

Company: Noble Energy Inc

Well: NCLP AA07-69-1AHNC  
Field: Wattenberg  
County: Weld State: Colorado

County: Weld			
Field: Wattenberg			
Location: SHL 75' FSL & 75' FWL			
Well: NCLP AA07-69-1AHNC			
Company: Noble Energy Inc			
USI-LITE			
Permanent Datum: Log Measured From: Drilling Measured From:		GL KB KB	Elev: K.B. 4727.0 F G.L. 4703.0 F D.F. 4726.0 F
API Serial No. 05-123-39110		Section 4	Township 6N
Range 63W			
Logging Date 30-Aug-2014			
Run Number One			
Depth Driller 7012.0 F			
Schlumberger Depth 7012.0 F			
Bottom Log Interval 6864.9 F			
Top Log Interval 44.0 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 881.0 F			
To 7012.0 F			
Casing Size 7.00 IN			
Weight 26.00 LB/F			
Grade N/A			
From 0.0 F			
To 7008.0 F			
Max Recorded Temp 204.9			
Logger on bottom (date) 30-Aug-2014			
Location Fort Morgan			
Recorded By Kevin Crow			
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: U711136 Length: 18000.00000

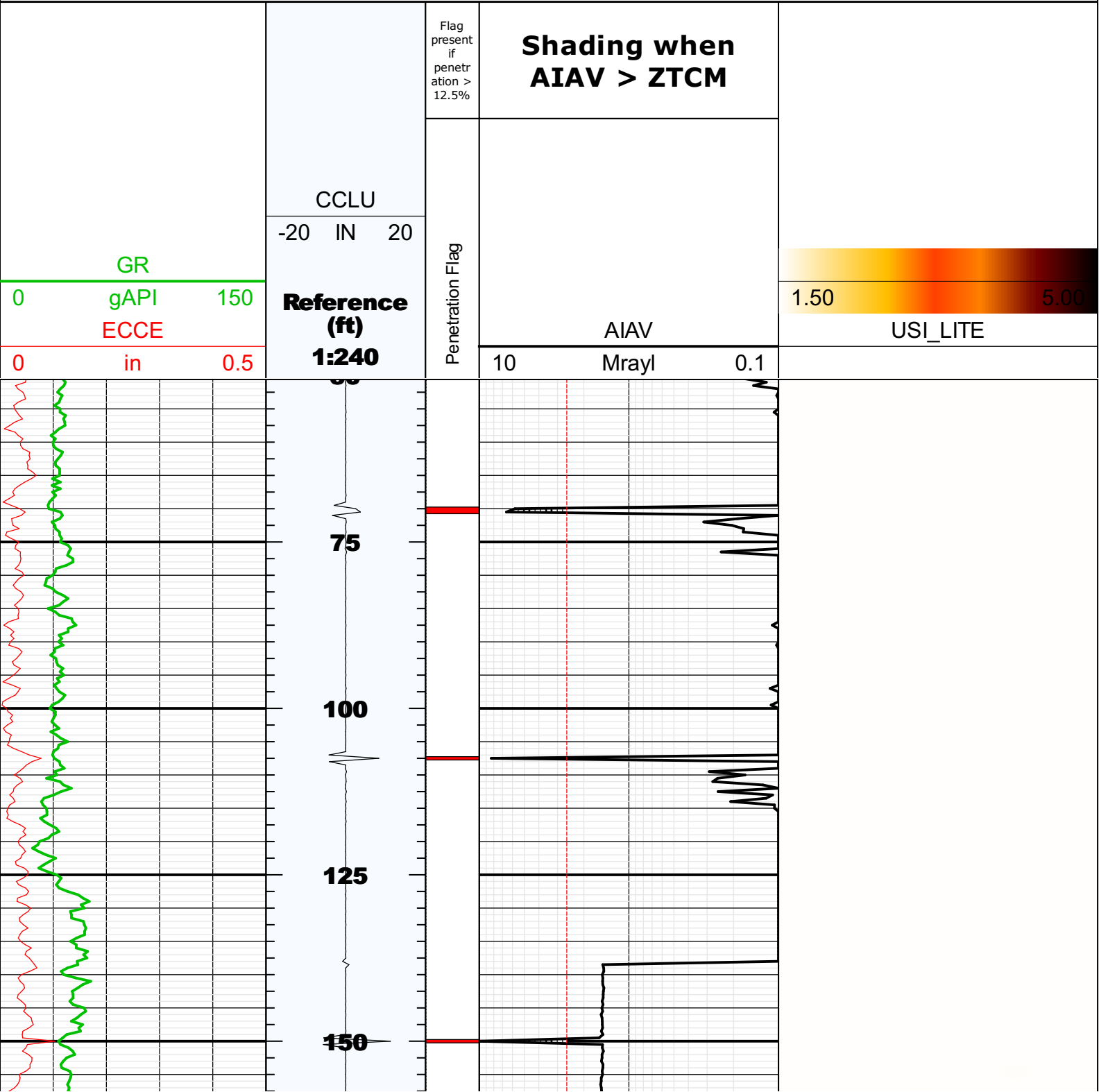
DISCLAIMER

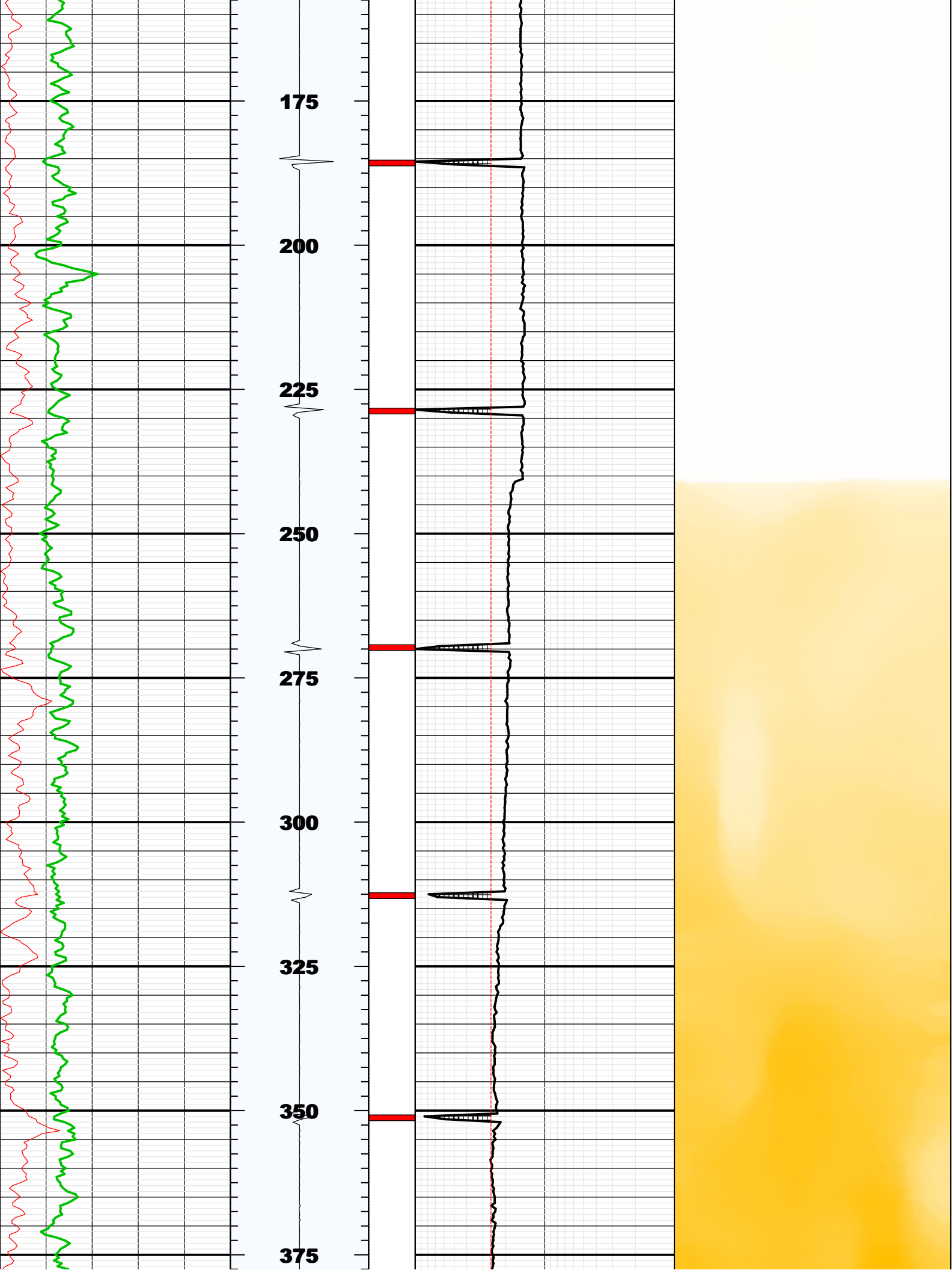
THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRCTIONS ON USE OF THE RECORDED-DATA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

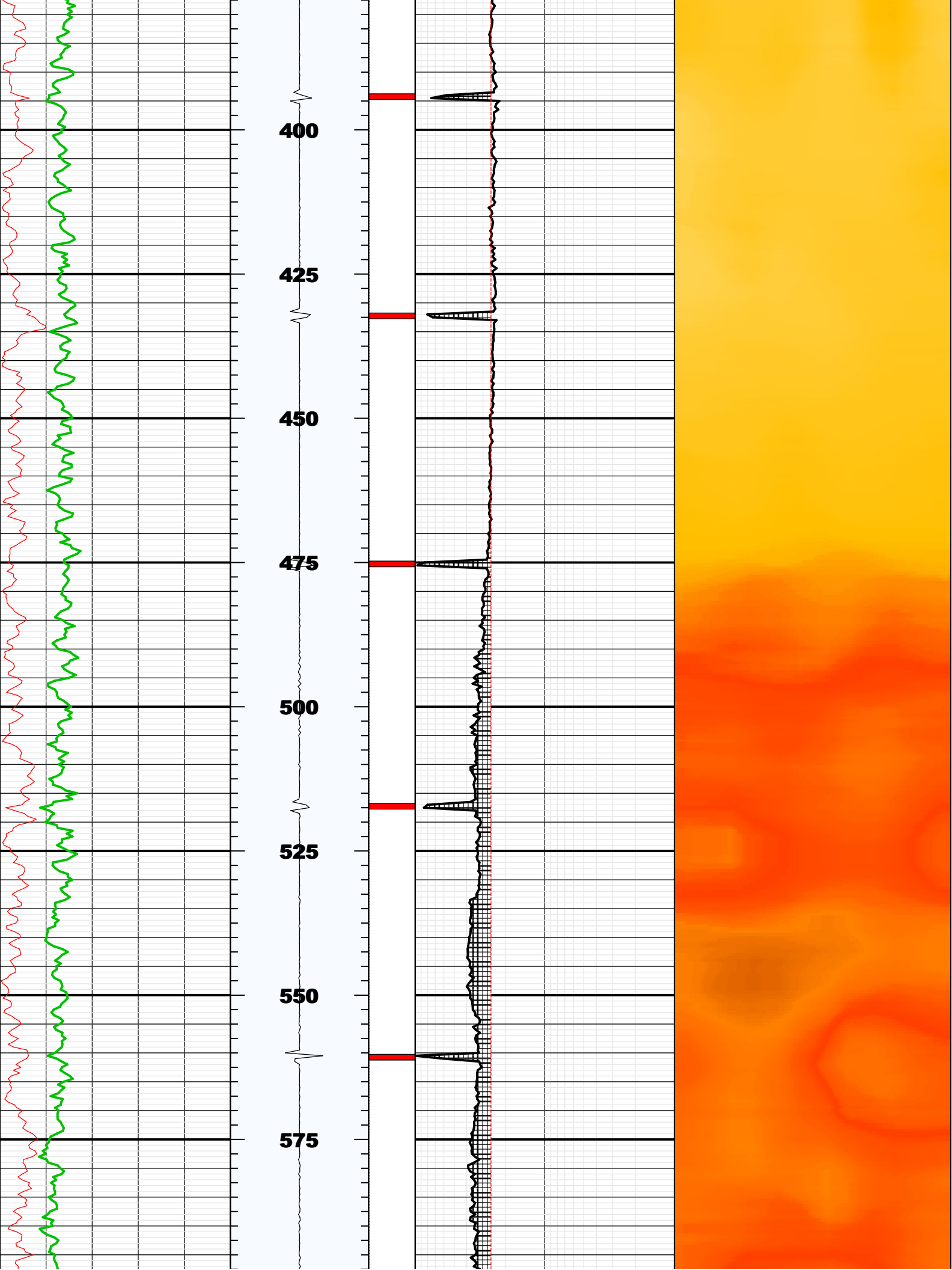
Thank you for choosing Schlumberger  
Tools ran as per tool sketch  
Repeat ran at 0 psi Main ran at 2500 psi

