



# PIONEER

Pioneer Energy Services

## RADIAL BOND LOG WITH GAMMA RAY

Company <b>VERDAD RESOURCES</b>		Other Services	
Well <b>KBL 1930-11H</b>		CCL TEMP	
Field <b>WATTENBERG</b>			
County <b>WELD</b>		State <b>CO</b>	
Location: <b>1806FSL 2096FEL</b>		API # : 05-123-50883	
SEC 19 TWP 2N RGE 63W			
Permanent Datum	GL	Elevation	4863'
Log Measured From	KB	21'	Above Perm. Datum
Drilling Measured From	KB		K.B. 4884' D.F. N/A G.L. 4863'
Date of Service	8-19-2021		
Run Number	ONE		
Depth Driller or P8TD	14410'		
Depth Logger	7134'		
Bottom Log Interval	7134'		
Top Log Interval	38'		
Open Hole Size	8.5"		
Type Fluid	FRESH WATER		
Fluid Level	38'		
Fluid Density	N/A		
Max. Recorded Temperature	191 DEG F		
Max. Wellhead Pressure	ZERO PSI		
Wellhead Connection	N/A		
Estimated Cement Top	582'		
Unit Number	P-132		
Wireline Size	9/32"		
Location	FORT MORGAN		
Recorded By	AJ SPILLMAN		
Witnessed By	JASON TURNER		
Tubing Record	Size	Wt/Ft	Top
Surface Casing	9.625"	36#	SURFACE
Production Casing	5.5"	17#	SURFACE
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 FIVE FOOT JOINT AT SURFACE

THANK YOU FOR USING PIONEER ENERGY SERVICES!

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: A.SPILLMAN Operator: M.BATRES Operator: O.ESTUPINAN\ Operator:		

Top - Bottom


BOREID in 7.875	BOTTEMP degF 100	CASEOD in 5.5	CASETHCK in 0	CASEWGHT lb/ft 17	MAXAMPL mV 0	MINAMPL mV 1
MINATTN db/ft 0.08	PERFS  No	PPT usec 0	SRFTEMP degF 0	TDEPTH ft 0		


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)
			Cable Head-Titan_144 1 7/16" Titan Cable Head	1.03	1.44	2.00
			Centralizer-275 Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
			PROBE-RBT-DIGITAL-RBL-DC (FW 1304-33) Probe 2 3/4" Radii Bond-Corrosion Package	8.75	2.75	100.00
WVFS8	12.09					
WVFS7	12.09					
WVFS6	12.09					
WVFS5	12.09					
WVFS4	12.09					
WVFS3	12.09					
WVFS2	12.09					
WVFS1	12.09					
WVFCAL	12.09					
WVF3FT	12.09					
WVF5FT	11.09					
HEADVOLT	7.90					
			Centralizer-275 Probe	2.88	2.75	15.00

CCL	4.20				
GCT_TEMP	3.41				
GR	2.83		4.69	2.75	60.00
			0.33	1.38	1.00
Dataset: verdad resources_kbl 1930-11h_0512350883_20210818_scbl.db: field/well/run1/pass6 Total length: 20.56 ft Total weight: 193.00 lb O.D.: 2.75 in					

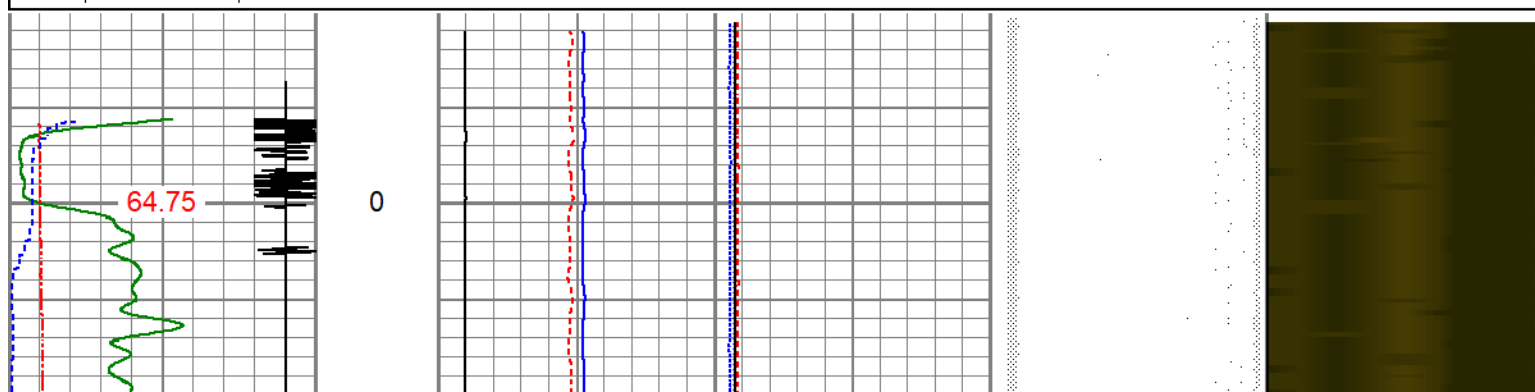


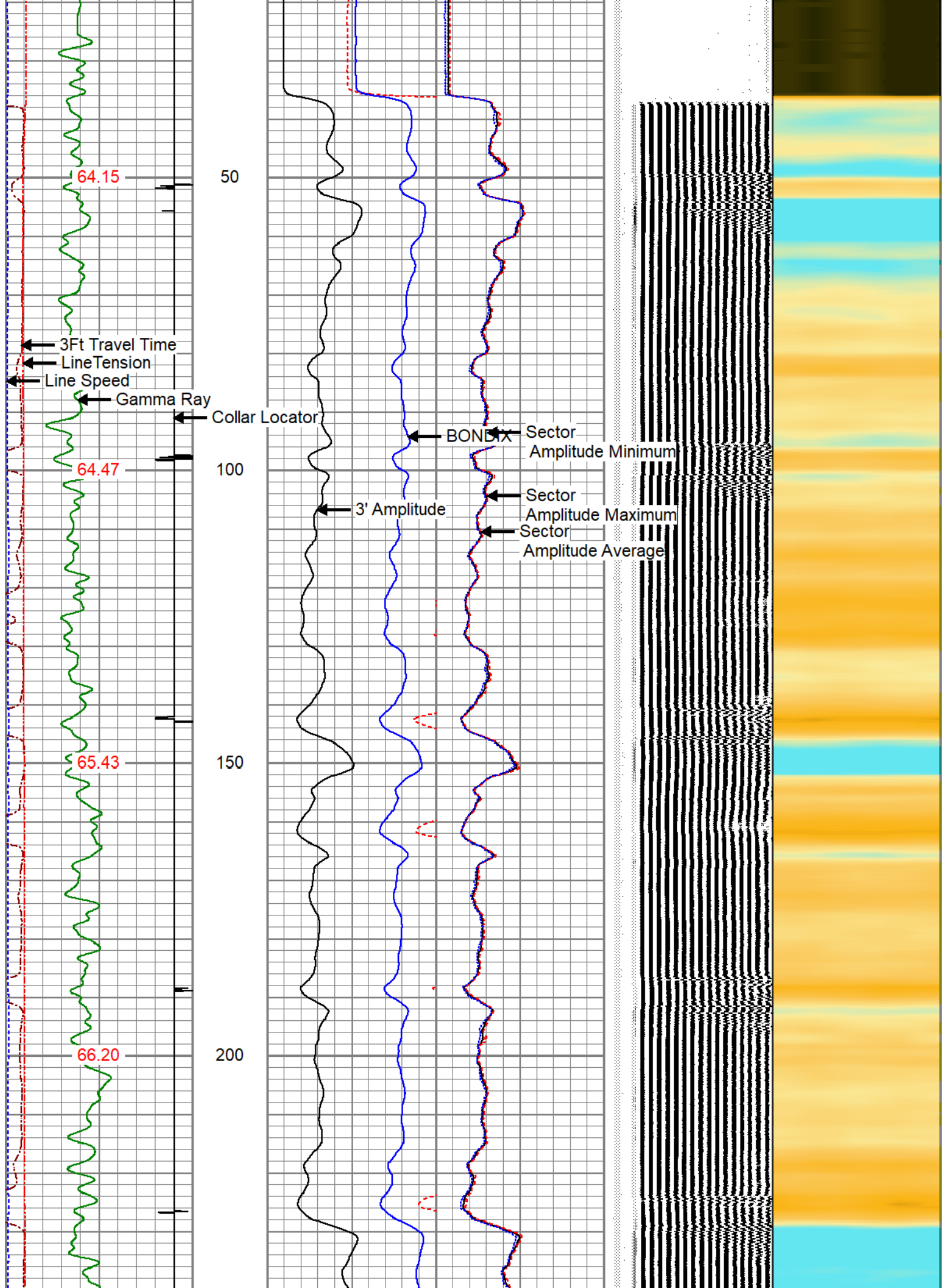
## MAIN LOG

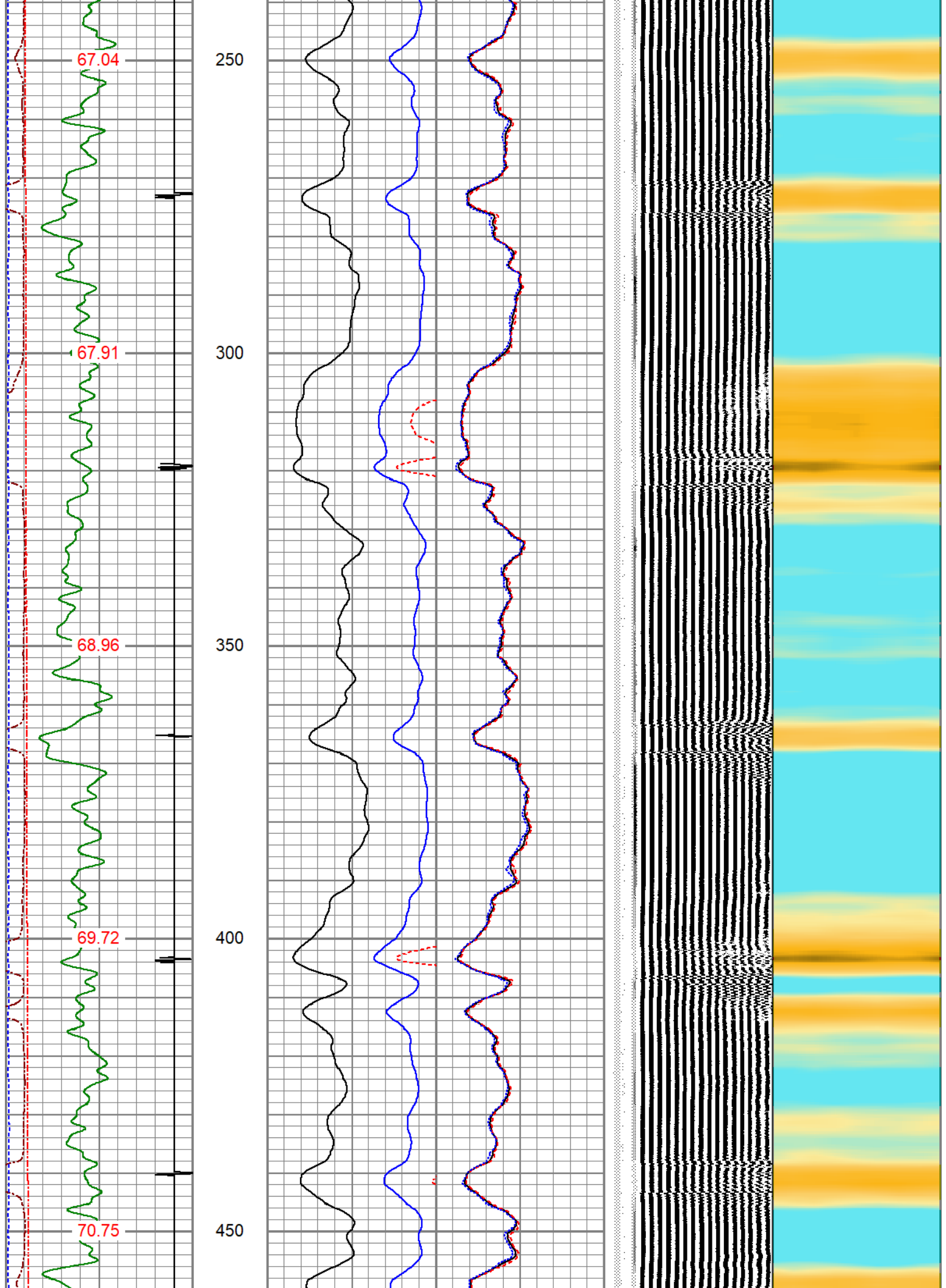
### ZERO PSI APPLIED AT SURFACE

Database File	verdad resources_kbl 1930-11h_0512350883_20210818_scbl.db
Dataset Pathname	pass6
Presentation Format	pinr_scbl
Dataset Creation	Thu Aug 19 06:52:41 2021
Charted by	Depth in Feet scaled 1:240

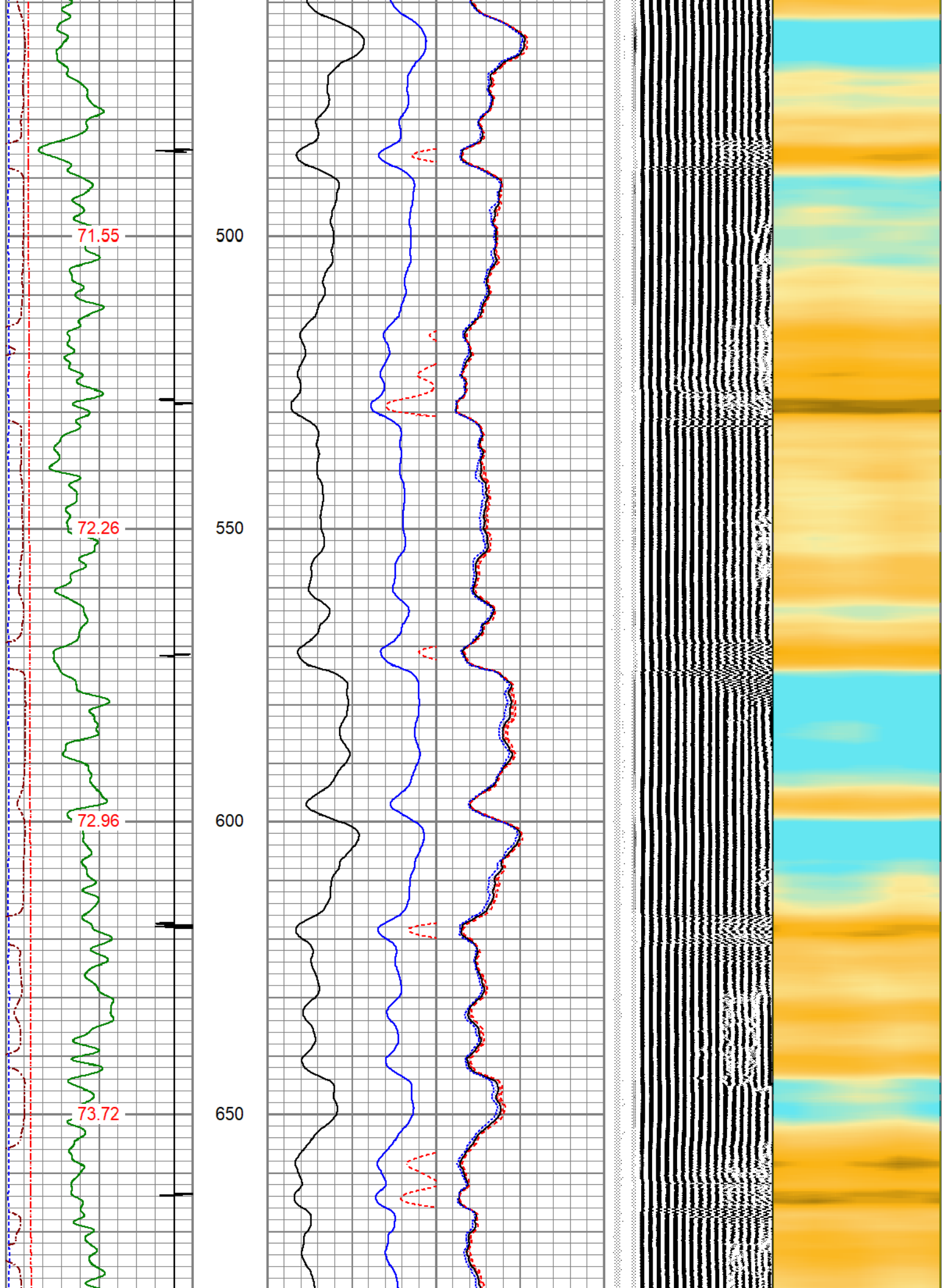
3Ft Travel Time	3' Amplitude	Sector Amplitude Average	VDL	1	Sector Map	8
275 (usec) 175	0 (mV) 100	0 150	200 (usec) 1200			
-9 Collar Locator 1	3' Amplified Amplitude X 5					
Gamma Ray	0 (mV) 20	Sector Amplitude Maximum				
0 (GAPI) 150	1 BONDIX 0	0 150				
LineTension		Sector Amplitude Minimum				
0 (lb) 2000		0 150				
Line Speed						
-100 (ft/min) 100						
TEMP (degF)						

