

Company: Noble Energy Inc

Well: Fiscus Federal LD15-77HN
Field: Wildcat
County: Weld State: Colorado

County: Weld			
Field: Wildcat			
Location: NENW Sec.15 T9N R58W			
Well: Fiscus Federal LD15-77HN			
Company: Noble Energy Inc			
USI-LITE (2500 psi)			
Permanent Datum: Log Measured From: Drilling Measured From:		GL KB KB	Elev: K.B. 4717.0 F G.L. 4701.0 F D.F. 4716.0 F
Logging Date	04-Dec-2014	API Serial No. 05-123-37367	Section 15
Run Number	Run 1		Township 9N
Depth Driller	6002.0 F		Range 58W
Schlumberger Depth	6002.0 F		
Bottom Log Interval	5781.0 F		
Top Log Interval	15.0 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	1220.0 F		
To	6002.0 F		
Casing Size	7.00 IN		
Weight	26.00 LB/F		
Grade	P110		
From	0.0 F		
To	5991.0 F		
Max Recorded Temp	215.0		
Logger on bottom (date)	04-Dec-2014		
Location	Fl. Morgan CO		
Recorded By	Aleksei Bekhterev		
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: 17000.00000

DISCLAIMER

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13.6 ppg single slurry cement

Top of Cement at 830'

Repeat pass is done with 0 psi

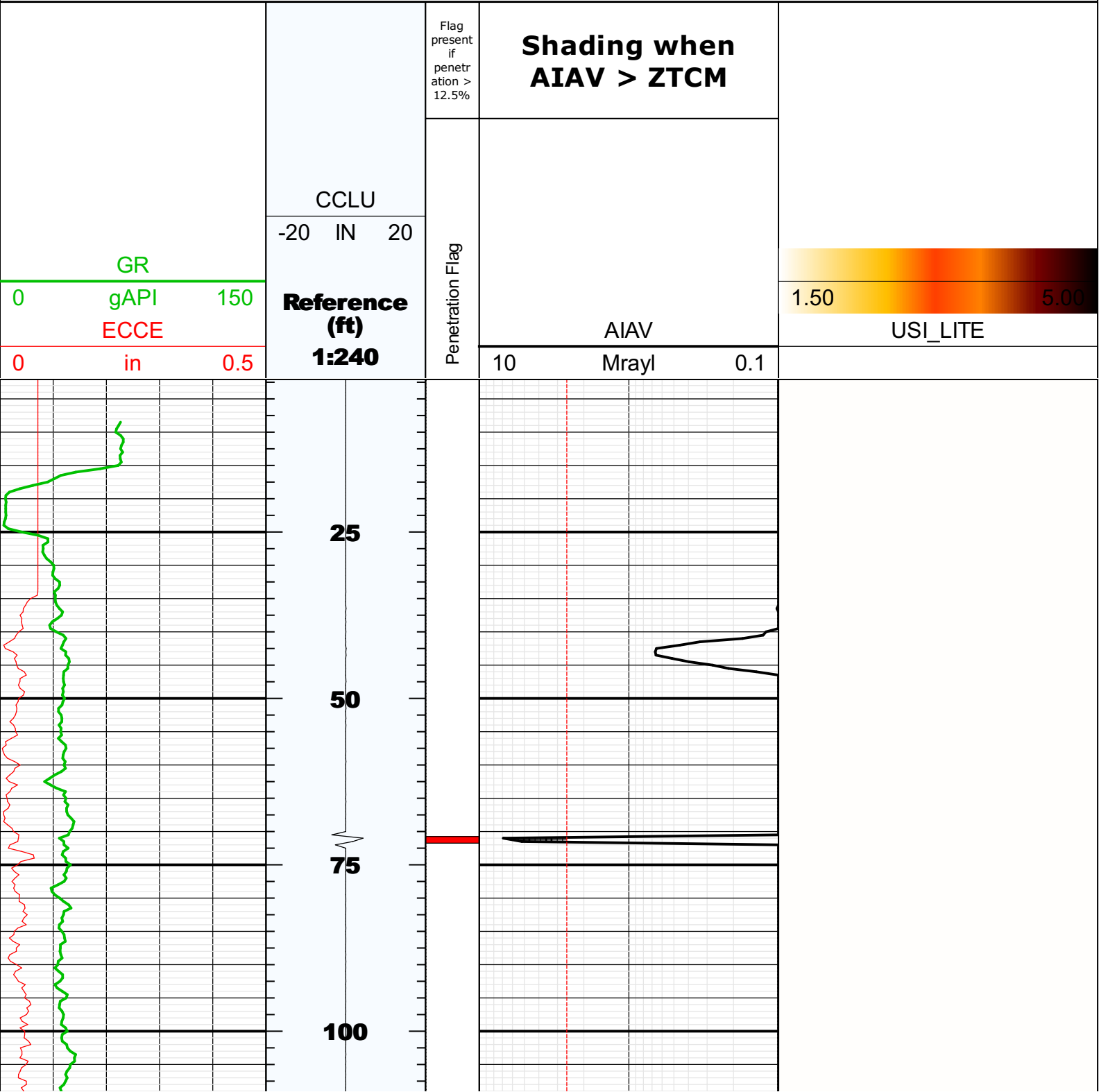
Main pass is done under 2500 psi

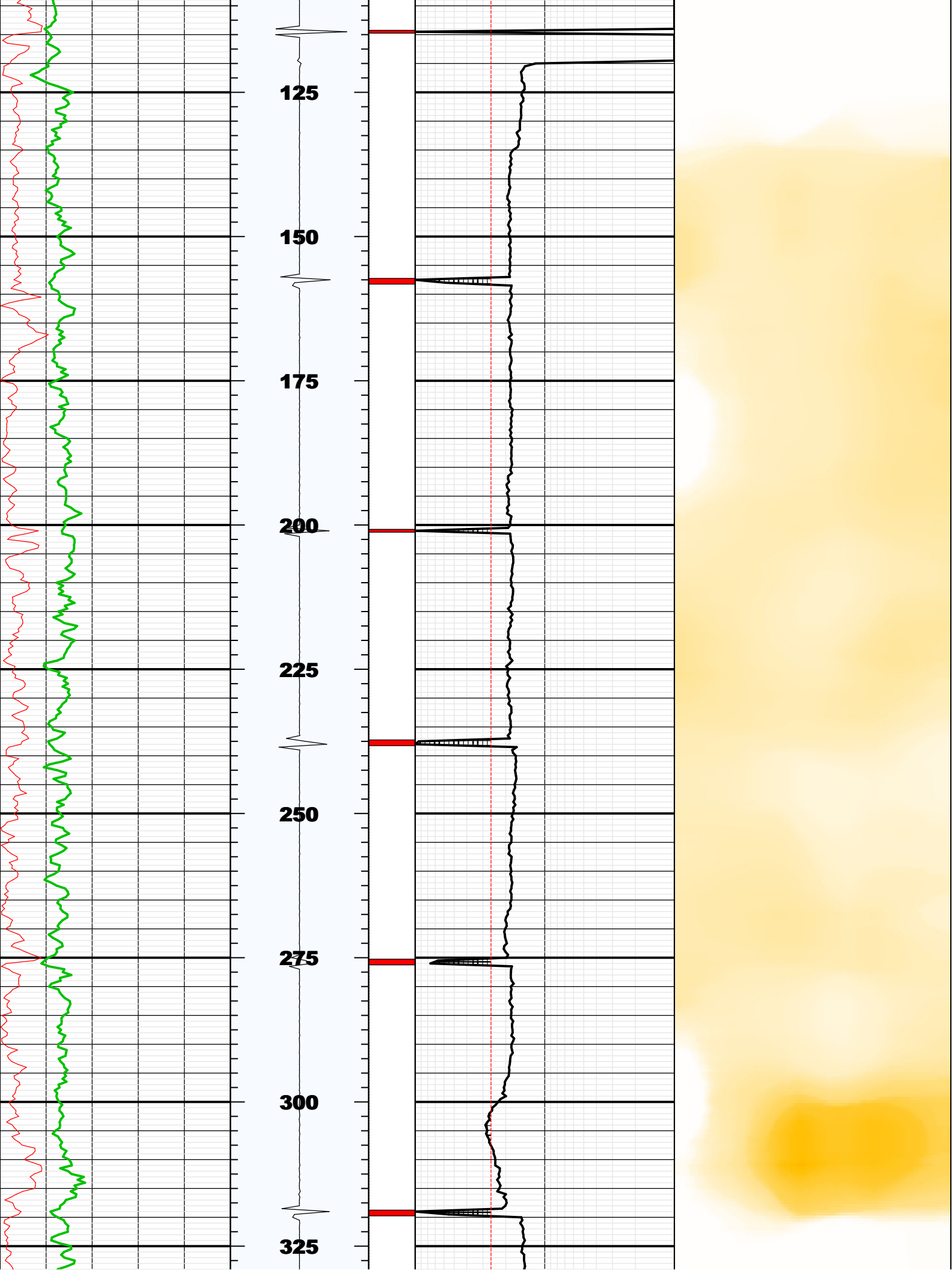
Temperature measured at depth of 215 degF

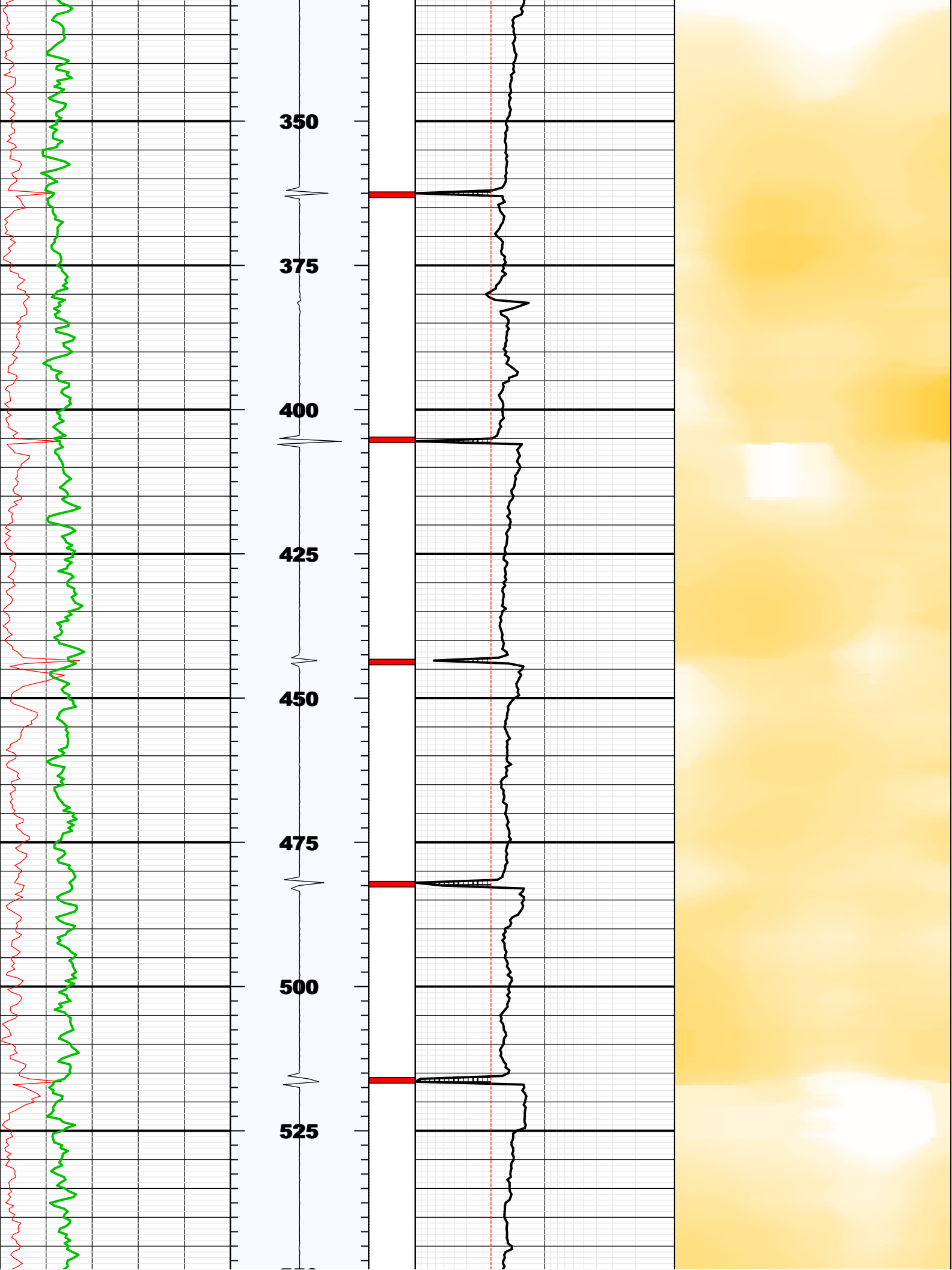
Log started 30 ft above top of the liner (5781 ft)

