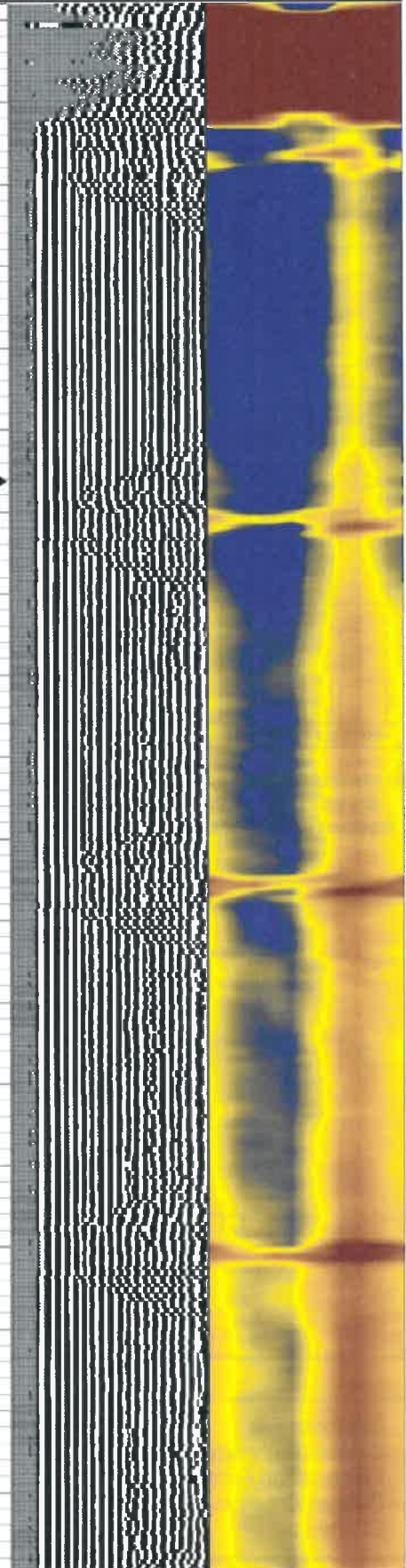
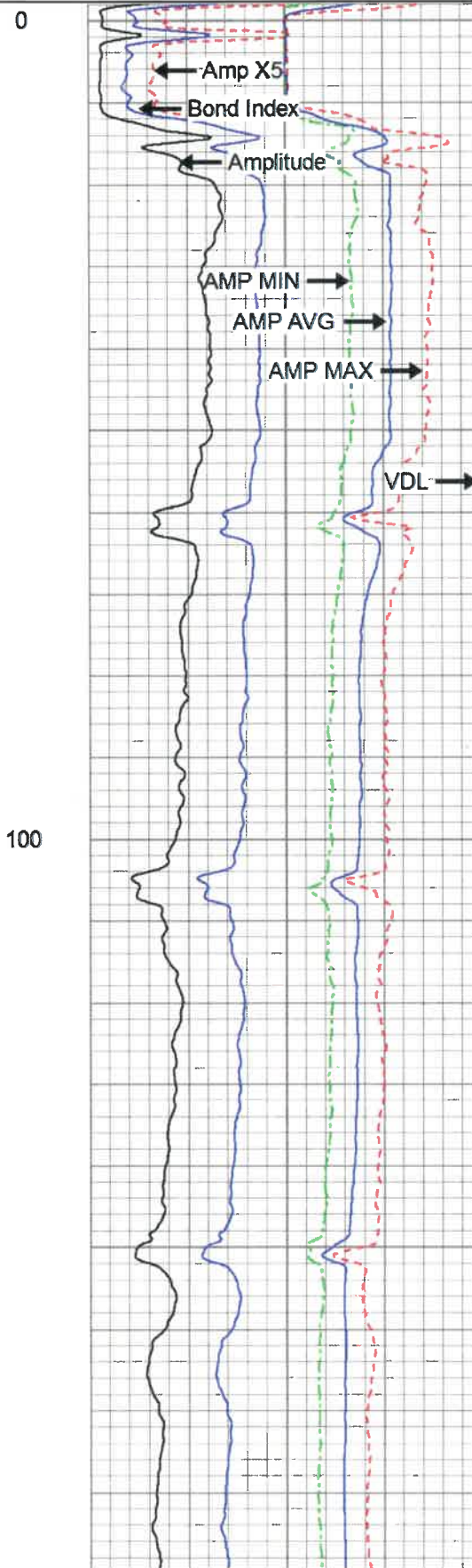
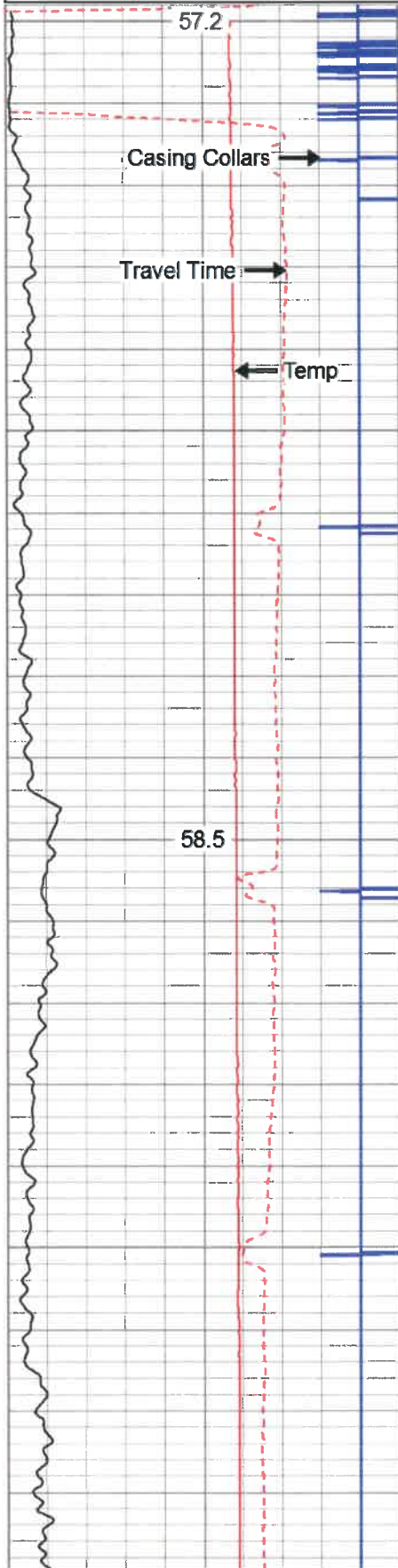
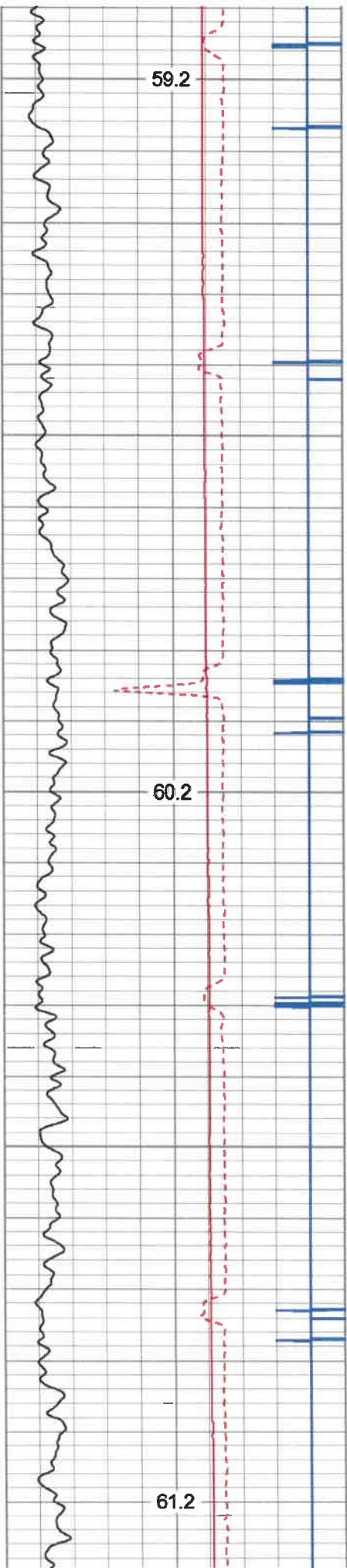


280	Travel Time (usec)	180
9	Casing Collars	-1
0	Gamma Ray	180
0	TEMP (degF)	100
TEMP (degF)		

Amplitude	0	Amp Avg	150	200	VDL	1200	1	Sector Map	12
0 (mV)	100	0	Amp Max	150				20	80
0 AmpX5 (mV)	20	0	Amp Min	150					
1 BONDIX	0								

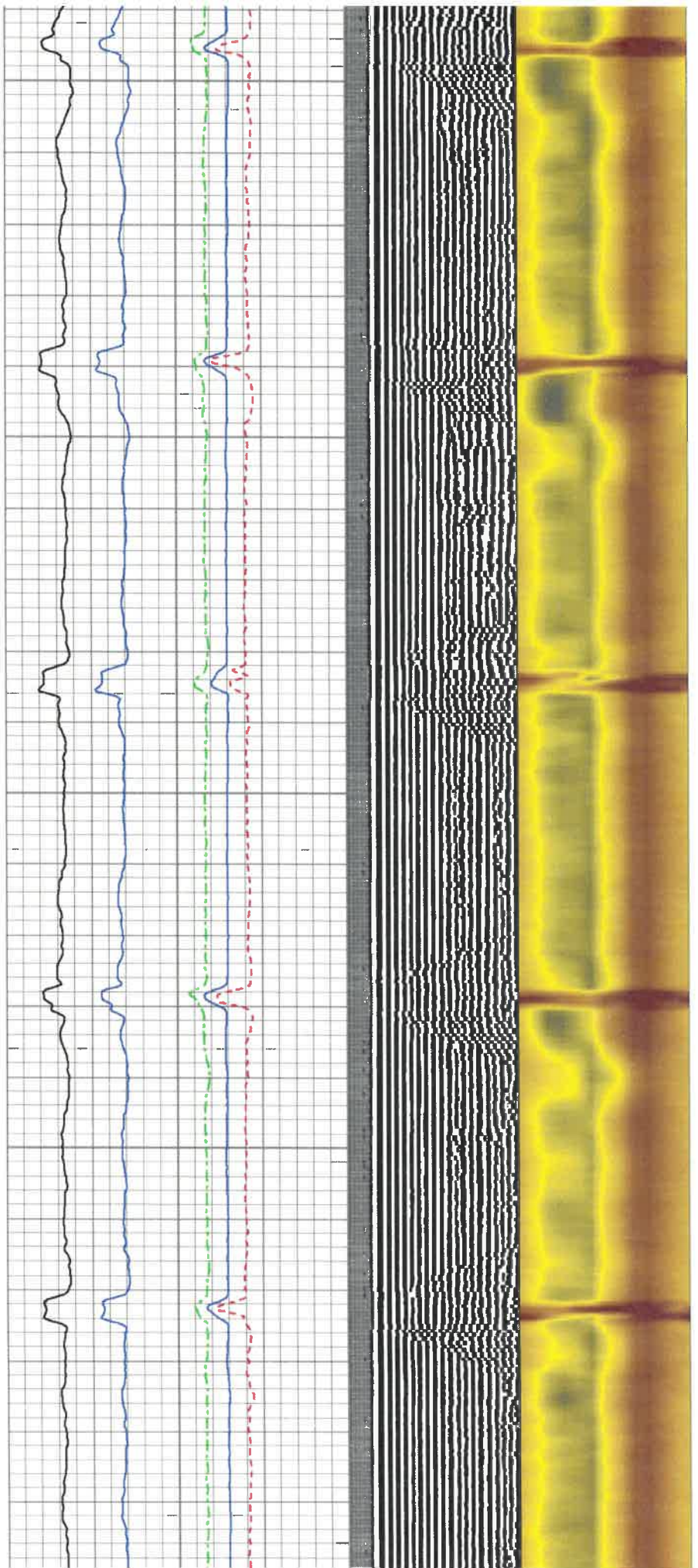


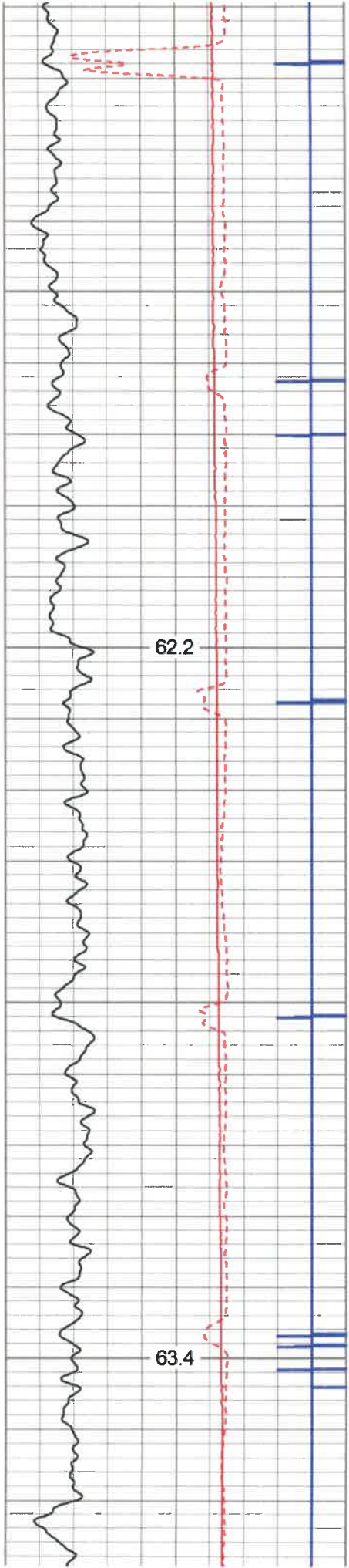


200

300

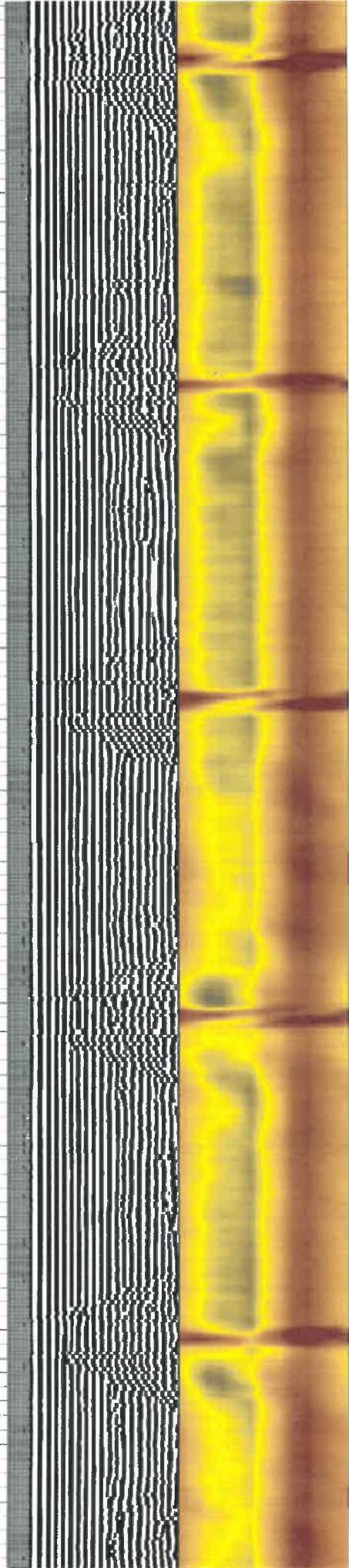
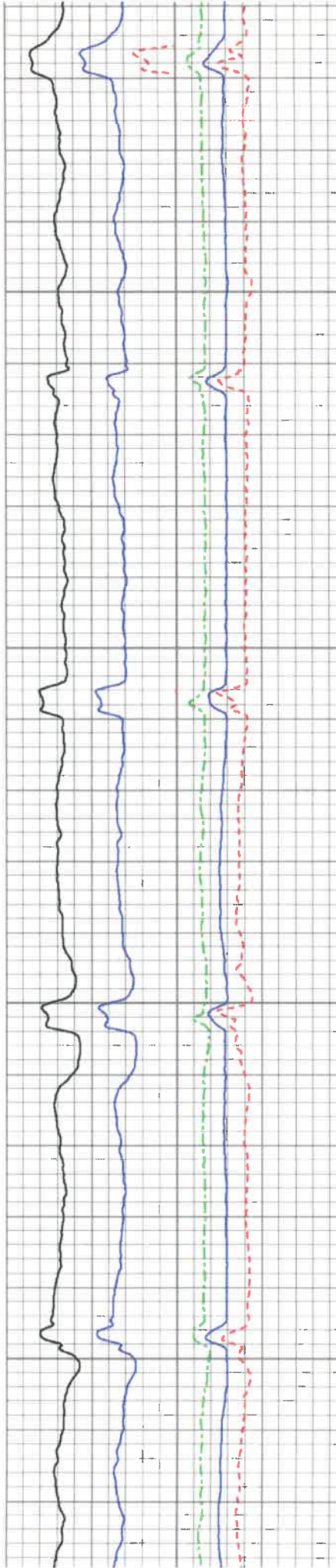
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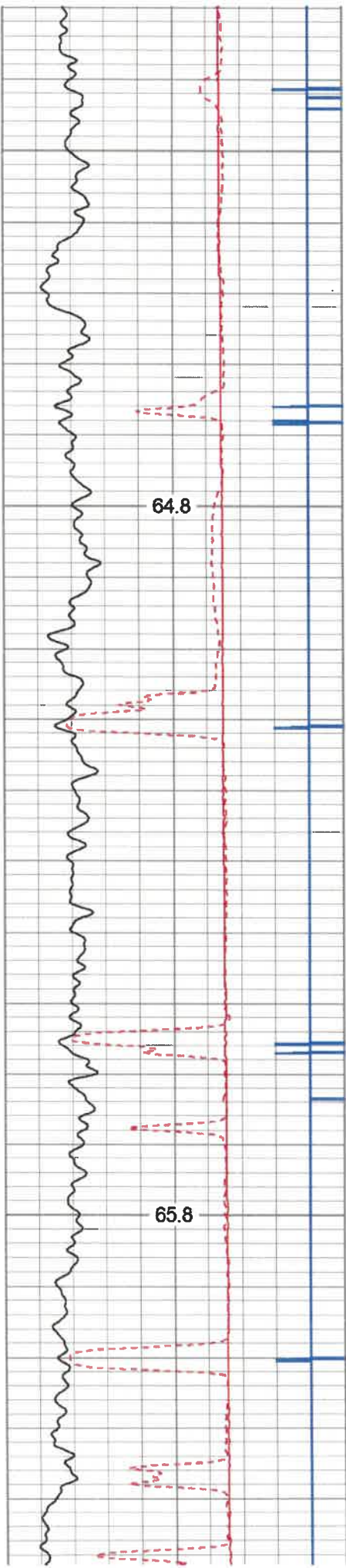




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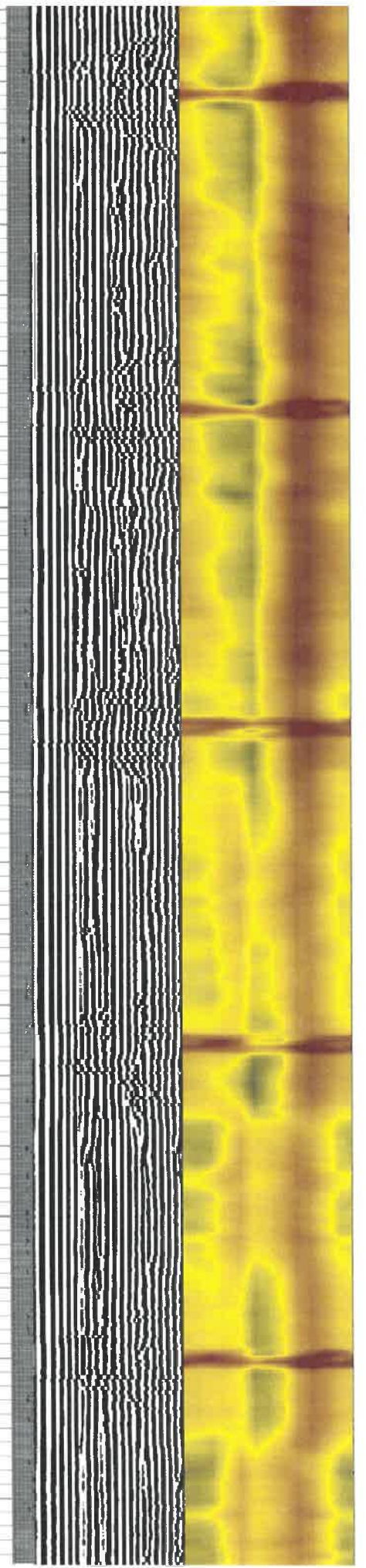
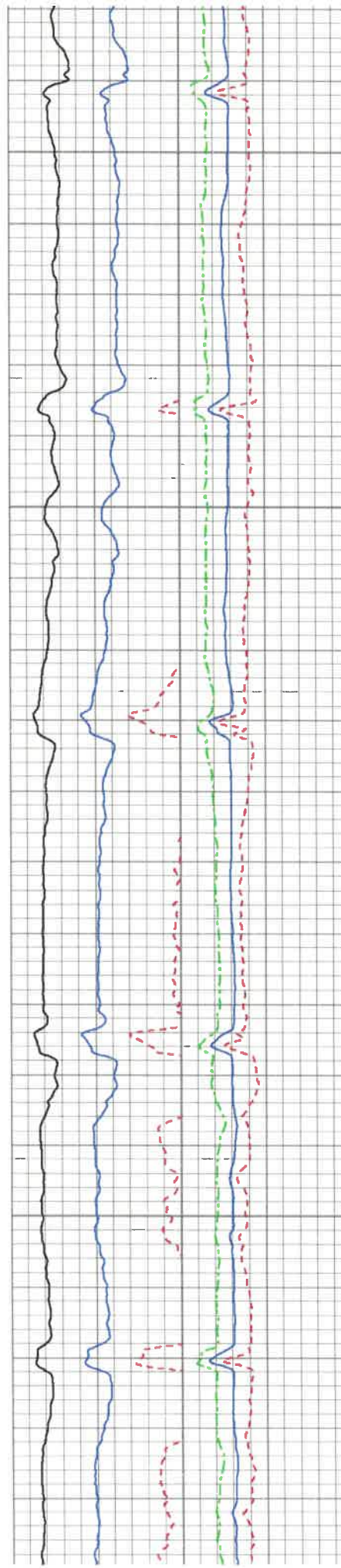
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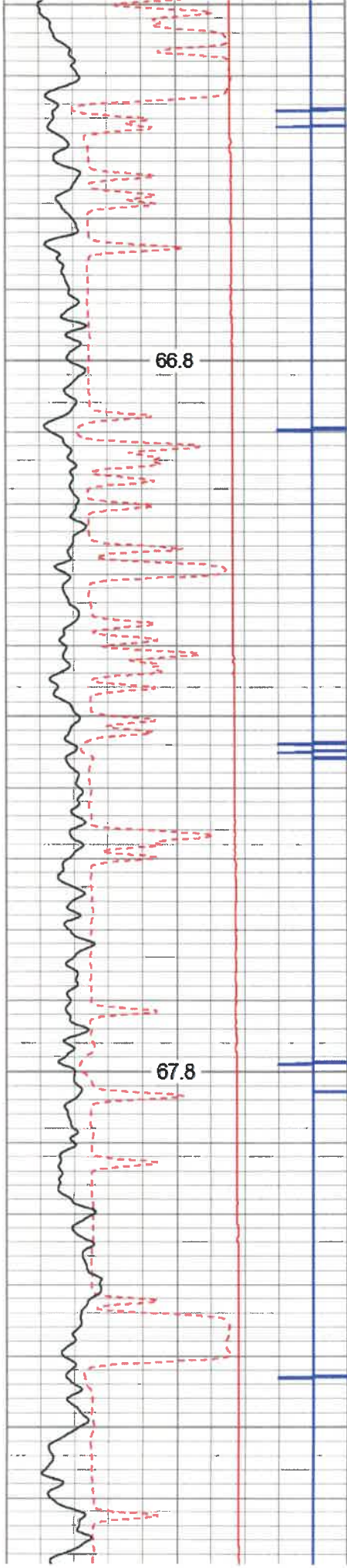




