



**PIONEER**

Pioneer Energy Services

**RADIAL BOND LOG  
WITH GAMMA RAY**

Comp. VERDAD RESOURCES		Company <b>VERDAD RESOURCES</b>	
Well TIMBRO 9-59 #8B-9-1		Well <b>TIMBRO 9-59 #8B-9-1</b>	
Field WILDCAT		Field <b>WILDCAT</b>	
Co. WELD		County <b>WELD</b>	
State COLORADO		State <b>COLORADO</b>	
Location:		API # : 05-123-47568	Other Services
1443' FSL & 600' FWL NW SW		NONE	
SEC 8 TWP 9N RGE 59W			
Permanent Datum	GL	Elevation 5044'	Elevation
Log Measured From	KB 24'	Above Perm. Datum	K.B. 5068'
Drilling Measured From	KB		D.F. N/A
			G.L. 5044'
Date of Service	06 JULY 2019		
Run Number	ONE		
Depth Driller or P8TD	16279'		
Depth Logger	6486'		
Bottom Log Interval	6486'		
Top Log Interval	SURFACE		
Open Hole Size	8.5"		
Type Fluid	WATER		
Fluid Level	FULL		
Fluid Density	N/A		
Max. Recorded Temperature	N/A		
Max. Wellhead Pressure	ZERO		
Wellhead Connection	5.125" 10K		
Estimated Cement Top	980'		
Unit Number	P-57		
Wireline Size	9/32"		
Location	FORT MORGAN		
Recorded By	SCHOENROGGE		
Witnessed By	MR. DAMRON		
	Size	Wt/Ft	Top
Tubing Record			Bottom
Surface Casing	9.625"	36#	SURFACE 1867.76'
Production Casing	5.5"	20#	SURFACE 16552'
Liner Record			

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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.  
CORRELATED TO CUSTOMER MARKER JOINT

THANK YOU FOR USING PIONEER ENERGY SERVICES!

Your Pioneer Energy Services Crew		Tool Data - Services	Serial Number
Engineer: SCHOENROGGE Operator: COOPER Operator: YUNG Operator:		SEE DIAGRAM PLUS OVERBODIES	



Top - Bottom

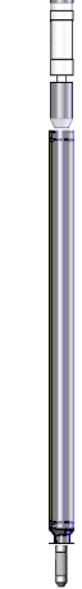
BOREID in 8.5	BOTTEMP degF 200	CASEOD in 5.5	CASETHCK in 0.361	CASEWGHT lb/ft 20	MAXAMPL mV 71.9	MINAMPL mV 2.2
MINATTN db/ft 0.8	PERFS 0	PPT usec 261	SRFTEMP degF 50	TDEPTH ft 6200		


Variable Description

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)
CCL	13.13		Cable Head-Titan_144 1 7/16" Titan Cable Head	1.03	1.44	2.00
			CCL_Logging-275 TekCo_2 (TekCo-275) 2 3/4"	1.83	2.75	15.00
WVFS8	7.88		PROBE-RBT-DIGITAL-RBL-DC (FW1304-38.75) Probe 2 3/4" Radii Bond-Corrosion Package	38.75	2.75	100.00
WVFS7	7.88					
WVFS6	7.88					
WVFS5	7.88					
WVFS4	7.88					
WVFS3	7.88					
WVFS2	7.88					
WVFS1	7.88					
WVFCAL	7.88					
WVF3FT	7.88					
WVF5FT	6.88					

HEADVOLT	3.69					
			GR-275 Probe (080630) Probe 2.75" Gamma Ray	3.36	2.75	40.00
GR	1.15					
			Bullnose-PROBE Probe Go Pin Pressure Cap	0.33	1.38	1.00
Dataset: verdad_timbro9-59#8b-9-1_0512347568_20190706_scbl.db: field/well/run1/pass5 Total length: 15.31 ft Total weight: 158.00 lb O.D.: 2.75 in						

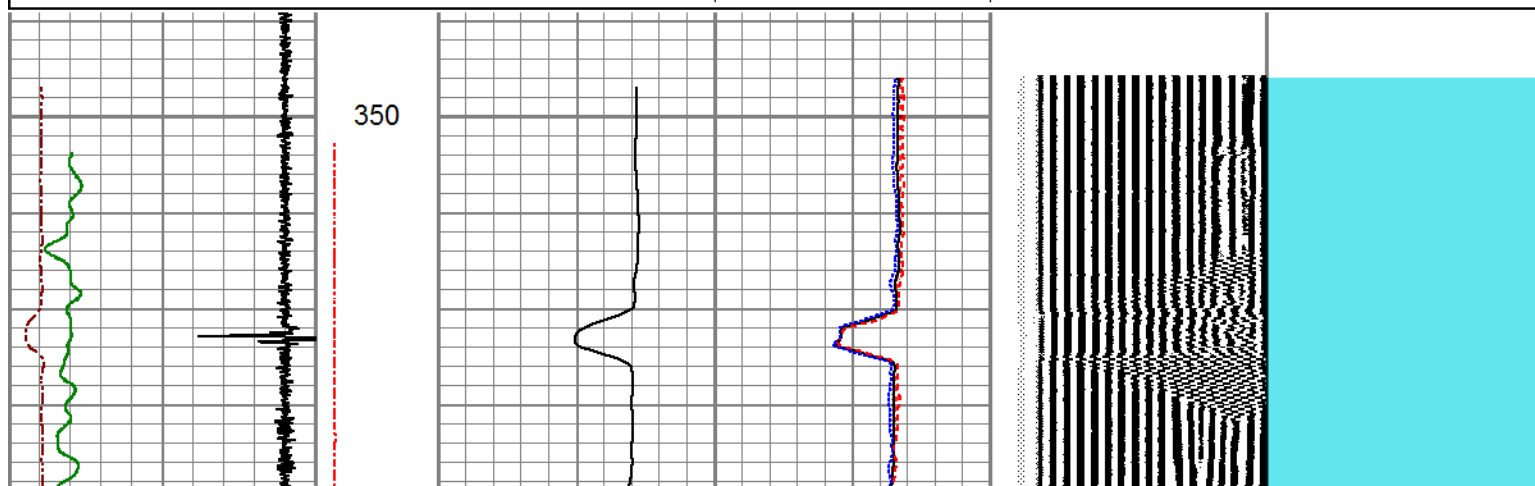


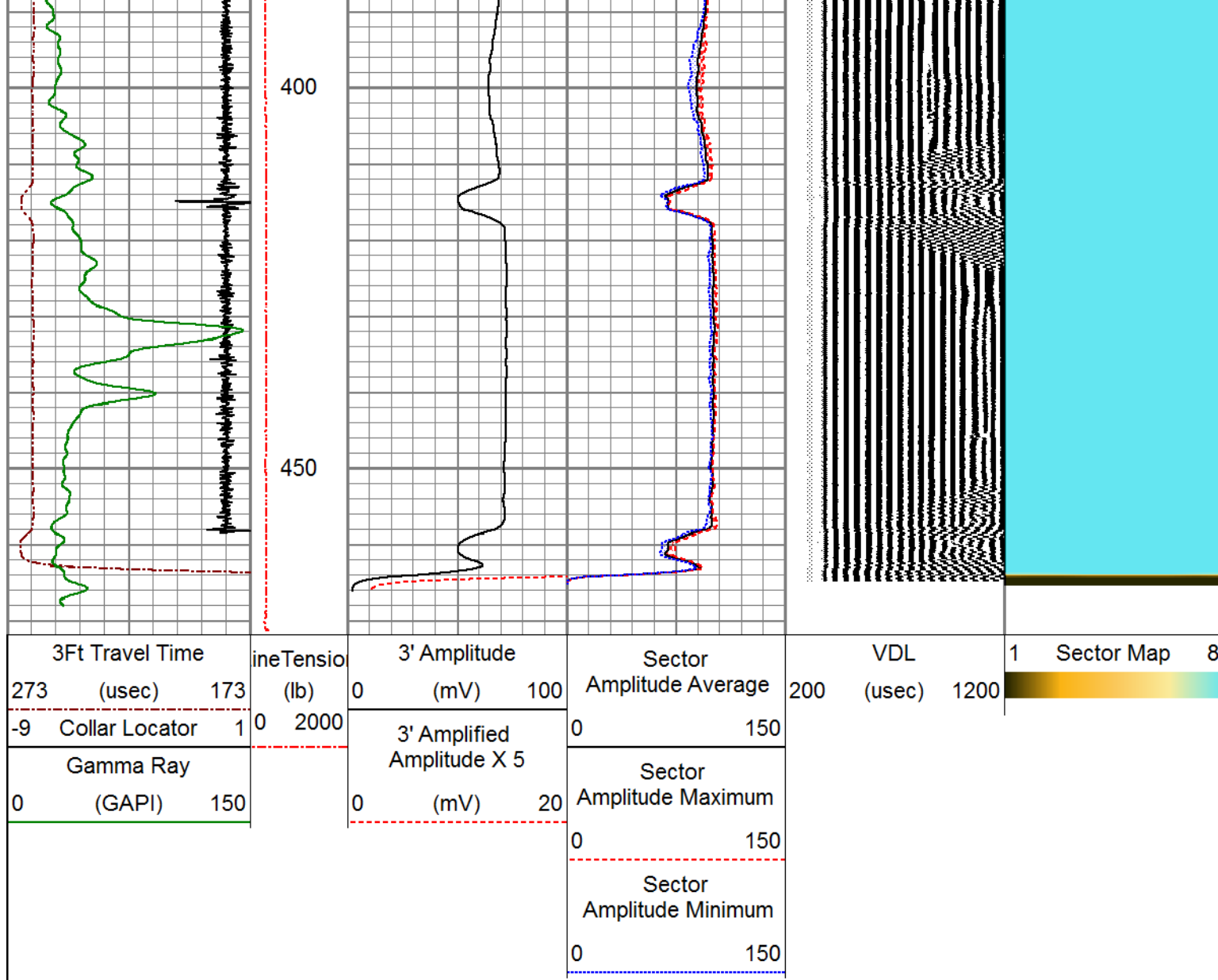
## FREE PIPE SECTION


### ZERO PSI APPLIED AT SURFACE

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Dataset Pathname	pass2
Presentation Format	pinr_scbl
Dataset Creation	Sat Jul 06 09:16:58 2019
Charted by	Depth in Feet scaled 1:240

3Ft Travel Time	ineTensio	3' Amplitude	Sector	VDL	1	Sector Map	8
273 (usec) 173	(lb)	0 (mV) 100	Amplitude Average	200 (usec) 1200			
-9 Collar Locator 1	0 2000	3' Amplified Amplitude X 5	0 150				
Gamma Ray		0 (mV) 20	Sector Amplitude Maximum				
0 (GAPI) 150			0 150				
			Sector Amplitude Minimum				
			0 150				