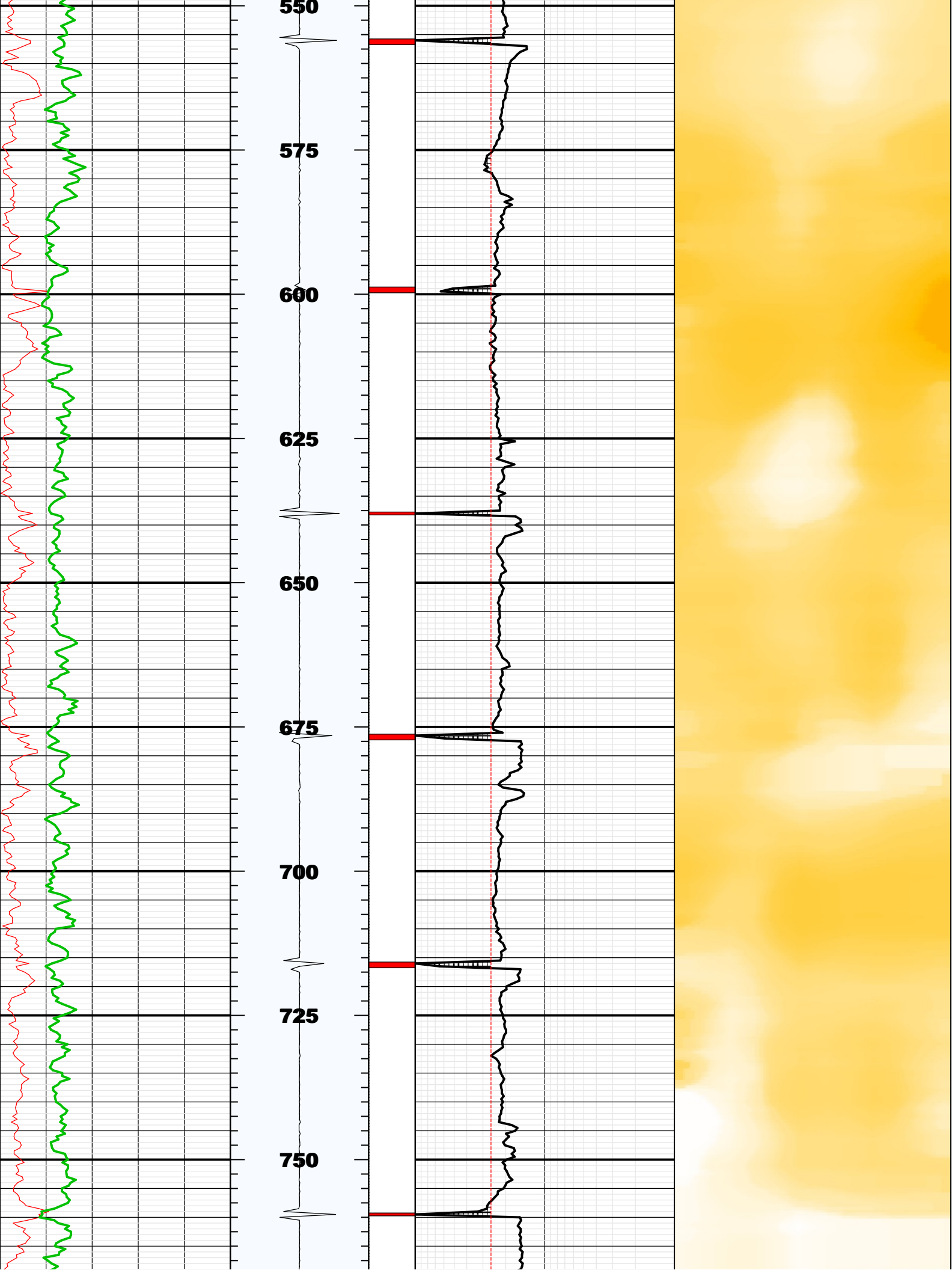
Main Pass

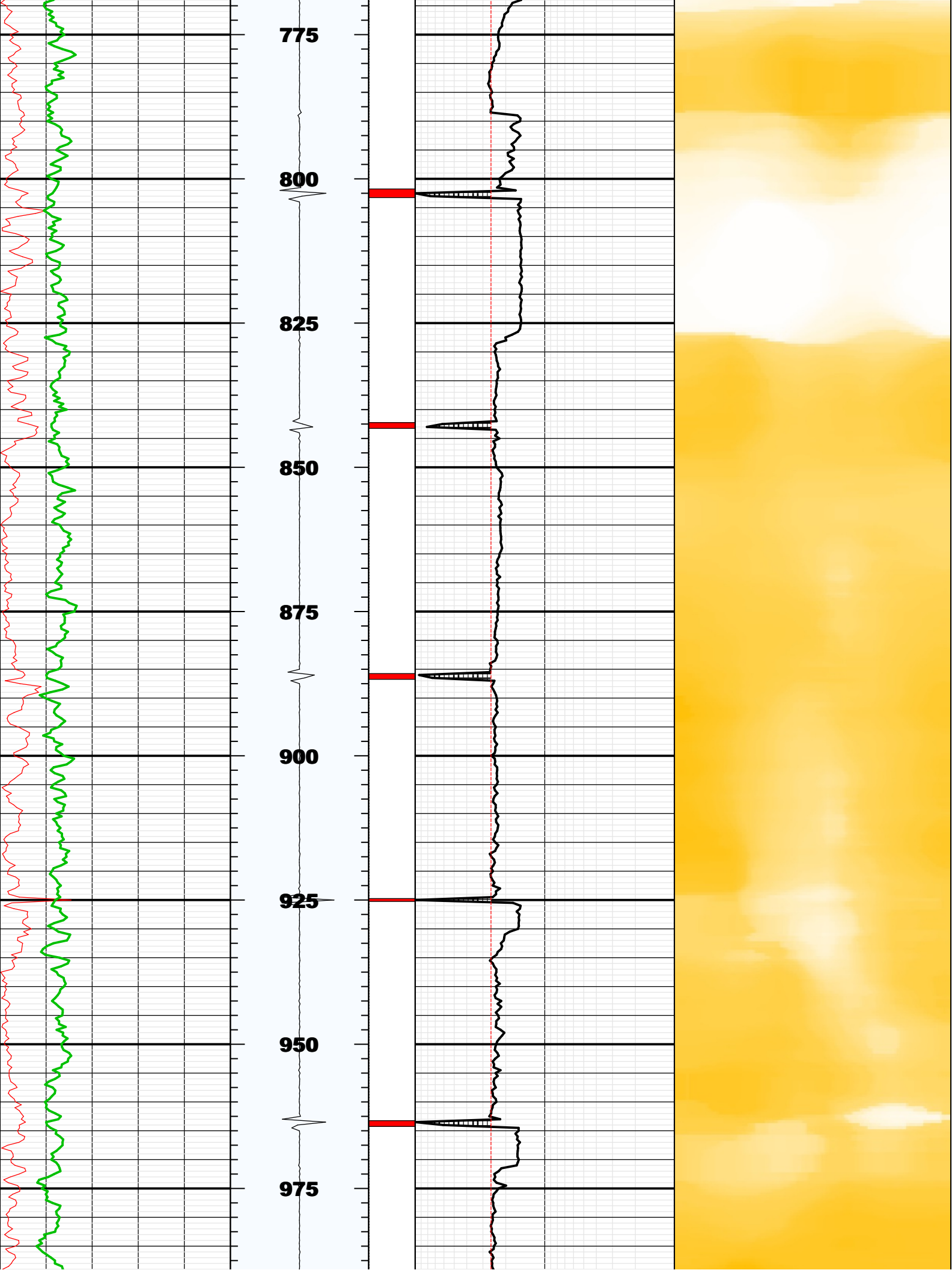
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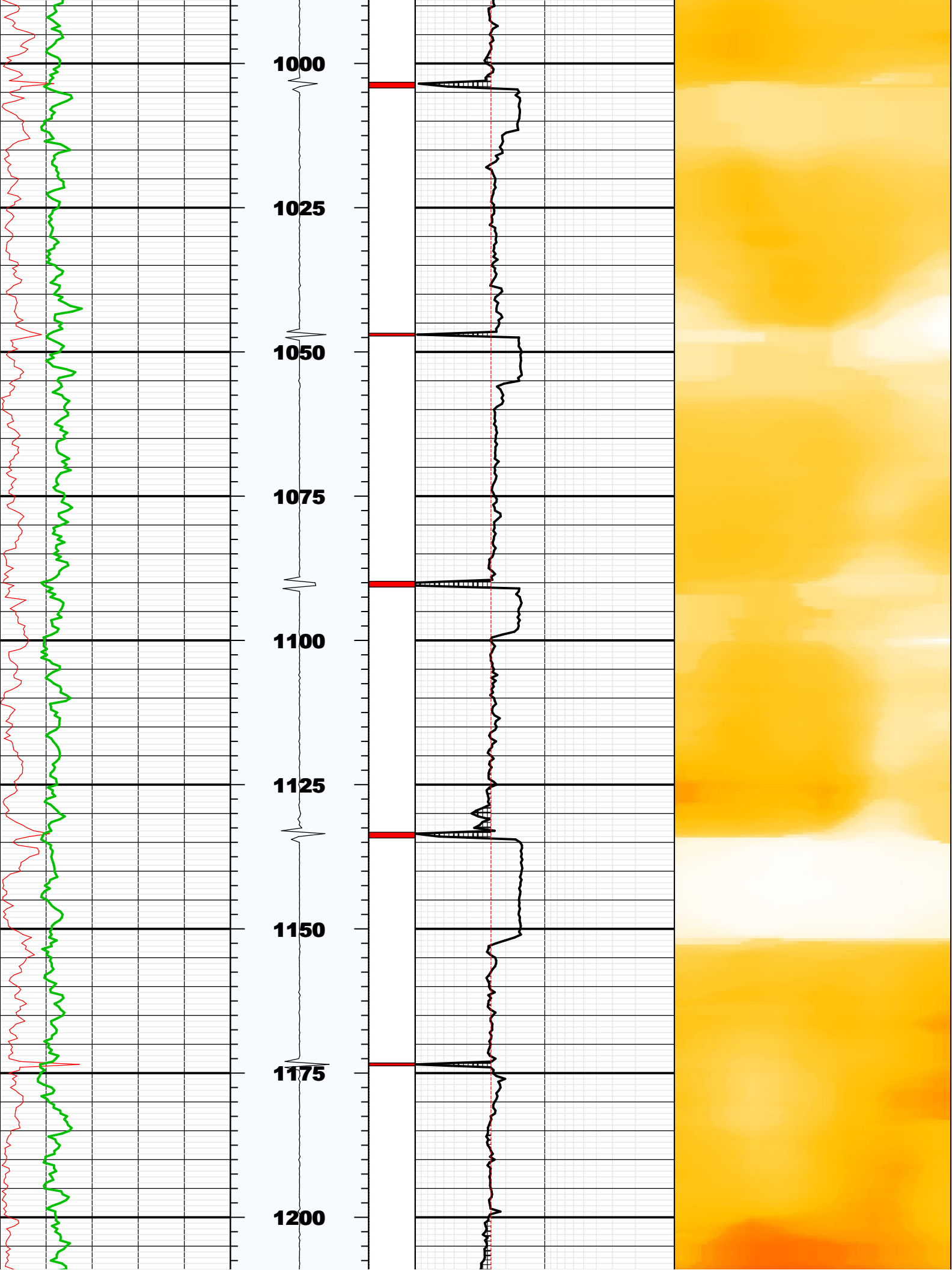


