



PIONEER

Pioneer Energy Services

RADIAL BOND LOG WITH GAMMA RAY

Company **EXTRACTION OIL AND GAS**
Well **TC HILAND KNOLLS C7-9-11**
Field **WATTENBERG**
County **WELD** State **CO**

Comp. **EXTRACTION OIL AND GAS**
Well **TC HILAND KNOLLS C7-9-11**
Field **WATTENBERG**
Co. **WELD**
State **CO**

Location: API #: 05-123-43513
NESE 2600 FSL 1189 FEL
LAT 40.41398 LONG -104.79866
SEC 8 TWP 5N RGE 66W
Permanent Datum KB Elevation 4792'
Log Measured From GL Above Perm. Datum
Drilling Measured From GL
Other Services
NONE
K.B. D.F. G.L. 4792'

Date of Service	6-15-17		
Run Number	ONE		
Depth Driller or PBTD	20525'		
Depth Logger	7704'		
Bottom Log Interval	7704'		
Top Log Interval	SURFACE		
Open Hole Size	N/A		
Type Fluid	FSW		
Fluid Level	SURFACE		
Fluid Density	N/A		
Max. Recorded Temperature	N/A		
Max. Wellhead Pressure	2500 PSI		
Wellhead Connection	5 1/16" 10 K		
Estimated Cement Top	SEE LOG		
Unit Number	P-129		
Wireline Size	9/32"		
Location	FT MORGAN		
Recorded By	W. DOLPH		
Witnessed By	MR. CAMPBELL		
Tubing Record	Size	Wt/Ft	Top
Surface Casing			Bottom
Production Casing	5 1/5"	20#	20525'
Liner Record			SURFACE

<<< 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.
NO REPEAT OR CAL. PASS PER CUSTOMERS REQUEST

CORRELATED TO MARKER JOINT AT 6989'

THANK YOU FOR USING PIONEER ENERGY SERVICES!

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: DOLPH Operator: UNDERWOOD Operator: VINET Operator: OCONAS		

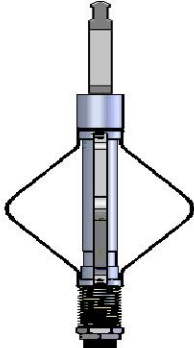
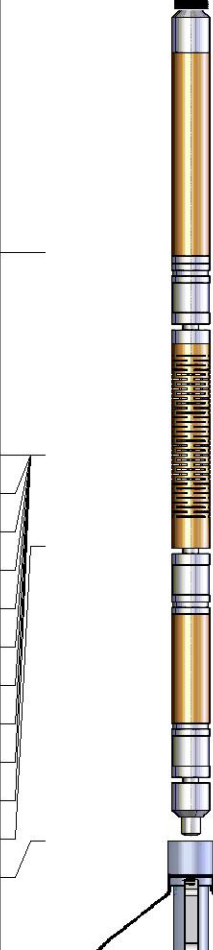
Top - Bottom

BHTEMP_Src	BOREID	BOTTEMP	CASEOD	CASETHCK	CASEWGHT	MAXAMPL	MINAMPL
TEMP	in 7.875	degF 100	in 5.5	in 0	lb/ft 20	mV 0	mV 2.2
MINATTN	PERFS	PPT	SRFTEMP	TDEPTH			
db/ft 0.08	0	usec 0	degF 0	ft 0			


Variable Description

BHTEMP_Src : BHTEMP Input Source Selector
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
CASEWGHT : Casing Weight
MAXAMPL : Maximum Amplitude

MINAMPL : Minimum Amplitude
MINATTN : Minimum Attenuation
PERFS : Perforation Flag
PPT : Predicted Pipe Time
SRFTEMP : Surface Temperature
TDEPTH : Total Depth

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
TEMP	14.17		Cable Head-Titan 143 1 7/16" Titan Cable Head	1.03	1.43	2.00
			Centralizer-275 Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
	11.94		SCBL-275 Probe w Temp New Mod (141169.17) Probe Radii Bond Tool with Temperature	1169.17	2.75	95.00
WVFS8	11.94					
WVFS7	11.94					
WVFS6	11.94					
WVFS5	11.94					
WVFS4	11.94					
WVFS3	11.94					
WVFS2	11.94					
WVFS1	11.94					
WVFCAL	11.94					
WVF3FT	11.94					
WVF5FT	10.94					
HEADVOLT	7.69					

			Centralizer-275 Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
CCL	3.91					
			GR_CCL-275 Probe GR-CCL Dig (Probe-24.54;R-CC2.75g) Probe 2 3/4" Gamma Ray / CCL Digital			60.00
GR	1.17					
			Bullnose-Titan GO Pin Pressure Cap	0.27	1.38	1.00
Dataset: extraction_tc hiland c7 9 11.db: field/well/run1/pass1 Total length: 20.76 ft Total weight: 188.00 lb O.D.: 2.75 in						



PIONEER

Pioneer Energy Services

MAIN LOG

2500 PSI APPLIED AT SURFACE

Database File

extraction_tc hiland c7 9 11.db

Dataset Pathname

pass2.3

Presentation Format

pinr_scbl

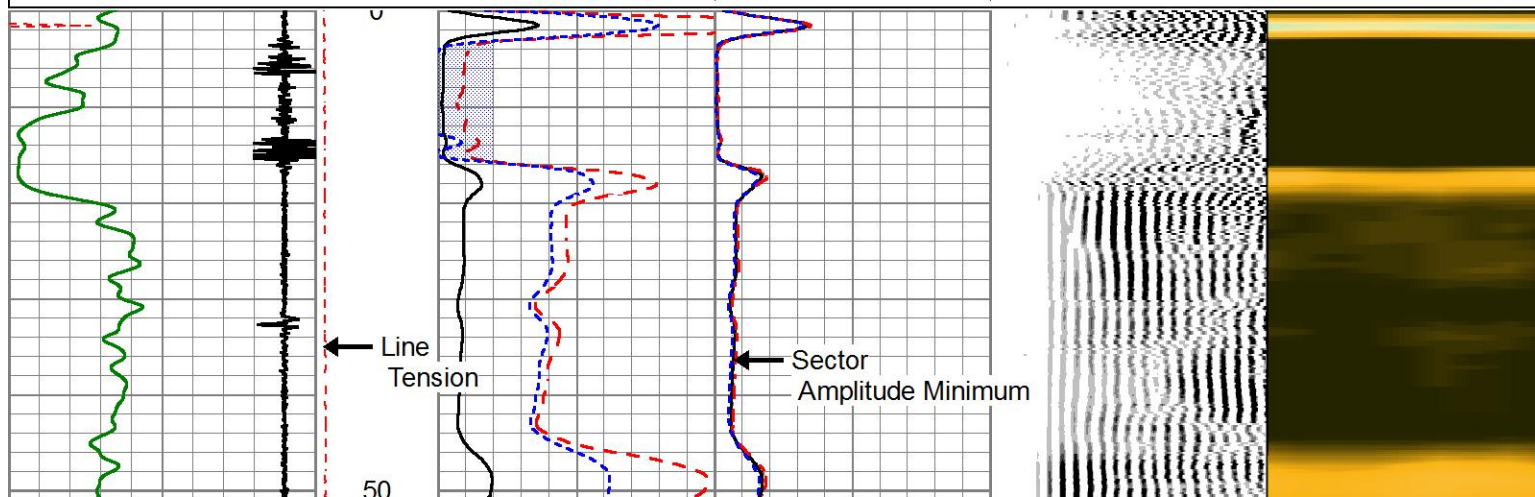
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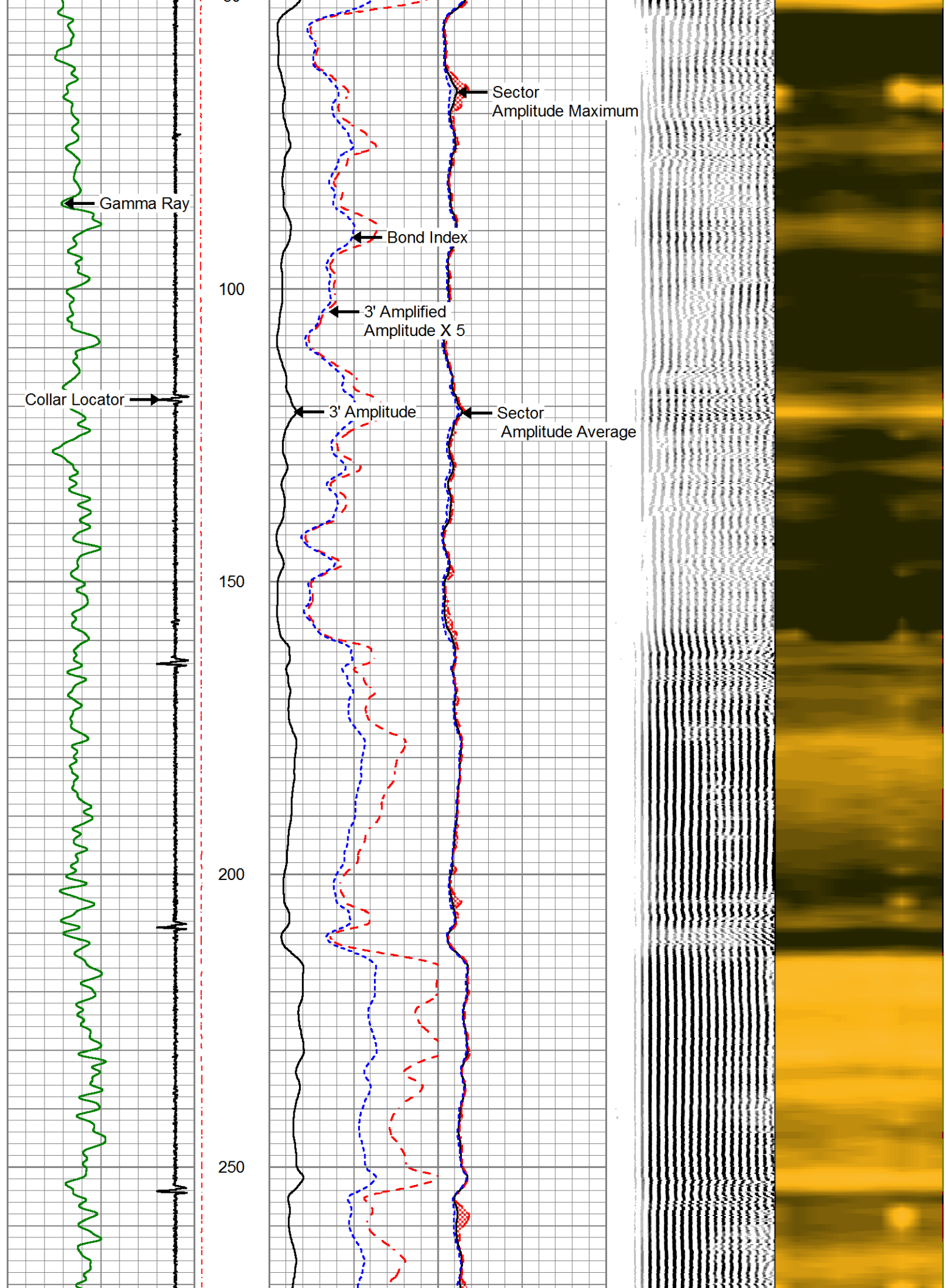
Thu Jun 15 14:34:02 2017

