

Company: Noble Energy Inc

Well: Oscar Y10-77-1HC
Field: Wattenberg
County: Weld

State: Colorado

County: Weld		USI-LITE	
Field: Wattenberg			
Location: NESW Sec. 10 T2N R64W			
Well: Oscar Y10-77-1HC			
Company: Noble Energy Inc			
LOCATION			
Permanent Datum:		GL	
Log Measured From:		KB	
Drilling Measured From:		KB	
API Serial No.			
05-123-38197-0000		Section 10	
Logging Date		Township 2N	
Run Number		Range 64W	
1			
Depth Driller		7513.9 F	
Schlumberger Depth		7513.9 F	
Bottom Log Interval		7294.0 F	
Top Log Interval		40.0 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		1180.0 F	
To		7513.9 F	
Casing Size		7.00 IN	
Weight		26.00 LB/F	
Grade		P110	
From		16.0 F	
To		7504.0 F	
Max Recorded Temp		225.0	
Logger on bottom (date)		10-May-2014	
Location		Fort Morgan CO	
Recorded By		Elizabeth Wilson	
Witnessed By			

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: 2858 Calibration Date: Calibrator Serial Number: Number Of Calibration Points: Calibration RMS: Calibration Peak Error:	Serial Number: F7136711 Length: 18200.00000

DISCLAIMER

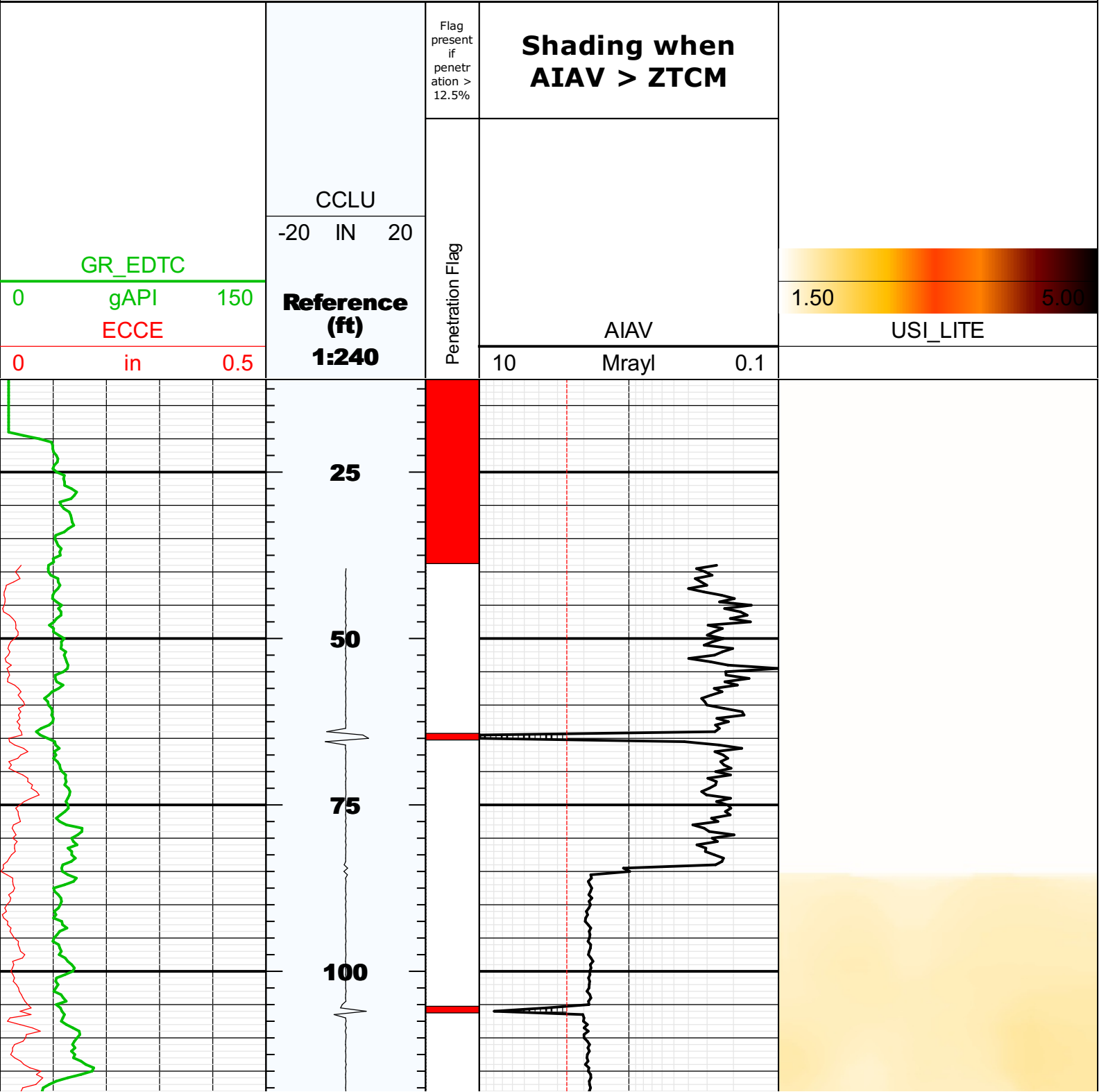
THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIIONS ON USE OF THE RECORDED-DATA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

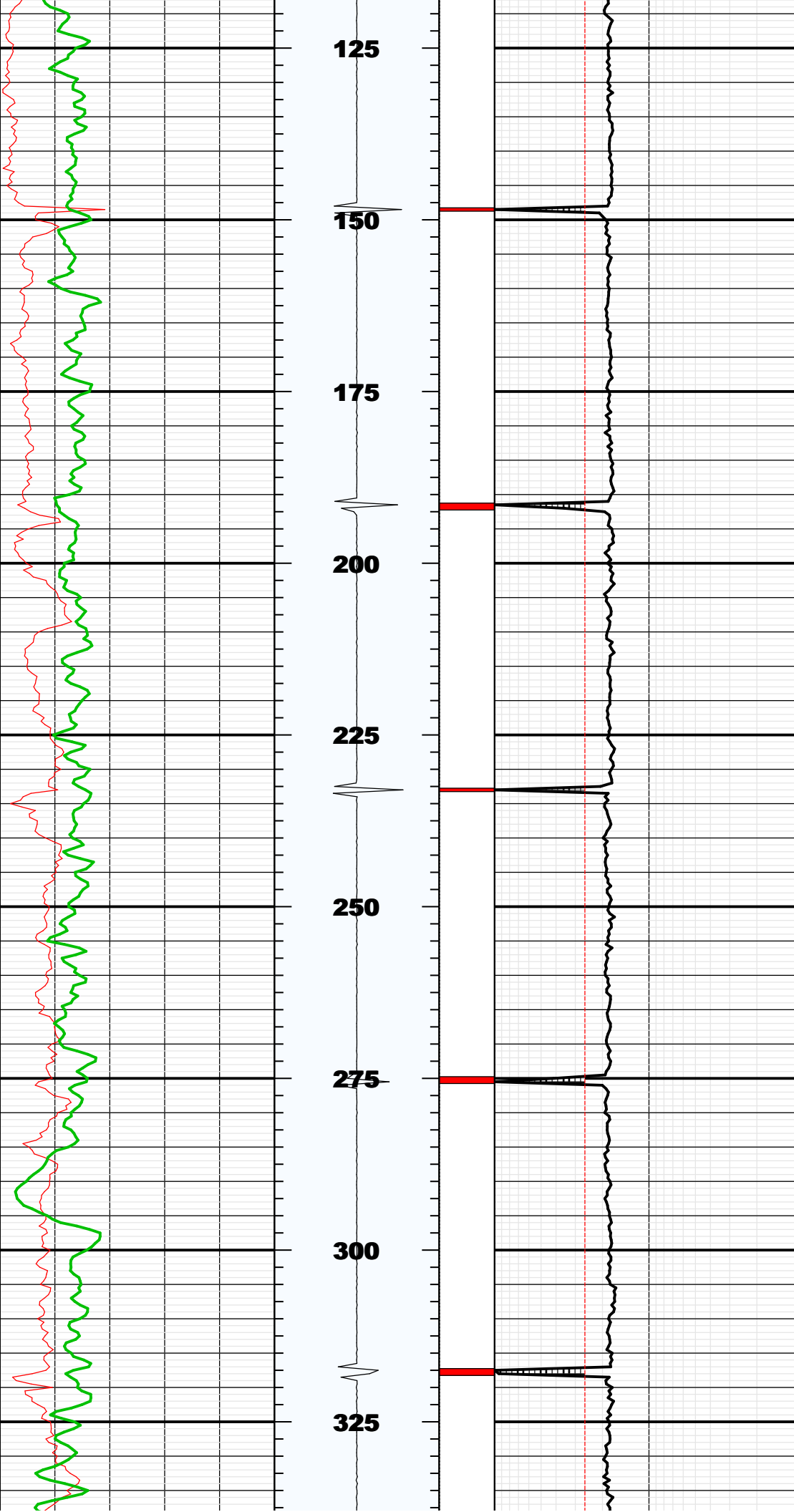
Toolstring ran as per tool sketch
Casing wear anomaly logged in high resolution and included in Casing Integrity print
Repeat pass ran under 0 psi
Main pass ran under 2500 psi
Lead cement 13.1 ppg
Tail cement 15.2 ppg
Estimated top of cement 810'

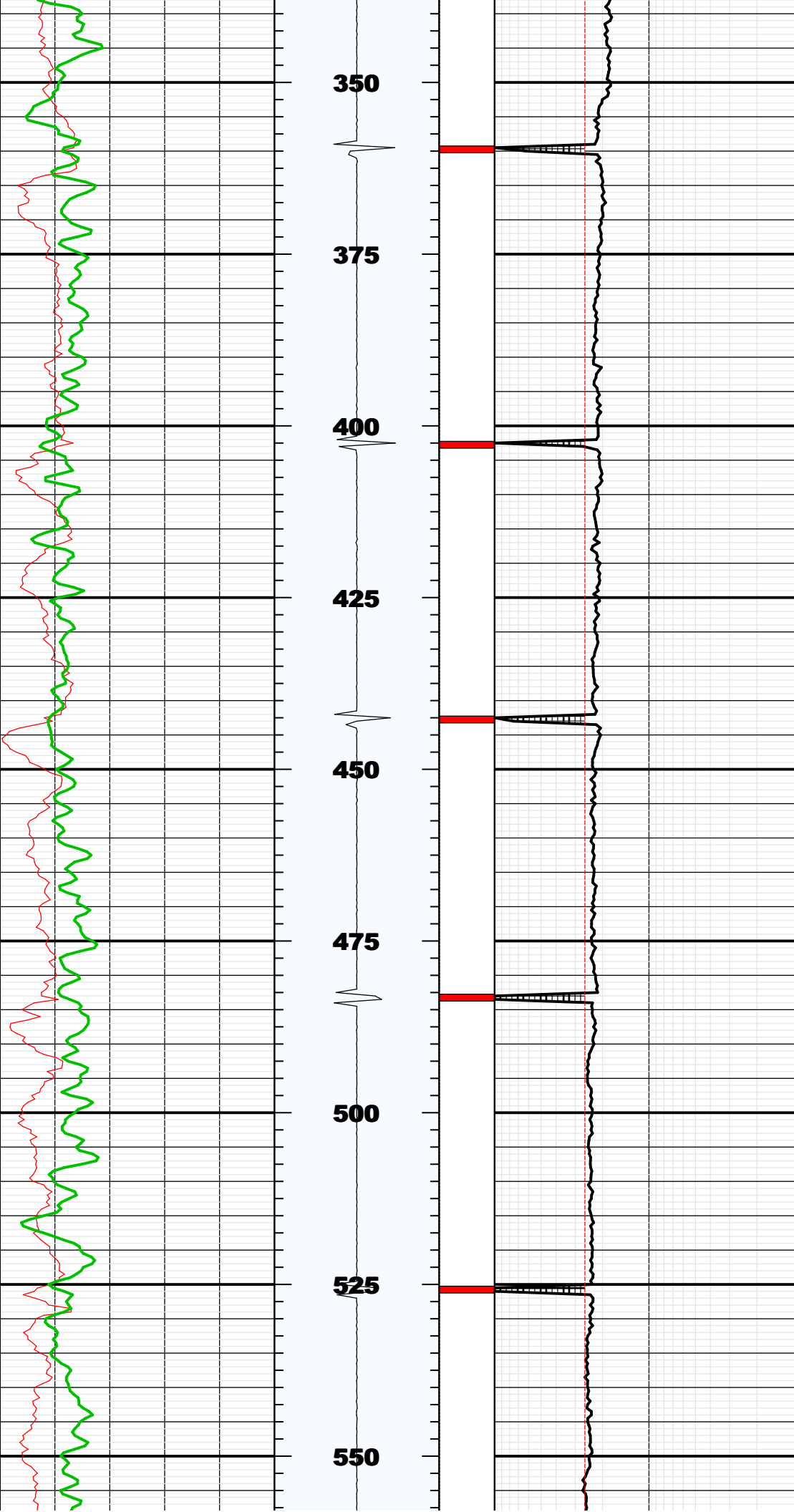
Crew Ian Derry Josh Strand Elizabeth Wilson
Thank you for choosing Schlumberger Wireline Services

