

Company: Noble Energy Inc

Well: Neal LC35-738  
Field: Wildcat  
County: Weld

State: Colorado

County: Weld		<div>USI-LITE</div>						
Field: Wildcat								
Location: SWSE Sec.26 T9N R59W								
Well: Neal LC35-738								
Company: Noble Energy Inc								
Logging Date	05-Jun-2015	LOCATION		Permanent Datum: Log Measured From: Drilling Measured From:	GL KB KB	Elev: K.B. 4878.0 F G.L. 4848.0 F D.F. 4877.0 F		
Run Number	Run 1	API Serial No. 05-123-40683	Section 26				Township 9N	Range 59W
Depth Driller	6428.0 F							
Schlumberger Depth	6428.0 F							
Bottom Log Interval	6240.0 F							
Top Log Interval	30.0 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	683.0 F							
To	6428.0 F							
Casing Size	7.00 IN							
Weight	26.00 LB/F							
Grade	P110							
From	0.0 F							
To	6421.3 F							
Max Recorded Temp	208.2							
Logger on bottom (date)	05-Jun-2015							
Location	Ft. Morgan CO							
Recorded By	Aleksei Bekhterev							
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: 1919 Calibration Date: Calibrator Serial Number: Number Of Calibration Points: Calibration RMS: Calibration Peak Error:	Serial Number: Length: 18000.00000

DISCLAIMER

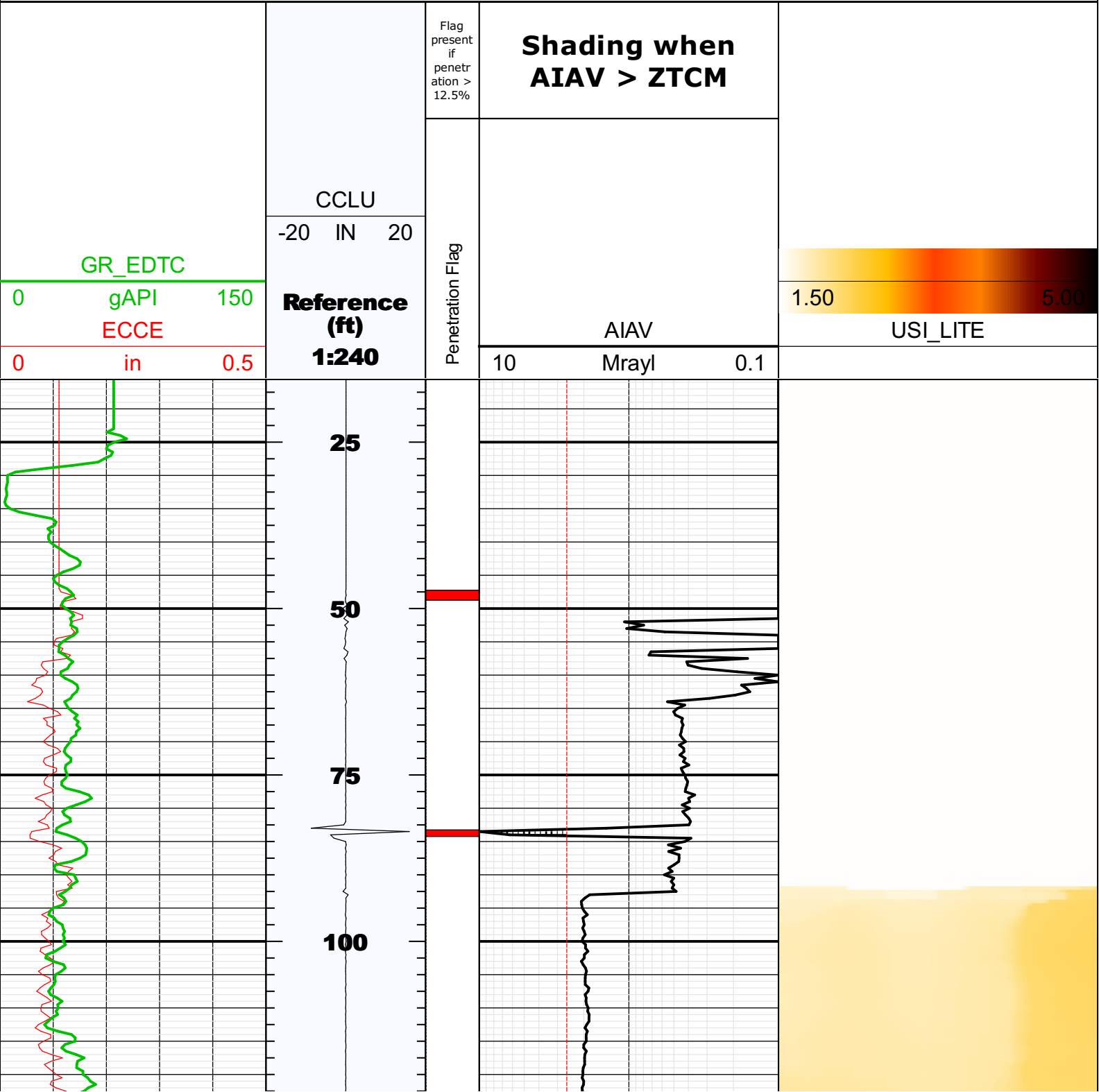
THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIIONS ON USE OF THE RECORDED-DATA (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

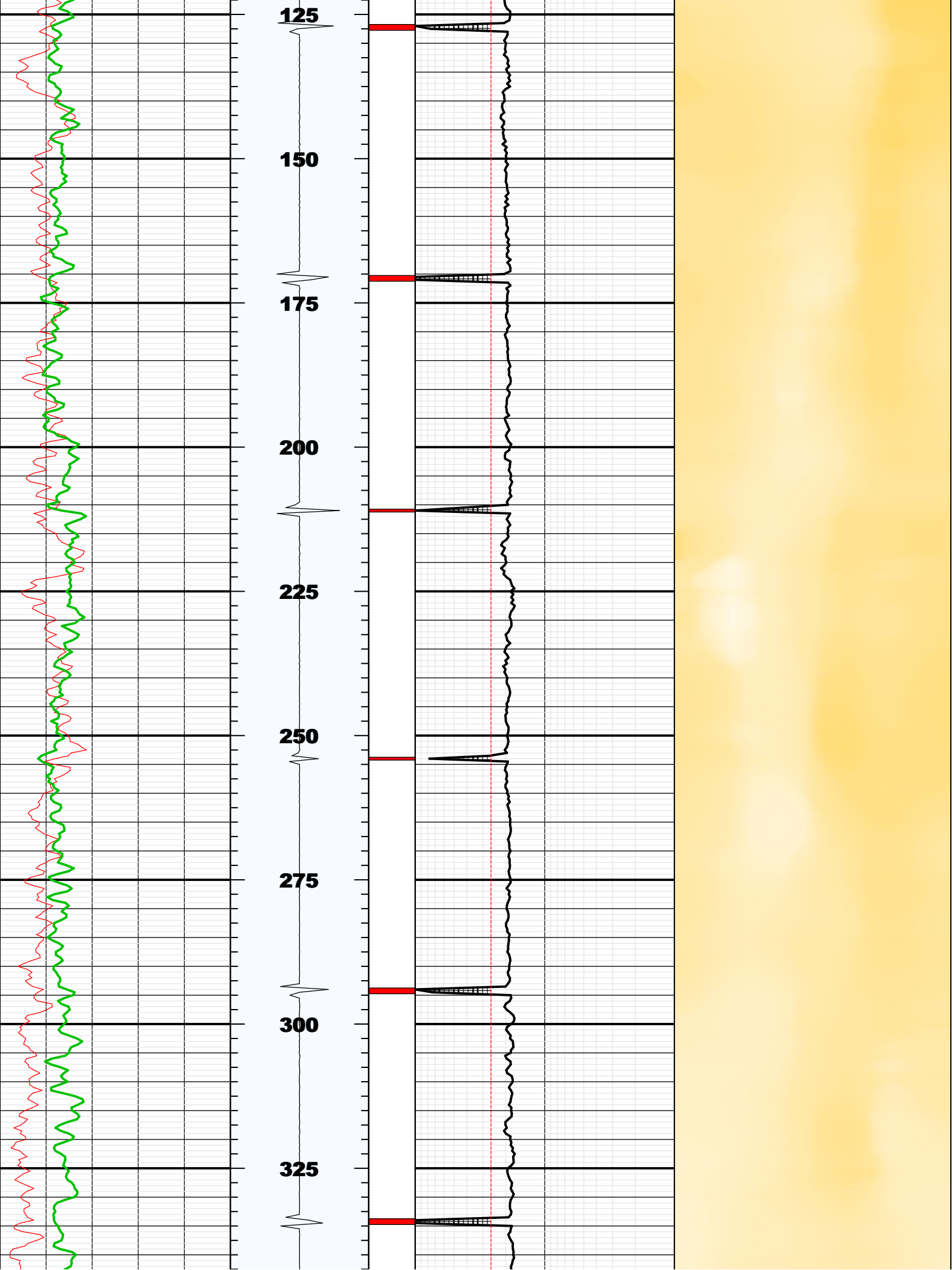
Toolstring ran as per tool sketch  
Repeat pass is done with 0 psi  
Main pass is done with 2500 psi  
Temperature at the bottom 208.2 degF  
Top of the cement 1770 ft  
Log started 30 ft above top of the liner (6240 ft)

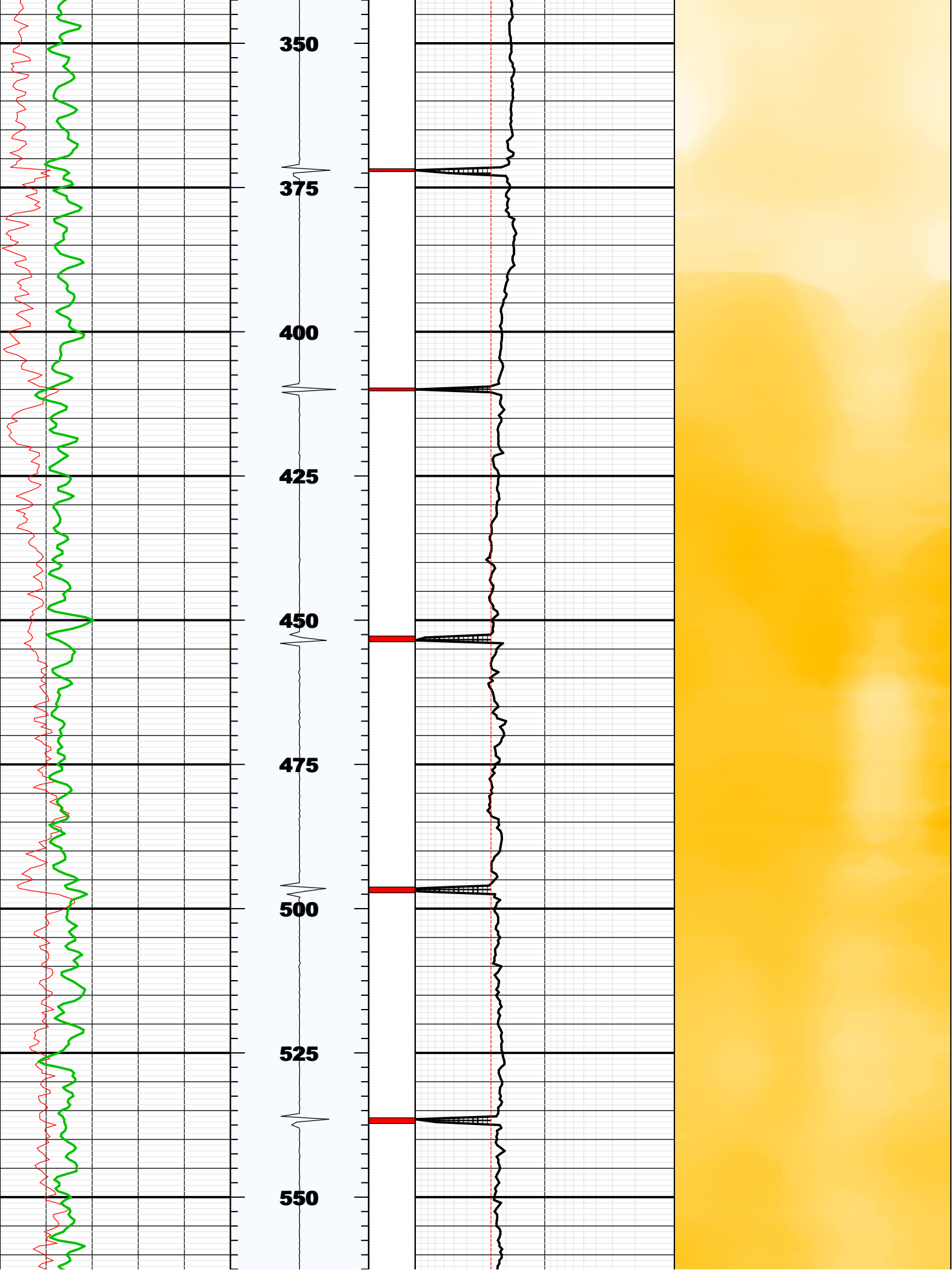
Crew Troy Ocanas Derrick Hunter  
Thank you for choosing Schlumberger Wireline!

