

Company: Noble Energy Inc

Well: Sater CC18-72-1HN
Field: Wattenberg
County: Weld State: Colorado

County: Weld		USI-LITE					
Field: Wattenberg							
Location: SESE Sec 18 T4N R63W							
Well: Sater CC18-72-1HN							
Company: Noble Energy Inc							
LOCATION		Permanent Datum: Log Measured From: Drilling Measured From:	GL KB KB	Elev: K.B. 4703.0 F G.L. 4679.0 F D.F. 4702.0 F			
API Serial No. 05-123-37985-0000					Section 18	Township 4N	Range 63W
Logging Date 08-May-2014							
Run Number Run 1							
Depth Driller 11370.0 F							
Schlumberger Depth 11370.0 F							
Bottom Log Interval 6310.0 F							
Top Log Interval -999.2 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 5660.0 F							
To 6900.0 F							
Casing Size 7.00 IN							
Weight 26.00 LB/F							
Grade P110							
From 24.0 F							
To 6893.0 F							
Max Recorded Temp -999.2							
Logger on bottom (date) 08-May-2014							
Location Fort Morgan CO							
Recorded By Keri Ondrus							
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: Length: 11500.00000

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

Toolstring run as per toolsketch

0 PSI on repeat and main pass. Pressured to 2500 PSI at 6310' but immediately lost pressure. Unable to pressure up again.
11.5 ppg spacer 12.5 ppg lead cement 13.8 ppg tail cement.

Expected TOC @ 270'

15 min casing test at 3044 psi floats held good returns 42 bbls spacer to surface.

4.5 liner top @ 6333.8'

Bottom log interval at 6310 feet to maintain distance from liner top

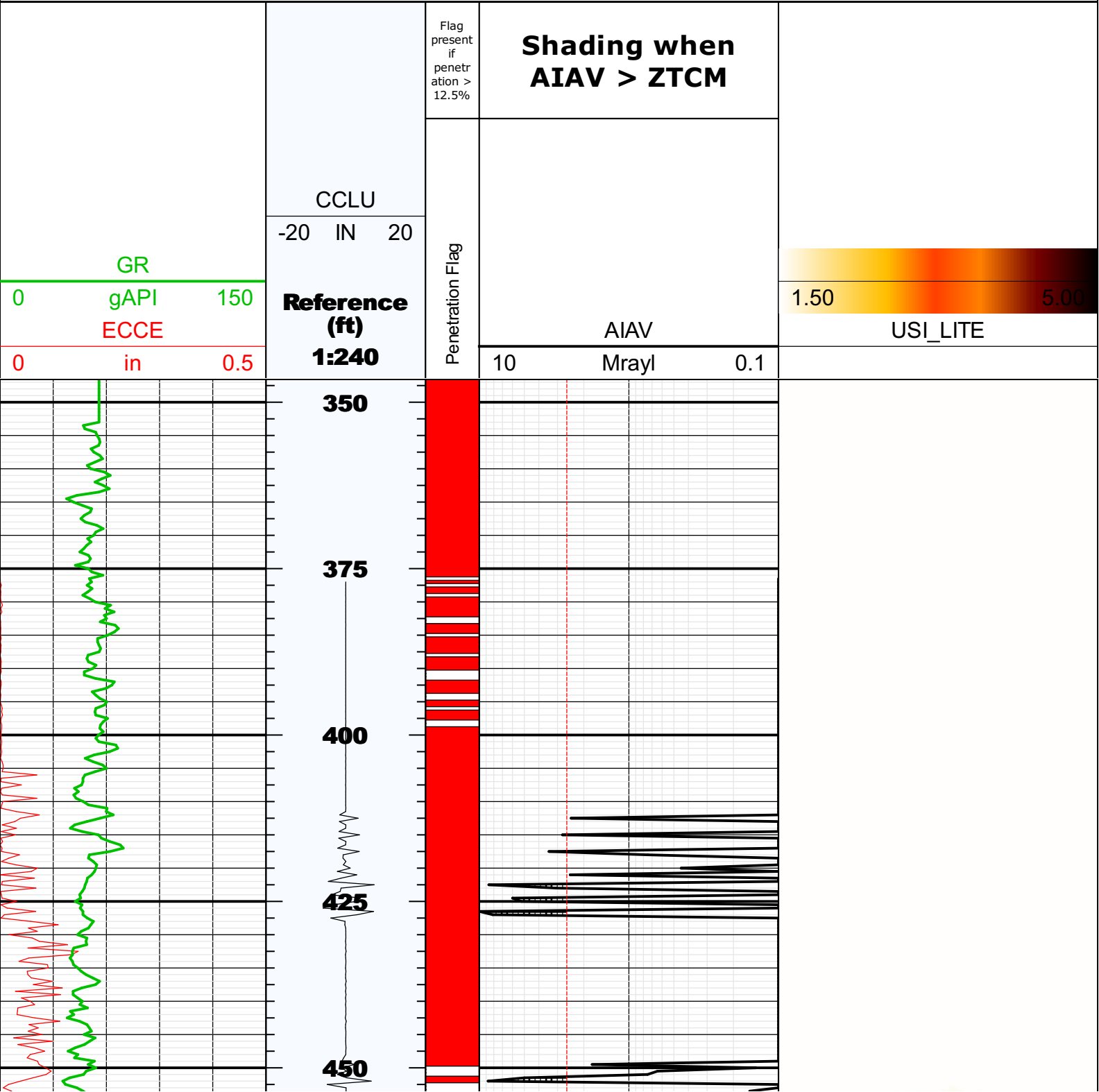
Top of fluid @ 450' did not find TOC below this.

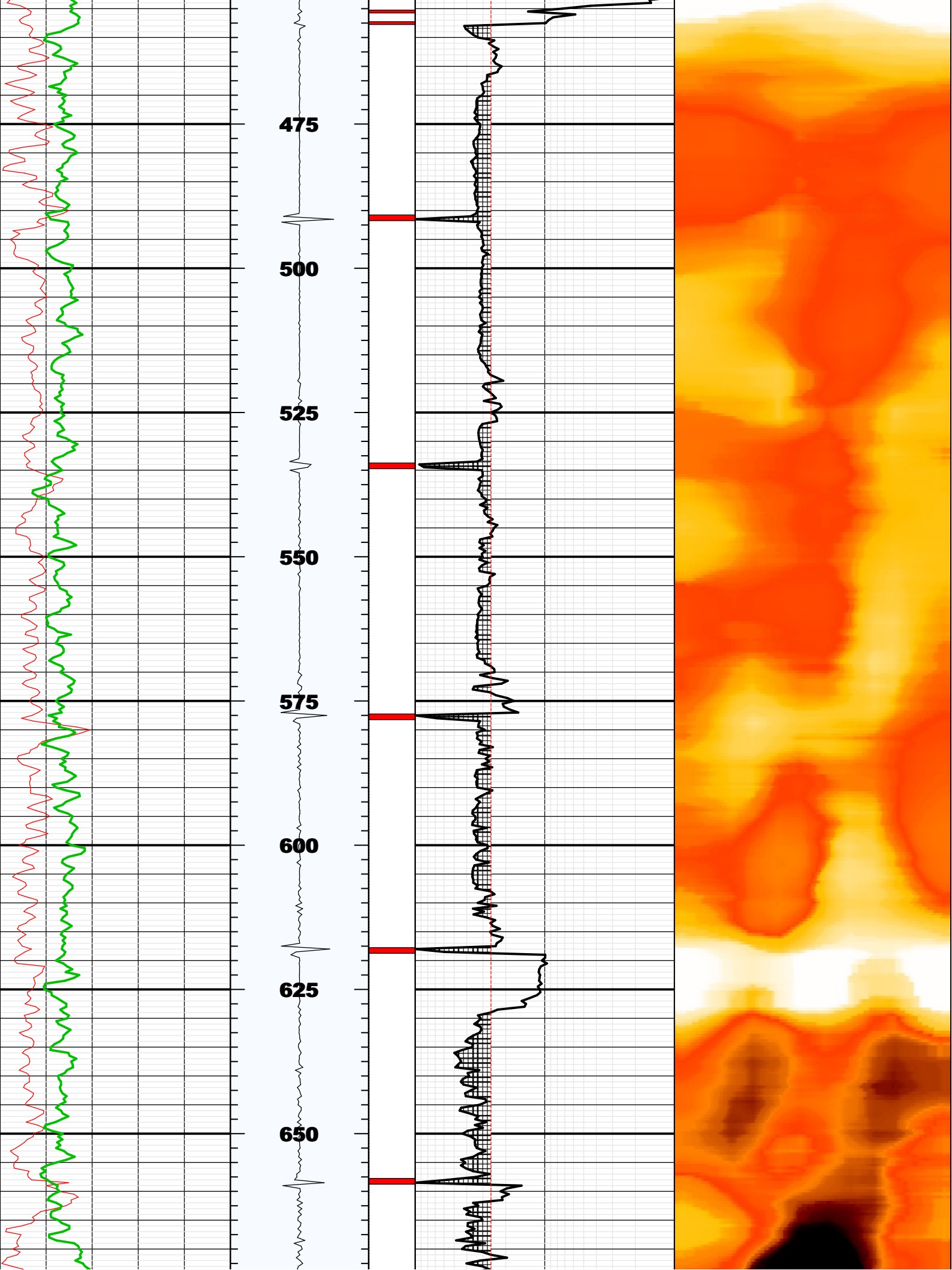
Thank you for choosing Schlumberger Wireline.

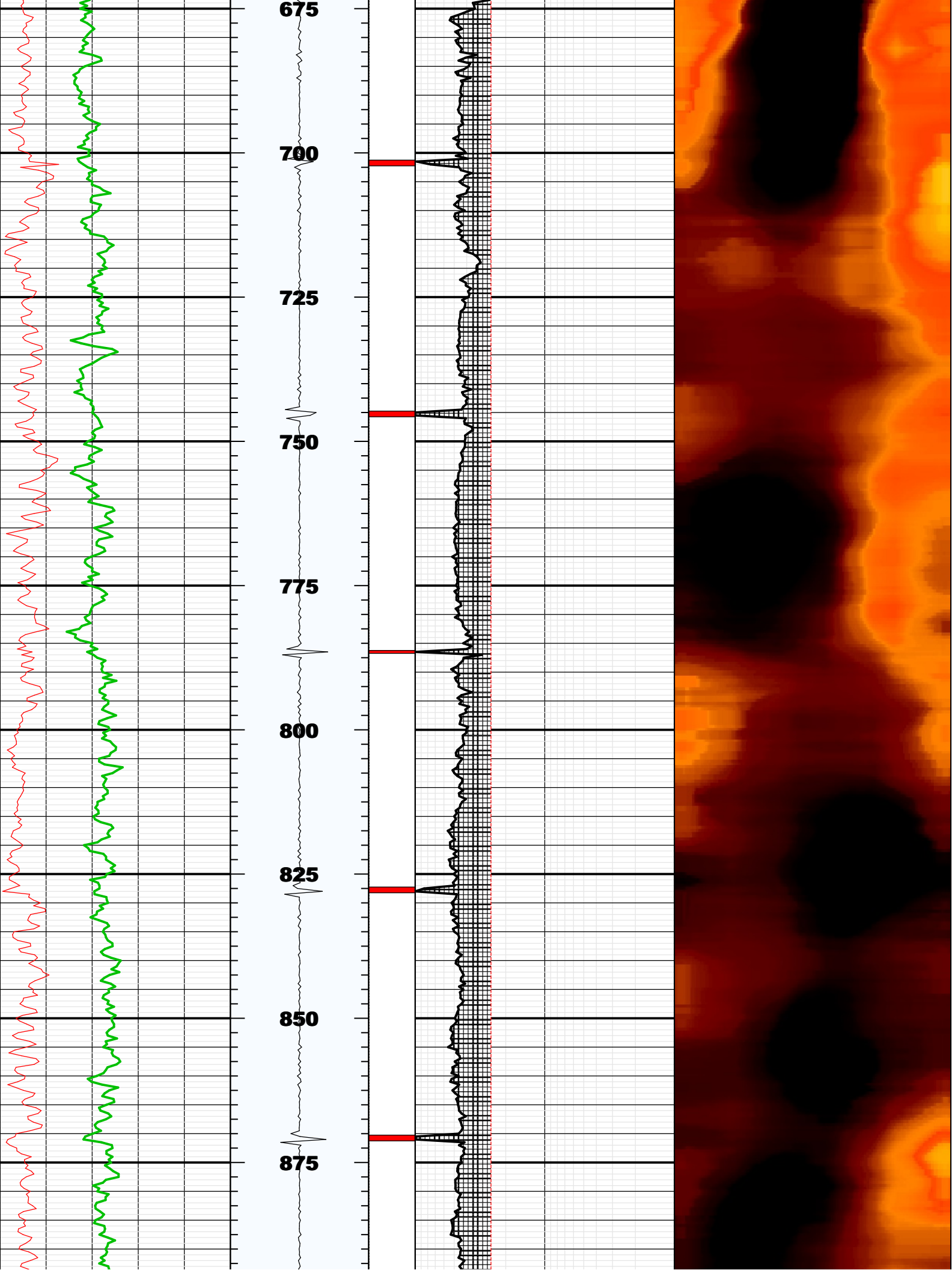
Schlumberger crew Jay Musgrave Troy Ocanas

