

Company: Noble Energy Inc

Well: COLT A13-638
Field: WATTENBERG
County: WELD

State: Colorado

County: WELD		USI-LITE				
Field: WATTENBERG						
Location: SWSW S17 T6 R63W						
Well: COLT A13-638						
Company: Noble Energy Inc						
LOCATION		Permanent Datum: Log Measured From: Drilling Measured From:	GL KB KB	Elev: K.B. 4696.0 F G.L. 4672.0 F D.F. 4695.0 F		
API Serial No. 05-123-40919	Section 17				Township 6	Range 63W
Logging Date 24-Apr-2015						
Run Number ONE						
Depth Driller	13377.0 F					
Schlumberger Depth	13377.0 F					
Bottom Log Interval	6948.0 F					
Top Log Interval	-999.2 F					
Casing Fluid Level	0.0 F					
Salinity						
Density	8.70 LB/G					
Fluid Level	0.0 F					
BIT/CASING/TUBING STRING						
Bit Size	8.750 IN					
From	932.9 F					
To	7232.0 F					
Casing Size	7.00 IN					
Weight	26.00 LB/F					
Grade	P110					
From	0.0 F					
To	7222.0 F					
Max Recorded Temp	215.0					
Logger on bottom (date)	24-Apr-2015					
Location	Fort Morgan CO.					
Recorded By	Benjamin Marmon					
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: 1109 Calibration Date: Calibrator Serial Number: Number Of Calibration Points: Calibration RMS: Calibration Peak Error:	Serial Number: U711136 Length: 17200.00000

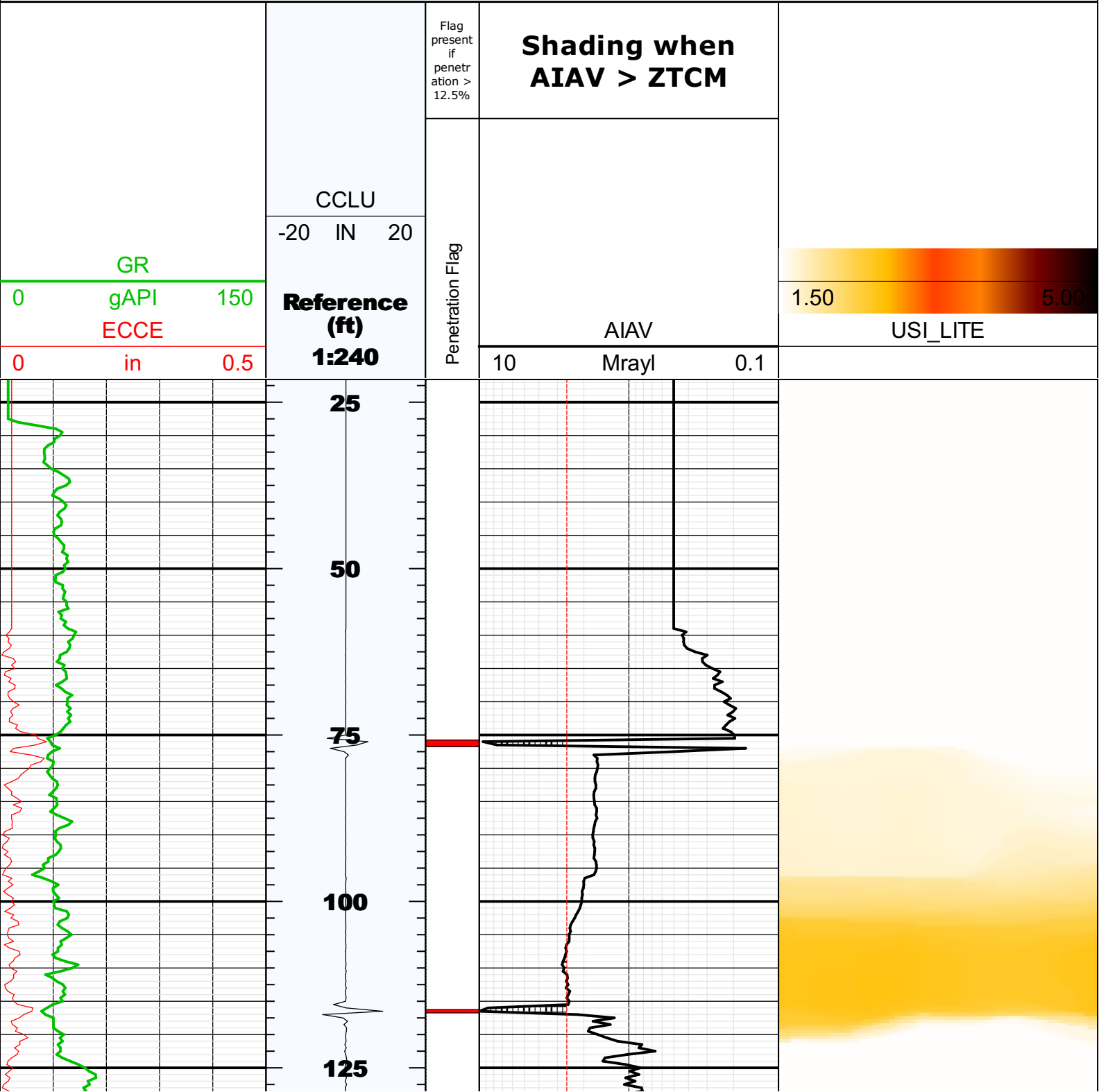
DISCLAIMER

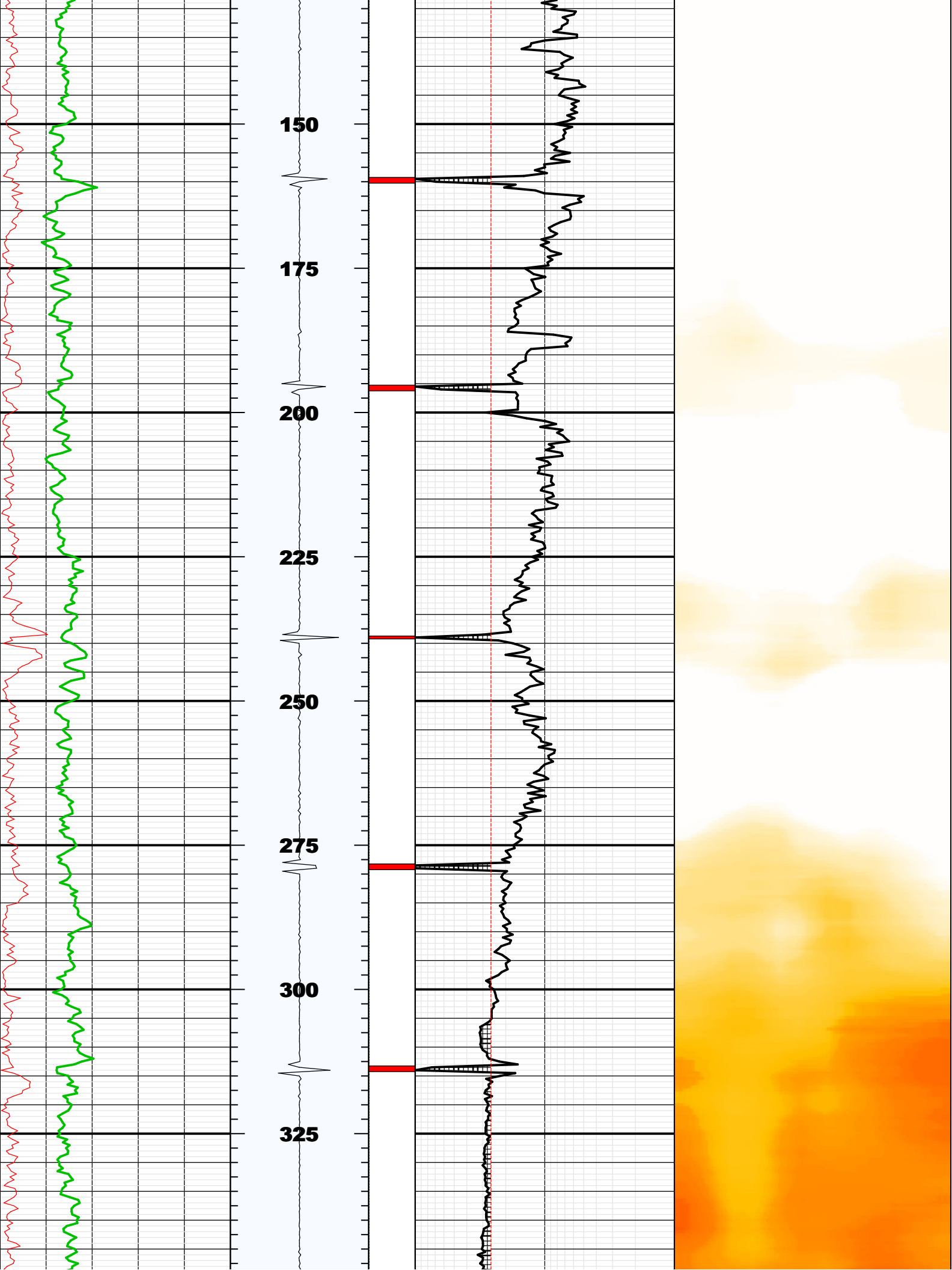
THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIIONS ON USE OF THE RECORDED-DATA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

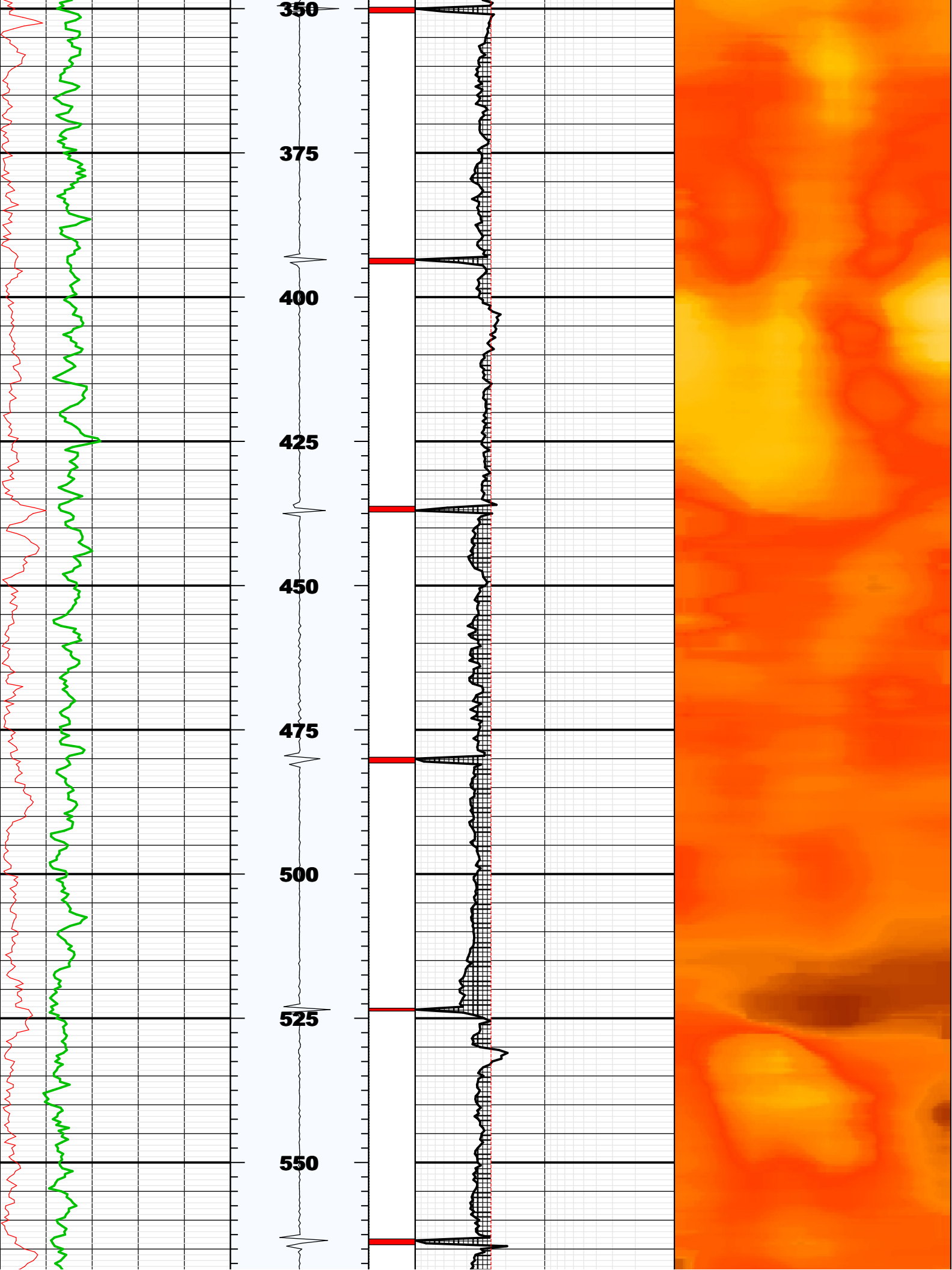
This is the first run in the hole.
Toolstring run as per toolsketch.
Log Objective Cement Evaluation
0 PSI repeat pass and 2500 PSI main pass.
Estimated TOC 790' @ . Expected TOC @ 1000 .
Bottom Log Interval 6968'. Lost tension and
Bottom hole temperature was 214 degF.
Top of 4.5 liner at 7232 .

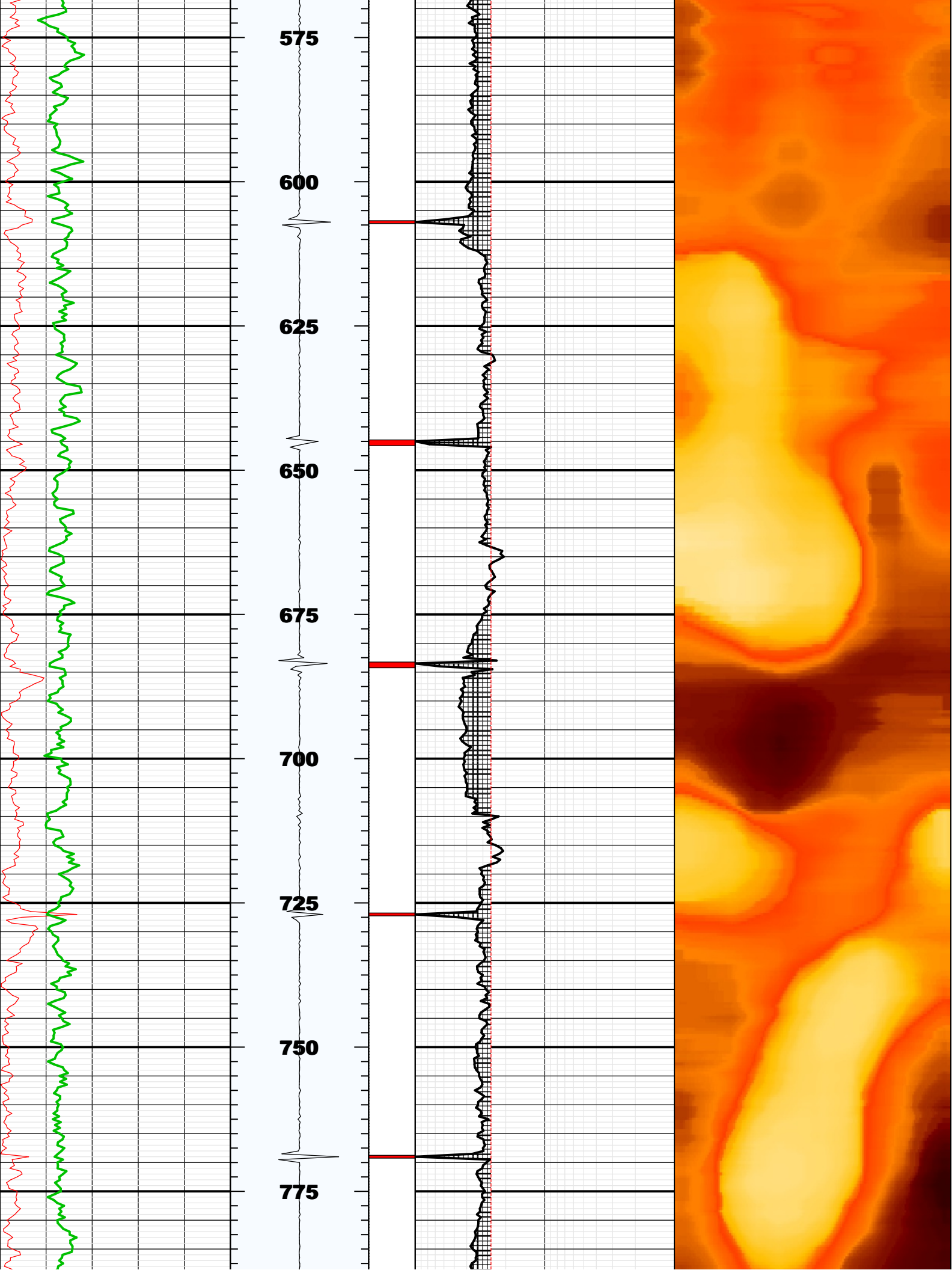
Main Pass

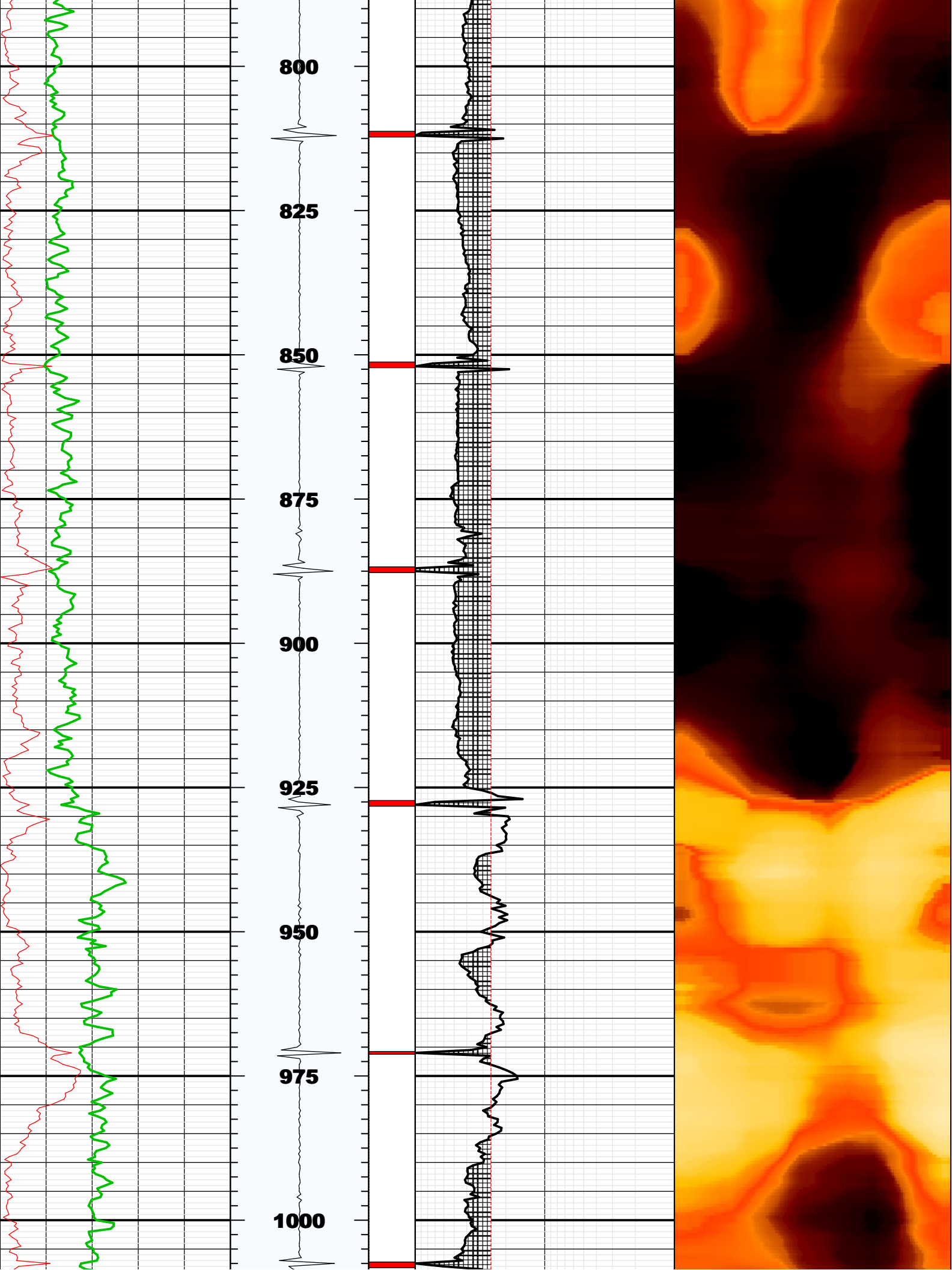
Company: Noble Energy Inc
Well: COLT A13-638
Field: WATTENBERG

