

Company: Noble Energy Inc

Well: Rohn State LD10-67-1HN
Field: Wildcat
County: Weld State: Colorado

| | | | | | | | |
|-------------------------------------|--|---|----------------|---|-----------|-------------|-----------|
| County: Weld | | <div>USI-LITE (2500 psi)</div> | | | | | |
| Field: Wildcat | | | | | | | |
| Location: SENE Sec. 9 T9N R58W | | | | | | | |
| Well: Rohn State LD10-67-1HN | | | | | | | |
| Company: Noble Energy Inc | | | | | | | |
| LOCATION | | Permanent Datum: Log Measured From: Drilling Measured From: | GL KB KB | Elev: K.B. 4760.0 F G.L. 4730.0 F D.F. 4759.0 F | | | |
| API Serial No. 05-123-37630-0000 | | | | | Section 9 | Township 9N | Range 58W |
| Logging Date 25-Oct-2014 | | | | | | | |
| Run Number Run 1 USIT | | | | | | | |
| Depth Driller 6280.0 F | | | | | | | |
| Schlumberger Depth 6280.0 F | | | | | | | |
| Bottom Log Interval 6095.0 F | | | | | | | |
| Top Log Interval -999.2 F | | | | | | | |
| Casing Fluid Level 8.0 F | | | | | | | |
| Salinity | | | | | | | |
| Density 8.40 LB/G | | | | | | | |
| Fluid Level 8.0 F | | | | | | | |
| BIT/CASING/TUBING STRING | | | | | | | |
| Bit Size 8.750 IN | | | | | | | |
| From 1221.0 F | | | | | | | |
| To 6280.0 F | | | | | | | |
| Casing Size 7.00 IN | | | | | | | |
| Weight 26.00 LB/F | | | | | | | |
| Grade P110 | | | | | | | |
| From 0.0 F | | | | | | | |
| To 6095.0 F | | | | | | | |
| Max Recorded Temp 221.0 | | | | | | | |
| Logger on bottom (date) 25-Oct-2014 | | | | | | | |
| Location Ft. Morgan | | | | | | | |
| Recorded By Danielle Maniere | | | | | | | |
| 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: 17000.00000 |

DISCLAIMER

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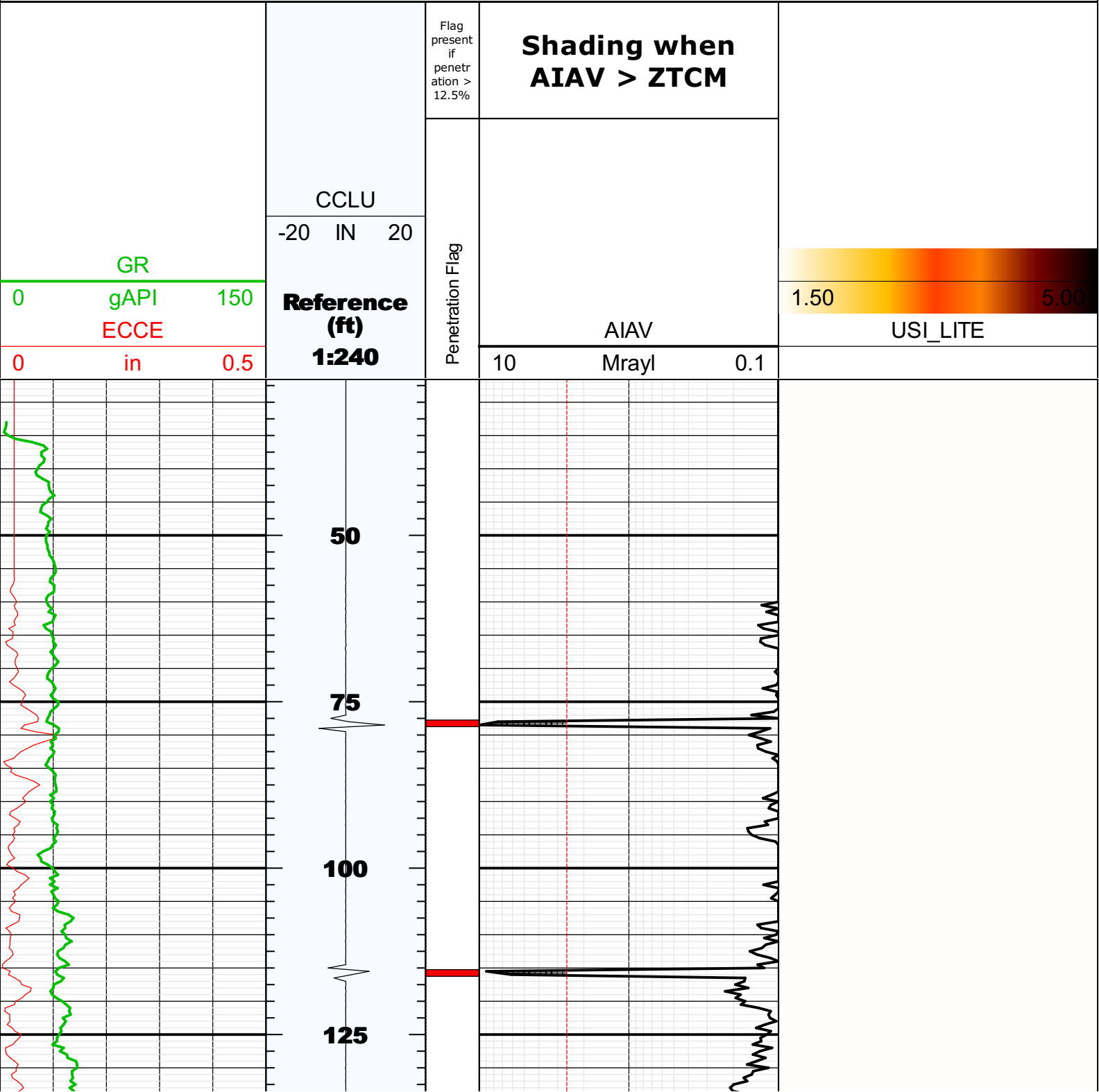
13.6 ppg single slurry cement
Top of cement 1110ft

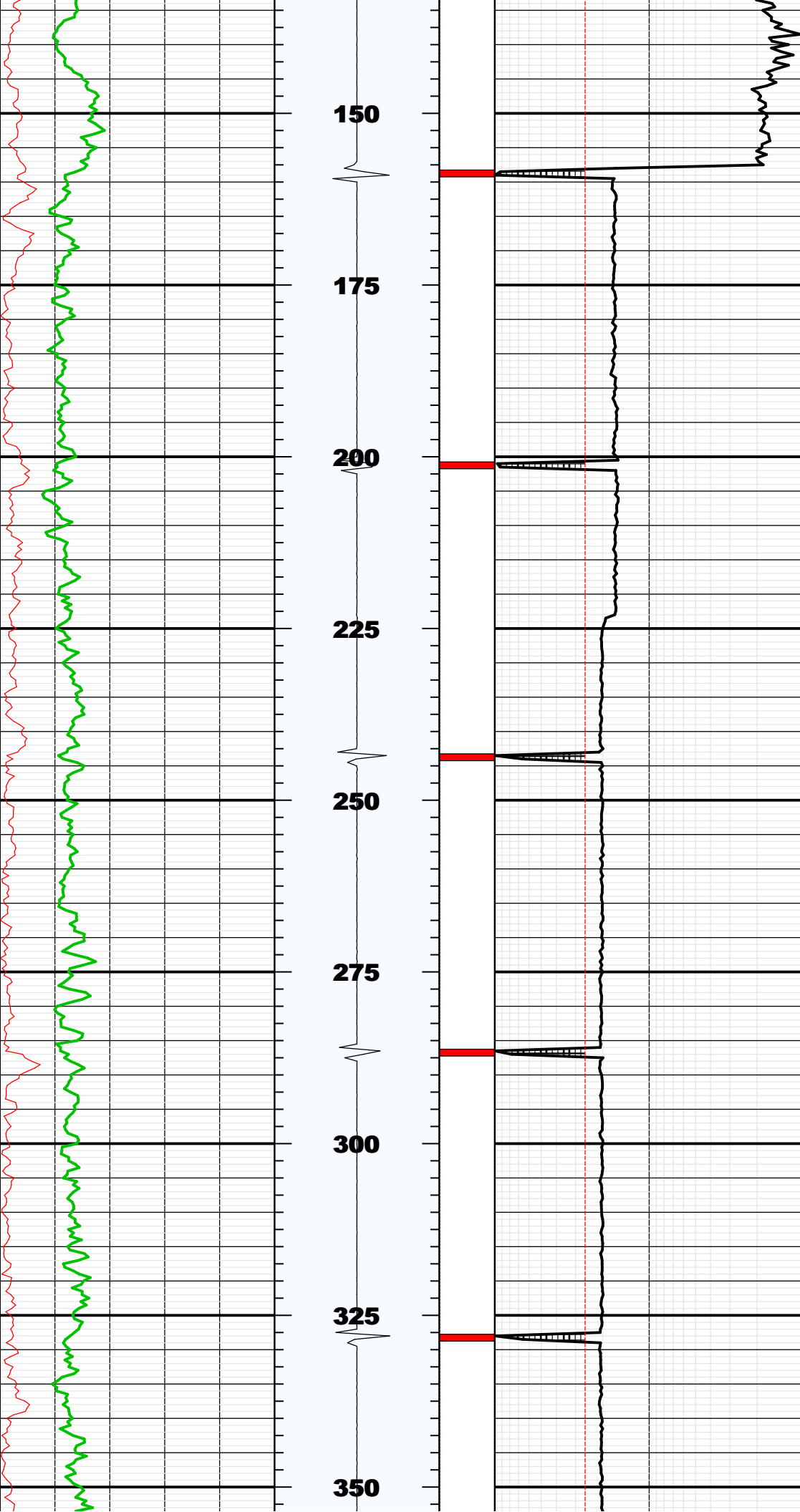
0psi repeat pass 2500psi main pass
Logged from 20ft above top of liner
Top of liner at 6115ft.