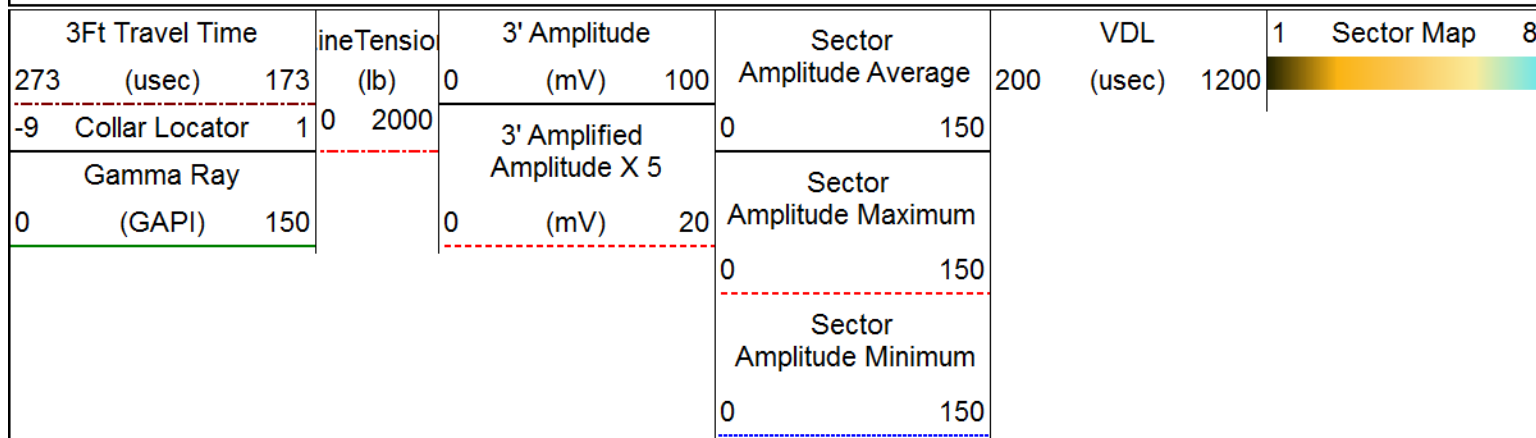


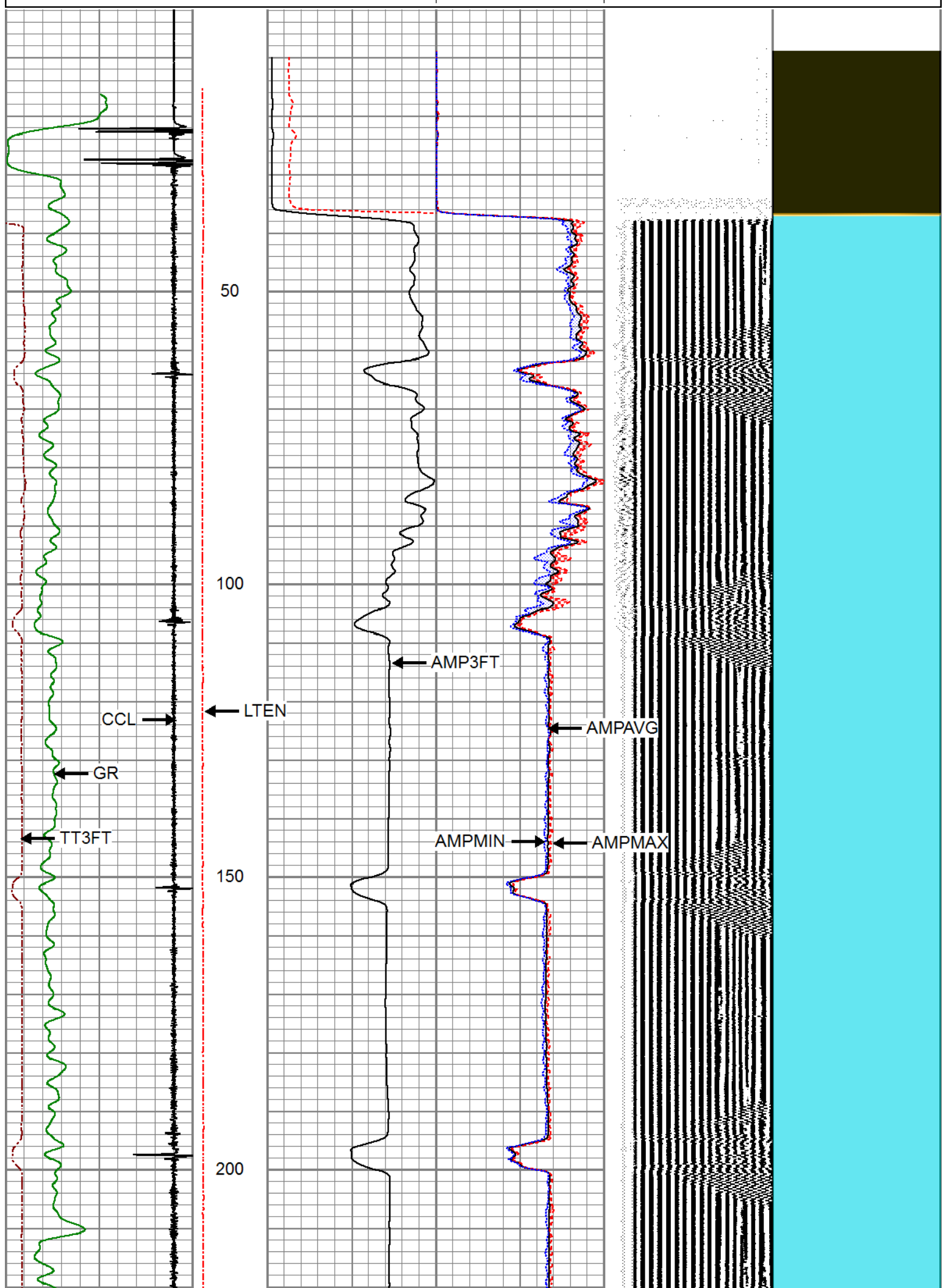
**PIONEER**  
Pioneer Energy Services

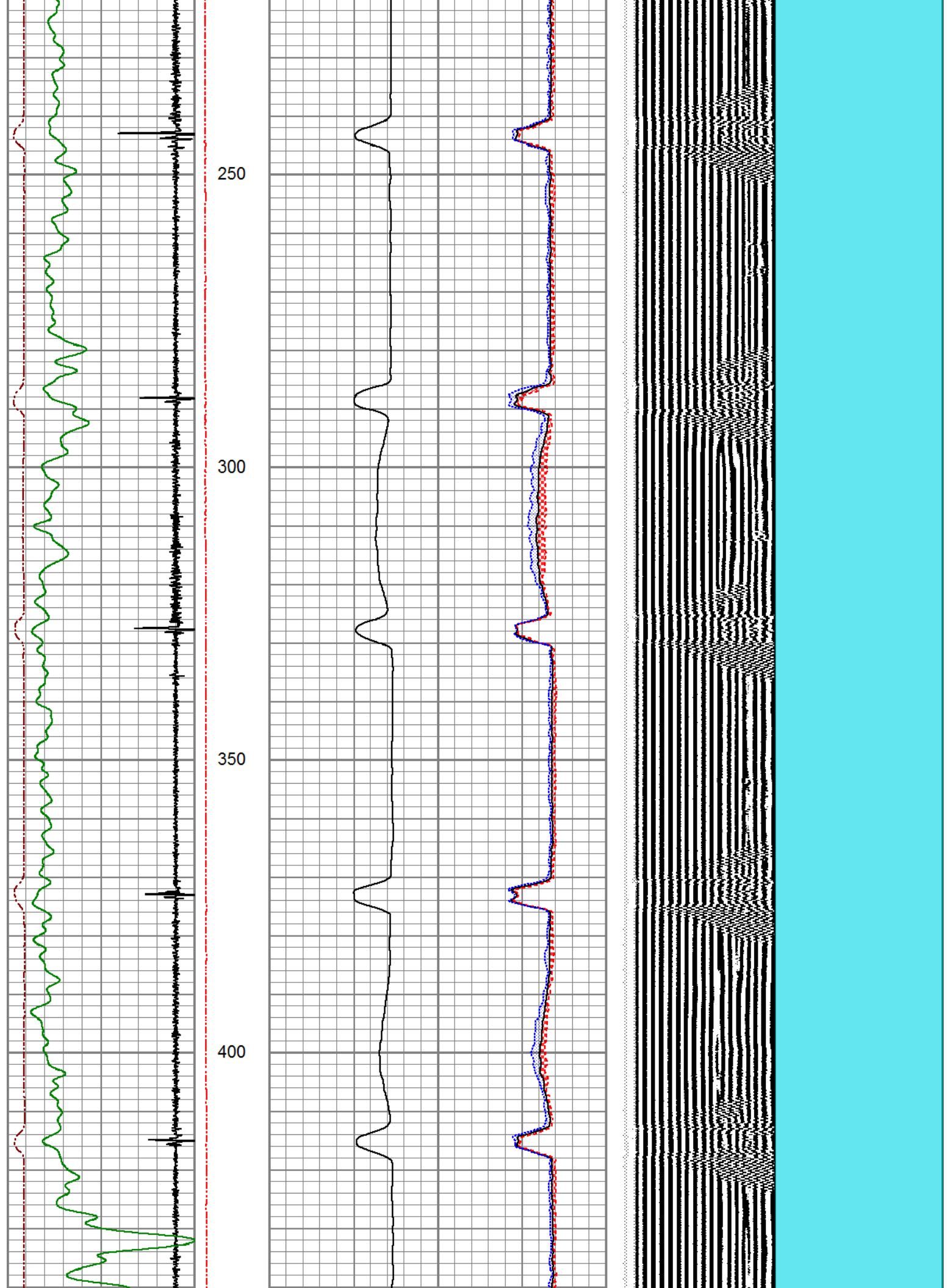
## MAIN LOG

### ZERO PSI APPLIED AT SURFACE

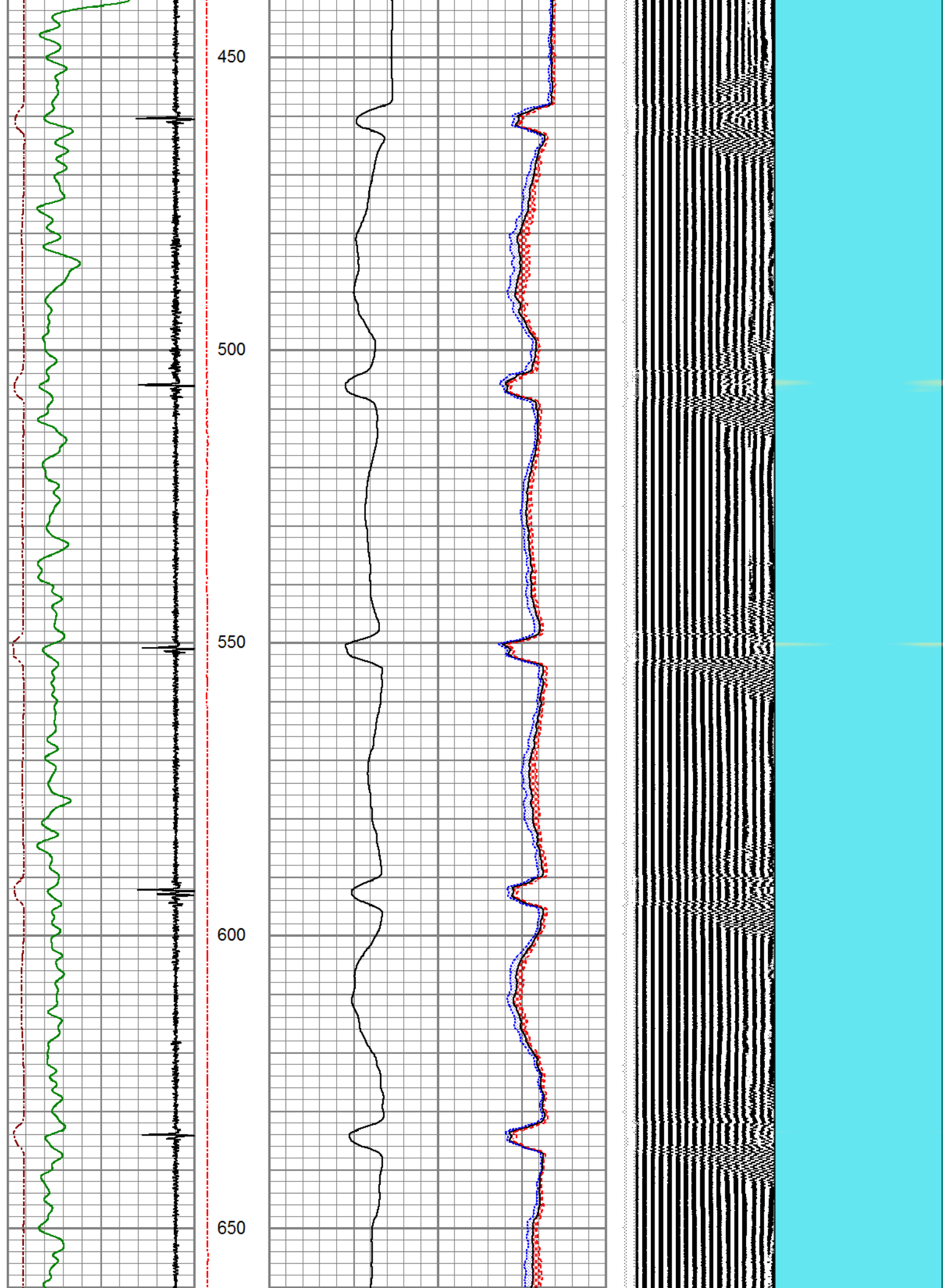
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Presentation Format	pinr_scbl
Dataset Creation	Sat Jul 06 09:43:57 2019
Charted by	Depth in Feet scaled 1:240