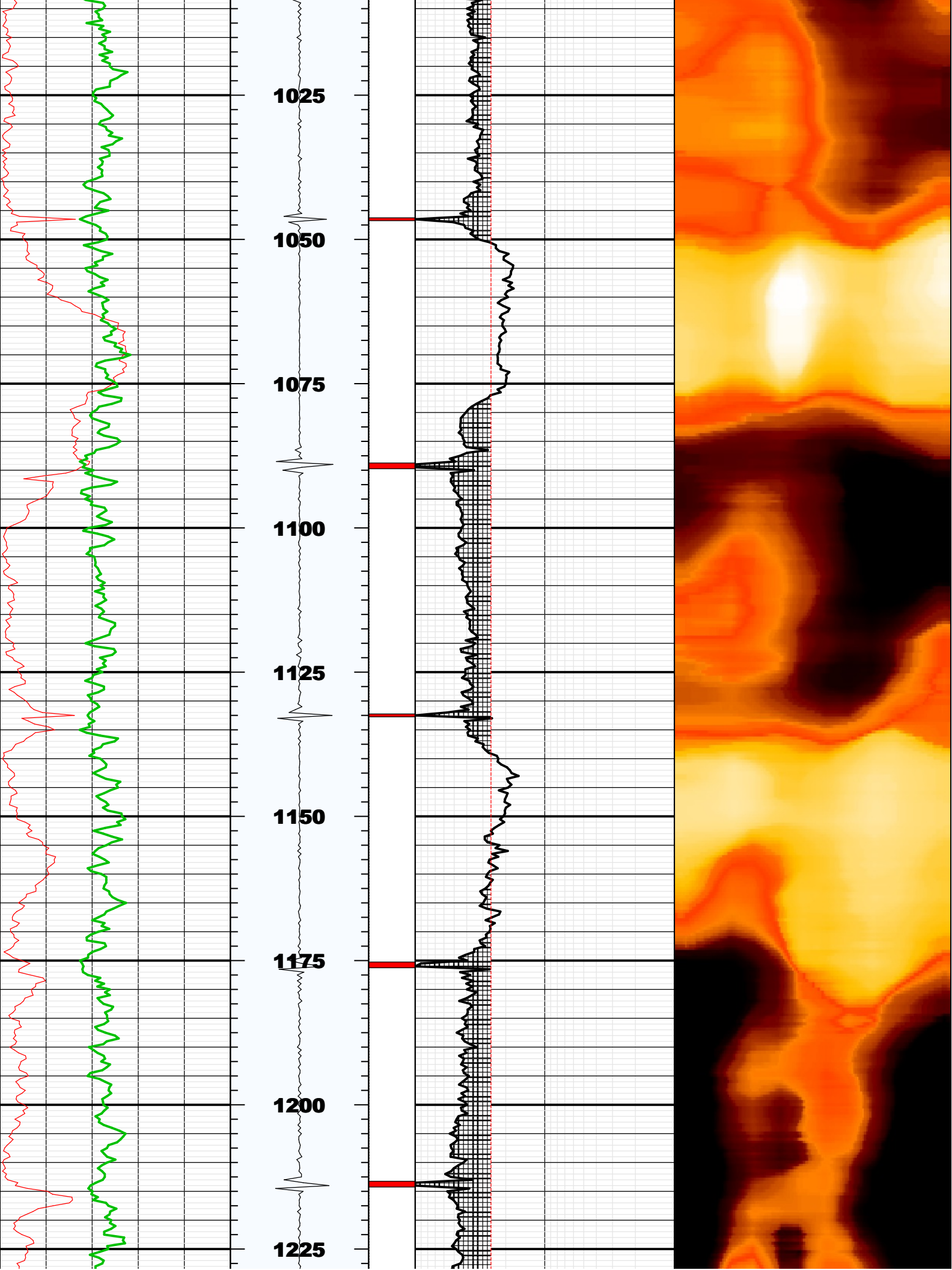


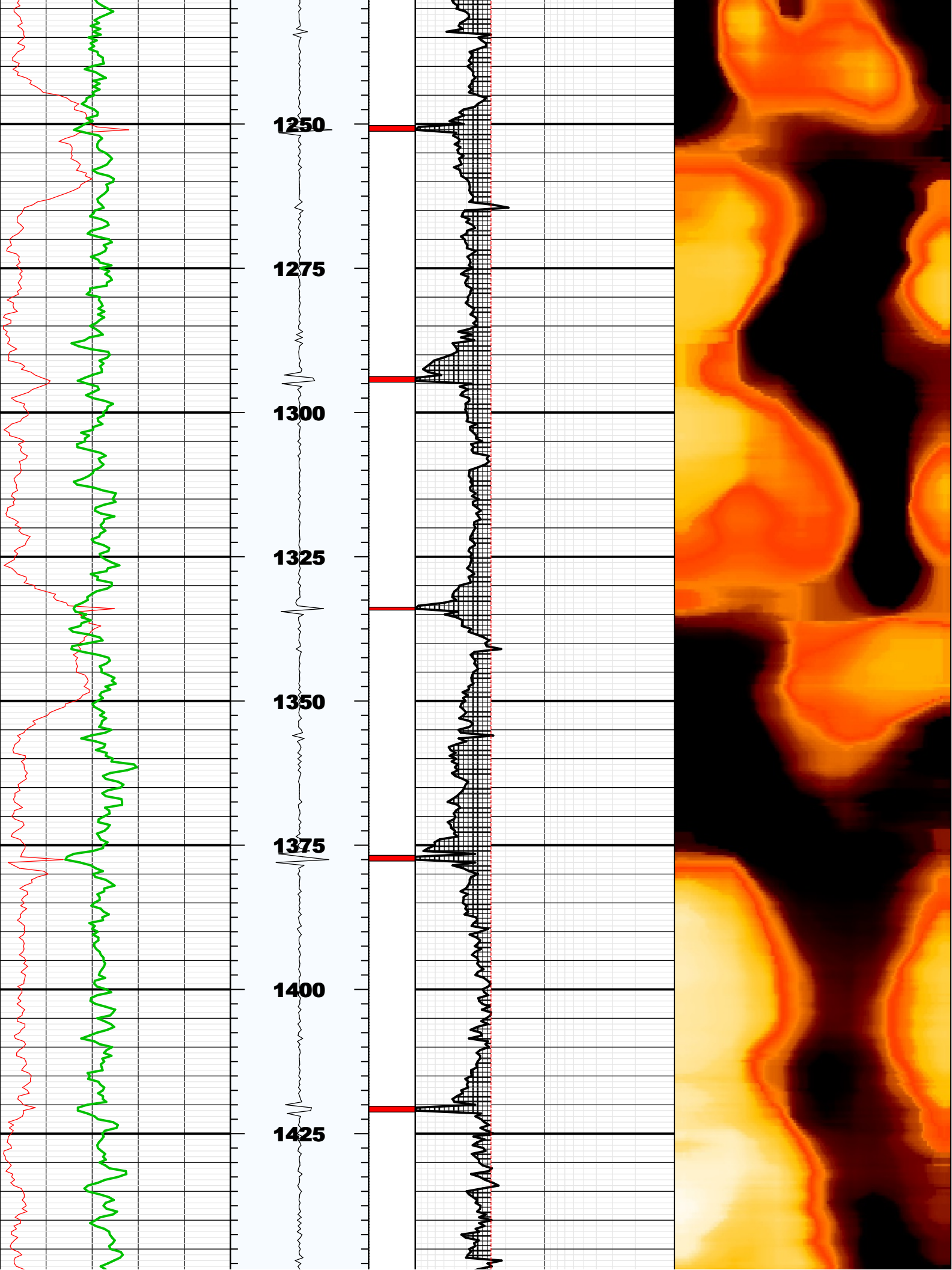


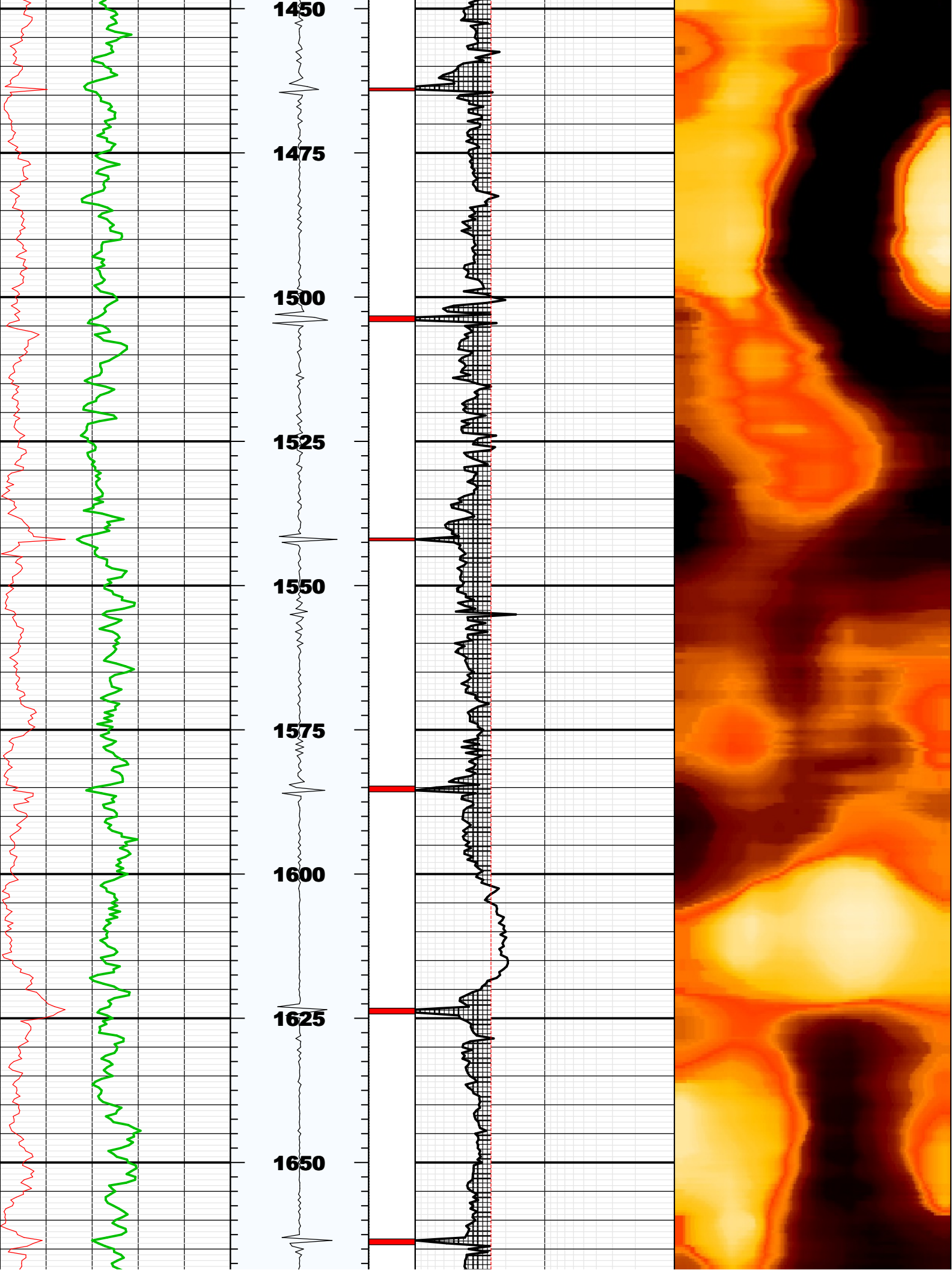


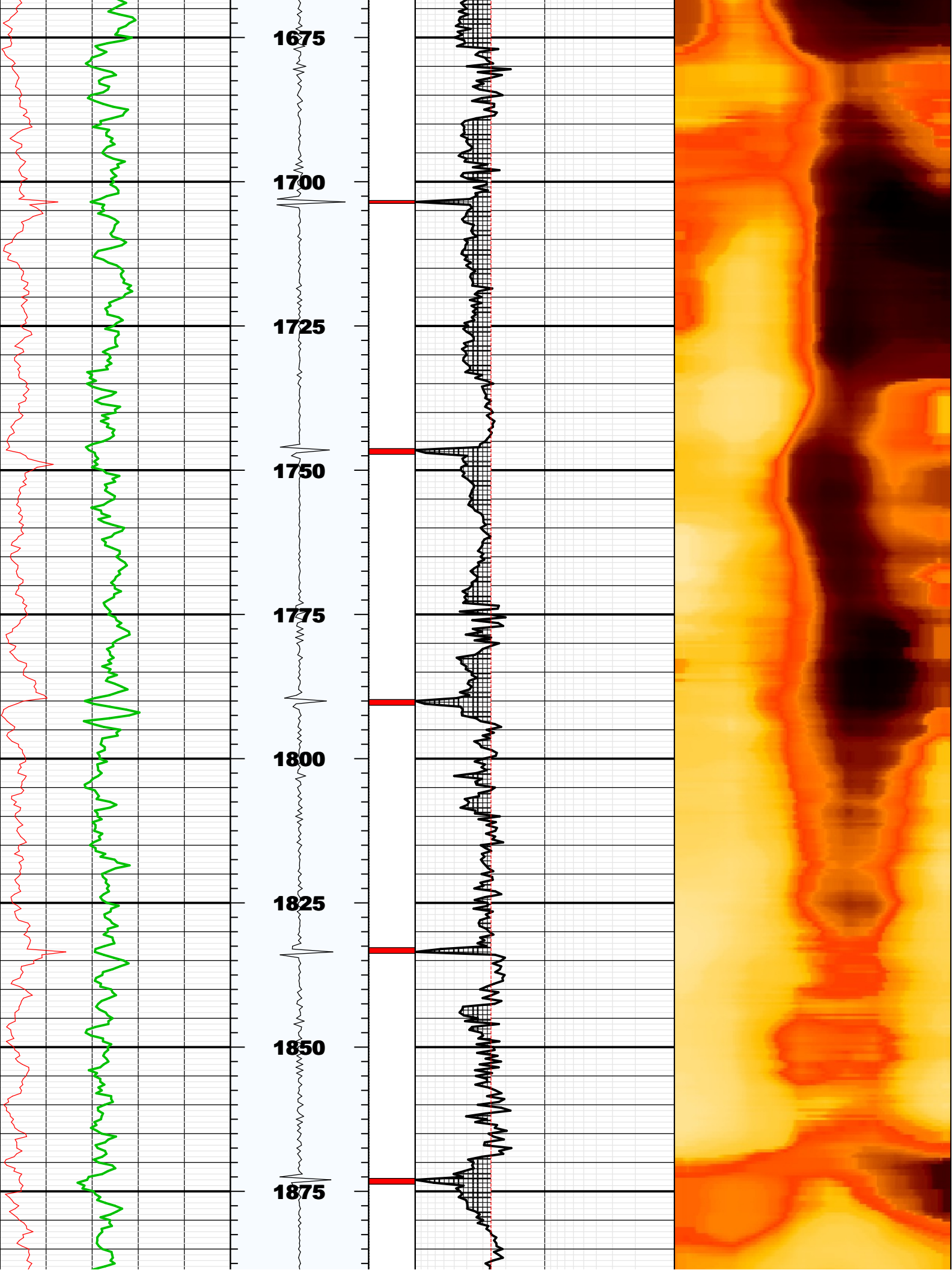


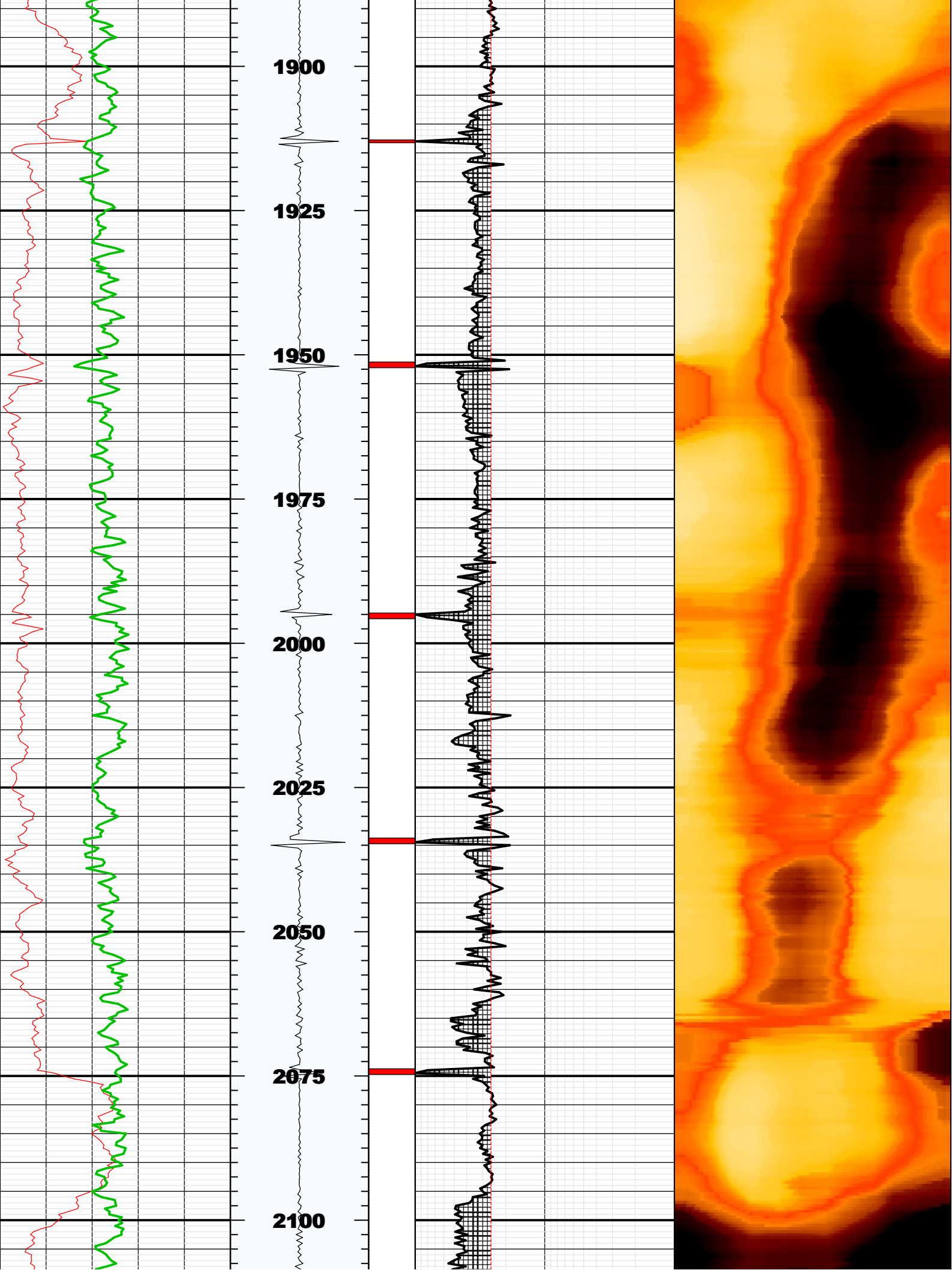


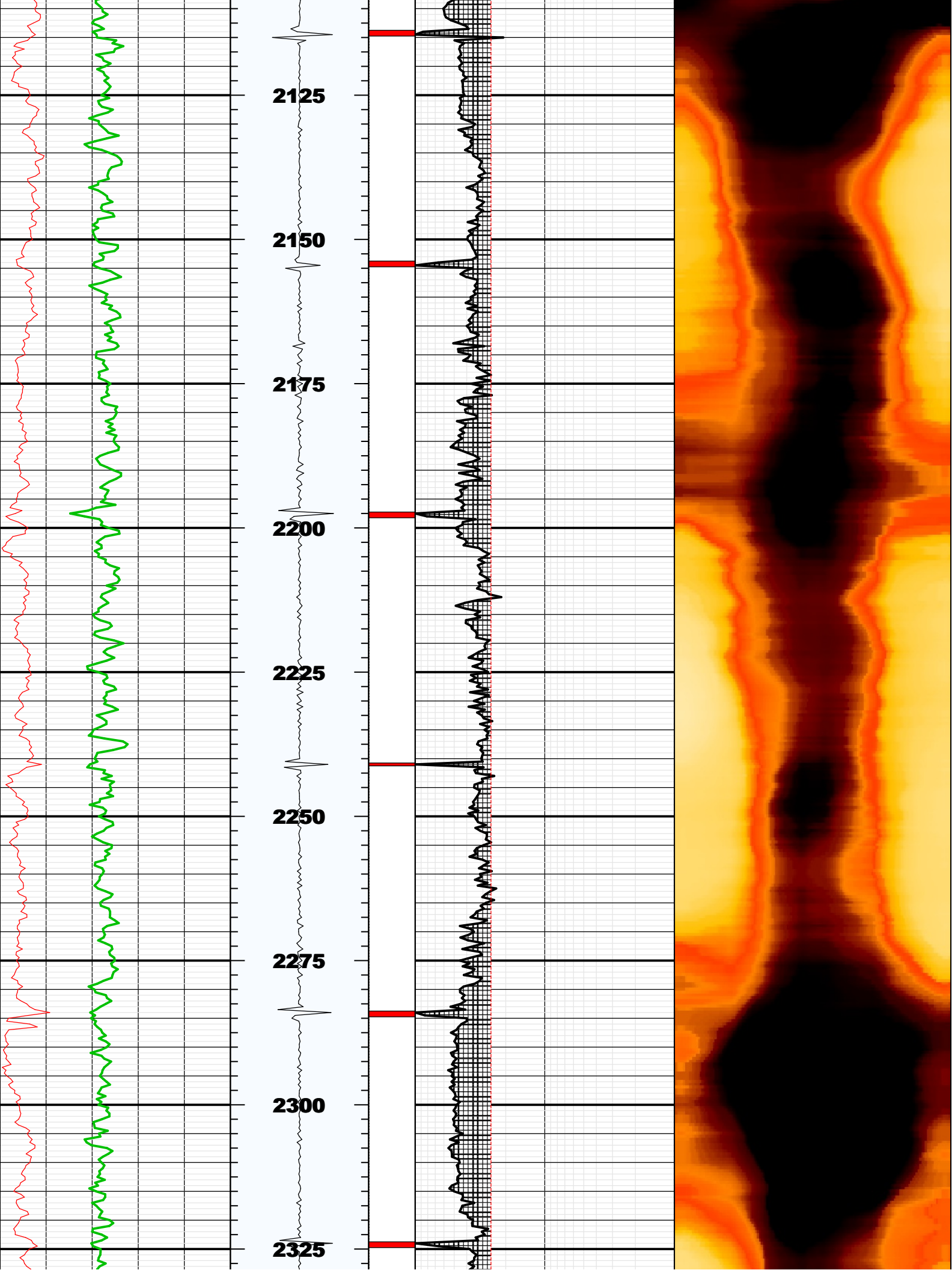


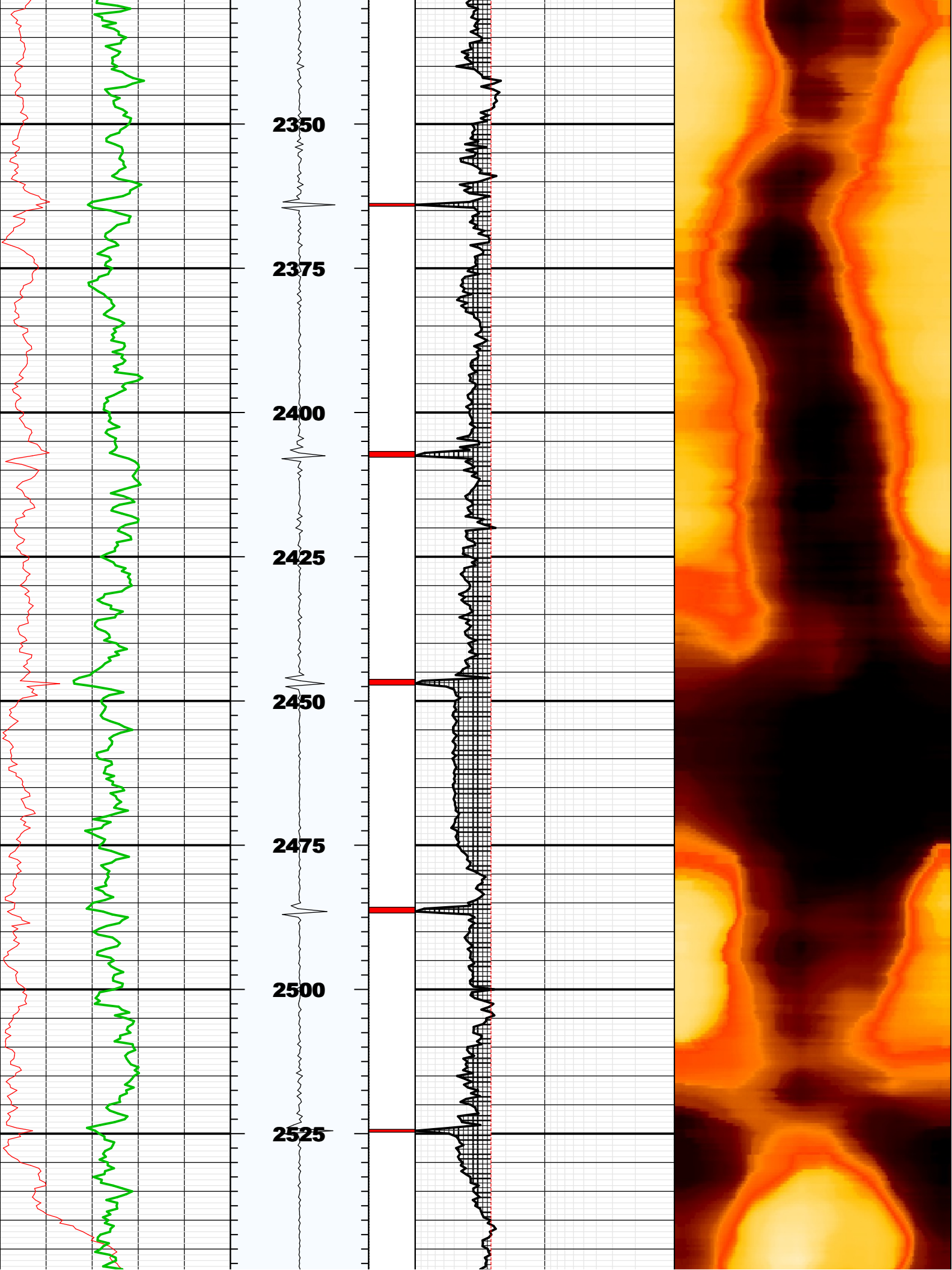


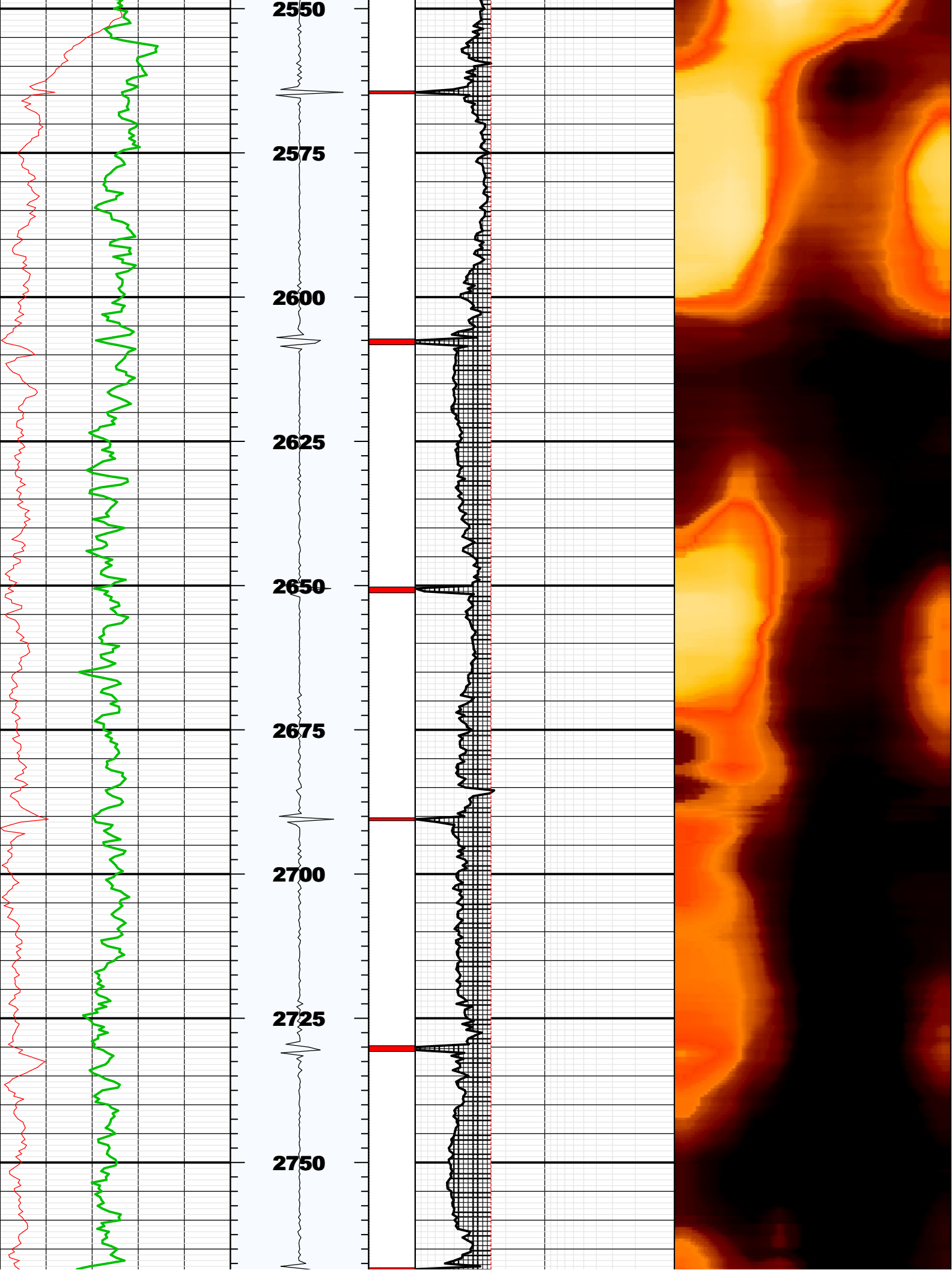


