

Company: Noble Energy Inc

Well: COLT A13-628
Field: WATTENBERG
County: WELD

State: COLORADO

County: WELD			
Field: WATTENBERG			
Location: SHL SWSW S17 T6N R63W			
Well: COLT A13-628			
Company: Noble Energy Inc			
USI-LITE			
Permanent Datum: Log Measured From: Drilling Measured From:		GL KB KB	Elev: K.B. 4689.0 F G.L. 4665.0 F D.F. 4688.0 F
Logging Date	24-Apr-2015	API Serial No. 05-123-40905	Section 17
Run Number	ONE	Township 6N	Range 63W
Depth Driller	7040.9 F		
Schlumberger Depth	6940.9 F		
Bottom Log Interval	6940.9 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	6940.9 F		
To	-999.2 F		
Casing Size	7.00 IN		
Weight	26.00 LB/F		
Grade	P110		
From	0.0 F		
To	6942.9 F		
Max Recorded Temp	227.0		
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

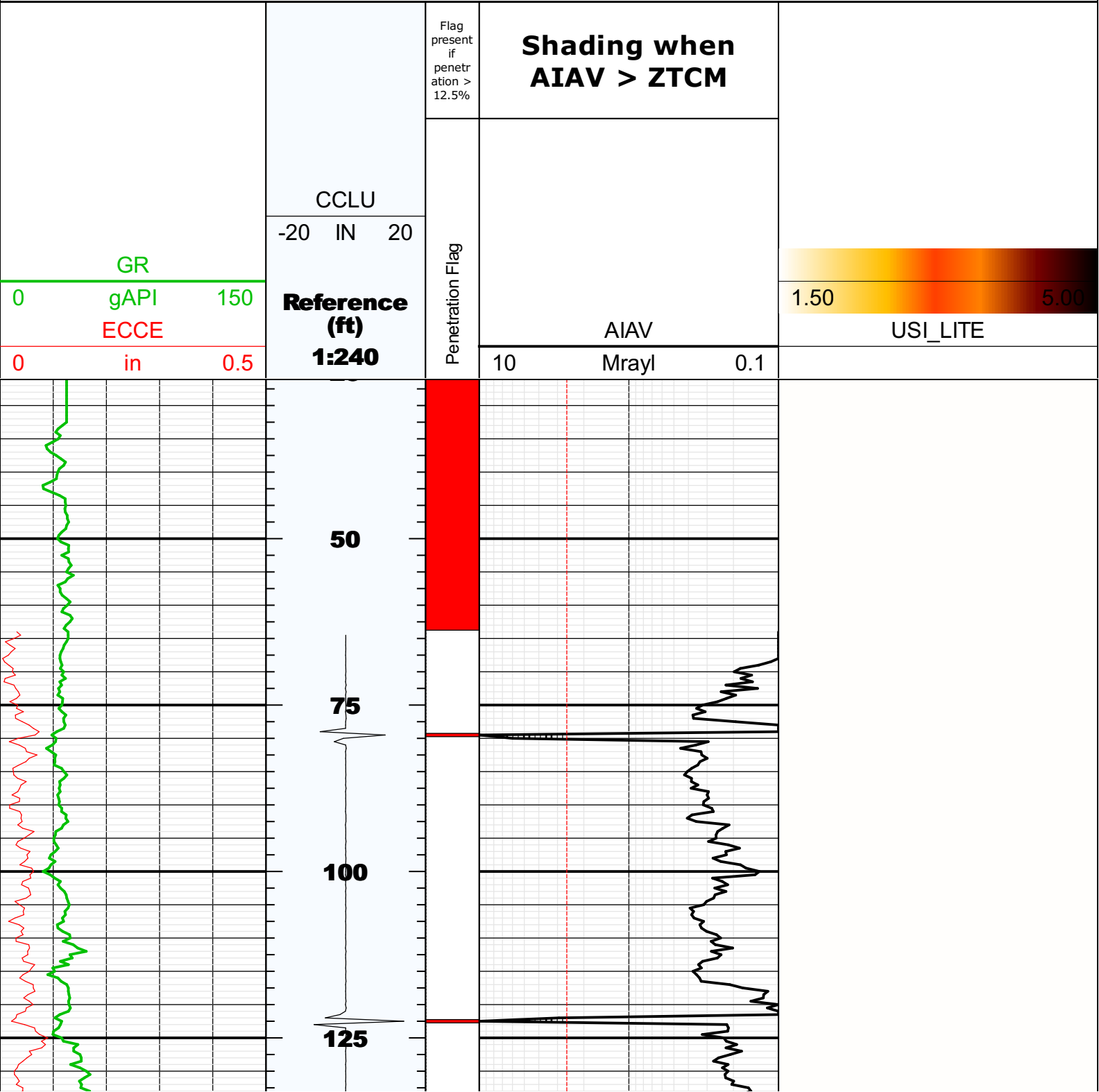
DISCLAIMER

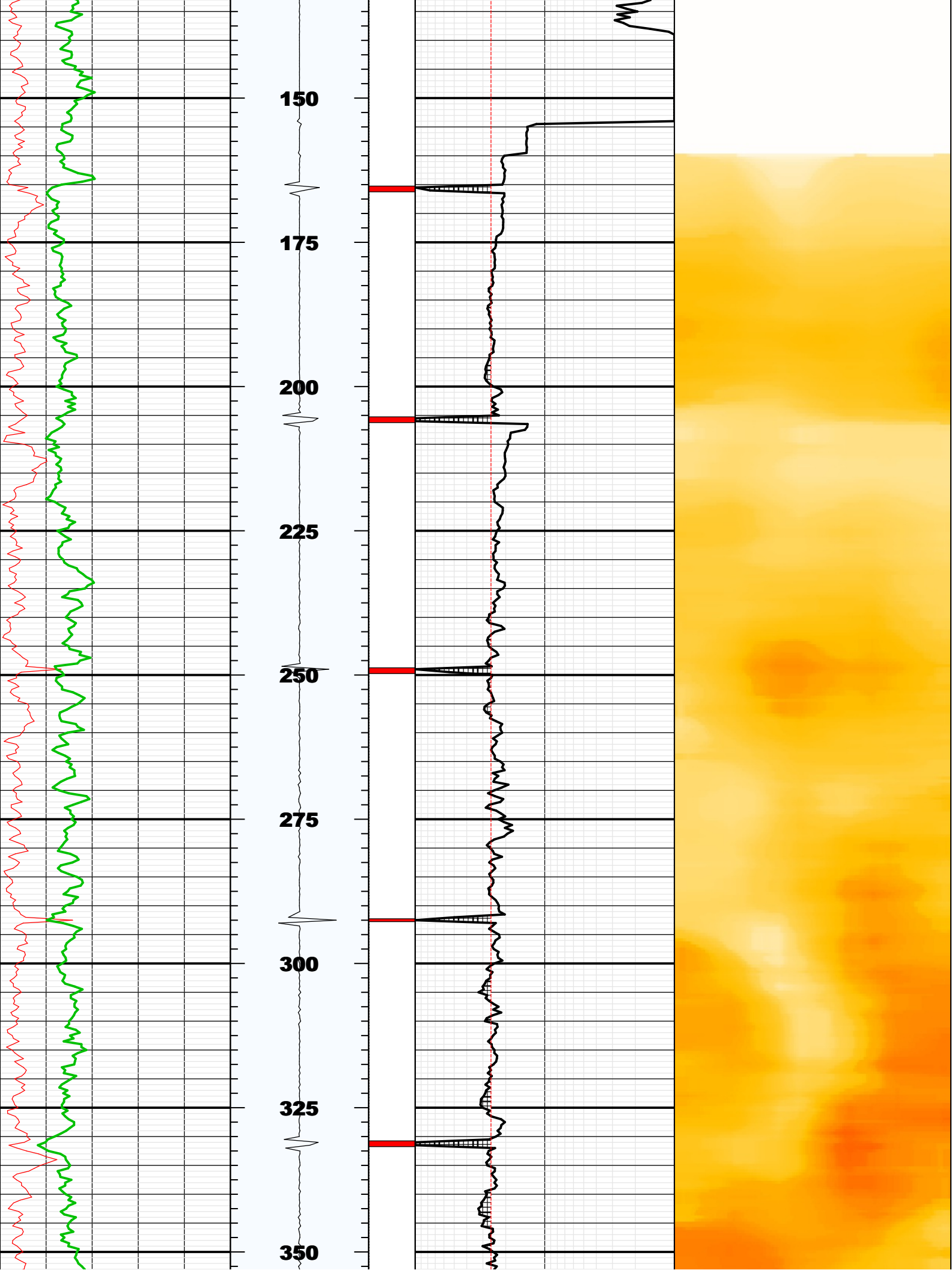
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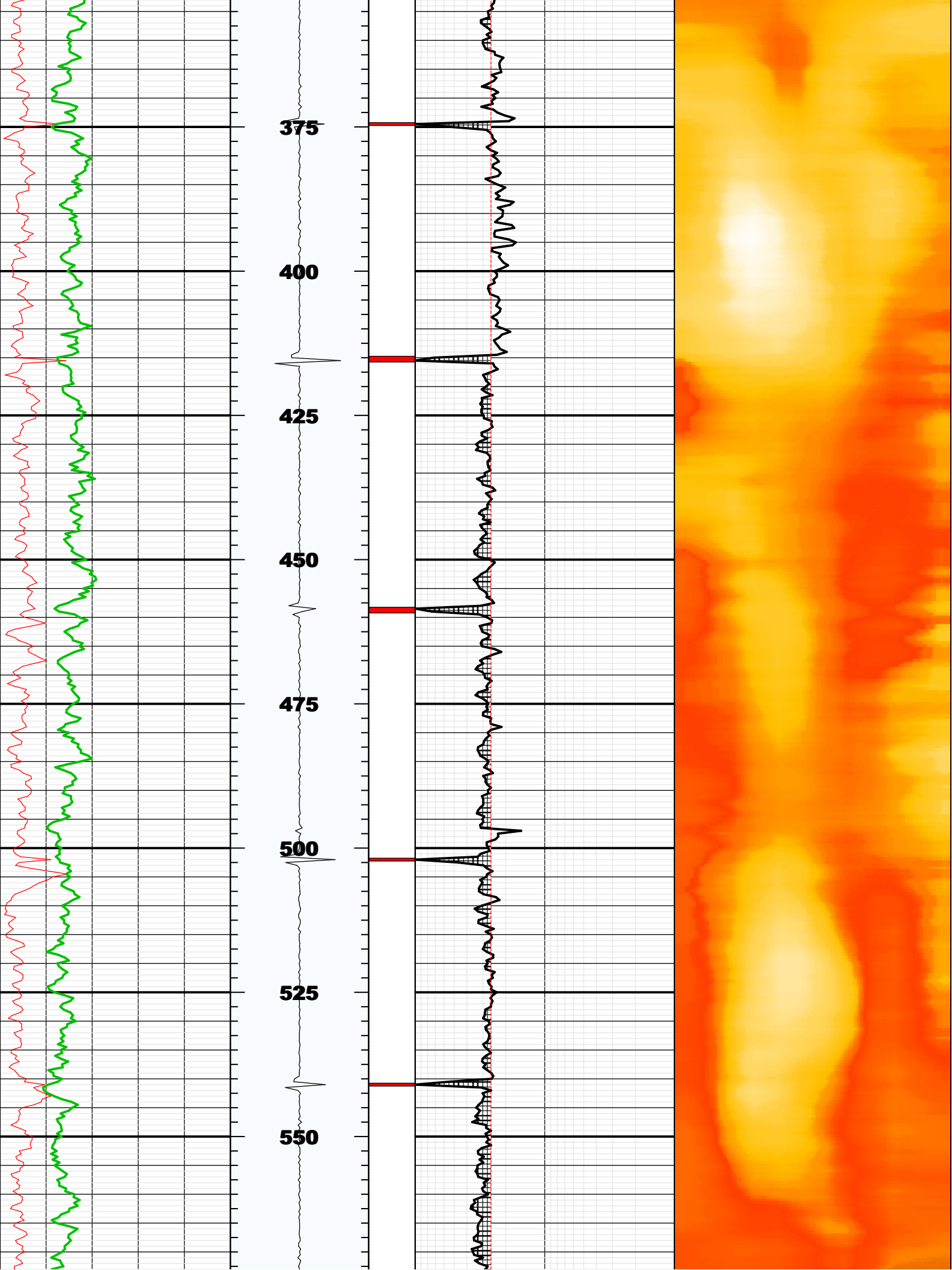
This is the first run in the hole.
Toolstring run as per toolsketch.
Log Objective Cement Evaluation
0 PSI Repeat pass and 2500 PSI Main pass.
Estimated TOC @ 710'. Expected TOC @ 1000'.
Top of 4.5 liner at 6960'.
Bottom Log Interval at 6941'. Lost tension and
Bottom Hole Temperature was 227 degF.
HI RES pass from 1310' to 1165'