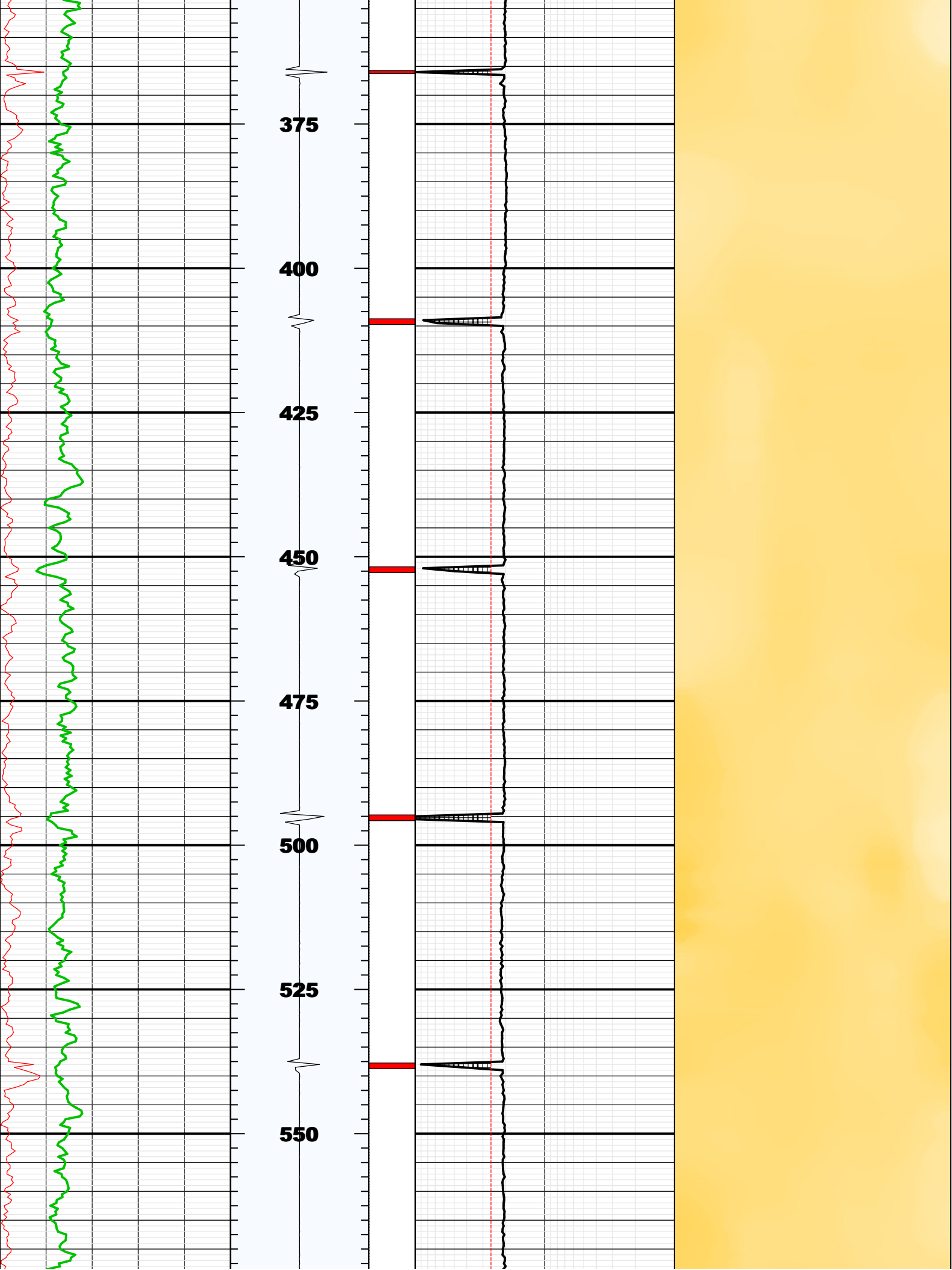
Bottom hole temperature 221degF

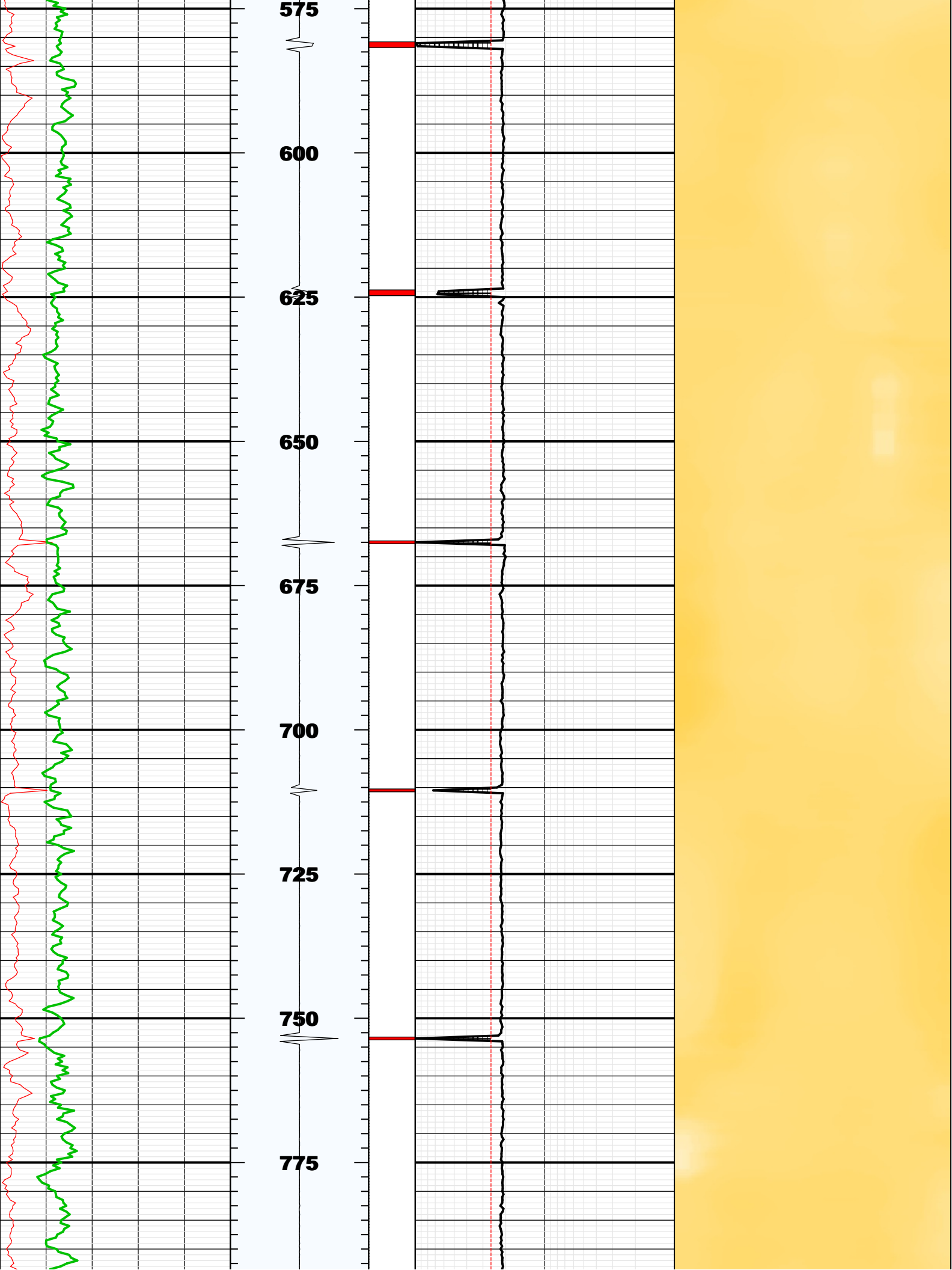
Main Pass

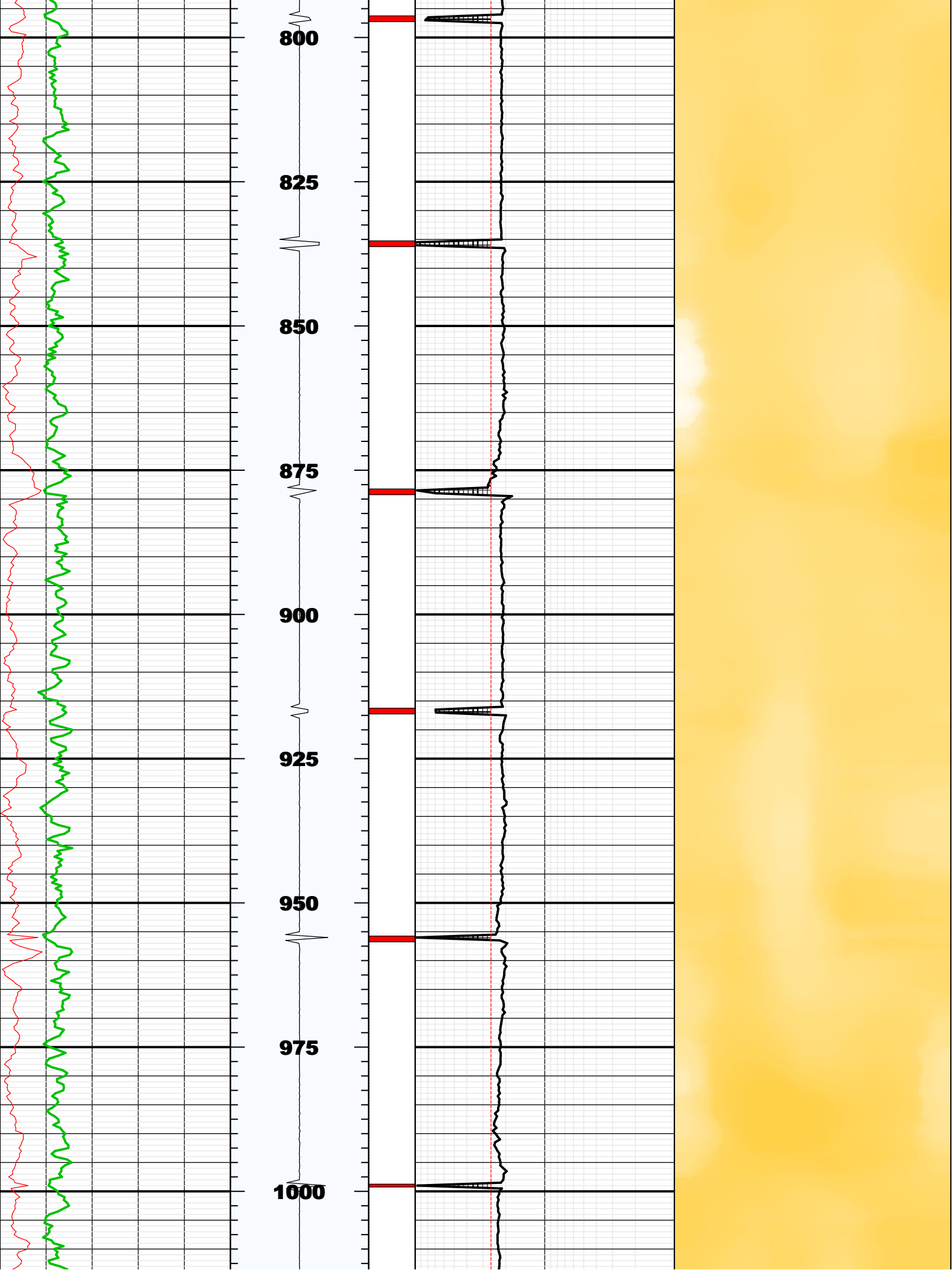
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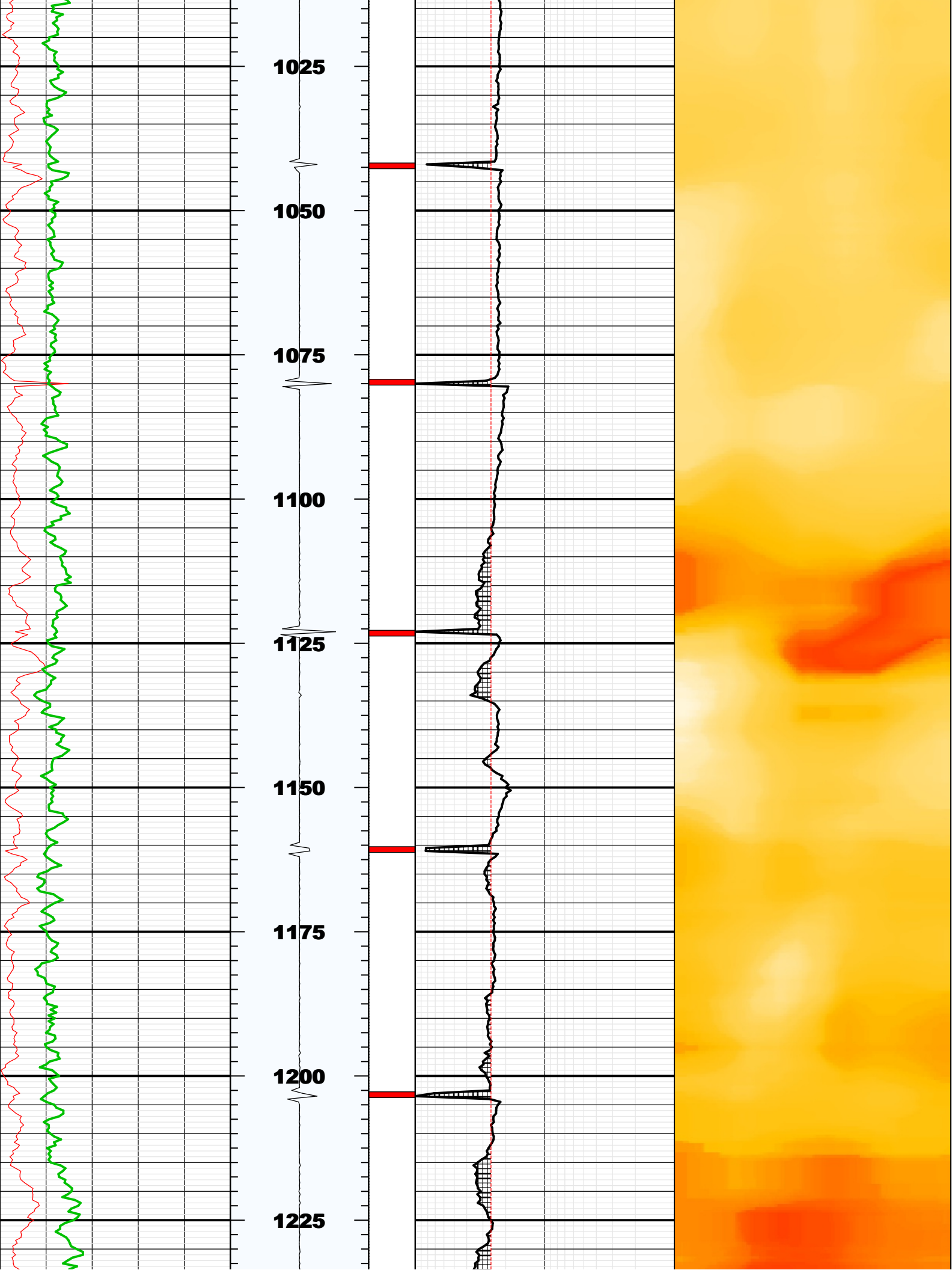


