

Company: Noble Energy Inc.

Well: Haley LC27-715
Field: WILDCAT
County: WELD

State: Colorado

County: WELD		USI-LITE	
Field: WILDCAT			
Location: SHL NENE S34 T9N R59W			
Well: Haley LC27-715			
Company: Noble Energy Inc.			
LOCATION			
Permanent Datum:		Elev: K.B. 4838.0 F	
Log Measured From:		G.L. 4814.0 F	
Drilling Measured From:		D.F. 4838.0 F	
GL KB KB			
API Serial No. 05-123-40597	Section 34	Township 9N	Range 59W
Logging Date 13-Jun-2015			
Run Number ONE			
Depth Driller 6342.0 F			
Schlumberger Depth 6078.0 F			
Bottom Log Interval 6078.0 F			
Top Log Interval -999.2 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 642.0 F			
To 6078.0 F			
Casing Size 7.00 IN			
Weight 26.00 LB/F			
Grade P110			
From 24.0 F			
To 6332.6 F			
Max Recorded Temp 184.0			
Logger on bottom (date) 13-Jun-2015			
Location Fort Morgan CO.			
Recorded By Benjamin Marmon			
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: 653 Calibration Date: Calibrator Serial Number: Number Of Calibration Points: Calibration RMS: Calibration Peak Error:	Serial Number: F713384 Length: 20000.00000

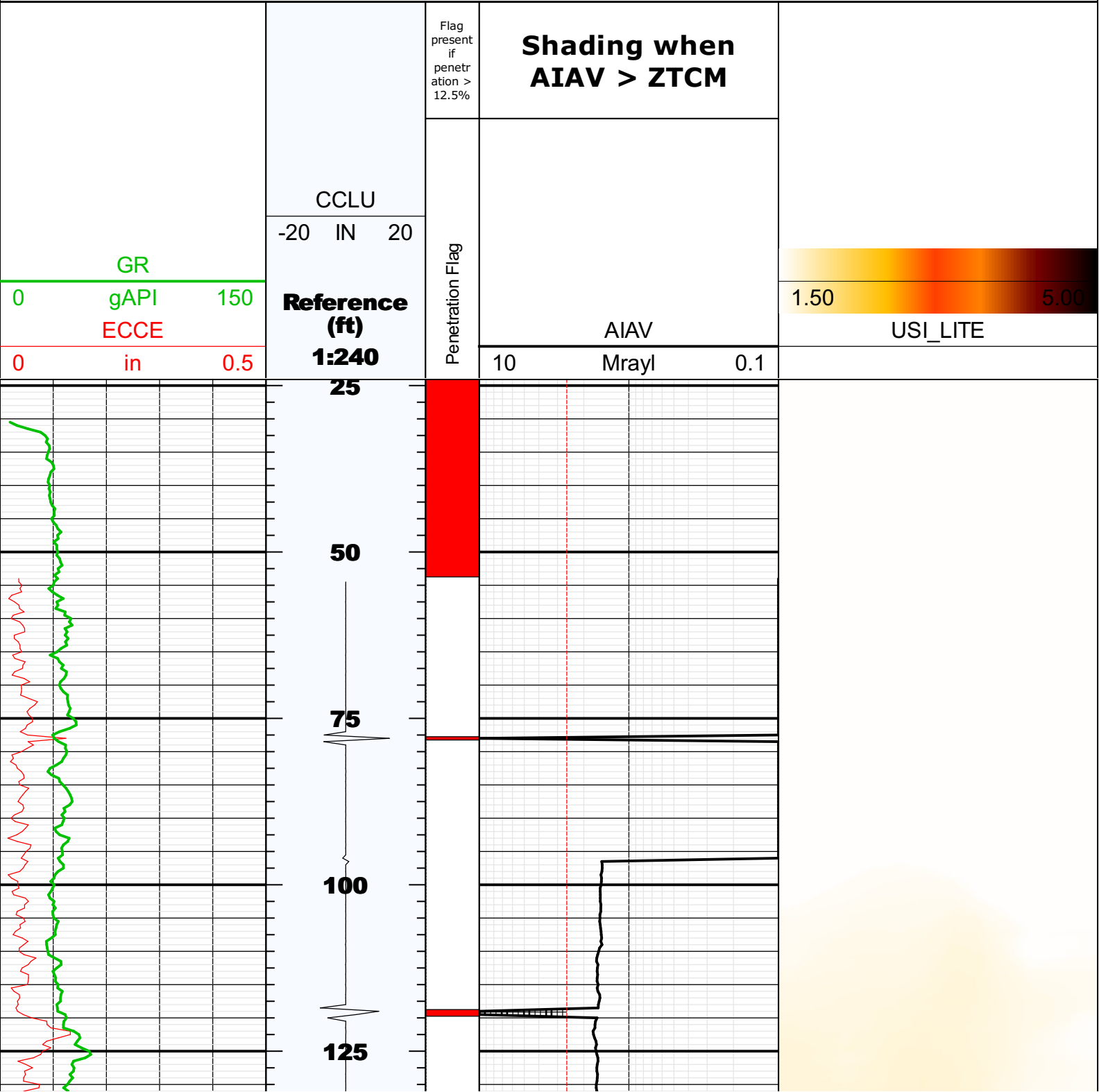
DISCLAIMER

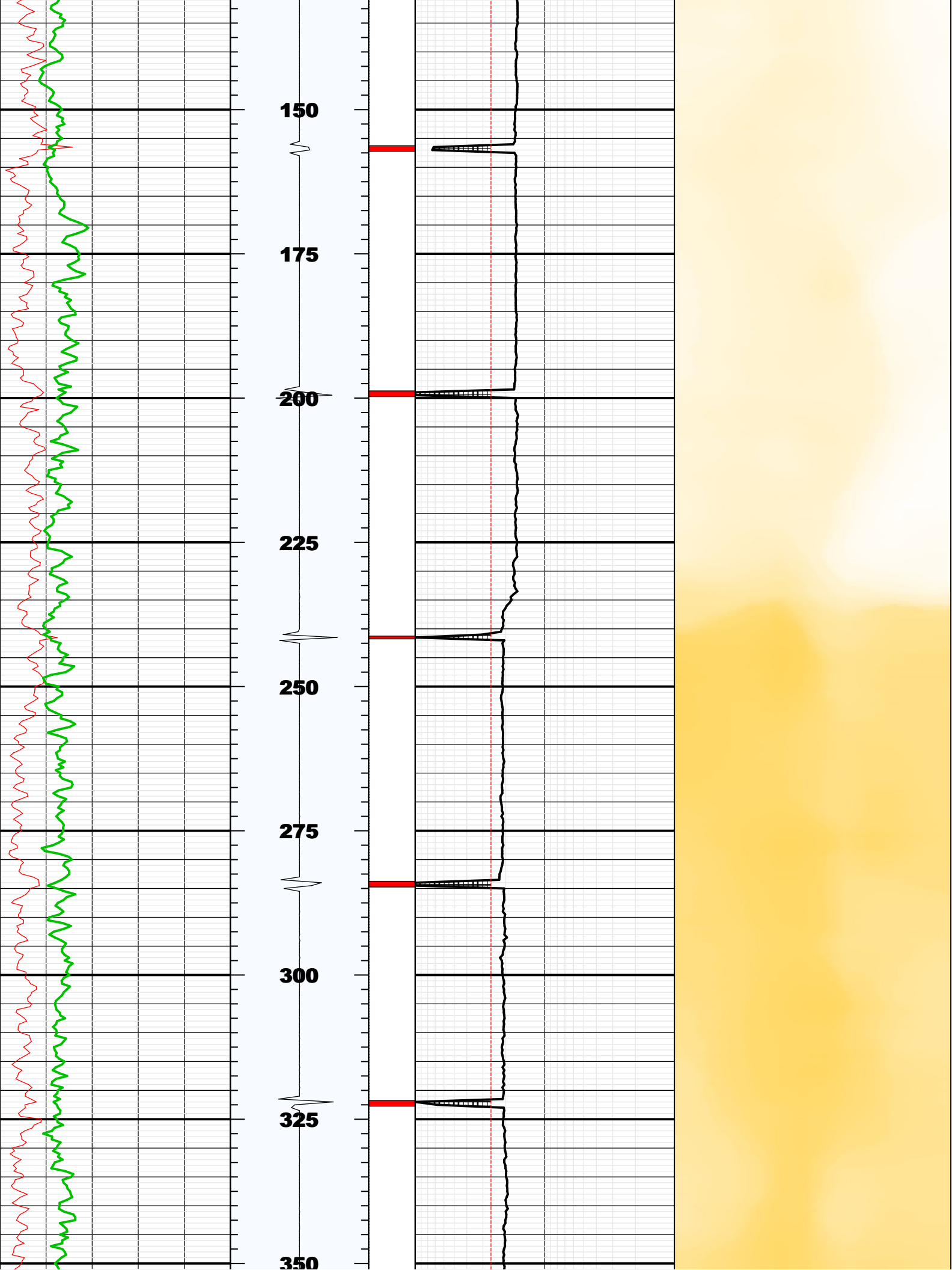
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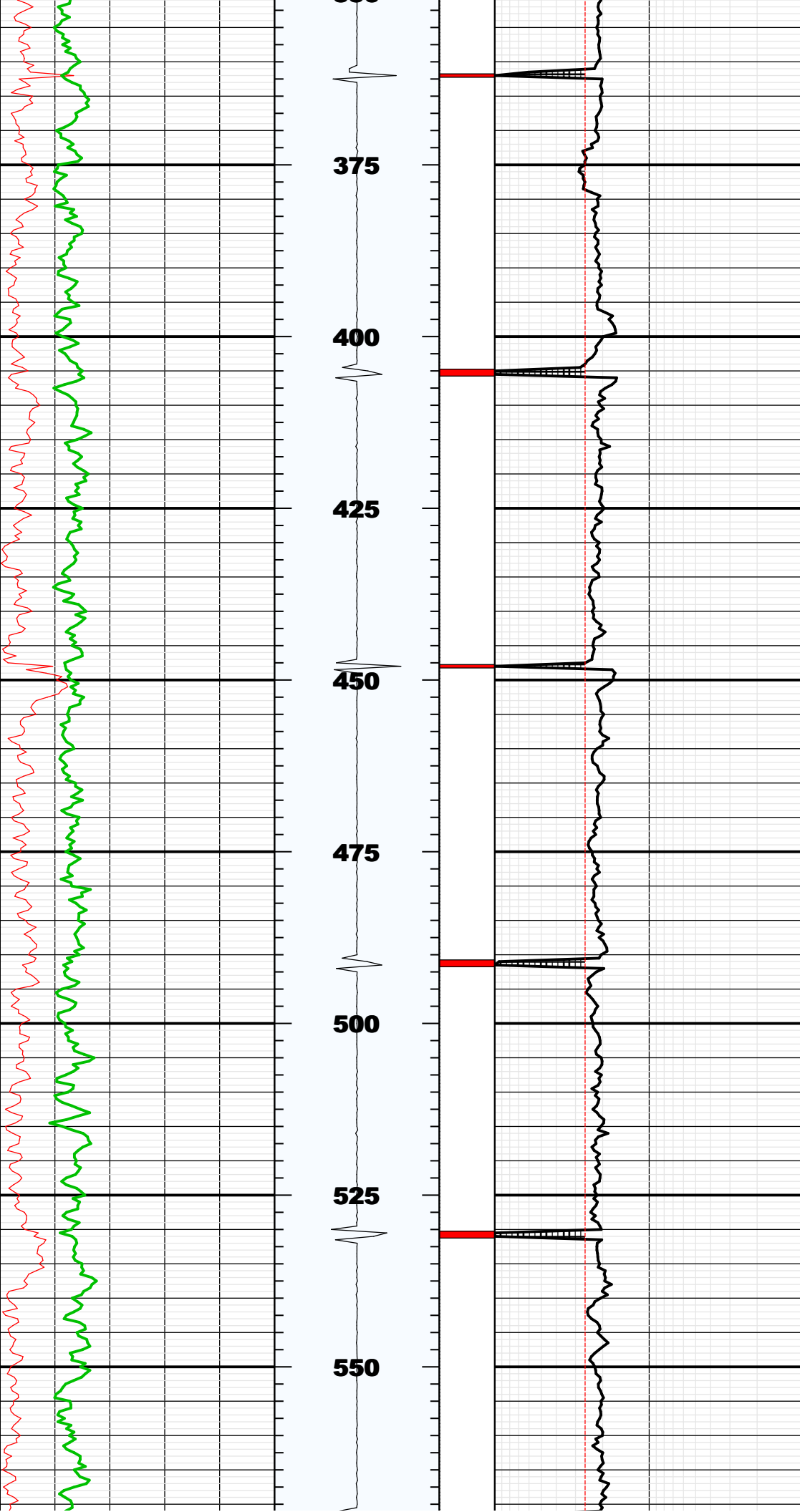
This is the first run in the well.
Toolstring run as per toolsketch.
Log Objective Cement Evaluation.
0 PSI Repeat Pass and 2500 PSI Main Pass.
Estimaed TOC @ 892'. Expected TOC@ 1794'.
Bottom Log Interval at 6078'. Sub would not spin below this depth.
Bottom hole temperature was 184 degF.

