

## HALLIBURTON

ACOUSTIC CEMENT  
BOND LOG

Company BILL BARRETT CORPORATION  
Well JOLLEY 41D-20-691  
Field MAMM CREEK  
County GARFIELD State CO

Company BILL BARRETT CORPORATION  
Well JOLLEY 41D-20-691  
Field MAMM CREEK  
County GARFIELD State CO

Other Services  
JUNK BASKET

Sec: 20 Twp:06S Rge: 91W

Permanent Datum GROUND LEVEL Elevation 6328'

Log Measured From K.B. , 15 Ft. above perm. datum

Drilling Measured From K.B.

Elevation  
K.B. 6343'  
D.F. -----  
G.L. 6328'

Date @ Time Logged 09/04/2008 2145 HRS

Type Fluid in Hole

FRESH WATER

Run No.

ONE

Density of Fluid

8.34 PPG

Depth - Driller

7574'

Fluid Level

FULL

Depth - Logger

7447'

Cement Top Est. Logged

3480'

Bottom - Logged Interval

7447'

Equipment / Location

10389647

Top - Log Interval

570'

Recorded by

A. LINTEL

Max. Recorded Temp.

185 F

Witnessed by

N/A

CEMENTING DATA

Surface

Protection

String

Date / Time Cemented

String

Production

Liner

Primary / Squeeze

String

String

Expected

String

String

Compressive Strength

psi@

hrs

psi@

hrs

Cement Volume

psi@

hrs

psi@

hrs

Cement Type / Weight

/

/

/

/

Formulation

/

/

/

Mud Type / Mud Wgt.

/

/

/

Borehole Record

From

To

Size

Weight

Run Number

ONE

From

To

Size

Run Number

TWO

From

To

Size

Run Number

ONE

From

To

Size

Run Number

TWO

From

To

Size

Run Number

ONE

From

To

Size

Run Number

TWO

From

To

Size

Run Number

ONE

From

To

Size

Run Number

TWO

From

To

Size

<<< Fold Here >>>

HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.

## Comments

GR-CCL-CBL RAN IN COMBINATION

CORRELATED TO WEATHERFORD DENSITY/NEUTRON LOG DATED 07/23/2008

LOG HEADER INFORMATION OBTAINED FROM WATHERFORD DENSITY/NEUTRON LOG DATED 07/23/2008

SHORT JOINT: 7351' - 7373'

YOUR CREW: NALL, COULTER, MAHONEY

\*\*\*THANK YOU FOR USING HALLIBURTON ENERGY SERVICES GRAND JUNCTION, CO\*\*\*

Service Ticket No. 6146627

API No. 05045158740000

PGM Ver WARRIOR 7.0

The Well Name, Location, Borehole Description, and / or Cementing Data Furnished by Client


EQUIPMENT DATA

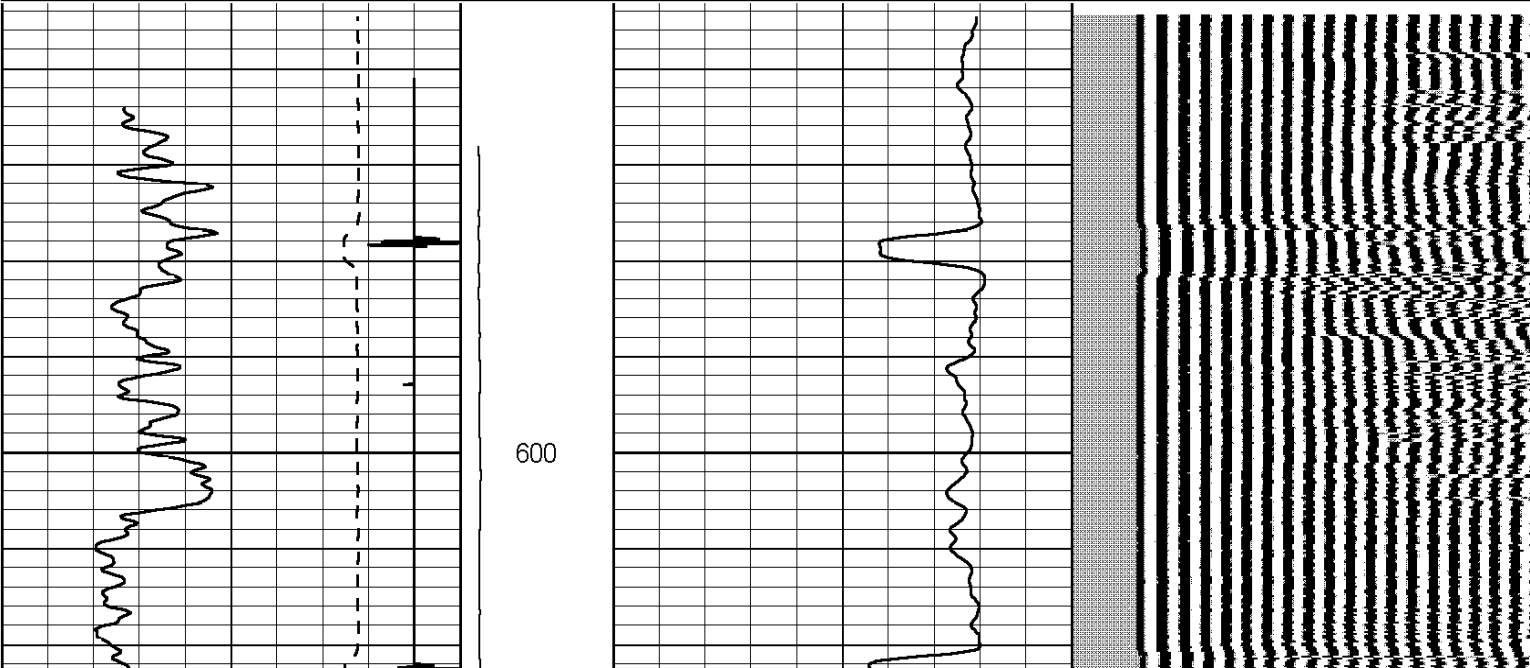
GR		CCL		CBL			
Run No.	ONE	Run No.	ONE	Run No.	ONE	Run No.	
Serial No.	070859	Serial No.	070859	Serial No.	061115	Serial No.	
Model No.	GR-PROBE	Model No.	GR-PROBE	Model No.	CBL-PROBE	Model No.	
Diameter	2.75"	Diameter	2.75"	Diameter	2.75"	Diameter	
LOGGING DATA							
General Data							
Pass	Depths		Well Head	Speed	Logging Run Comments		
No.	From	To	Pressure	Ft/Min			
ONE	7447'	570'	0 PSI	60	MAIN LOG SECTION		
	GAMMA RAY		CCL		AMPLITUDE		
Pass	Scale		Scale		Scale		Scale
No.	L	R	L	R	L	R	L R
ONE	0	200	-9	1	0	100	
DIRECTIONAL INFORMATION							
Maximum Deviation			deg. @		KOP		

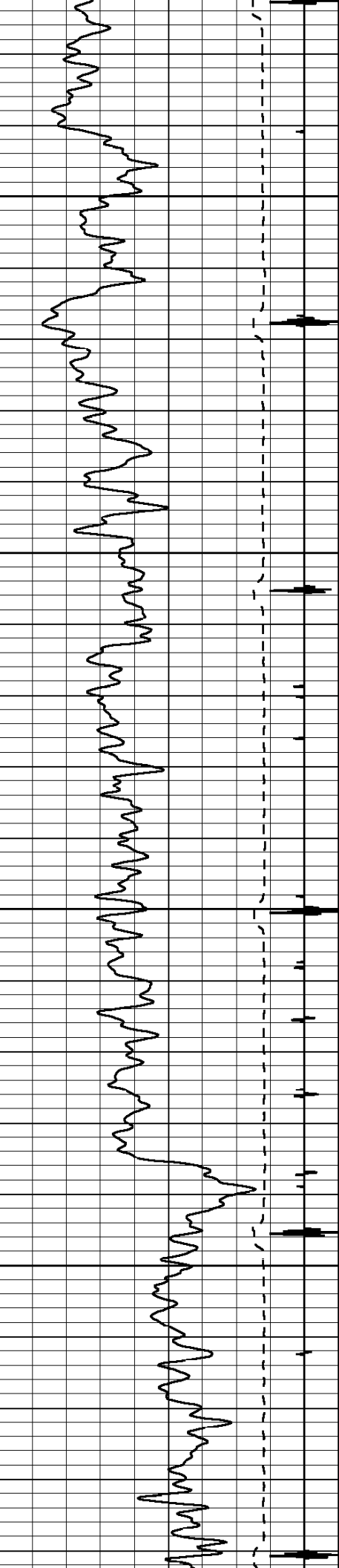
HALLIBURTON

ACOUSTIC CEMENT BOND LOG  
MAIN LOG SECTION  
5" = 100'

Database File:	jolley_41d_20_691_cbl.db
Dataset Pathname:	mainF
Presentation Format:	cbl_main
Dataset Creation:	Fri Sep 05 01:00:57 2008
Charted by:	Depth in Feet scaled 1:240