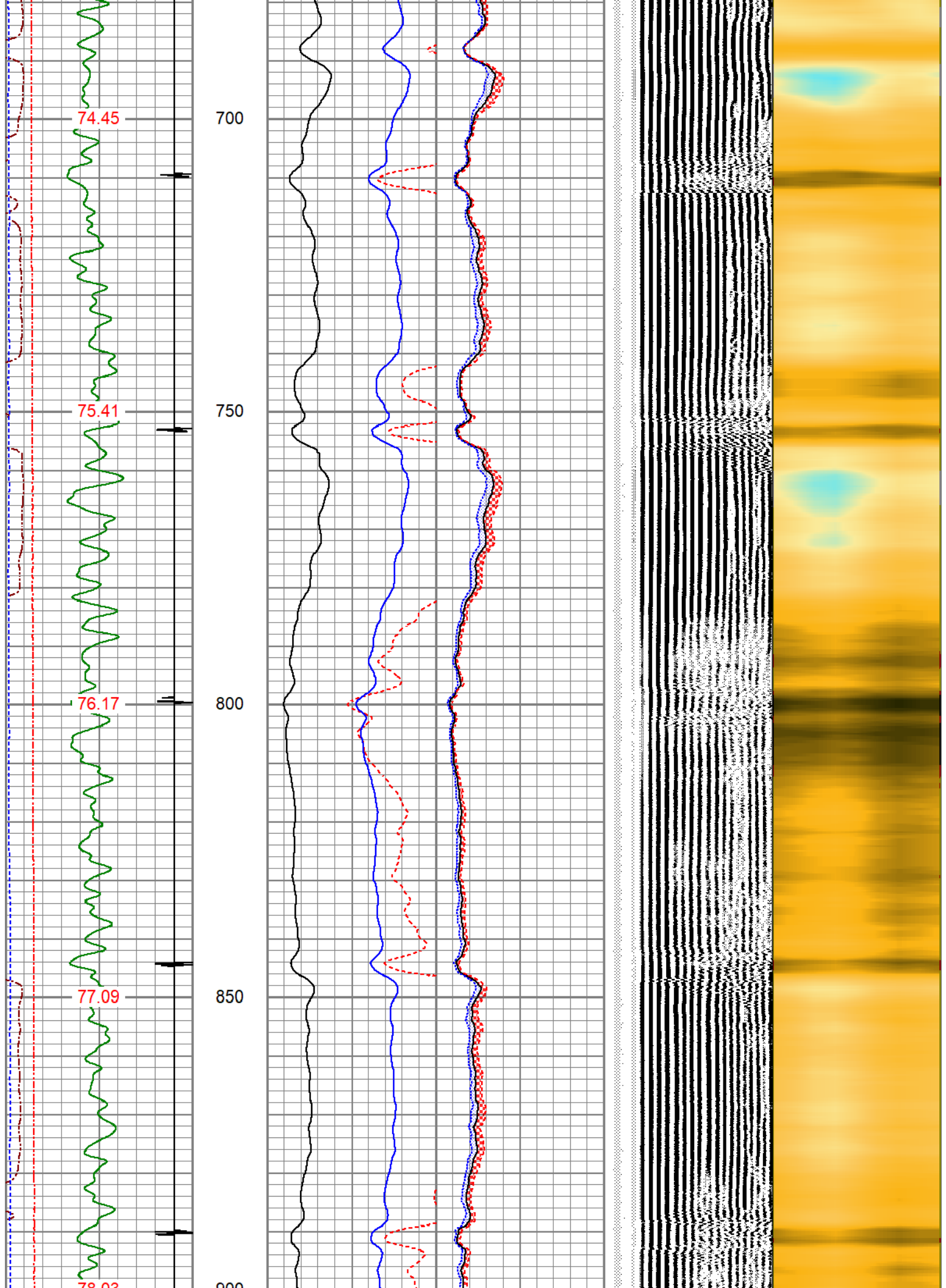


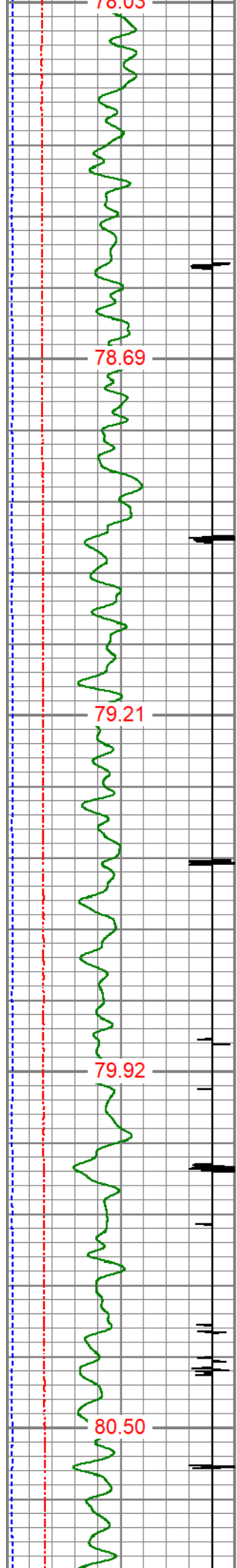




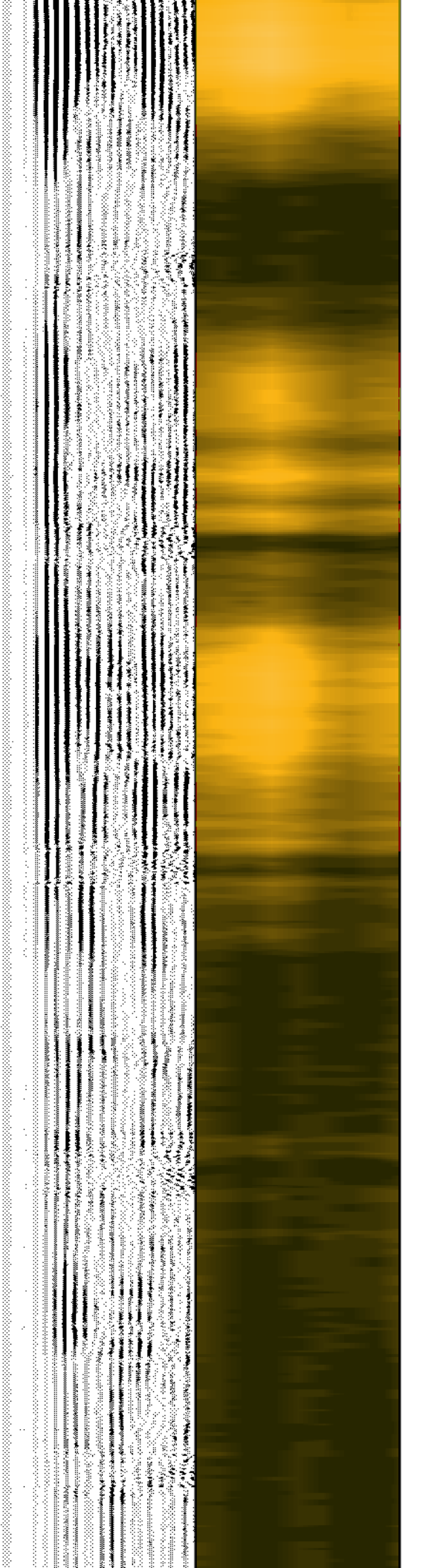
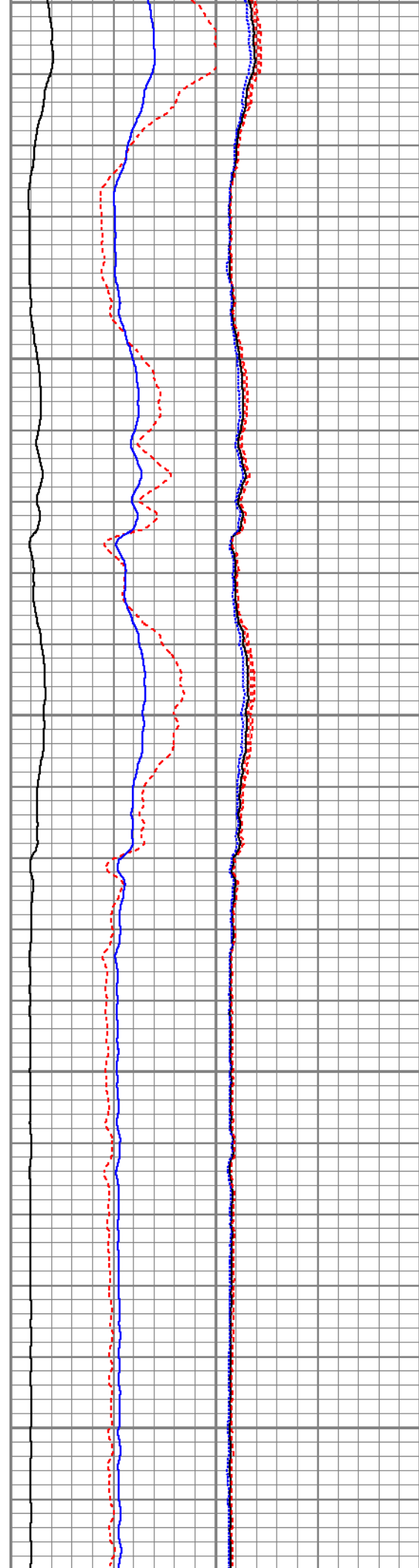




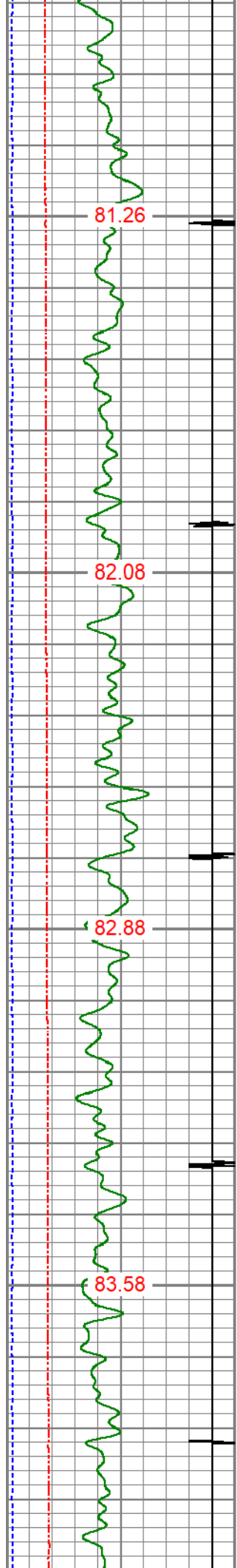




900  
950  
1000  
1050  
1100





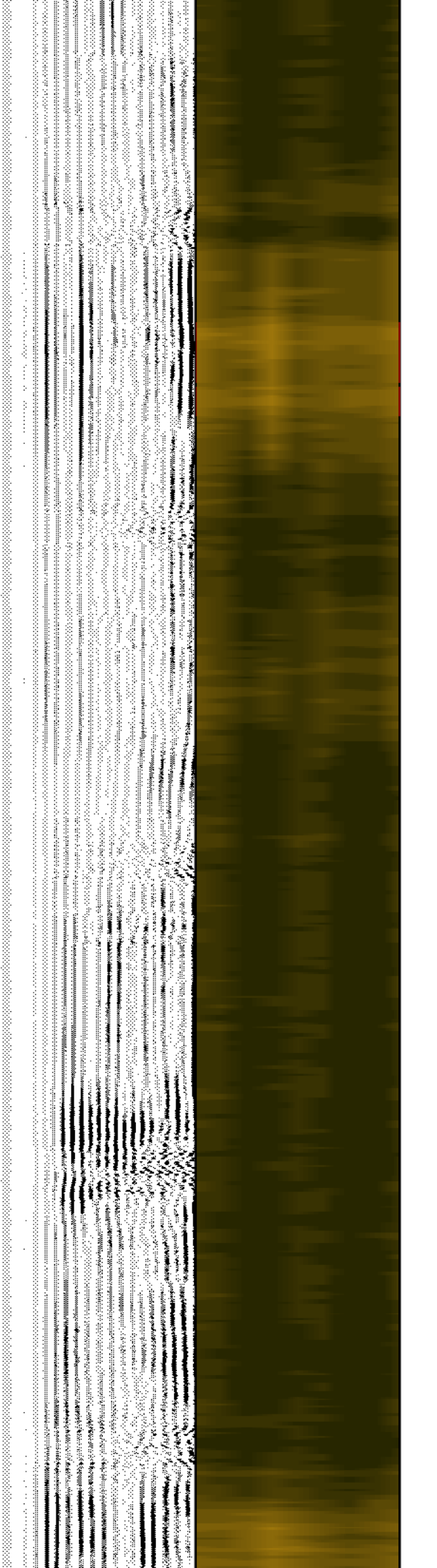
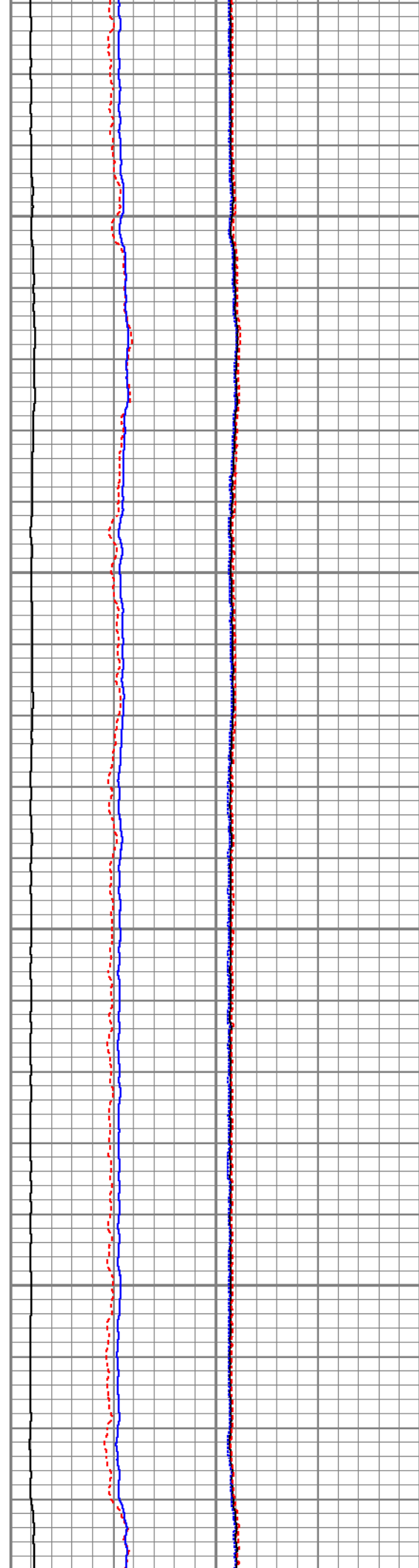


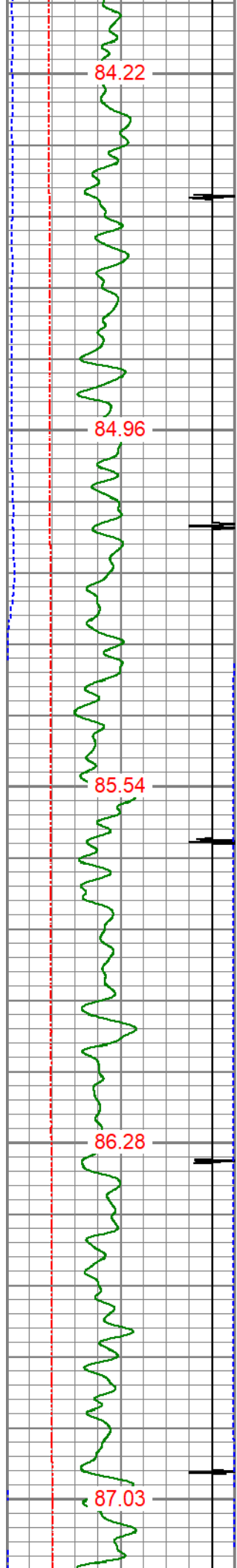
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1200

1250

1300





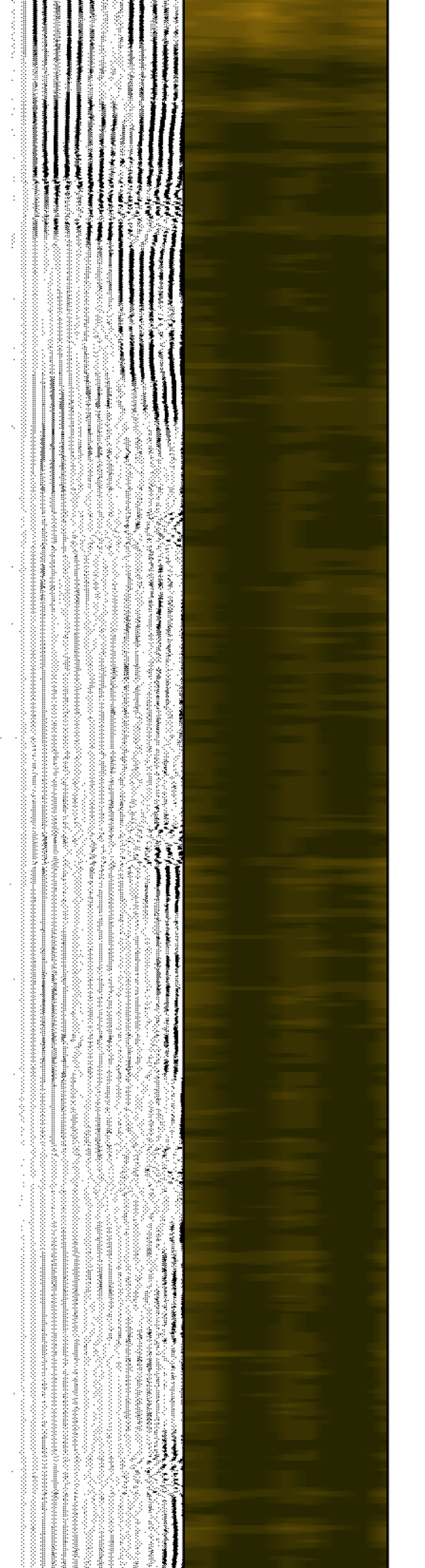
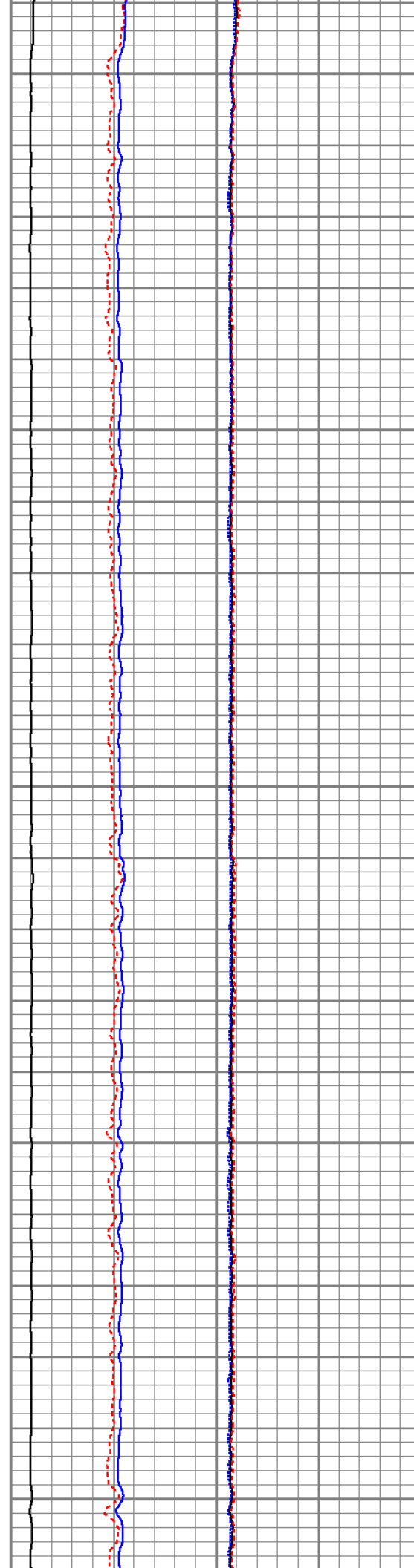
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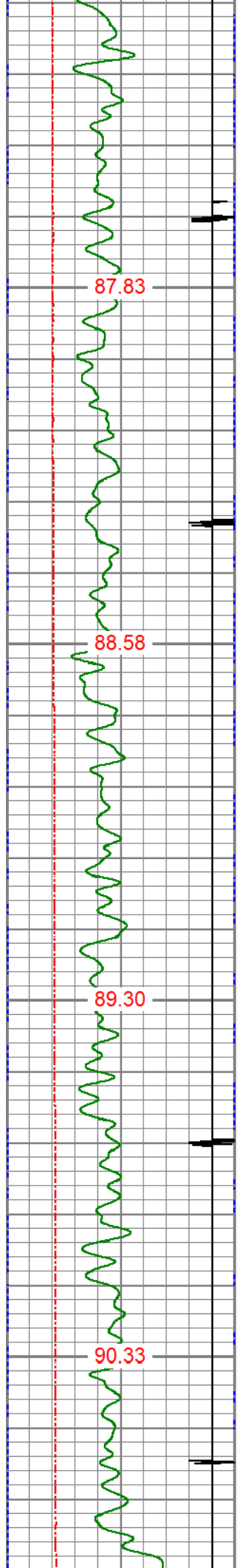
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1500

1550



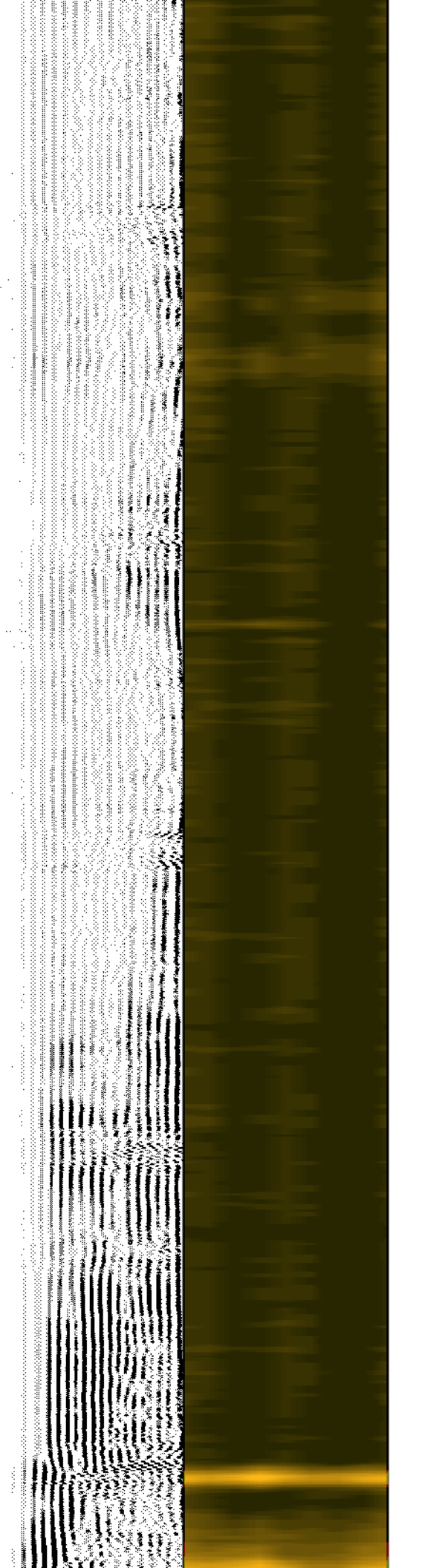
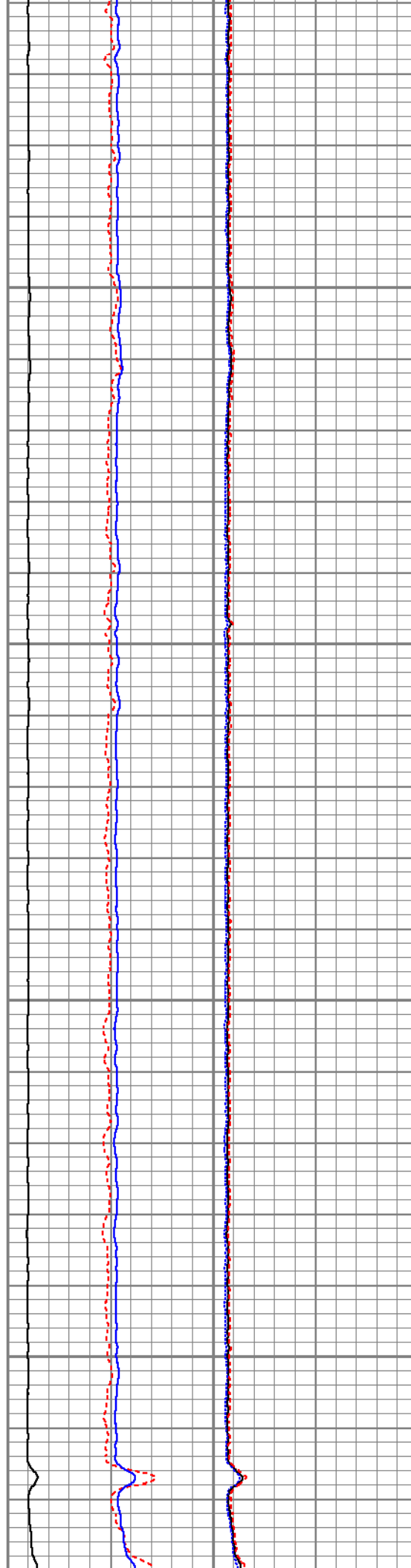