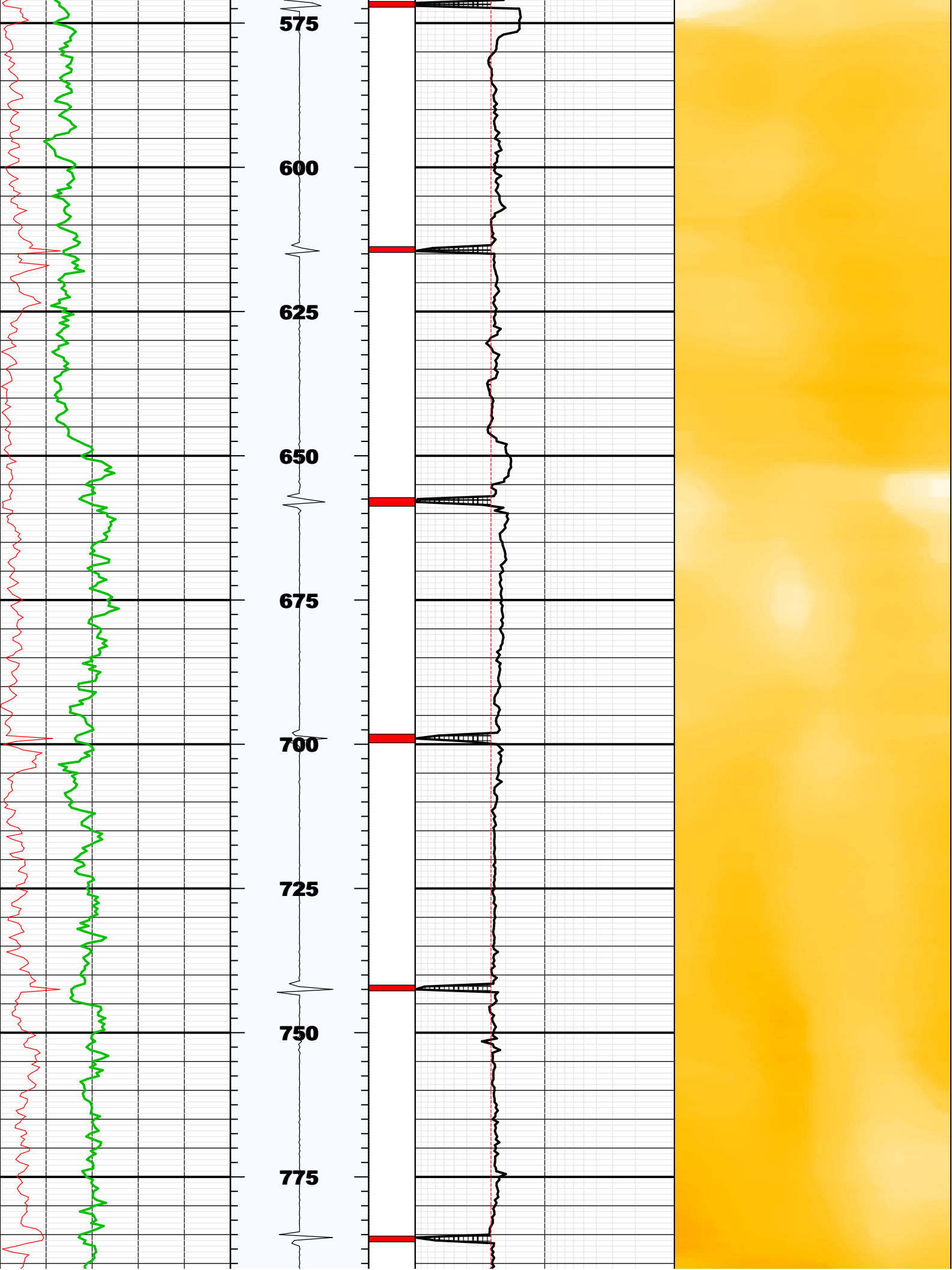
Main Pass

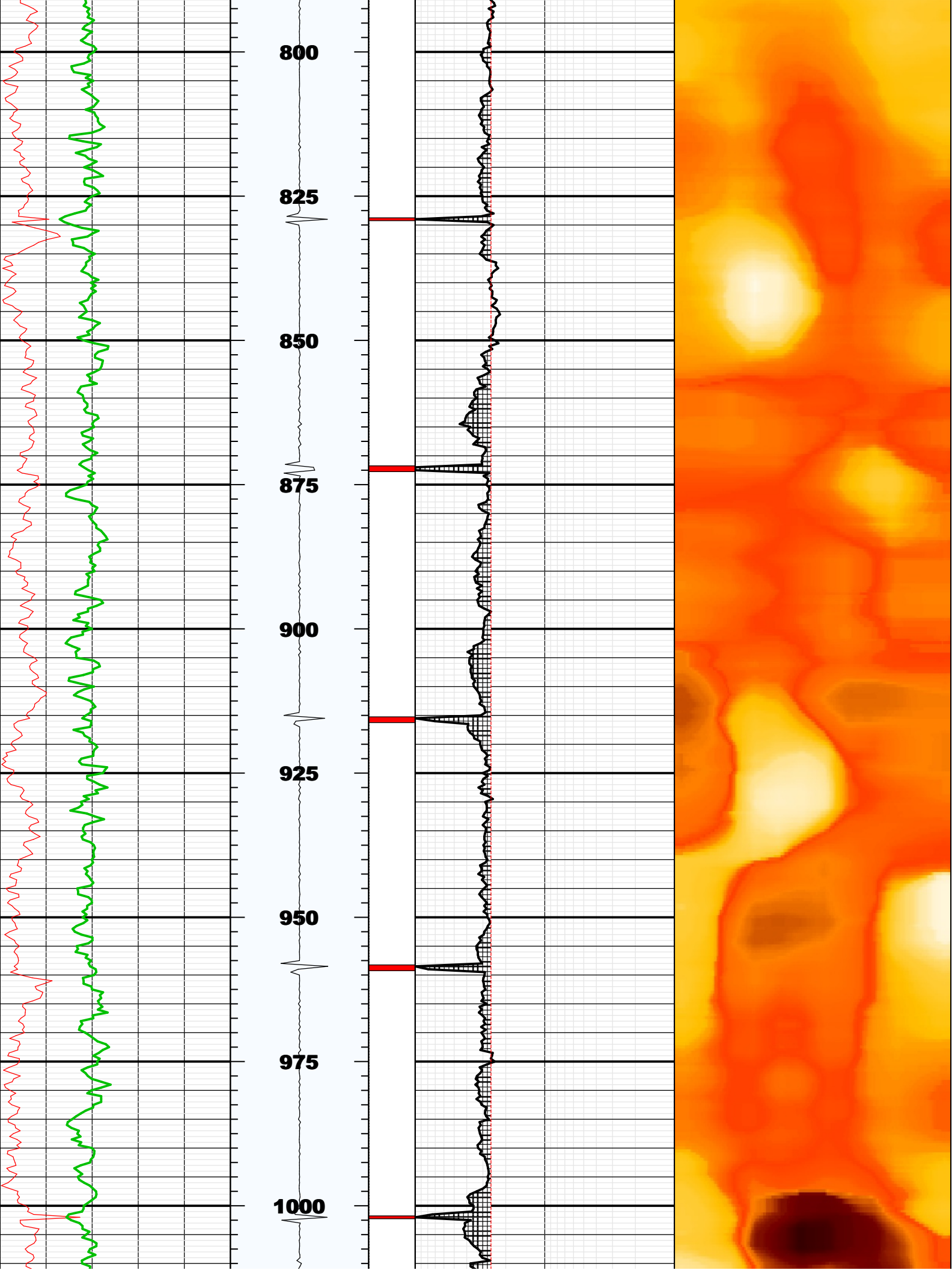
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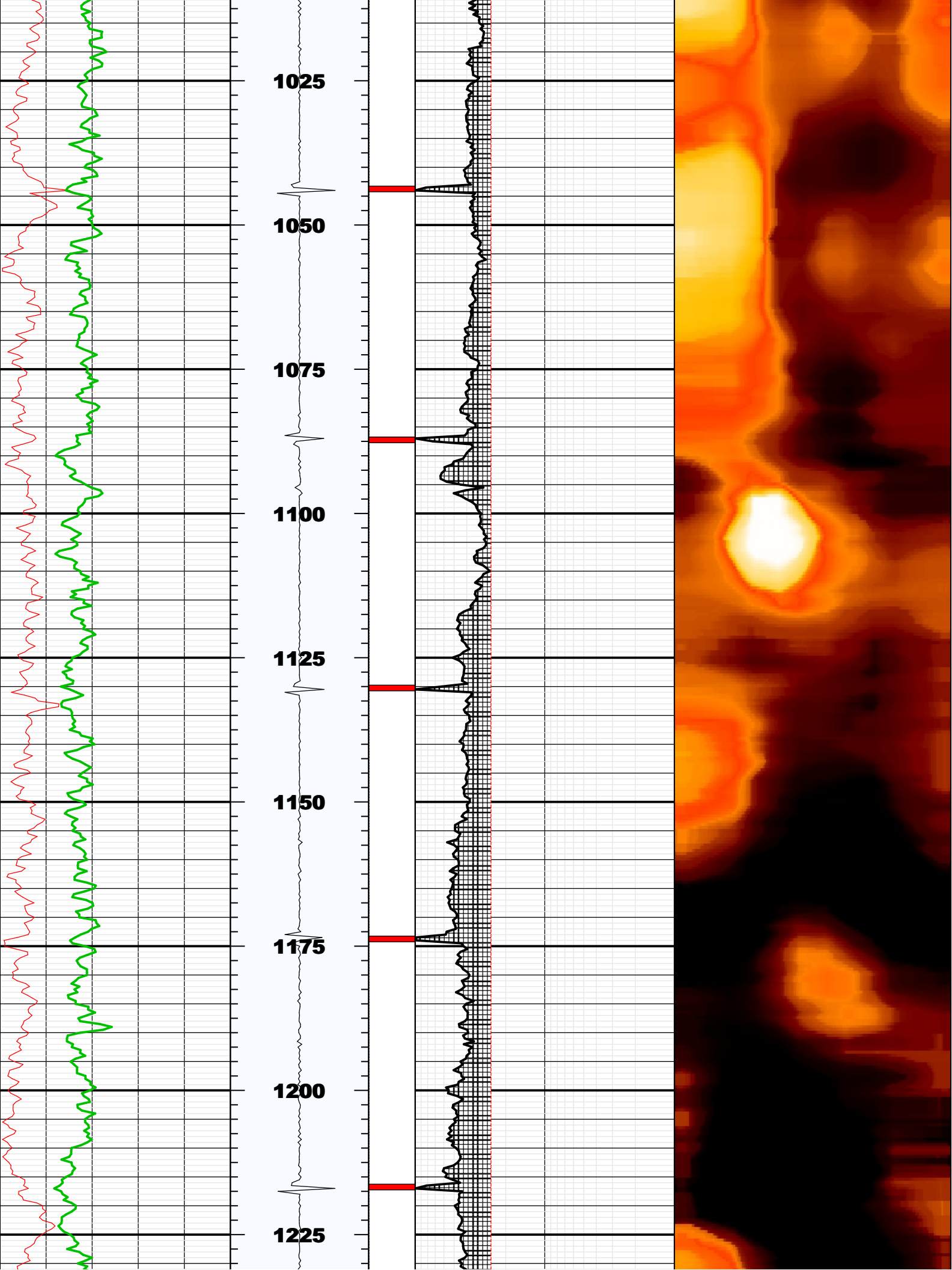


