



## SECTOR CEMENT LOG

COMPANY URSA OPERATING COMPANY			
WELL BAT 34A-24-07-96			
FIELD BATTLEMENT MESA			
CNTY GARFIELD		STATE CO	
COMPANY URSA OPERATING COMPANY			
WELL BAT 34A-24-07-96			
FIELD BATTLEMENT MESA			
COUNTY GARFIELD		STATE COLORADO	
LOCATION:		OTHER SERVICES:	
SHL 1903' FSL & 1966' FWL		NONE	
API# 05-045-22092			
SEC. 24	TWP. 7S	RGE. 96W	

PERM. DATUM GROUND LEVEL				ELEV. 5182.5'		ELEV.:K.B. 5197.9	
LOG MEASURED FROM K.B.15.4 FT. ABOVE PERMANENT DATUM						D.F. 5196.9	
DRILLING MEASURED FROM KELLY BUSHING						G.L. 5182.5	
DATE	02-JUL-2014						
RUN NO.	ONE						
DEPTH DRILLER	6177'						
DEPTH LOGGER	5961'						
BTM. LOG INTERVAL	5955'						
TOP LOG INTERVAL	1819'						
OPEN HOLE SIZE	7.875"						
TYPE FLUID	WATER						
DENS.	VISC.	N/A		N/A			
MAX. REC. TEMP. °F	190						
EST. CEMENT TOP	SEE LOG						
TIME WELL READY	ROA						
TIME LOGGER ON BTM.	SEE LOG						
EQUIP. NO.	14247						
LOCATION	FARMINGTON						
RECORDED BY	C.CALIENDO						
WITNESSED BY	L. GRIEGER						
BOREHOLE RECORD					TUBING RECORD		
RUN NO.	BIT	FROM	TO	SIZE	WGT.	FROM	TO
CASING RECORD	SIZE	WT/FT	GRADE	TYPE JOINT		TOP	BOTTOM
SURFACE STRING	8-5/8"					SURF	1700'
PROT. STRING							
PROD. STRING	4.5"	13.5				SURF	6177'
LINER							

All interpretations of log data are opinions based on inferences from electrical or other measurements. We do not guarantee the accuracy or correctness of any interpretation or recommendation and we shall not be liable or responsible for any loss, cost, damages or expenses incurred or sustained by anyone resulting from any interpretation or recommendation made by any of our employees or agents.

REMARKS	Rig: EXPRESS (14247)	Service Order # 91510673
LOG WAS RAN WITH A 15' K.B.		BHT 190 °F

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**Prints: 2**

**THANK YOU FOR CHOOSING WEATHERFORD WIRELINE SERVICES FARMINGTON.NM (505)564-9131**

[illegible]

DEPTH SCALE: 5":100'

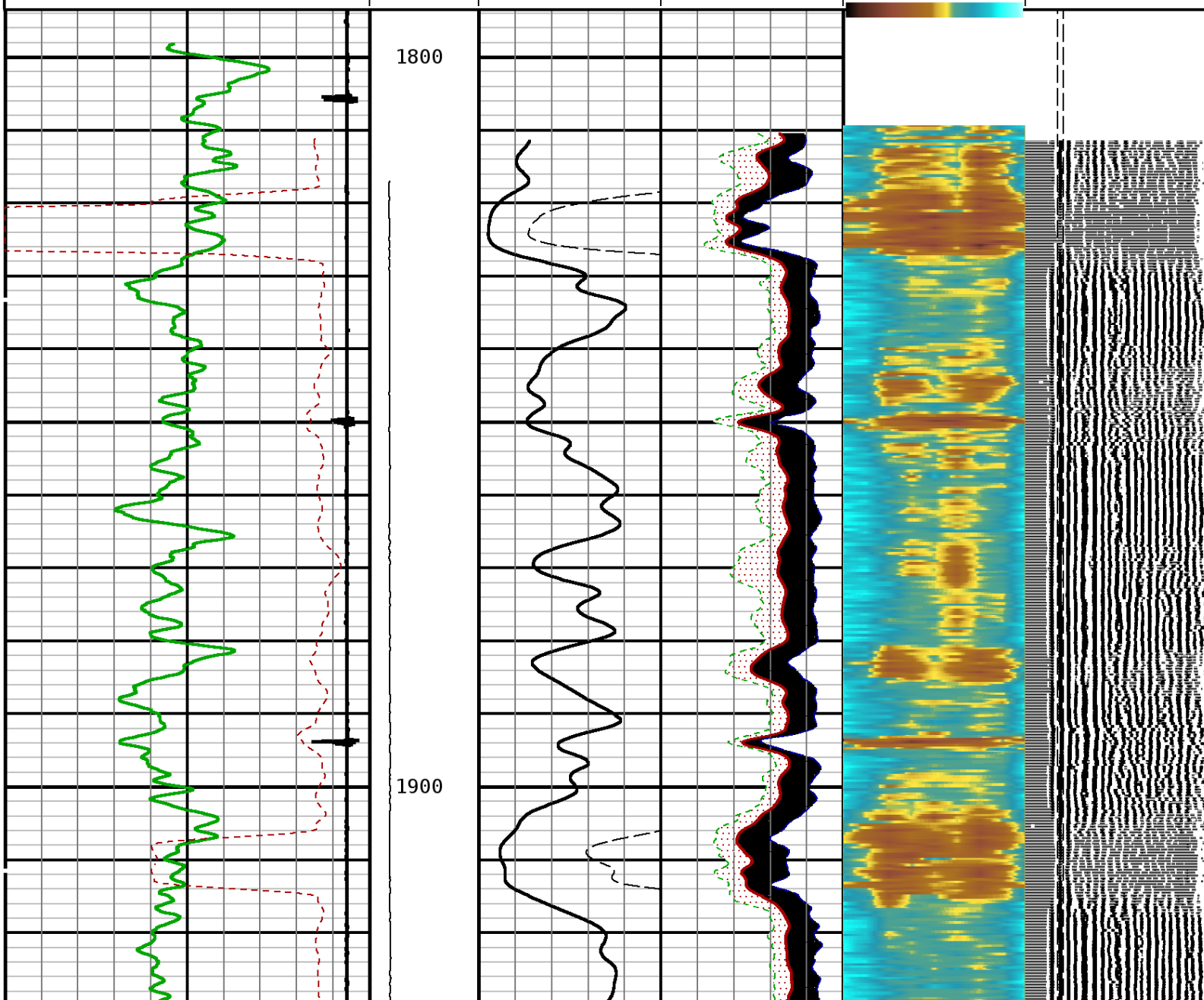
PROCESSED VERSION: 2012.07.18.162"

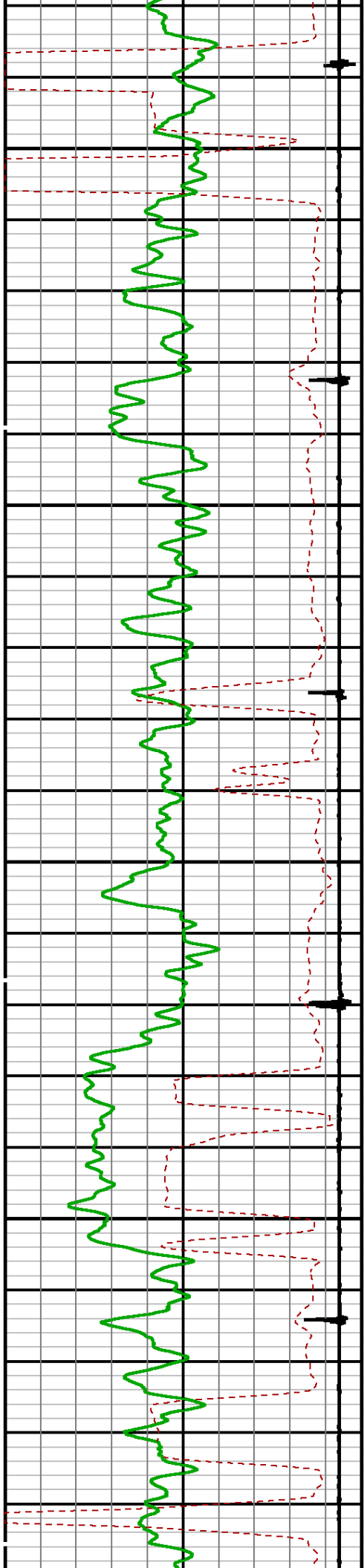
## MAIN PASS

91510673 SBTMF

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RECOMPUTED DATE: 07/02/2014 TIME: 18:15

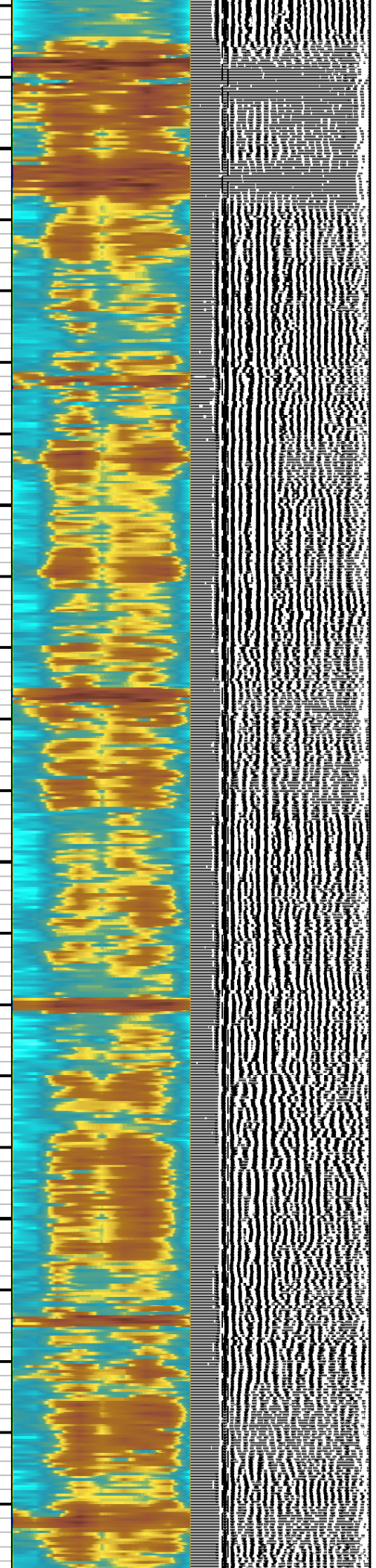
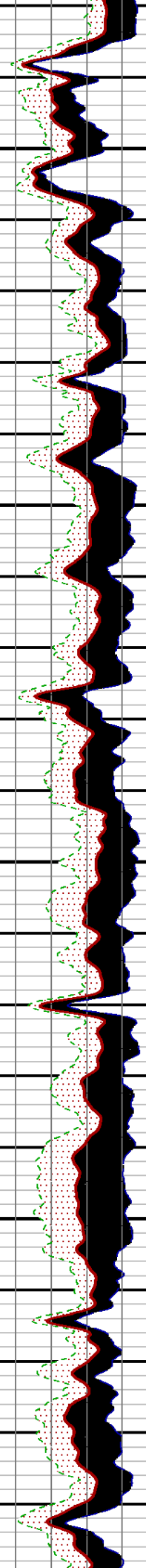
Collar Locator						MAX ENERGY			FREE PIPE GATE		
-1800	Millivolts	120				0	mv	100	200	us	1200
Gamma Ray			AMPLITUDE 3FT			AVG ENERGY			FREE PIPE GATE		
0	API	200	0	mv	20	0	mv	100	200	us	1200
TRAVEL TIME 3FT			Tension	AMPLITUDE 3FT		MIN ENERGY		VARIABLE ENERGY	VARIABLE DENSI		
305	Microseconds	205	0 3000	0	mv 100	0	mv 100	0 mv 80	200	us	1200

