

Company: Noble Energy Inc

Well: Oscar Y10-74-1HC
Field: Wattenberg
County: Weld

State: Colorado

USI-LITE (with 2500 psi)

| | | | |
|---|--|-------------------------|--|
| County: | | Weld | |
| Field: | | Wattenberg | |
| Location: | | NWSE Sec. 10 T 2N R 64W | |
| Well: | | Oscar Y10-74-1HC | |
| Company: | | Noble Energy Inc | |
| USI-LITE (with 2500 psi) | | | |
| LOCATION | | | |
| Permanent Datum: Log Measured From: Drilling Measured From: | | GL KB KB | |
| API Serial No. 05-123-38204-0000 | | Section 10 | |
| Township 2N | | Range 64W | |

| | |
|--------------------------|------------------------|
| Logging Date | 16-Dec-2014 |
| Run Number | Run 1 USIT |
| Depth Driller | 7443.0 F |
| Schlumberger Depth | 7150.0 F |
| Bottom Log Interval | 7150.0 F |
| Top Log Interval | 50.0 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 | 7150.0 F |
| To | -999.2 F |
| Casing Size | 7.00 IN |
| Weight | 26.00 LB/F |
| Grade | P110 |
| From | 0.0 F |
| To | 7150.0 F |
| Max Recorded Temp | 234.7 |
| Logger on bottom (date) | 16-Dec-2014 |
| Location | Fort Morgan CO |
| Recorded By | MK Henrikson/D 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: F713384 Length: 17000.00000 |

DISCLAIMER

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRTICTIONS ON USE OF THE RECORDED-DATA (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF ANR RELIANCE UPN THE RECORDED-DATA; AND (c)CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISIONS MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA

0 PSI repeat pass 2500 PSI main pass

Top of Cement seen at 330'.

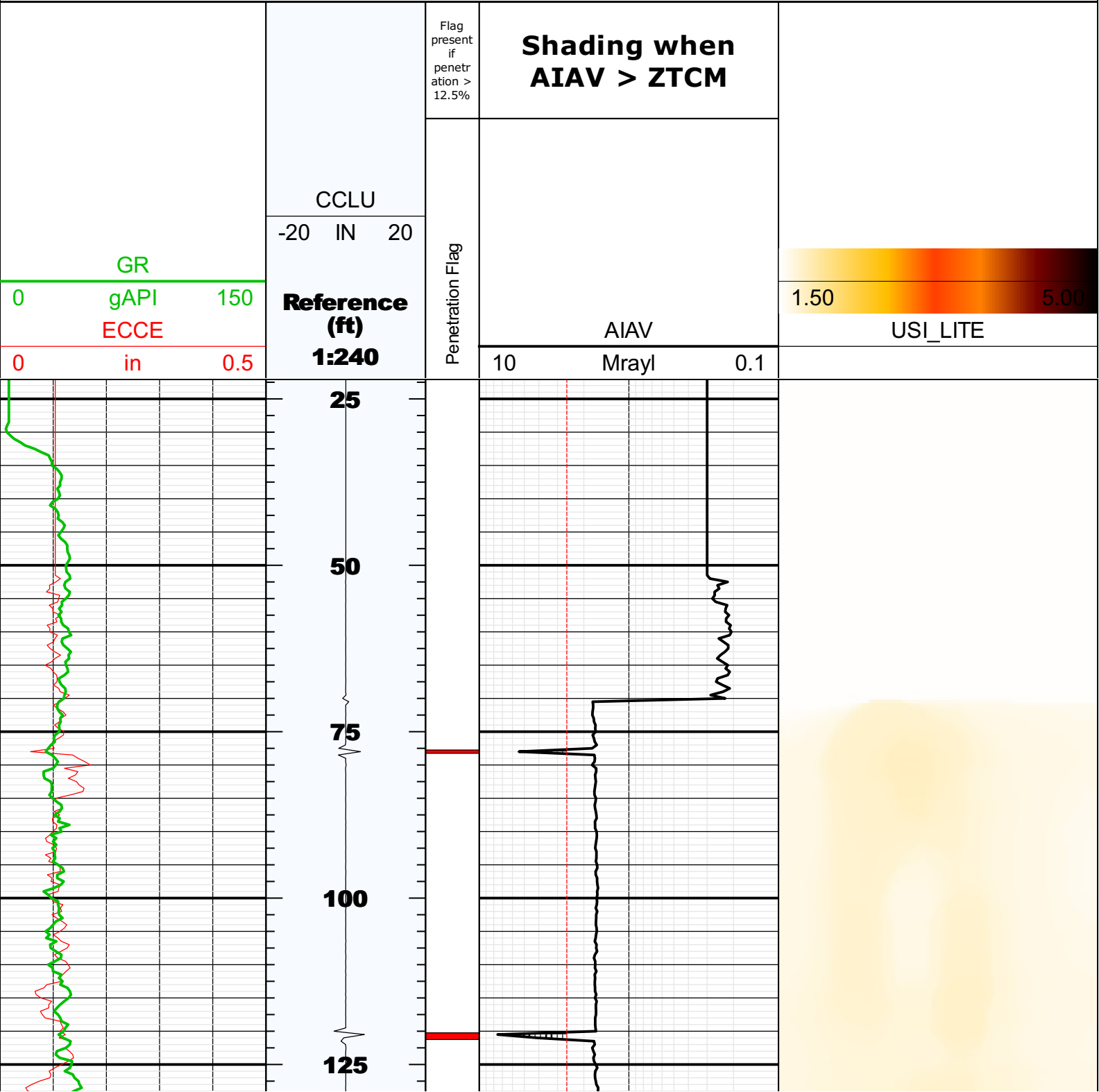
Top of 4.5 liner at 7245.6 ft

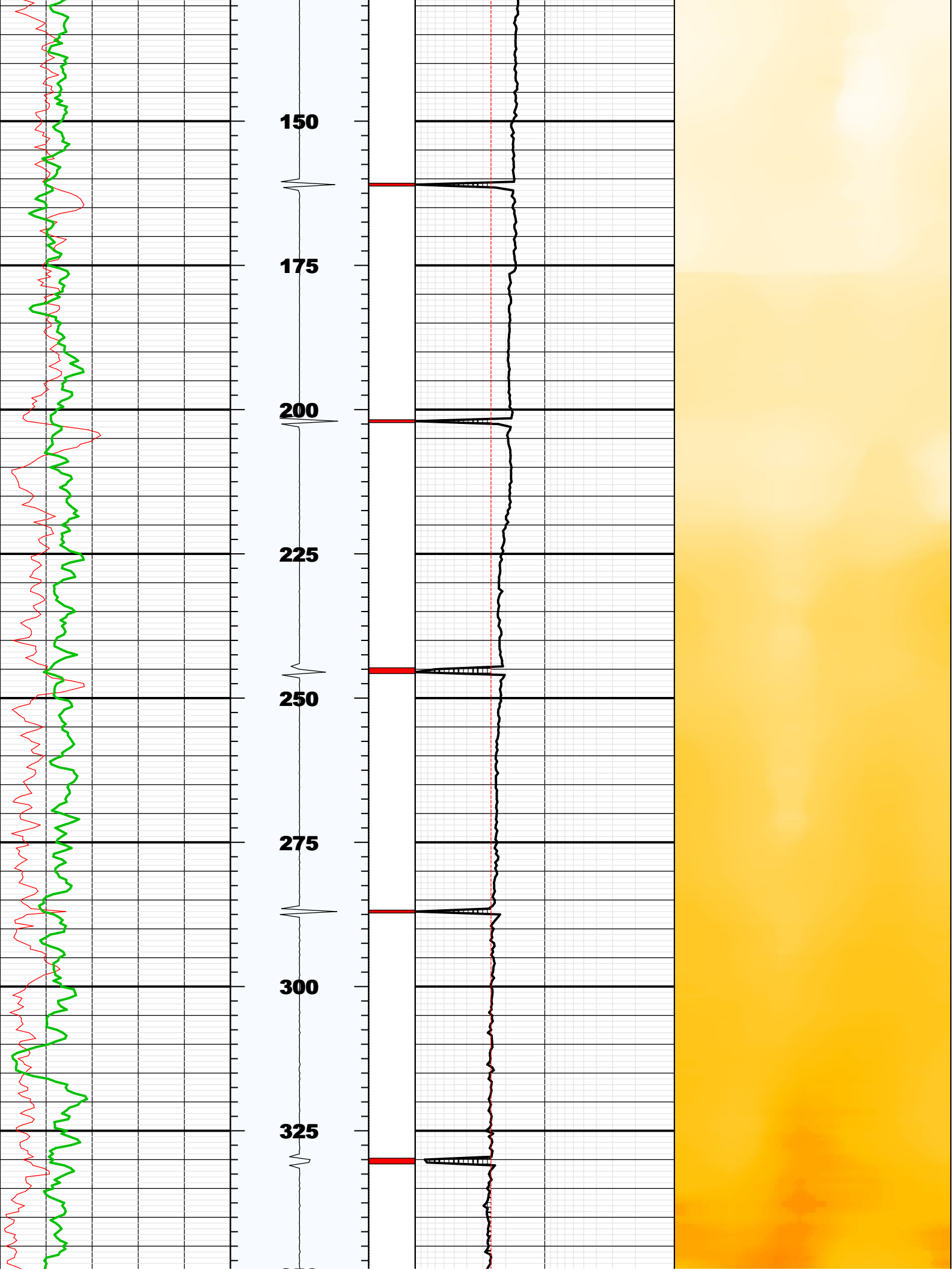
Bottom log temperature was 234 deg F measured at depth.

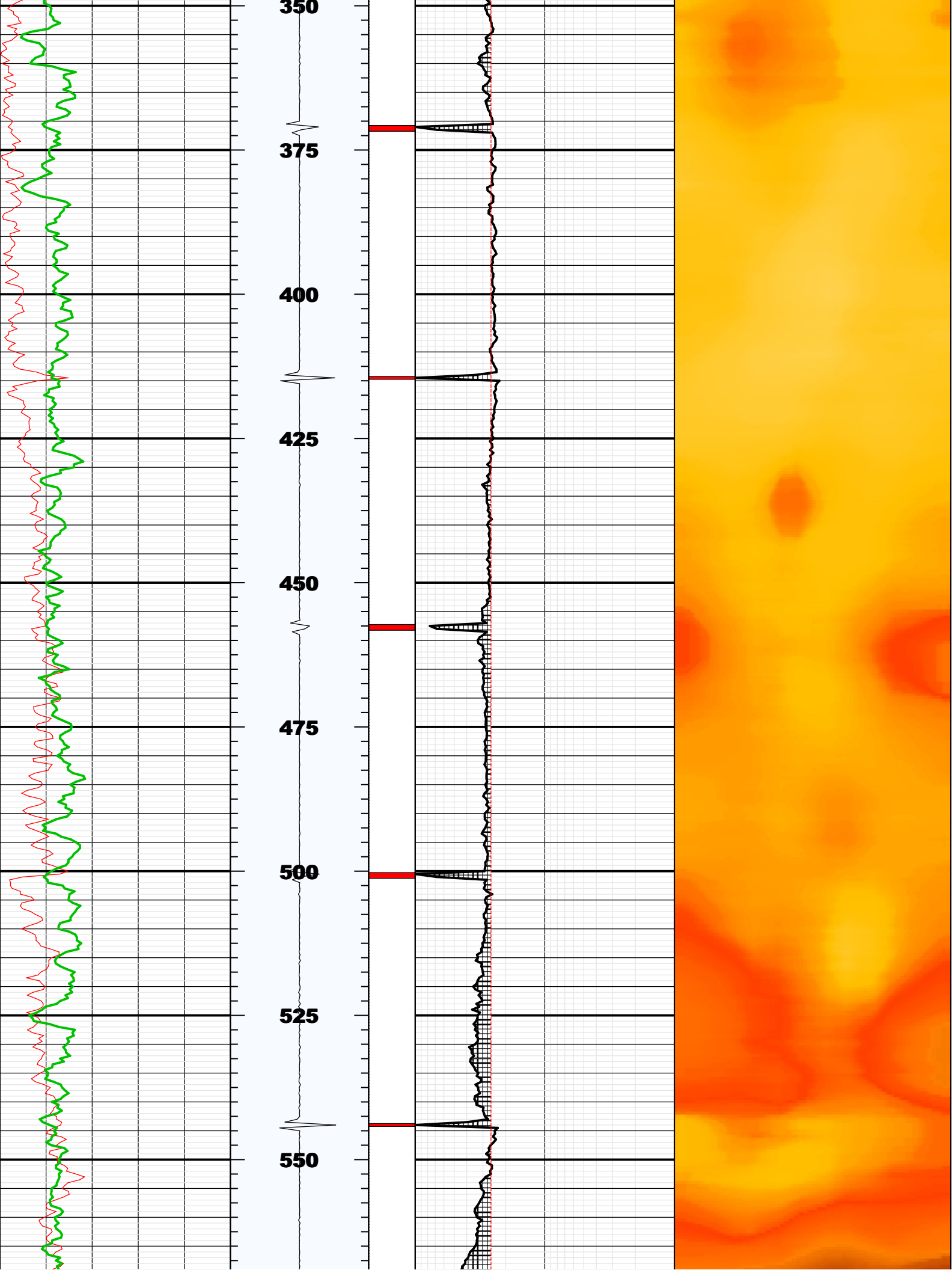
Debris in well started log 95 feet above top of liner (7245.6 ft)