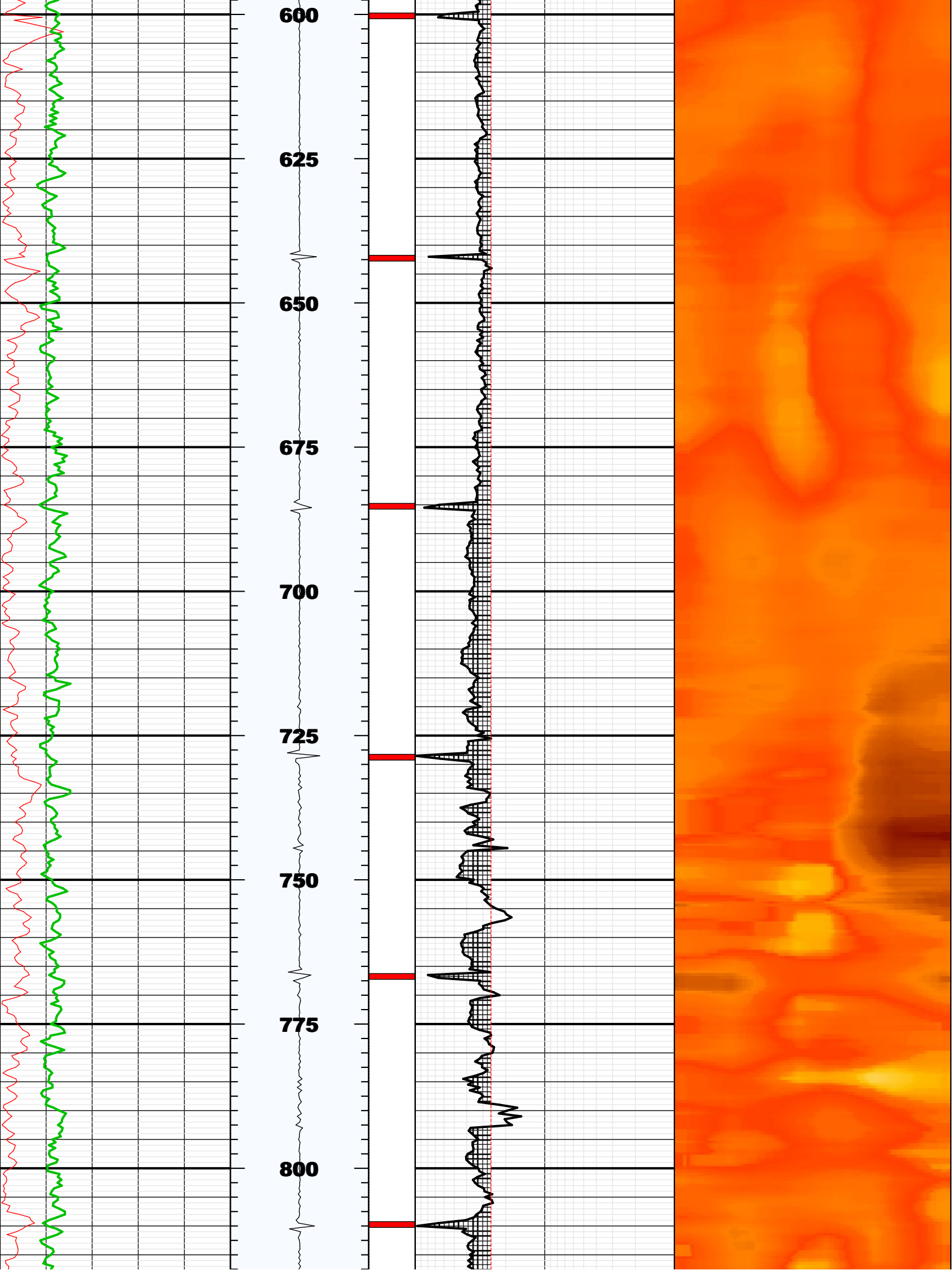
Main Pass

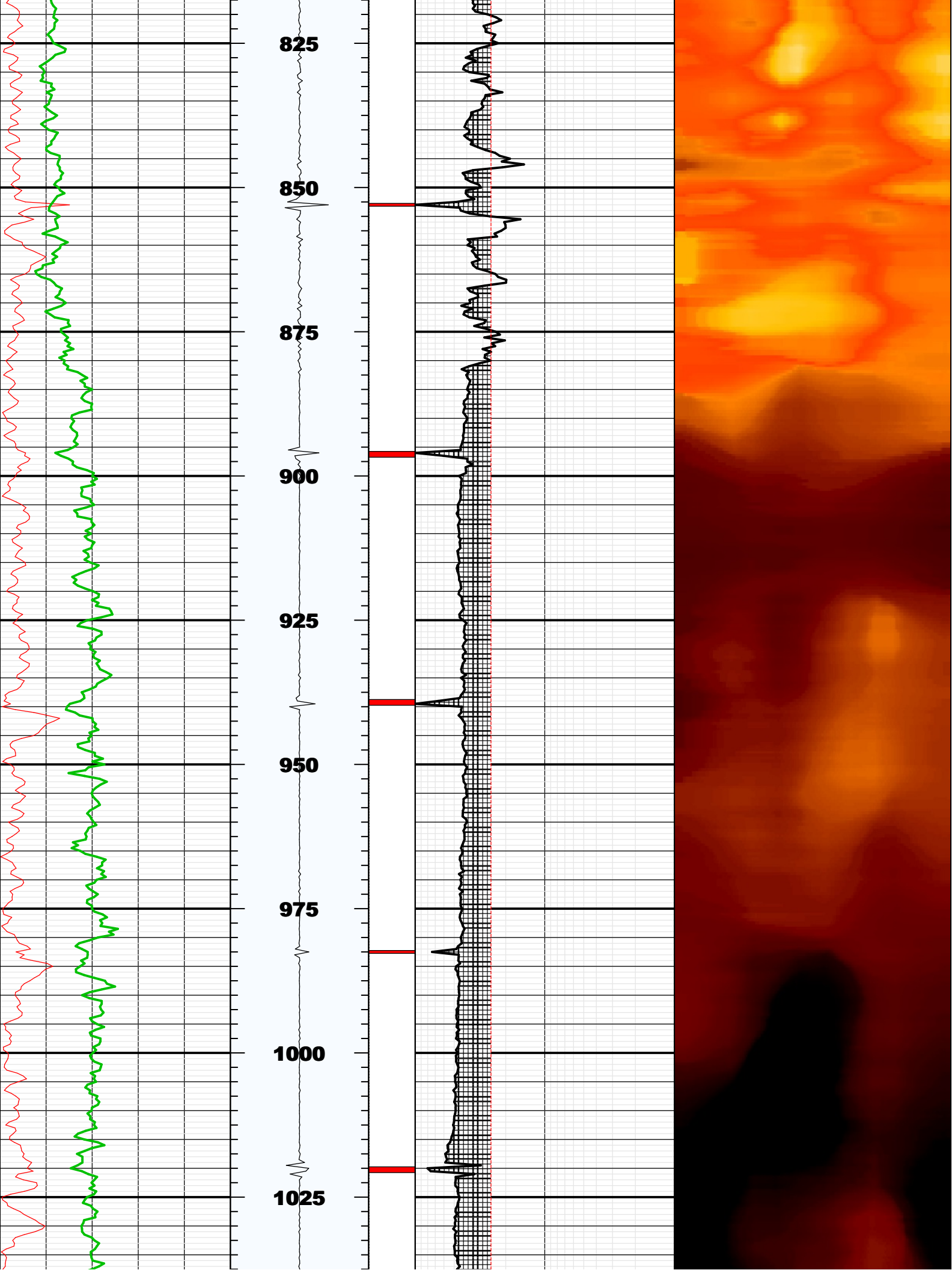
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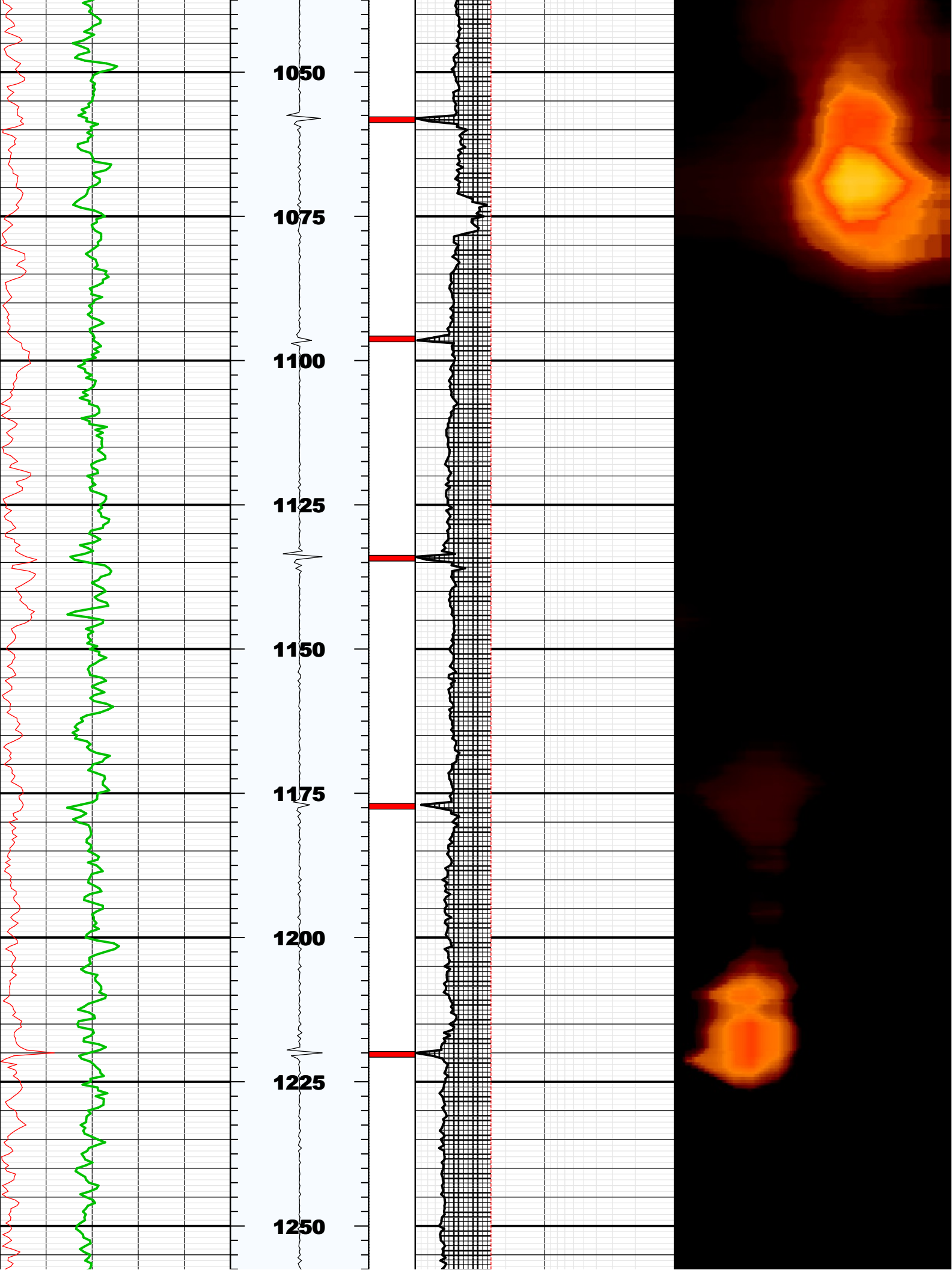