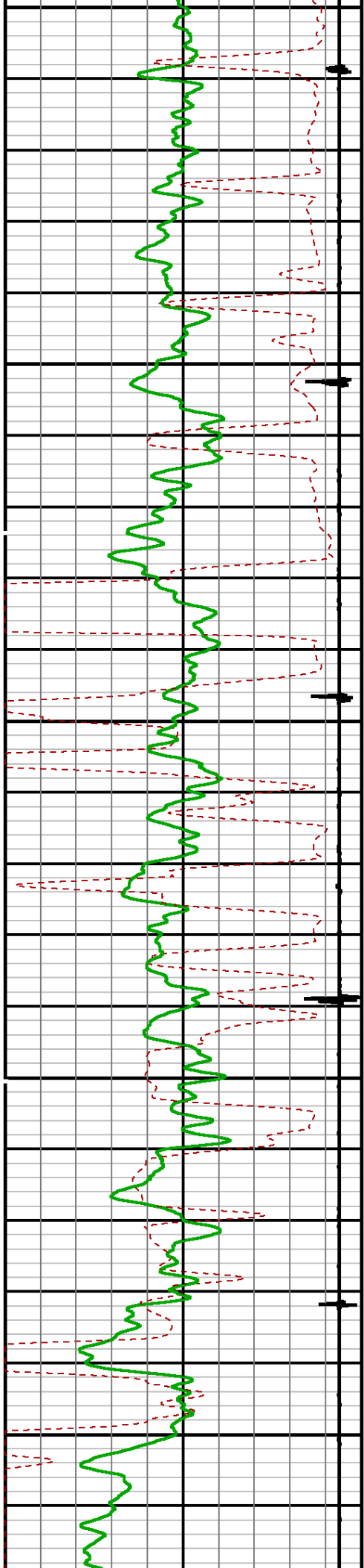




2000

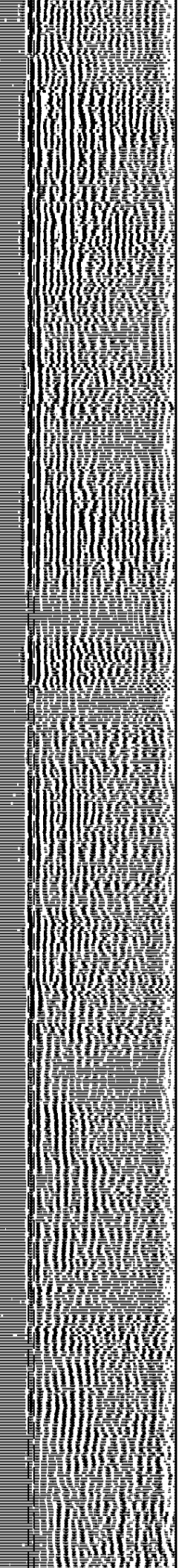
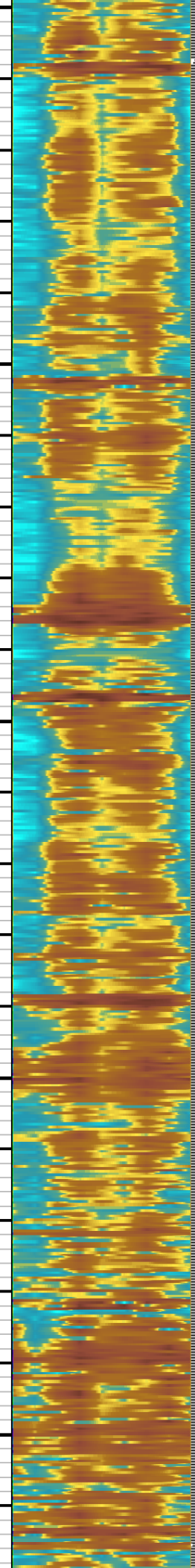
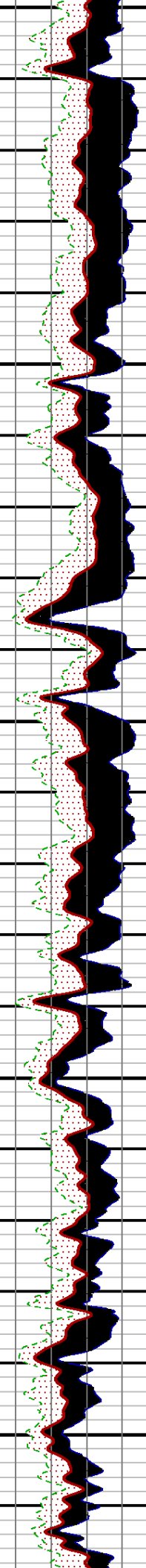
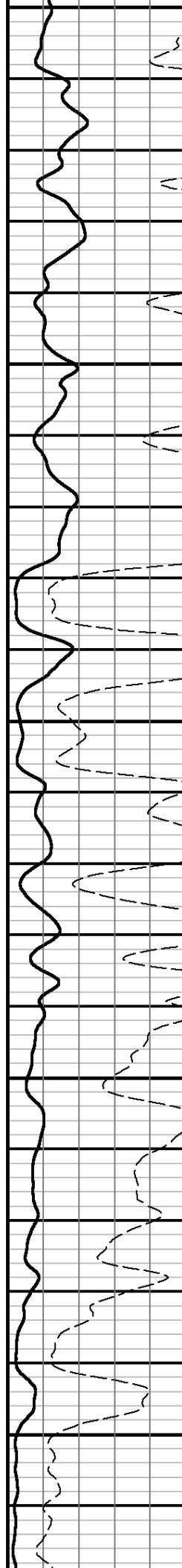
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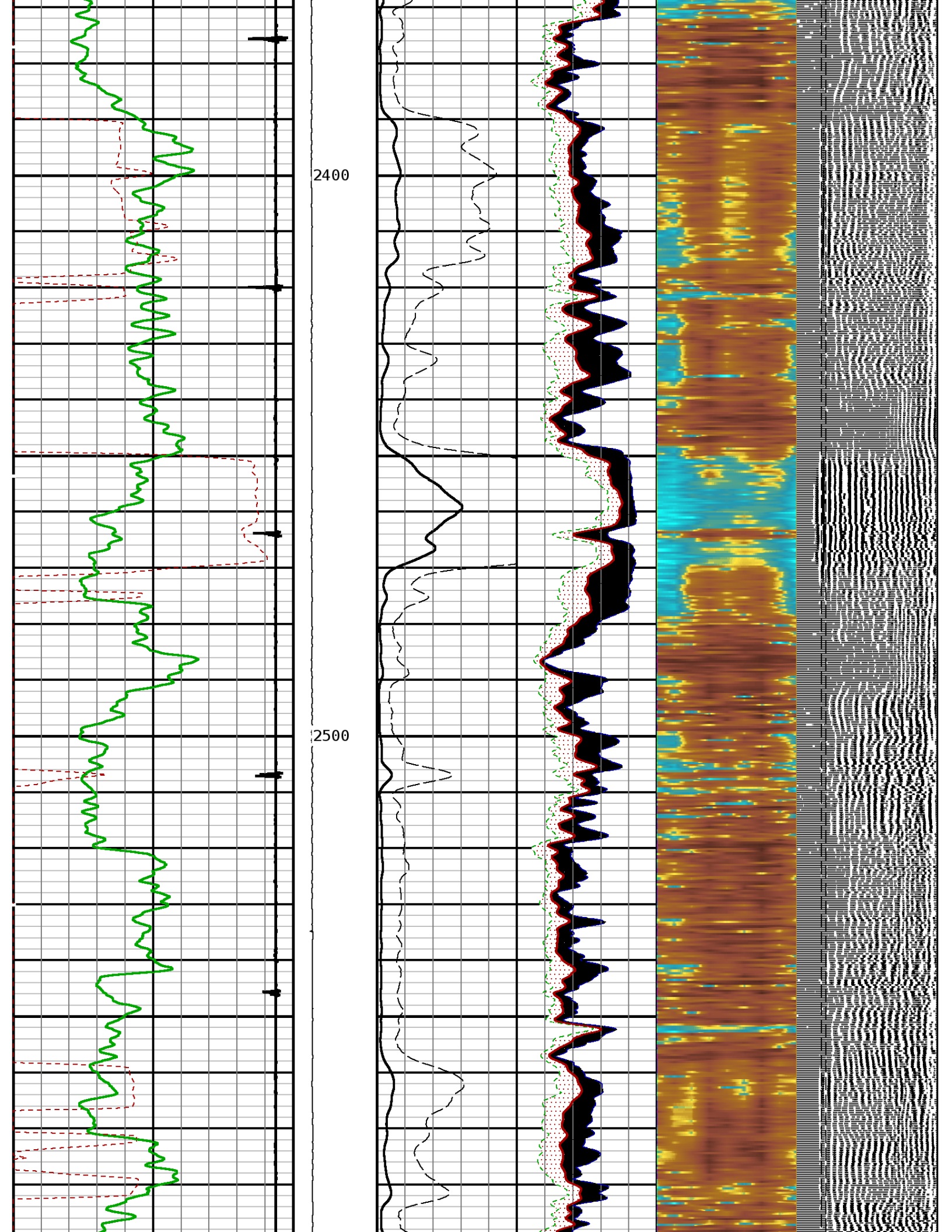


