



# RADIAL SECTOR BOND LOG WITH GAMMA RAY

Pioneer Energy Services

Company		CARRIZO	
Well		TIMBRO RANCH 1-34-10-59	
Field		WATTENBERG	
County		WELD	
State		COLORADO	
Location:		API #: 05-123-40527-0000	
Permanent Datum		SEC 3 TWP 9N RGE 59W	
Log Measured From		GROUND LEVEL Elevation 5056'	
Drilling Measured From		KELLY BUSHING KB = 17'	
Other Services		NONE	
Date		FEBRUARY 21, 2015	
Run Number		ONE	
Depth Driller		N/A	
Depth Logger		6200'	
Bottom Logged Interval		6200'	
Top Log Interval		SURFACE	
Open Hole Size		N/A	
Type Fluid		FSW	
Density / Viscosity		N/A	
Max. Recorded Temp.		255 DegF	
Estimated Cement Top		750'	
Time Well Ready		08:00	
Time Logger on Bottom		9:15	
Equipment Number		P-133	
Location		FORT MORGAN	
Recorded By		L. MAVROS	
Witnessed By		MR. KIRK WILLIAMS	
Run Number		Borehole Record	
Bit		From To Size Weight From To	
Casing Record		Size Wgt/Ft Top Bottom	
Surface String			
Prot. String			
Production String		7" 23# SURFACE N/A	
Liner		4.5" 11.6# 5680' TD	

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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 OTHER LOG FOR CORRELATION  
WELL INFORMATION PROVIDED BY  
COMPANY REPRESENTATIVE AND  
LIMITED ON DATA OFFERED

THANK YOU FOR USING PIONEER ENERGY SERVICES

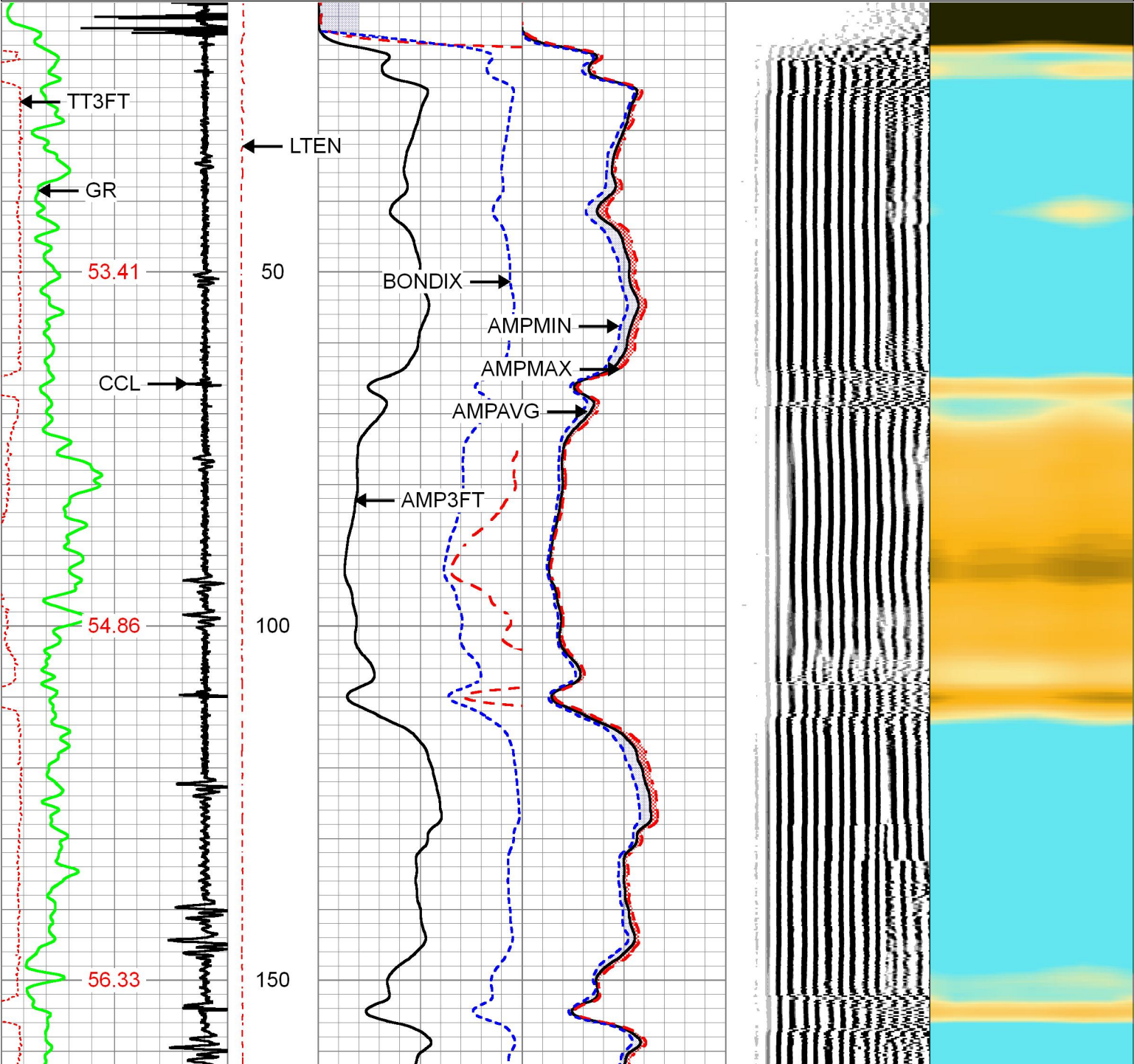
Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			CHD-Titan 1 7/16" Titan Cable Head	1.00	1.44	2.00

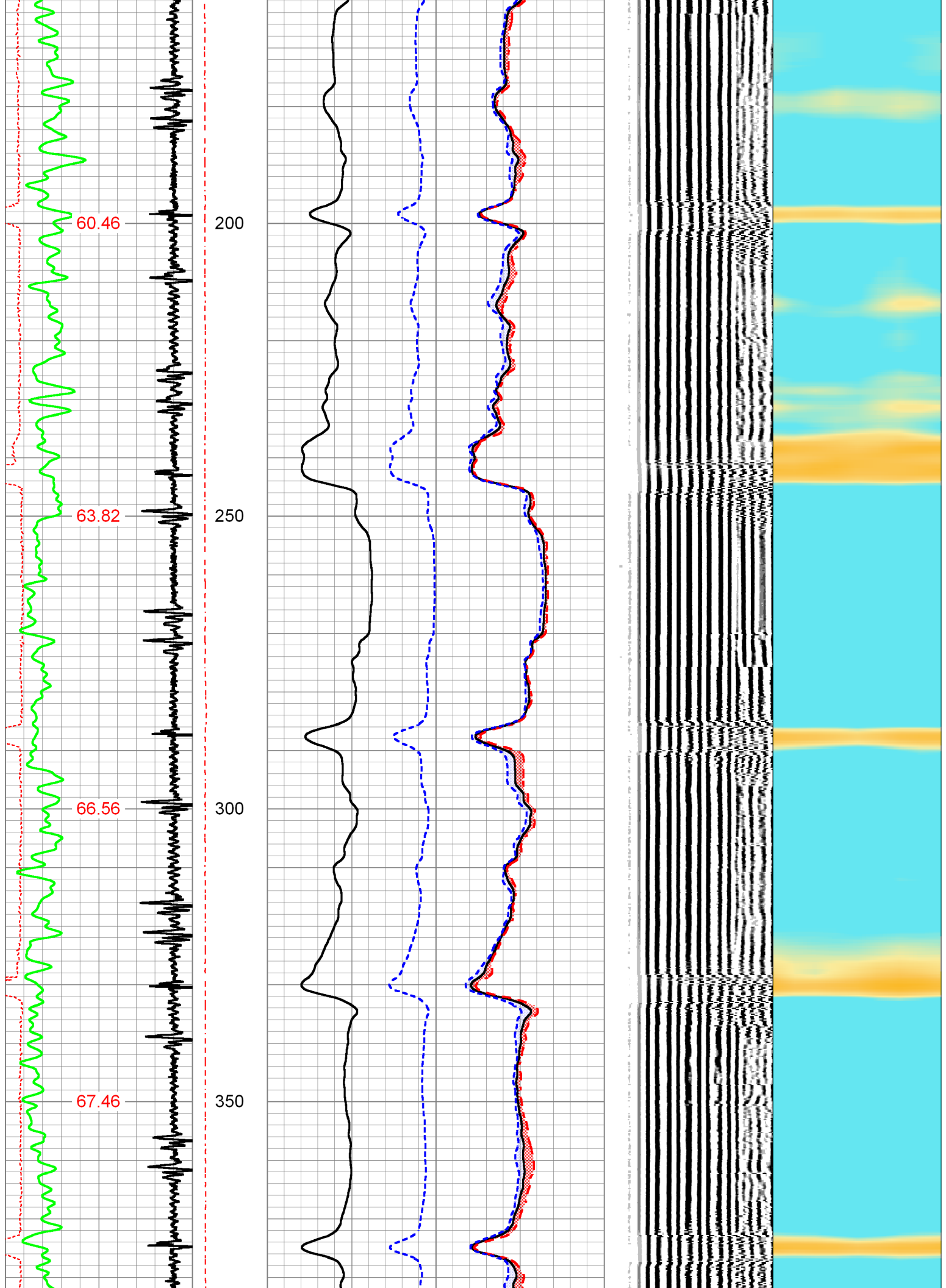
			CENT-Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
HEADVOLT	19.21					
TEMP	16.77					
			RBT-ProbeTemp(Probe (1305-84) Probe Radii Bond Tool with Digital Telemetry and Temperature	9.39	2.75	95.00
WVFS8	14.54					
WVFS7	14.54					
WVFS6	14.54					
WVFS5	14.54					
WVFS4	14.54					
WVFS3	14.54					
WVFS2	14.54					
WVFS1	14.54					
WVFCAL	14.54					
WVF3FT	14.54					
WVF5FT	13.54					
			CENT-Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
CCL	6.51					
GR	5.18		GR-PTS275Inv (125010)	4.54	2.75	50.00
			CENT-Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
Dataset: timbro_ranch_1-3-9-59_rbl.db: field/well/run1/pass4.1 Total length: 23.56 ft Total weight: 192.00 lb O.D.: 2.75 in						

Database File  
Dataset Pathname  
Presentation Format  
Dataset Creation  
Charted by

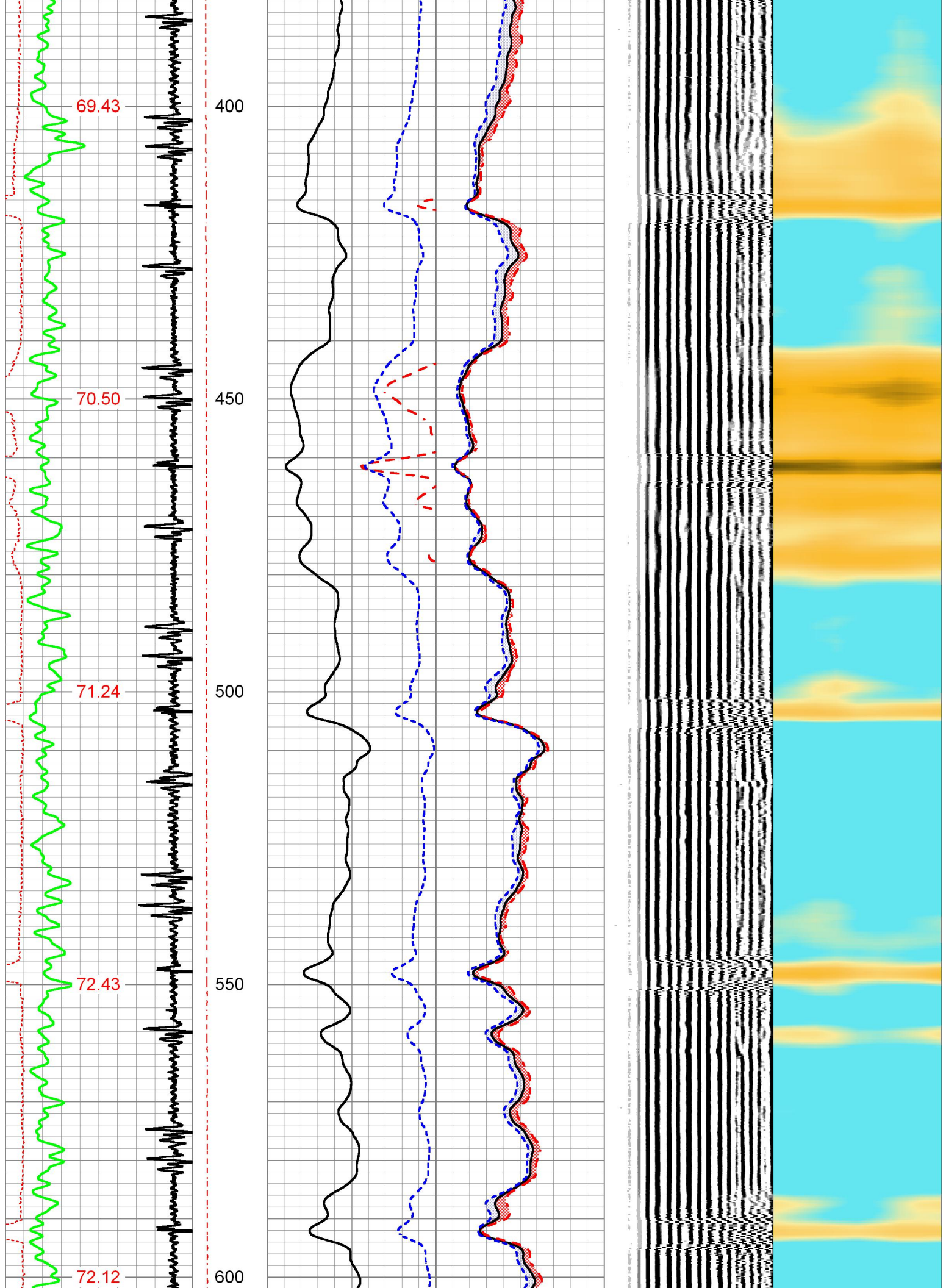
timbro\_ranch\_1-3-9-59\_rbl.db  
pass4.1  
pnr\_scbl  
Sat Feb 21 10:31:57 2015  
Depth in Feet scaled 1:240

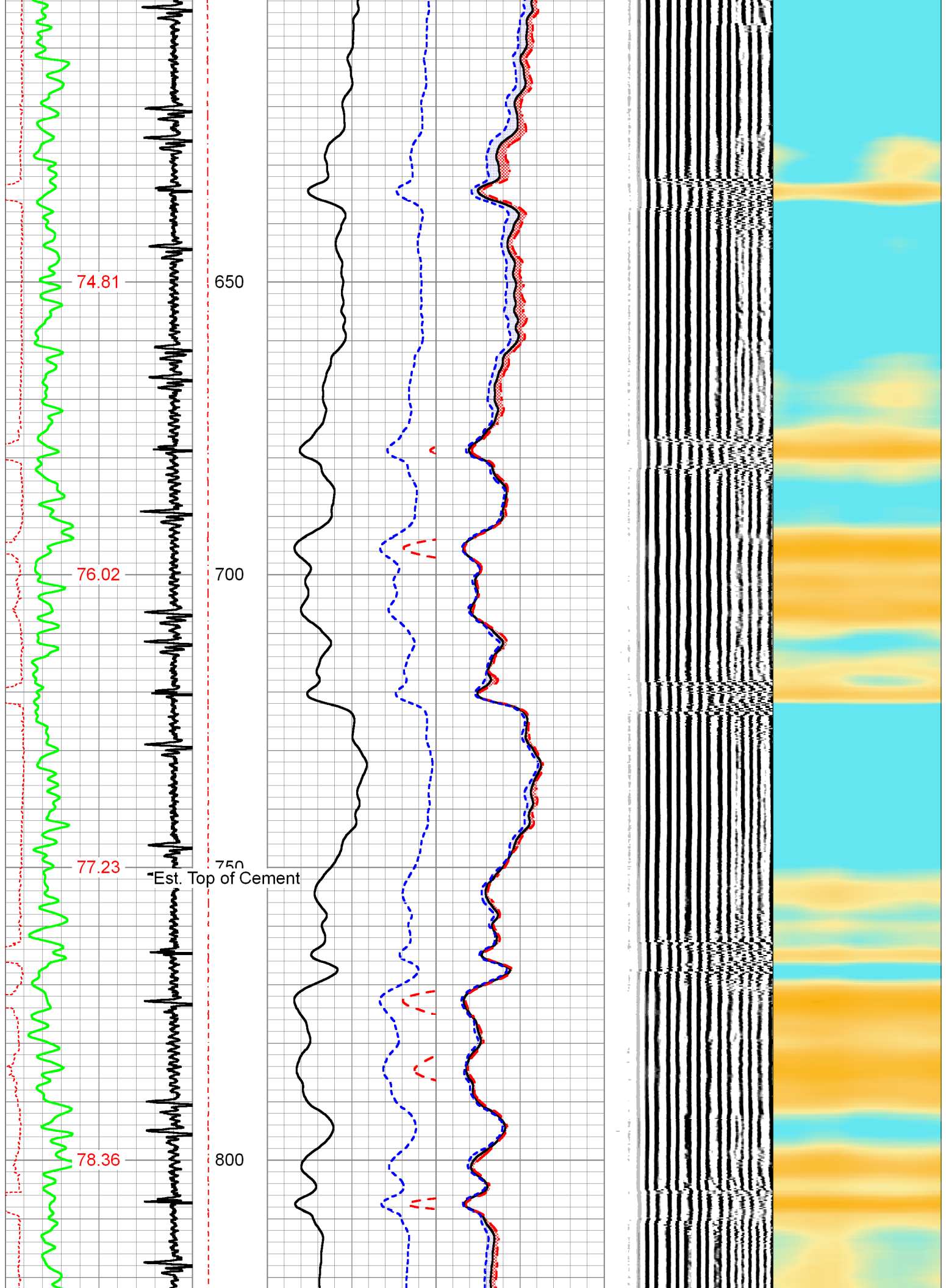
3' Travel Time			Line Tension	3' Amplitude		Sector Amplitude Average	200	VDL	1200	1	Sector Map	8	
				0 (mV) 100									0 150
294	(usec)	194		3' Amplified Amplitude X 5									
-9	Collar Locator	1		0 (mV) 20									
Gamma Ray				1 Bond Index 0									
0 (cps) 150					0 150								
TEMP						Sector Amplitude Minimum							
(degF)							0 150						



