

Company: Noble Energy Inc

Well: Cutthroat LC28-73HNB  
Field: Wildcat  
County: Weld State: Colorado

County: Weld		Field: Wildcat		Location: SHL SESE 340' FSL & 1030' FEL		Well: Cutthroat LC28-73HNB		Company: Noble Energy Inc	
USI-LITE		LOCATION		Permanent Datum: Log Measured From: Drilling Measured From:		GL KB KB		Elev: K.B. 4866.0 F G.L. 4836.0 F D.F. 4865.0 F	
Logging Date	01-Aug-2014	API Serial No. 05-123-38604-00	Section 28	Township 9N	Range 59W				
Run Number	Run 1								
Depth Driller	6436.0 F								
Schlumberger Depth	6436.0 F								
Bottom Log Interval	6185.0 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	6436.0 F								
Casing Size	7.00 IN								
Weight	26.00 LB/F								
Grade	P110								
From	0.0 F								
To	6426.0 F								
Max Recorded Temp	222.9								
Logger on bottom (date)	01-Aug-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: 24000.00000

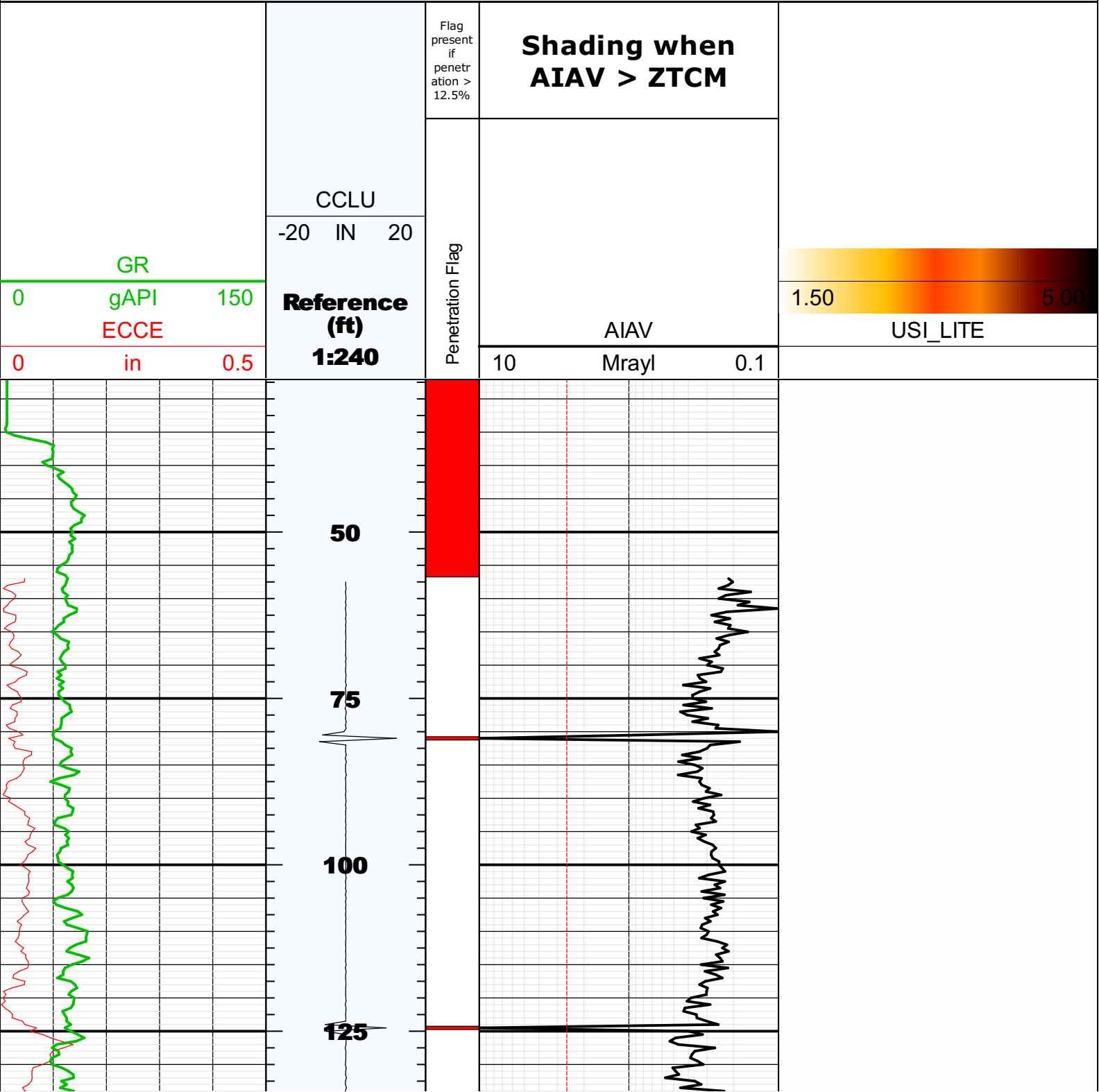
DISCLAIMER

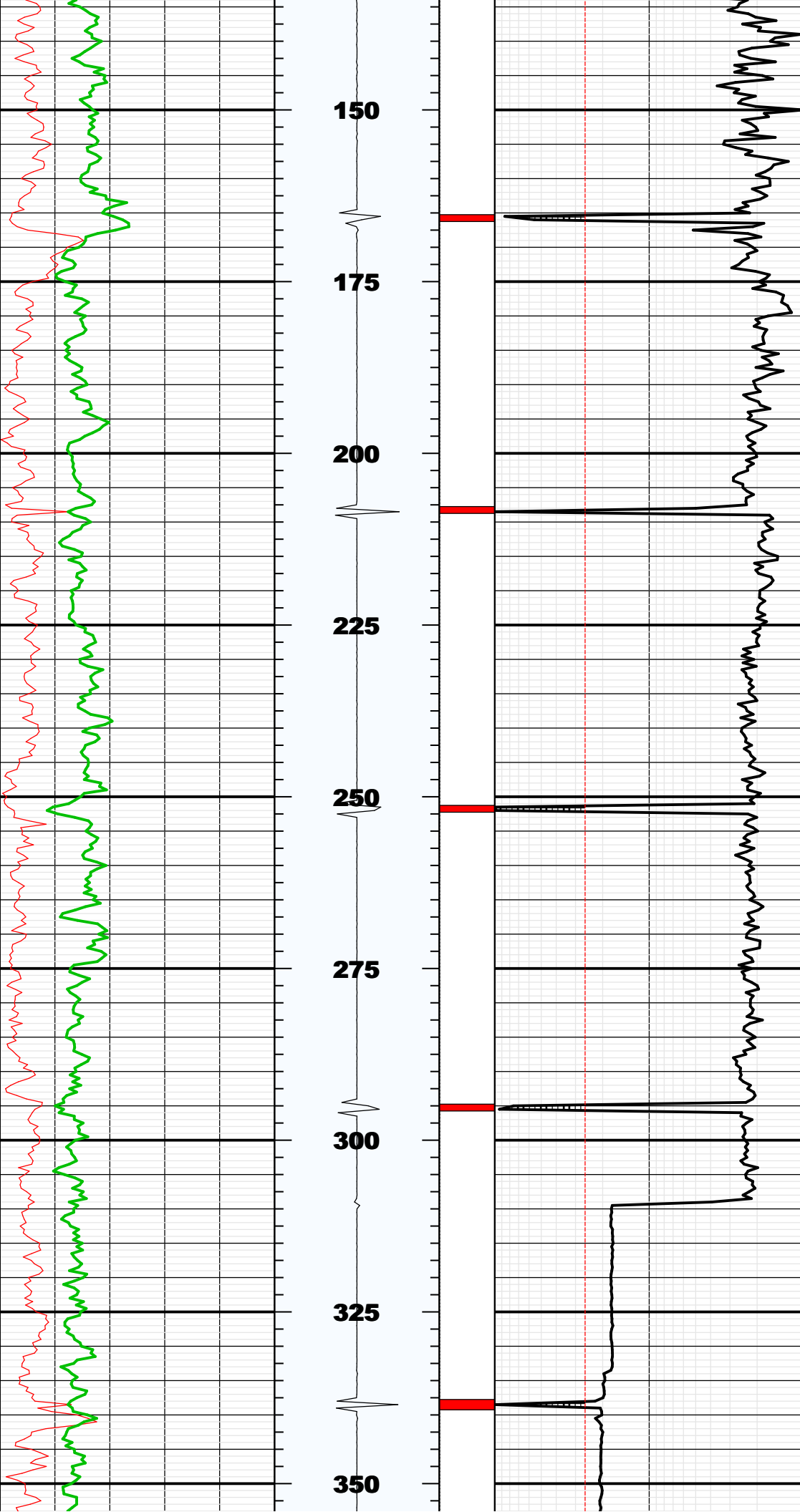
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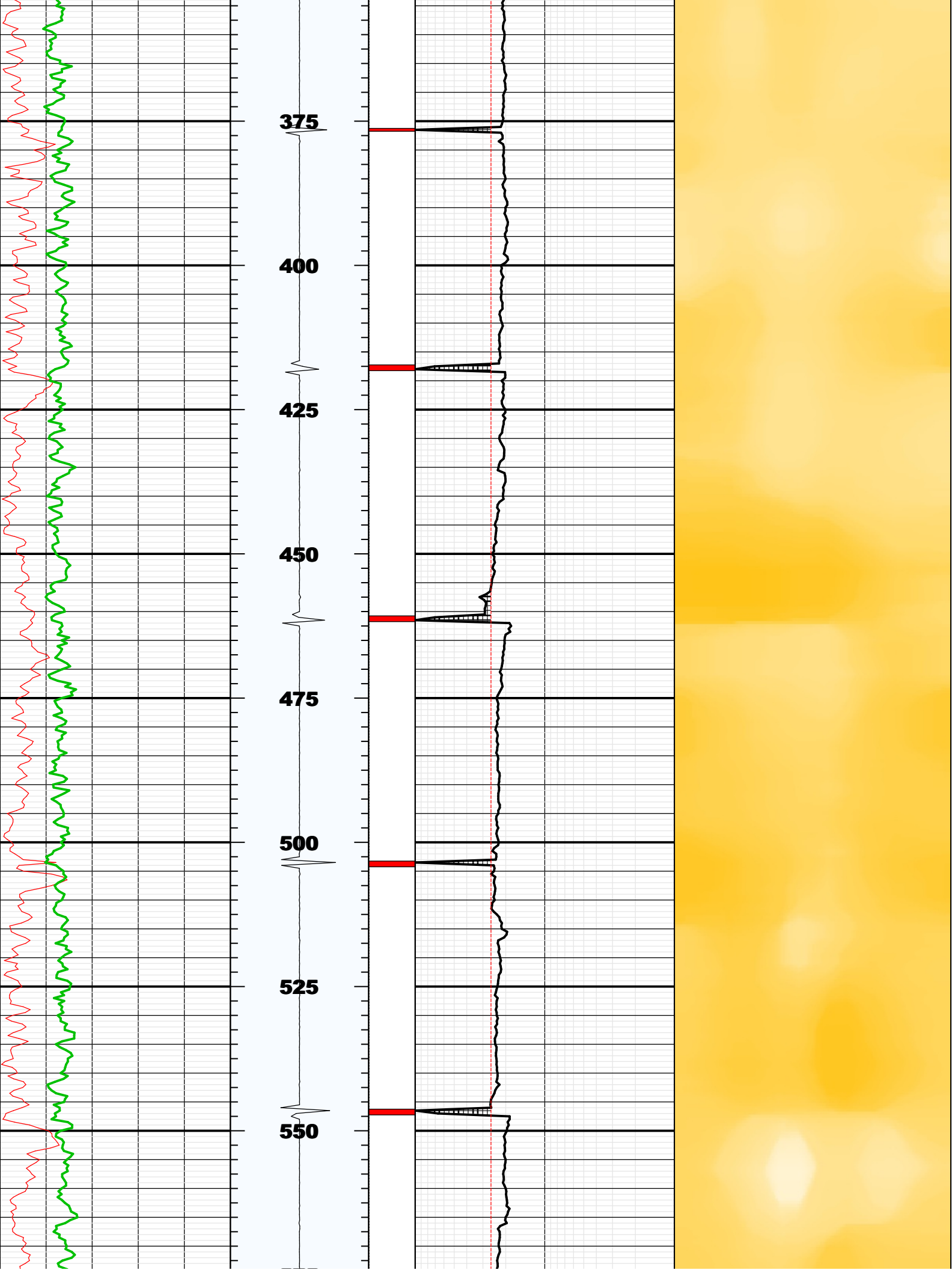
This is the first run in hole  
Toolstring run as per tool sketch  
Lead cement density not provided by client  
Tail cement density not provided by client  
0 PSI repeat pass  
2500 PSI main pass  
Bottom hole temperature 223 deg F  
Top of cement 940 feet  
Crew Jake Jump Ian Derry

