



**CEMENT BOND LOG  
WITH GAMMA RAY**

**Company** BAYSWATER E & P, LLC  
**Well** ALBRIGHTON J-10HN  
**Field** WATTENBERG  
**County** WELD **State** WELD

**Location:** API #: 05-123-42504  
 SHL: 1170' FSL & 1257' FWL  
 SWSW  
 SEC 10 TWP 6N RGE 64W  
**Permanent Datum** GL **Elevation**  
**Log Measured From** KB **23'** **Above Perm. Datum**  
**Drilling Measured From** KB **Elevation**  
 K.B. 4830'  
 D.F. 4830'  
 G.L. 4807'

Date of Service	2/20/2016
Run Number	1
Depth Driller or PBTID	N/A
Depth Logger	7050'
Bottom Log Interval	7050'
Top Log Interval	SURFACE
Open Hole Size	7.875
Type Fluid	WBM
Fluid Level	SURFACE
Fluid Density	N/A
Max. Recorded Temperature	N/A
Max. Wellhead Pressure	0 PSI
Wellhead Connection	N/A
Estimated Cement Top	SEE LOG
Unit Number	P-133
Wireline Size	9/32"
Location	FT. MORGAN
Recorded By	S. STUMP
Witnessed By	S. OSBORN

Tubing Record	Size	Wt/Ft	Top	Bottom
Surface Casing				
Production Casing	5.5	17#	SURFACE	TD
Liner Record				

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

**Comments**

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

0 PSI ON WELL WHILE LOGGING

SO# 2-290158


THANK YOU FOR USING PIONEER ENERGY SERVICES!

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: S. STUMP	GR/CCL	1408-106
Operator: M. GARCIA	RBL	1410-01
Operator: S. HUGHS		
Operator:		

Top - Bottom

BHTEMP_Src	PPT usec	CASEWGHT lb/ft	MAXAMPL mV	MINAMPL mV	MINATTN db/ft	SRFTEMP degF
TEMP	0	17	0	1.5	0.08	0
CASETHCK in	CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF	BOREID in	
0	5.5	0	0	203	7.875	

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)	
			Cable Head-Titan 143 1 7/16" Titan Cable Head	1.03	1.43	2.00	
			Centralizer-169 Titan Non-ADJ Titan 1 11/16" Non Adjustable Centralizer	2.17	2.88	22.00	
TEMP	13.46						
WVFS8	11.23			SCBL-275 Probe w Temp New Mod (FW1:9.1731) Probe Radii Bond Tool with Temperature	2.75	2.75	95.00
WVFS7	11.23						
WVFS6	11.23						
WVFS5	11.23						
WVFS4	11.23						
WVFS3	11.23						
WVFS2	11.23						
WVFS1	11.23						
WVFCAL	11.23						
WVF3FT	11.23						
WVF5FT	10.23						
			Centralizer-169 Titan Non-ADJ Titan 1 11/16" Non Adjustable Centralizer	2.17	2.88	22.00	
CCL	3.91						

GR	1.17		GR_CCL-275 Probe GR-CCL Corrosion (F4.54108-1C2.75 Probe 2 3/4" Gamma Ray / CCL Corrosion Digital)	60.00
			Bullnose-Titan GO Pin Pressure Cap	0.27 1.38 1.00
Dataset: 2-290158.db: field/well/run1/FINAL				
Total length: 19.34 ft				
Total weight: 202.00 lb				
O.D.: 2.88 in				



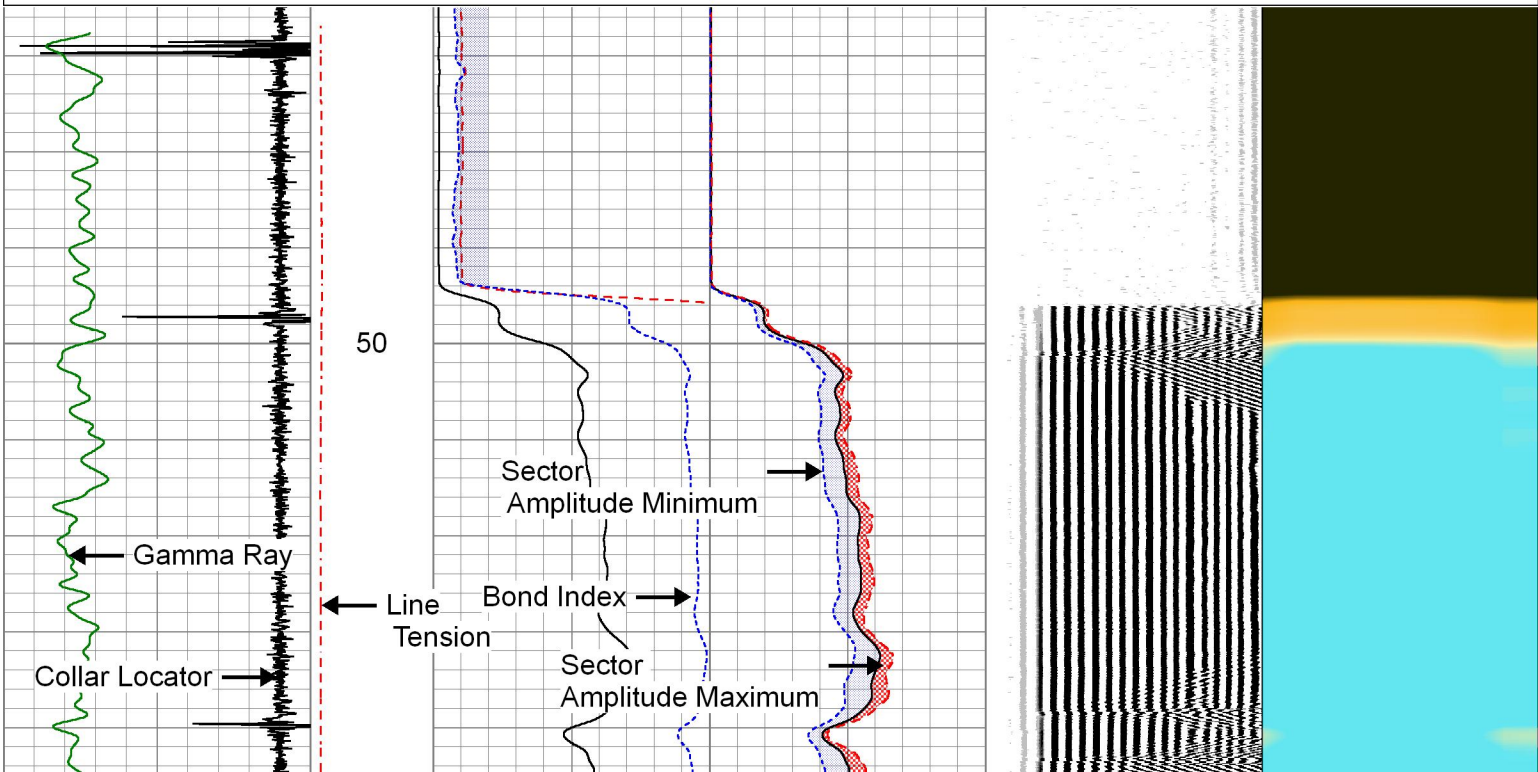
**PIONEER**  
Pioneer Energy Services

## MAIN PASS

0 PSI ON WELL WHILE LOGGING

Database File	2-290158.db
Dataset Pathname	FINAL
Presentation Format	pinr_scbl
Dataset Creation	Sat Feb 20 12:26:02 2016
Charted by	Depth in Feet scaled 1:240

-9	Collar Locator	1	Line Tension	0	3' Amplitude (mV)	100	Sector Amplitude Average	200	VDL	1200	1	Sector Map	8
0	Gamma Ray (GAPI)	200		0 (3000)	0	3' Amplified Amplitude X 5 (mV)		20	0	150	10		60
				0	Bond Index	0	0	150					
								Sector Amplitude Minimum	0	150			