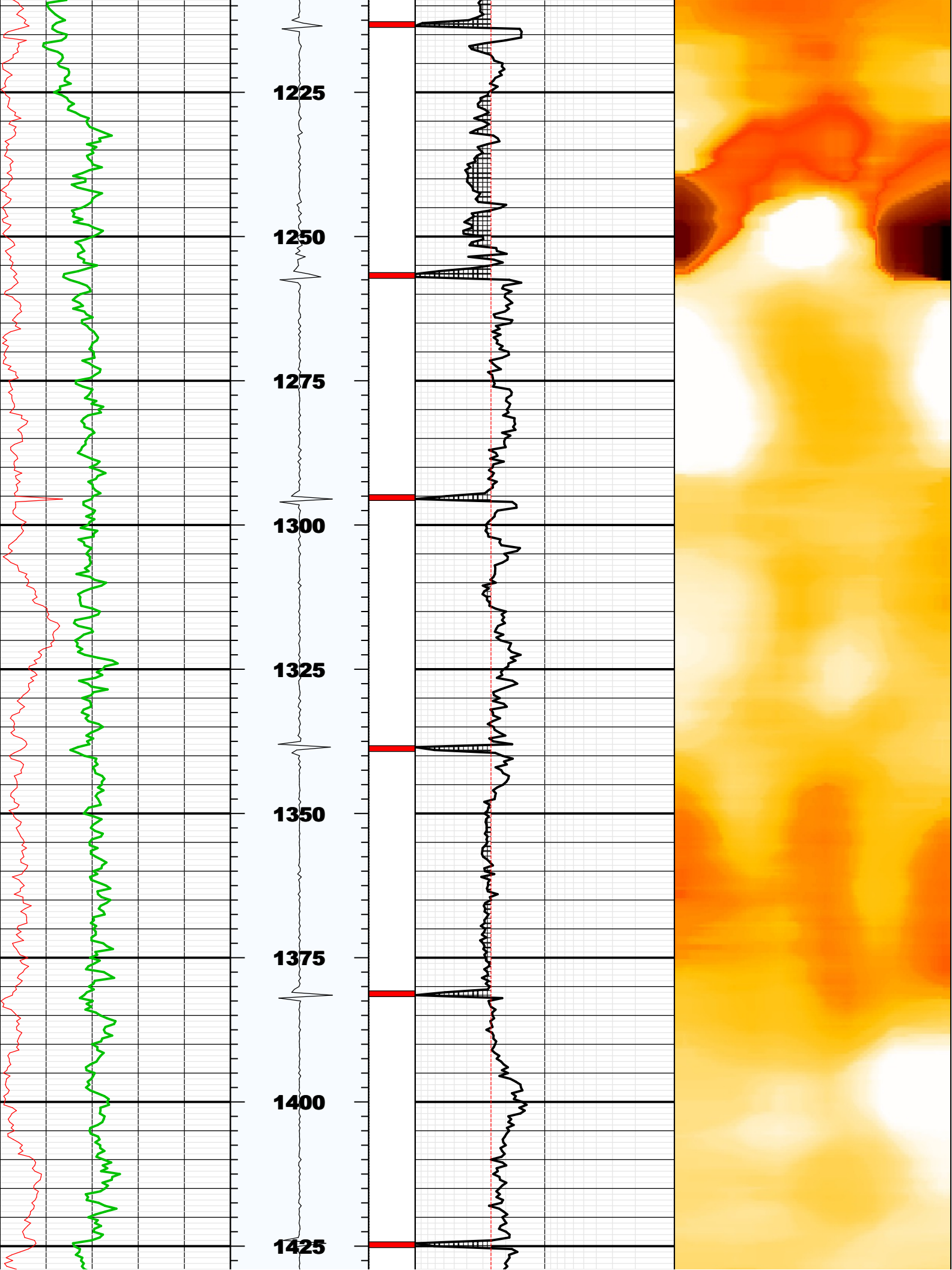


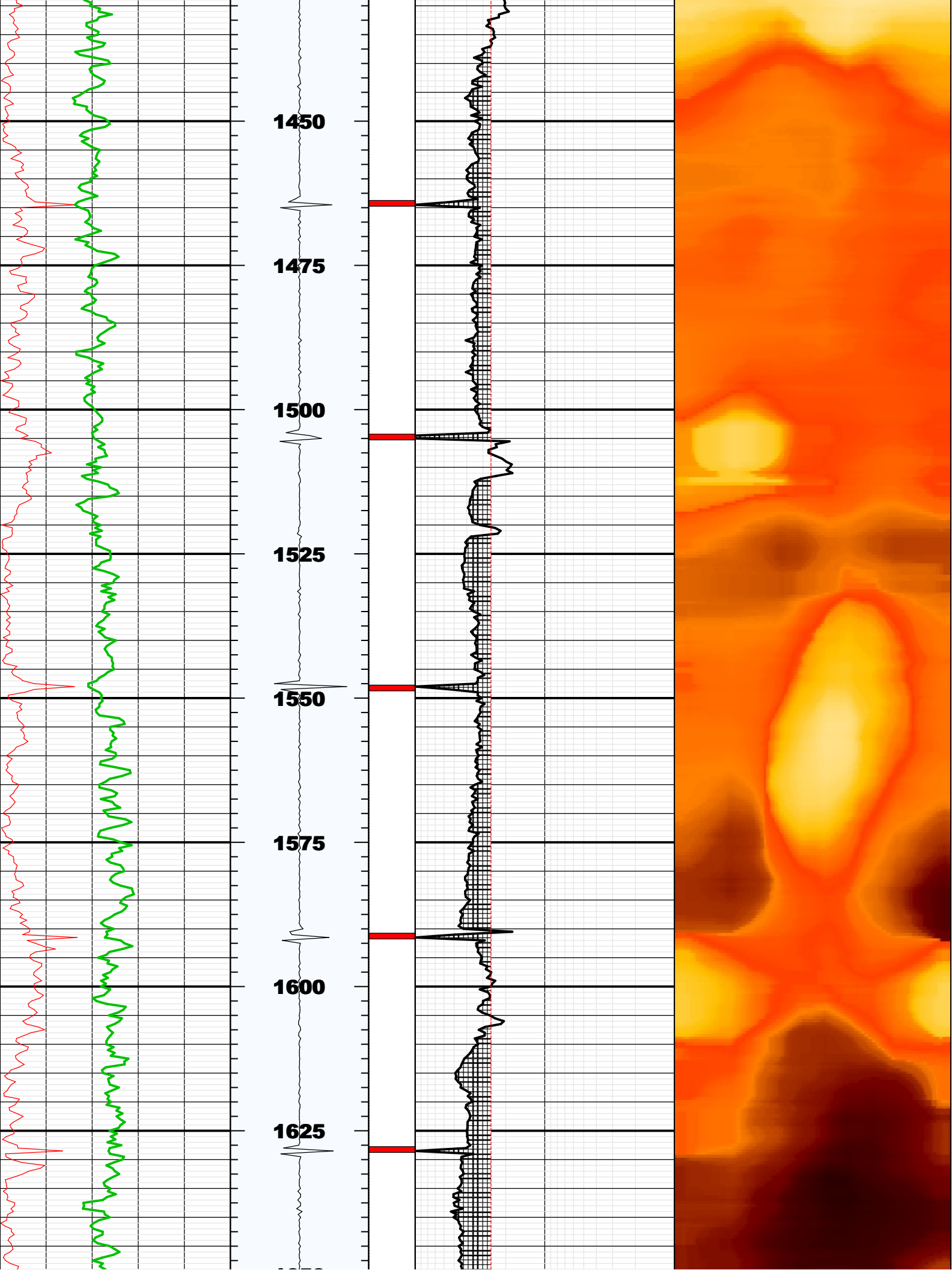


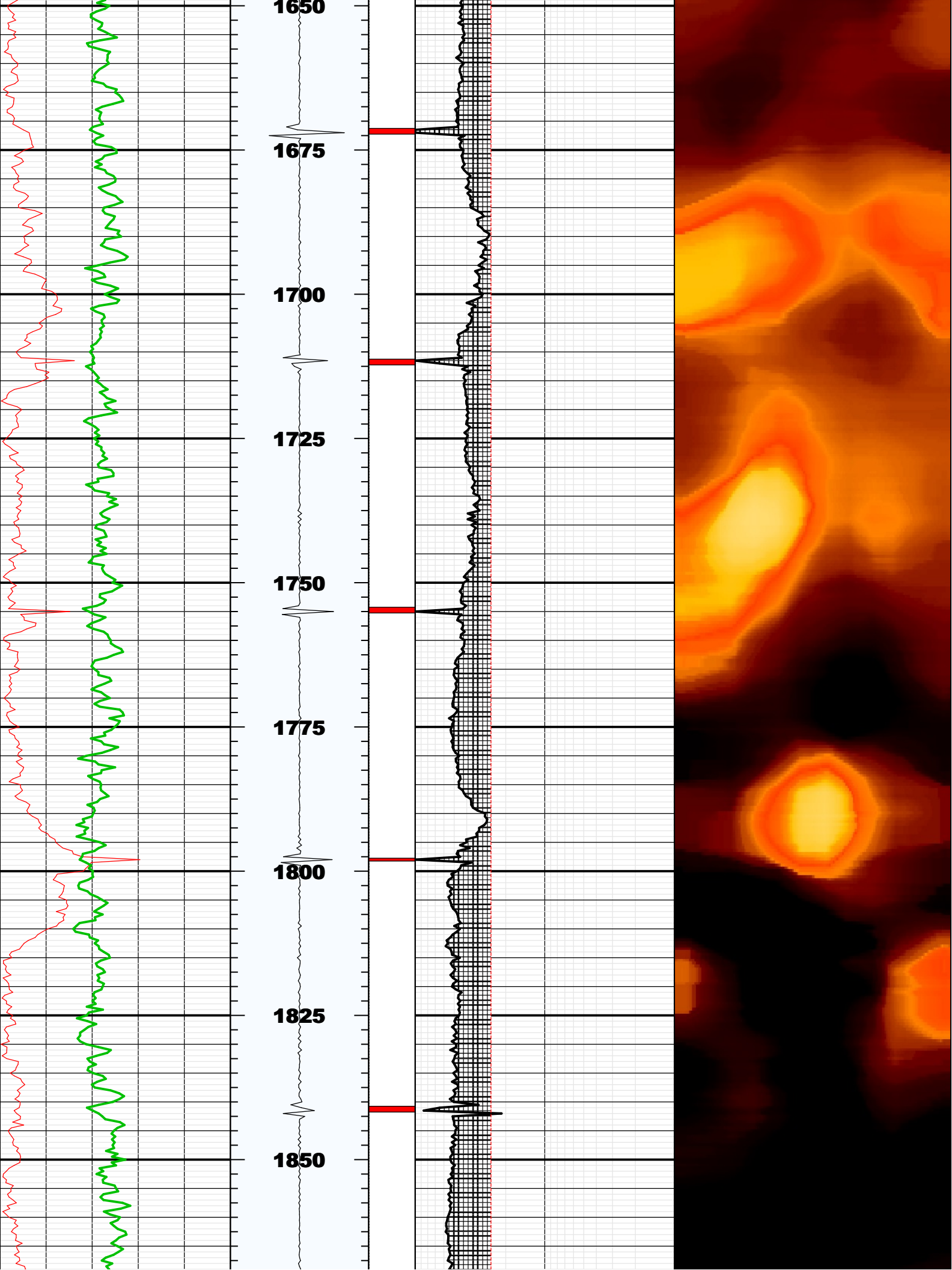


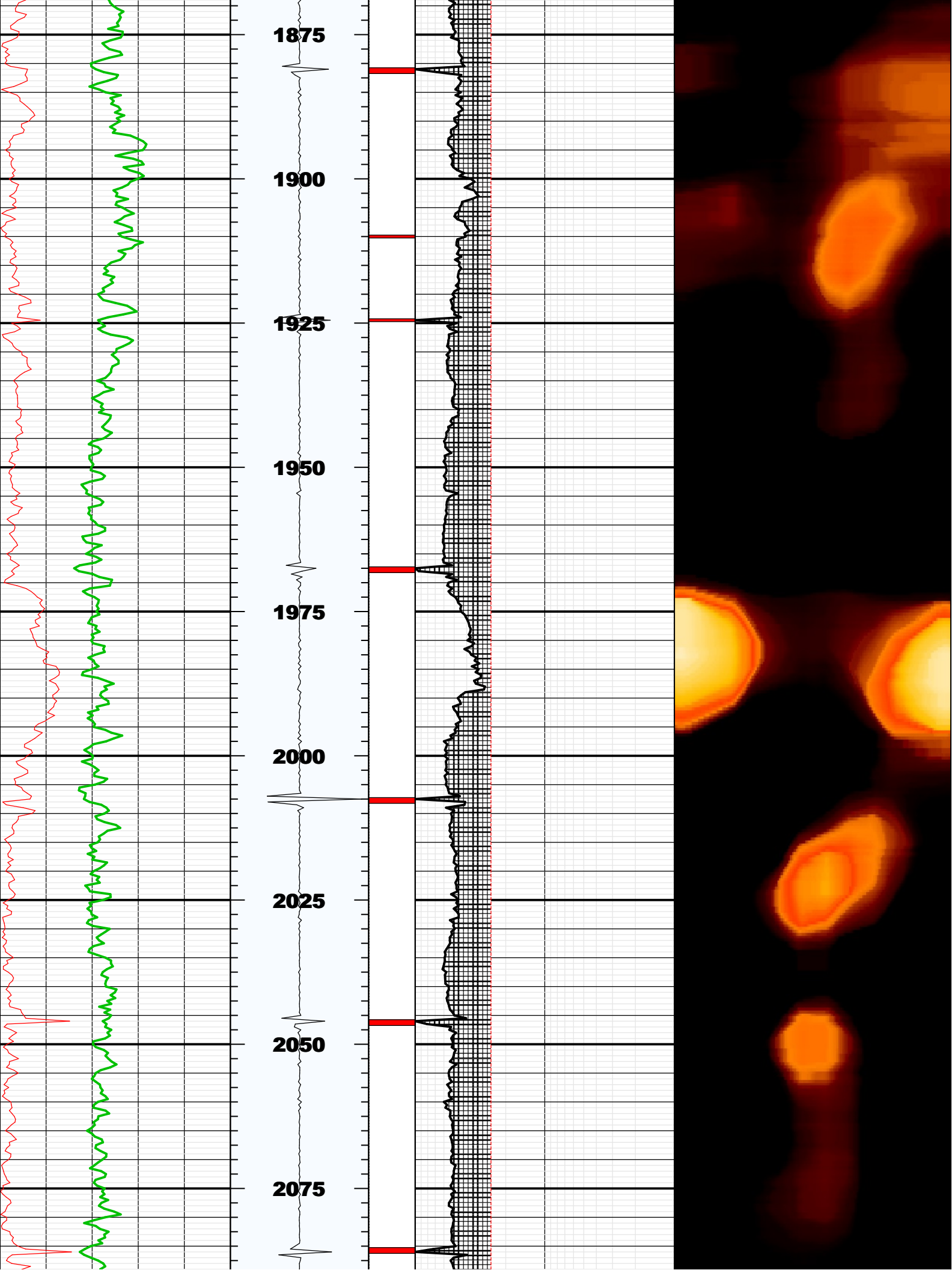


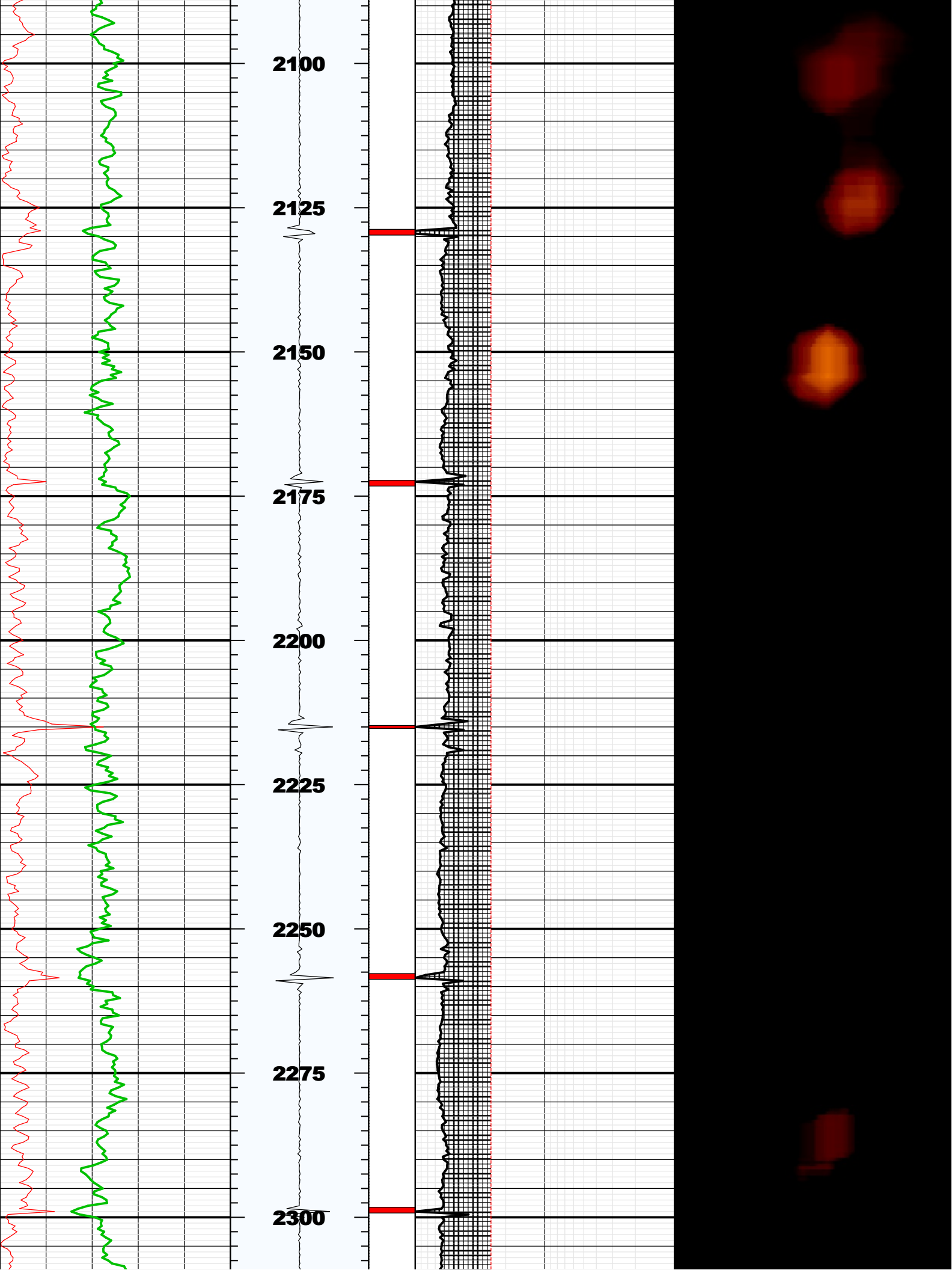


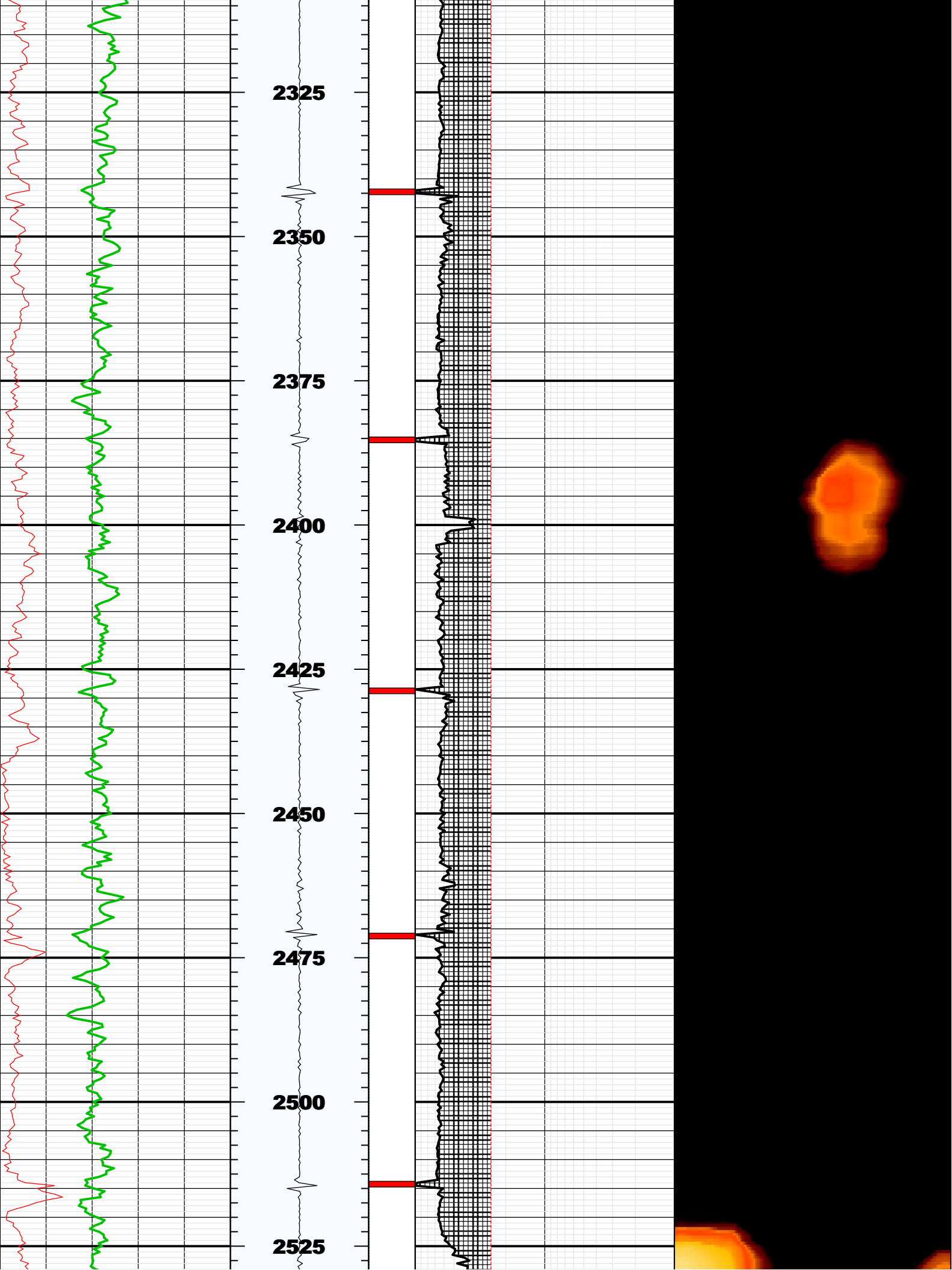


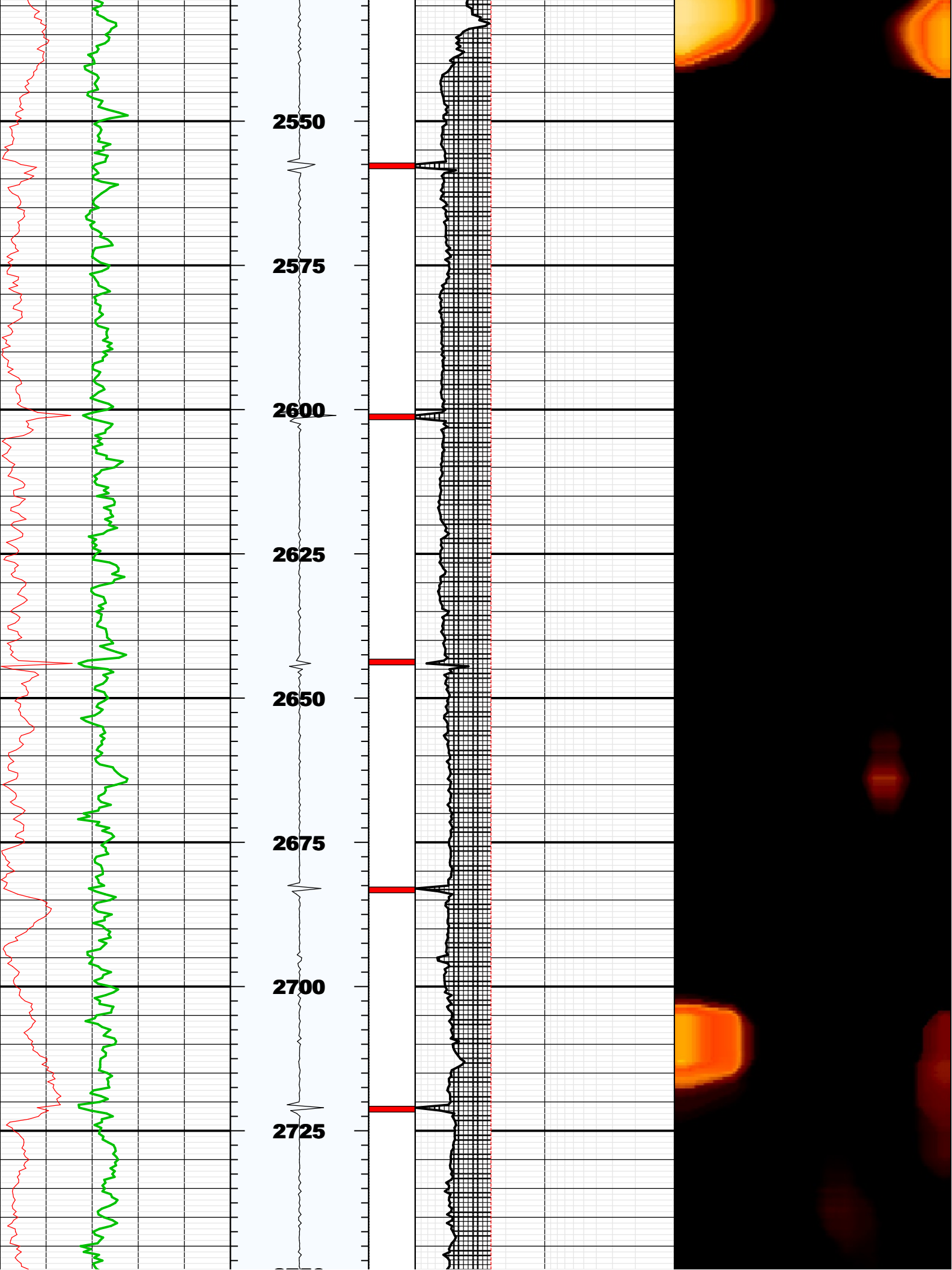