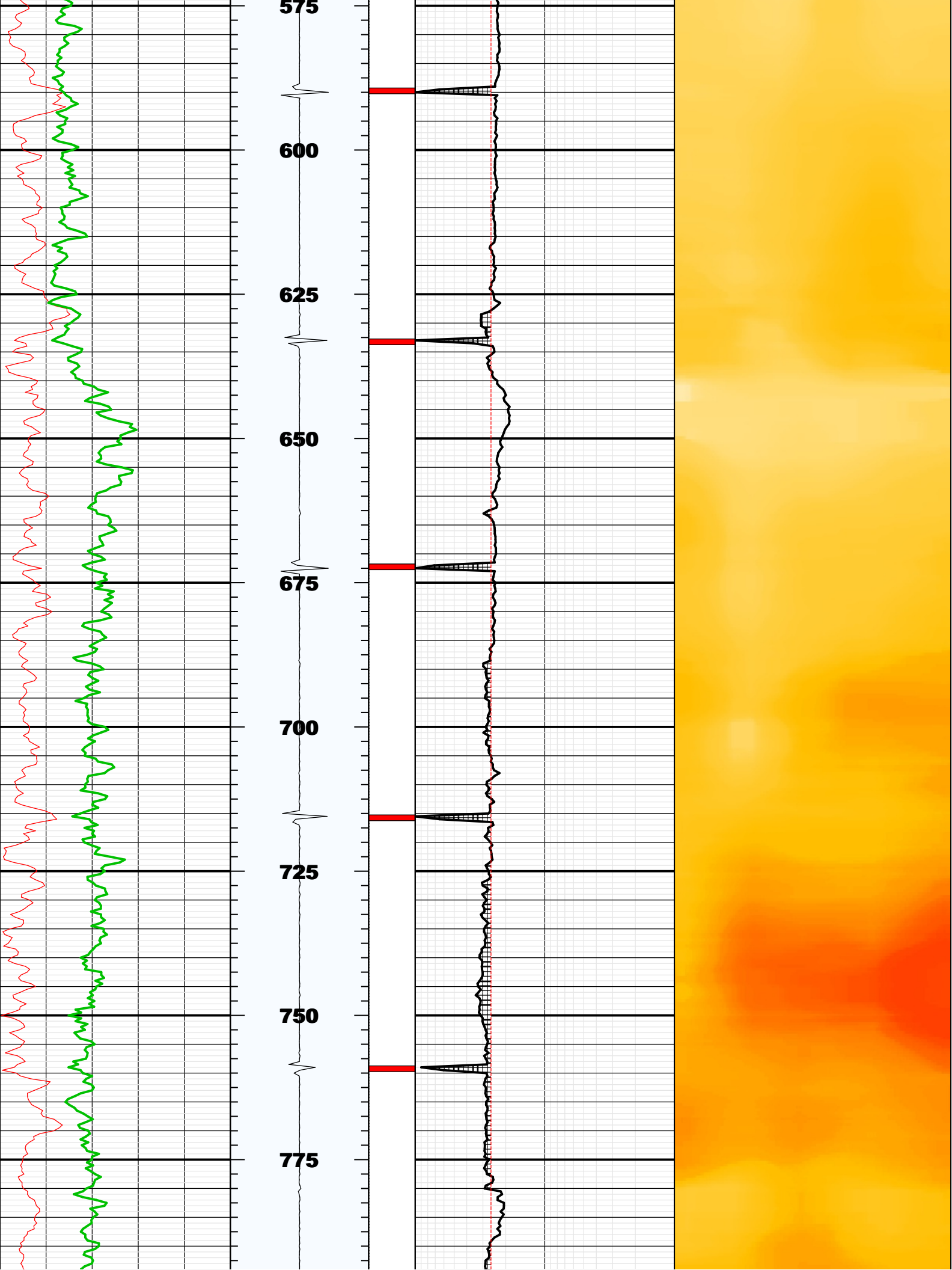
Main Pass

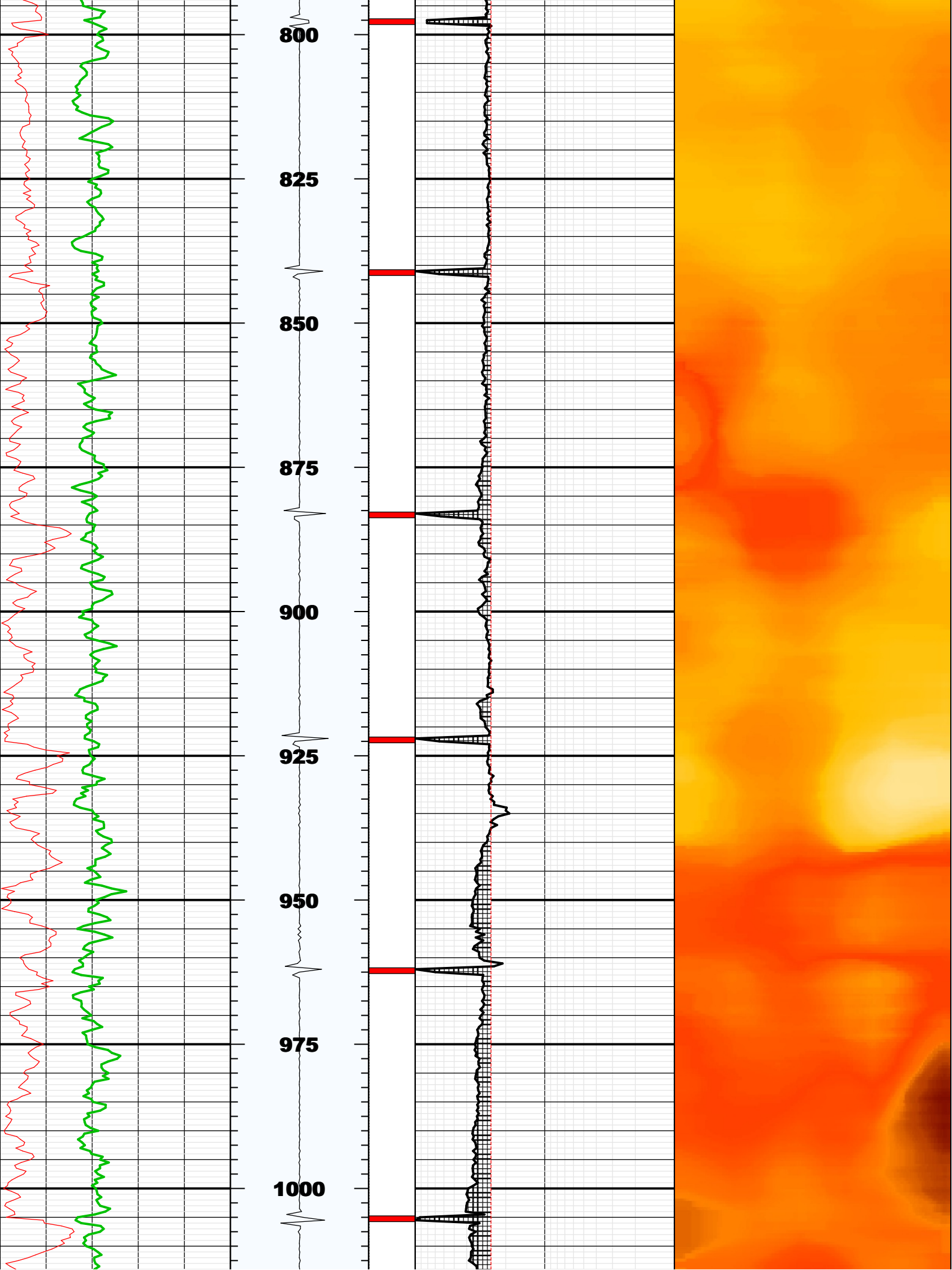
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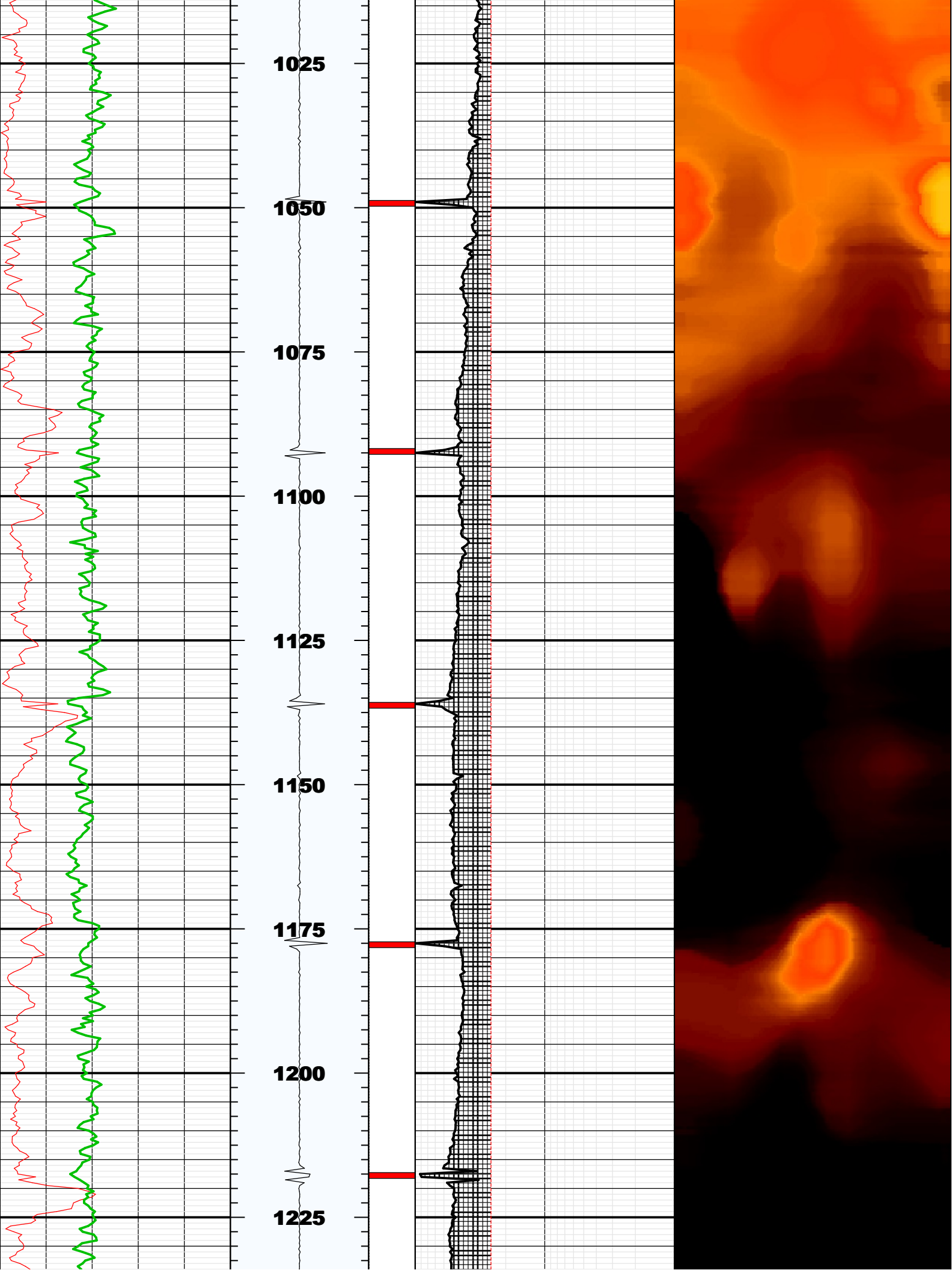