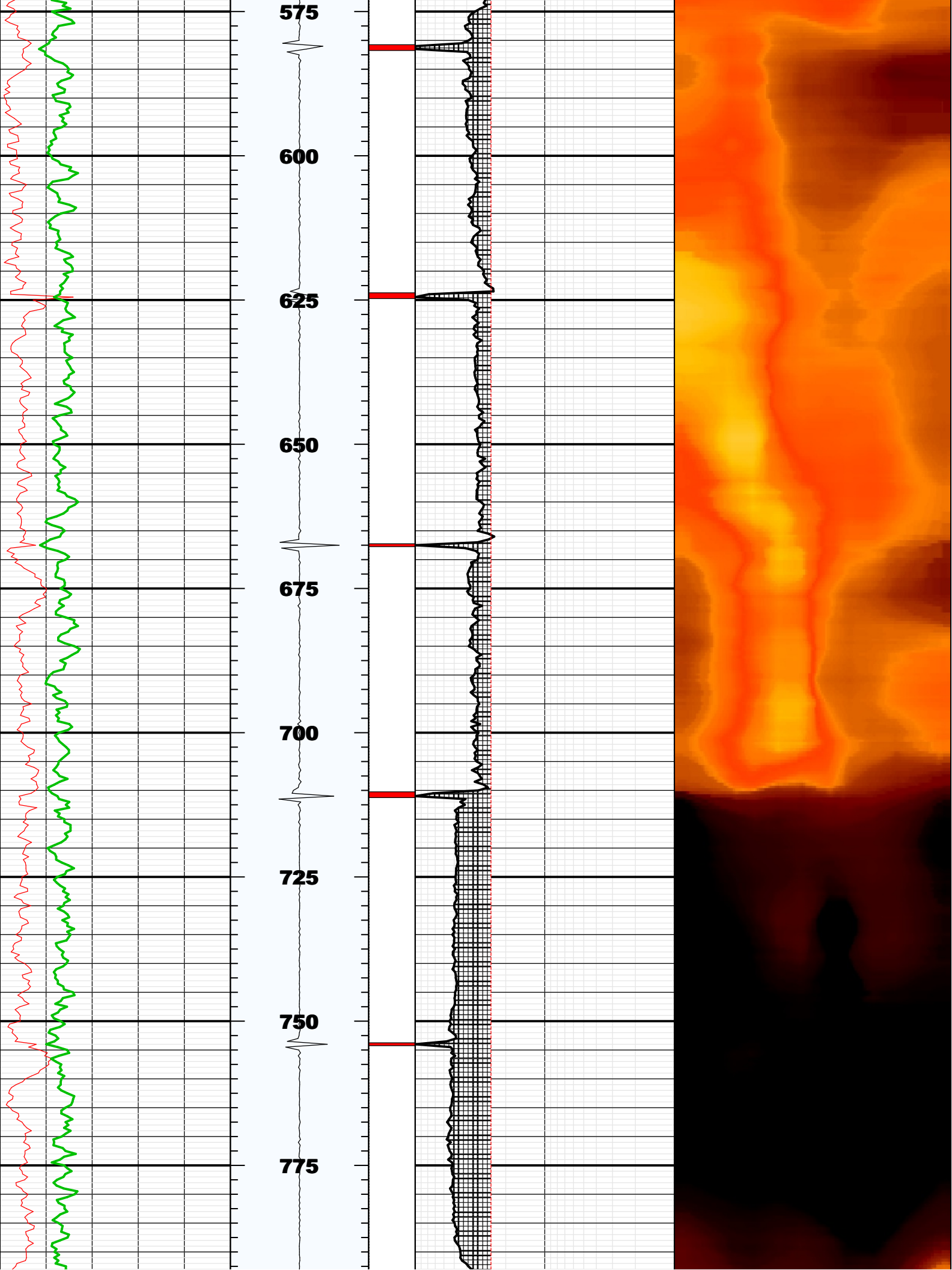
Main Pass

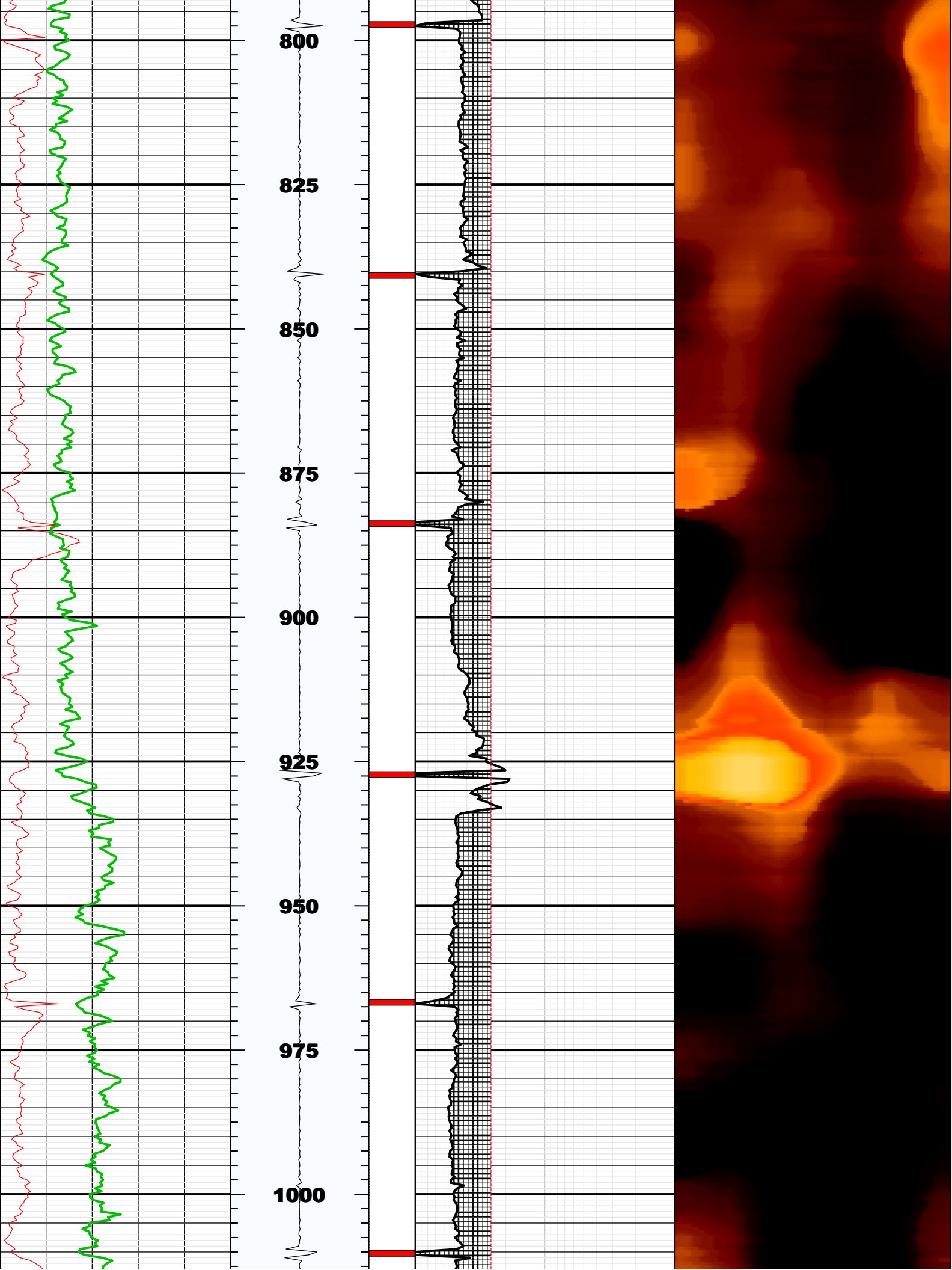
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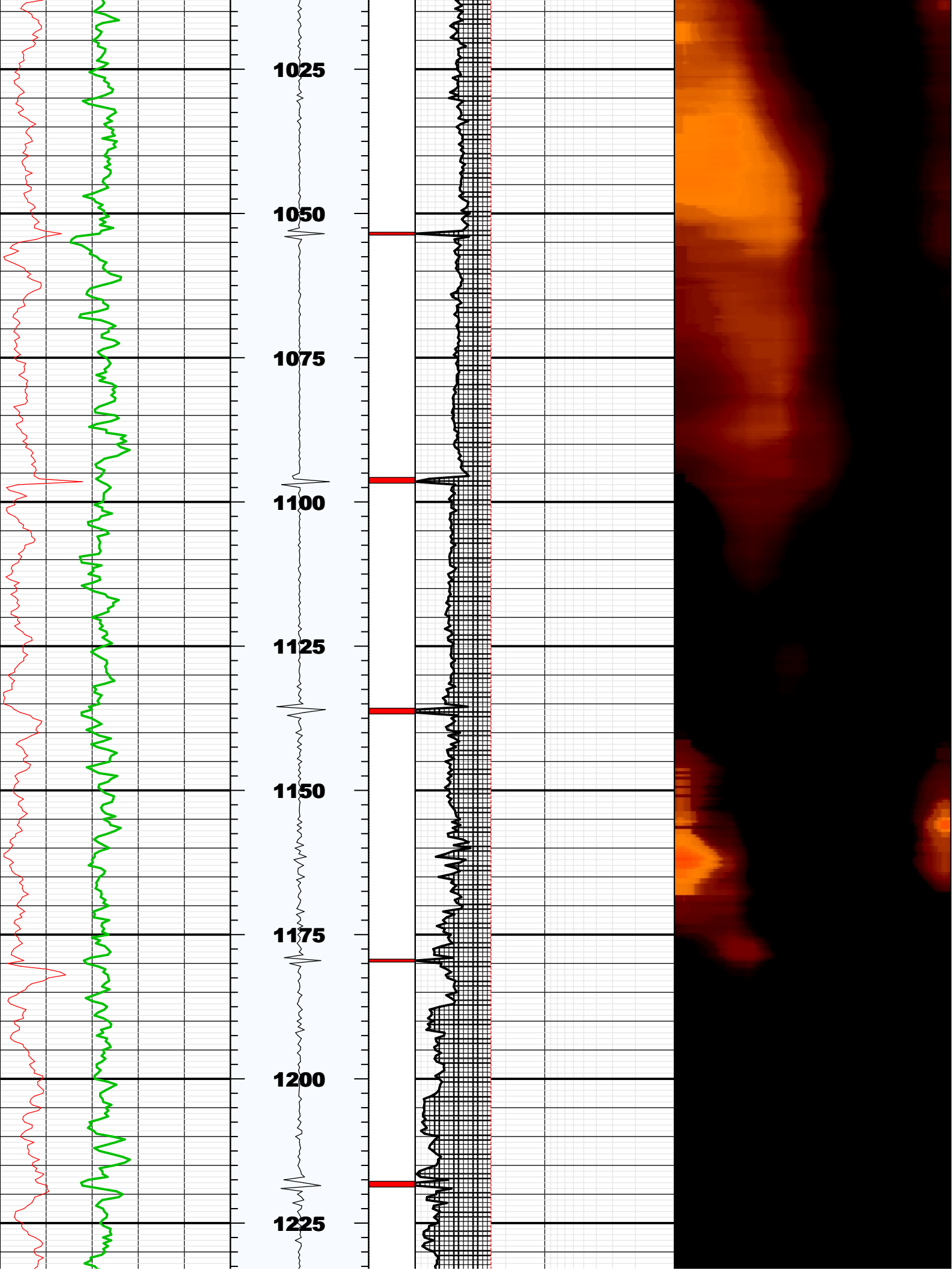


