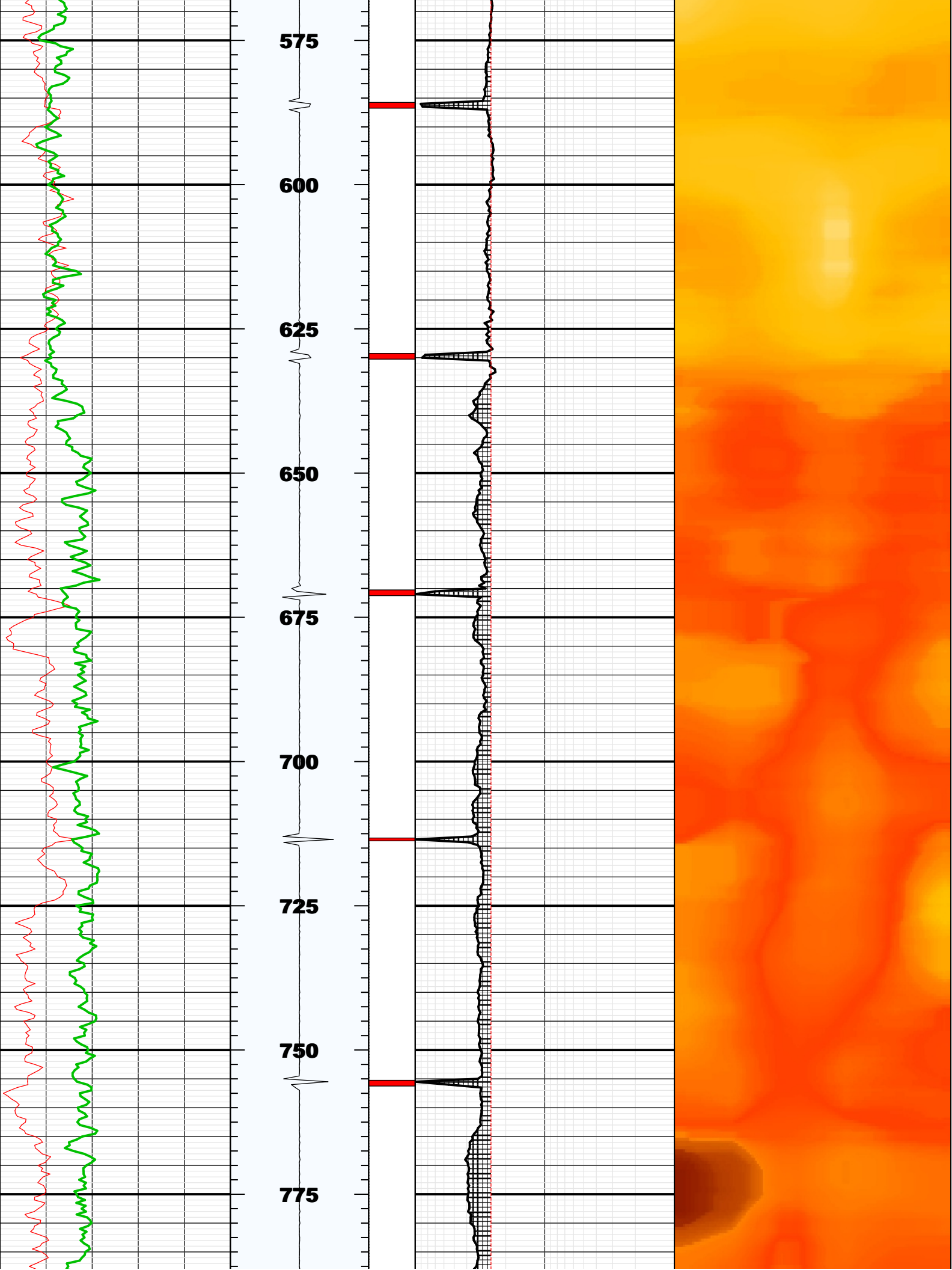
Main Pass

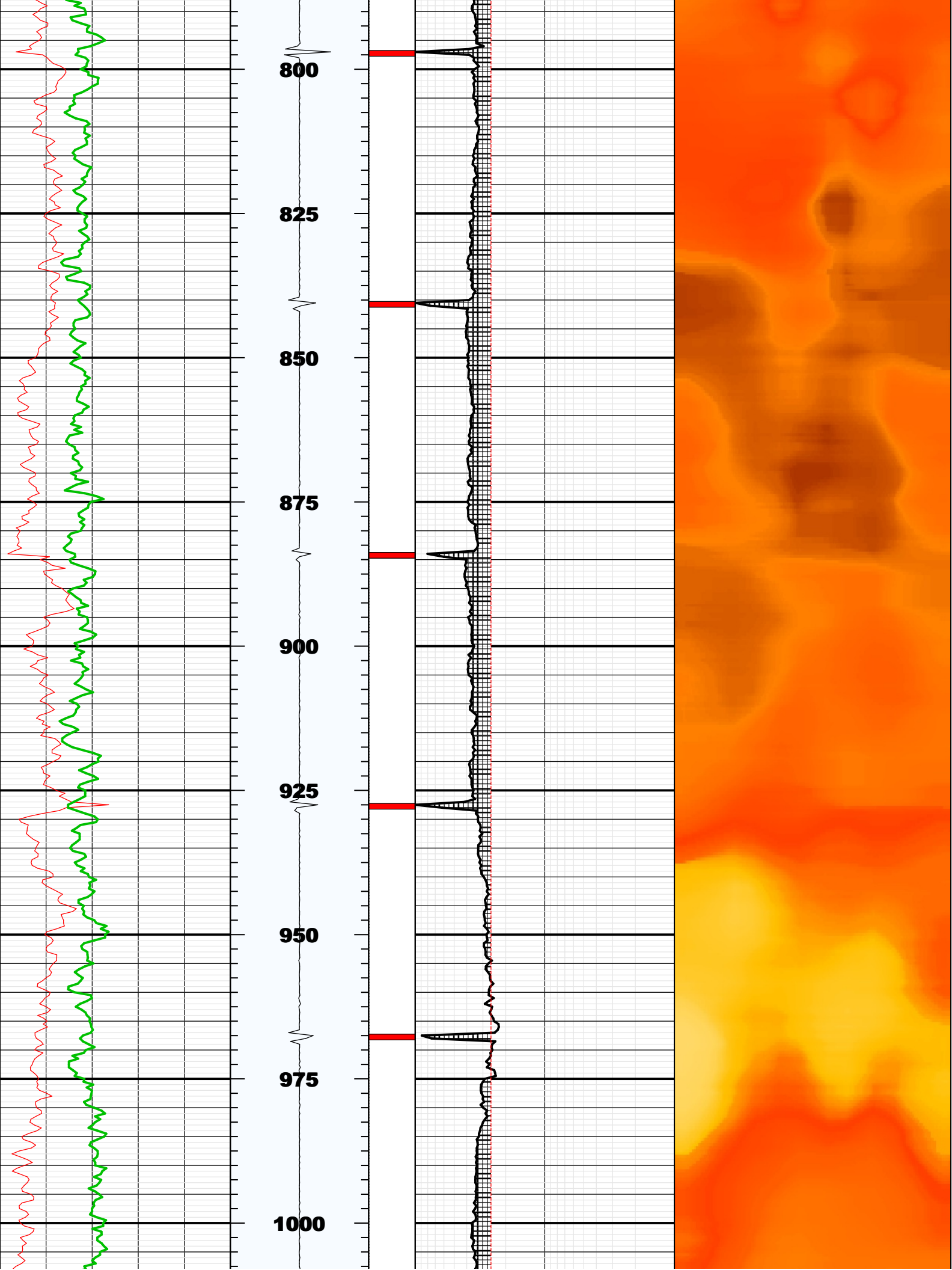
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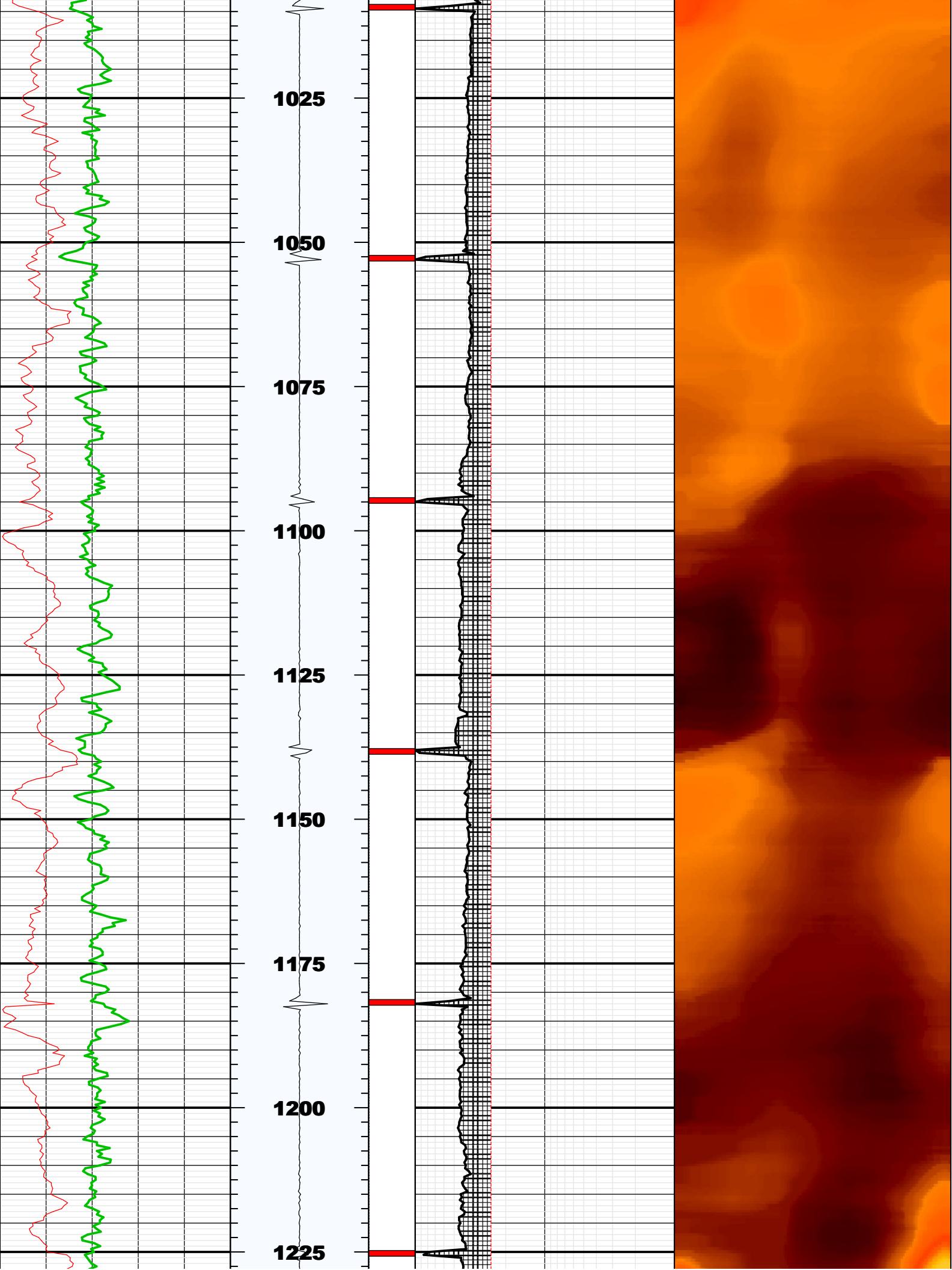