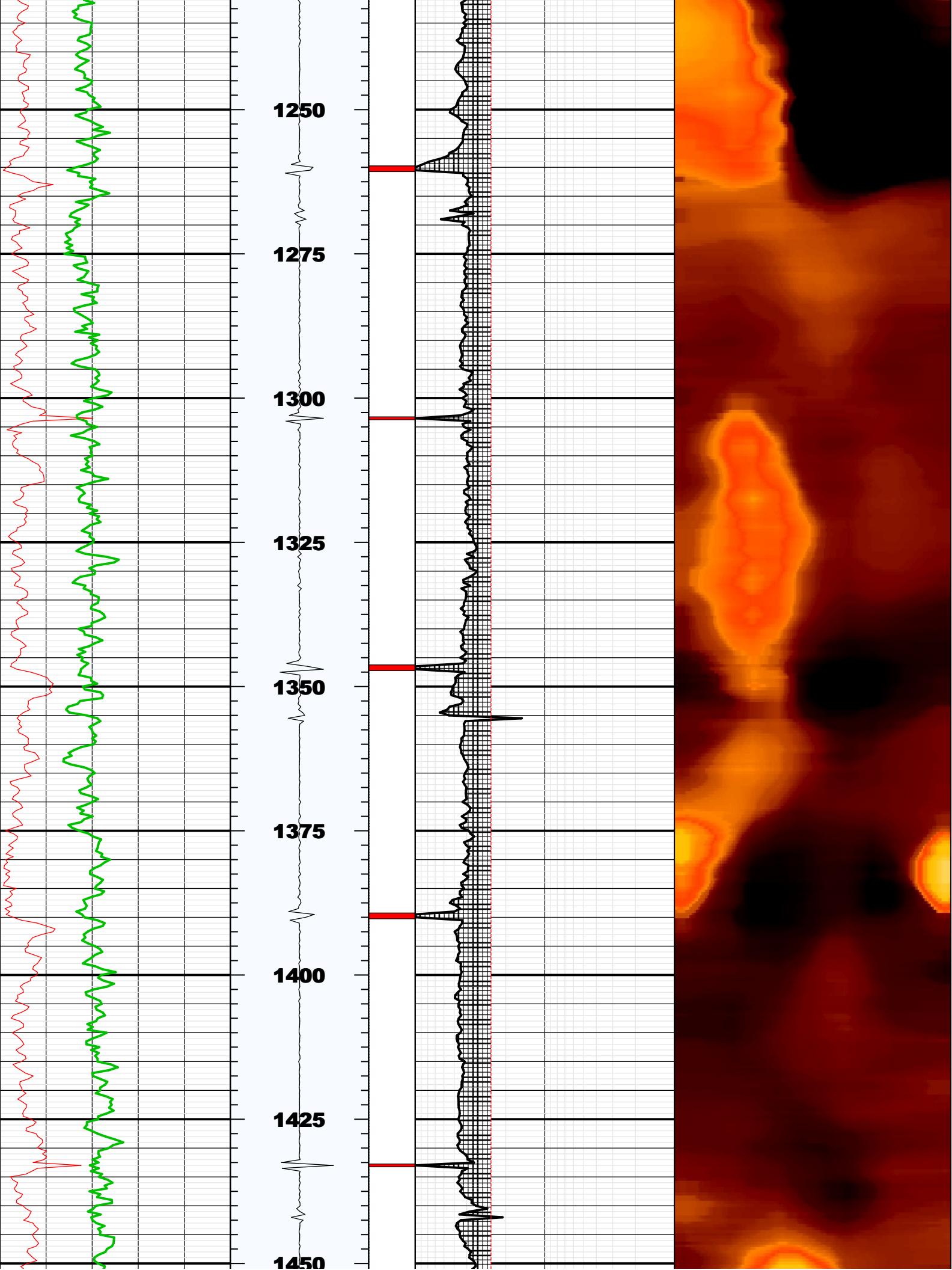


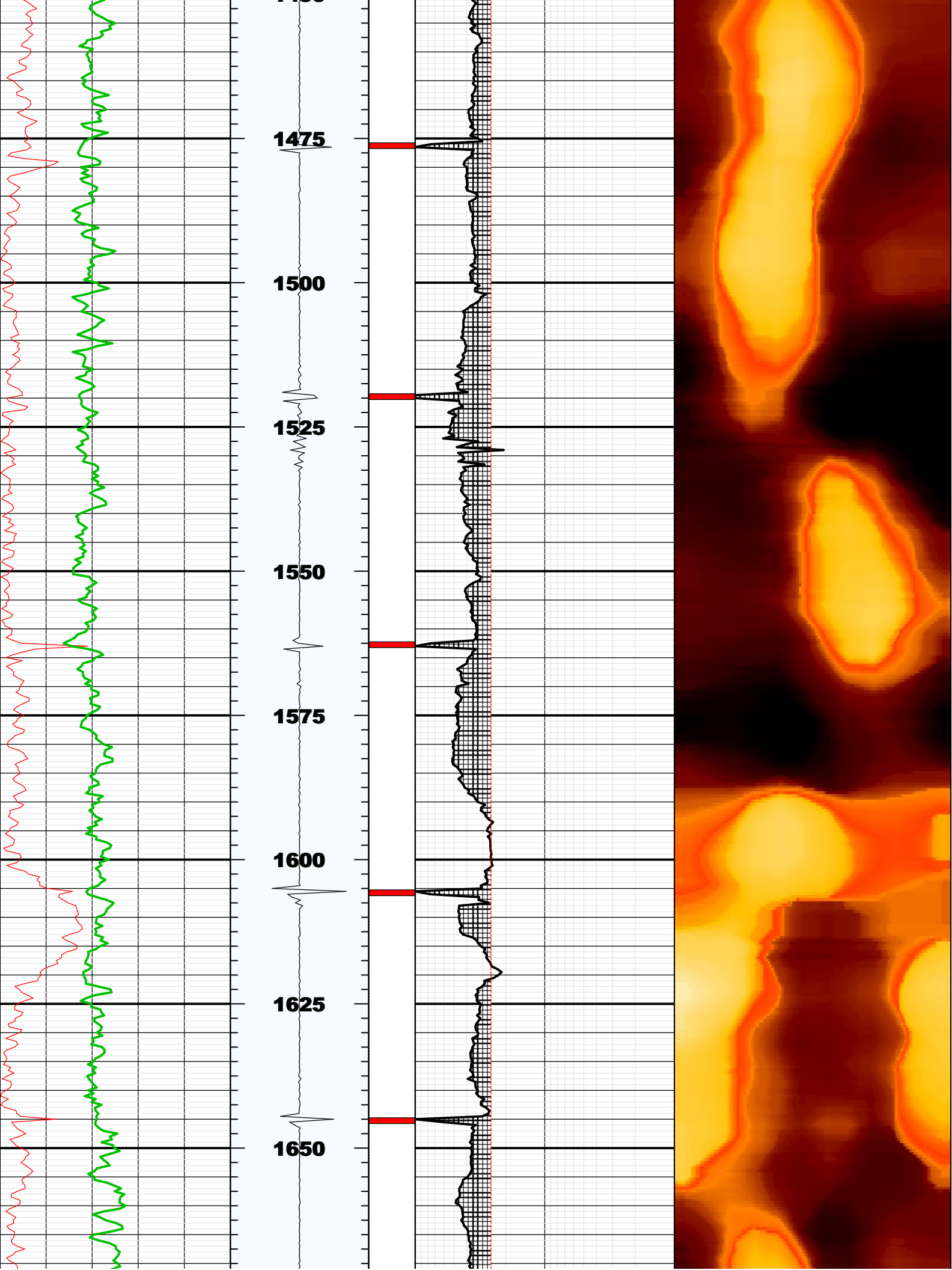


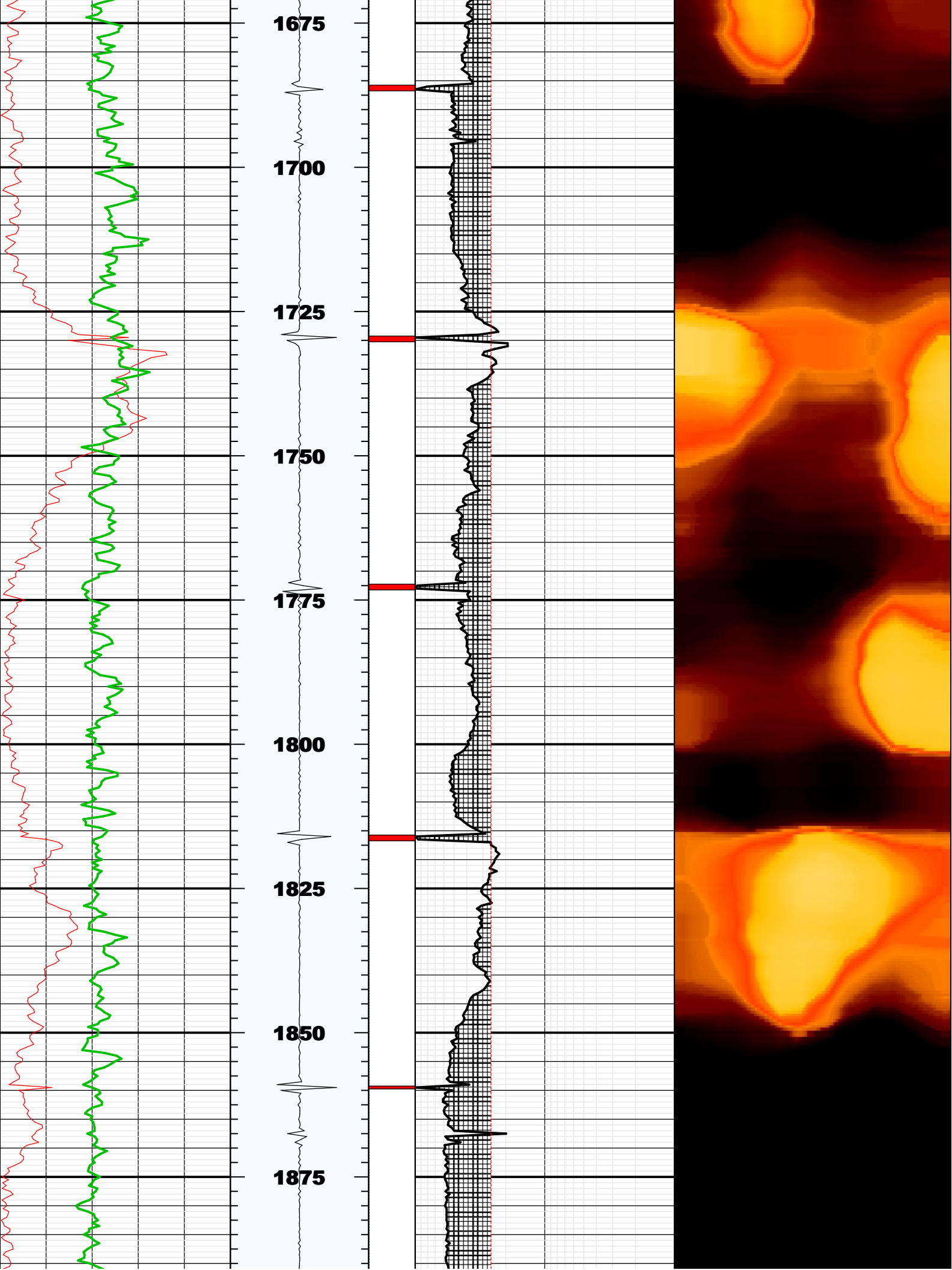


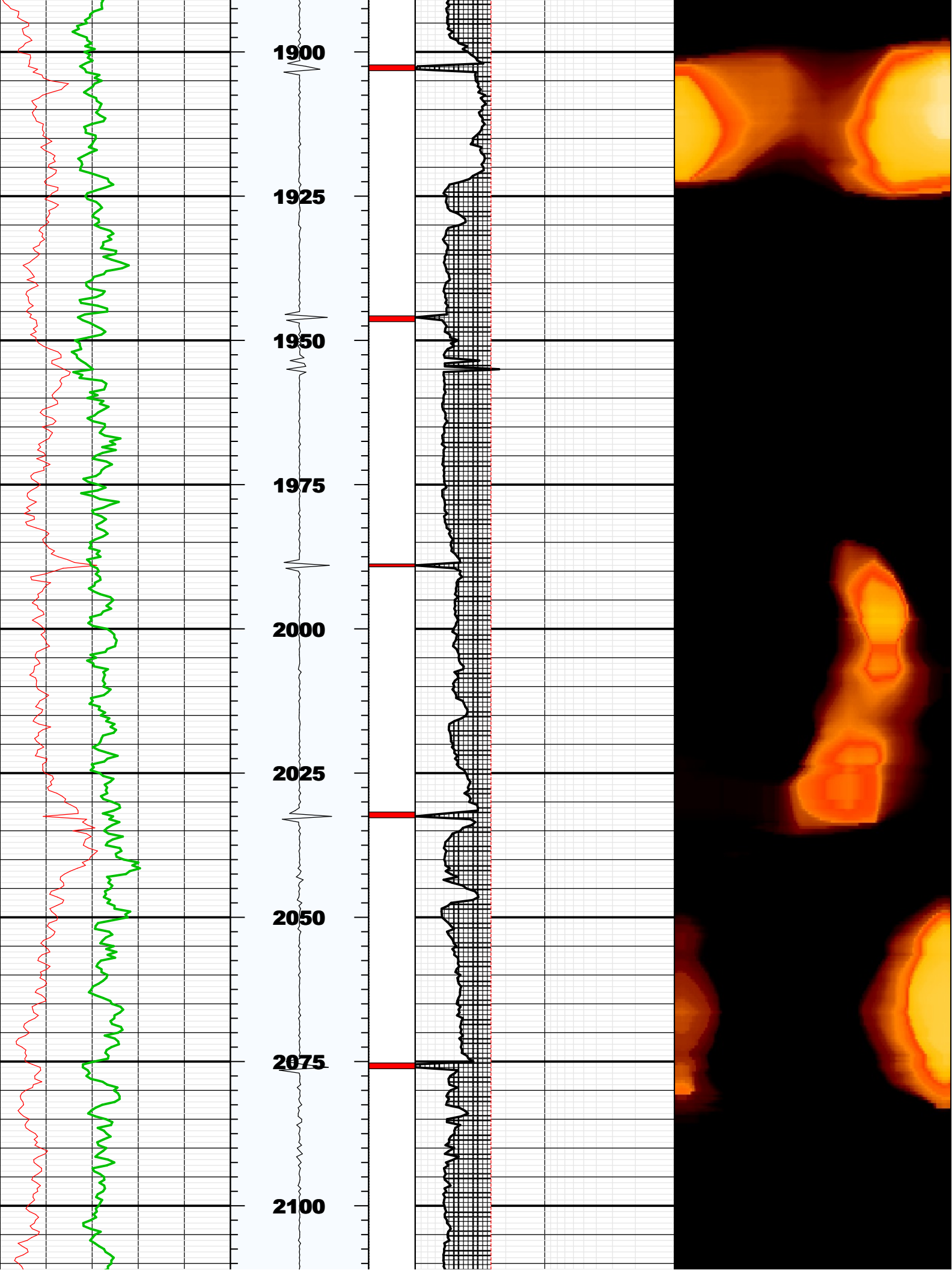