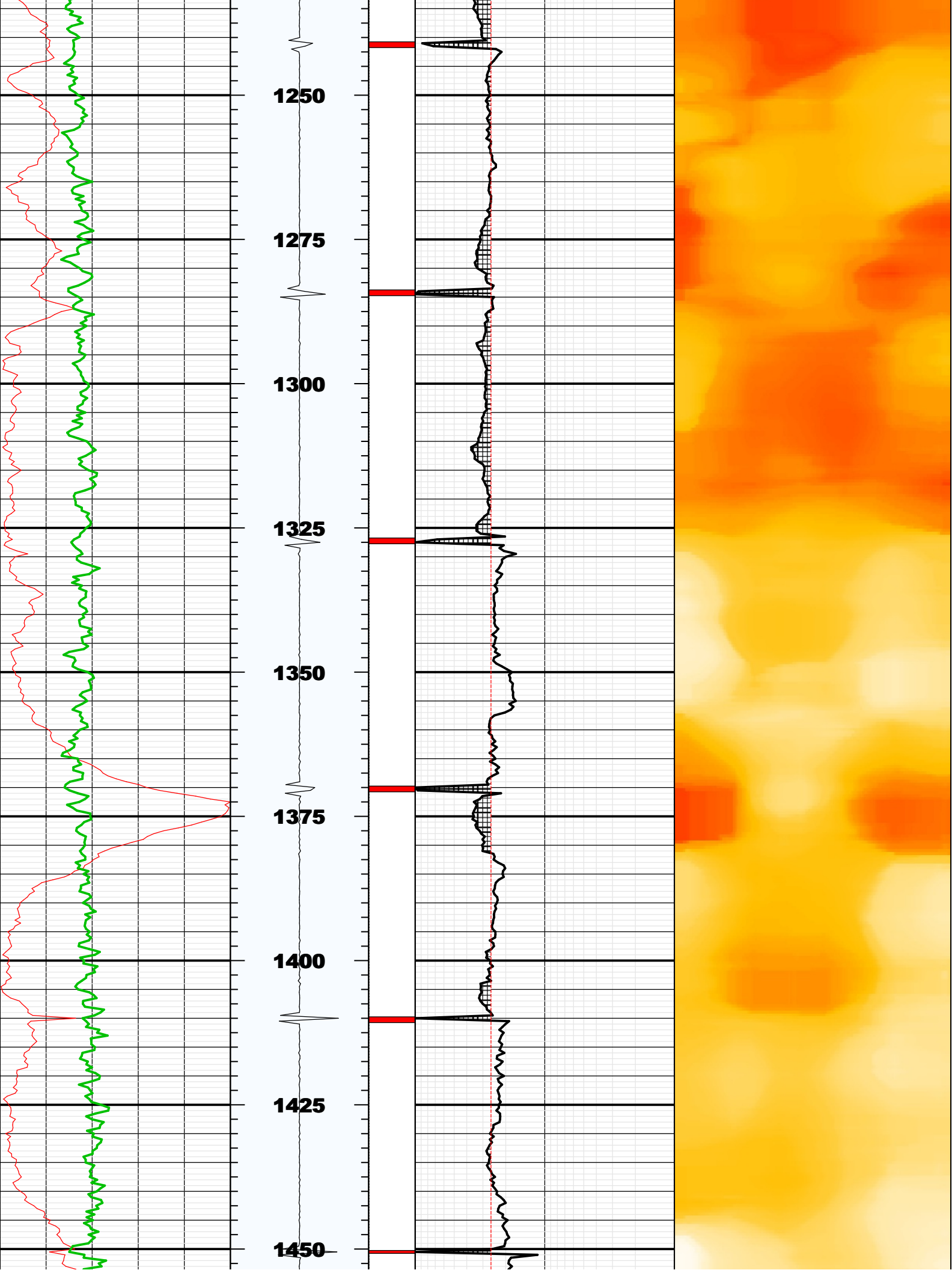


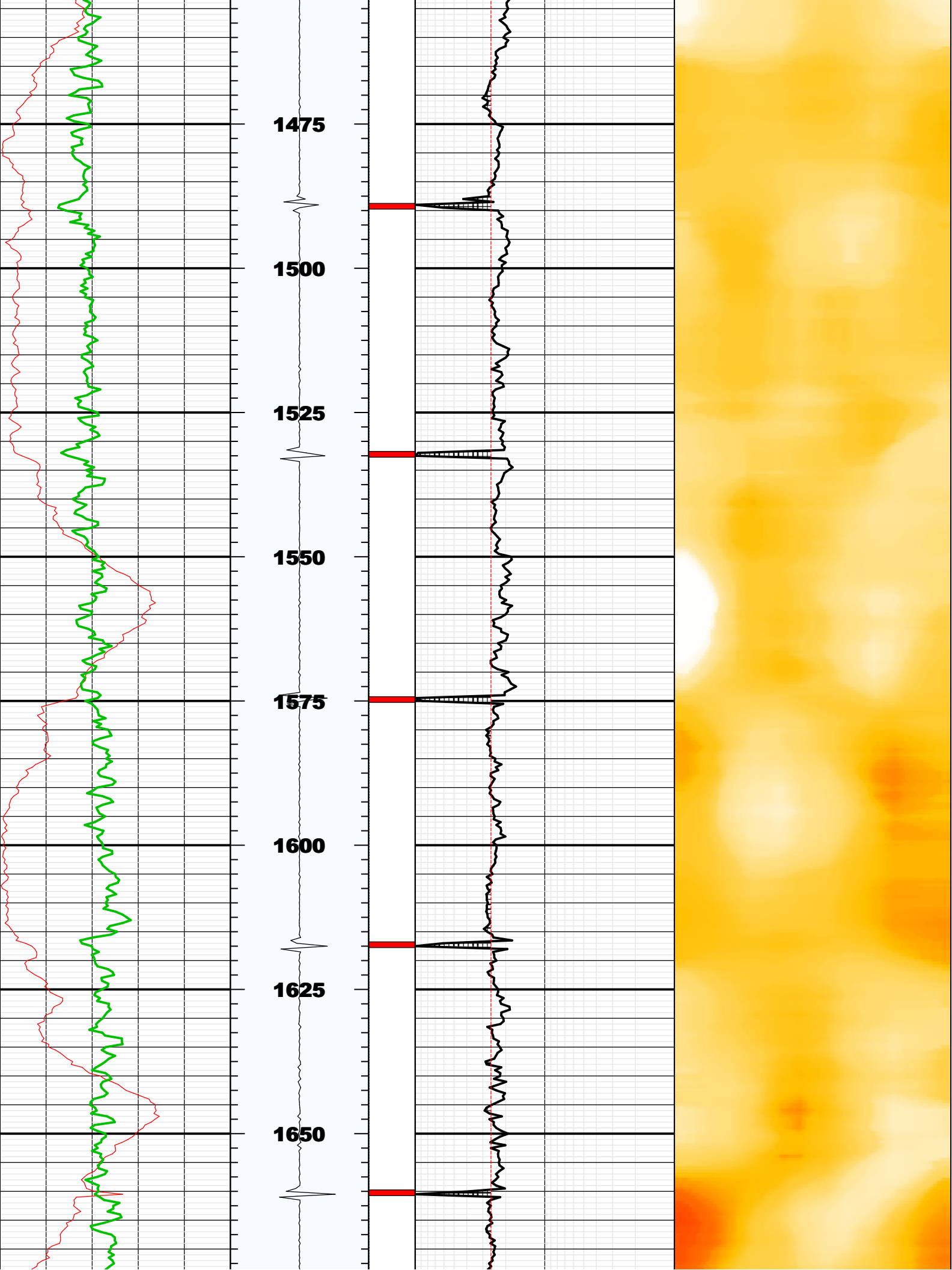


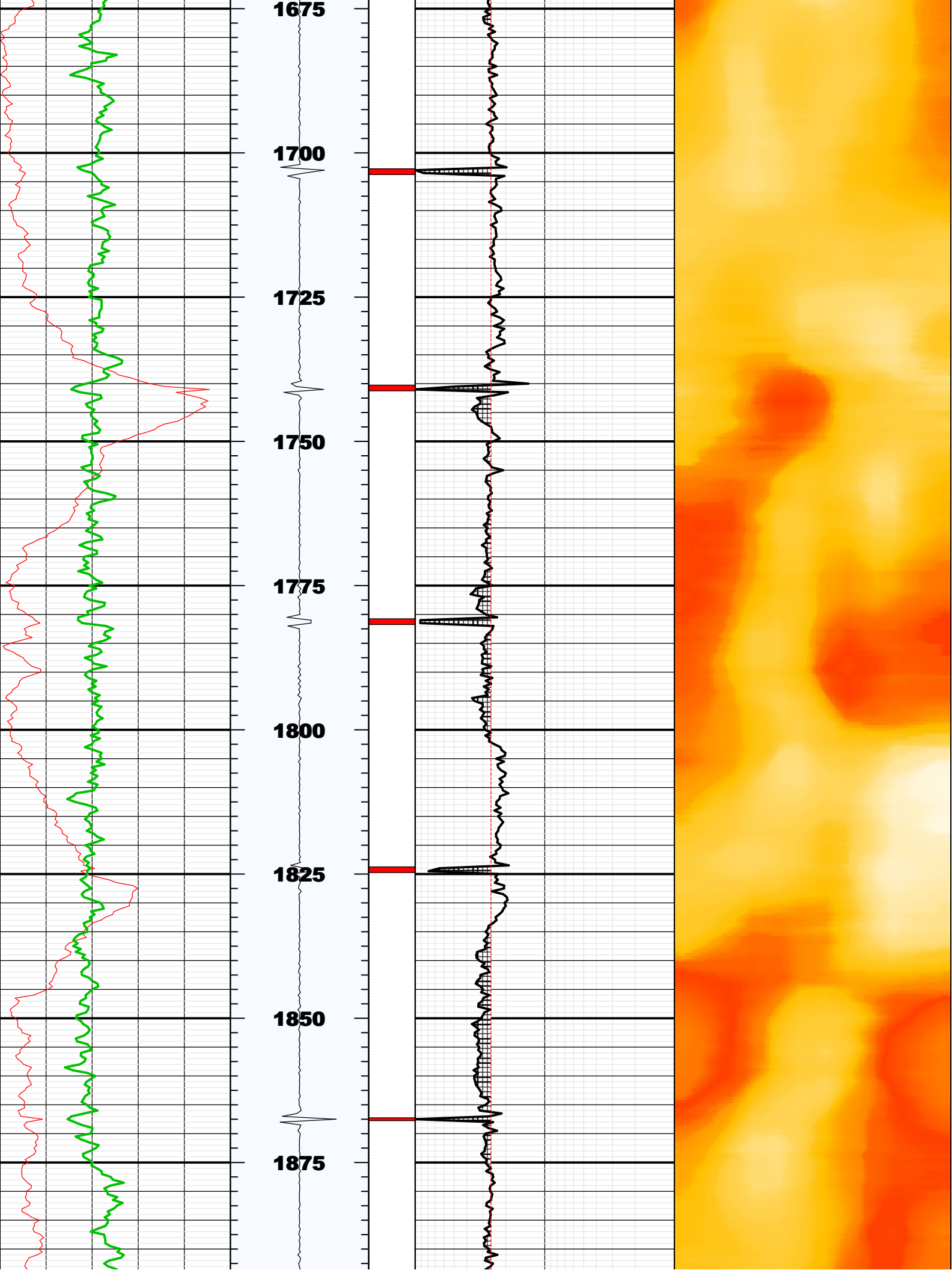


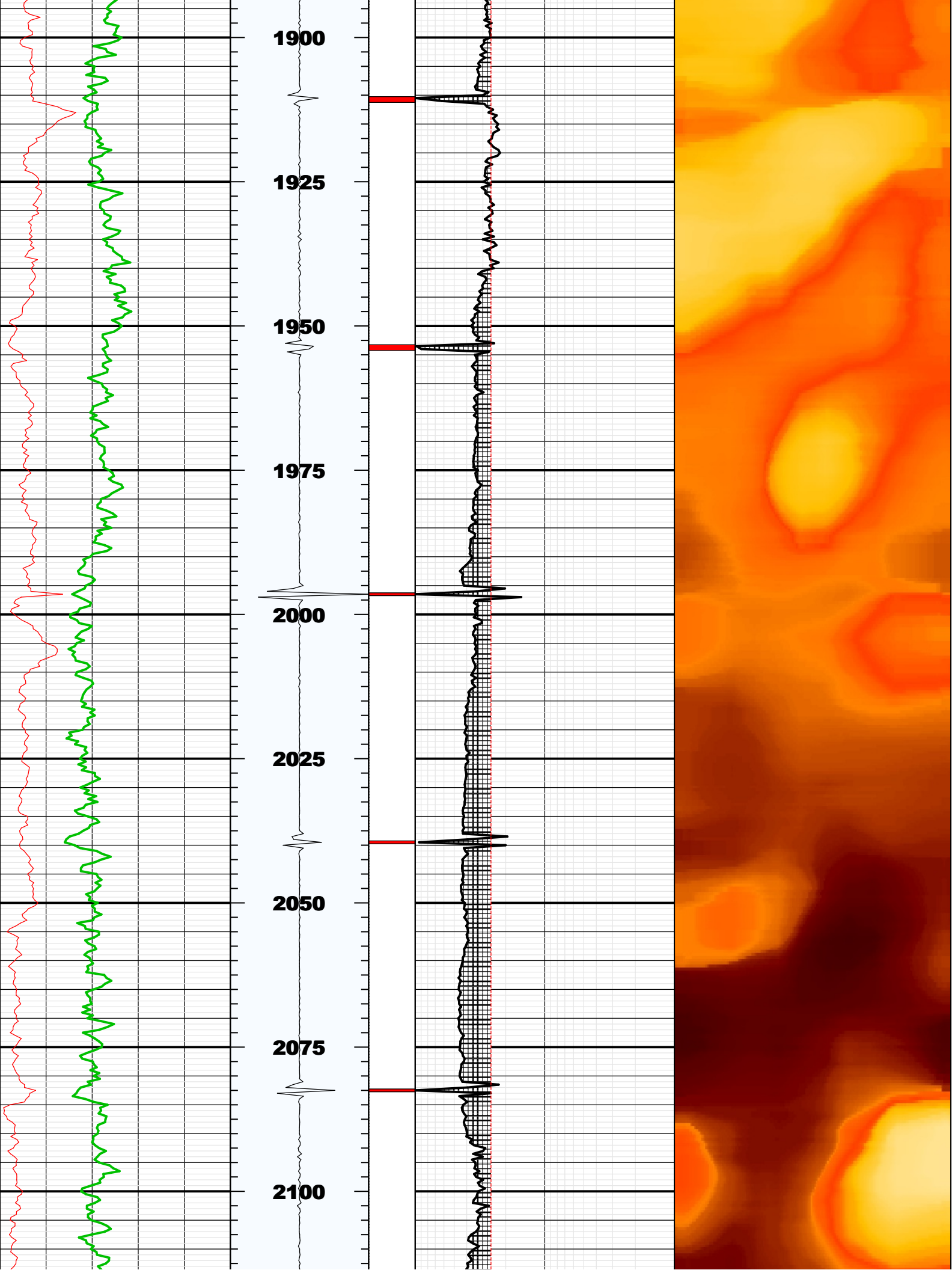


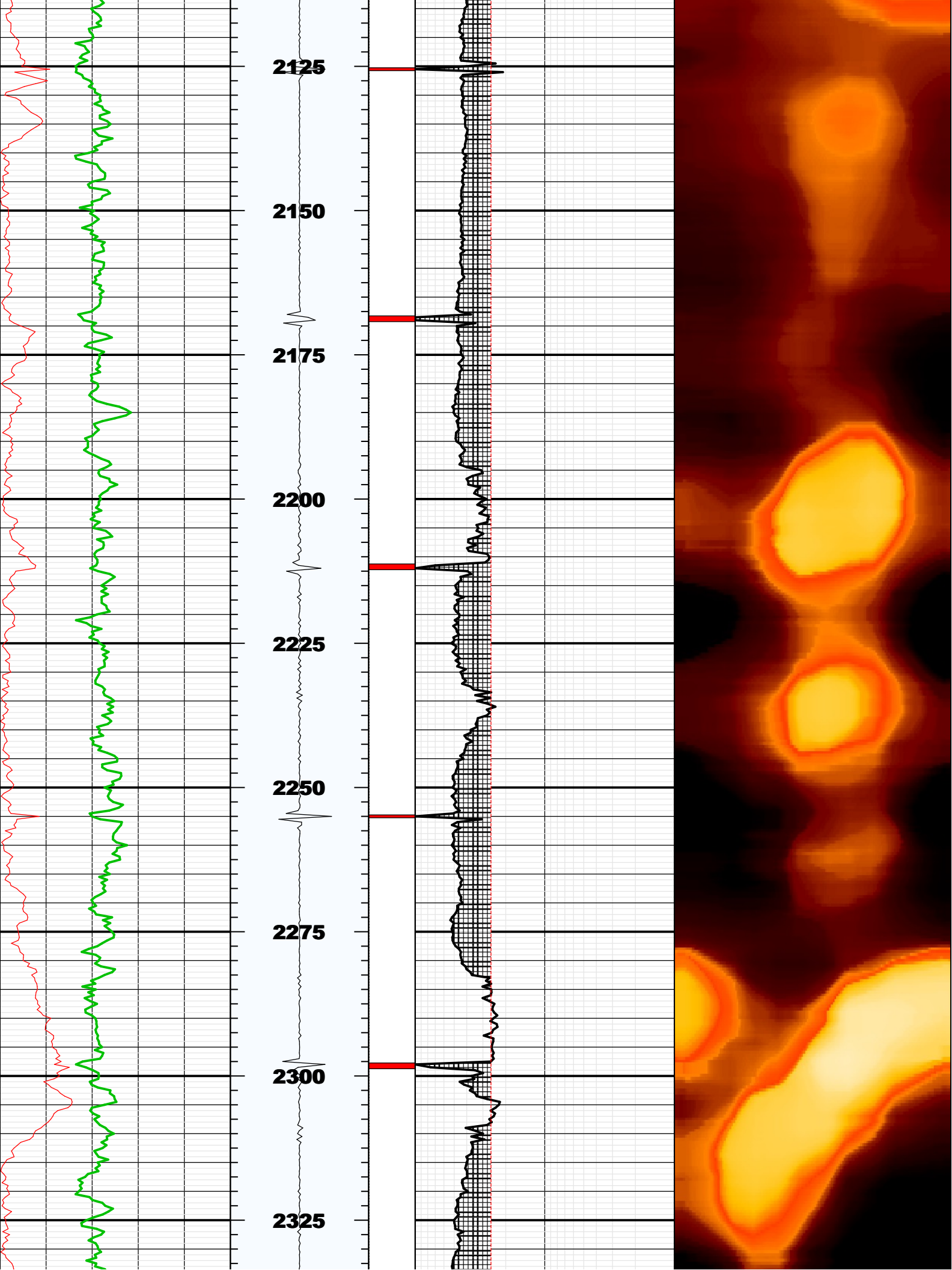


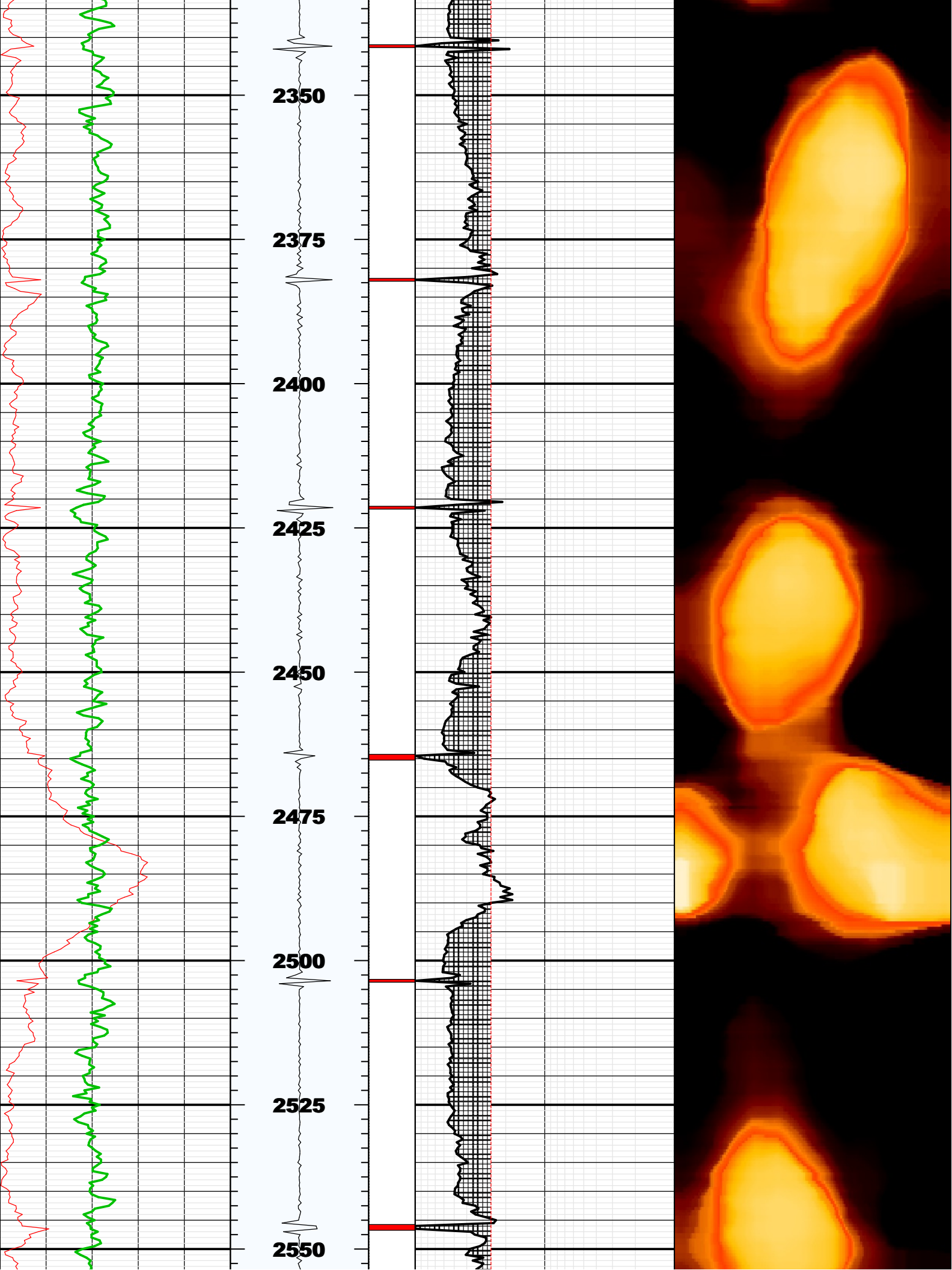


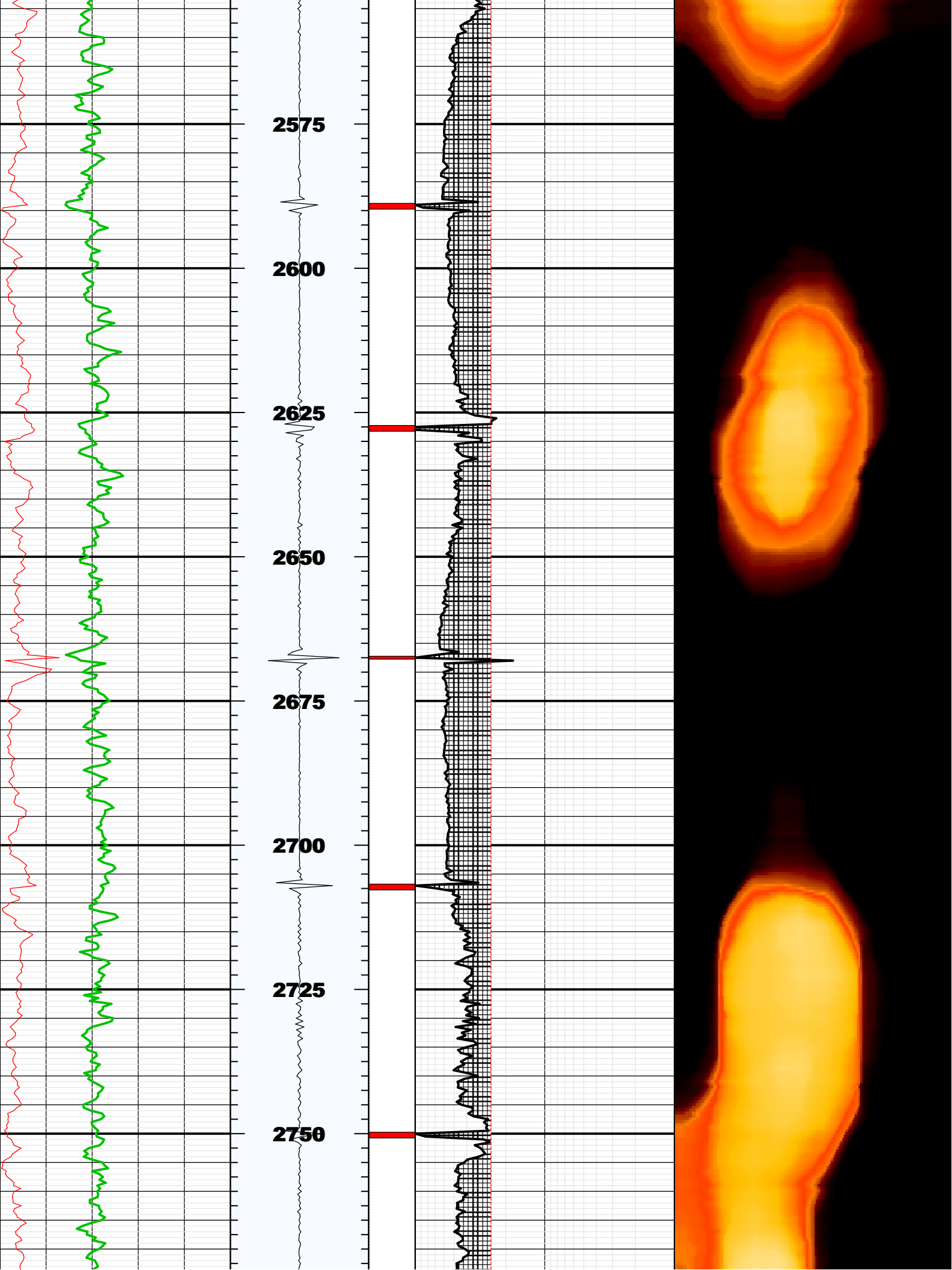


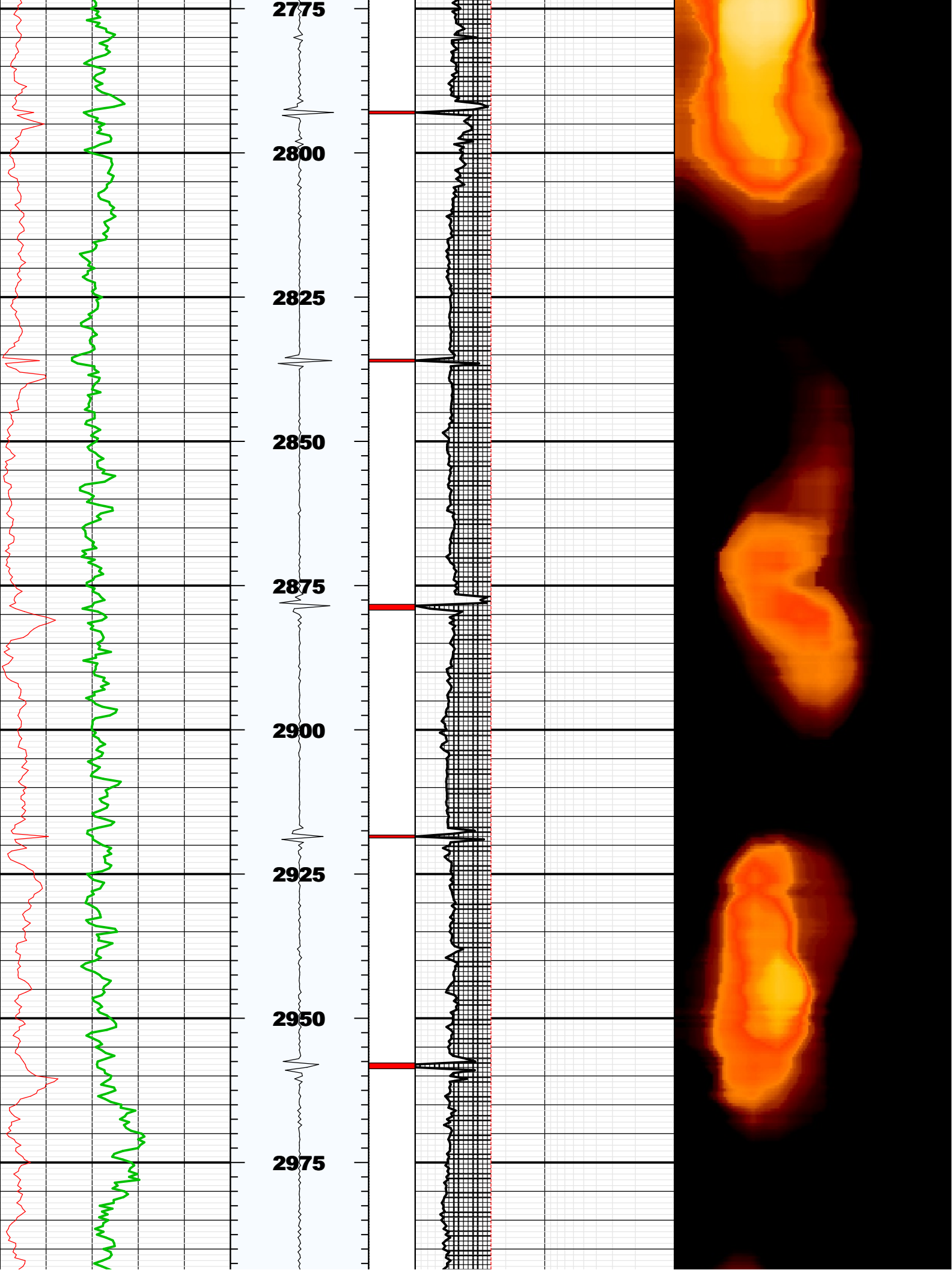