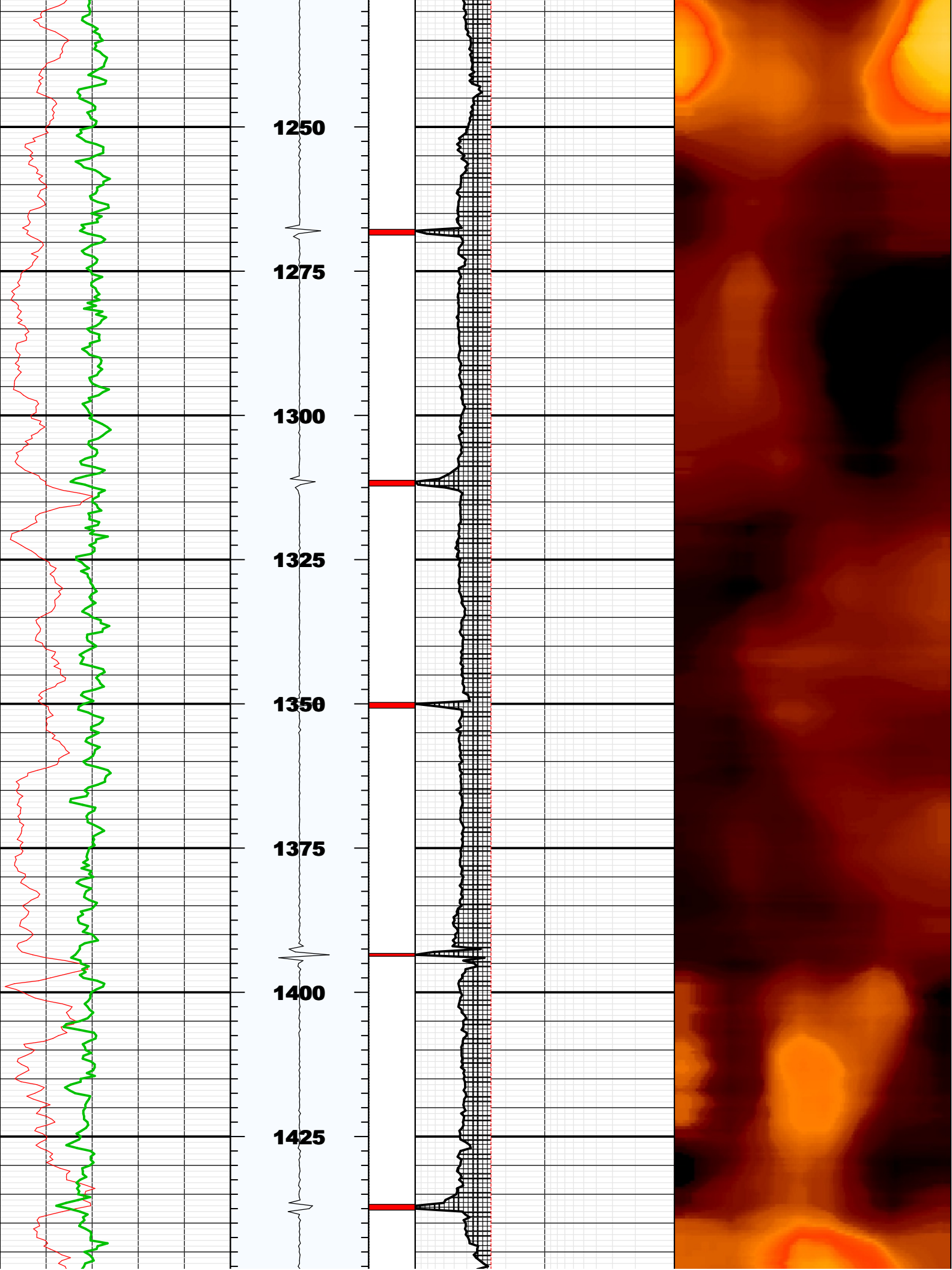


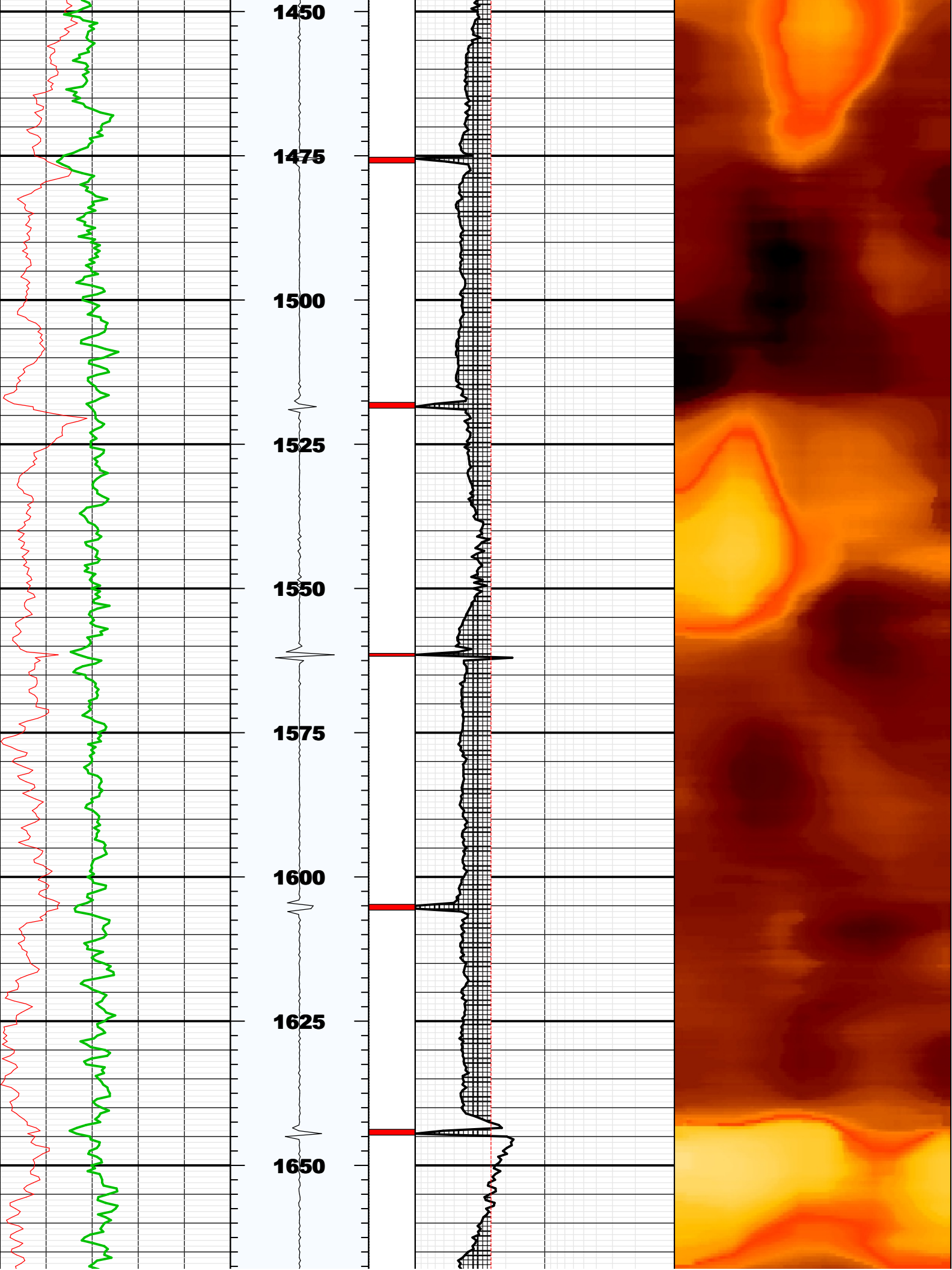


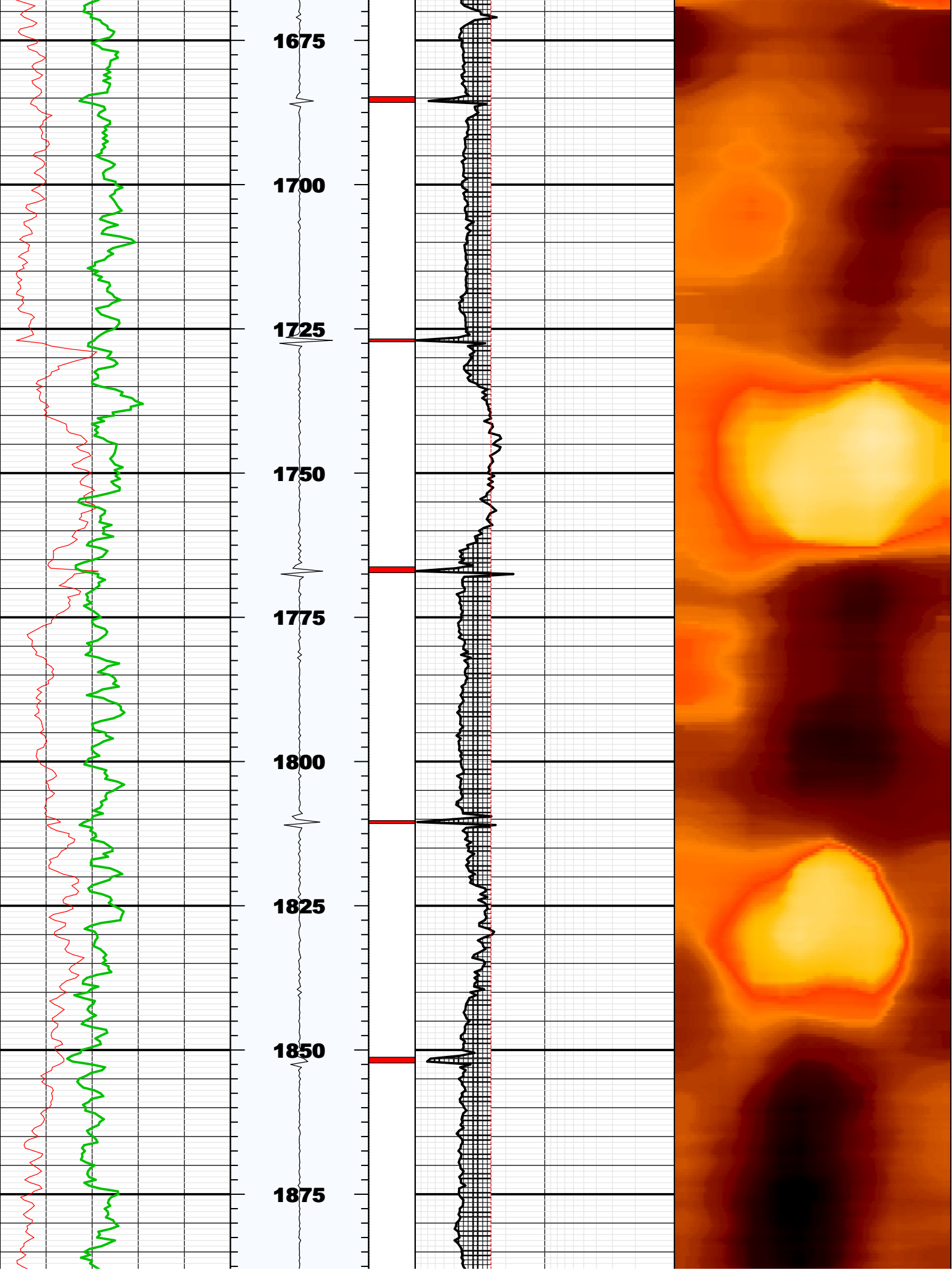


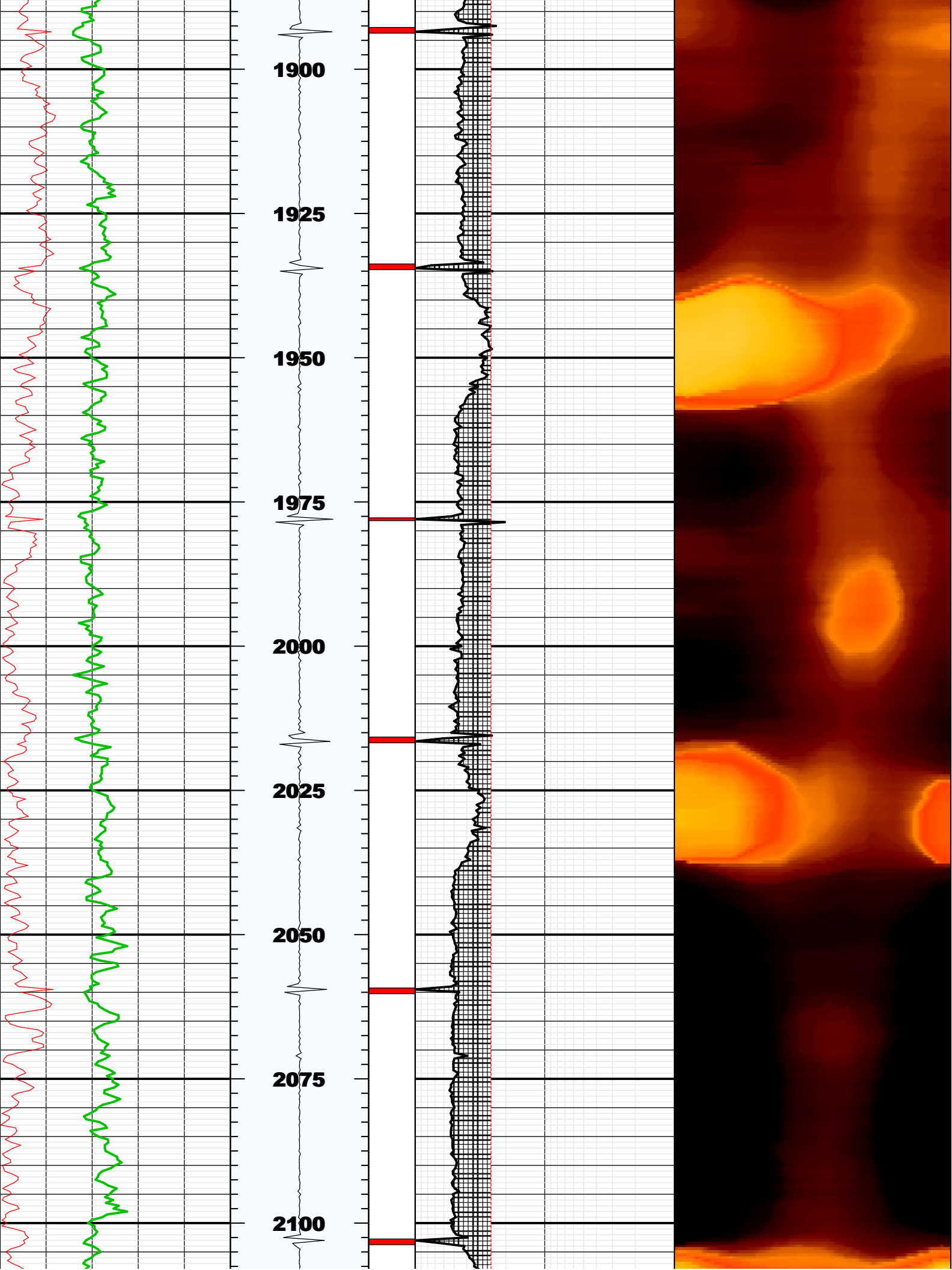