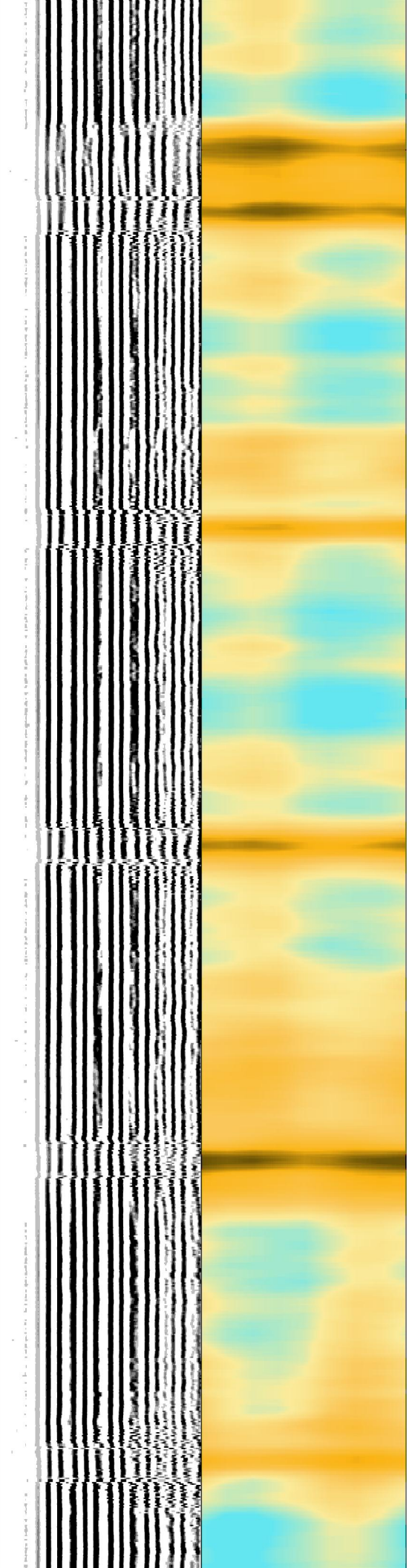
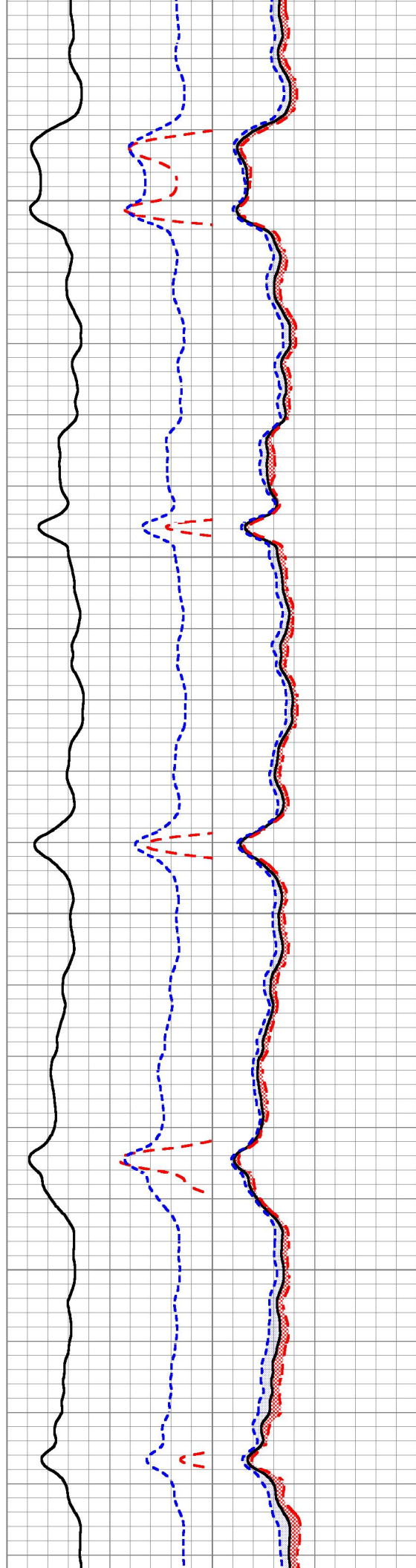
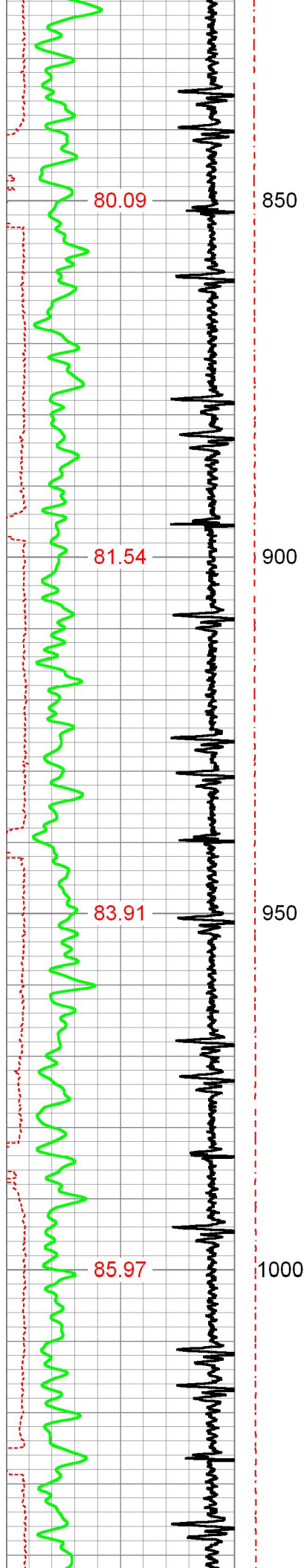