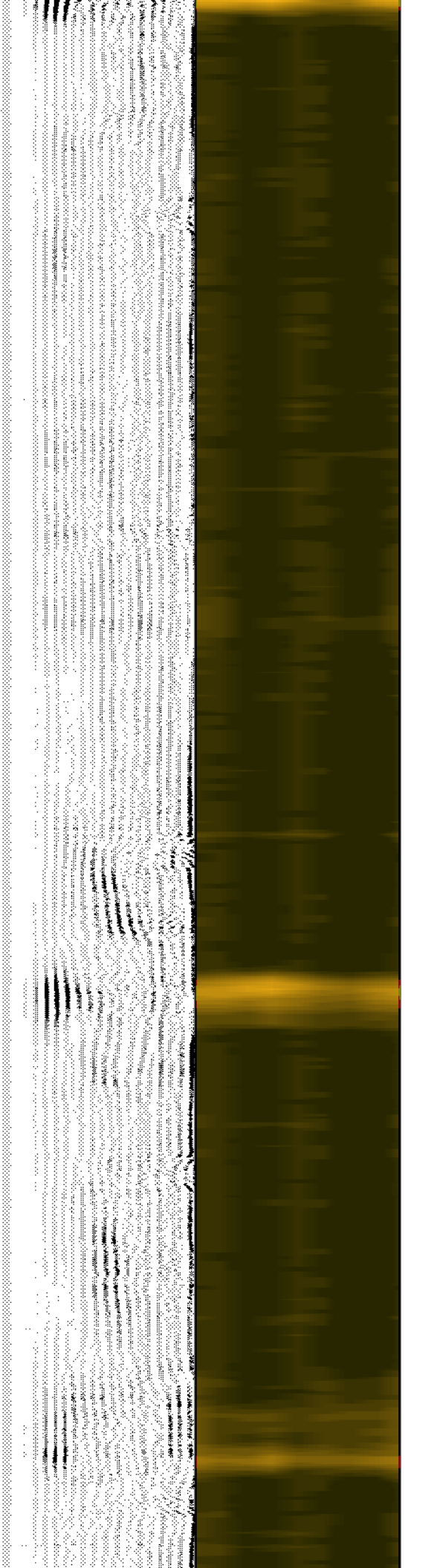
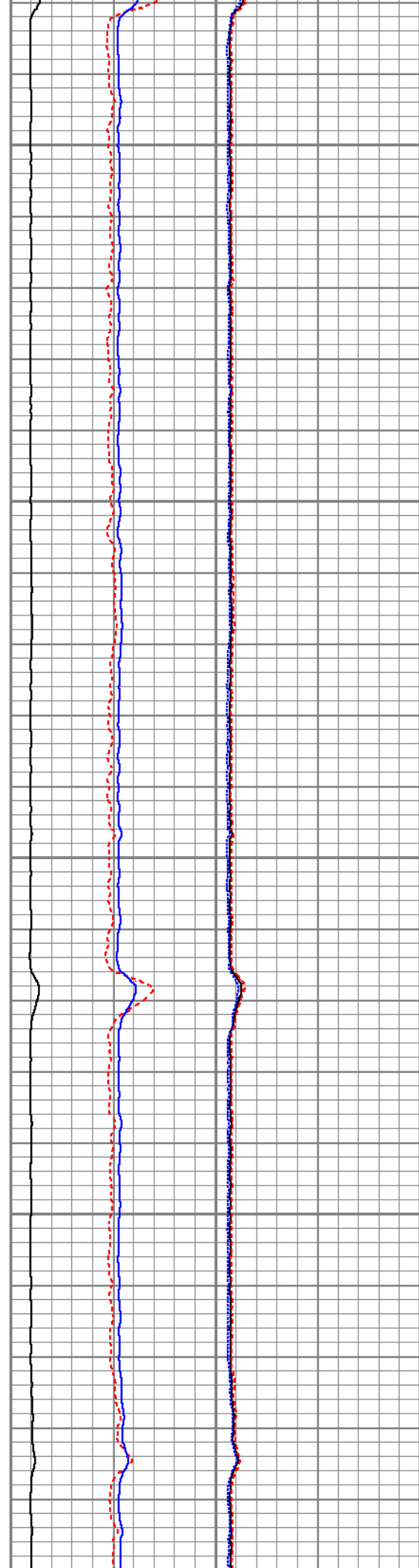
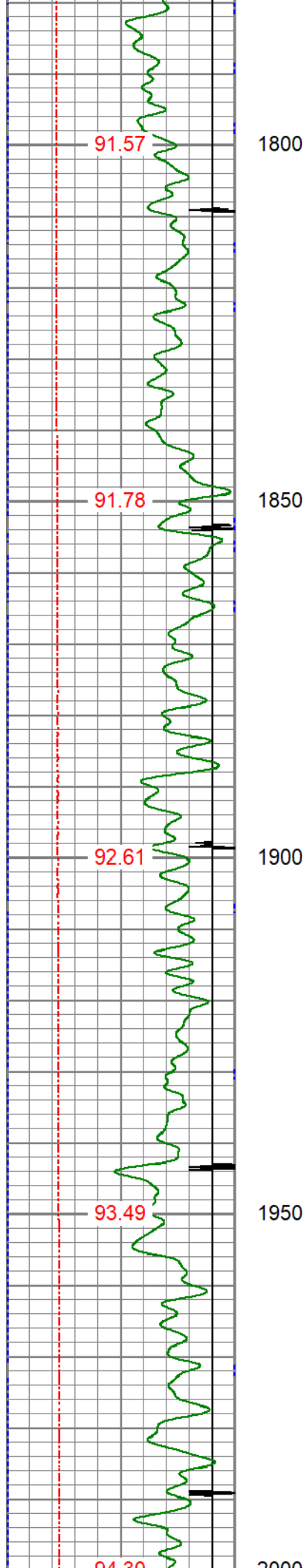
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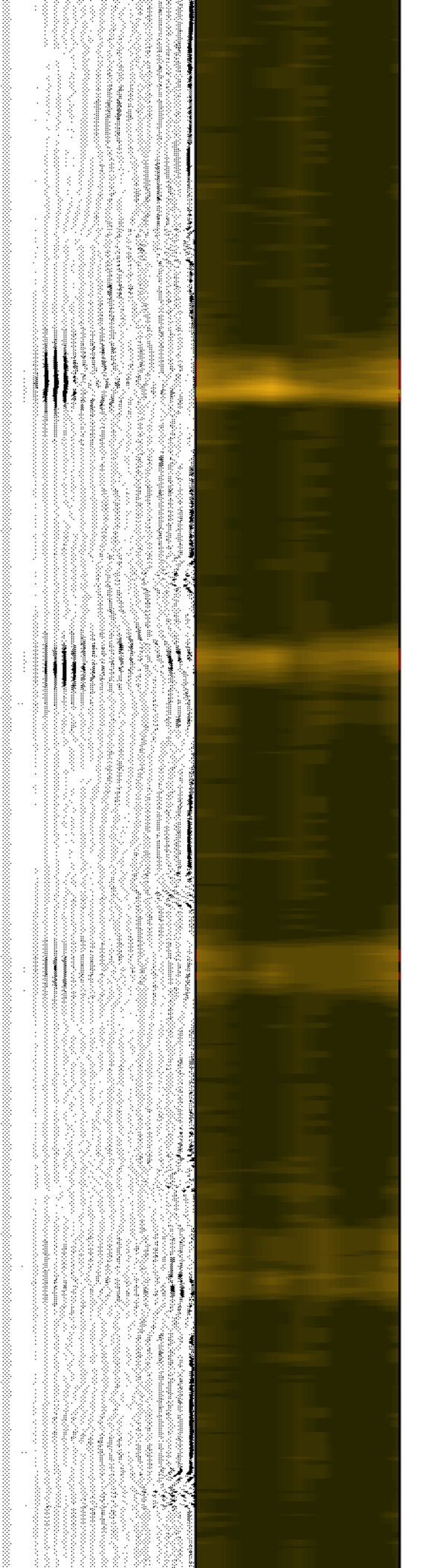
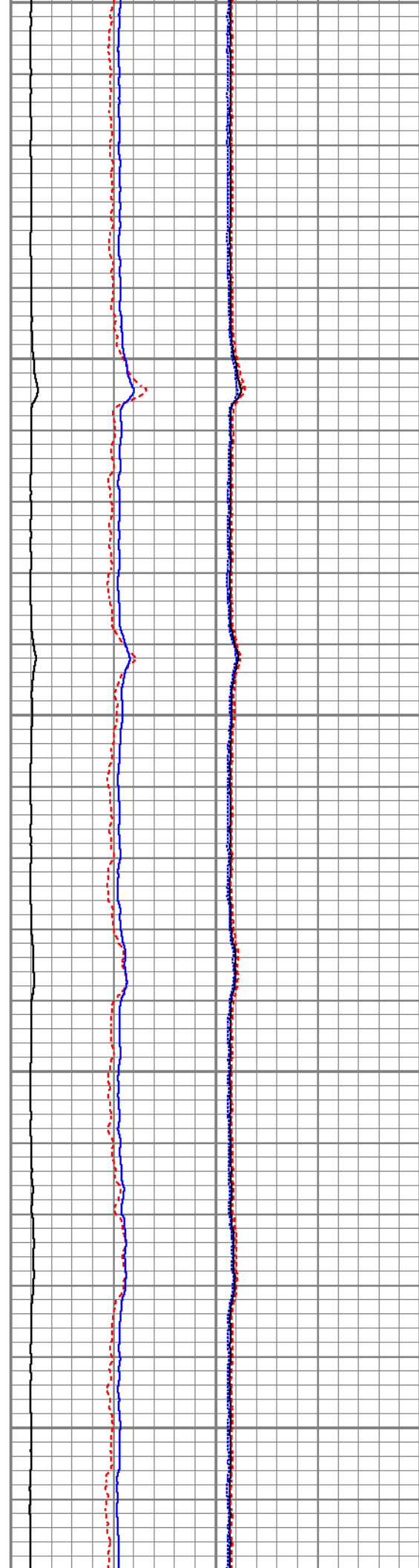
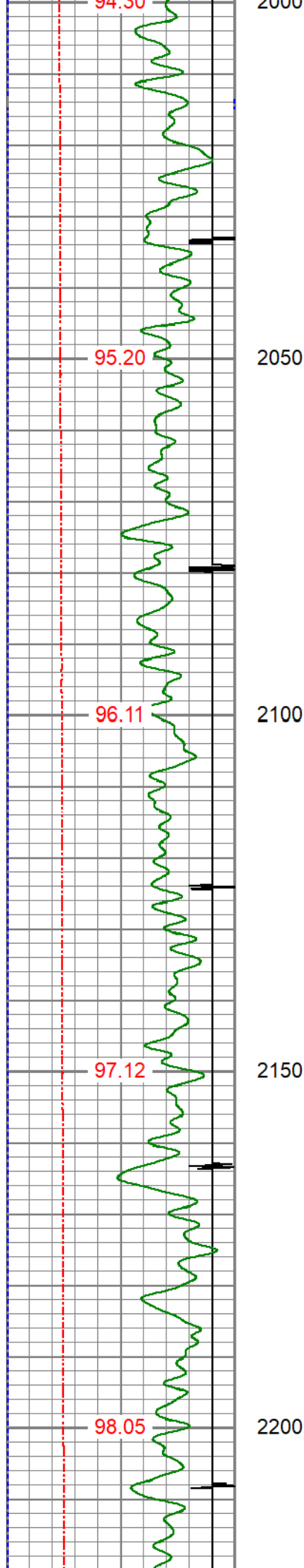
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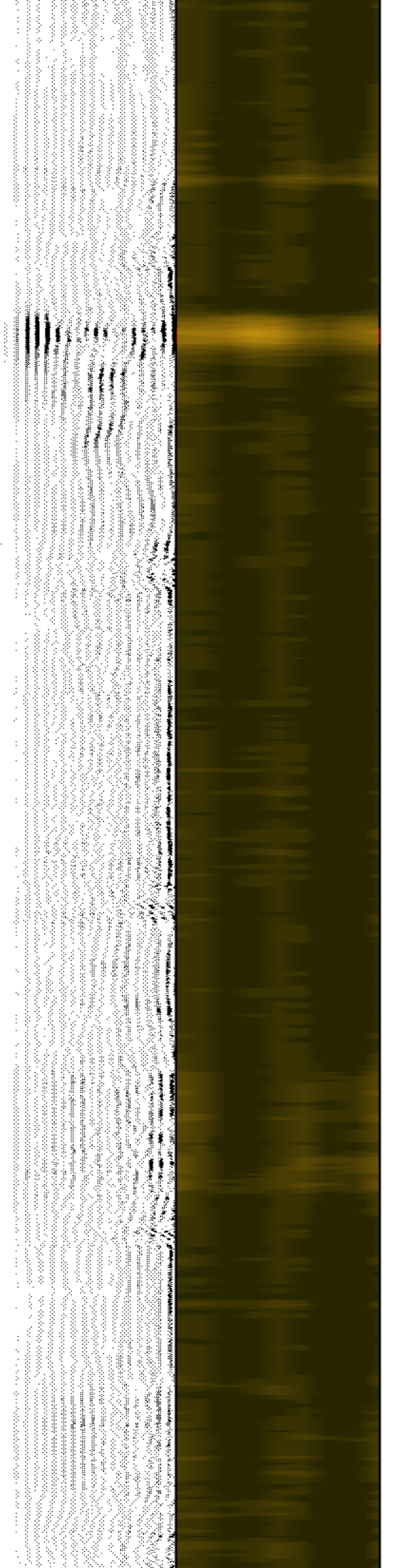
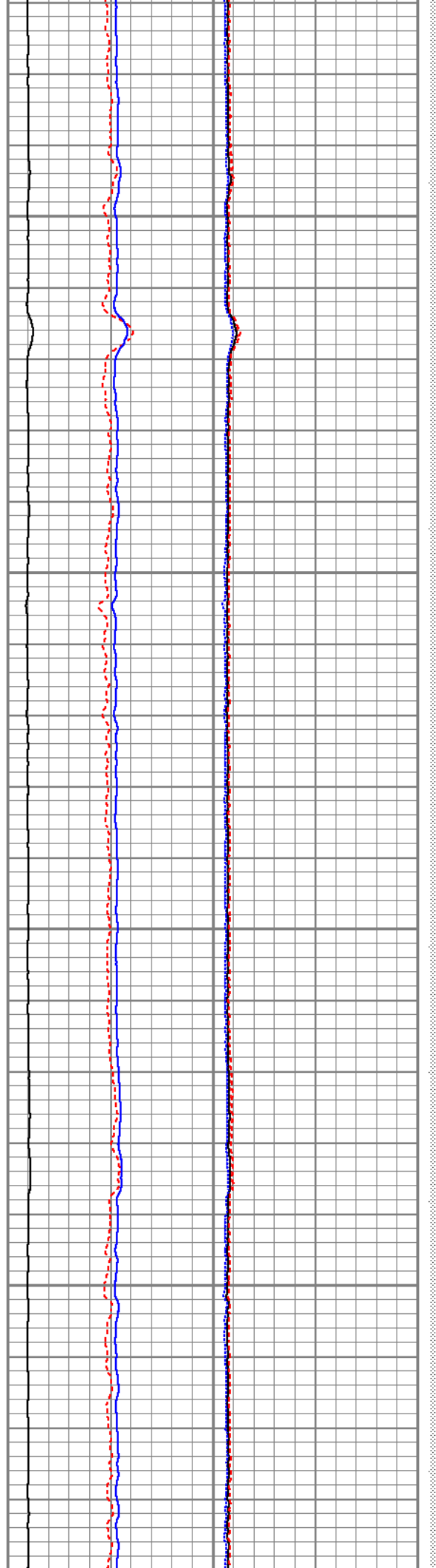
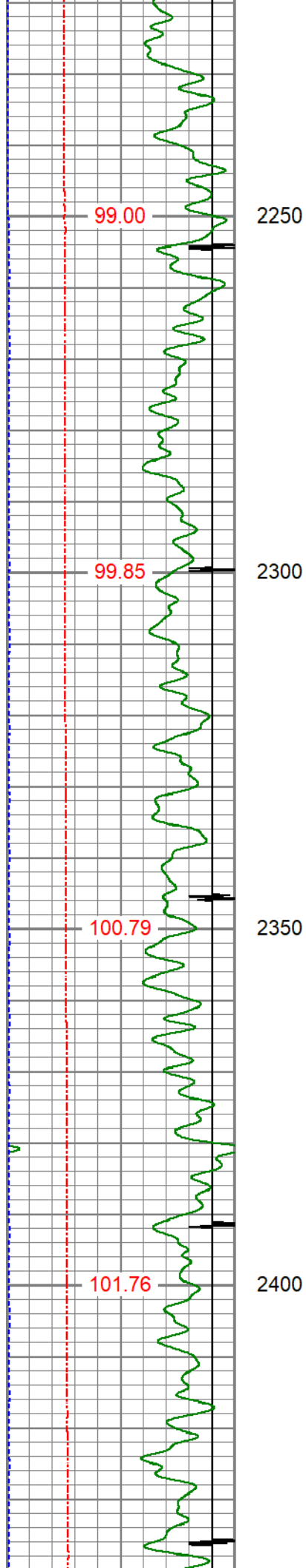


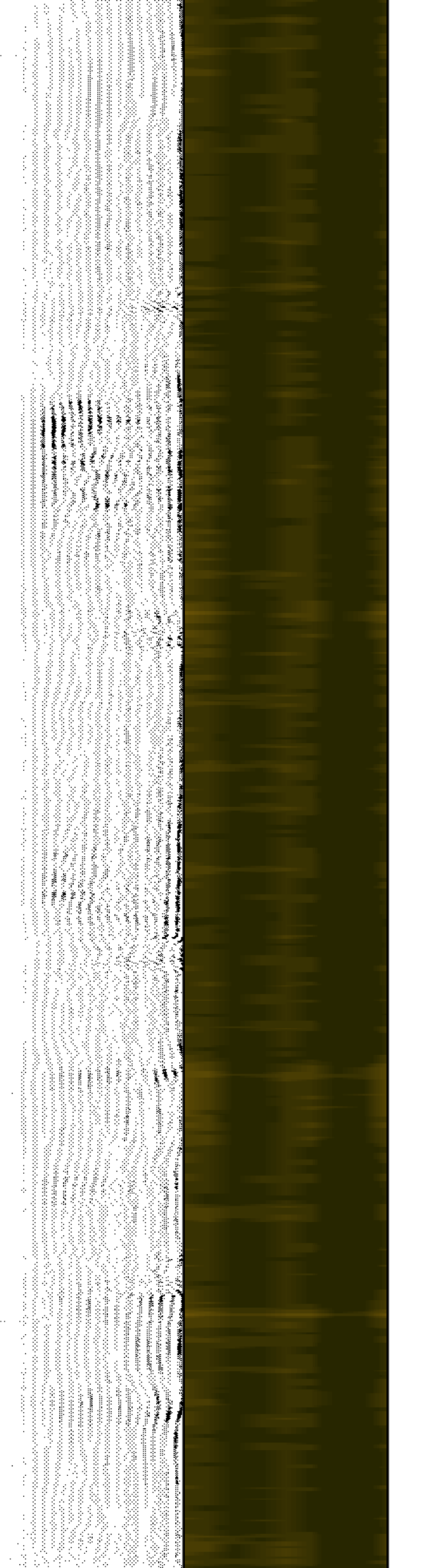
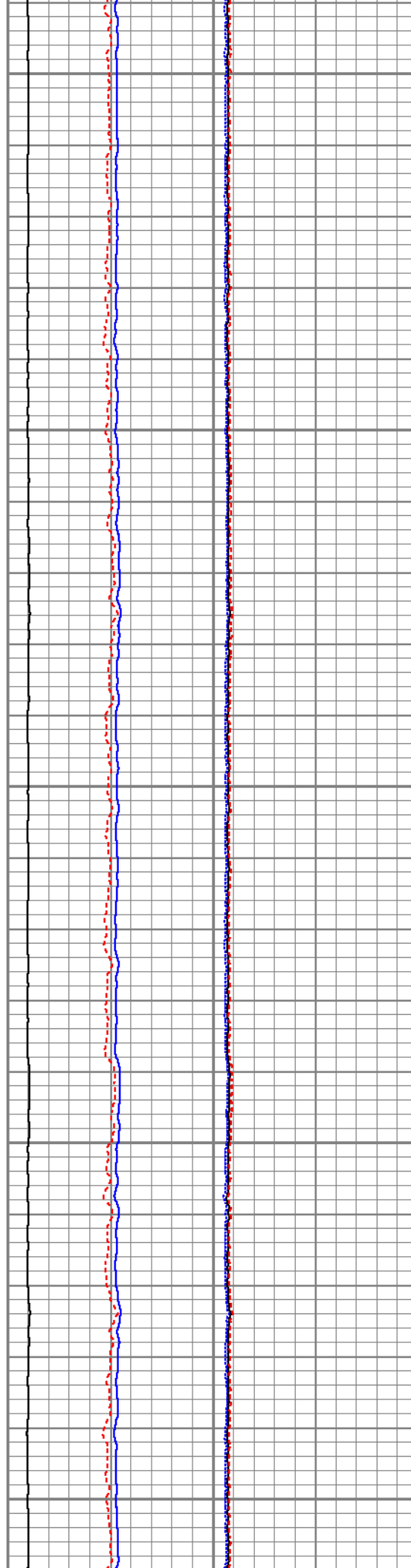
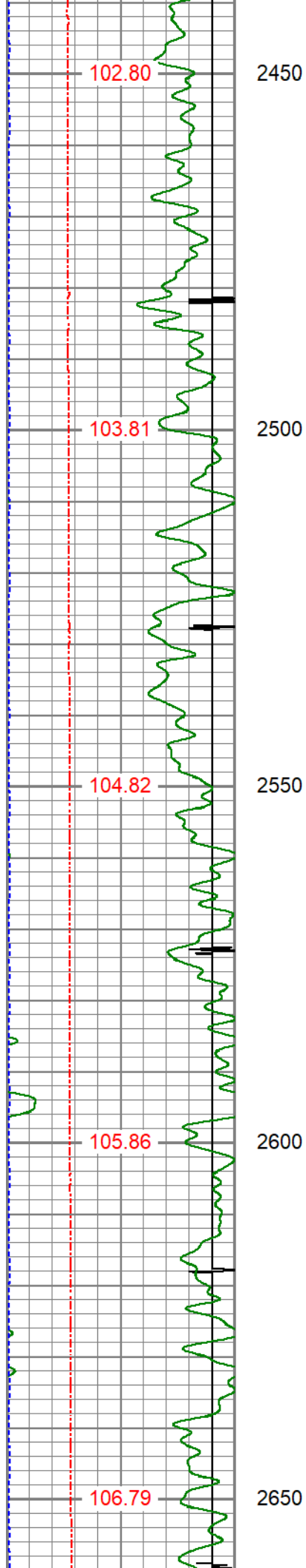


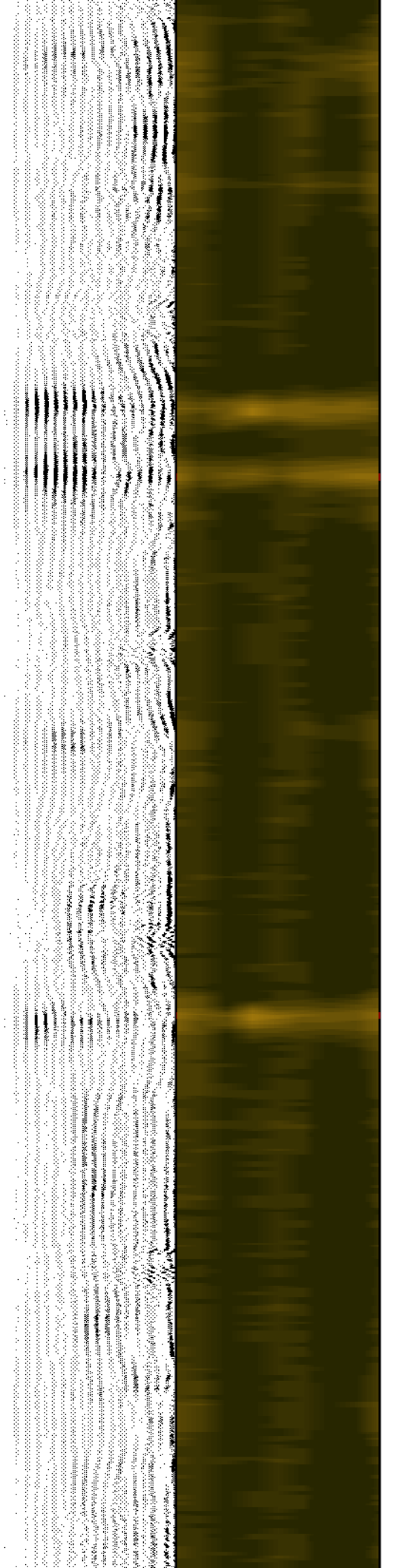
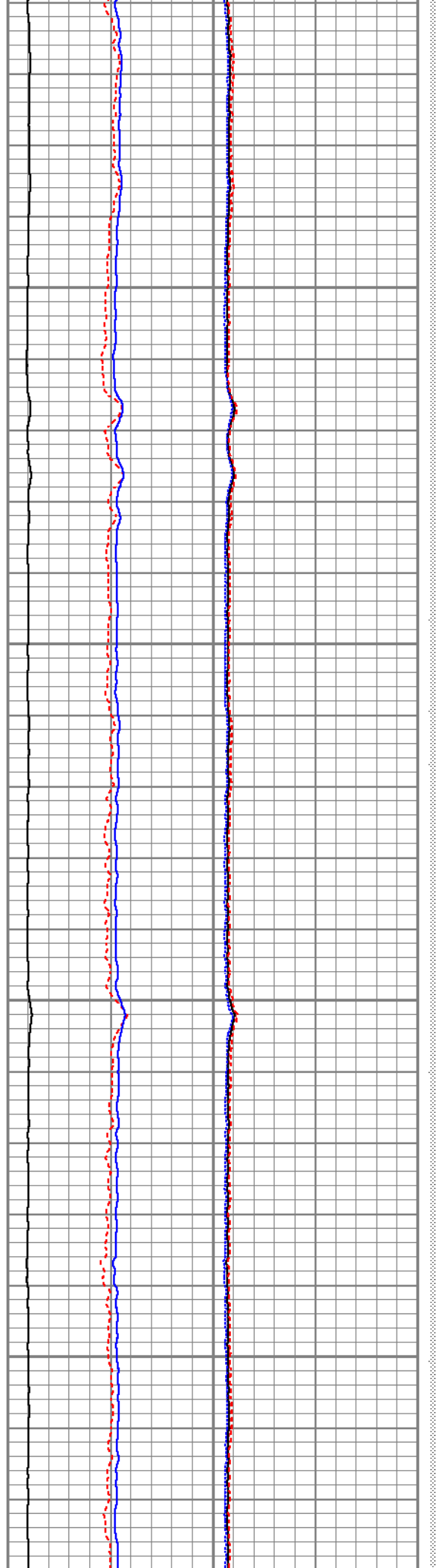
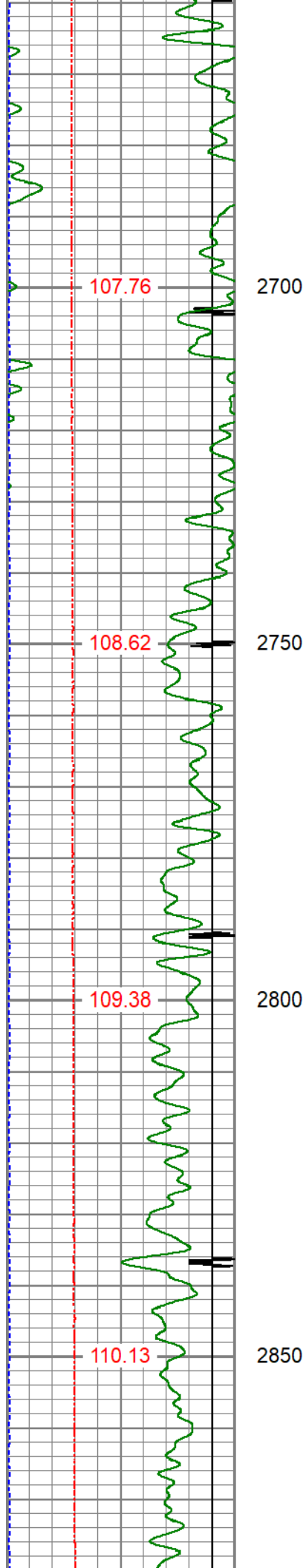