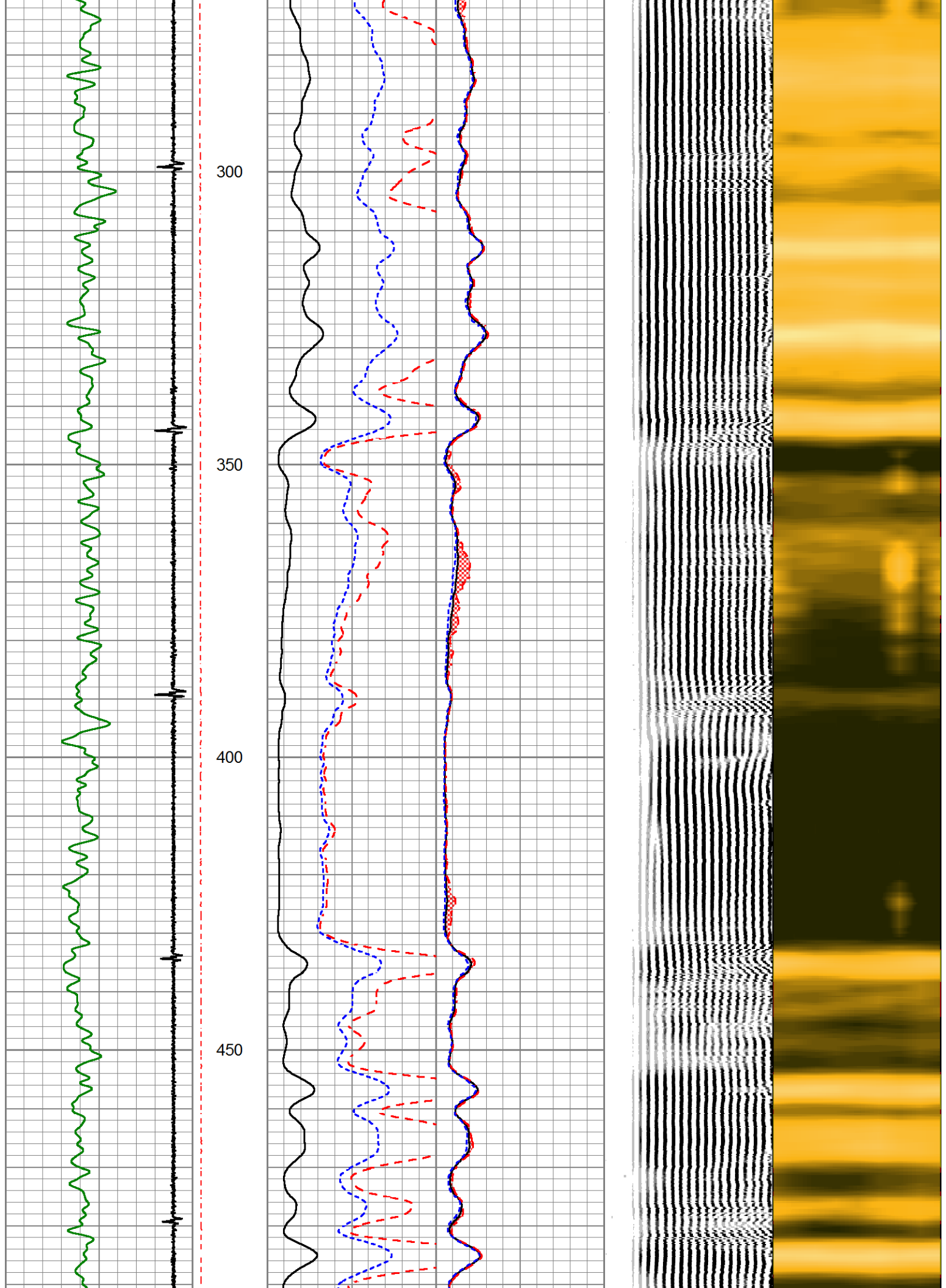
Charted by

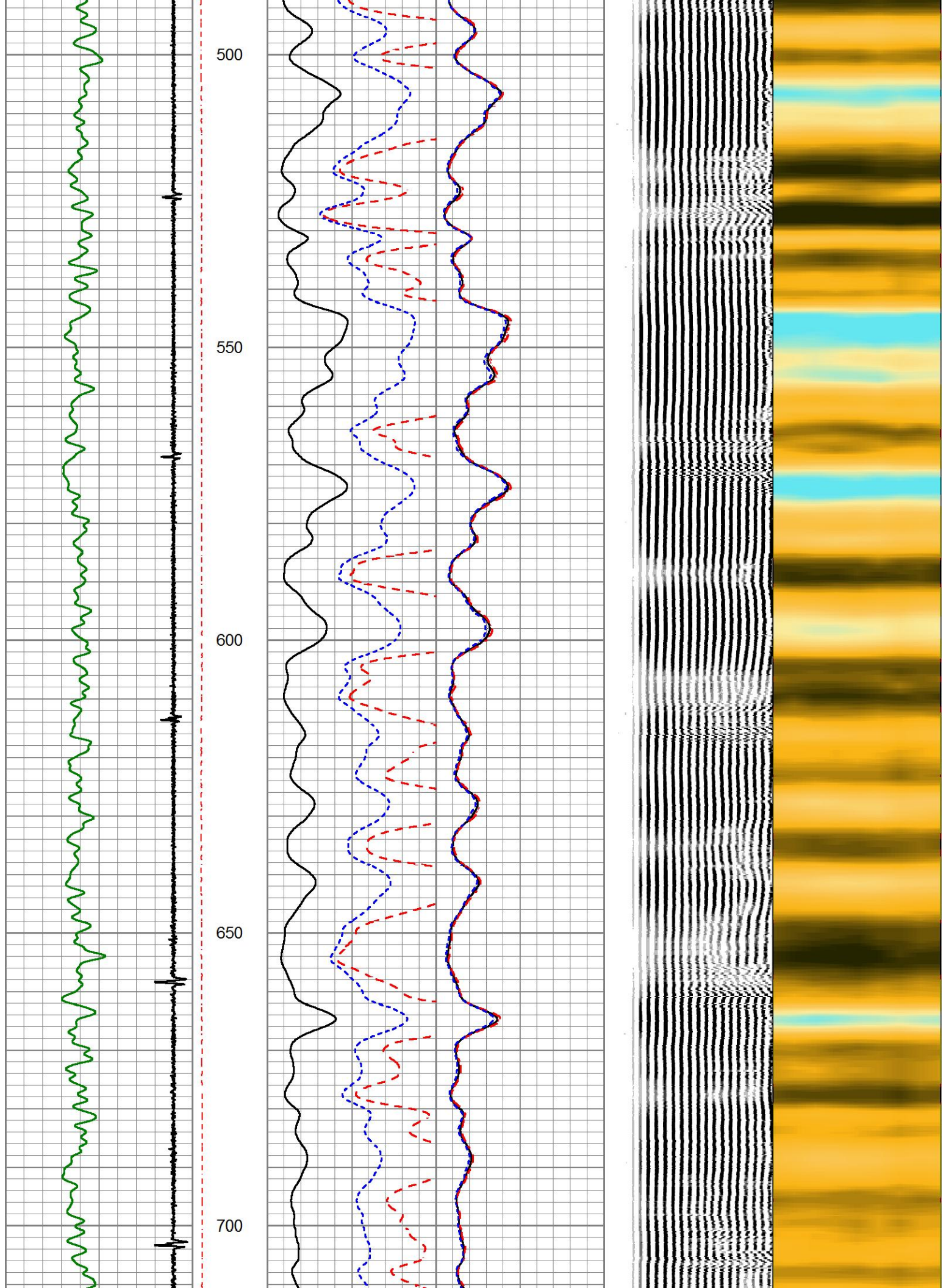
Depth in Feet scaled 1:240

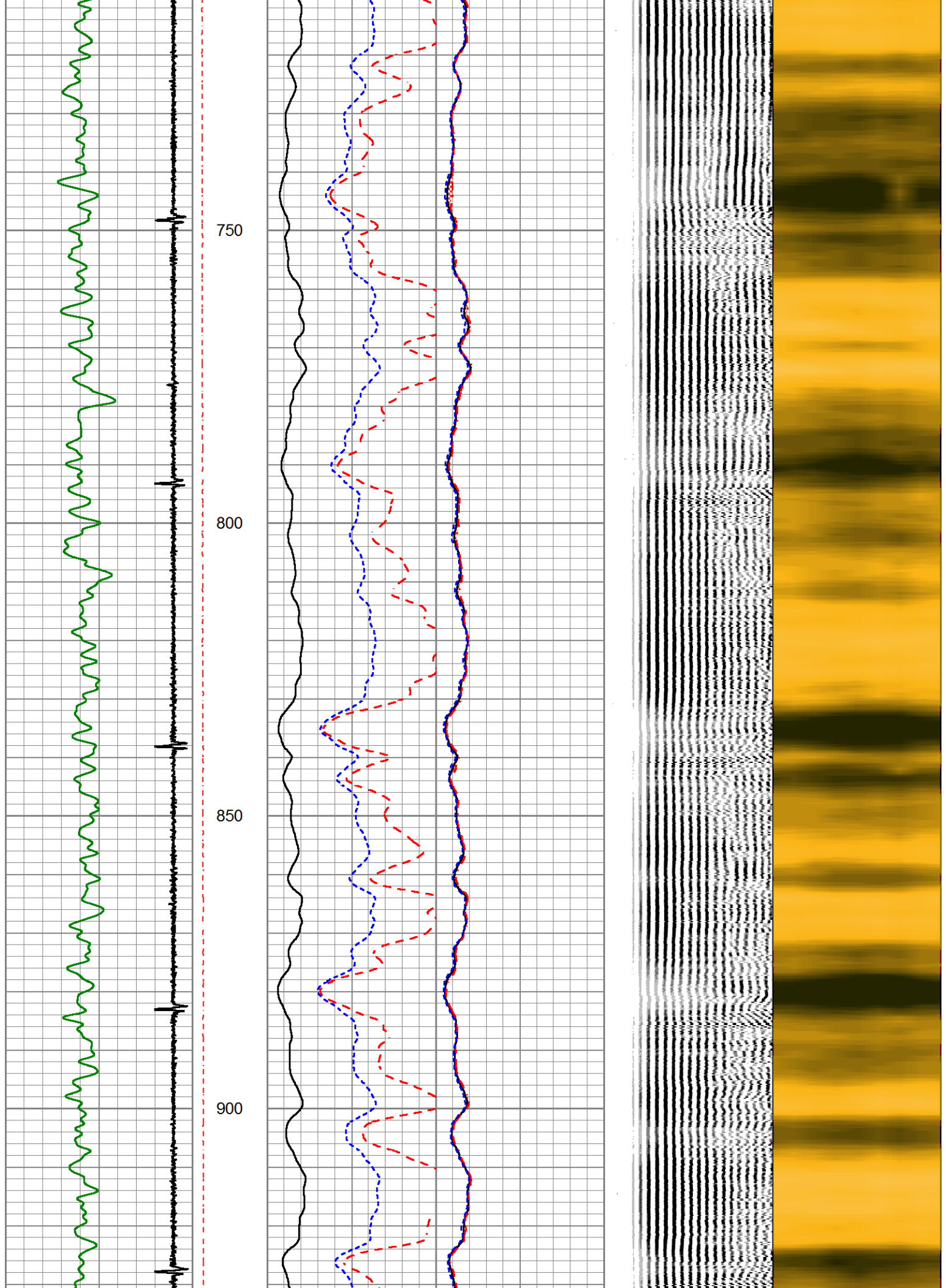
3' Travel Time	Line Tension	3' Amplitude (mV)	Sector Amplitude Average	200	VDL	1200	1	Sector Map	8
280 (usec)	0 (12000)	0 100	0 150				10		60
-9 Collar Locator		3' Amplified Amplitude X 5							
Gamma Ray		0 (mV)	Sector Amplitude Maximum						
0 (GAPI)		1 Bond Index	0 150						
			Sector Amplitude Minimum						
			0 150						

