

Company: Noble Energy Inc

Well: Gradishar State LD11-73-1AHN
Field: Wildcat
County: Weld State: Colorado

County: Weld		USI-LITE (2500 psi)					
Field: Wildcat							
Location: SESE Sec.2 T9N R58W							
Well: Gradishar State LD11-73-1AHN							
Company: Noble Energy Inc							
LOCATION		Permanent Datum: Log Measured From: Drilling Measured From:	GL KB KB	Elev: K.B. G.L. D.F. 4685.0 F 4661.0 F 4684.0 F			
API Serial No. 05-123-39809					Section 2	Township 9N	Range 58W
Logging Date 27-Jan-2015							
Run Number Run 1							
Depth Driller		5964.0 F					
Schlumberger Depth		5964.0 F					
Bottom Log Interval		5815.0 F					
Top Log Interval		15.0 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		1231.0 F					
To		5964.0 F					
Casing Size		7.00 IN					
Weight		26.00 LB/F					
Grade		P110					
From		0.0 F					
To		5963.2 F					
Max Recorded Temp		213.0					
Logger on bottom (date)		27-Jan-2015					
Location		Fl. Morgan CO					
Recorded By		Aleksai 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: 1109 Calibration Date: Calibrator Serial Number: Number Of Calibration Points: Calibration RMS: Calibration Peak Error:	Serial Number: Length: 14500.00000

DISCLAIMER

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Repeat pass logged with 0 psi, Main pass was done under 2500 psi

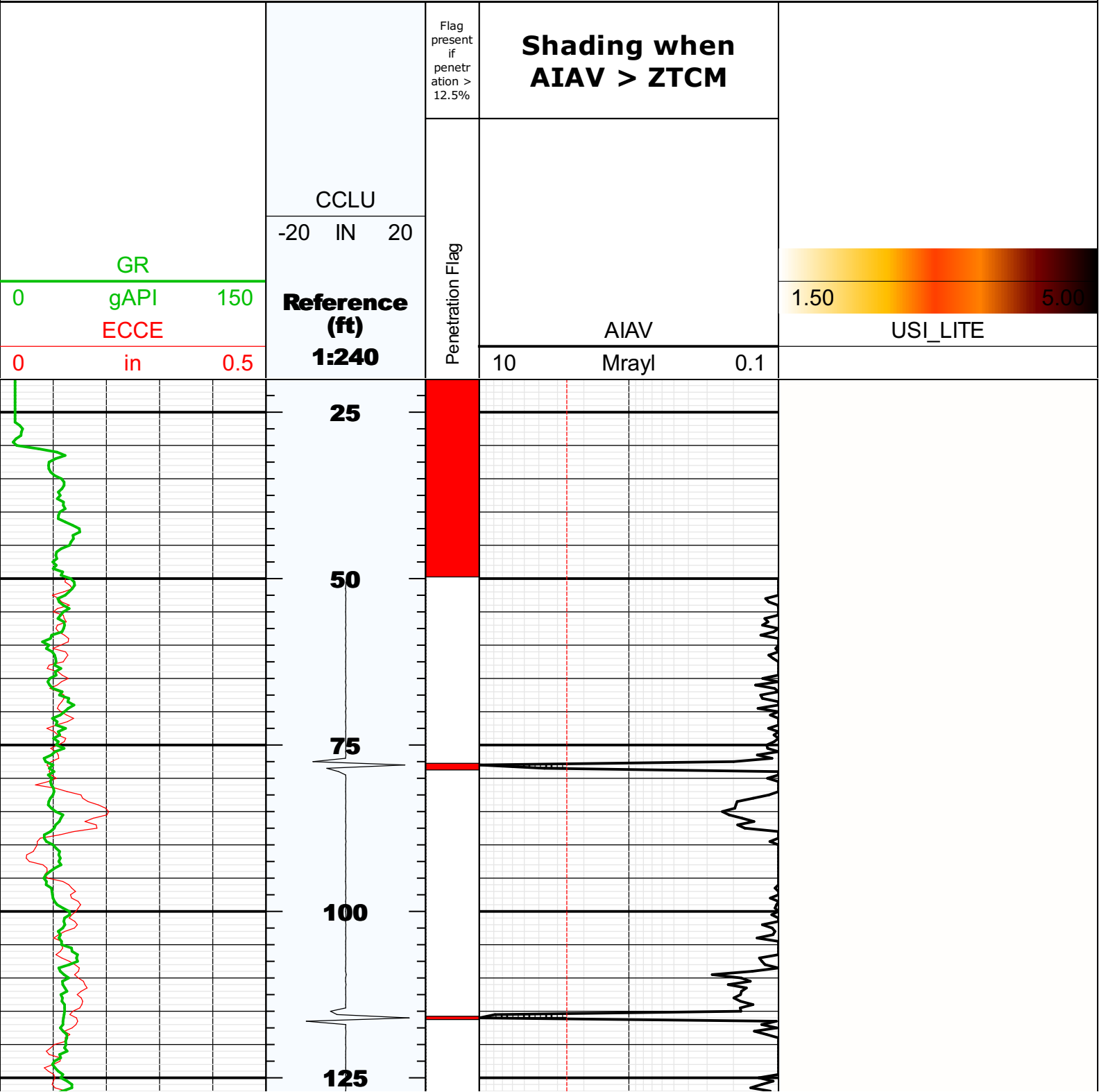
Top of cement seen at 1175'.

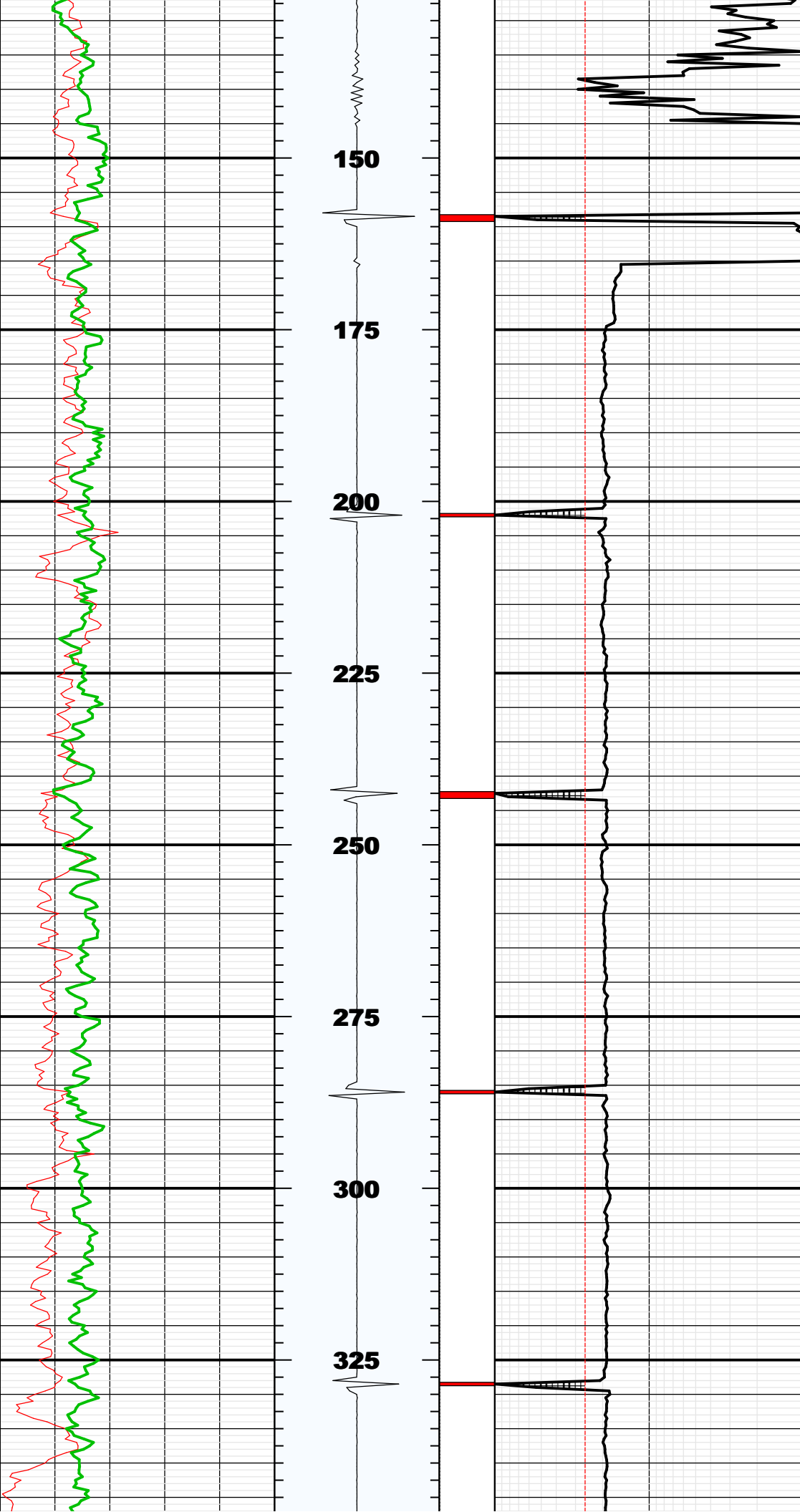
Log started 30 ft above top of the liner (5815 ft)

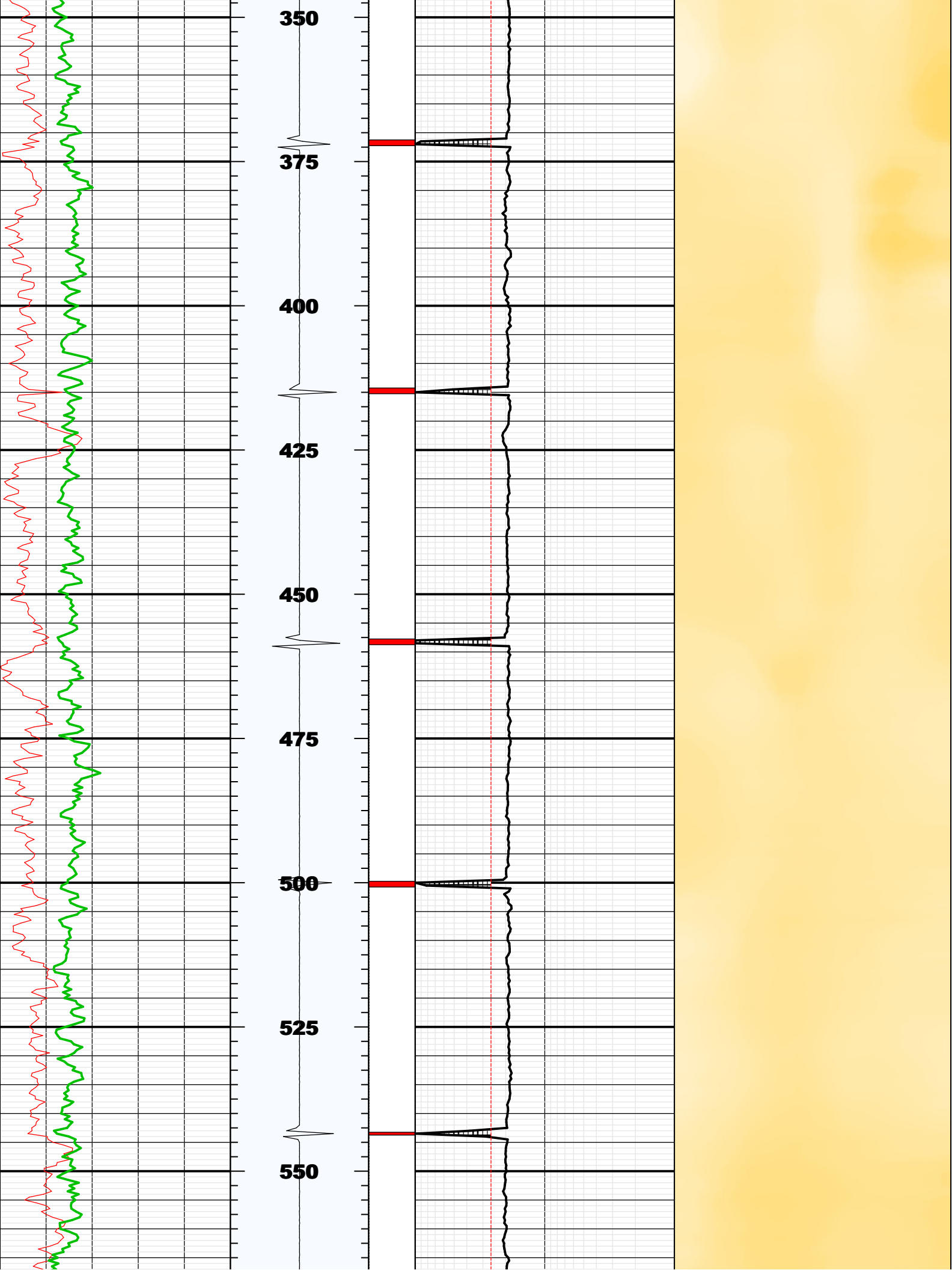
Temperature measured at 213 degF (measured at depth).

