

Company: Noble Energy Inc

Well: Wells Ranch AE30-65-1AHNB
Field: Wattenberg
County: Weld State: Colorado

County: Weld		Field: Wattenberg	
Location: NWSW Sec. 29 T6N R62W		Well: Wells Ranch AE30-65-1AHNA	
Company: Noble Energy Inc			
USI-LITE		LOCATION	
		Permanent Datum: Log Measured From: Drilling Measured From:	GL KB KB Elev: K.B. 4788.0 F G.L. 4758.0 F D.F. 4787.0 F
Logging Date	24-May-2014	API Serial No. 05-123-38652-0000	Section 29 Township 6N Range 62W
Run Number	Run1 USIT		
Depth Driller	11945.0 F		
Schlumberger Depth	11945.0 F		
Bottom Log Interval	6728.0 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	-999.2 F		
To	11945.0 F		
Casing Size	7.00 IN		
Weight	26.00 LB/F		
Grade	P110		
From	0.0 F		
To	6901.9 F		
Max Recorded Temp	-999.2		
Logger on bottom (date)	24-May-2014		
Location	Fl. Morgan CO		
Recorded By	Tim Hoffman		
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: 12800.00000

DISCLAIMER

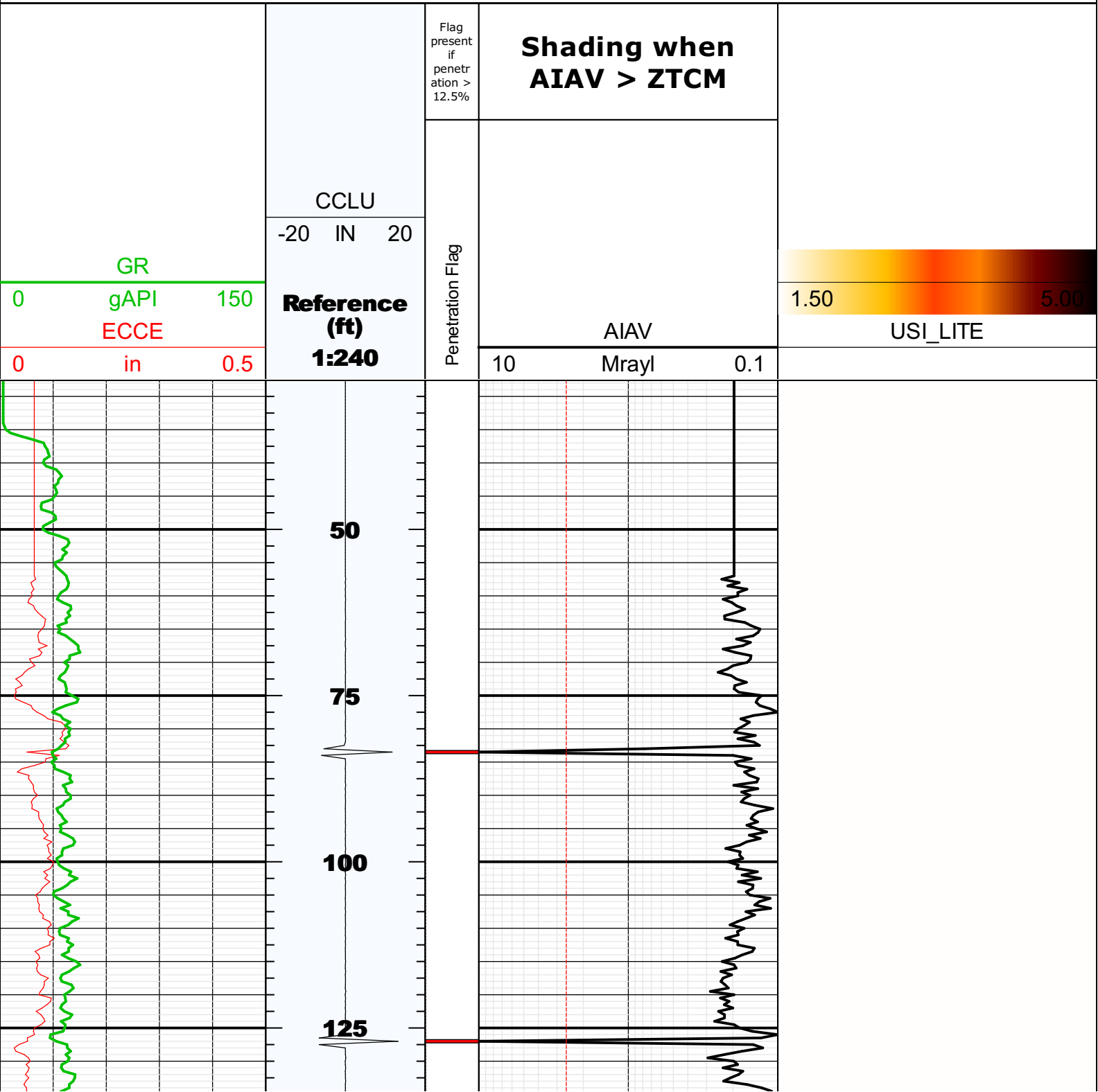
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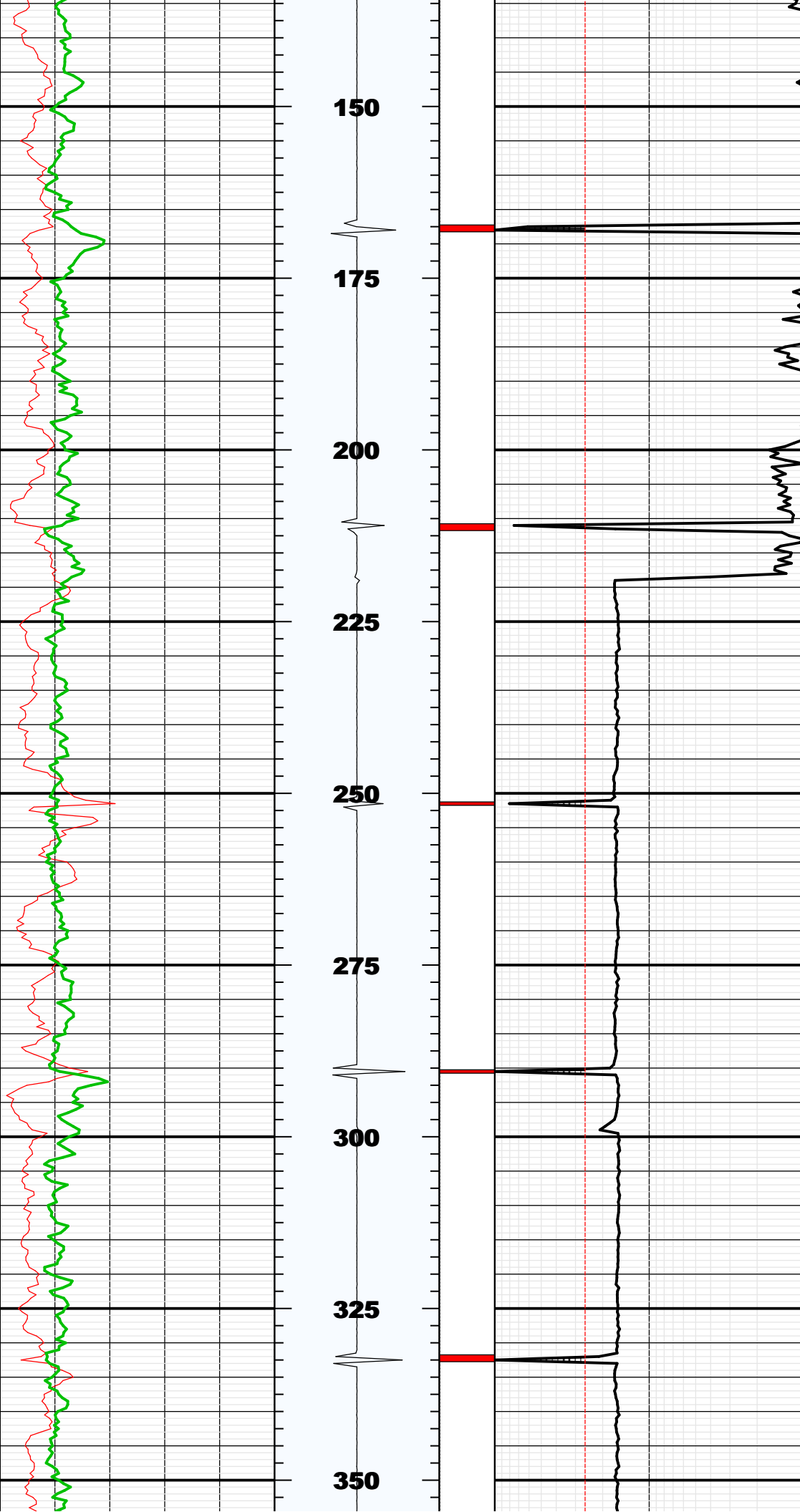
This is the first run in hole
Toolstring run as per tool sketch
12.5 ppg lead cement
13.8 ppg tail cement
0 PSI repeat pass
2500 PSI main pass
Top of cement 600 ft
Sub would not spin below 6295 ft either due to deviation or a bridge logged out from there