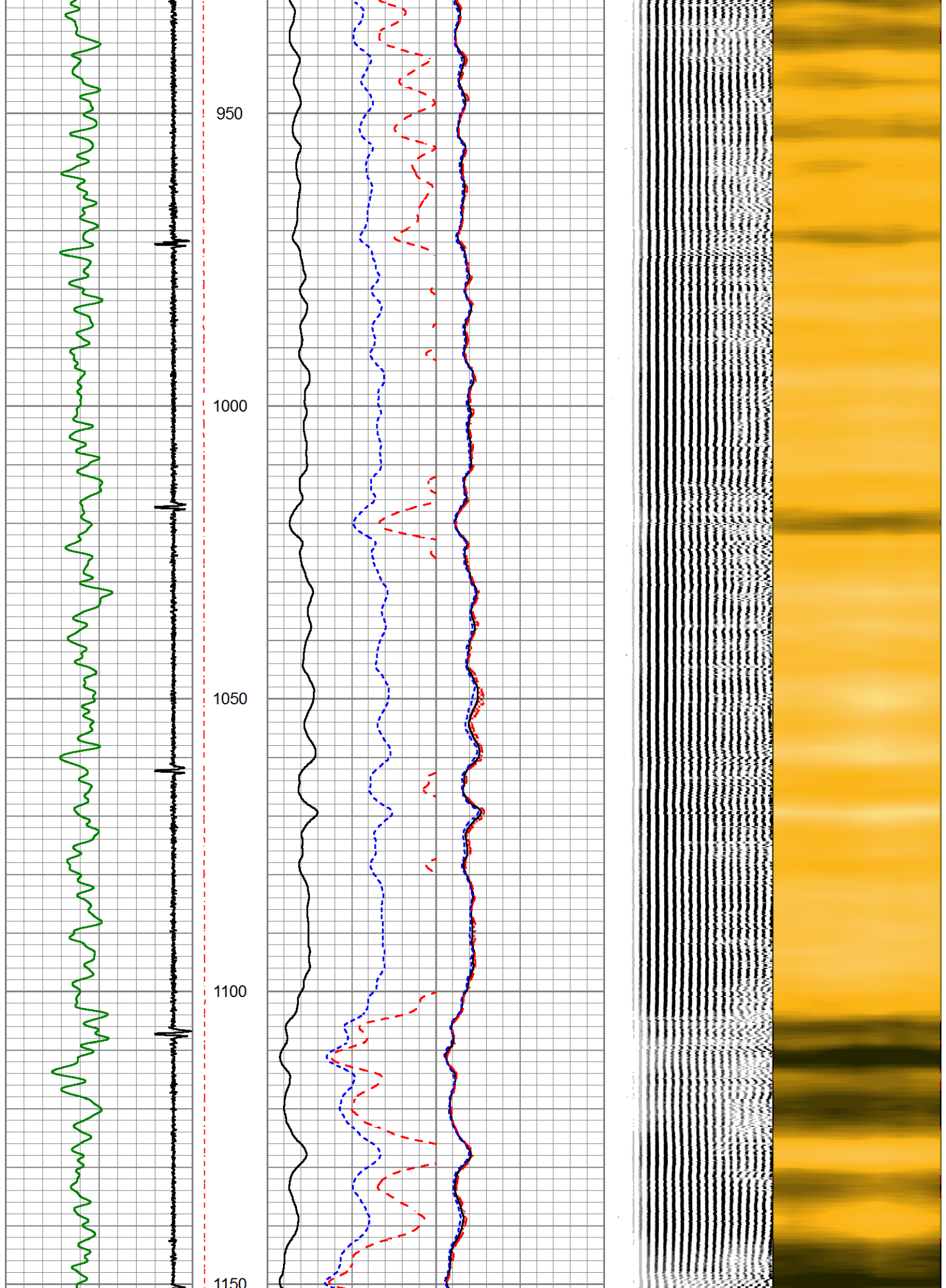


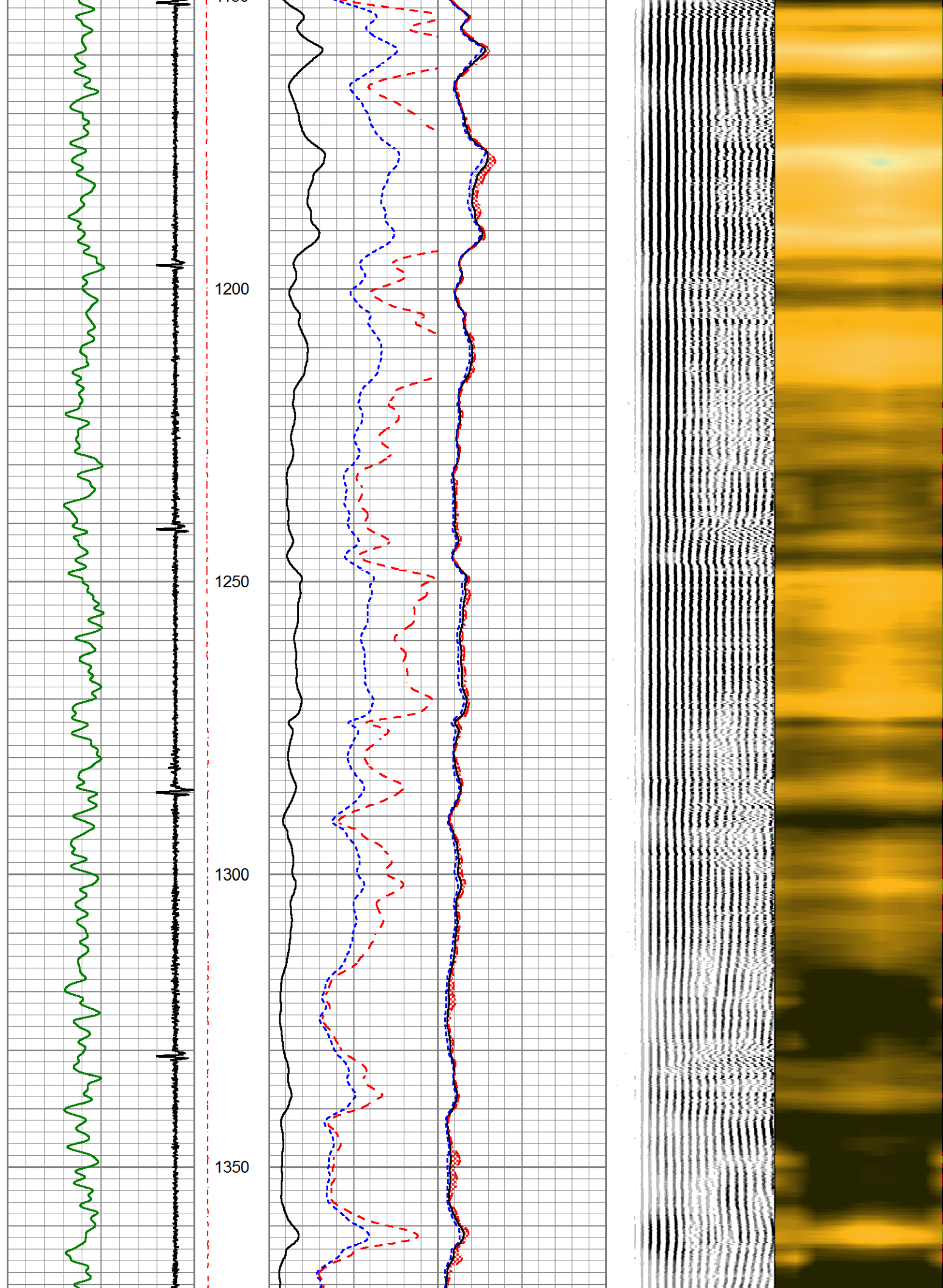


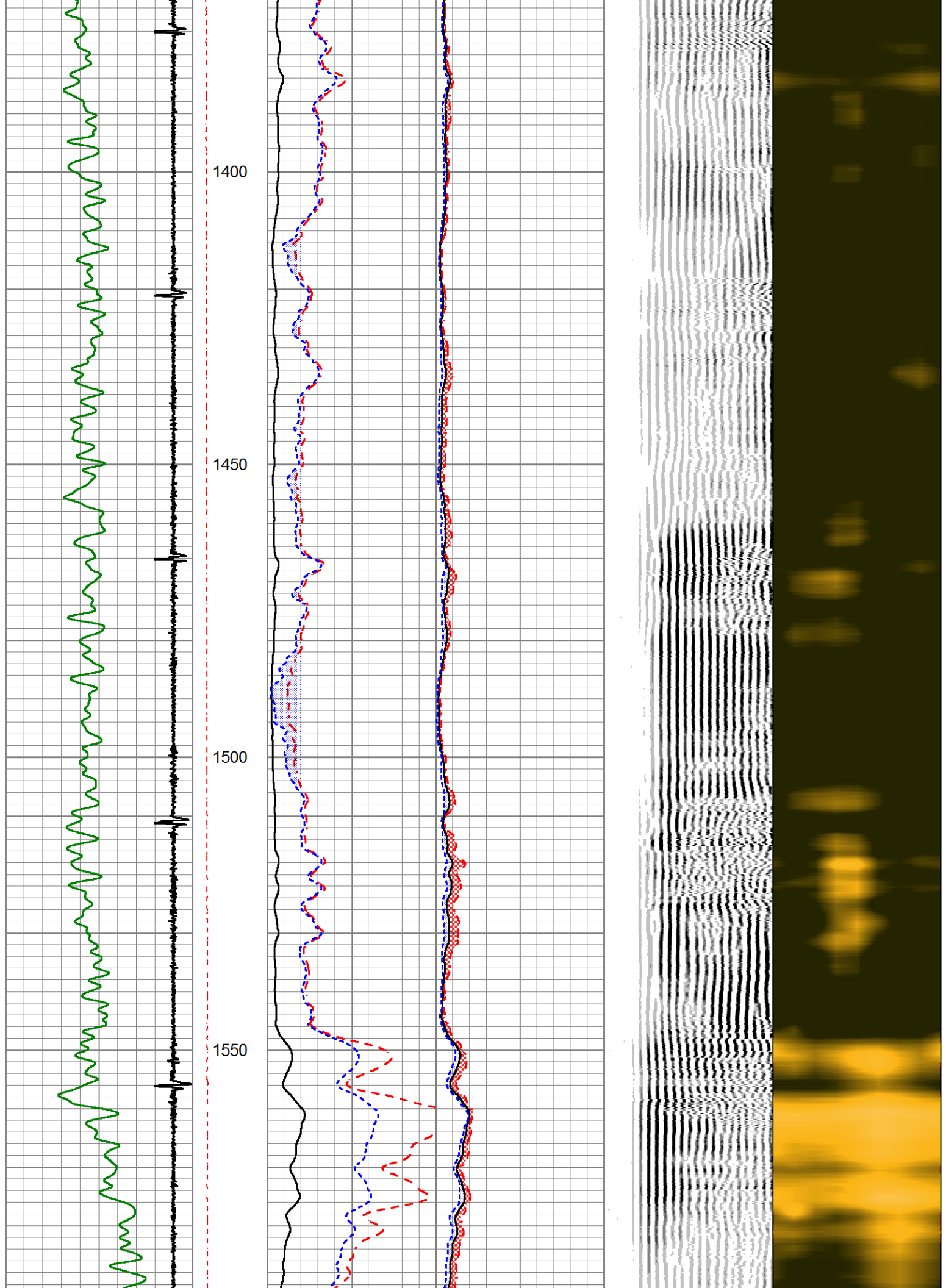


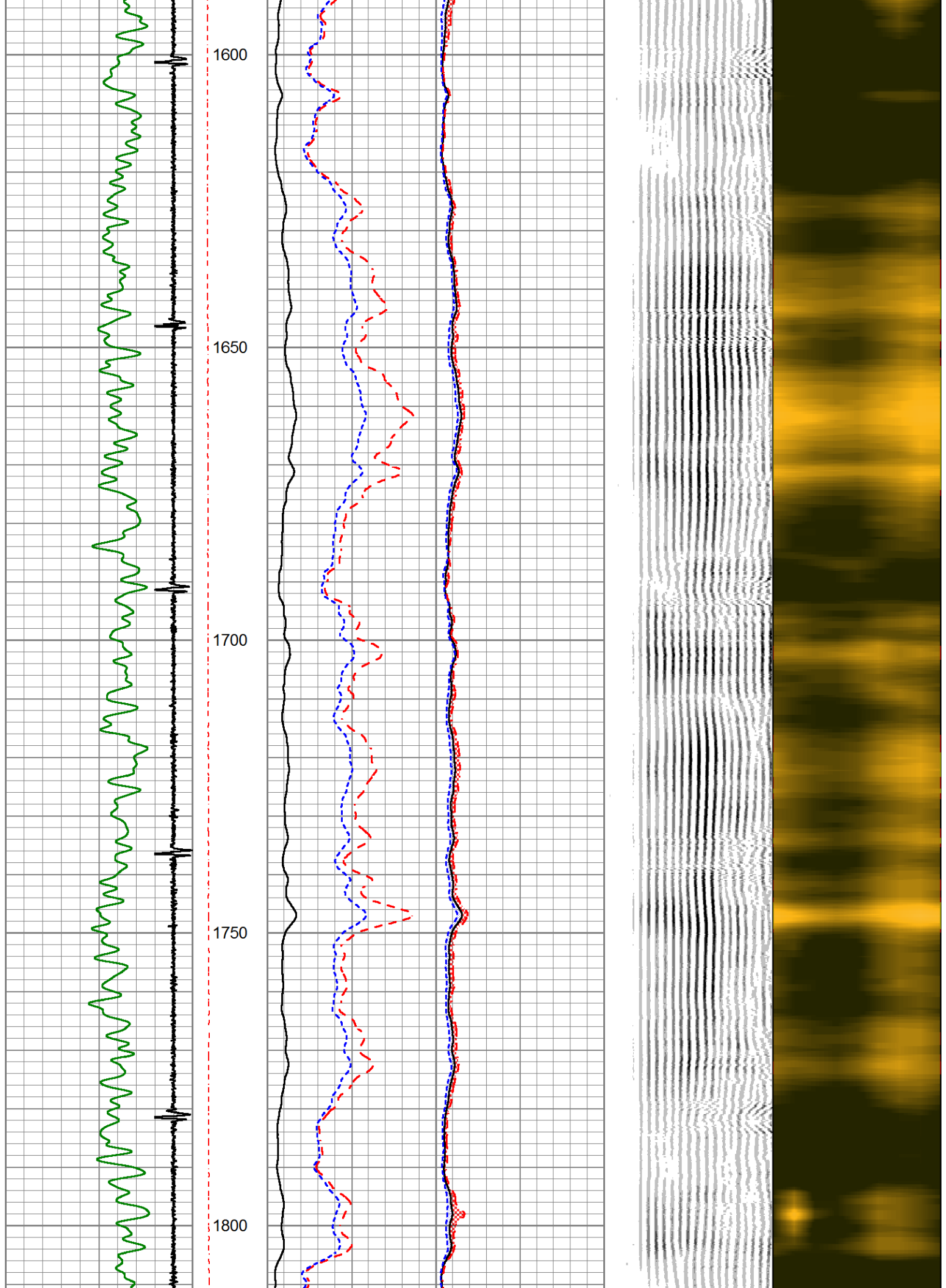


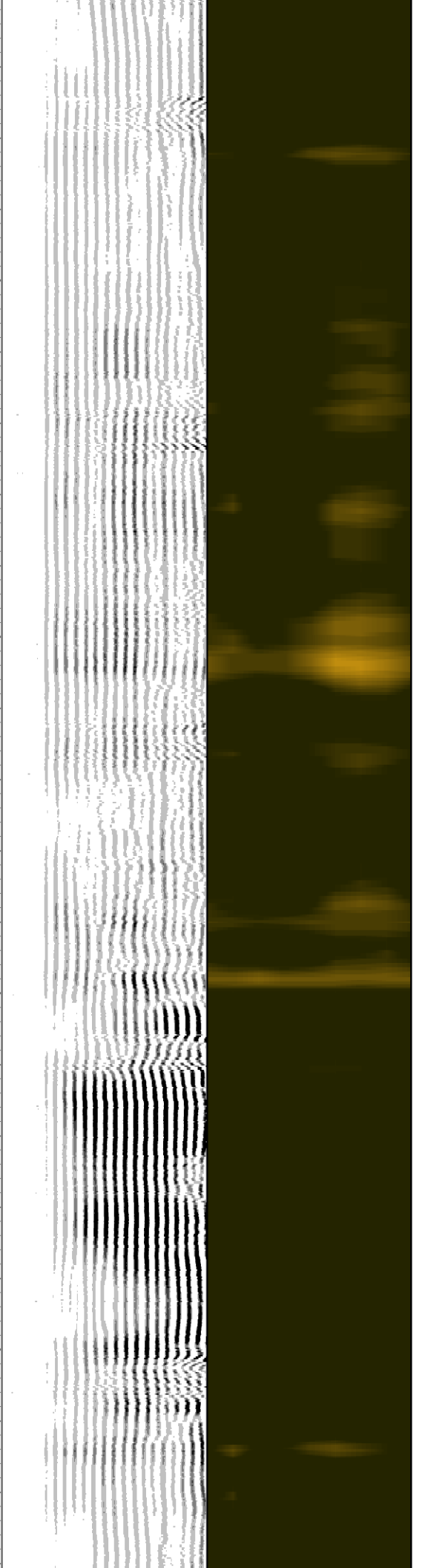
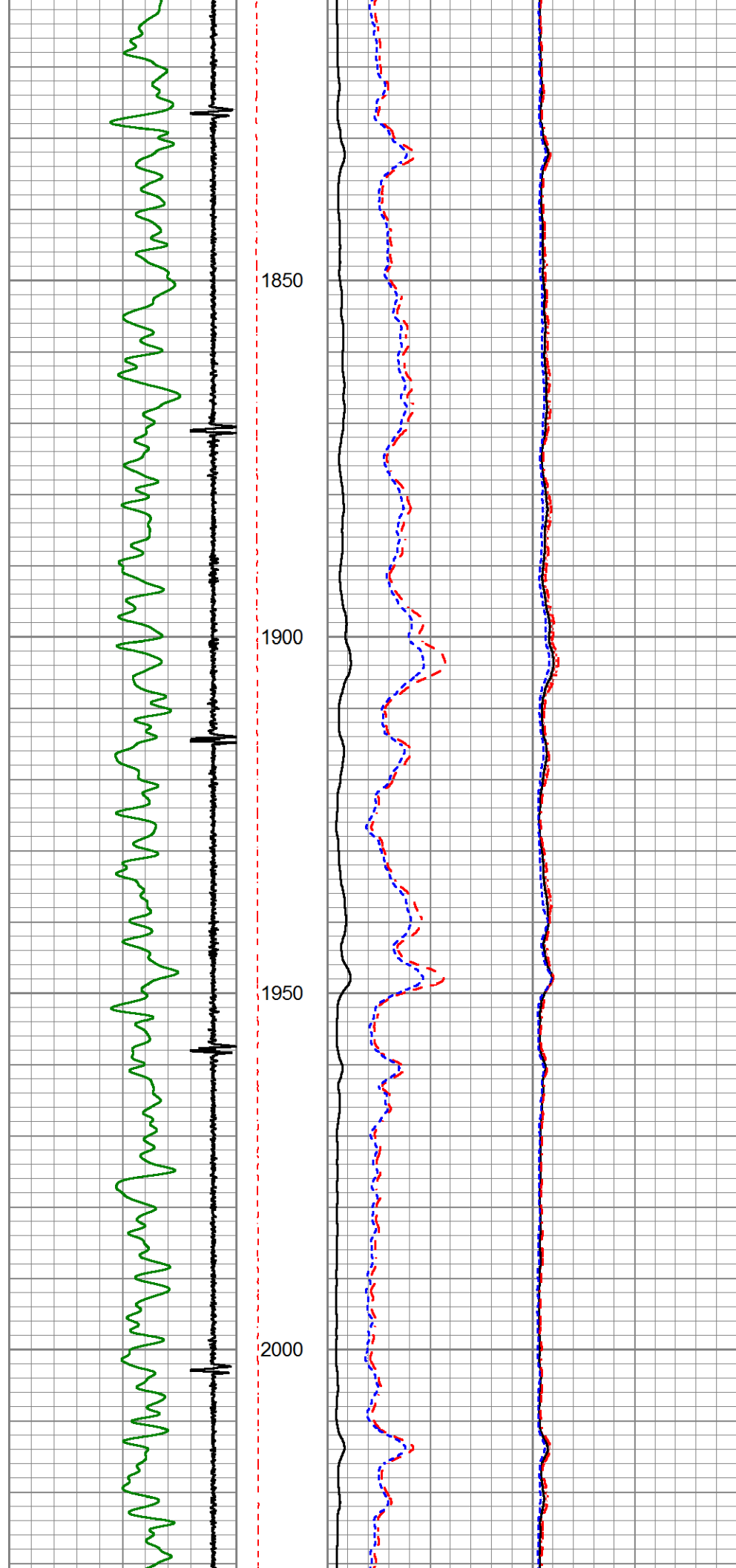