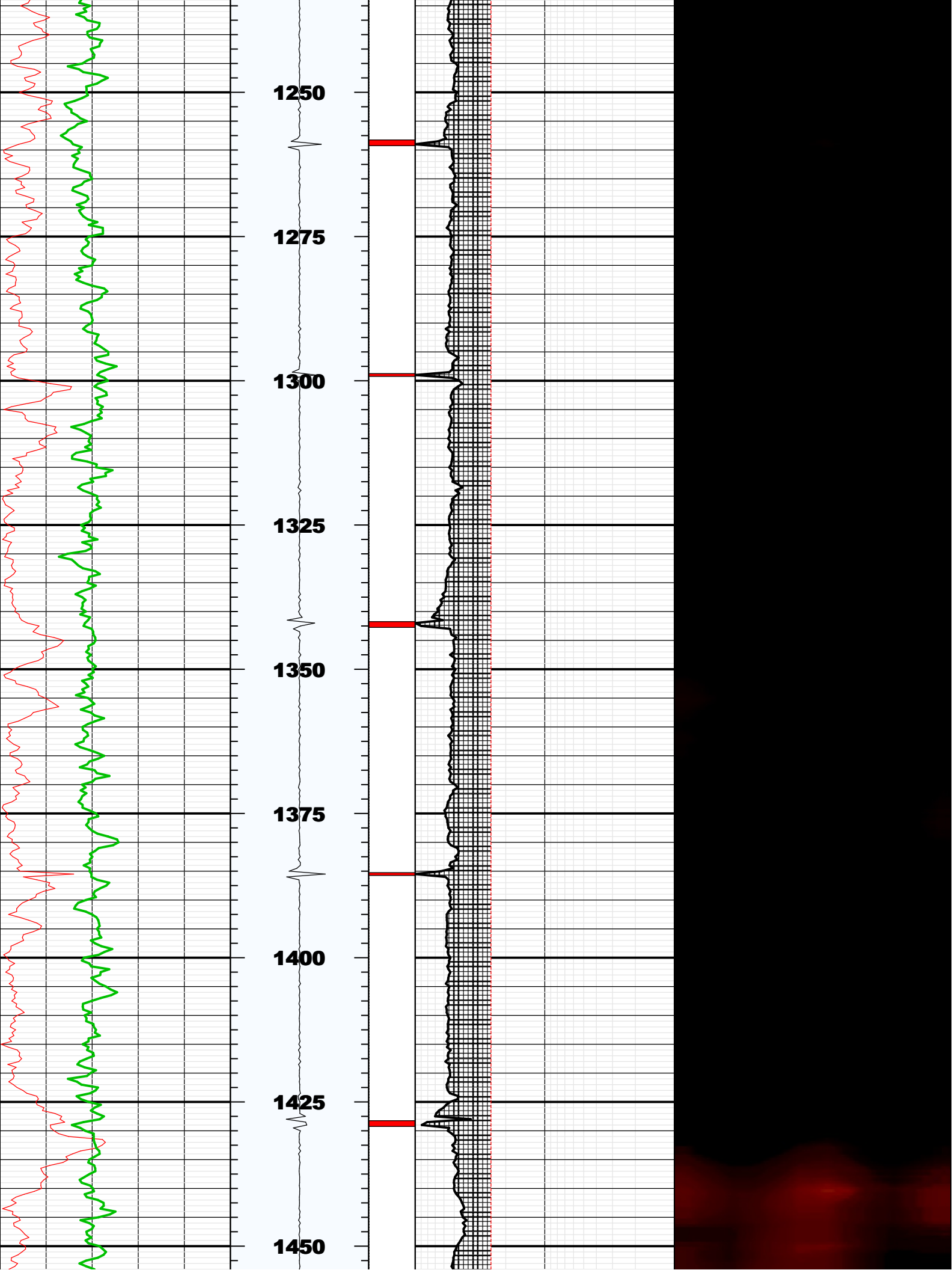


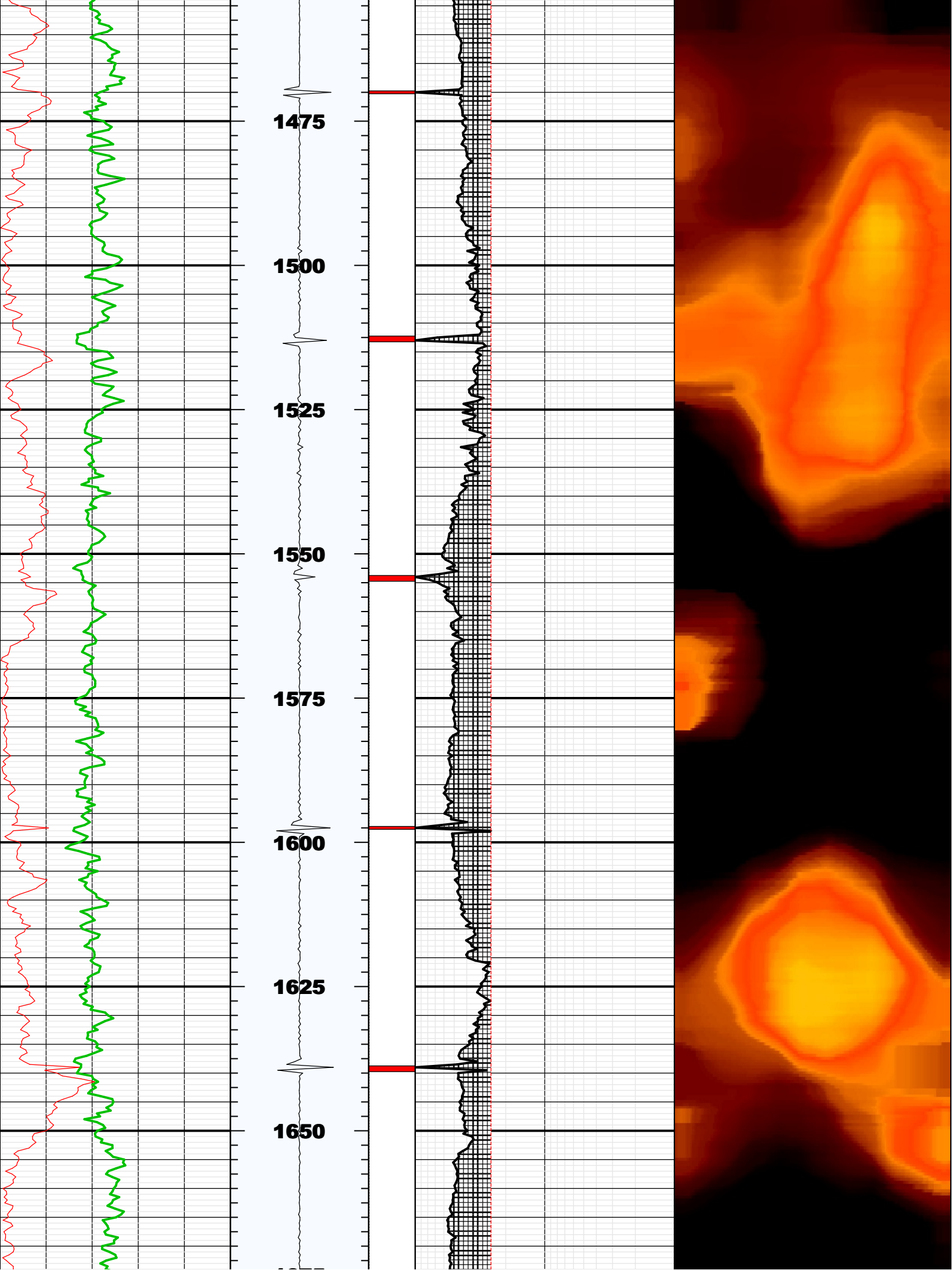


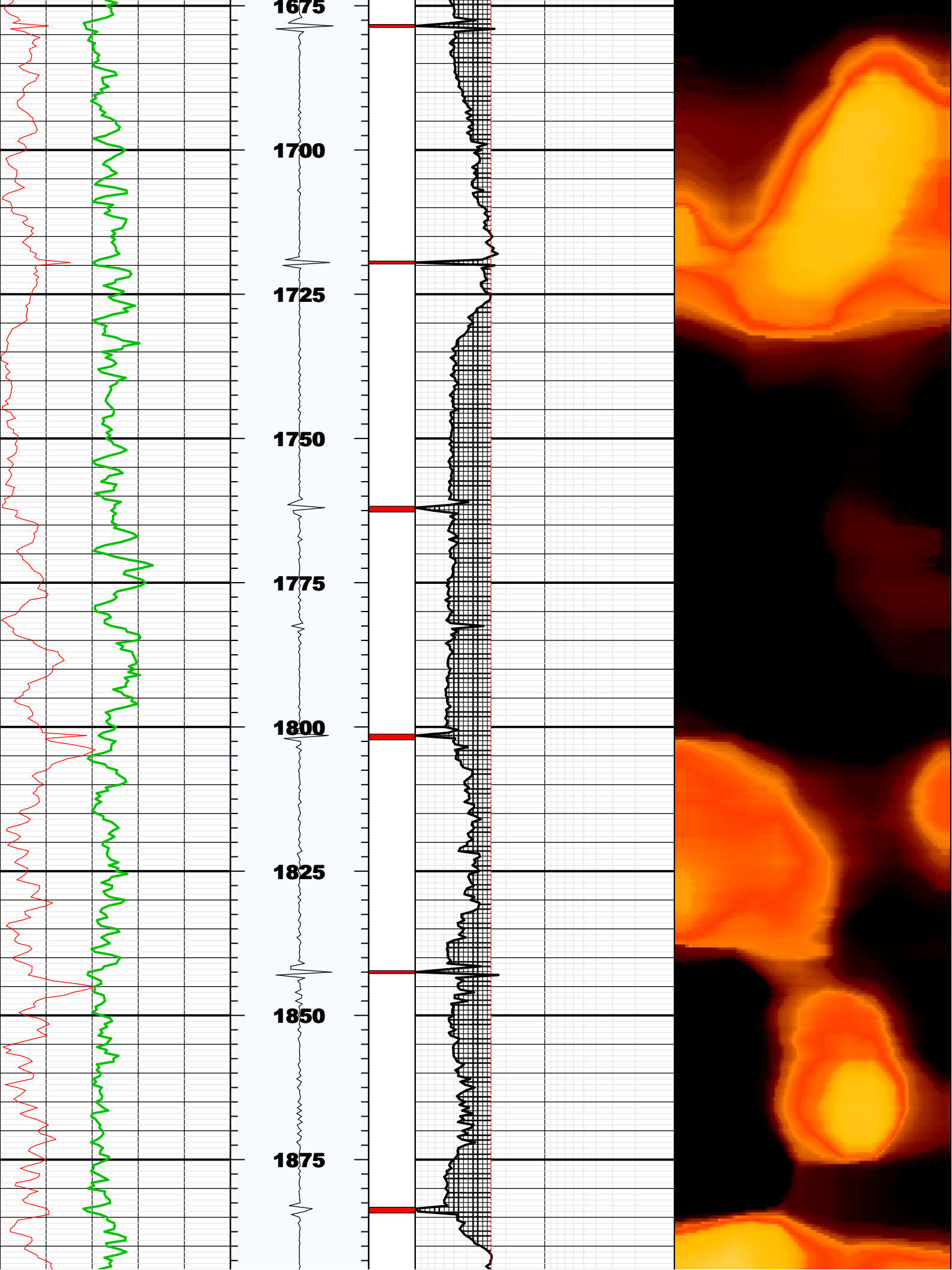


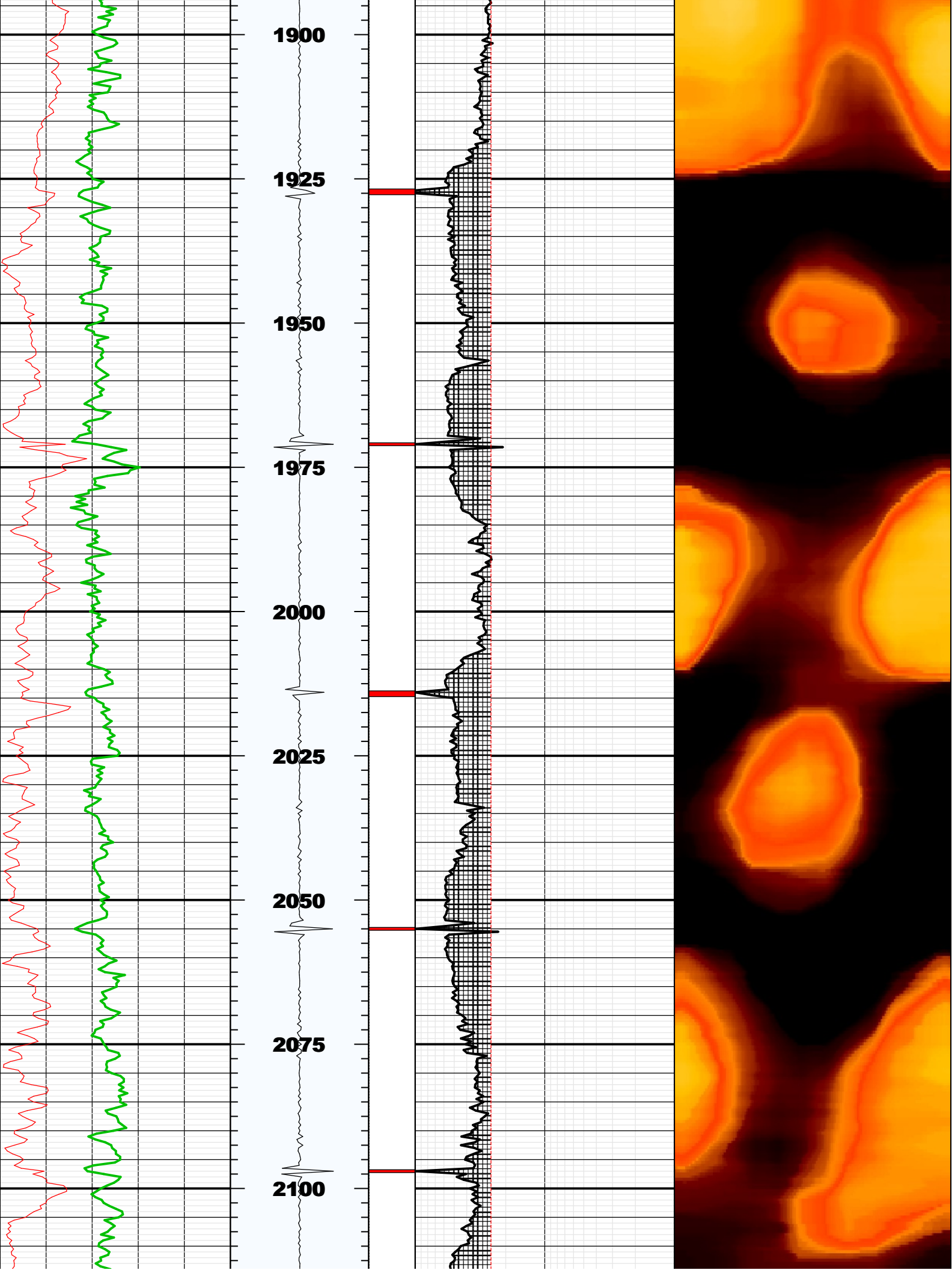




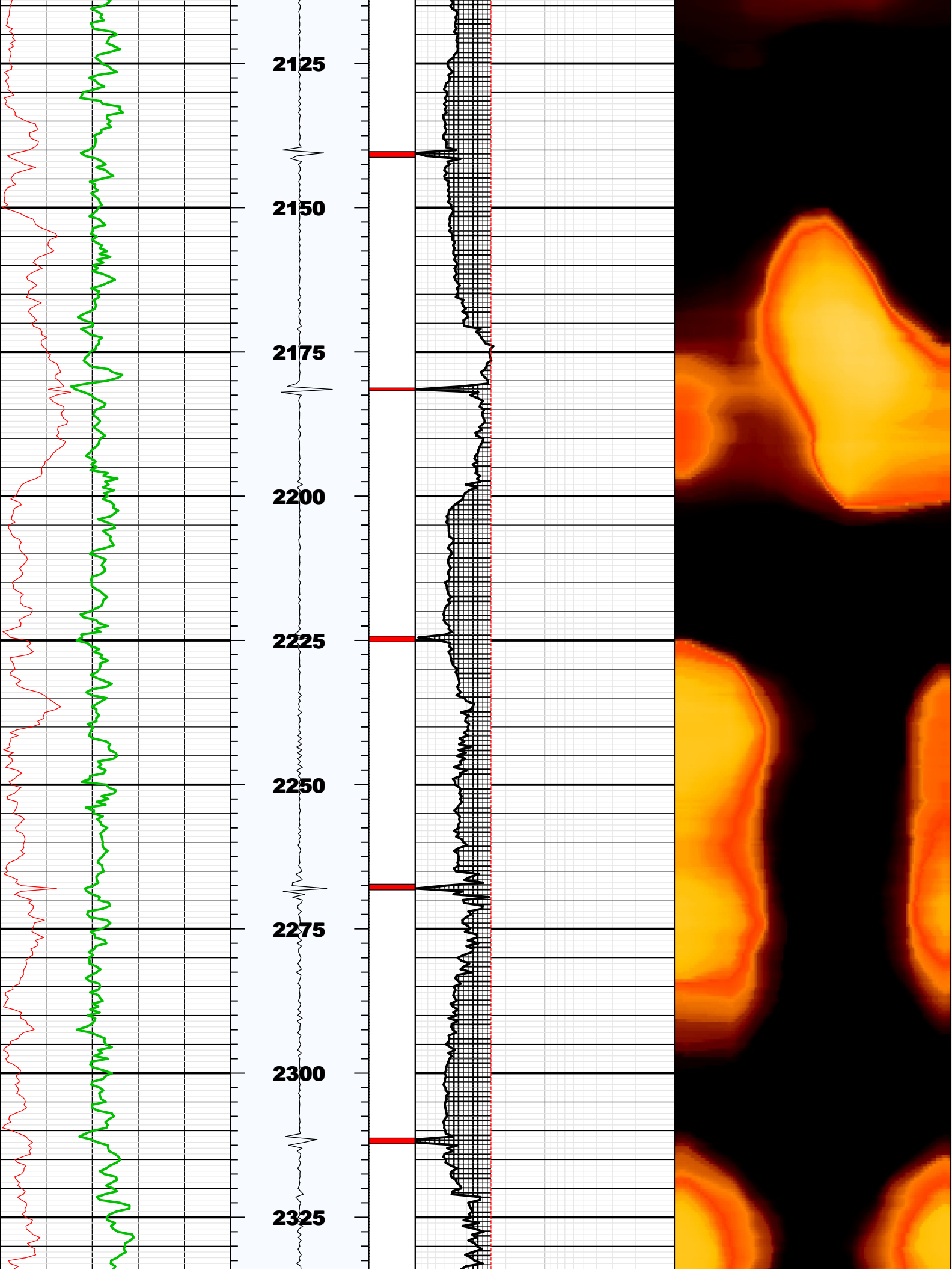


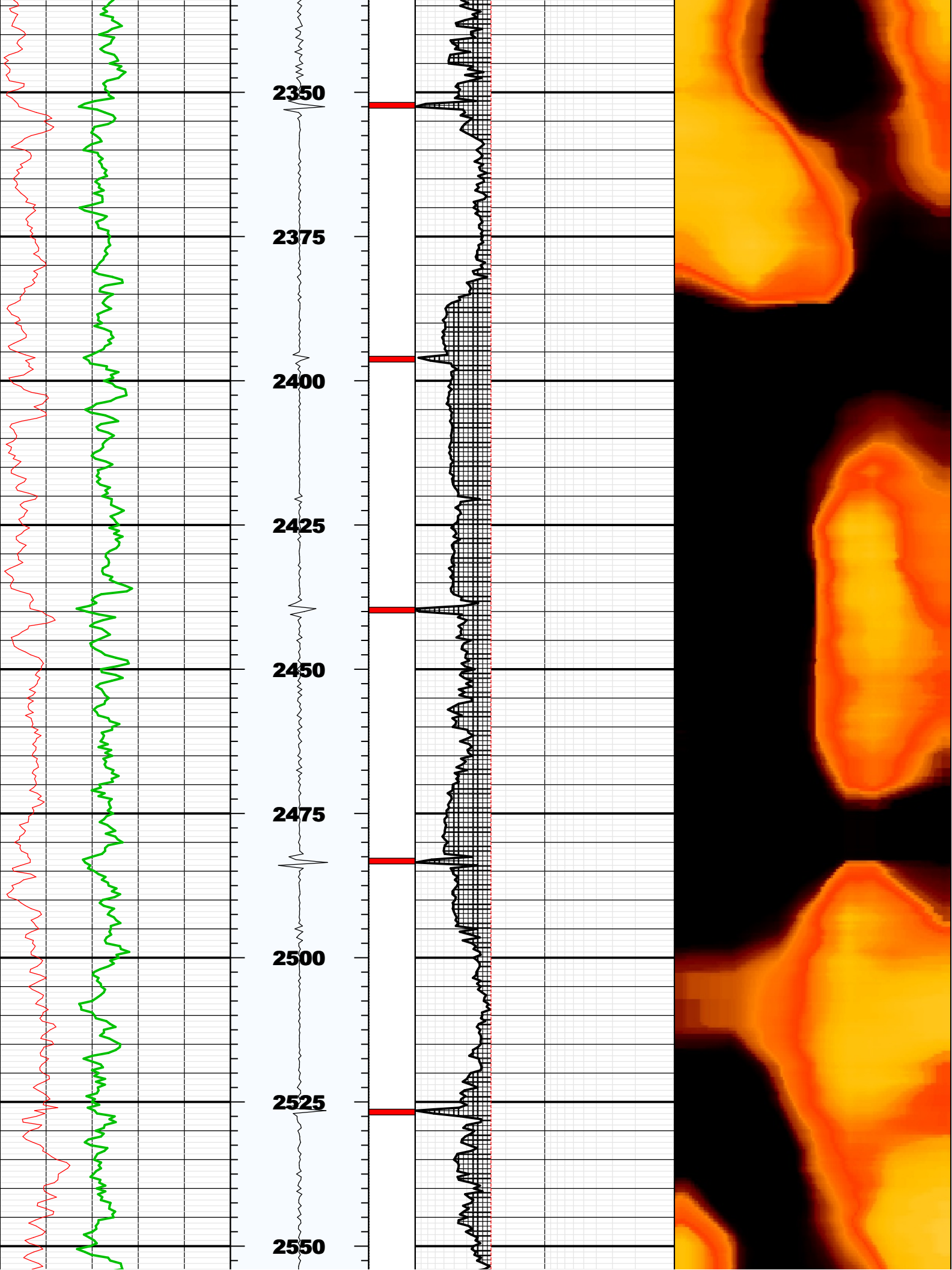


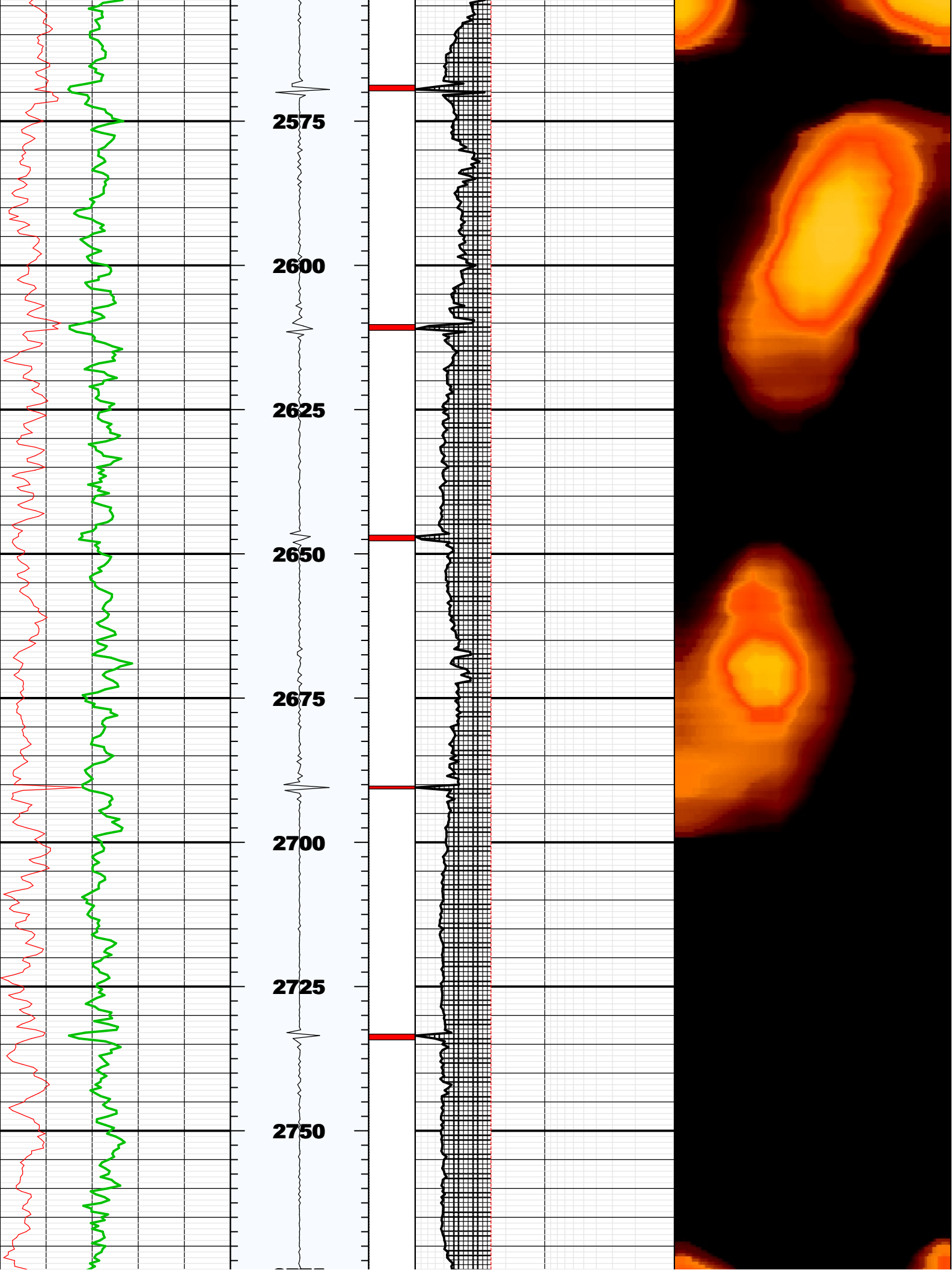


