



Pioneer Energy Services

CEMENT BOND GAMMA RAY CCL LOG

Company AUGUSTUS ENERGY RESOURCES LLC
Well FRANSON 23-33 4N47W
Field BUFFALO GRASS
County YUMA
State

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Location: API #: 05-125-12122

Other Services

Permanent Datum GL Elevation 4010'
Log Measured From K.B. 6' AGL
Drilling Measured From KB
SEC 33 TWP 4N RGE 47W
SHL: 2230' FSL & 1985' FWL NESW

Date 28-OCT-2014

Run Number	ONE		
Depth Driller	3006		
Depth Logger	2934'		
Bottom Logged Interval	2934'		
Top Log Interval	SURFACE		
Open Hole Size	6.25		
Type Fluid	WATER		
Density / Viscosity	N/A		
Max. Recorded Temp.	113 DEG F		
Estimated Cement Top			
Time Well Ready	13:00		
Time Logger on Bottom	13:30		
Equipment Number	P-75		
Location	FT. MORGAN		
Recorded By	HARPER		
Witnessed By			

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record				Size	Wgt/Ft	Top	Bottom
Surface String							
Prot. String							
Production String							
Liner							

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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

LOG CORRELATED TO:
PIONEER
HIGH RESOLUTION INDUCTION
COMPENSATED DENSITY
COMPENSATED NEUTRON
DATED: OCTOBER 16 2014

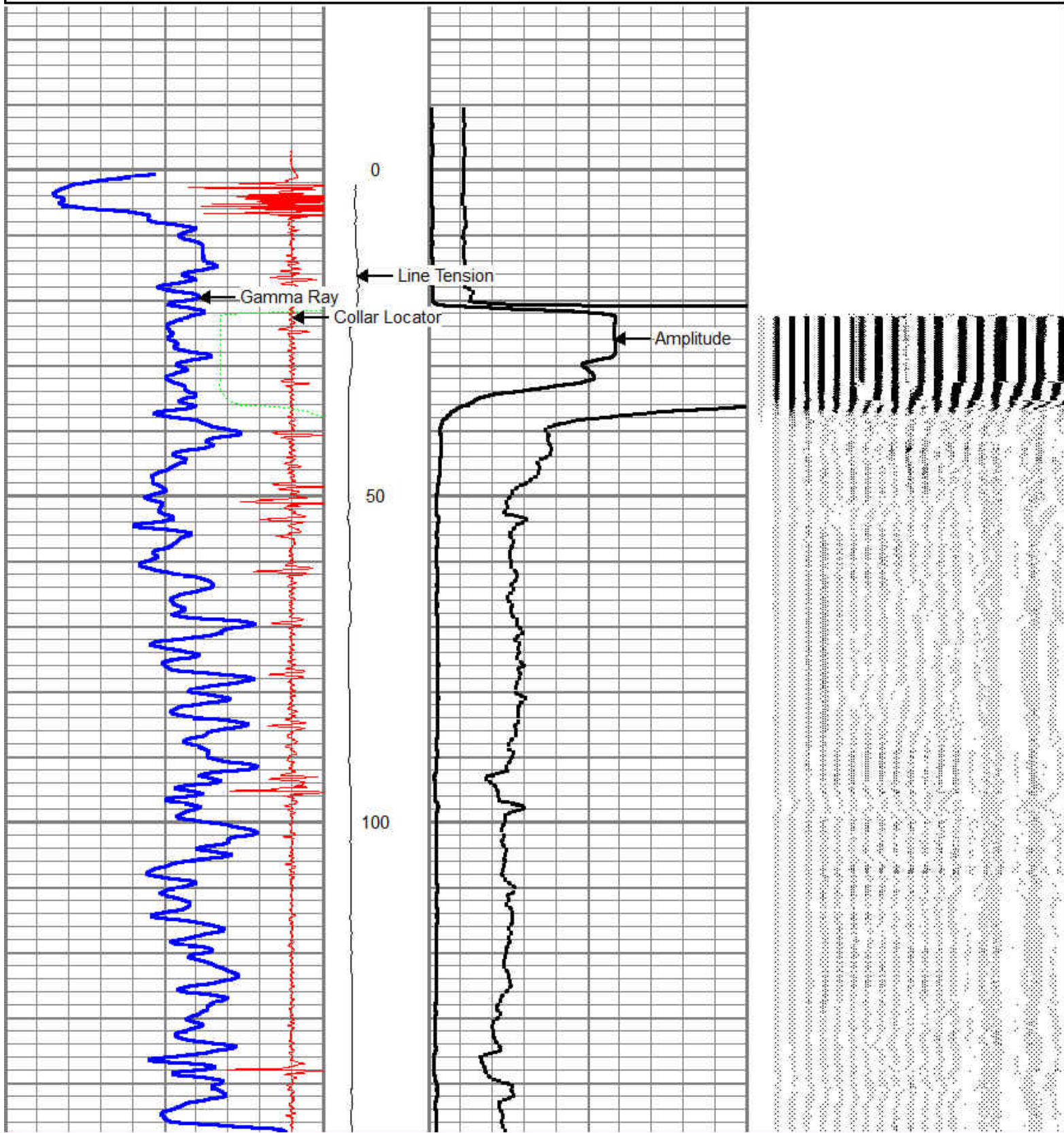
SHORT JOINT:2658-79'

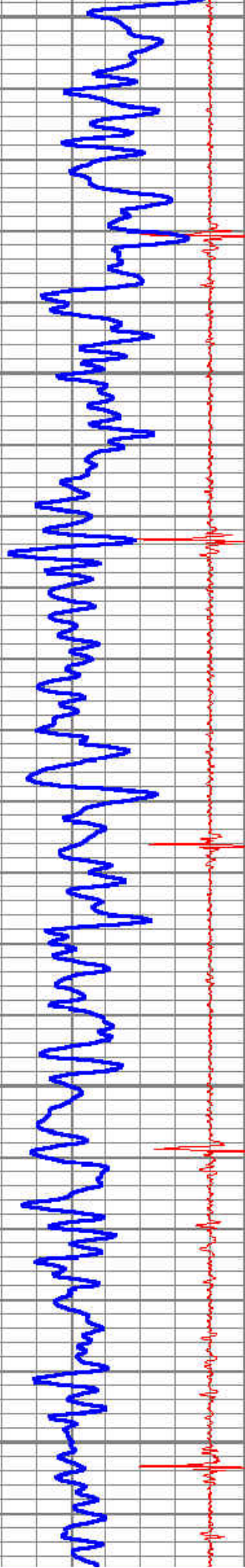
Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)

			SDSCENT Centralizer for testing	3.00	3.25	20.00
WVF3	13.25		CBL-Probe (050215) Probe 2.75" Dual Receiver Bond	8.75	2.75	60.00
WVF5	12.25					
			SDSCENT Centralizer for testing	3.00	3.25	20.00
CCL	5.17		CCL-Probe (275)	1.42	2.75	
GR	3.79		GR-Probe275 (030606)	3.33	2.75	57.00
TEMP	0.08		TEMP-1.375TEMP (0001) Temperature Tool	1.25	1.38	30.00
Dataset: augustus franson 23-33 4n47w.db: field/well/run1/pass7 Total Length: 20.75 ft Total Weight: 187.00 lb O.D. 3.25 in						

Database File: augustus franson 23-33 4n47w.db
 Dataset Pathname: pass7.1
 Presentation Format: cbl_dr
 Dataset Creation: Tue Oct 28 14:50:15 2014 by Calc 7.0 B1
 Charted by: Depth in Feet scaled 1:240

9	Collar Locator	-1	Line Tension	0	Amplified Amplitude (mV)	10	200	Variable Density	1200
0	Gamma Ray (GAPI)	200	0 (lb/1000)	0	Amplitude (mV)	100			
250	Travel Time (usec)	450							