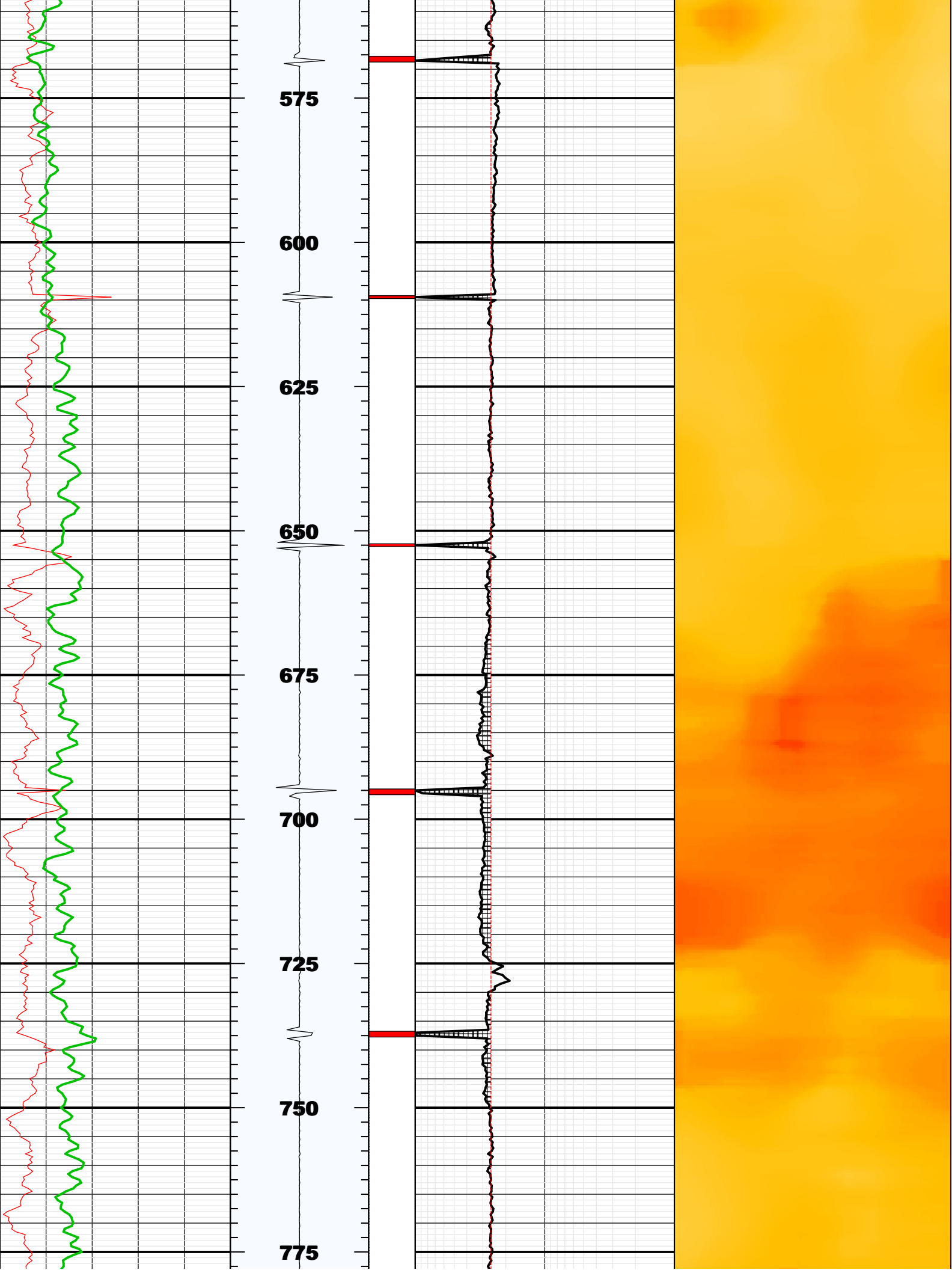
Main Pass

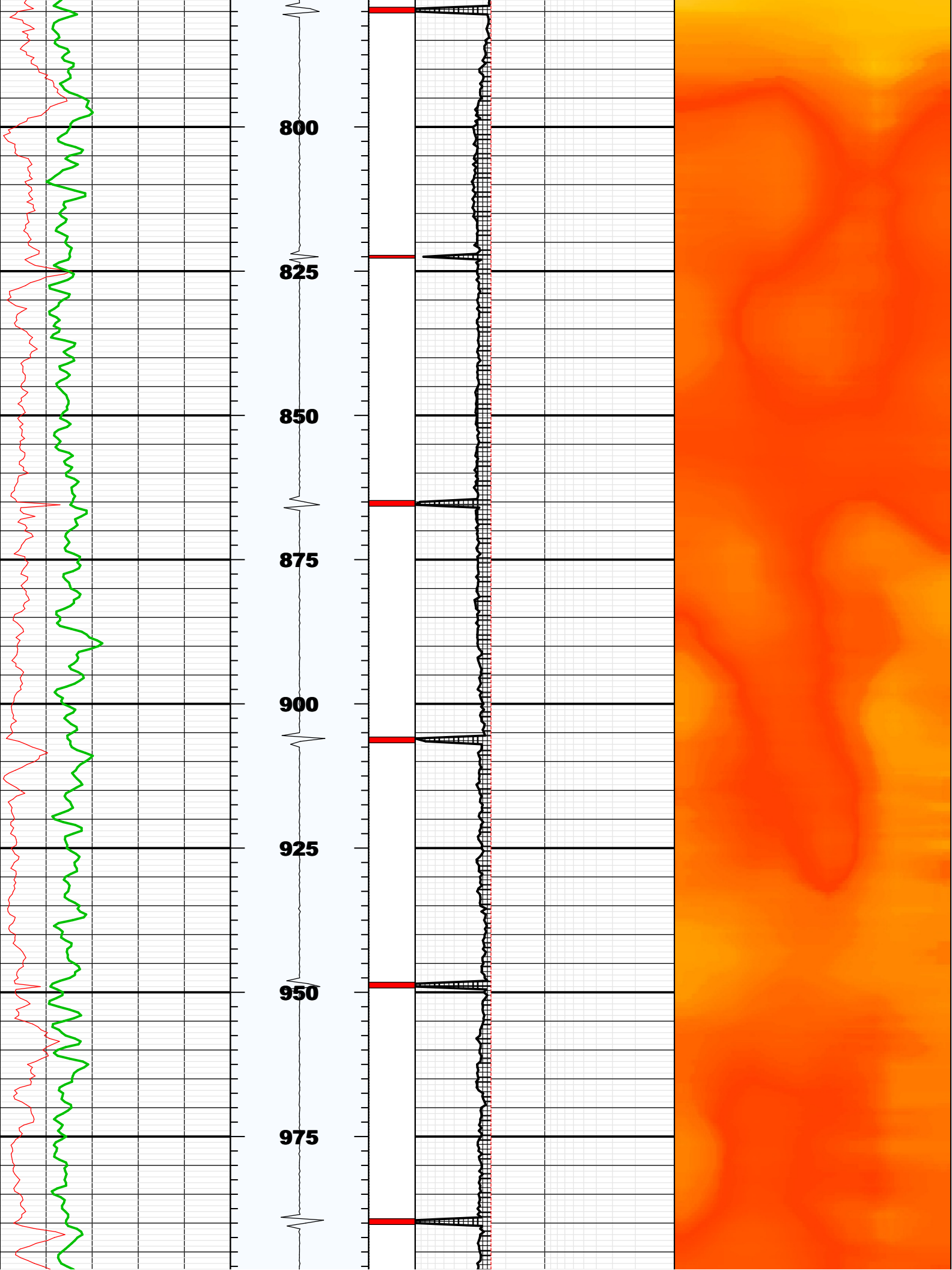
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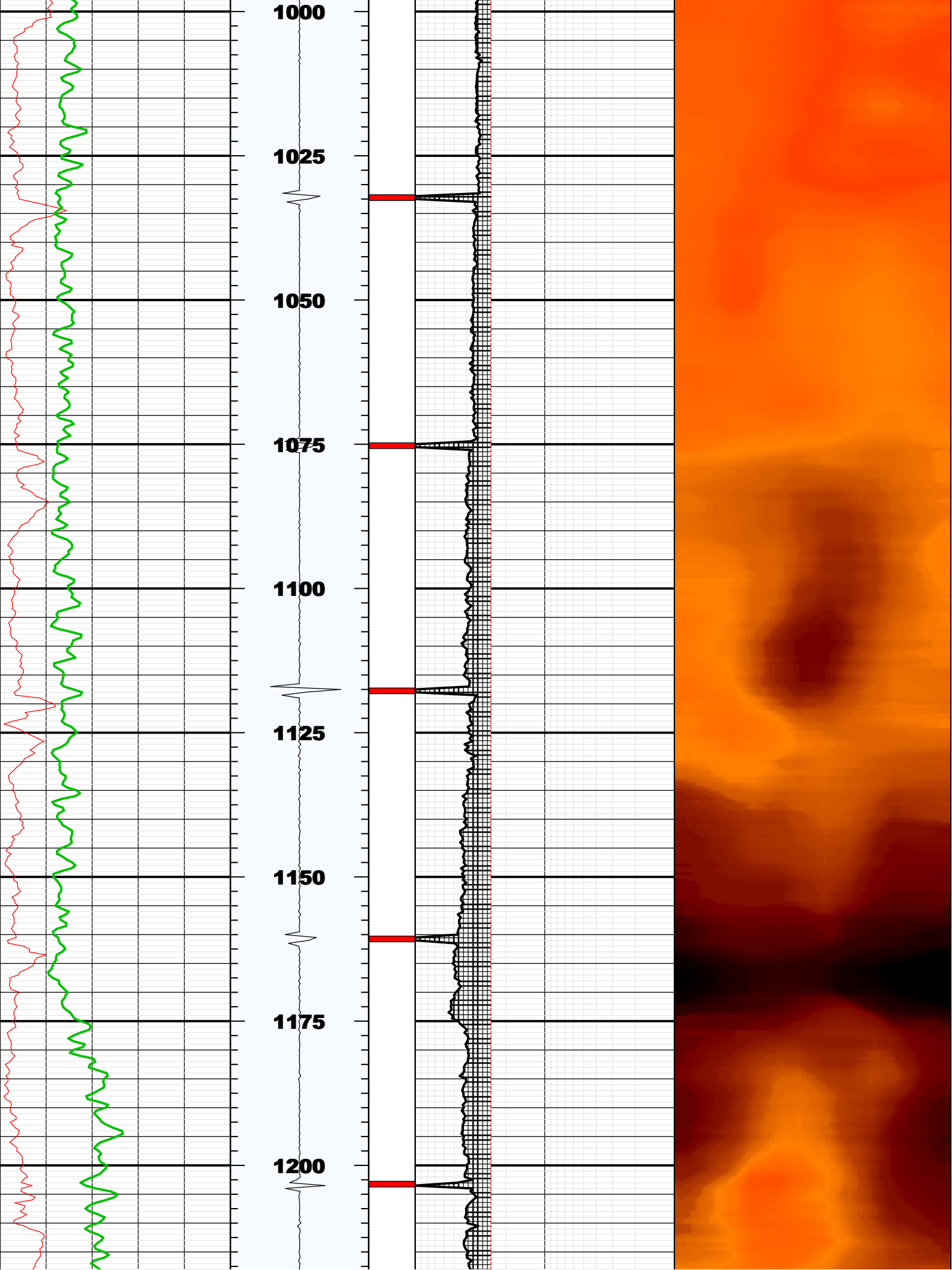