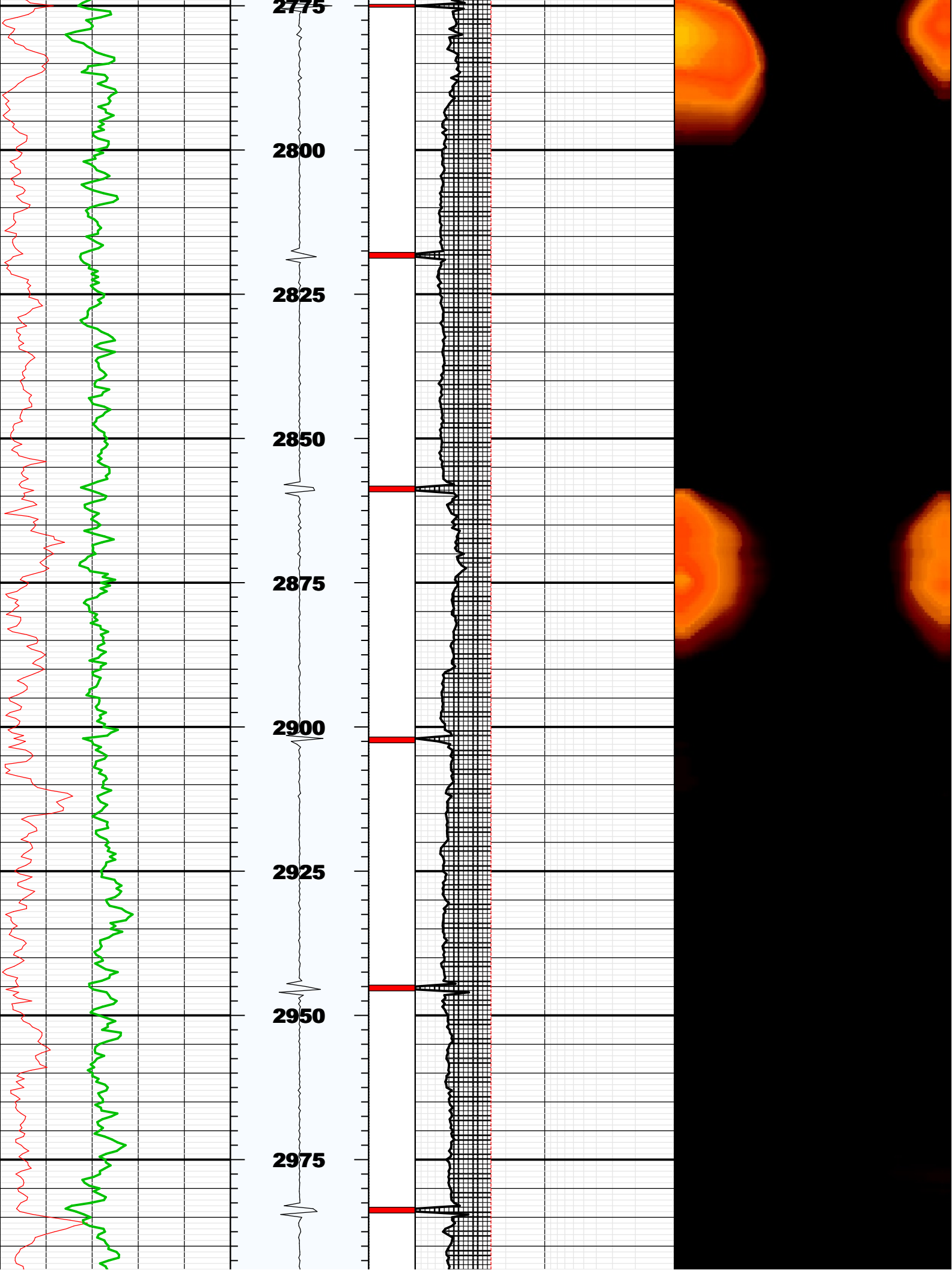




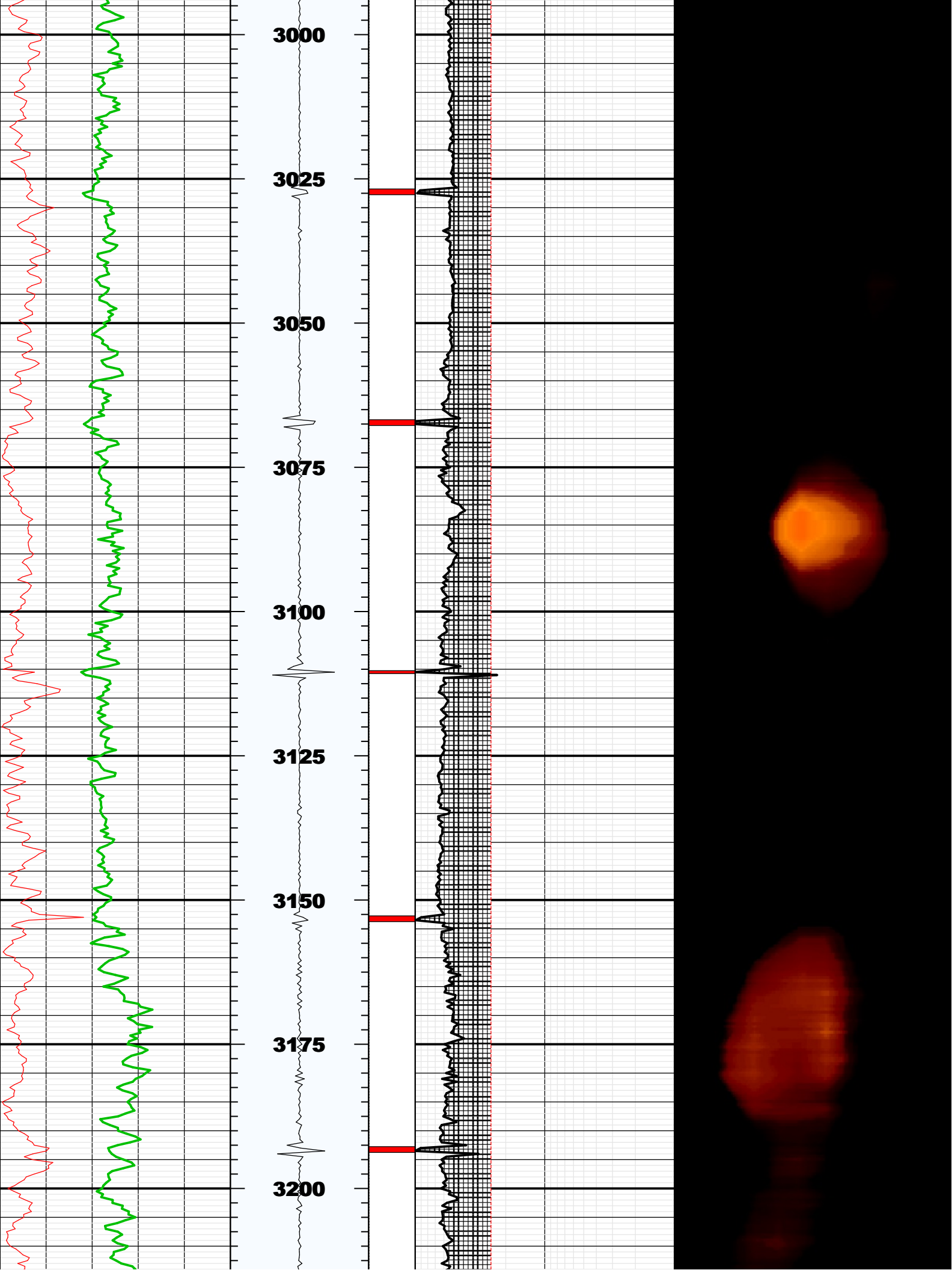


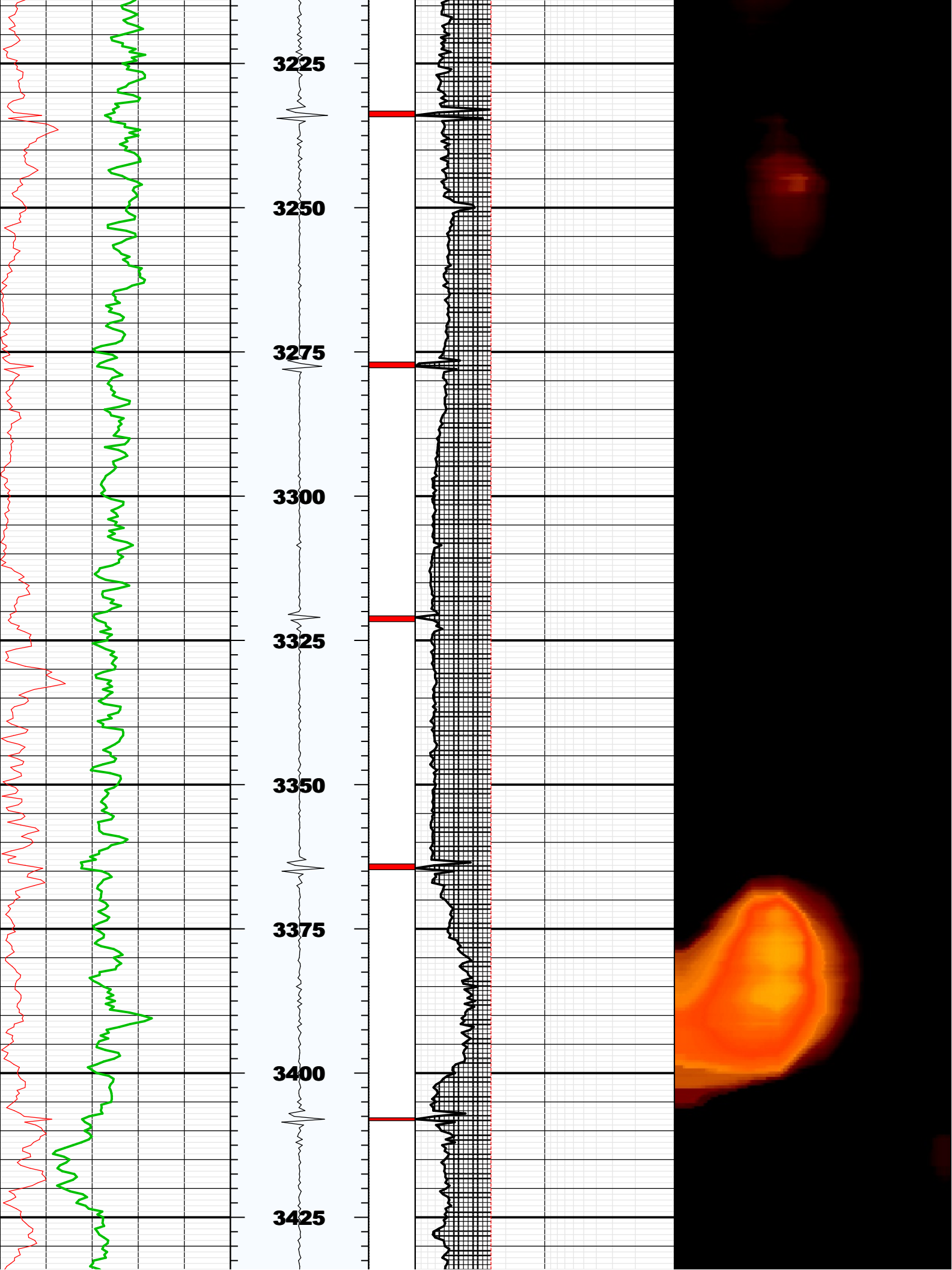


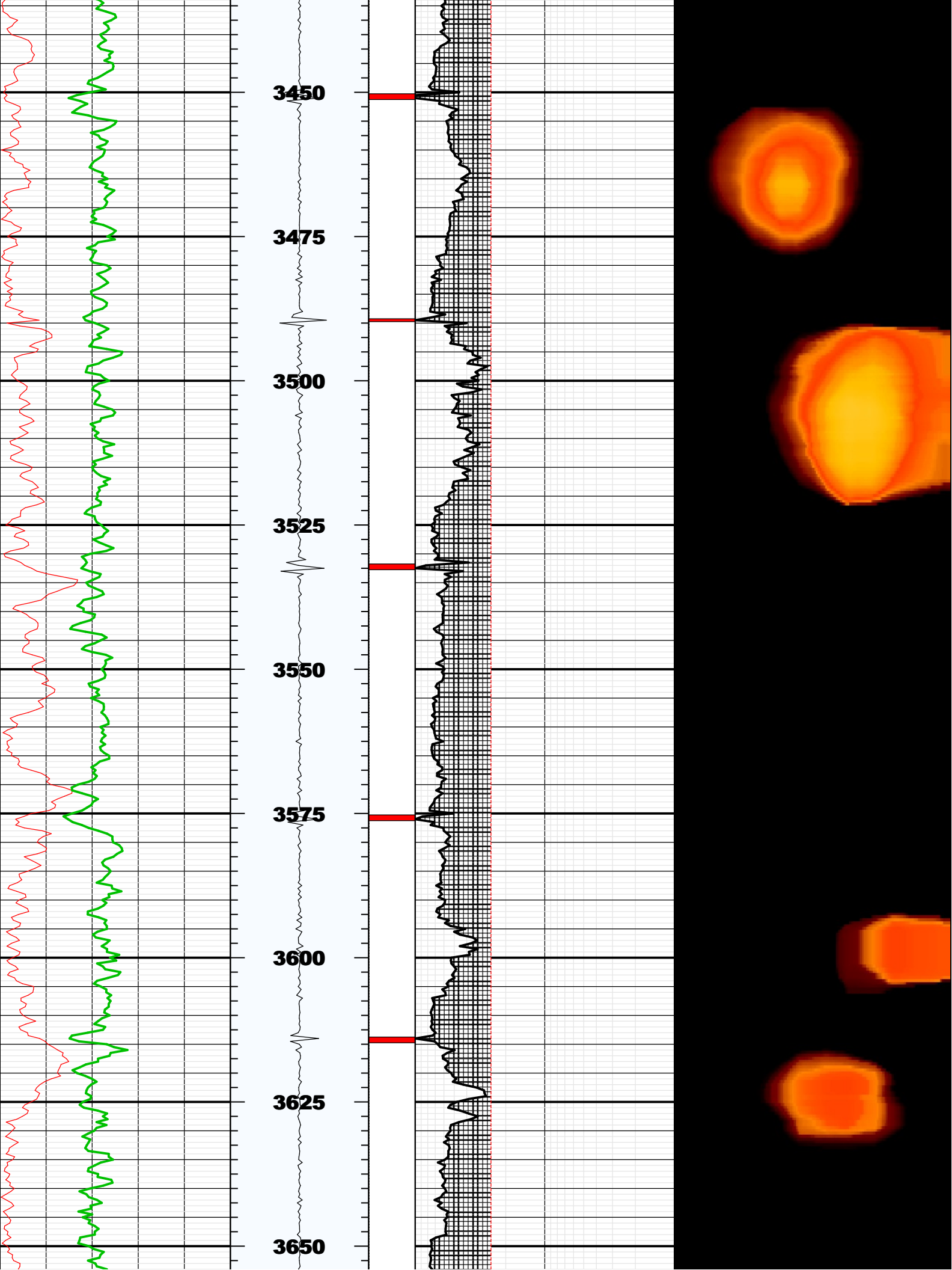


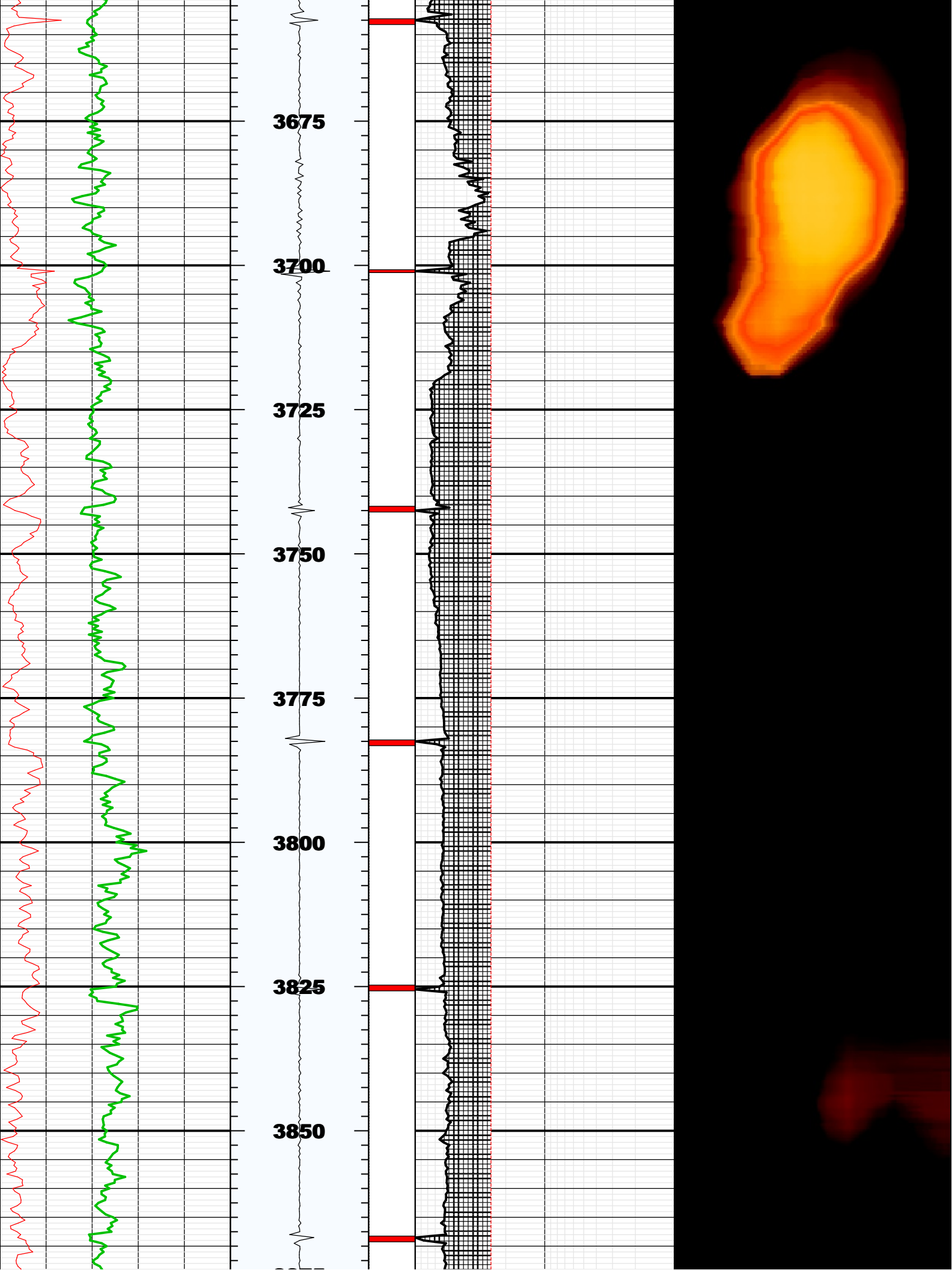


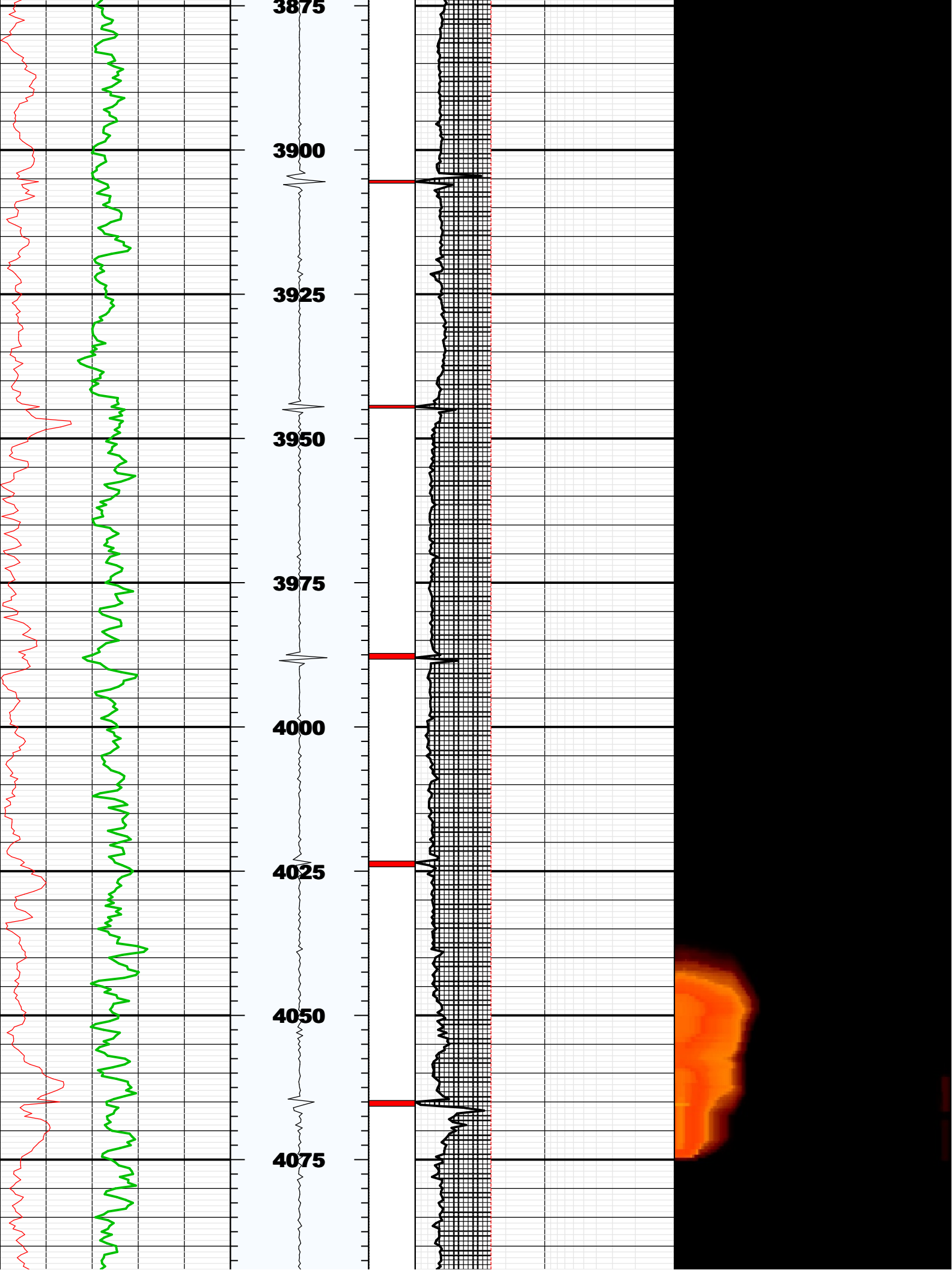


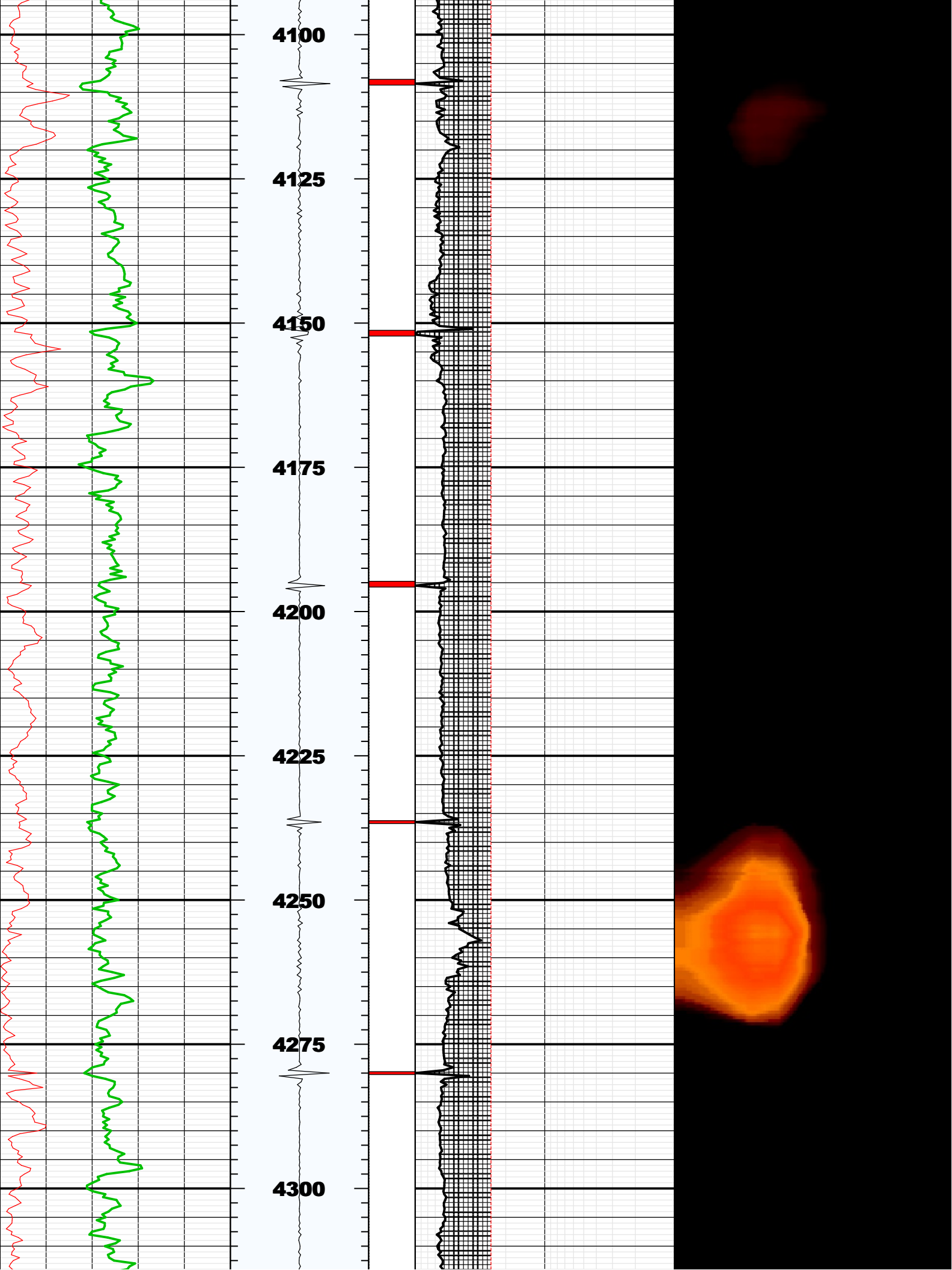