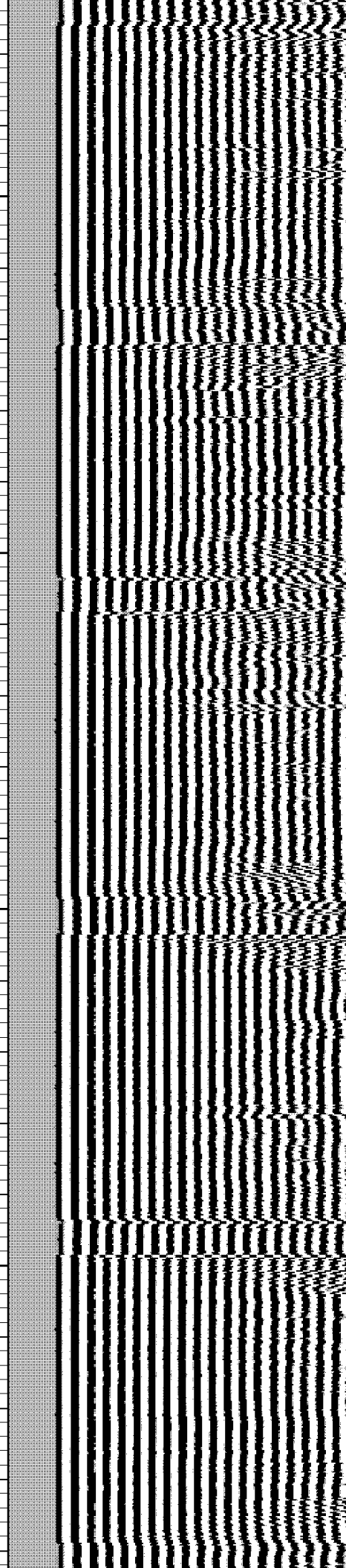
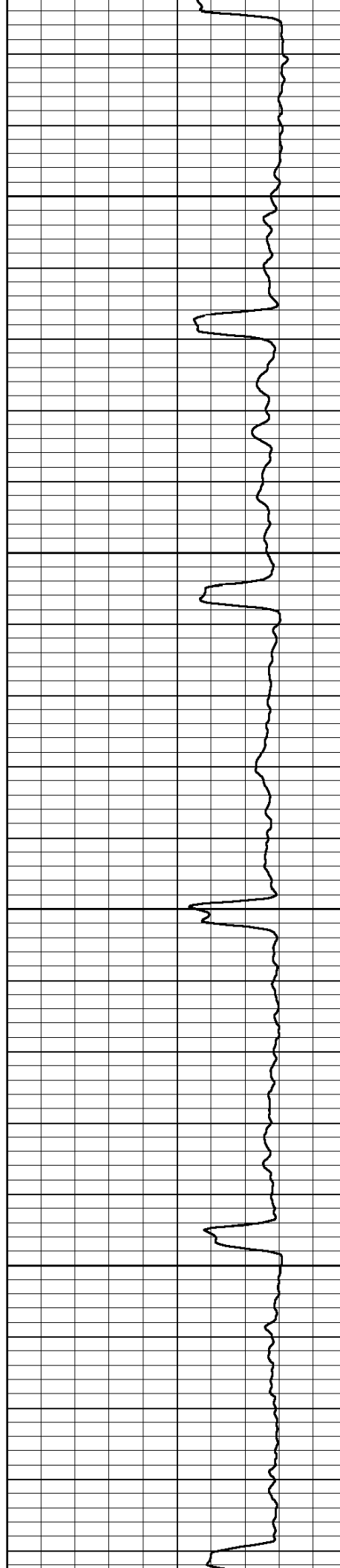
400	Travel Time (usec)	200	LTEN	0	Amplified Amplitude (mV)	10	200	MSG	1200
-9	Collar Locator	1	0 (lb)3000	0	Amplitude (mV)	100			
0	Gamma Ray (GAPI)	200							

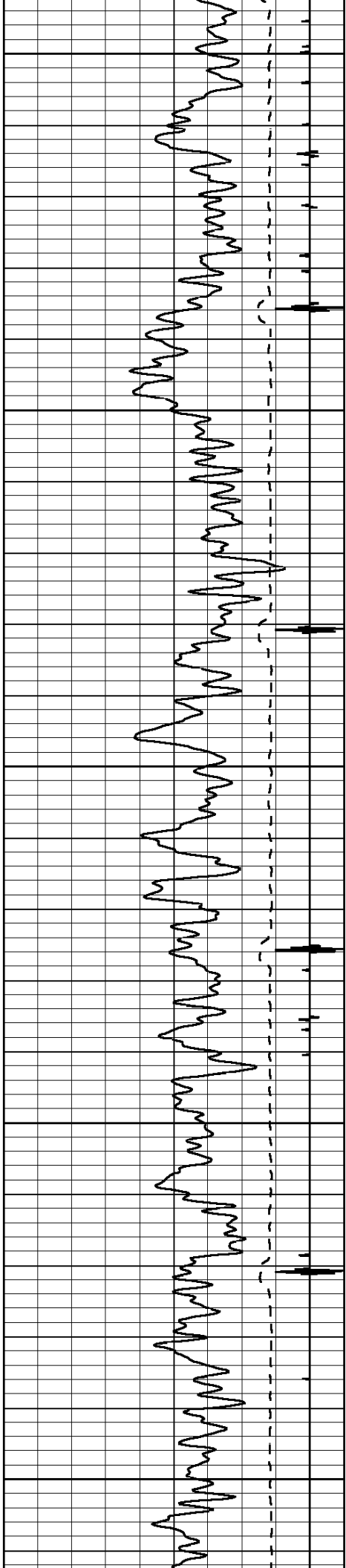




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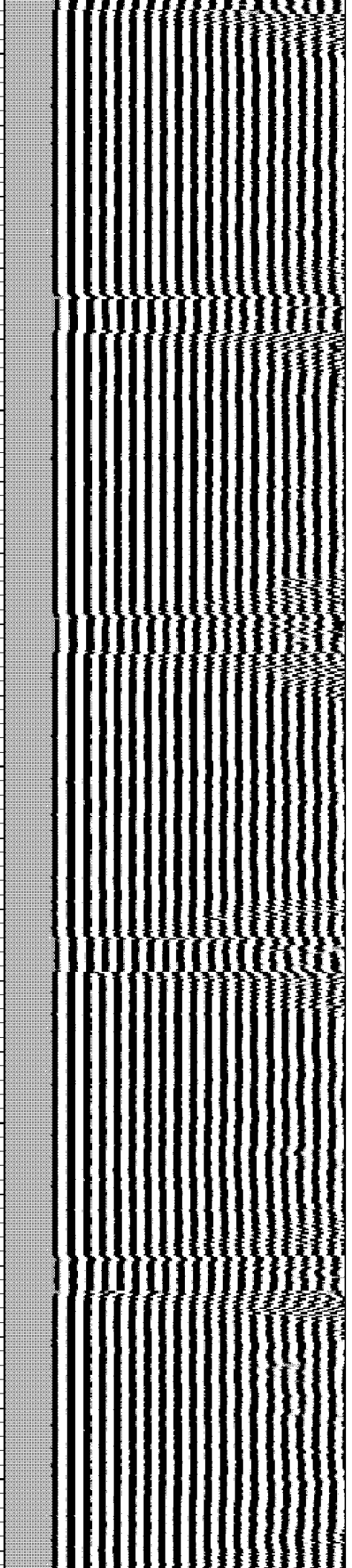
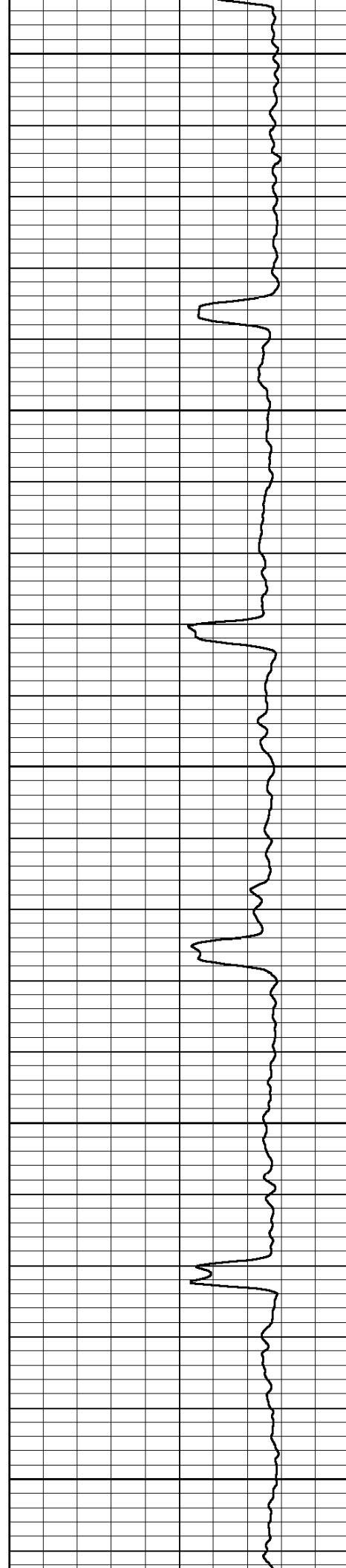
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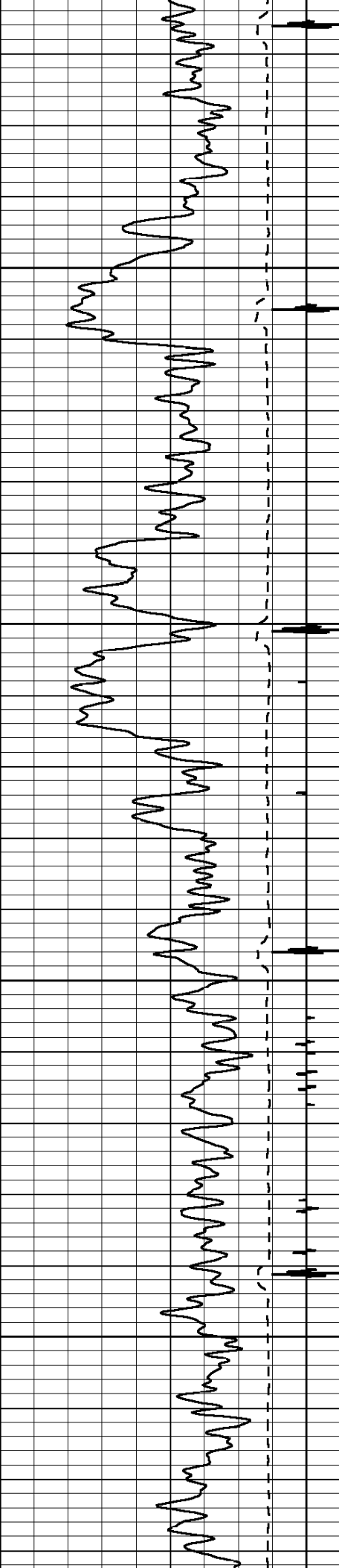