Sector  
1'3" Amplitude Amplitude Average

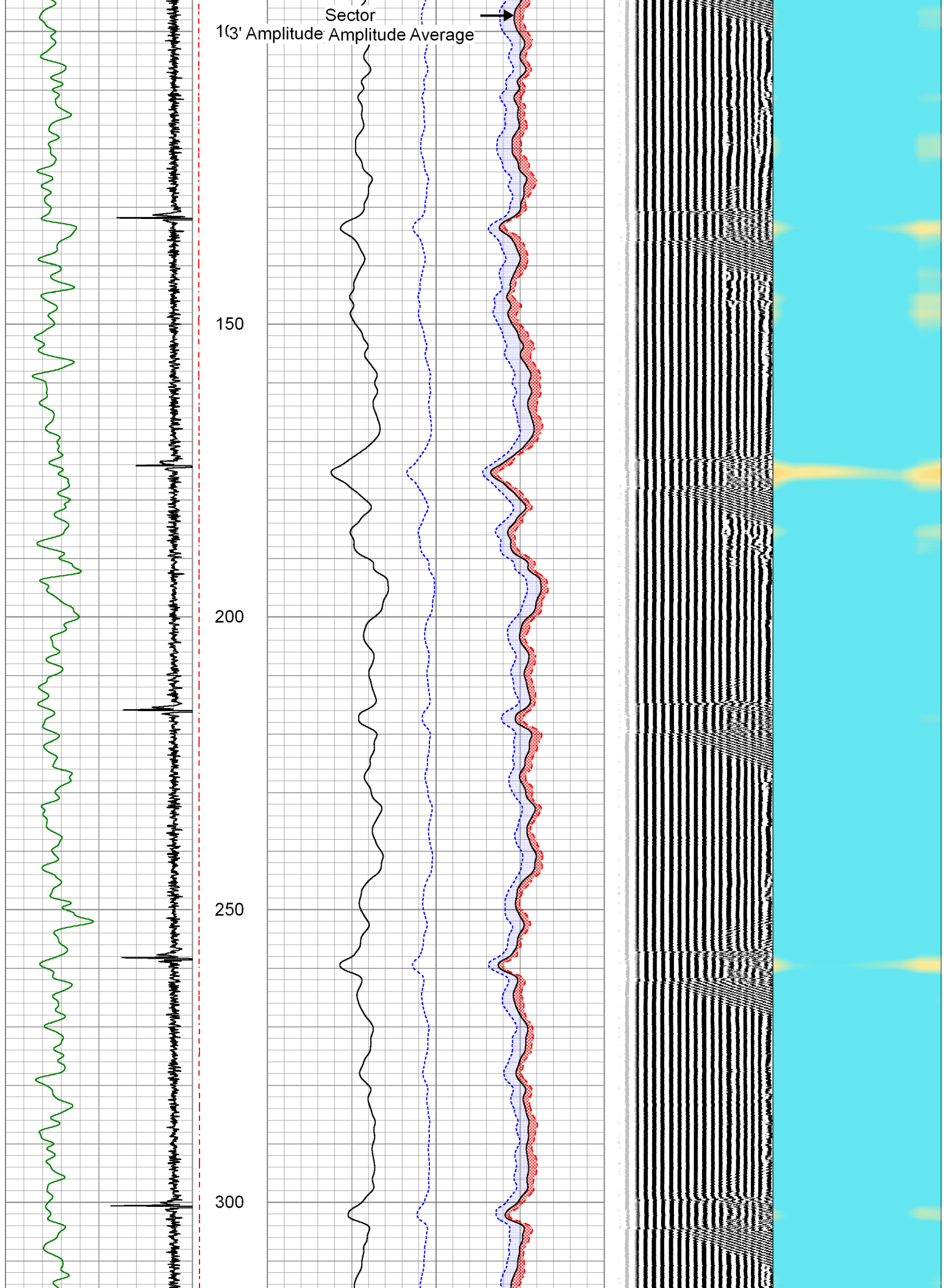


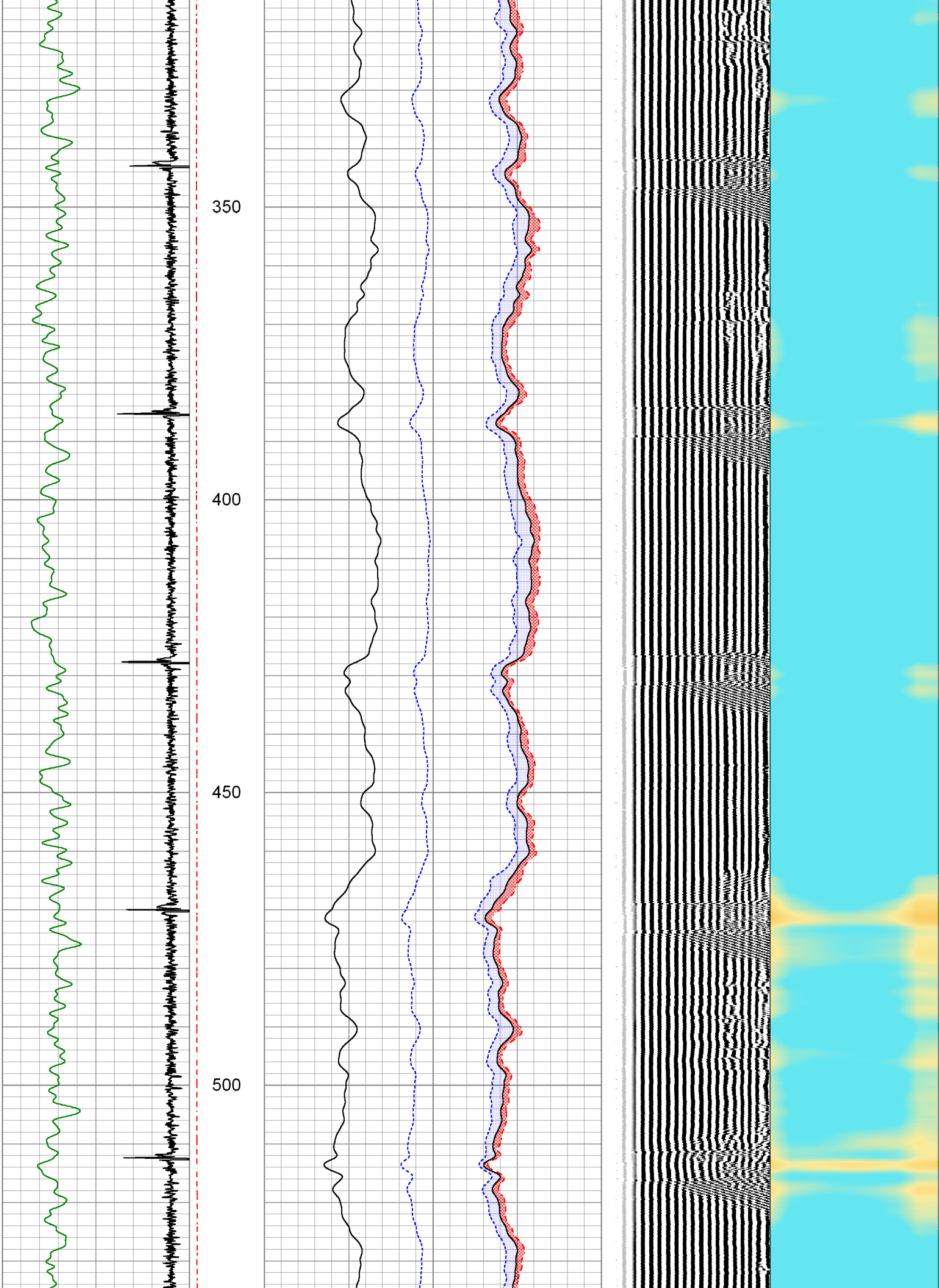
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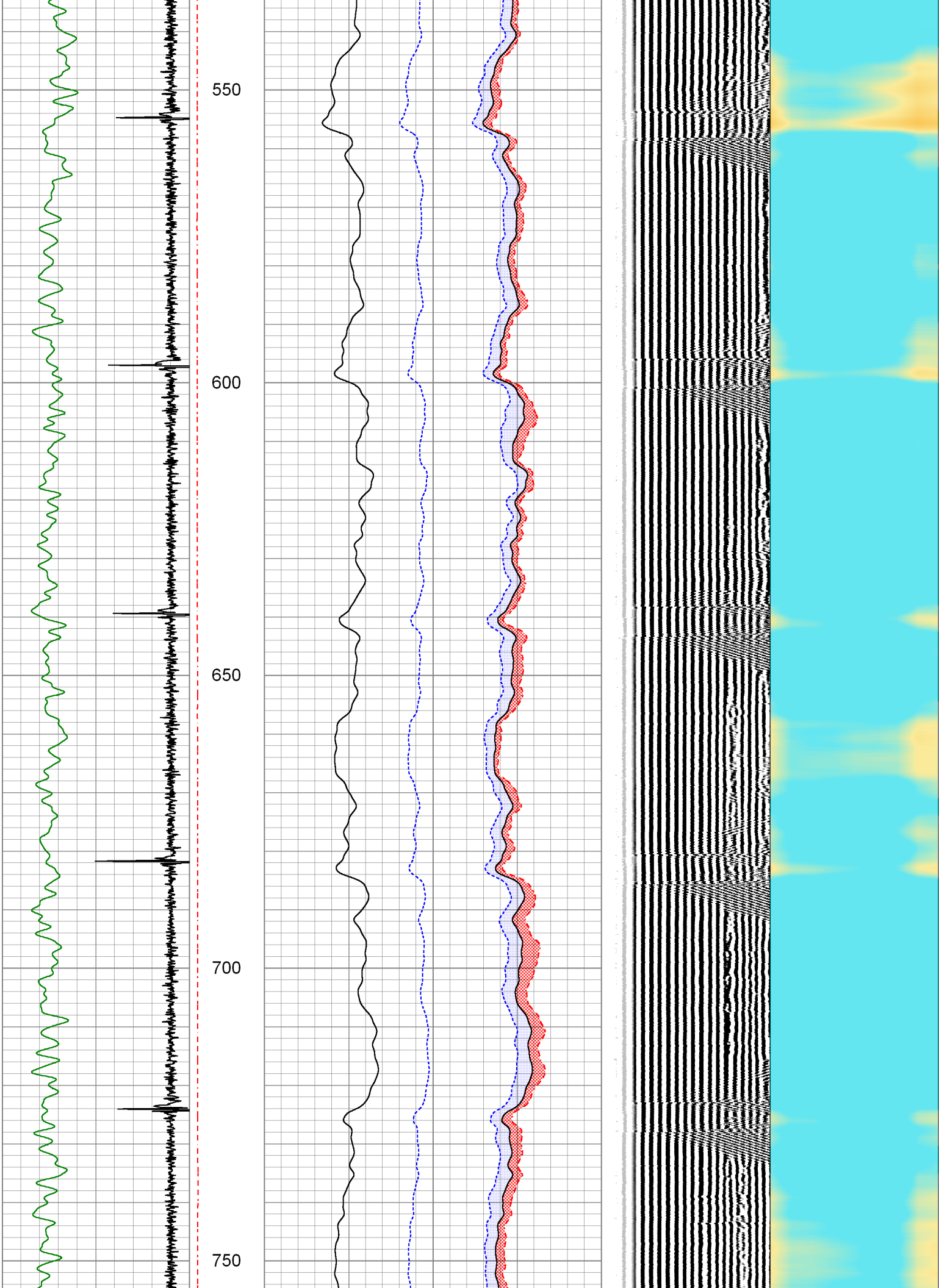
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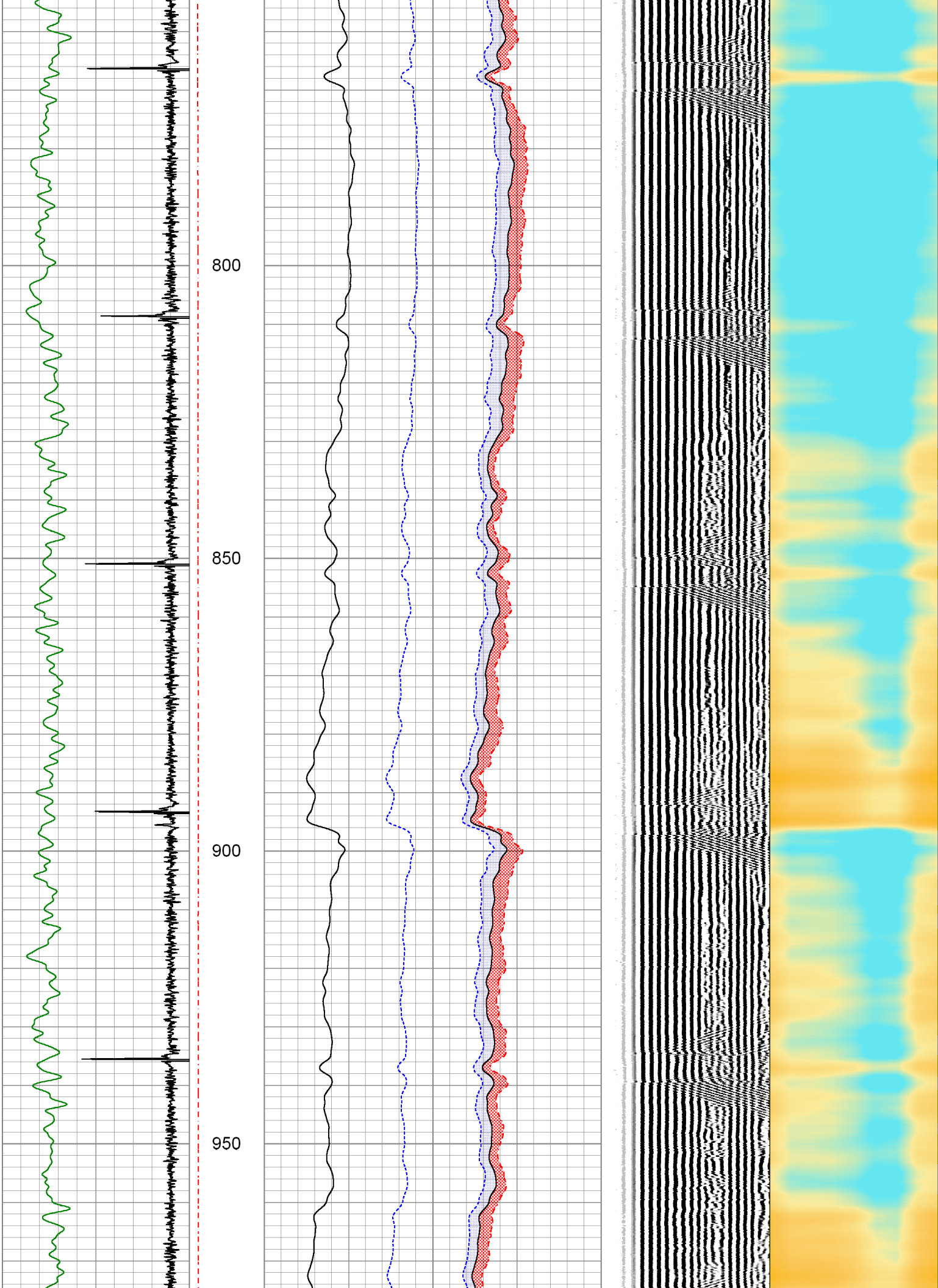
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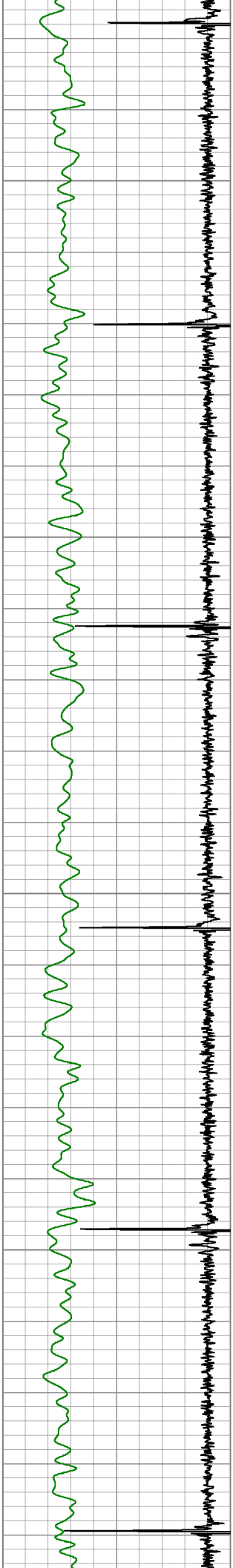
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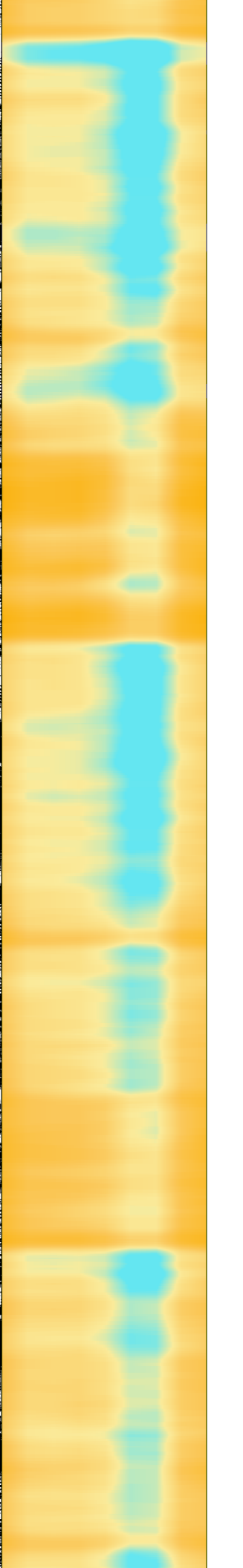
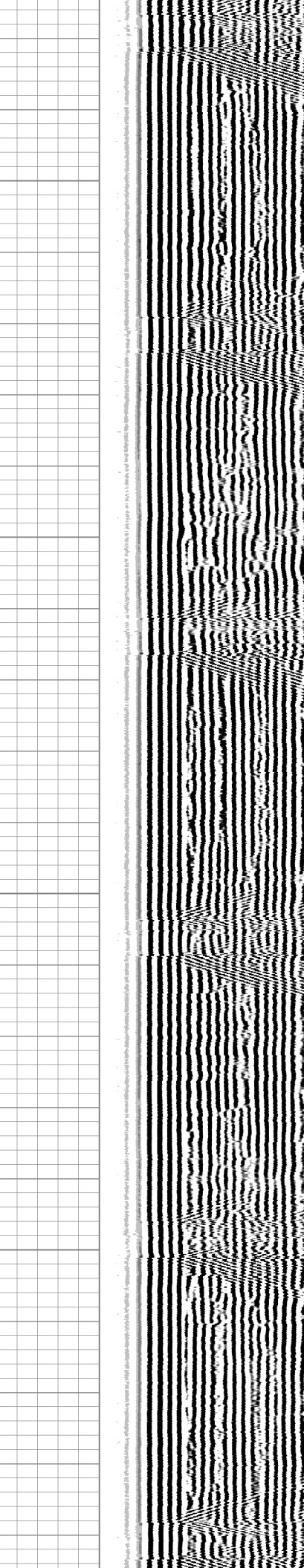
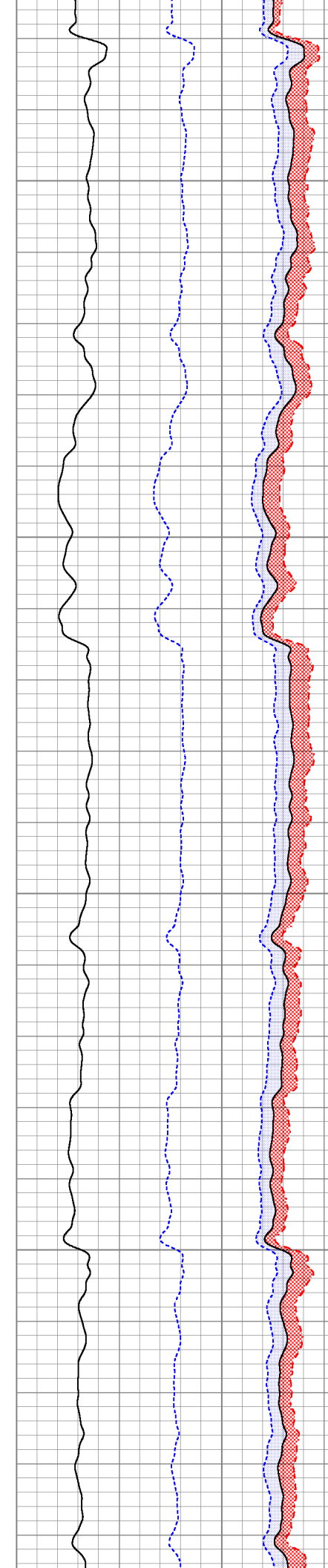


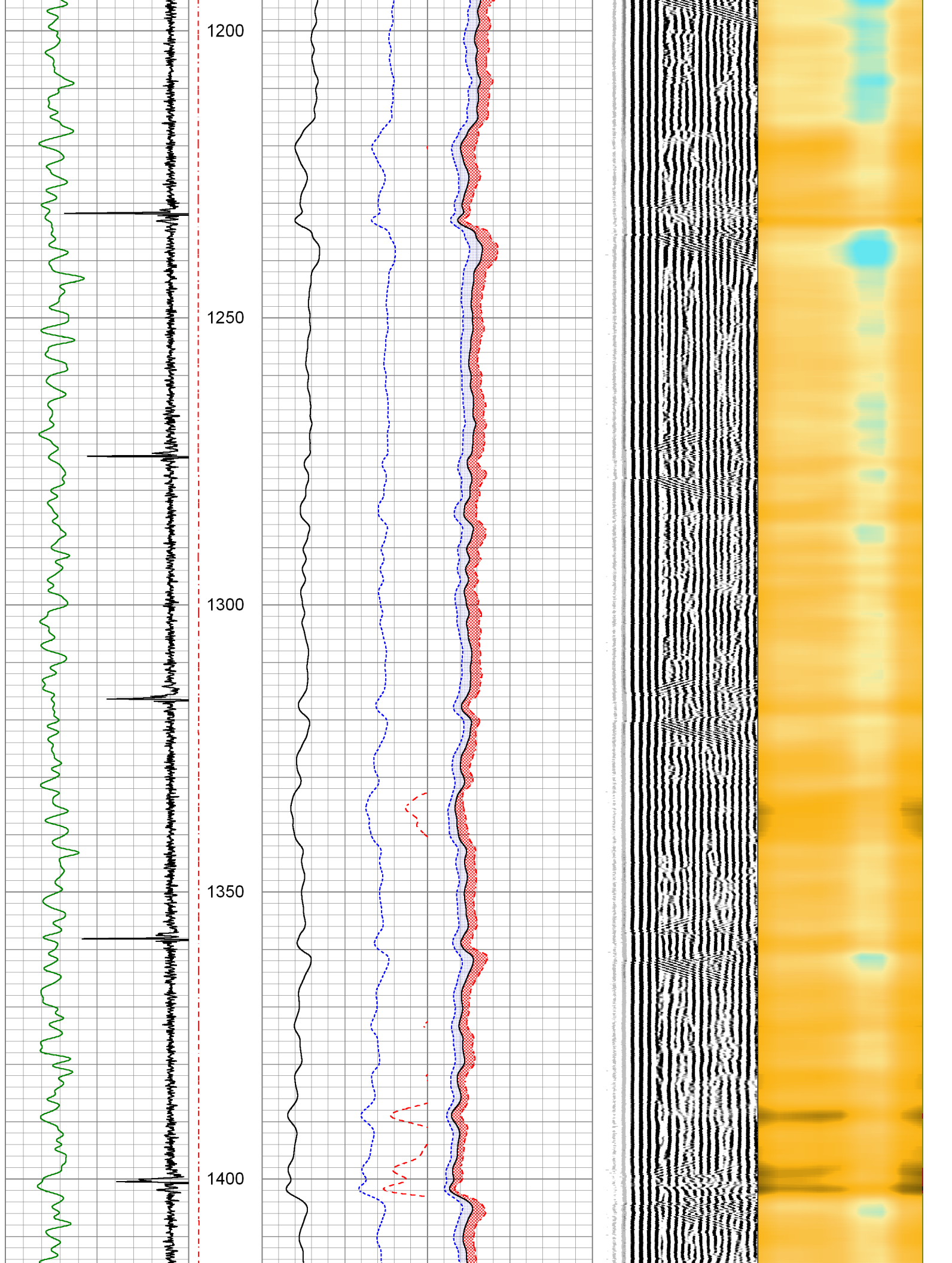


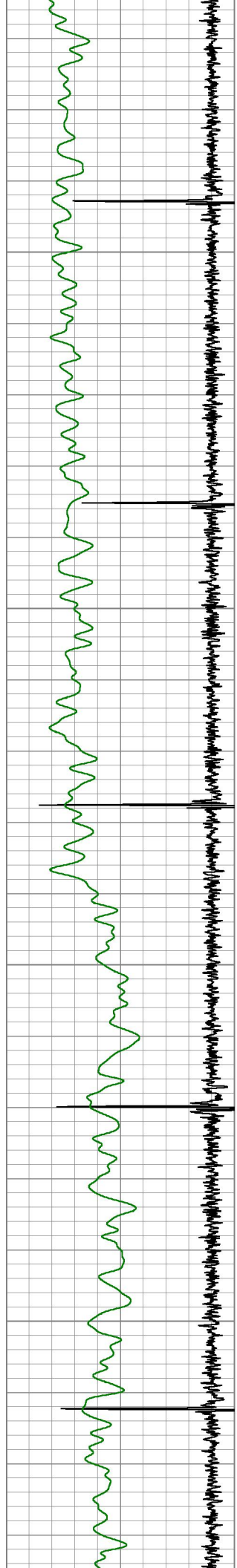




1000  
1050  
1100  
1150





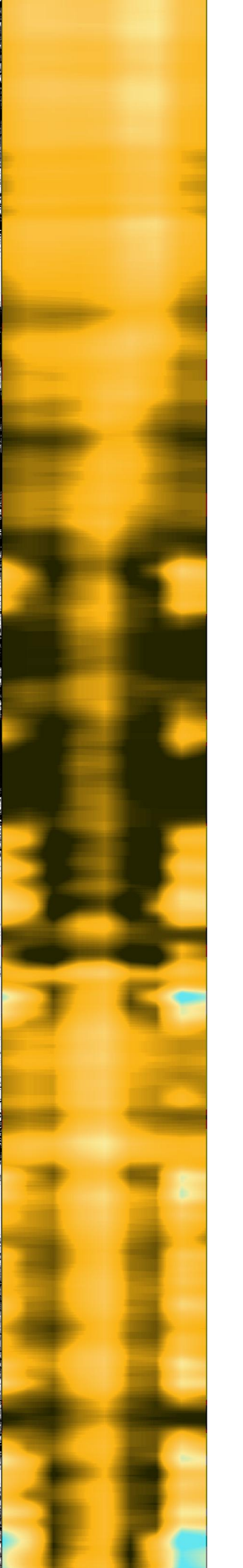
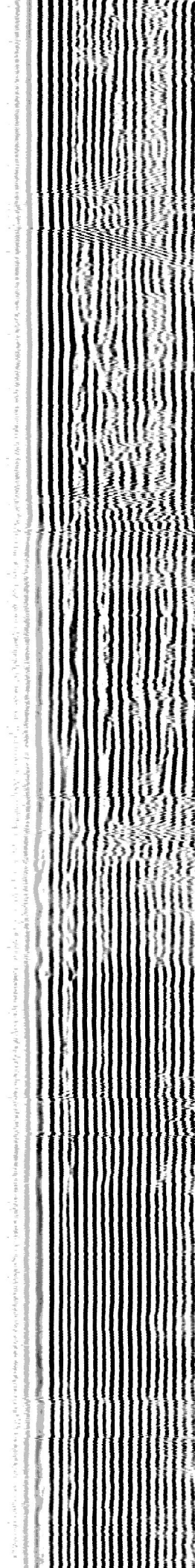
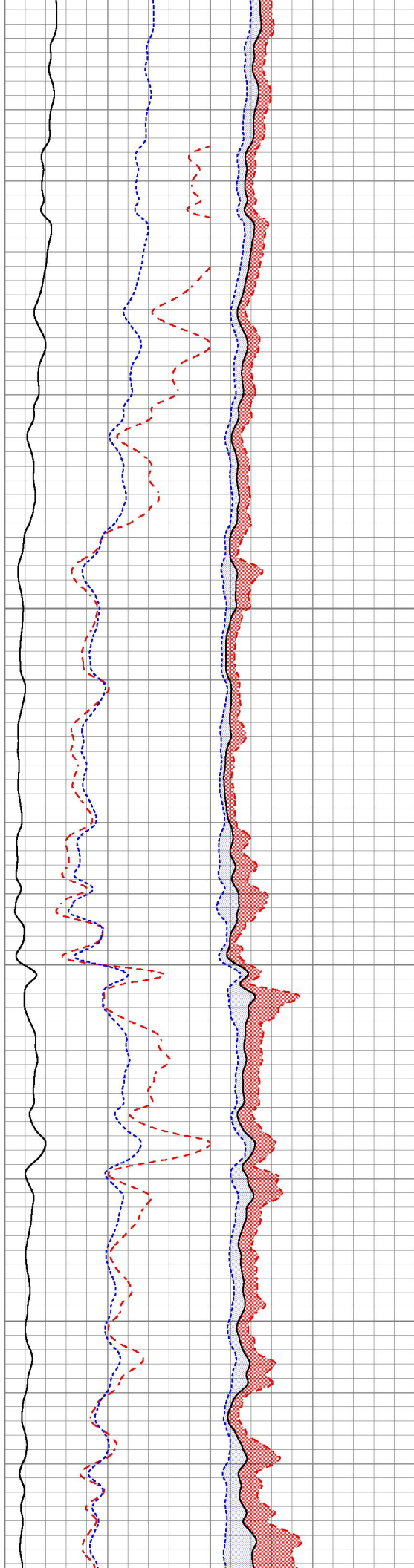