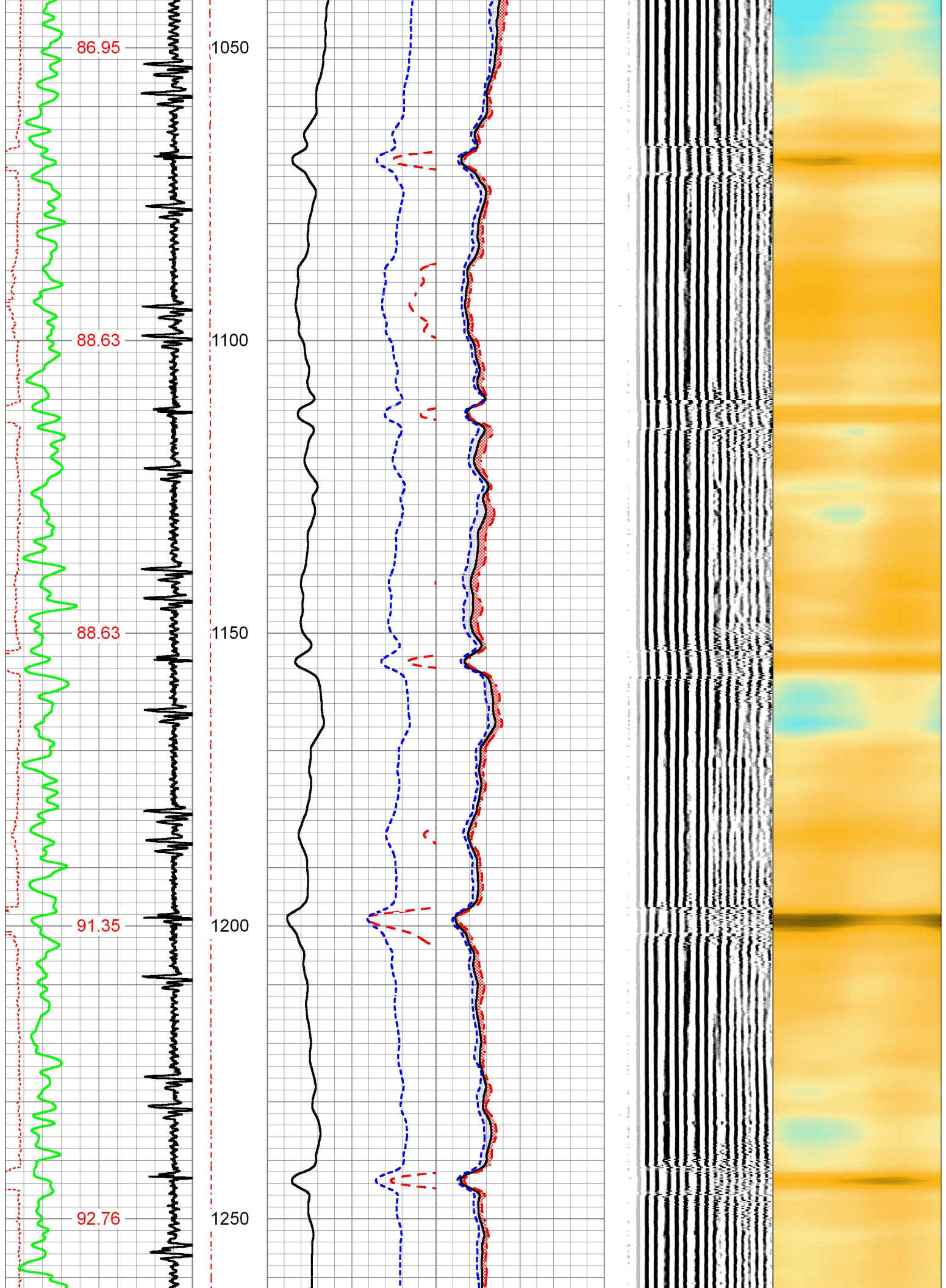




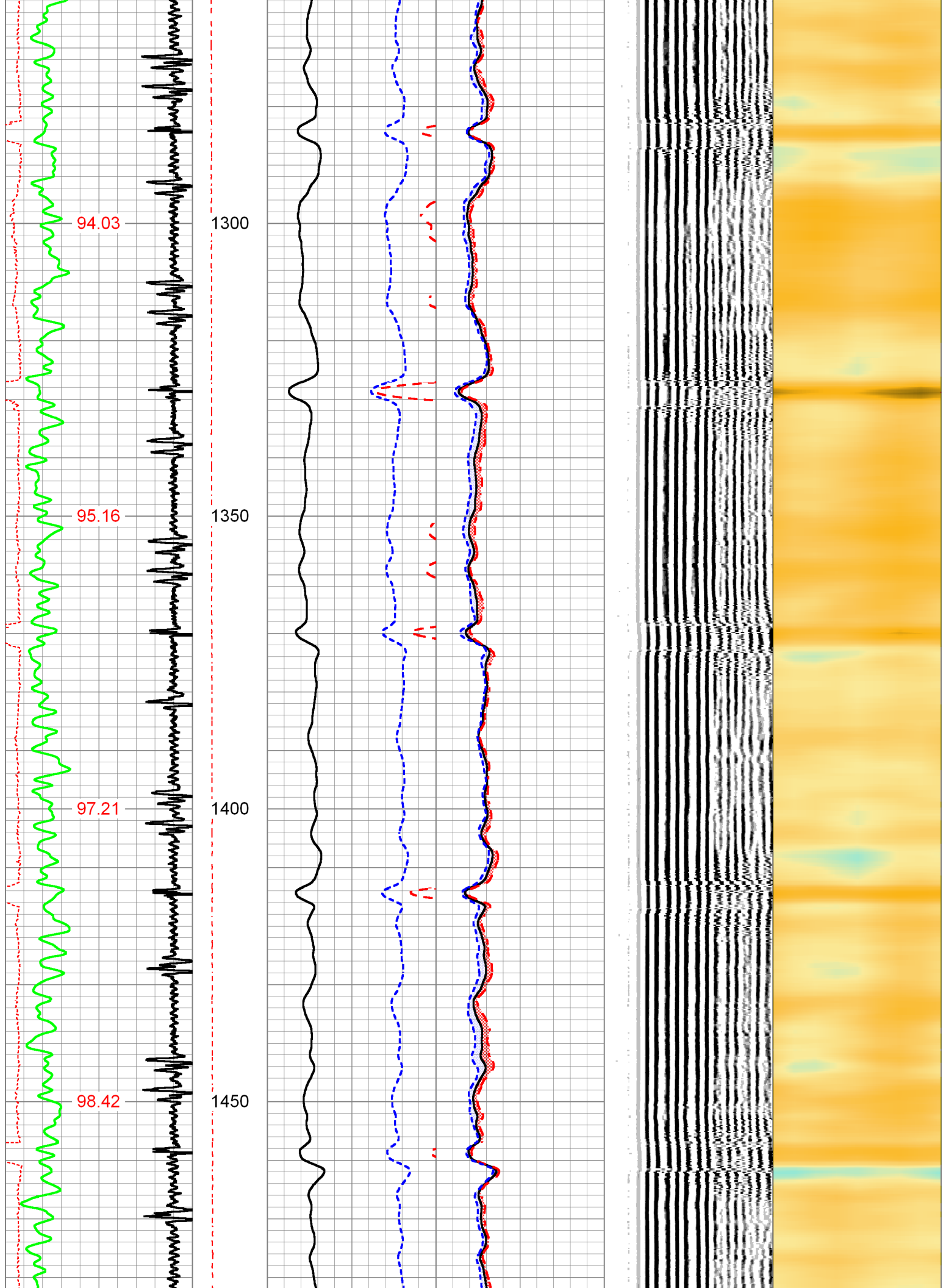


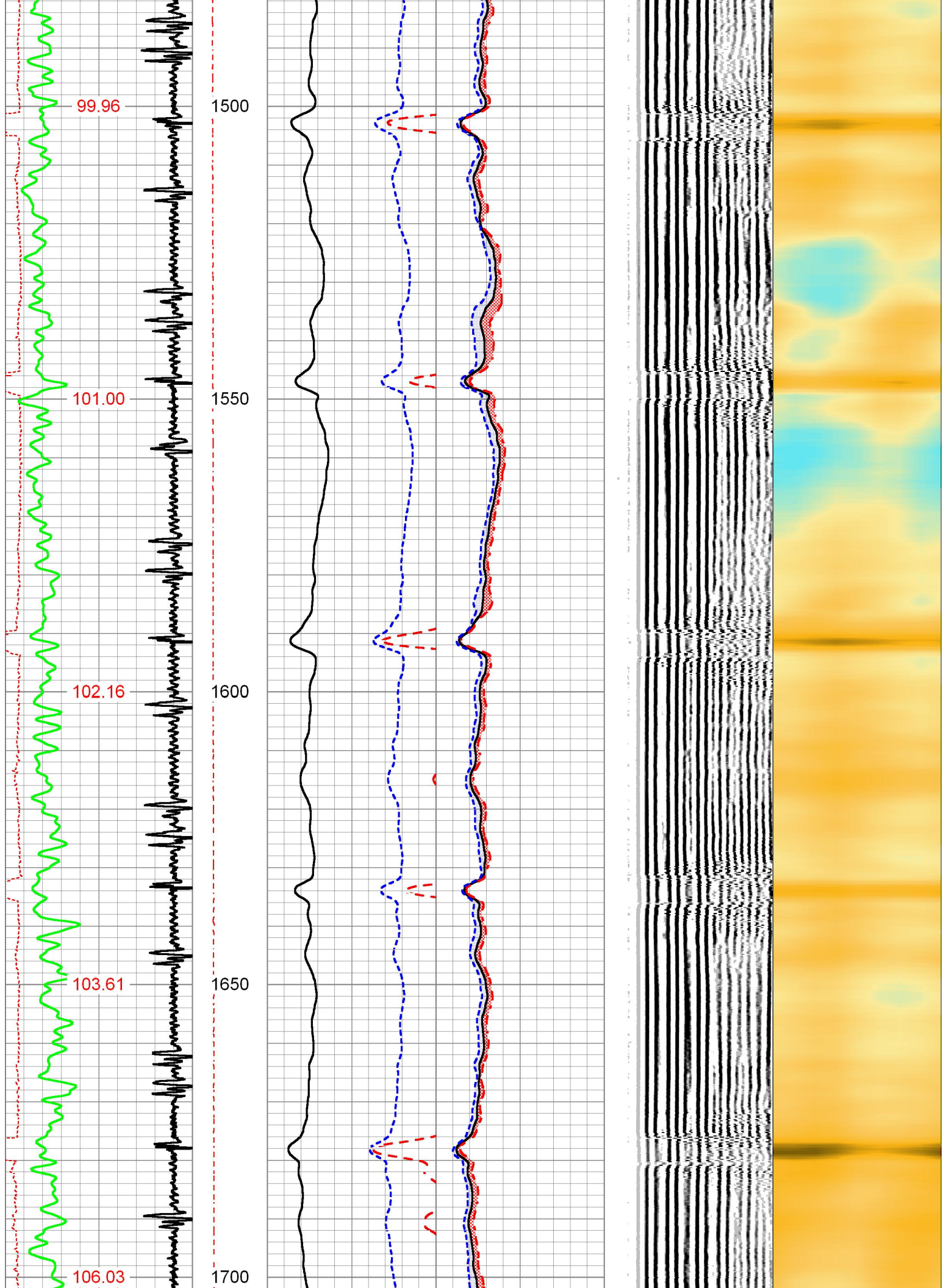


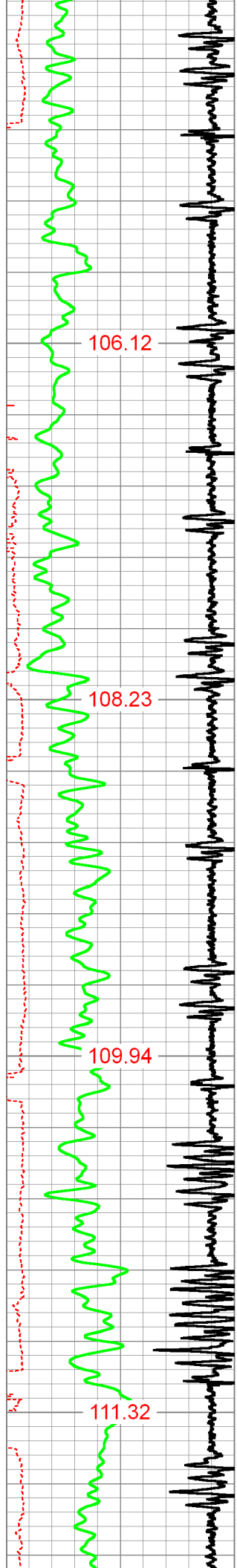












106.12

108.23

109.94

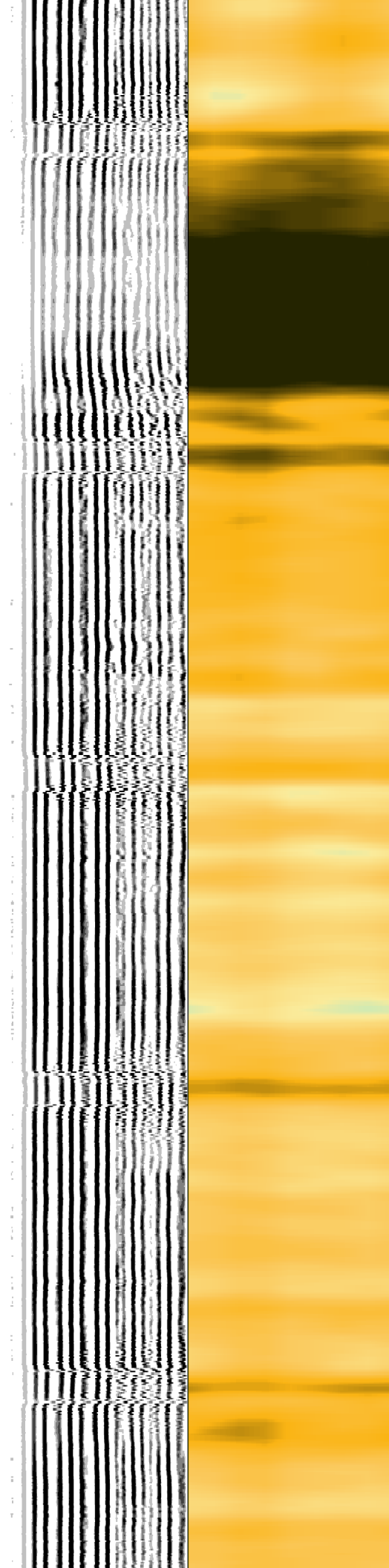
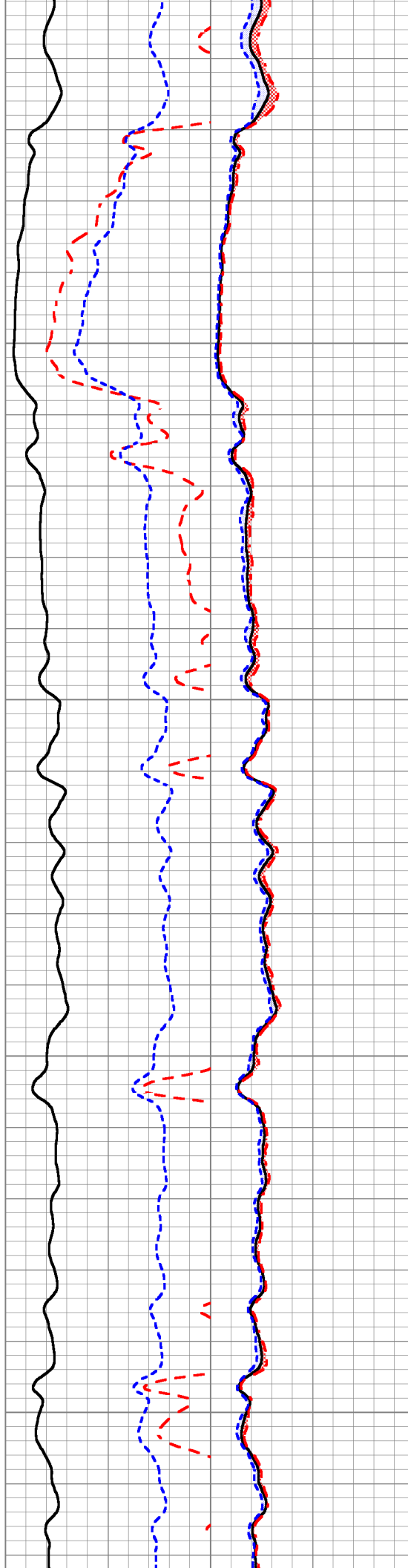
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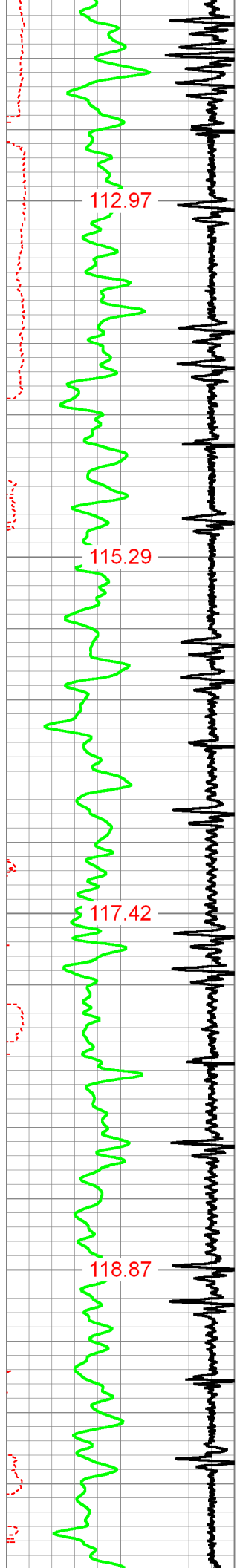
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1850

1900





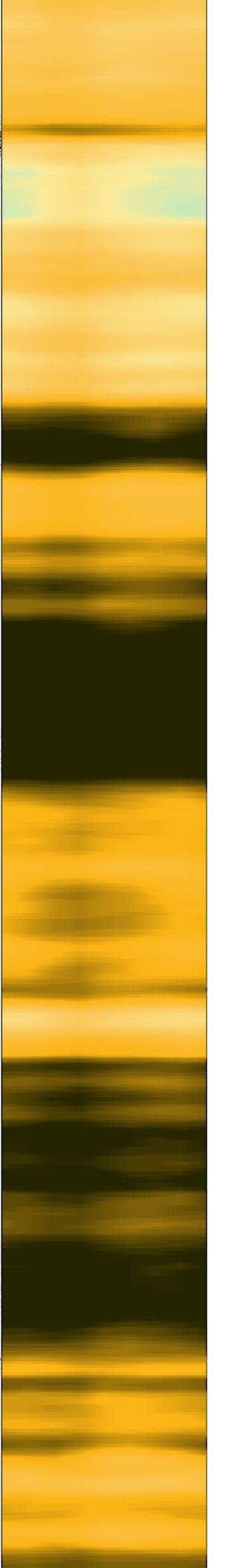
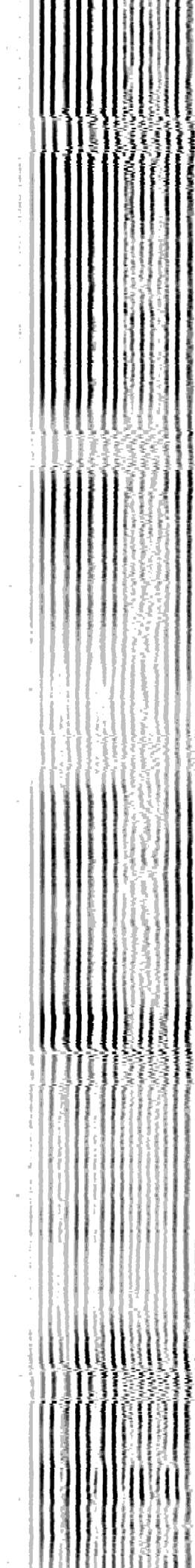
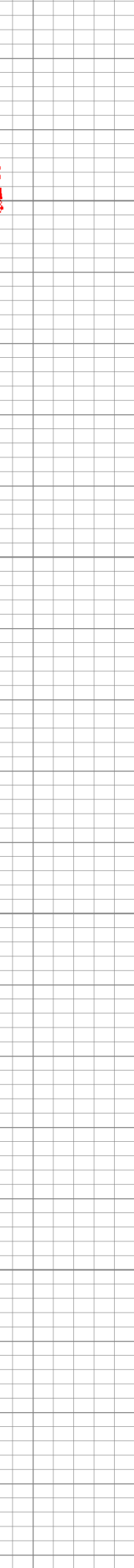
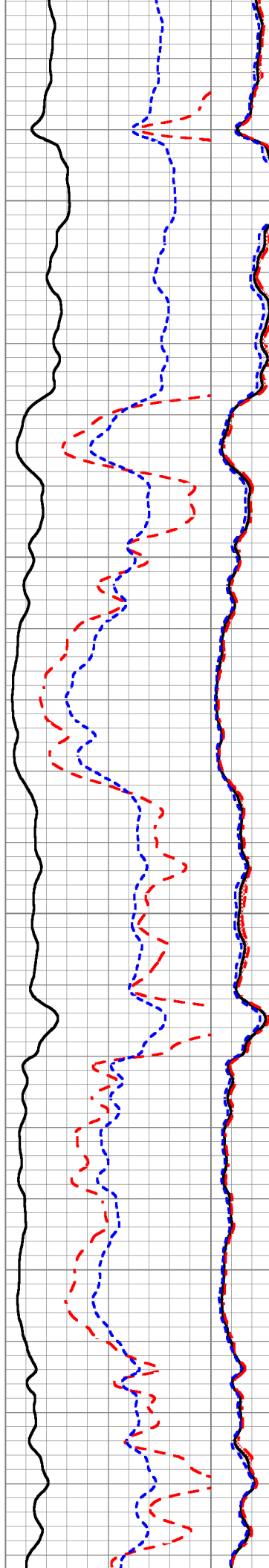


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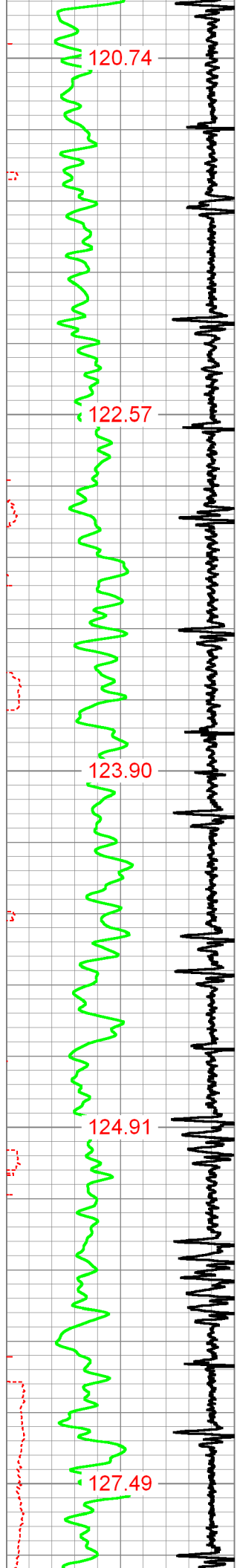
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2050

