



**RADIAL CEMENT BOND / CCL
GAMMA RAY / VDL**

Company ANTERO RESOURCES CORPORATION
 Well RODZINA 1H
 Field MARCELLUS
 County TYLER
 State W.V.

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 Well RODZINA 1H
 Field MARCELLUS
 County TYLER State W.V.

Location: API #: 4709502585 Other Services
 SEC TWP RGE
 Permanent Datum G.L. Elevation 1009'
 Log Measured From K.B. 1039'
 Drilling Measured From K.B. OF 30' G.L. 1039'
 G.L. 1009'

Date	10/9/19
Run Number	ONE
Depth Driller	16967'
Depth Logger	7318'
Bottom Logged Interval	7318'
Top Log Interval	SURFACE
Open Hole Size	N/A
Type Fluid	H2O
Density / Viscosity	N/A
Max. Recorded Temp.	141 DEG
Estimated Cement Top	3510'
Time Well Ready	N/A
Time Logger on Bottom	N/A
Equipment Number	340
Location	BRIDGEPORT, WV
Recorded By	JBOGGS
Witnessed By	BRYAN HEMARD

Borehole Record		Casing Record					
Run Number	Bit	From	To	Size	Weight	From	To
				13 3/8"	N/A	579'	SURFACE
				9 5/8"	N/A	2644'	SURFACE
				5 1/2"	N/A	16967'	SURFACE

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, 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. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

THANK YOU FOR USING KLX ENERGY SERVICES
 TOP OF CEMENT @ 3510'
 MARKER JOINT @ 6415'-6425'
 BOTTOM HOLE TEMP-141 DEG



LOGGED UNDER 1500 PSI.

Database File: e:\rodzina1h.db
 Dataset Pathname: pass2.1
 Presentation Format: antero
 Dataset Creation: Wed Oct 09 12:08:35 2019 by Calc 7.0 B1
 Charted by: Depth in Feet scaled 1:240

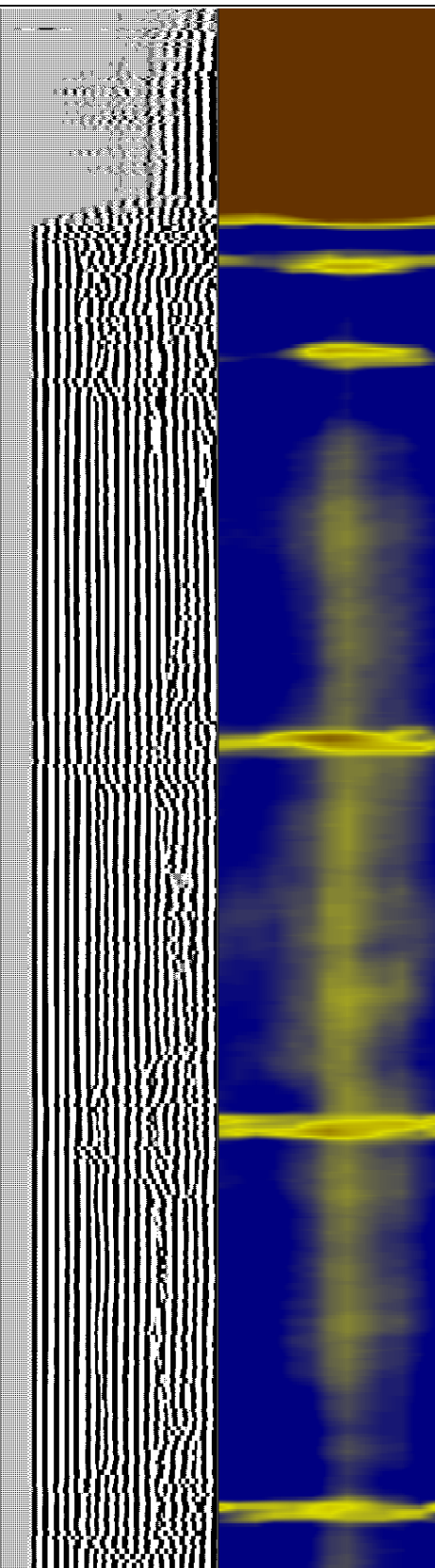
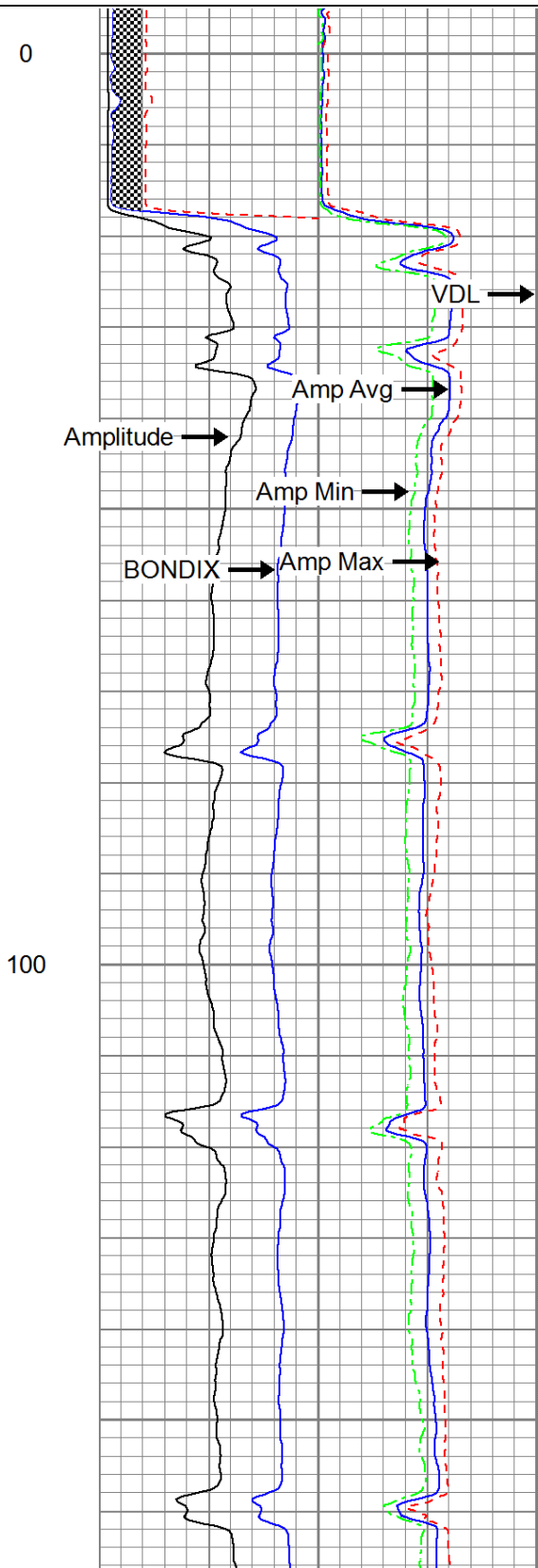
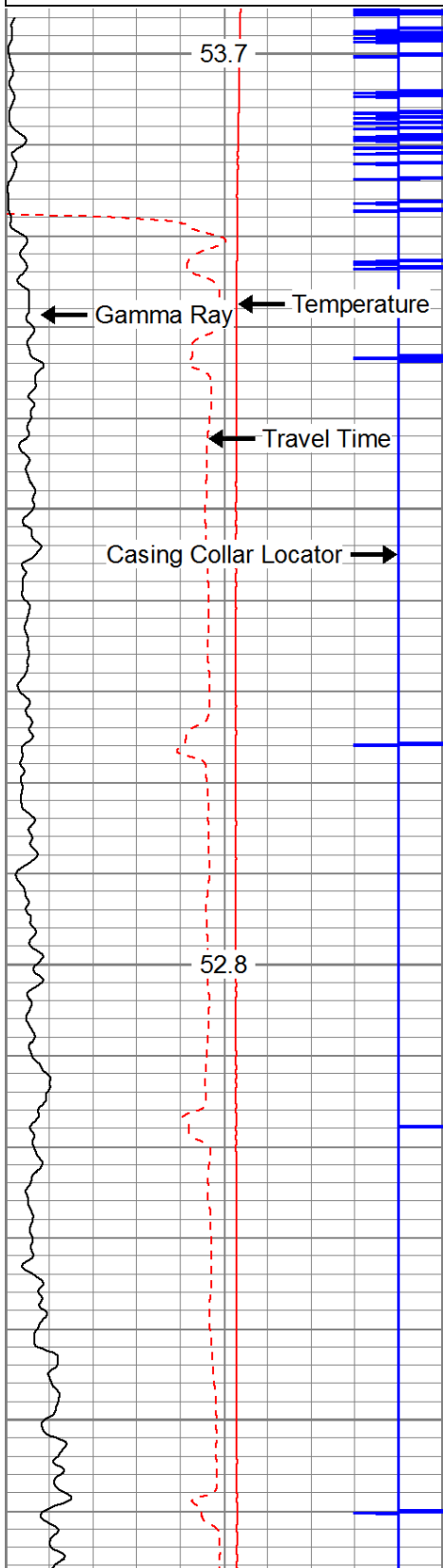
280	Travel Time (usec)	180
9	Casing Collars	-1
0	Gamma Ray	180
0	TEMP (degF)	100

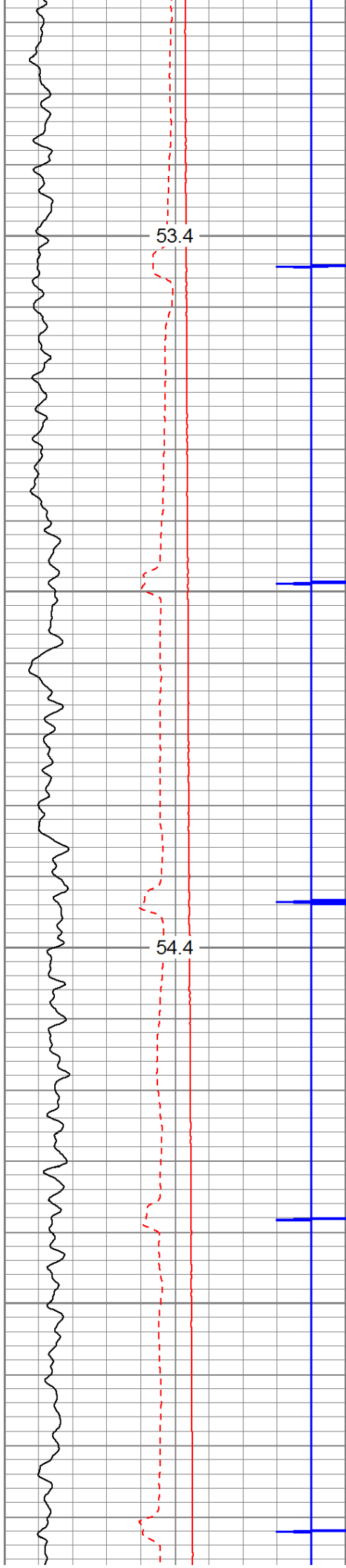
Amplitude	0	Amp Avg	150
(mV)	100	Amp Max	150
0 AmpX5 (mV)	20	Amp Min	150
1 BONDIX	0		

200	VDL	1200	1	Sector Map	12
			20		80



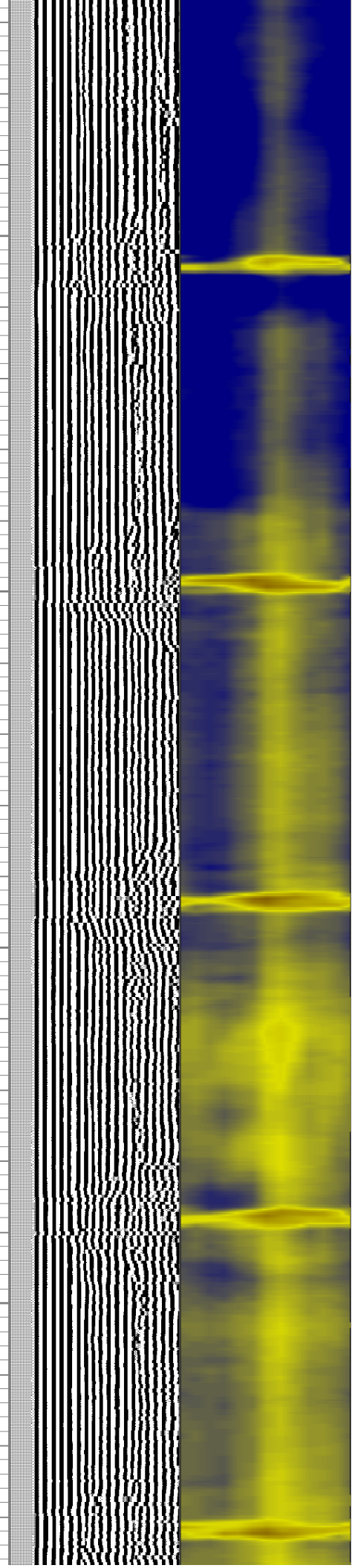
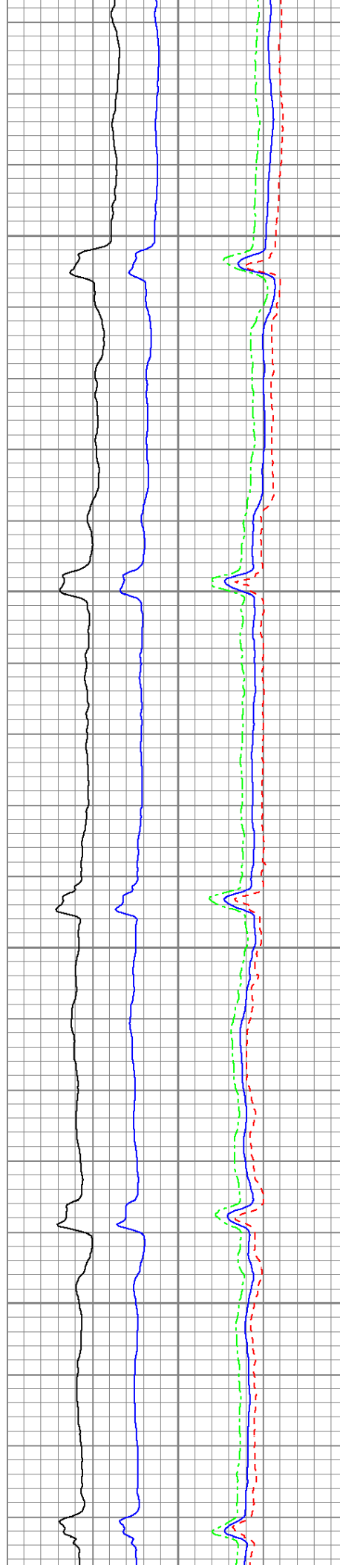
TEMP
(degF)

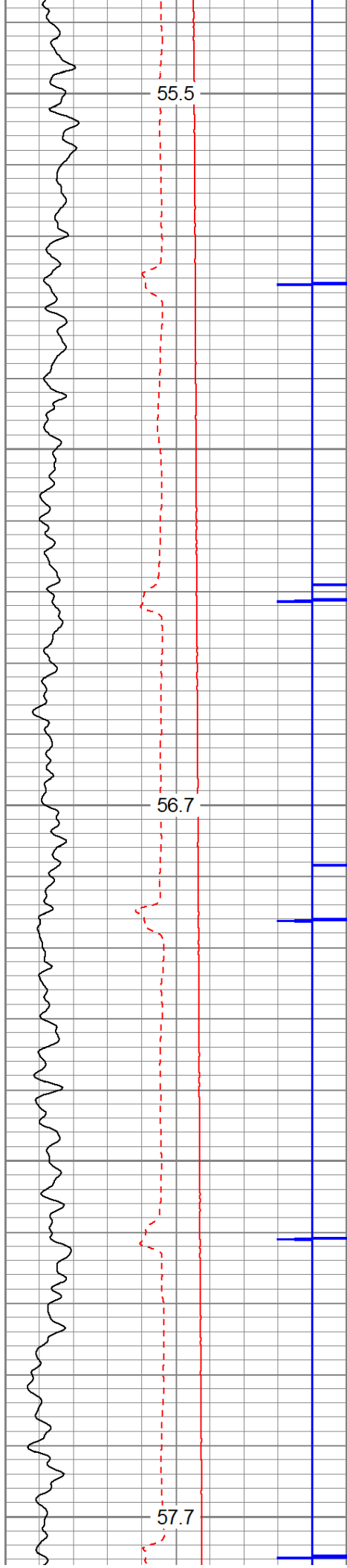




200

300

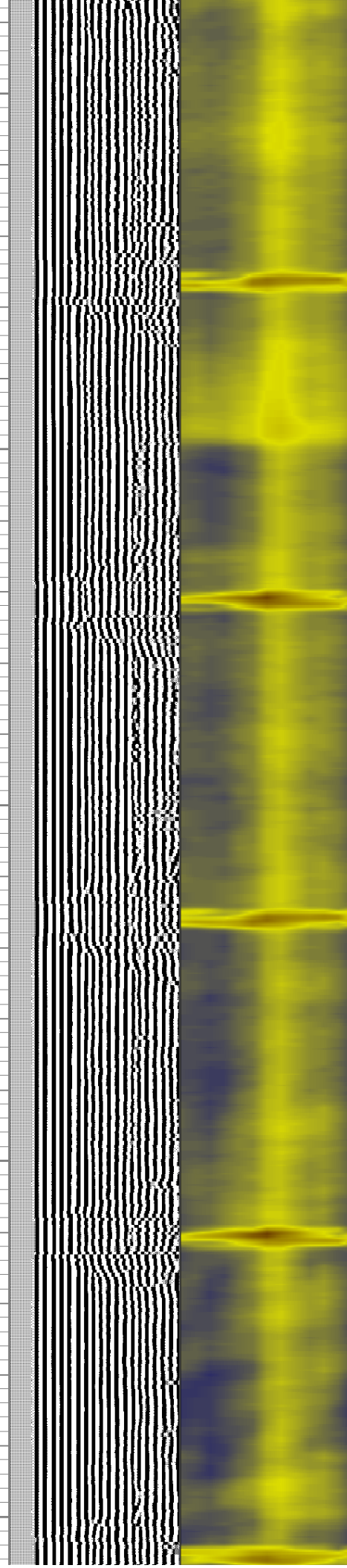
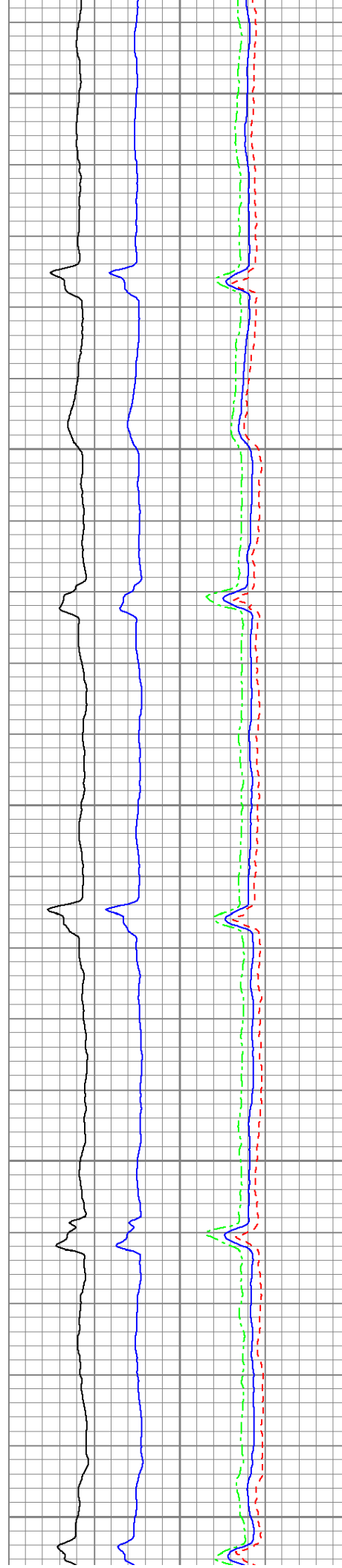


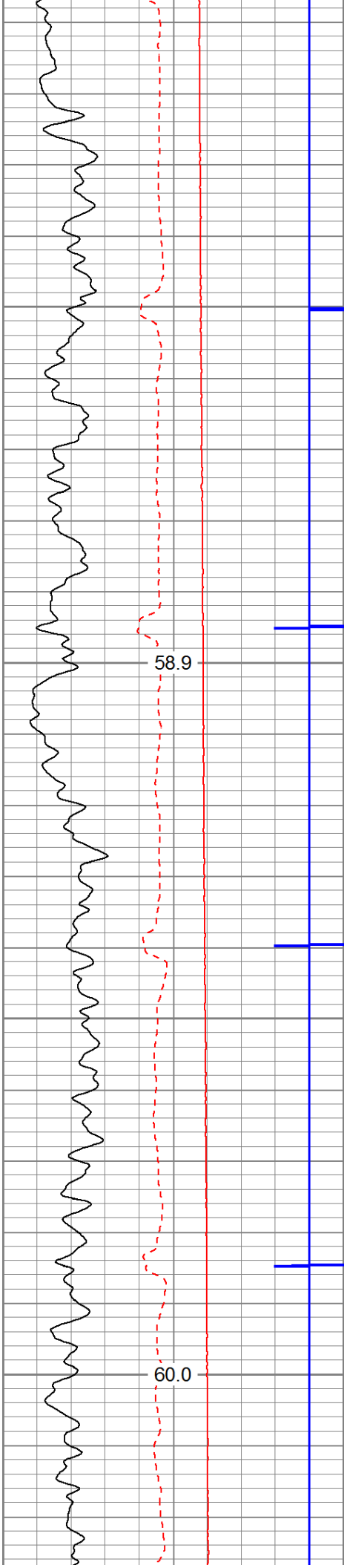


400

500

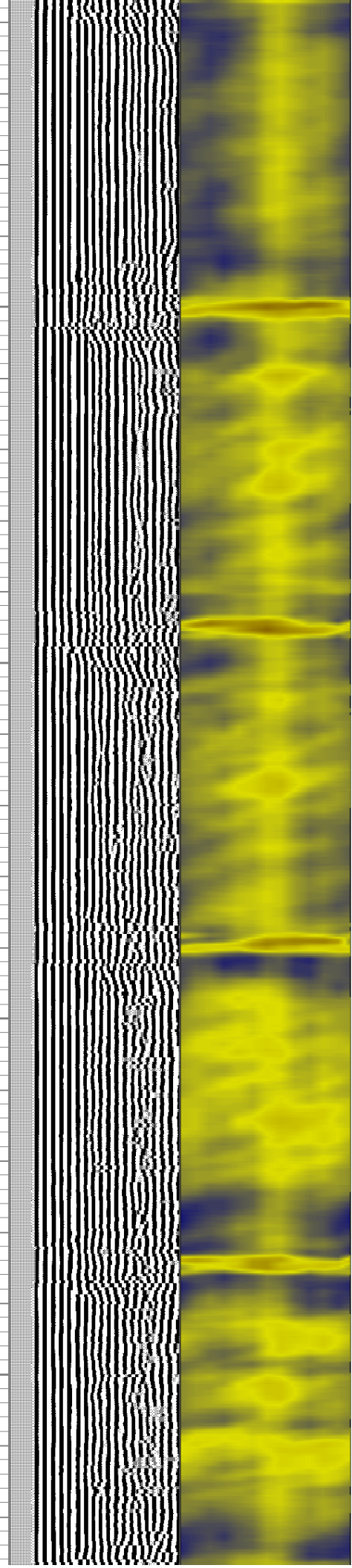
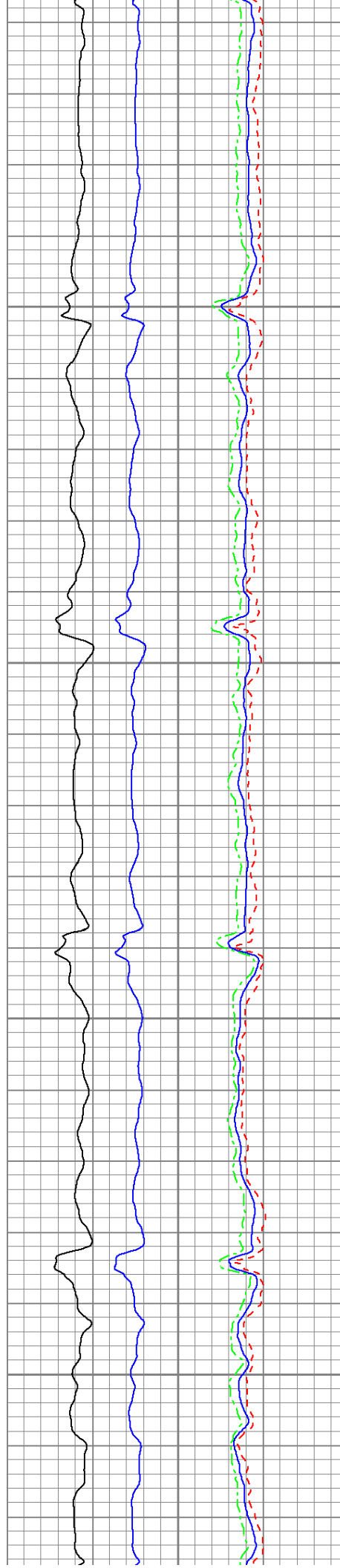
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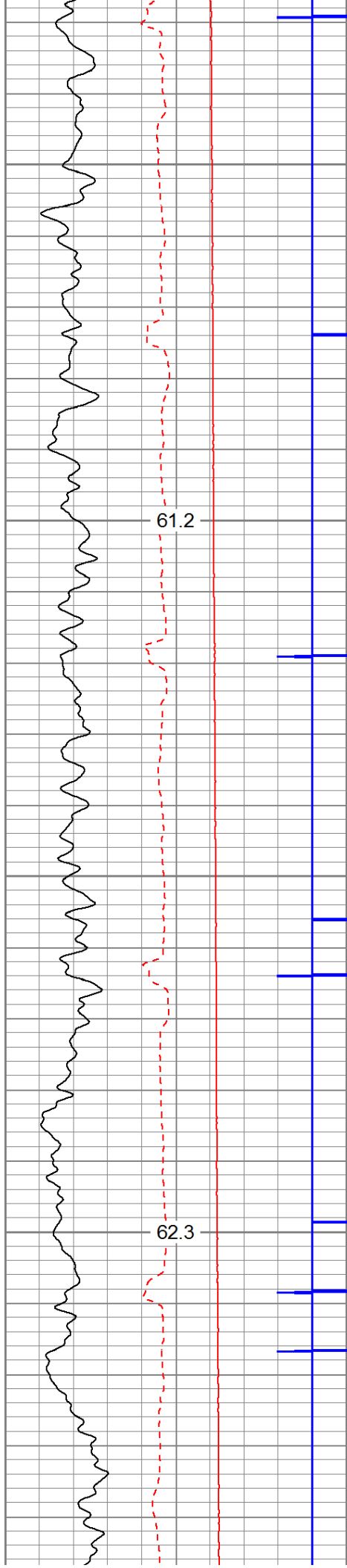