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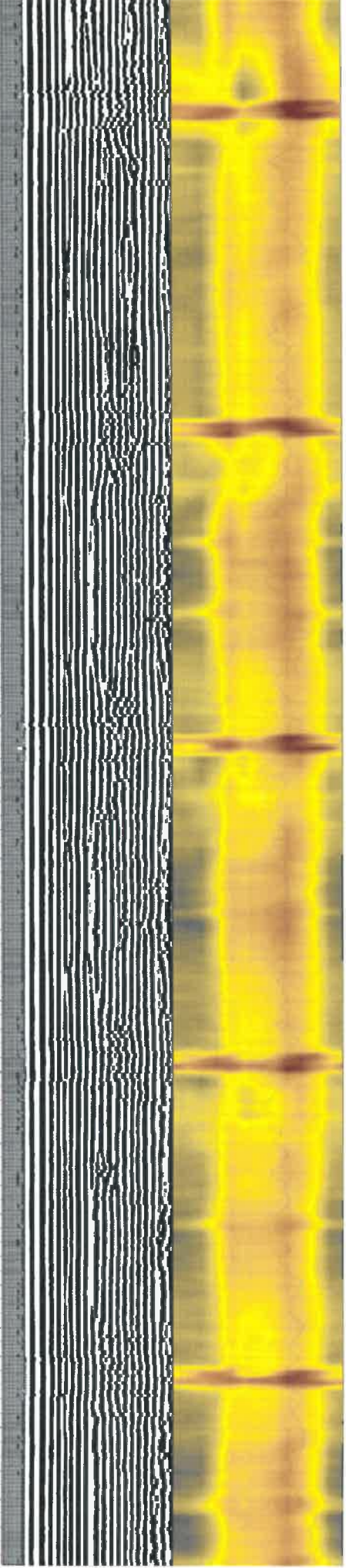
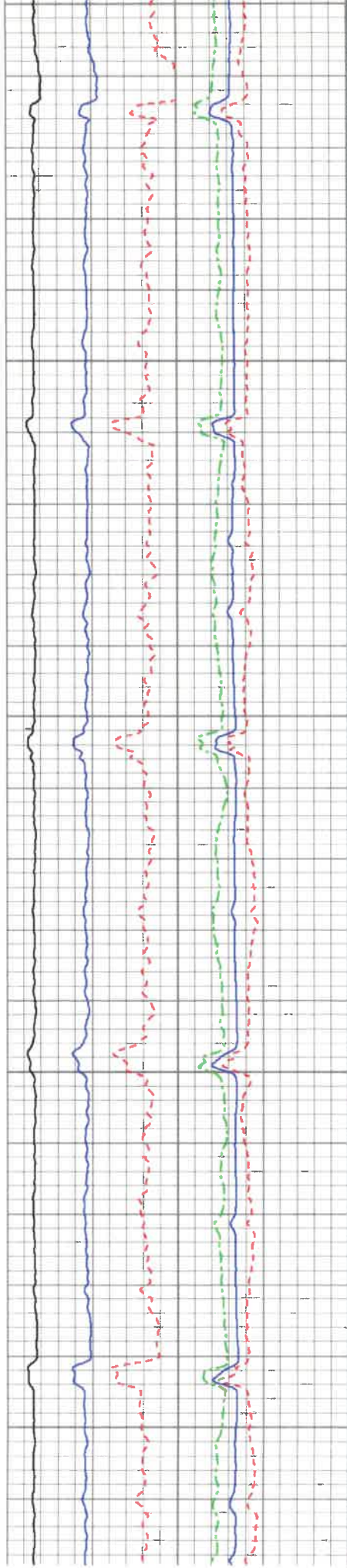
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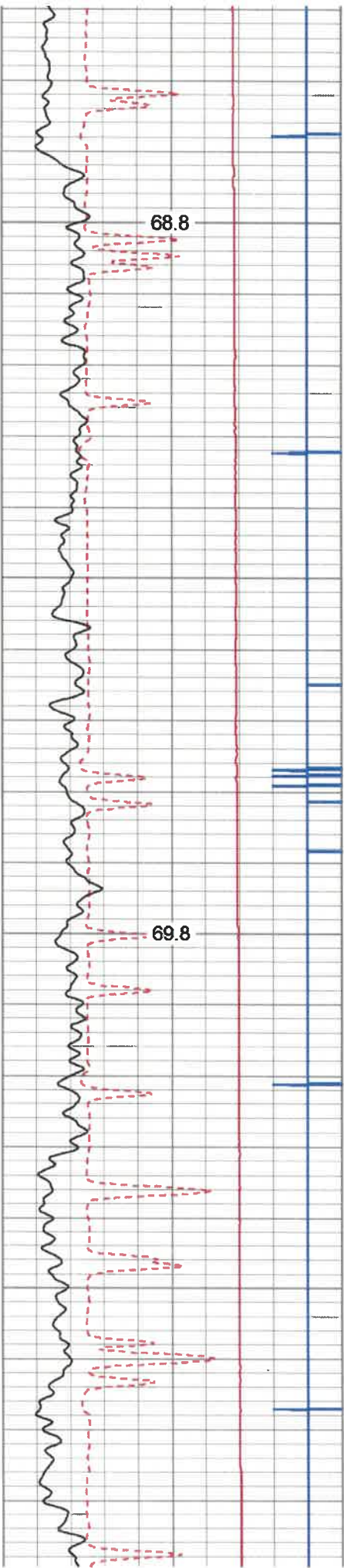




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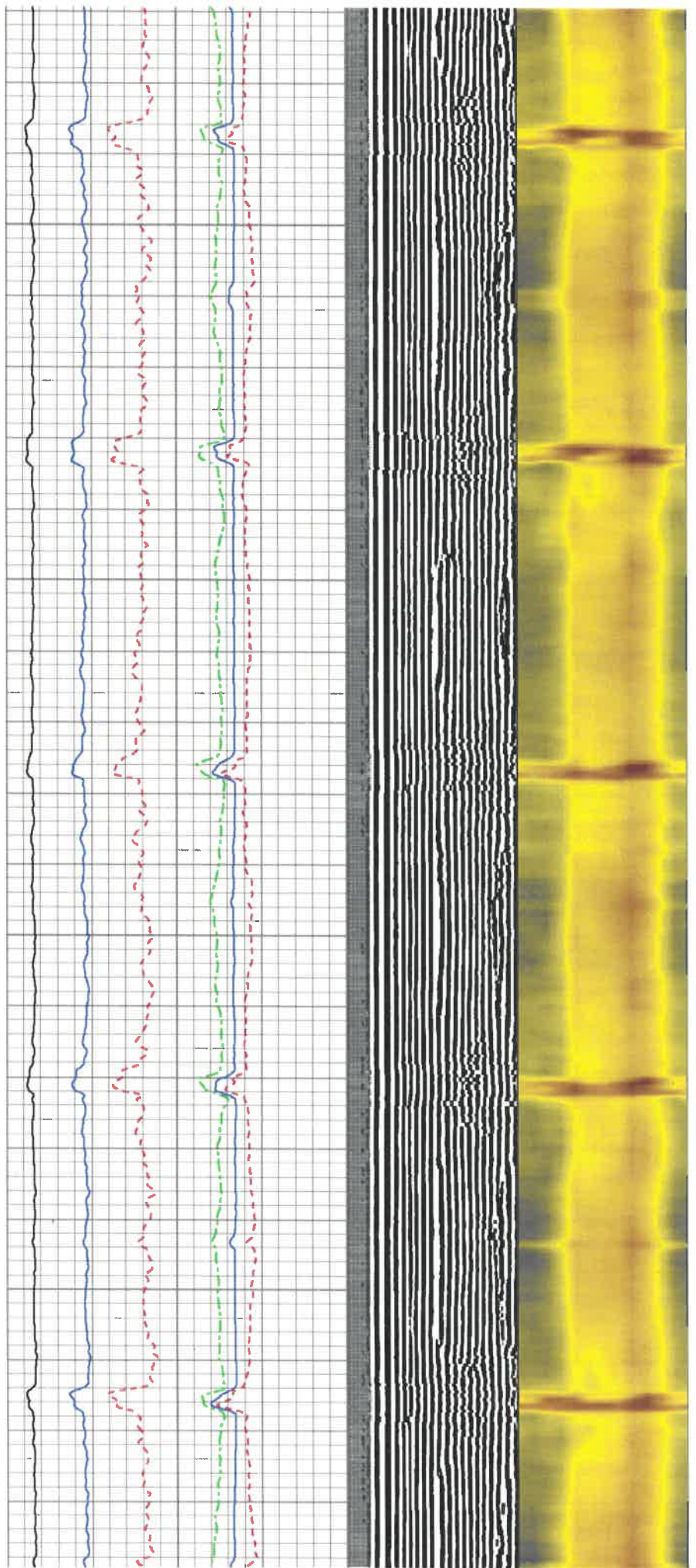
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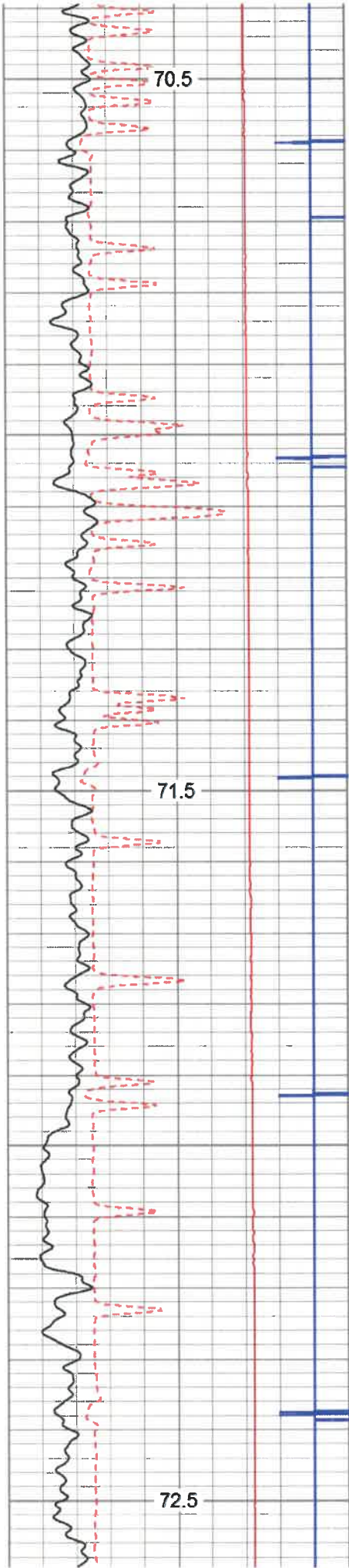




1100

1200

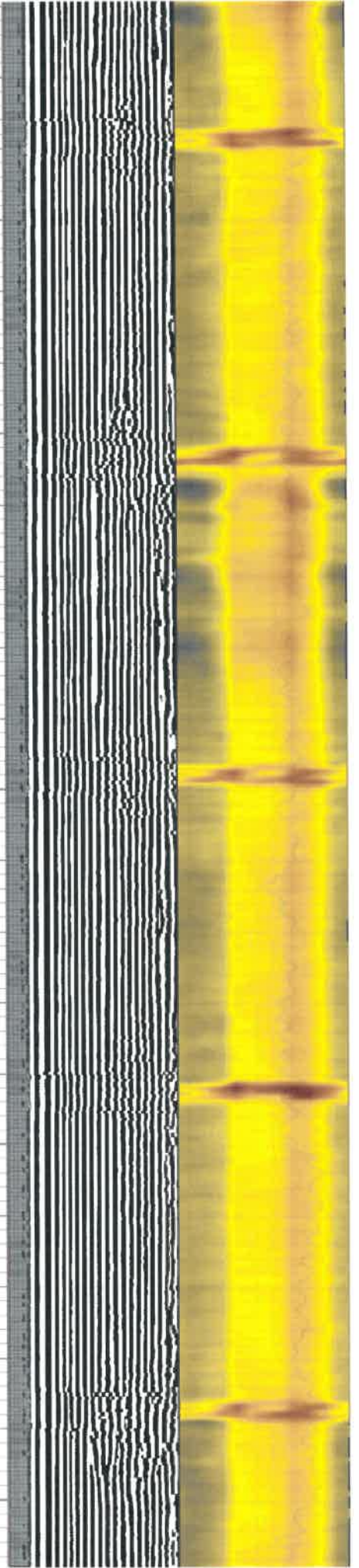
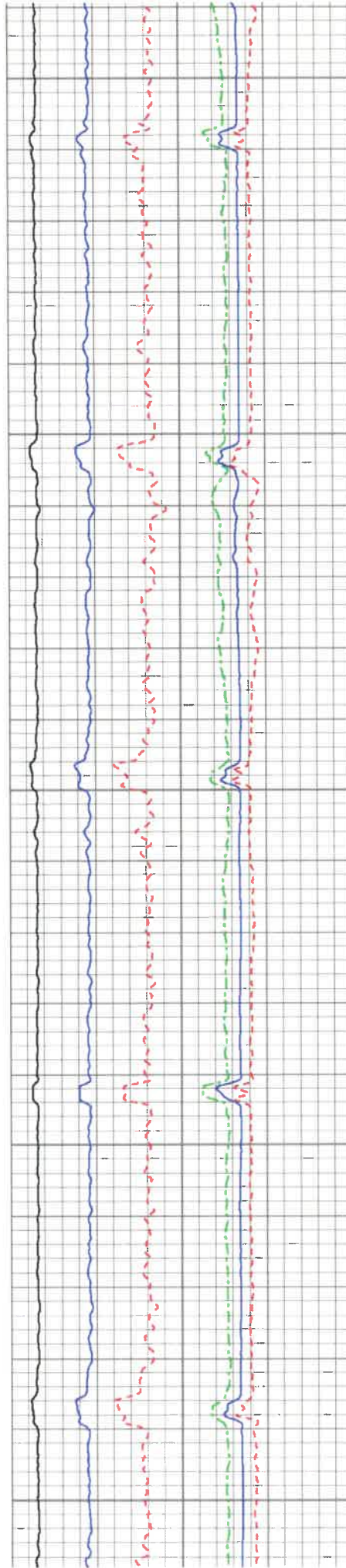


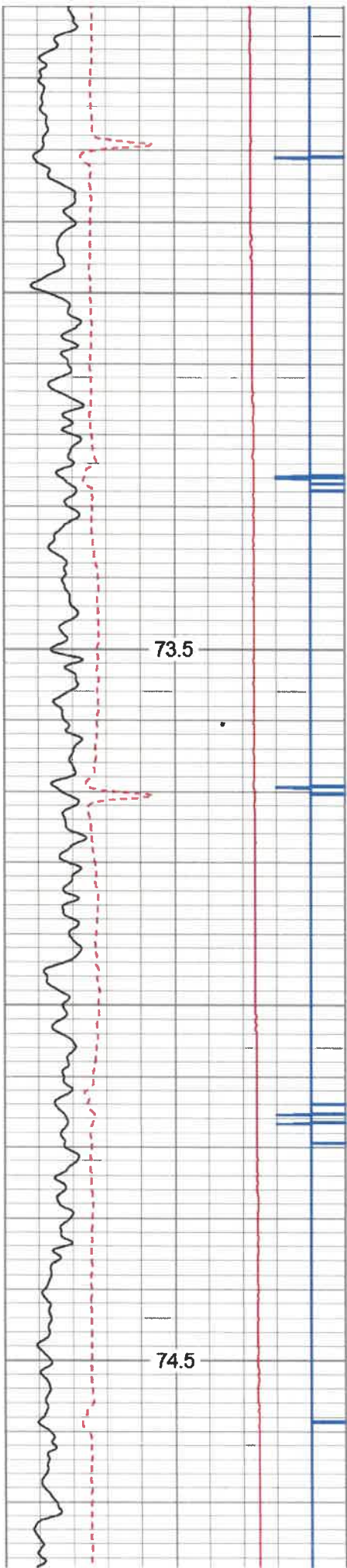


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1400

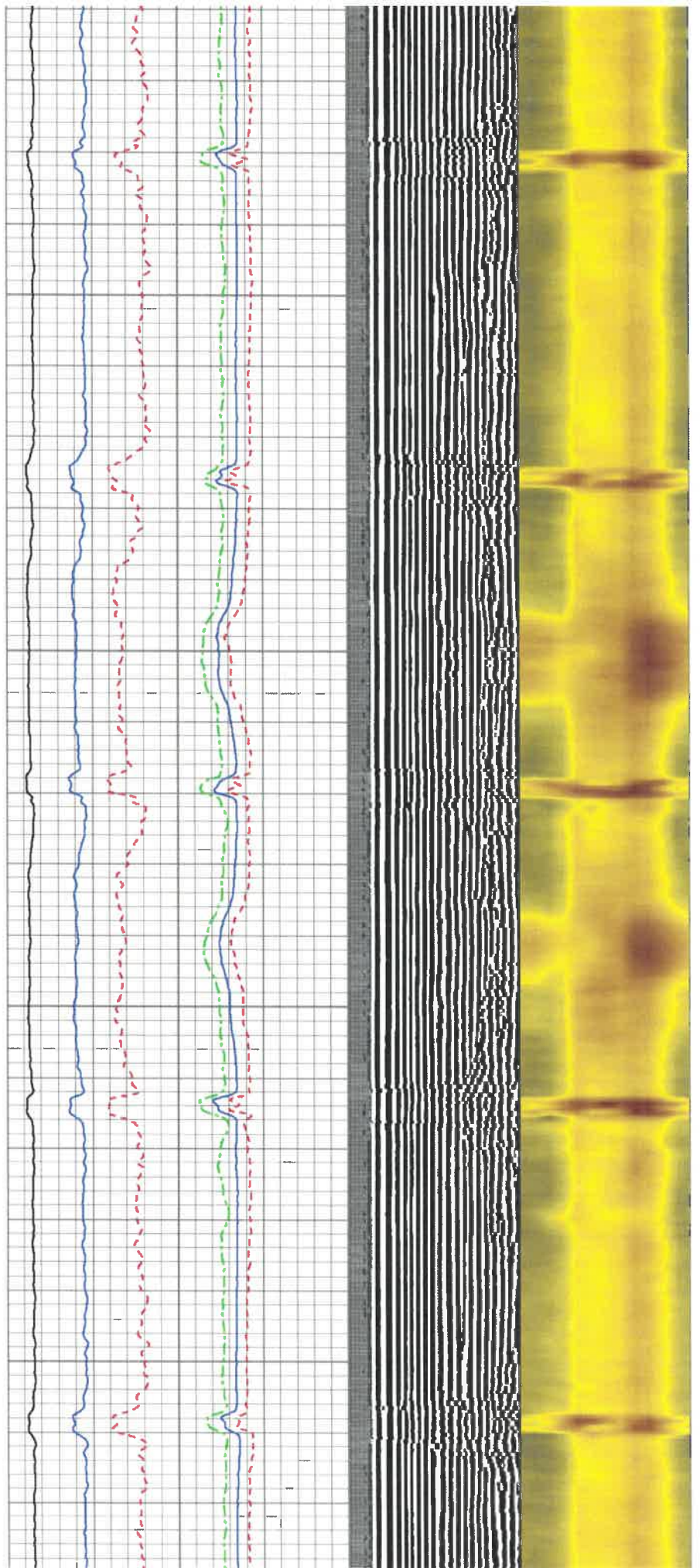
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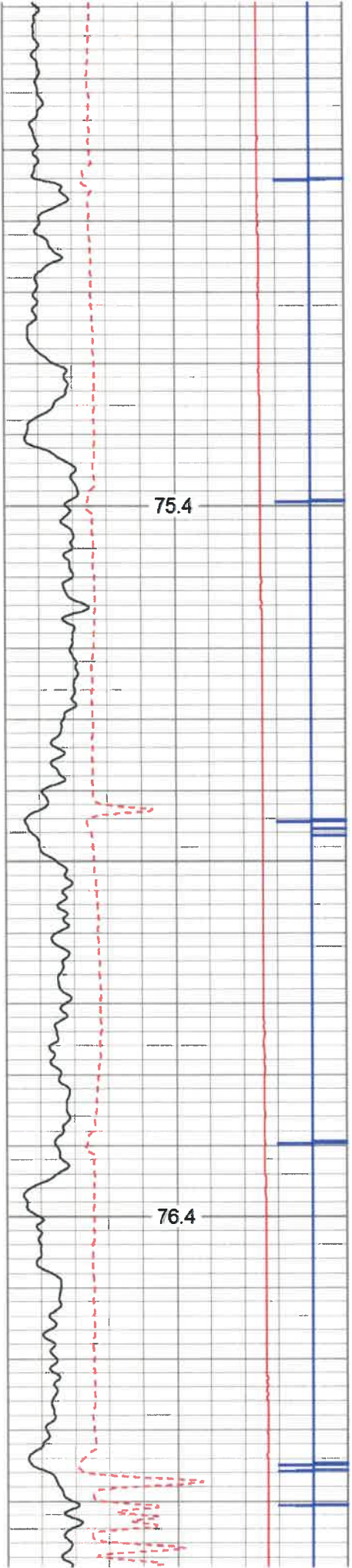




