

Company: Noble Energy Inc

Well: McCaffrey State LD12 75 1BHN
Field: Wattenberg
County: Weld State: Colorado

County: Weld			
Field: Wattenberg			
Location: SHL 250' FSL & 2163' FEL			
Well: McCaffrey State LD12 75 1BHN			
Company: Noble Energy Inc			
USI-LITE	LOCATION		
	Permanent Datum: Log Measured From: Drilling Measured From:		
	GL KB KB		
	Elev: K.B. 4657.0 F G.L. 4633.0 F D.F. 4656.0 F		
	API Serial No. 05-123-39654		
	Section 1		
	Township 9N		
	Range 58W		
	Logging Date 20-Dec-2014		
	Run Number Run 1		
Depth Driller 6000.0 F			
Schlumberger Depth 6000.0 F			
Bottom Log Interval 5650.0 F			
Top Log Interval 70.0 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 6000.0 F			
Casing Size 7.00 IN			
Weight 26.00 LB/F			
Grade P110			
From 0.0 F			
To 5797.0 F			
Max Recorded Temp 211.0			
Logger on bottom (date) 20-Dec-2014			
Location Fort Morgan CO			
Recorded By Max Pace			
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: Calibration Date: Calibrator Serial Number: Number Of Calibration Points: Calibration RMS: Calibration Peak Error:	Serial Number: Length: 22000.00000

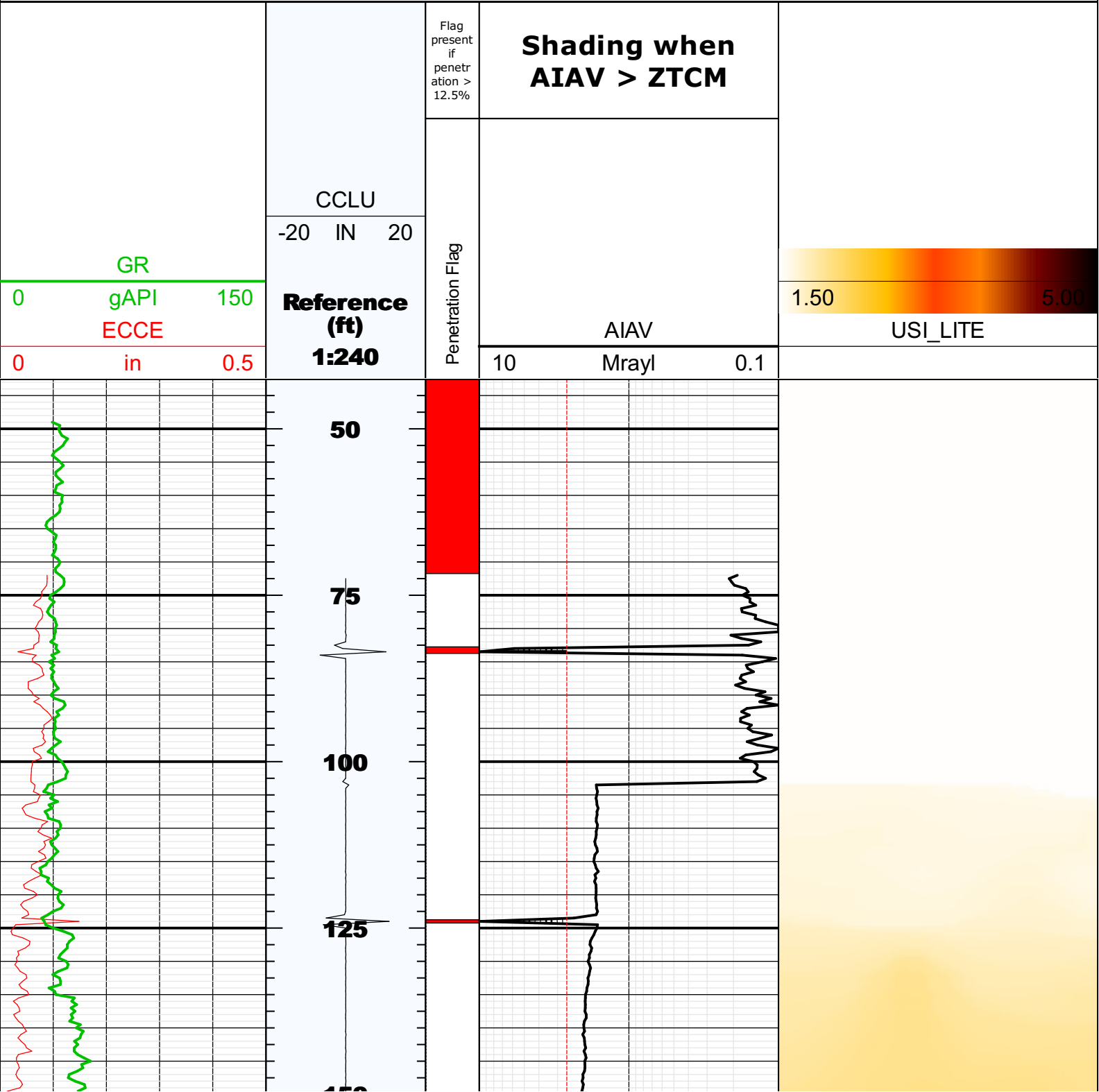
DISCLAIMER

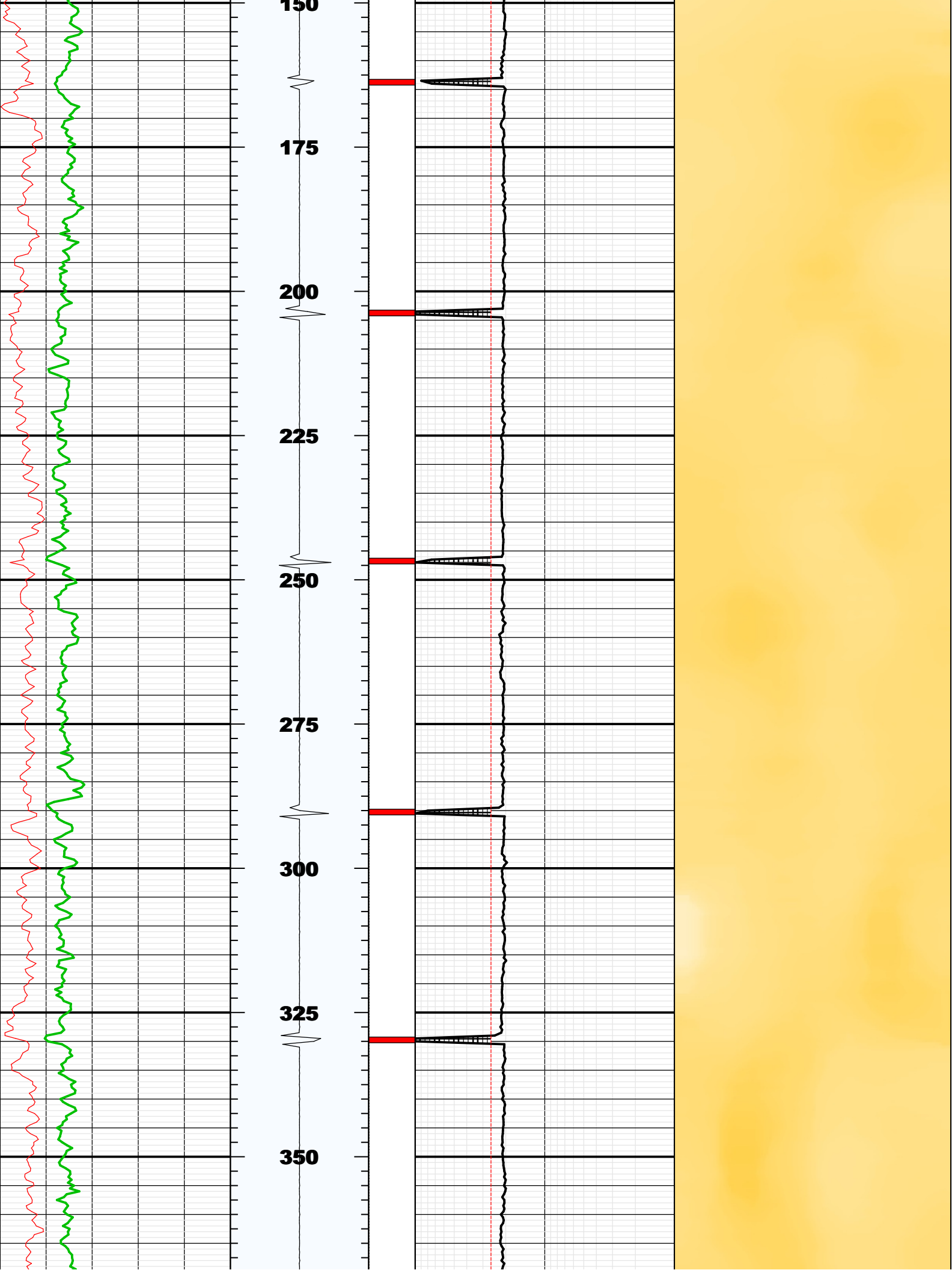
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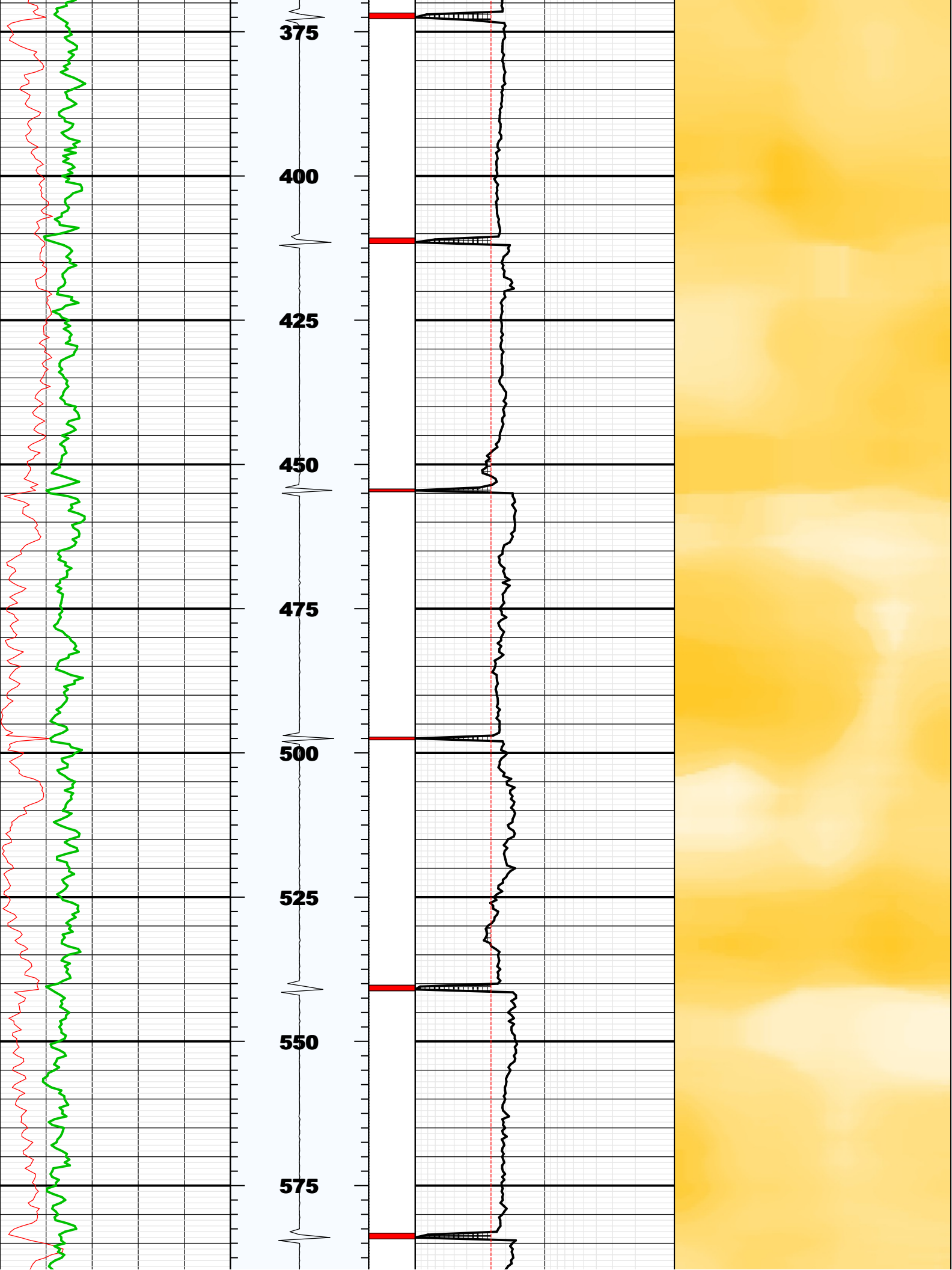
BHT 211 degF
Top of Cement
Lead cement density
Tail cement density
Pressure 0 PSI repeat 2500 PSI main