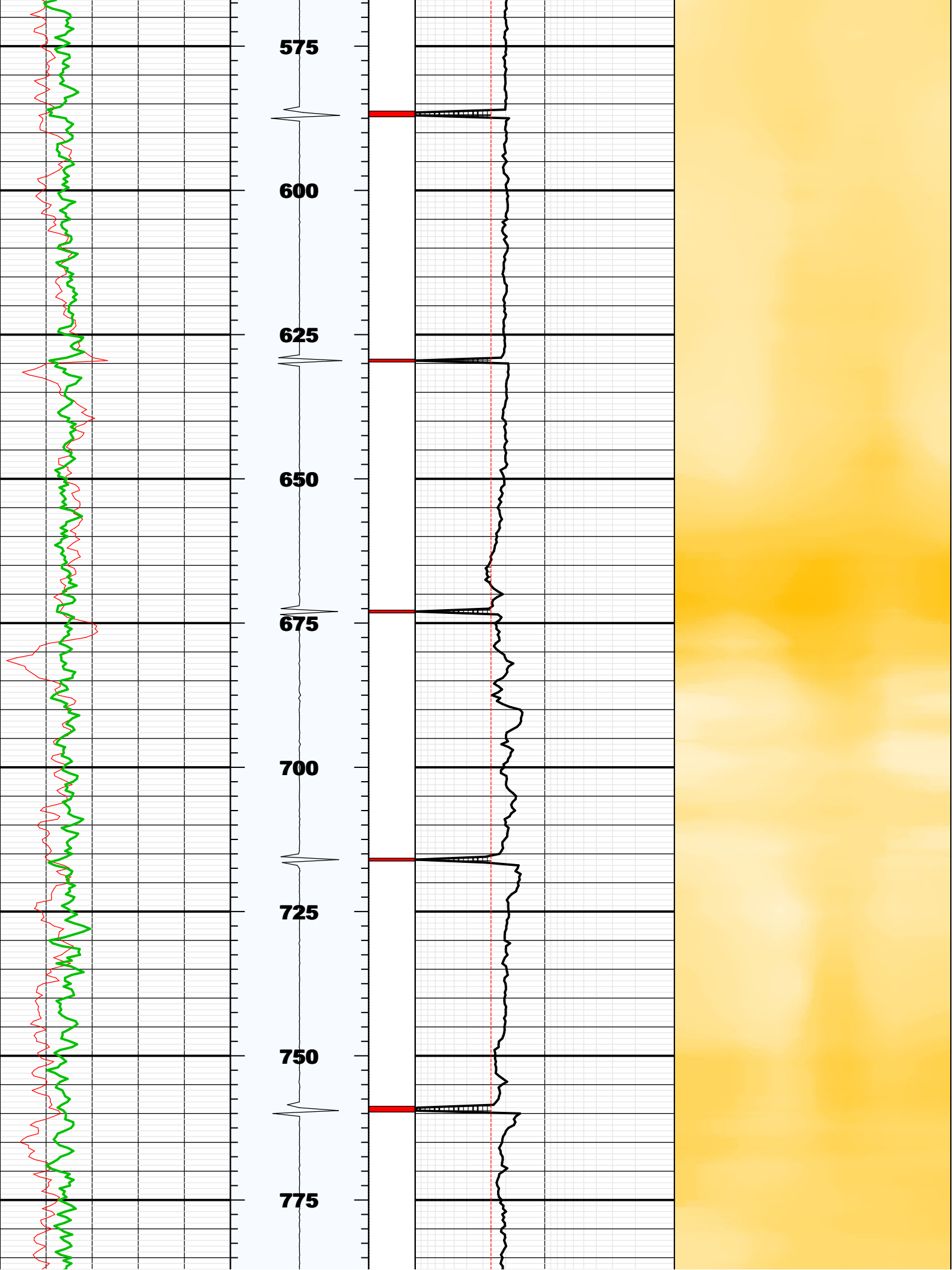
Main Pass

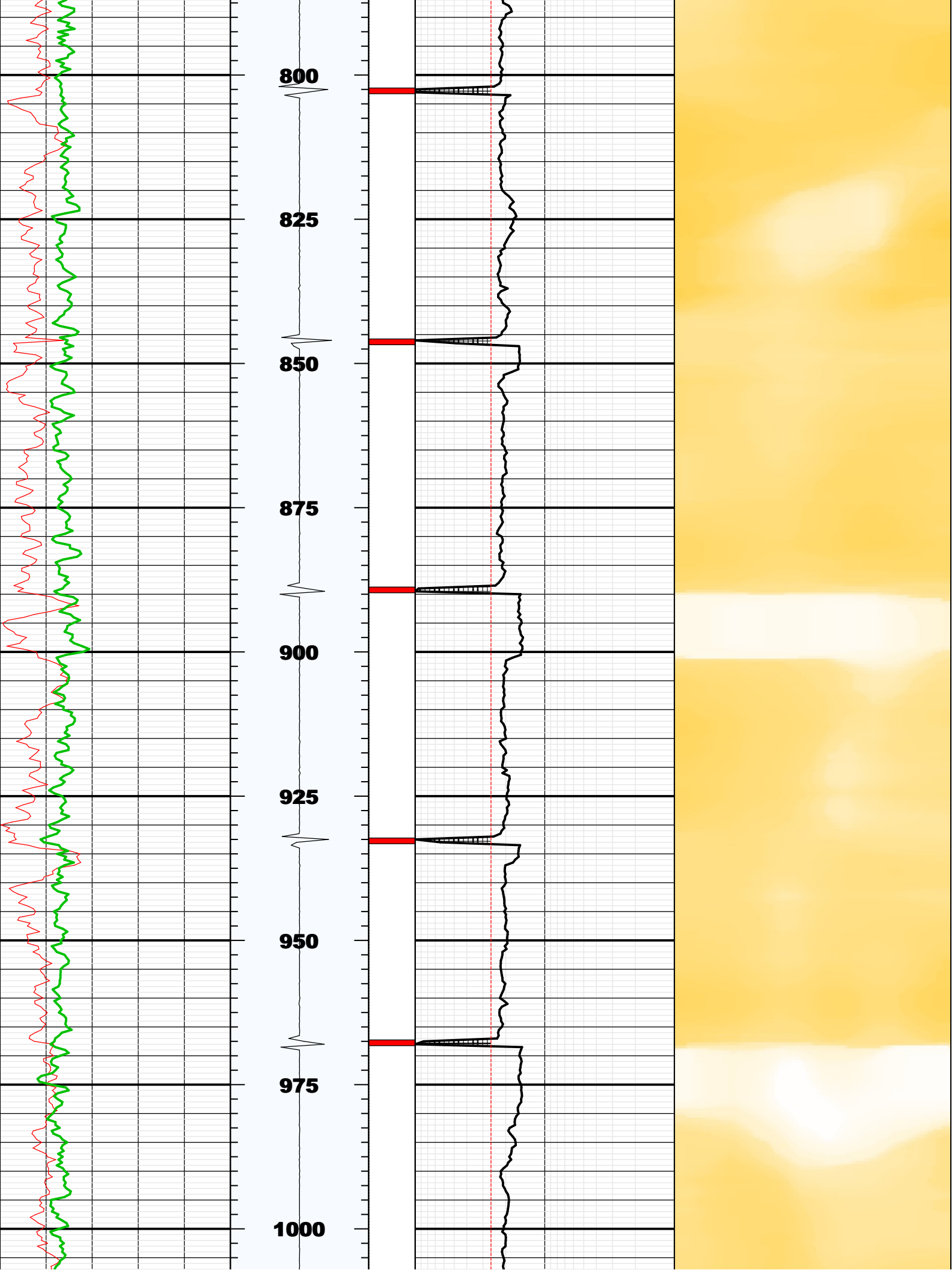
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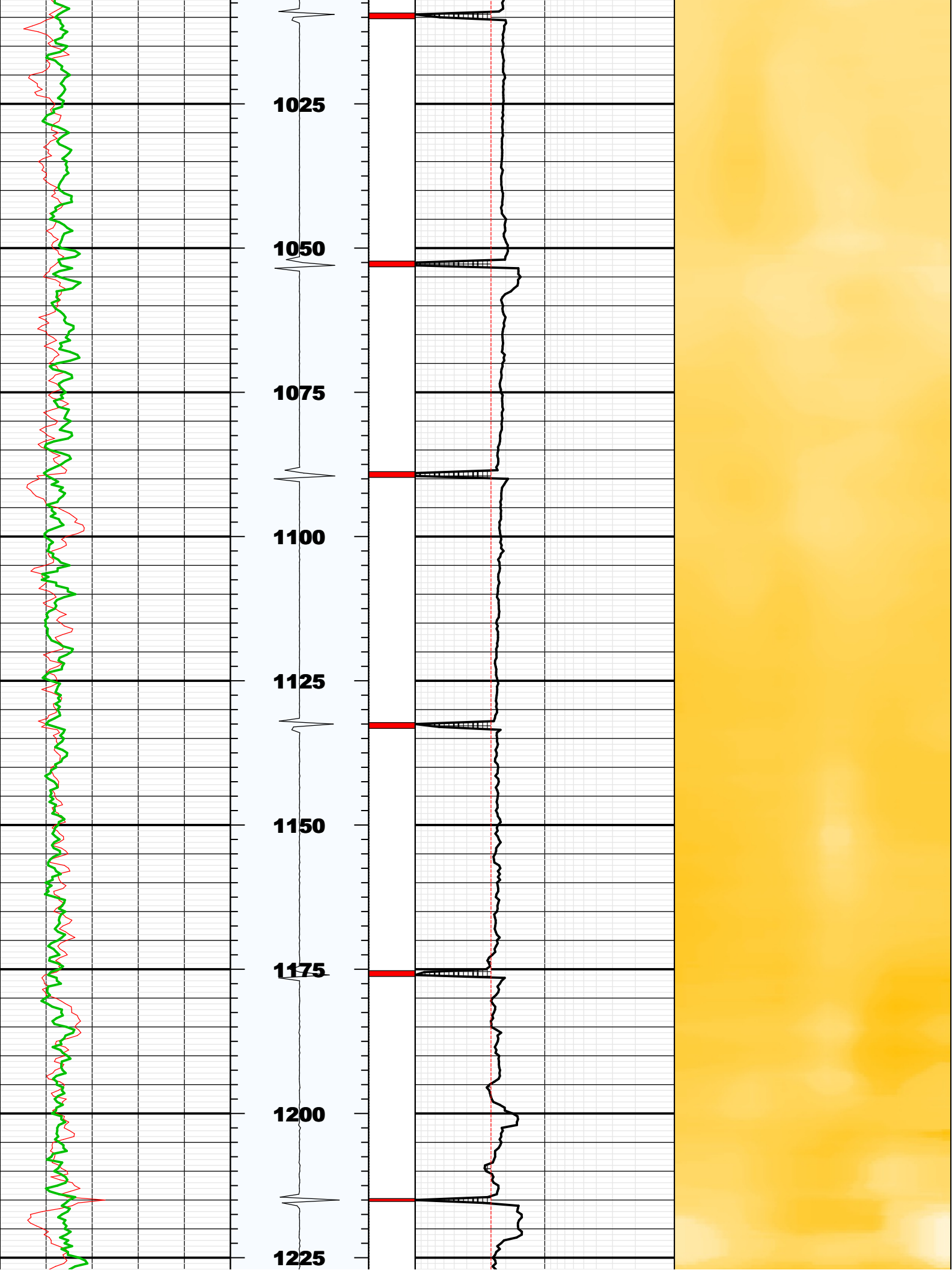