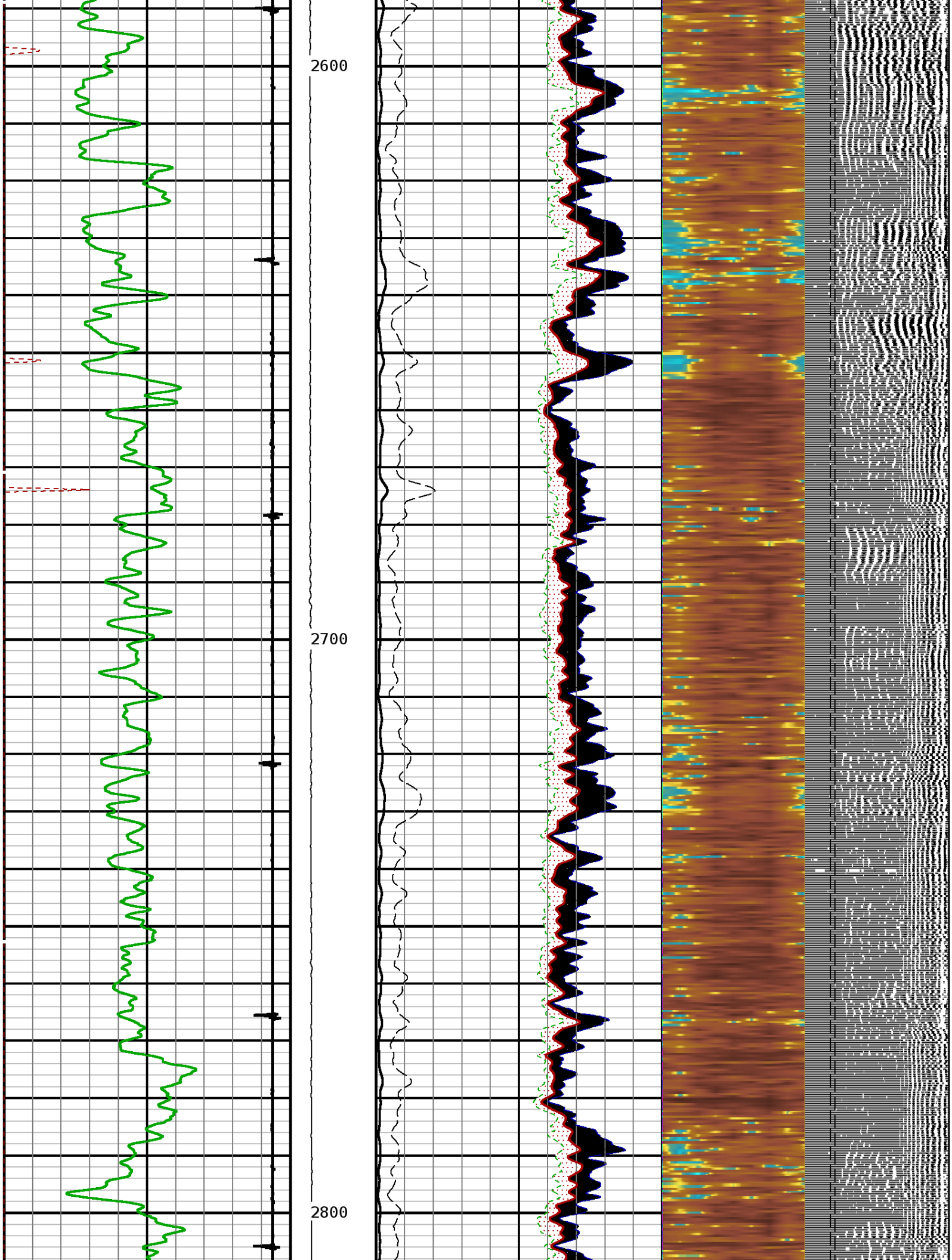
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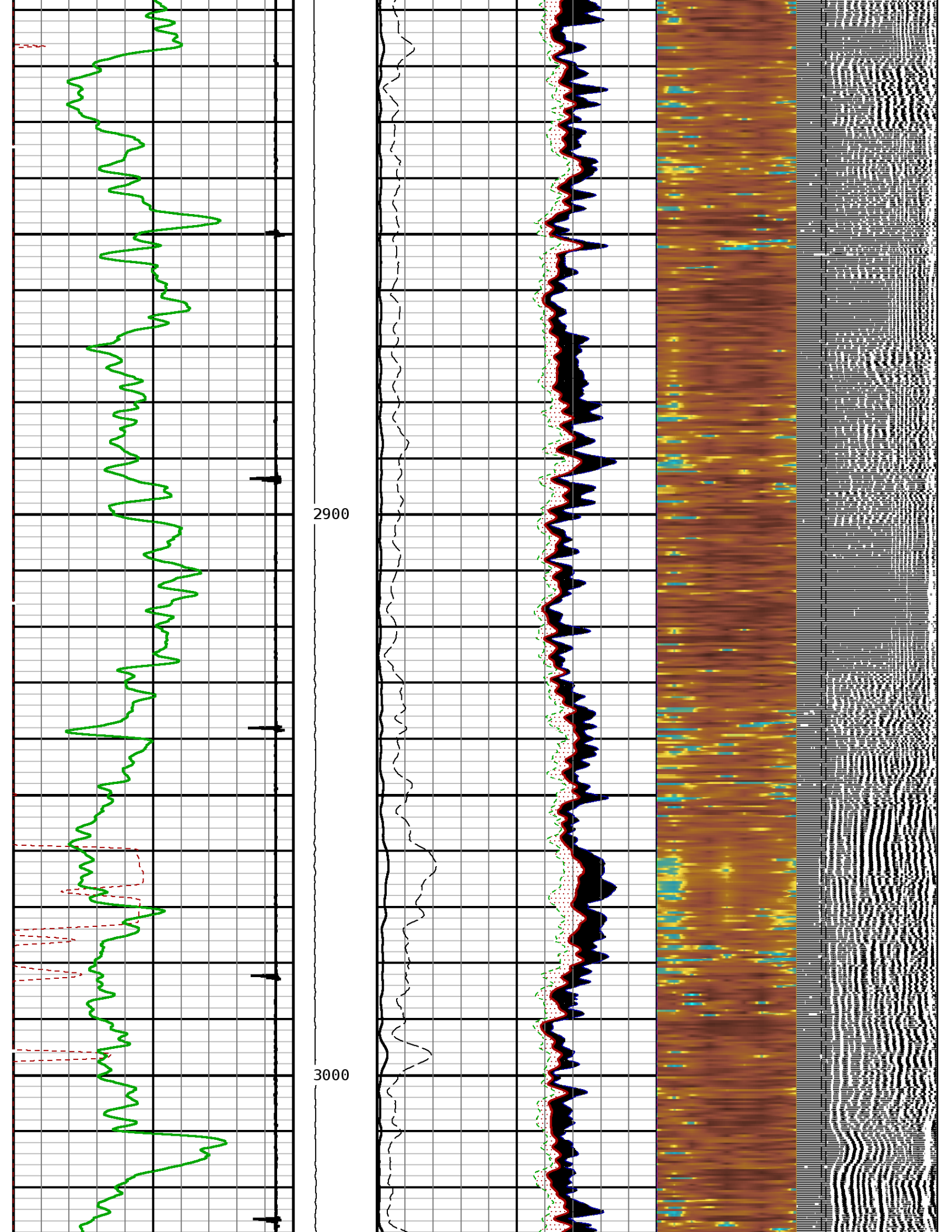
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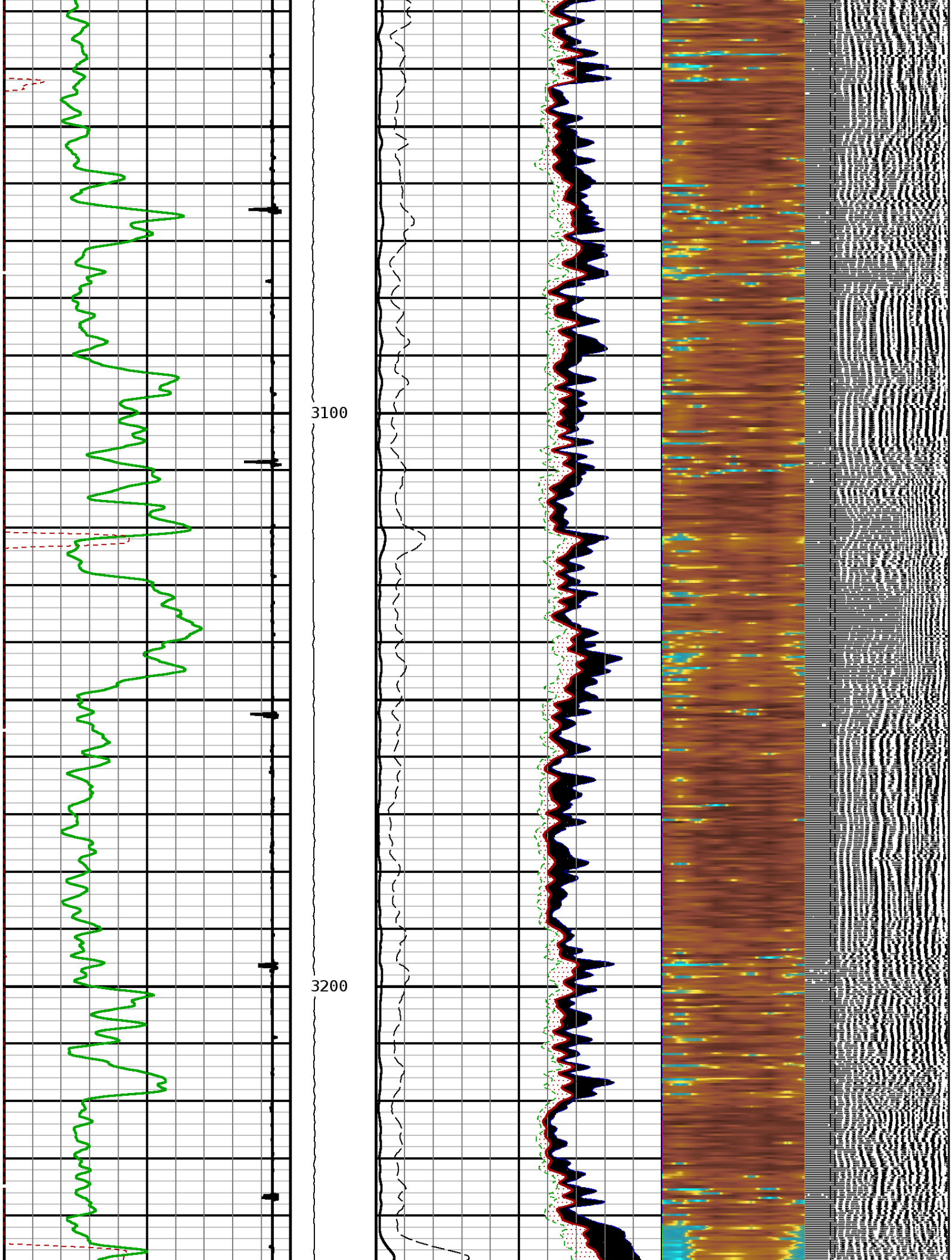




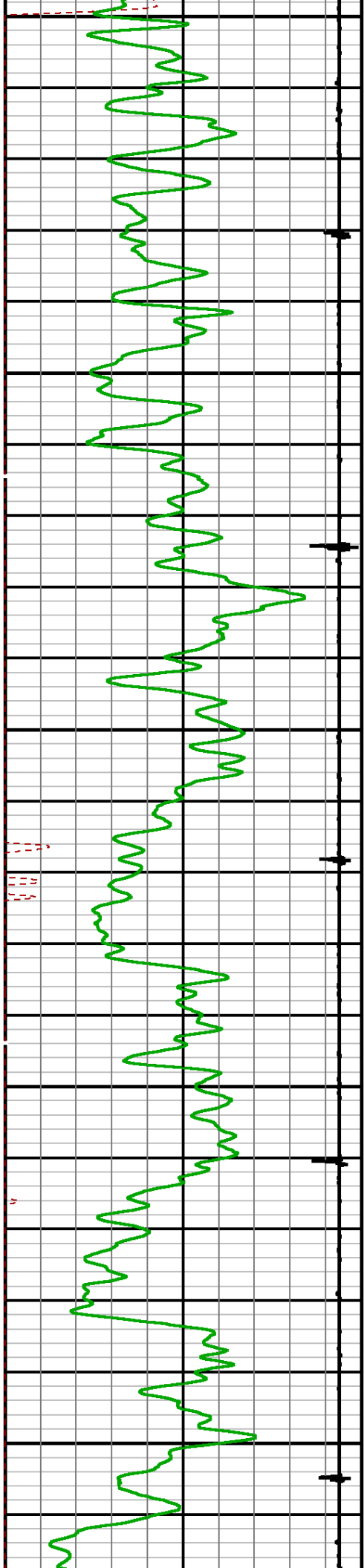






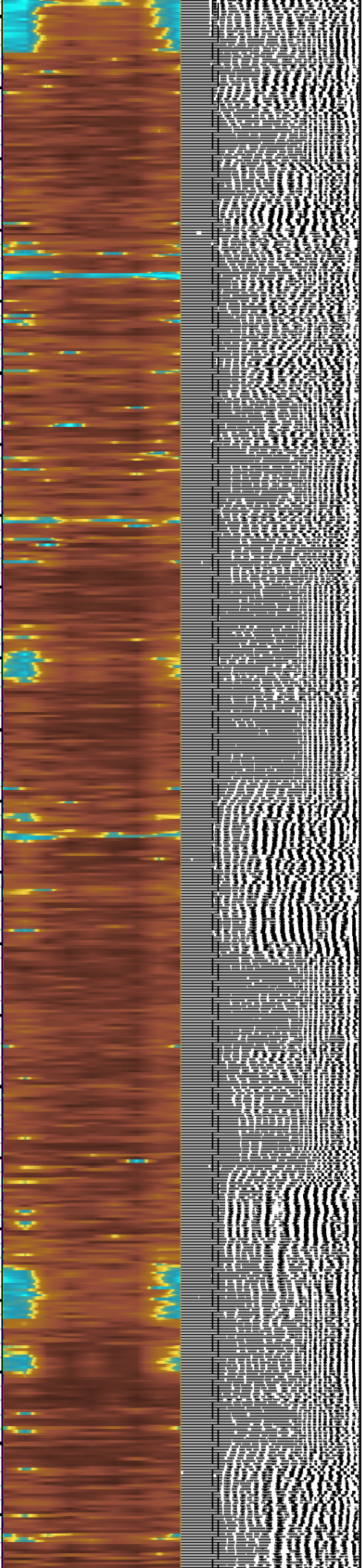
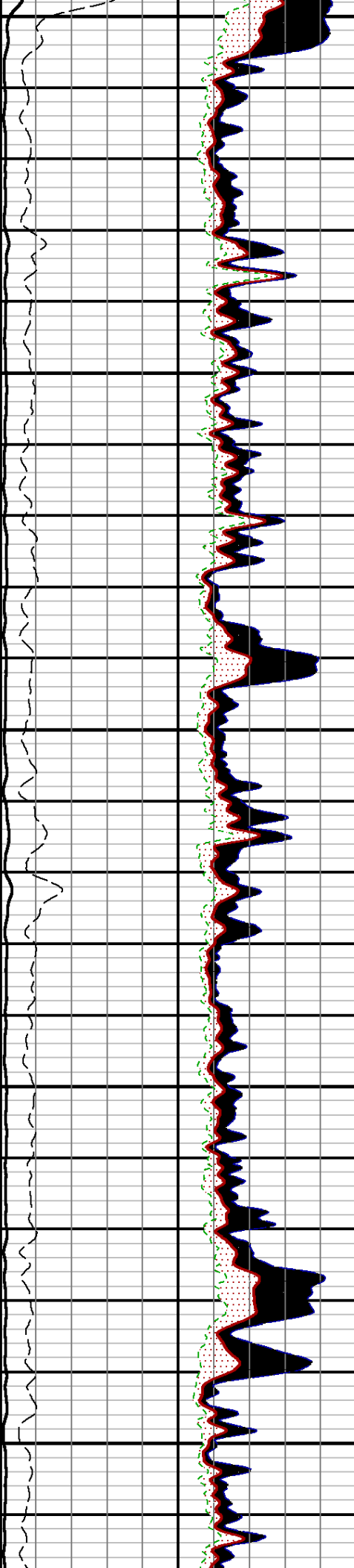