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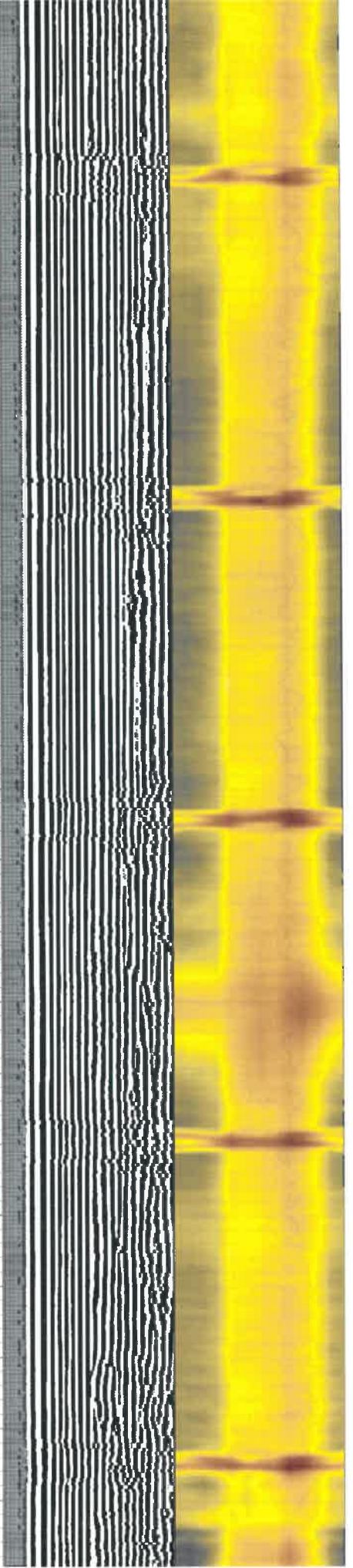
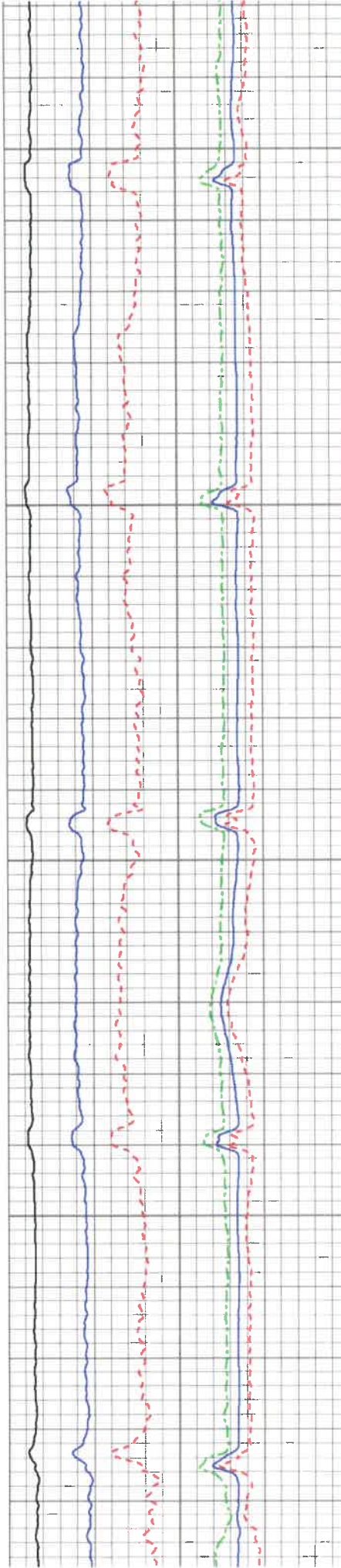
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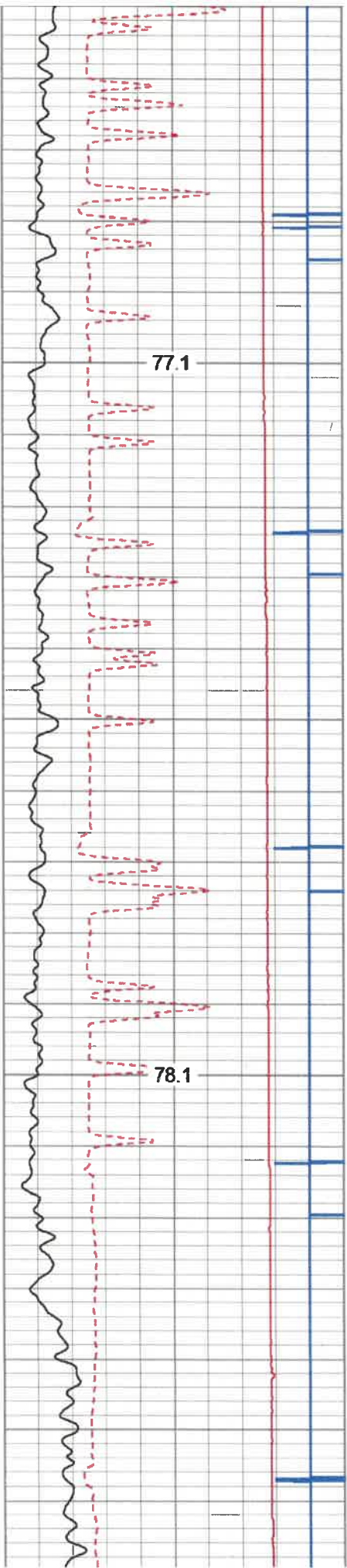




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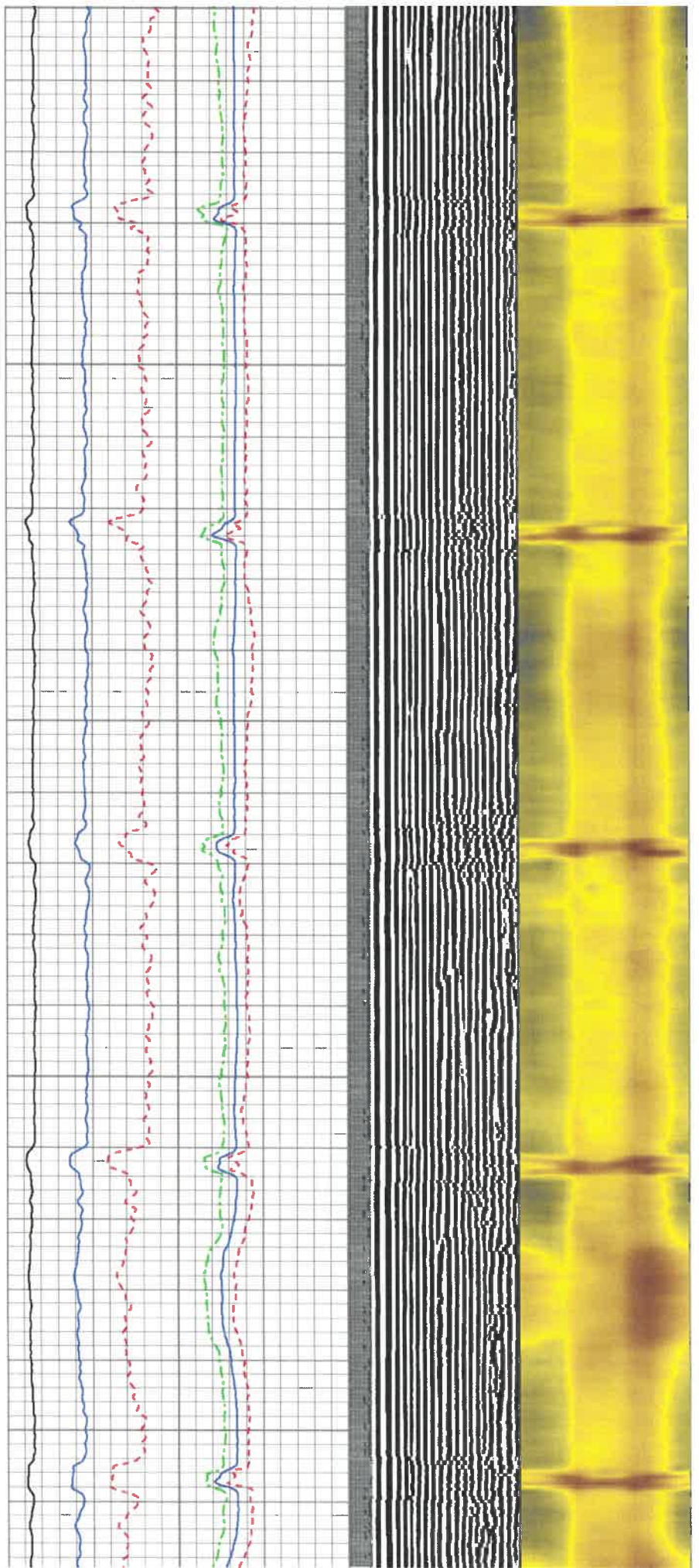
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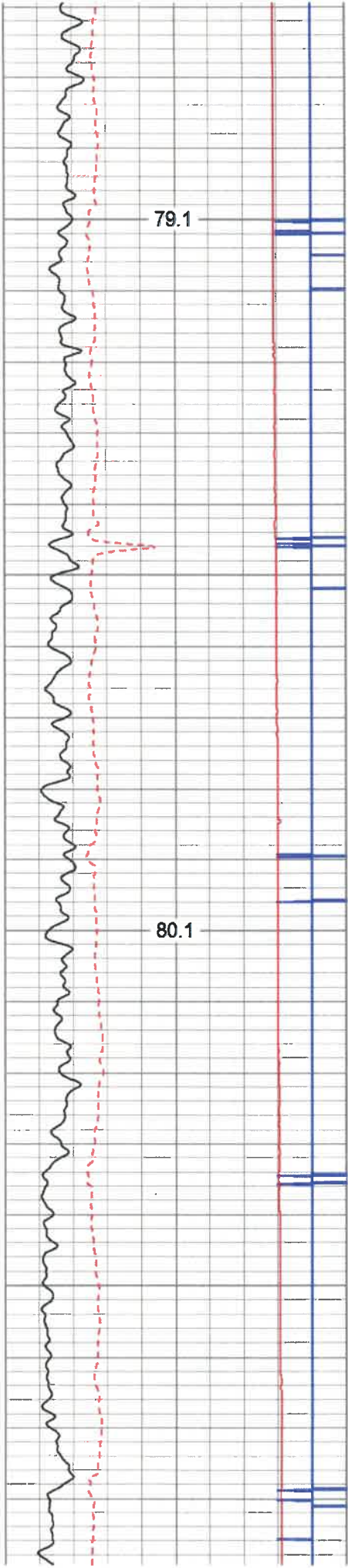




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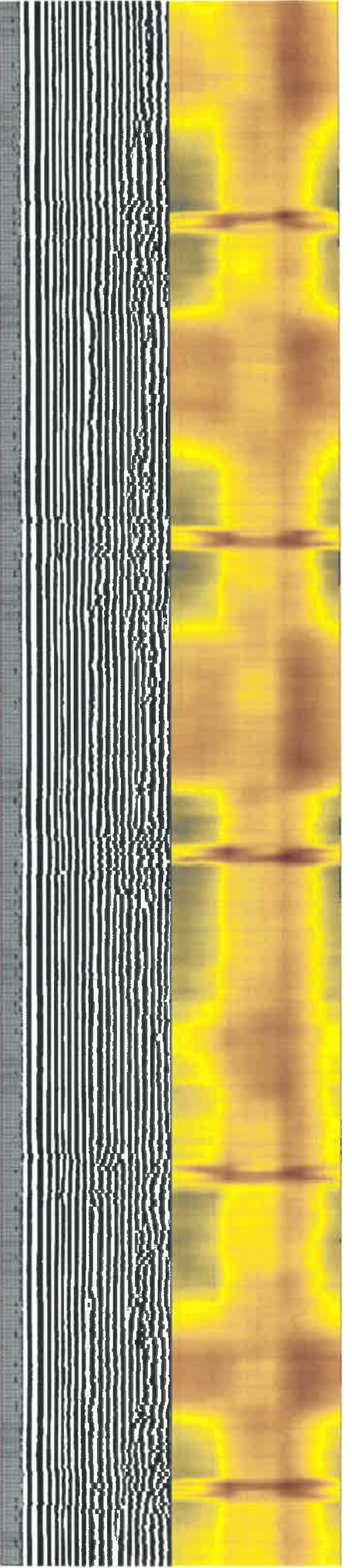
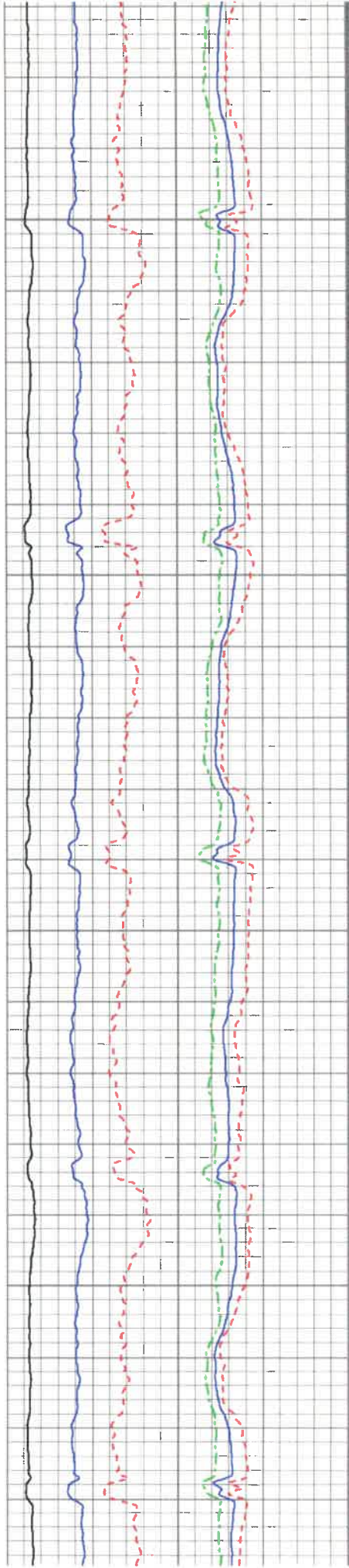
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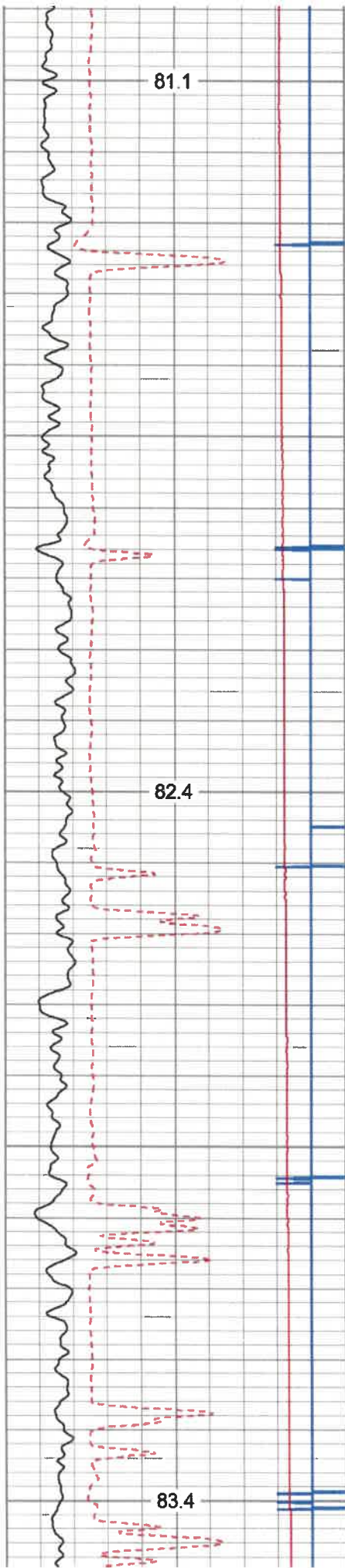




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2300

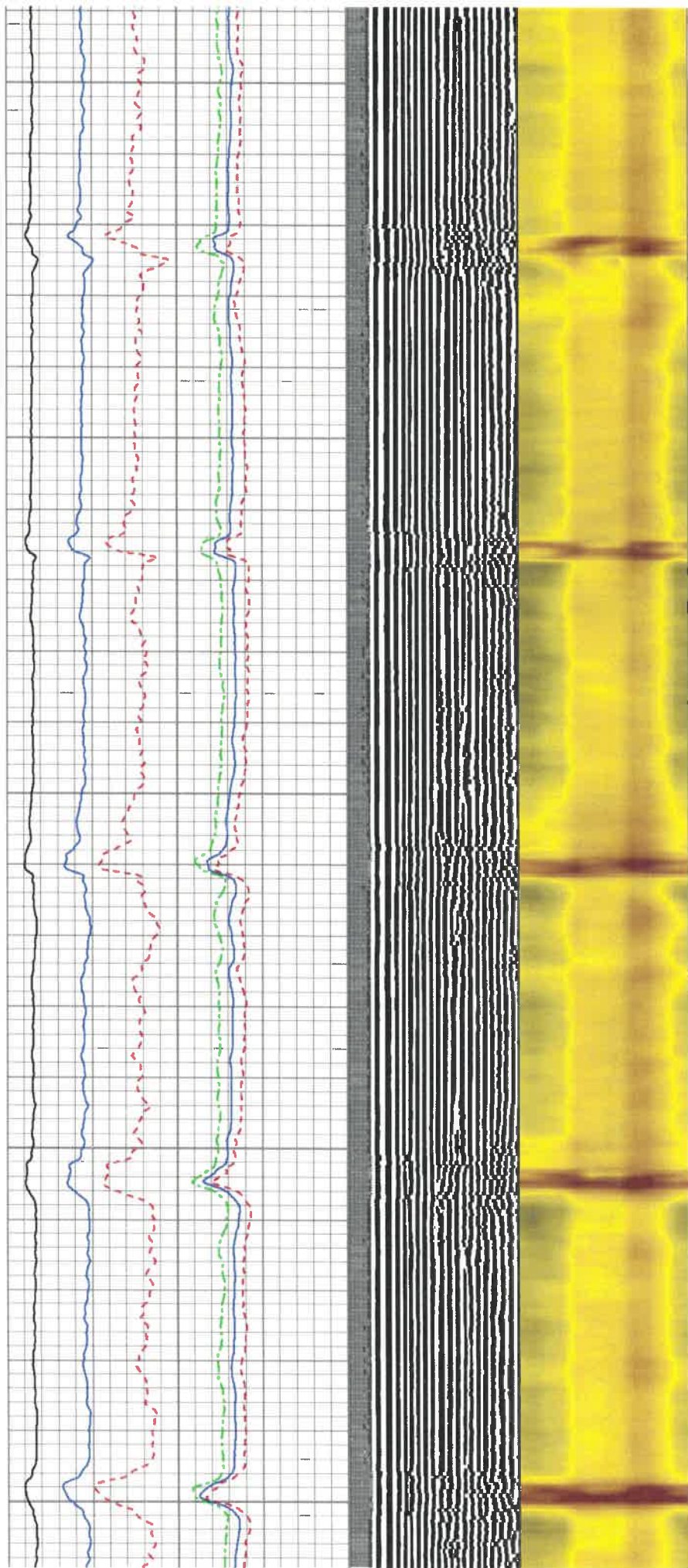


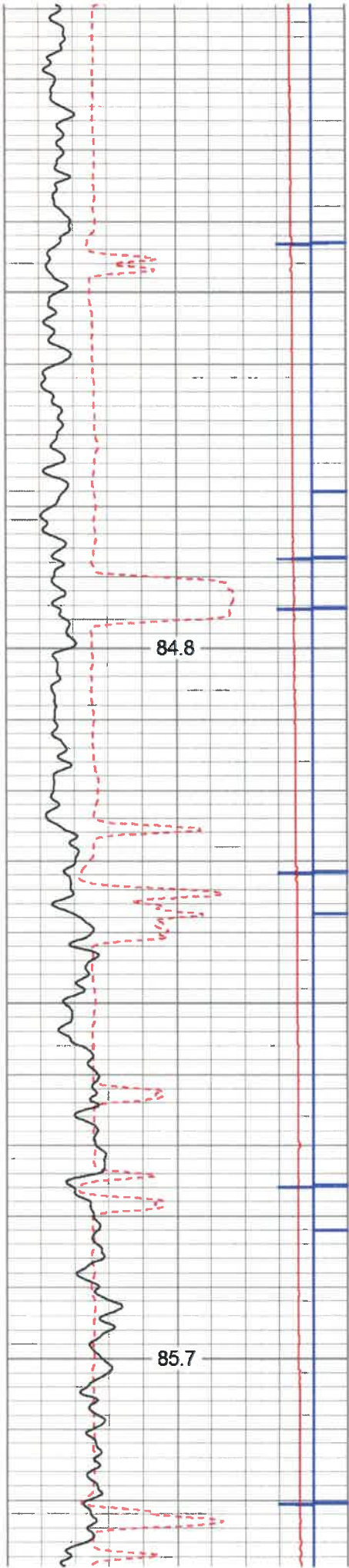


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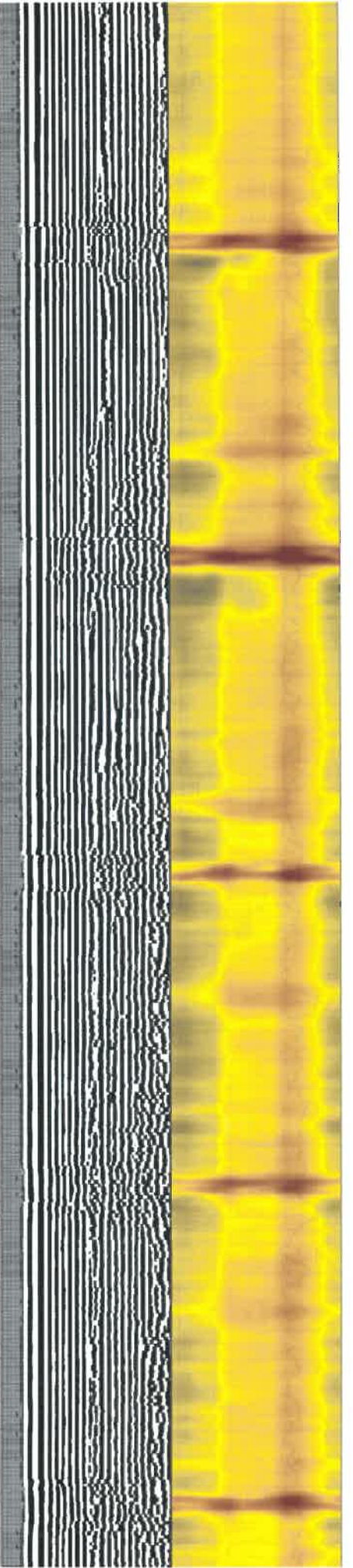
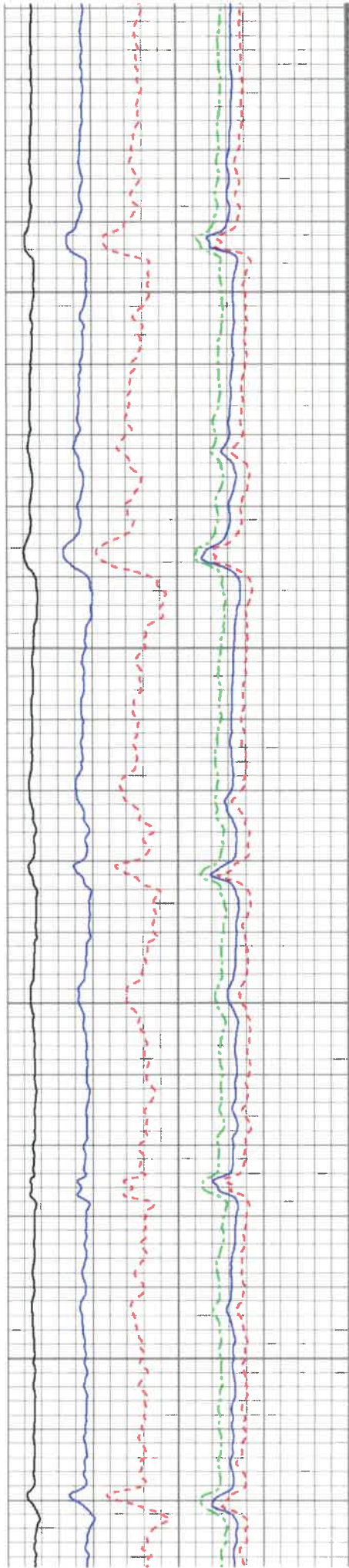
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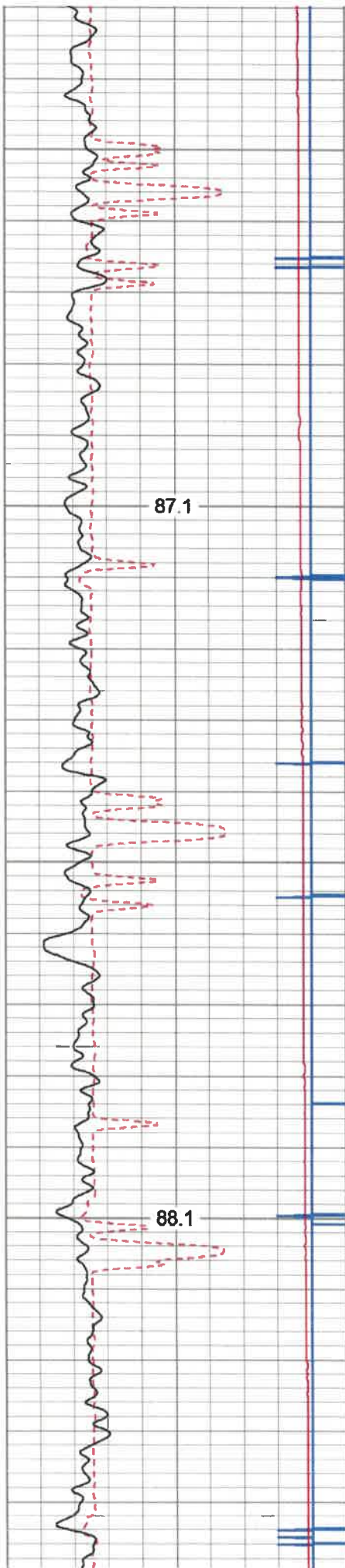