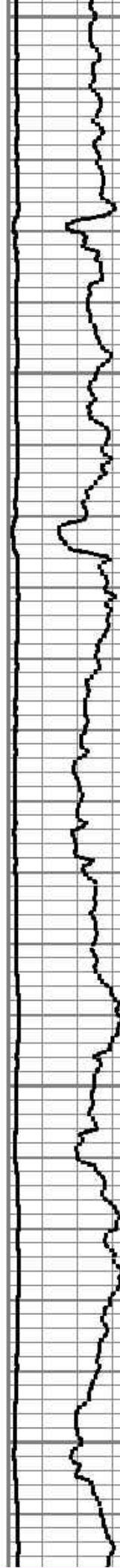
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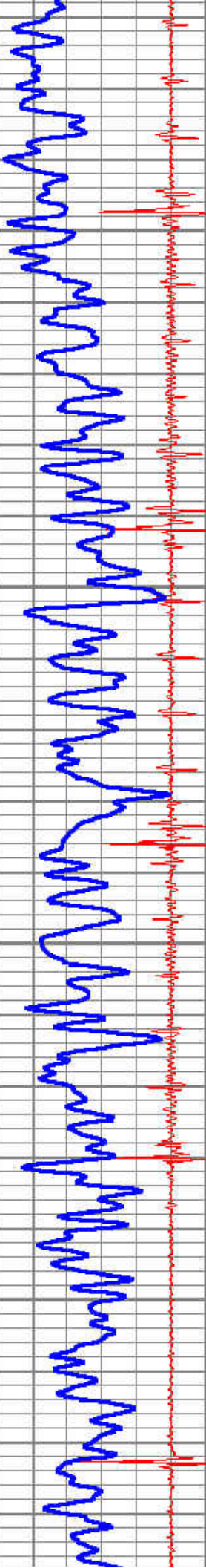
200

250

300

350



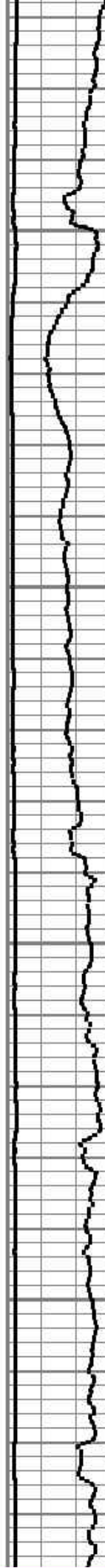


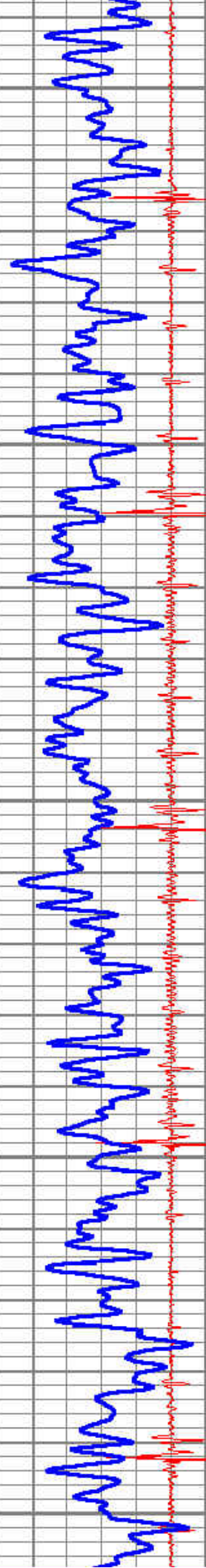
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450

500

550





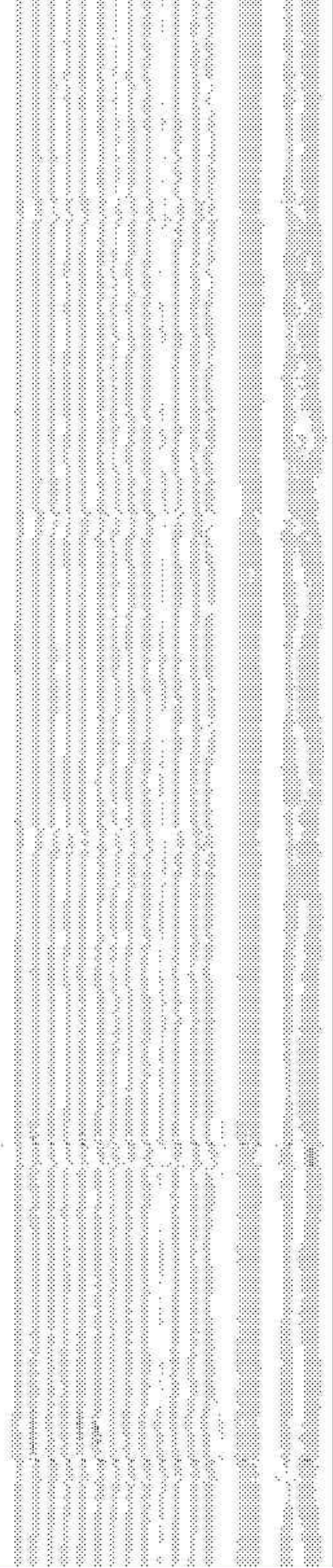
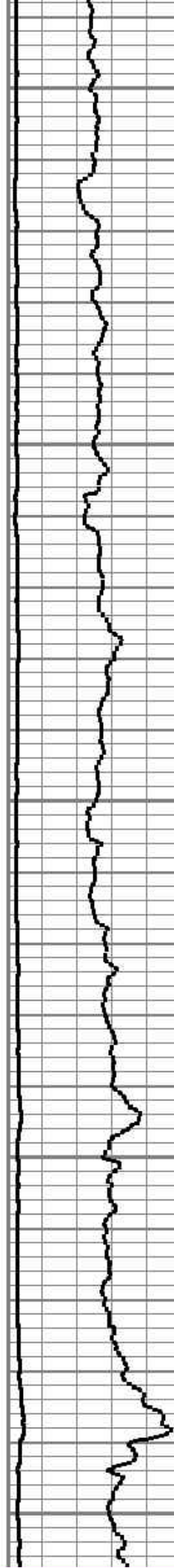
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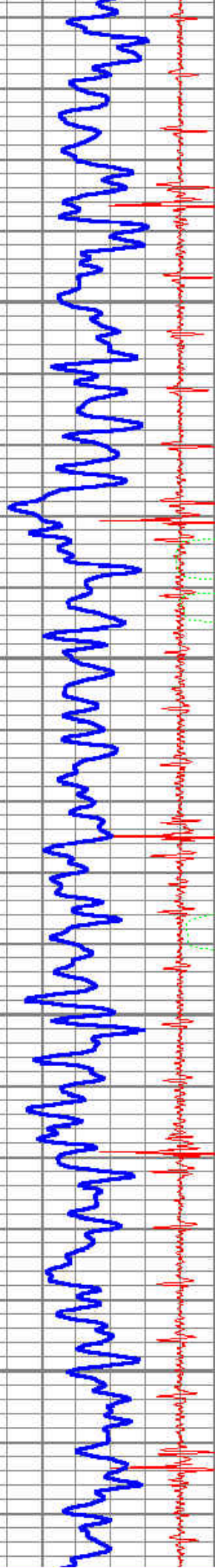
650