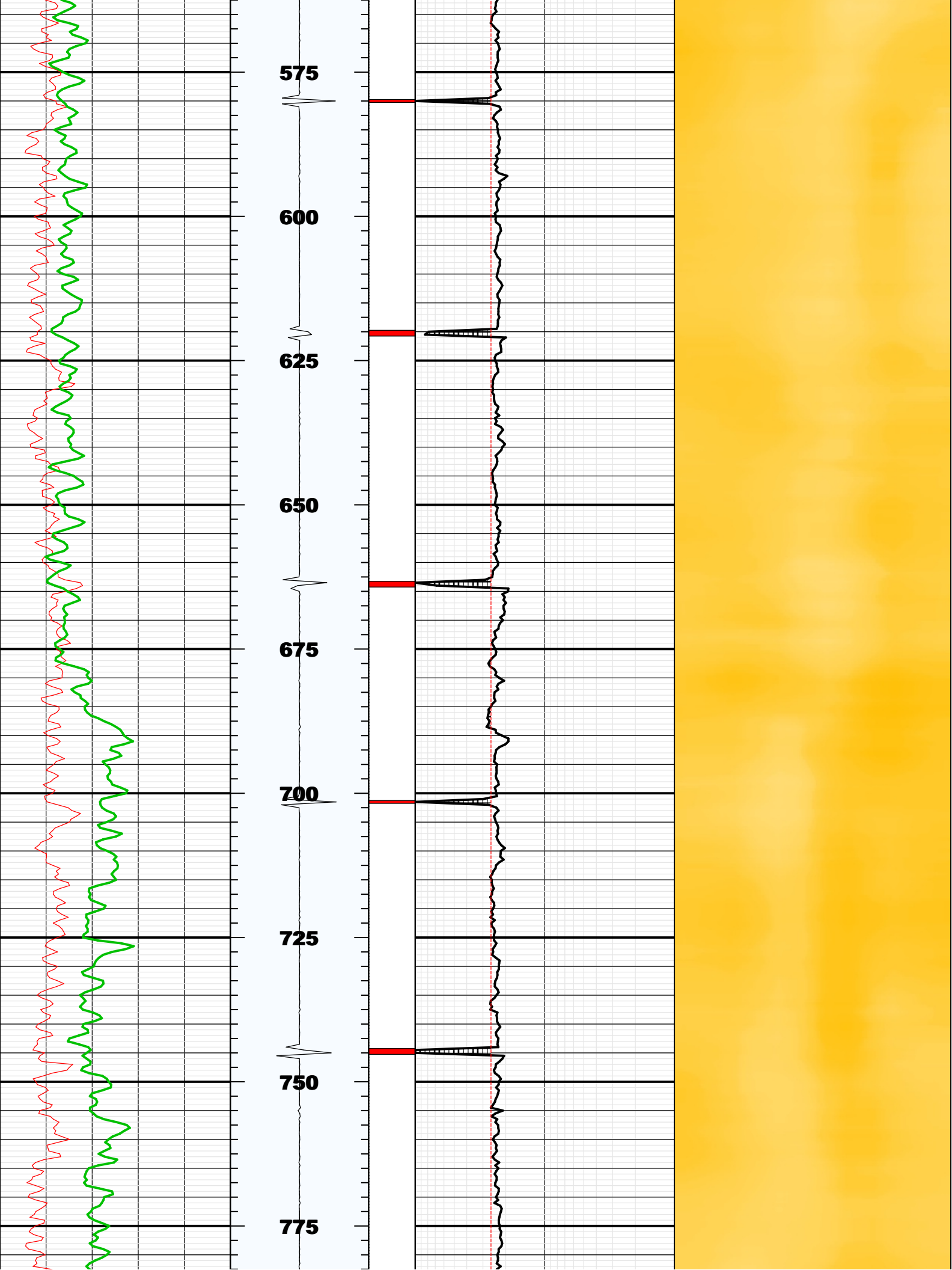
Main Pass

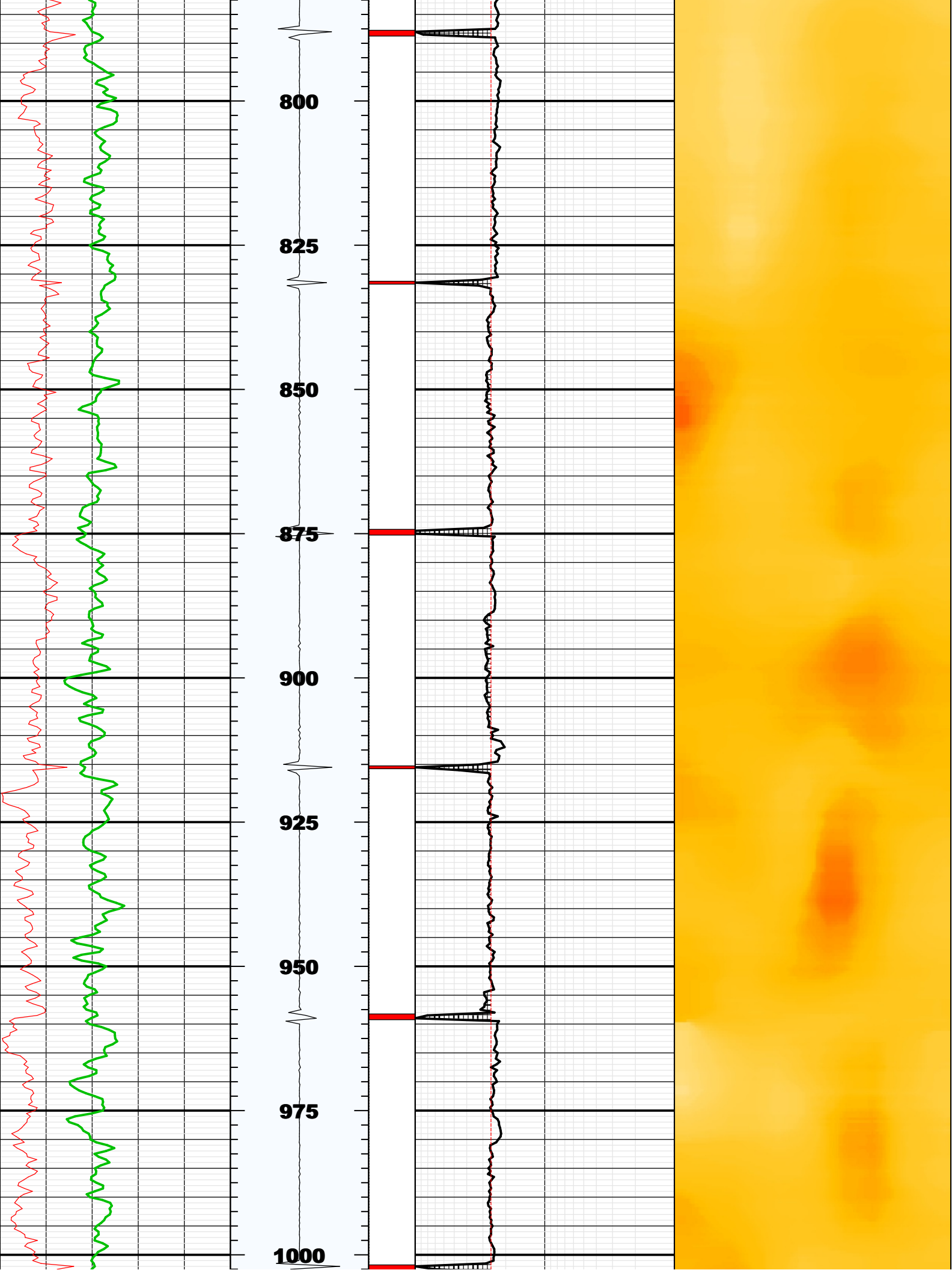
Company: Noble Energy Inc  
Well: Neal LC35-738  
Field: Wildcat