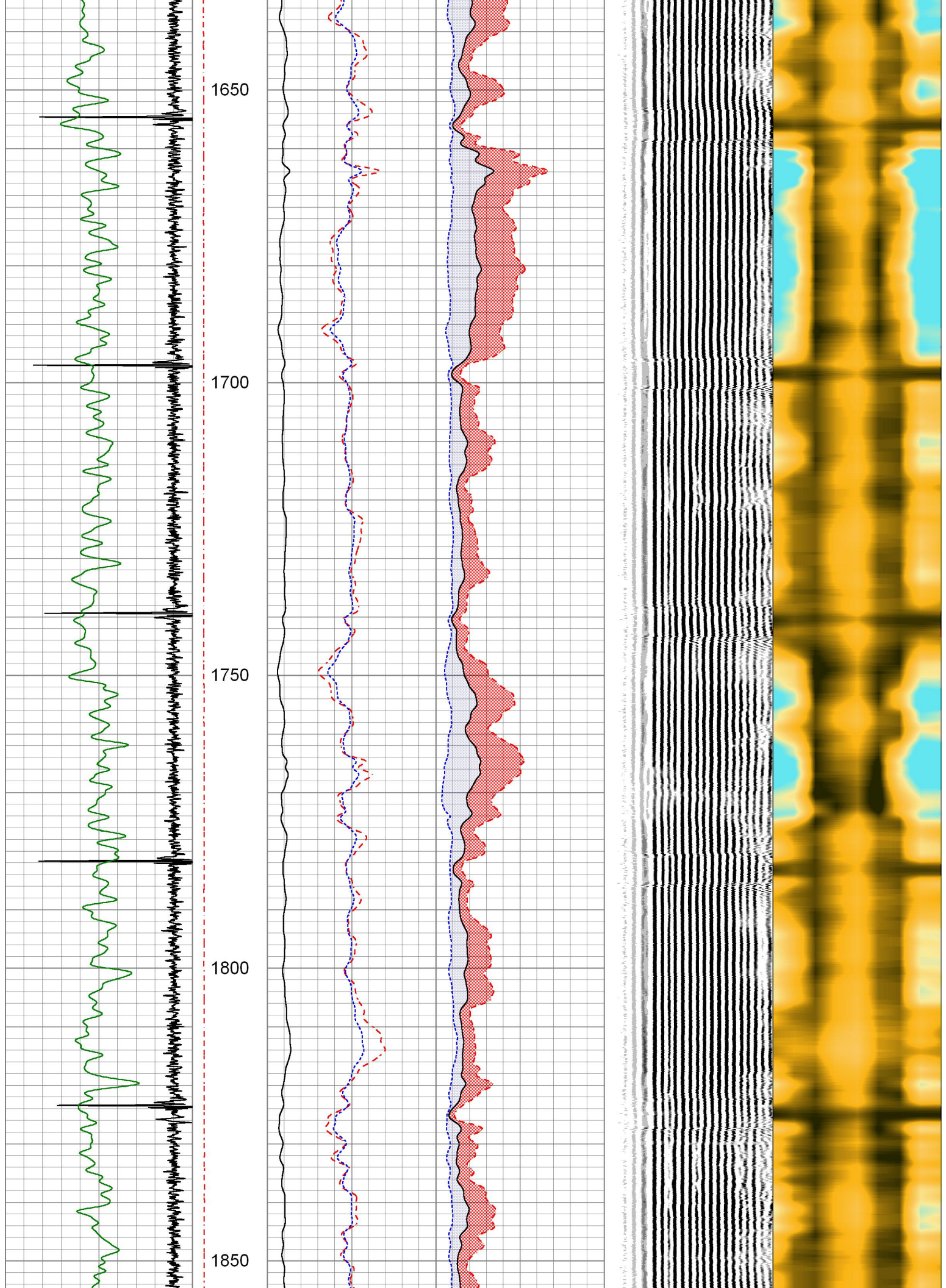
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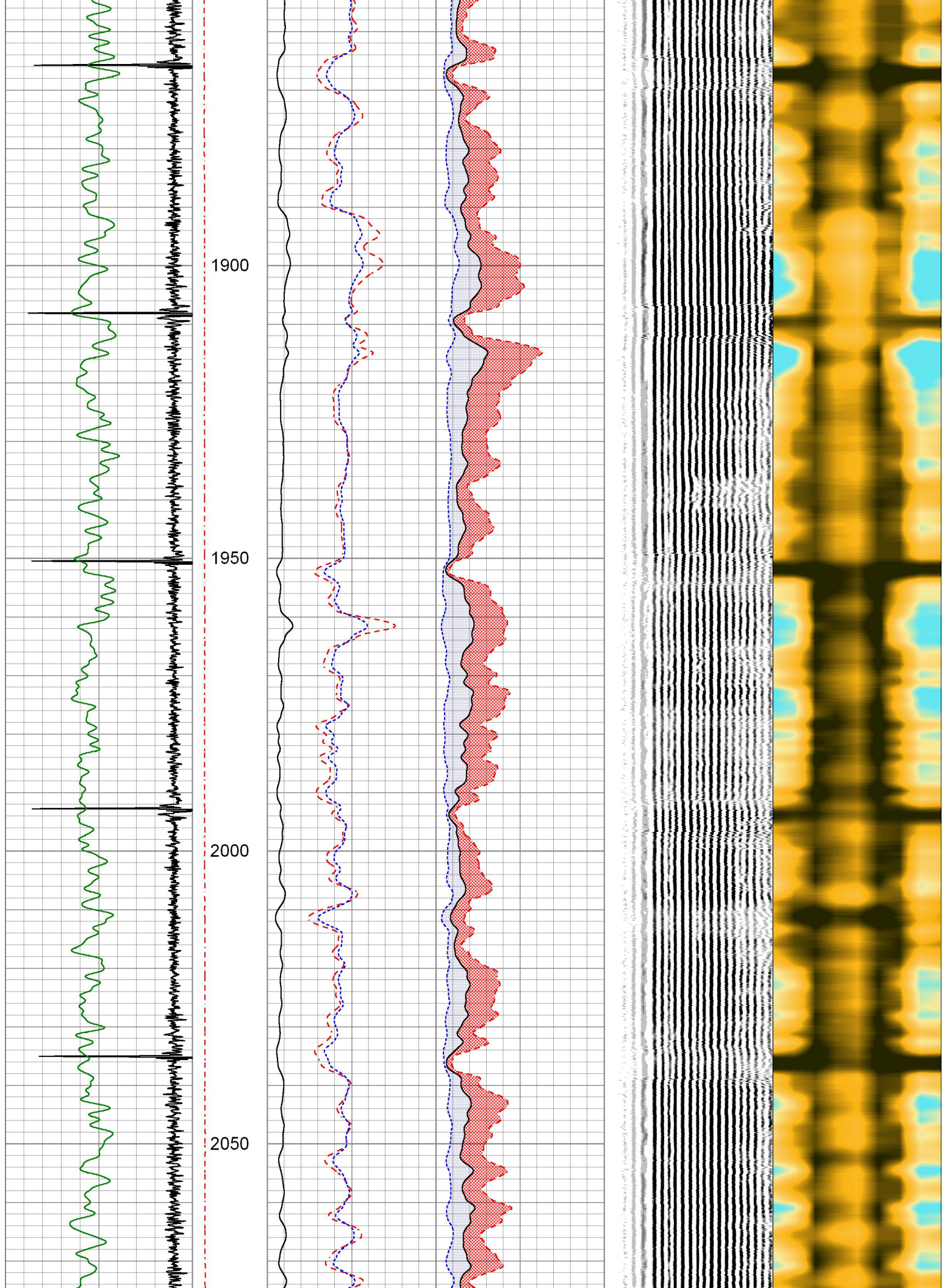
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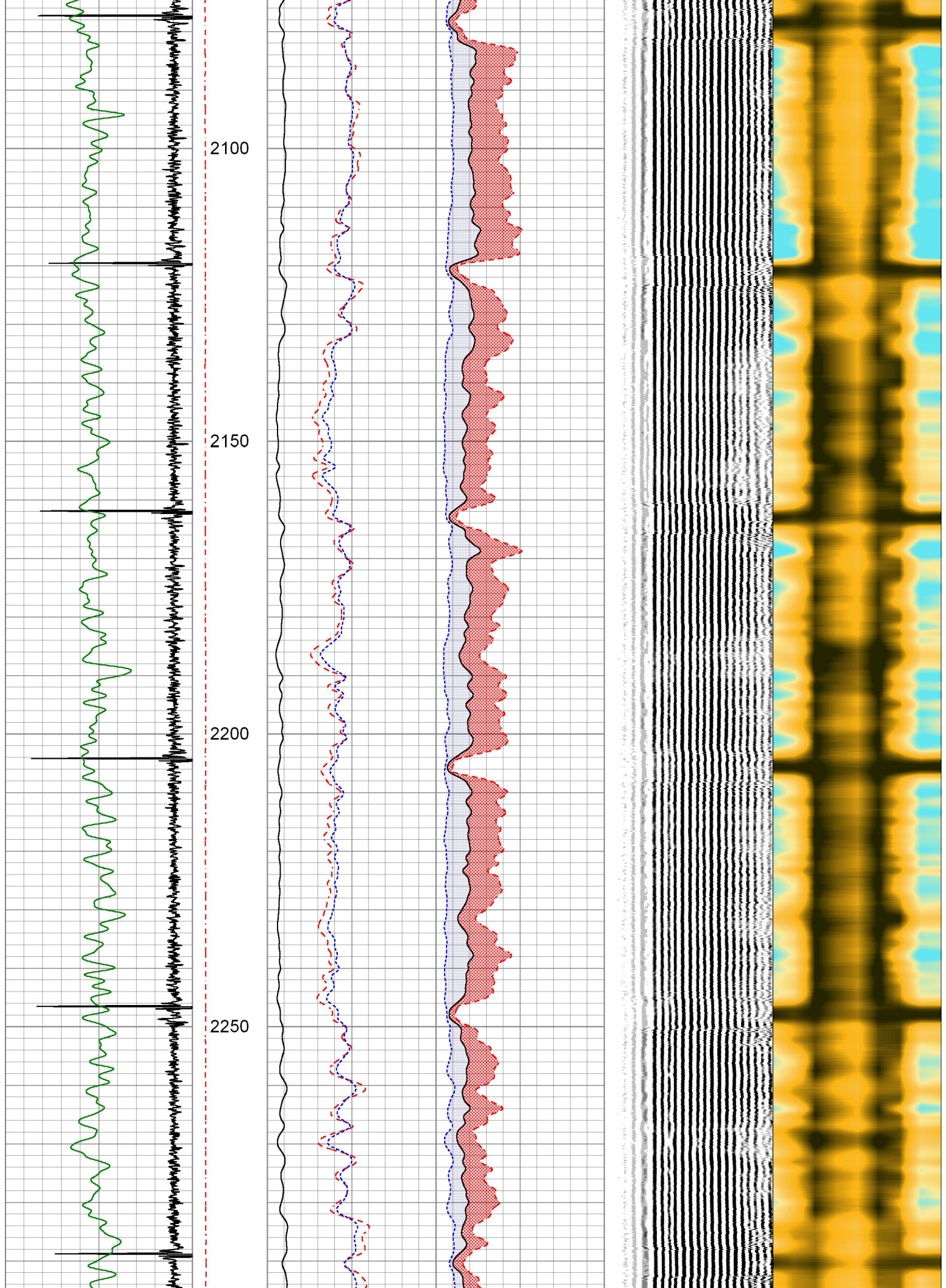
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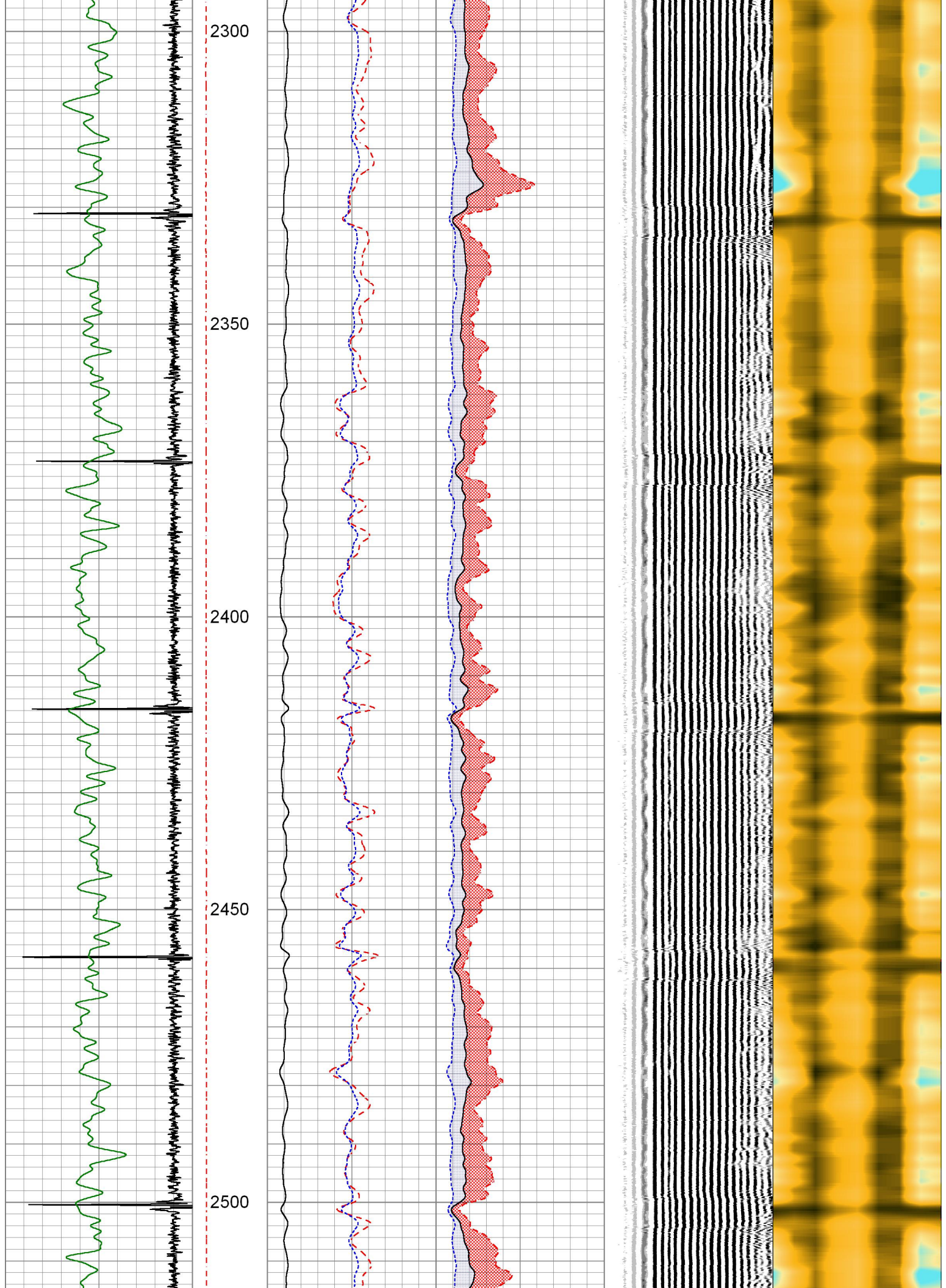
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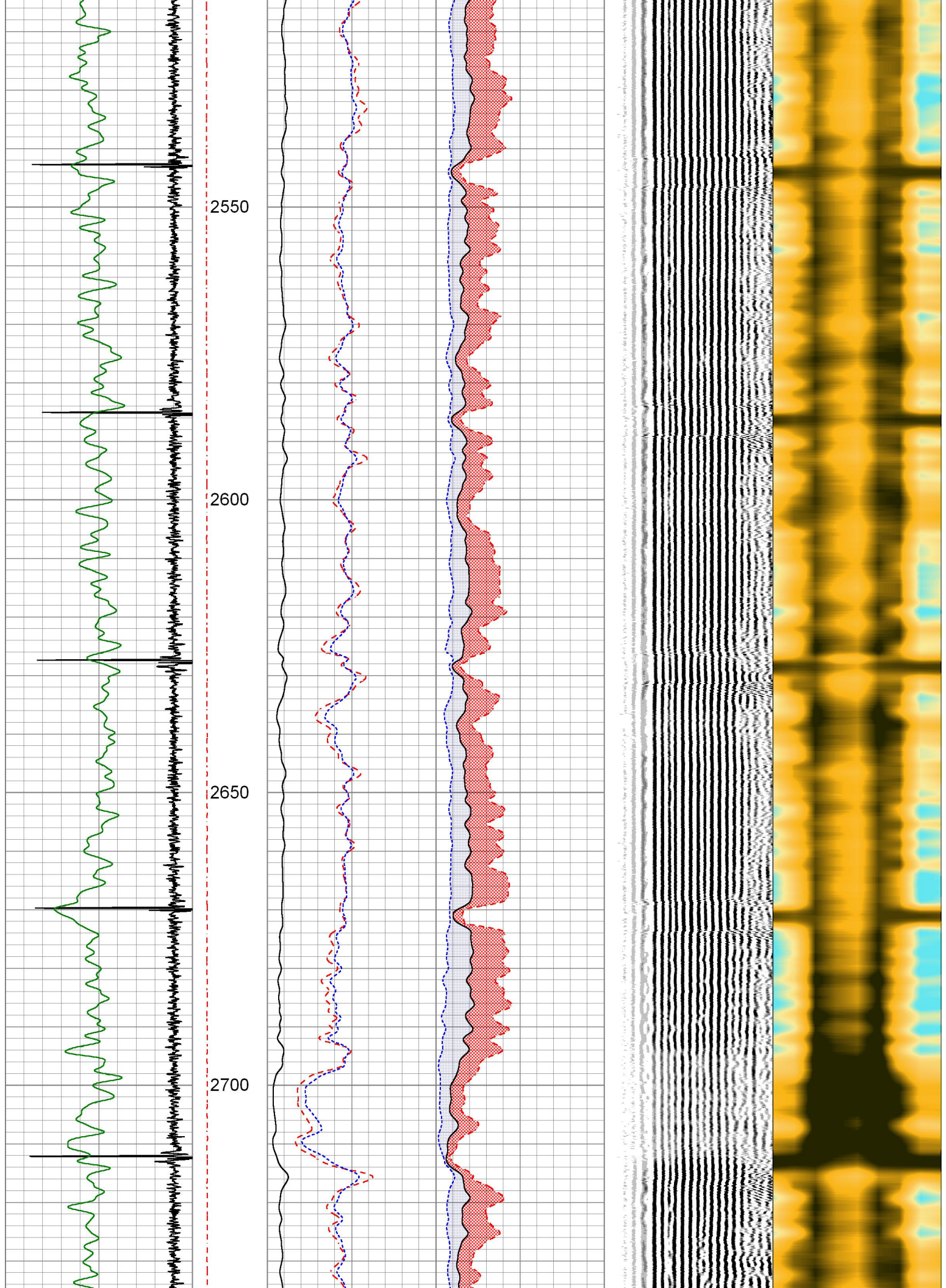


