



**CEMENT BOND
GAMMA RAY
CCL LOG**

Comp. OCCIDENTAL PETROLEUM CORP.
Well RICKS 22-15
Field WATTENBERG
Co. WELD
State COLORADO

Company **OCCIDENTAL PETROLEUM CORP.**
Well **RICKS 22-15**
Field **WATTENBERG**
County **WELD** State **COLORADO**

Location: API #: 05-123-32743
SEC 15 TWP 2N RGE 65W
Permanent Datum GL Elevation 4875'
Log Measured From KB 15' Above Perm. Datum
Drilling Measured From KB
Other Services
NA

Date of Service	15-JAN-2025								
Run Number	ONE								
Depth Driller or PBTD	8330'								
Depth Logger	5000'								
Bottom Log Interval	5000'								
Top Log Interval	SURFACE								
Open Hole Size	7-7/8"								
Type Fluid	H2O								
Fluid Level	SURFACE								
Fluid Density	NA								
Max. Recorded Temperature	NA								
Max. Wellhead Pressure	ZERO								
Wellhead Connection	7-1/16" 5K								
Estimated Cement Top	SEE LOG								
Unit Number	1010								
Wireline Size	1/4"								
Location	BRIGHTON								
Recorded By	J. ELSENPETER								
Witnessed By	ERIC WENZEL								
Surface Casing	8-5/8"	Size	24#	W/Ft	SURFACE	Top	SURFACE	Bottom	925'
Production Casing	4-1/2"	Size	11.6#	W/Ft	SURFACE	Top	SURFACE	Bottom	8310'
Liner Casing									
Tubing Record									

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All interpretations are opinions based on inferences from electrical or other measurements and Ranger Energy Services cannot and does not guarantee the accuracy or correctness of any interpretation, and Ranger Energy Services 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.
LOG CORRELATED TO KB

THANK YOU FOR USING RANGER ENERGY SERVICES! FIELD TICKET #17193

Your Ranger Energy Services Crew	Tool Data - Services	Serial Number
Engineer: J. ELSENPETER Operator: J. STROUT Operator: C. BOND Operator:		

Operator	Offset (ft)	Substrate	Description	Length (ft)	C.D. (in)	Weight (lb)
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Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)	
ErrCt	17.60		Cable_Head-1_7/16 Titan 1 7/16" Cable Head	1.02	1.44	3.31	
IntTemp	15.34						
WVFS8	12.09			RBT-Probe (070150) Probe Radii Bond Tool with Digital Telemetry	8.75	2.75	90.00
WVFS7	12.09						
WVFS6	12.09						
WVFS5	12.09						
WVFS4	12.09						
WVFS3	12.09						
WVFS2	12.09						
WVFS1	12.09						
WVFCAL	12.09						
WV3FT	12.09						
WV5FT	11.09						
CCL	6.89						
GR	5.65			GR_analog-GR275B (071129) 275 Gamma-CCL (Pulse) Top Detector	4.57	2.75	55.00
			Centralizers-Sondex PRC 2.75" Roller Centralizers Tekco 2 3/4" Adjustable Centralizer	3.00	2.75	25.00	
			Bull_Plug-1_7/16_GO Titan 1 7/16" Female Bull Plug	0.27	1.44	1.00	

Dataset: 1010_817193_occidental_ricks 22-15_0512332743_20250115_scbl-gr-ccl.db: field/well/run1/pass3
 Total length: 17.60 ft
 Total weight: 174.31 lb
 O.D.: 2.75 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\1010_817193_occidental_ricks 22-15_0512332743_202507
 Dataset field/well/run1/pass3/_vars_

Top - Bottom

BOREID in 7.875	BOTTEMP degF 100	CASEOD in 4.5	CASETHCK in 0.25	CASEWGHT lb/ft 11.6	MAXAMPL mV 81.2	MINAMPL mV 0.7	MINATTN db/ft 0.8
PERFS No	PPT usec 249	SRFTEMP degF 41	TDEPTH ft 5000				

Variable Description

BOREID : Borehole I.D.	CASEWGHT : Casing Weight	PERFS : Perforation Flag
BOTTEMP : Bottom Hole Temperature	MAXAMPL : Maximum Amplitude	PPT : Predicted Pipe Time
CASEOD : Casing O.D.	MINAMPL : Minimum Amplitude	SRFTEMP : Surface Temperature
CASETHCK : Casing Thickness	MINATTN : Minimum Attenuation	TDEPTH : Total Depth

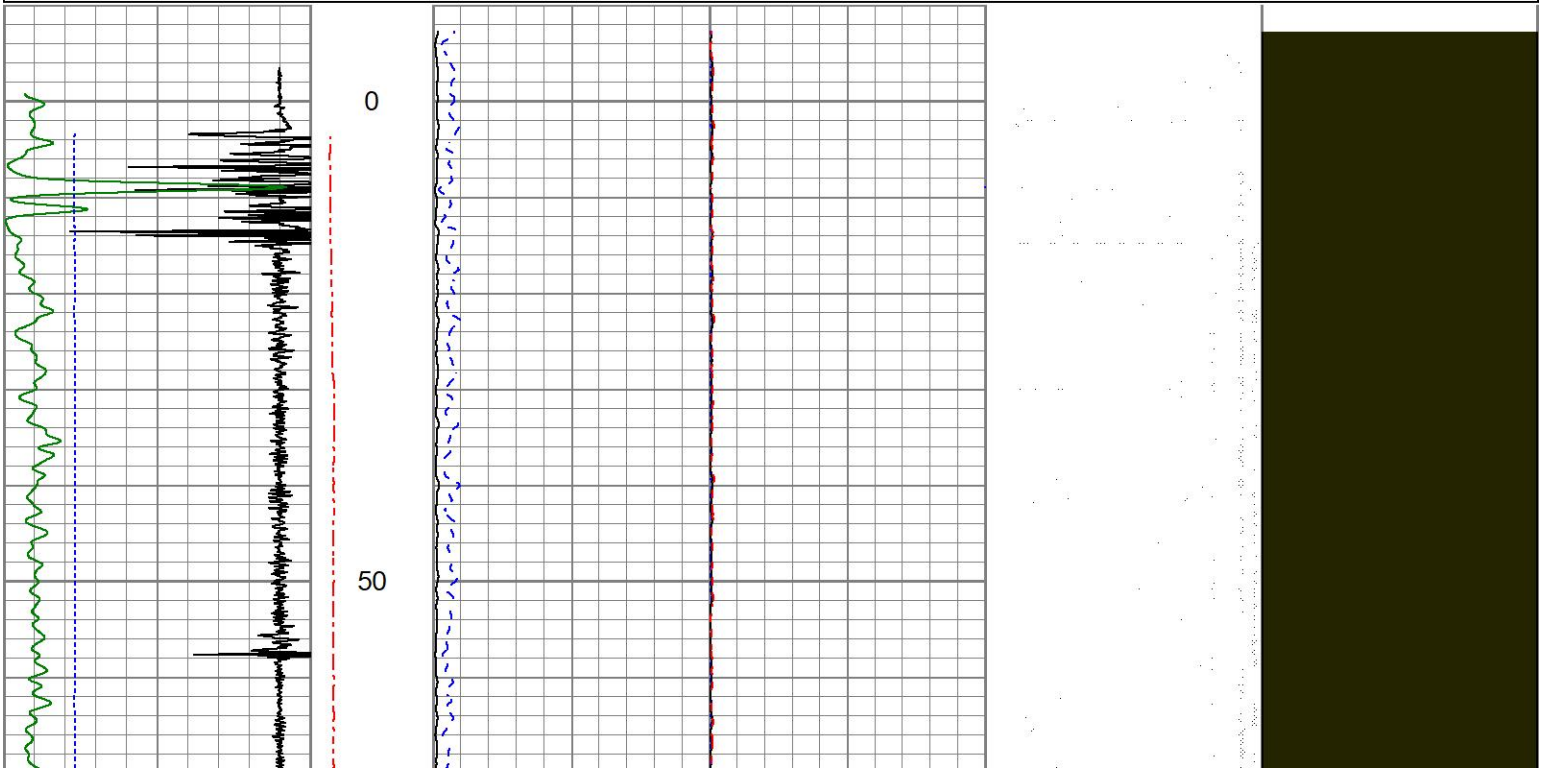


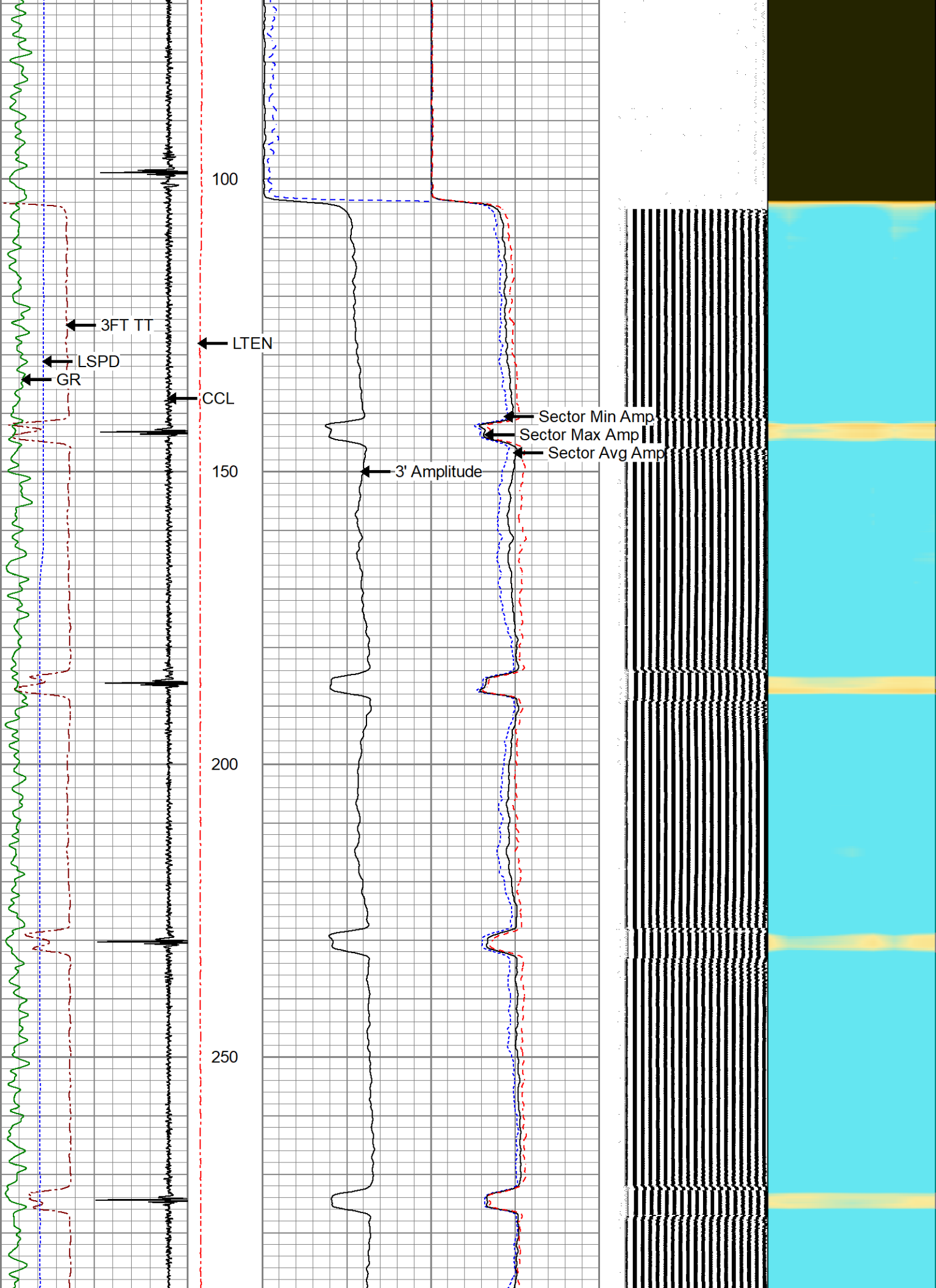
MAIN PASS

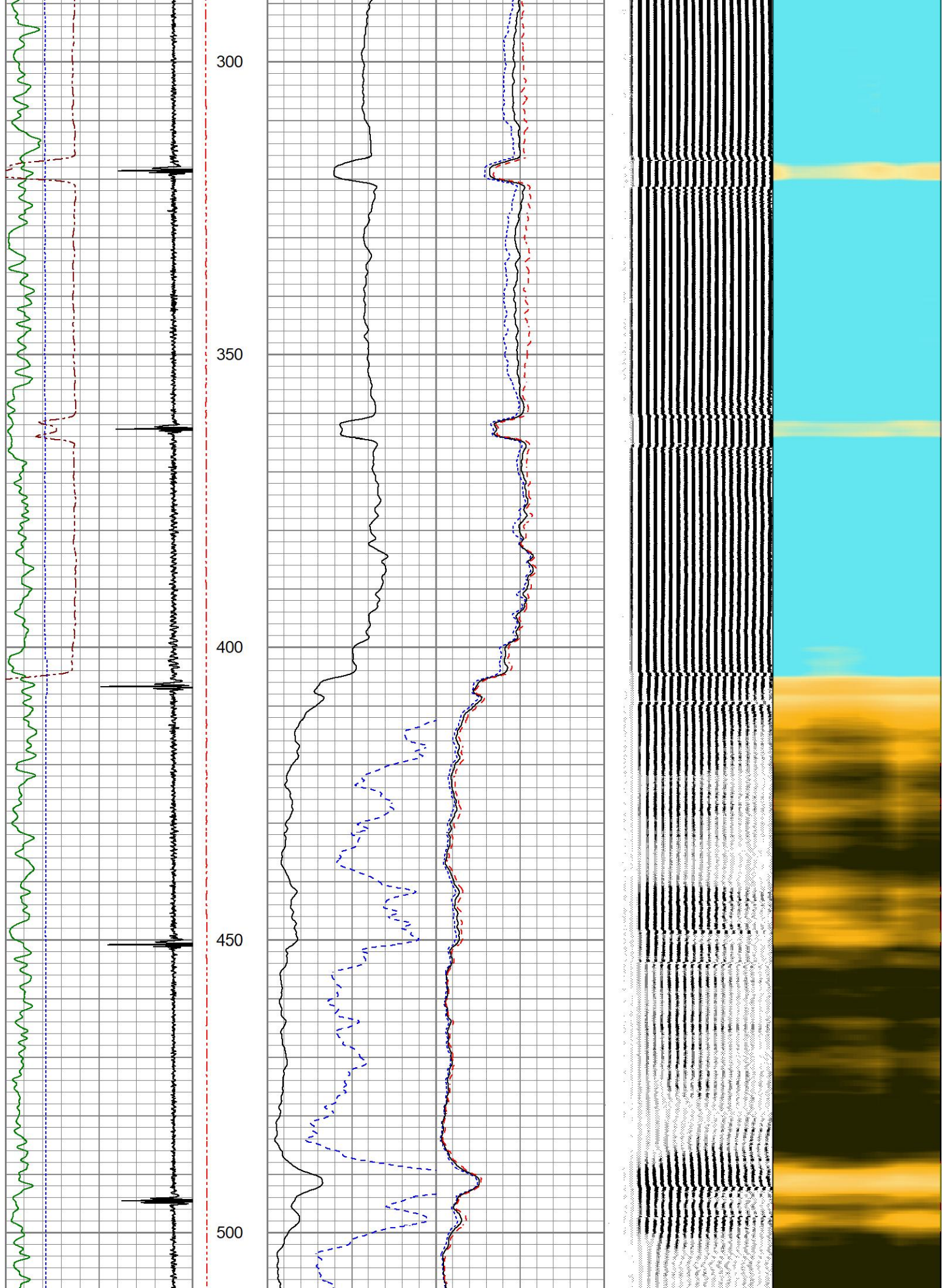
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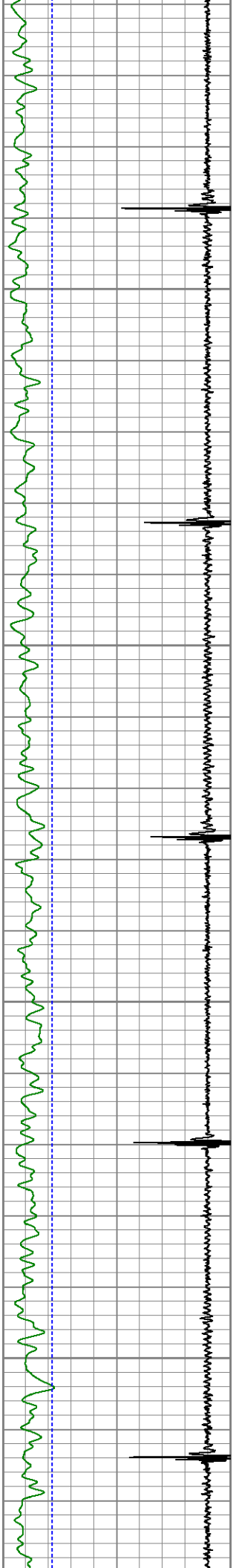
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 Dataset Pathname pass3
 Presentation Format res_scbl 8sec
 Dataset Creation Wed Jan 15 13:21:53 2025
 Charted by Depth in Feet scaled 1:240