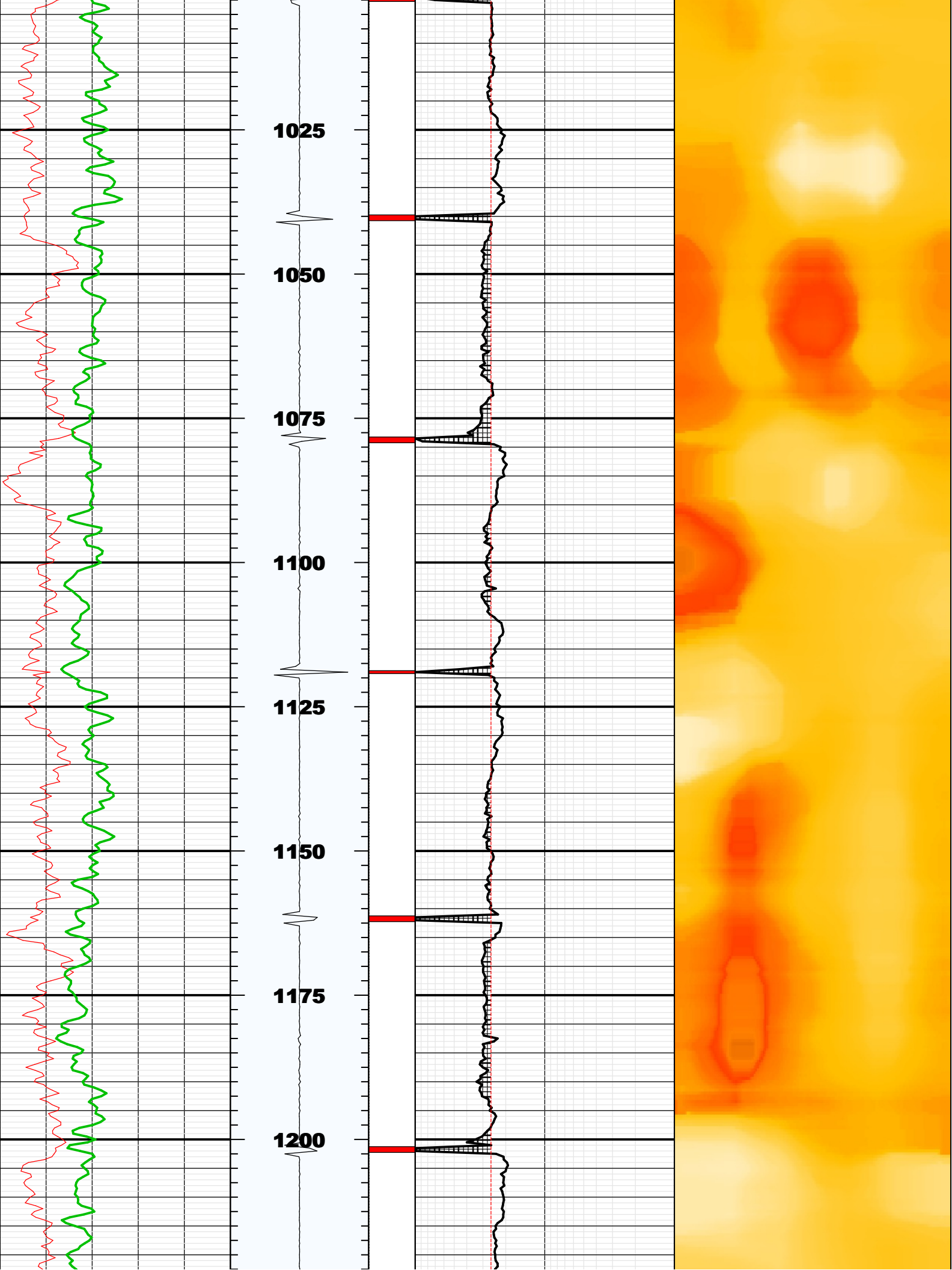




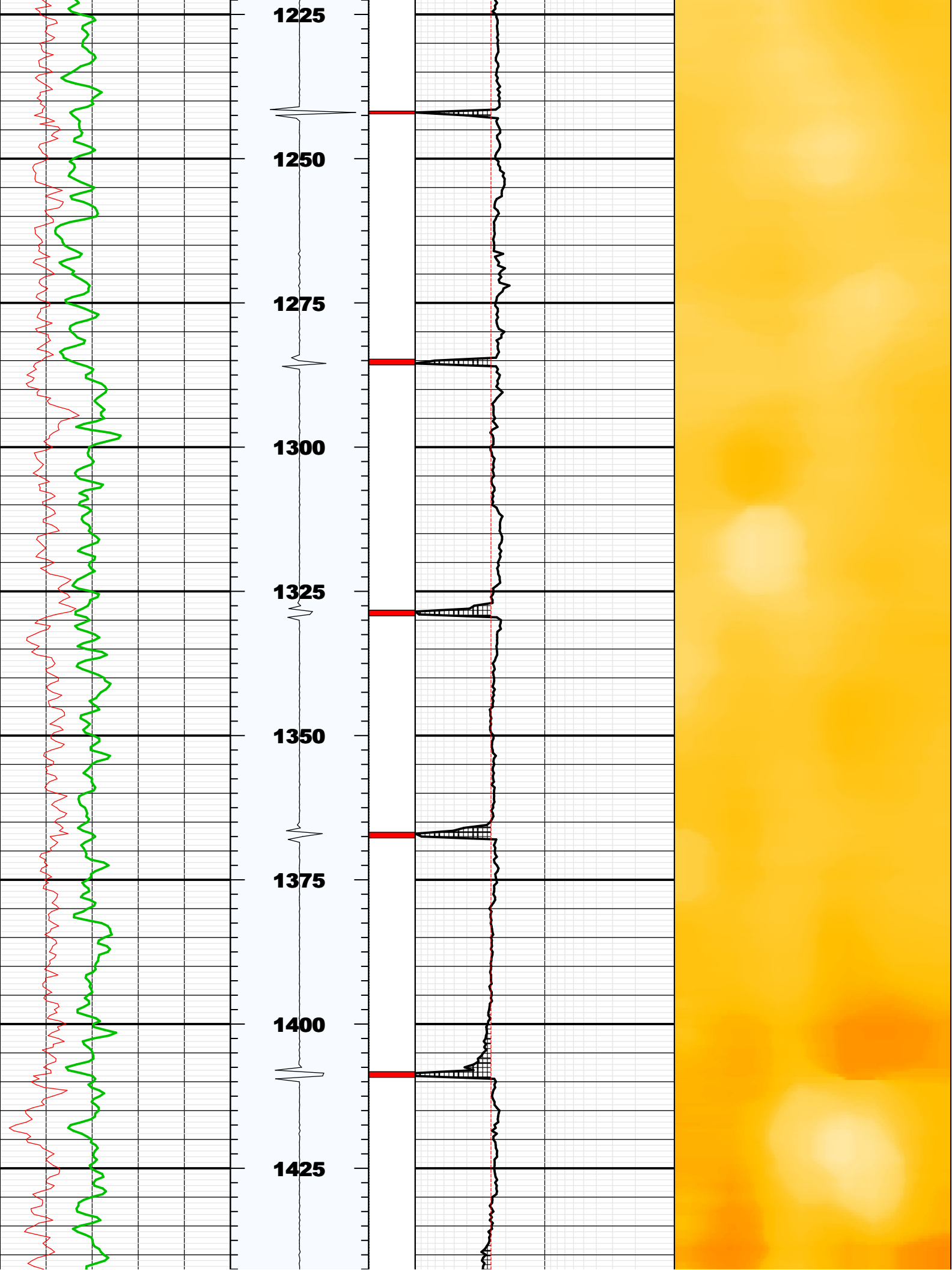


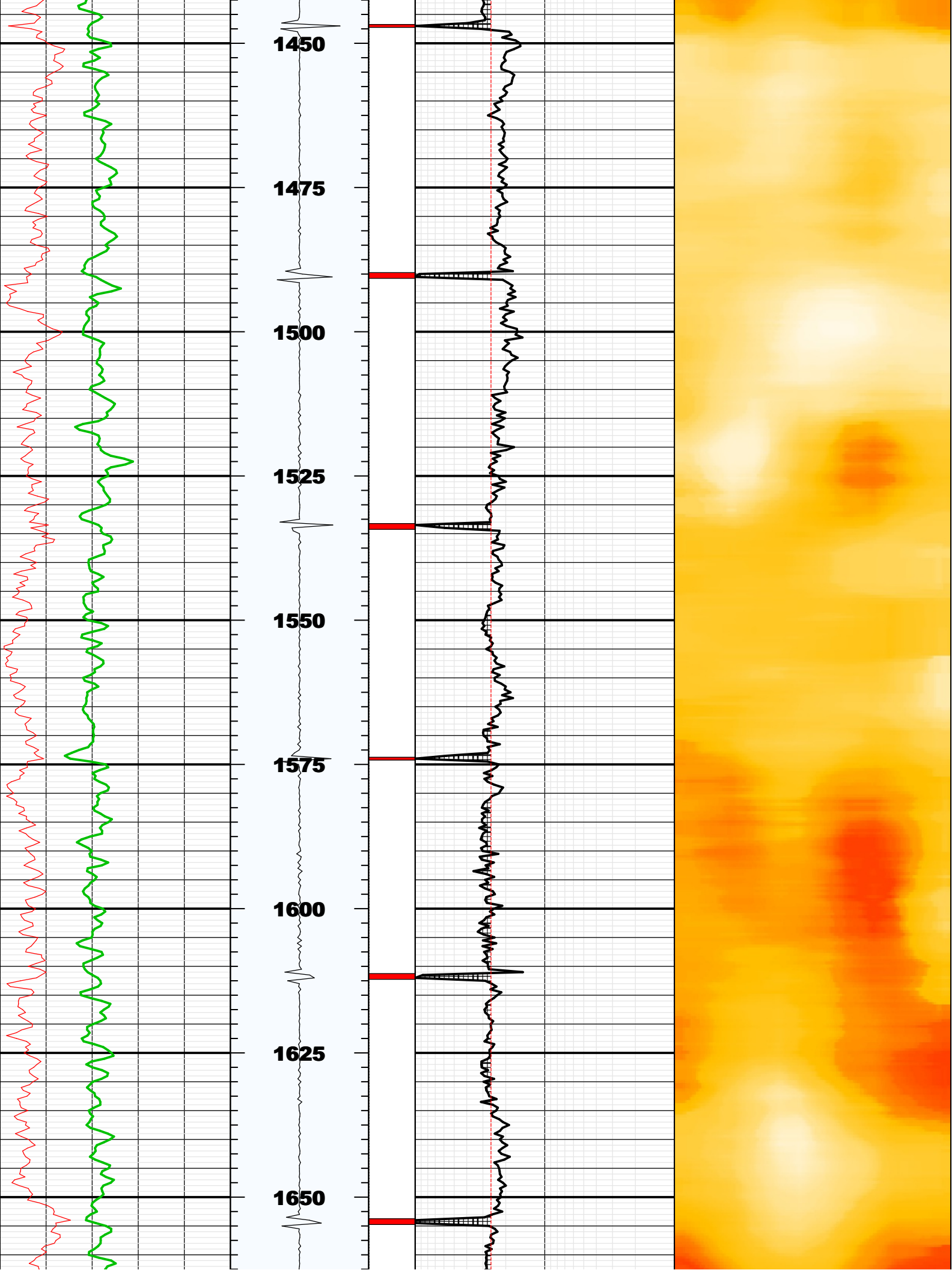


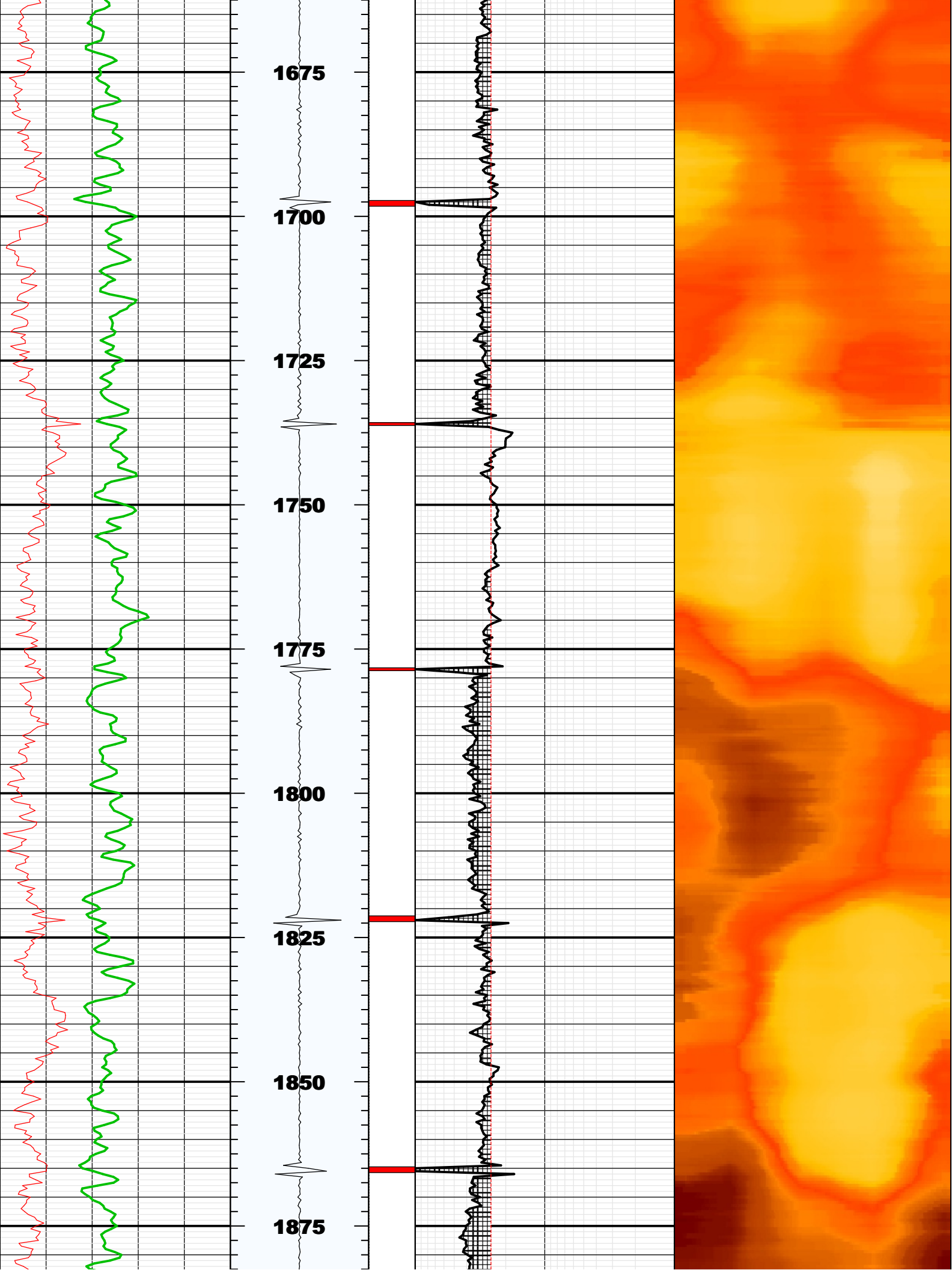


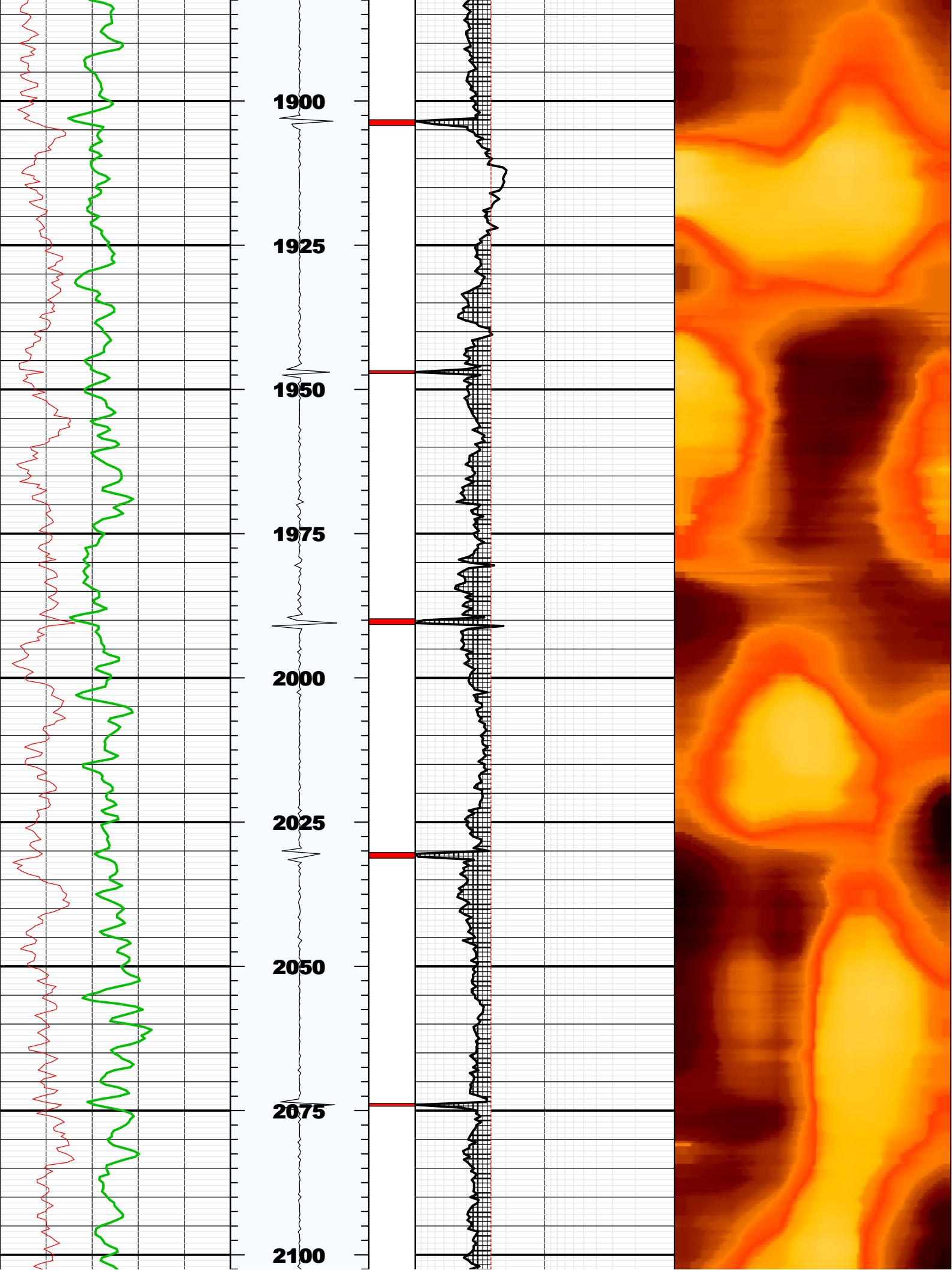




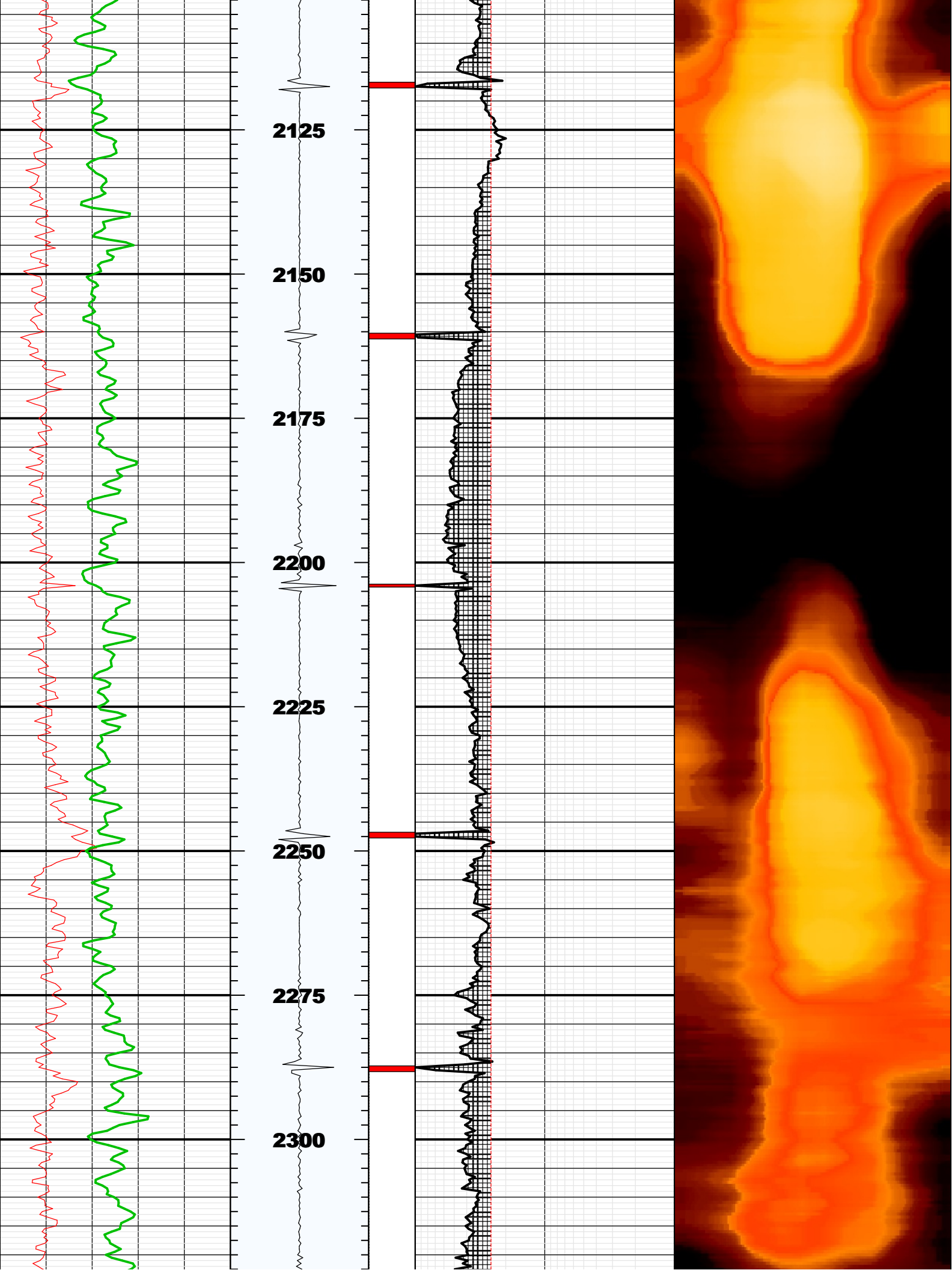


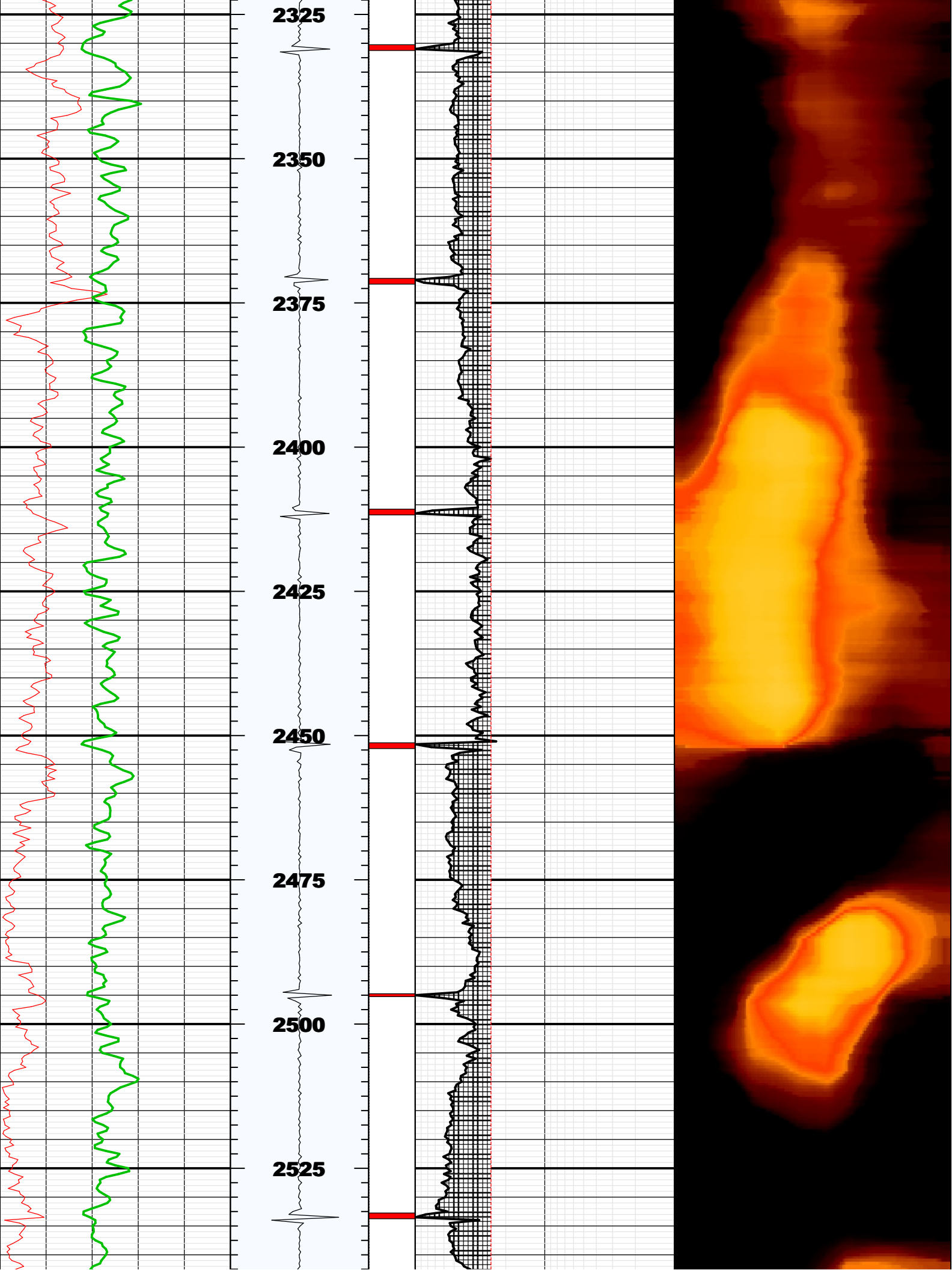


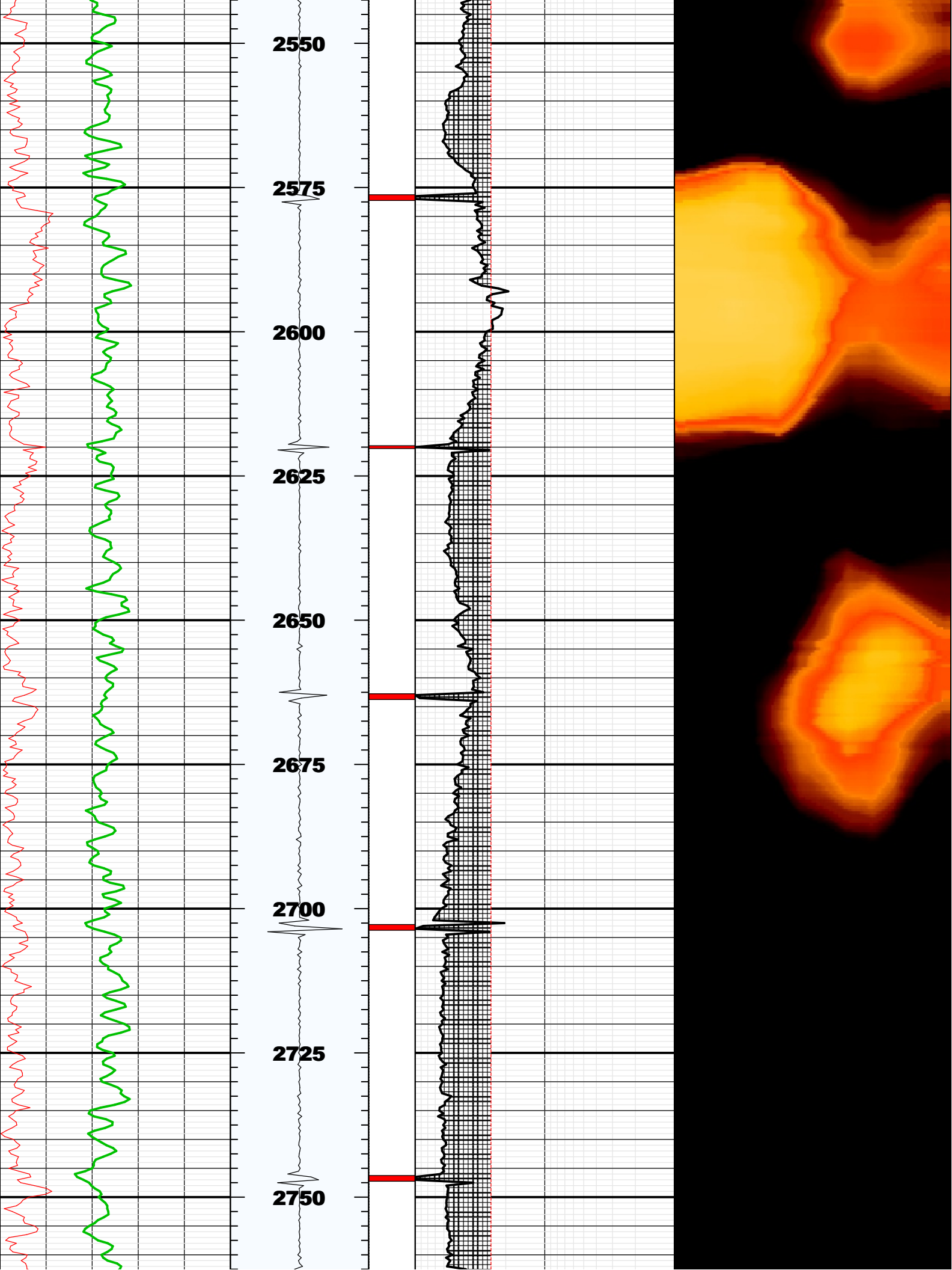