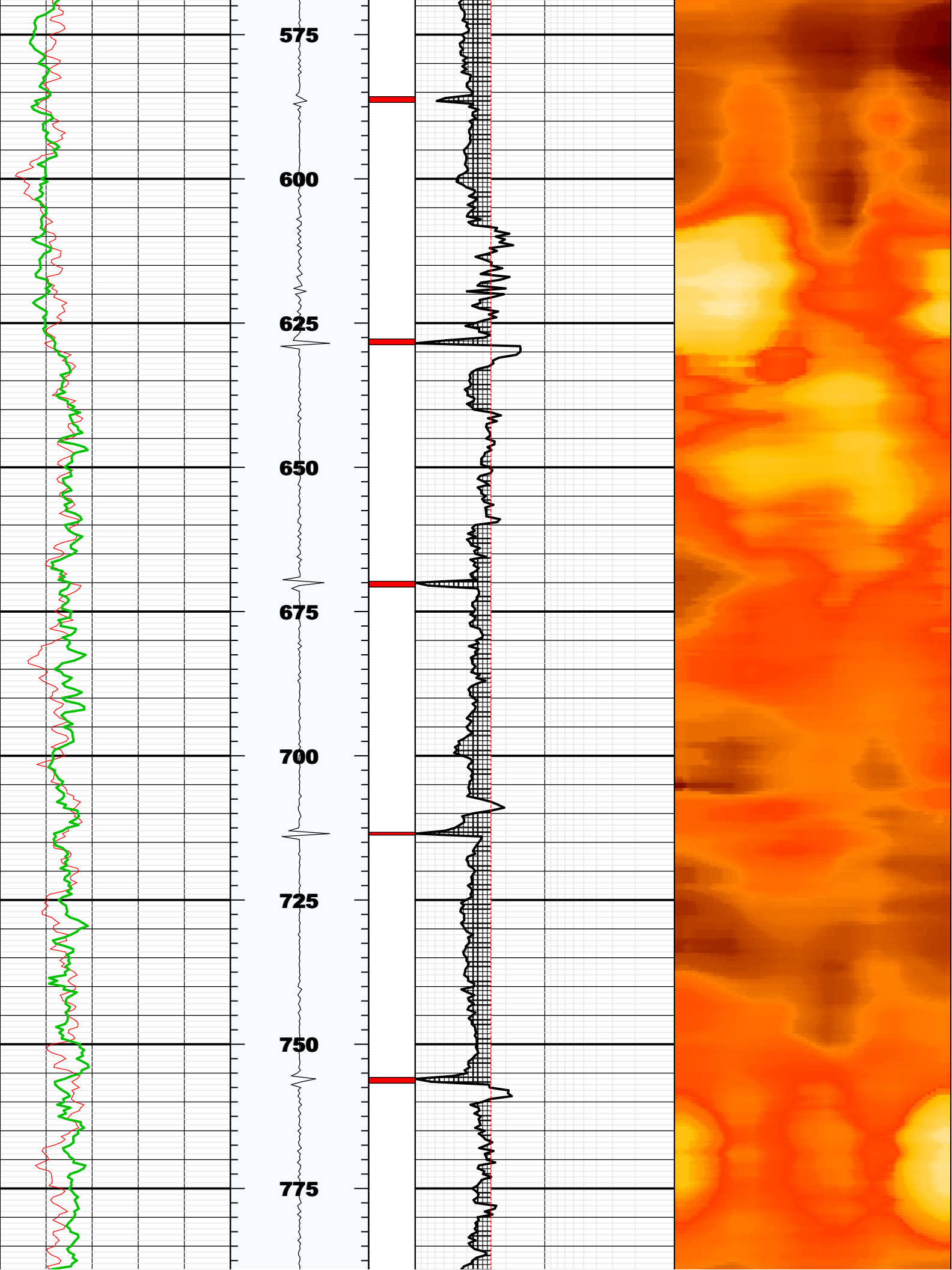
Main Pass

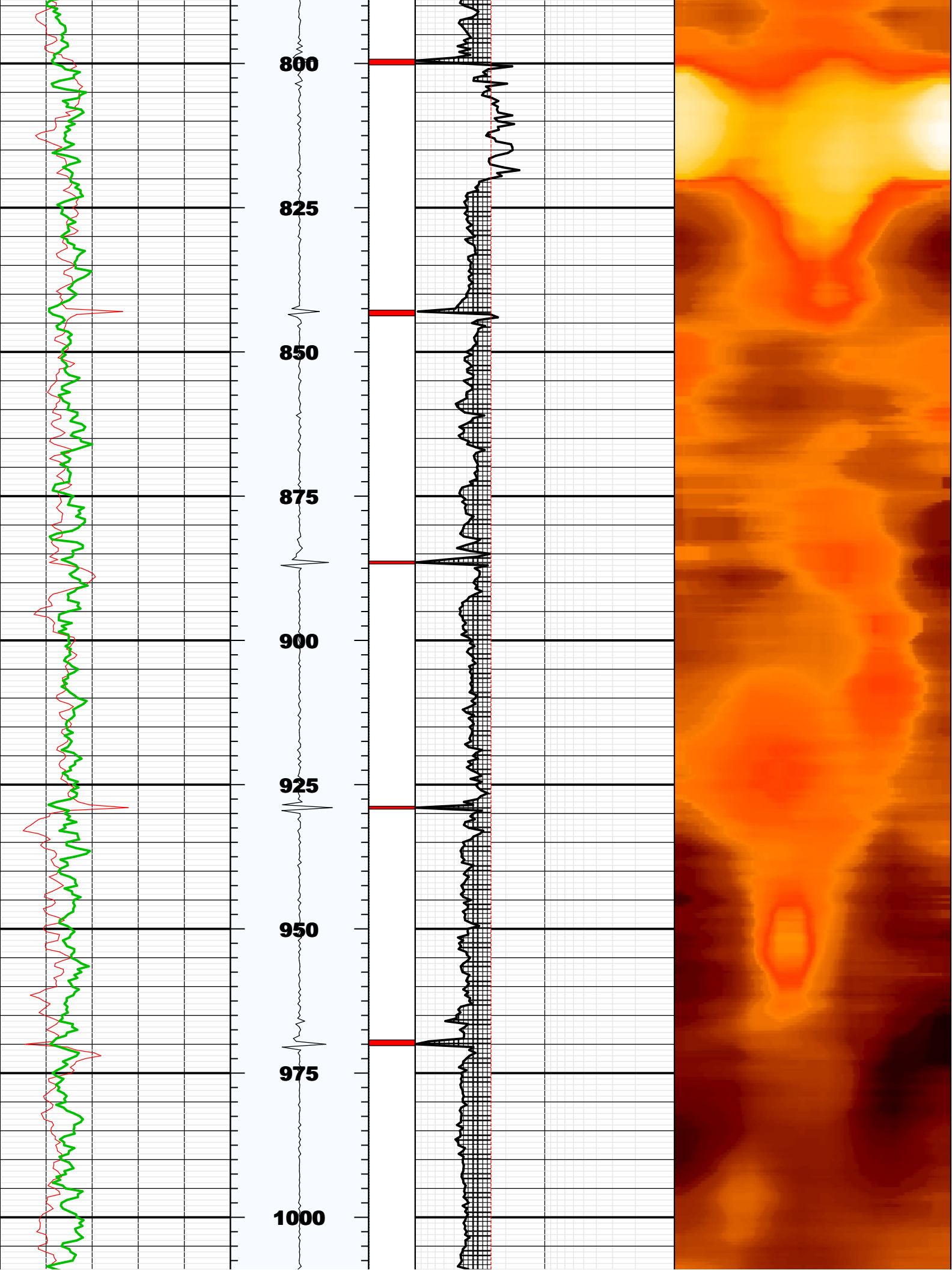
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Well: Oscar Y10-74-1HC
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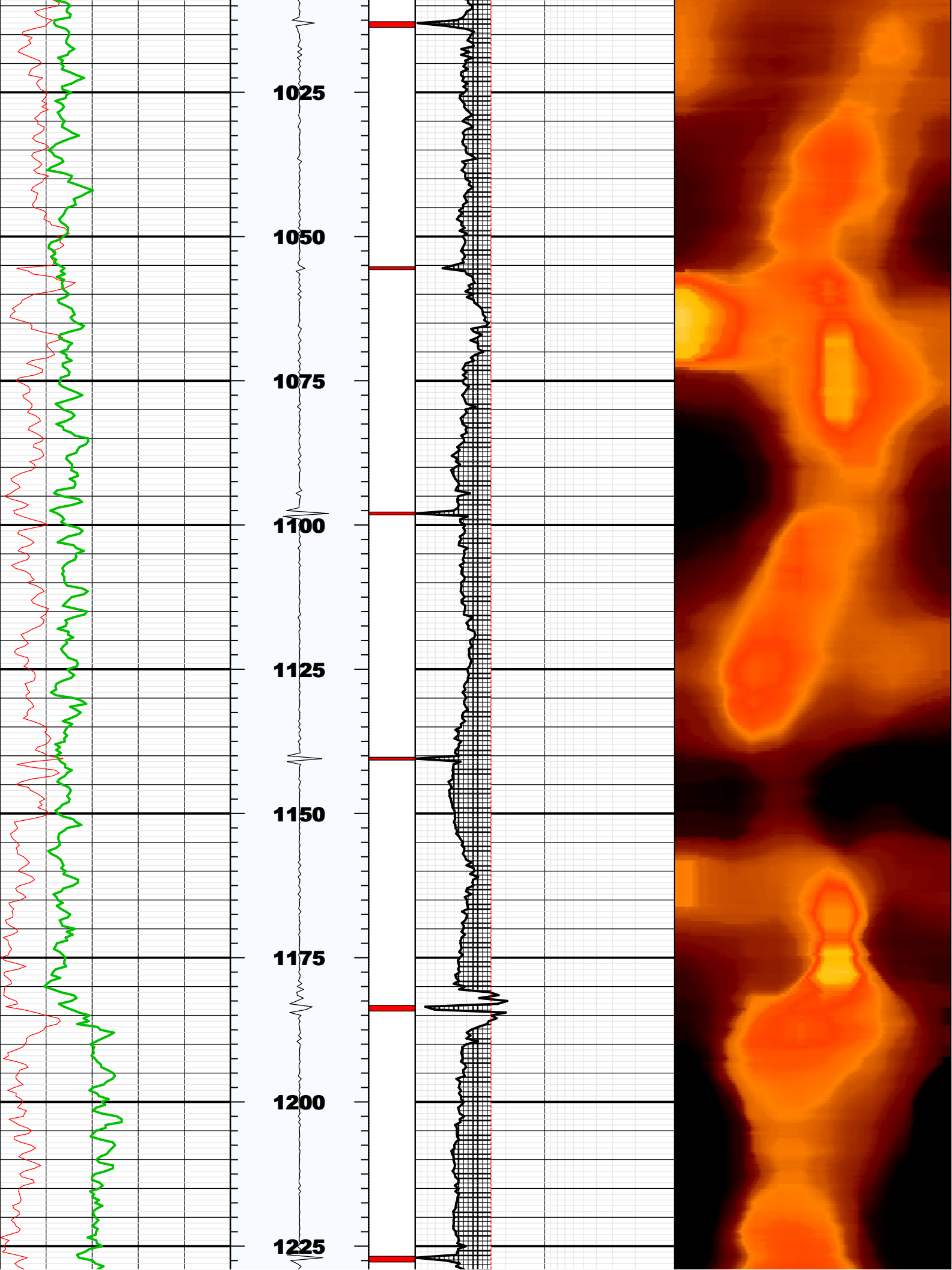