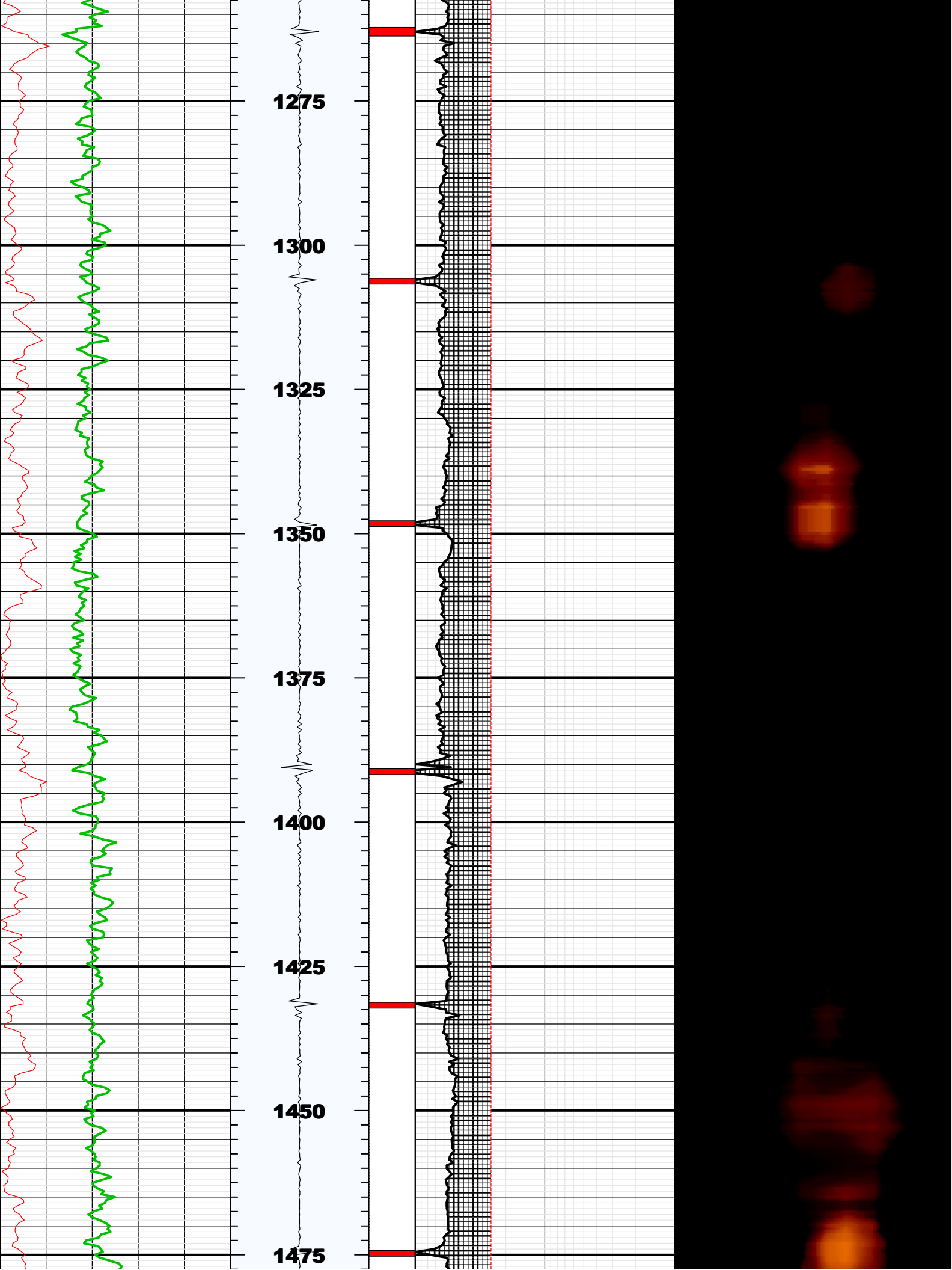


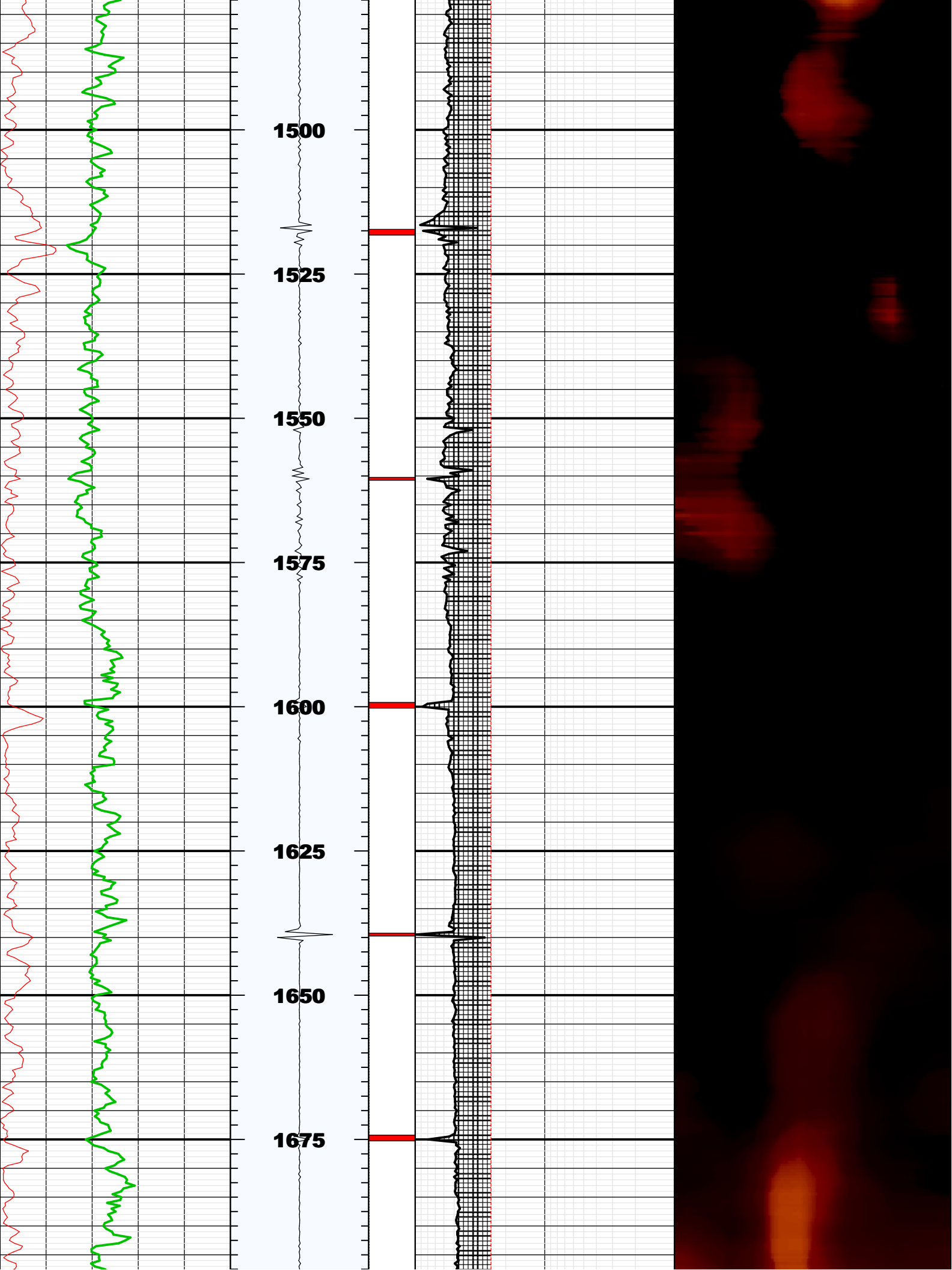


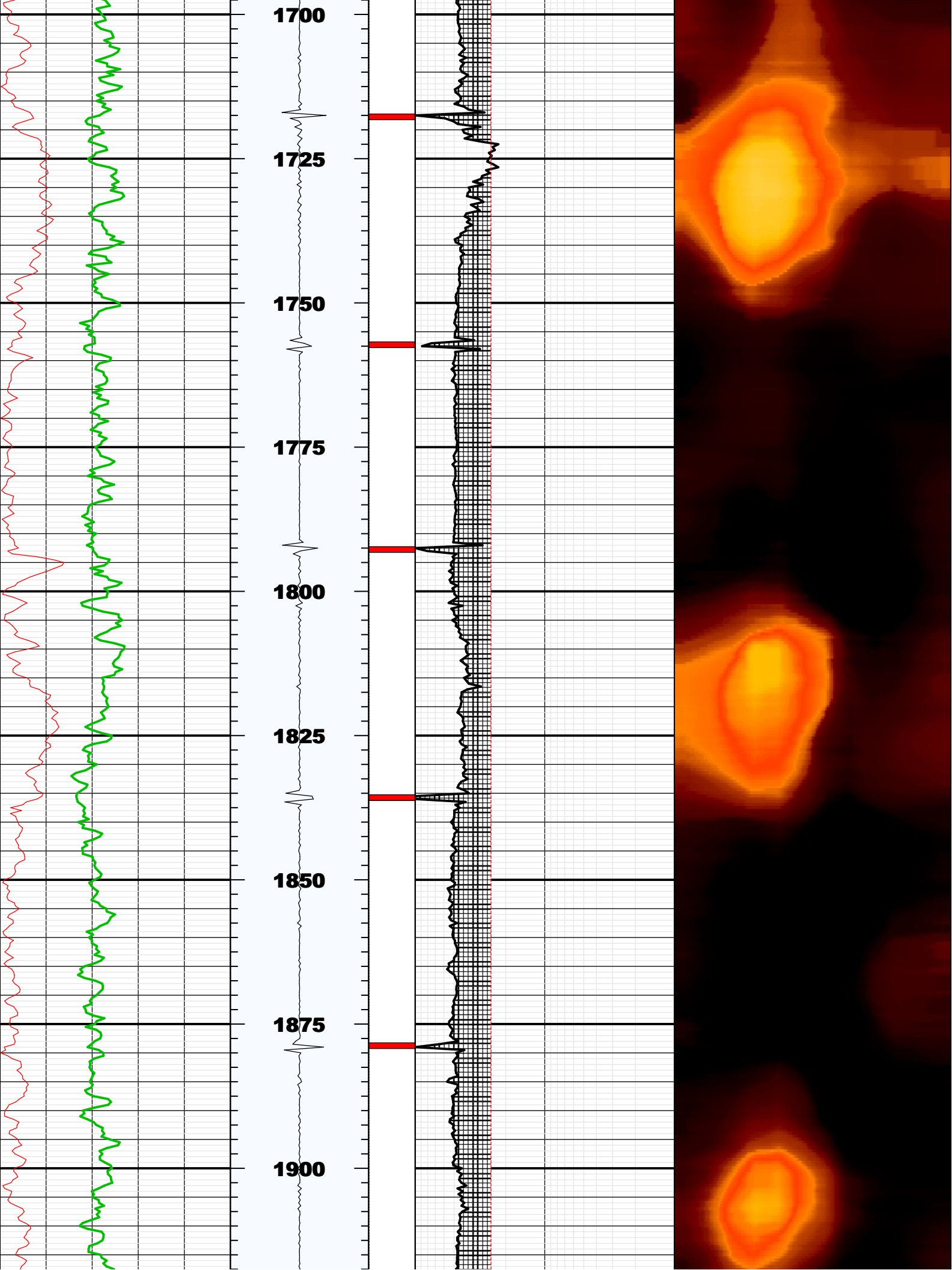


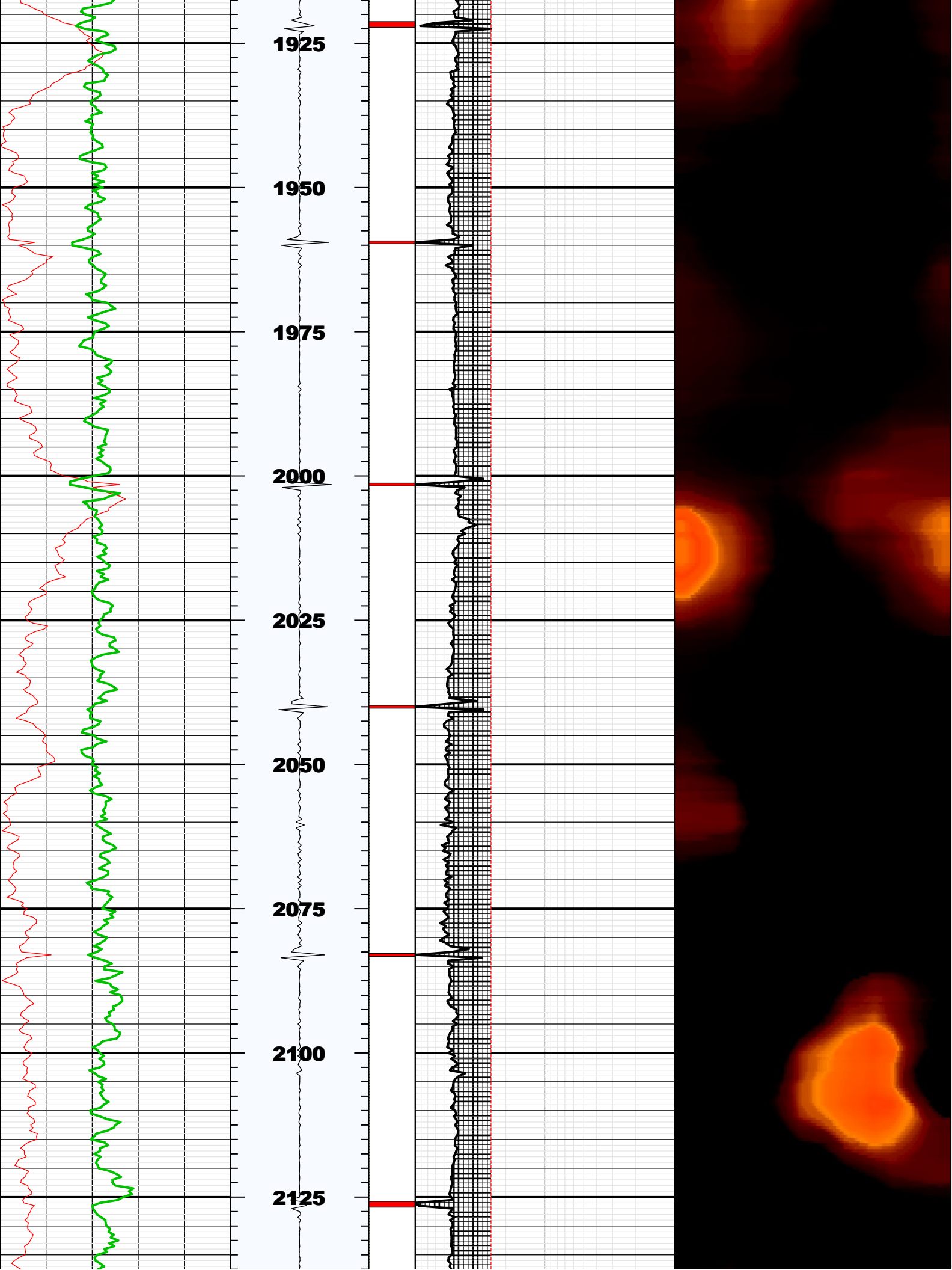


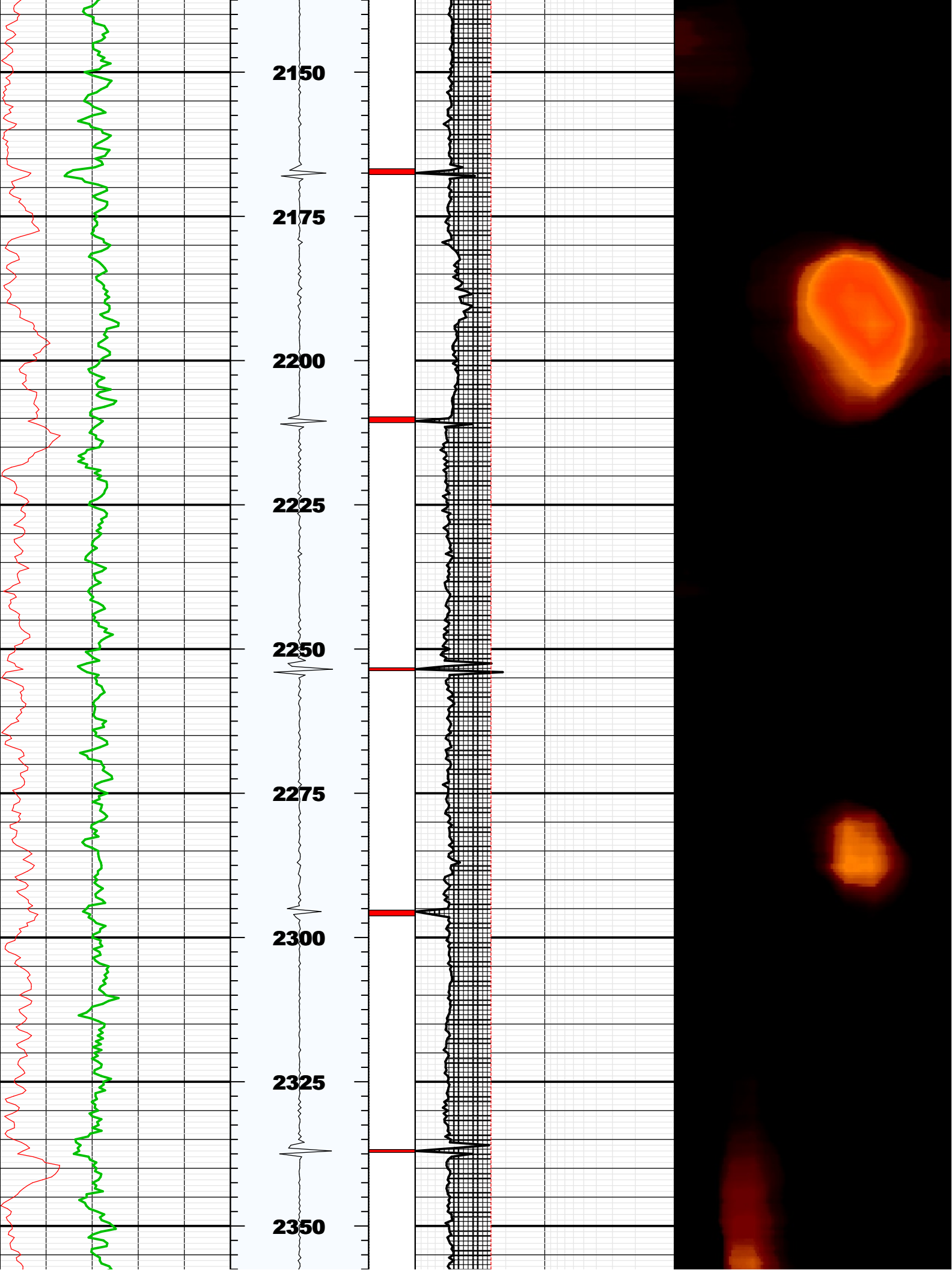




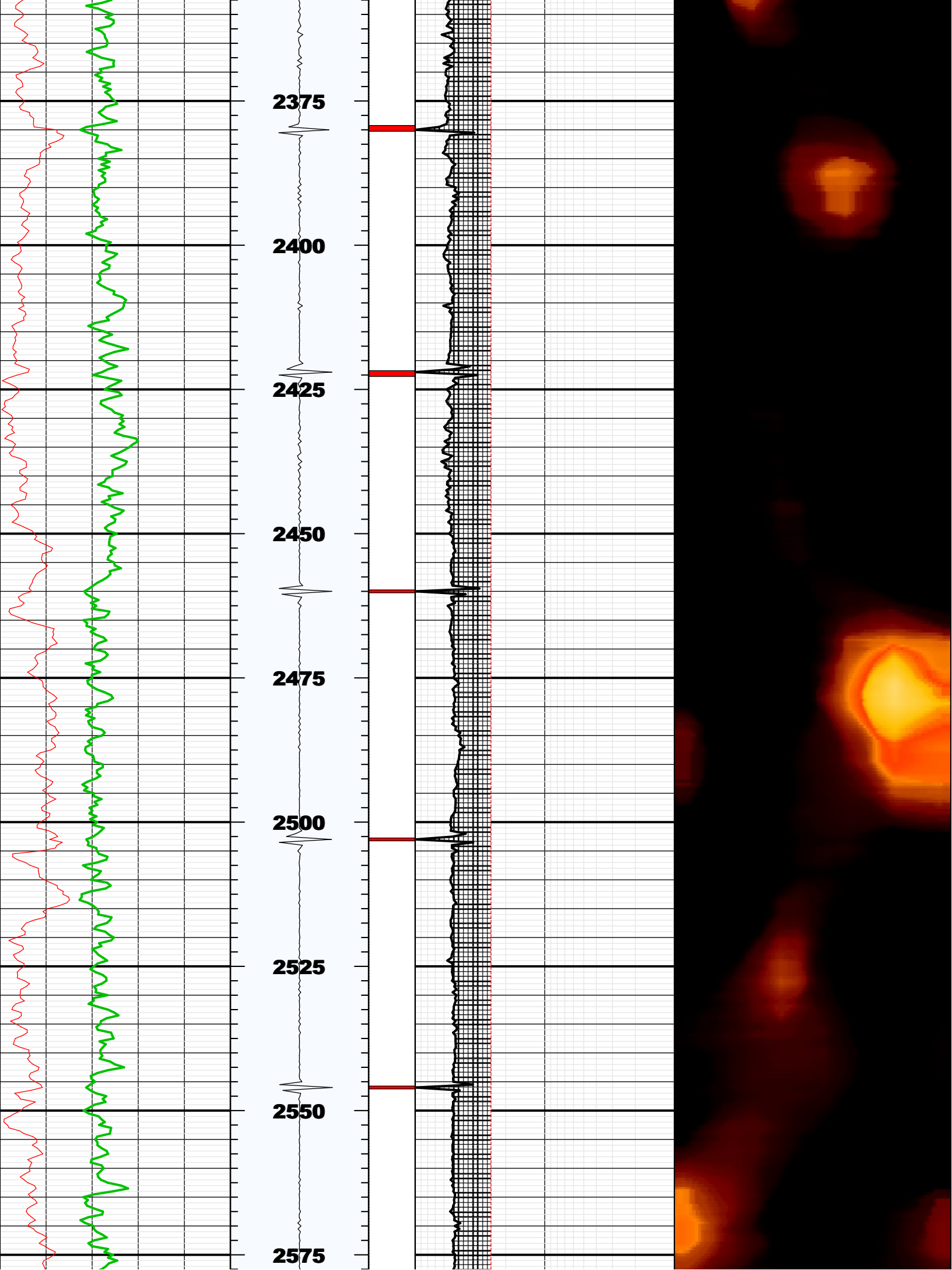


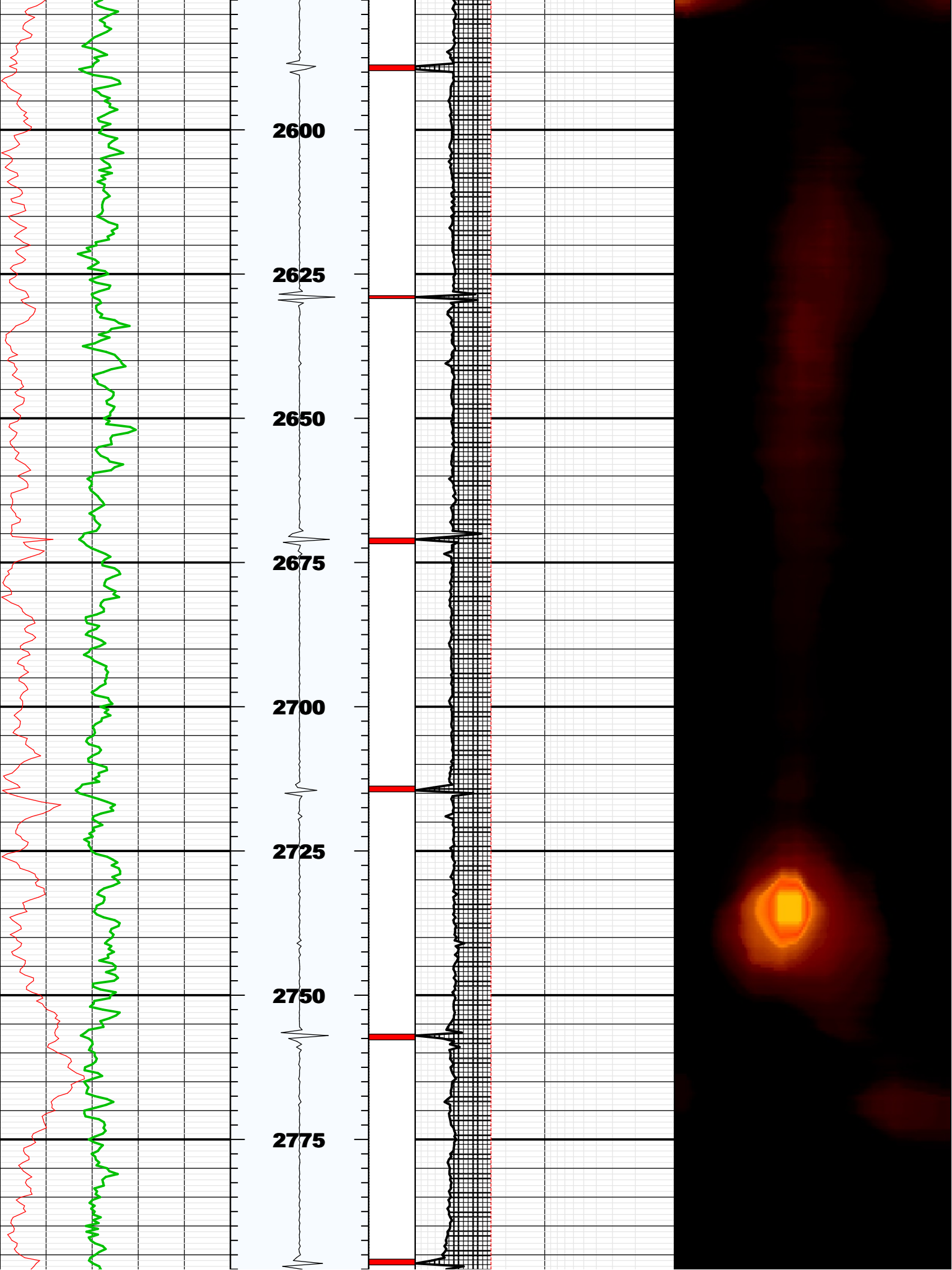


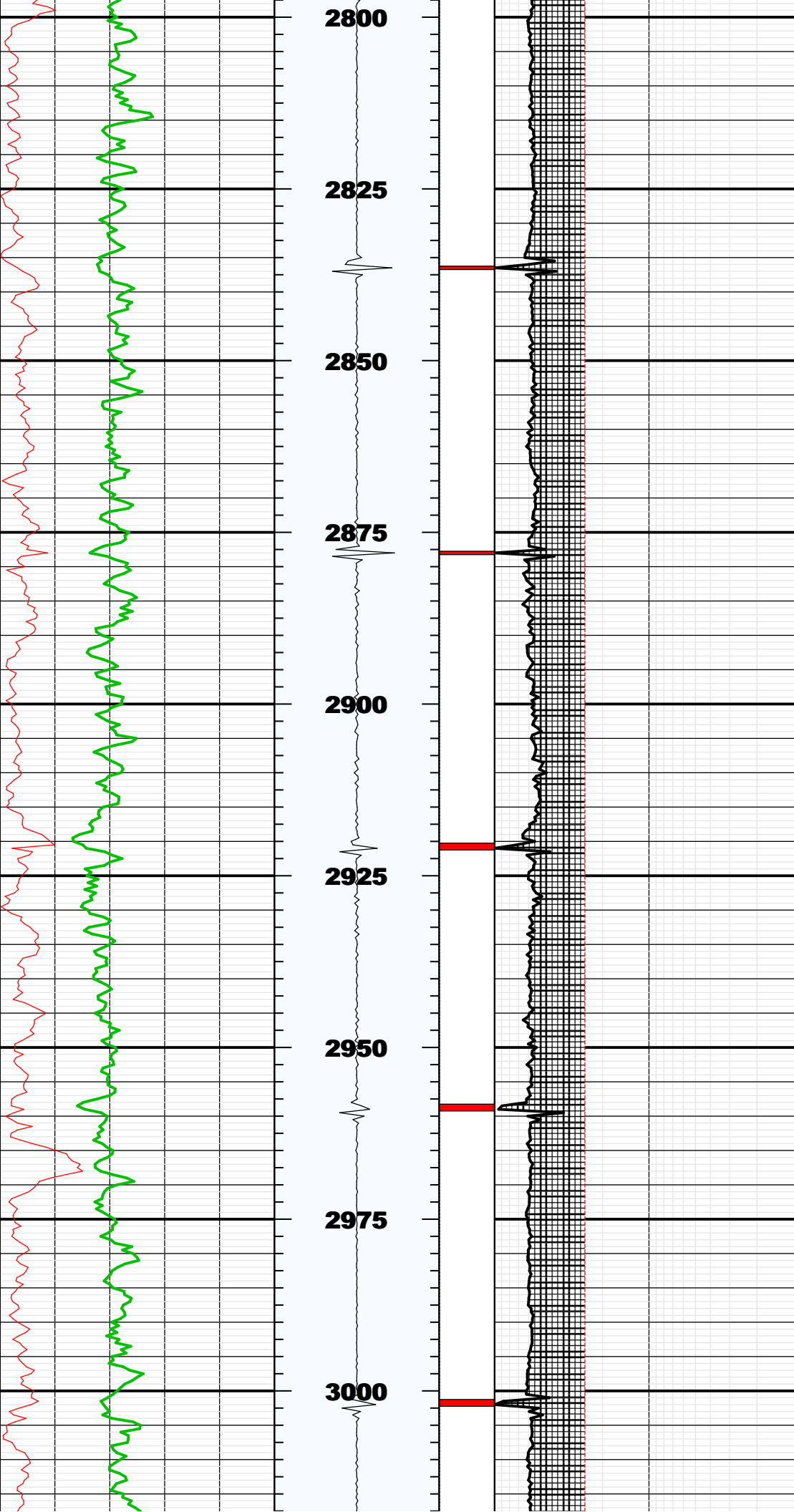