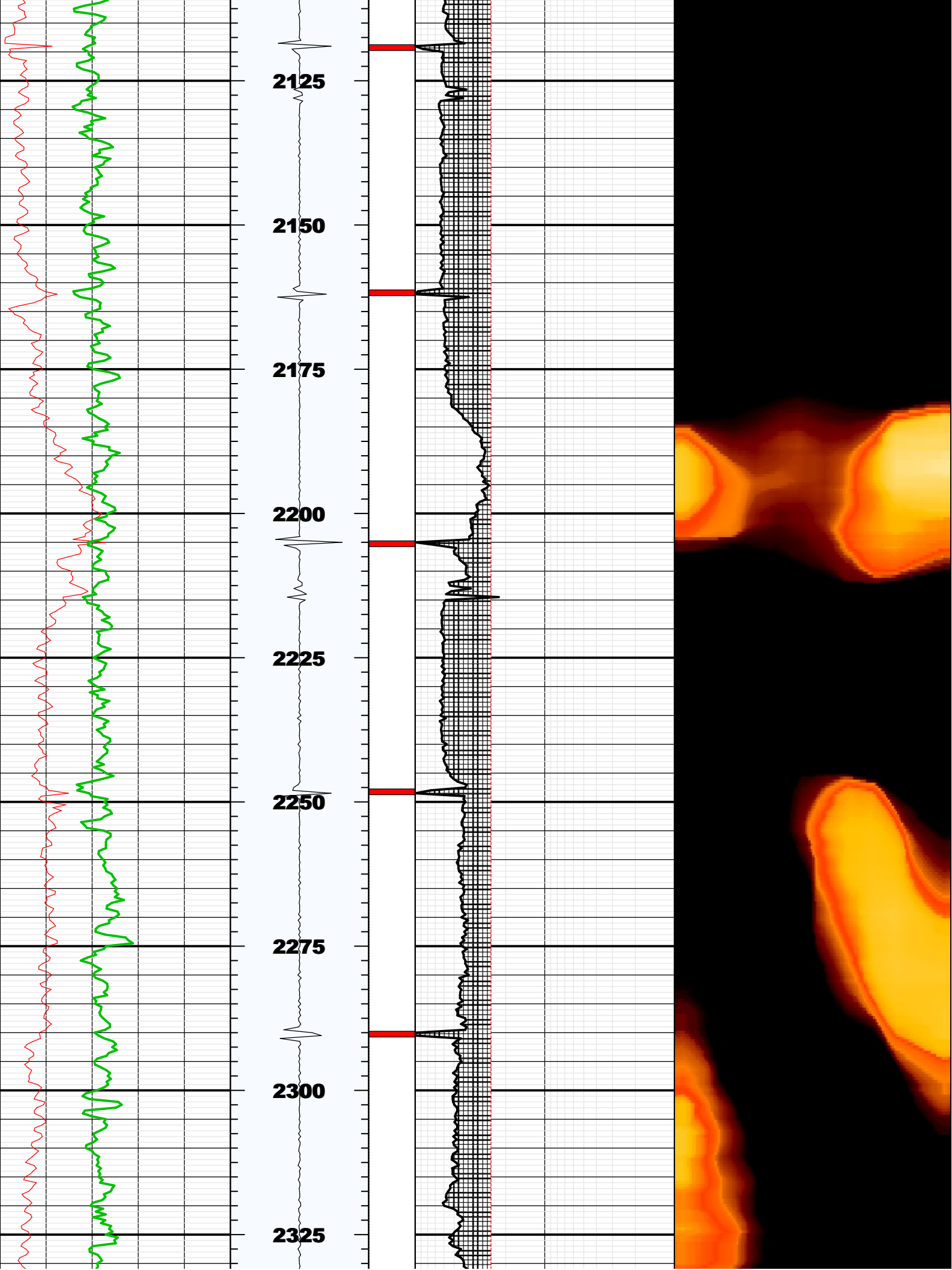


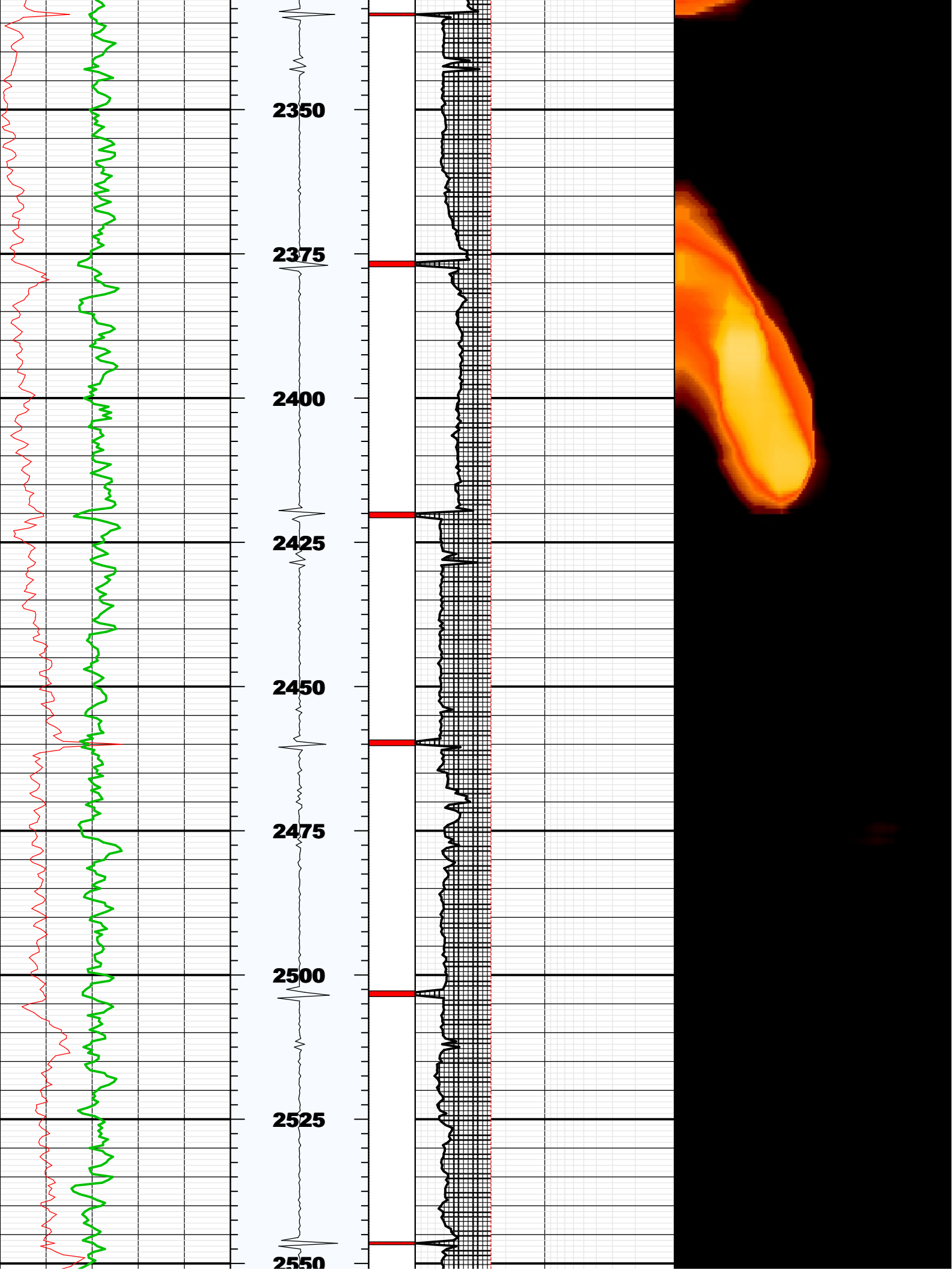


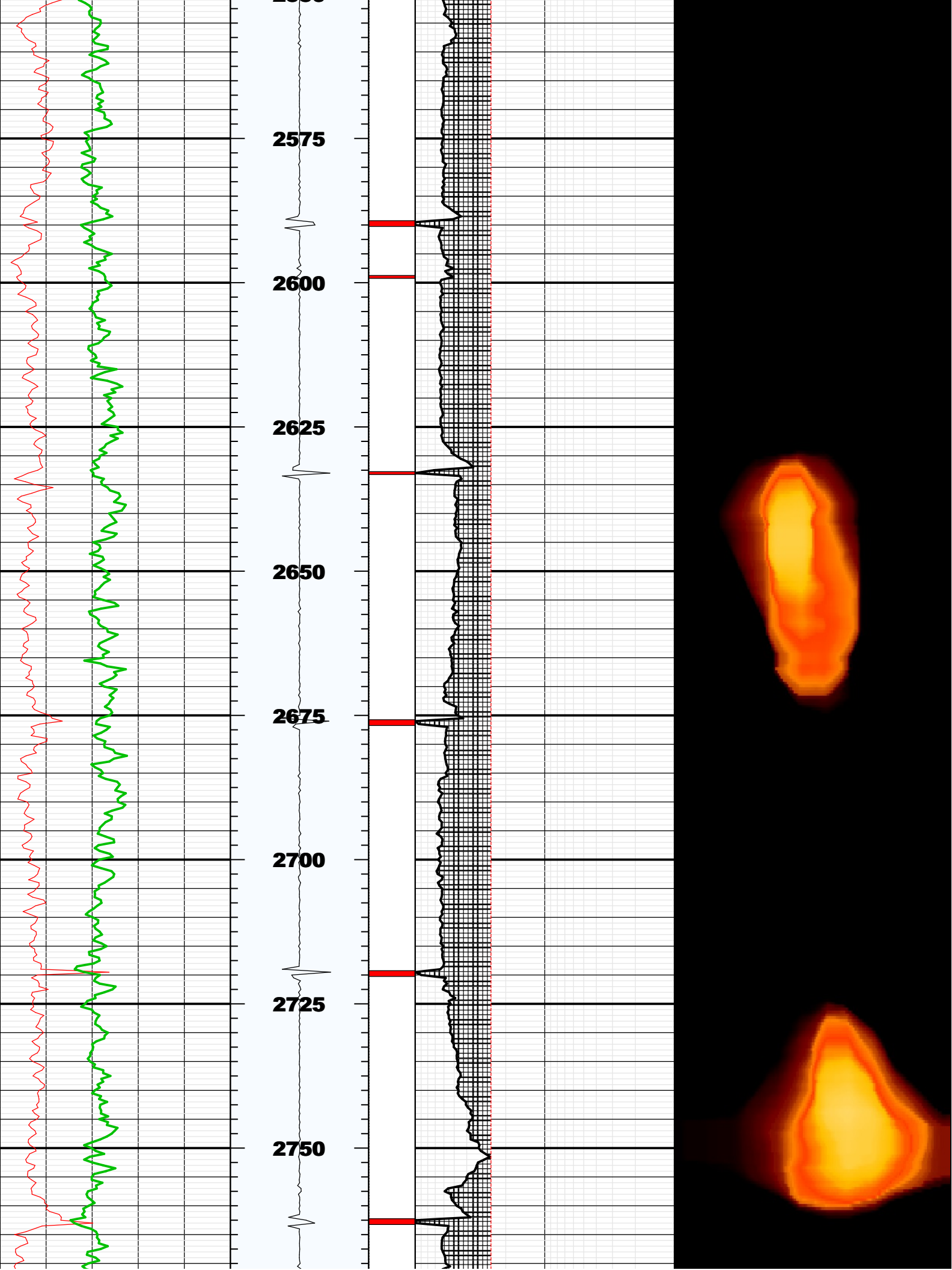


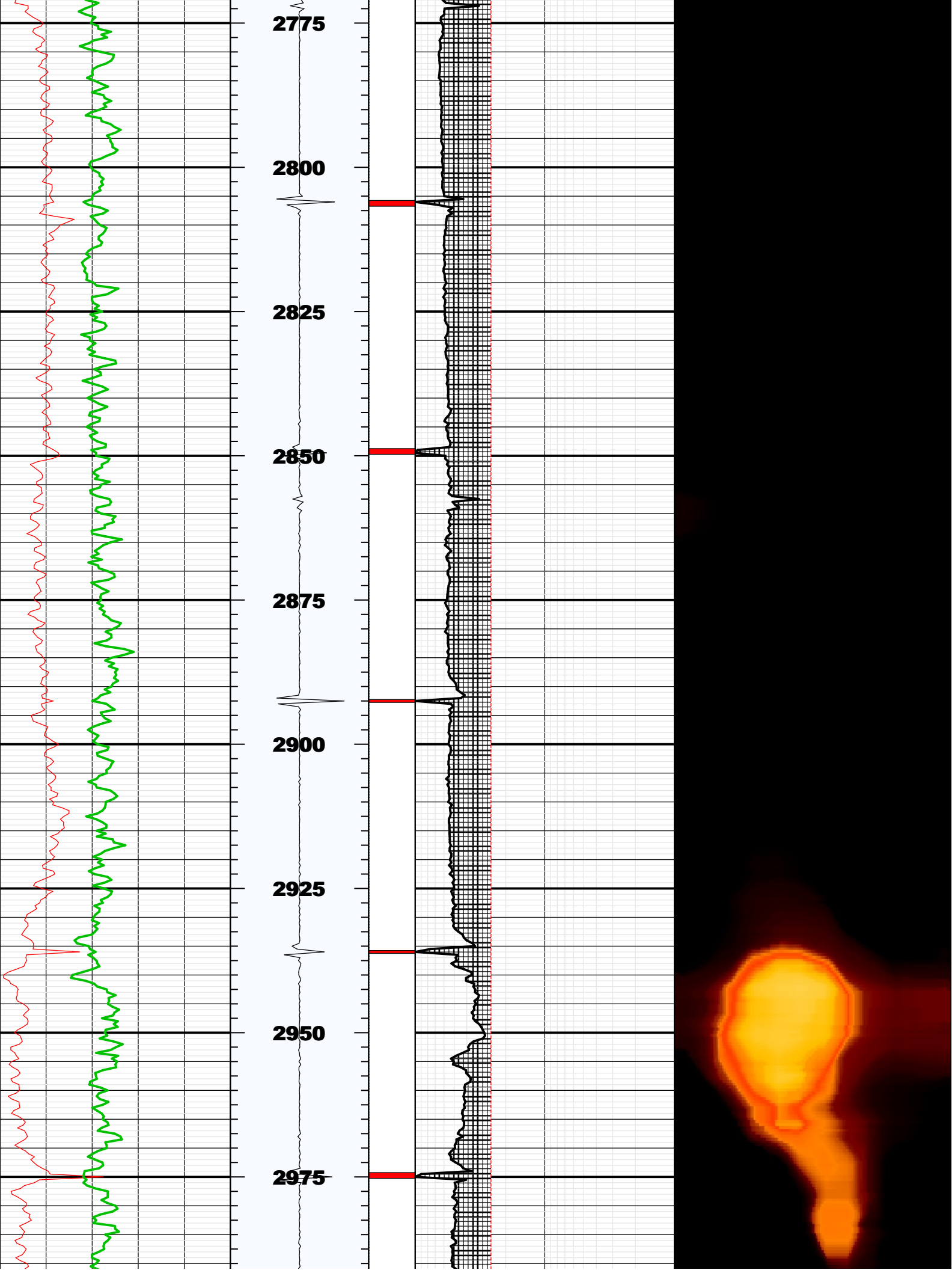


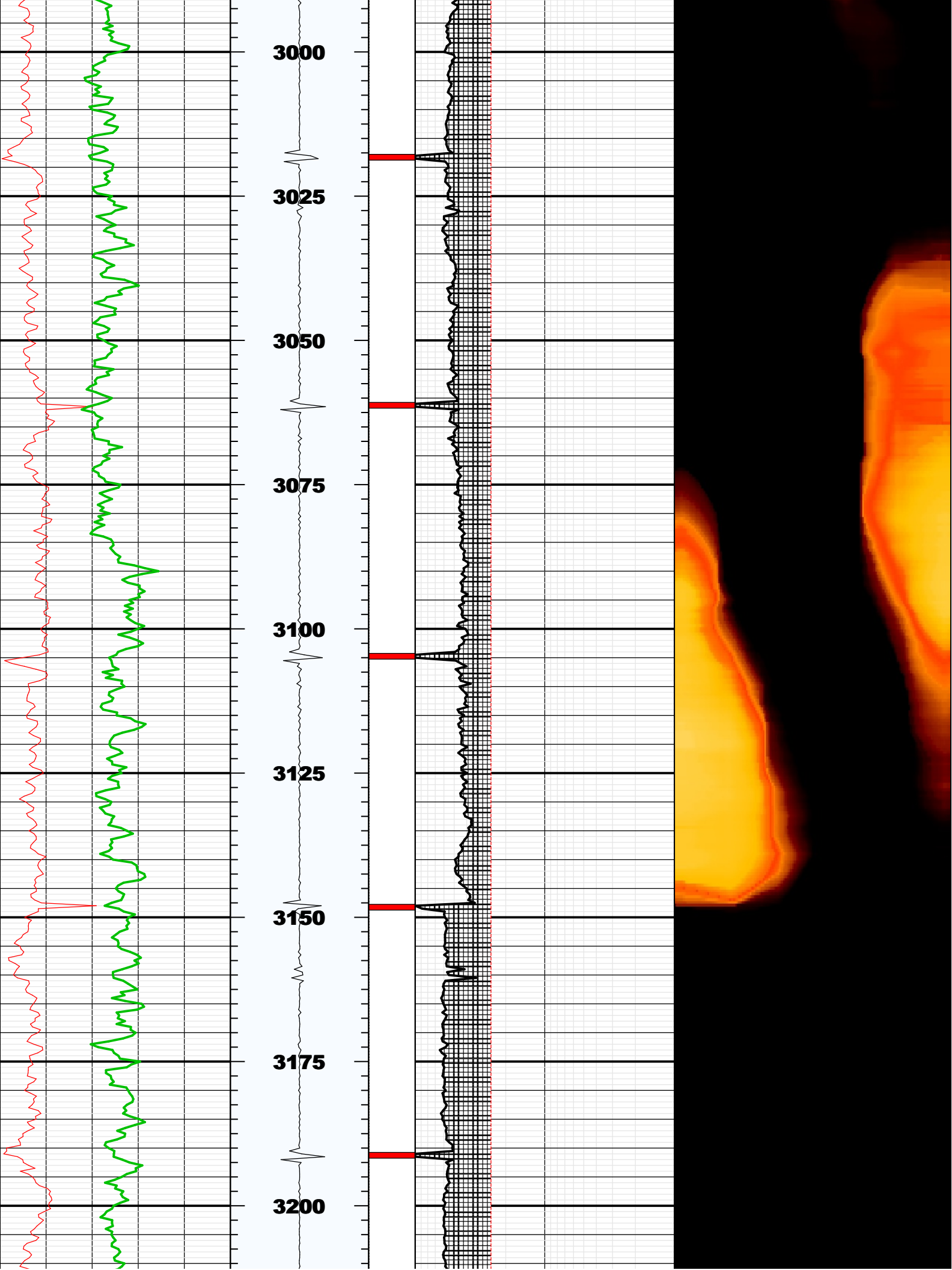