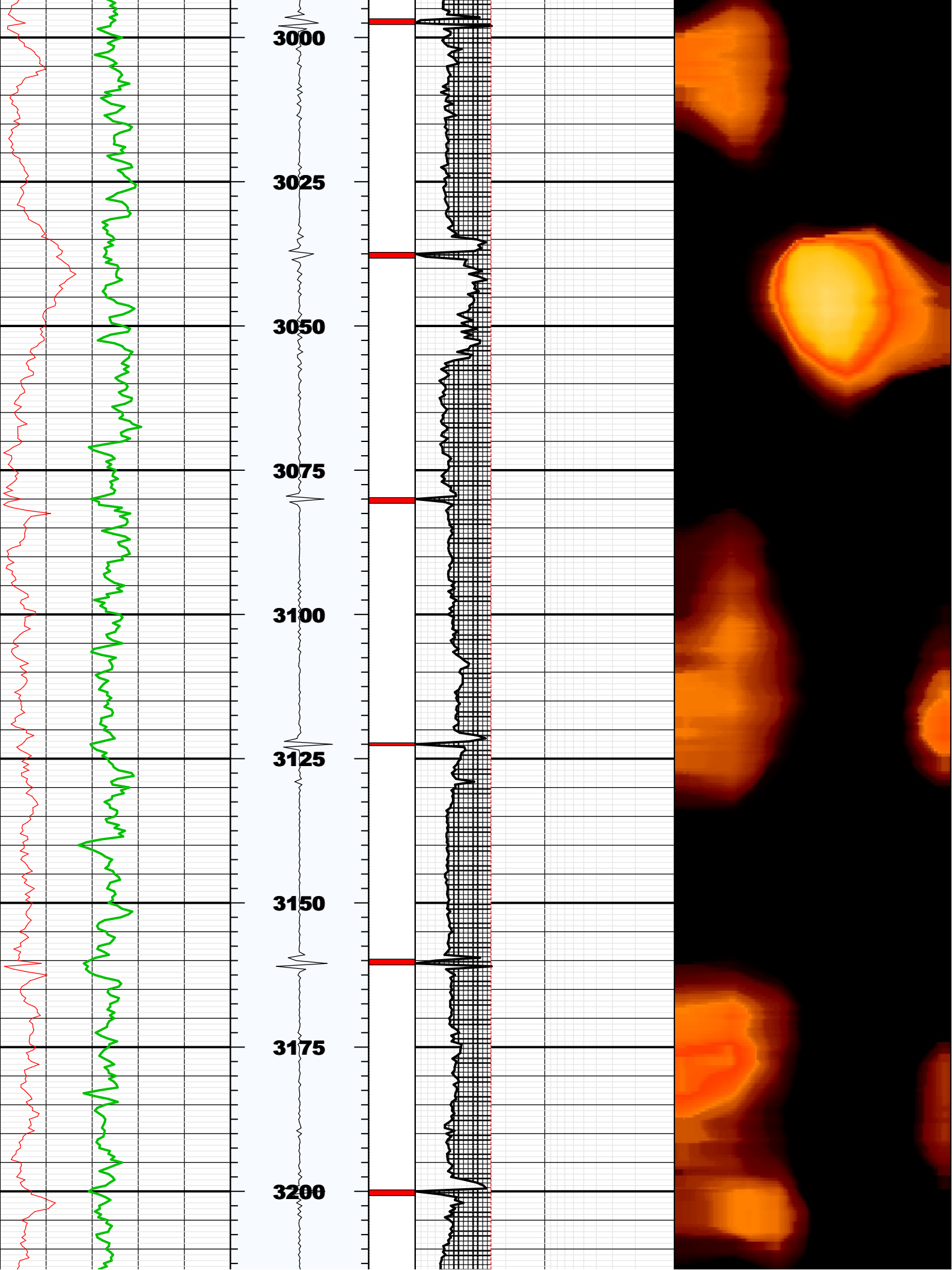


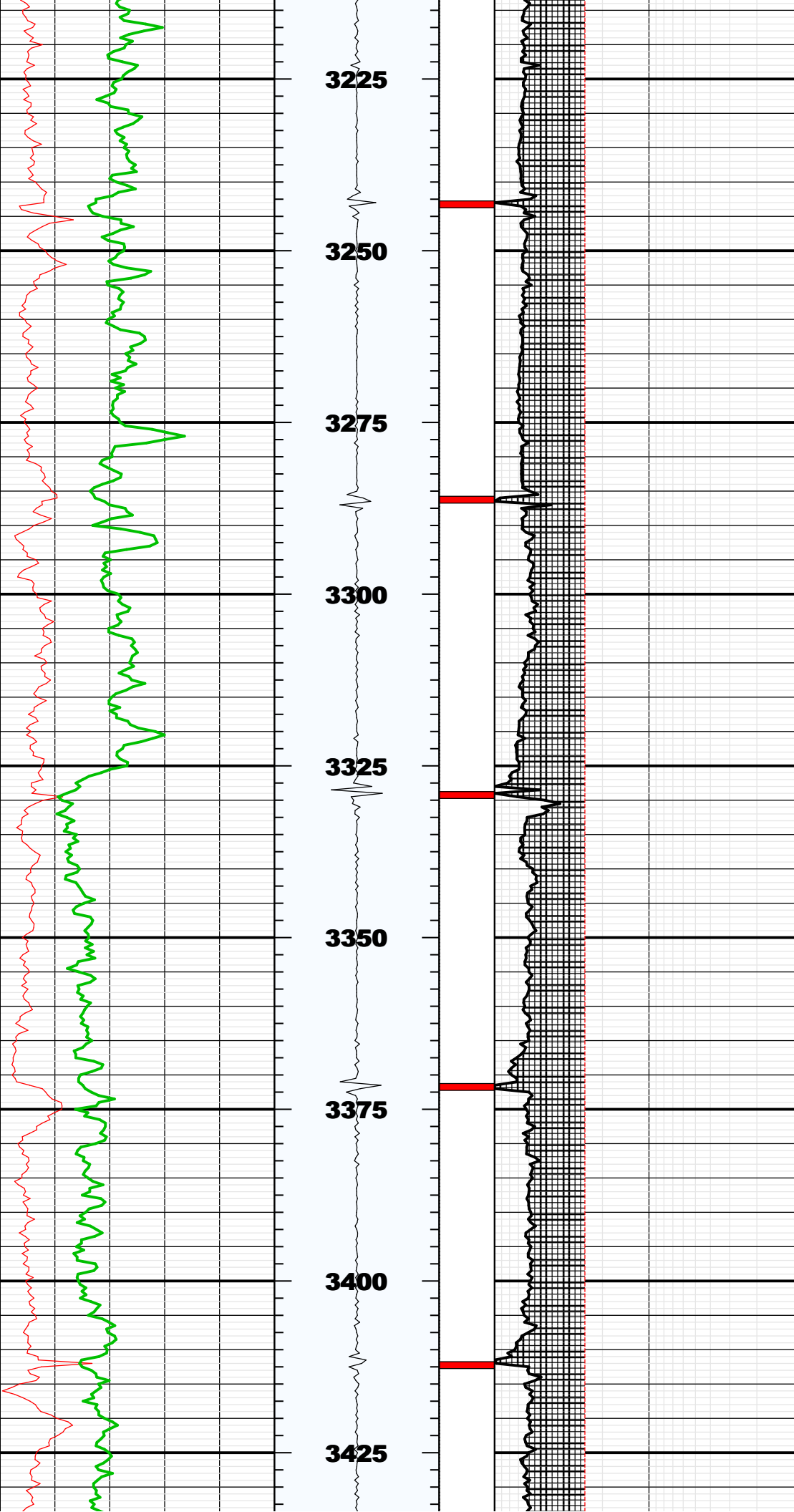


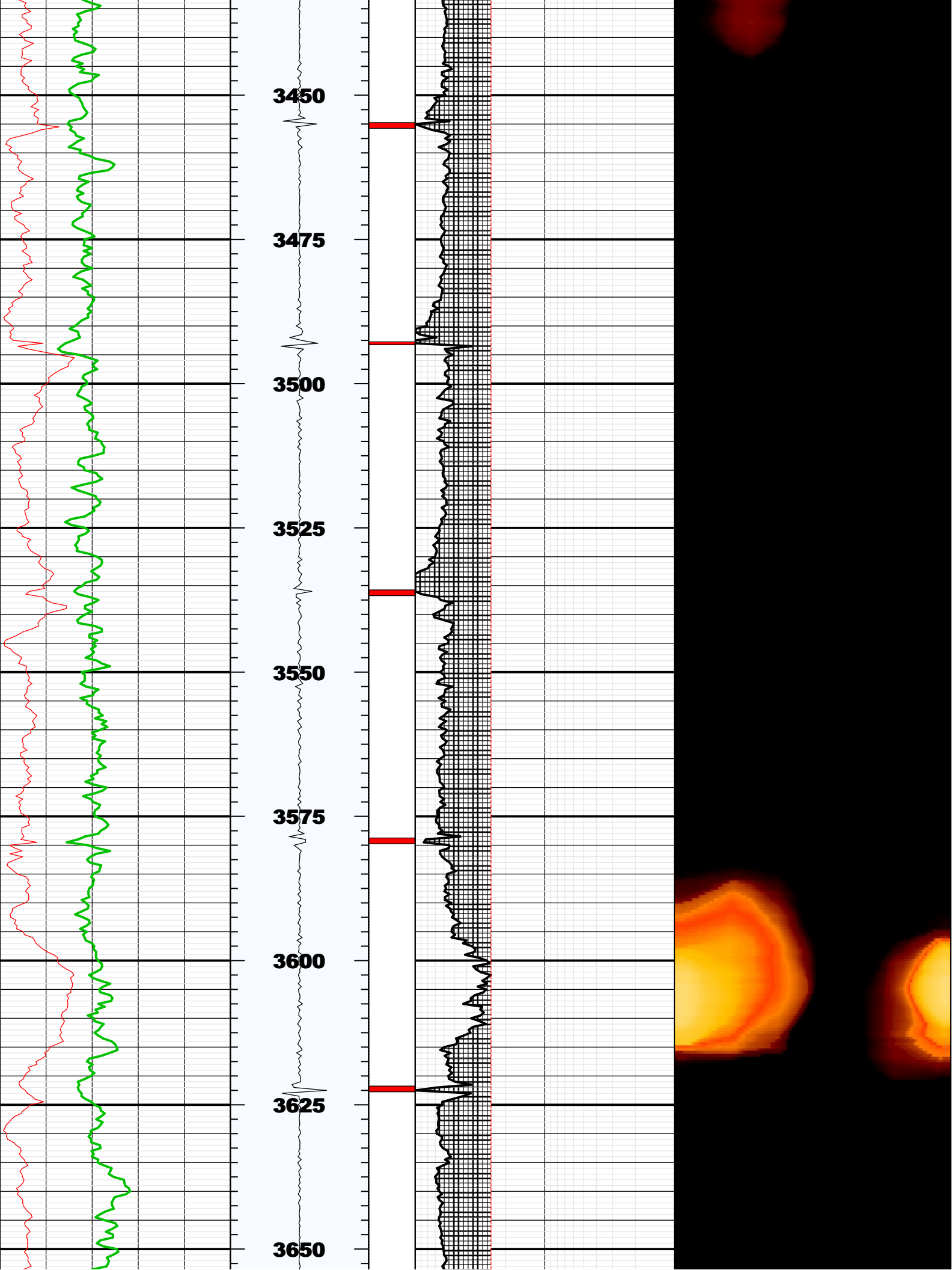


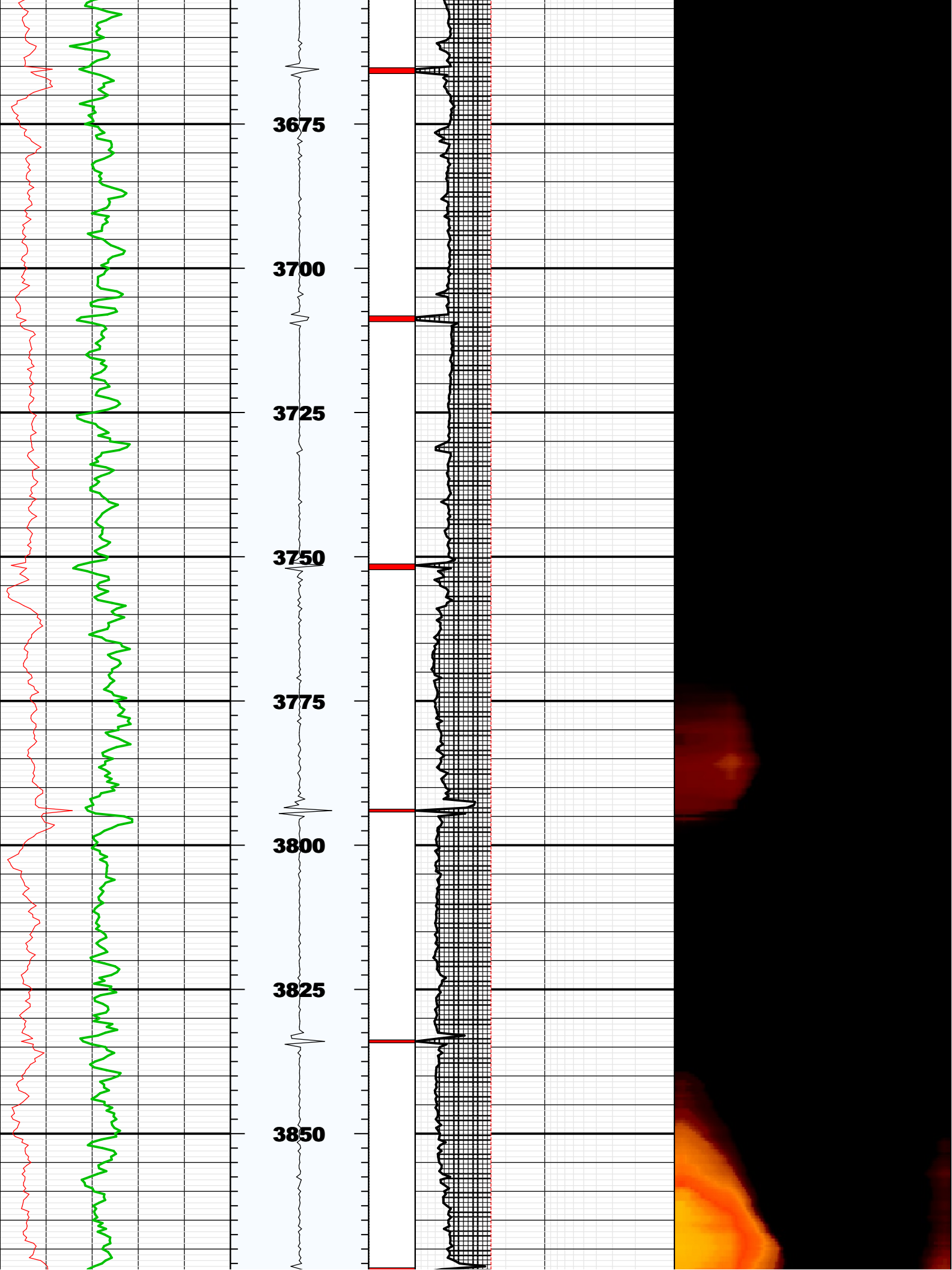


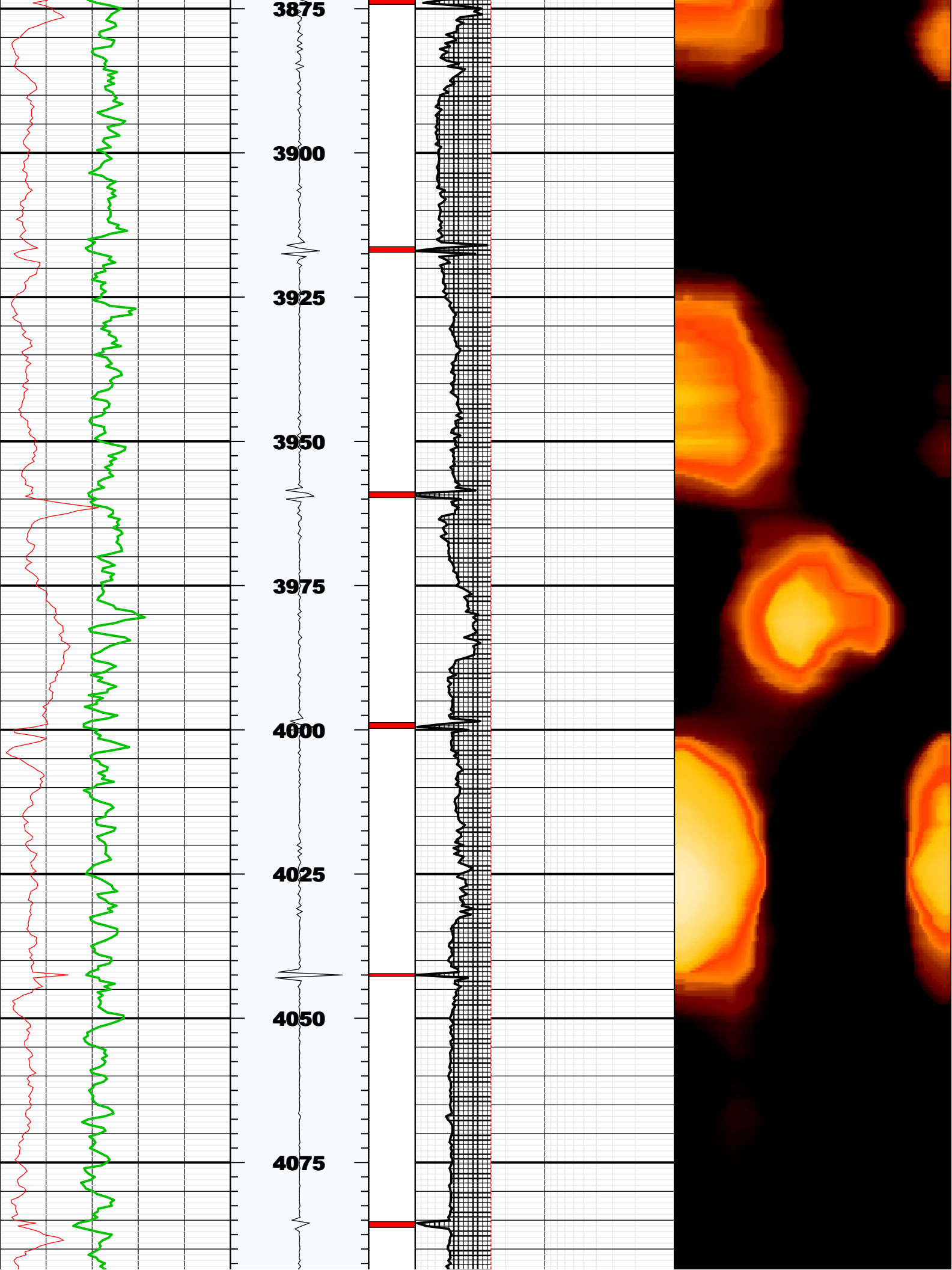


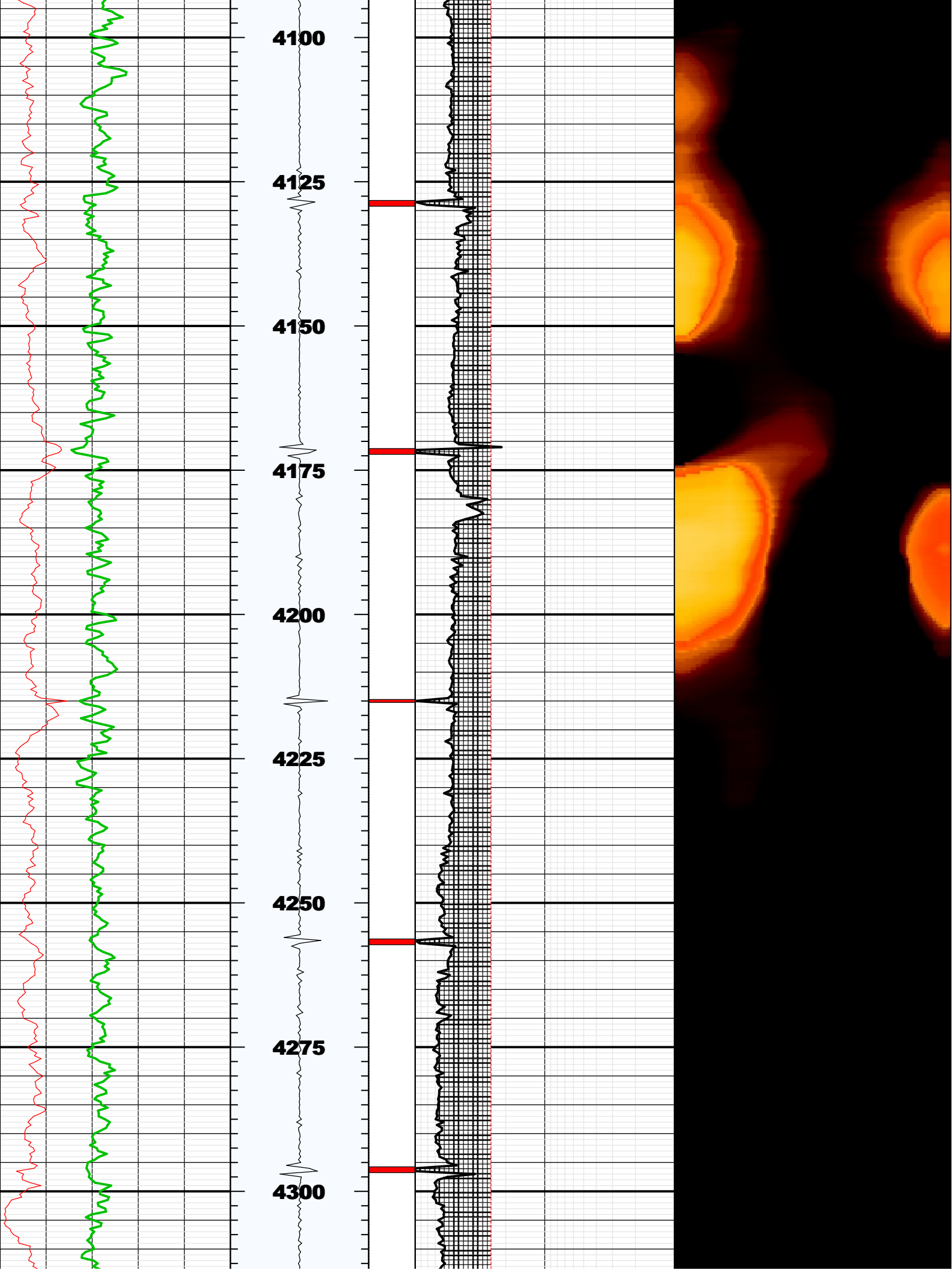


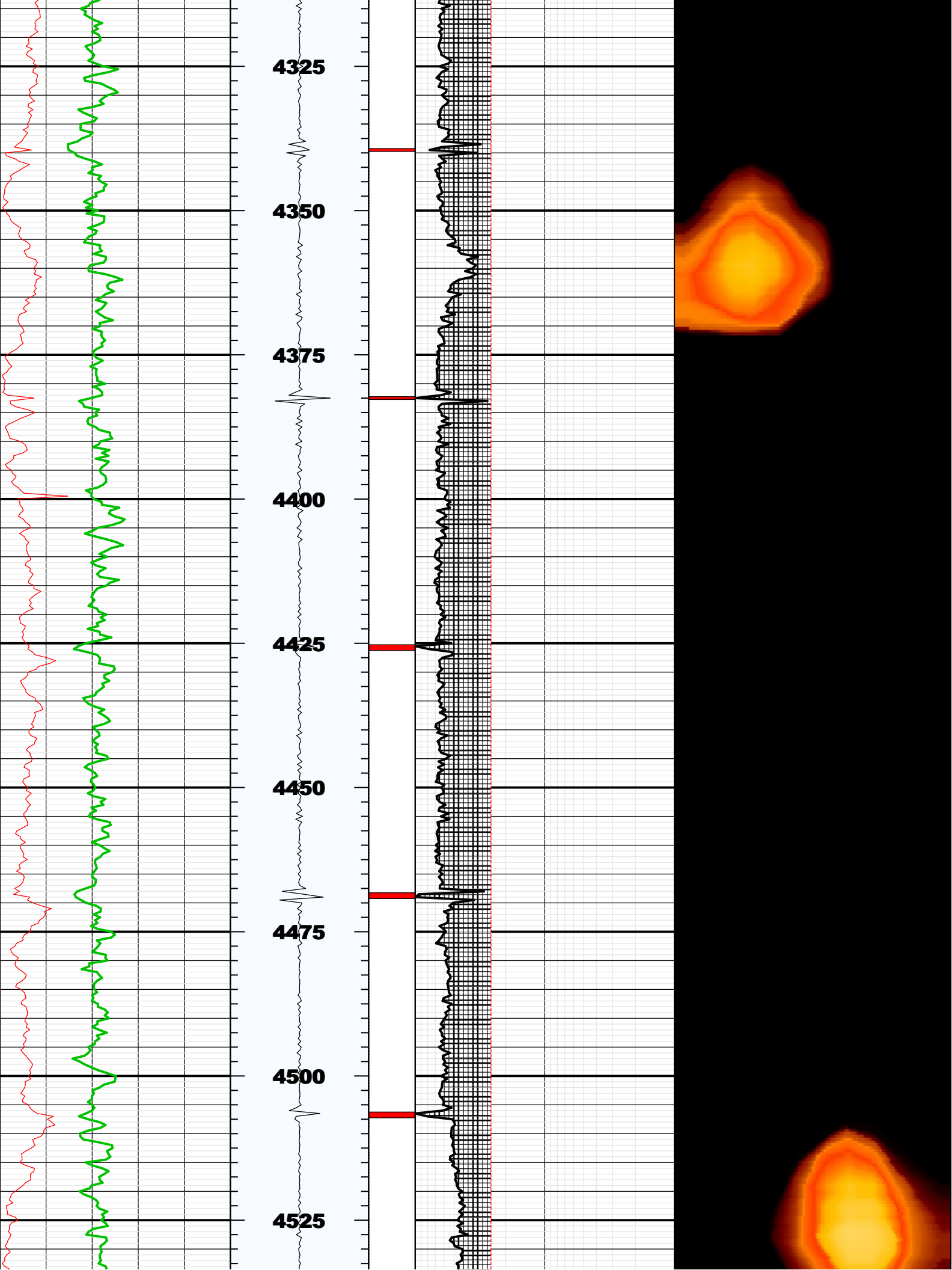