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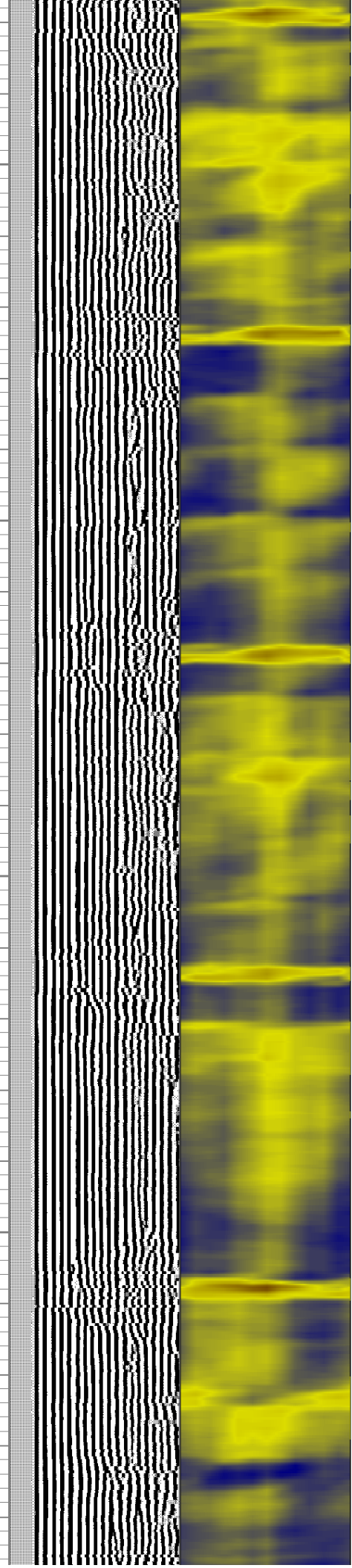
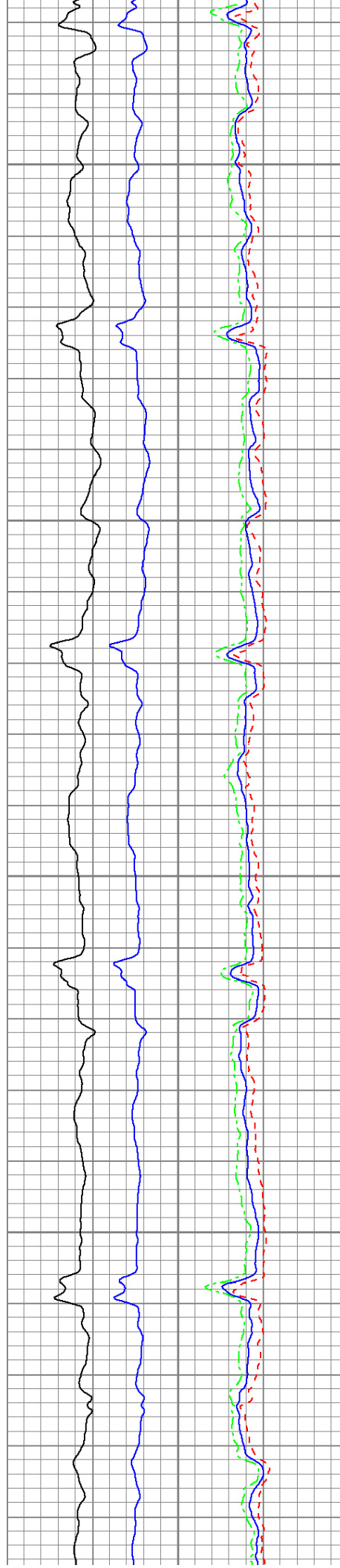
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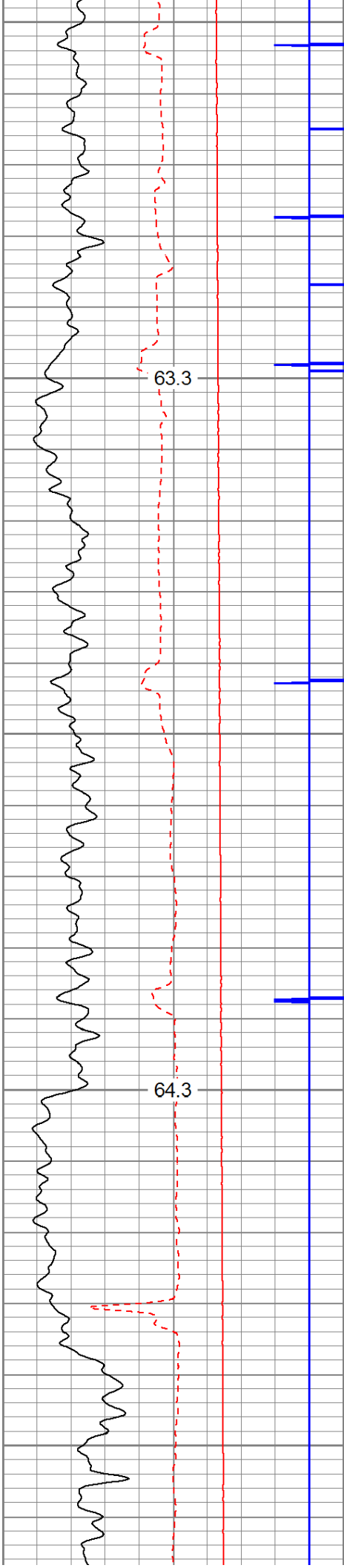




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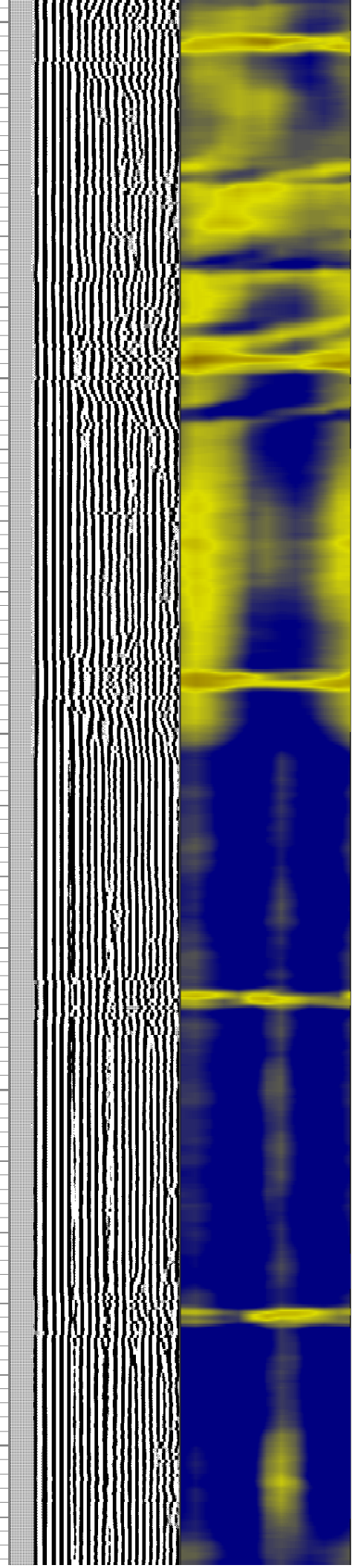
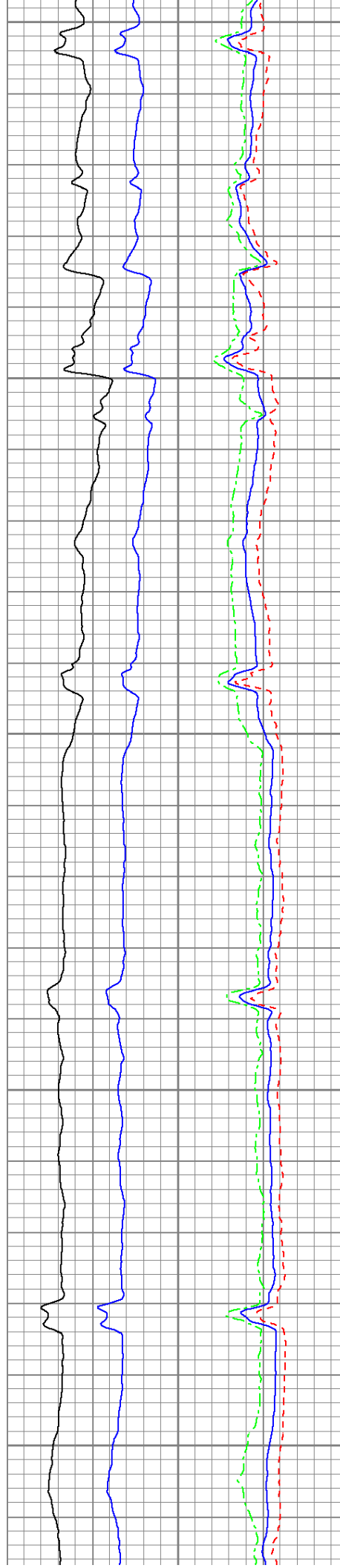
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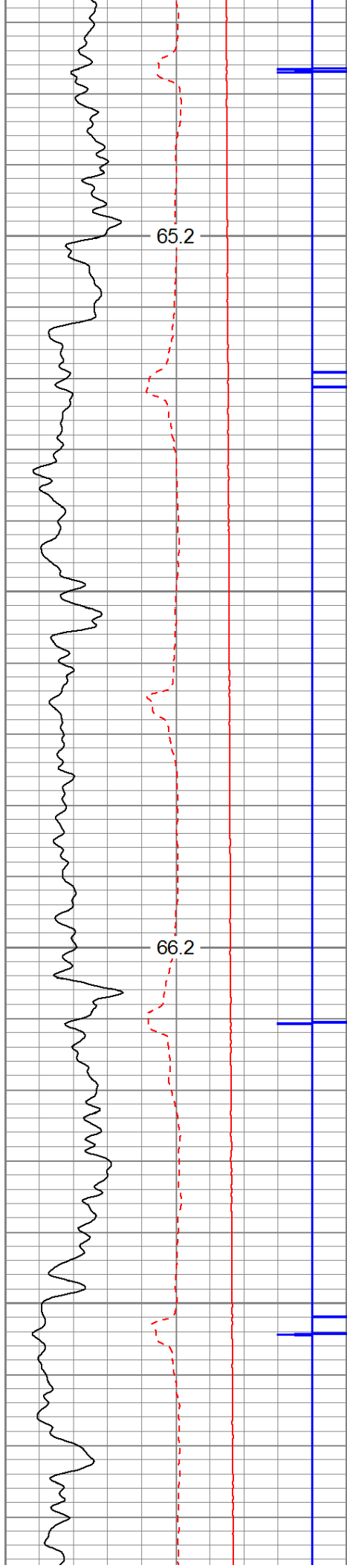




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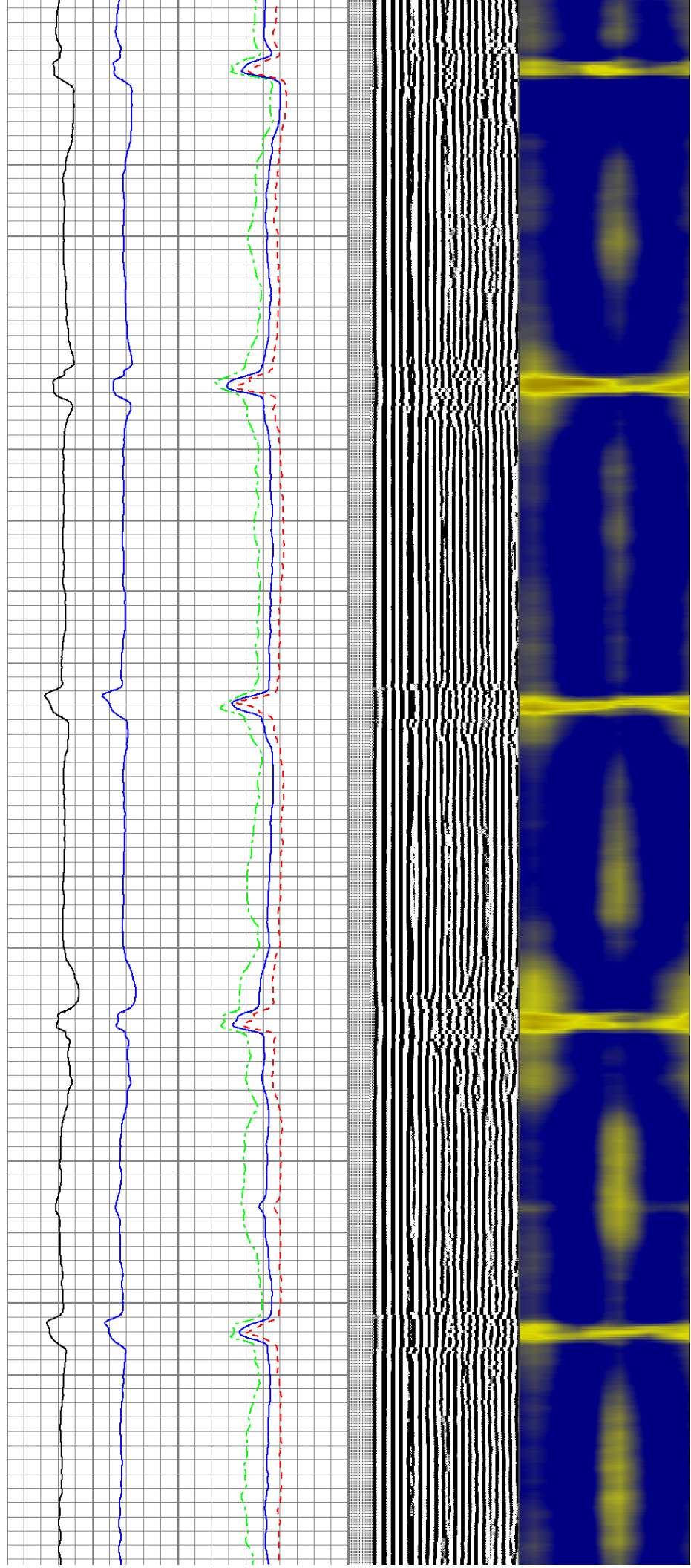
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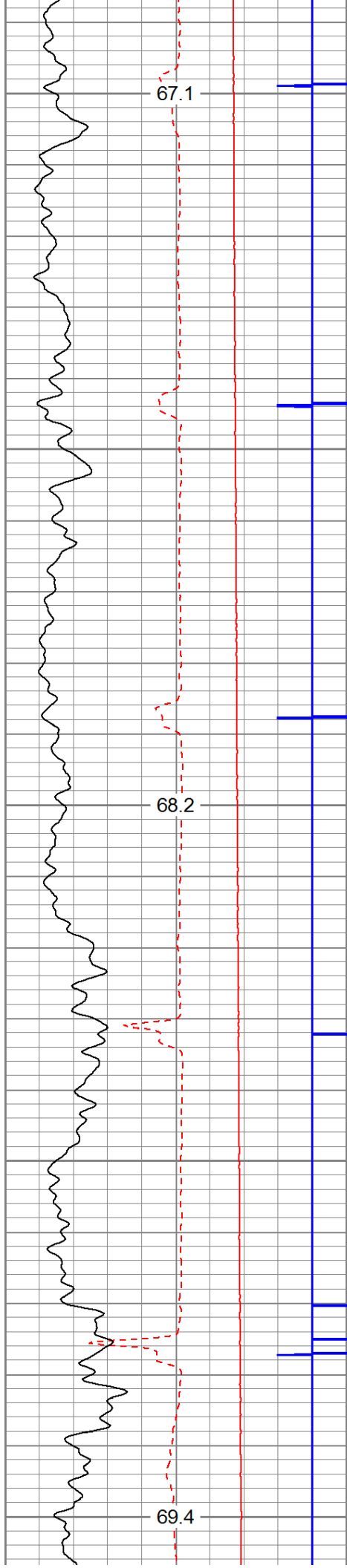




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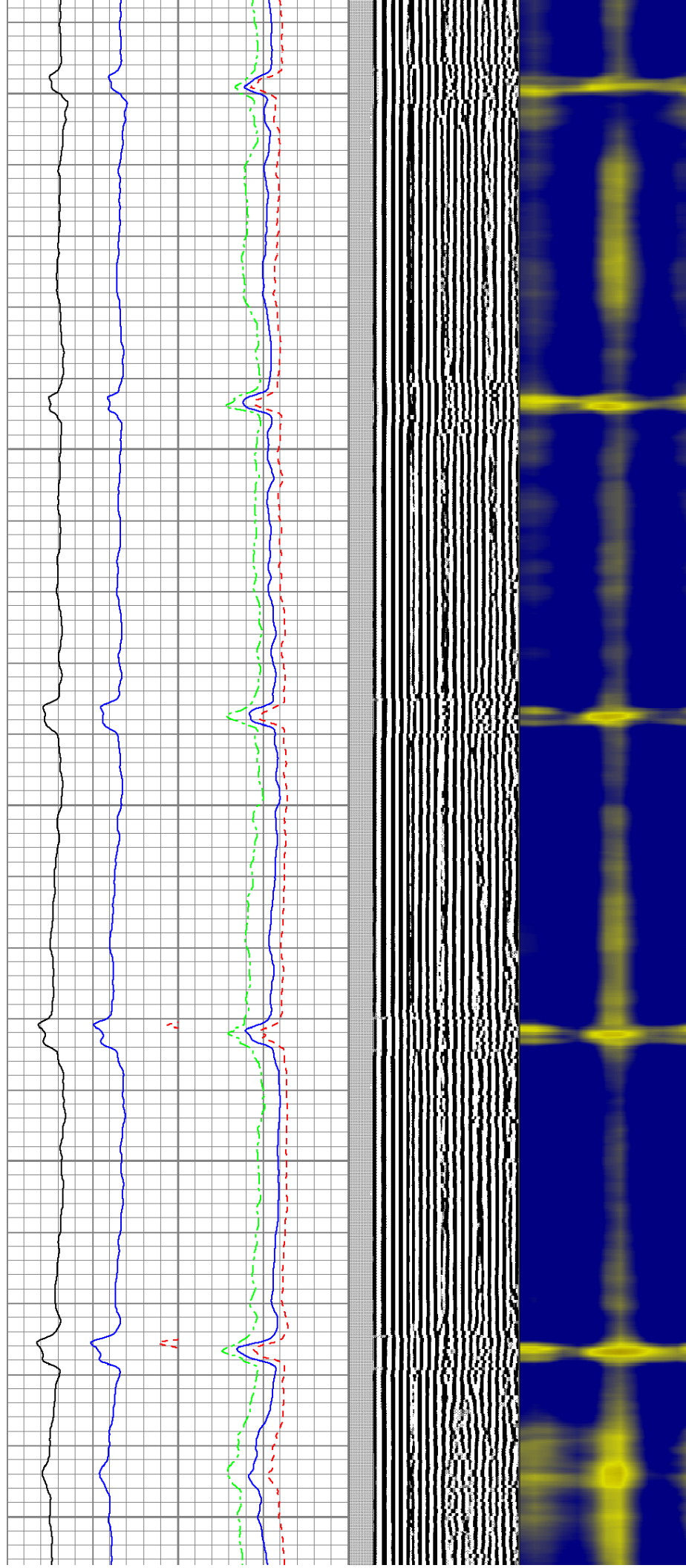