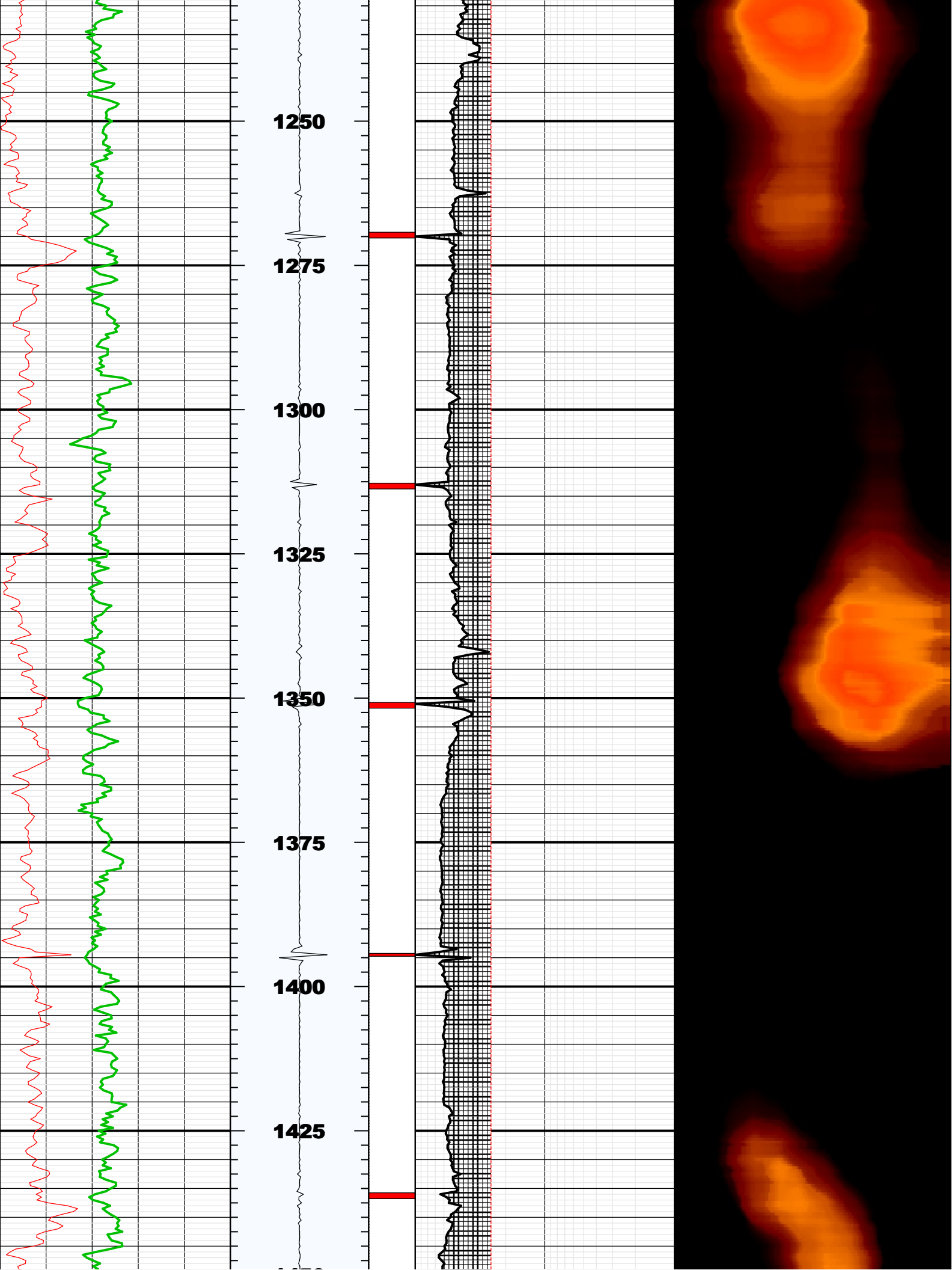


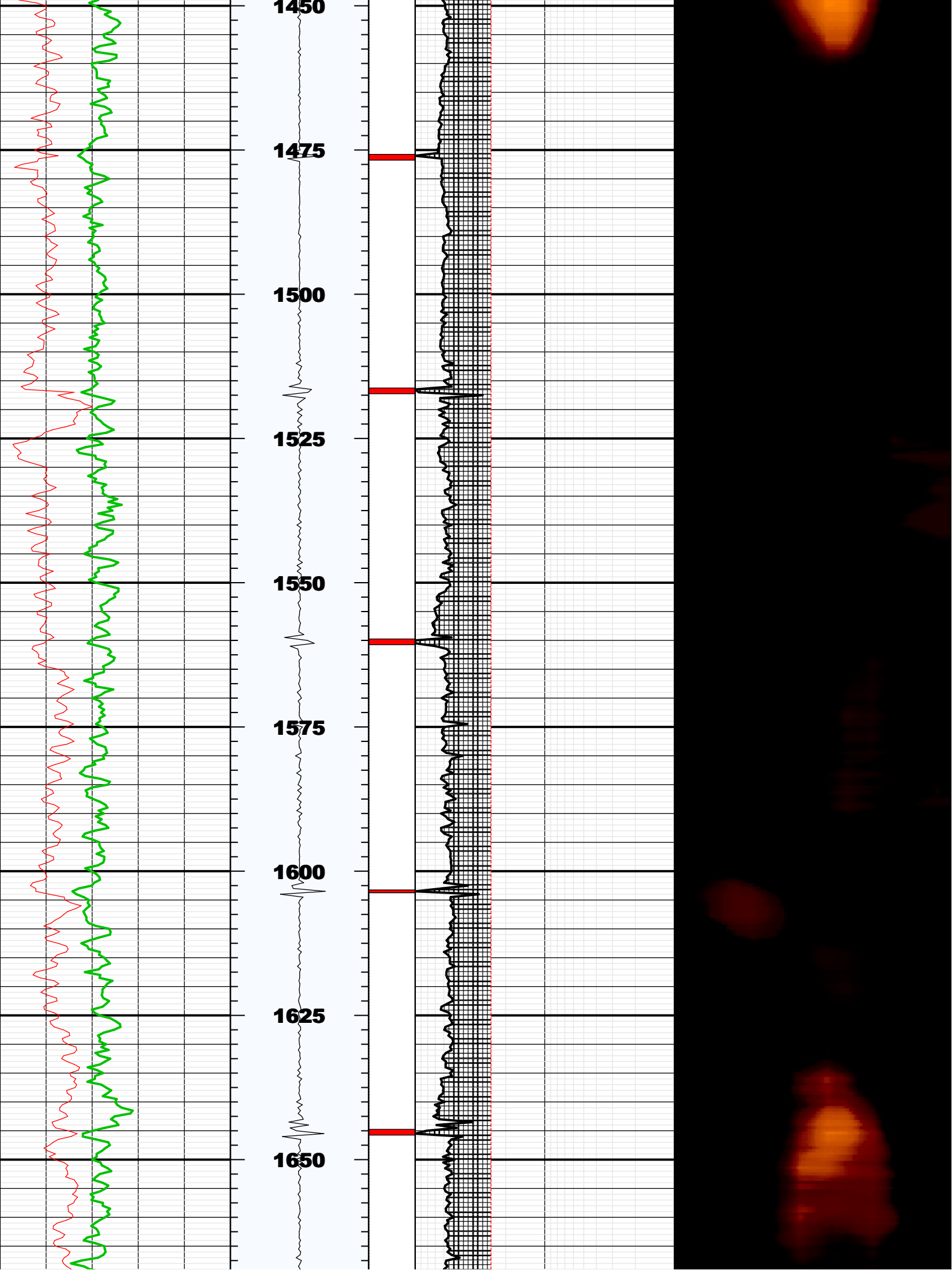


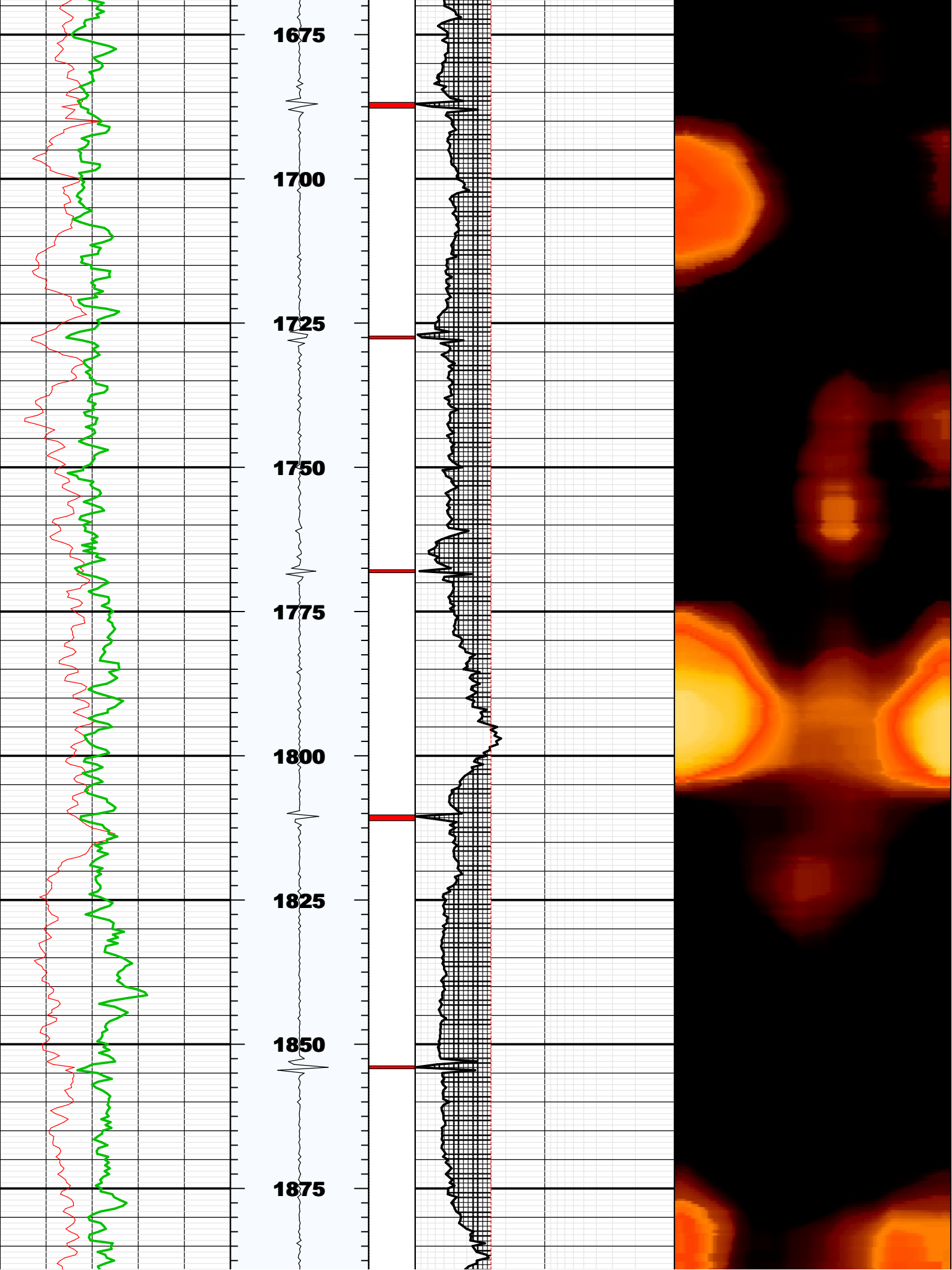


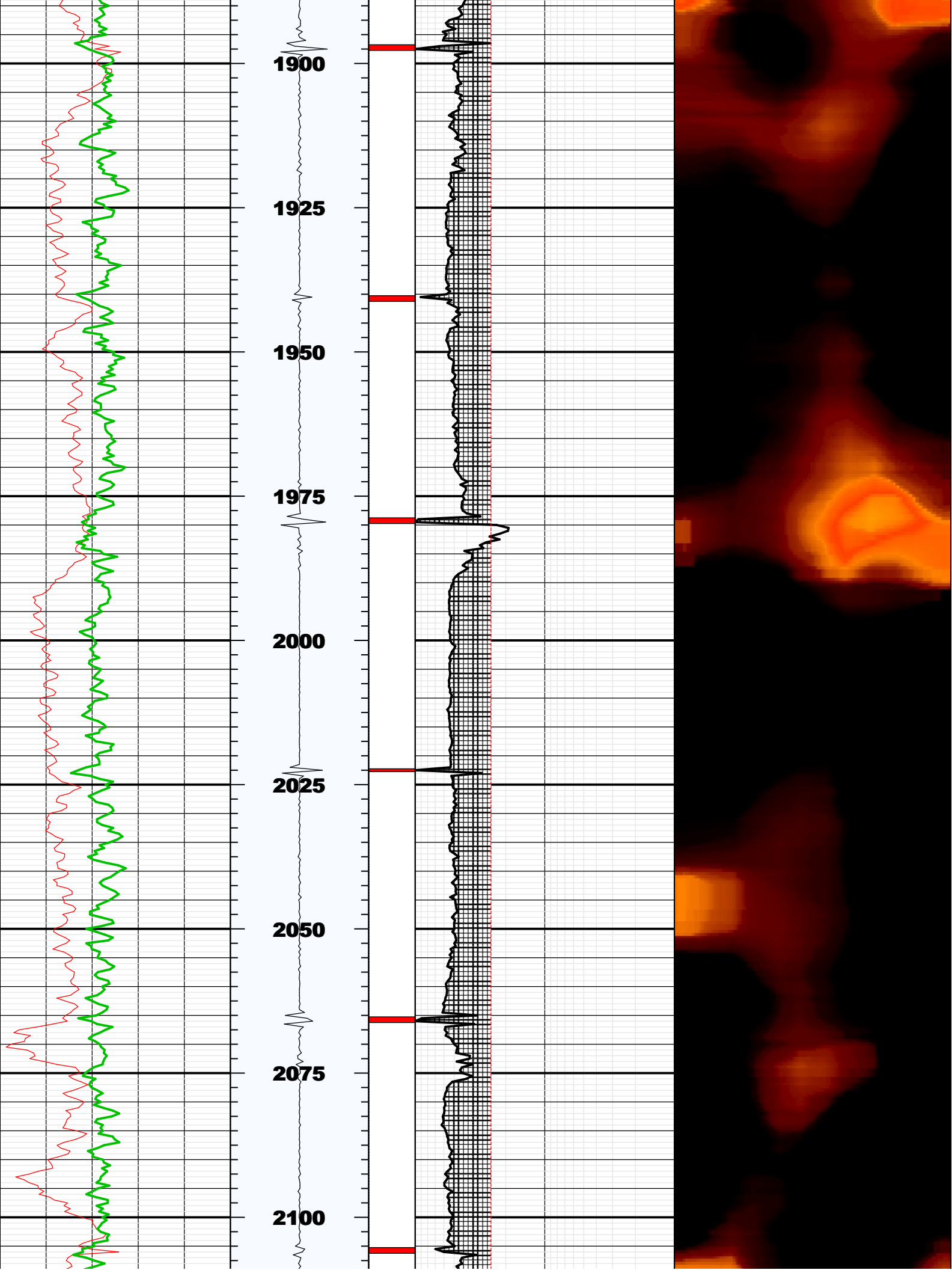


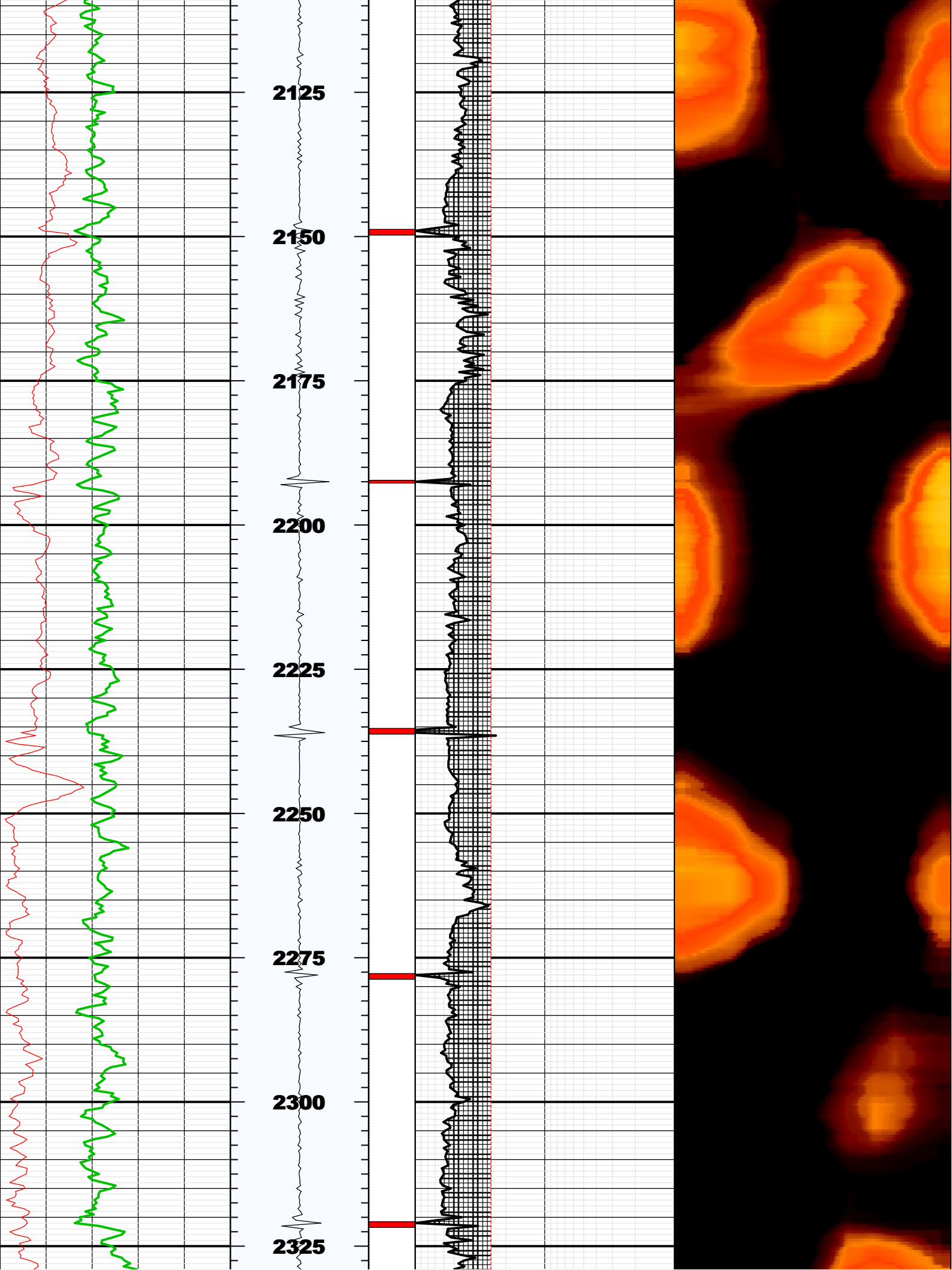


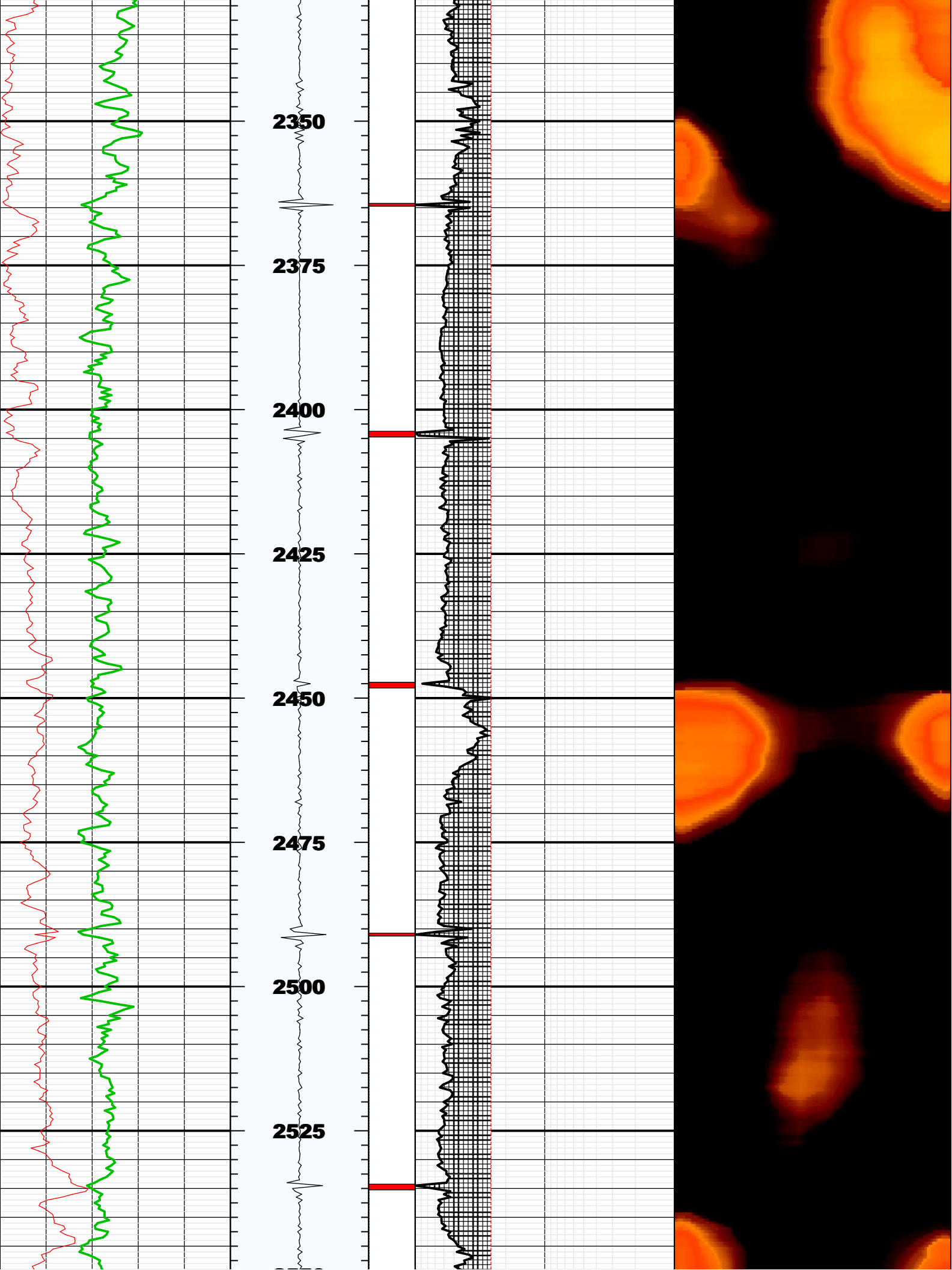