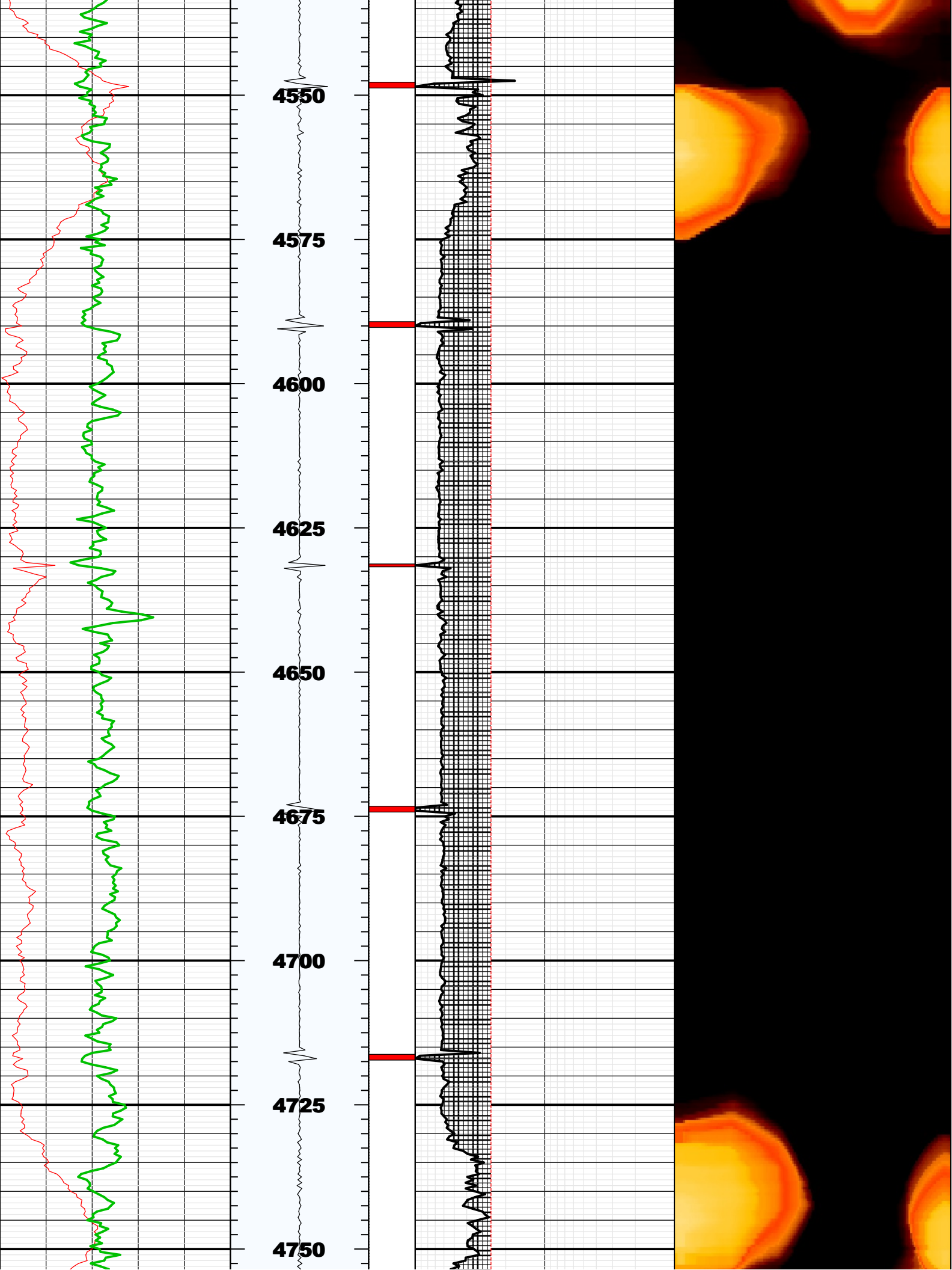


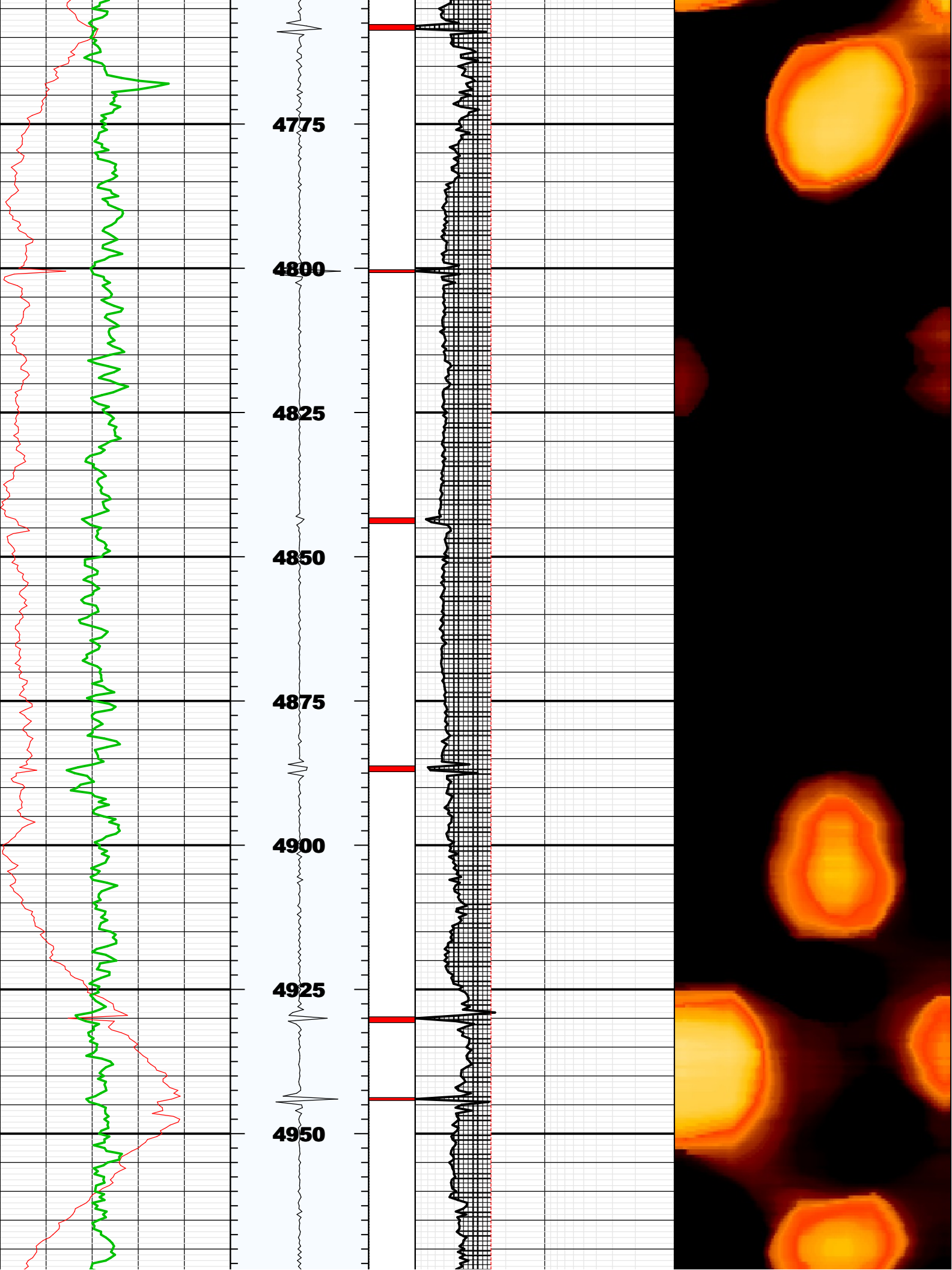


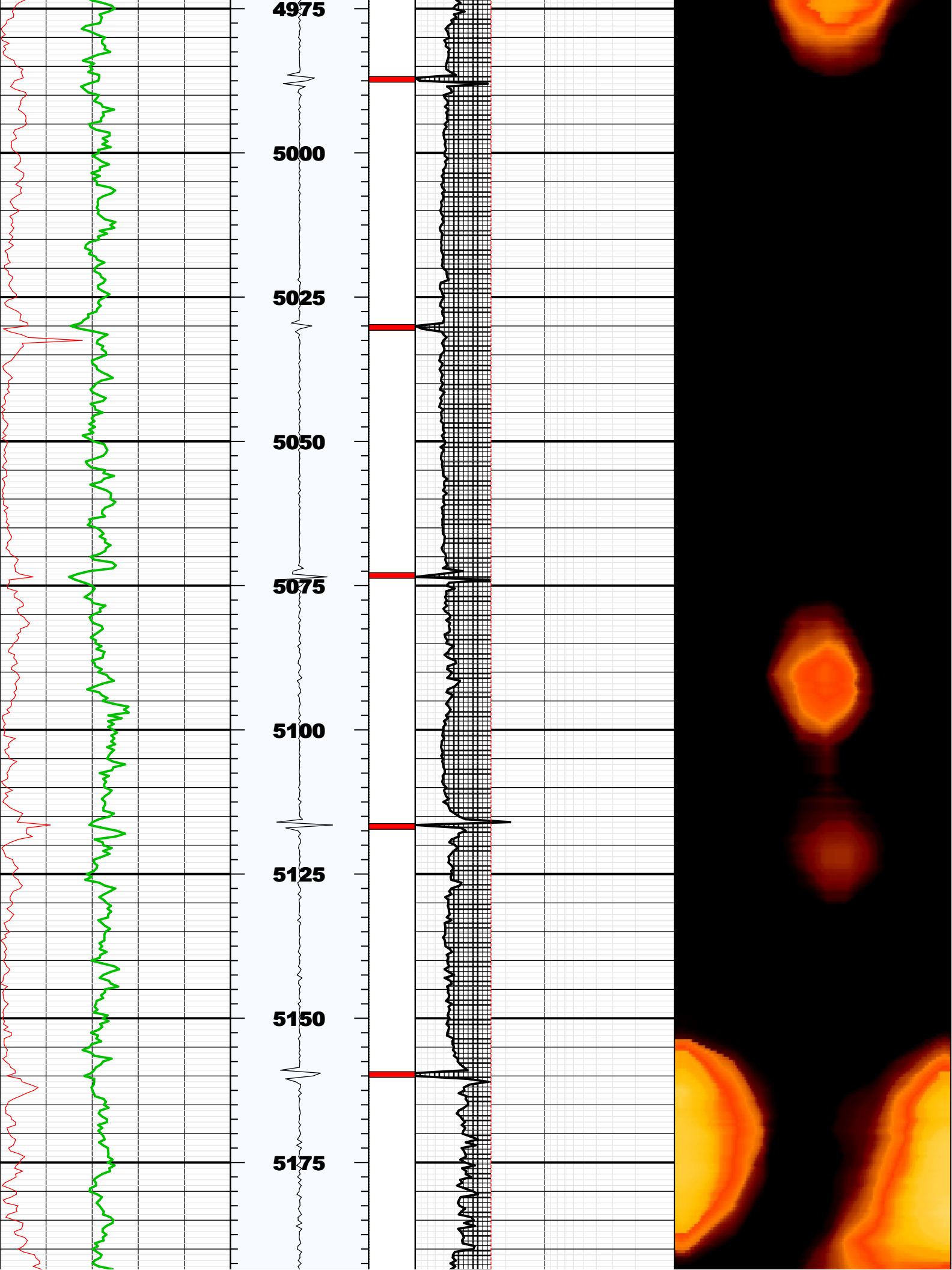


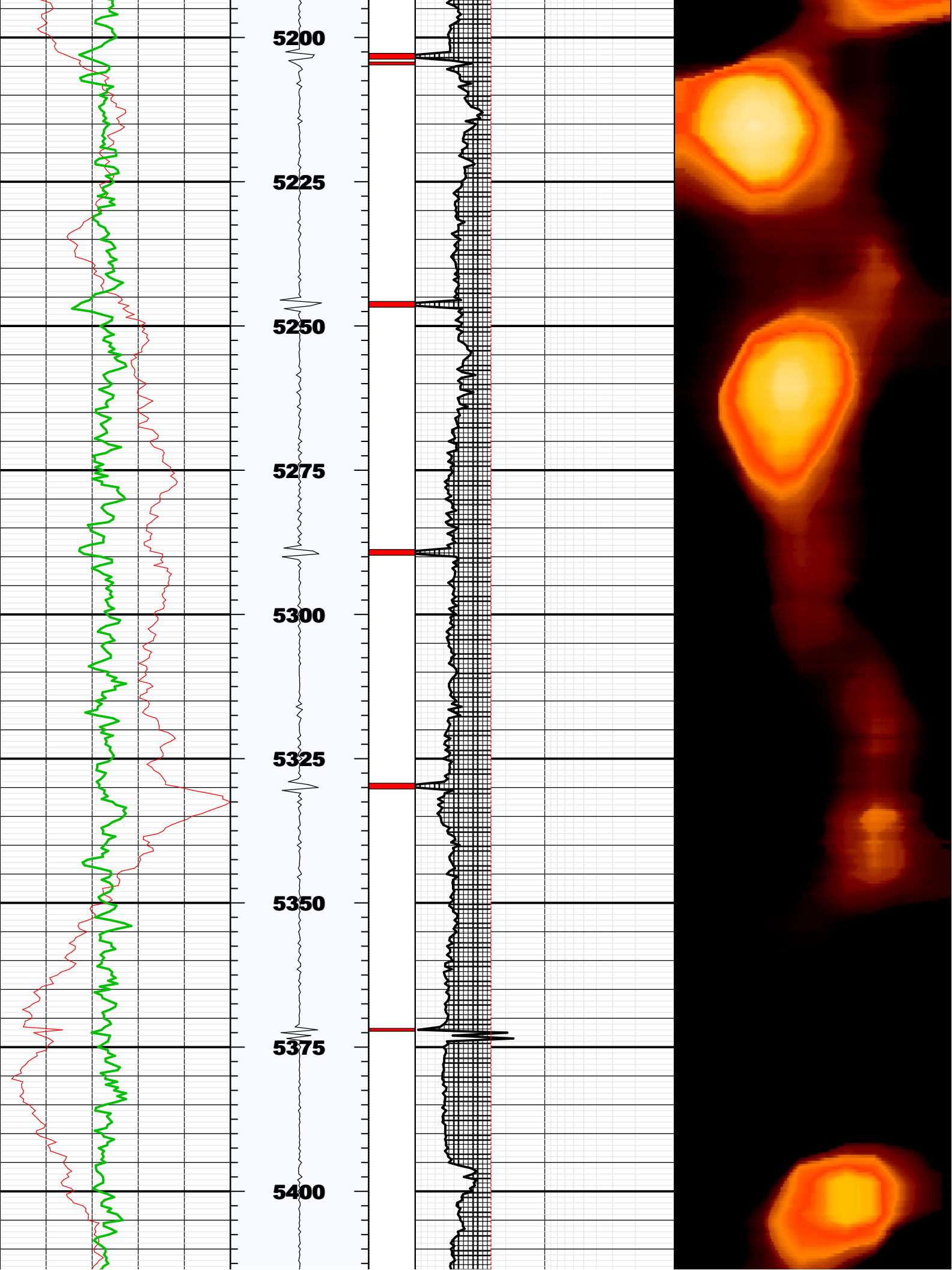










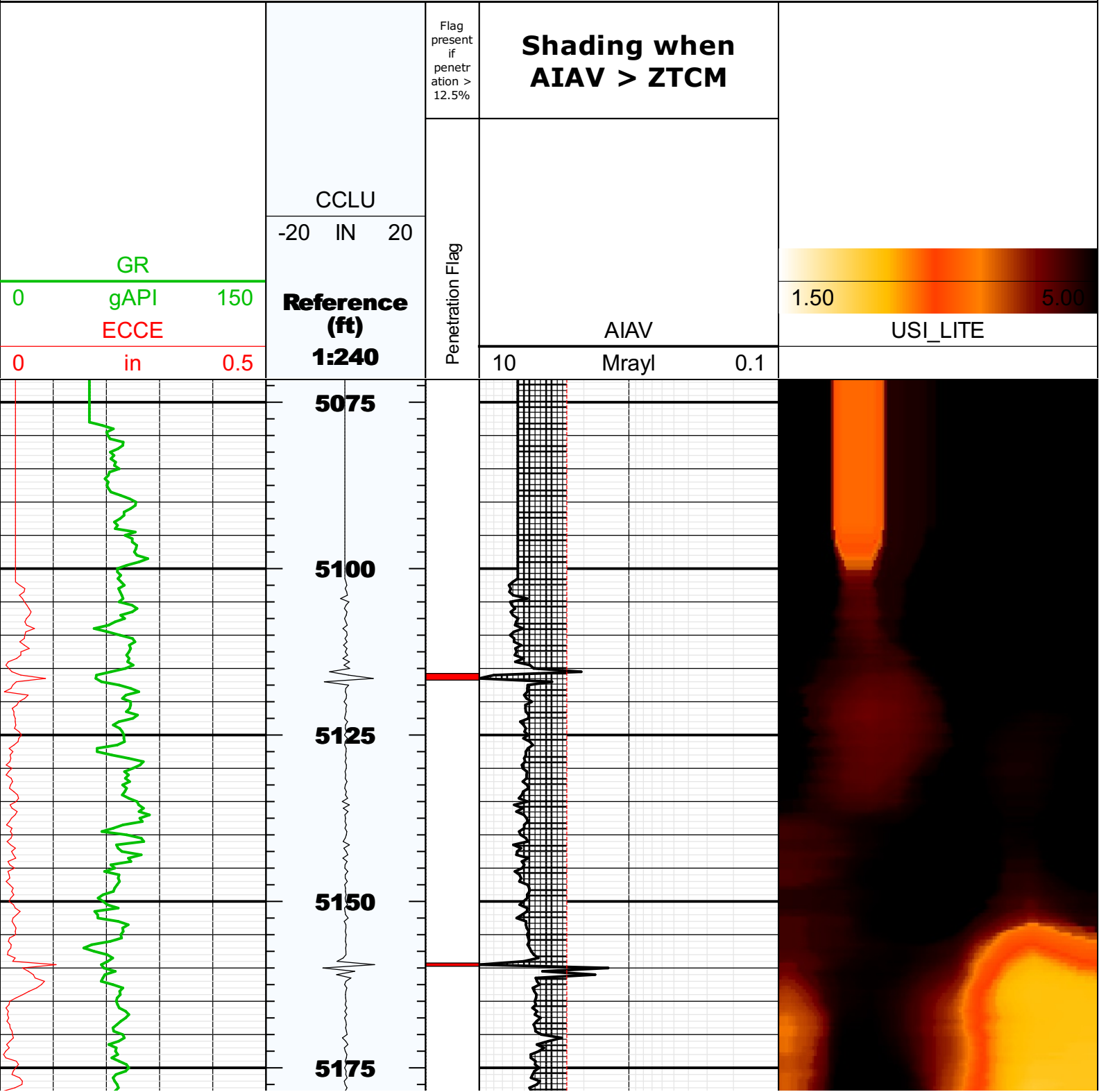


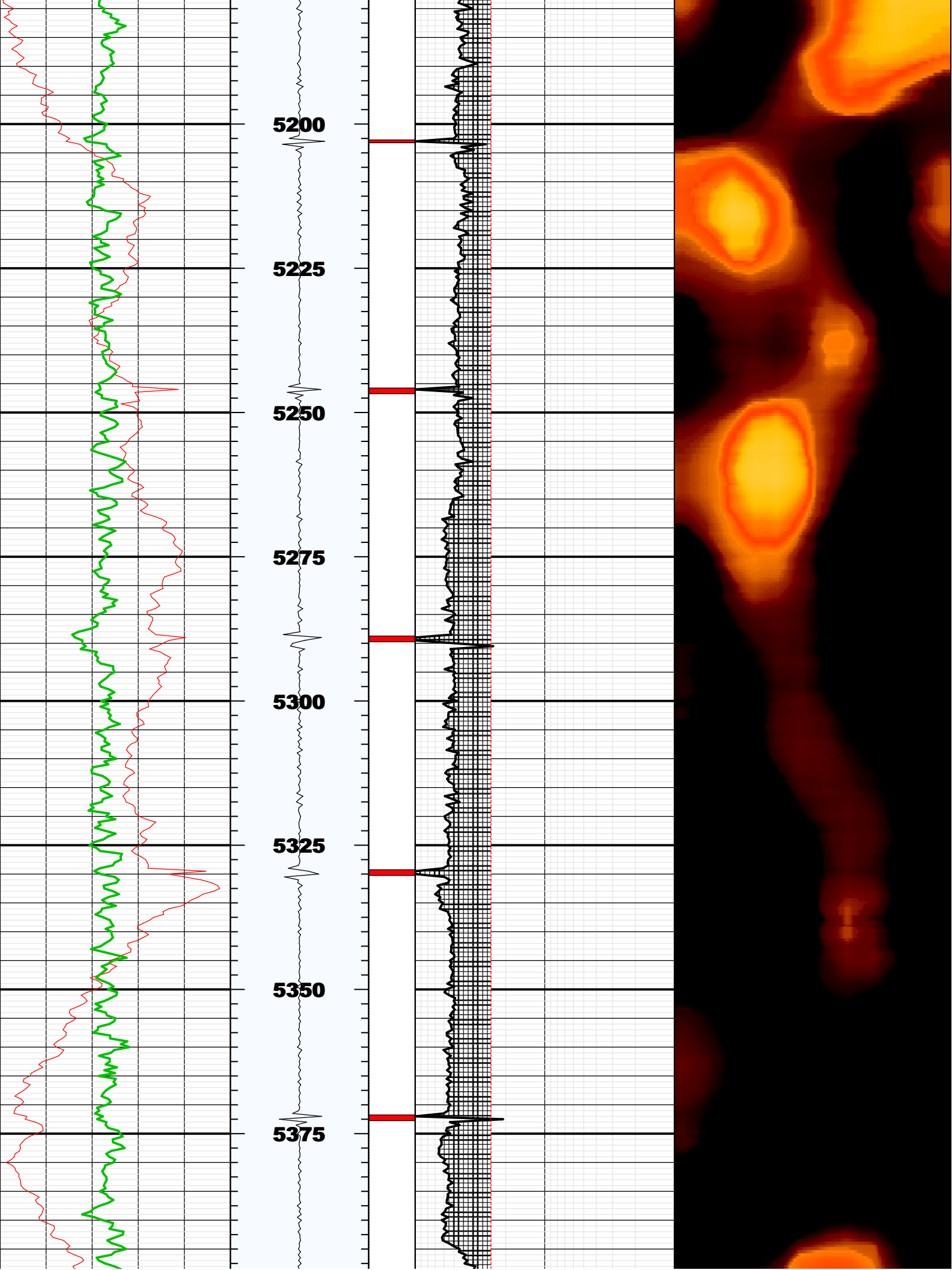


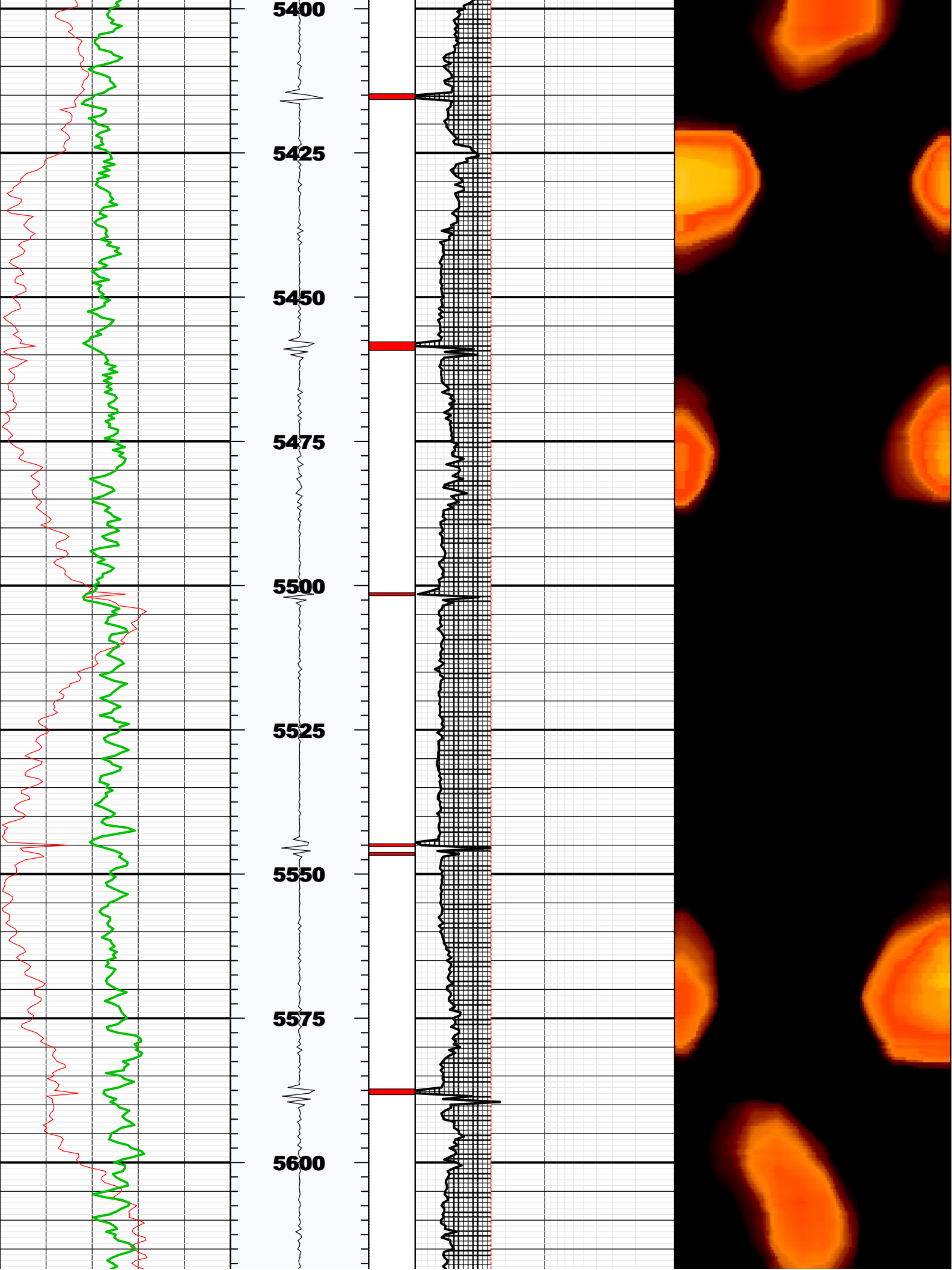
| | | | |
|-------------|-------------|------|--|