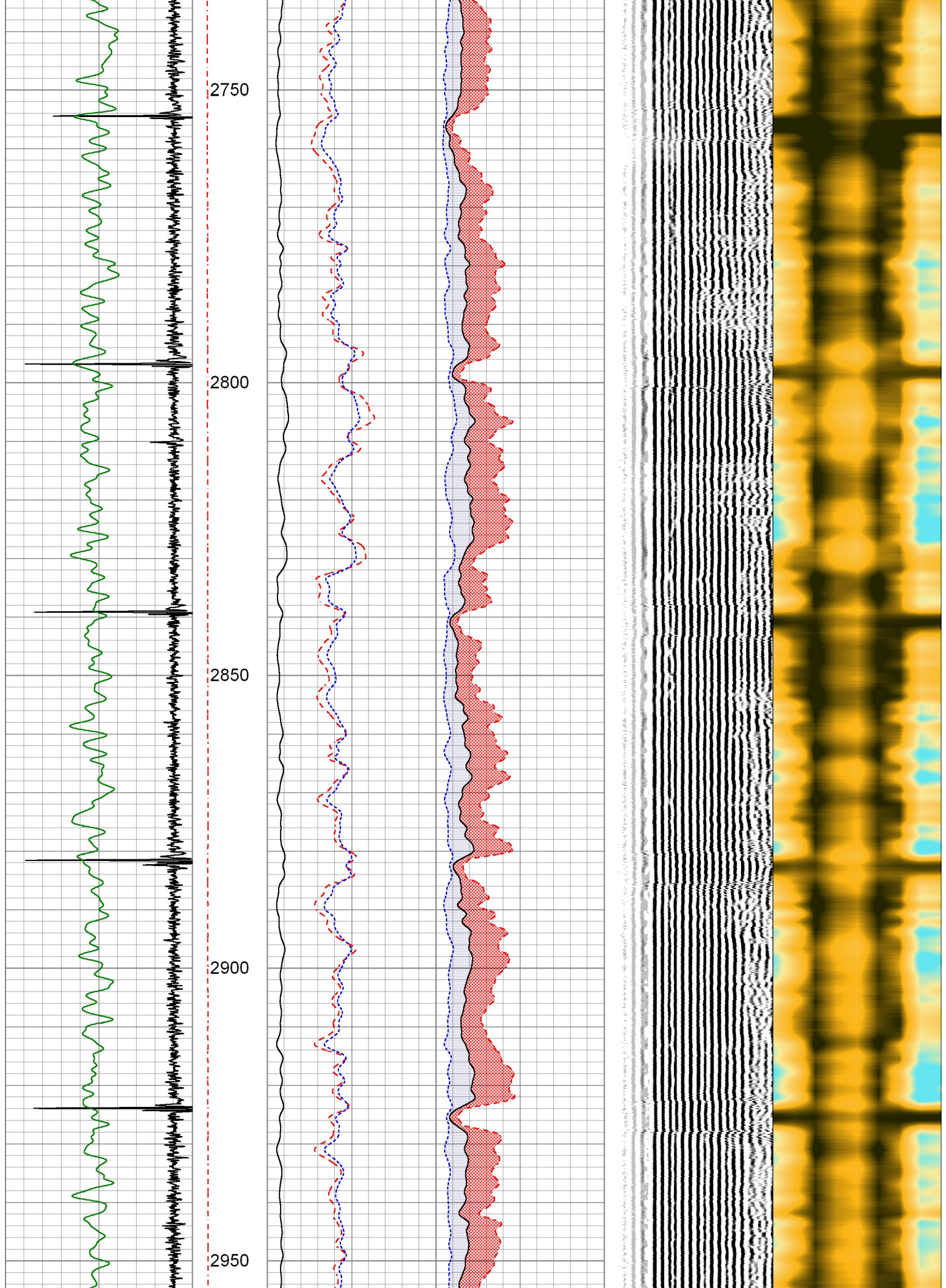


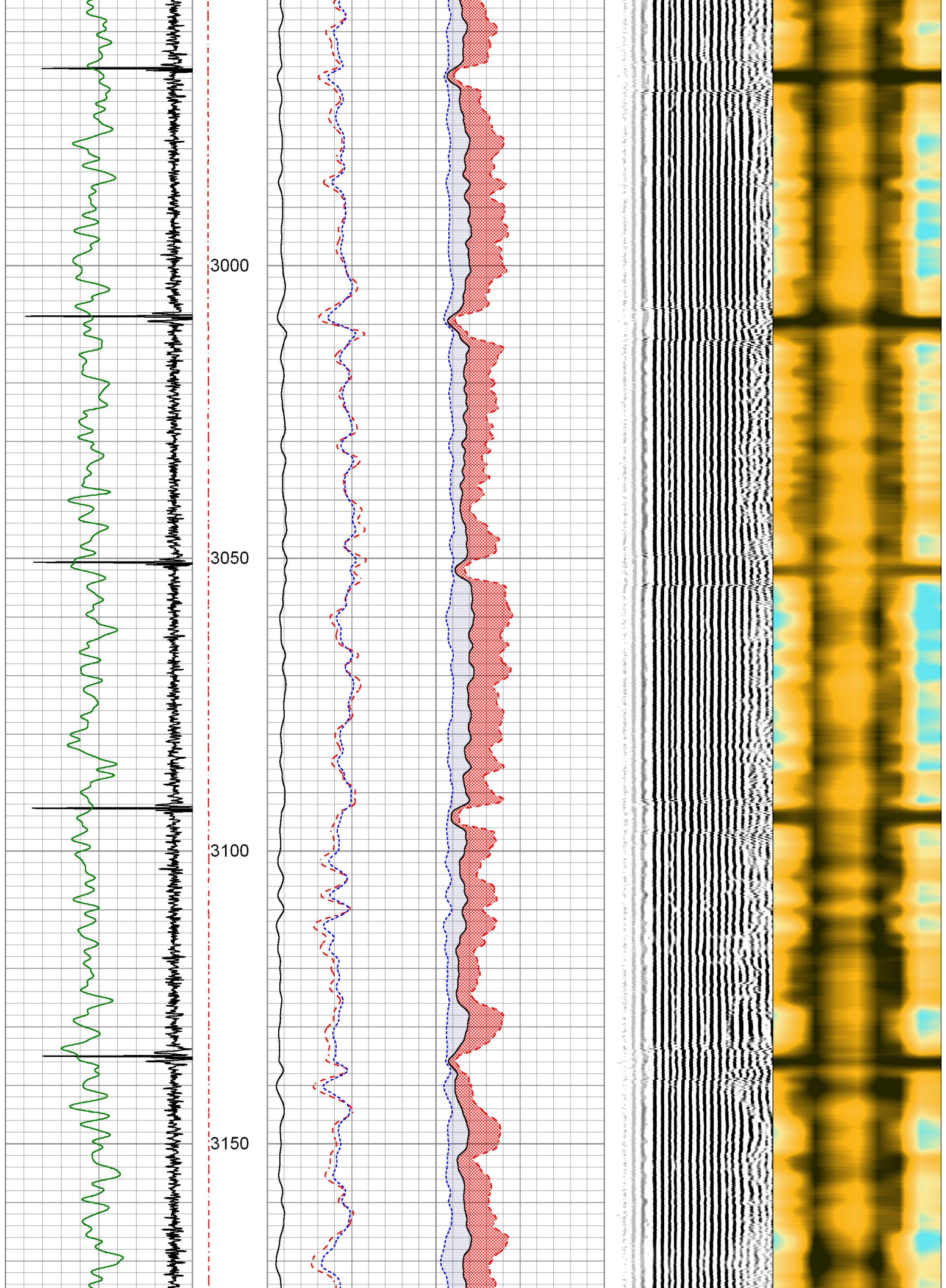


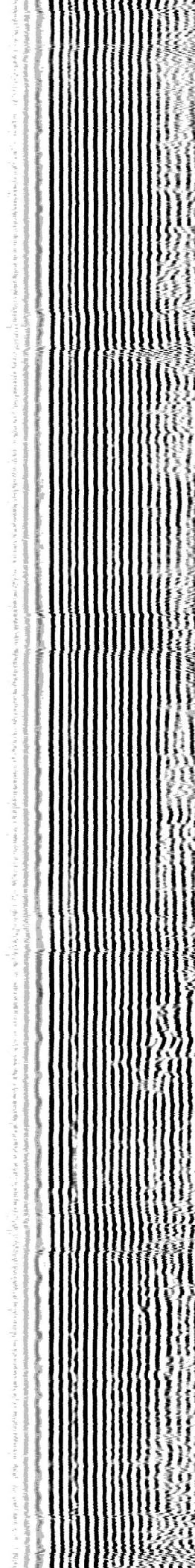
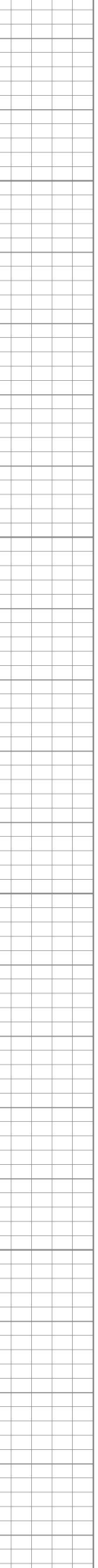
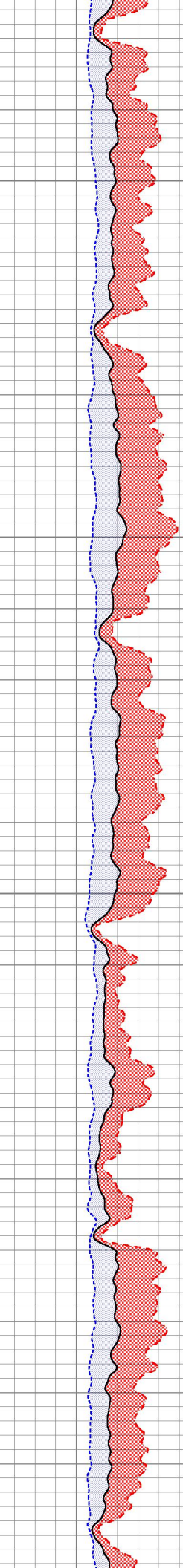
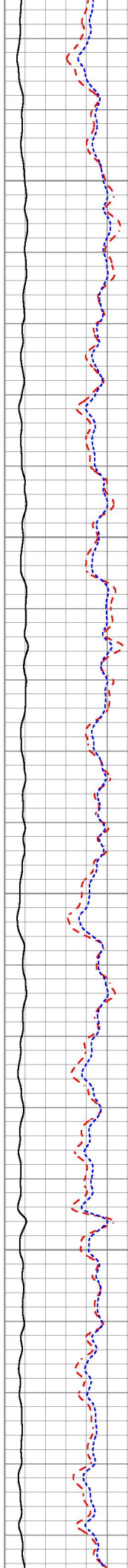
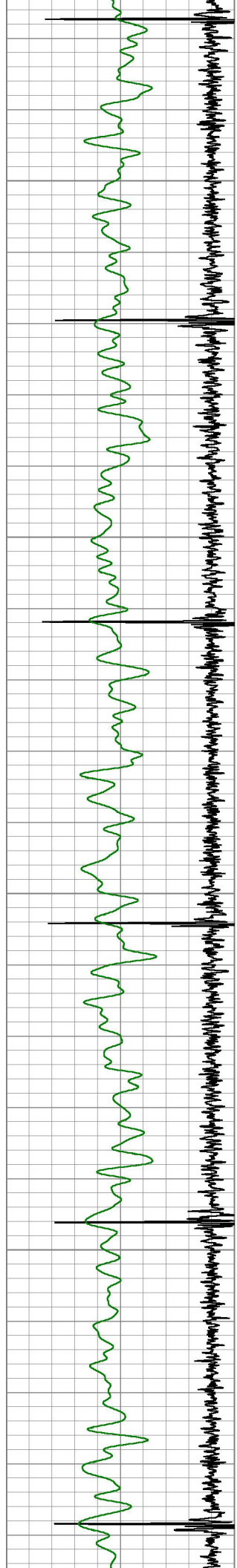