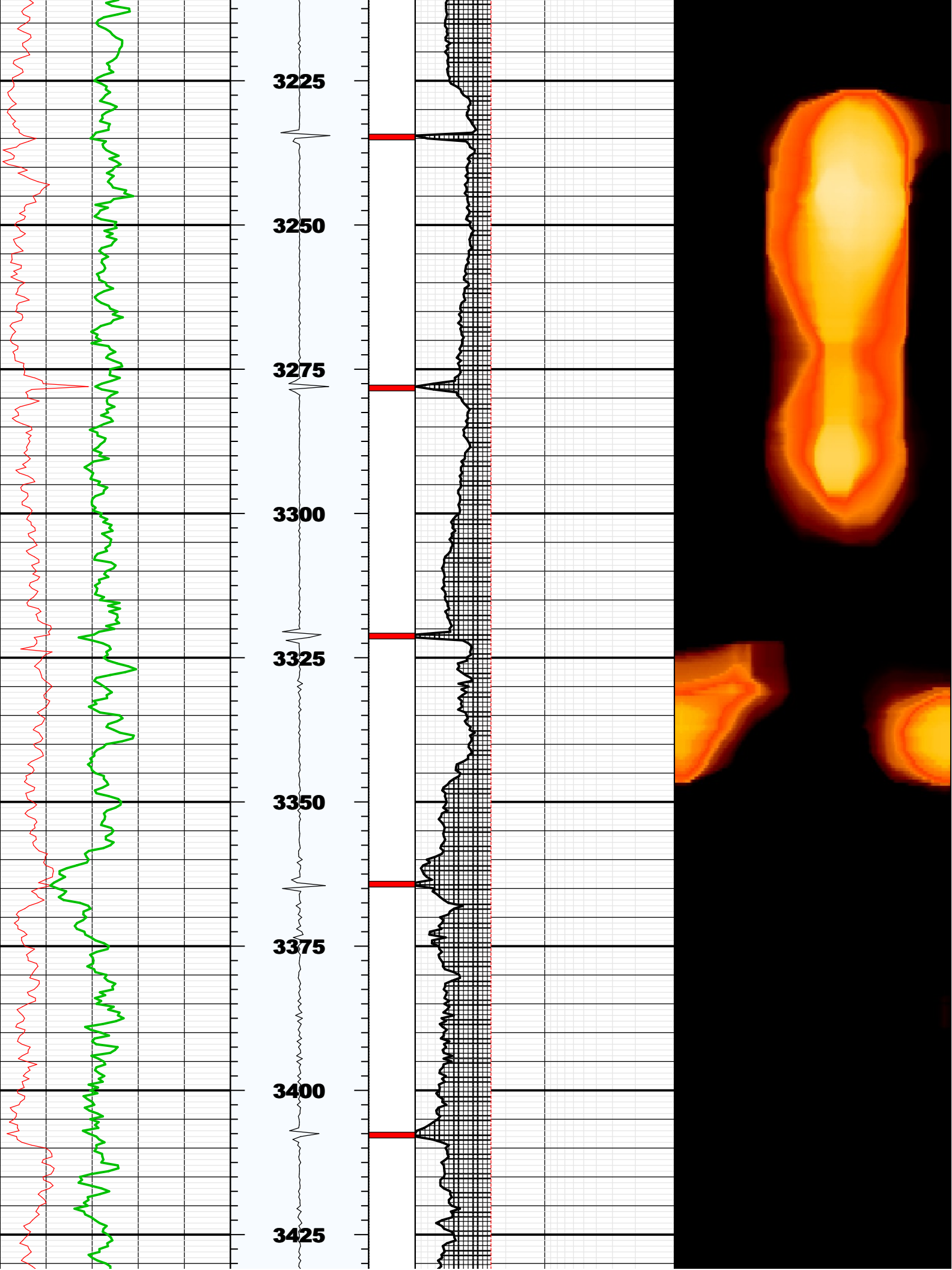


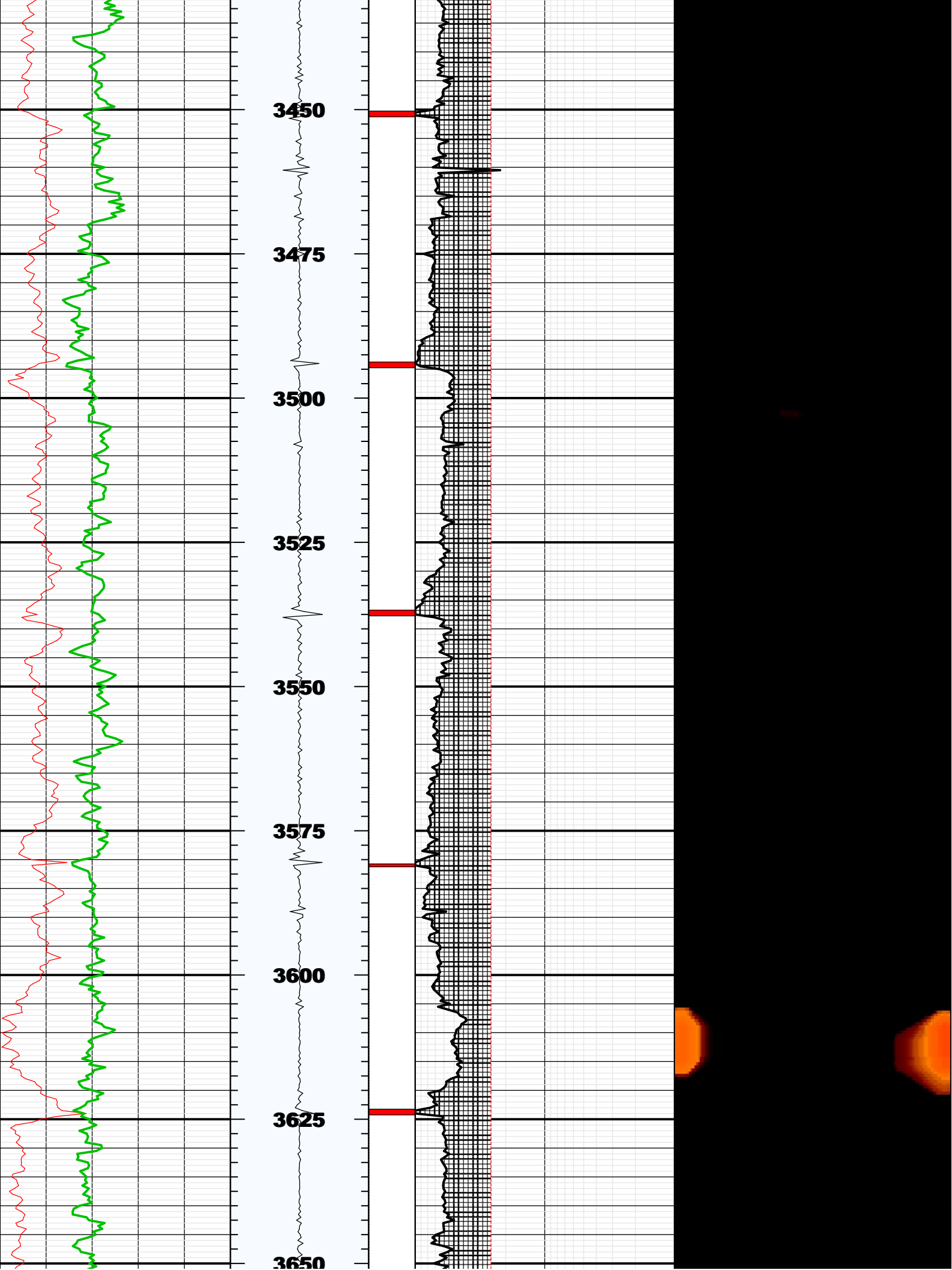


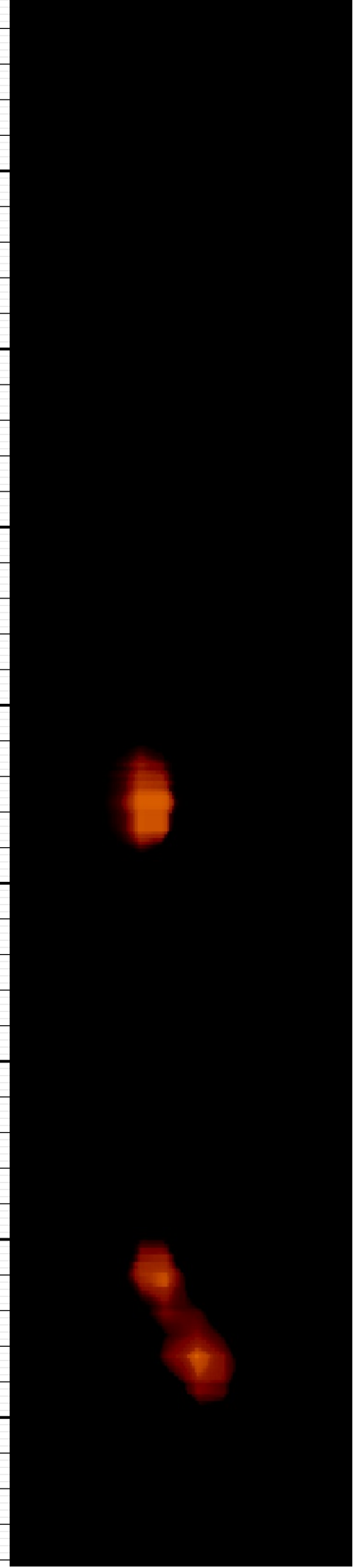
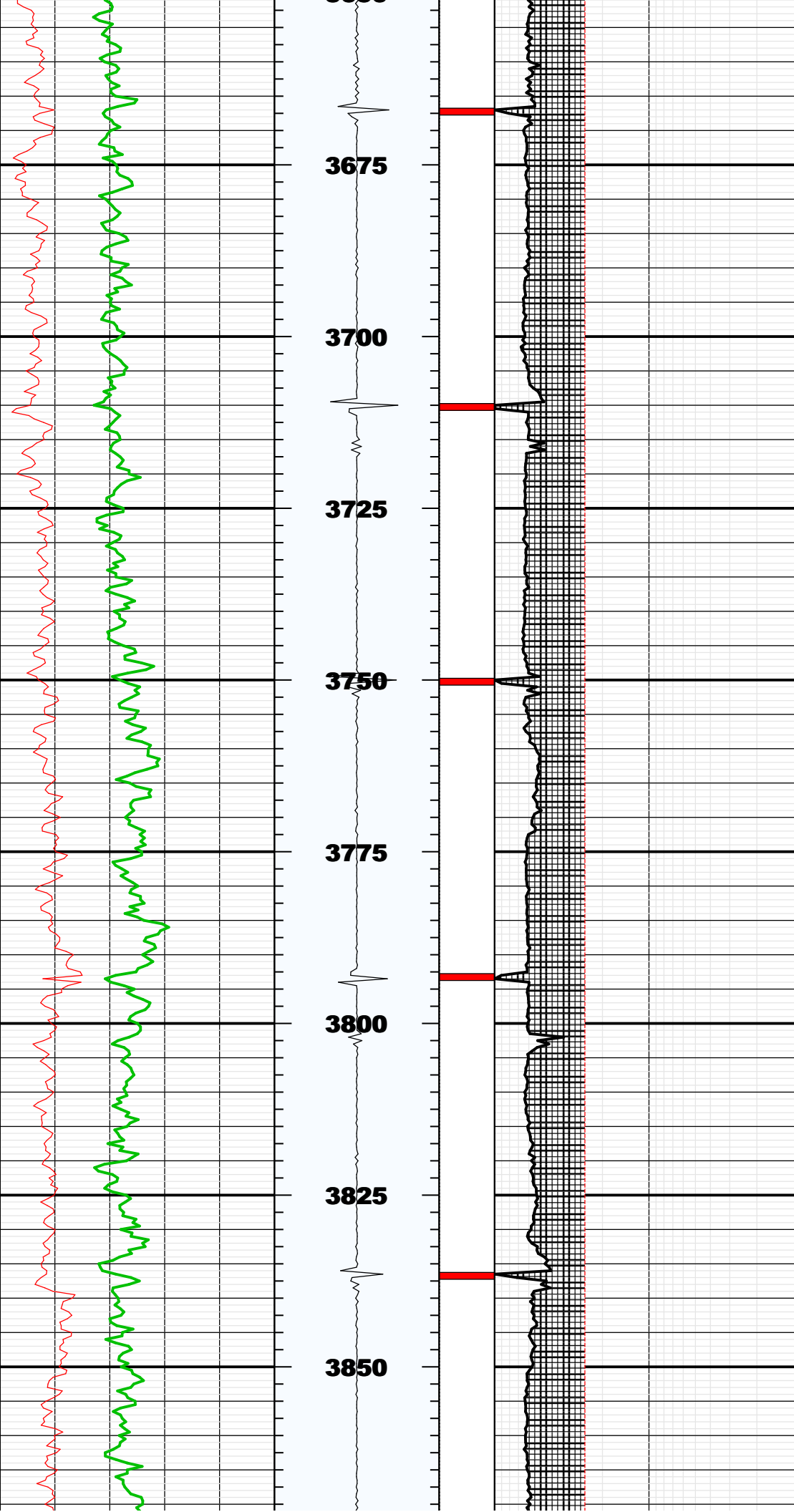