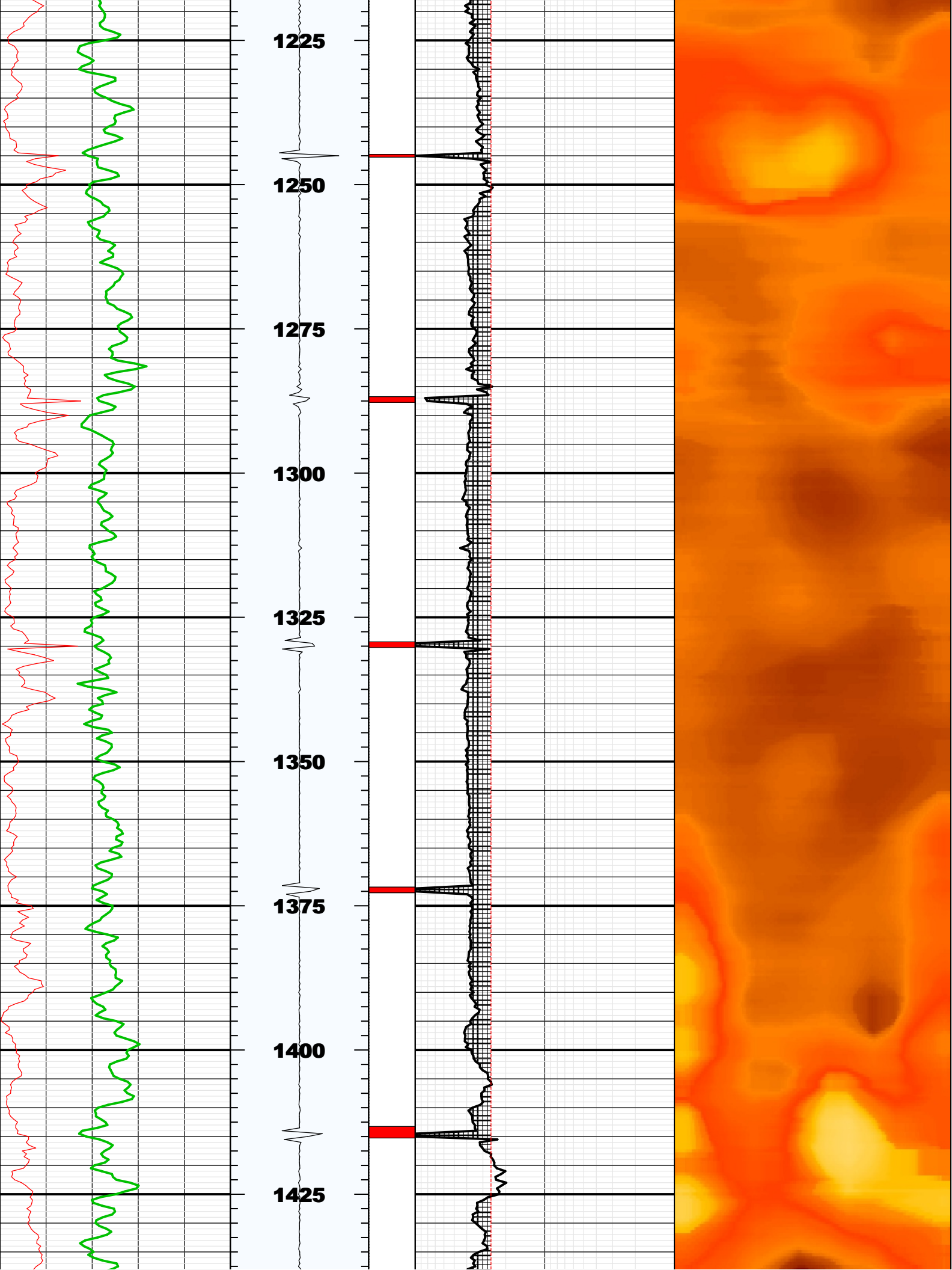


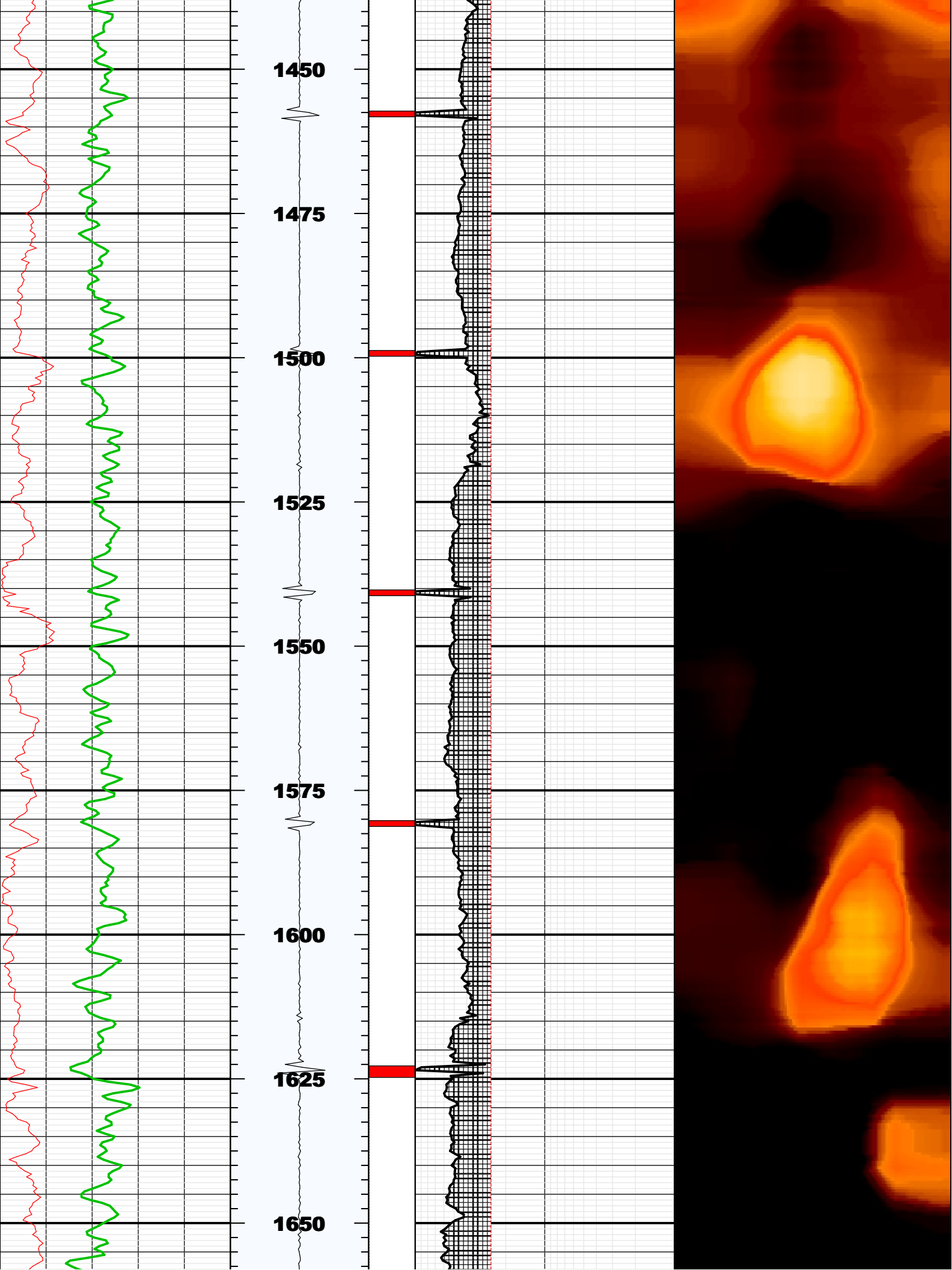


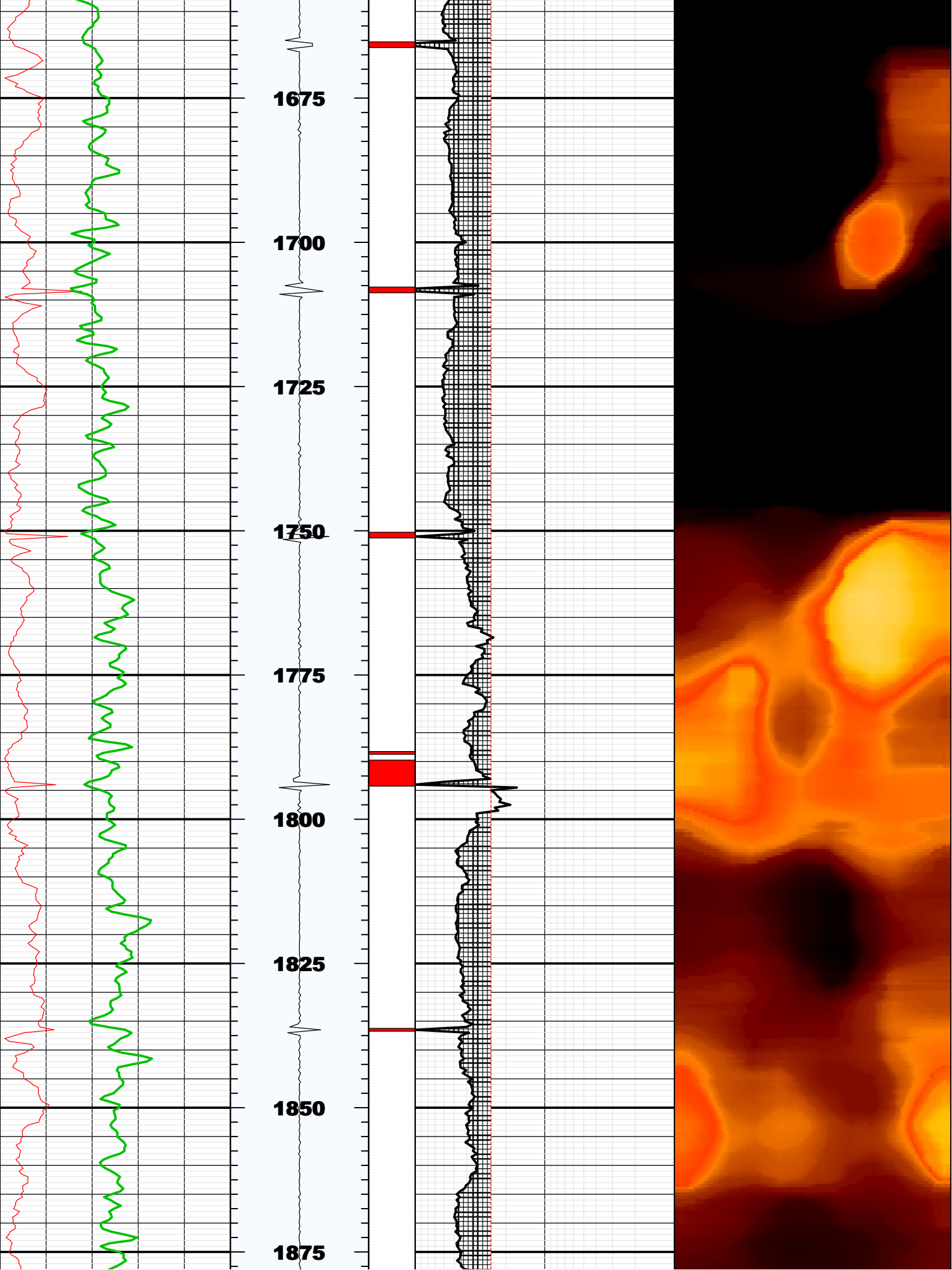


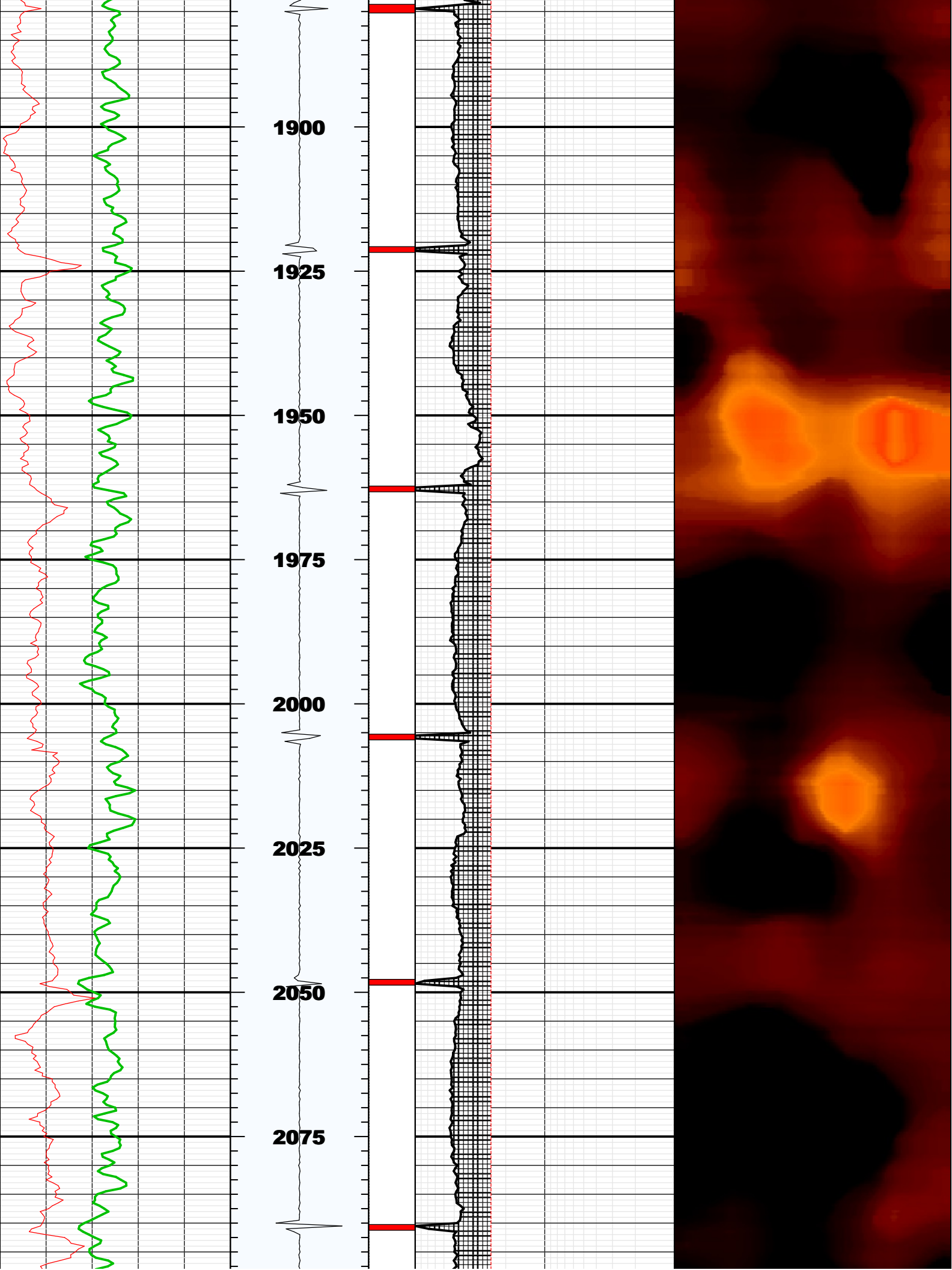


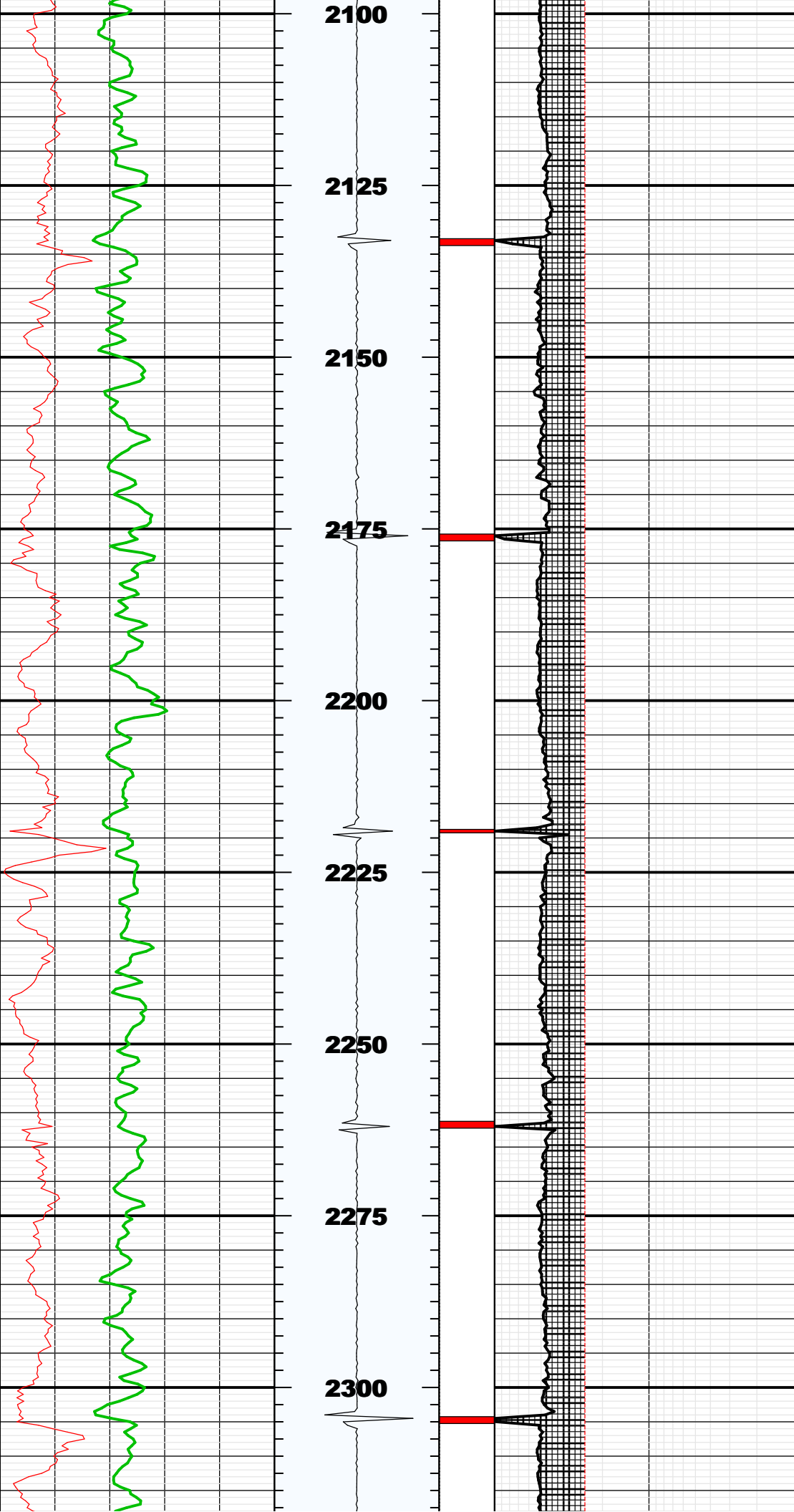


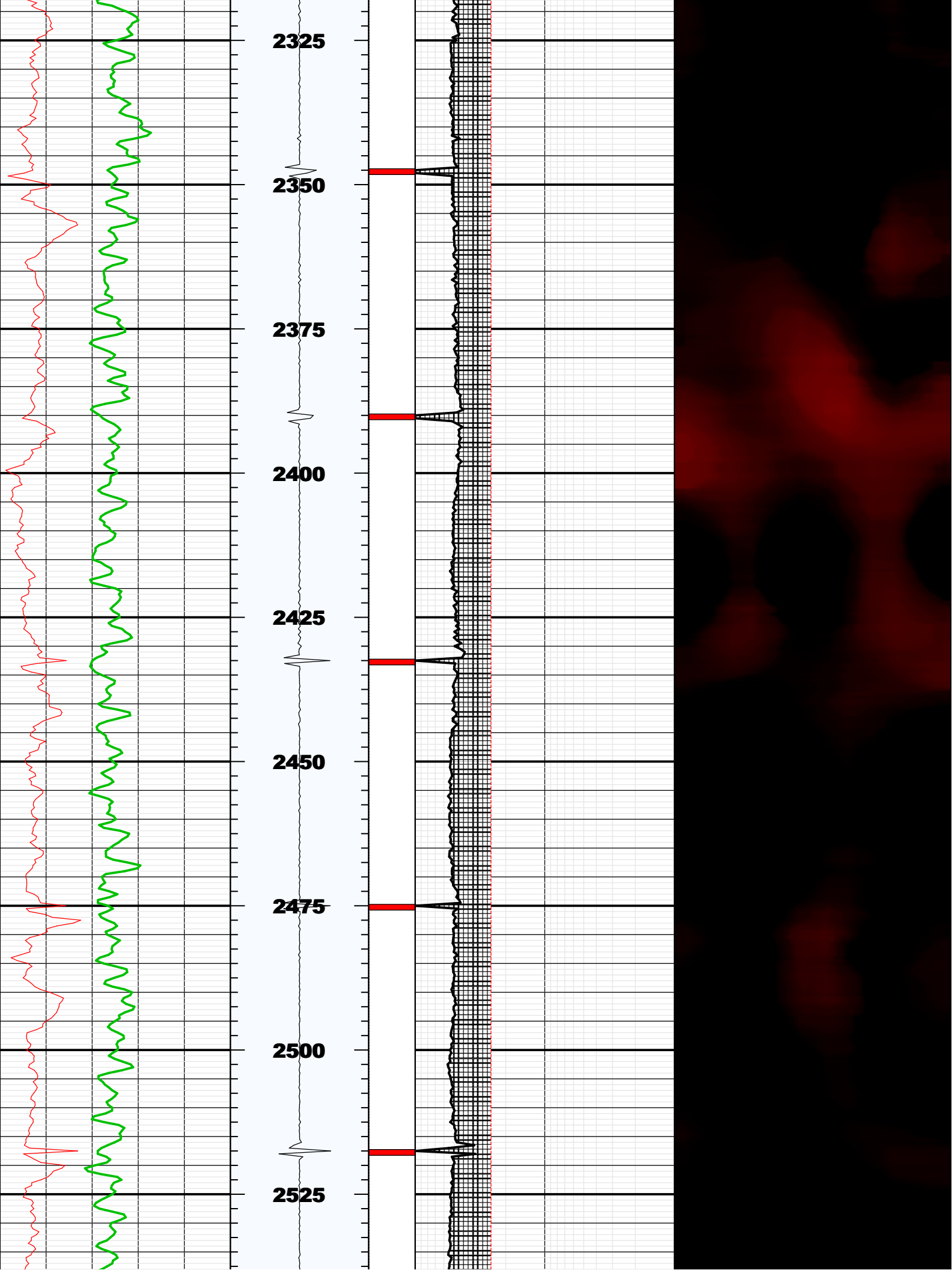


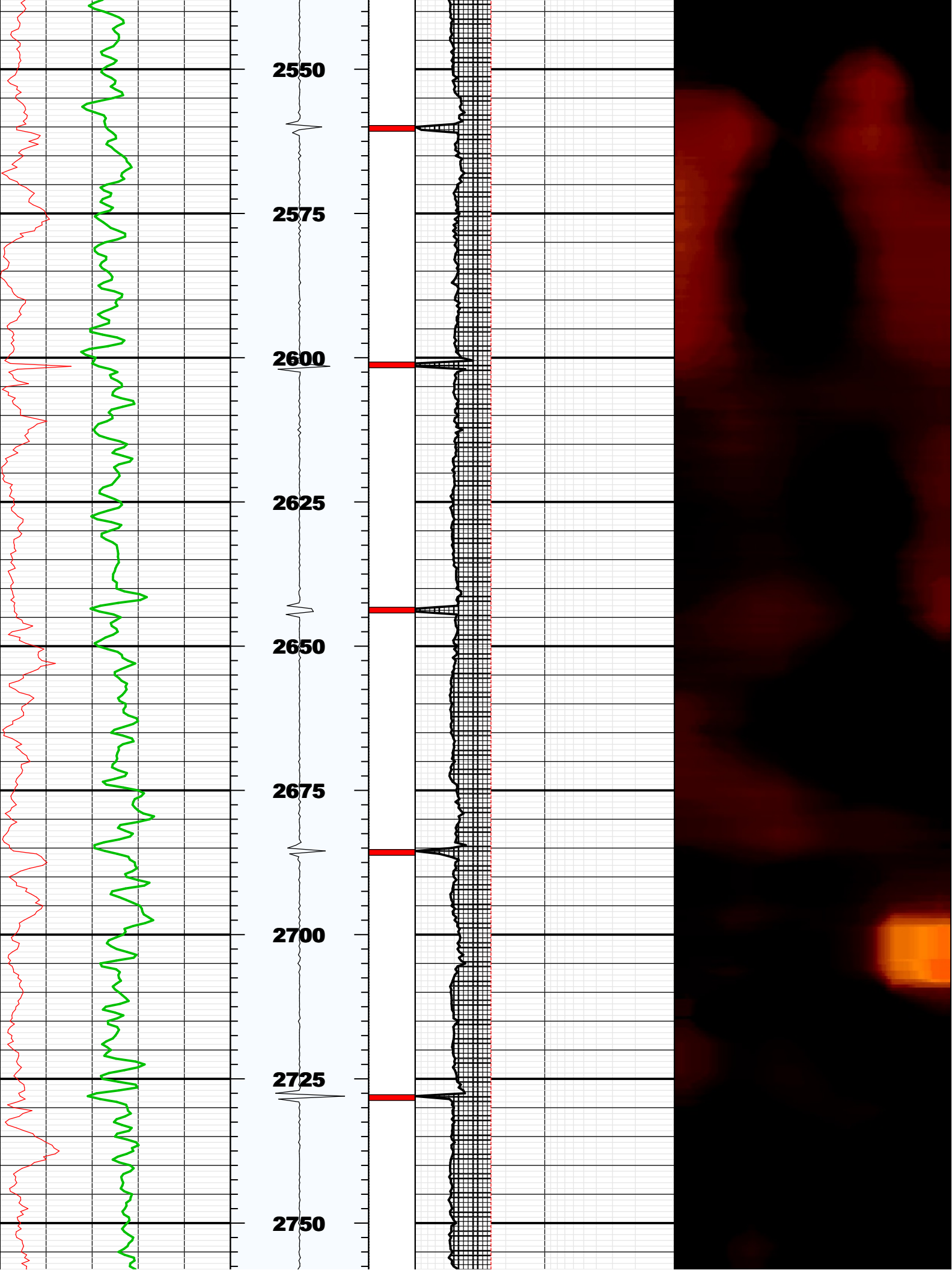