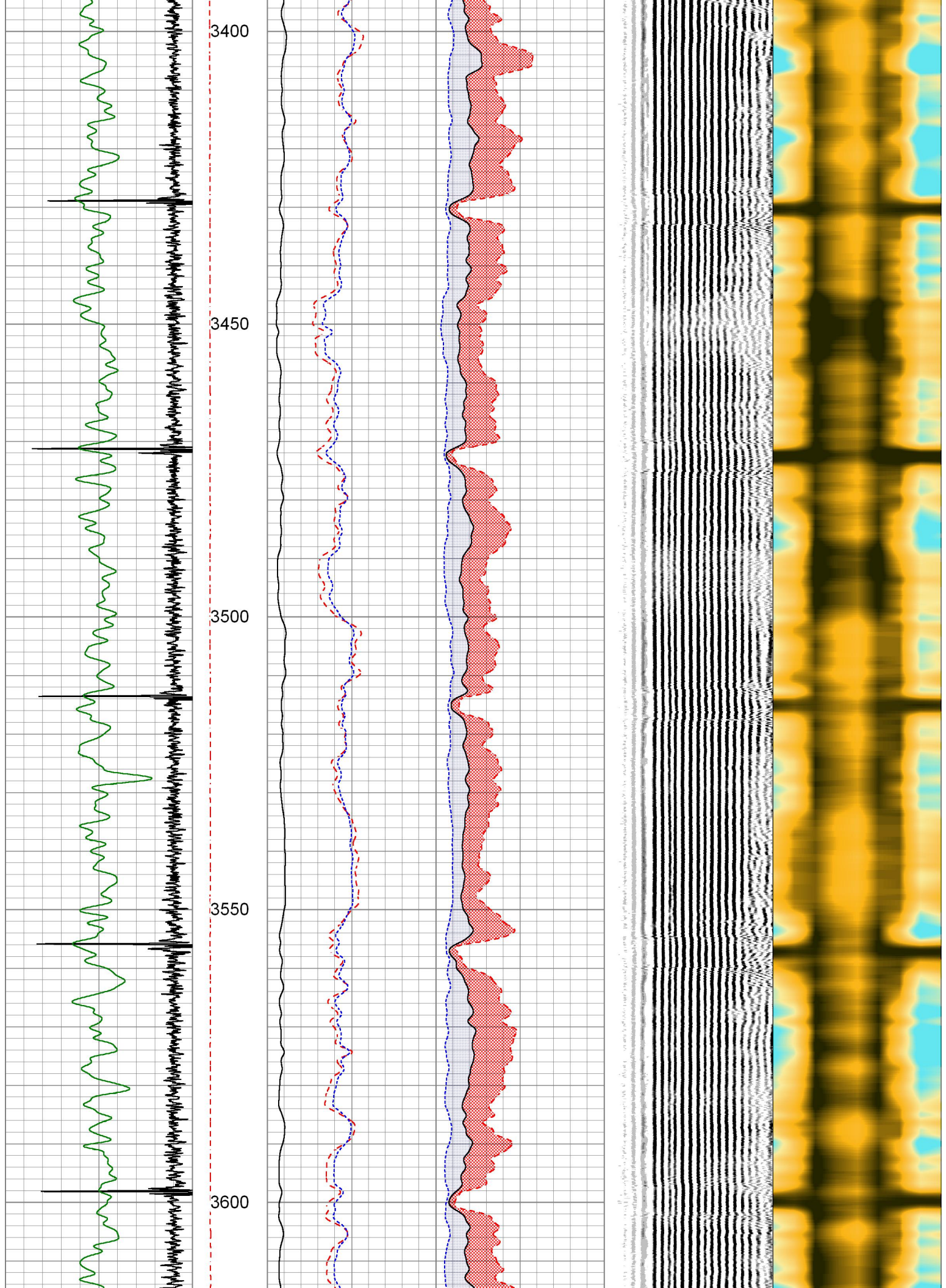


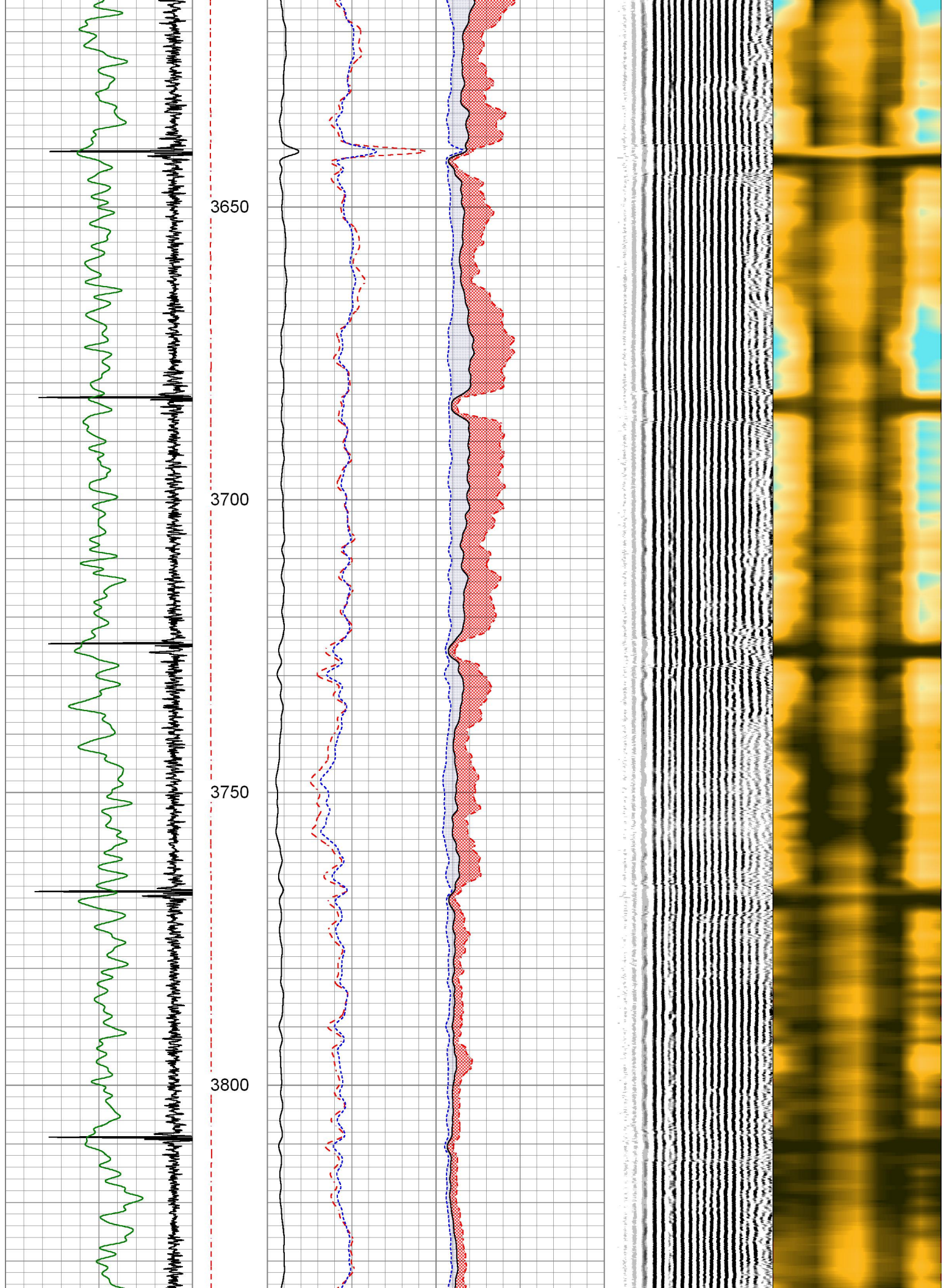


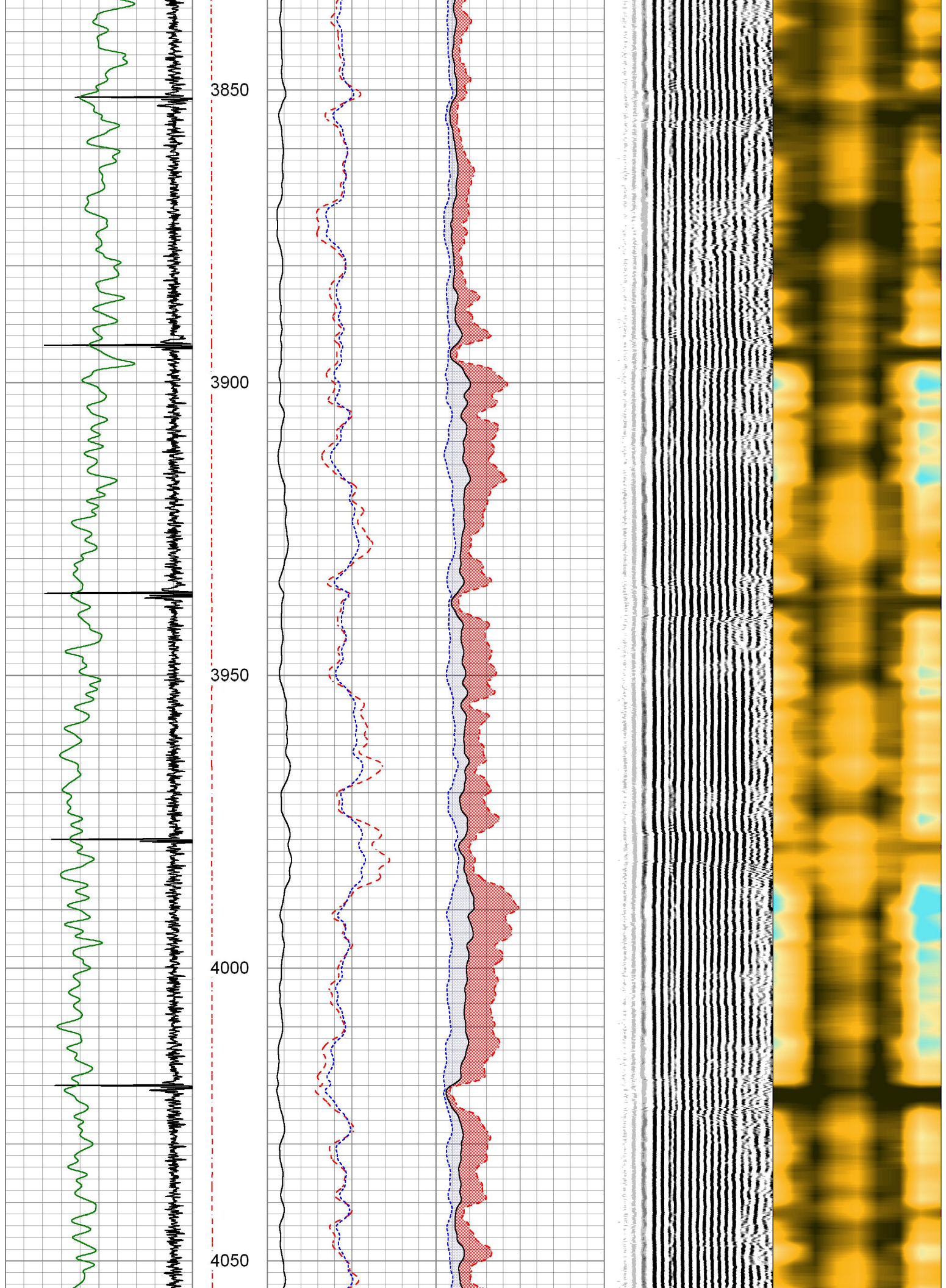


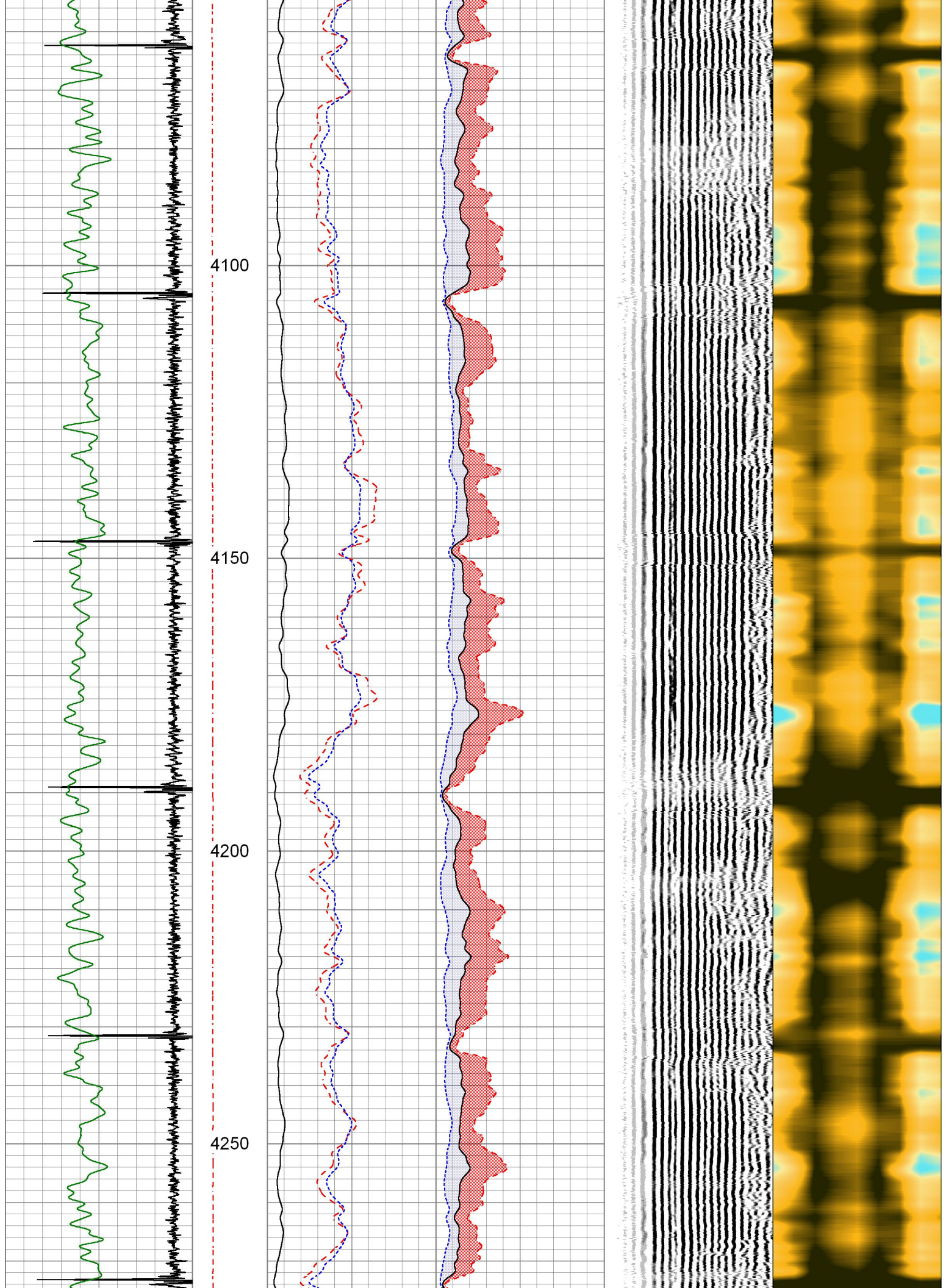


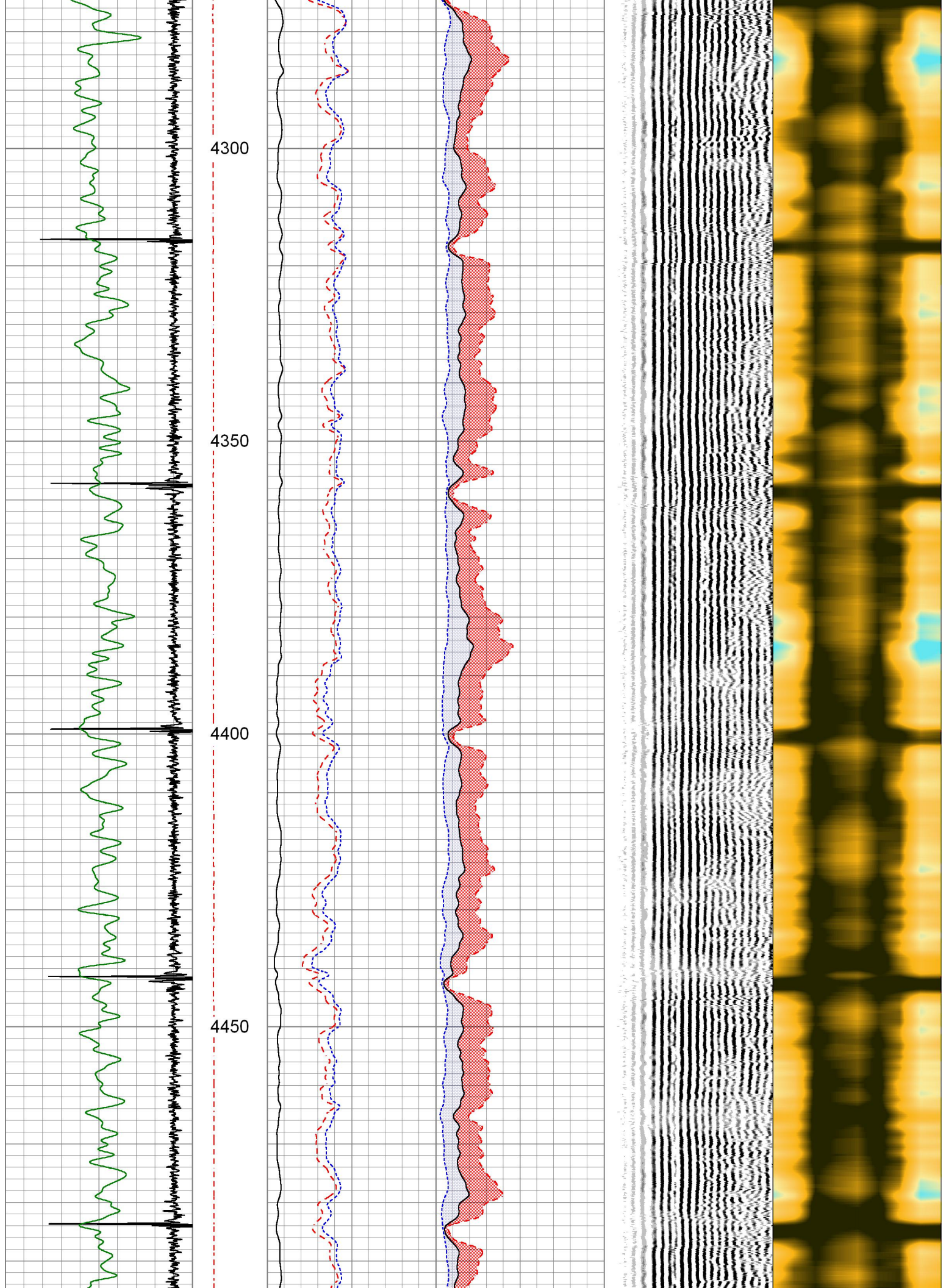


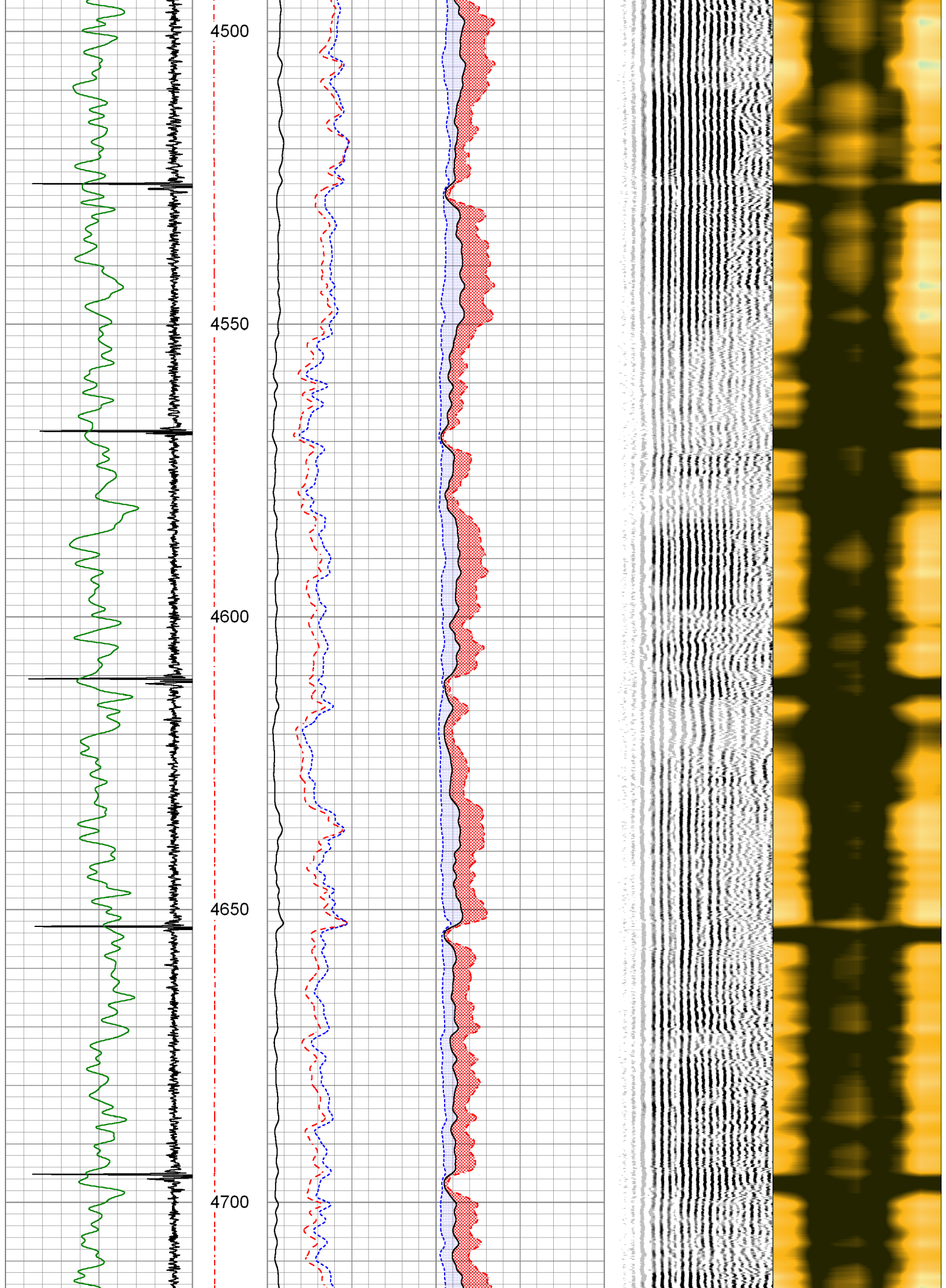


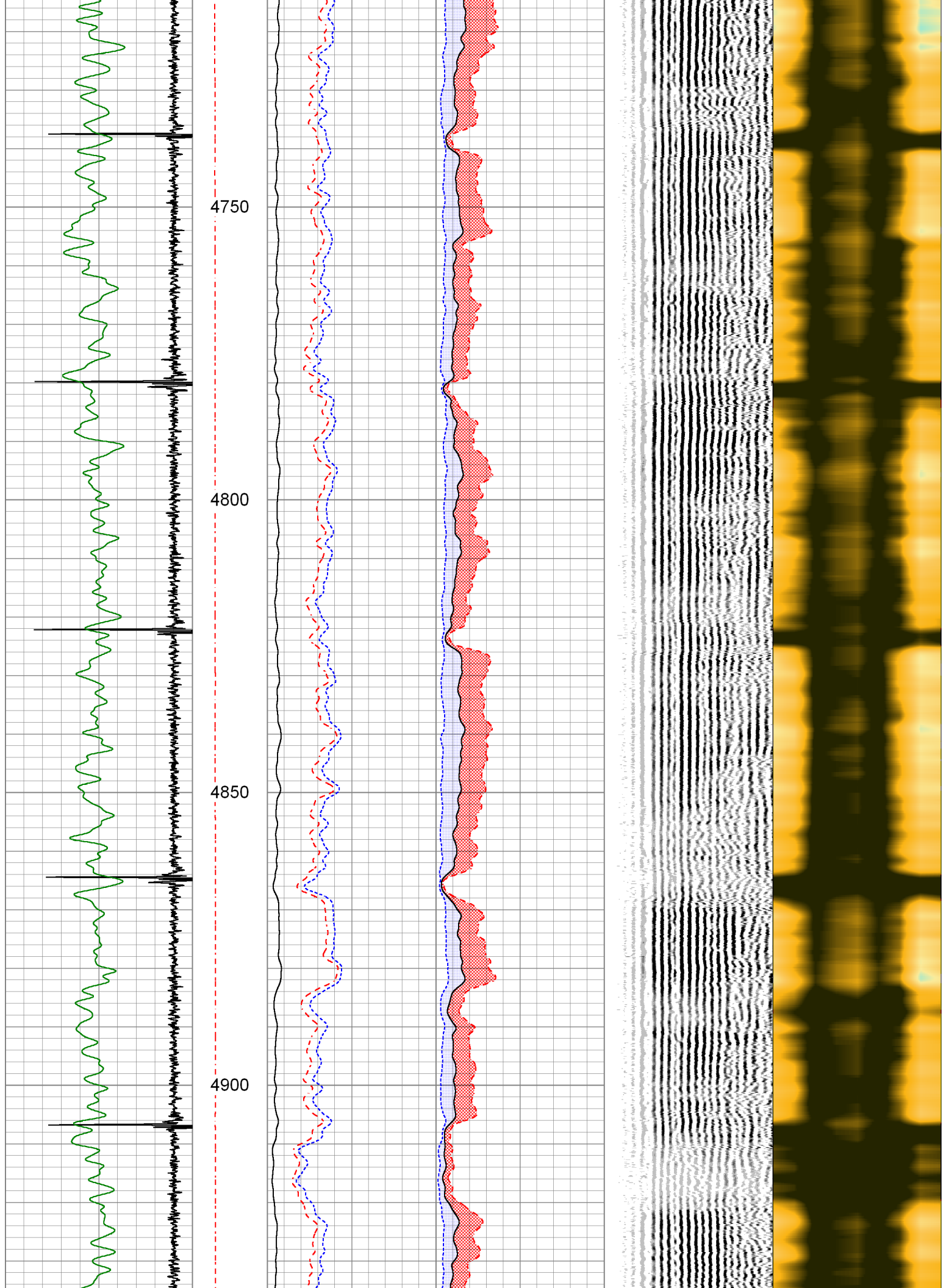












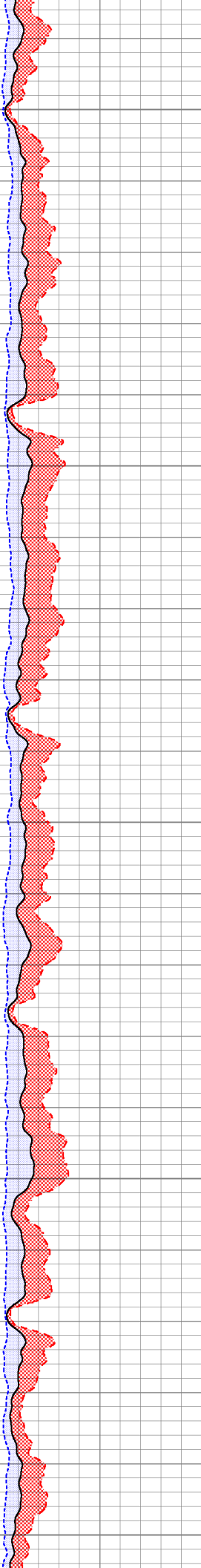
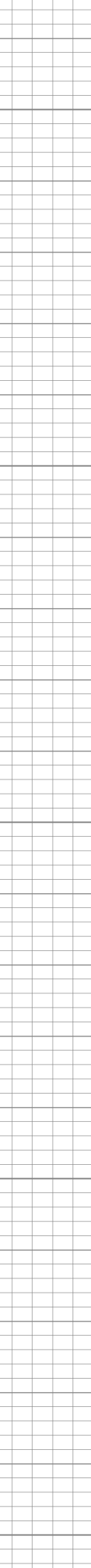
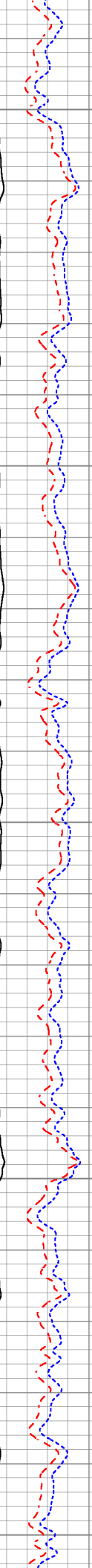
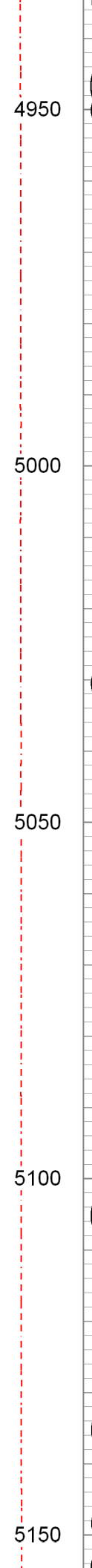
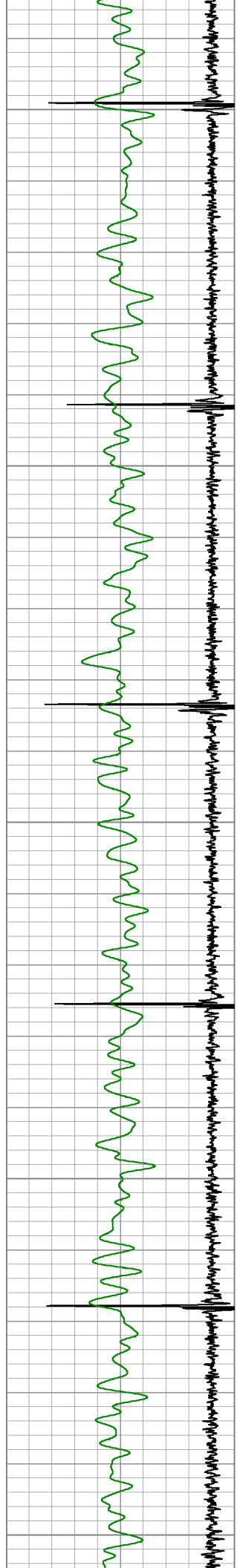
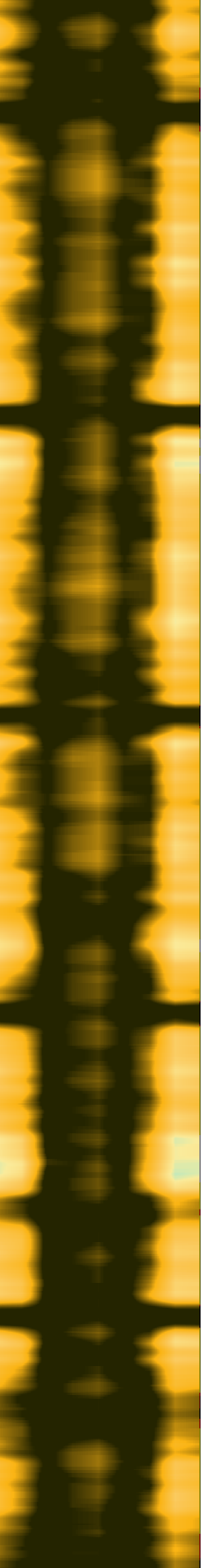
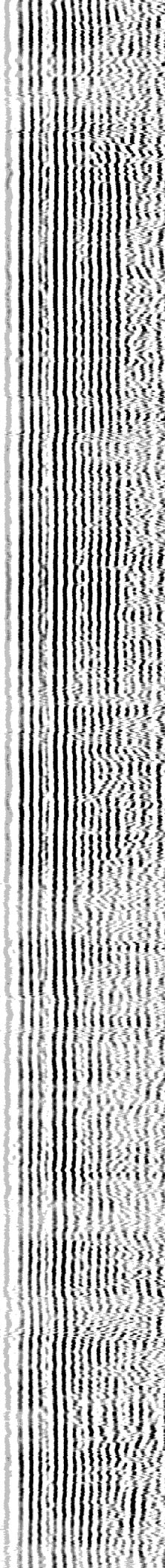
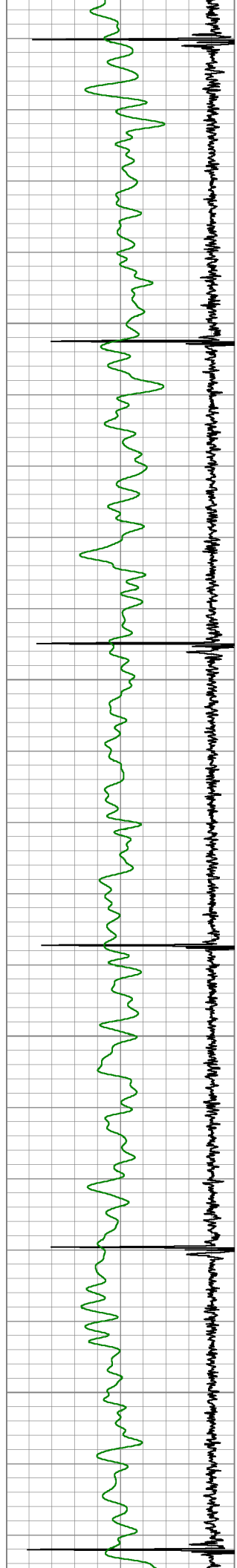


Figure 1. Vertical section of seismic data showing depth (m) on the y-axis (4950 to 5150) and time on the x-axis. The plot displays multiple traces, including a green trace, a