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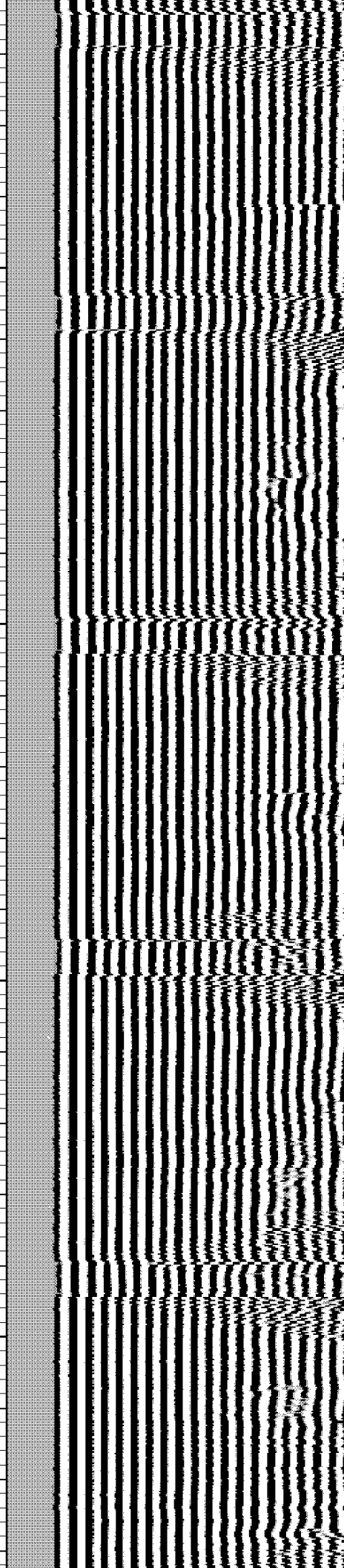
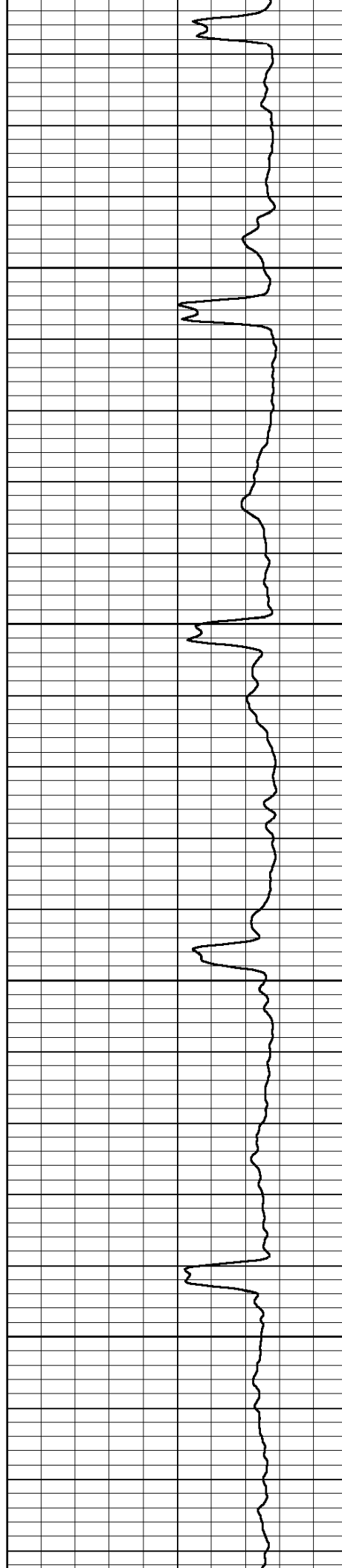
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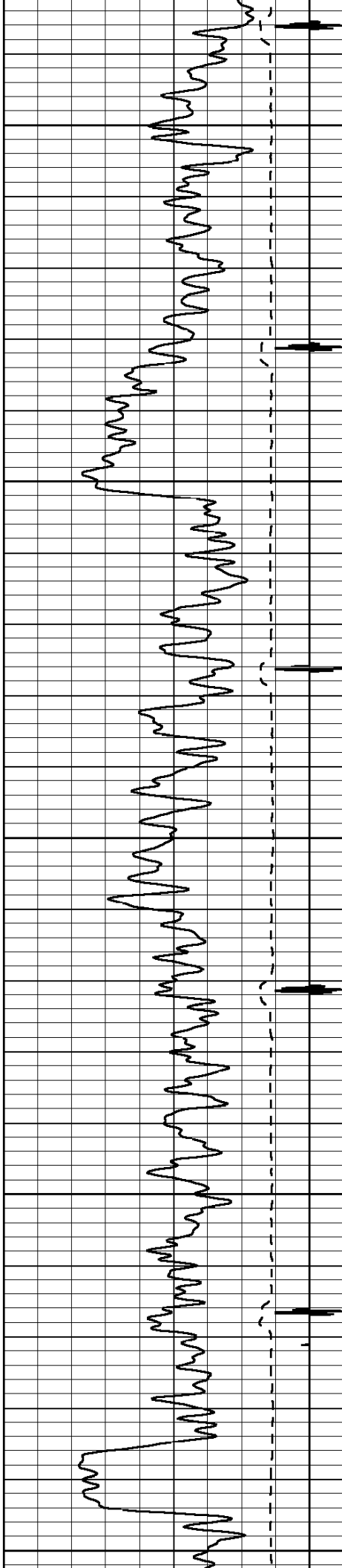




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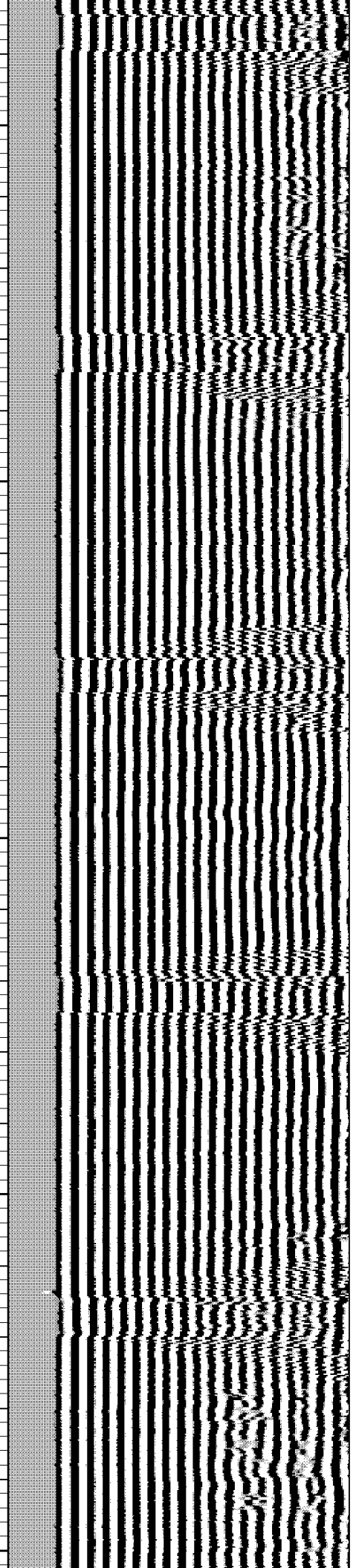
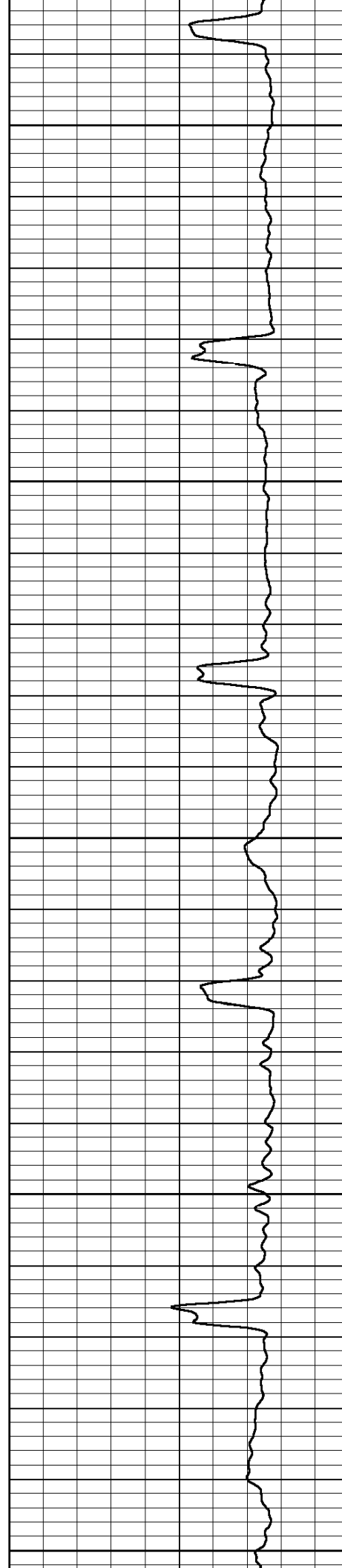