2100







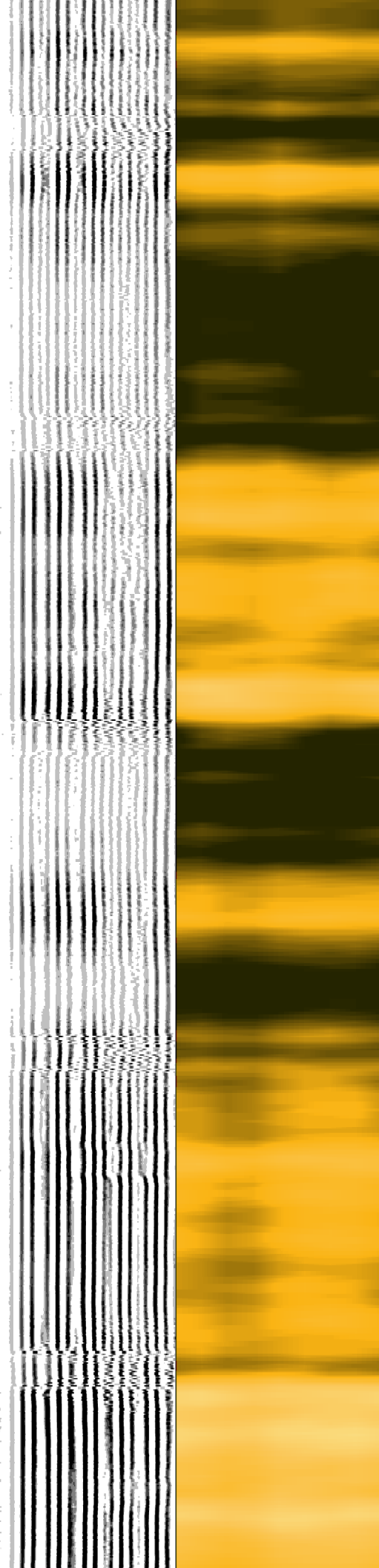
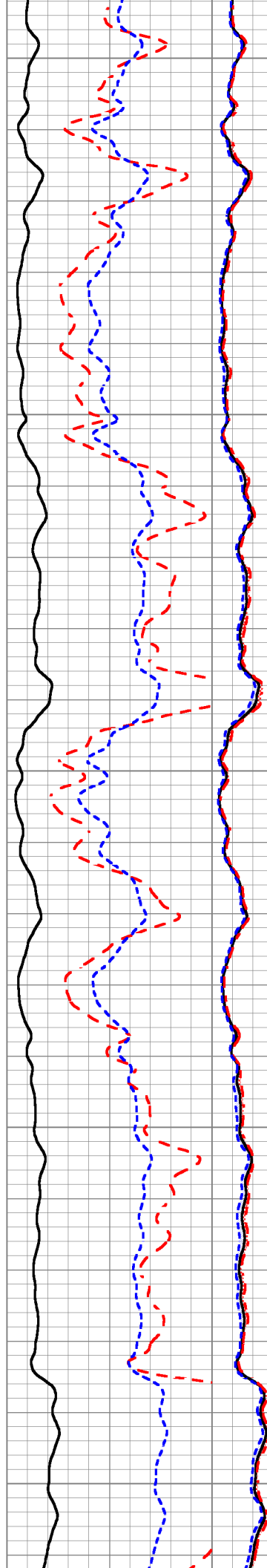
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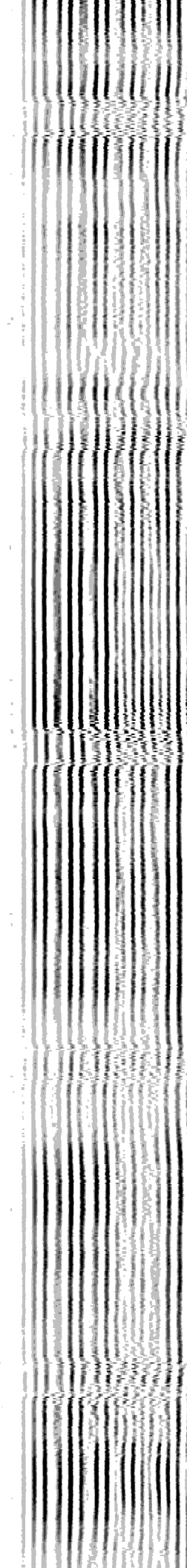
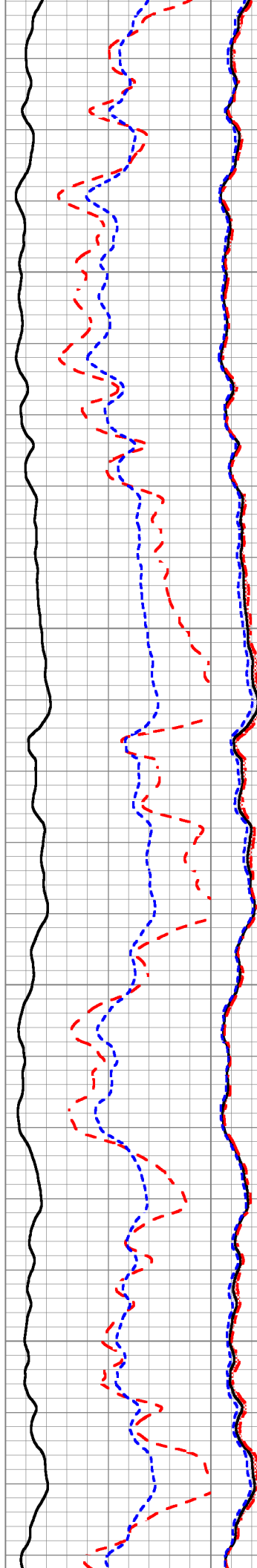
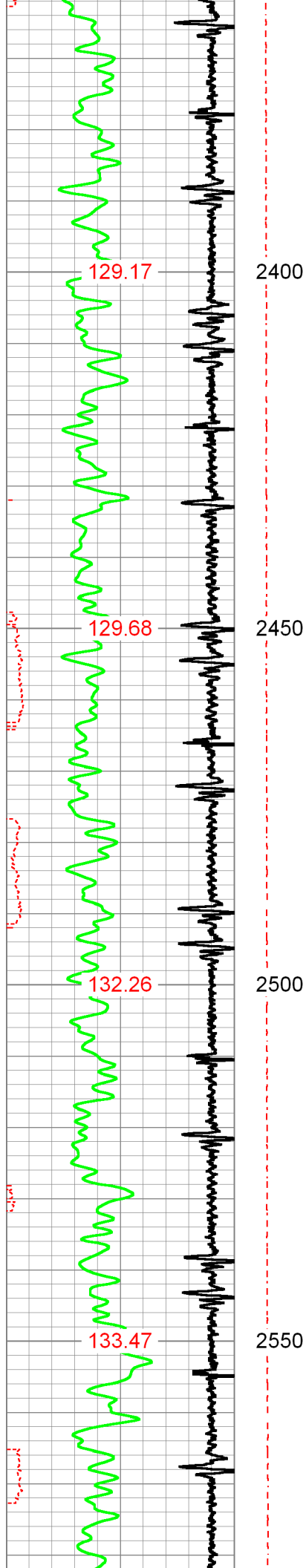
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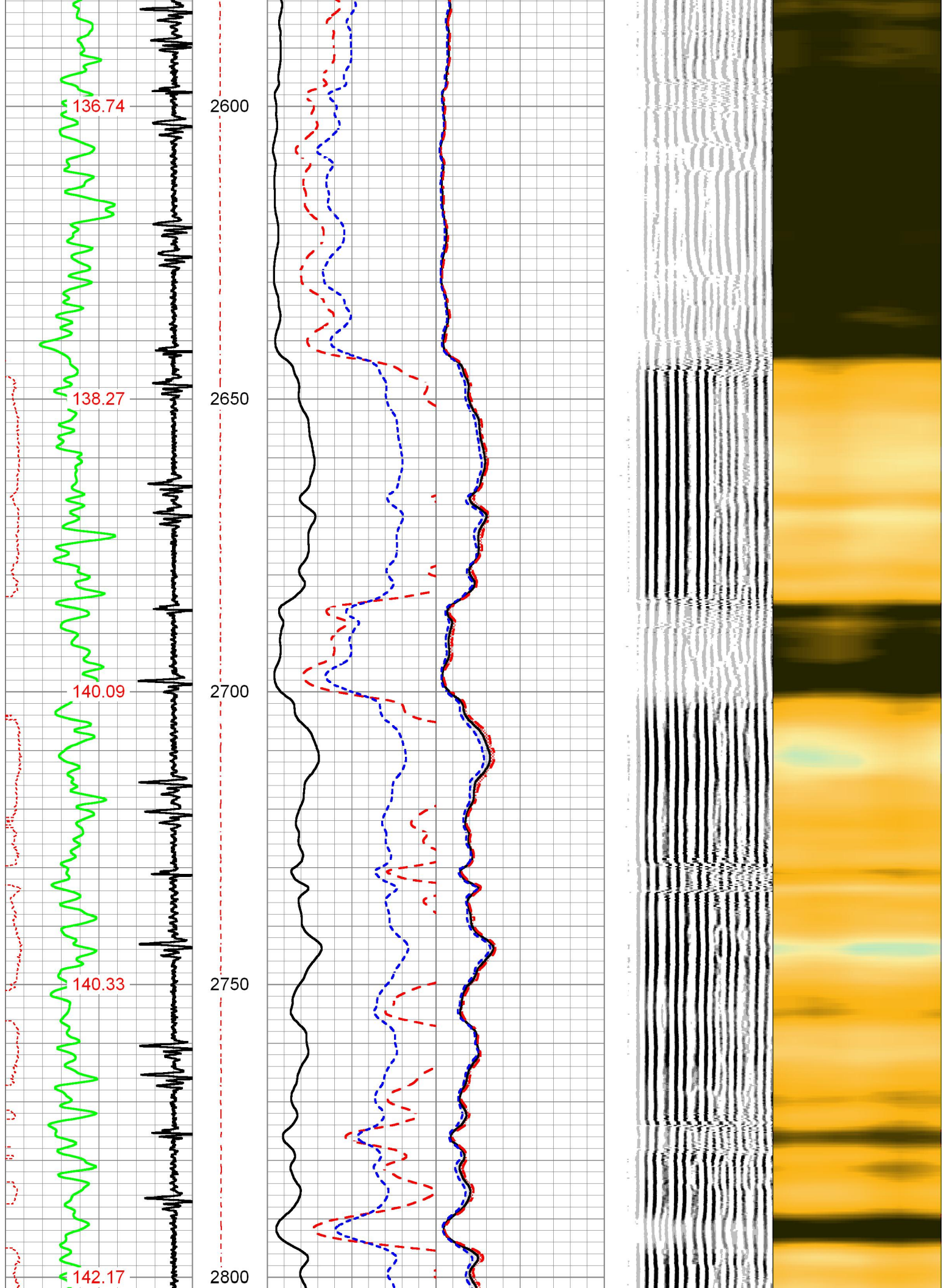
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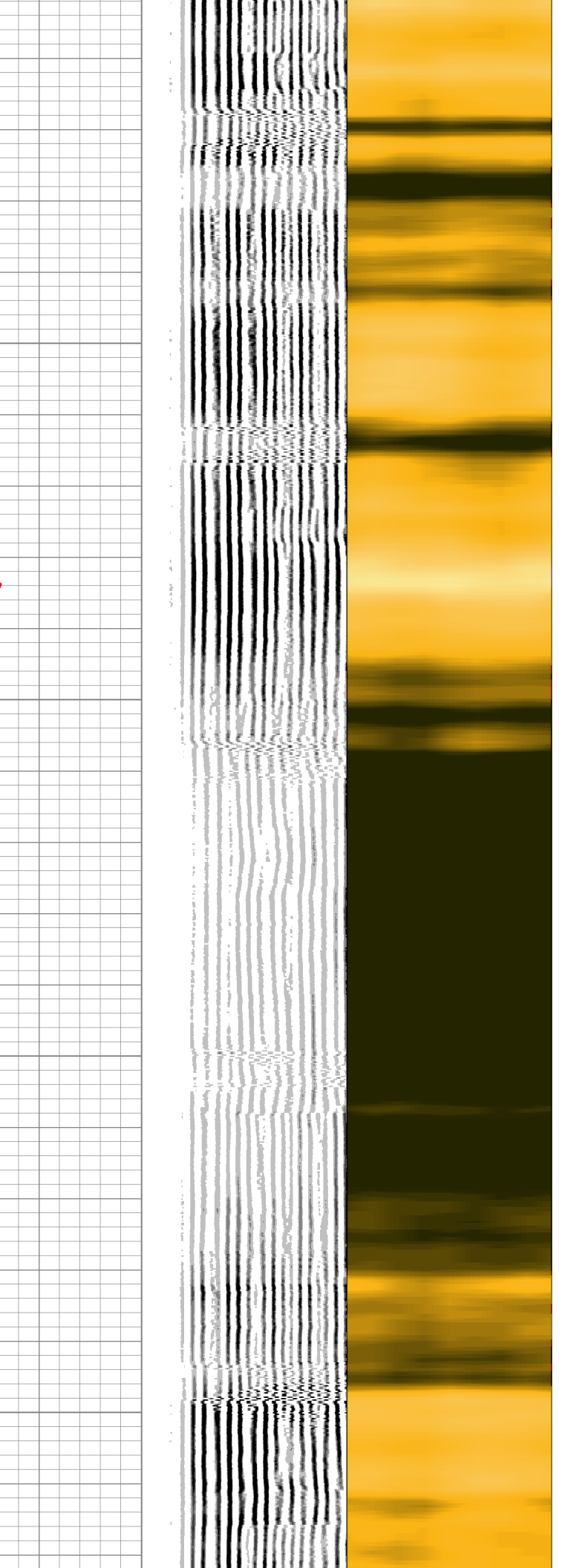
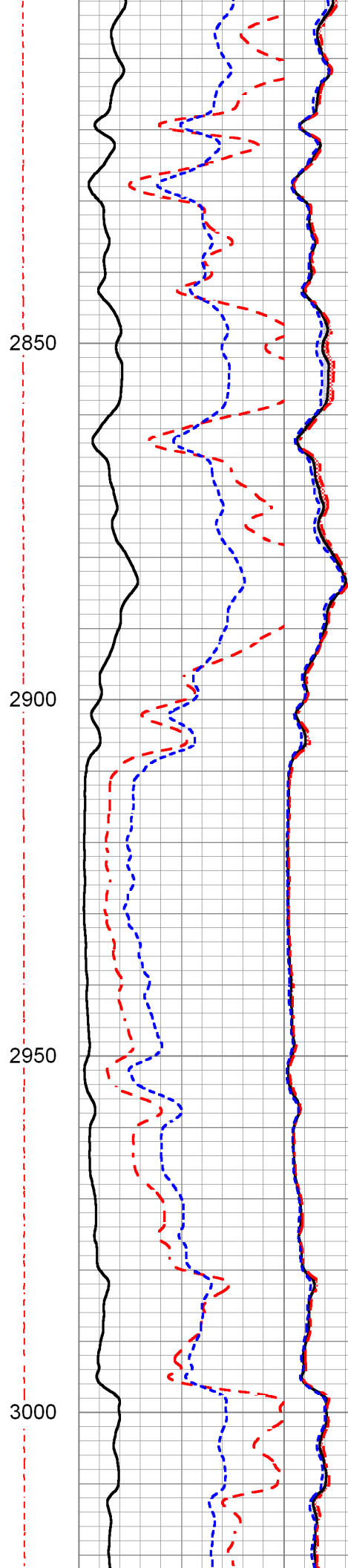
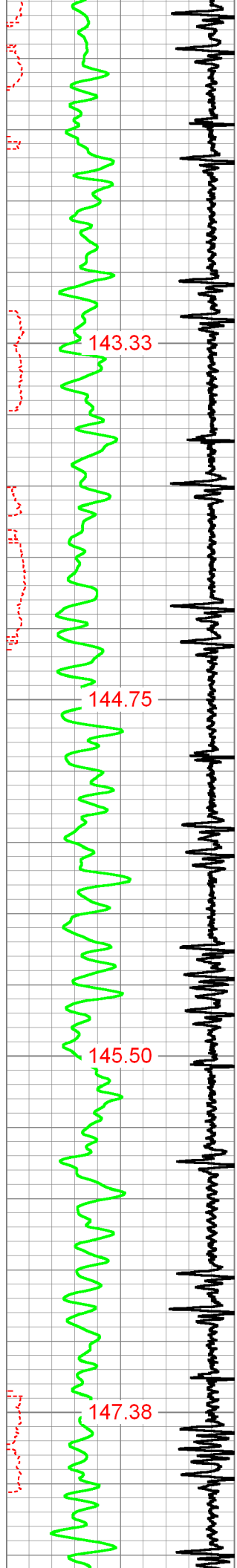
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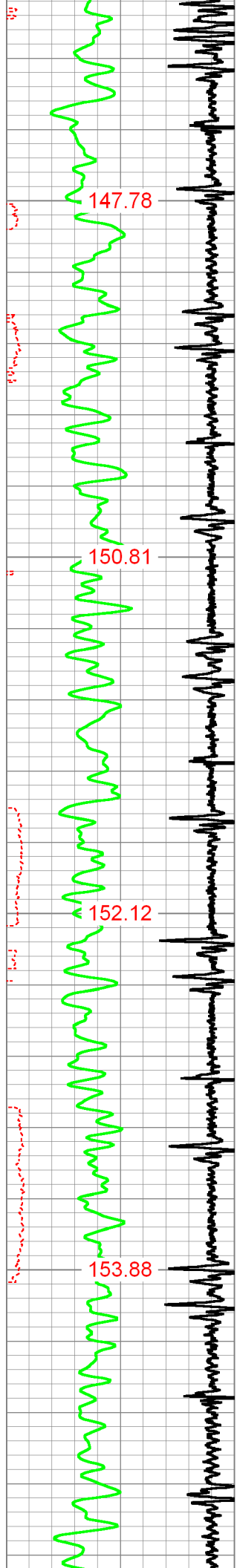










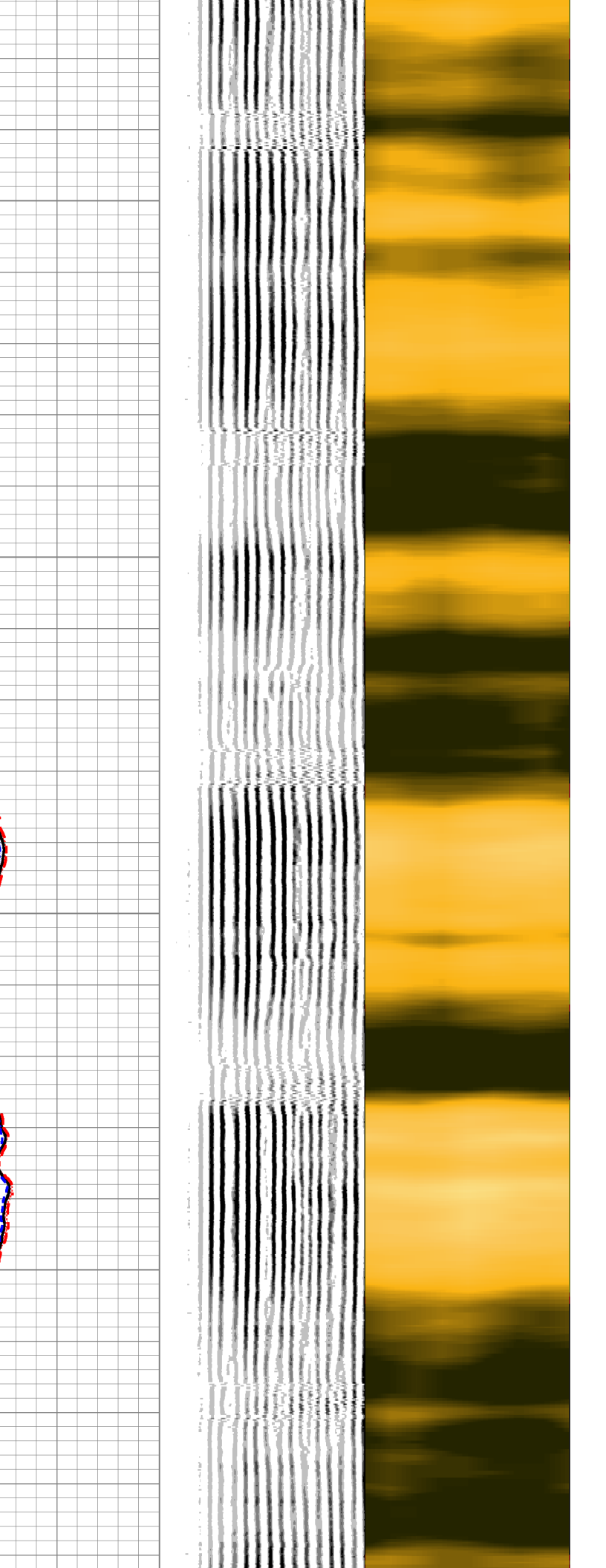
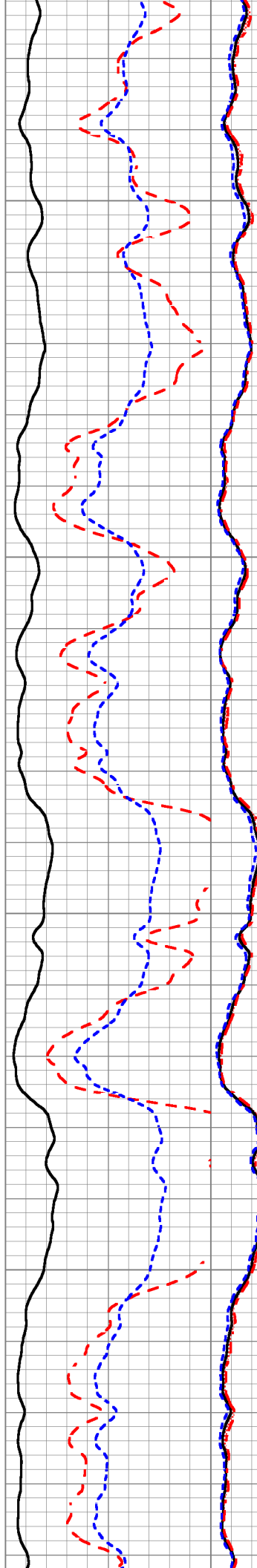