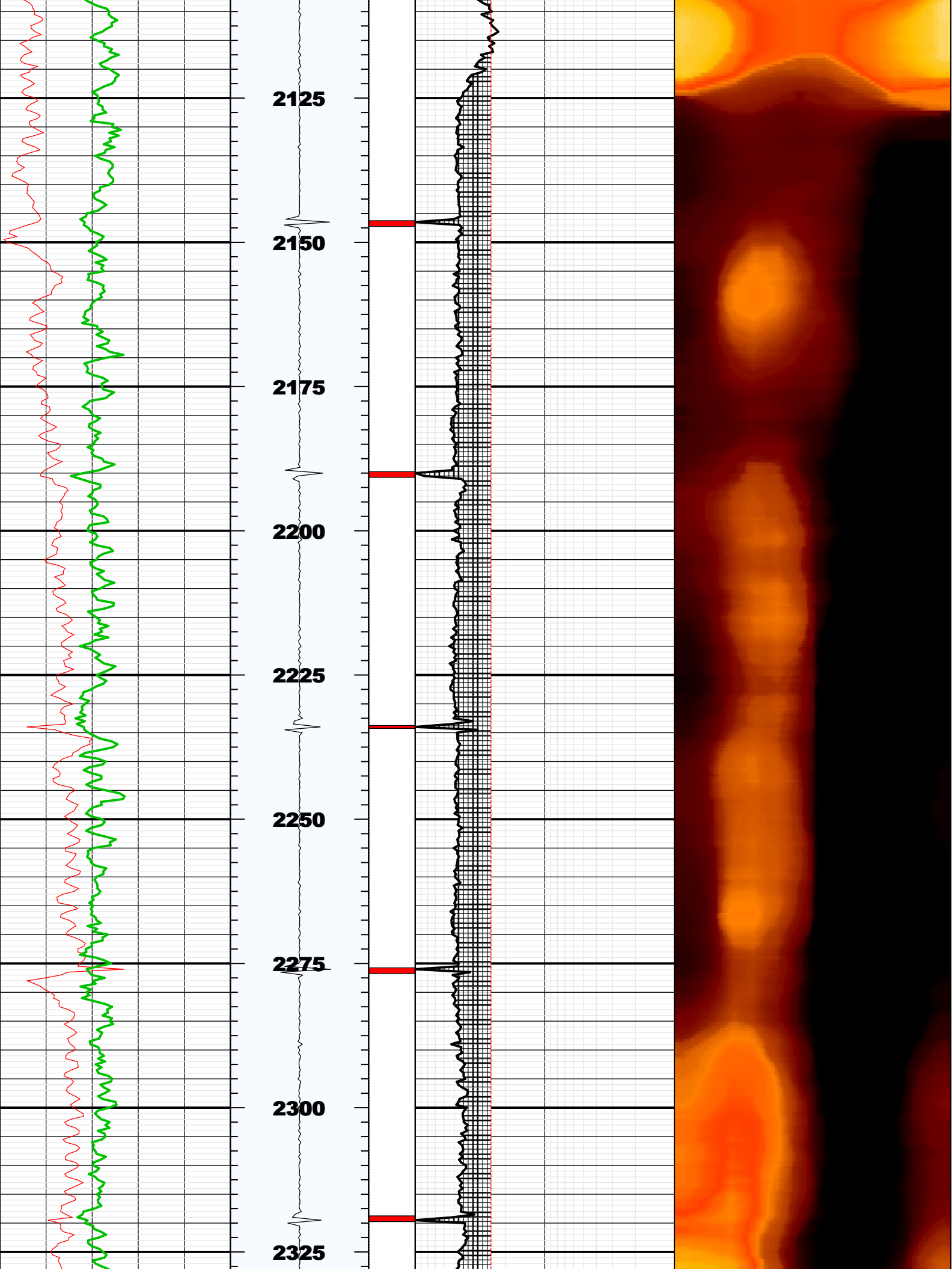


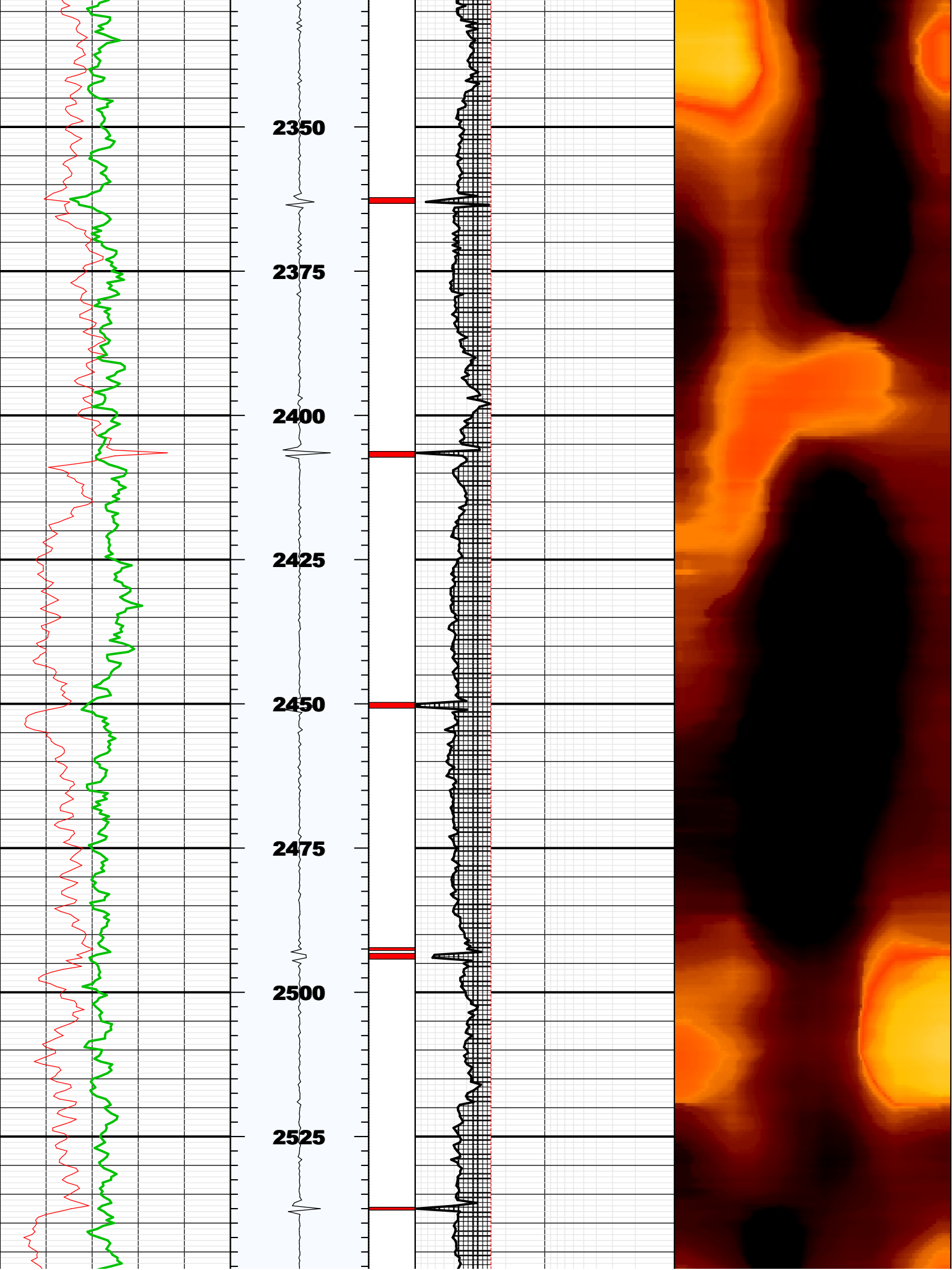


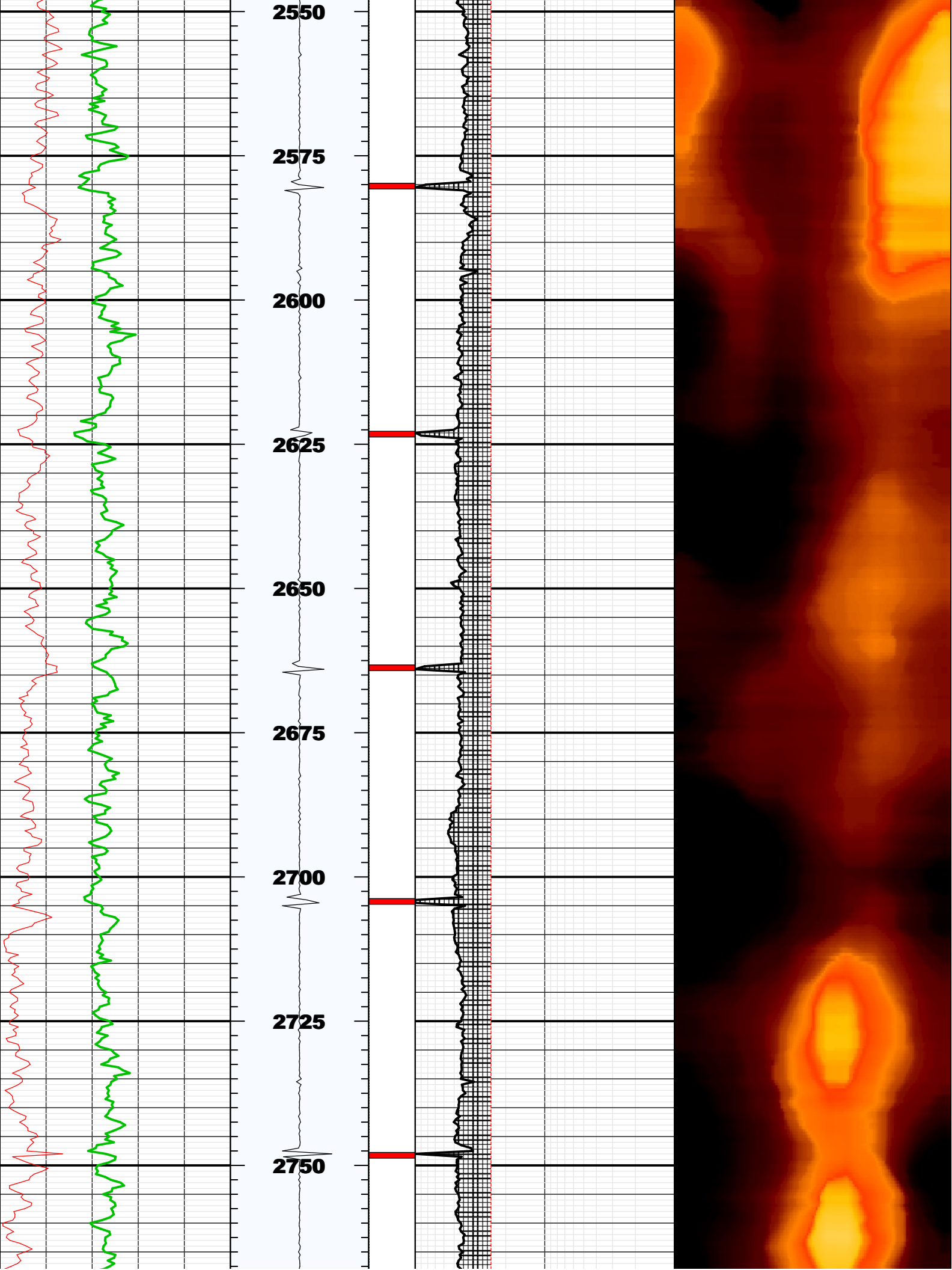