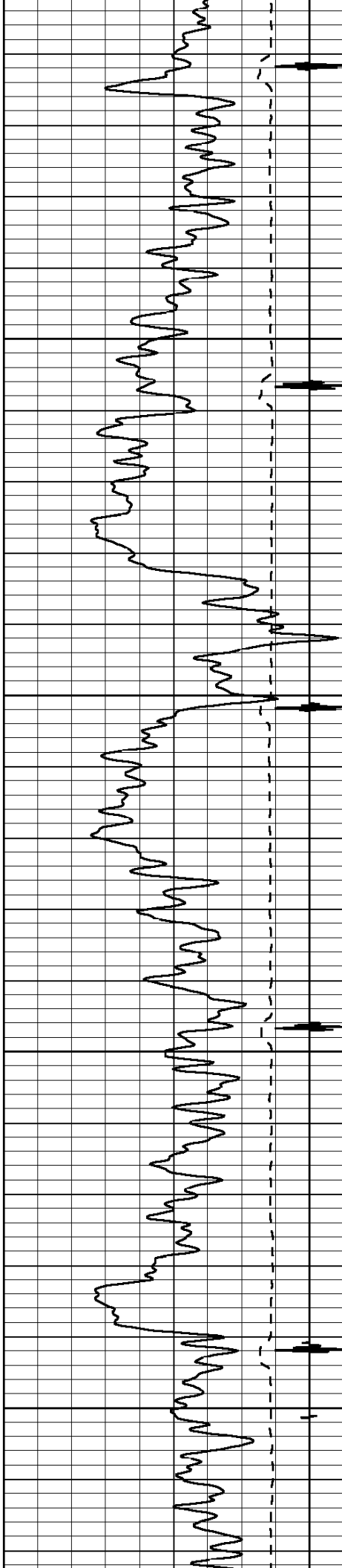


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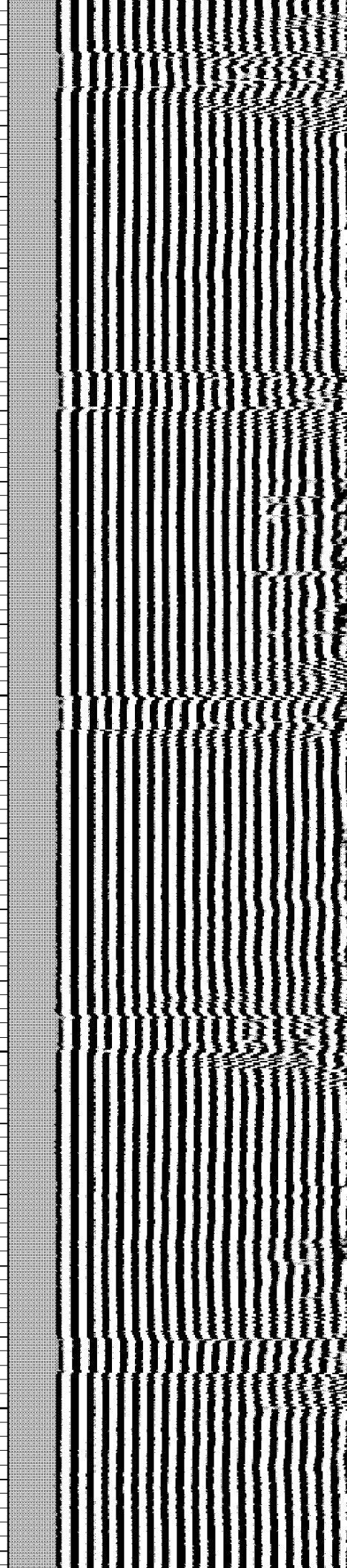
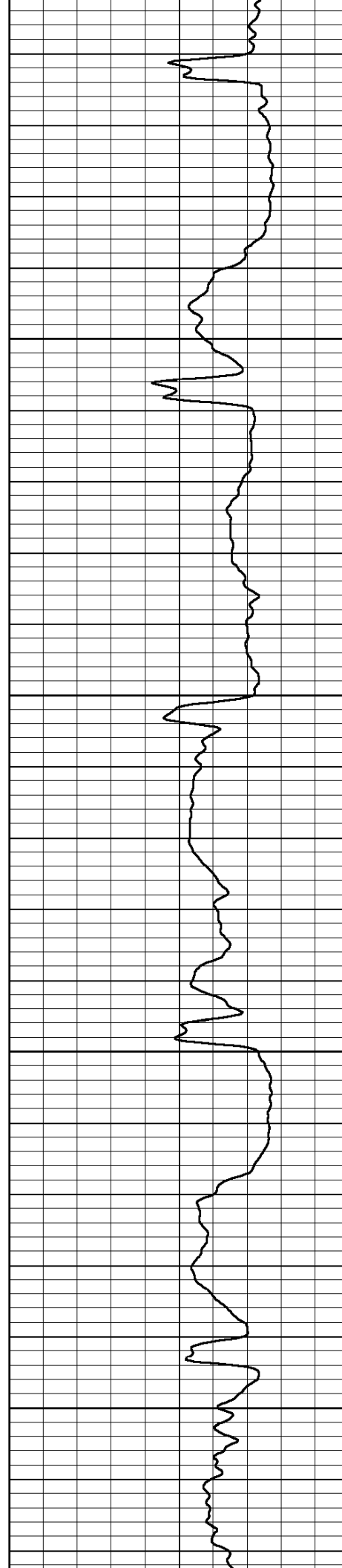
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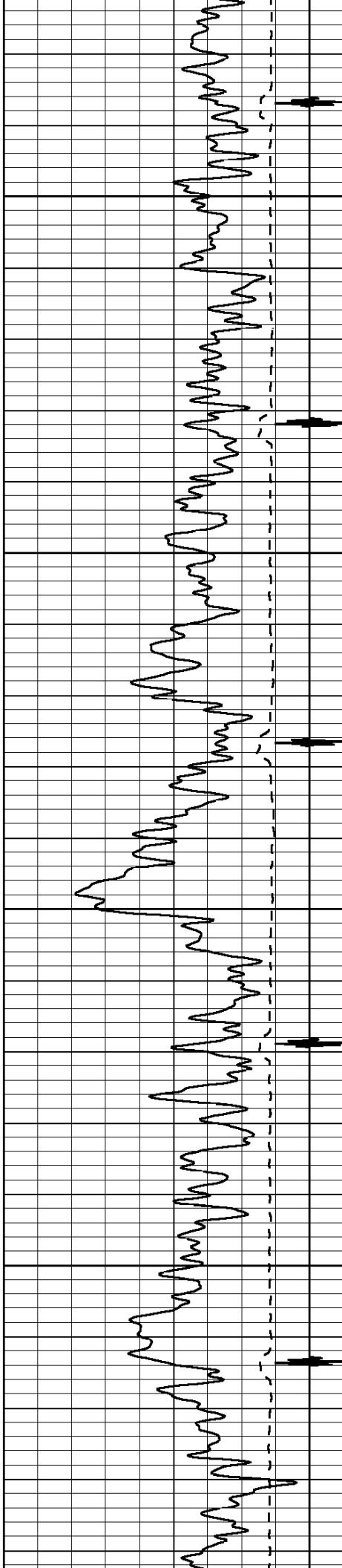




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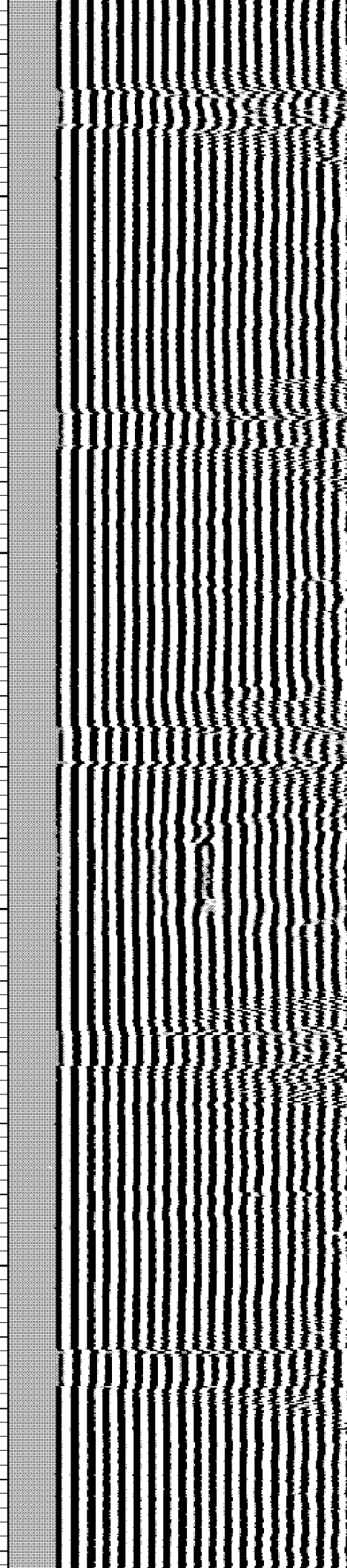
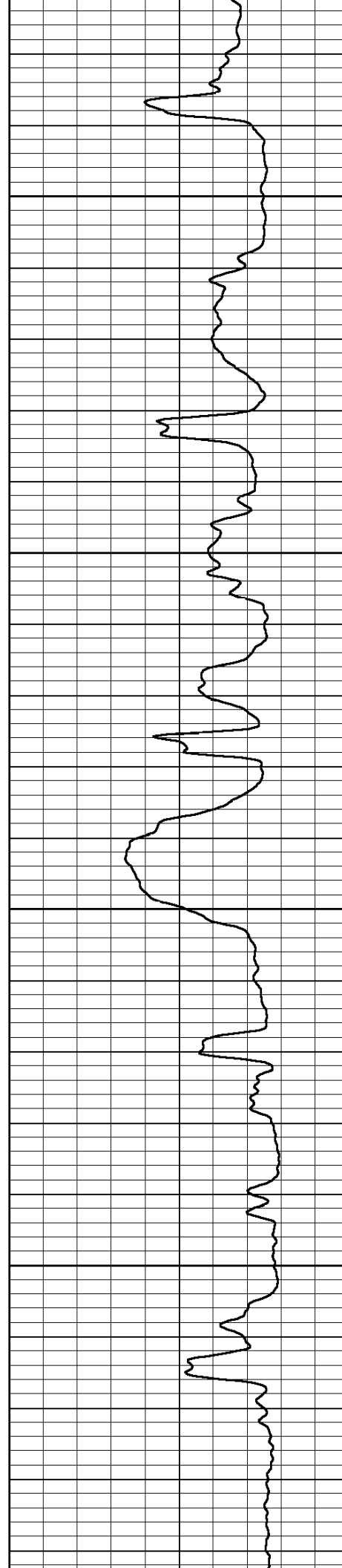
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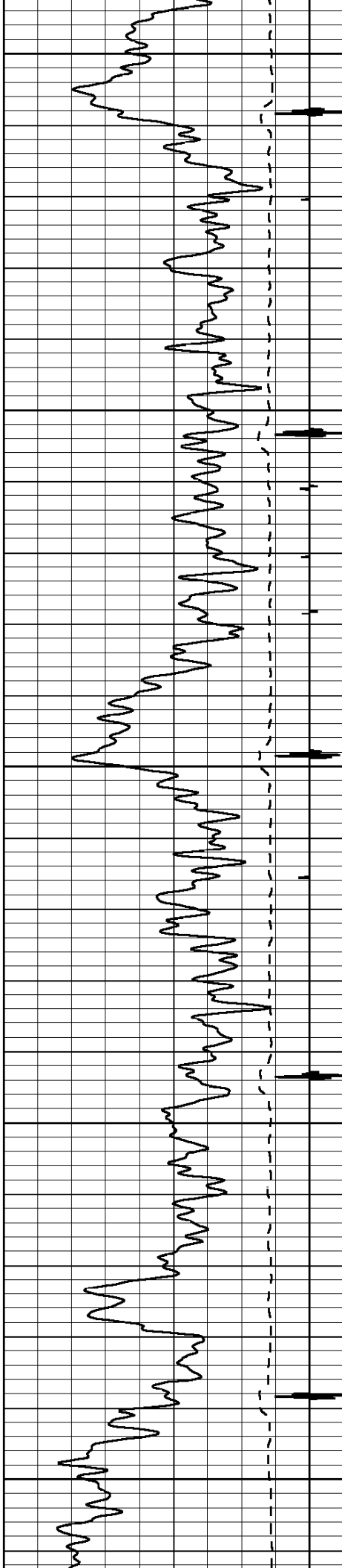