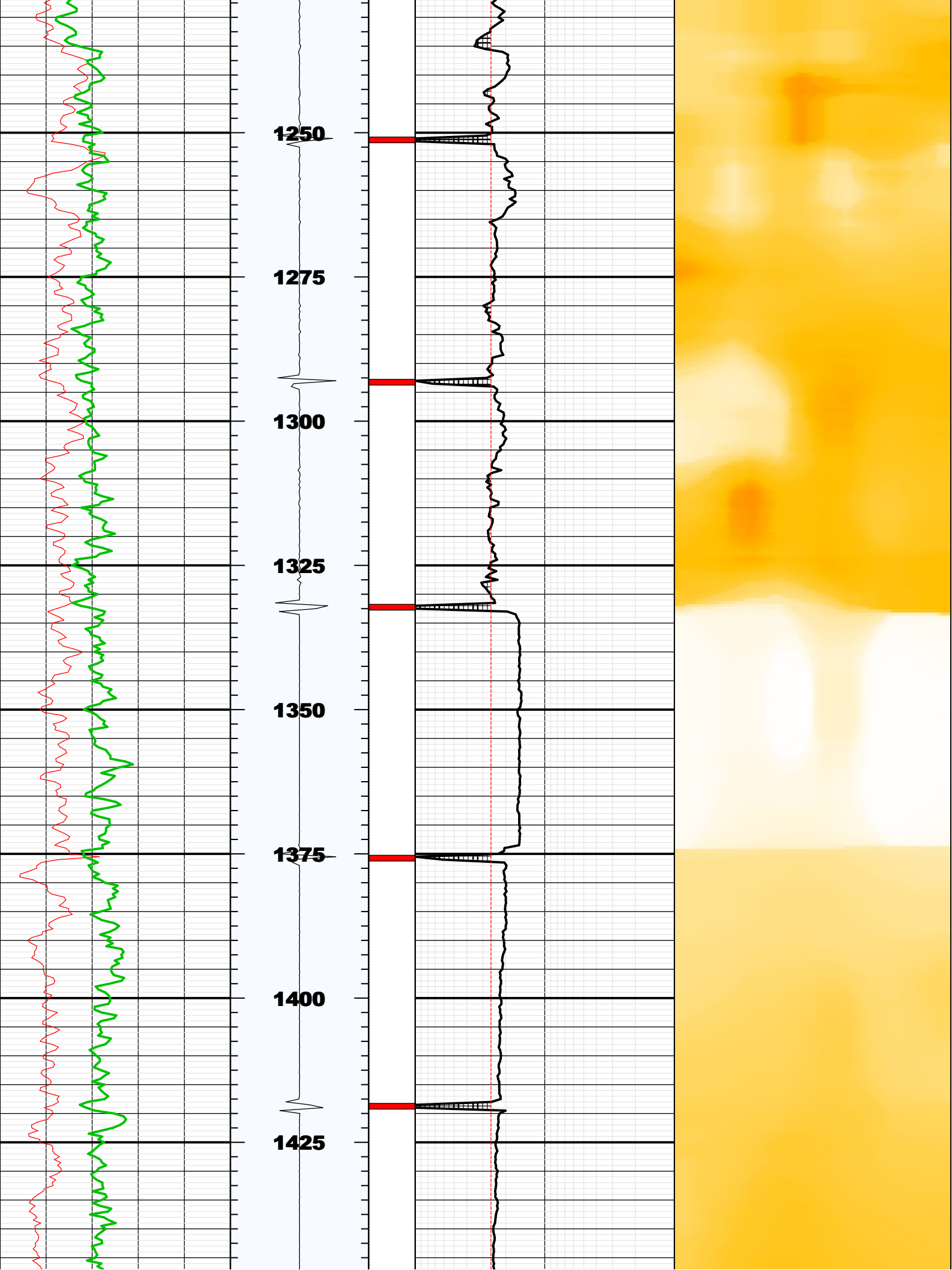


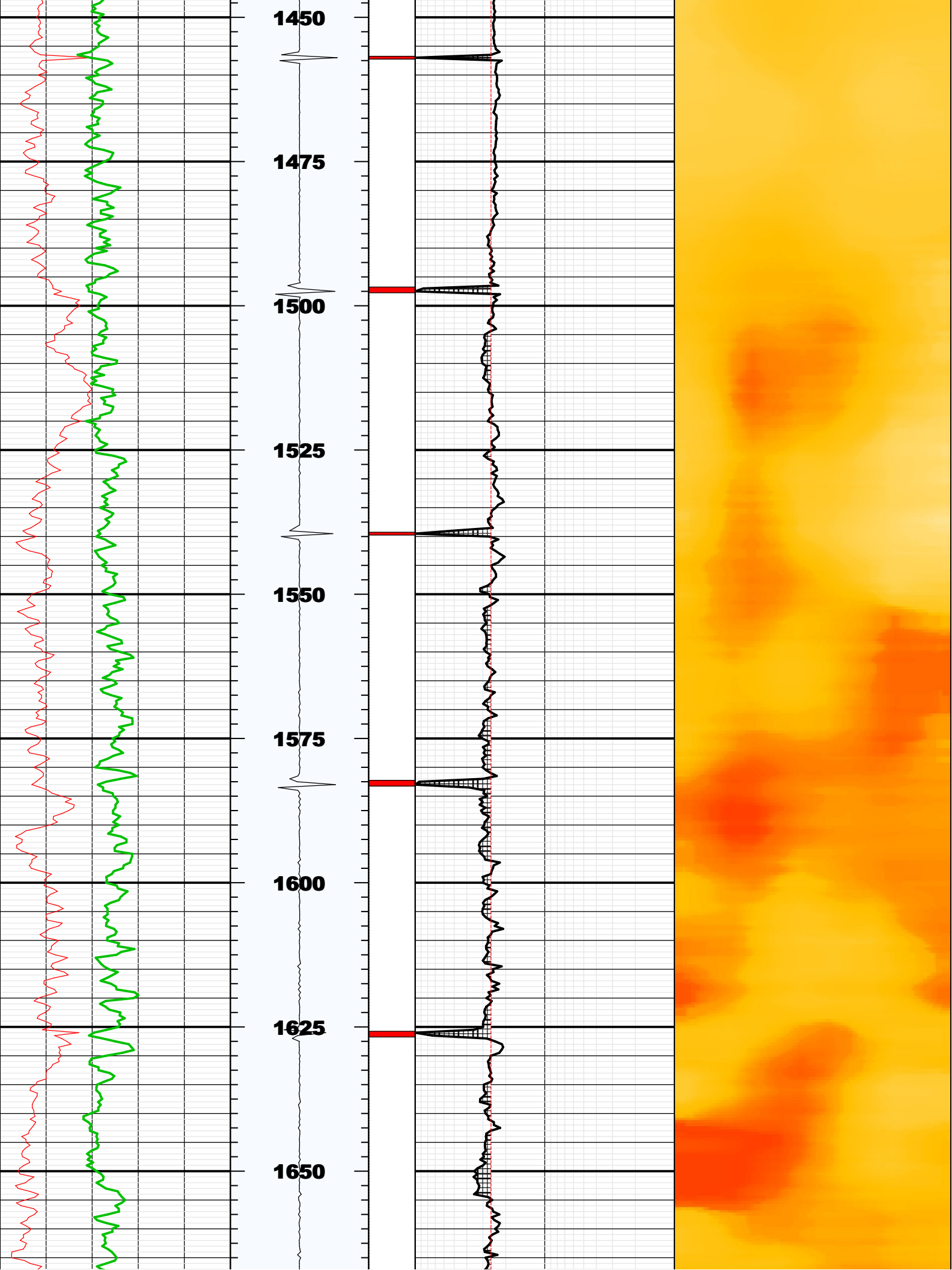


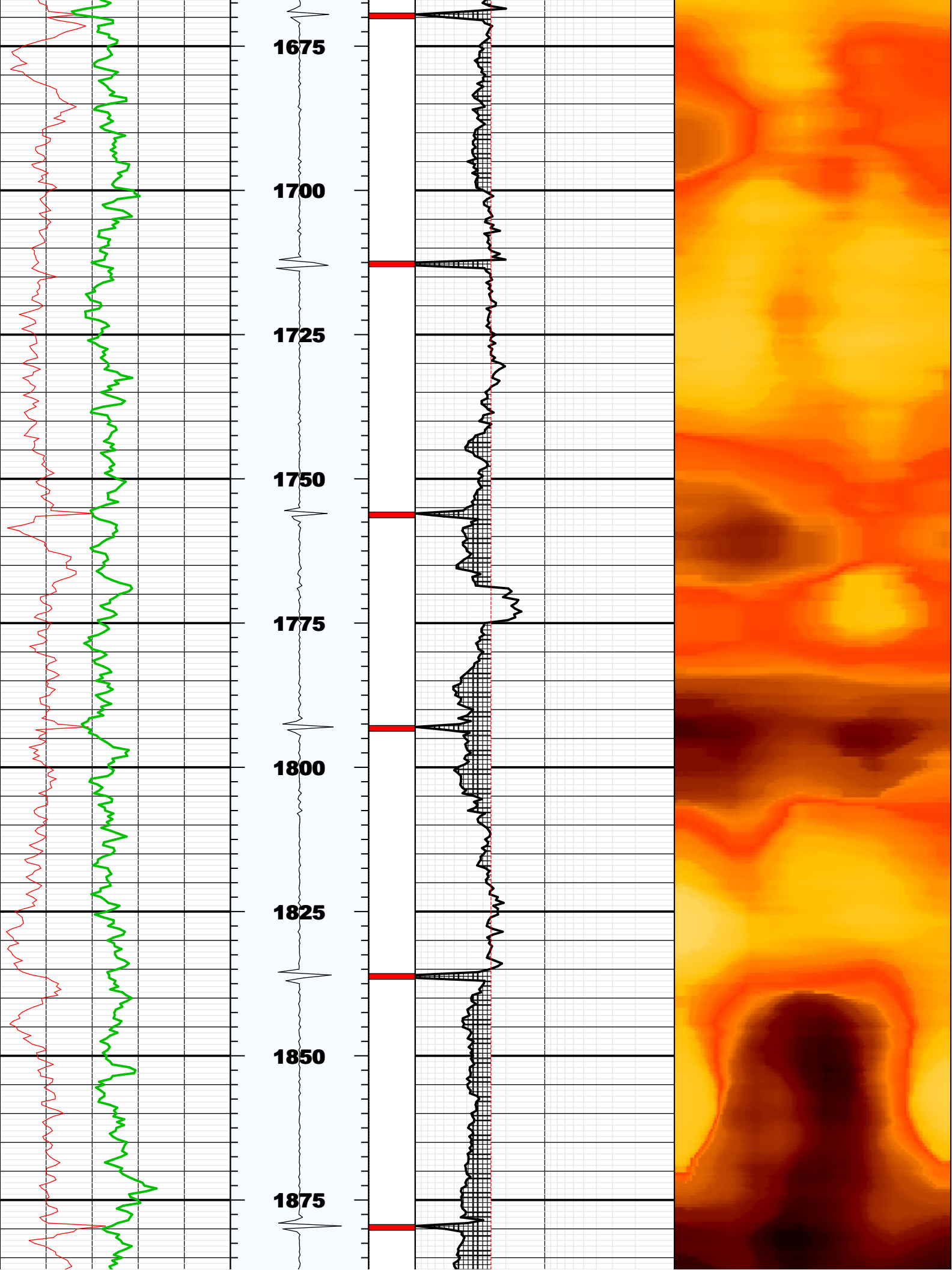


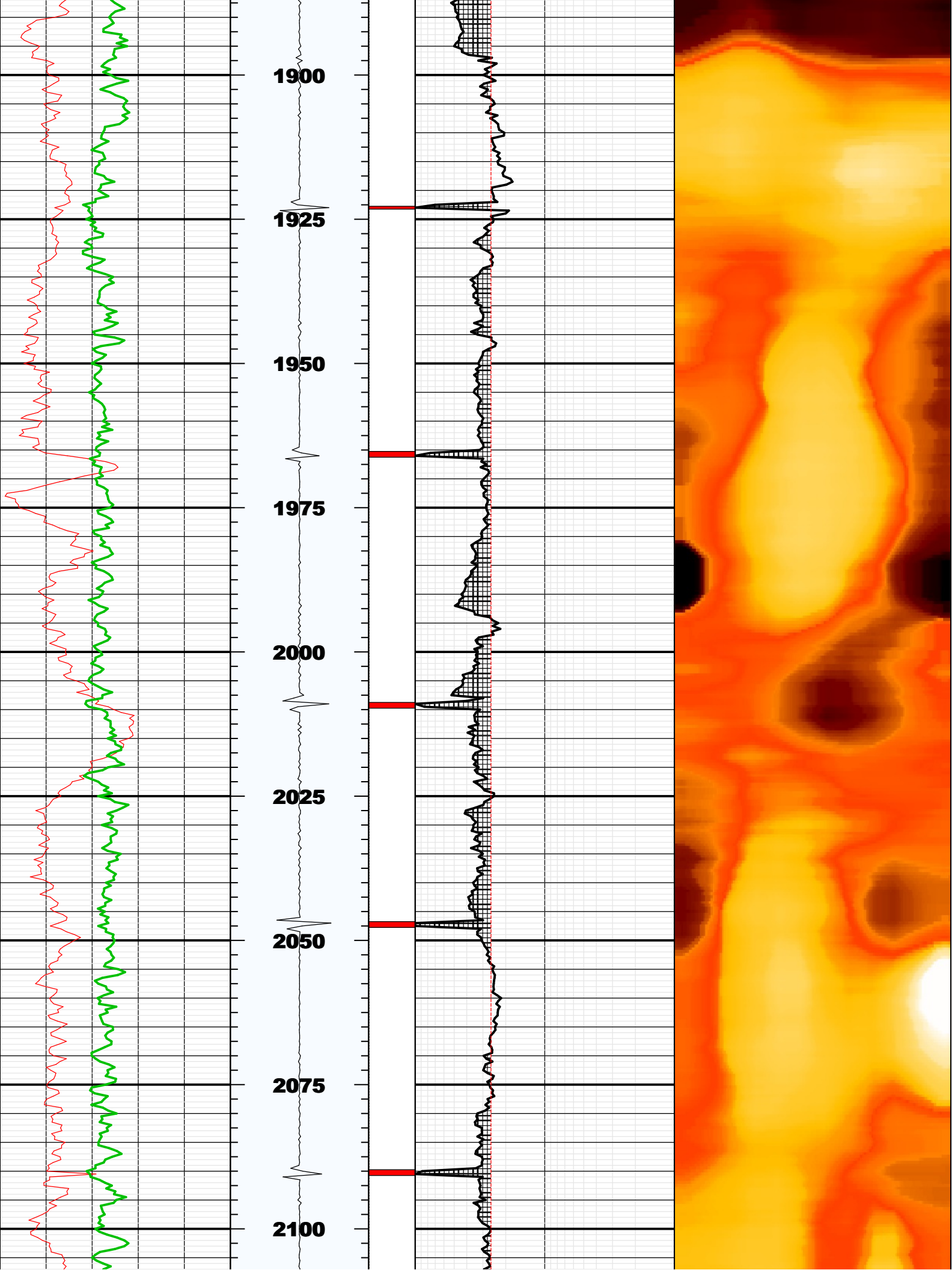


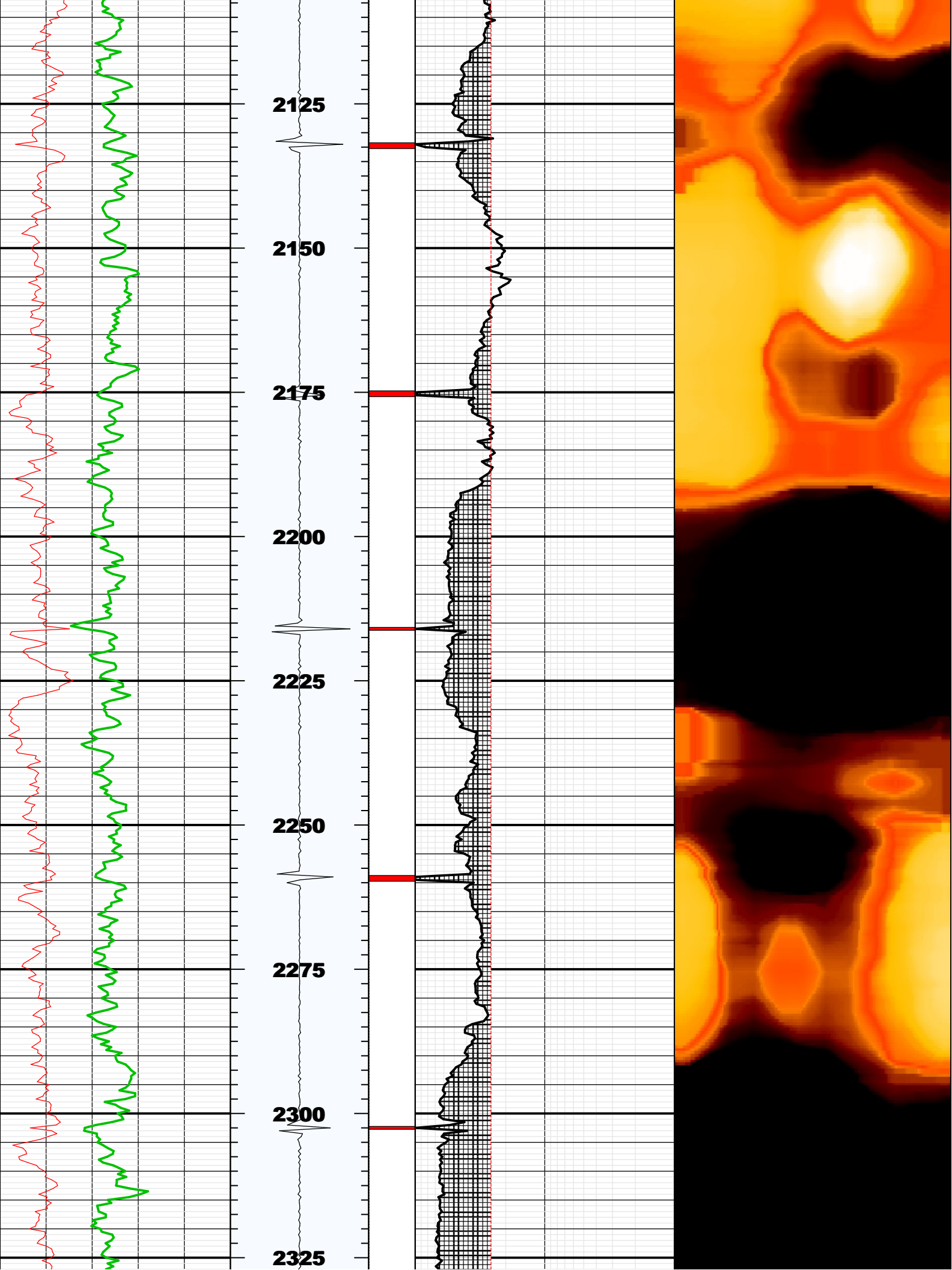


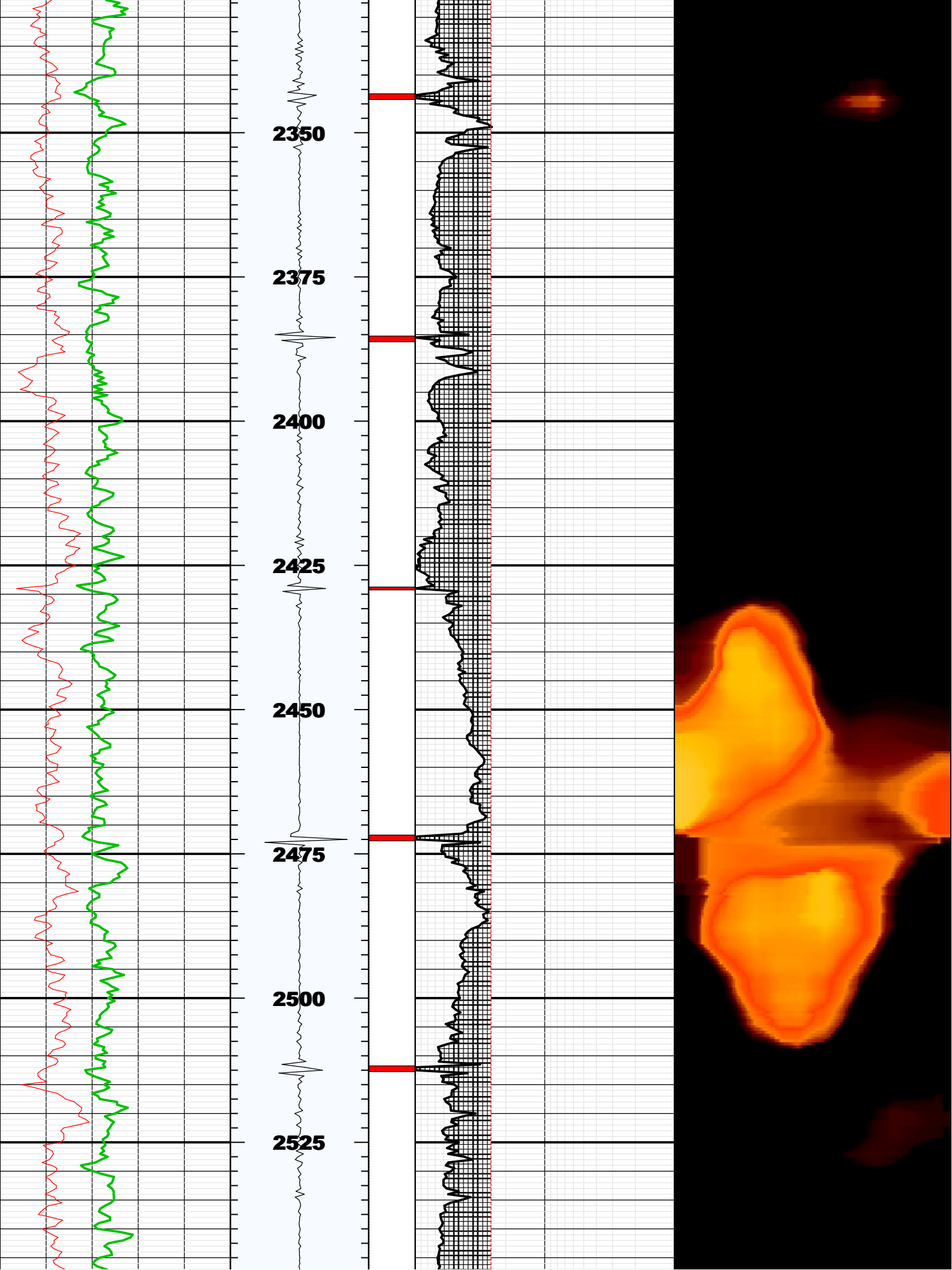


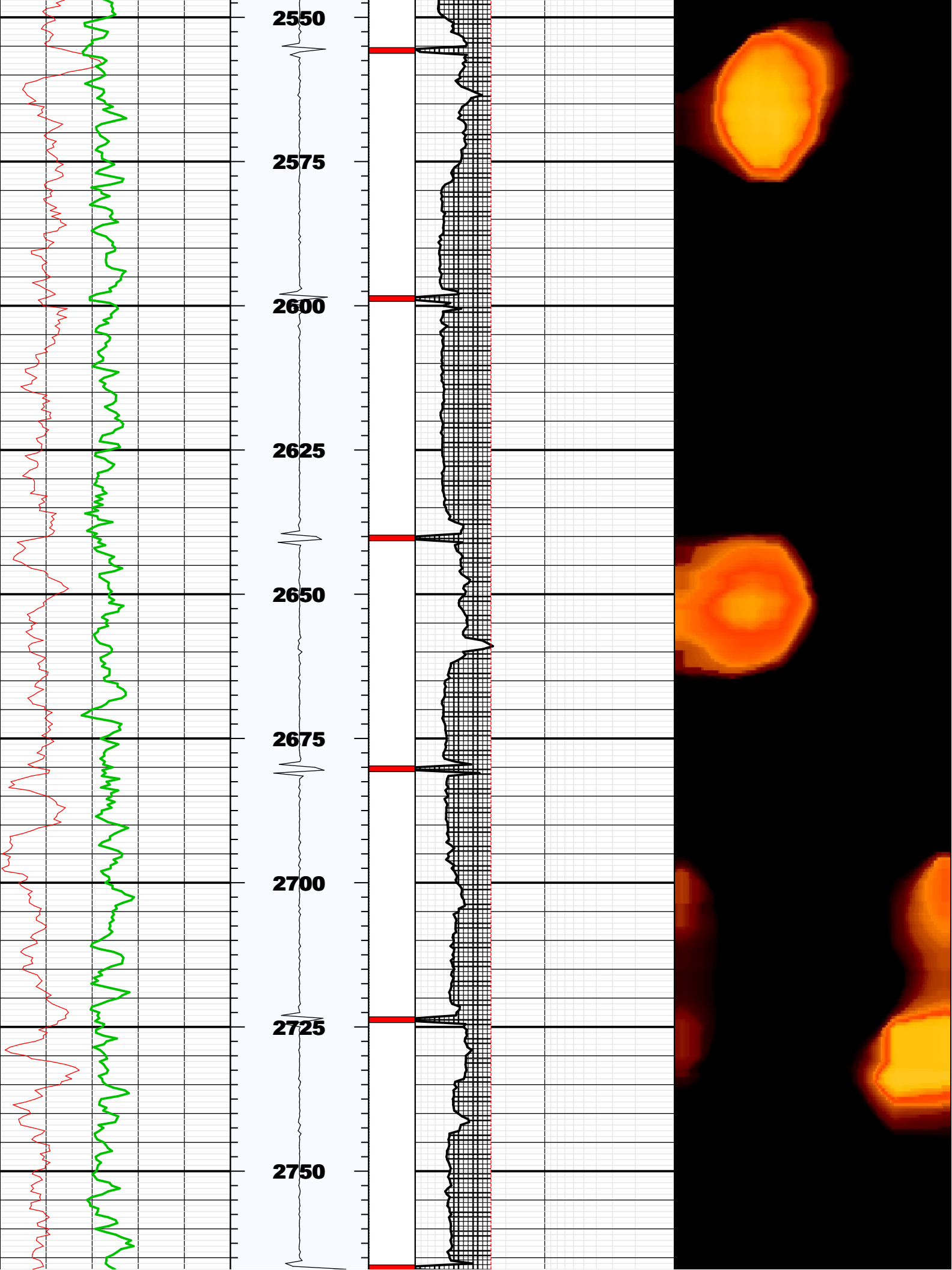