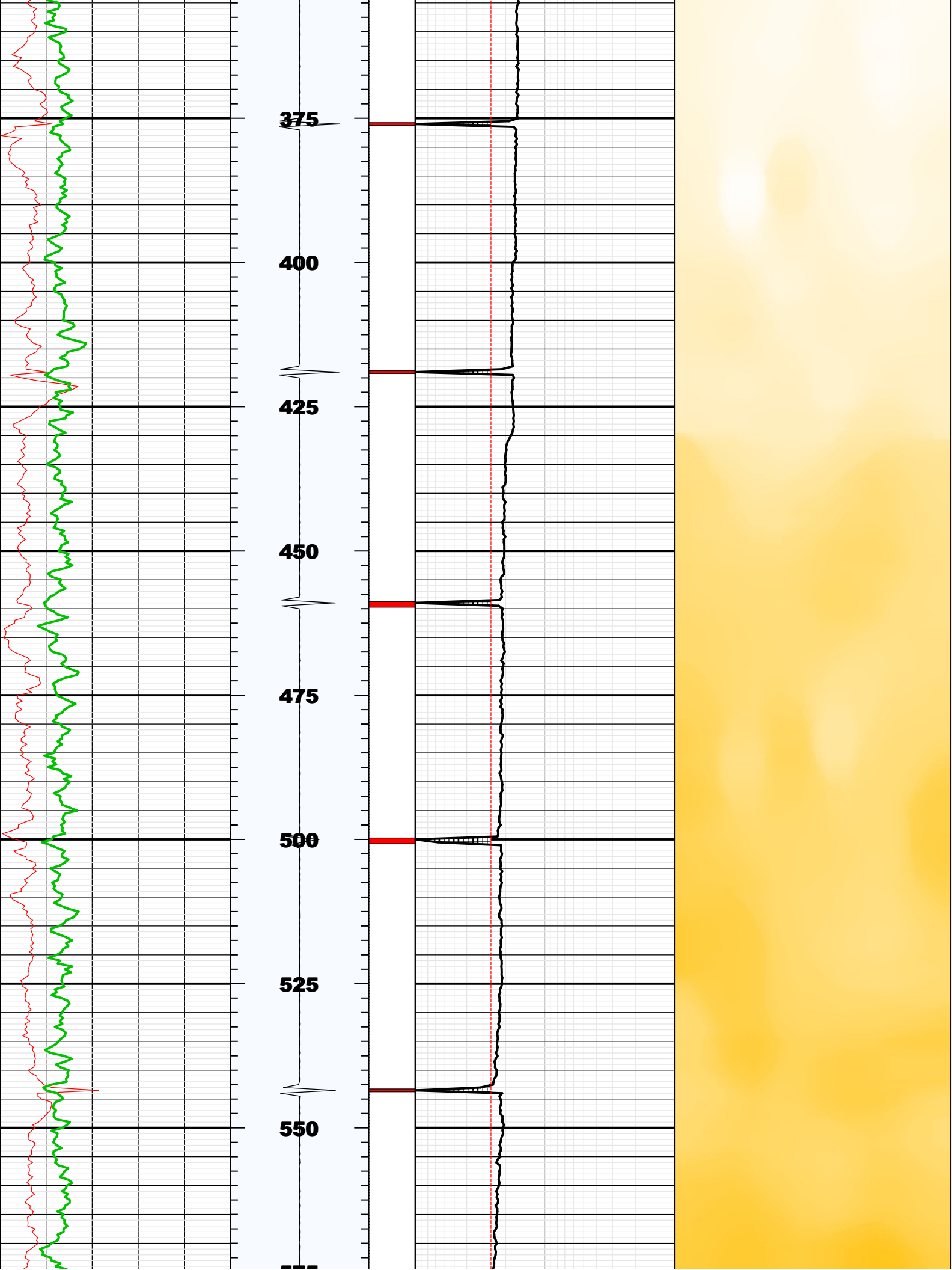
Crew Troy Ocanas Jay Musgrave

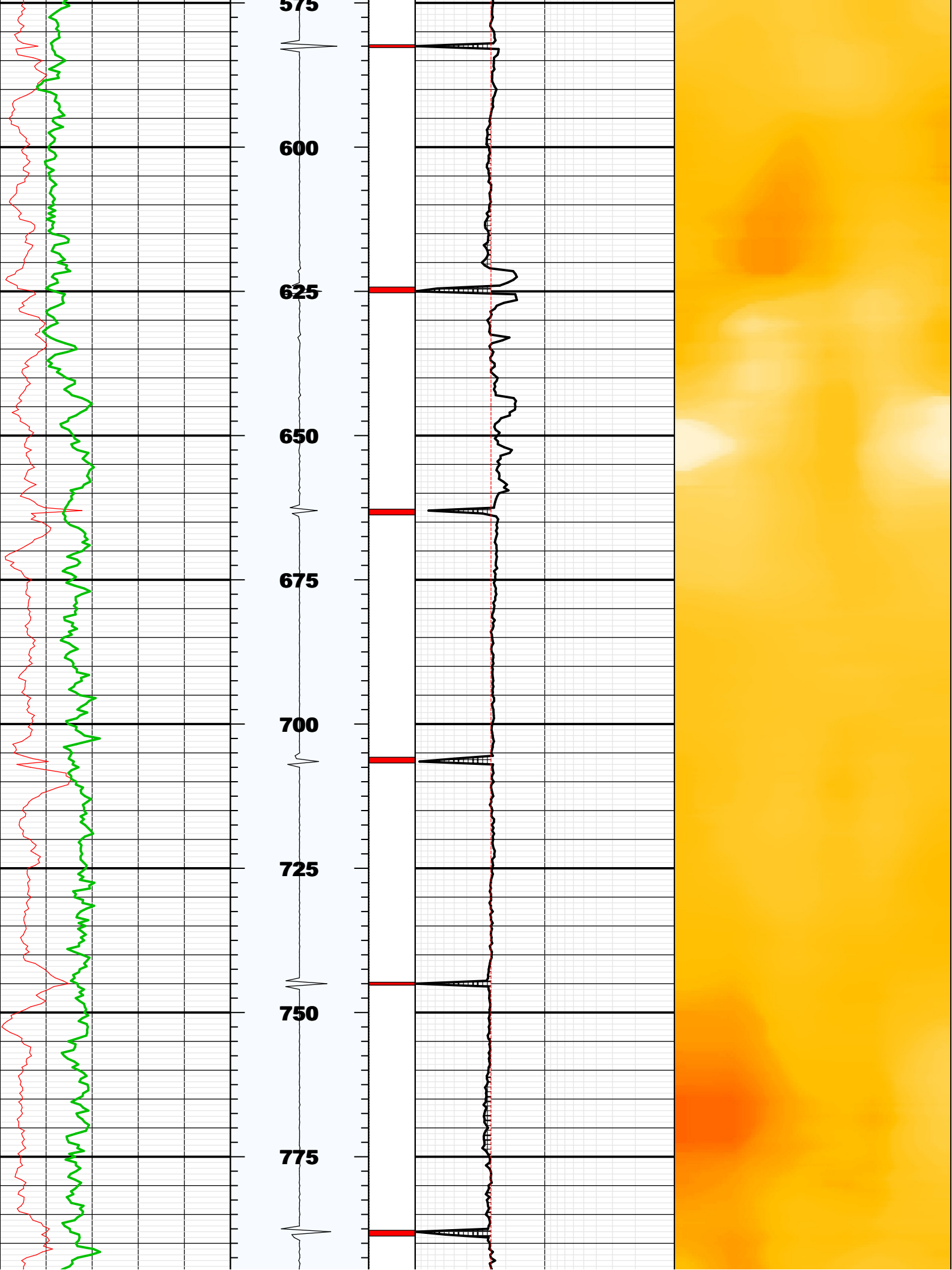
Main Pass

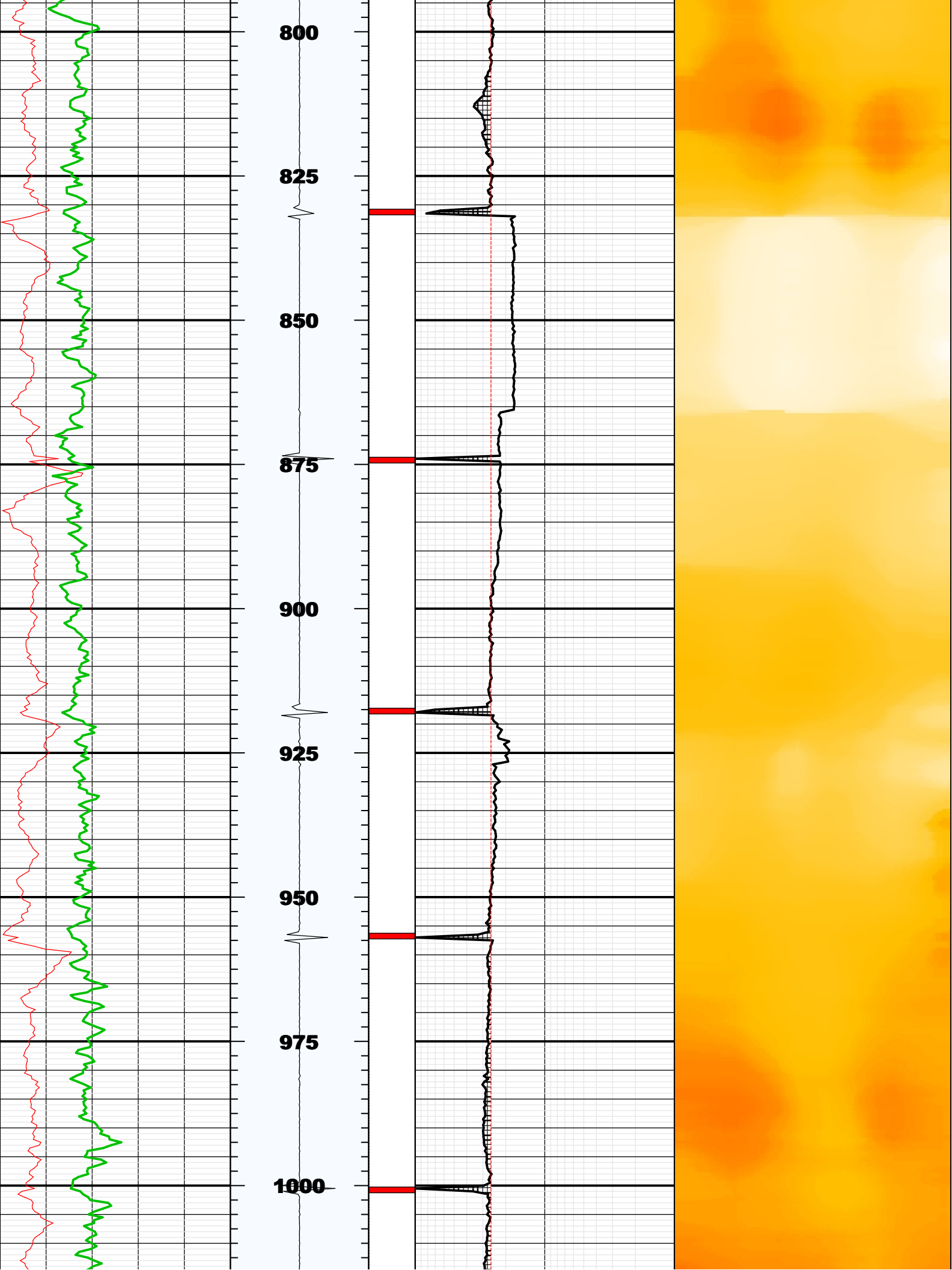
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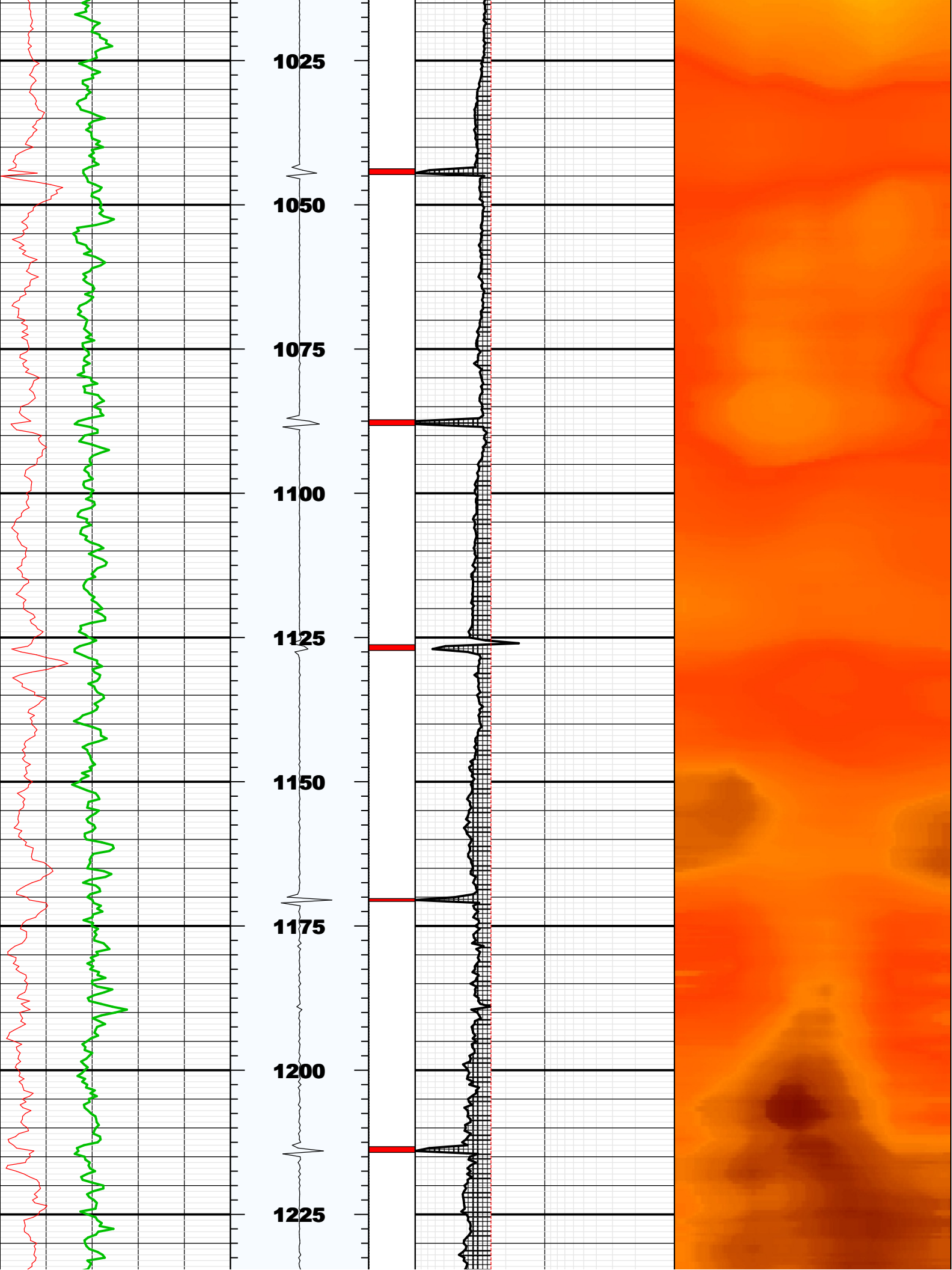