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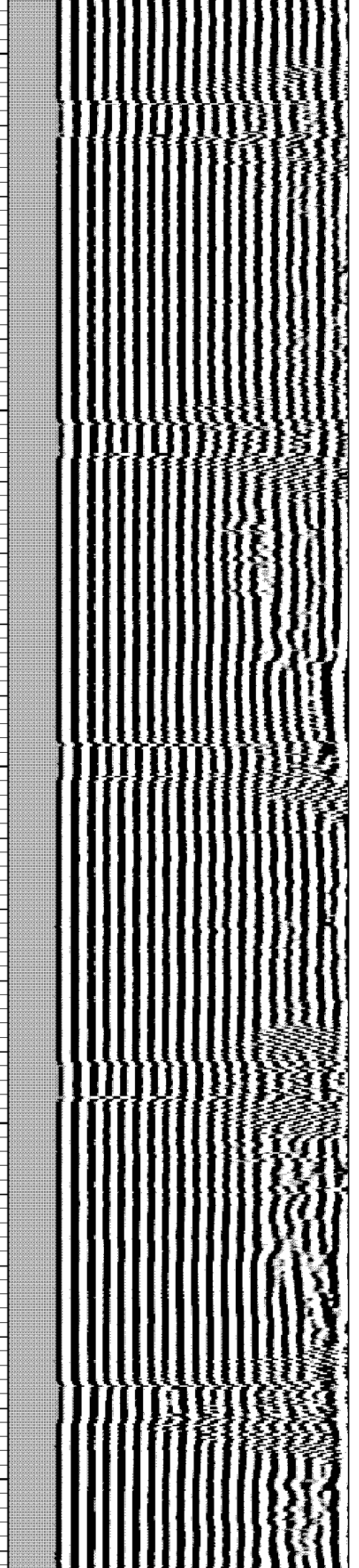






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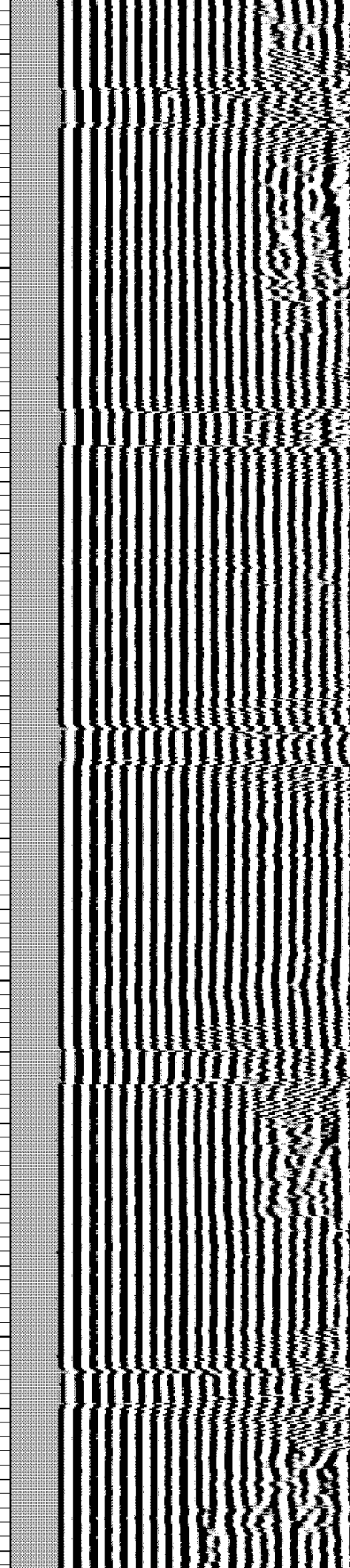
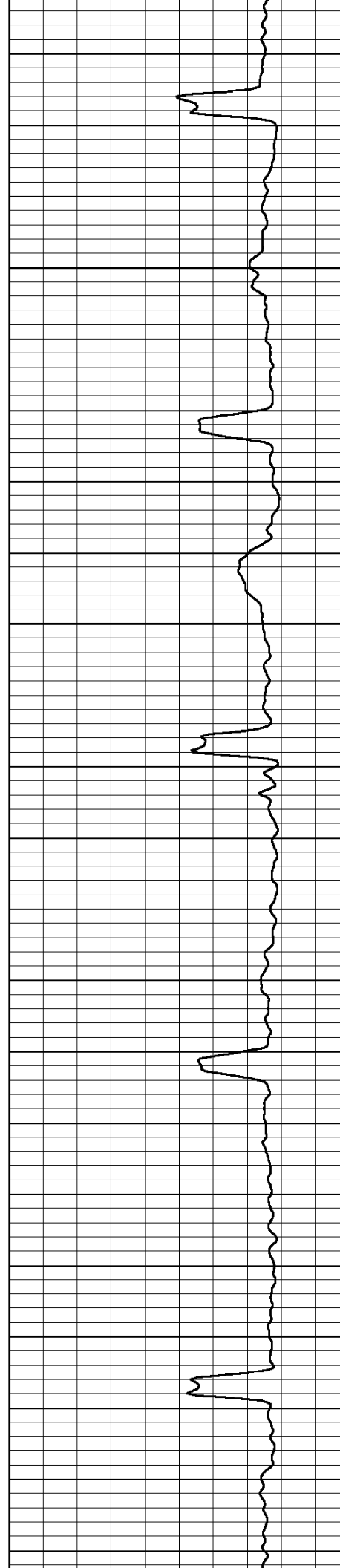
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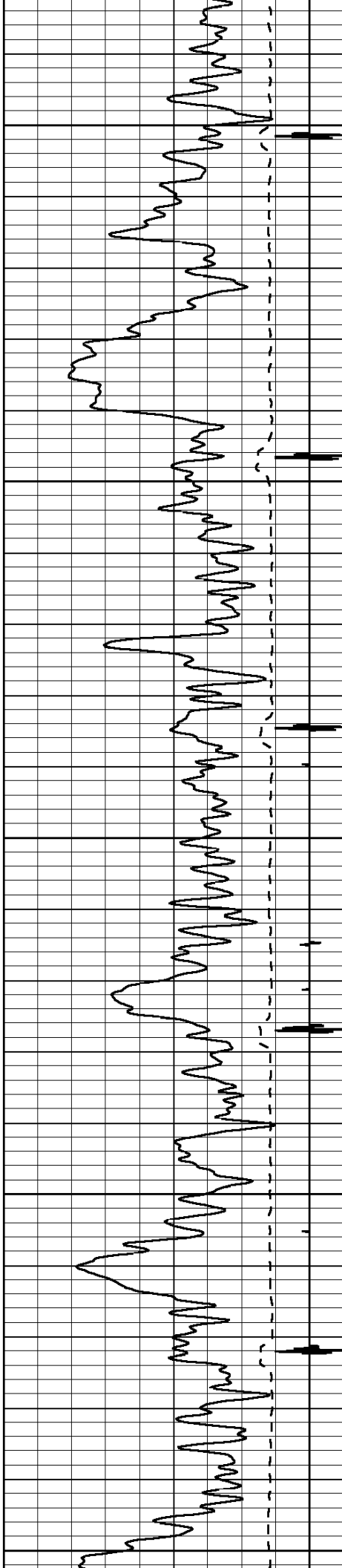




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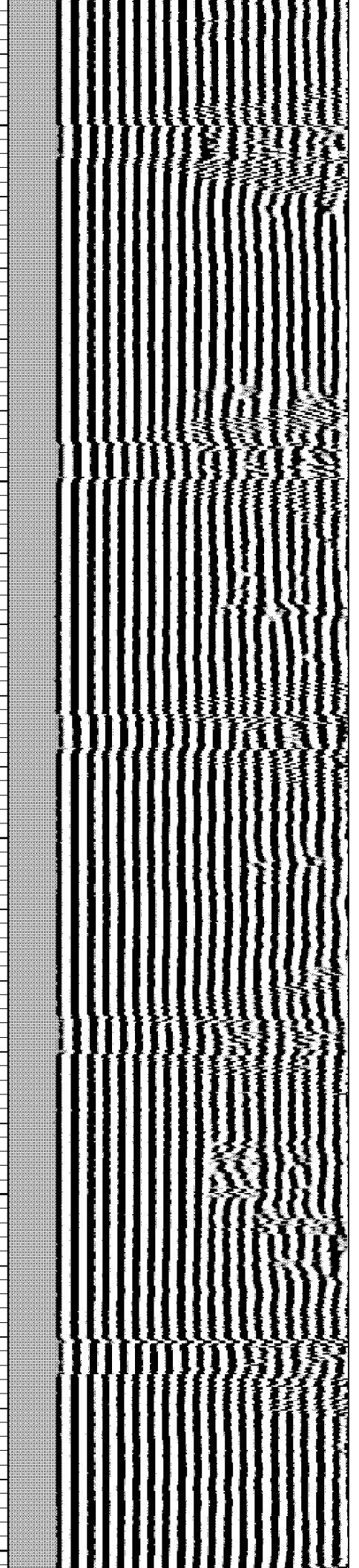
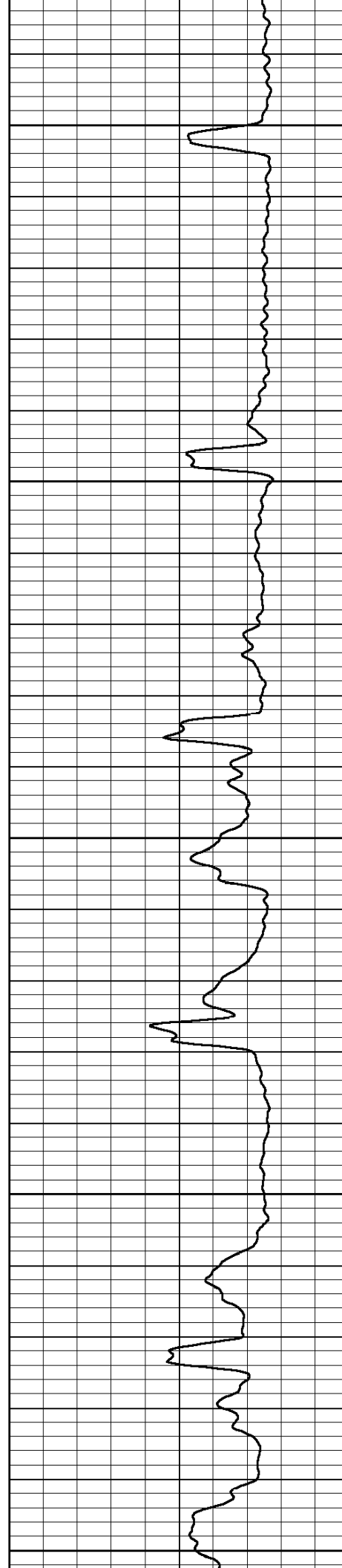