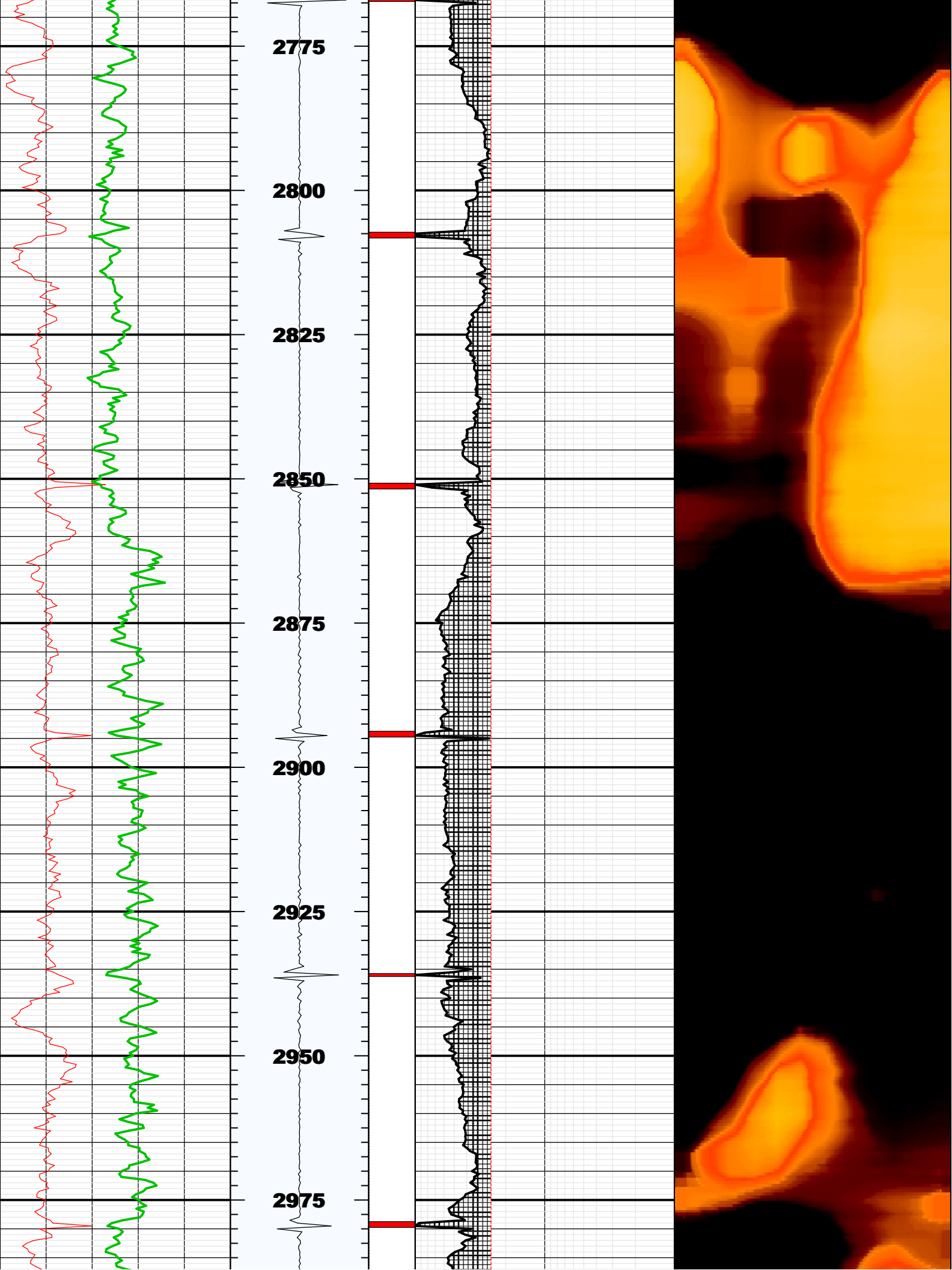


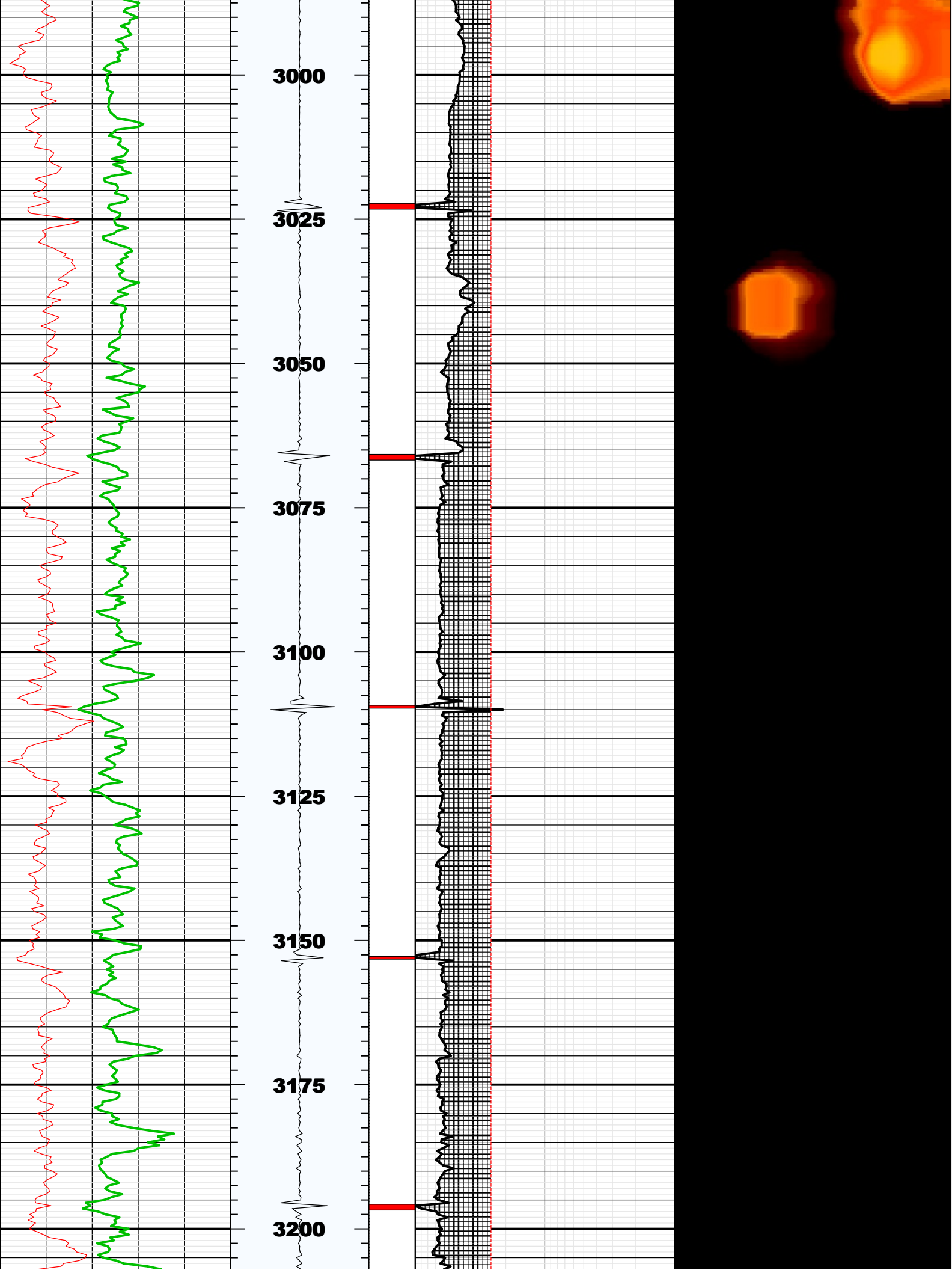


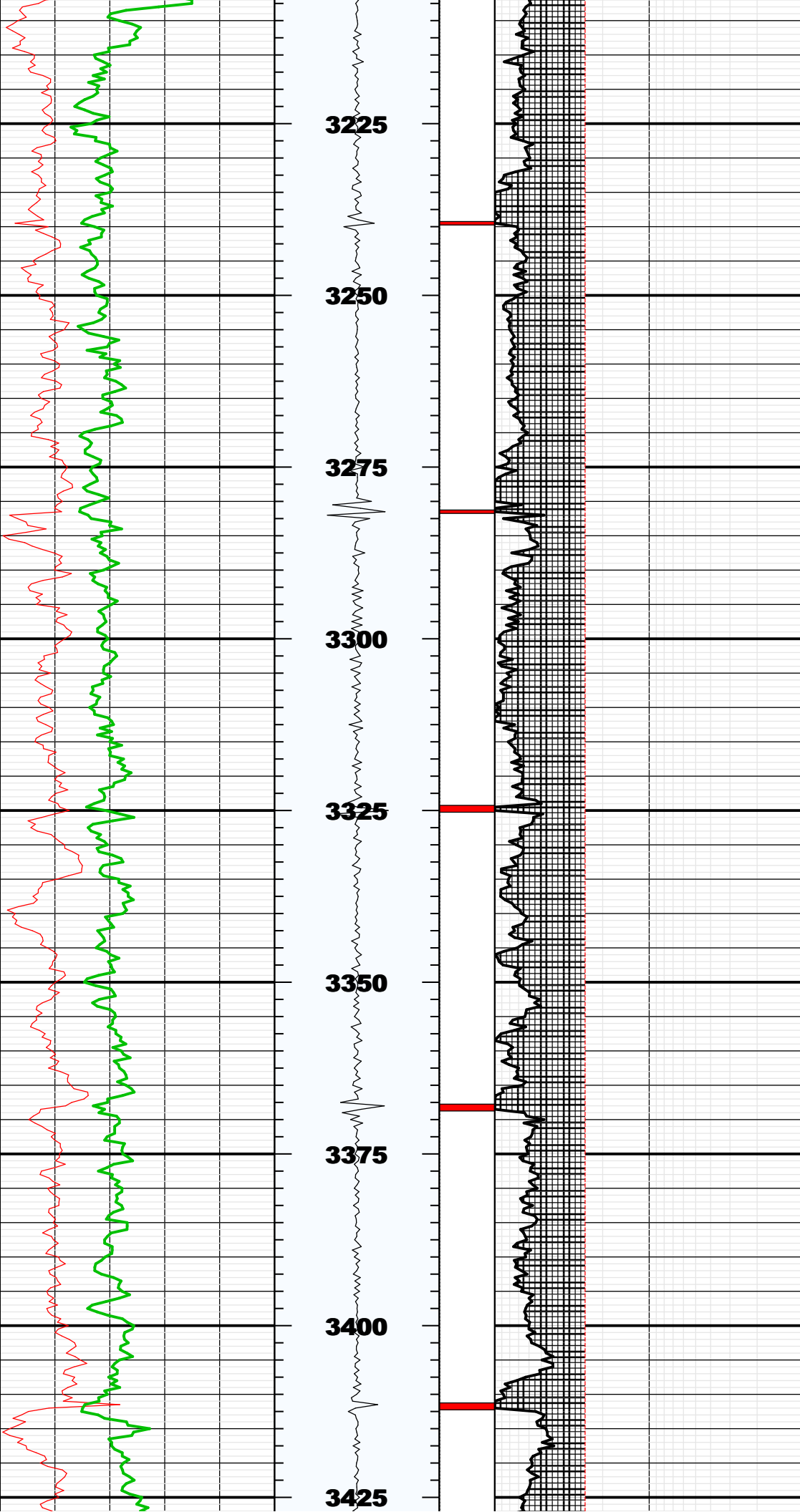


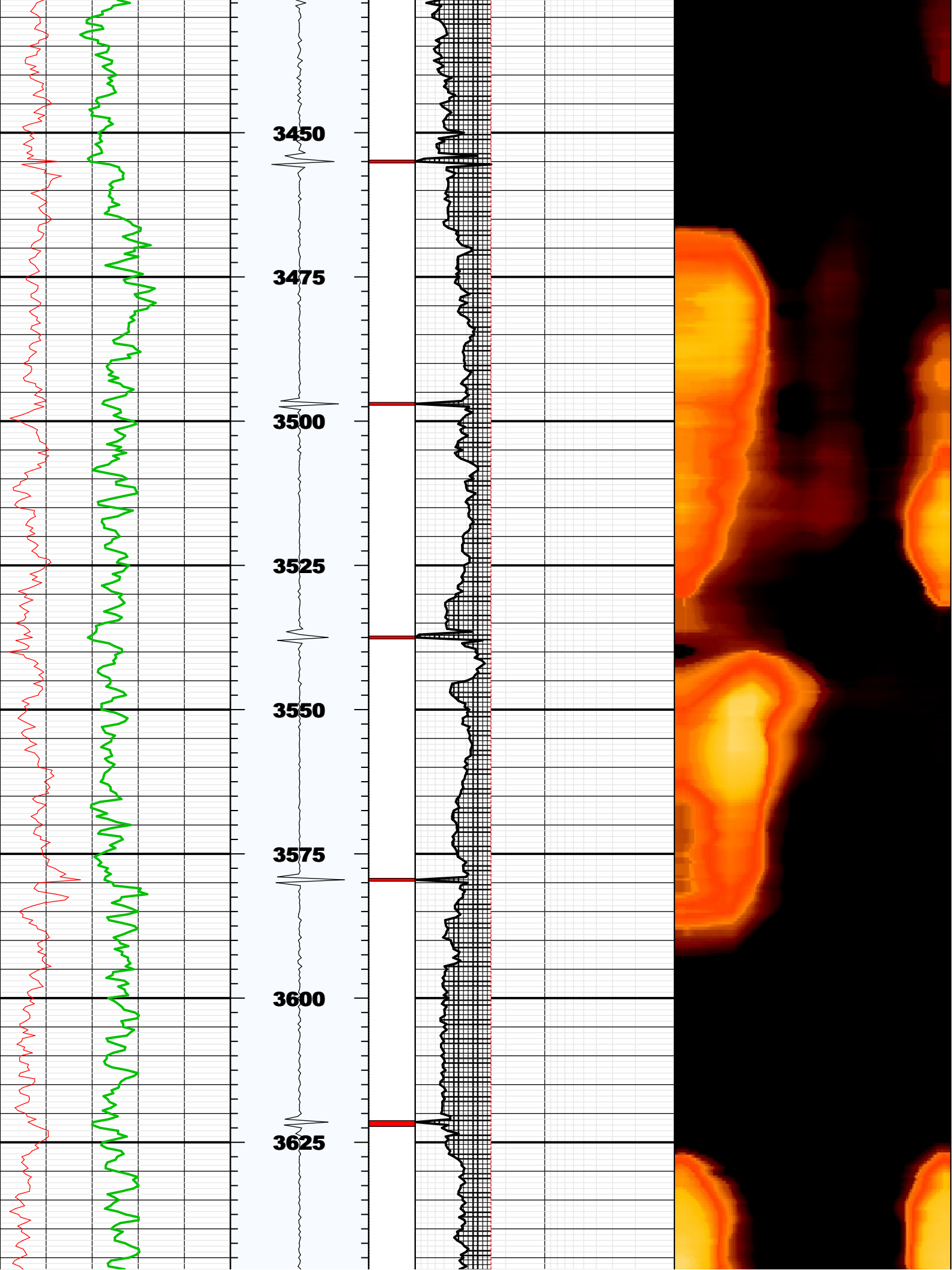


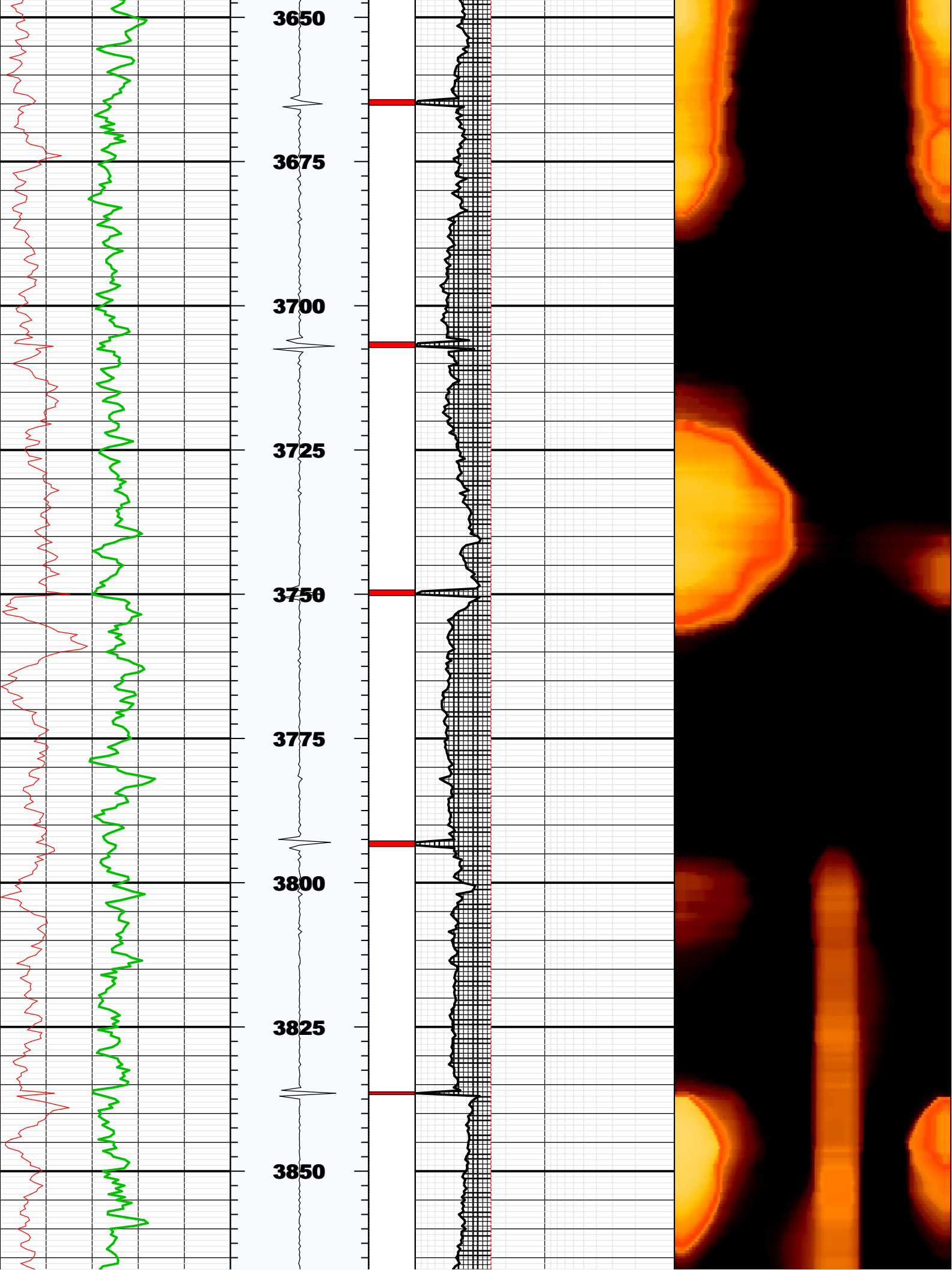


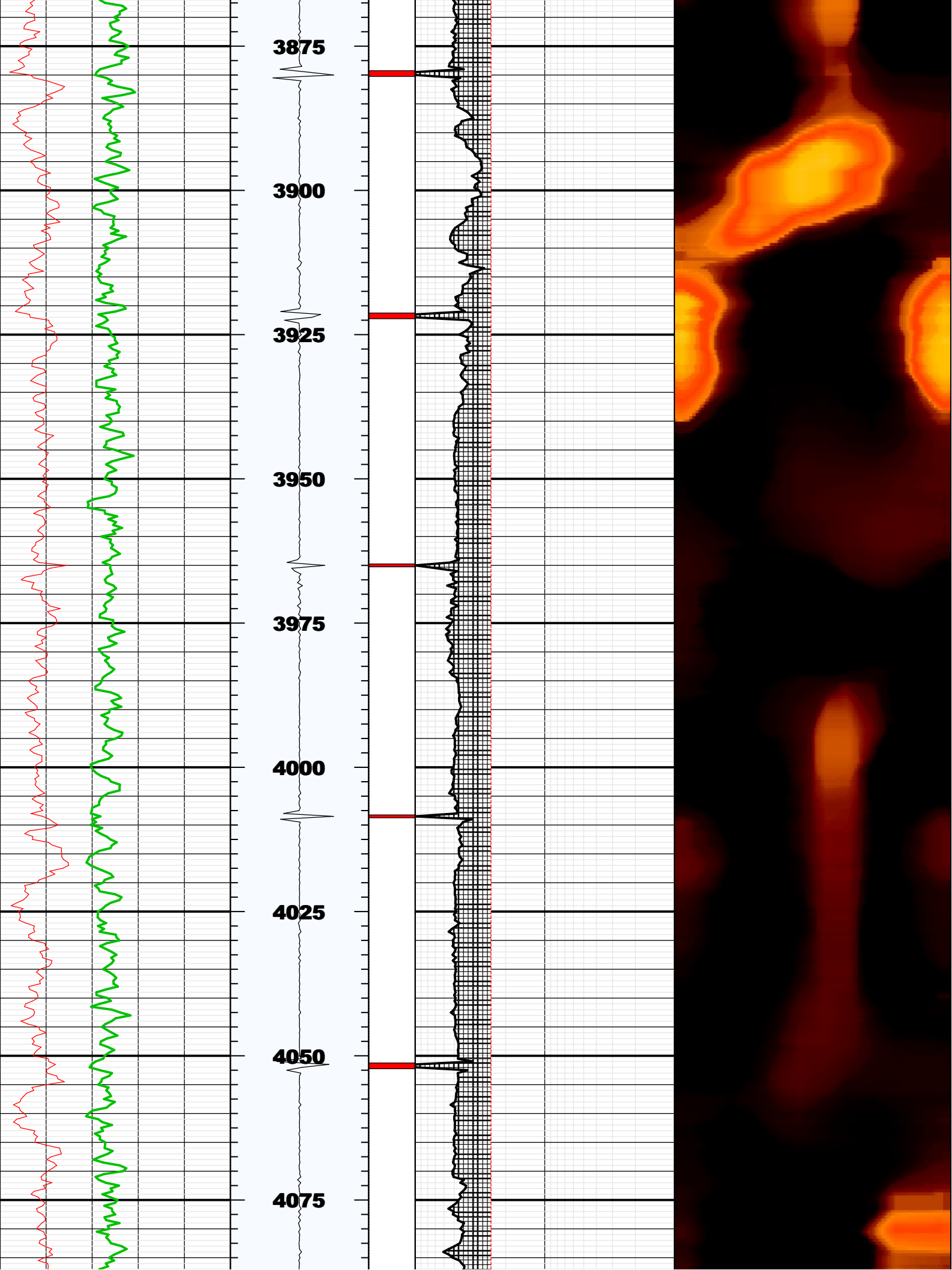


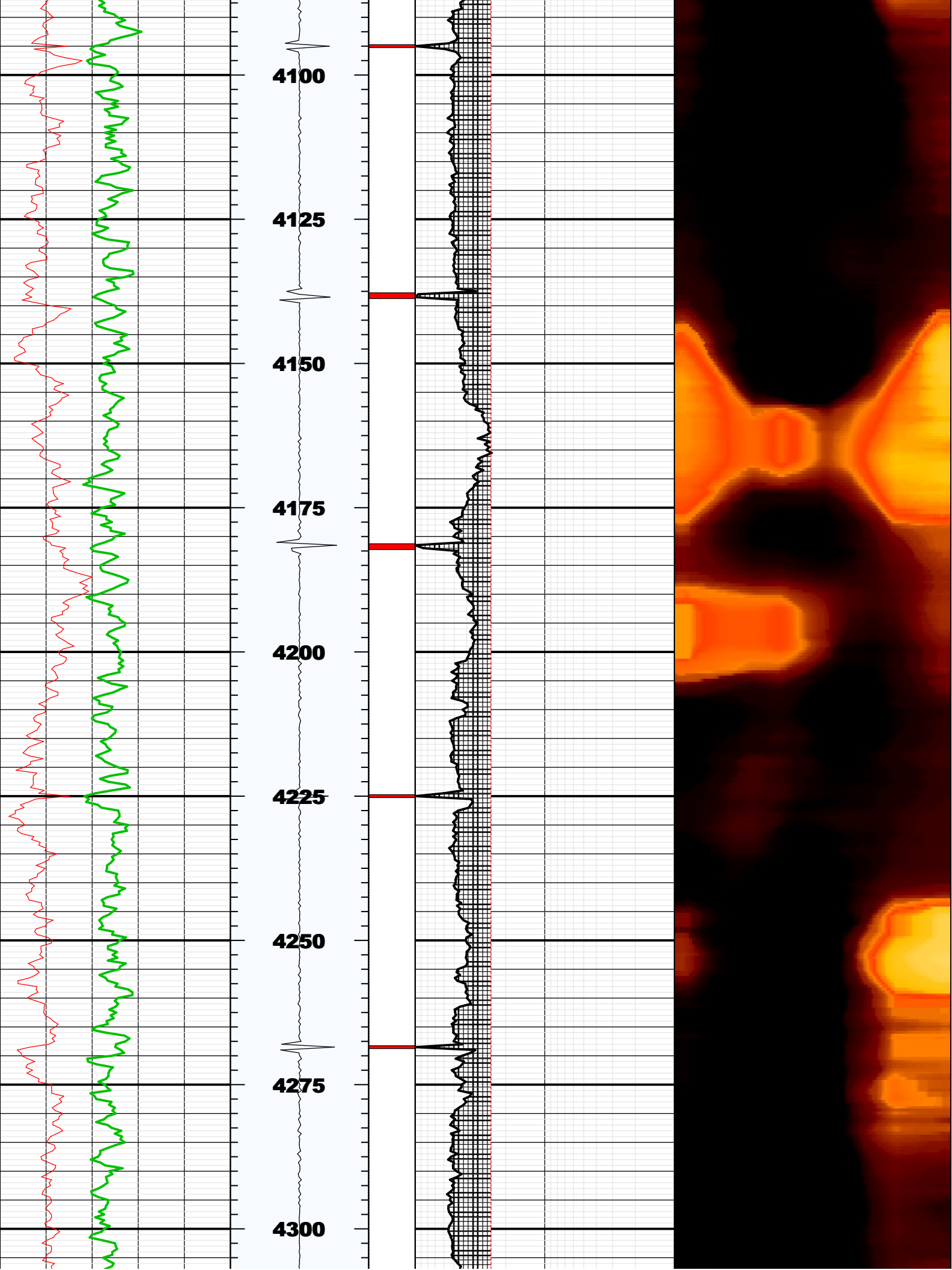