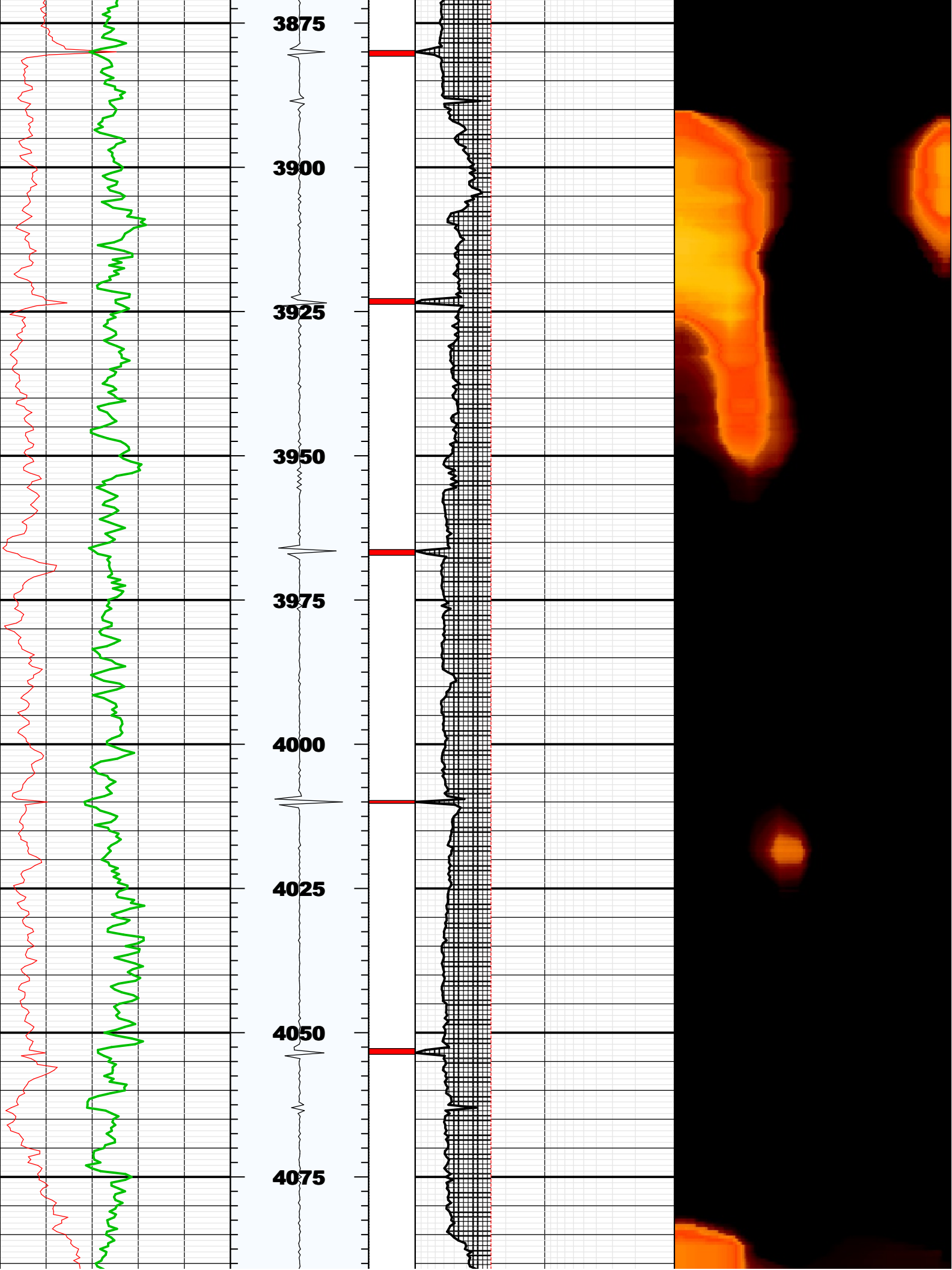


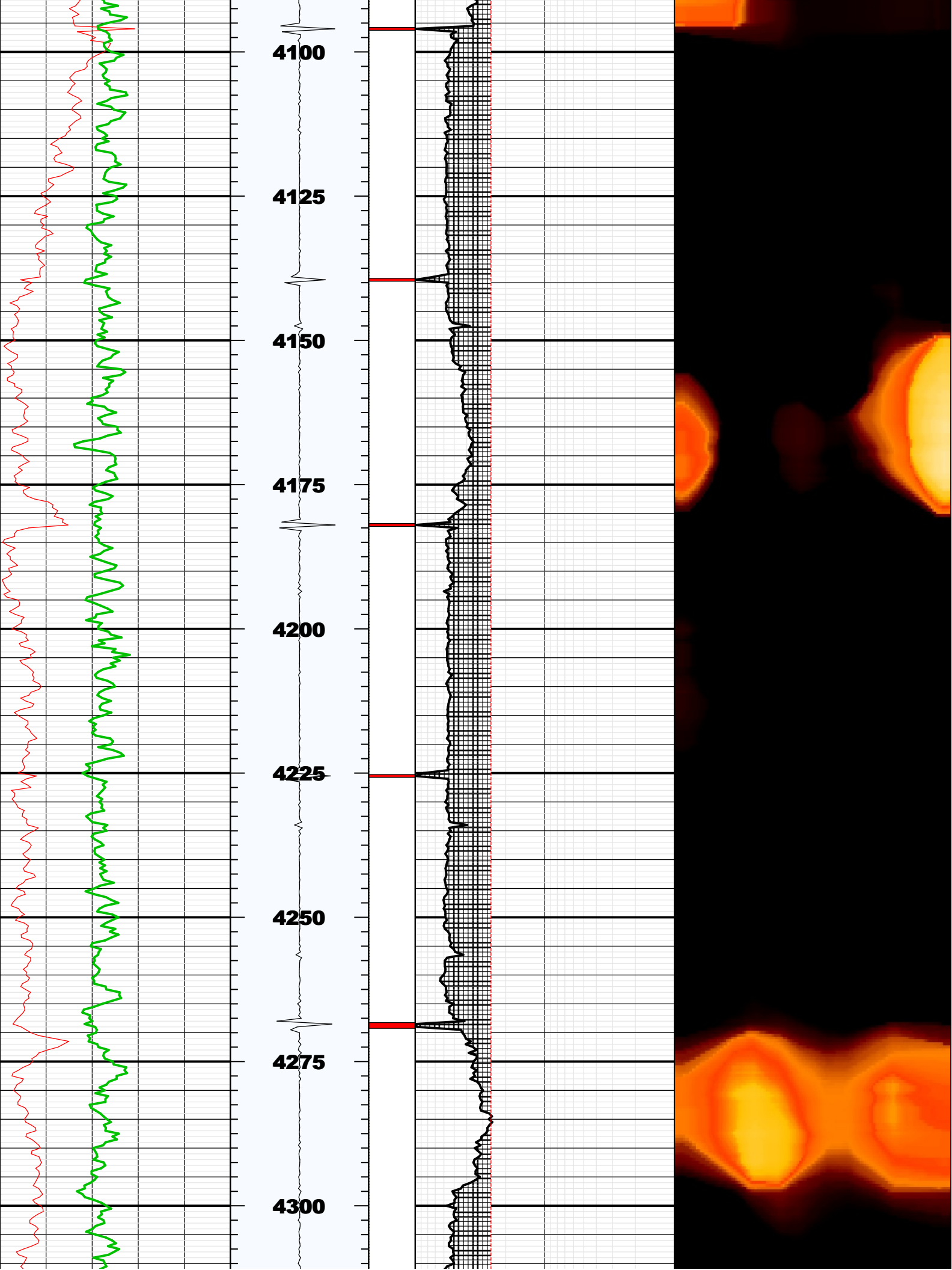


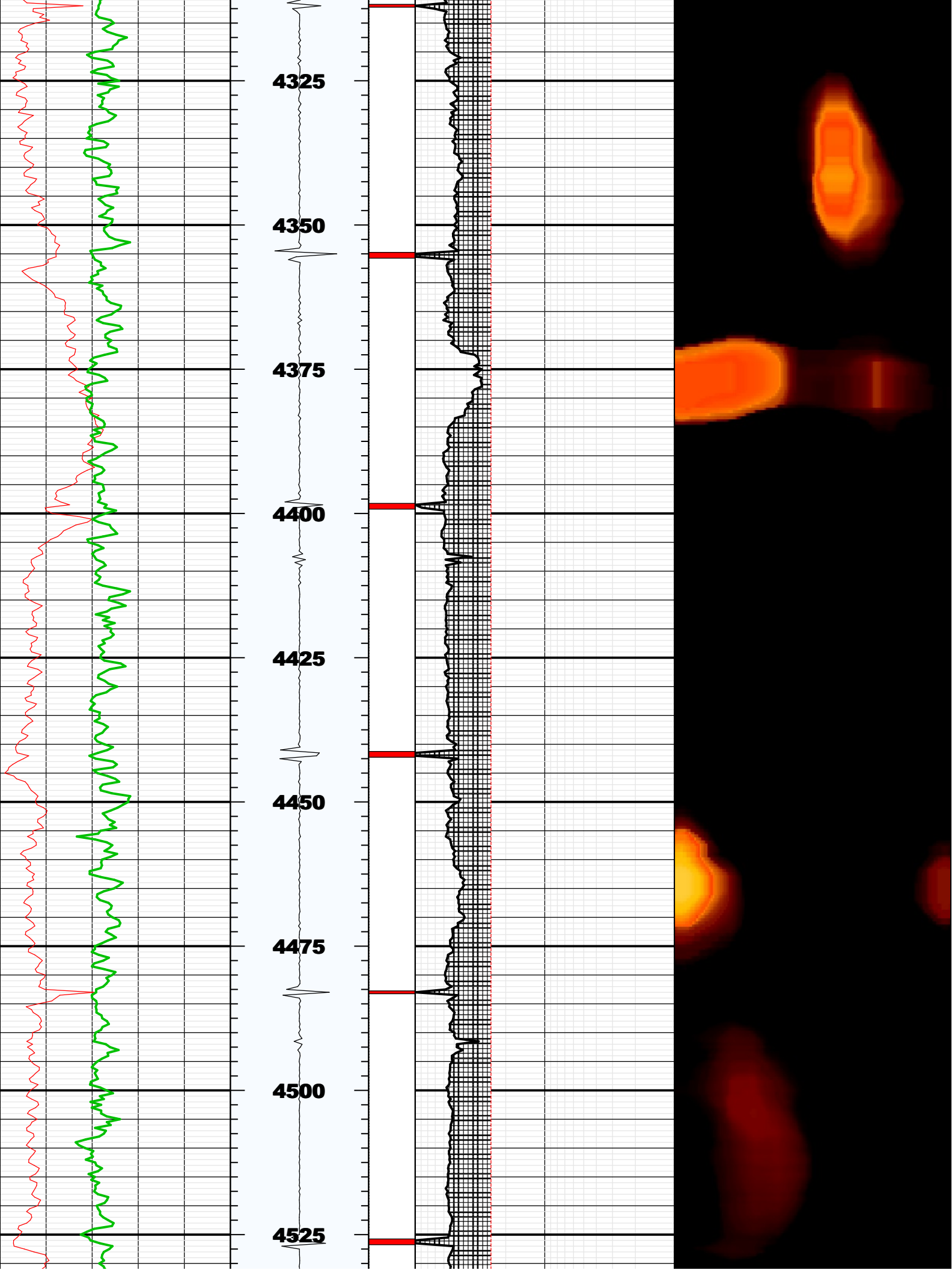


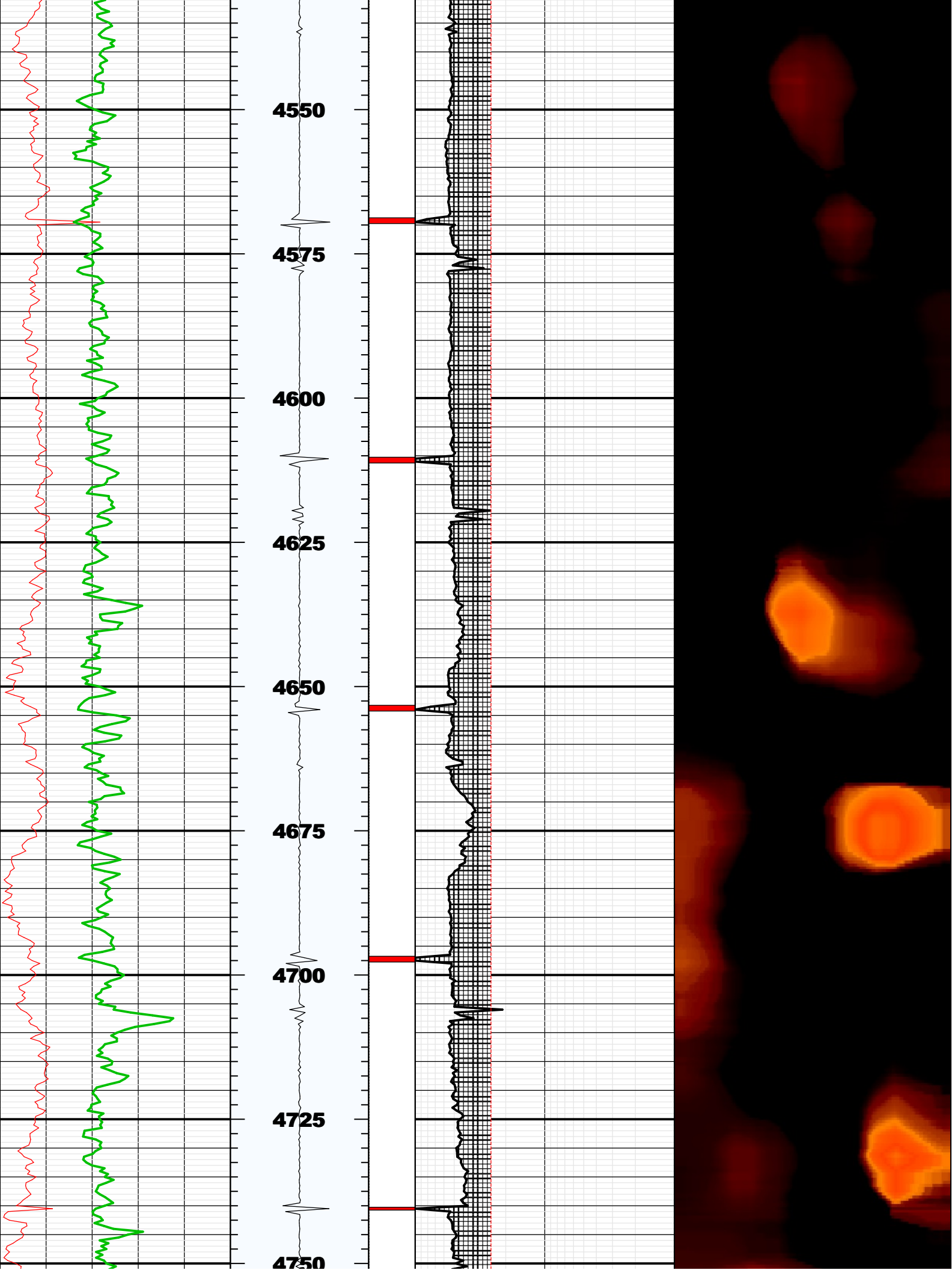


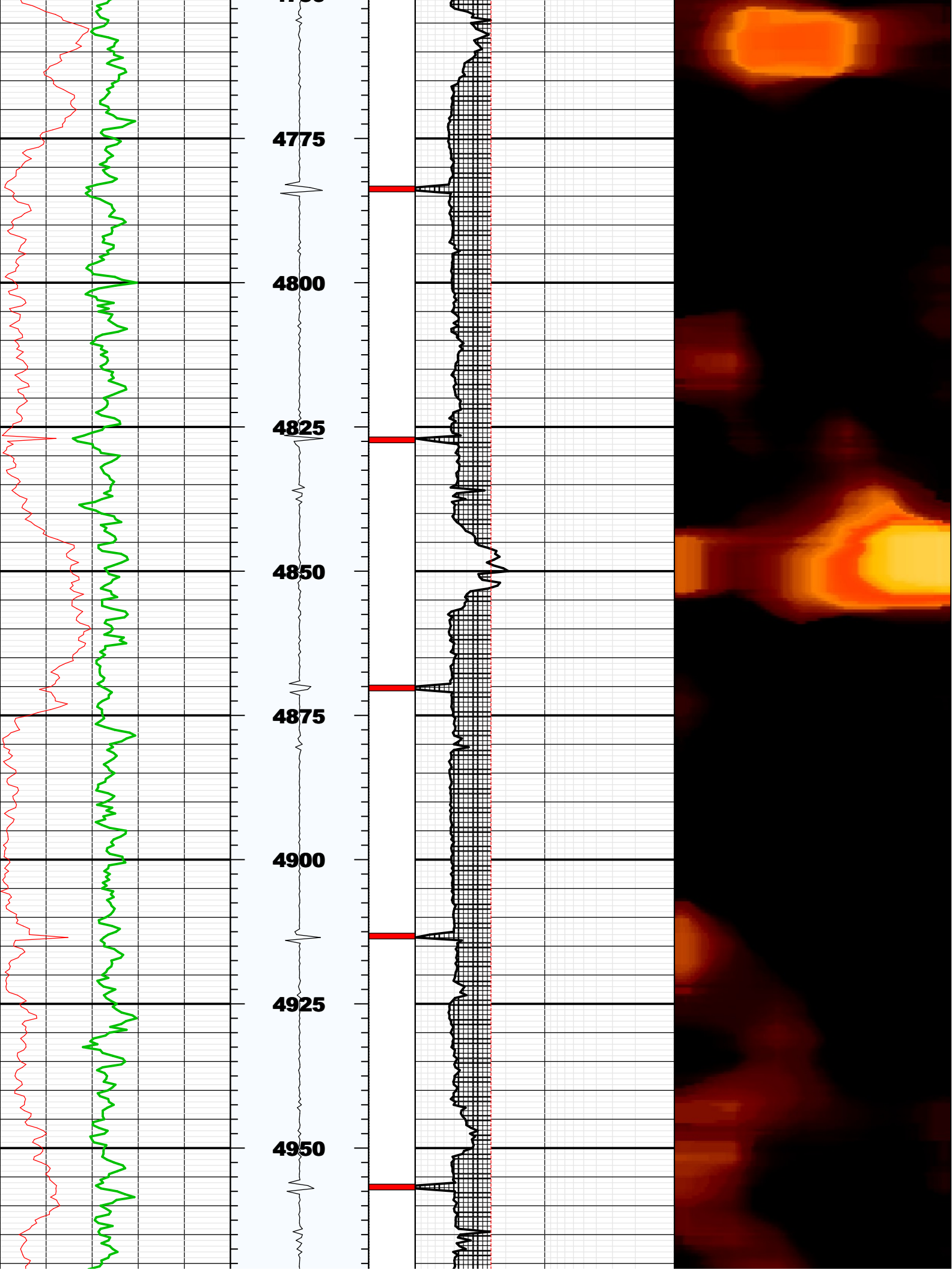


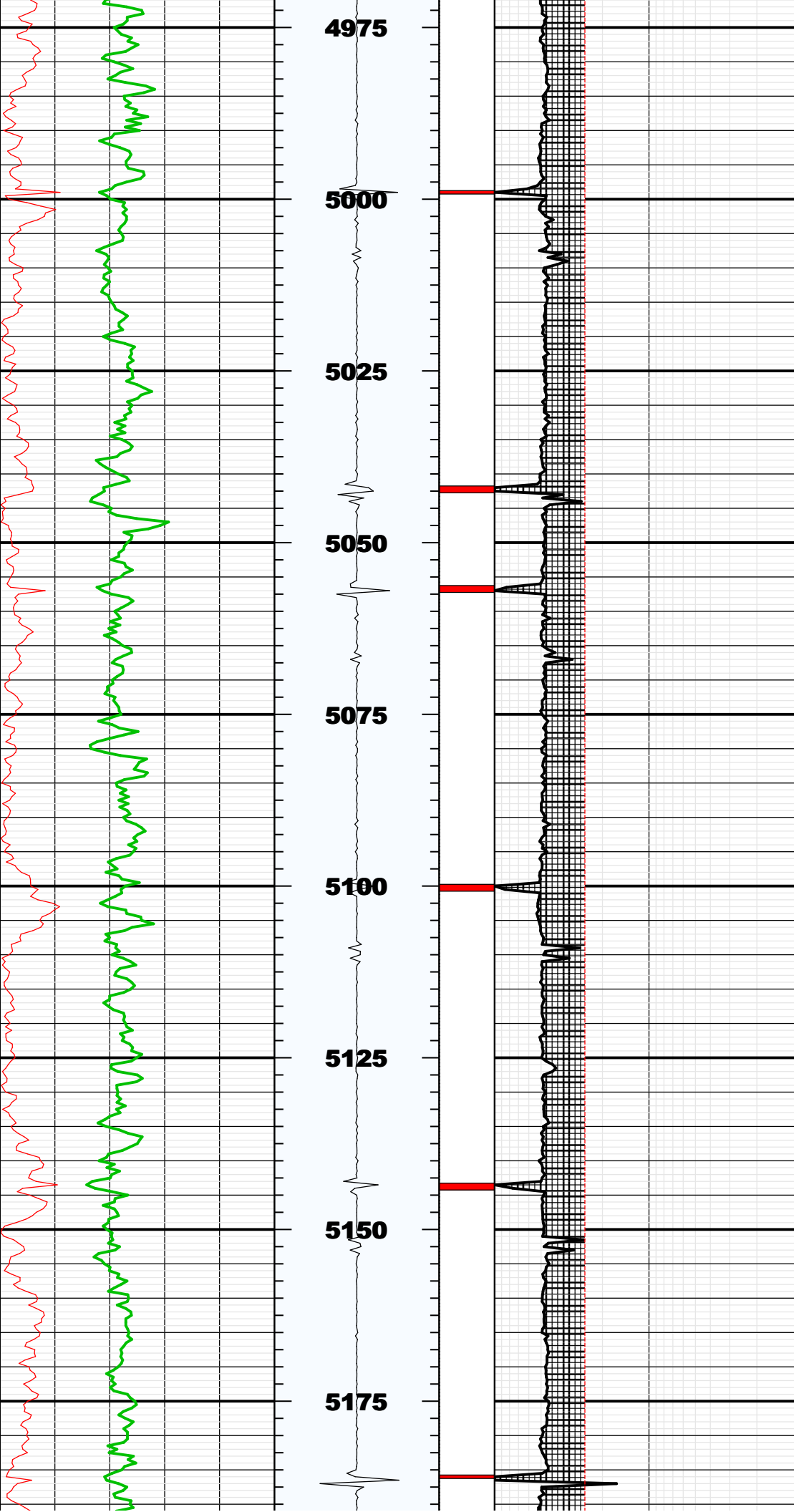


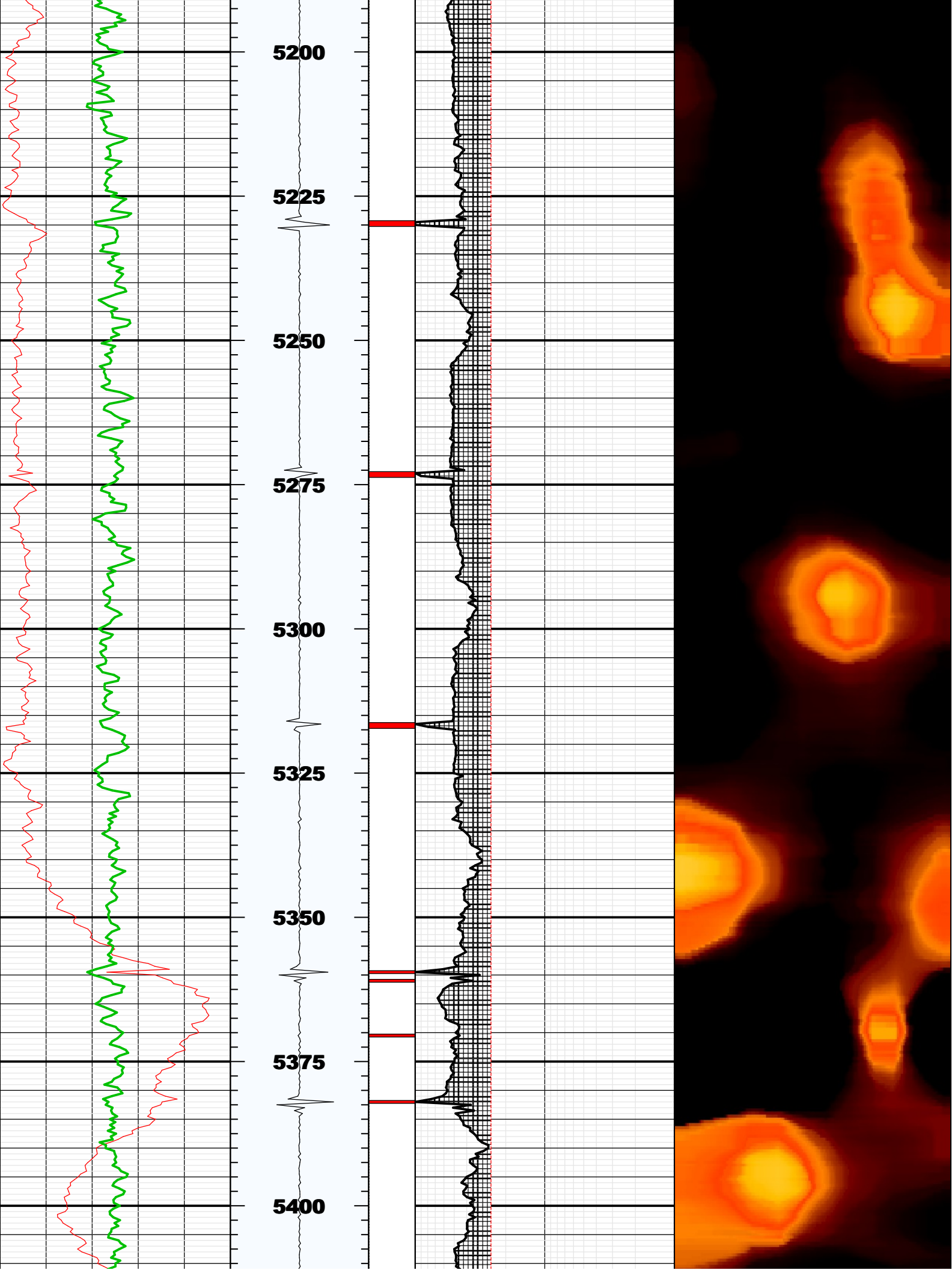


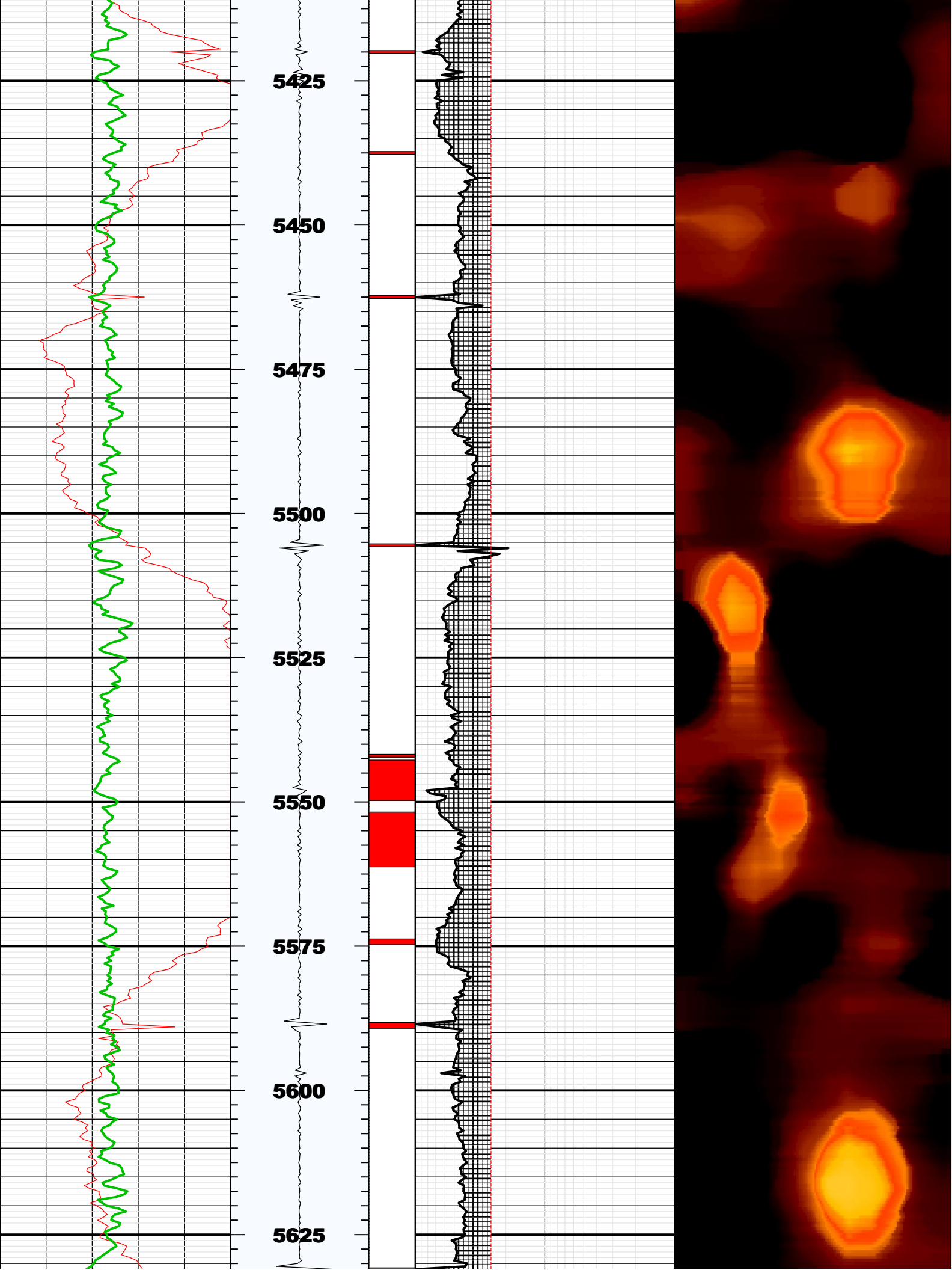


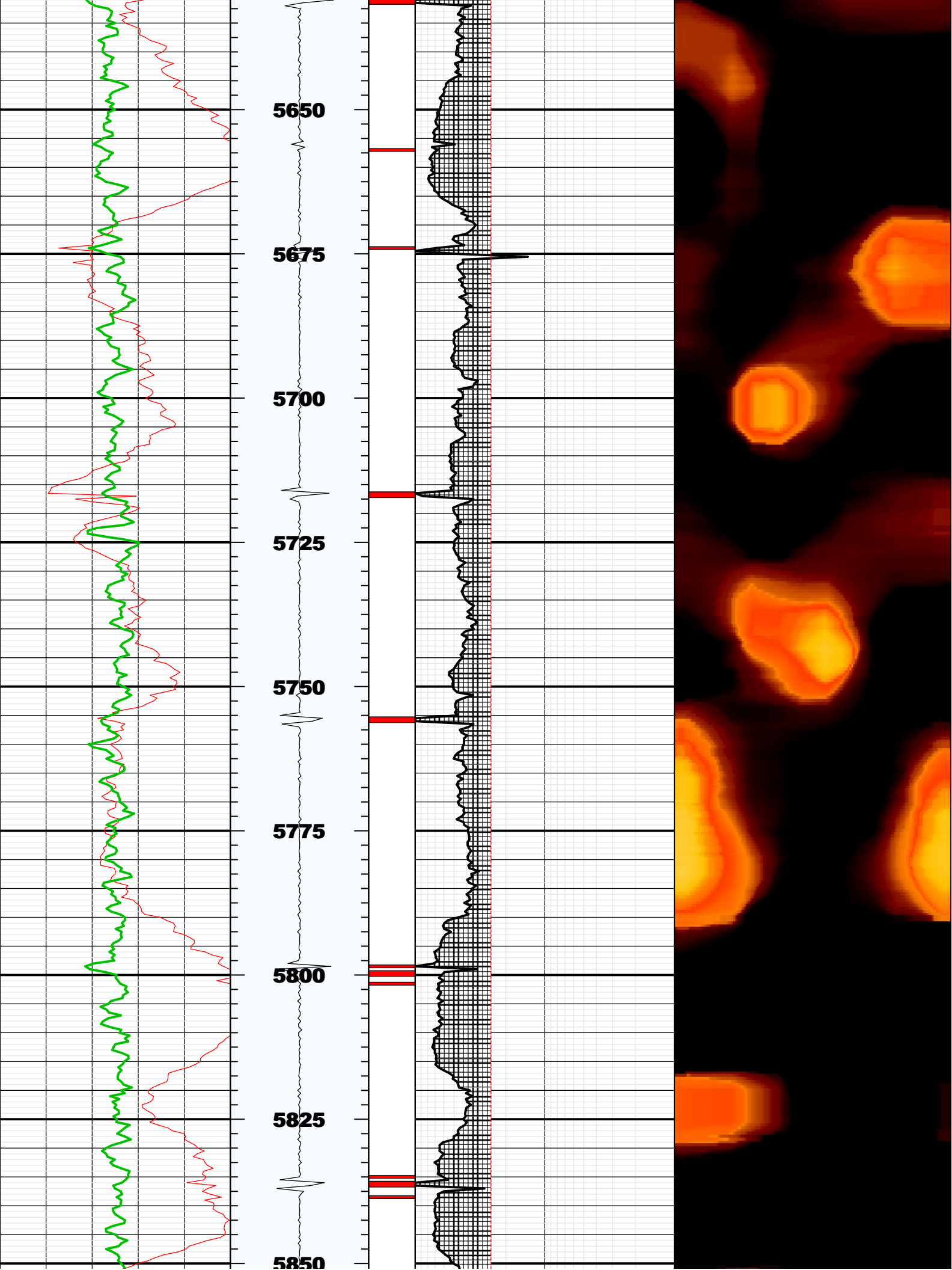


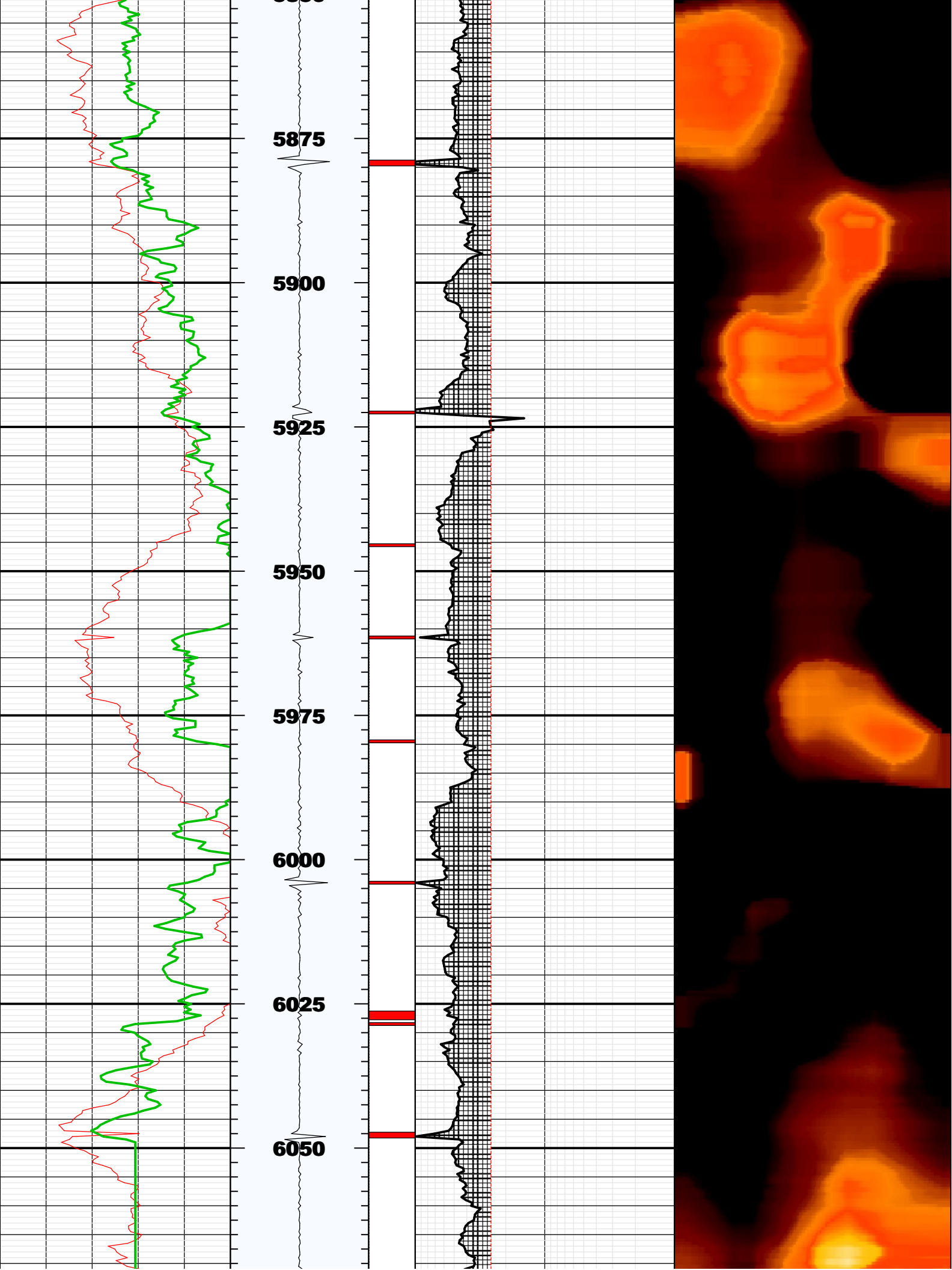