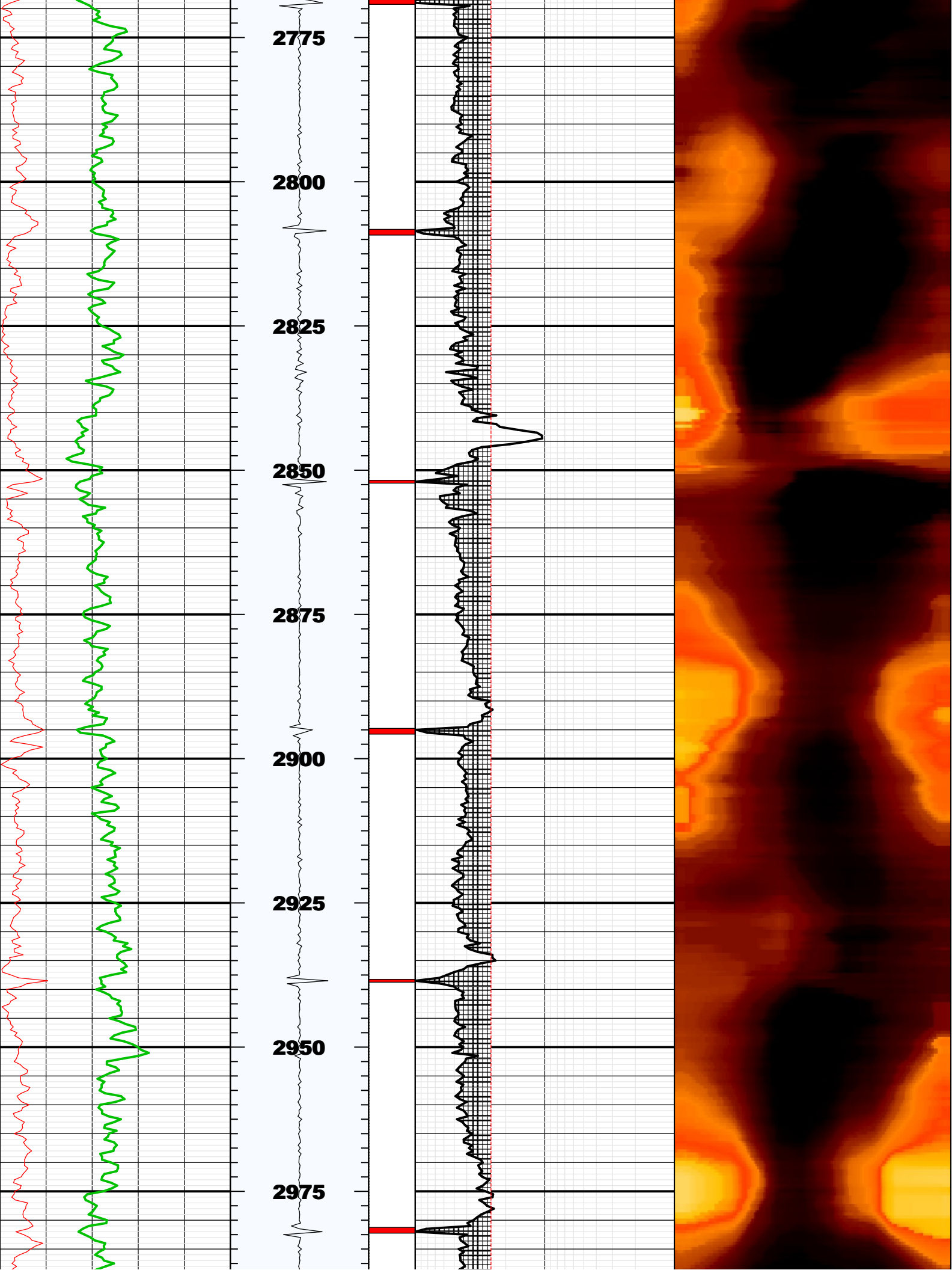


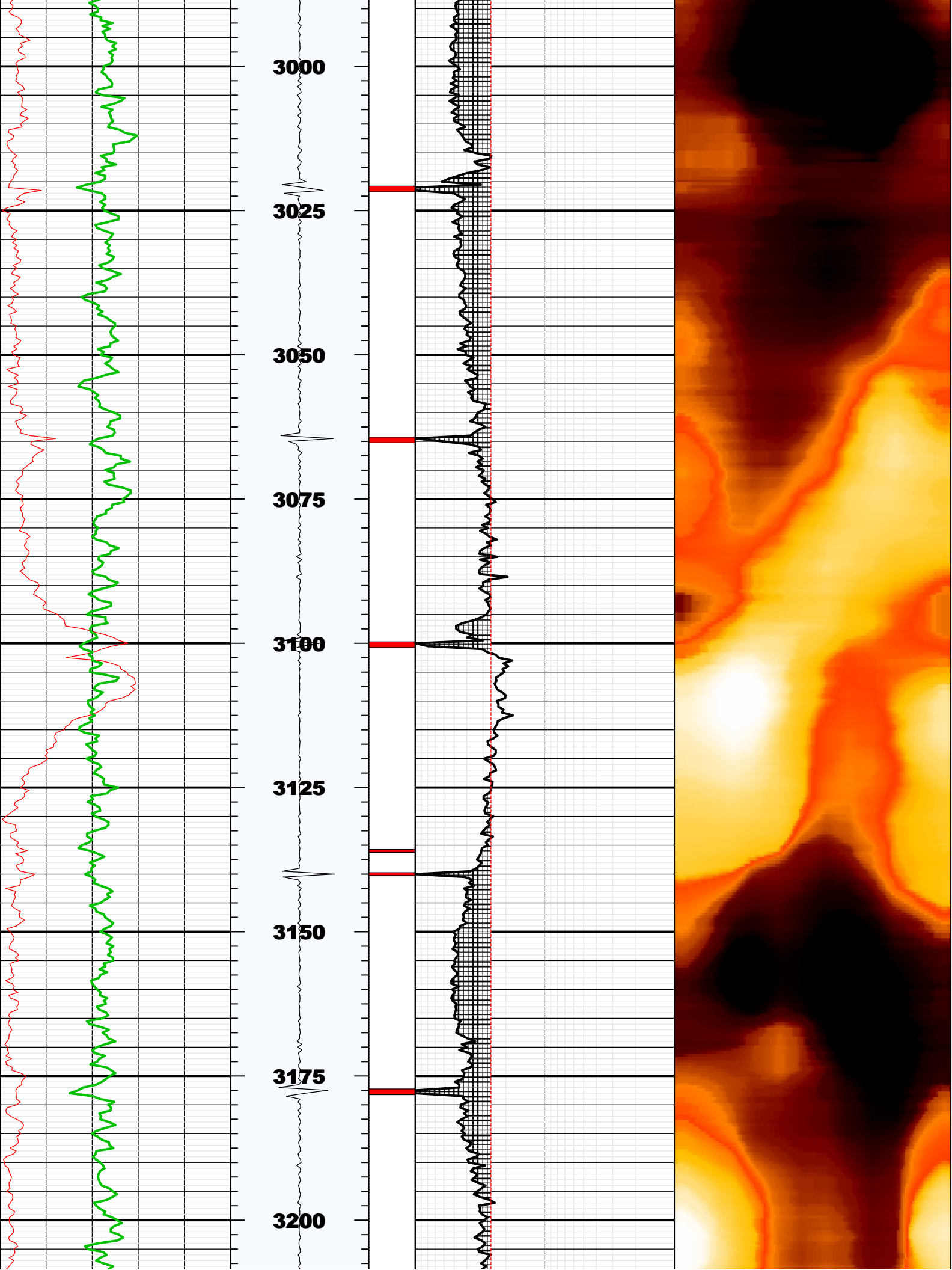


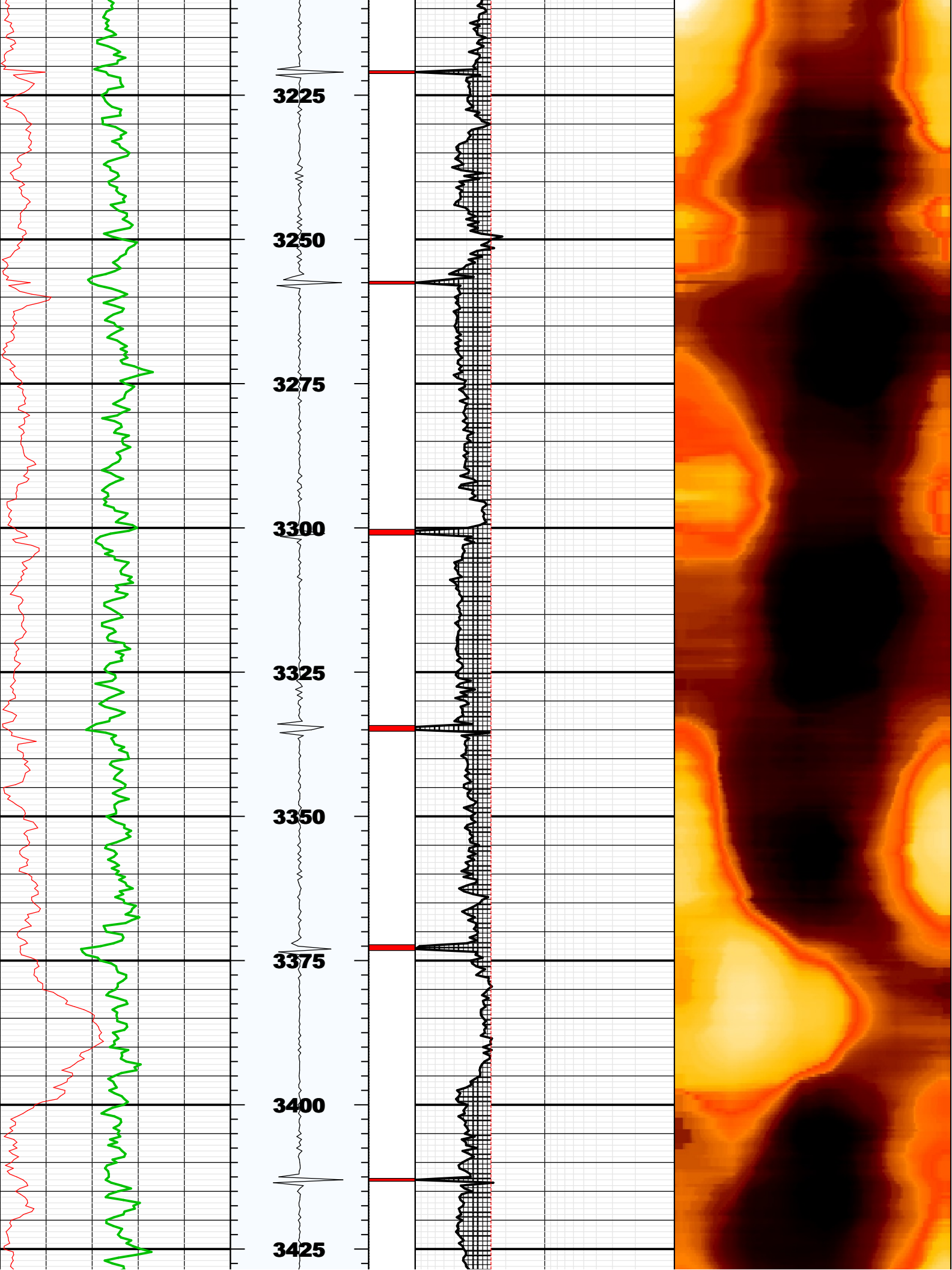


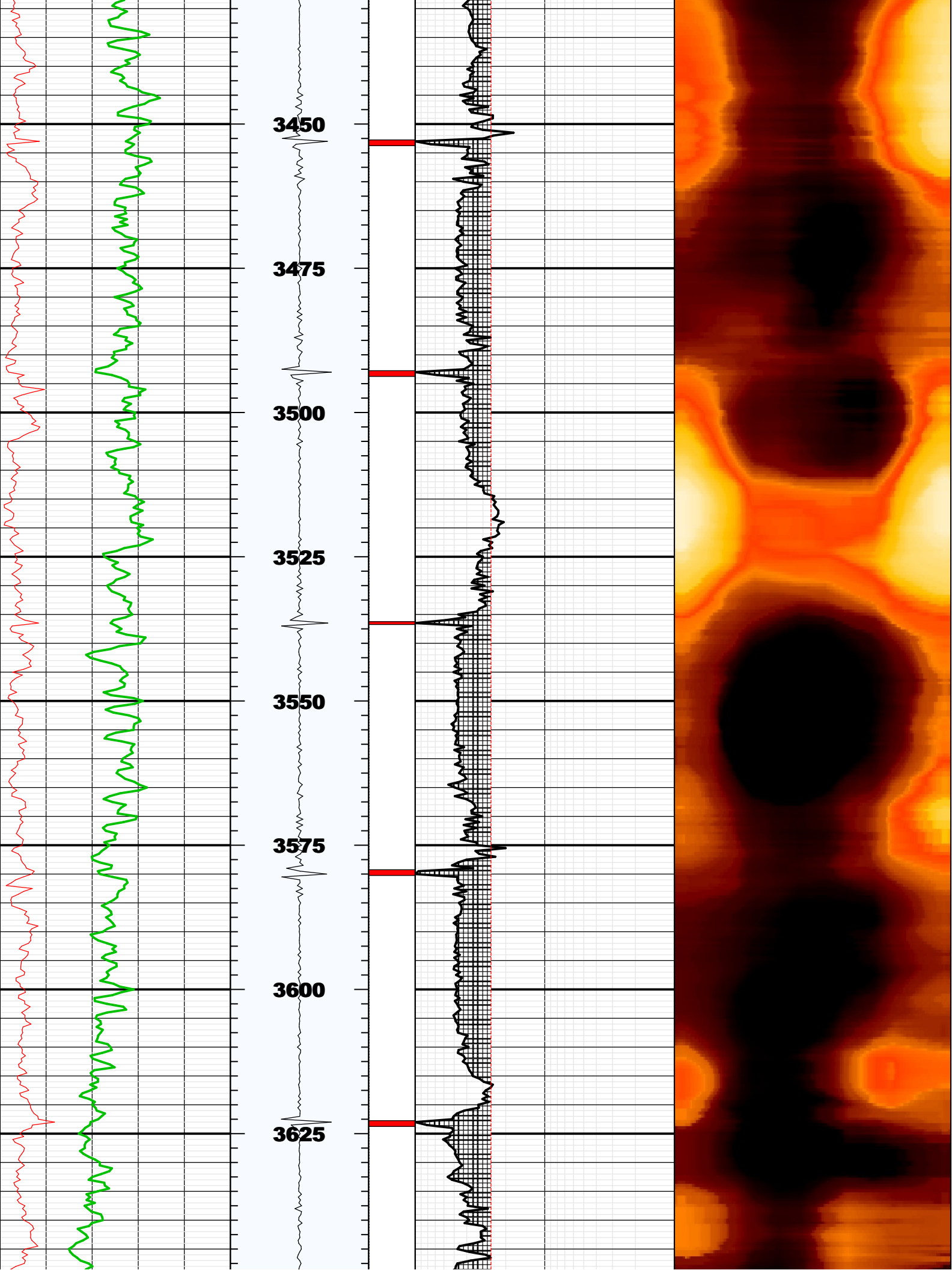


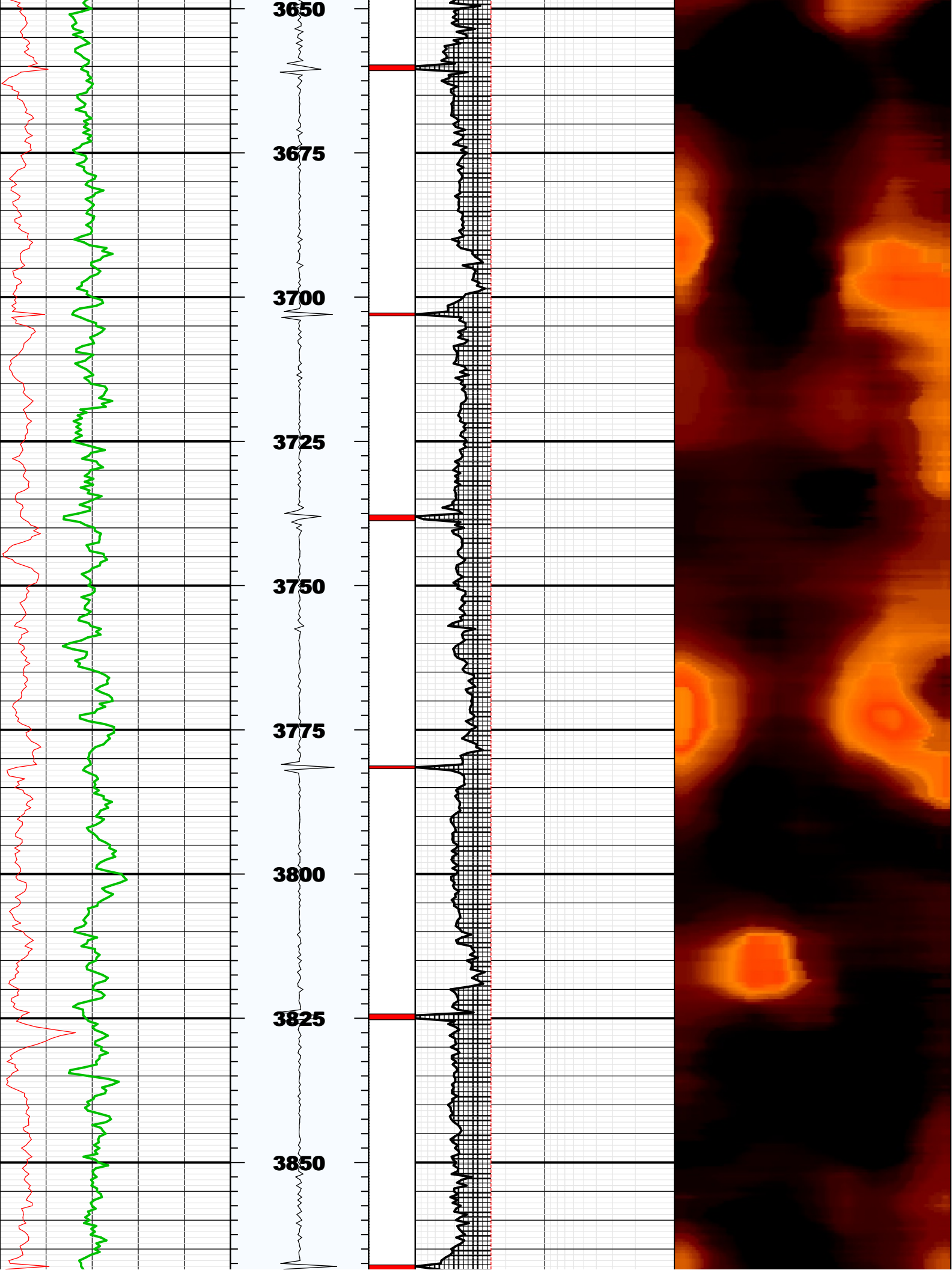


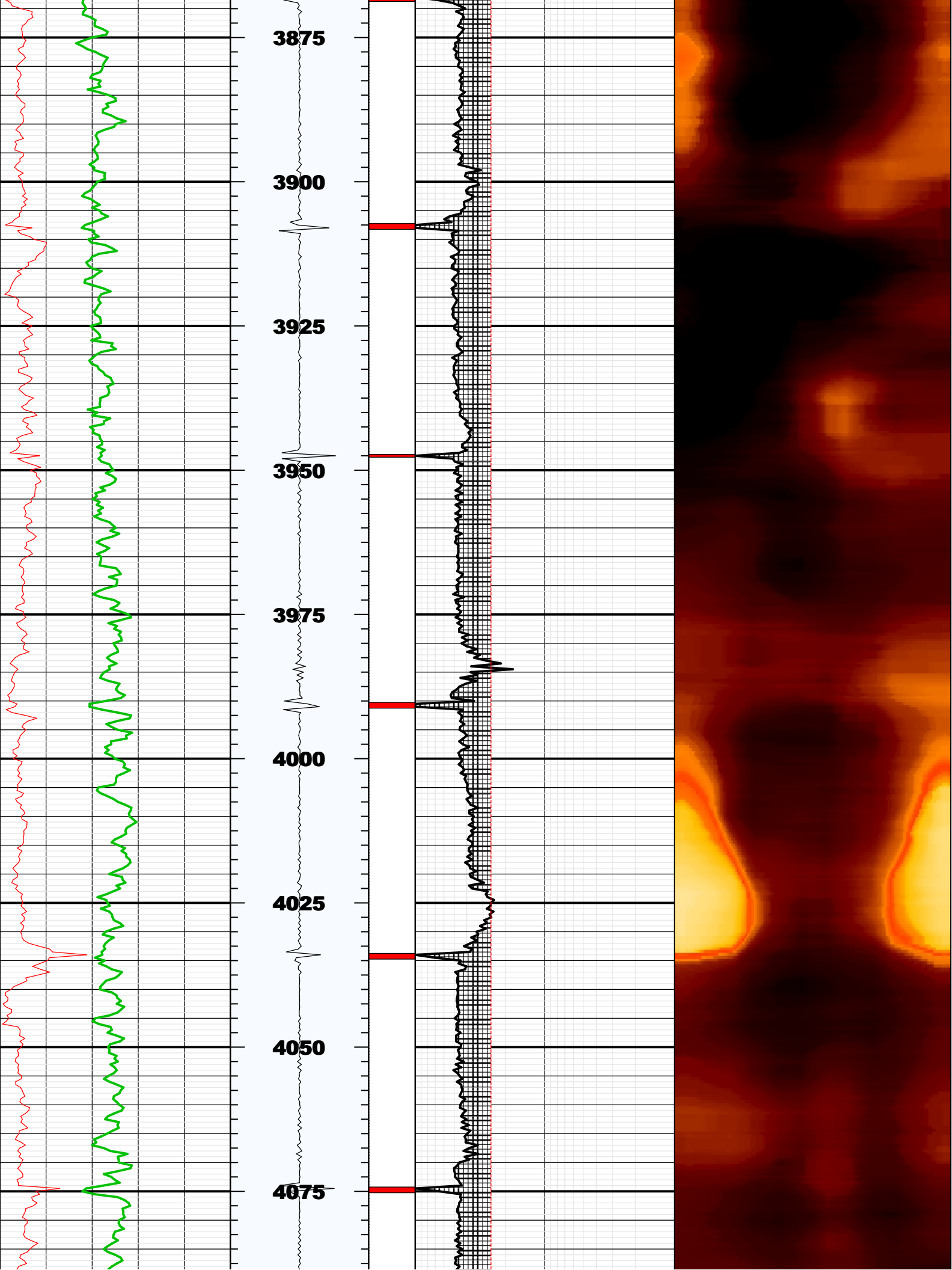


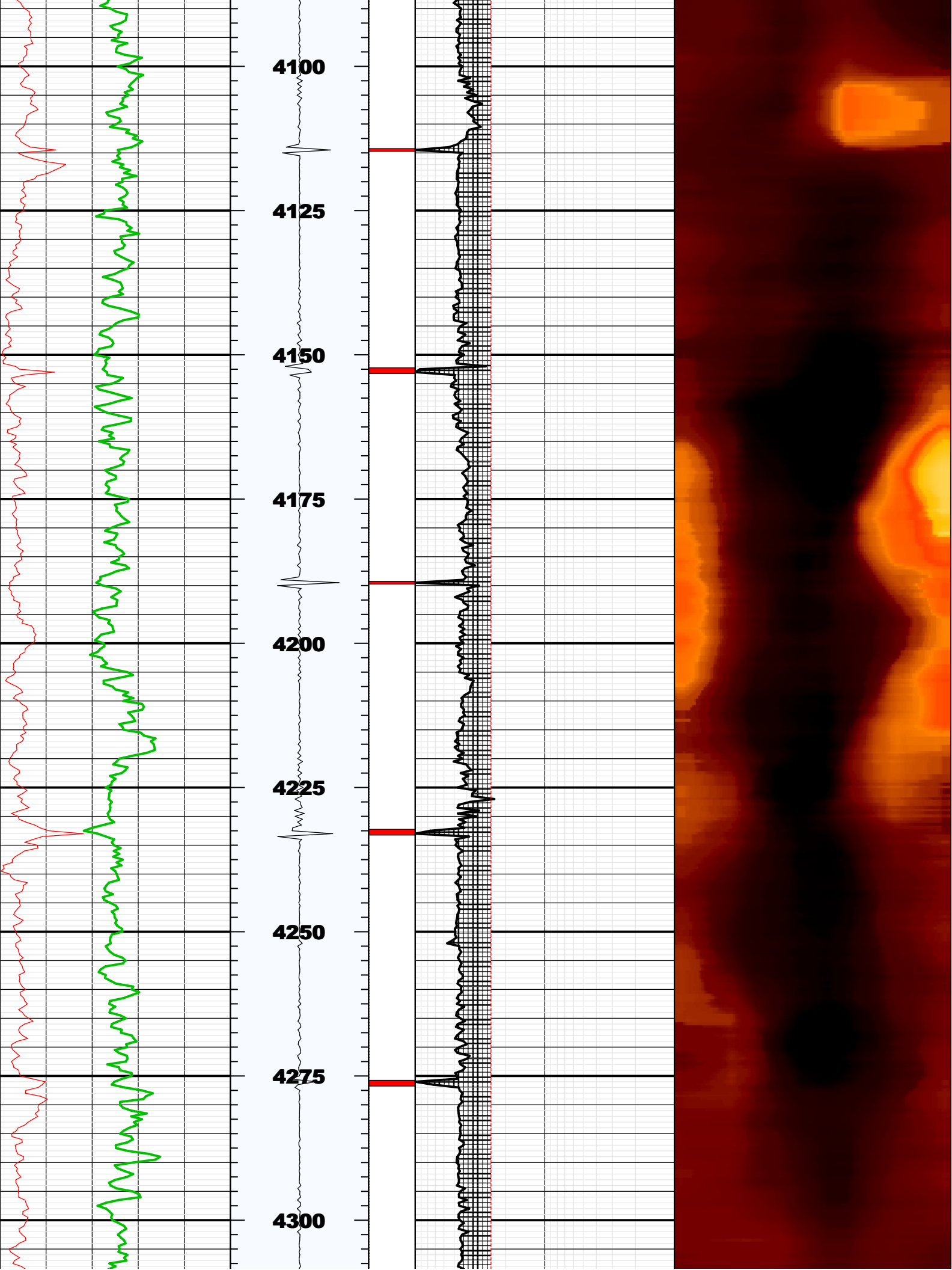