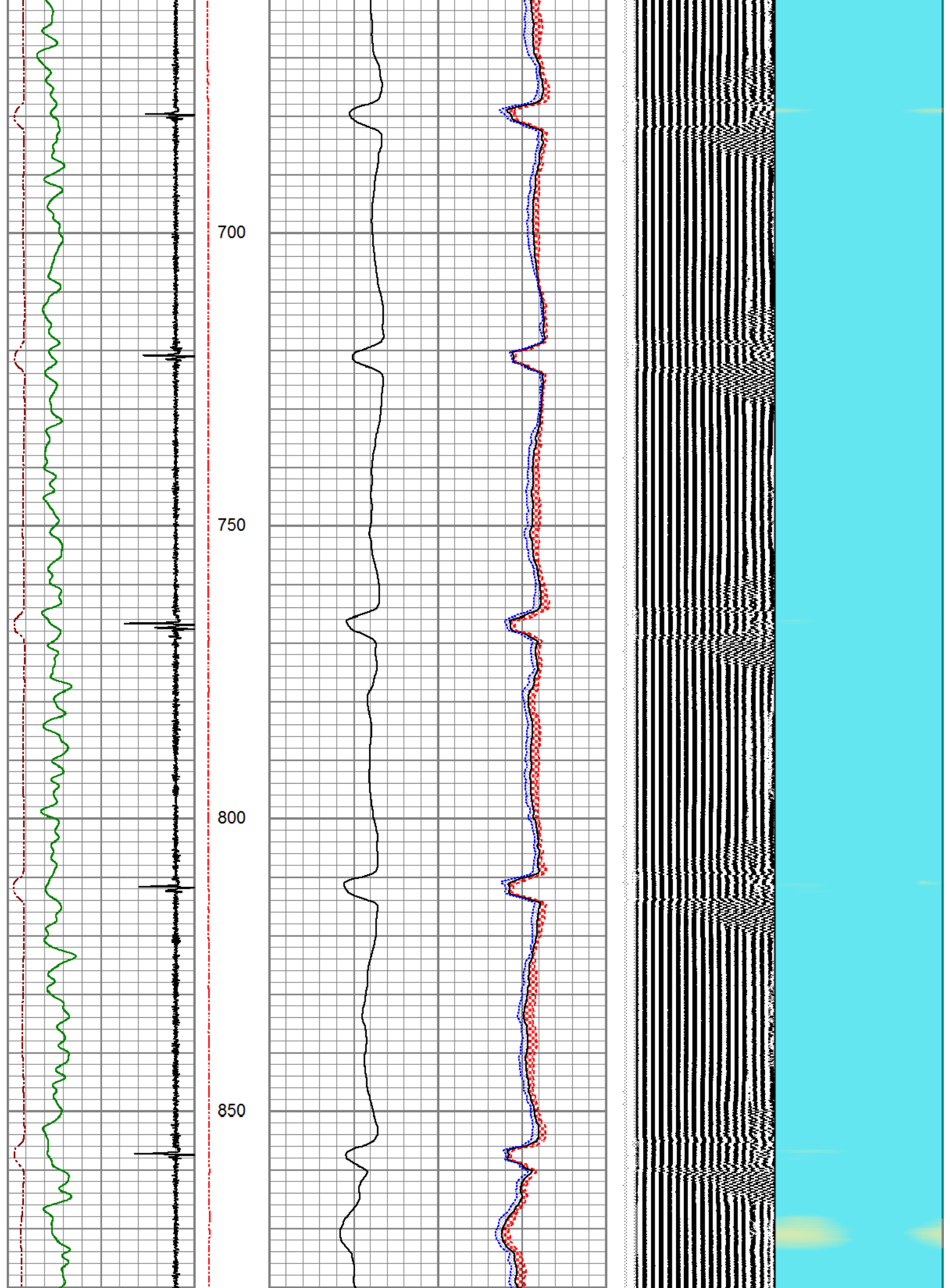




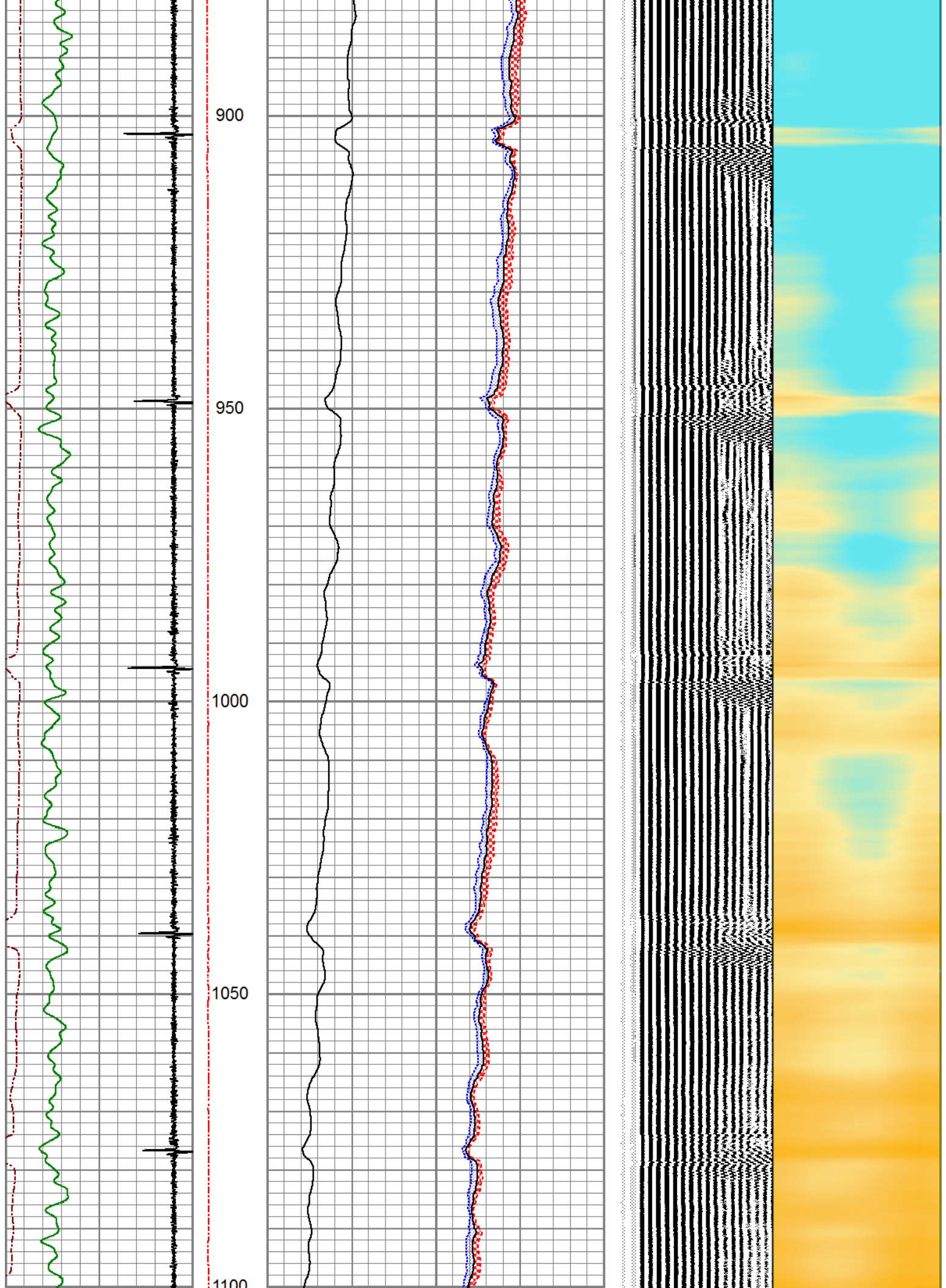


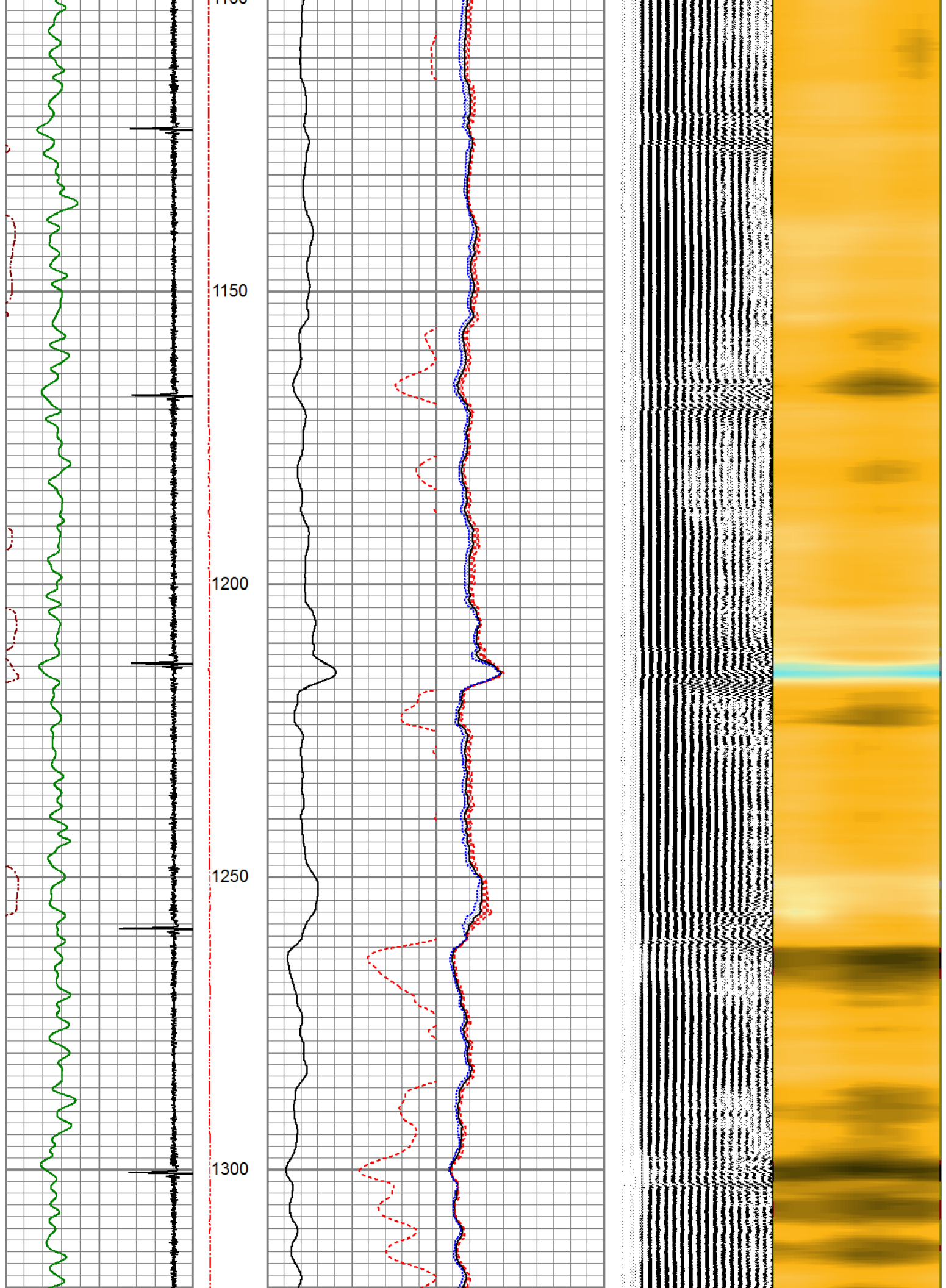


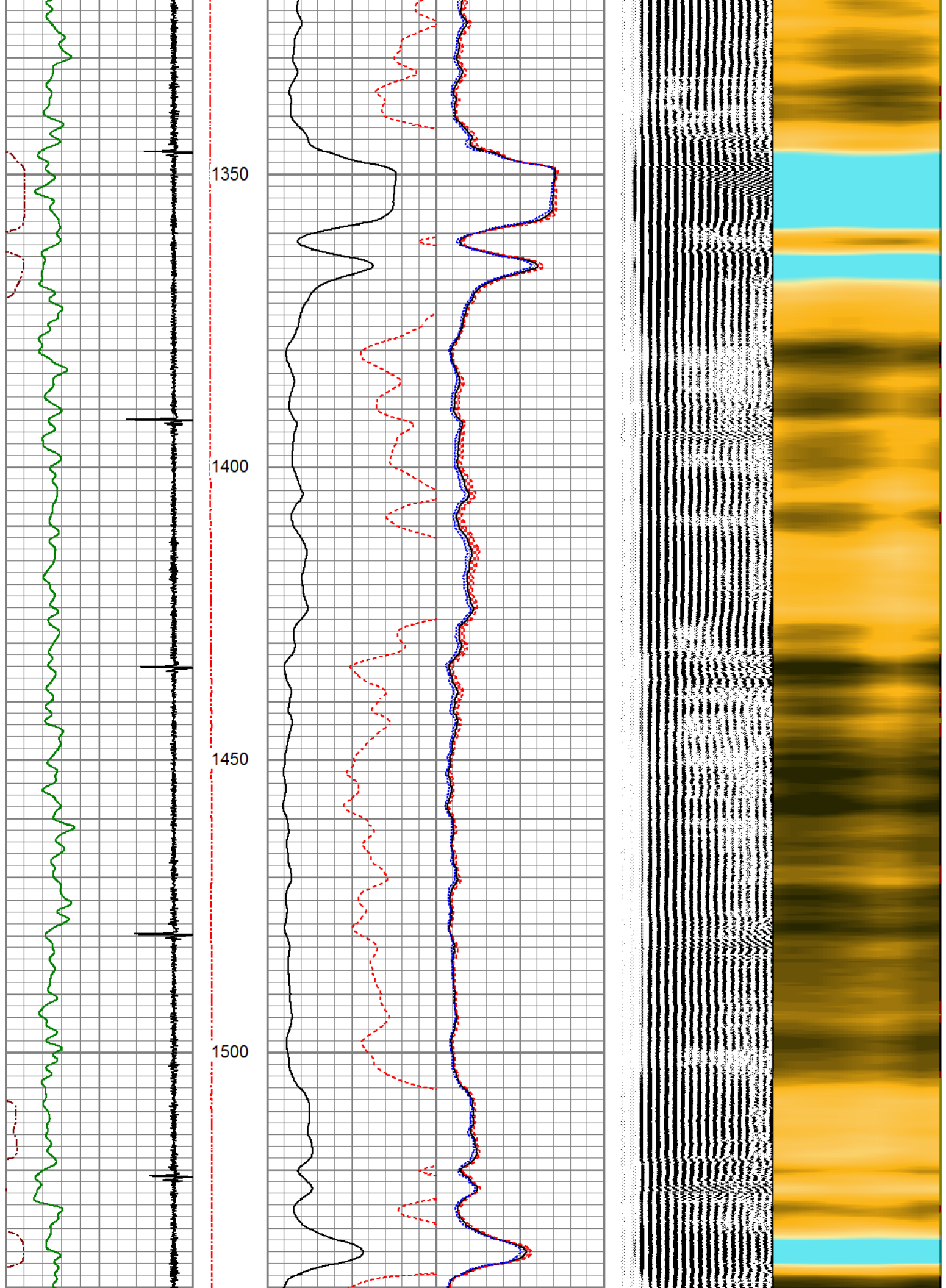


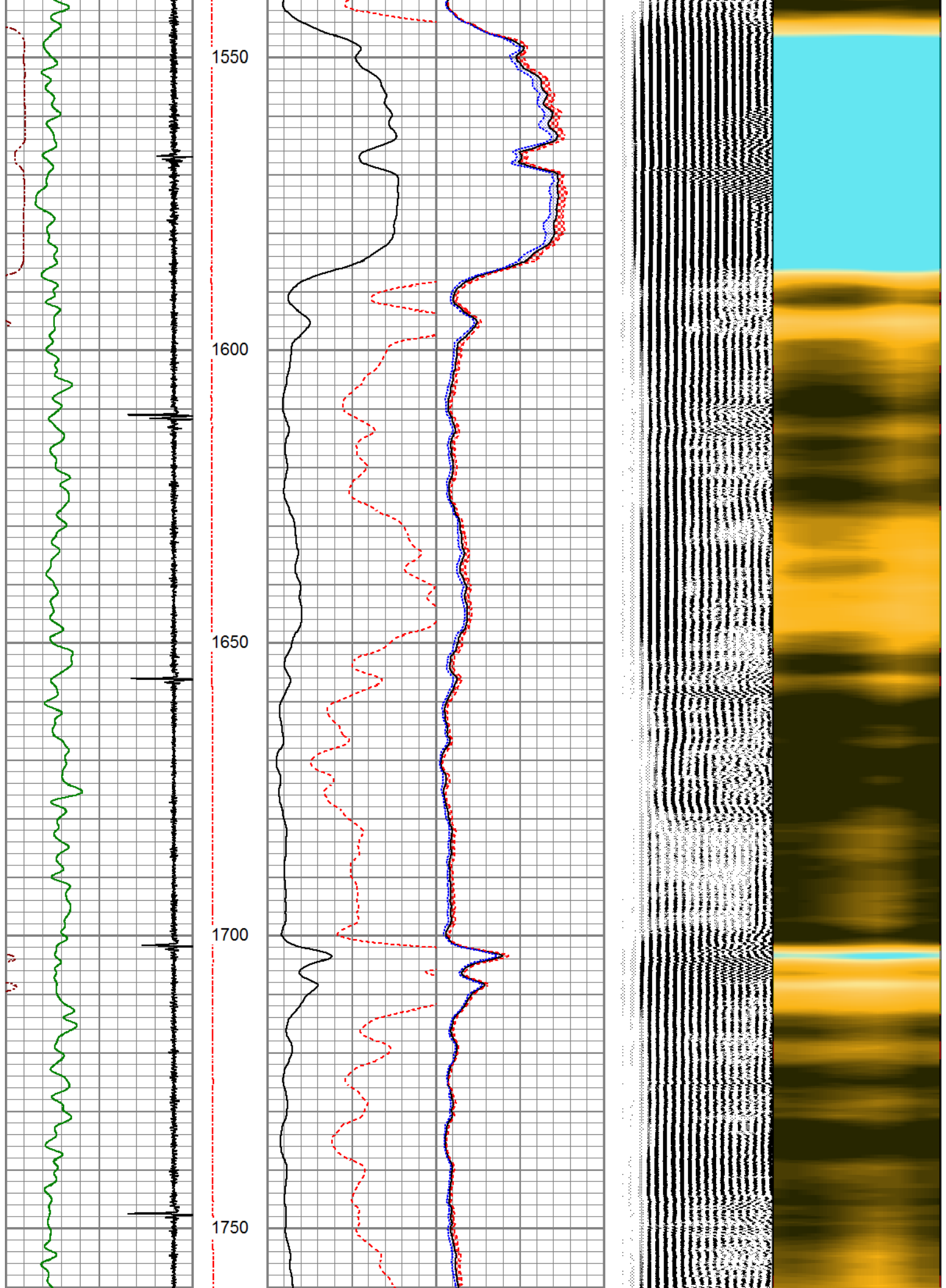




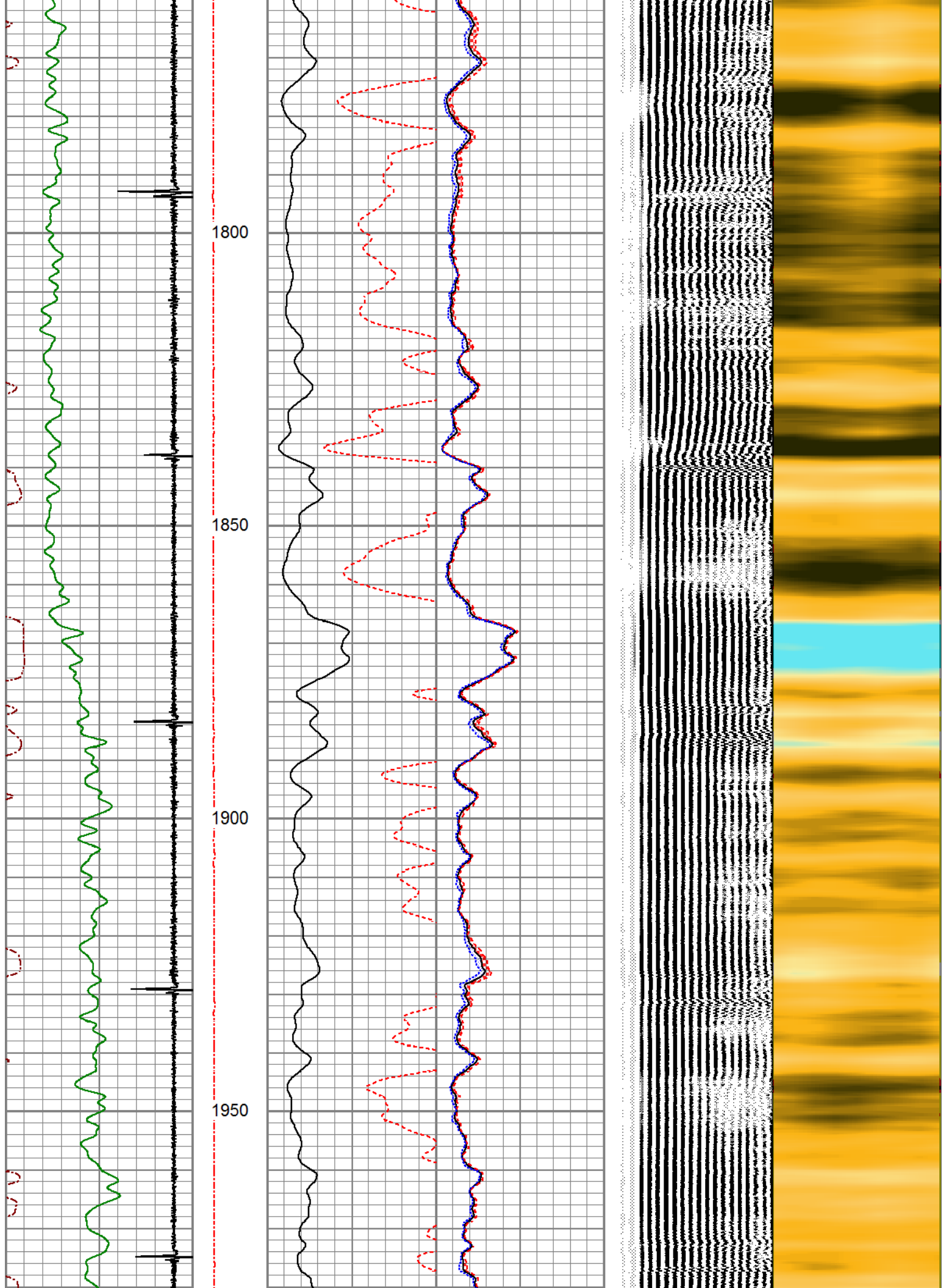


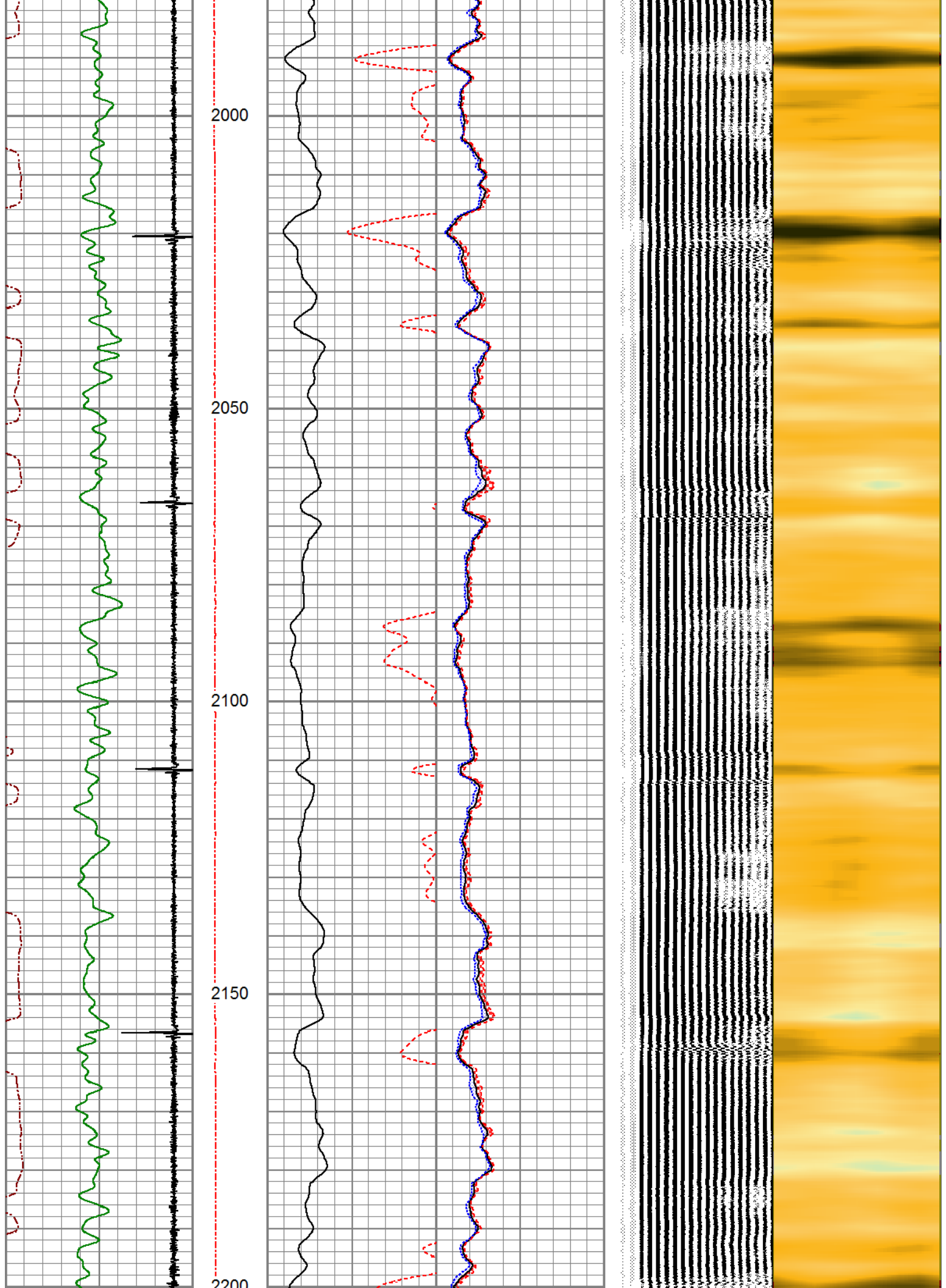




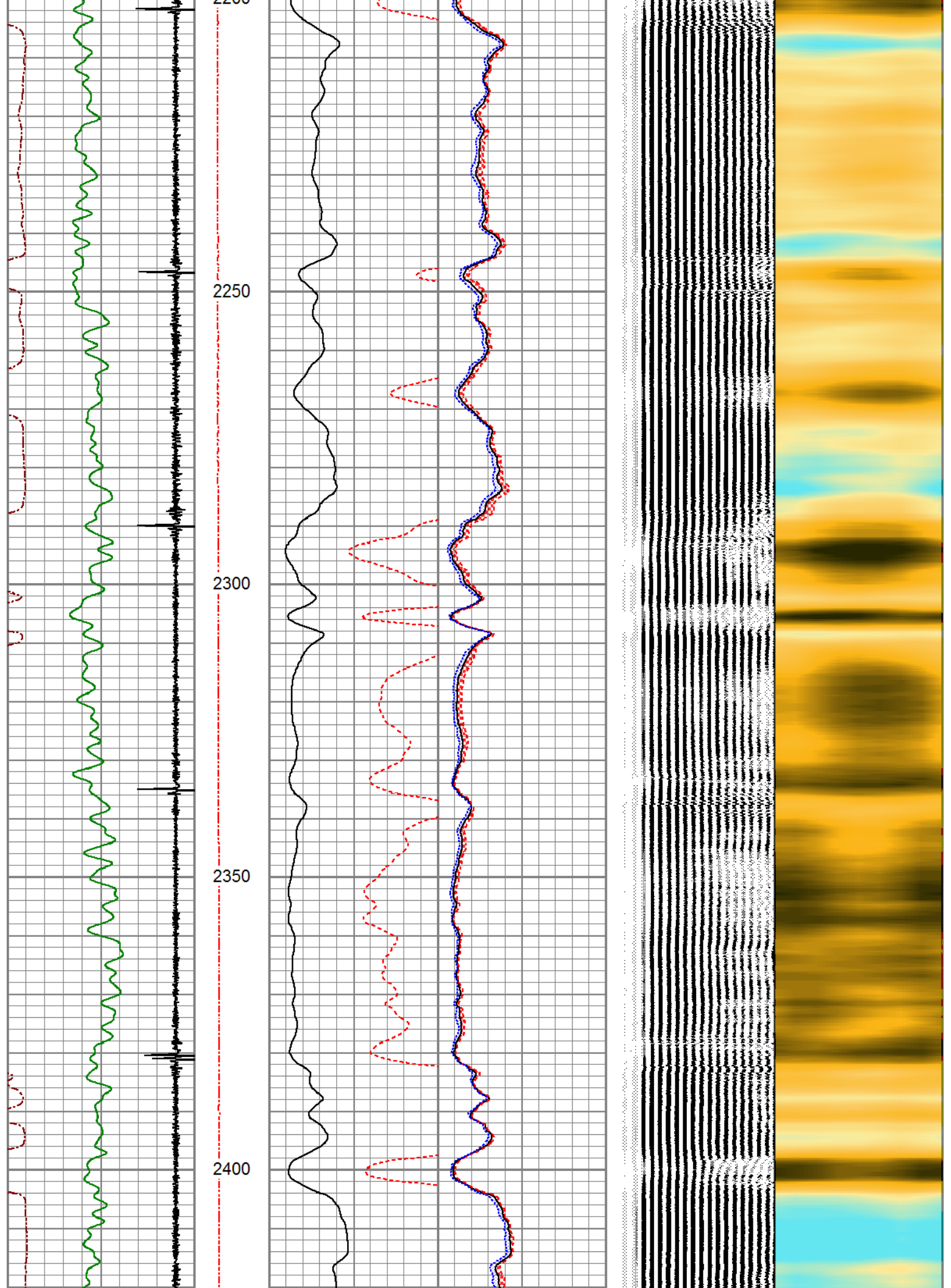


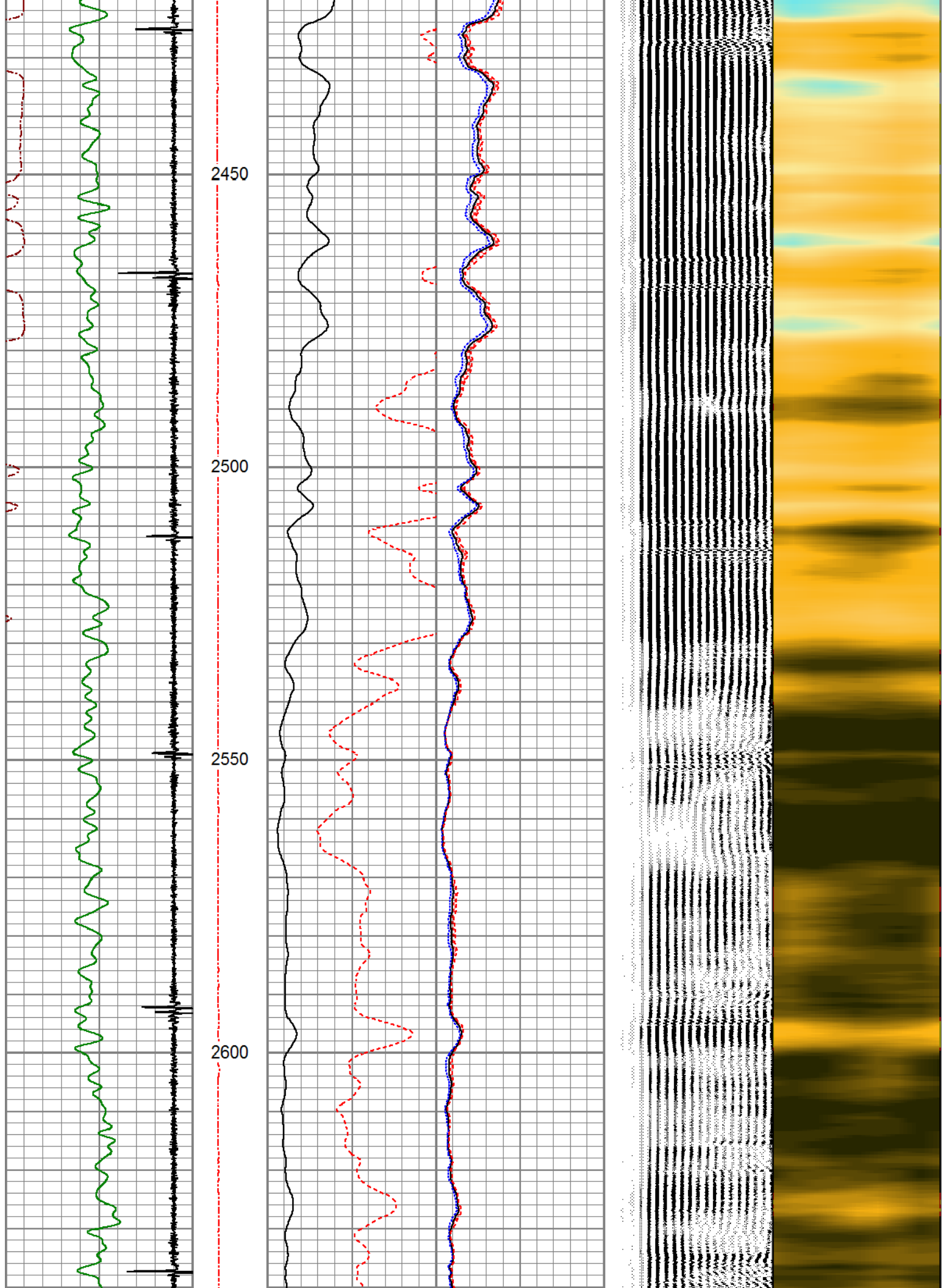


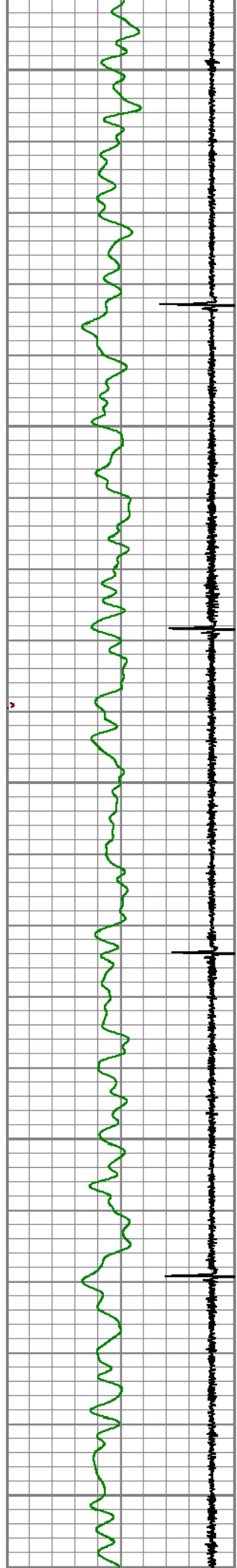