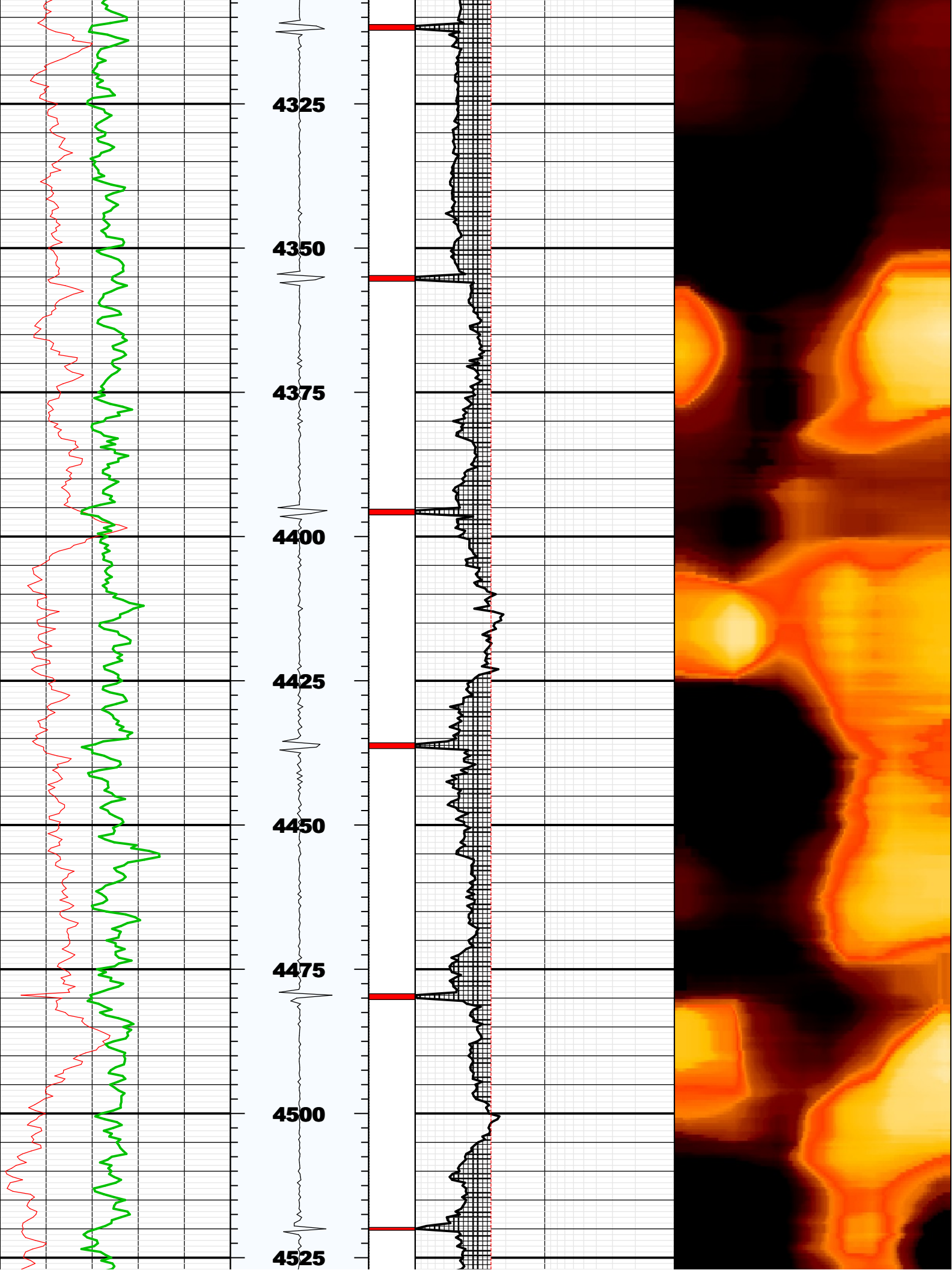


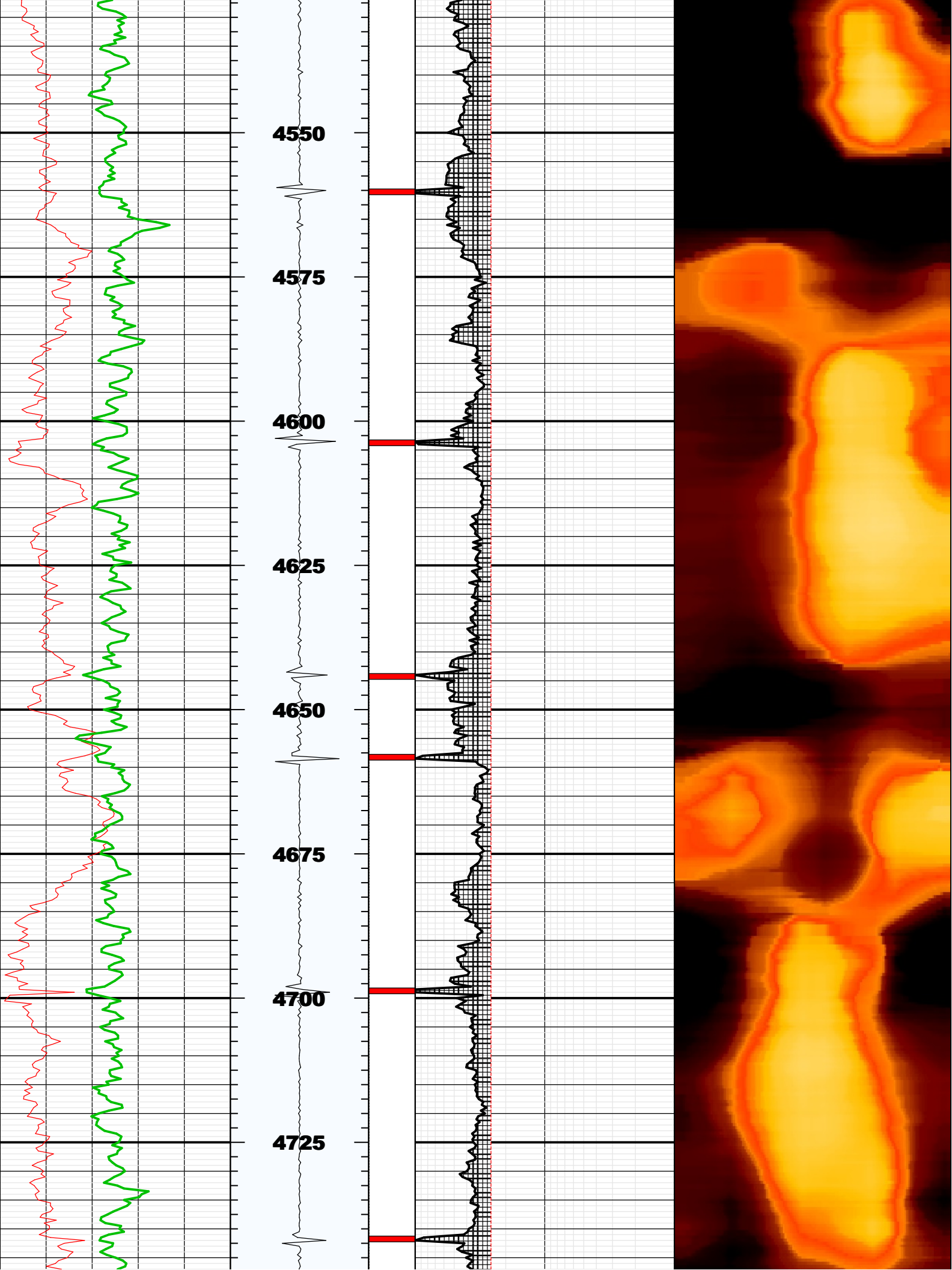


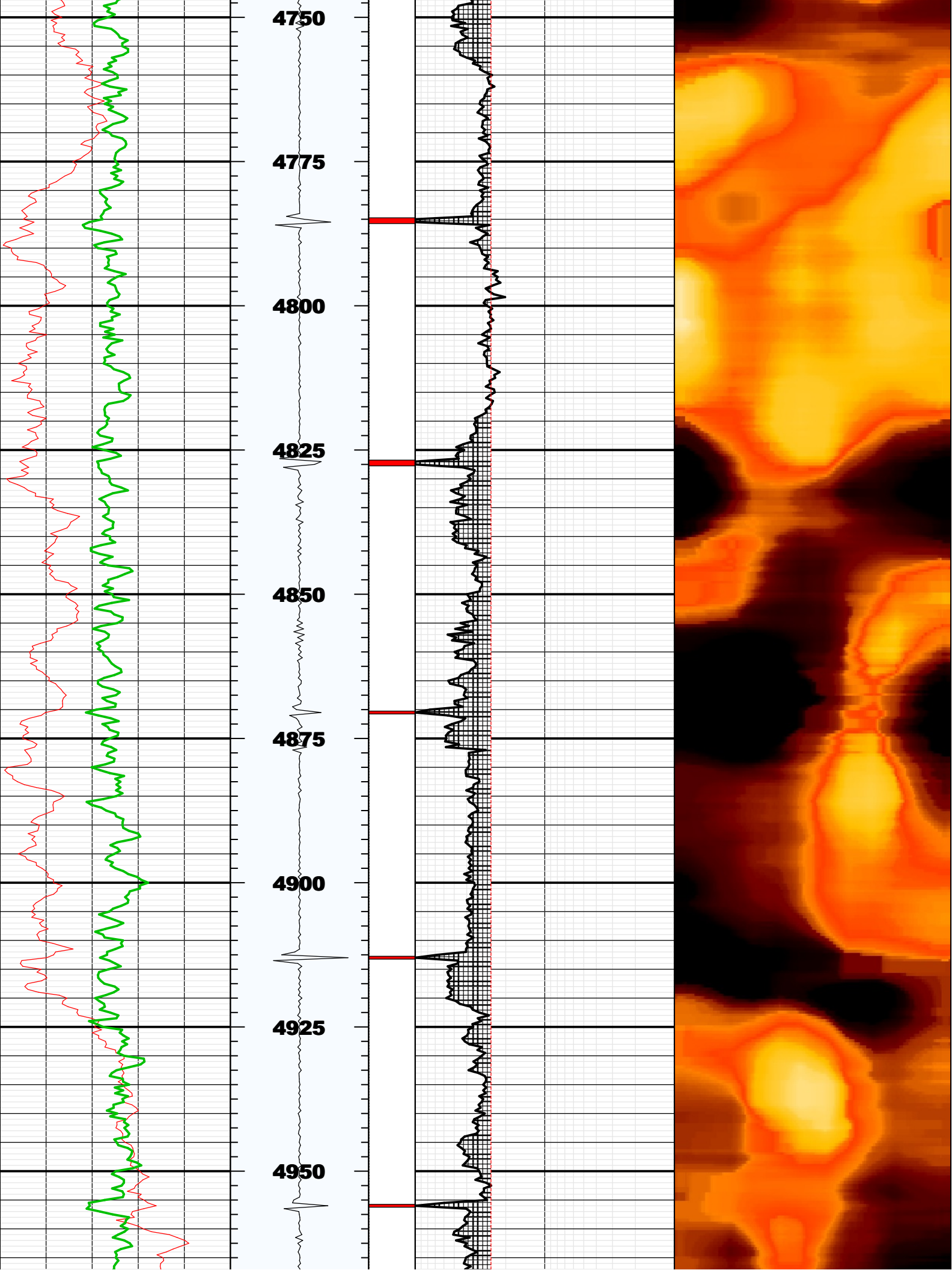


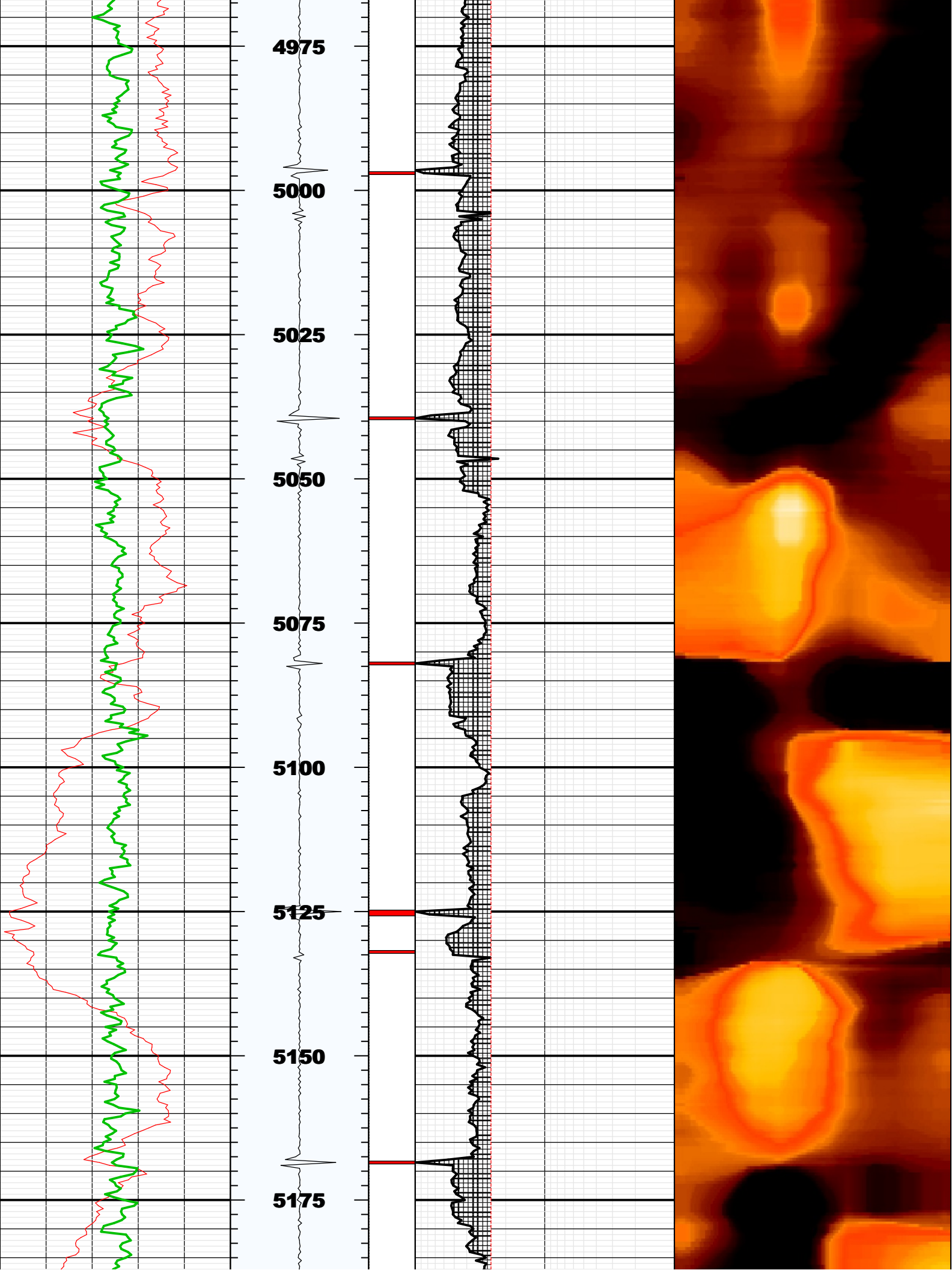


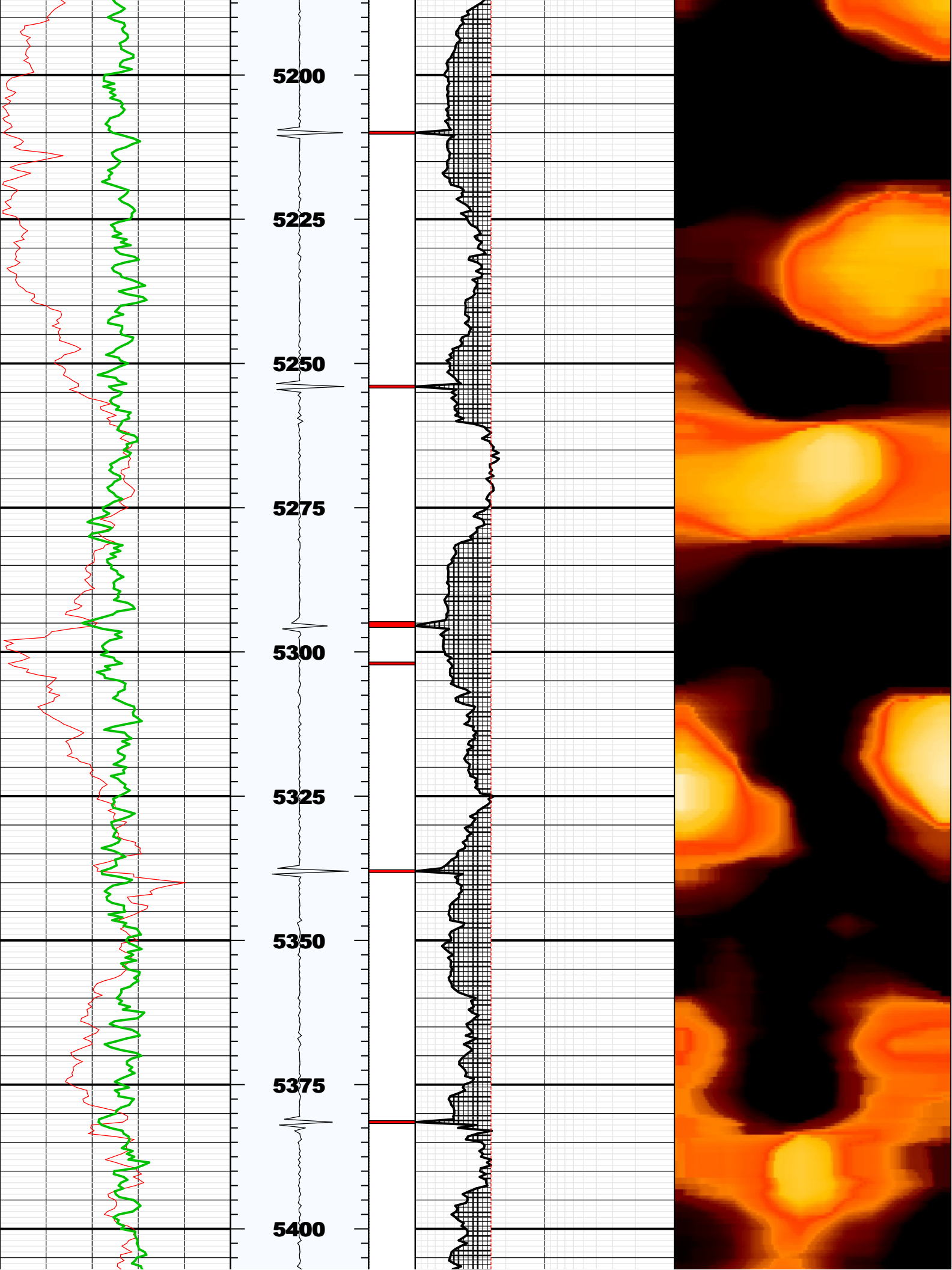


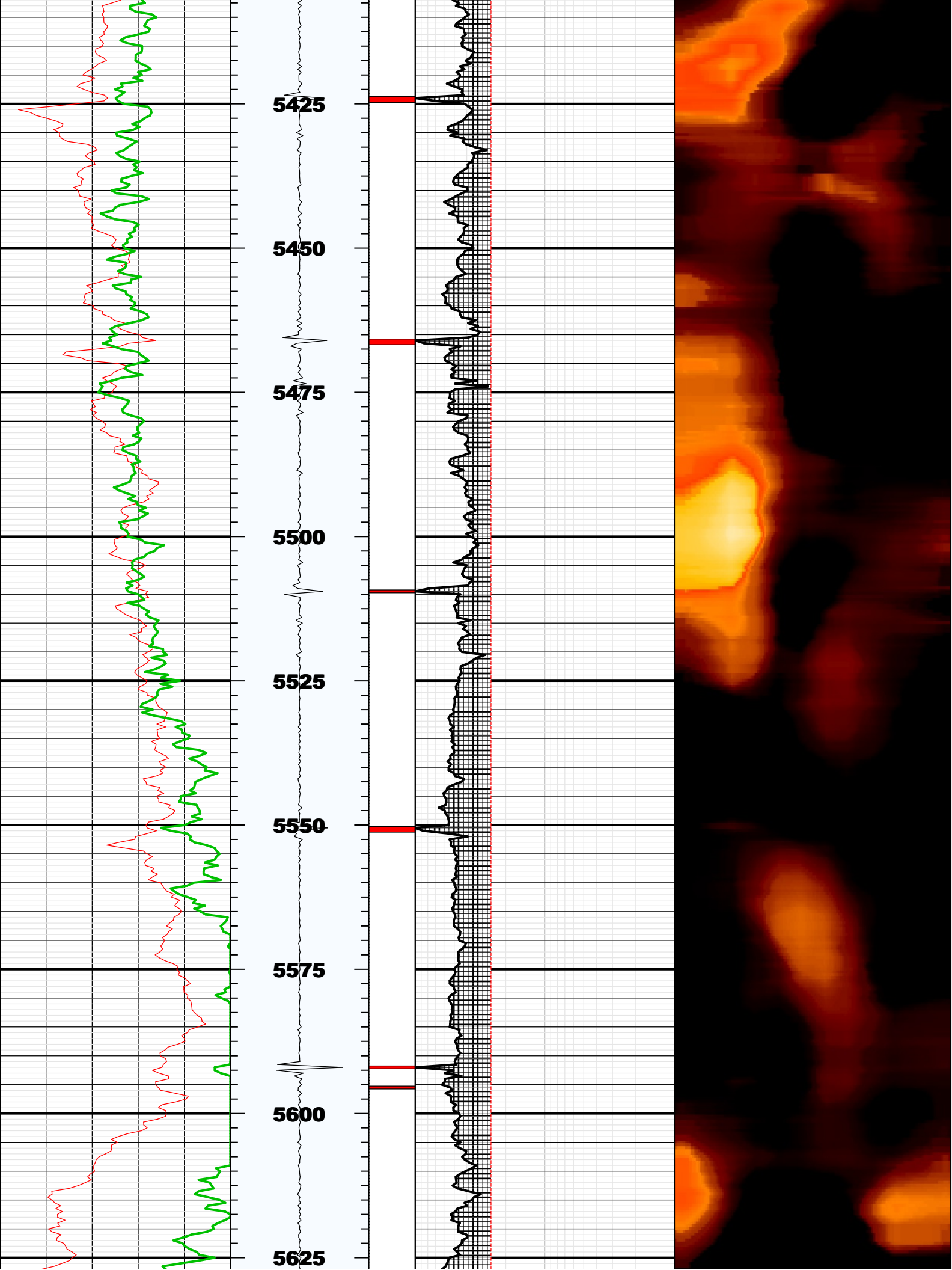


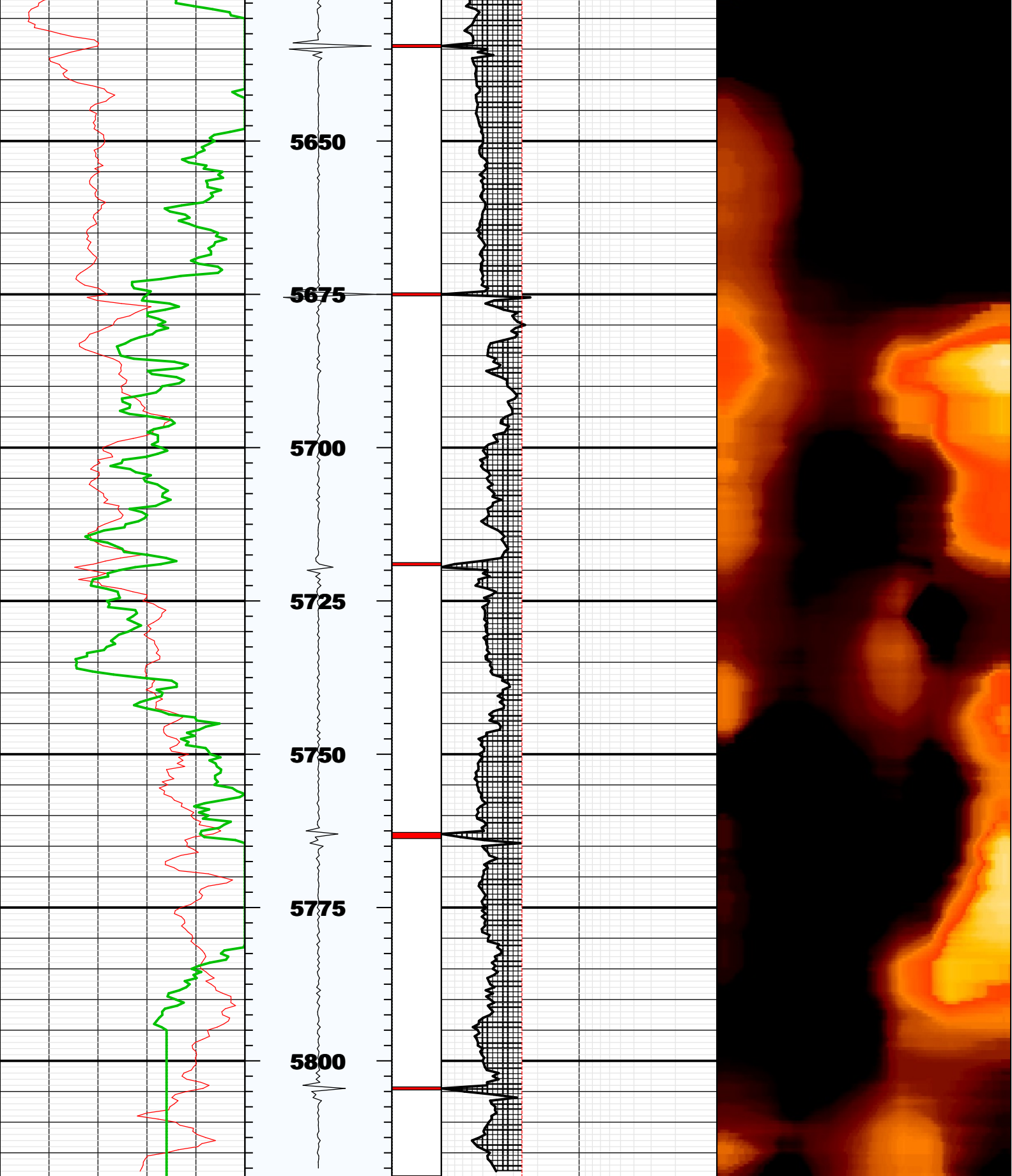