black trace, a red dashed trace, a blue dashed trace, and a red shaded area. A vertical red dashed line is positioned at approximately 5025 m. The traces show complex waveforms with several peaks and troughs, indicating seismic activity. The background is a light gray grid.



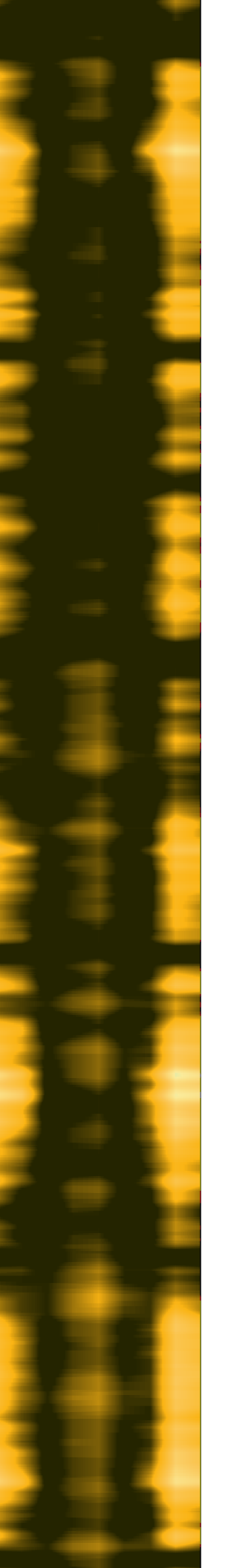
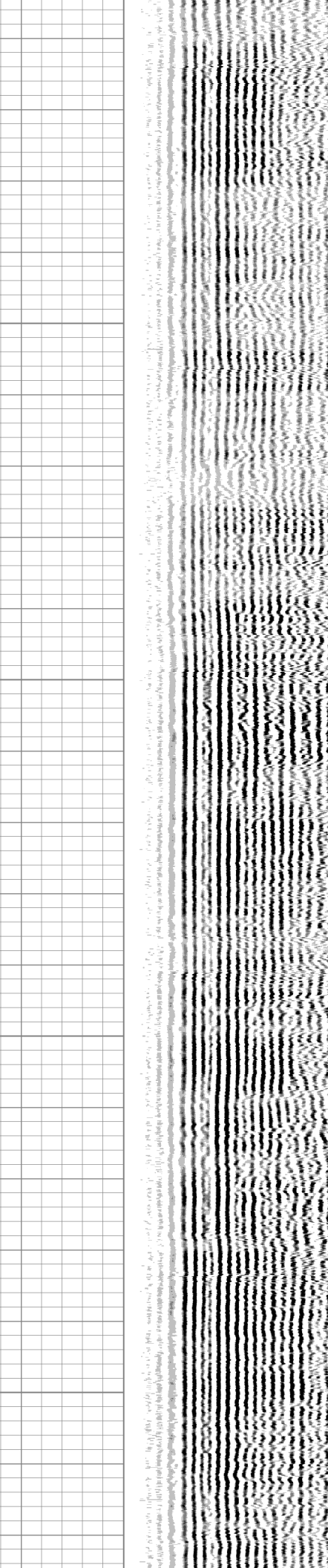
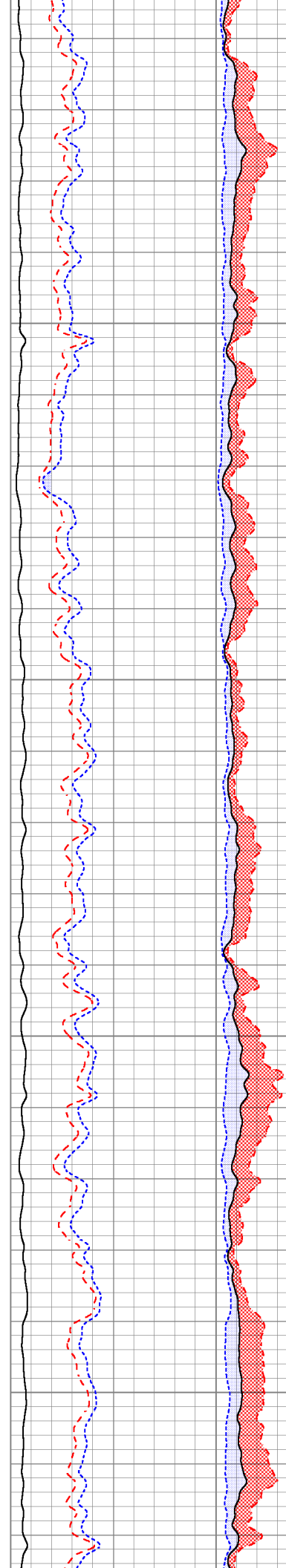


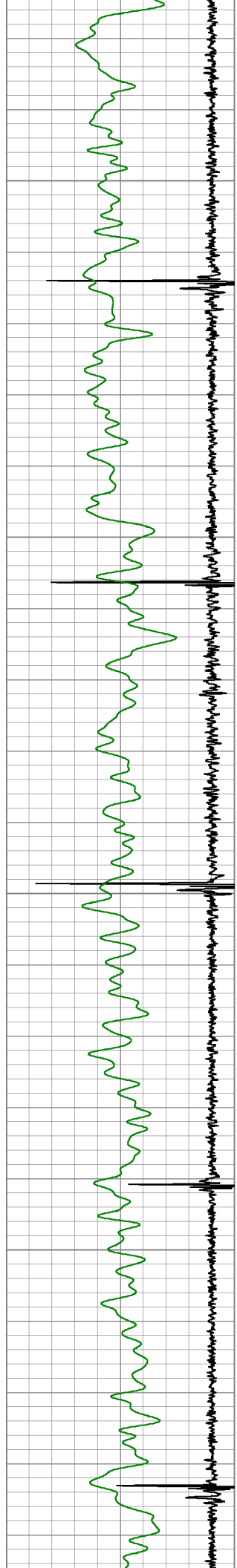
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5250

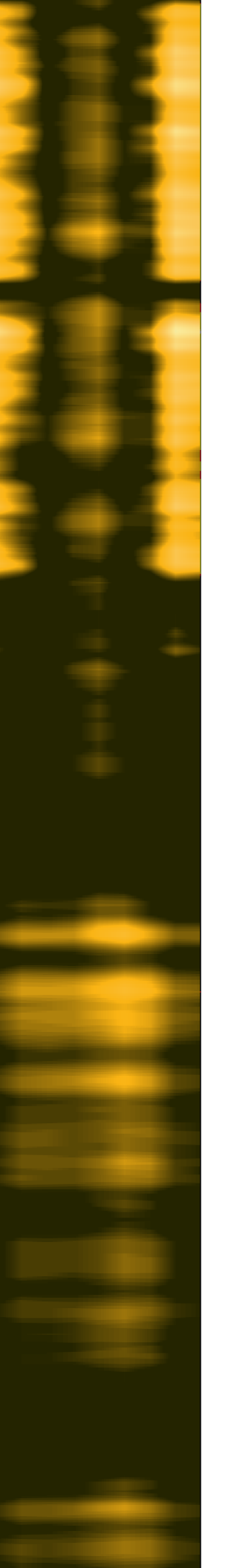
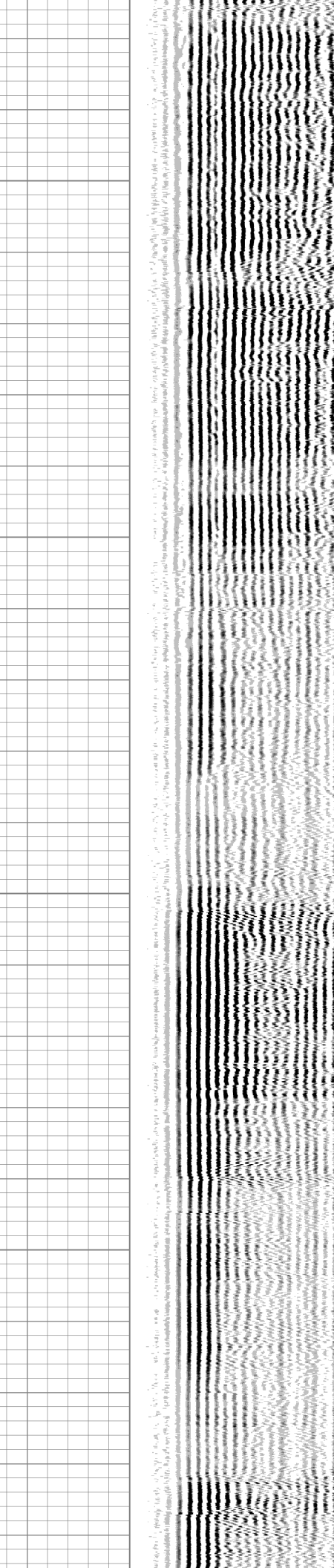
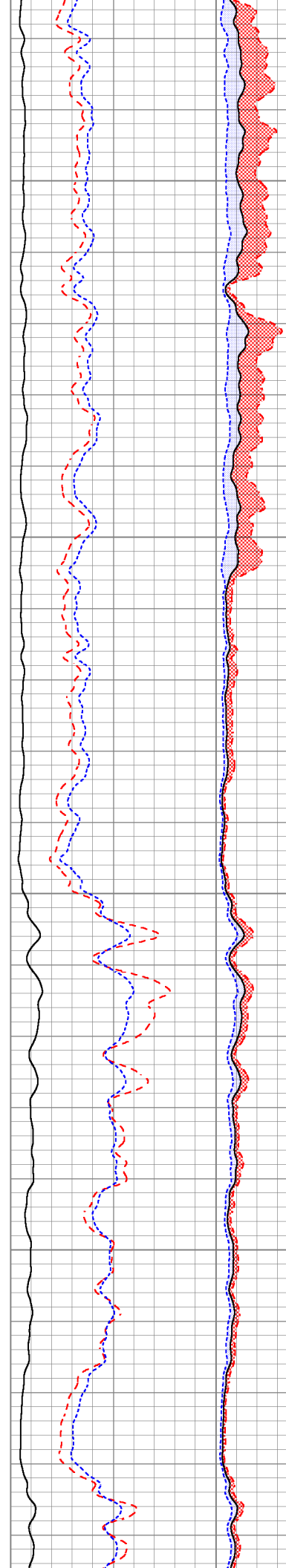
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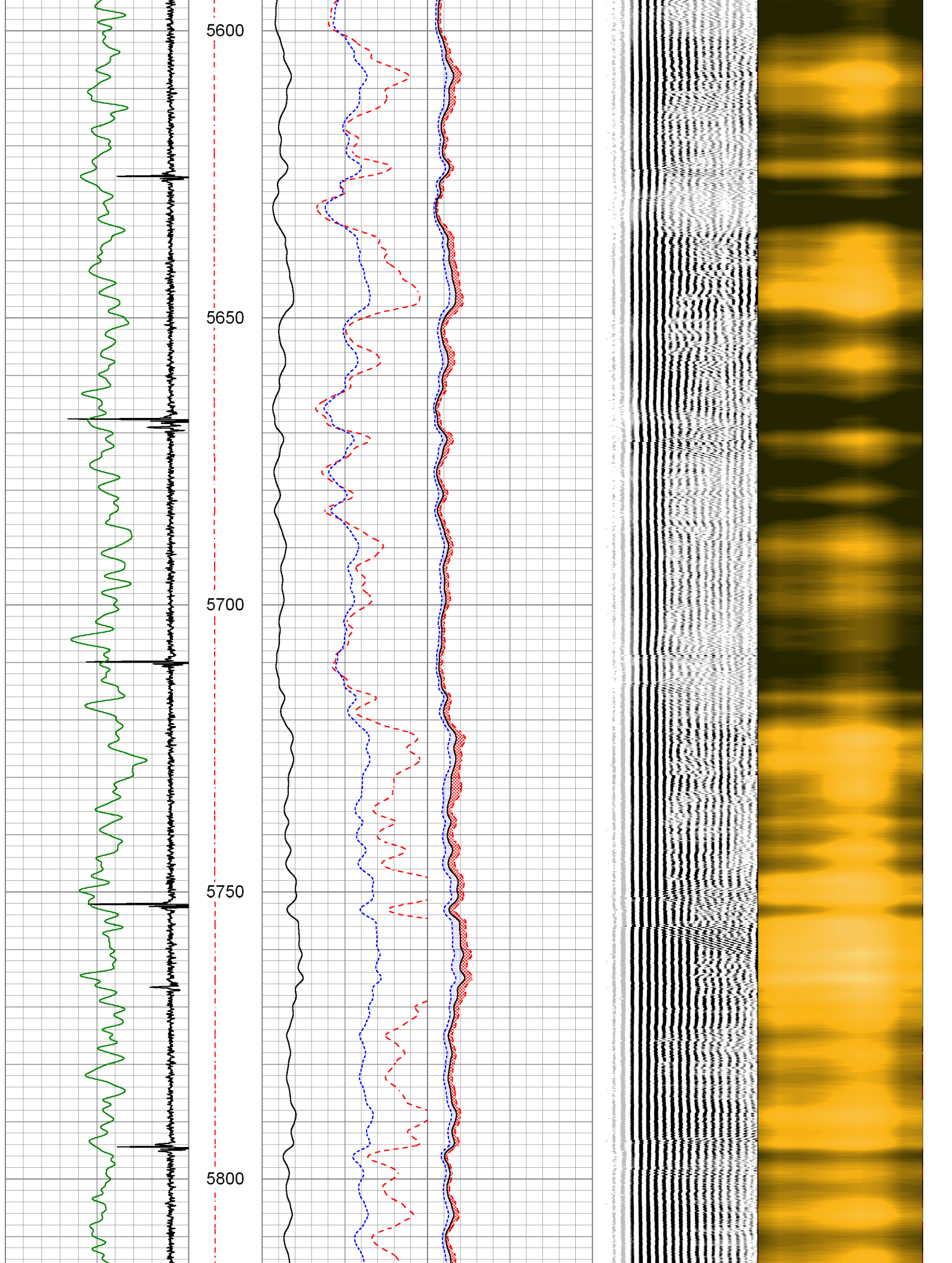
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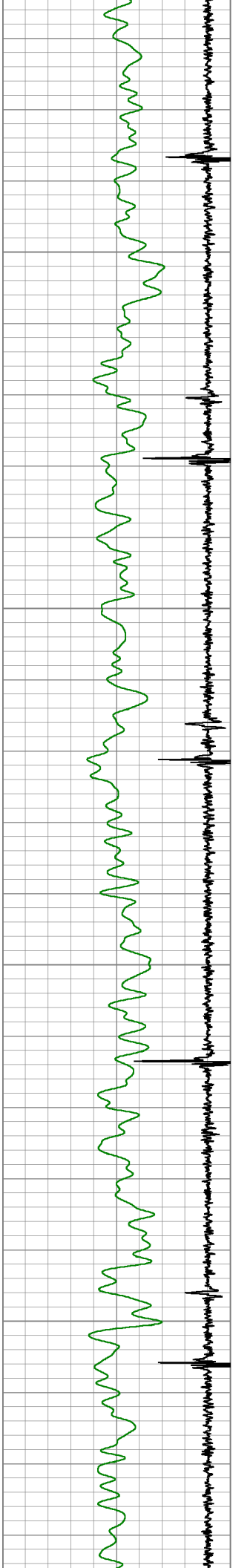