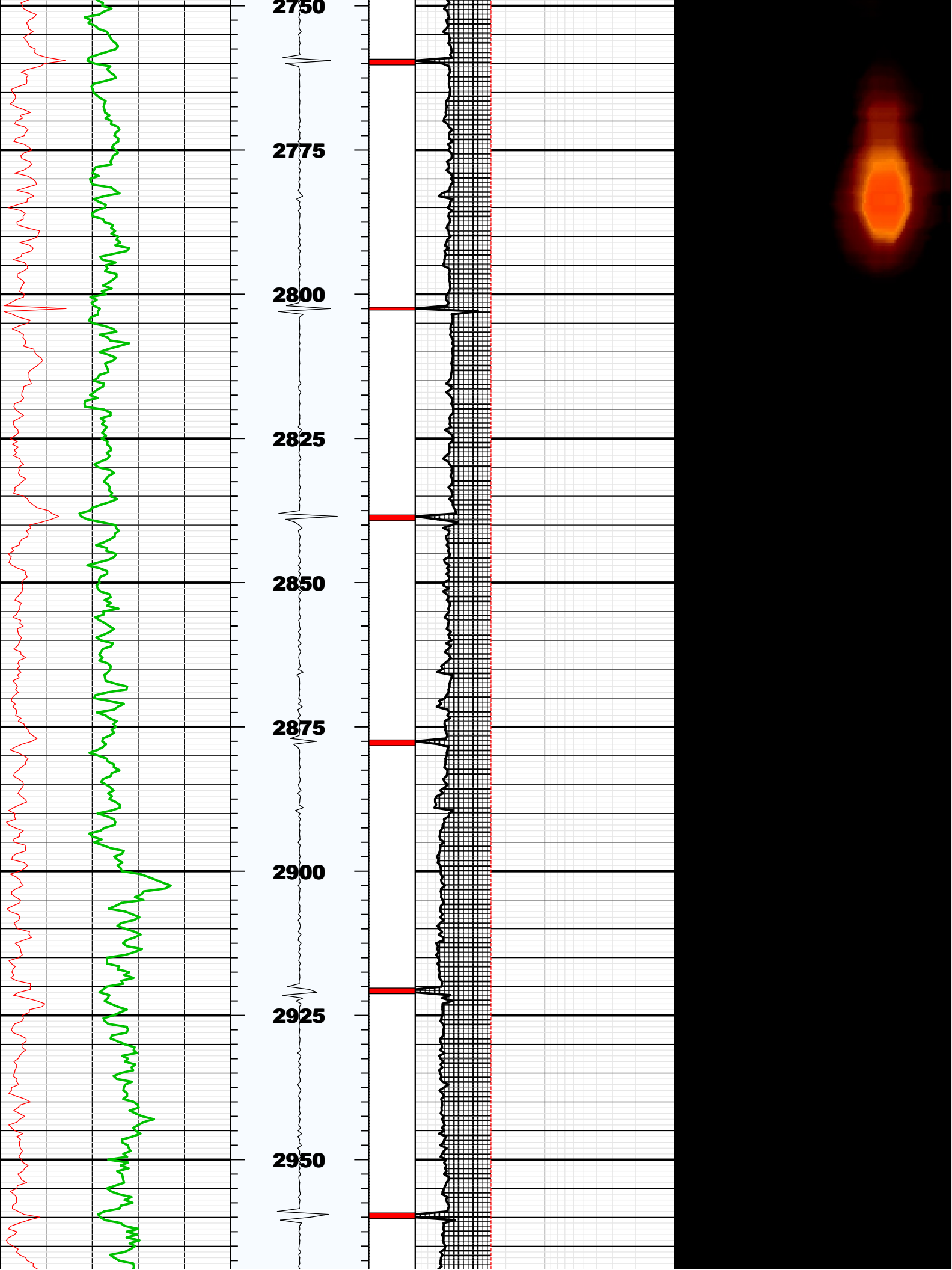


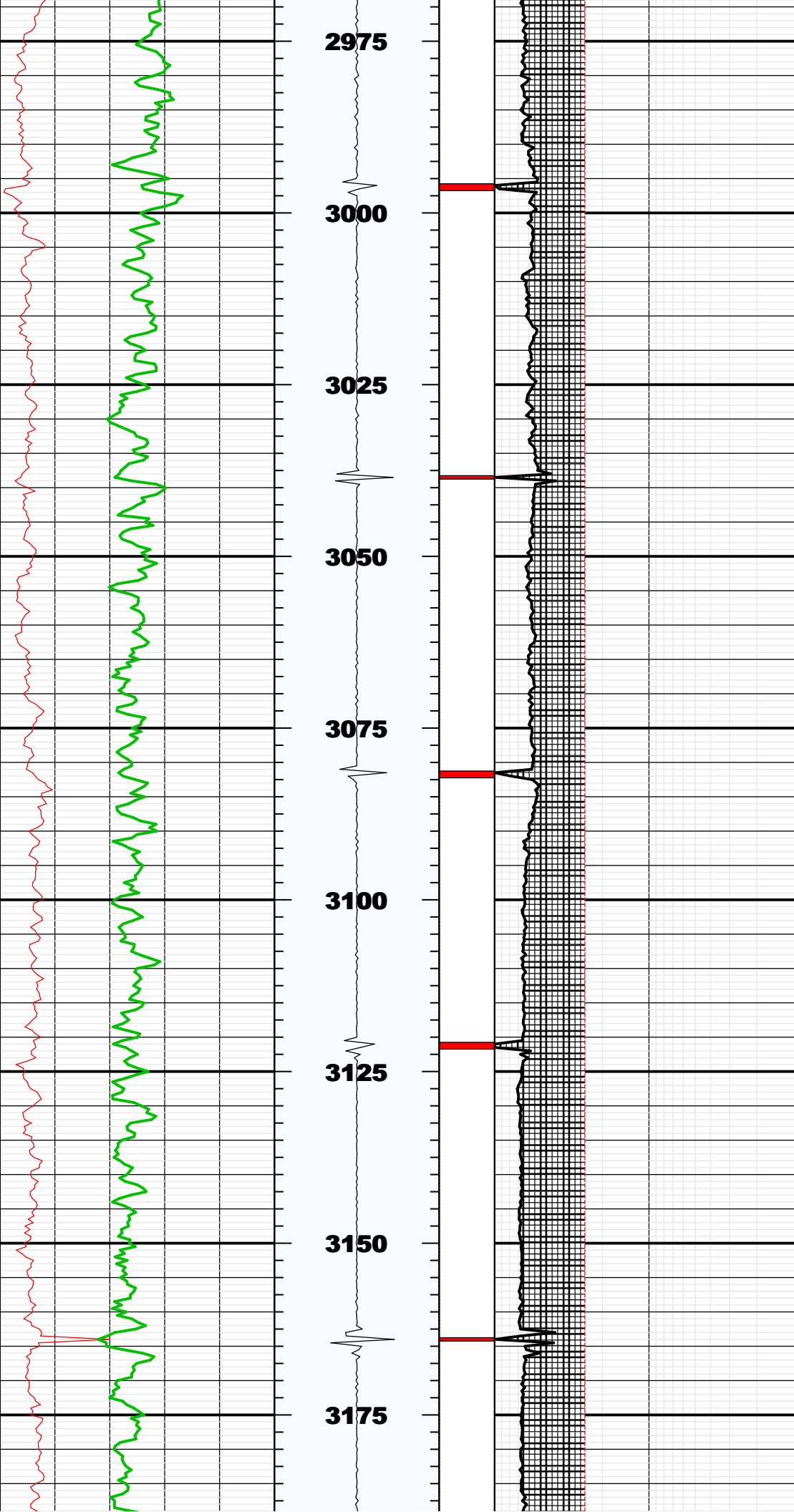


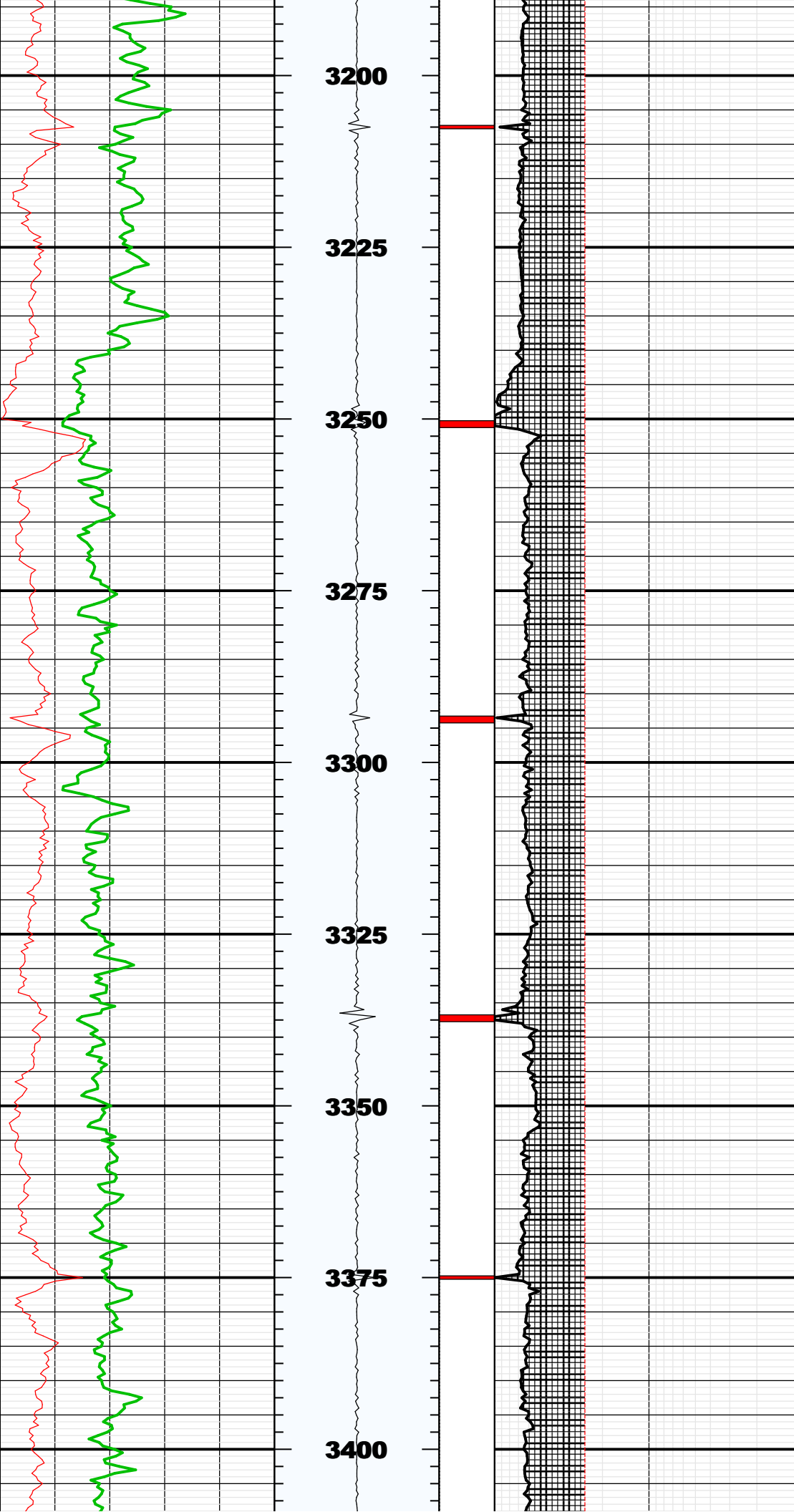


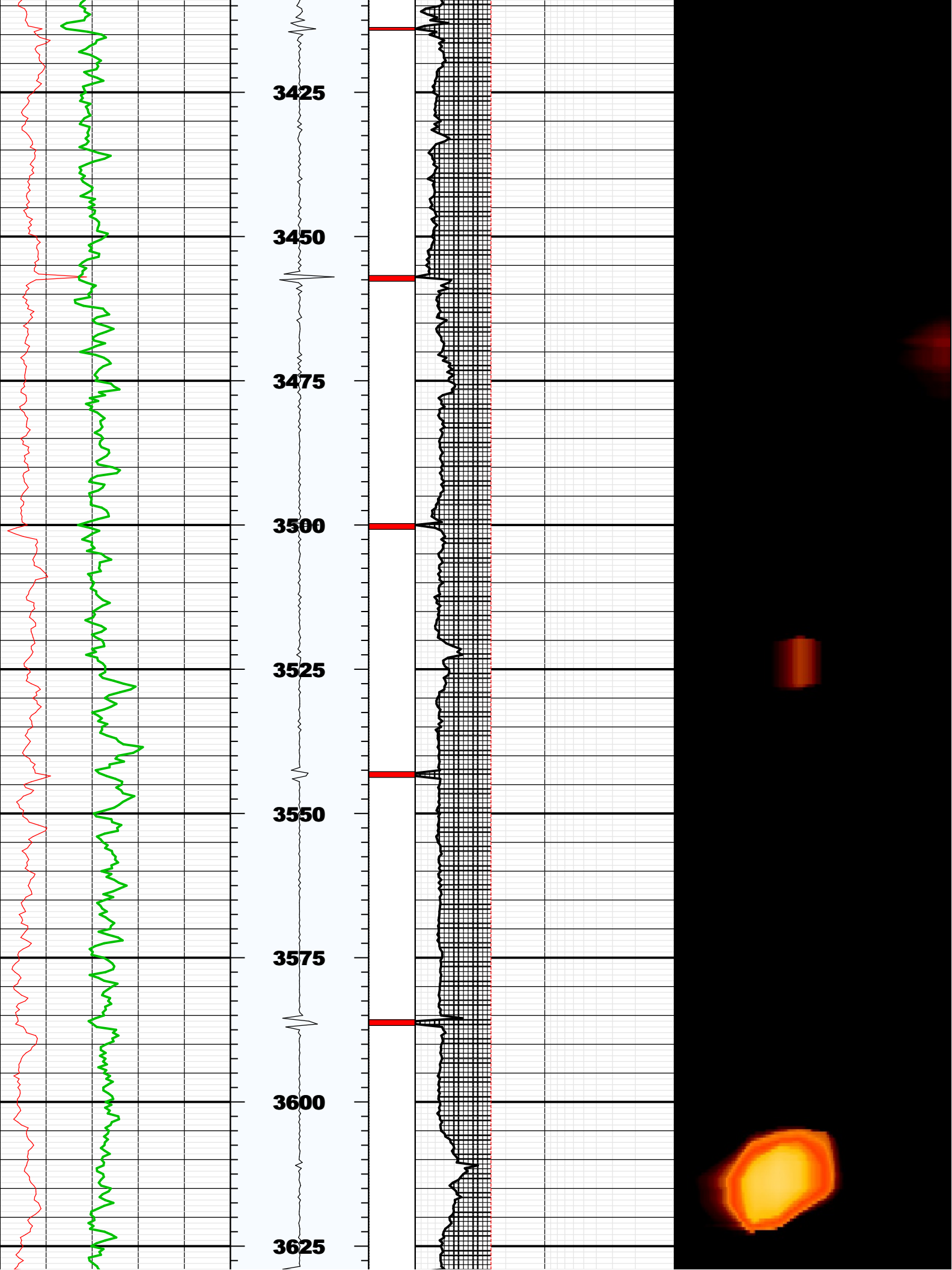


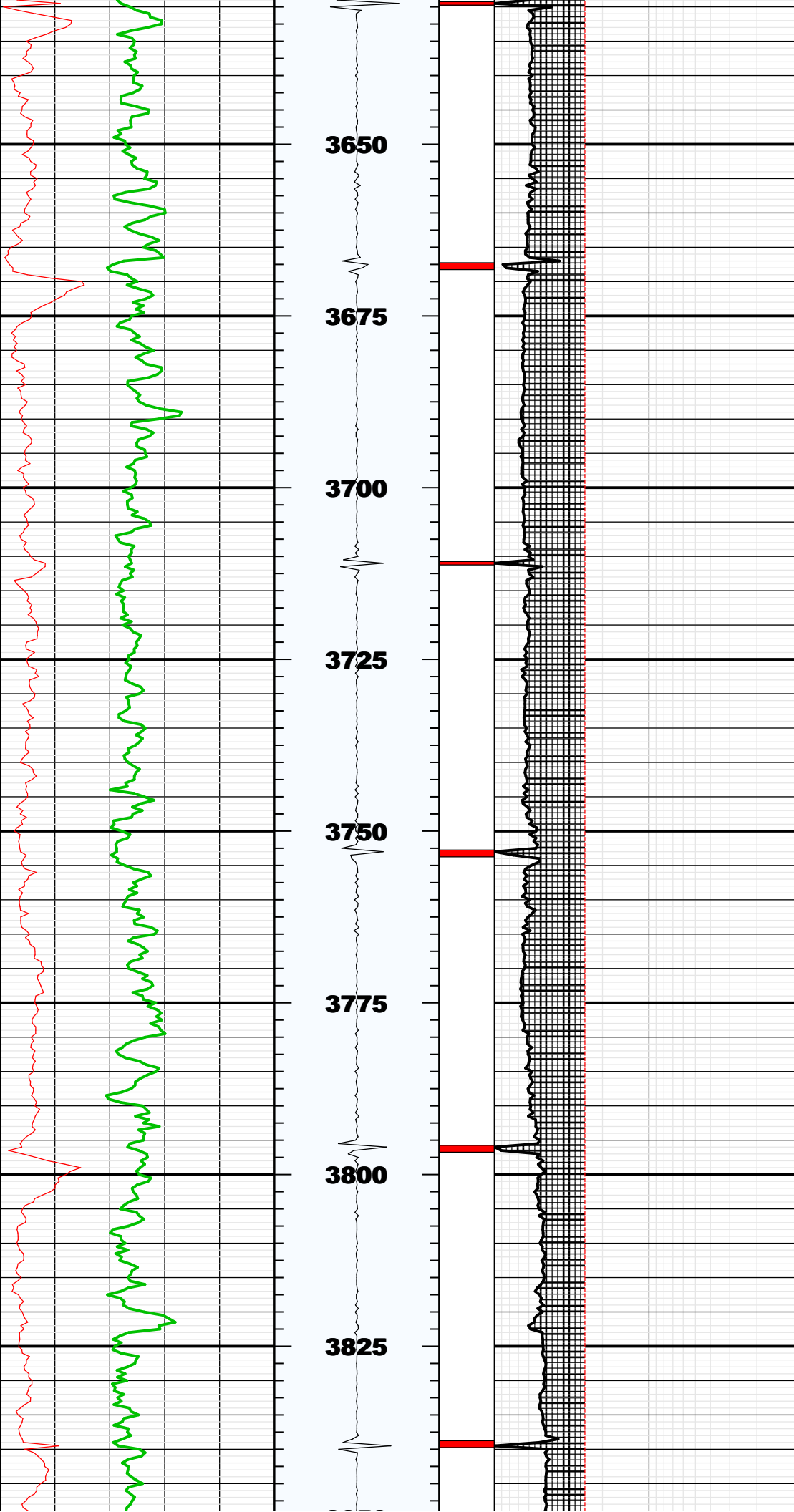


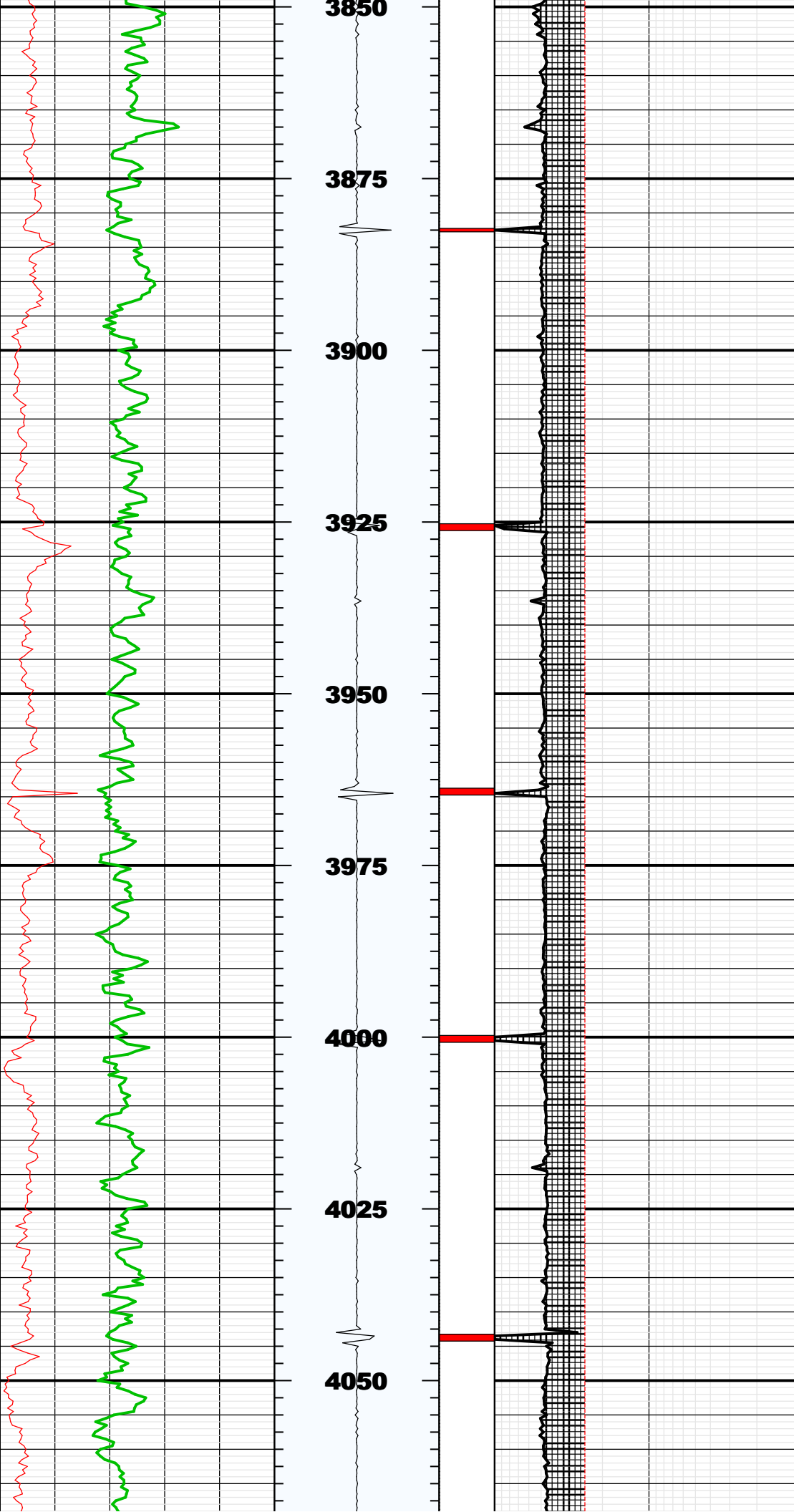


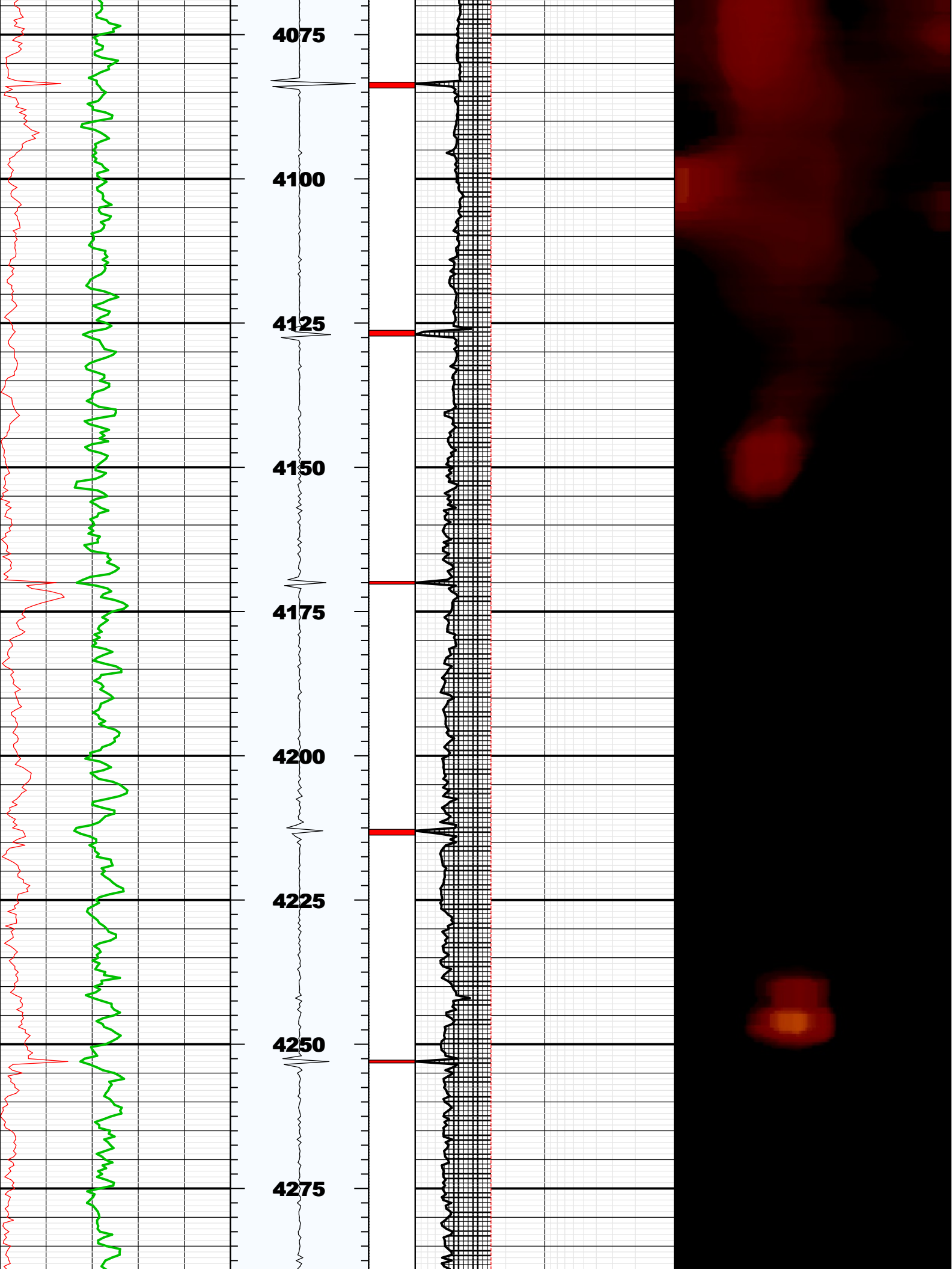