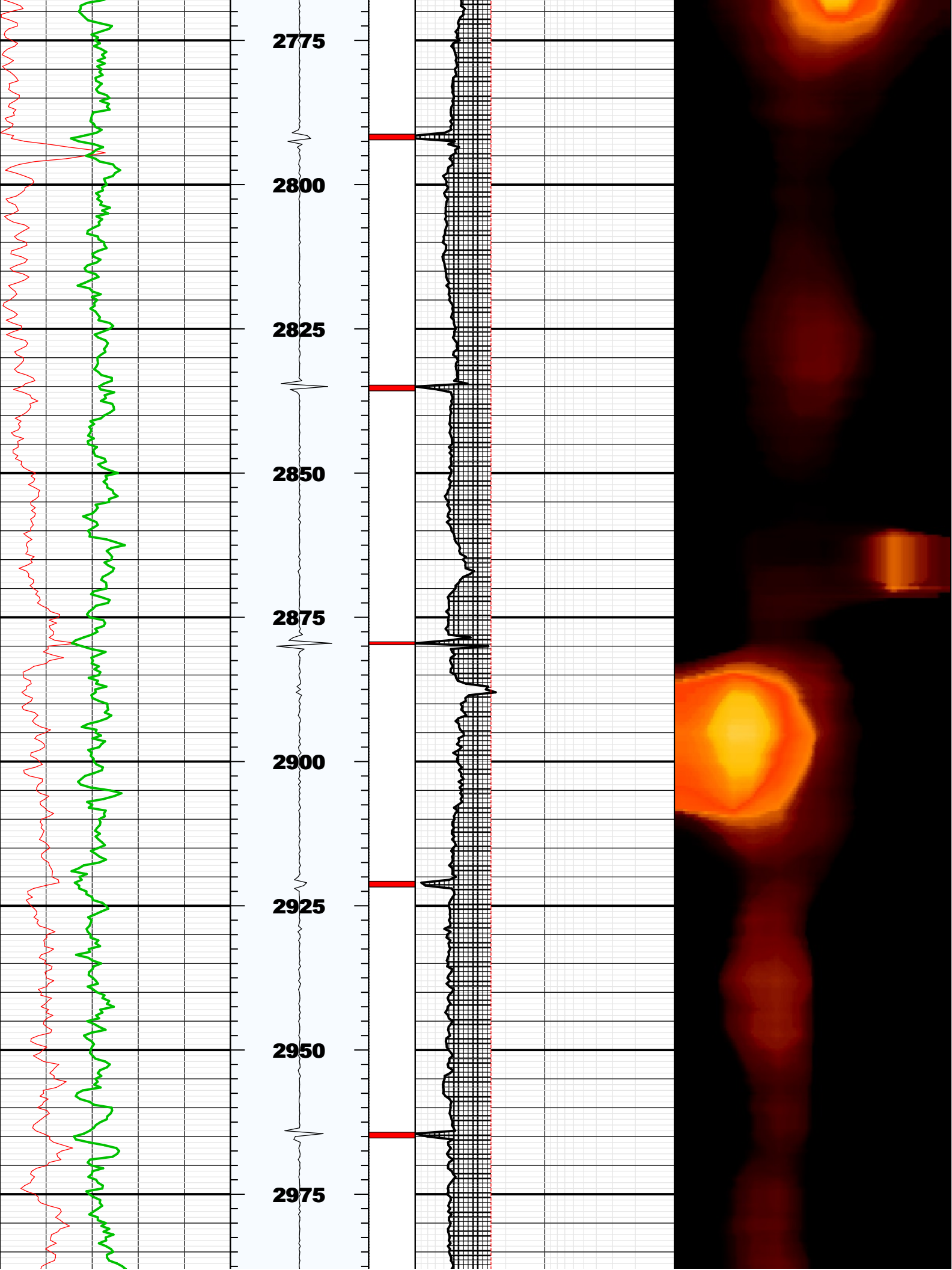


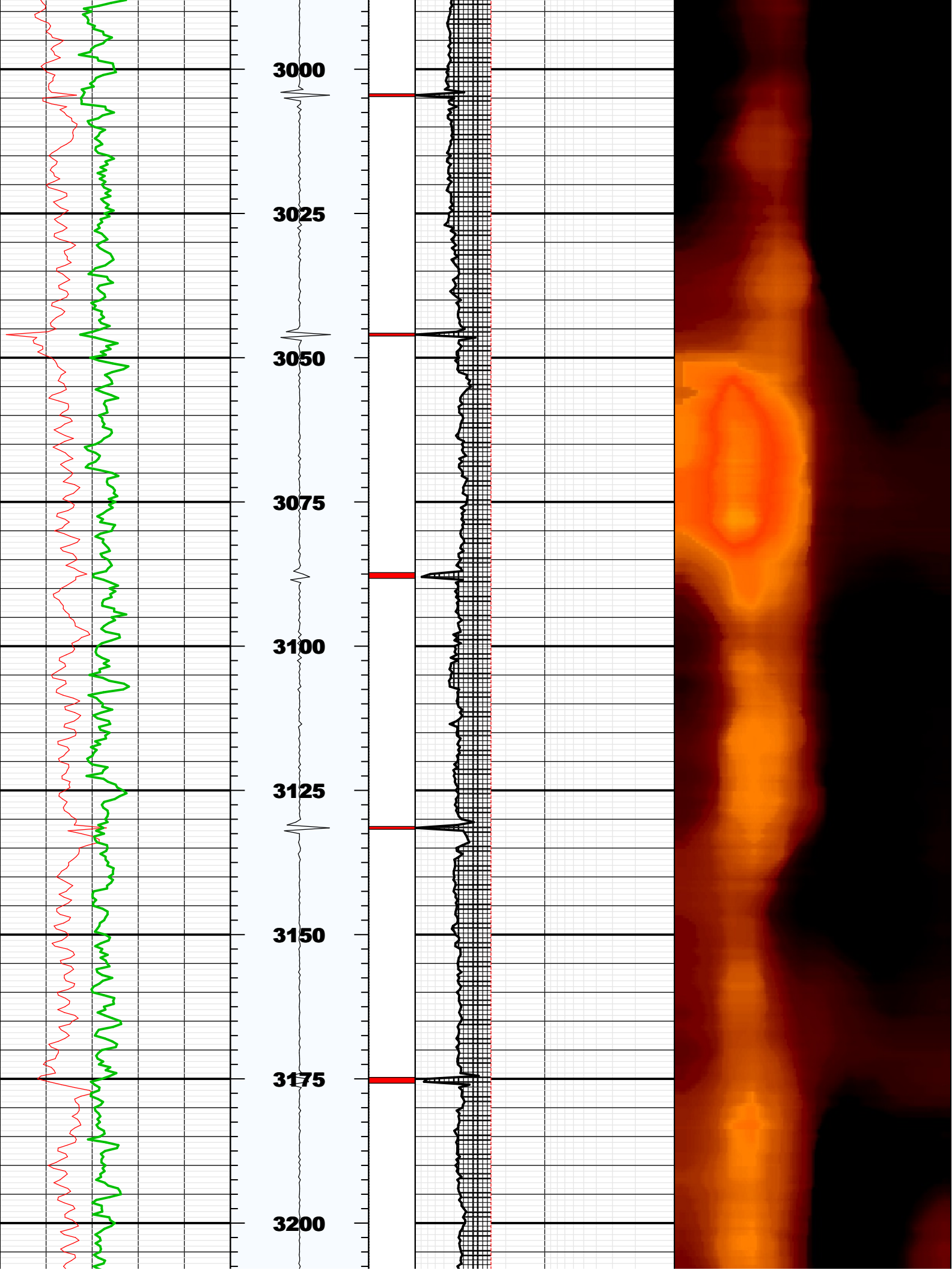


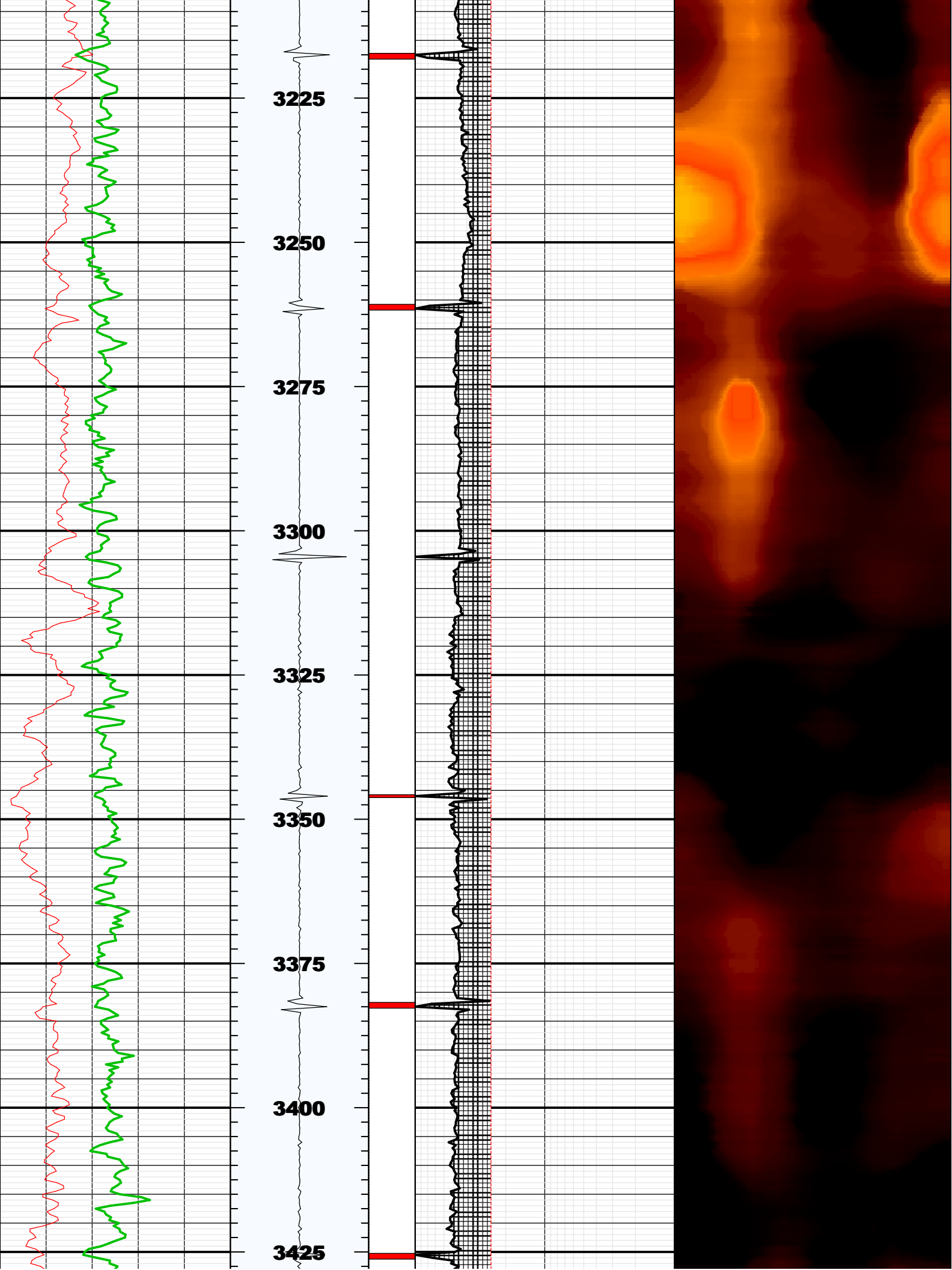


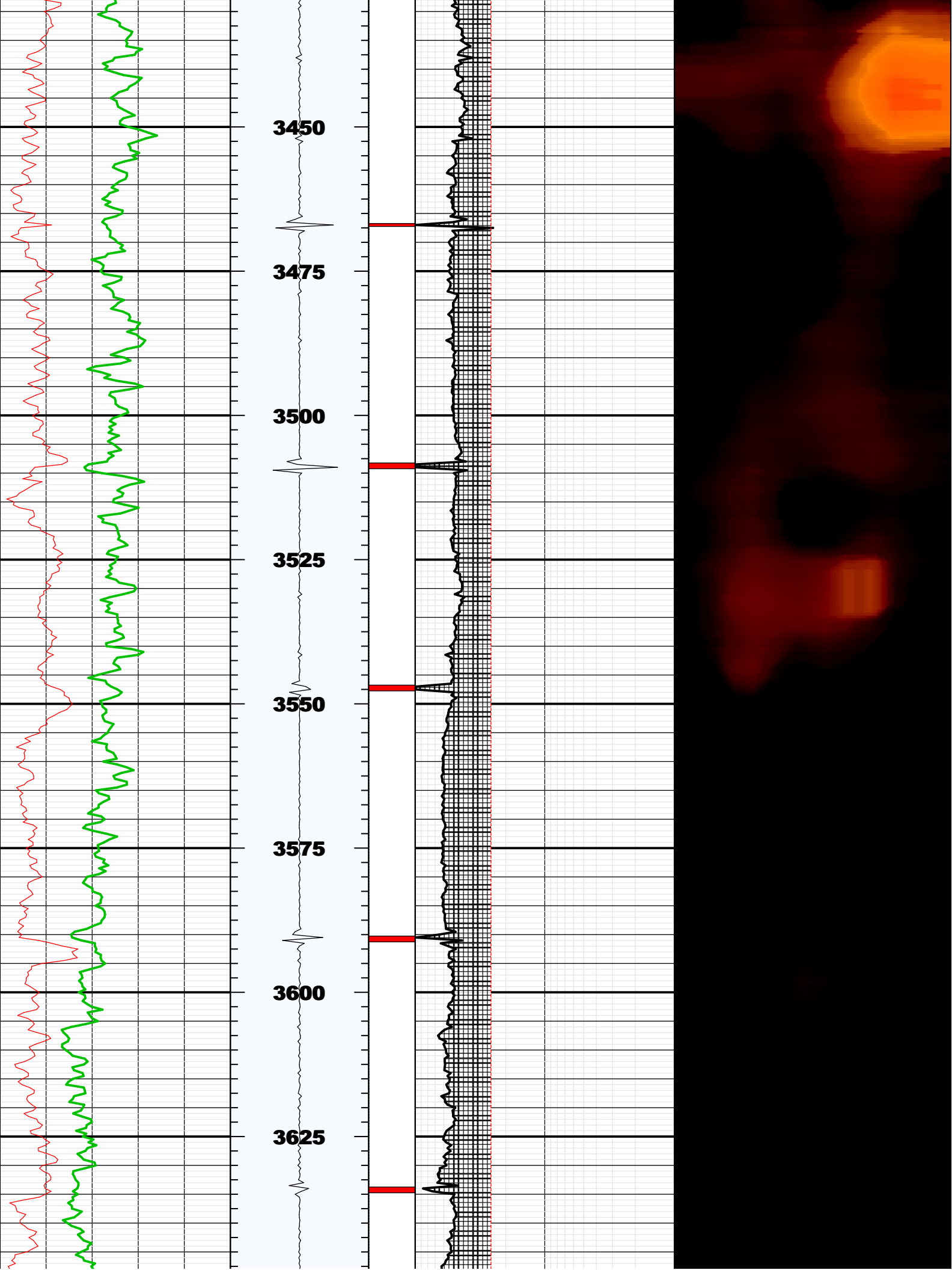