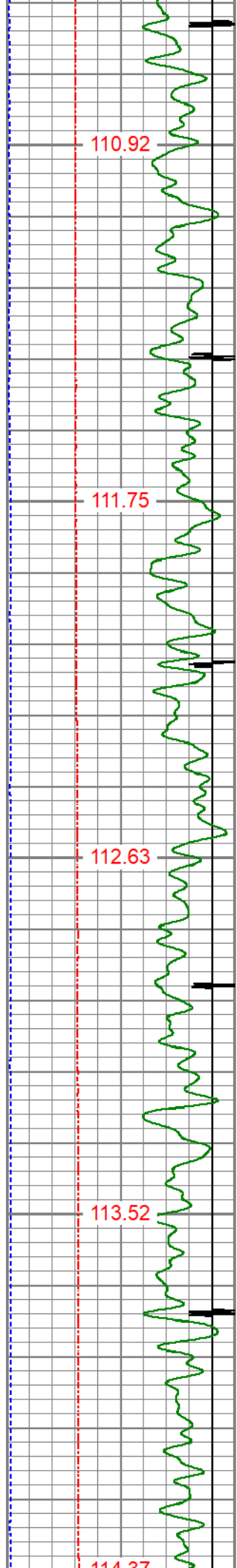












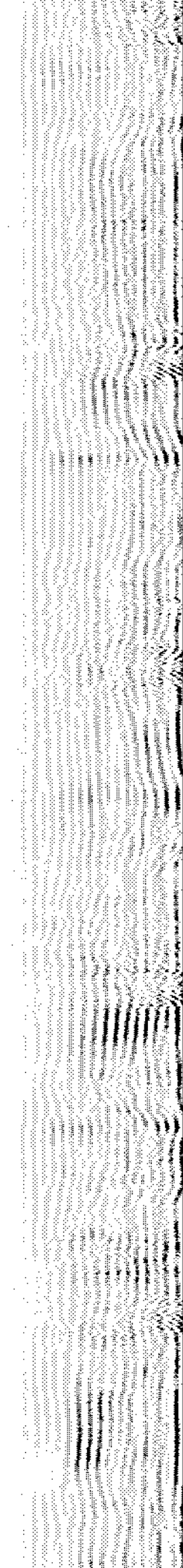
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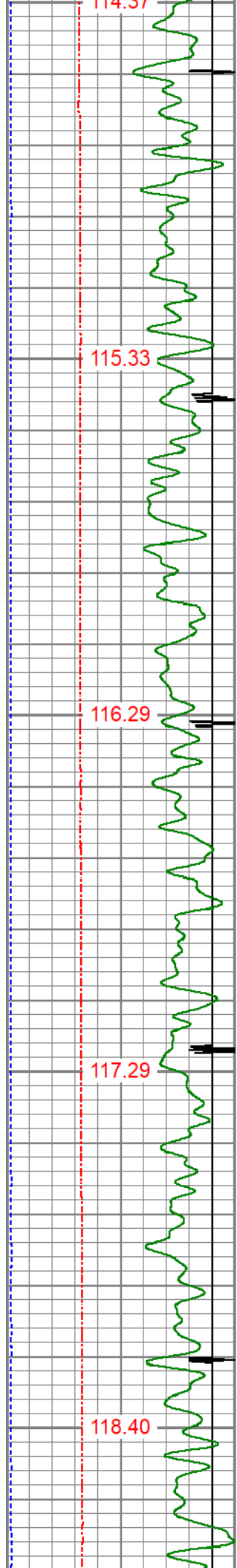
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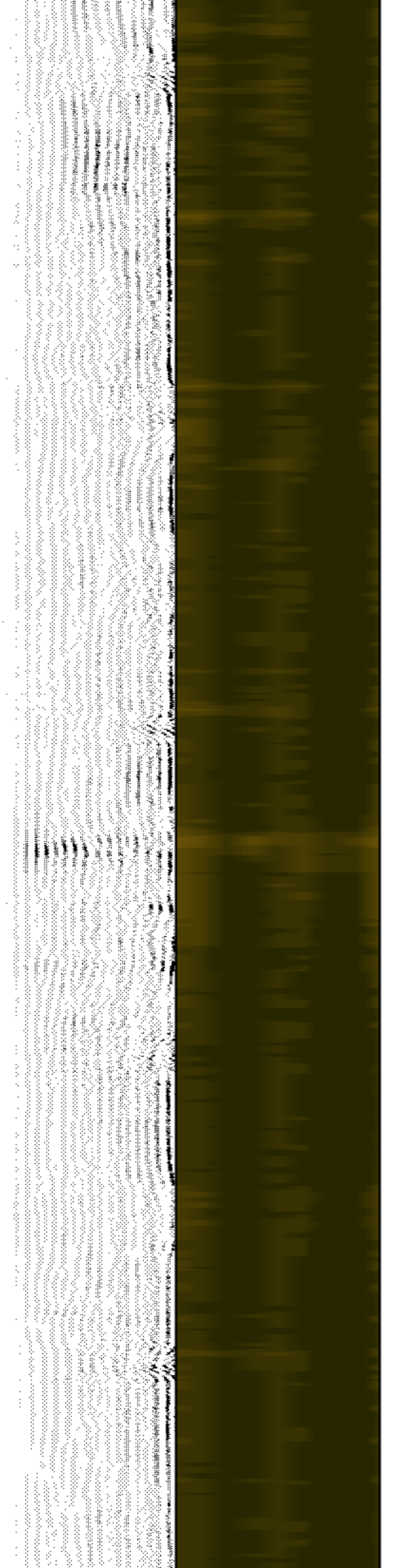
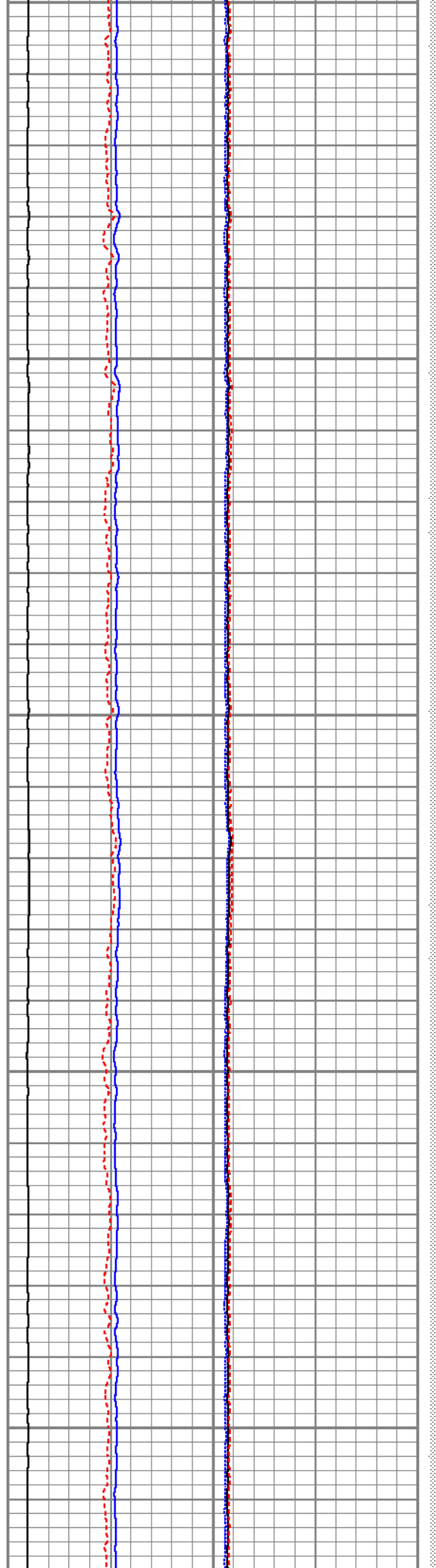
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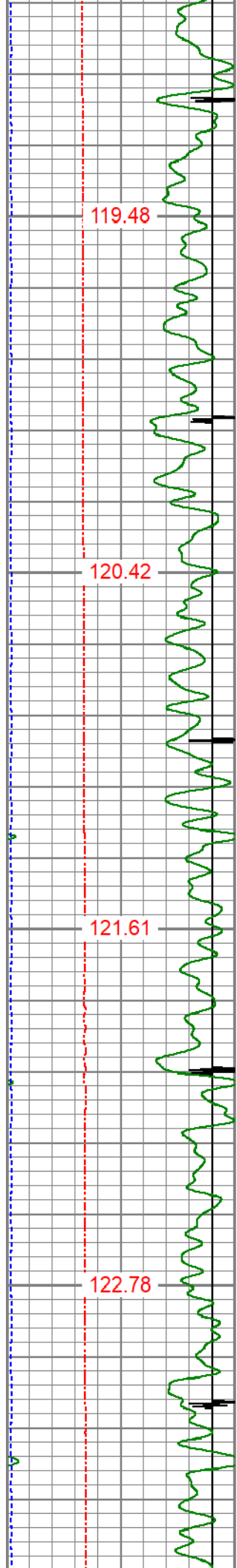




3100  
3150  
3200  
3250  
3300







119.48

3350

120.42

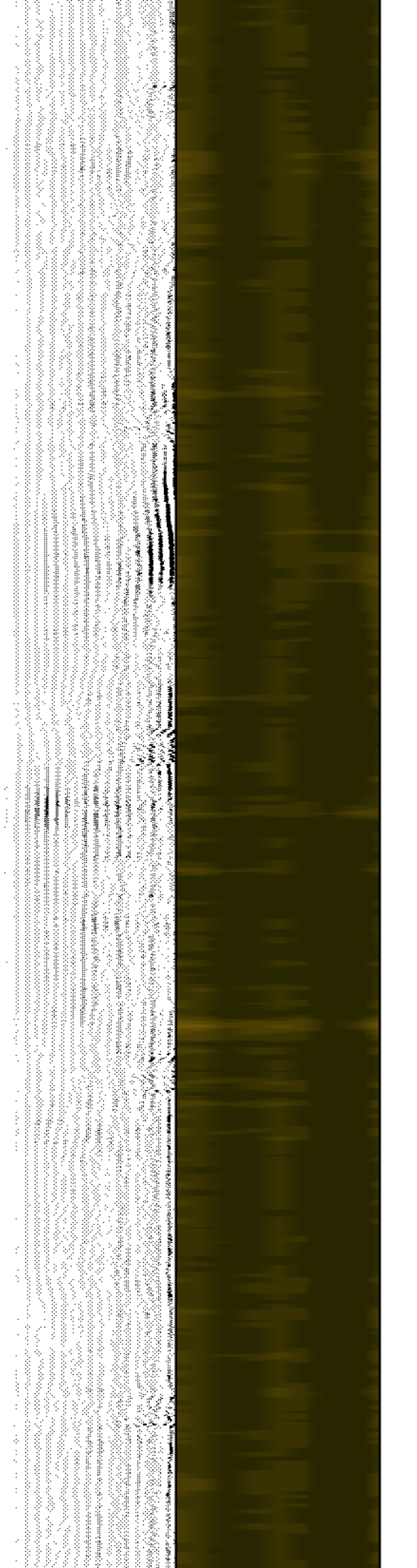
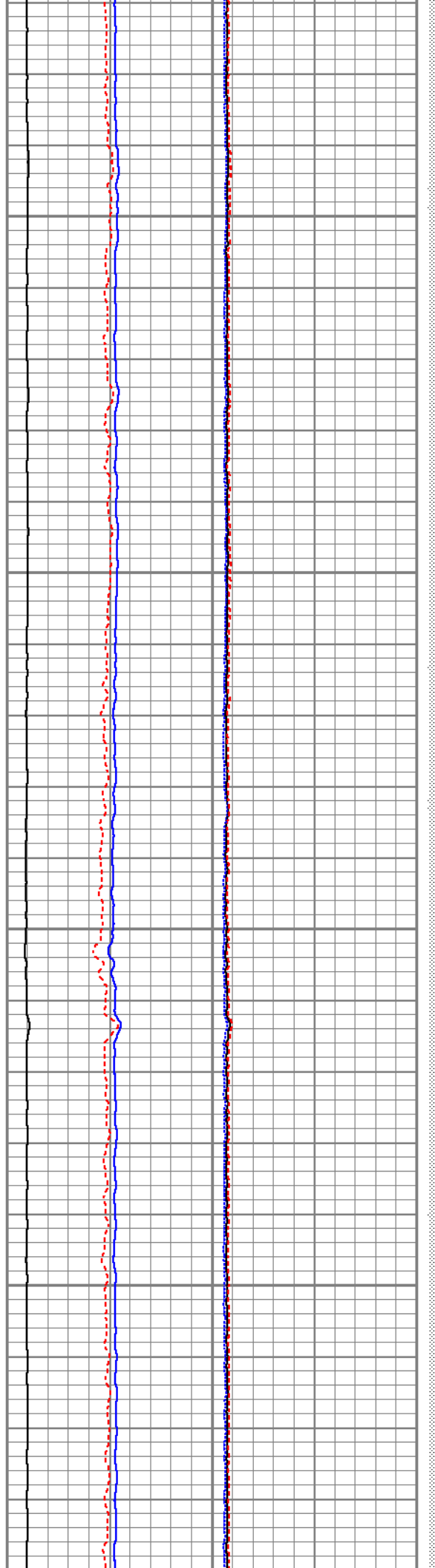
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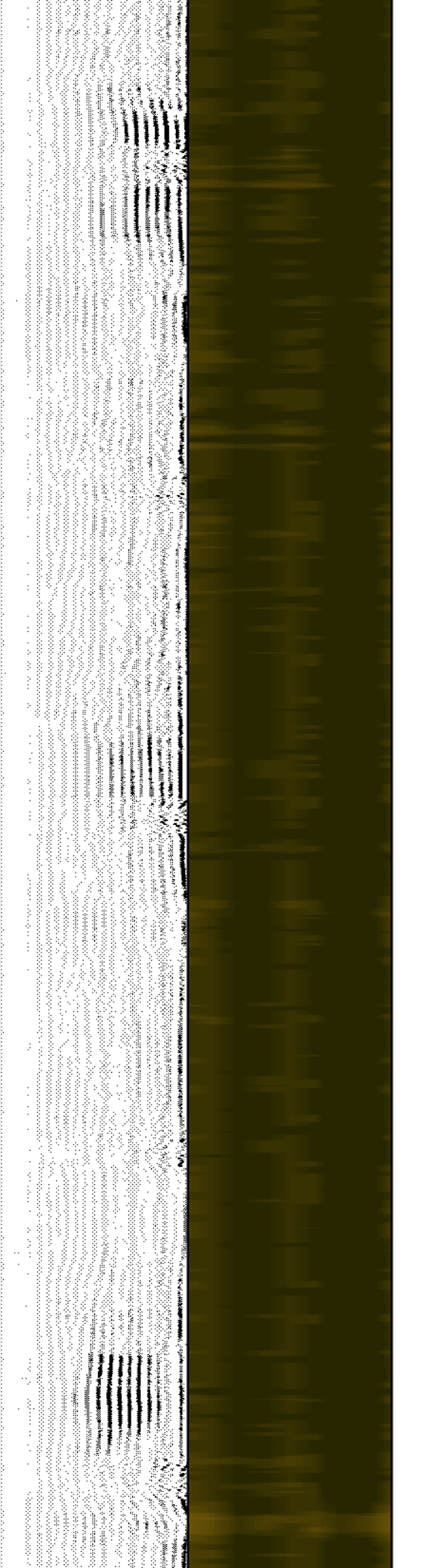
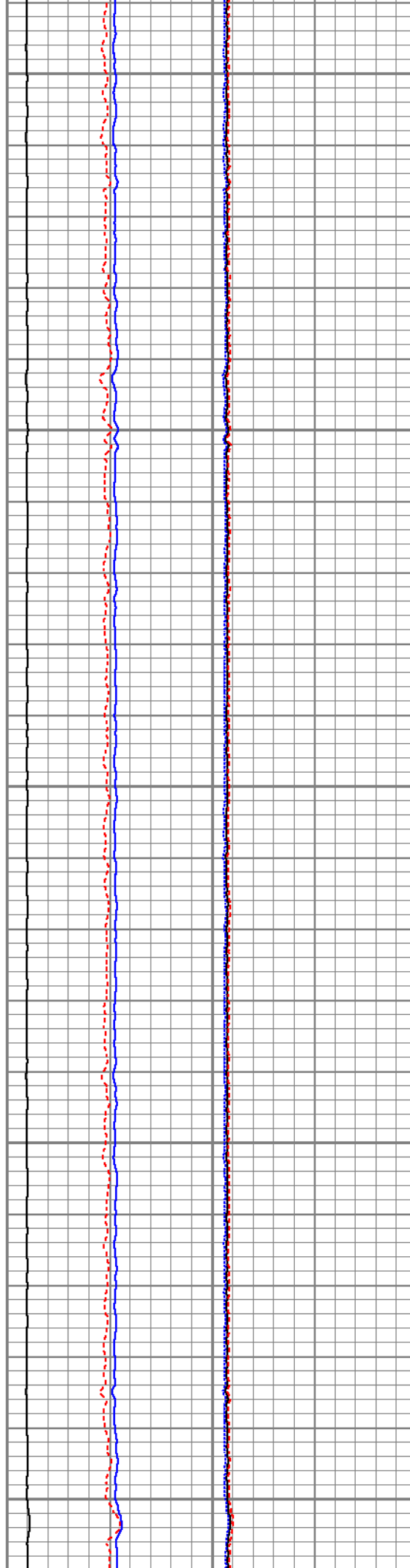
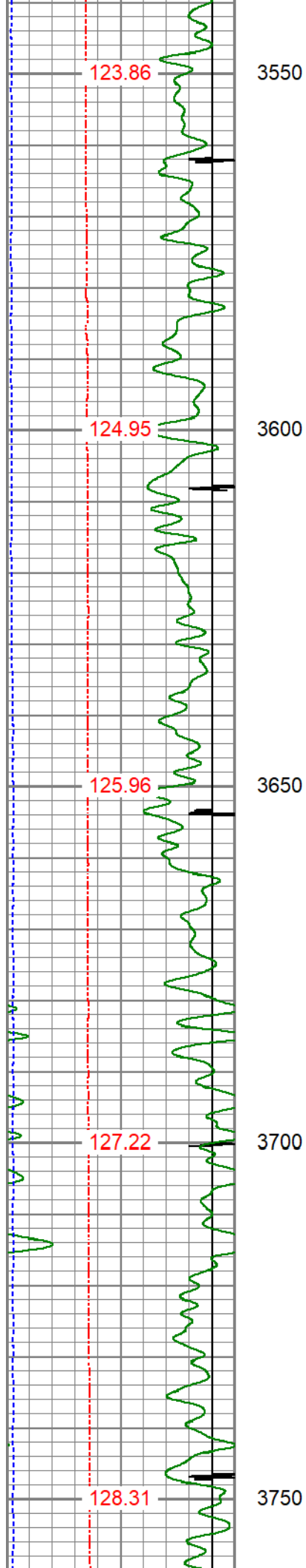
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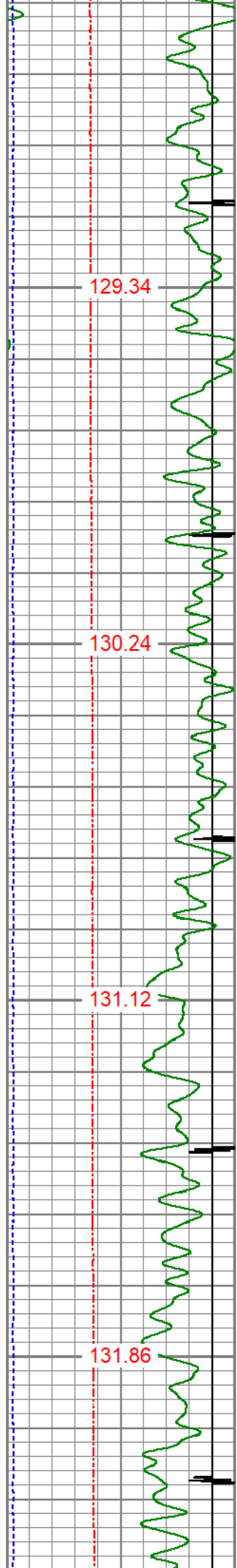
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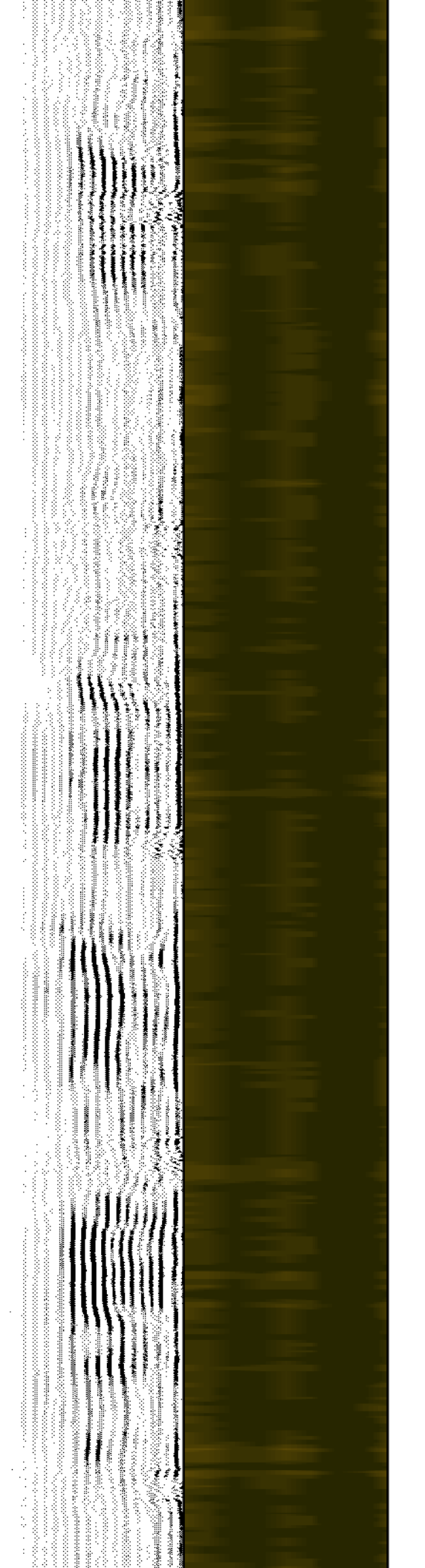
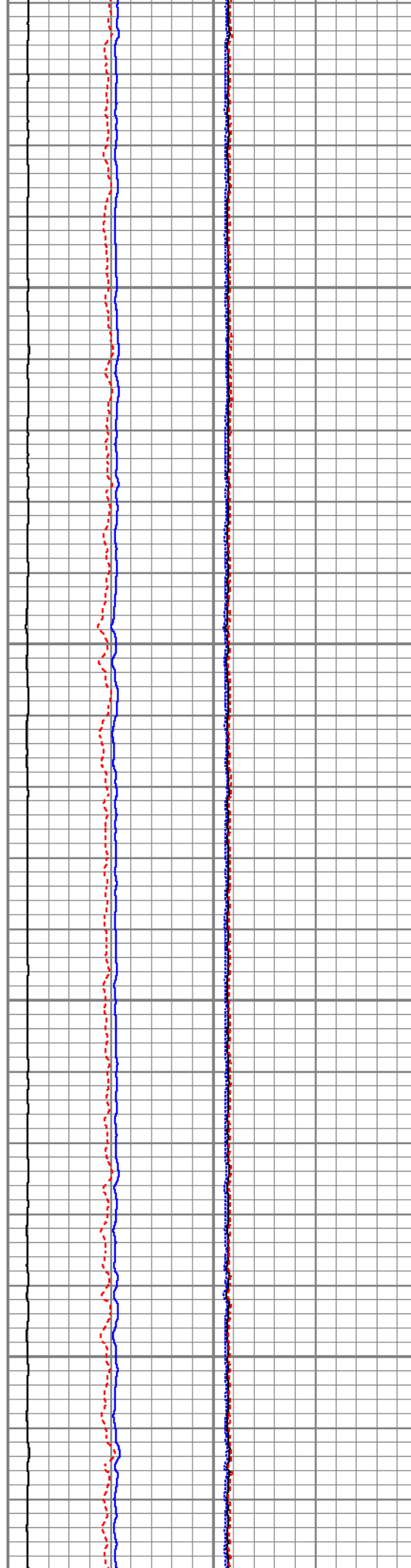