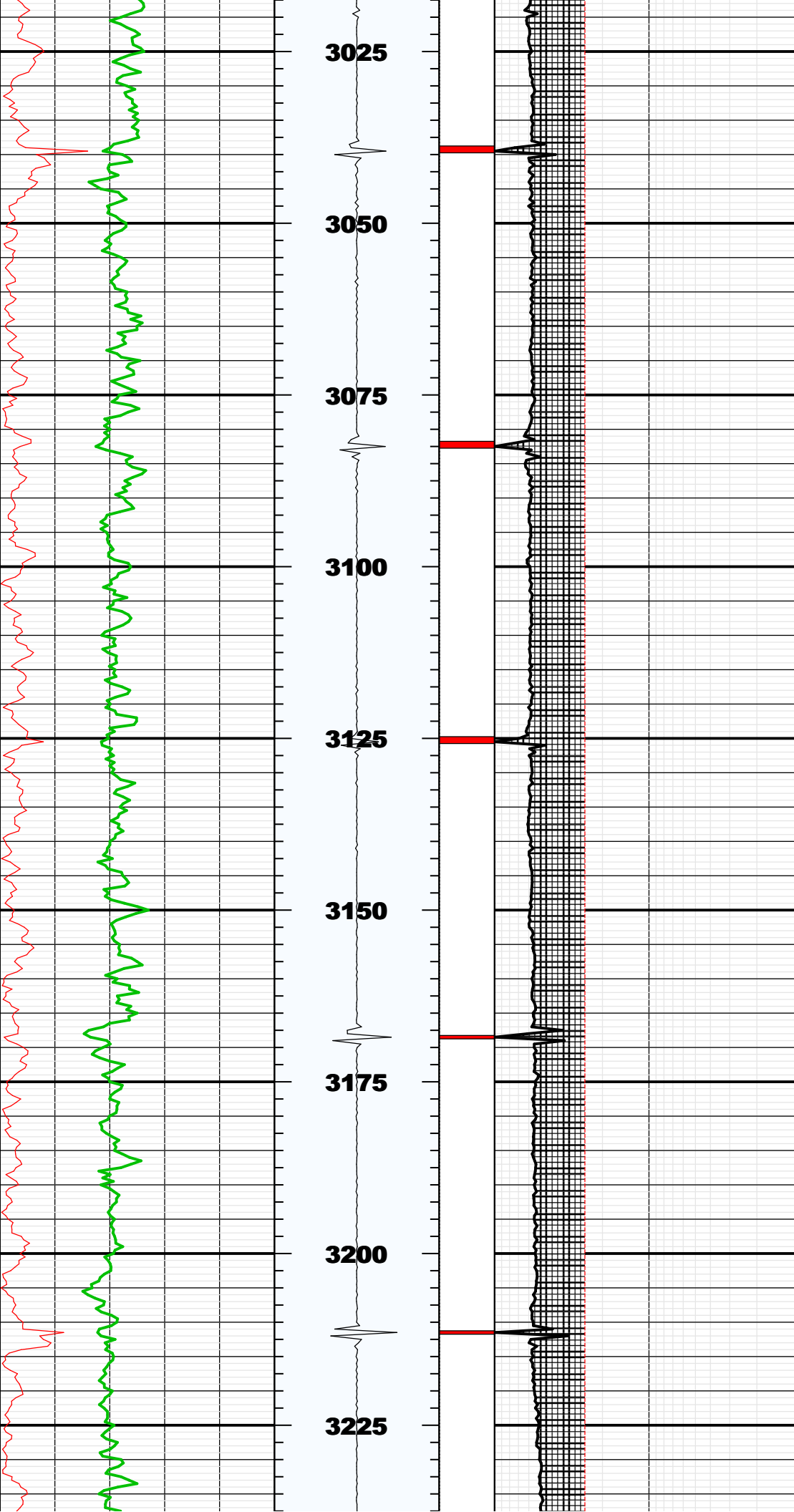


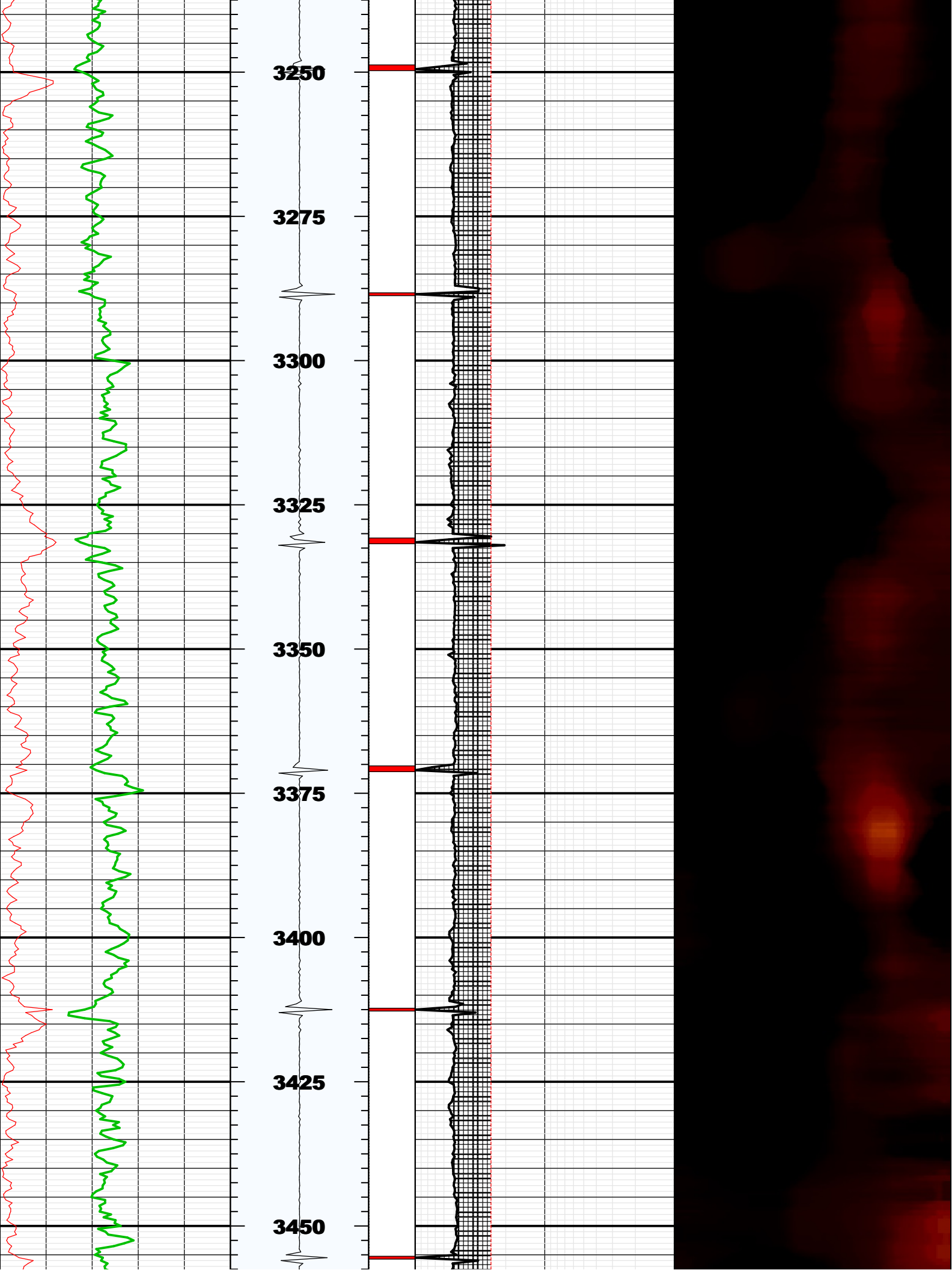


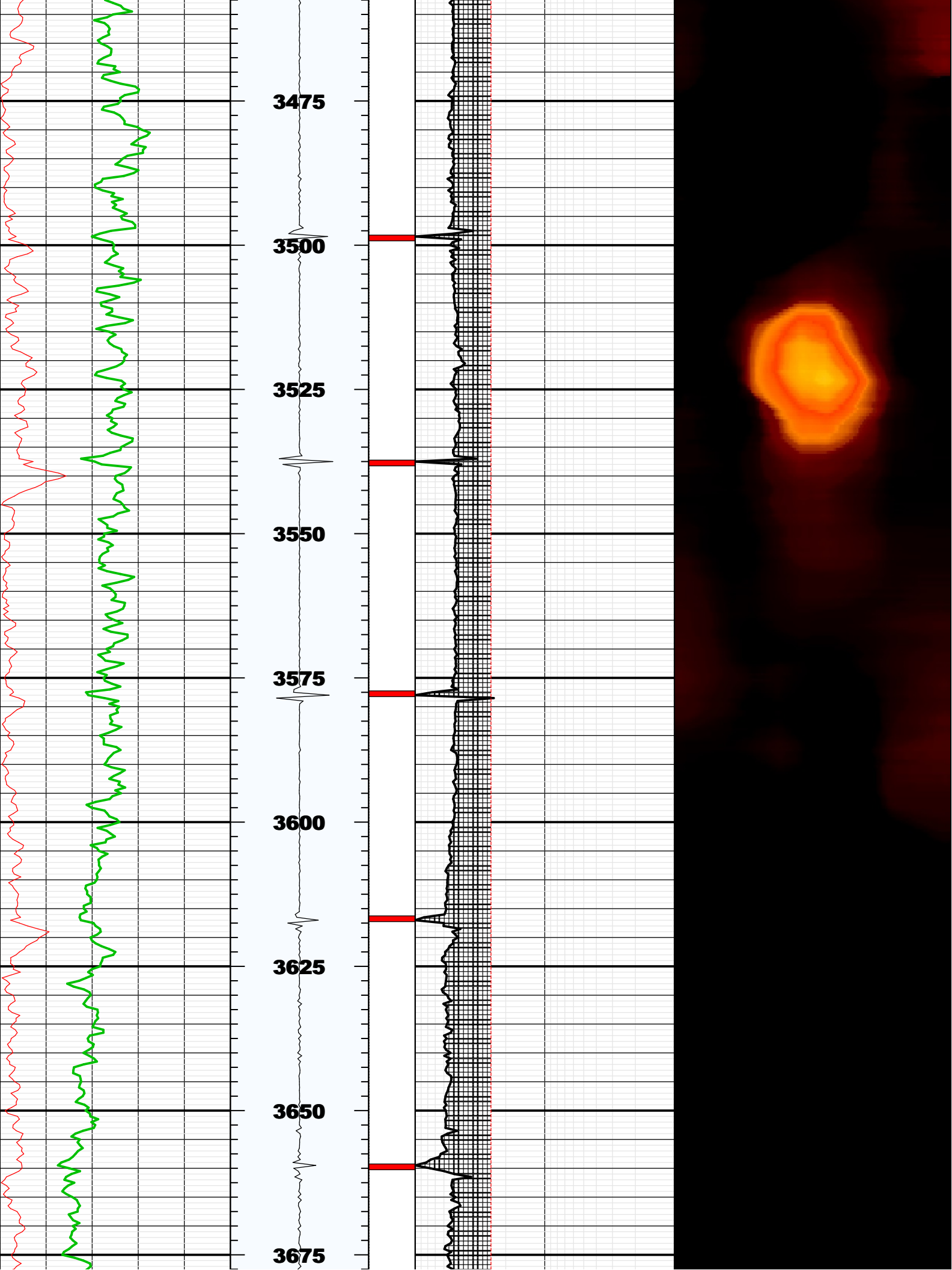


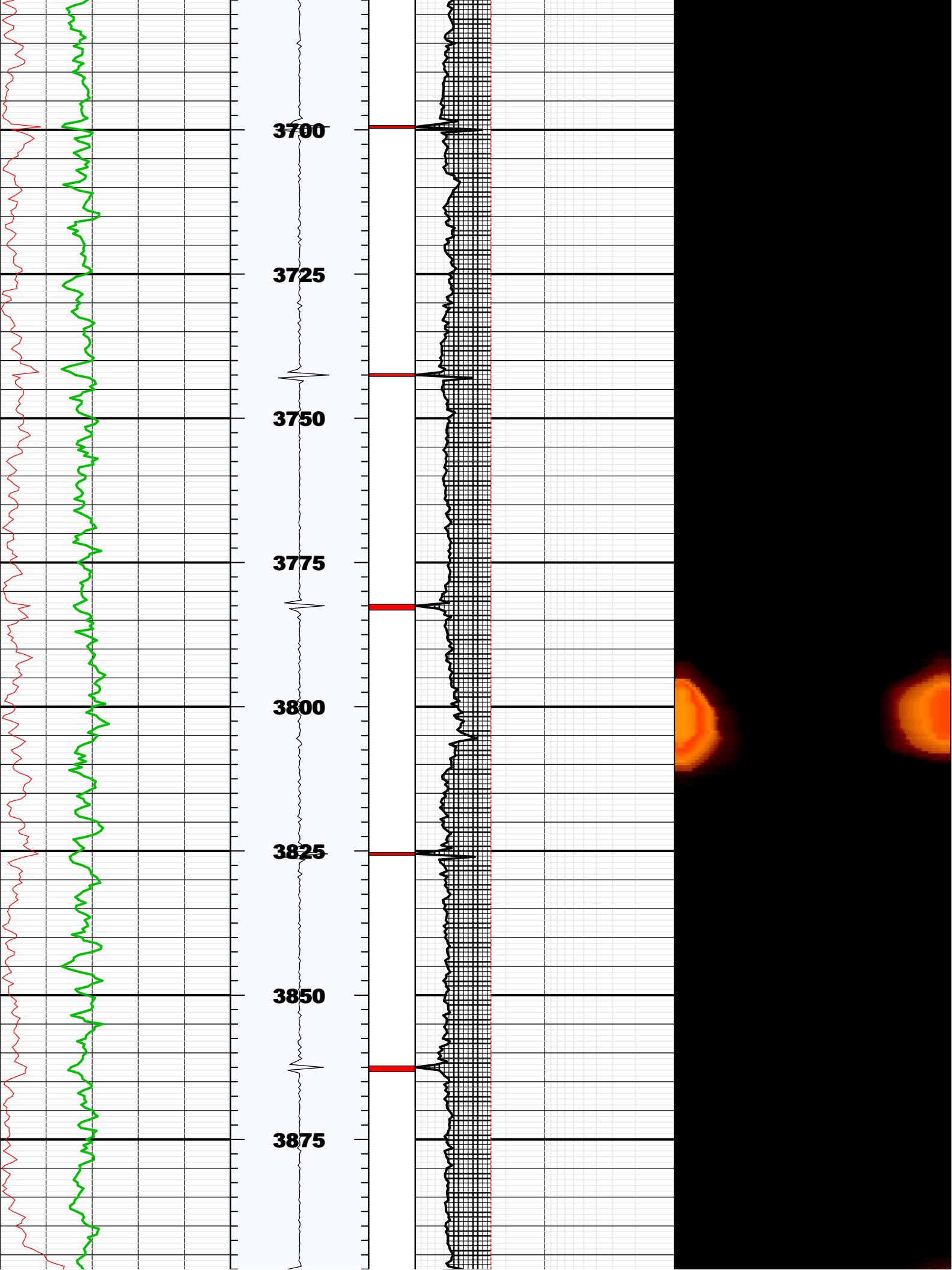


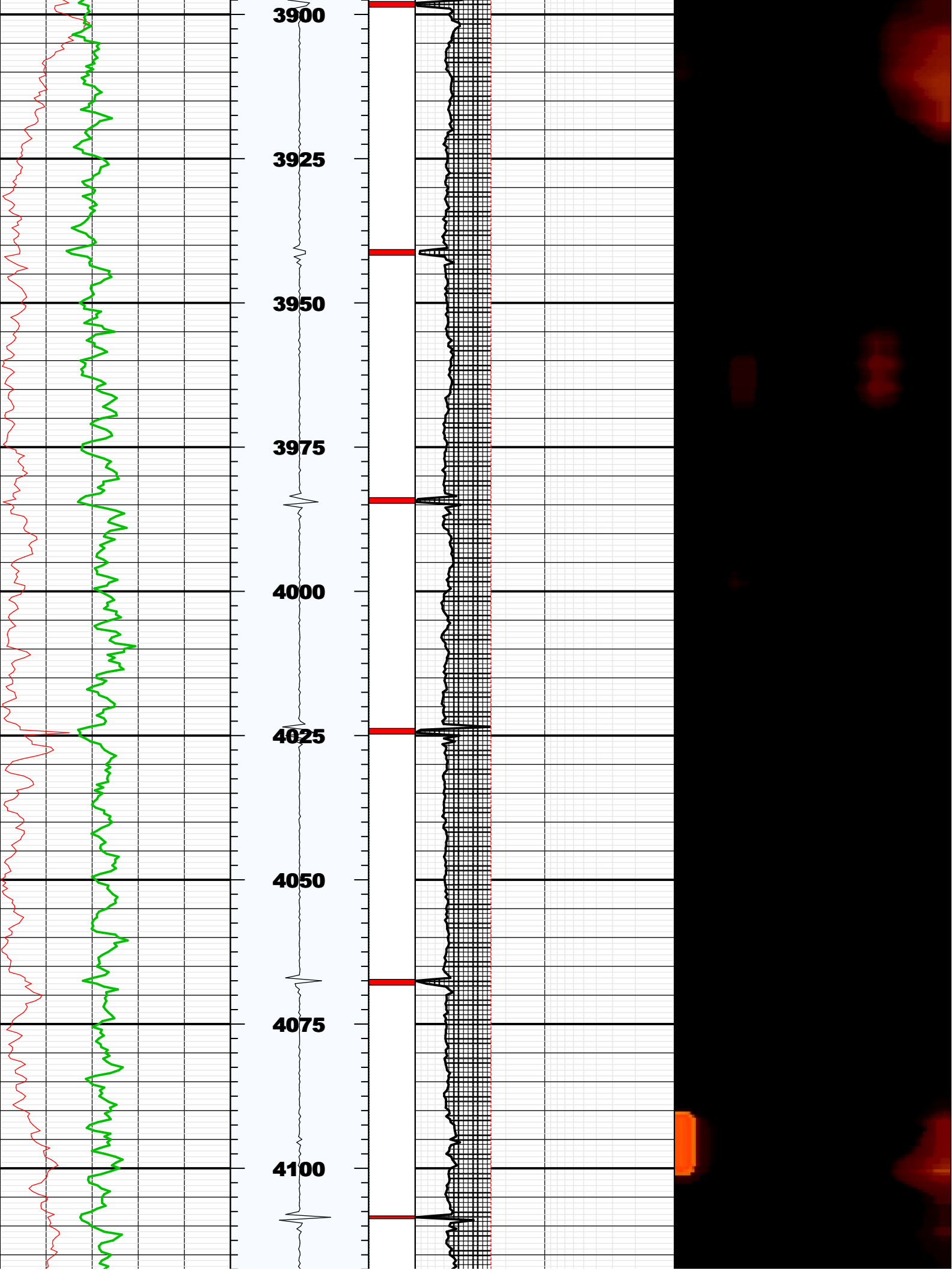


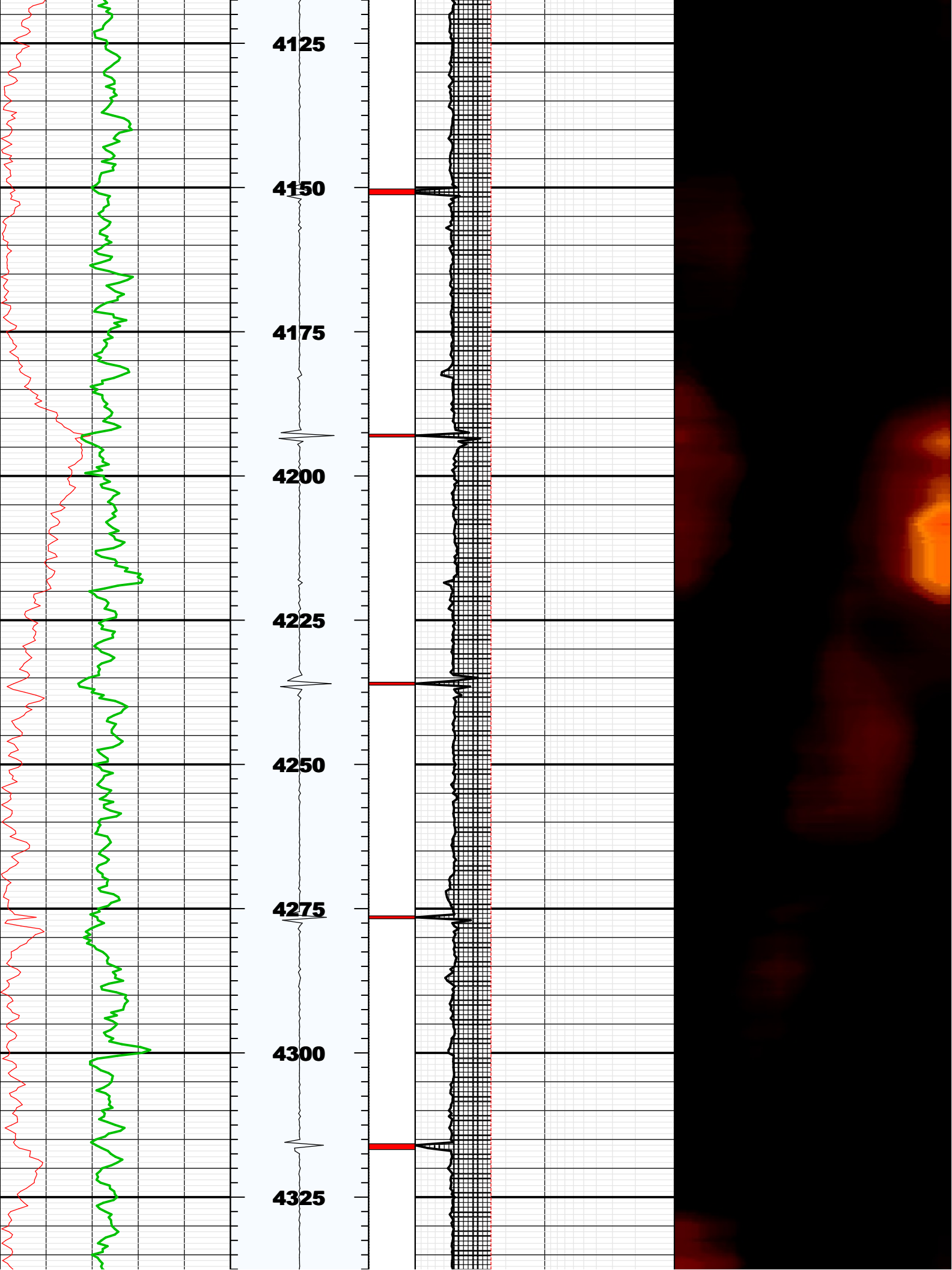




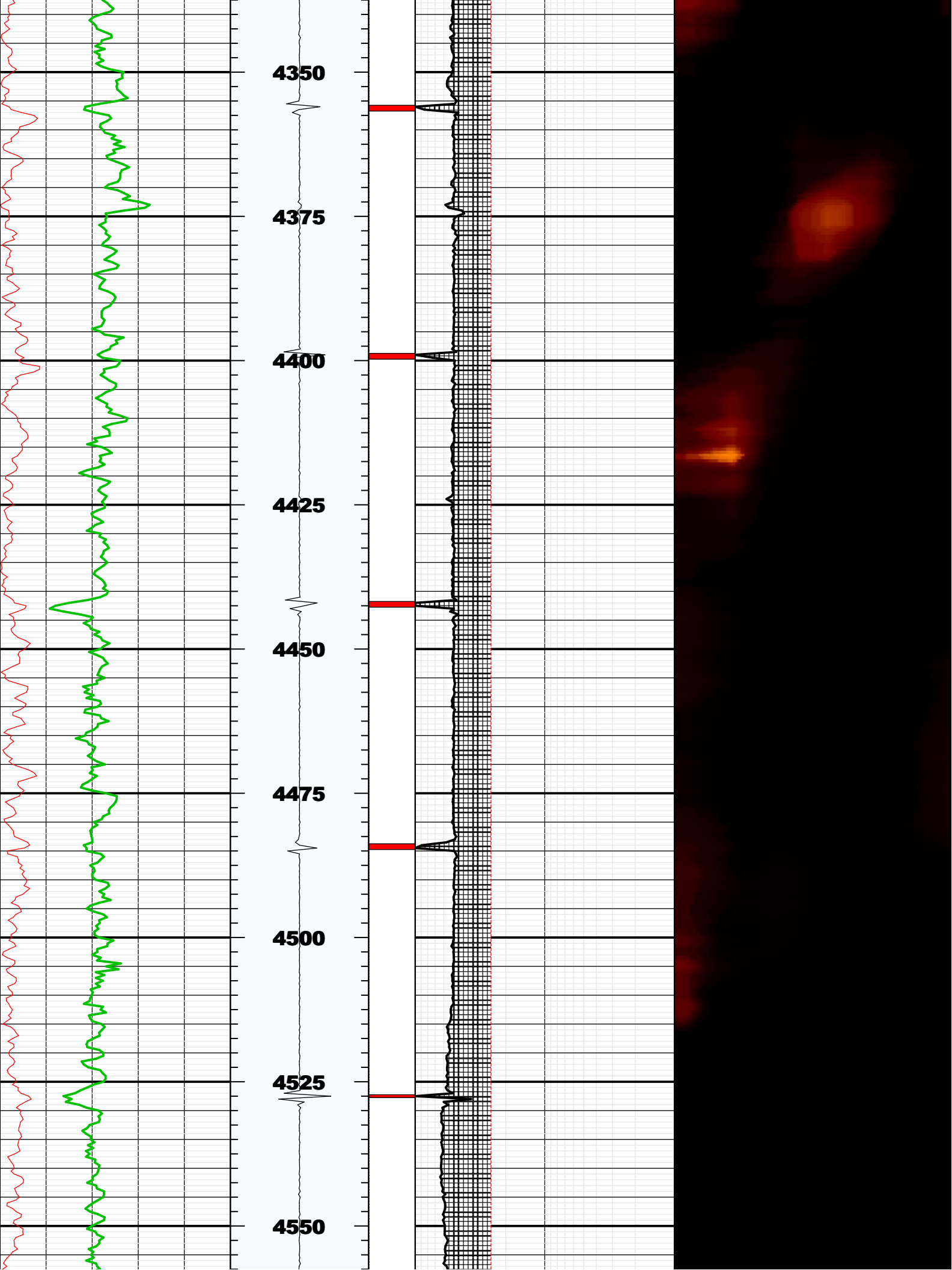