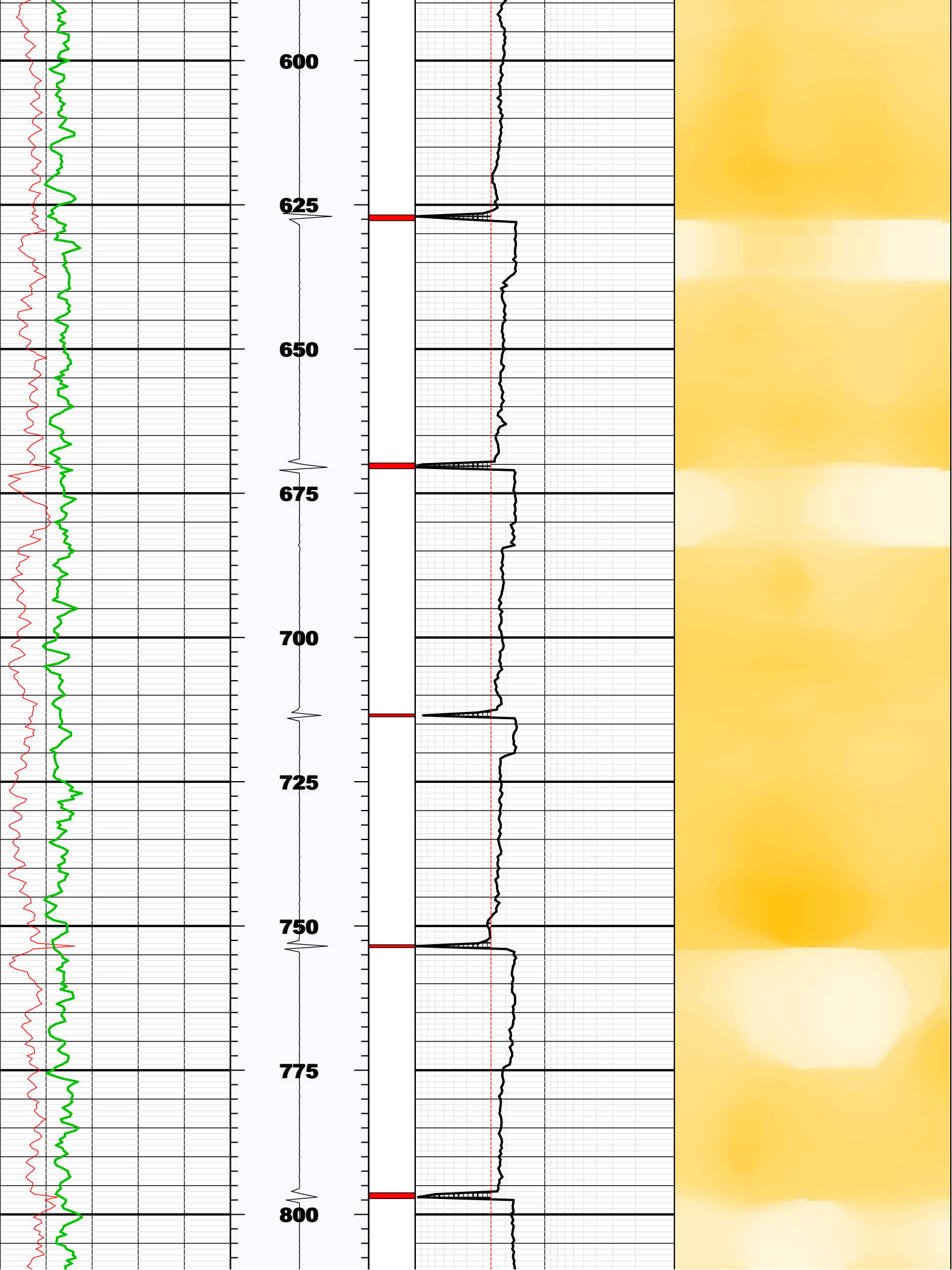
Main Pass

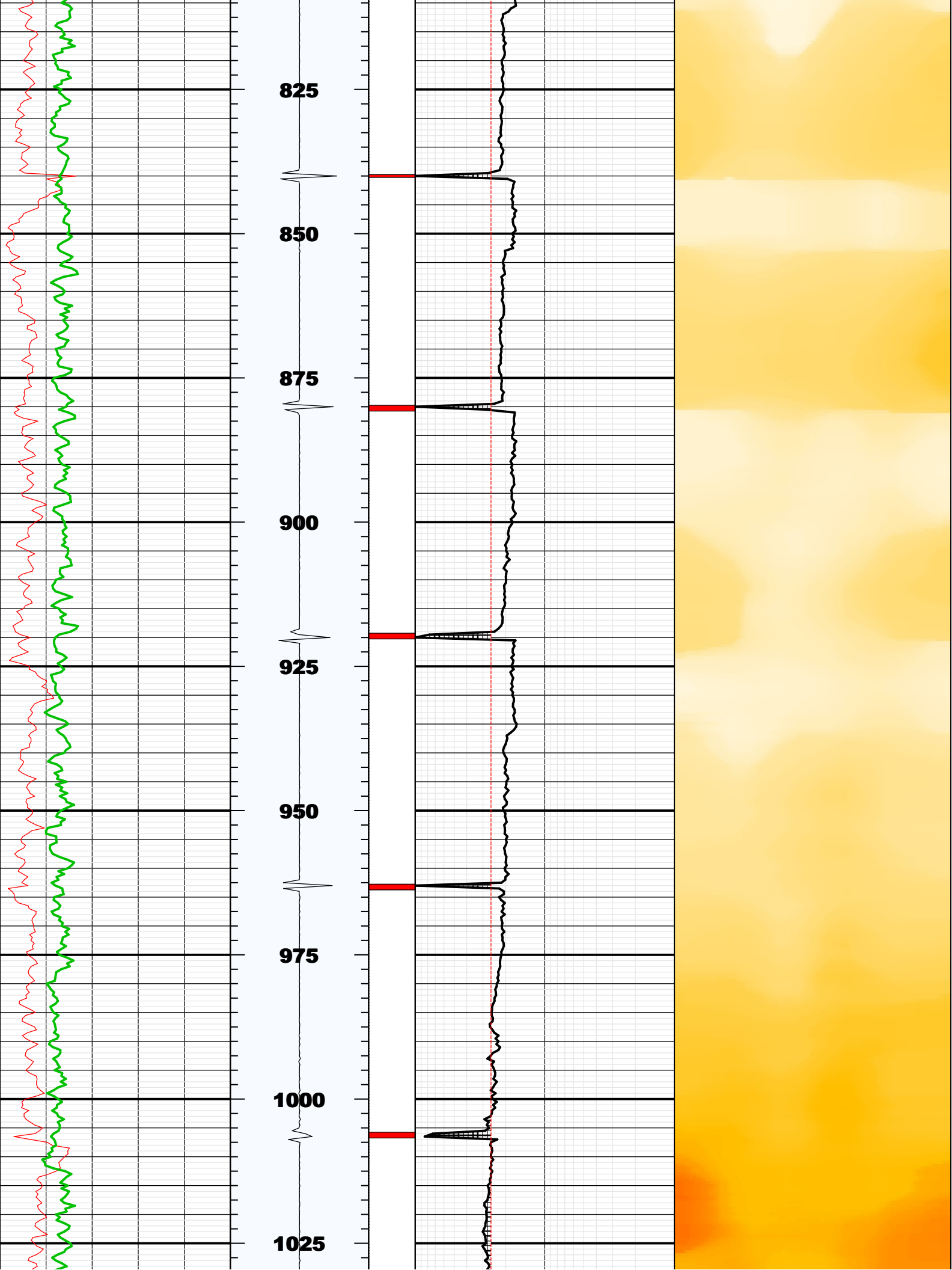
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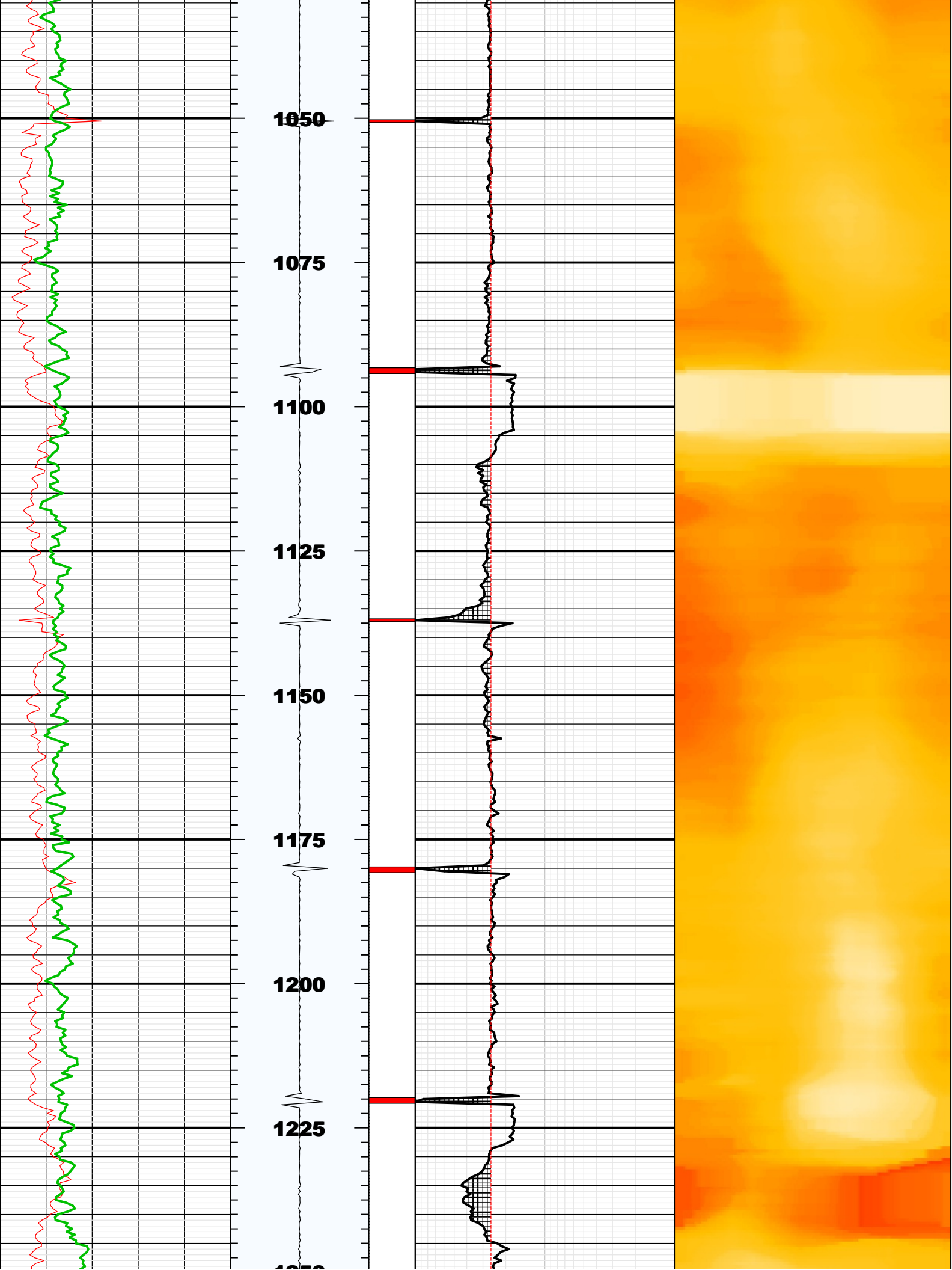