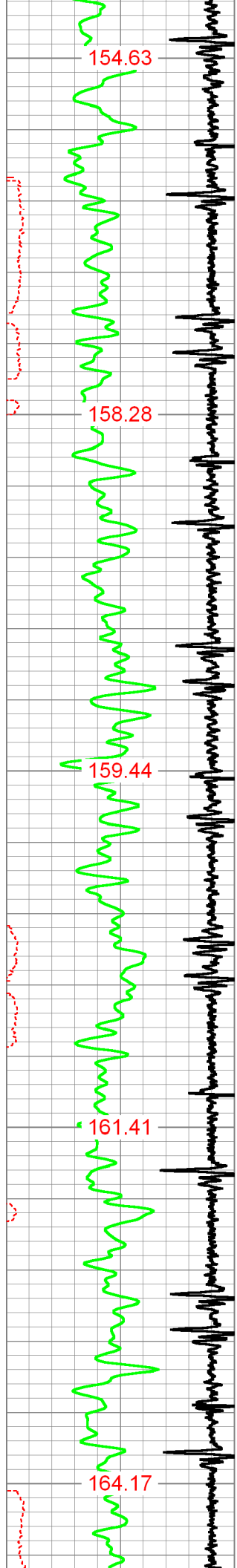
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3100

3150

3200





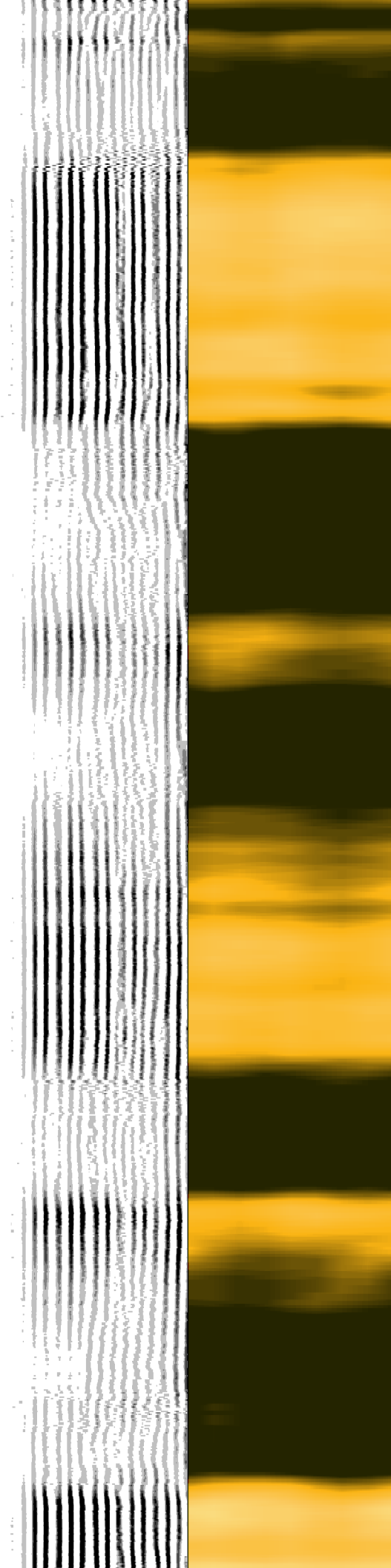
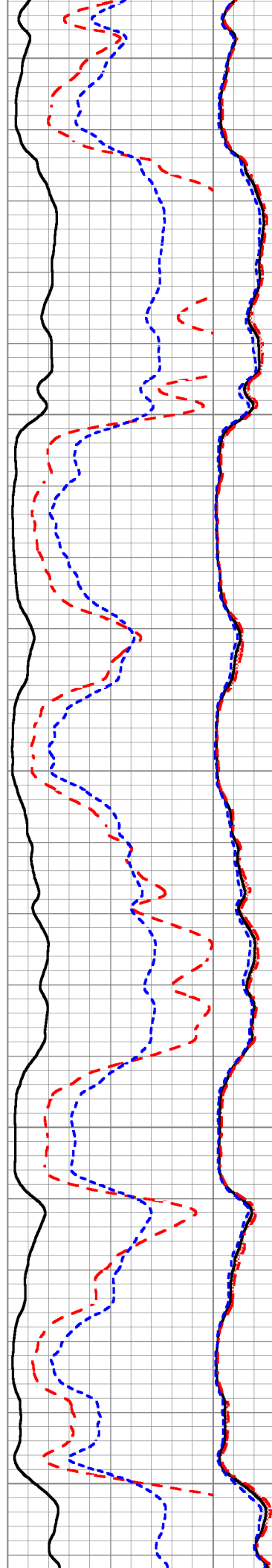
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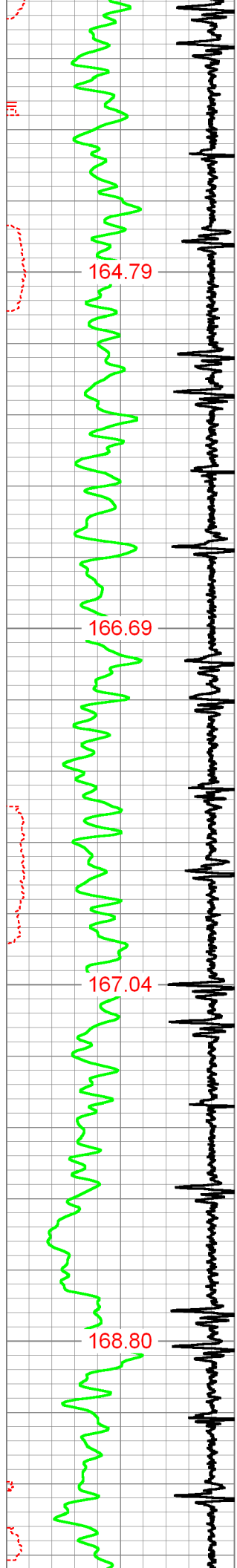
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3400

3450



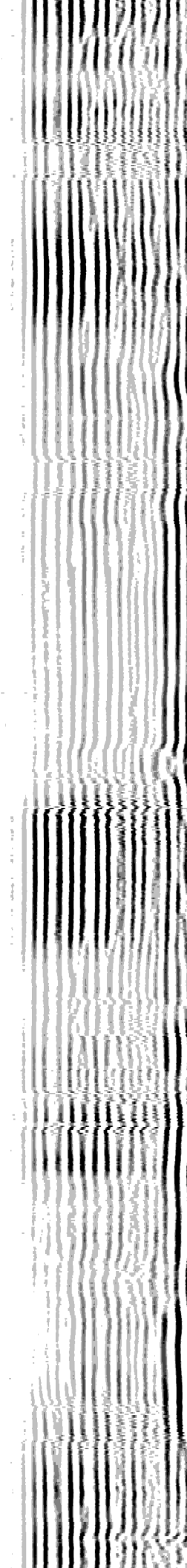
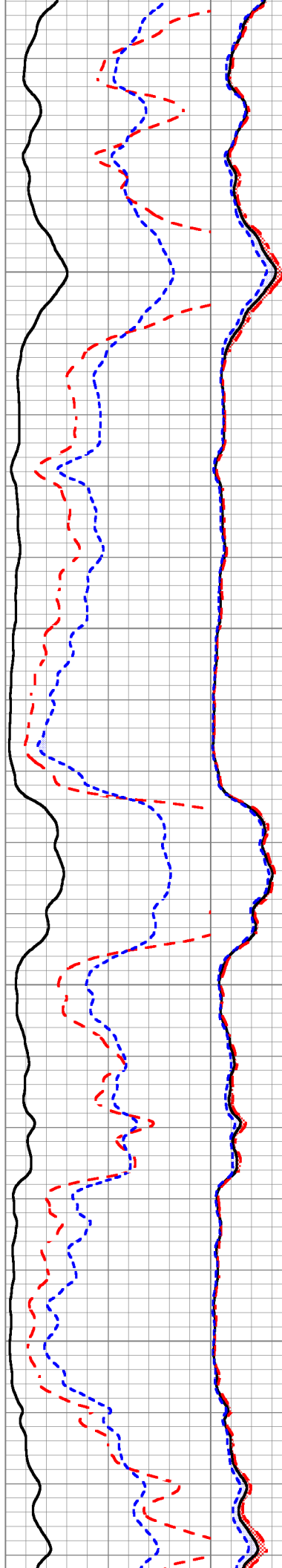


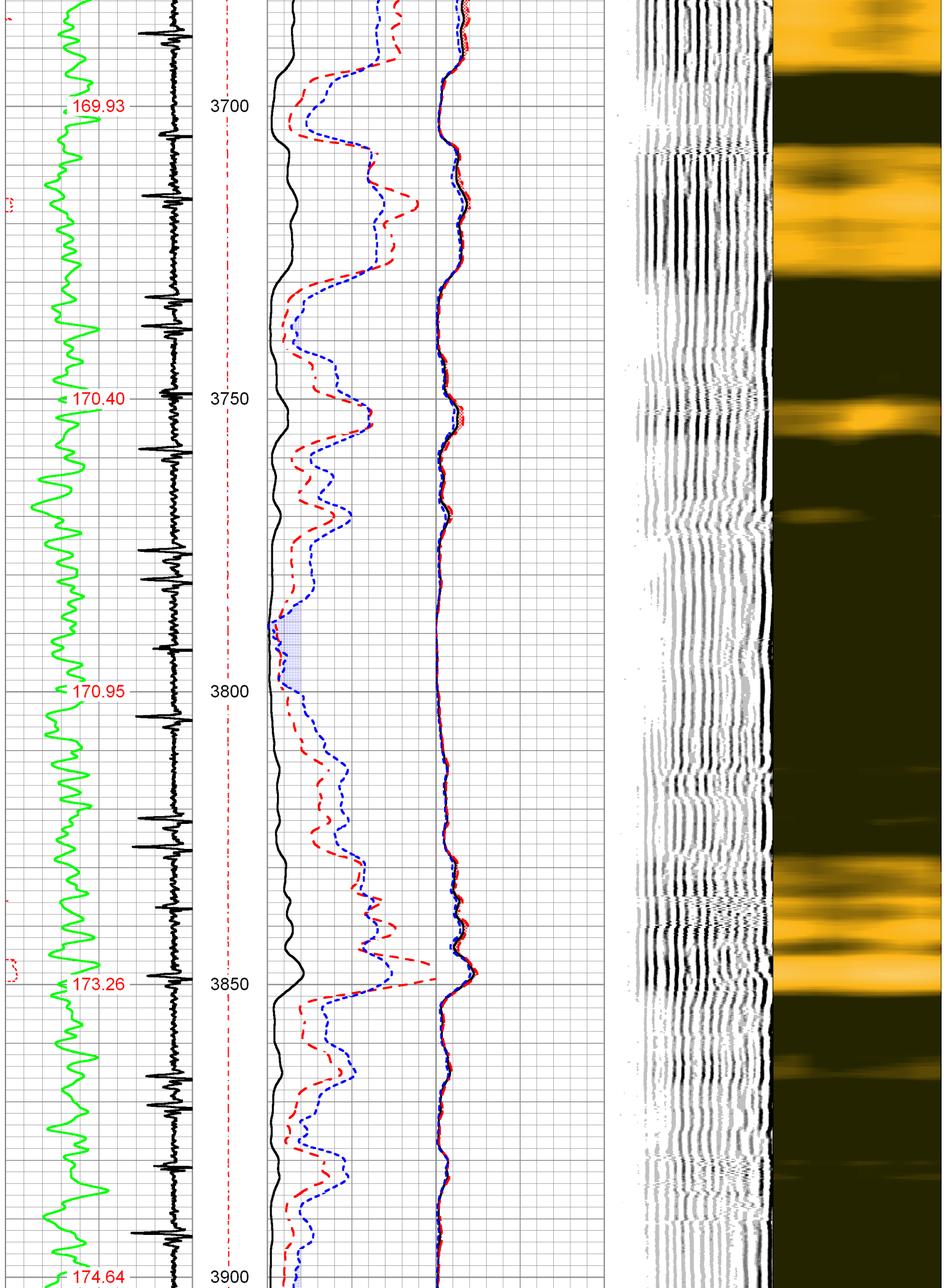
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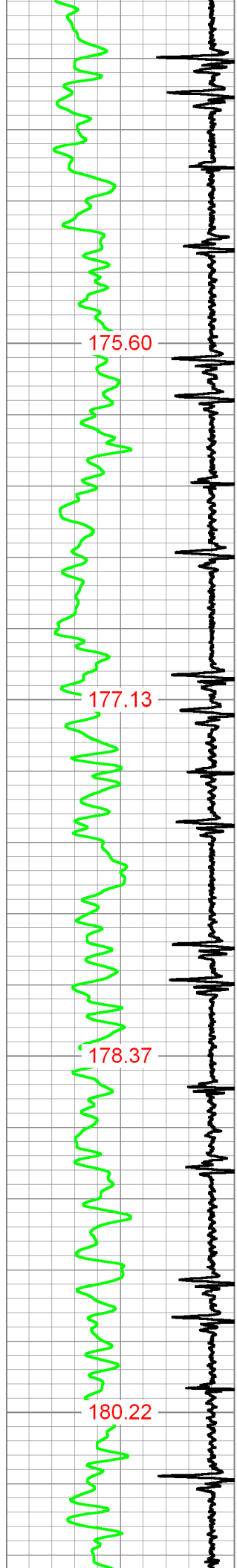
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3650