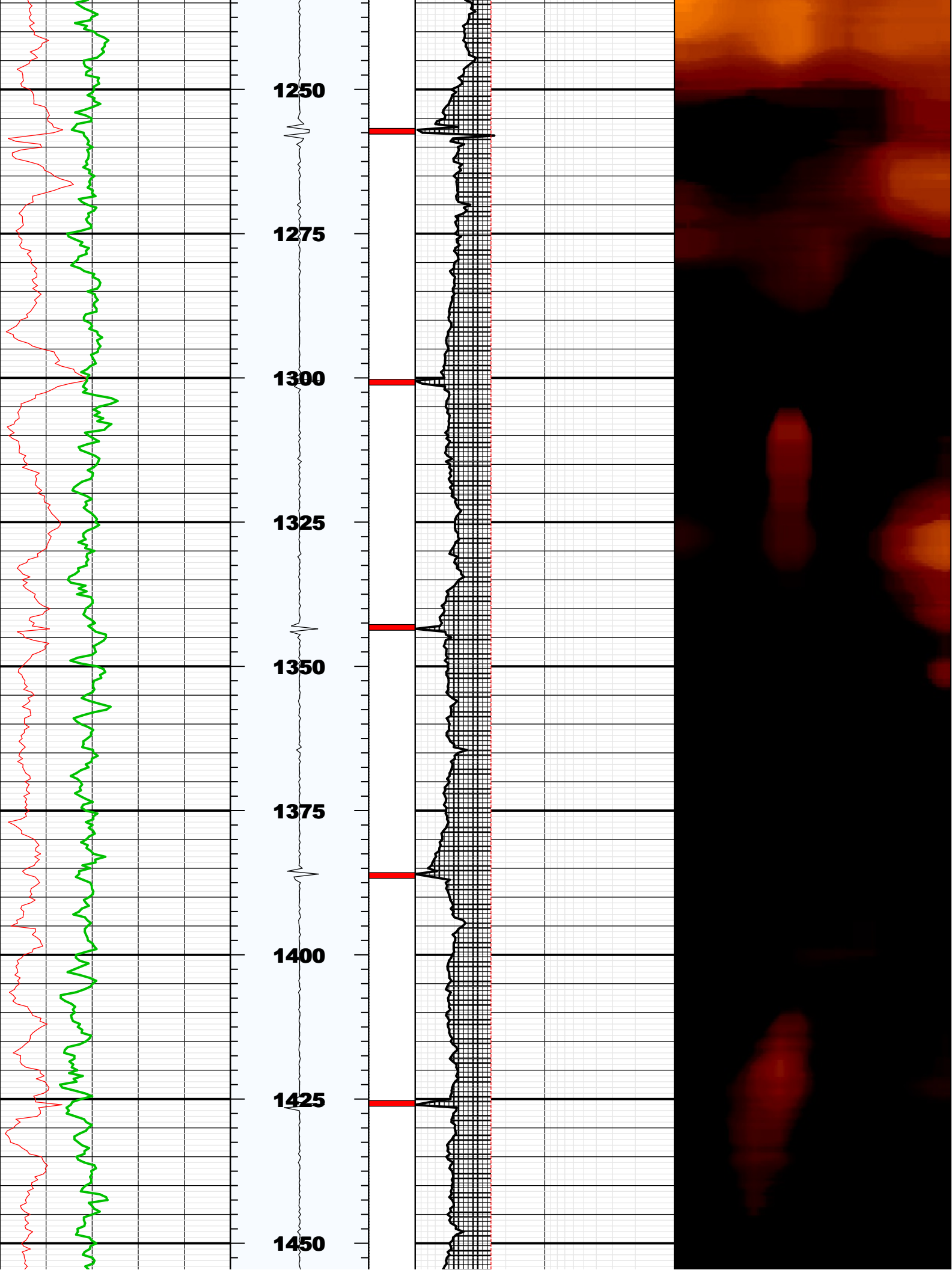


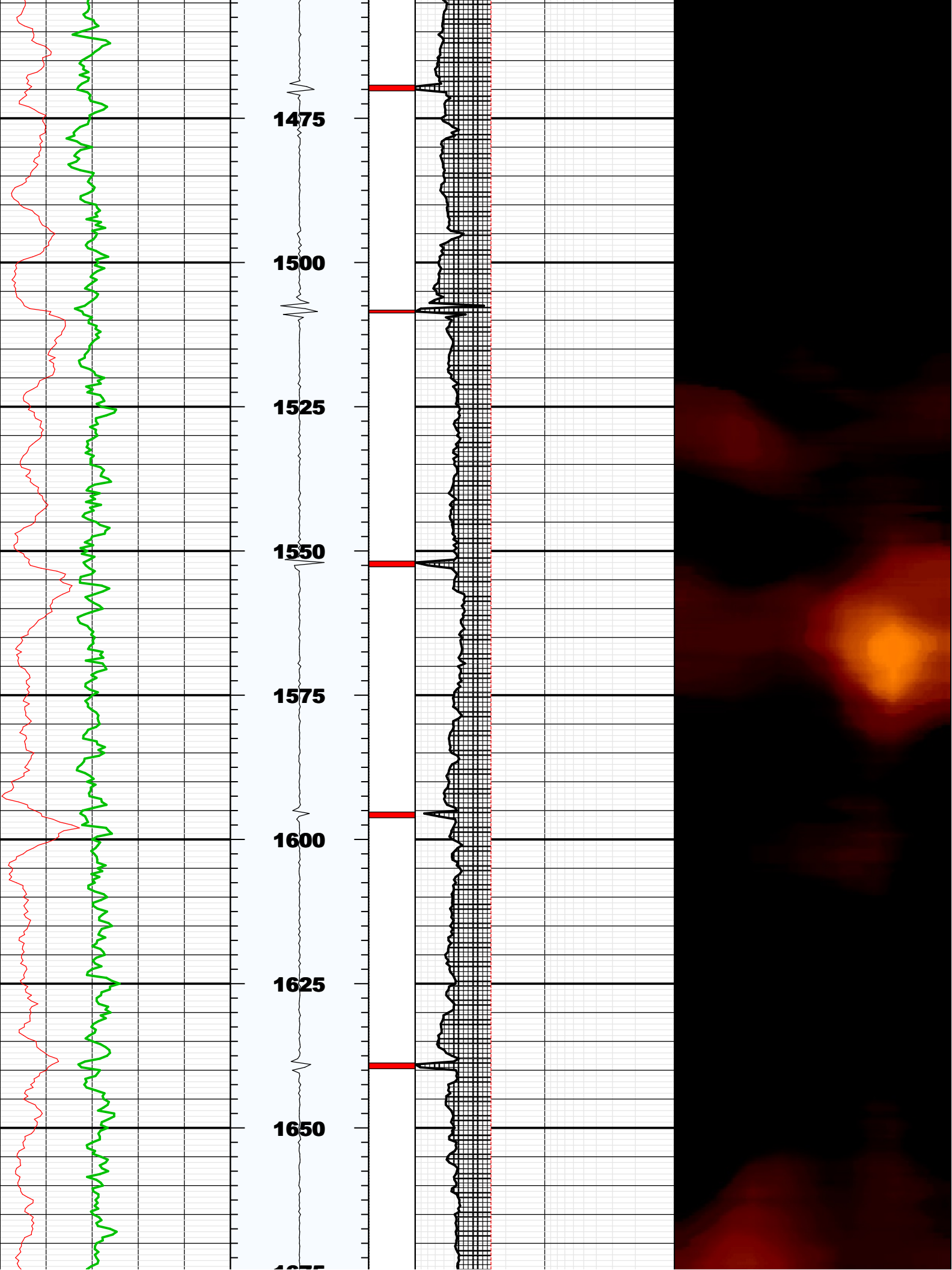


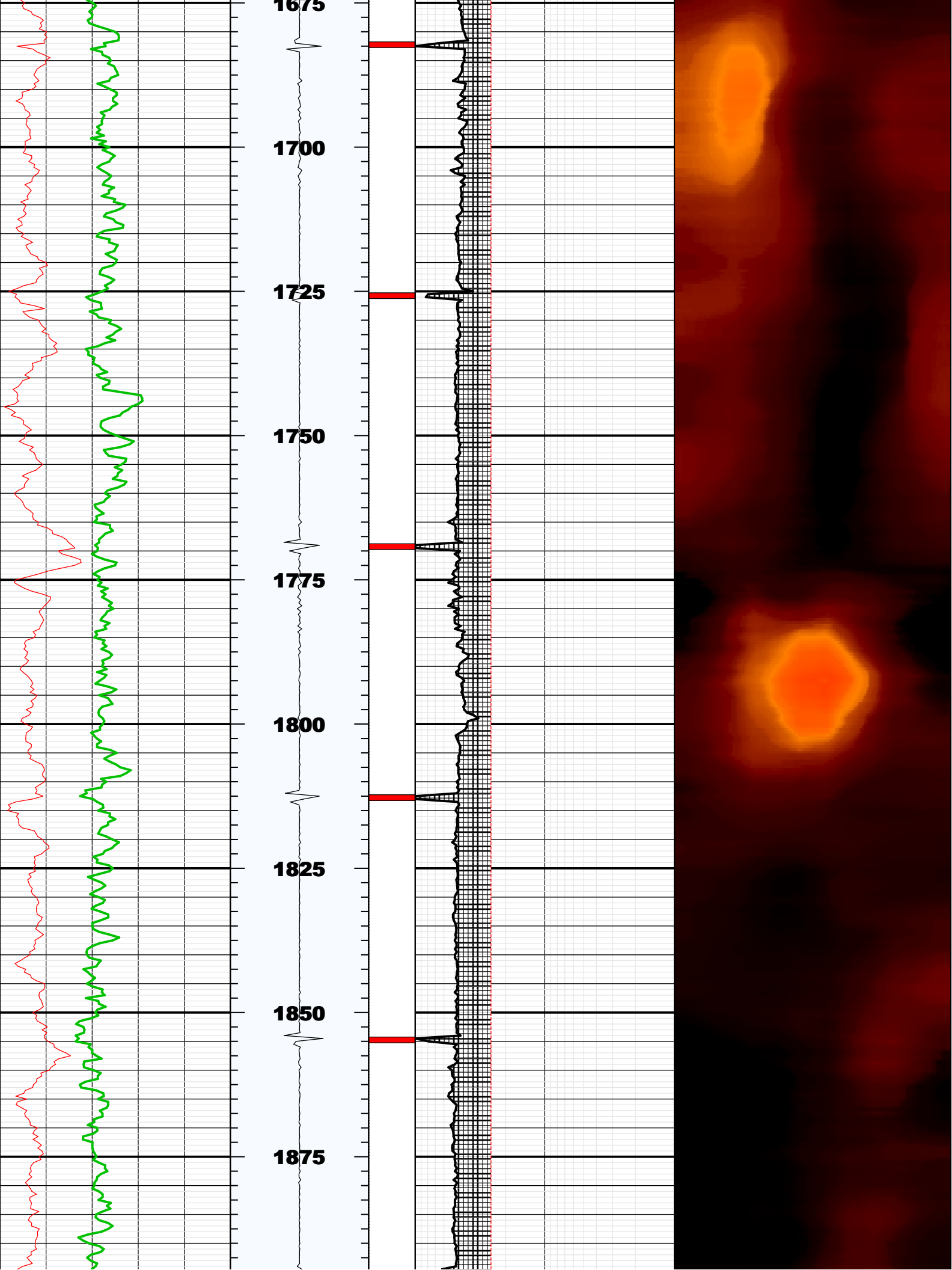


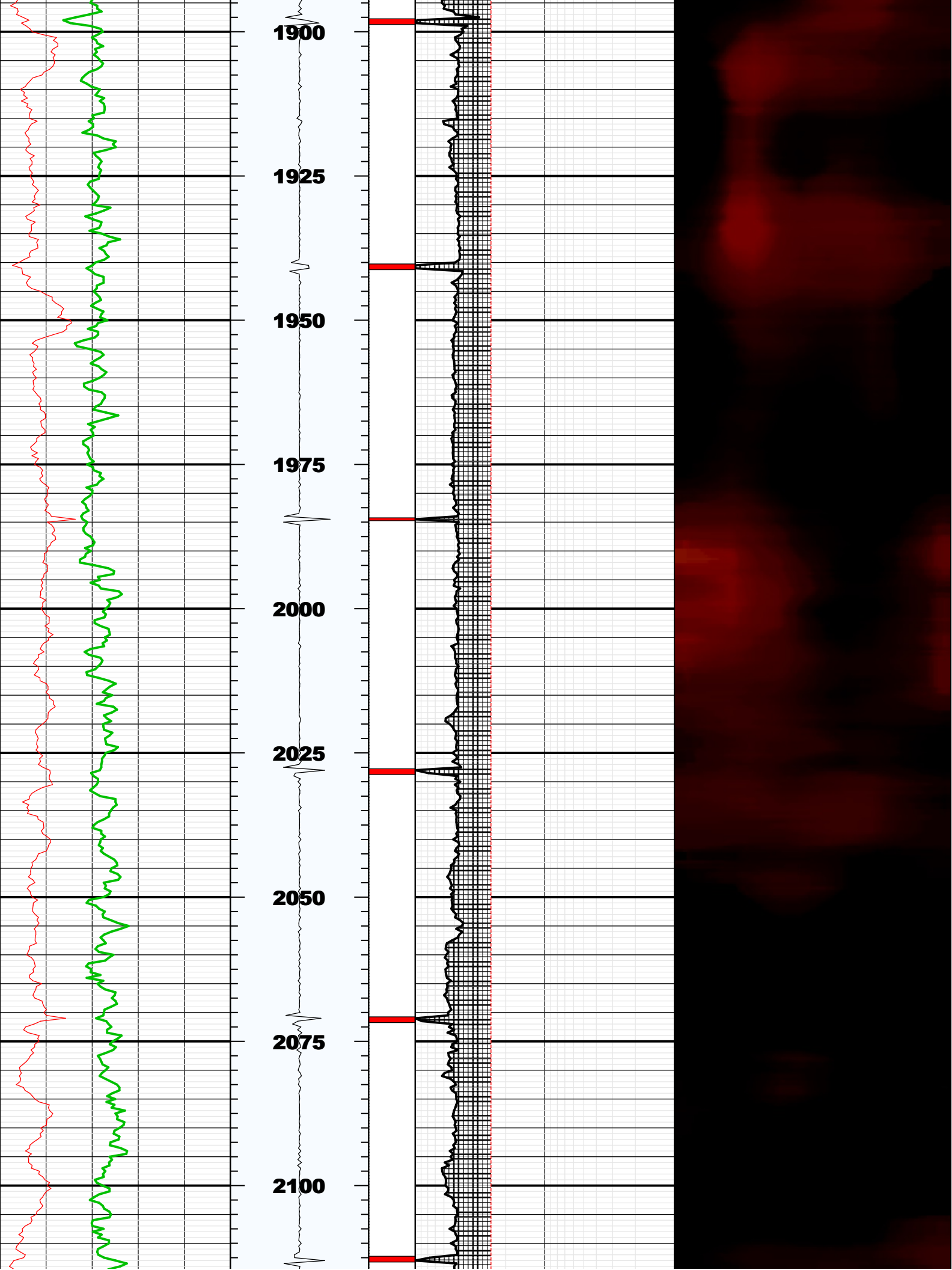


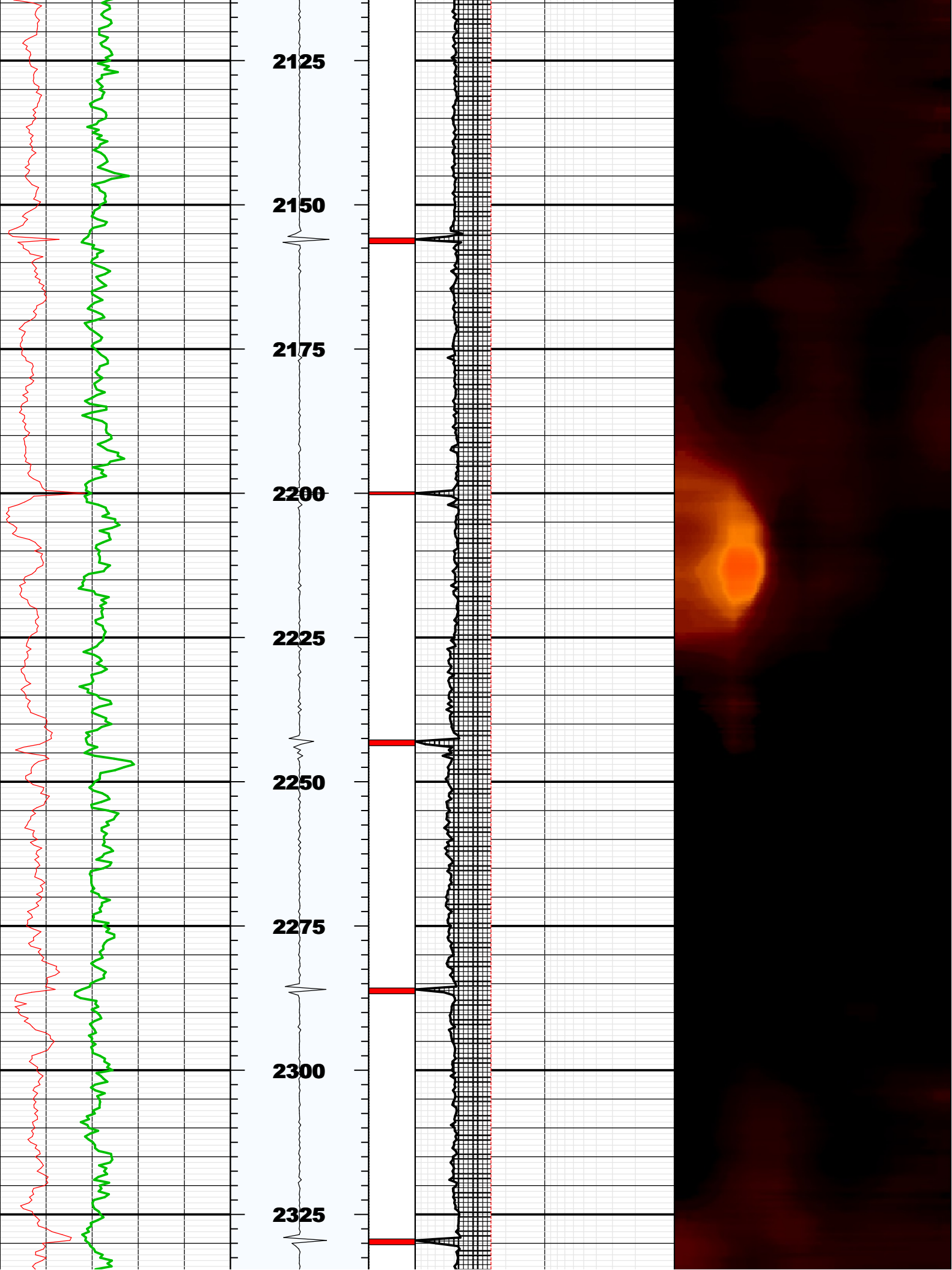


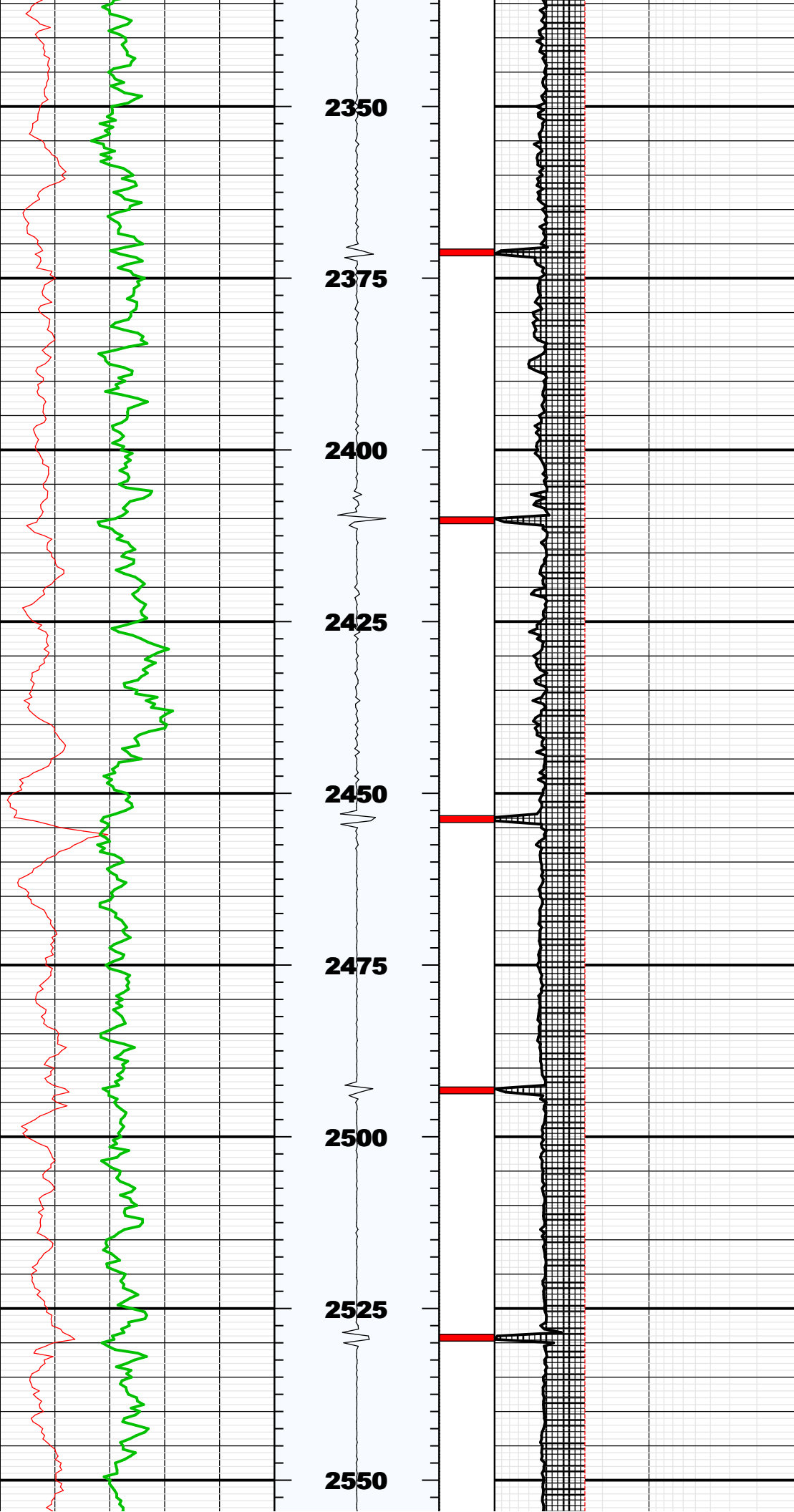