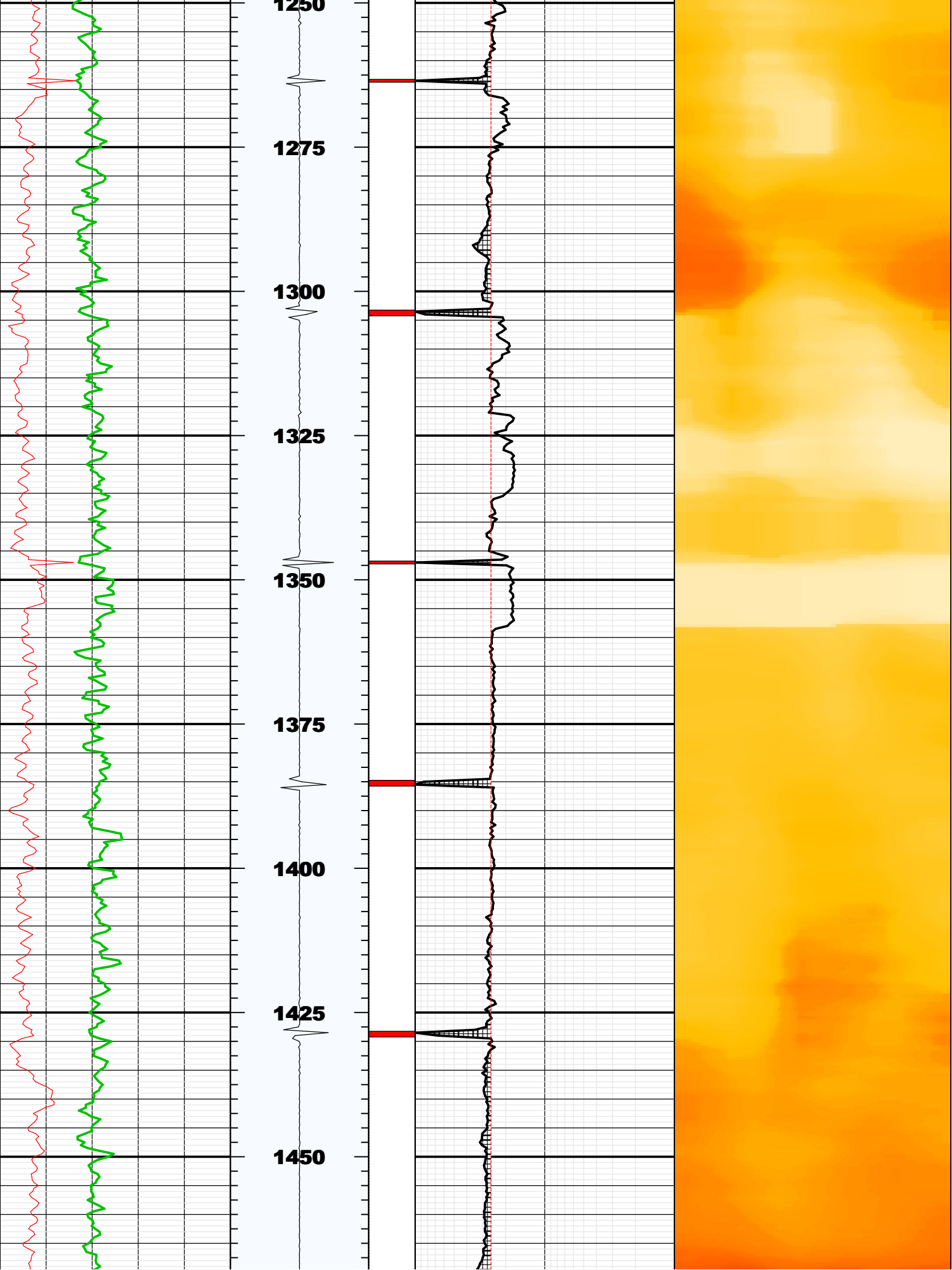


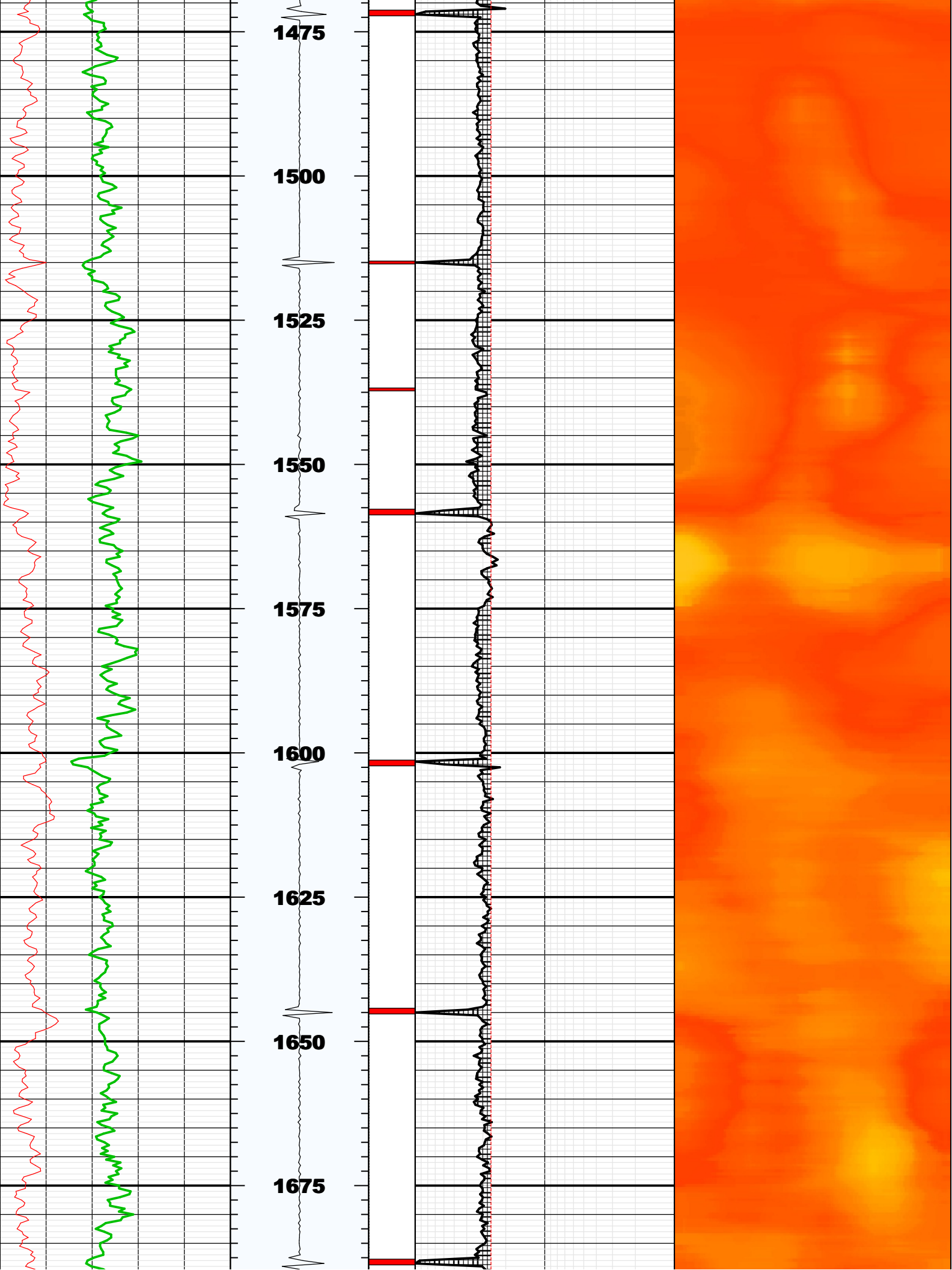


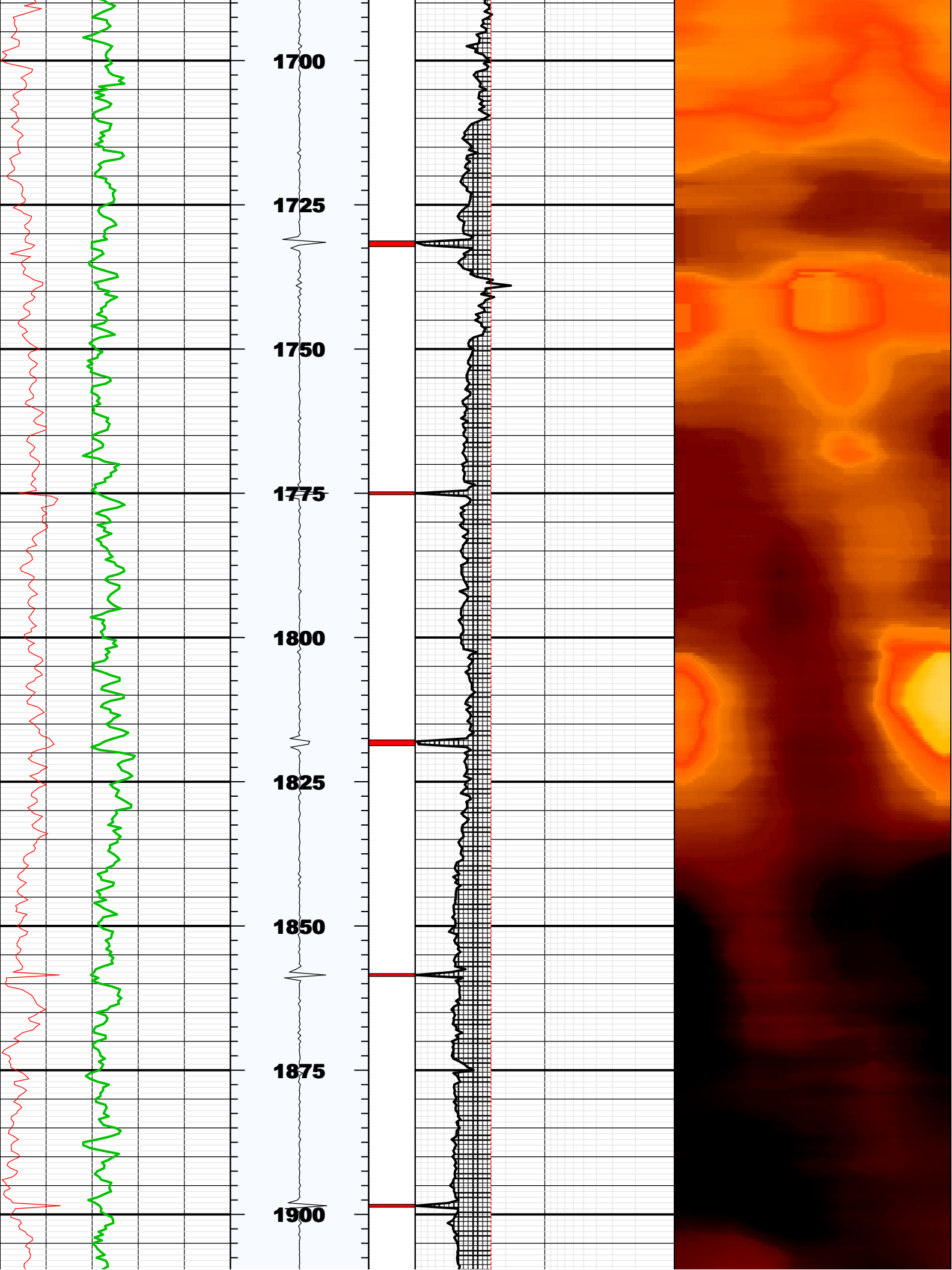


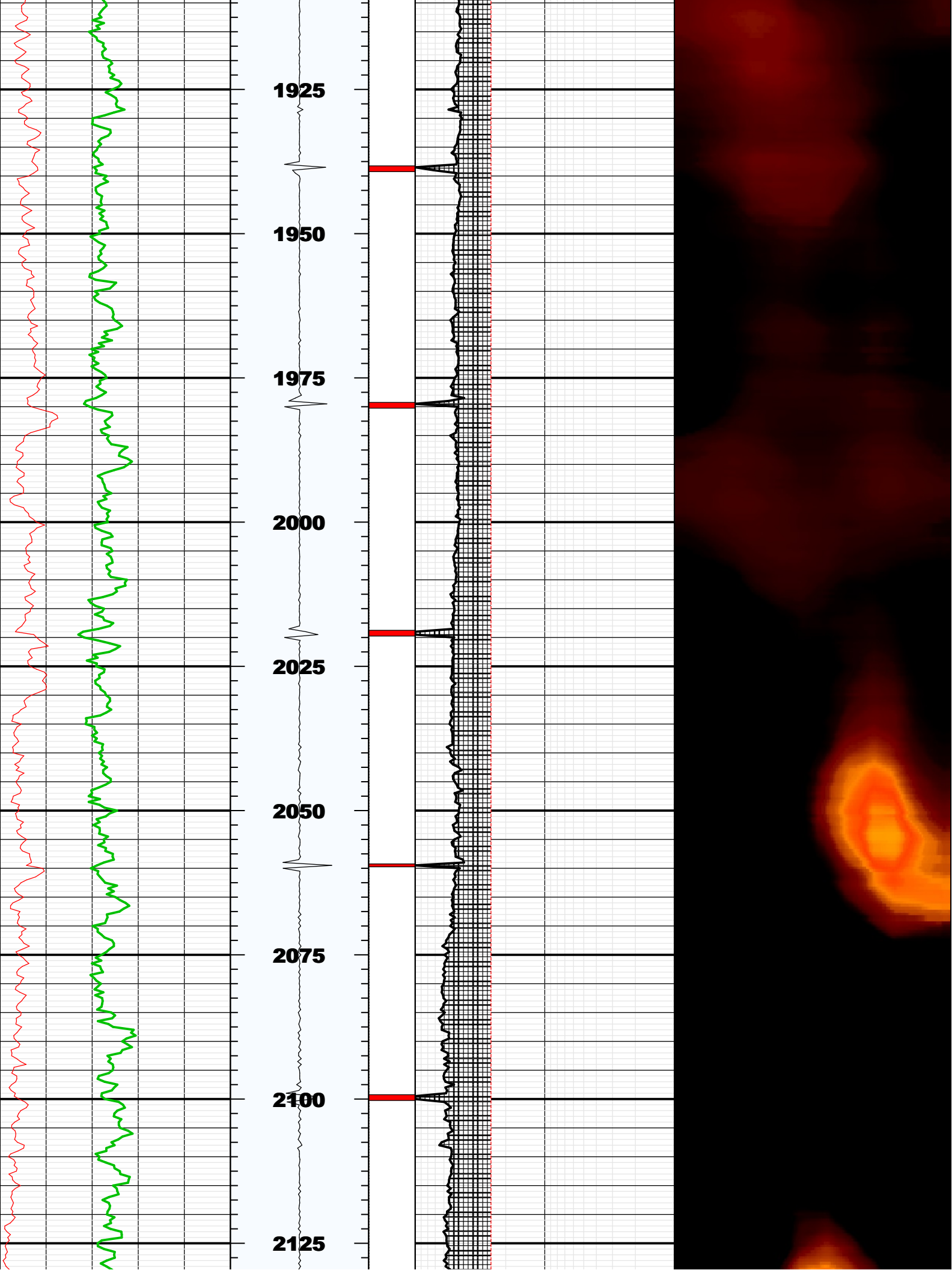


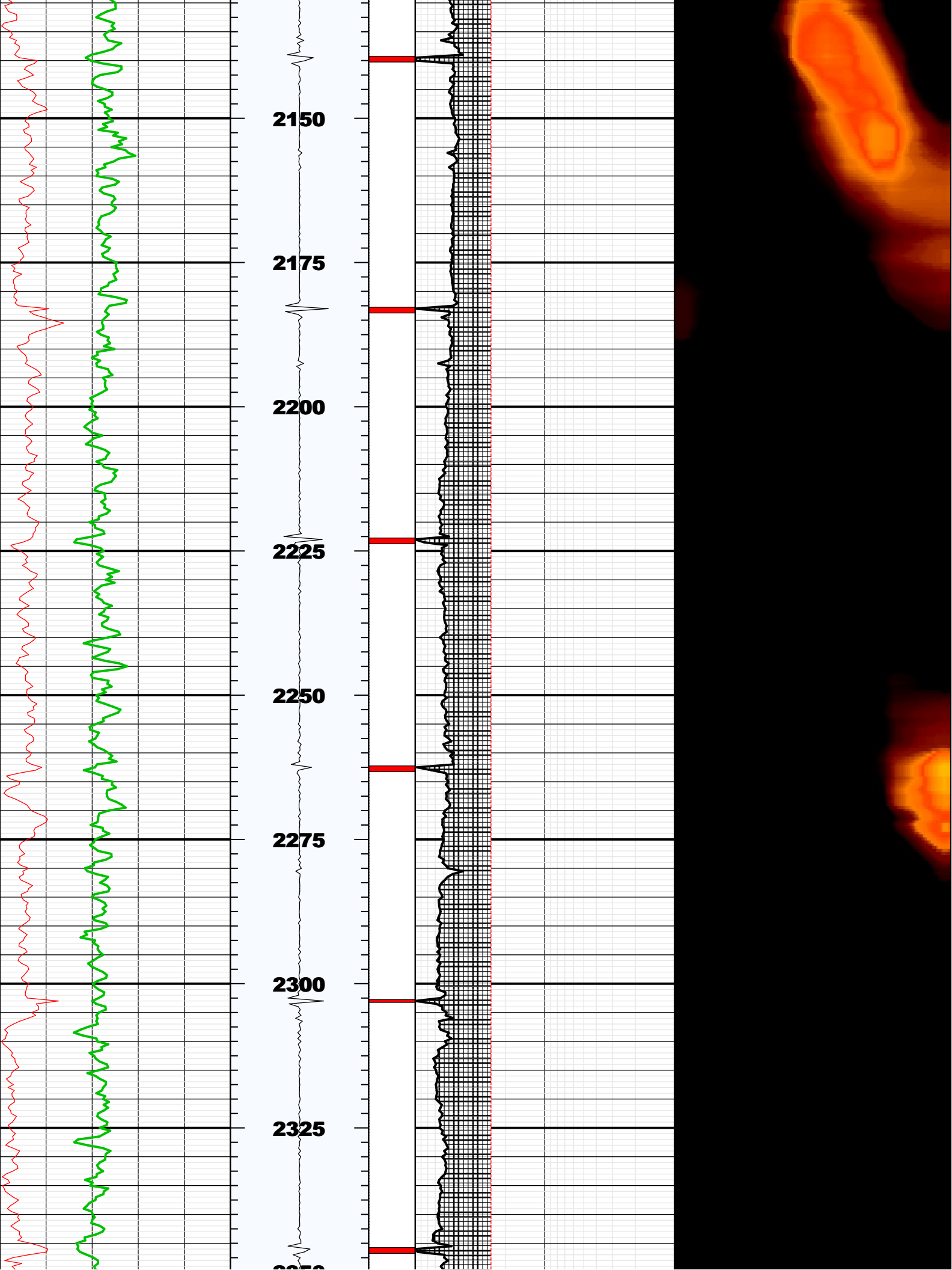


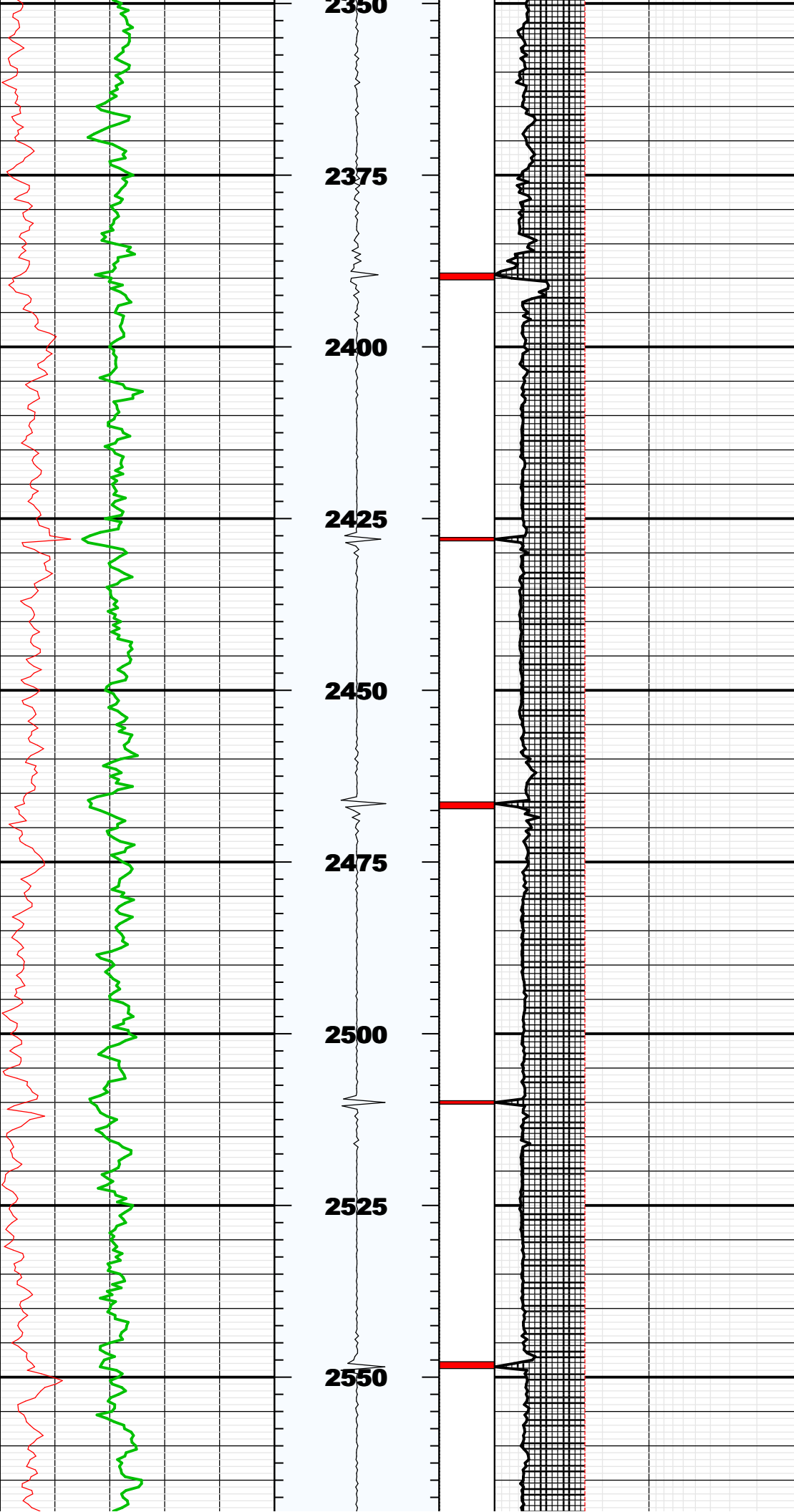