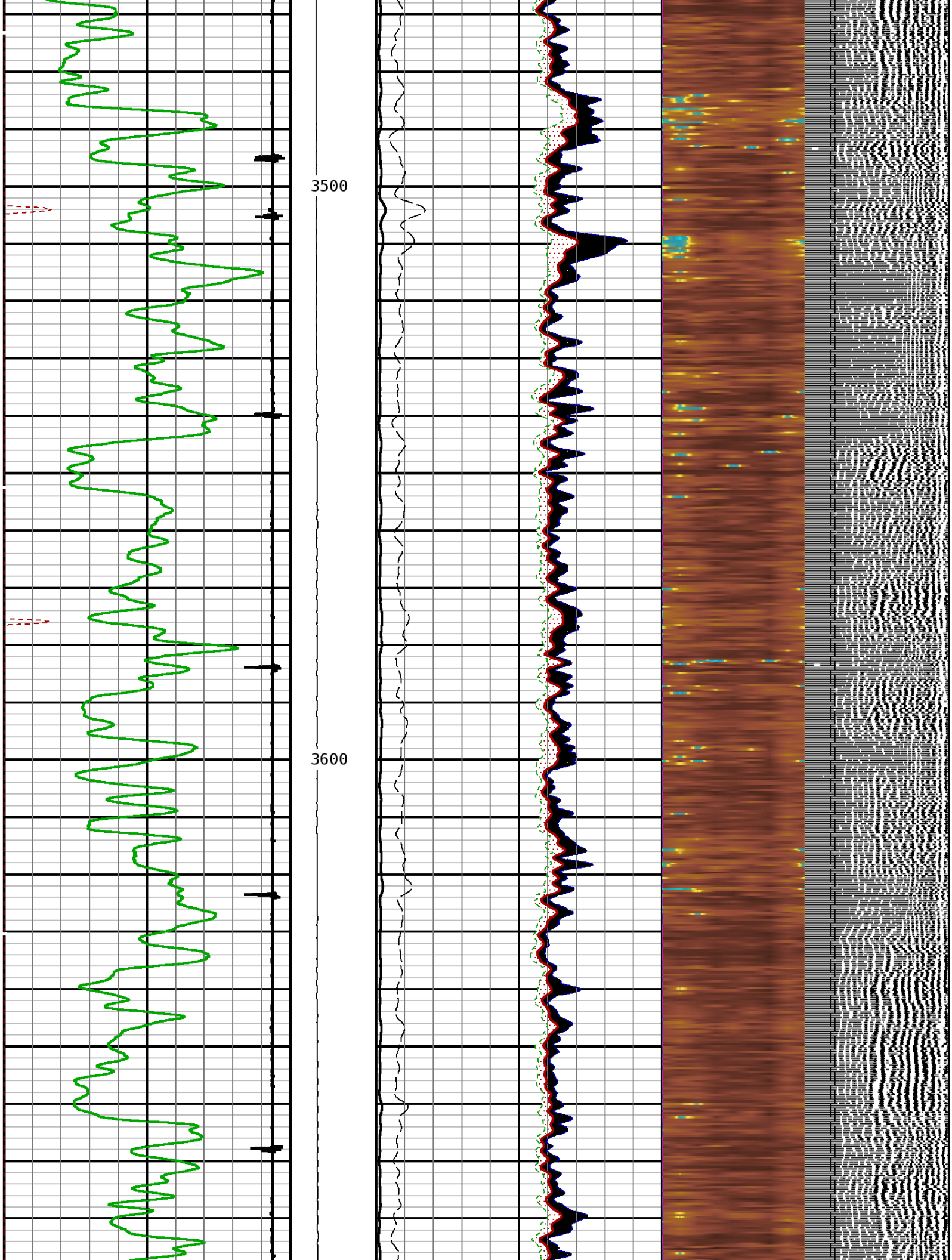


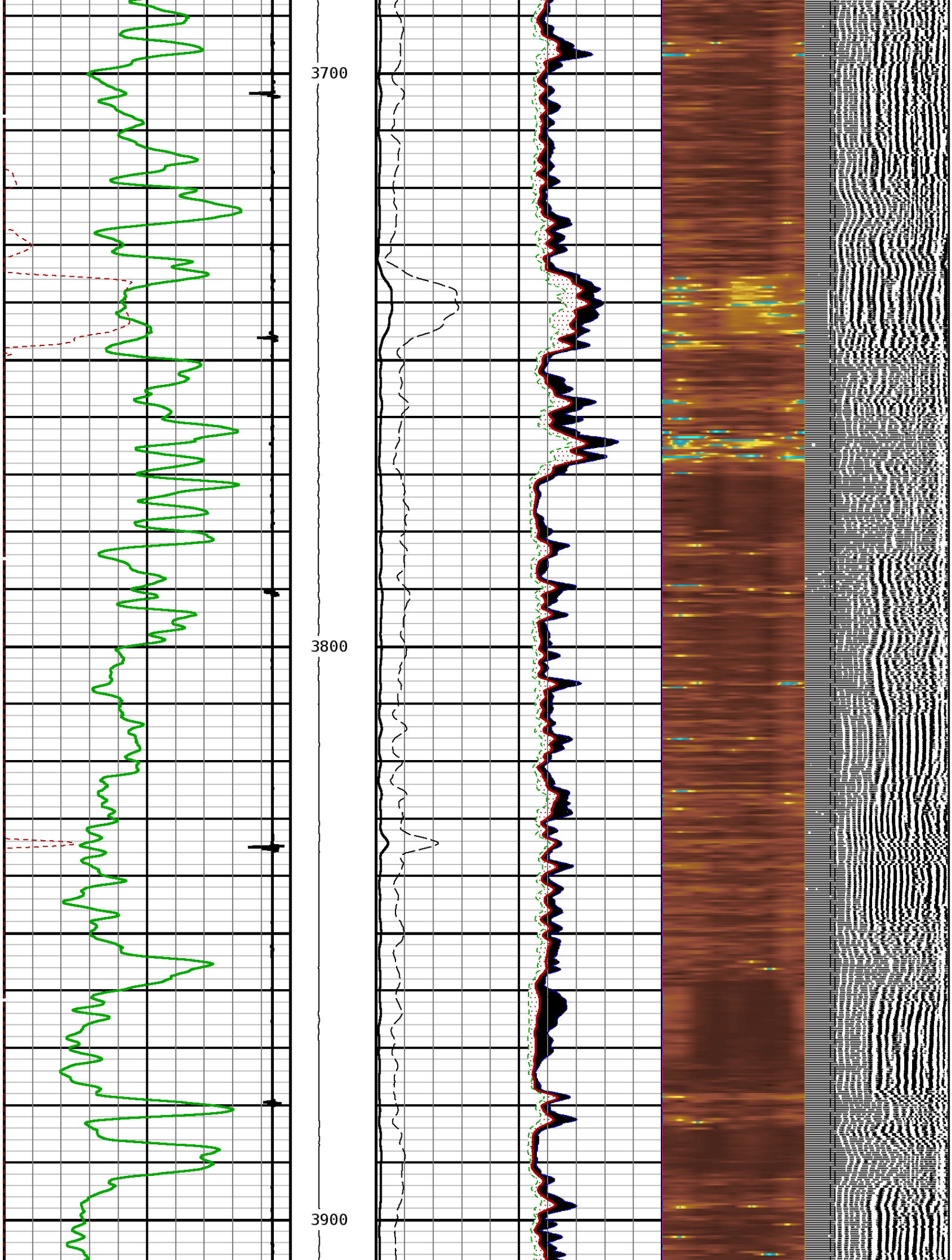


3300

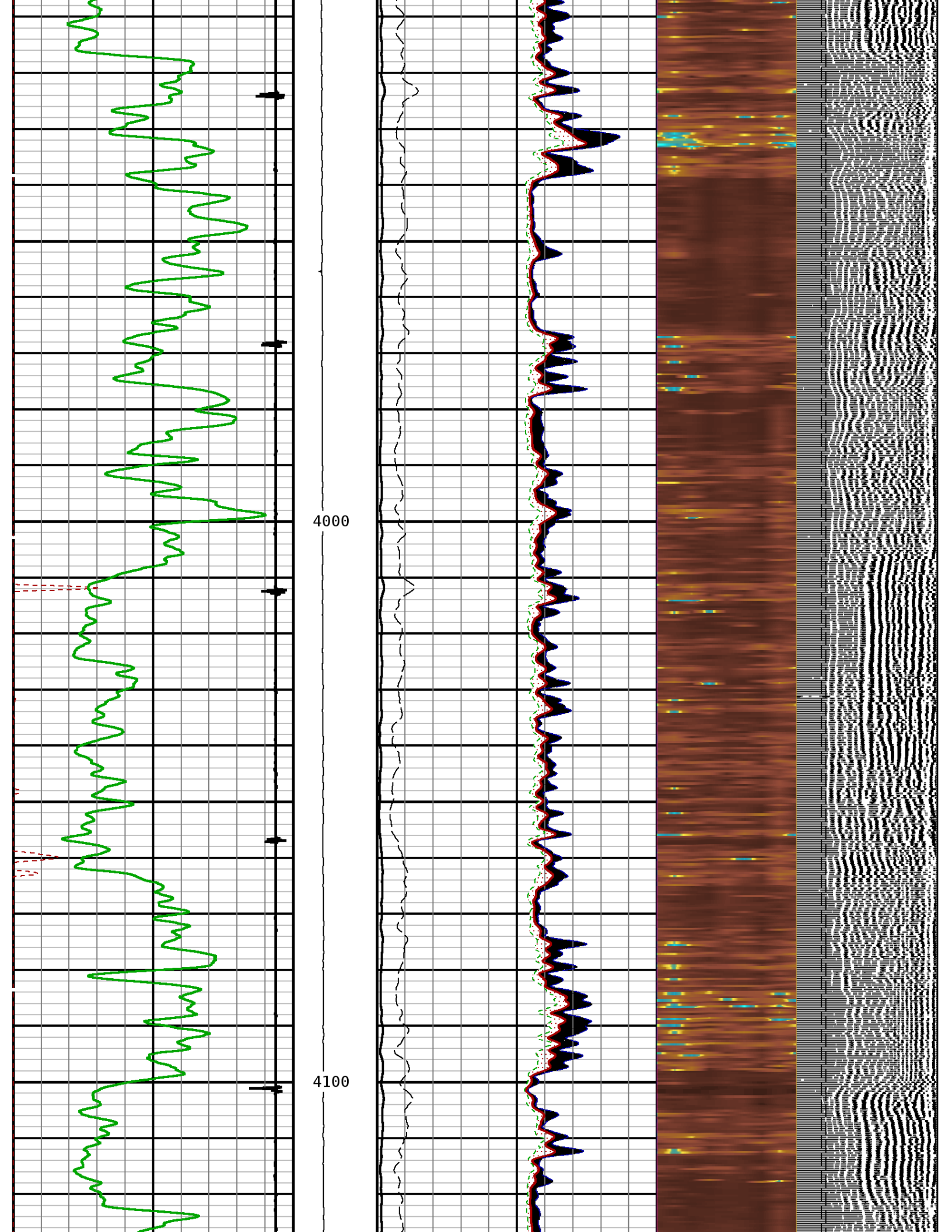
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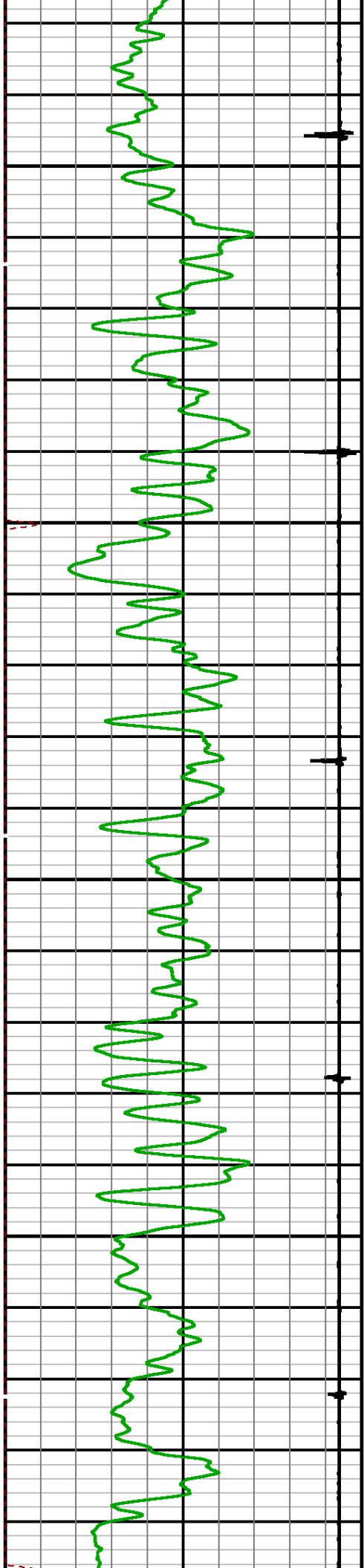