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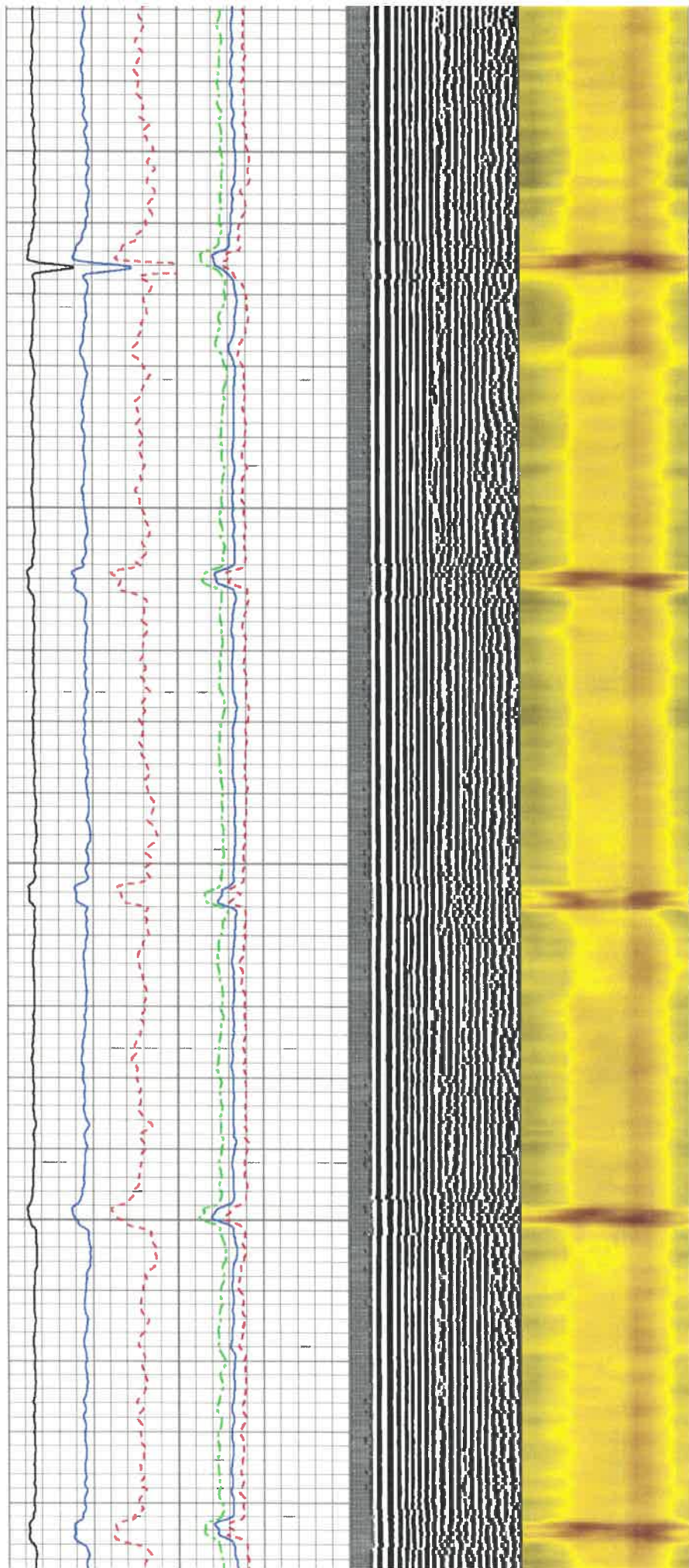
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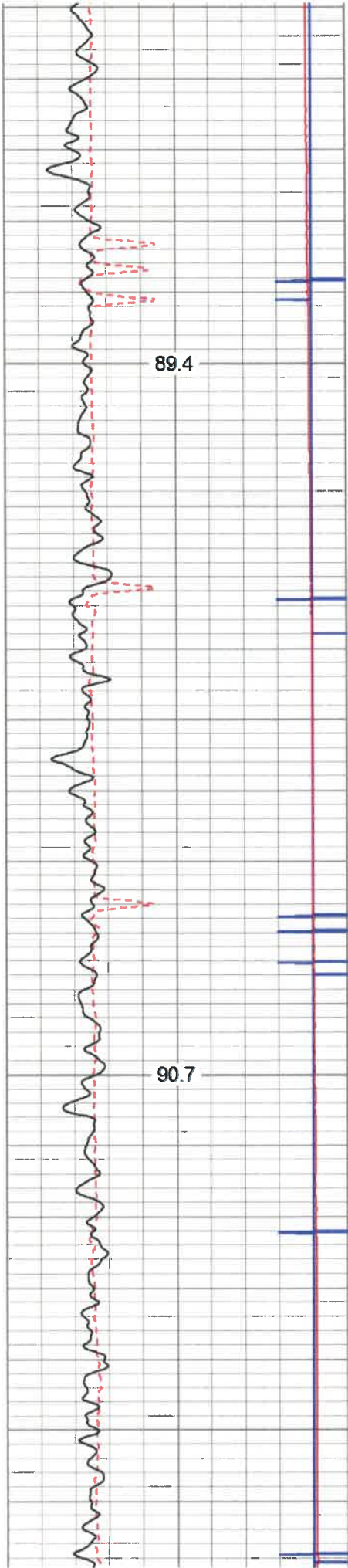




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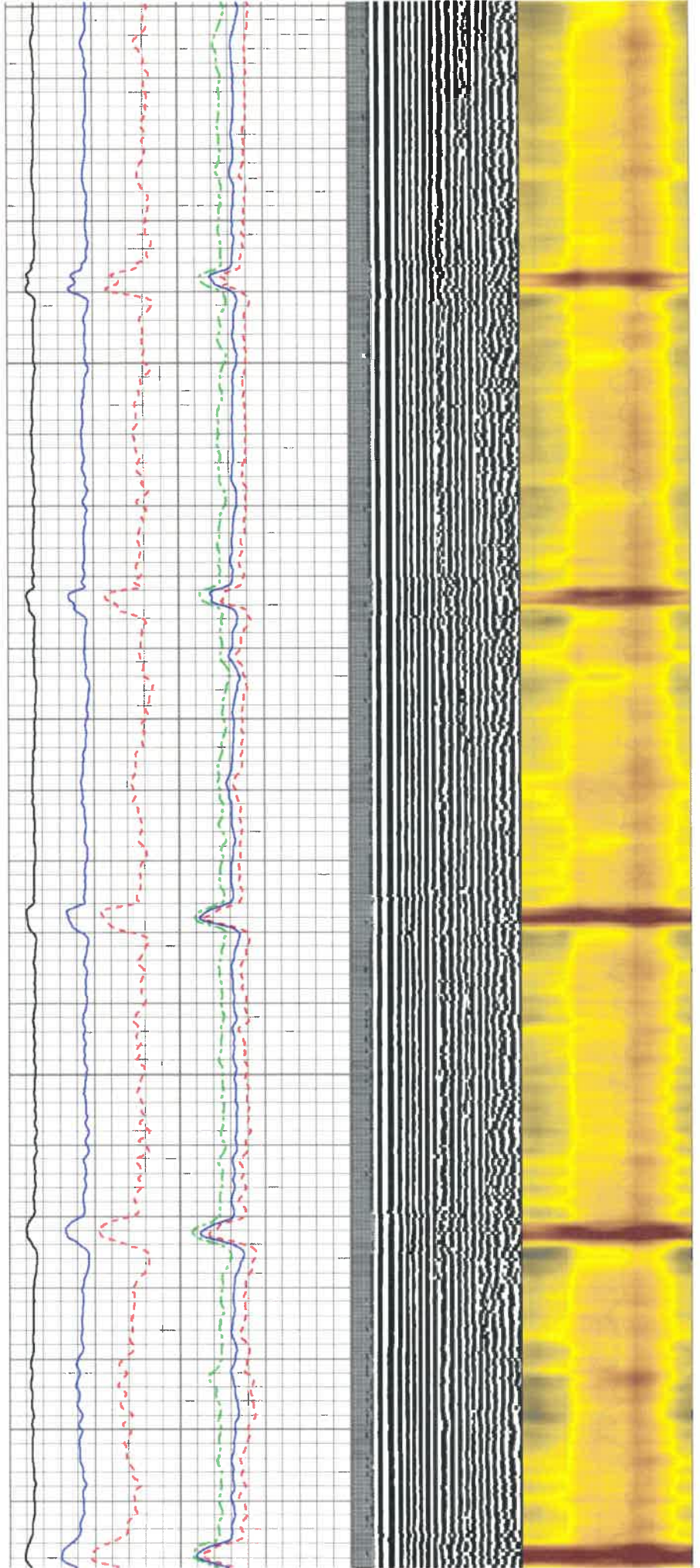
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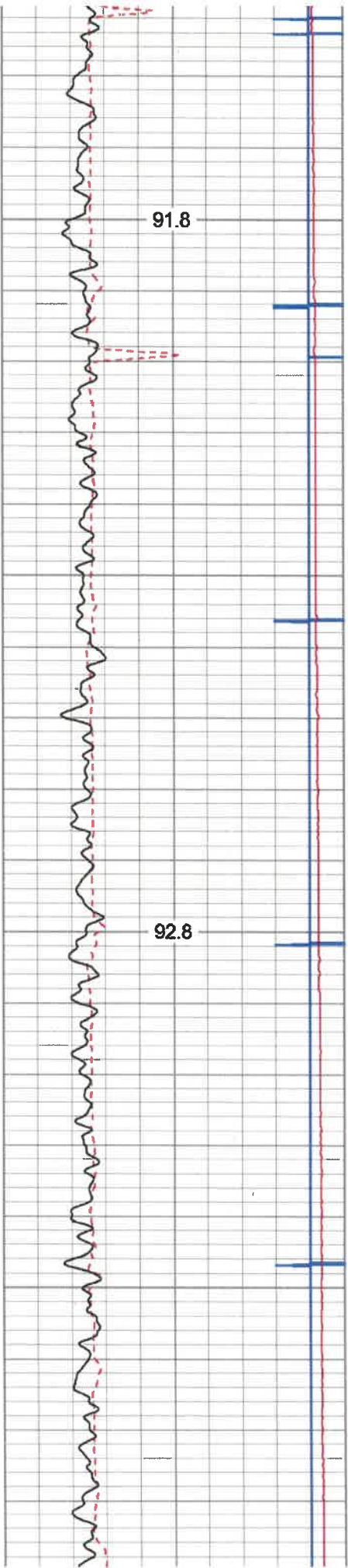




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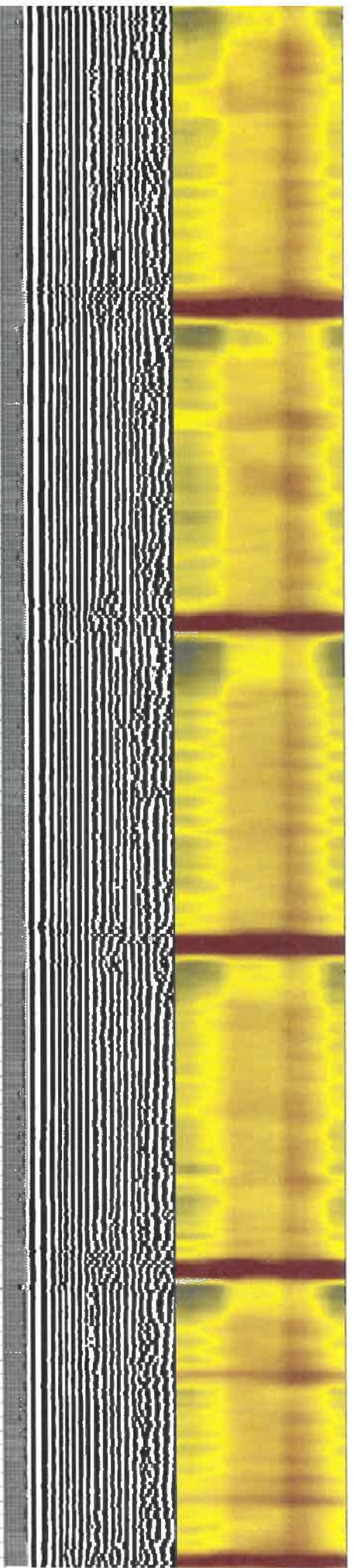
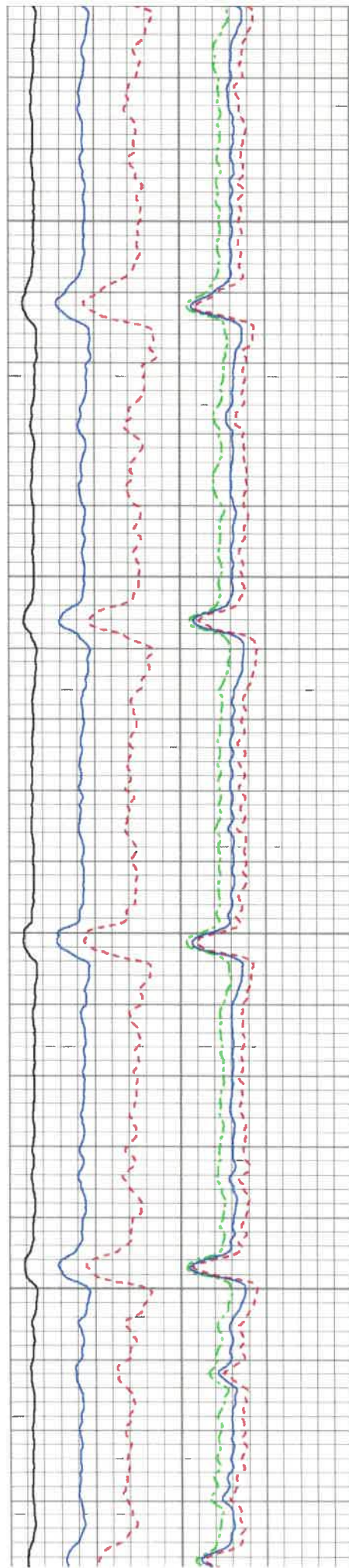
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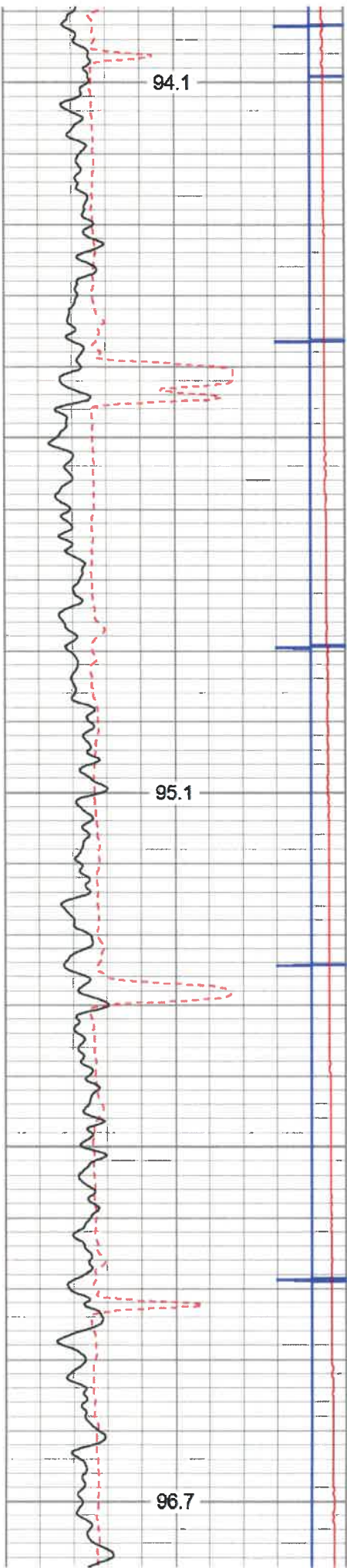




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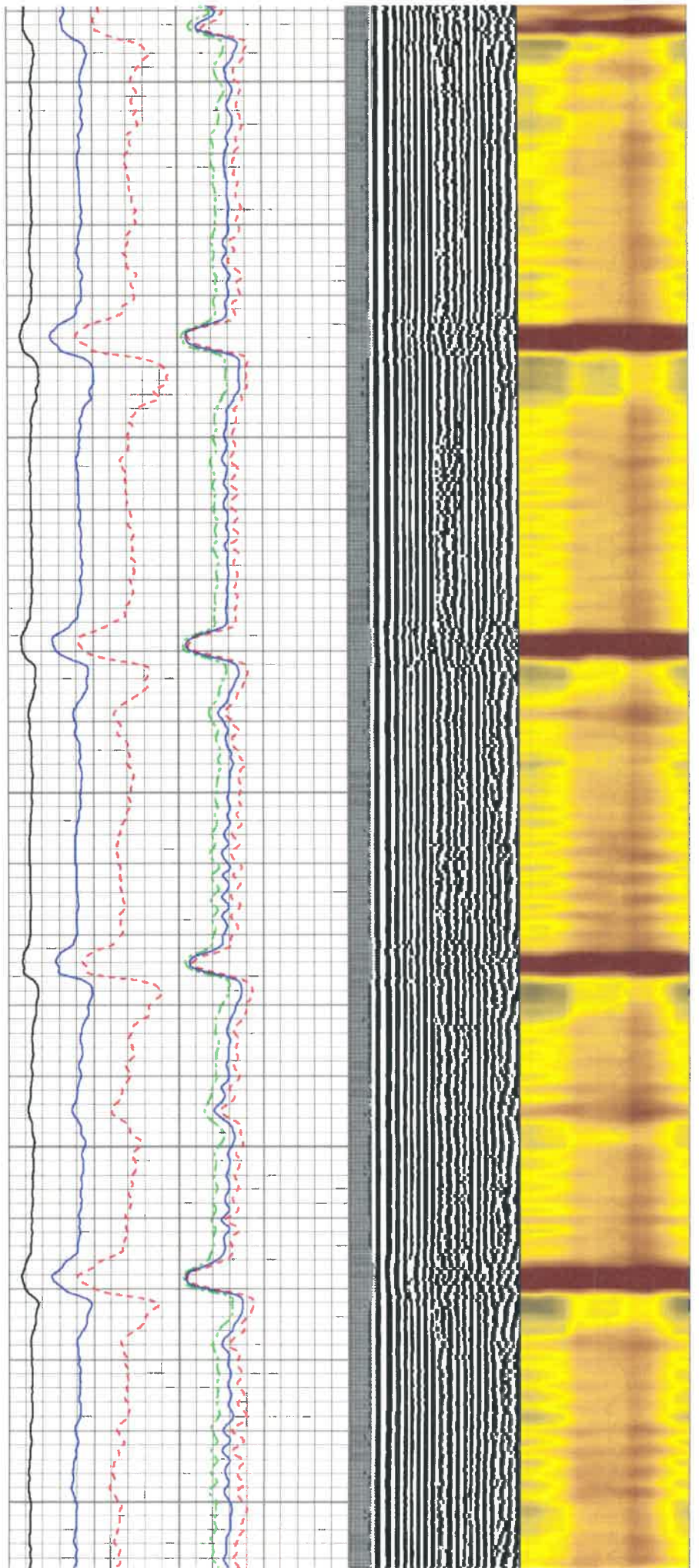


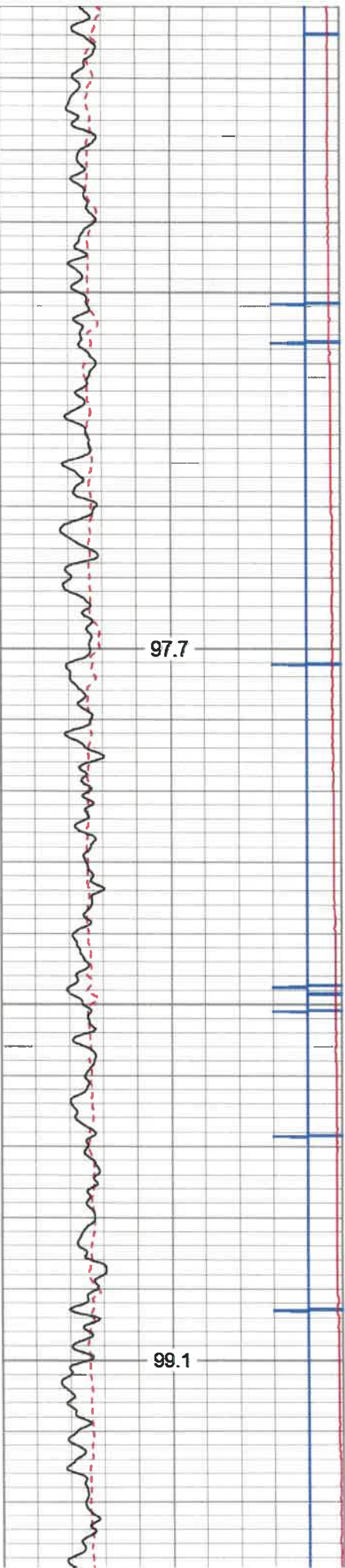


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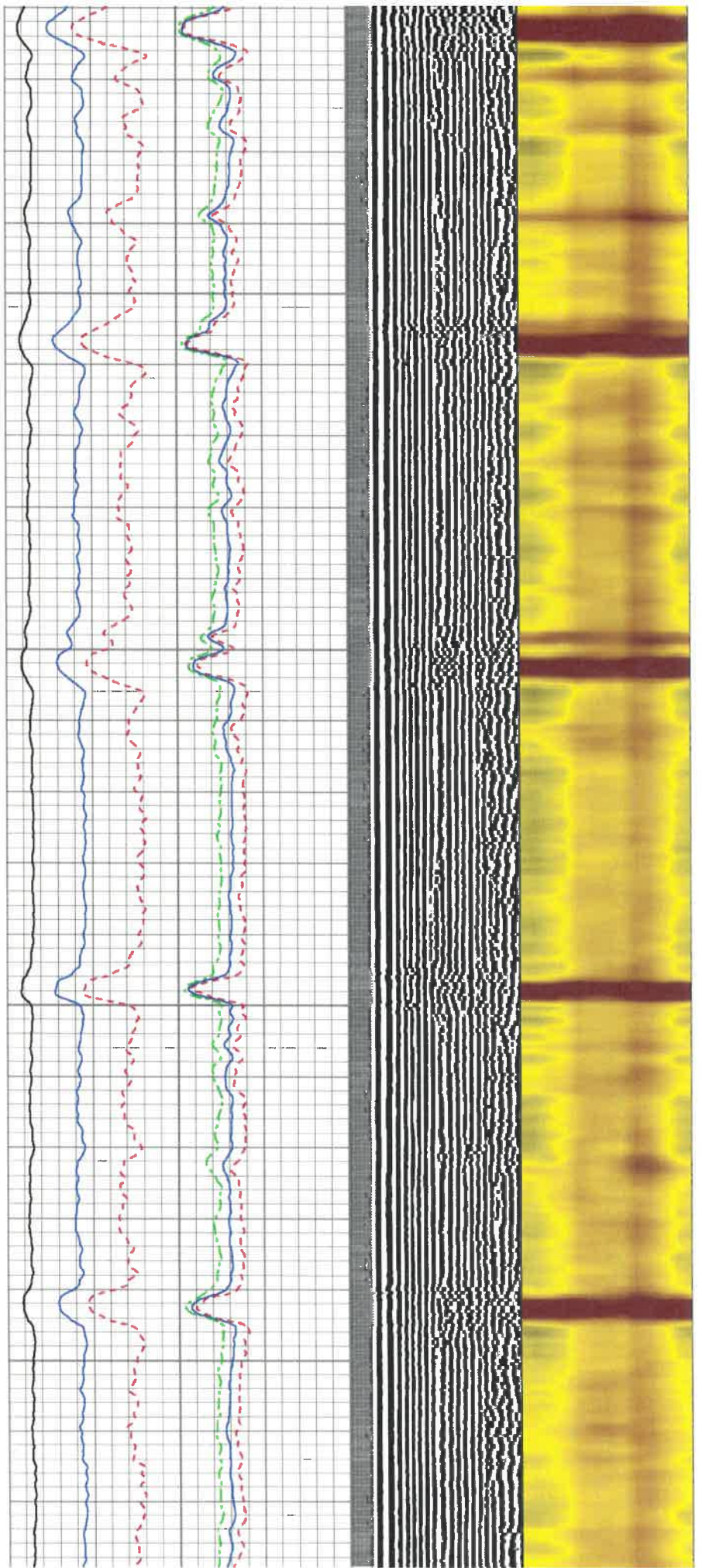
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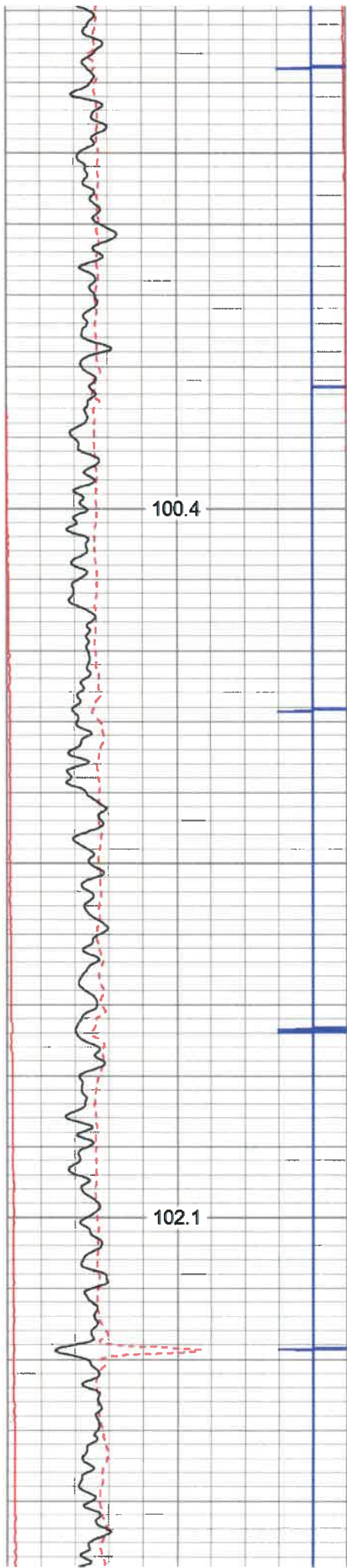