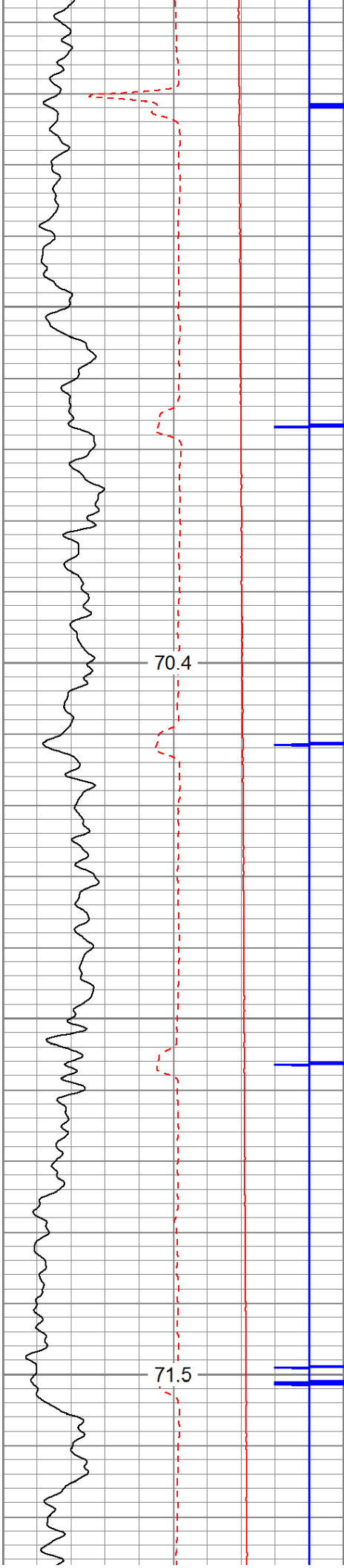


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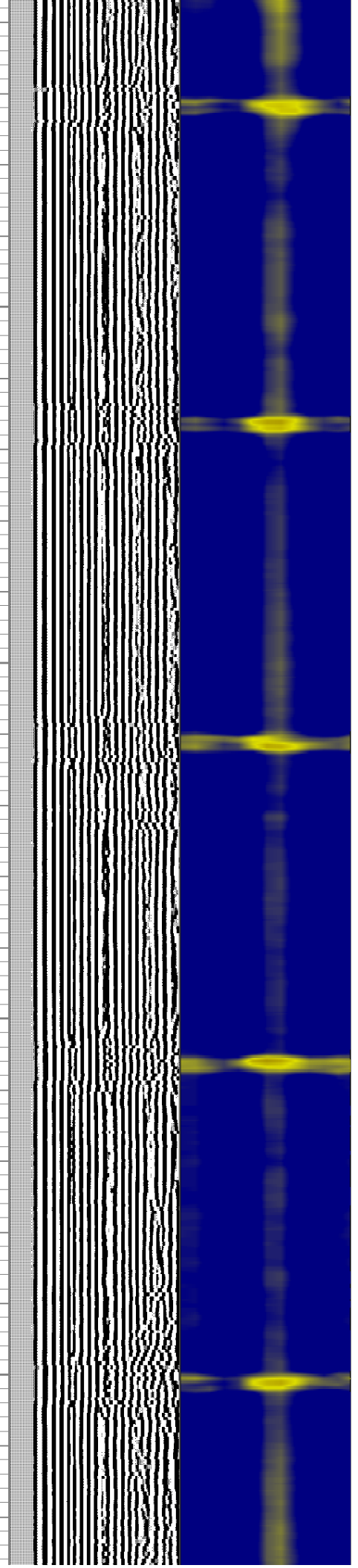
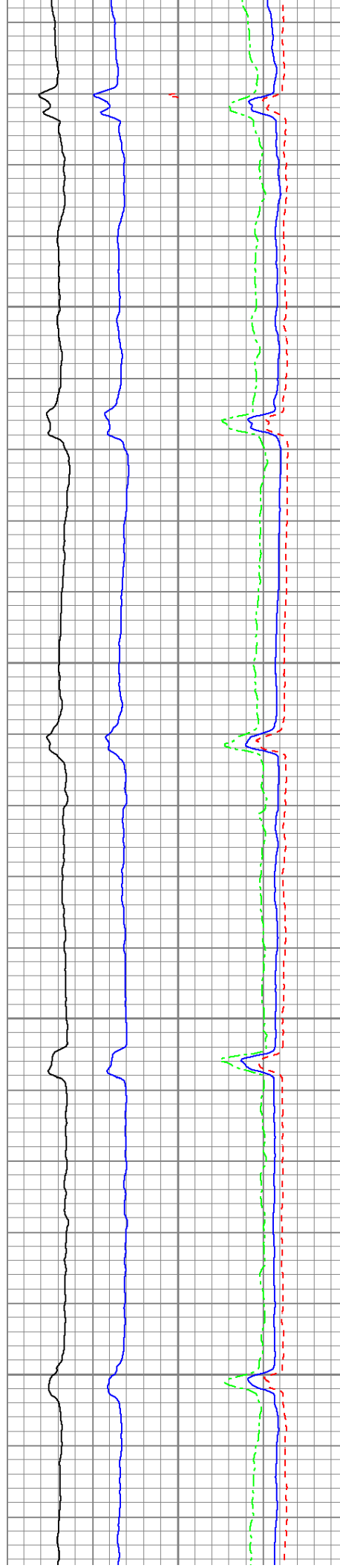
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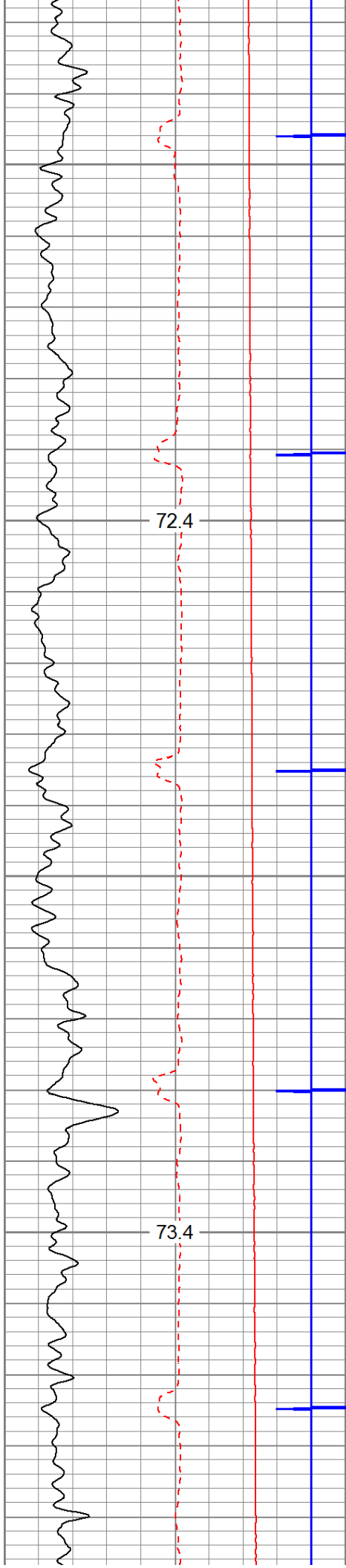




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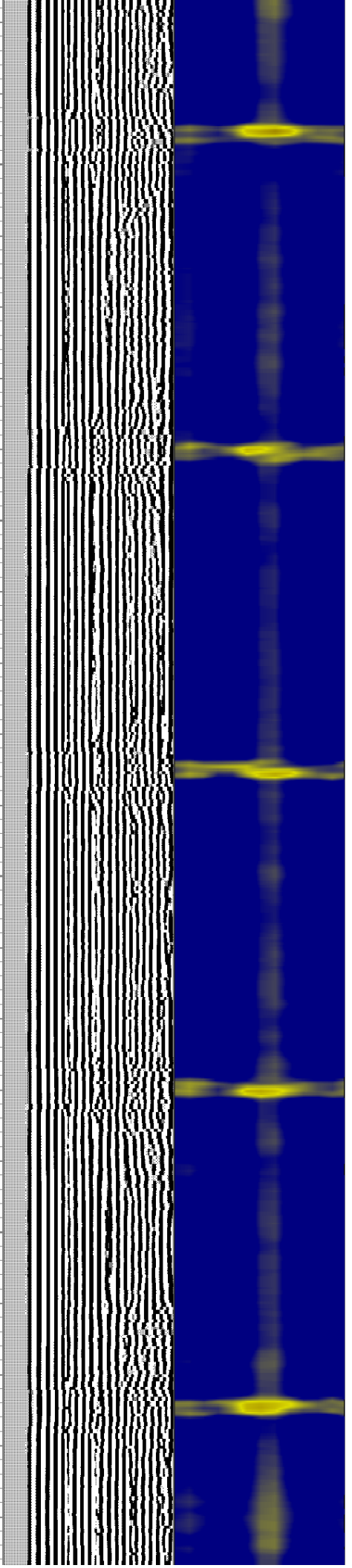
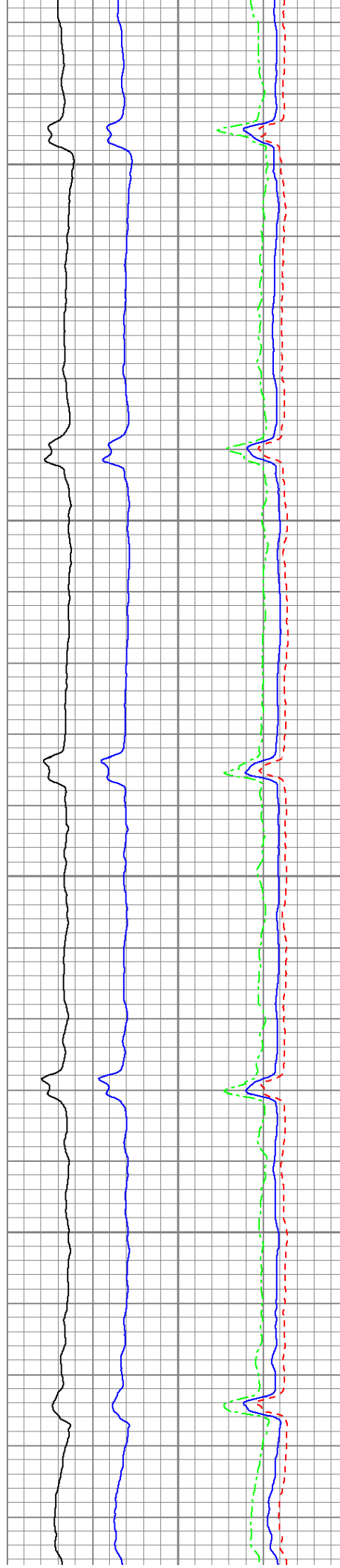
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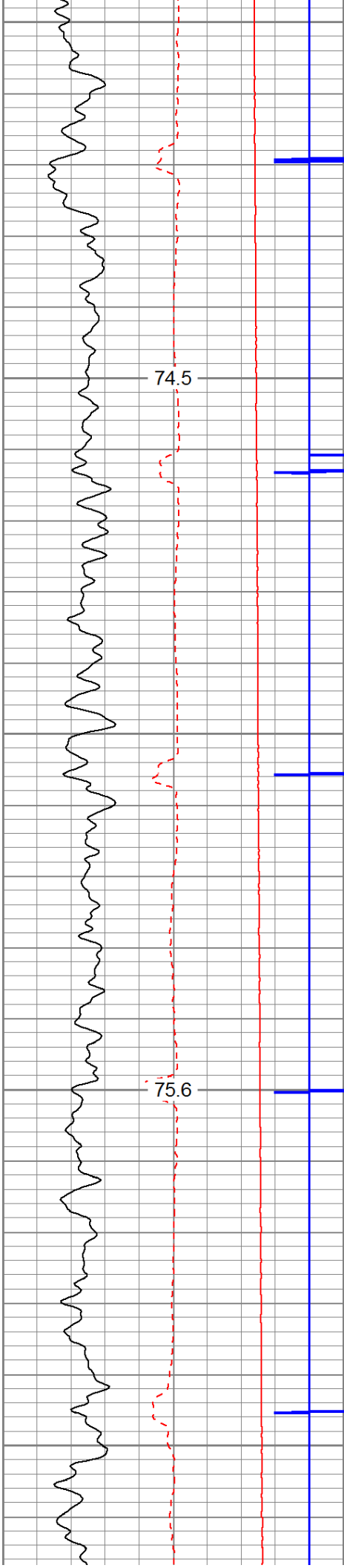




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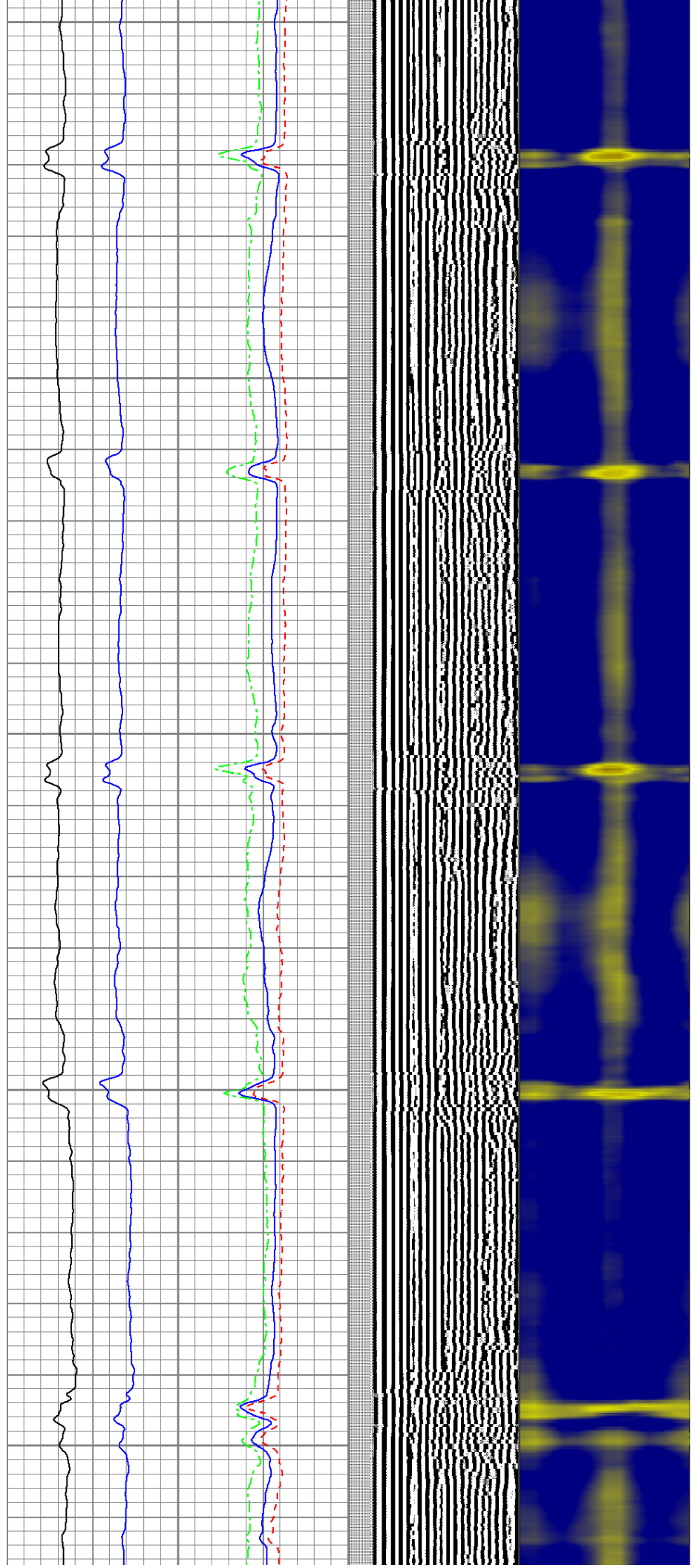
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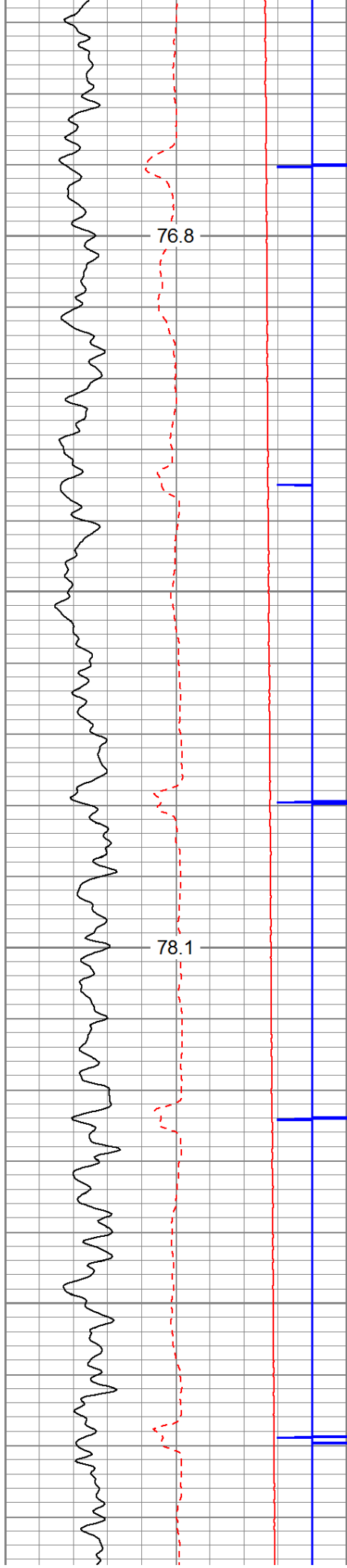




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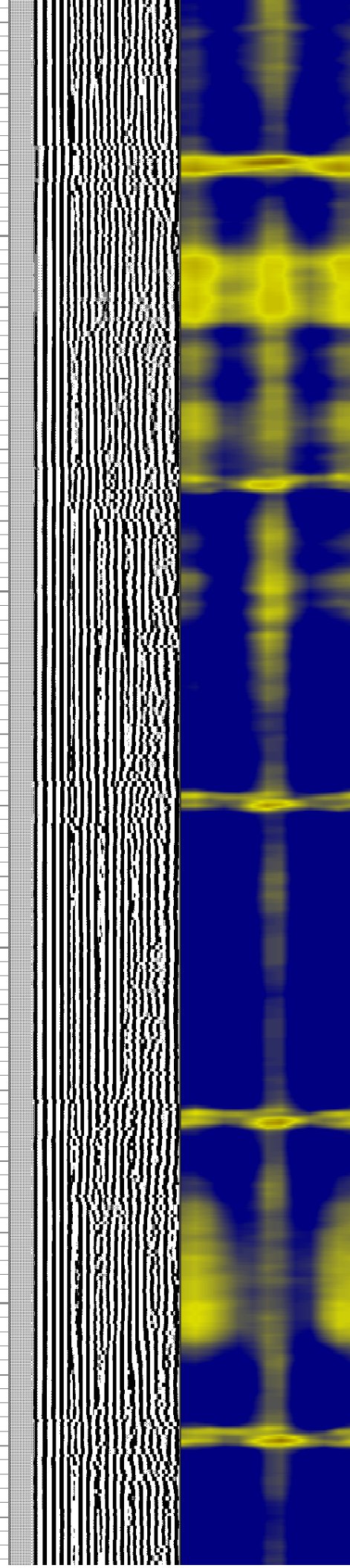
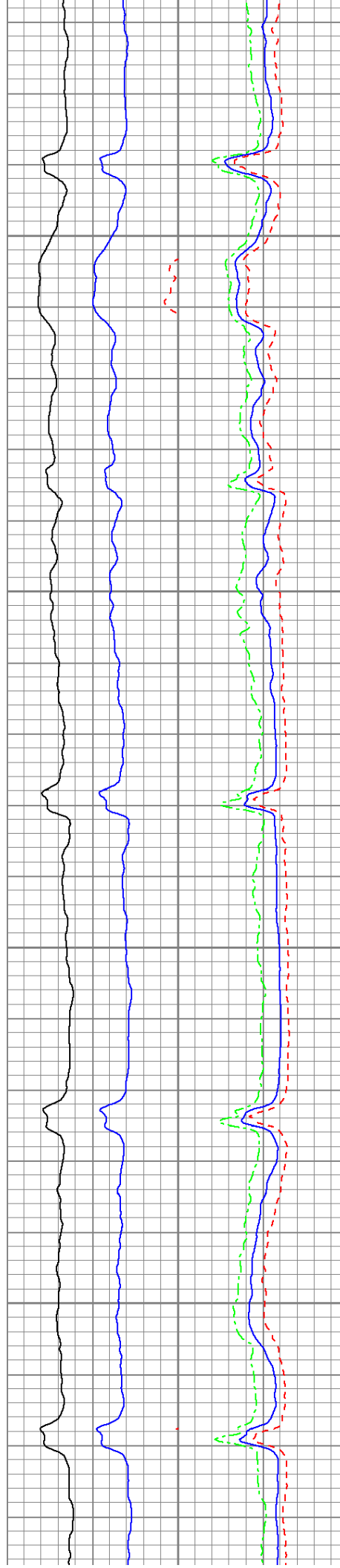
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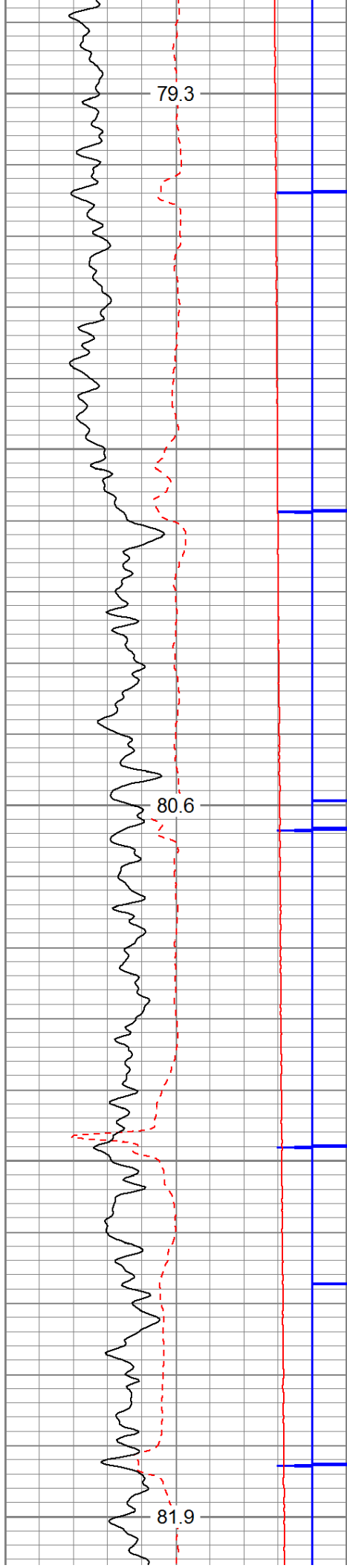




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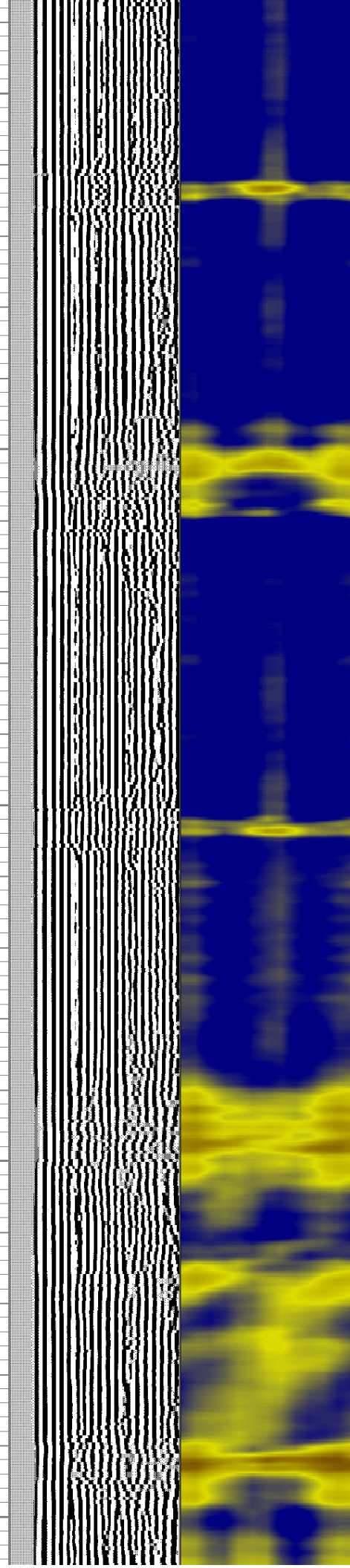
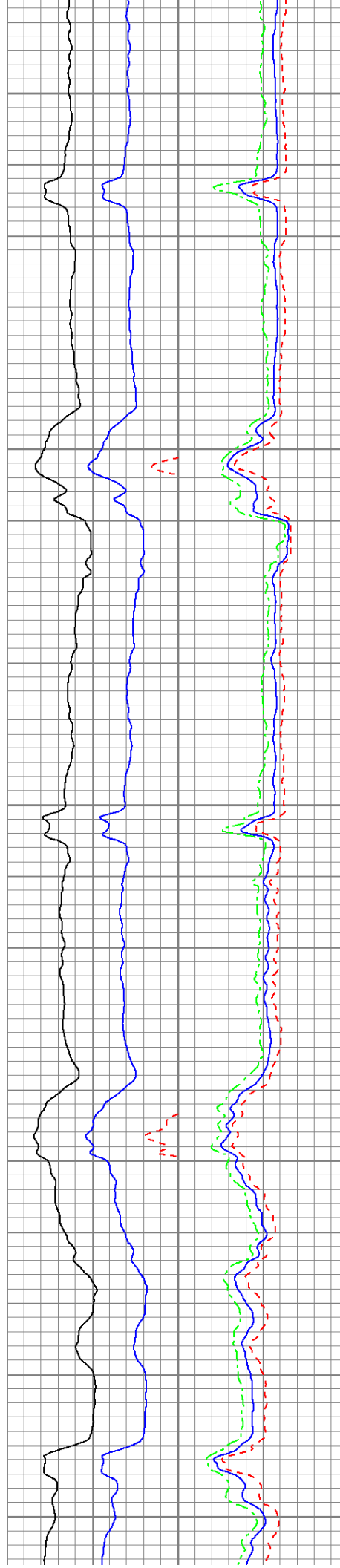