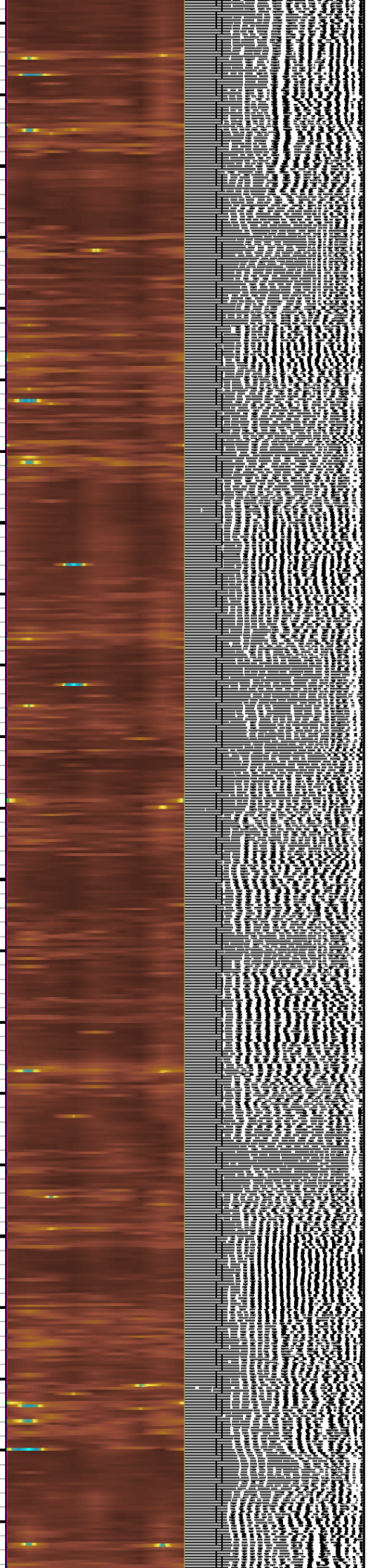
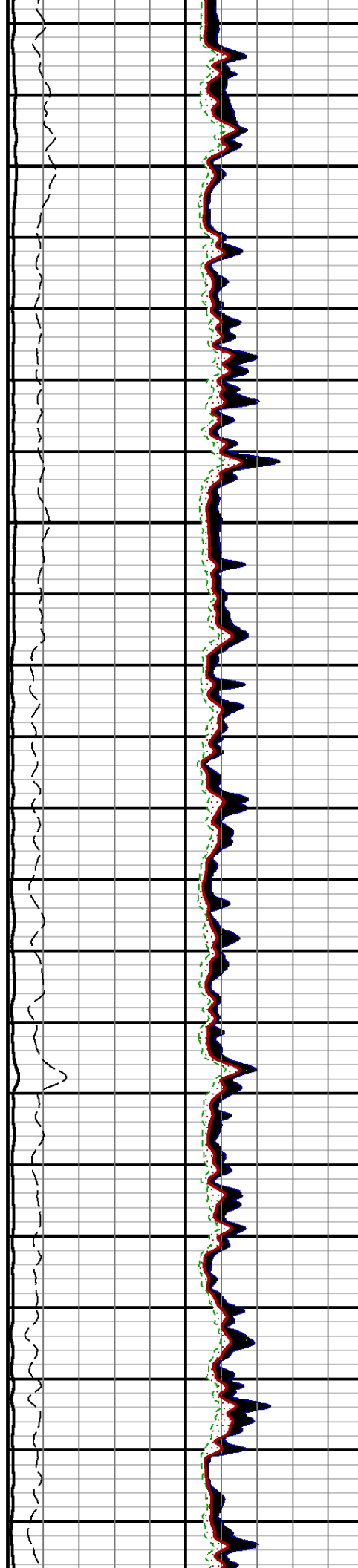