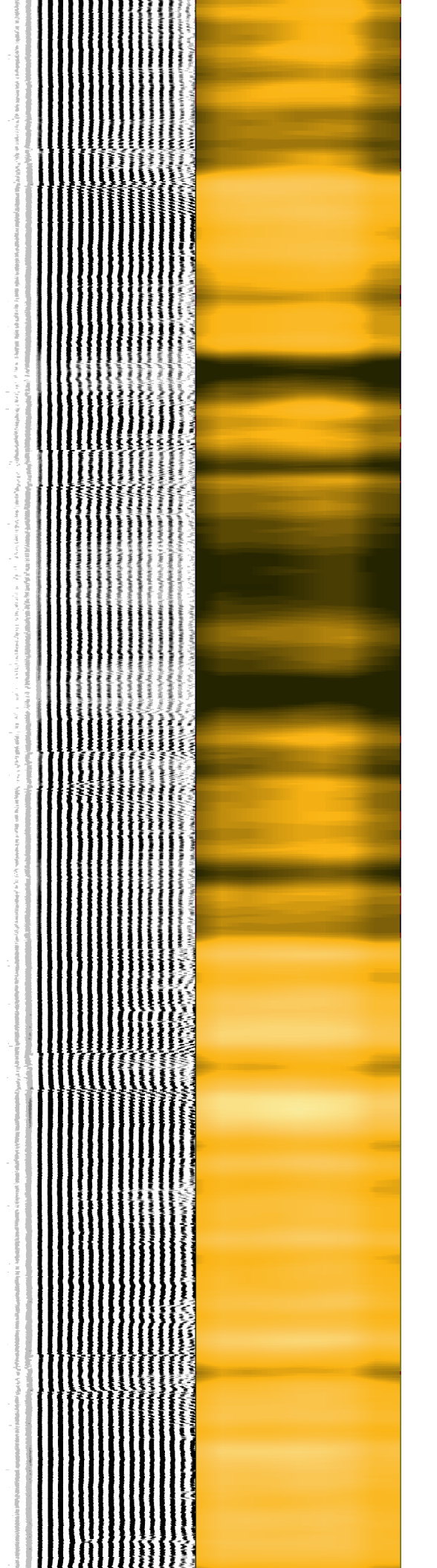
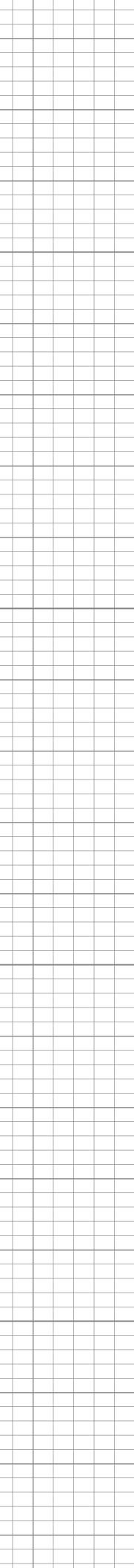
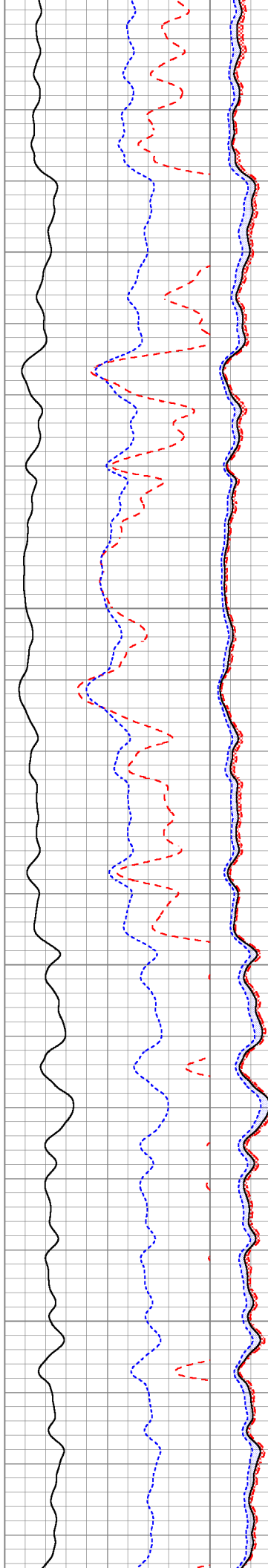
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5450  
5500  
5550

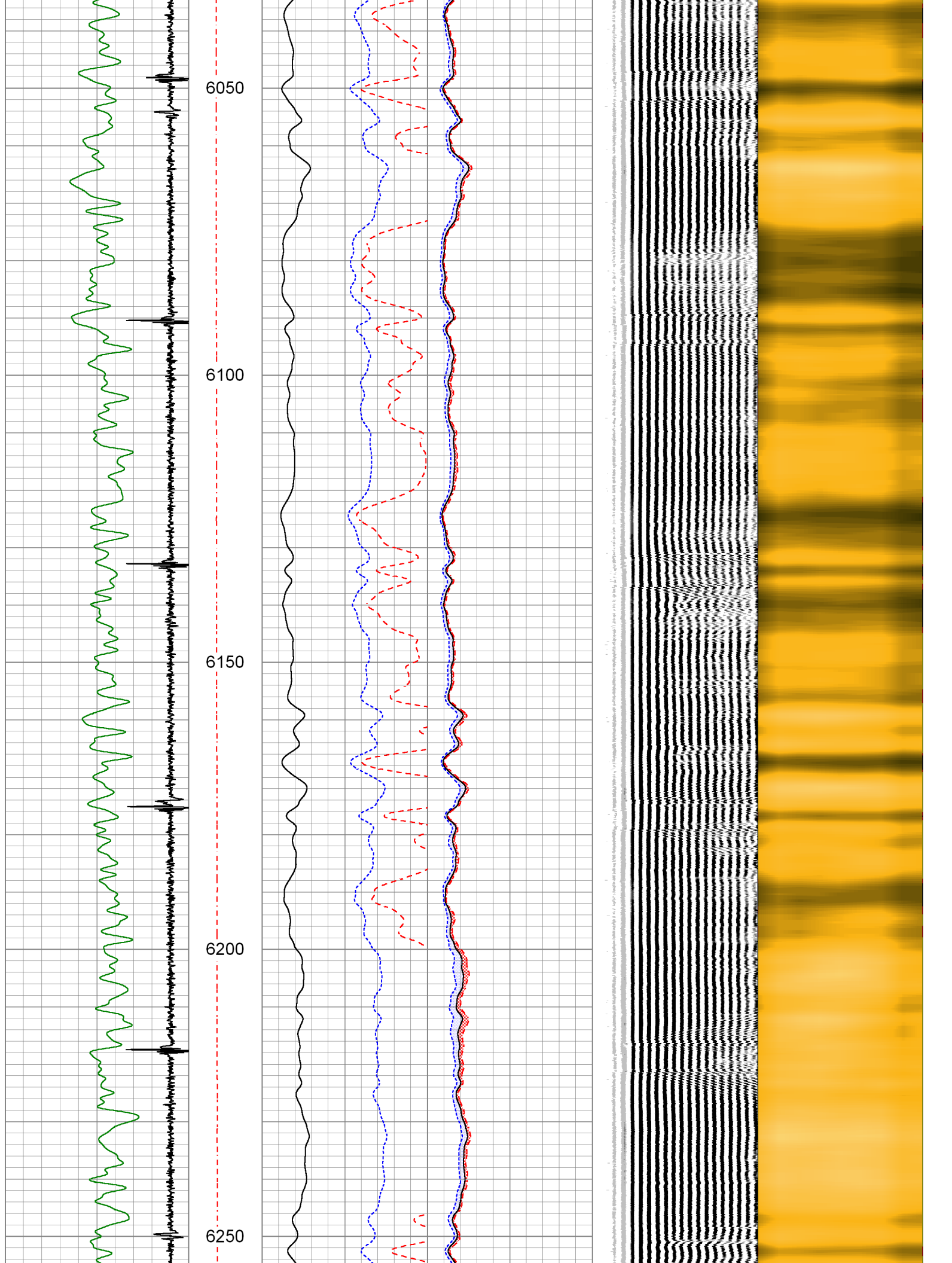


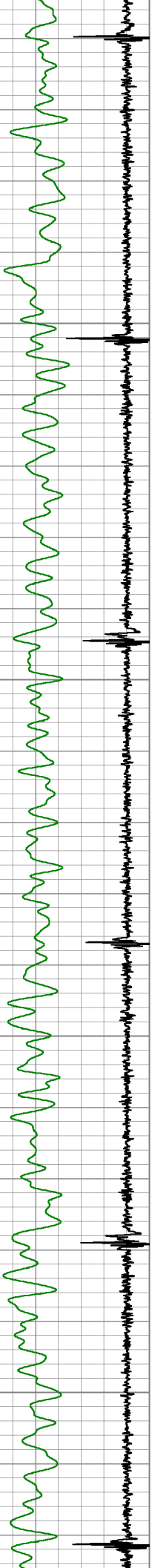




5850  
5900  
5950  
6000





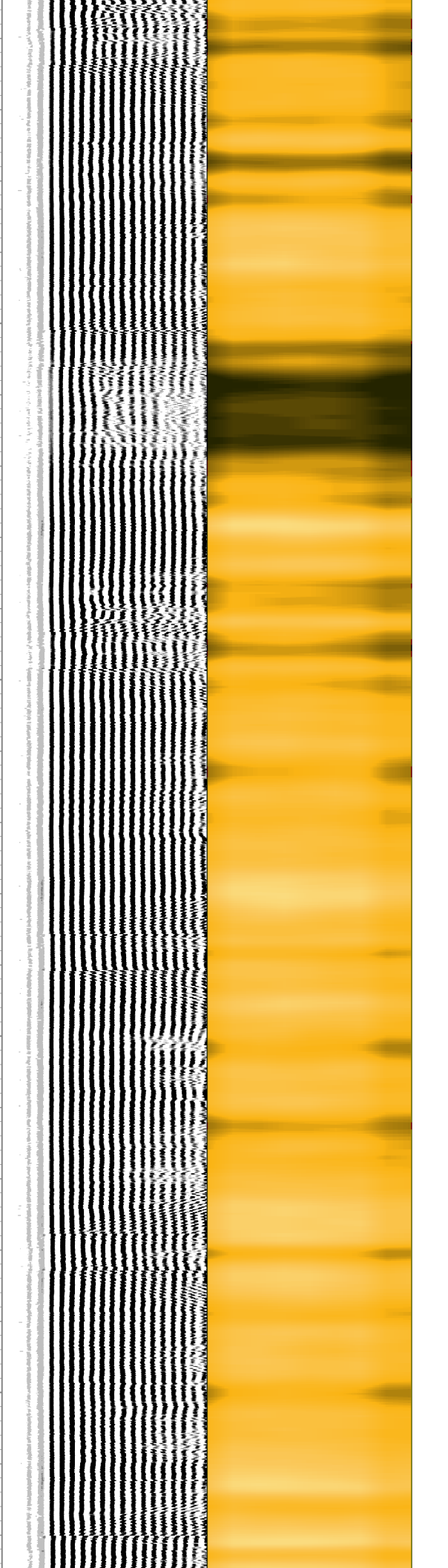
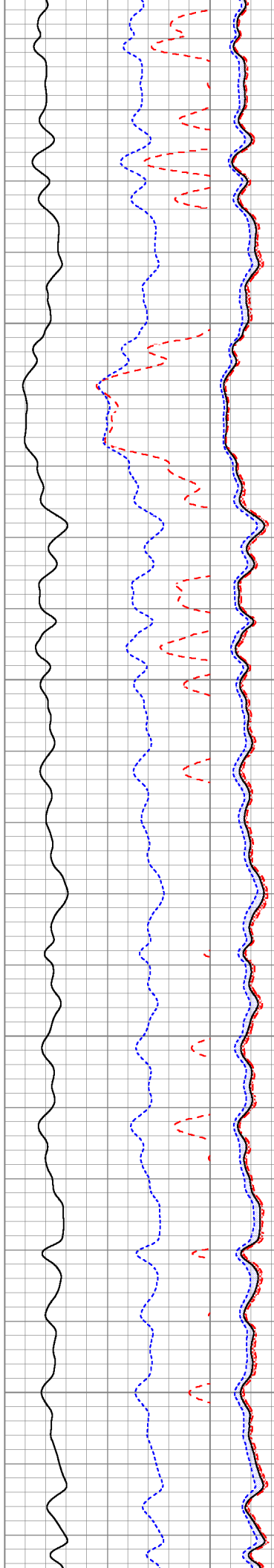