175.60

177.13

178.37

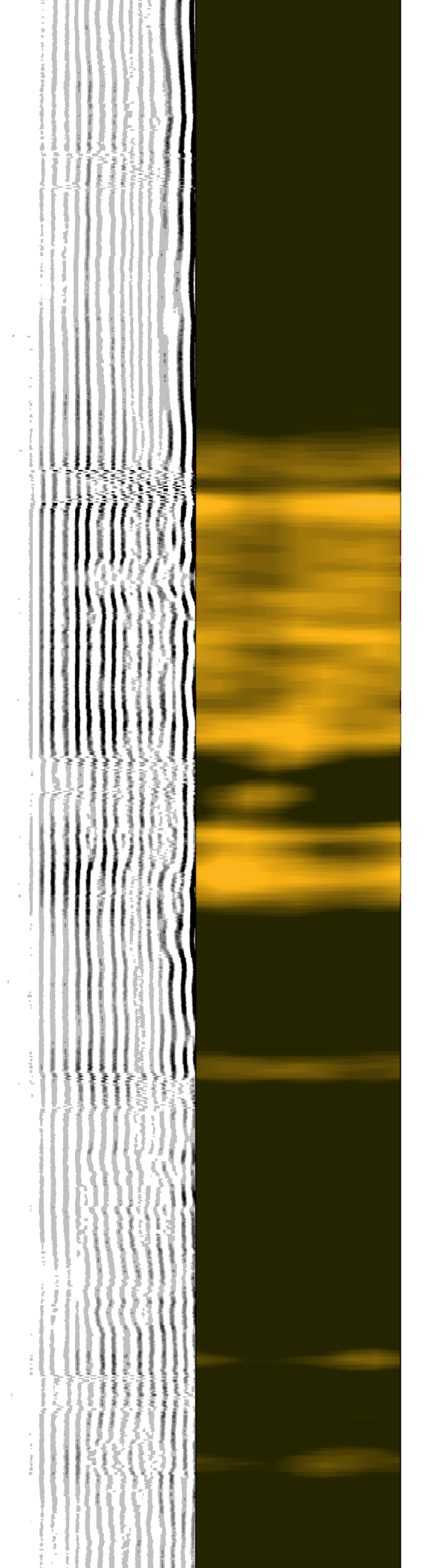
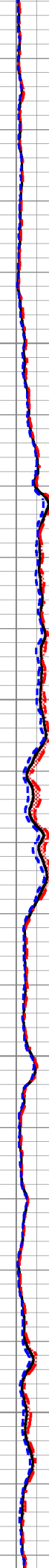
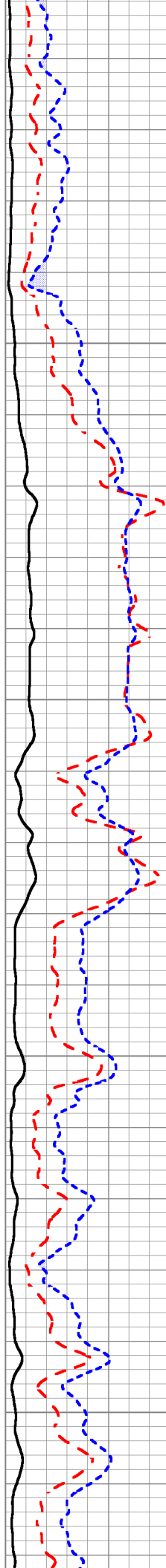
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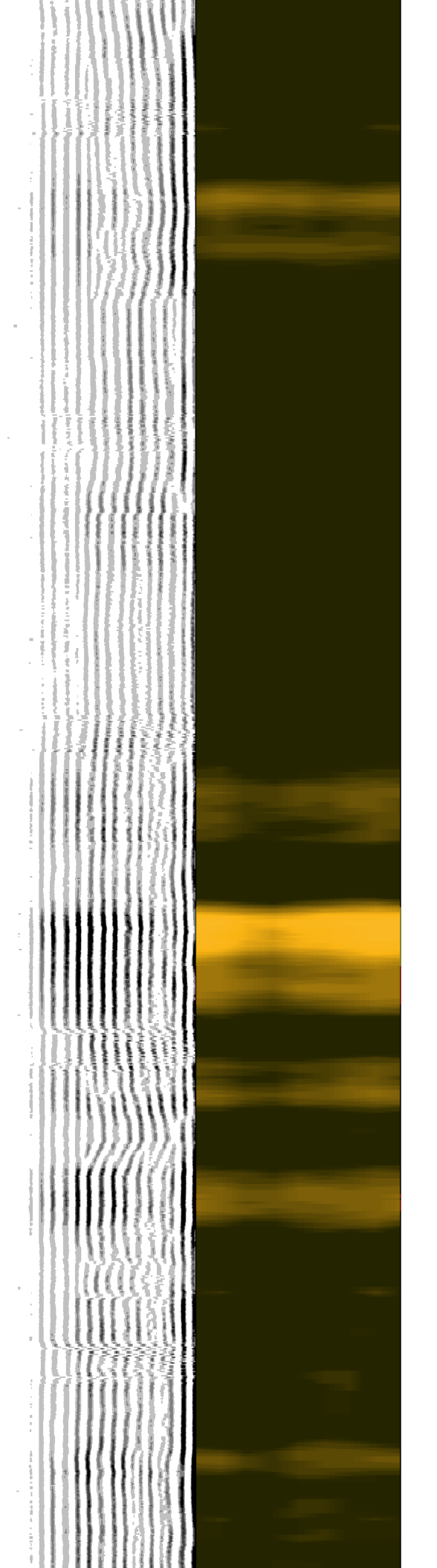
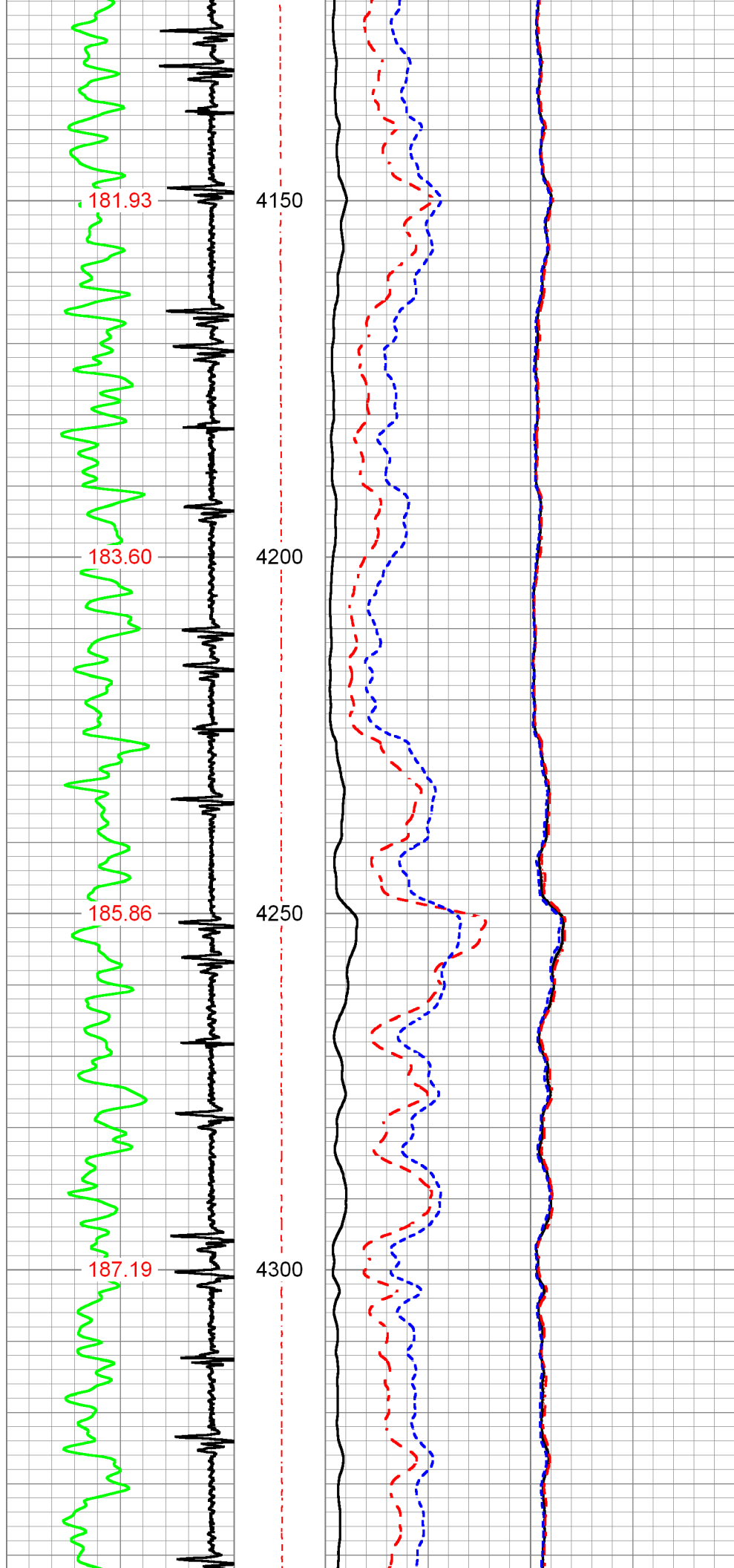
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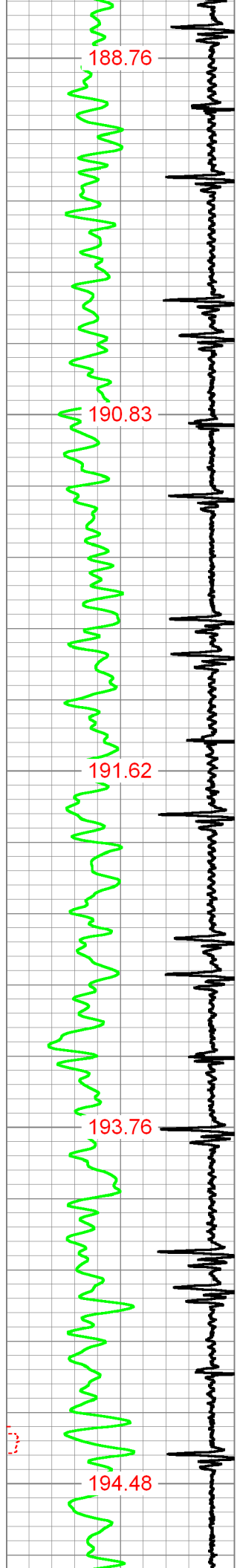
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4100







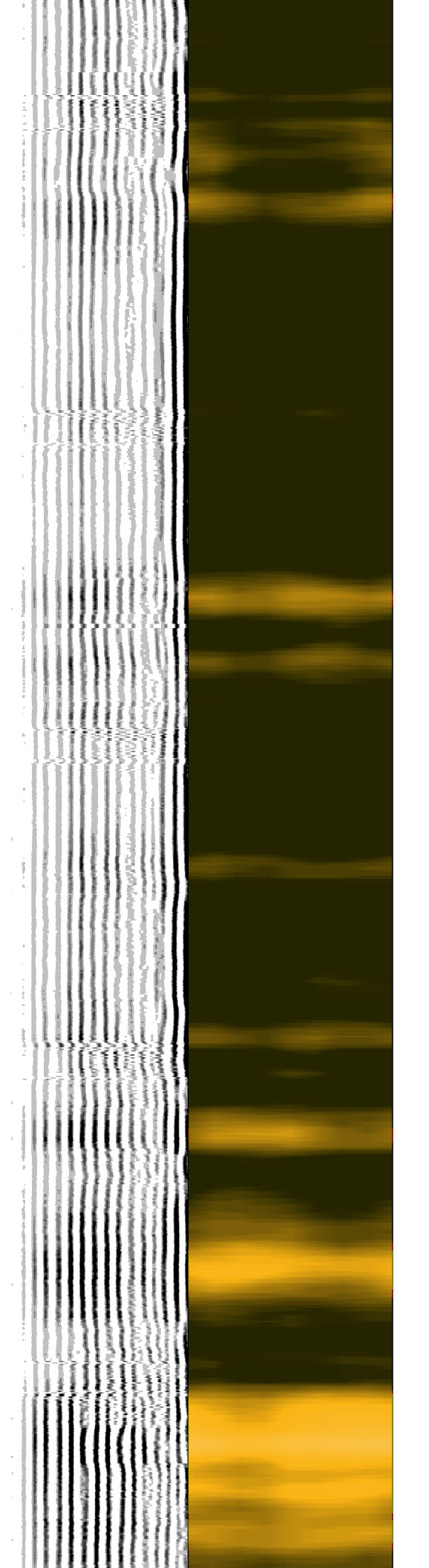
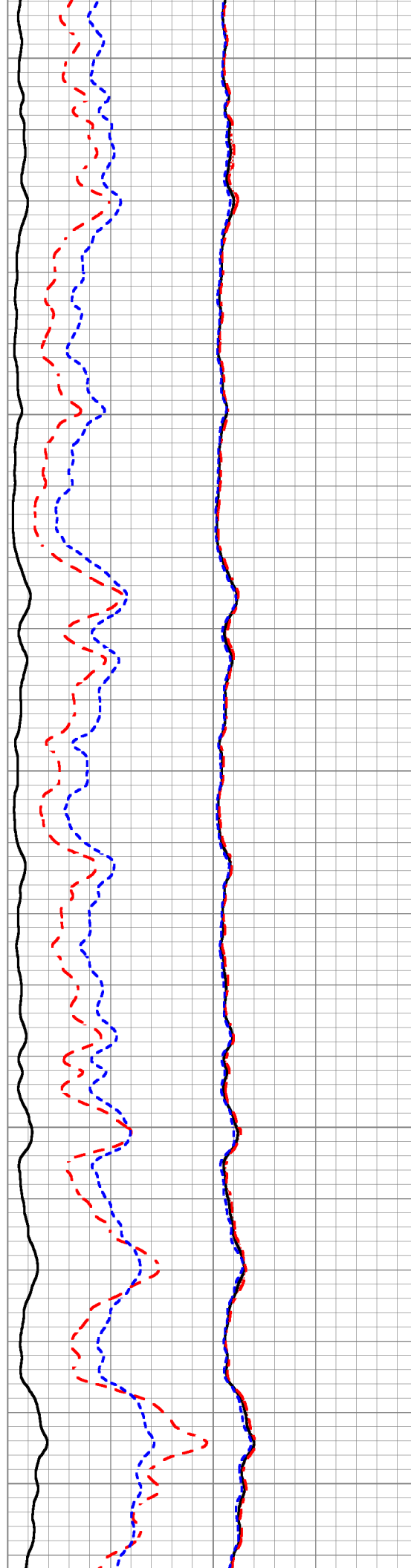
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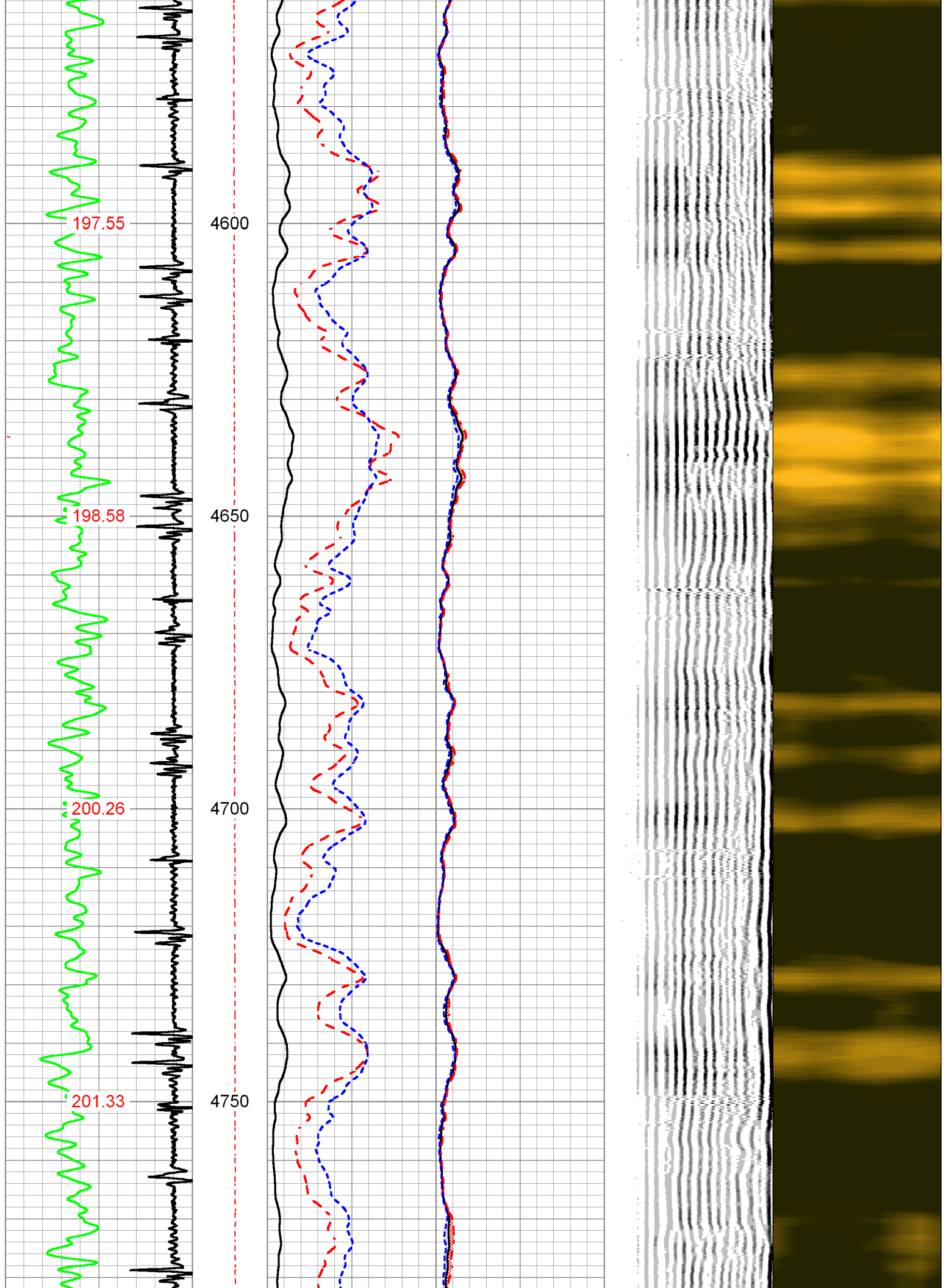
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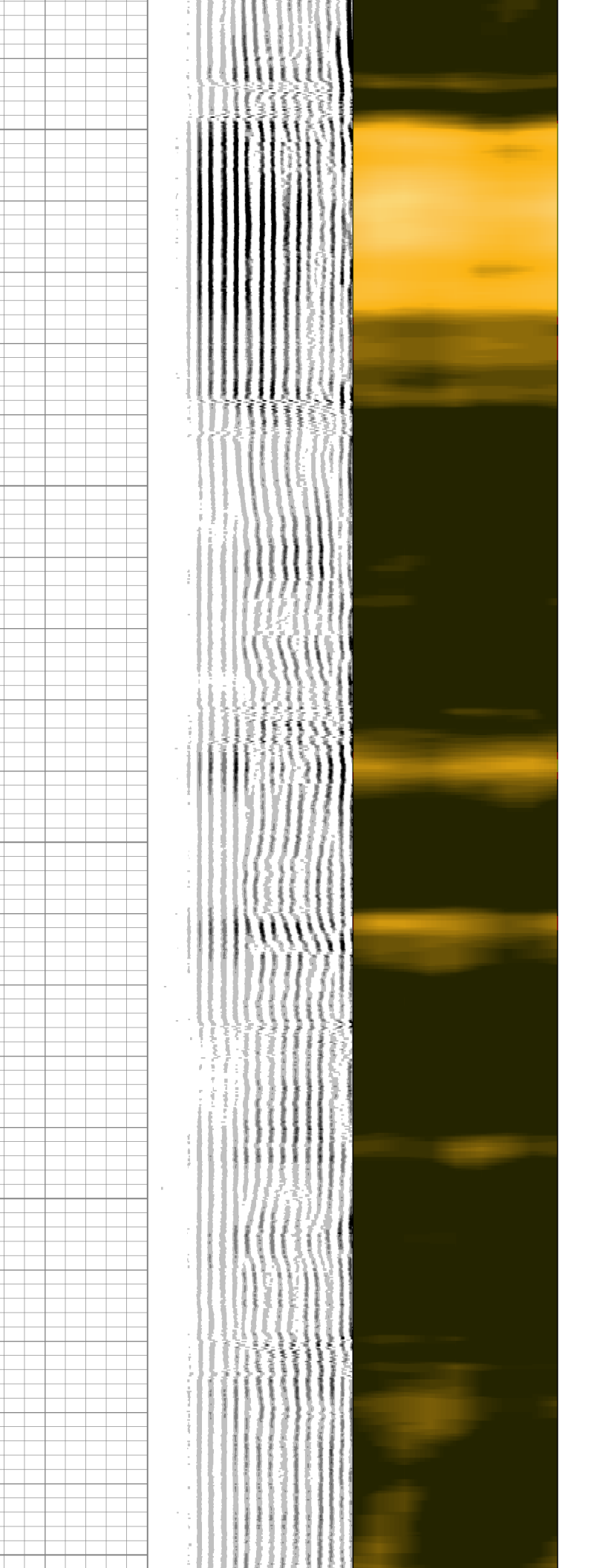
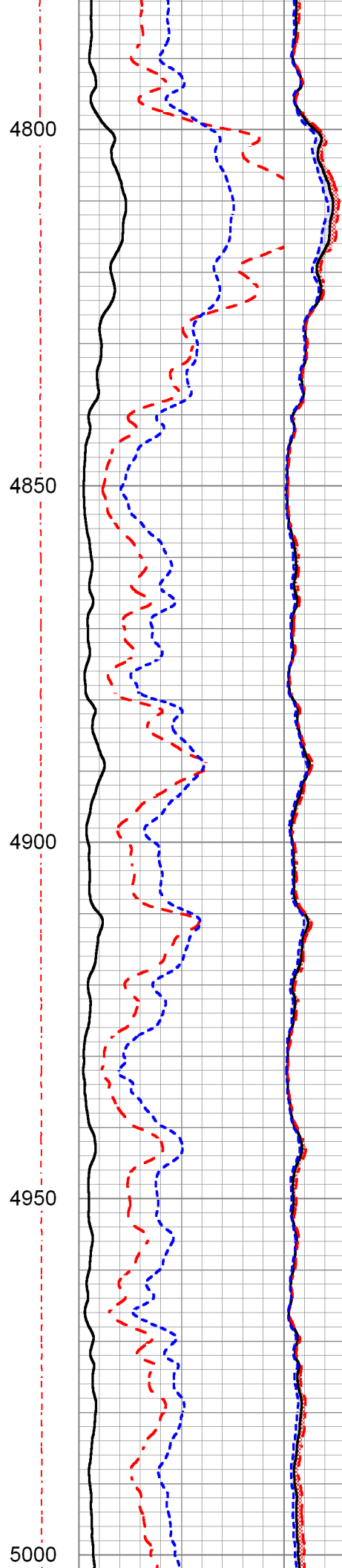
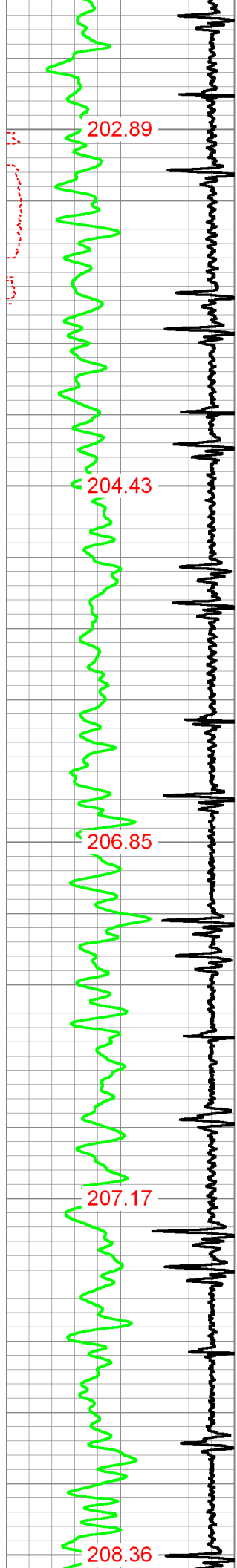
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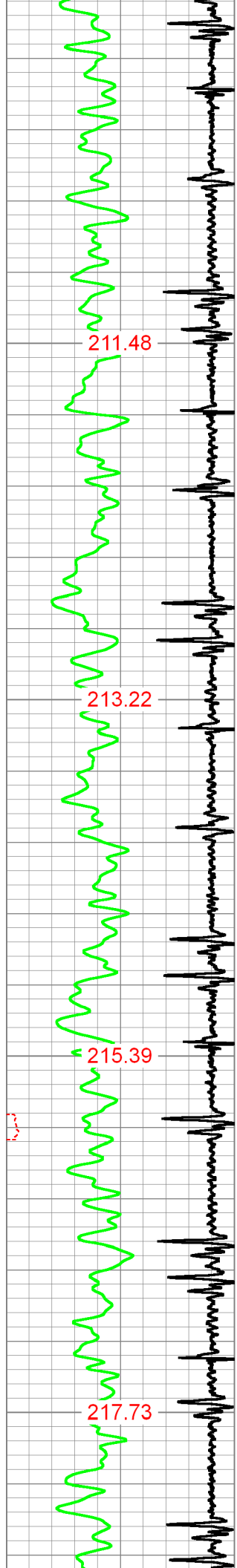
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211.48