280 3FT TT (usec) 180	LTEN	3' Amplitude	0 Sector Min Amp	150	200 VDL (usec) 1200	1 Sector Map	8
-9 CCL 1	(lb)	(mV) 100	Sector Avg Amp				
0 GR (GAPI) 150	0 2000	3' Amplified	0 150				
-150 LSPD (ft/min) 150		Amplitude X 5	Sector Max Amp				
		(mV) 20	0 150				

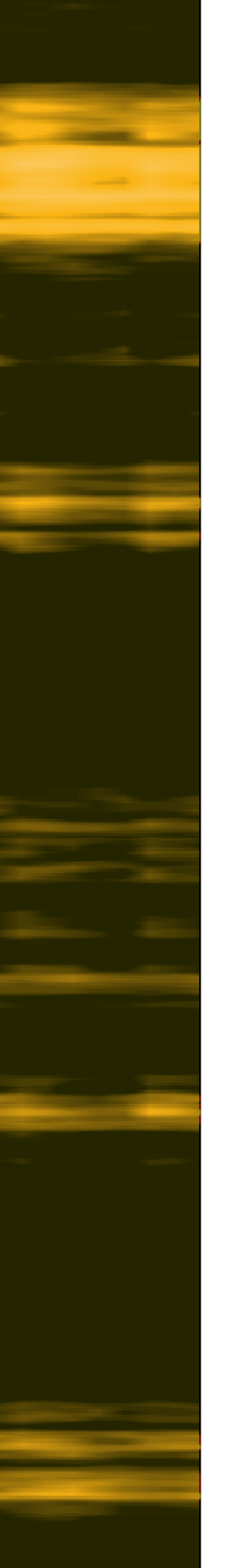
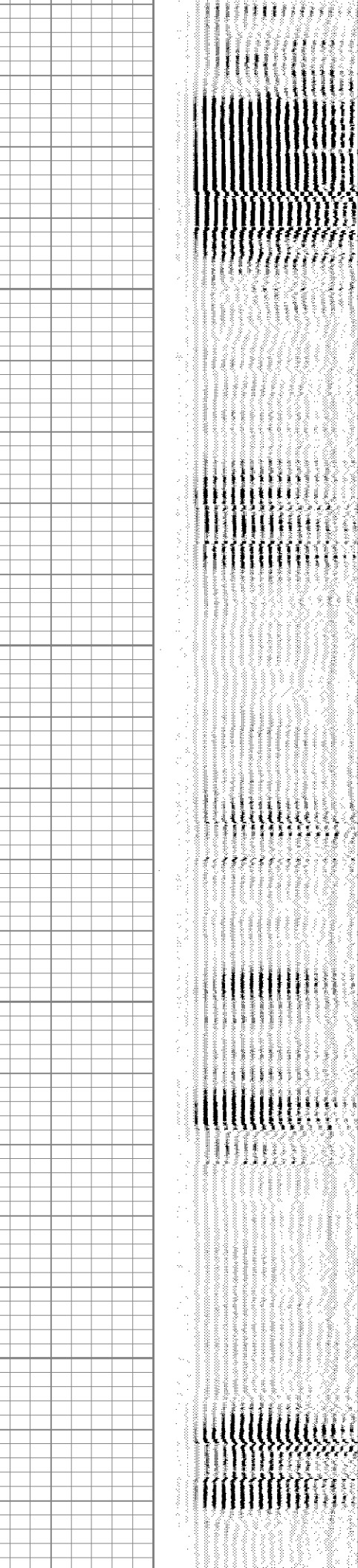
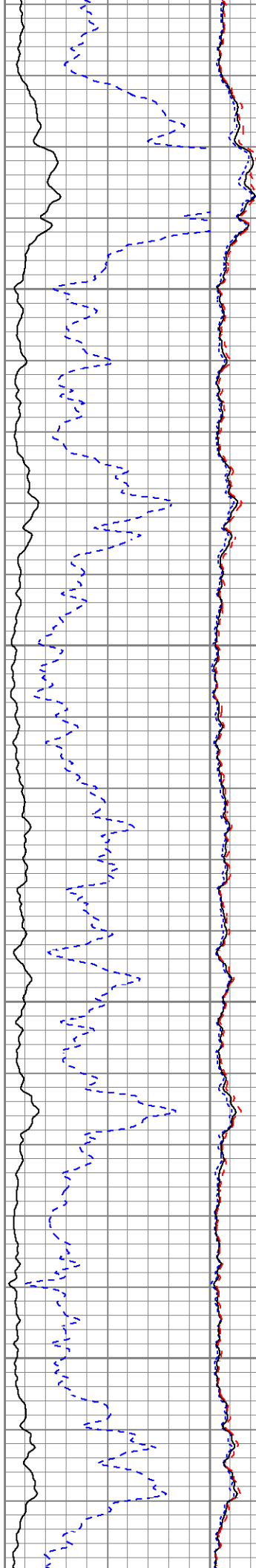


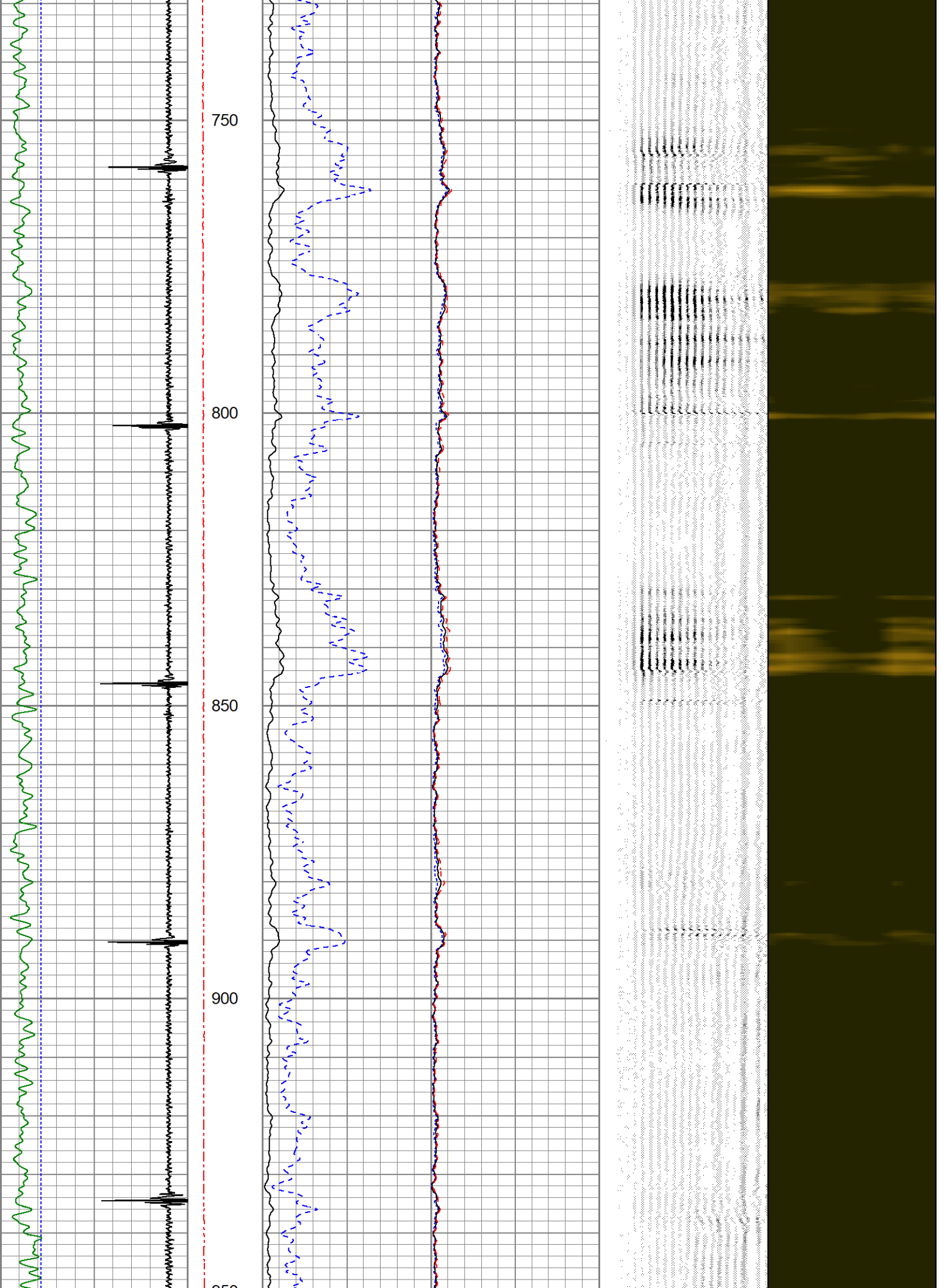


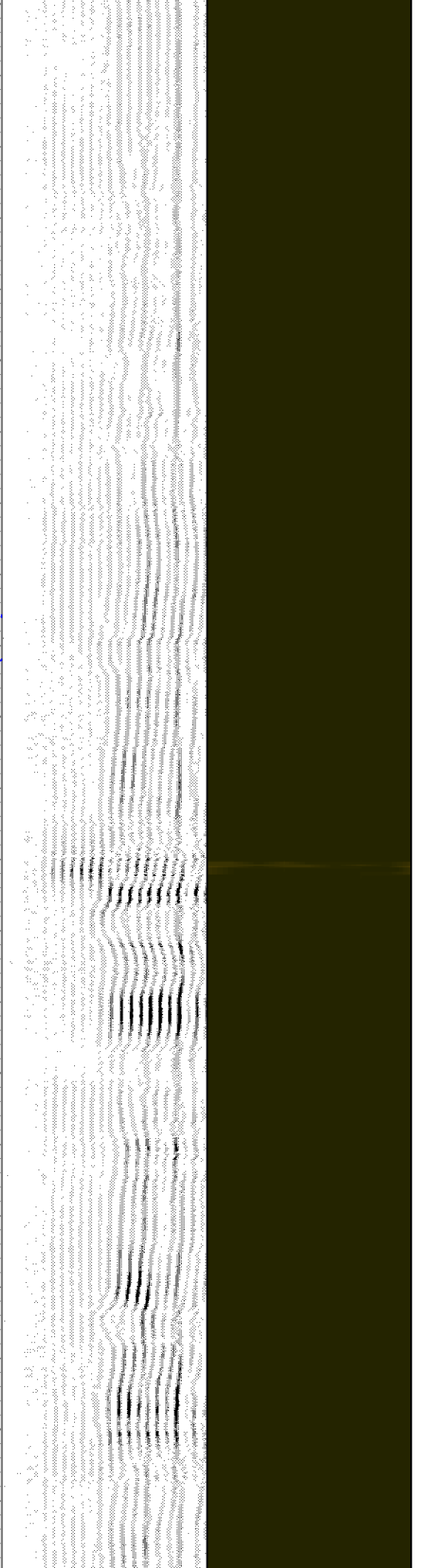
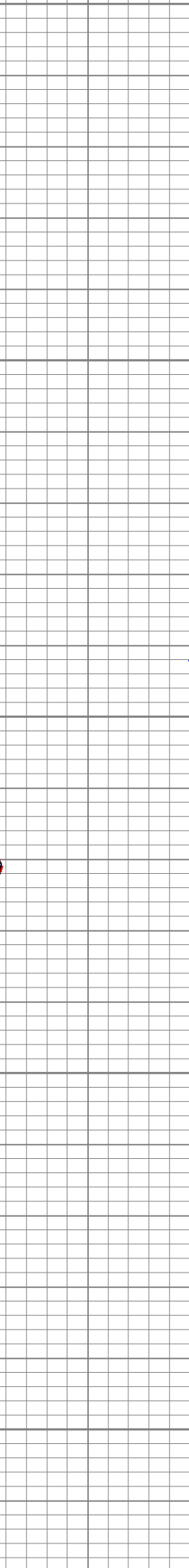
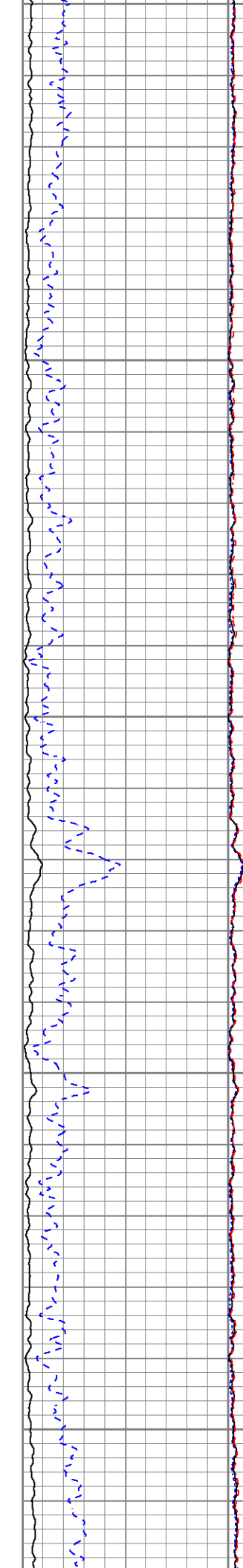
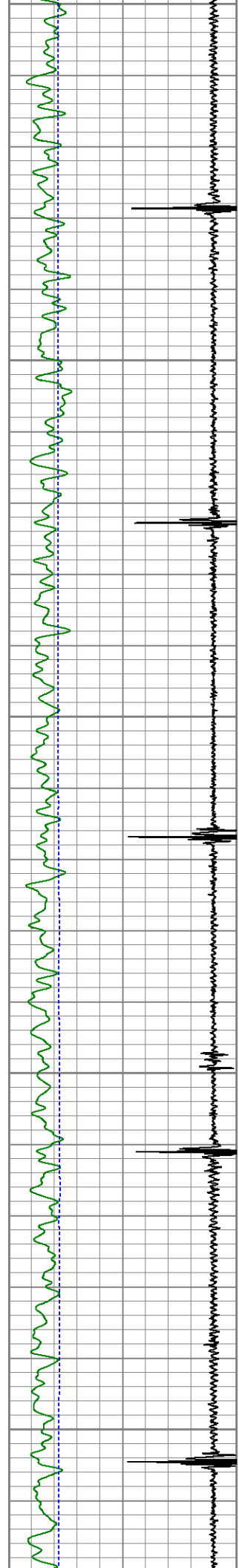