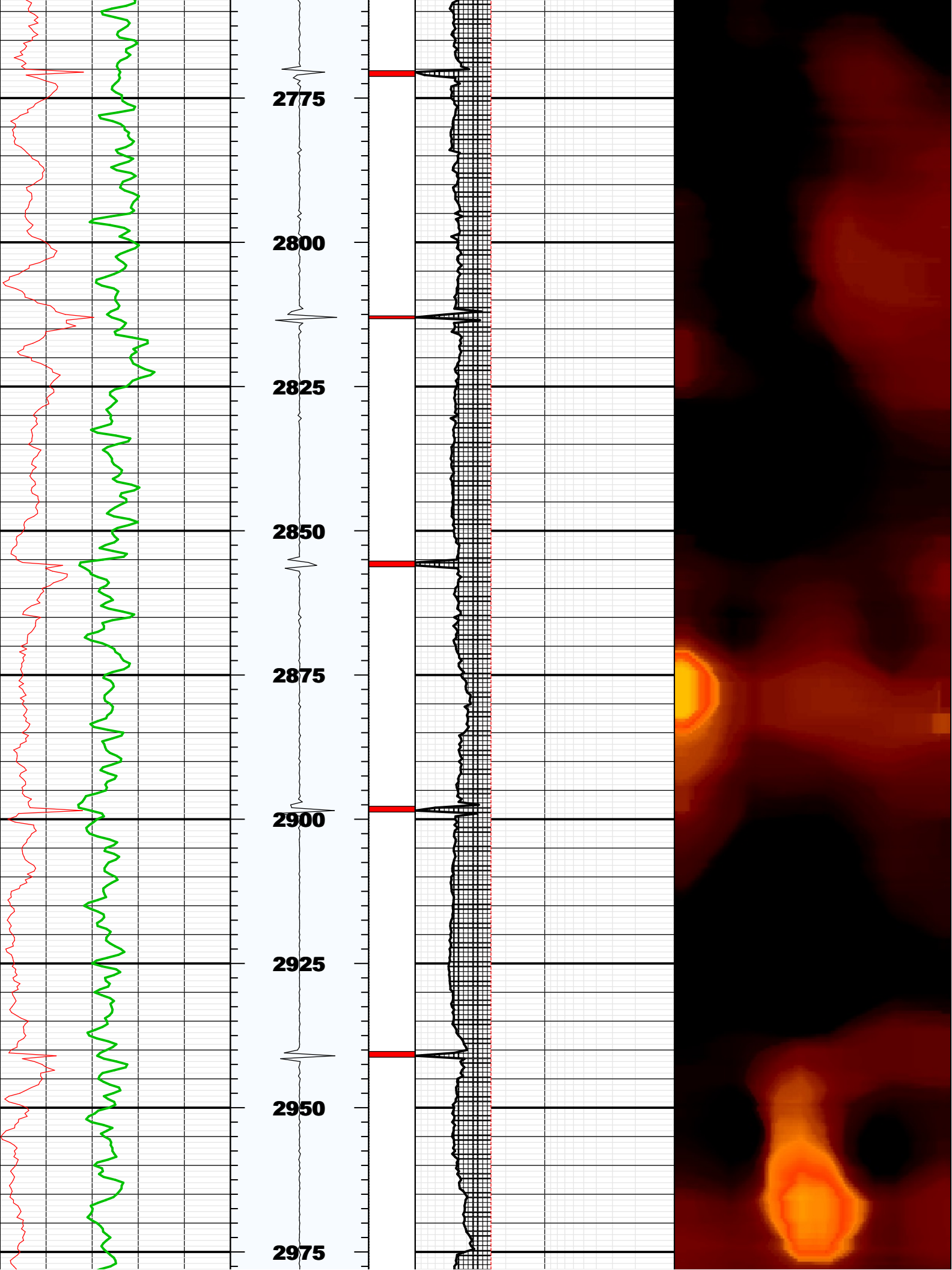


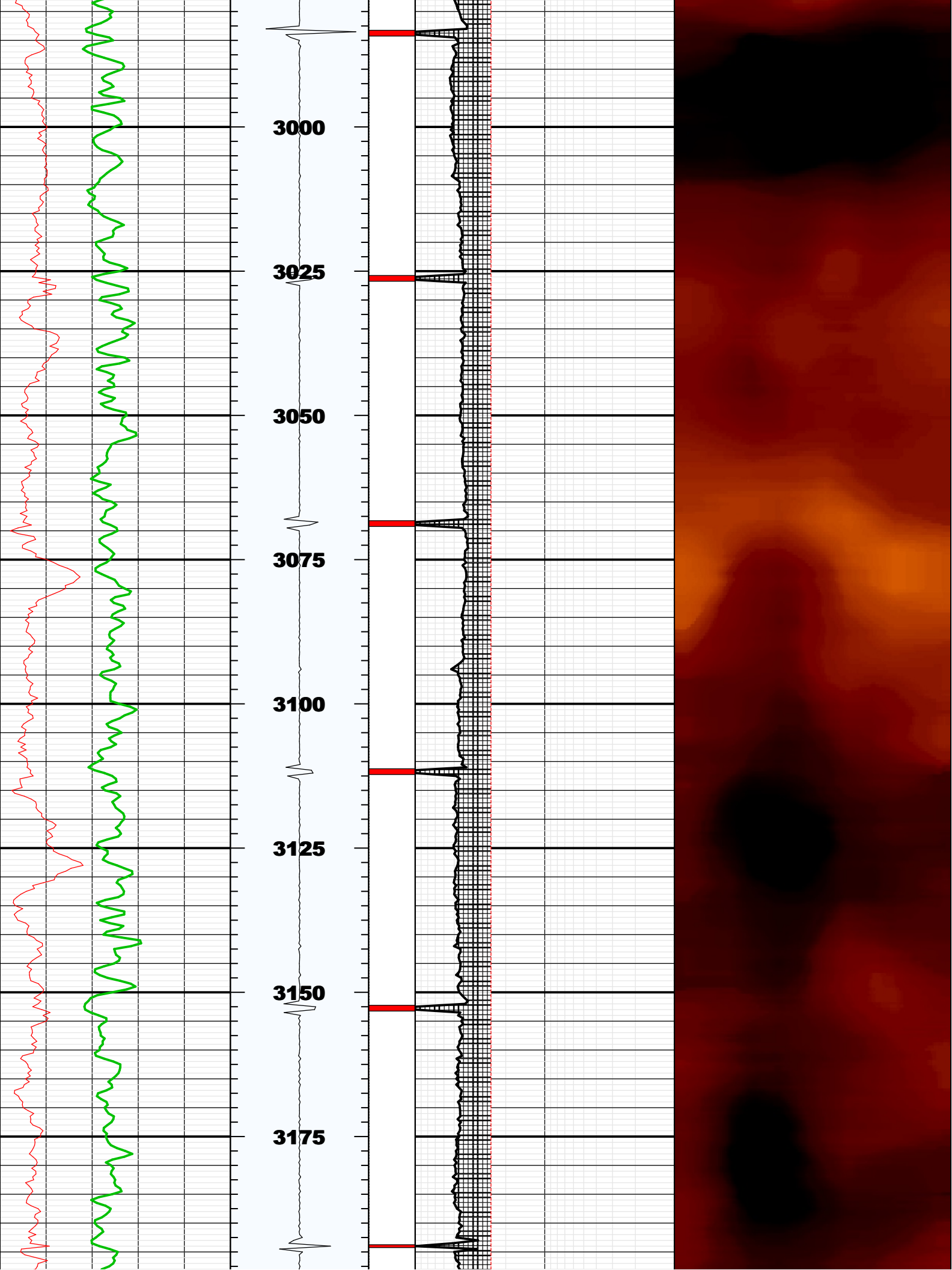


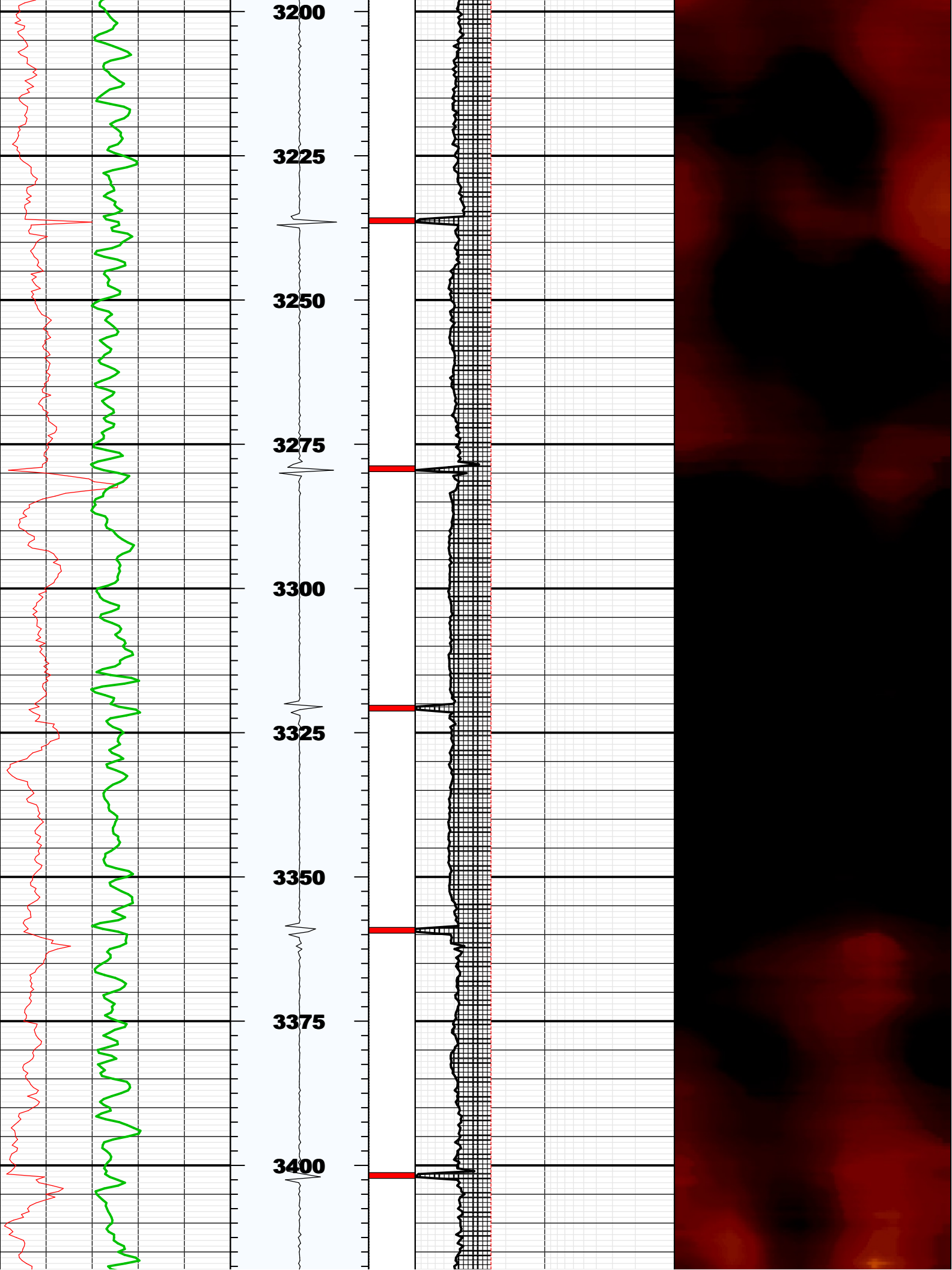


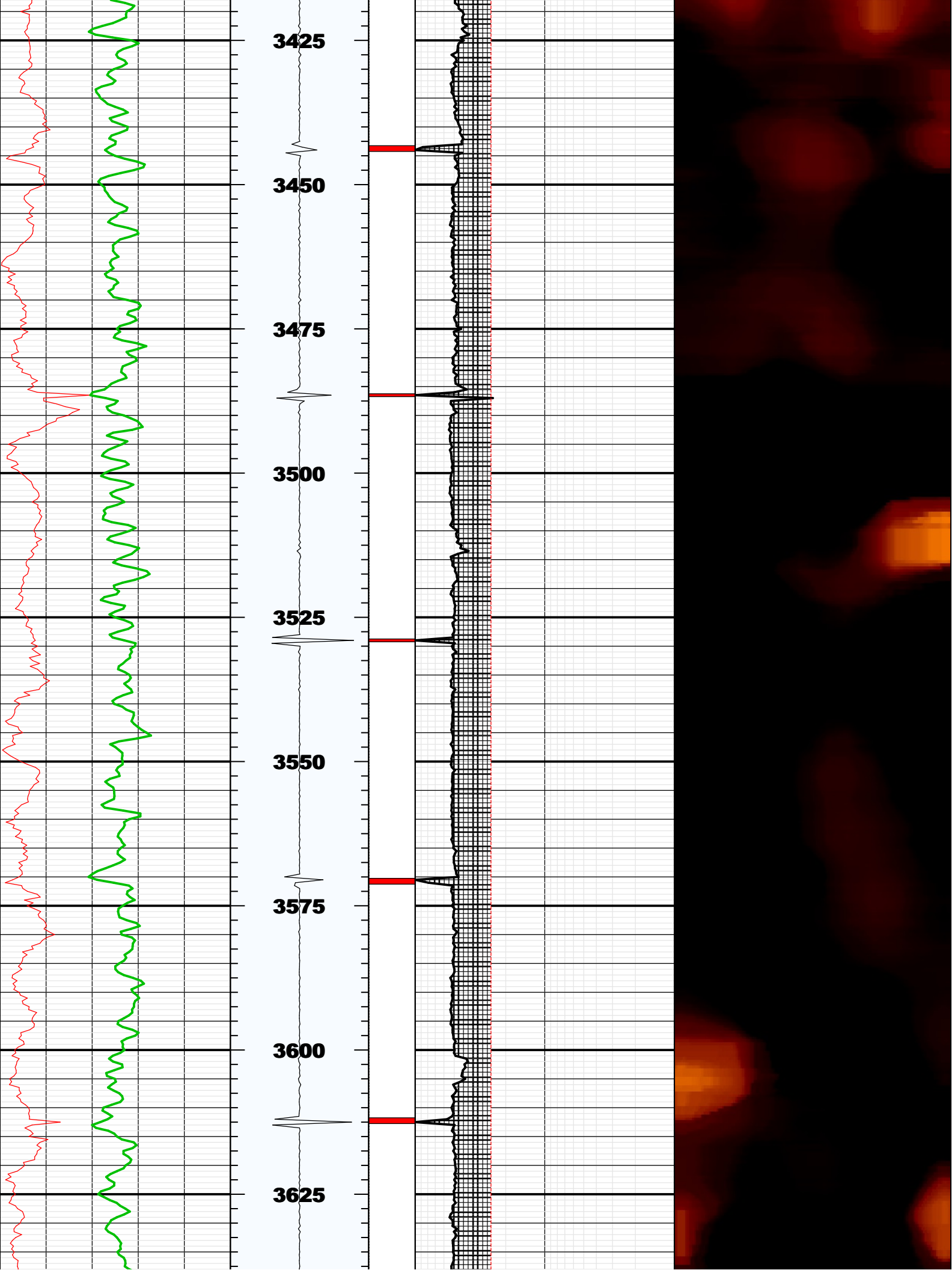


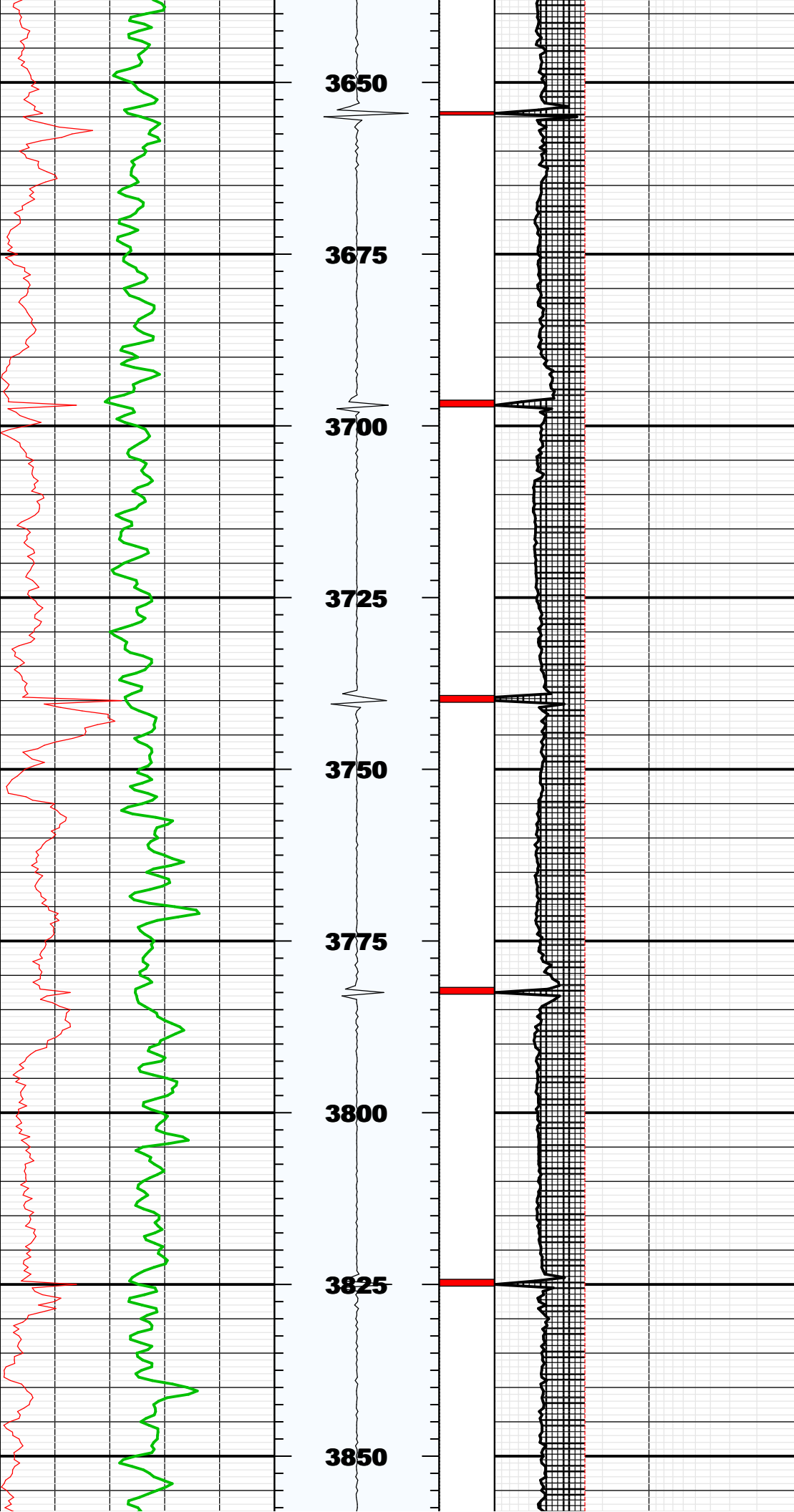


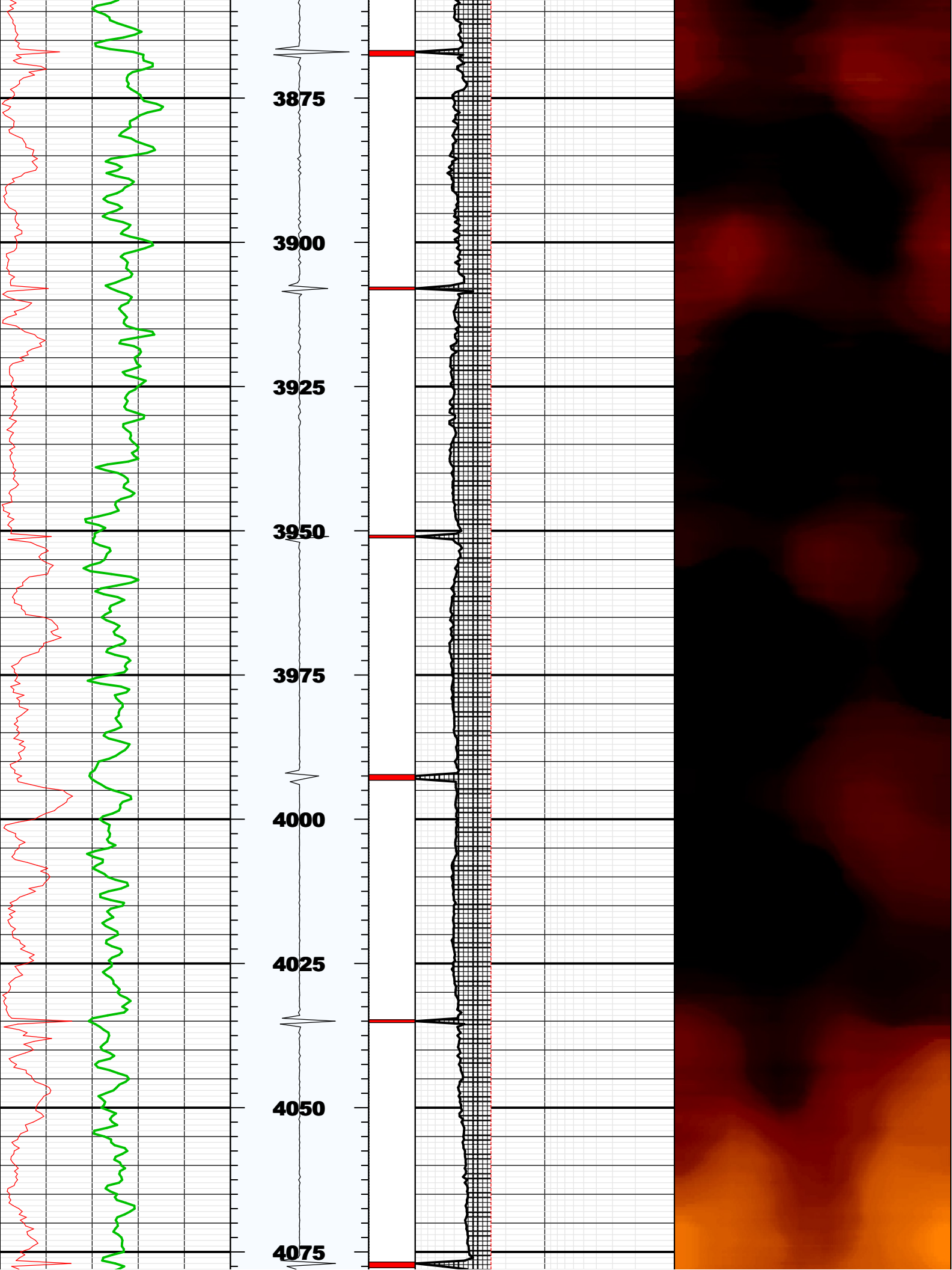


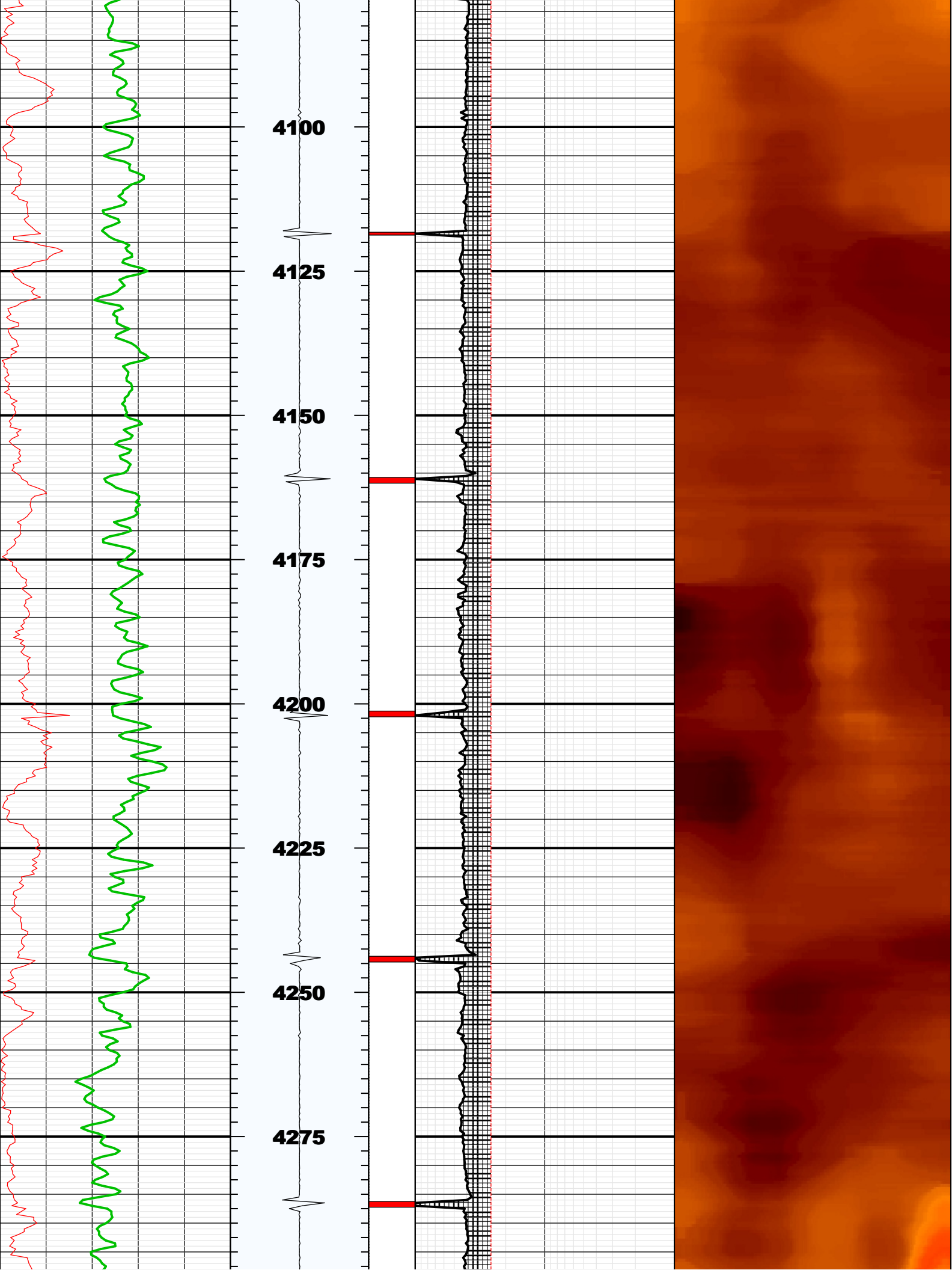