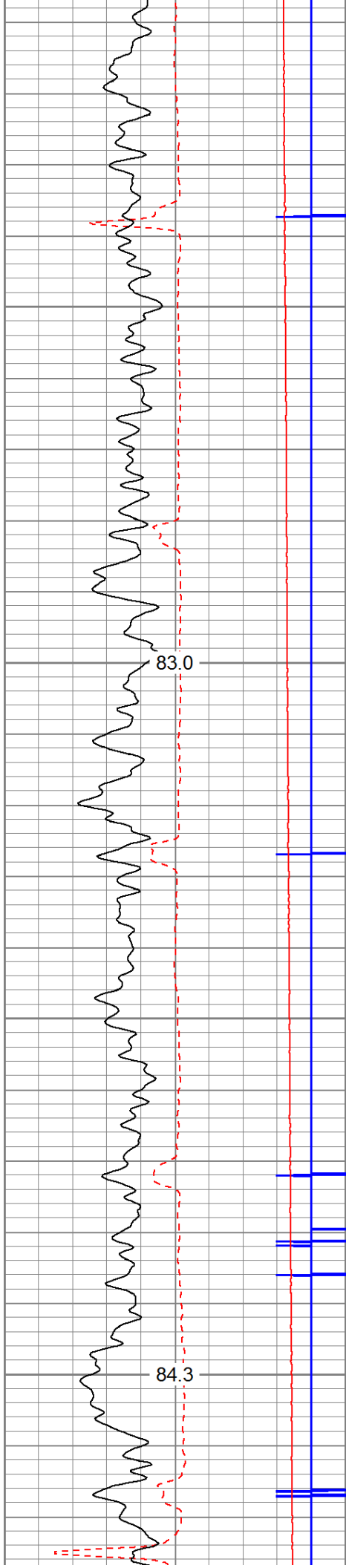


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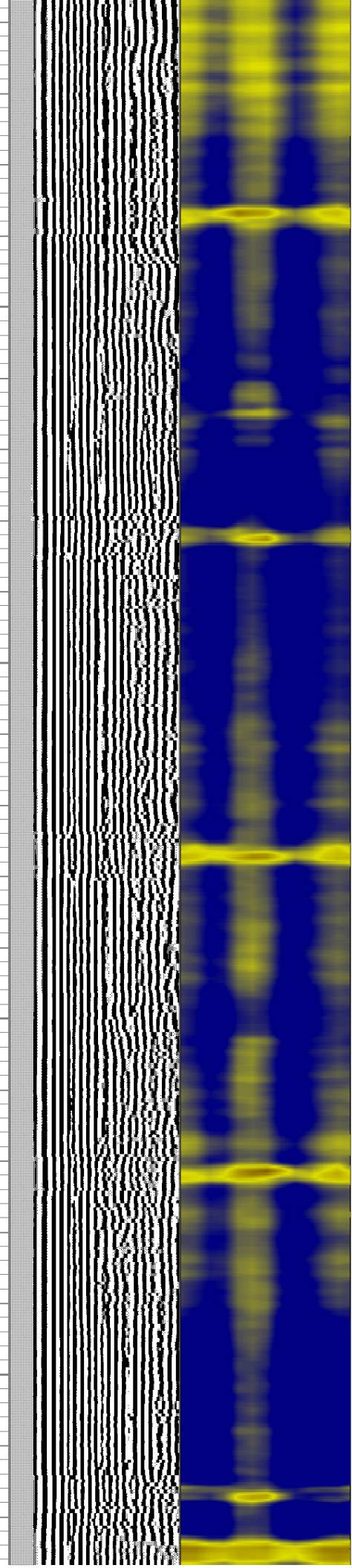
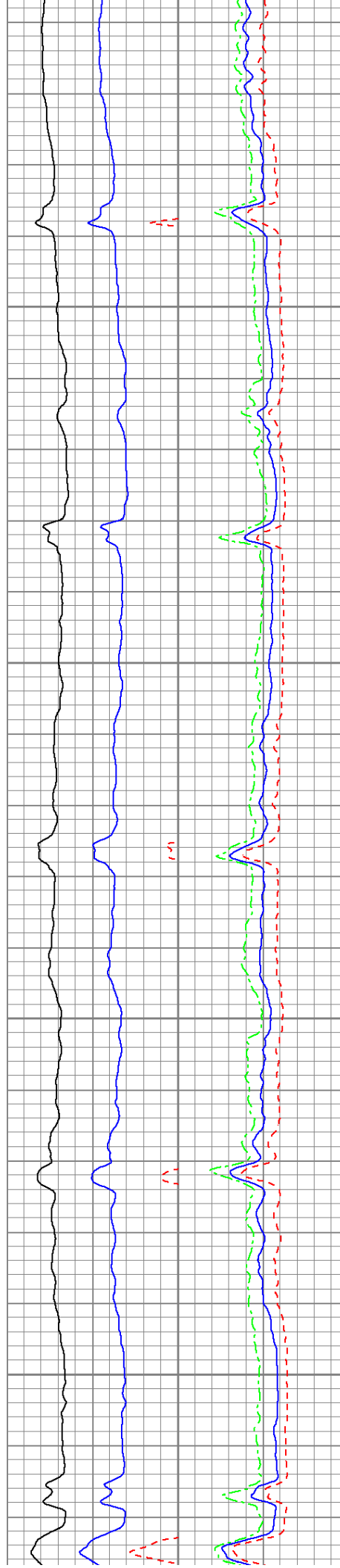
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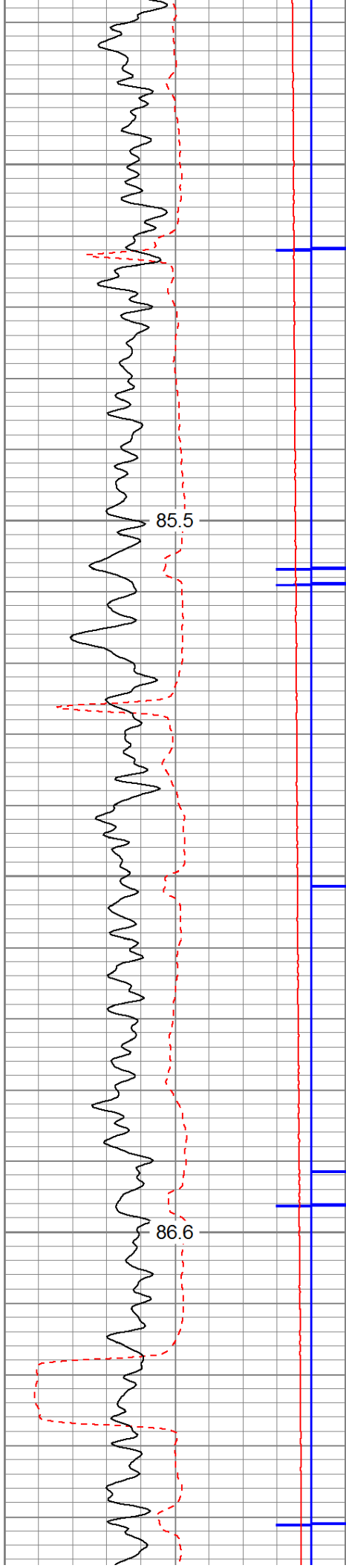




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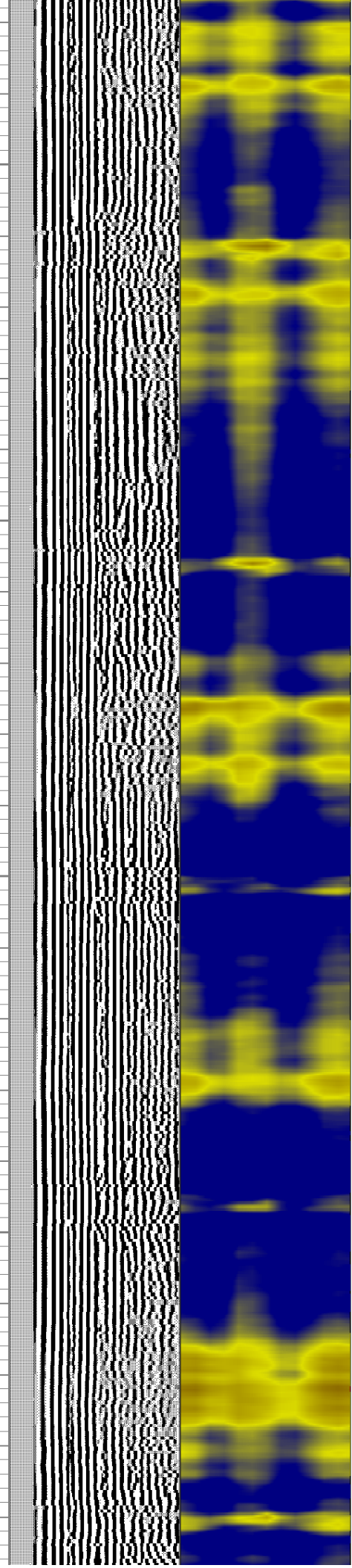
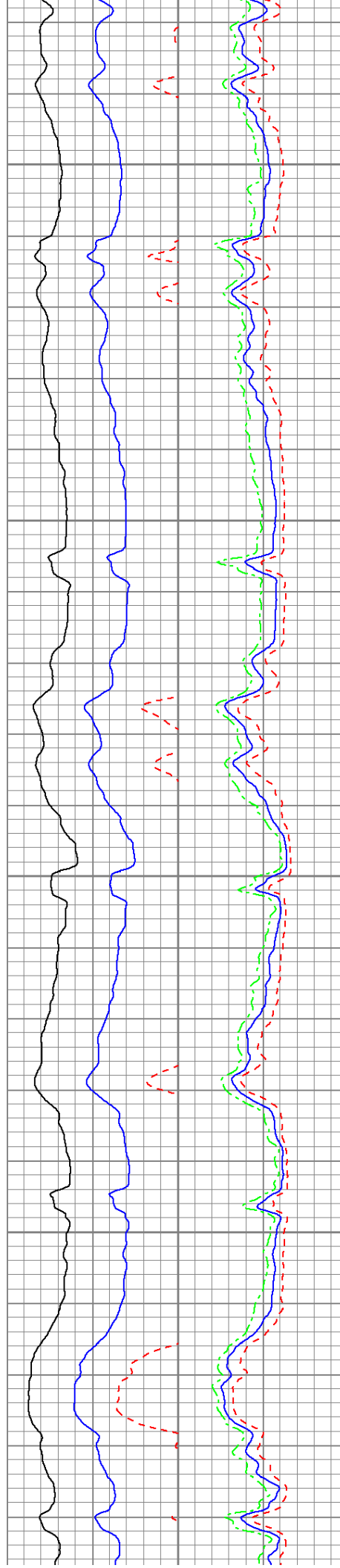
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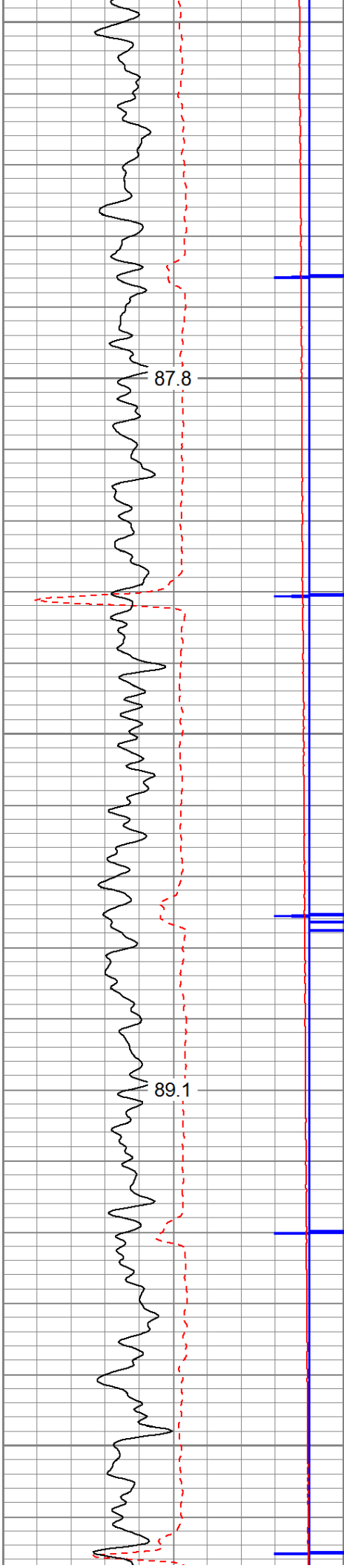




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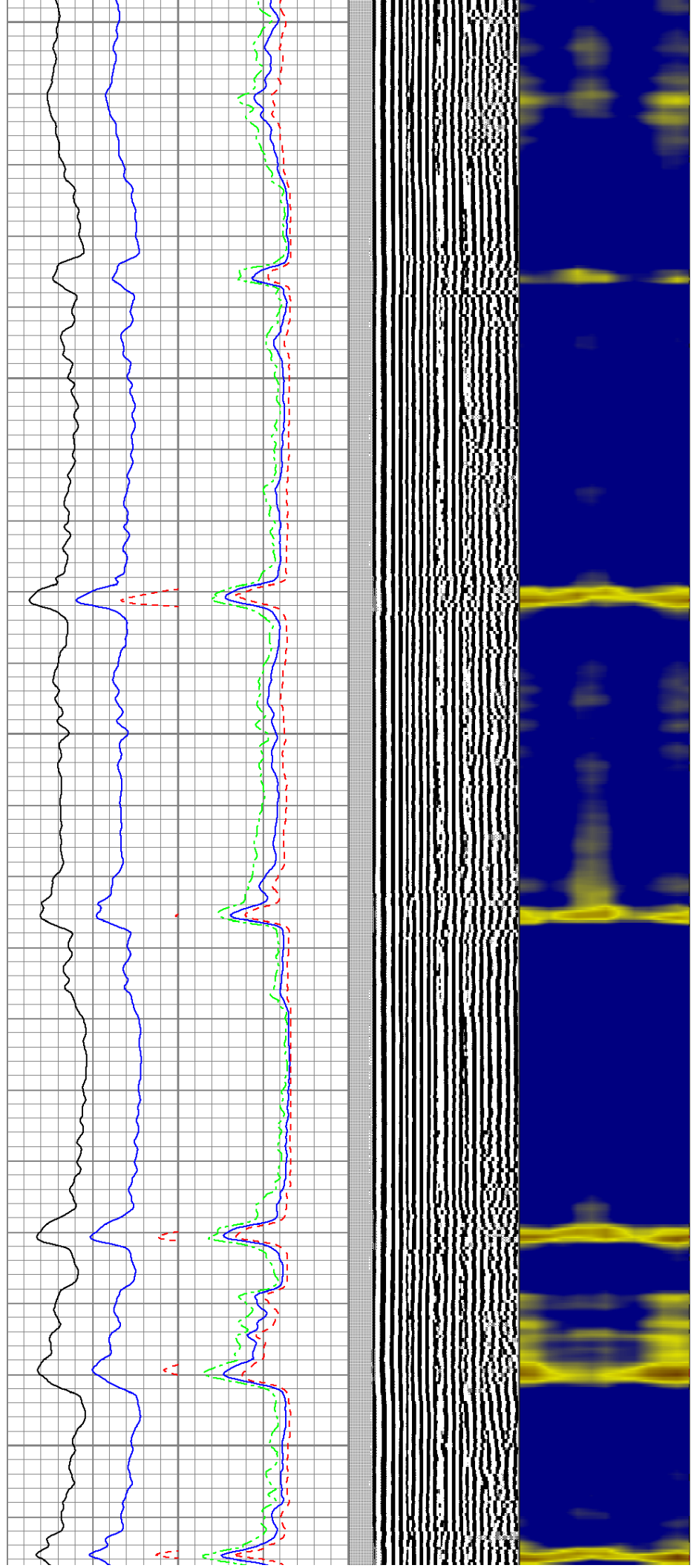
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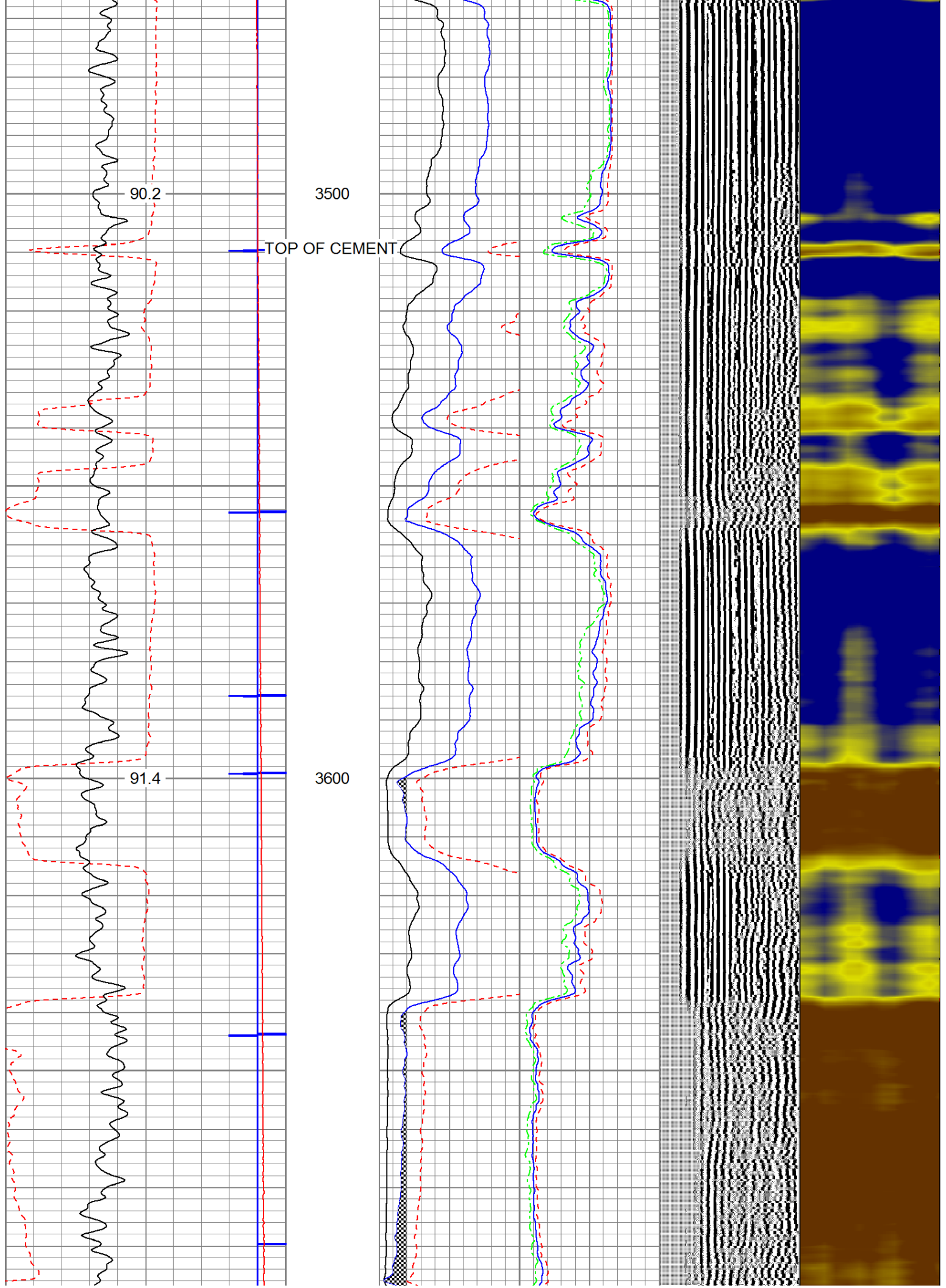


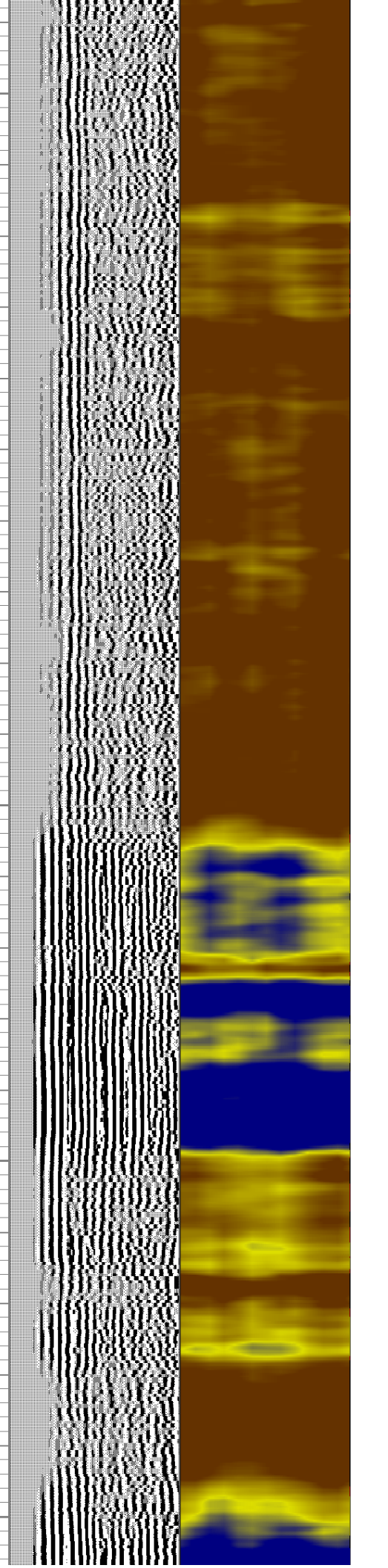
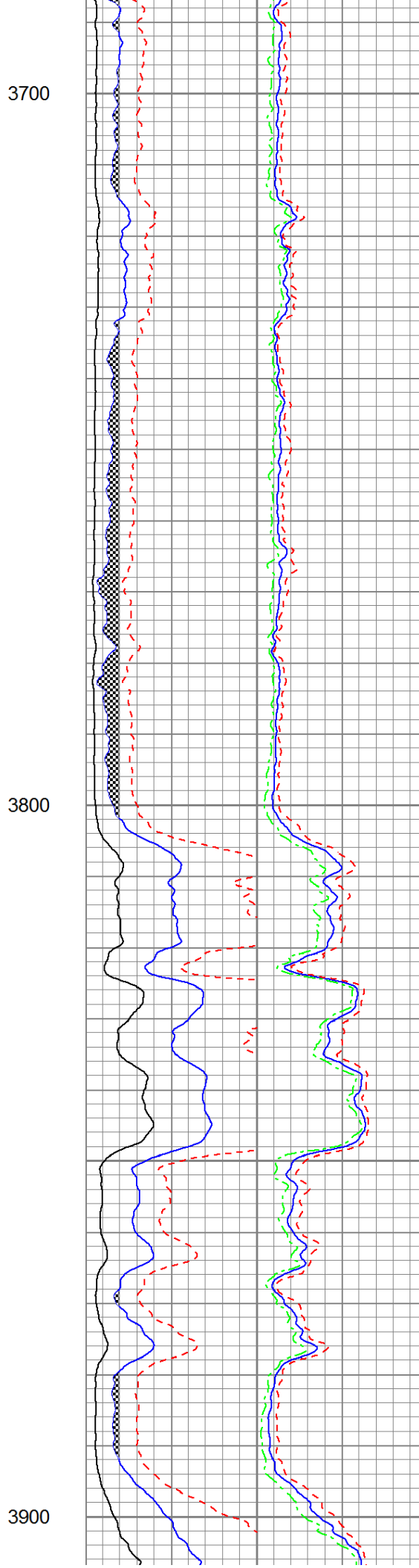
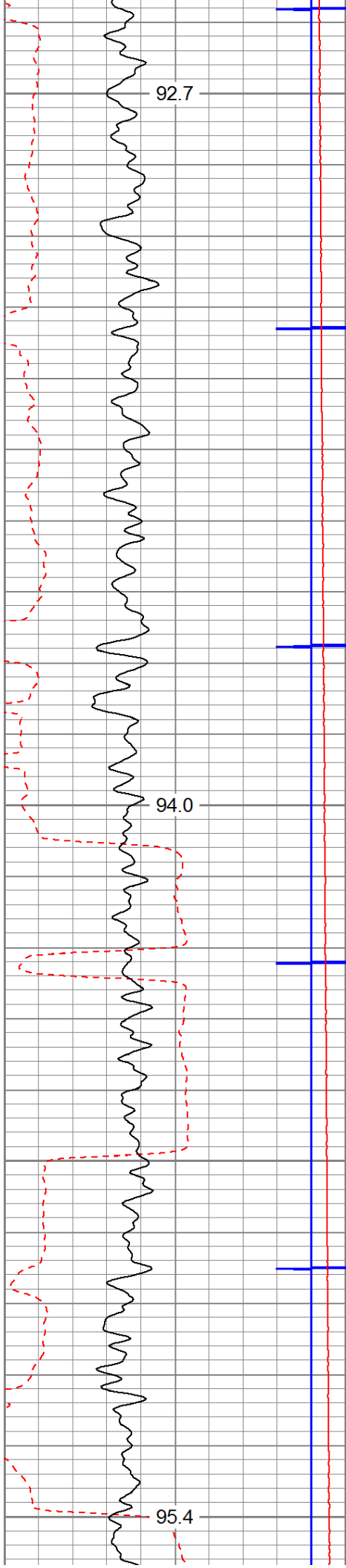


