



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

Company ANTERO RESOURCES CORPORATION
 Well WINCHESTER UNIT 2H
 Field MARCELLUS
 County TYLER
 State W.V.

Company ANTERO RESOURCES CORPORATION
 Well WINCHESTER UNIT 2H
 Field MARCELLUS
 County TYLER State W.V.

Location: API #: 47095025340000 Other Services

SEC	TWP	RGE	Elevation	N/A	Elevation
Permanent Datum	G.L.		K.B. N/A		D.F. N/A
Log Measured From	K.B.		G.L. N/A		
Drilling Measured From	K.B. OF 25'				

Date	3/31/19
Run Number	ONE
Depth Driller	16780'
Depth Logger	6651'
Bottom Logged Interval	6651'
Top Log Interval	SURFACE
Open Hole Size	N/A
Type Fluid	H2O
Density / Viscosity	N/A
Max. Recorded Temp.	141 DEG
Estimated Cement Top	125'
Time Well Ready	N/A
Time Logger on Bottom	11.40
Equipment Number	340
Location	BRIDGEPORT, WV
Recorded By	JBOGGS
Witnessed By	MR. BOB REED

Borehole Record				Casing Record			
Run Number	Bit	From	To	Size	Weight	From	To
				20"	94LB	SURFACE	123'
				13 3/8"	54.5LB	SURFACE	390'
				9 5/8"	36LB	SURFACE	2676'
				5 1/2"	23LB	SURFACE	16780'

<<< Fold Here >>>

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
 LOG WAS RAN ON 5 1/2" CASING WITH 1500PSI ON CASING
 TOP OF CEMENT- 125'
 BOTTOM HOLE TEMP- 141 DEG
 MARKER JOINT ON LOG @ 5346'-5356'
 CORRECTED UP HOLE 19' TO PUT MARKER ON DEPTH WITH PIPE TALLY



Main Pass @ 1500 PSI

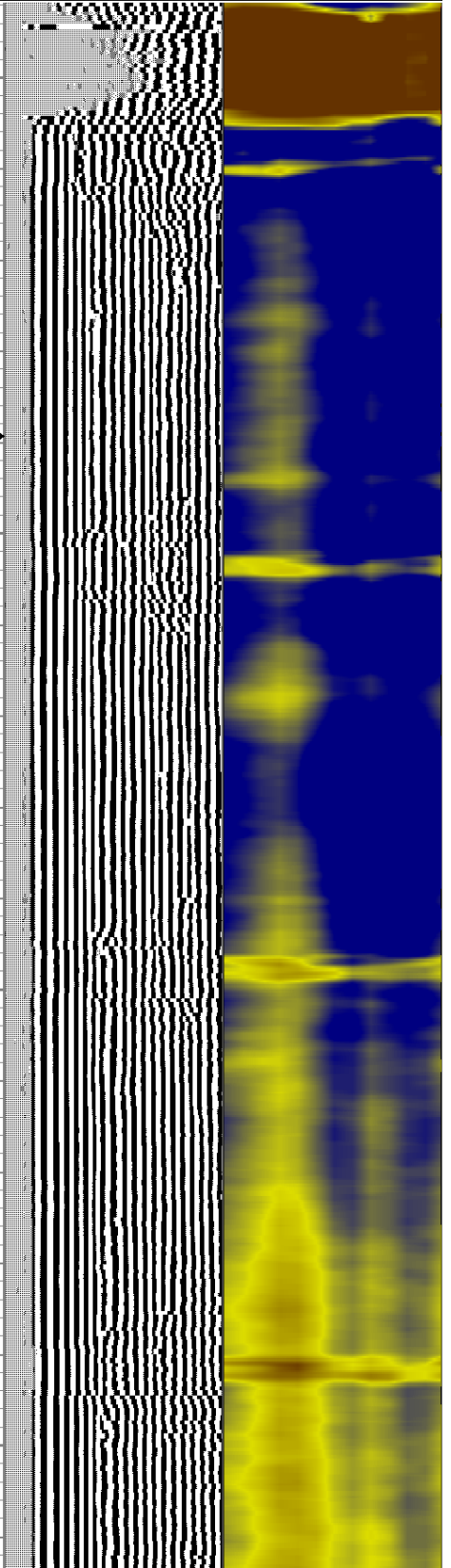
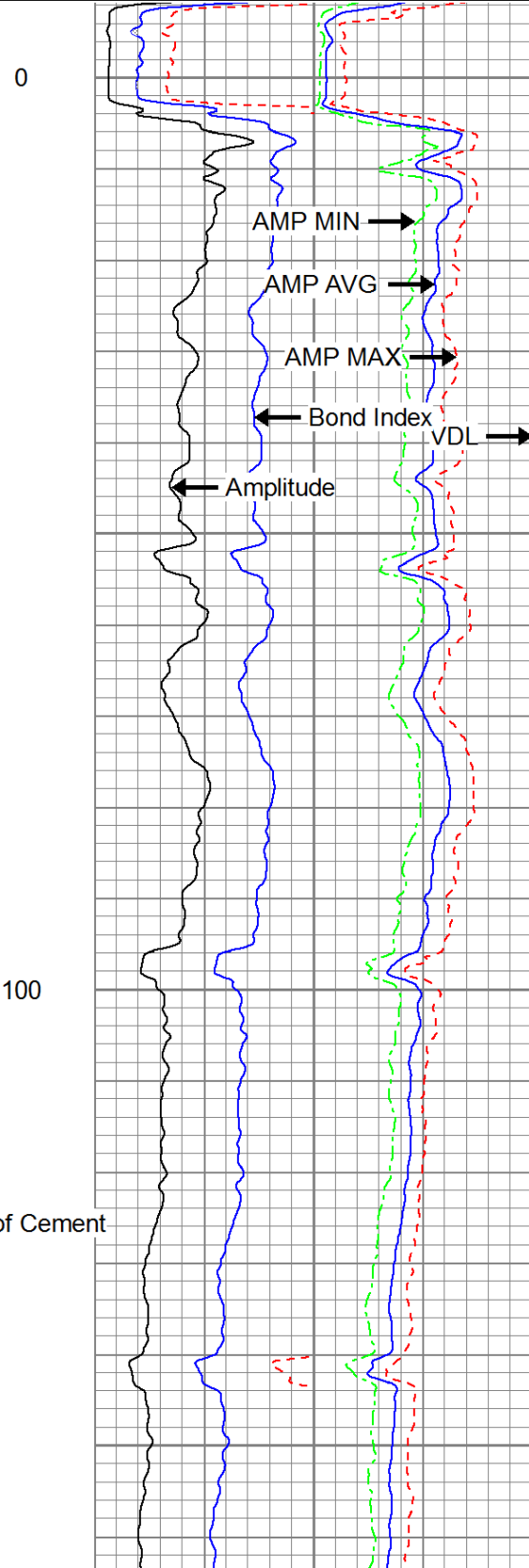
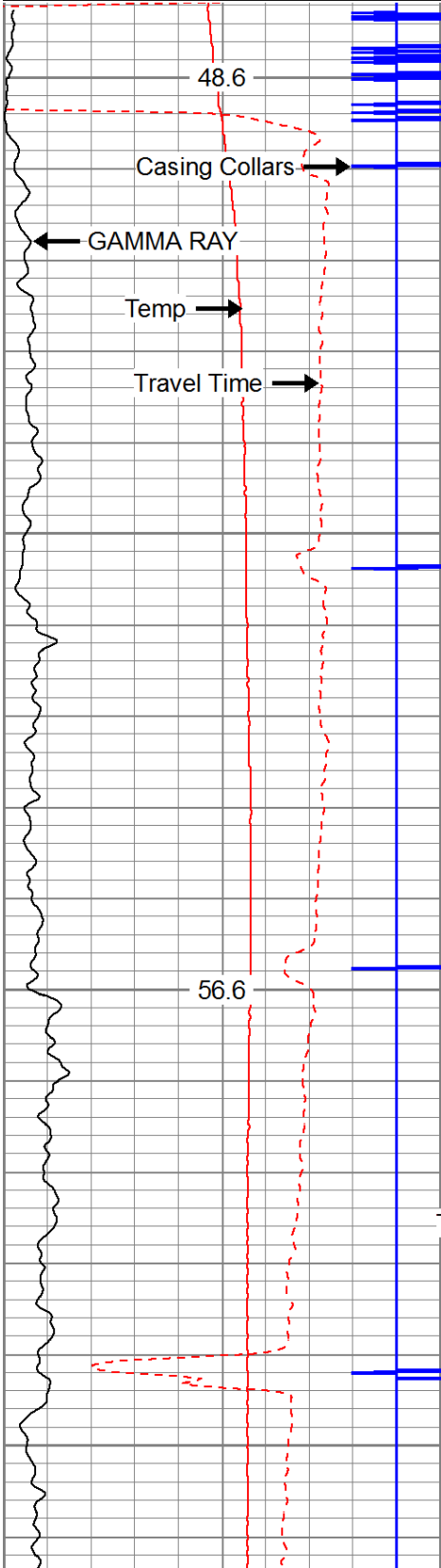
Database File: c:\warrior\data\2019 antero\antero-winchester unit 2h.db
 Dataset Pathname: pass3.4
 Presentation Format: antero f
 Dataset Creation: Mon Apr 01 08:49:20 2019 by Calc Std Casedhole 10081
 Charted by: Depth in Feet scaled 1:240

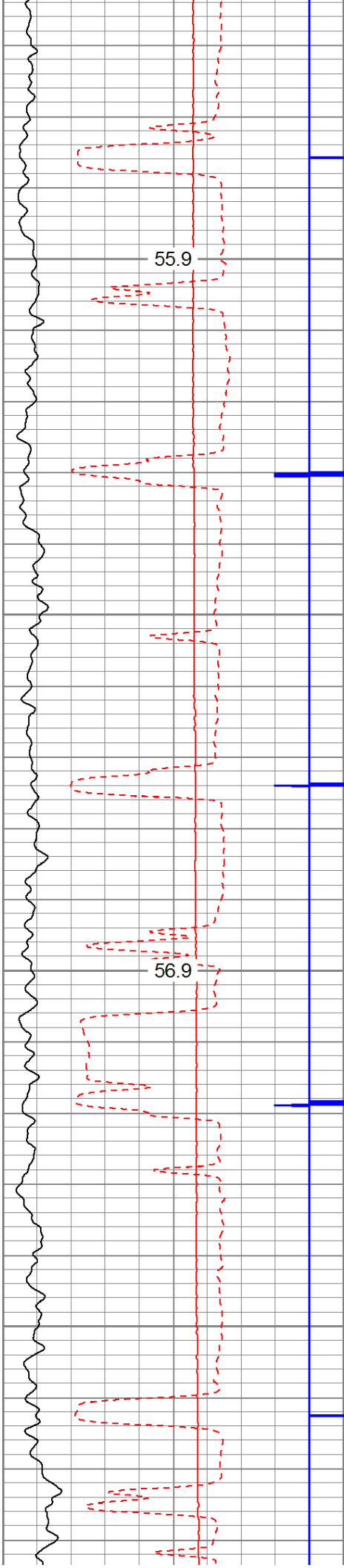
280	Travel Time (usec)	180
9	Casing Collars	-1
0	Gamma Ray	180
0	TEMP (degF)	100

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

1	Sector Map	12
20		80

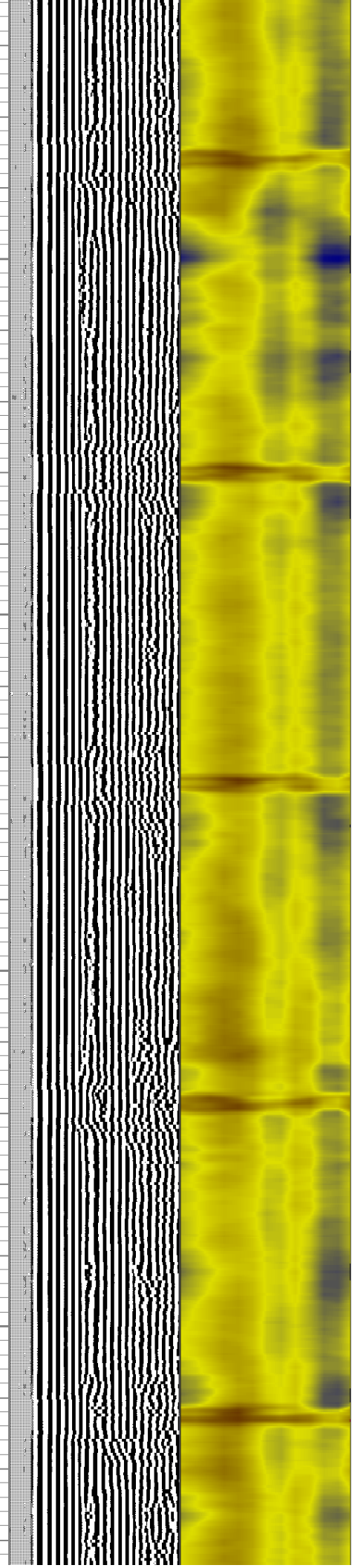
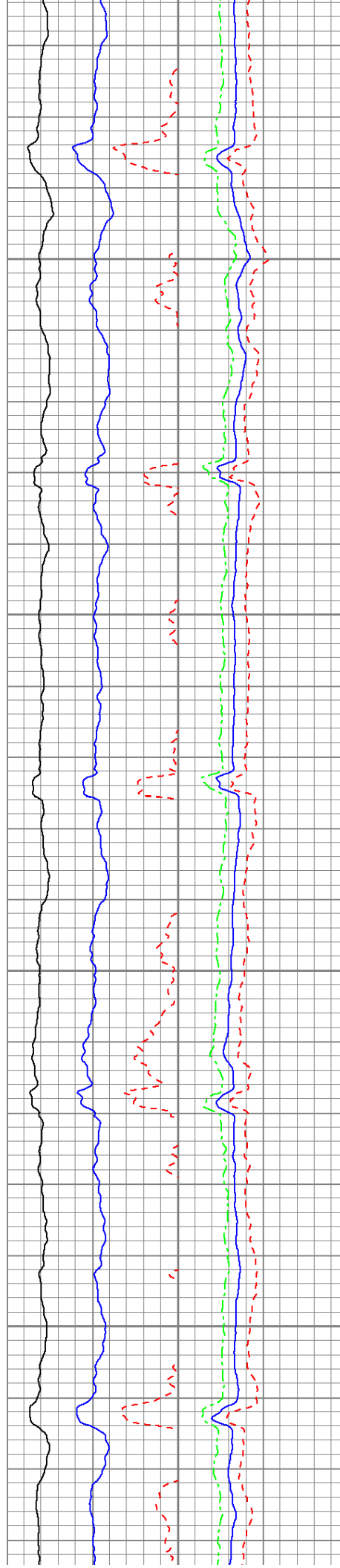
TEMP (degF)

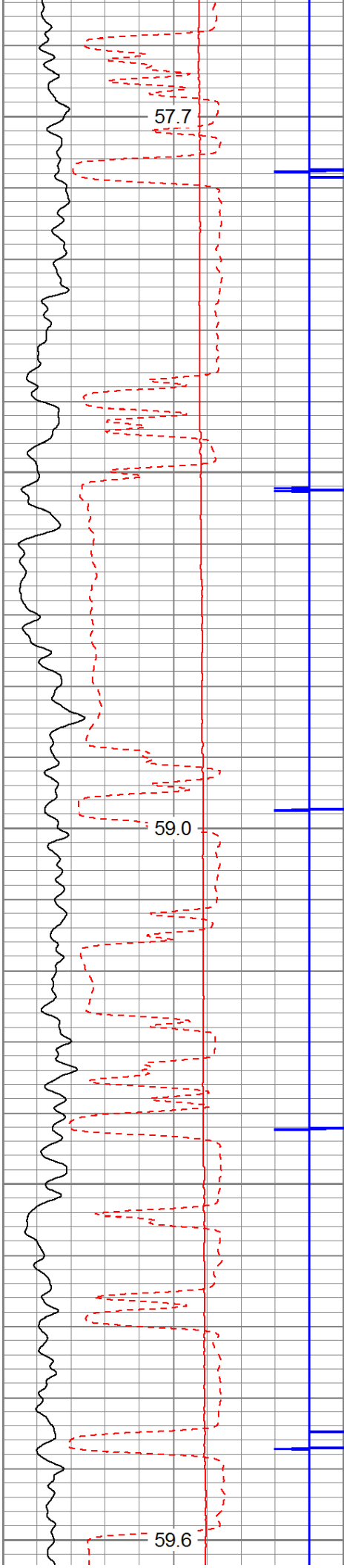




200

300

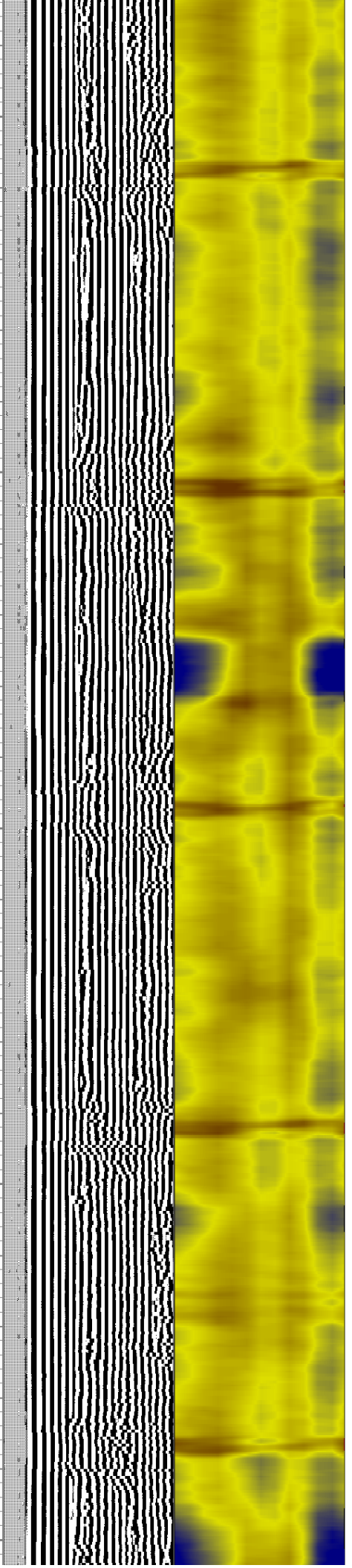
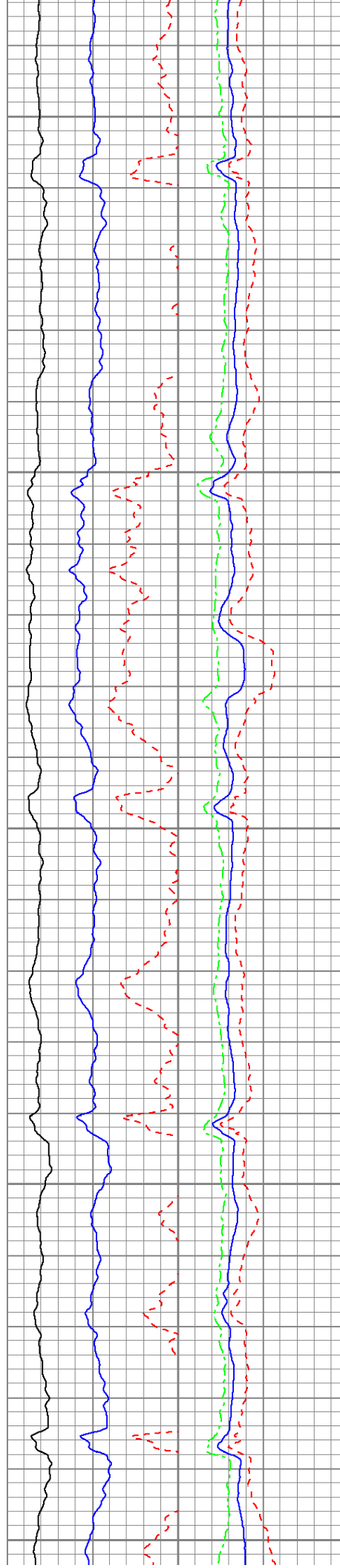