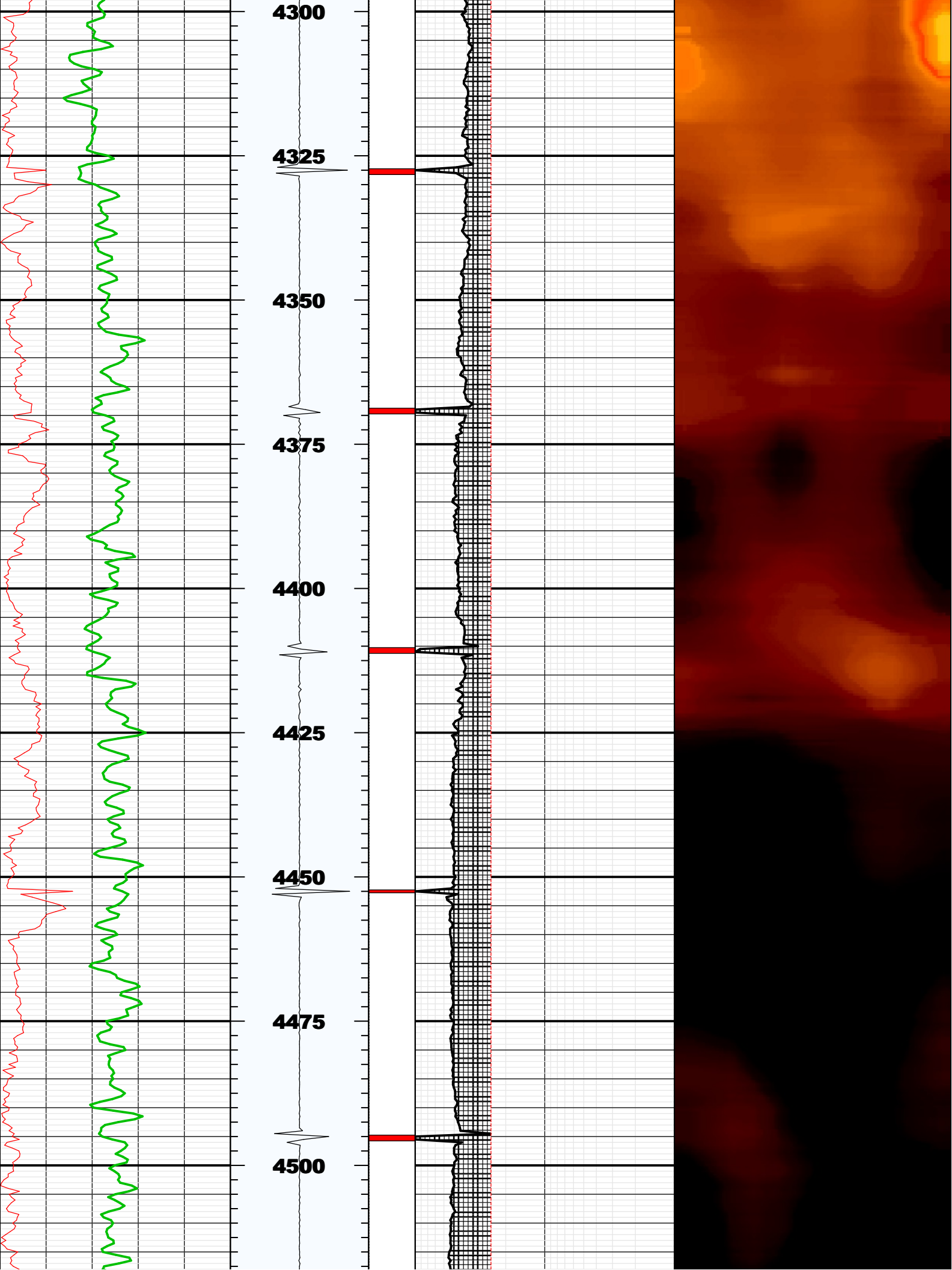


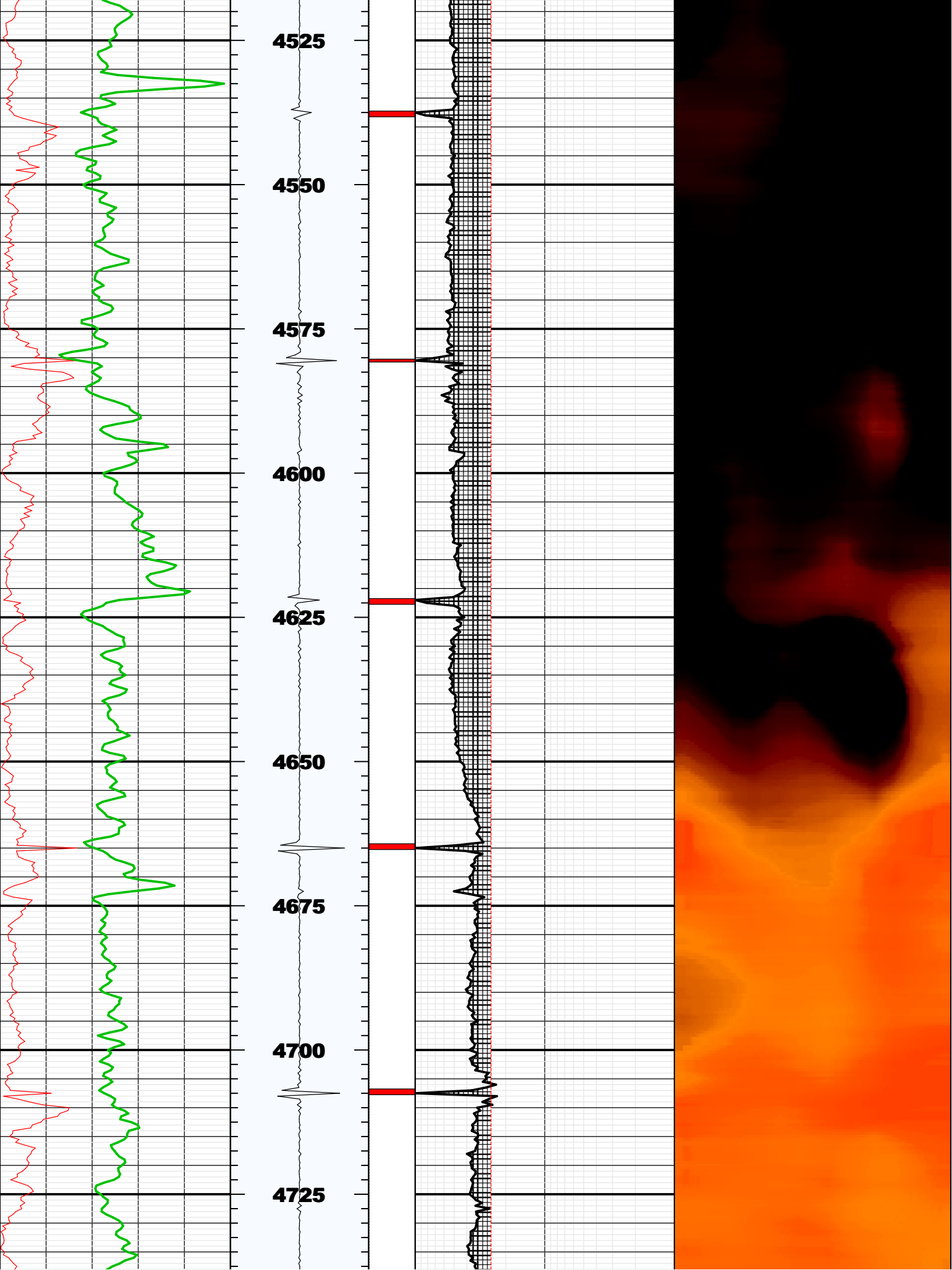


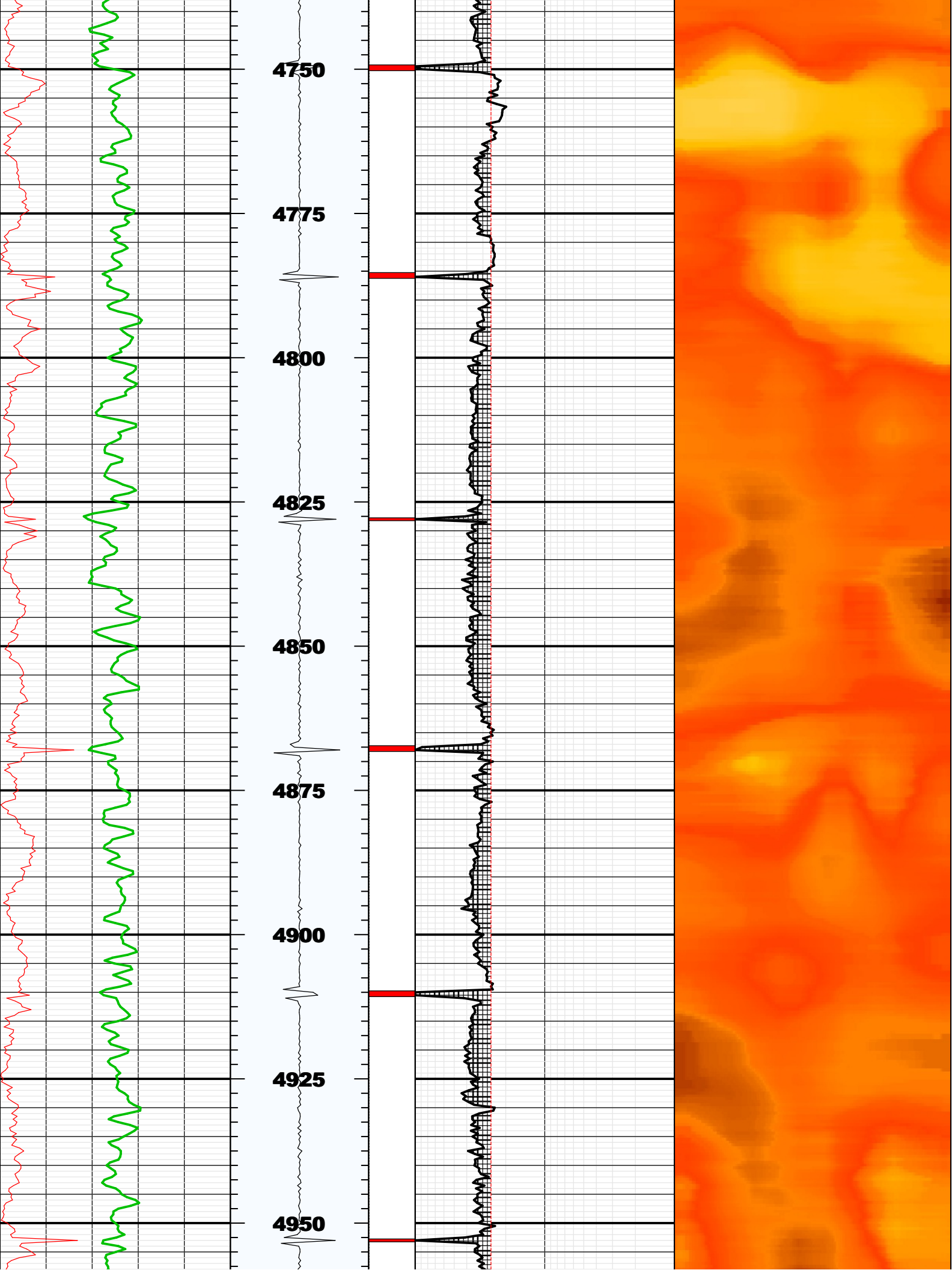


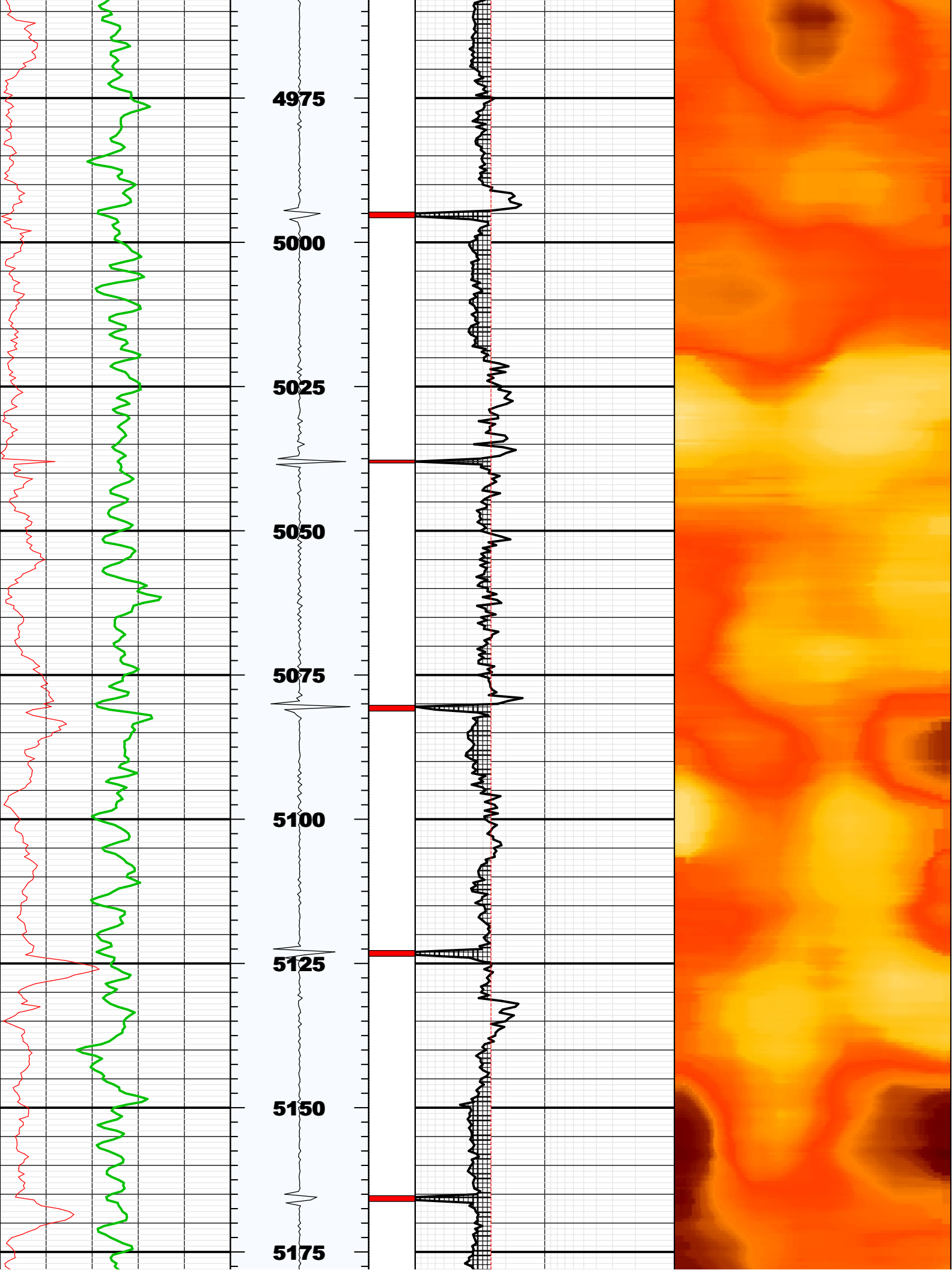


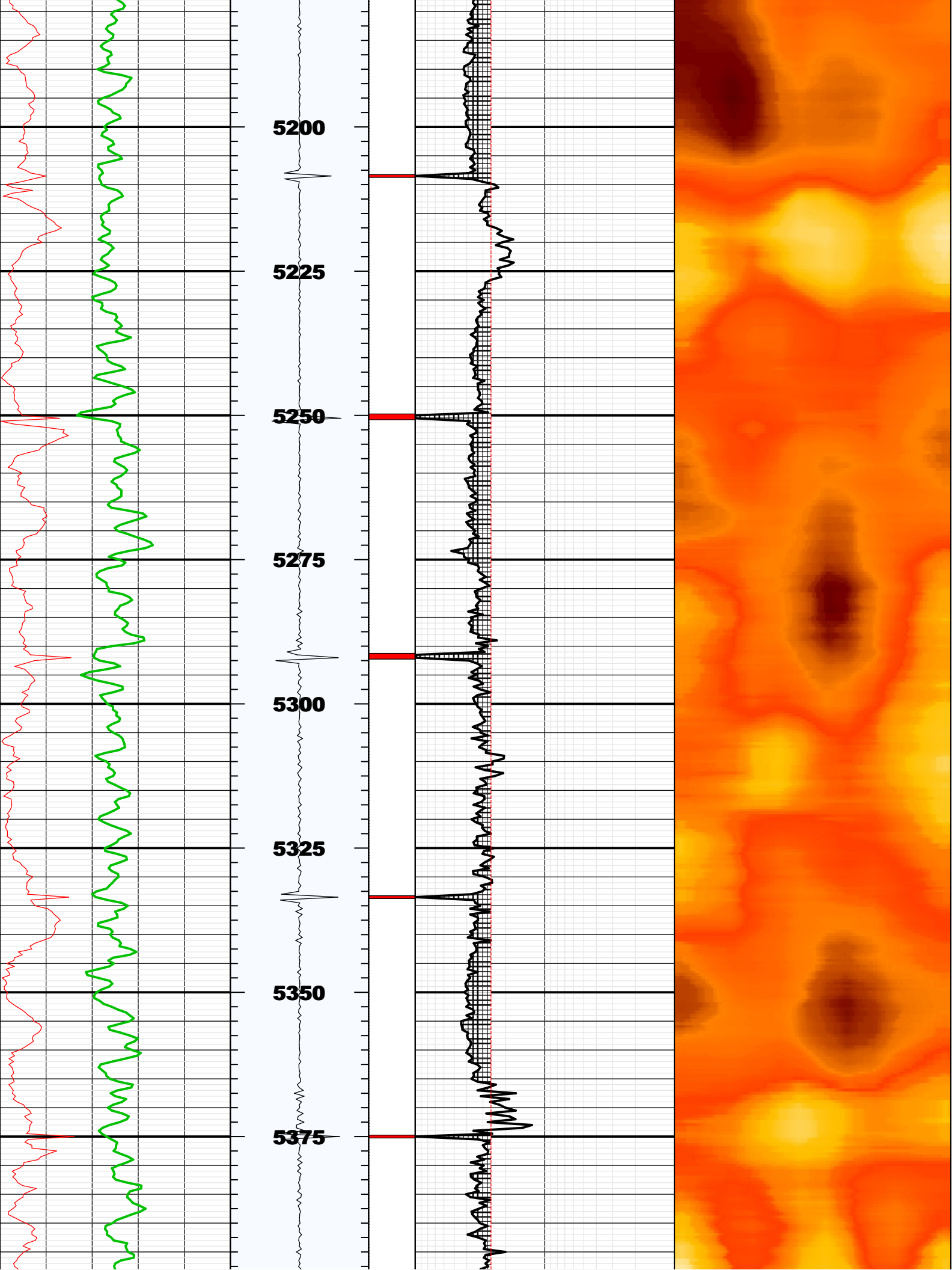


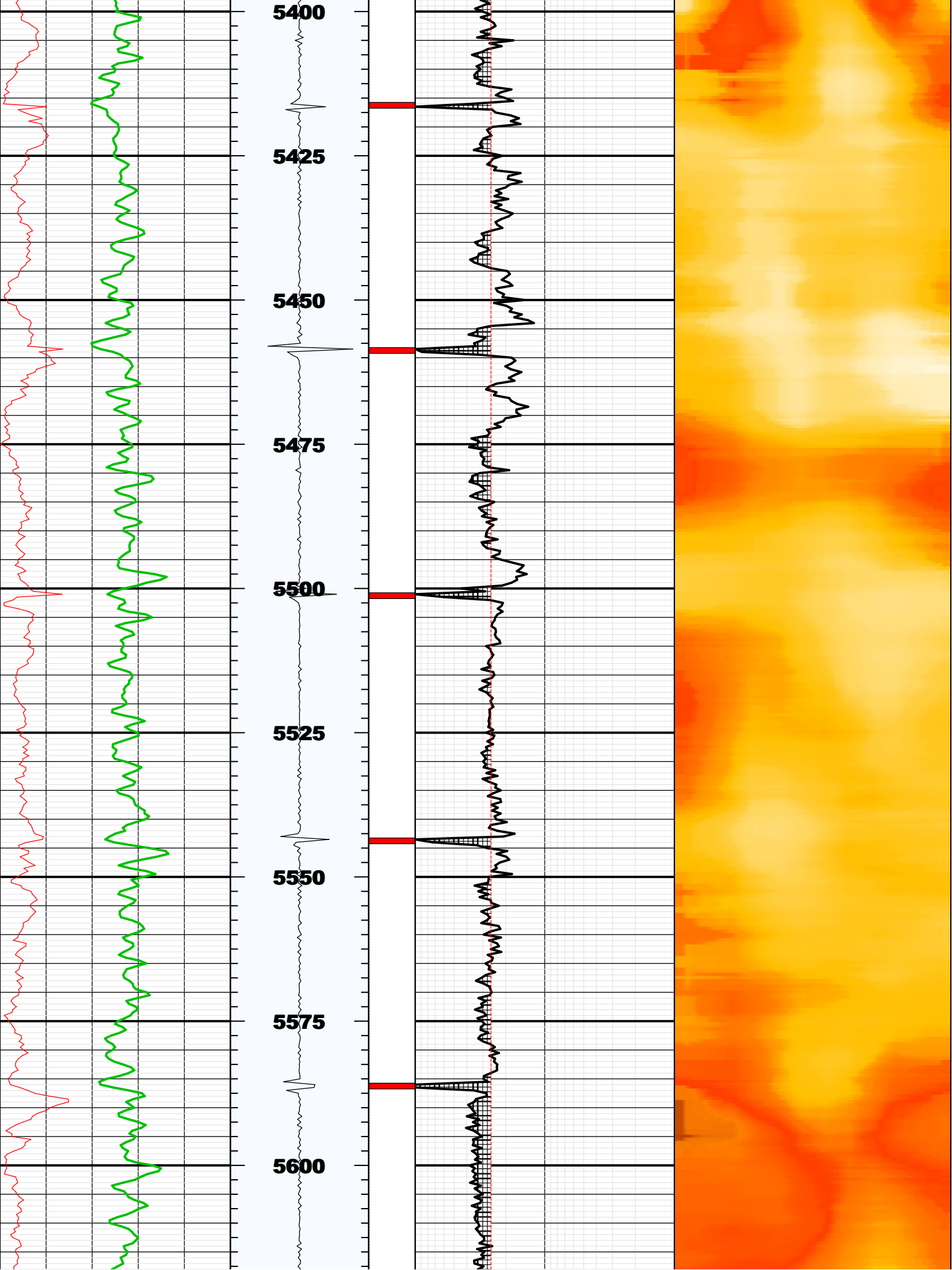


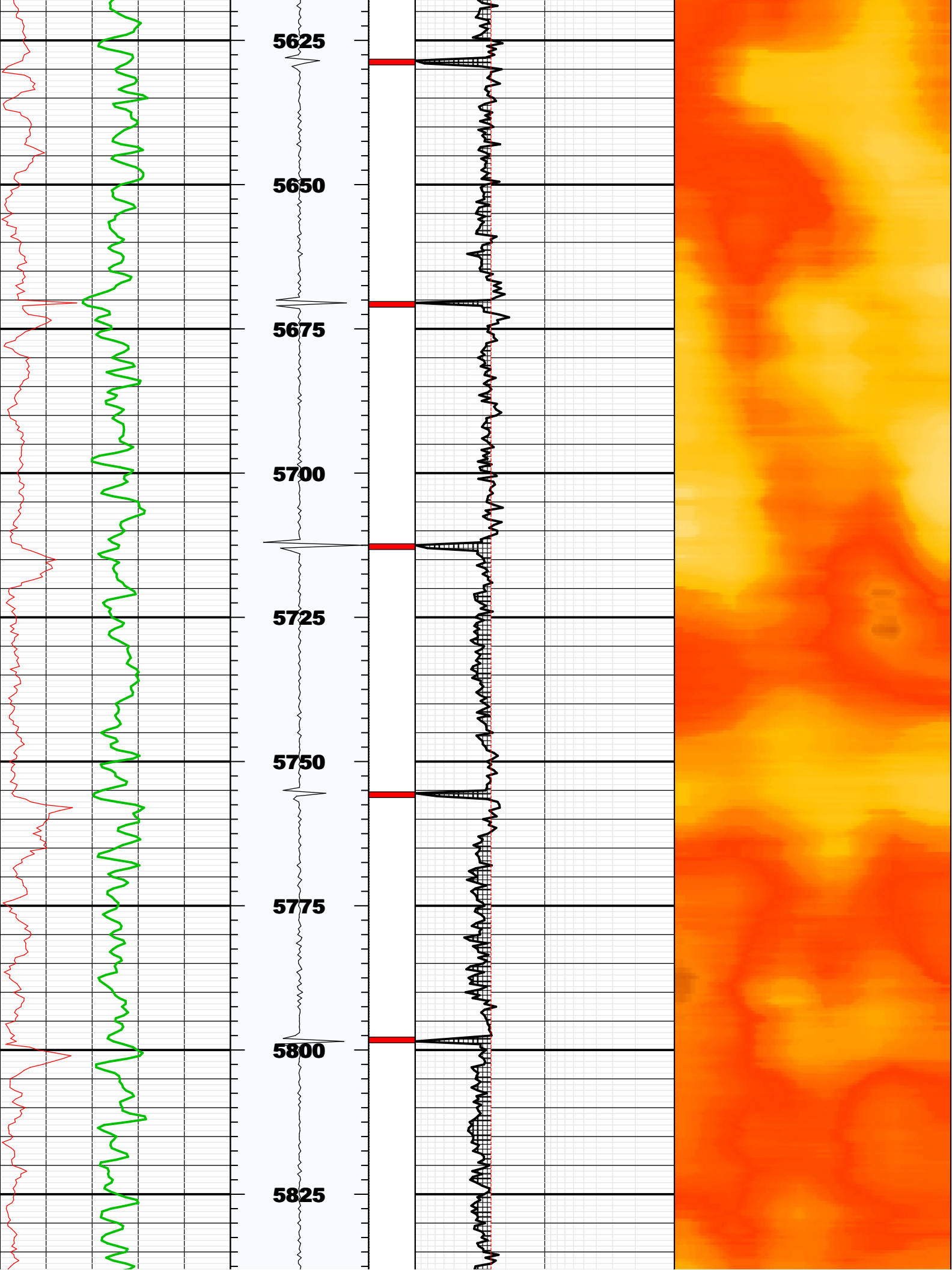