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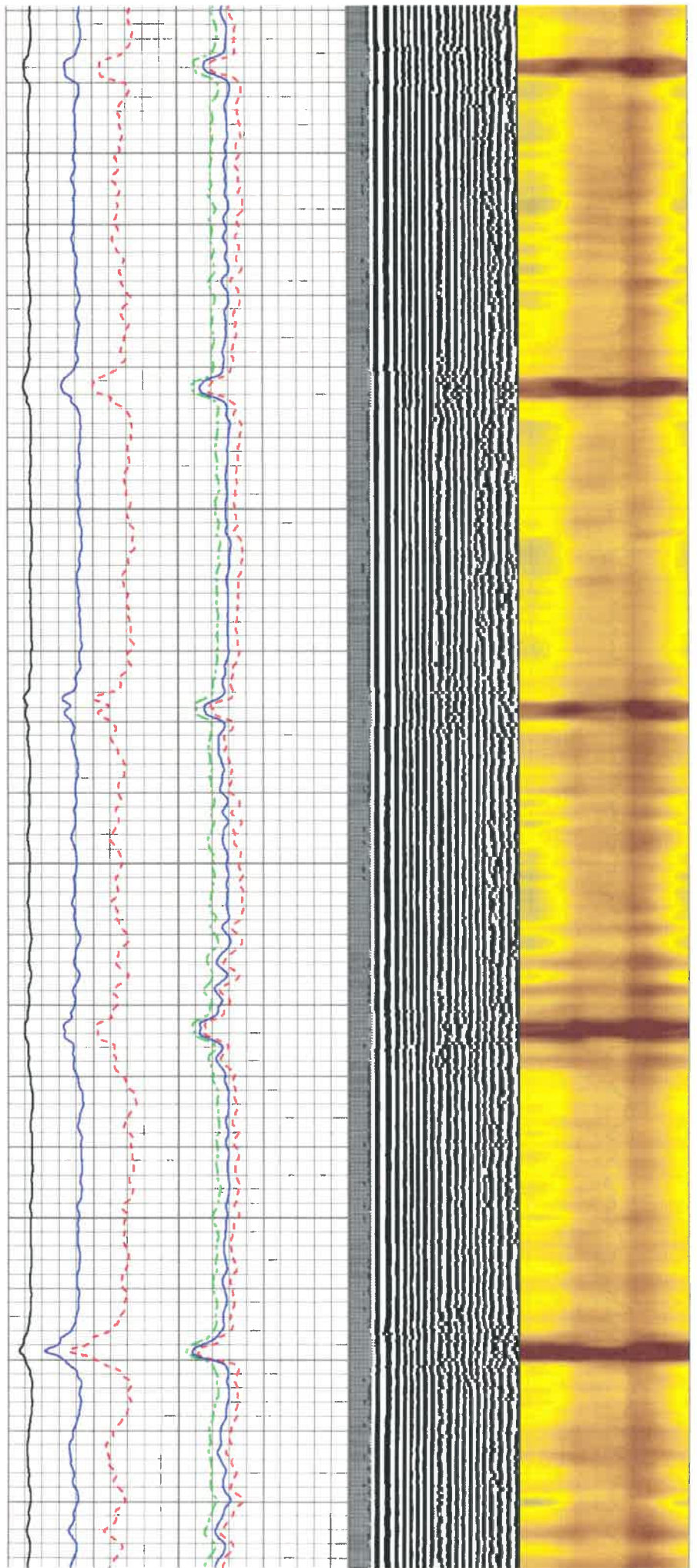
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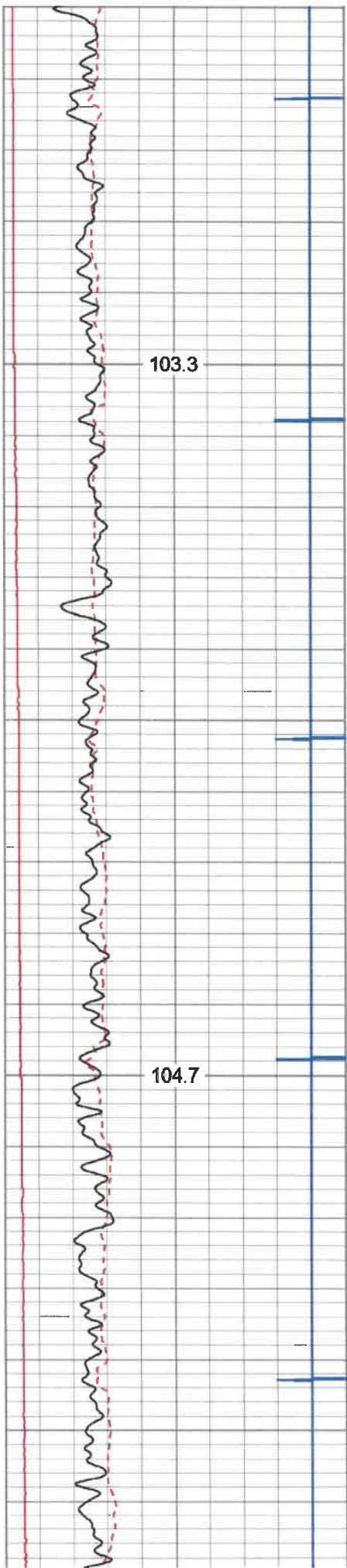




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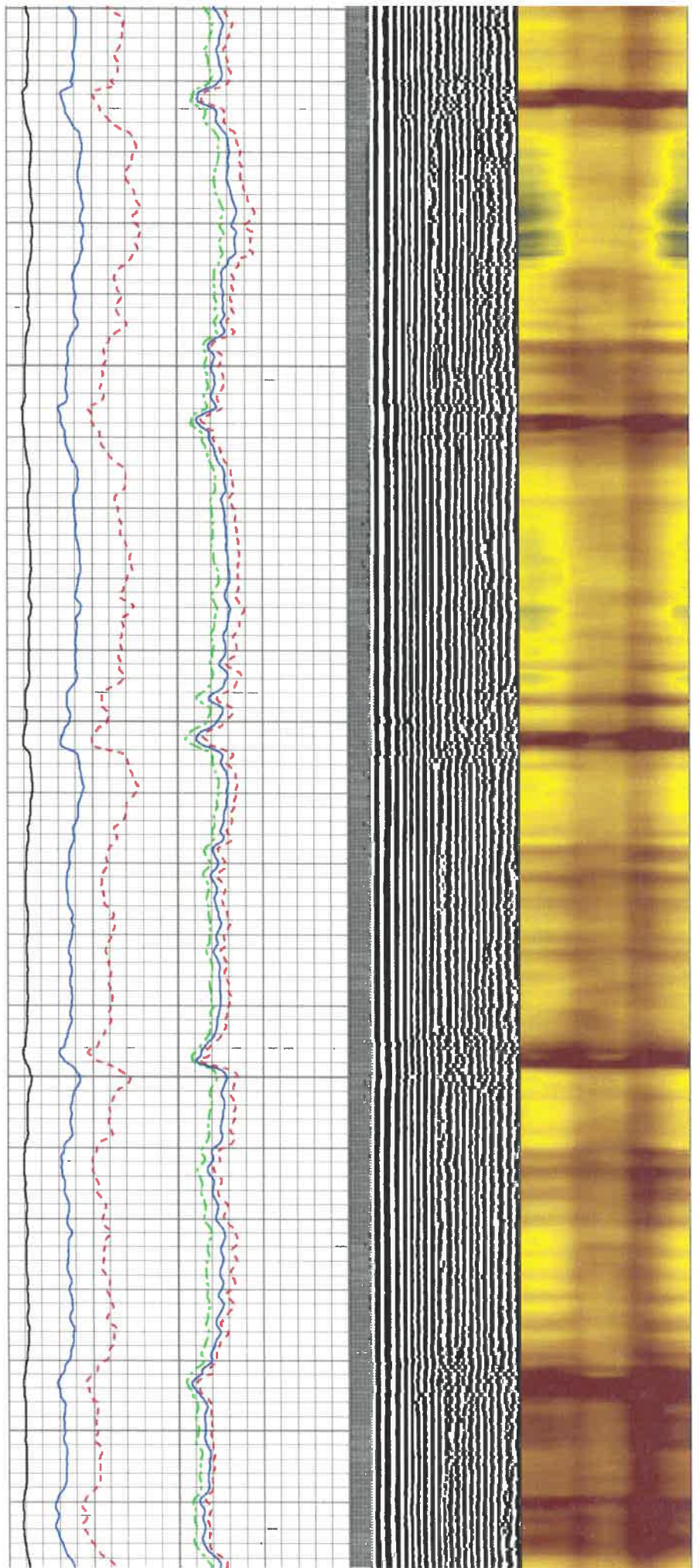
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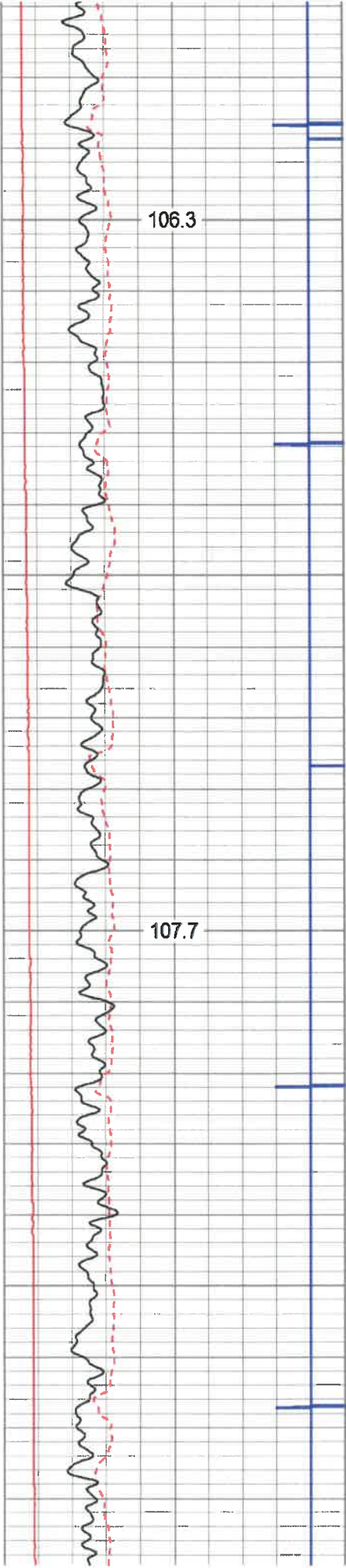




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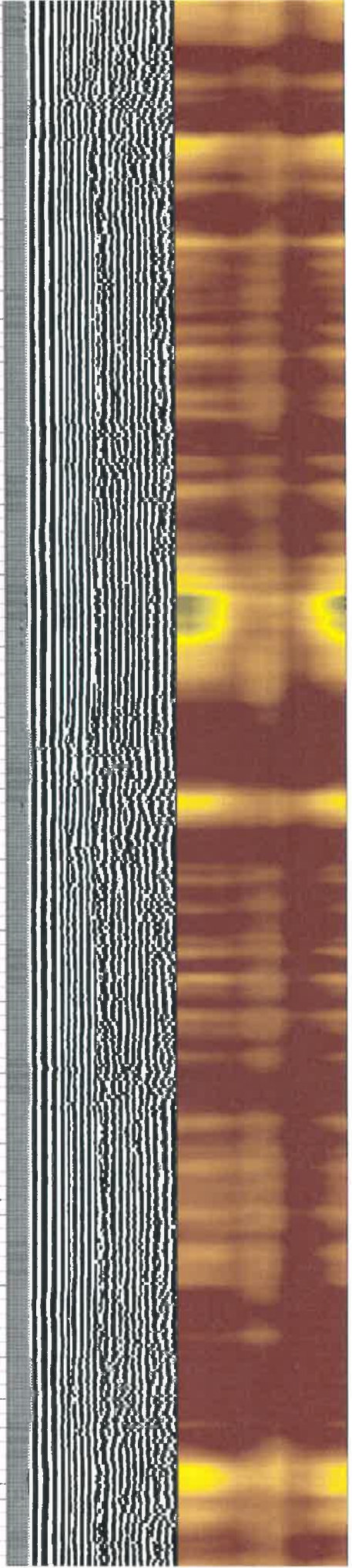
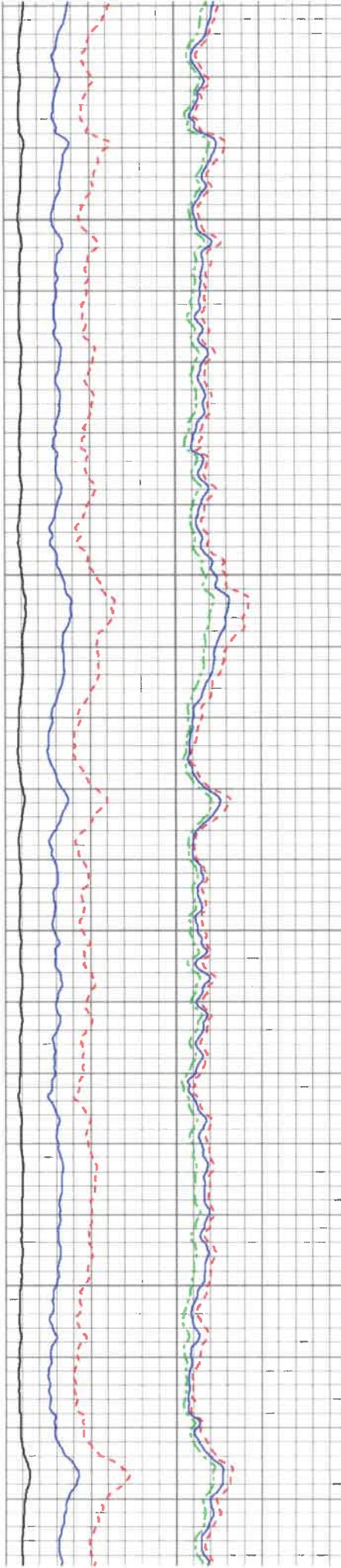
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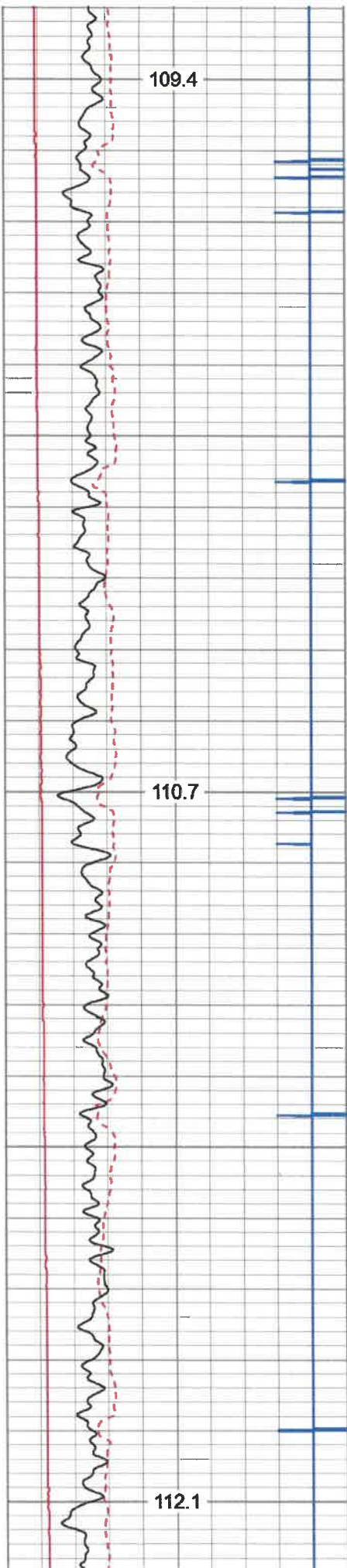




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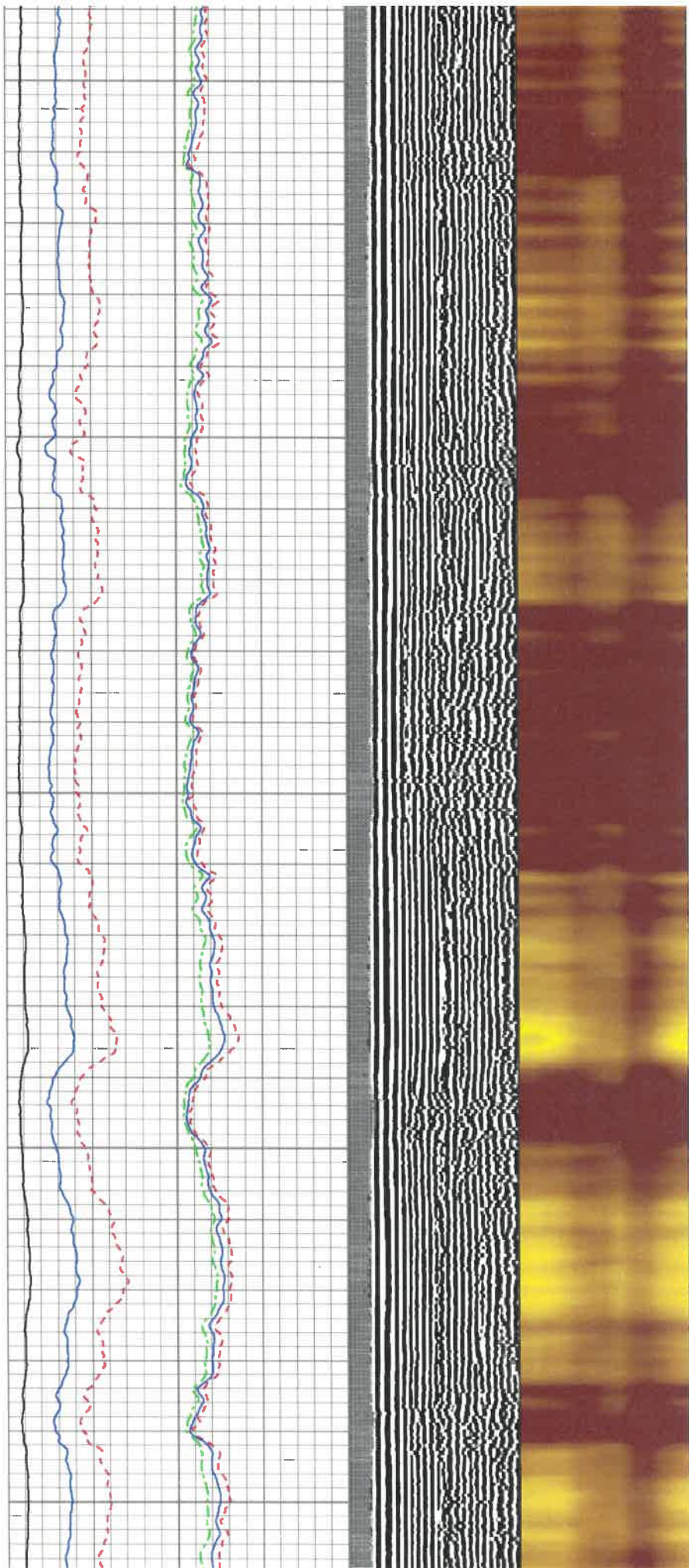