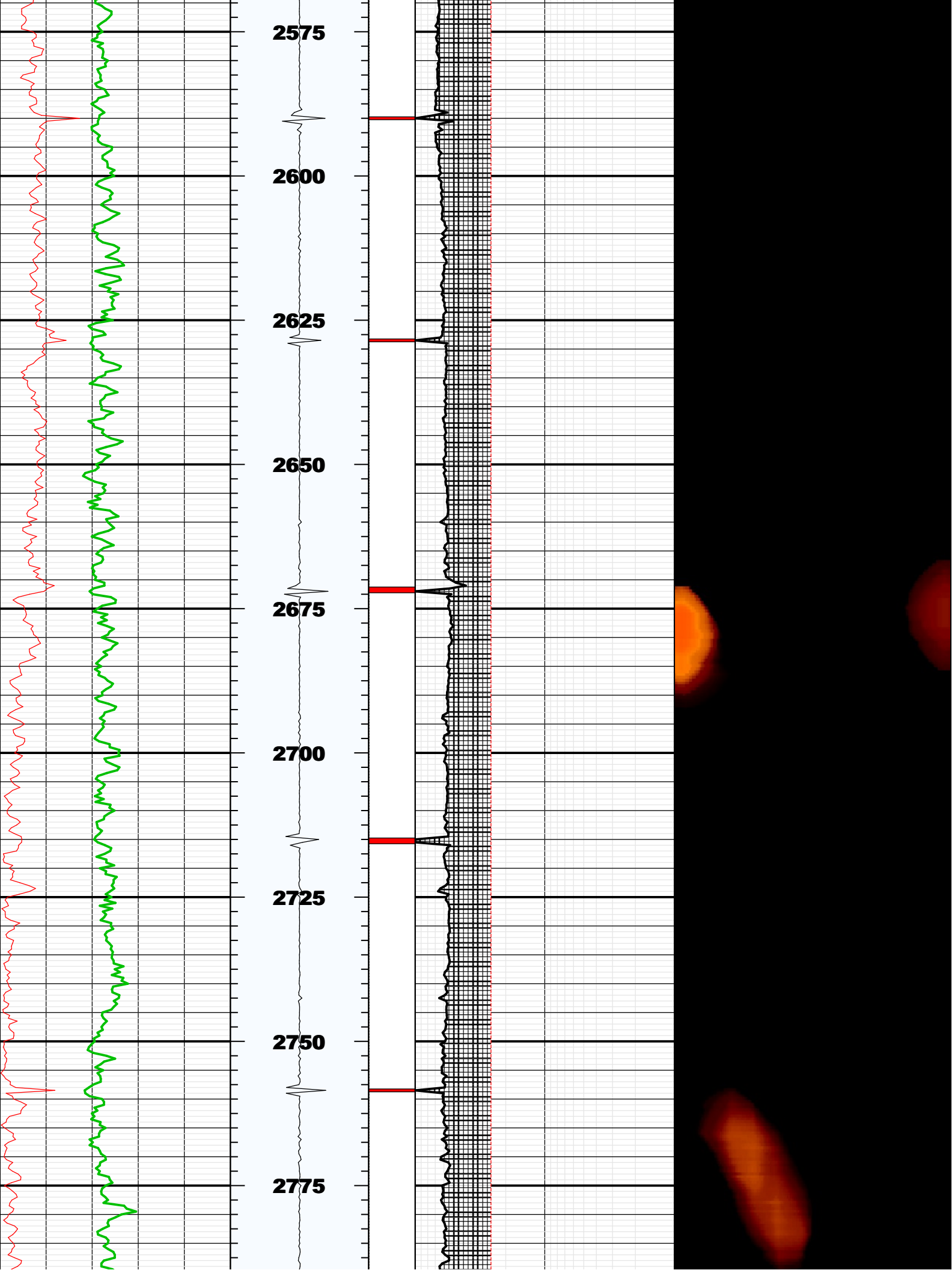


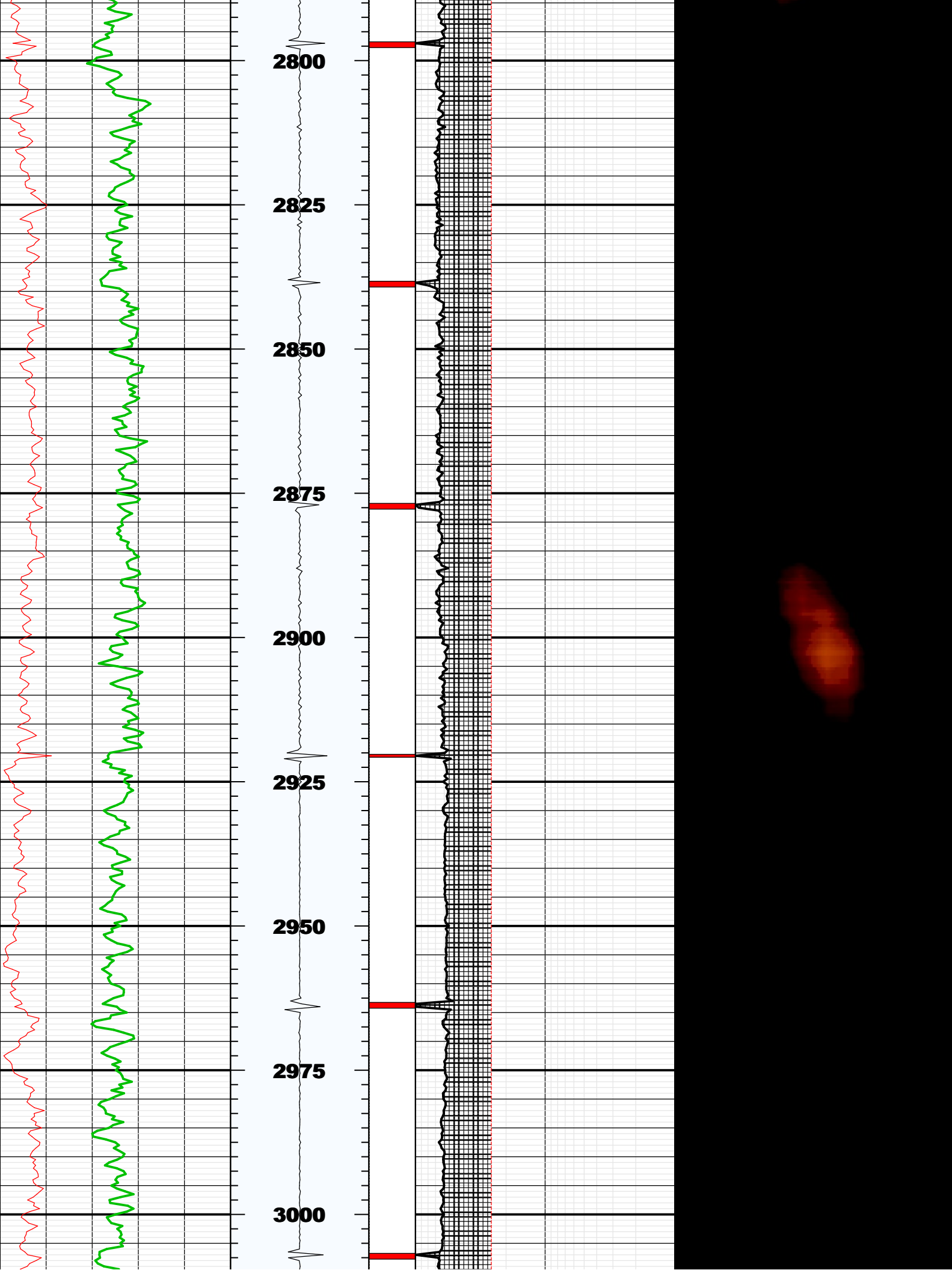


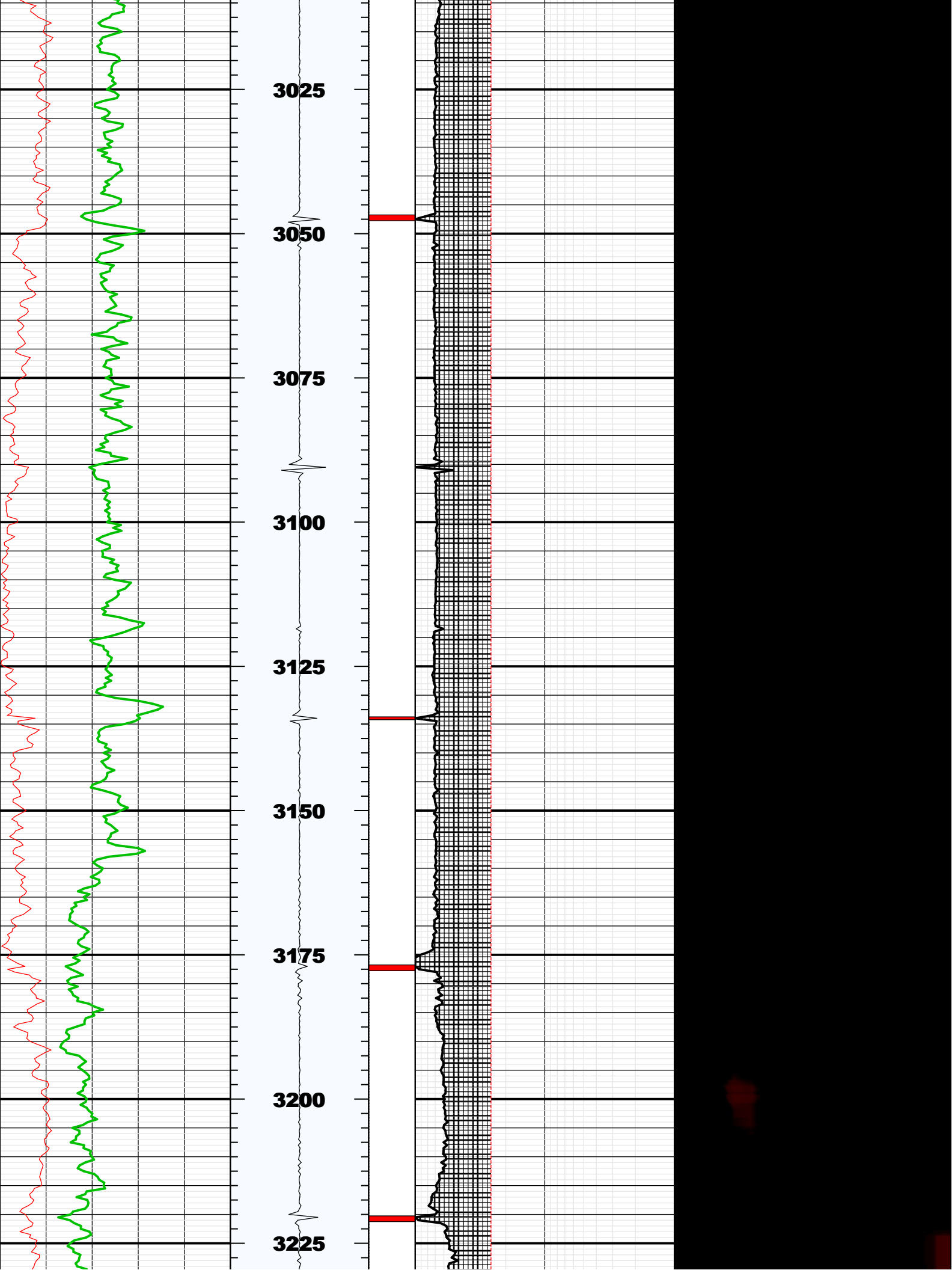


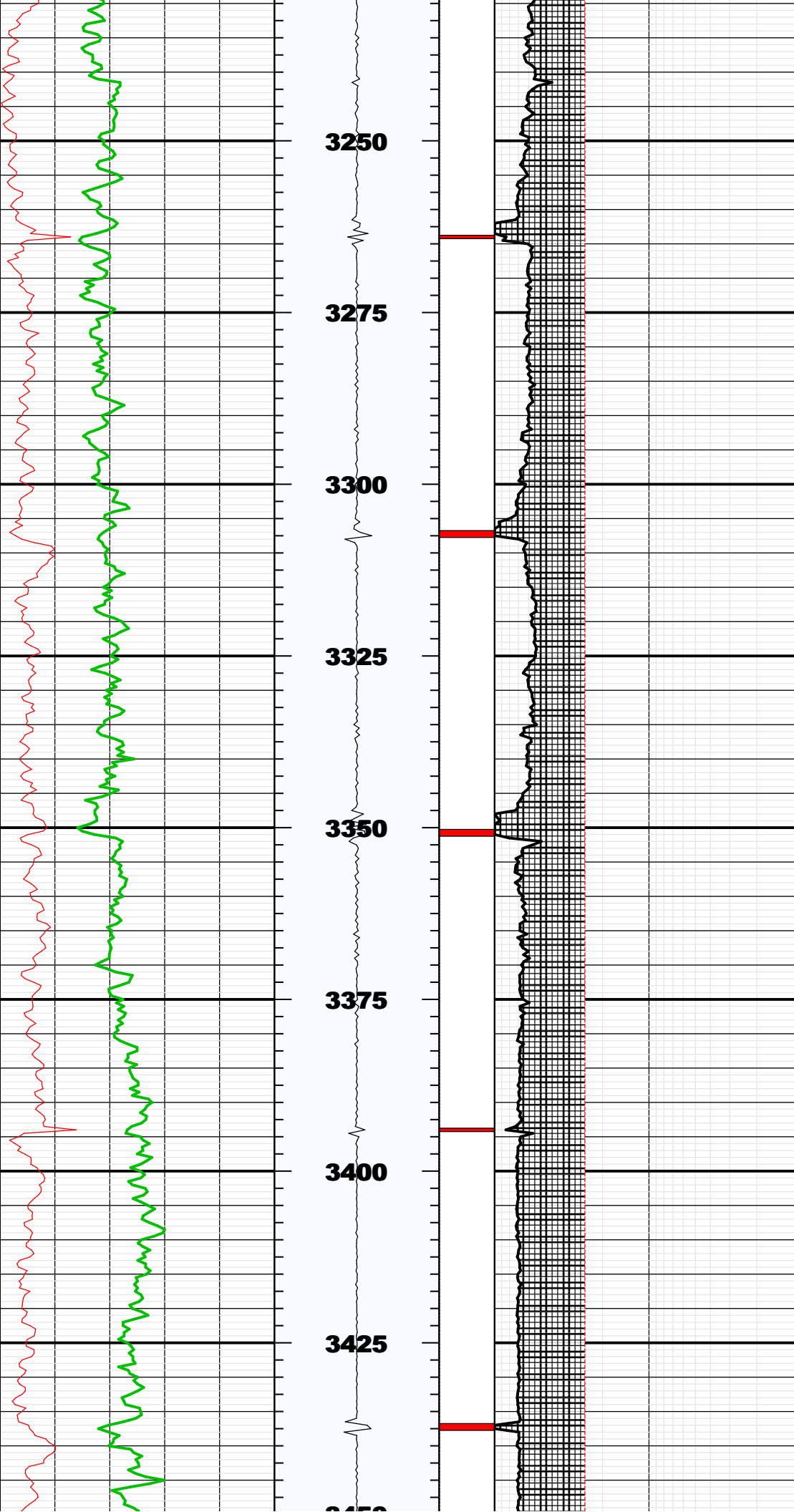


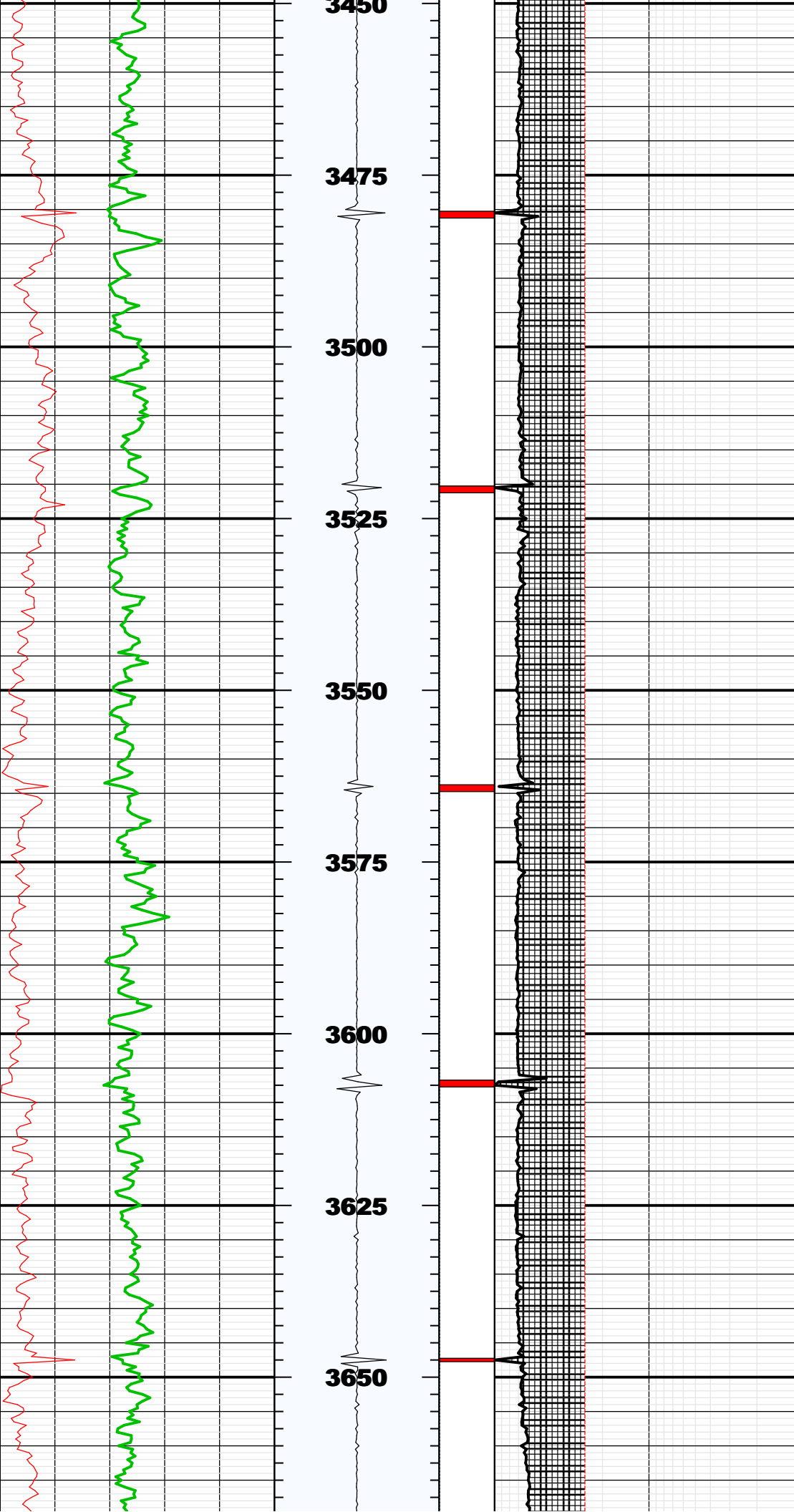