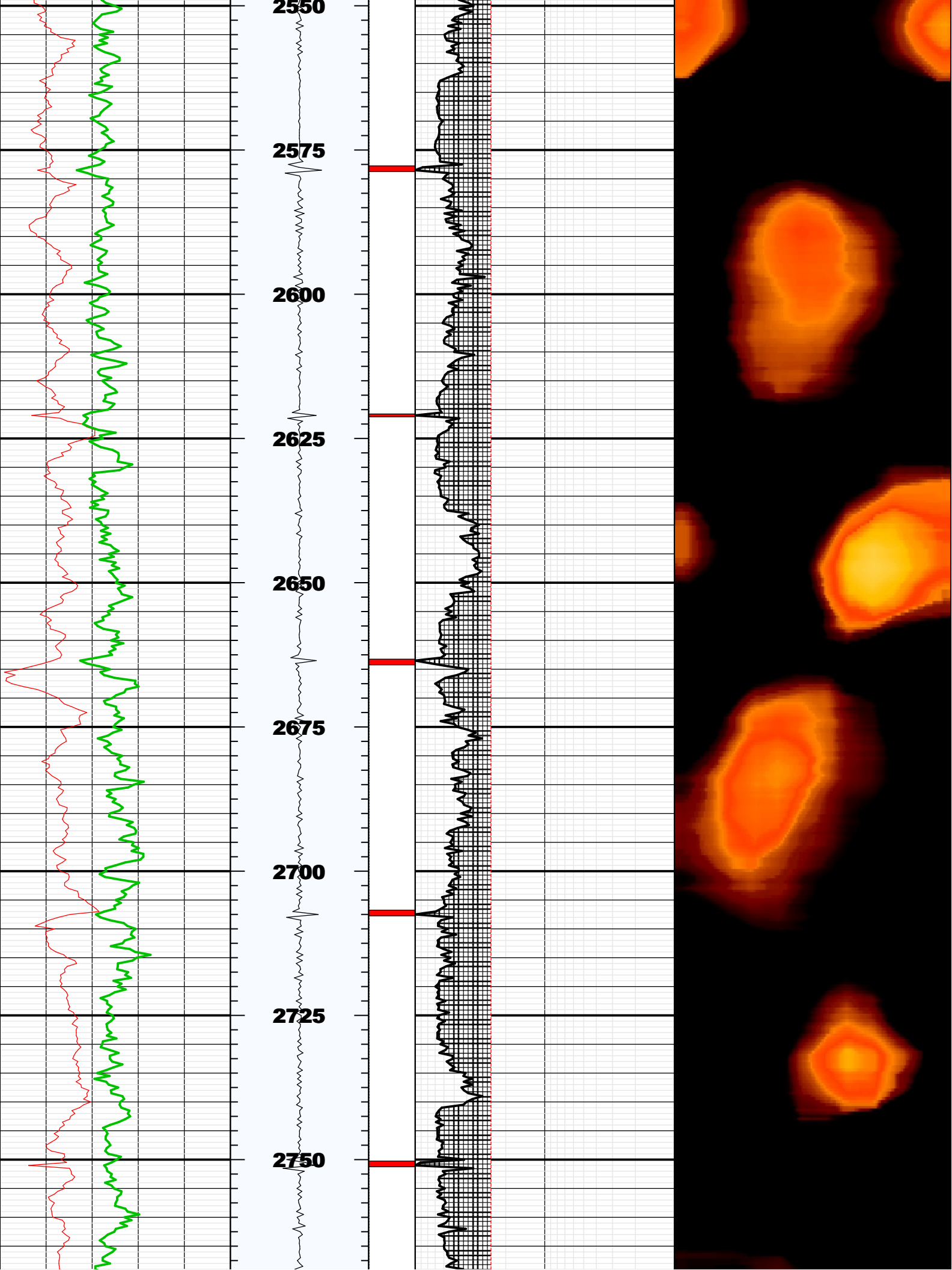


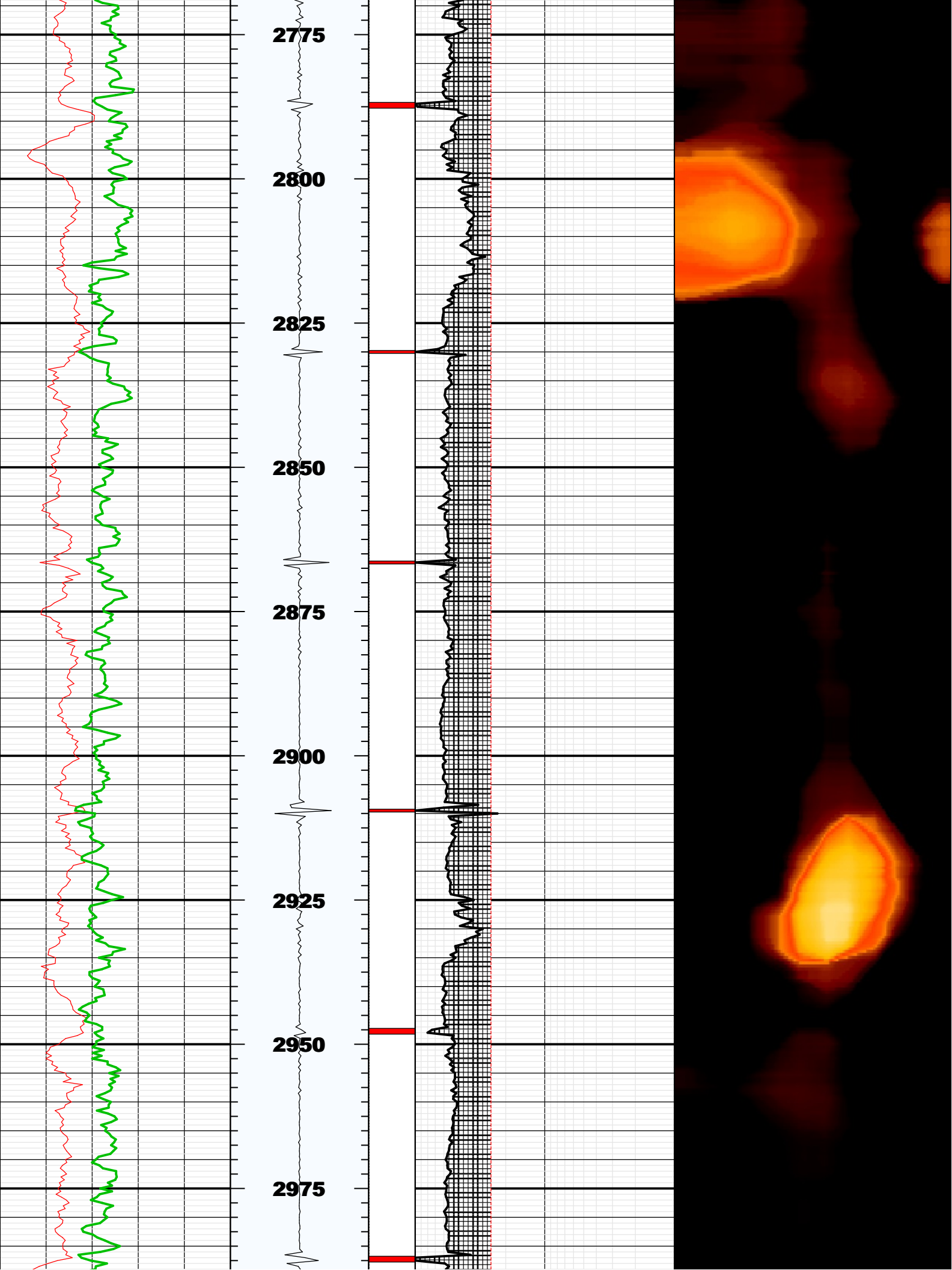


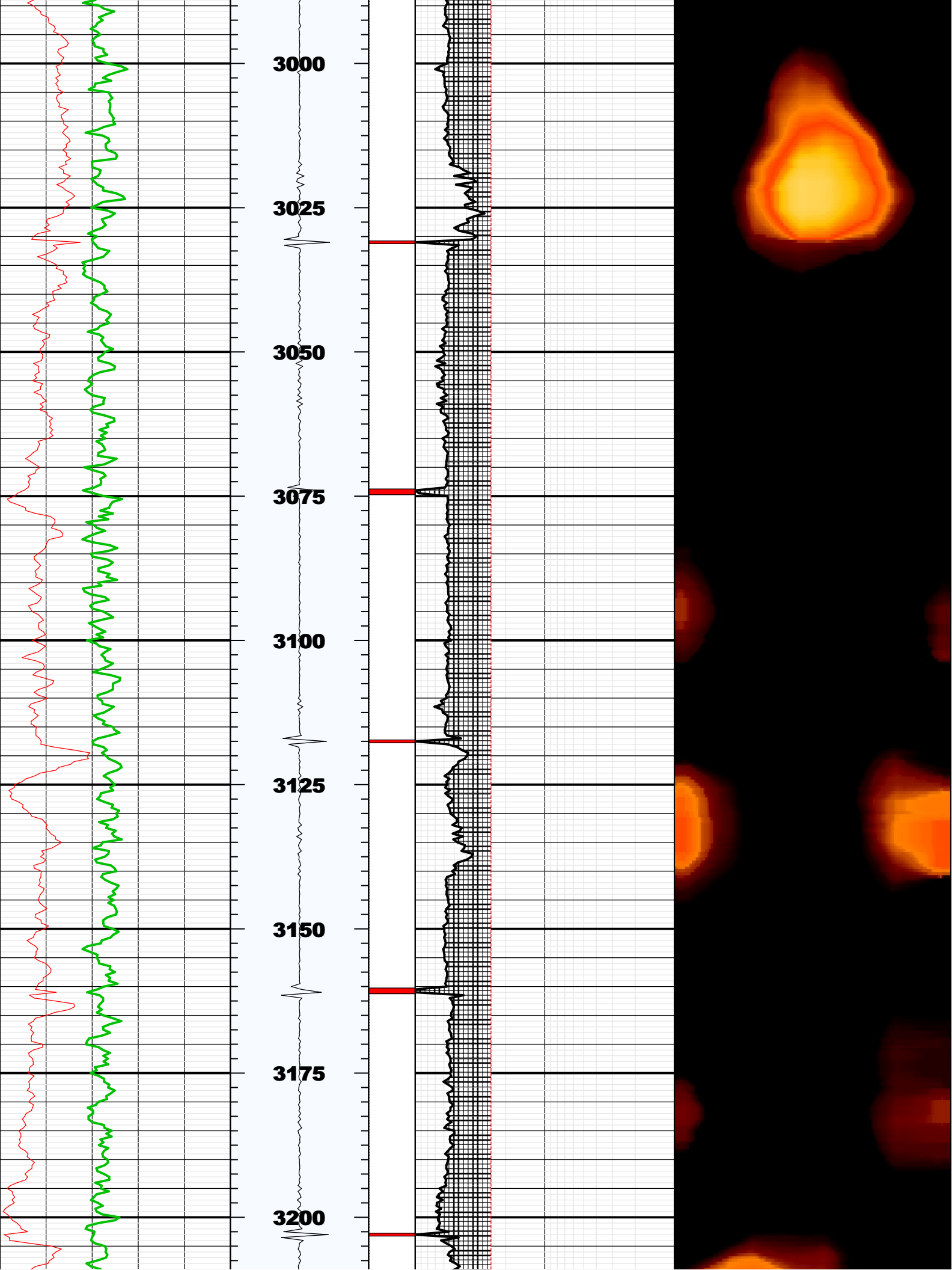


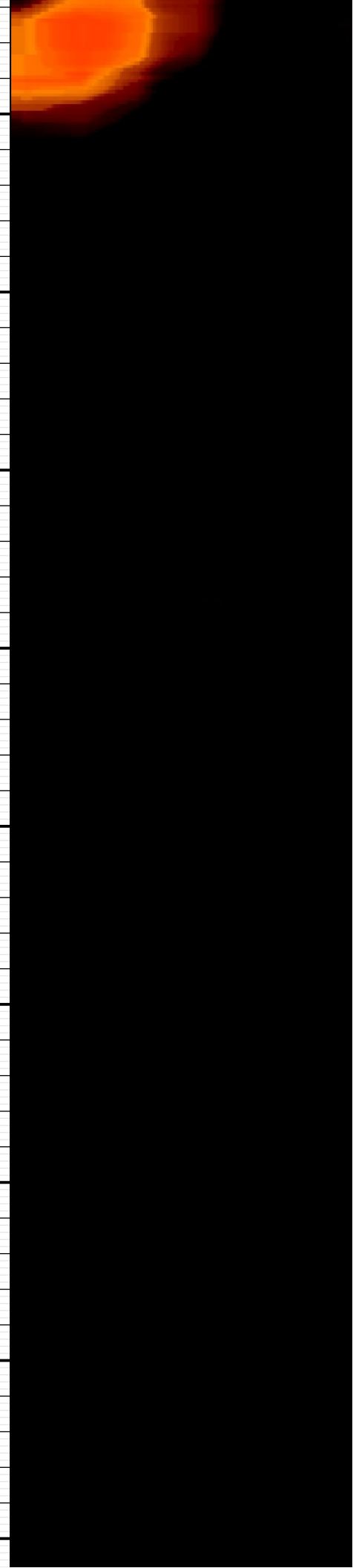
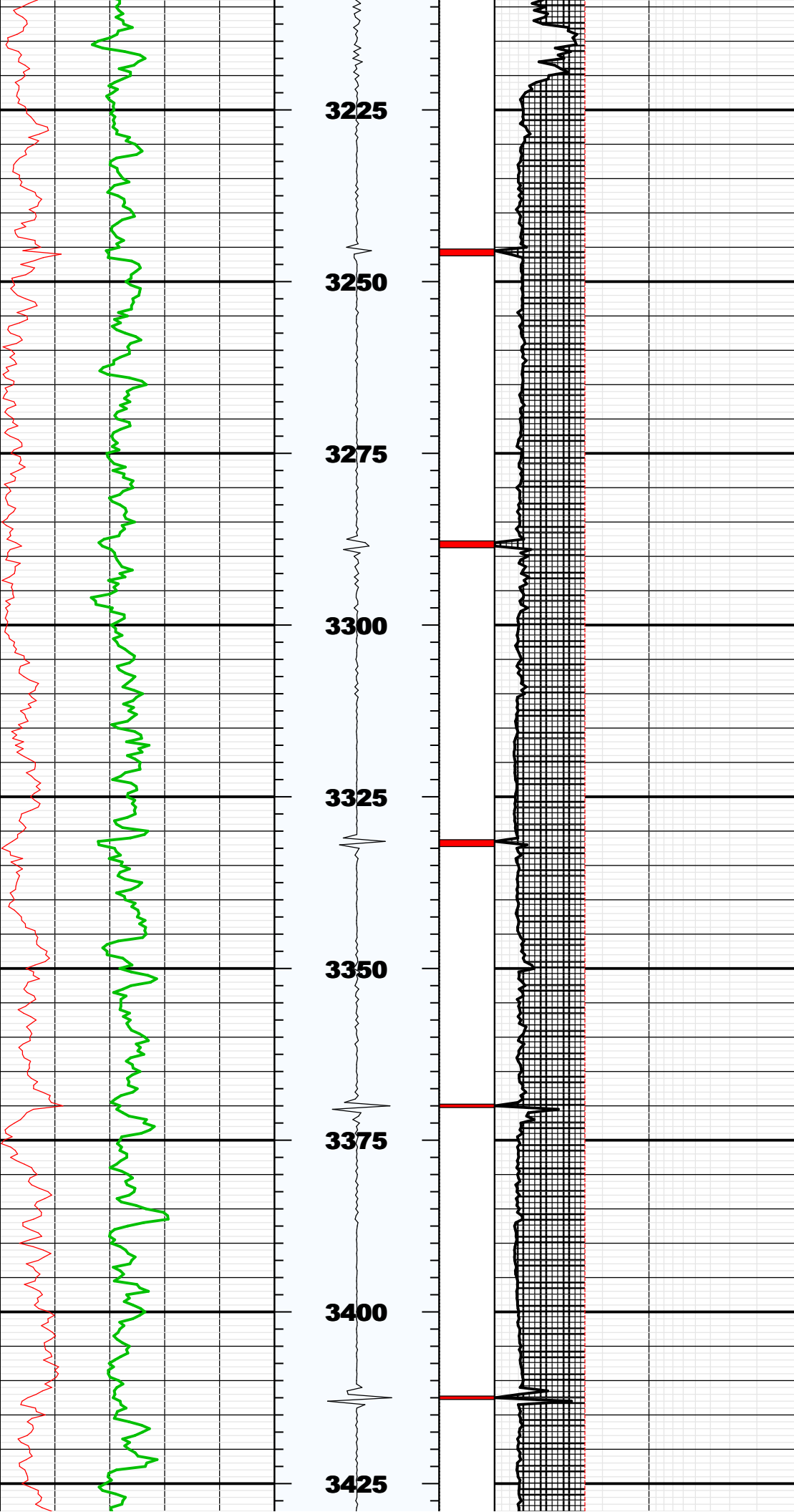


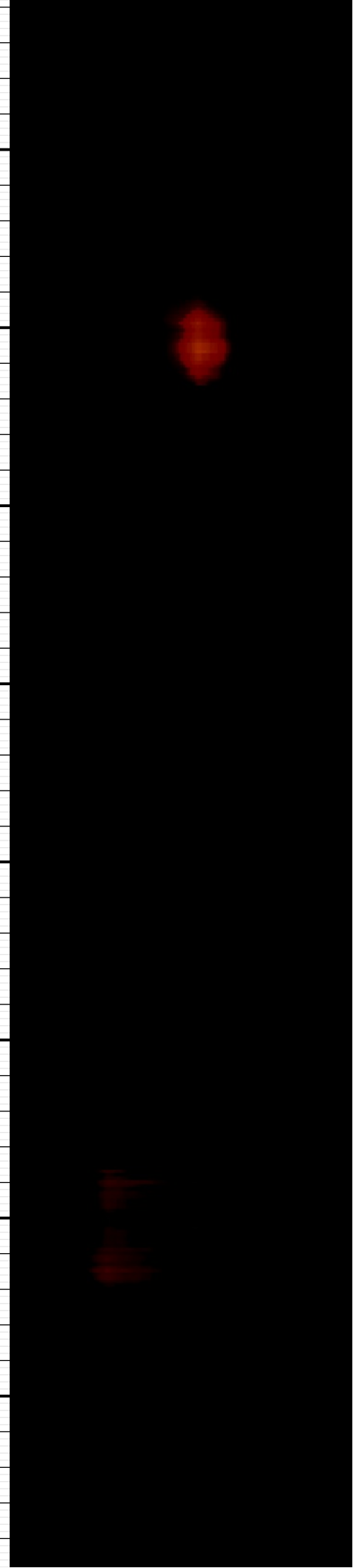
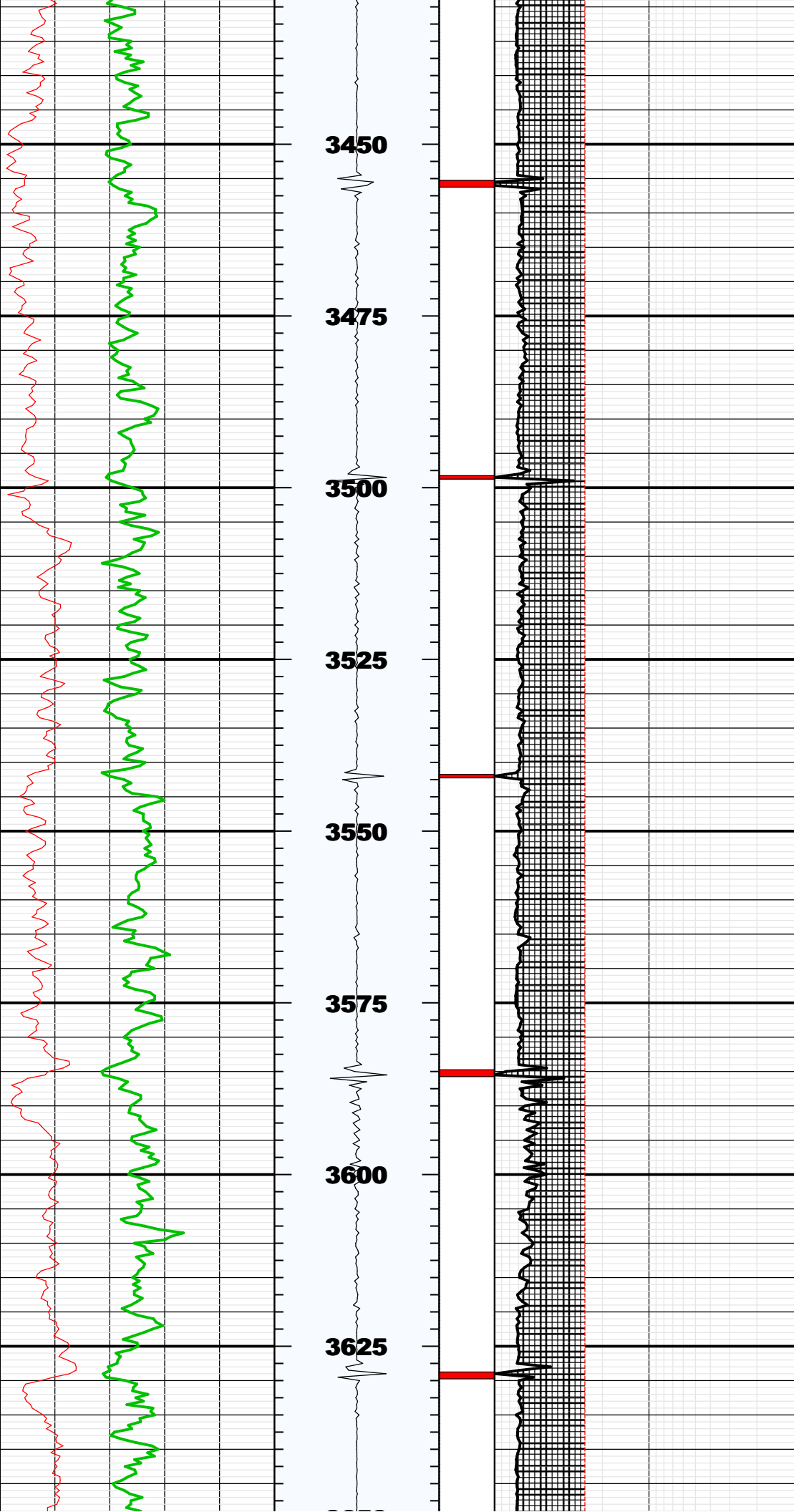