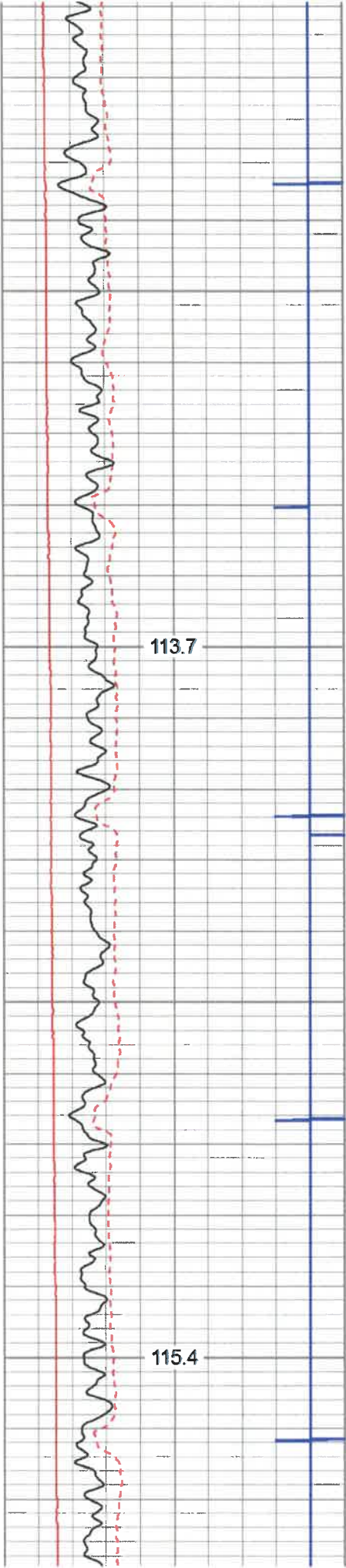


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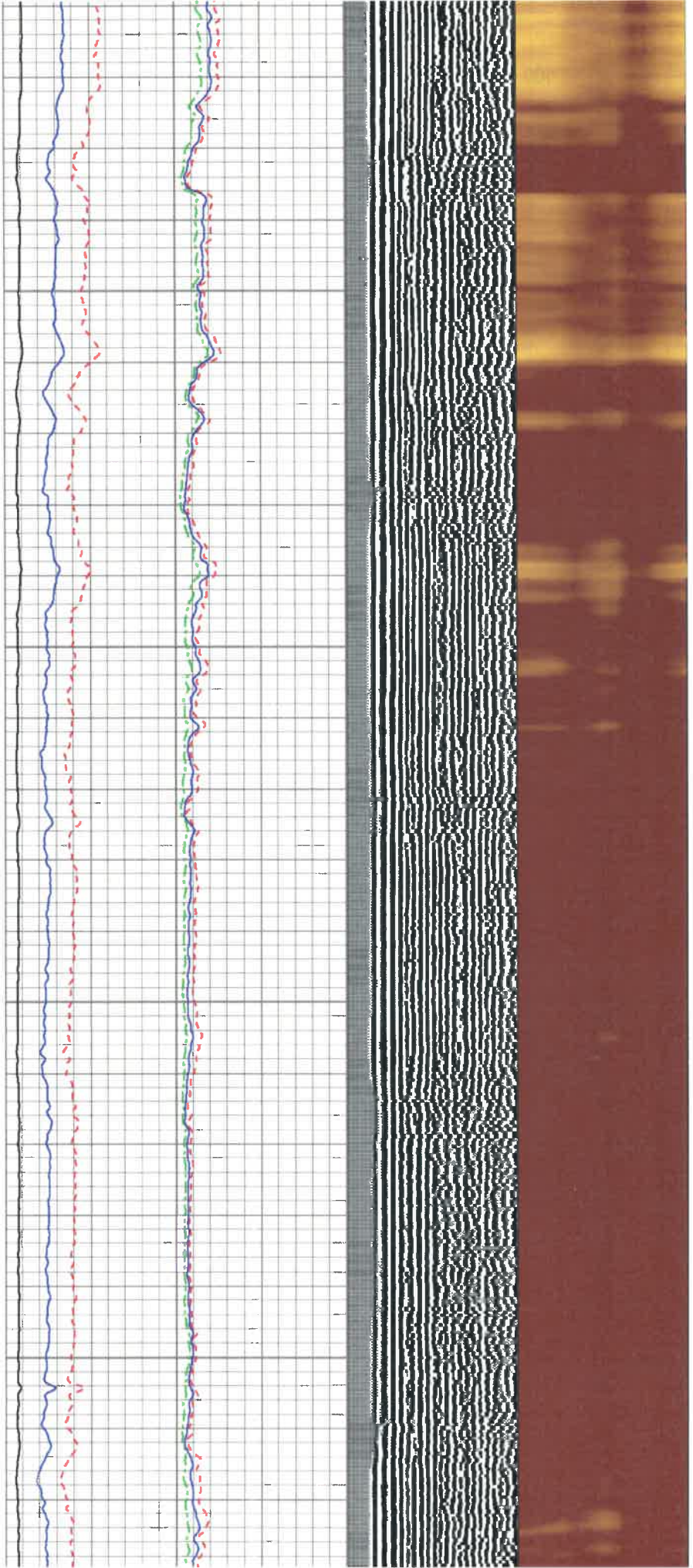
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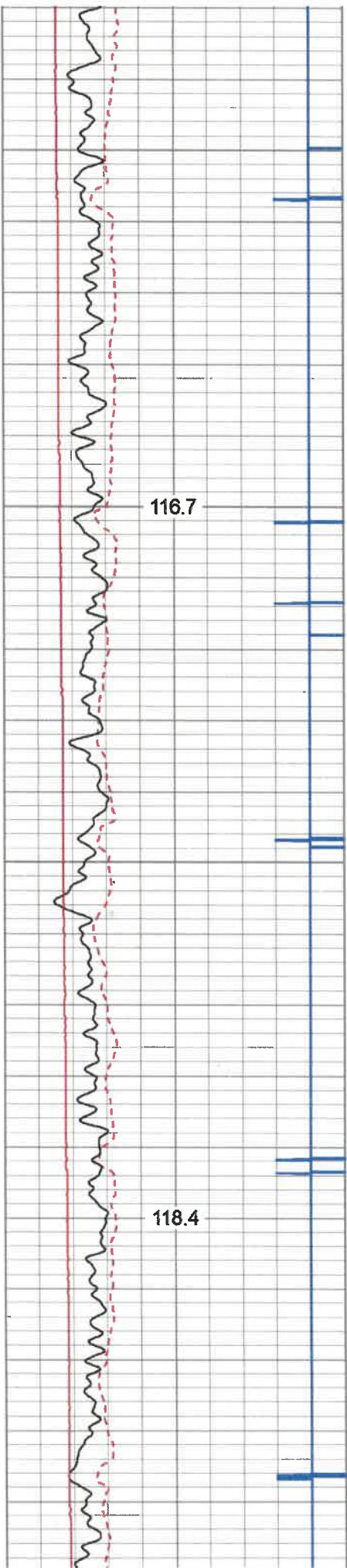




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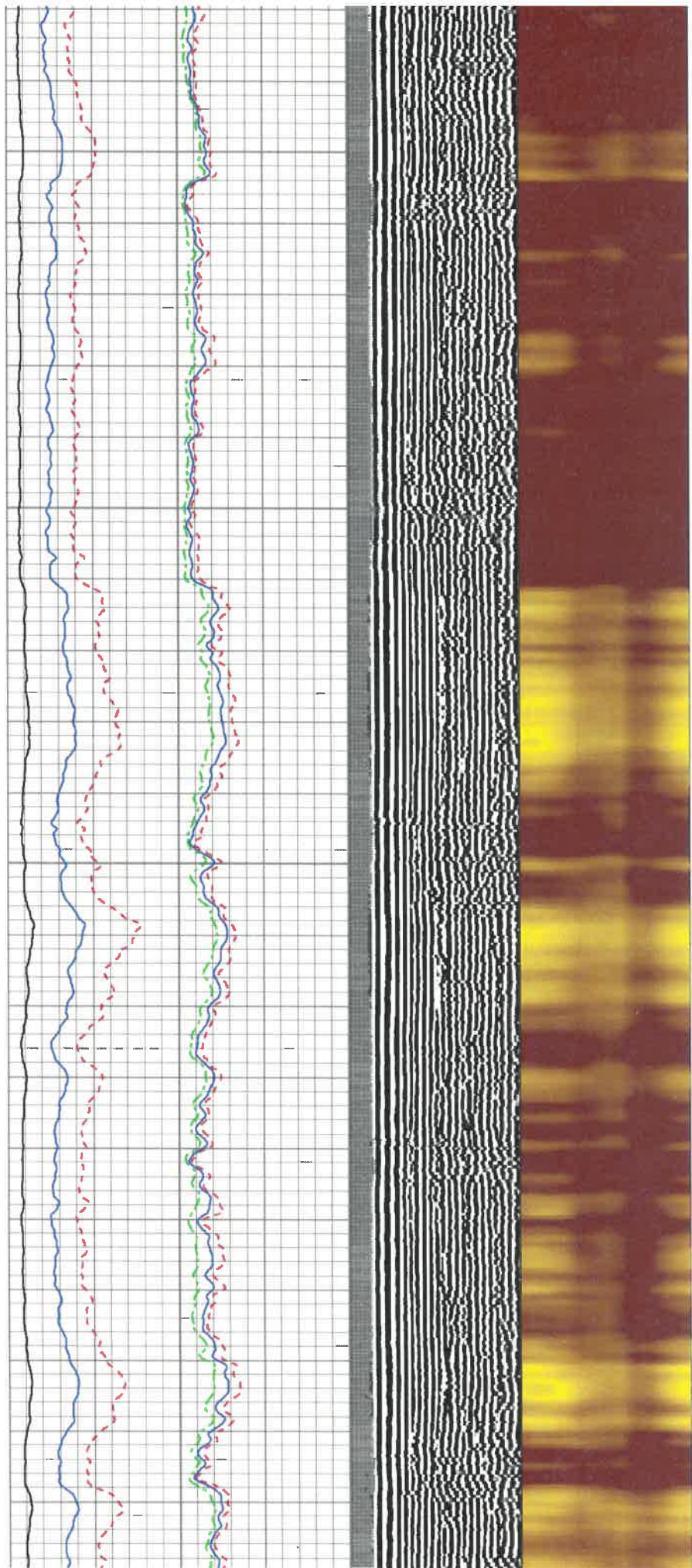
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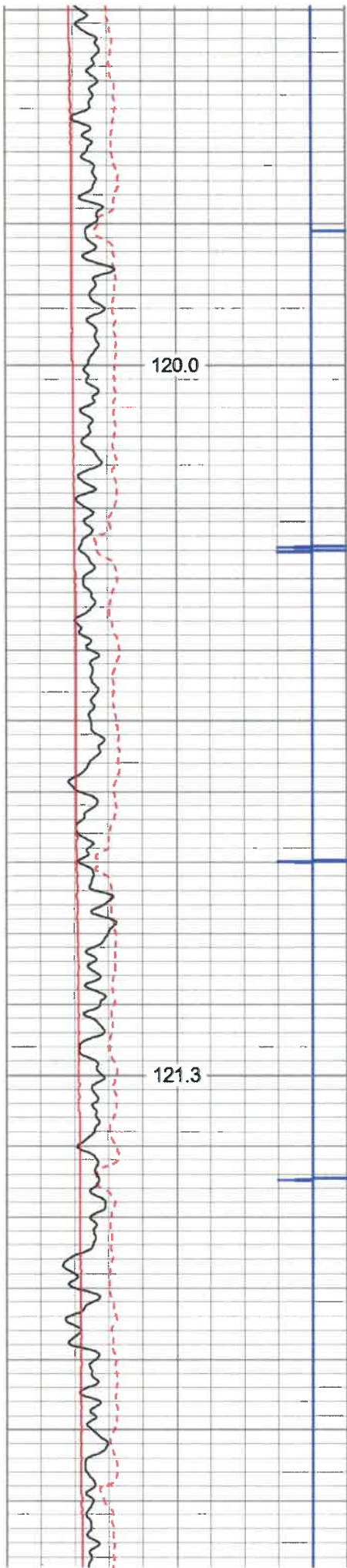




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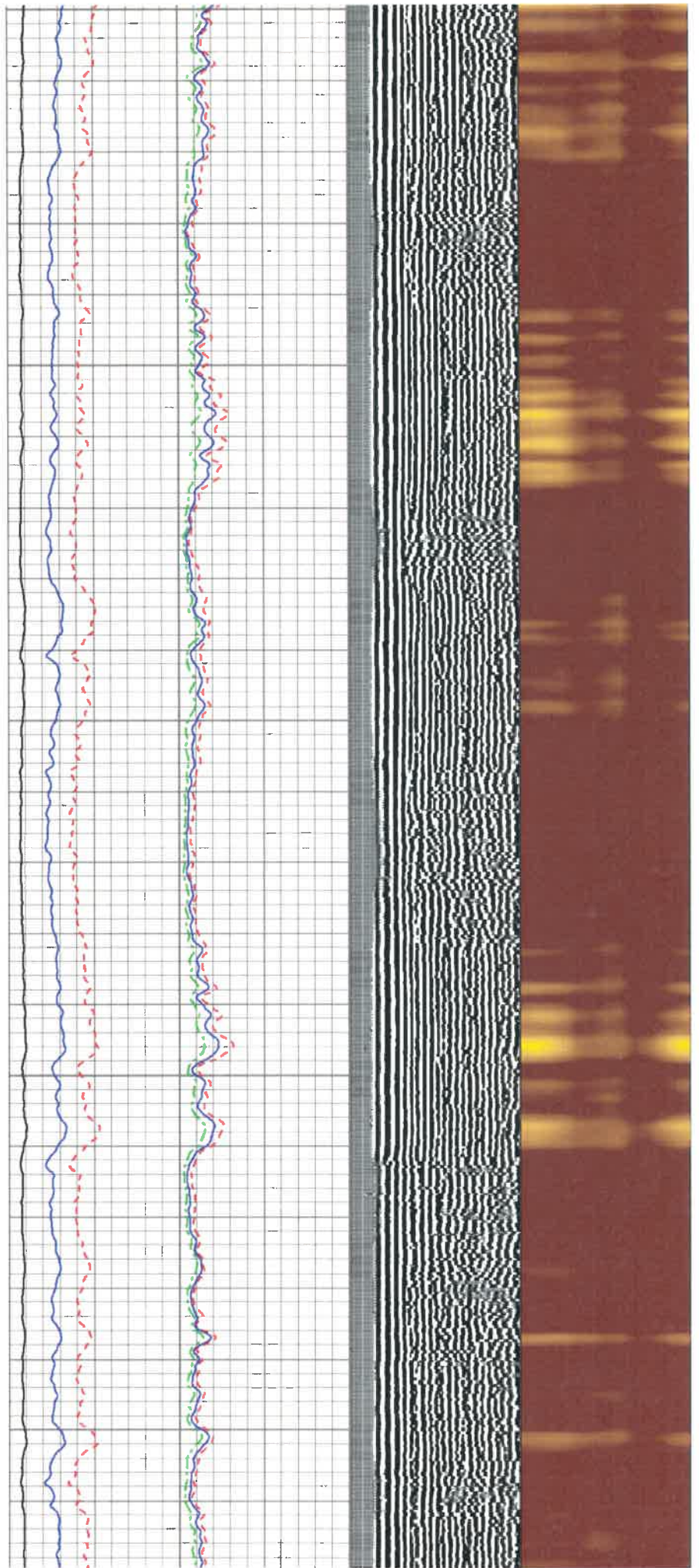
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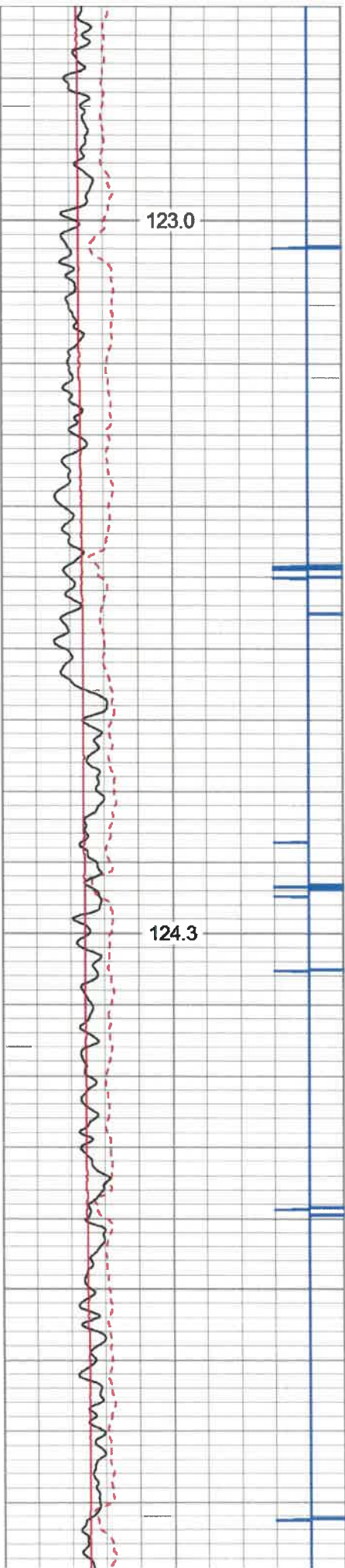




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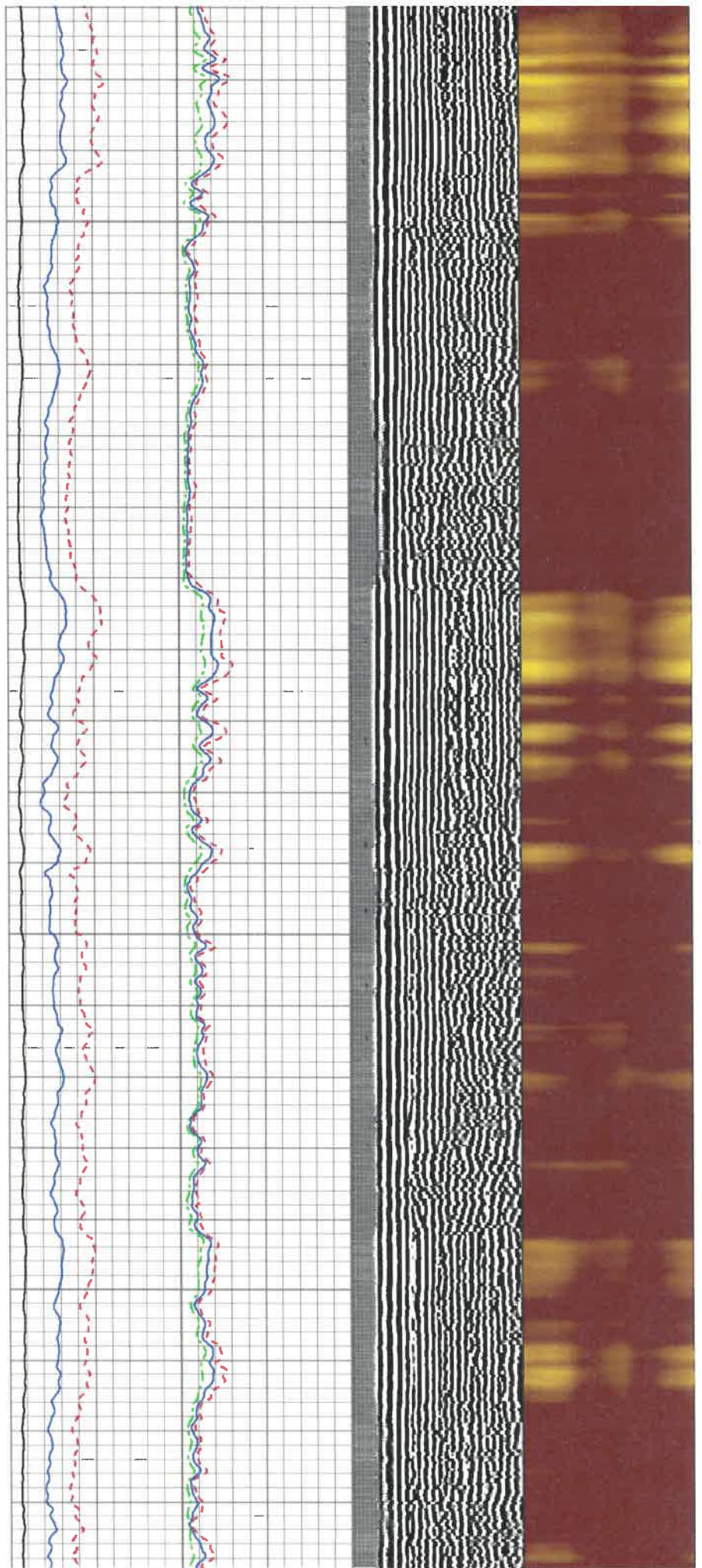
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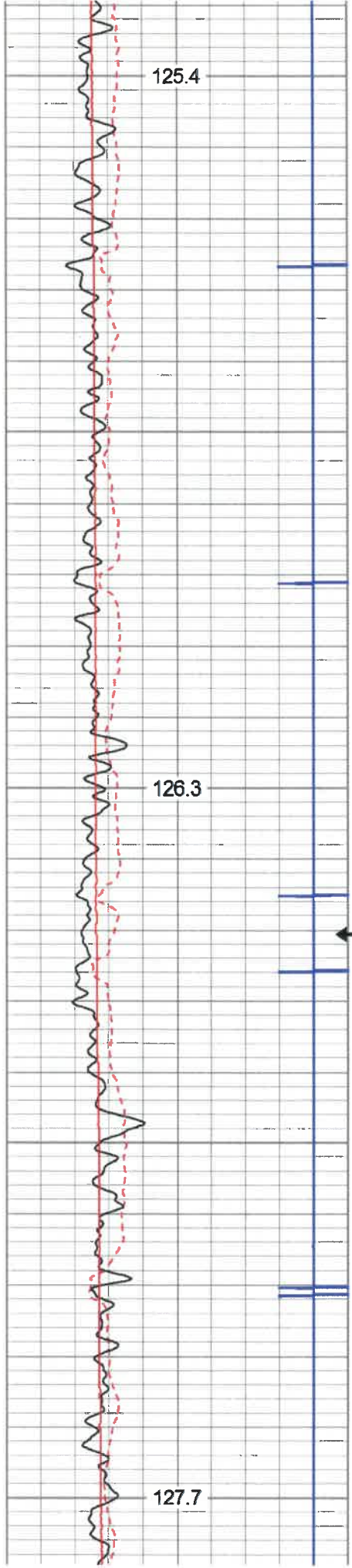




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5600



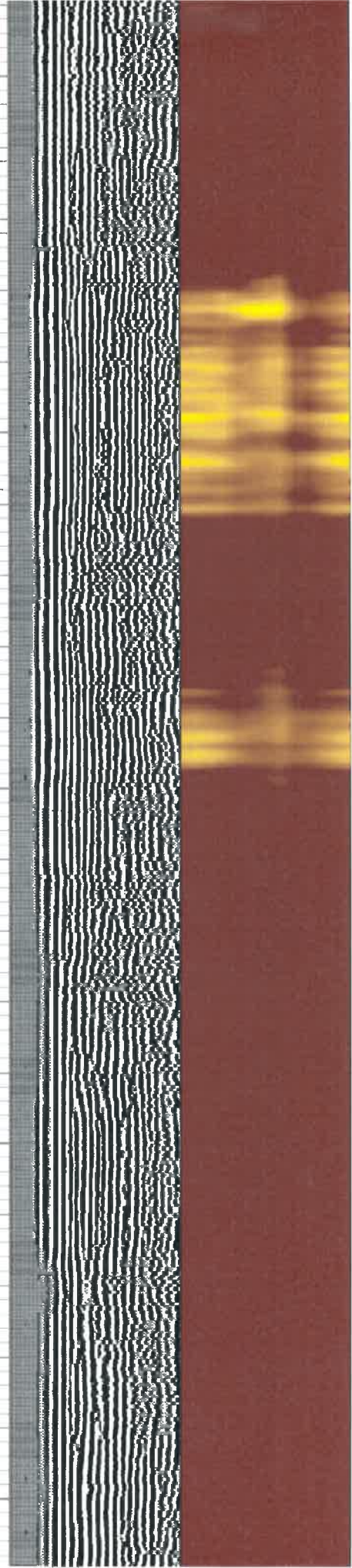
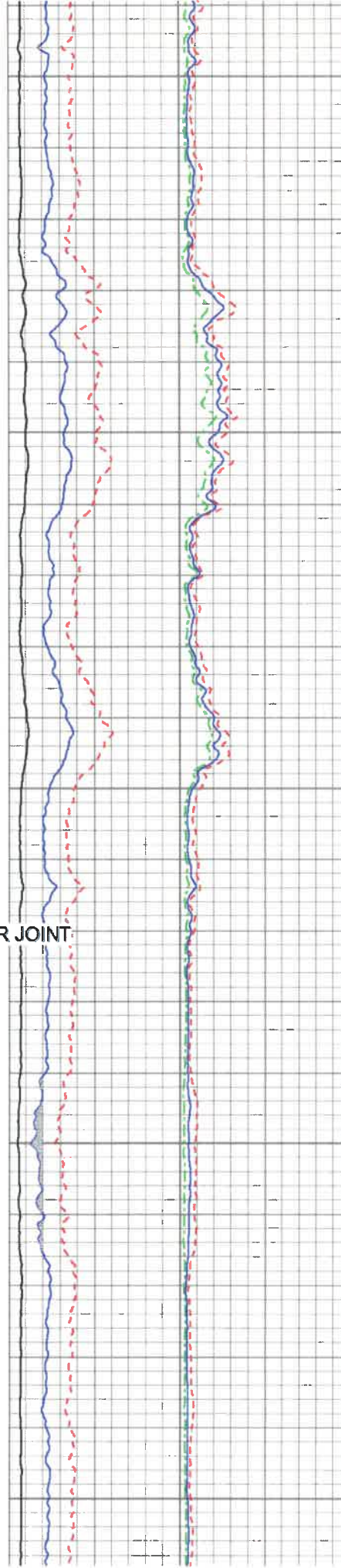