700

750

800



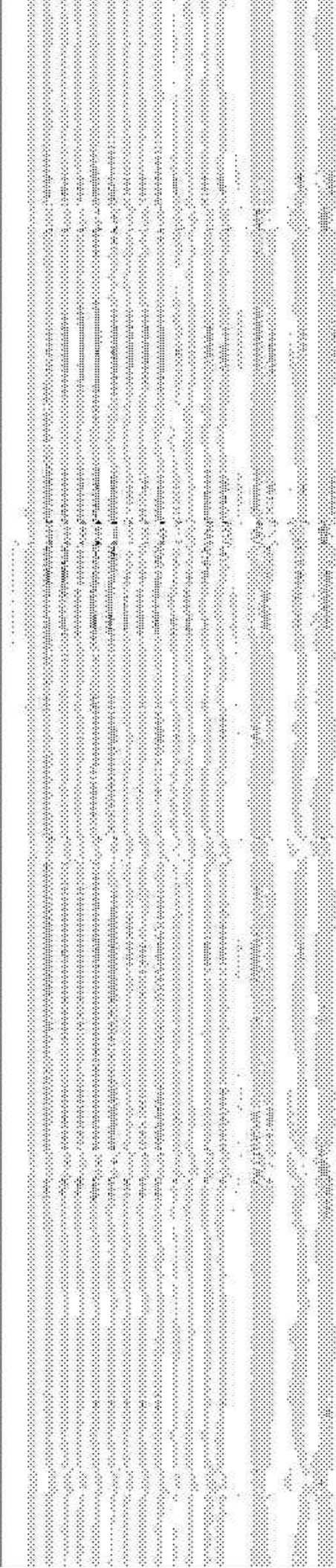
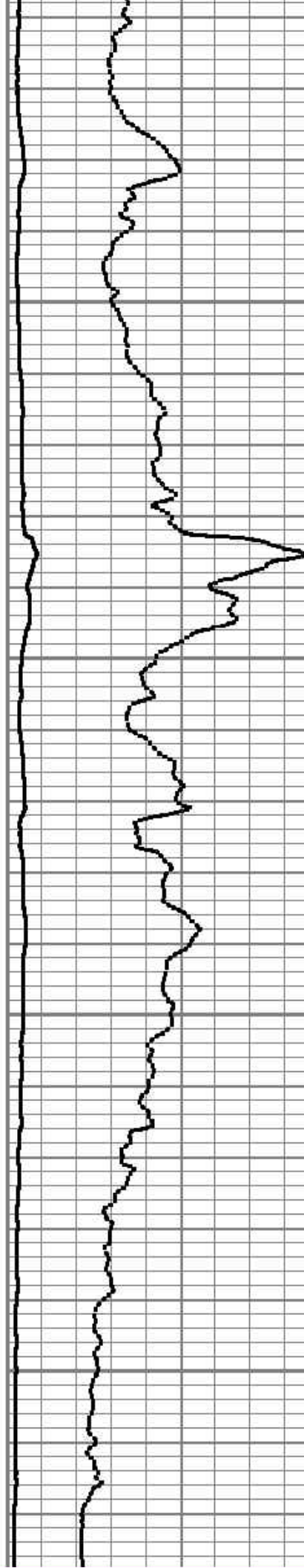


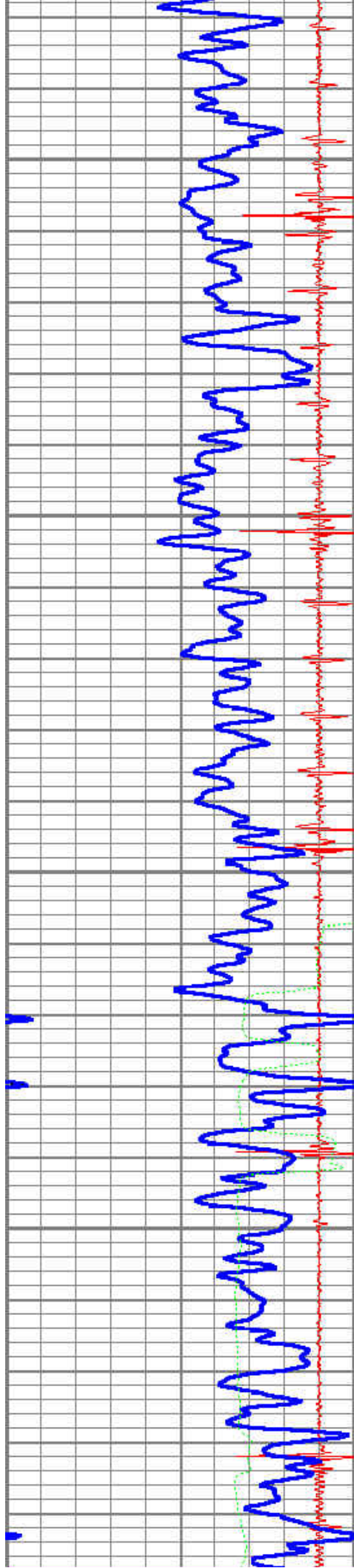
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900

950

1000



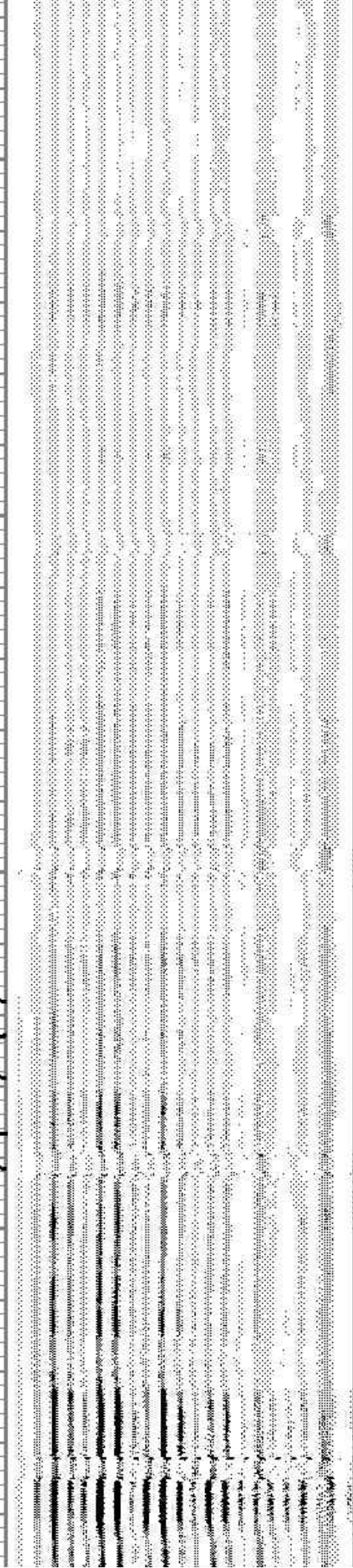
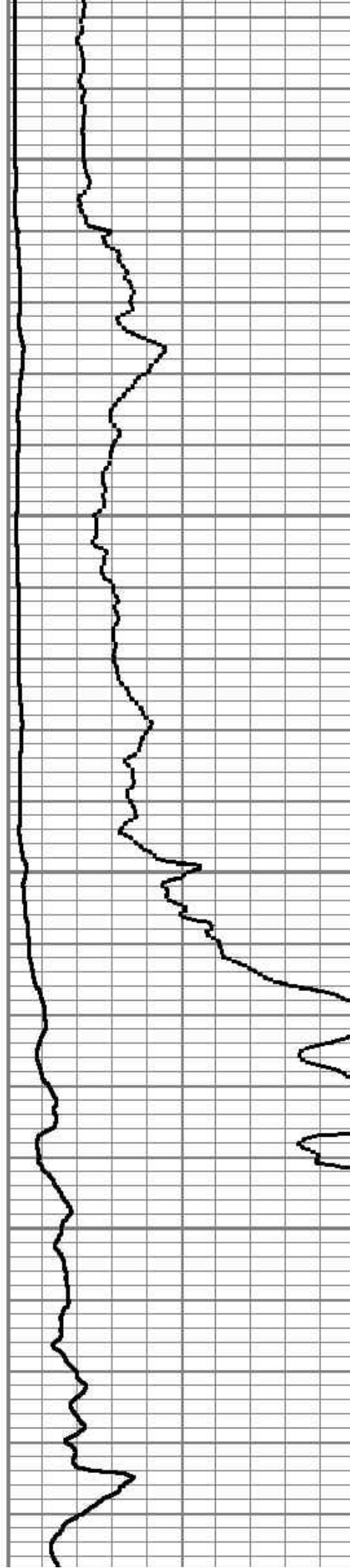