213.22

215.39

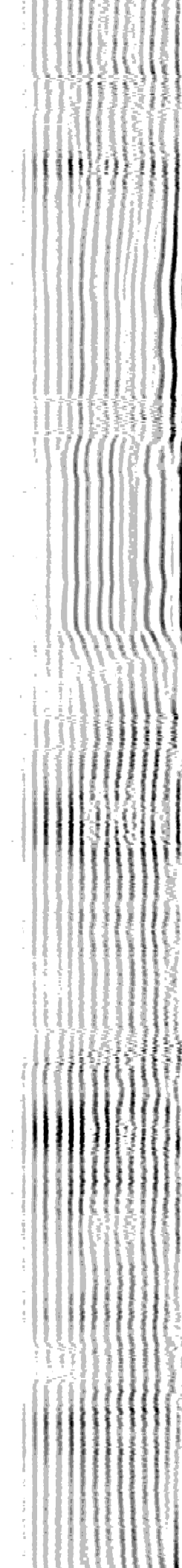
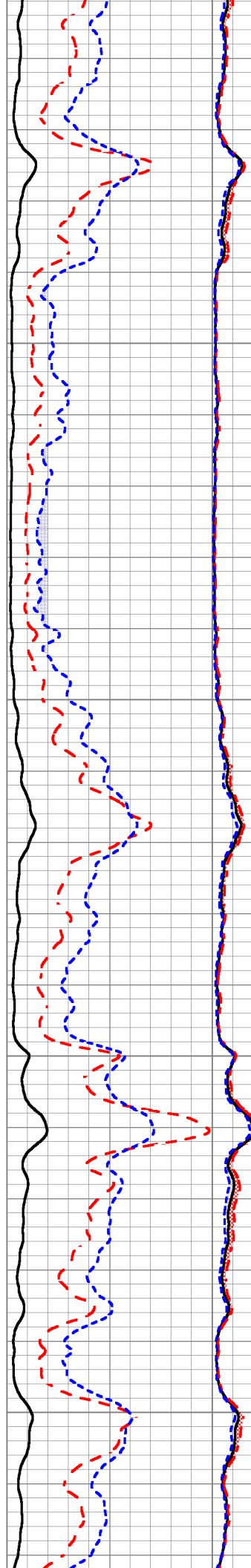
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5050

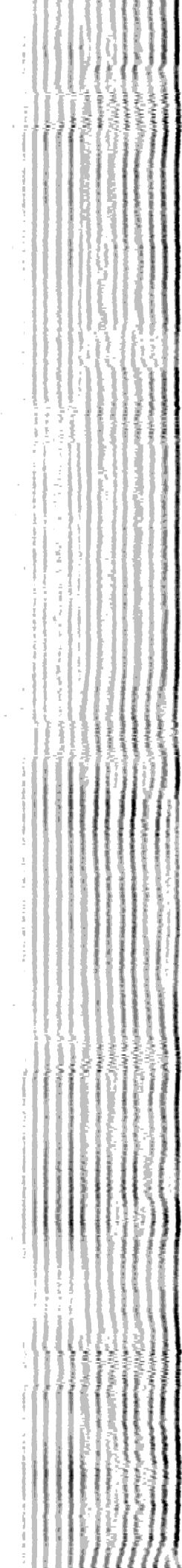
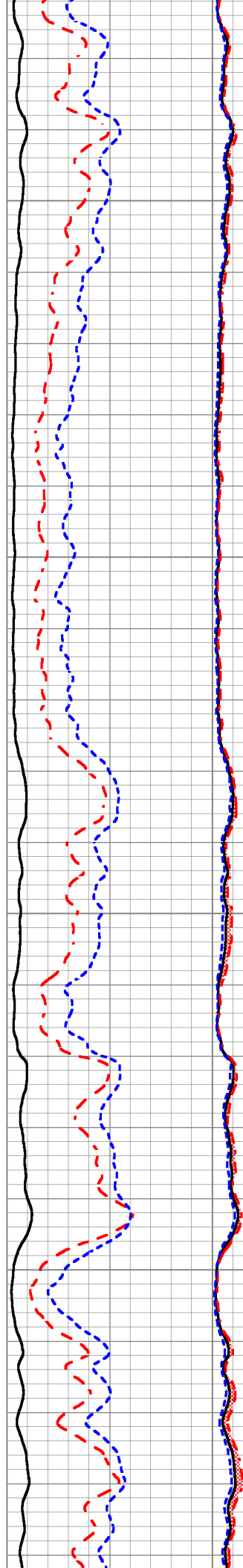
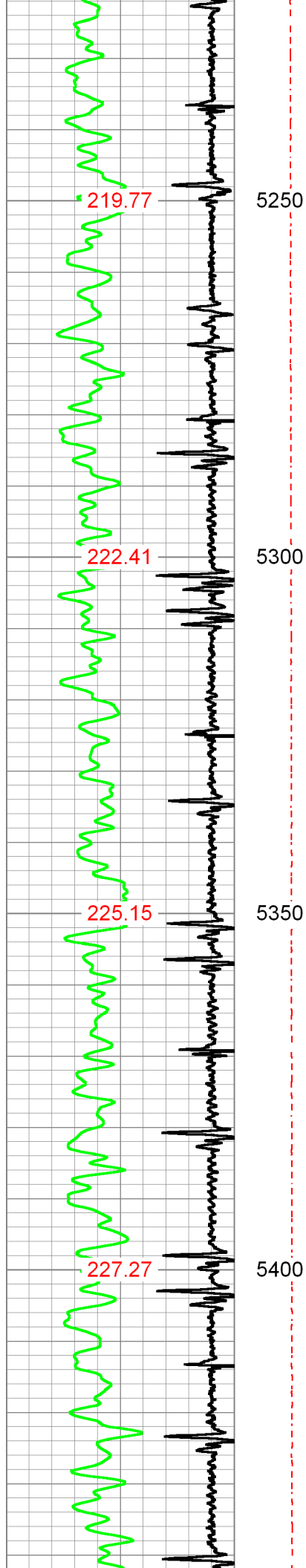
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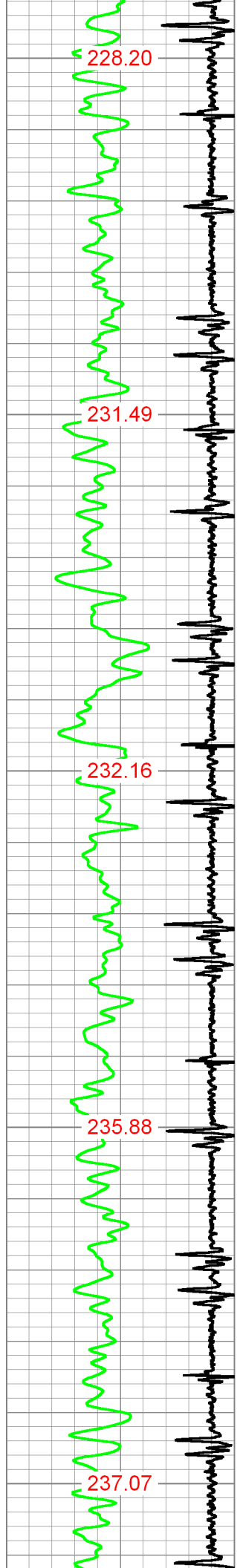
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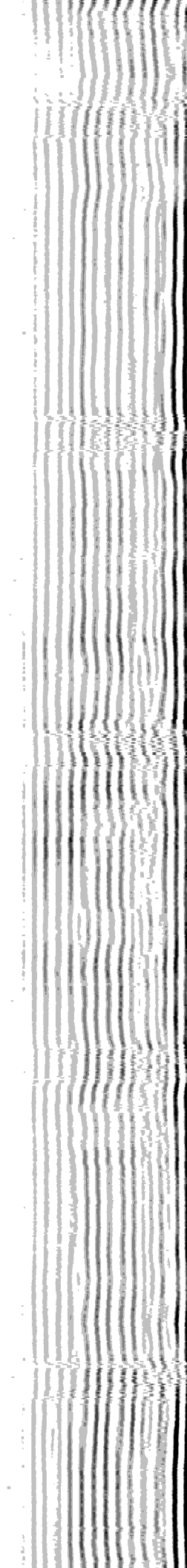
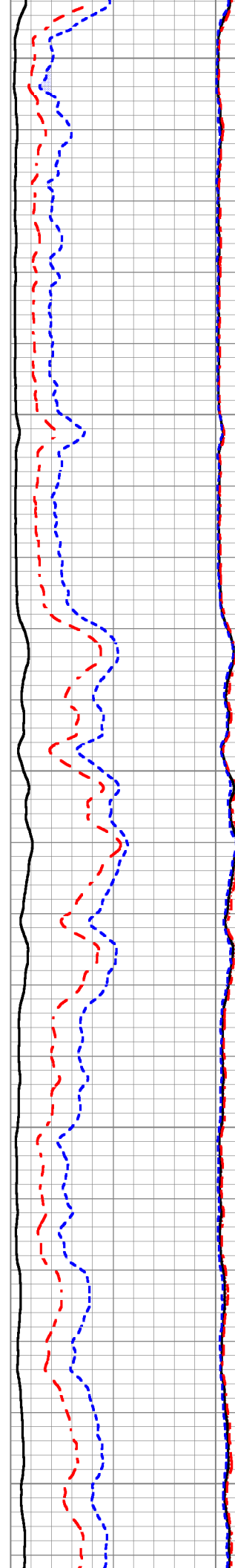