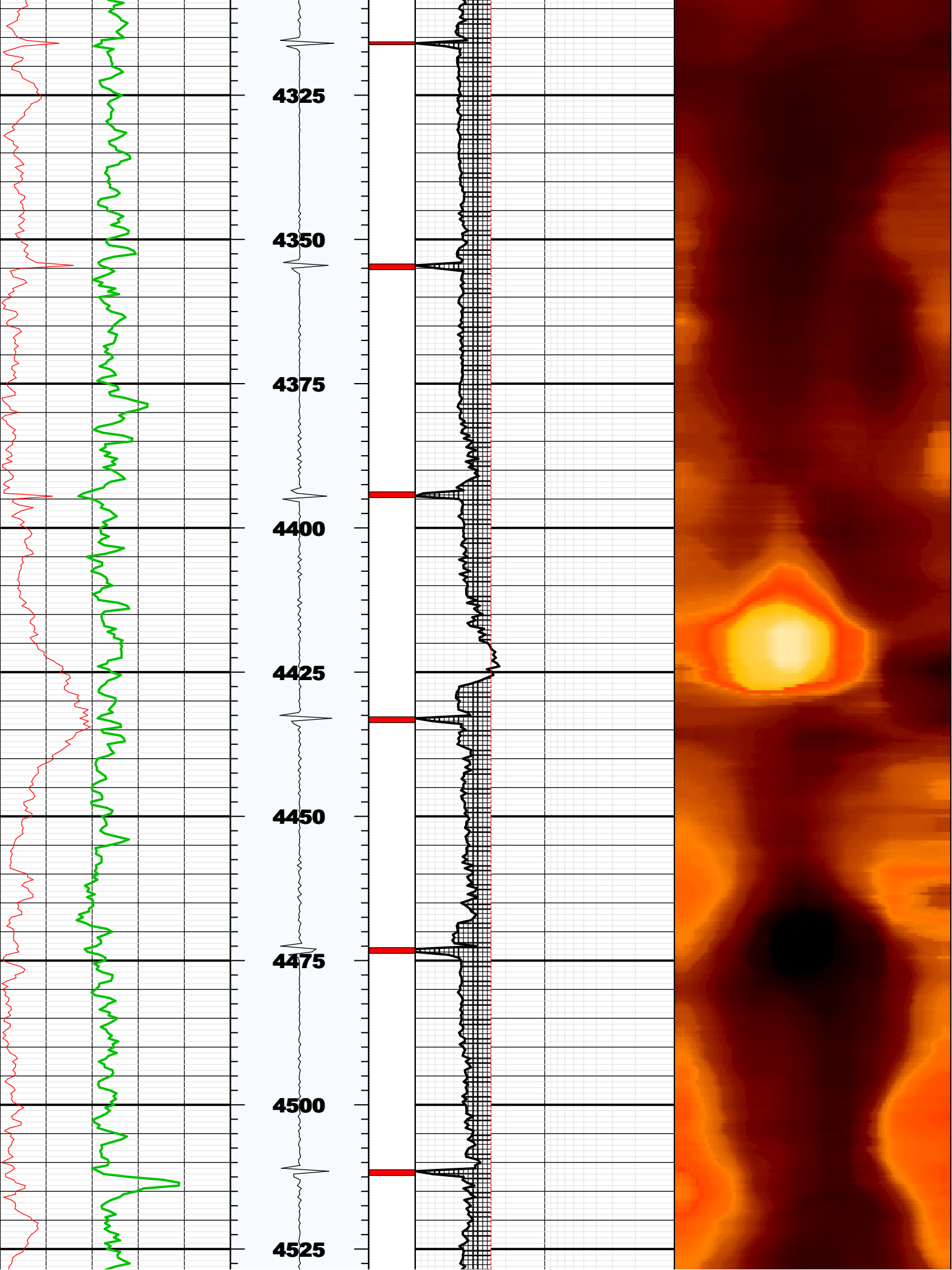


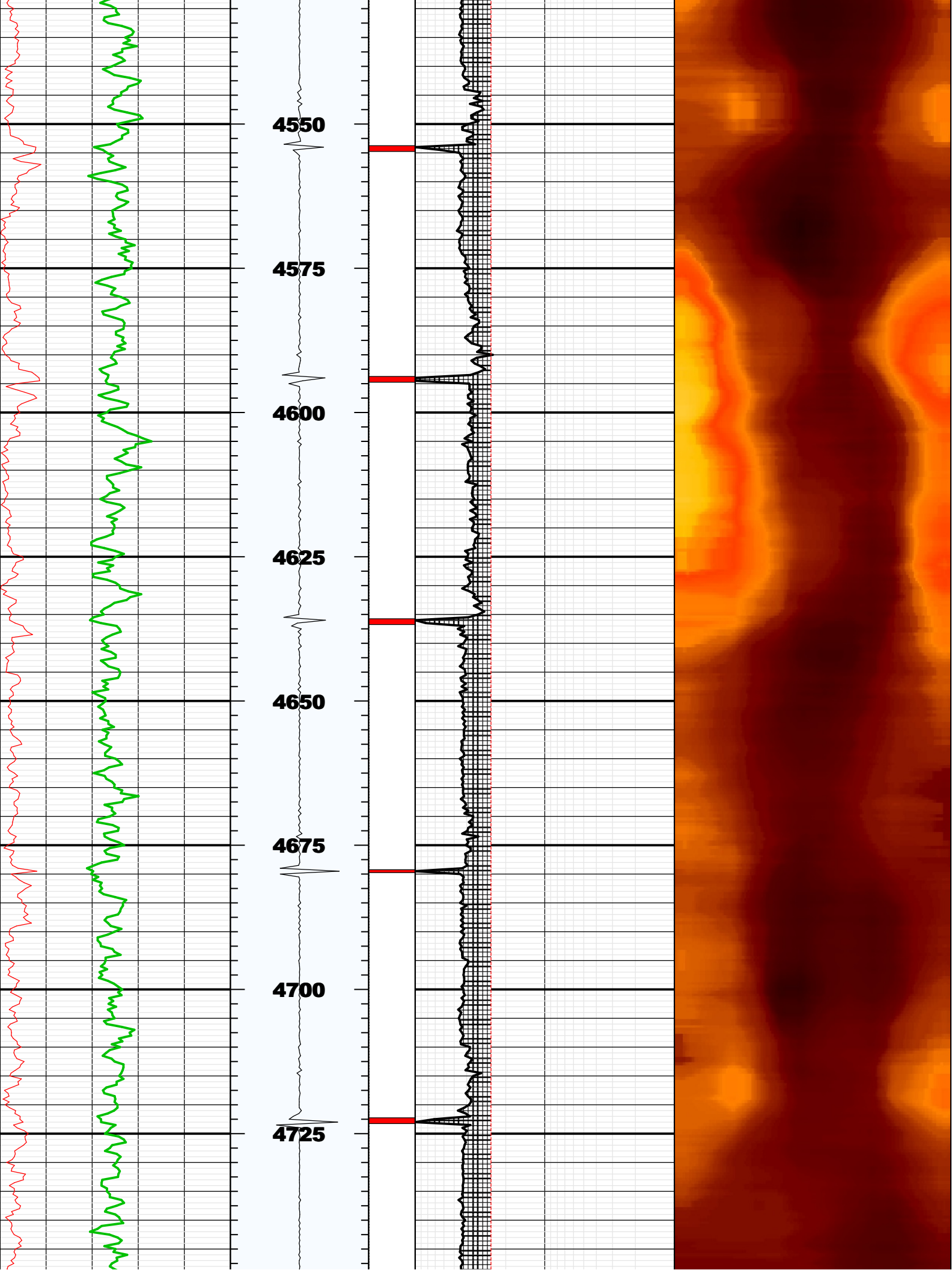


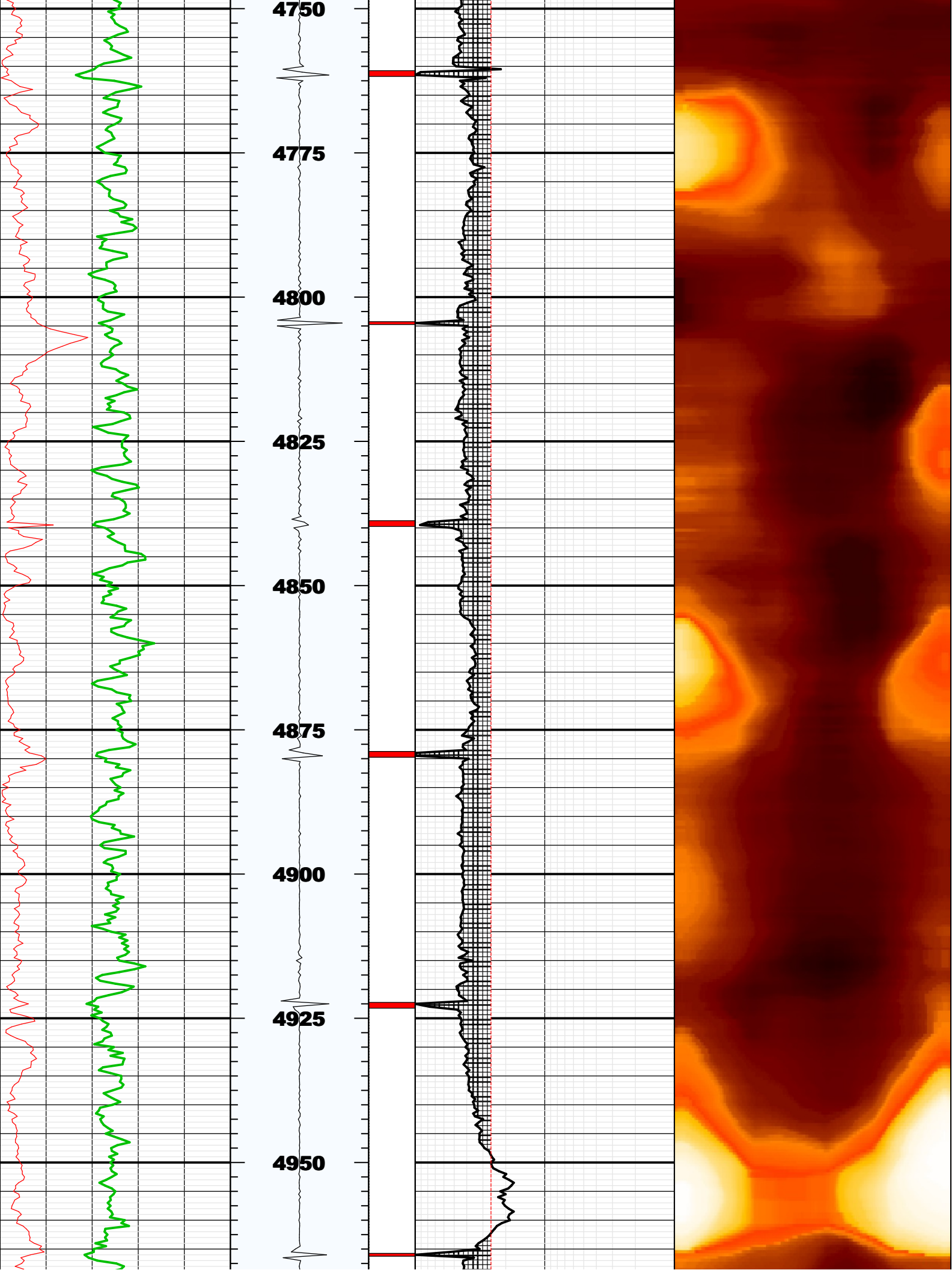


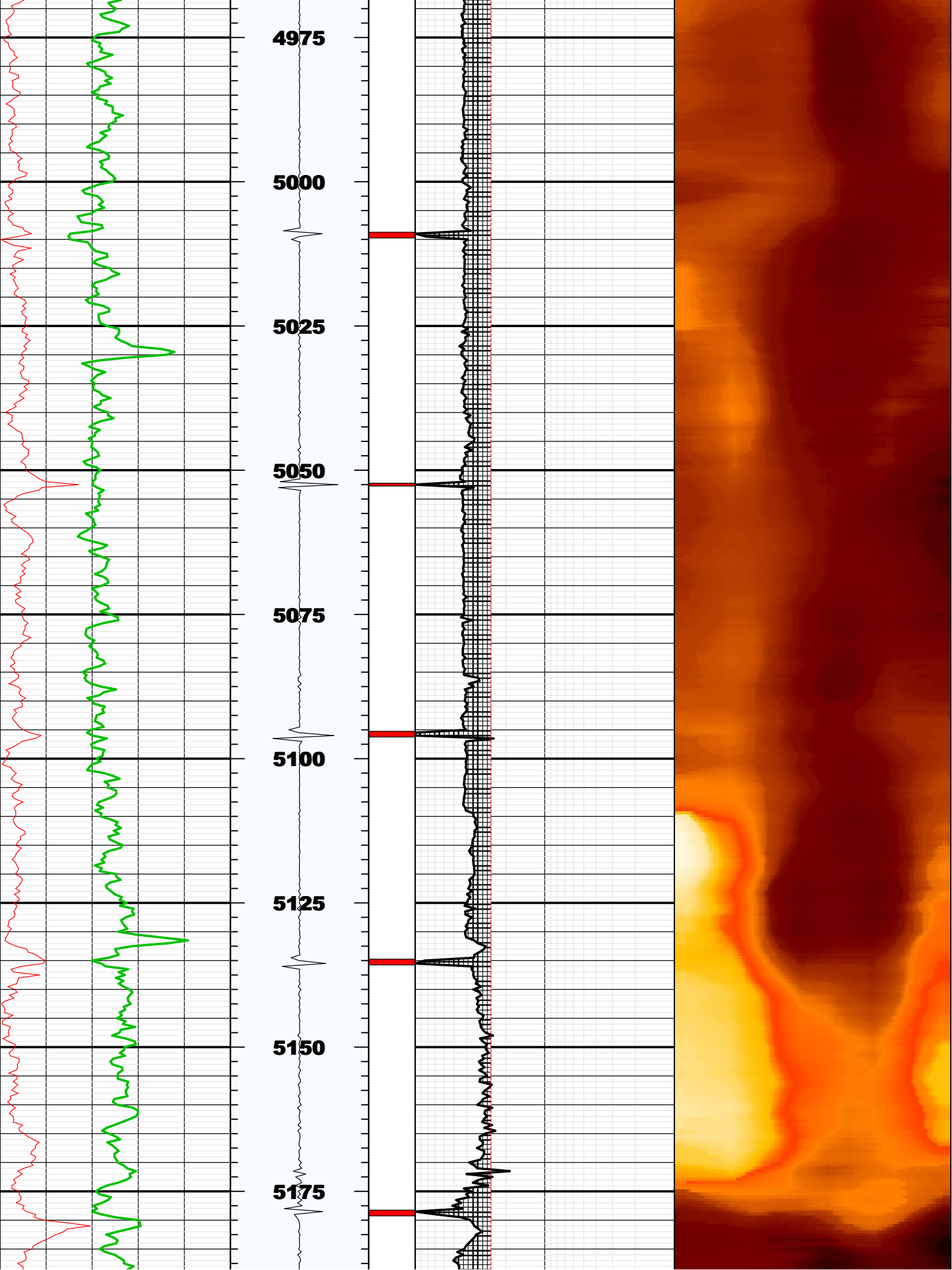


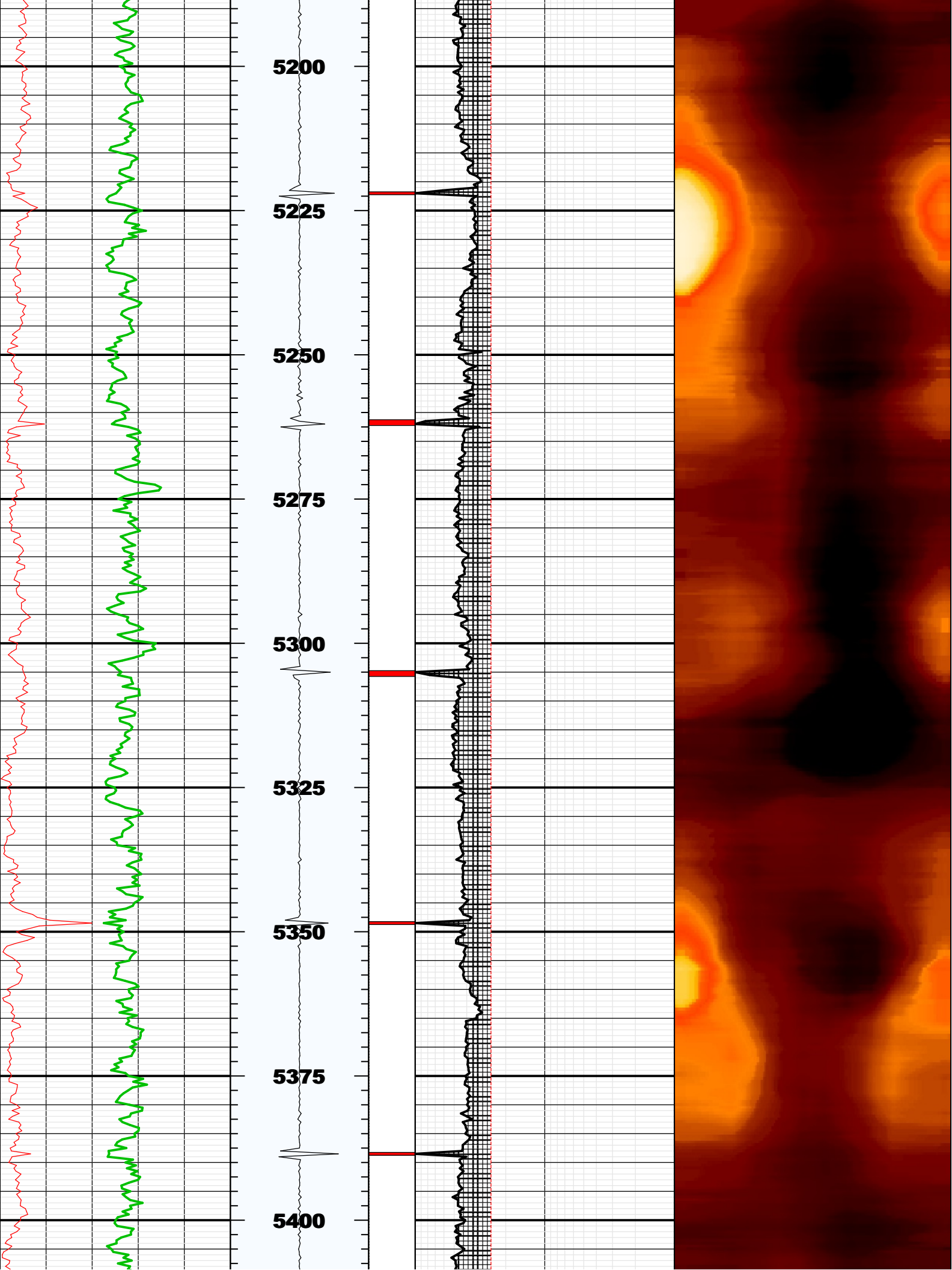


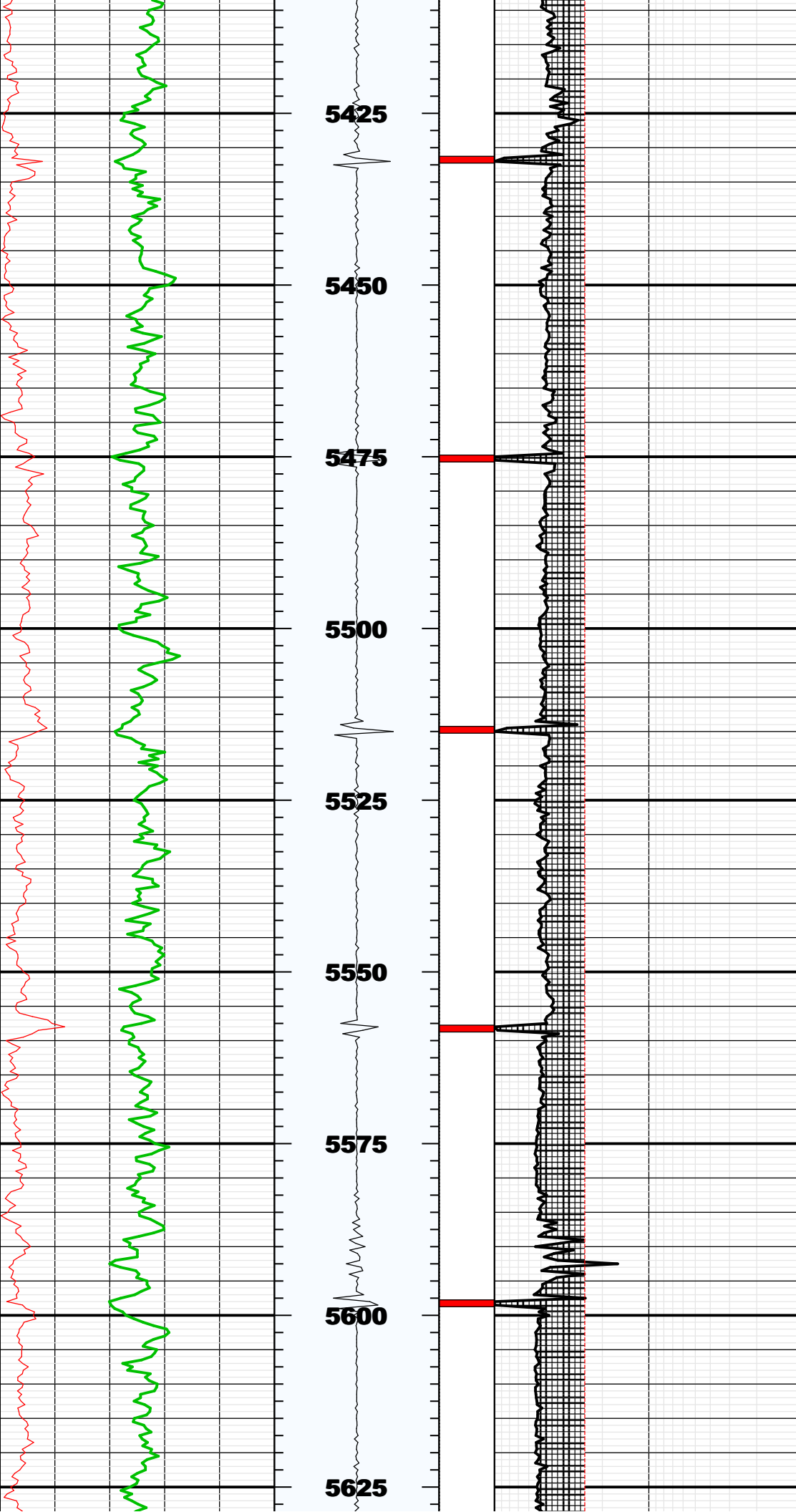


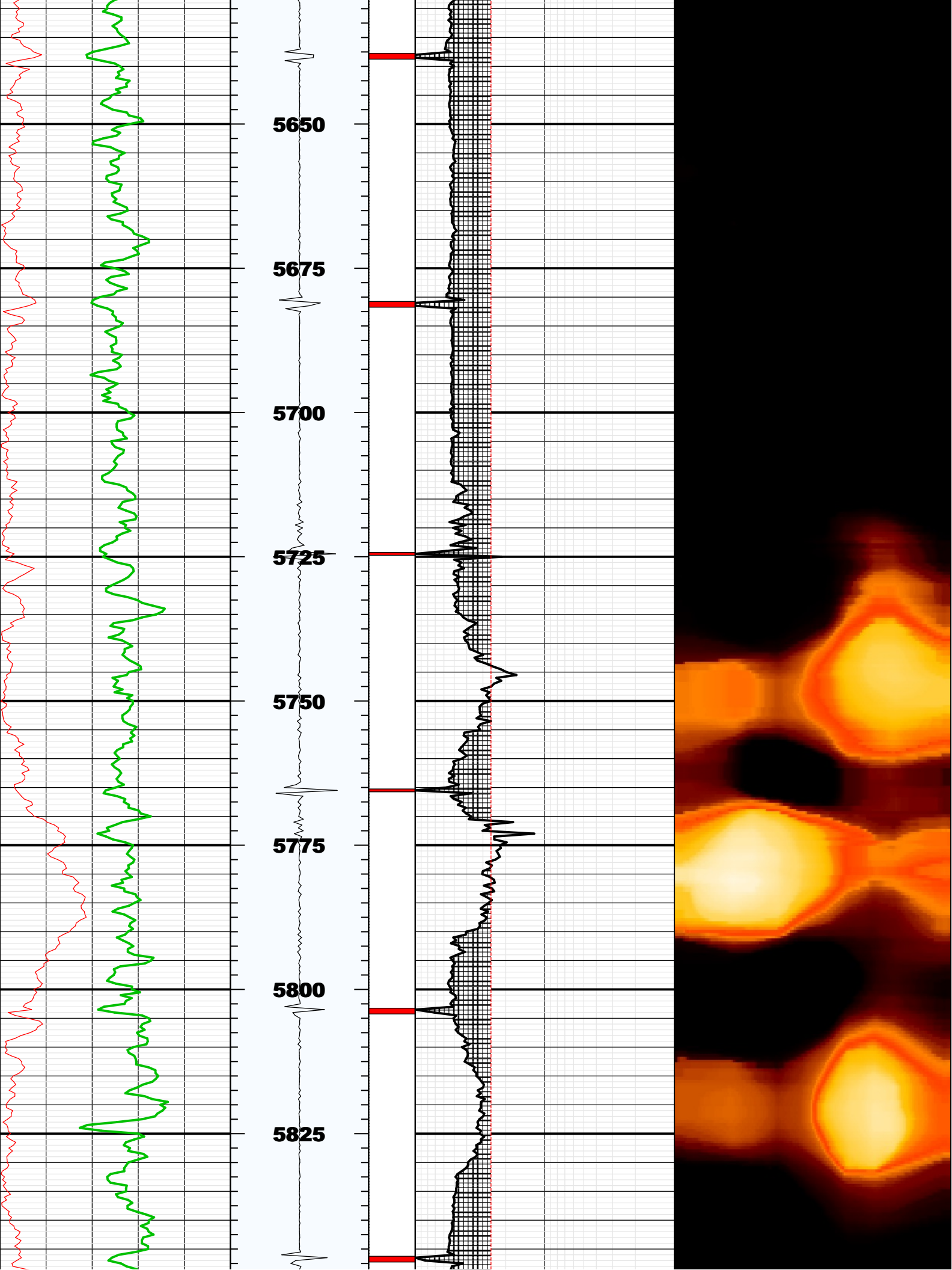


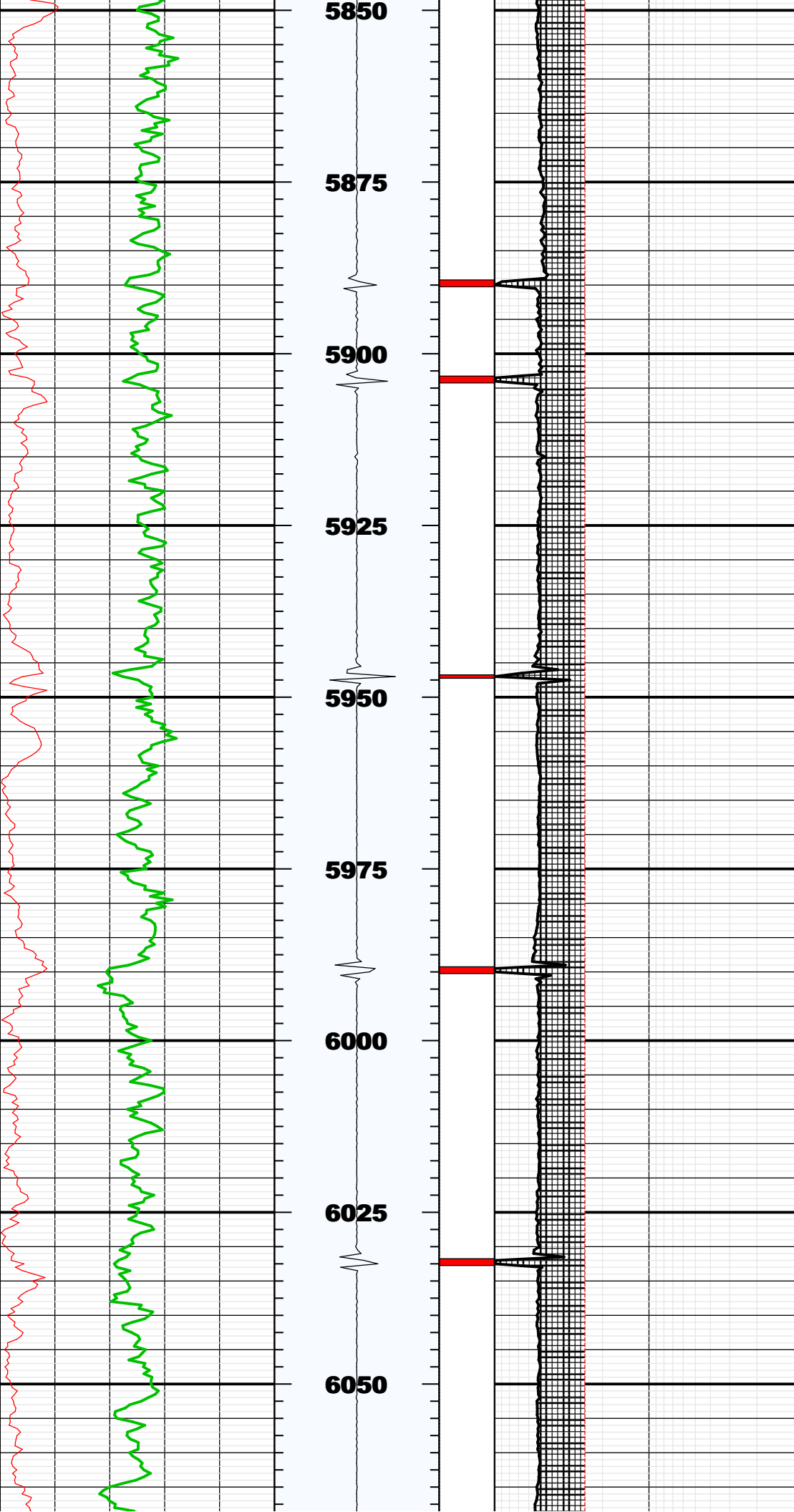