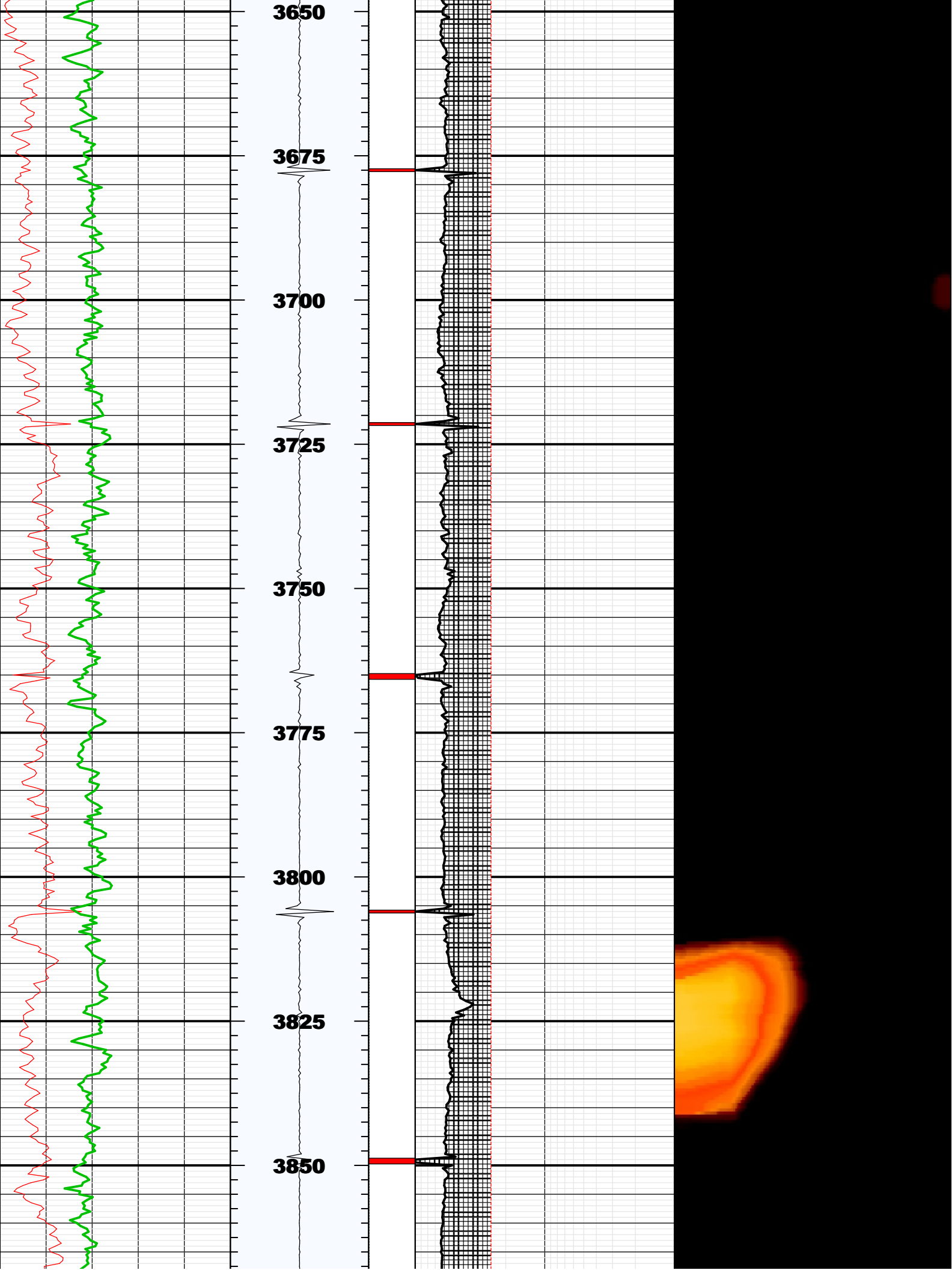


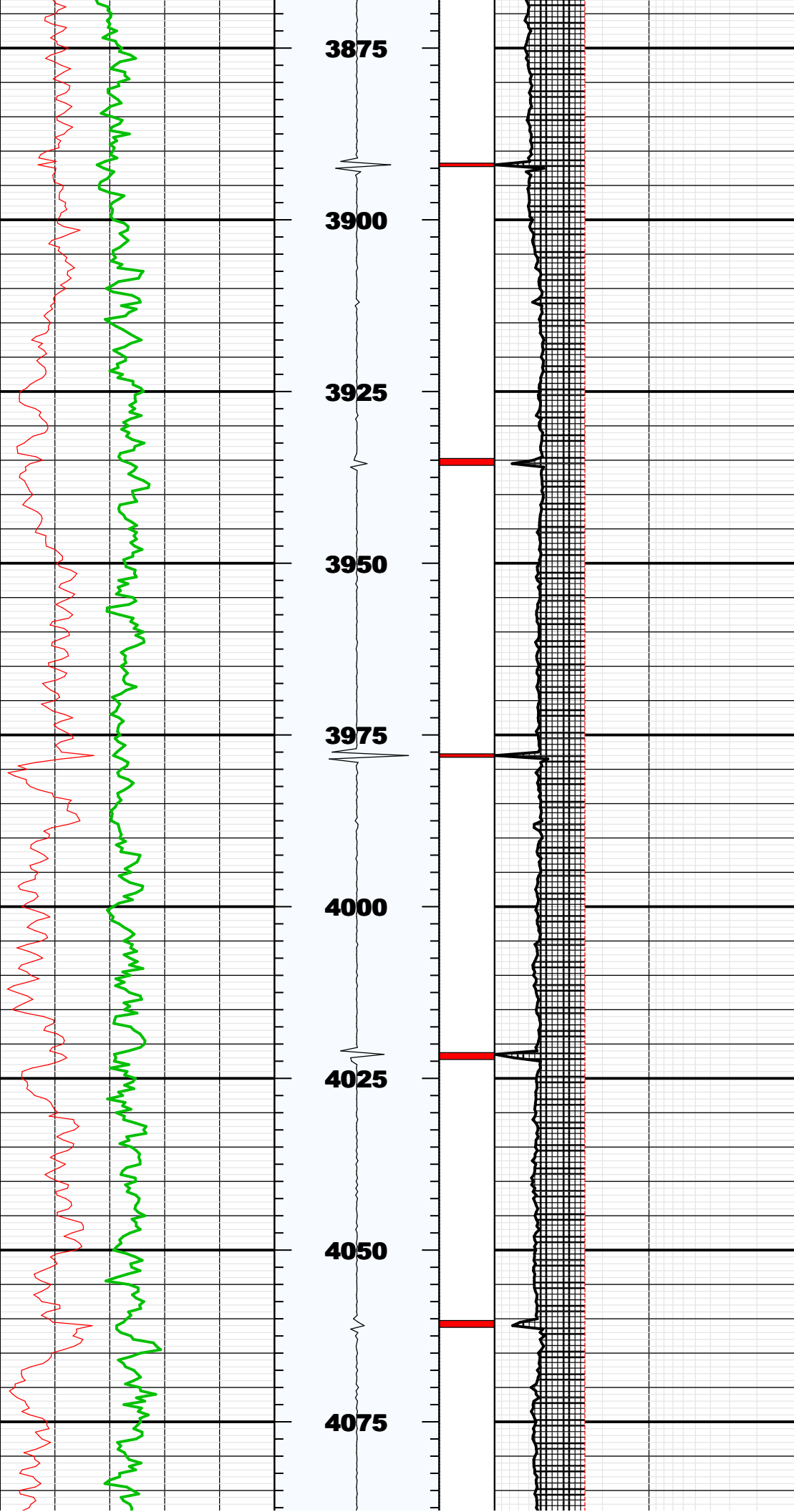


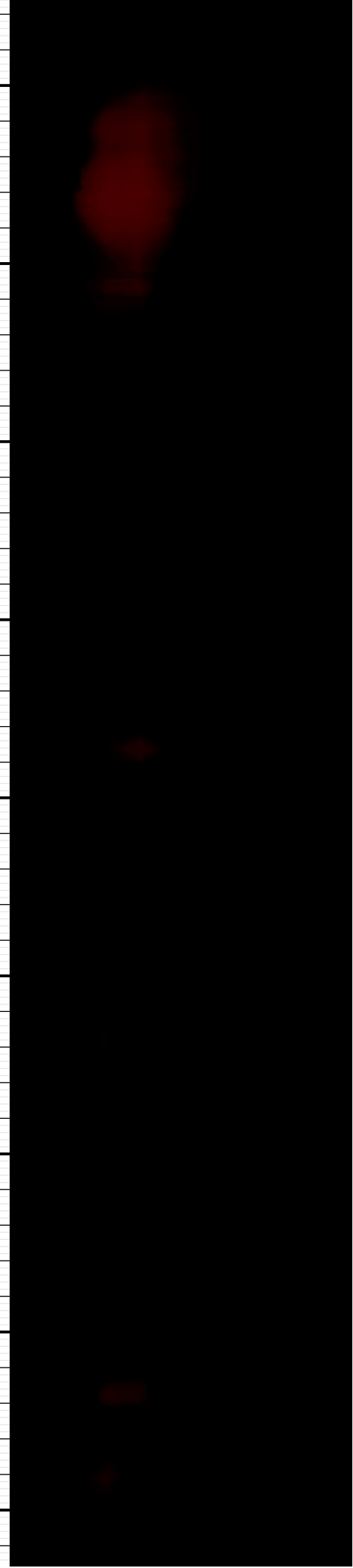
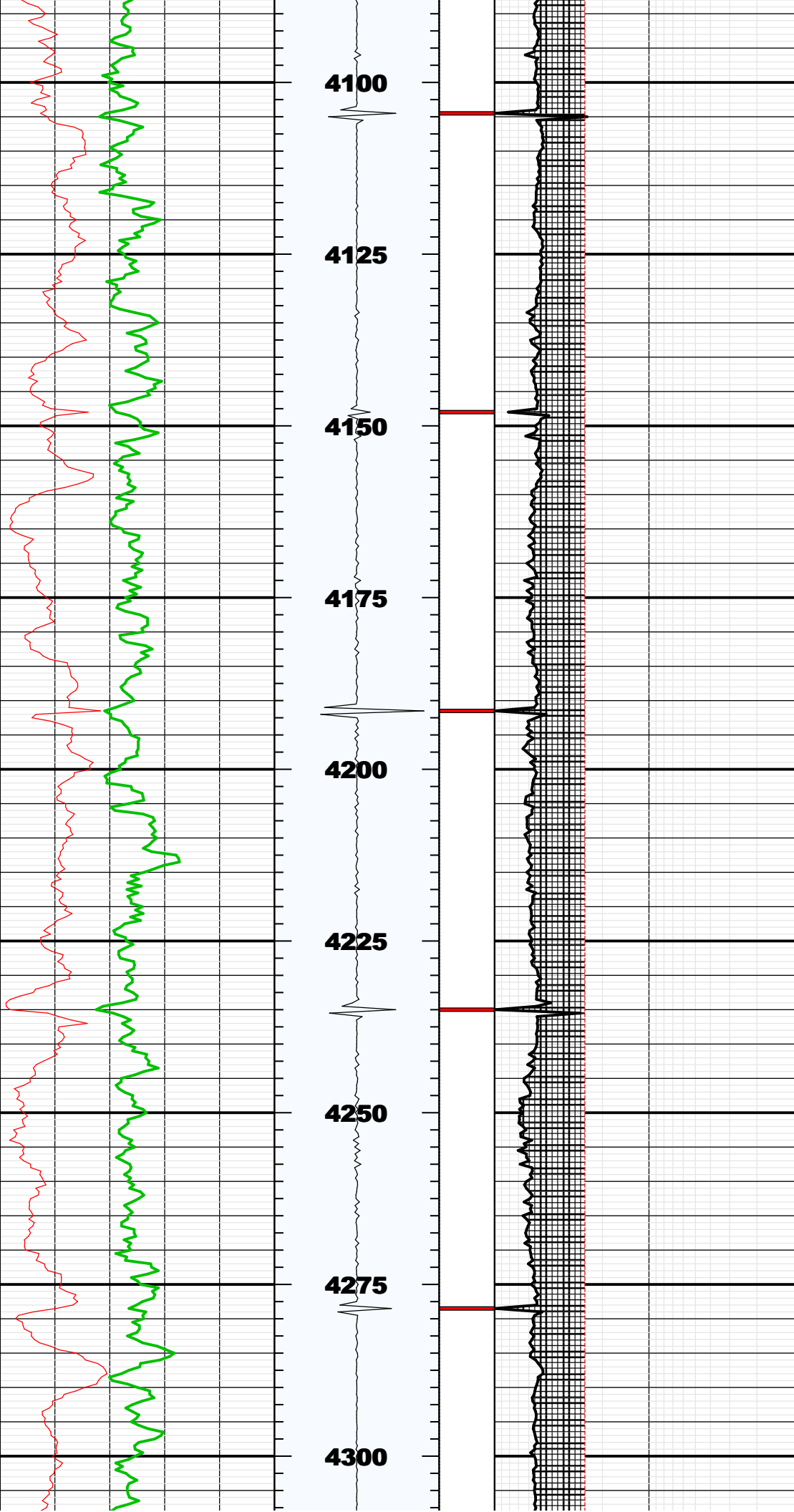