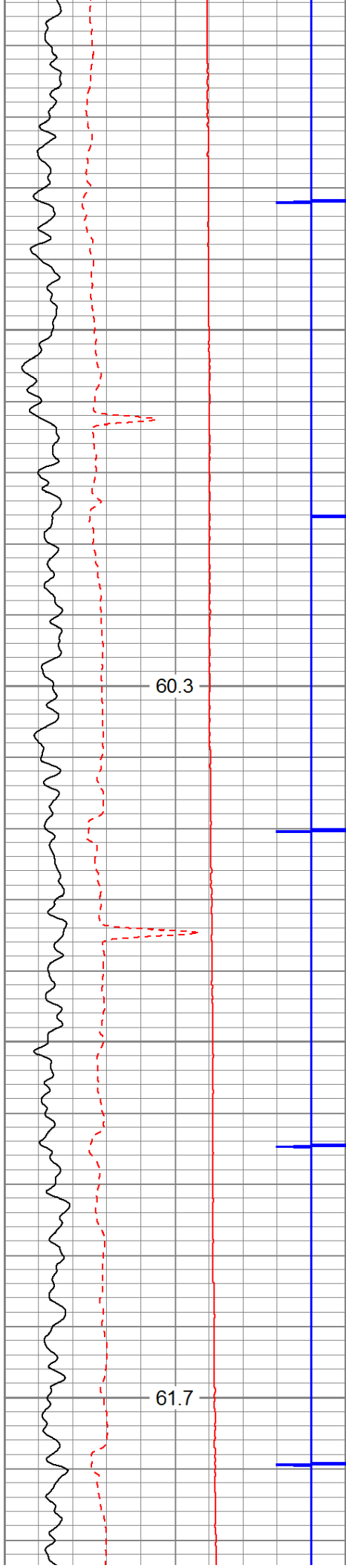


400

500

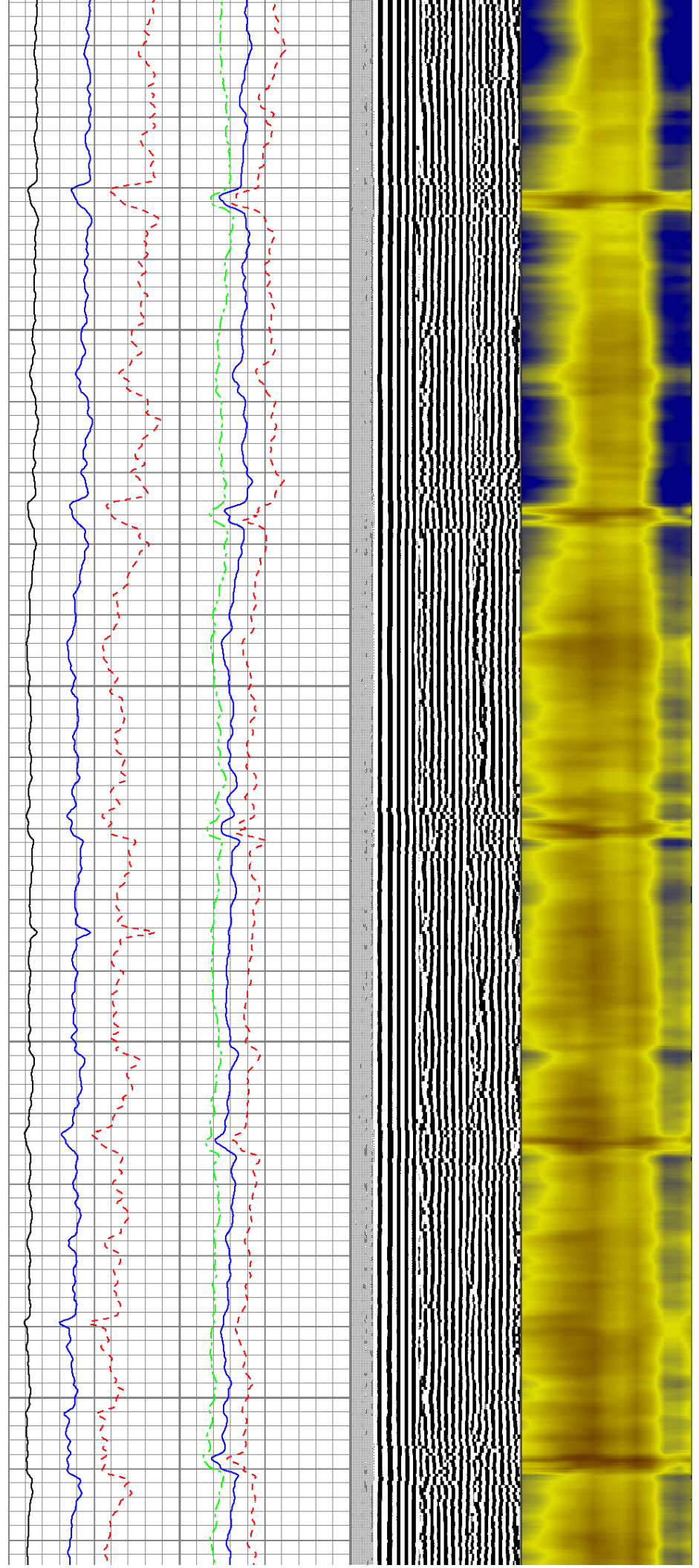
600

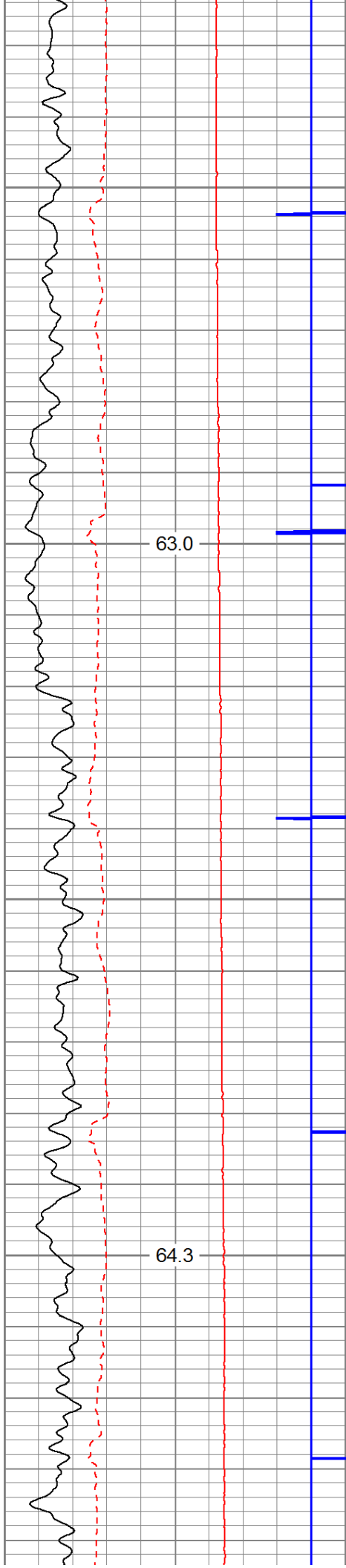




700

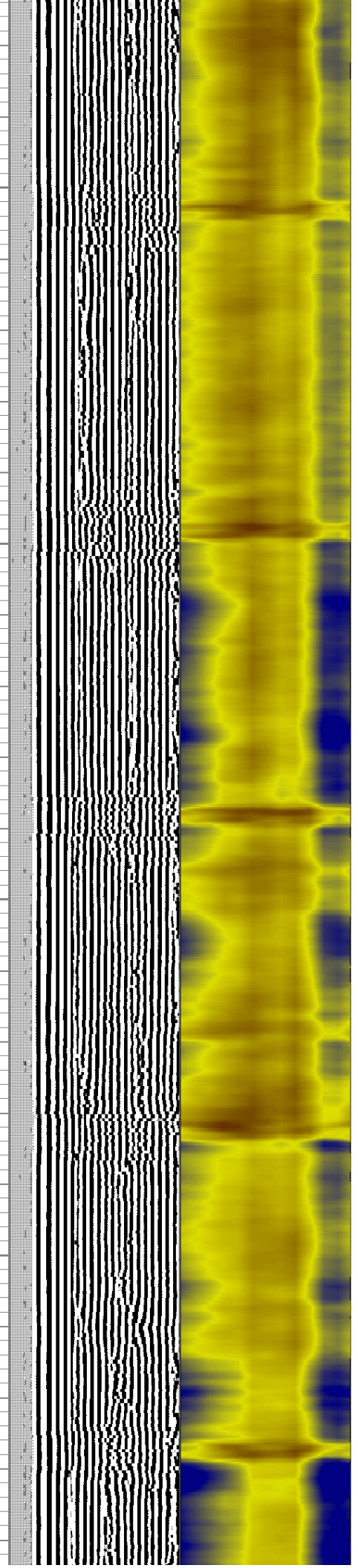
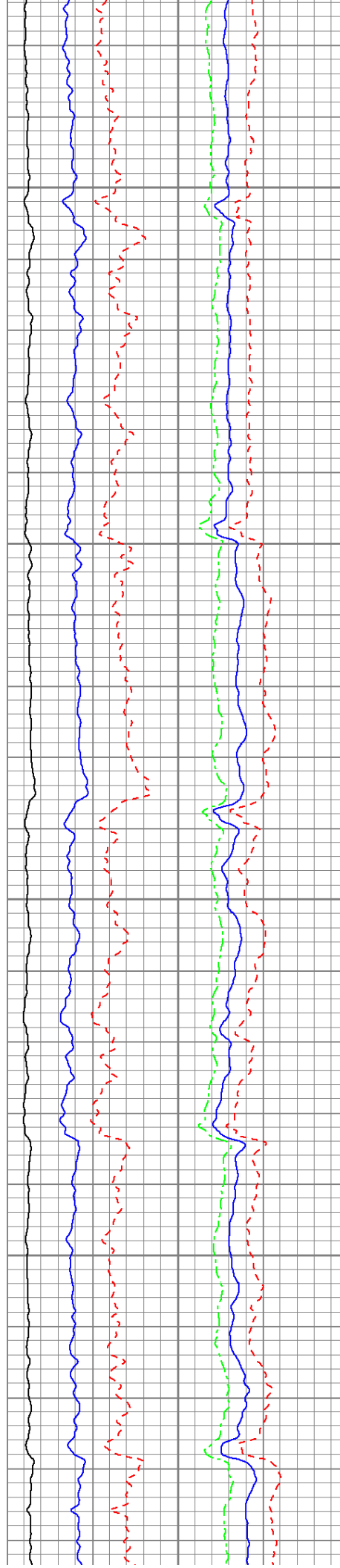
800

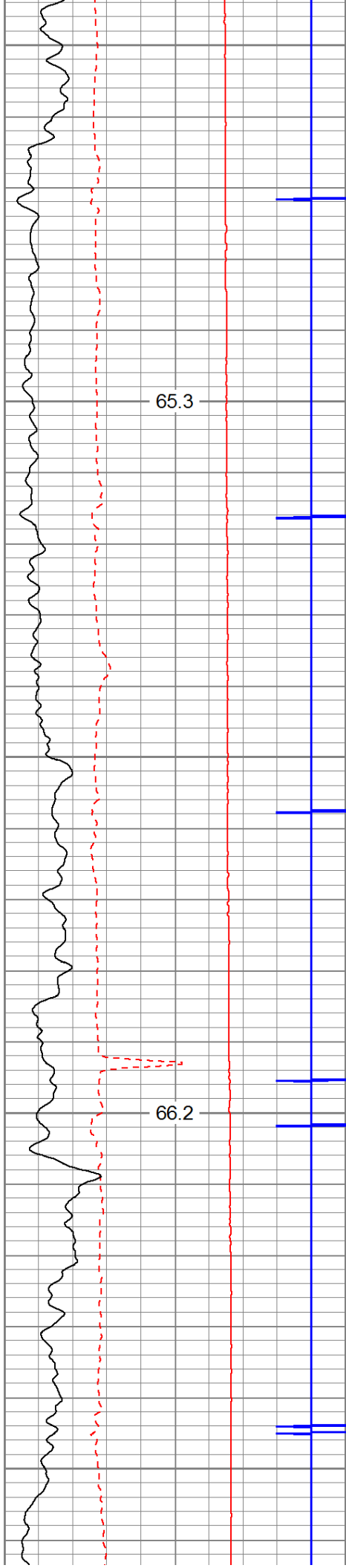




900

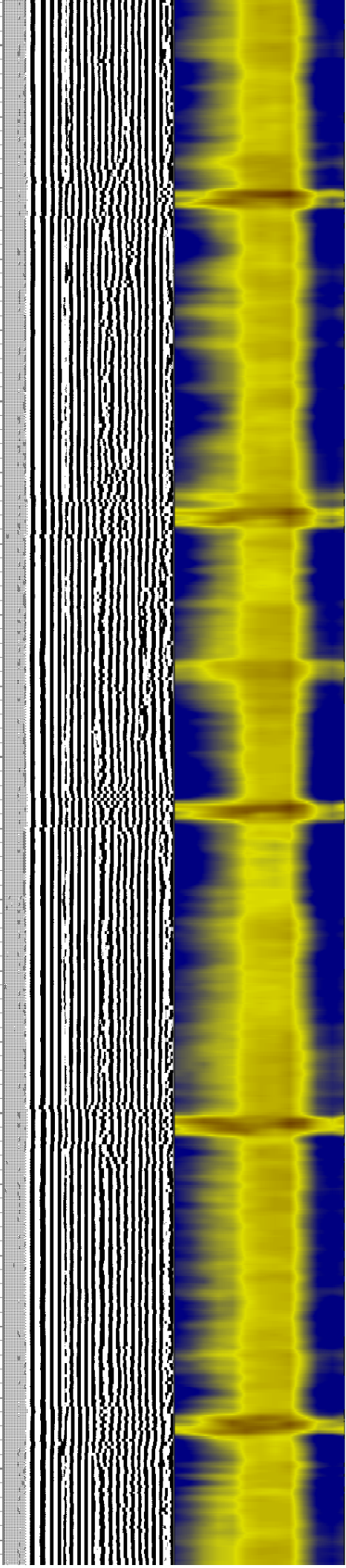
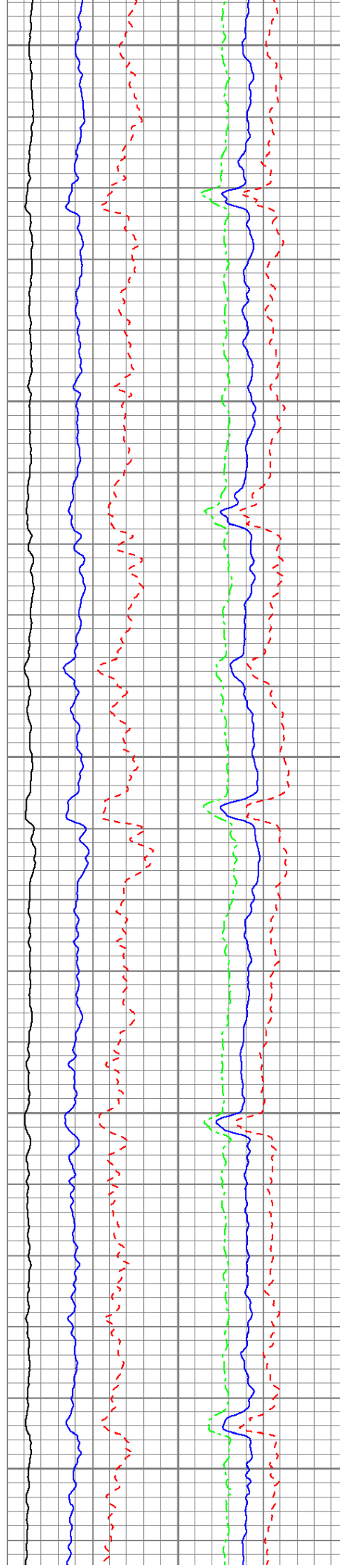
1000

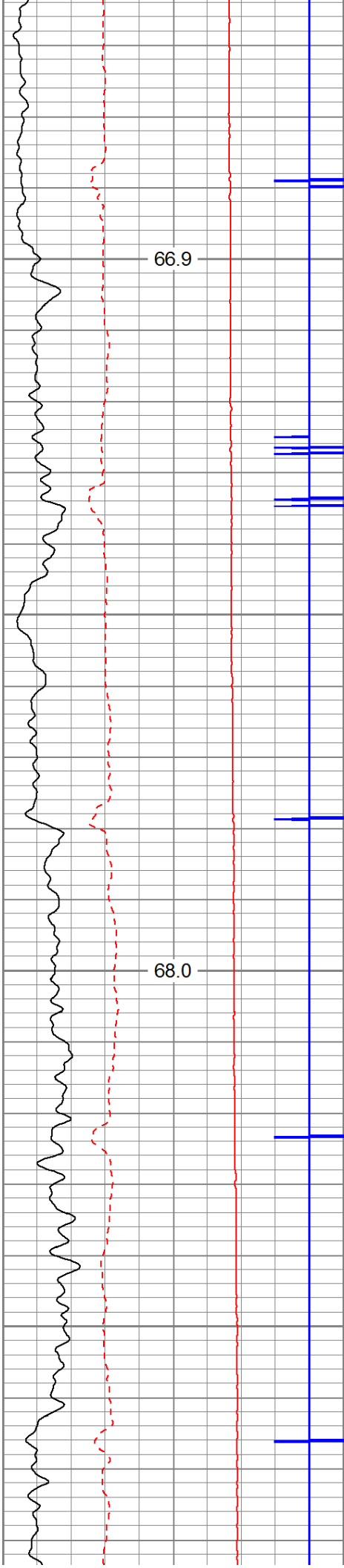




1100

1200



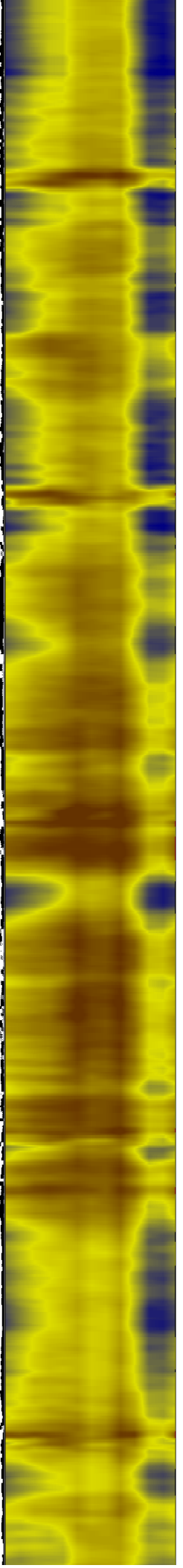
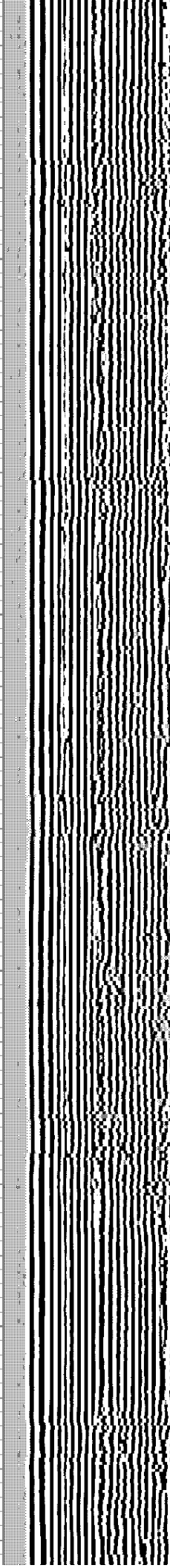
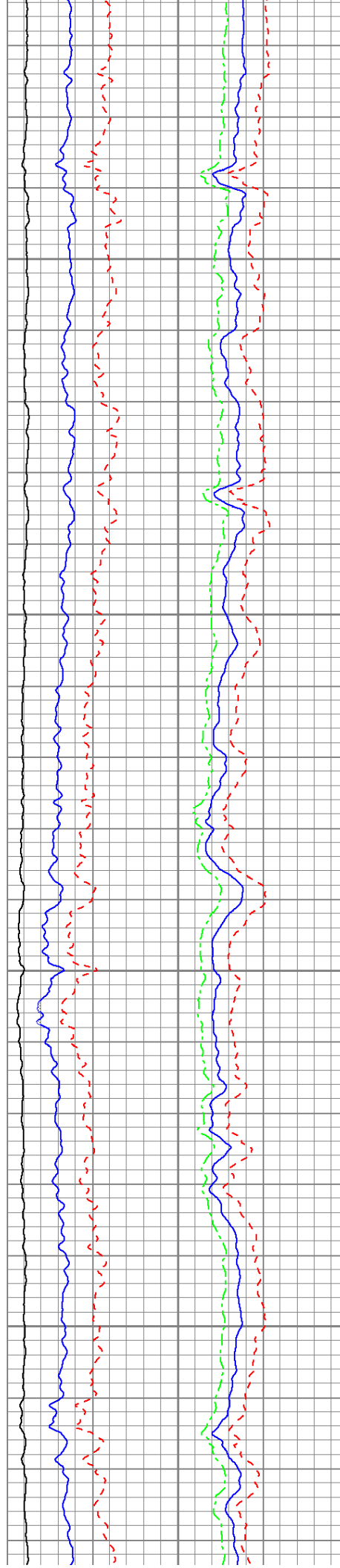