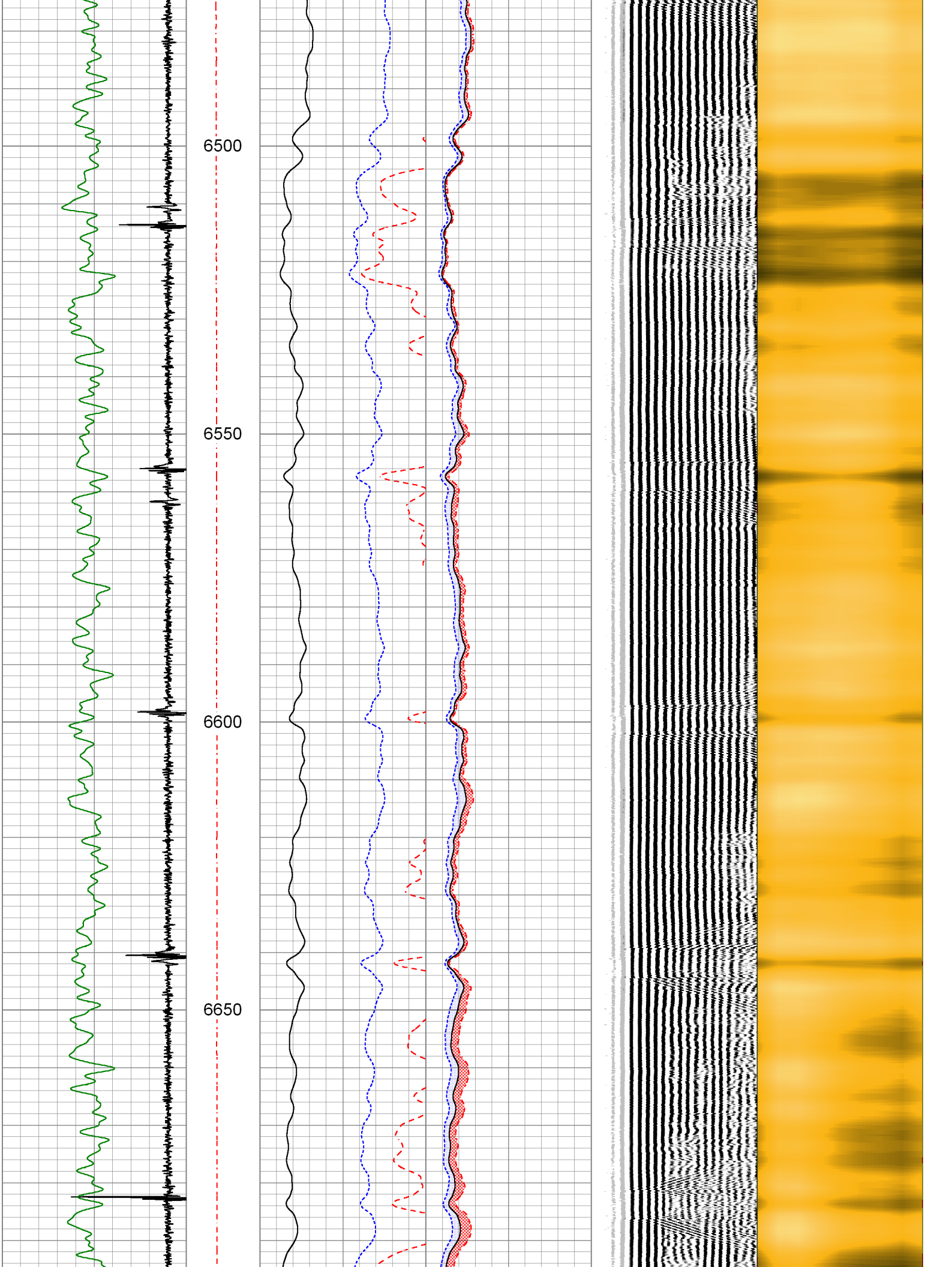
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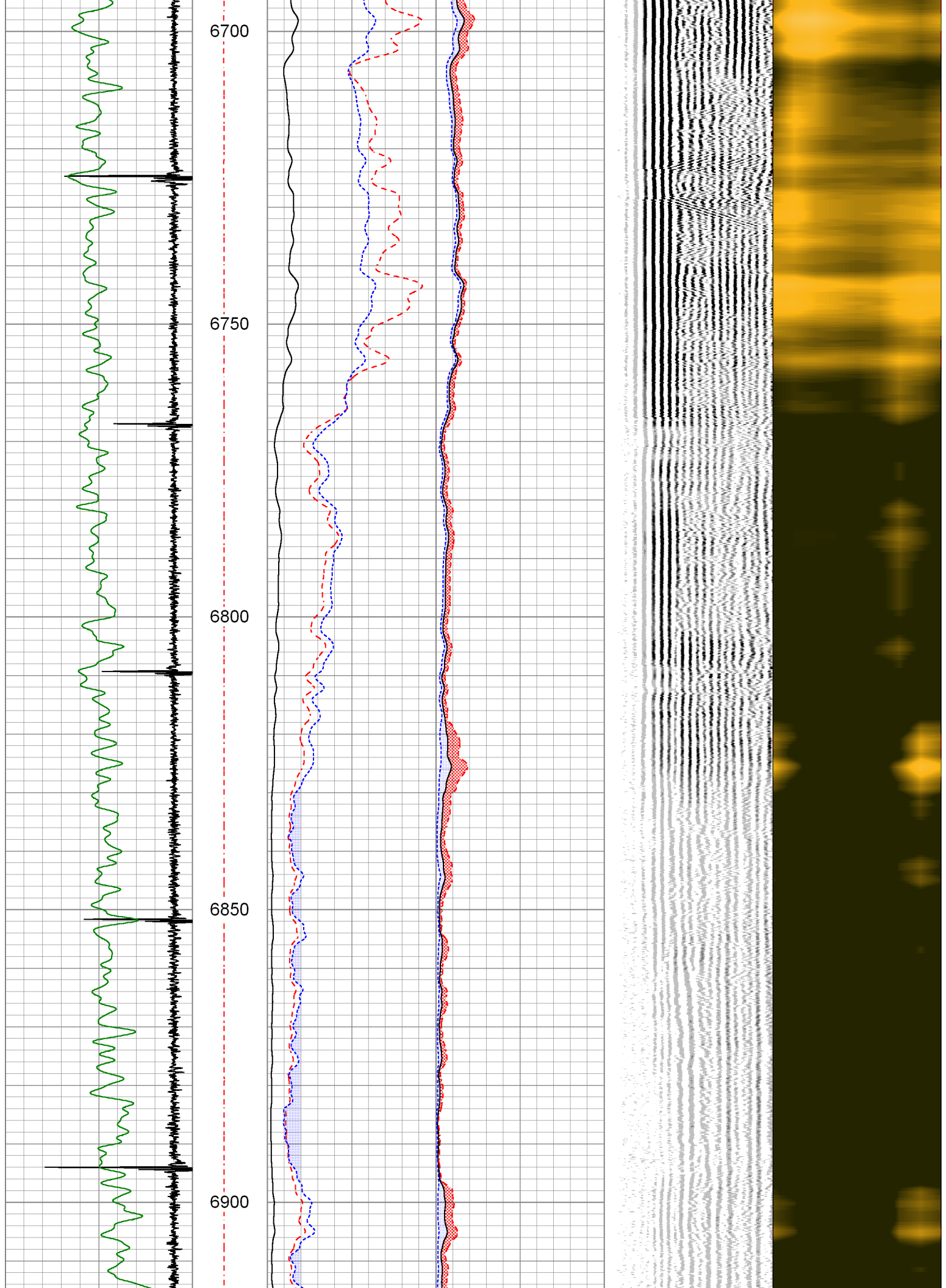
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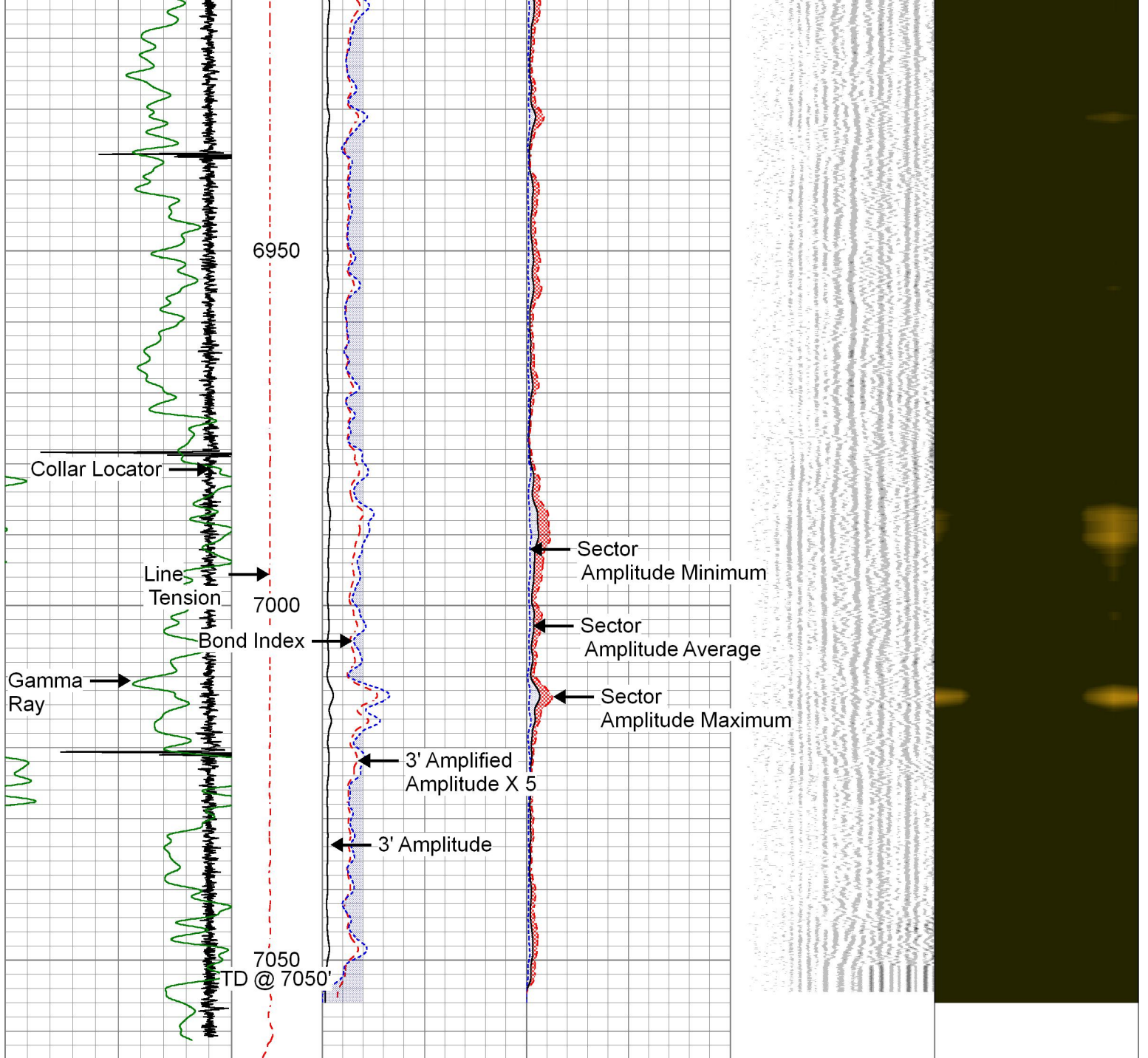
6400

6450









-9	Collar Locator	1	Line Tension	3' Amplitude (mV)	0	100	Sector Amplitude Average	0	150	200	VDL	1200	1	Sector Map	8
0	Gamma Ray (GAPI)	200	0 (3000)	3' Amplified Amplitude X 5 (mV)	0	20	Sector Amplitude Maximum	0	150				10		60
				Bond Index	1	0	Sector Amplitude Minimum	0	150						

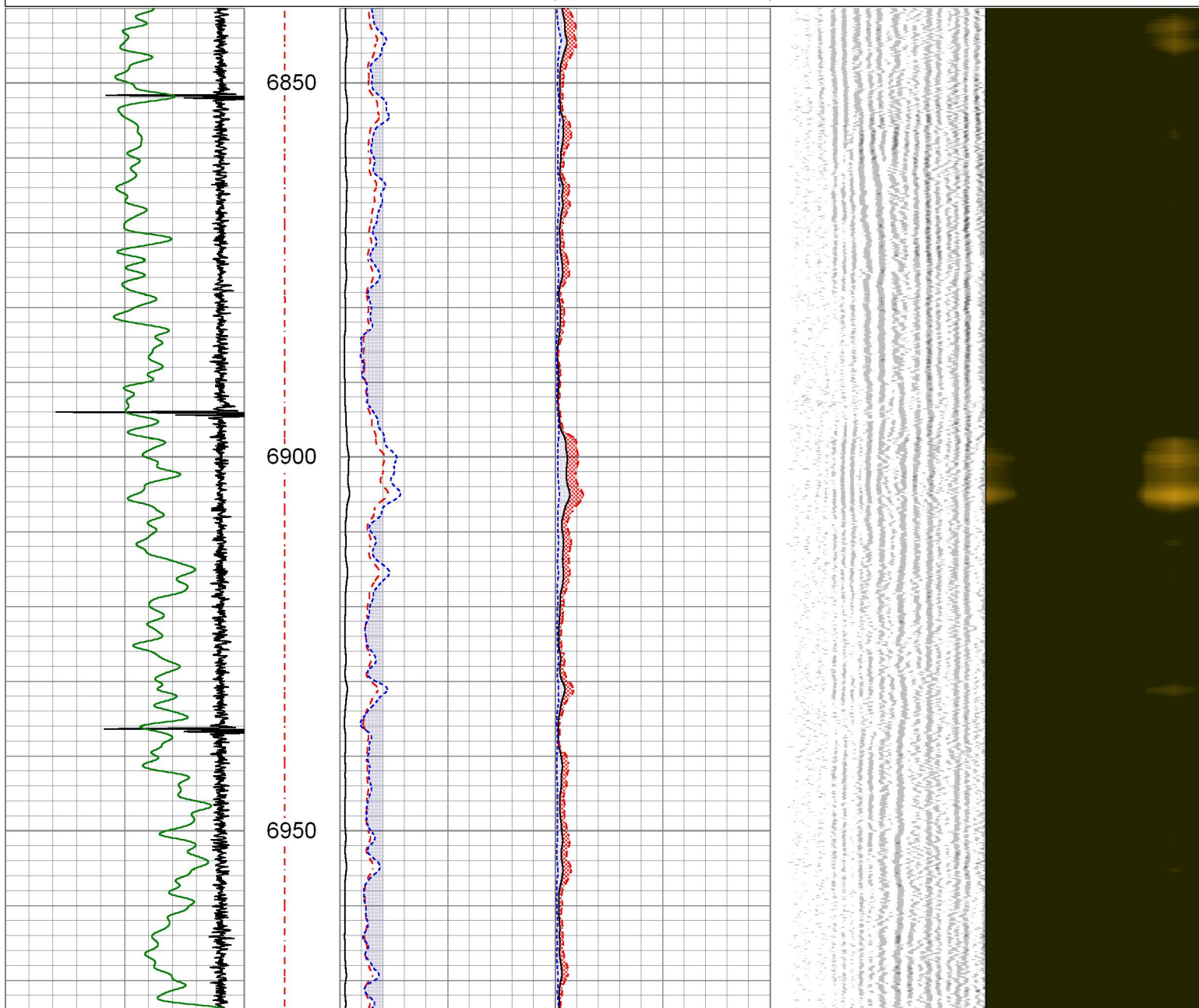


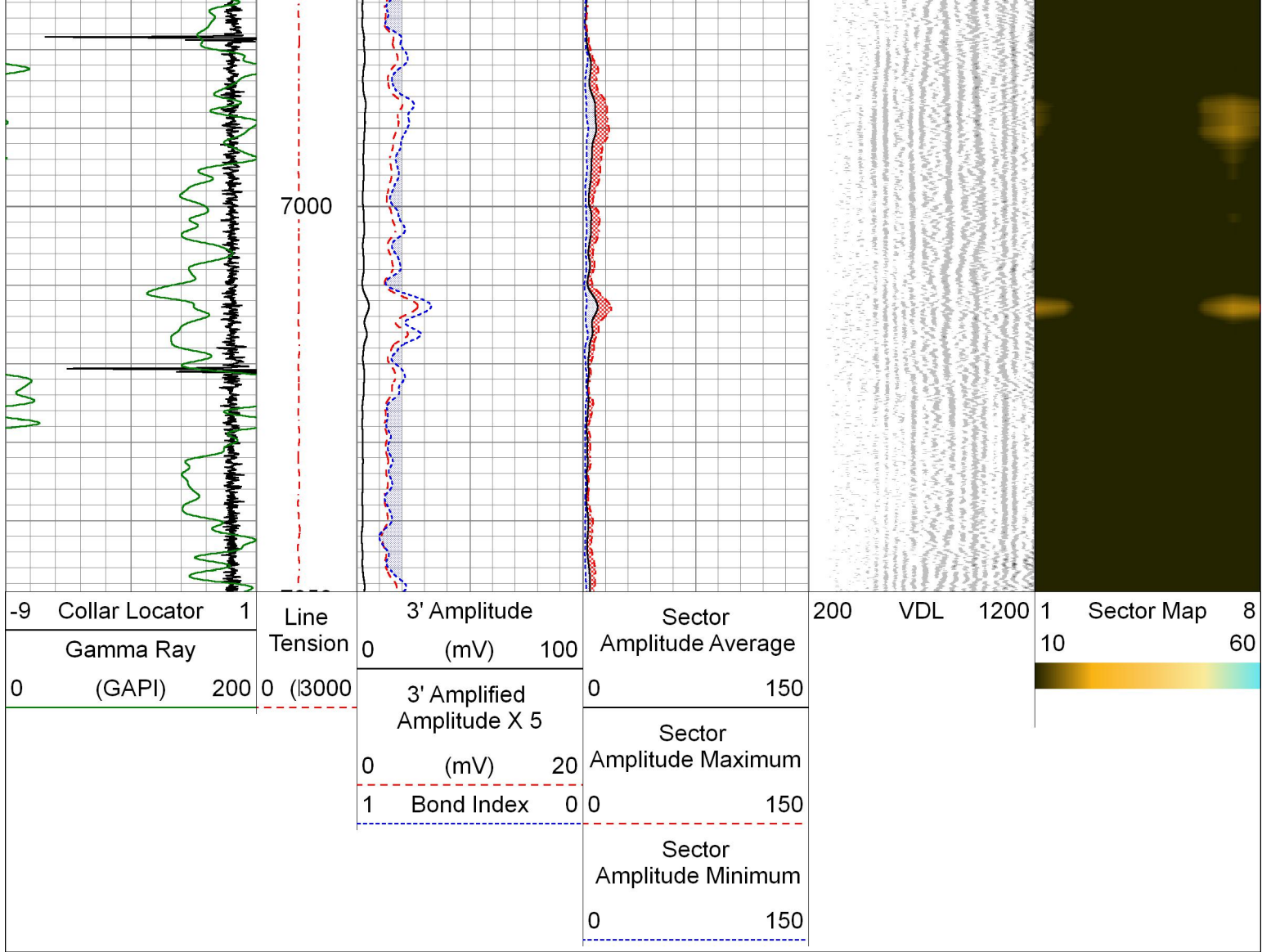
**END OF MAIN PASS**

0 PSI ON WELL WHILE LOGGING

Database File 2-290158.db  
 Dataset Pathname pass3.1  
 Presentation Format pinr\_scbl  
 Dataset Creation Sat Feb 20 12:23:23 2016  
 Charted by Depth in Feet scaled 1:240

-9	Collar Locator	1	Line	3' Amplitude	Sector	200	VDL	1200	1	Sector Map	8
	Gamma Ray		Tension	(mV)	Amplitude Average				10		60
0	(GAPI)	200	0 (3000)	0 100	0 150						
				3' Amplified	Sector						
				Amplitude X 5	Amplitude Maximum						
				(mV)	0 20						
				Bond Index	0 0						
				0	150						
					Sector						
					Amplitude Minimum						
					0 150						





### Calibration Report

Database File 2-290158.db  
 Dataset Pathname FINAL  
 Dataset Creation Sat Feb 20 12:26:02 2016

### Gamma Ray Calibration Report

Serial Number: FW1408-106  
 Tool Model: 275 Probe GR-CCL Corrosion  
 Performed: Sat Feb 20 10:09:52 2016

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps  
 Calibrator Reading: 1.0 cps

Sensitivity: 0.9000 GAPI/cps

### Segmented Cement Bond Log Calibration Report

Serial Number: FW1410-01  
 Tool Model: 275 Probe w Temp New Mod

Calibration Casing Diameter: 5.500 in  
 Calibration Depth: 95.617 ft

Master Calibration performed (Derived):

Master Calibration, performed (Derived).

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	1.358	1.500	71.921	51.852	1.500
CAL	1.498	1.498				
5'	0.000	1.160	1.500	71.921	60.718	1.500
SUM						
S1	-0.001	1.633	0.000	100.000	61.212	0.047
S2	0.000	1.398	0.000	100.000	71.555	-0.000
S3	0.000	1.373	0.000	100.000	72.812	-0.000
S4	0.000	1.366	0.000	100.000	73.220	-0.000
S5	0.000	1.397	0.000	100.000	71.600	-0.000
S6	0.000	1.402	0.000	100.000	71.314	-0.000
S7	0.000	1.427	0.000	100.000	70.091	-0.000
S8	0.000	1.673	0.000	100.000	59.771	-0.000

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	1.498	1.498	1.000	0.000

Air Zero Calibration, performed Sat Feb 20 08:49:20 2016:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.000		0.000			0.000
5'	0.000		0.000			0.000
SUM						
S1	0.000		0.000			0.000
S2	0.000		0.000			0.000
S3	0.000		0.000			0.000
S4	0.000		0.000			0.000
S5	0.000		0.000			0.000
S6	0.000		0.000			0.000
S7	0.000		0.000			0.000
S8	0.000		0.000			0.000

### Temperature Calibration Report

Serial Number: FW1410-01  
 Tool Model: 275 Probe w Temp New Mod  
 Performed: Mon Nov 16 08:48:27 2015

	Reference	Reading
Low Reference:	0.00 degF	0.00 degF
High Reference:	1.00 degF	1.00 degF

Gain: 1.00  
 Offset: 0.00  
 Delta Spacing: 1



Company: BAYSWATER E & P, LLC  
 Well: ALBRIGHTON J-10HN

**PIONEER**

Pioneer Energy Services



Well WATTENBERG

County WELD

State WELD