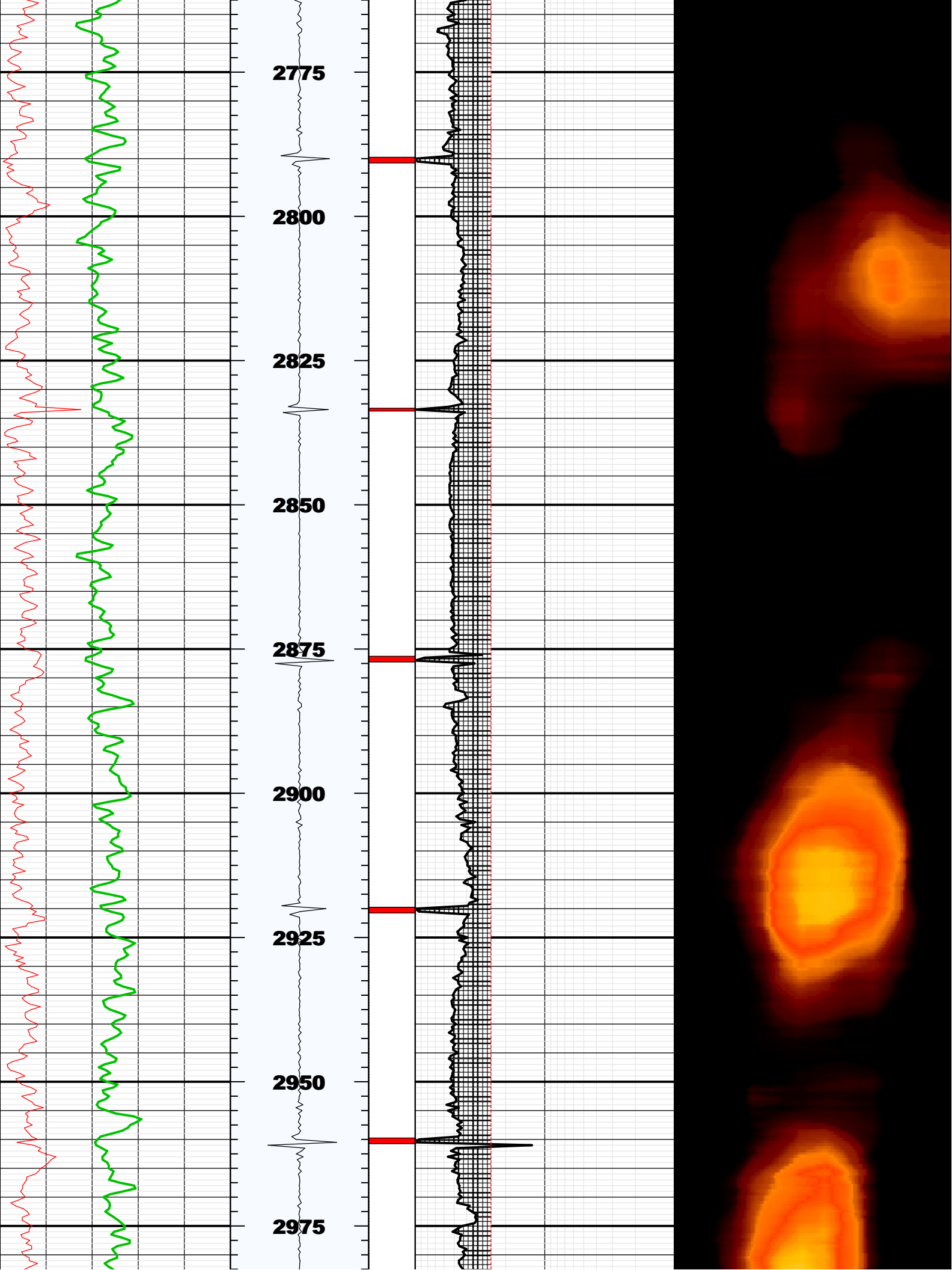




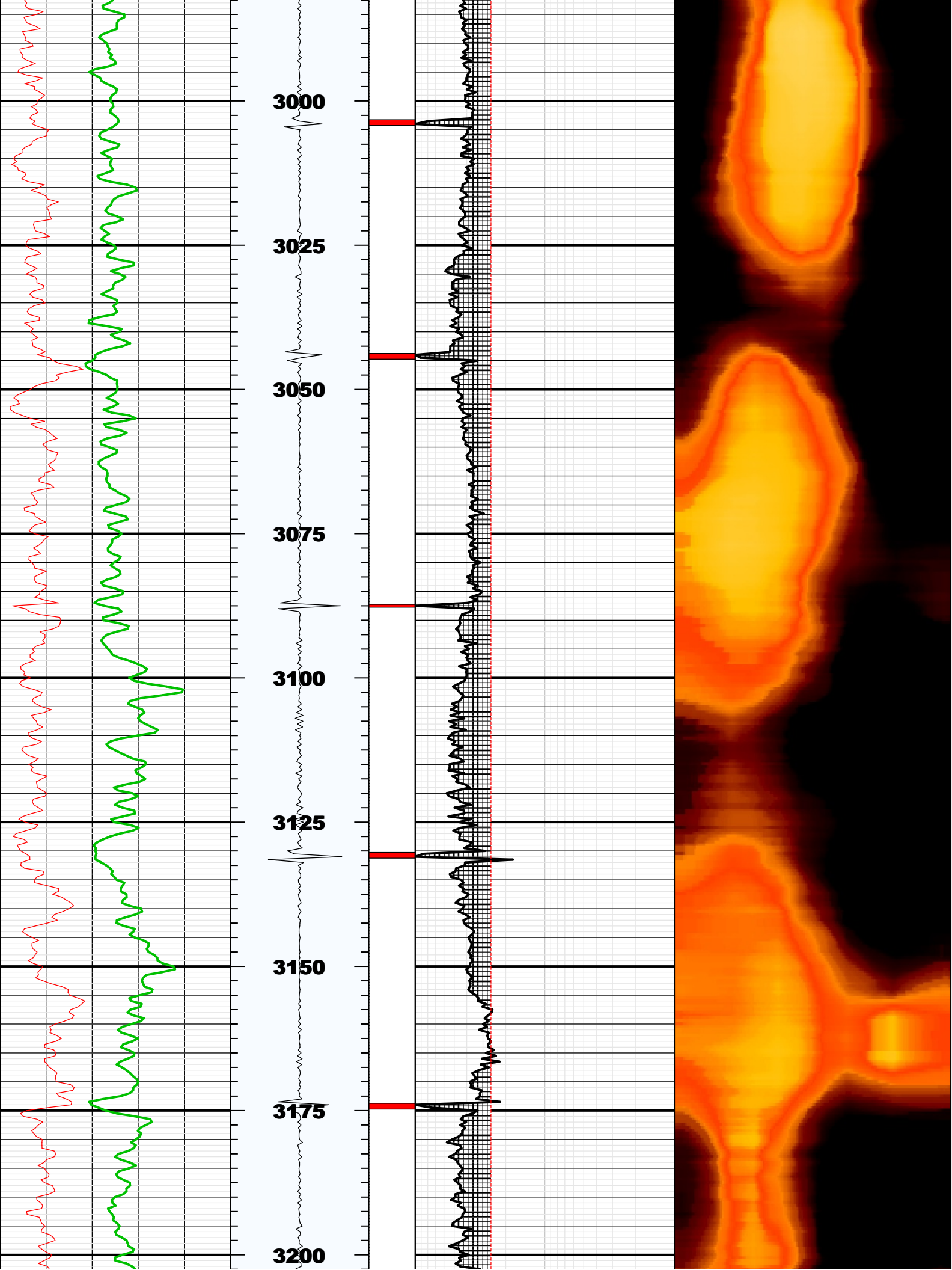


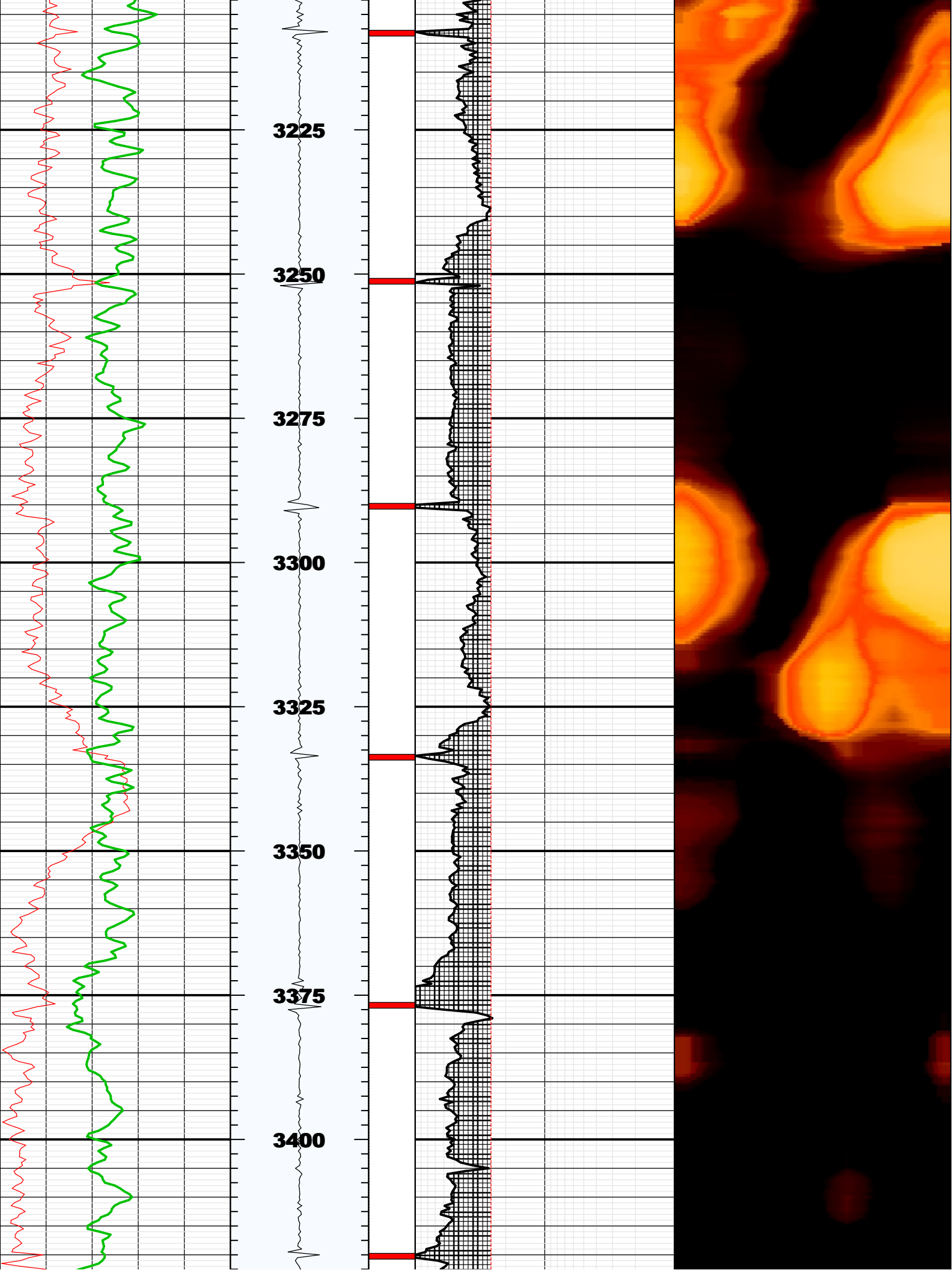


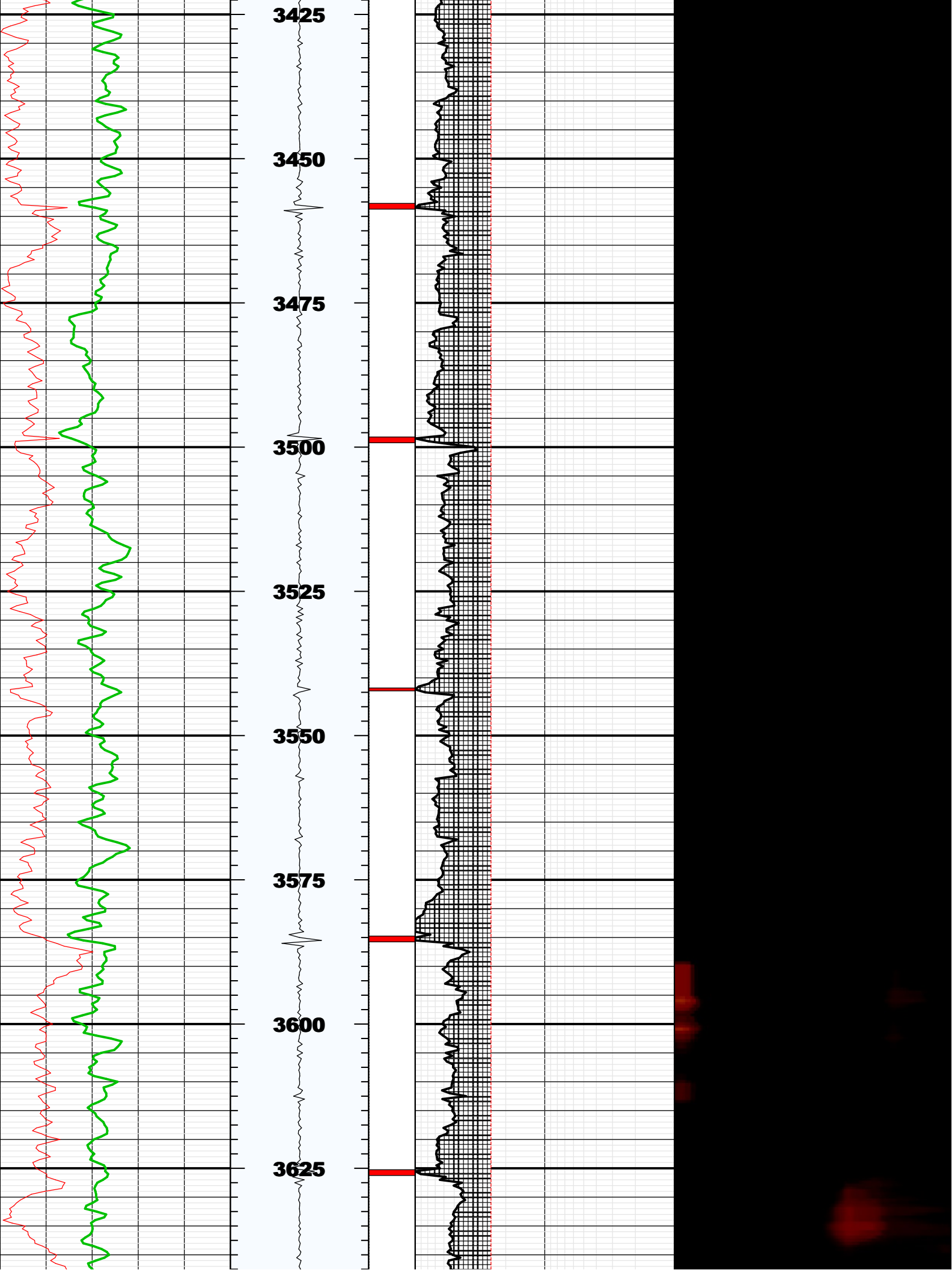


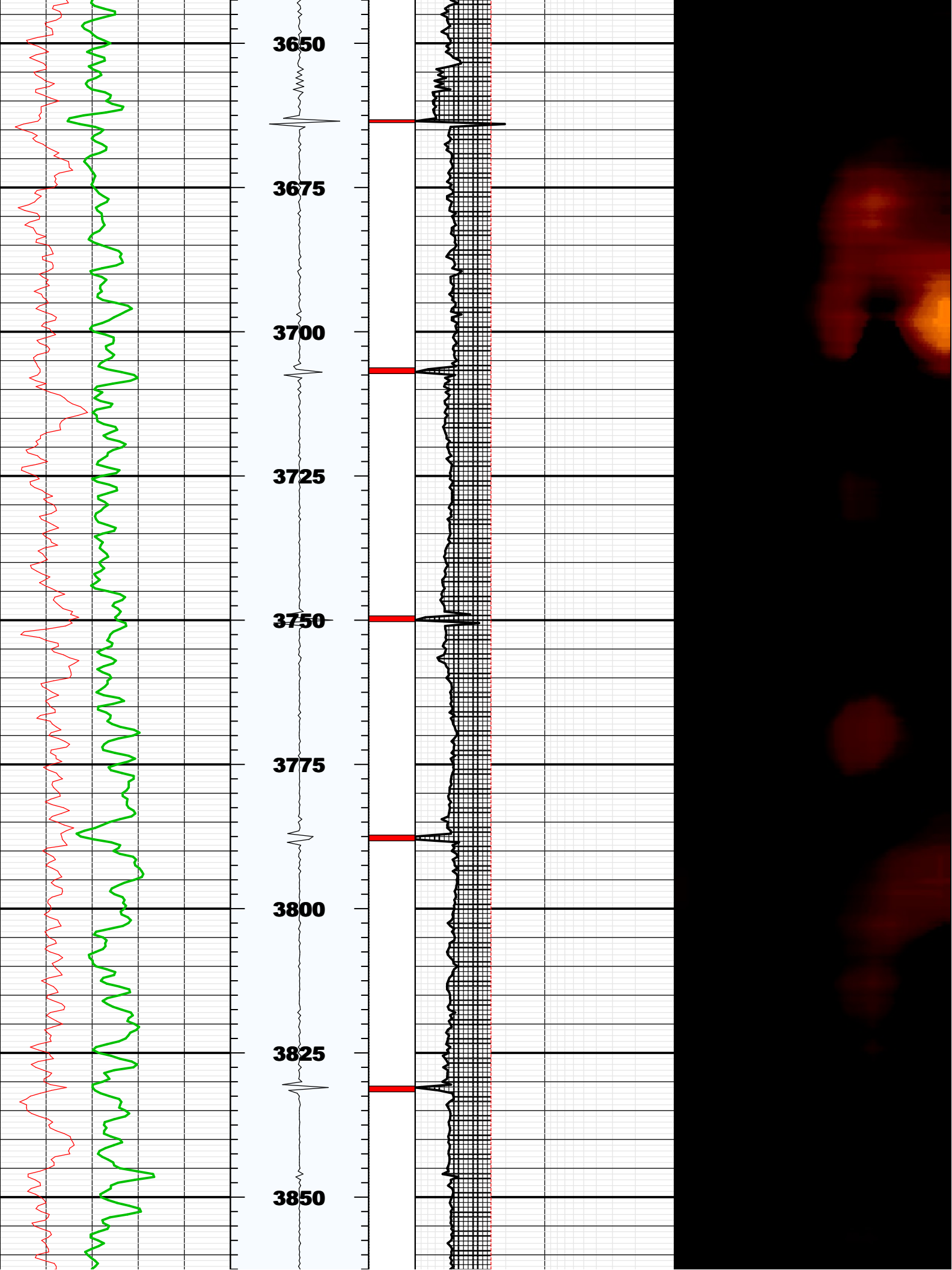


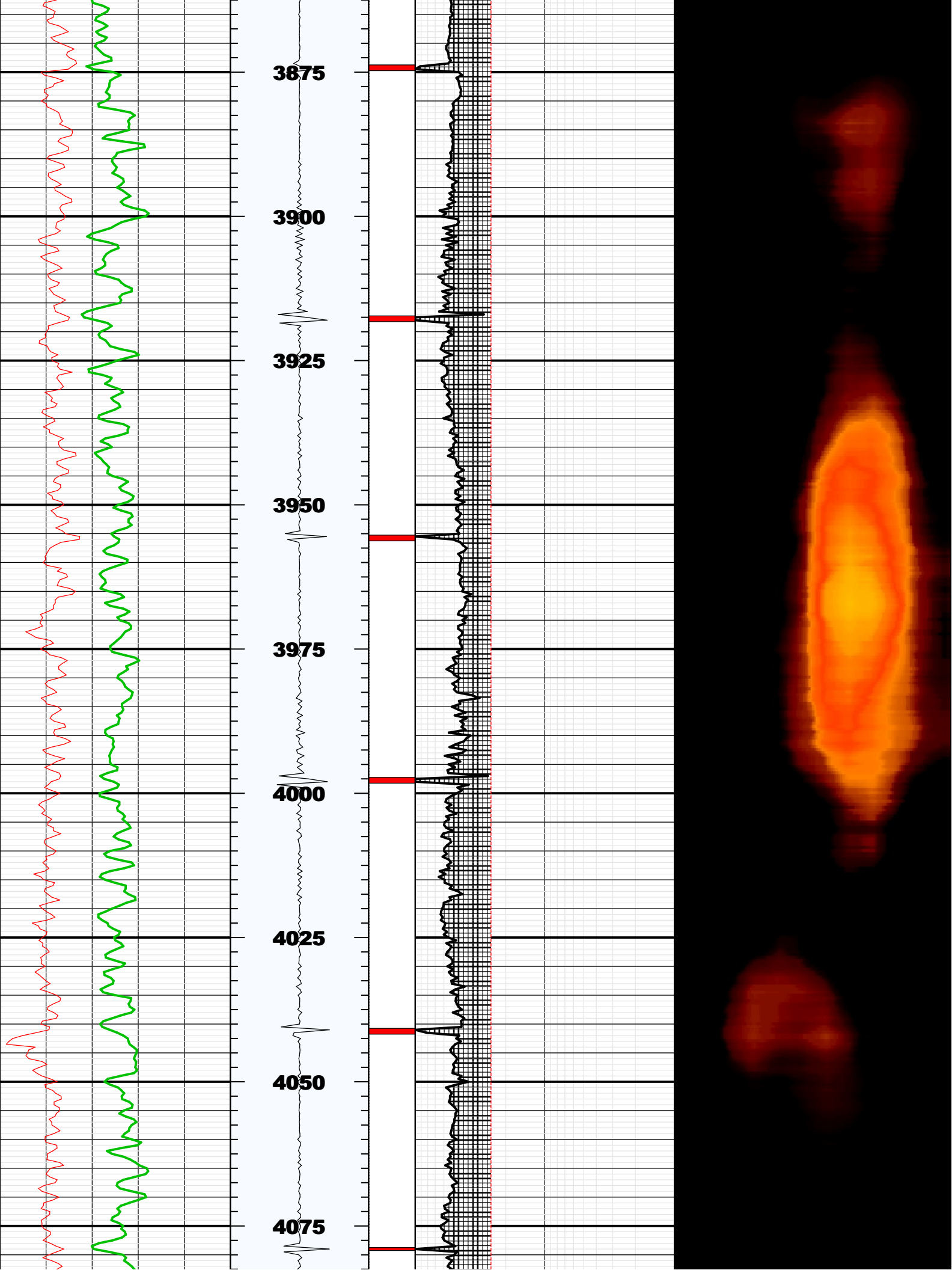




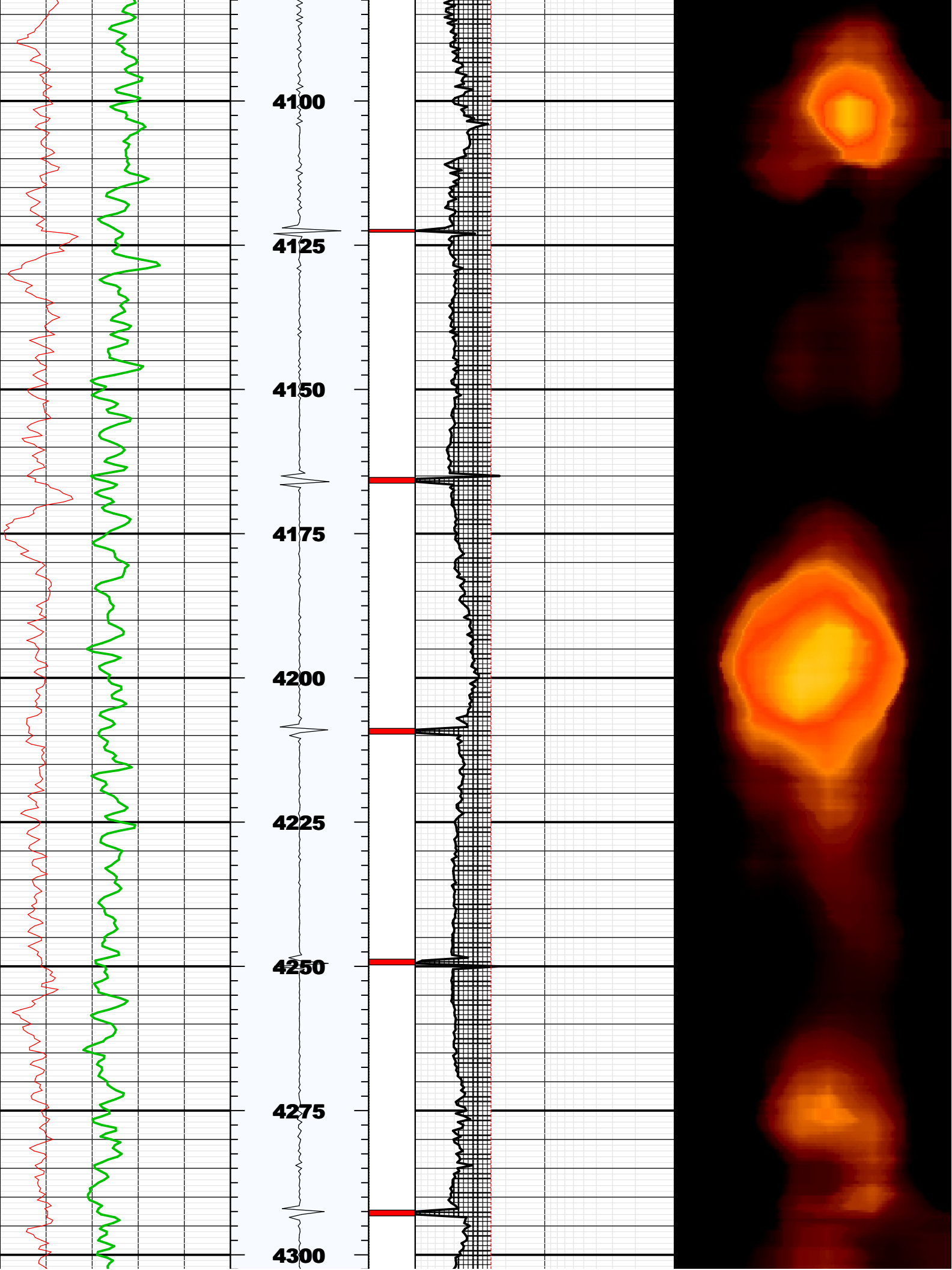