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600
650
700







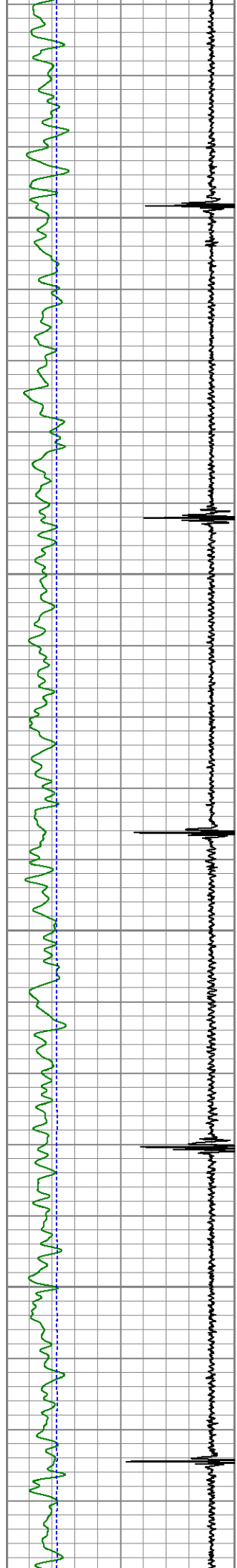
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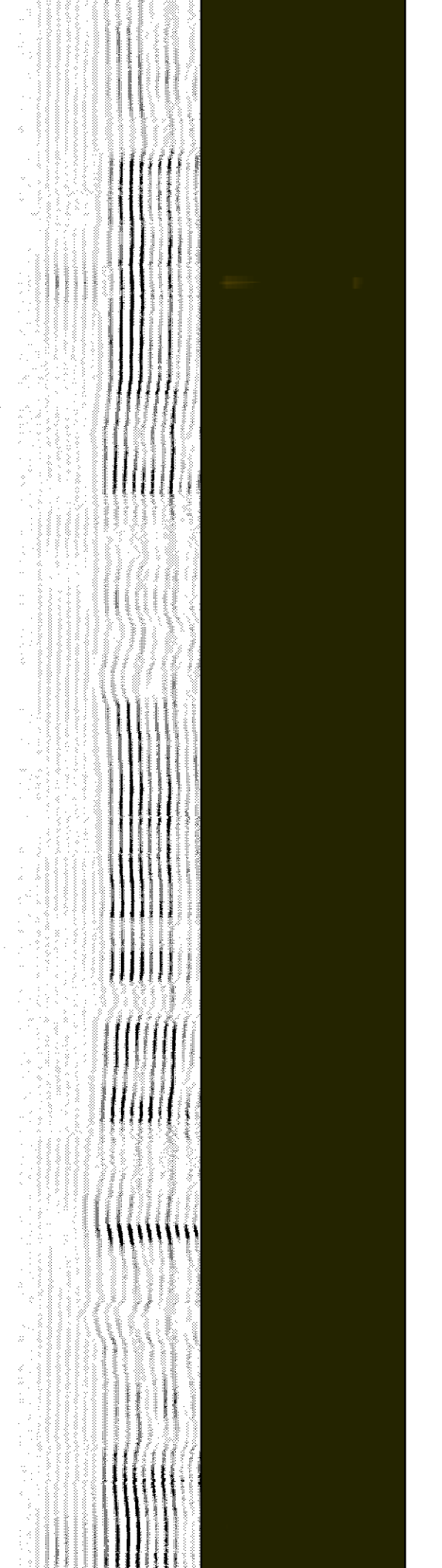
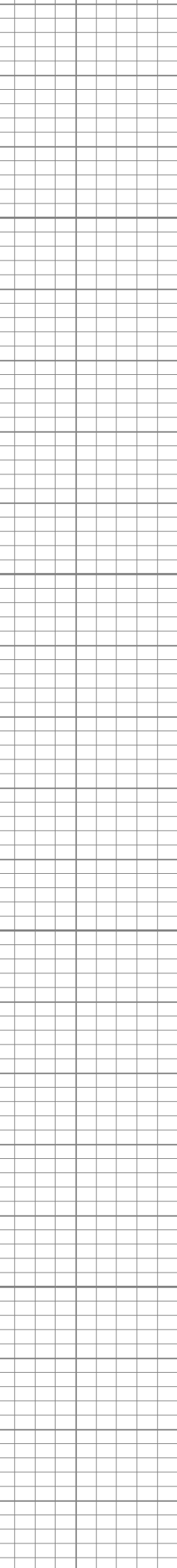
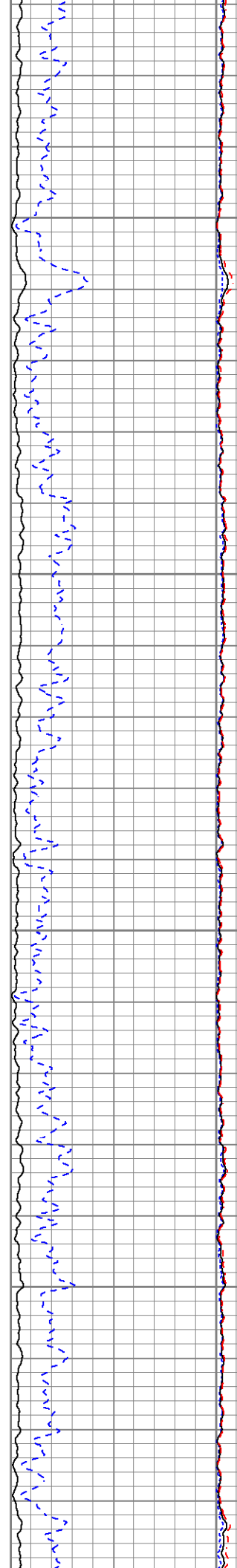
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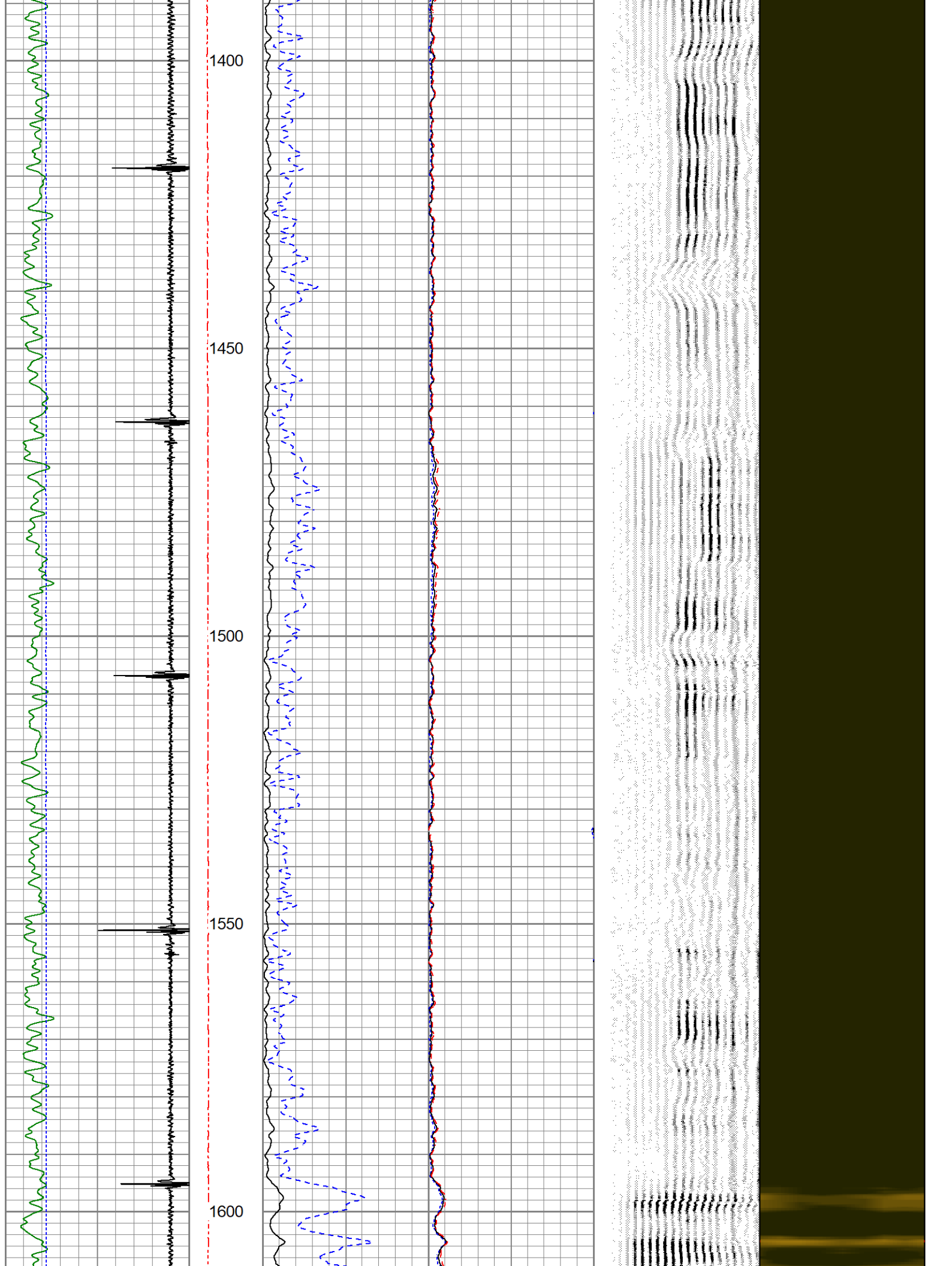
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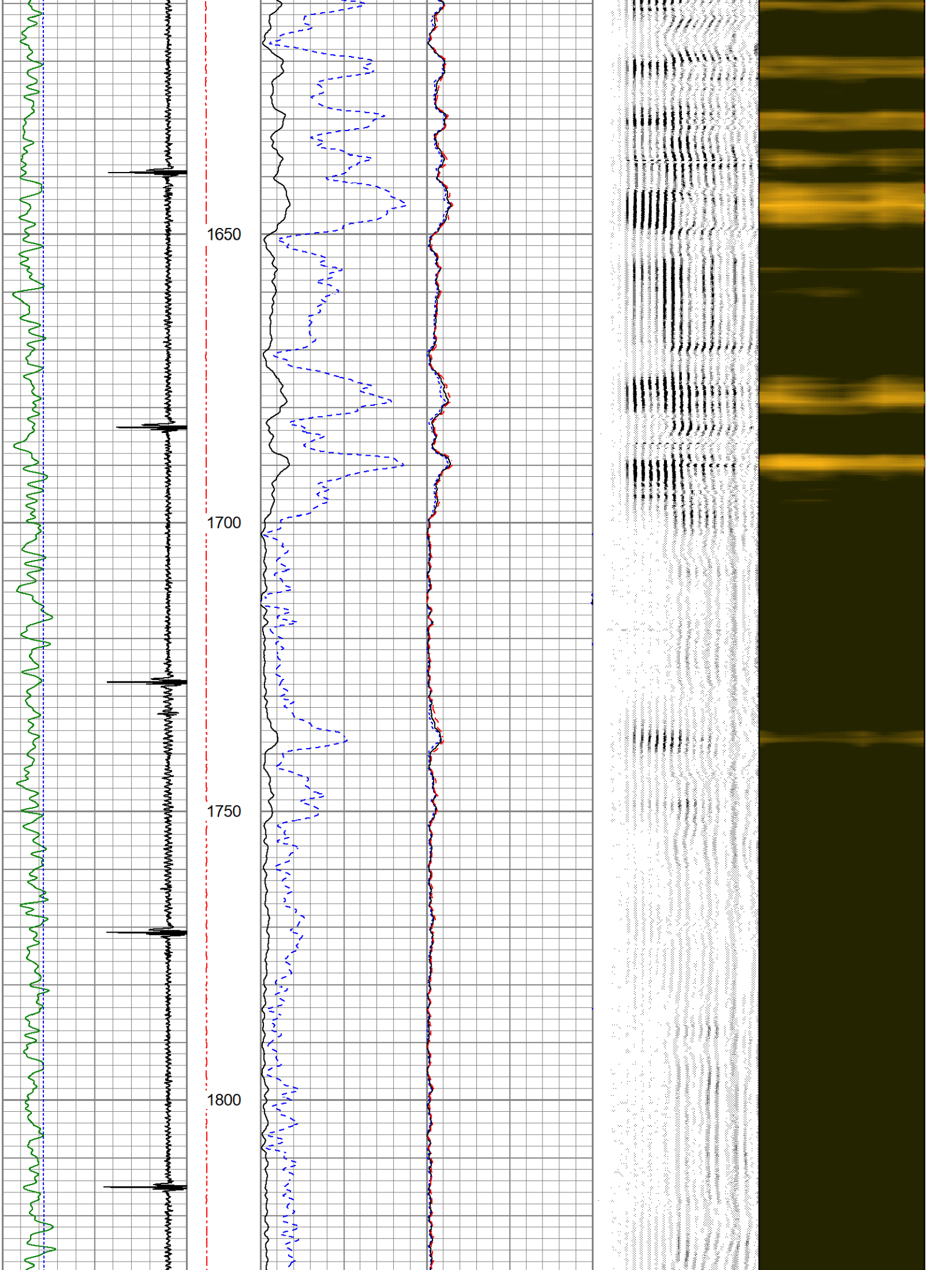
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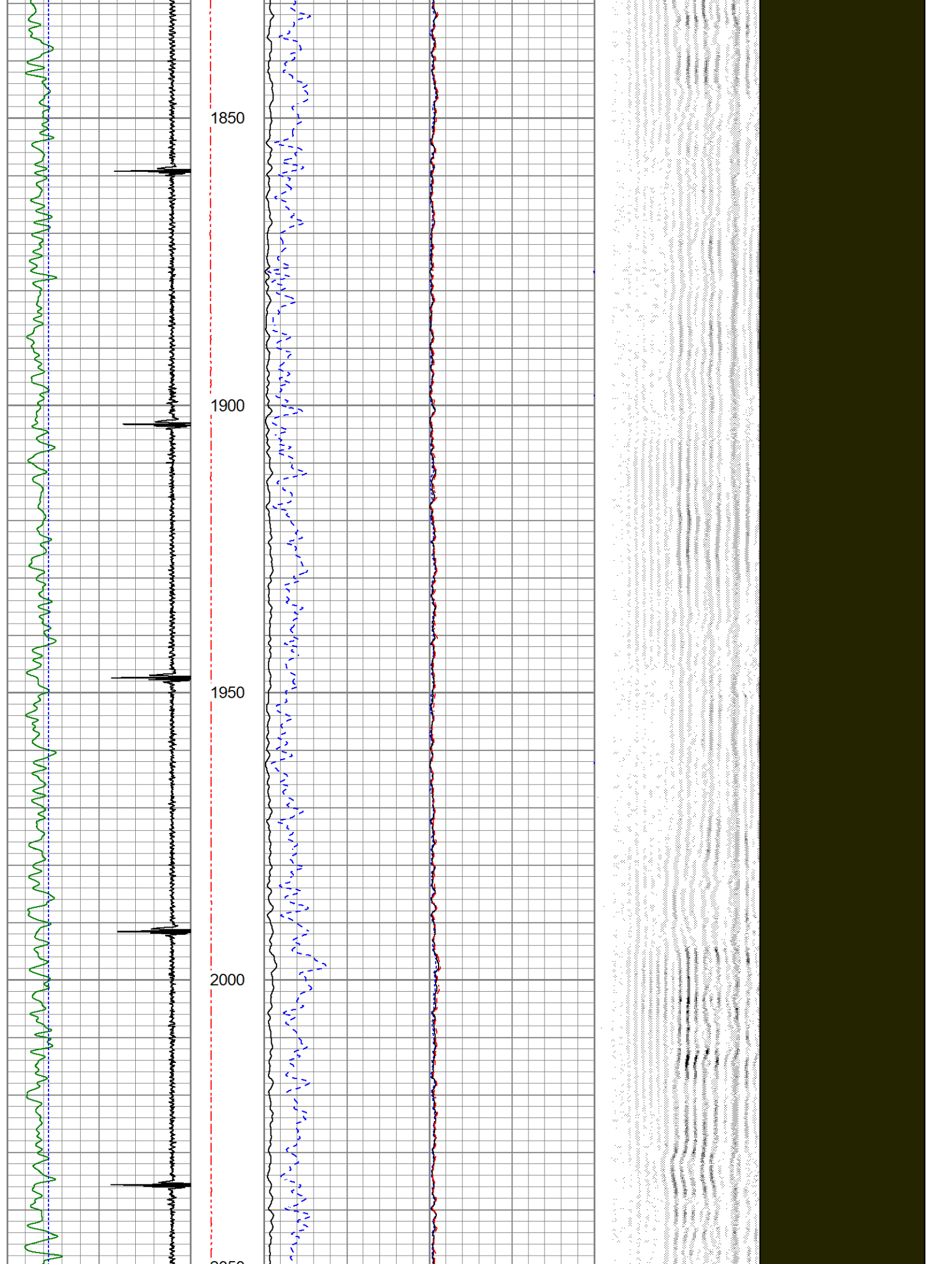