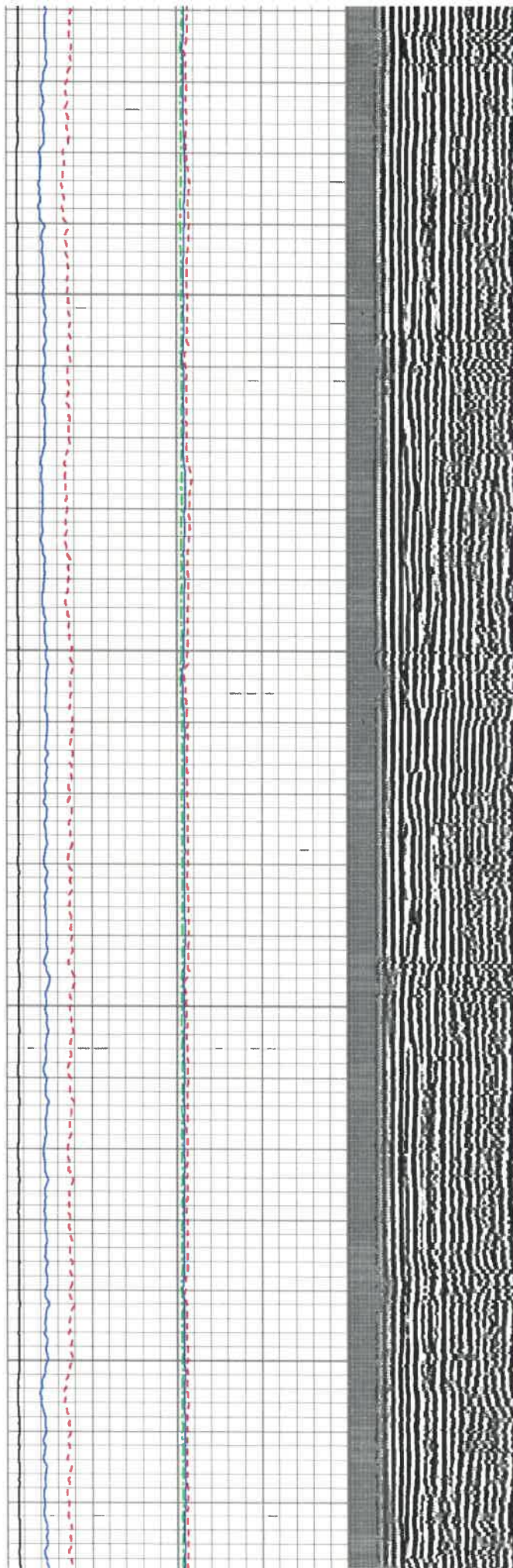
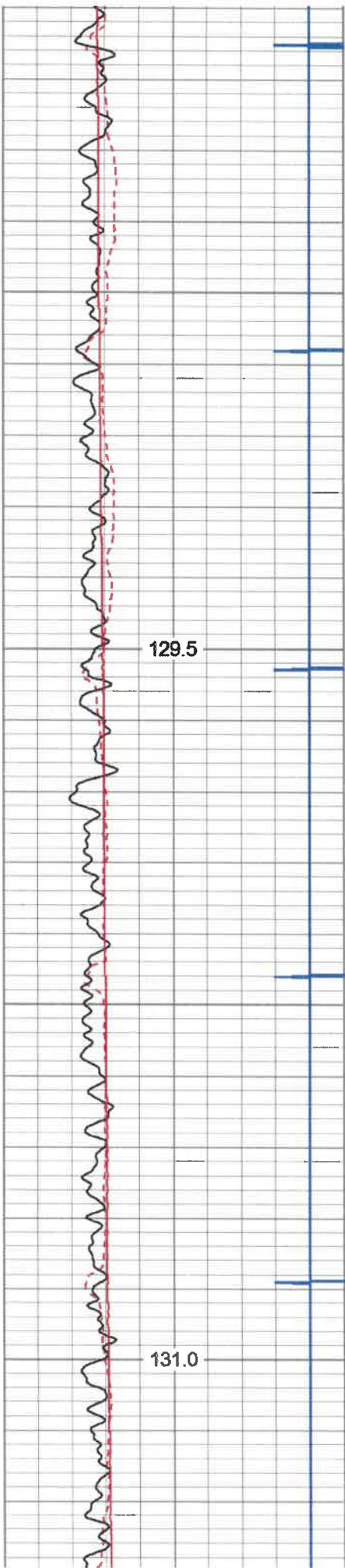
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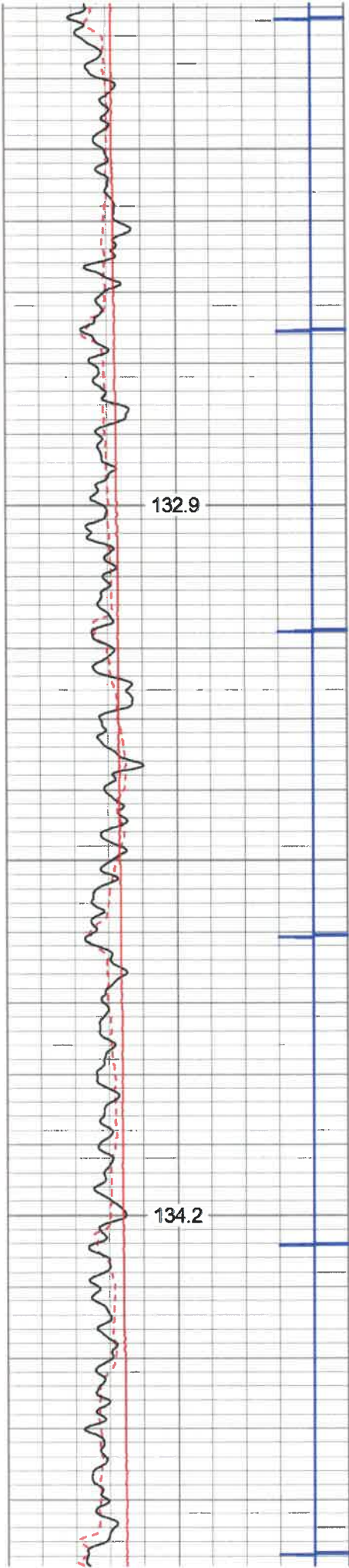
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5900

← MARKER JOINT

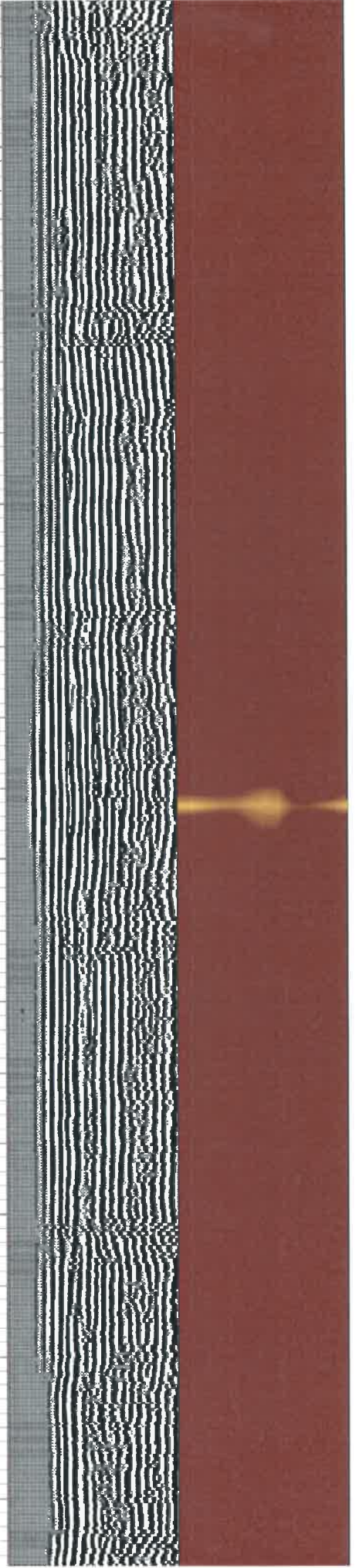
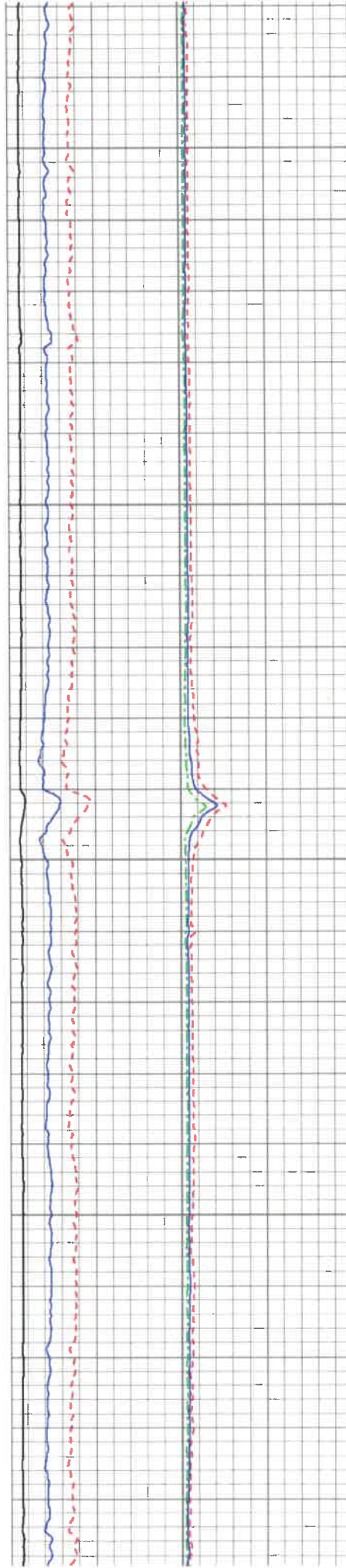


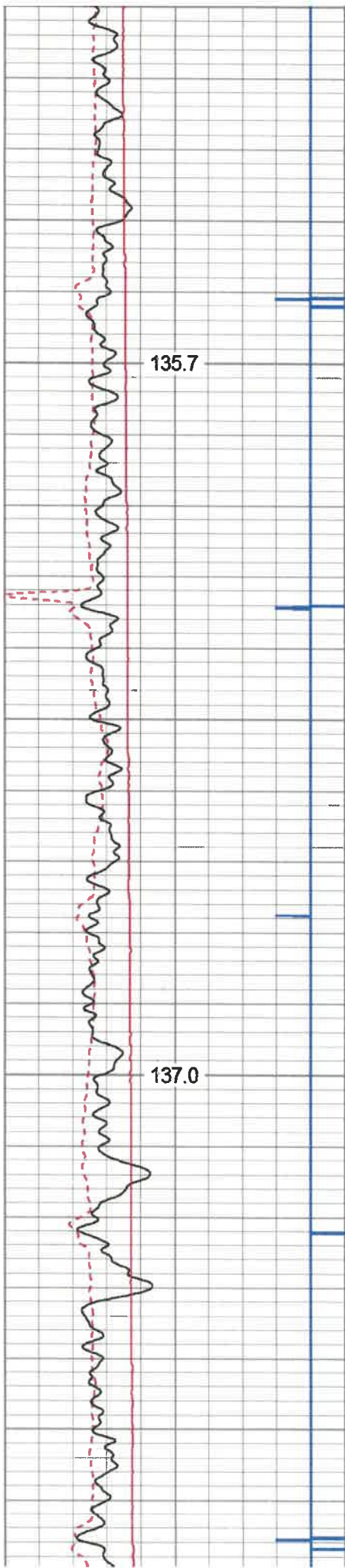




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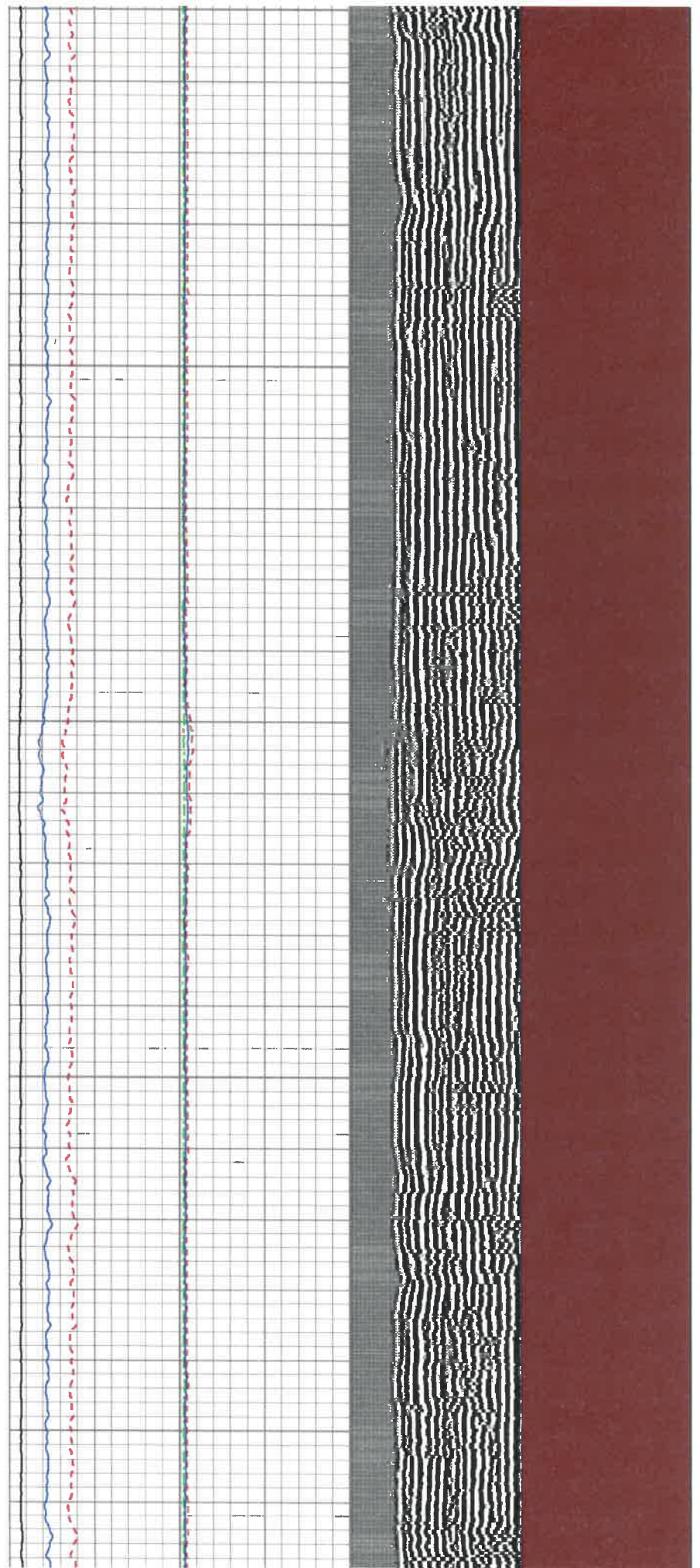
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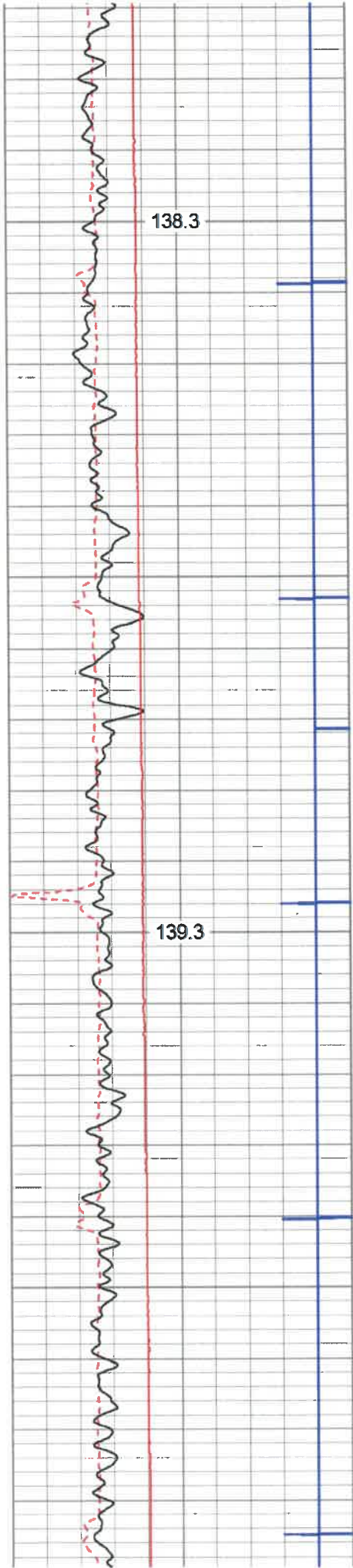




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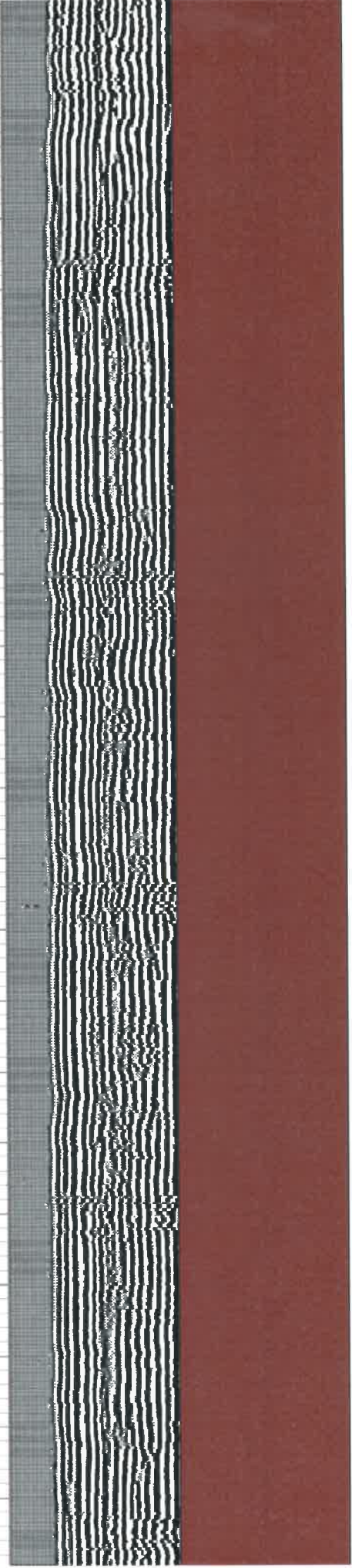
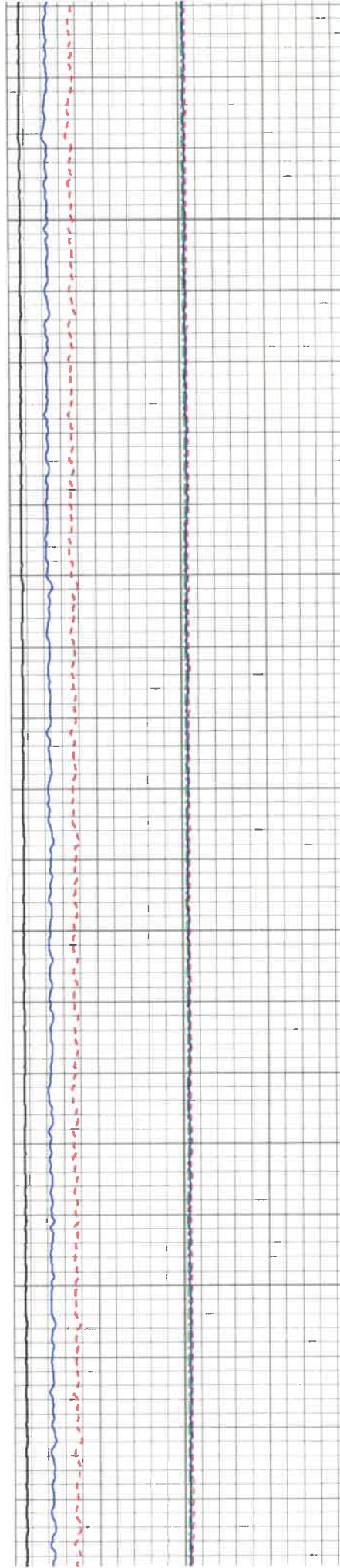
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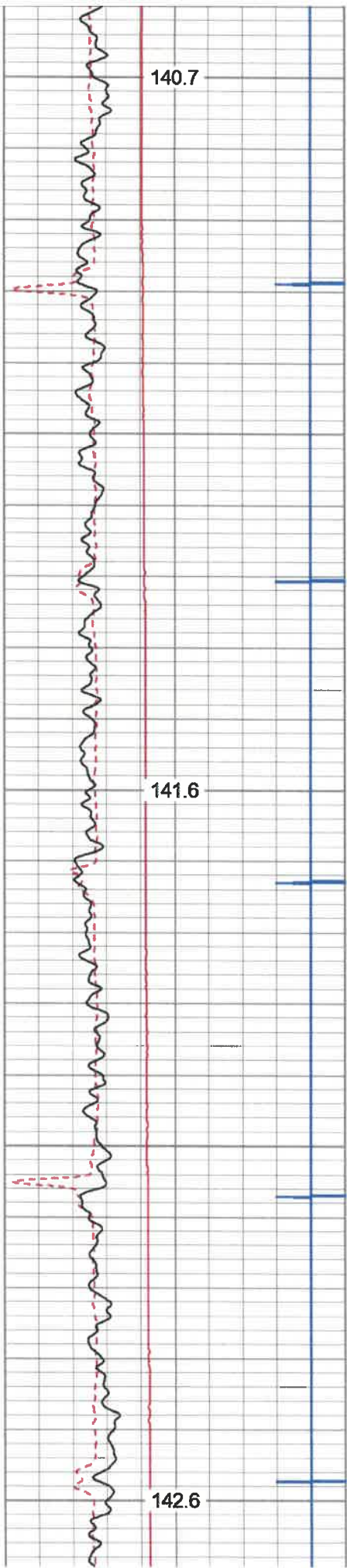