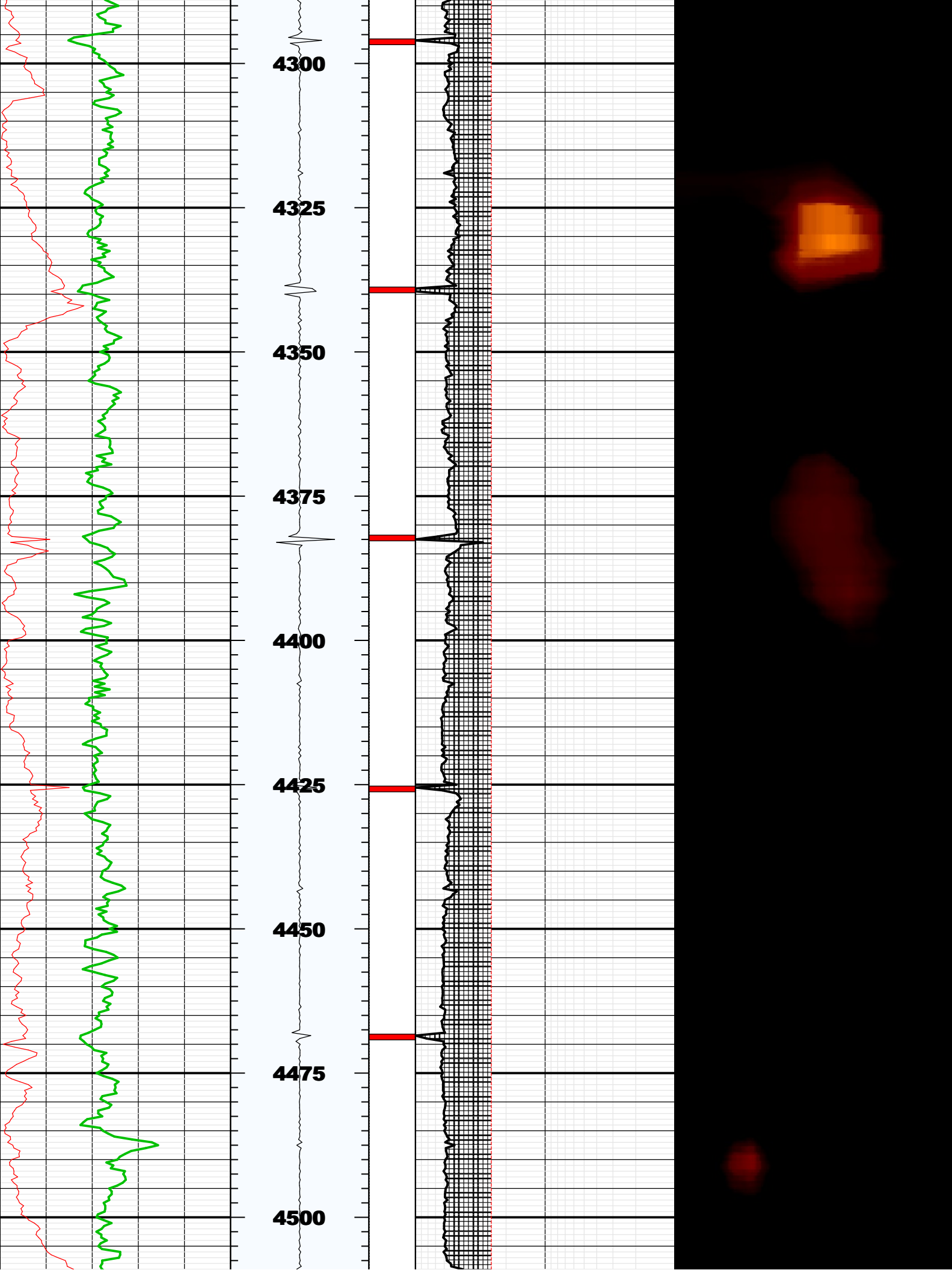


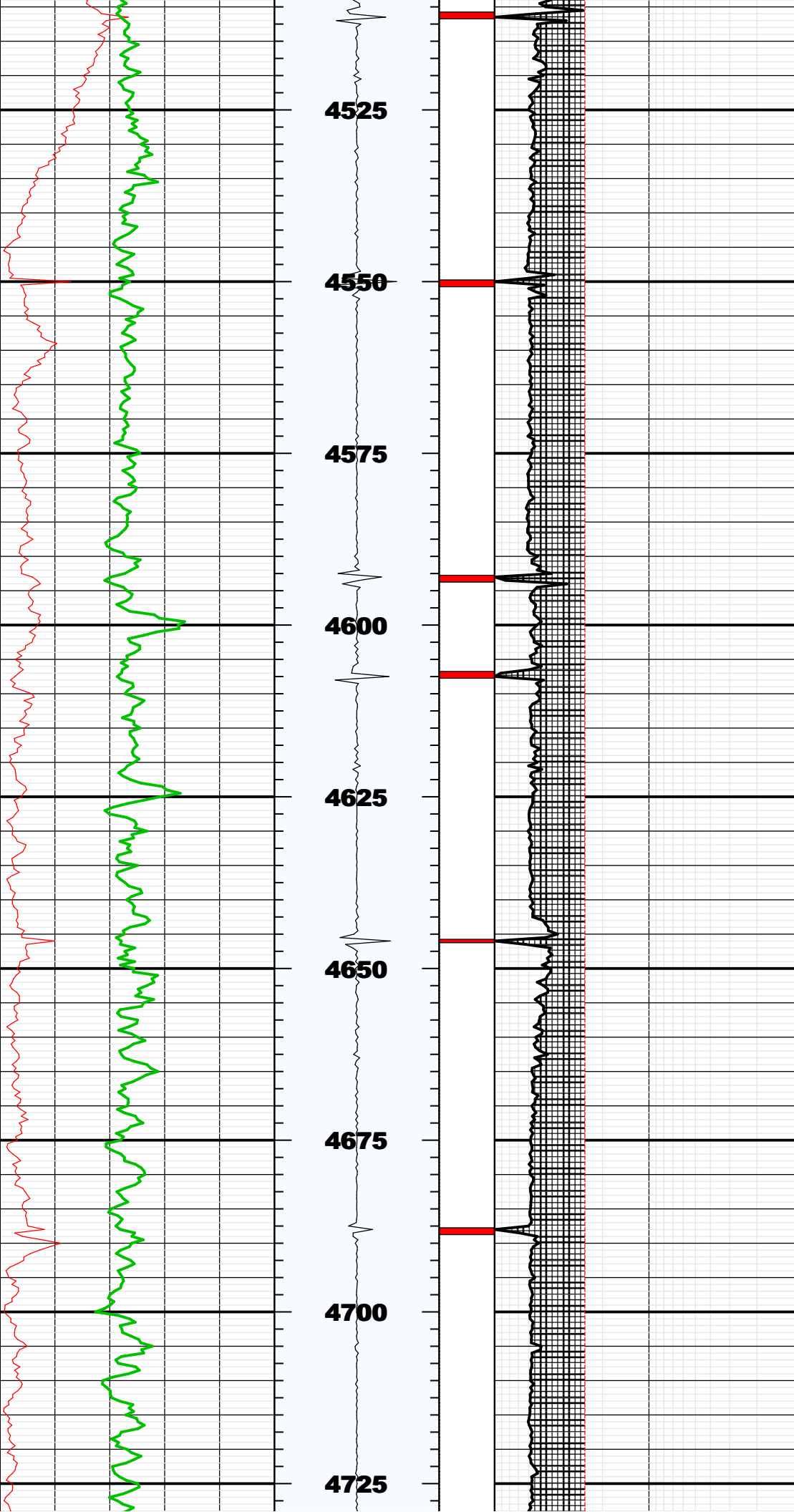


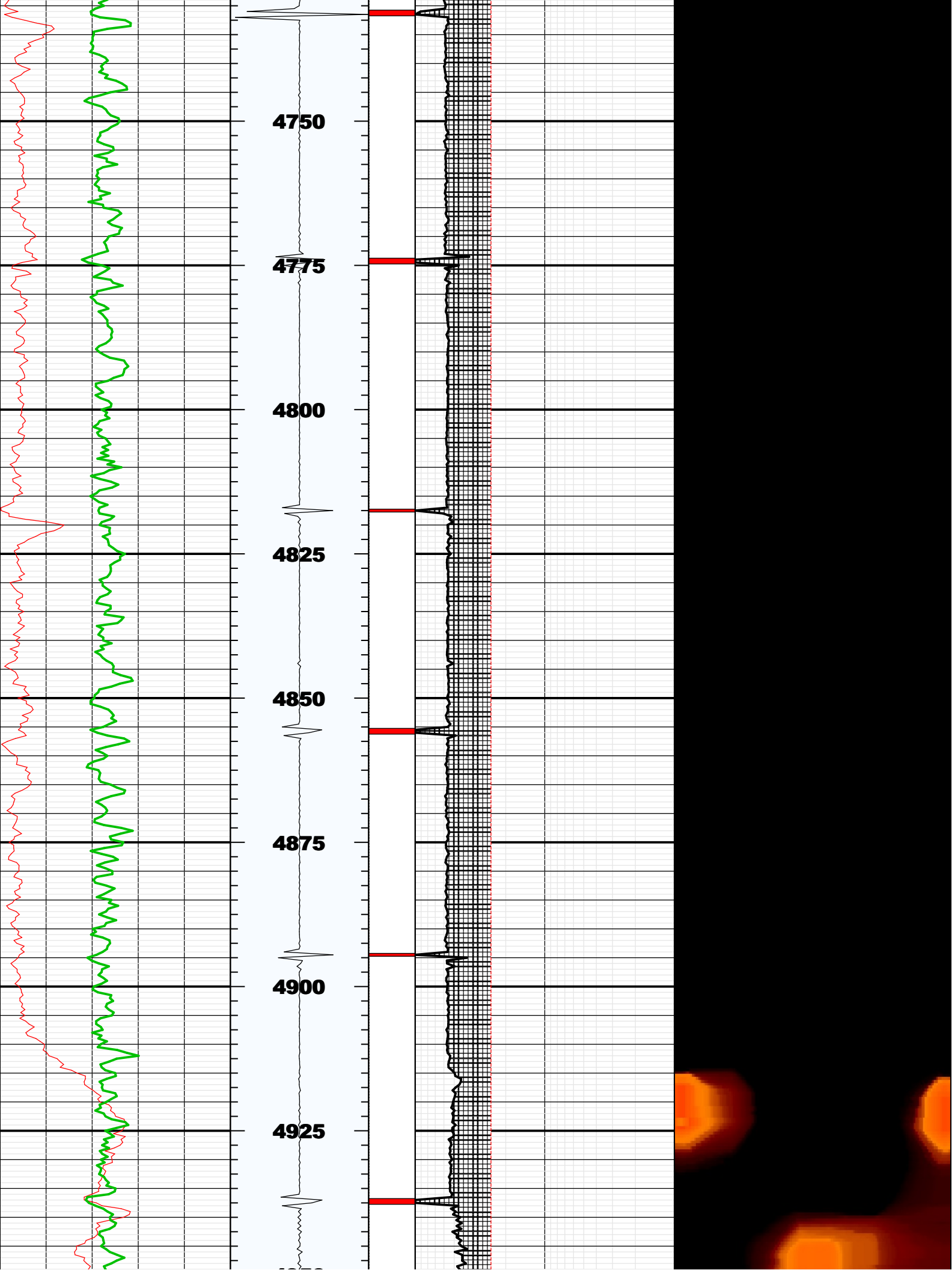


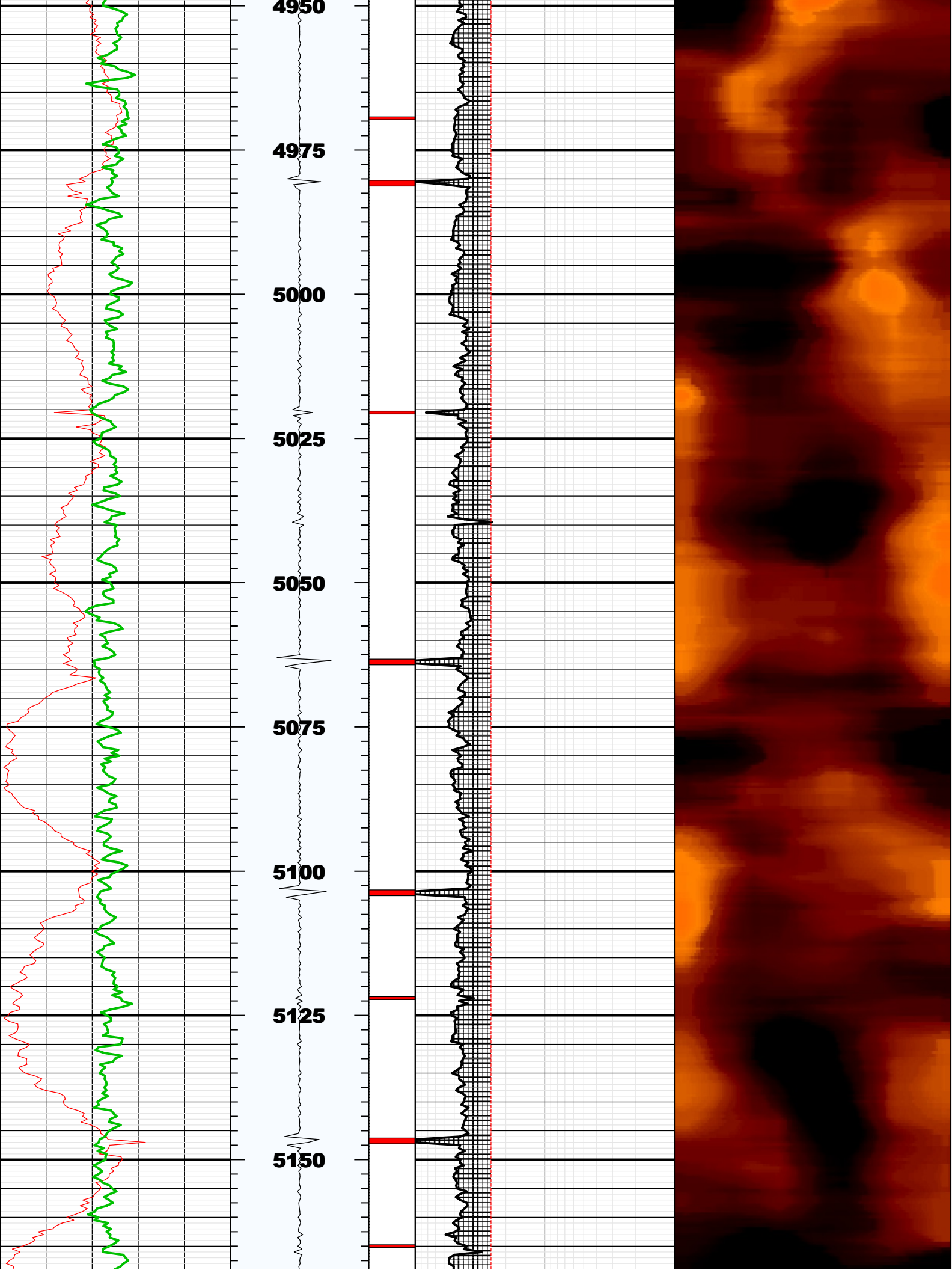


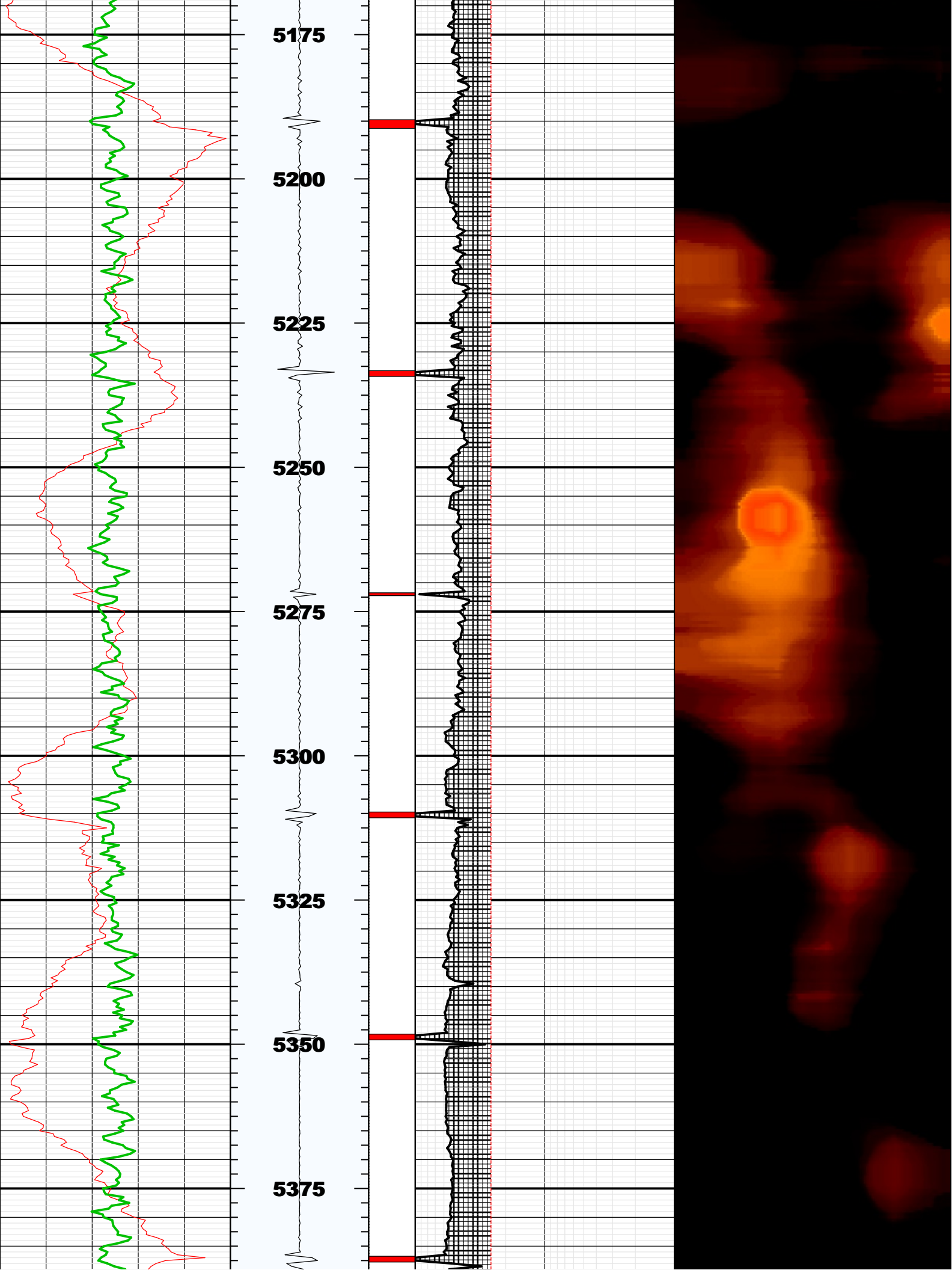


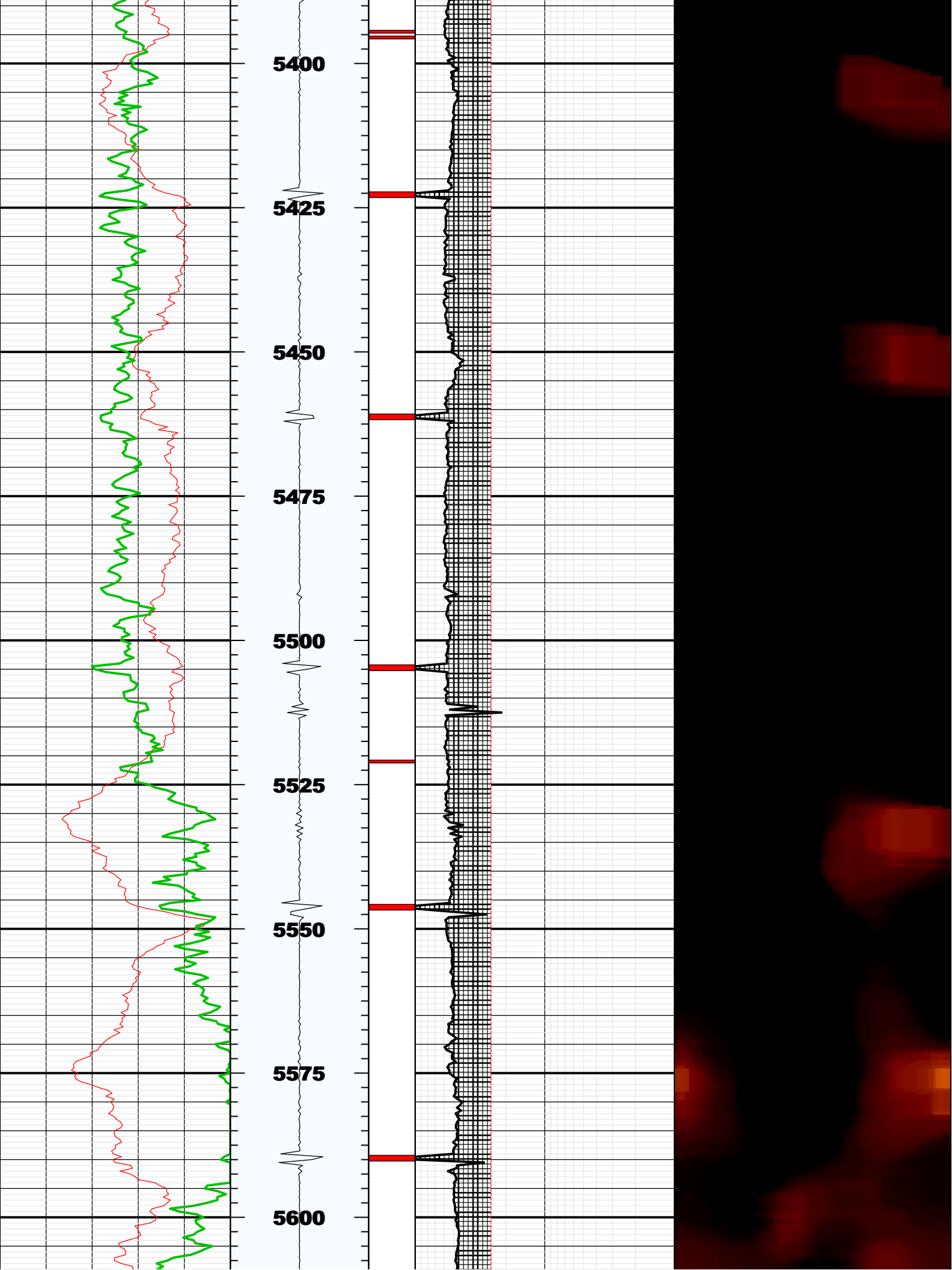


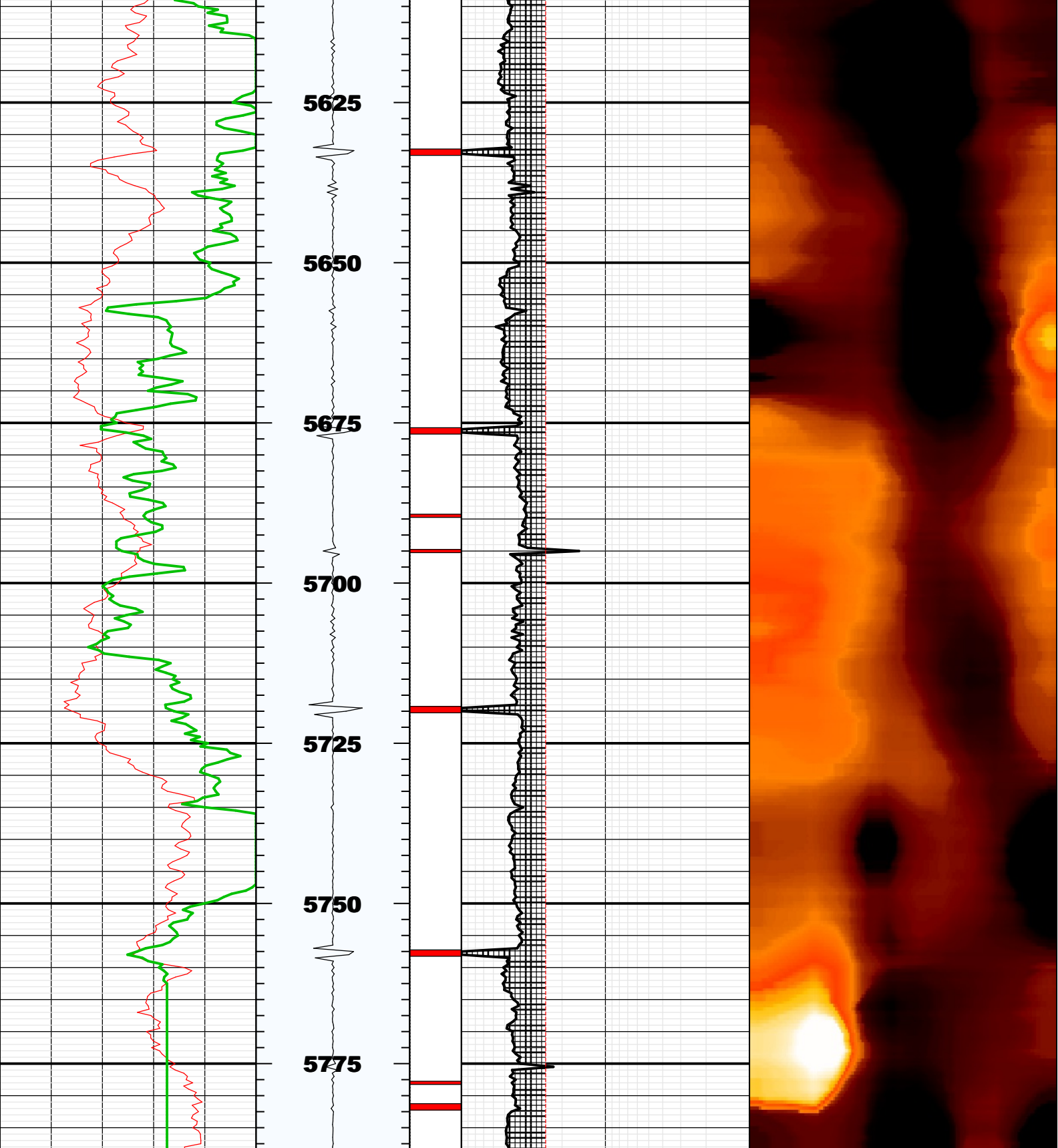