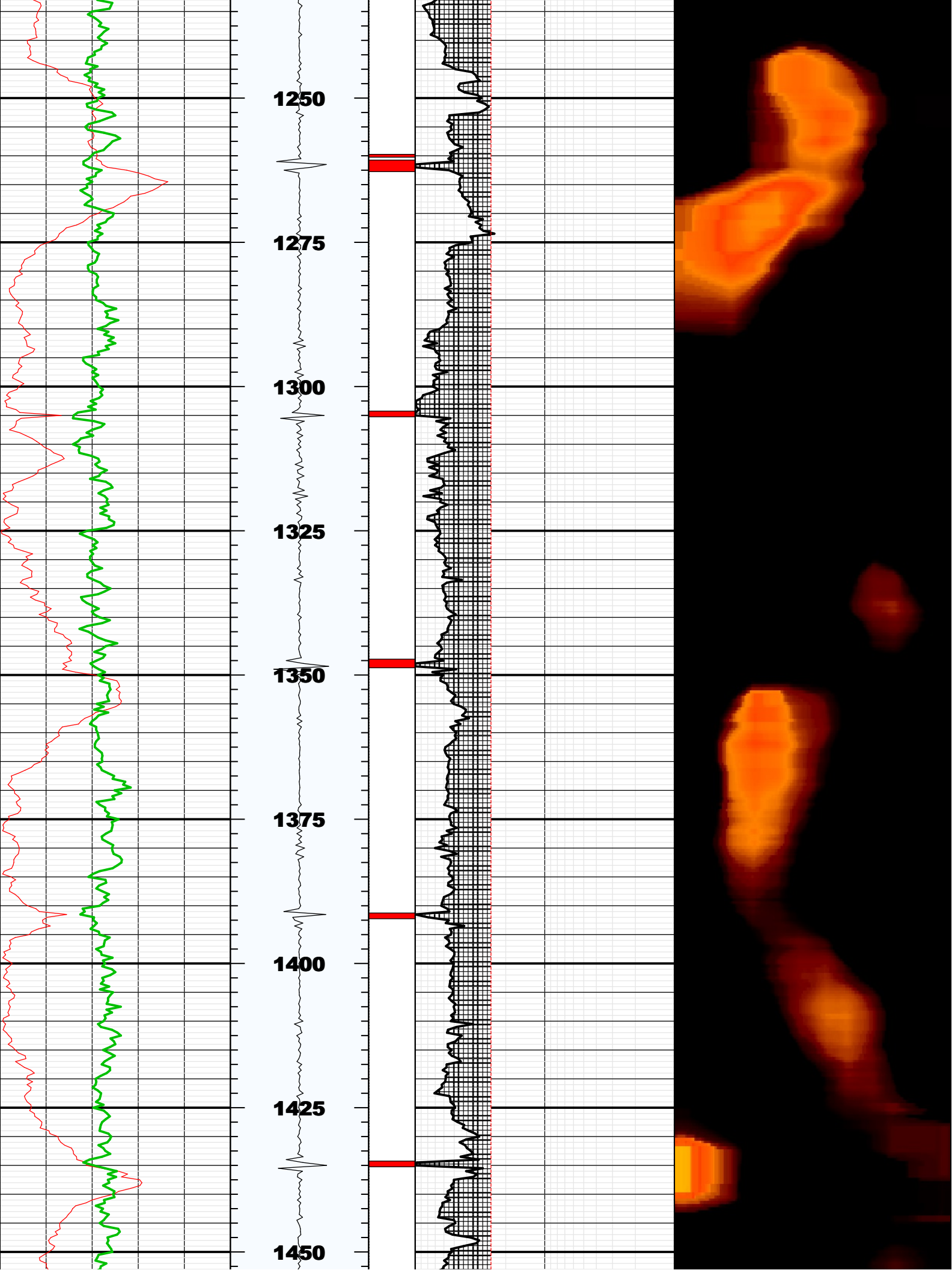


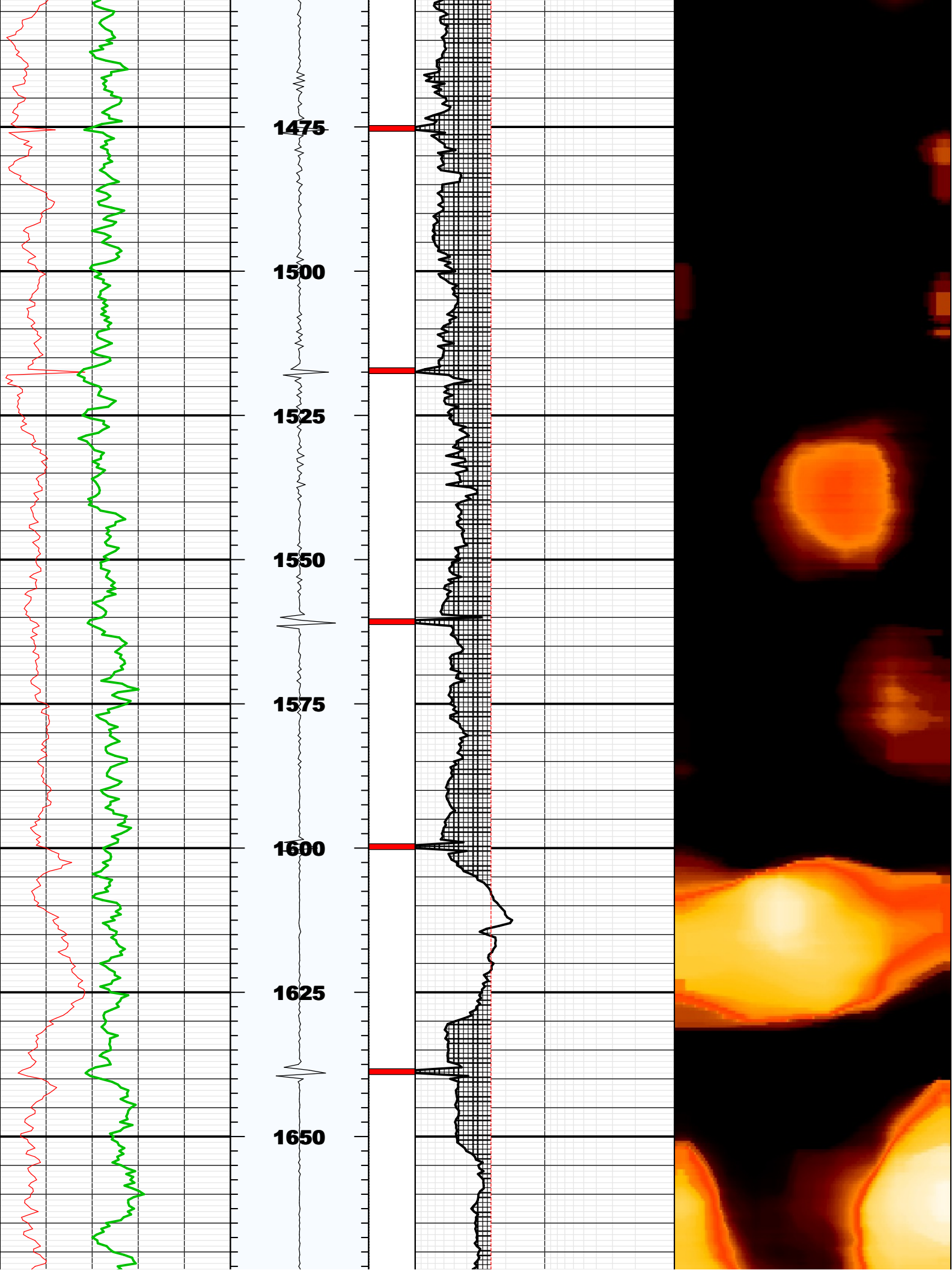


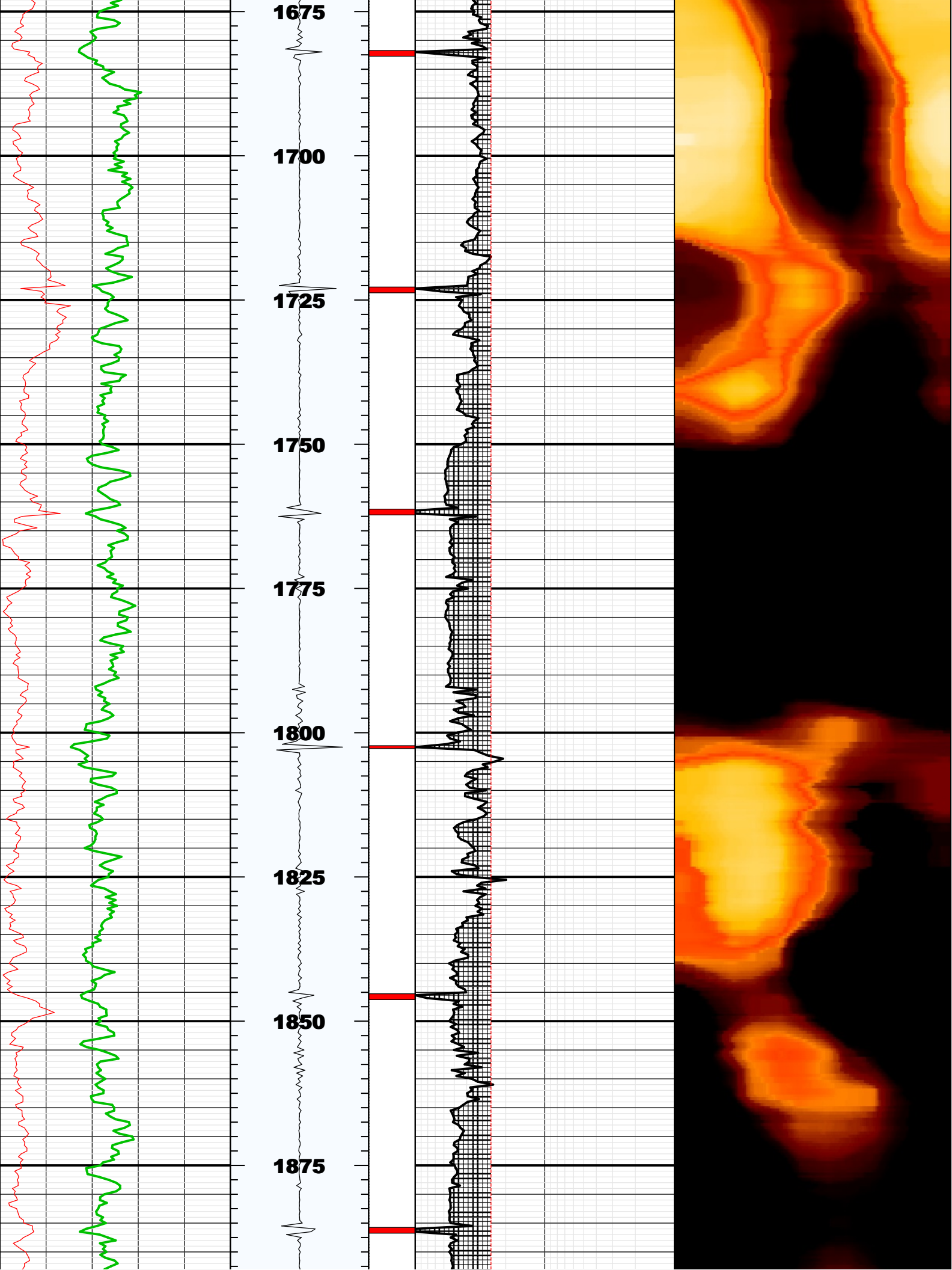


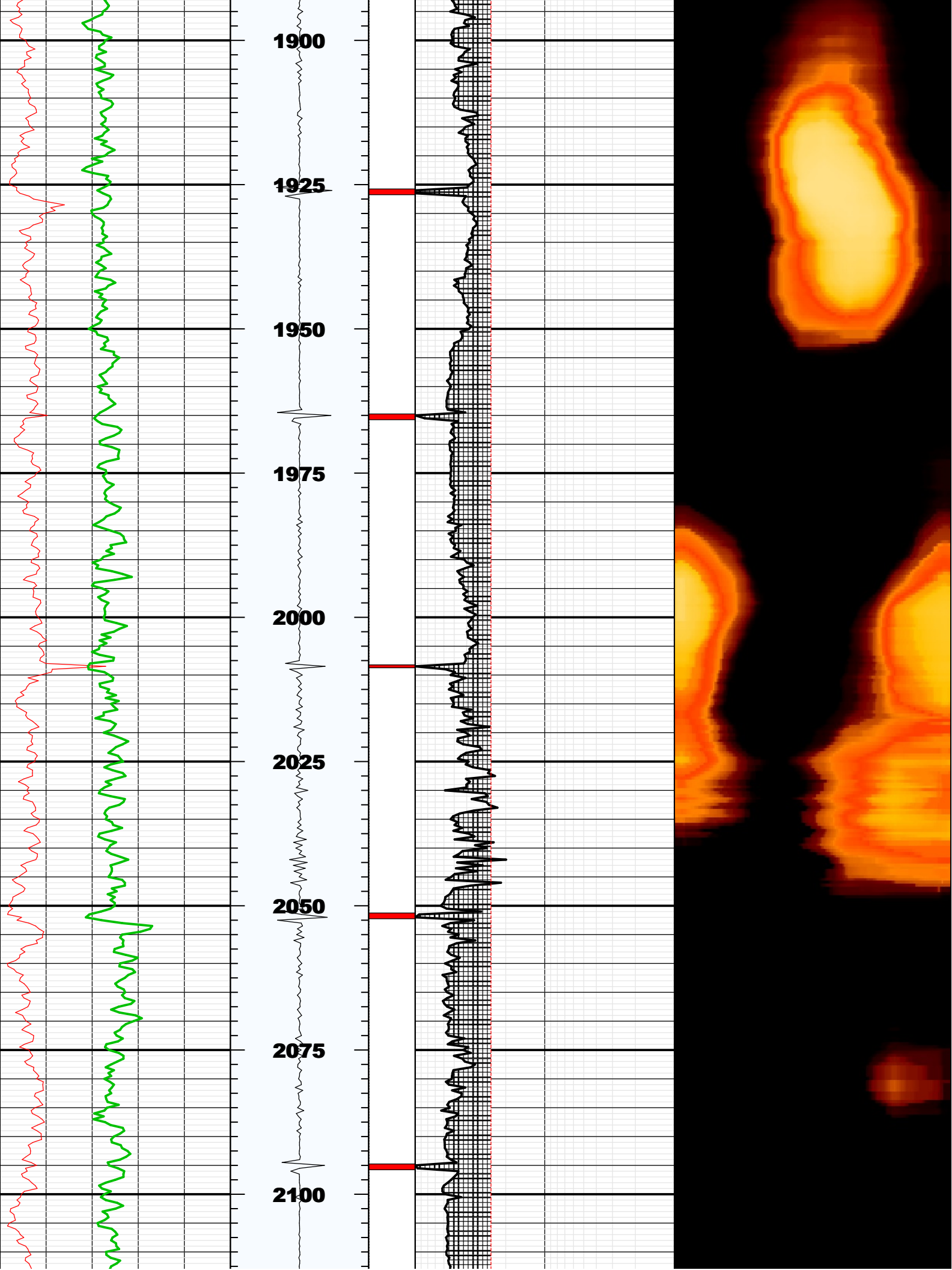


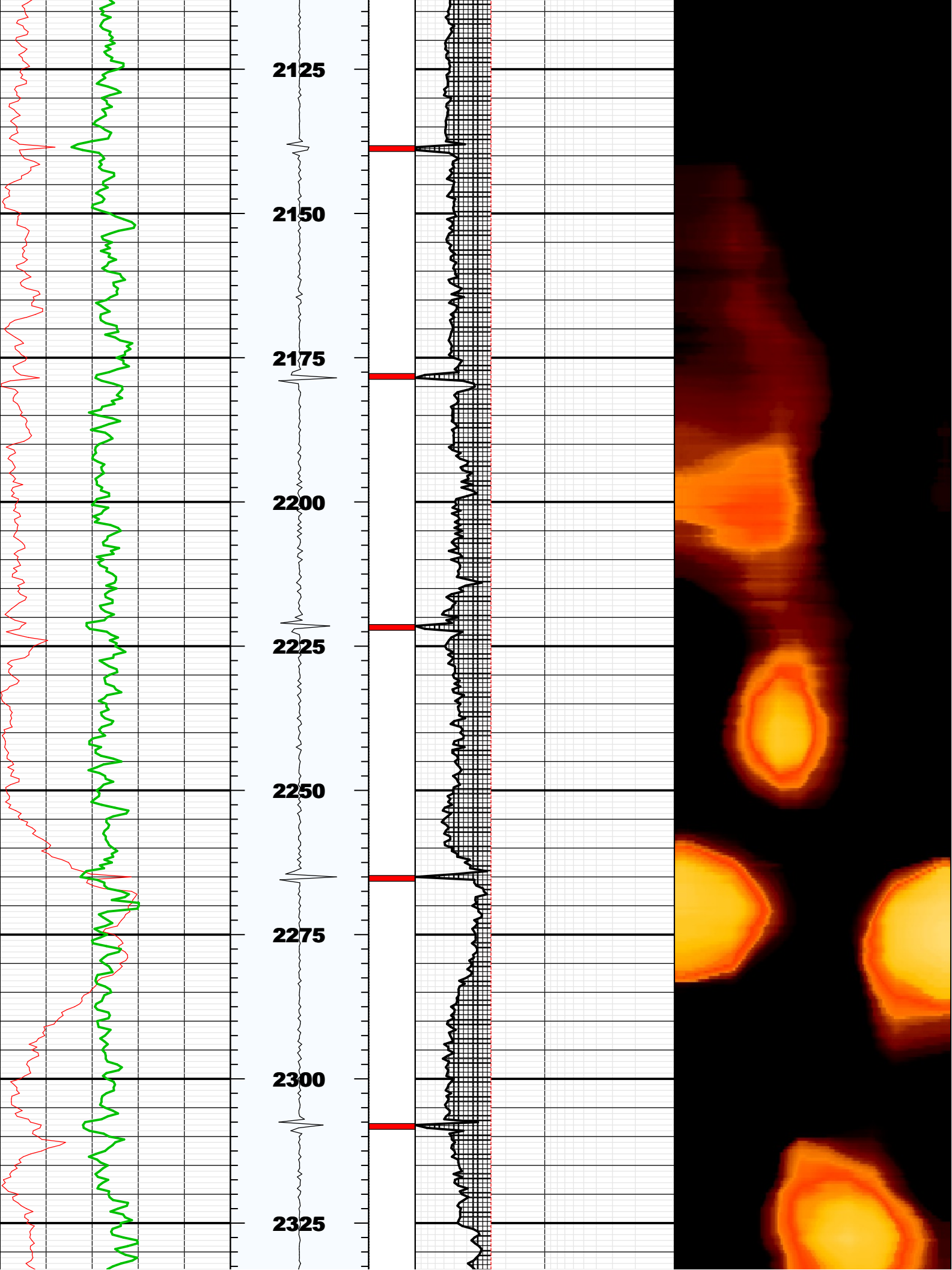


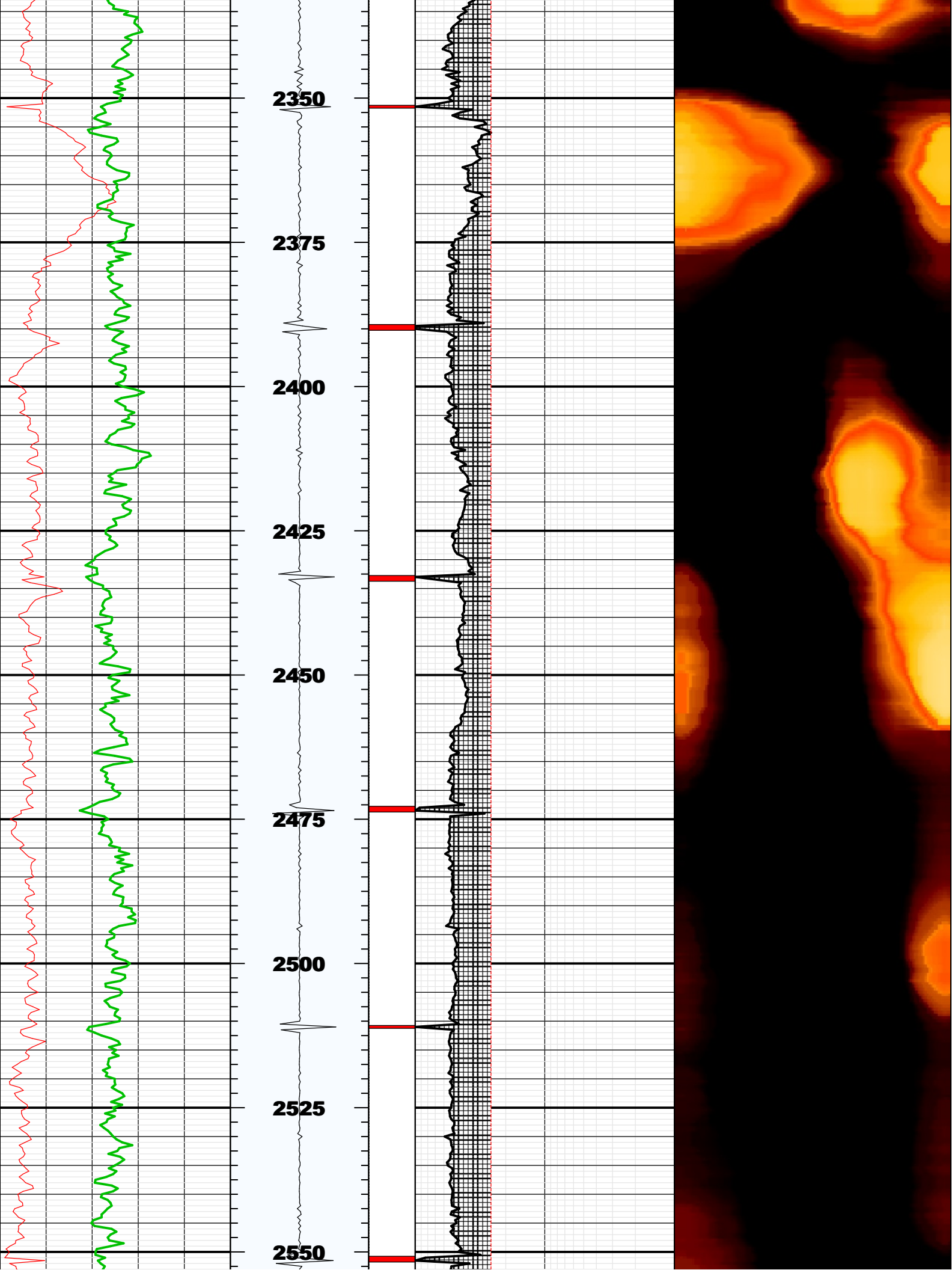


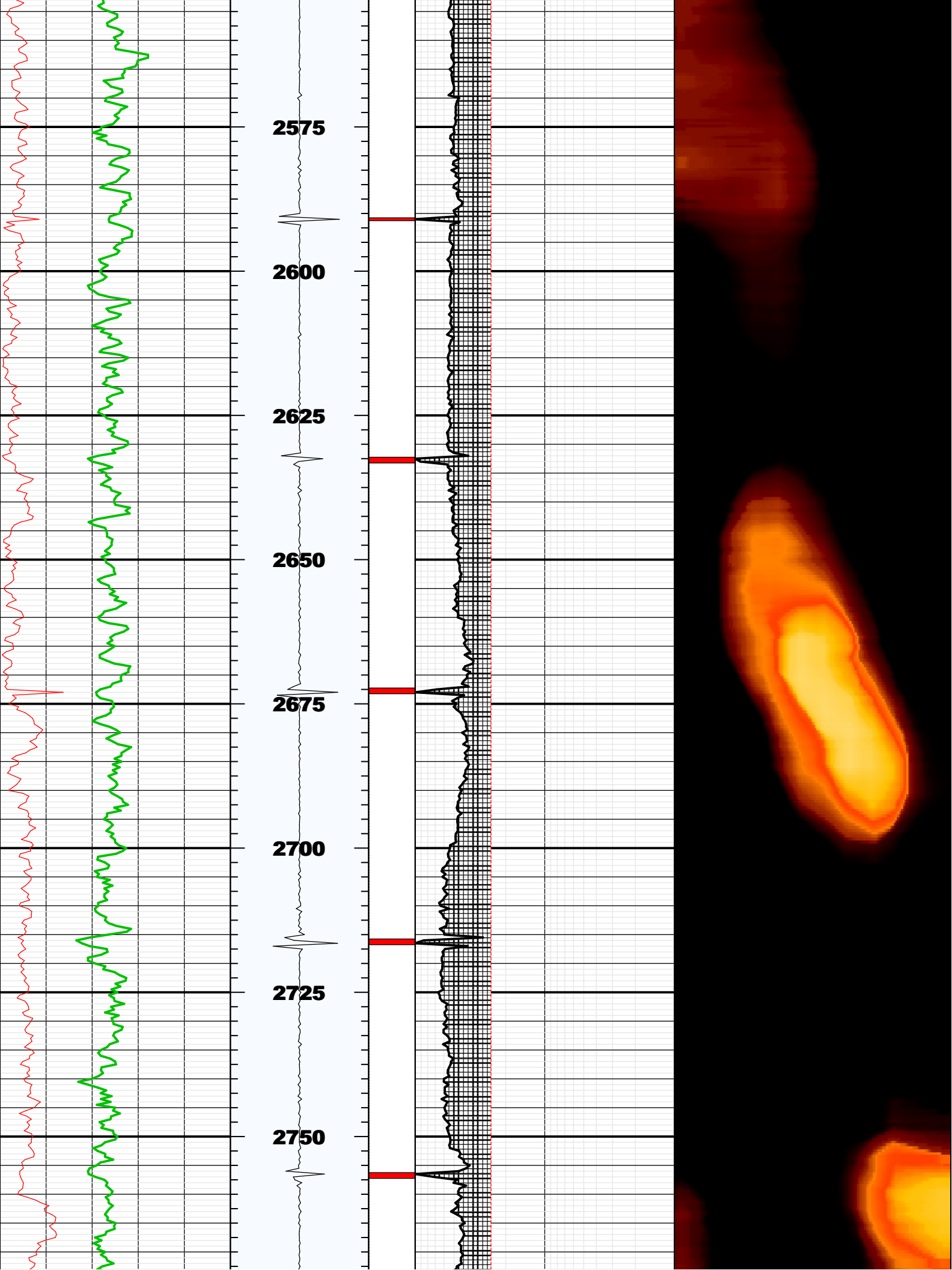


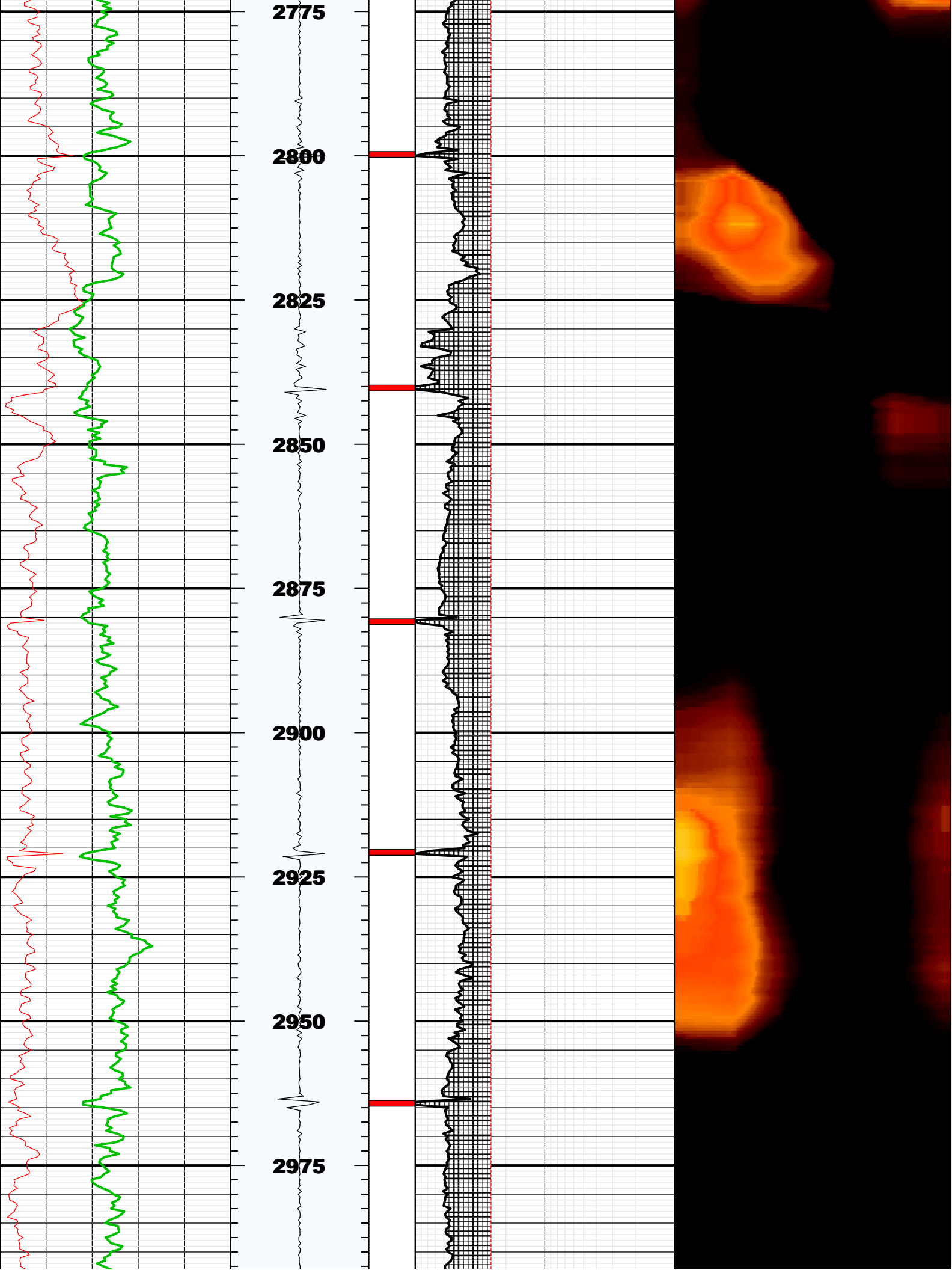