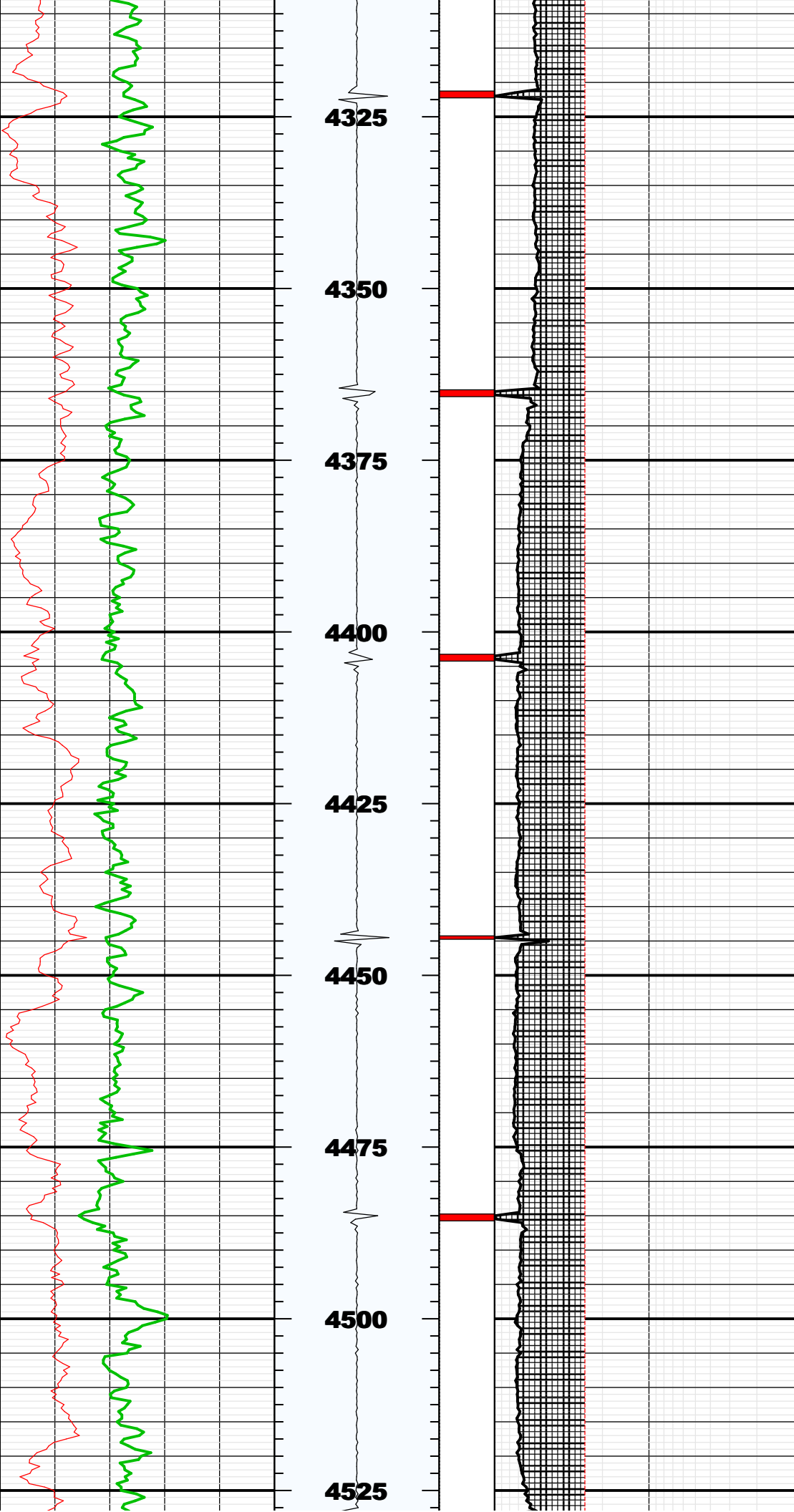


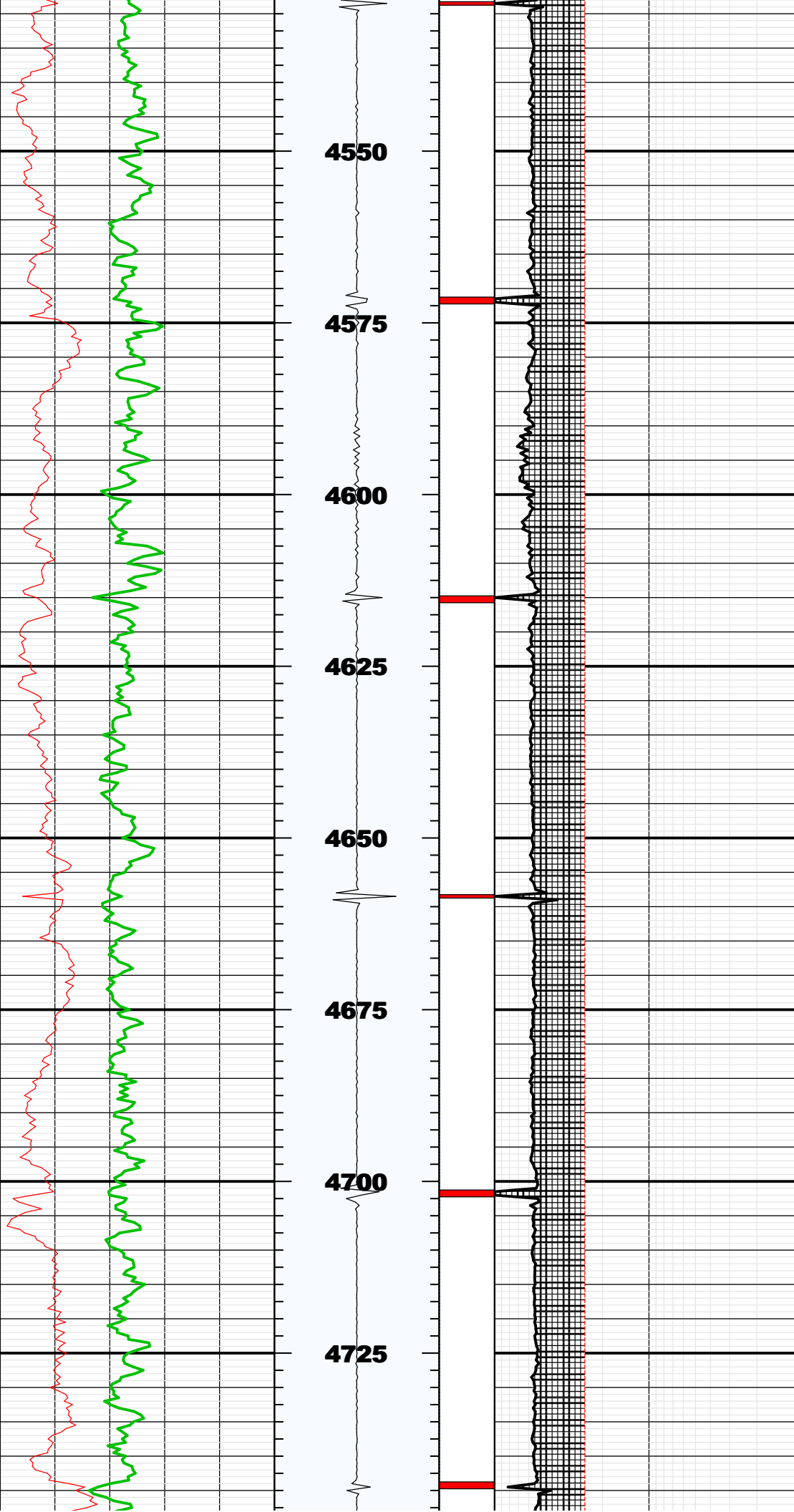


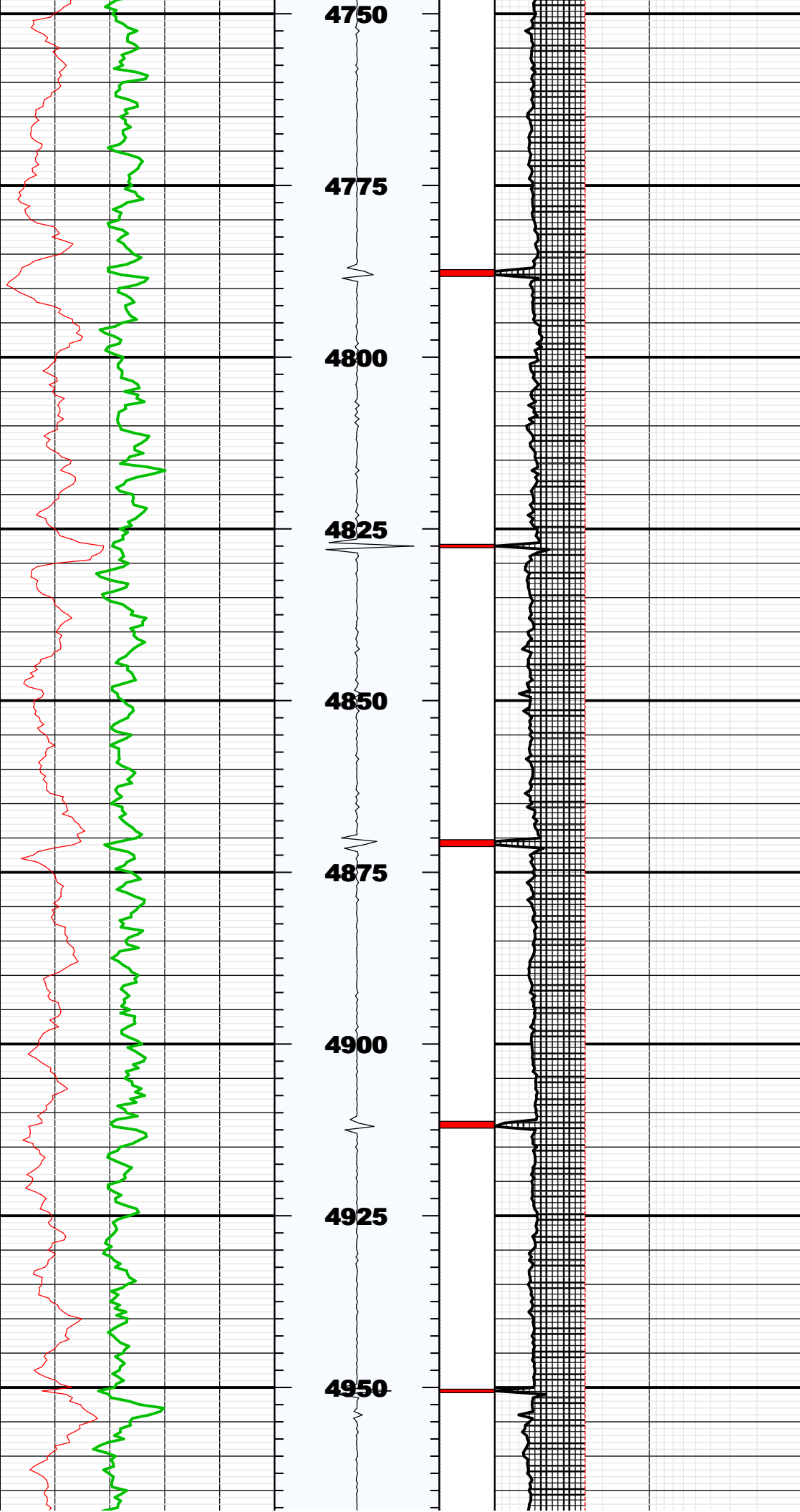


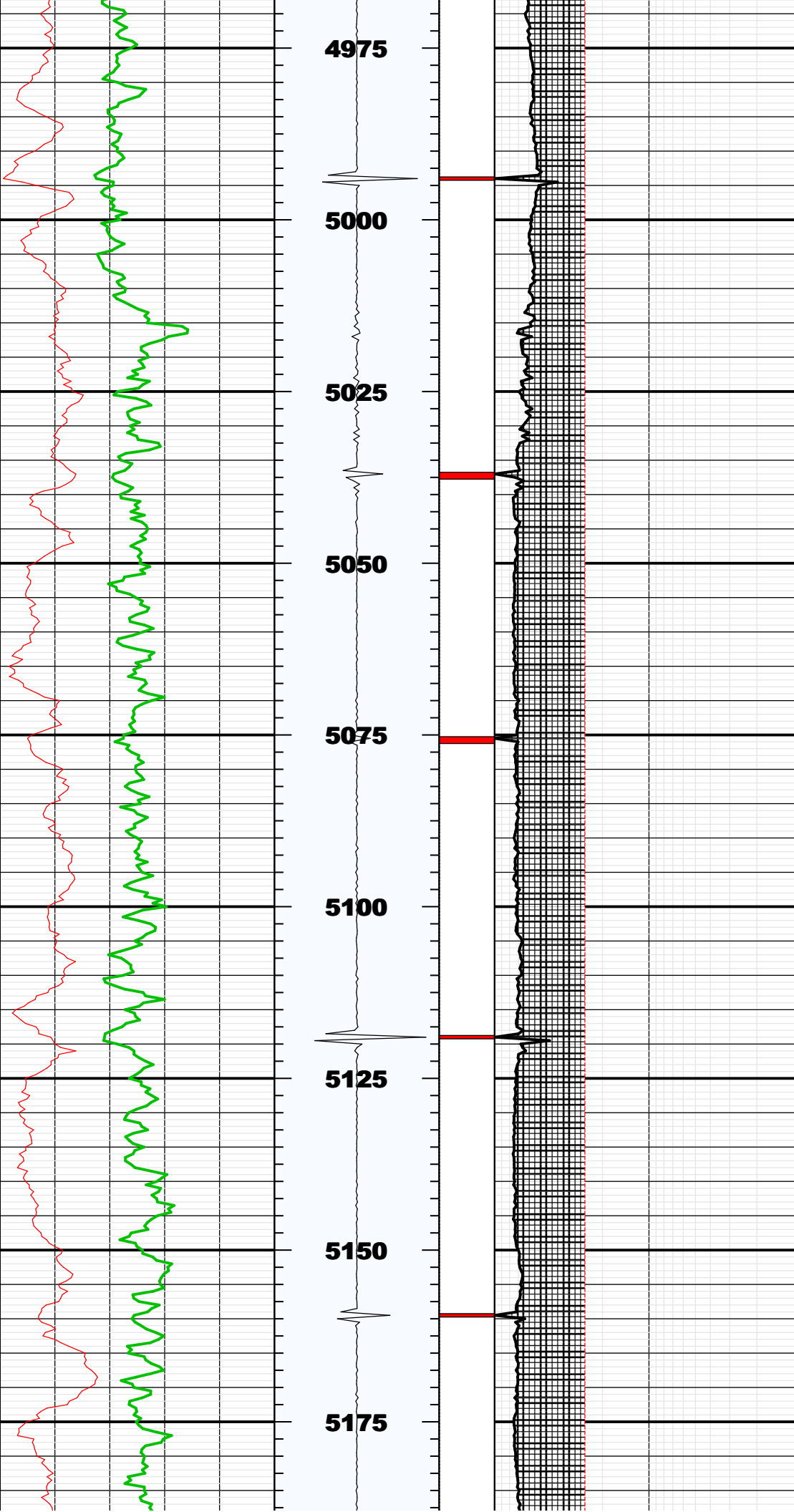


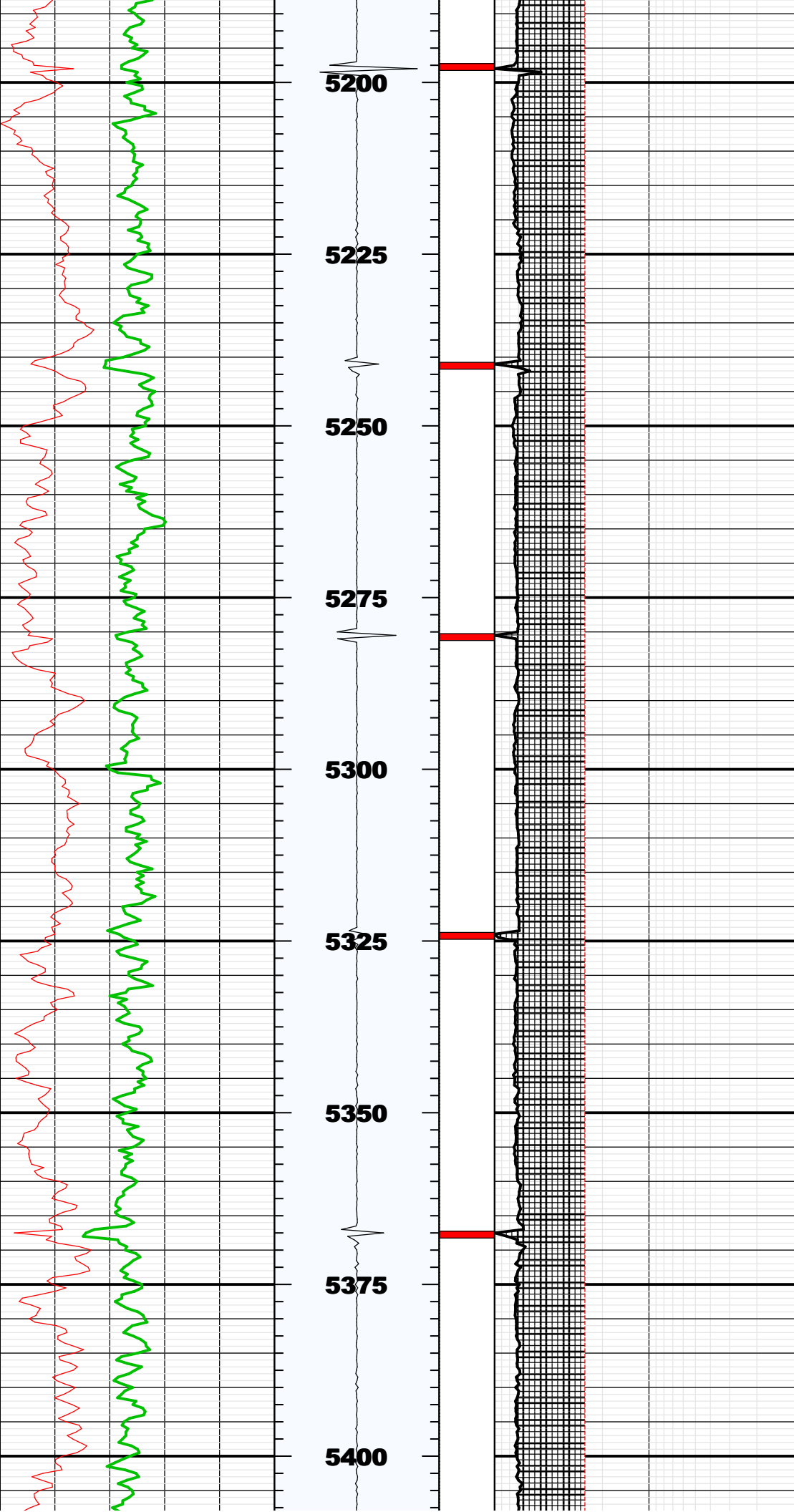