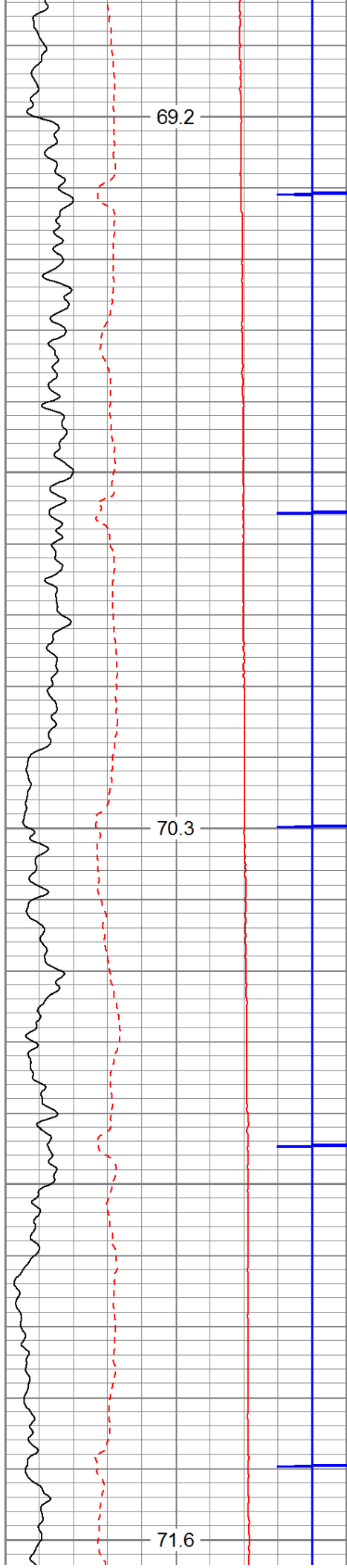
66.9

68.0

1300

1400

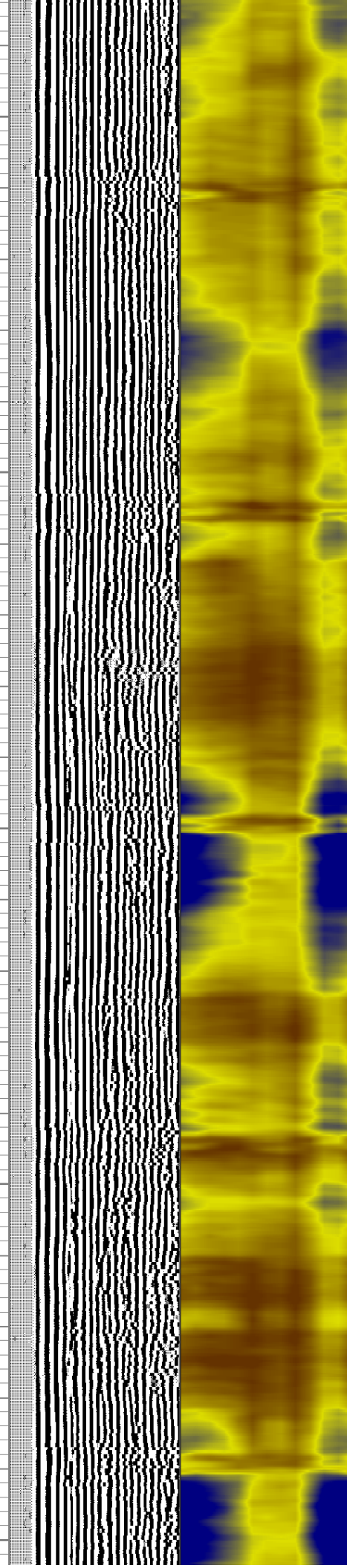
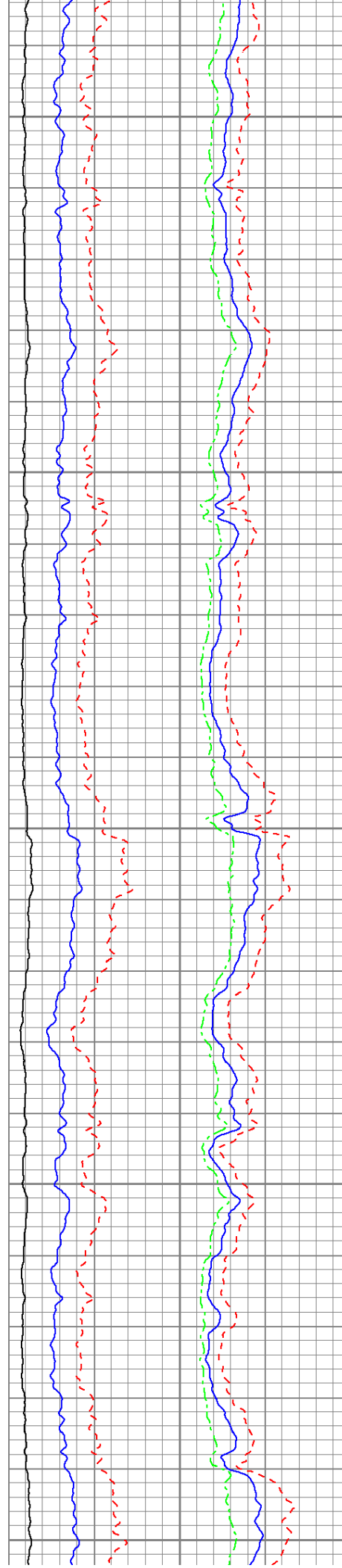


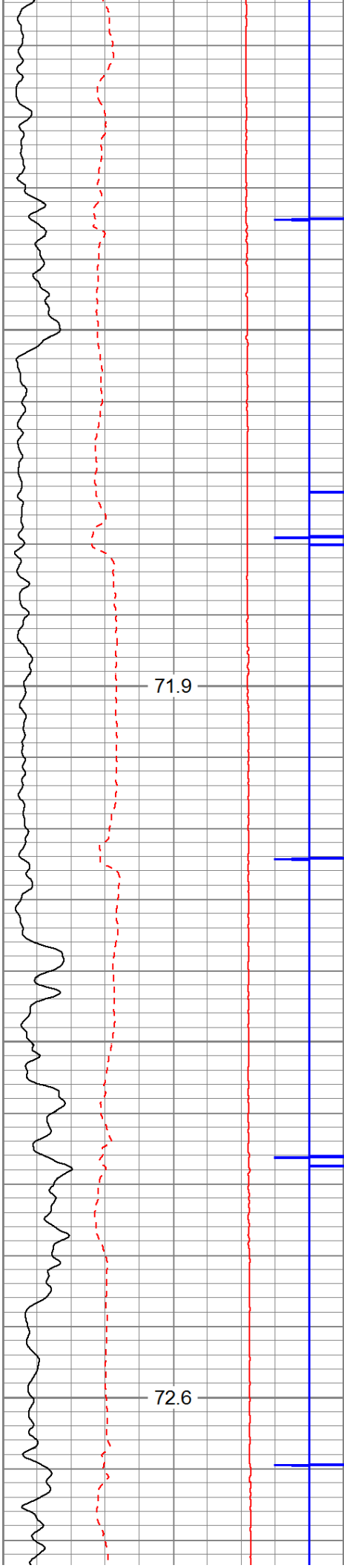


1500

1600

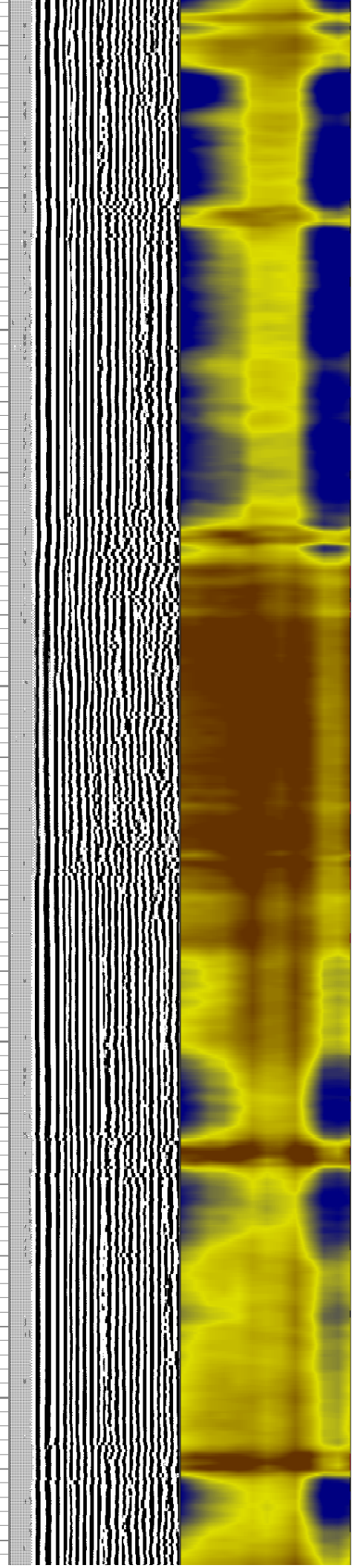
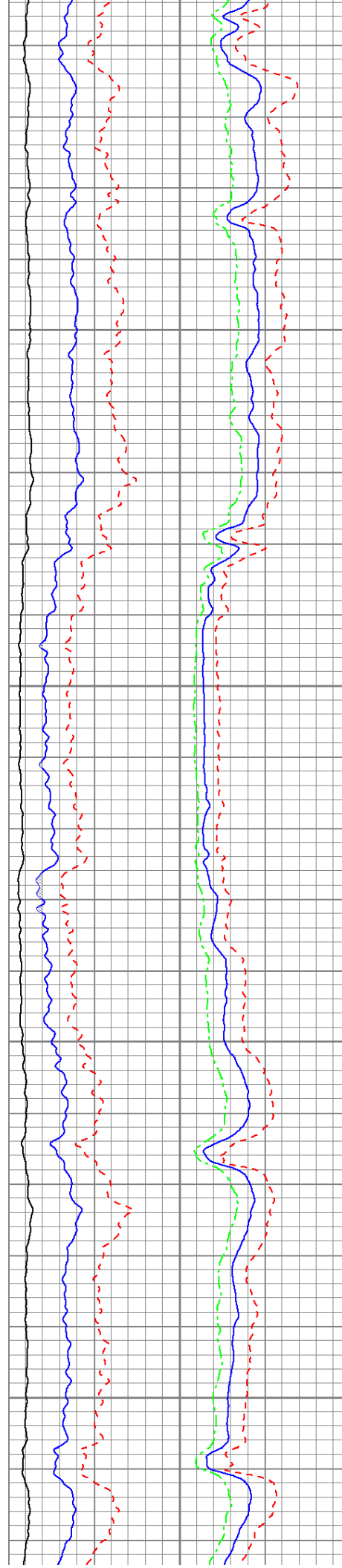
1700

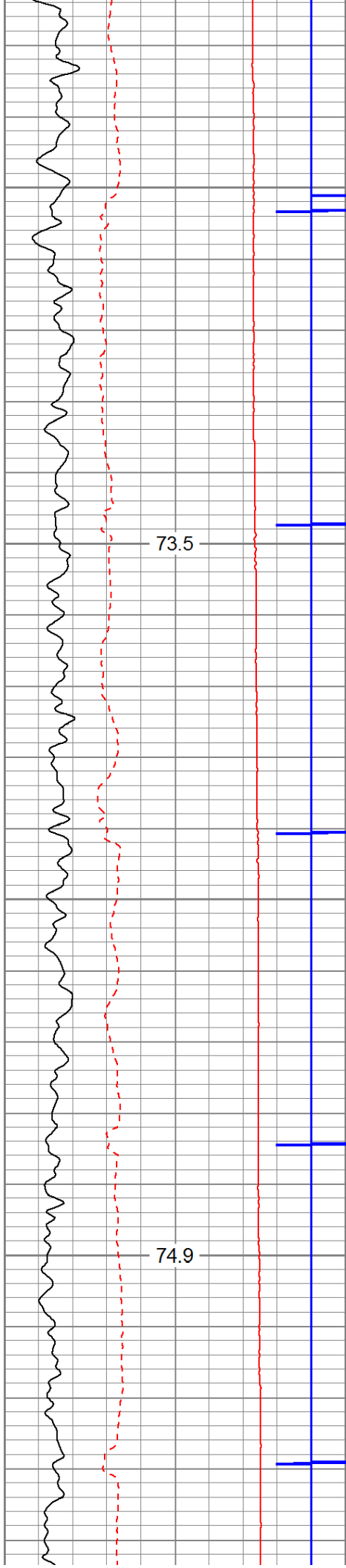




1800

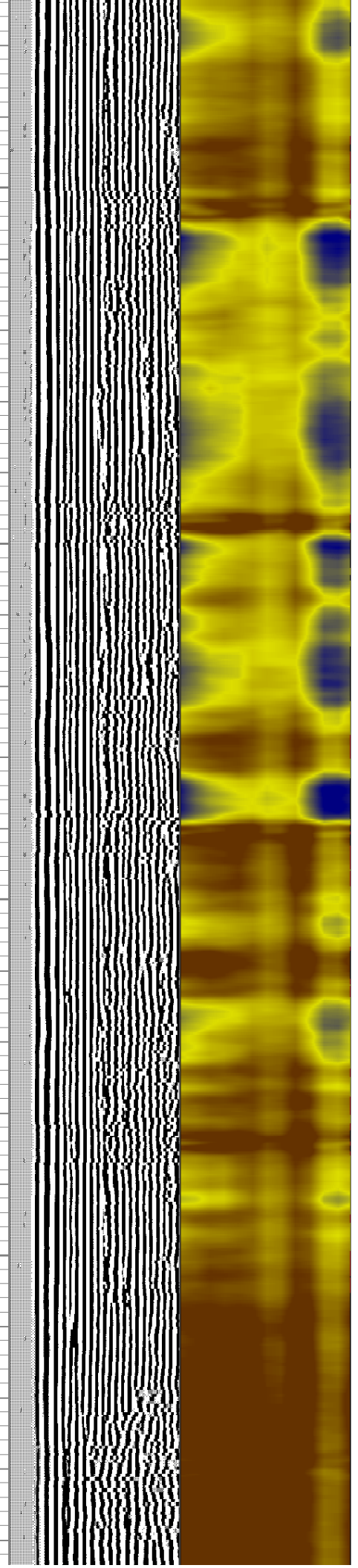
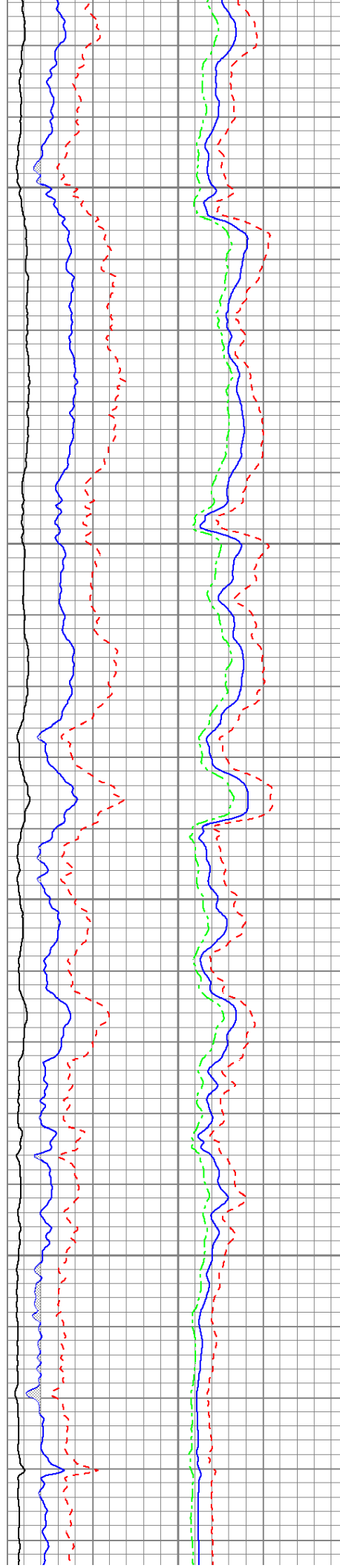
1900

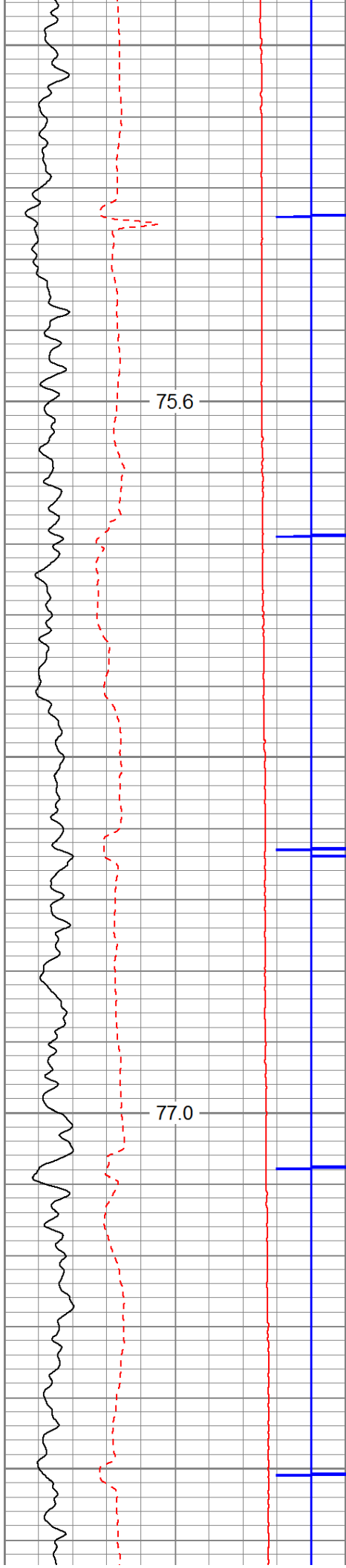




2000

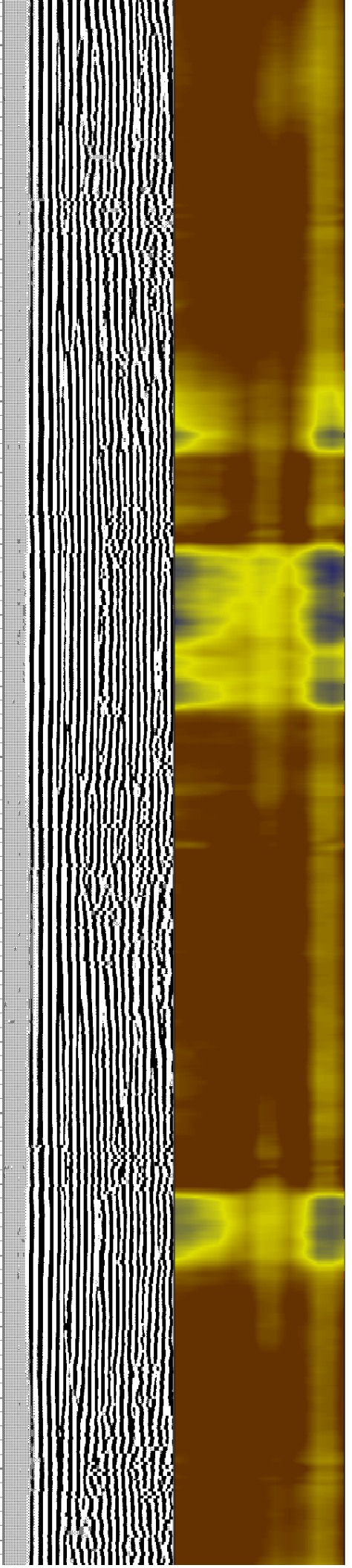
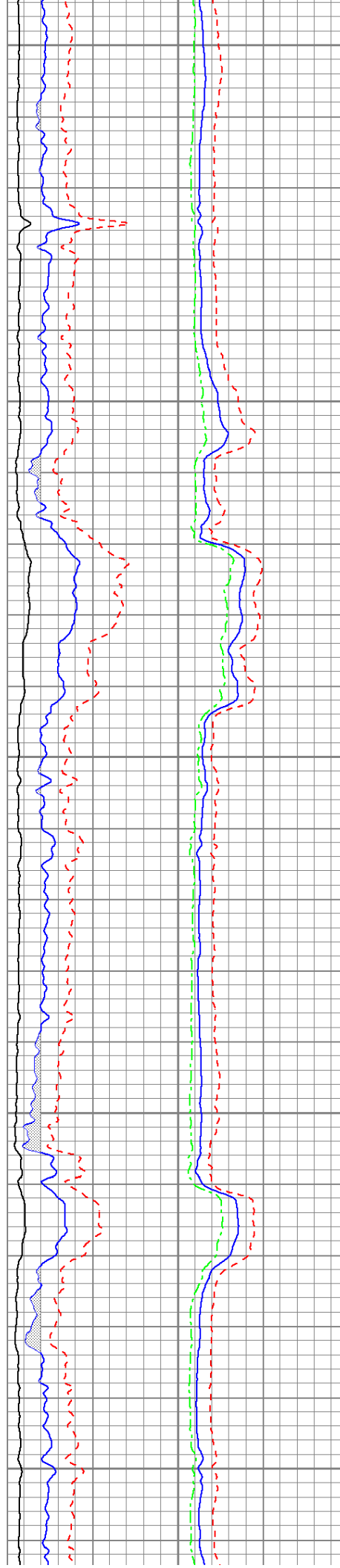
2100