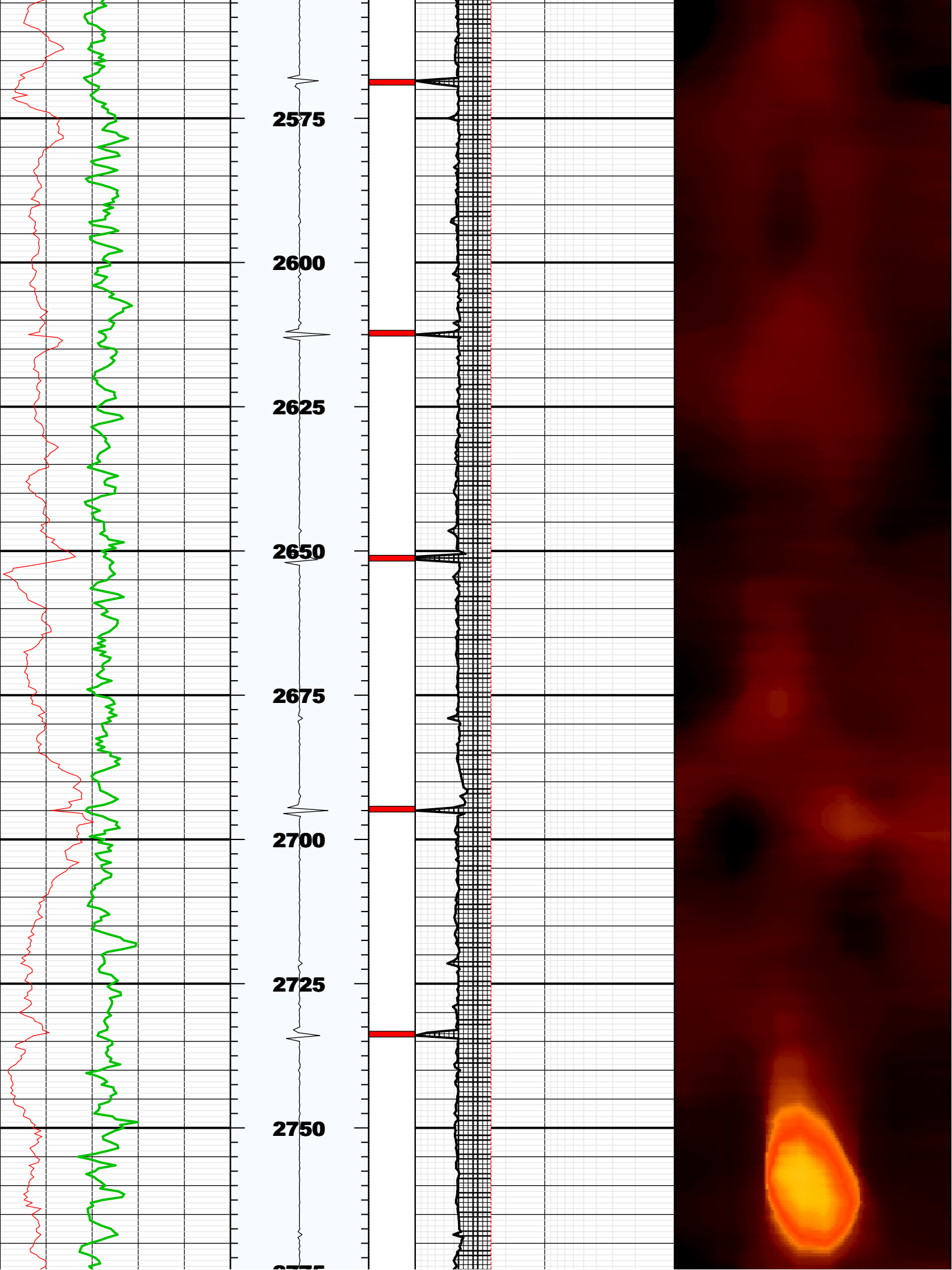


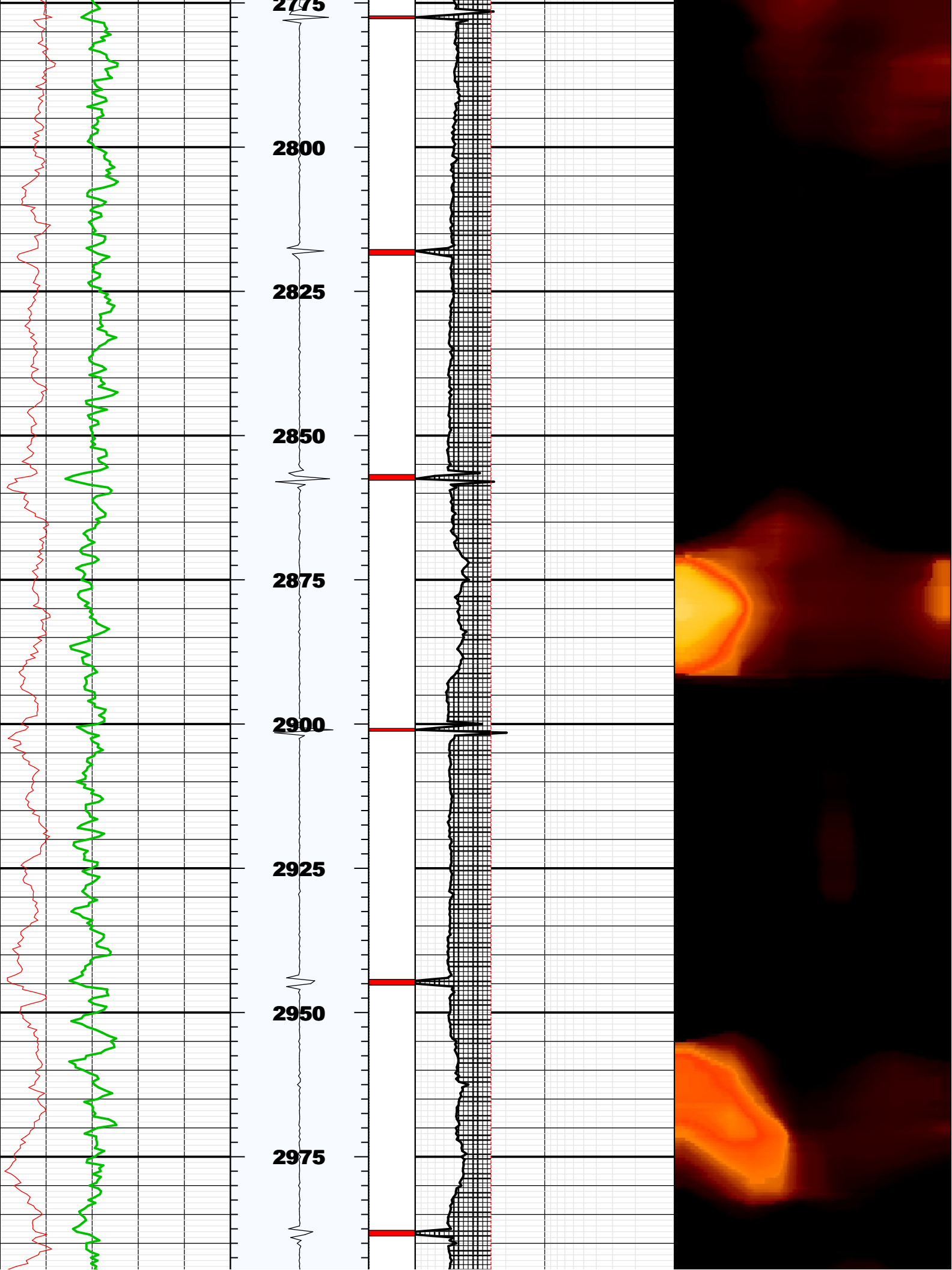


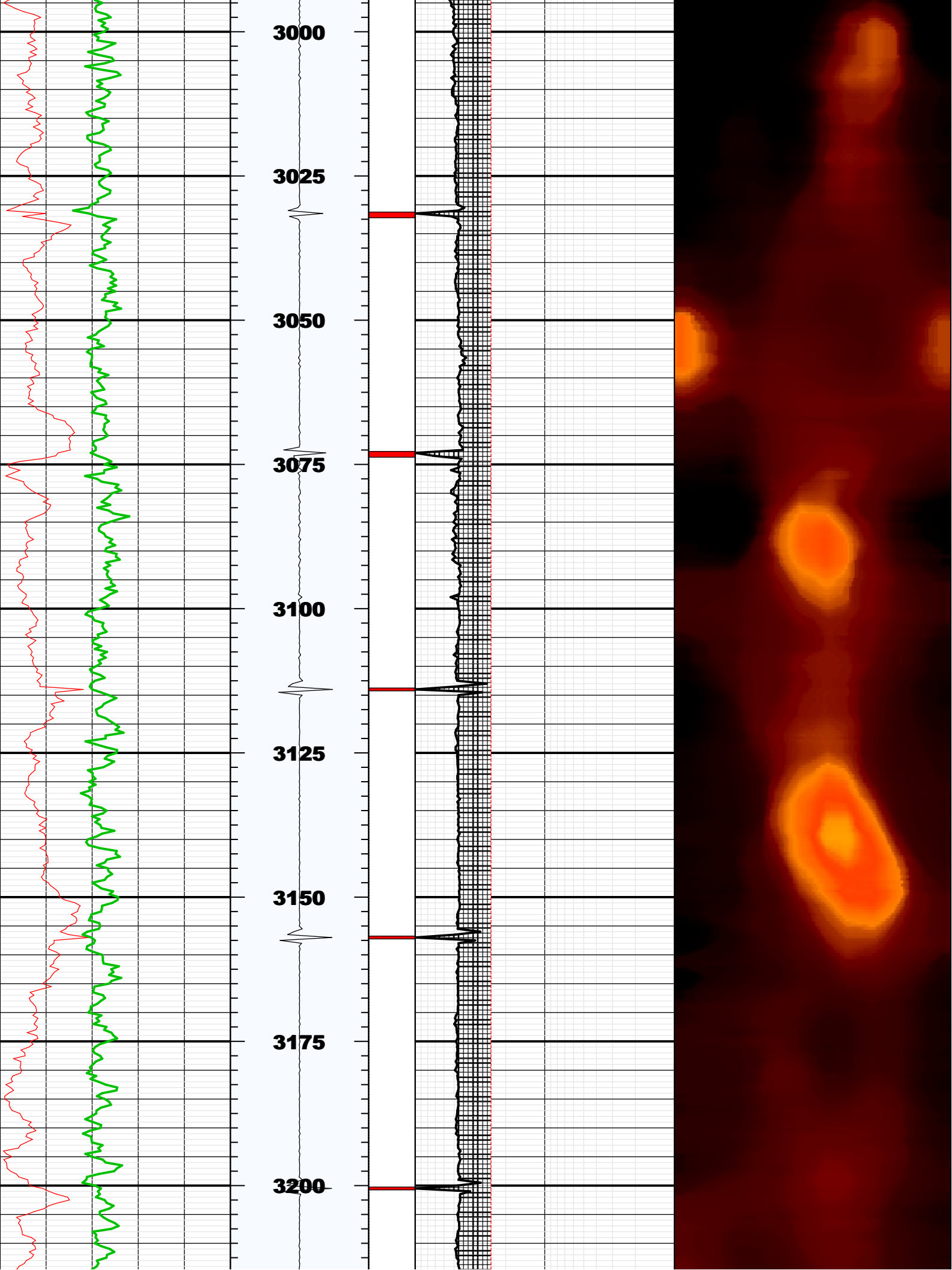


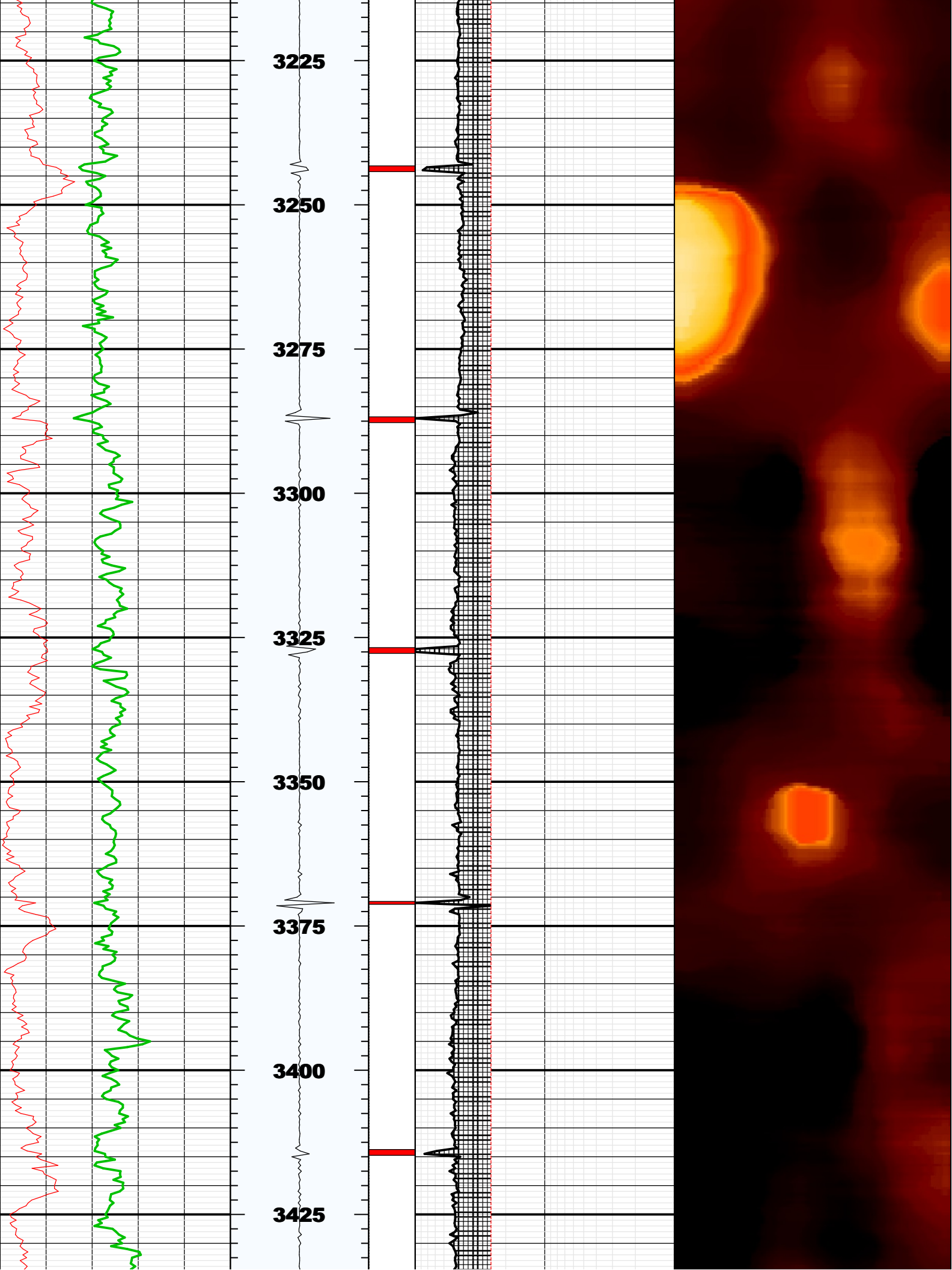


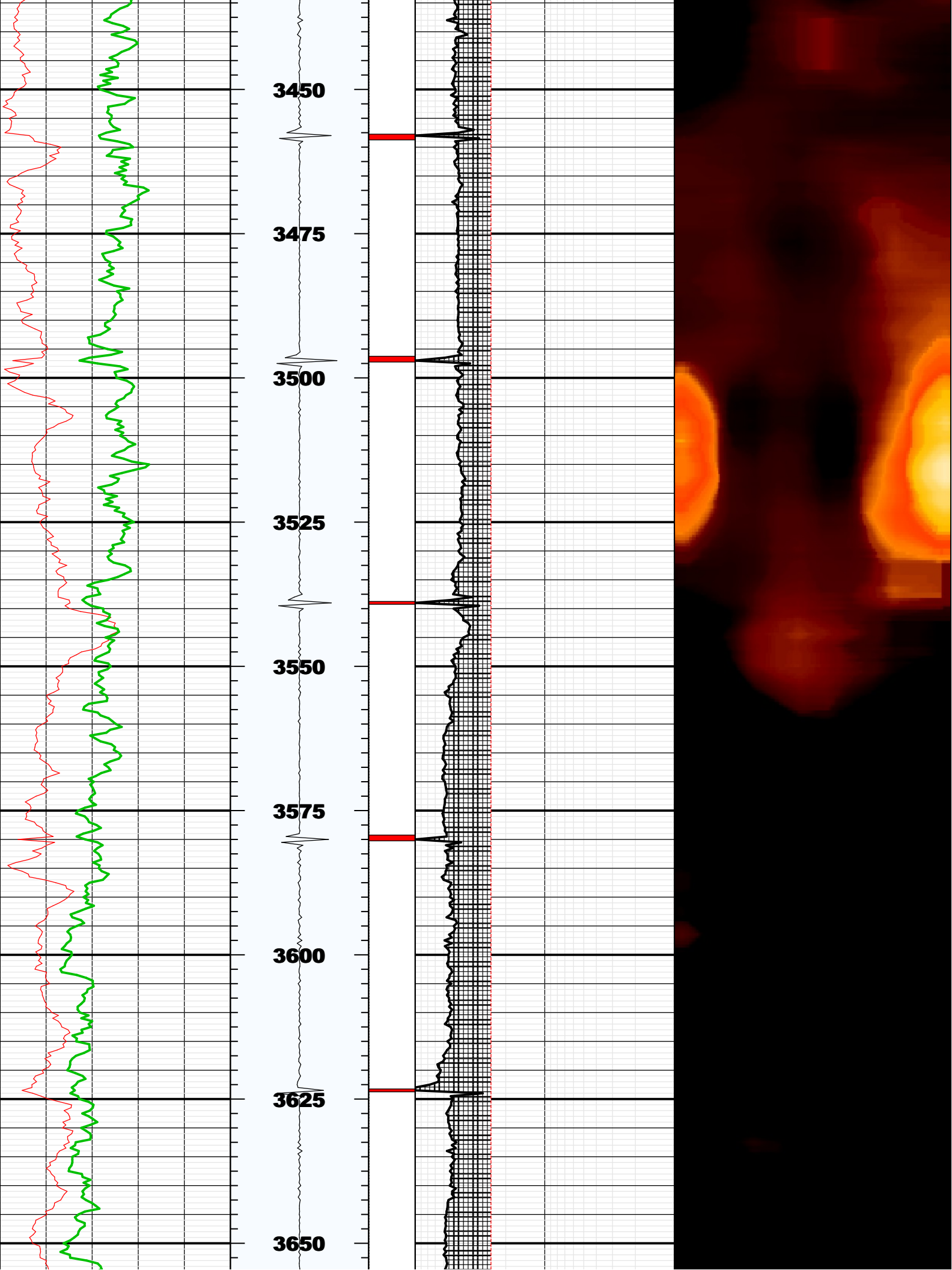


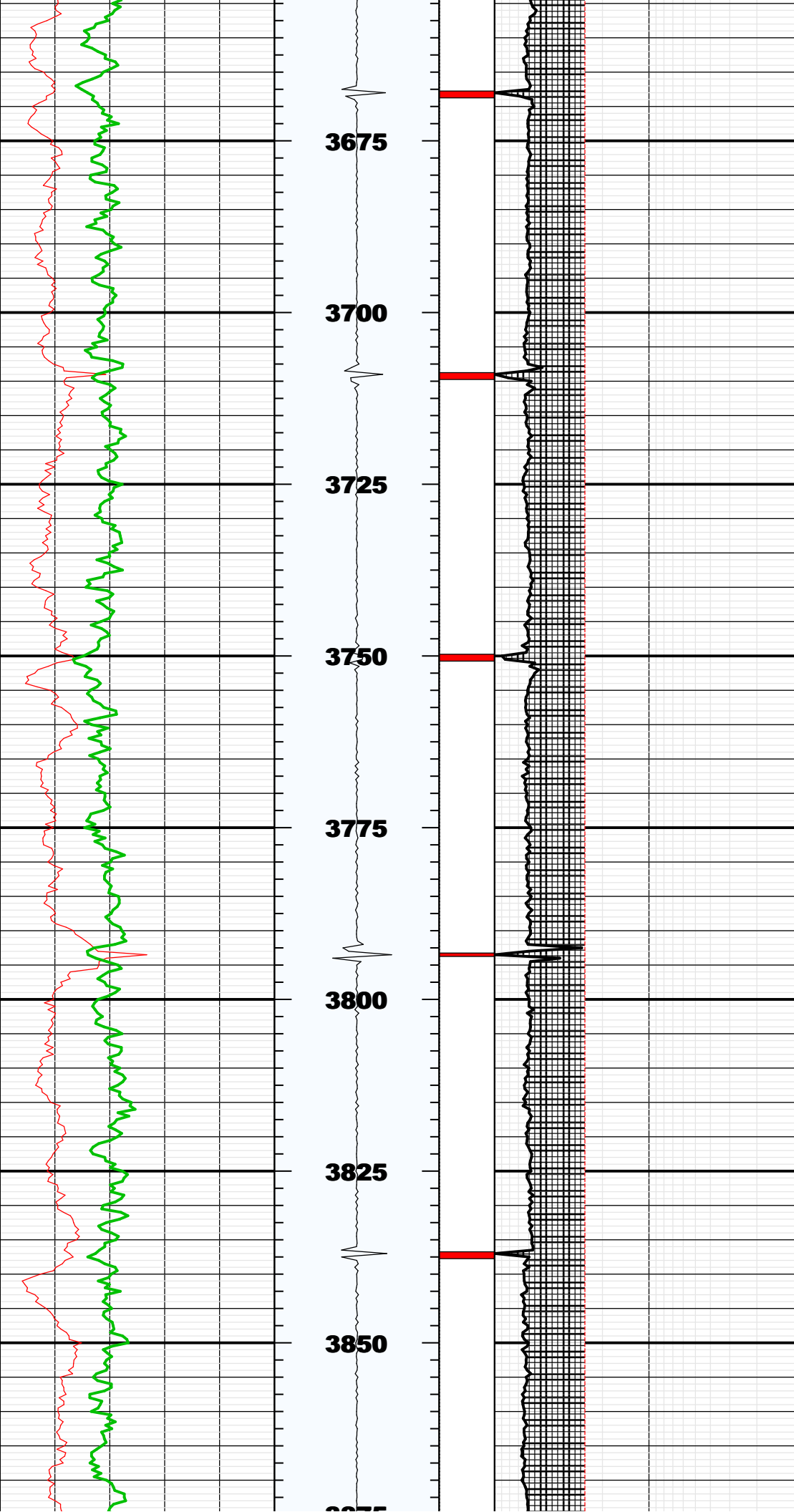