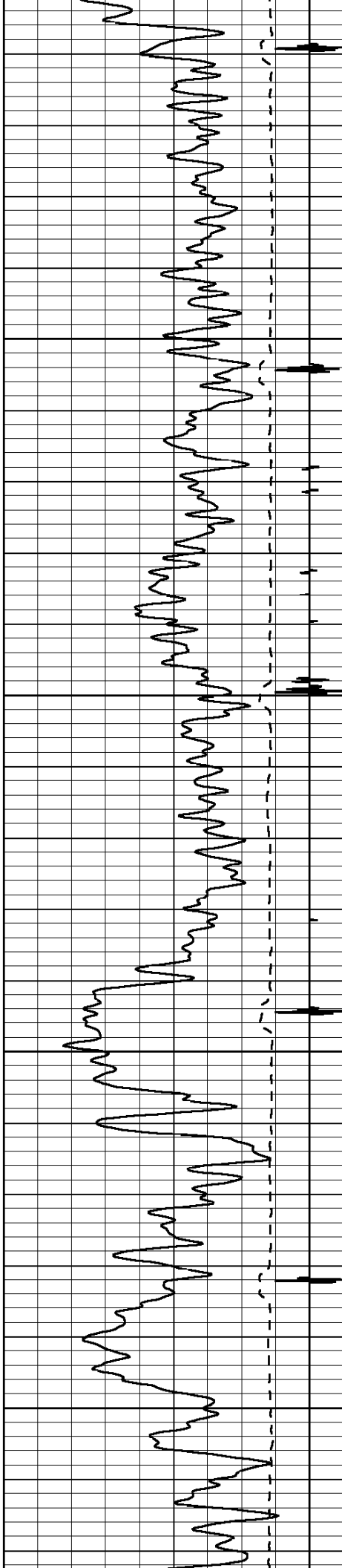


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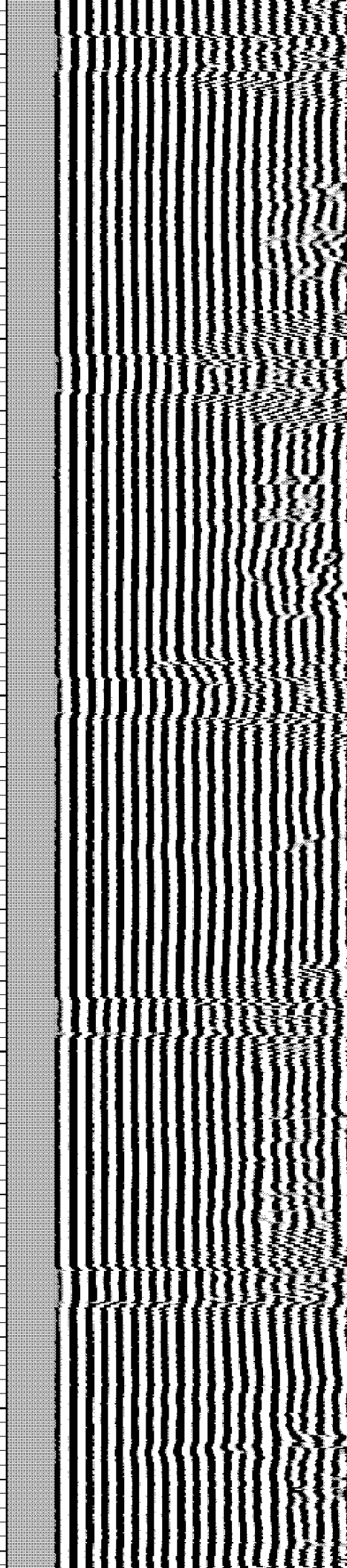
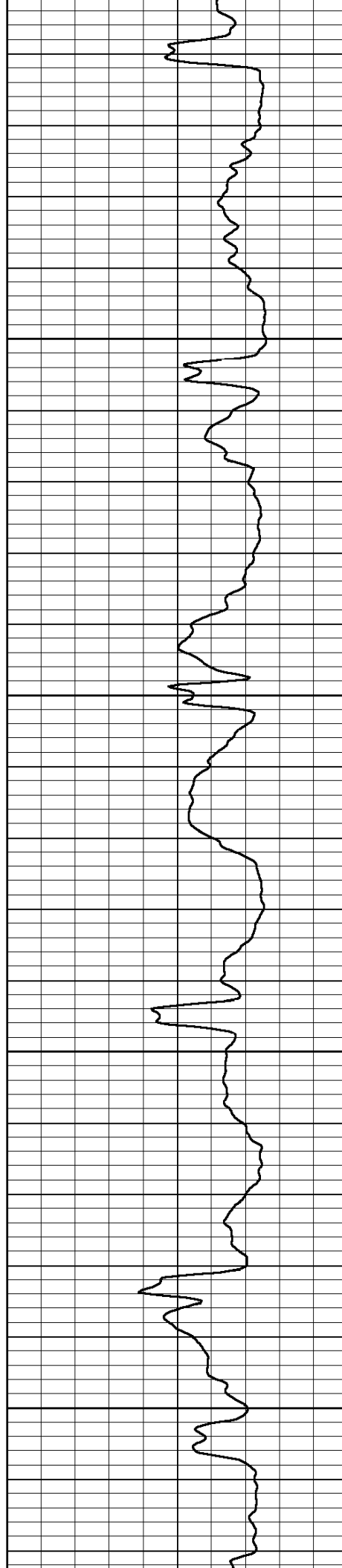
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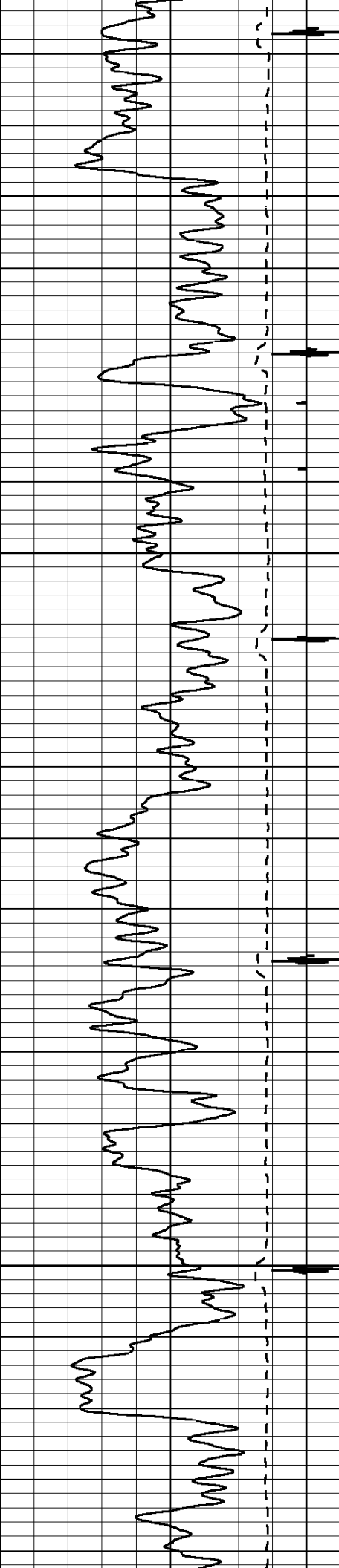