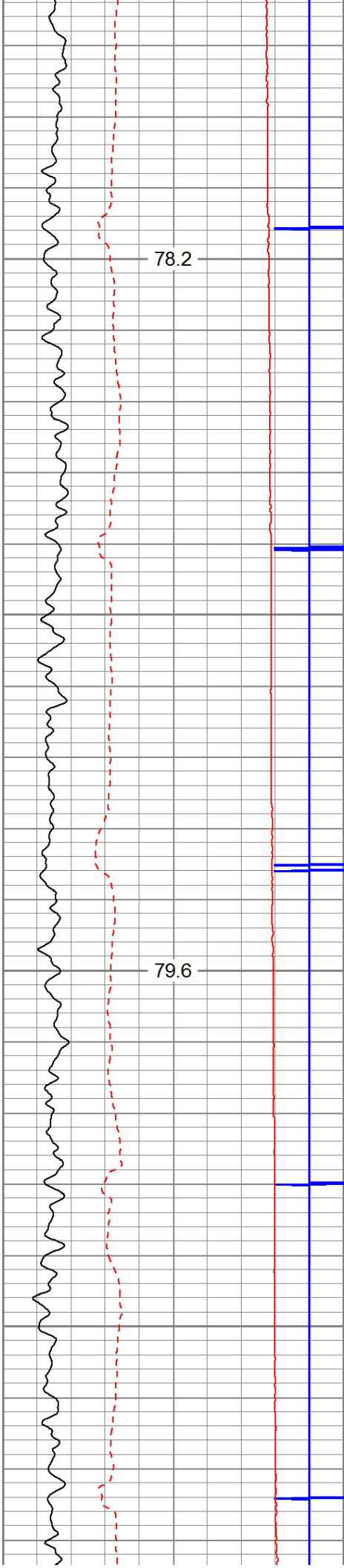




2200

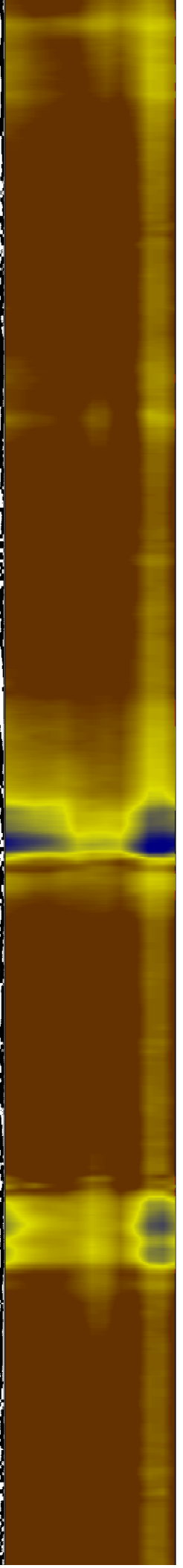
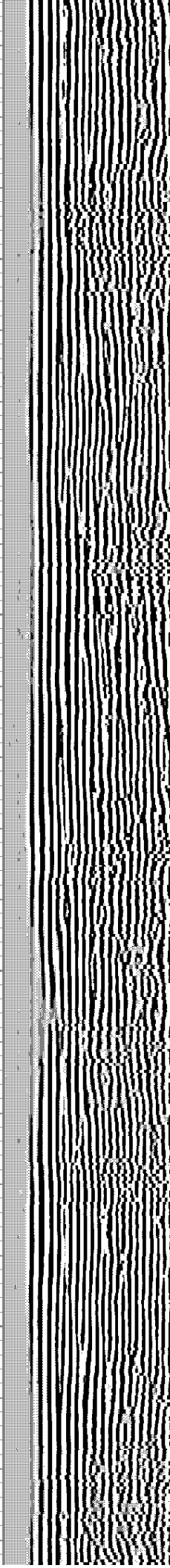
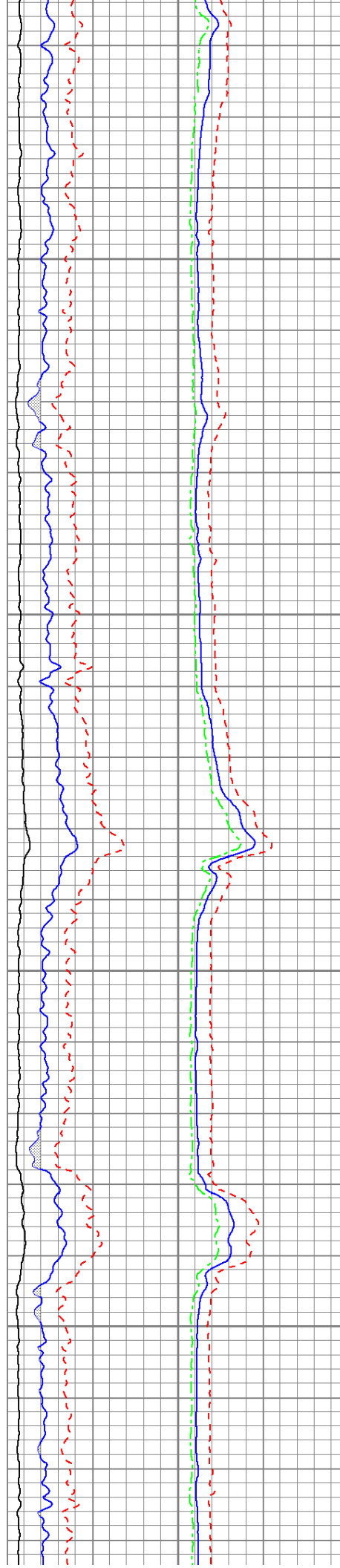
2300

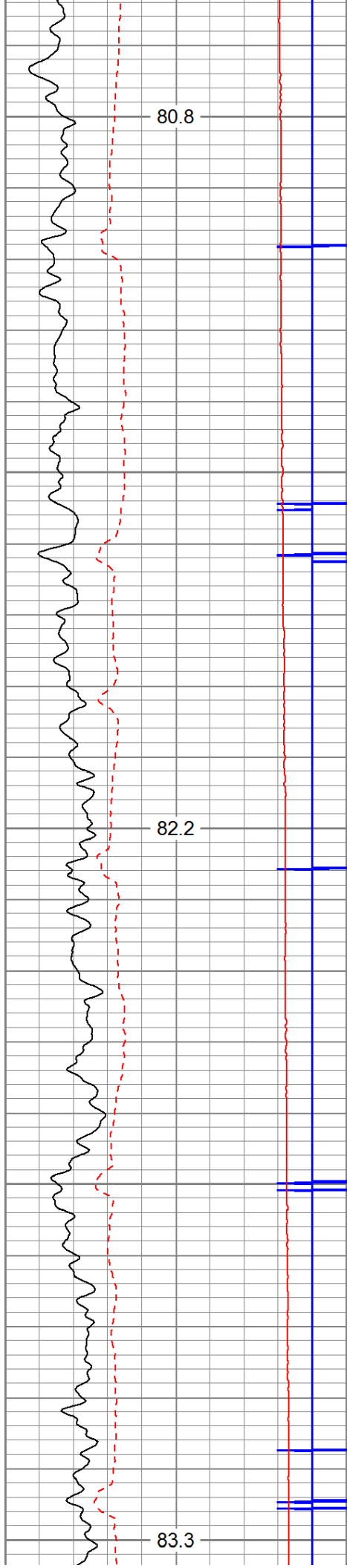




2400

2500

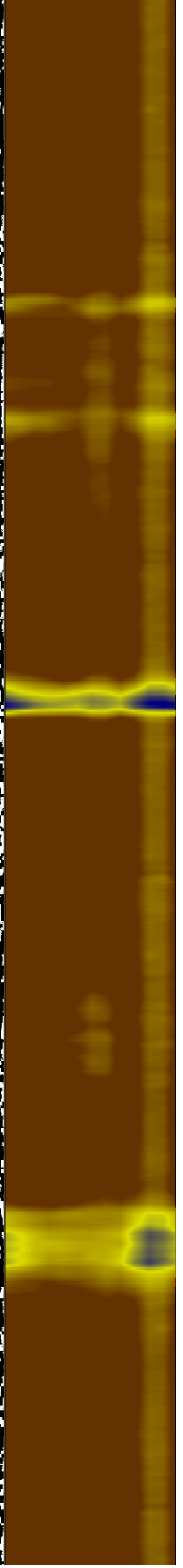
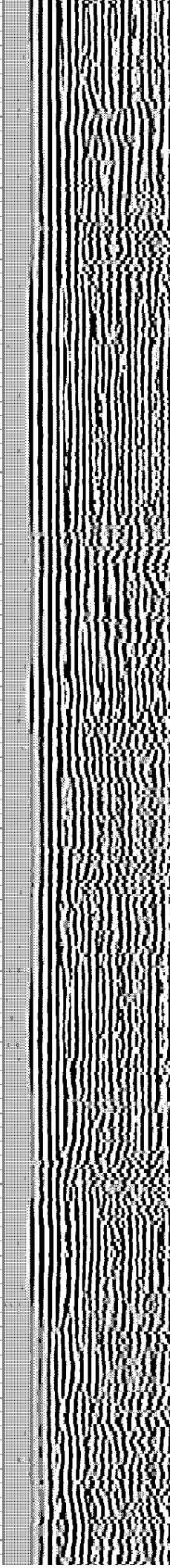
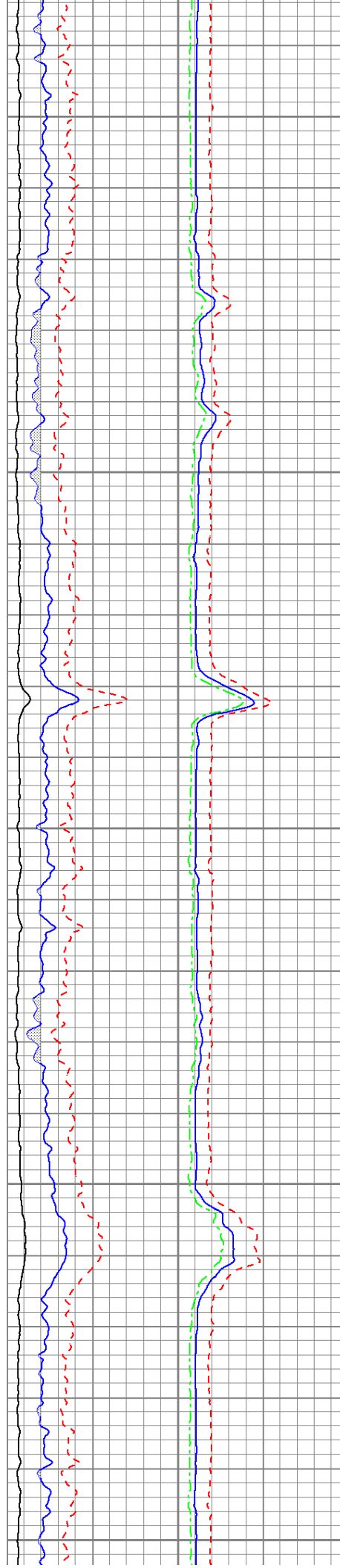


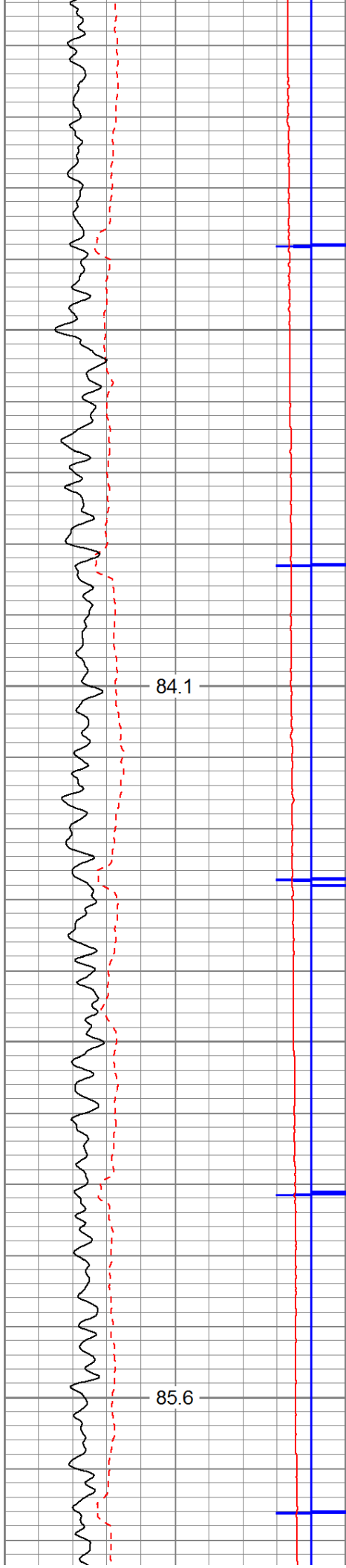


2600

2700

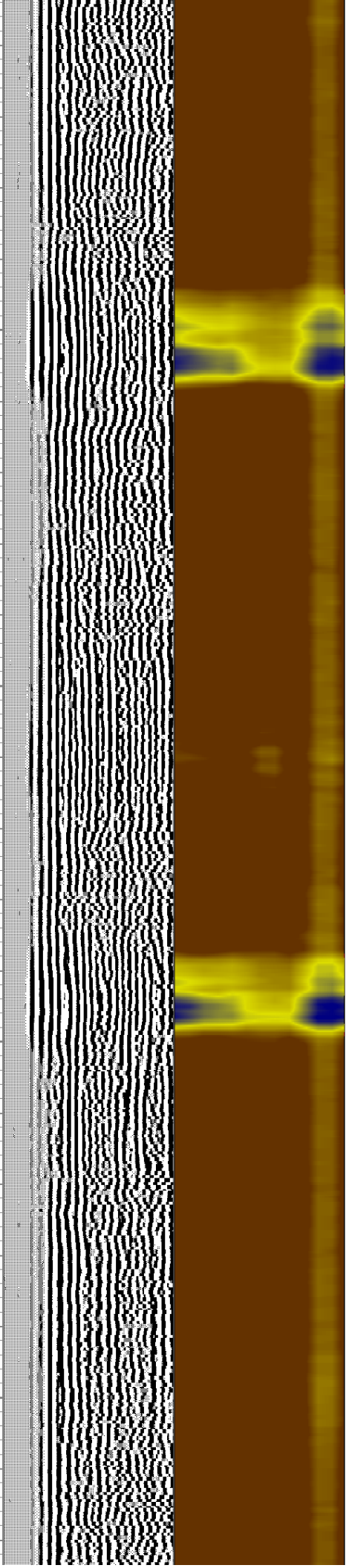
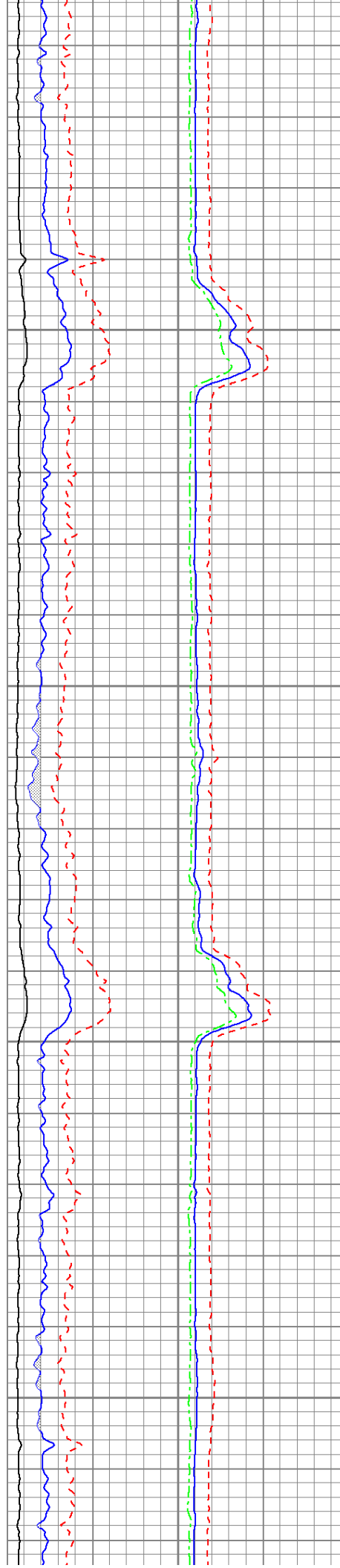
2800

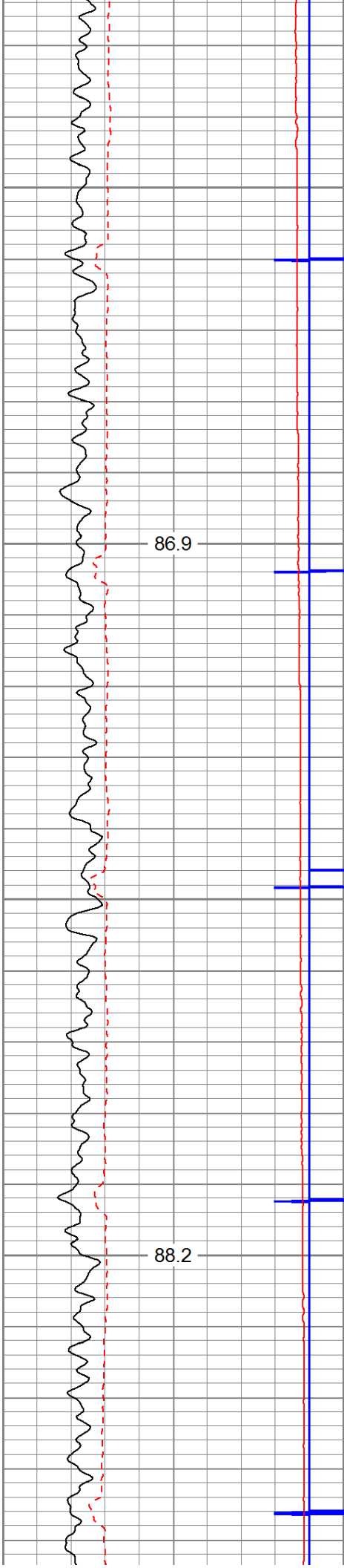




2900

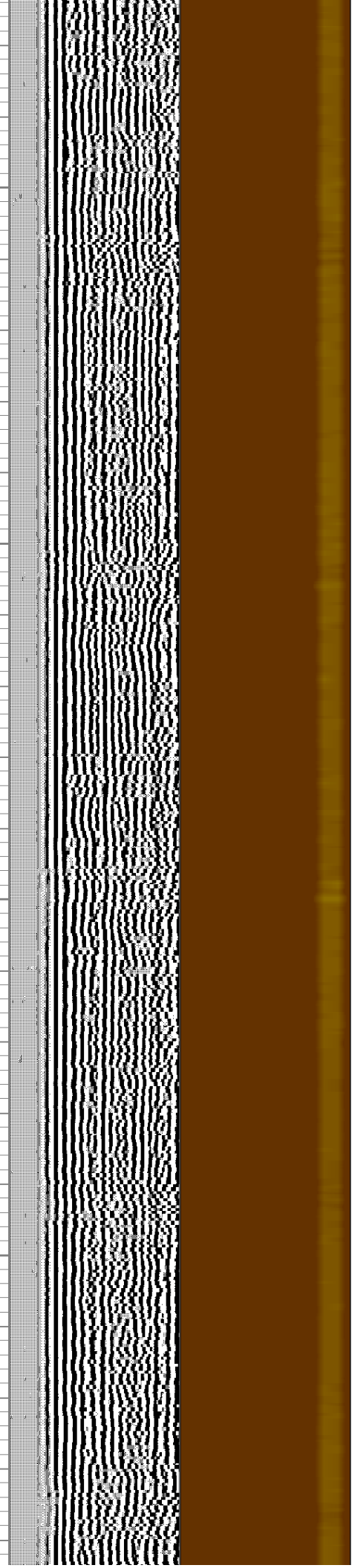
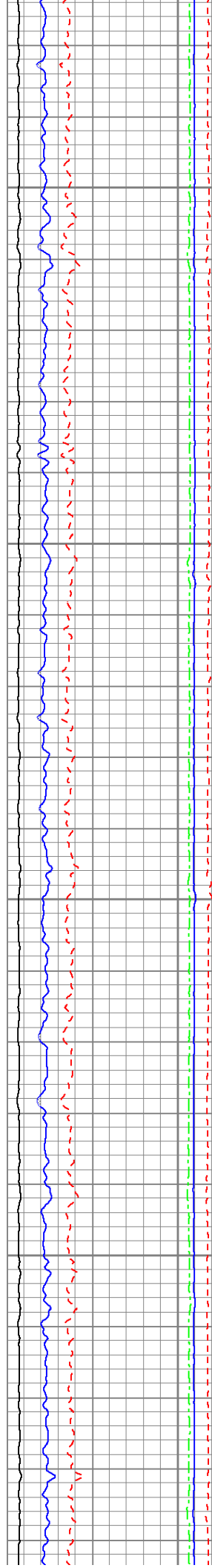
3000