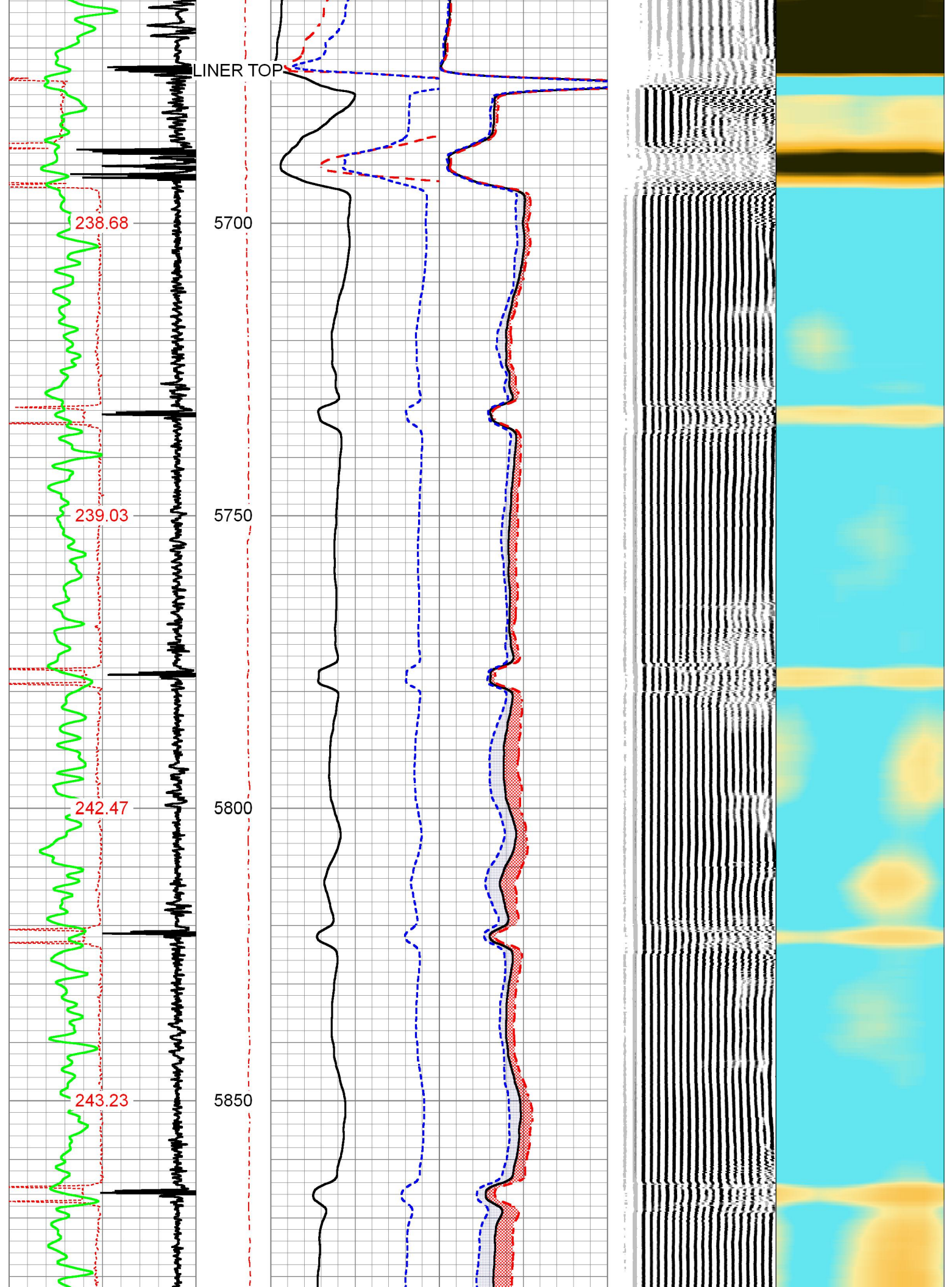




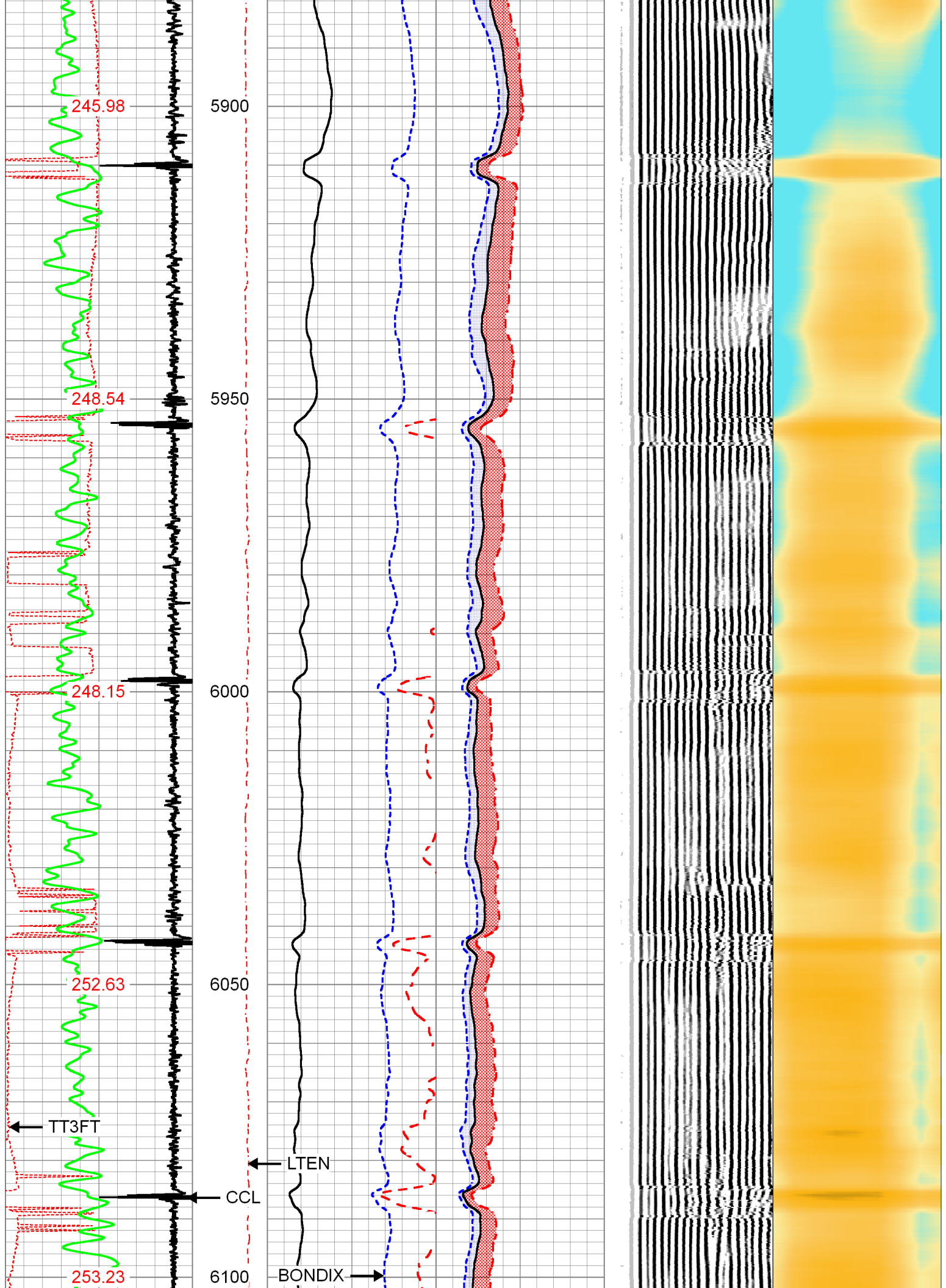


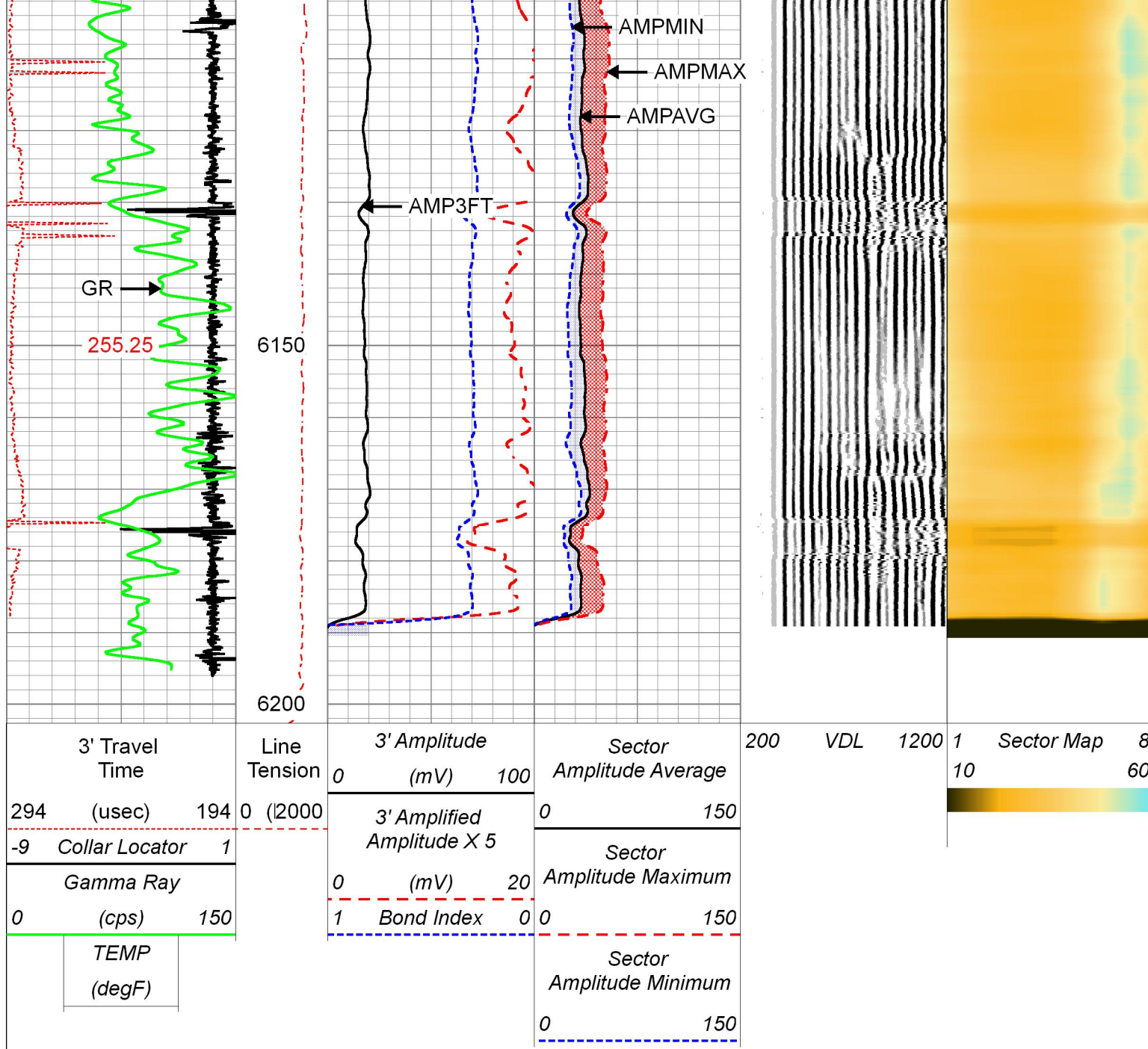
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5550  
5600  
5650









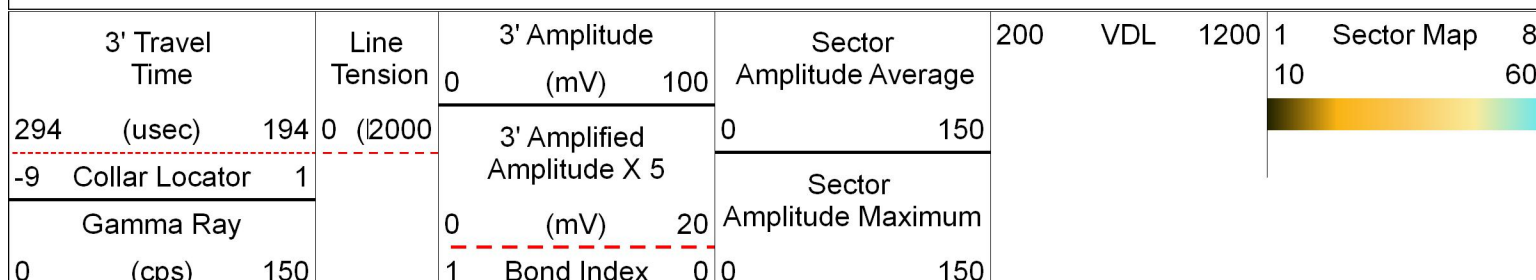


Pioneer Energy Services

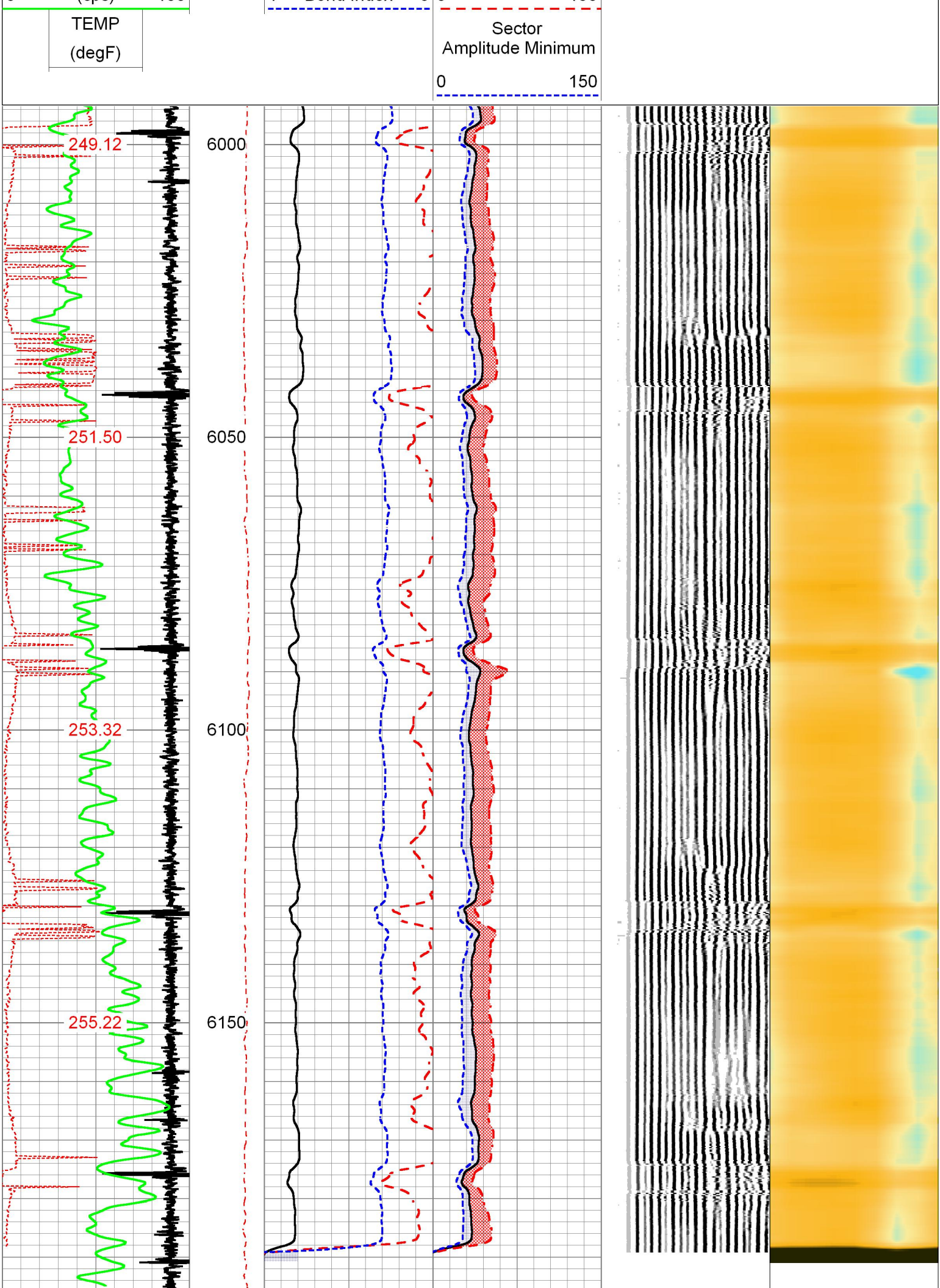
## REPEAT SECTION

1000 PSI APPLIED AT SURFACE

Database File timbro\_ranch\_1-3-9-59\_rbl.db  
 Dataset Pathname pass3.1  
 Presentation Format pnr\_scbl  
 Dataset Creation Sat Feb 21 10:43:56 2015  
 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
294	(usec)	194	0 (2000)	0 100	0 150				10		60
-9 Collar Locator 1				3' Amplified Amplitude X 5							
Gamma Ray				0 (mV) 20	Sector Amplitude Maximum						
0	(cps)	150		1 Bond Index 0	0 150						
TEMP (degF)					Sector Amplitude Minimum						
					0 150						

Actual Temperature: 68.000, pressure: 14.700, probe: 1305-84

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.005	0.665	1.000	0.000

Air Zero Calibration, performed Sat Feb 21 08:19:30 2015:

	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: 1305-84  
Tool Model: ProbeTemp(Probe  
Performed: Thu Feb 19 13:18:02 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

Well TIMBRO RANCH 1-34-10-59  
Field WATTENBERG  
County WELD  
State COLORADO

Country USA