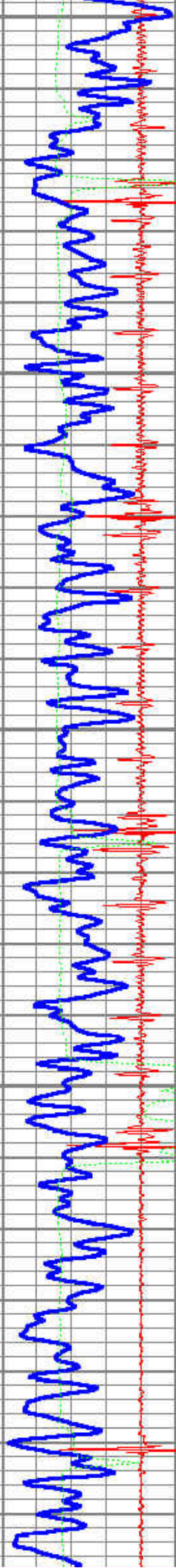
1050

1100

1150

1200





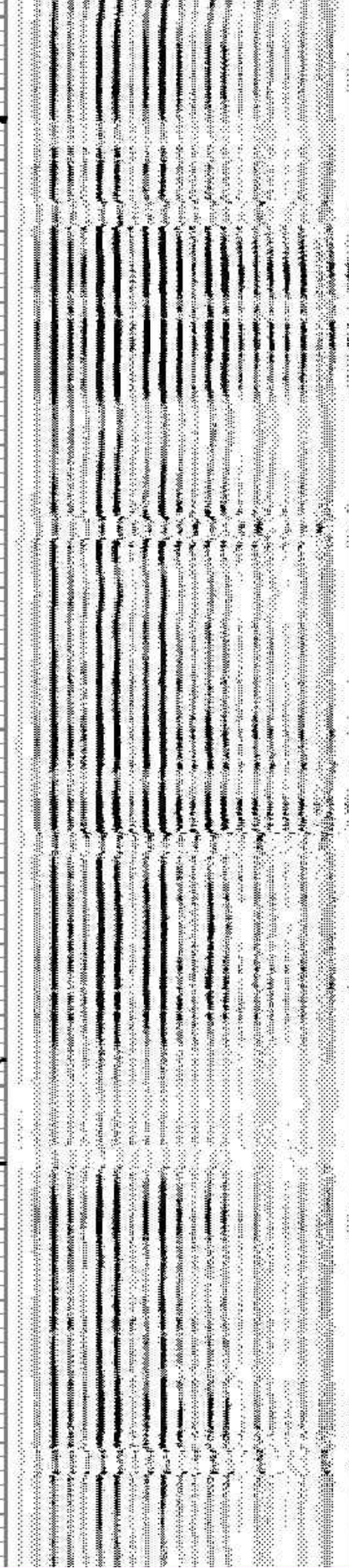
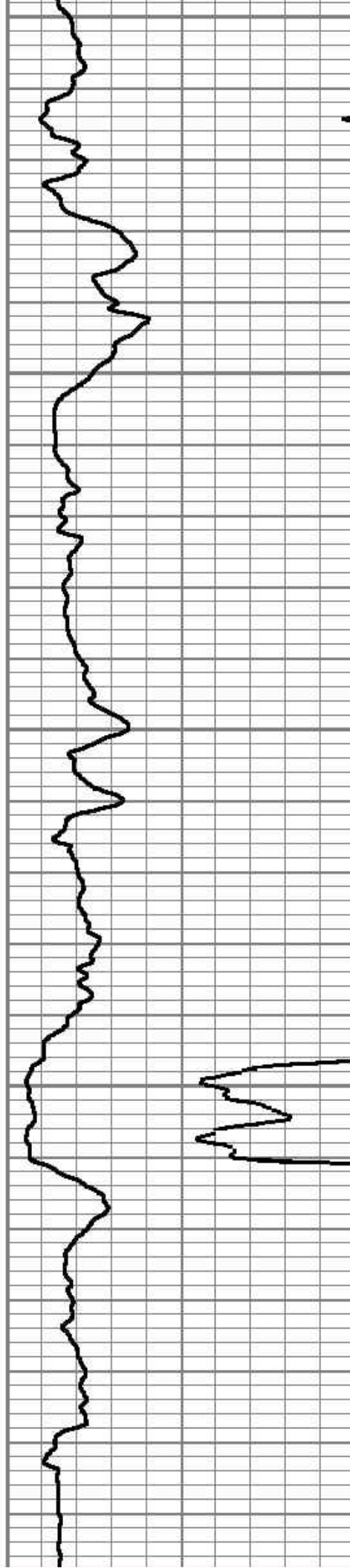
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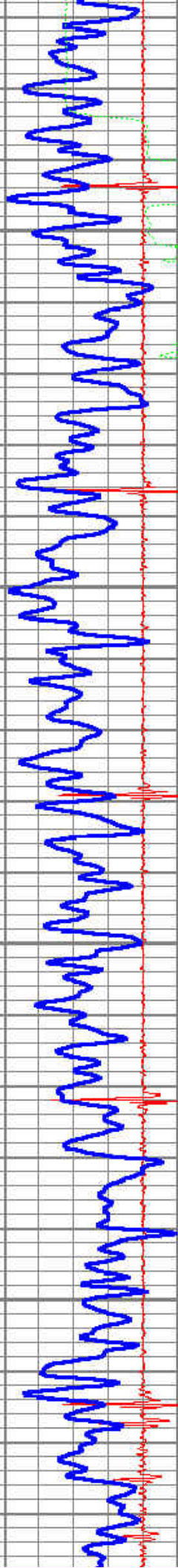
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1350

1400

1450



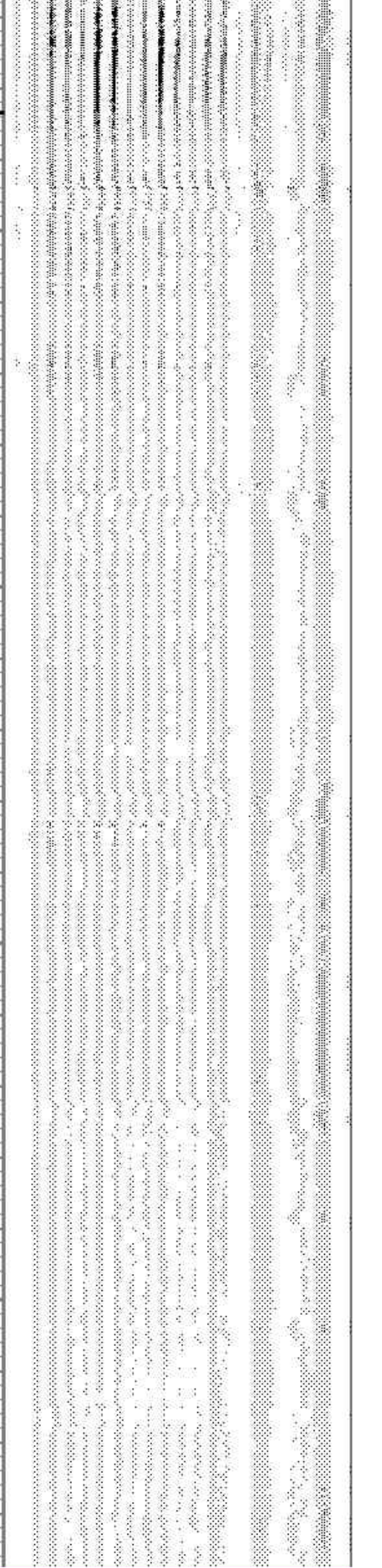
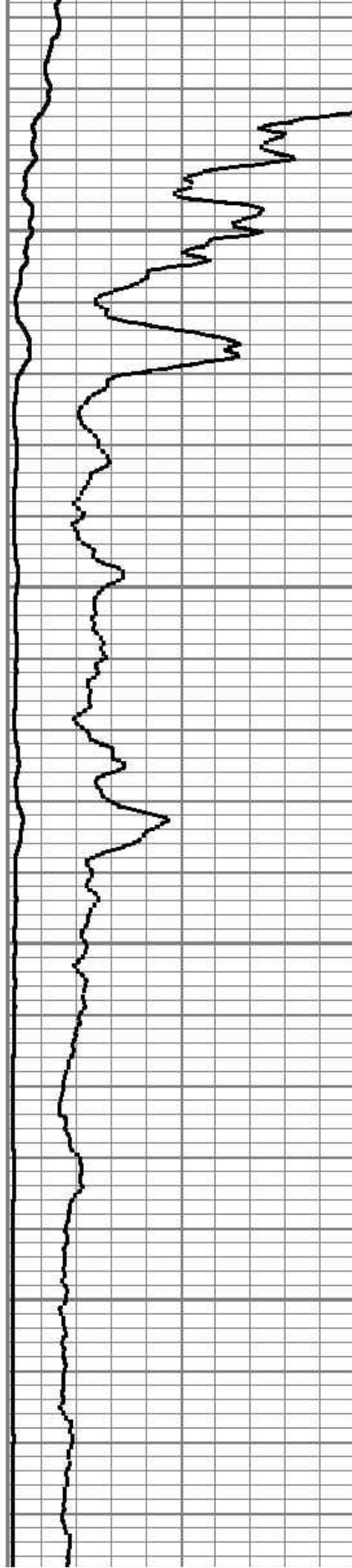