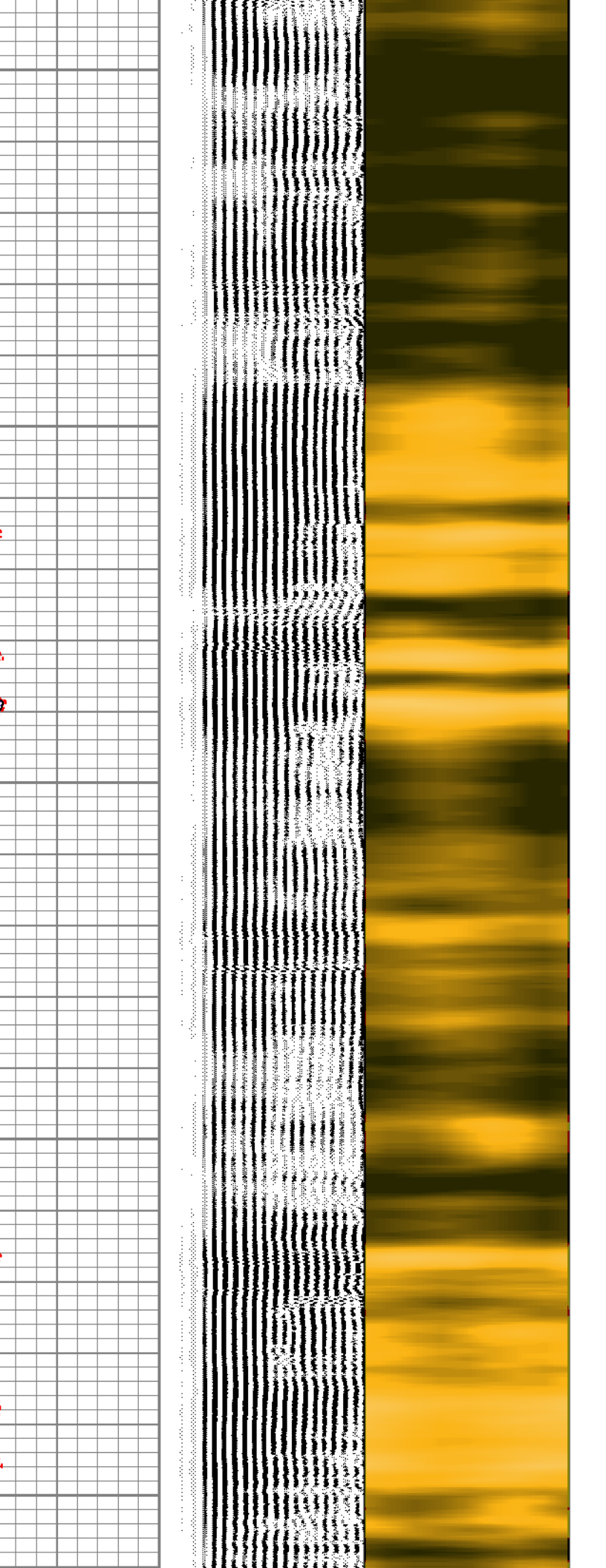
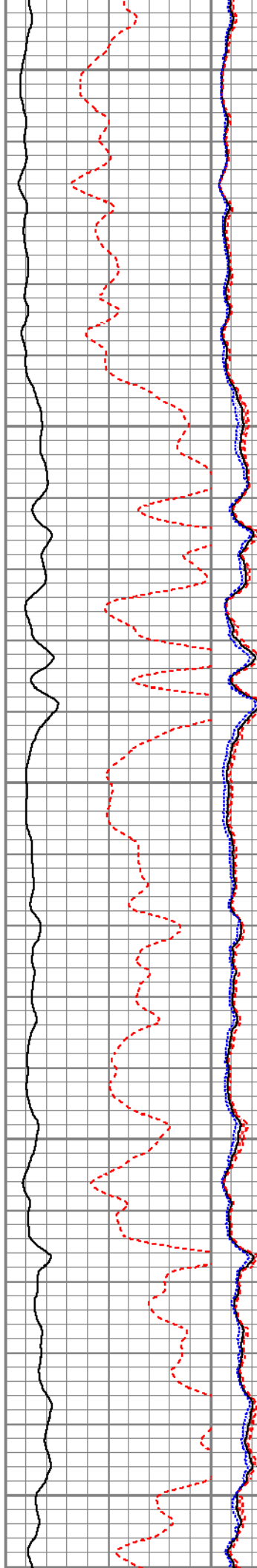
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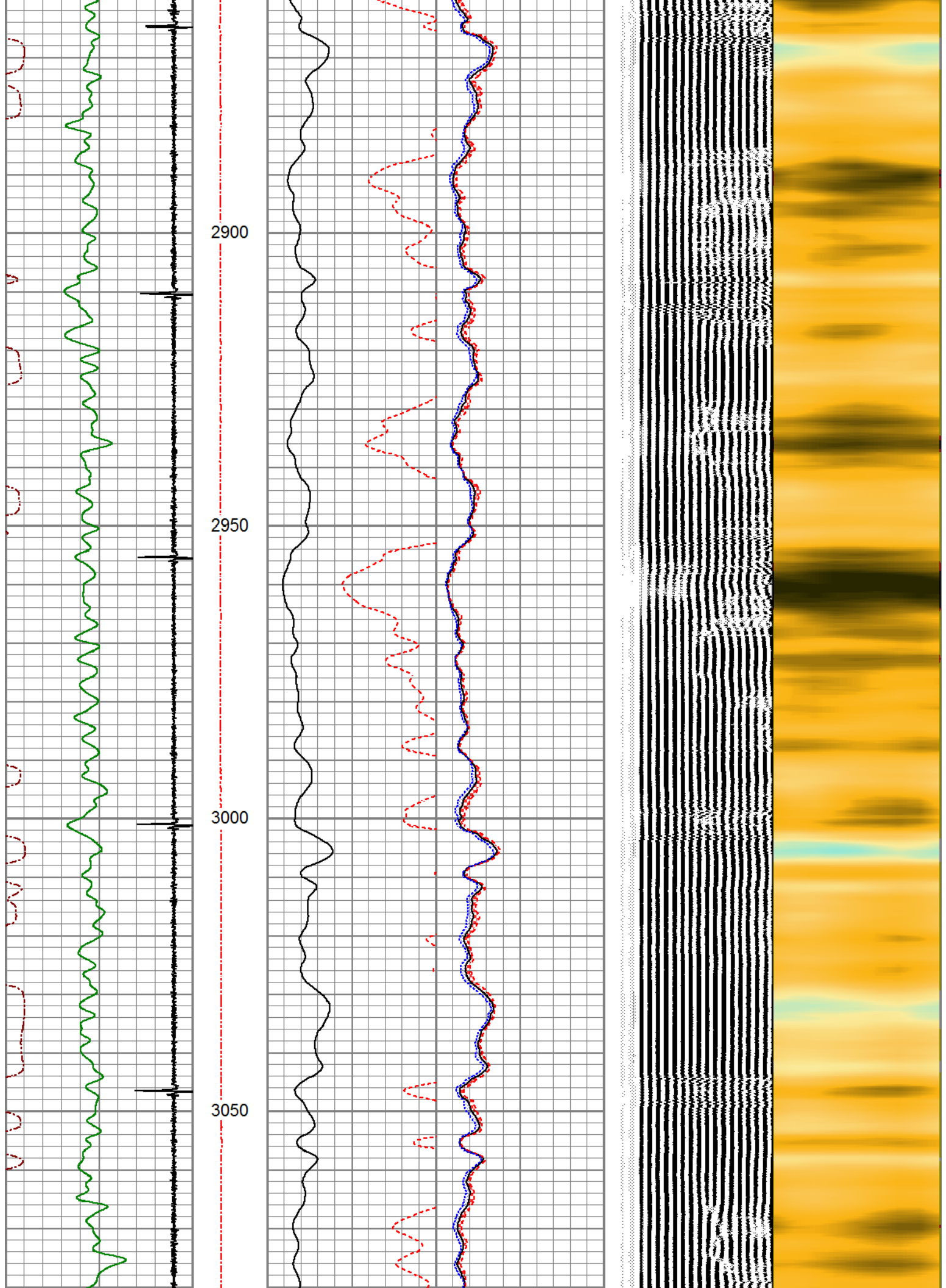
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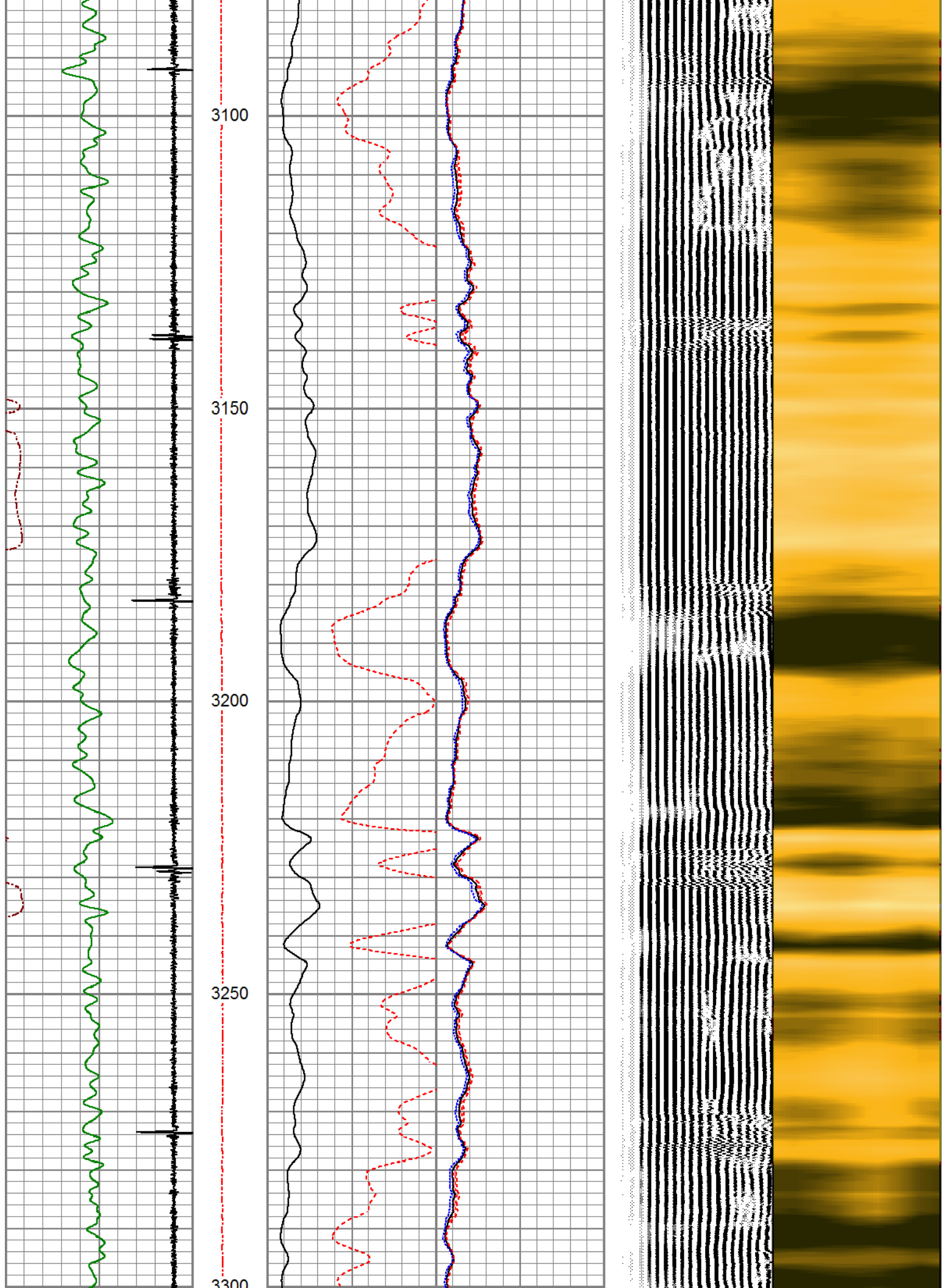
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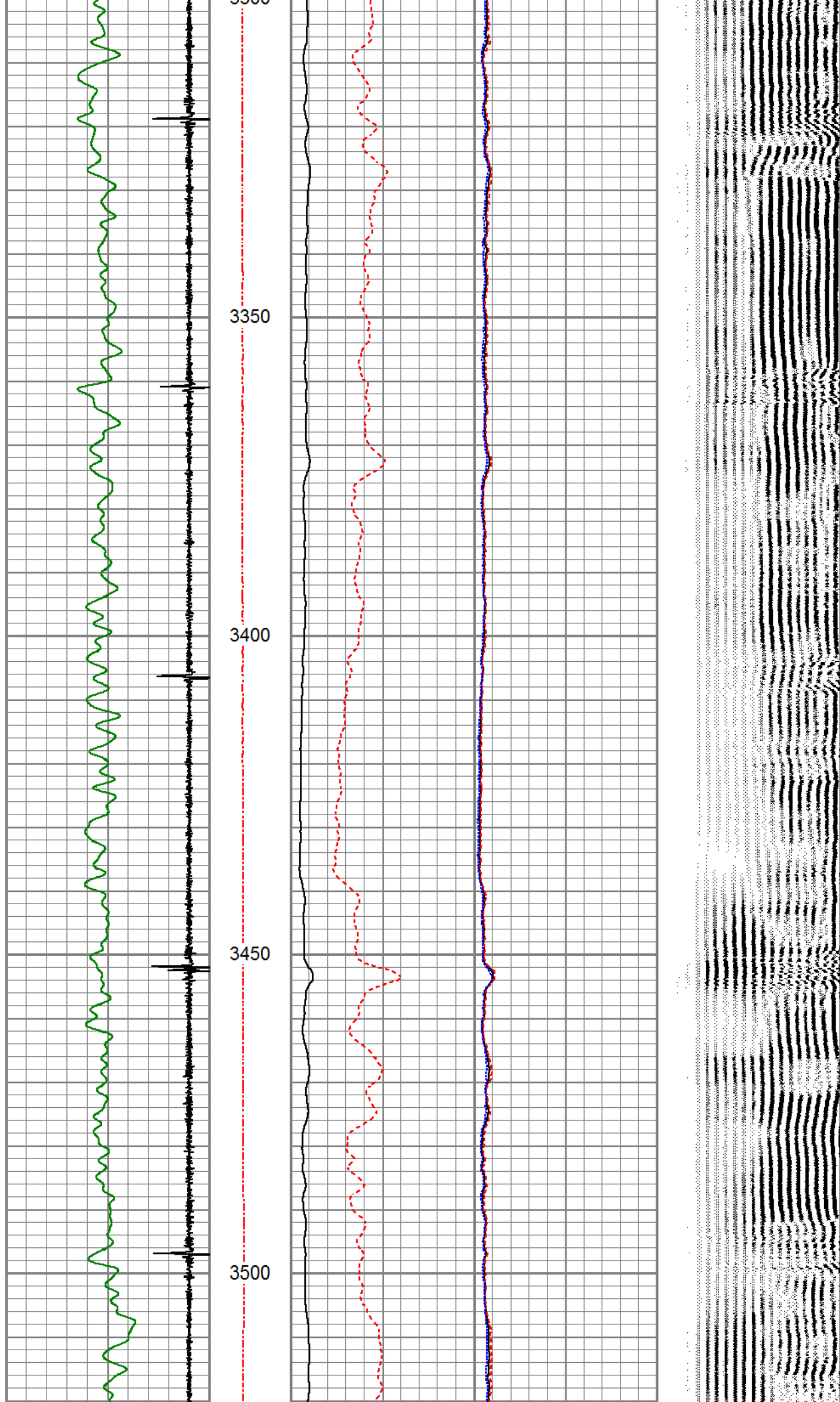
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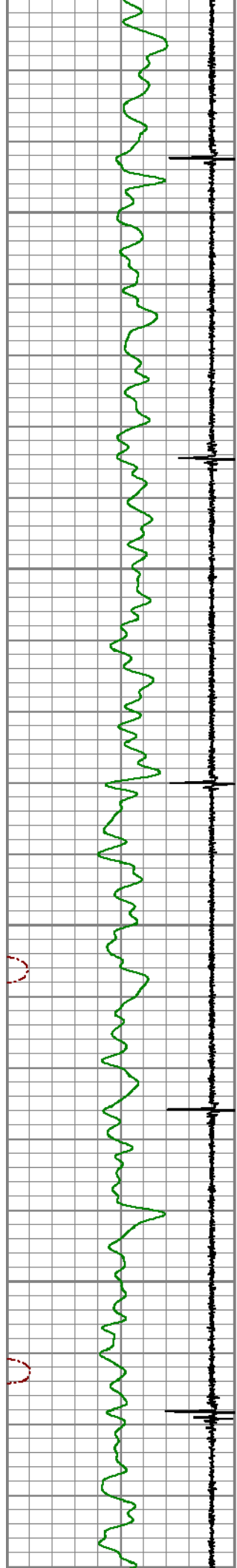