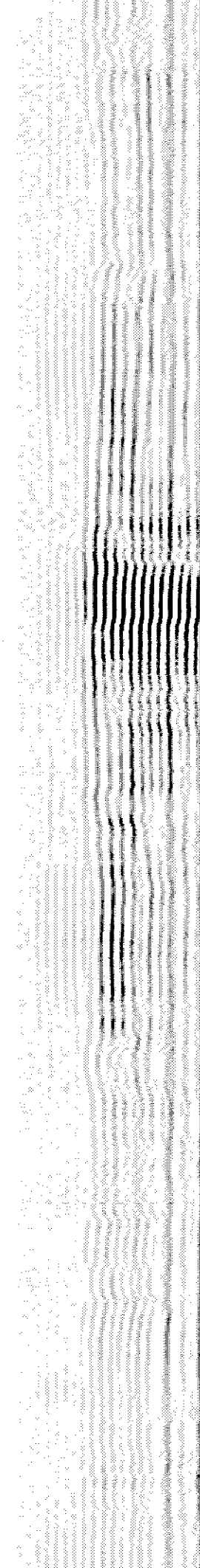
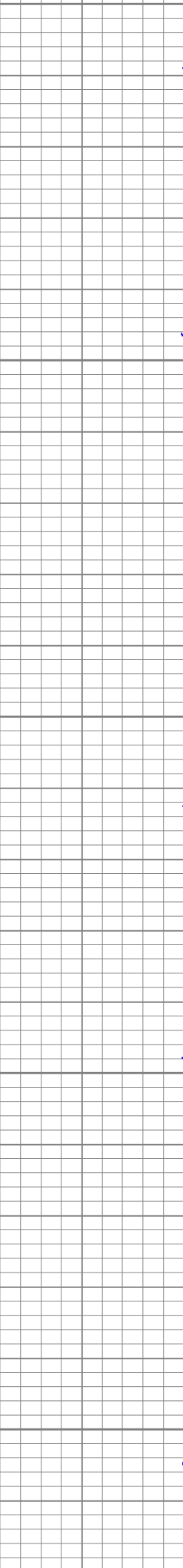
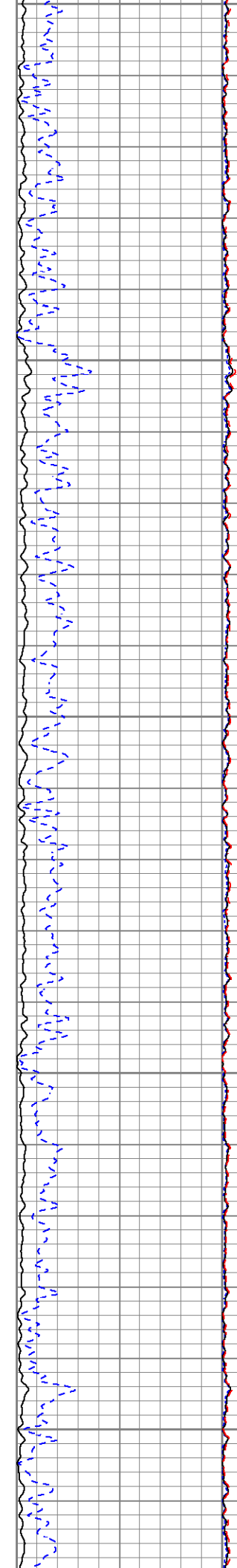
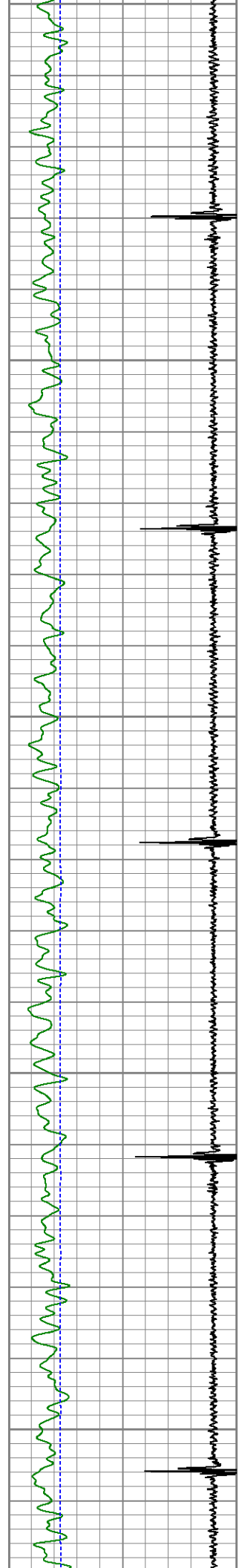
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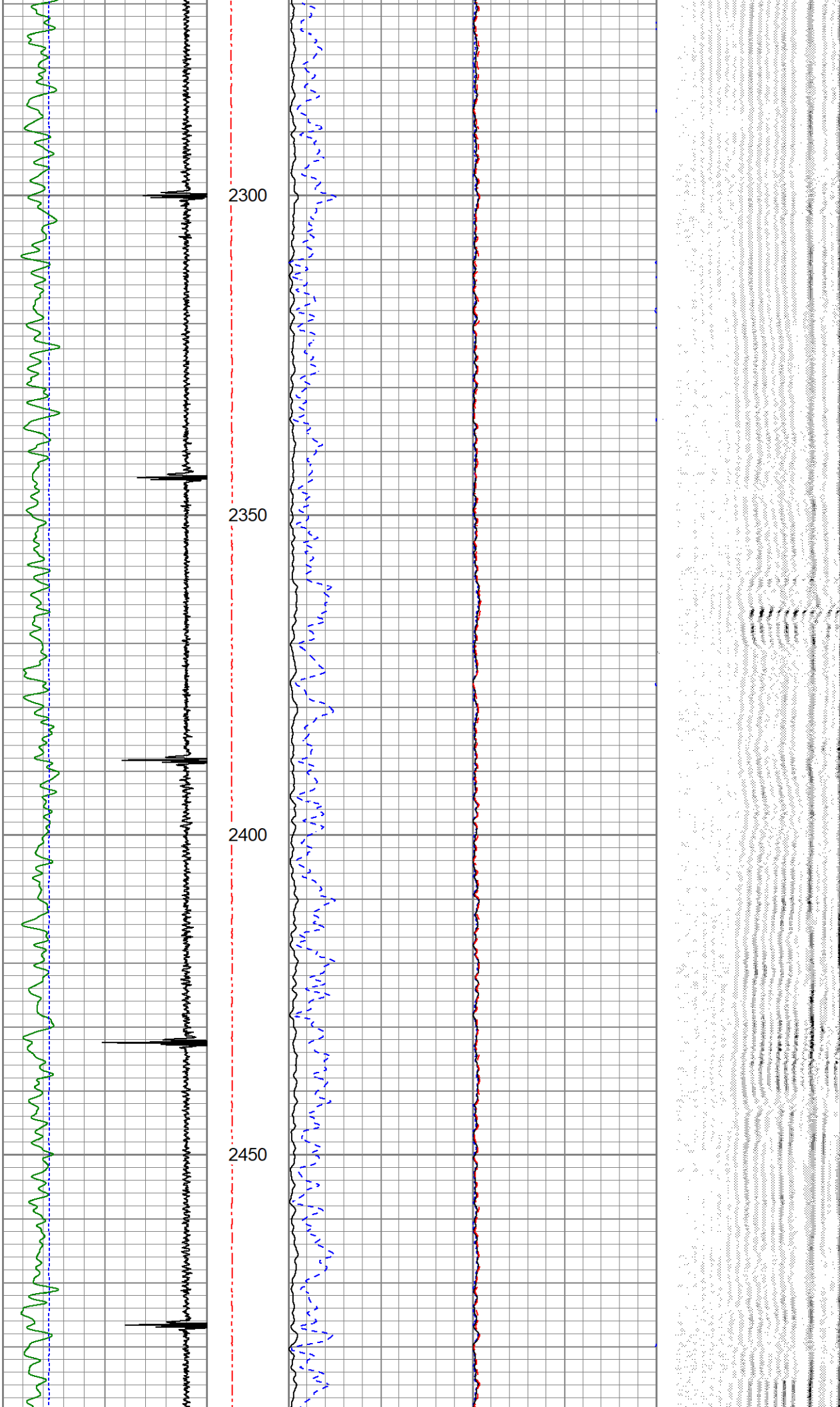


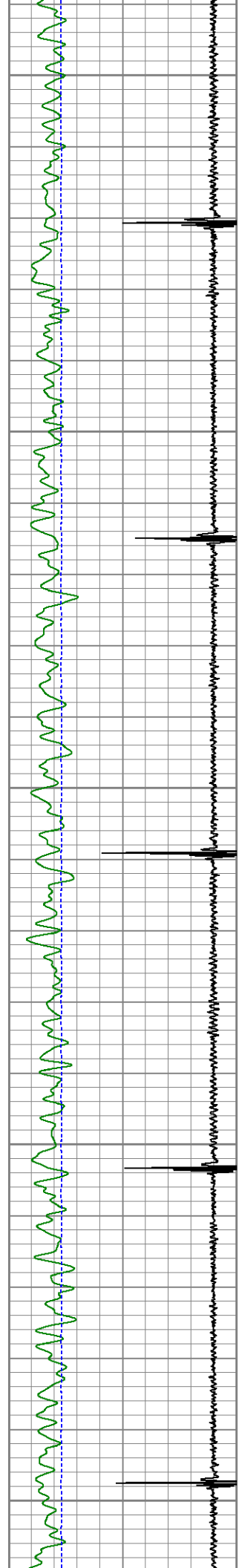




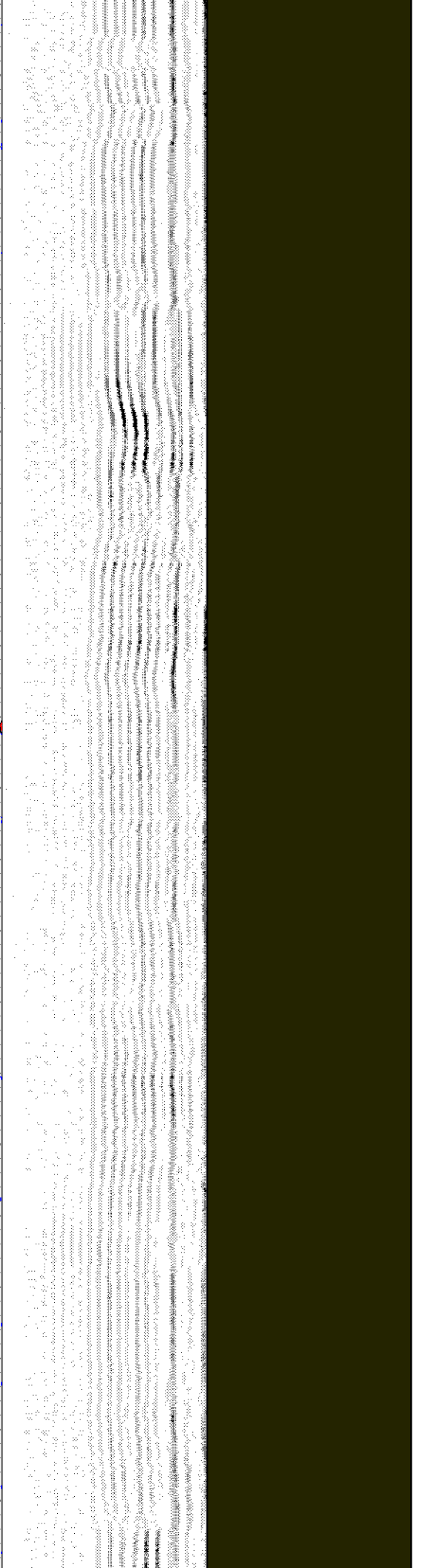
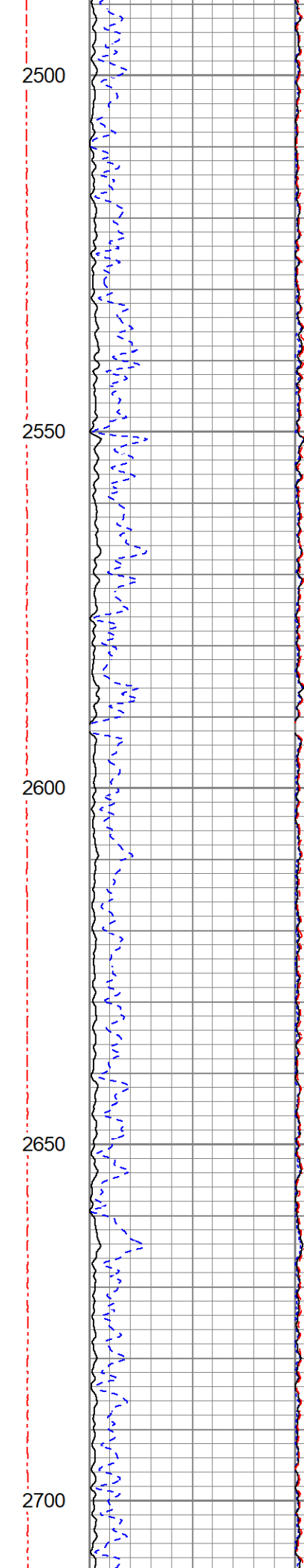