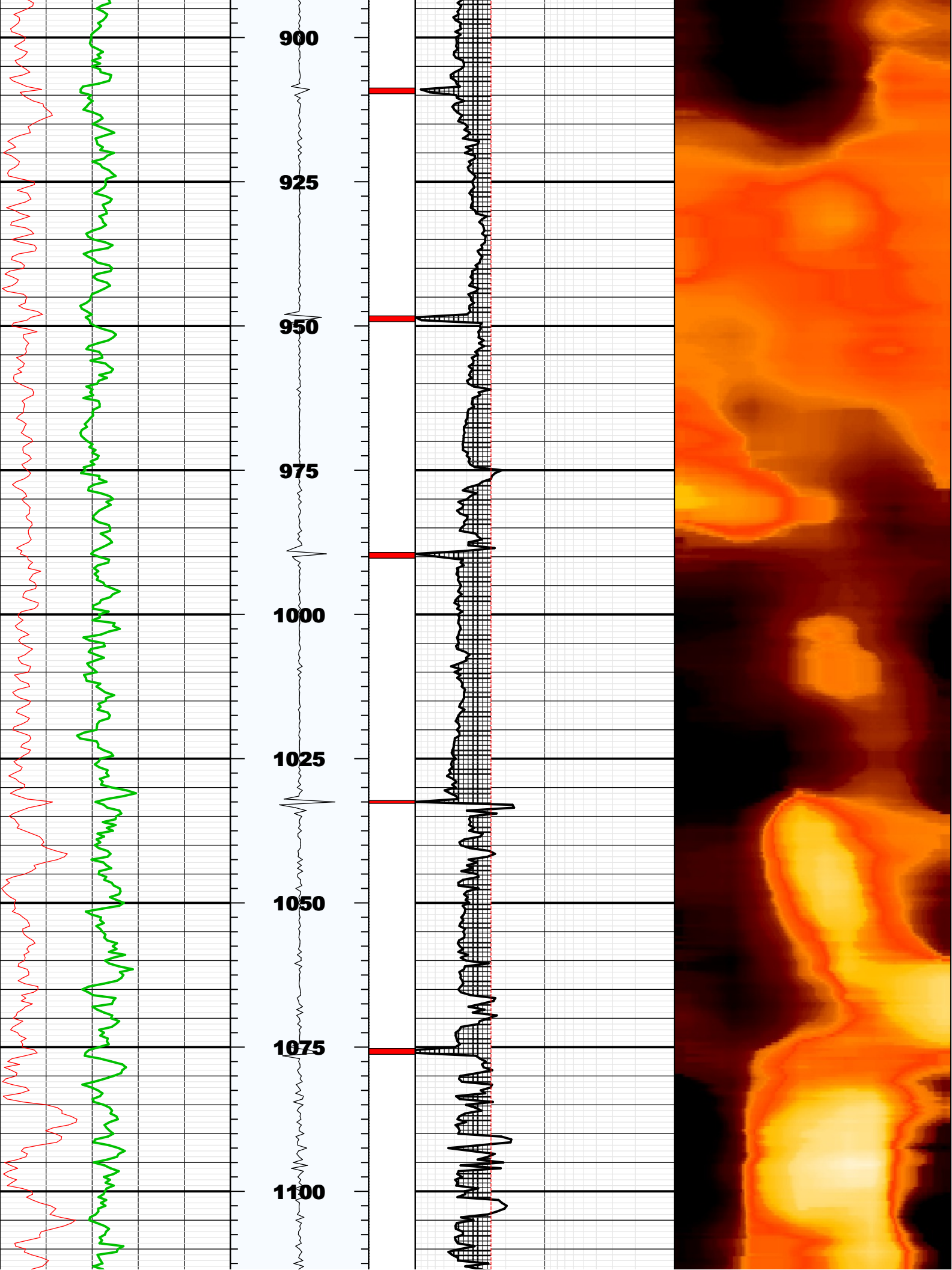
Main Pass

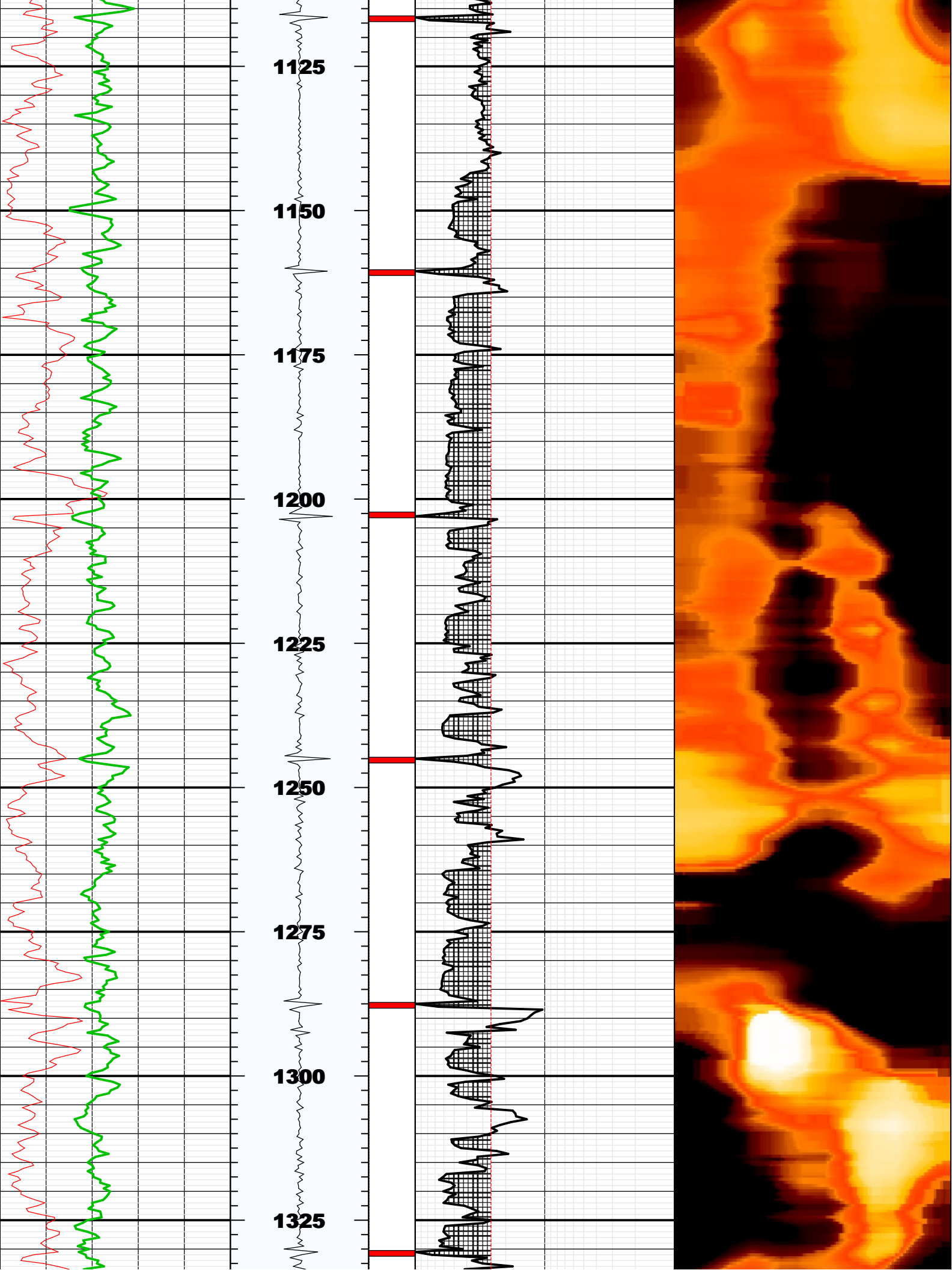
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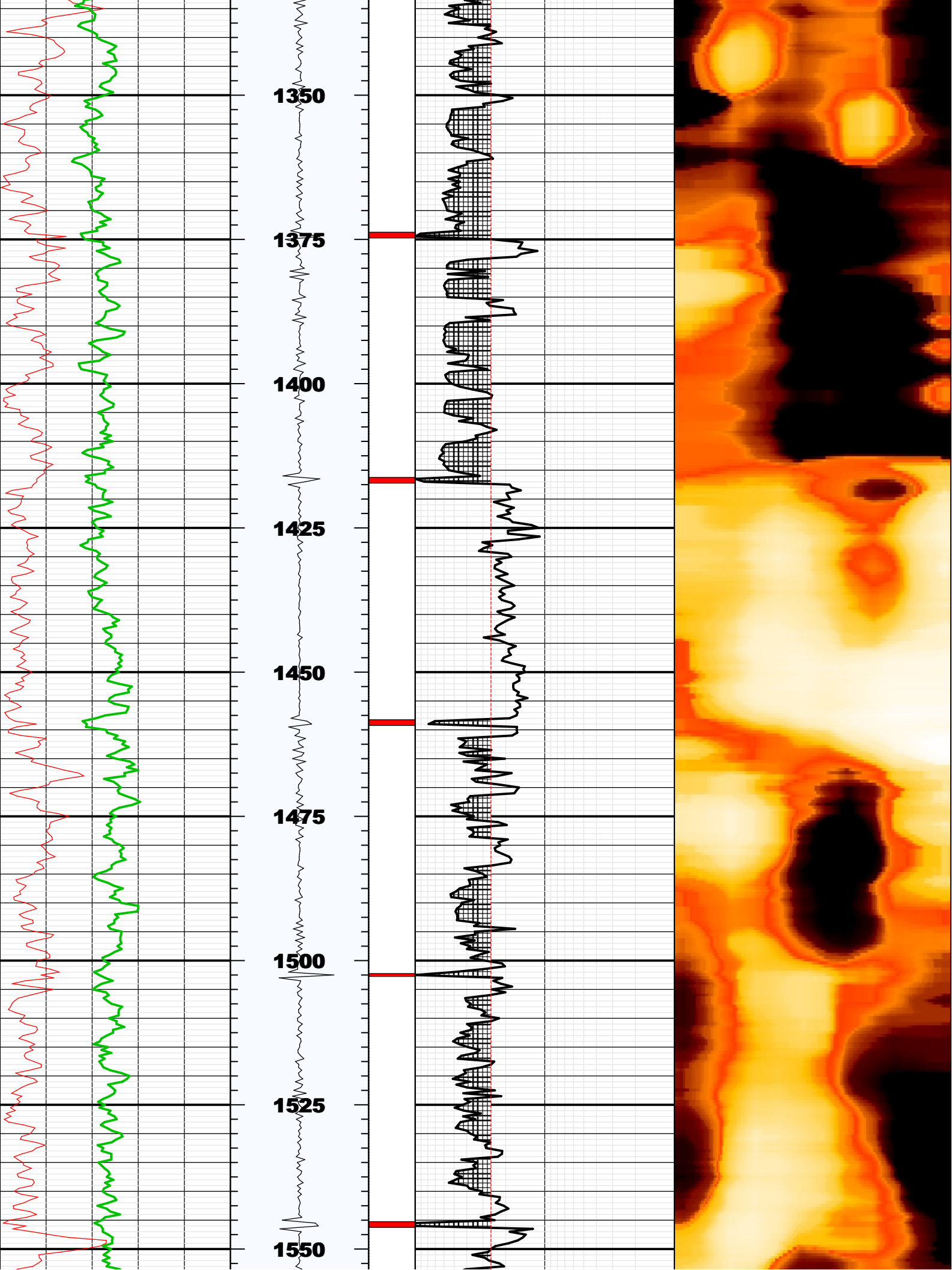