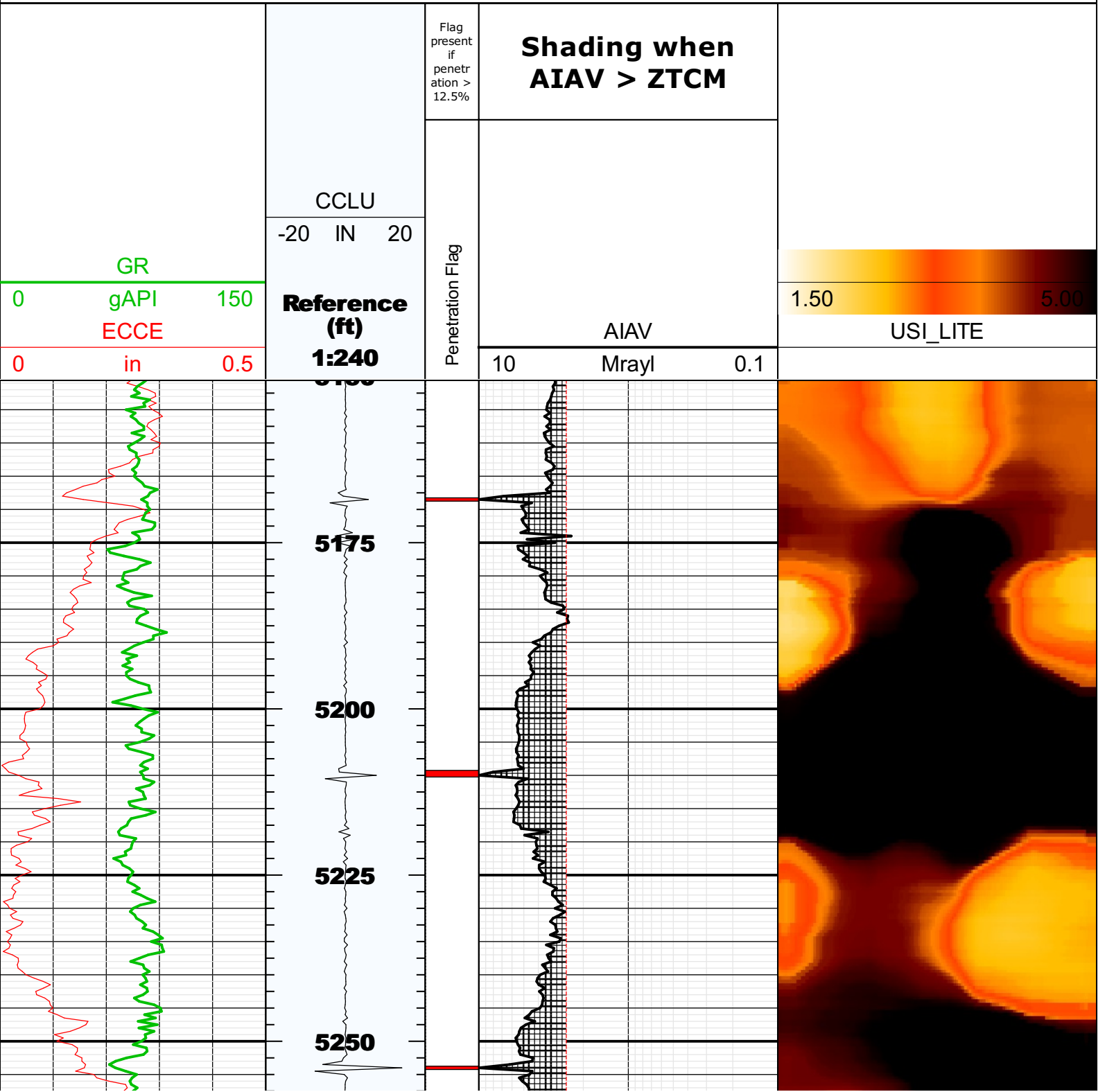


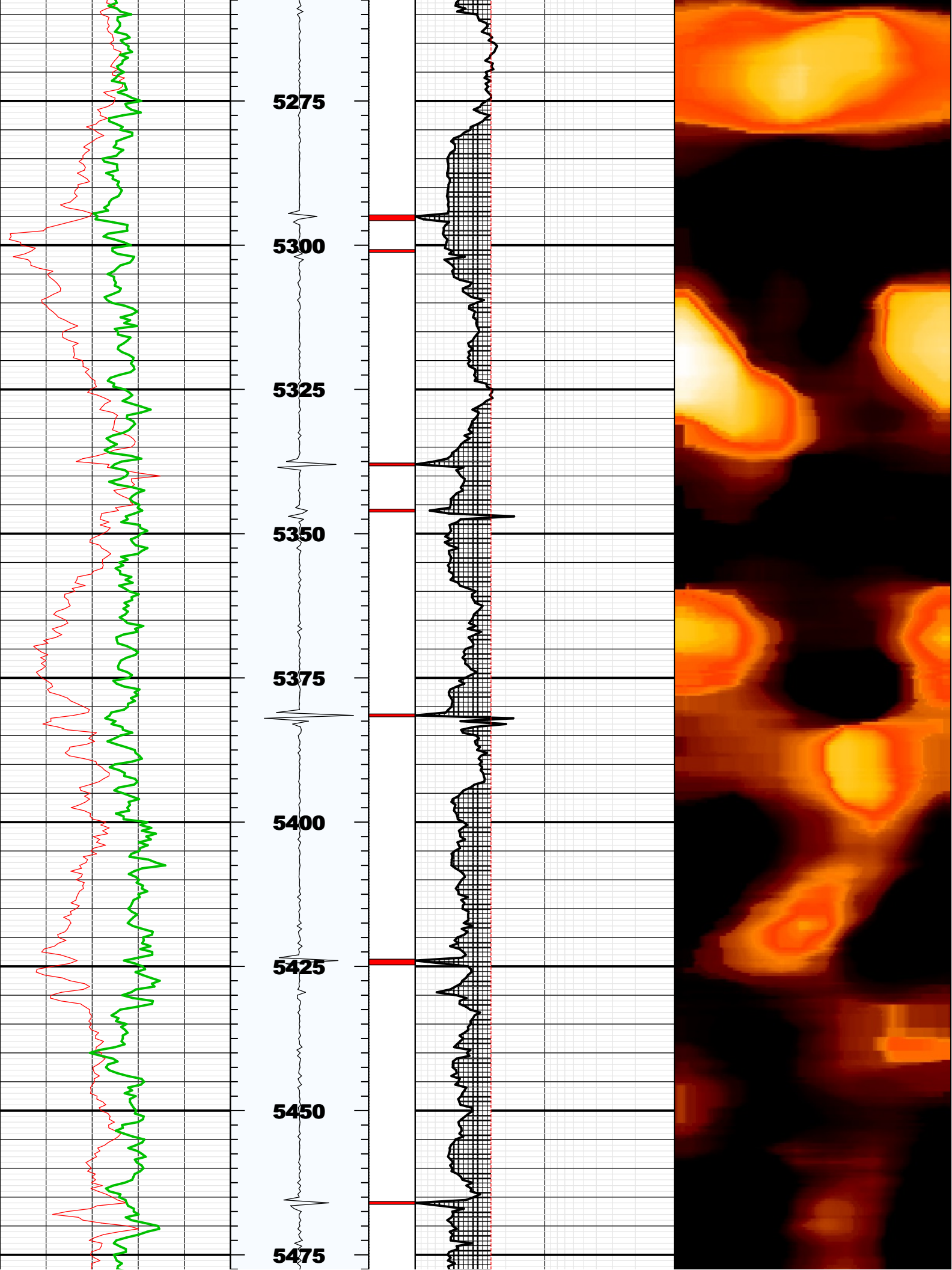


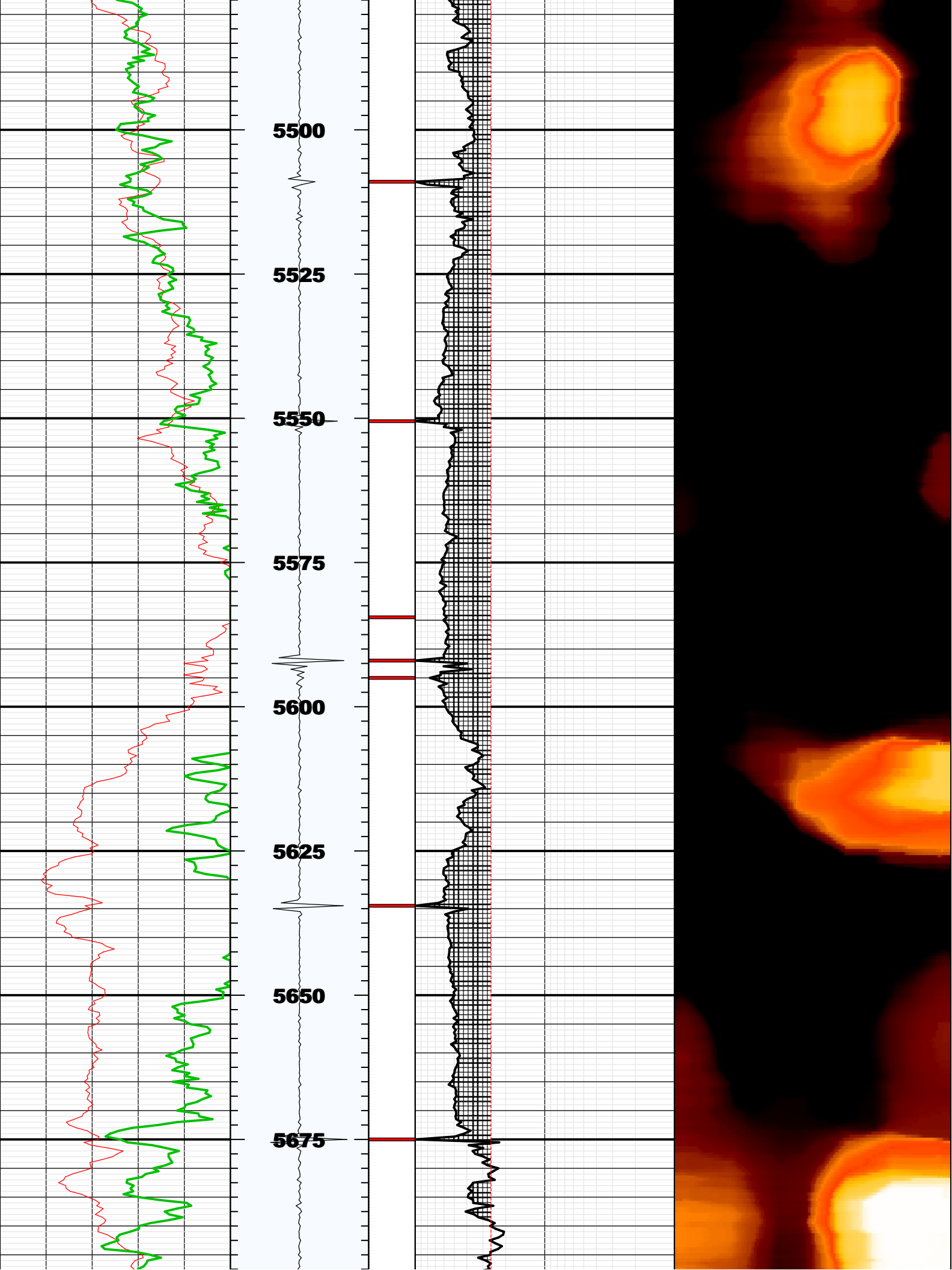
BS	8.75000	IN	Bit Size
CASG	P110		Casing Grade
CDIA	7.00000	IN	Casing Outer Diameter
CSID	6.27600	IN	Casing Inner Diameter
CSIZ	7.00000	IN	Current Casing Size