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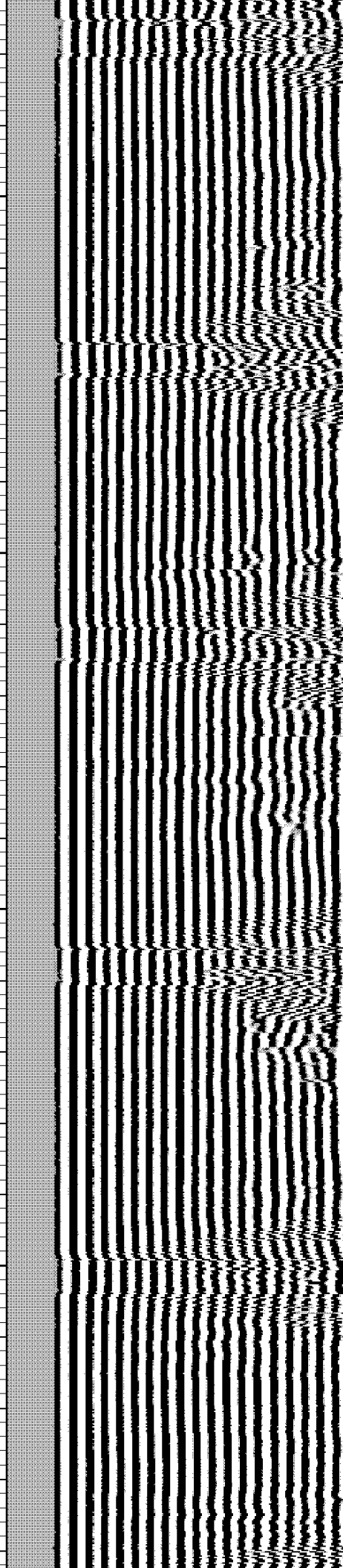
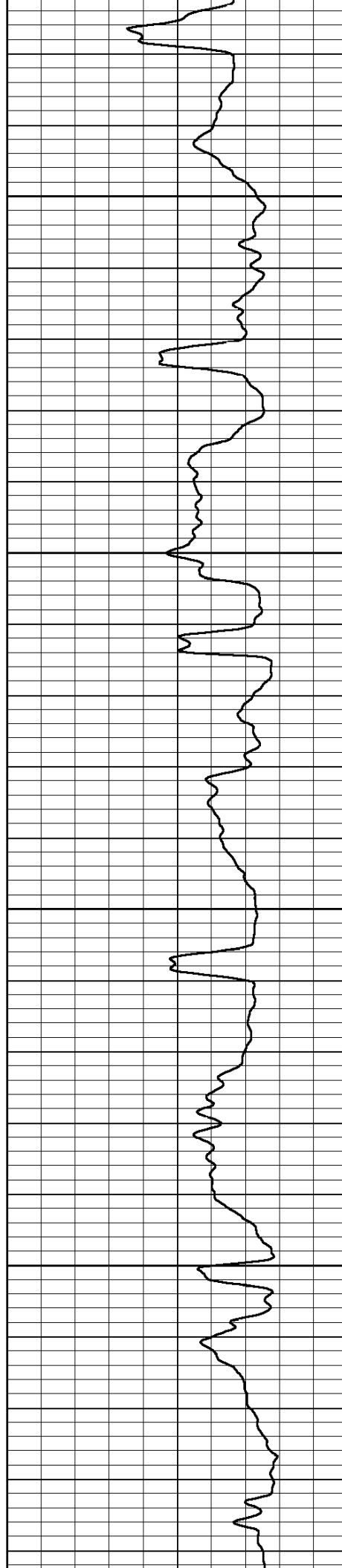
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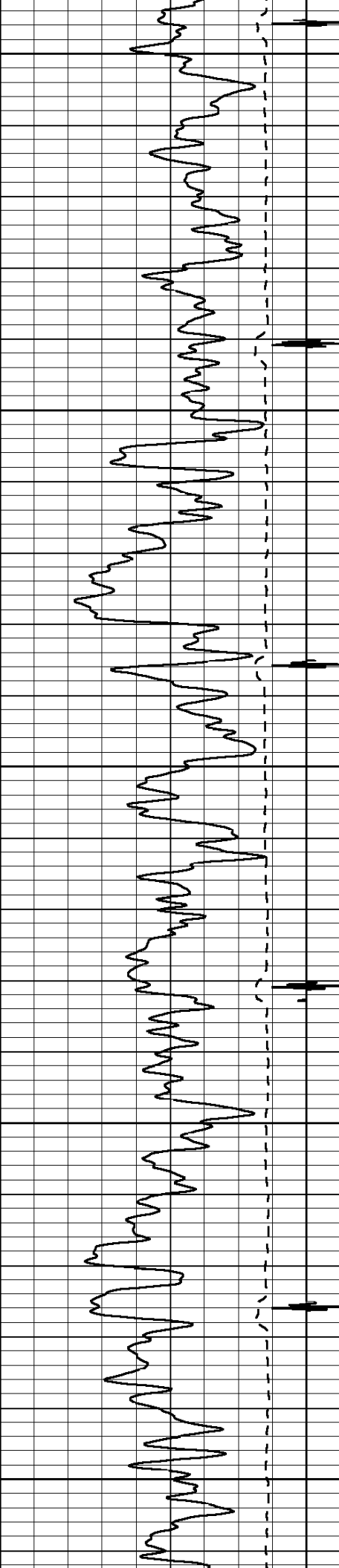




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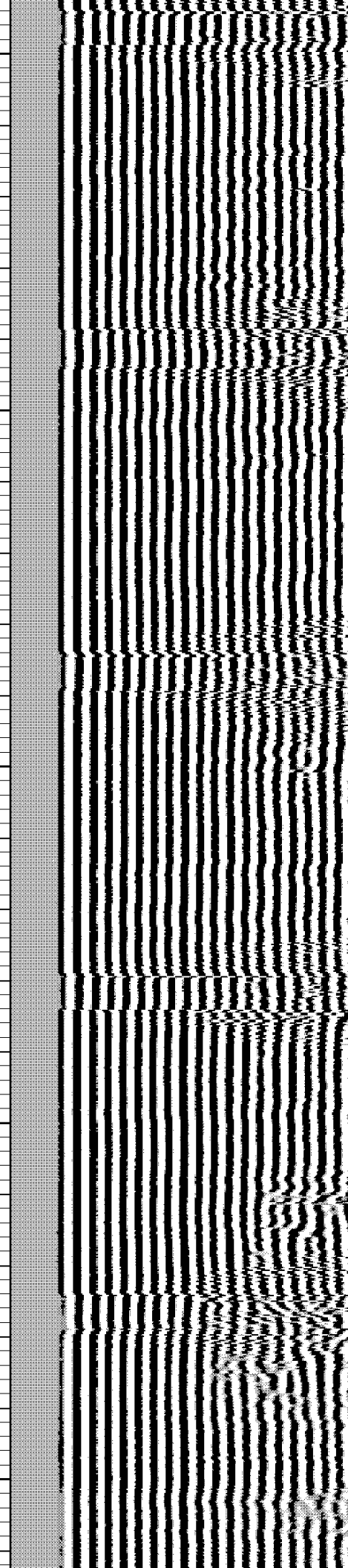
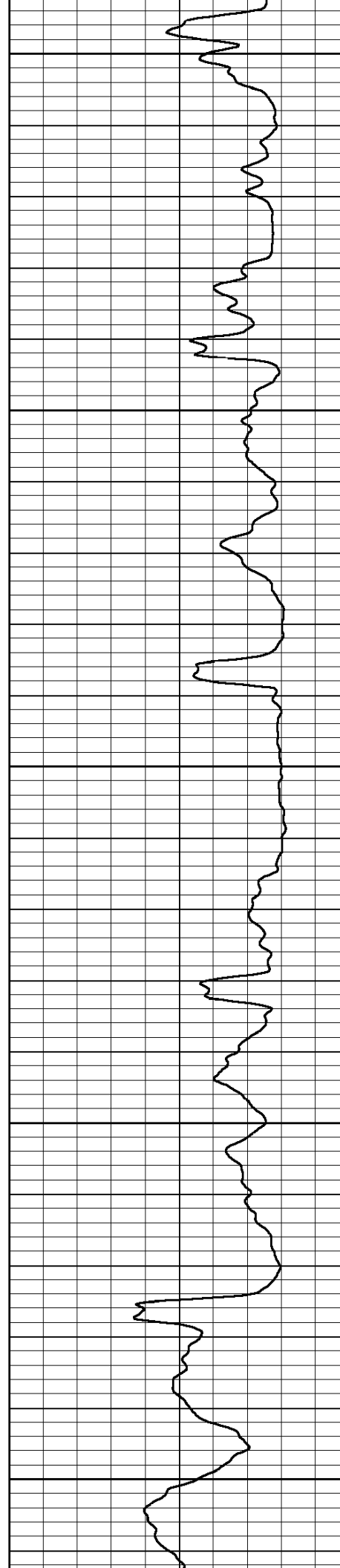
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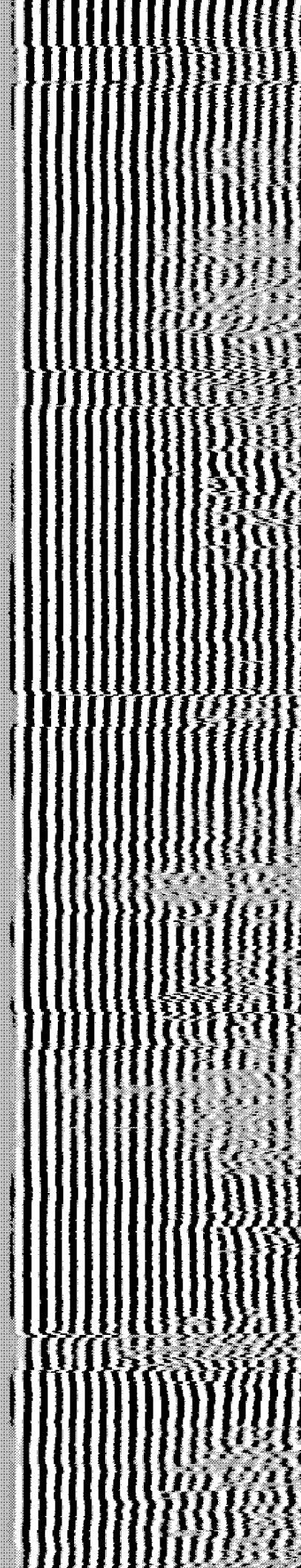
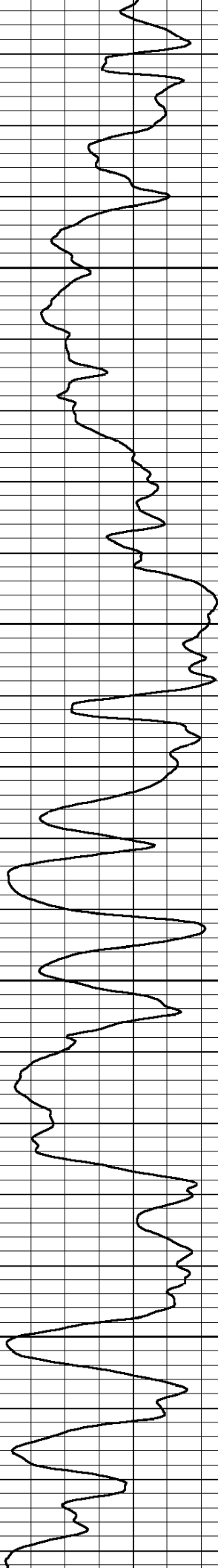
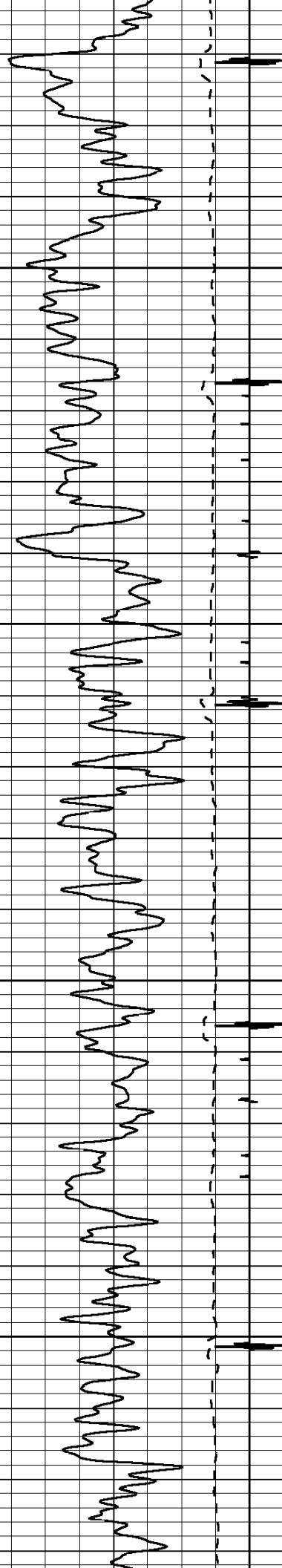
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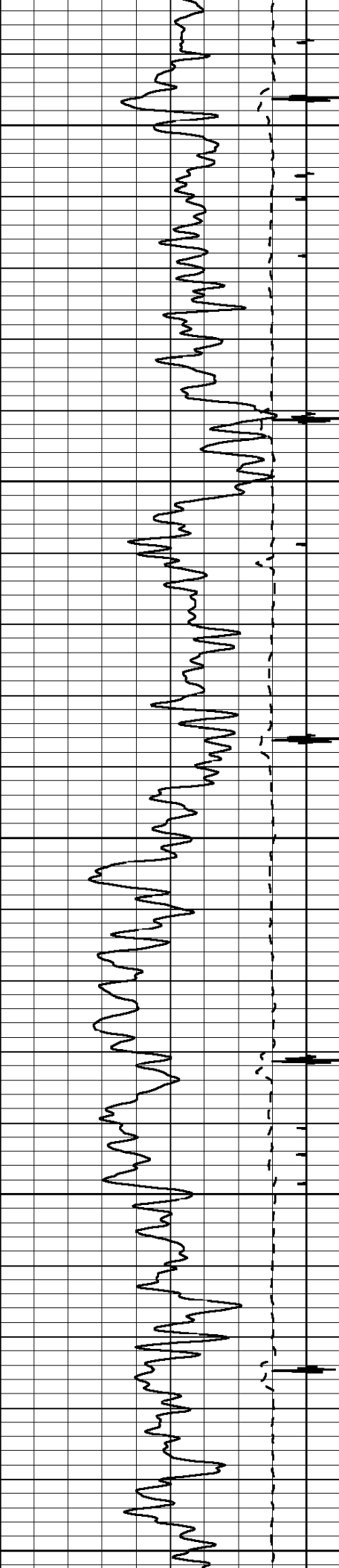