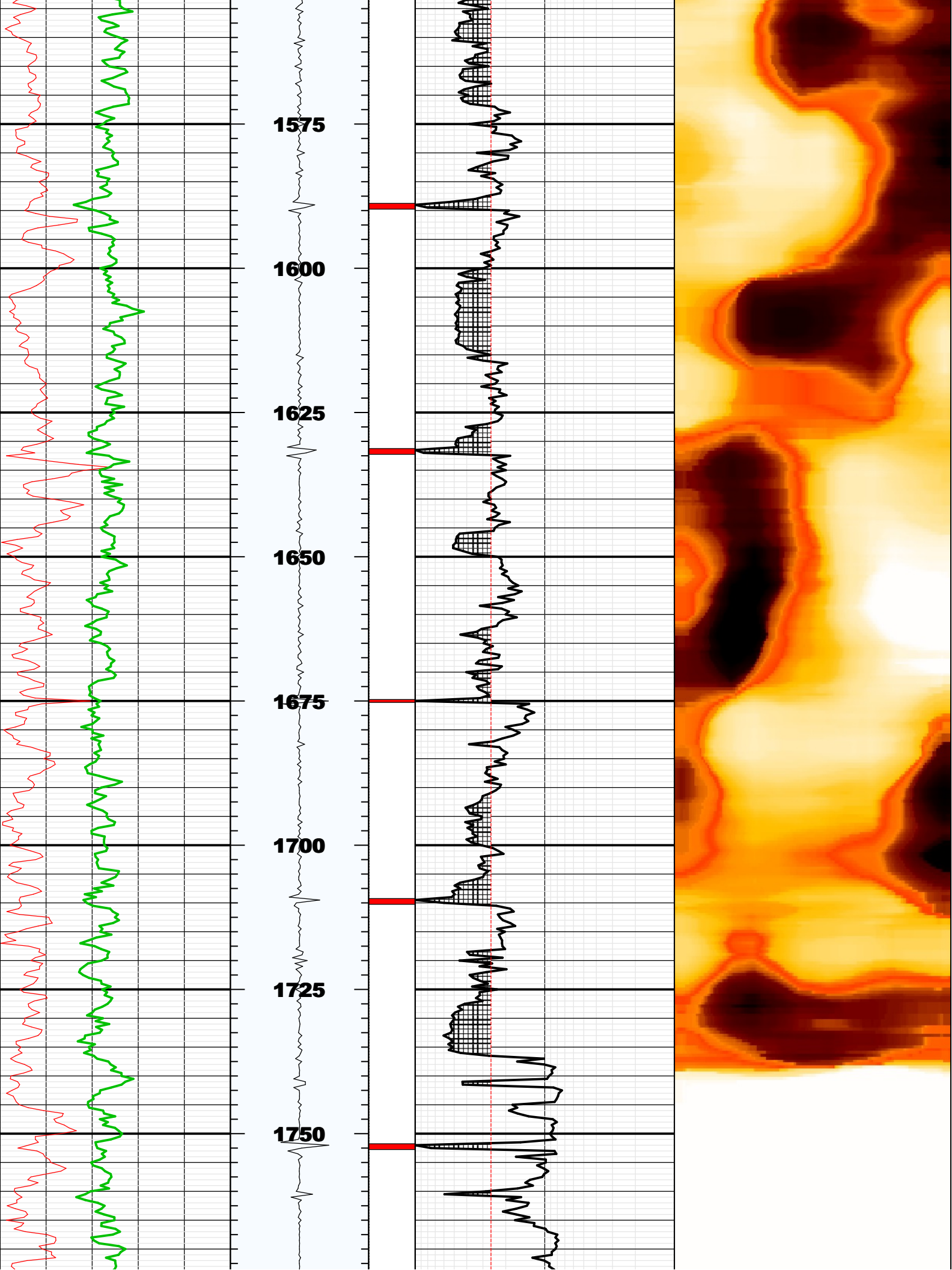


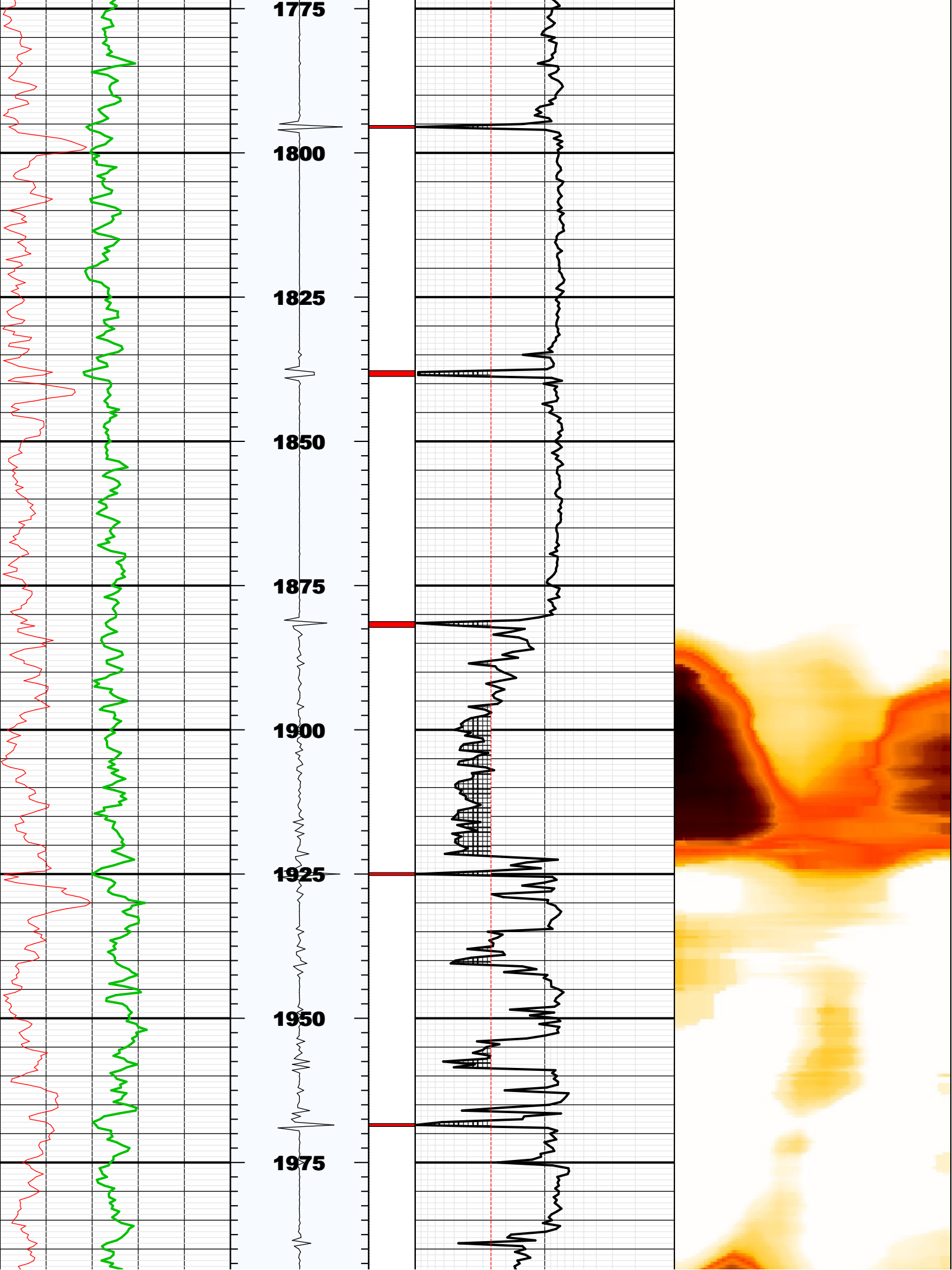


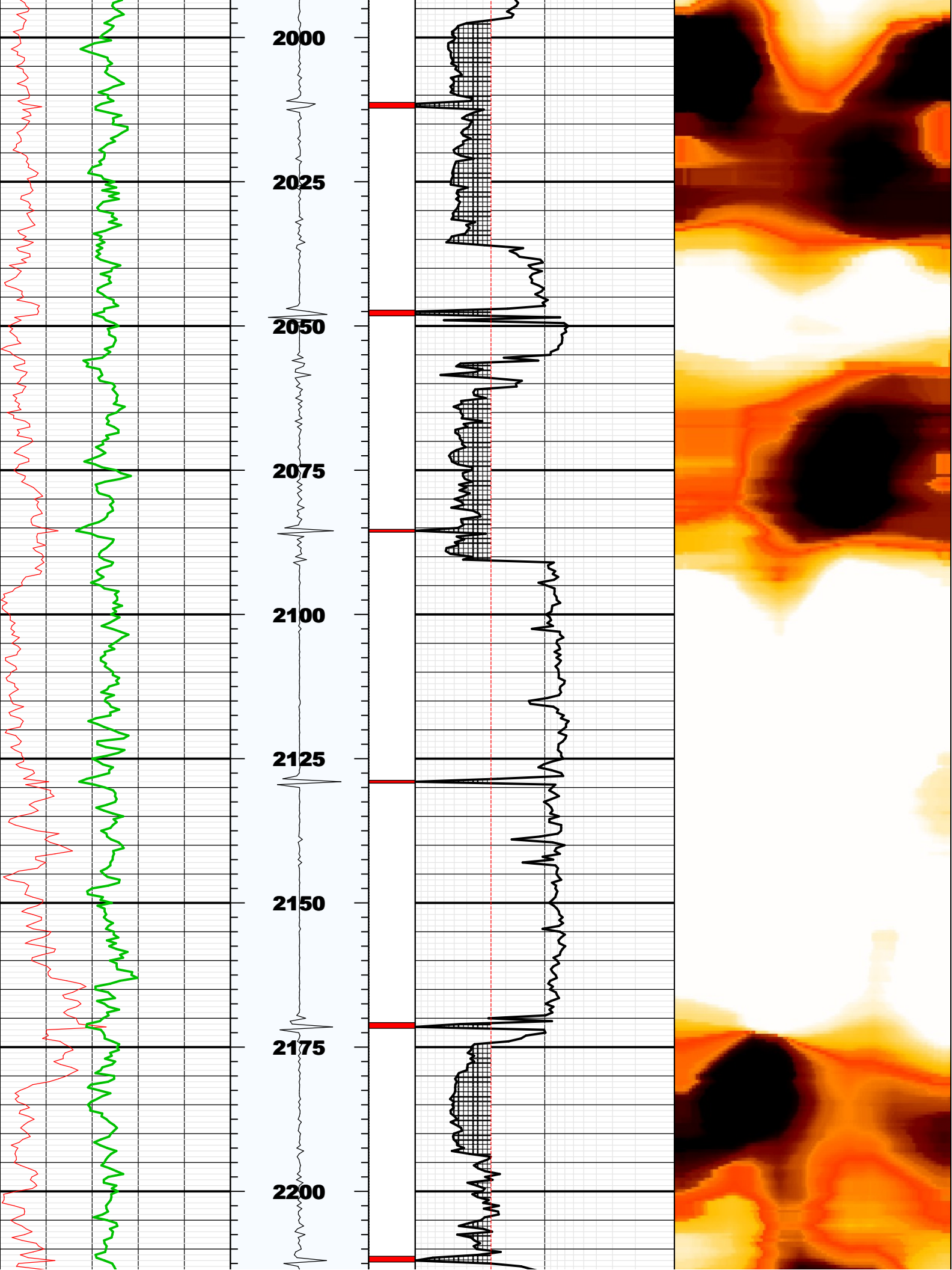


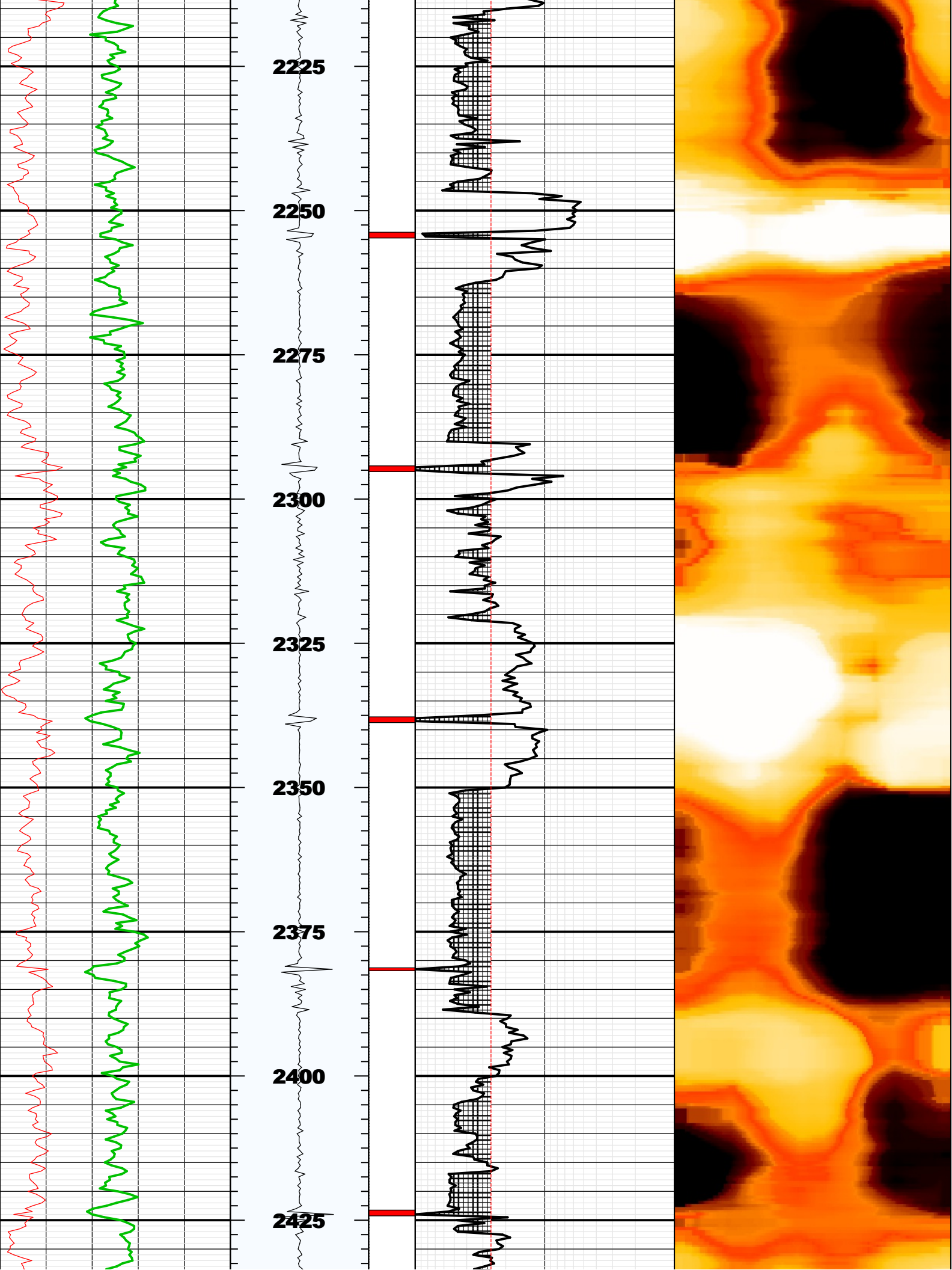


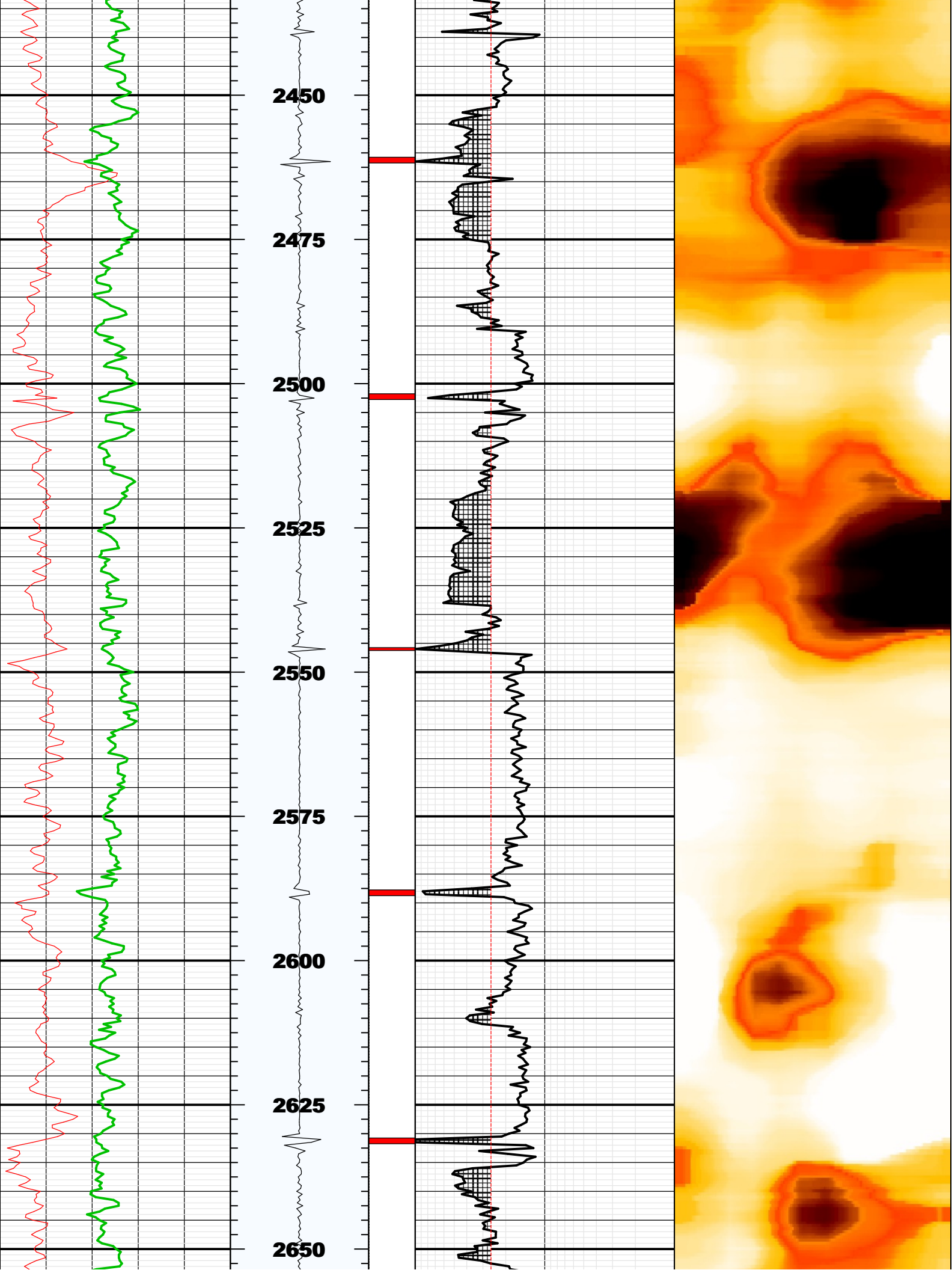