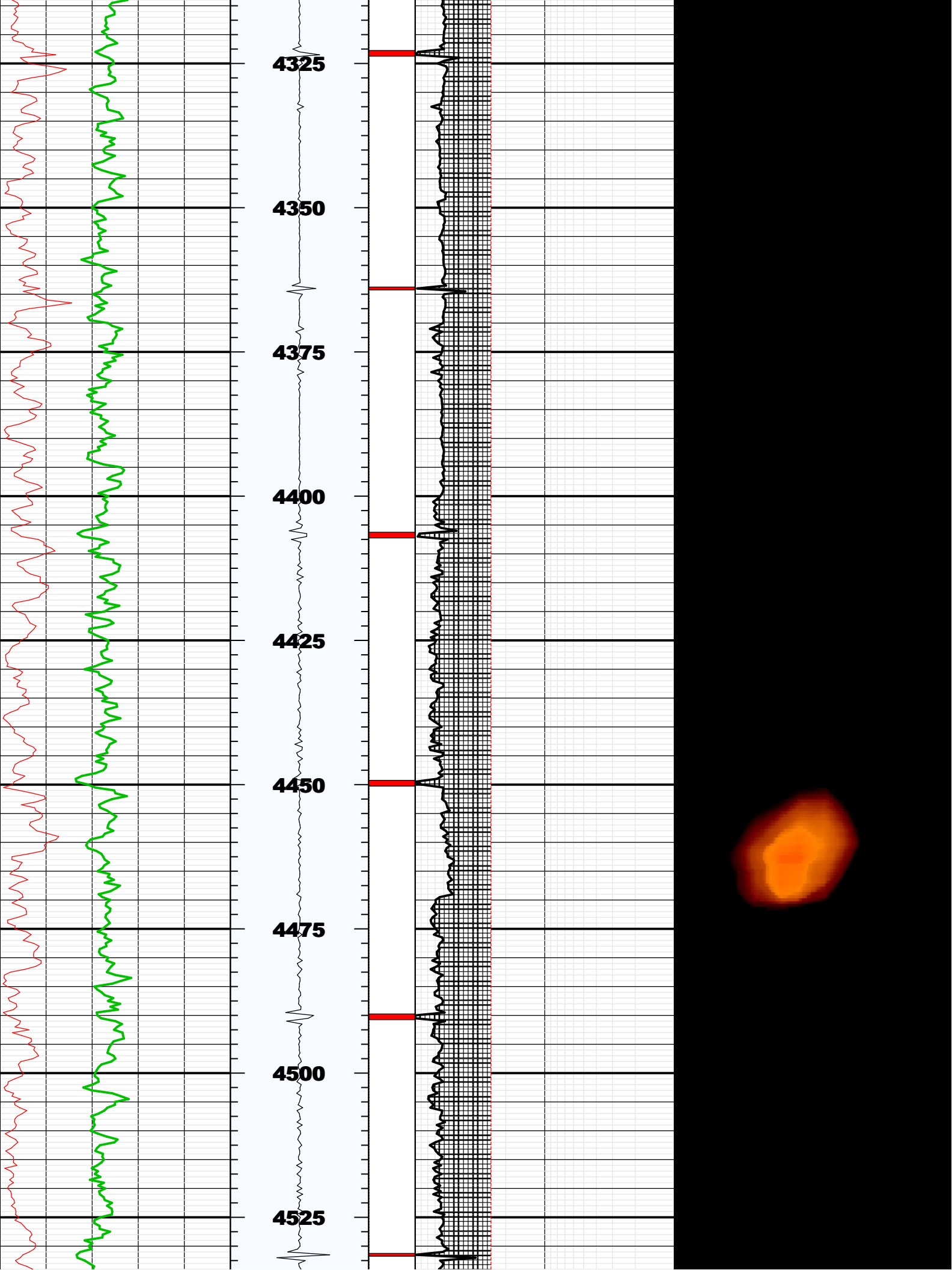


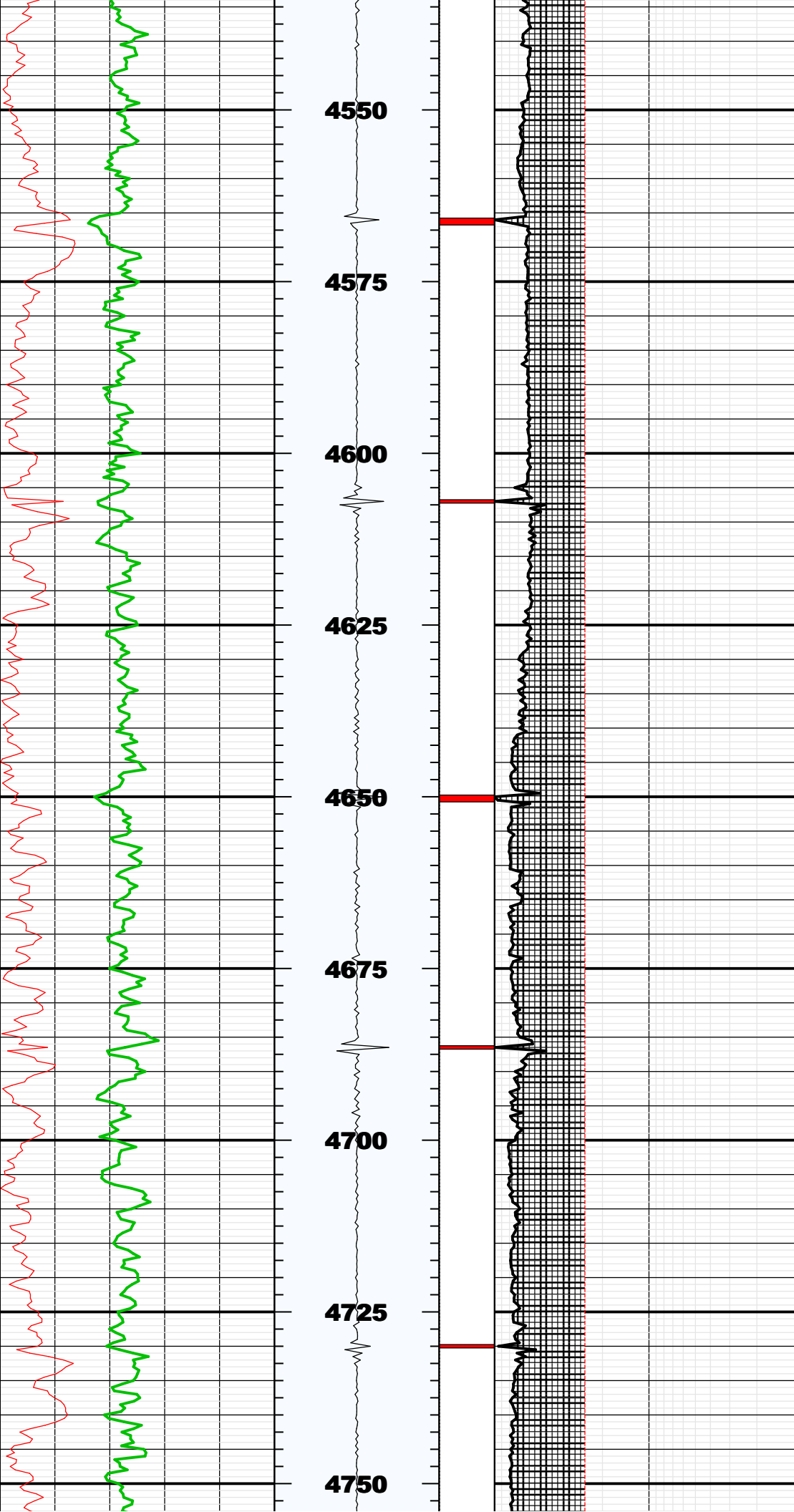




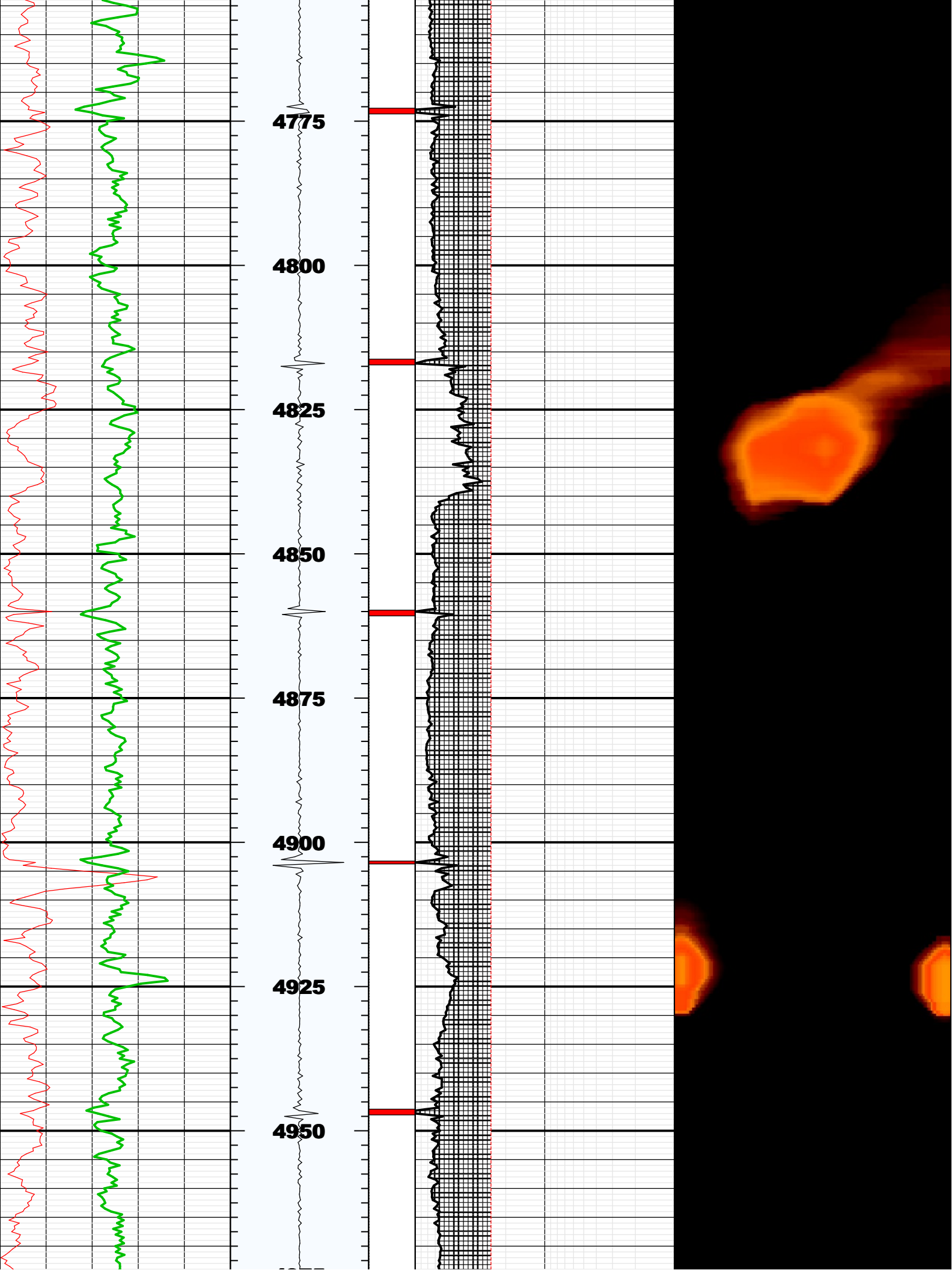


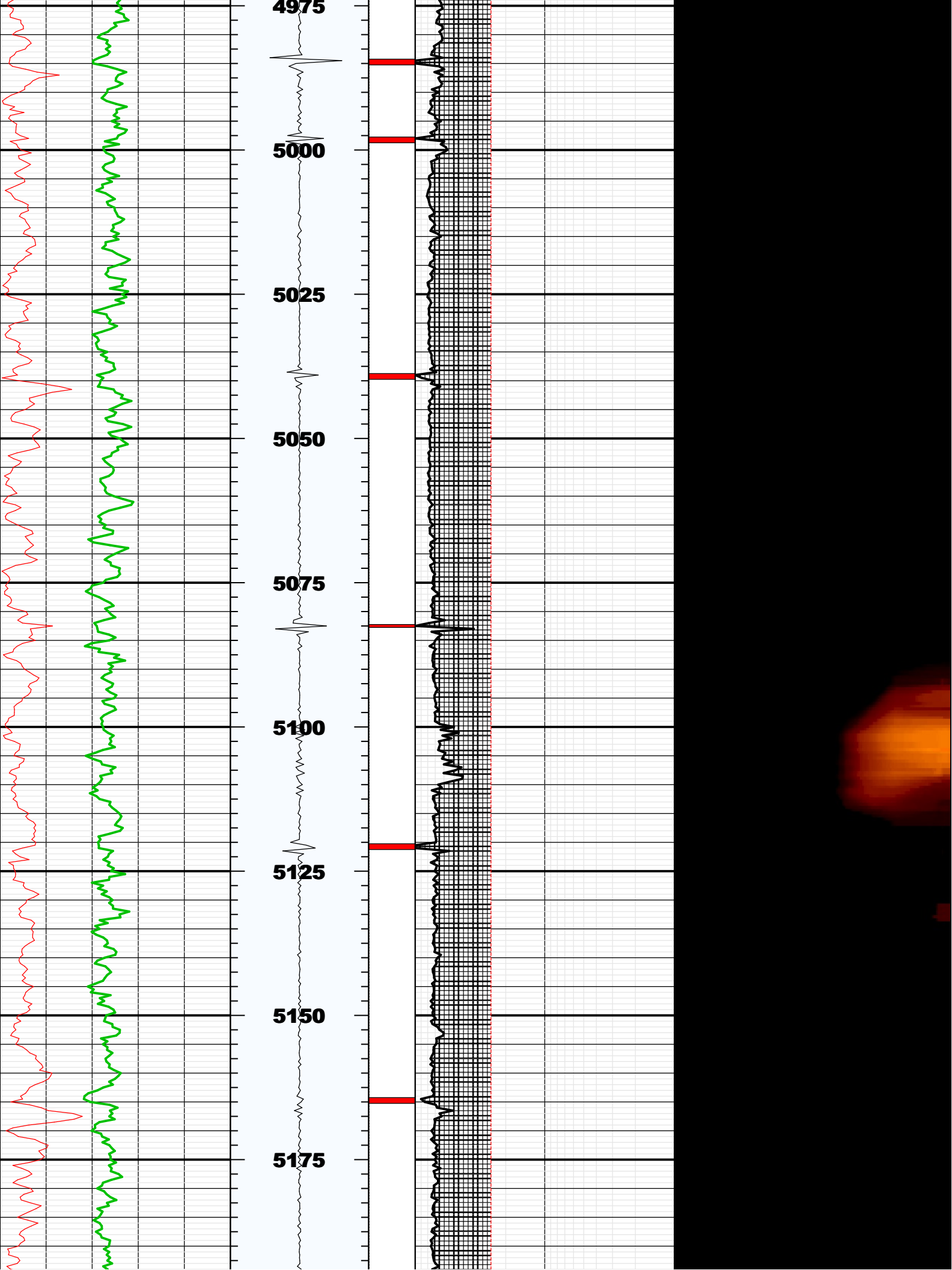


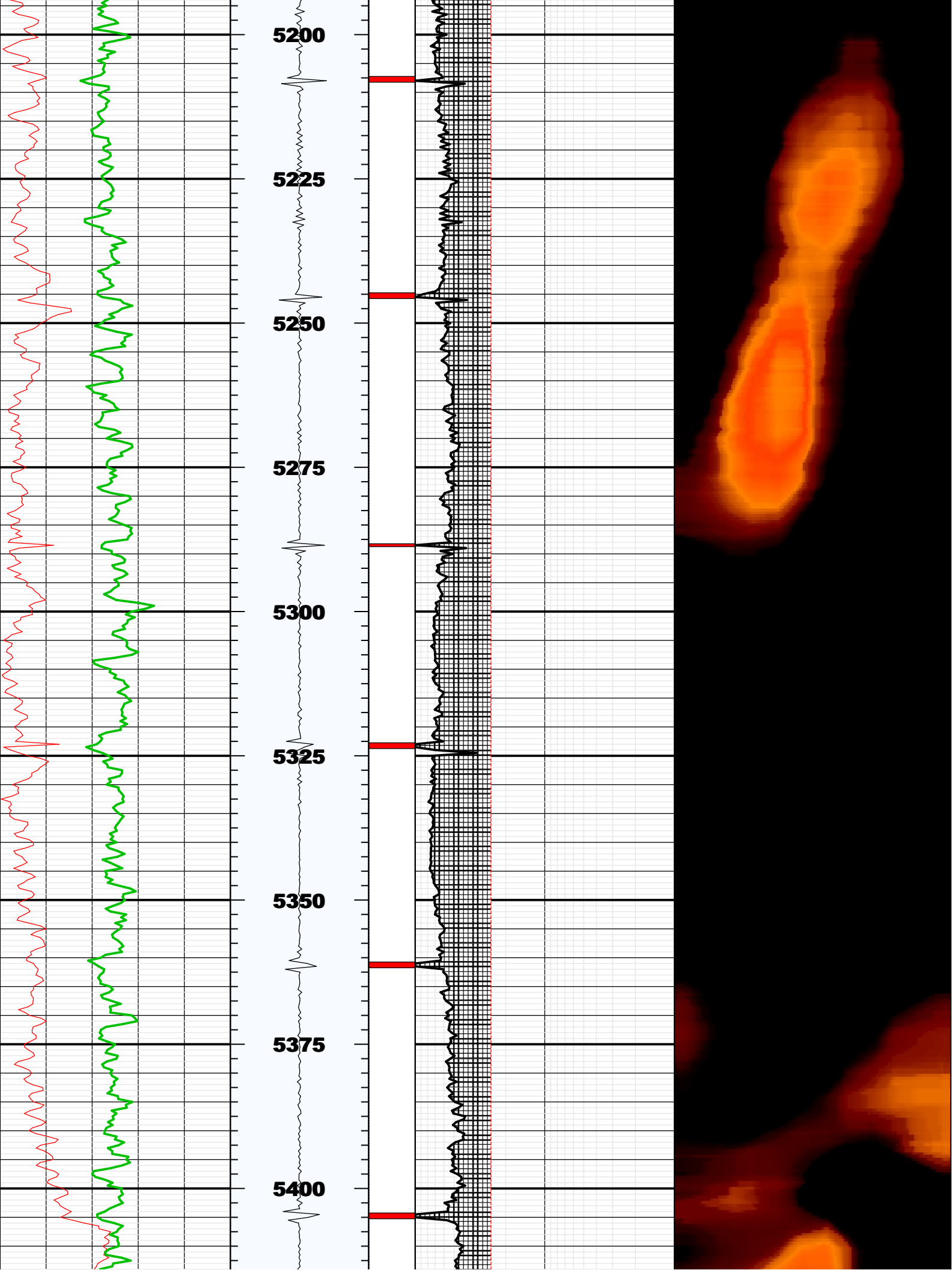


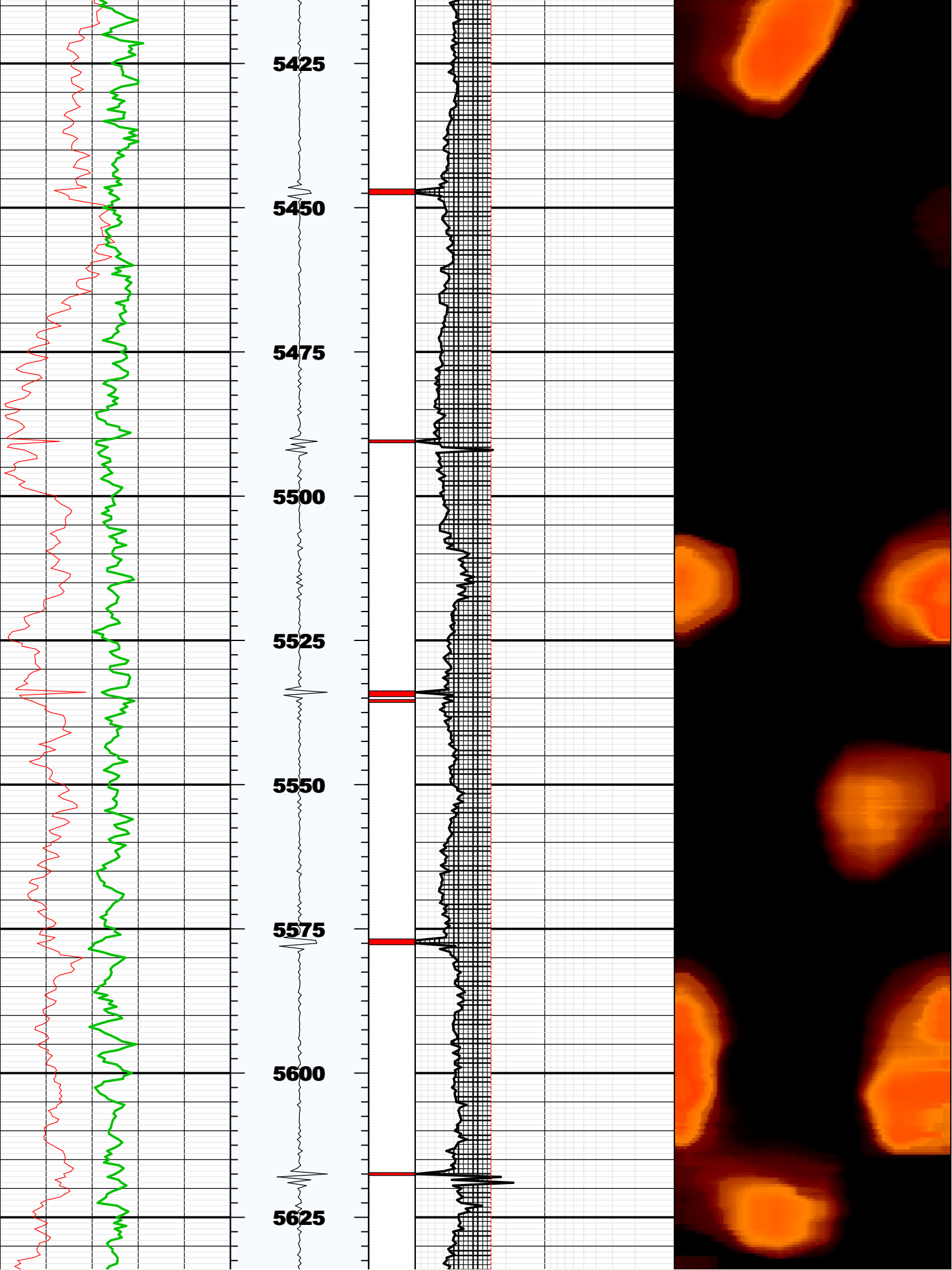


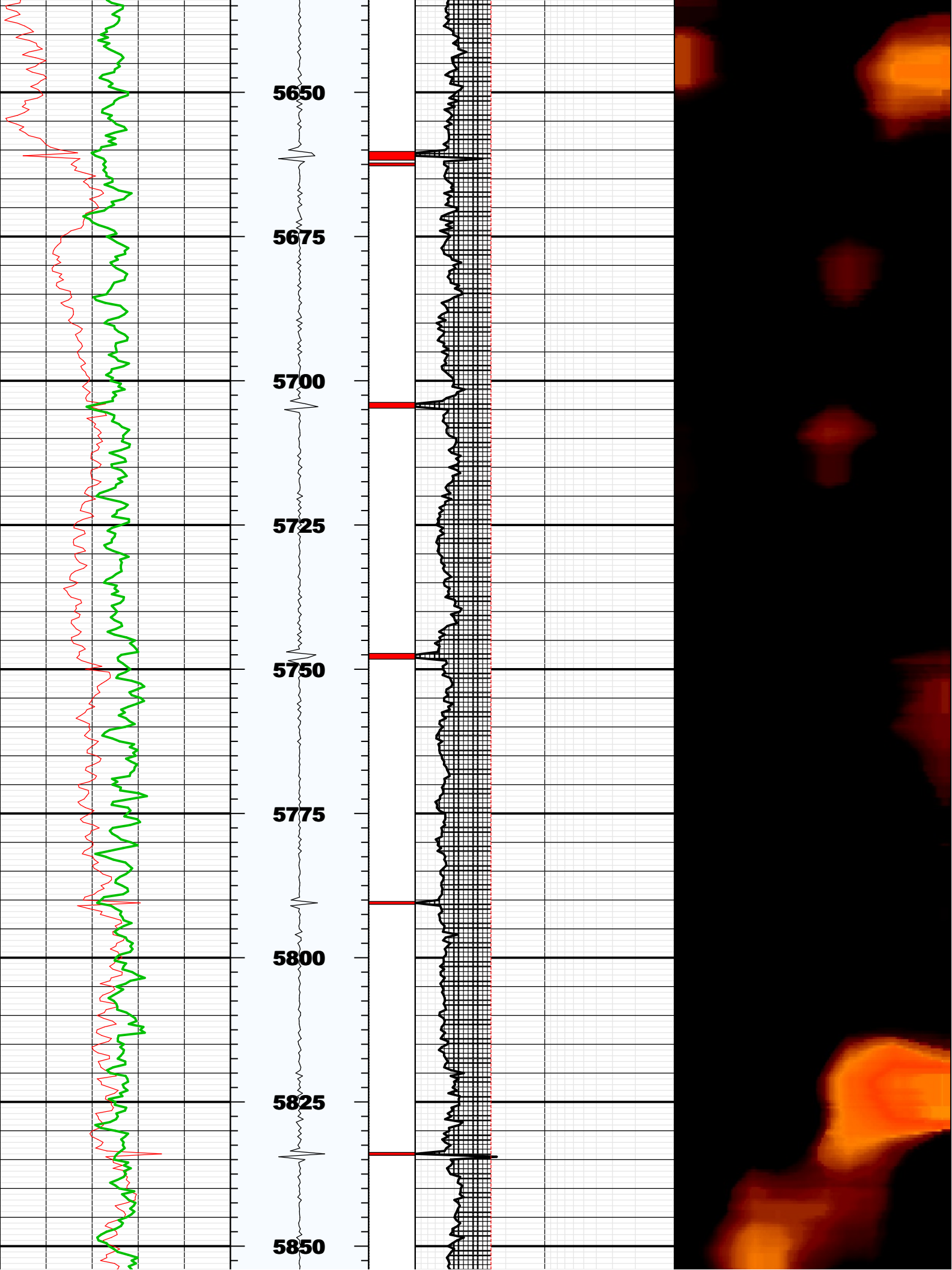