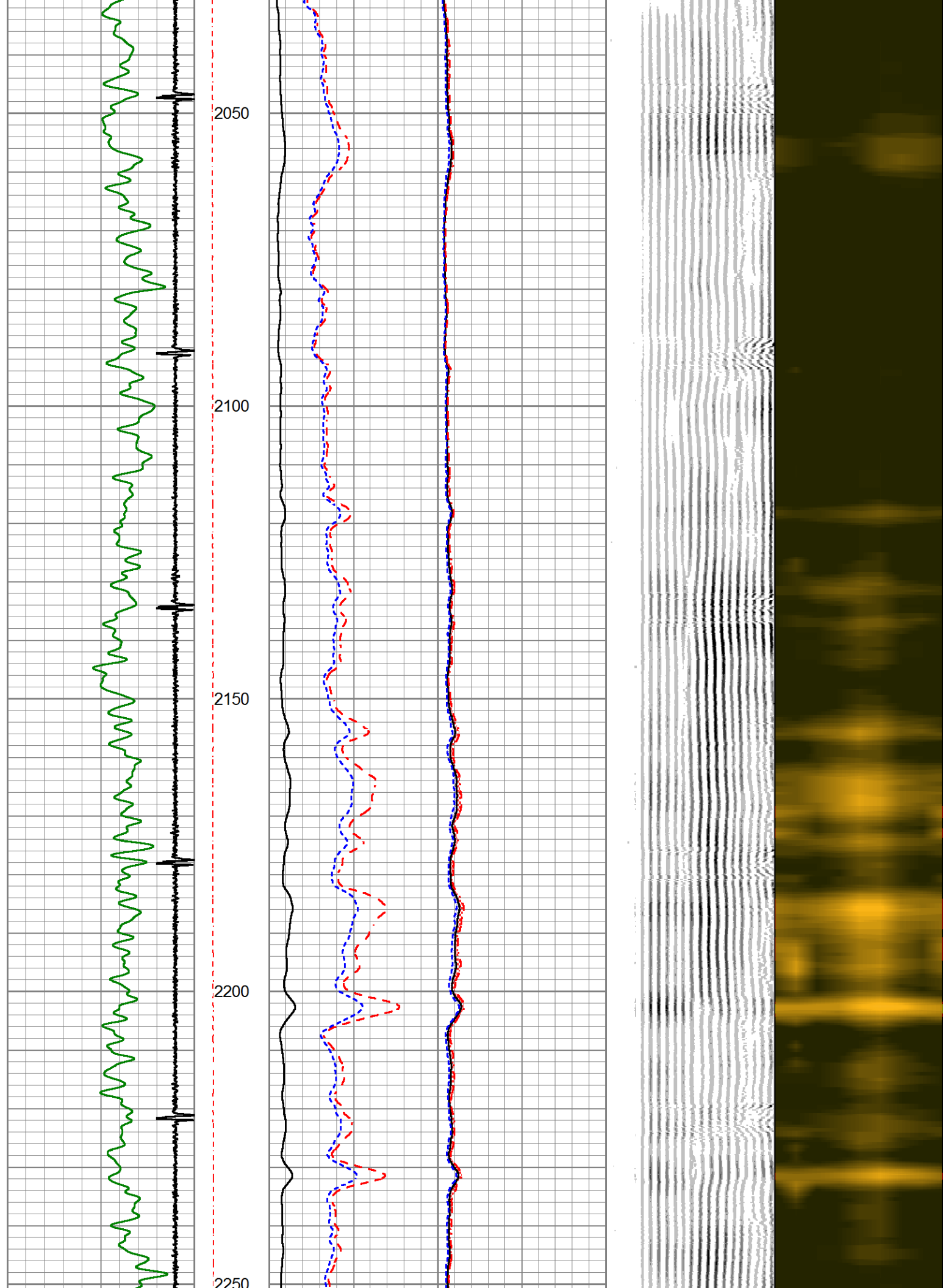


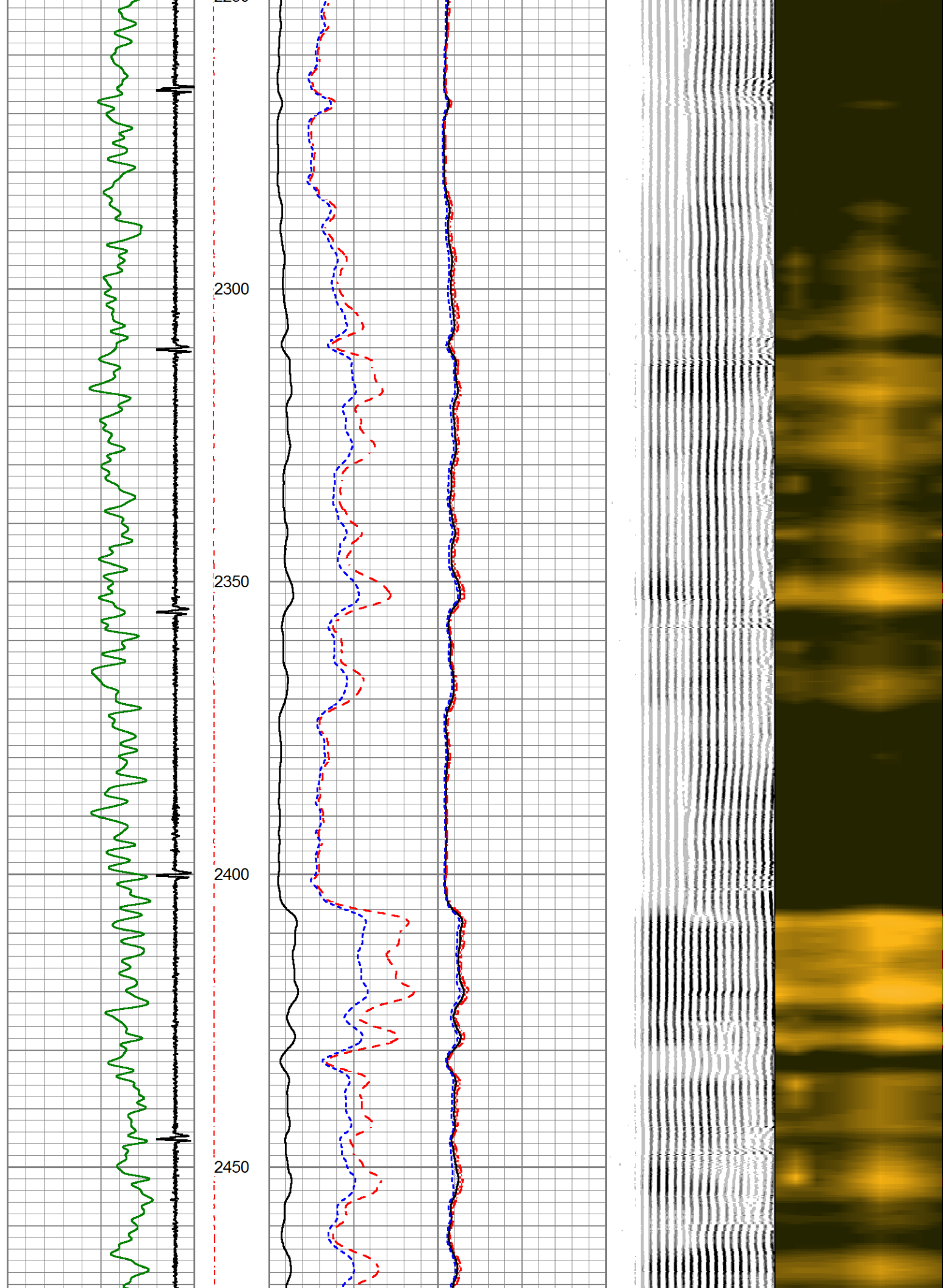


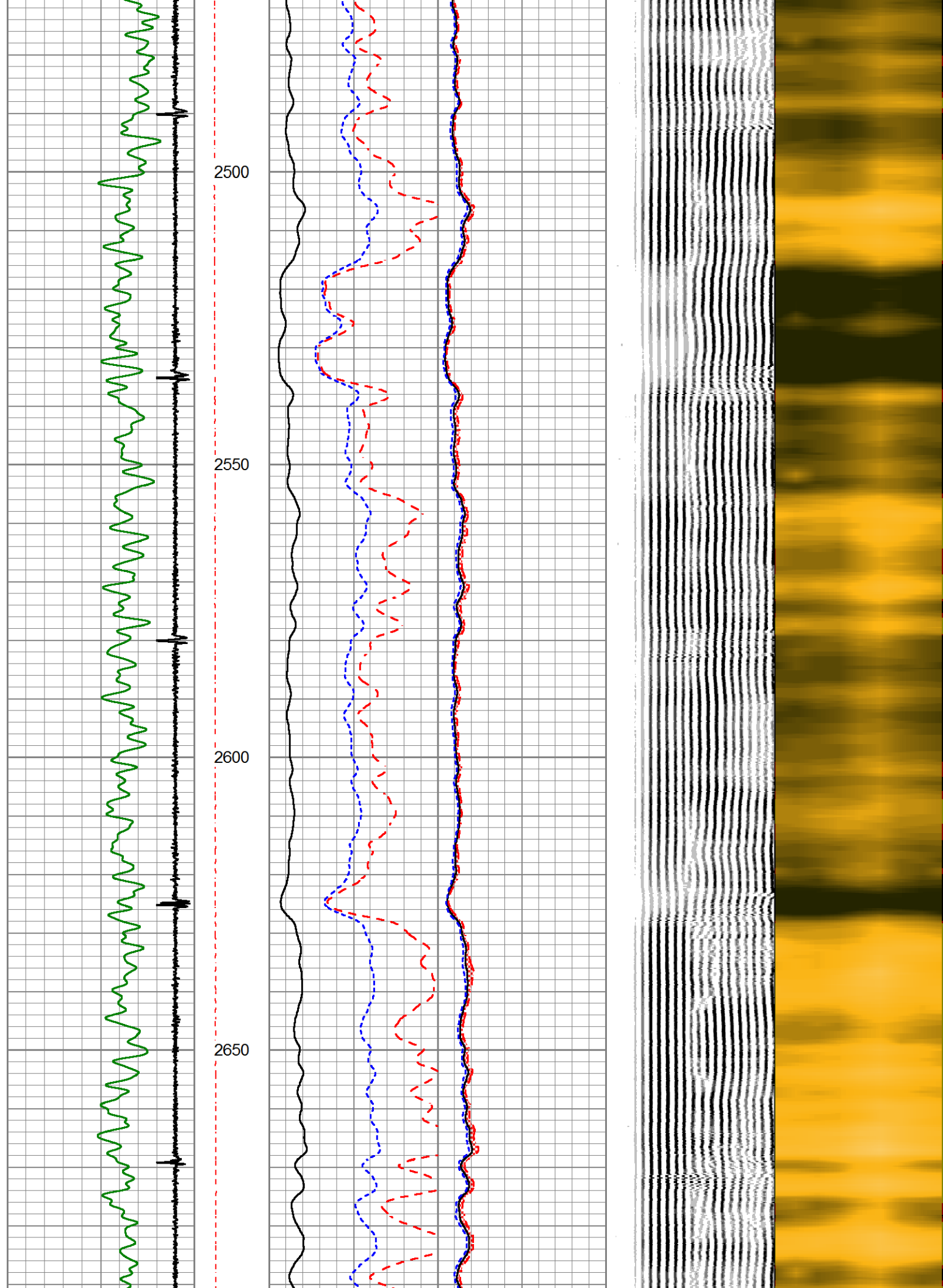


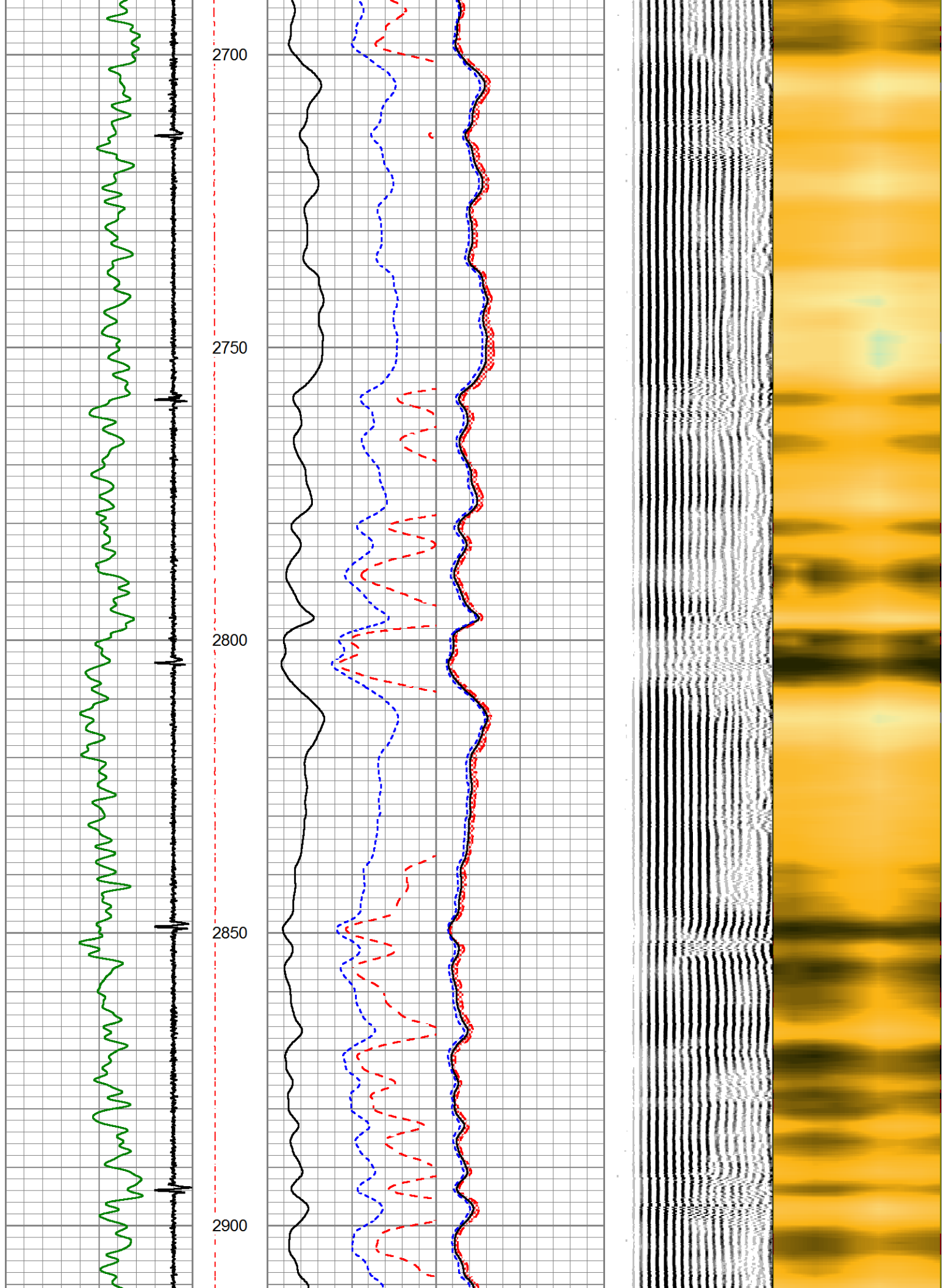


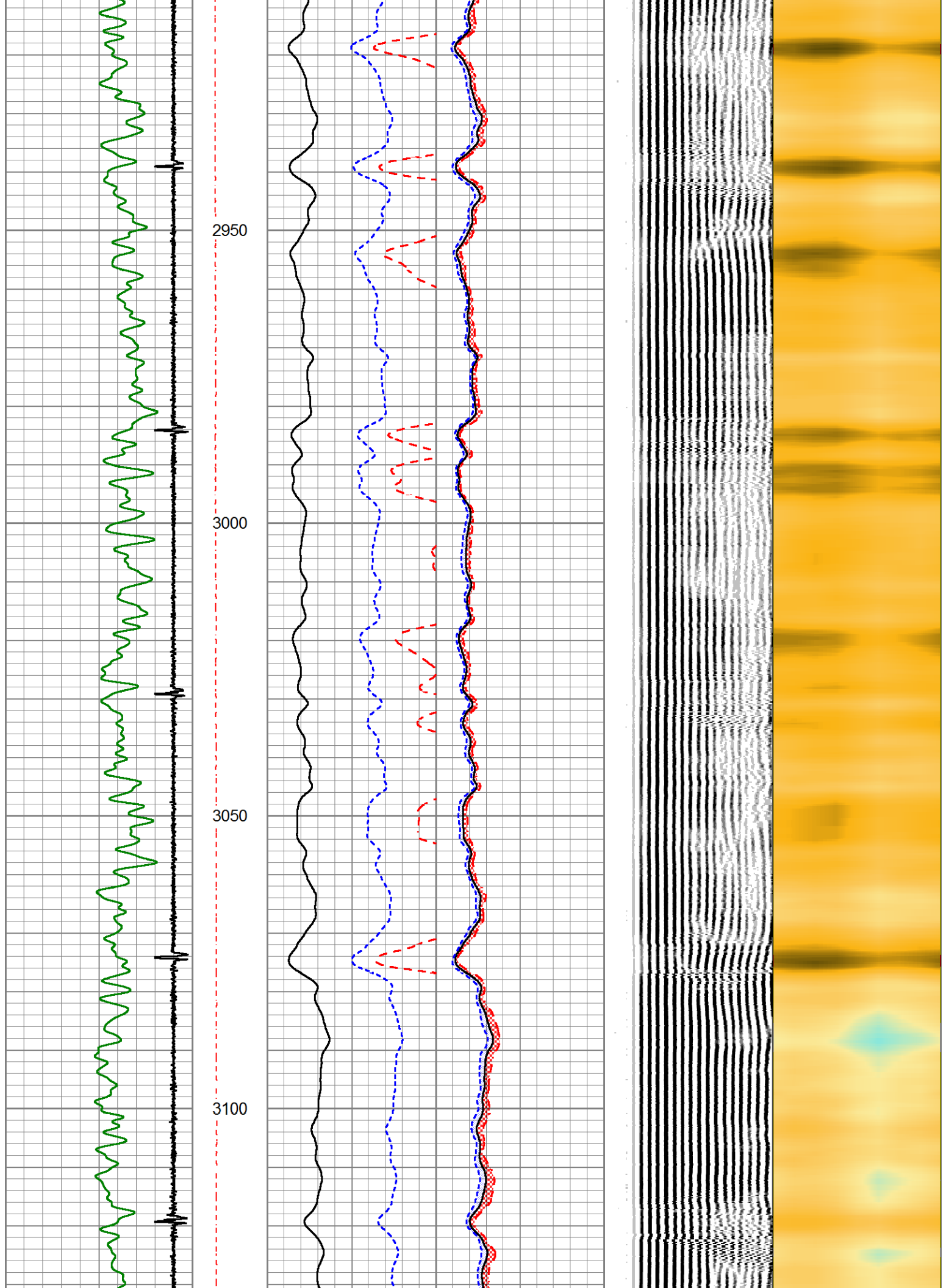


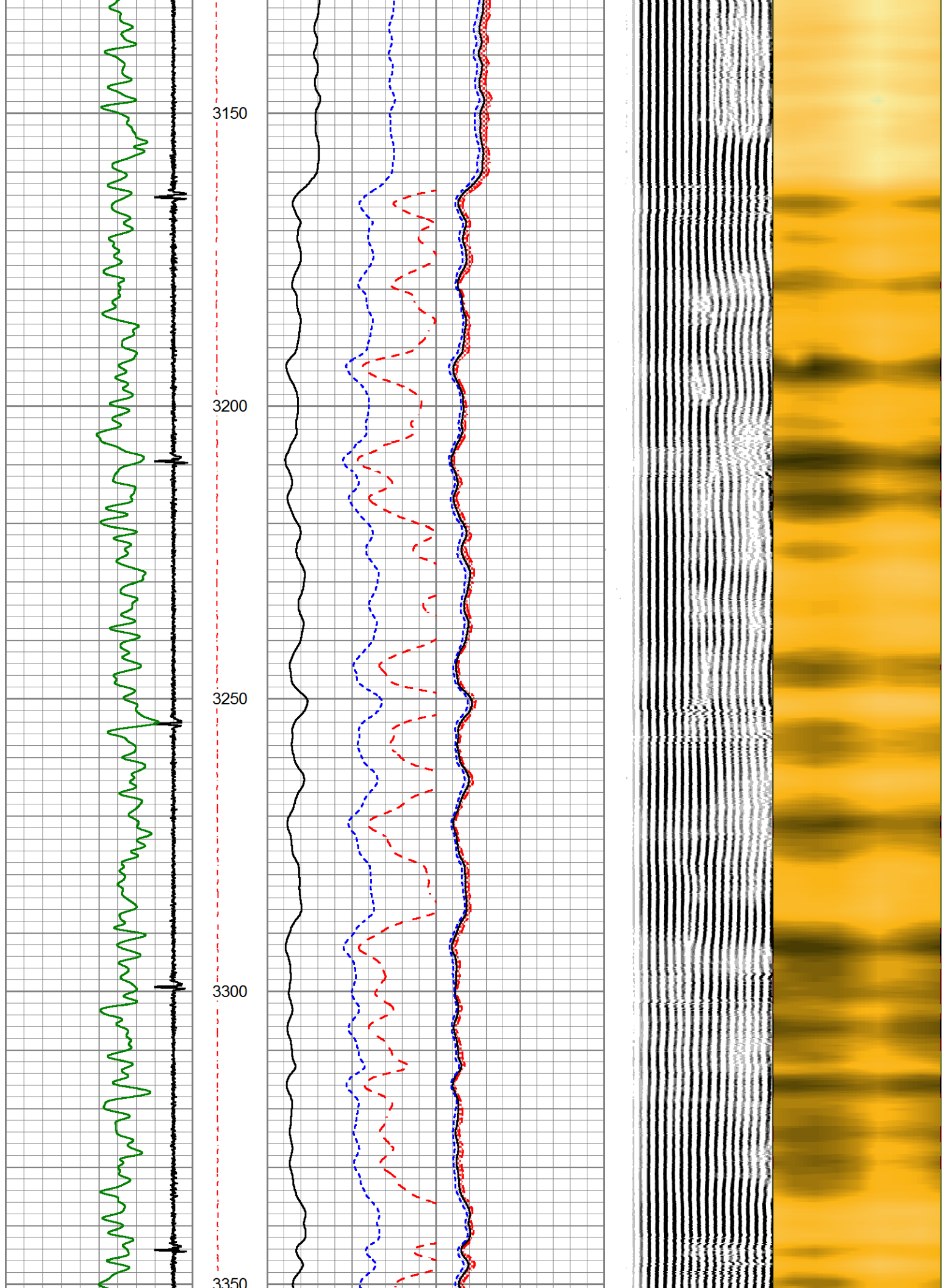


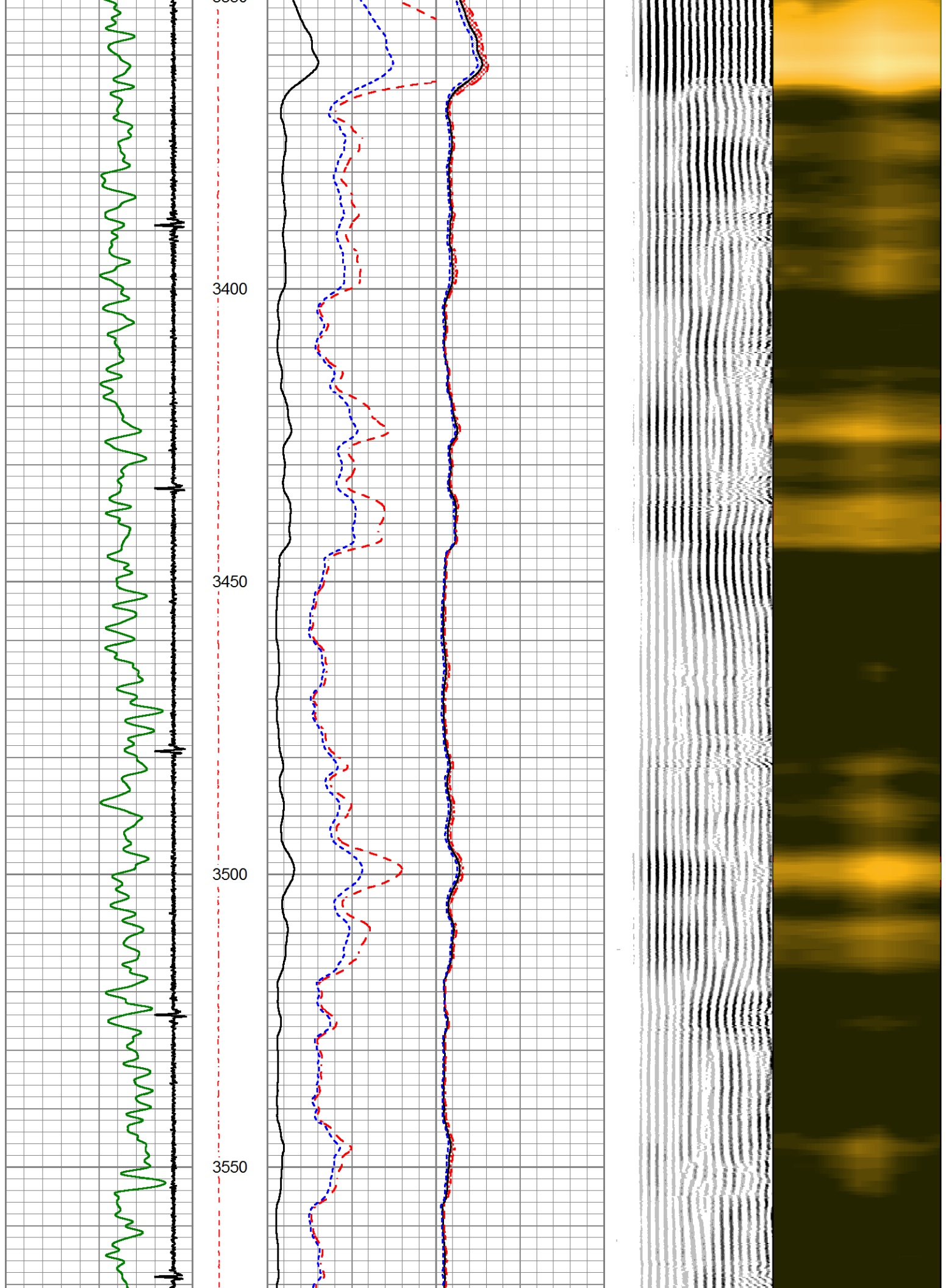


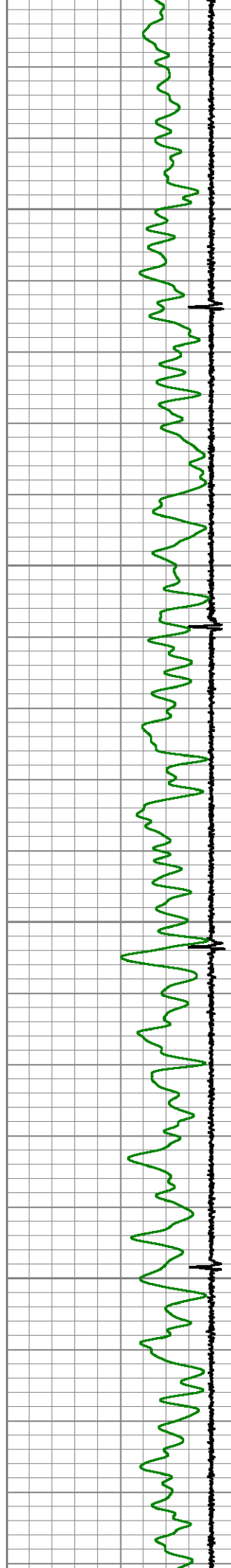










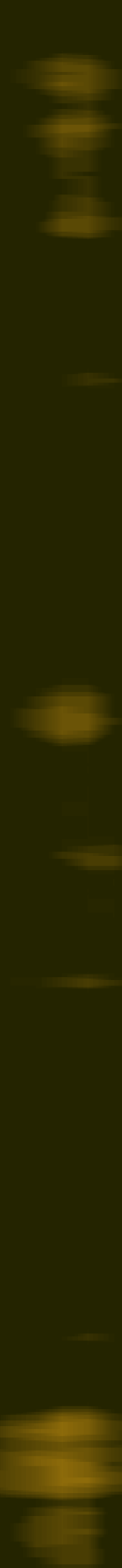
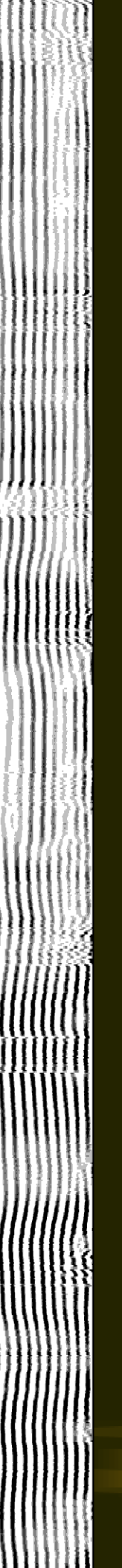
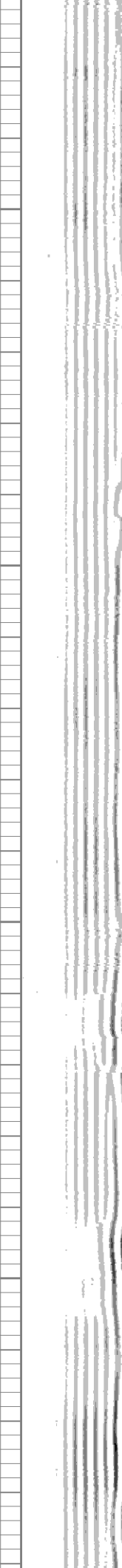
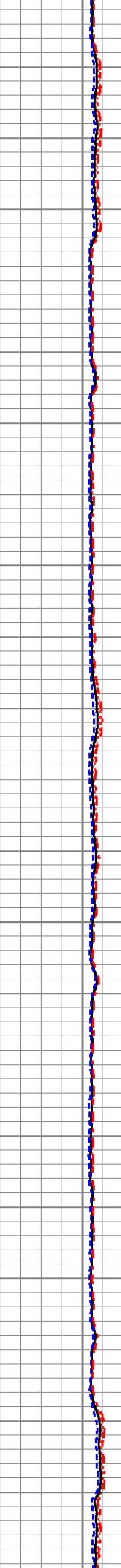
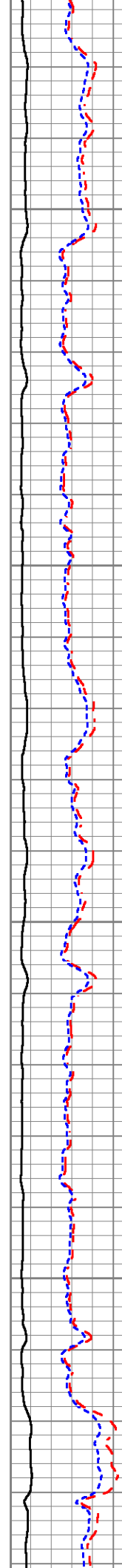