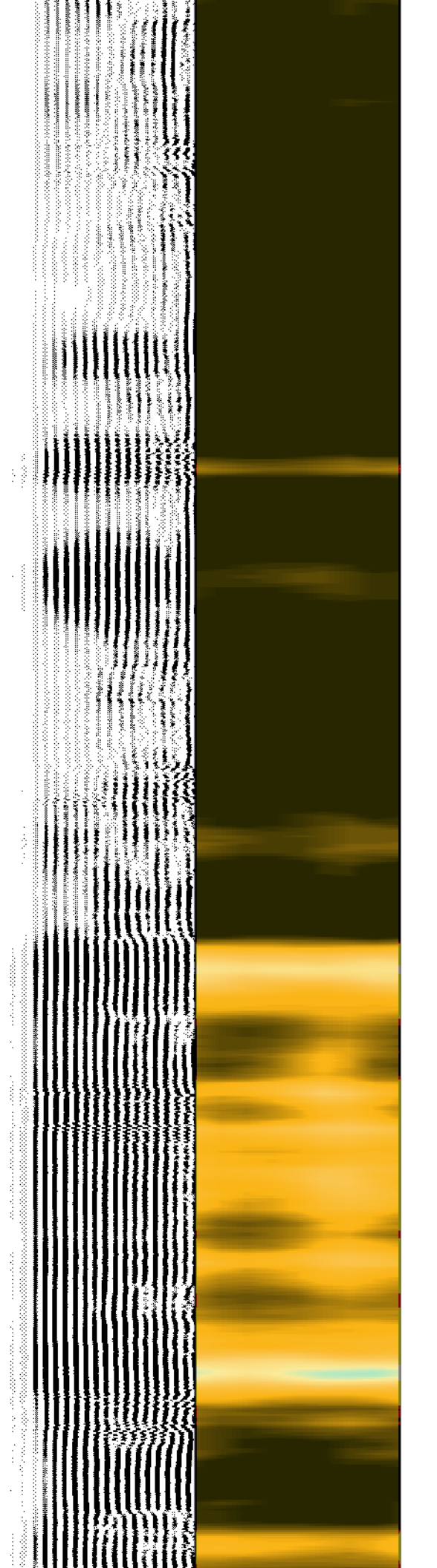


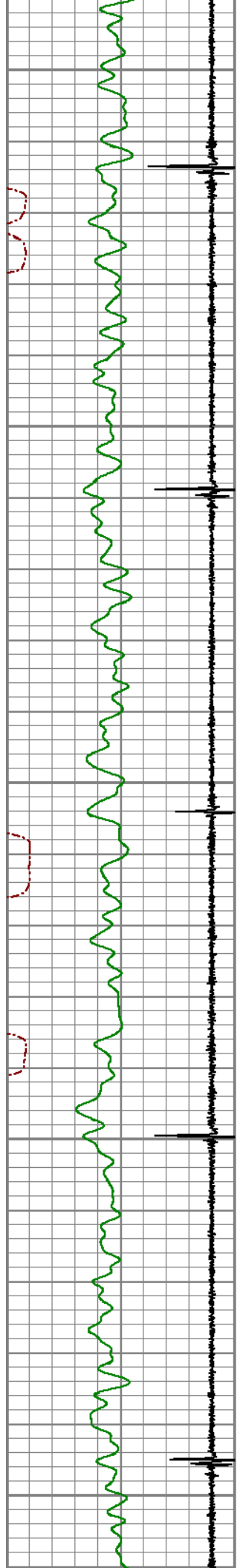
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3650

3700





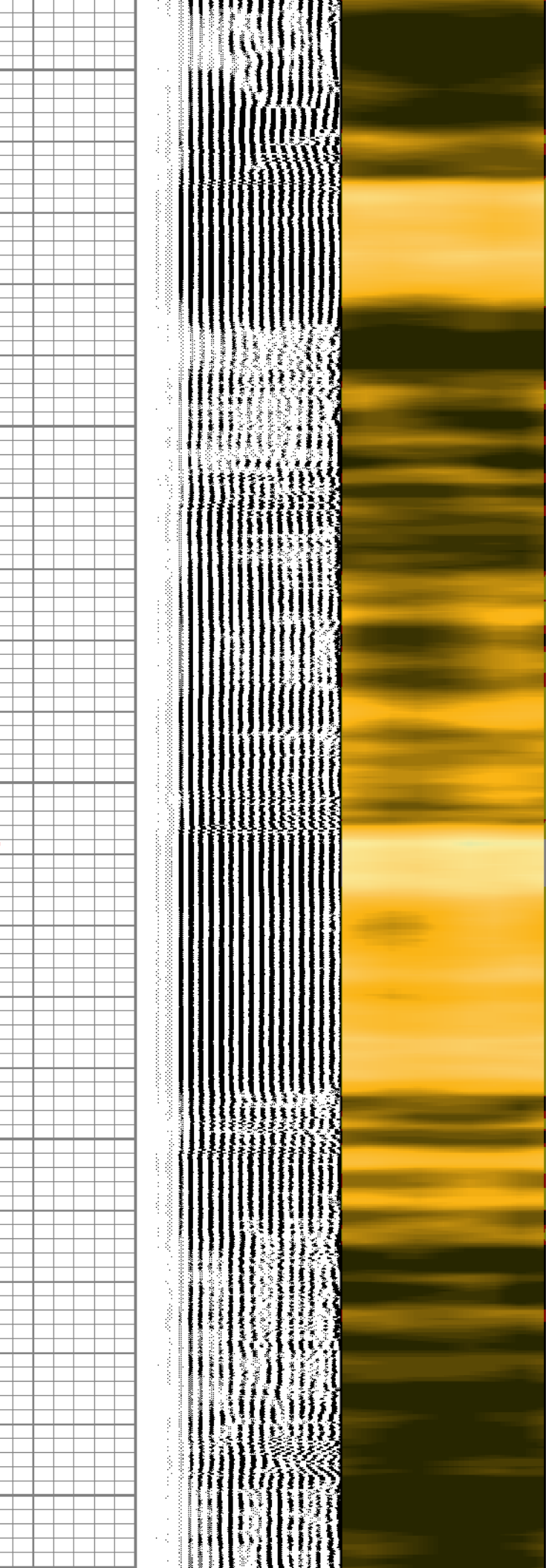
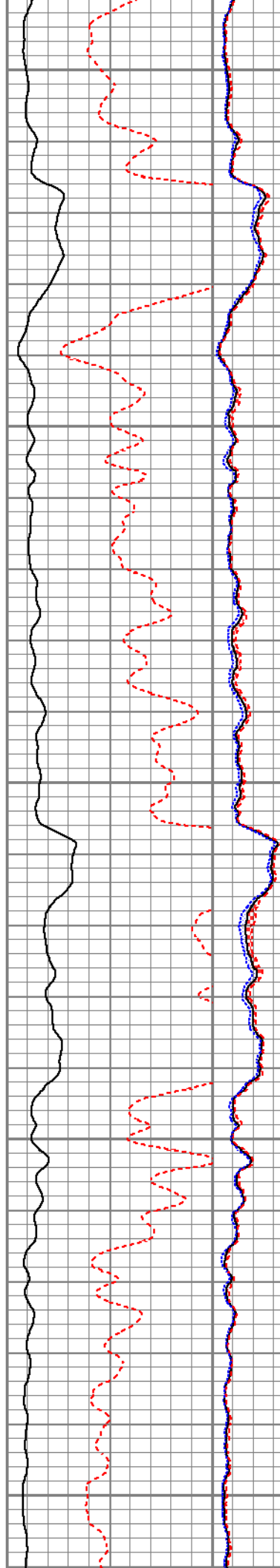
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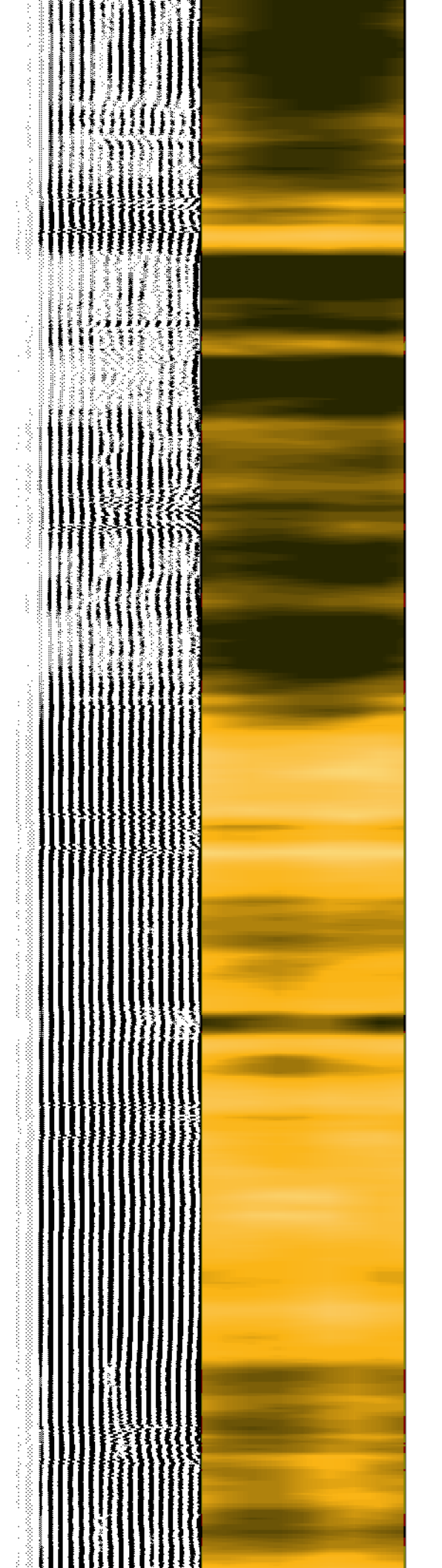
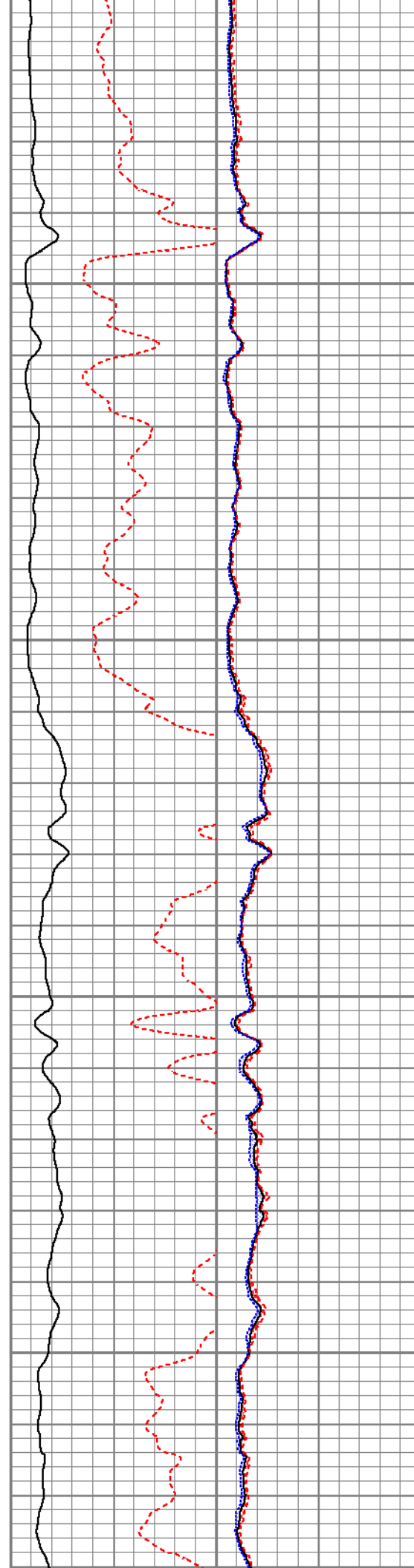
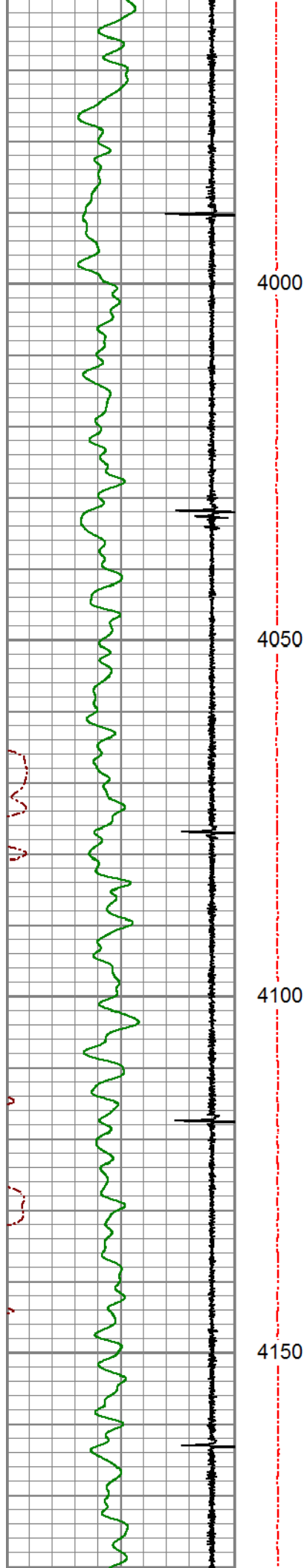
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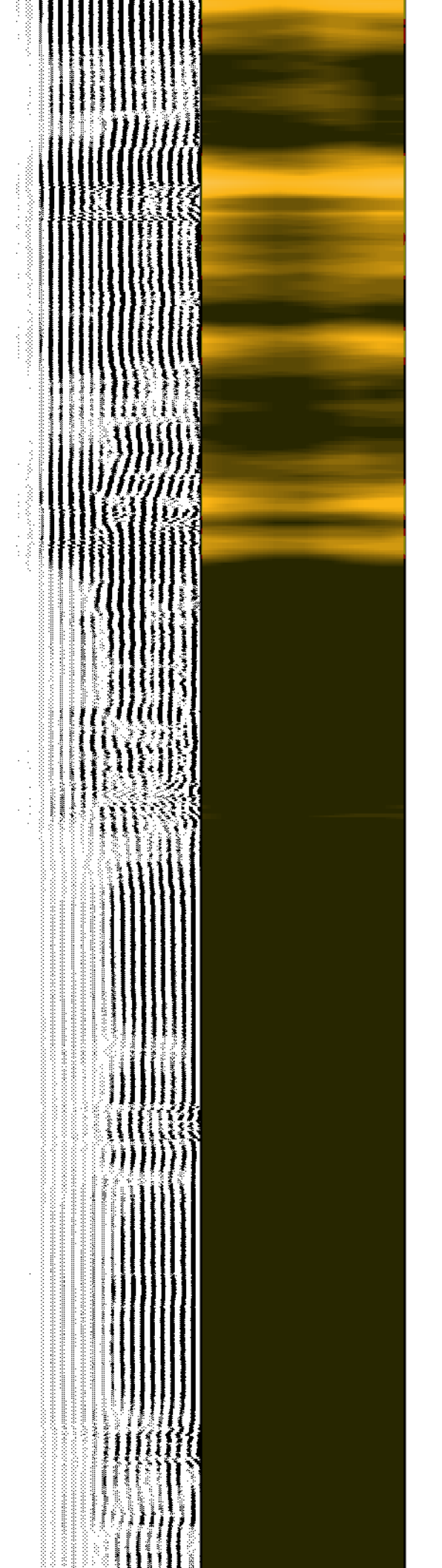
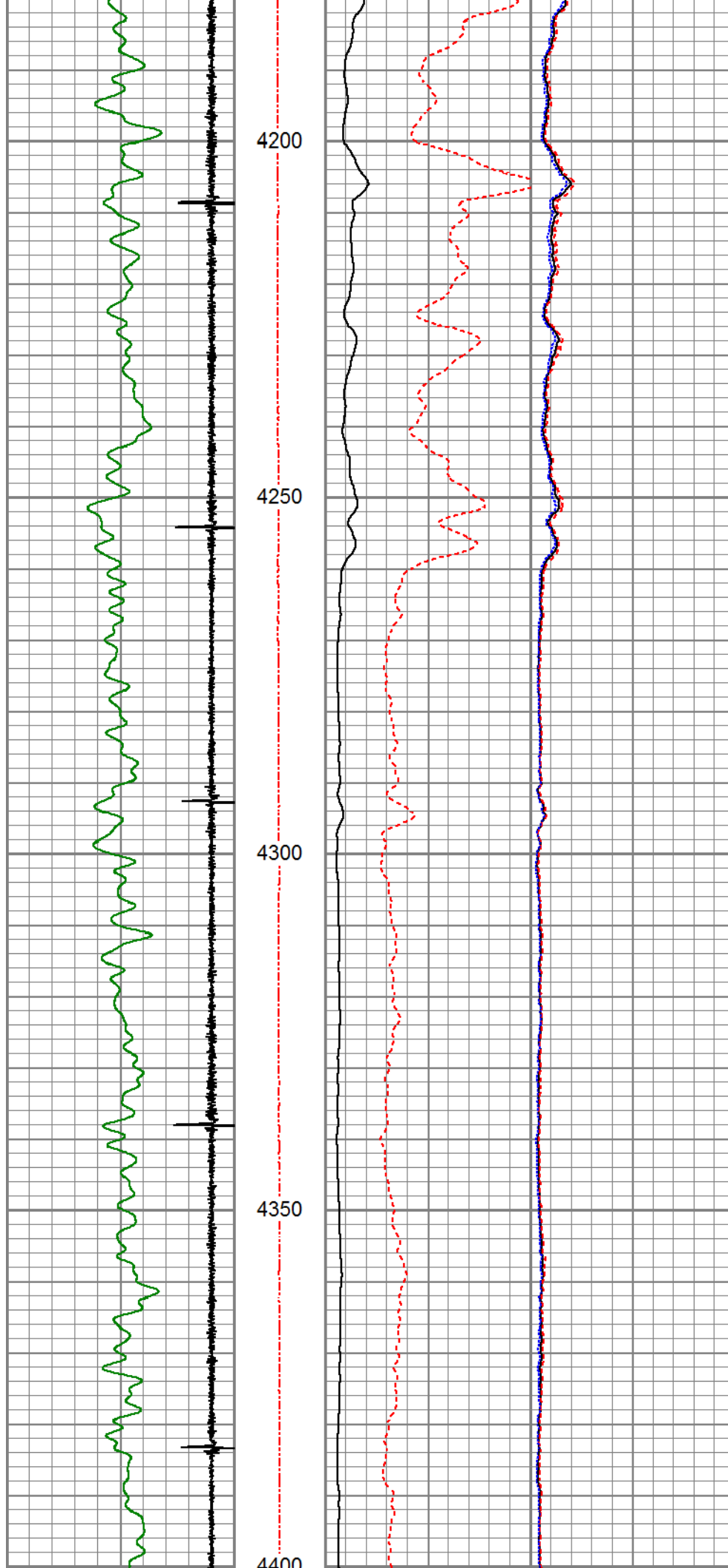
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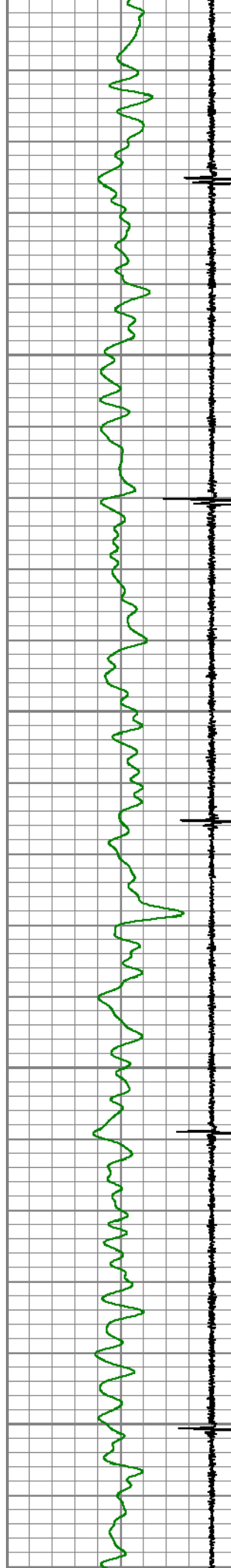
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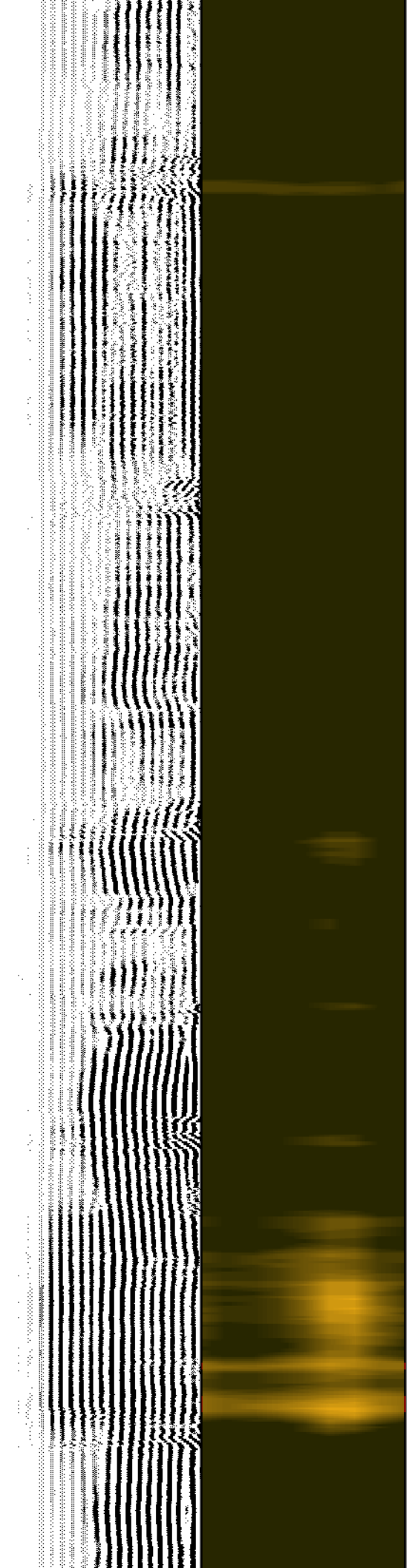
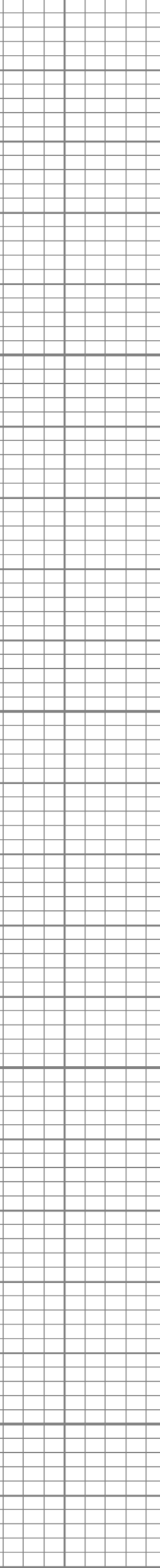
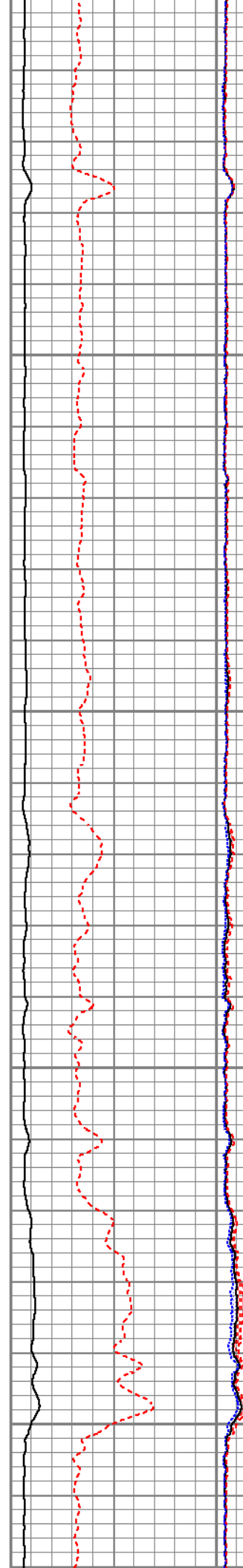