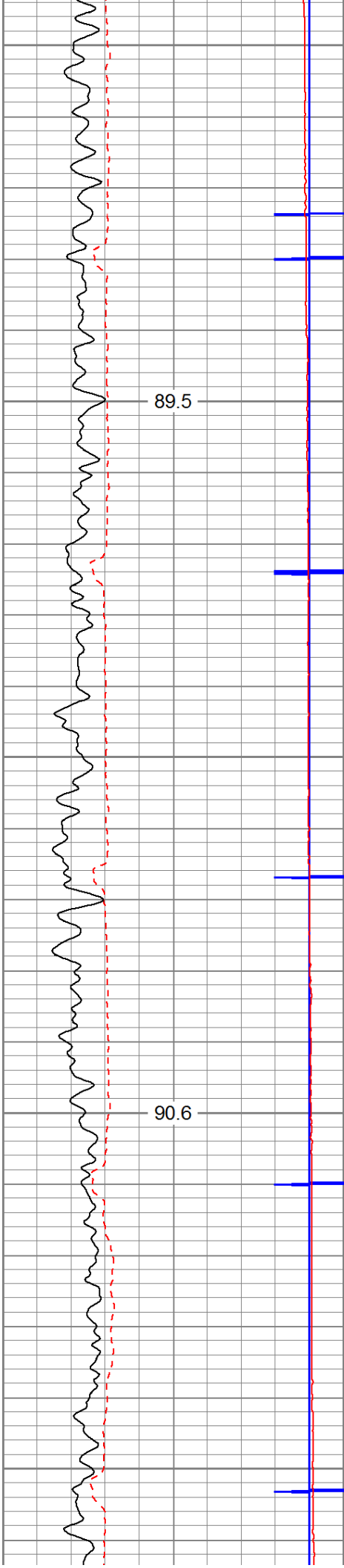




3100

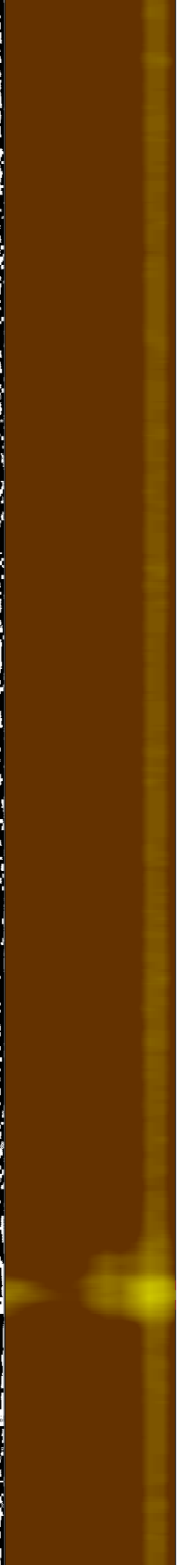
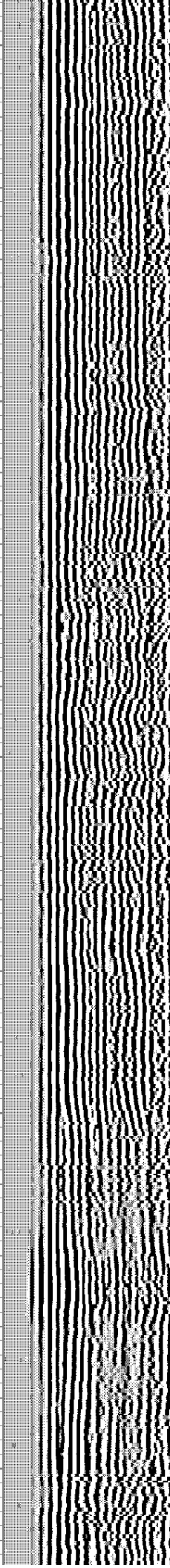
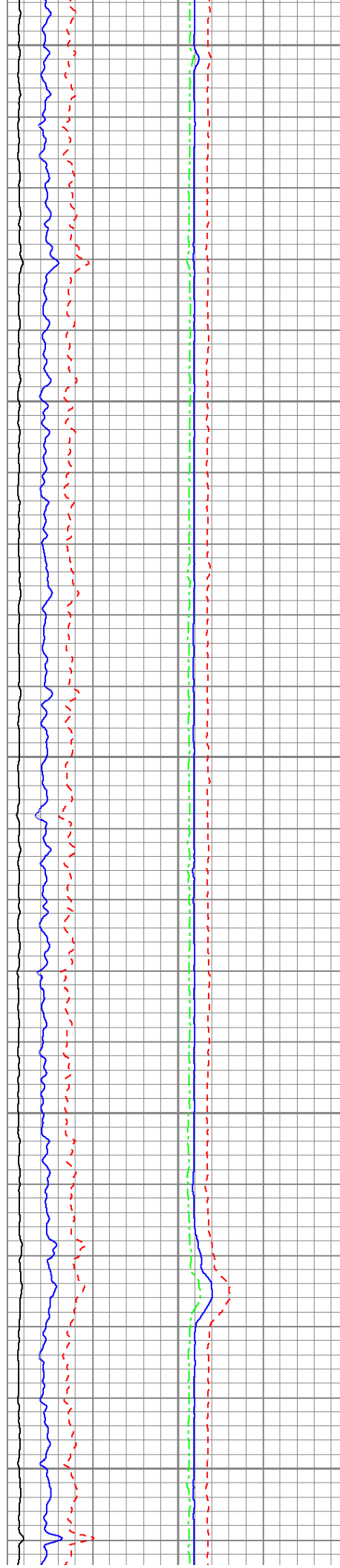
3200

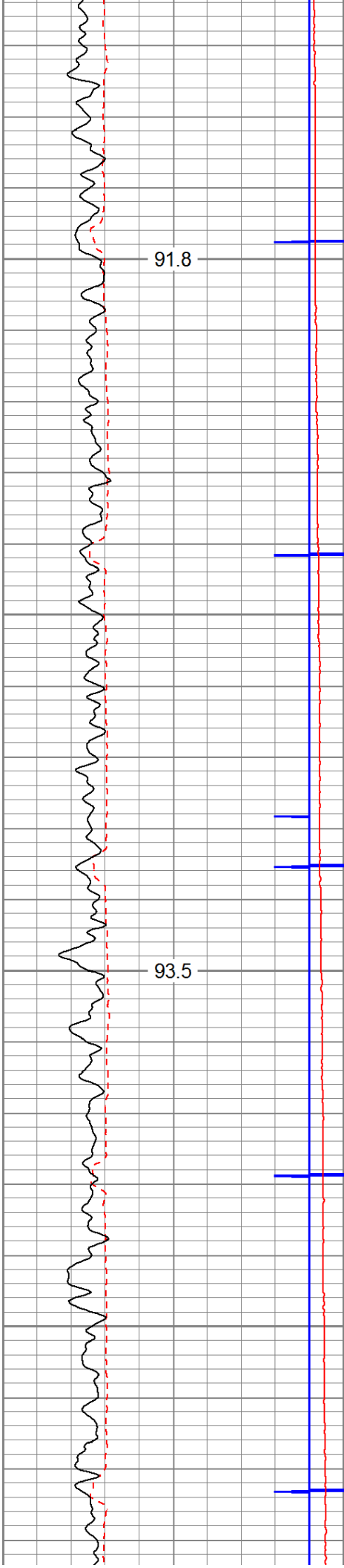




3300

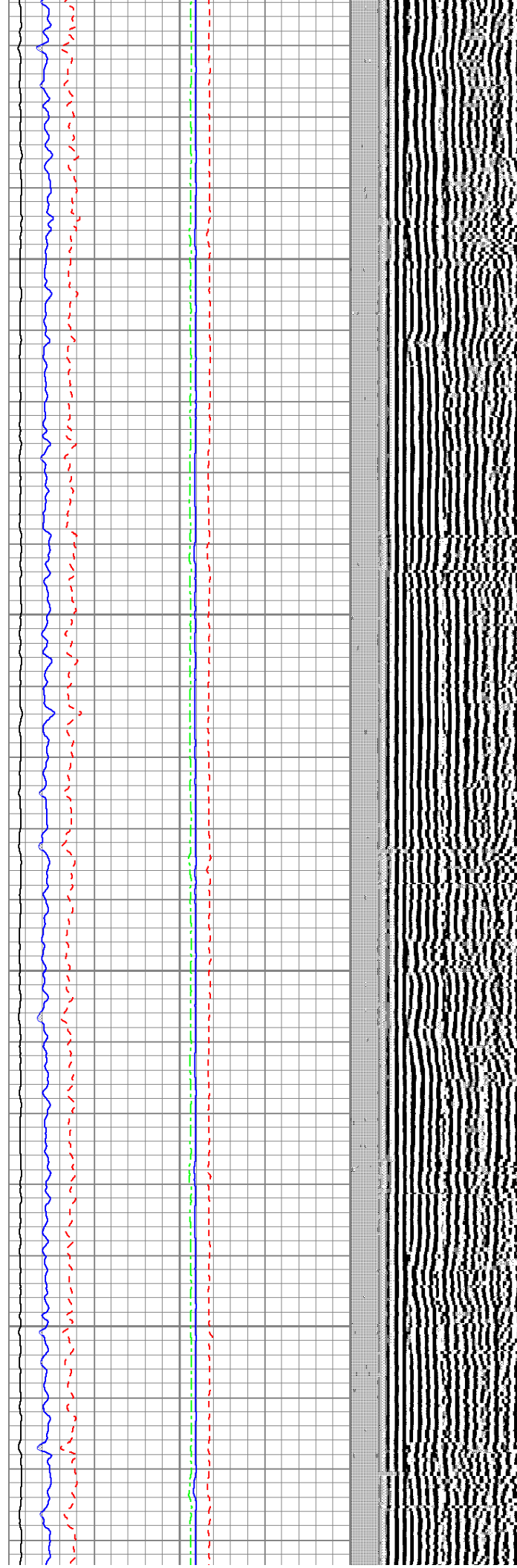
3400

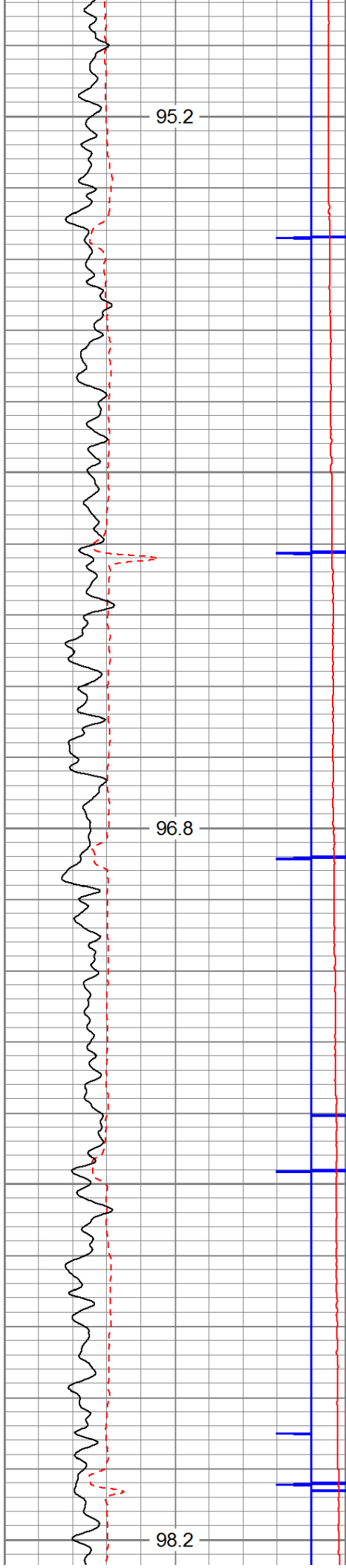




3500

3600

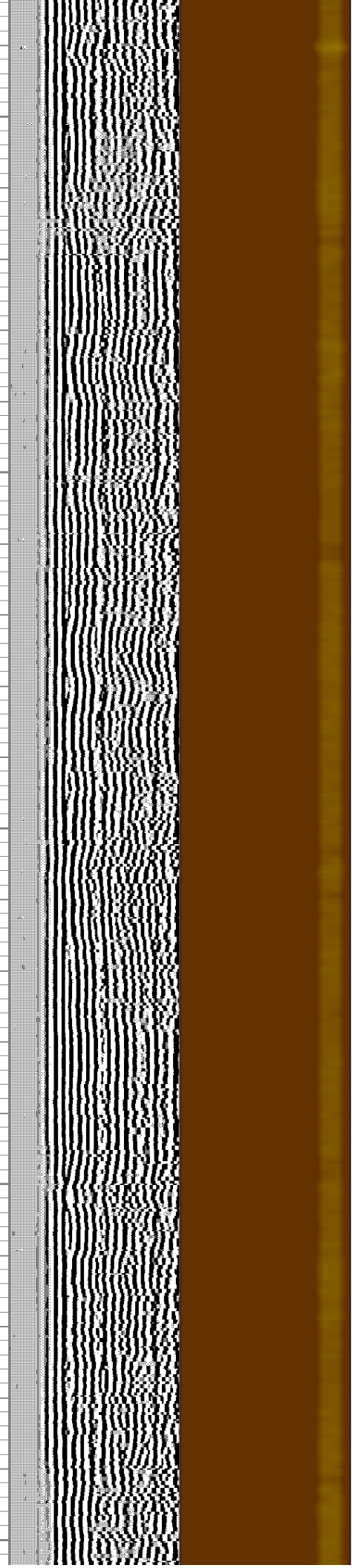
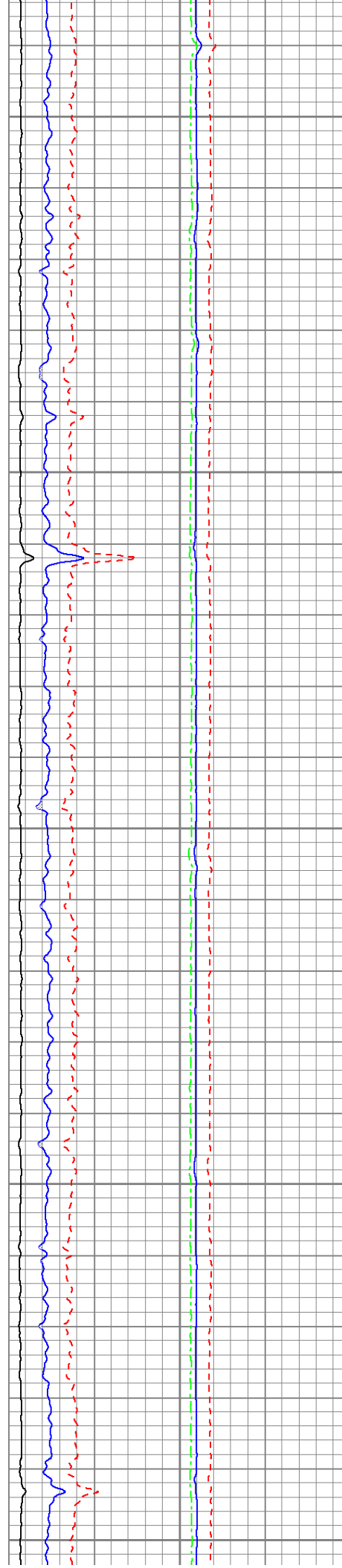


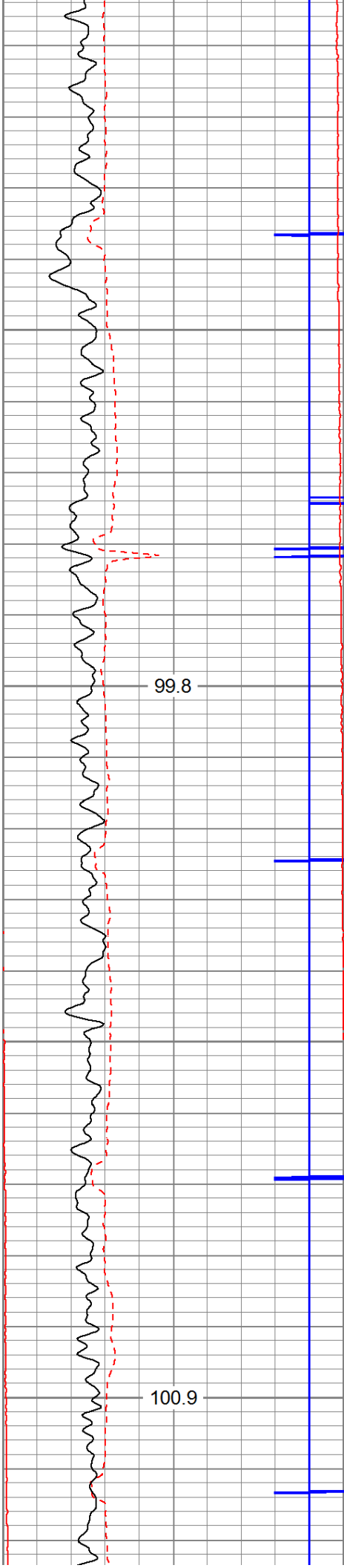


3700

3800

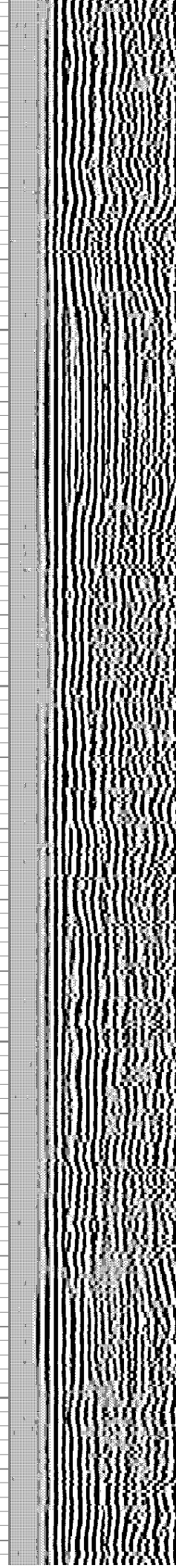
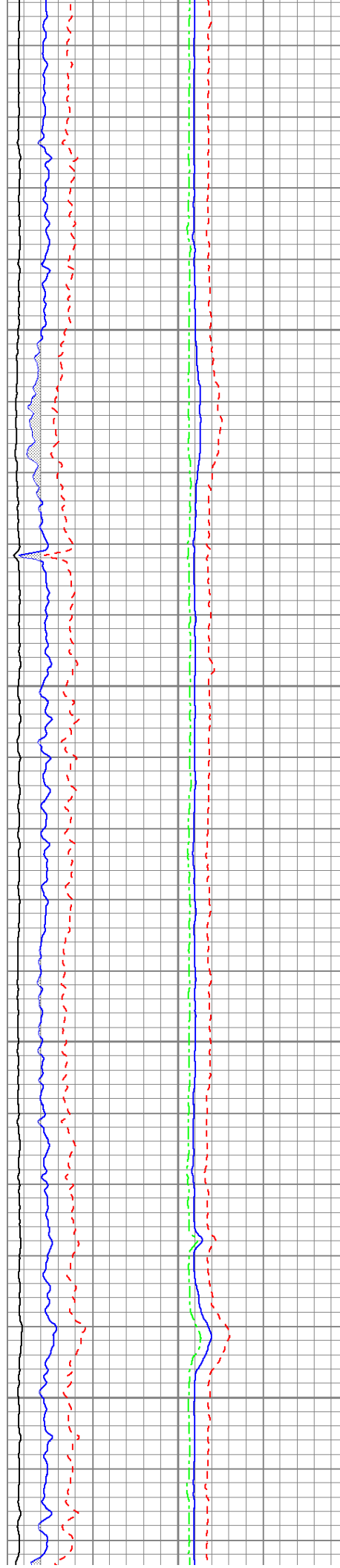
3900

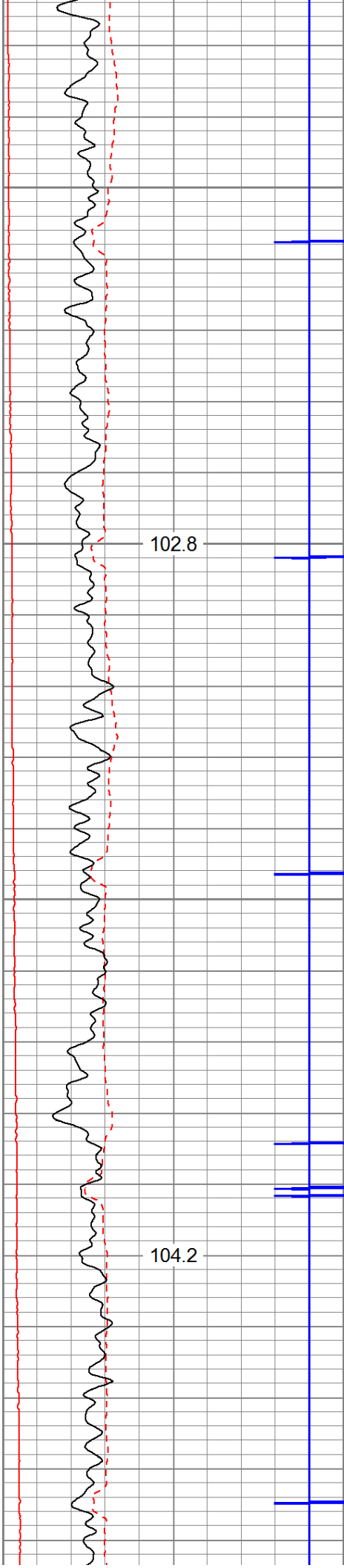




4000

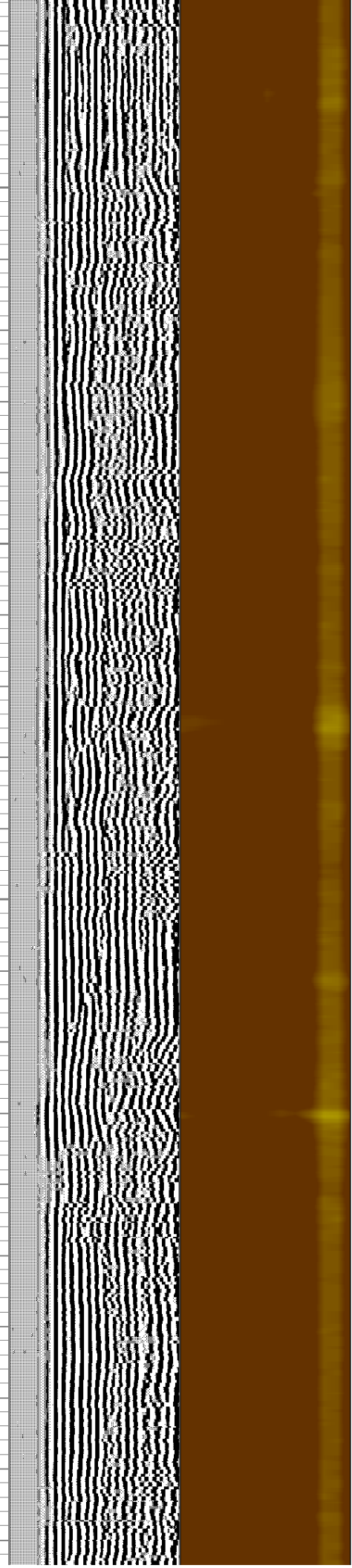
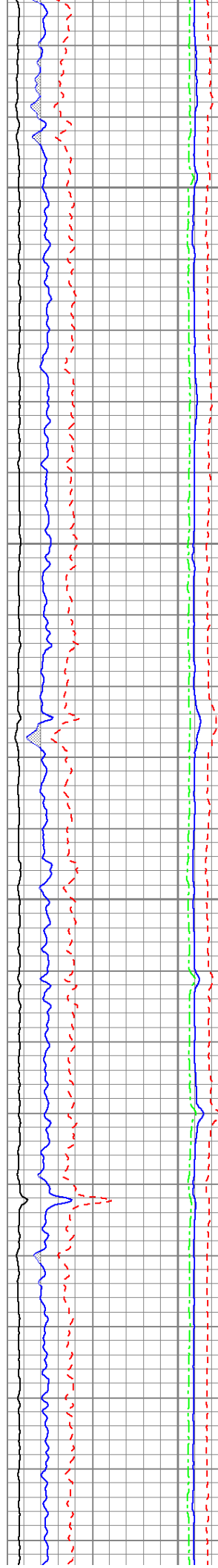
4100