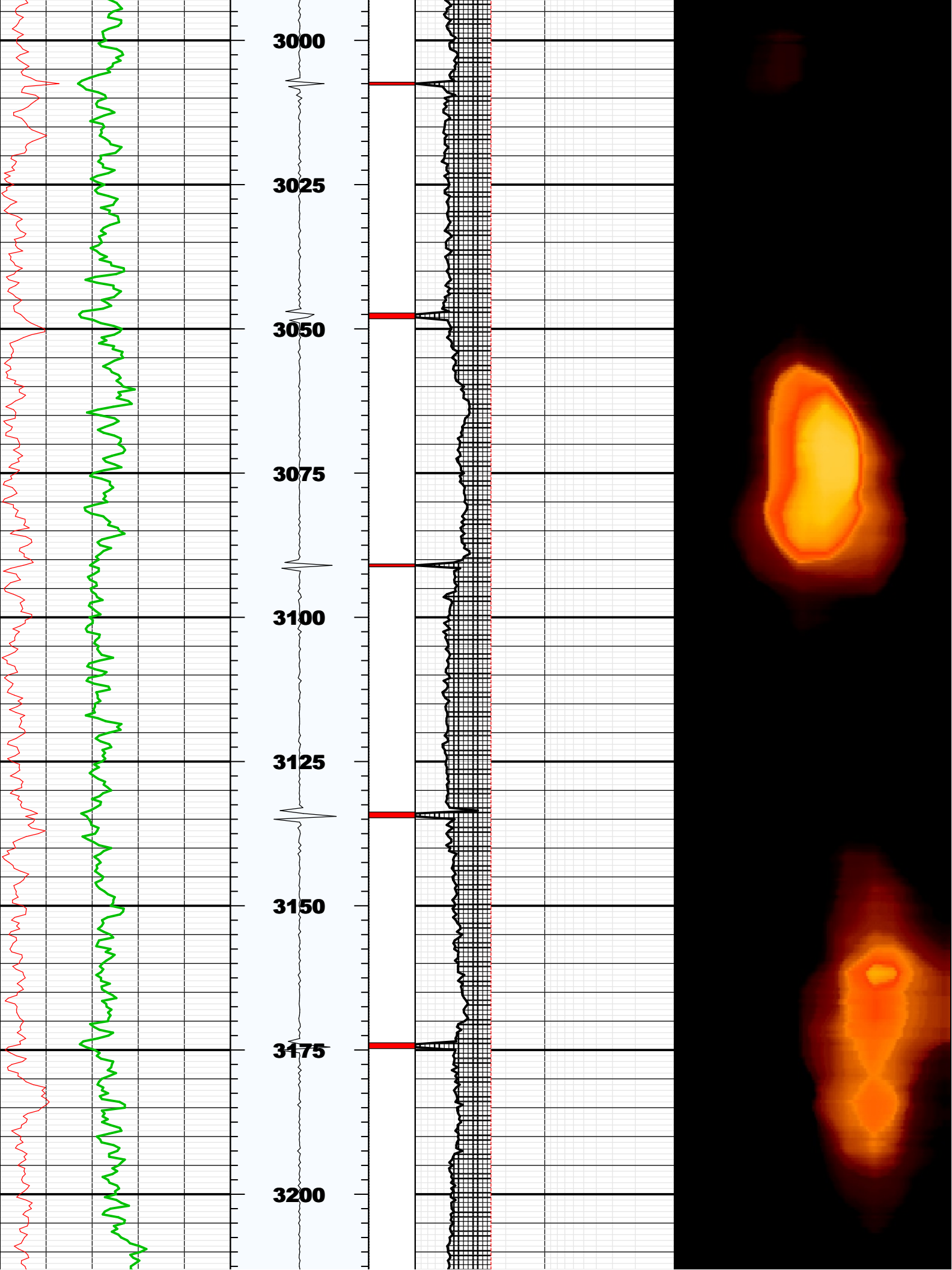


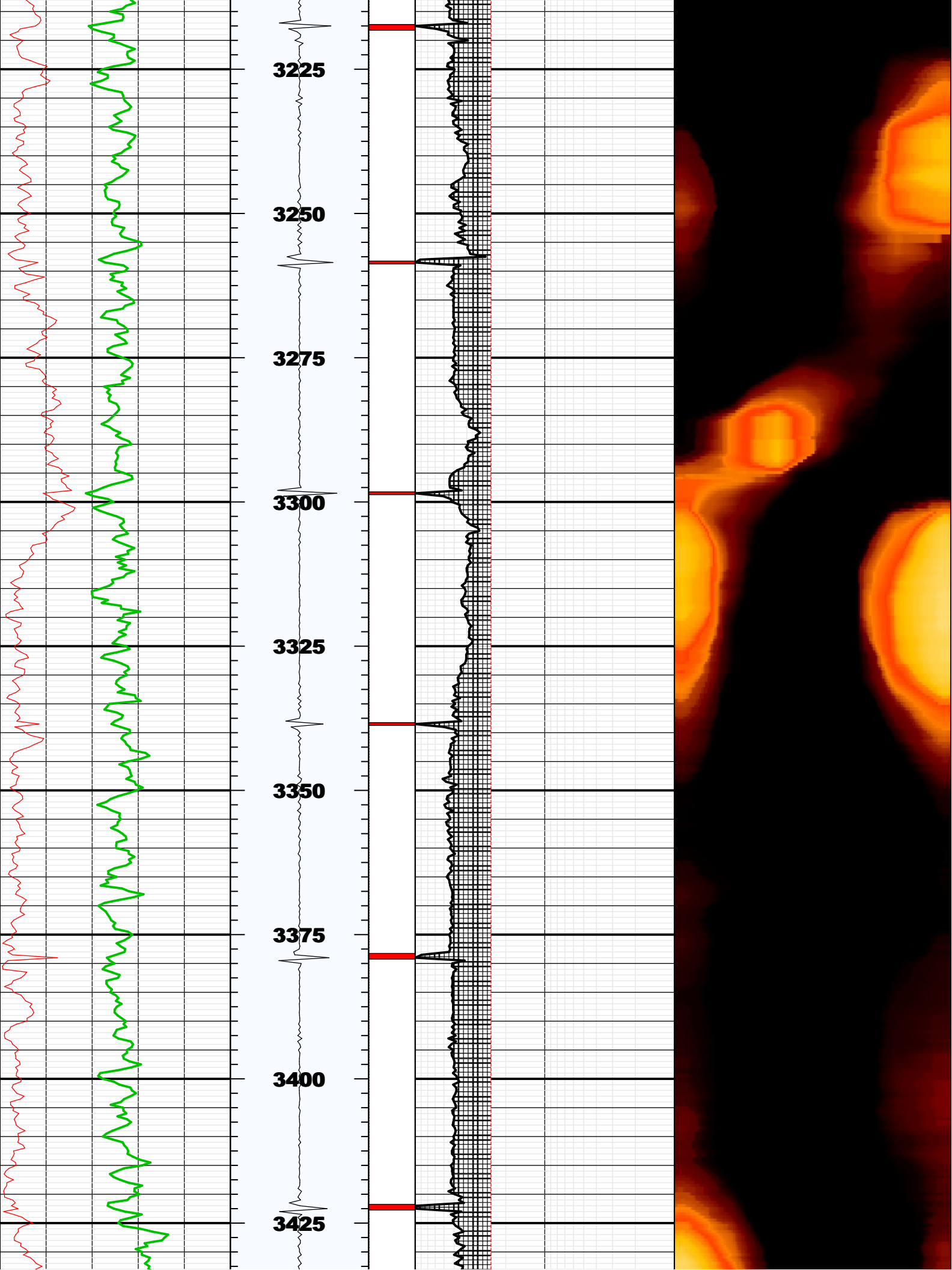


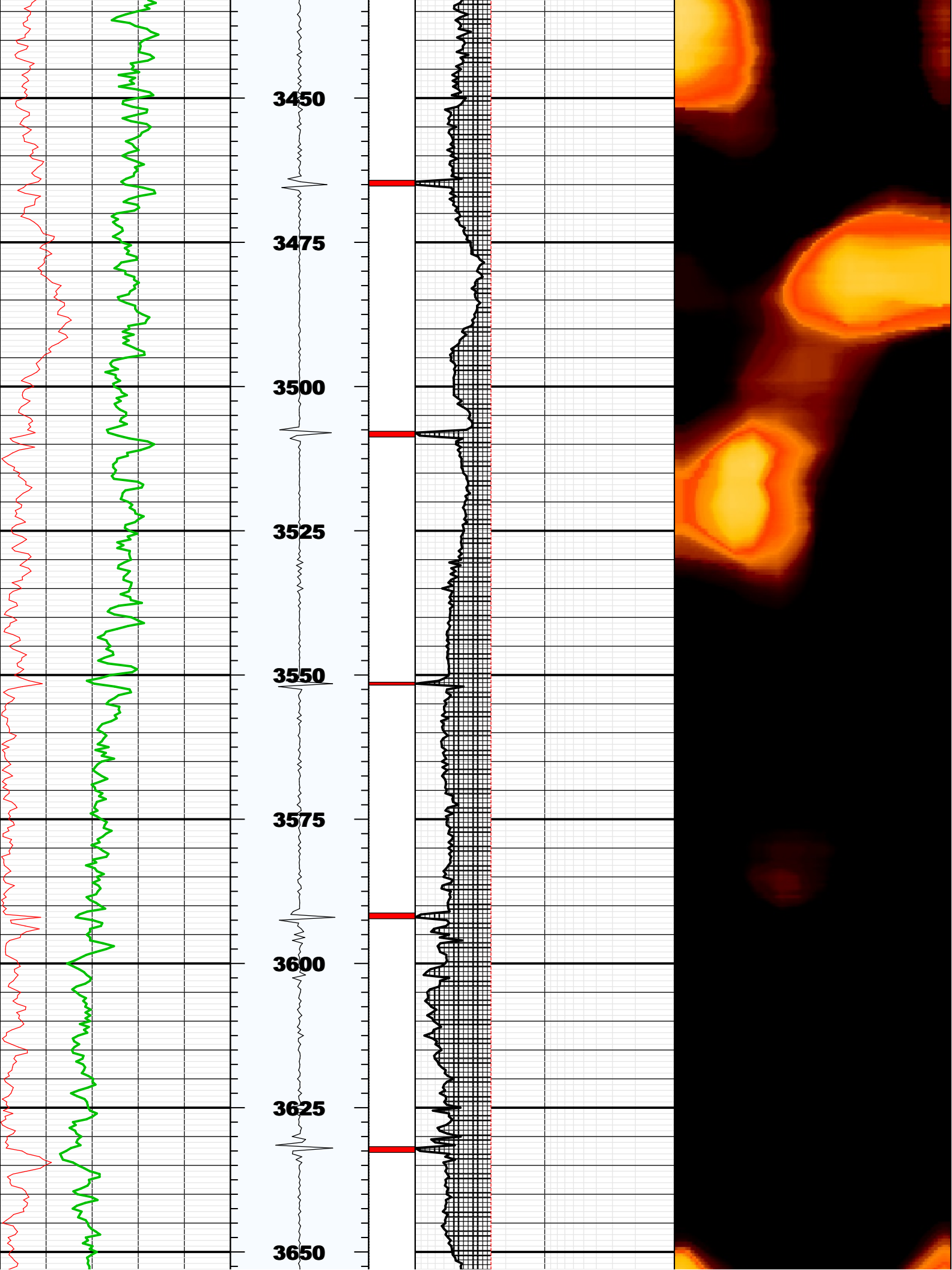


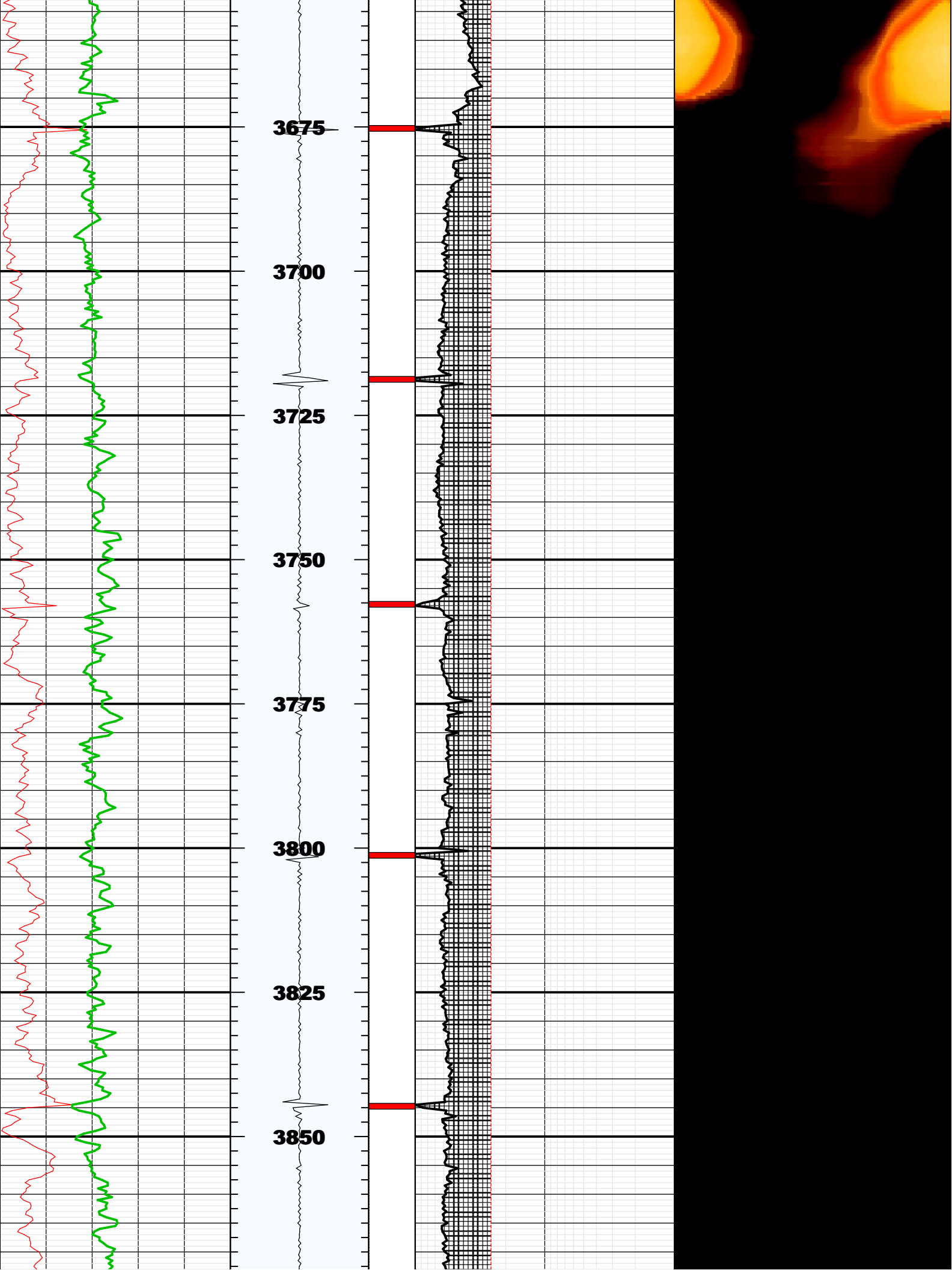


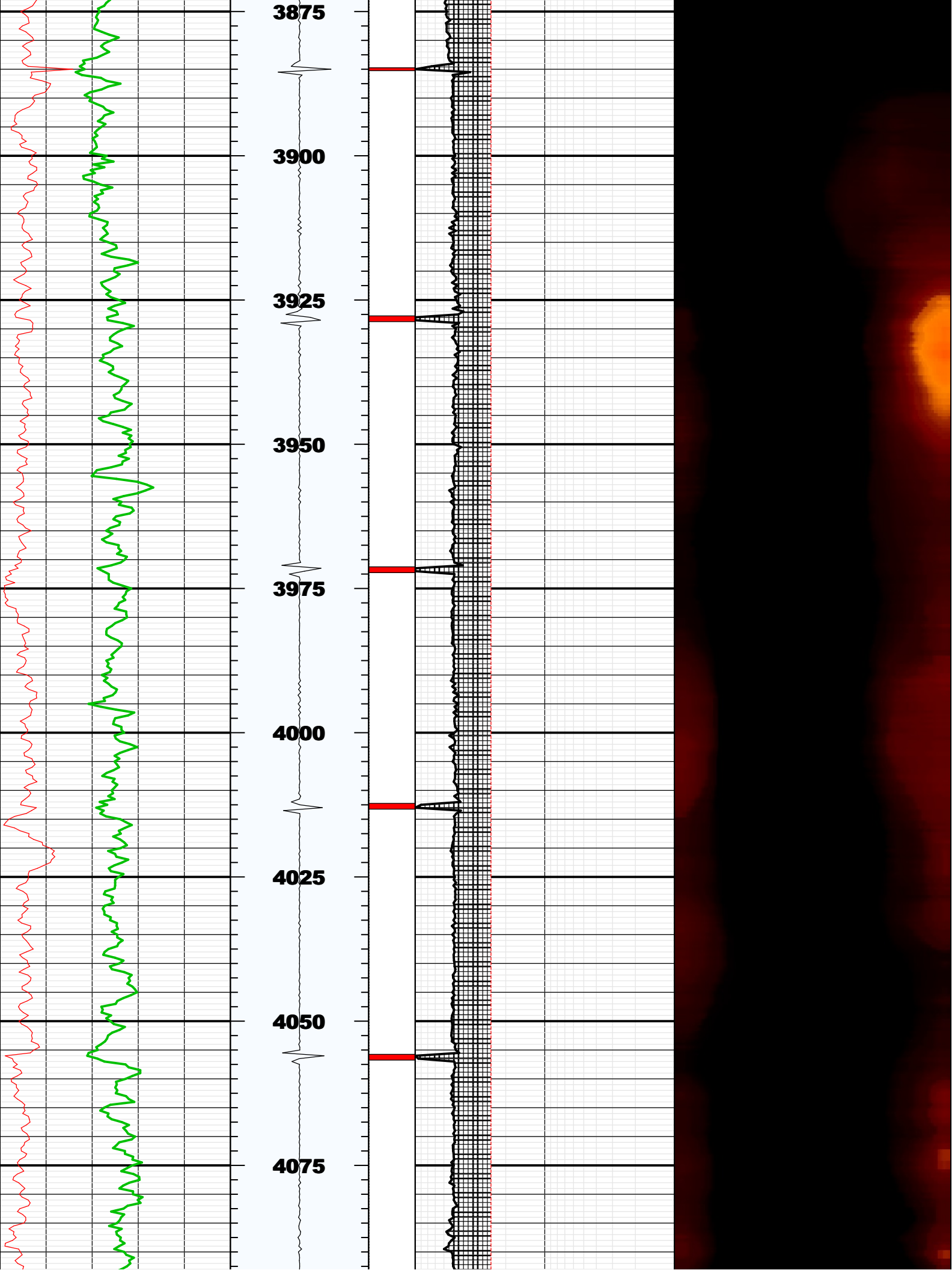


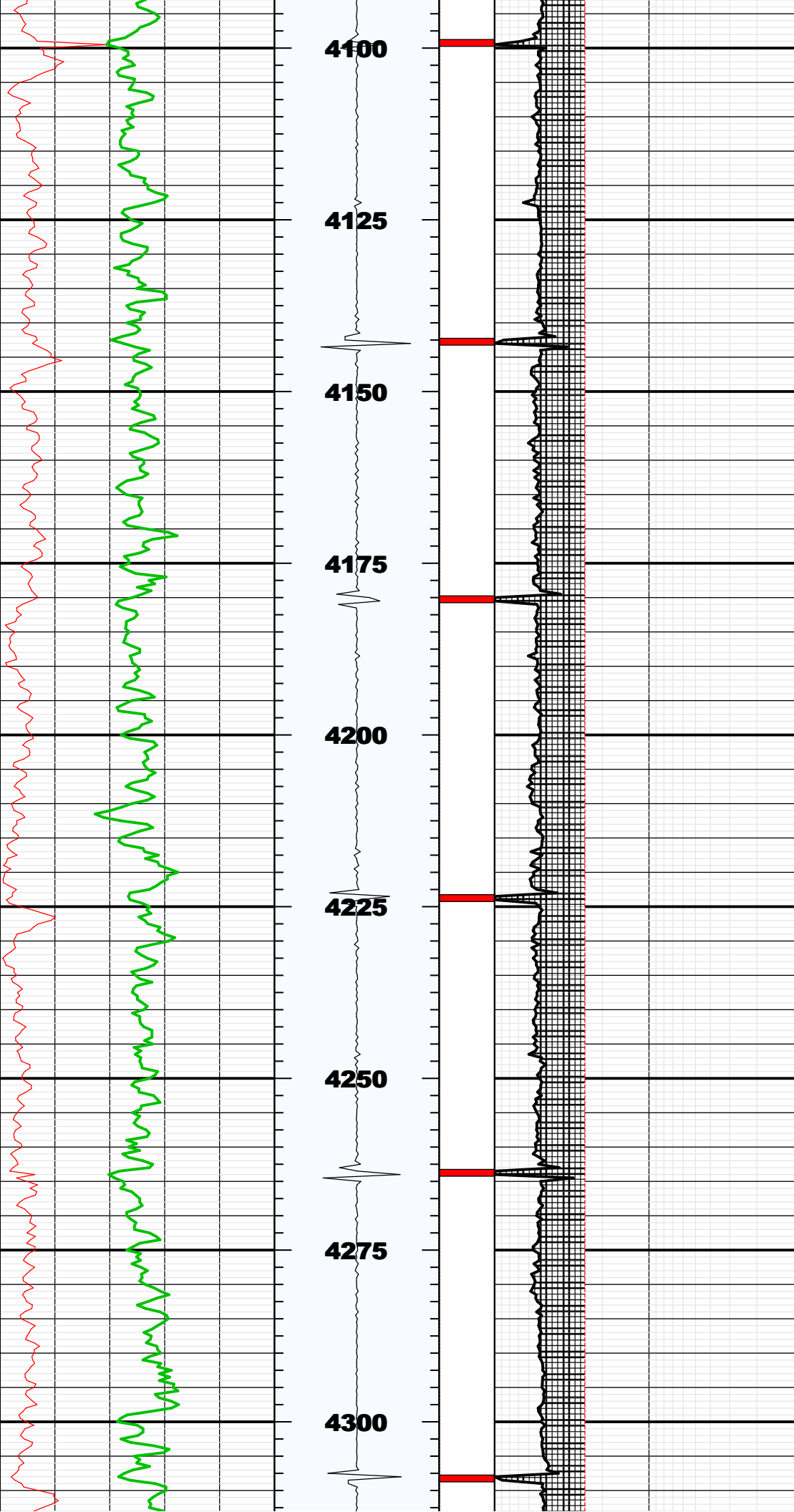


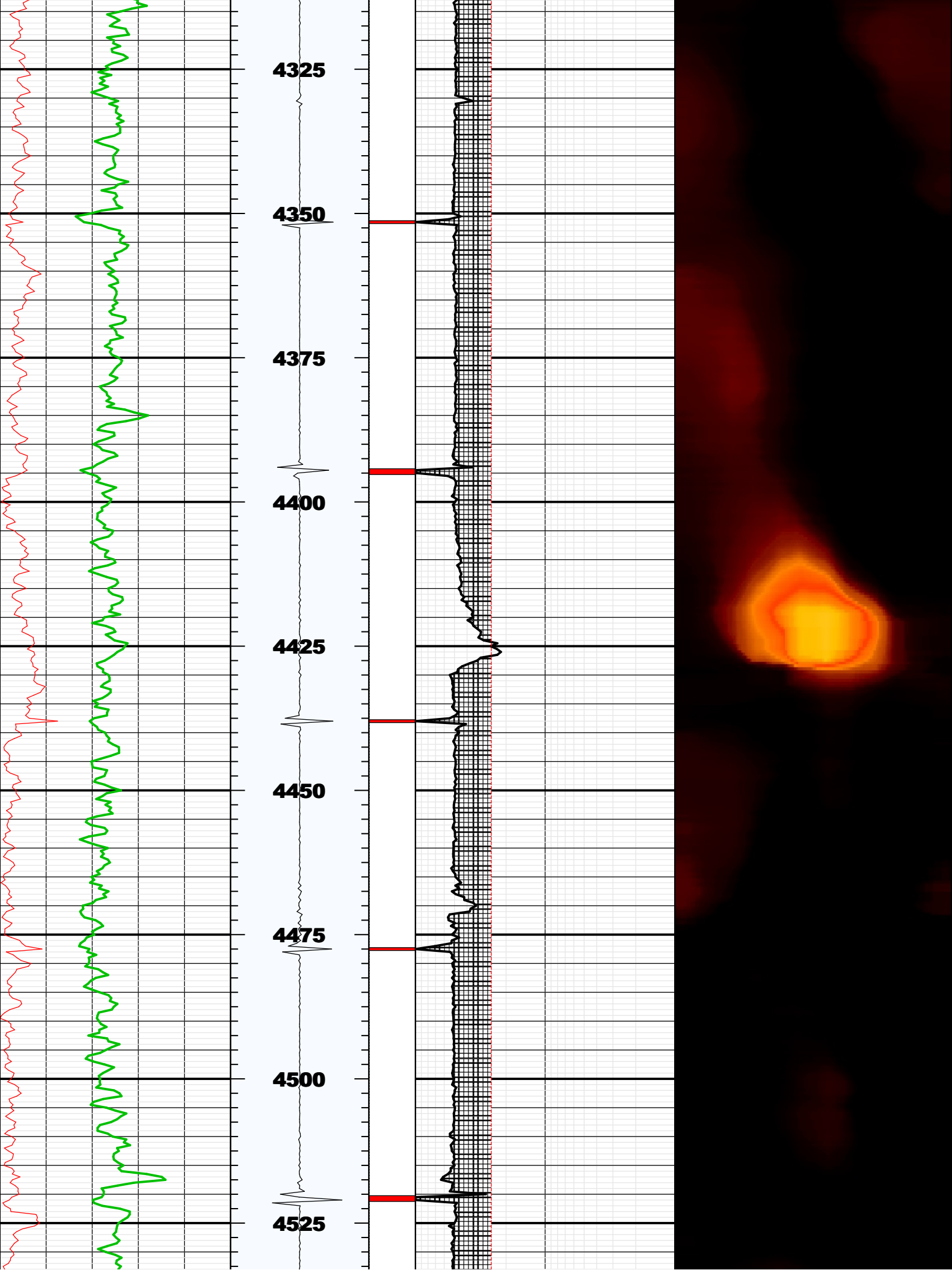


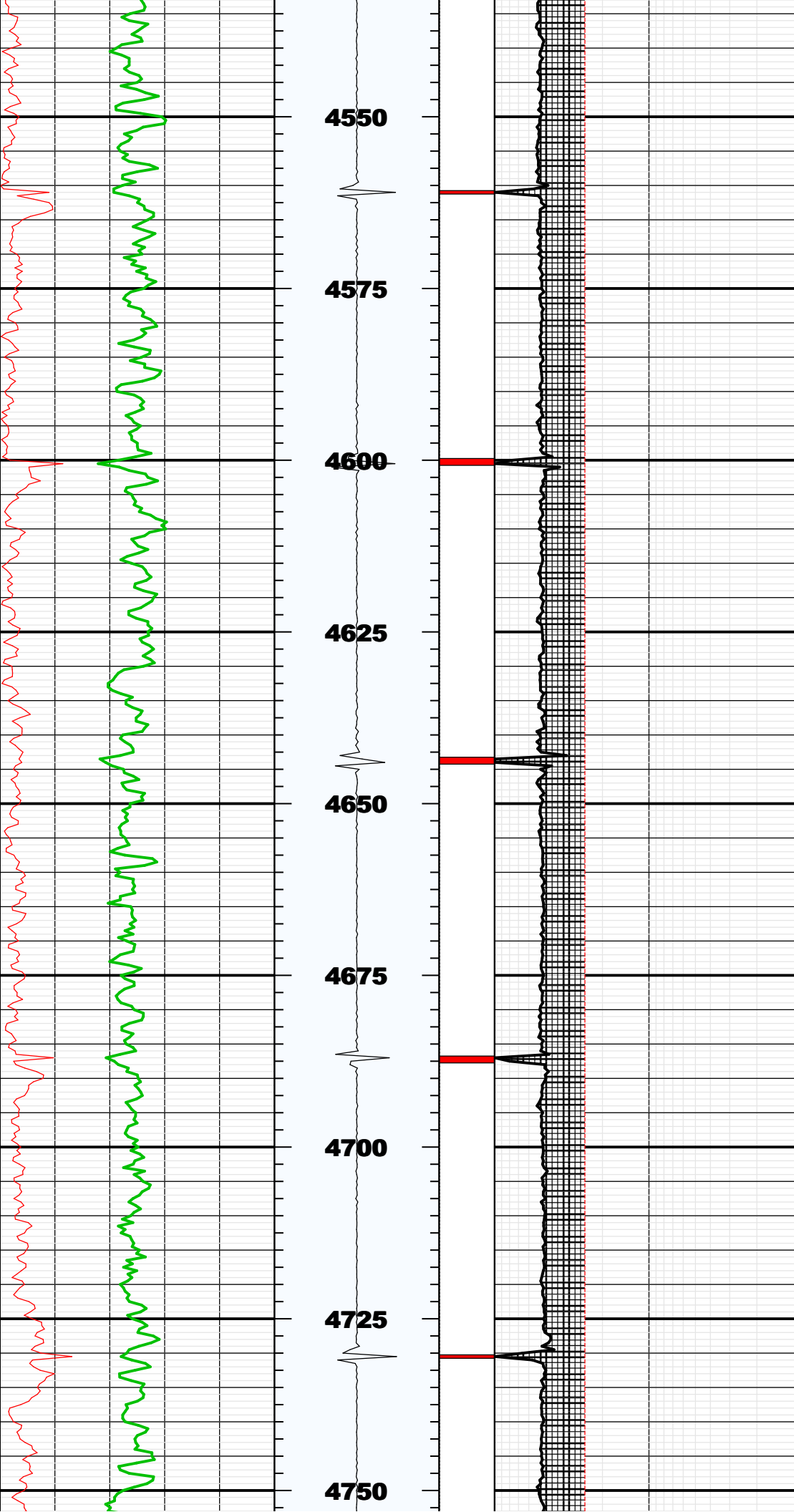