4600  
4550  
4500  
4450

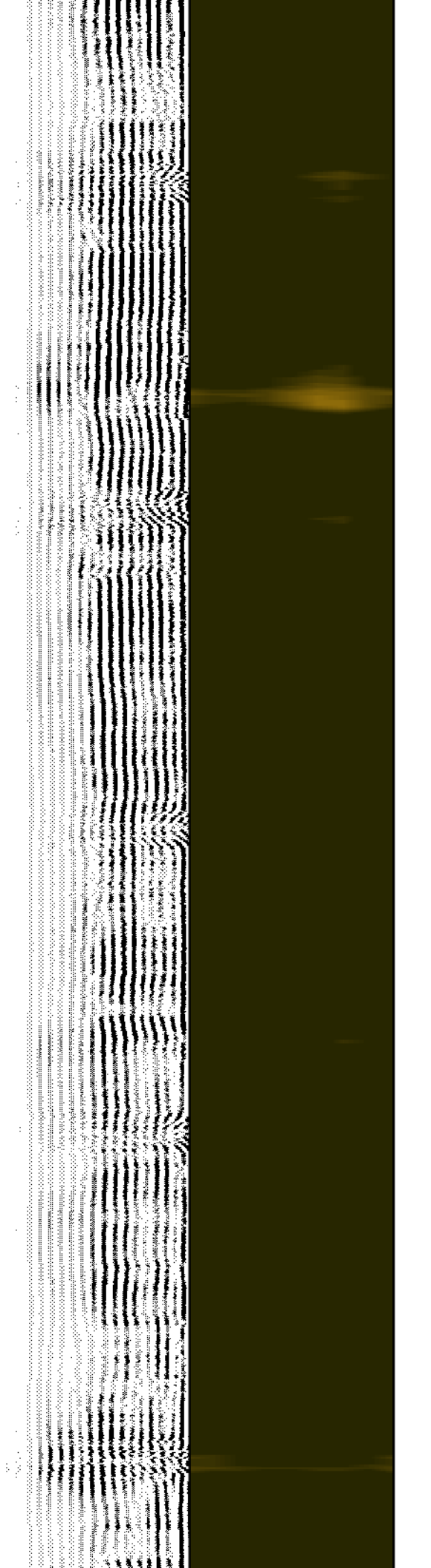


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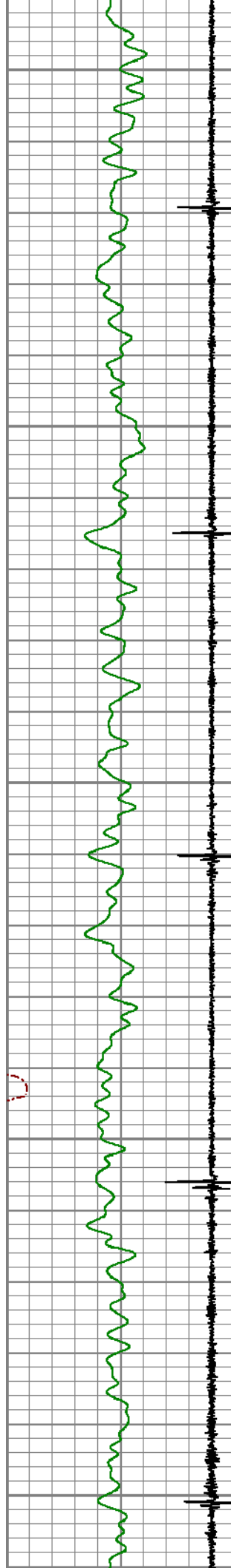
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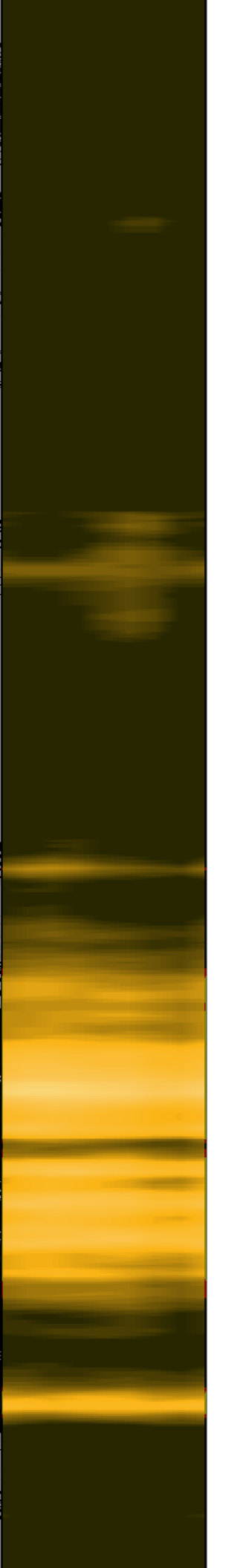
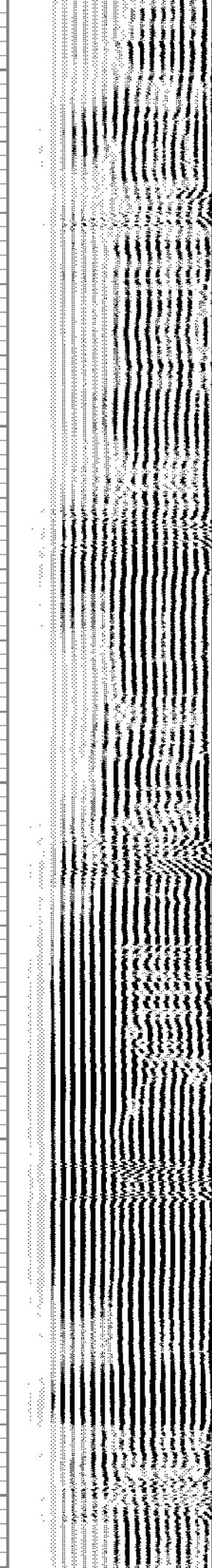
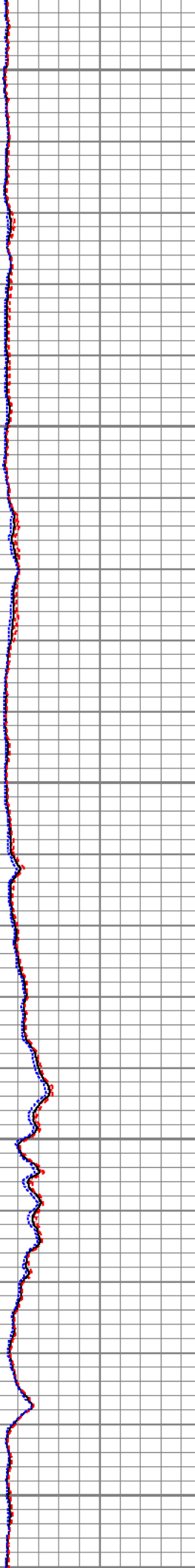
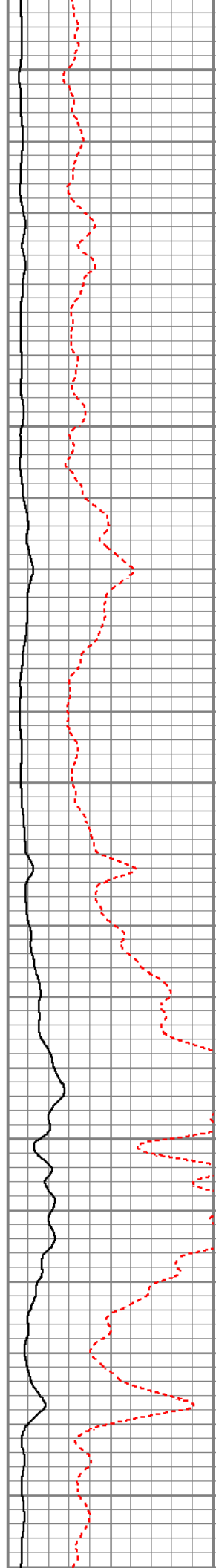
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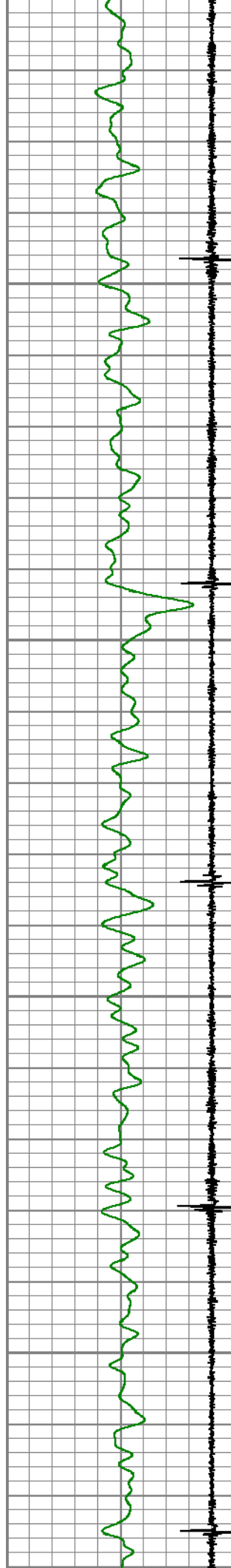
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5050



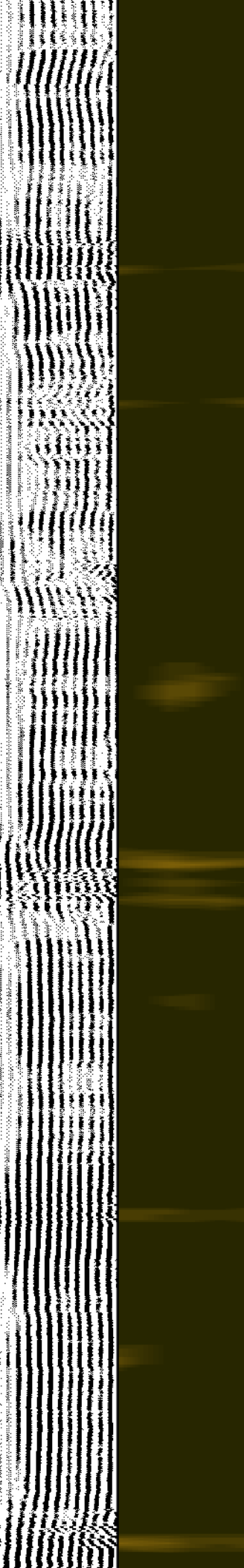
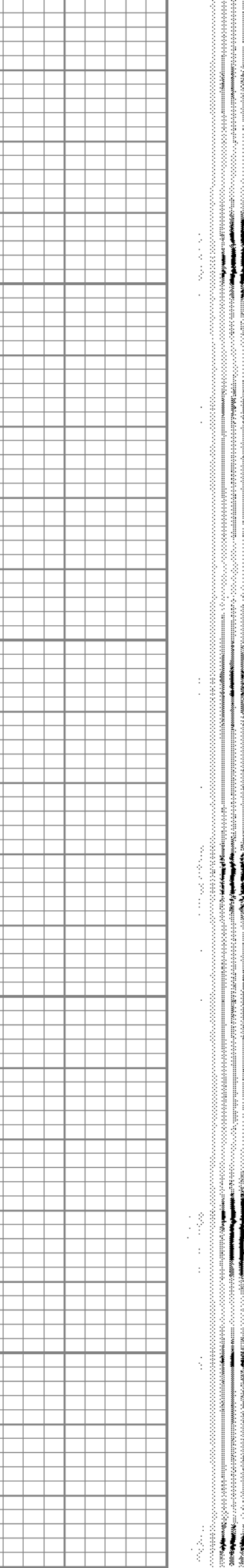
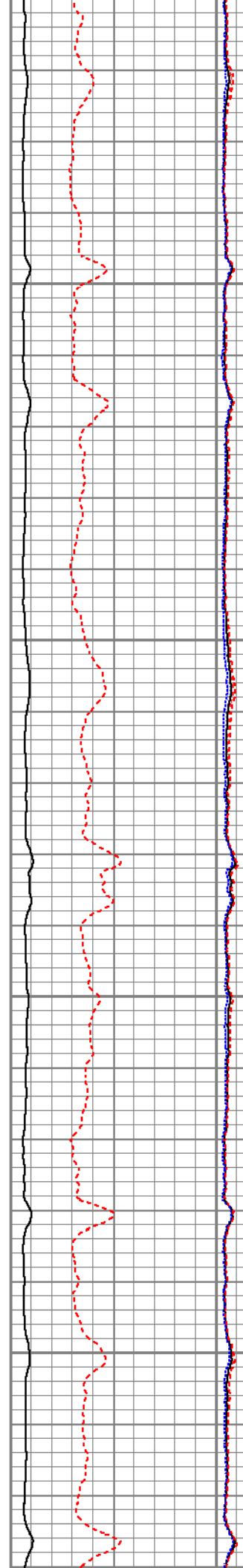