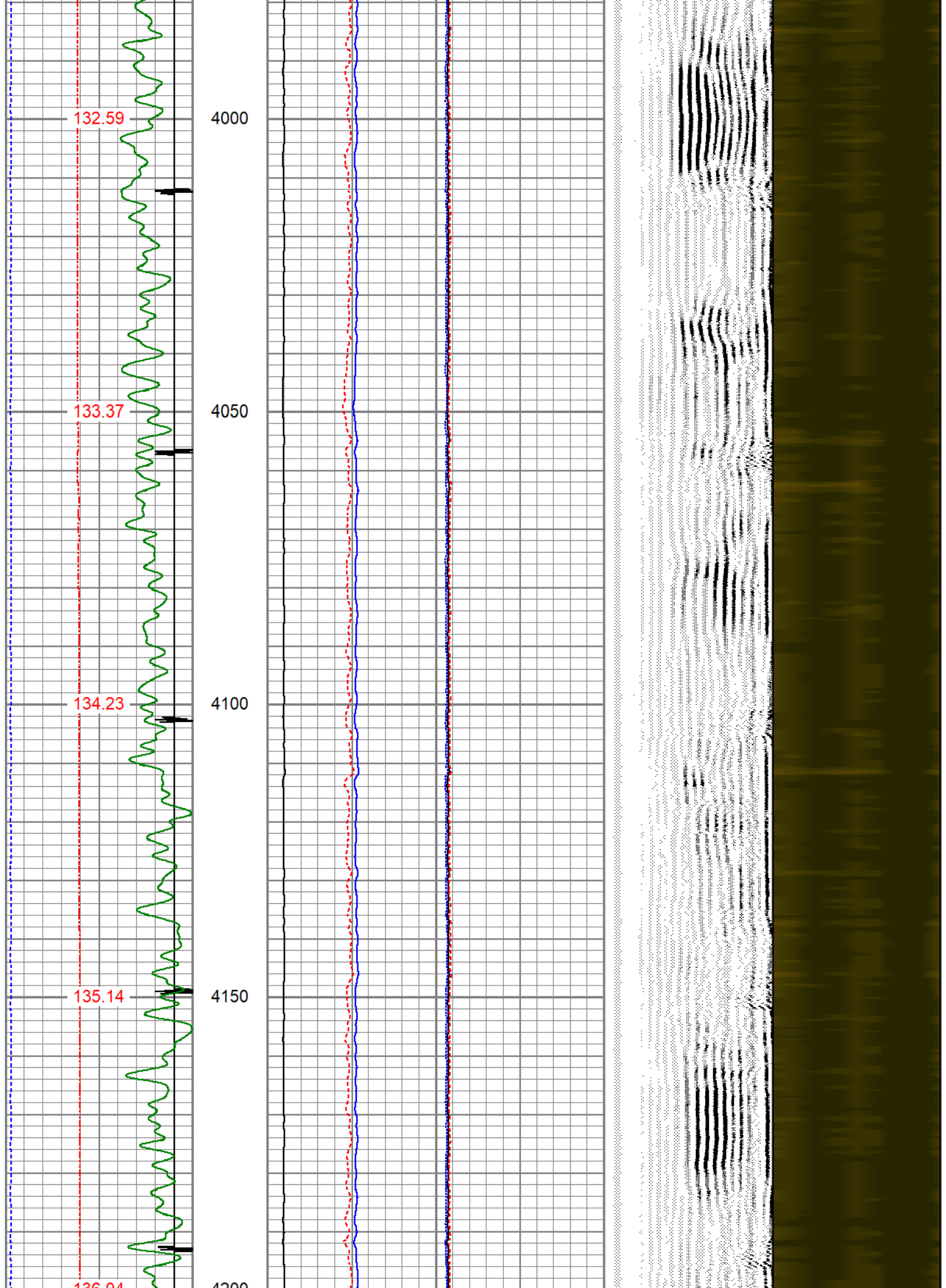
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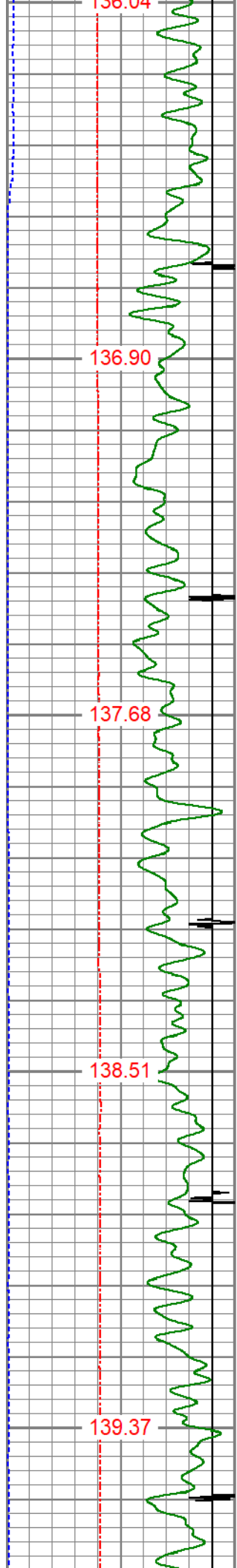
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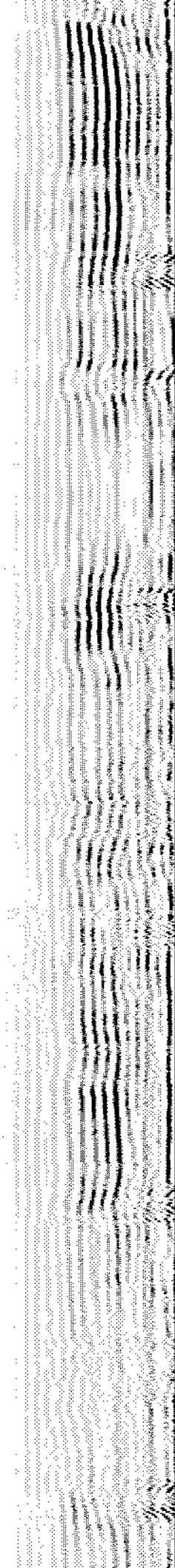
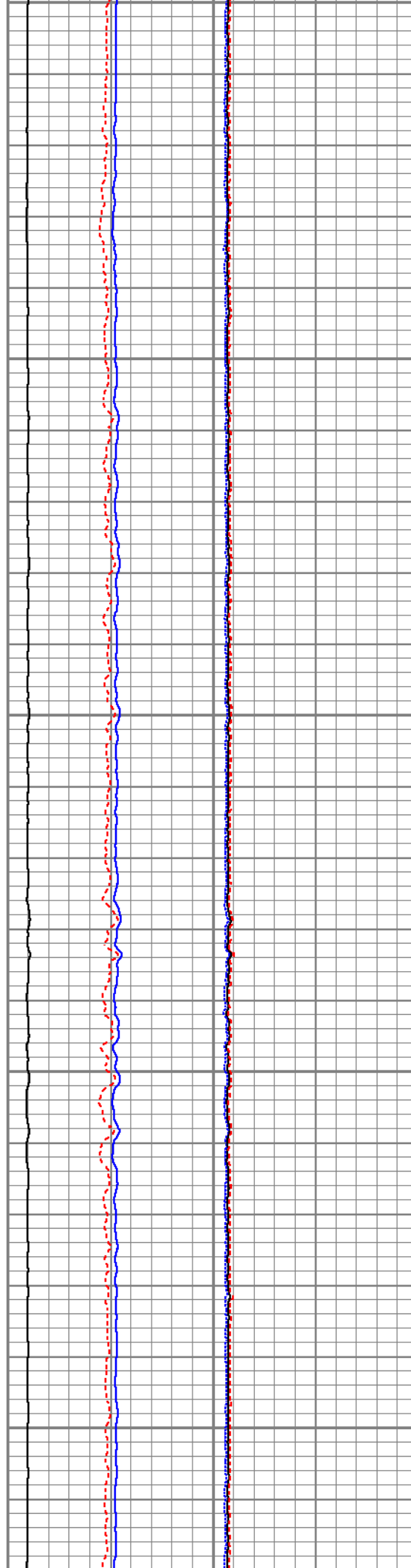




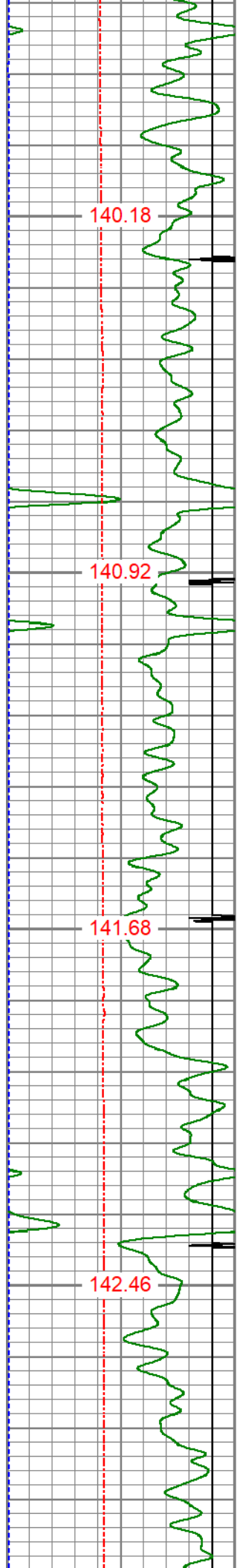




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4250  
4300  
4350  
4400







140.18

140.92

141.68

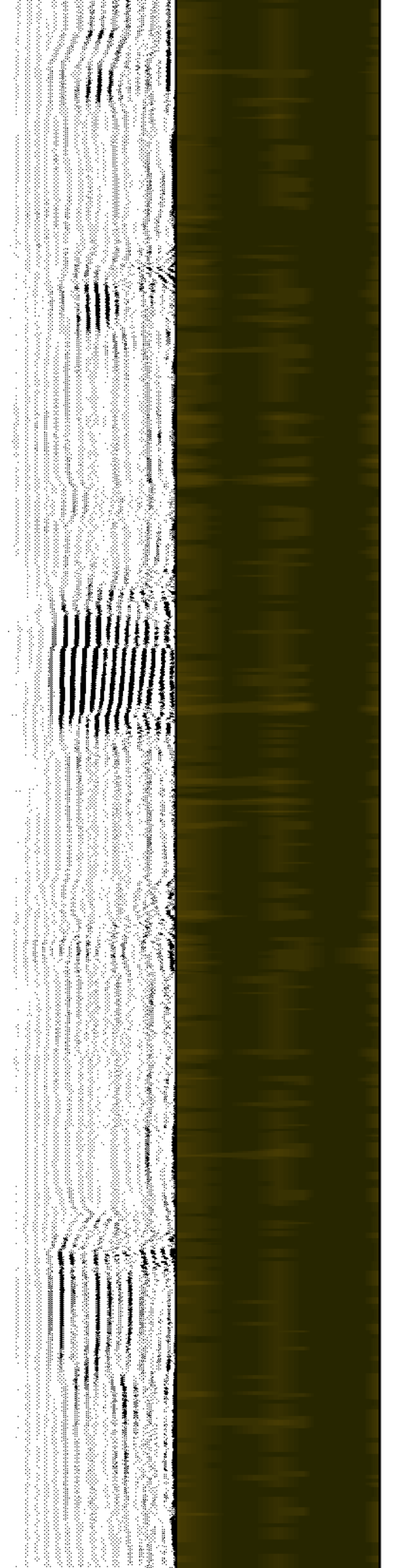
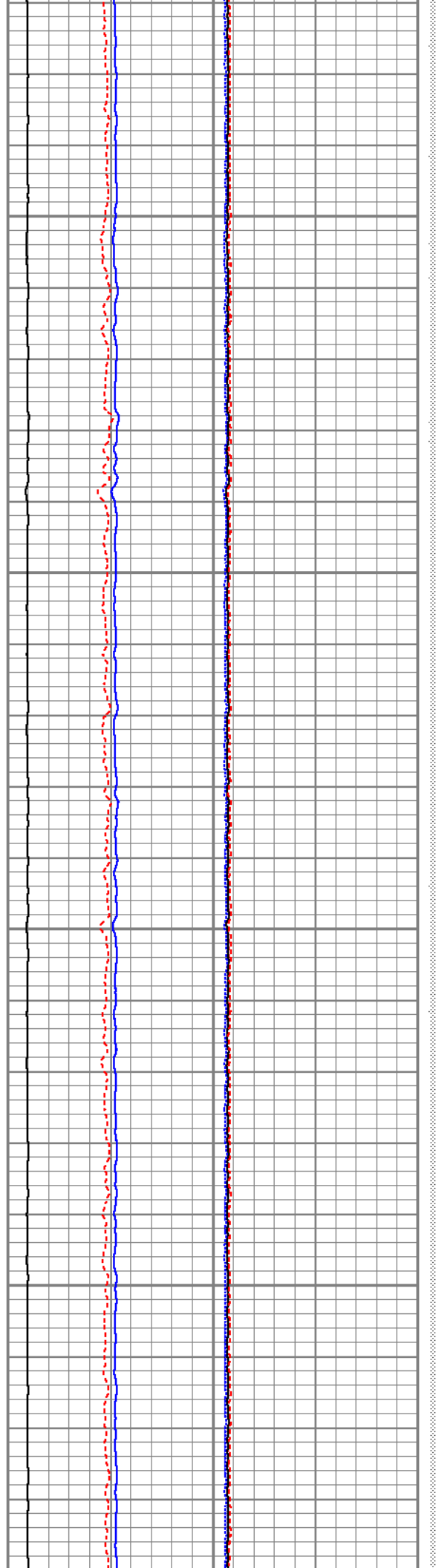
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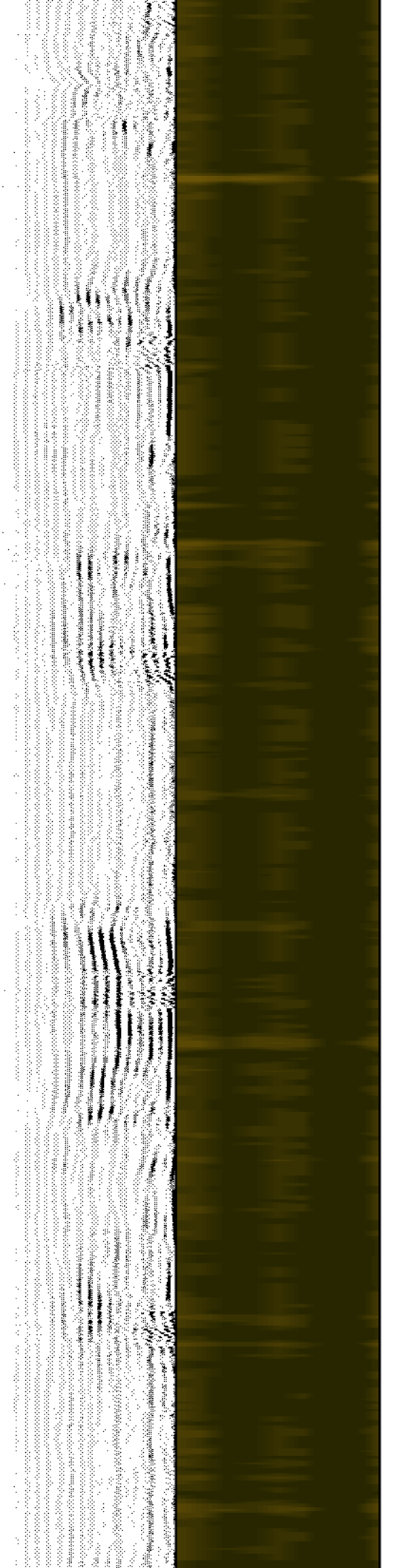
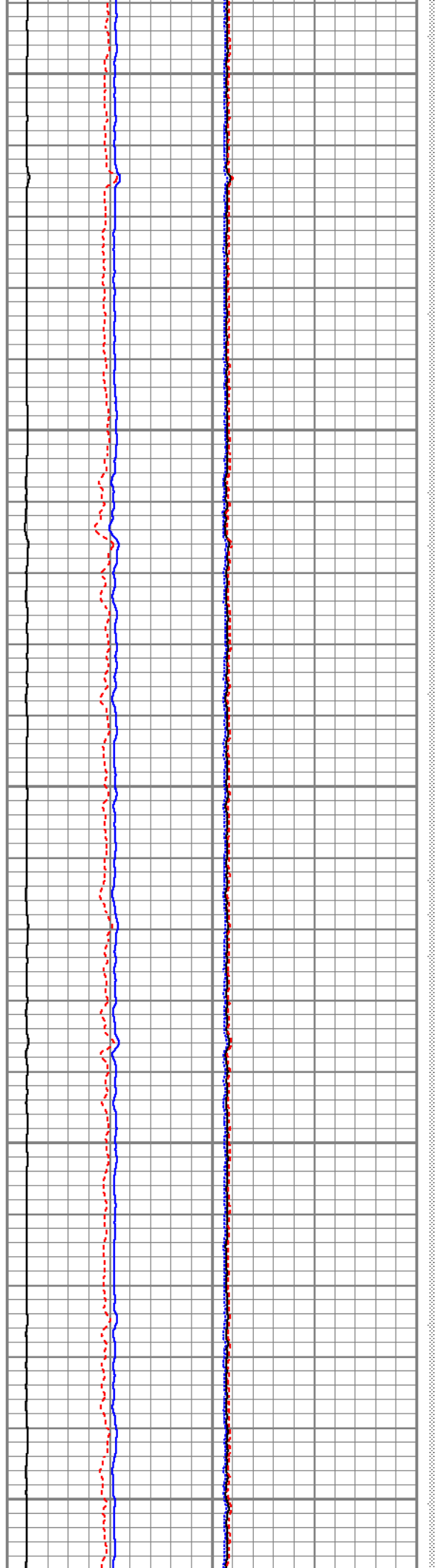
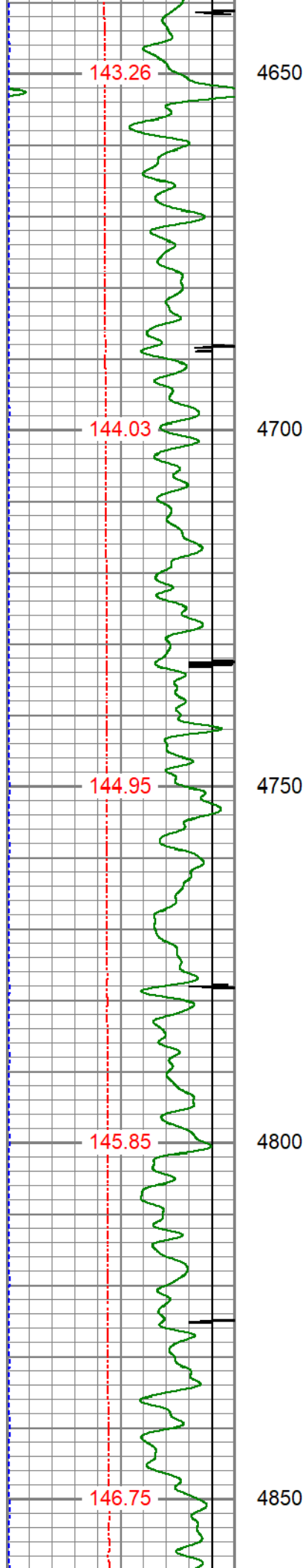
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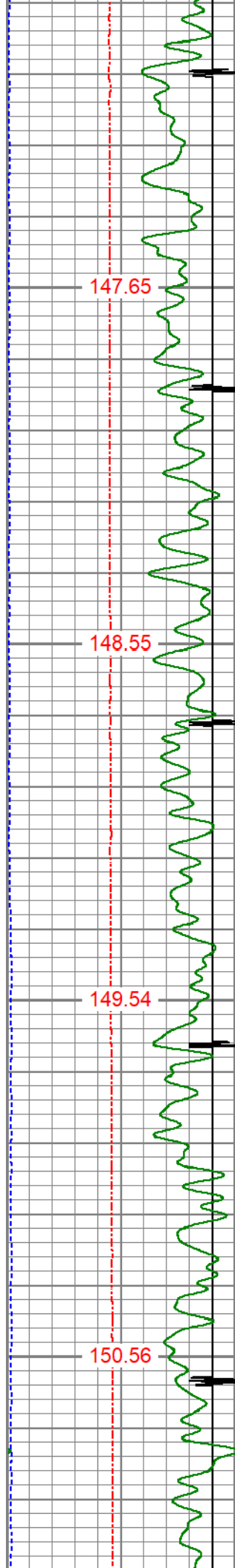
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148.55