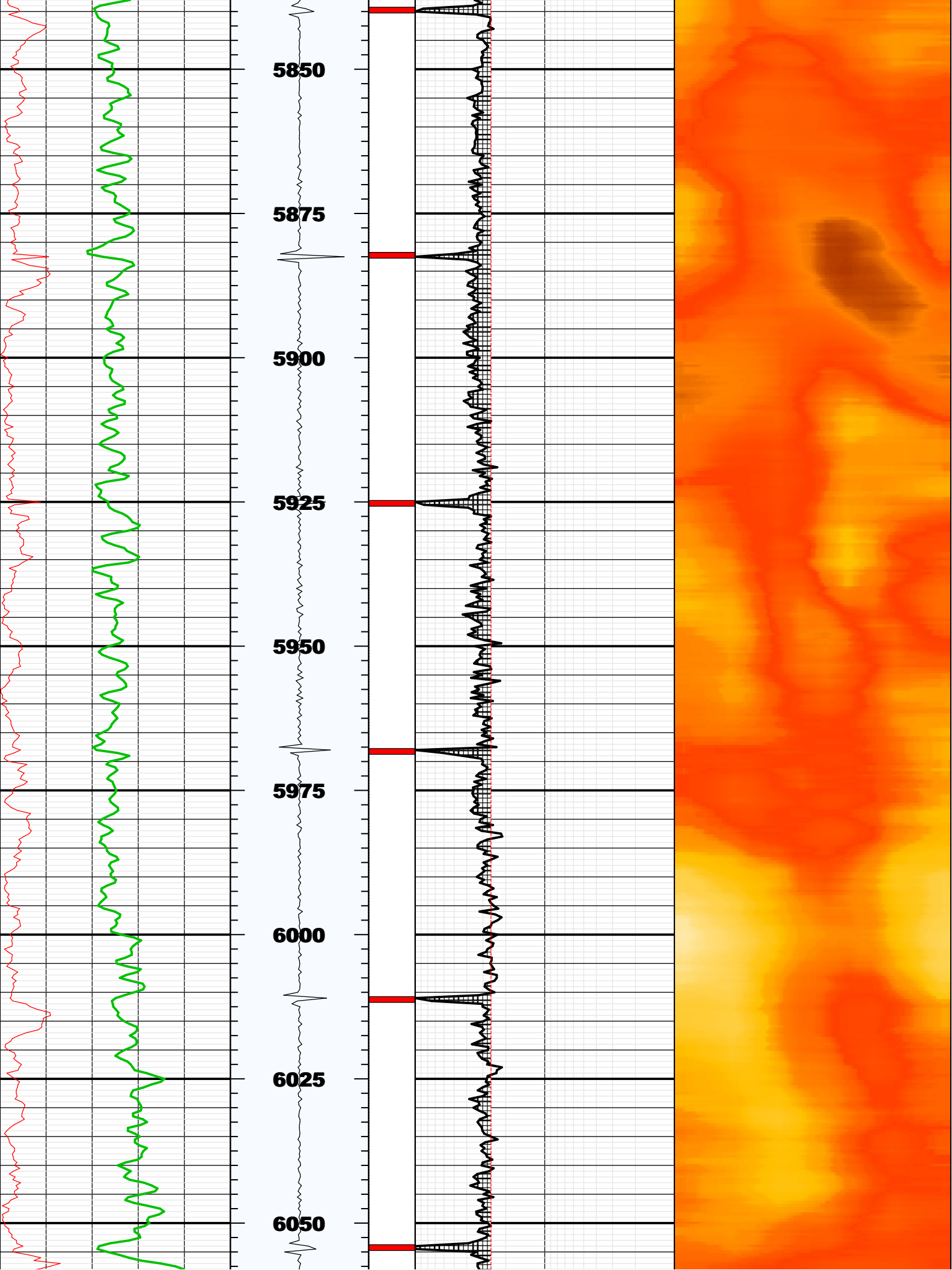


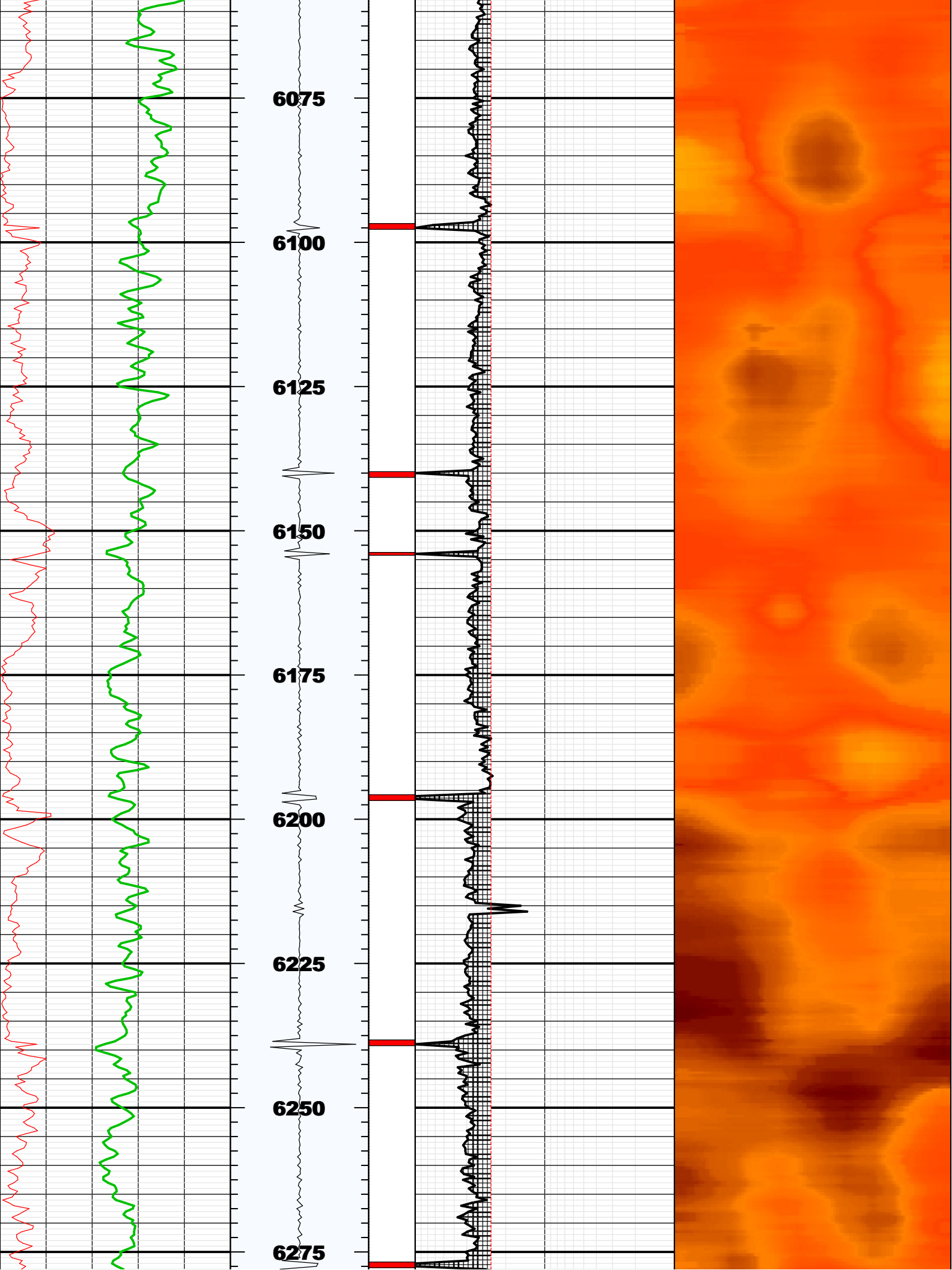


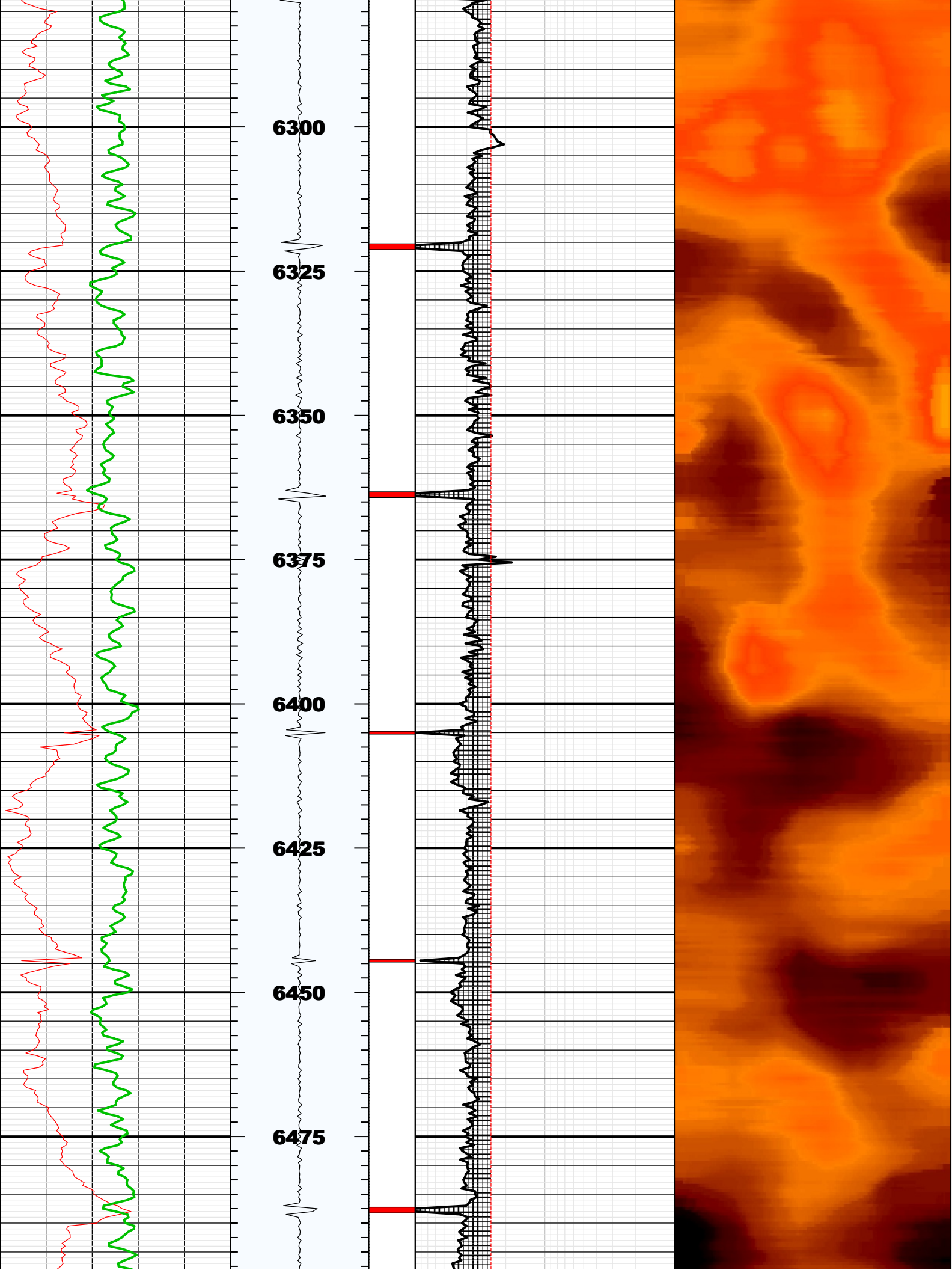


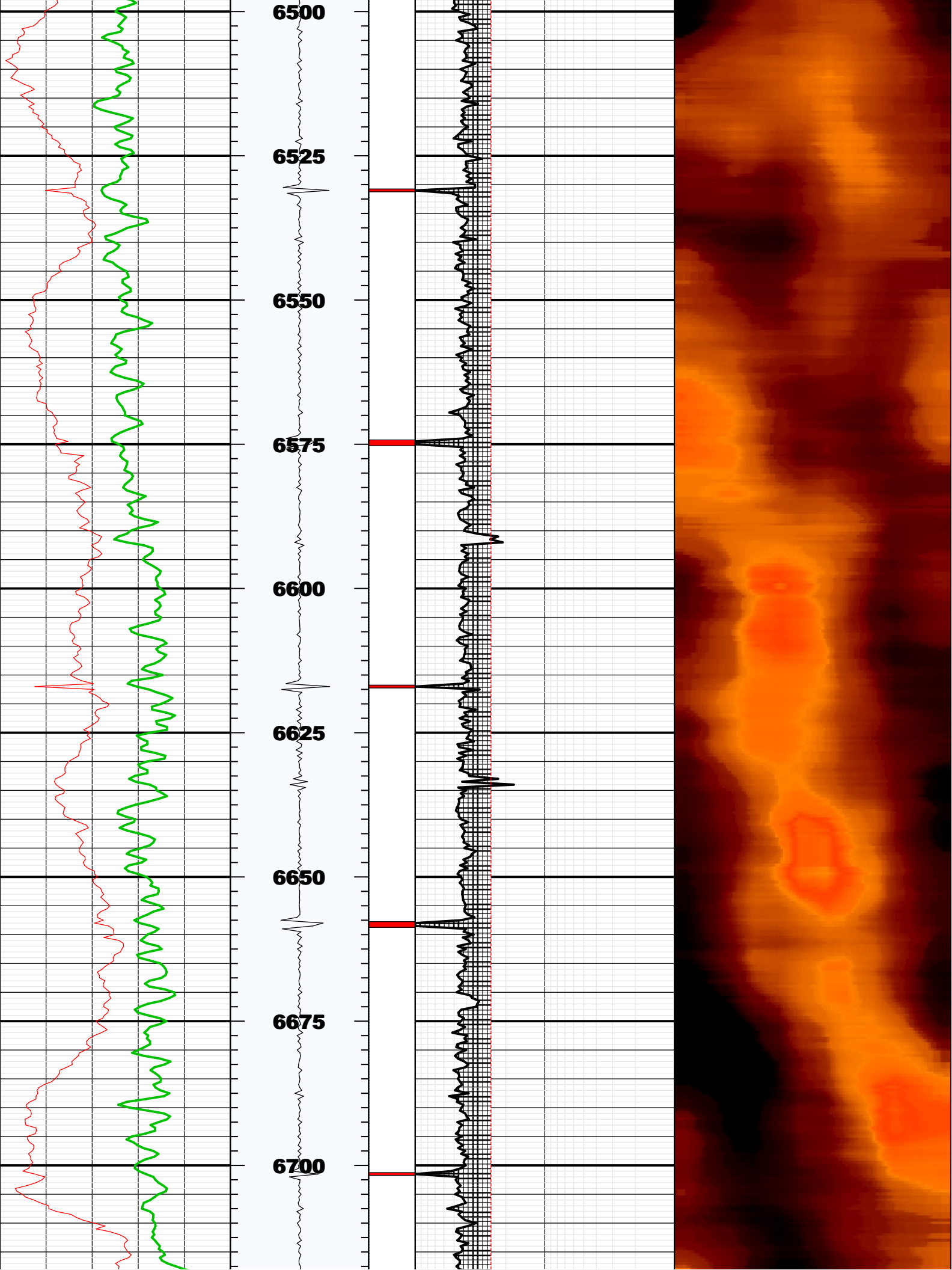


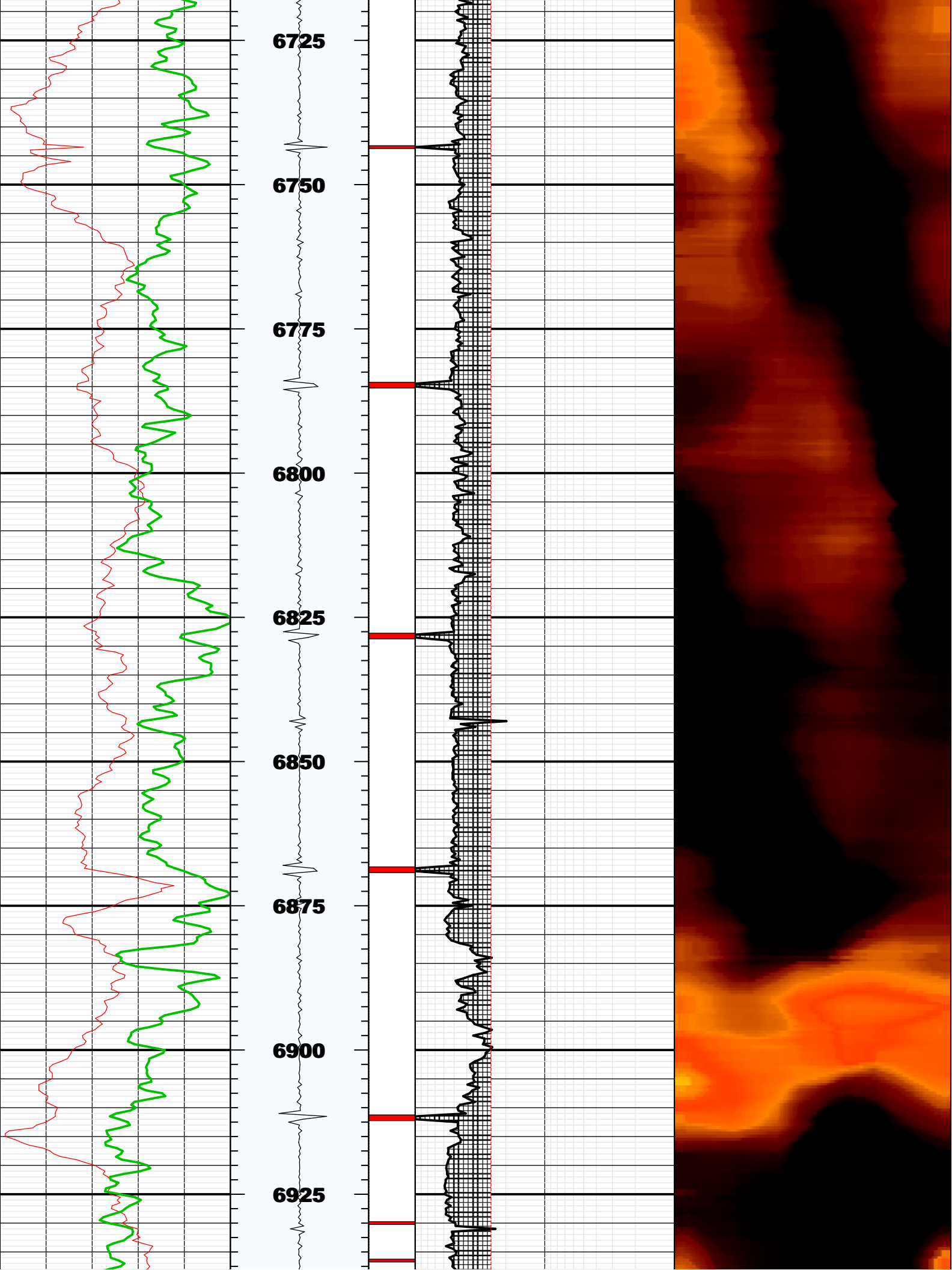


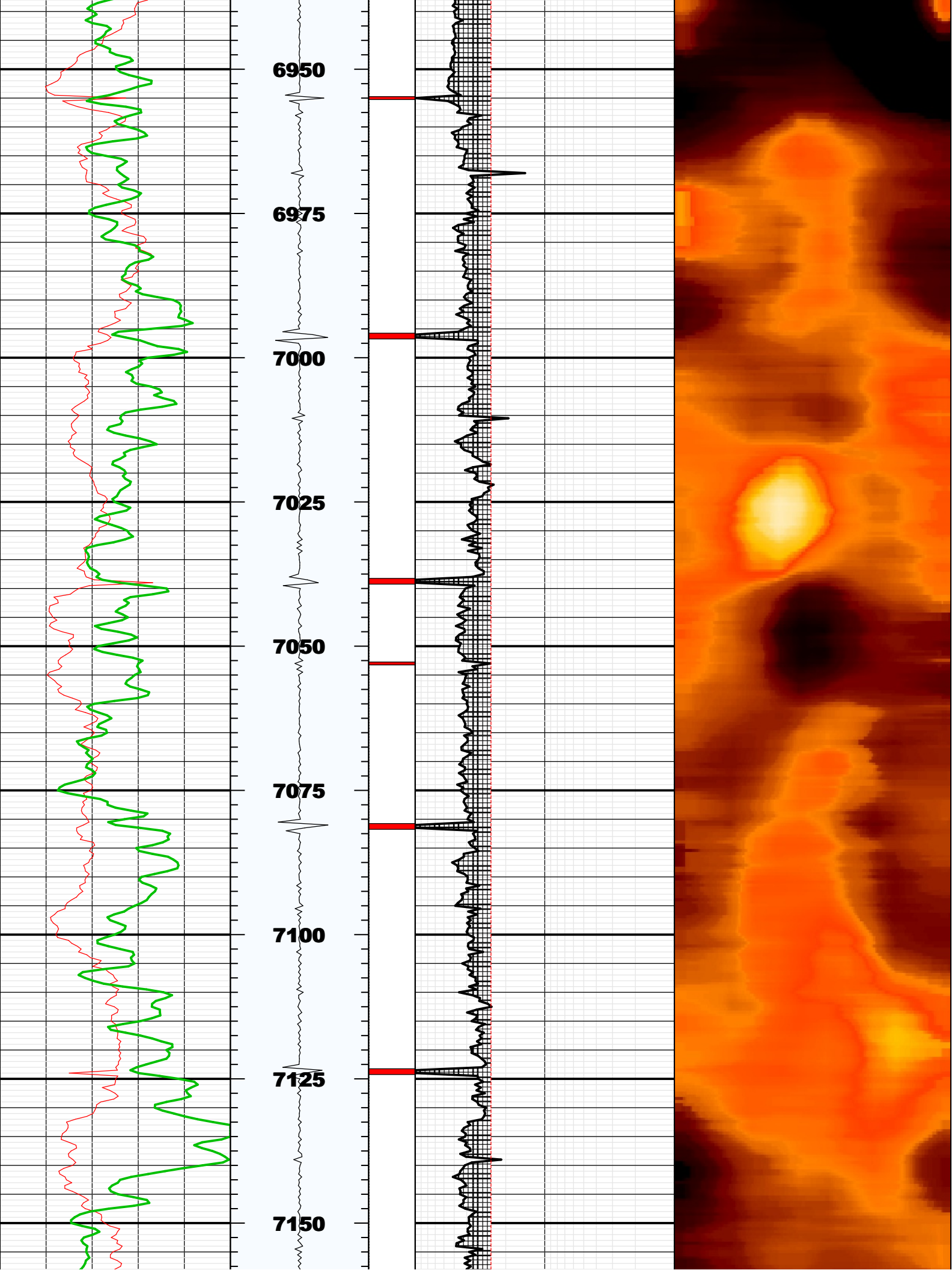


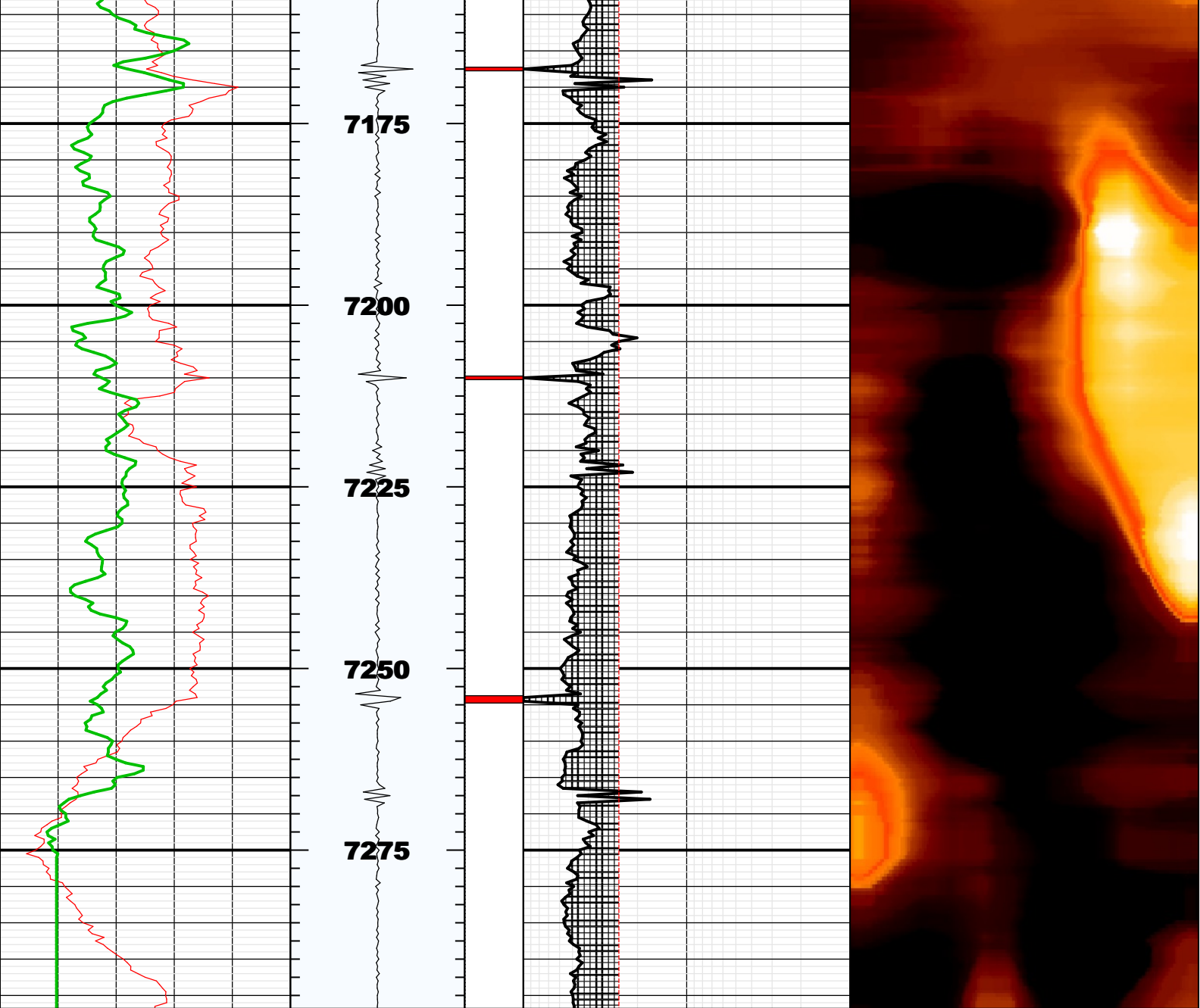