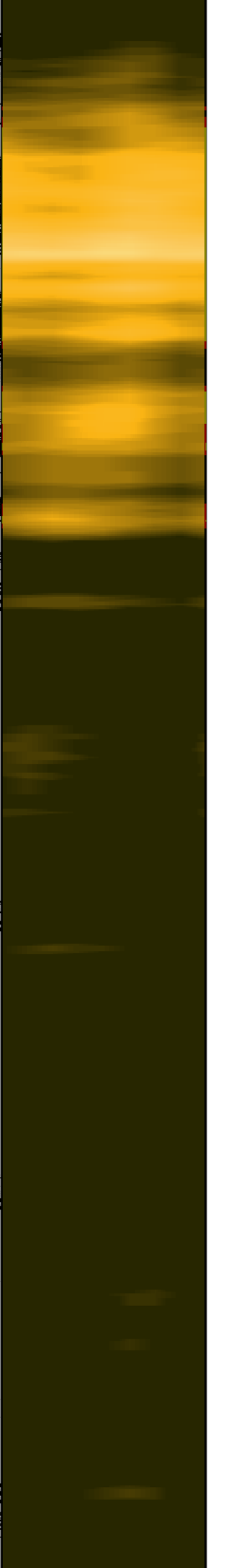
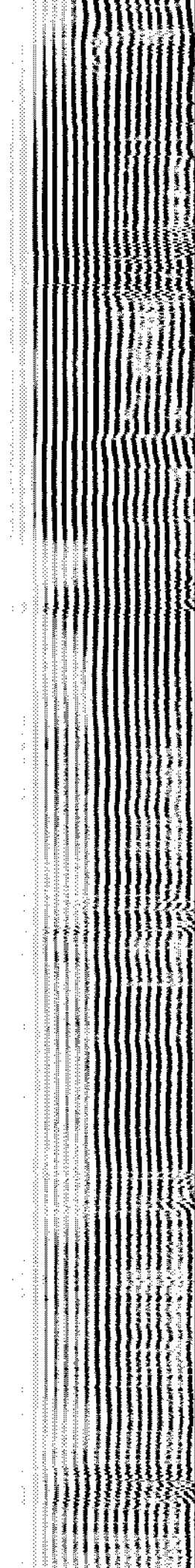
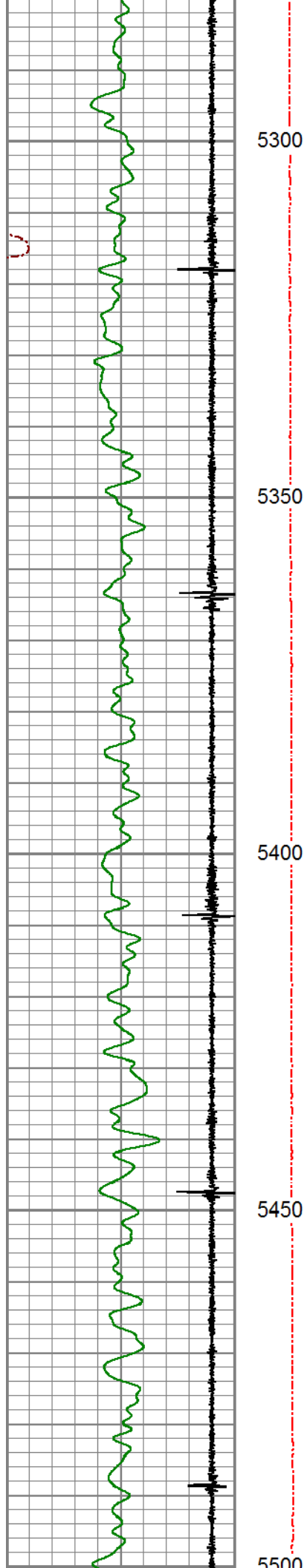
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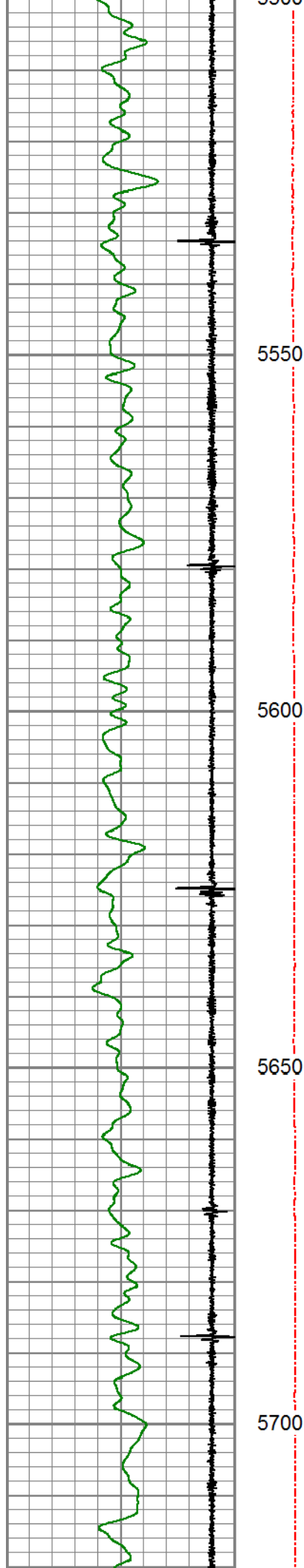
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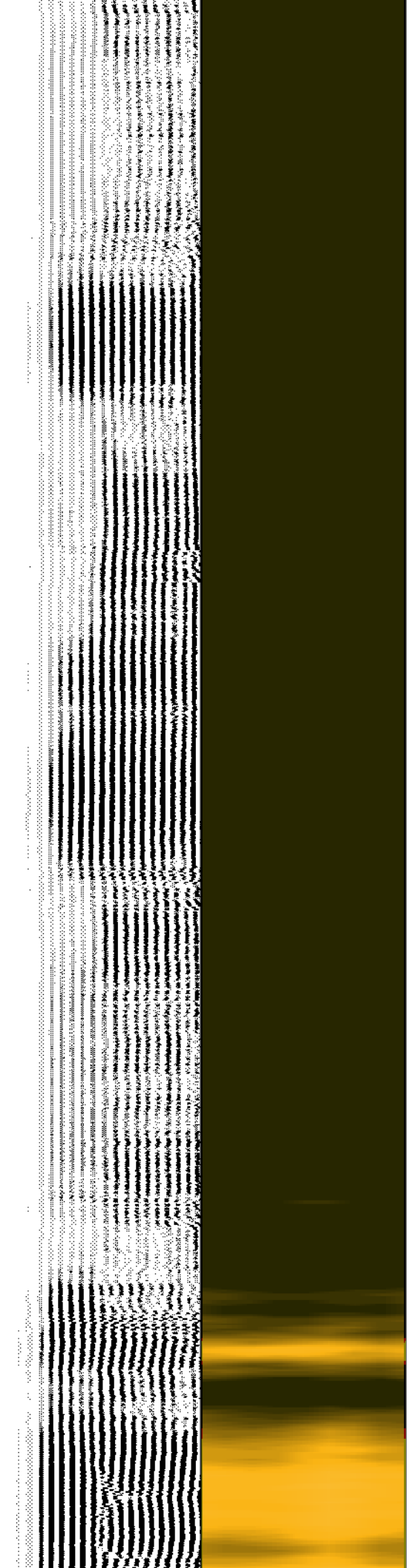


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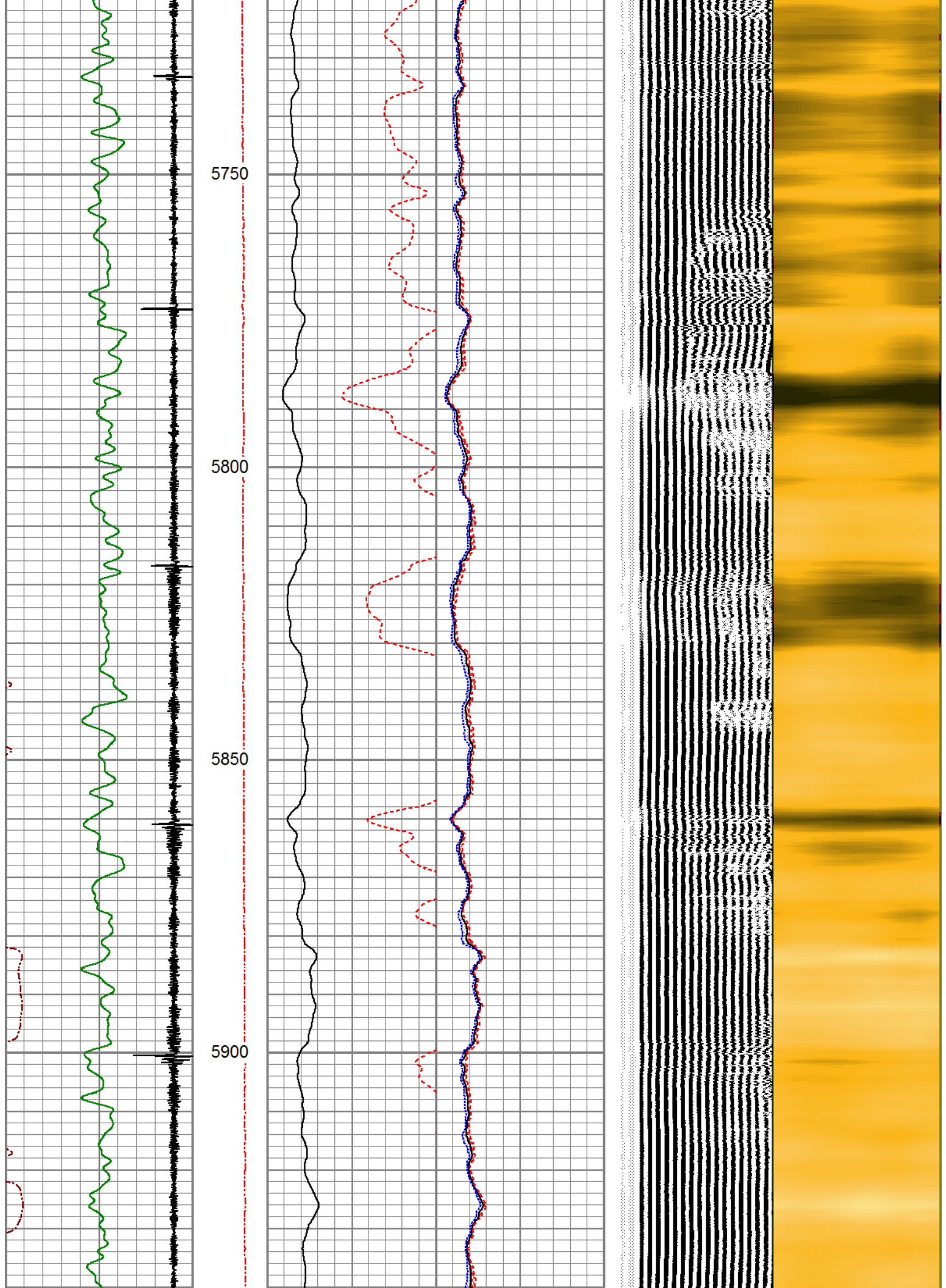
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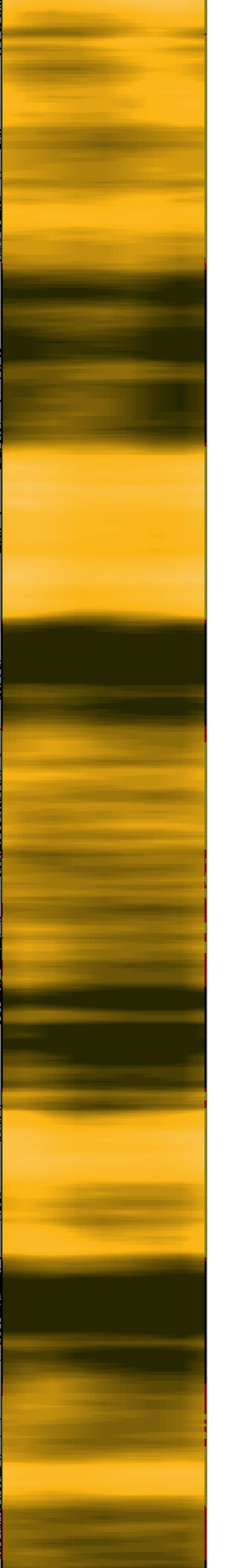
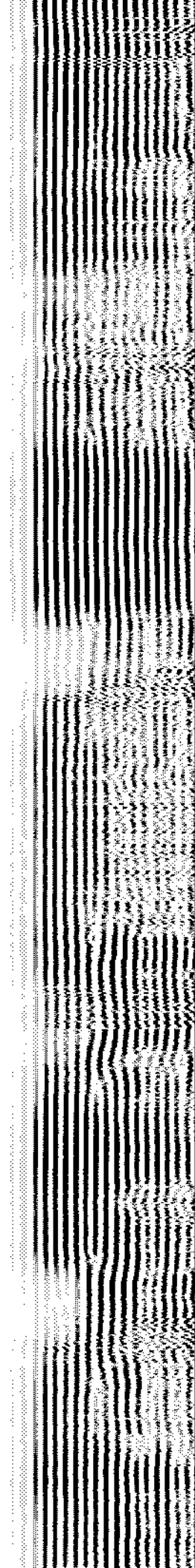
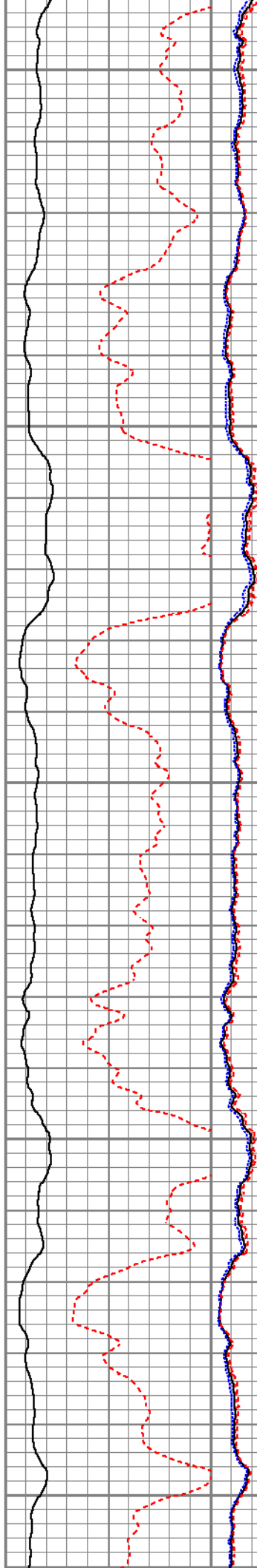
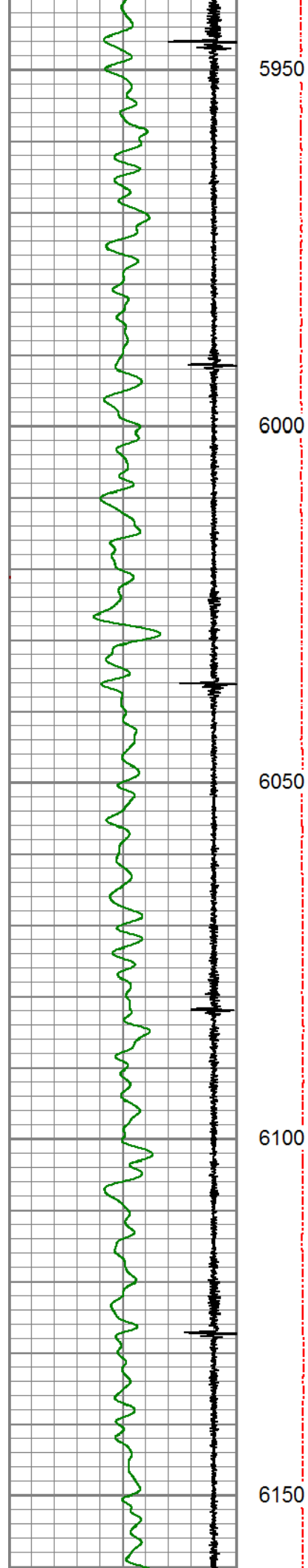
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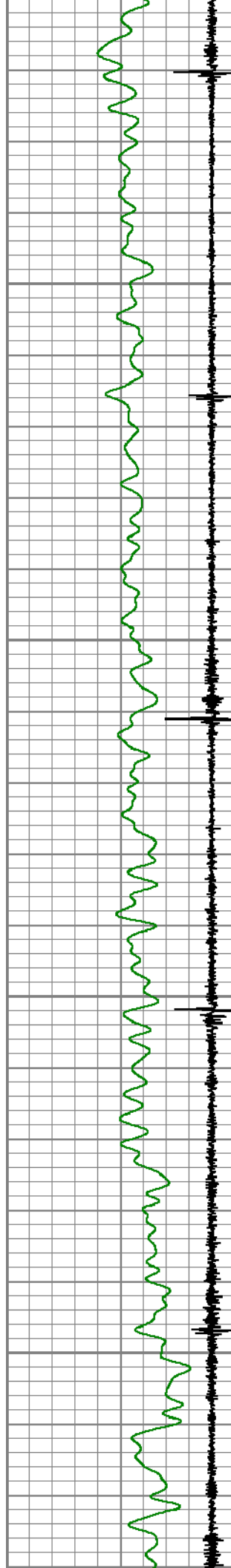