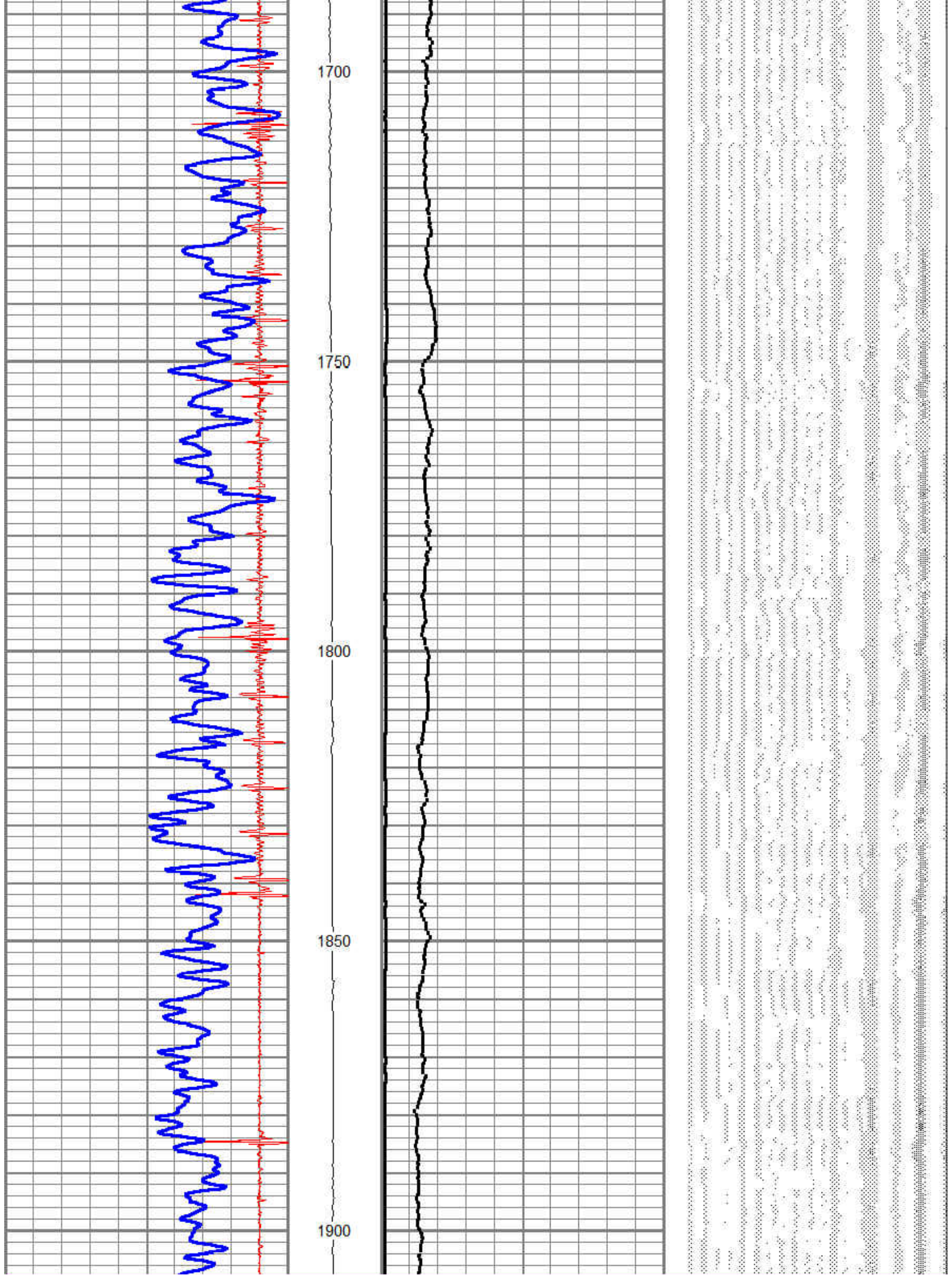
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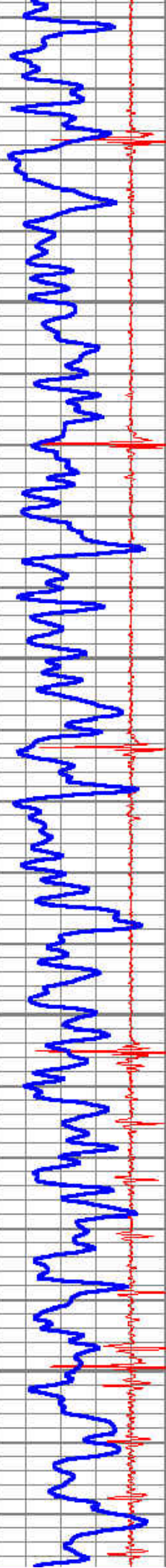
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1600

1650





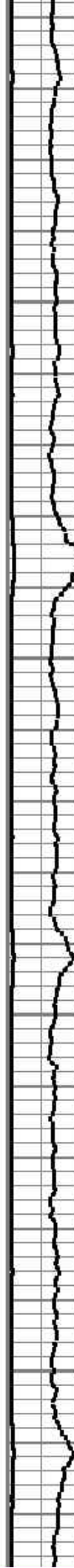


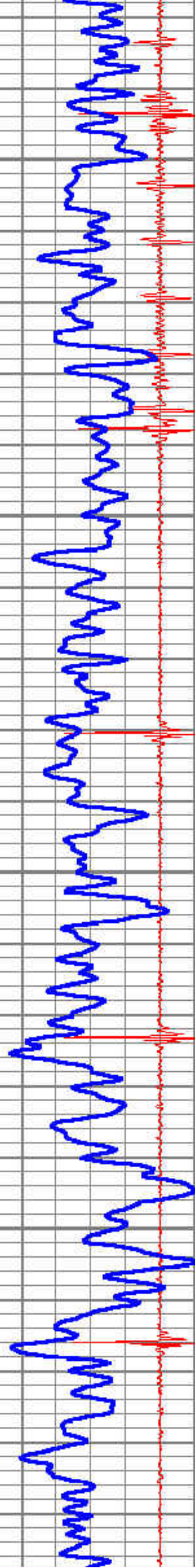
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2000