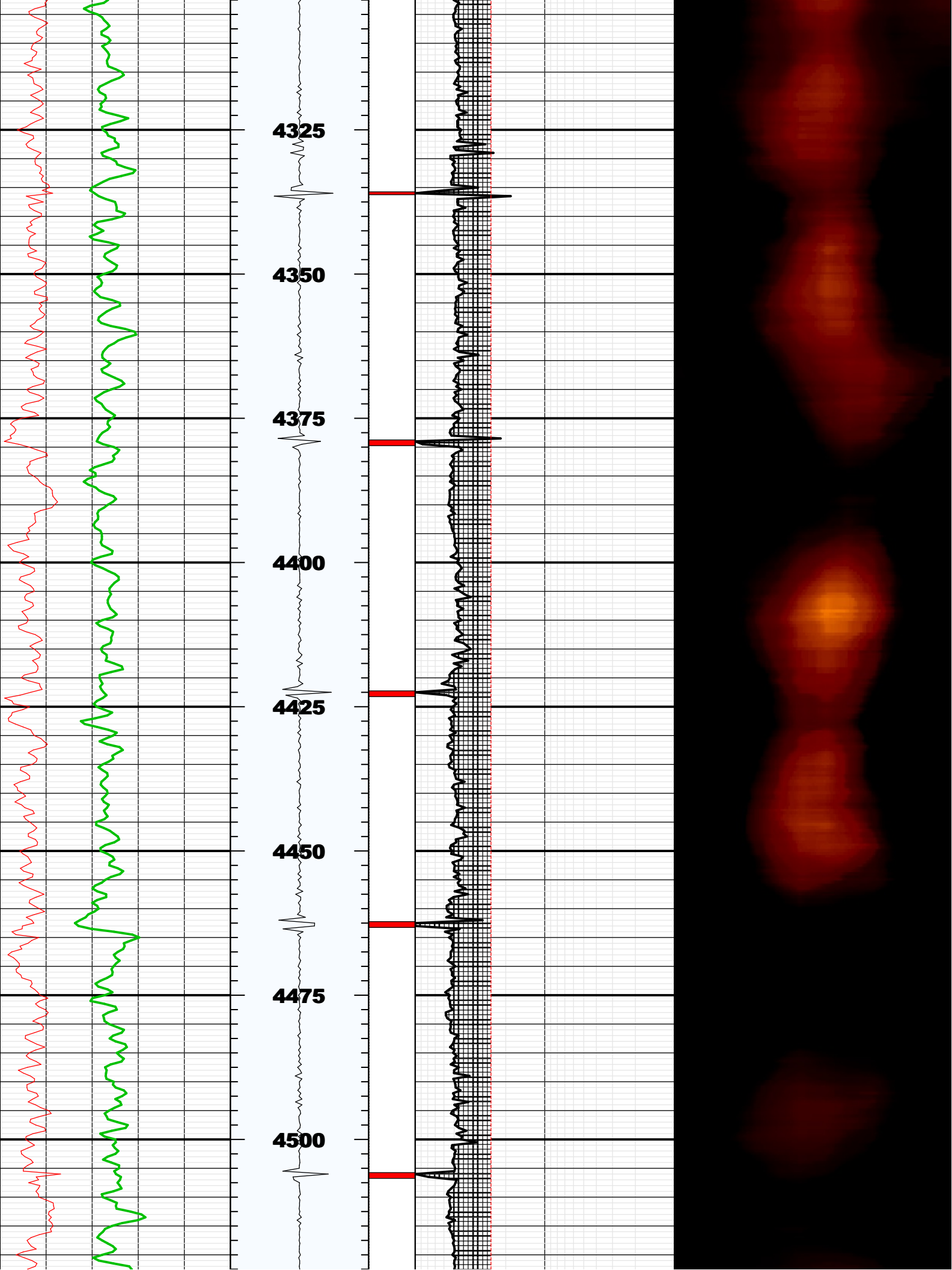


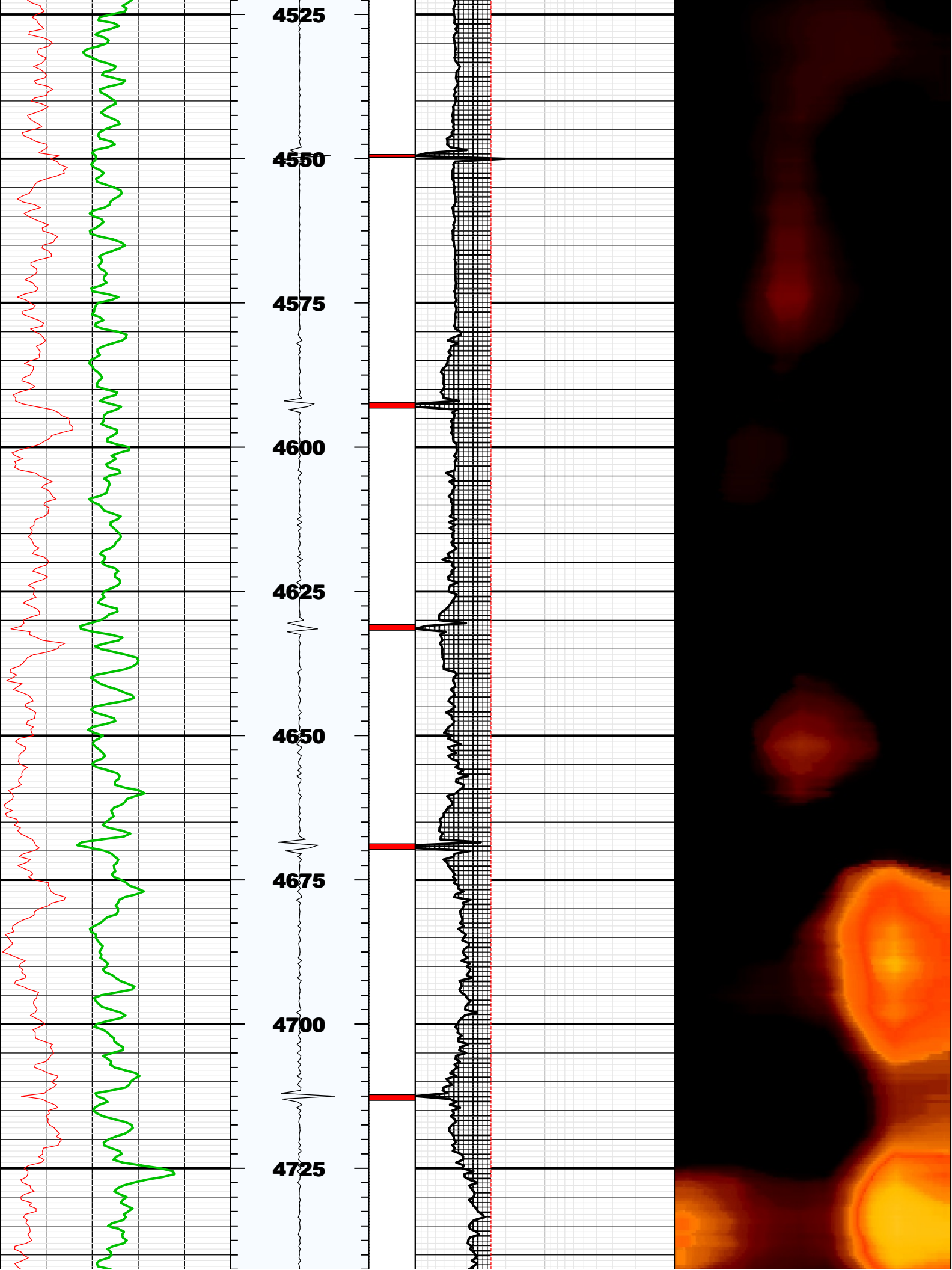




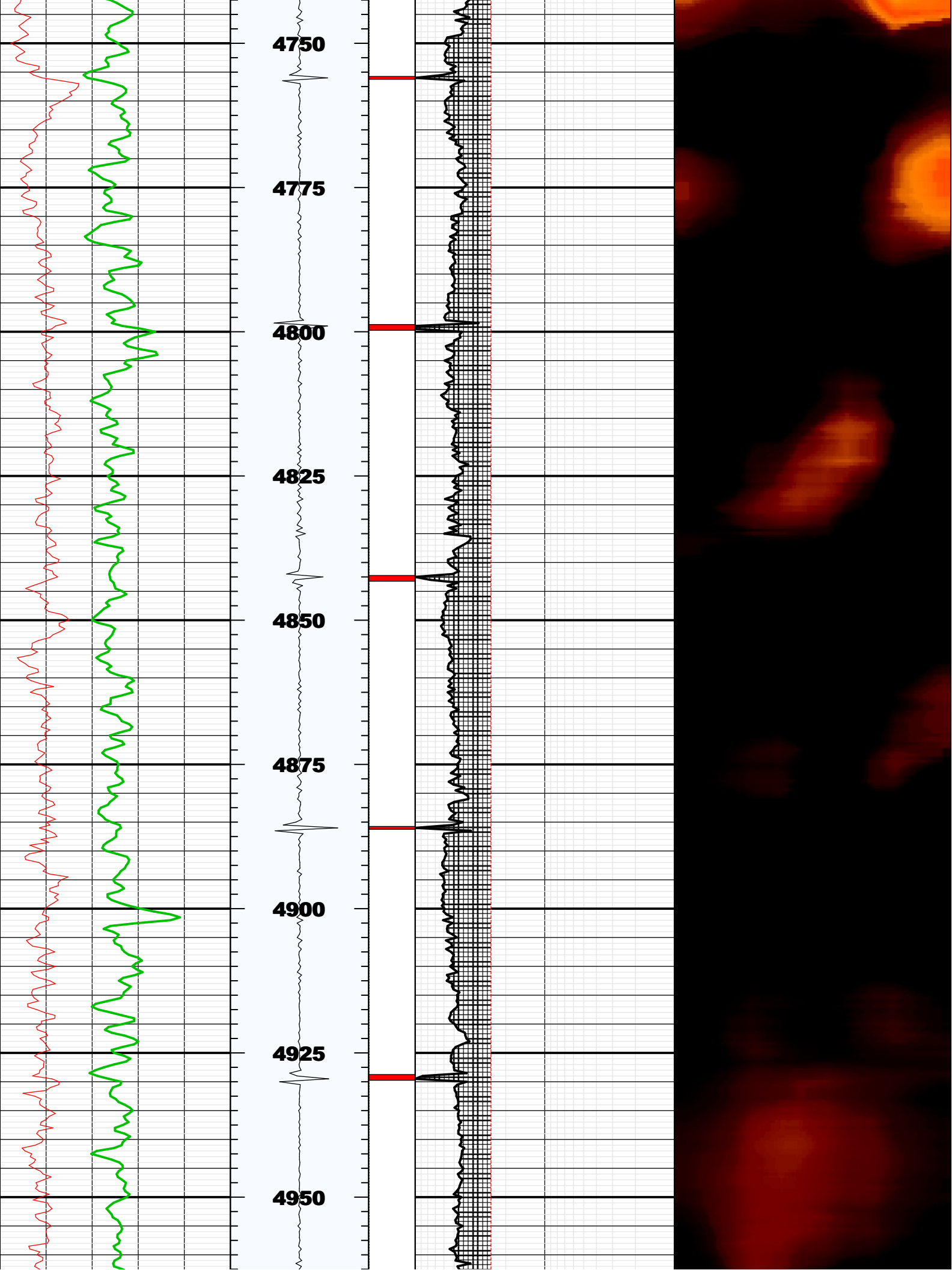


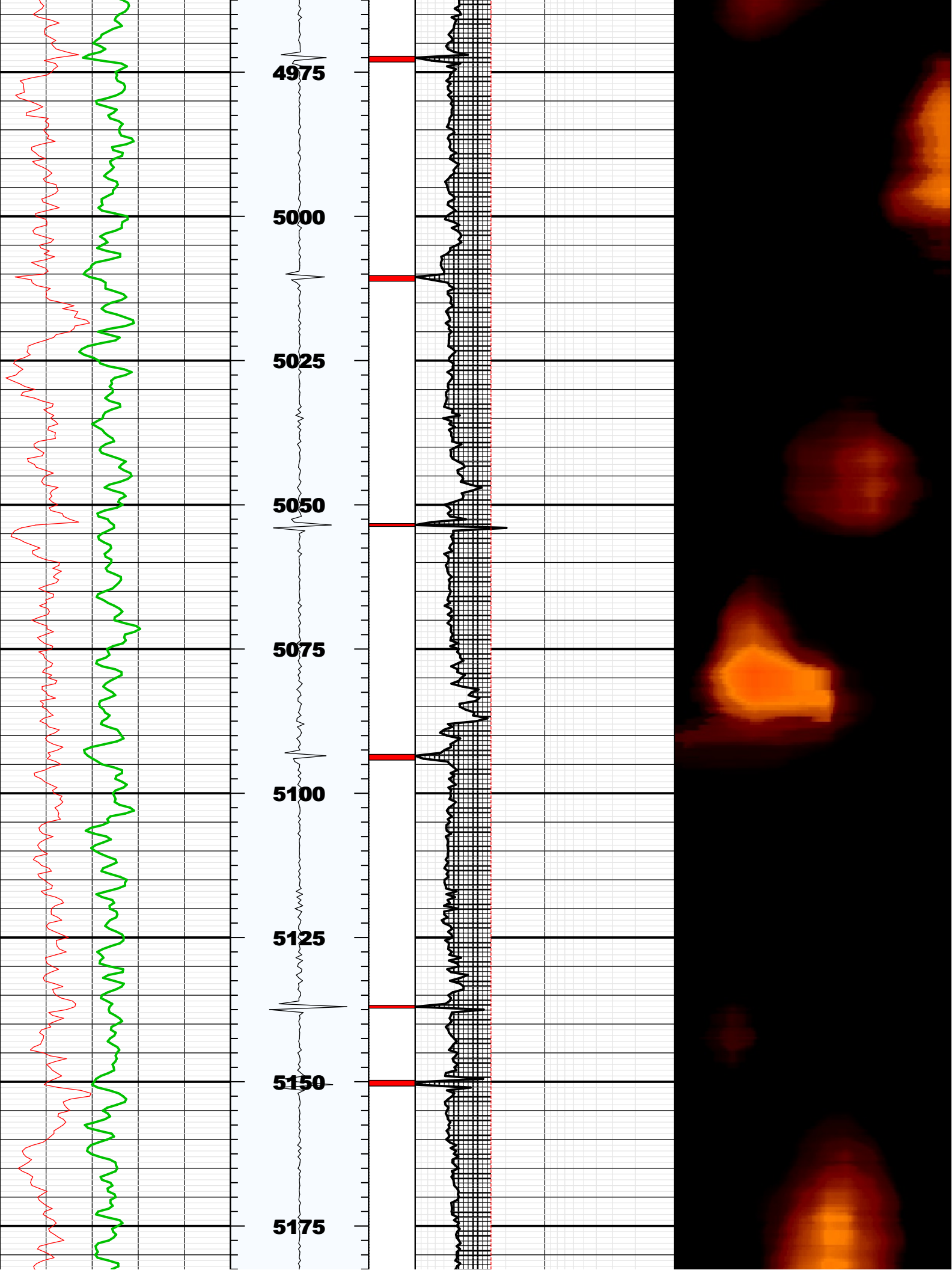


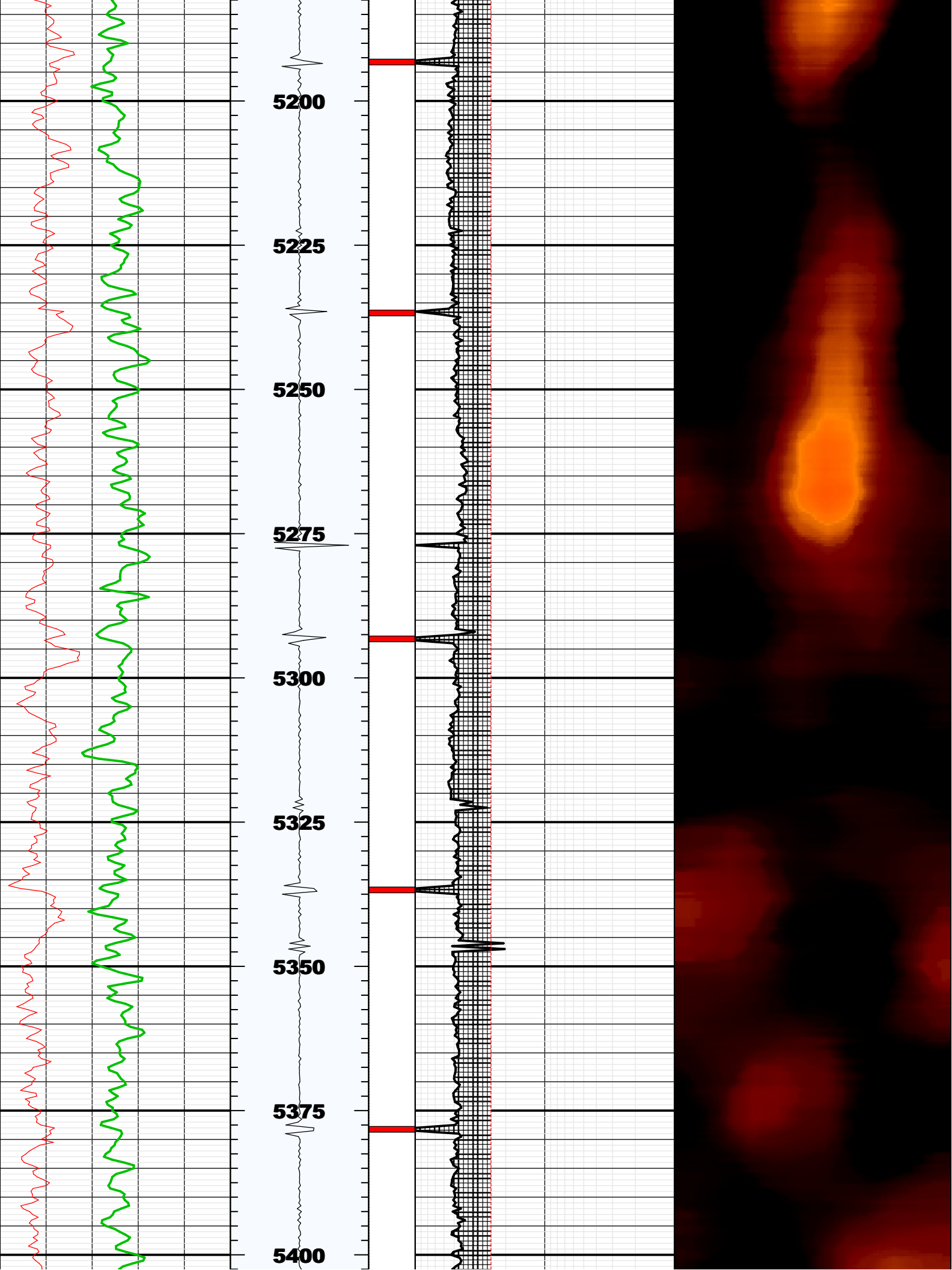


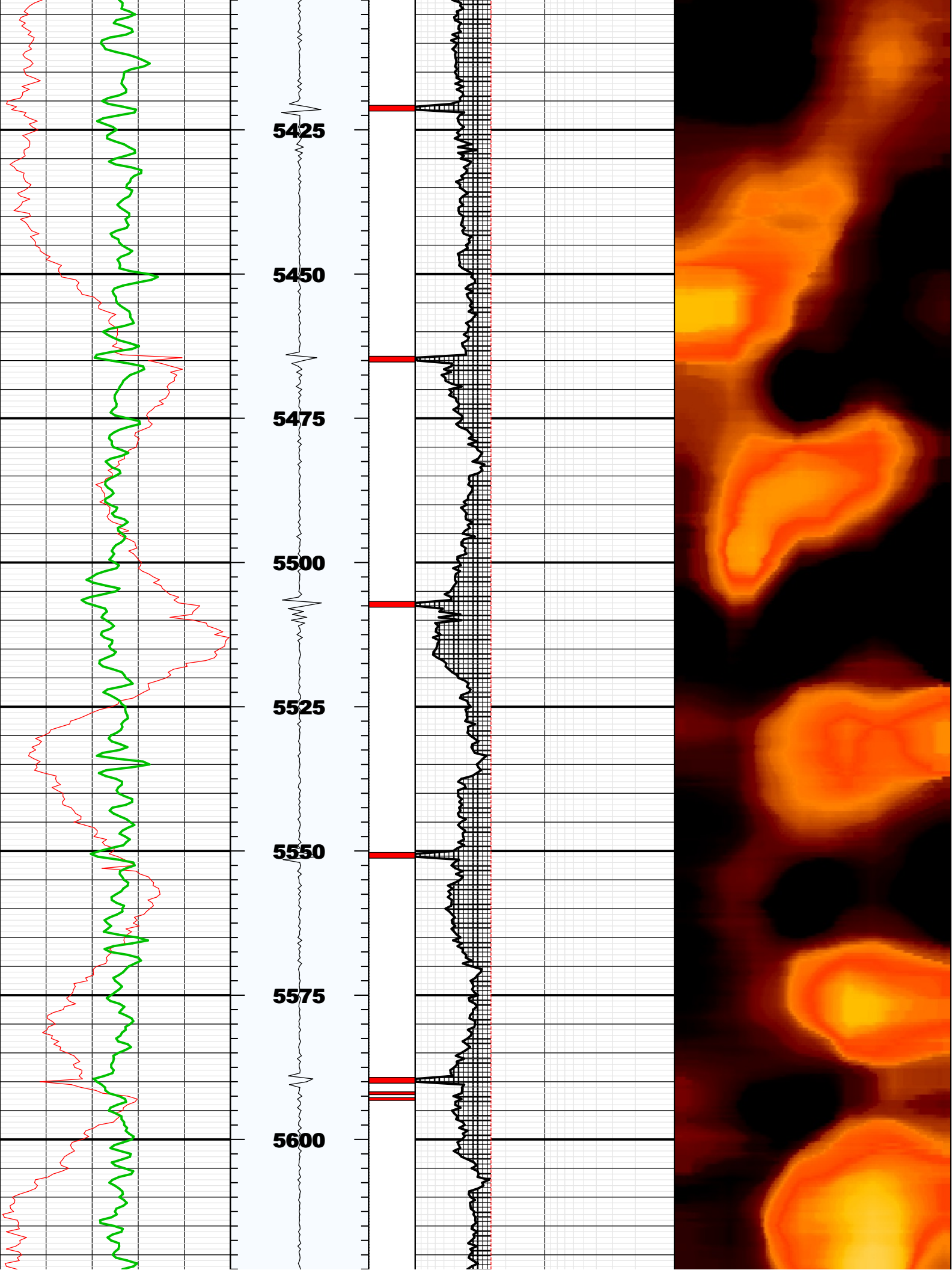




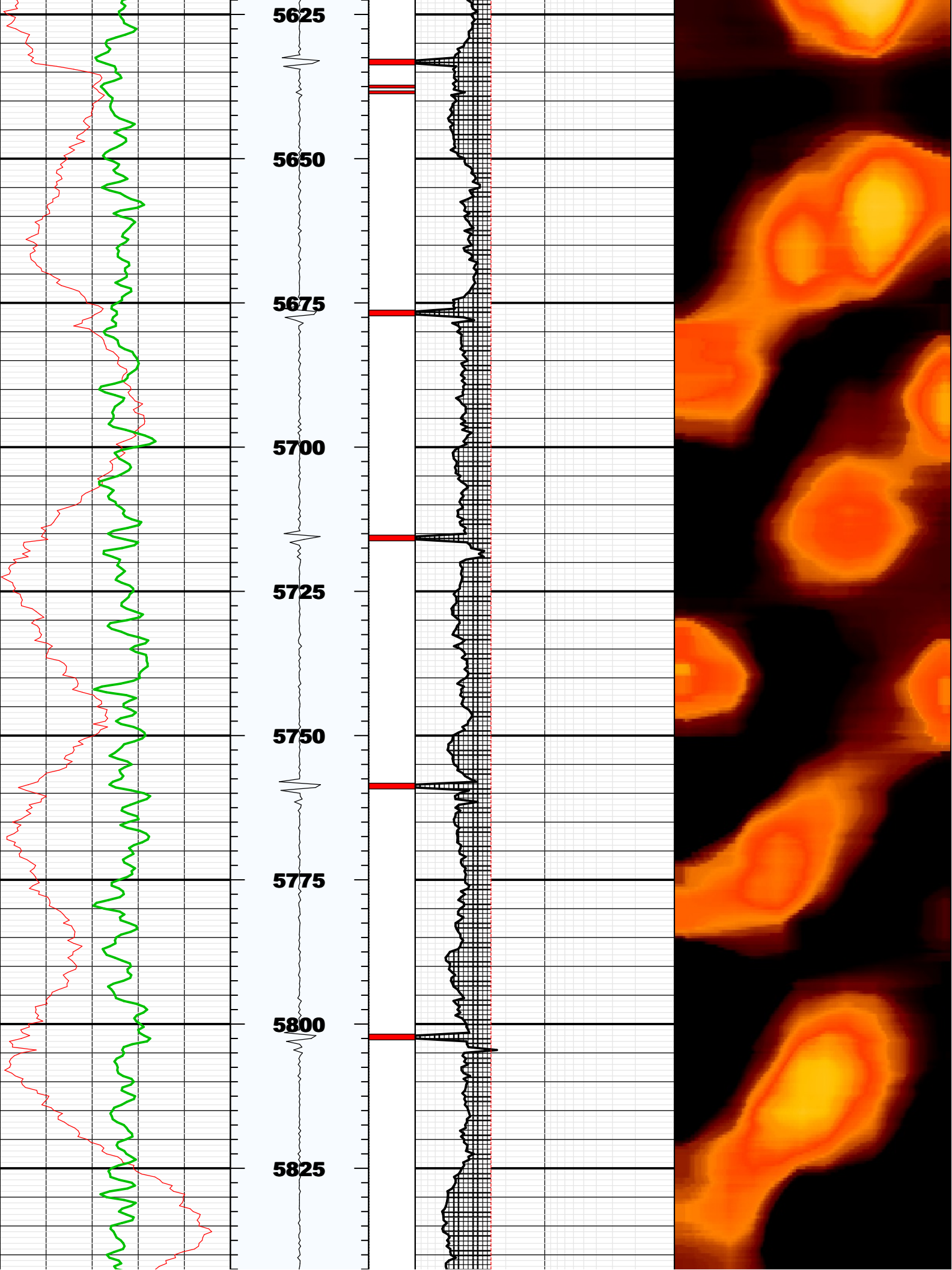


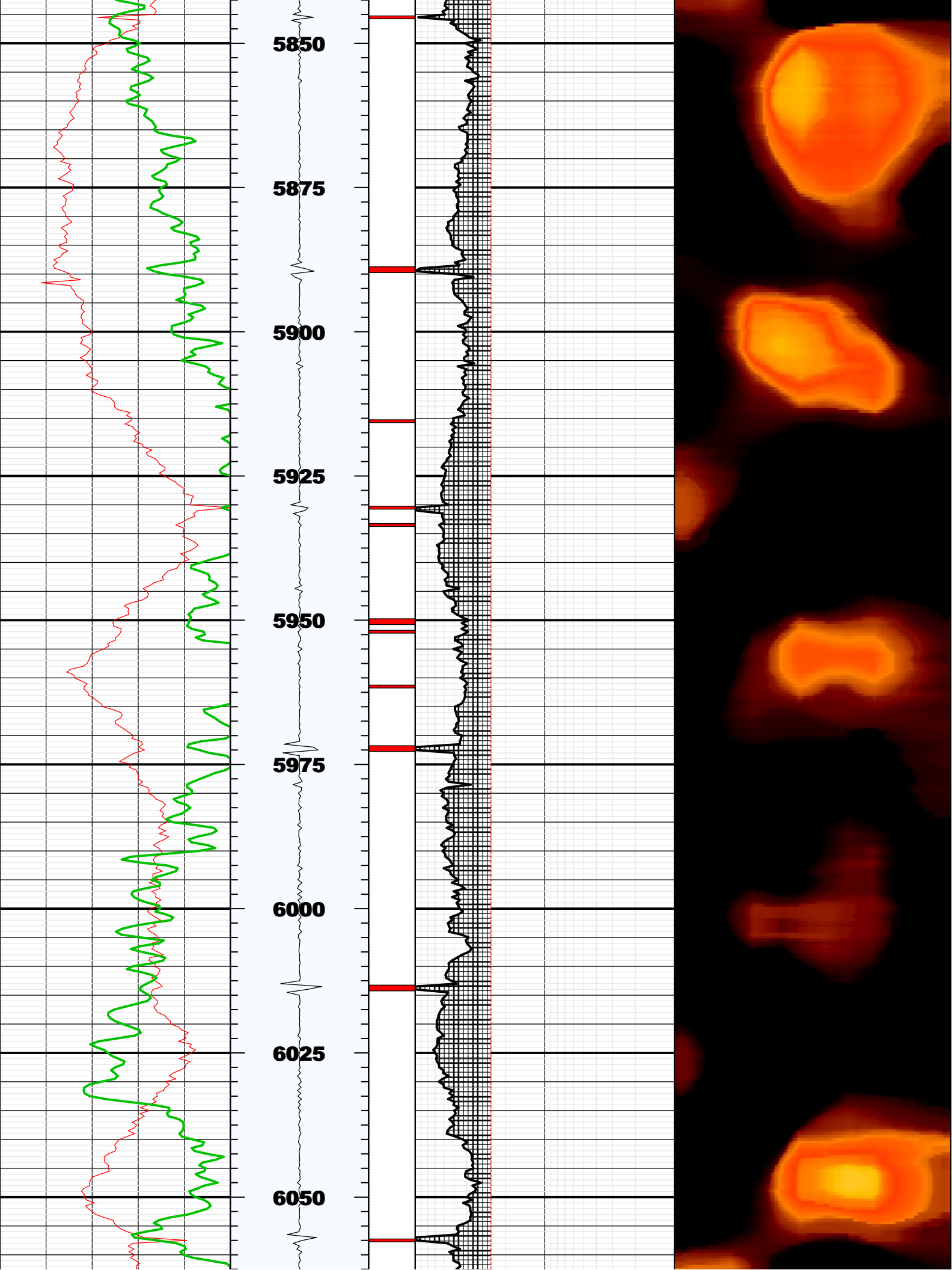