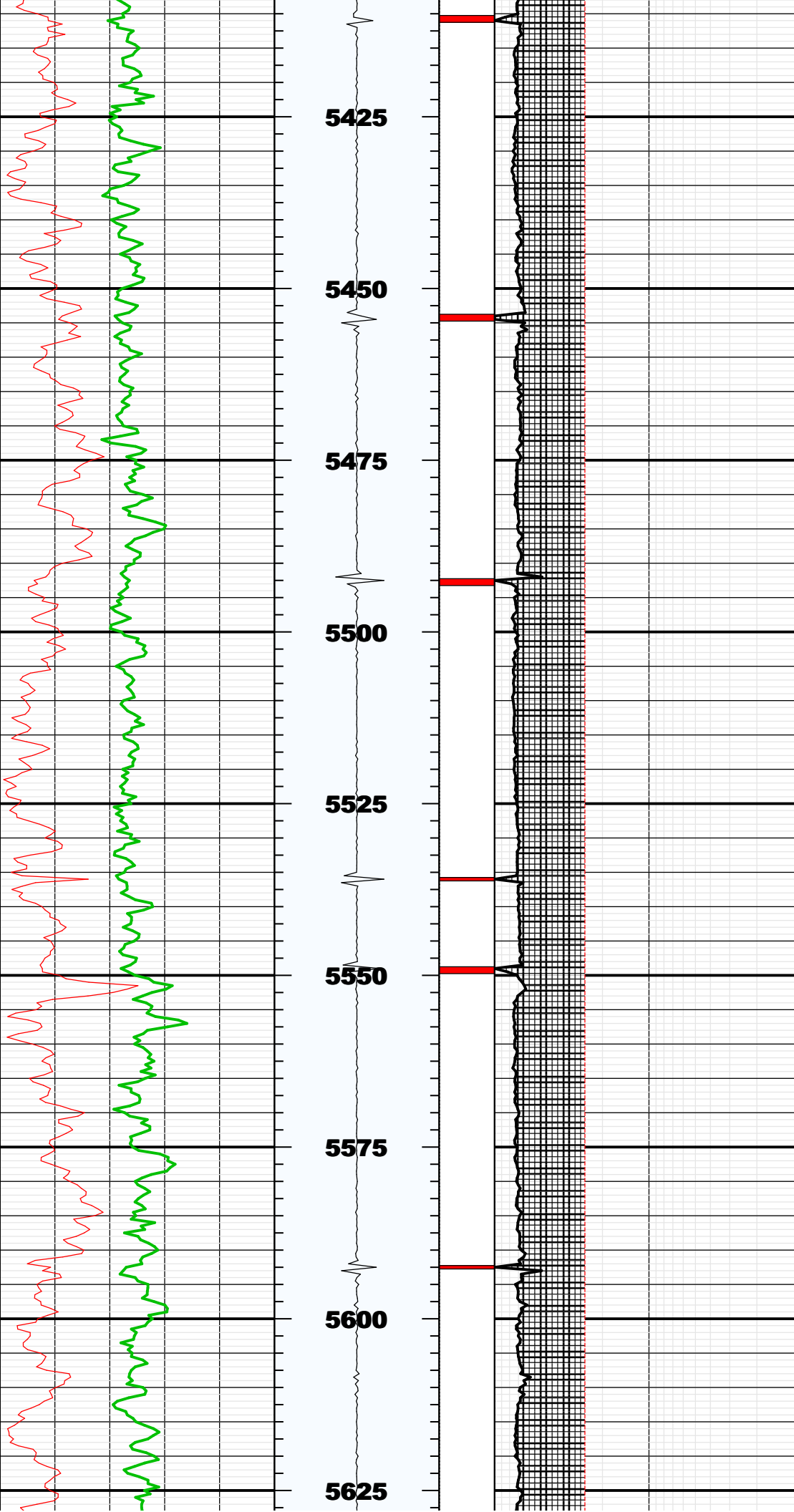


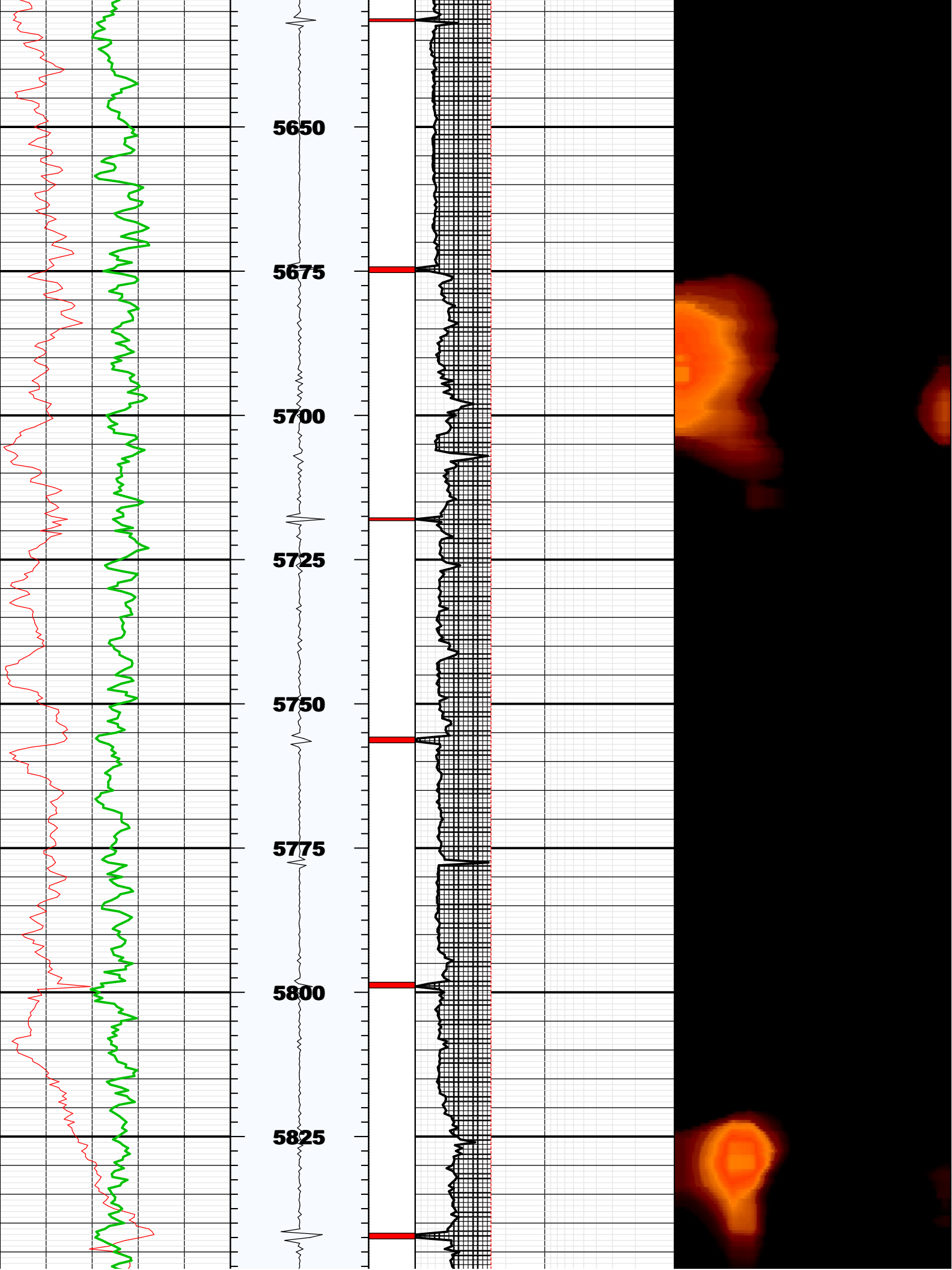


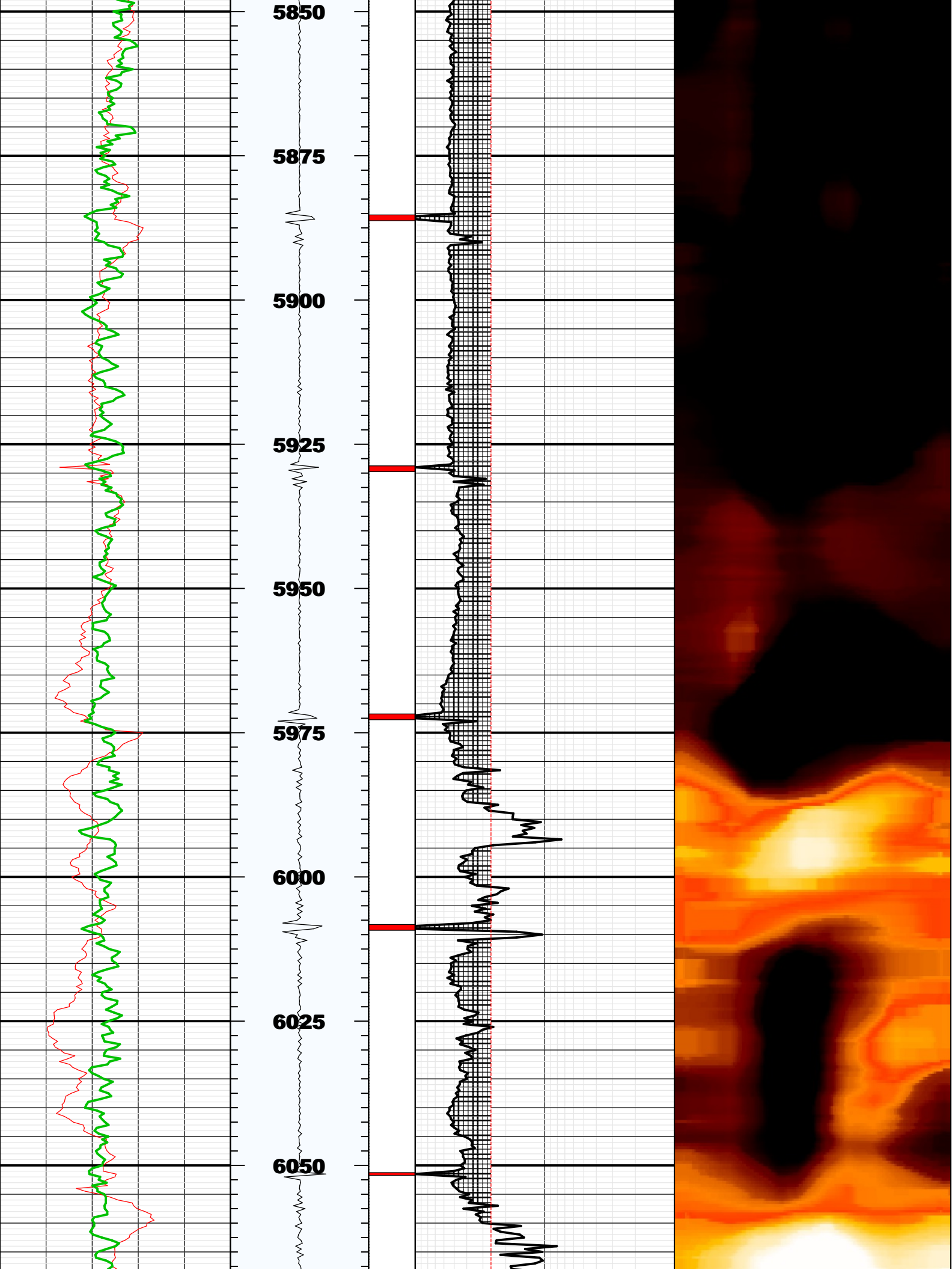


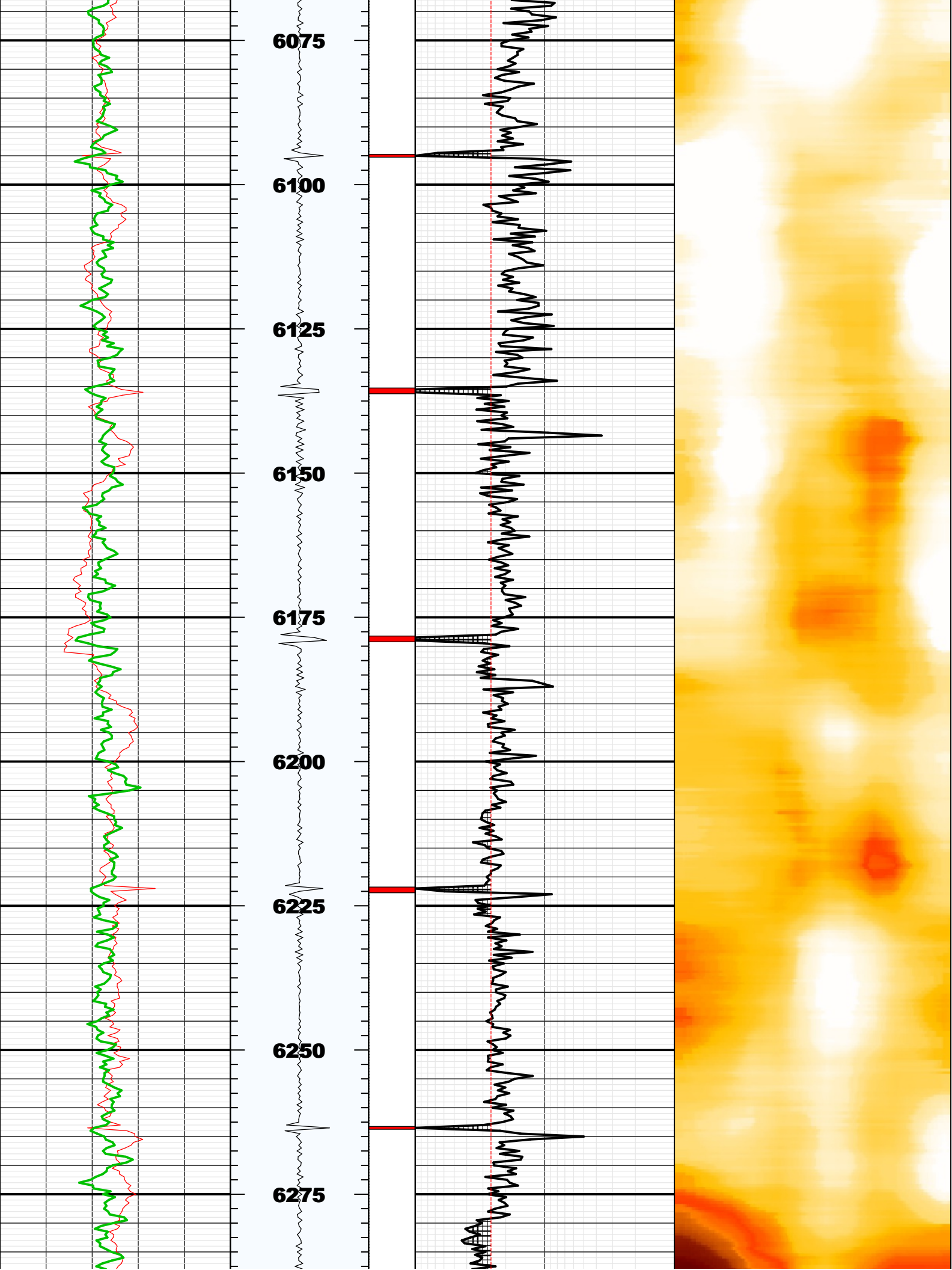


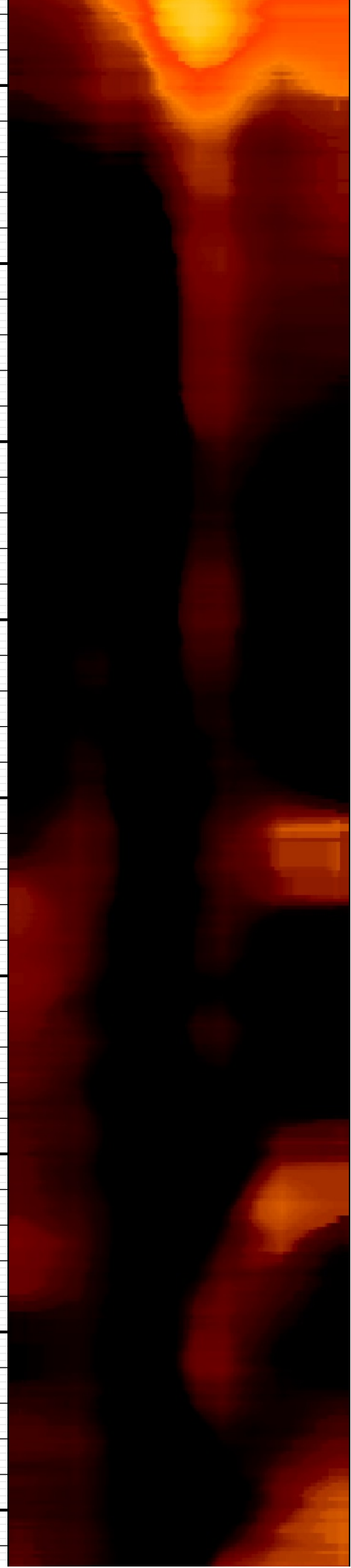
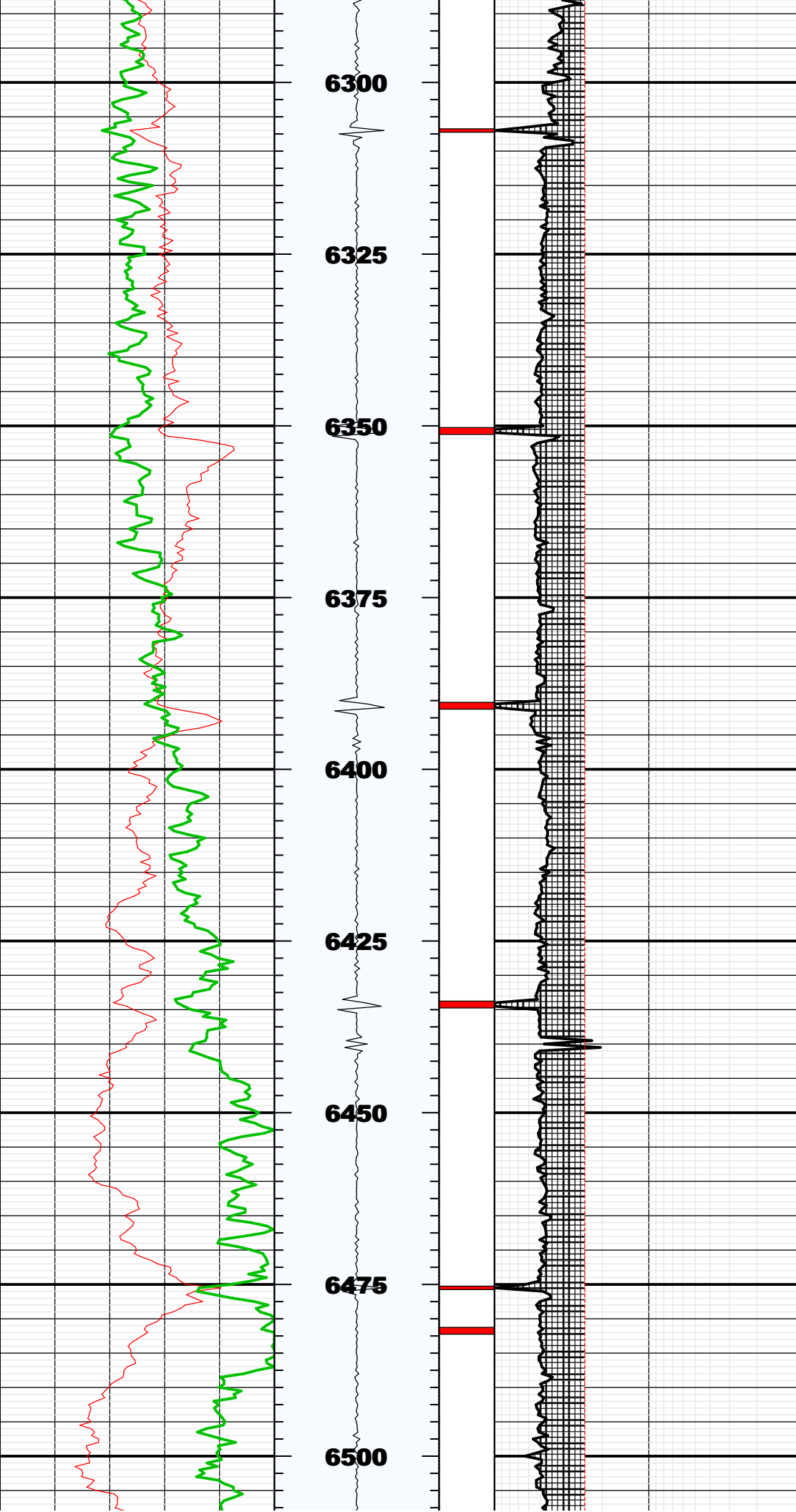