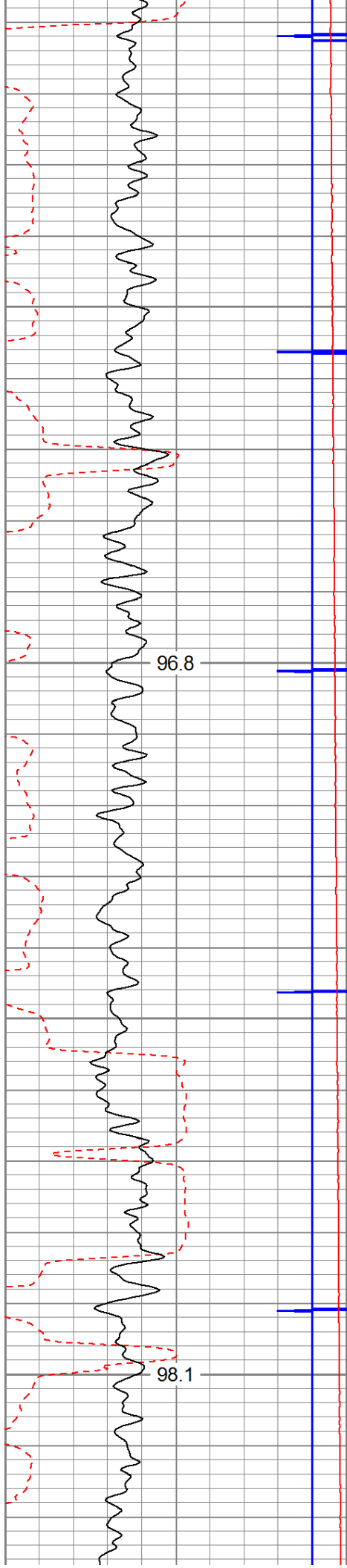
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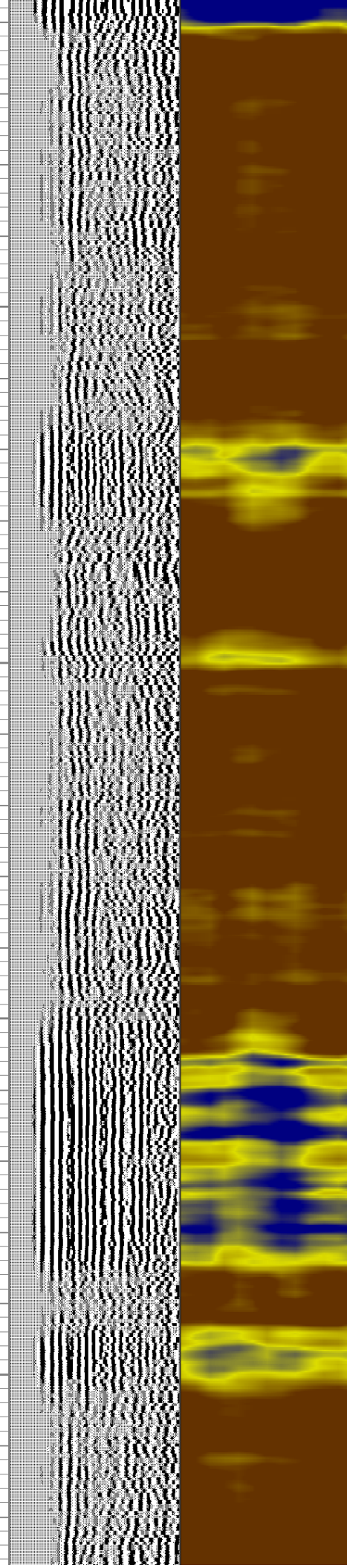
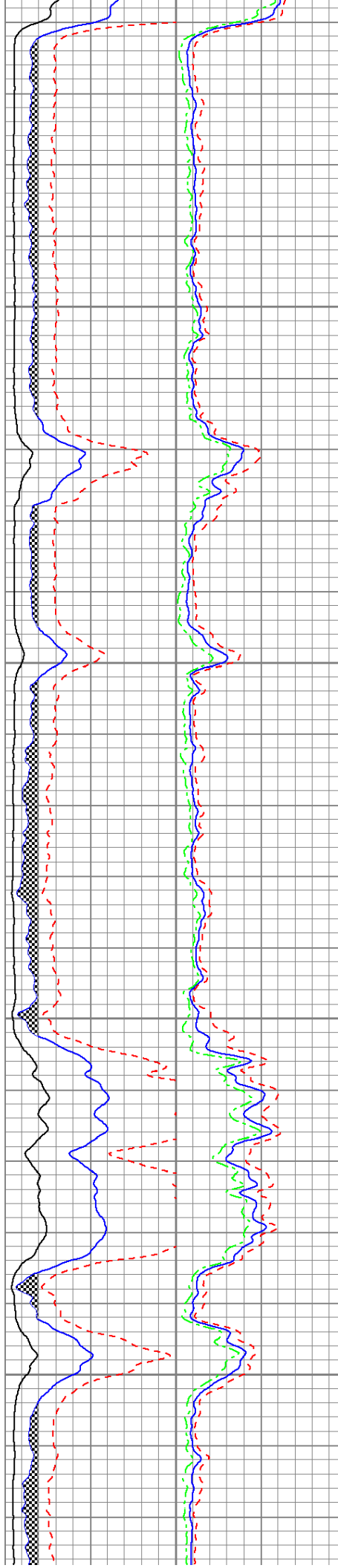


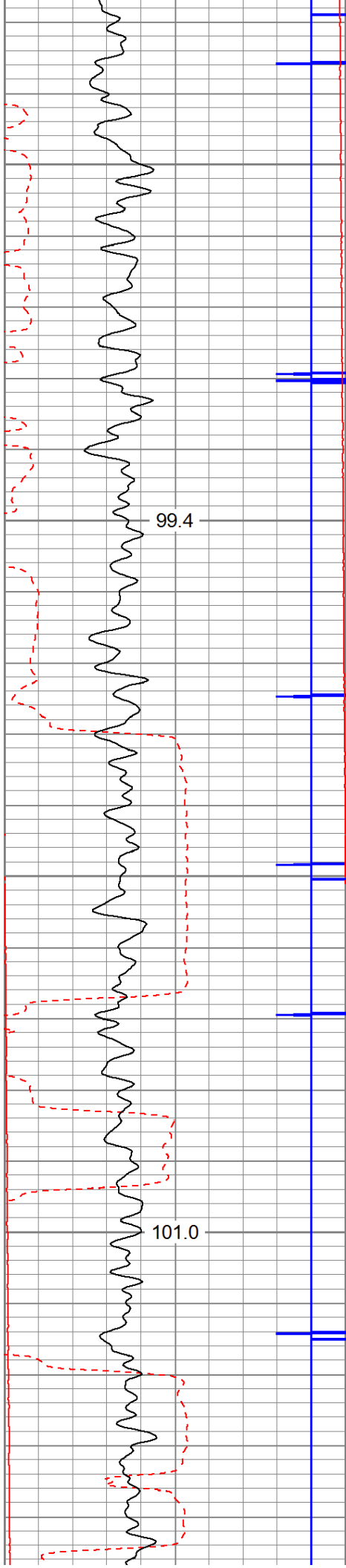




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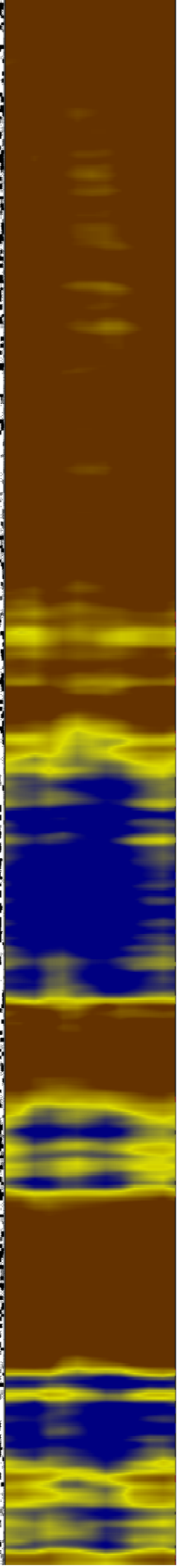
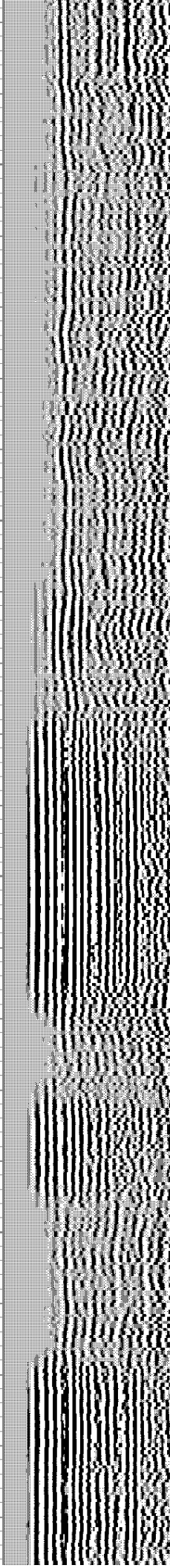
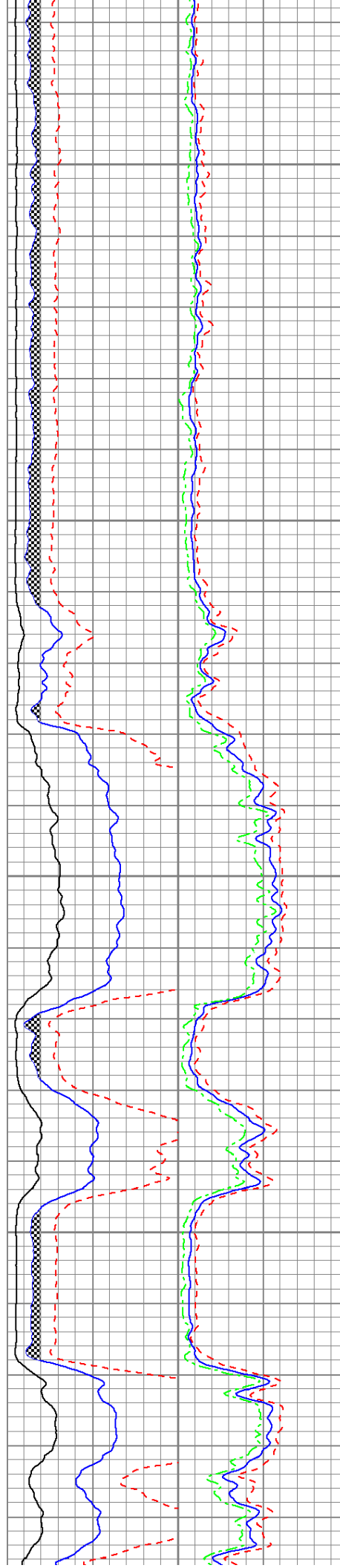
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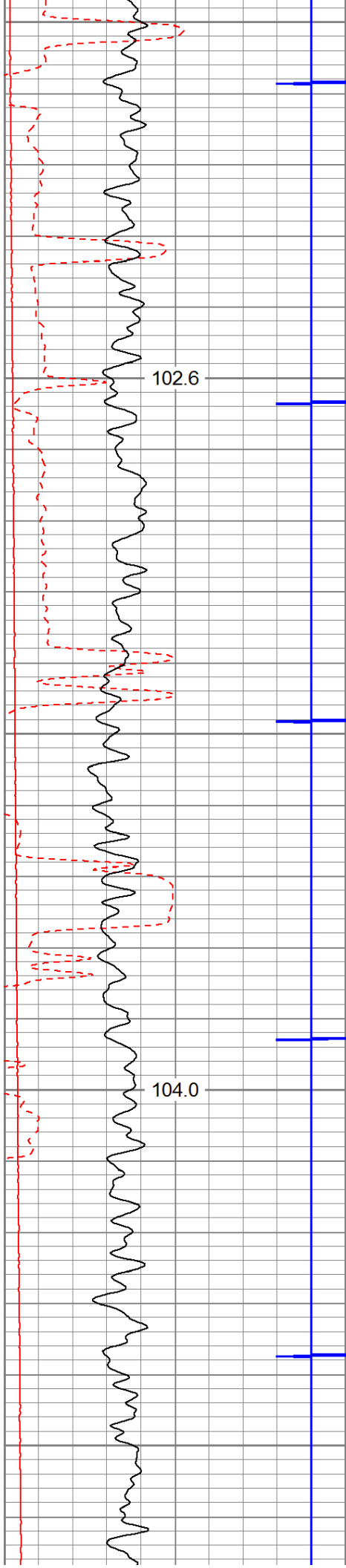




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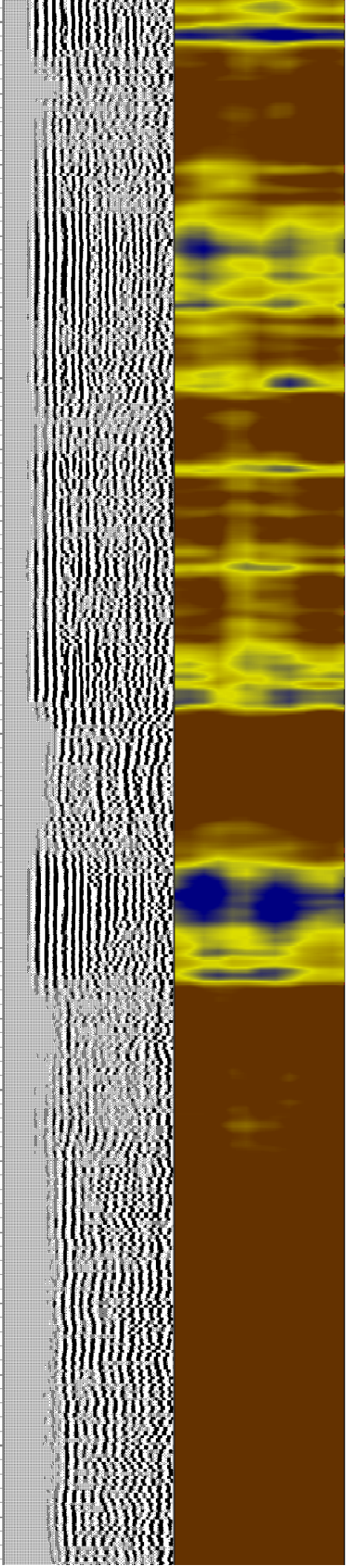
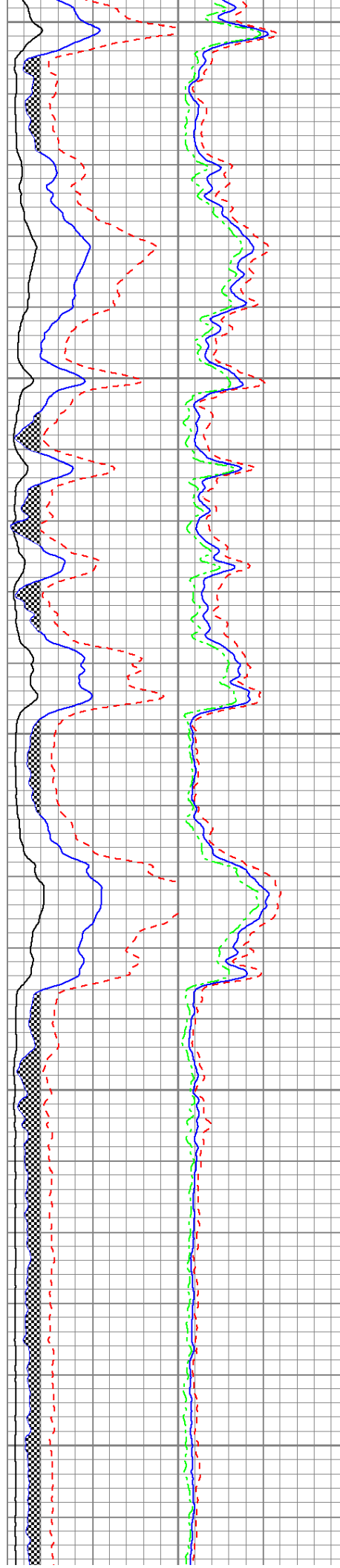
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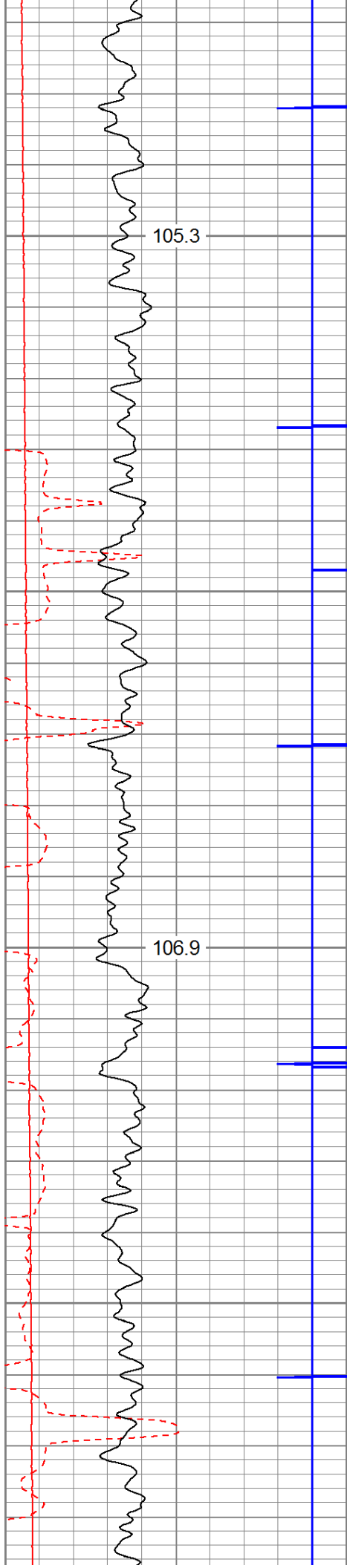