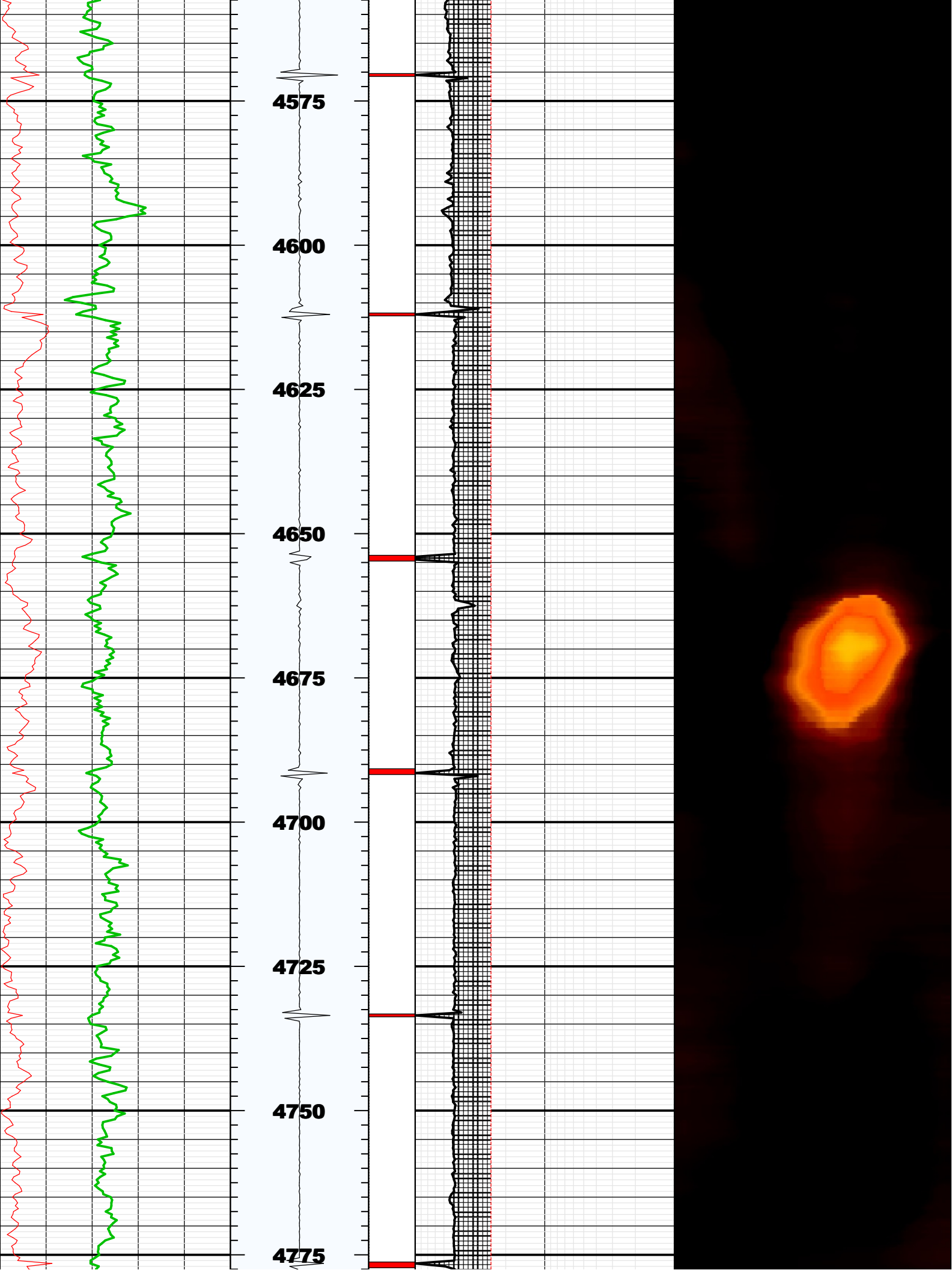




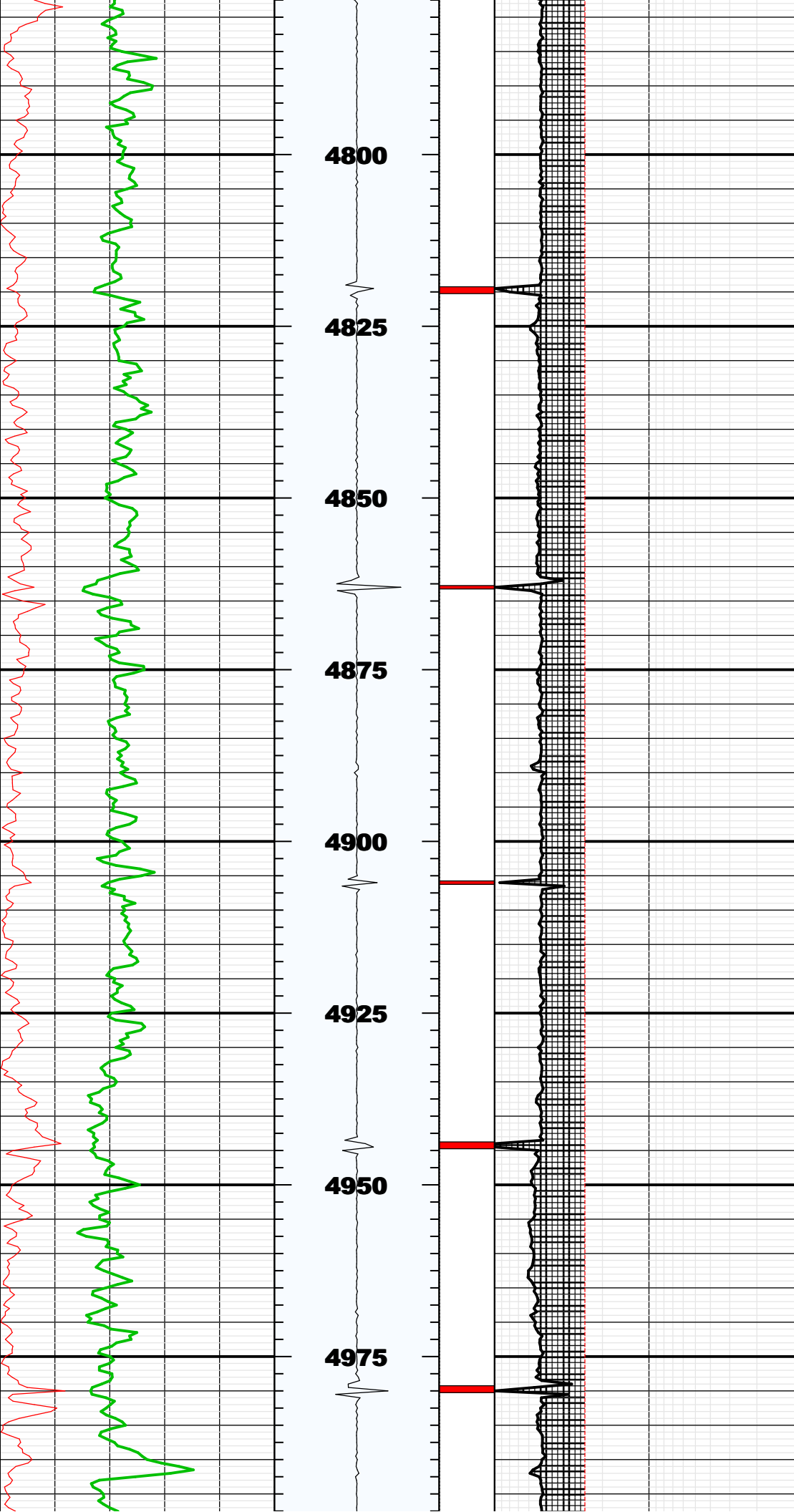


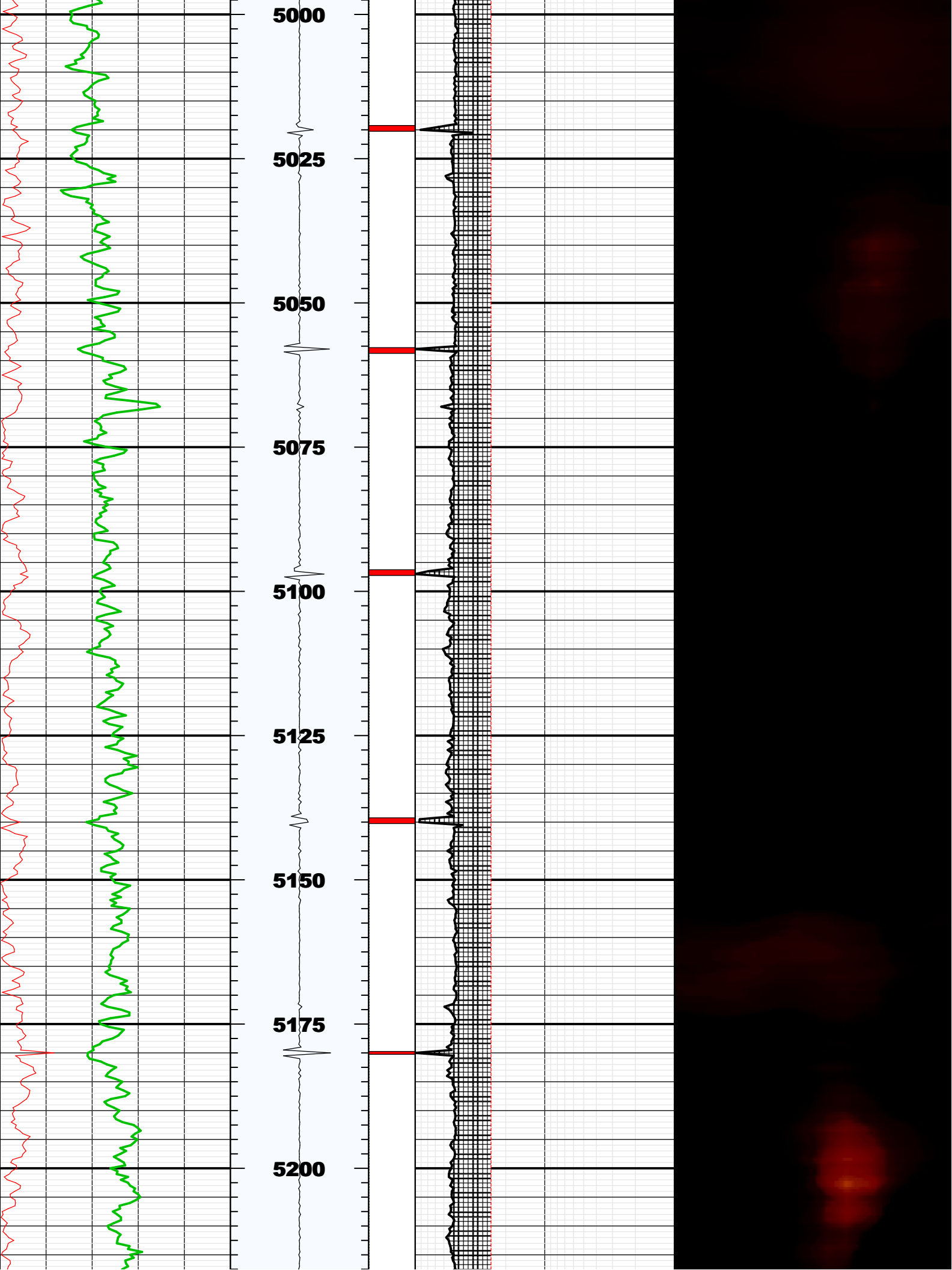


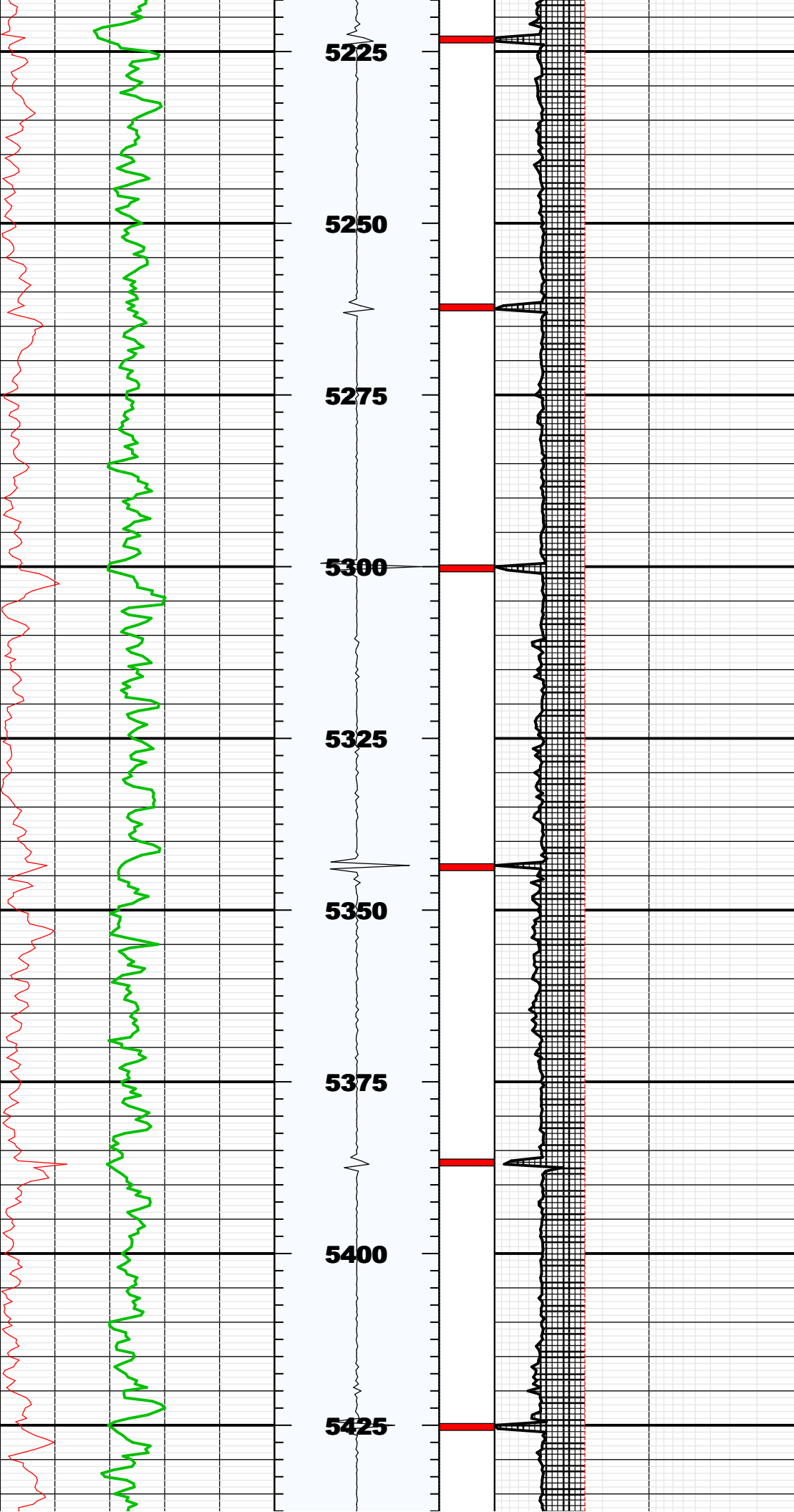


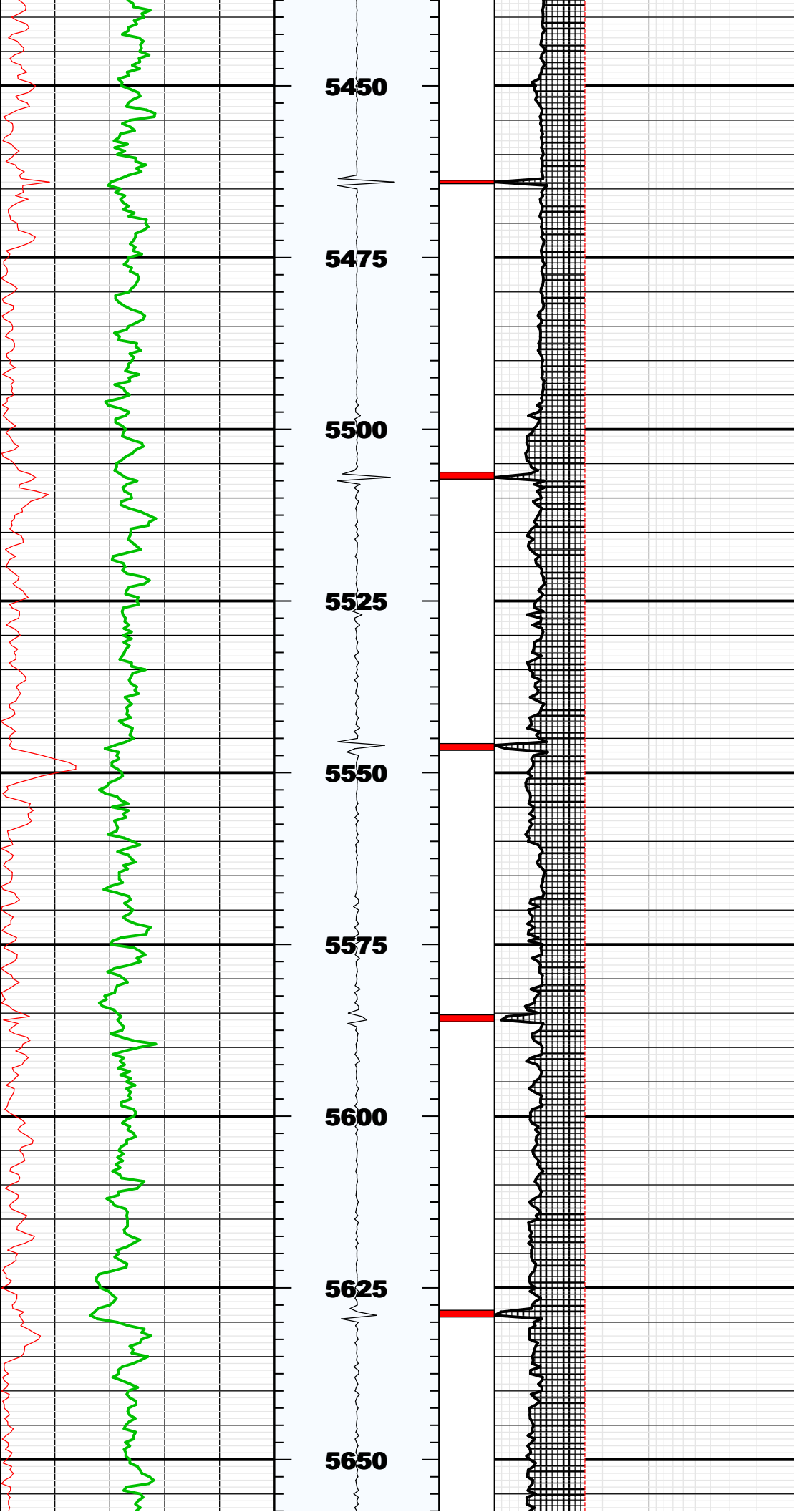


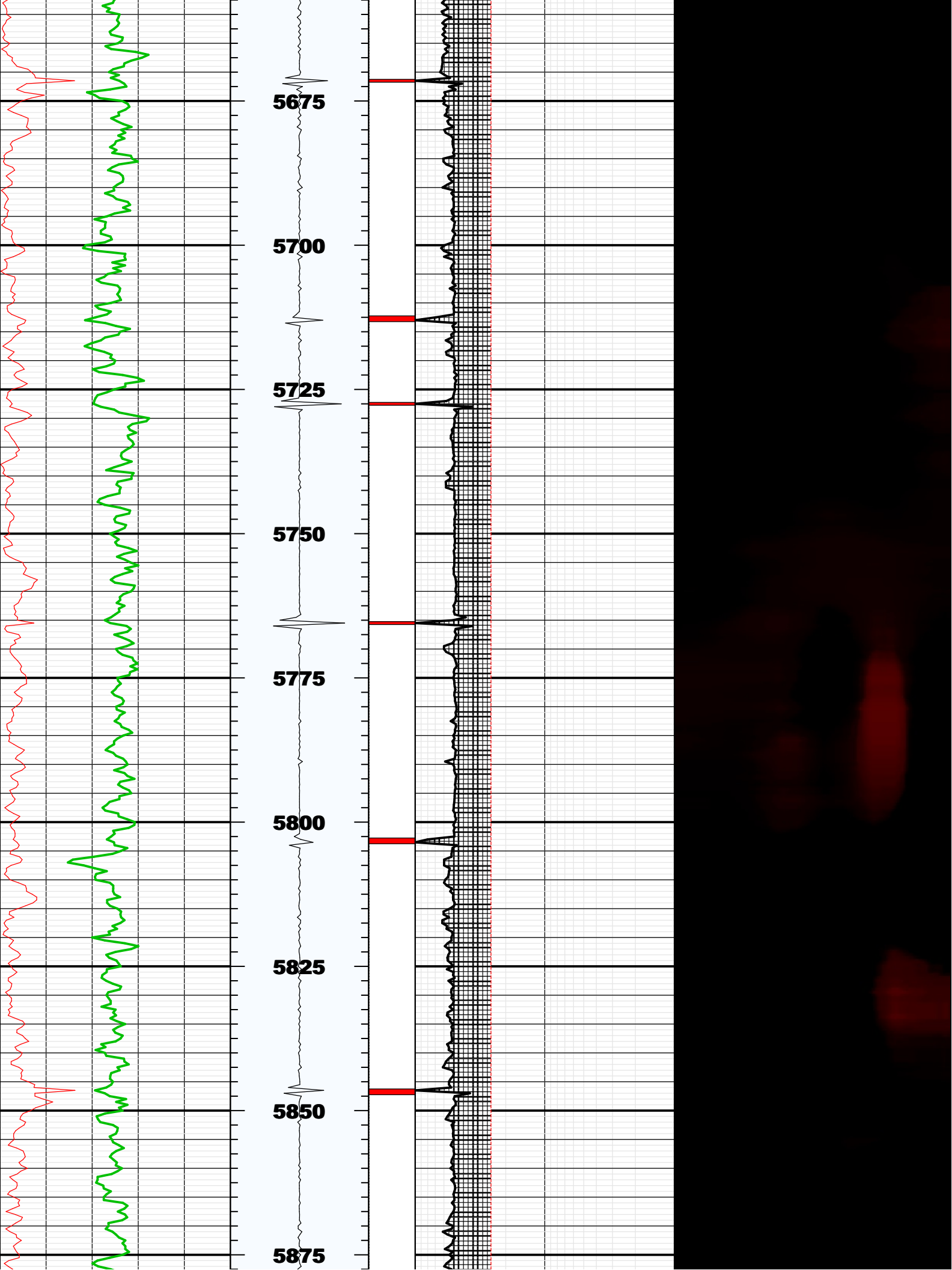


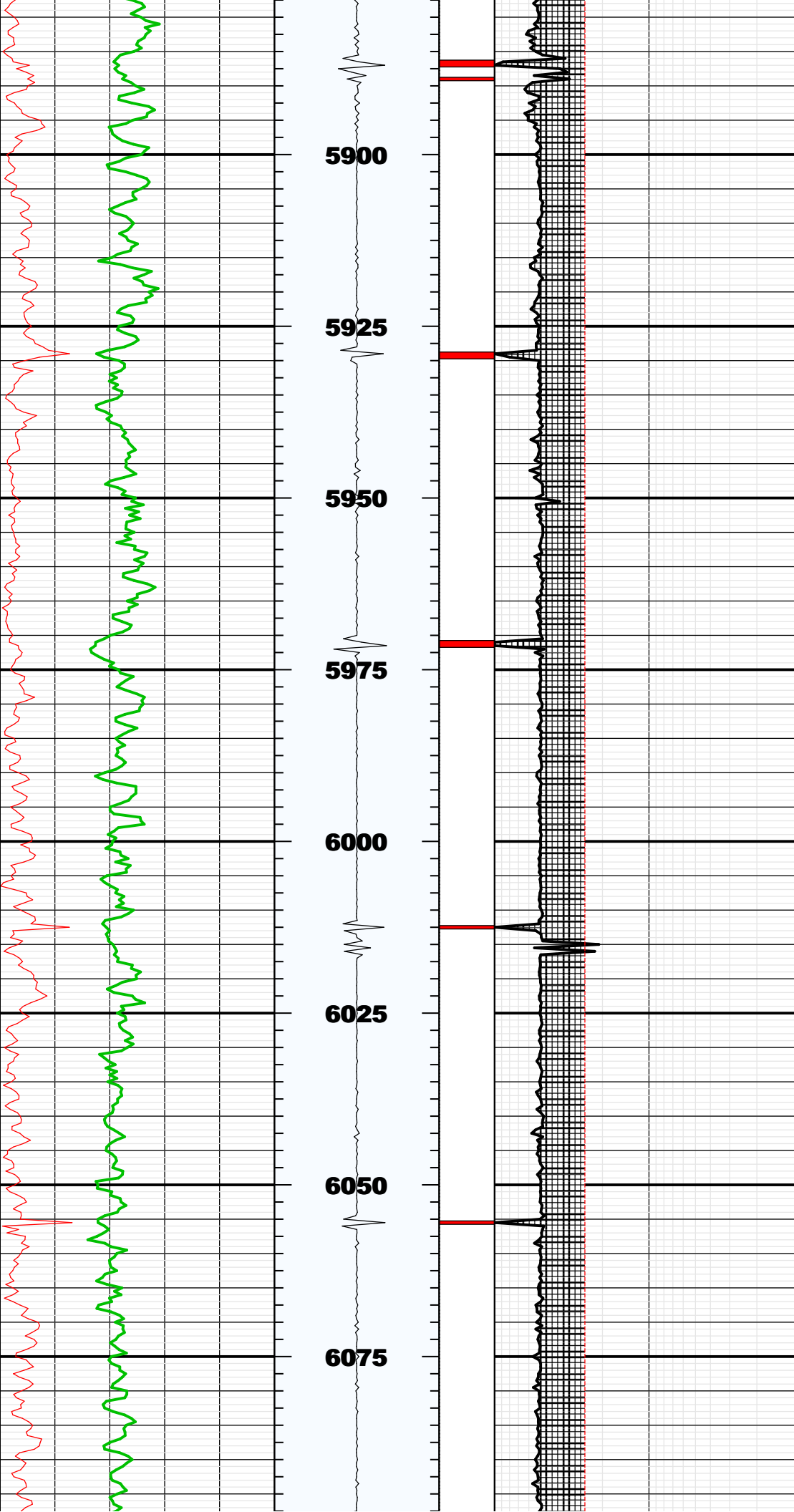




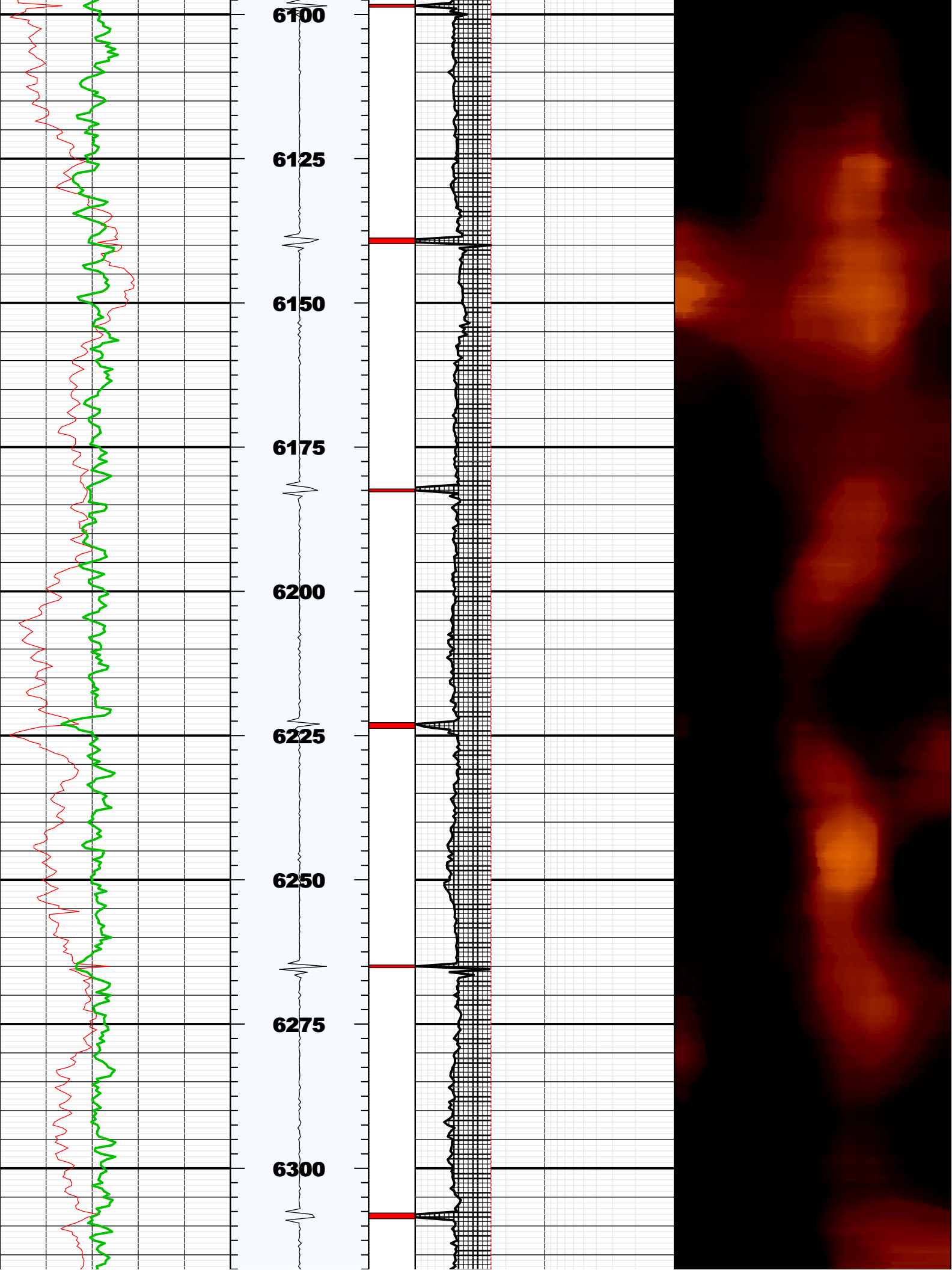