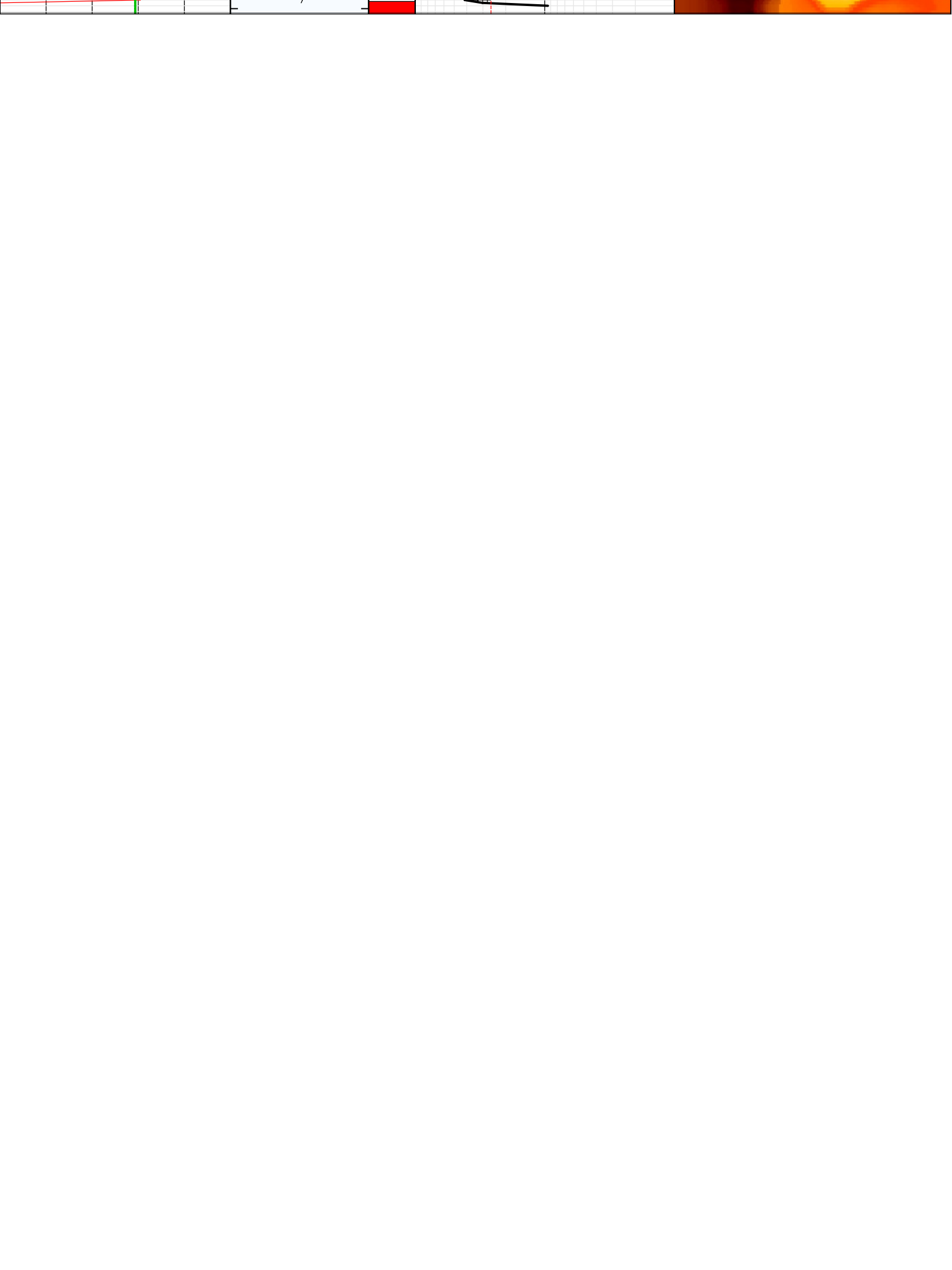








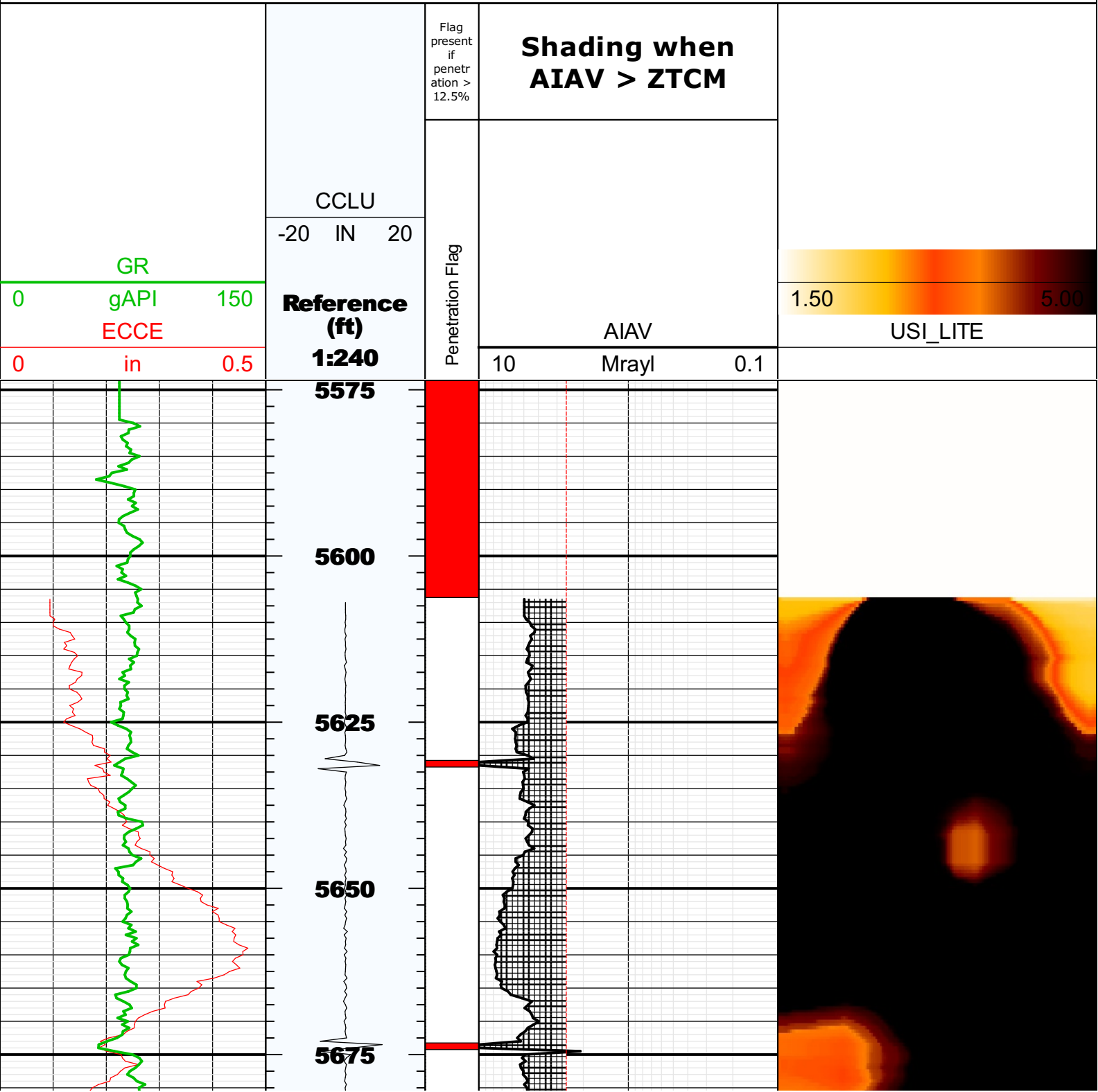


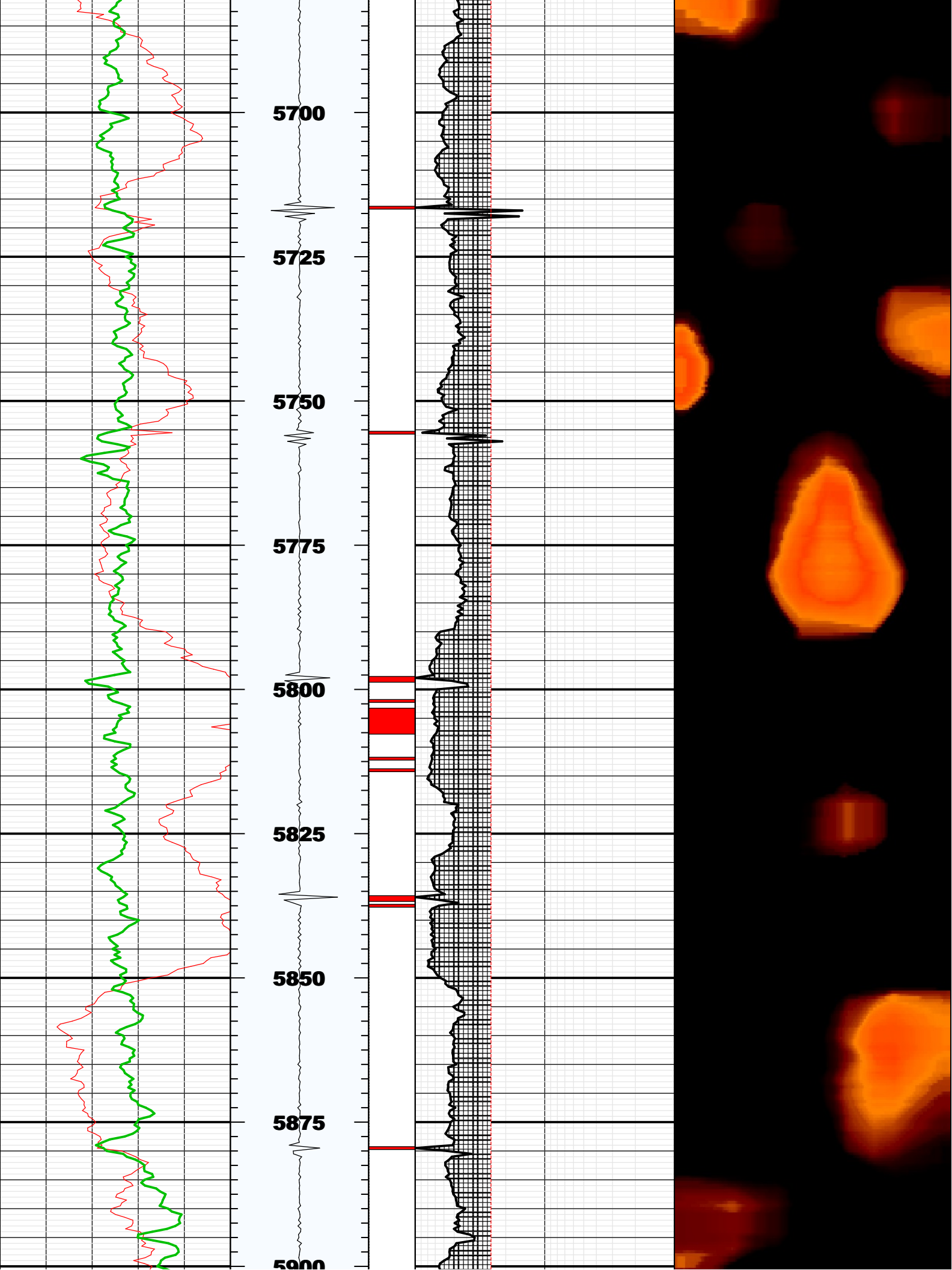


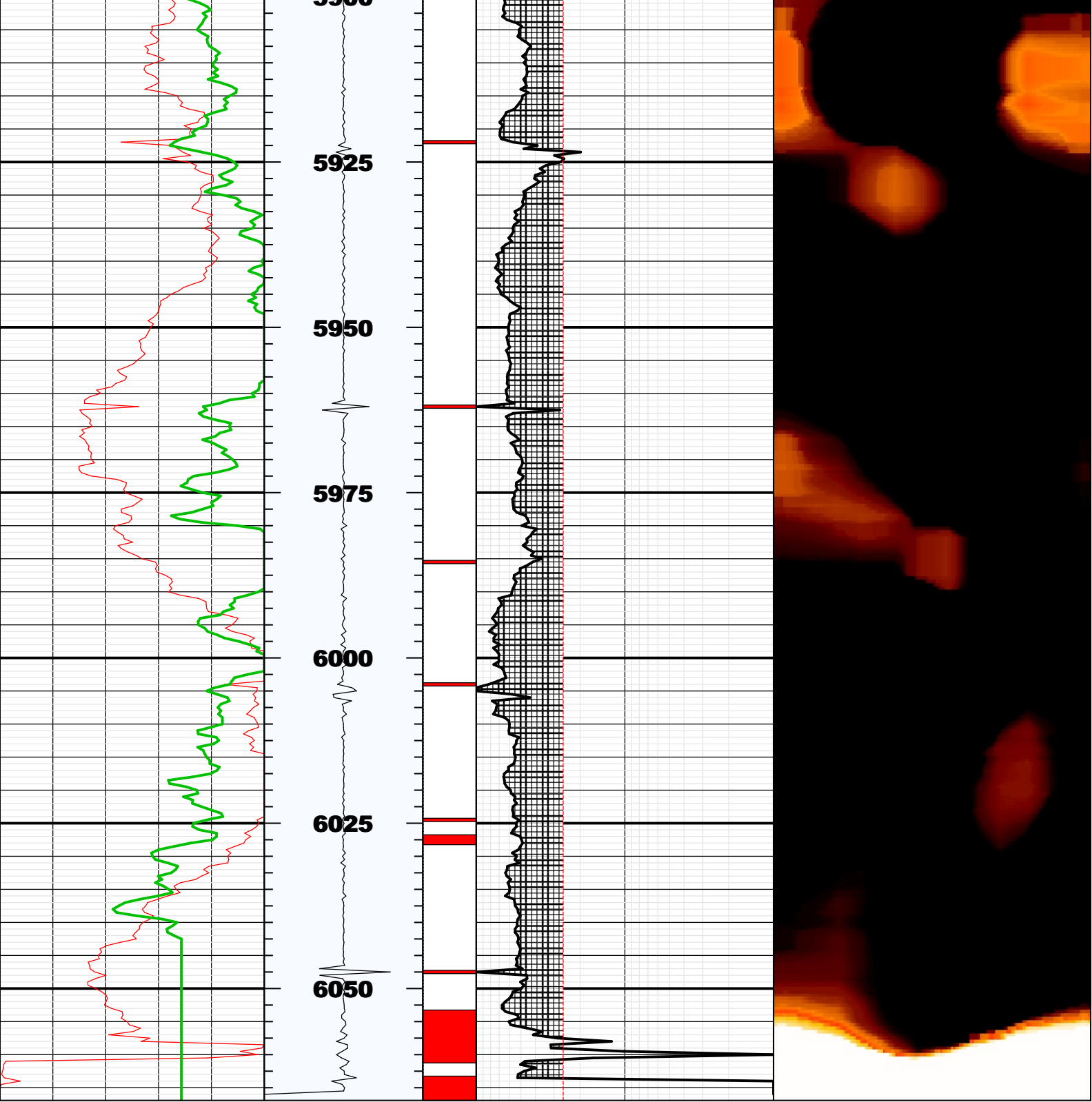
BS	8.75000	IN	Bit Size
CASG	P110		Casing Grade
CDIA	7.00000	IN	Casing Outer Diameter
CSID	6.27600	IN	Casing Inner Diameter
CSIZ	7.00000	IN	Current Casing Size
CWEI	26.00000	LB/F	Casing Weight
DFD	8.40000	LB/G	Drilling Fluid Density
DFVL	190.00000	US/F	Default Fluid Velocity
DO			