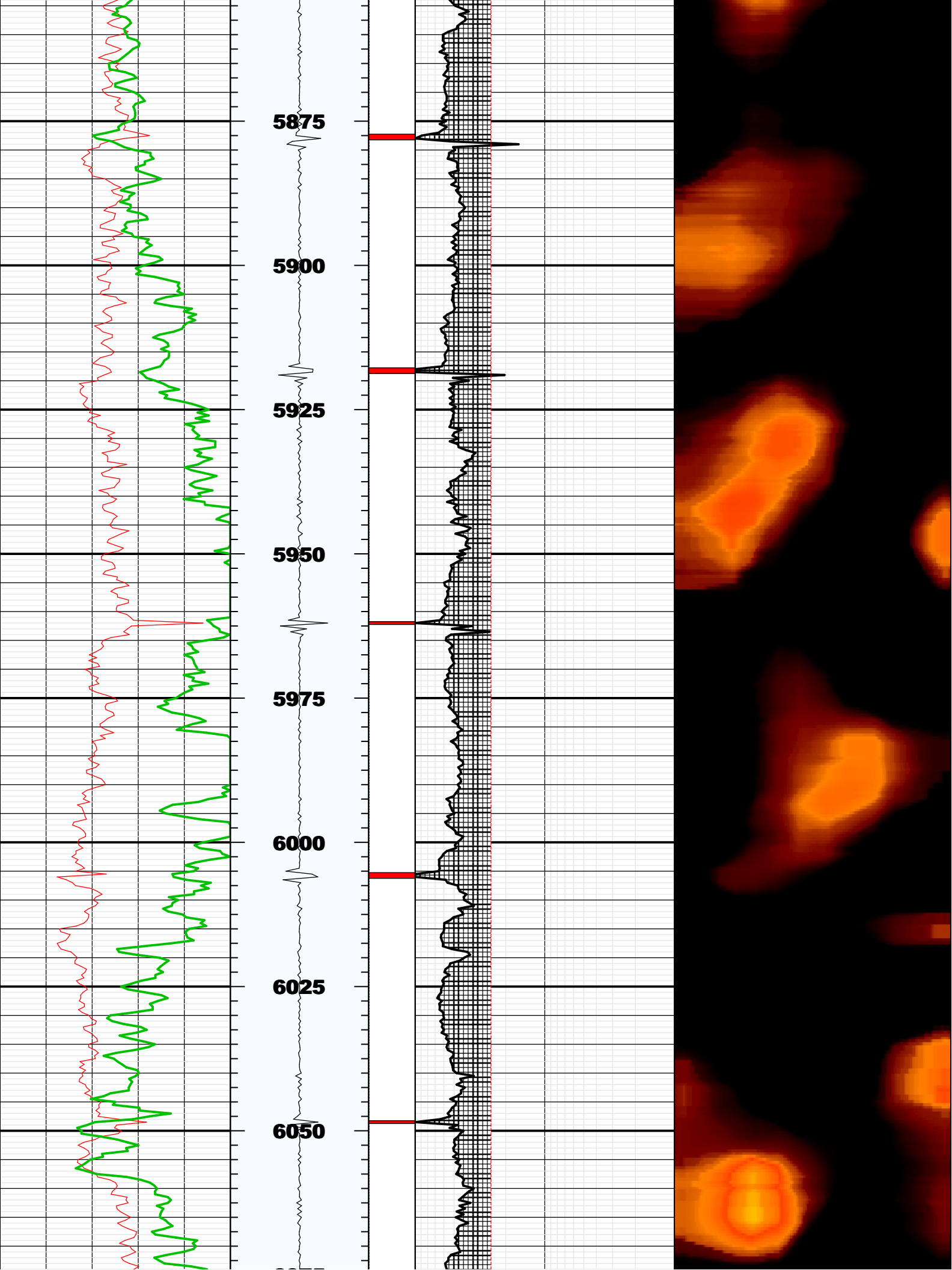


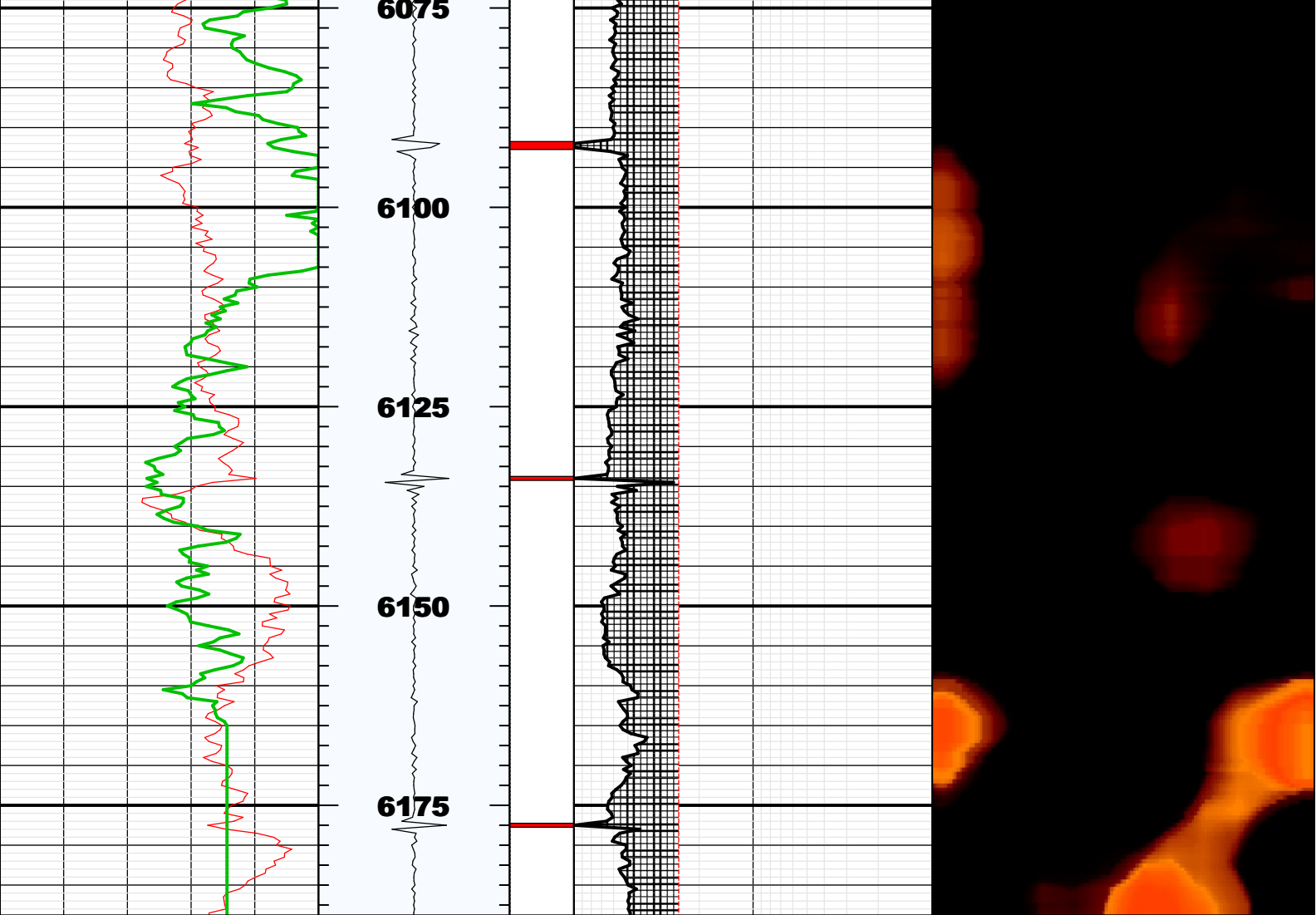










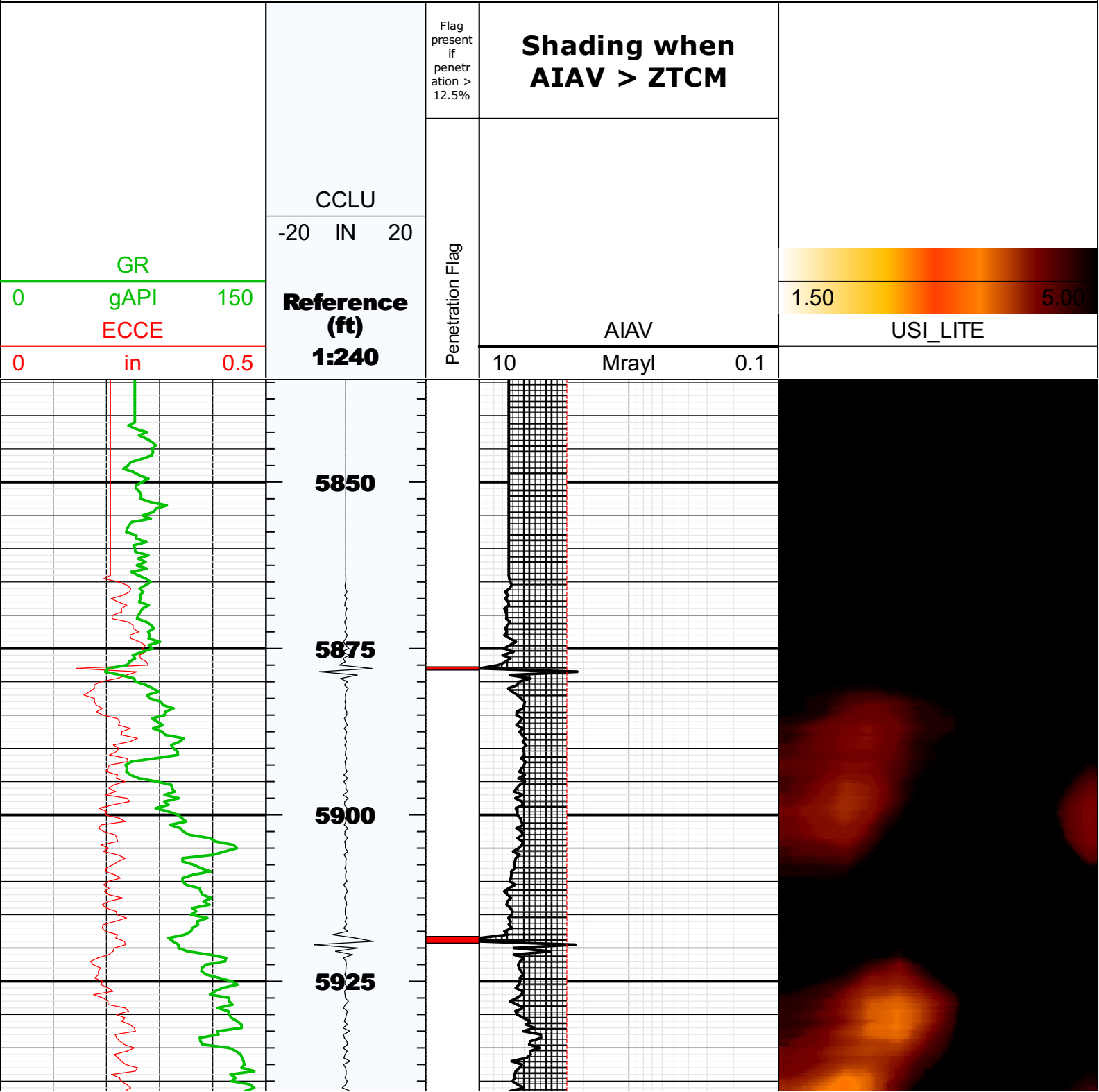


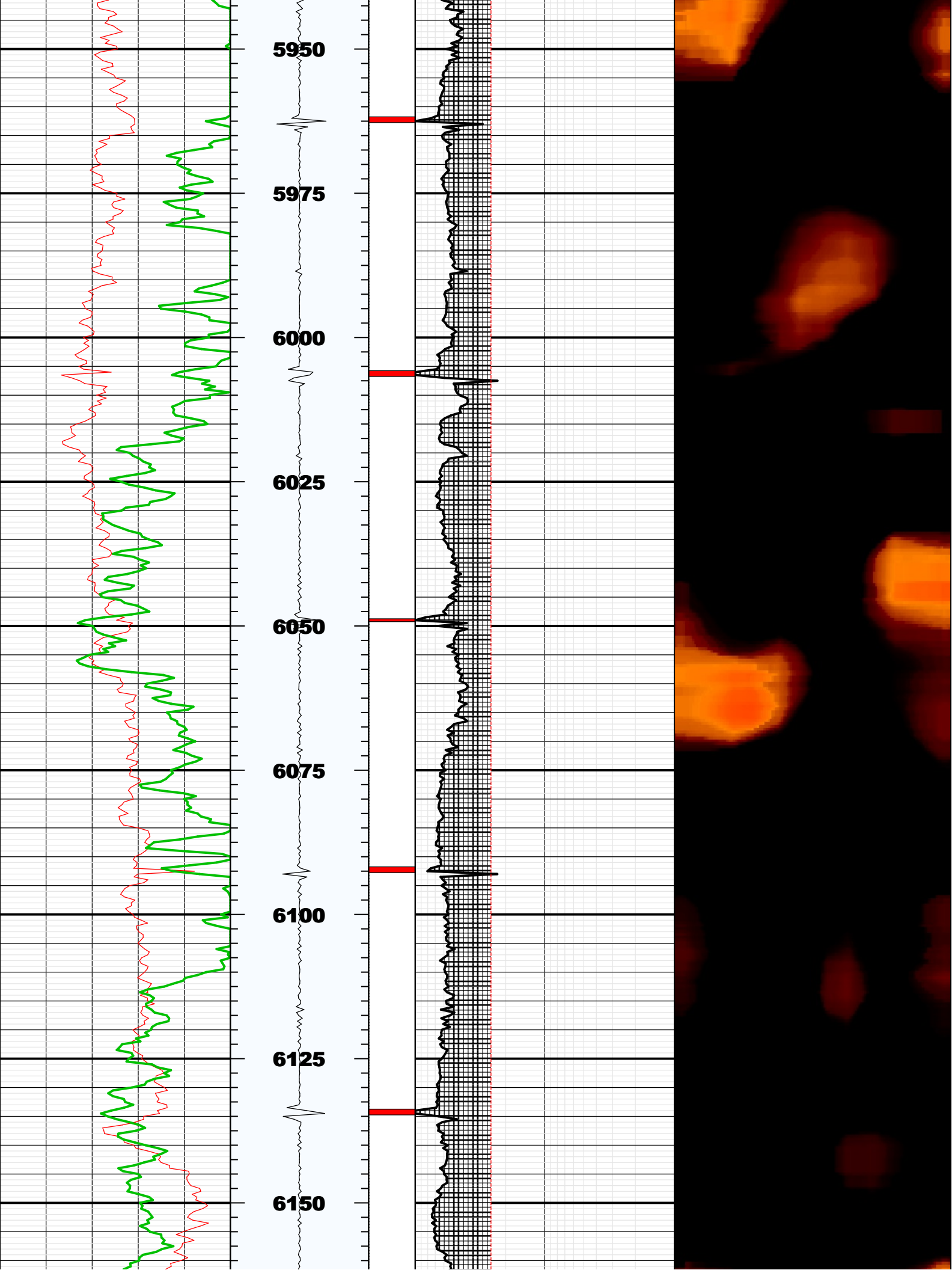
BS	8.75000	IN	Bit Size
CASG	P110		Casing Grade
CDIA	7.00000	IN	Casing Outer Diameter
CSID			
CSIZ	7.00000	IN	Current Casing Size