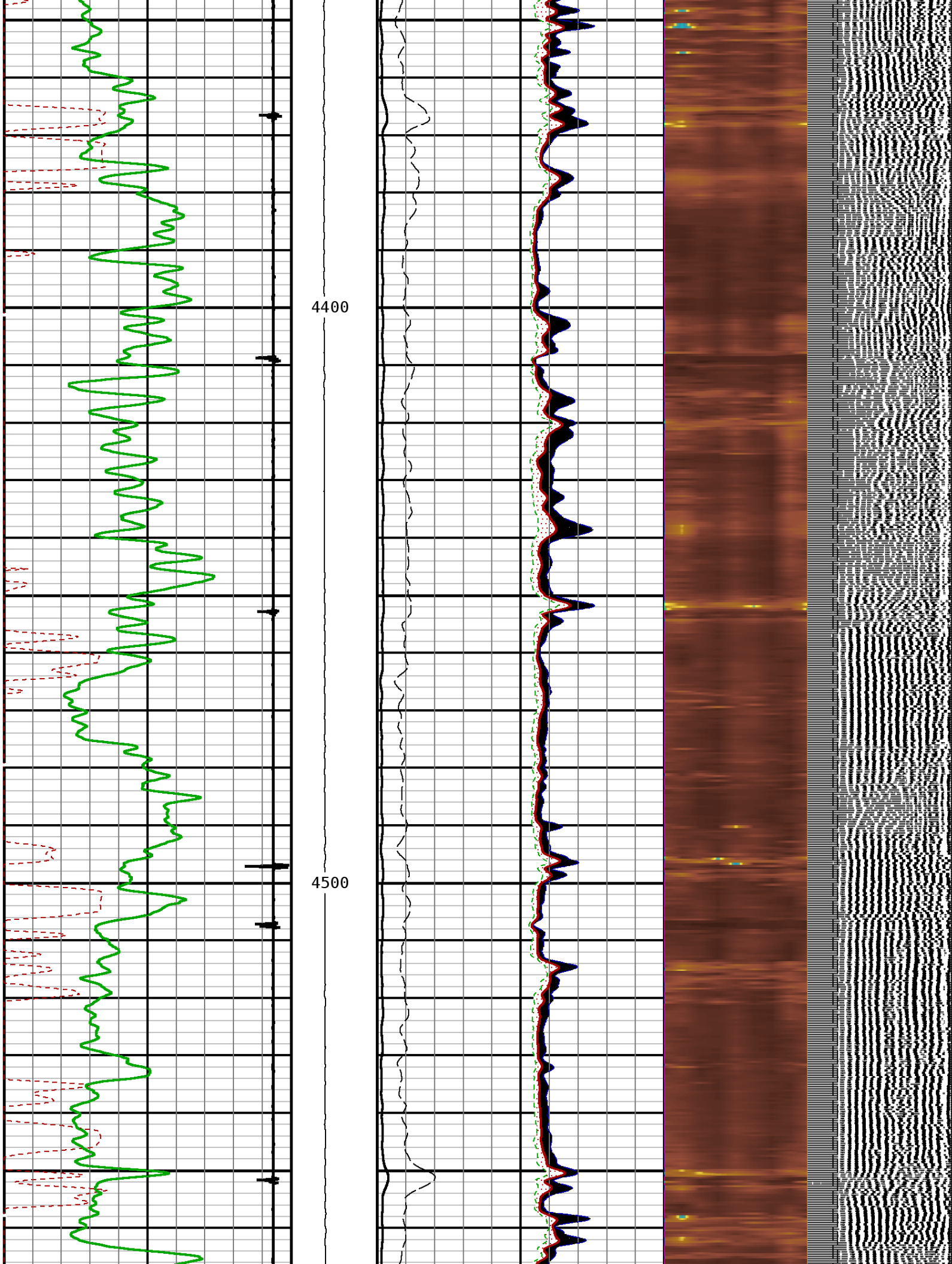




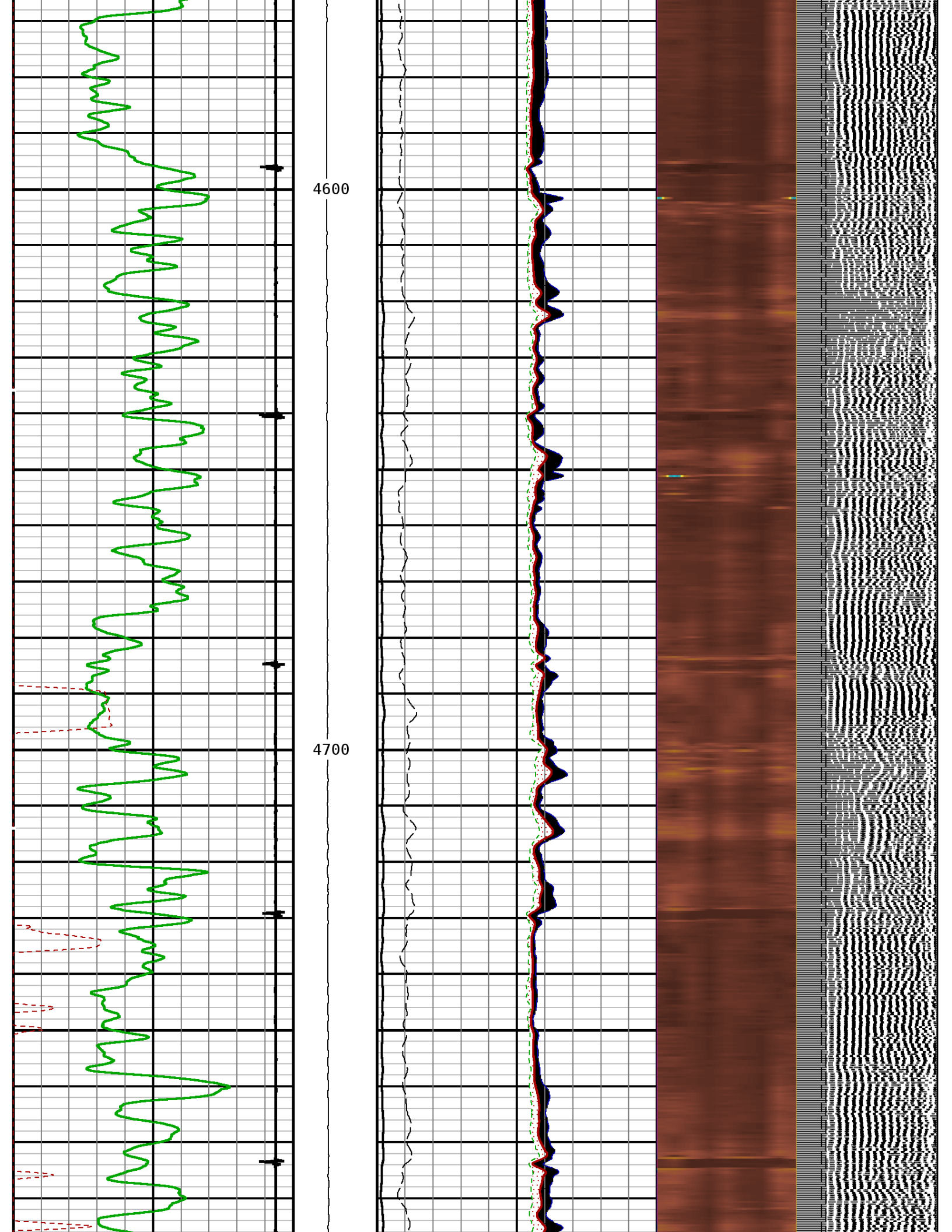
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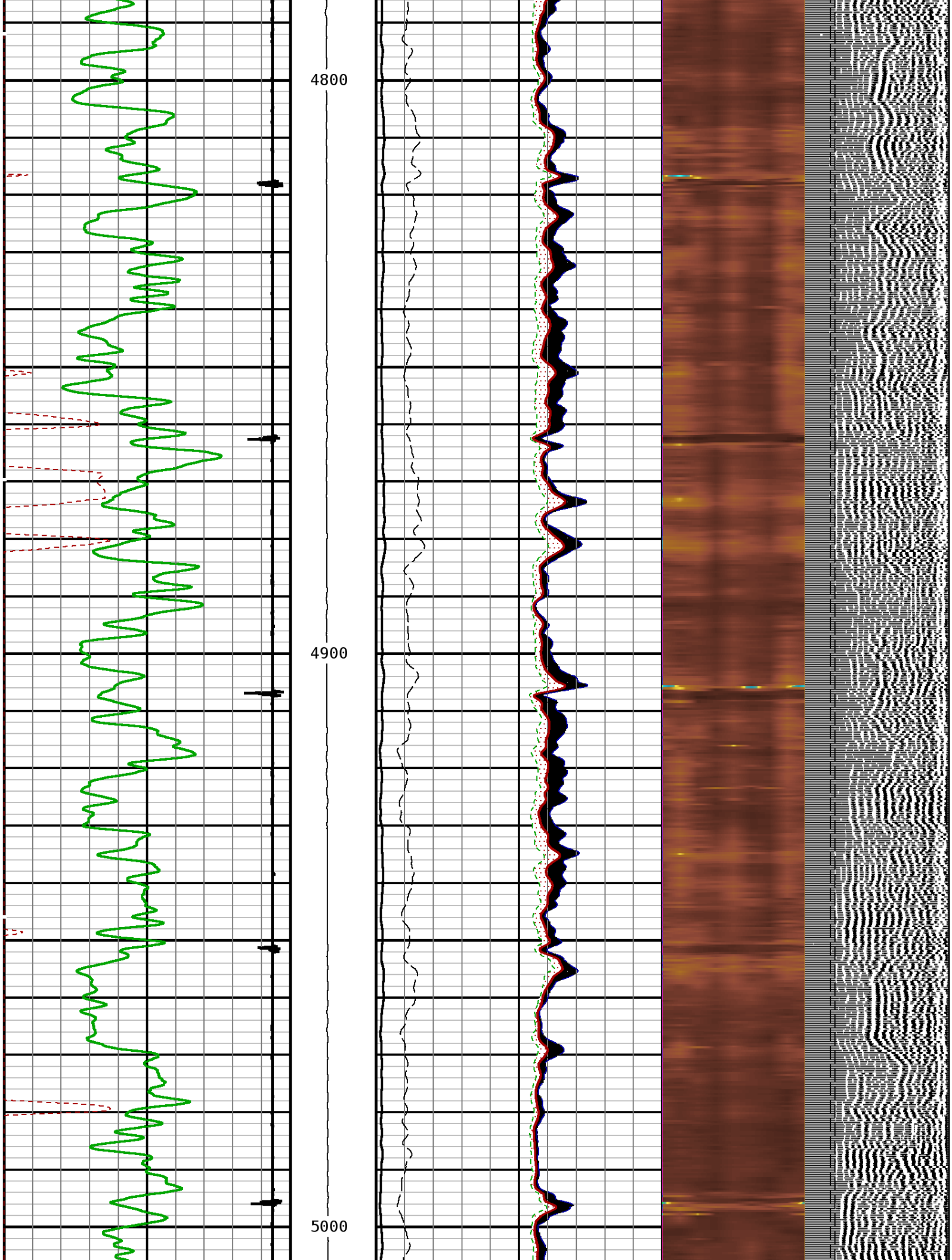
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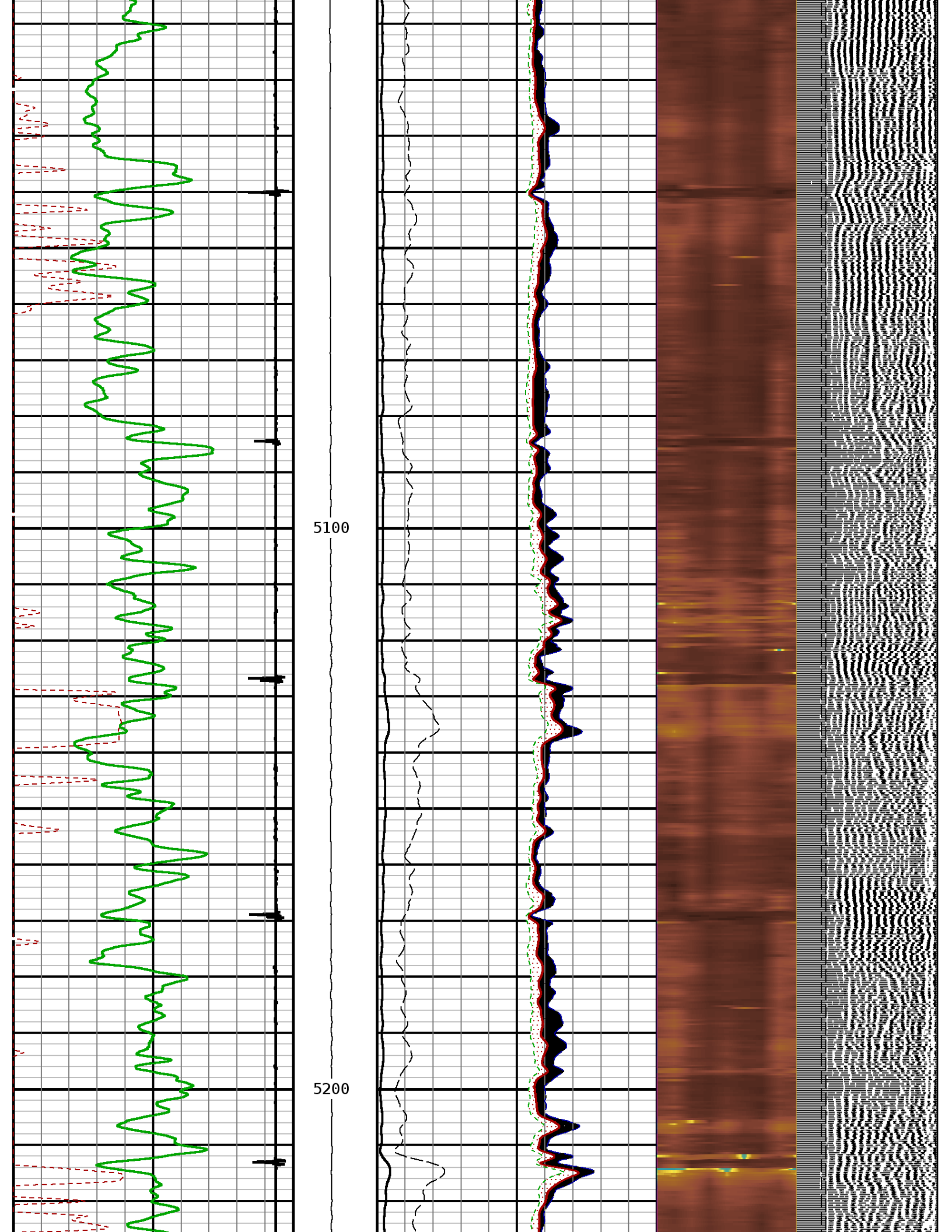