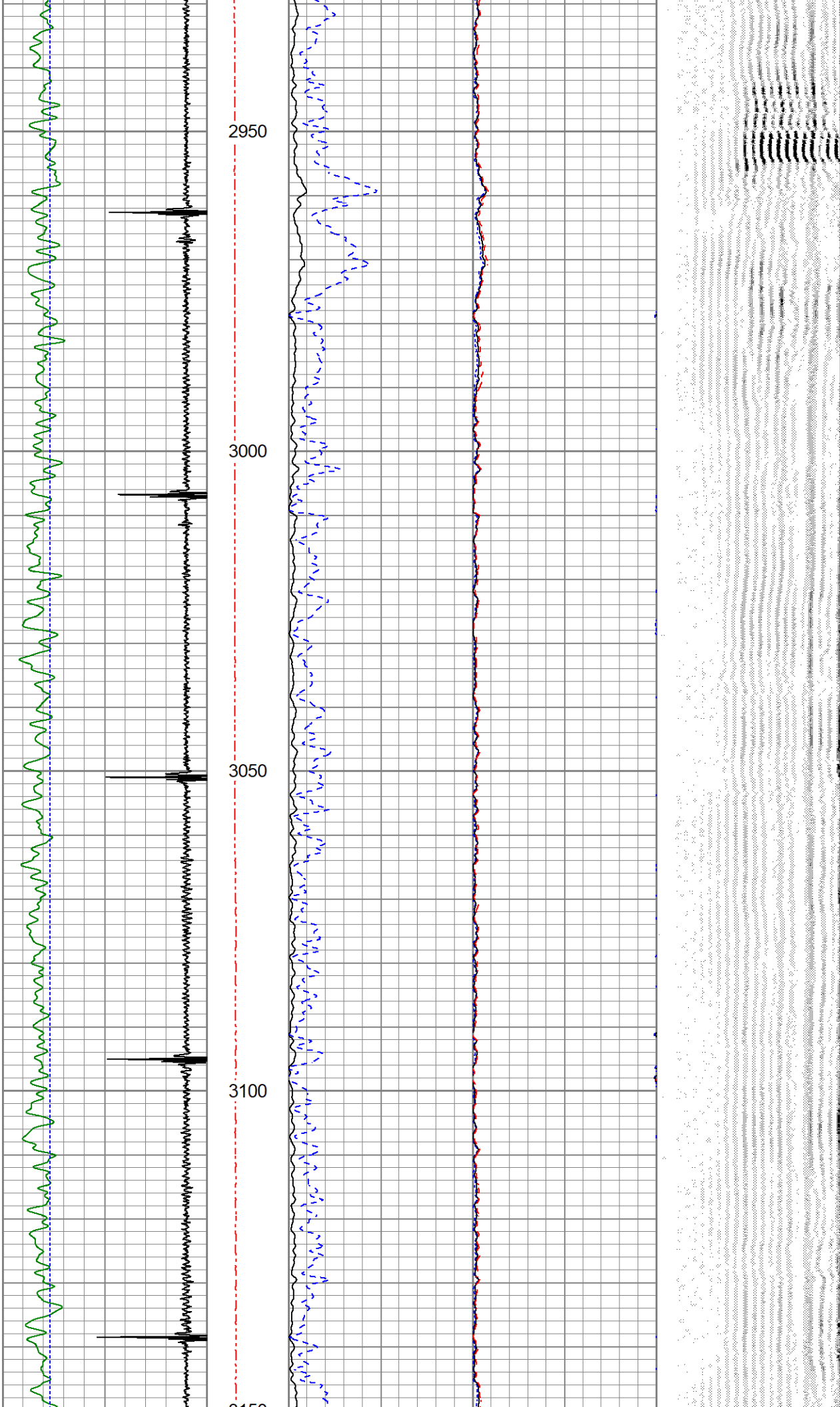






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2700





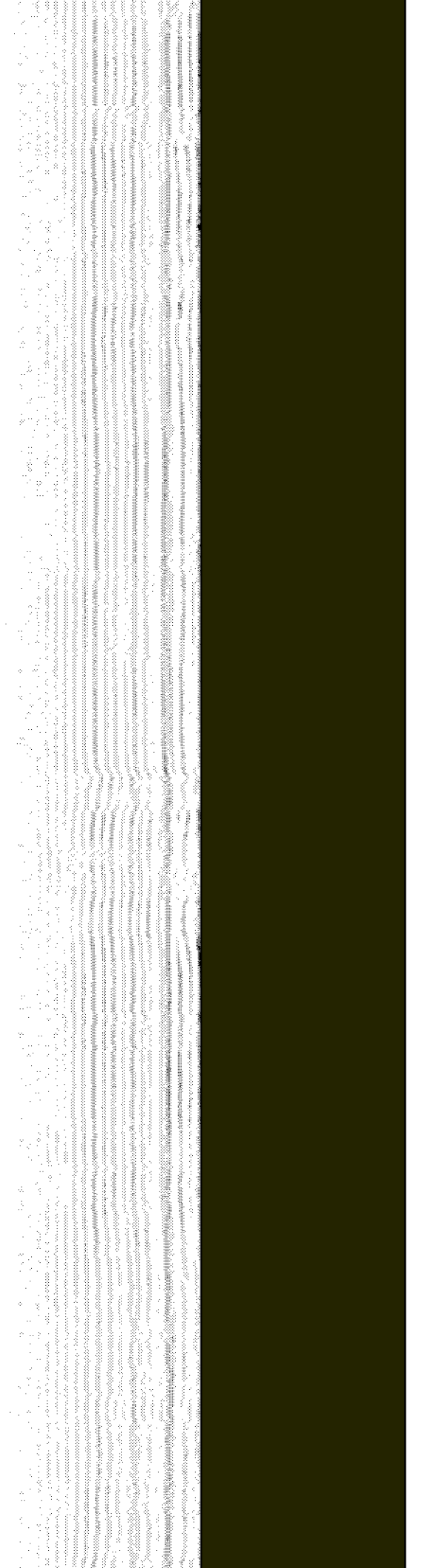
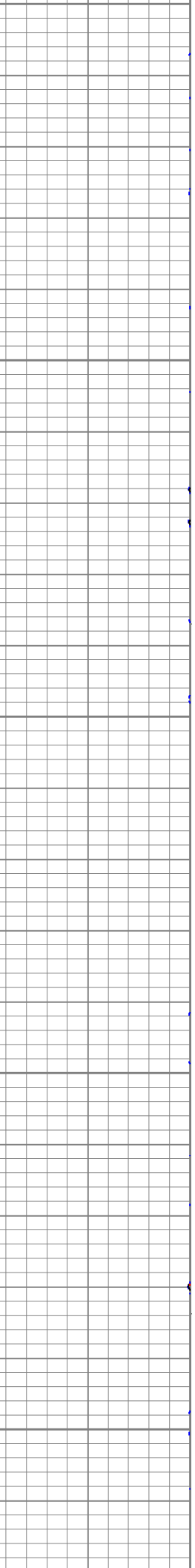
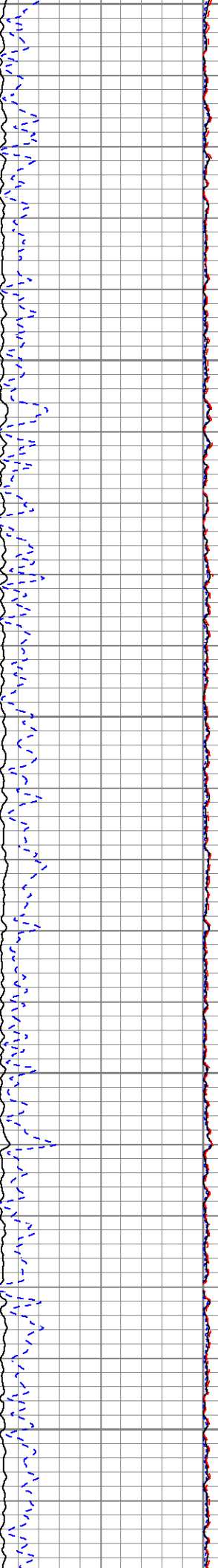
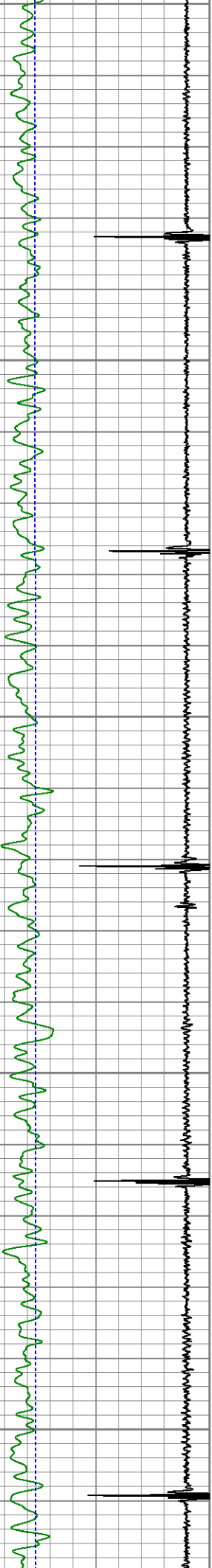
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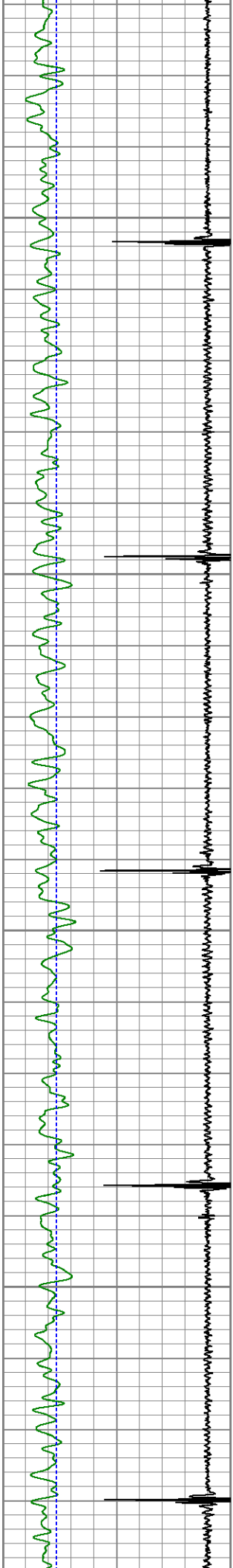
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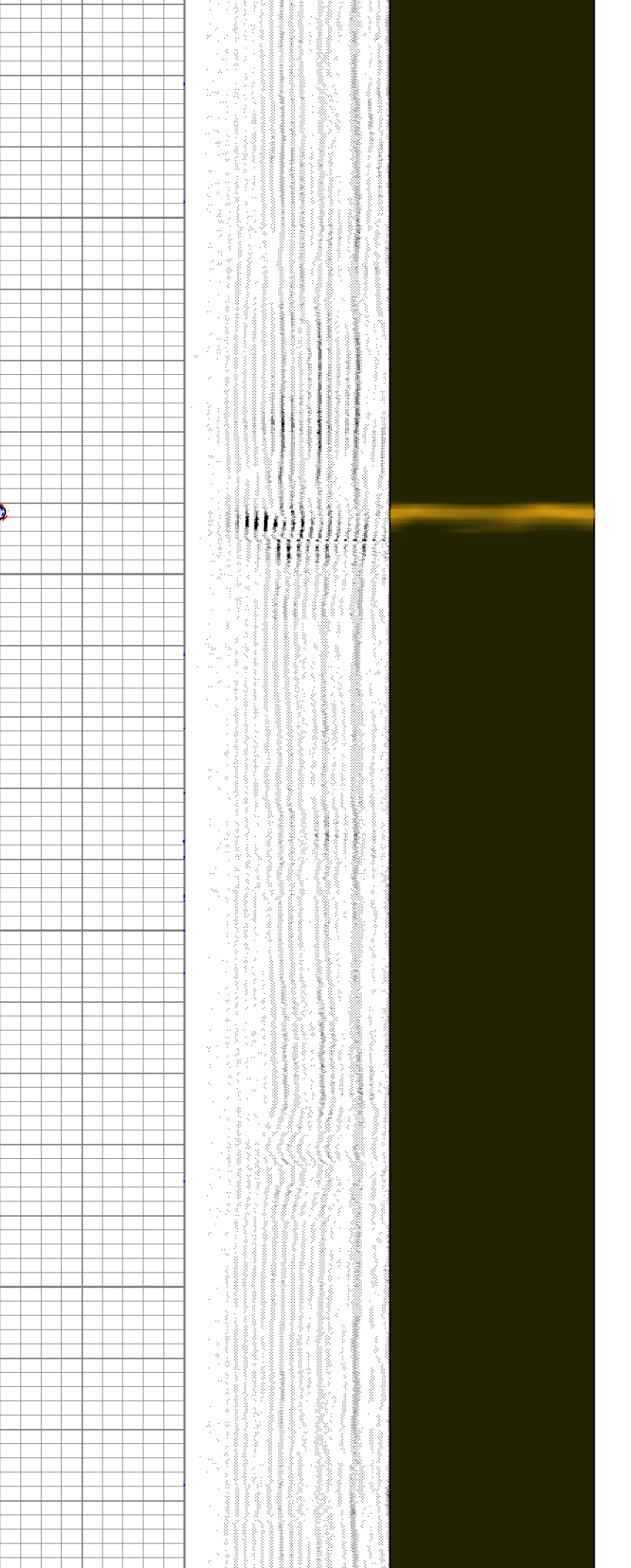
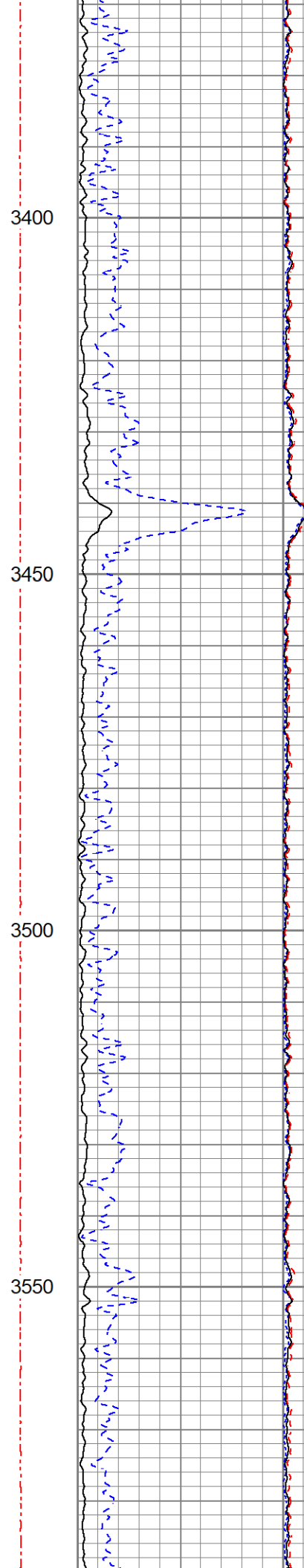