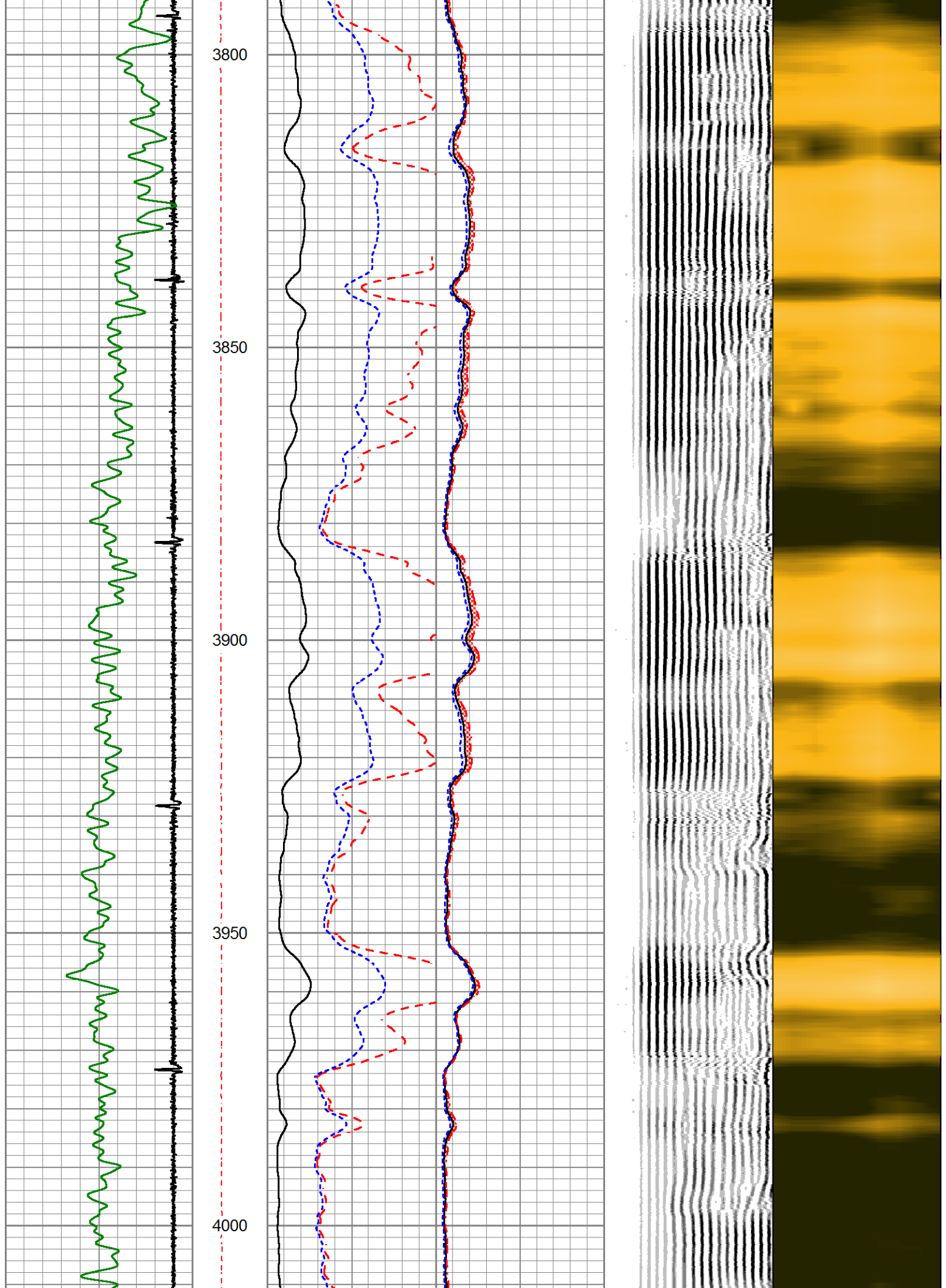
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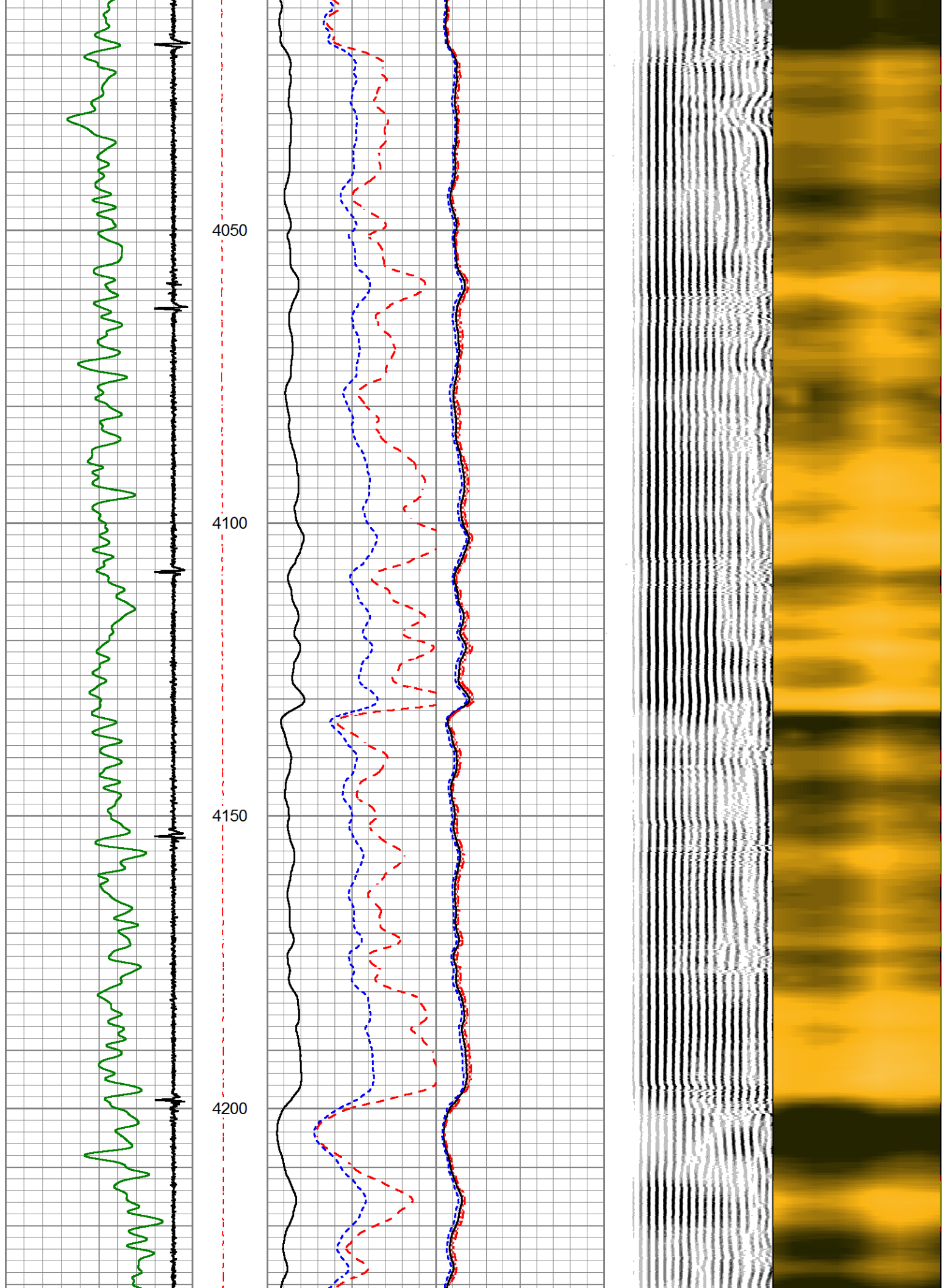
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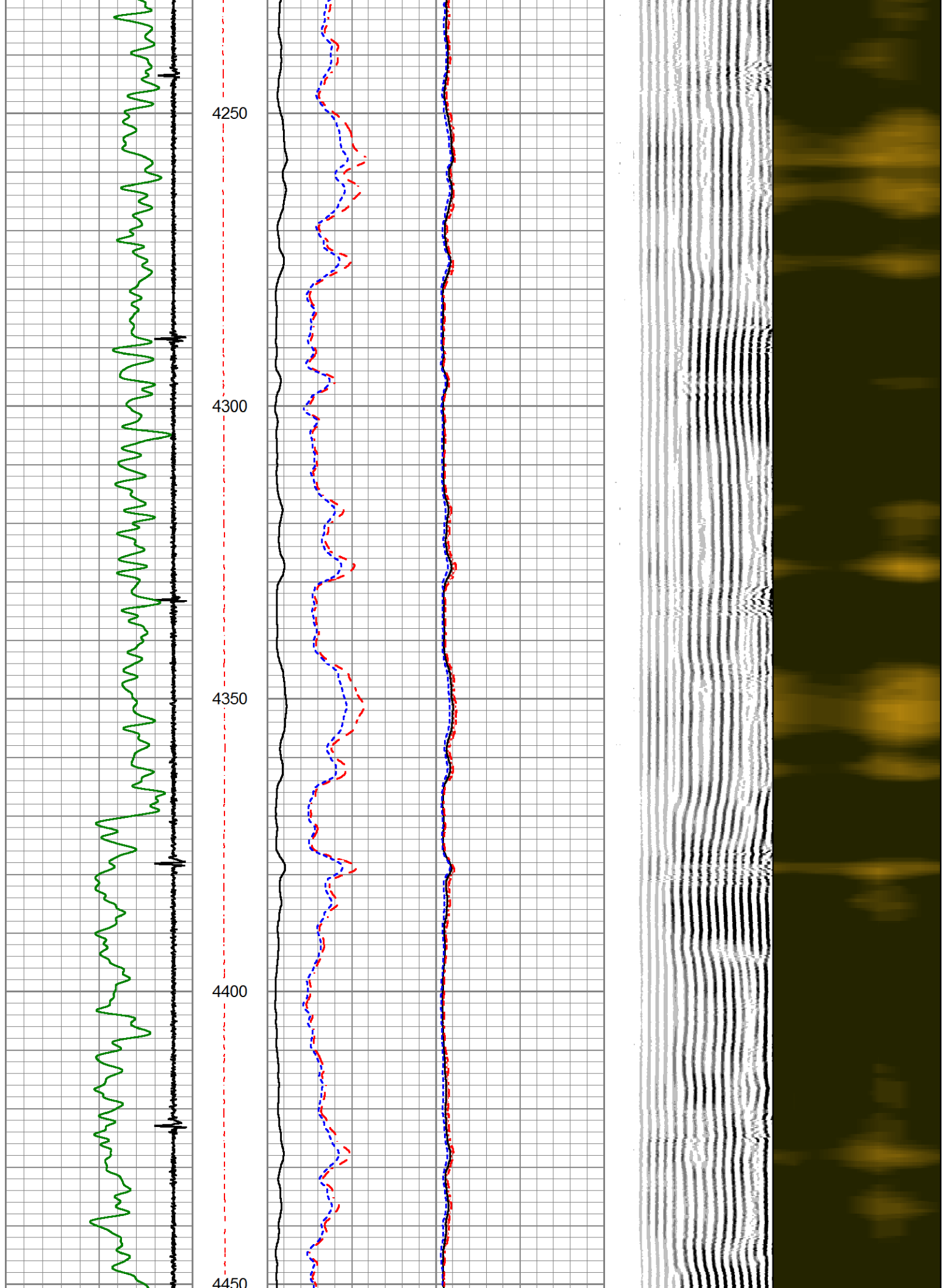
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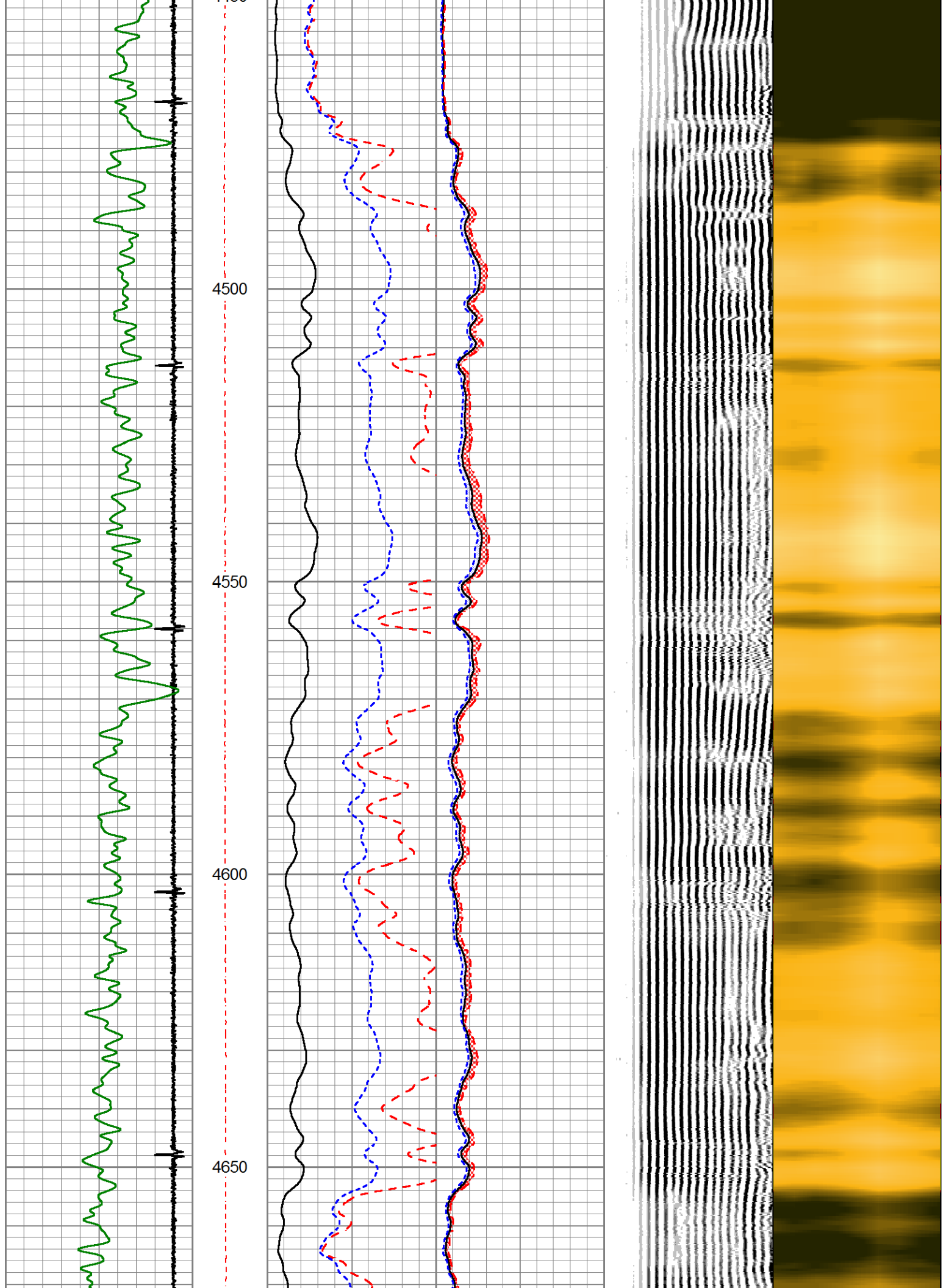
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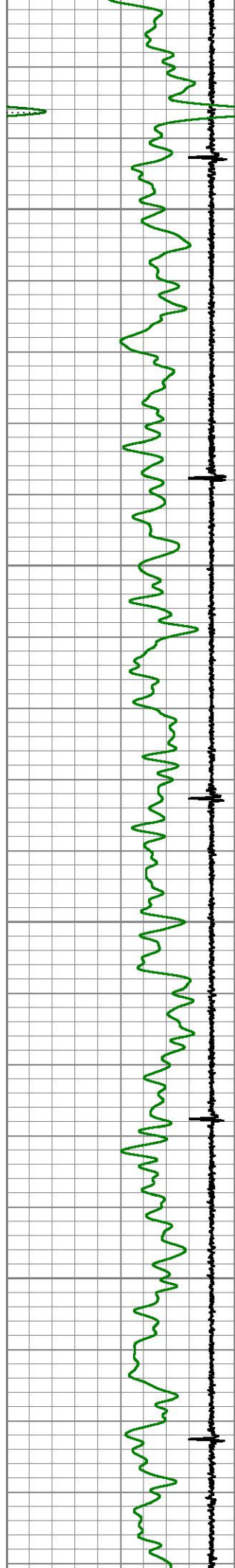










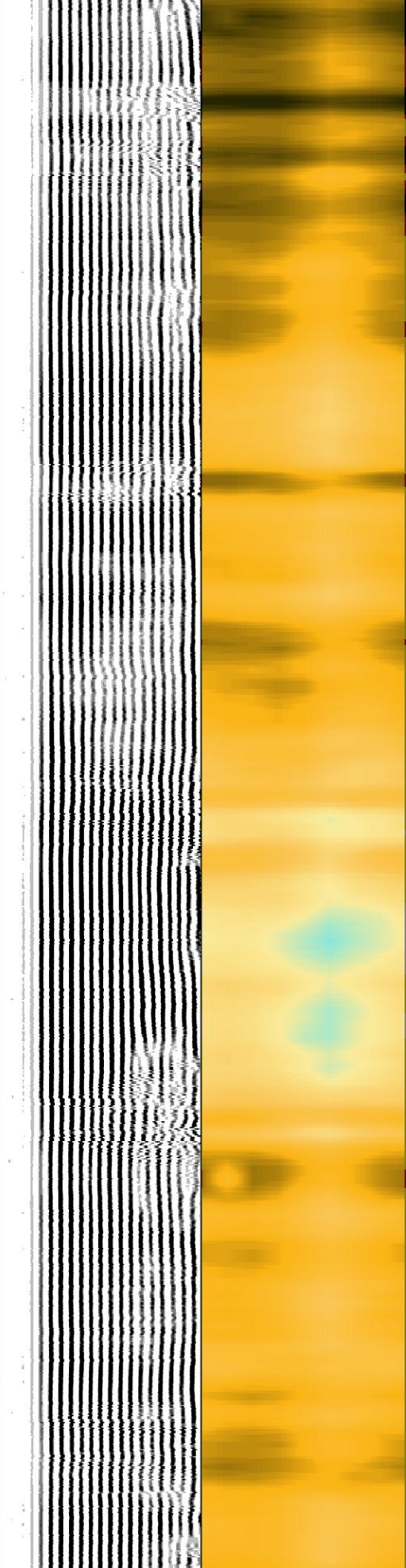
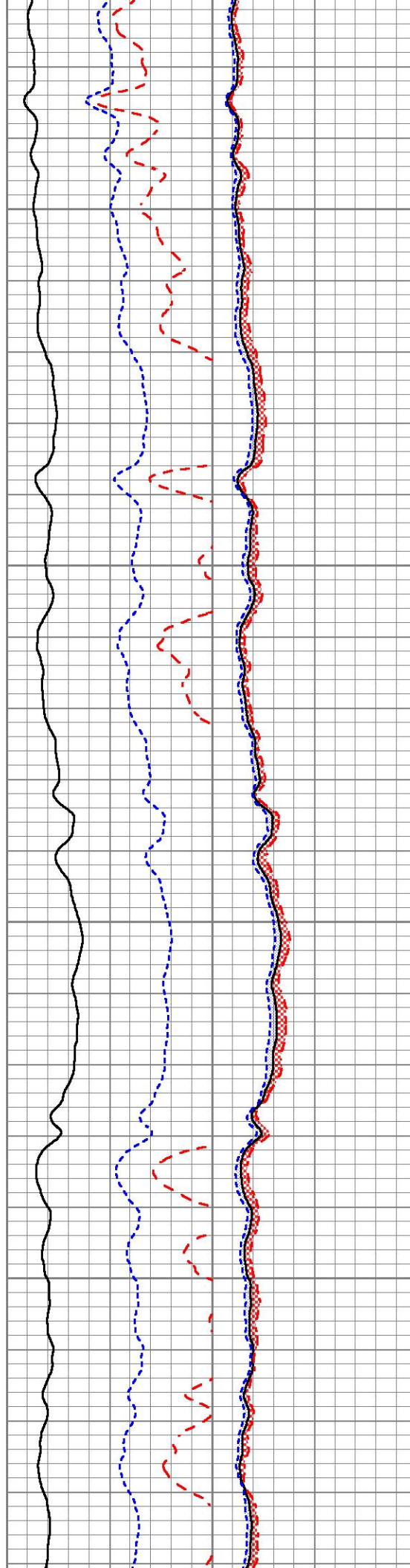