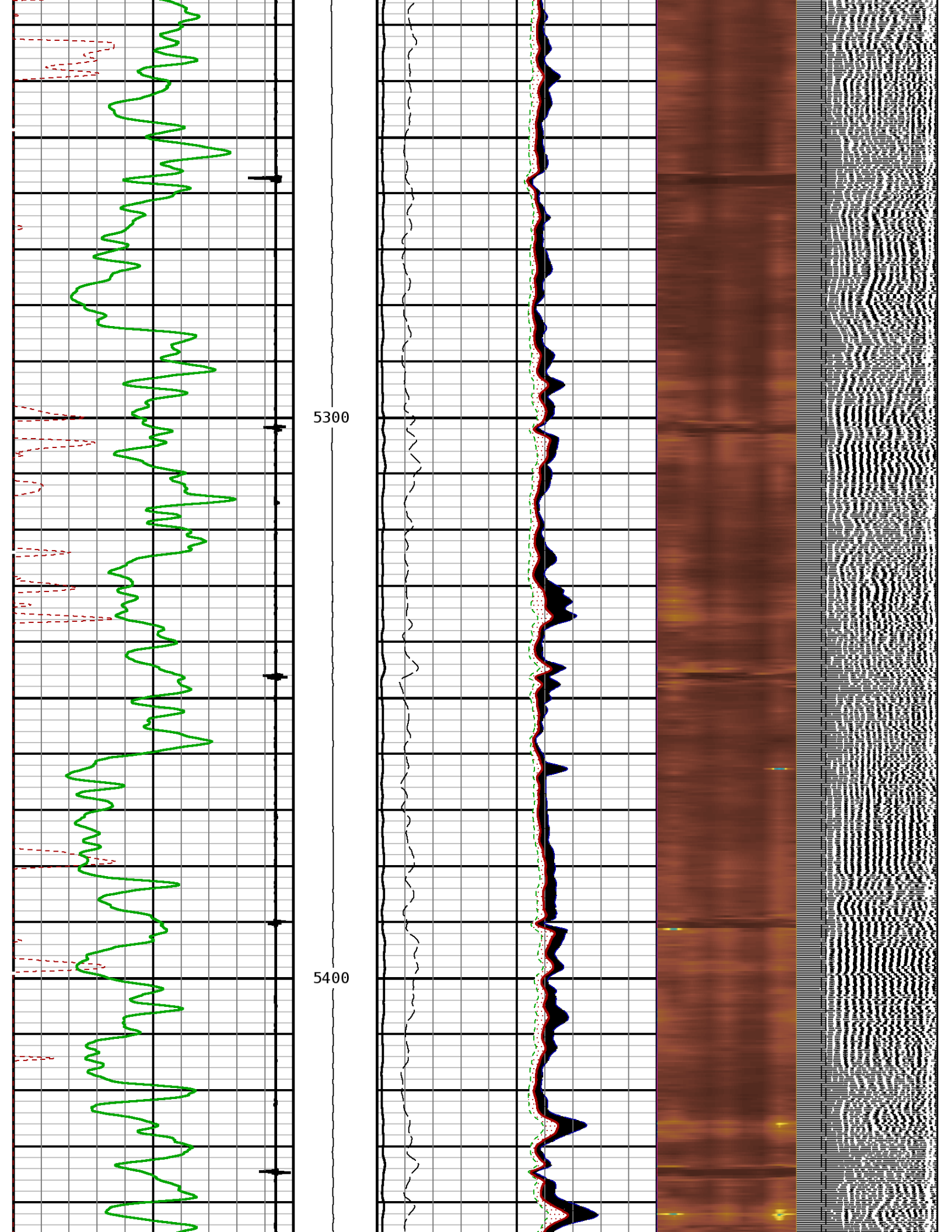


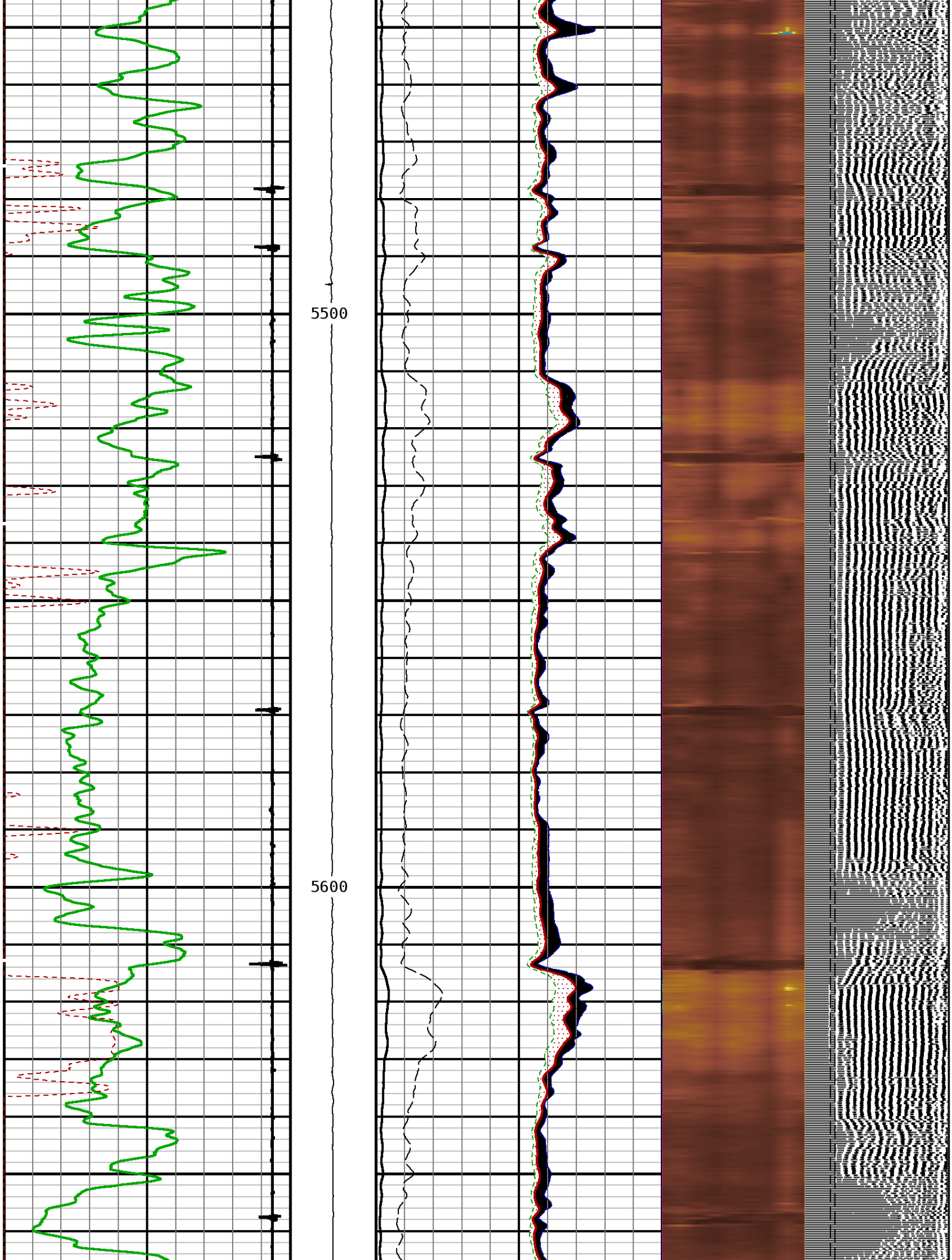


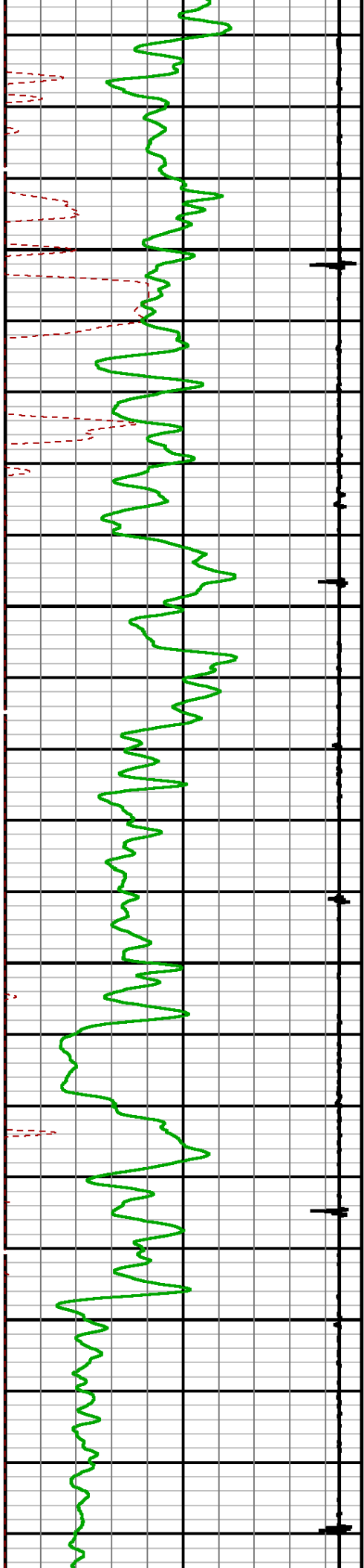






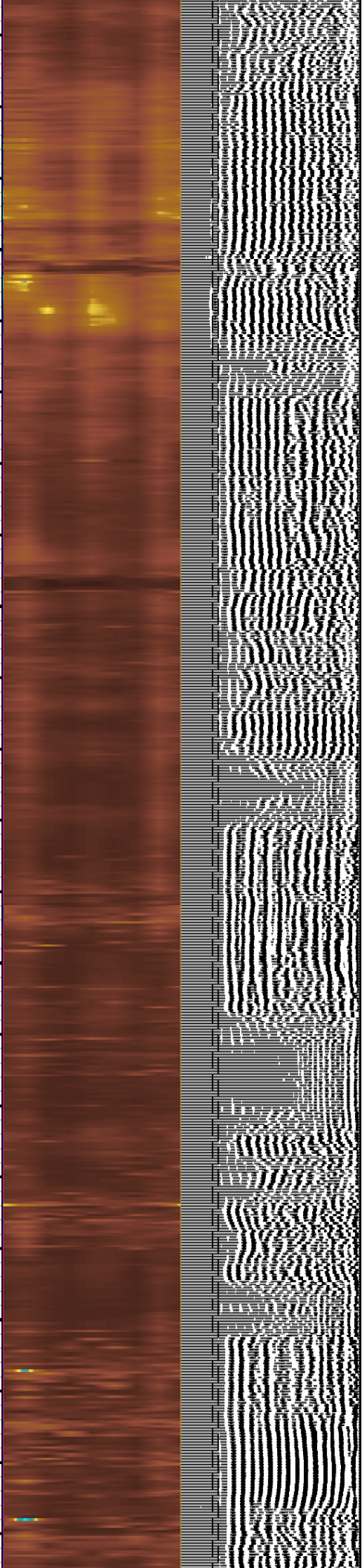
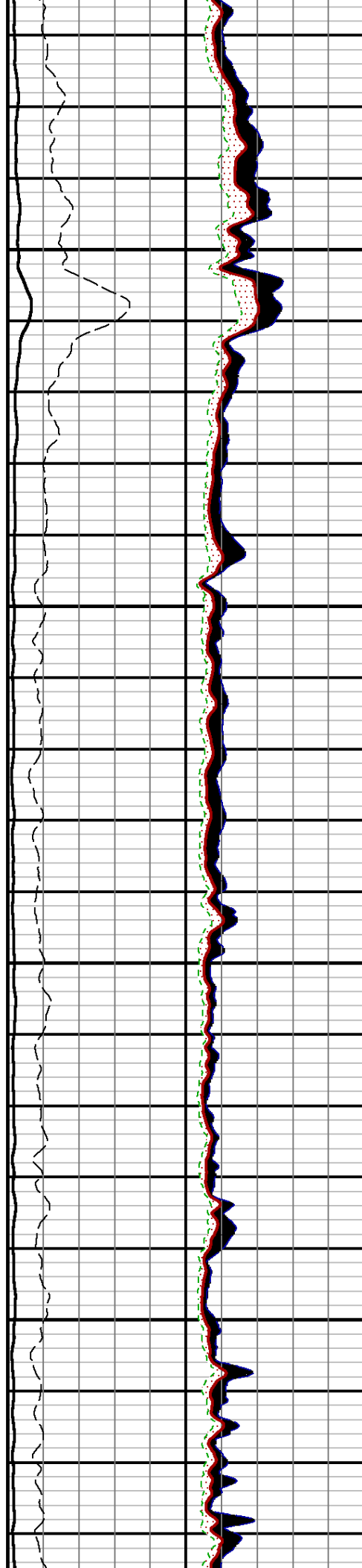




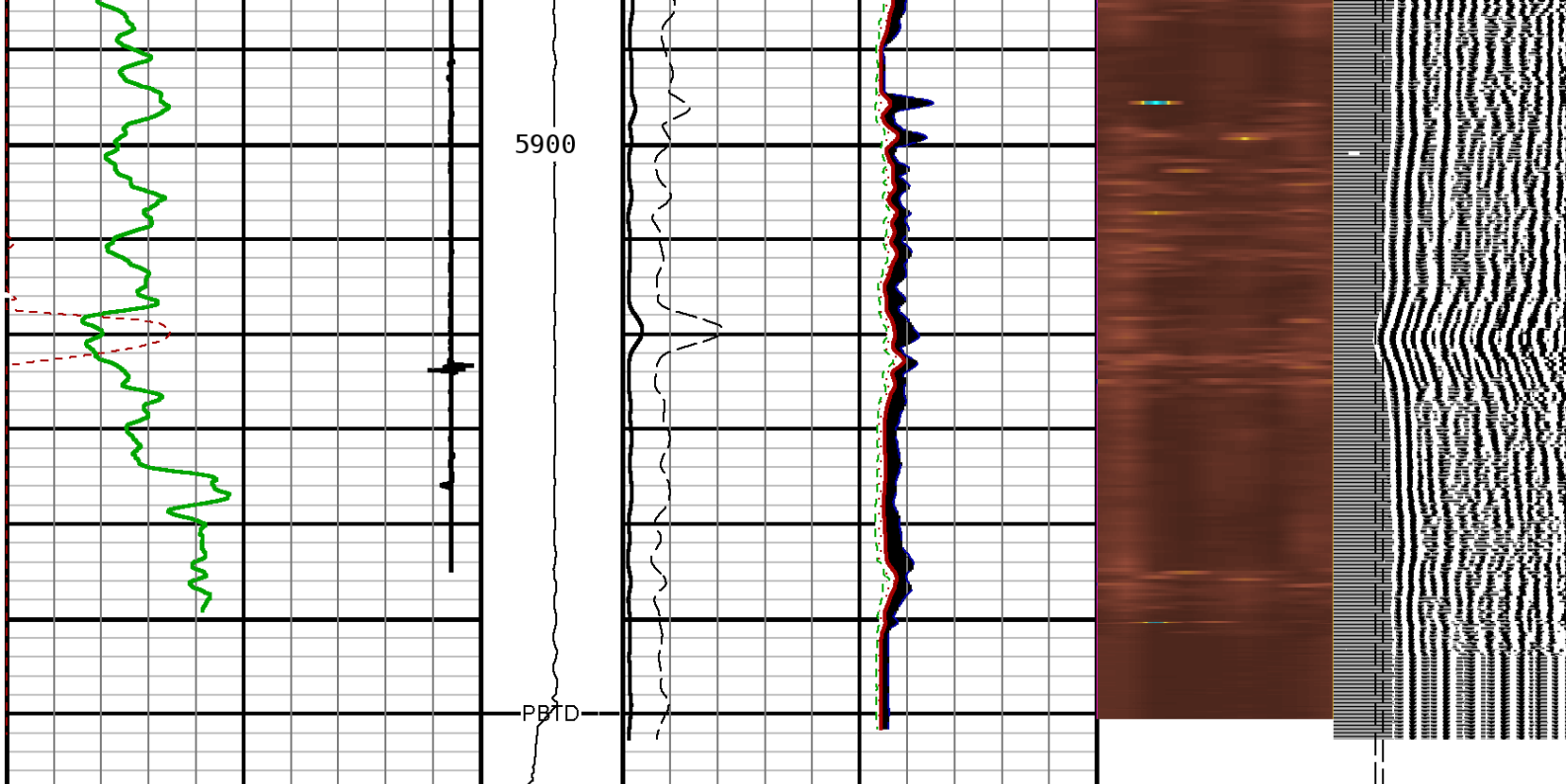


5700

5800







TRAVEL TIME 3FT	Tension	AMPLITUDE 3FT	MIN ENERGY	VARIABLE ENERGY	VARIABLE DENSI
305 Microseconds 205	0 3000	0 mv 100	0 mv 100	0 mv 80	200 us 1200
Gamma Ray		AMPLITUDE 3FT	AVG ENERGY		FREE PIPE GATE
0 API 200		0 mv 20	0 mv 100		200 us 1200
Collar Locator			MAX ENERGY		FREE PIPE GATE
-1800 Millivolts 120			0 mv 100		200 us 1200