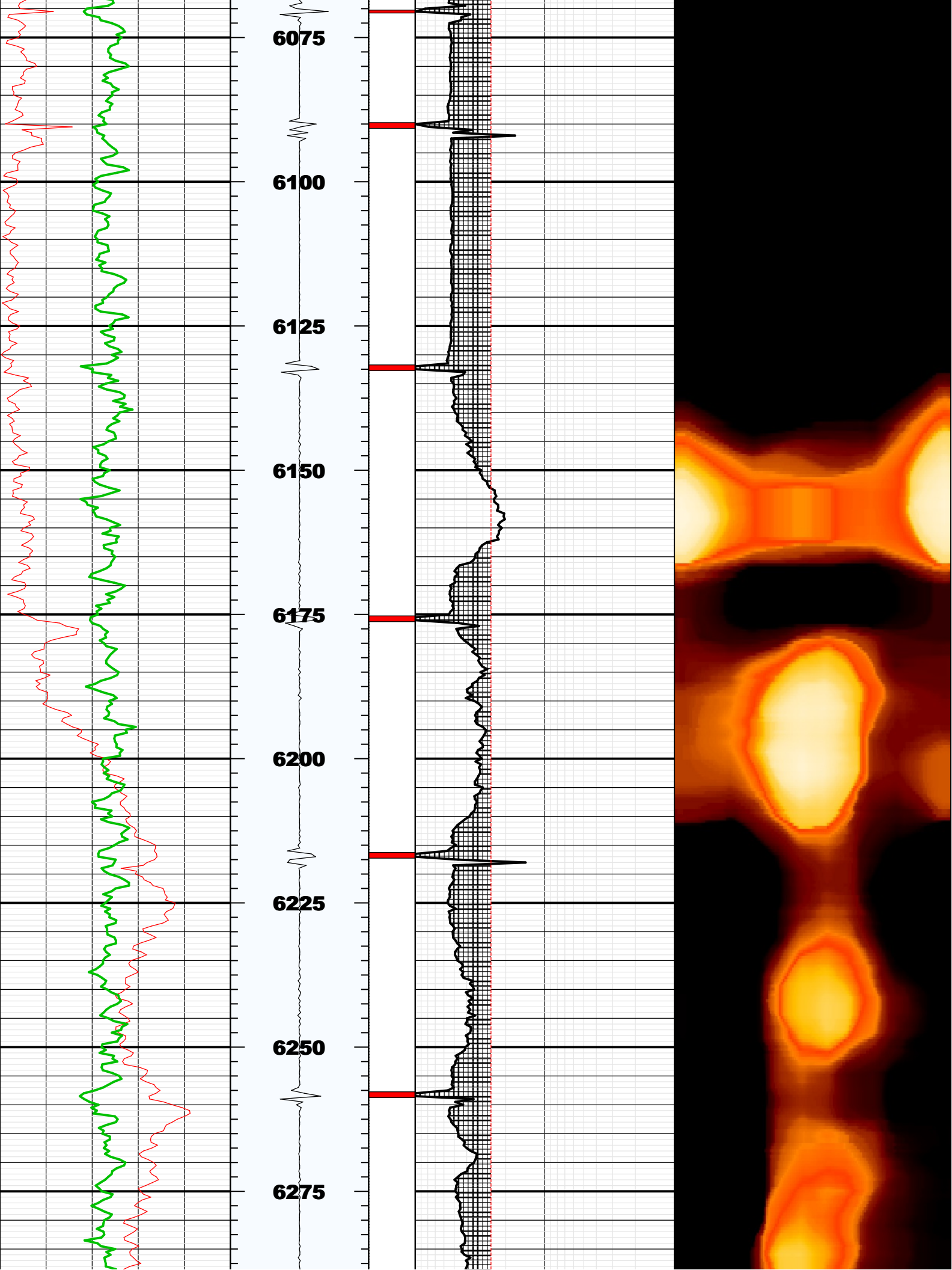


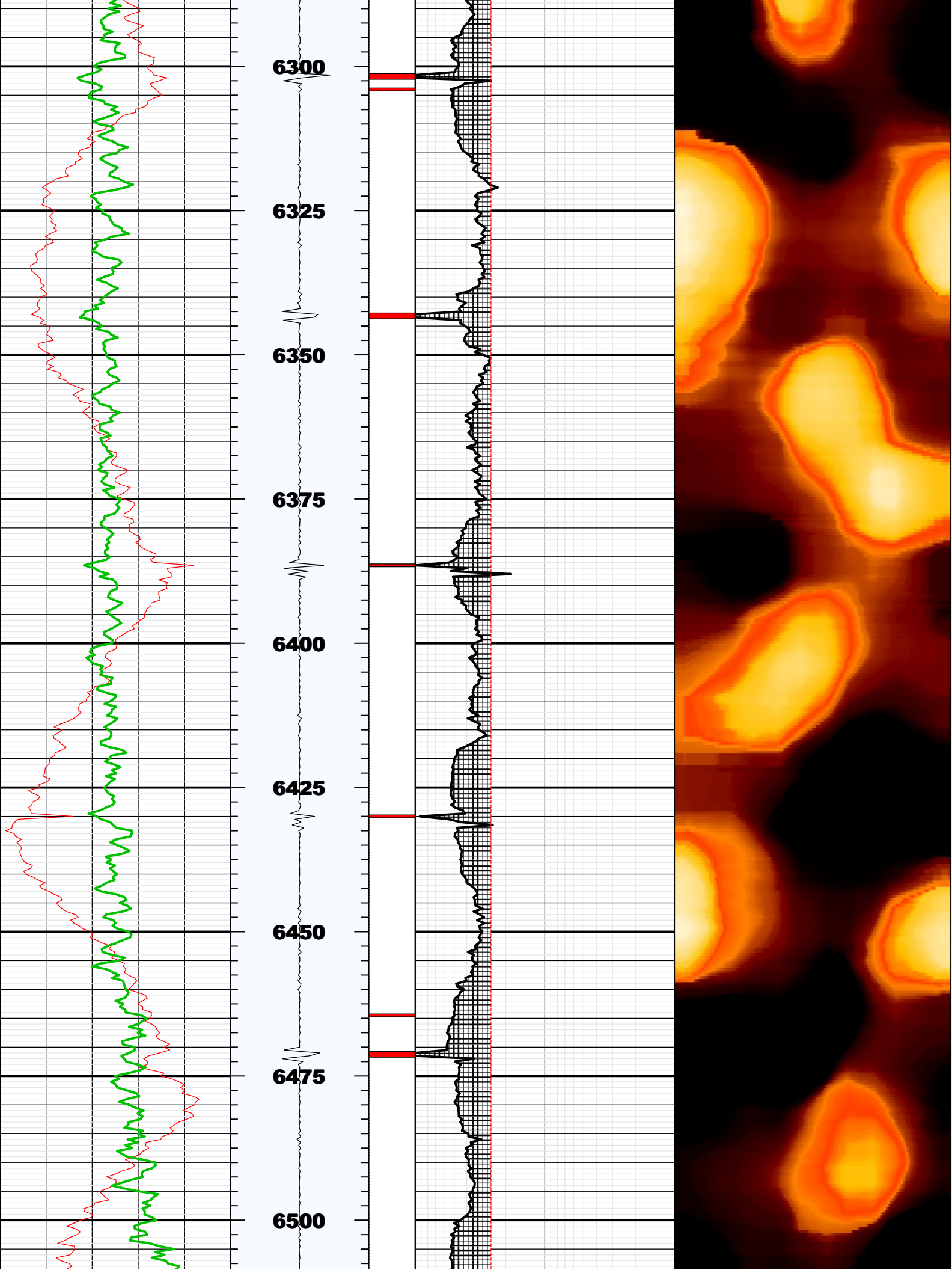


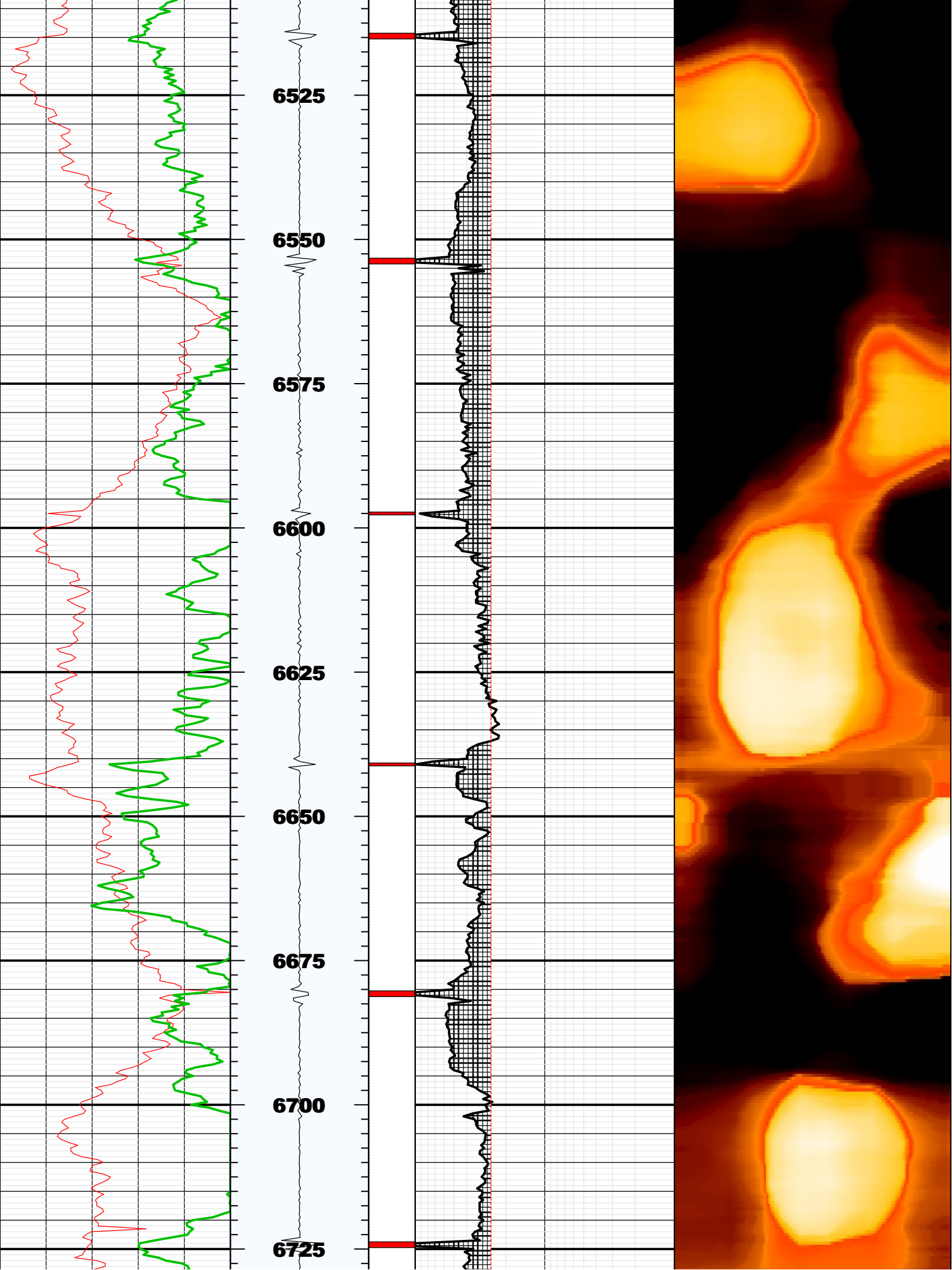


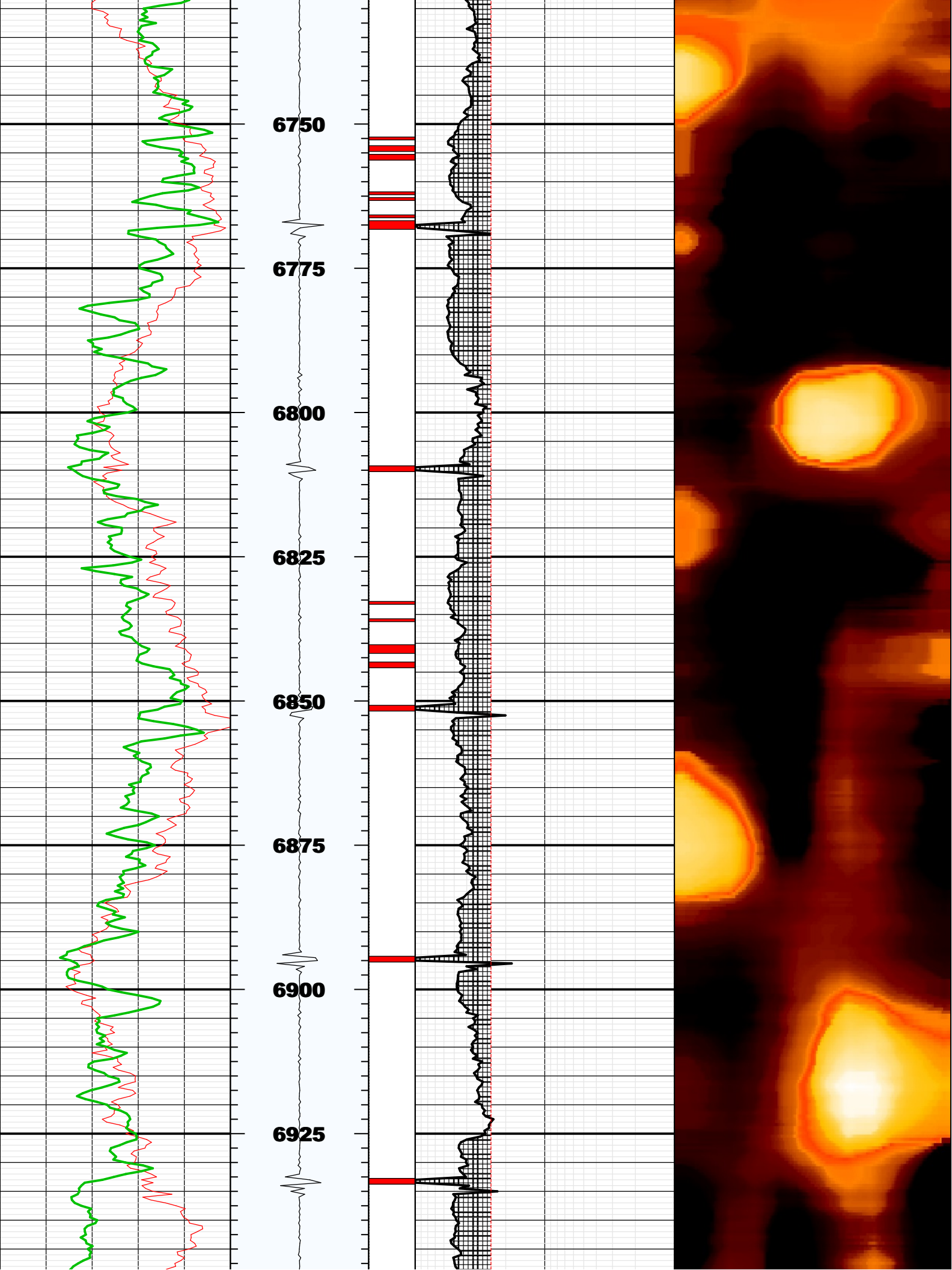


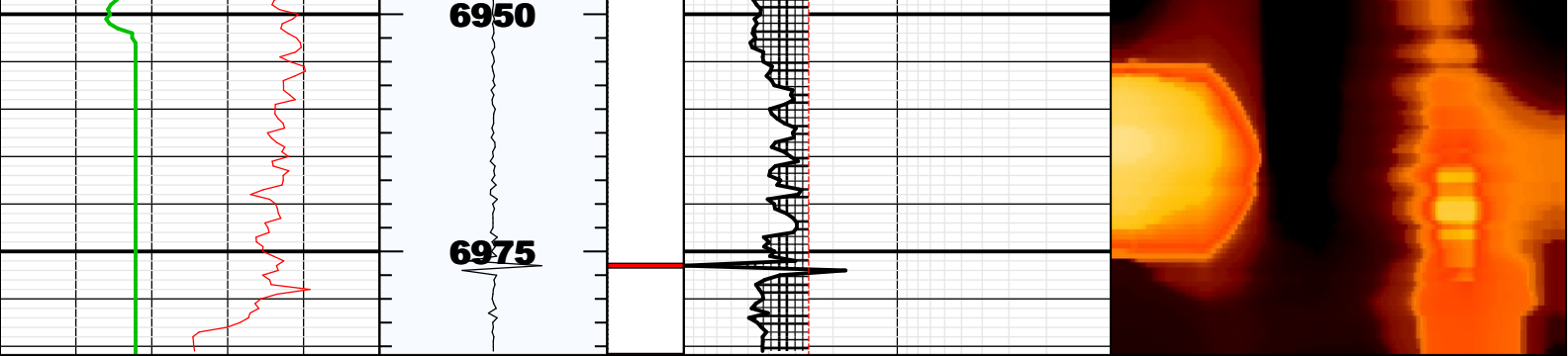








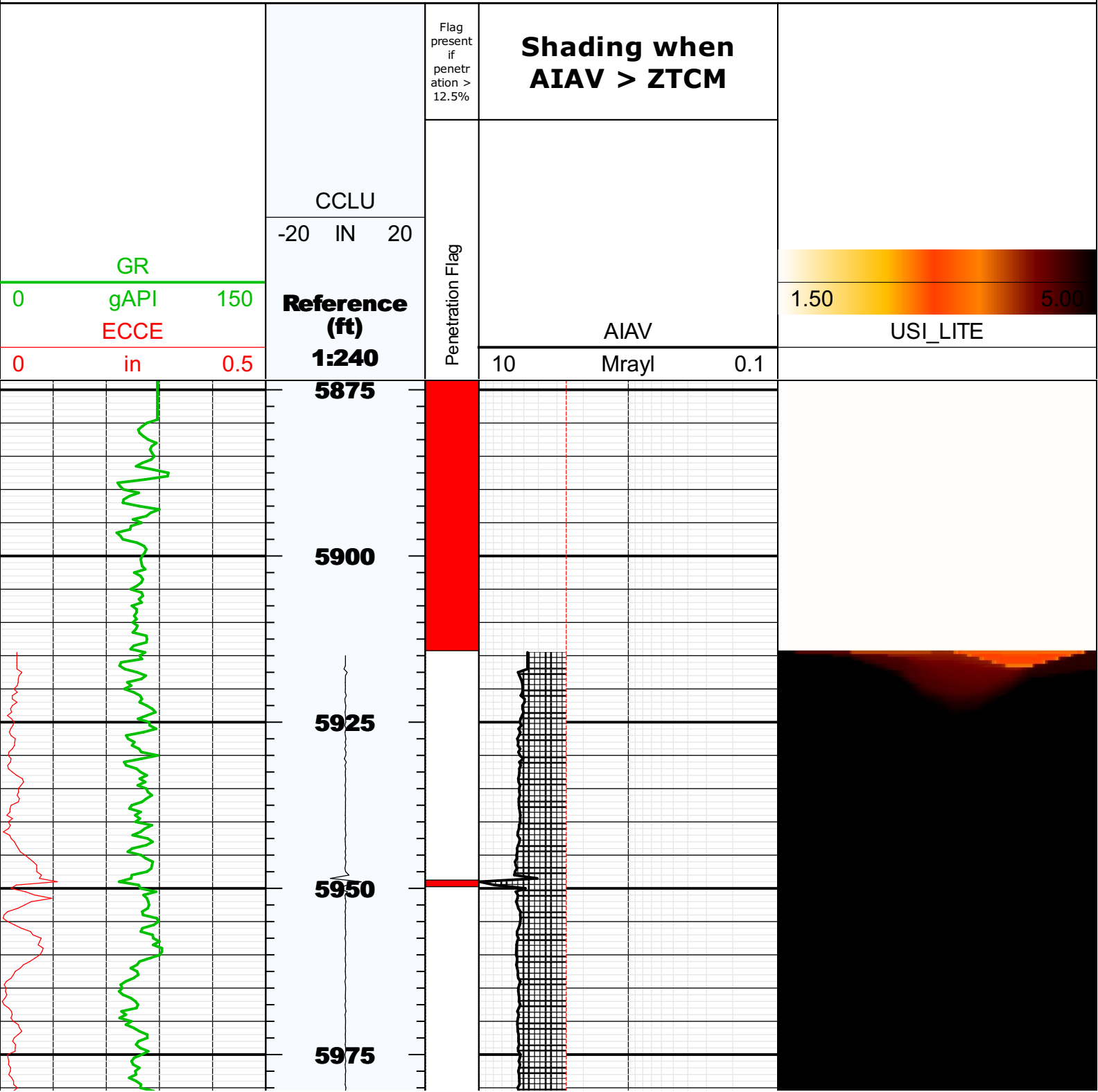


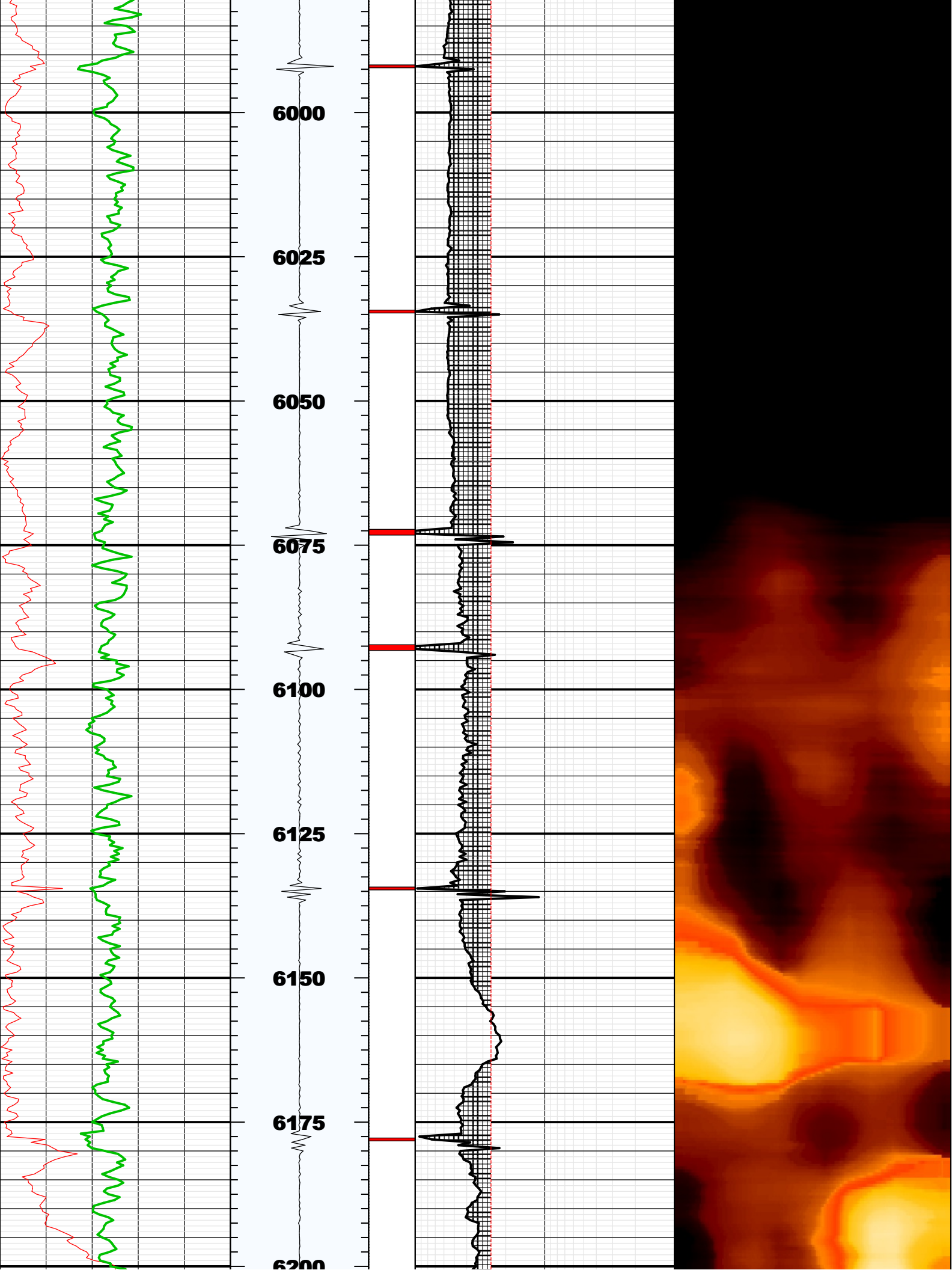


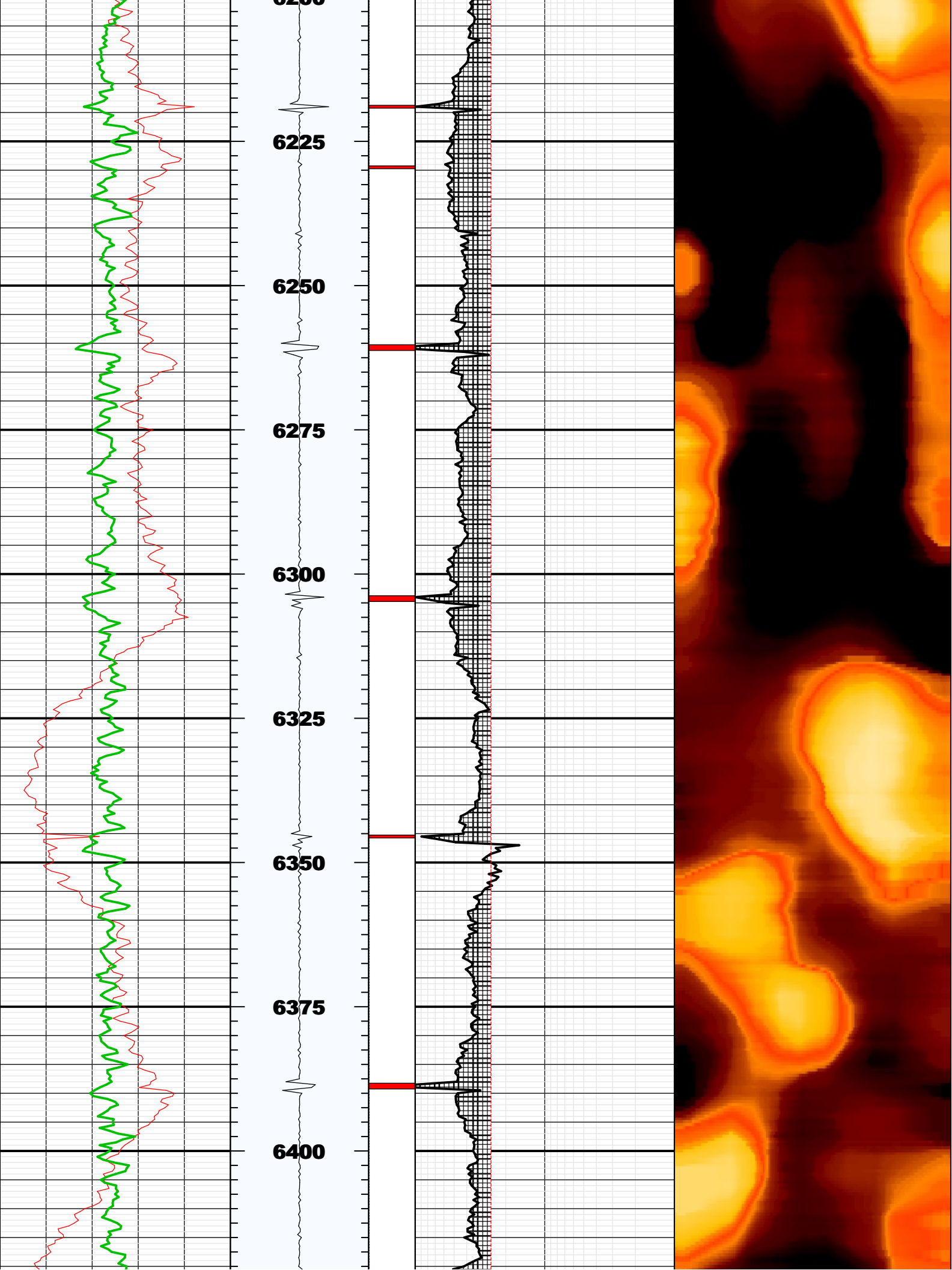