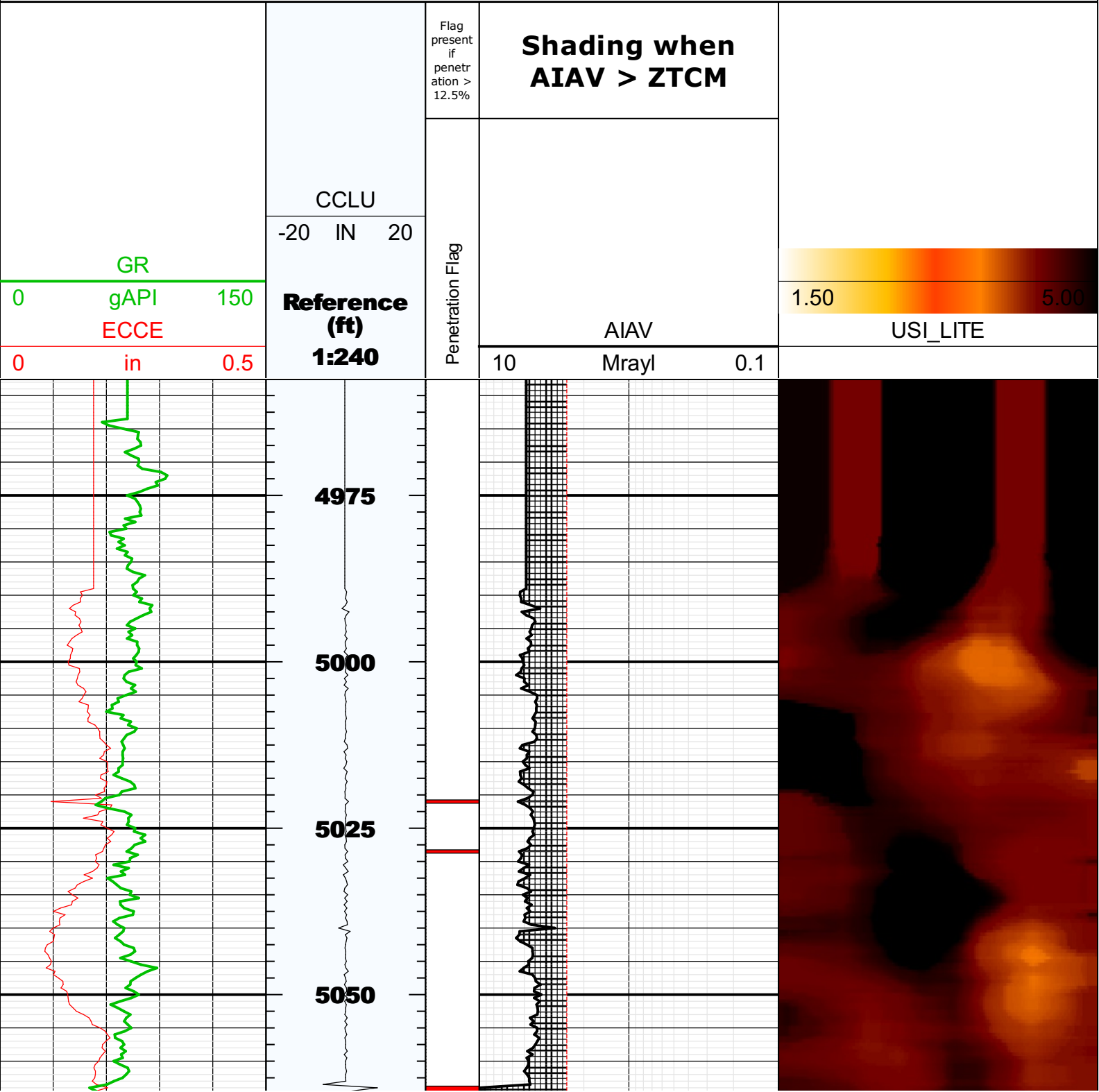


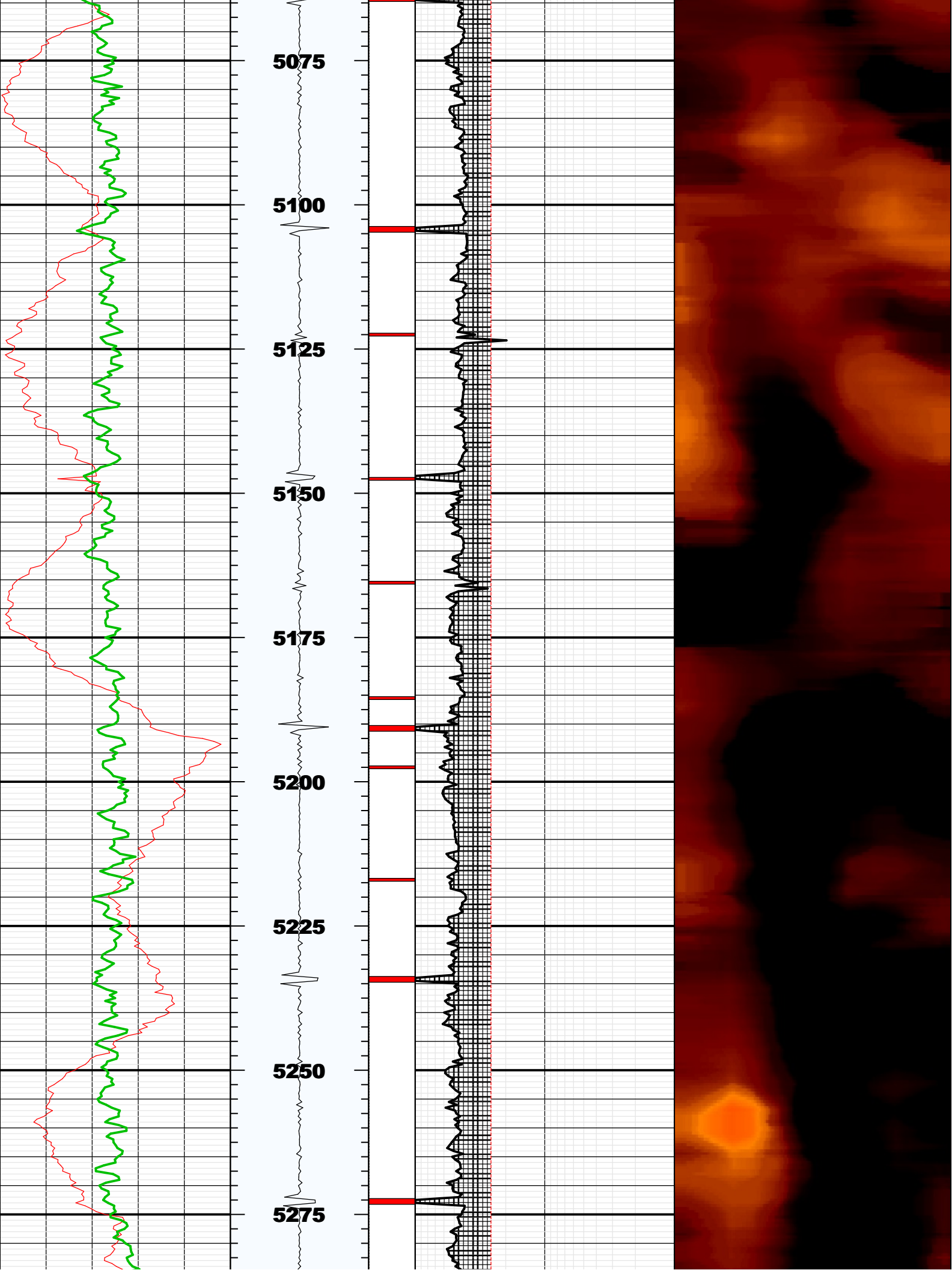


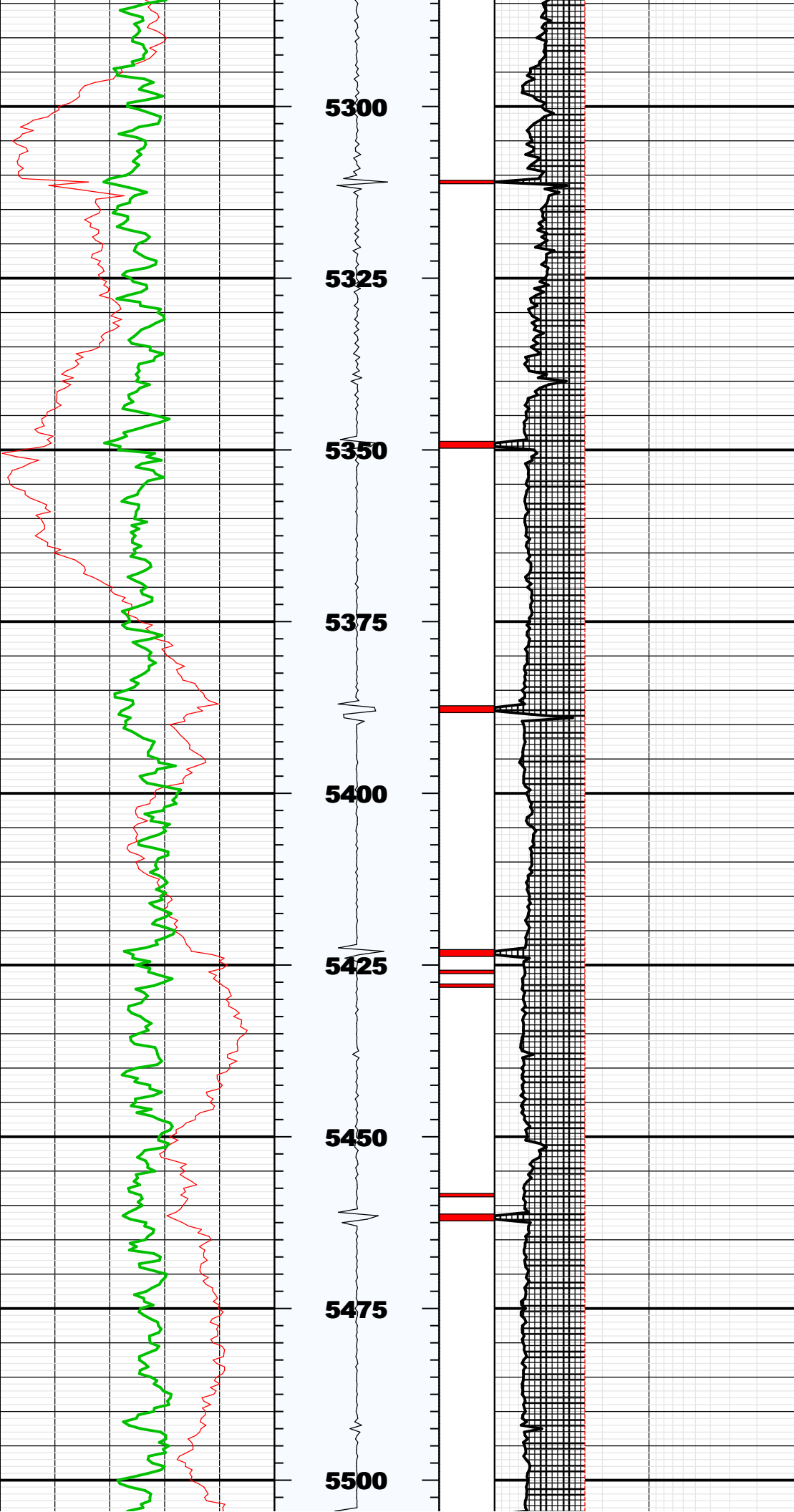
BS	8.75000	IN	Bit Size
CASG	P110		Casing Grade
CDIA	7.00000	IN	Casing Outer Diameter
CSID			
CSIZ	7.00000	IN	Current Casing Size
CWEI	26.00000	LB/F	Casing Weight