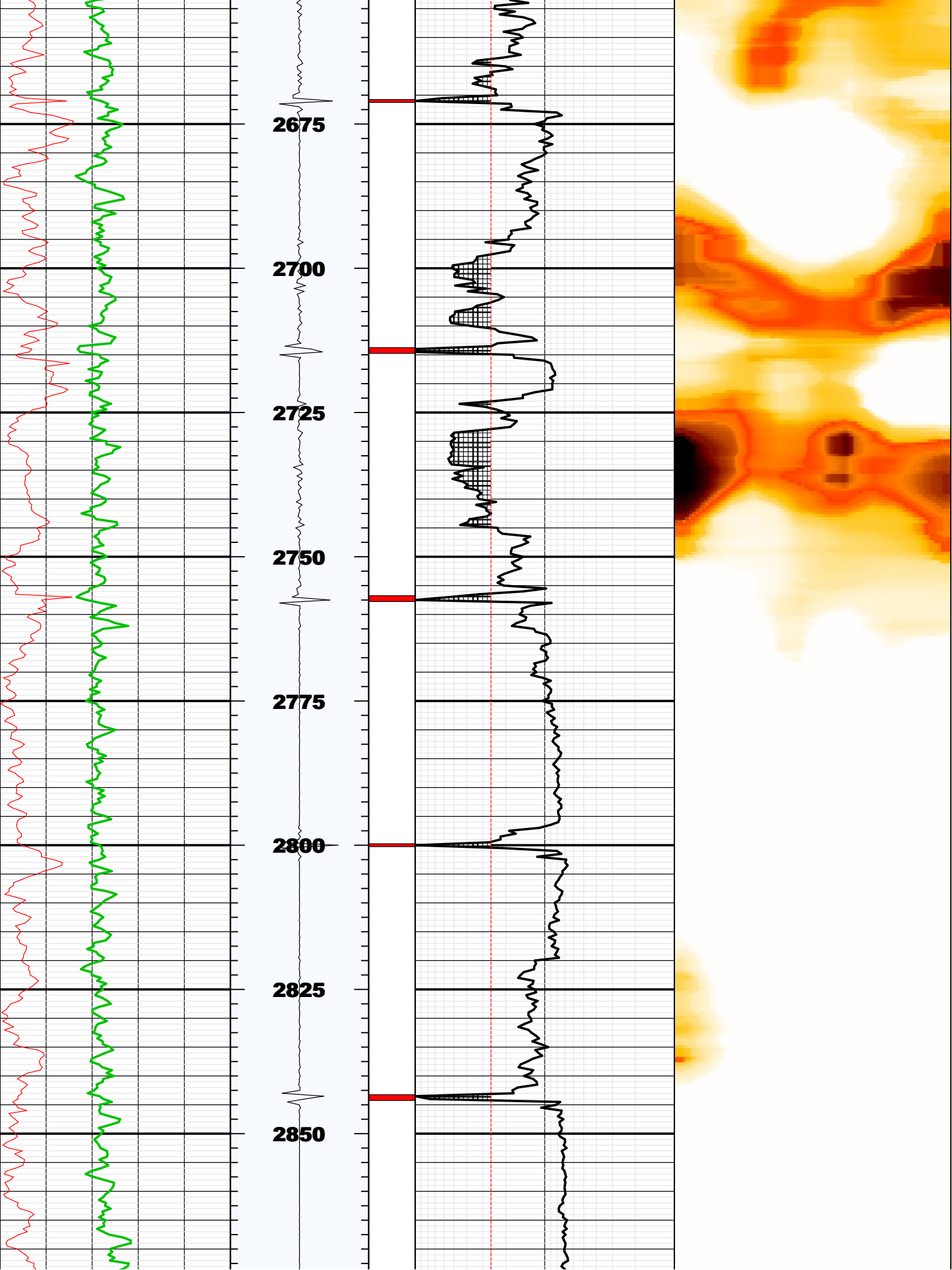


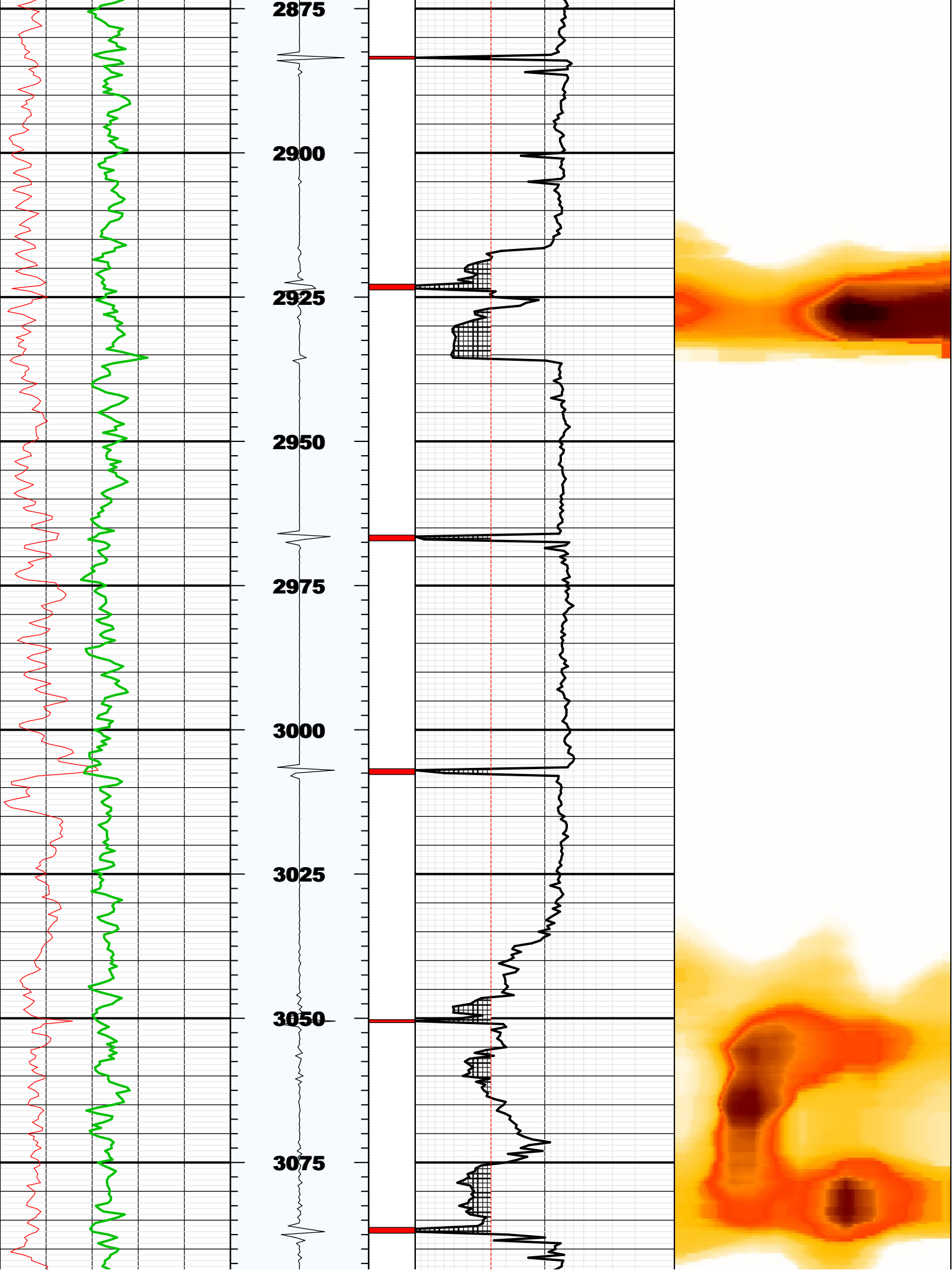


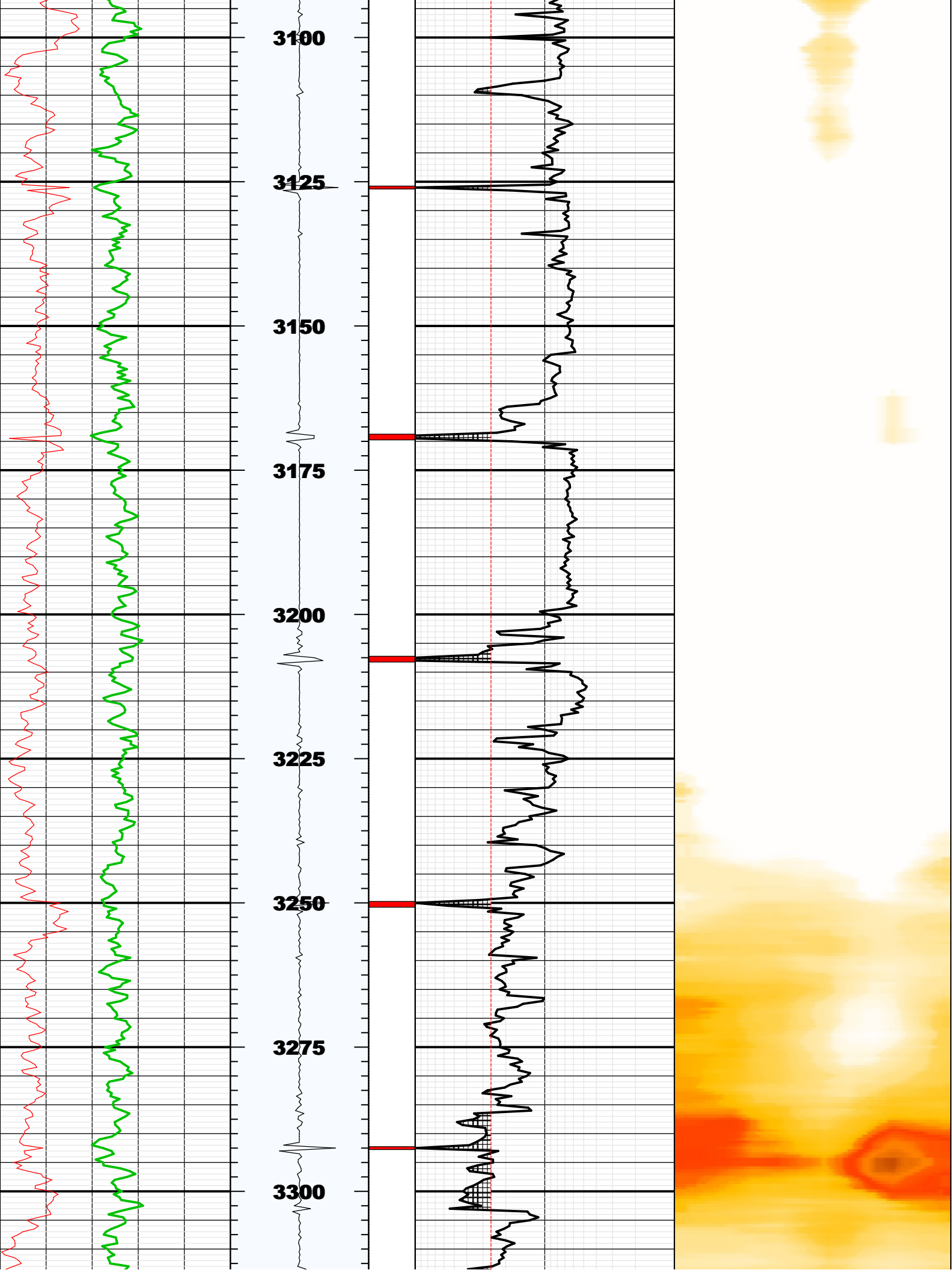


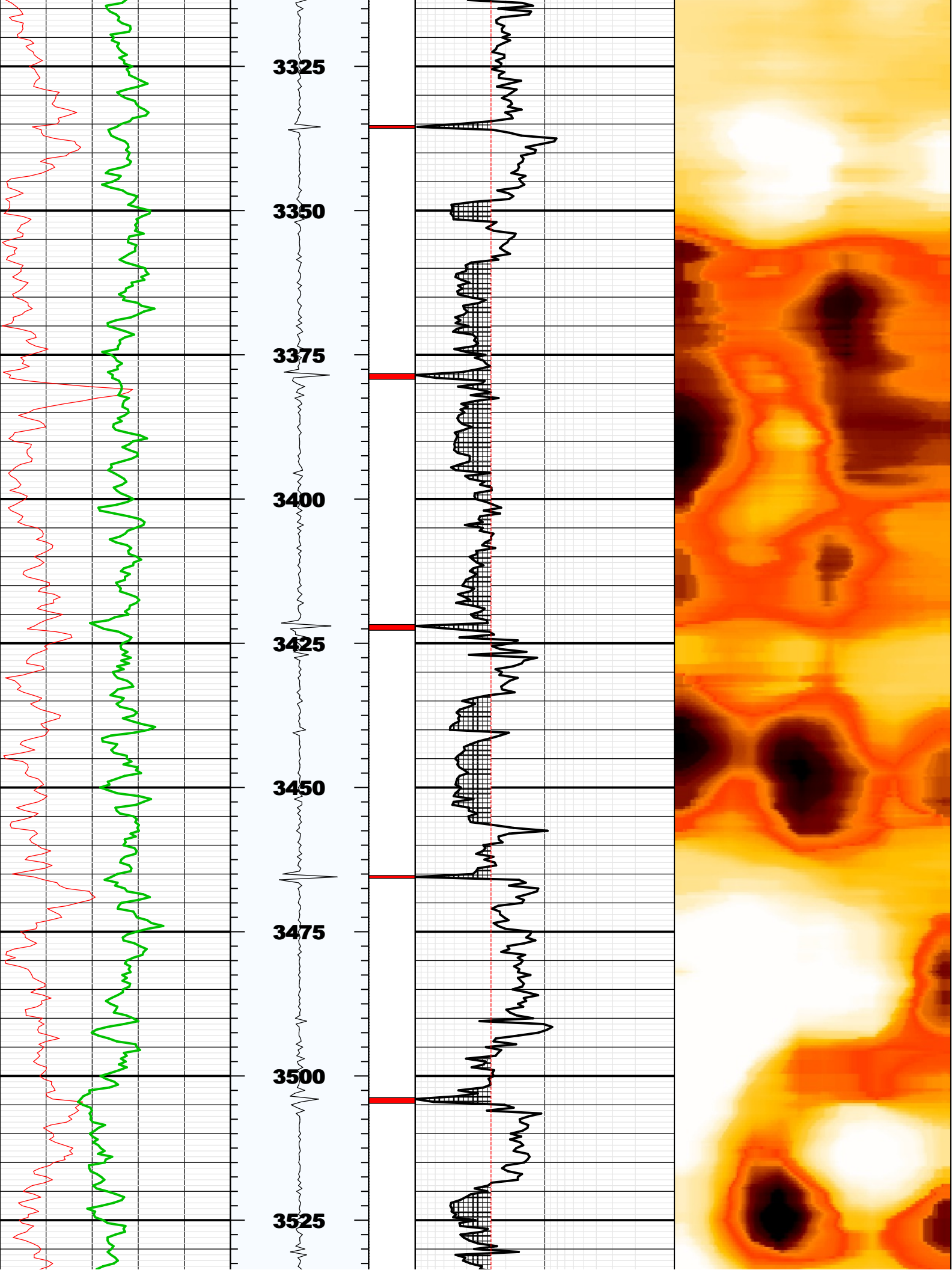