CWEI	26.00000	LB/F	Casing Weight
DFD	8.40000	LB/G	Drilling Fluid Density
DFVL	190.00000	US/F	Default Fluid Velocity
DO			
DOT	2.87400	IN	Diameter of Transducer Sensor
EMXV	45	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	1.84000	MRAY	Acoustic Impedance of Mud
ZTCM	2.60000	MRAY	Acoustic Impedance Threshold for Cement
ZTGS	0.30000	MRAY	Acoustic Impedance Threshold for Gas
WLEN	22.50350	US	T <sup>^</sup> 3 Processing Length

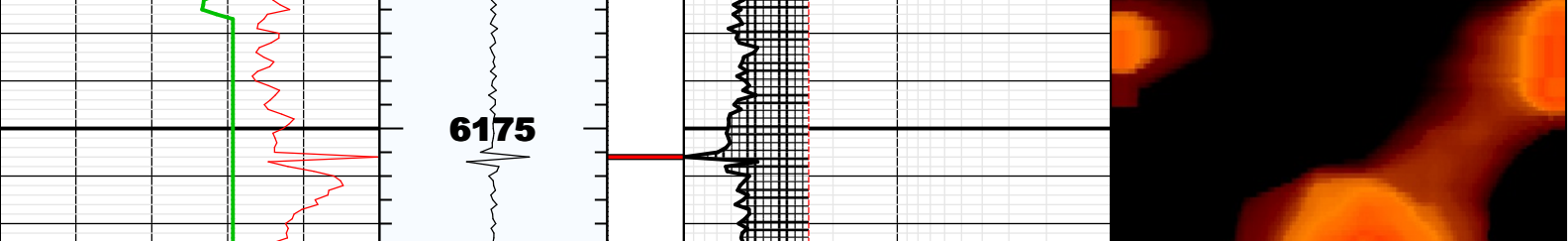


Repeat Pass

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Field: Wildcat







## Fluid Properties Used for Main Pass