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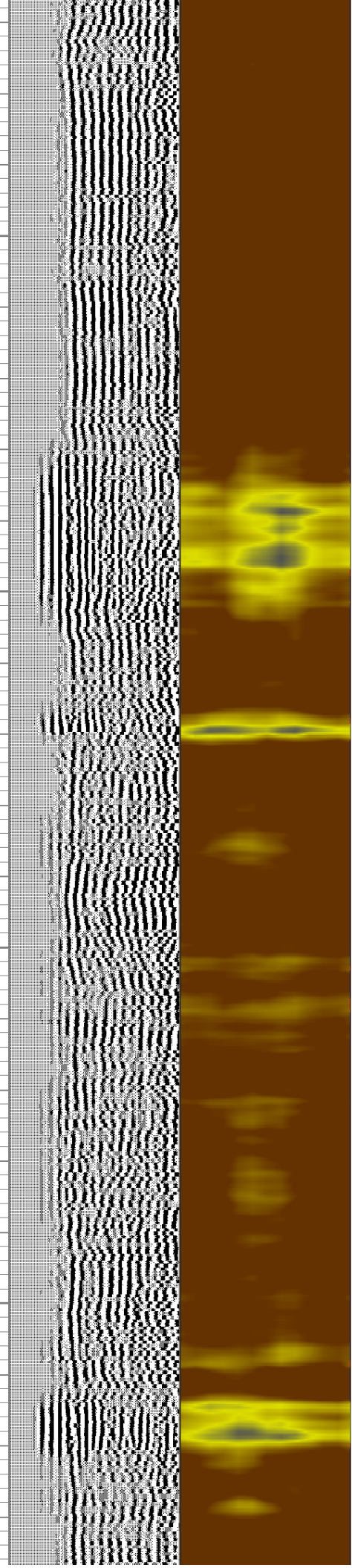
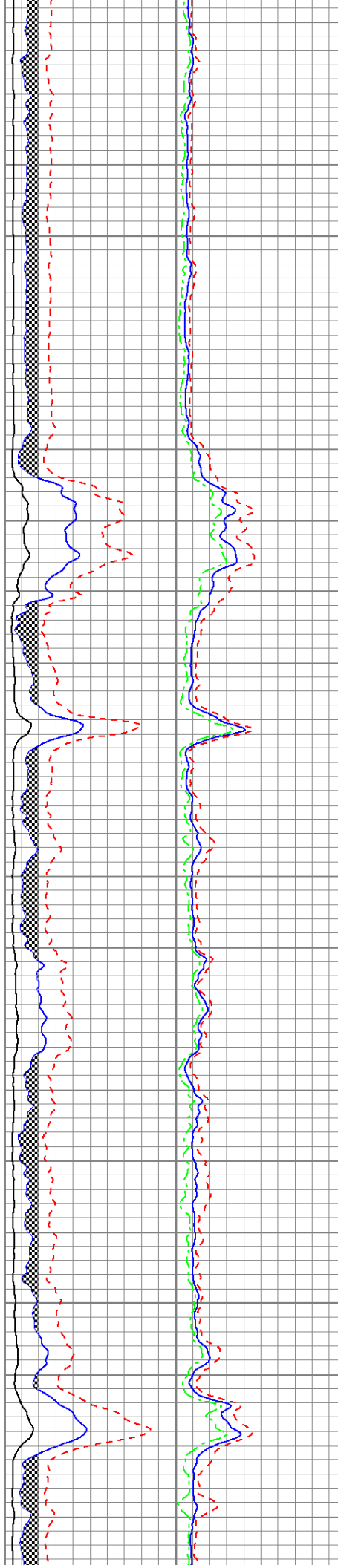
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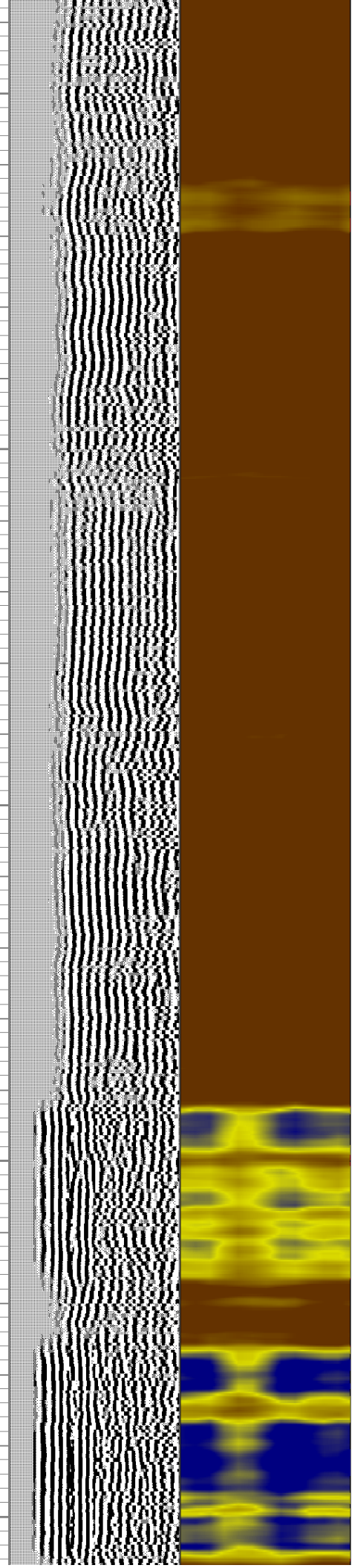
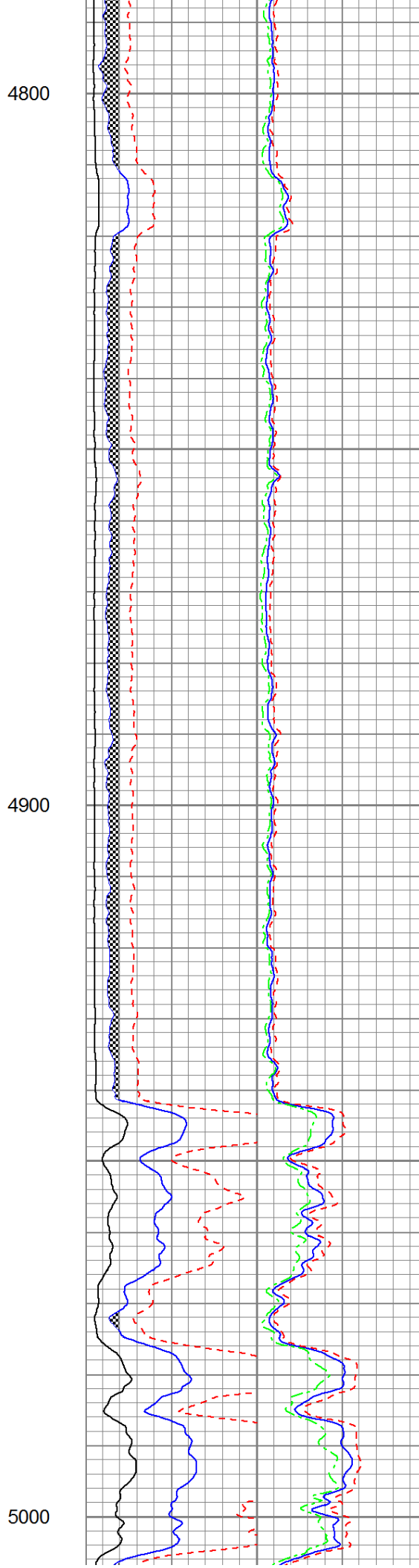
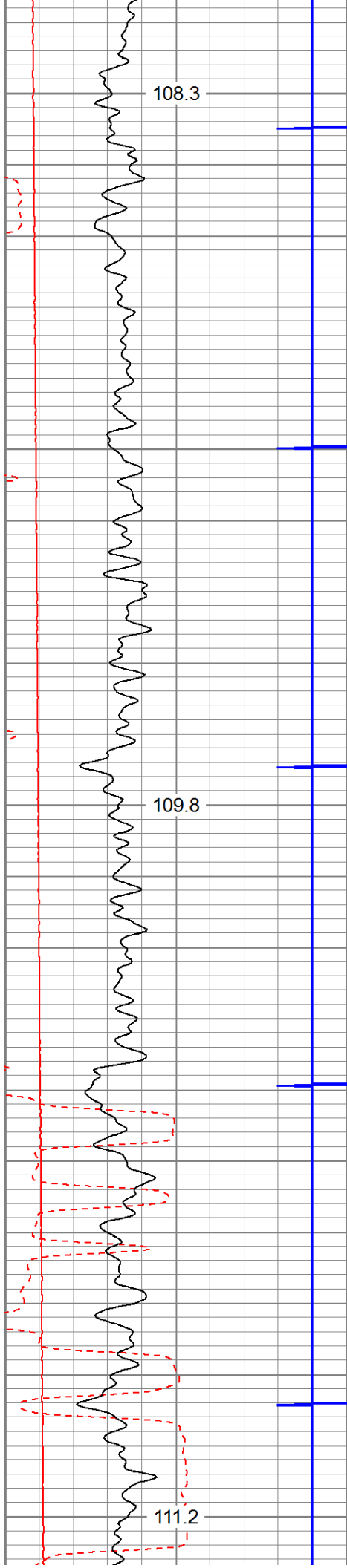


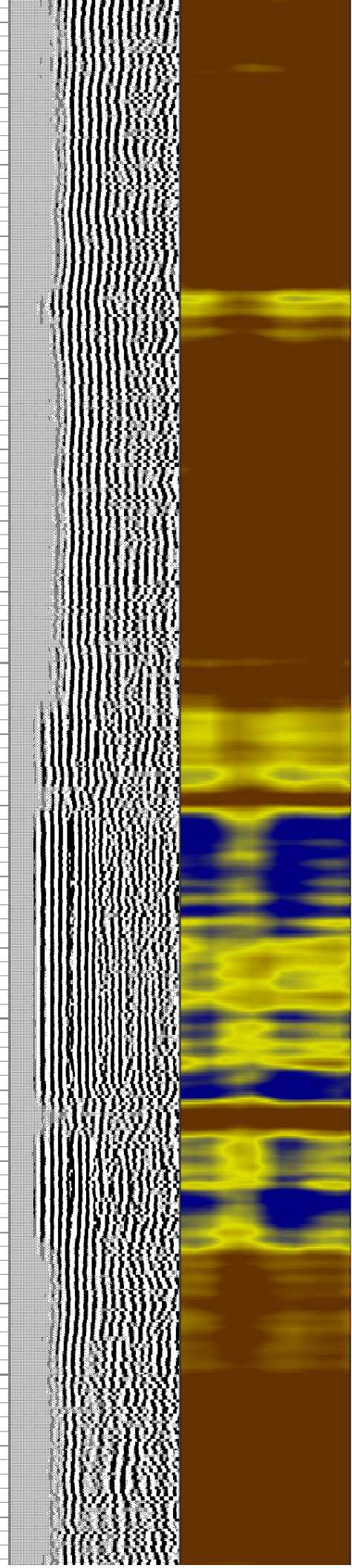
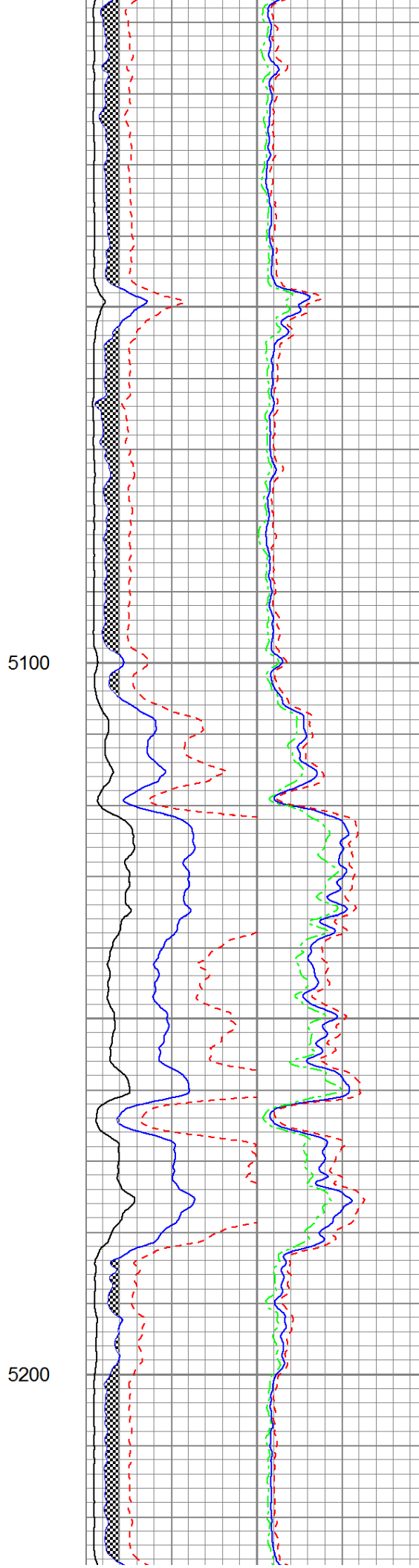
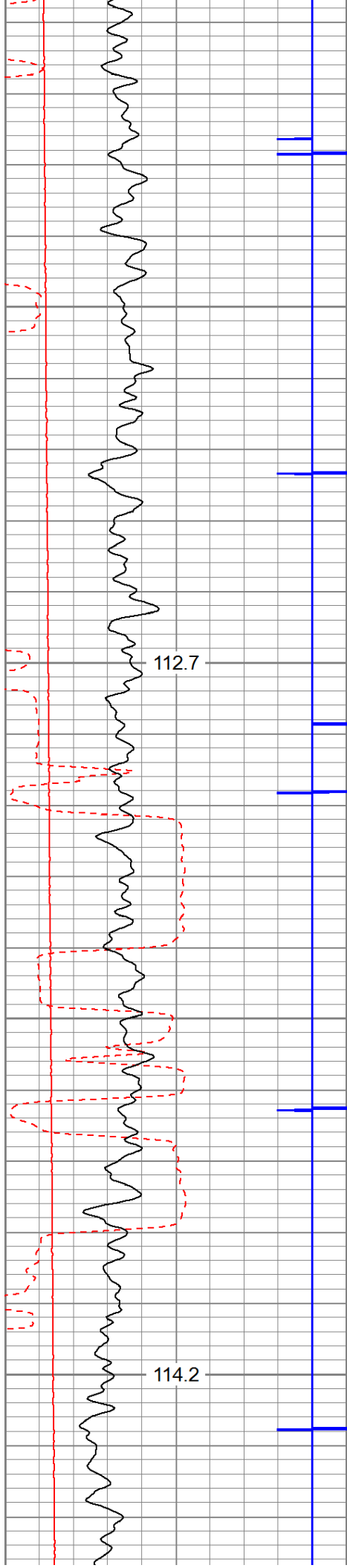


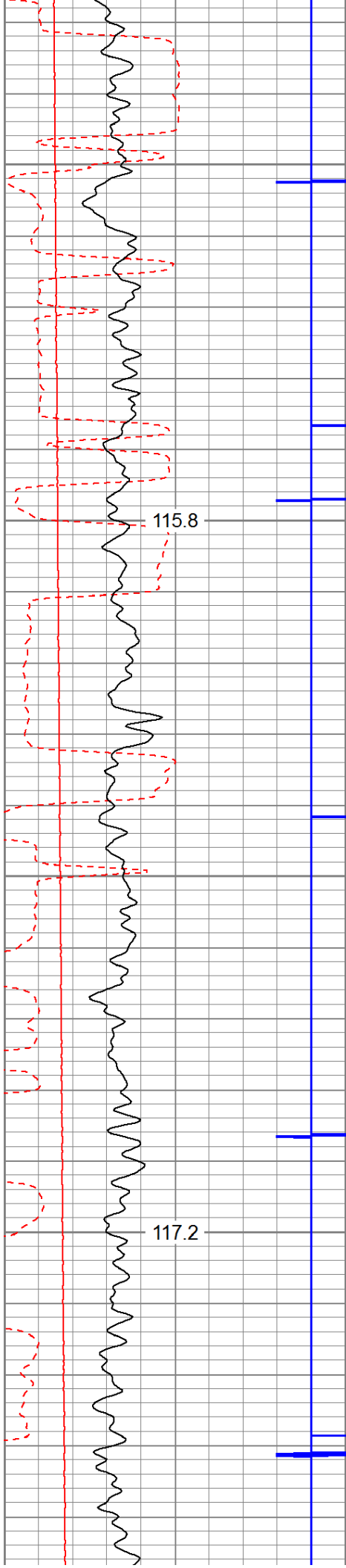
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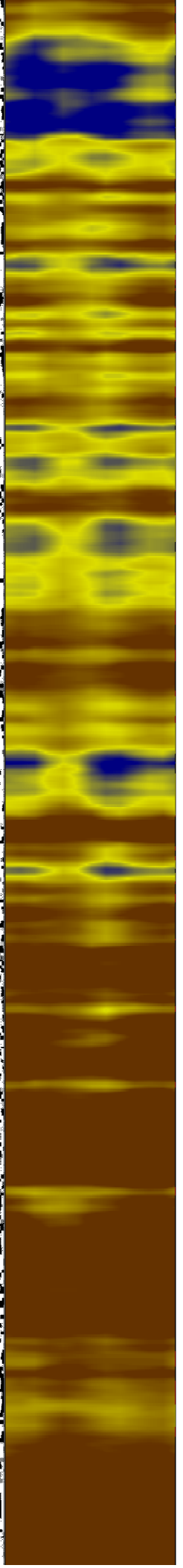
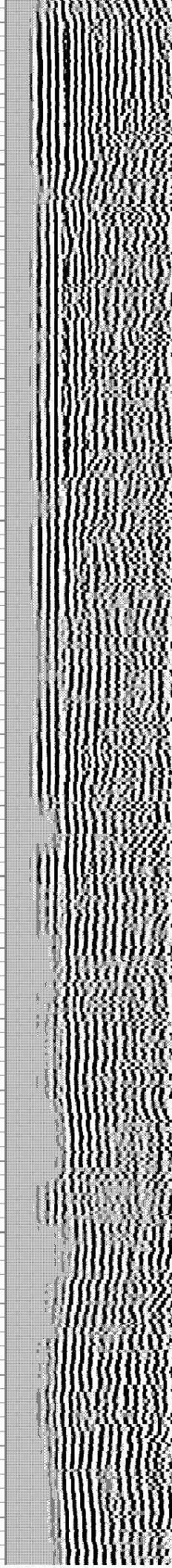
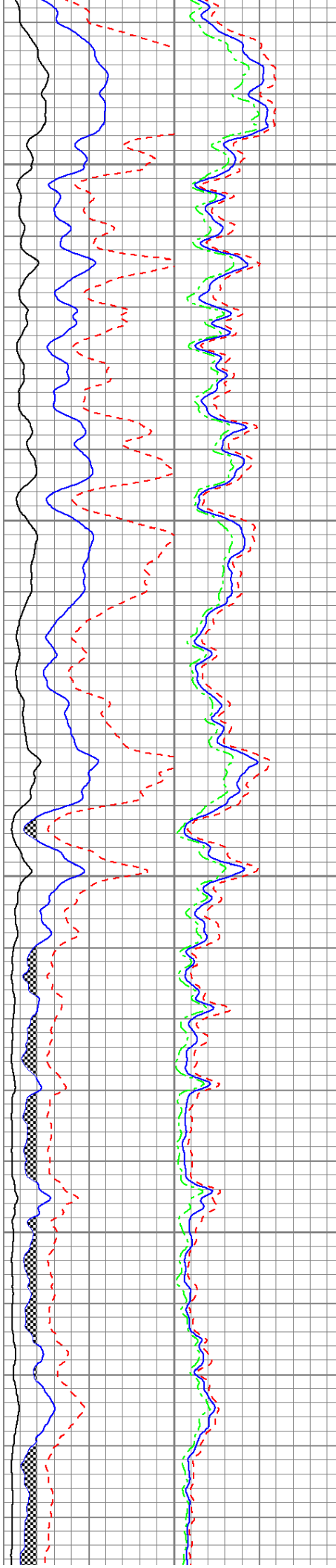


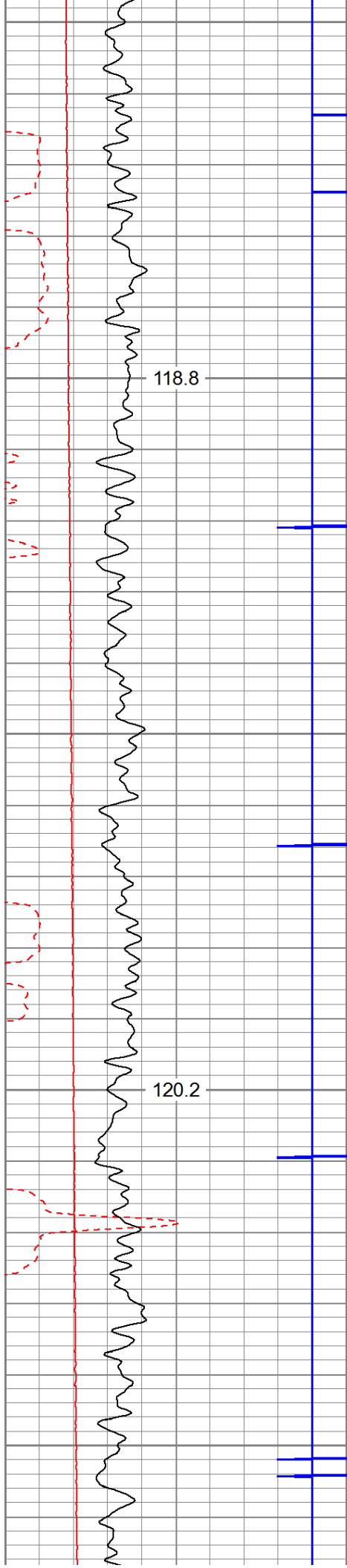




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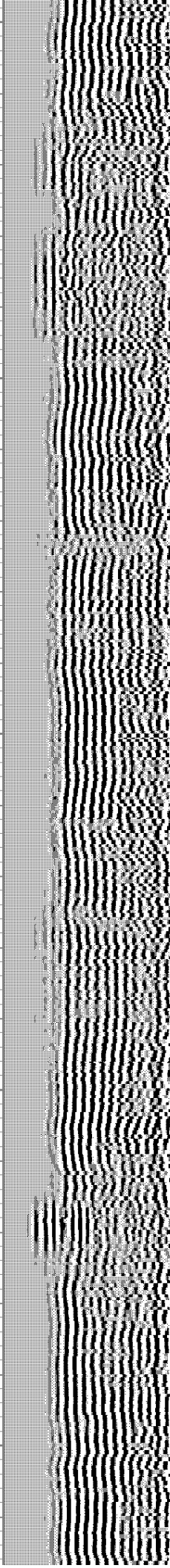
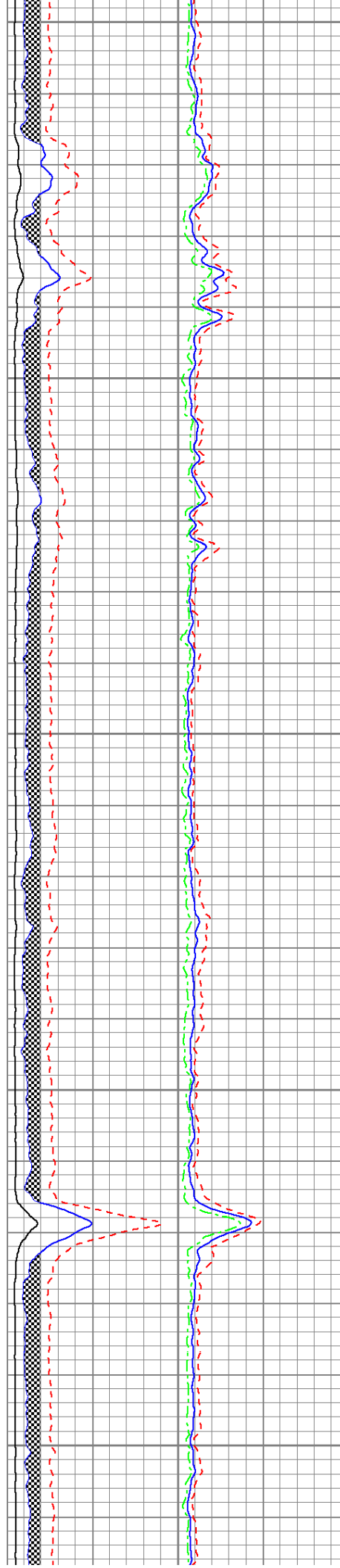
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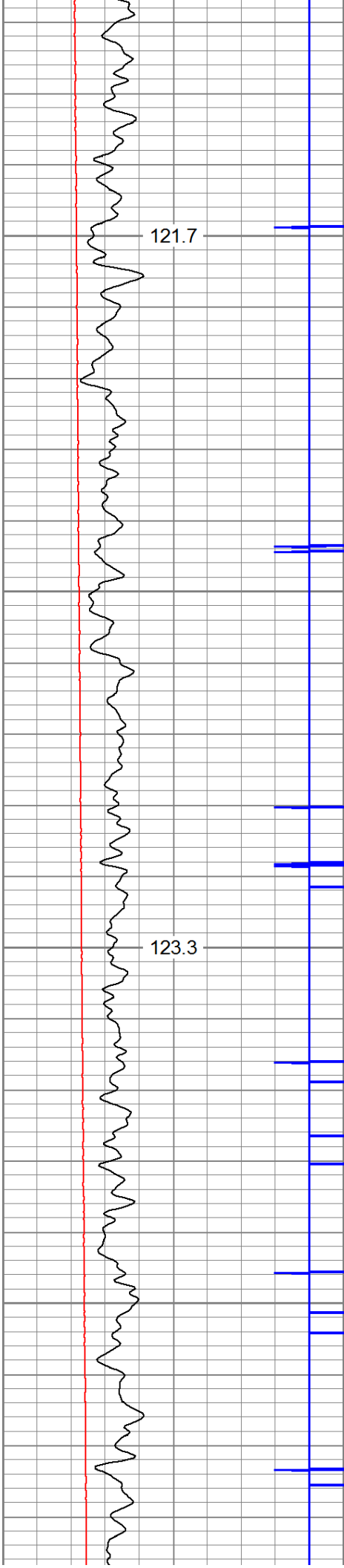