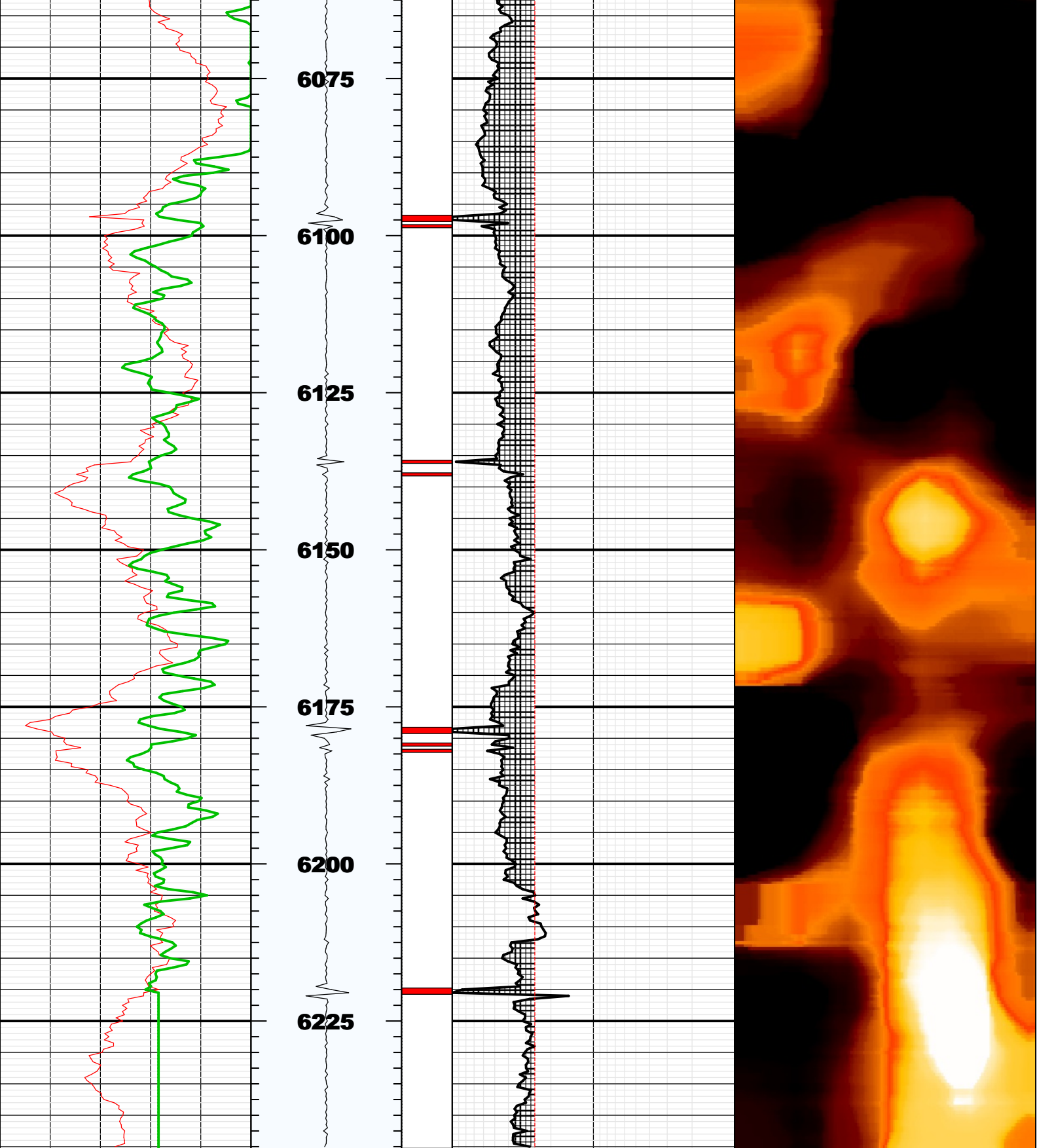










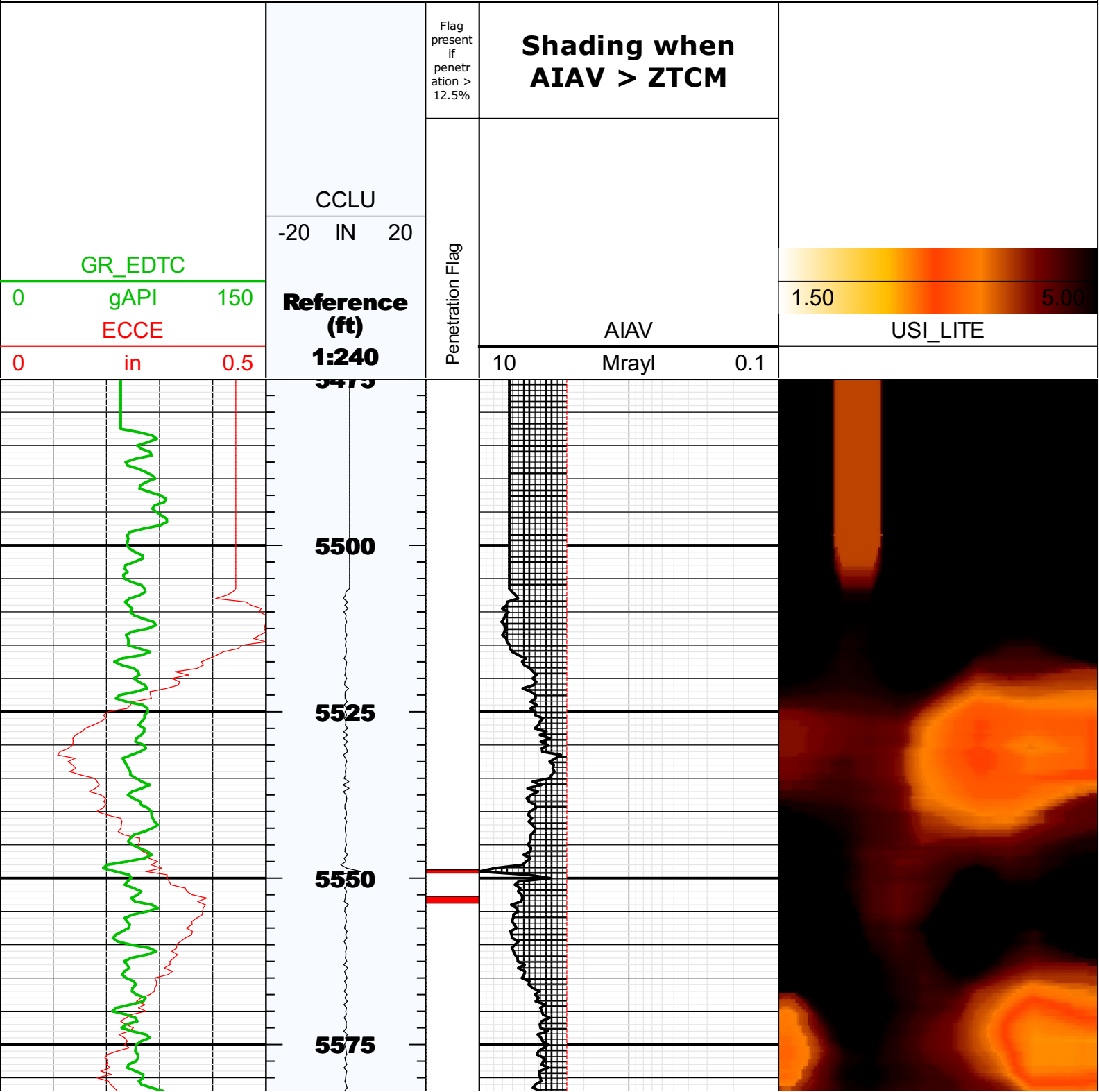


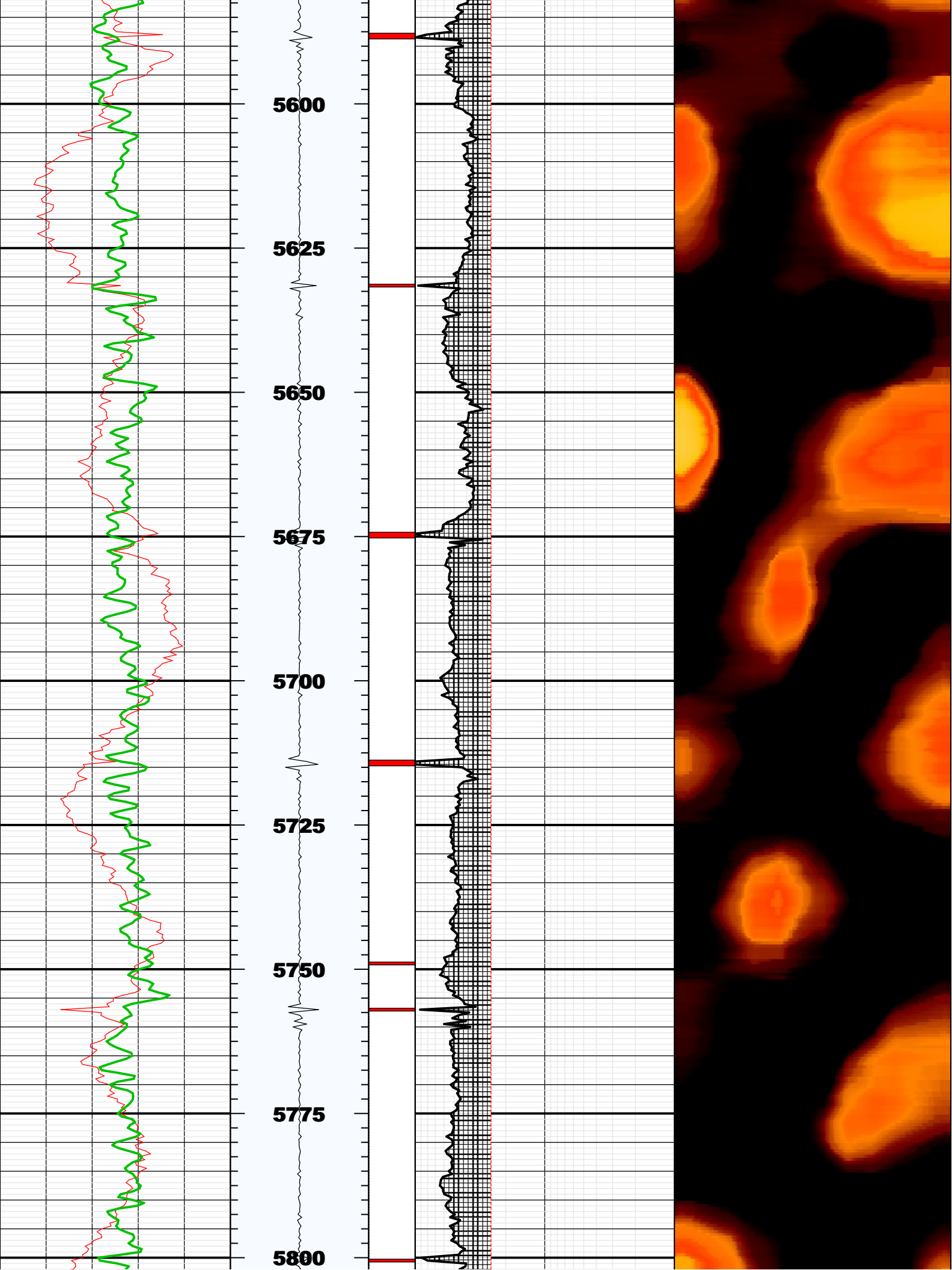
BS	8.75000	IN	Bit Size
CASG	P110		Casing Grade
CDIA	7.00000	IN	Casing Outer Diameter
CSID	6.27600	IN	Casing Inner Diameter
CSIZ	7.00000	IN	Current Casing Size
CWEI	26.00000	LB/F	Casing Weight