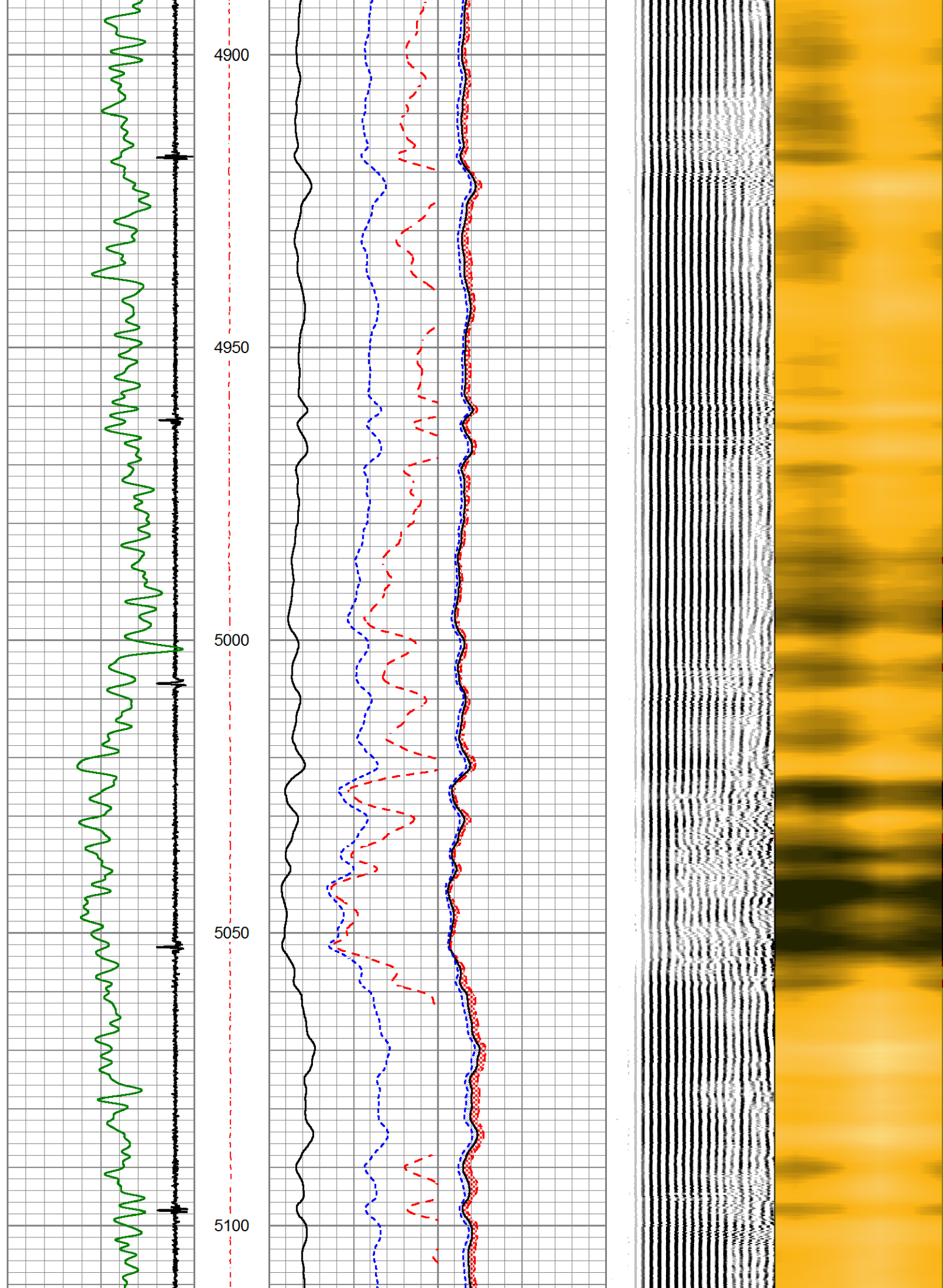
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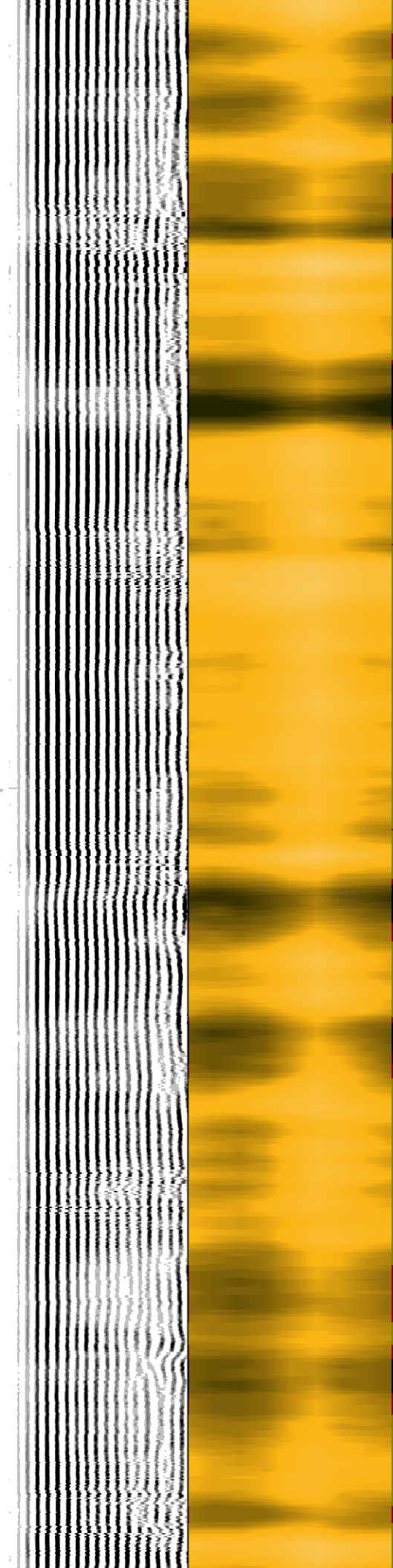
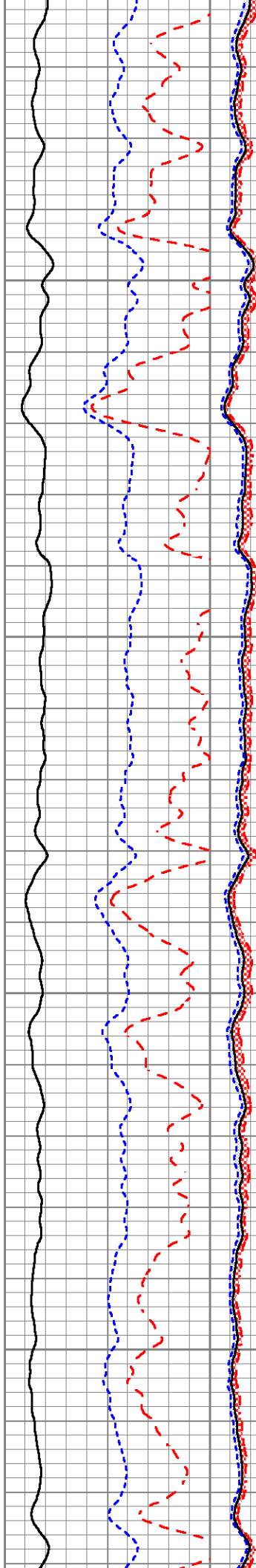
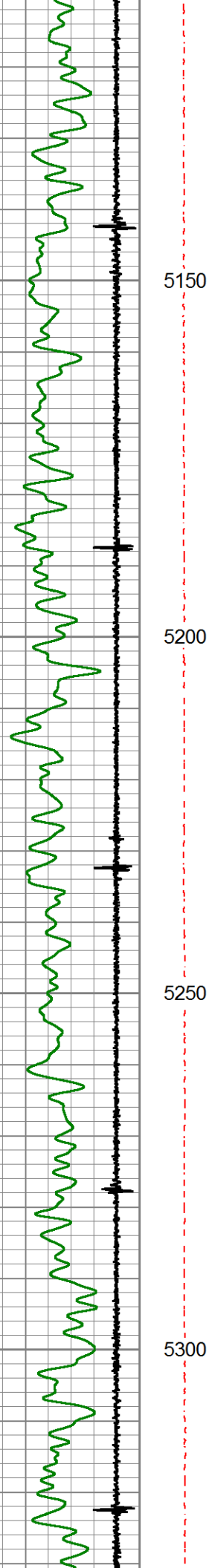
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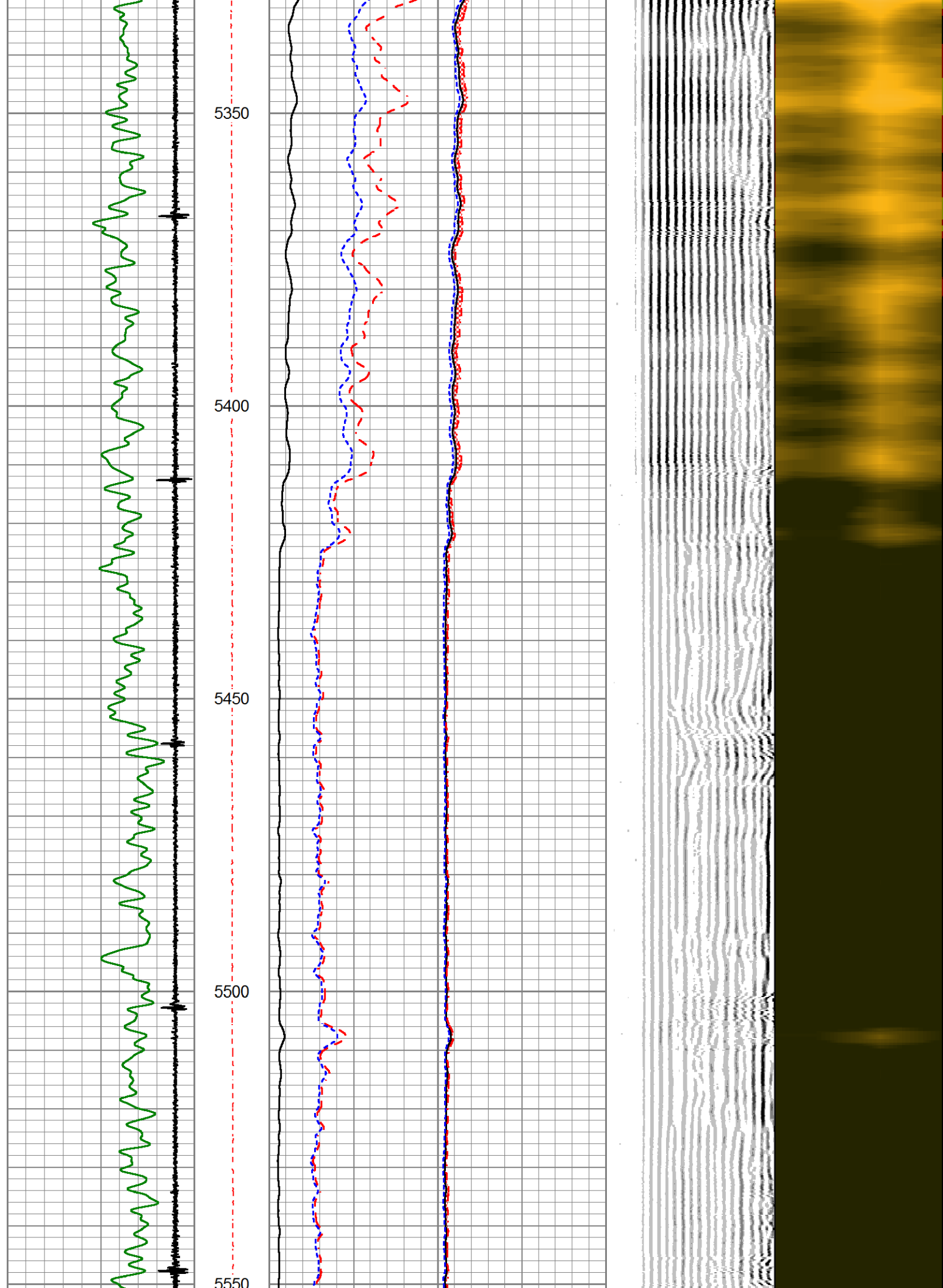
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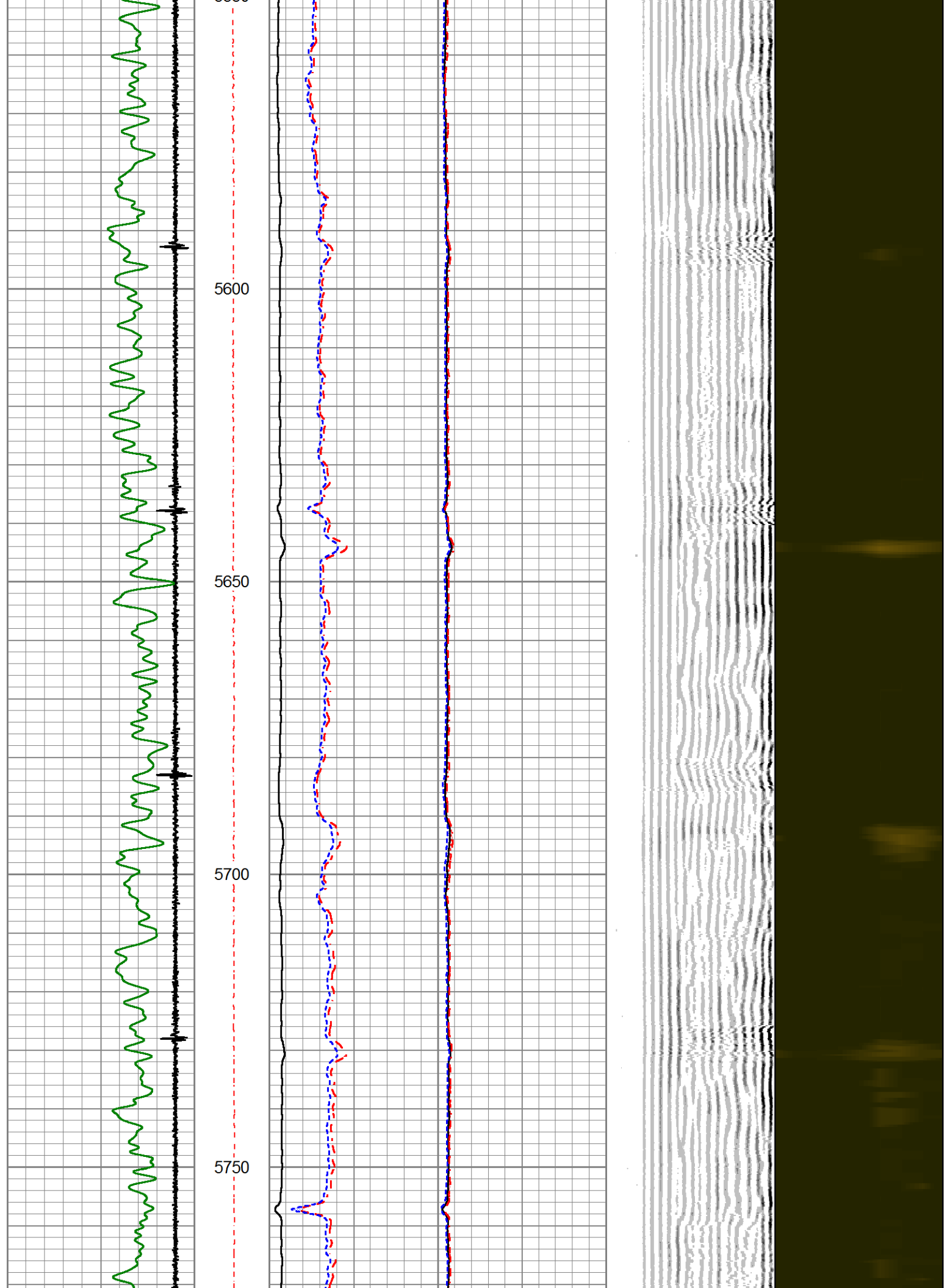
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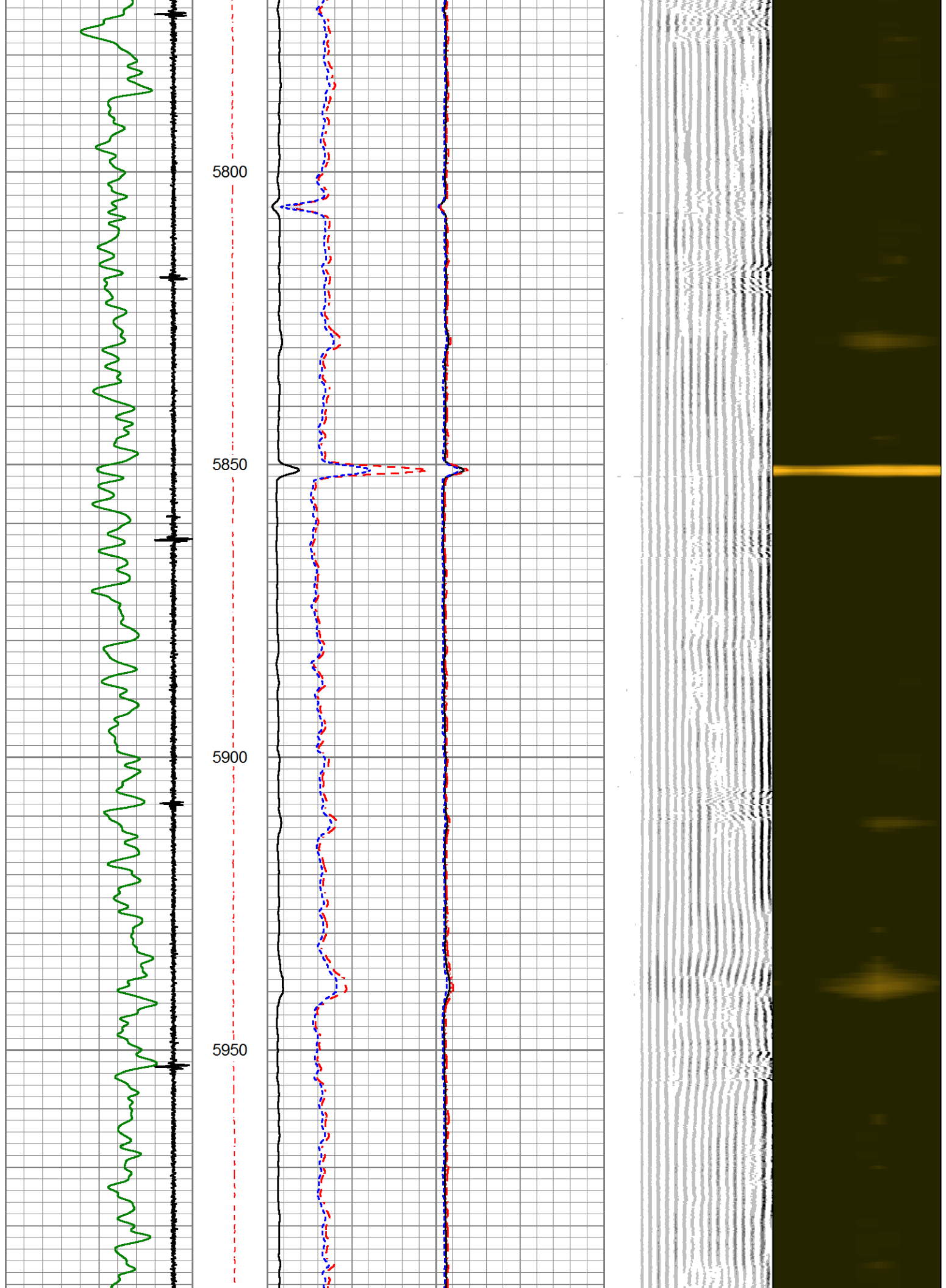