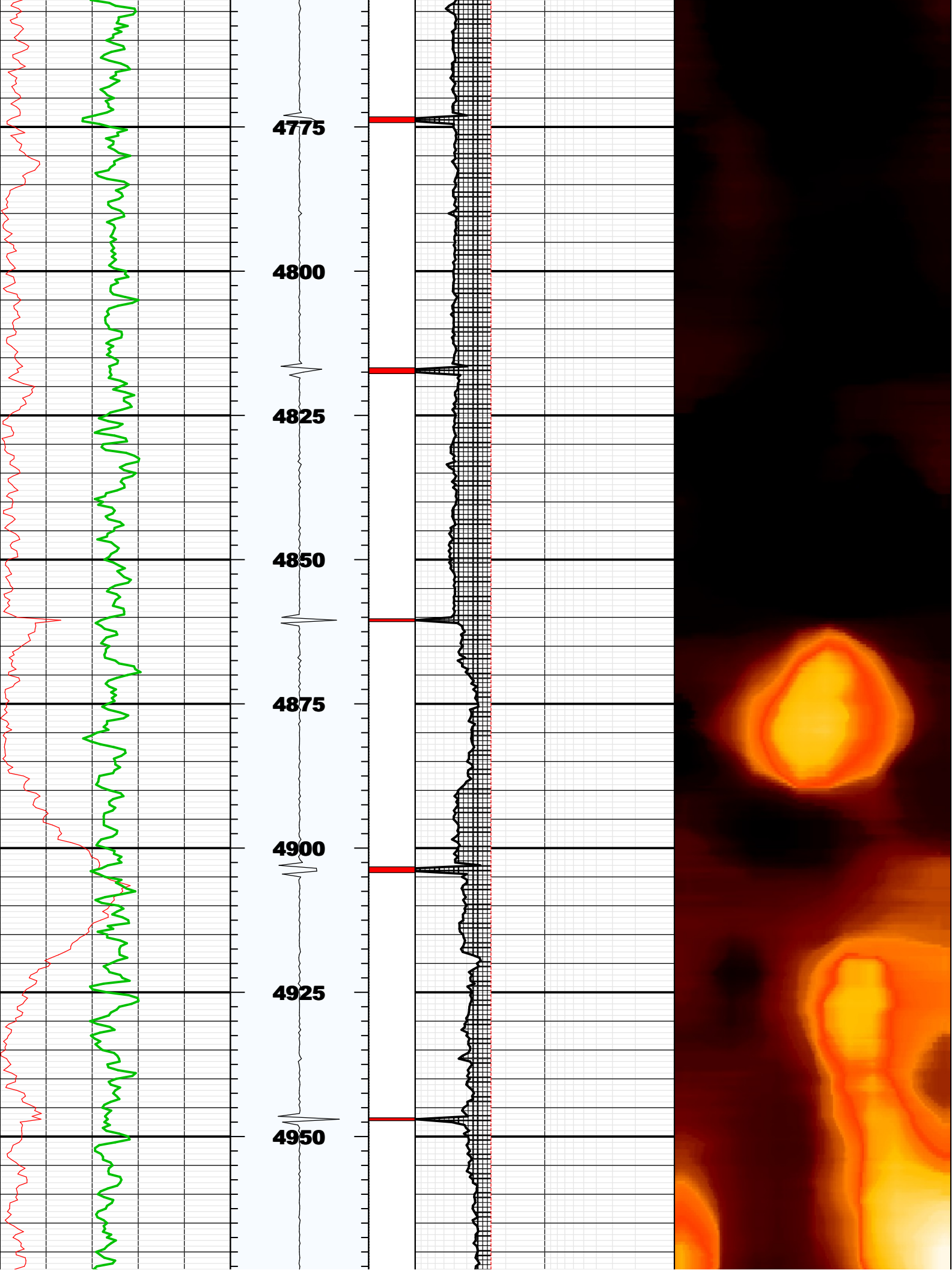


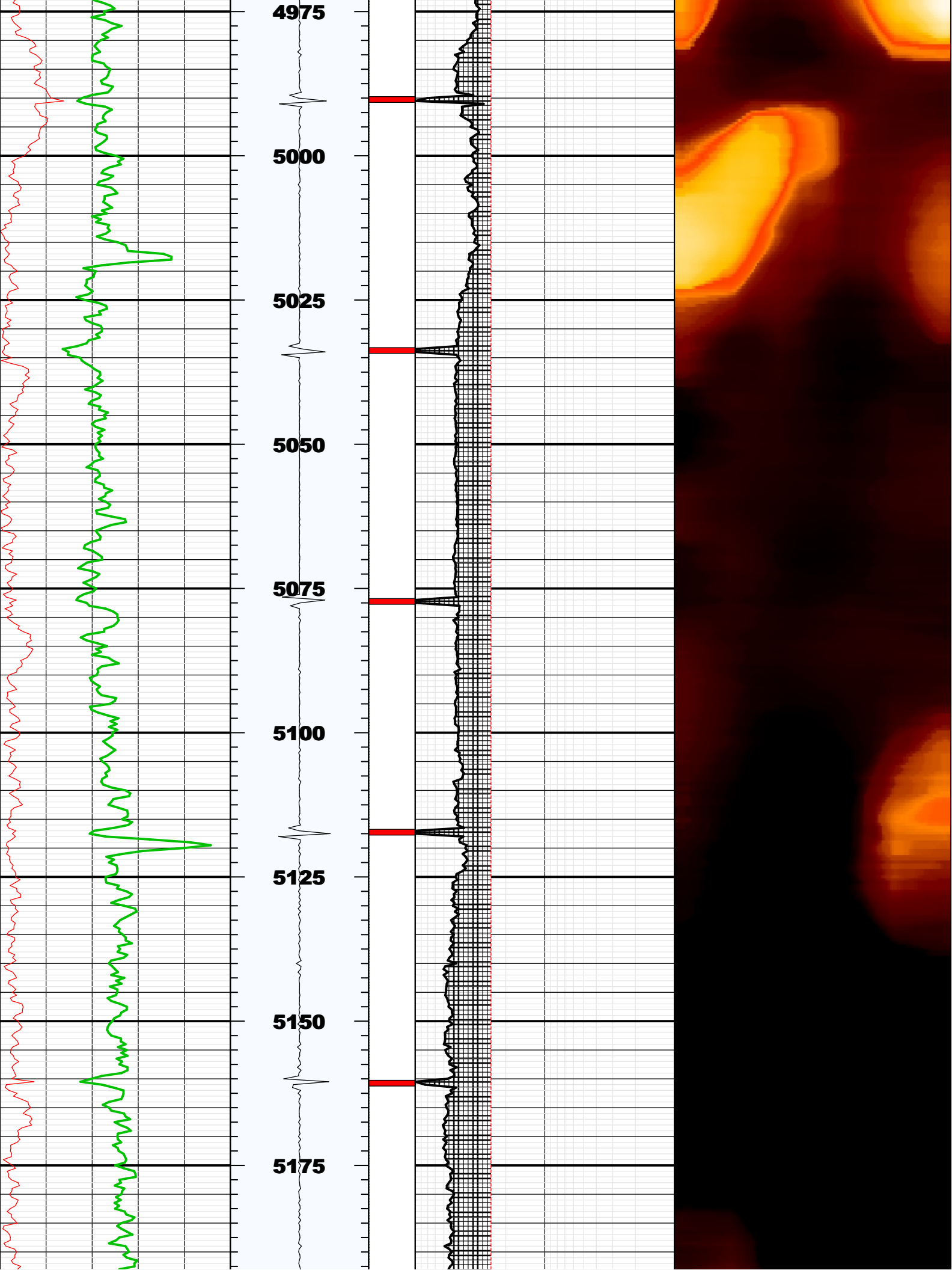


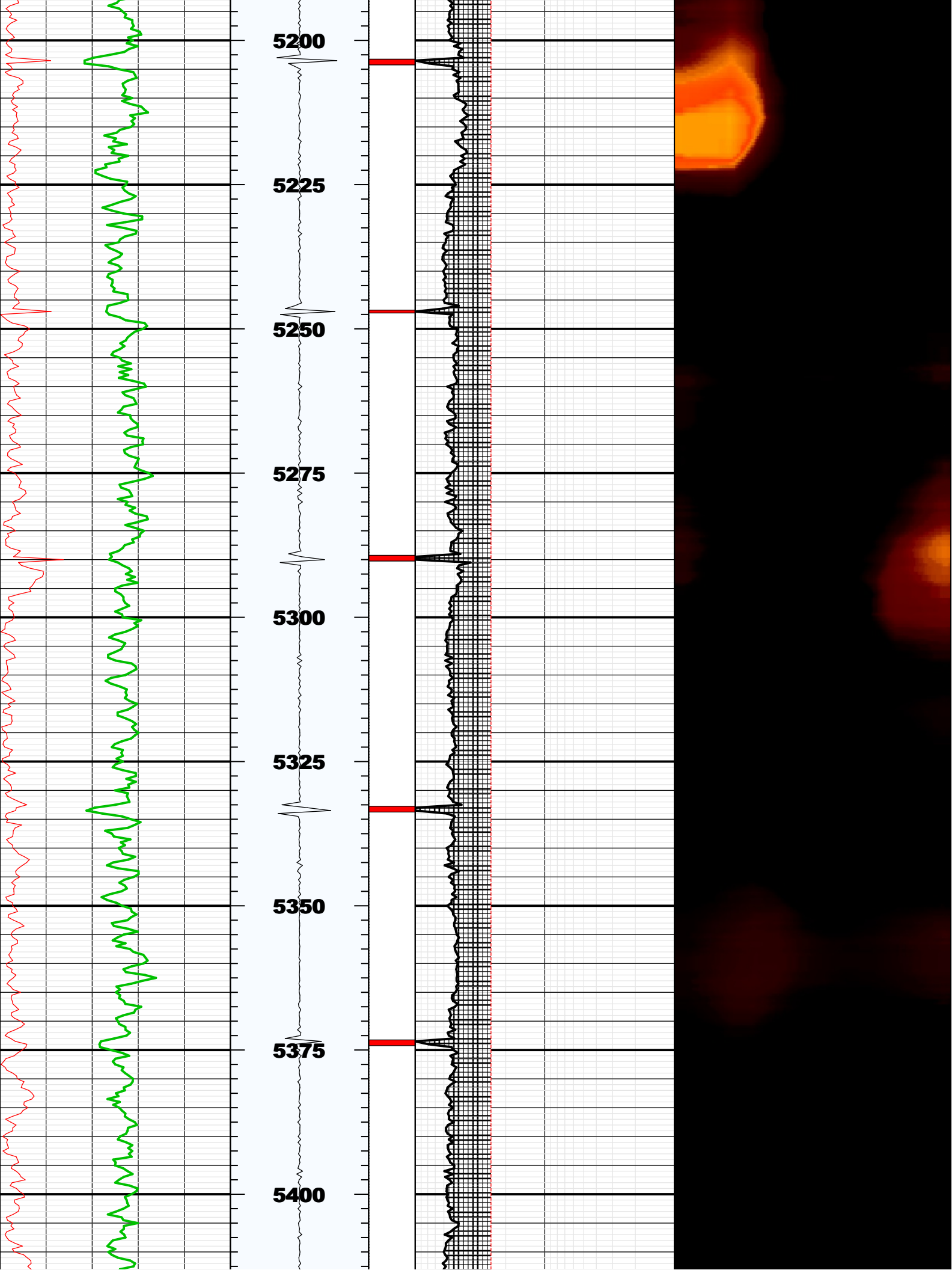


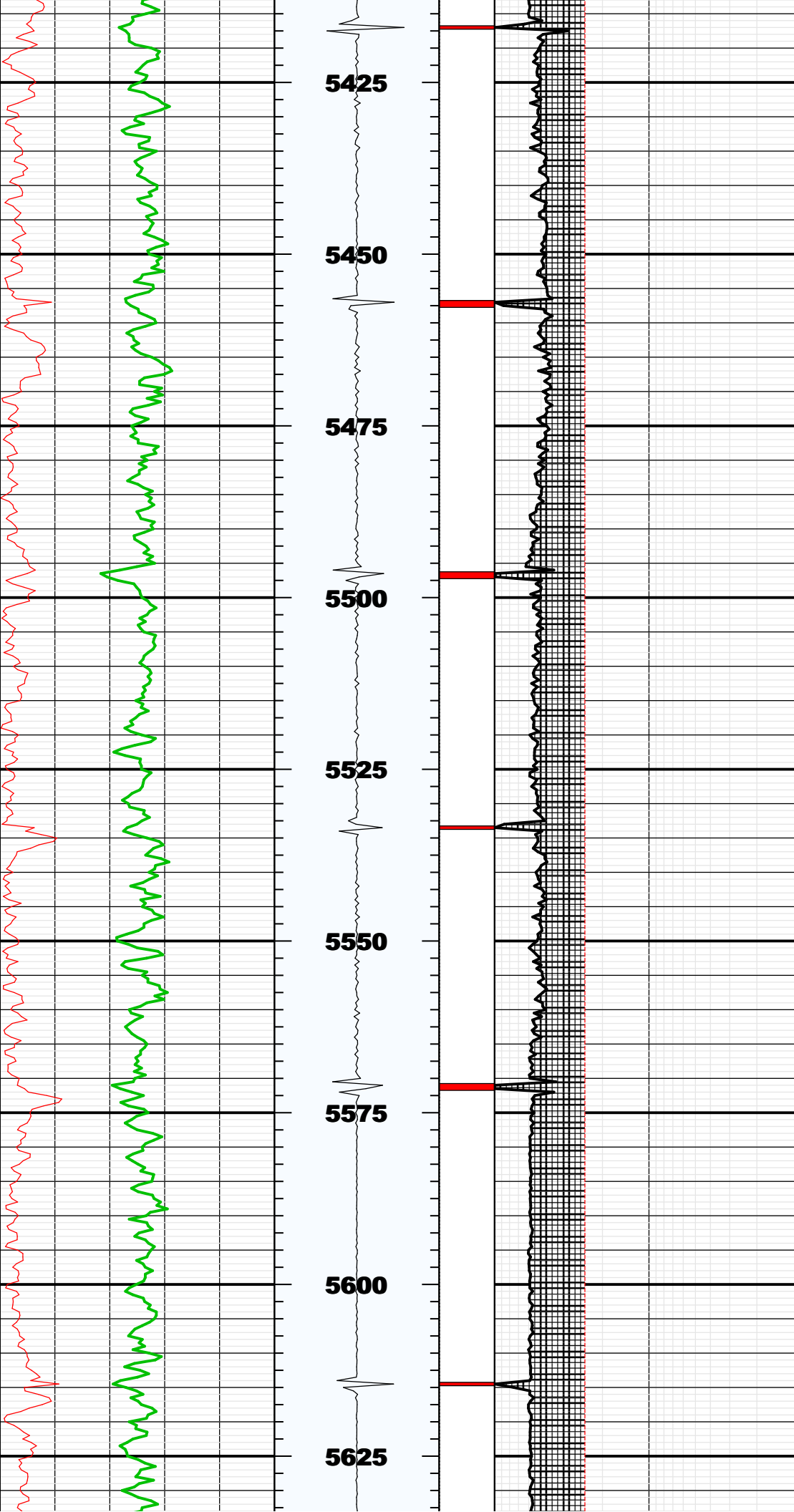


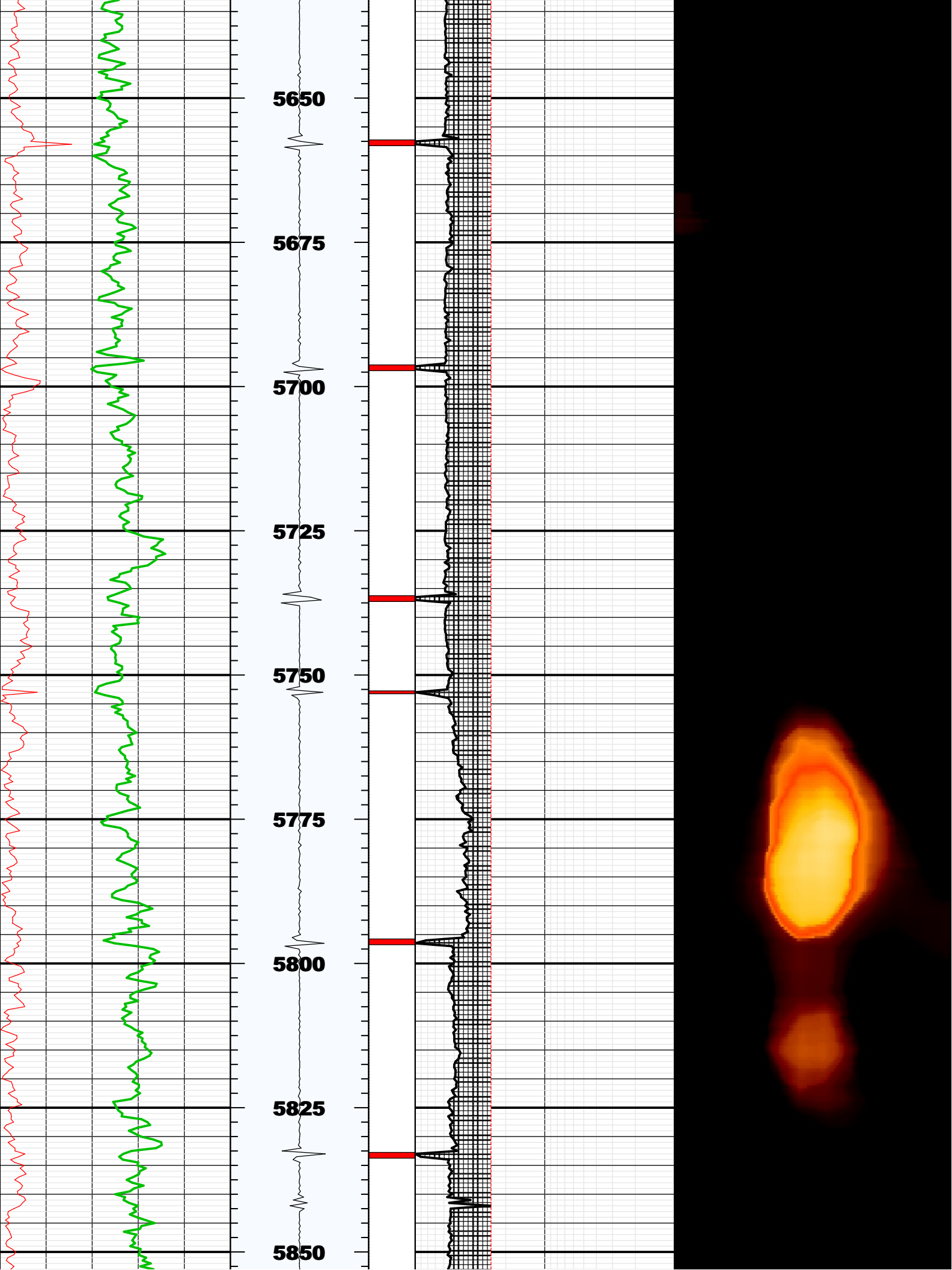


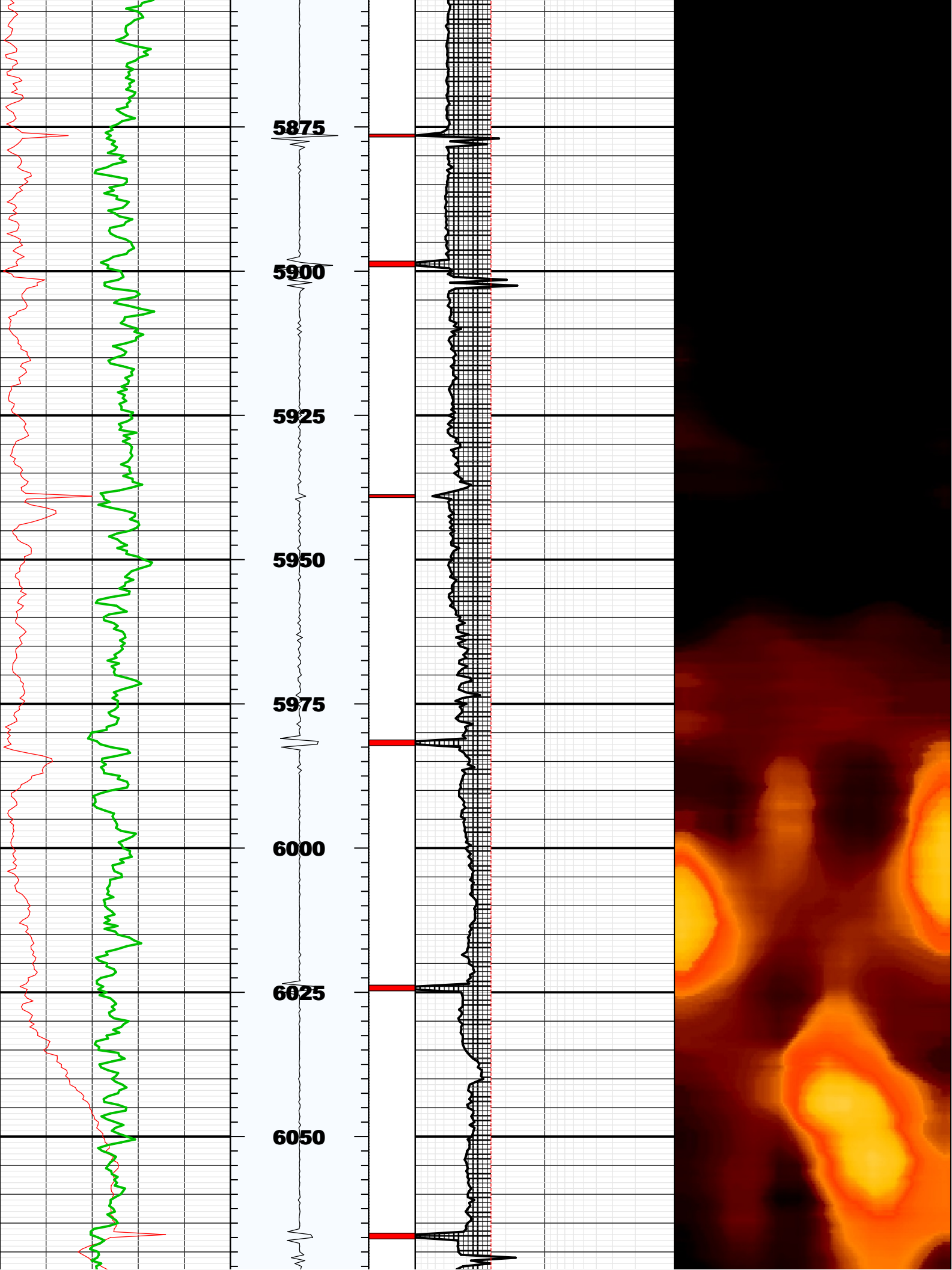


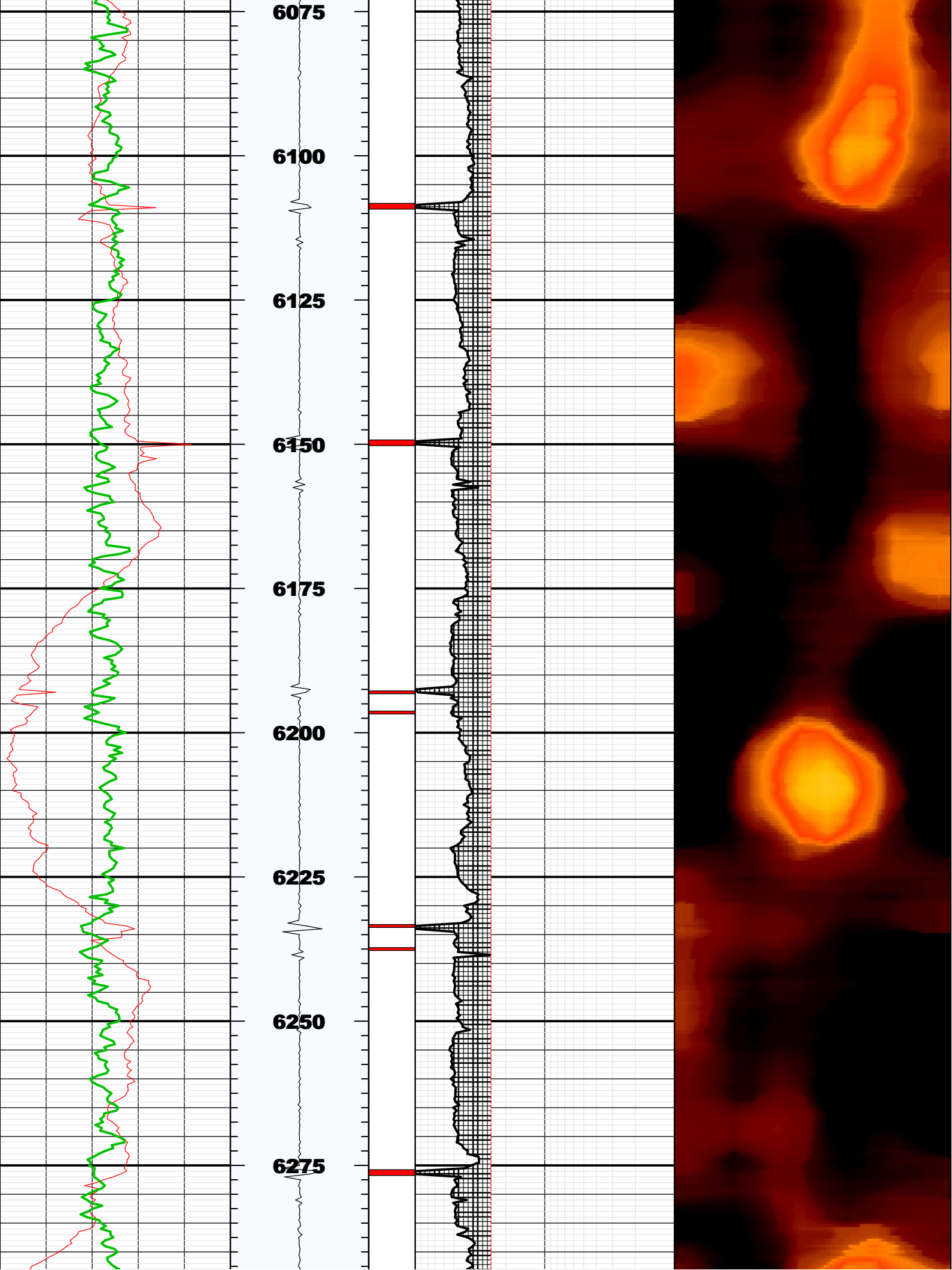


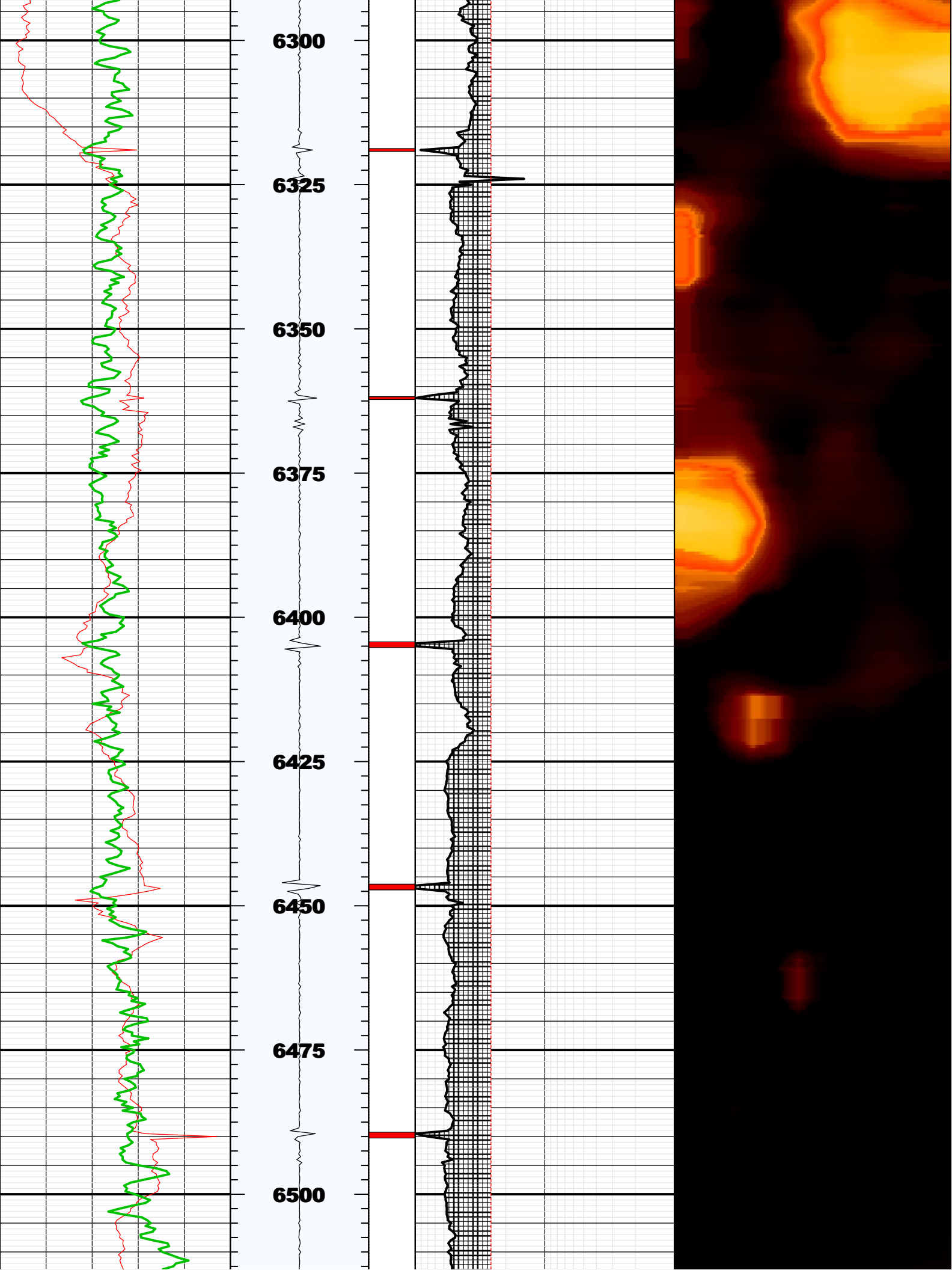