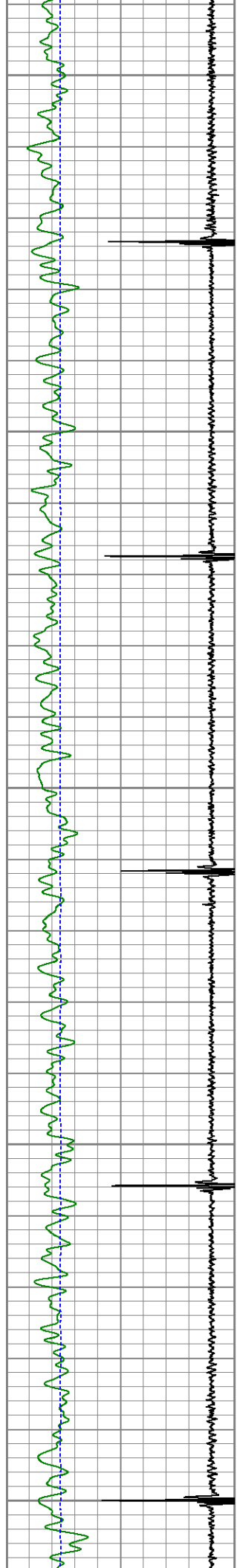
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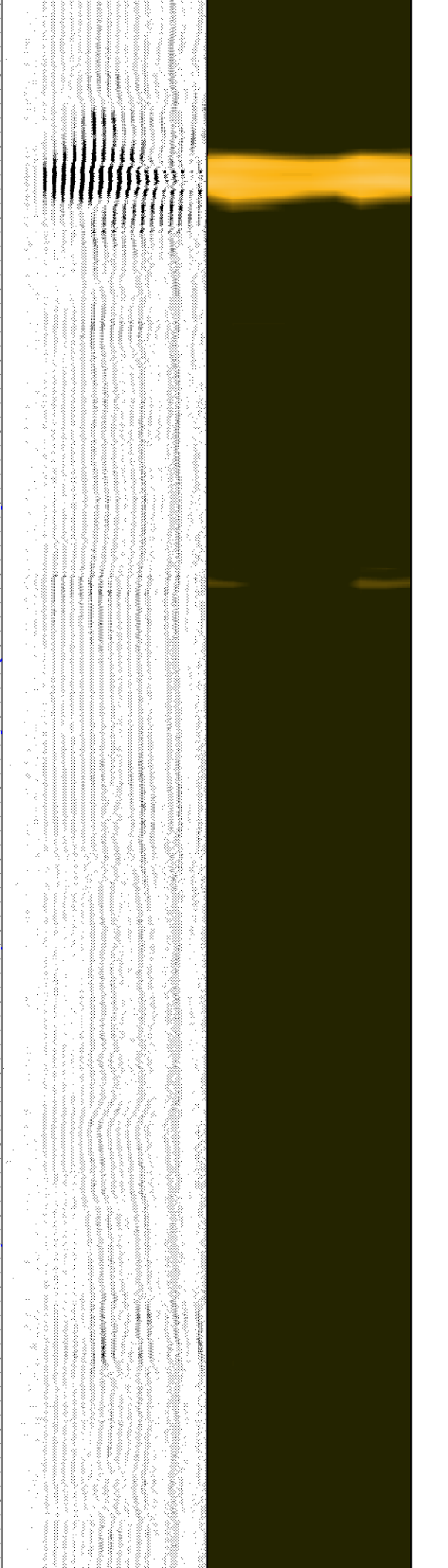
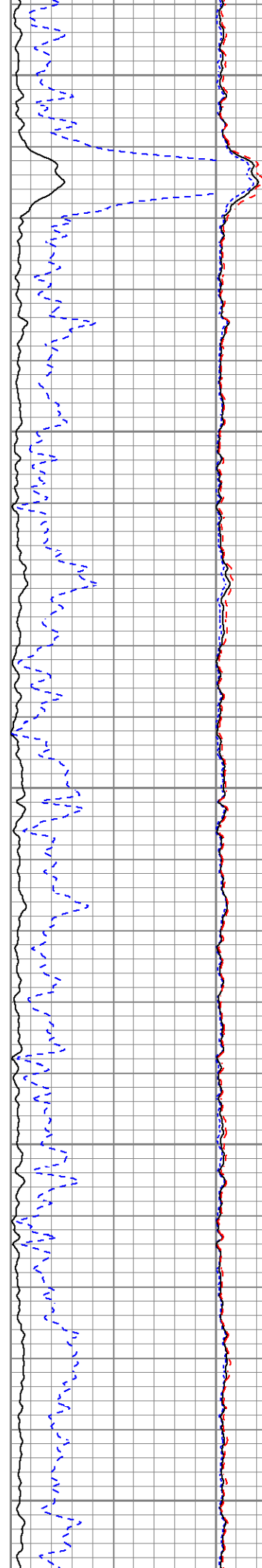
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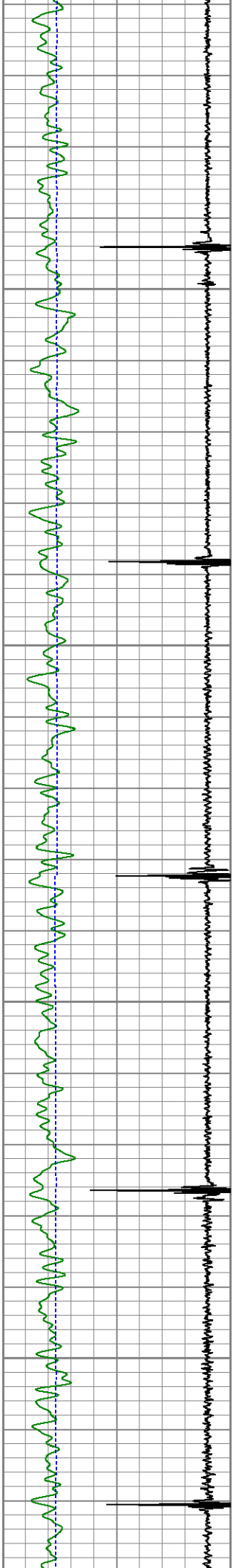
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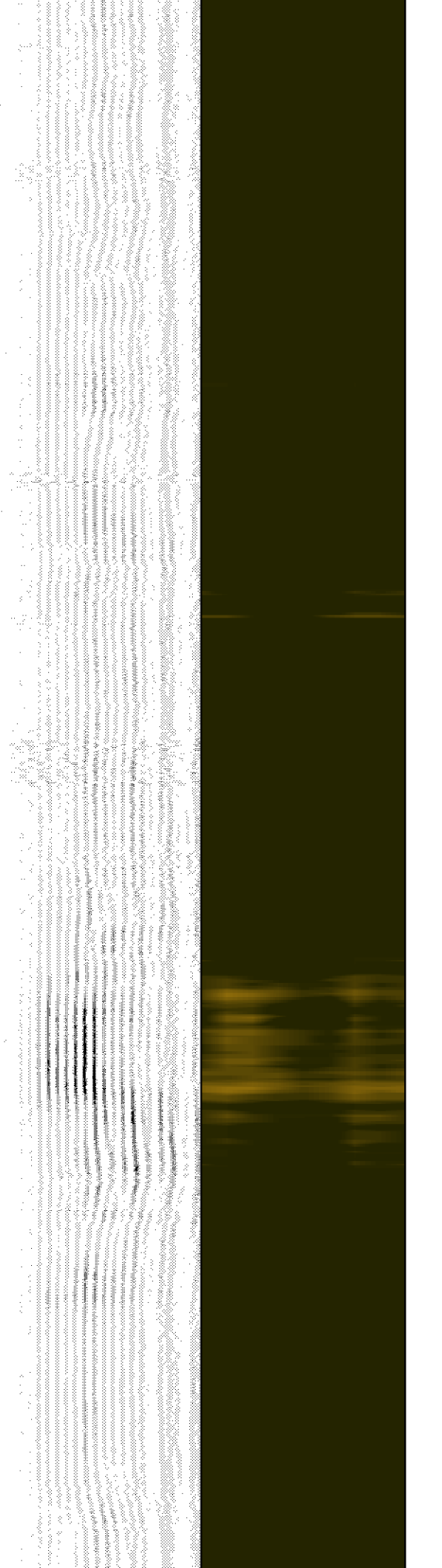
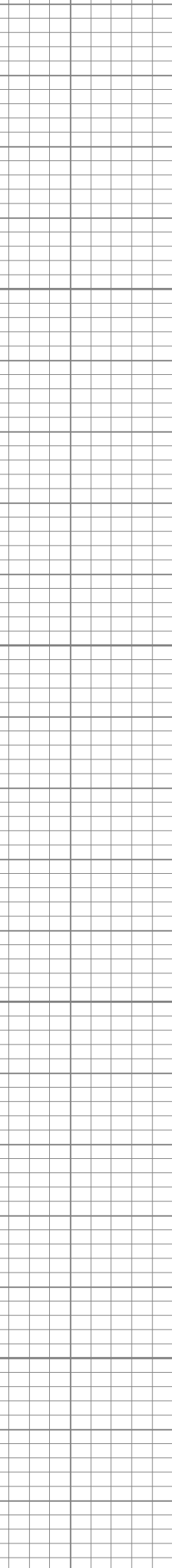
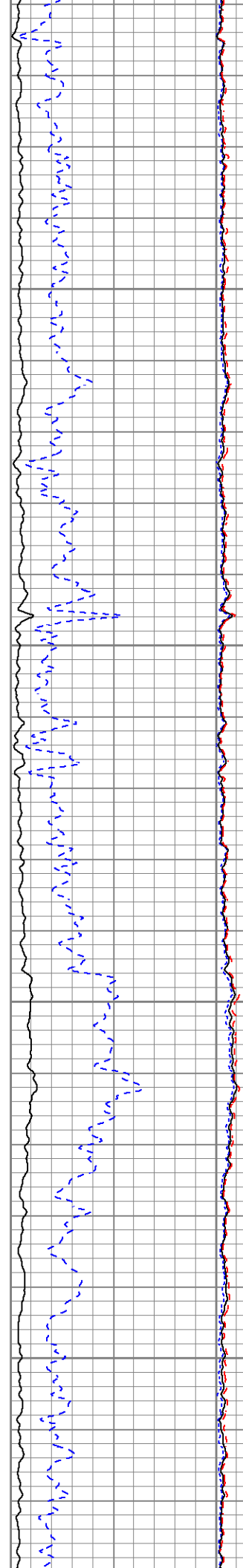