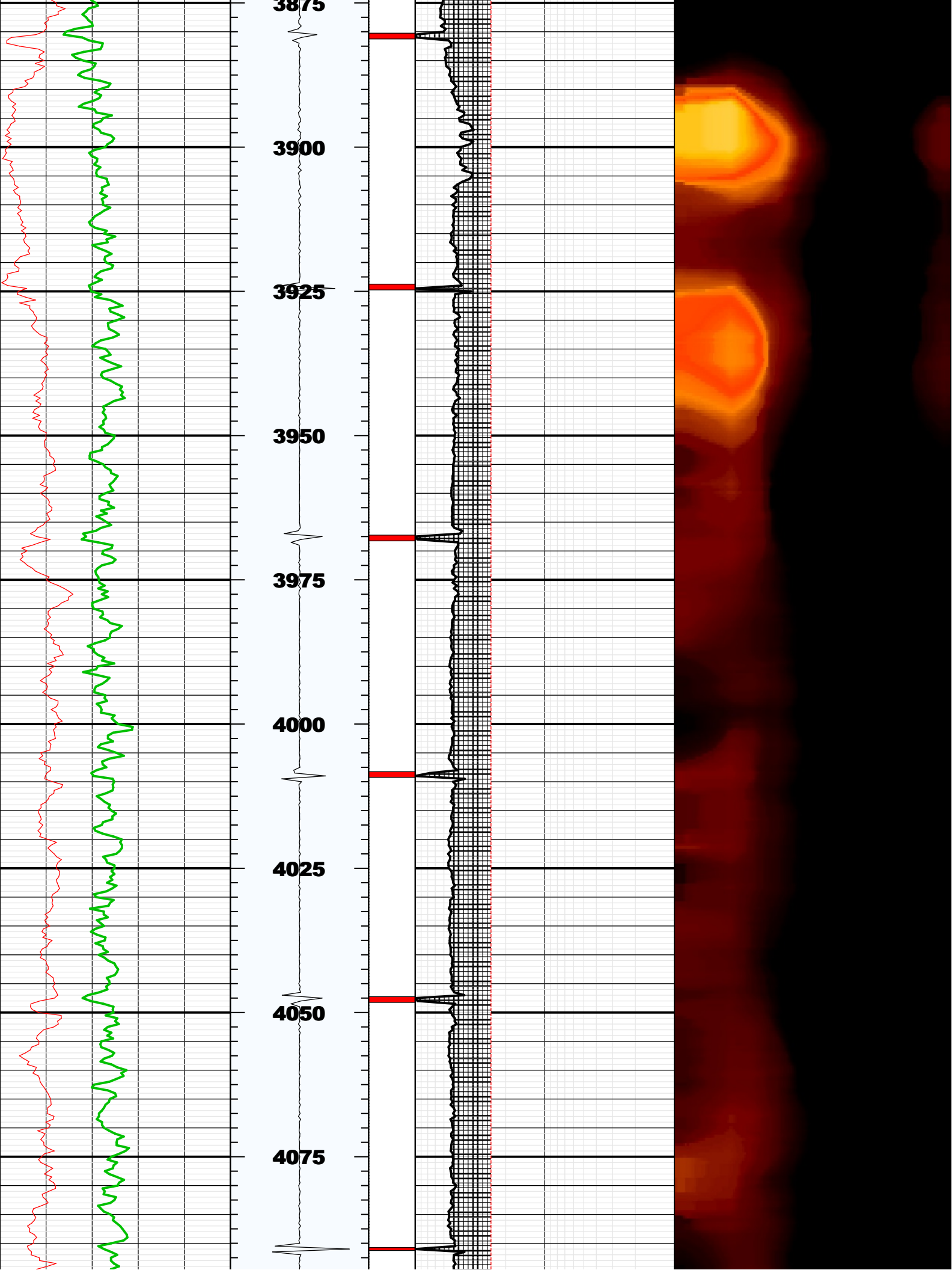


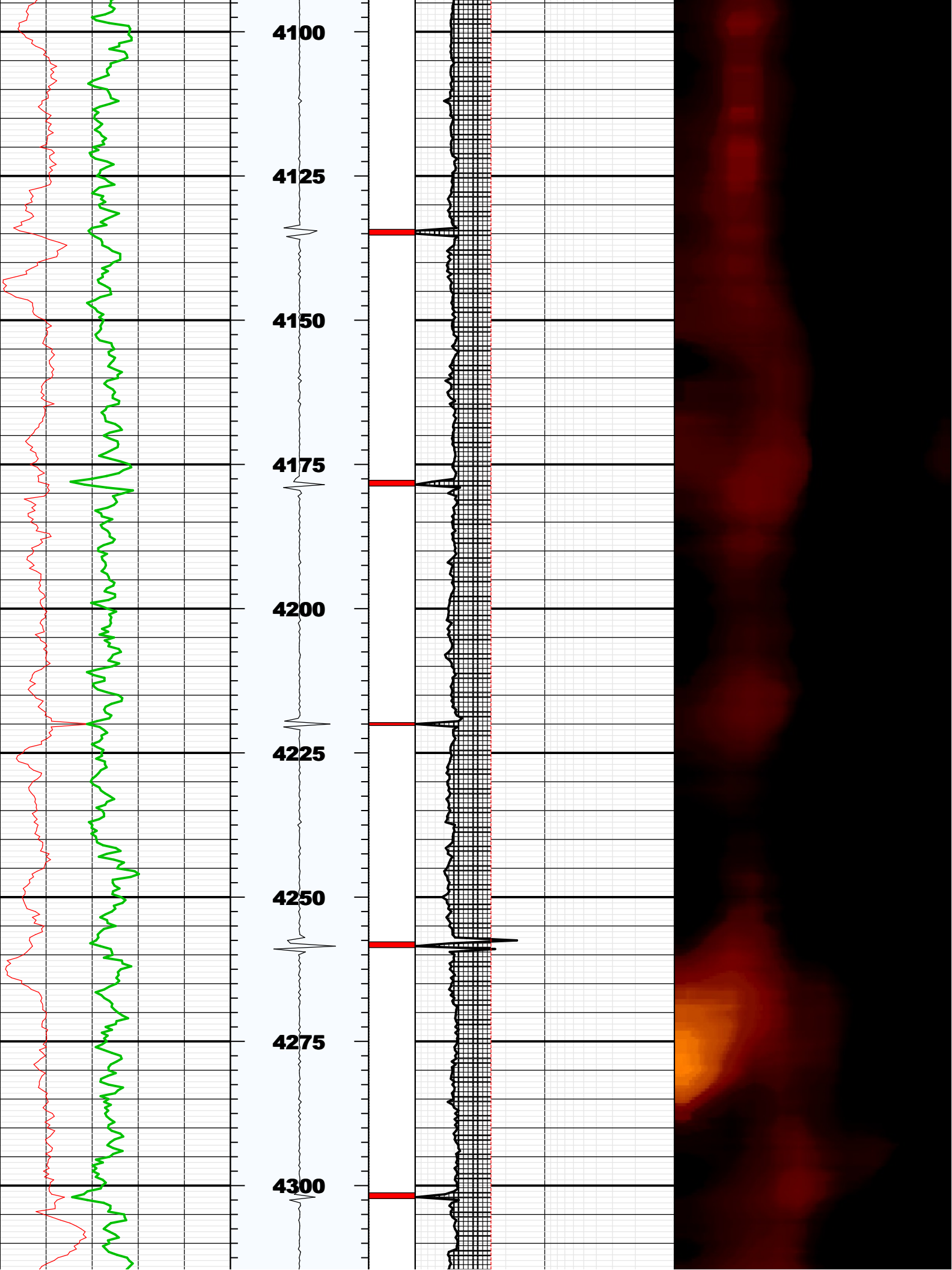


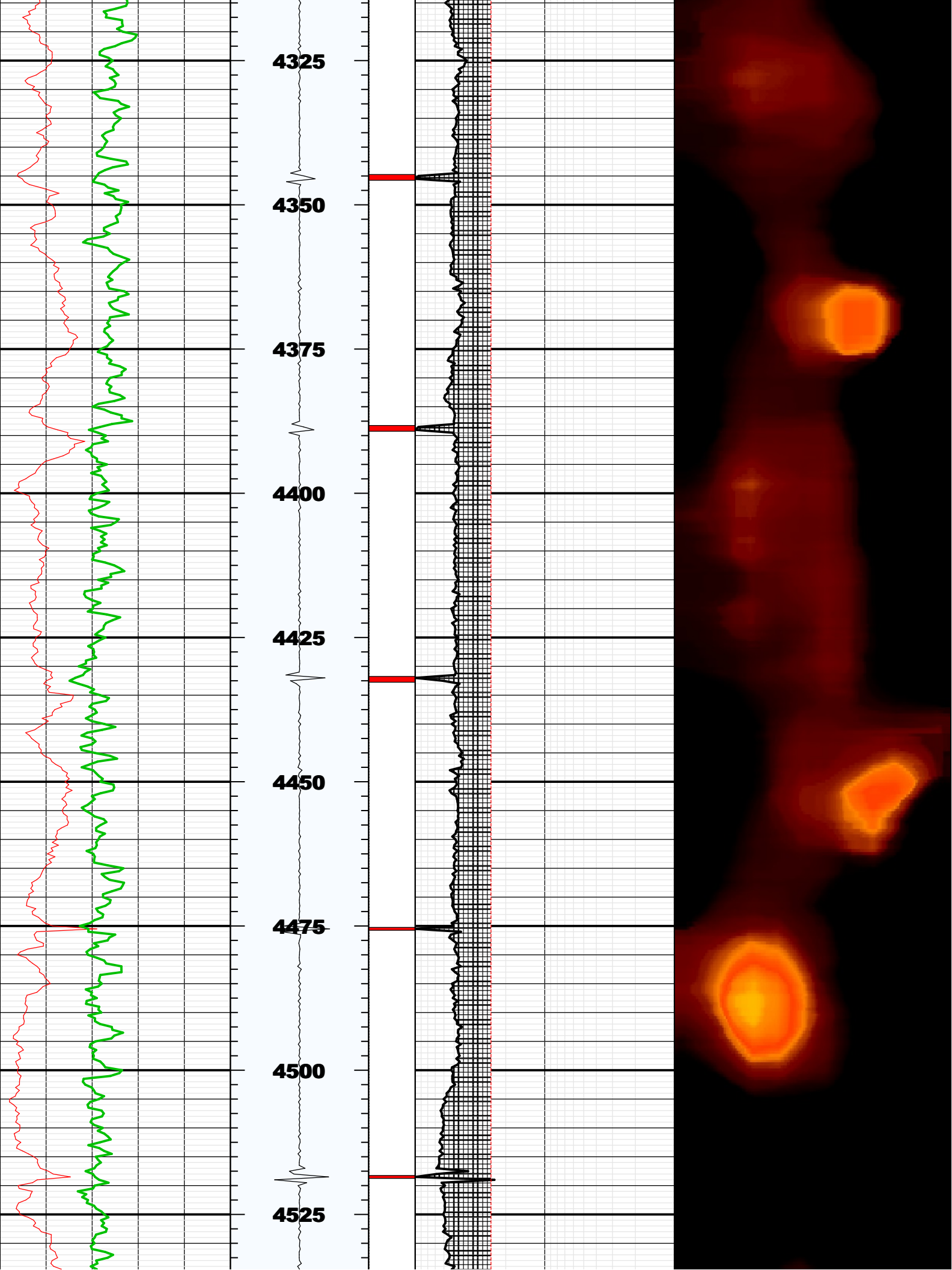


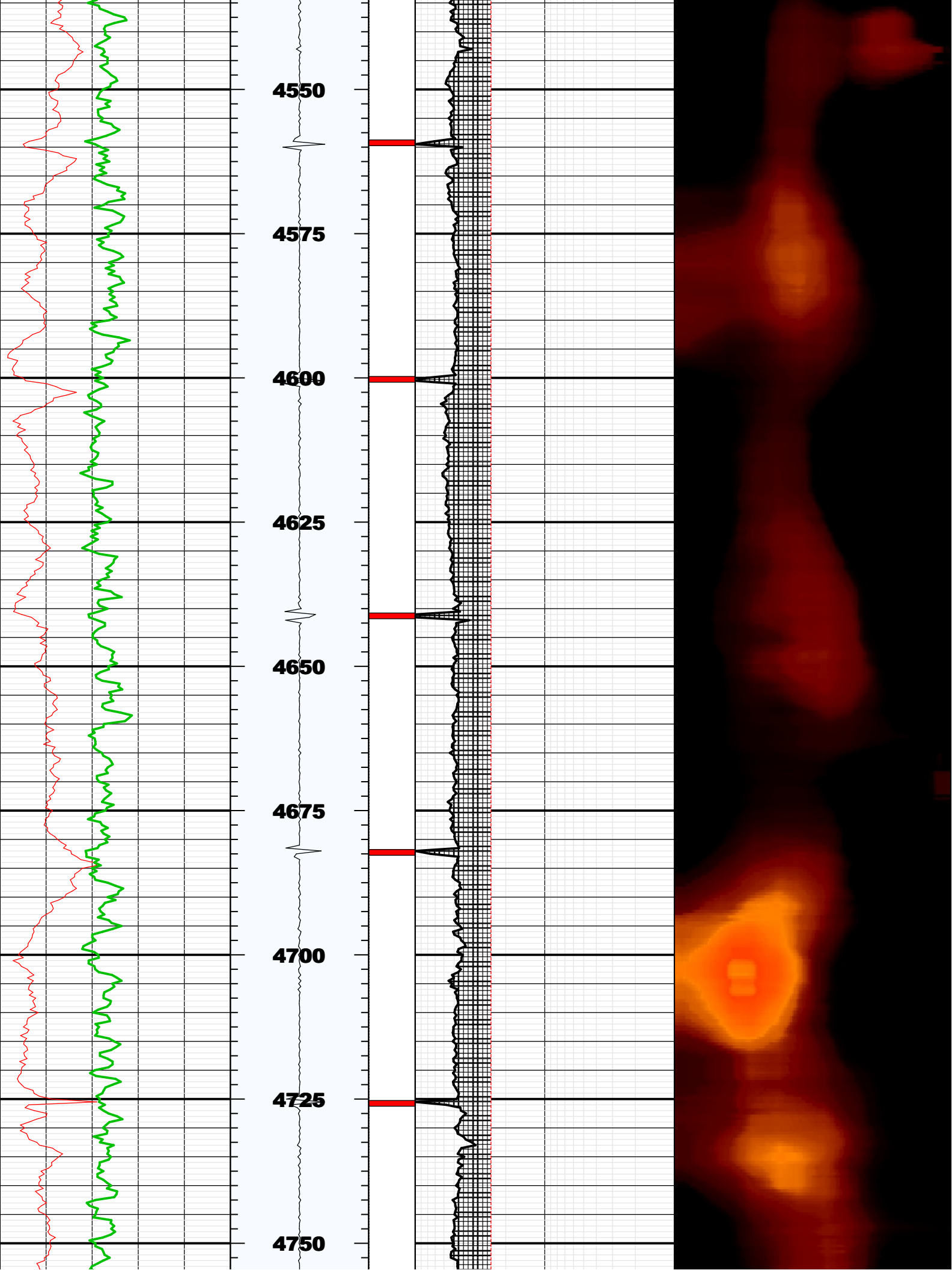


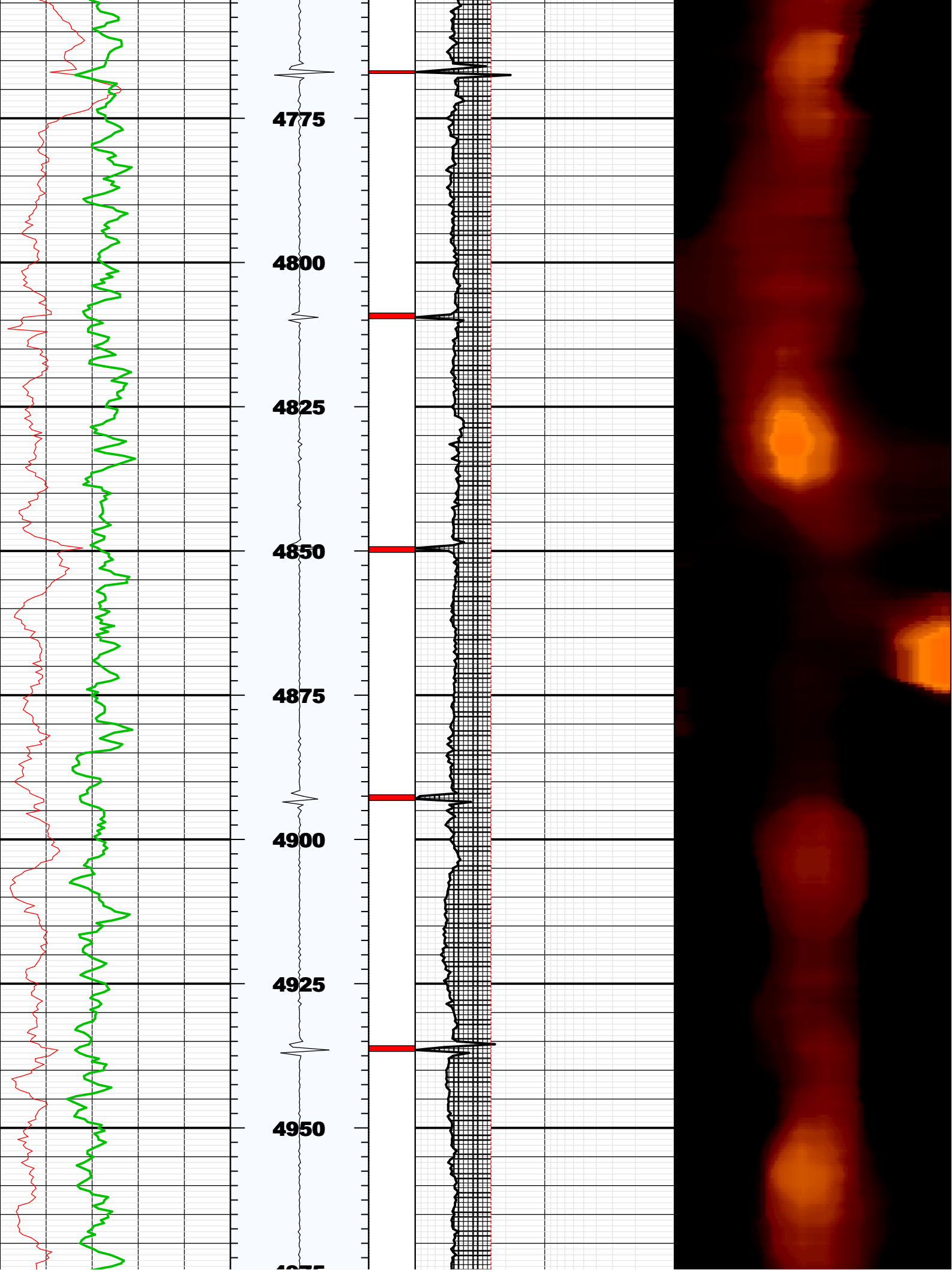


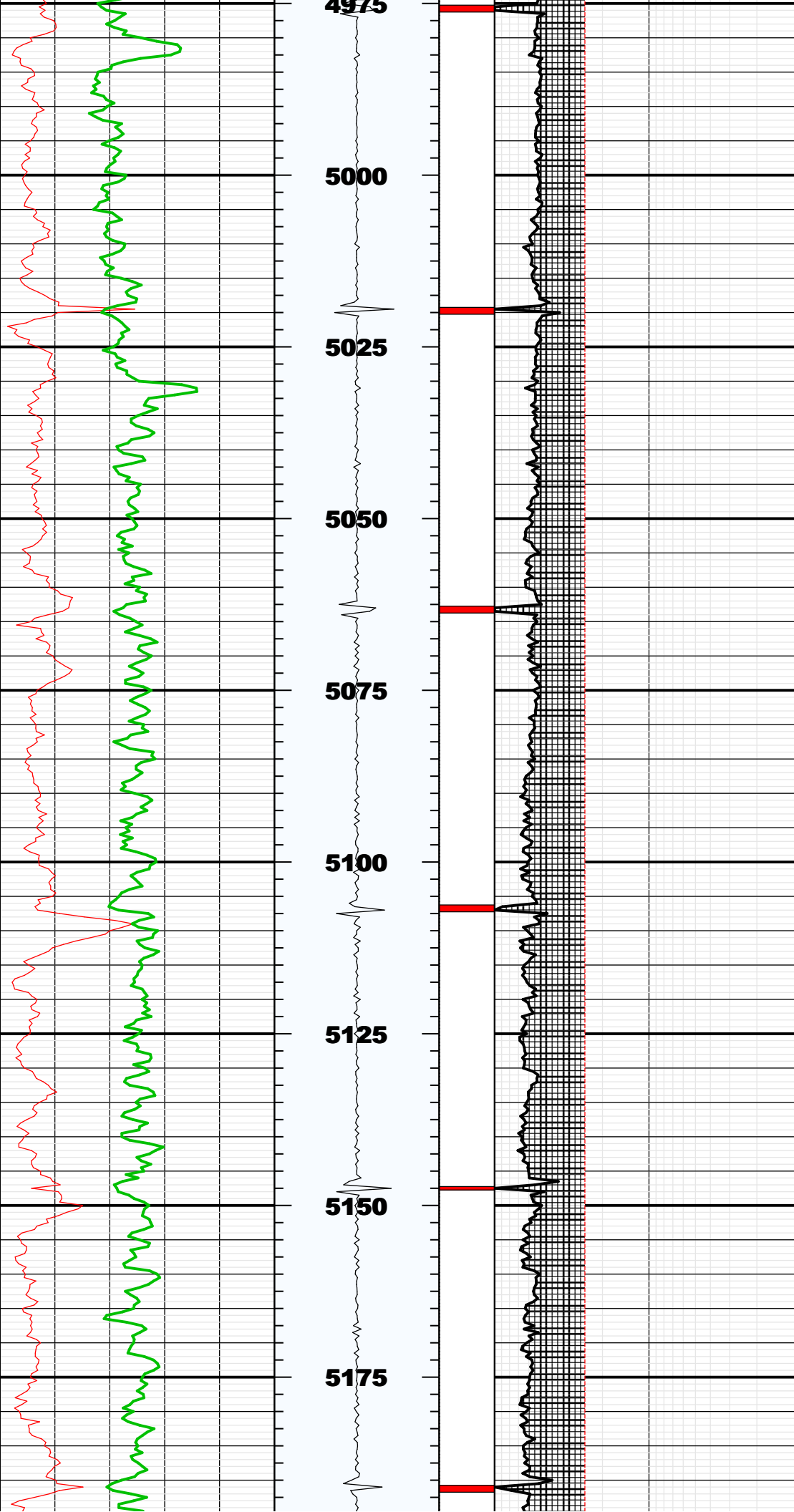