149.54

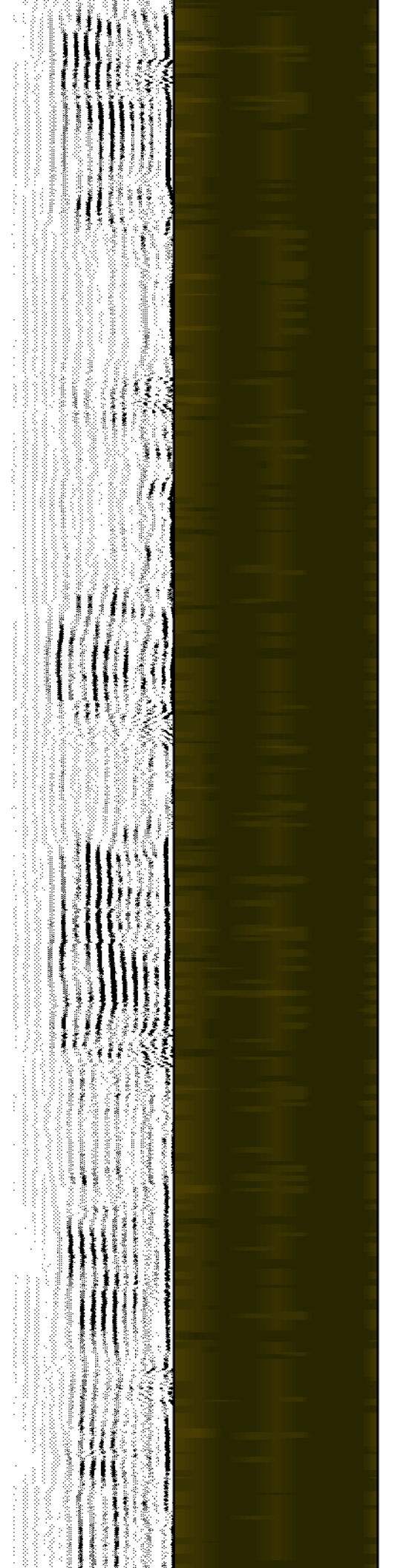
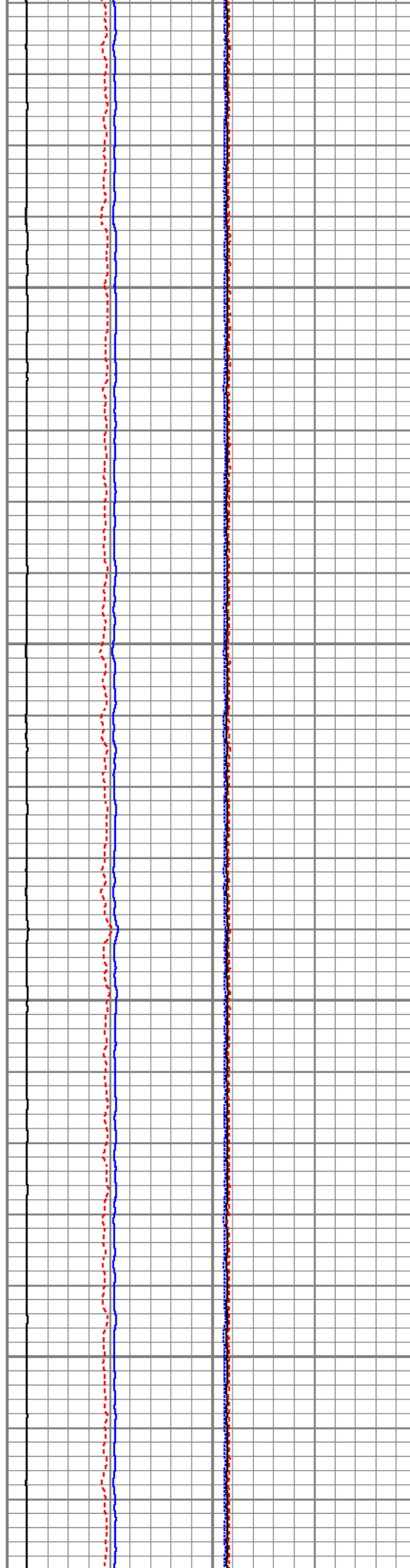
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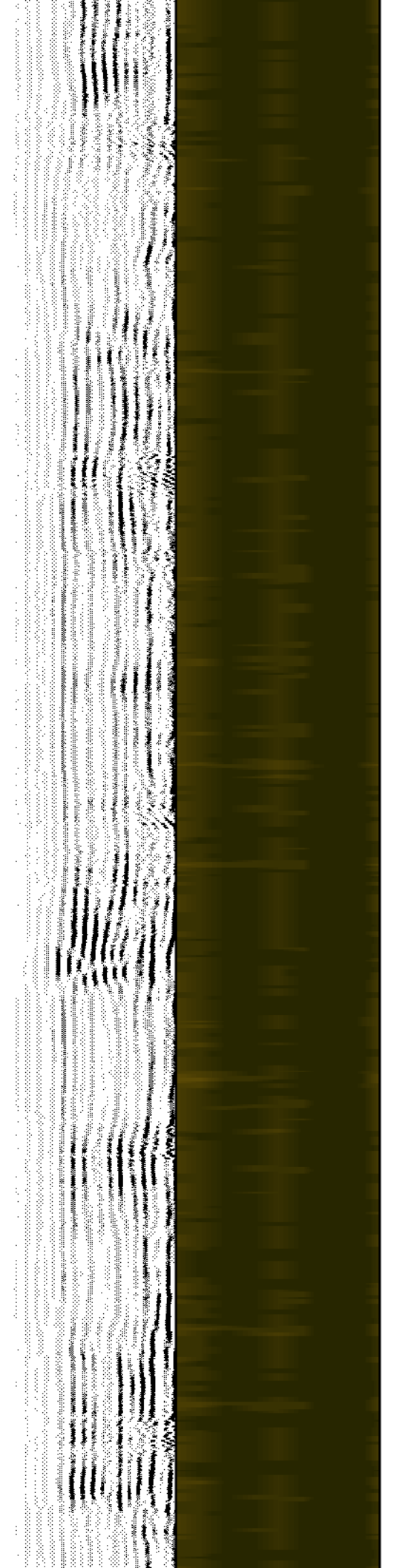
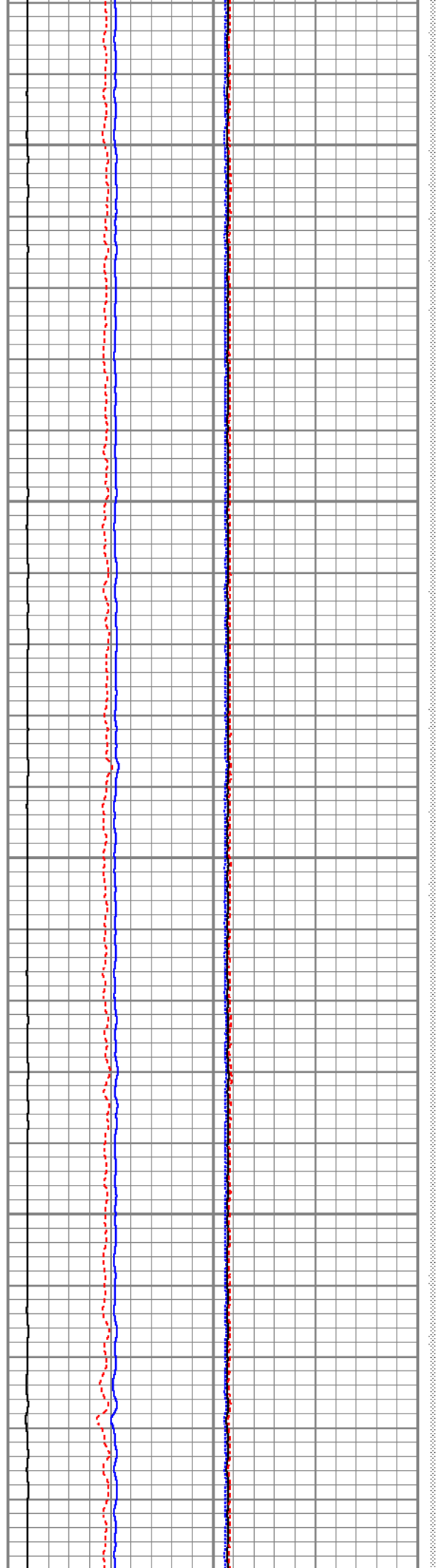
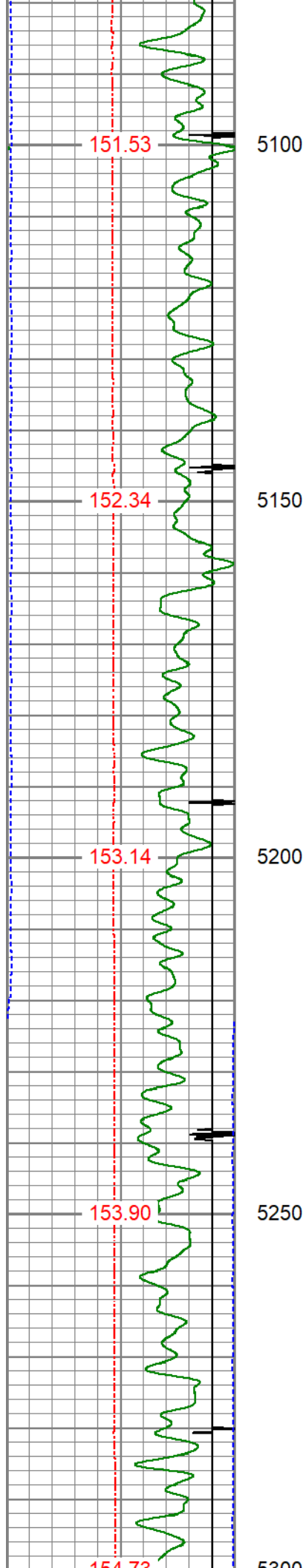
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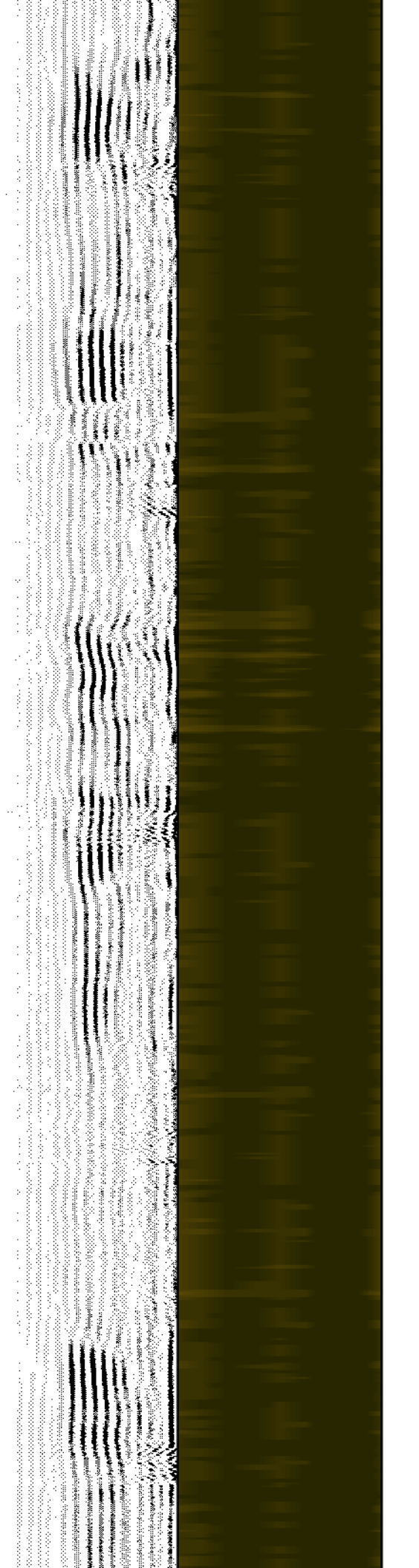
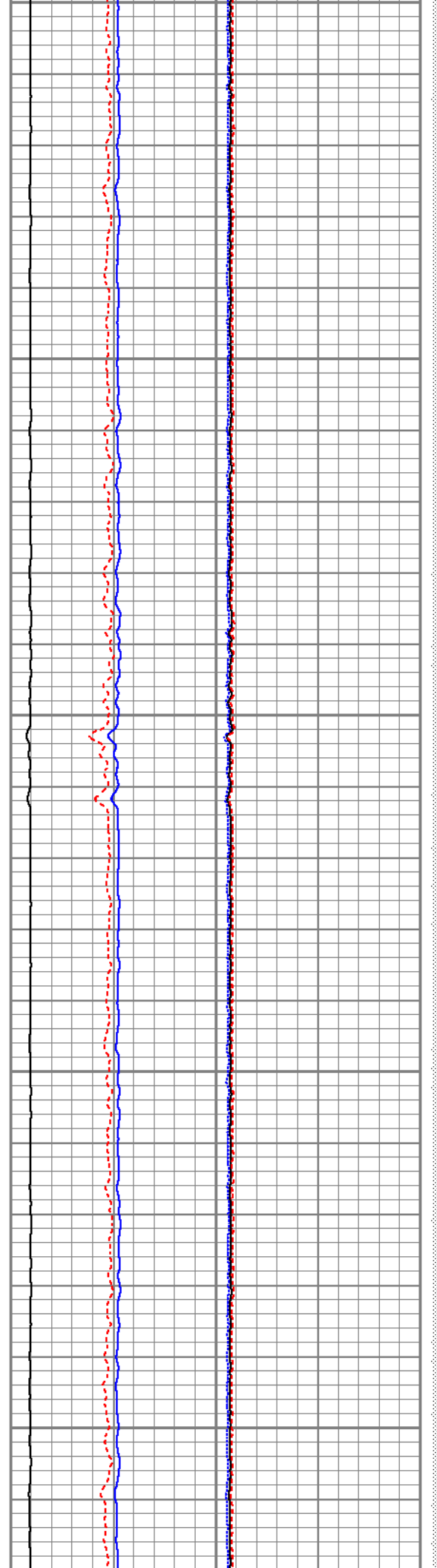
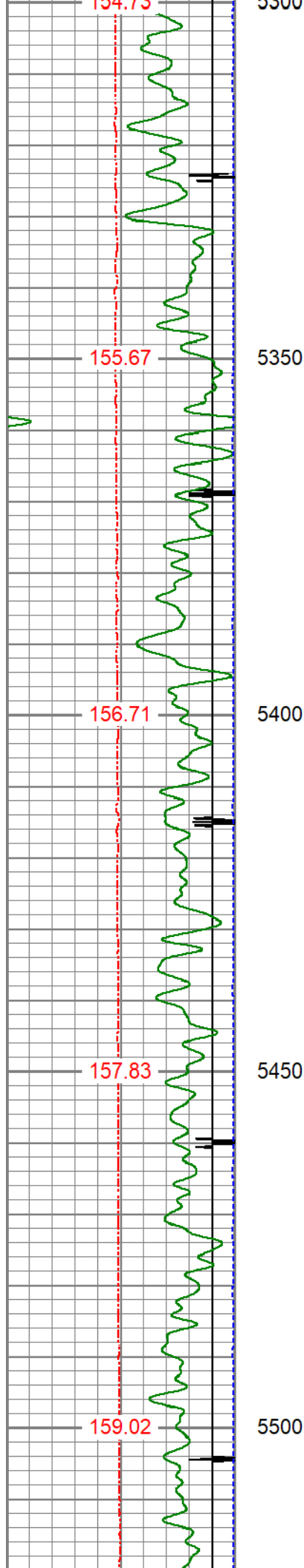
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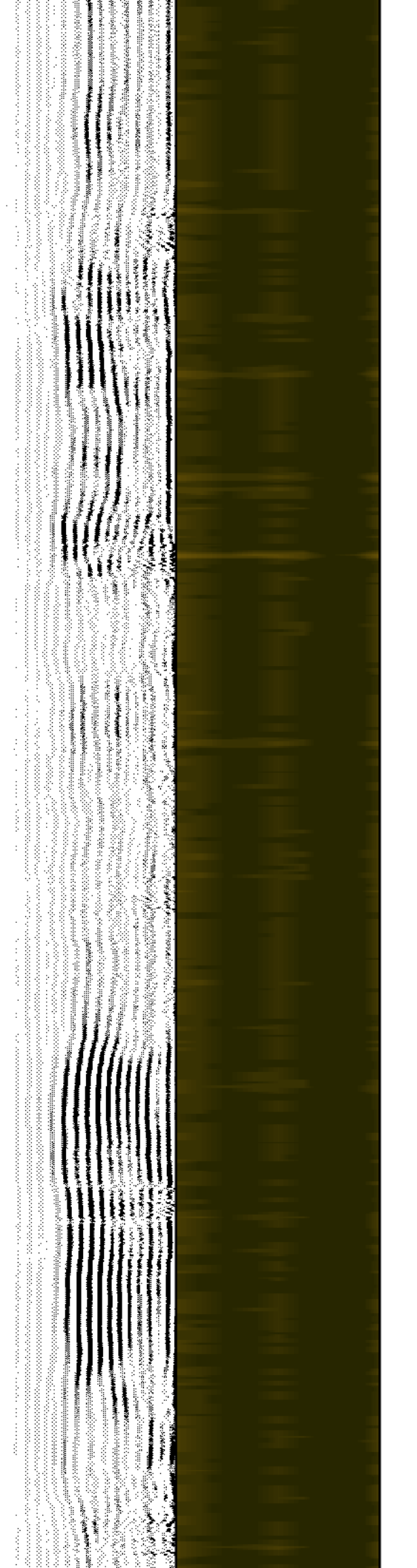
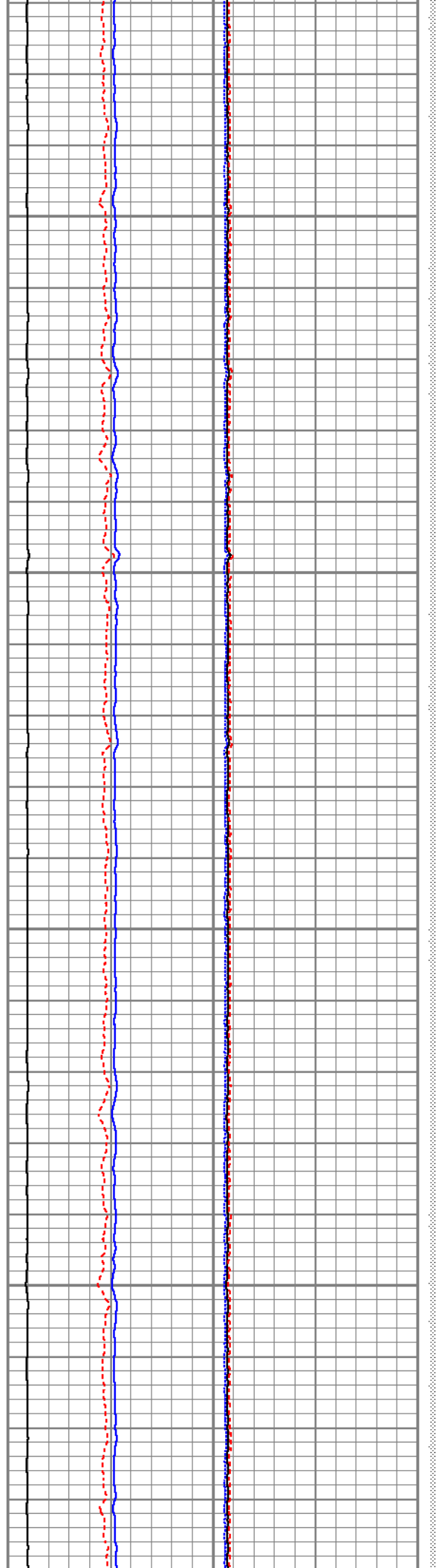
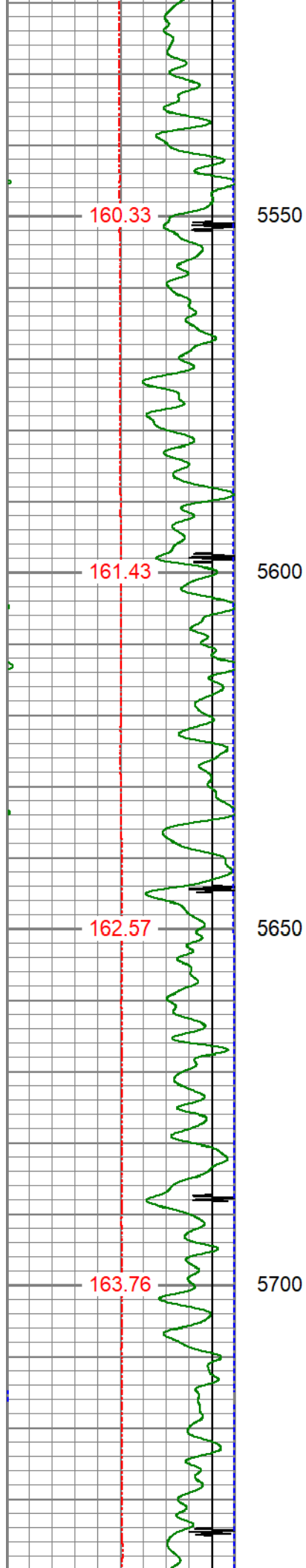