DFD	8.40000	LB/G	Drilling Fluid Density
DFVL	206.00000	US/F	Default Fluid Velocity
DO			
DOT	2.87400	IN	Diameter of Transducer Sensor
EMXV	30	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	29.66931	US	Window Begin Time
WINE	74.17931	US	Window End Time
ZCAS	46.25000	MRAY	Acoustic Impedance of Casing
ZINI	-1.00000	MRAY	Initial Estimate of Cement Impedance
ZMUD	1.72000	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 <sup>^</sup> 3 Processing Length

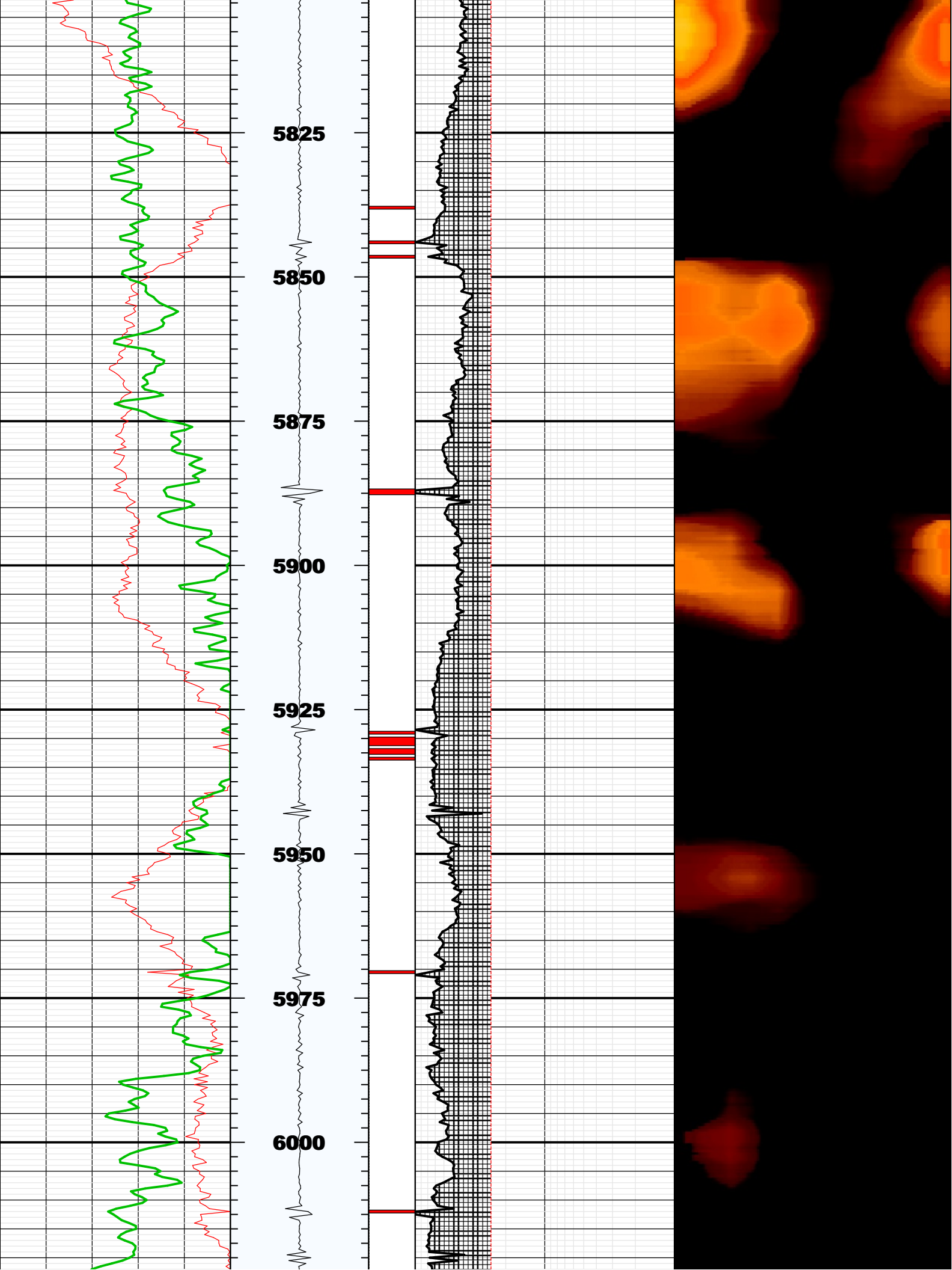


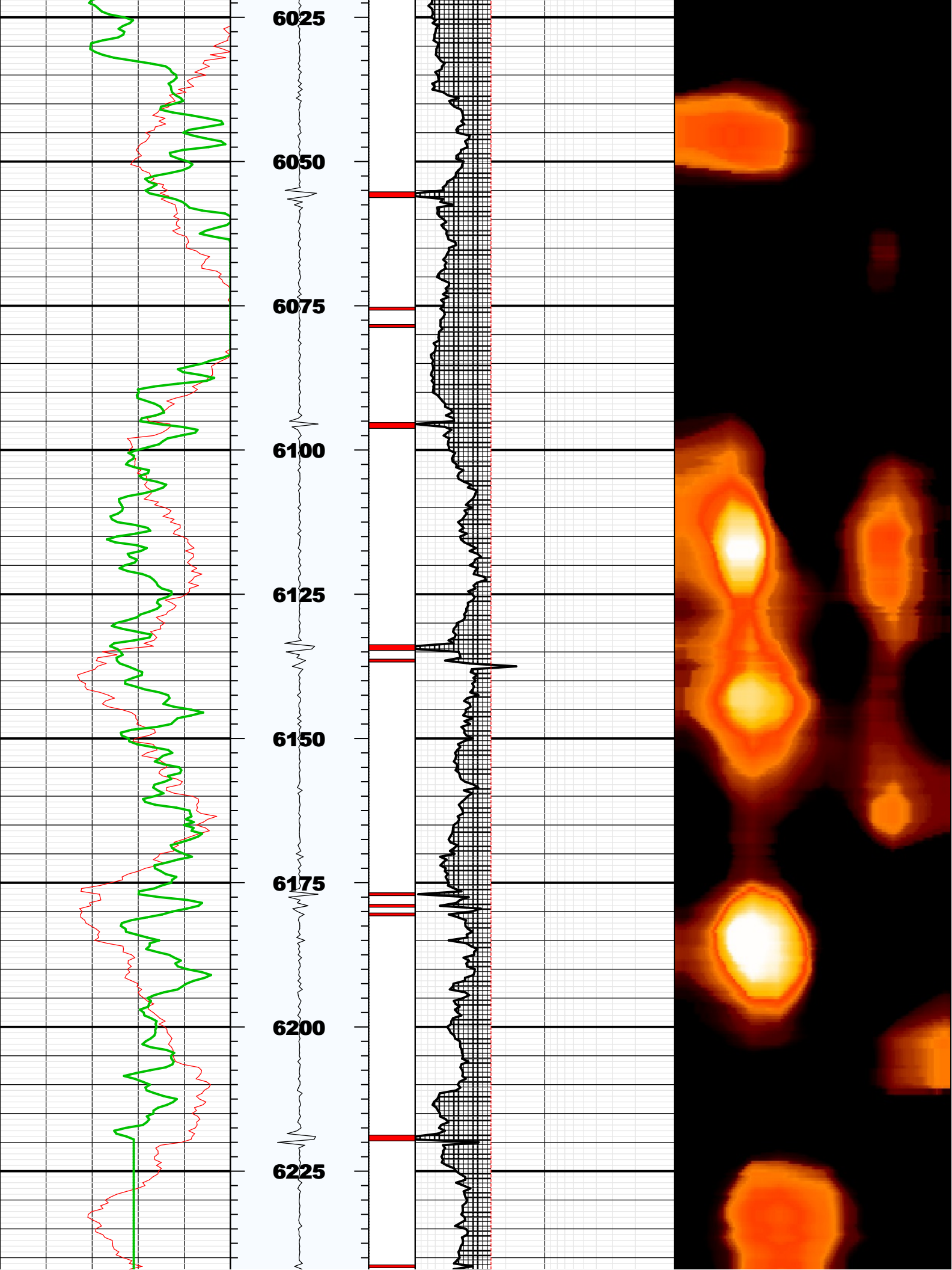
Repeat Pass

Company: Noble Energy Inc  
Well: Neal LC35-738  
Field: Wildcat











## Fluid Properties Used for Main Pass