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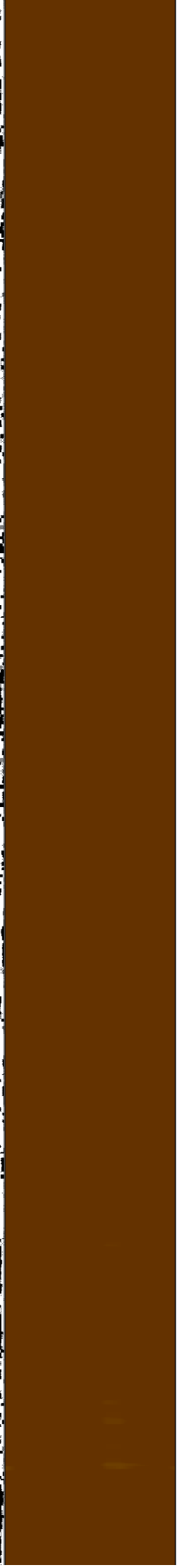
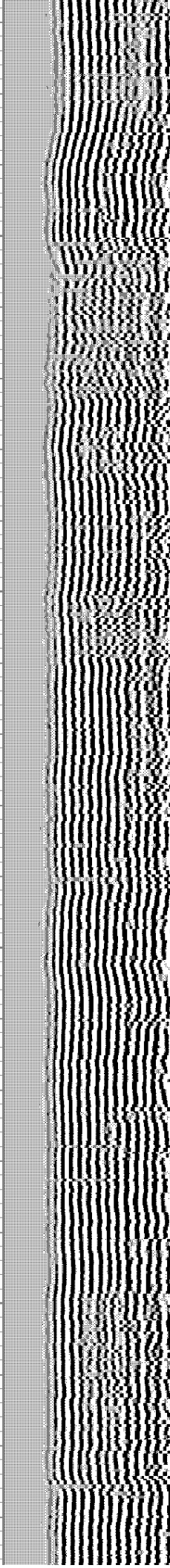
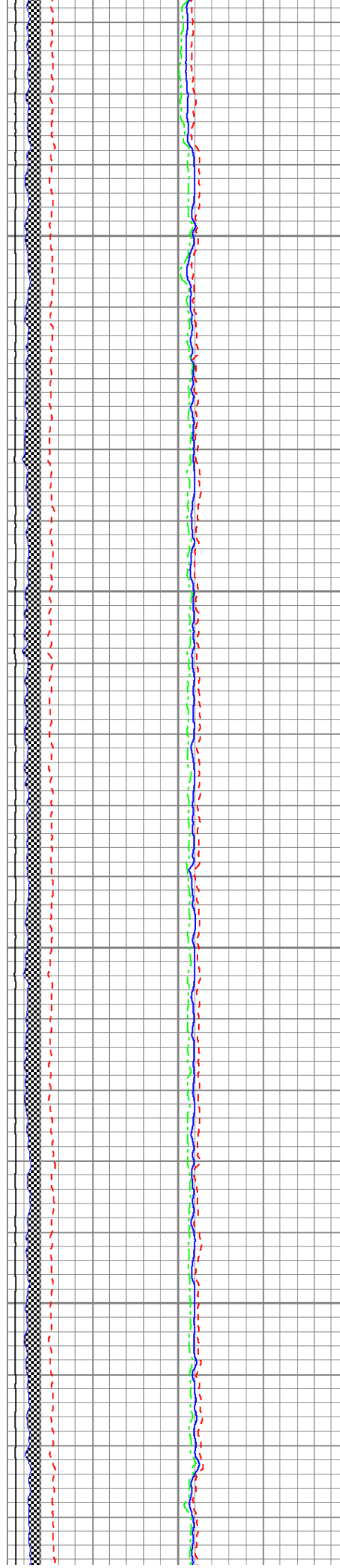
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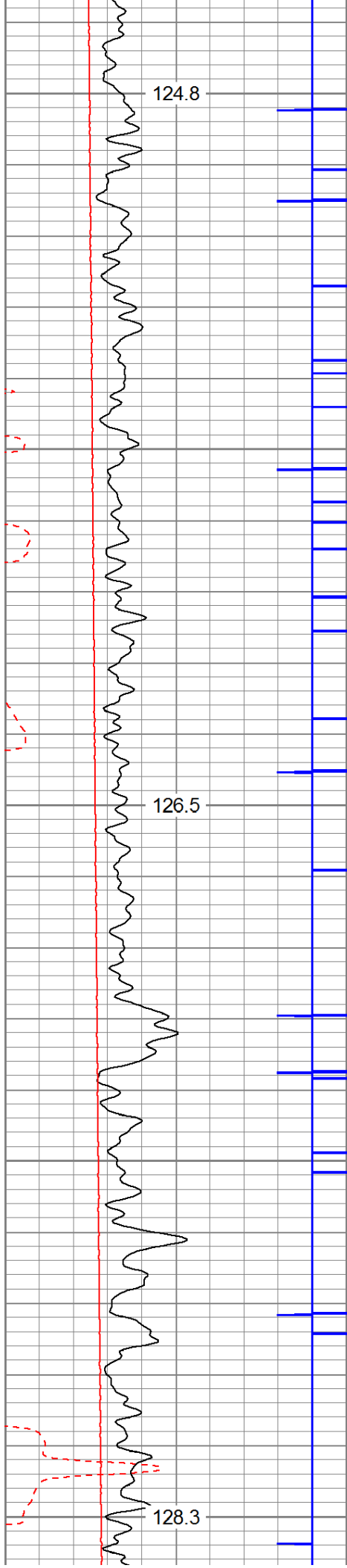




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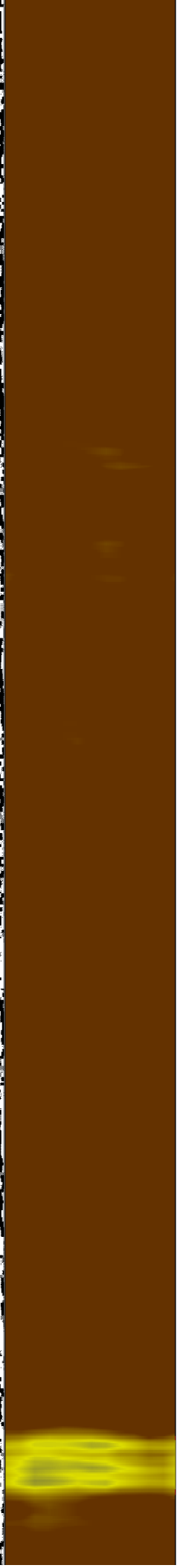
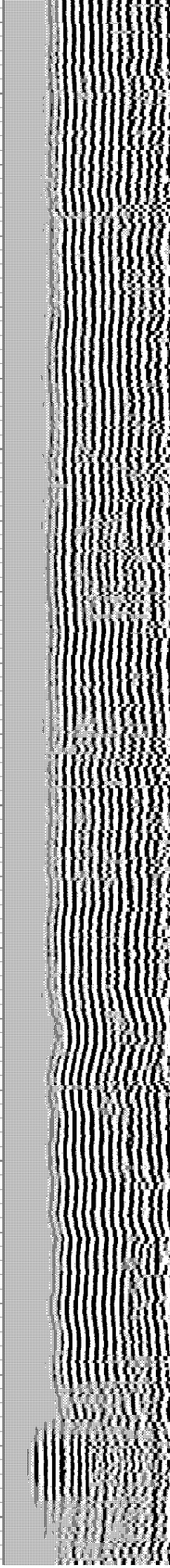
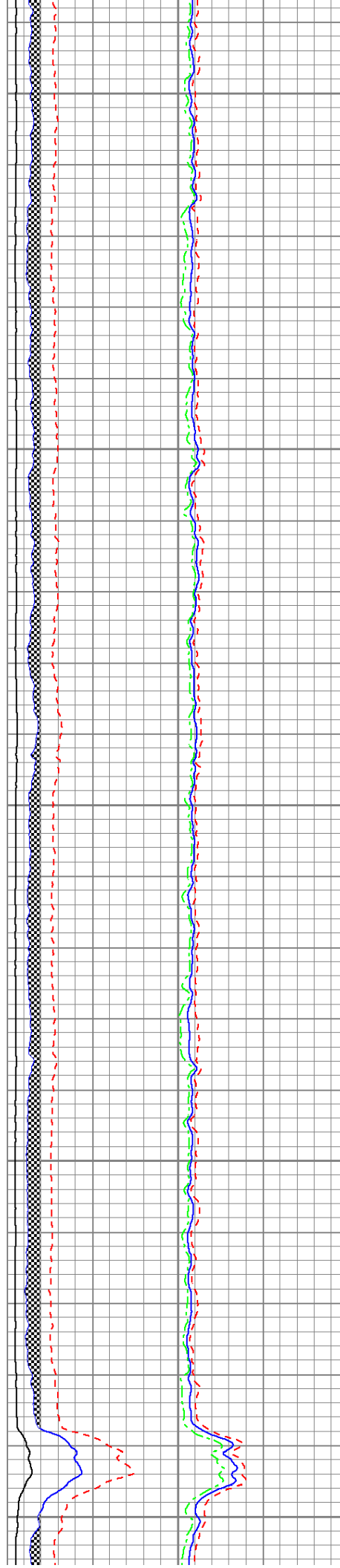


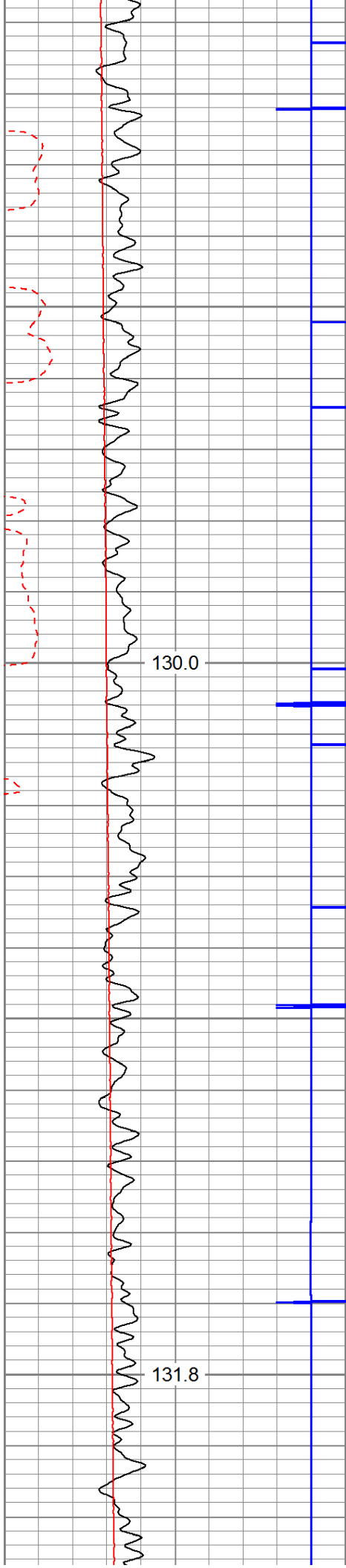


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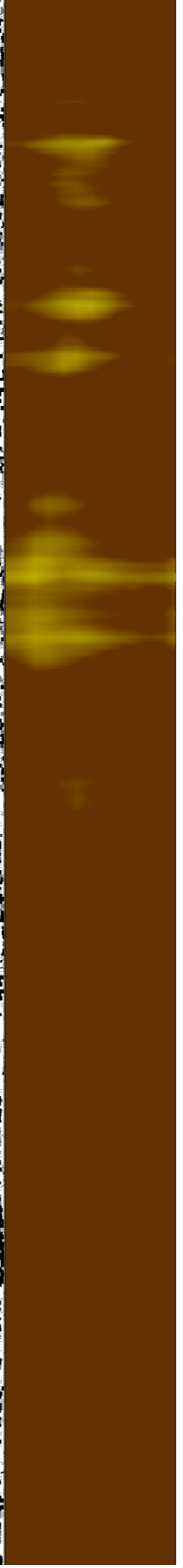
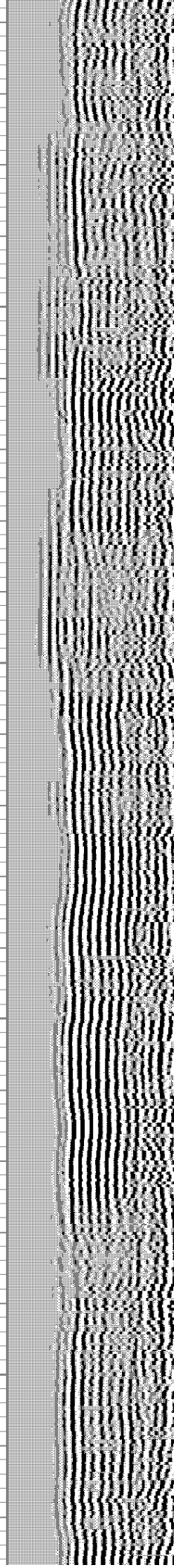
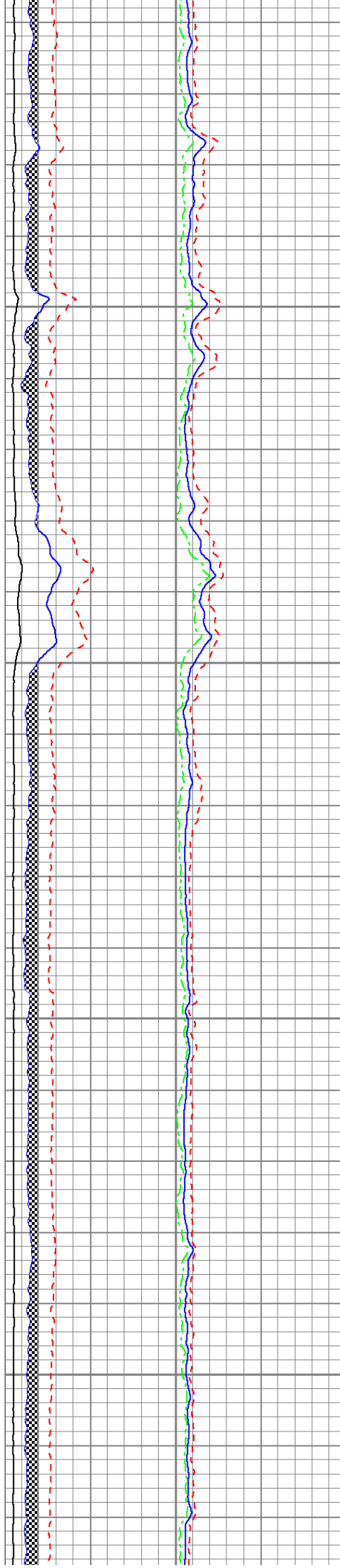
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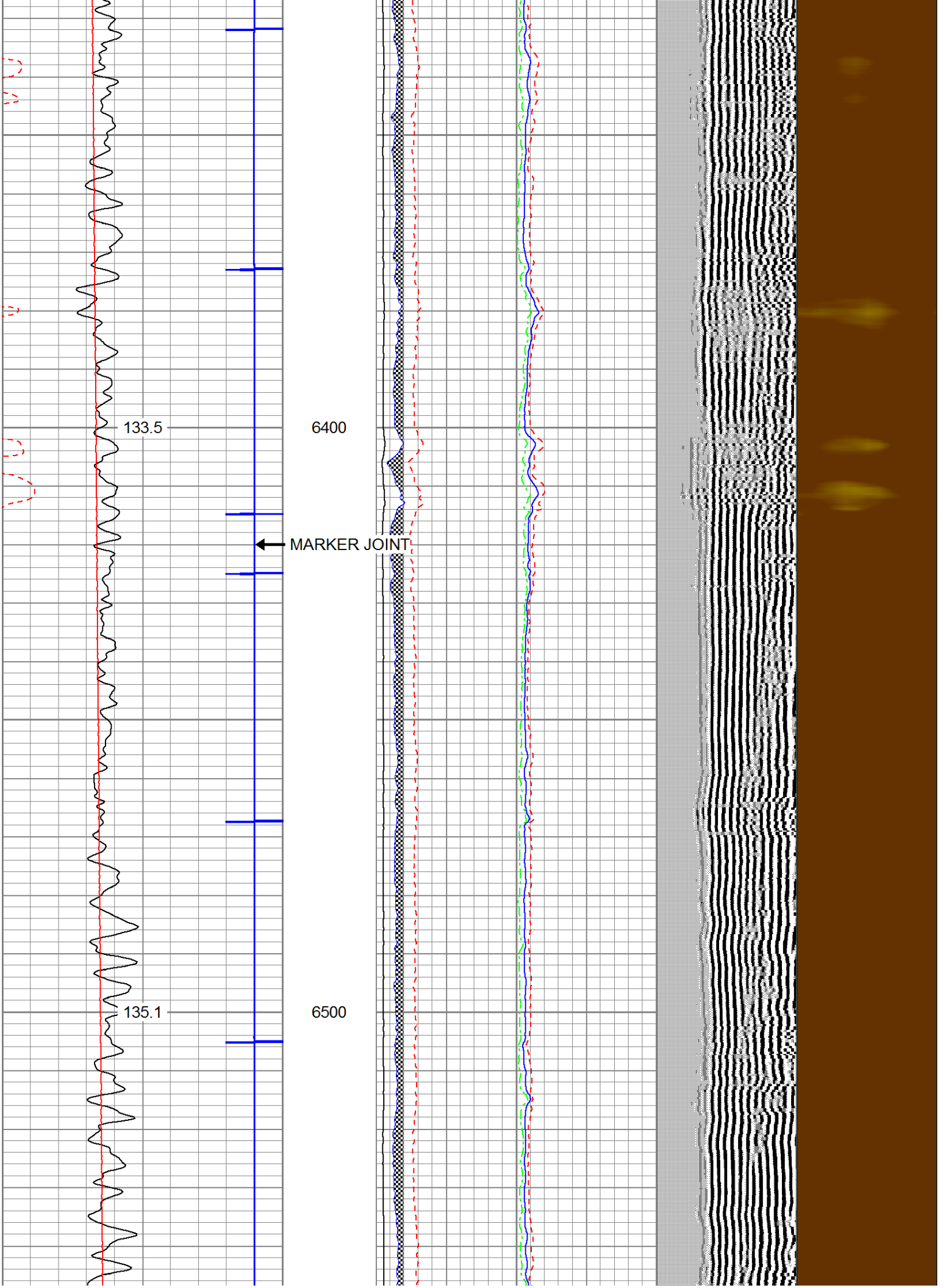


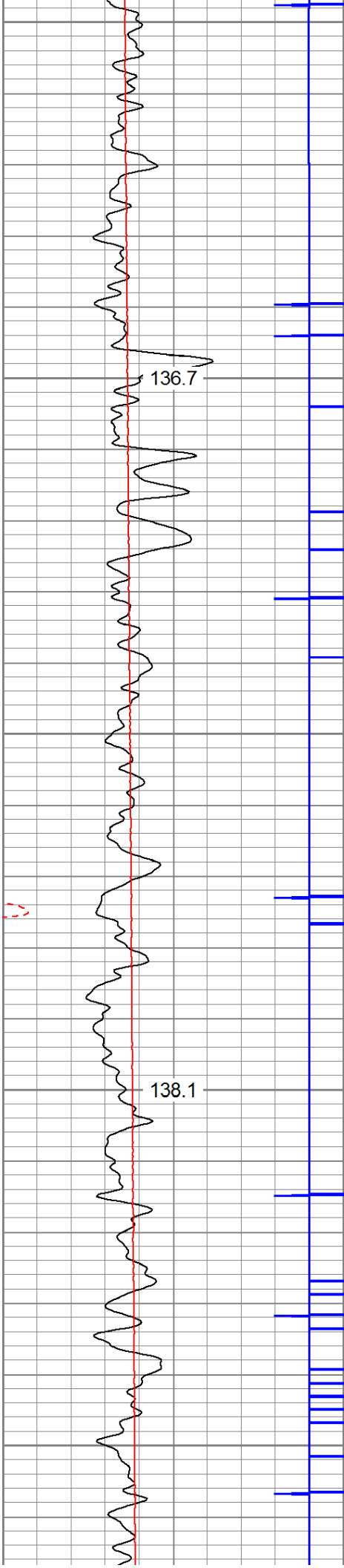


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6300

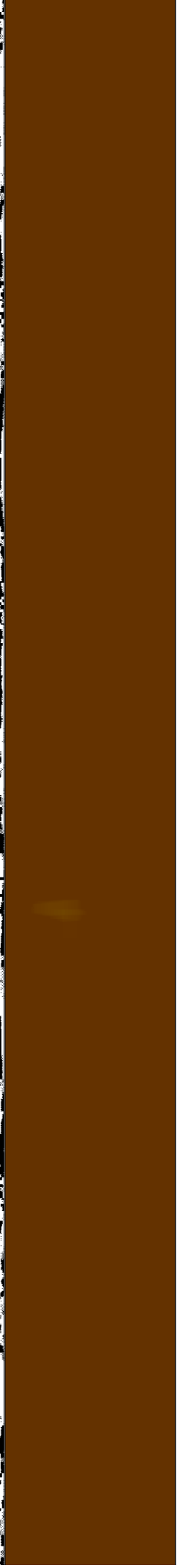
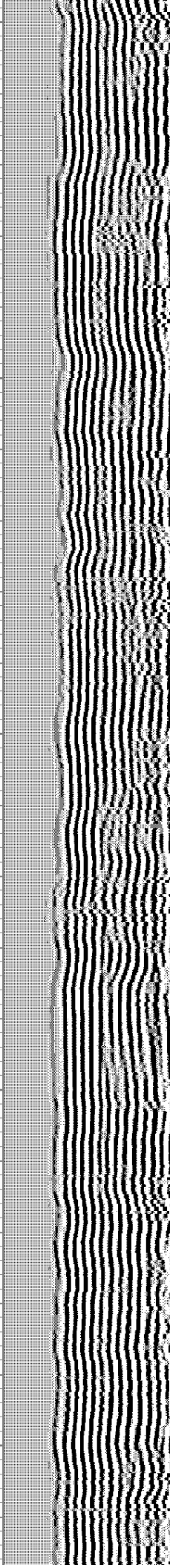