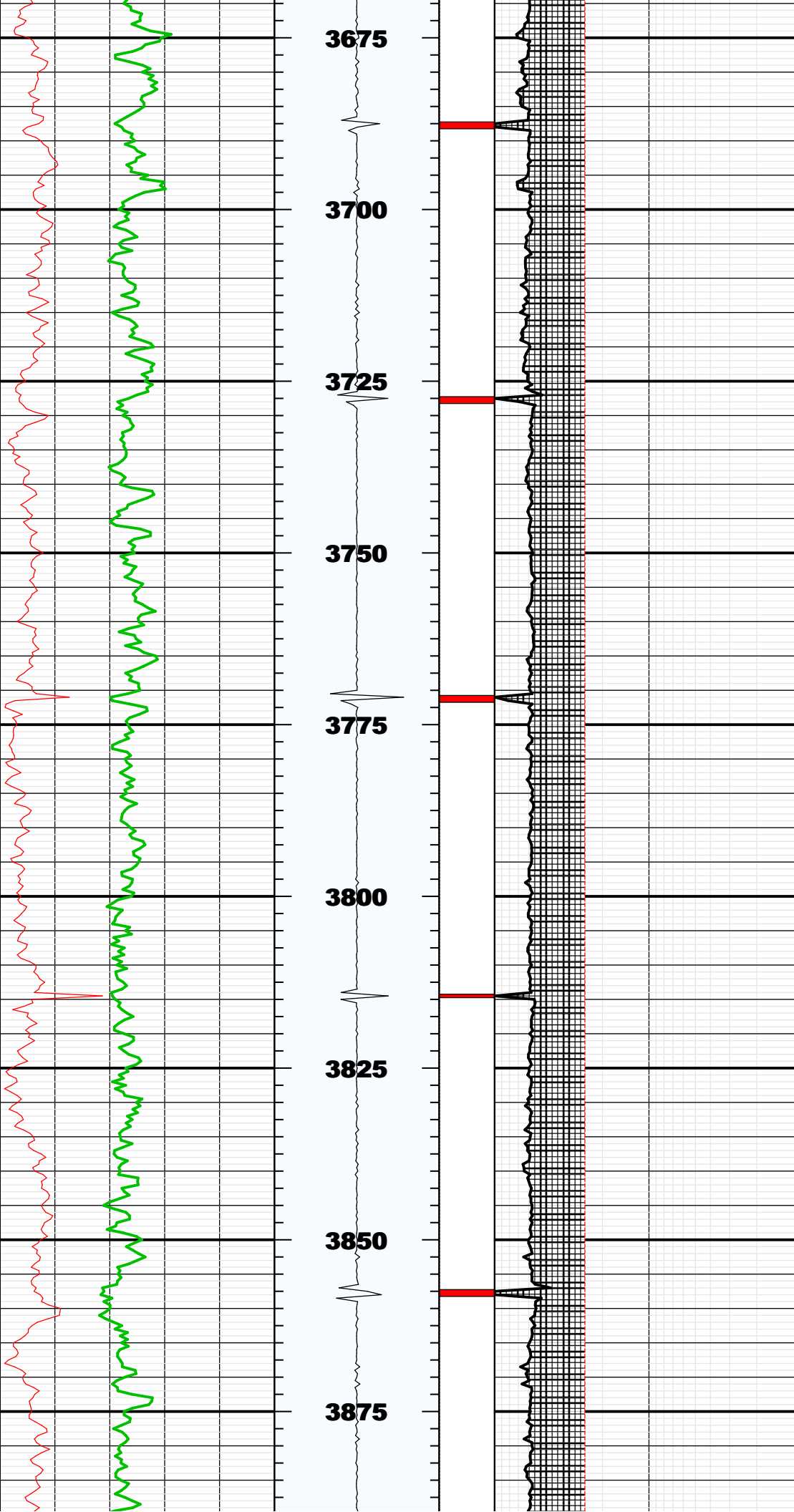


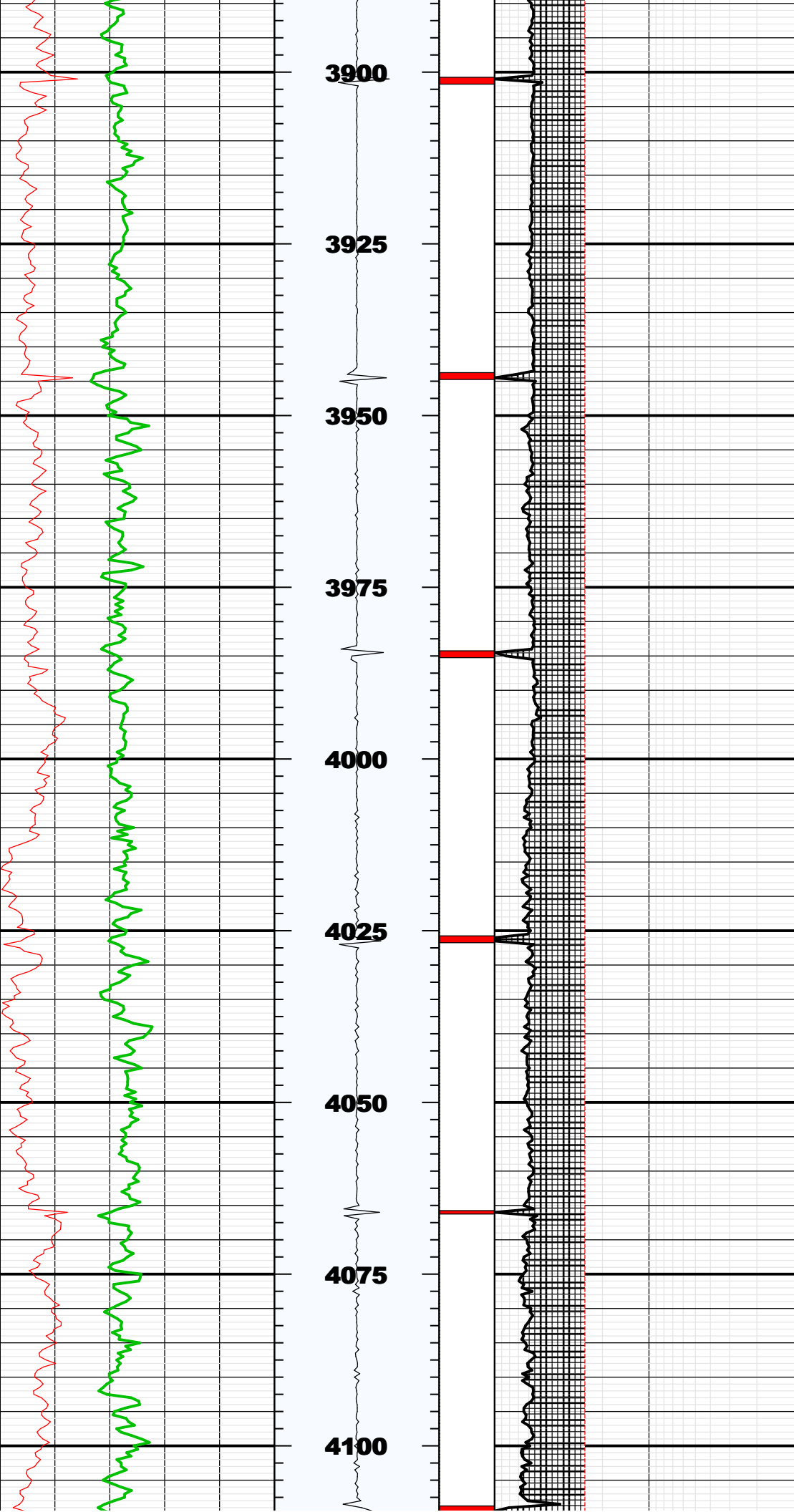


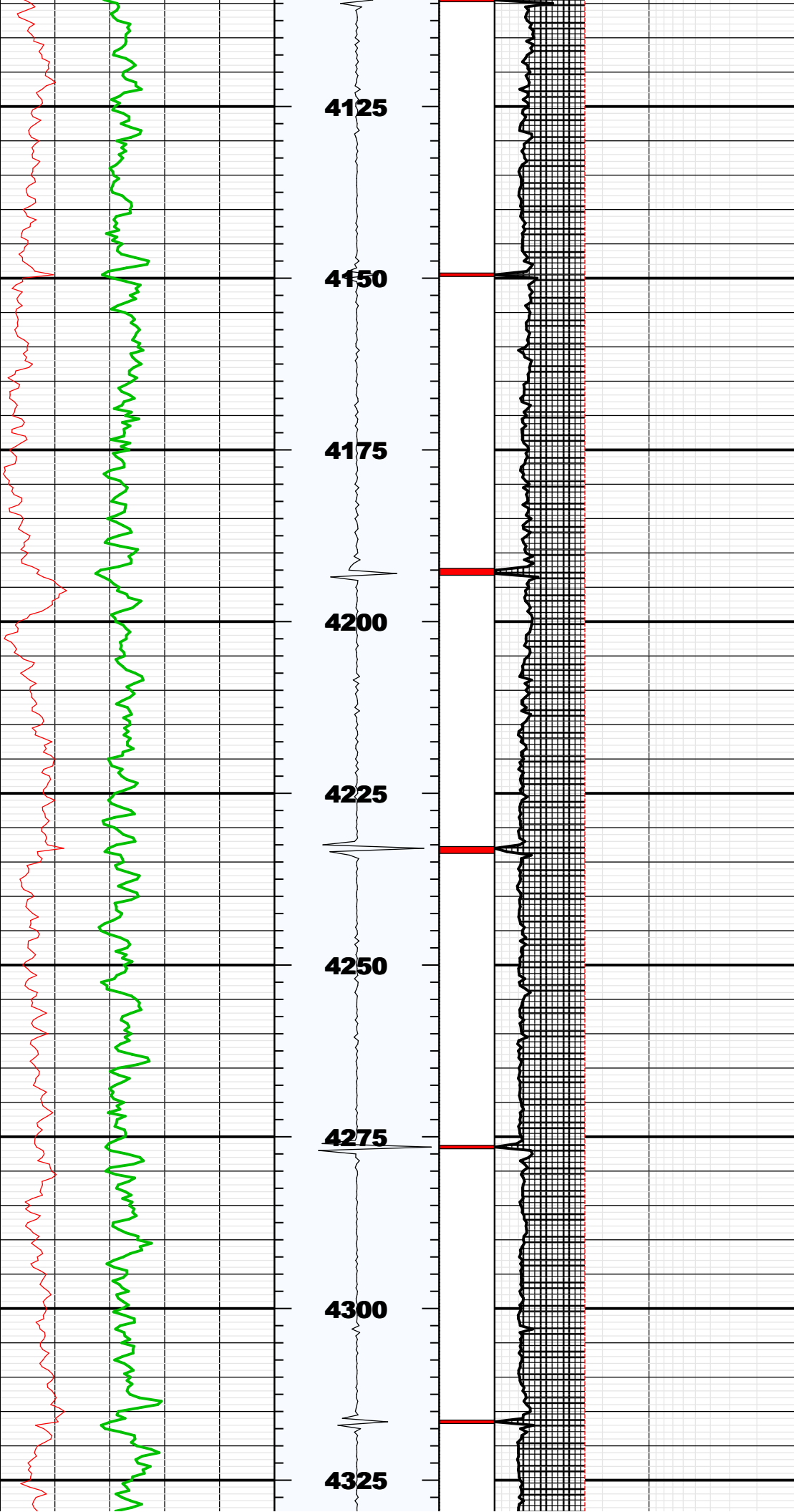


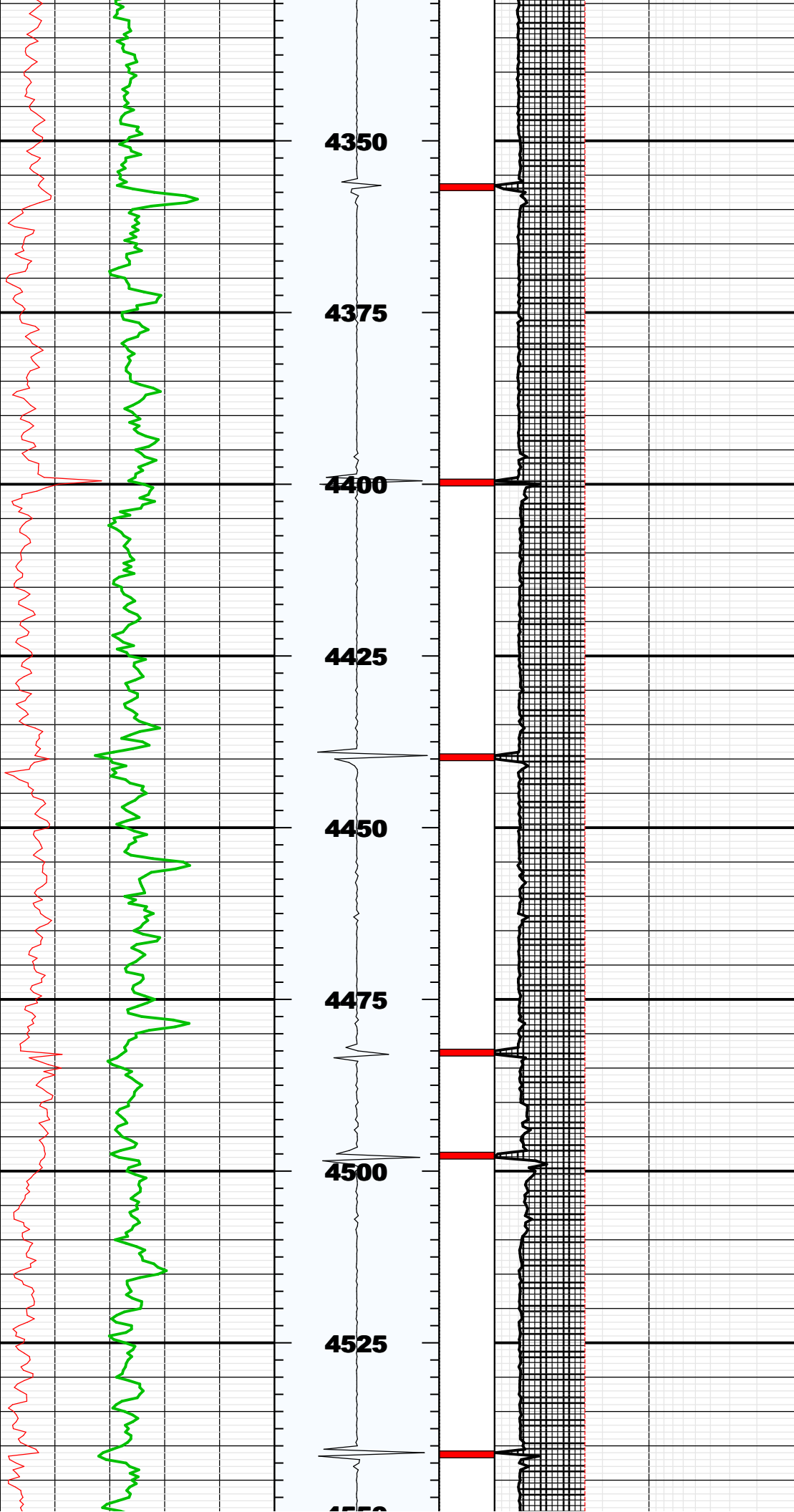


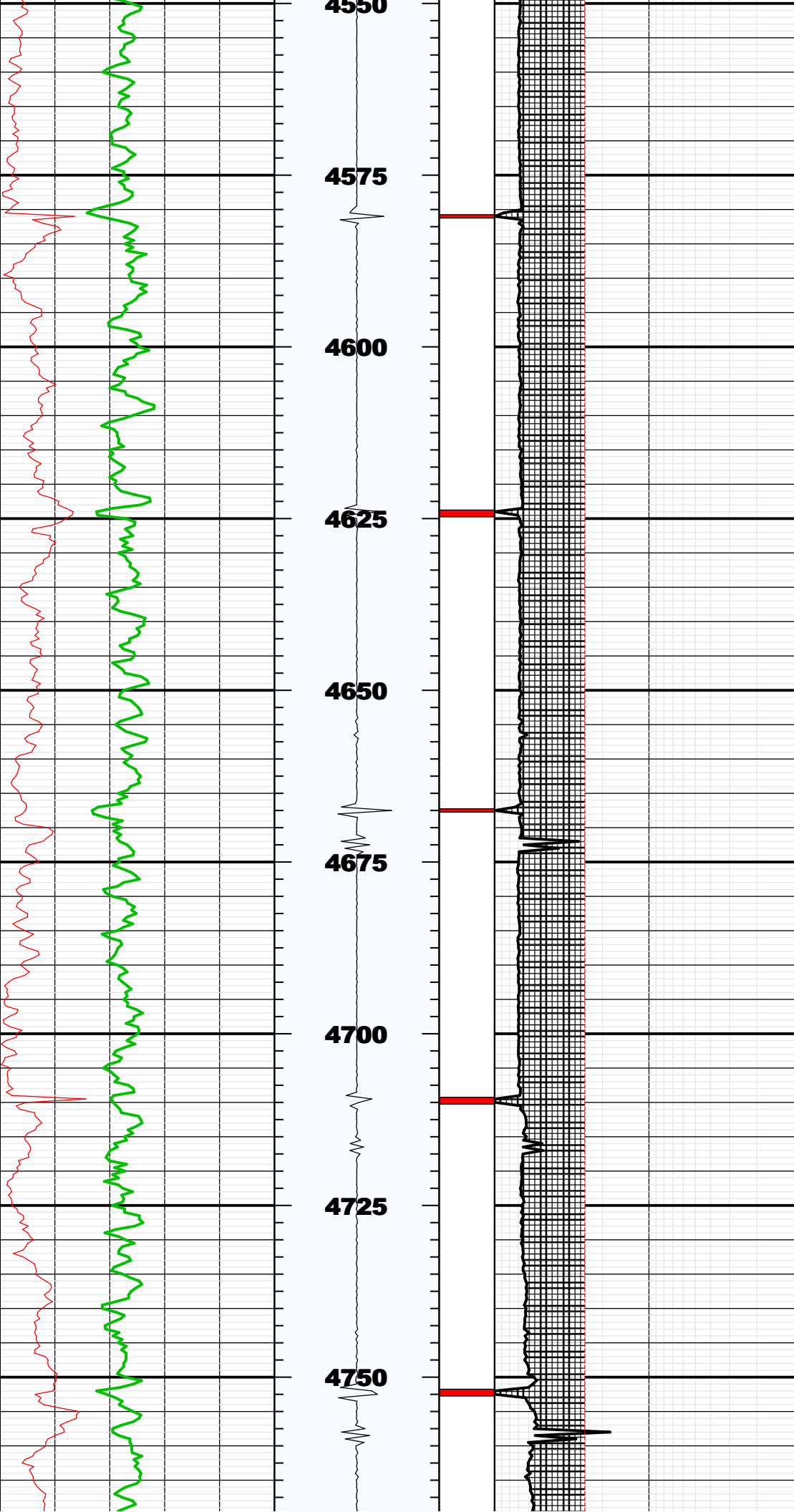


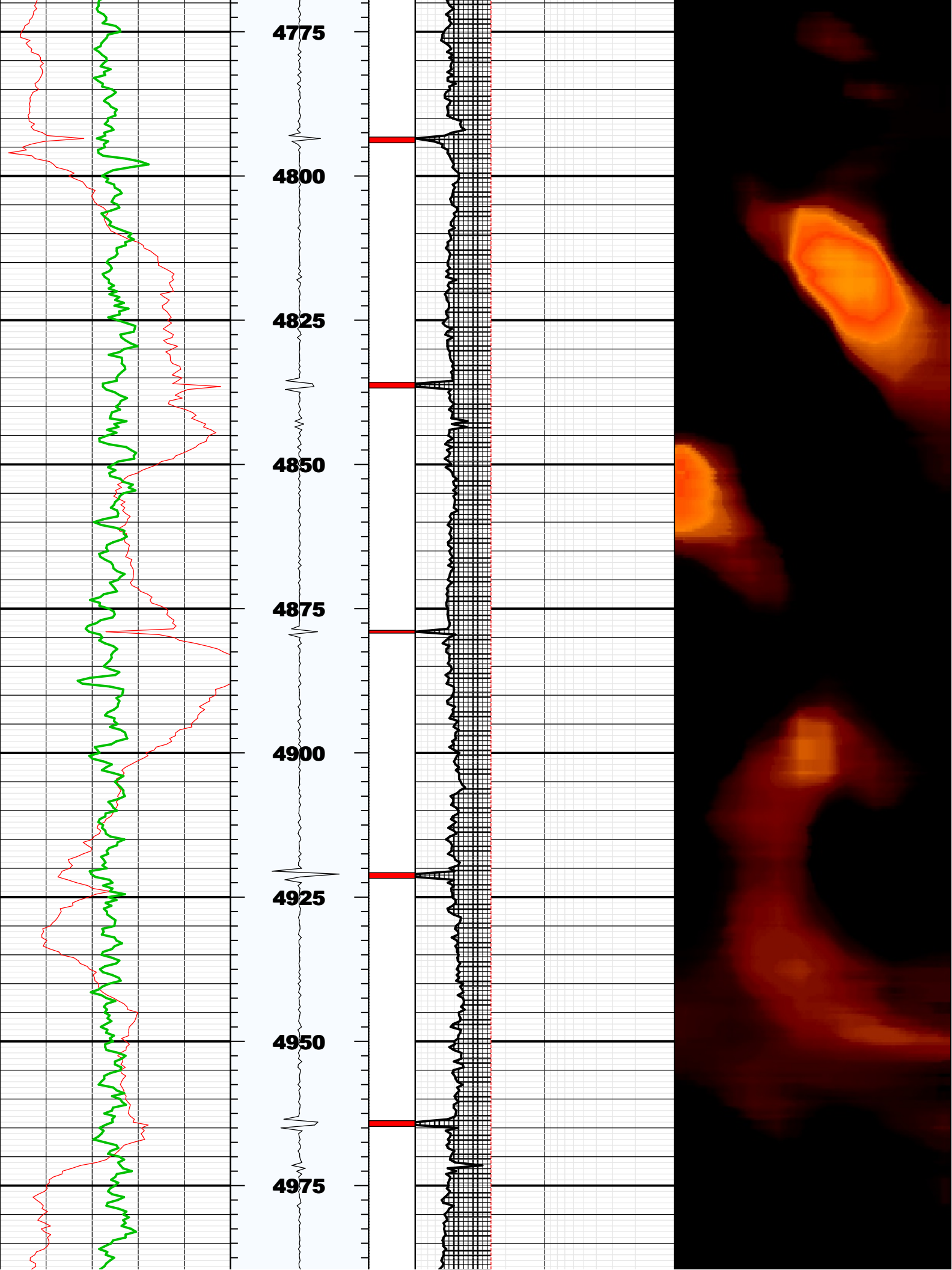