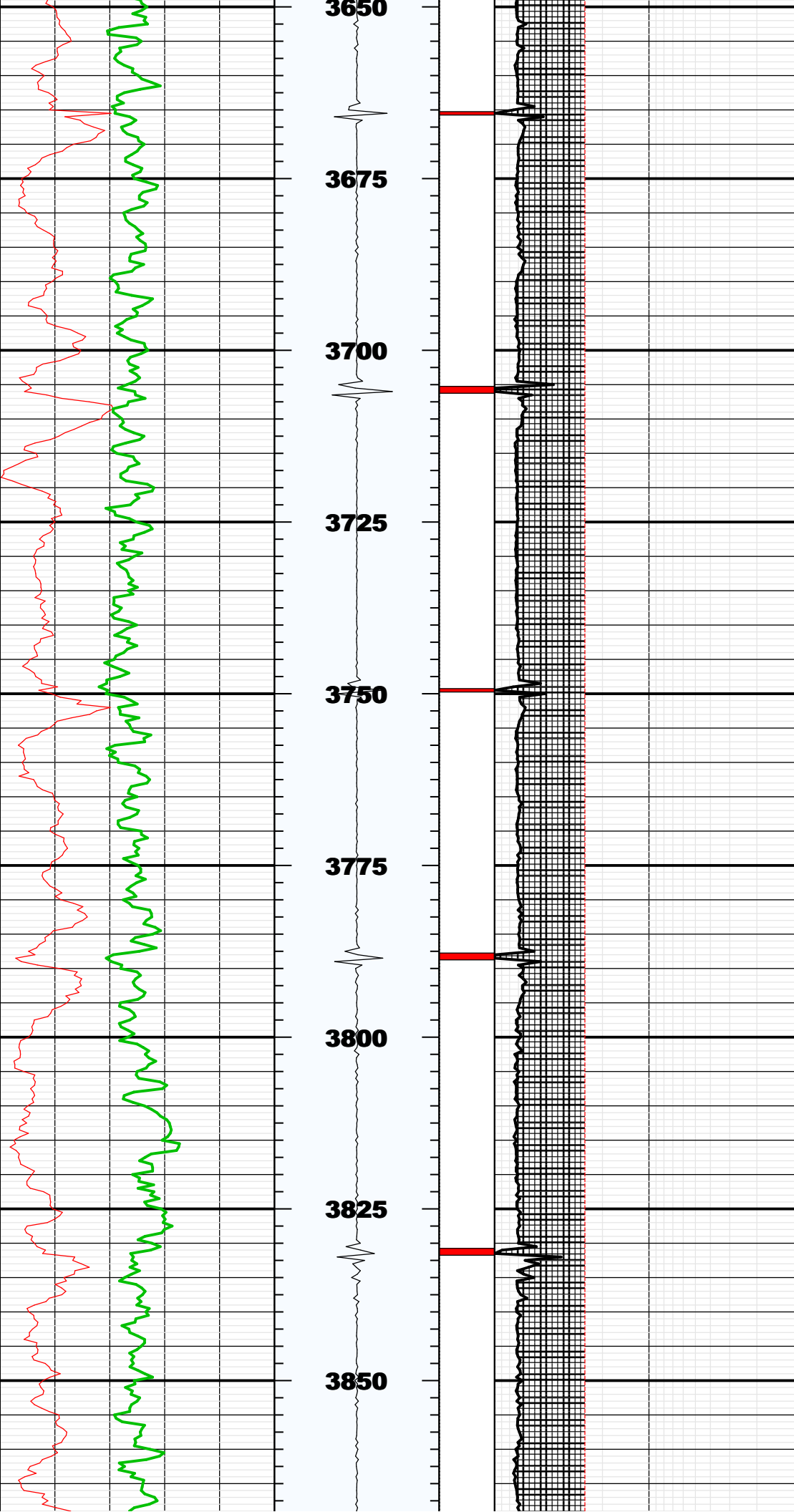


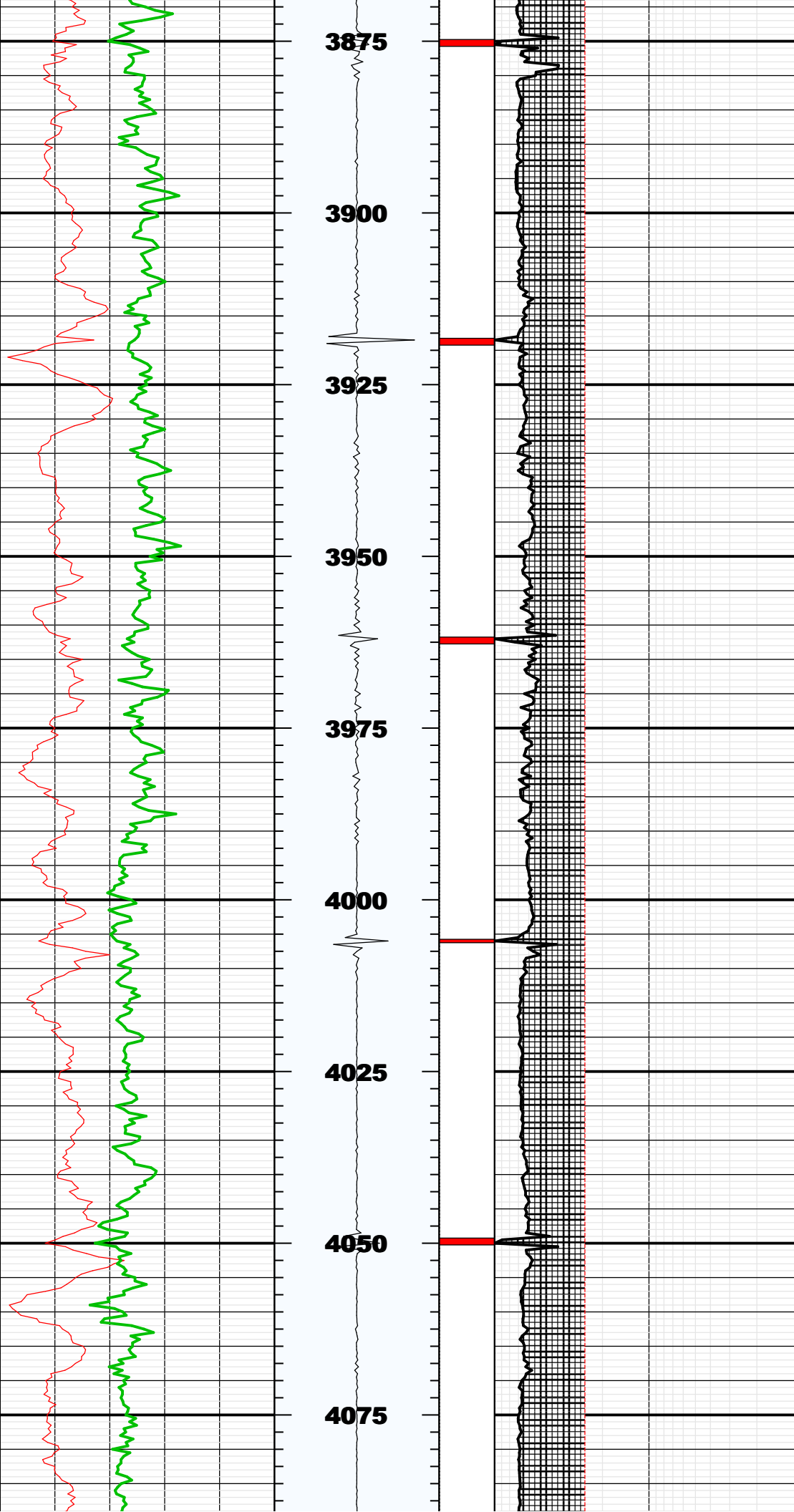


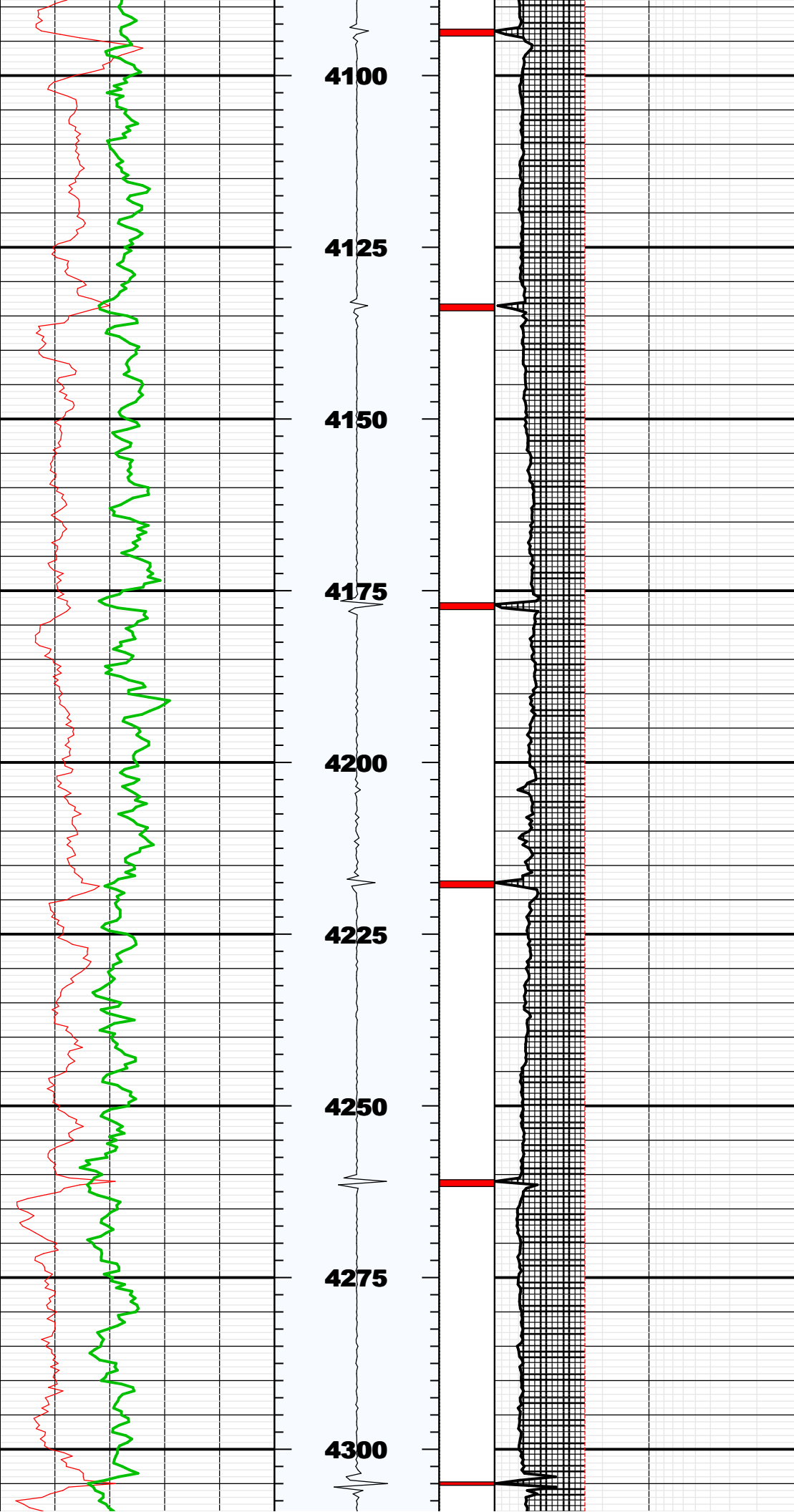


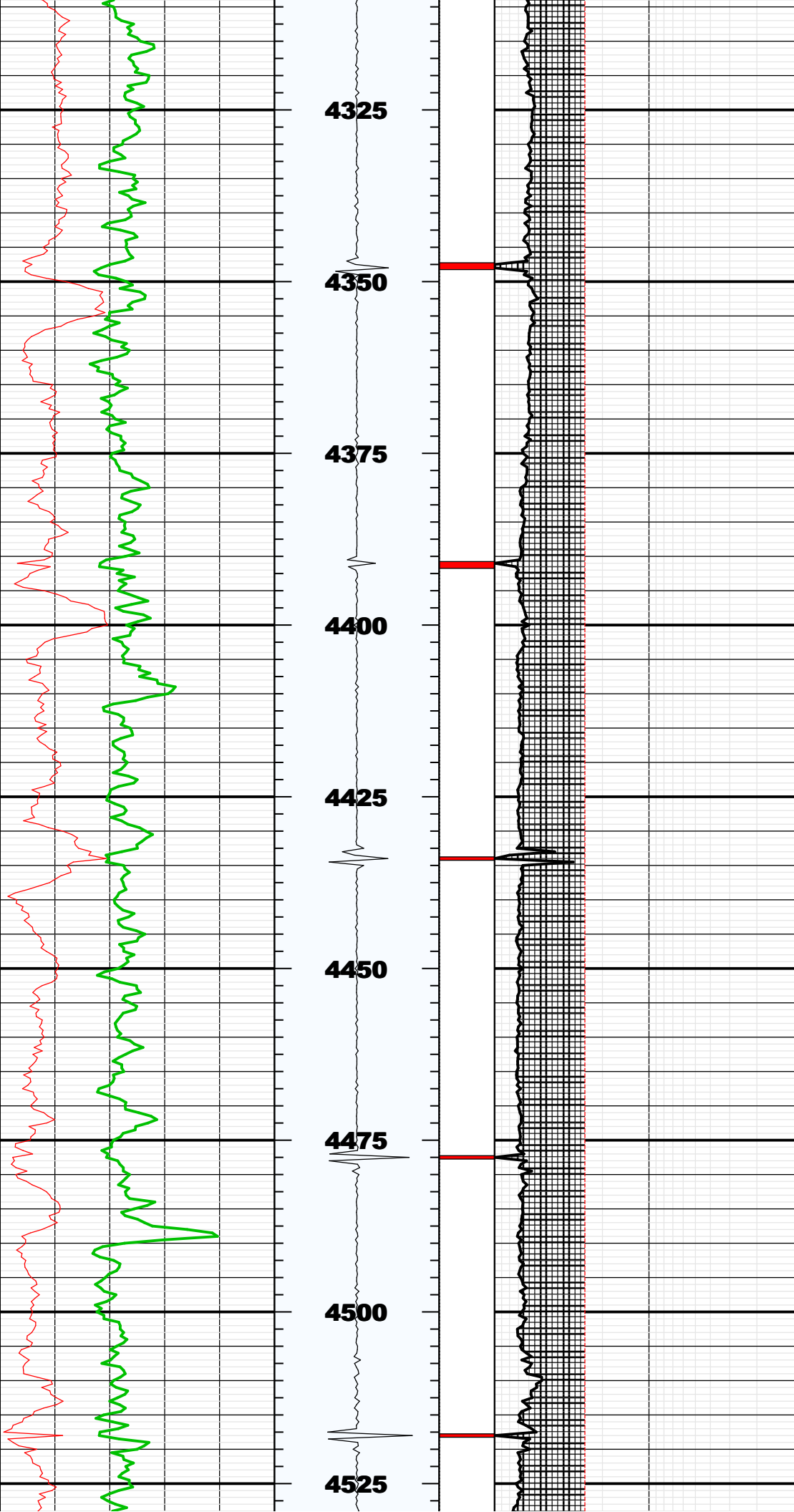


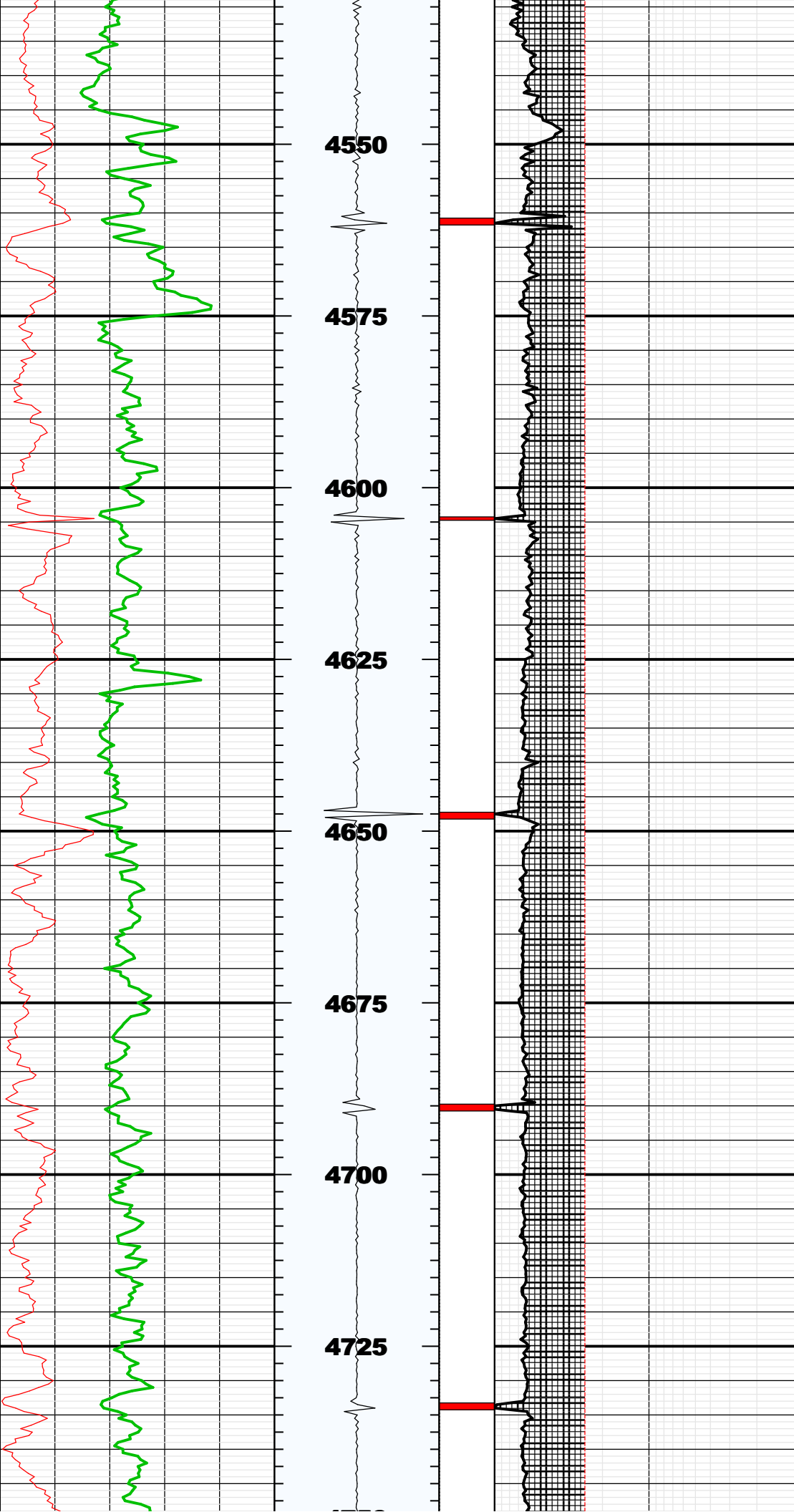


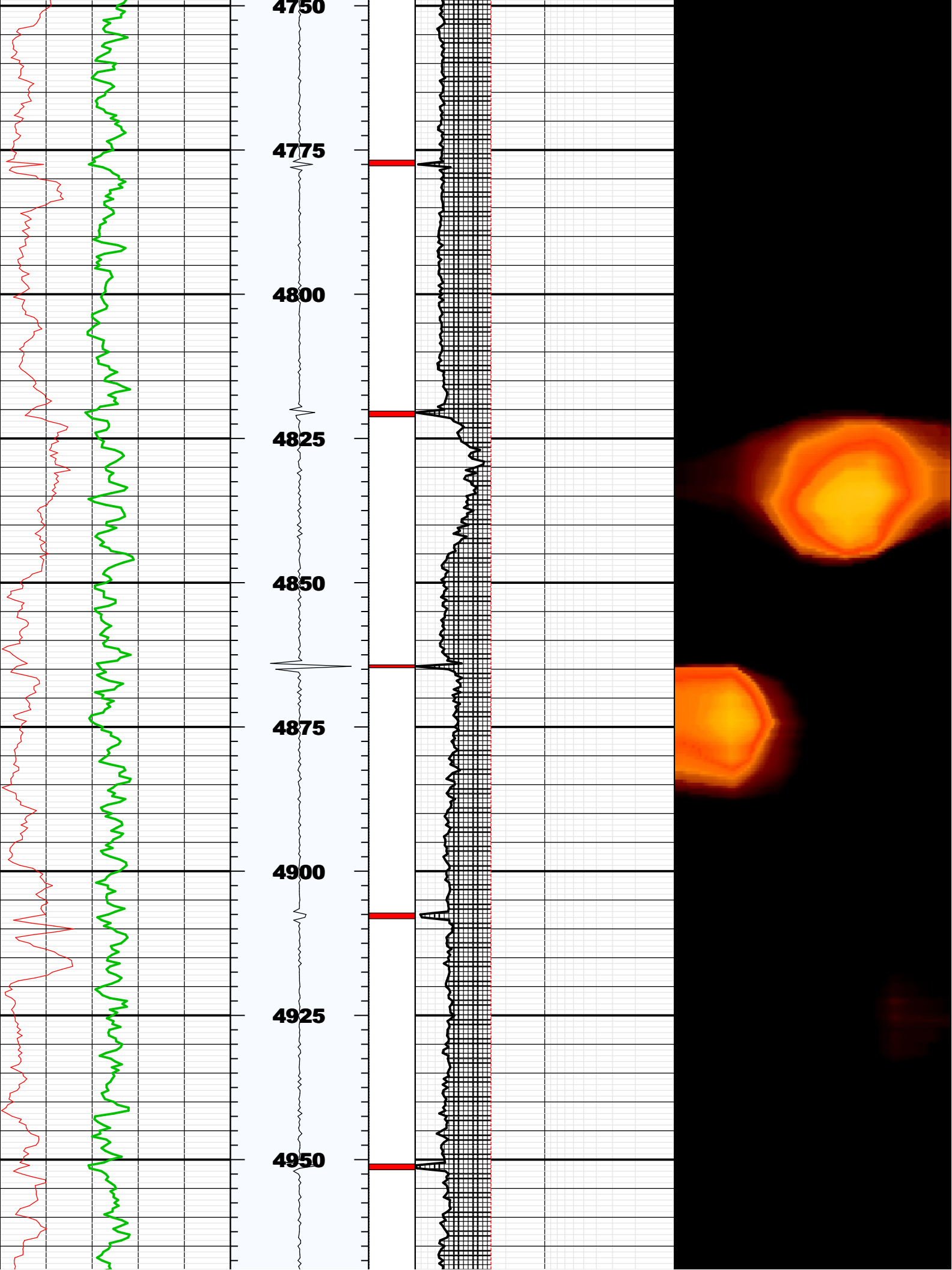


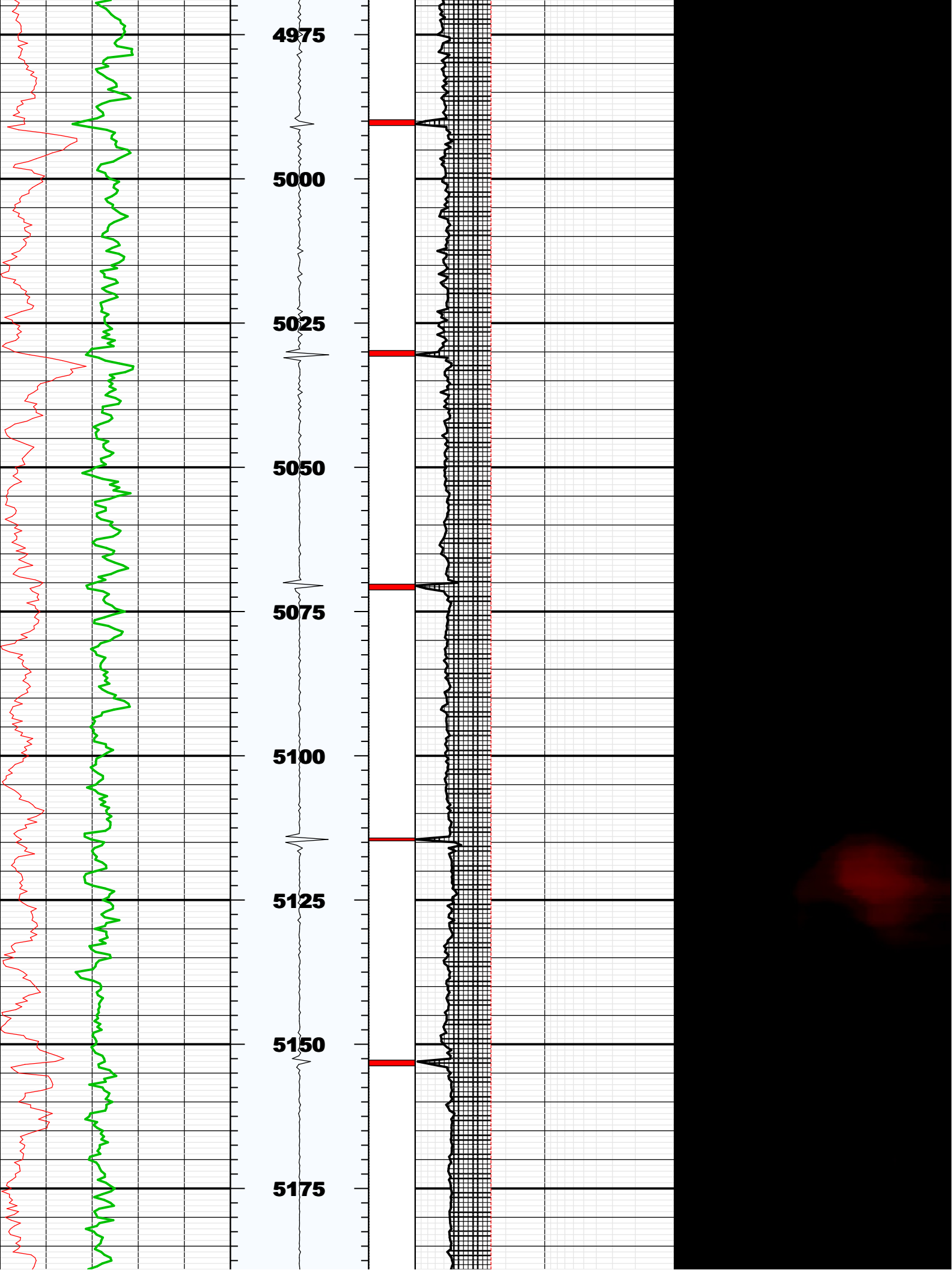


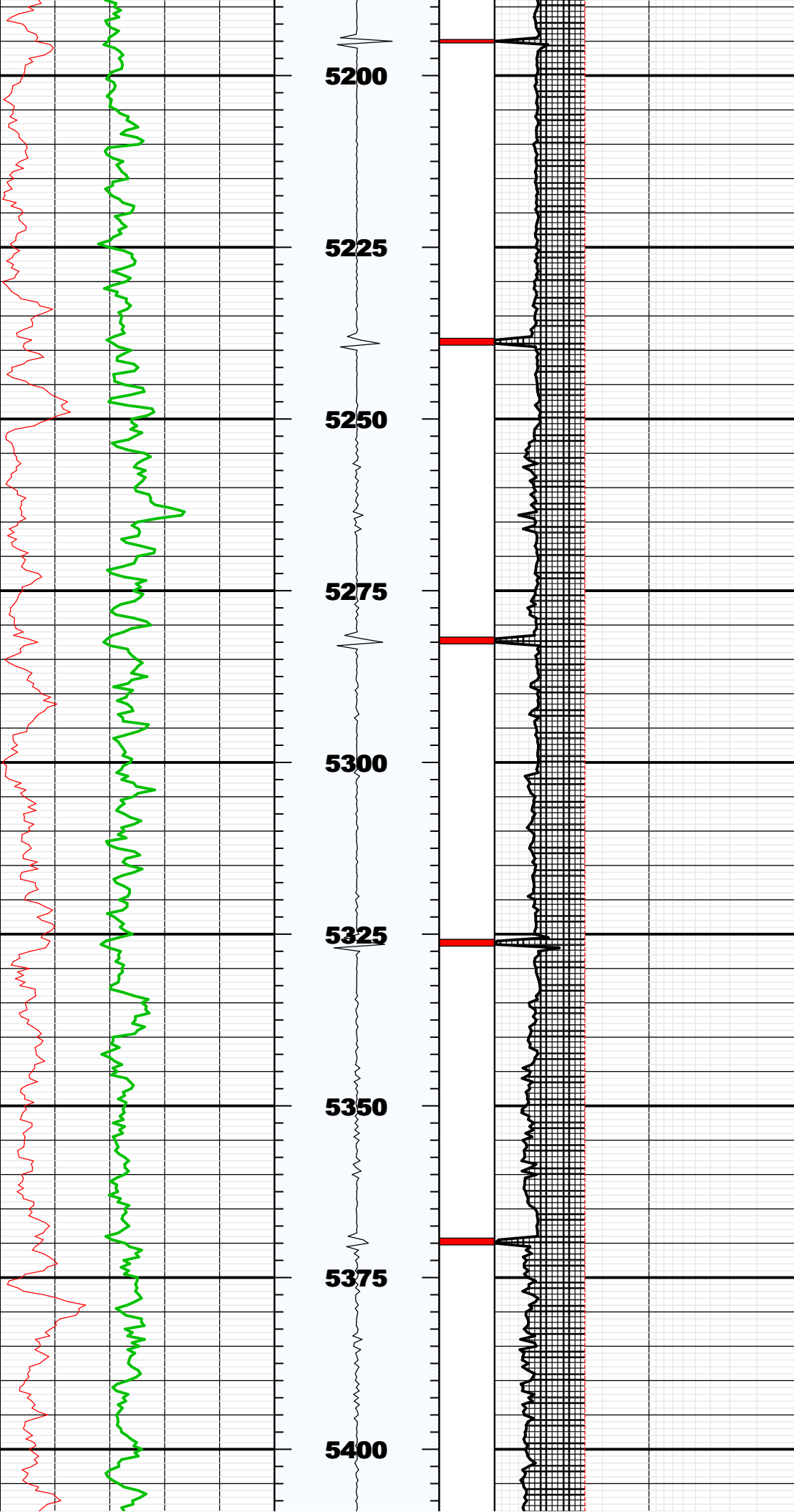


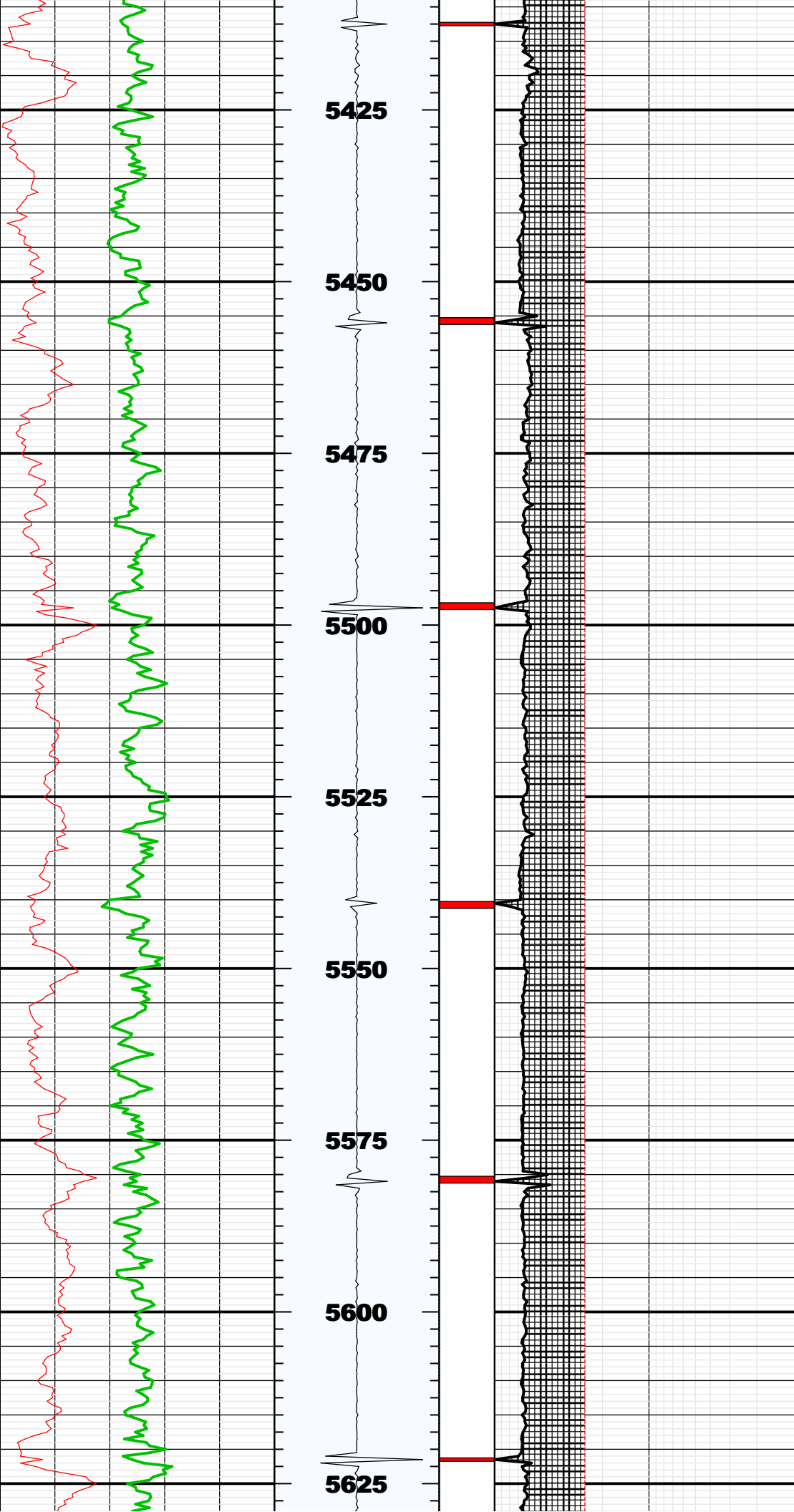