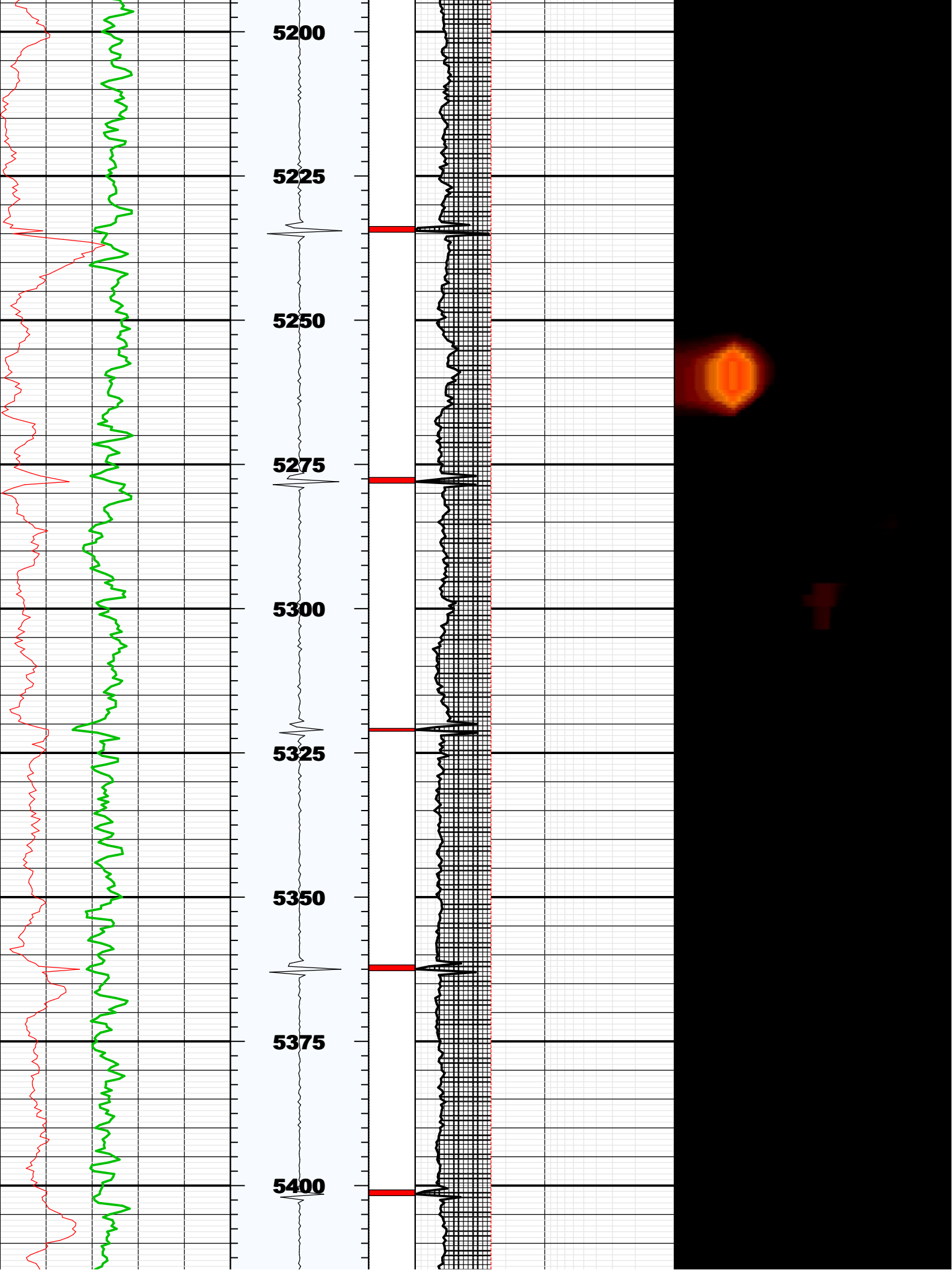


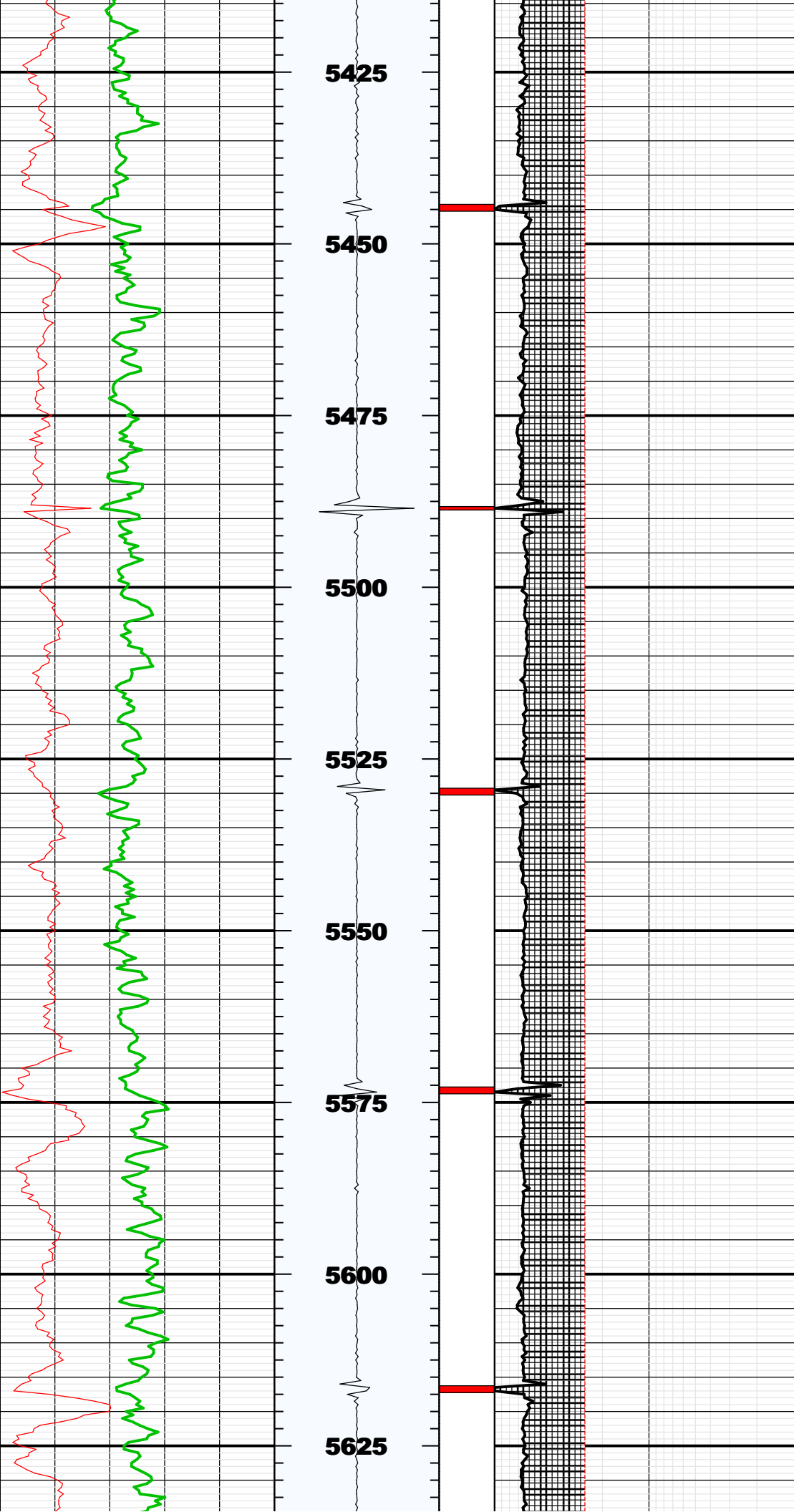


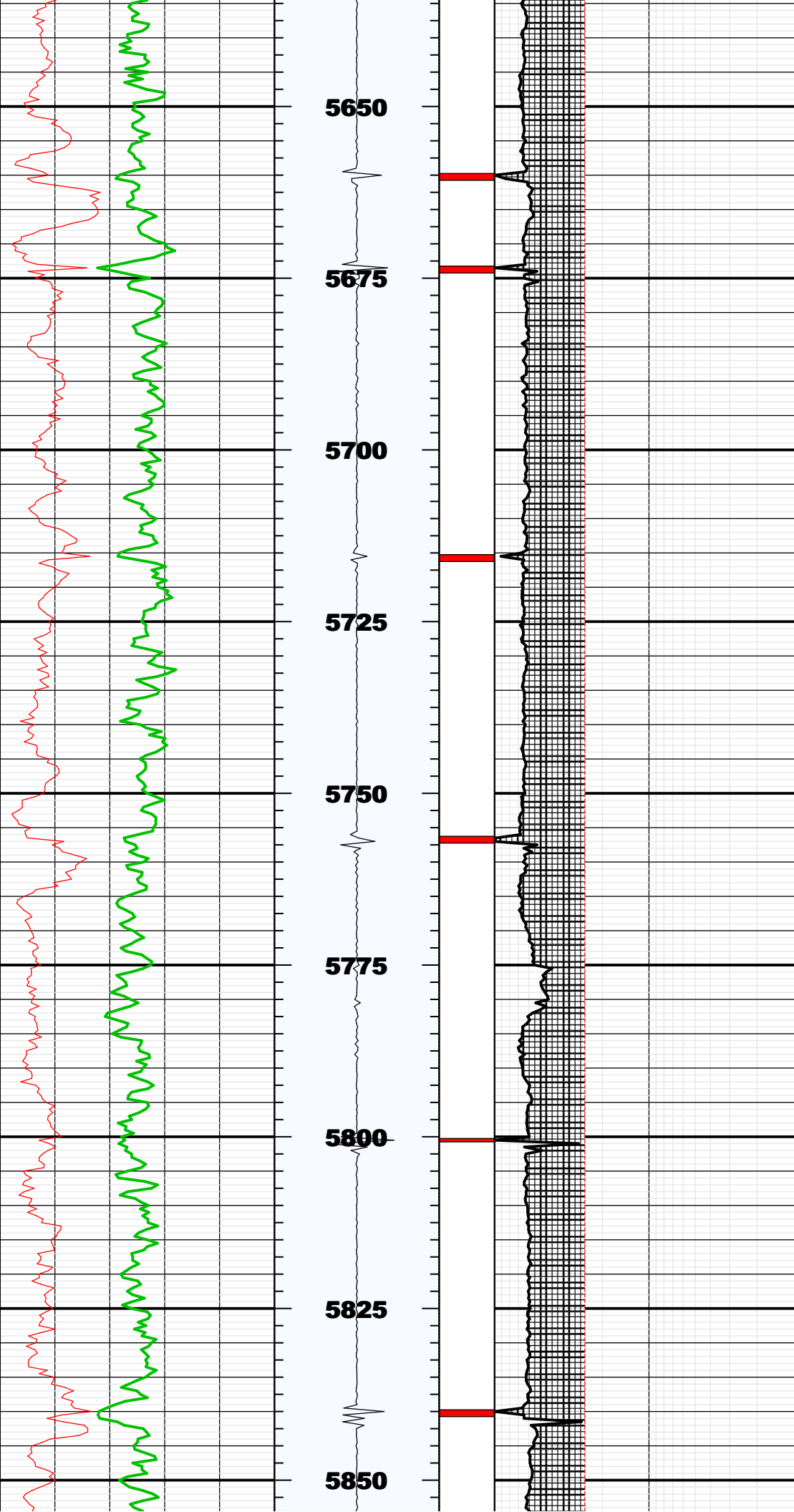


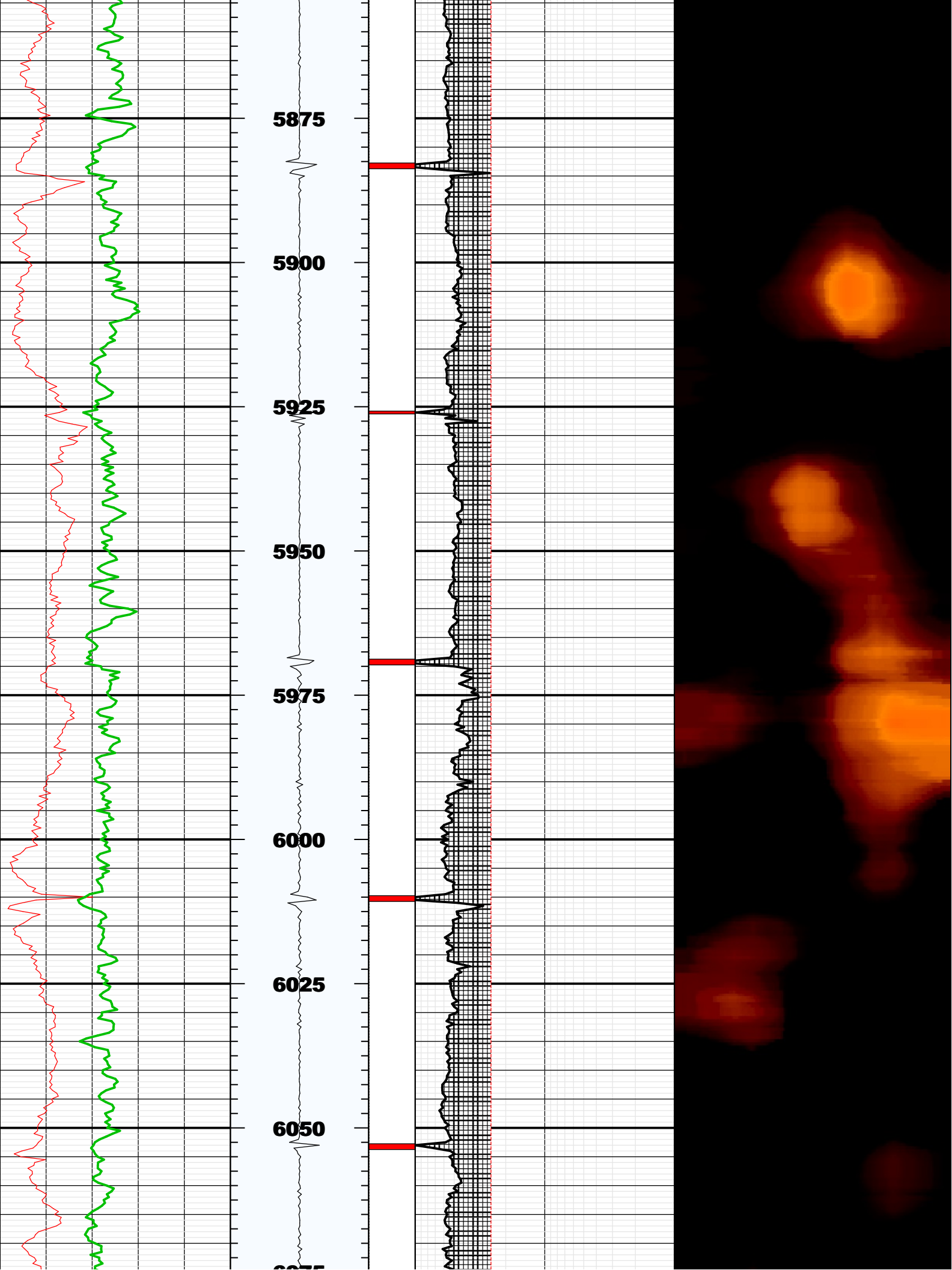


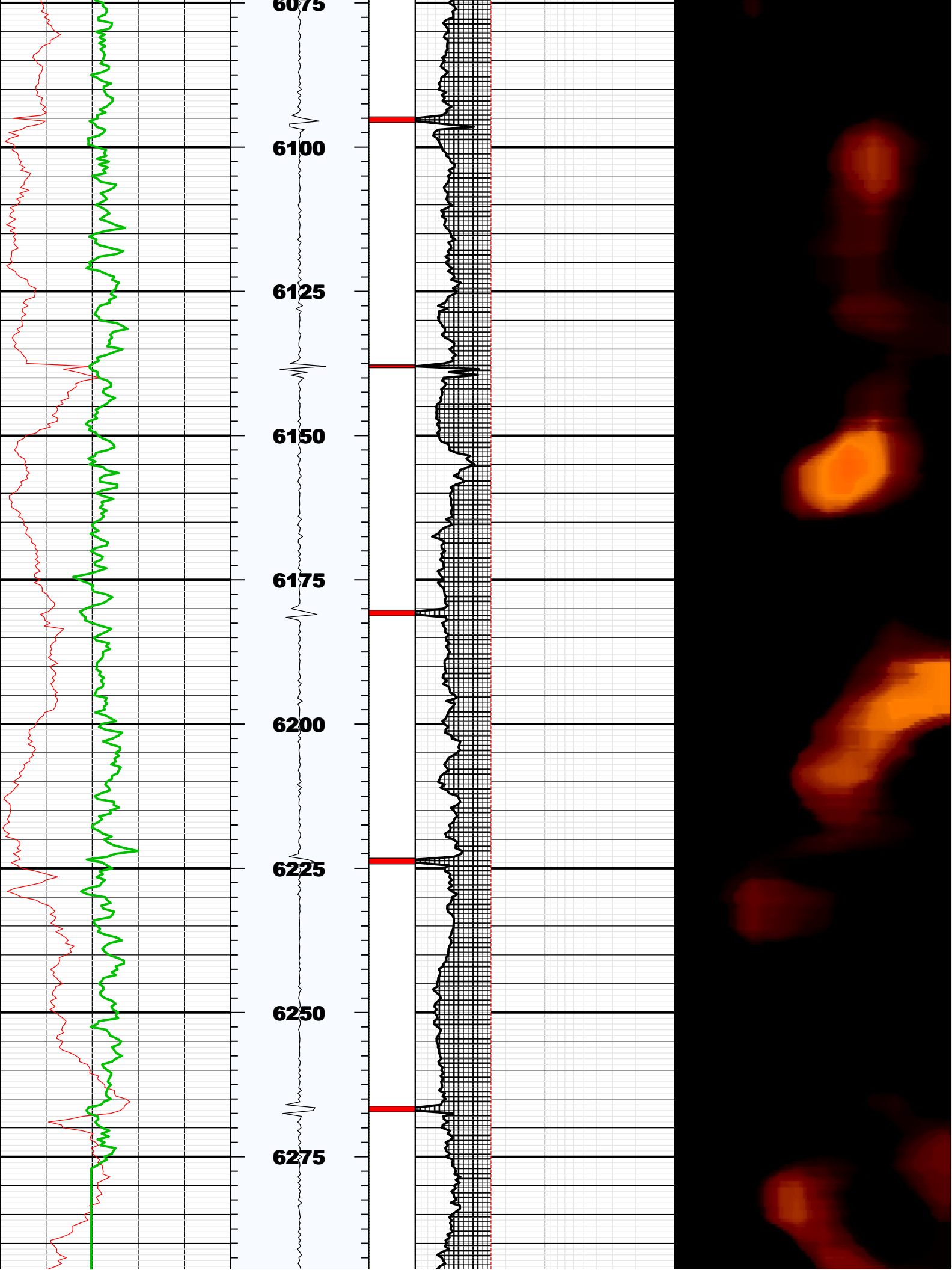










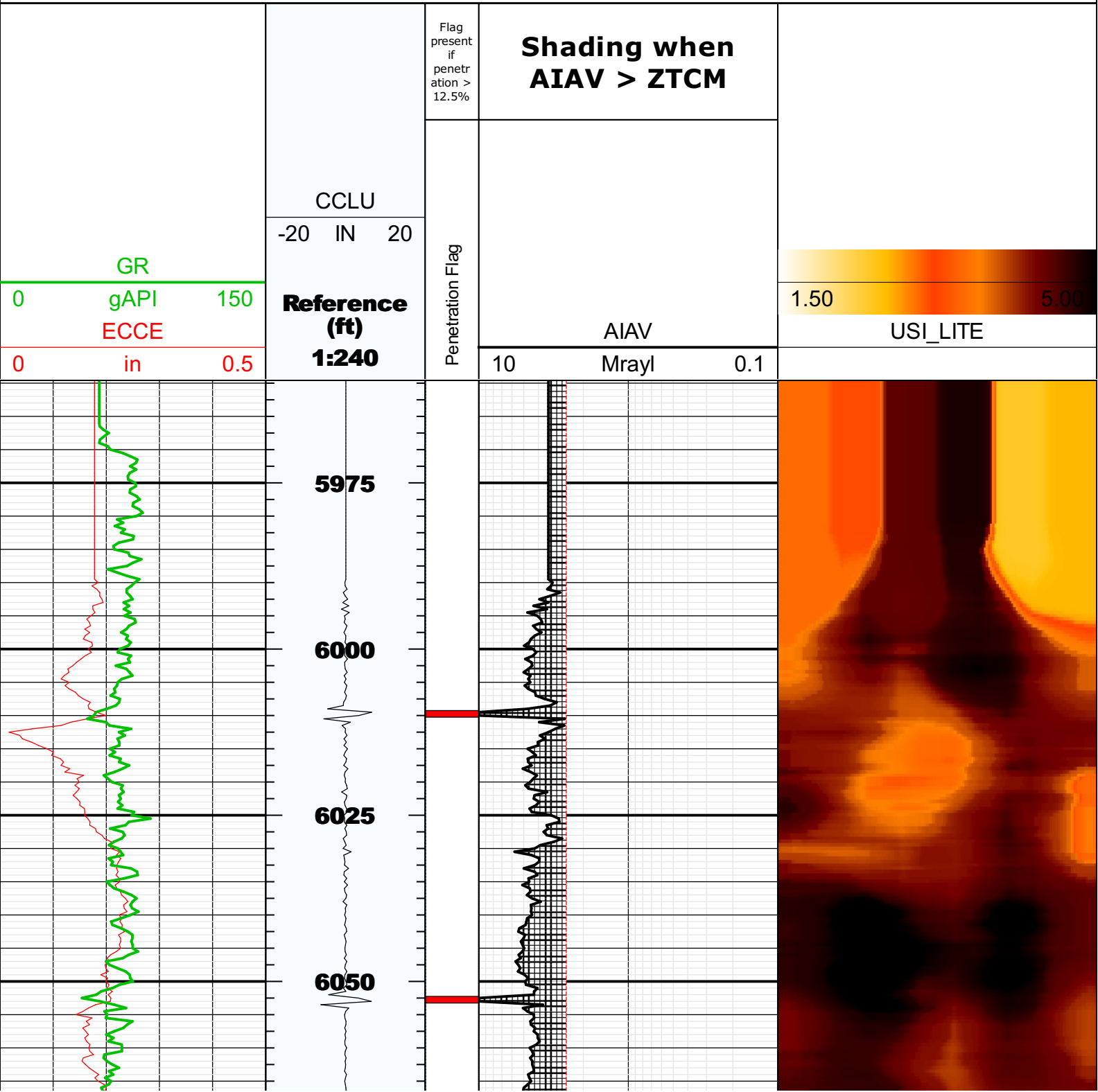