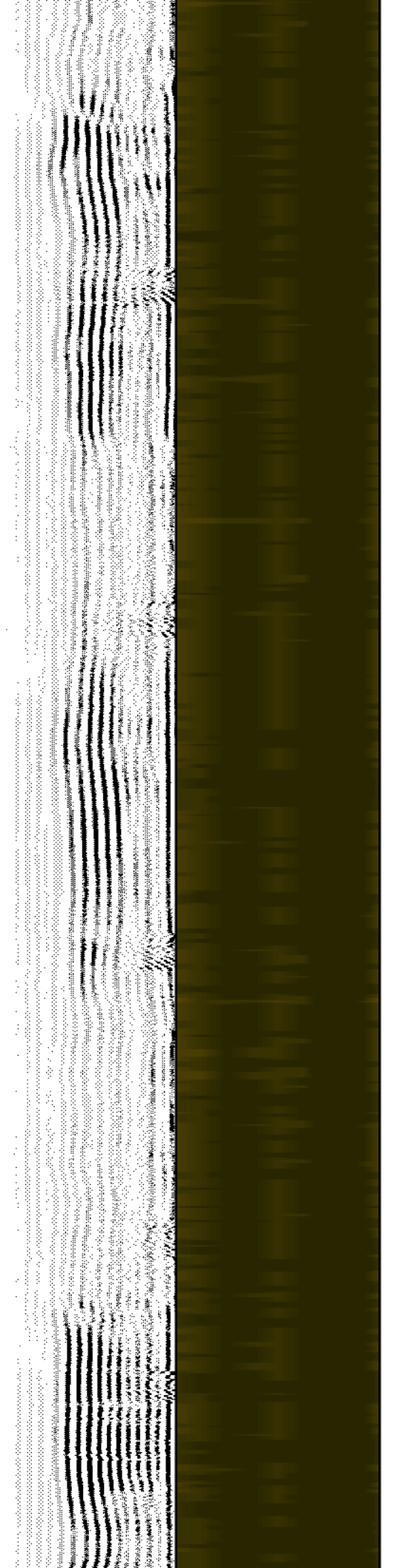
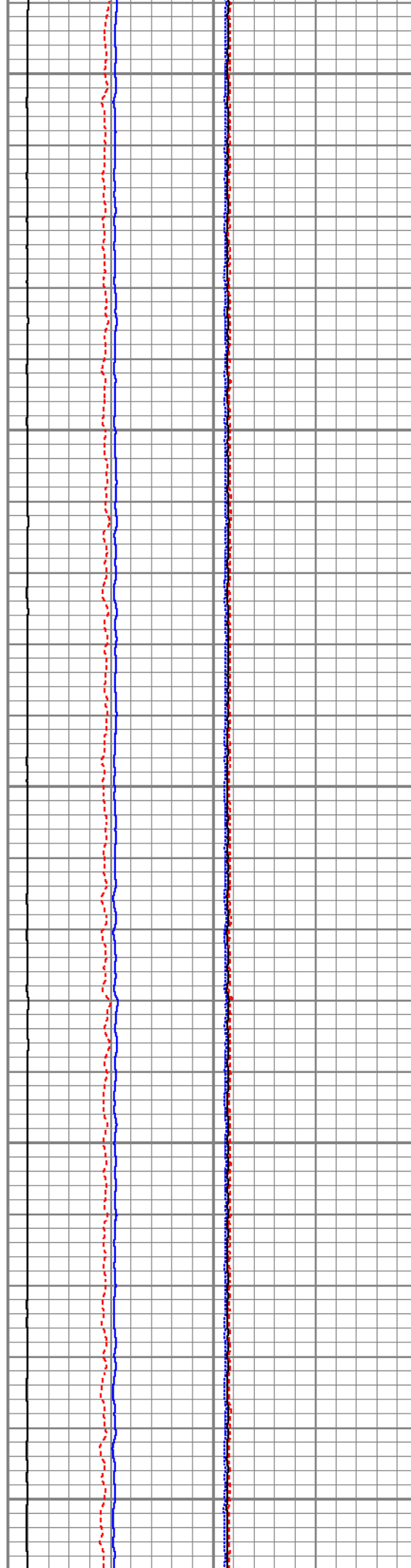
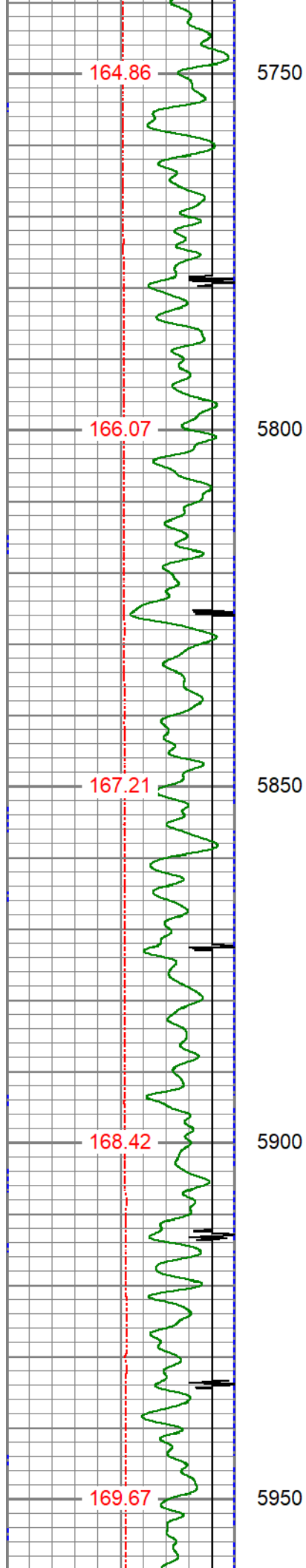


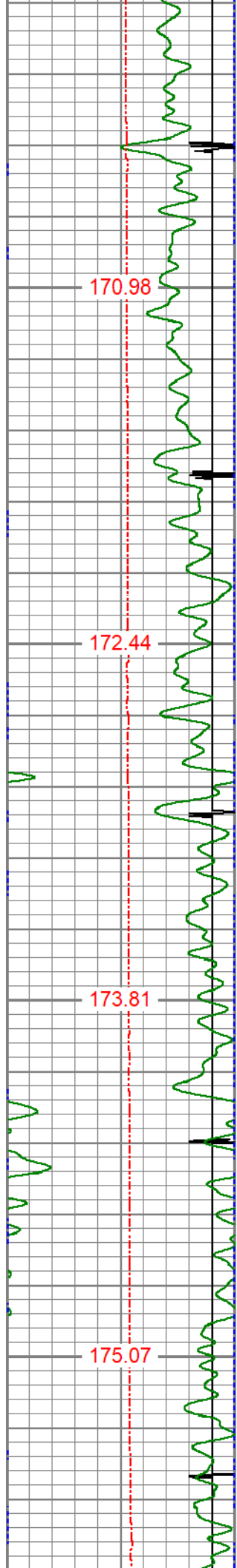










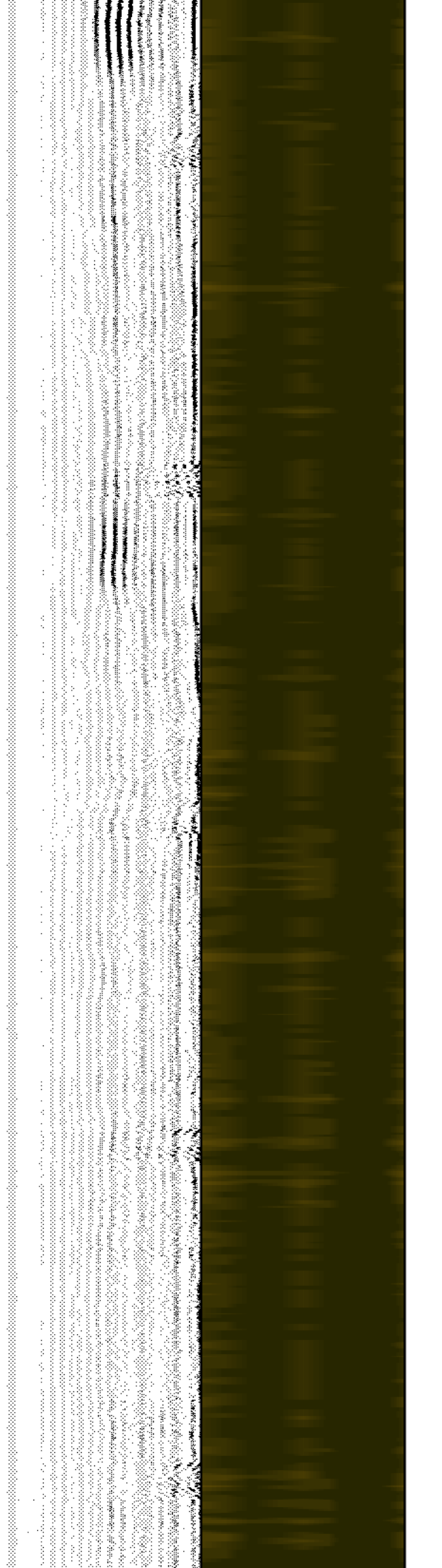
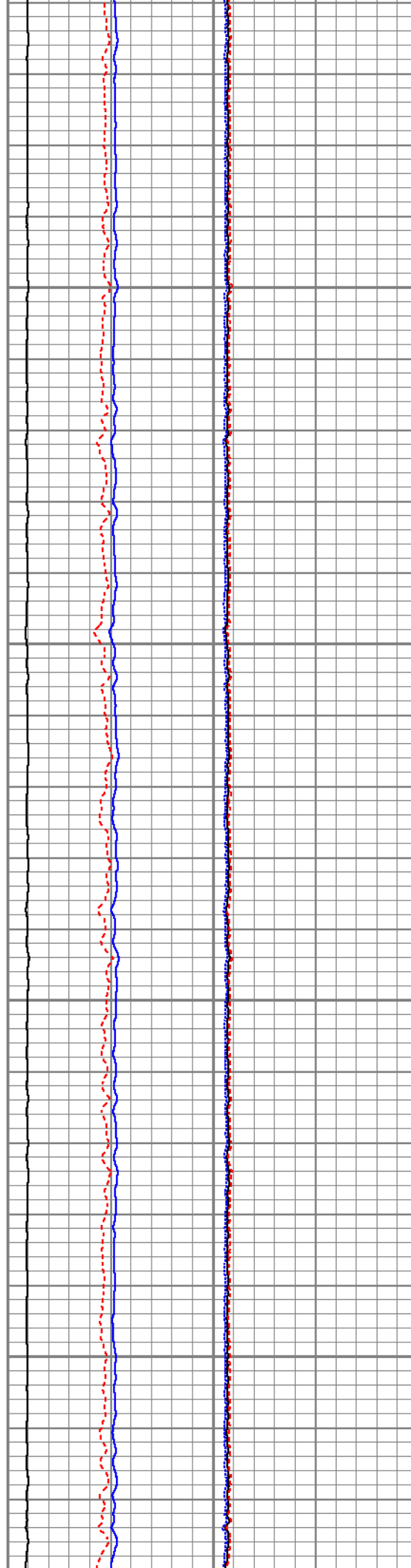


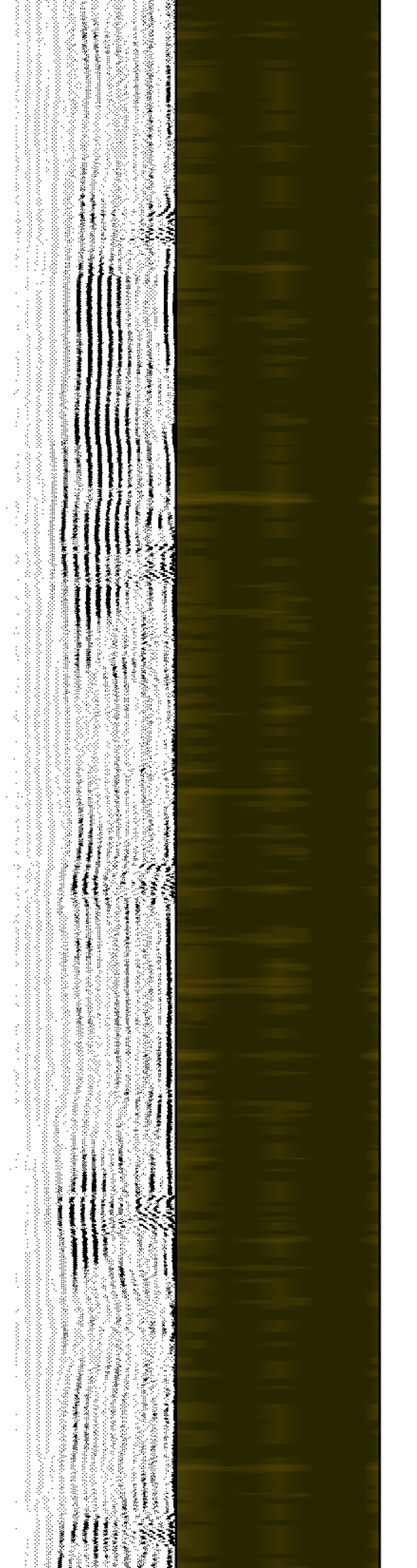
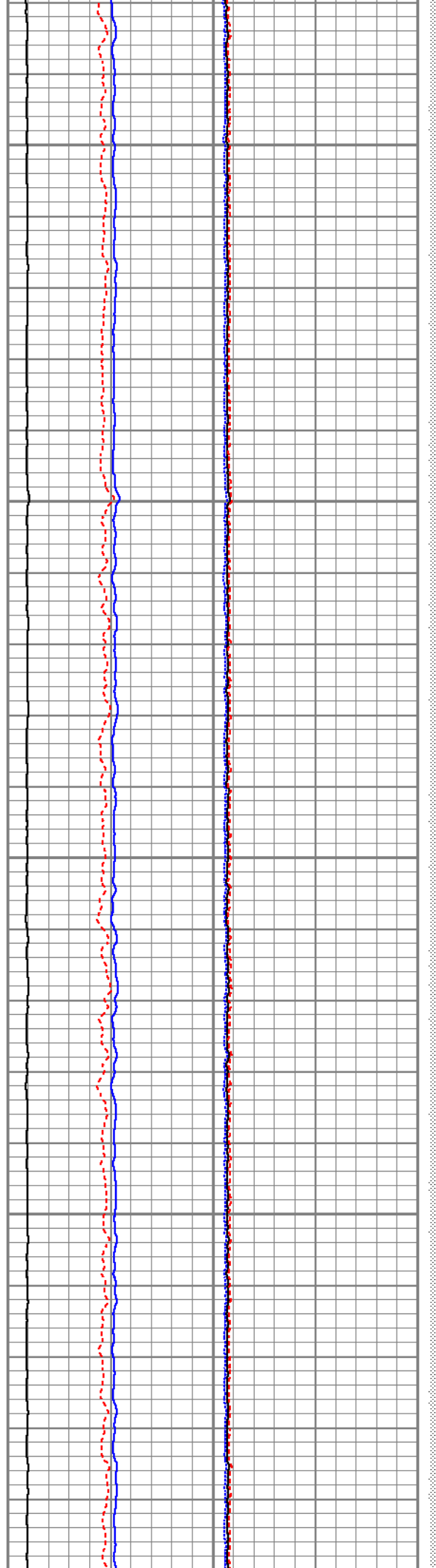
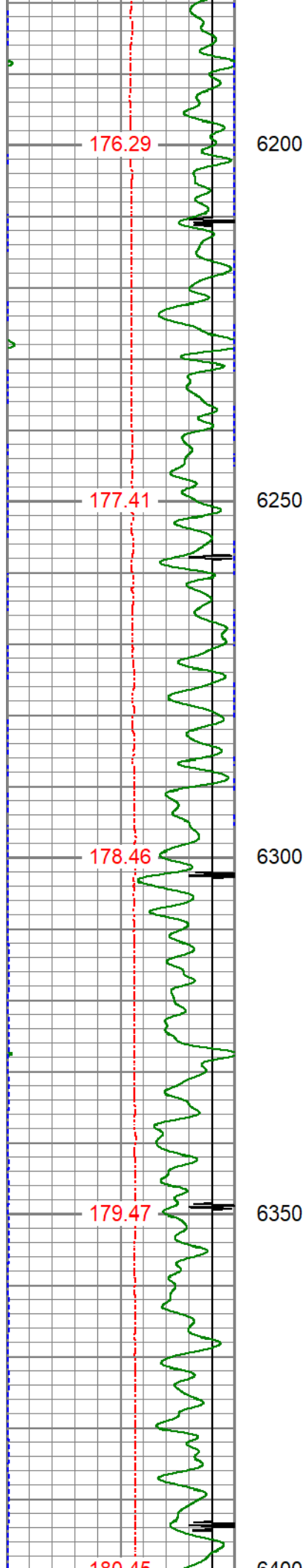
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6050

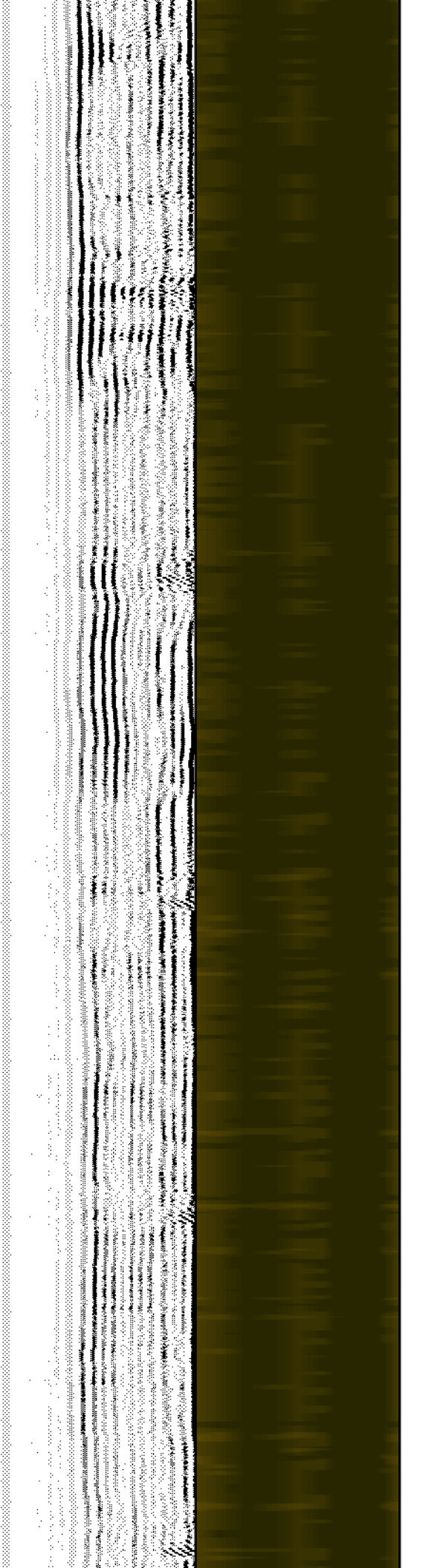
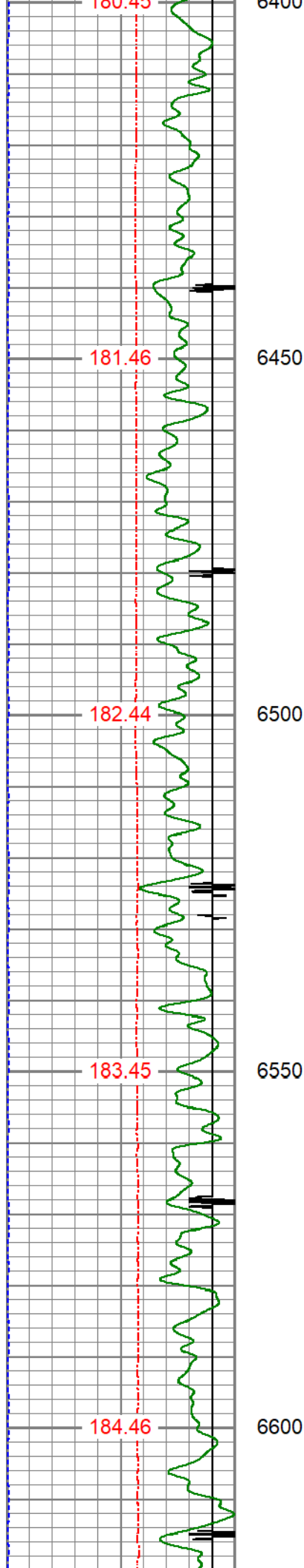
6100