| BS | 8.75000 | IN | Bit Size |
| CASG | P110 | | Casing Grade |
| CDIA | 7.00000 | IN | Casing Outer Diameter |
| CSID | | | |
| CSIZ | 7.00000 | IN | Current Casing Size |
| CWEI | 26.00000 | LB/F | Casing Weight |
| DFD | 8.40000 | LB/G | Drilling Fluid Density |
| DFVL | 188.00000 | US/F | Default Fluid Velocity |
| DO | | | |
| DOT | 2.87400 | IN | Diameter of Transducer Sensor |
| EMXV | 70 | 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 | 32.73896 | US | Window Begin Time |
| WINE | 76.48156 | US | Window End Time |
| ZCAS | 46.25000 | MRAY | Acoustic Impedance of Casing |
| ZINI | -1.00000 | MRAY | Initial Estimate of Cement Impedance |
| ZMUD | 1.80000 | 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 |

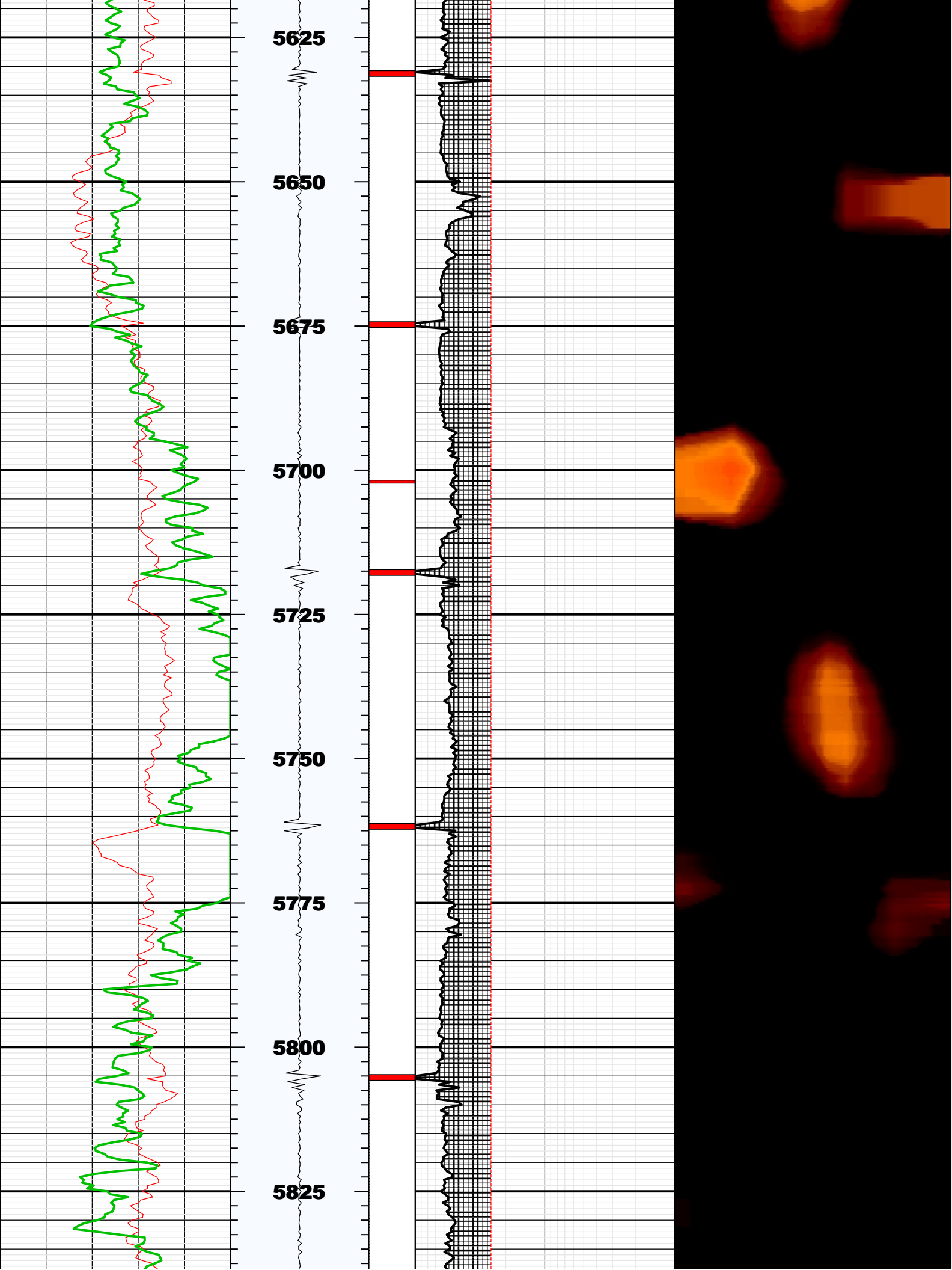
Repeat Pass

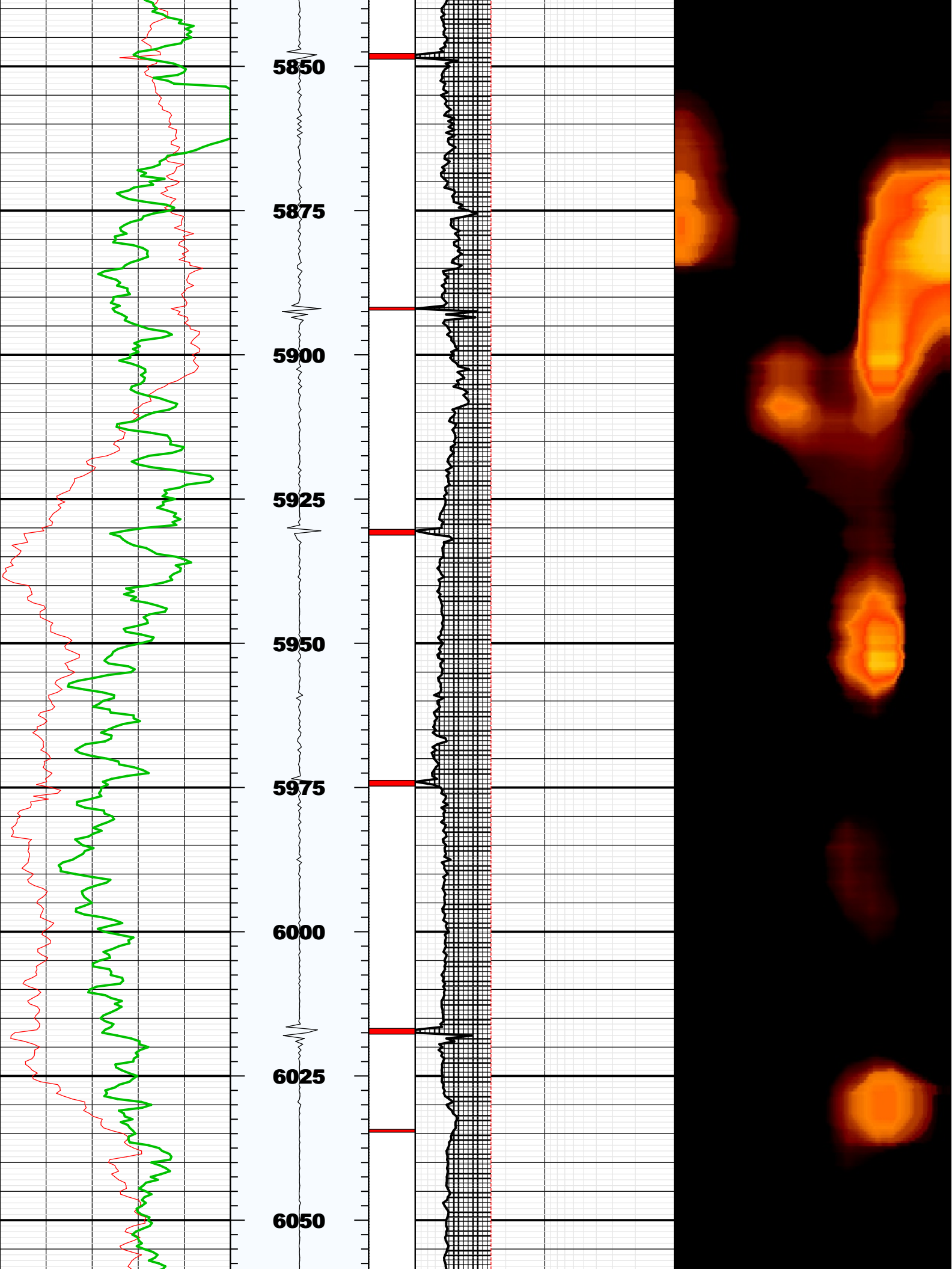
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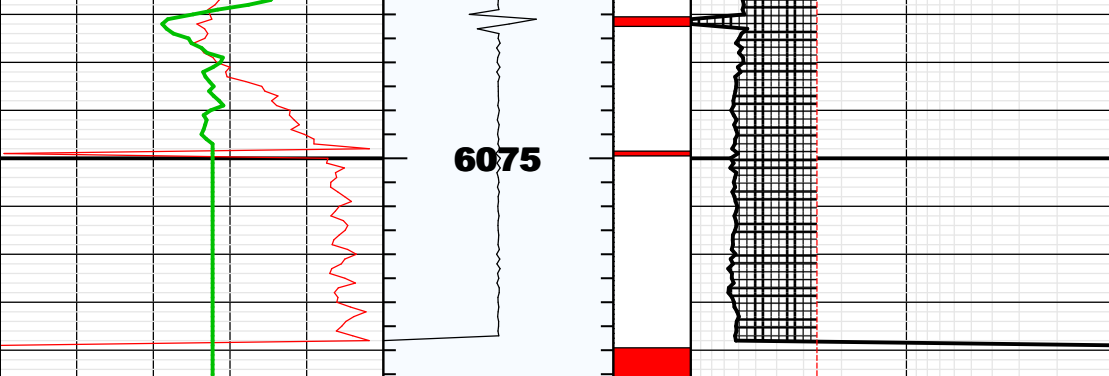












Fluid Properties Used for Main Pass