2050

2100



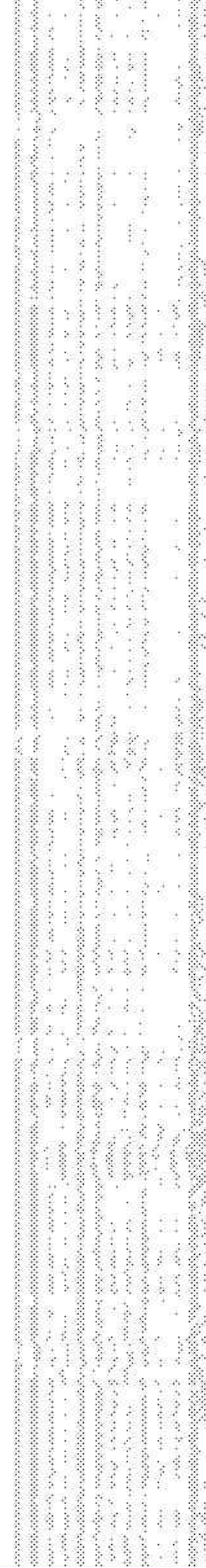
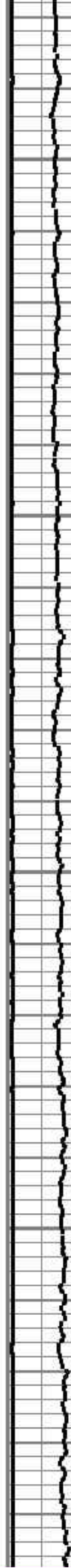


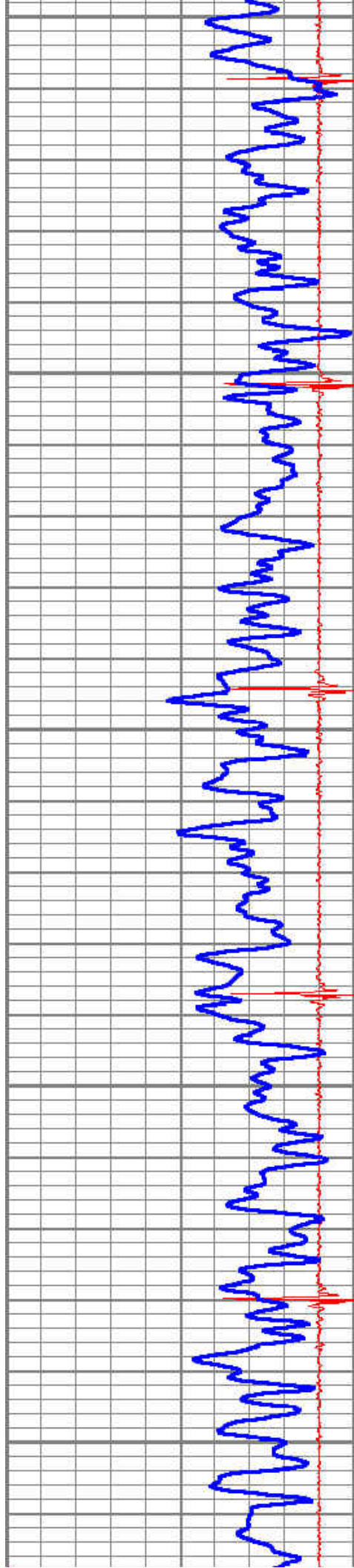
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2200

2250

2300





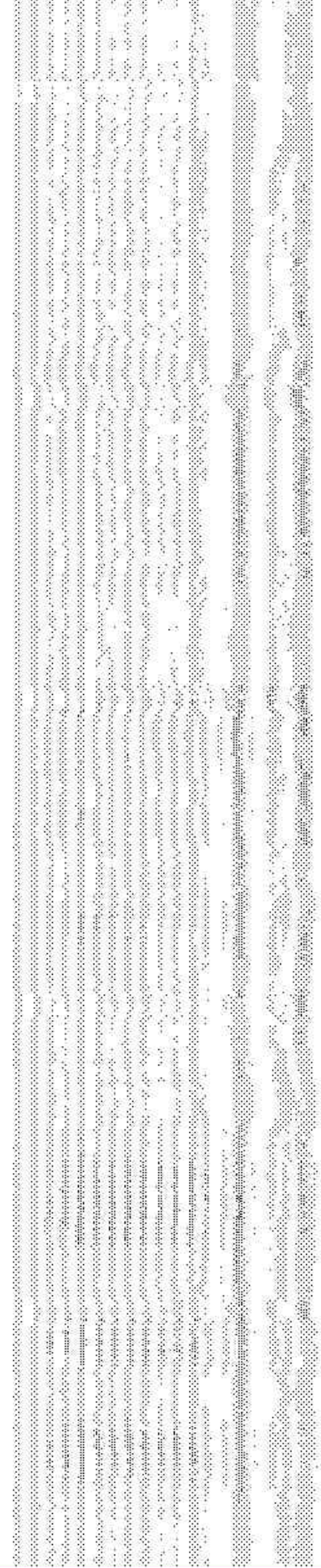
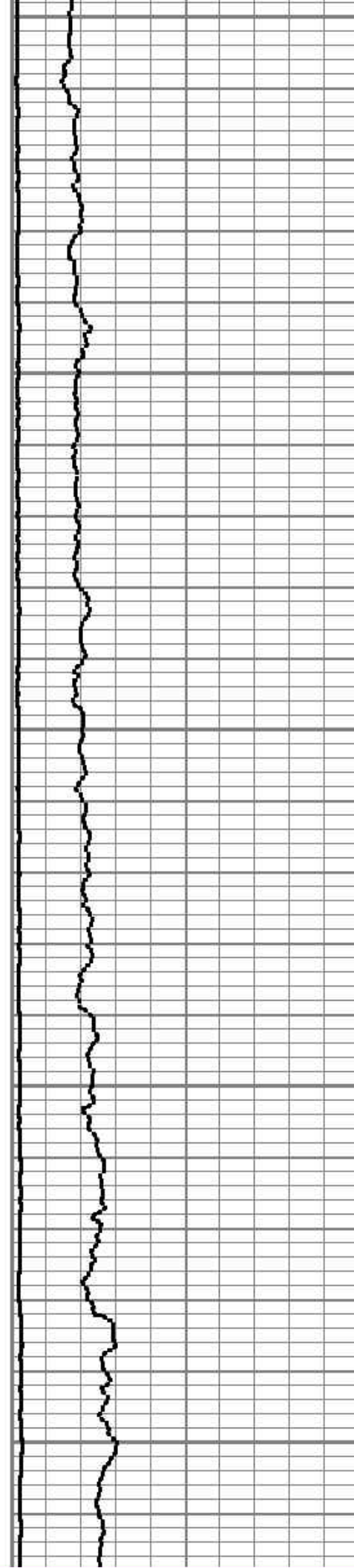
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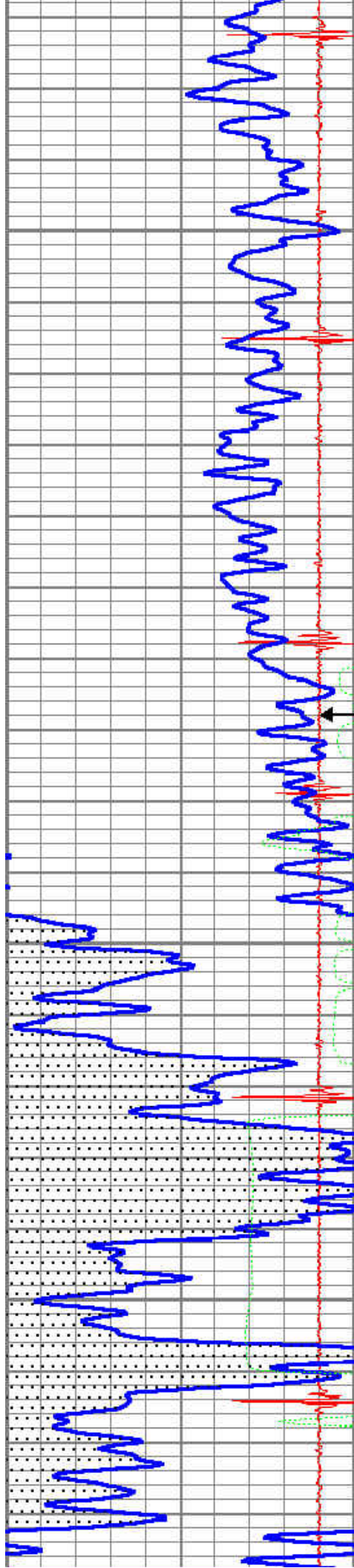
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2450