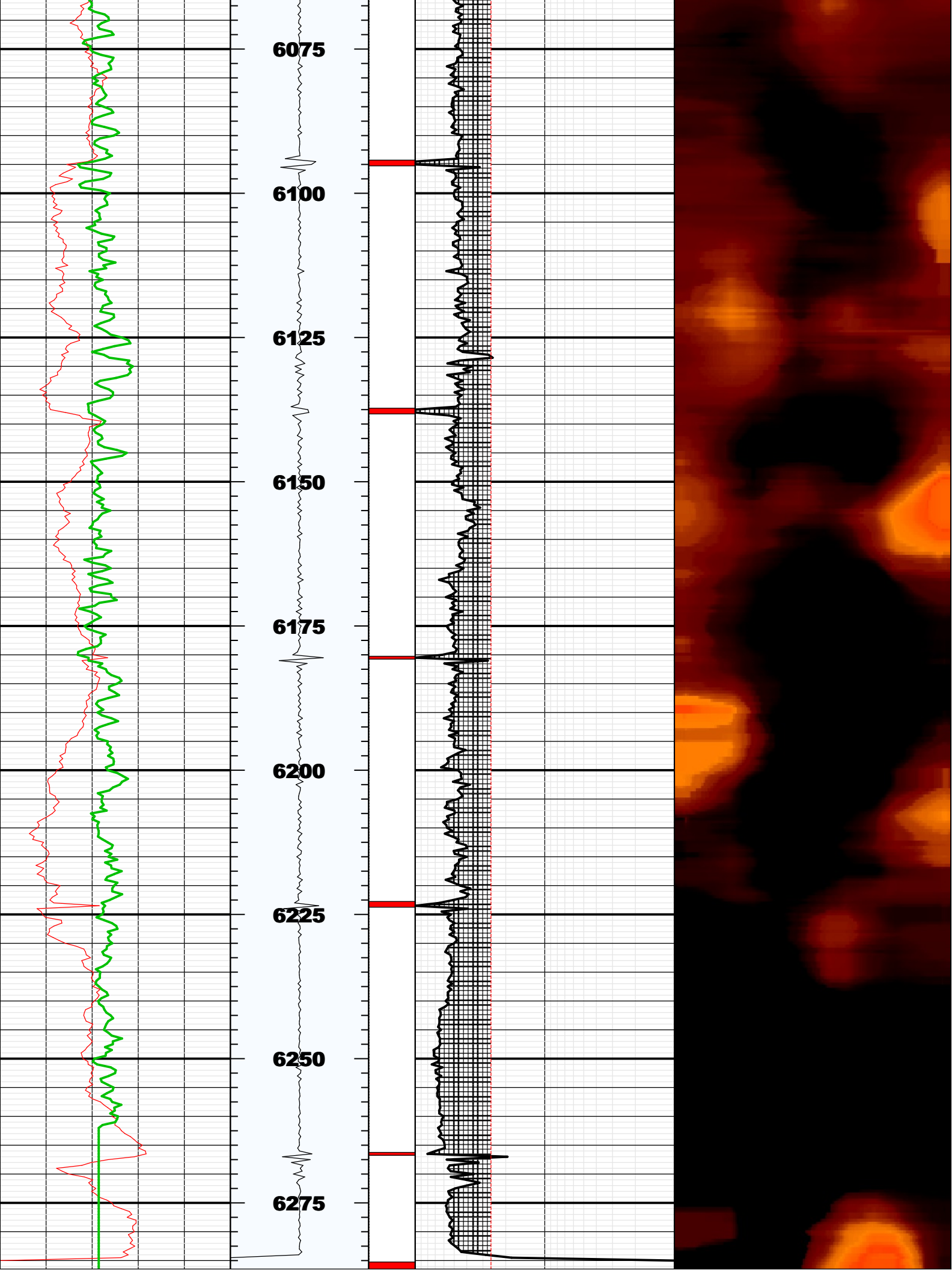


BS	8.75000	IN	Bit Size
CASG	P110		Casing Grade
CDIA	7.00000	IN	Casing Outer Diameter
CSID			
CSIZ	7.00000	IN	Current Casing Size
CWEI	26.00000	LB/F	Casing Weight
DFD	8.40000	LB/G	Drilling Fluid Density
DFVL	190.00000	US/F	Default Fluid Velocity
DO			
DOT	2.87400	IN	Diameter of Transducer Sensor
EMXV	50	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	33.86500	US	Window Begin Time
WINE	73.86501	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