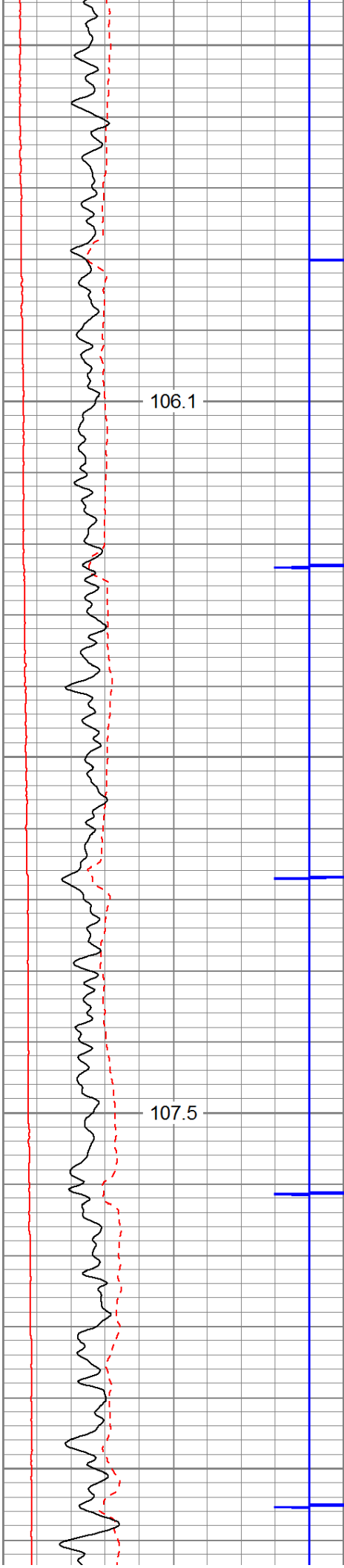




4200

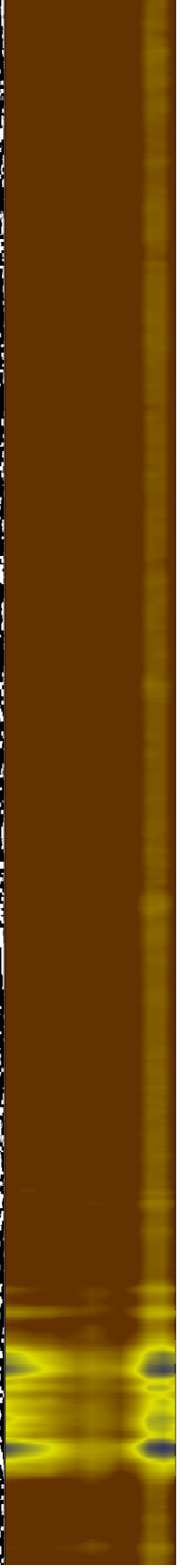
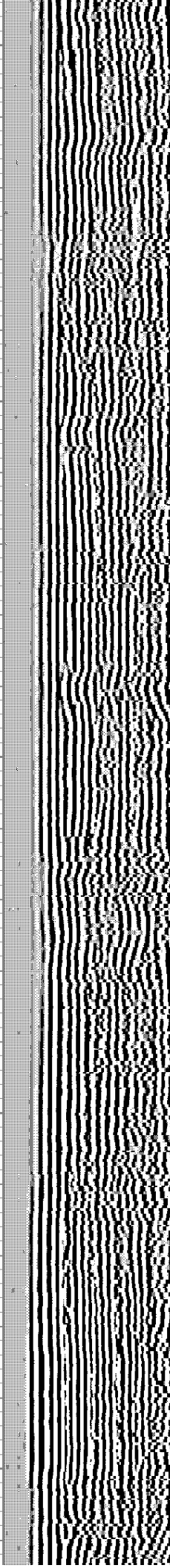
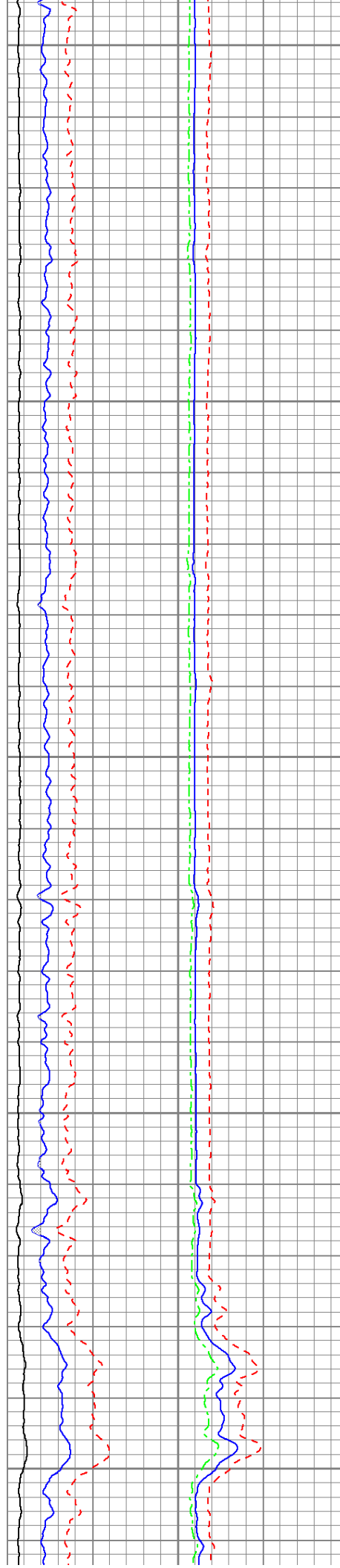
4300

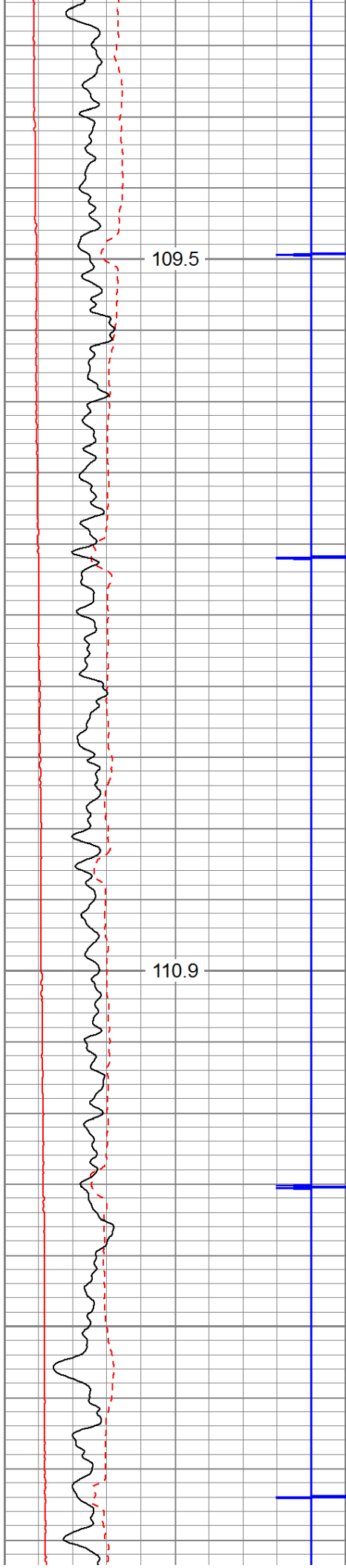




4400

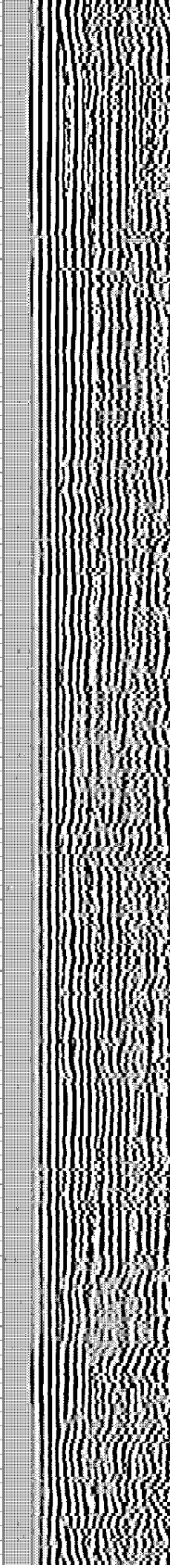
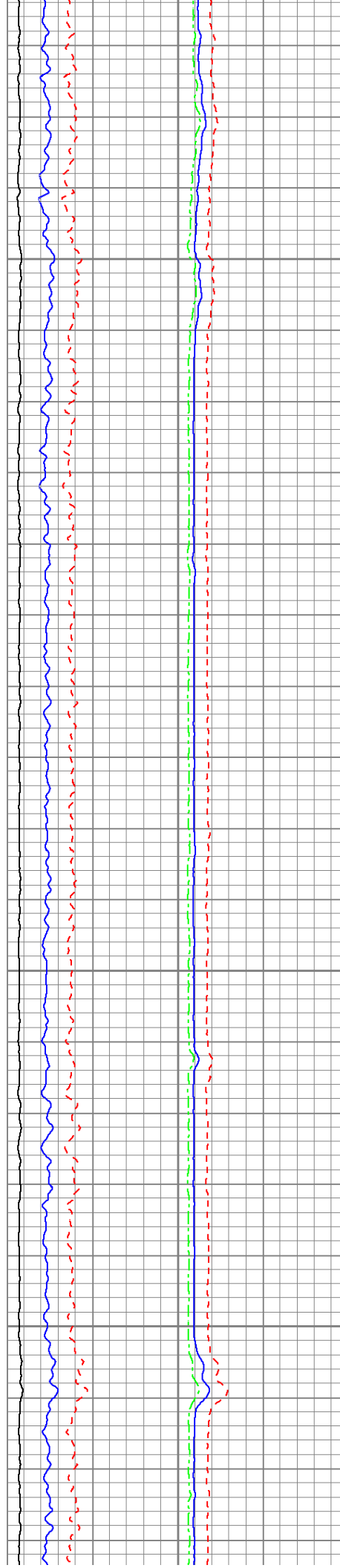
4500

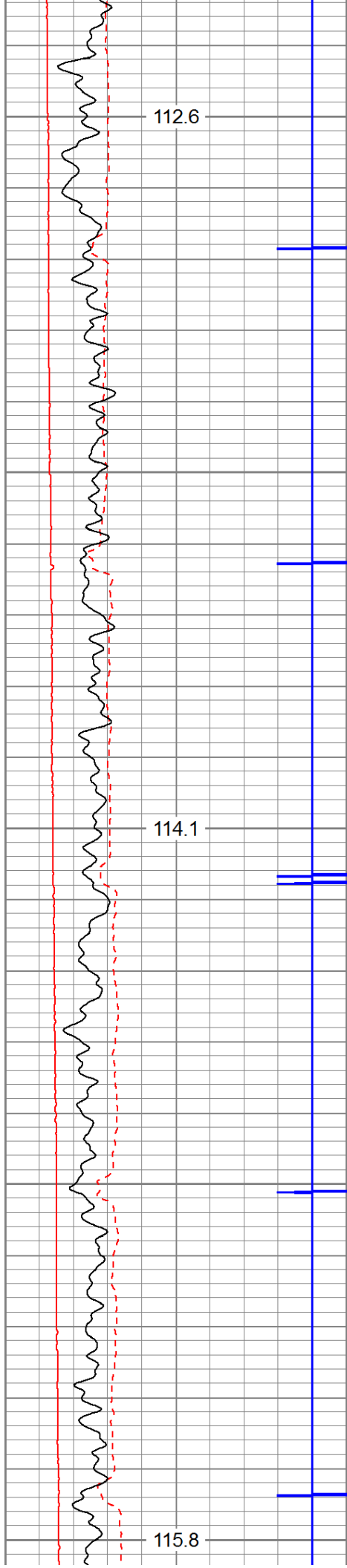




4600

4700

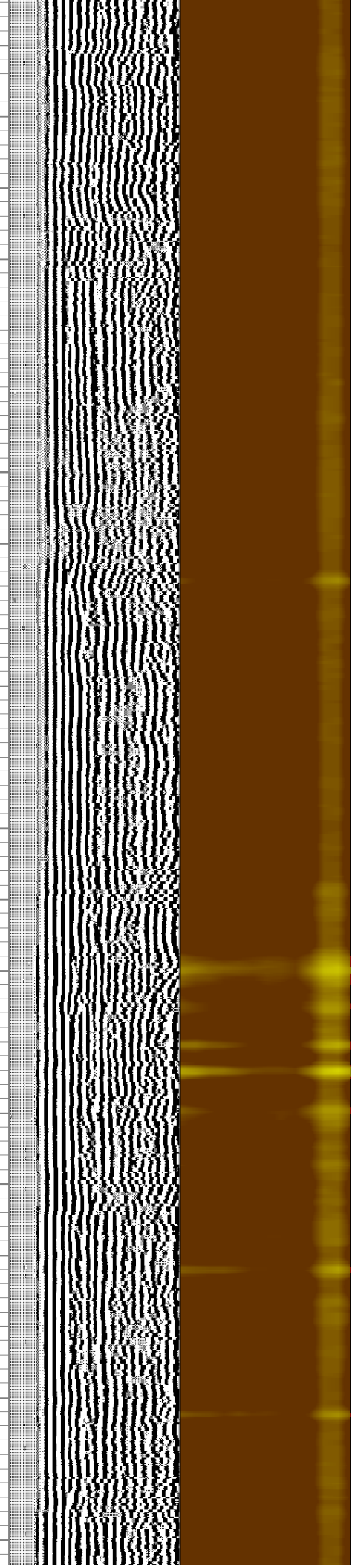
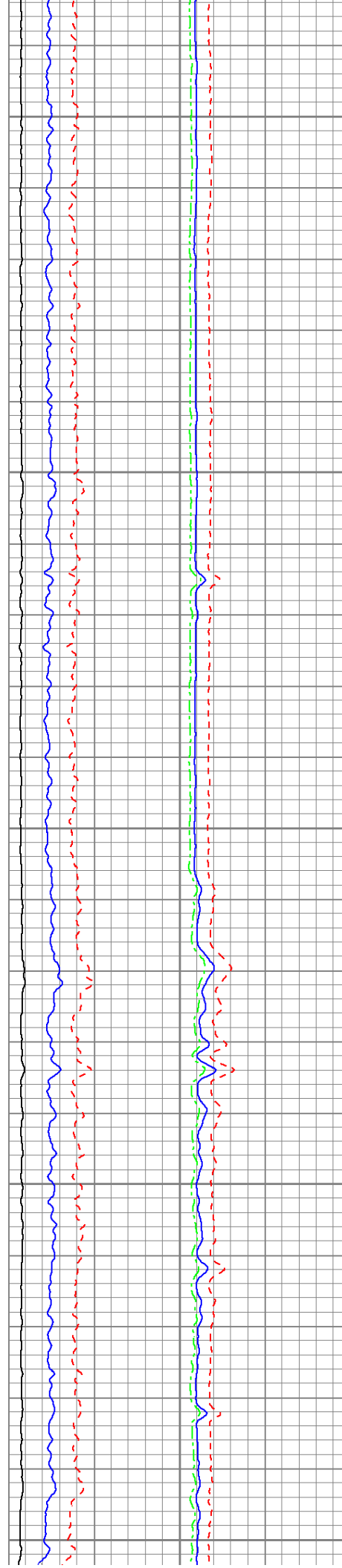


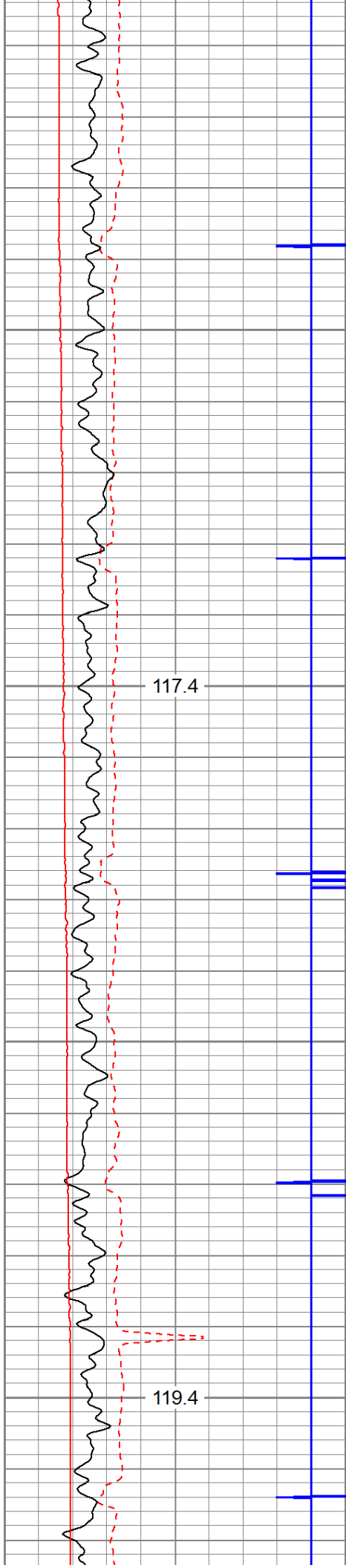


4800

4900

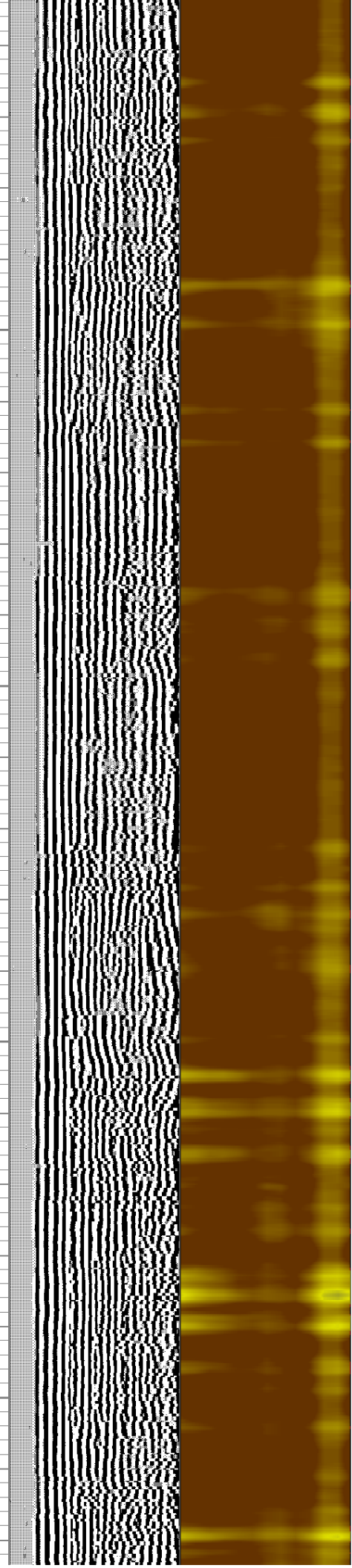
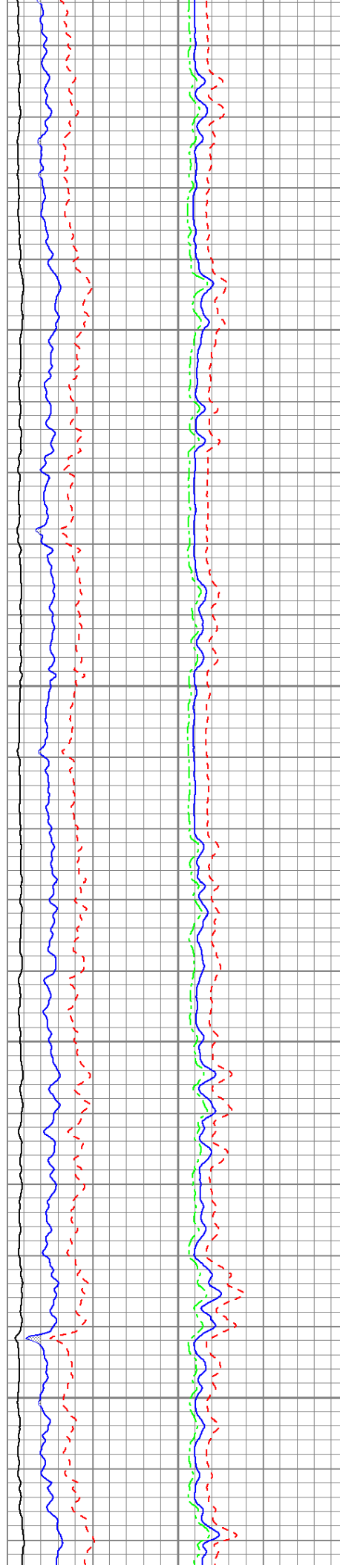
5000