2500

2550





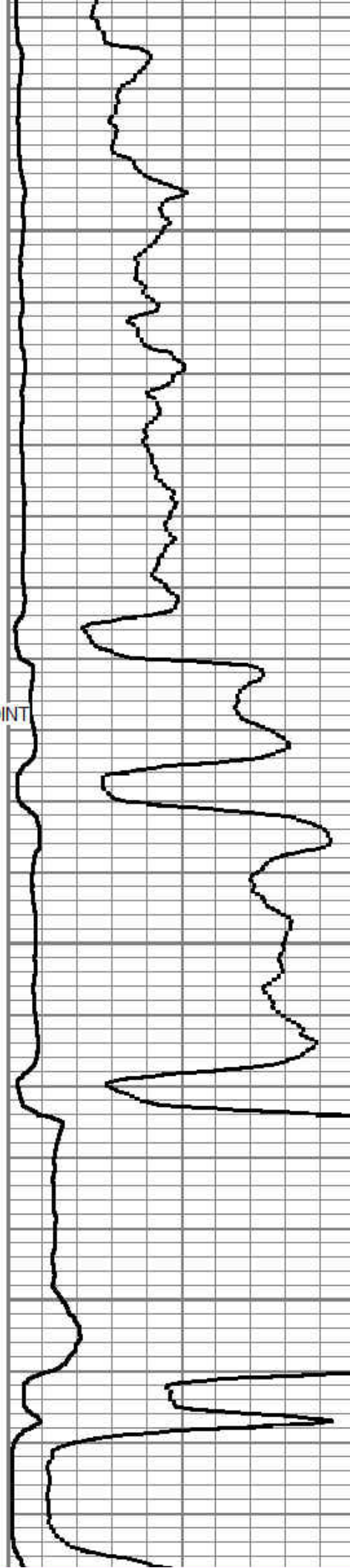
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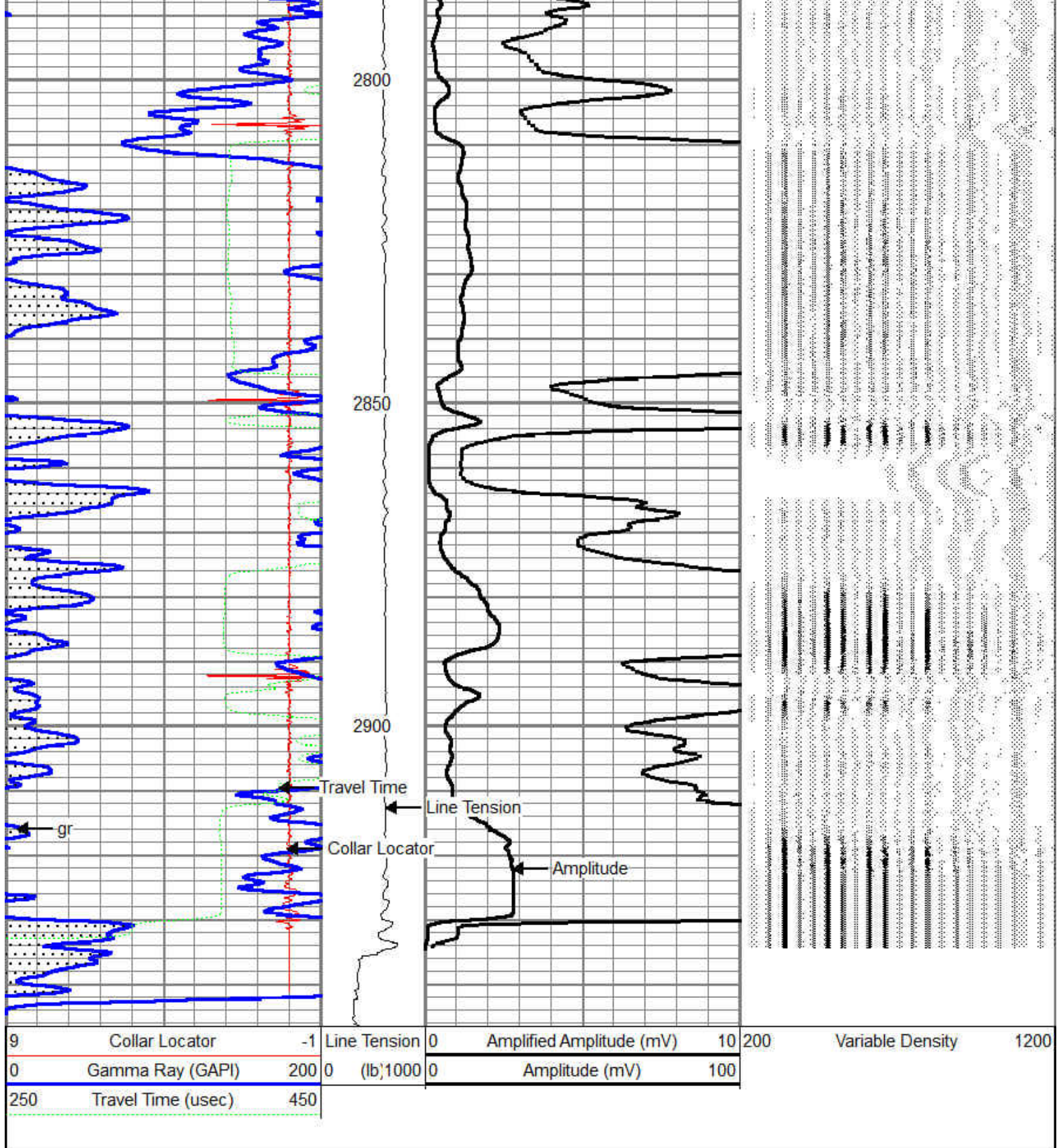
2650