DFD	8.40000	LB/G	Drilling Fluid Density
DFVL	196.00000	US/F	Default Fluid Velocity
DO			
DOT	2.87400	IN	Diameter of Transducer Sensor
EMXV	60	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	31.97155	US	Window Begin Time
WINE	84.15570	US	Window End Time
ZCAS	46.25000	MRAY	Acoustic Impedance of Casing
ZINI	-1.00000	MRAY	Initial Estimate of Cement Impedance
ZMUD	1.71000	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

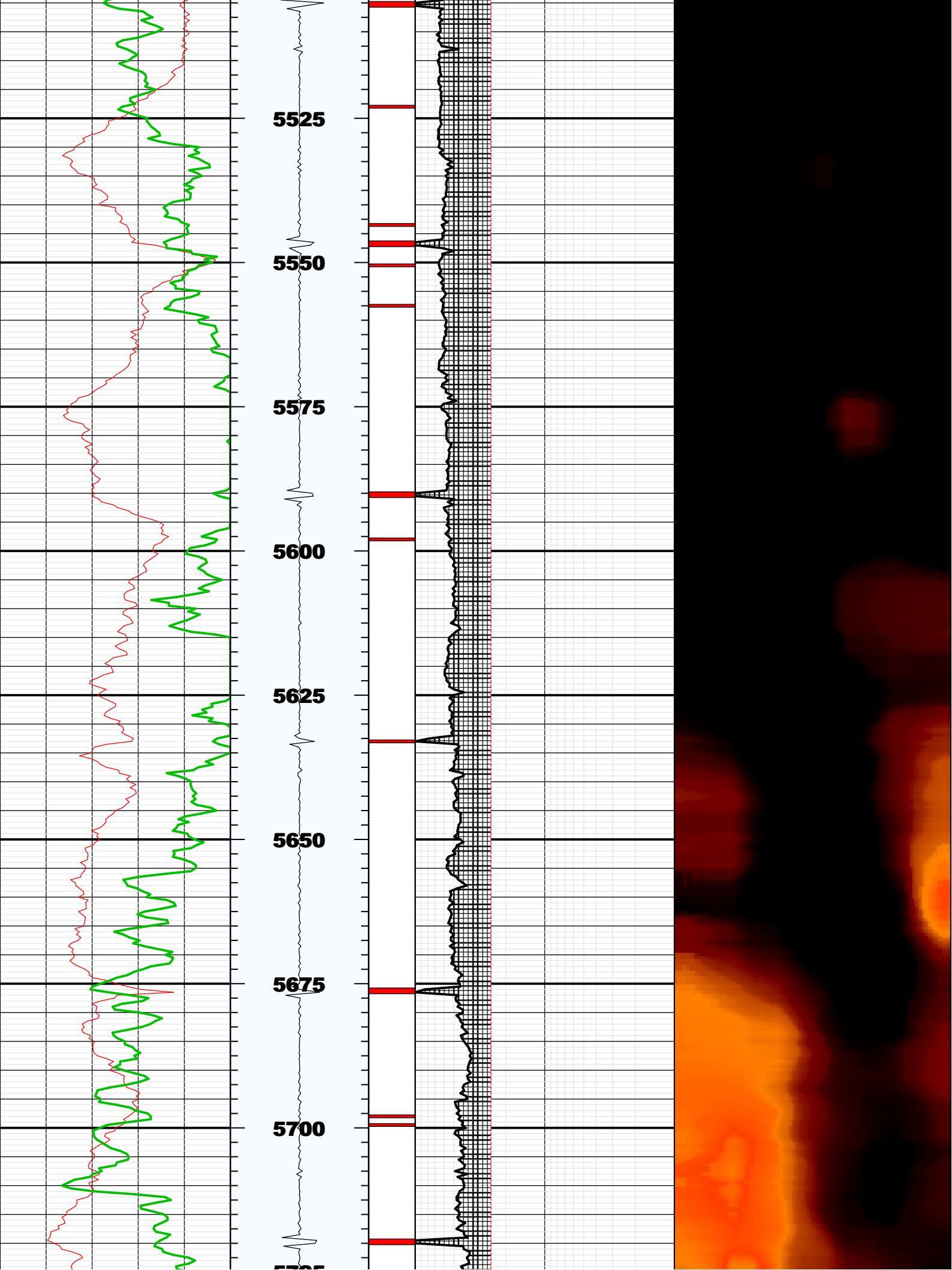
Repeat Pass

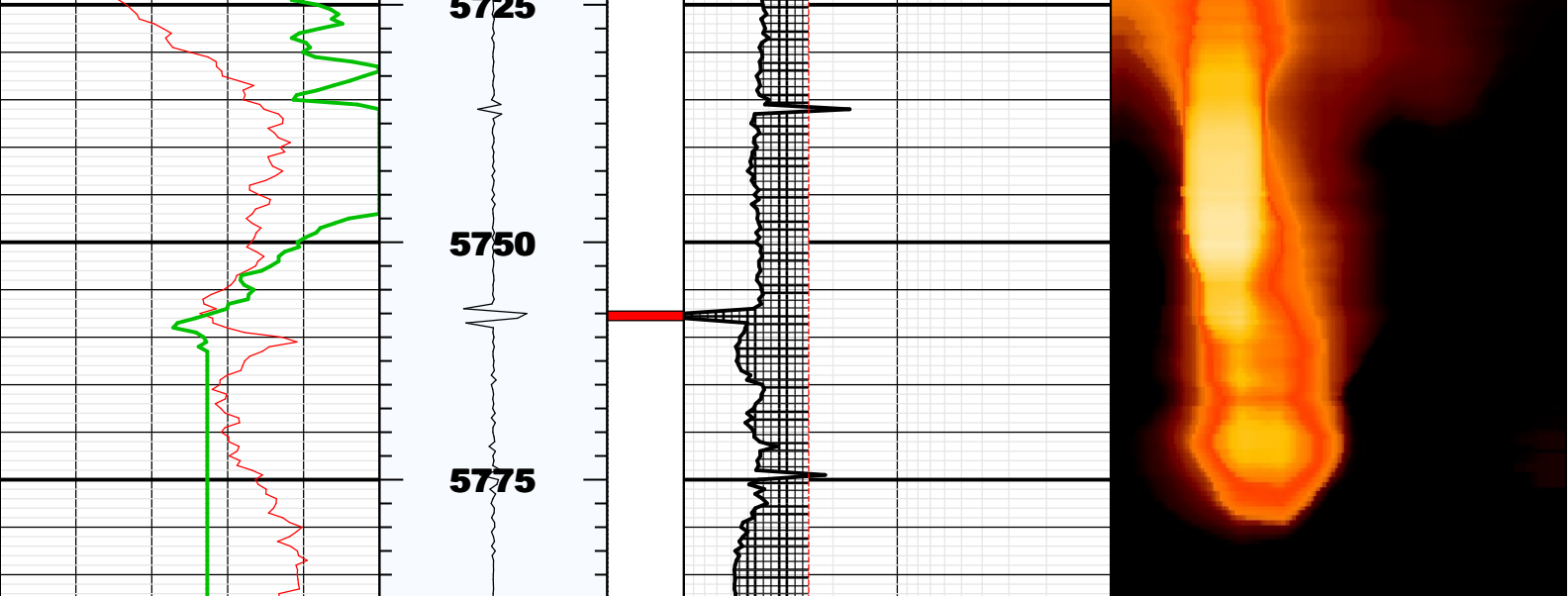
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Fluid Properties Used for Main Pass