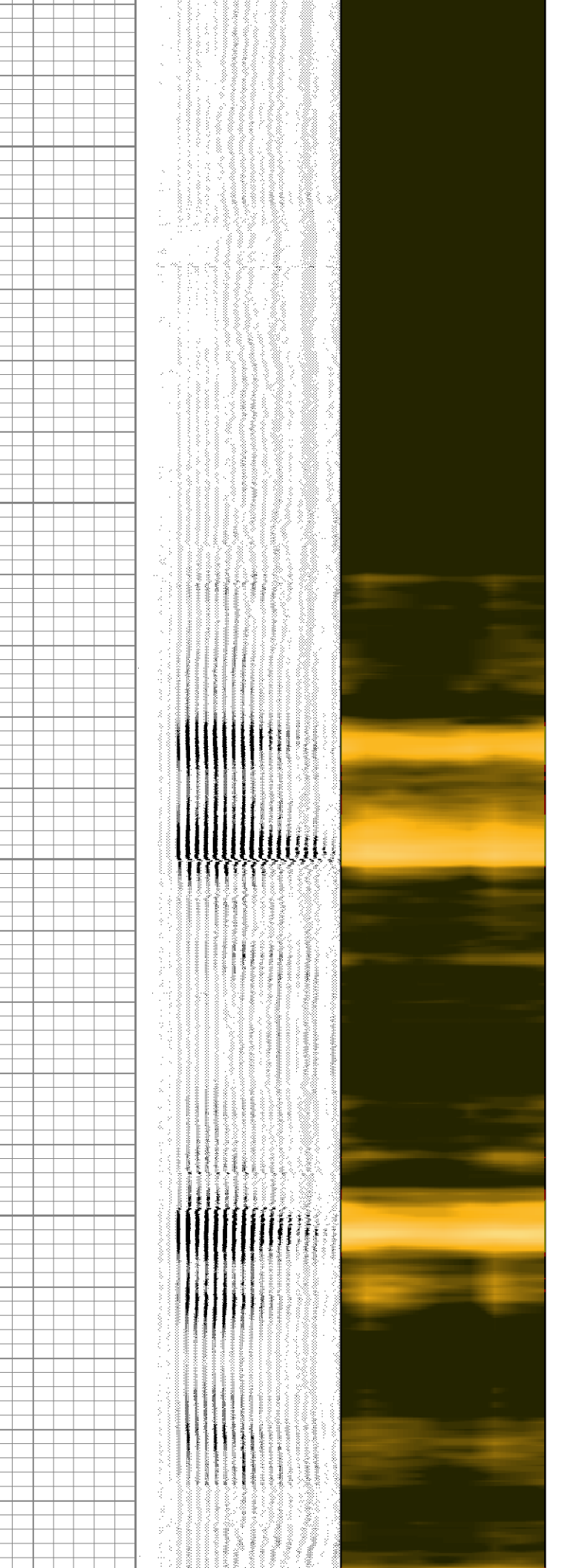
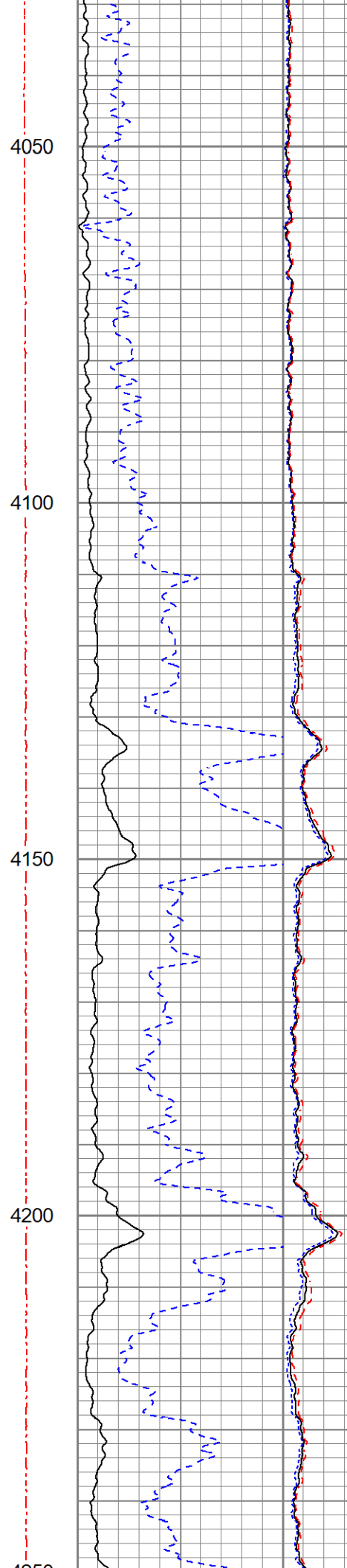
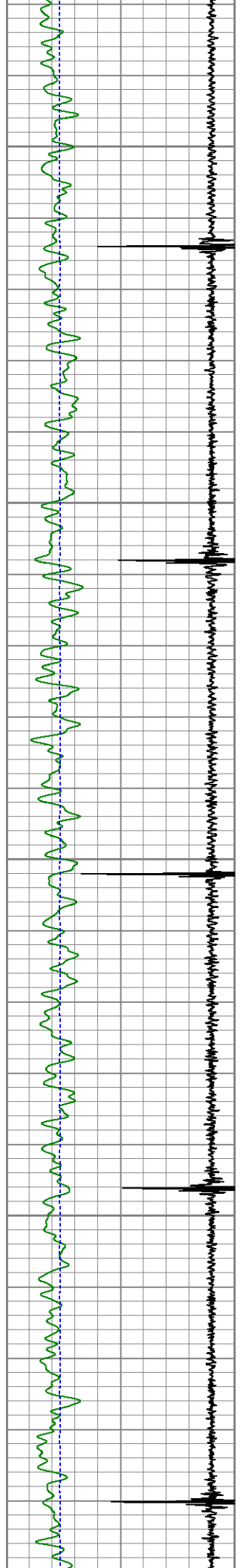
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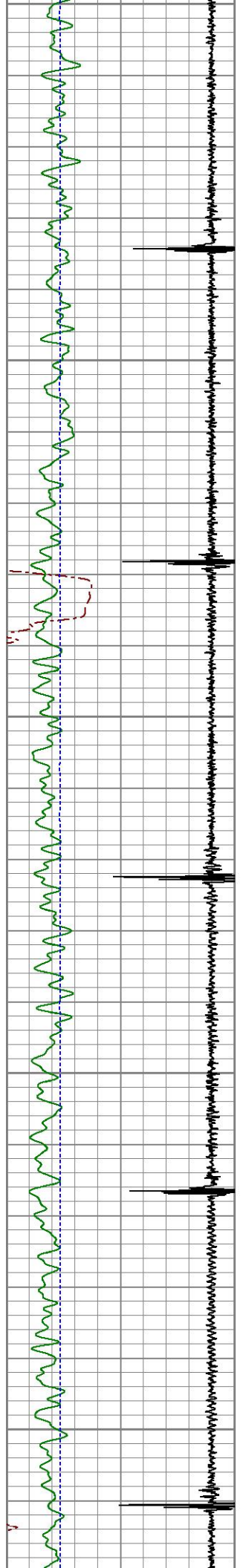




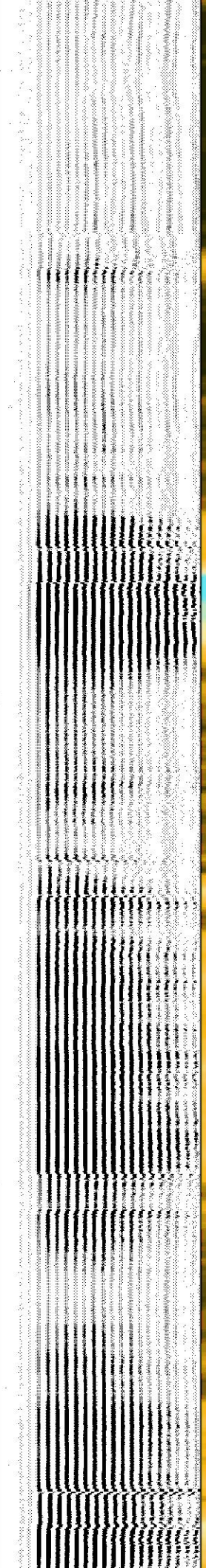
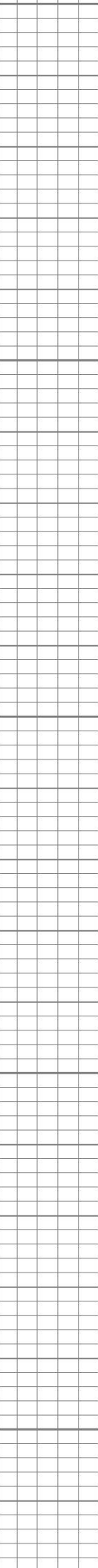
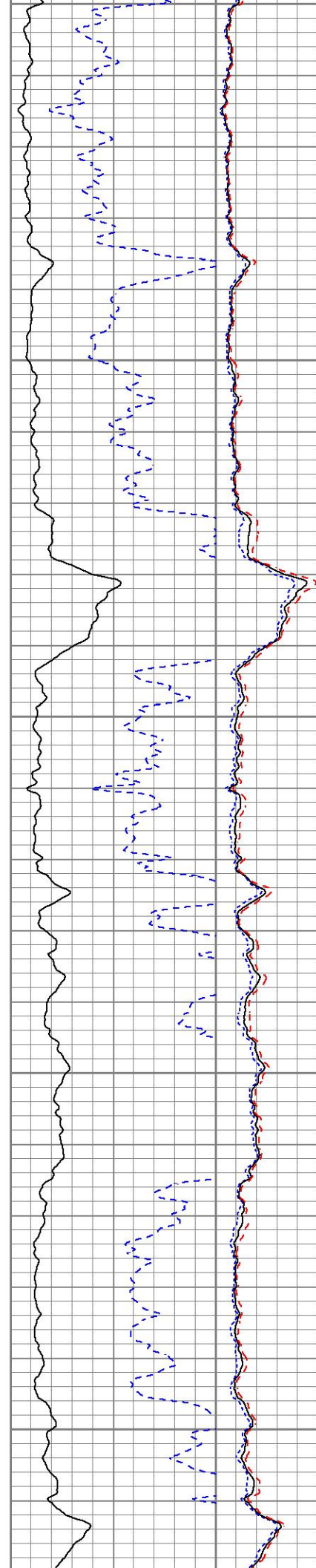
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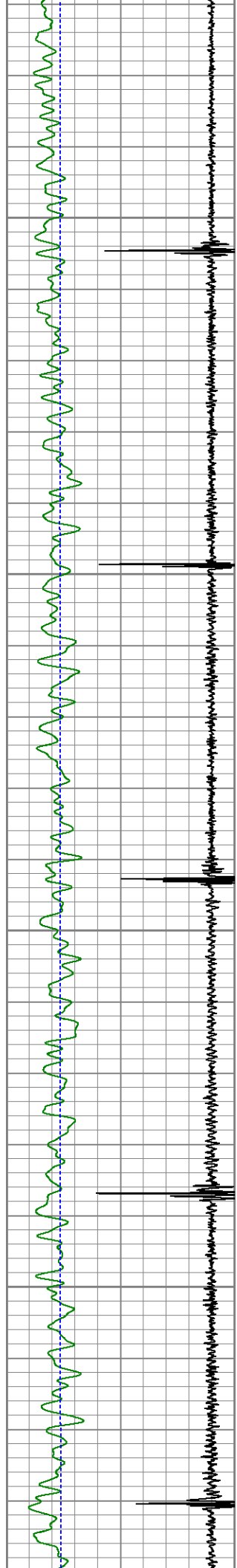




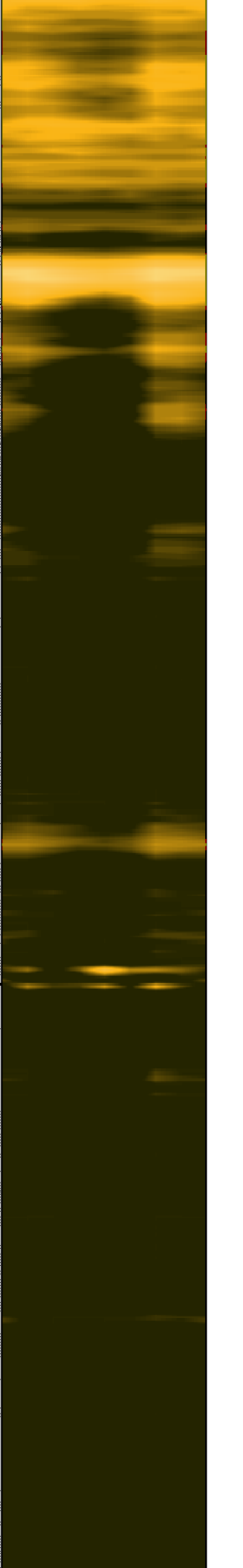
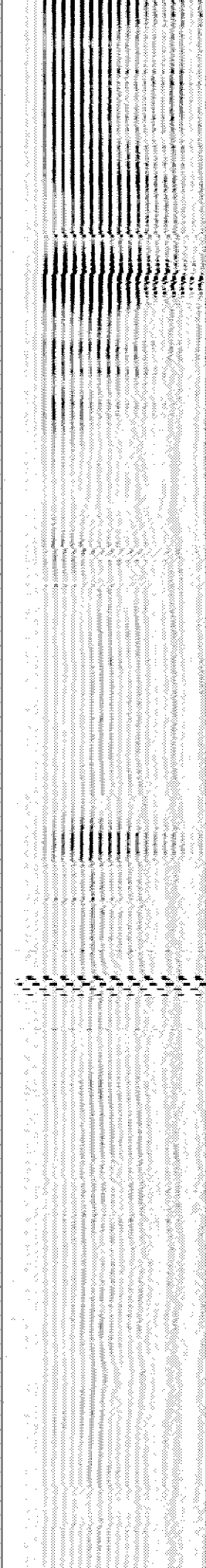
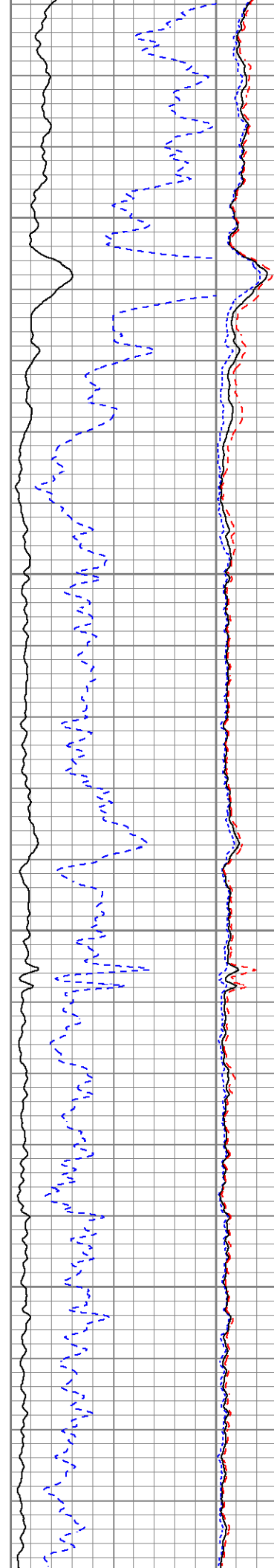