DOT	2.87400	IN	Diameter of Transducer Sensor
EMXV	40	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	28.00000	US	Window Begin Time
WINE	80.00000	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	22.50350	US	T [^] 3 Processing Length

Repeat Pass

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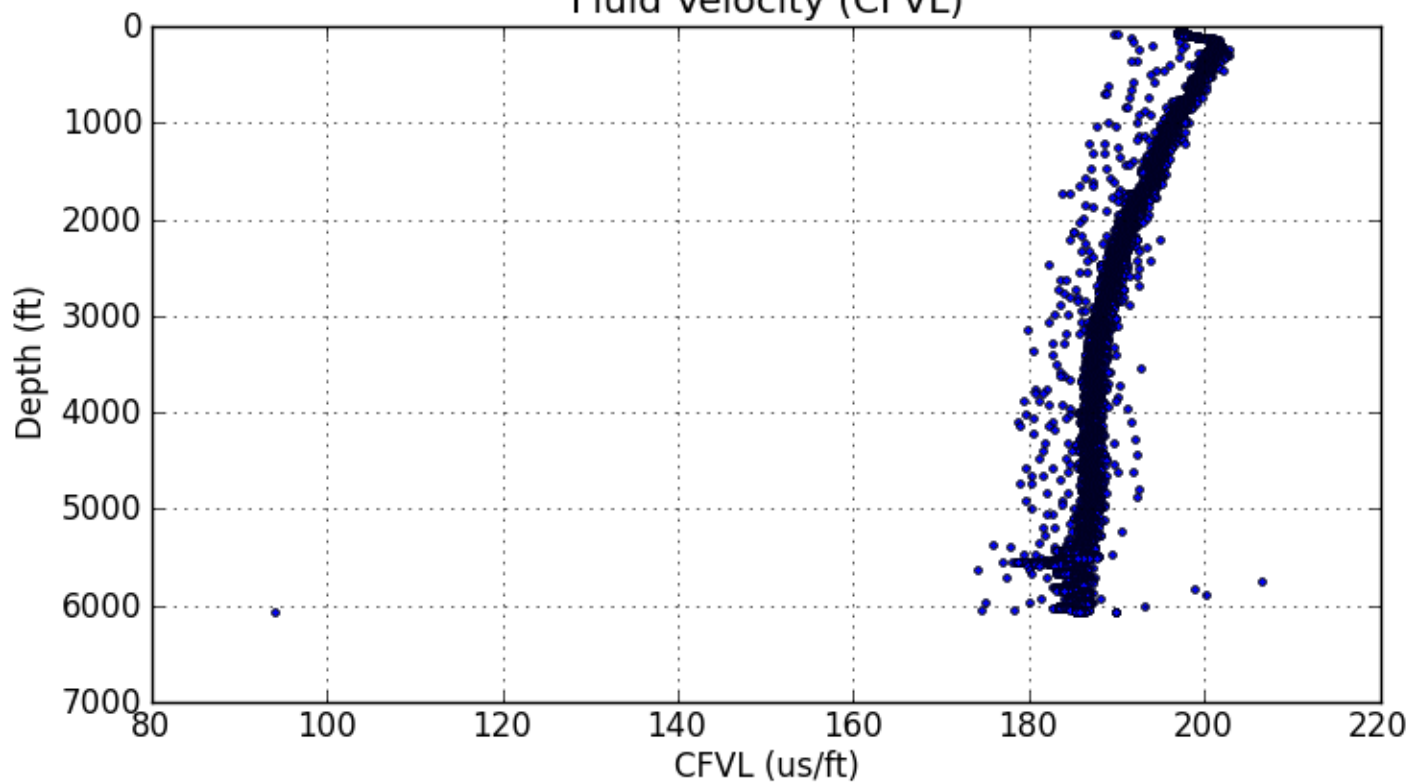






Fluid Properties Used for Main Pass

Fluid Velocity (CFVL)



Acoustic Impedance of Mud (CZMD)