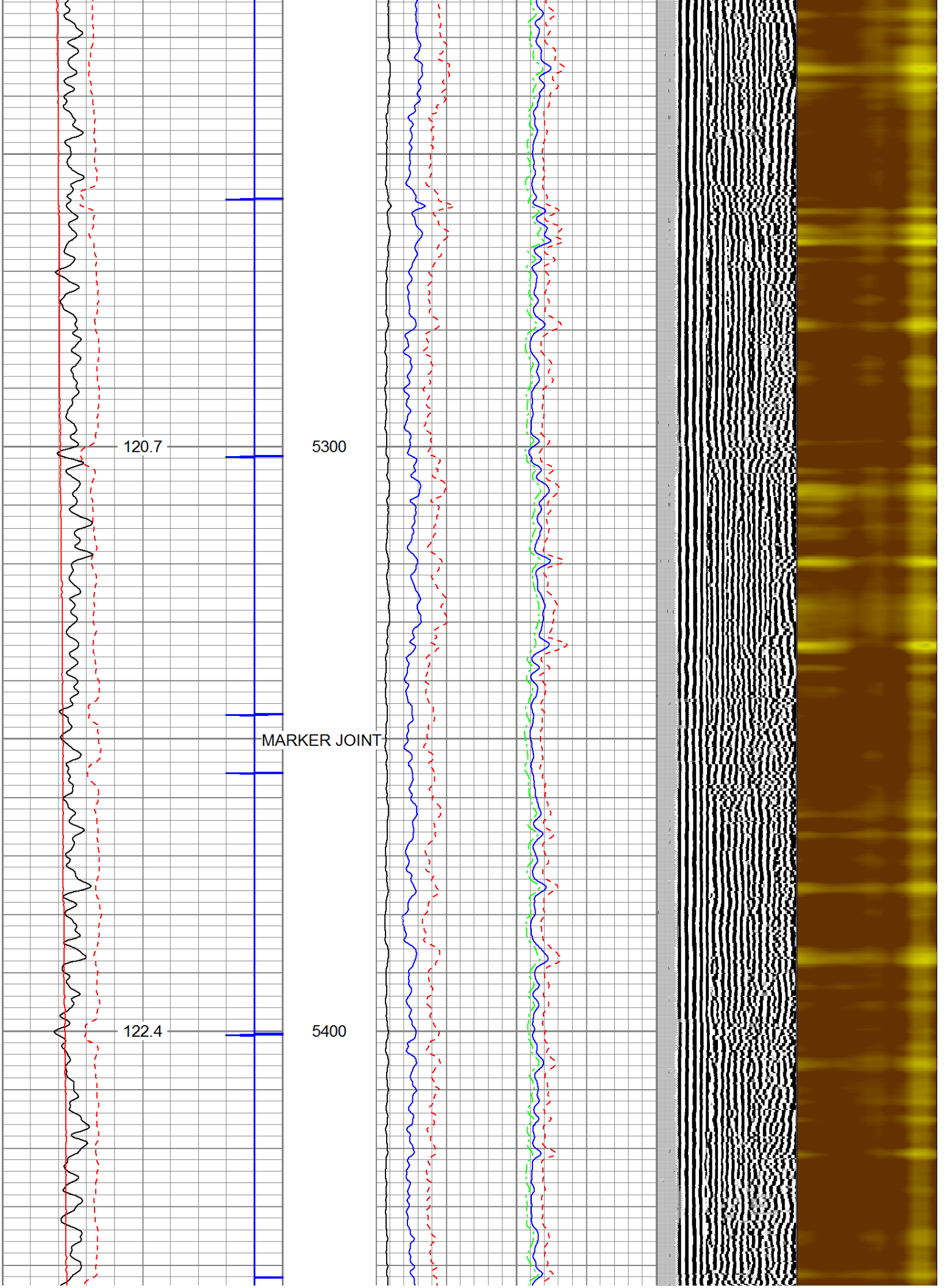


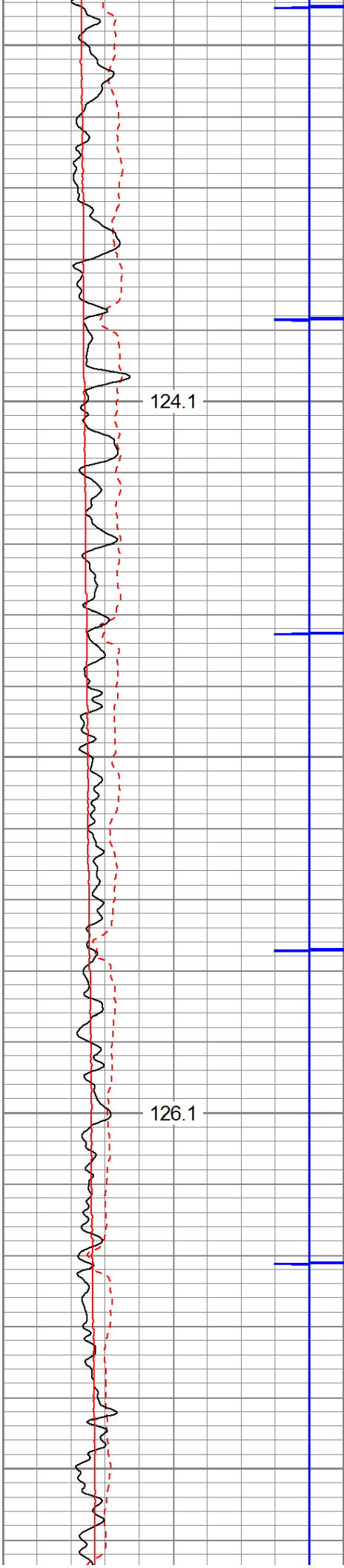


5100

5200

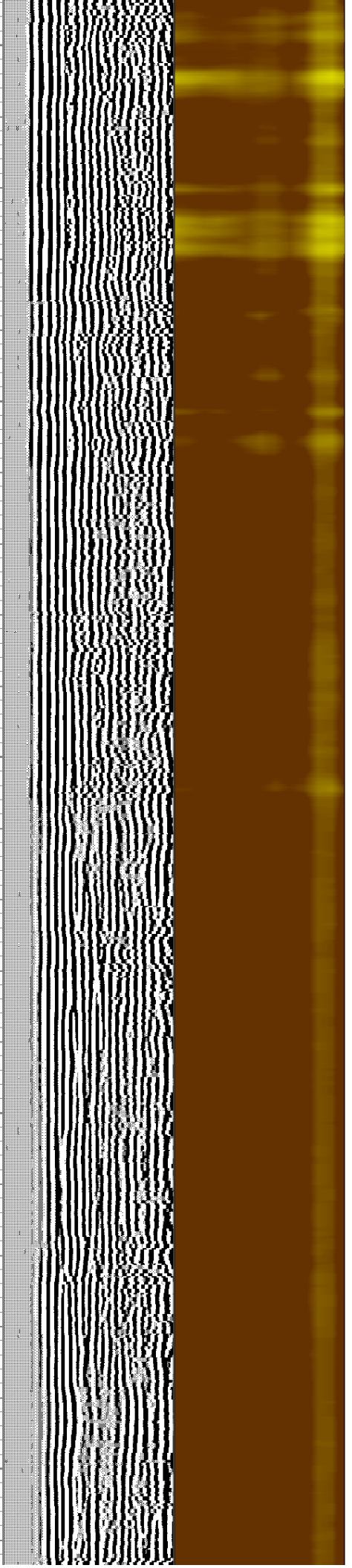
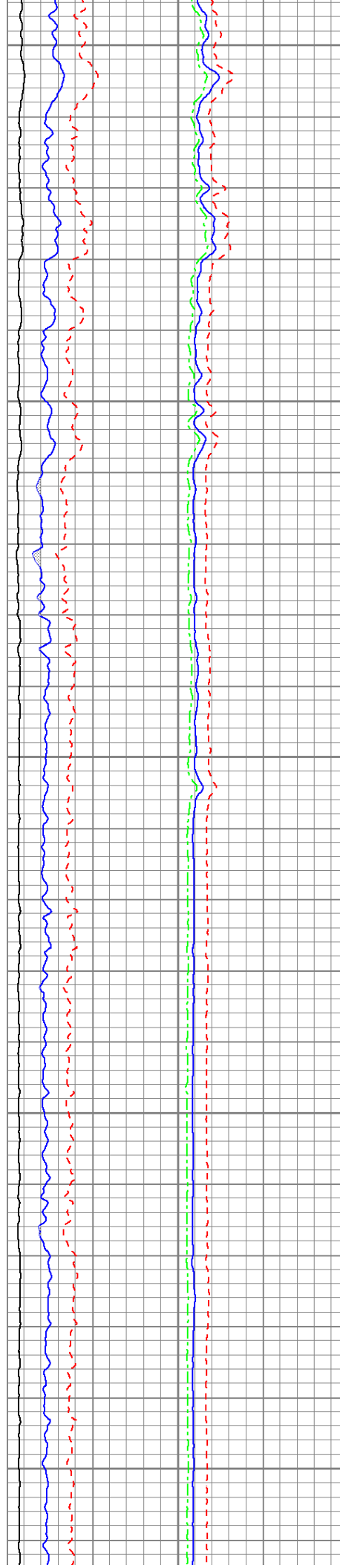


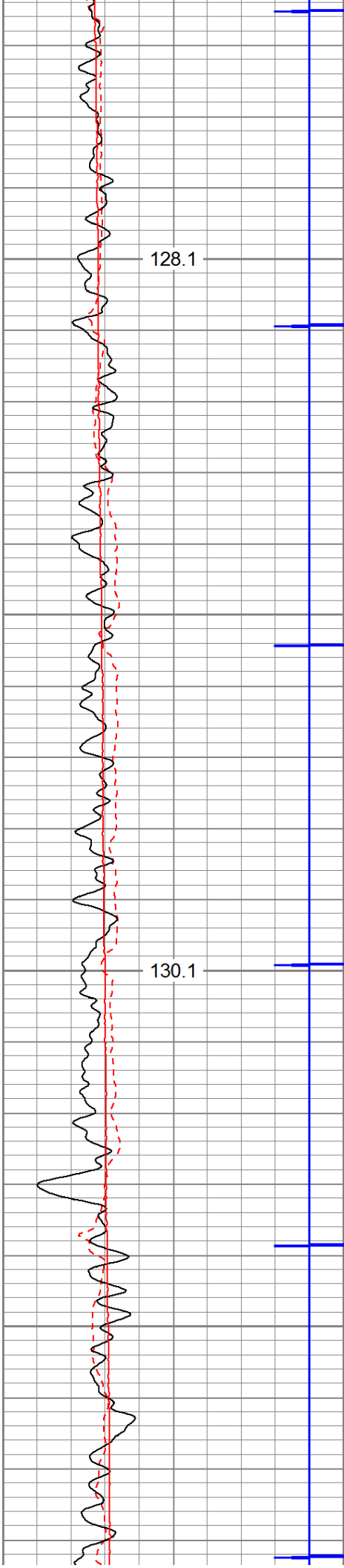




5500

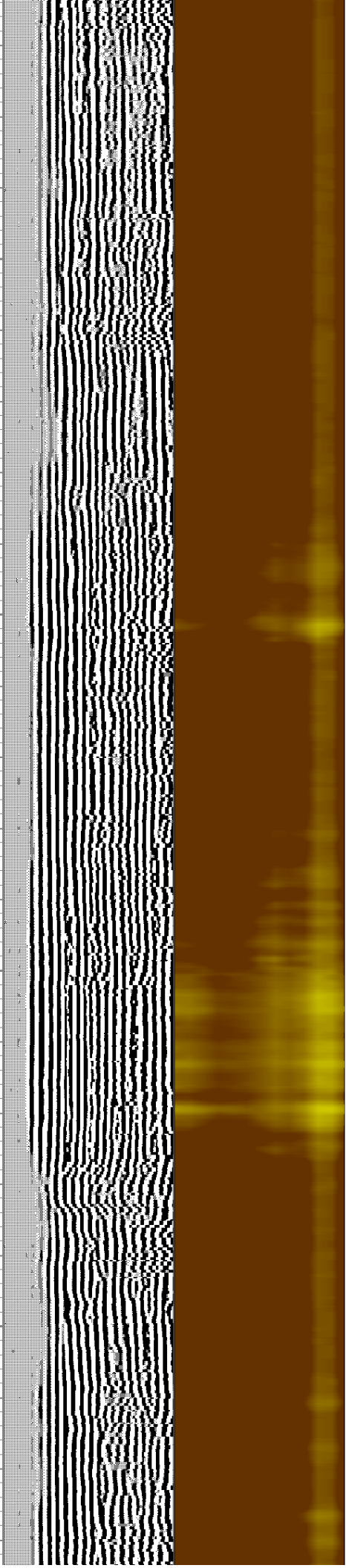
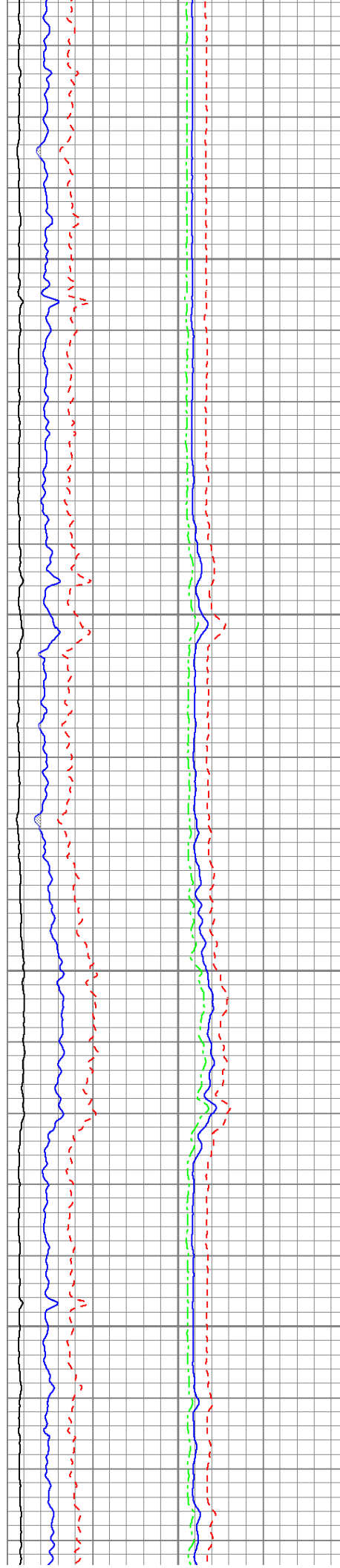
5600

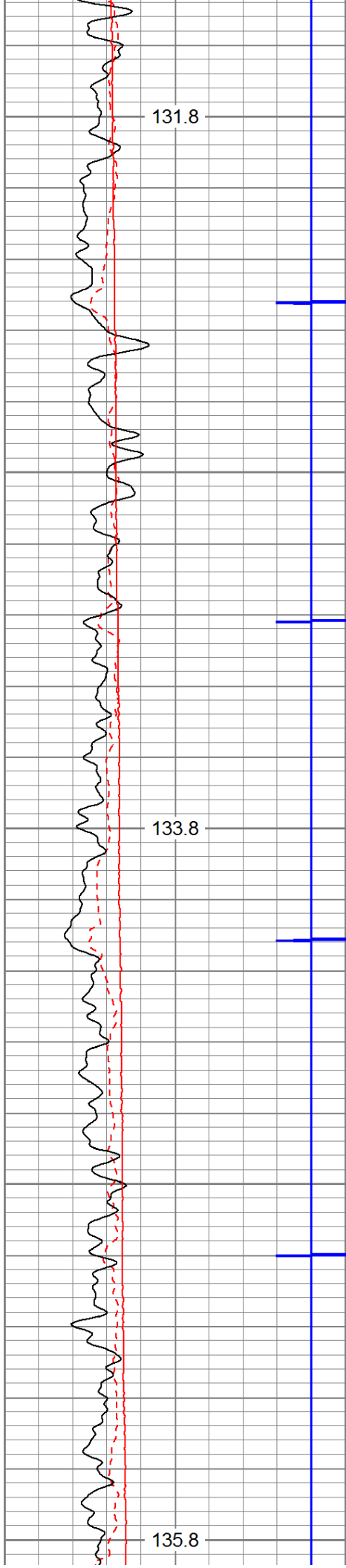




5700

5800

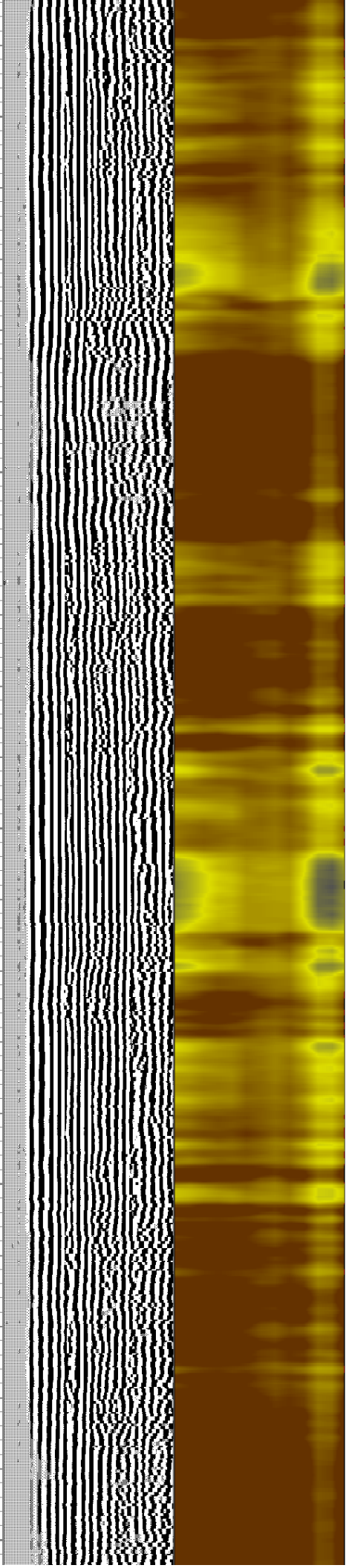
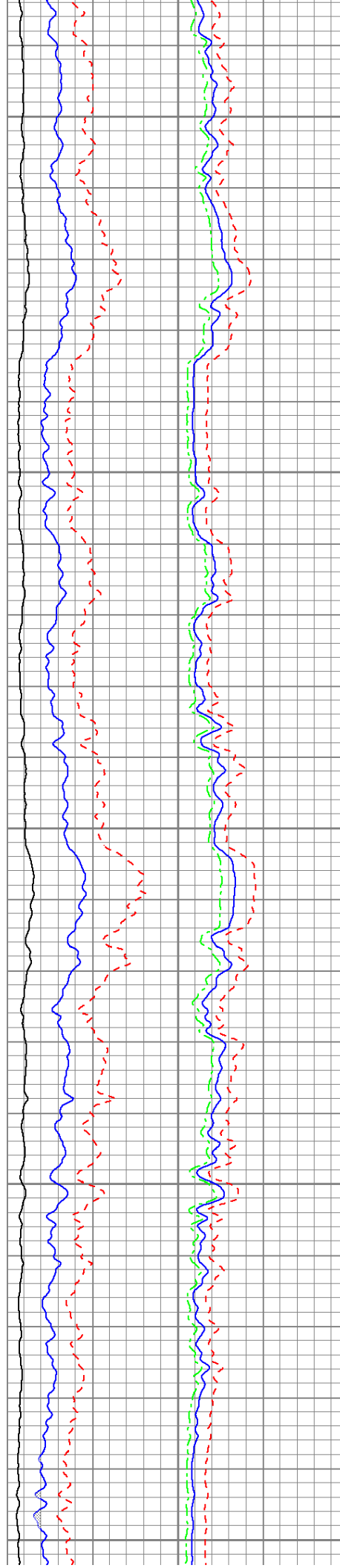