← SHORT JOINT

2700

2750





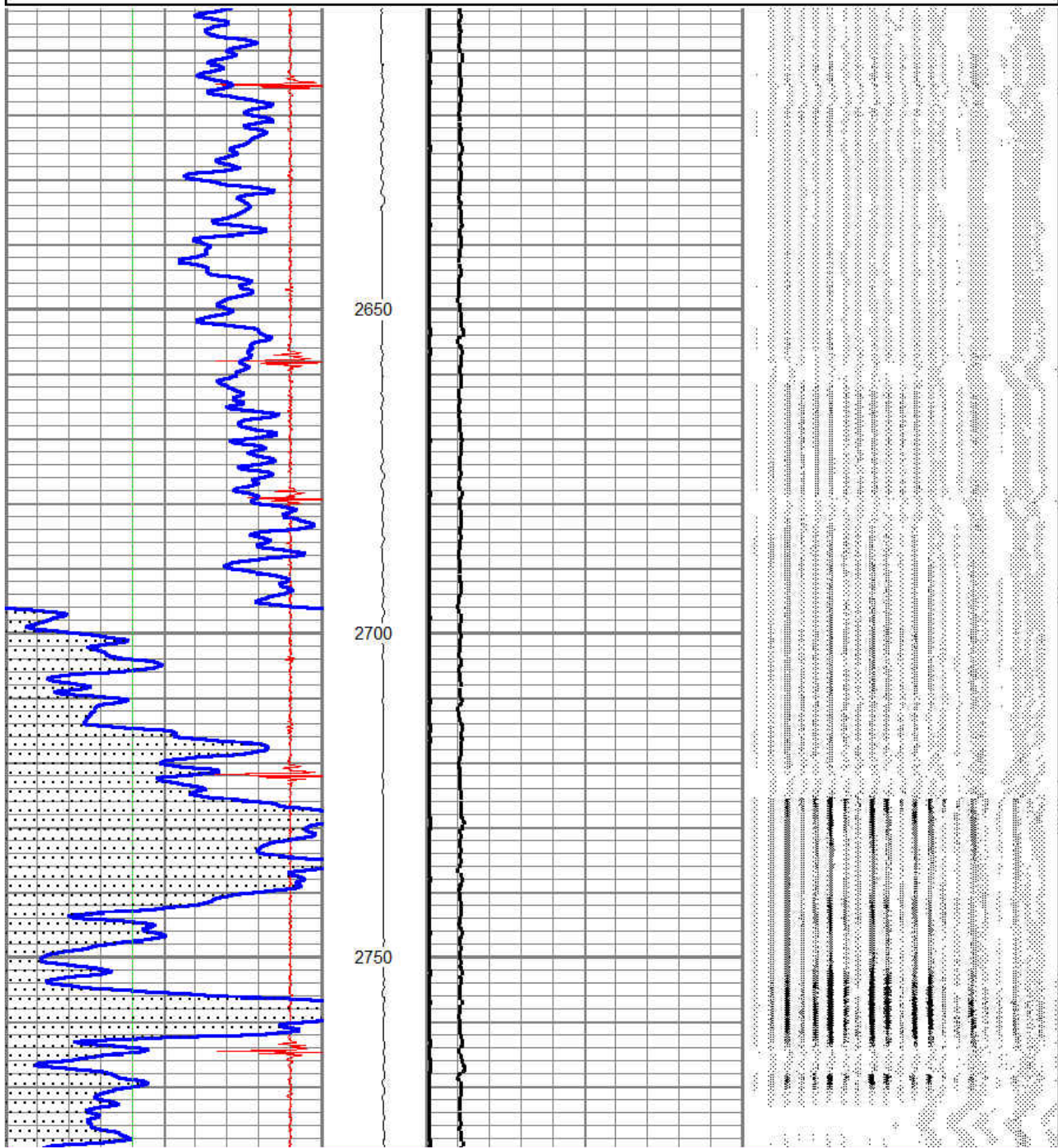
MAIN PASS

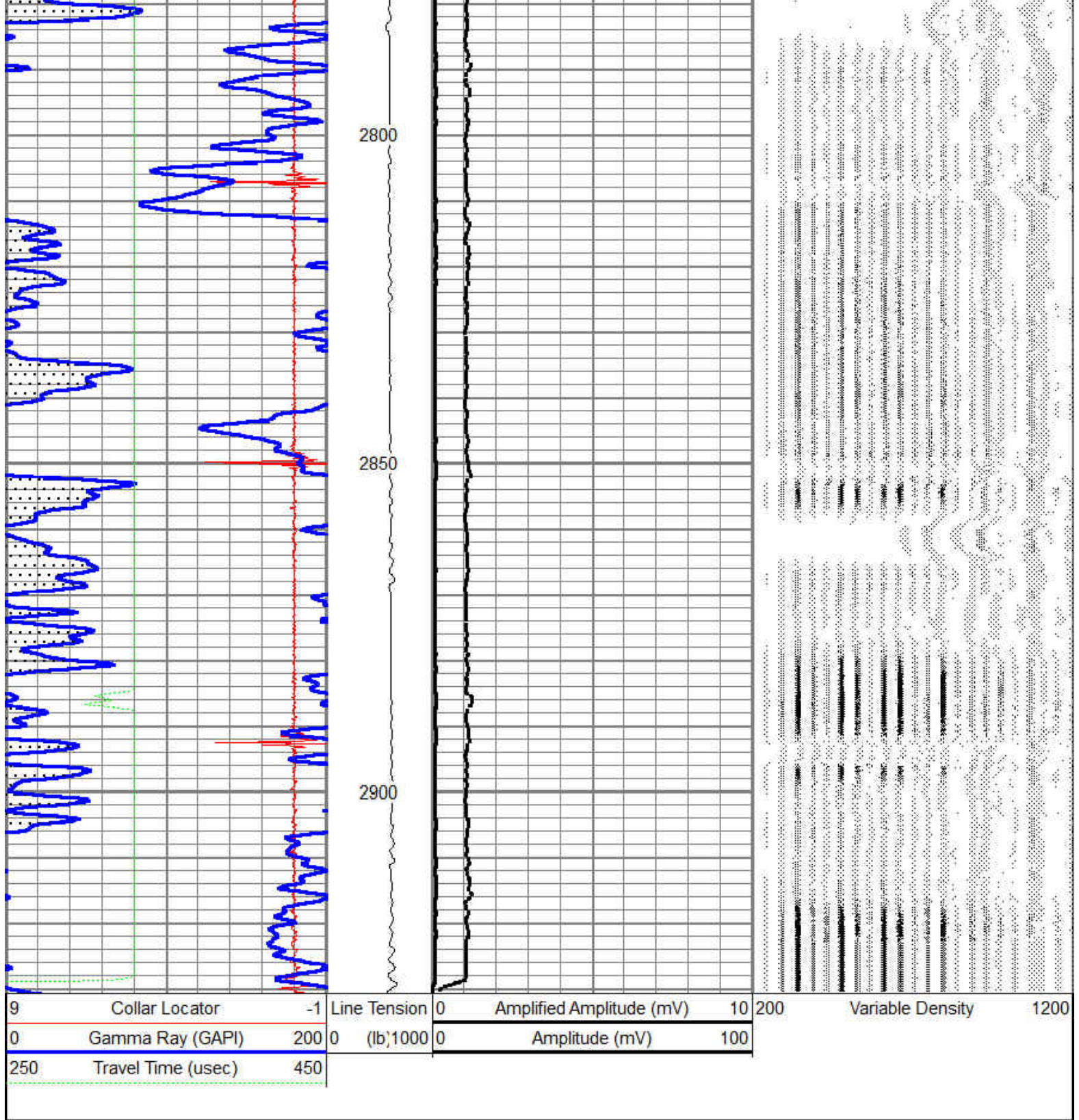


REPEAT PASS

Database File: augustus franson 23-33 4n47w.db
Dataset Pathname: pass6
Presentation Format: cbl_dr
Dataset Creation: Tue Oct 28 14:17:29 2014 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

9	Collar Locator	-1	Line Tension	0	Amplified Amplitude (mV)	10	200	Variable Density	1200
0	Gamma Ray (GAPI)	200	0 (lb/1000)	0	Amplitude (mV)	100			
250	Travel Time (usec)	450							





REPEAT PASS

Calibration Report

Database File: augustus franson 23-33 4n47w.db
Dataset Pathname: pass6
Dataset Creation: Tue Oct 28 14:17:29 2014 by Log 7.0 B1

Temperature Calibration Report

Serial Number: 0001
Tool Model: 1.375TEMP
Performed: Wed Mar 15 15:39:51 2006

	Reference	Reading
Low Reference:	0.00 degF	0.00 cps
High Reference:	100.00 degF	1000.00cps
Gain:	0.10	
Offset:	0.00	
Delta Spacing	2	

Gamma Ray Calibration Report

Serial Number: 030606
Tool Model: Probe275
Performed: Mon Feb 03 13:47:27 2014

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 1.0000 GAPI/cps

Cement Bond Log Calibration Report

Serial Number: 050215
Tool Model: Probe
Performed: Fri Oct 17 07:22:58 2014

Depth: 455.392 ft
Casing Diameter: 5.5 in

	3' Spacing	5' Spacing	
Signal Zero:	1	1	mV
Calibrated Amplitude:	83	83	mV
Reading at Signal Zero:	0.0098877	0.00996094	V
Reading in Free Pipe:	1.08298	0.791064	V
Gain:	66.4144	104.98	
Offset:	0.244437	-0.0456961	