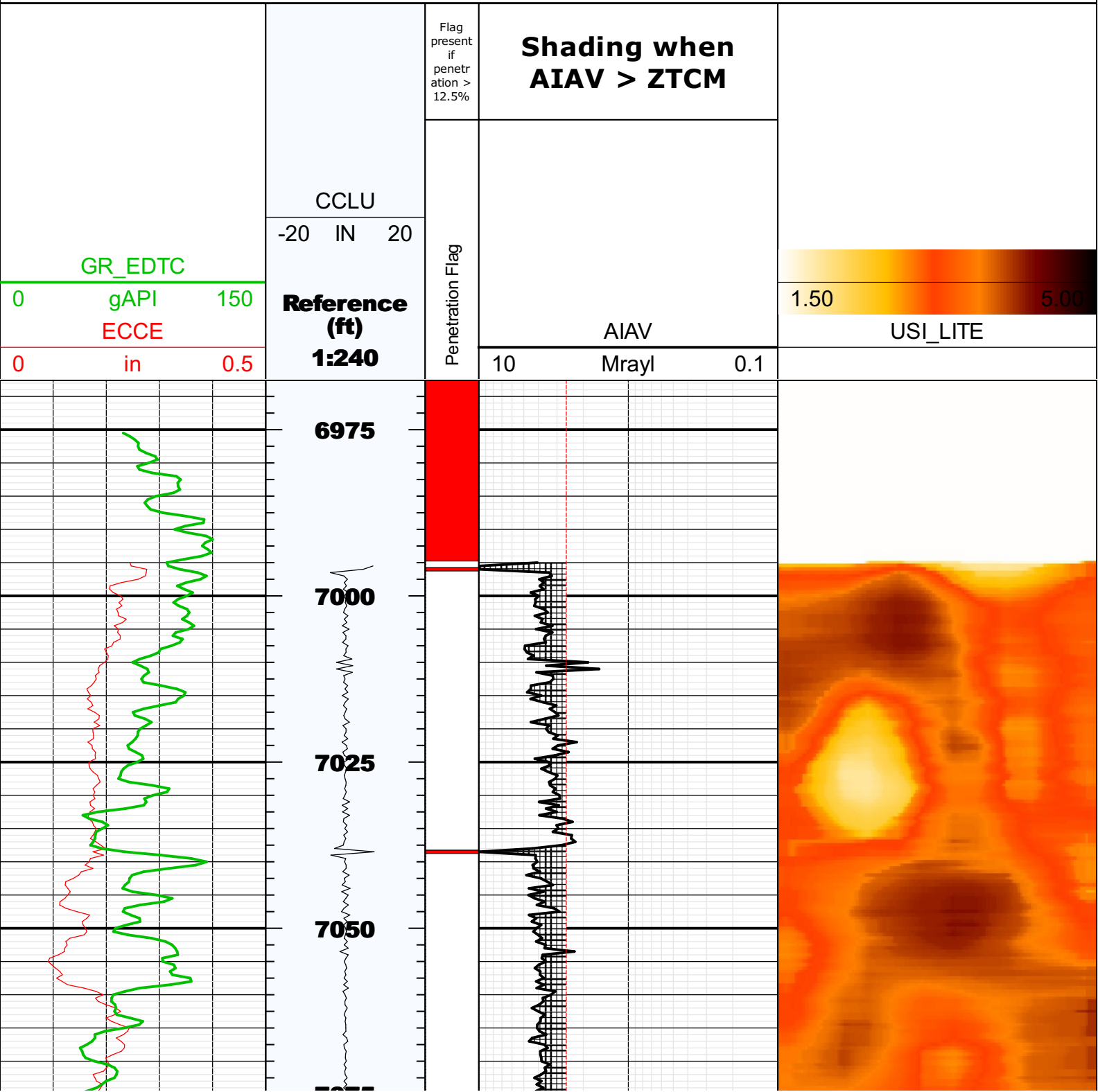


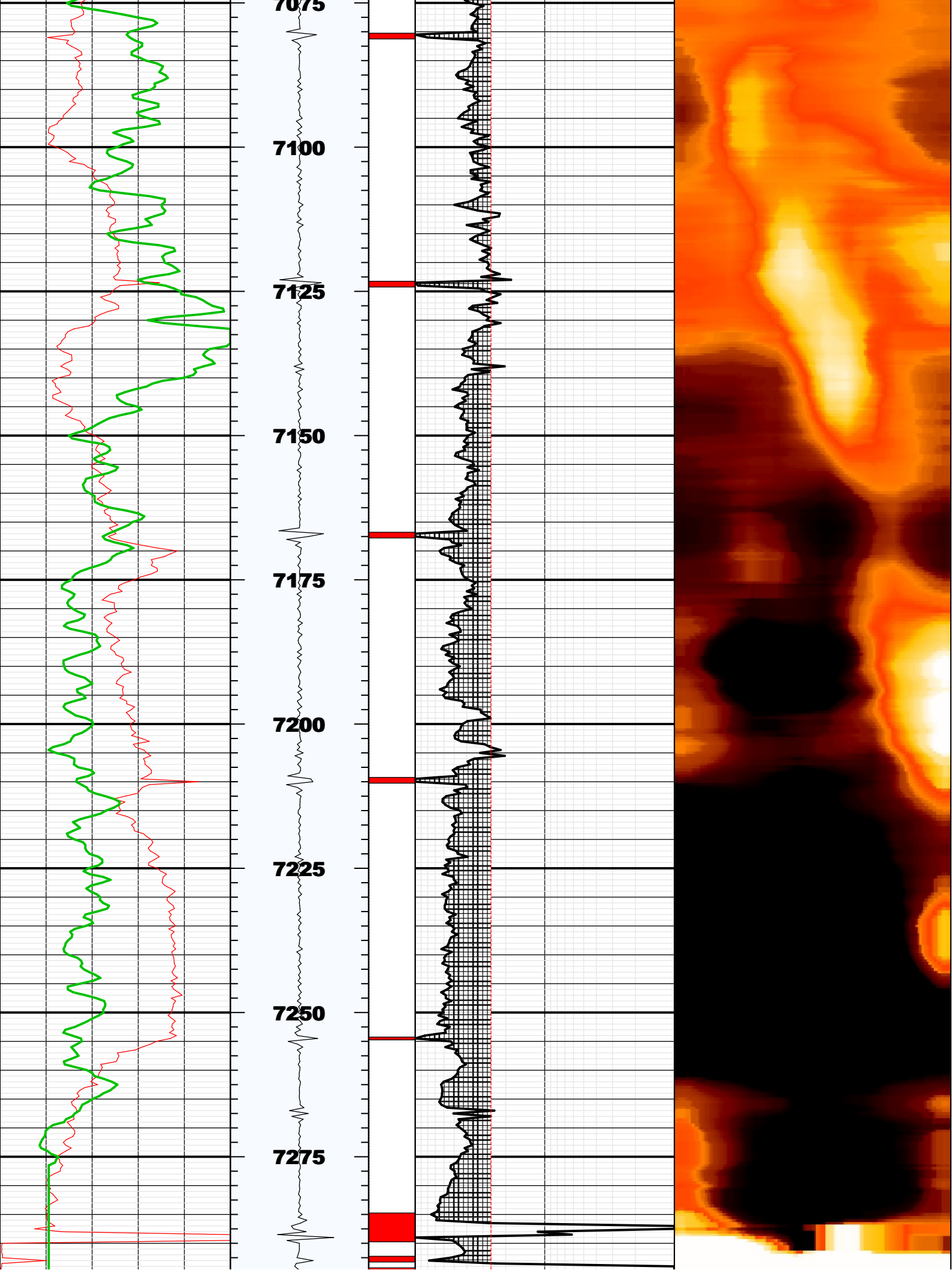


BS	8.75000	IN	Bit Size
CASG	P110		Casing Grade
CDIA	7.00000	IN	Casing Outer Diameter
CSID			
CSIZ	7.00000	IN	Current Casing Size
CWEI	26.00000	LB/F	Casing Weight
DFD	8.40000	LB/G	Drilling Fluid Density
DFVL	190.00000	US/F	Default Fluid Velocity
DO			
DOT	2.87400	IN	Diameter of Transducer Sensor
EMXV	80	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	1.83000	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 Y10-77-1HC
Field: Wattenberg





Fluid Properties Used for Main Pass