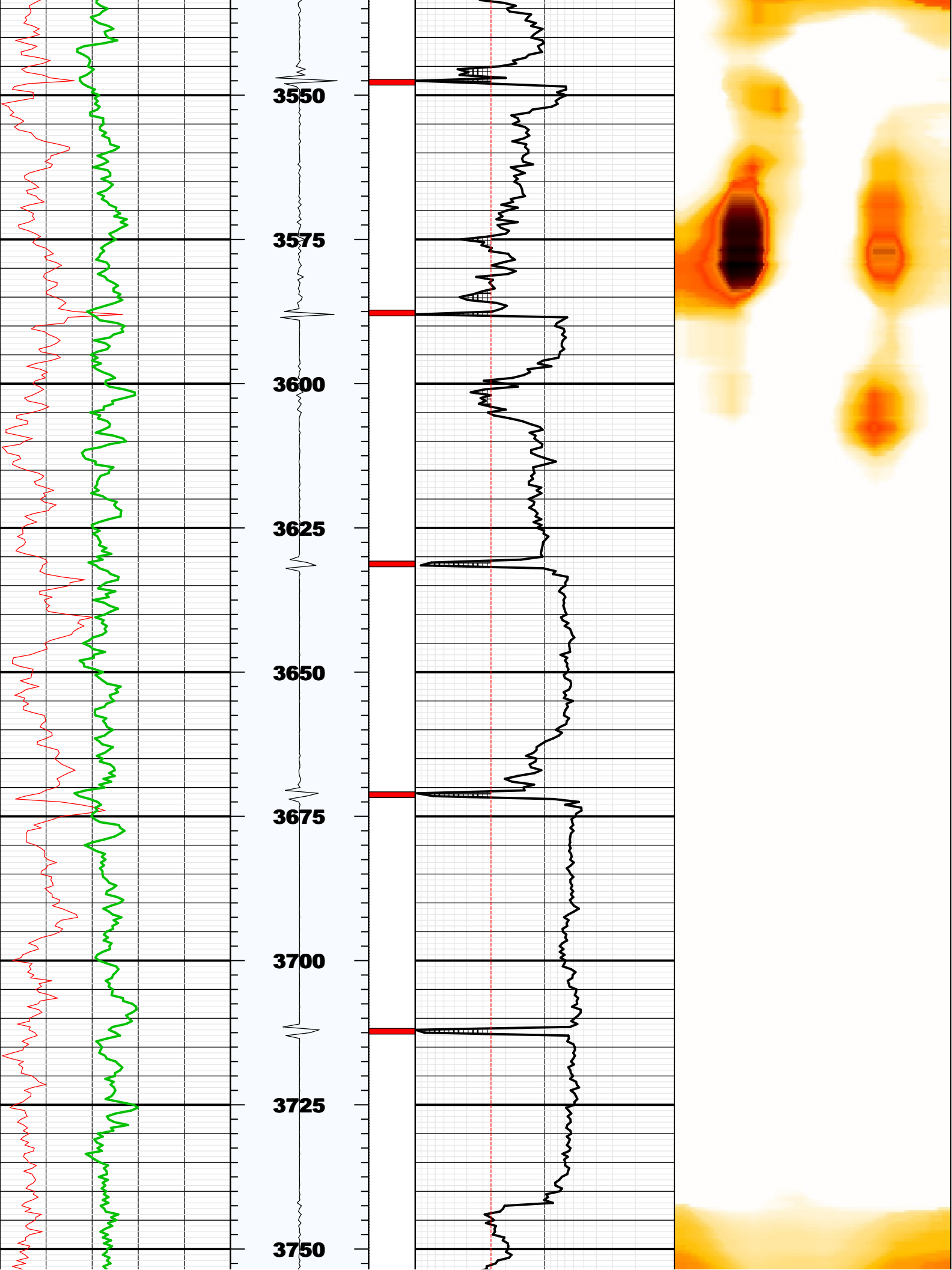


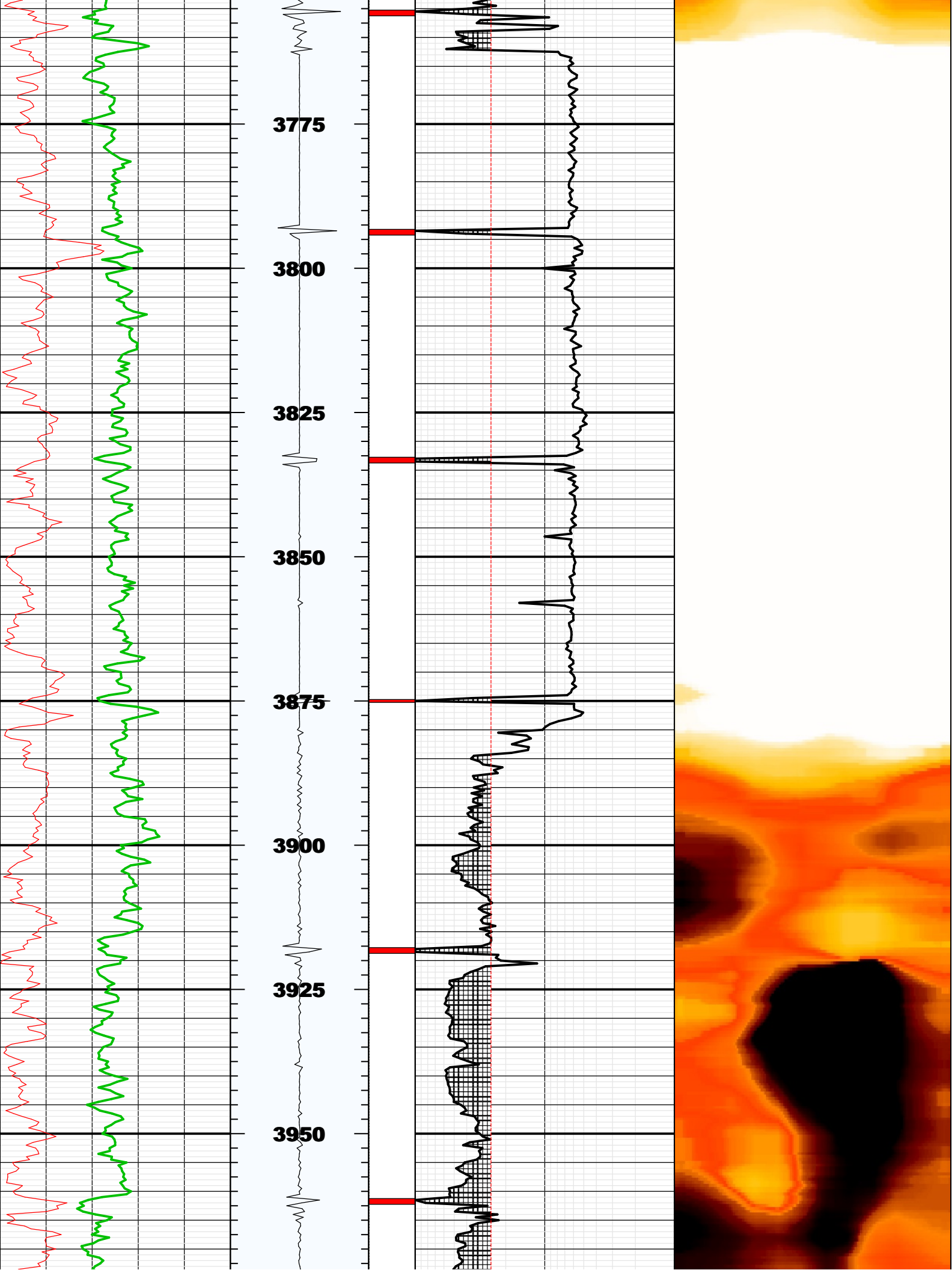


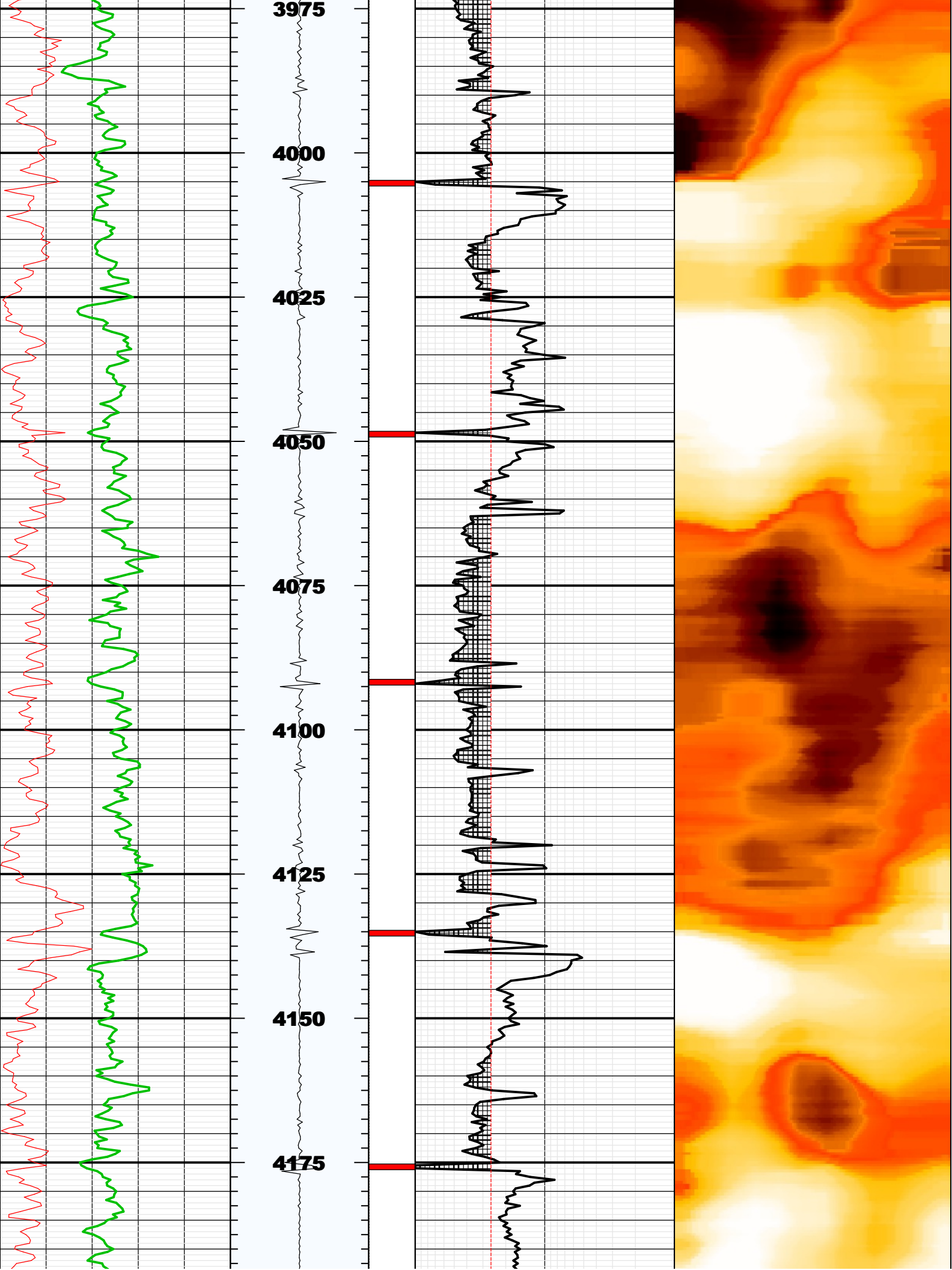


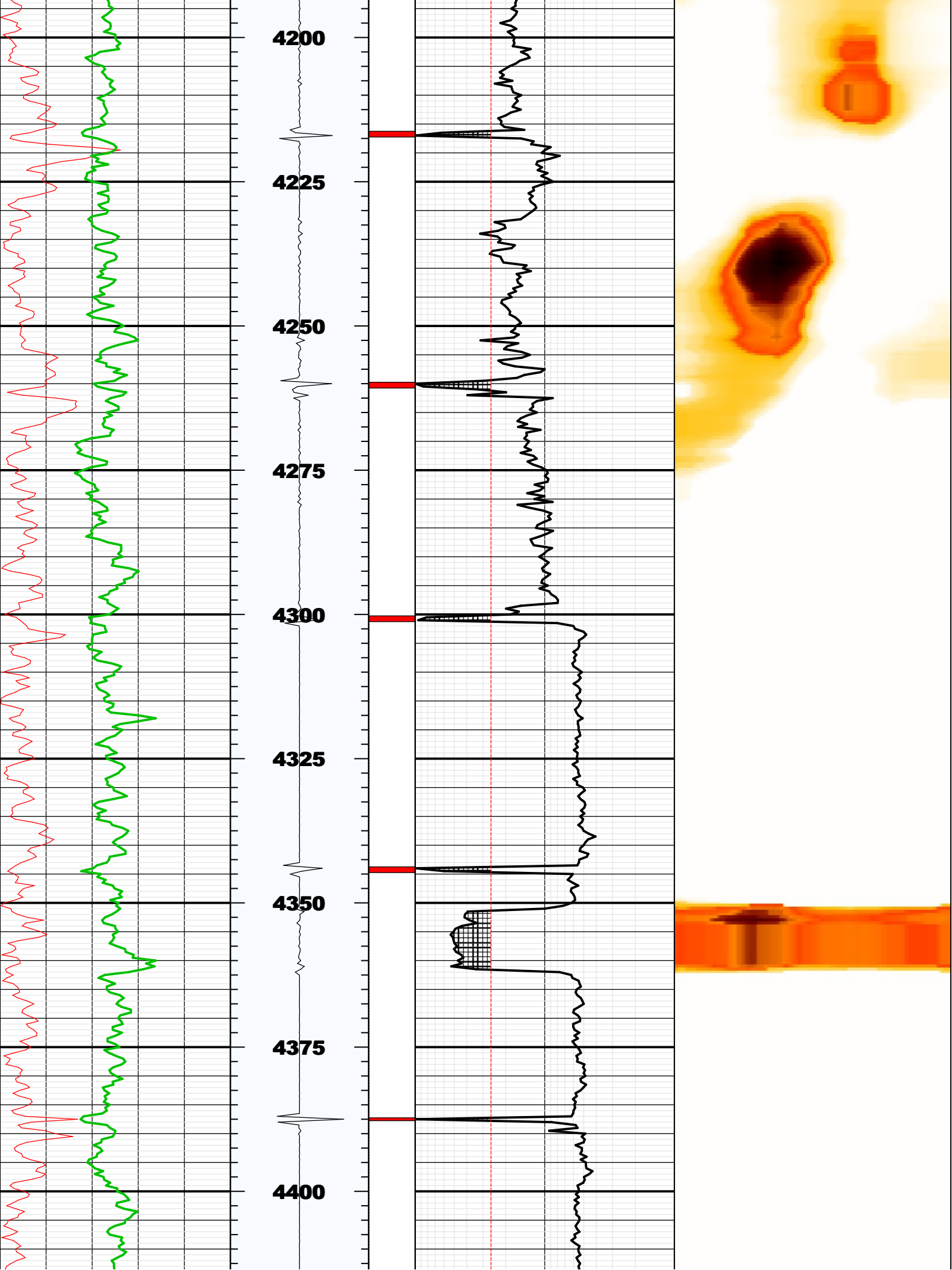


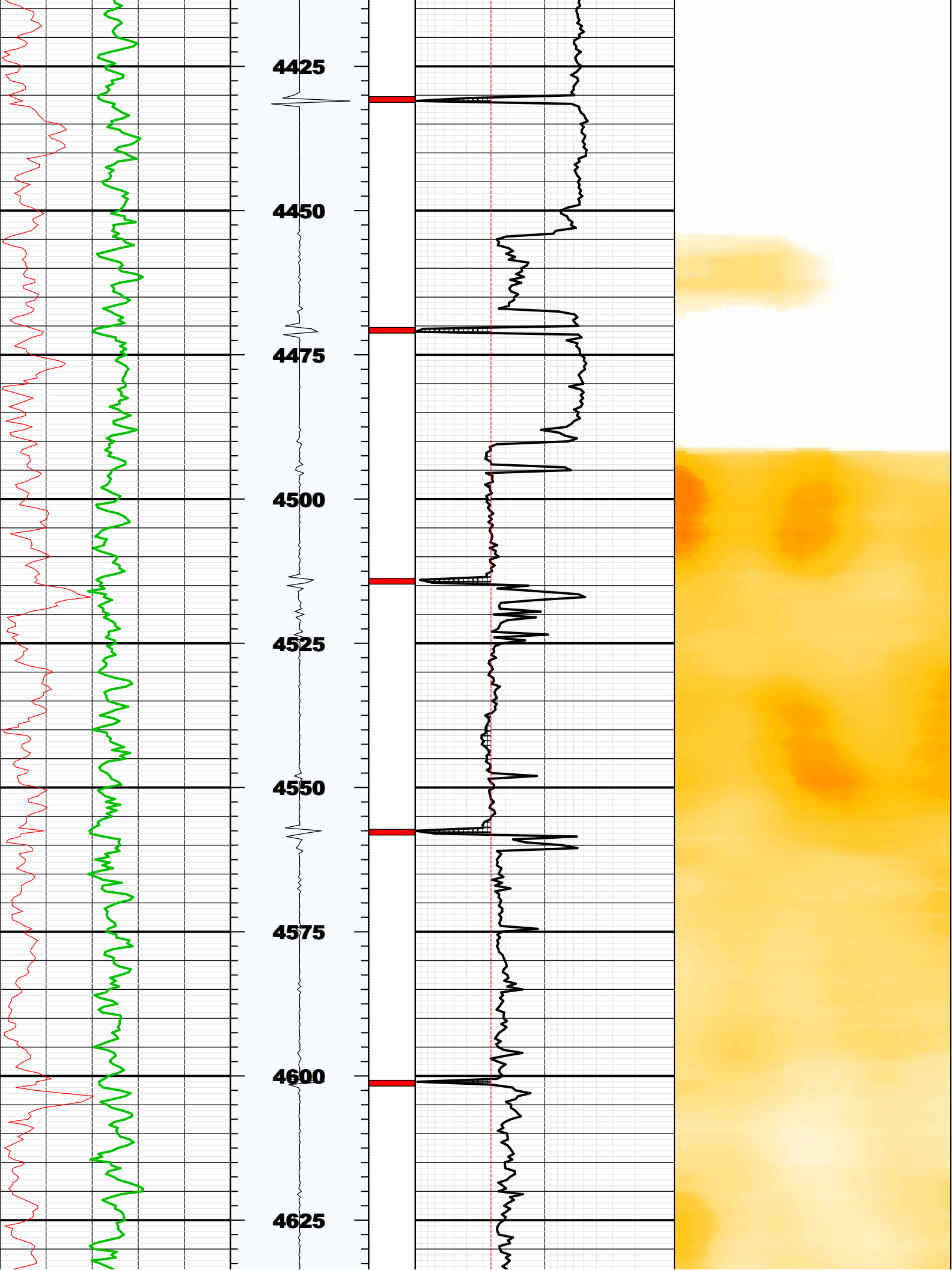