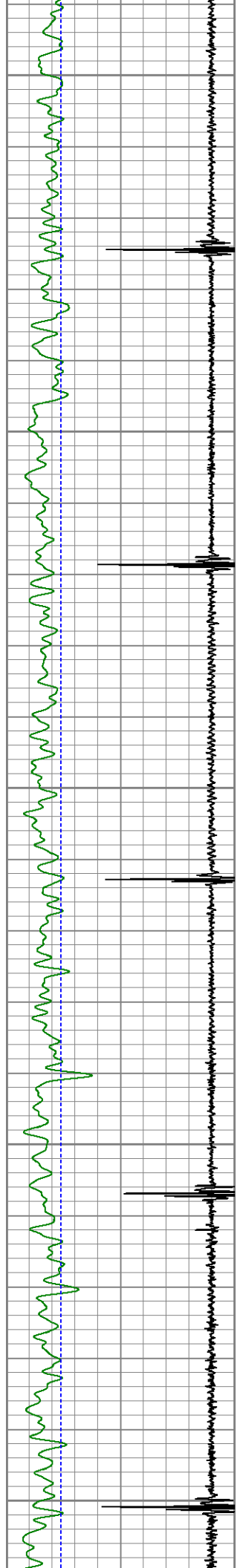
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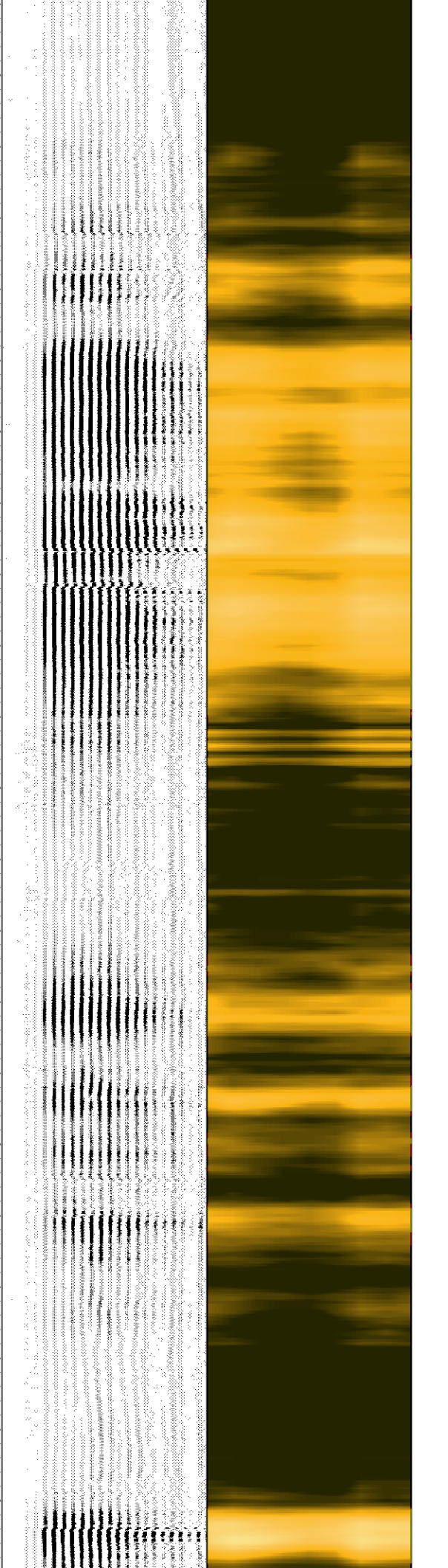
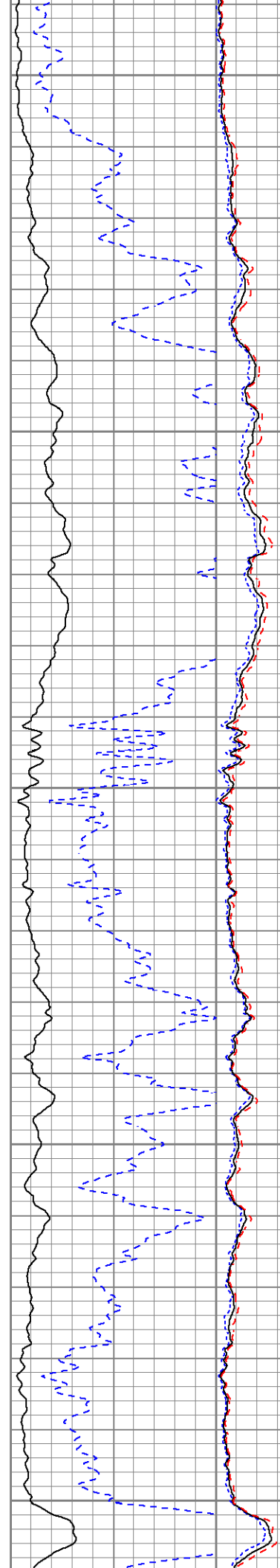


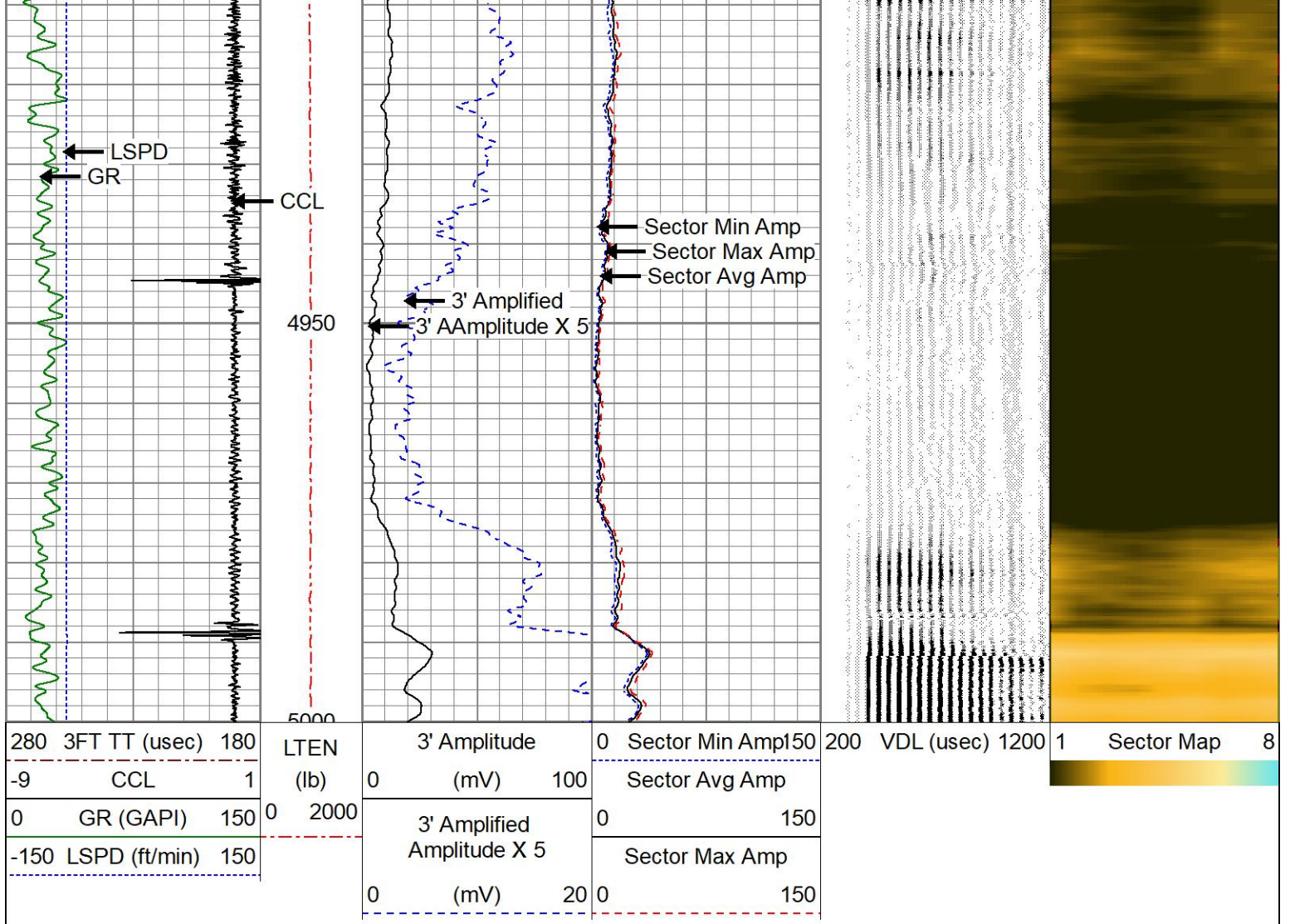
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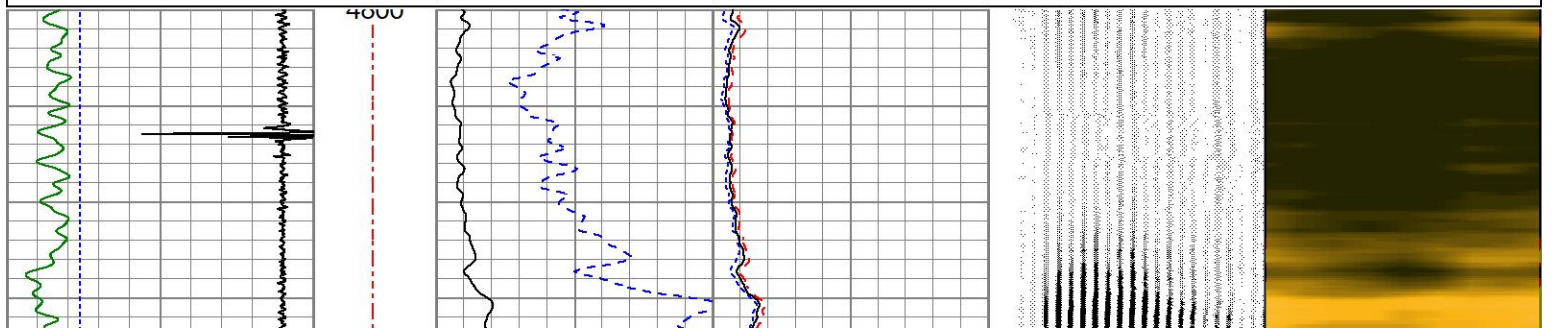
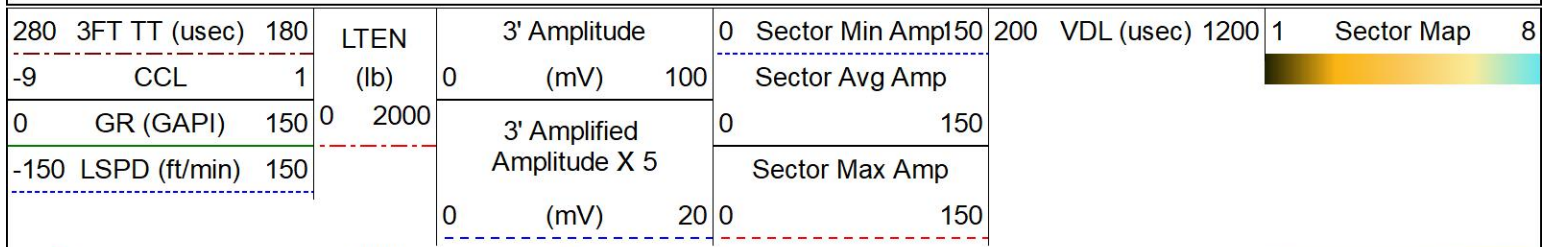


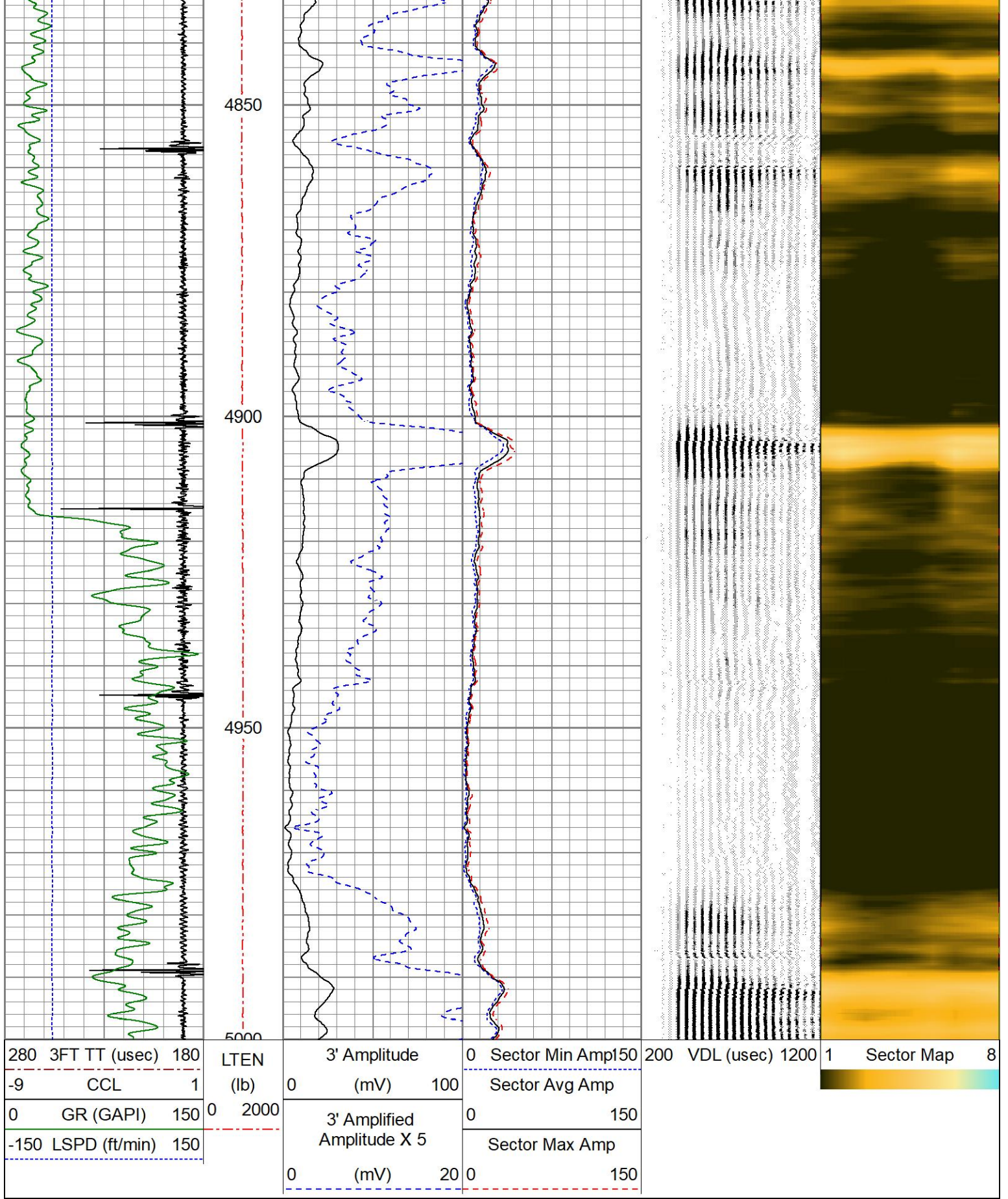


REPEAT PASS

0 PSI APPLIED AT SURFACE

Database File 1010_817193_occidental_ricks 22-15_0512332743_20250115_scbl-gr-ccl.db
 Dataset Pathname pass2
 Presentation Format res_scbl 8sec
 Dataset Creation Wed Jan 15 13:17:08 2025
 Charted by Depth in Feet scaled 1:240





Calibration Report

Database File 1010_817193_occidental_ricks 22-15_0512332743_20250115_scbl-gr-ccl.db
 Dataset Pathname pass3
 Dataset Creation Wed Jan 15 13:21:53 2025

Serial Number: 071129
 Tool Model: GR275B
 Performed: Wed Oct 30 07:22:40 2024

Calibrator Value: 250.0 GAPI

Background Reading: 34.9 cps
 Calibrator Reading: 302.3 cps

Sensitivity: 0.9349 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: 070150
 Tool Model: Probe

Calibration Casing Diameter: 4.500 in
 Calibration Depth: -1205.320 ft

Master Calibration, performed Fri Jan 03 12:09:00 2025:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	1.147	0.700	81.196	70.186	0.700
CAL	0.000	1.147				
5'	0.000	1.145	0.700	81.196	70.324	0.700
SUM						
S1	0.000	1.185	0.000	100.000	84.384	0.000
S2	0.000	1.094	0.000	100.000	91.383	0.000
S3	0.000	1.113	0.000	100.000	89.826	0.000
S4	0.000	1.147	0.000	100.000	87.178	0.000
S5	0.000	1.171	0.000	100.000	85.411	0.000
S6	0.000	1.179	0.000	100.000	84.823	0.000
S7	0.000	1.130	0.000	100.000	88.458	0.000
S8	0.000	1.185	0.000	100.000	84.407	0.000

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.000	1.147	1.000	0.000

Air Zero Calibration, performed Fri Jan 03 12:08:21 2025:

	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



Company

OCCIDENTAL PETROLEUM CORP.

Well

RICKS 22-15

Field

WATTENBERG

County

WELD

State

COLORADO