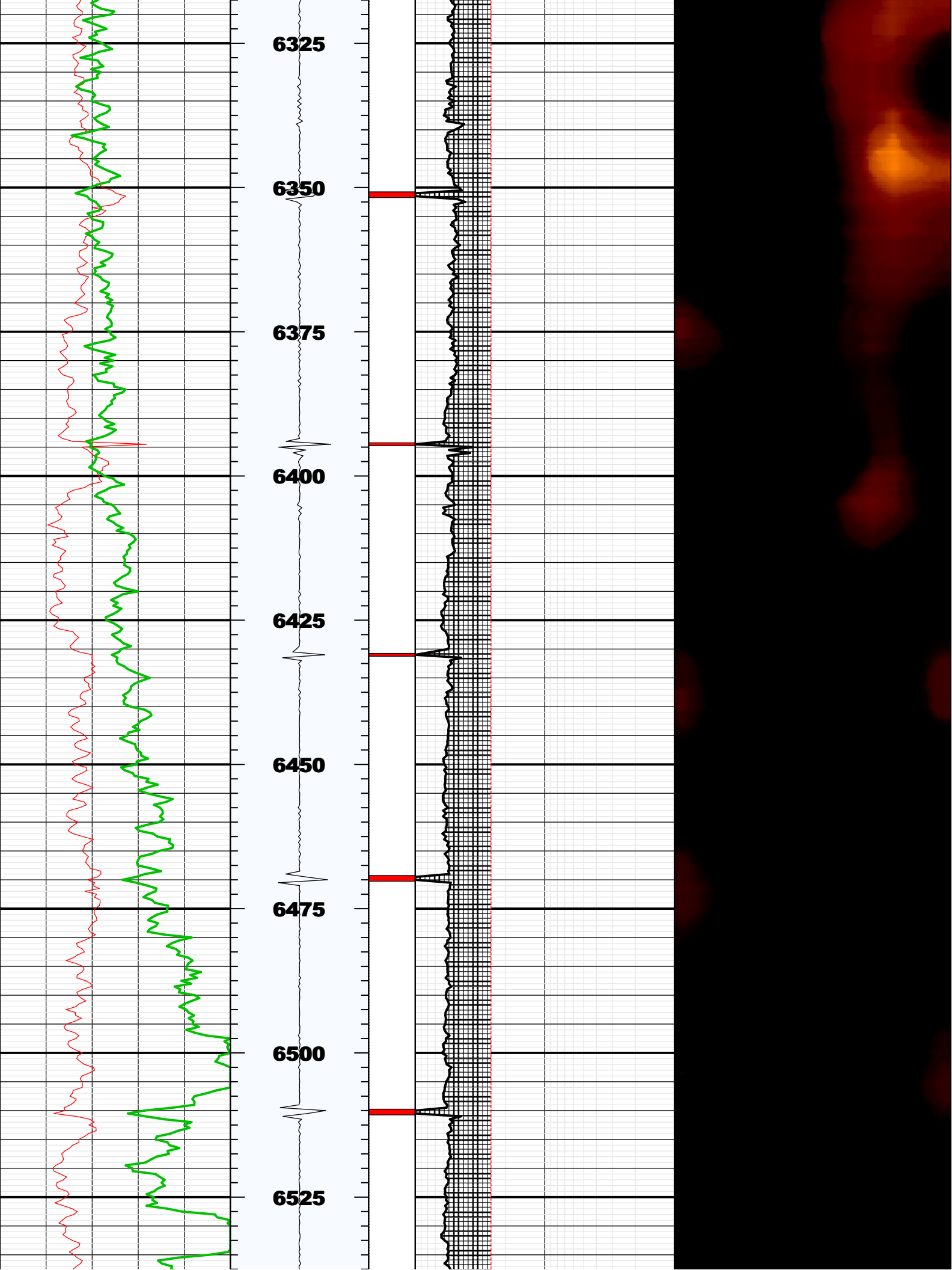




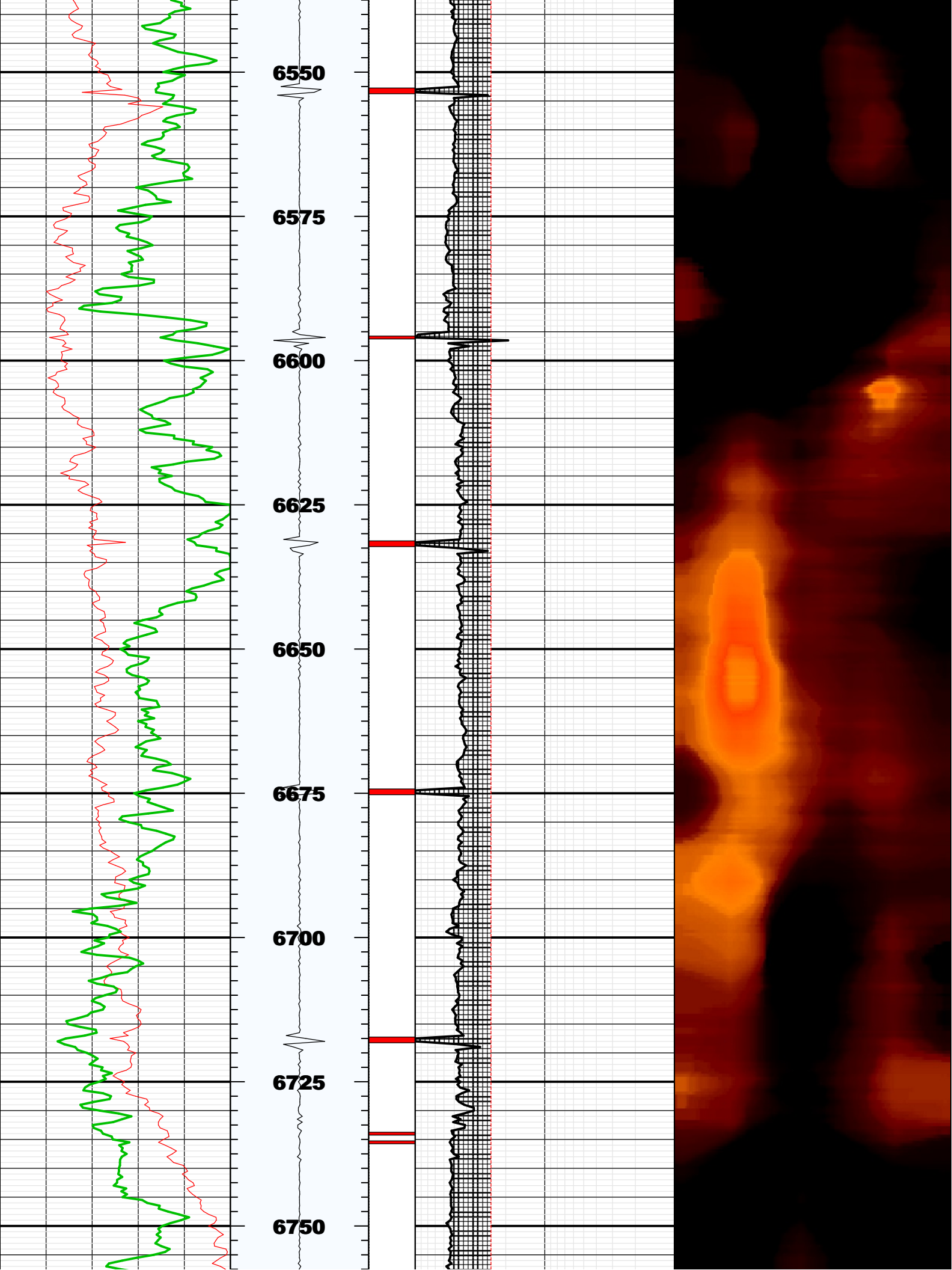


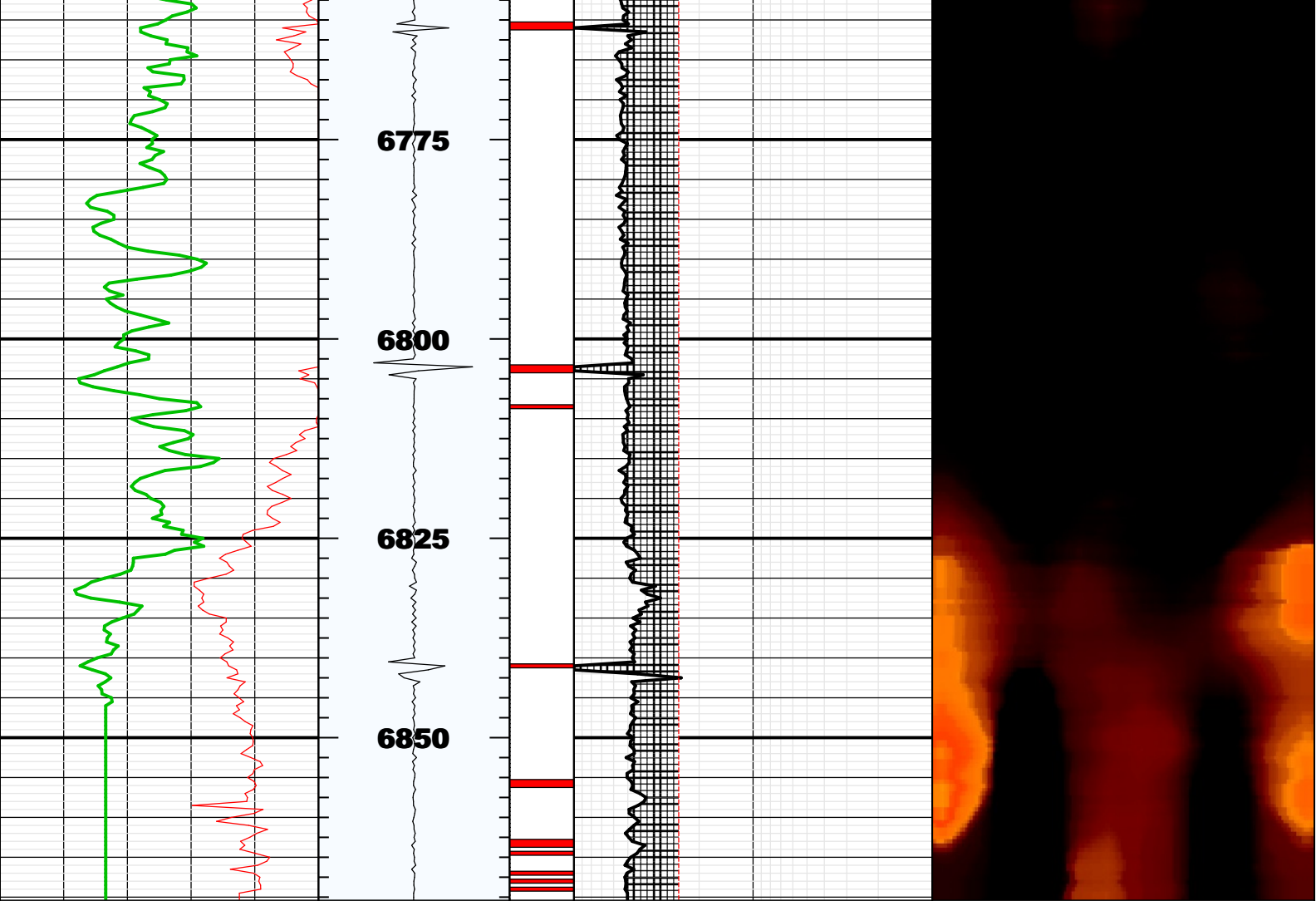








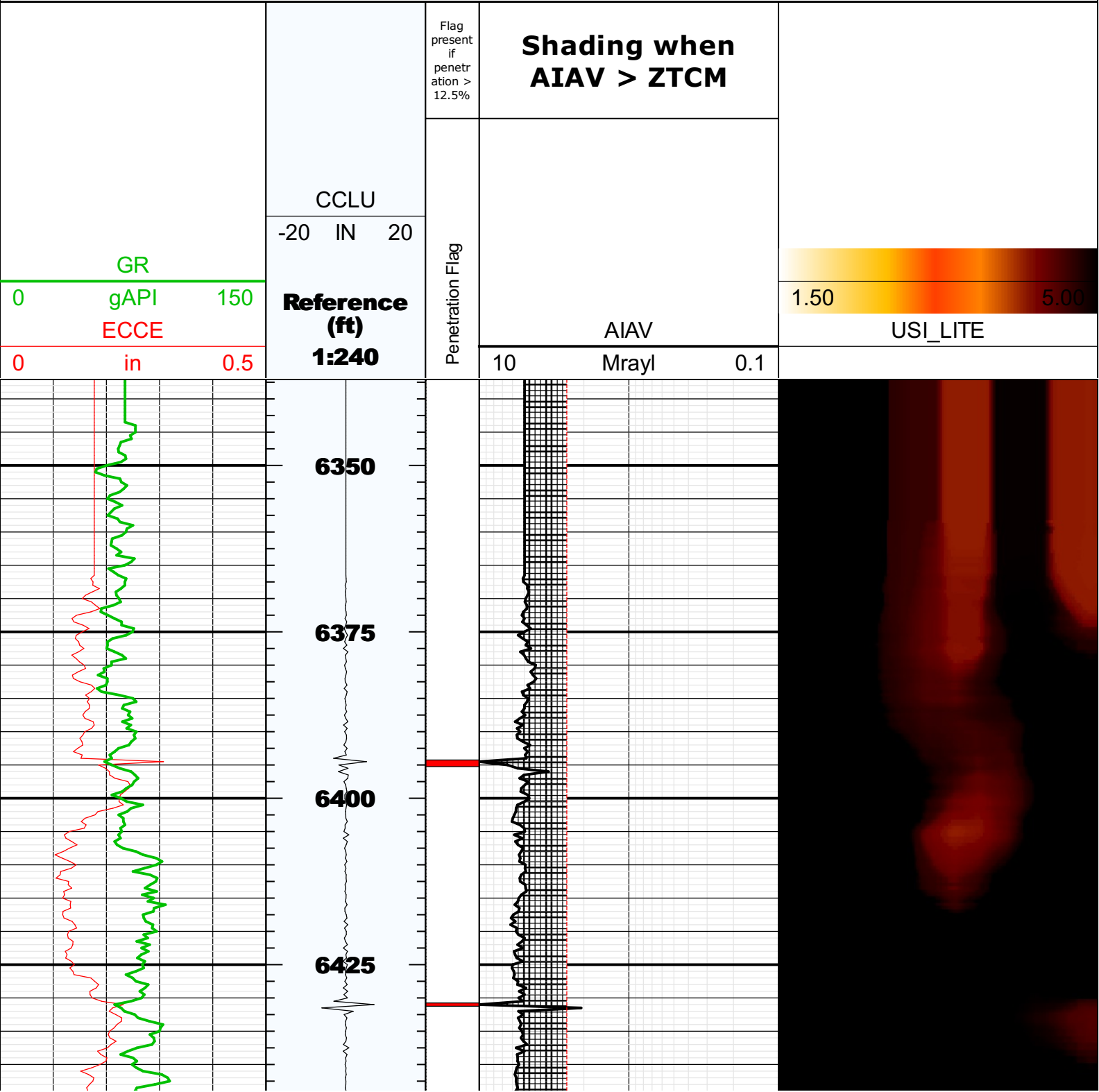


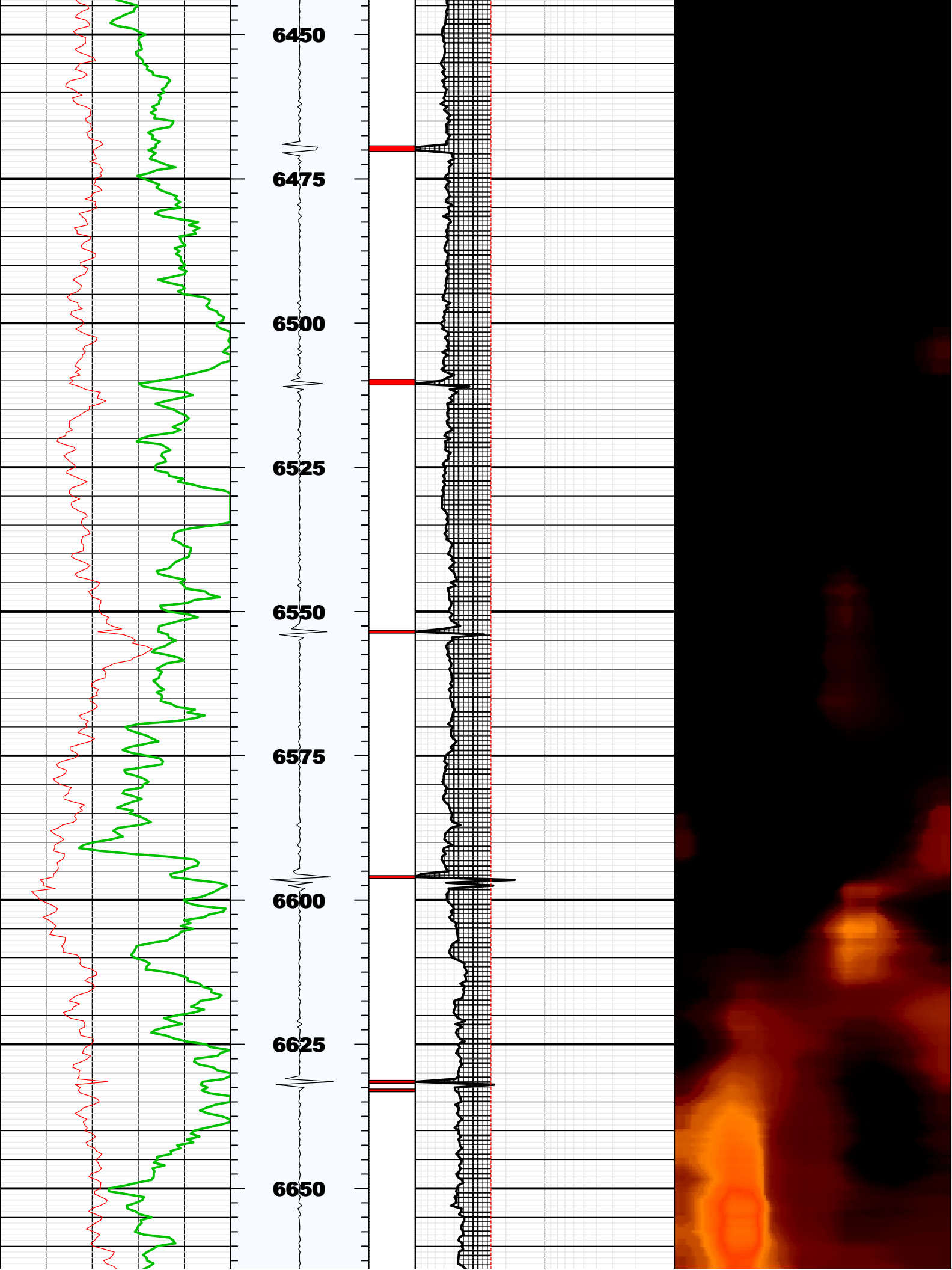


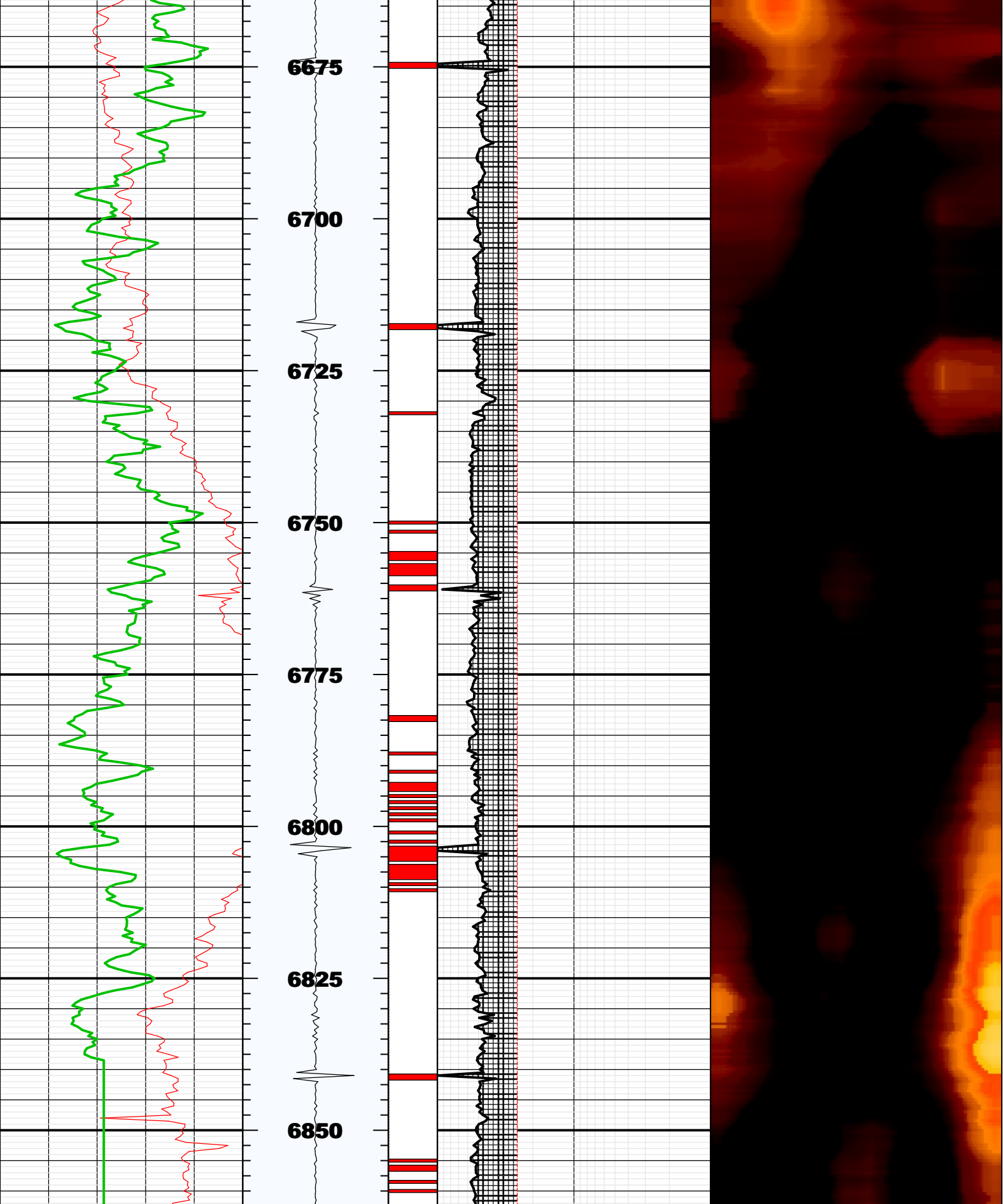
BS	8.75000	IN	Bit Size
CASG	N/A		Casing Grade
CDIA	7.00000	IN	Casing Outer Diameter
CSID			
CSIZ	7.00000	IN	Current Casing Size
CWEI	26.00000	LB/F	Casing Weight
DFD	8.40000	LB/G	Drilling Fluid Density
DFVL	195.00000	US/F	Default Fluid Velocity
DO			
DOT	2.87400	IN	Diameter of Transducer Sensor
EMXV	30	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	33.00000	US	Window Begin Time
WINE	75.28250	US	Window End Time
ZCAS	46.25000	MRAY	Acoustic Impedance of Casing
ZINI	-1.00000	MRAY	Initial Estimate of Cement Impedance
ZMUD	1.78000	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>3</sup> Processing Length

Repeat Pass

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Field: Wattenberg







## Fluid Properties Used for Main Pass