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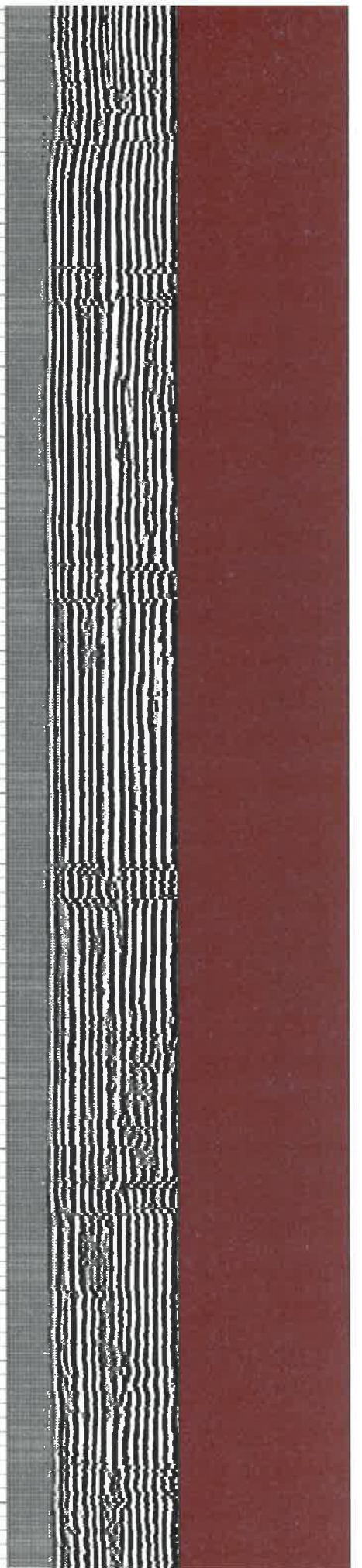
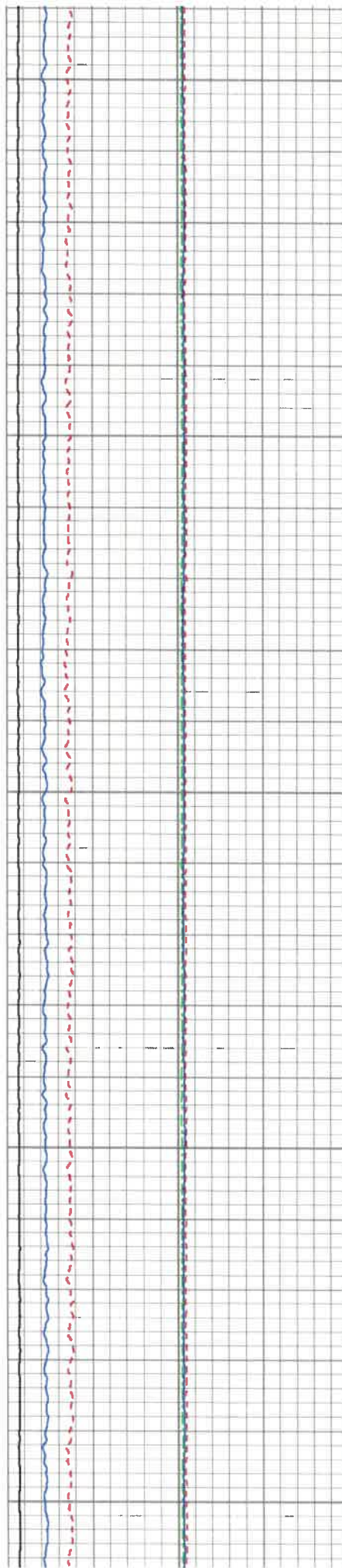


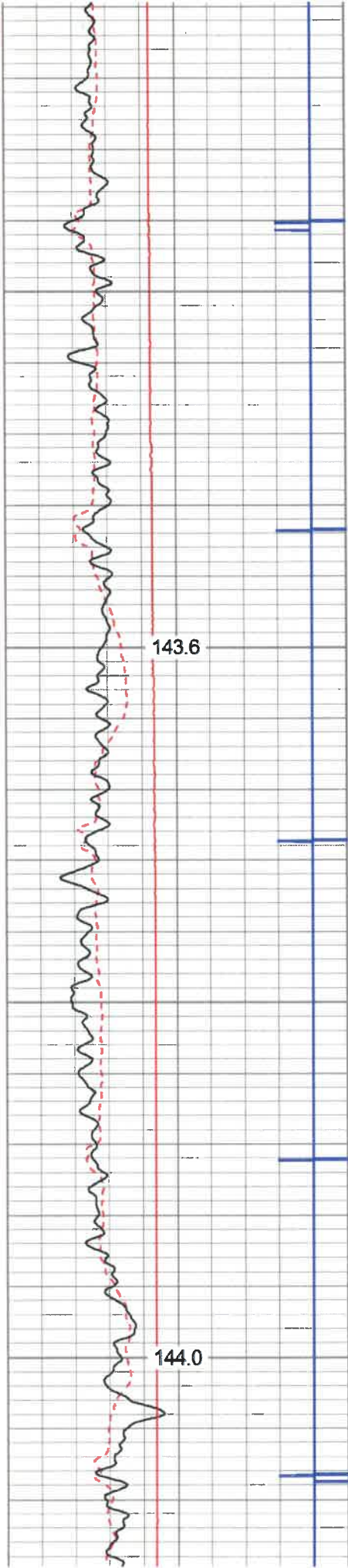


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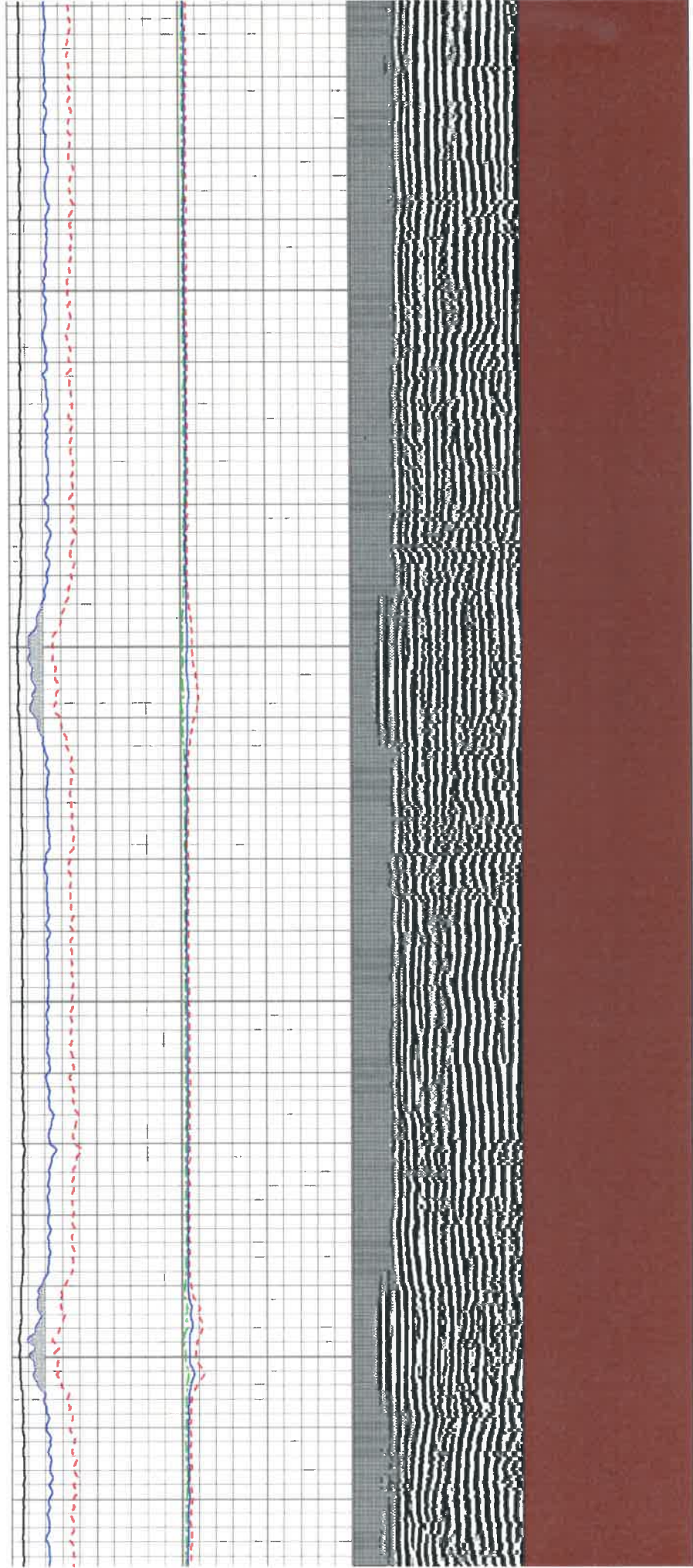
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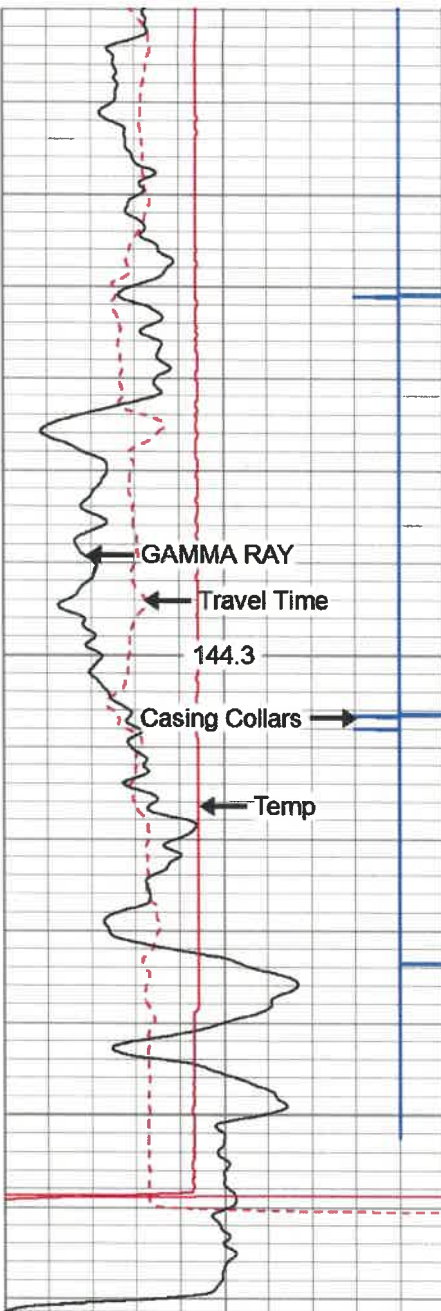




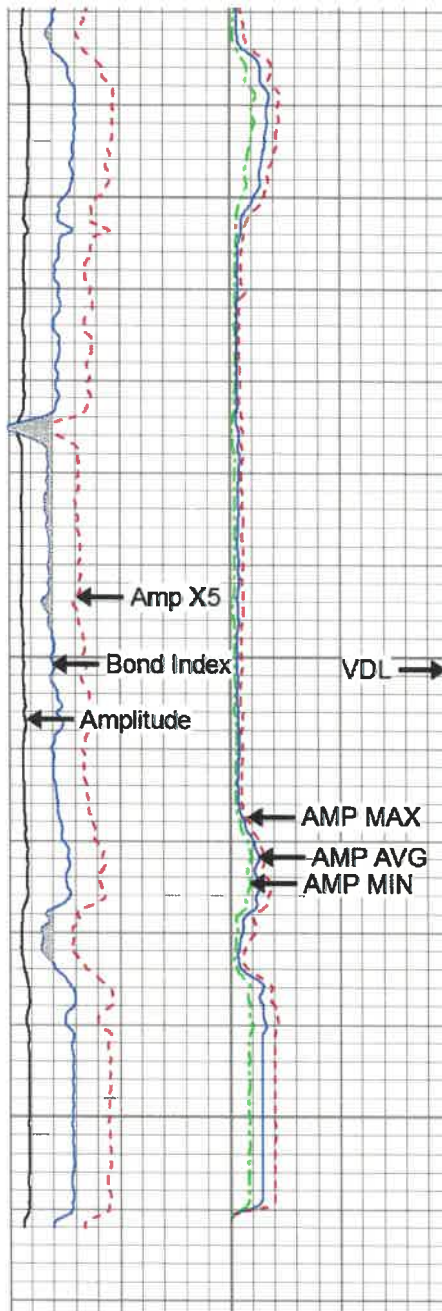
7100

7200





7300



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

TEMP
(degF)

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

200	VDL	1200	1	Sector Map	12
			20		80

RECEIVED
 Office of Oil and Gas
 FEB 18 2020
 Wyoming Department of
 Environmental Protection



REPEAT SECTION

Database File: c:\warrior\data\2019 antero\antero-hughes river 3h.db
 Dataset Pathname: pass4
 Presentation Format: antero f
 Dataset Creation: Tue Apr 02 10:16:59 2019 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240

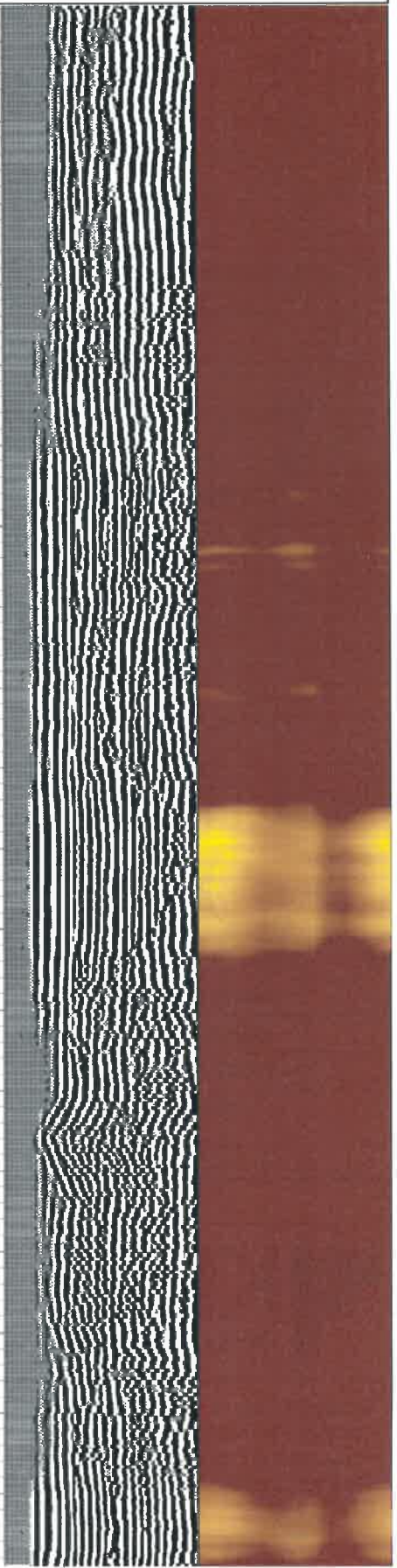
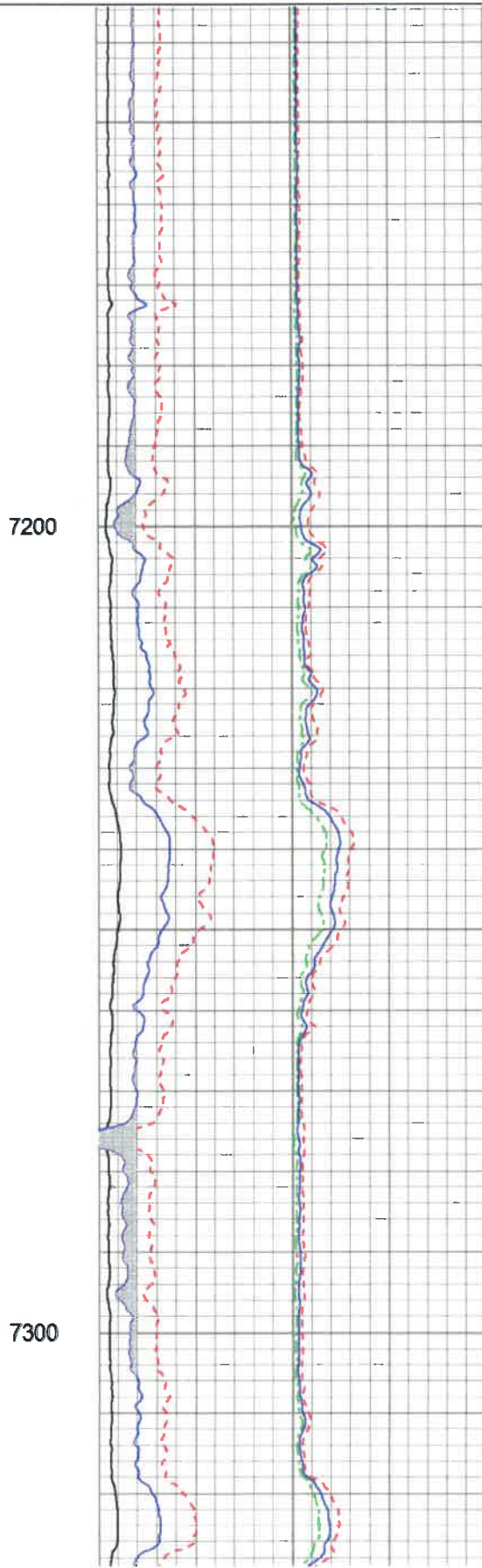
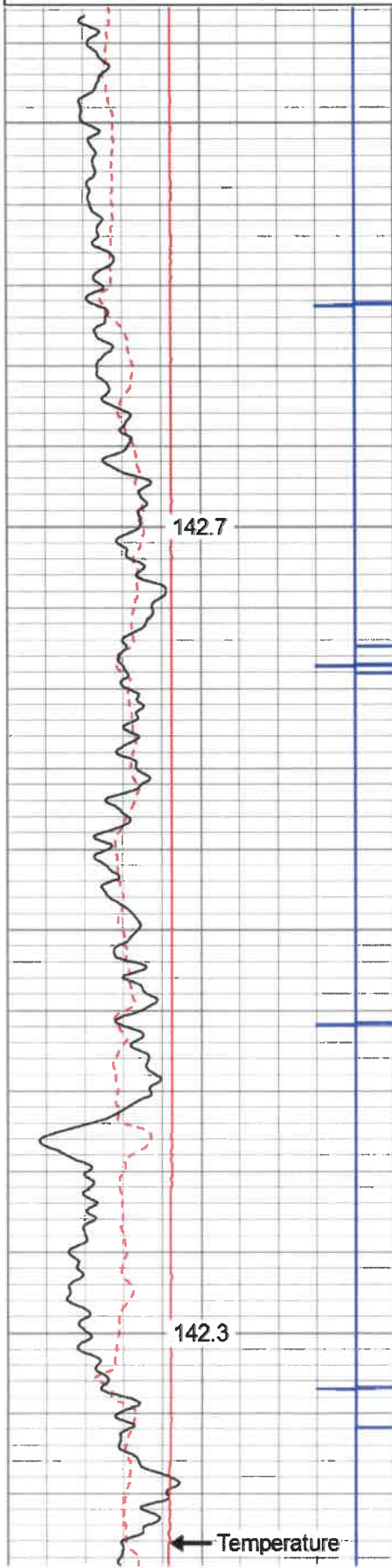
280	Travel Time (usec)	180	Amplitude	0	Amp Avg	150	200	VDL	1200	1	Sector Map	12
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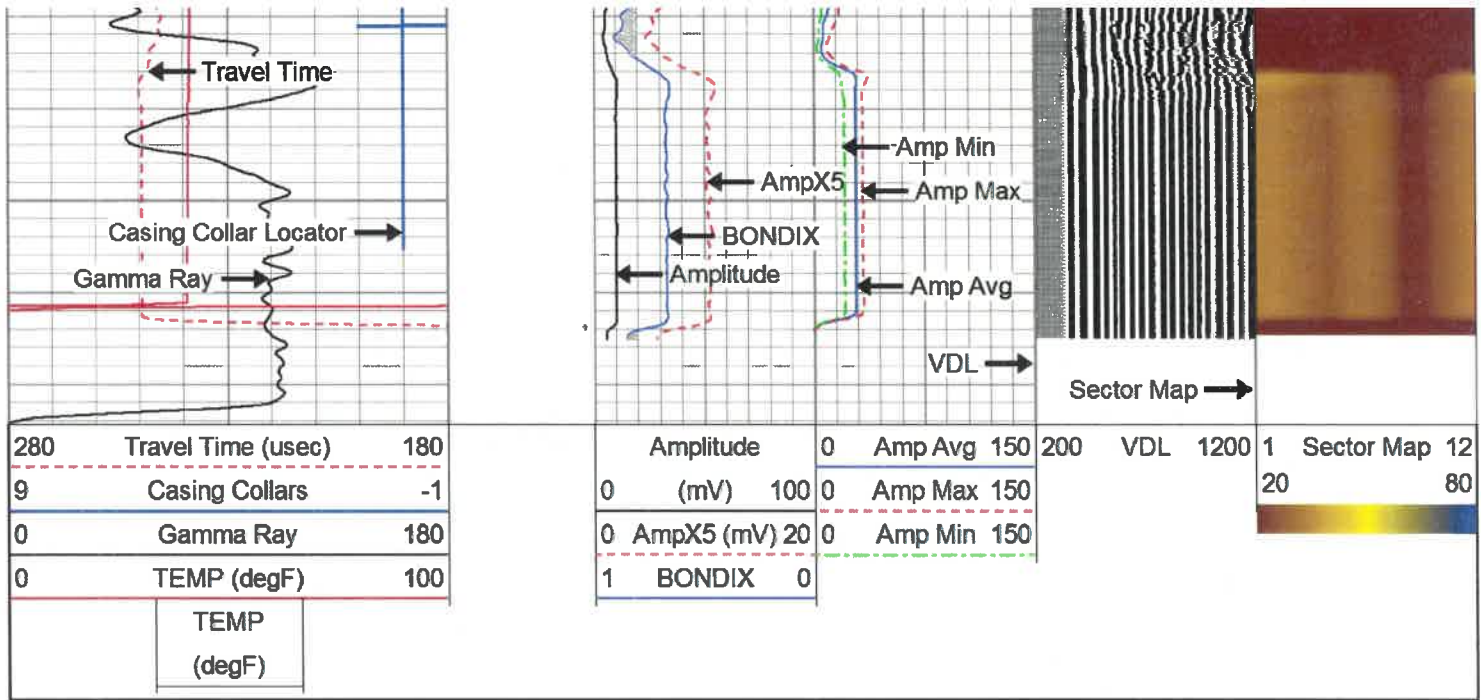
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0	Gamma Ray	180
0	TEMP (degF)	100

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



TEMP
(degF)





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		SCBL-Tek12 (IOL40-05) Tekco 400 Deg F 12 Sector RIB with Temp	9.13	3.25	135.00
WVFS2	11.48					
WVFS3	11.48					
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					

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WVFCAL	10.73		2.75 2 3/4" Tekco Adjustable Centralizer	2.73	2.75	25.00
WVF5FT	9.73					
WVFTEMP	6.40					
WVFSYNC	6.40					
GR	1.04		GR-Tek-Co 2 3/4 (IPSNO-03) Tekco 2 3/4" 400 Deg. F Logging Gamma Ray	3.67	2.75	40.00

Dataset: antero-hughes river 3h.db: field/well/run1/pass5.3
 Total Length: 20.07 ft
 Total Weight: 250.00 lb
 O.D.: 3.25 in

Calibration Report

Database File: C:\Warrior\Data\2019 antero\antero-hughes river 3h.db
 Dataset Pathname: pass5.3
 Dataset Creation: Tue Apr 02 12:19:34 2019 by Calc 7.0 B1

Gamma Ray Calibration Report

Serial Number: IPSNO-03
 Tool Model: Tek-Co 2 3/4
 Performed: Mon Nov 07 10:23:17 2016
 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: HUGHES RIVER UNIT 3H
 Field: MARCELLUS
 County: RITCHIE

Energy Services

State

W.V.

Country

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