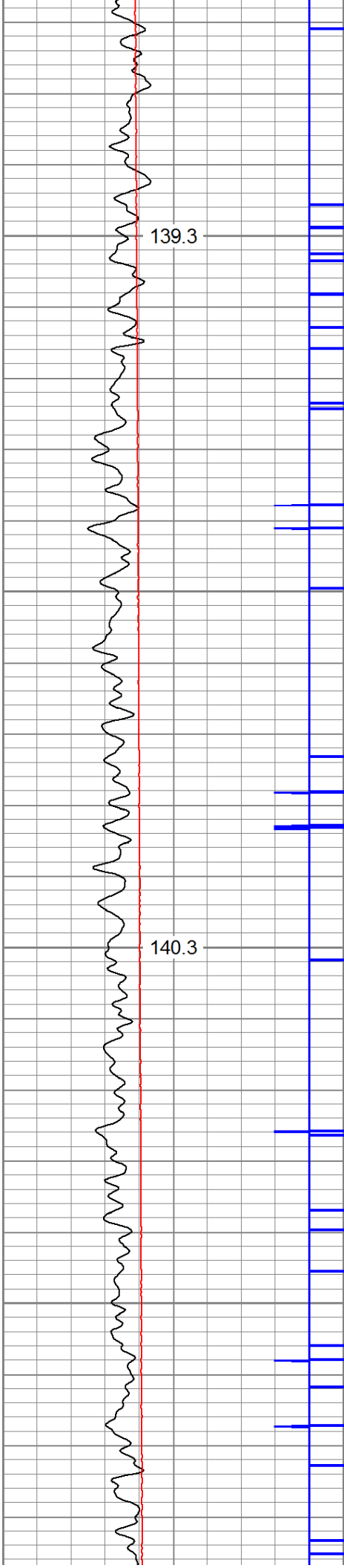




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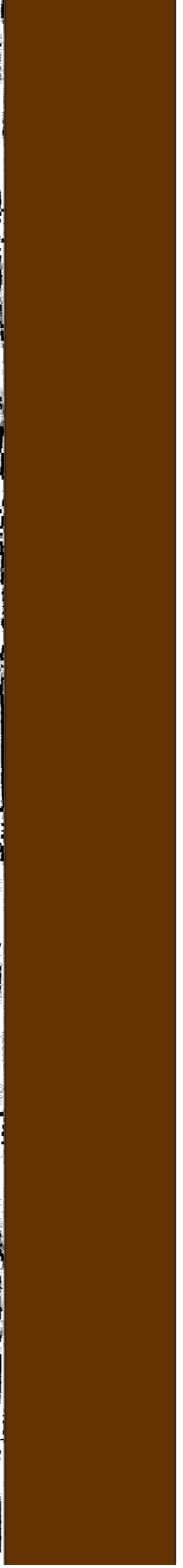
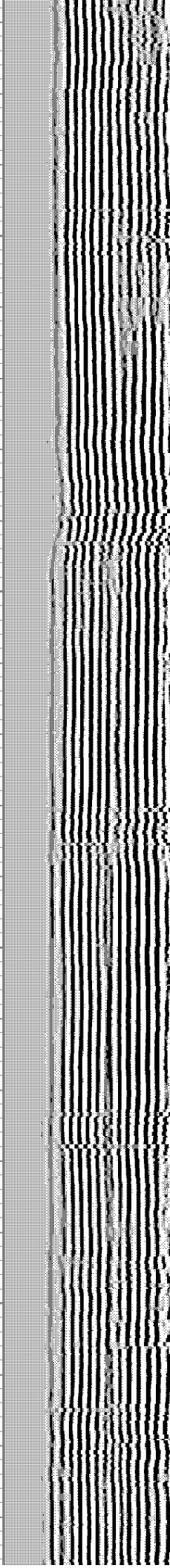
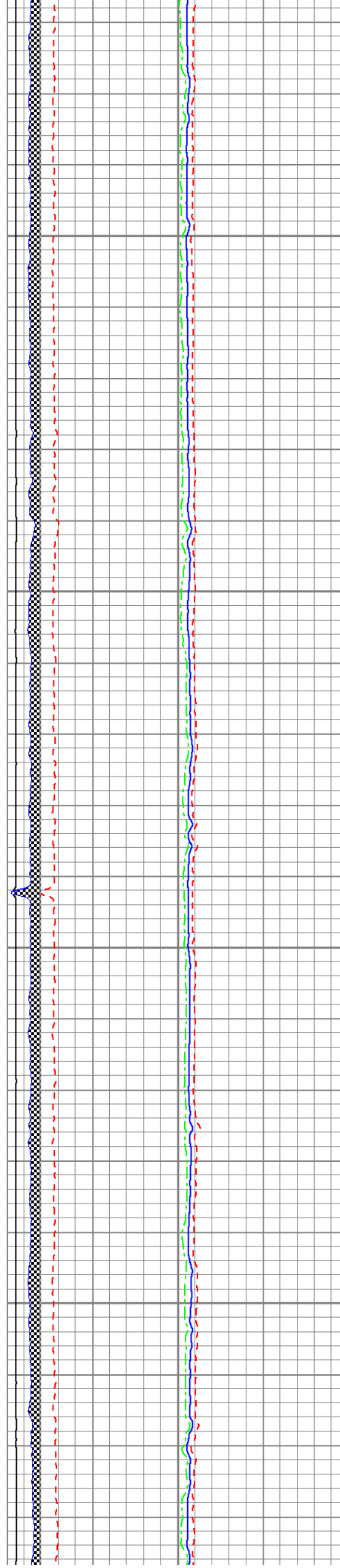
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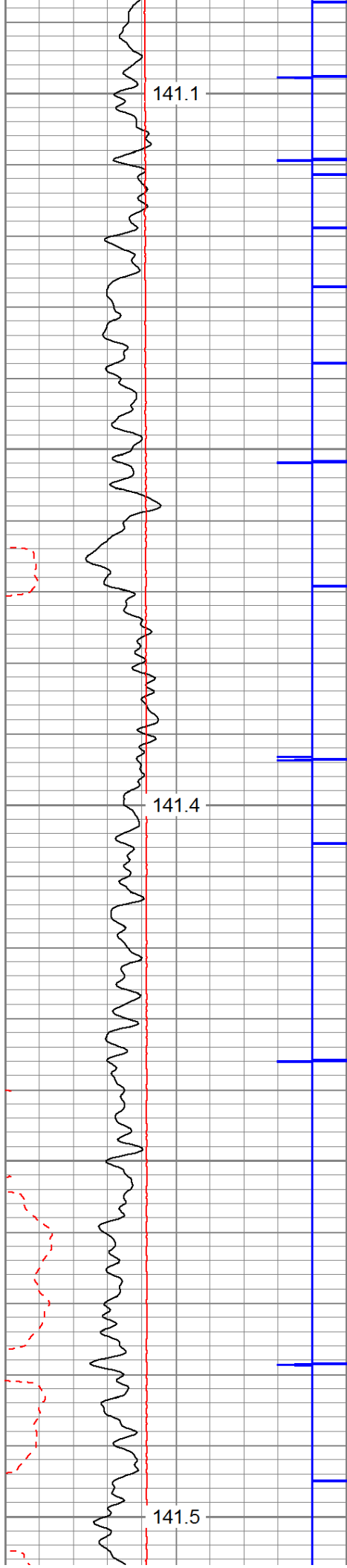




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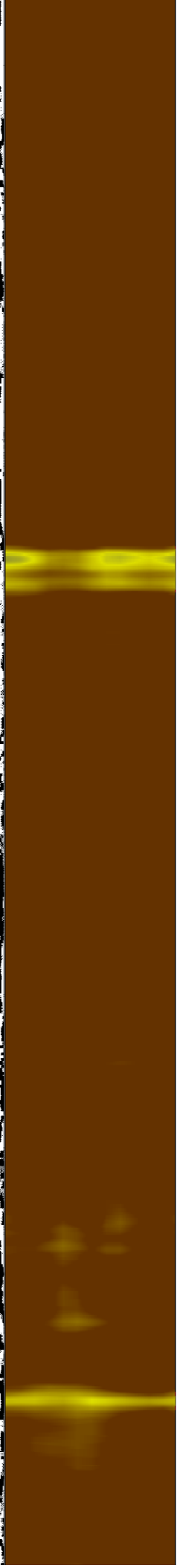
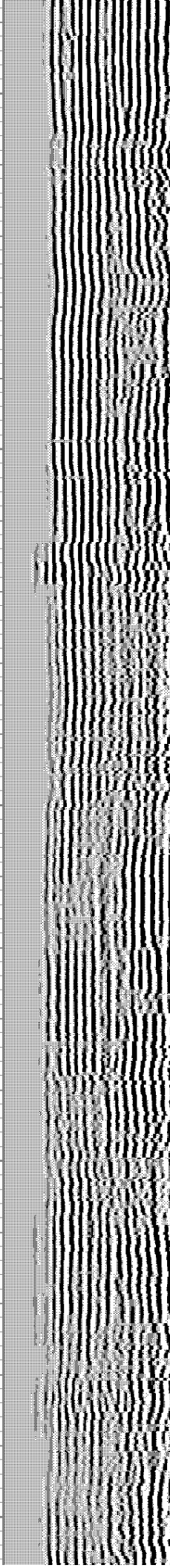
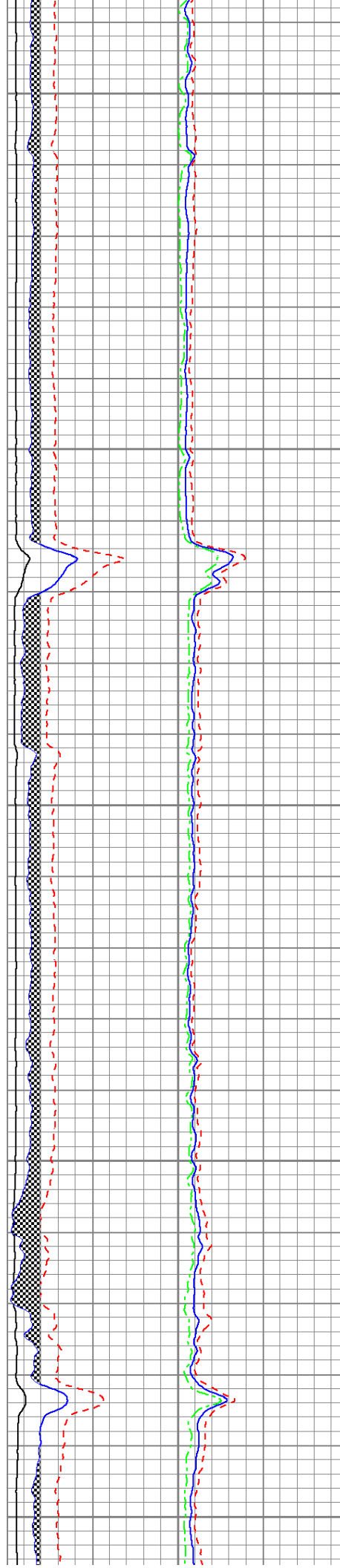


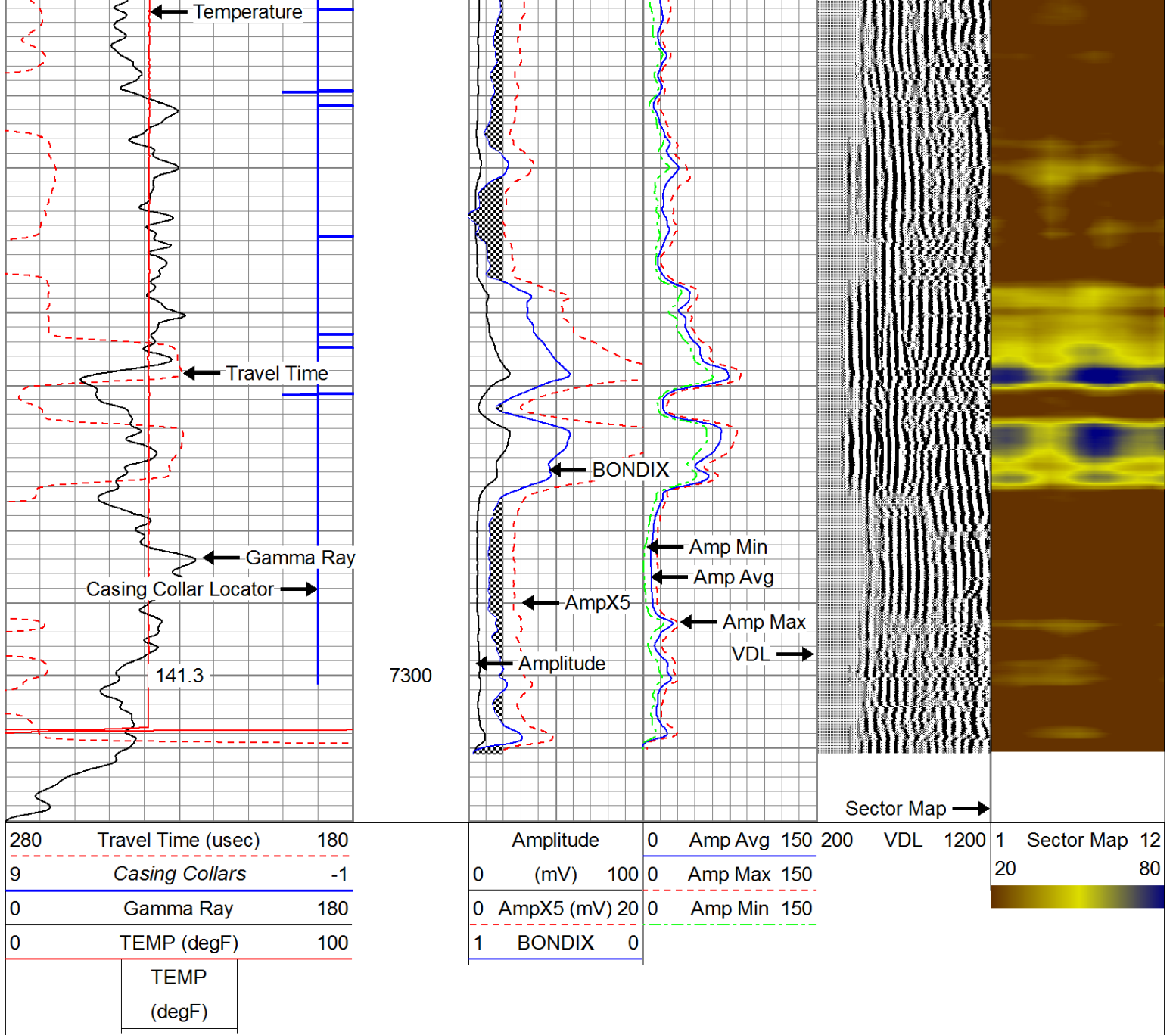


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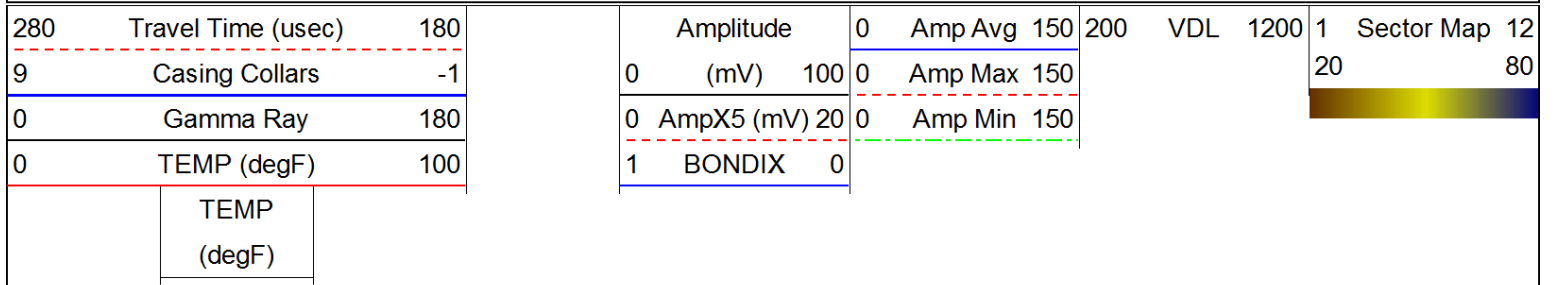
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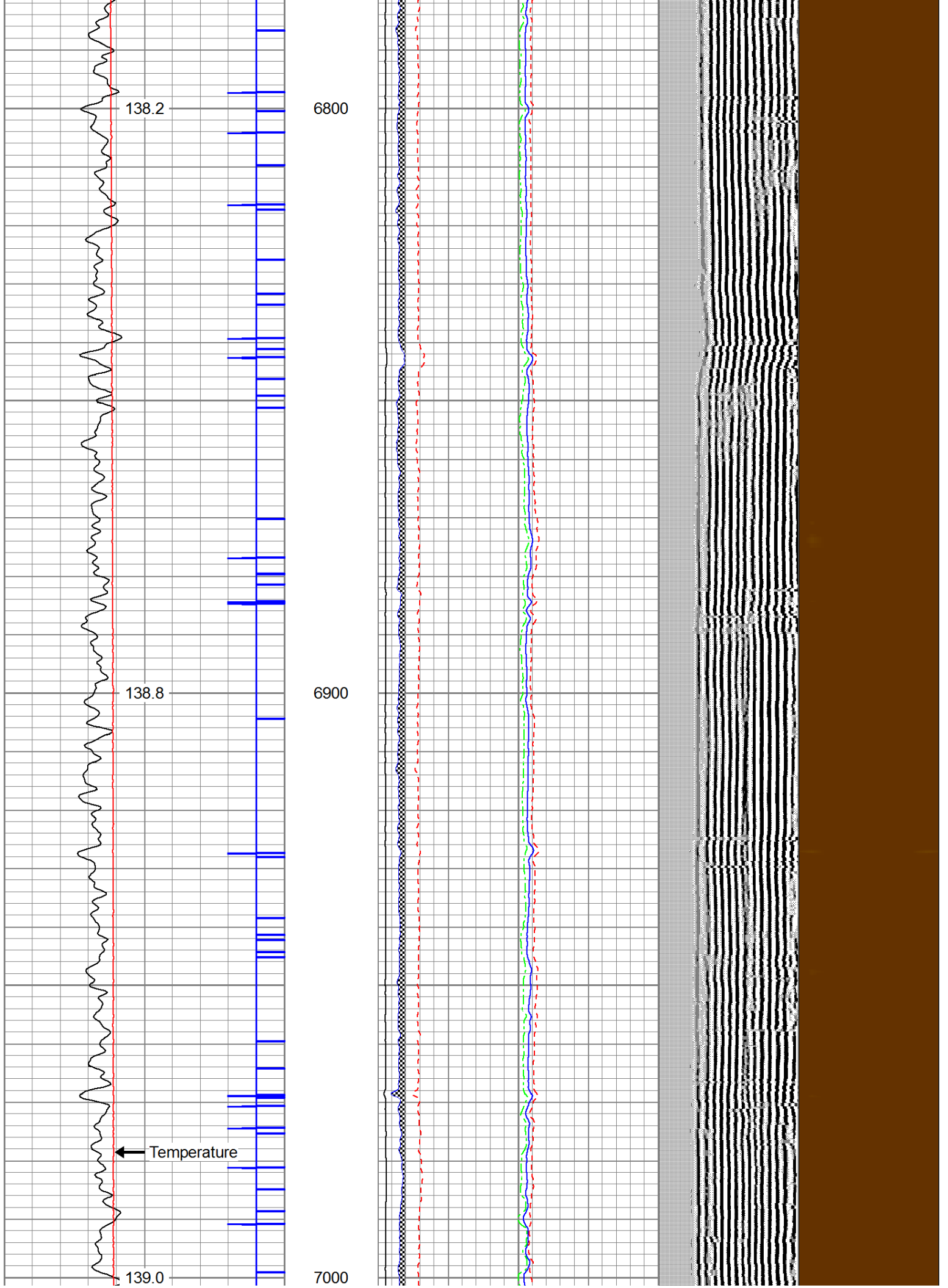


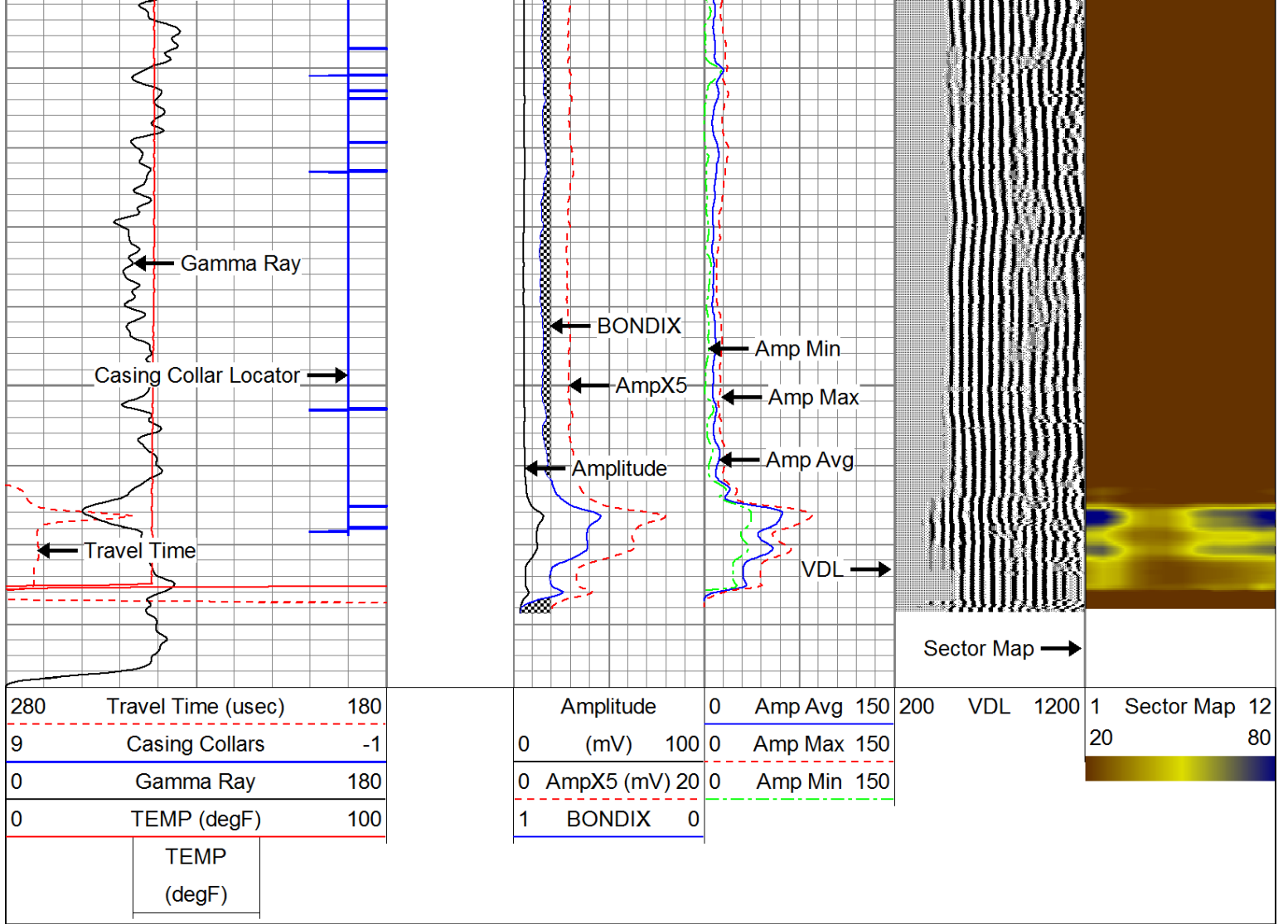


REPEAT SECTION

Database File: e:\rodzina1h.db
 Dataset Pathname: pass1.1
 Presentation Format: antero
 Dataset Creation: Thu Oct 10 09:41:55 2019 by Calc 7.0 B1
 Charted by: Depth in Feet scaled 1:240







Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
CCL	18.93		CCL-312tekco (3.12TEKCO) Tekco 3 1/8" 450 Deg. "F" SmCo Logging CCL	1.82	3.12	25.00
			2.75 2 3/4" Tekco Adjustable Centralizer	2.73	2.75	25.00
TEMP	12.77					
WVFS1	11.48					
WVFS2	11.48					
WVFS3	11.48		SCBL-Tek12 (IOL40-05) Tekco 400 Deg F 12 Sector RIB with Temp	9.13	3.25	135.00

WVFS4	11.48					
WVFS5	11.48					
WVFS6	11.48					
WVFS7	11.48					
WVFS8	11.48					
WVFS9	11.48					
WVFS10	11.48					
WVFS11	11.48					
WVFS12	11.48					
WVF3FT	10.73					
WVFCAL	10.73					
WVF5FT	9.73					
WVFTEMP	6.40					
WVFSYNC	6.40		2.75 2 3/4" Tekco Adjustable Centralizer	2.73	2.75	25.00
			GR-Tek-Co 2 3/4 (IPSNO-03) Tekco 2 3/4" 400 Deg. F Logging Gamma Ray	3.67	2.75	40.00
GR	1.04					

Dataset: rodzina1h.db: field/well/run1/pass2.1
 Total Length: 20.07 ft
 Total Weight: 250.00 lb
 O.D.: 3.25 in

Calibration Report

Database File: E:\rodzina1h.db
 Dataset Pathname: pass2.1
 Dataset Creation: Wed Oct 09 12:08:35 2019 by Calc 7.0 B1

Gamma Ray Calibration Report

Serial Number: IPSNO-03
 Tool Model: Tek-Co 2 3/4
 Performed: Wed Oct 09 09:42:39 2019

 Calibrator Value: 1.0

 Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

 Sensitivity: 0.3000 /cps

Temperature Calibration Report

Serial Number: IOL40-05
 Tool Model: Tek12
 Performed: Wed Jul 31 10:53:14 2013

	Reference		Reading	
Low Reference:	0.00	degF	0.00	usec
High Reference:	1.00	degF	1.00	usec

Gain: 0.33
Offset: 0.00
Delta Spacing 2



Company	ANTERO RESOURCES CORPORATION	
Well	RODZINA 1H	
Field	MARCELLUS	
County	TYLER	
State	W.V.	Country USA