BS	8.75000	IN	Bit Size
CASG	P110		Casing Grade
CDIA	7.00000	IN	Casing Outer Diameter
CSID	6.27600	IN	Casing Inner Diameter
CSIZ	7.00000	IN	Current Casing Size
CWEI	26.00000	LB/F	Casing Weight
DFD	8.70000	LB/G	Drilling Fluid Density
DFVL	190.00000	US/F	Default Fluid Velocity
DO			
DOT	2.87400	IN	Diameter 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	30.00000	US	Window Begin Time
WINE	75.00000	US	Window End Time
ZCAS	46.25000	MRAY	Acoustic Impedance of Casing
ZINI	-1.00000	MRAY	Initial Estimate of Cement Impedance
ZMUD	1.70000	MRAY	Acoustic Impedance of Mud
ZTCM	2.60000	MRAY	Acoustic Impedance Threshold for Cement
ZTGS	0.30000	MRAY	Acoustic Impedance Threshold for Gas
WLEN	20.00000	US	T^3 Processing Length

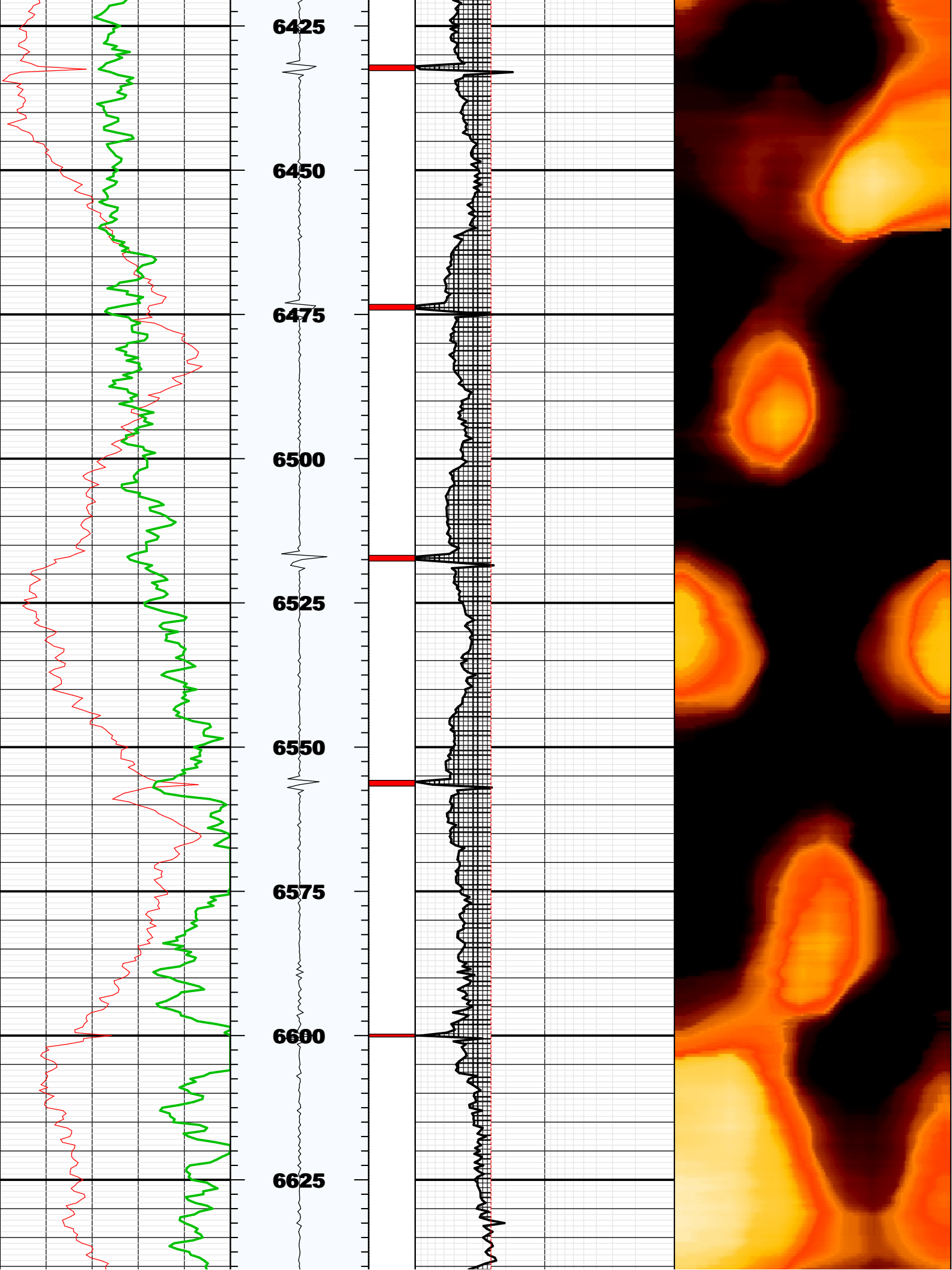
Repeat Pass

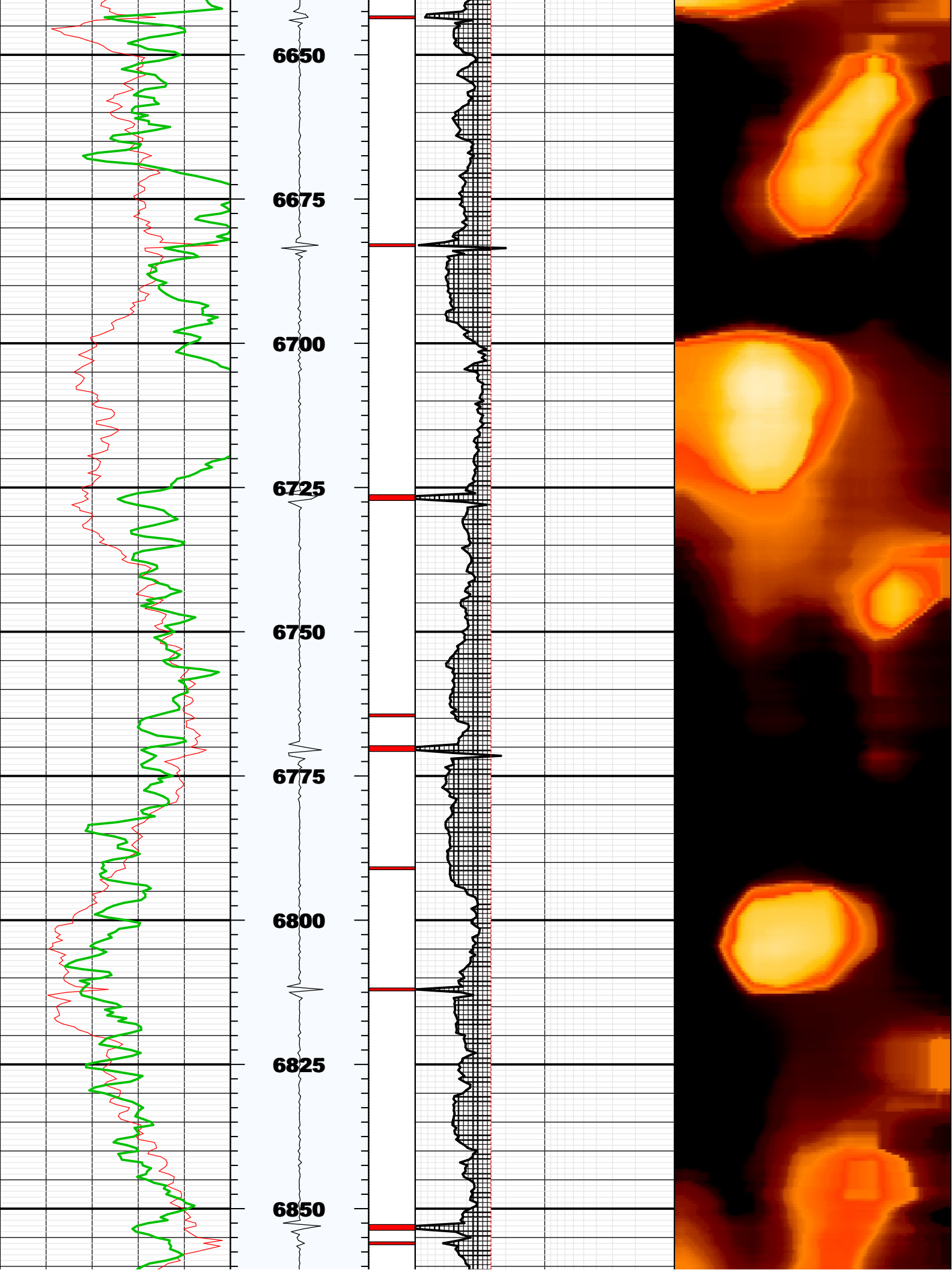
Company: Noble Energy Inc
Well: COLT A13-638
Field: WATTENBERG

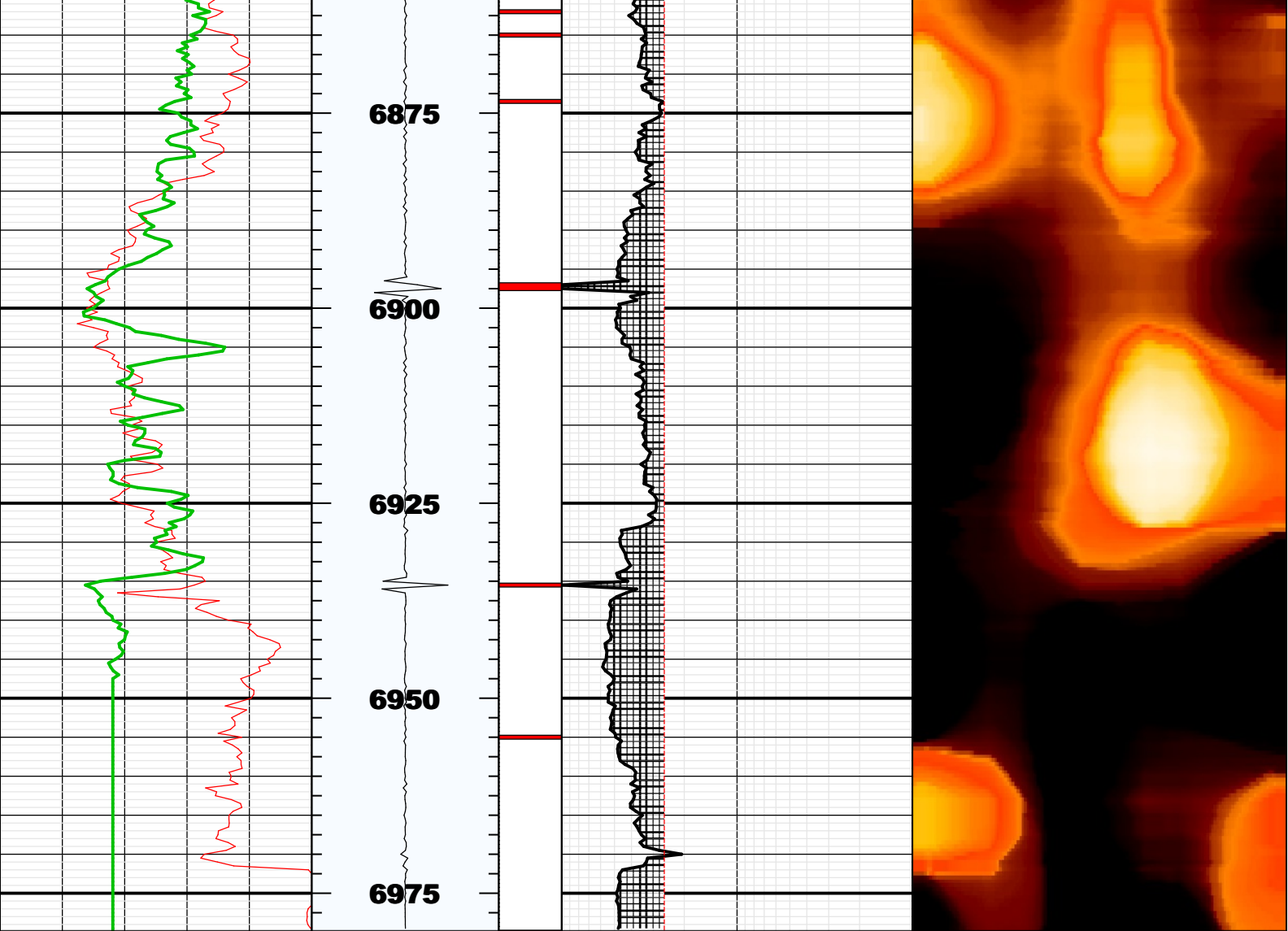












Fluid Properties Used for Main Pass