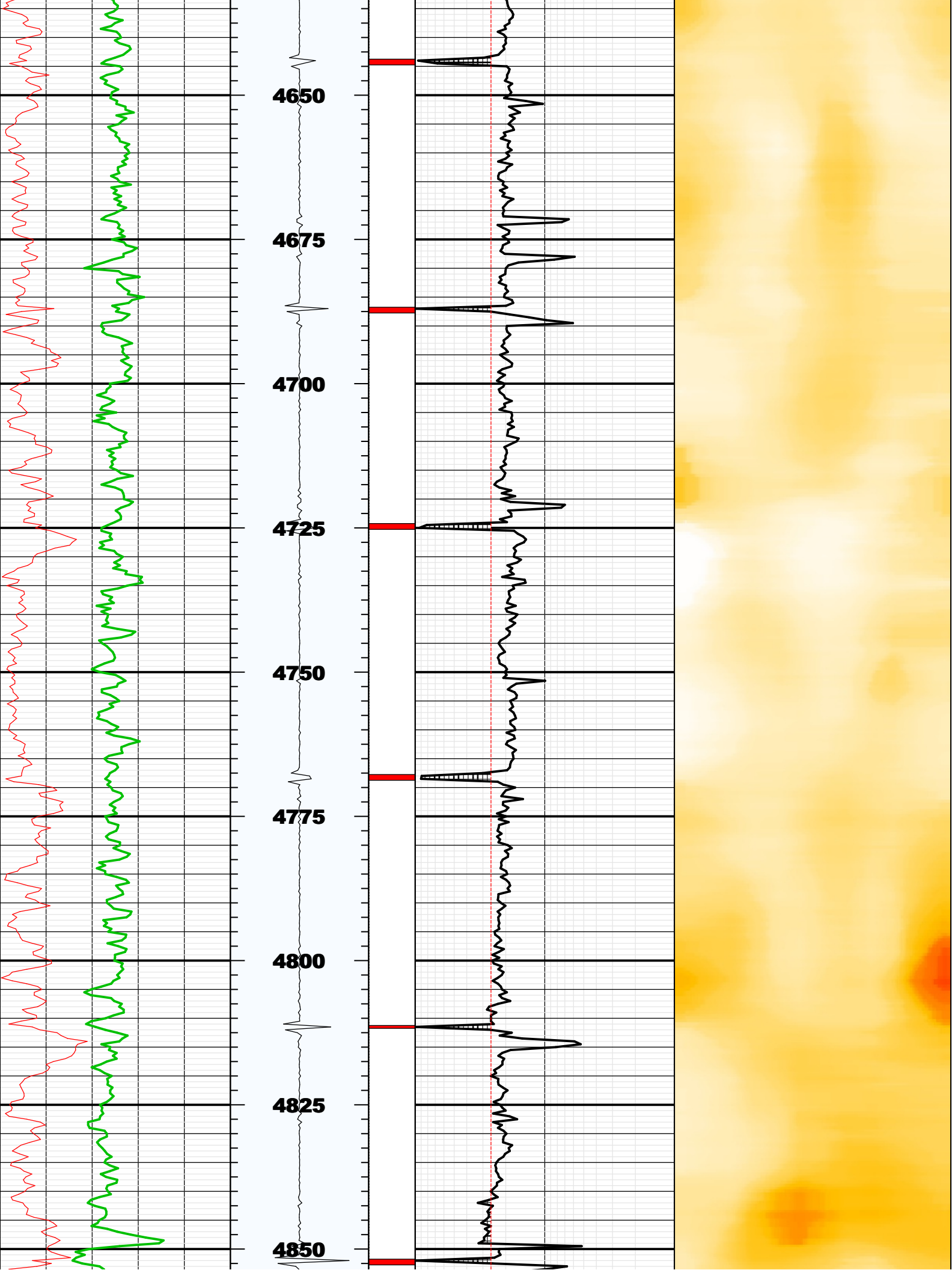


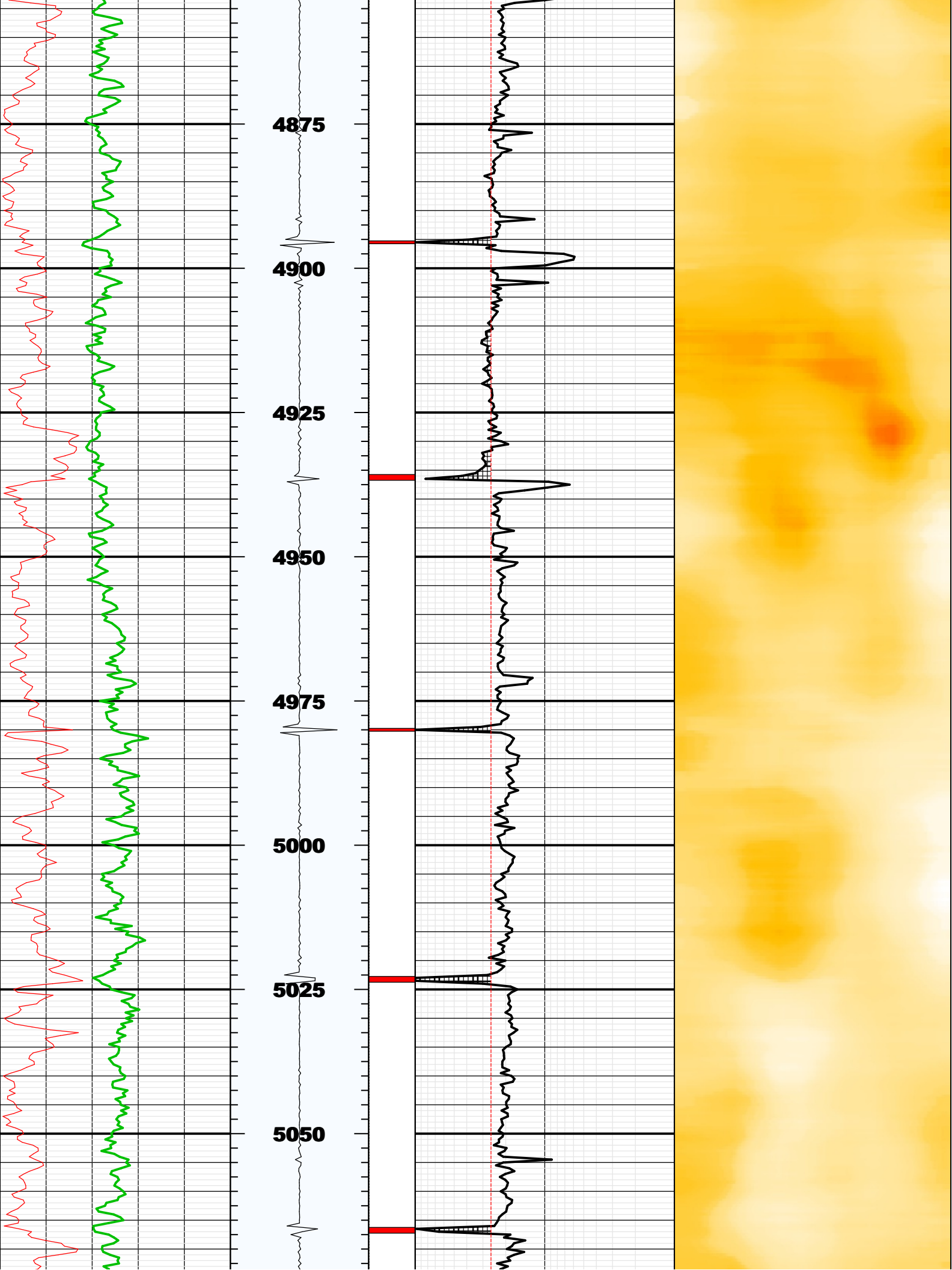


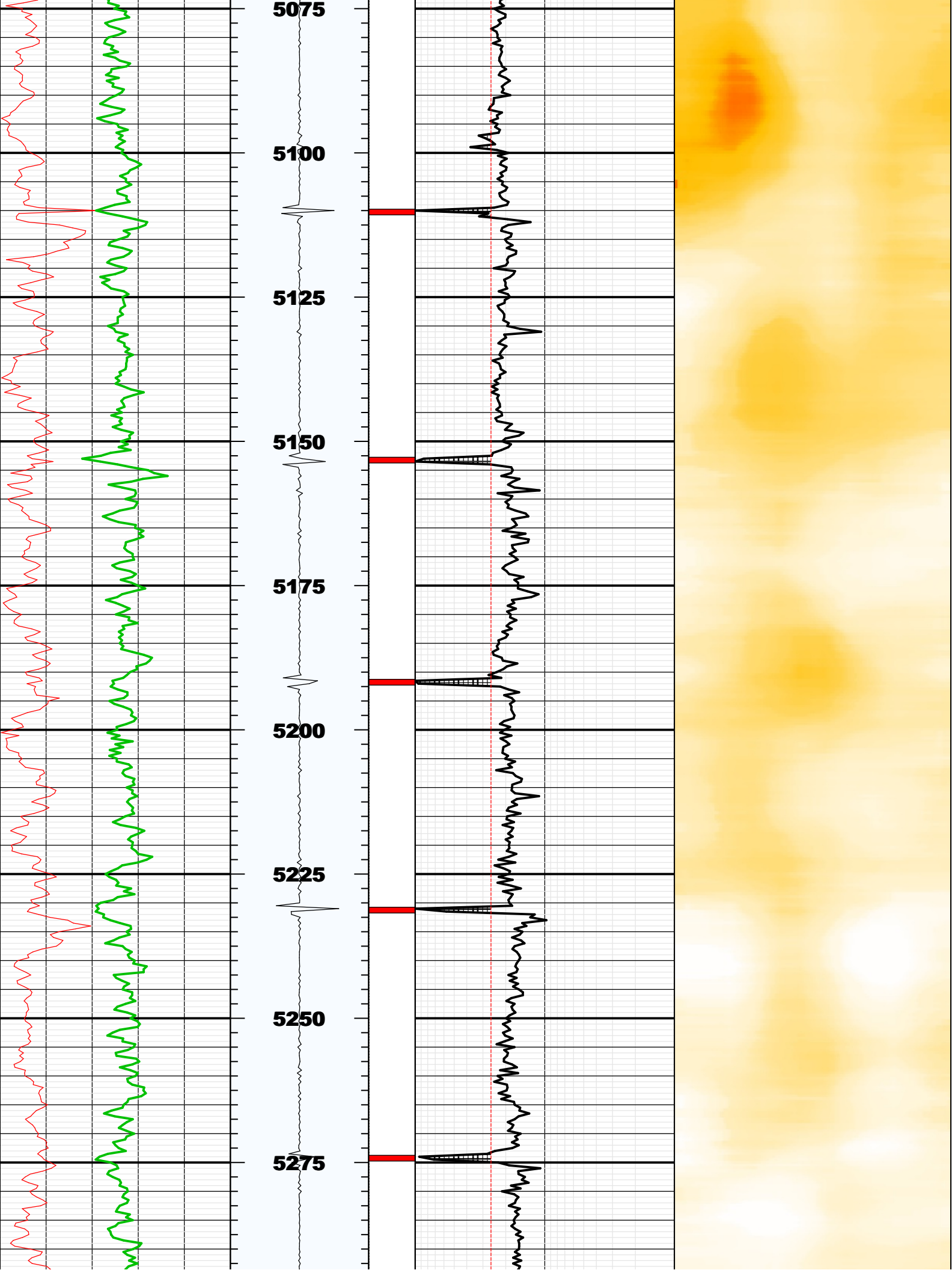


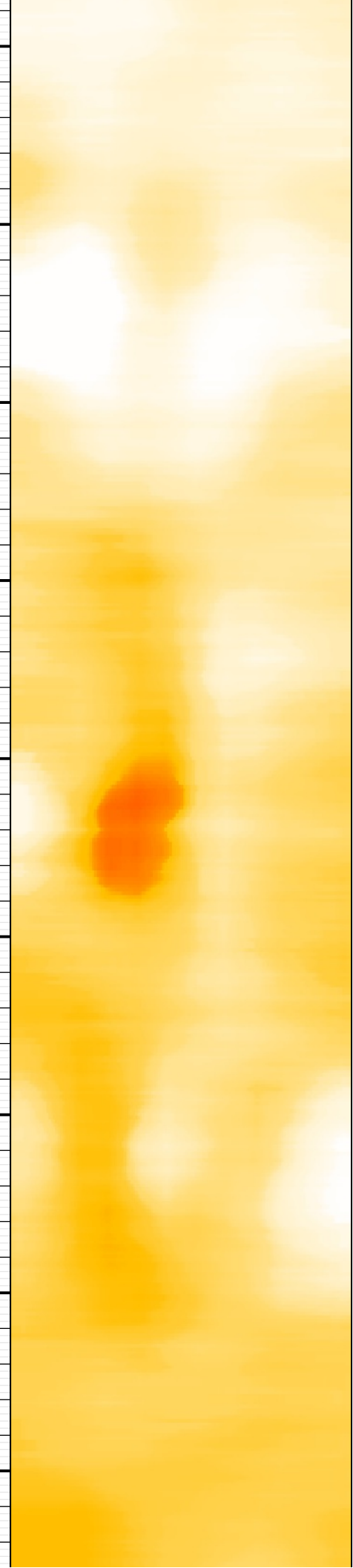
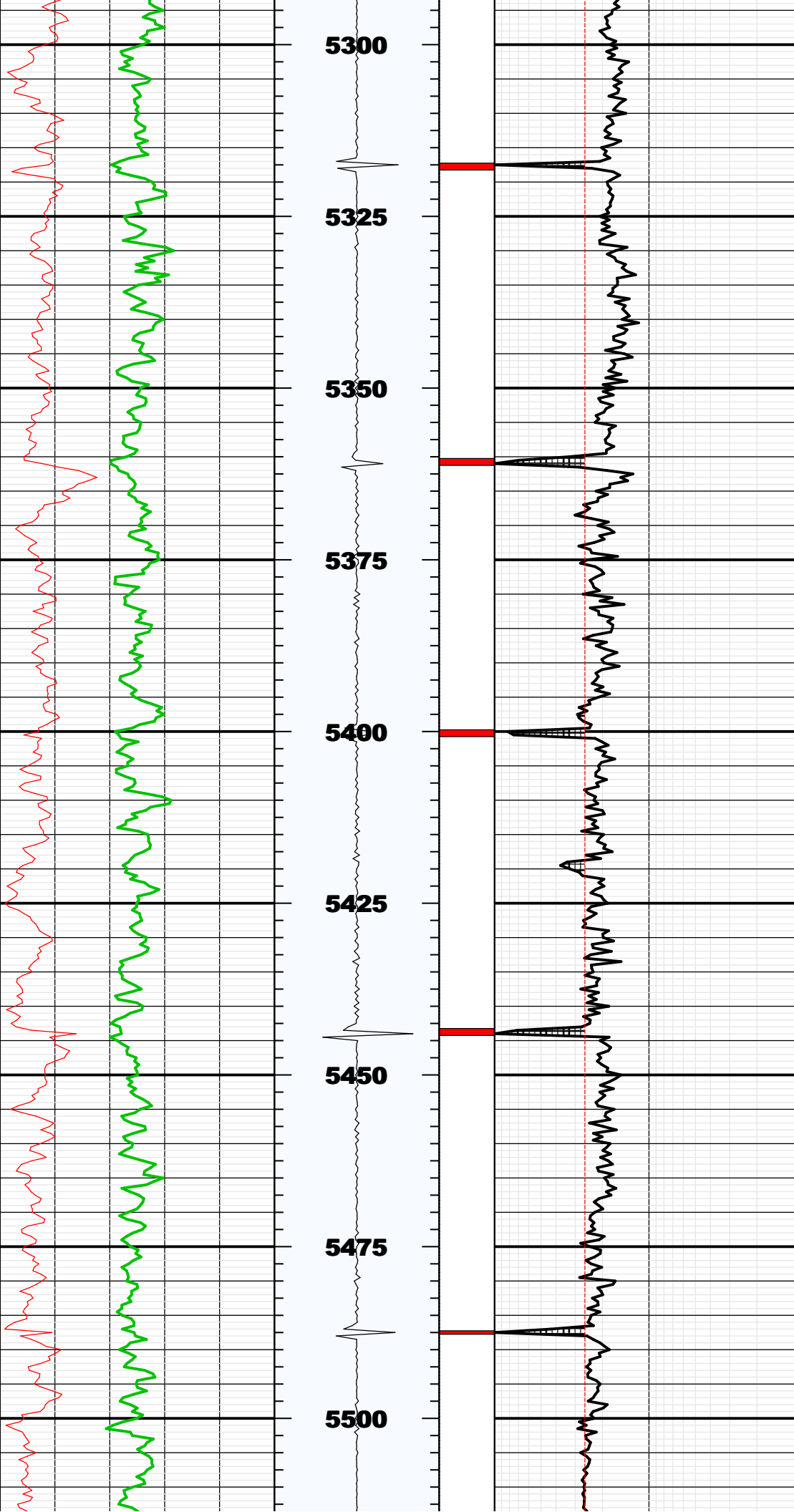