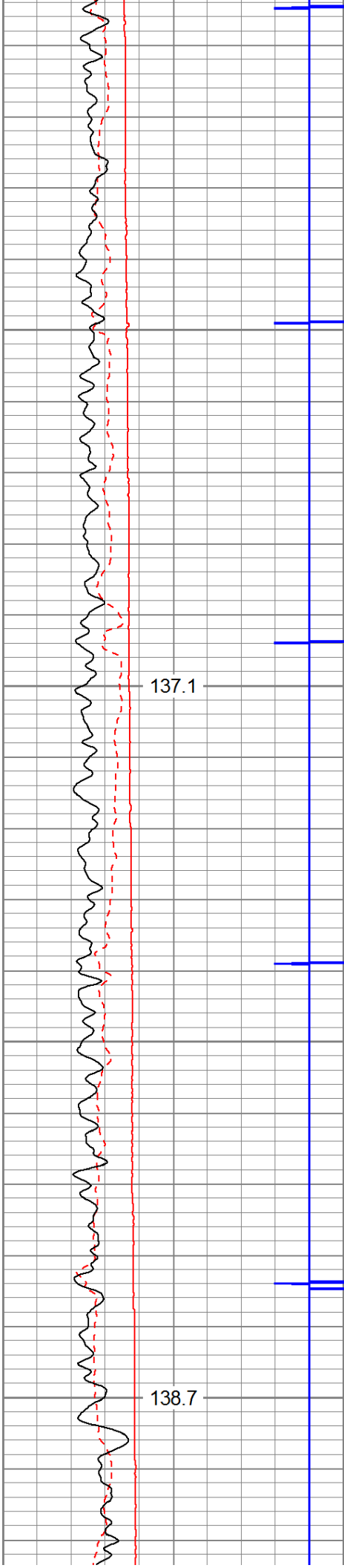


5900

6000

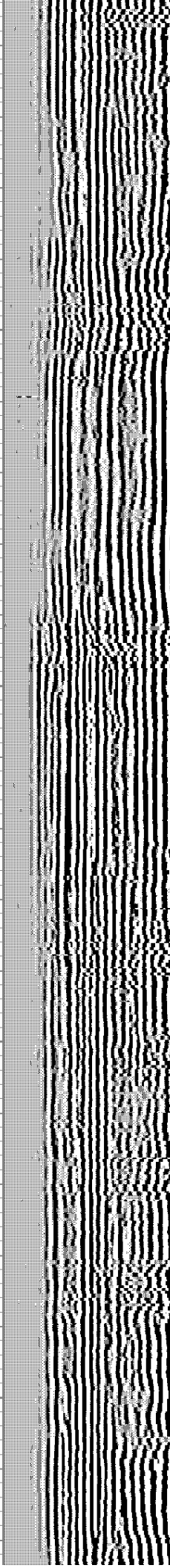
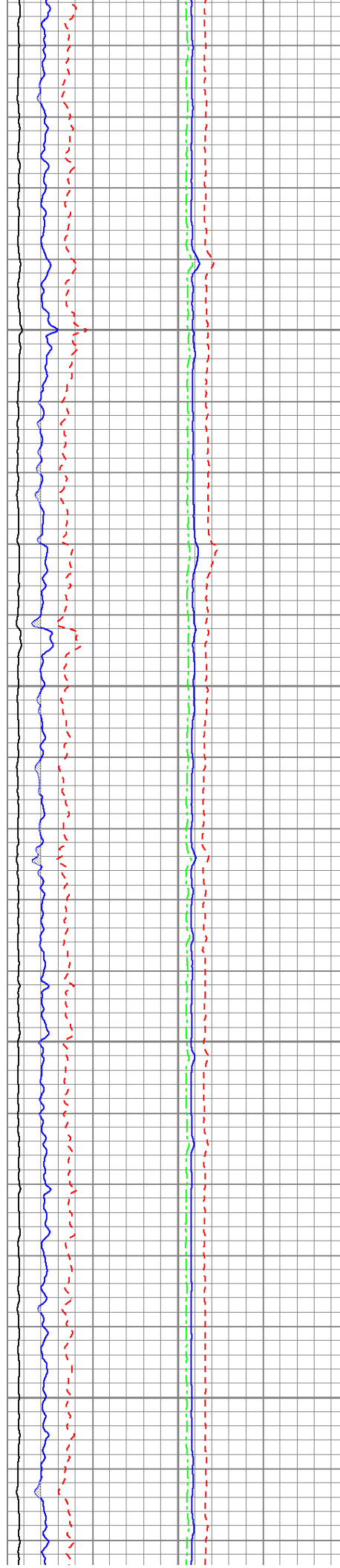
6100

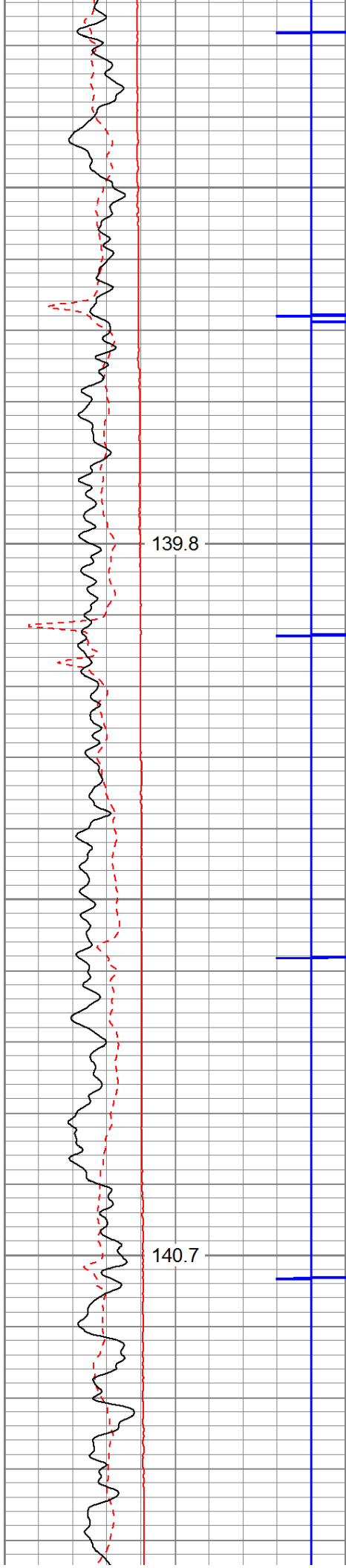




6200

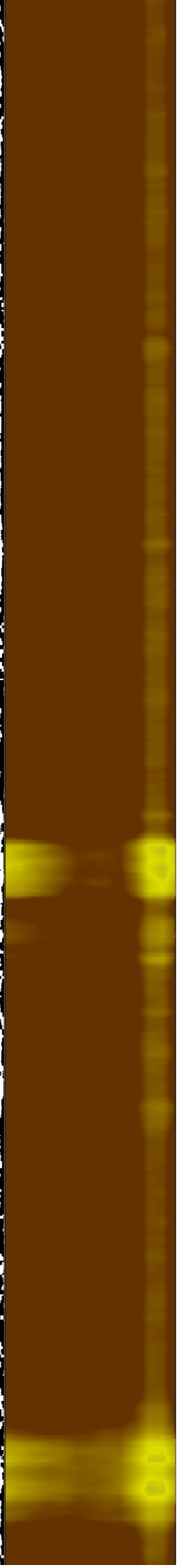
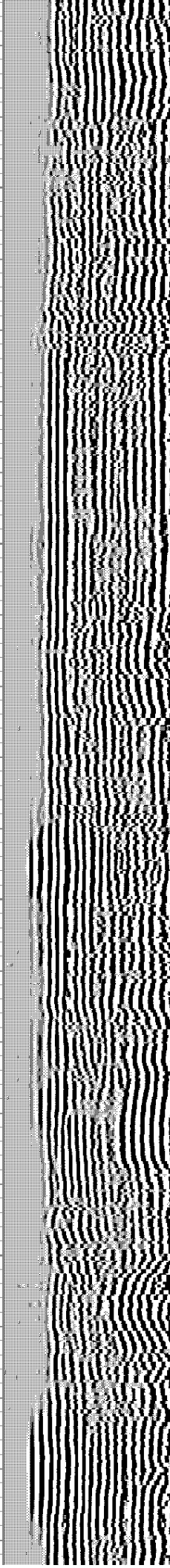
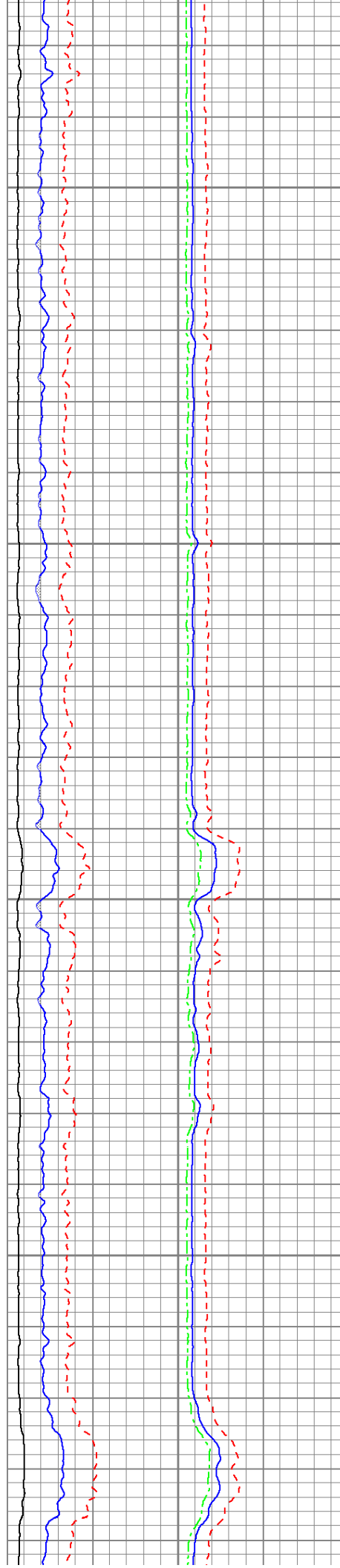
6300

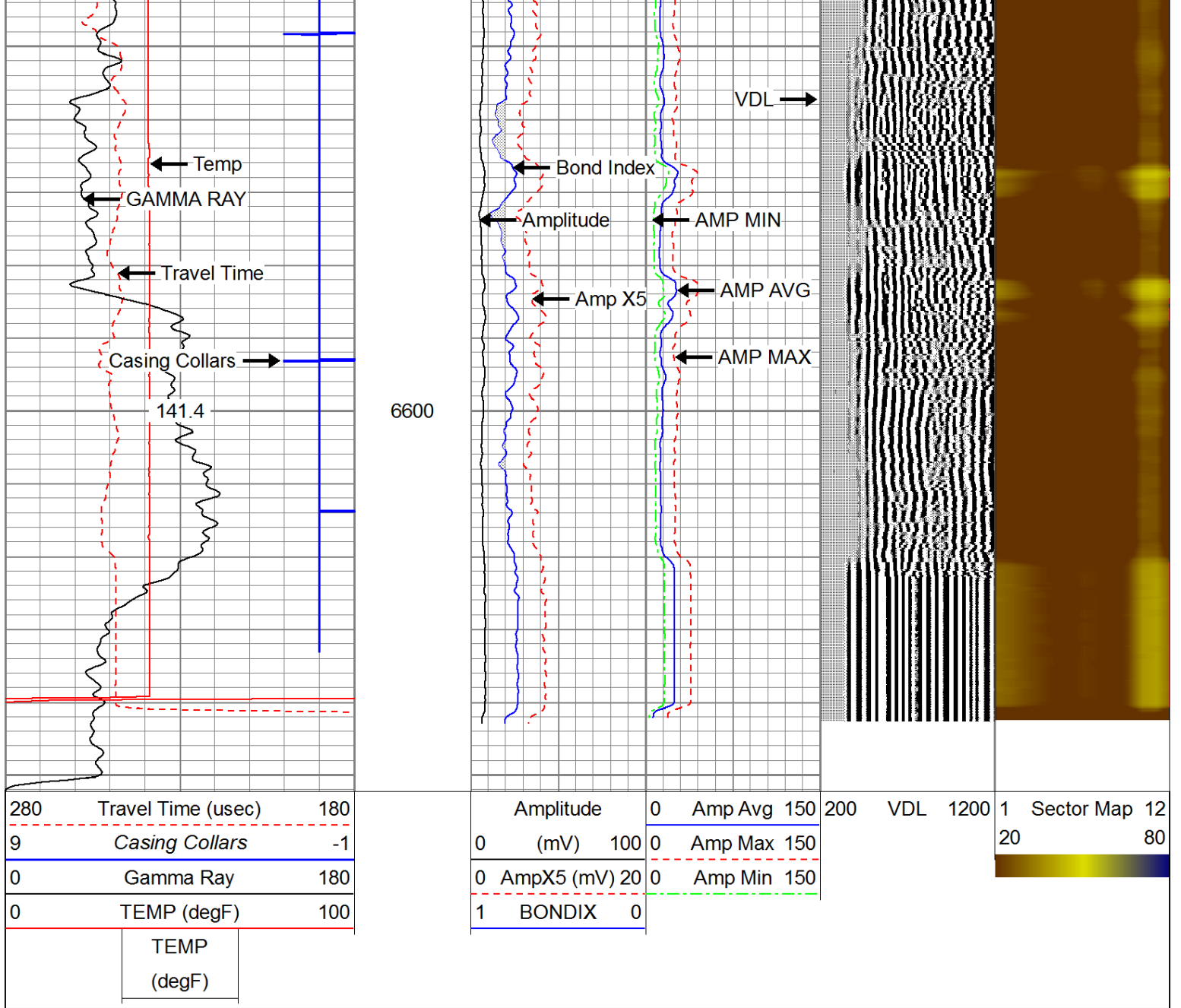




6400

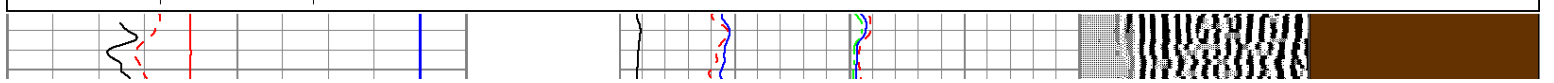
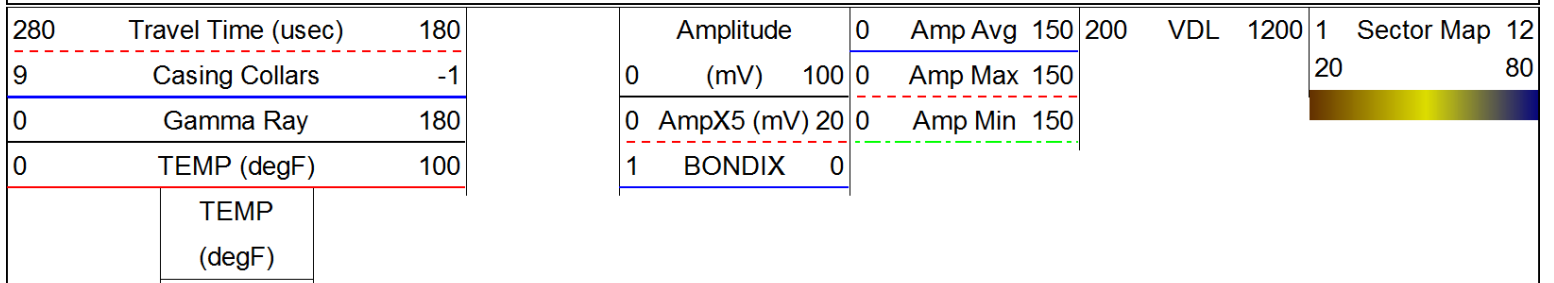
6500

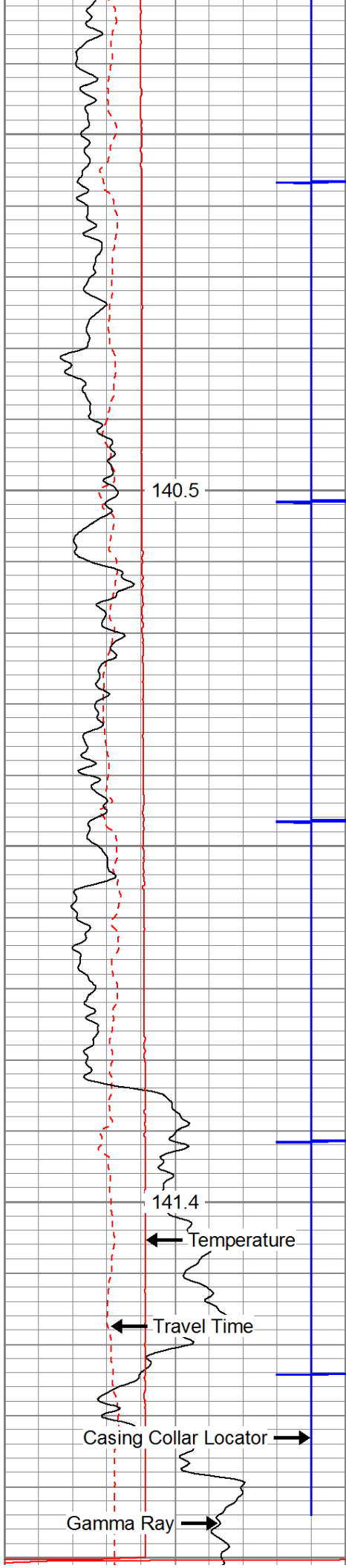




REPEAT SECTION

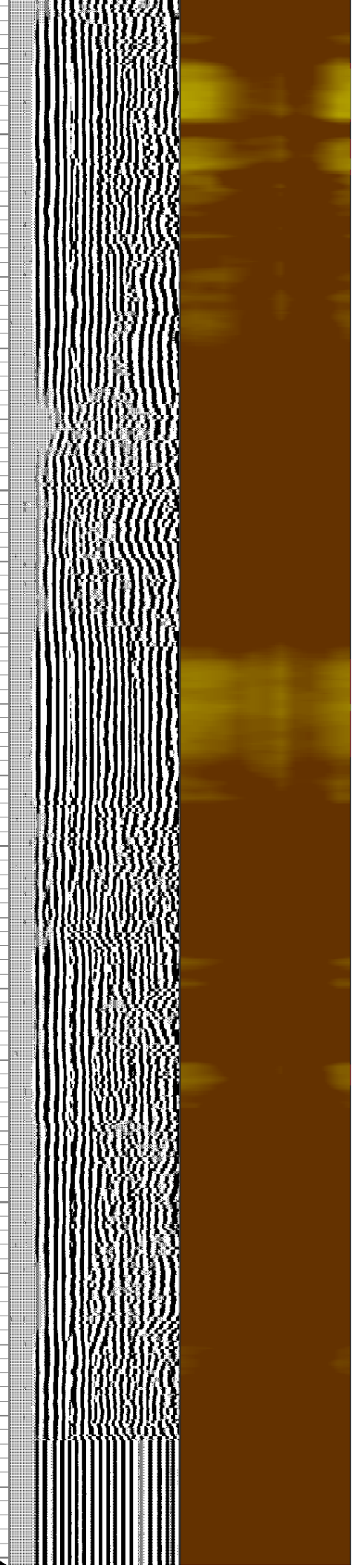
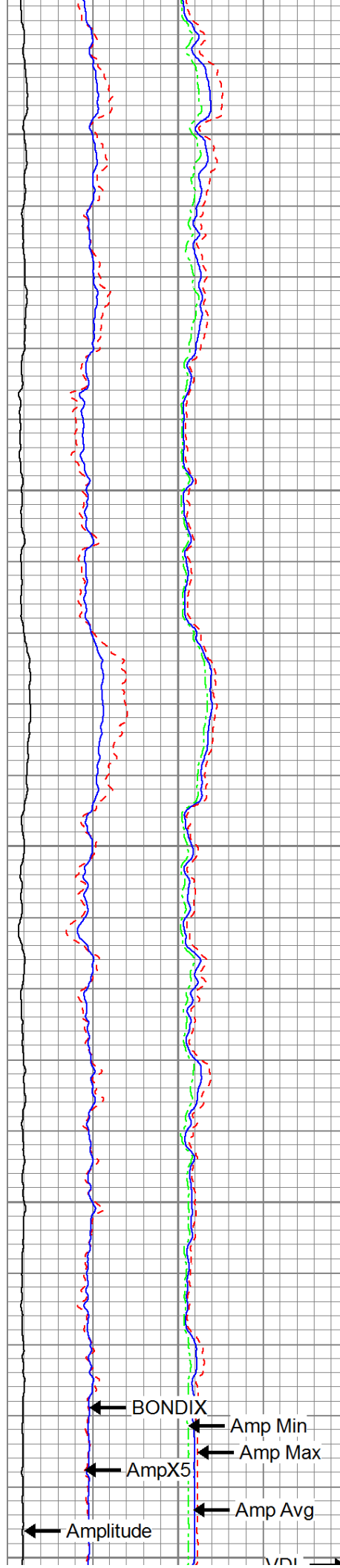
Database File: c:\warrior\data\2019 antero\antero-winchester unit 2h.db
 Dataset Pathname: pass2
 Presentation Format: antero f
 Dataset Creation: Sun Mar 31 11:31:57 2019 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240






6500

6600




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-winchester unit 2h.db: field/well/run1/pass3			
		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-winchester unit 2h.db
Dataset Pathname:	pass3
Dataset Creation:	Sun Mar 31 11:37:36 2019 by Log 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	WINCHESTER UNIT 2H		
	Field	MARCELLUS		
	County	TYLER		
	State	W.V.	Country	