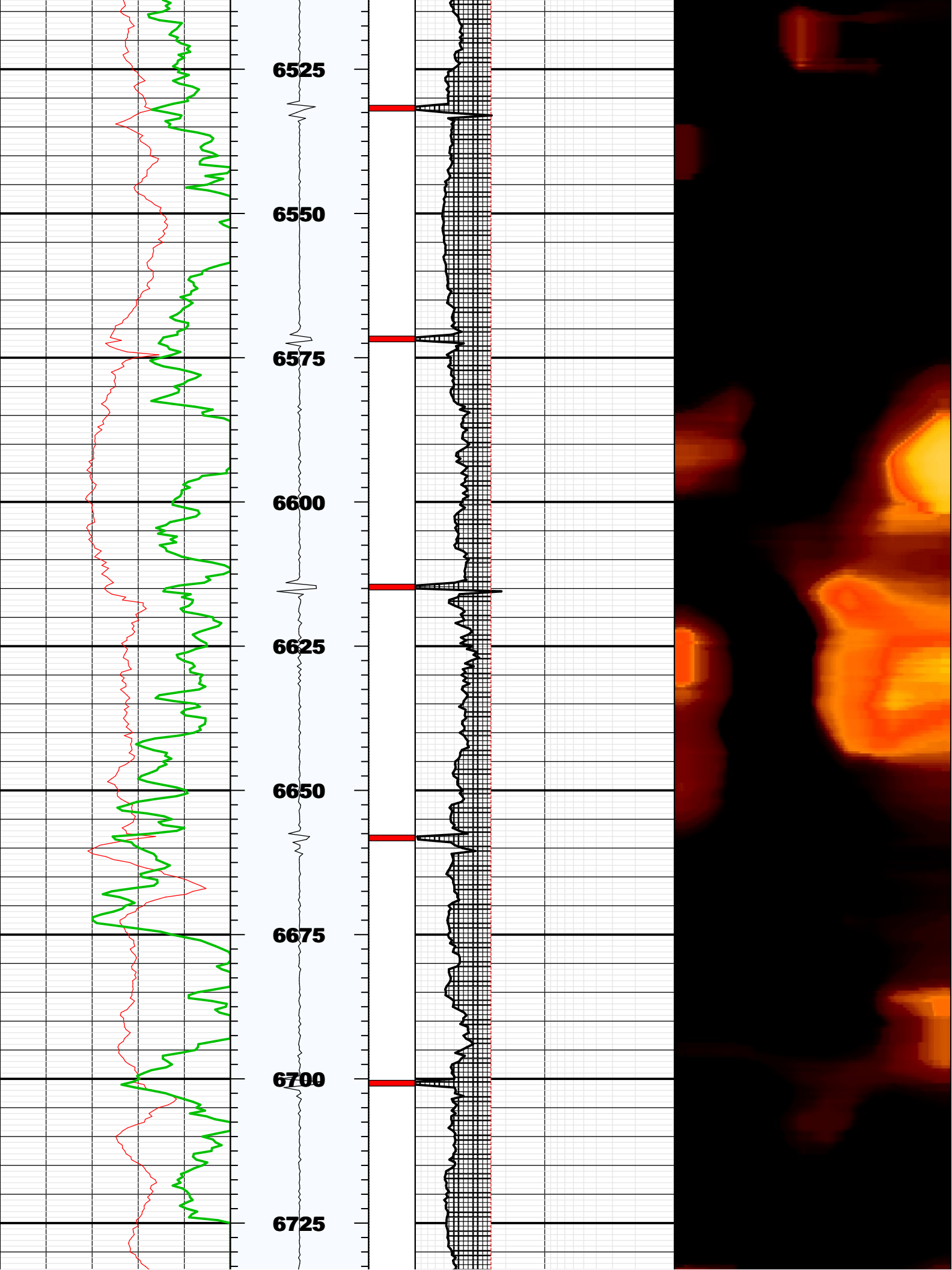


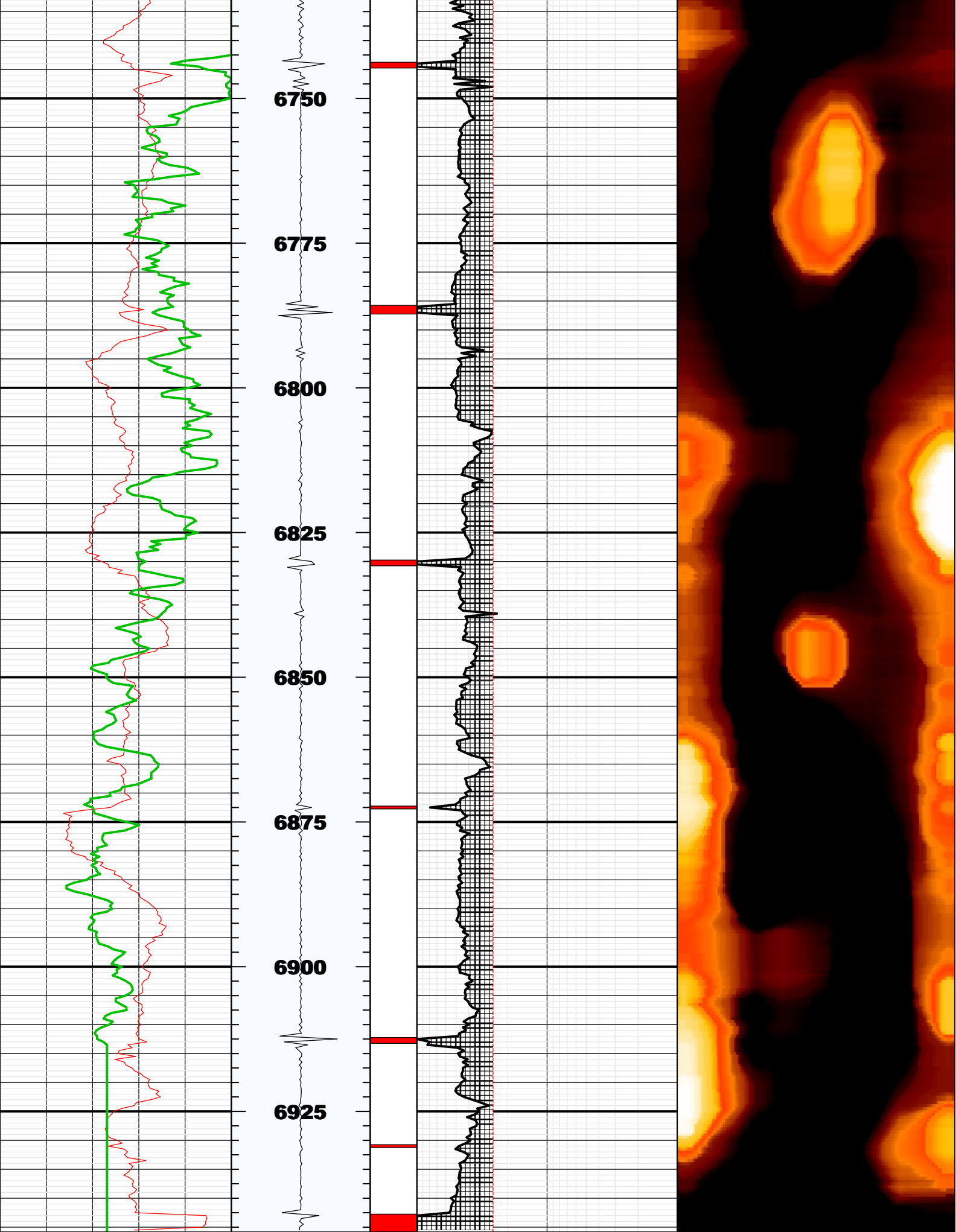








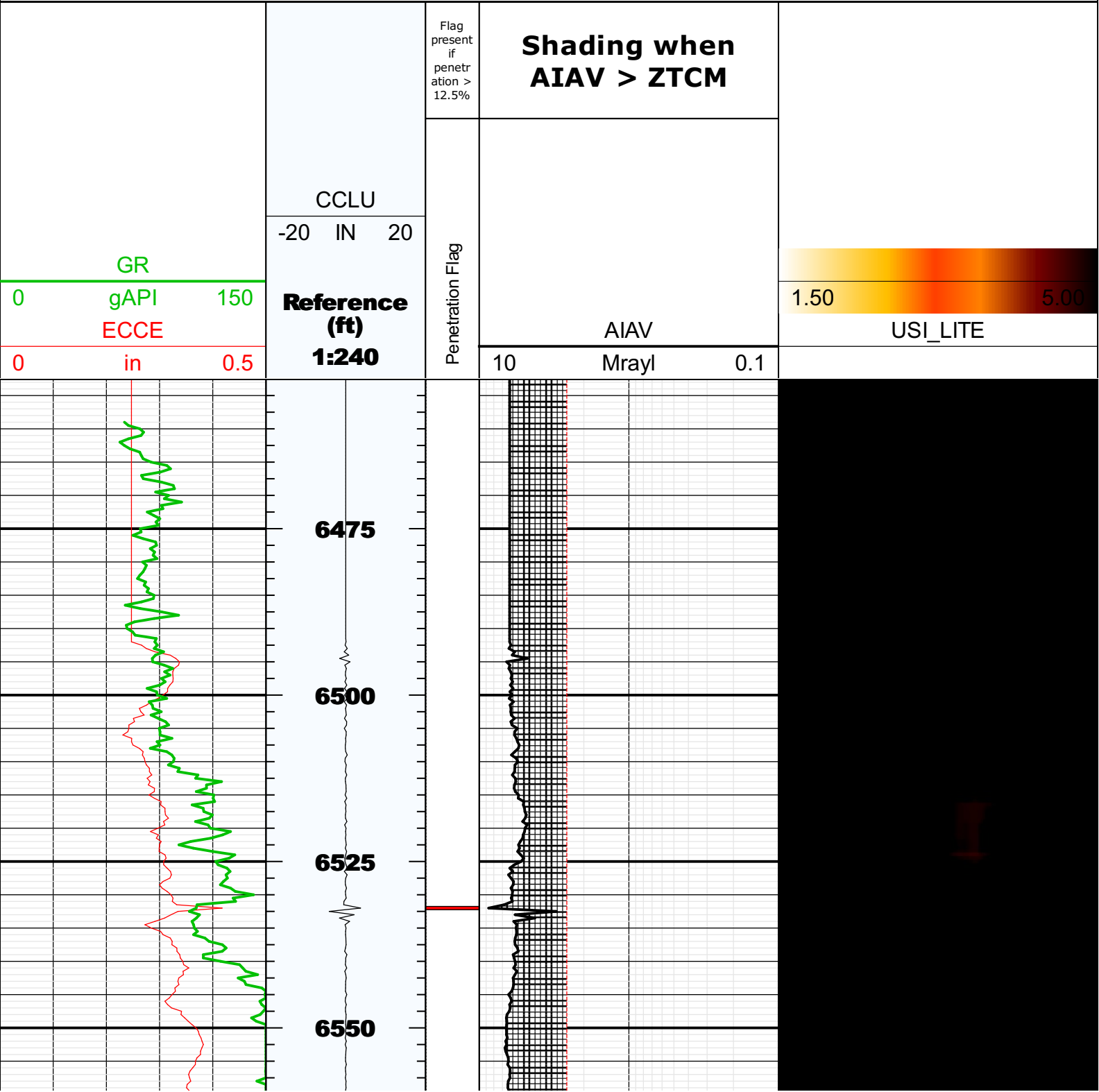


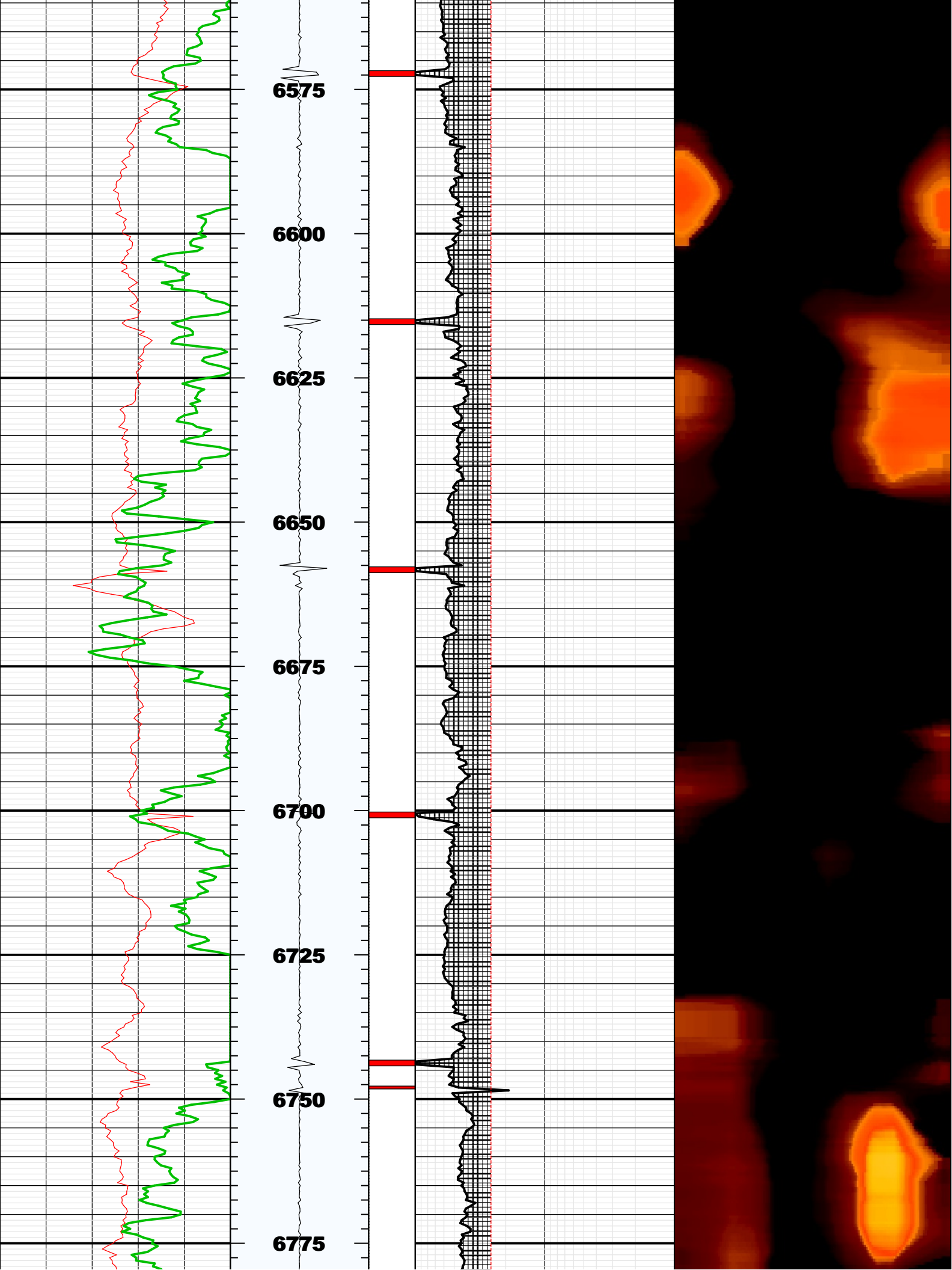


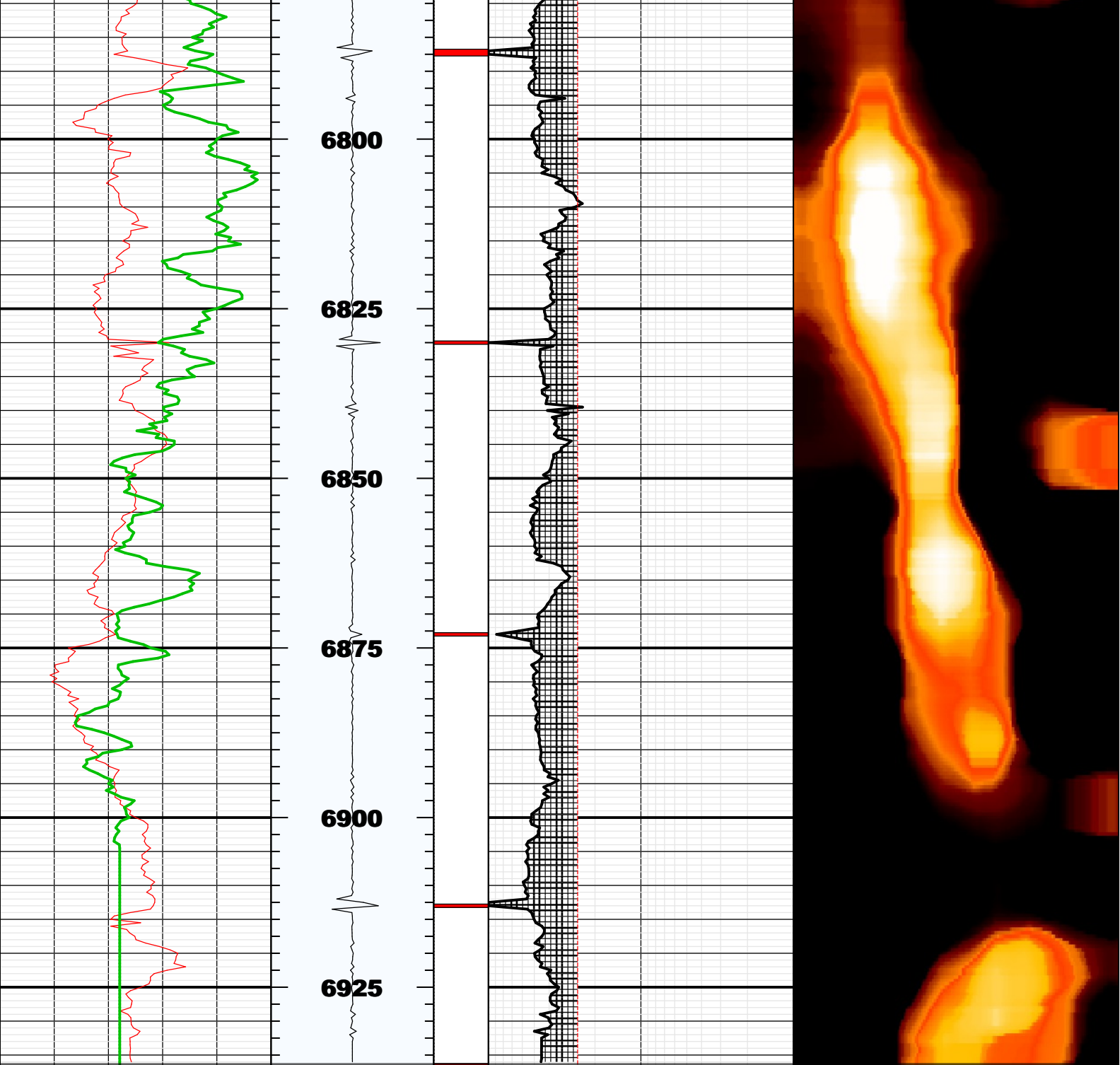
BS	8.75000	IN	Bit Size
CASG	P110		Casing Grade
CDIA	7.00000	IN	Casing Outer Diameter
CSID	6.27600	IN	Casing Inner Diameter