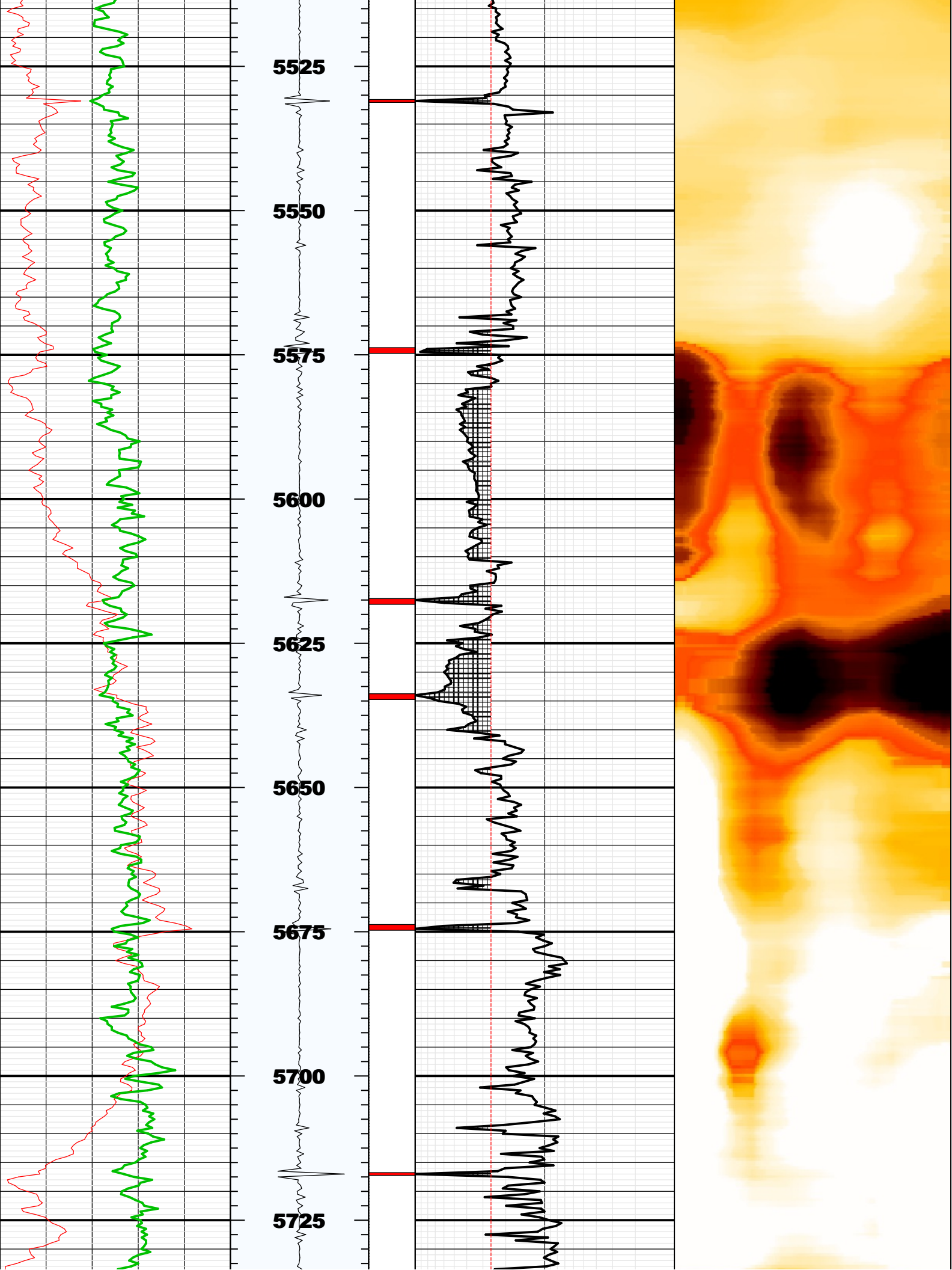


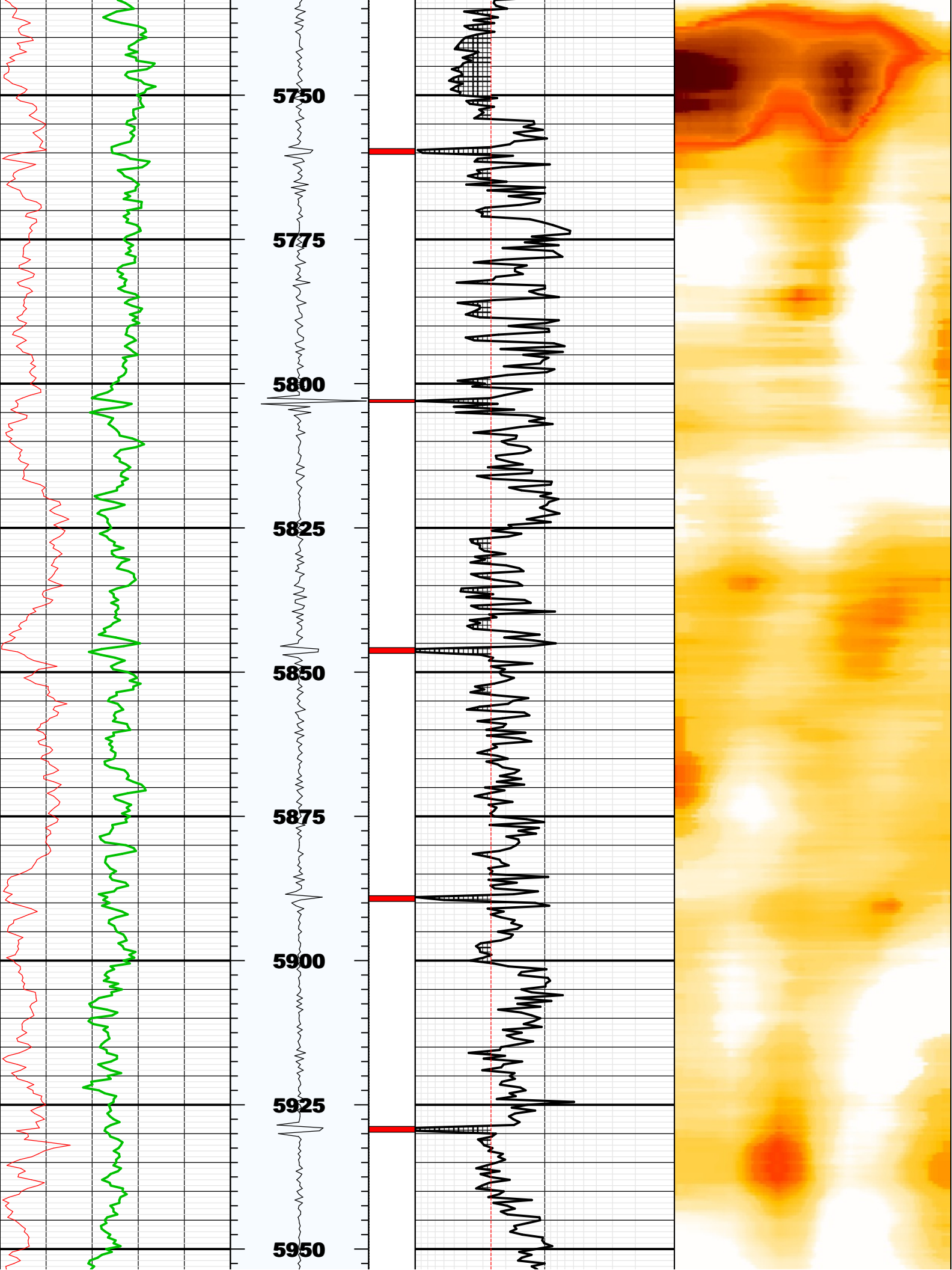


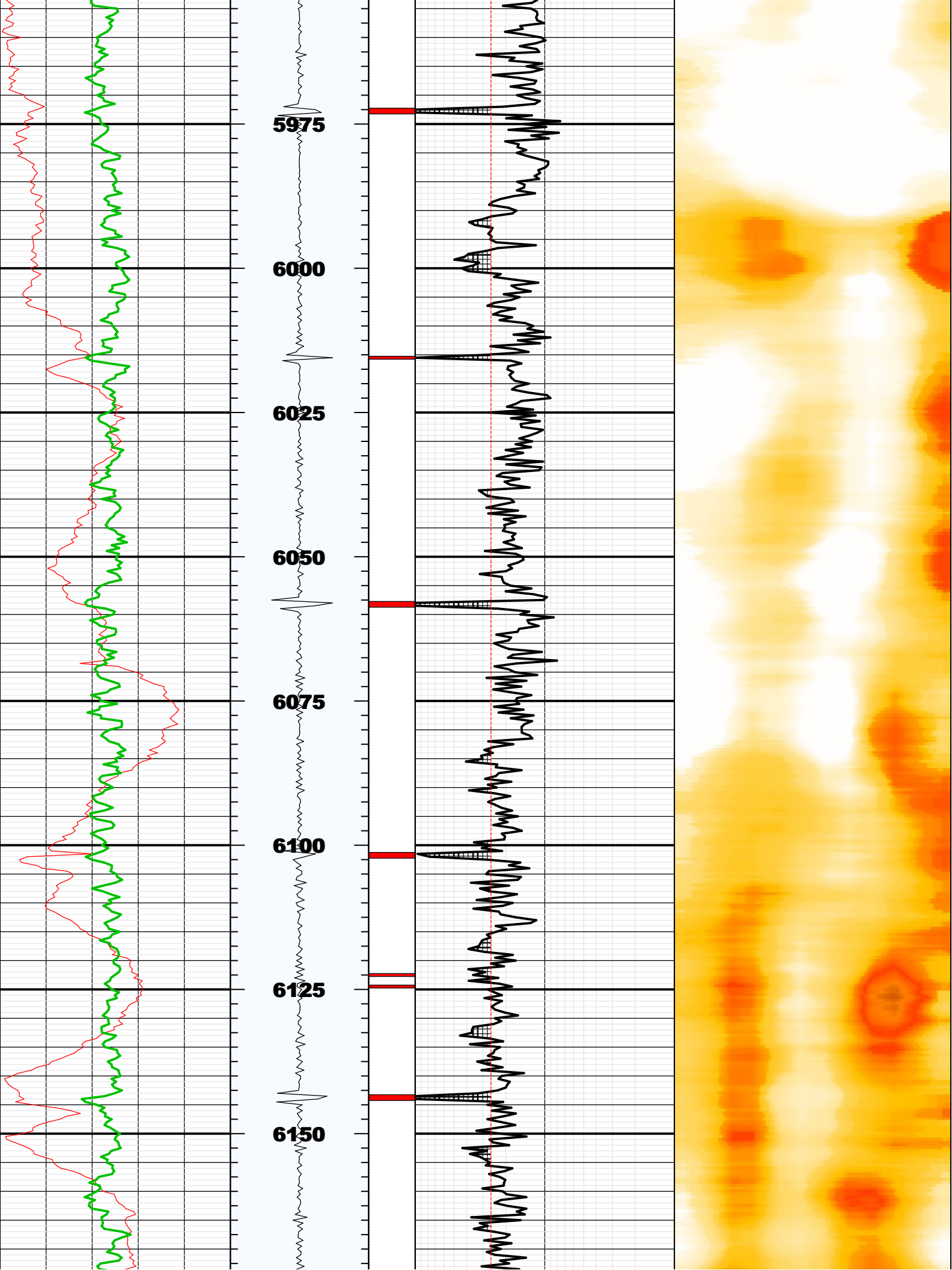


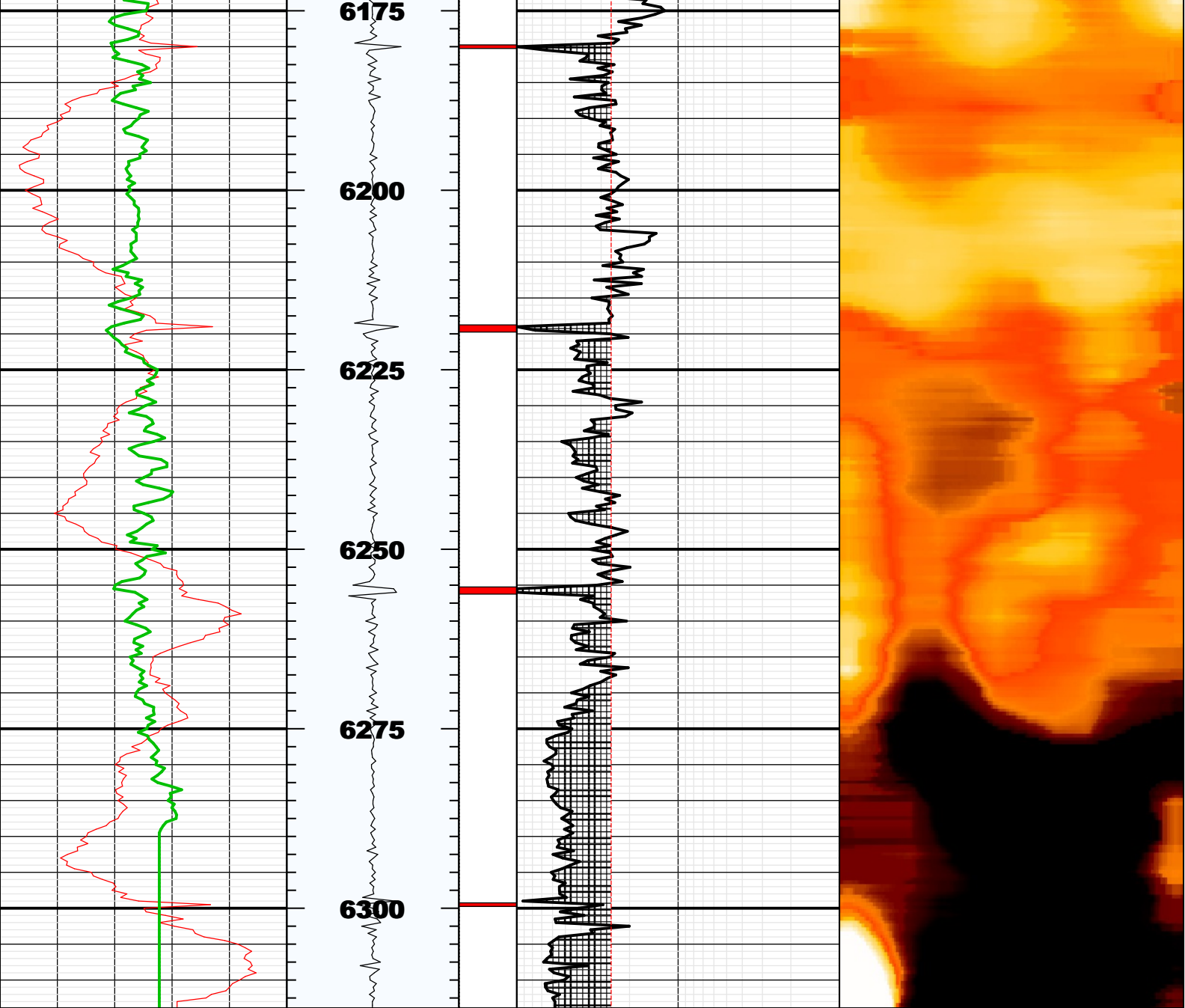








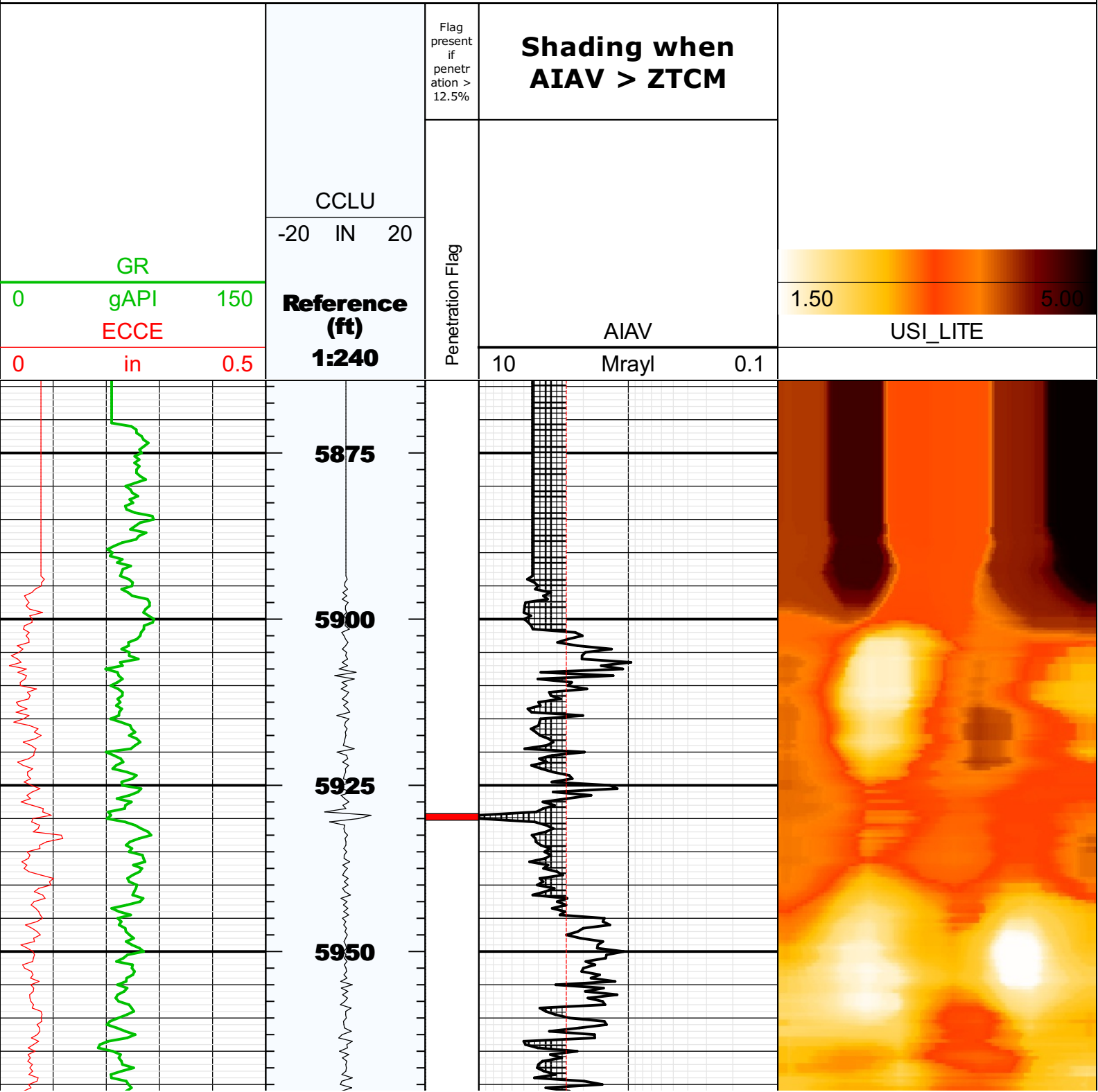


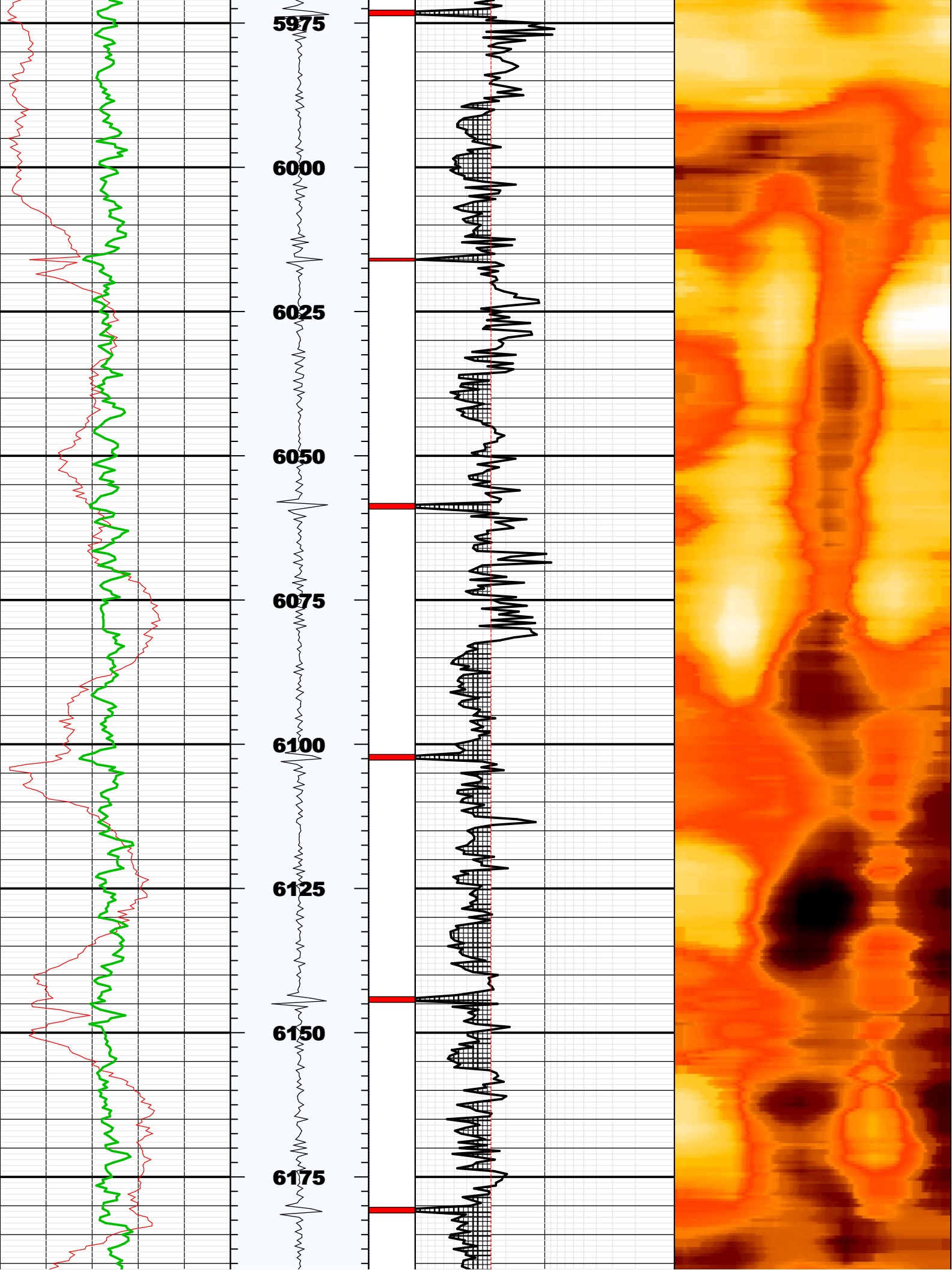


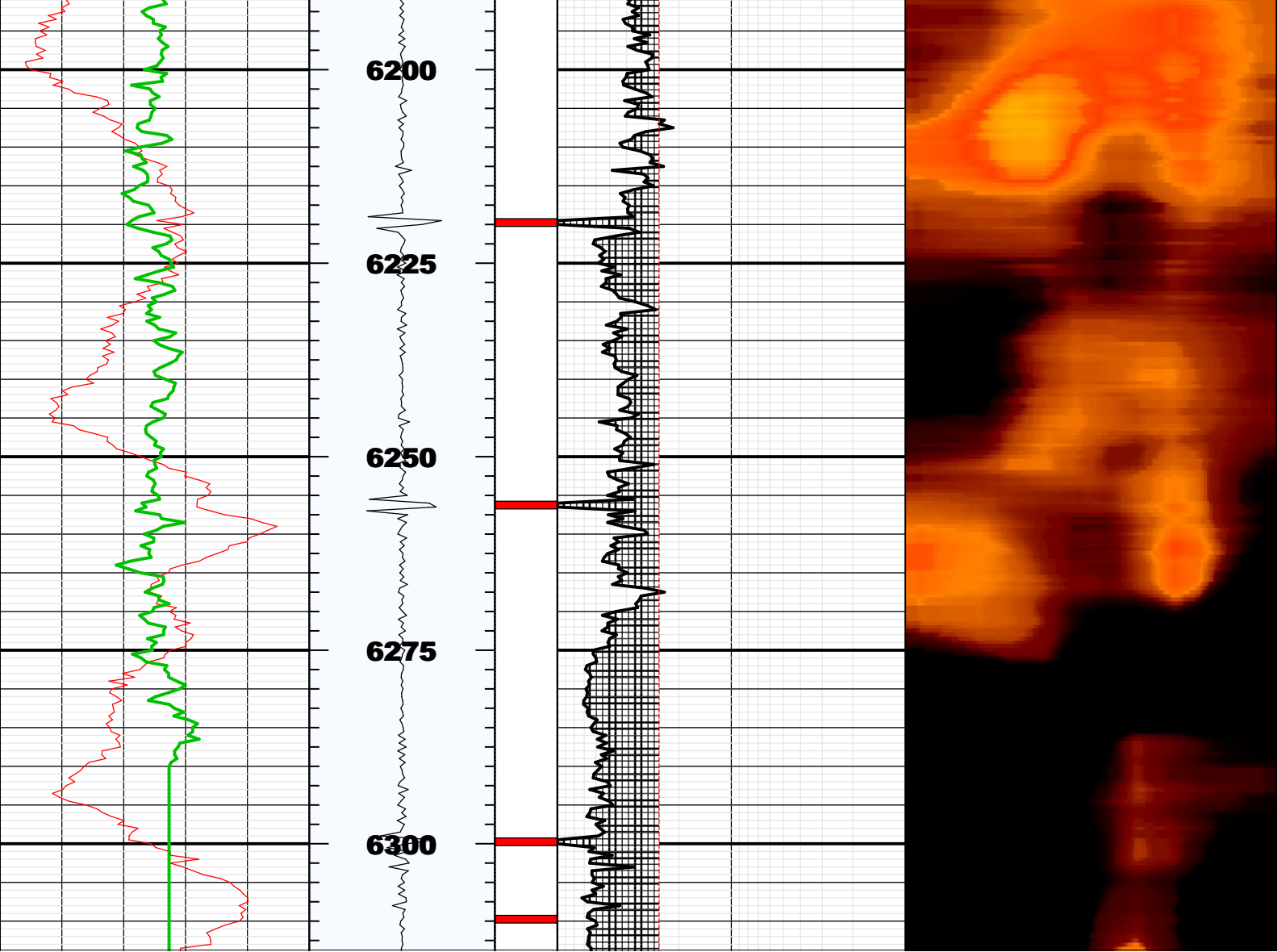
BS	8.75000	IN	Bit Size
CASG	P110		Casing Grade
CDIA	7.00000	IN	Casing Outer Diameter
CSID			
CSIZ	7.00000	IN	Current Casing Size
CWEI	26.00000	LB/F	Casing Weight
DFD	8.40000	LB/G	Drilling Fluid Density
DFVL	206.00000	US/F	Default Fluid Velocity
DO			
DOT	2.87400	IN	Diameter of Transducer Sensor
EMXV	55	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	34.59587	US	Window Begin Time
WINE	78.40100	US	Window End Time
ZCAS	46.25000	MRAY	Acoustic Impedance of Casing
ZINI	-1.00000	MRAY	Initial Estimate of Cement Impedance
ZMUD	1.84000	MRAY	Acoustic Impedance of Mud
ZTCM	2.60000	MRAY	Acoustic Impedance Threshold for Cement
ZTGS	0.30000	MRAY	Acoustic Impedance Threshold for Gas
WLEN	15.36685	US	T [^] 3 Processing Length

Repeat Pass

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Fluid Properties Used for Main Pass