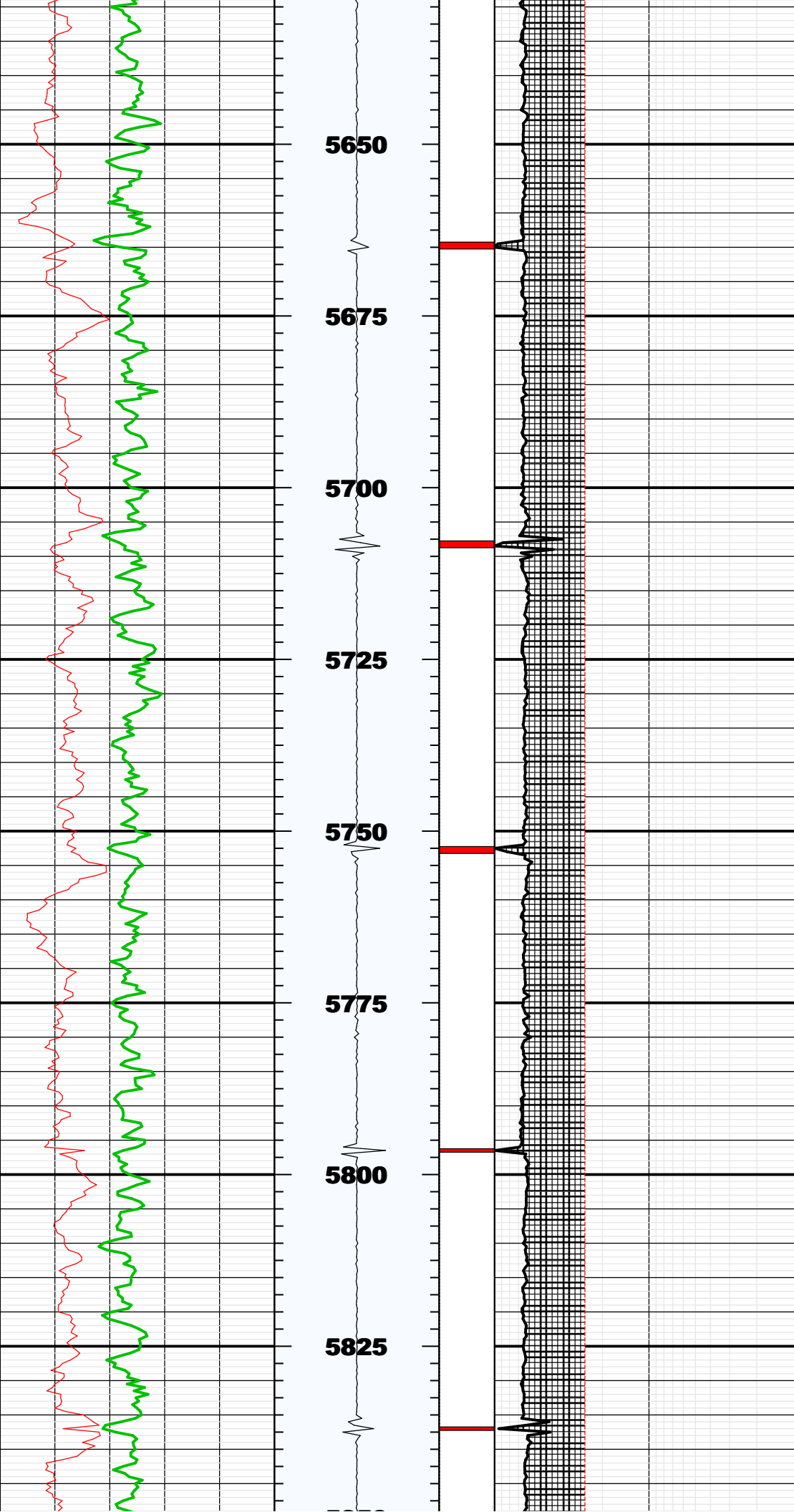


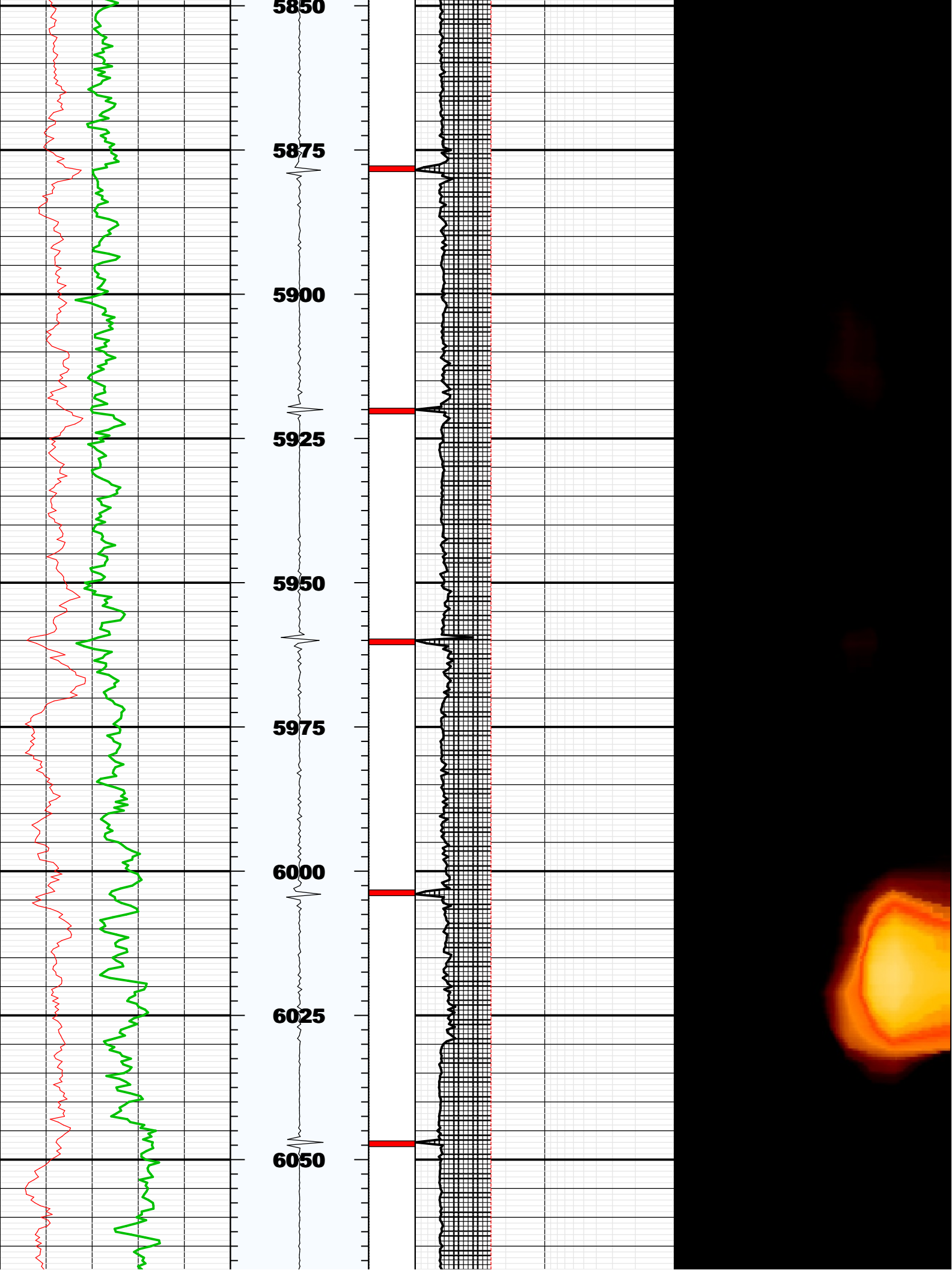


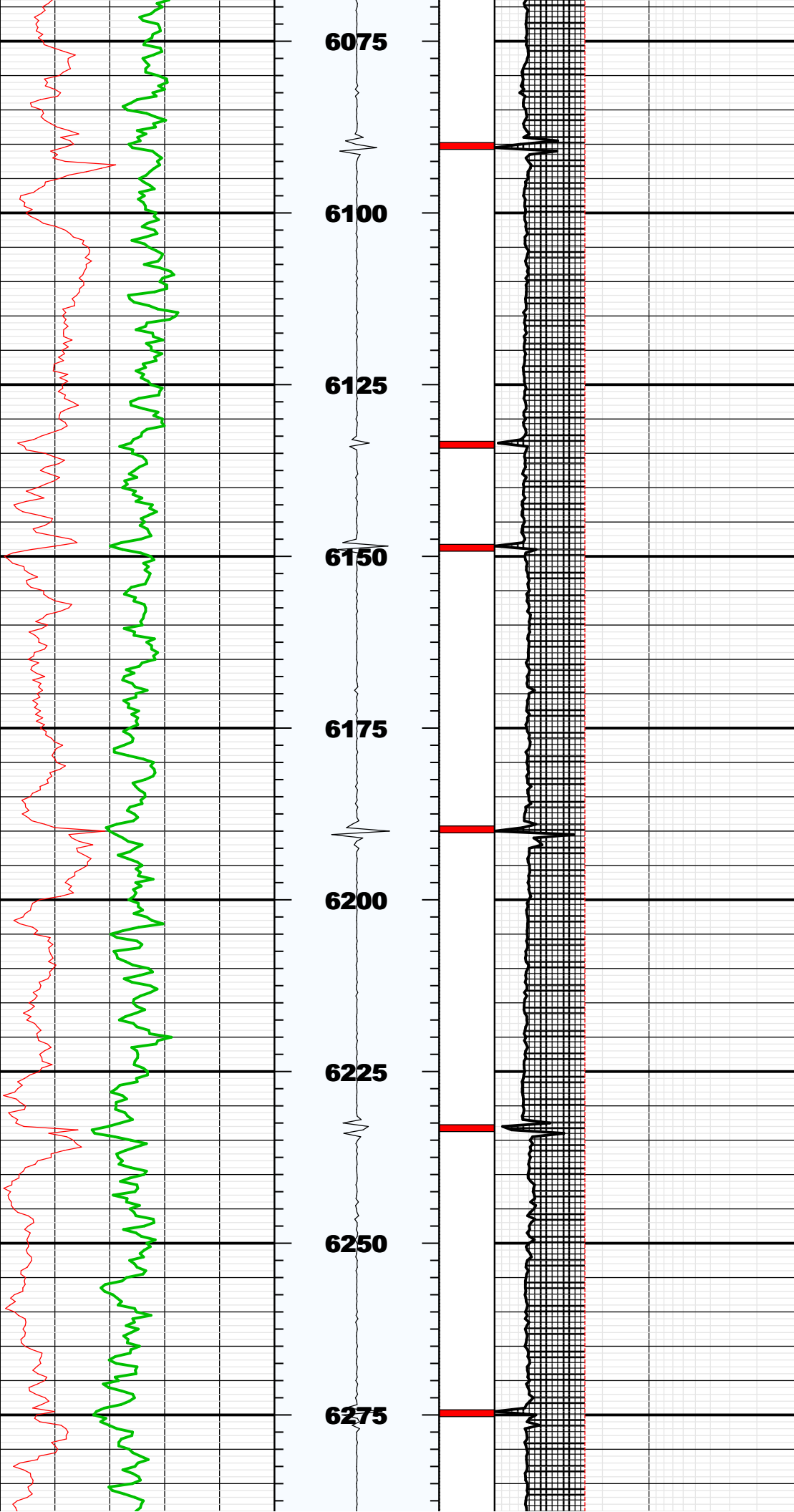


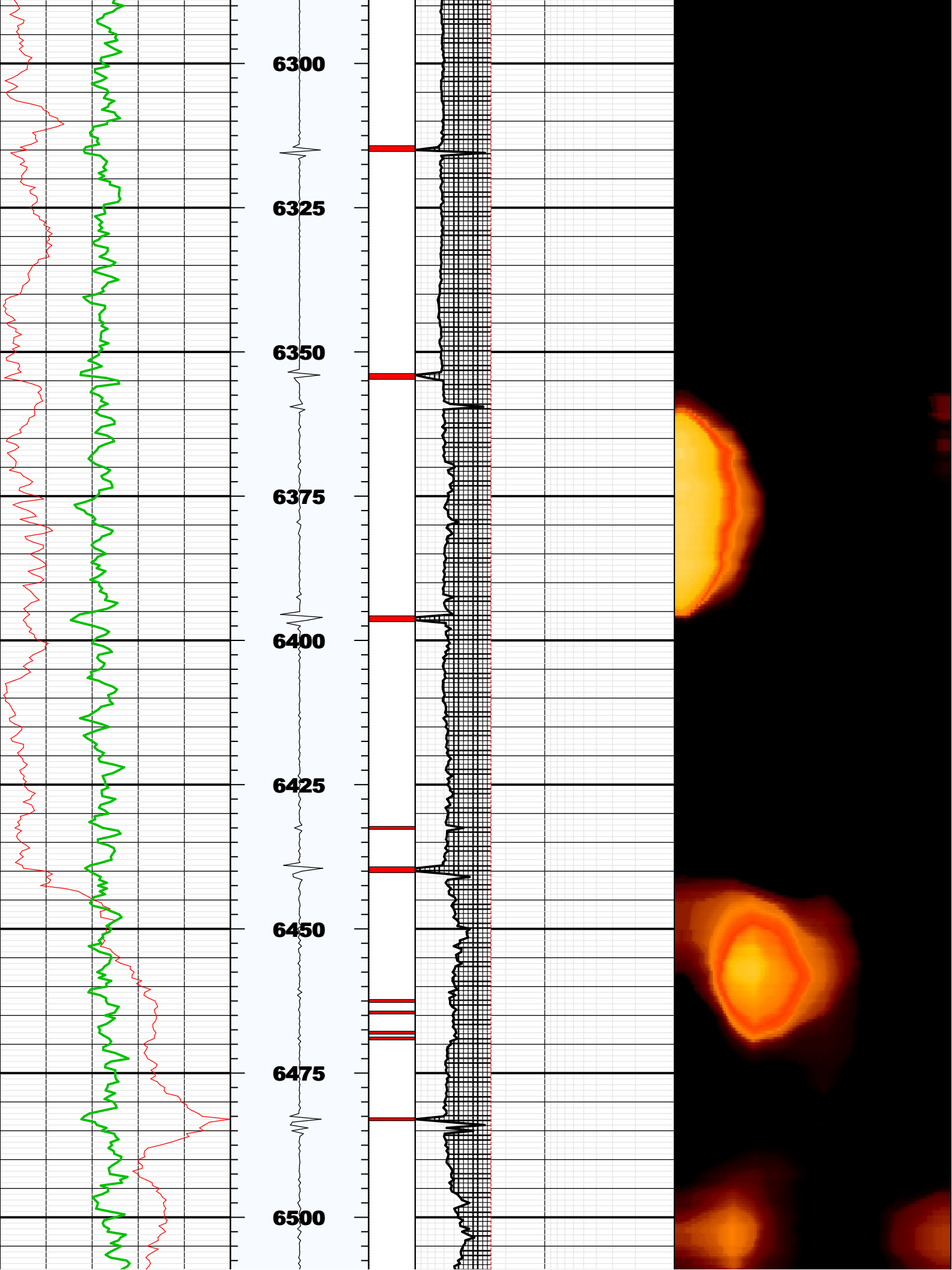


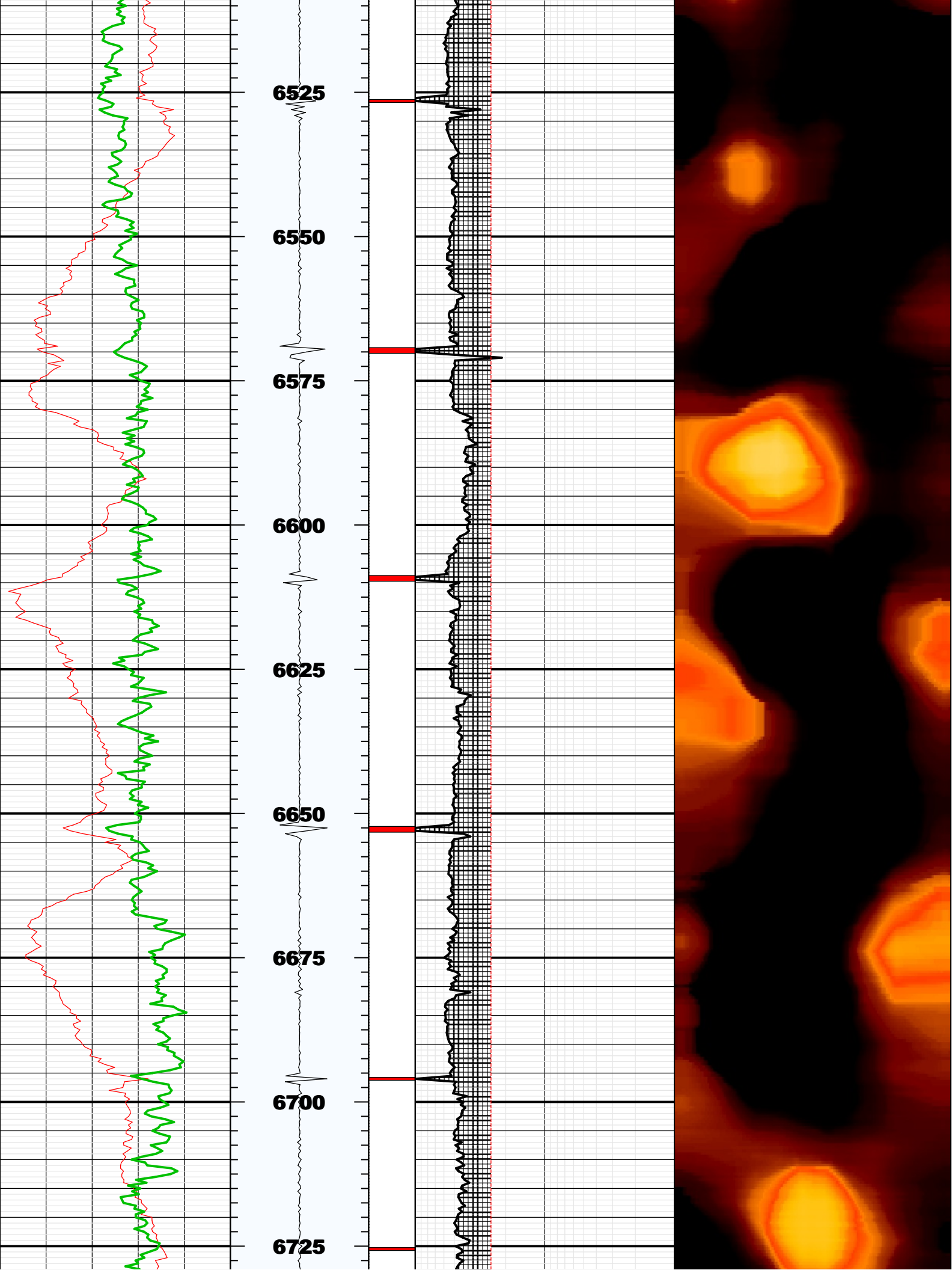


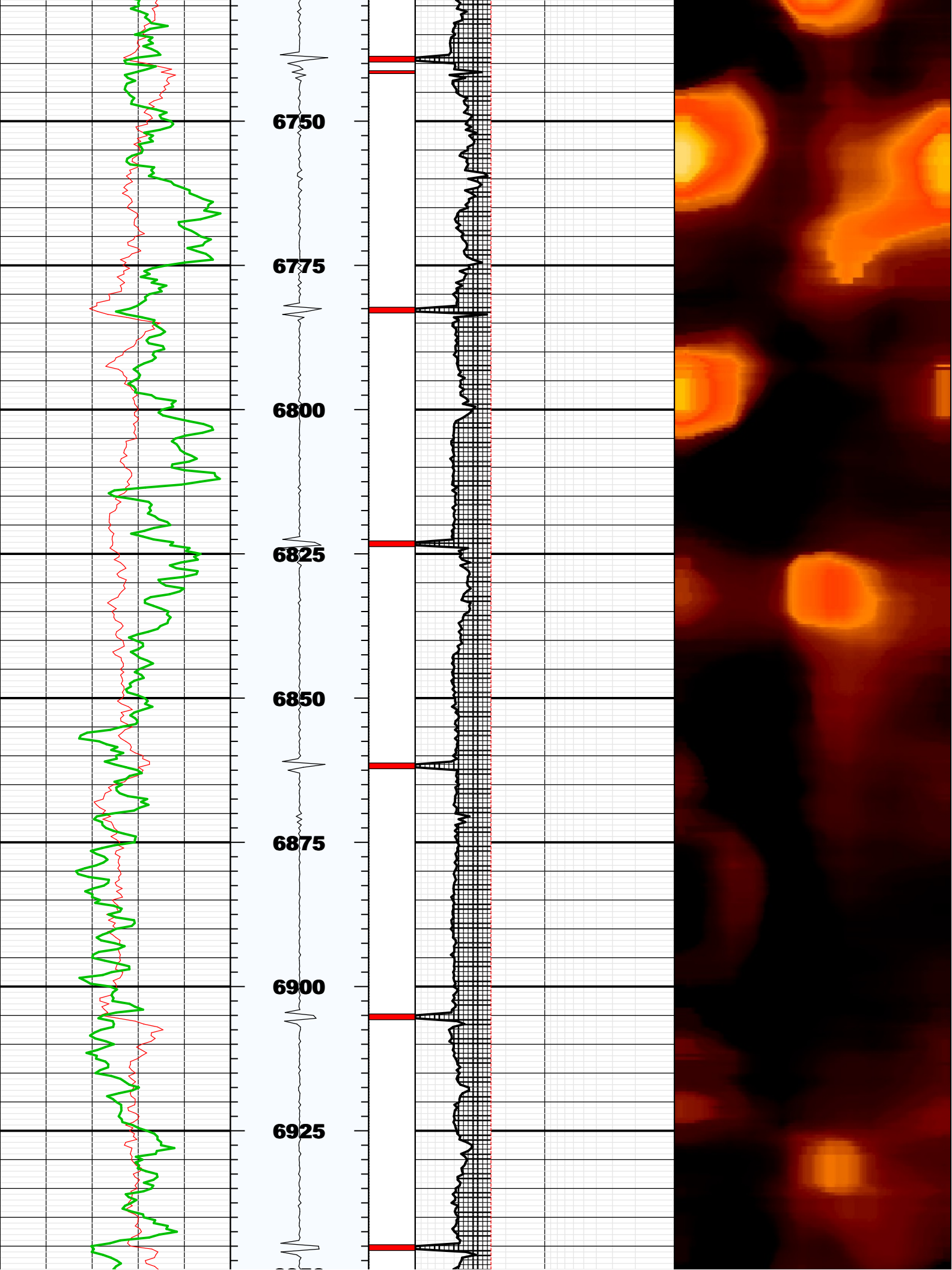


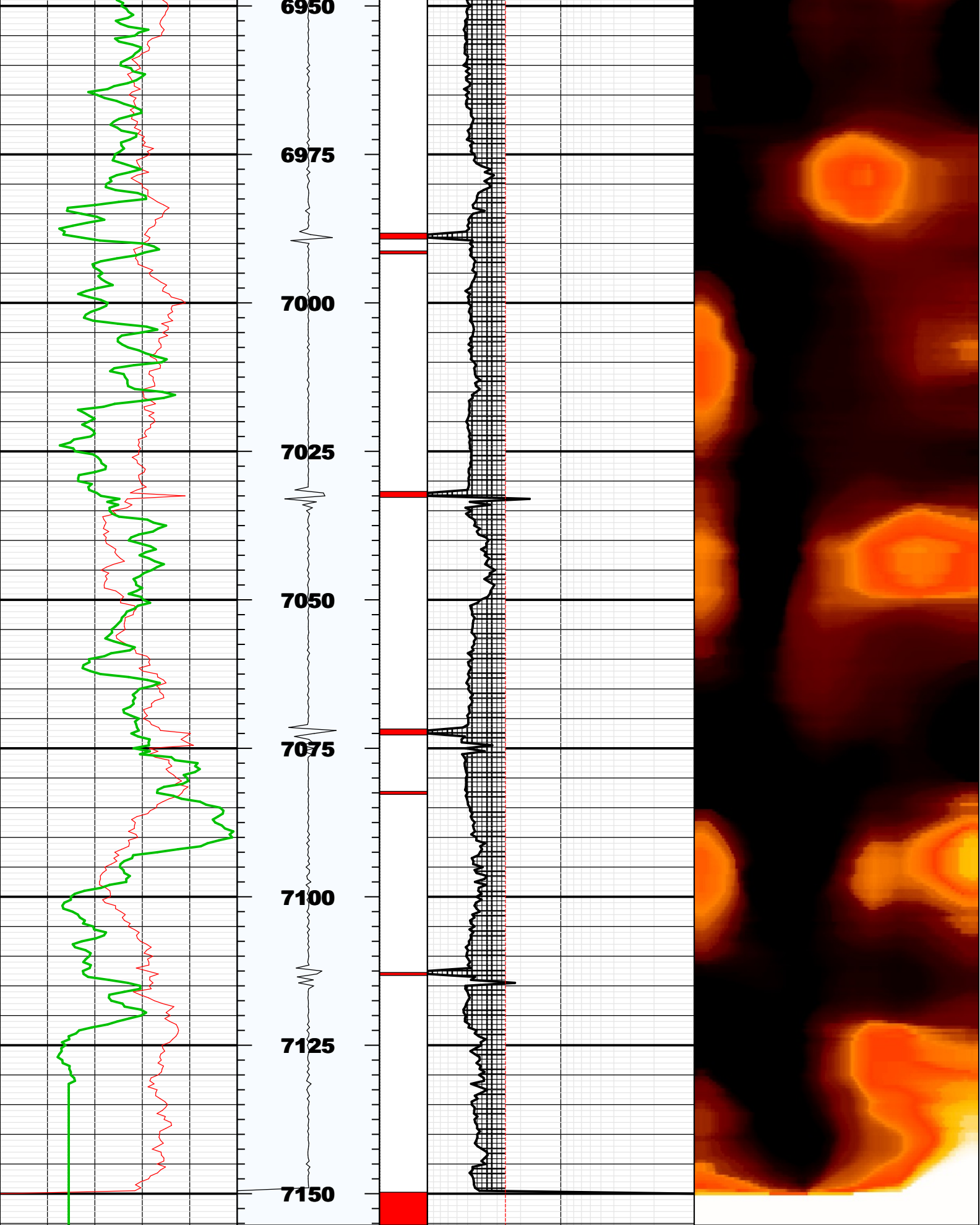








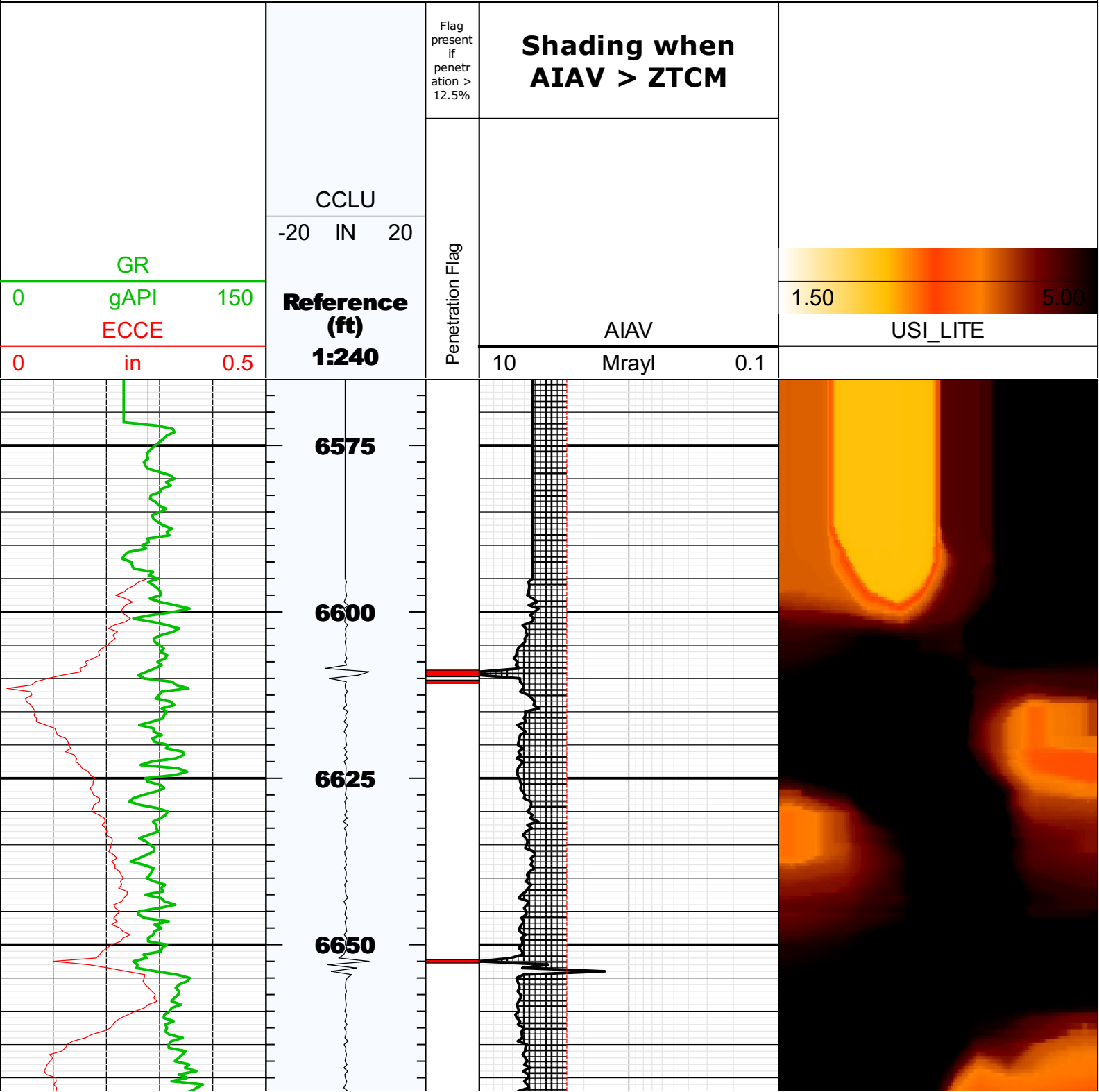


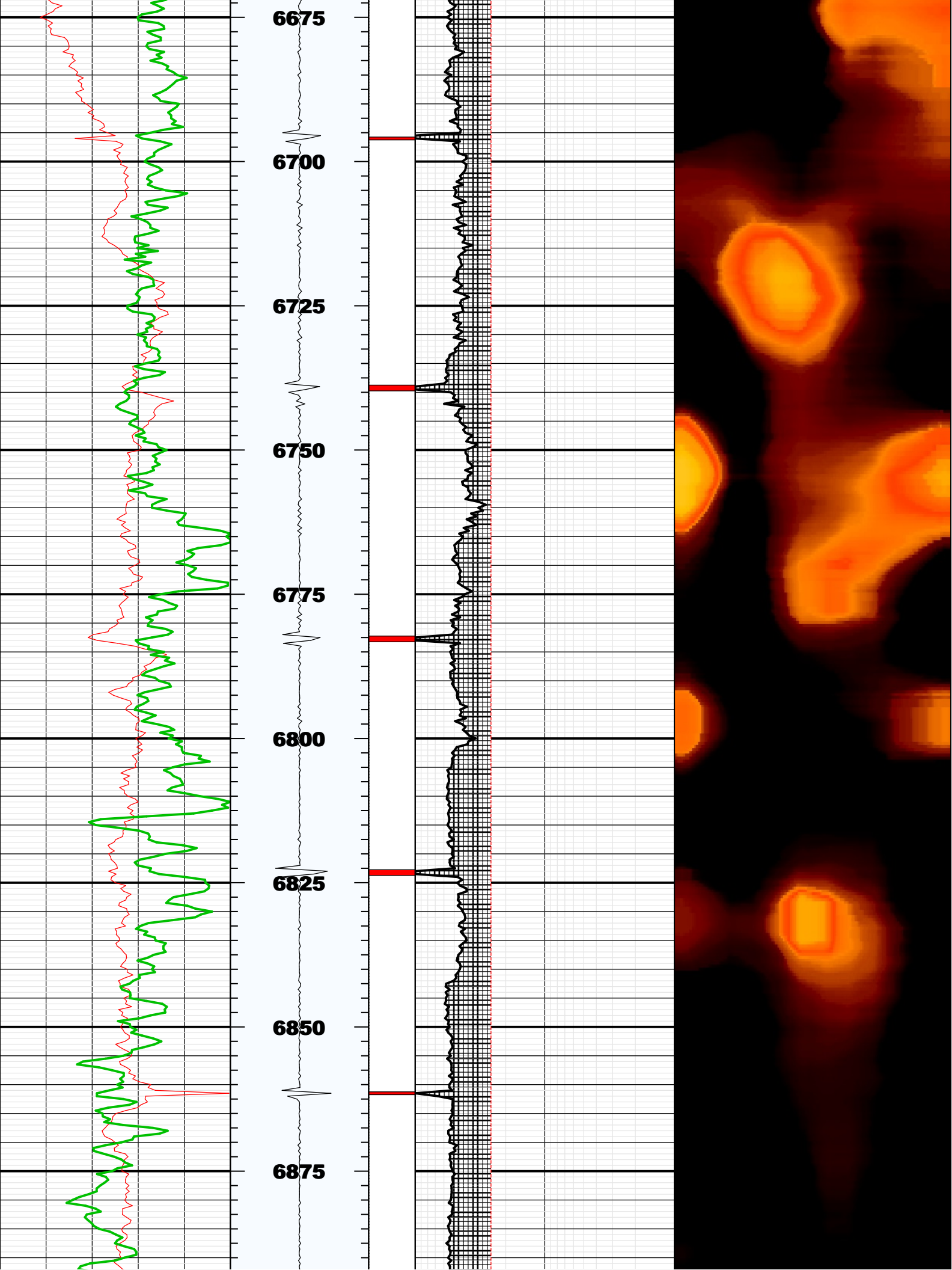