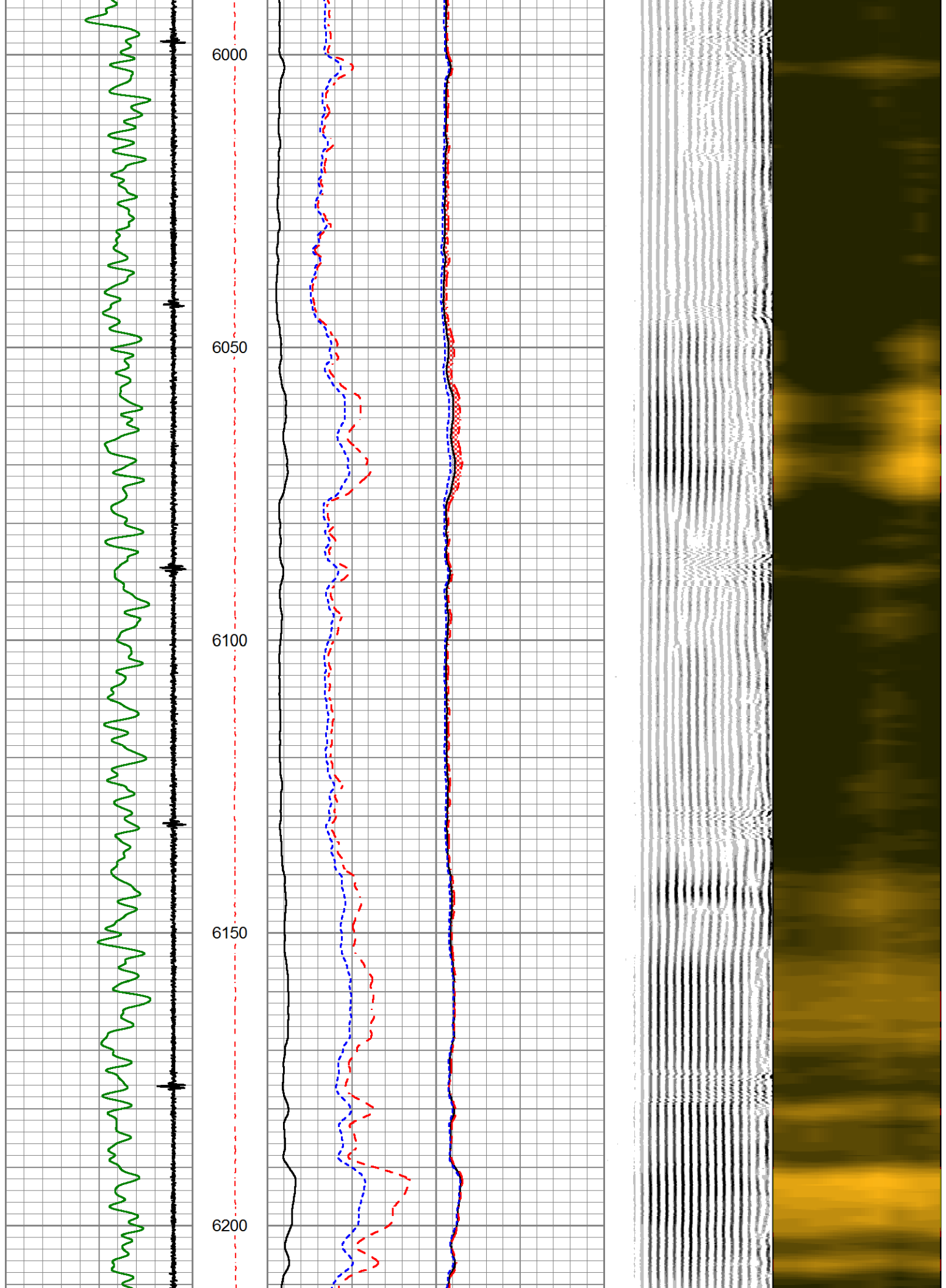


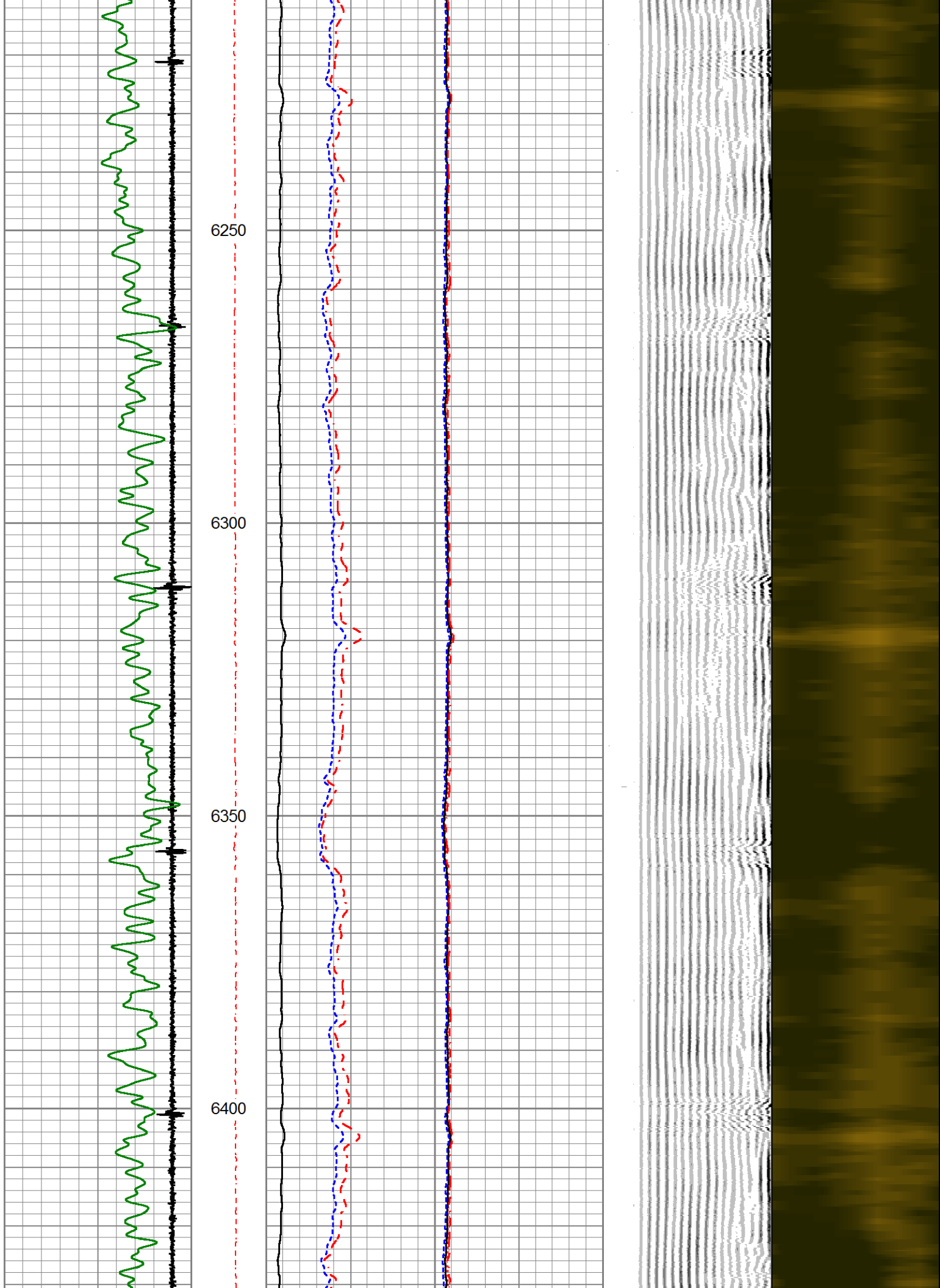


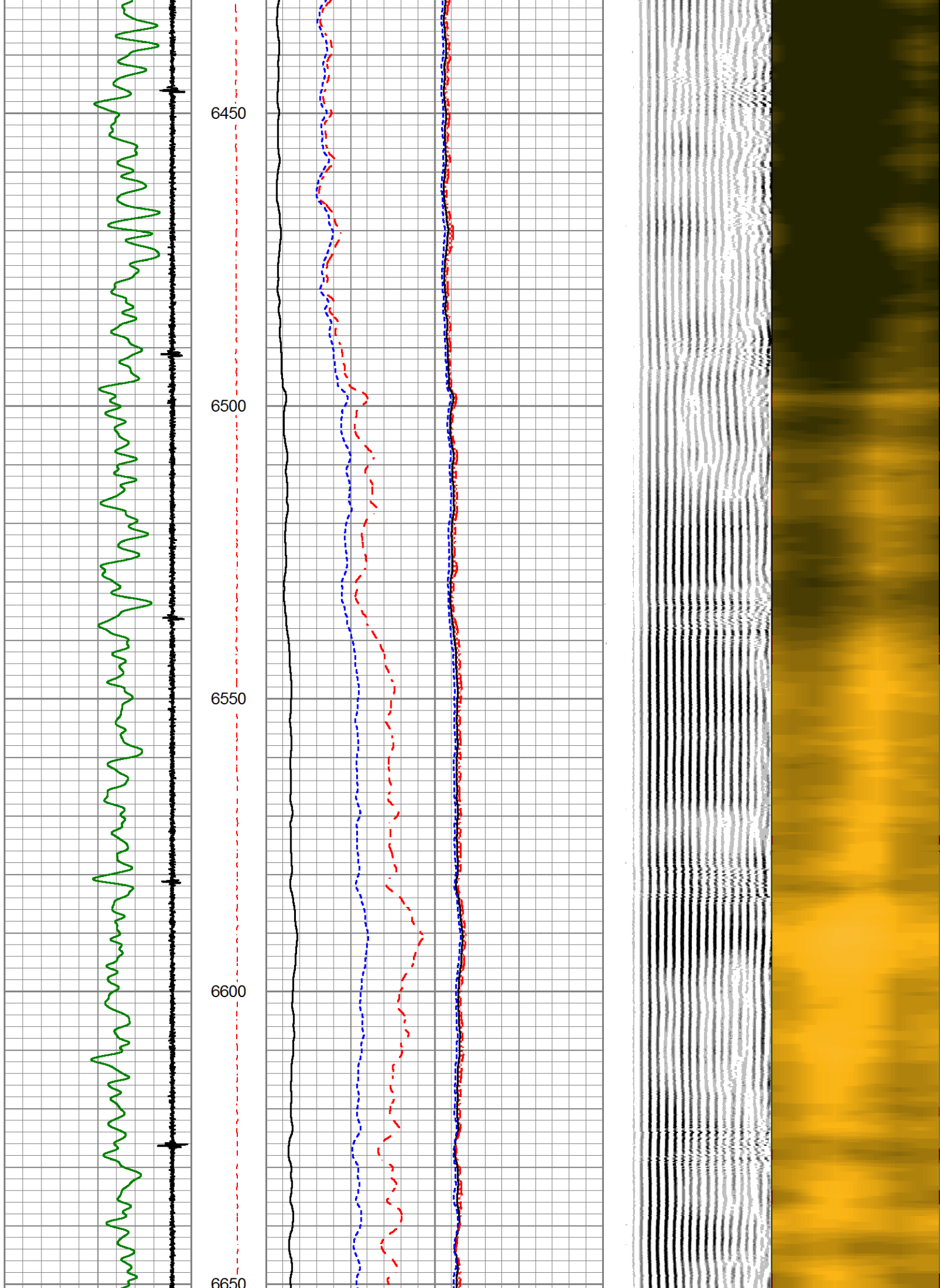


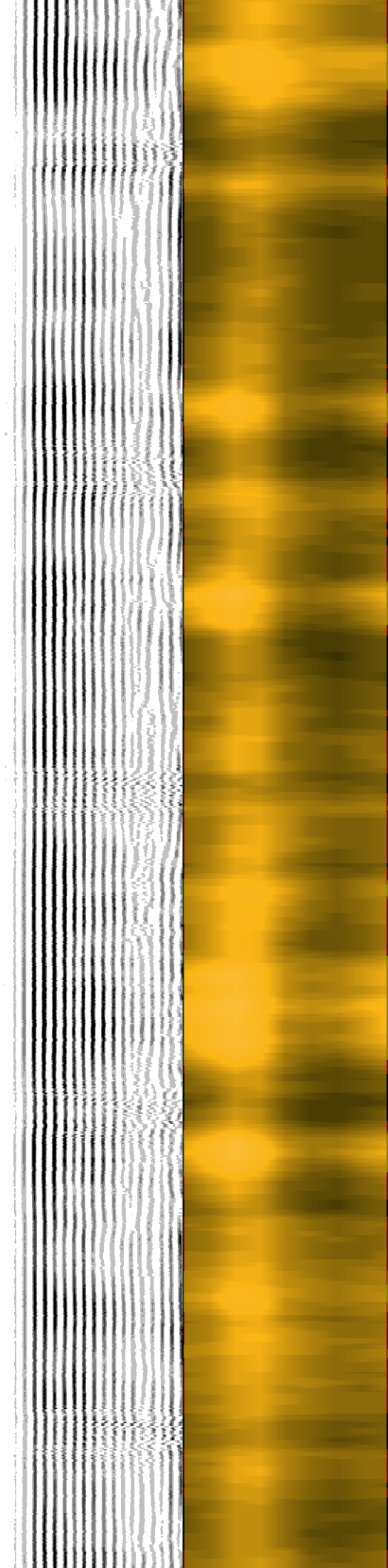
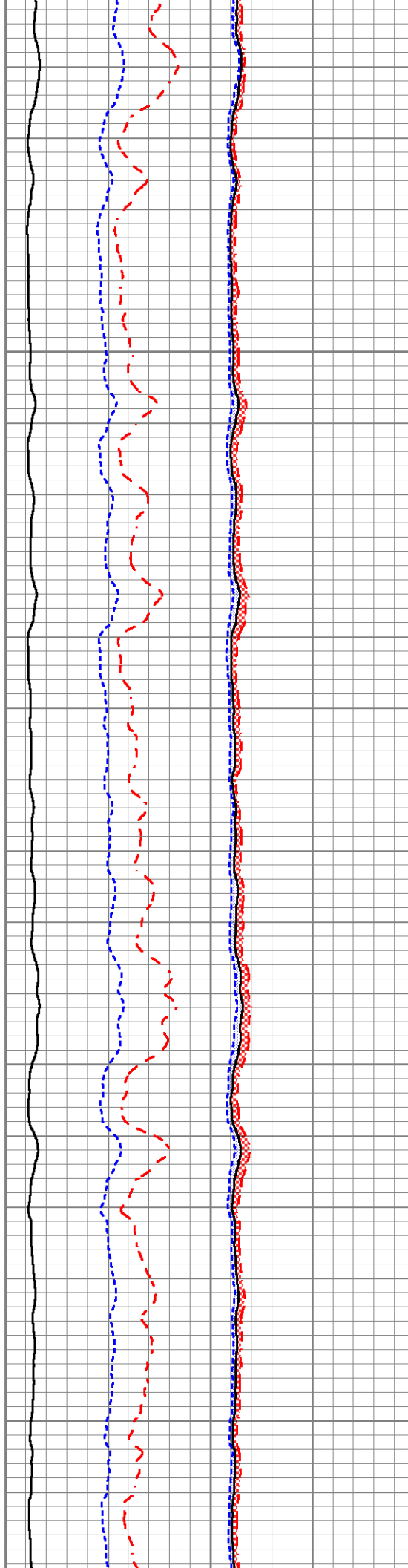
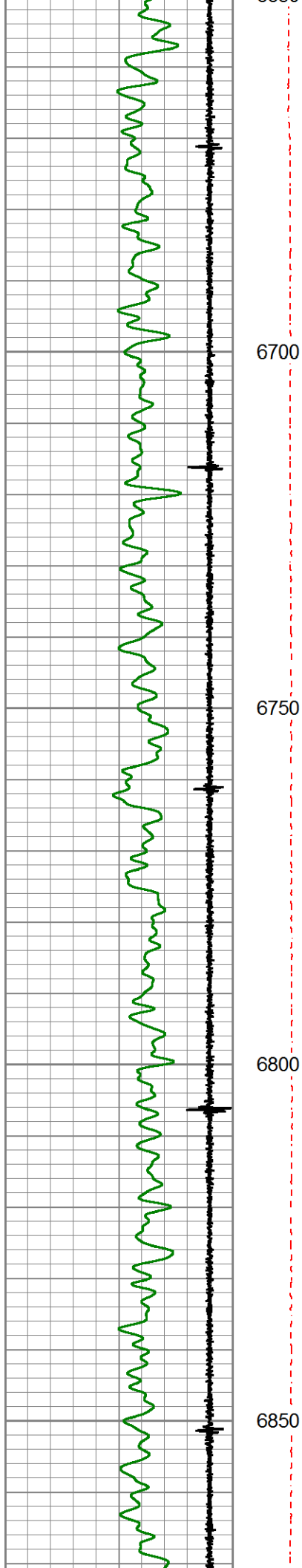