CWEI	26.00000	LB/F	Casing Weight
DFD	8.40000	LB/G	Drilling Fluid Density
DFVL	206.00000	US/F	Default Fluid Velocity
DO			
DOT	2.87400	IN	Diameter of Transducer Sensor
EMXV	35	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	29.77316	US	Window Begin Time
WINE	82.91007	US	Window End Time
ZCAS	46.25000	MRAY	Acoustic Impedance of Casing
ZINI	-1.00000	MRAY	Initial Estimate of Cement Impedance
ZMUD	1.71000	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

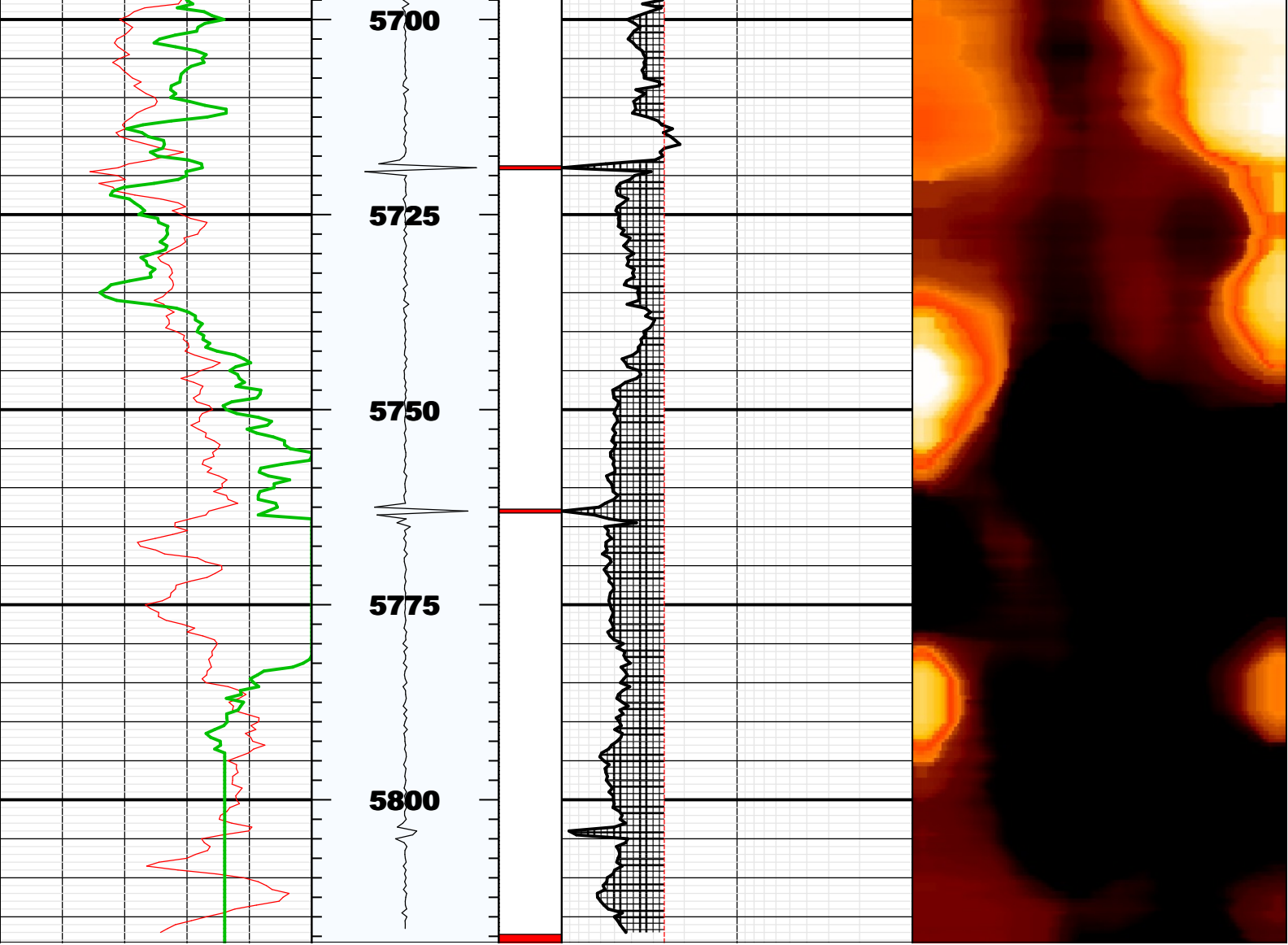
Repeat Pass

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Fluid Properties Used for Main Pass