CSIZ	7.00000	IN	Current Casing Size
CWEI	26.00000	LB/F	Casing Weight
DFD	8.70000	LB/G	Drilling Fluid Density
DFVL	190.00000	US/F	Default Fluid Velocity
DO			
DOT	2.87400	IN	Diameter 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	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	1.78000	MRAY	Acoustic Impedance of Mud
ZTCM	2.60000	MRAY	Acoustic Impedance Threshold for Cement
ZTGS	0.30000	MRAY	Acoustic Impedance Threshold for Gas
WLEN	20.00000	US	T ³ Processing Length

Repeat Pass

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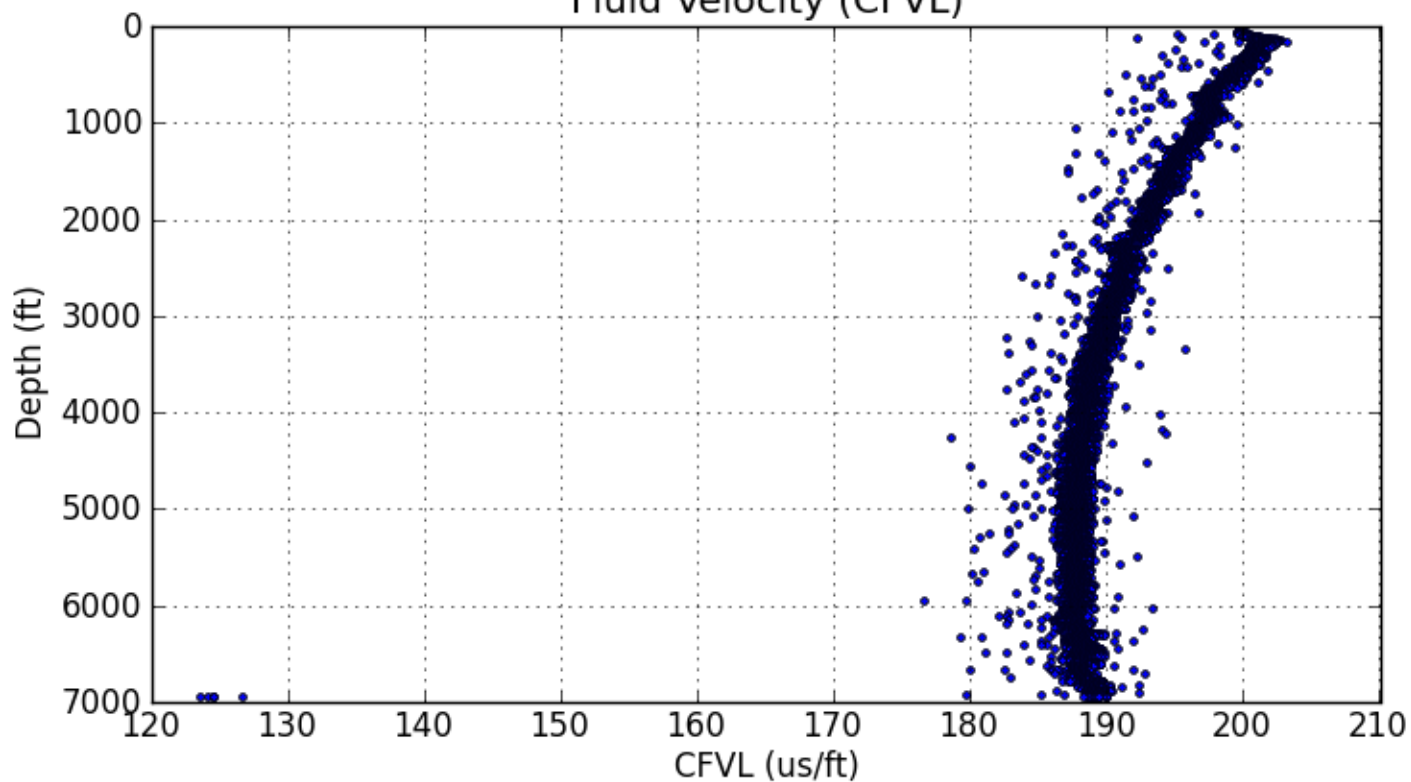






Fluid Properties Used for Main Pass

Fluid Velocity (CFVL)



Acoustic Impedance of Mud (CZMD)