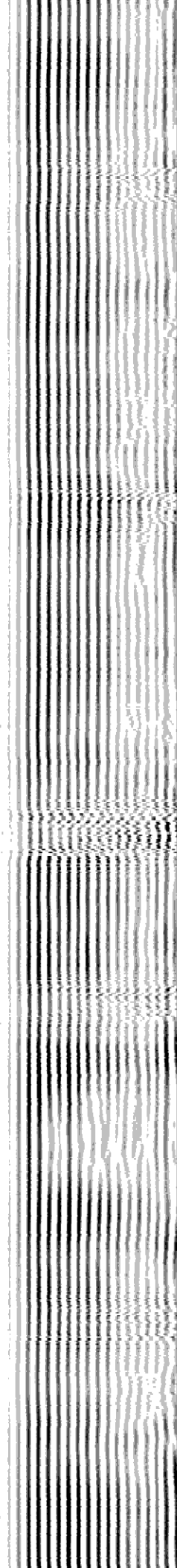
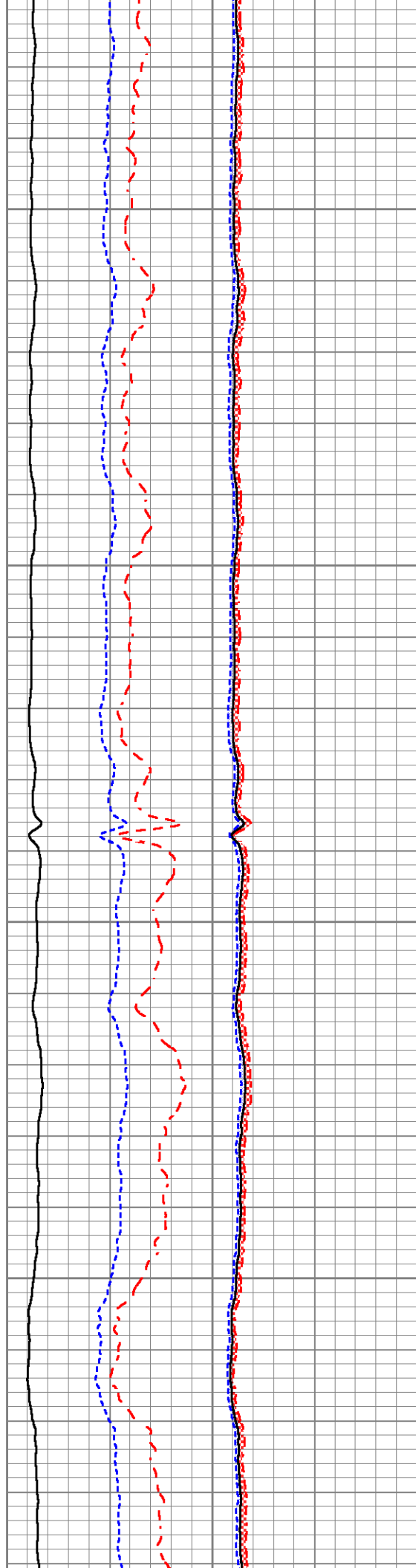
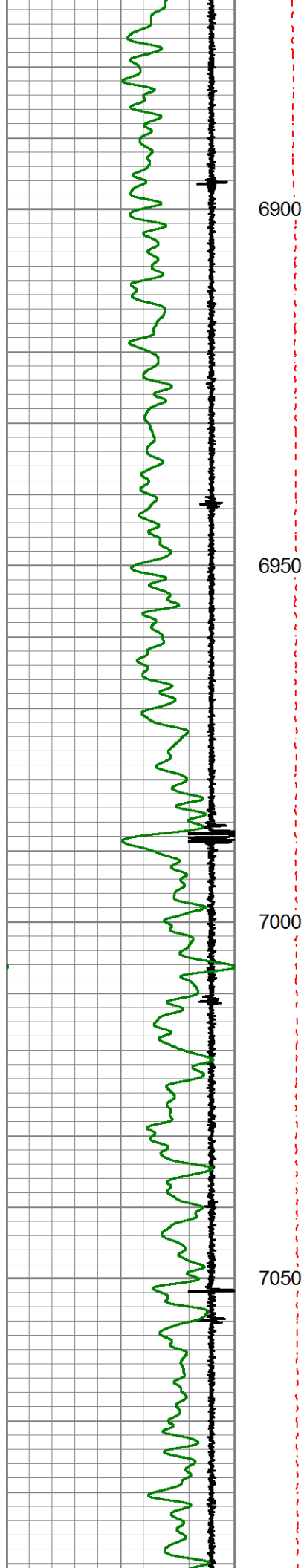


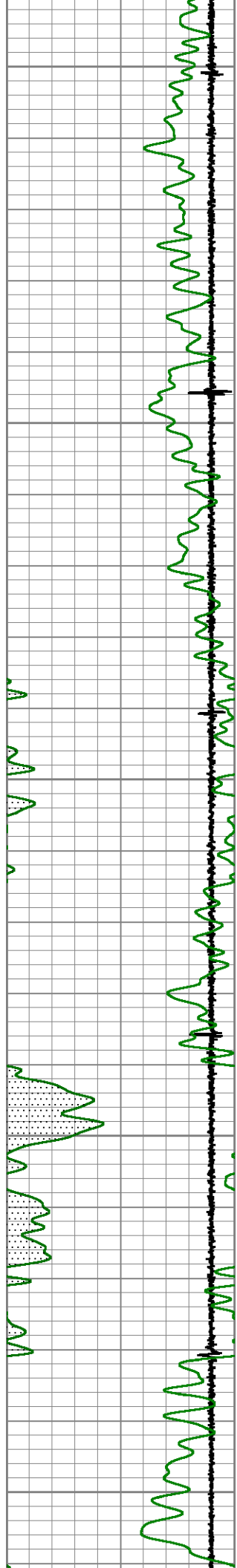




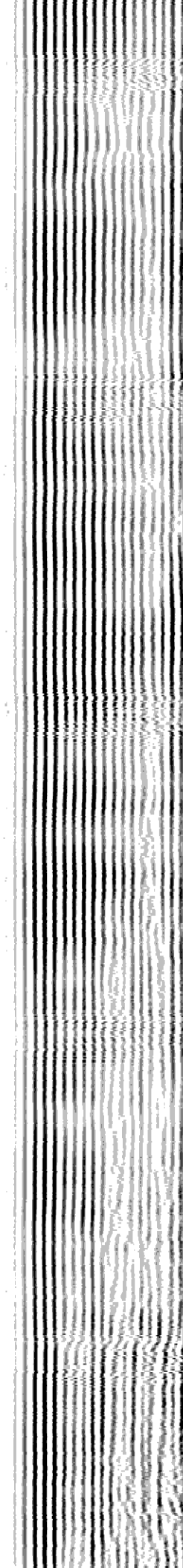
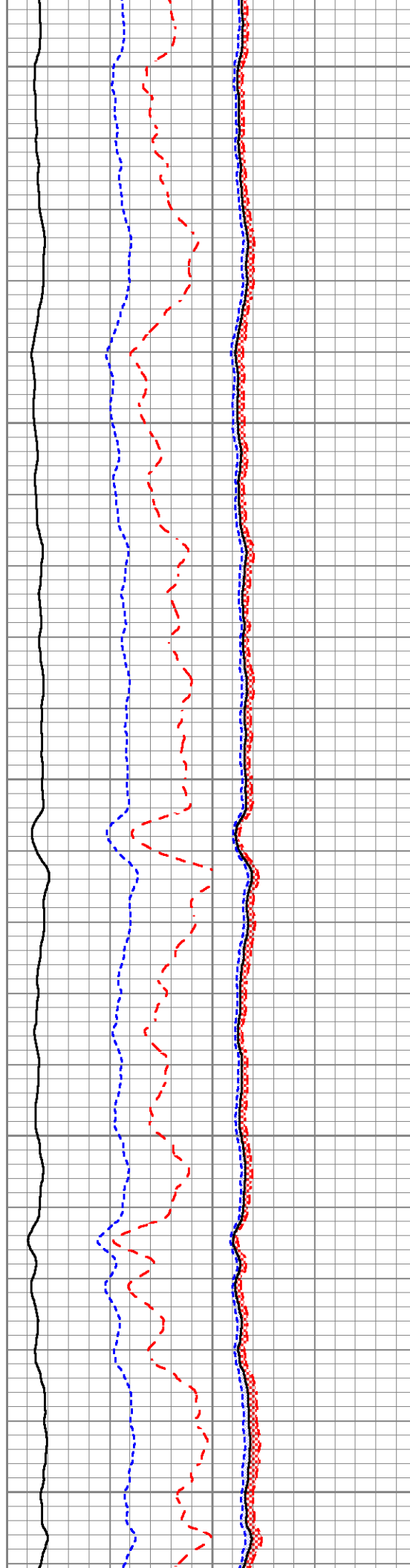


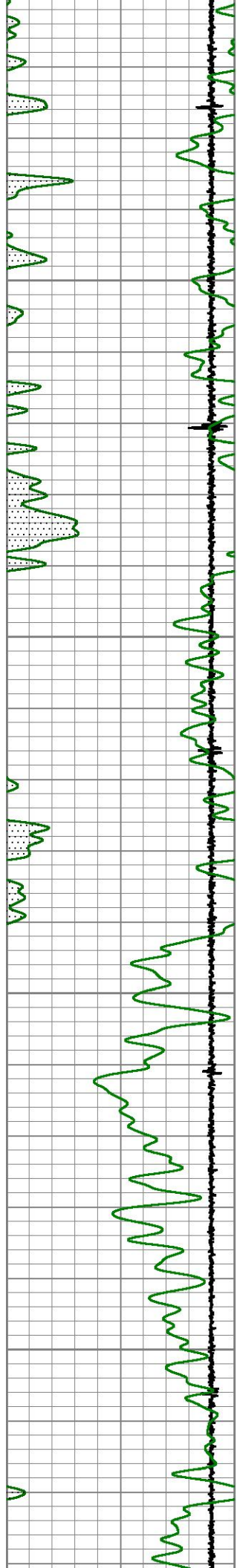






7100
7150
7200
7250
7300



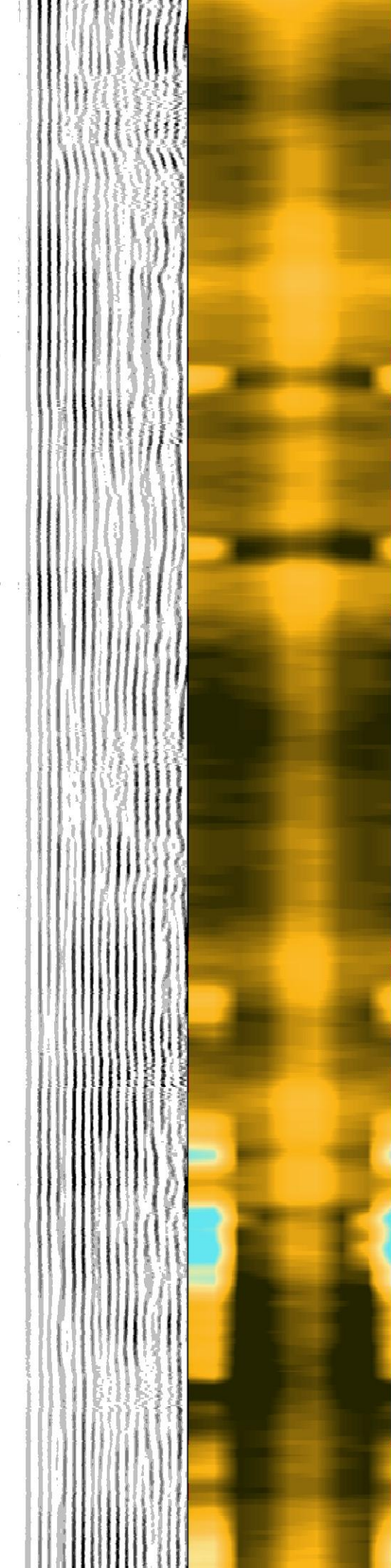
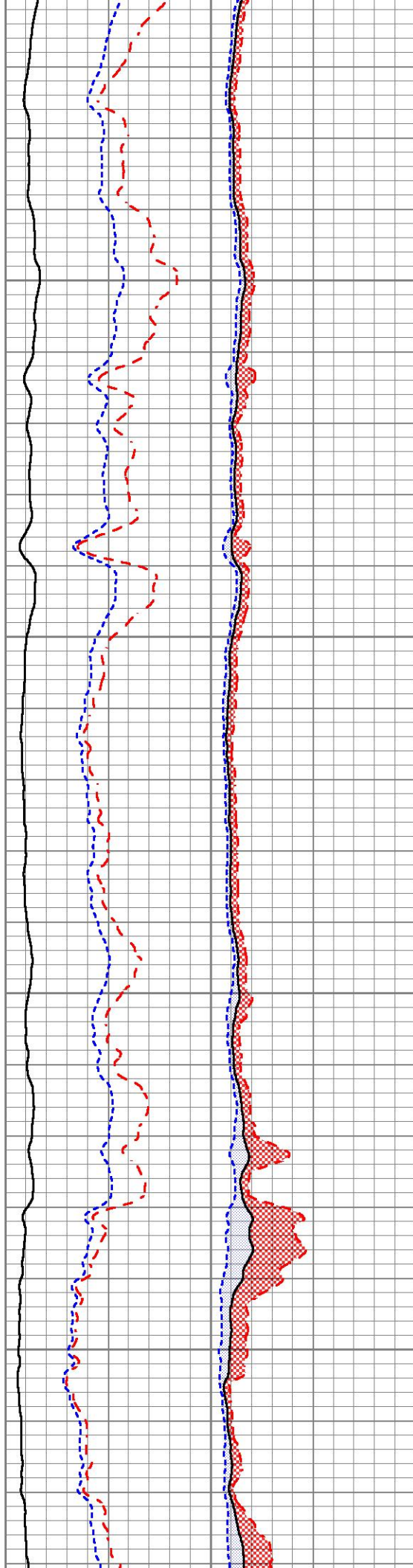


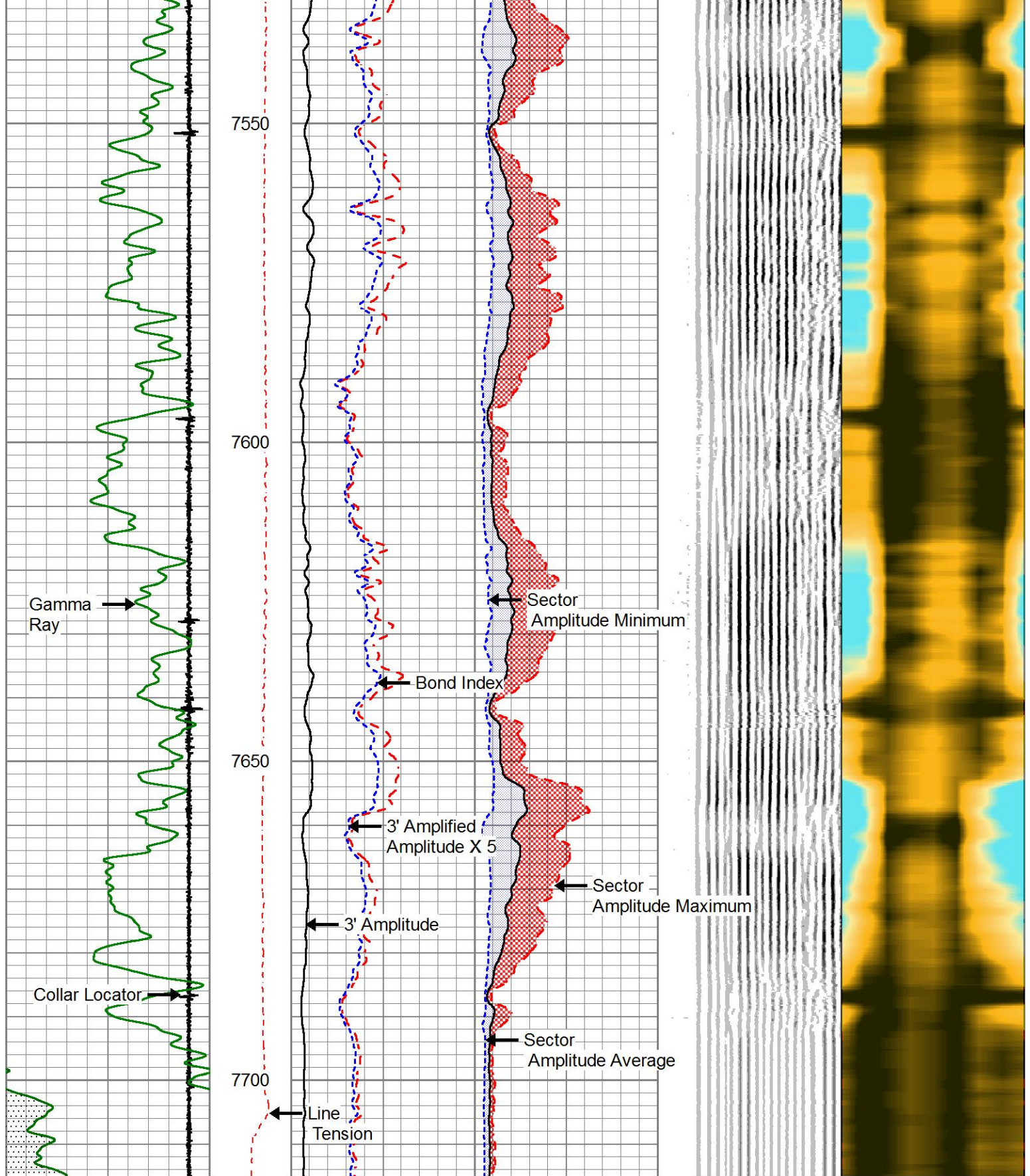
7350

7400

7450

7500





3' Travel Time	Line Tension	3' Amplitude (mV)	Sector Amplitude Average	200	VDL	1200	1	Sector Map	8
280 (usec)	0 (12000)	0 100	0 150				10		60
-9 Collar Locator		3' Amplified Amplitude X 5 (mV)	Sector Amplitude Maximum						
Gamma Ray		0 20	0 150						
0 (GAPI)		1 Bond Index	Sector Amplitude Minimum						
		0 0							

Amplitude Minimum
0 150

Calibration Report

Database File extraction_tc hiland c7 9 11.db
Dataset Pathname pass2.3
Dataset Creation Thu Jun 15 14:34:02 2017

Gamma Ray Calibration Report

Serial Number: Probe-275-GR-CCL-Dig
Tool Model: 275 Probe GR-CCL Dig
Performed: Thu Jun 15 09:36:37 2017

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.8000 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: 141166
Tool Model: 275 Probe w Temp New Mod

Calibration Casing Diameter: 4.500 in
Calibration Depth: 926.367 ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	0.561	1.000	72.000	126.657	1.000
CAL	0.000	0.666				
5'	-0.004	0.442	1.000	72.000	159.155	1.595
SUM						
S1	-0.002	0.622	0.000	100.000	160.261	0.350
S2	-0.001	0.649	0.000	100.000	153.877	0.179
S3	-0.001	0.666	0.000	100.000	150.060	0.134
S4	-0.001	0.687	0.000	100.000	145.305	0.115
S5	-0.001	0.680	0.000	100.000	146.752	0.163
S6	-0.002	0.642	0.000	100.000	155.271	0.378
S7	-0.002	0.638	0.000	100.000	156.086	0.365
S8	-0.002	0.611	0.000	100.000	163.152	0.364

Temperature Calibration Report

Serial Number: 141166
Tool Model: 275 Probe w Temp New Mod
Performed: Thu Oct 27 07:20:08 2016

	Reference	Reading
Low Reference:	35.00 degF	0.25 degF
High Reference:	210.00 degF	1.31 degF

Gain: 0.76
Offset: 6.00
Delta Spacing 1

Company	EXTRACTION OIL AND GAS		
Well	TC HILAND KNOLLS C7-9-11		
Field	WATTENBERG		
County	WELD	State	CO