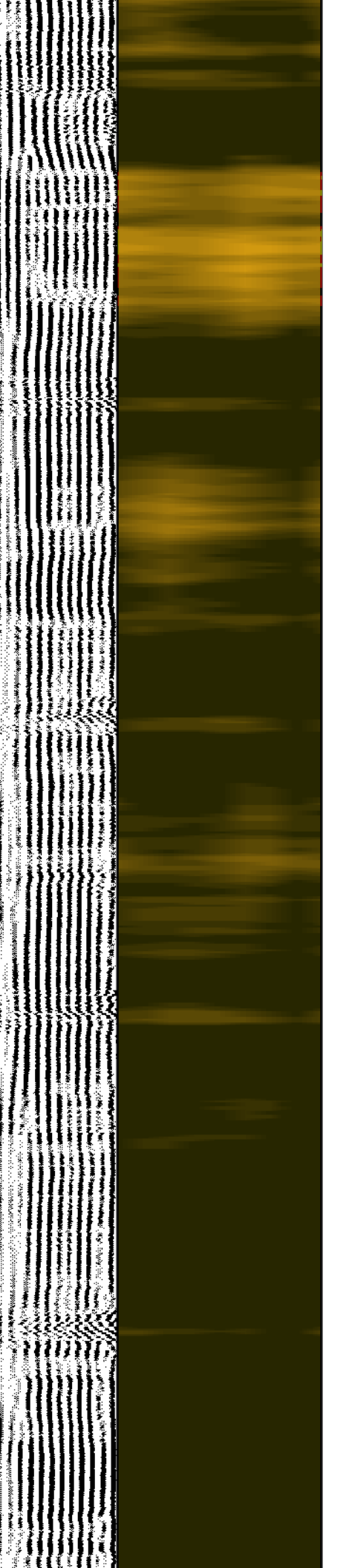
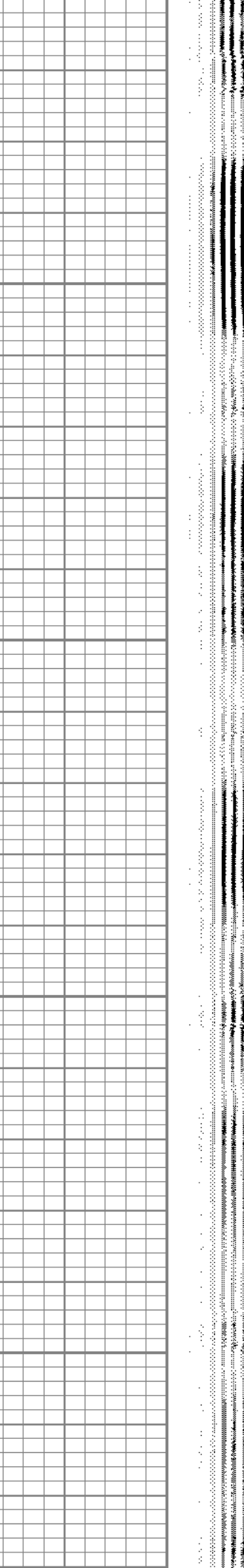
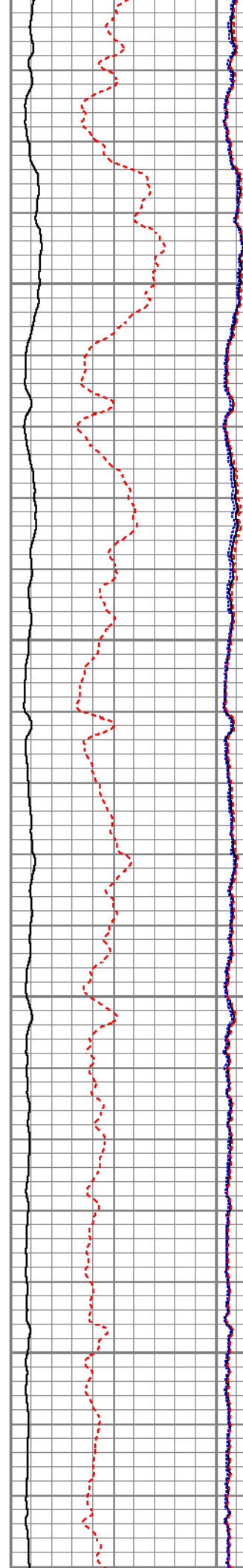


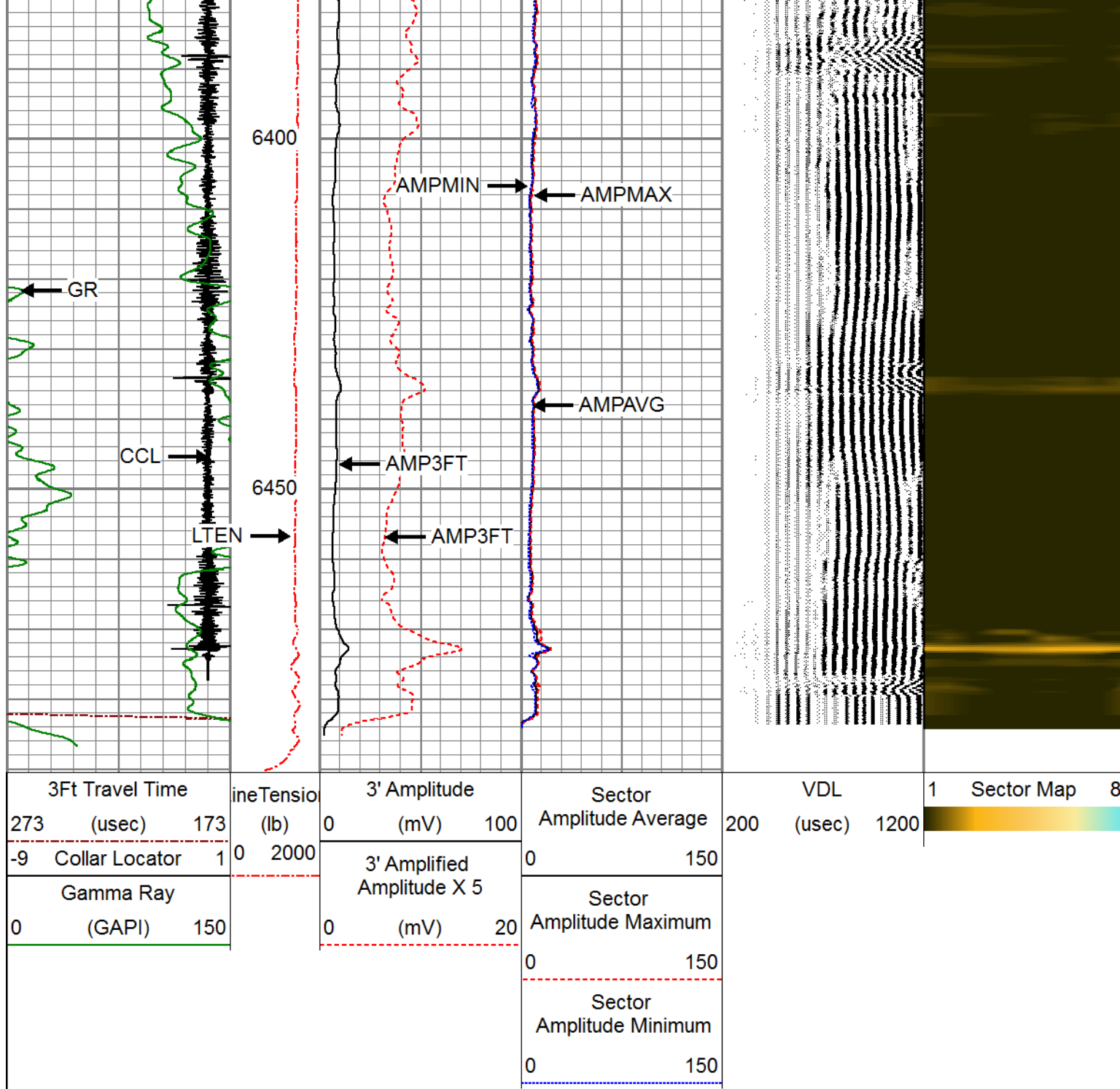
6200


6250

6300

6350







**PIONEER**  
Pioneer Energy Services

## REPEAT SECTION

### ZERO PSI APPLIED AT SURFACE

Database File

Dataset Pathname

Presentation Format

Dataset Creation

Charted by

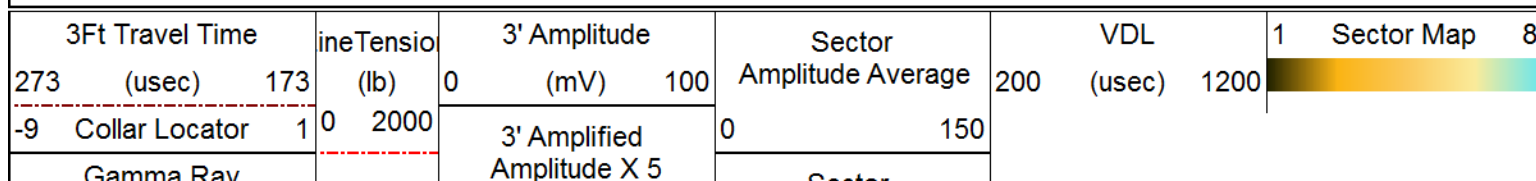
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pass4

pinr\_scbl

Sat Jul 06 09:39:18 2019

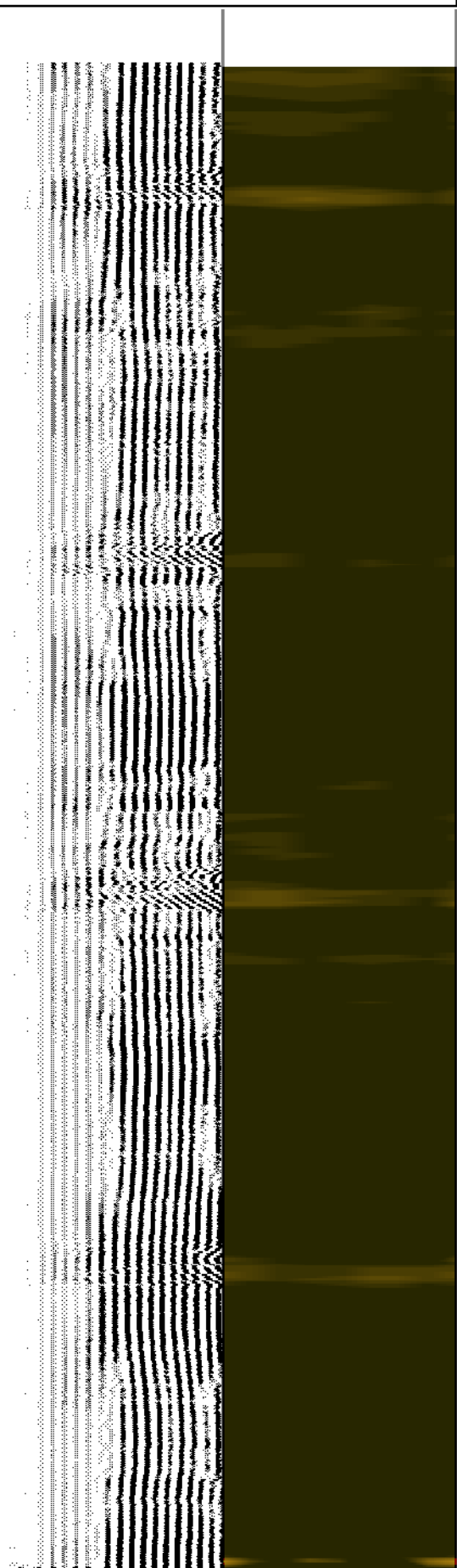
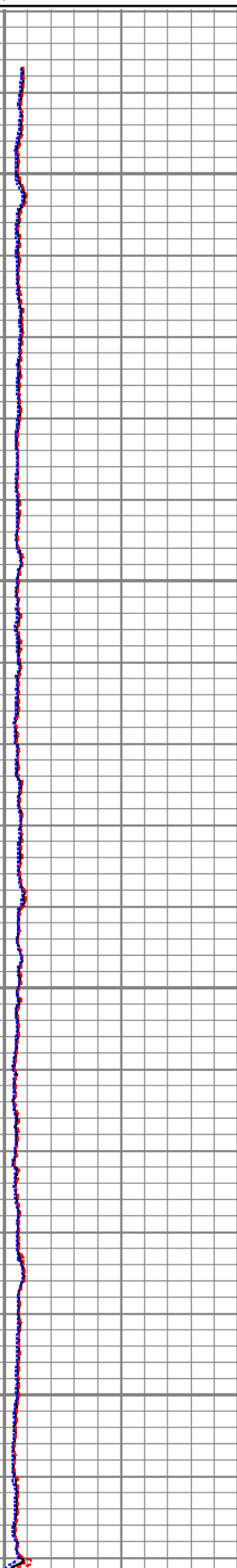
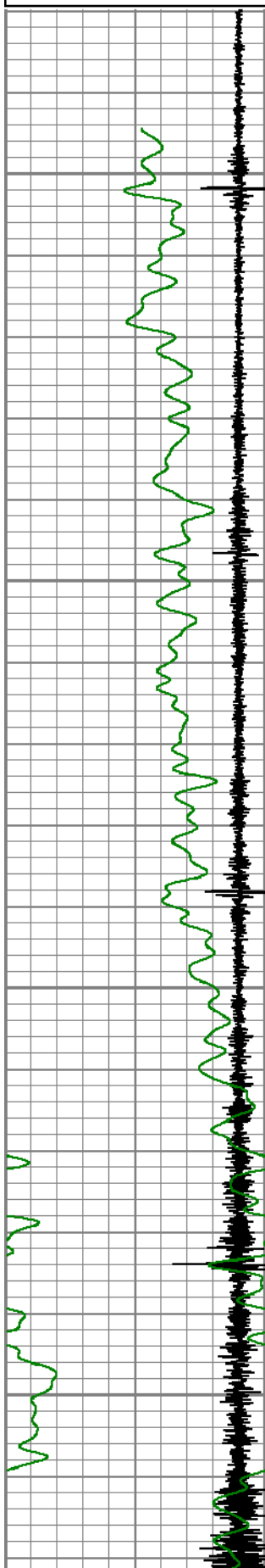
Depth in Feet scaled 1:240

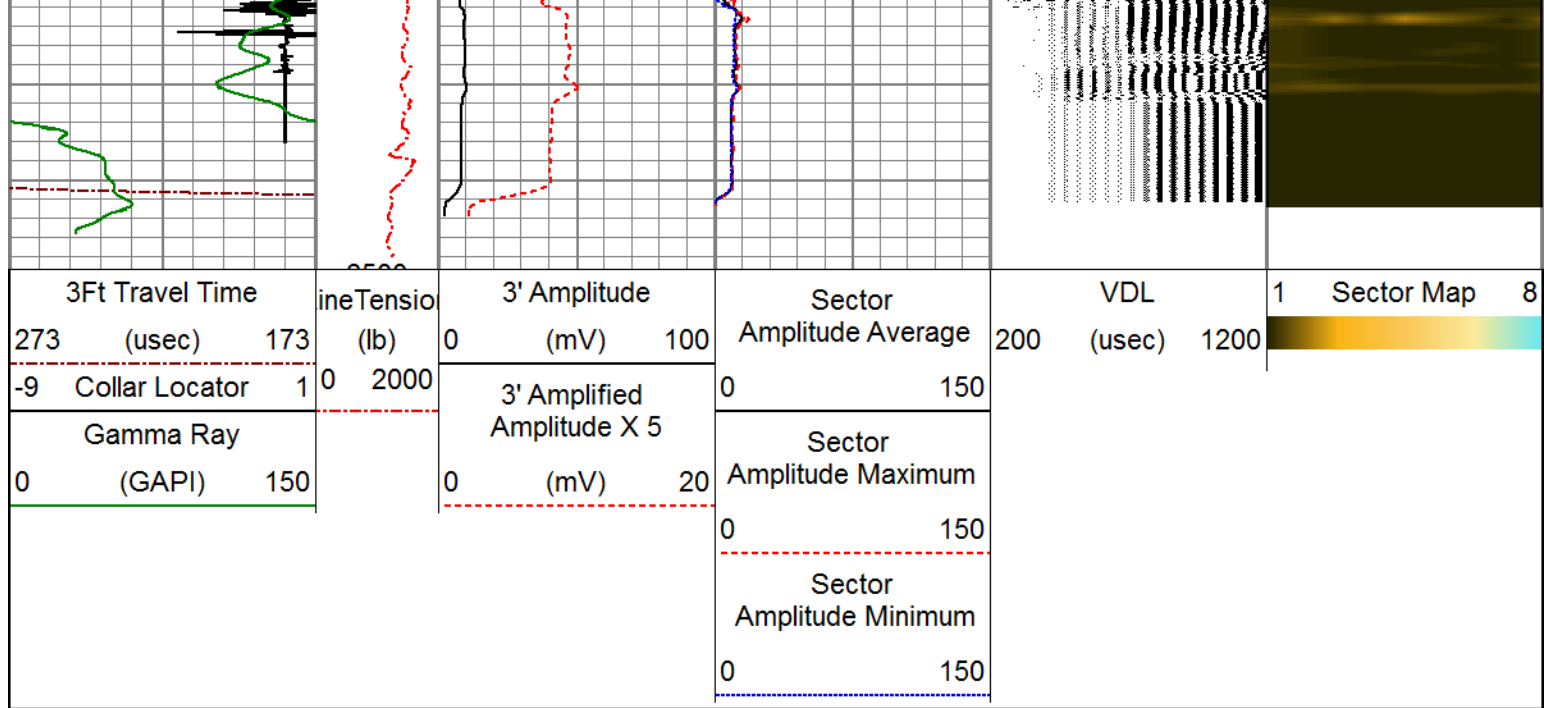


Gamma Ray  
0 (GAPI) 150

0 (mV) 20

Sector  
Amplitude Maximum  
0 150  
Sector  
Amplitude Minimum  
0 150





Calibration Report						
Database File	verdad_timbro9-59#8b-9-1_0512347568_20190706_scbl.db					
Dataset Pathname	pass5					
Dataset Creation	Sat Jul 06 09:43:57 2019					
Gamma Ray Calibration Report						
Serial Number:	080630					
Tool Model:	275 Probe					
Performed:	Sat Jul 06 08:52:43 2019					
Calibrator Value:	1.0	GAPI				
Background Reading:	0.0	cps				
Calibrator Reading:	1.0	cps				
Sensitivity:	0.7100	GAPI/cps				
Segmented Cement Bond Log Calibration Report						
Serial Number:	FW1304-33-T					
Tool Model:	RBL-DC					
Calibration Casing Diameter:	5.500	in				
Calibration Depth:	443.203	ft				
Master Calibration, performed Sat Jul 06 09:16:42 2019:						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.001	1.350	2.200	71.921	51.691	2.135
CAL	0.001	1.500				
5'	0.012	1.367	2.200	71.921	51.441	1.587
SUM						
S1	-0.003	1.301	0.000	100.000	76.683	0.216
S2	0.007	1.378	0.000	100.000	72.938	-0.479
S3	0.007	1.337	0.000	100.000	75.141	-0.492
S4	0.006	1.343	0.000	100.000	74.781	-0.463
S5	0.007	1.303	0.000	100.000	77.153	-0.510

S5	0.007	1.303	0.000	100.000	77.153	-0.340
S6	0.006	1.285	0.000	100.000	78.182	-0.497
S7	0.006	1.246	0.000	100.000	80.634	-0.464
S8	0.009	1.324	0.000	100.000	76.044	-0.656

Air Zero Calibration, performed (Not Performed):

	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



**PIONEER**

Pioneer Energy Services

Company VERDAD RESOURCES  
Well TIMBRO 9-59 #8B-9-1  
Field WILDCAT  
County WELD  
State COLORADO