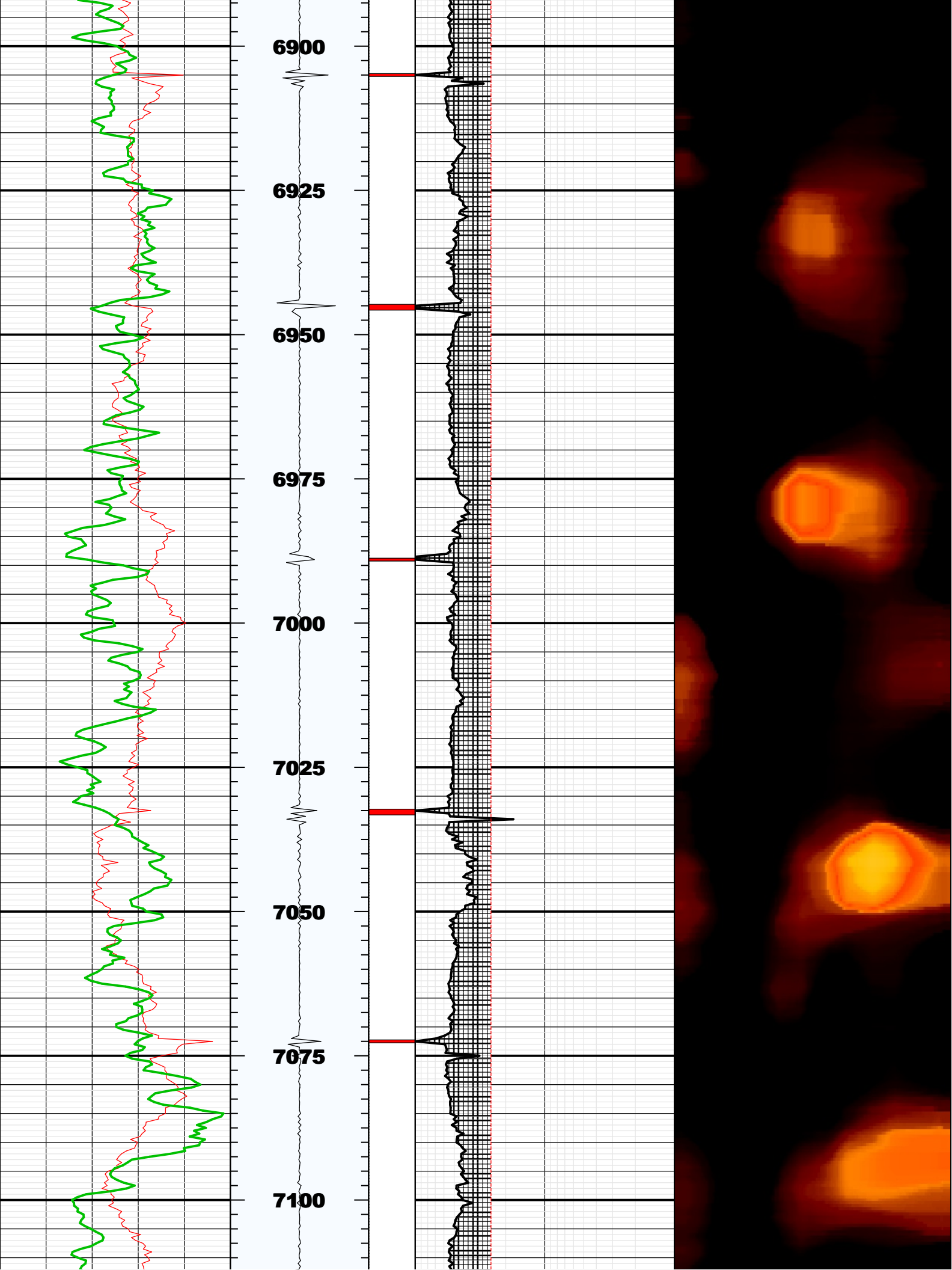
| | | | |
|-------------|-------------|------|--|
| BS | 8.75000 | IN | Bit Size |
| CASG | P110 | | Casing Grade |
| CDIA | 7.00000 | IN | Casing Outer Diameter |
| CSID | | | |
| CSIZ | 7.00000 | IN | Current Casing Size |
| CWEI | 26.00000 | LB/F | Casing Weight |
| DFD | 8.40000 | LB/G | Drilling Fluid Density |
| DFVL | 188.00000 | US/F | Default Fluid Velocity |
| DO | | | |
| DOT | 2.87400 | IN | Diameter of Transducer Sensor |
| EMXV | 50 | 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 | 34.69662 | US | Window Begin Time |
| WINE | 74.57723 | 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

Company: Noble Energy Inc
Well: Oscar Y10-74-1HC
Field: Wattenberg









Fluid Properties Used for Main Pass