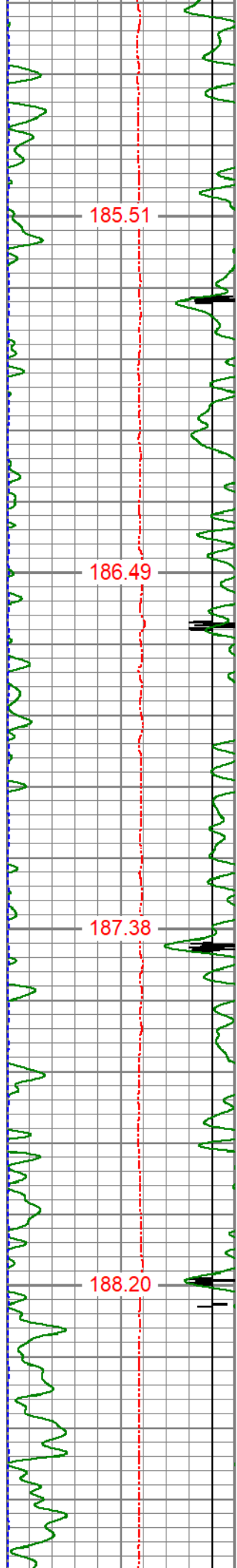
6150











185.51

186.49

187.38

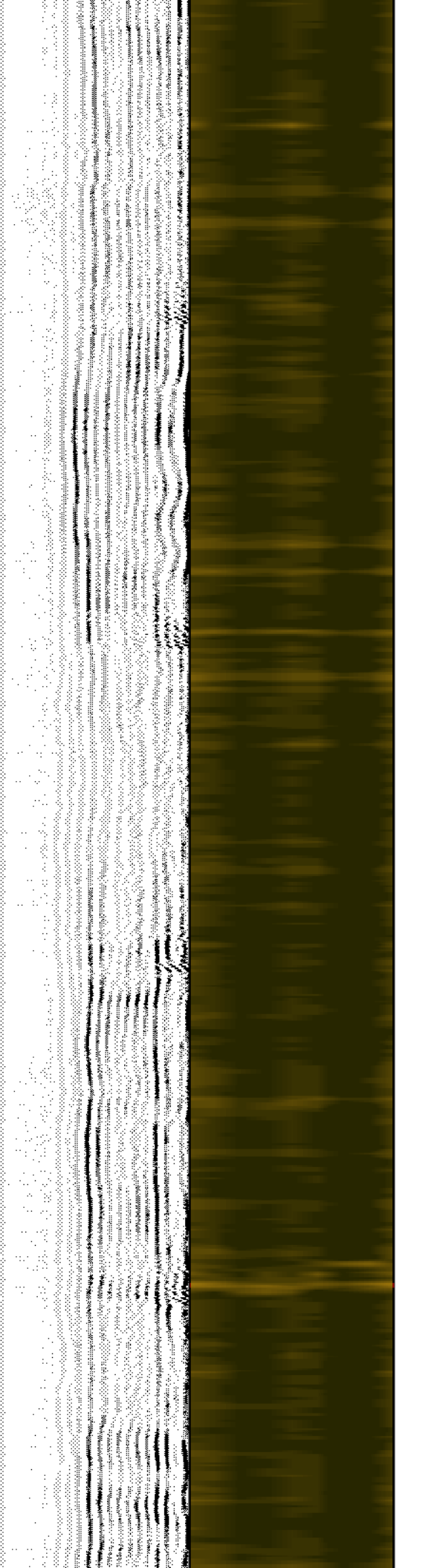
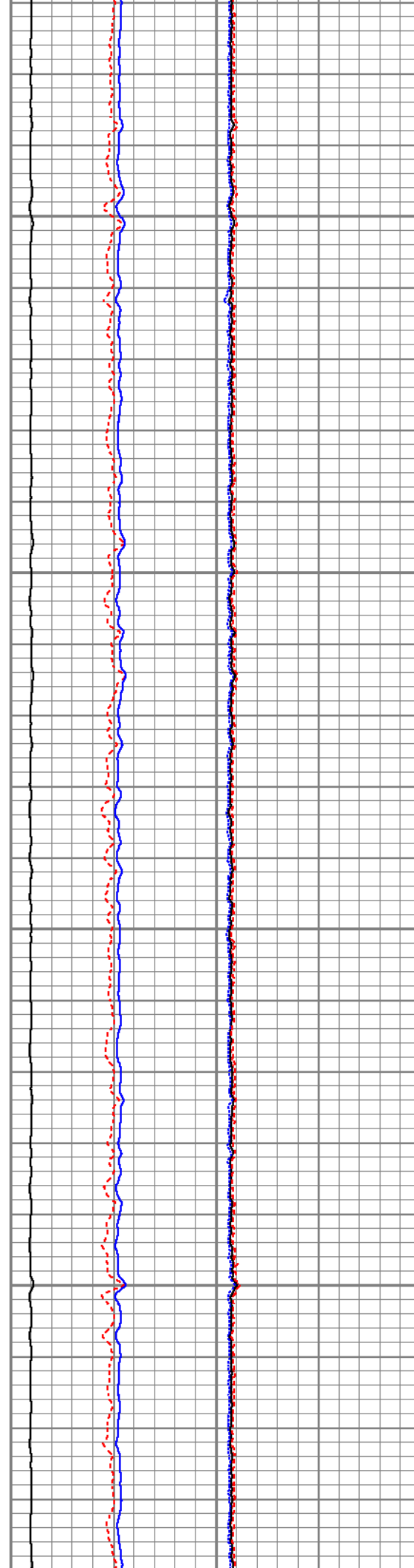
188.20

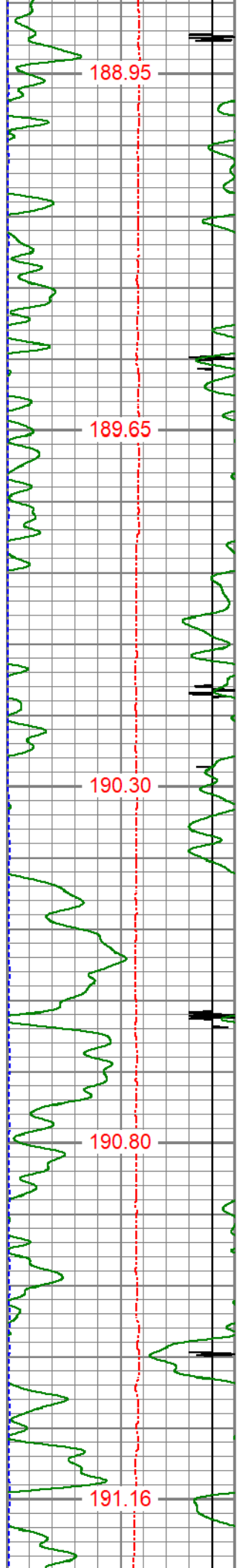
6650

6700

6750

6800





188.95

189.65

190.30

190.80

191.16

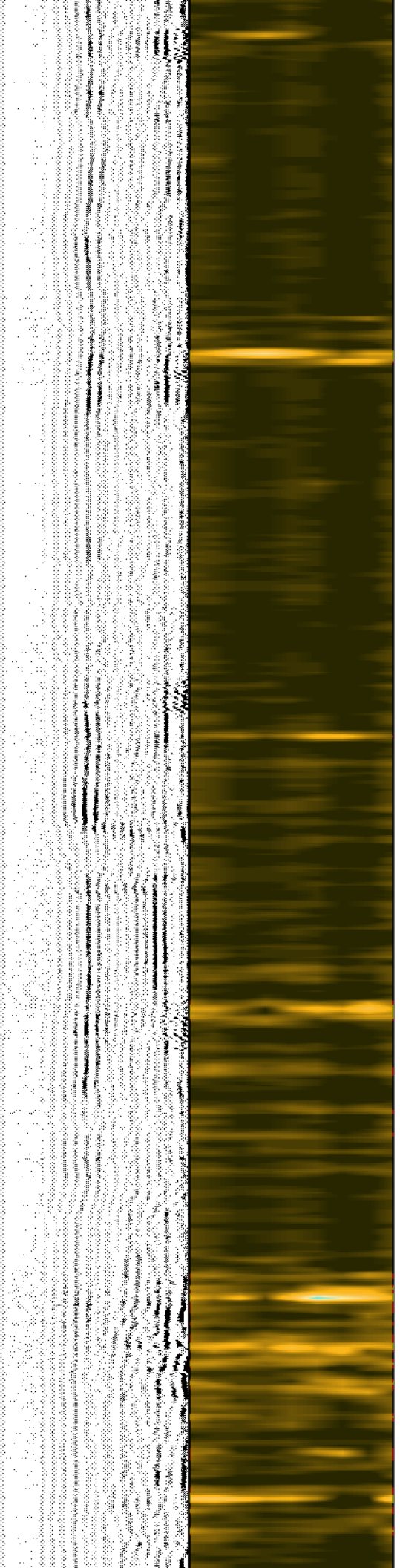
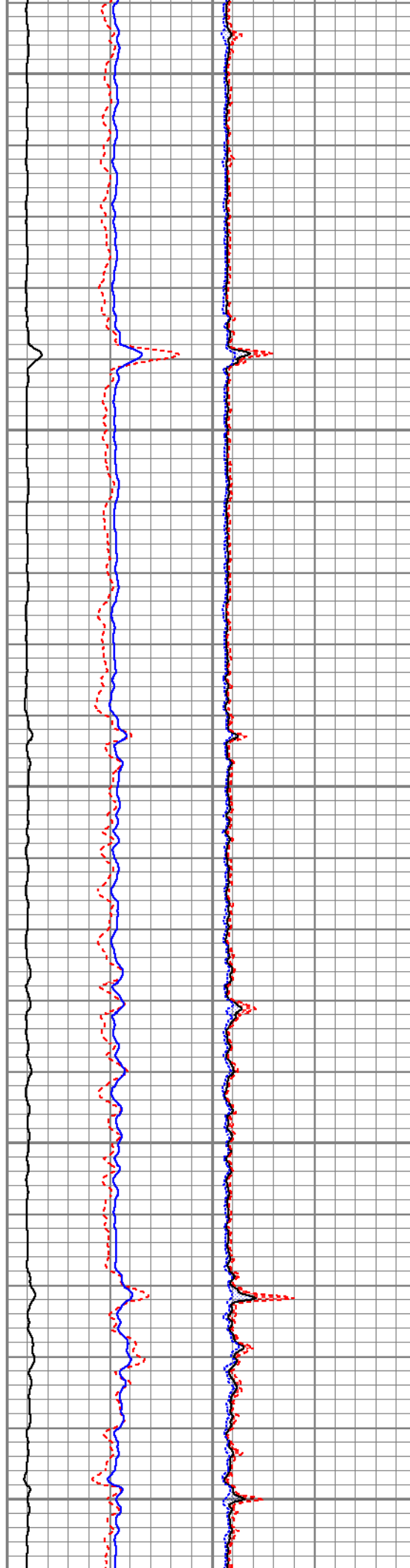
6850

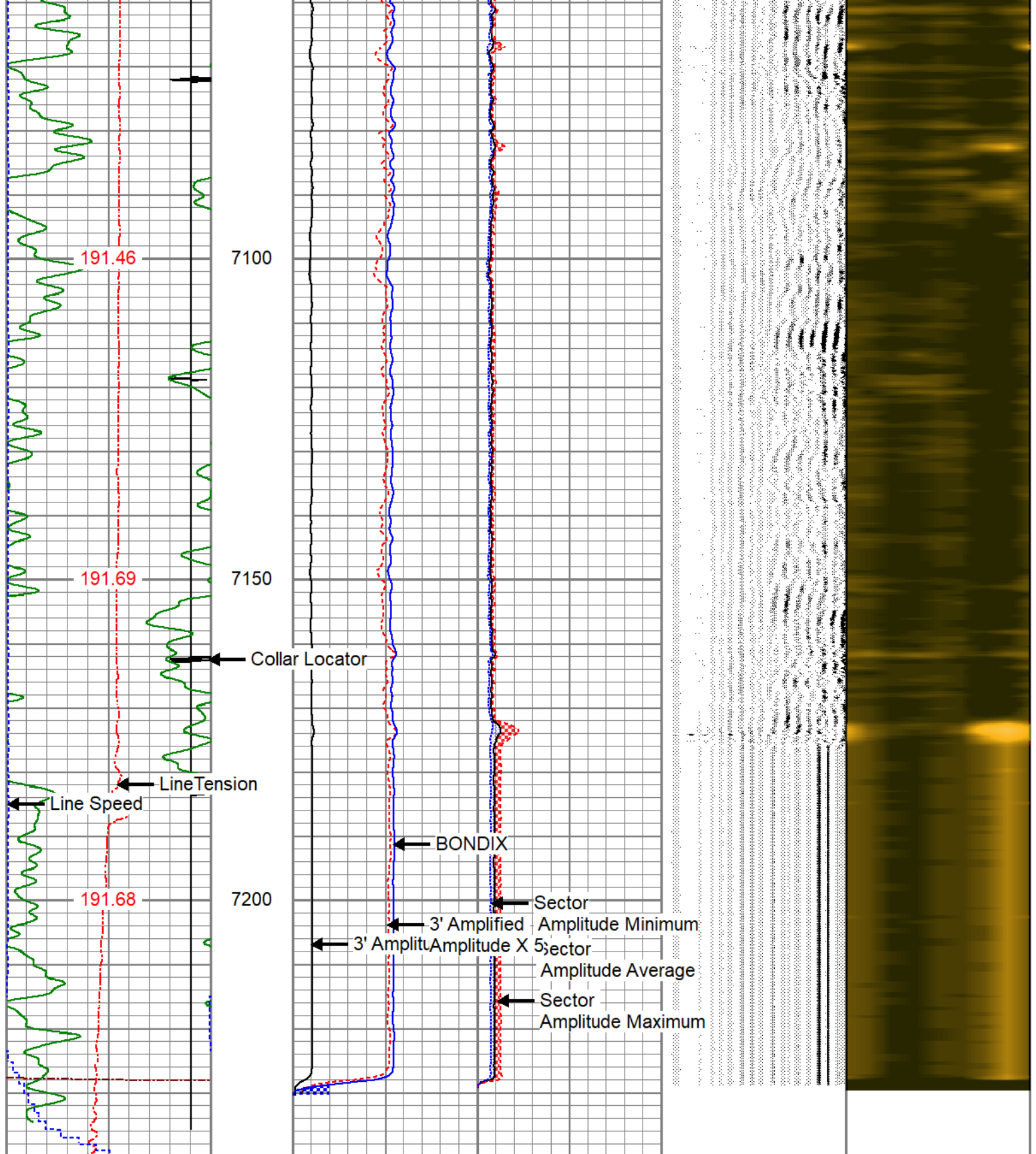
6900

6950

7000

7050






3Ft Travel Time	3' Amplitude	Sector	VDL	1	Sector Map	8
275 (usec) 175	0 (mV) 100	Amplitude Average	200 (usec) 1200			
-9 Collar Locator 1	3' Amplified Amplitude X 5	0 150				
Gamma Ray	0 (mV) 20	Sector Amplitude Maximum				
0 (GAPI) 150	1 BONDIX 0	0 150				
LineTension		Sector Amplitude Minimum				
0 (lb) 2000						
Line Speed						



-100	(ft/min)	100	0	150
TEMP				
(degF)				

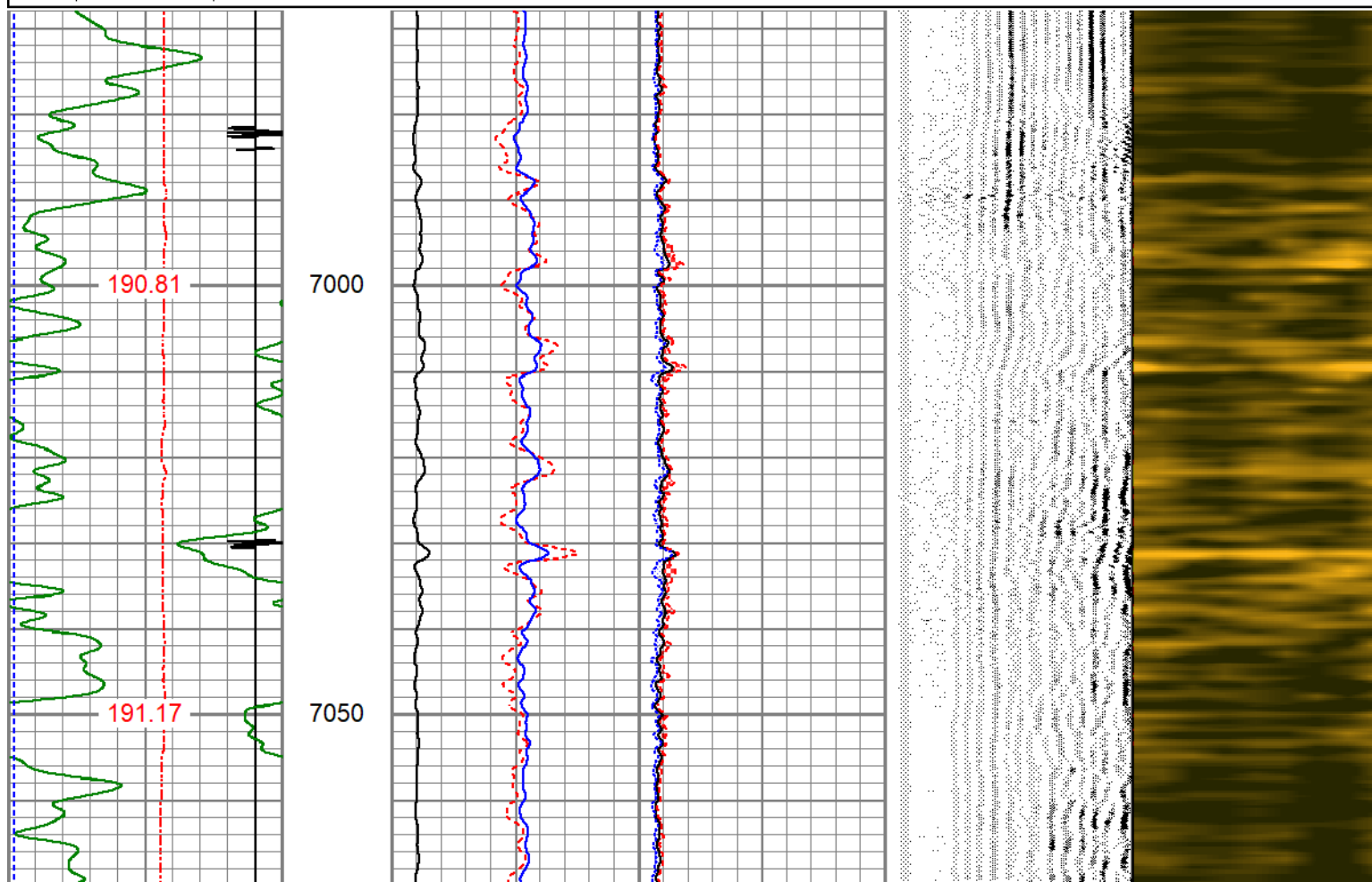


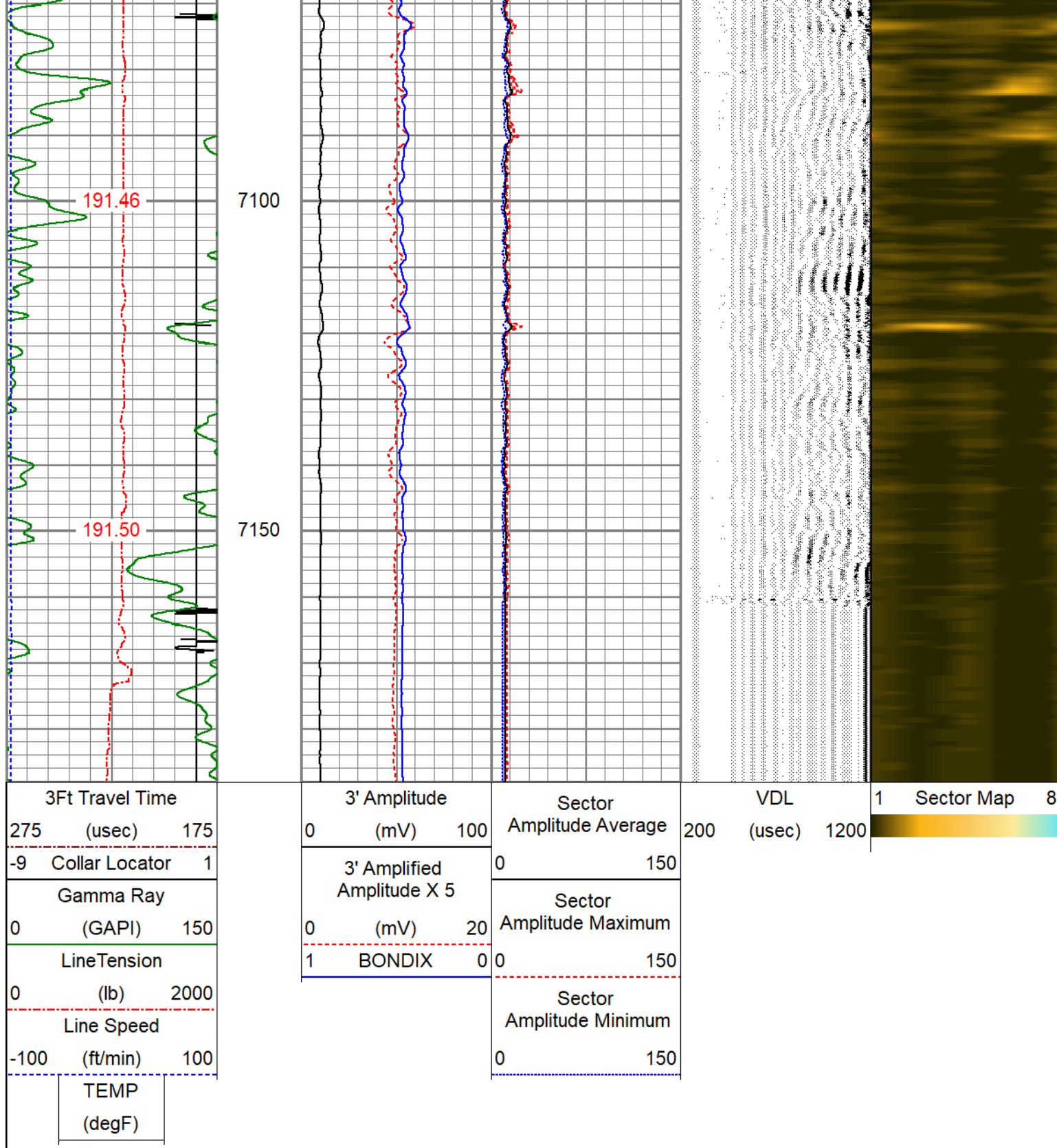
# REPEAT SECTION

## ZERO PSI APPLIED AT SURFACE

Database File	verdad resources_kbl 1930-11h_0512350883_20210818_scbl.db
Dataset Pathname	pass4
Presentation Format	pinr_scbl
Dataset Creation	Thu Aug 19 06:48:28 2021
Charted by	Depth in Feet scaled 1:240

3Ft Travel Time		3' Amplitude	Sector	VDL	1	Sector Map	8
275 (usec) 175		0 (mV) 100	Amplitude Average	200 (usec) 1200			
-9 Collar Locator 1			0 150				
Gamma Ray		3' Amplified	Sector				
0 (GAPI) 150		Amplitude X 5	Amplitude Maximum				
		0 (mV) 20					
LineTension		1 BONDIX 0	0 150				
0 (lb) 2000			Sector				
Line Speed			Amplitude Minimum				
-100 (ft/min) 100			0 150				
TEMP							
(degF)							





### Calibration Report

Database File: verdad resources\_kbl 1930-11h\_0512350883\_20210818\_scbl.db  
 Dataset Pathname: pass6  
 Dataset Creation: Thu Aug 19 06:52:41 2021

### Gamma Ray Calibration Report

Serial Number: 140181  
 Tool Model: 275 Probe GCT  
 Performed: Wed Aug 18 11:00:13 2021

Calibrator Value: 1.0 GAPI

Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

### Segmented Cement Bond Log Calibration Report

Serial Number: FW 1304-33  
Tool Model: RBL-DC

Calibration Casing Diameter: 5.500 in  
Calibration Depth: -128.507 ft

Master Calibration, performed Thu Aug 19 06:24:12 2021:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	1.278	1.000	71.921	55.494	1.000
CAL	0.000	1.222				
5'	0.000	1.211	1.000	71.921	58.564	1.000
SUM						
S1	0.000	1.189	0.000	100.000	84.104	0.000
S2	-0.006	1.249	0.000	100.000	79.681	0.478
S3	0.000	1.250	0.000	100.000	80.000	0.000
S4	0.000	1.279	0.000	100.000	78.186	0.000
S5	-0.003	1.297	0.000	100.000	76.923	0.231
S6	0.000	1.290	0.000	100.000	77.519	0.000
S7	0.000	1.282	0.000	100.000	78.003	0.000
S8	0.000	1.255	0.000	100.000	79.681	0.000

Air Zero Calibration, performed Wed Aug 18 10:56:40 2021:

	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 VERDAD RESOURCES  
Well KBL 1930-11H  
Field WATTENBERG  
County WELD  
State CO