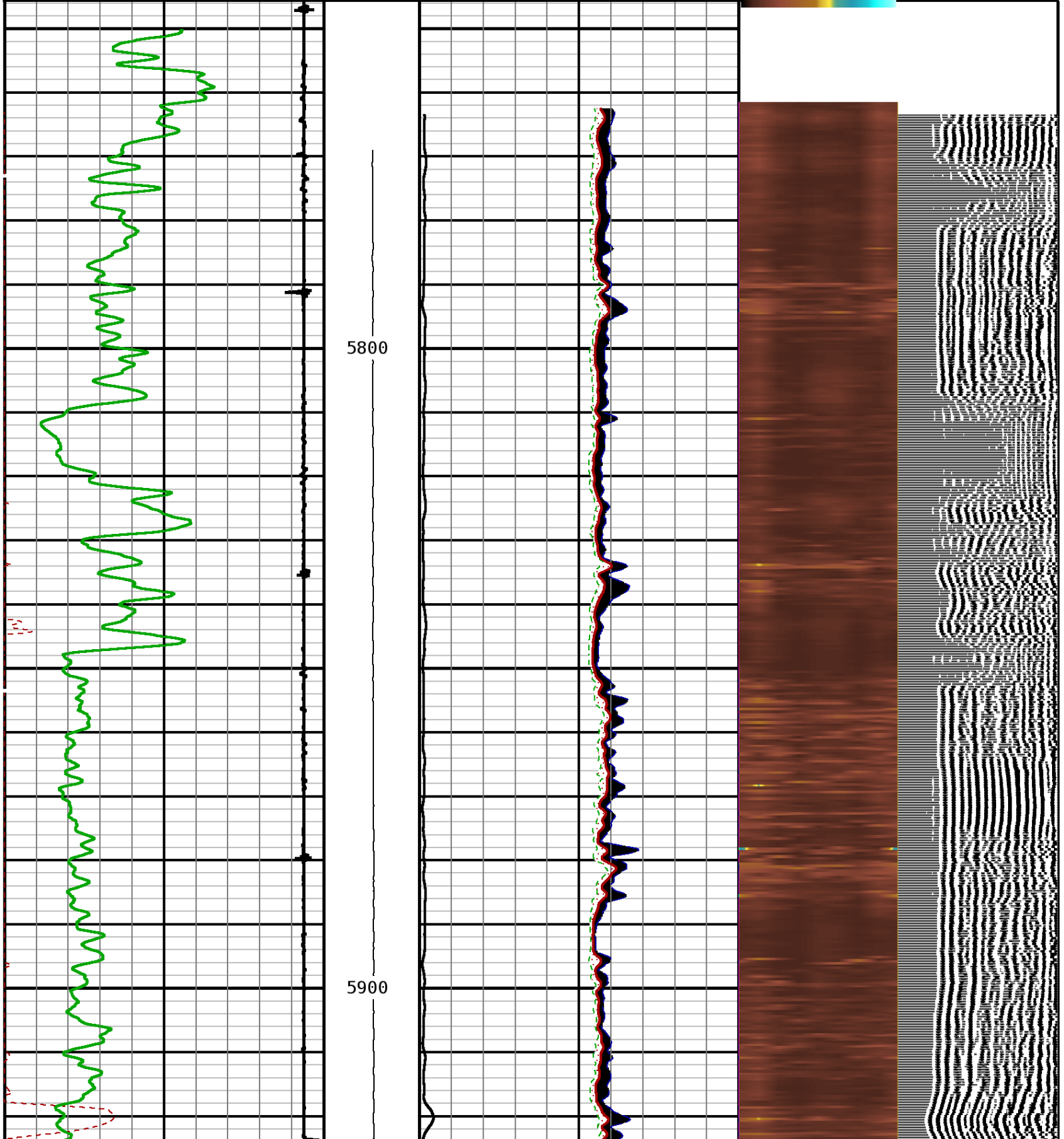
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RECOMPUTED	DATE: 07/02/2014	TIME: 18:13		
91510673 SBTMF				

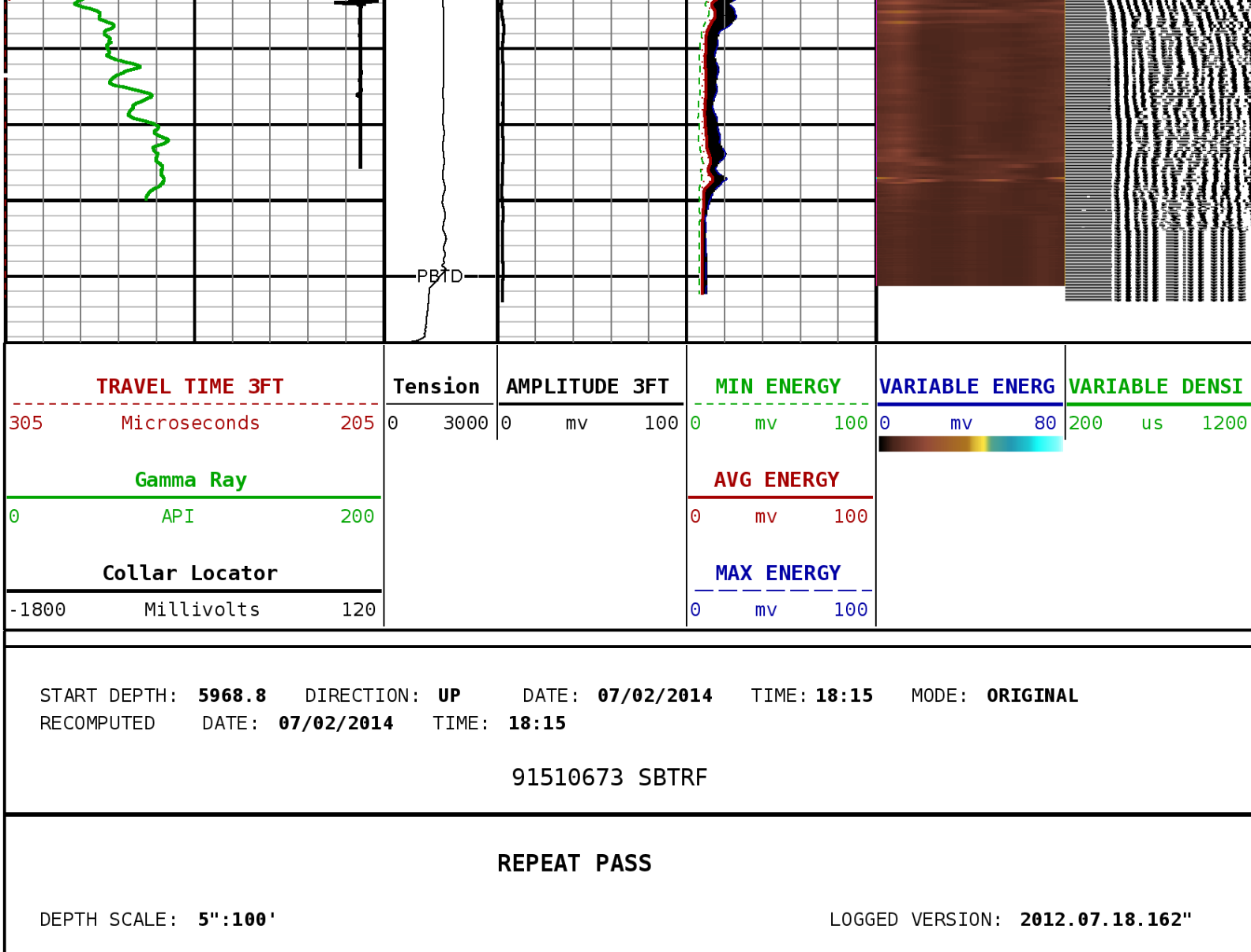
MAIN PASS	
DEPTH SCALE: 5":100'	LOGGED VERSION: 2012.07.18.162"

DEPTH SCALE: 5":100'	PROCESSED VERSION: 2012.07.18.162"
REPEAT PASS	

91510673 SBTRF										
FINISH DEPTH:	5769.0	Feet	DIRECTION:	UP	DATE:	07/02/2014	TIME:	18:15	MODE:	ORIGINAL
RECOMPUTED	DATE:		07/02/2014	TIME:		18:15				

Collar Locator						MAX ENERGY					
-1800	Millivolts	120				0	mv	100			
Gamma Ray						AVG ENERGY					
0	API	200				0	mv	100			
TRAVEL TIME 3FT			Tension	AMPLITUDE 3FT		MIN ENERGY			VARIABLE ENERGY	VARIABLE DENSI	
305	Microseconds	205	0 3000	0	mv 100	0	mv	100	0 mv 80	200 us	1200





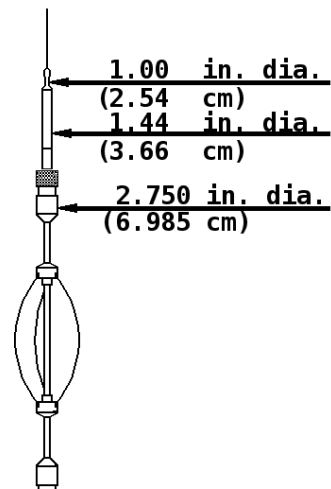
### 1 7/16 Adapter Head

Weight 2.2 LB.  
Length 2.54  
Max. Diameter 1.44 IN.

Total Stack Weight 223.0 LBS. in air  
Total Stack Length 27.83 FT.

### Slim Hole Centralizer

Weight 15 lbs  
Length 2.49 FT.  
Max. Diameter 2.750 IN.





### Collar Locator

Weight 39.8 LBS.  
Length 3.40 FT.  
Max. Diameter 2.75 IN.

### Slim Hole Gamma Ray

Weight 39.8 LBS.  
Length 4.71 FT.  
Max. Diameter 2.750 IN.

### Slim Hole Centralizer

Weight 22 LBS.  
Length 3.08 FT.  
Max. Diameter 2.750 IN.

### Sector Bond

Weight 89.2 LBS>  
Length 10.32 FT.  
Max. Diameter 2.750 IN.

### Slim Hole Centralizer

Weight 15.0 LBS

CCL 23.57 FT.

GR 19.97 FT.

SBT/CBL Tx 8.75 FT.

SBT Rx 7.77 FT.

3' Rx 7.28 FT.

5' Rx 6.28 FT.

2.750 in. dia.  
(6.985 cm)

2.750 in. dia.  
(6.985 cm)

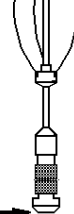
2.750 in. dia.  
(6.985 cm)

2.750 in. dia.  
(6.985 cm)

2.750 in. dia.  
(6.985 cm)

Weight 15.10 LBS.  
Length 2.82 FT.  
Max. Diameter 2.750 IN.

Tool Zero



**COMPANY**    **URSA OPERATING COMPANY**

**WELL**        **BAT 34A-24-07-96**

**FIELD**      **BATTLEMENT MESA**

**COUNTY**    **GARFIELD**                      **STATE**    **COLORADO**



**Weatherford®**