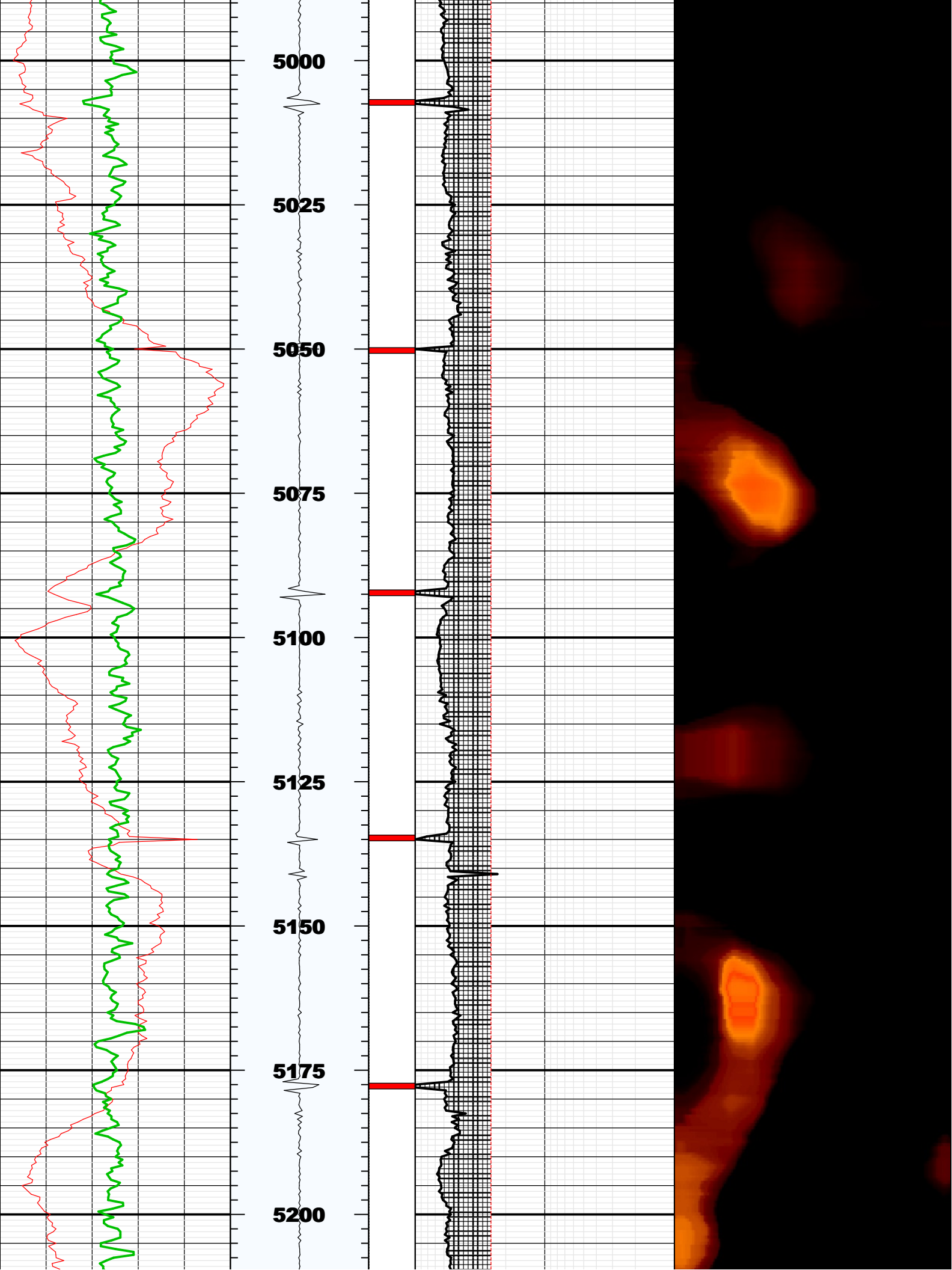


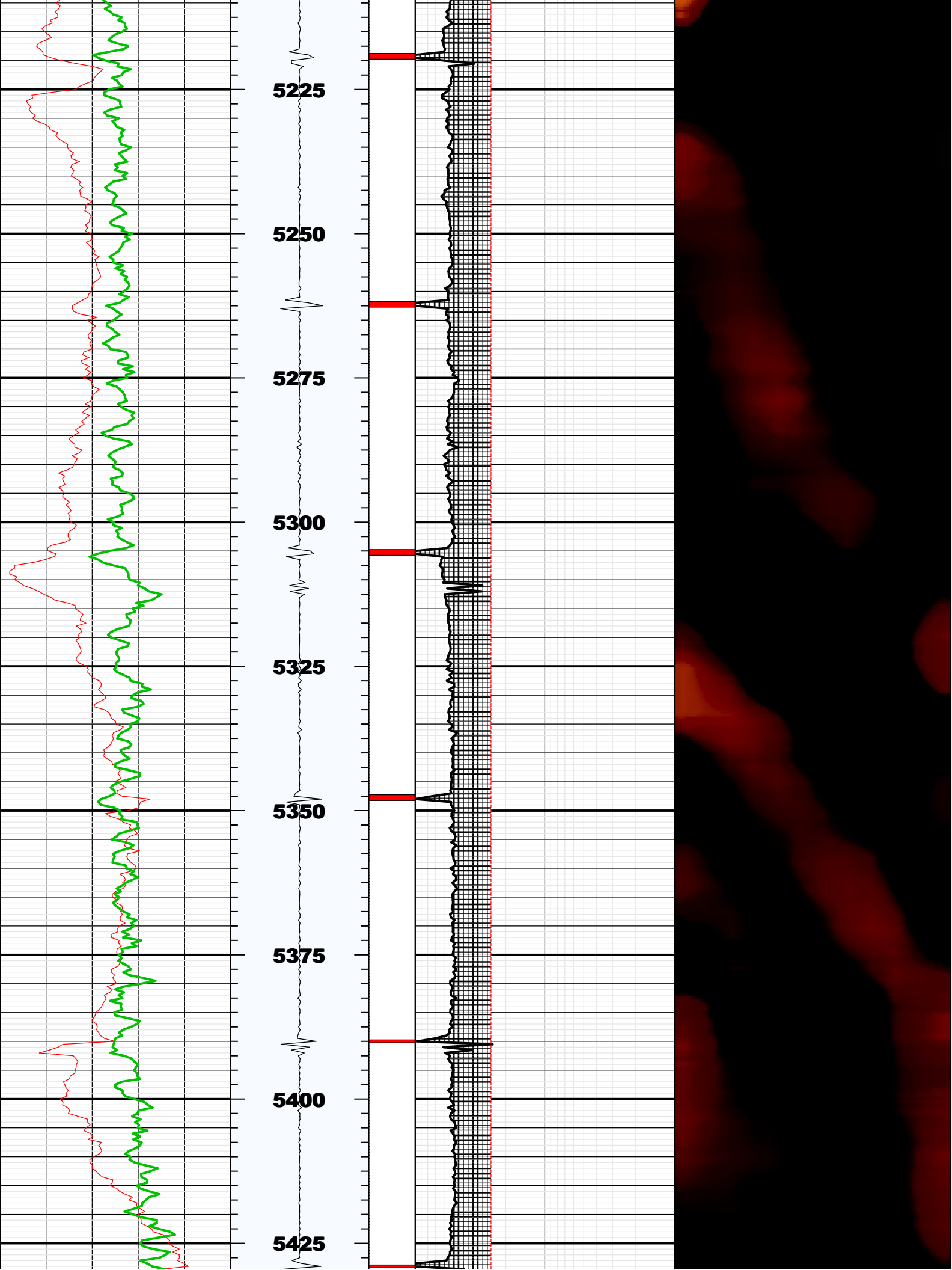


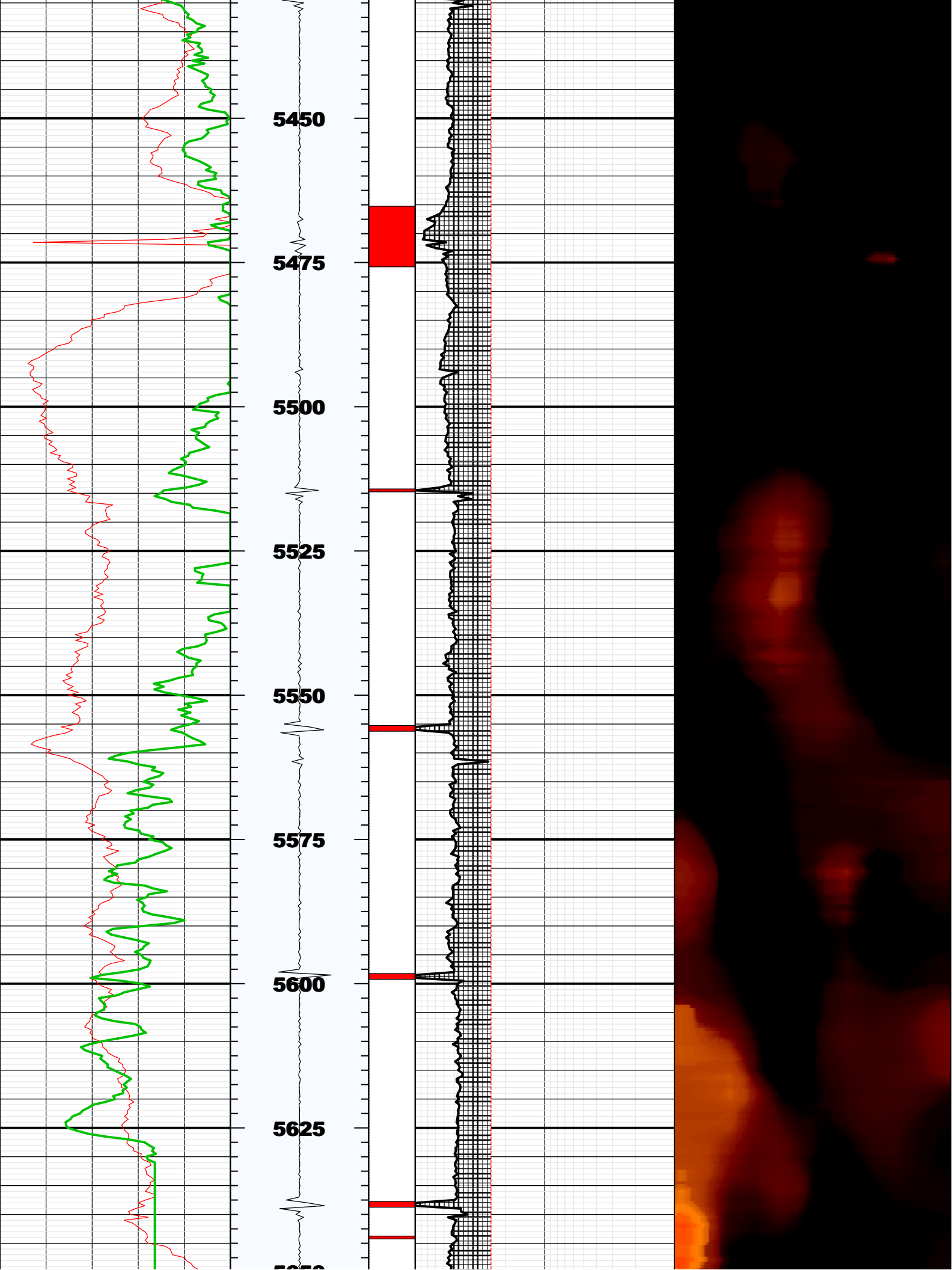








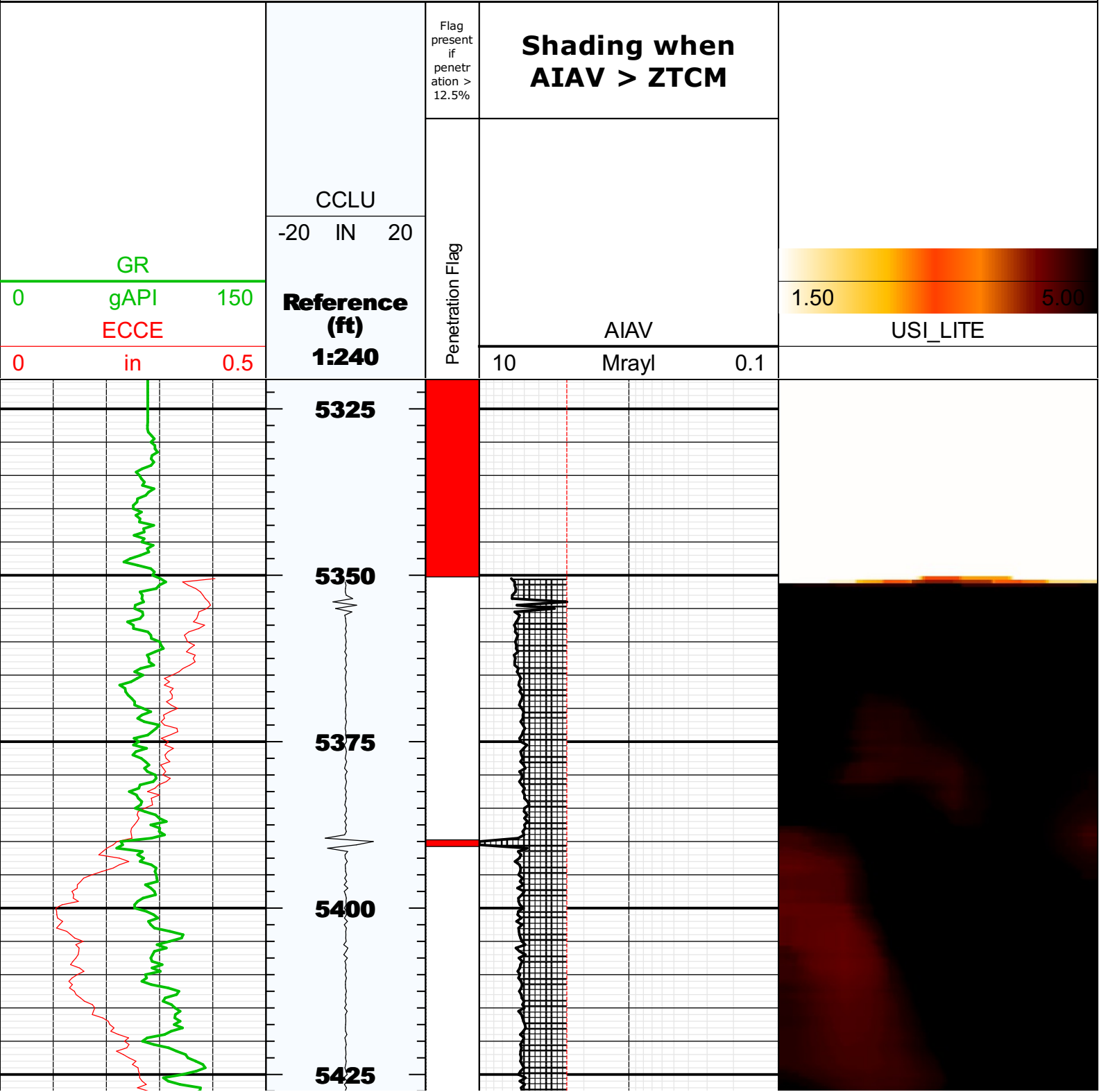


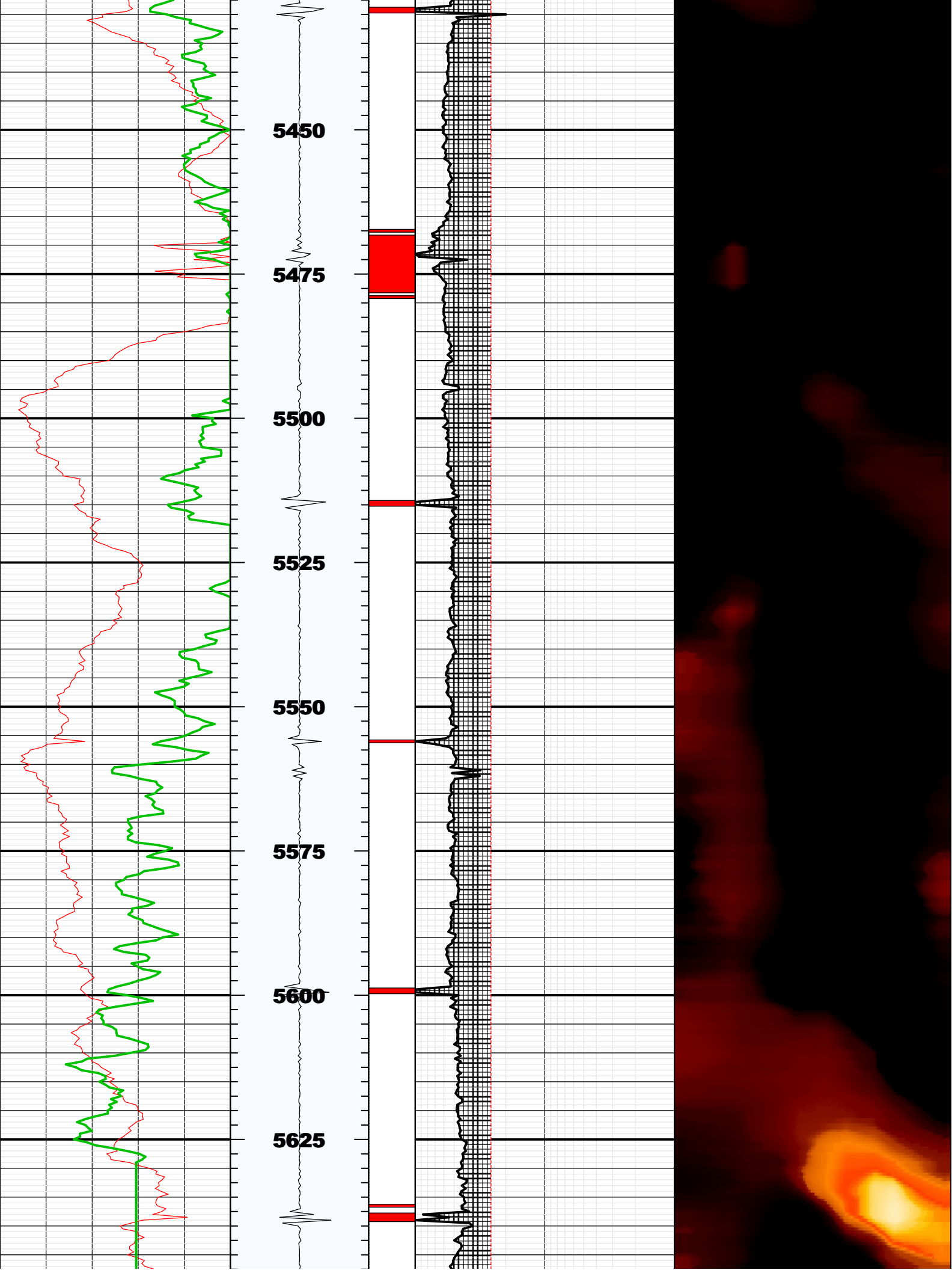


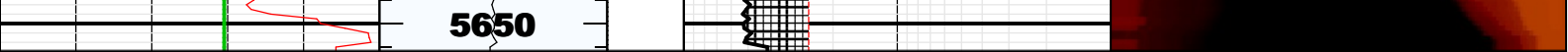
BS	8.75000	IN	Bit Size
CASG	P110		Casing Grade
CDIA	7.00000	IN	Casing Outer Diameter
CSID			
CSIZ	7.00000	IN	Current Casing Size
CWEI	26.00000	LB/F	Casing Weight
DFD	8.40000	LB/G	Drilling Fluid Density
DFVL	190.00000	US/F	Default Fluid Velocity
DO			
DOT	2.87400	IN	Diameter of Transducer Sensor
EMXV	80	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	BRINE		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	1.72000	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