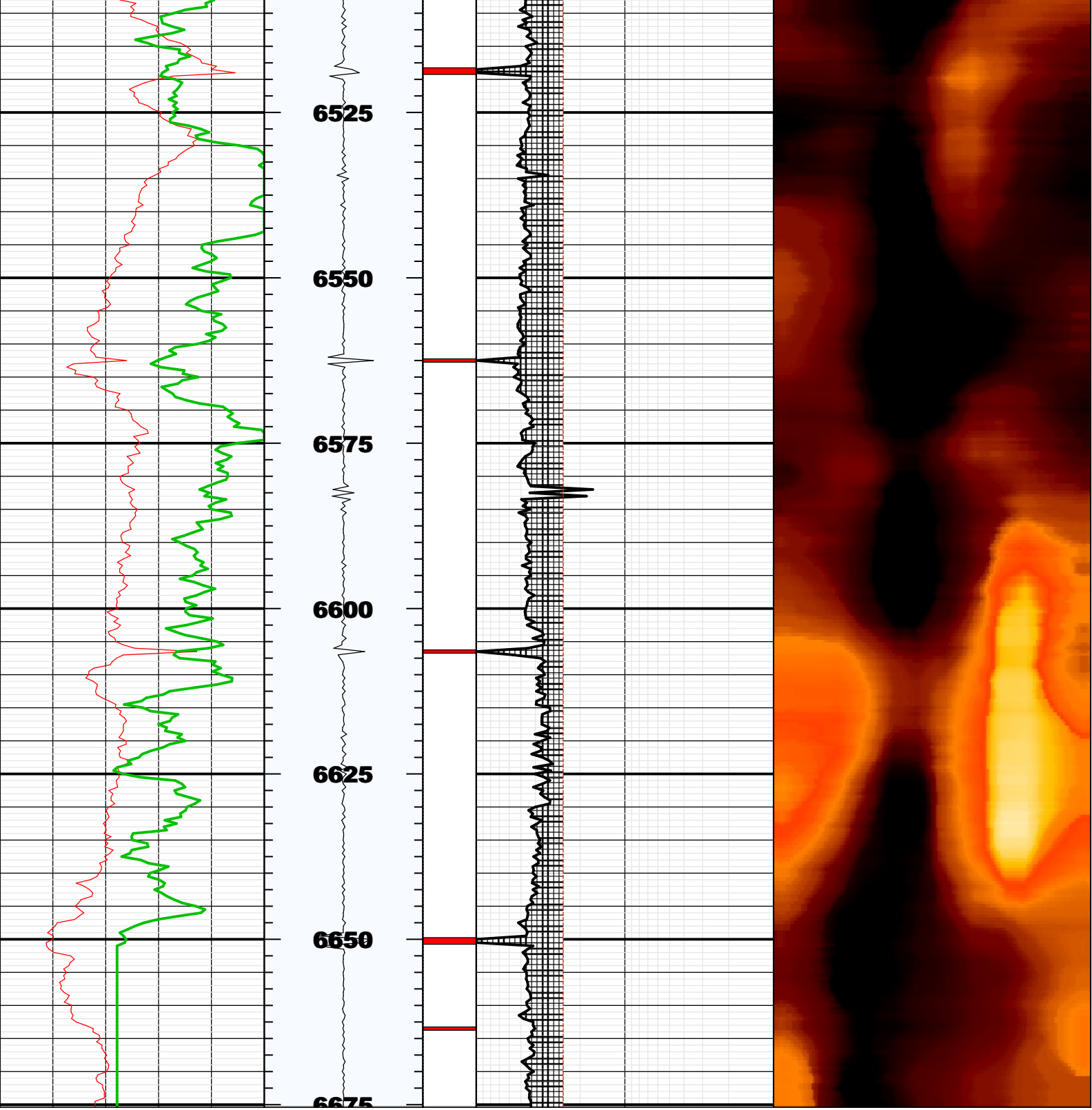








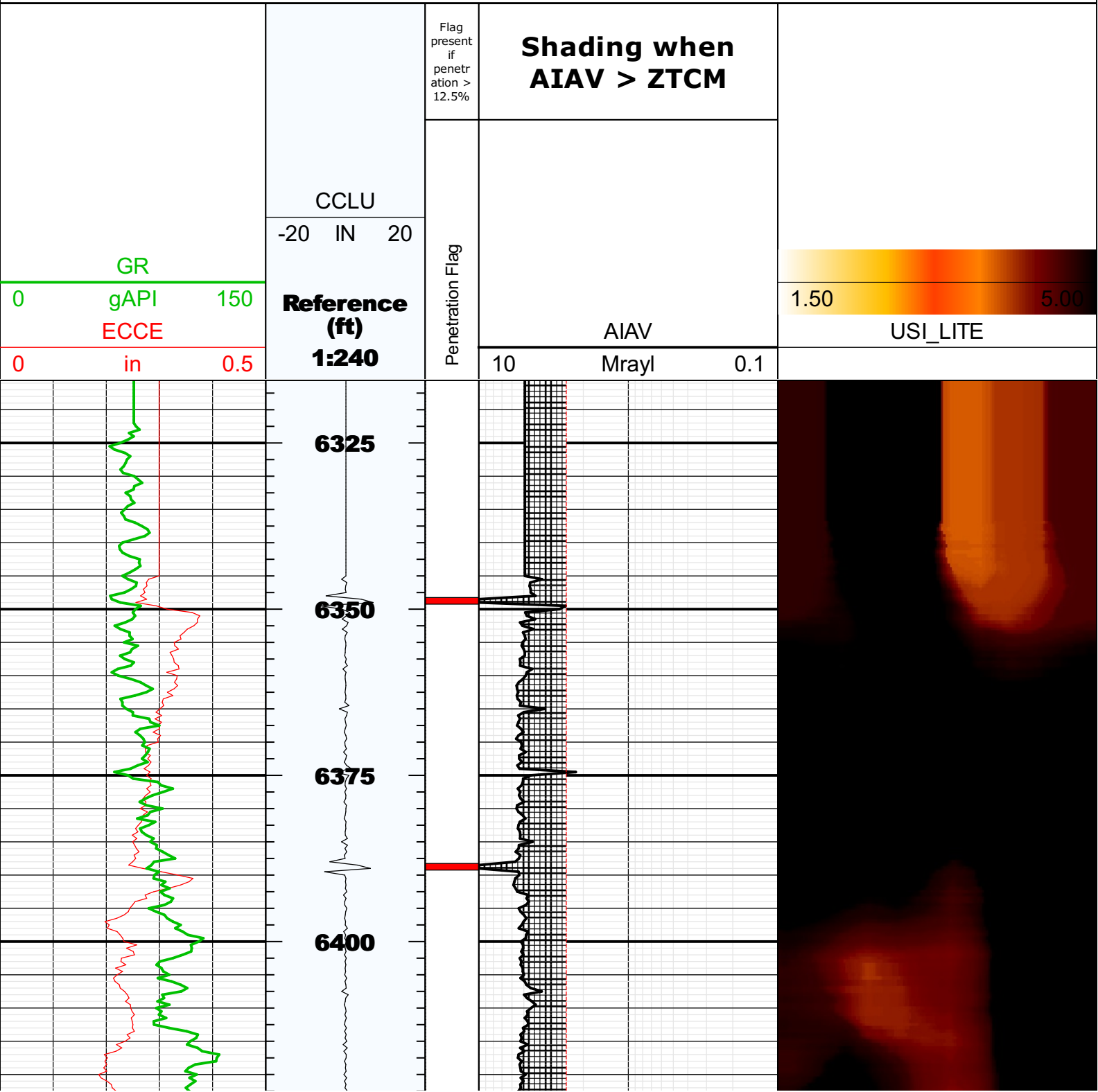


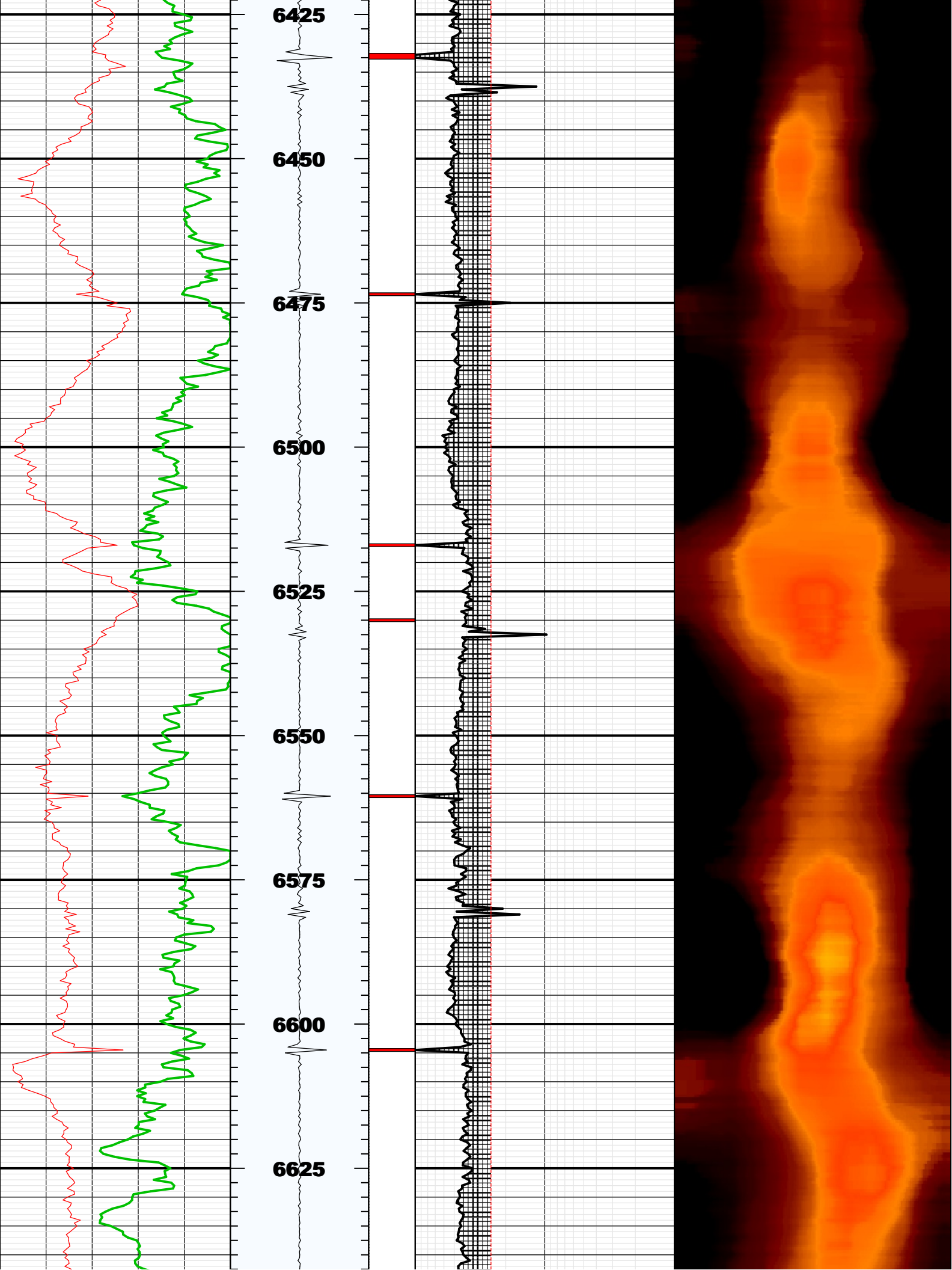


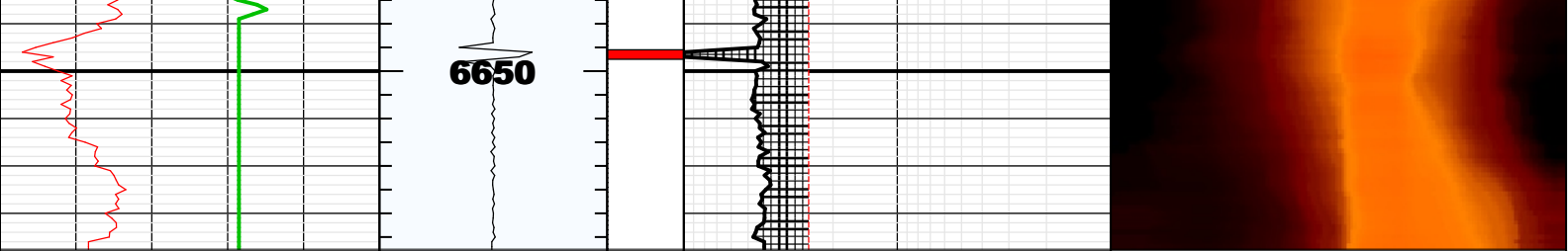
| | | | |
|-------------|-------------|------|--|
| BS | 8.75000 | IN | Bit Size |
| CASG | P110 | | Casing Grade |
| CDIA | 7.00000 | IN | Casing Outer Diameter |
| CSID | | | |
| CSIZ | 7.00000 | IN | Current Casing Size |
| CWEI | 26.00000 | LB/F | Casing Weight |
| DFD | 8.40000 | LB/G | Drilling Fluid Density |
| DFVL | 190.00000 | US/F | Default Fluid Velocity |
| DO | | | |
| DOT | 2.87400 | IN | Diameter of Transducer Sensor |
| EMXV | 40 | V | EMEX Voltage |
| FDII | 0.00000 | F | FPM Data Interpolation Interval |
| FSOD | 0_OFF | | Fluid Slowness Fits Casing Outer Diameter |
| LOGMODE | | | |
| PP | | | |
| STEP | -0.5 | F | STEP |
| THDH | 130.00000 | % | Maximum Search Thickness (percentage of nominal) |
| THDL | 70.00000 | % | Minimum Search Thickness (percentage of nominal) |
| THDP | Fundamental | | Thickness Detection Policy |
| THNO | 0.36200 | IN | Nominal Thickness of Casing |
| TMUC | WRM | | Type of Mud |
| U-USIT_DT3P | | | |
| UPAT | 375K | | Emission Pattern |
| USUB | 7INC | | USIT Sub Identifier |
| UWKM | D603010L | | Working Mode |
| VCAS | 51.40000 | US/F | Ultrasonic Transversal Velocity in Casing |
| WINB | 33.86500 | US | Window Begin Time |
| WINE | 73.86501 | US | Window End Time |
| ZCAS | 46.25000 | MRAY | Acoustic Impedance of Casing |
| ZINI | -1.00000 | MRAY | Initial Estimate of Cement Impedance |
| ZMUD | 1.78000 | MRAY | Acoustic Impedance of Mud |
| ZTCM | 2.60000 | MRAY | Acoustic Impedance Threshold for Cement |
| ZTGS | 0.30000 | MRAY | Acoustic Impedance Threshold for Gas |
| WLEN | 22.50350 | US | T [^] 3 Processing Length |

Repeat Pass

Company: Noble Energy Inc
Well: Wells Ranch AE30-64-1BHNA
Field: Wattenberg







Fluid Properties Used for Main Pass