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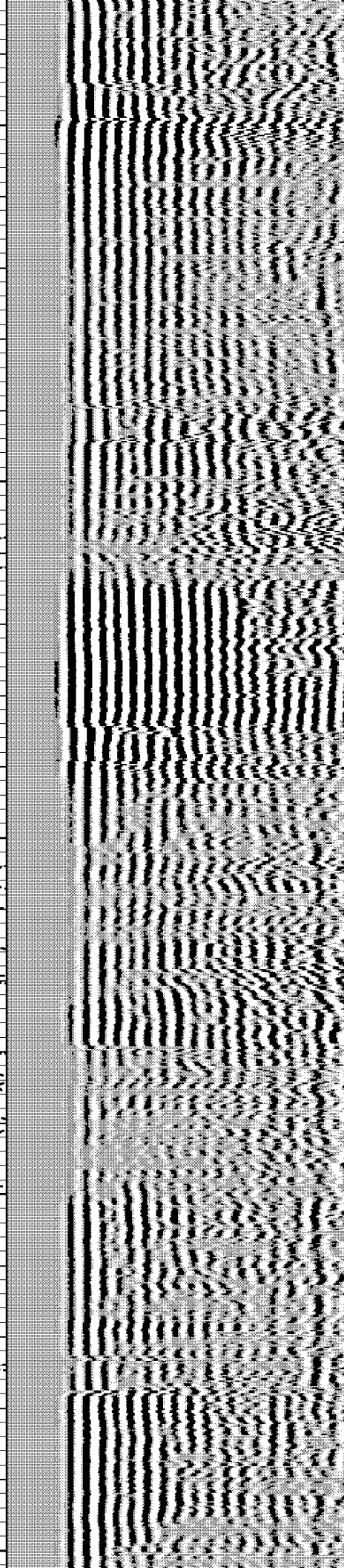
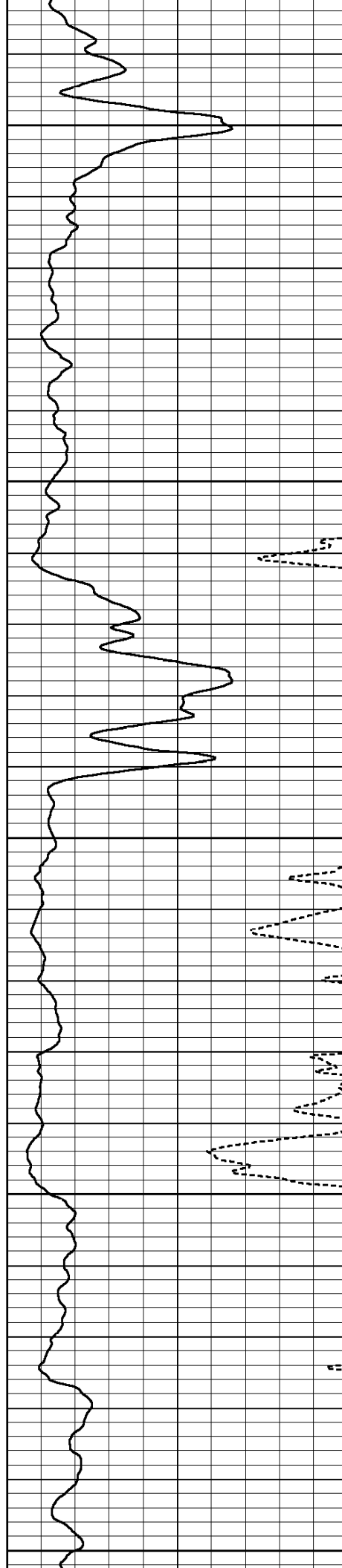




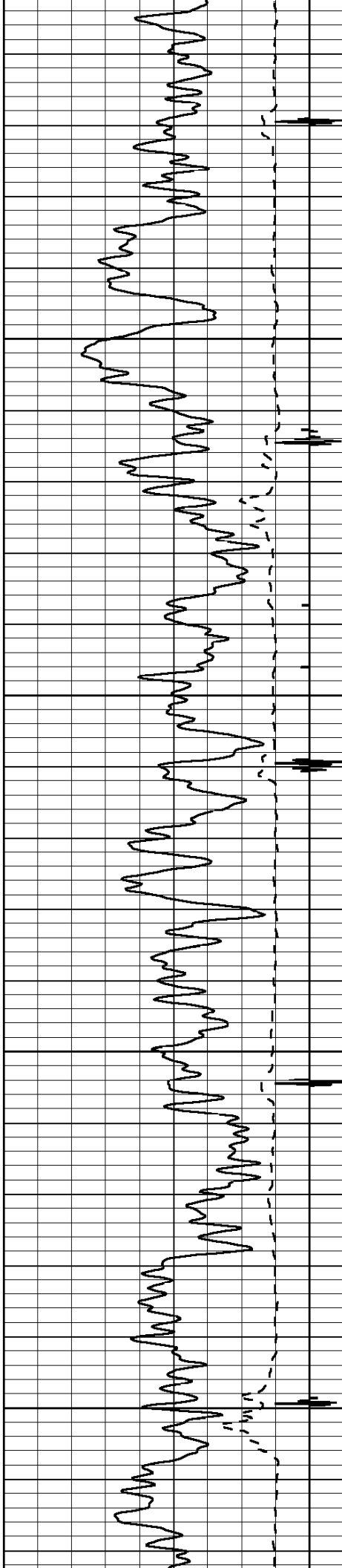
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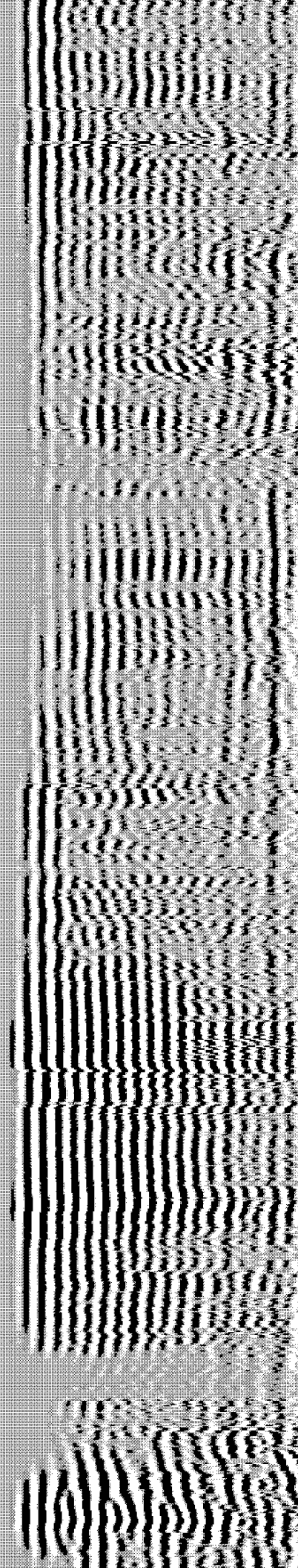
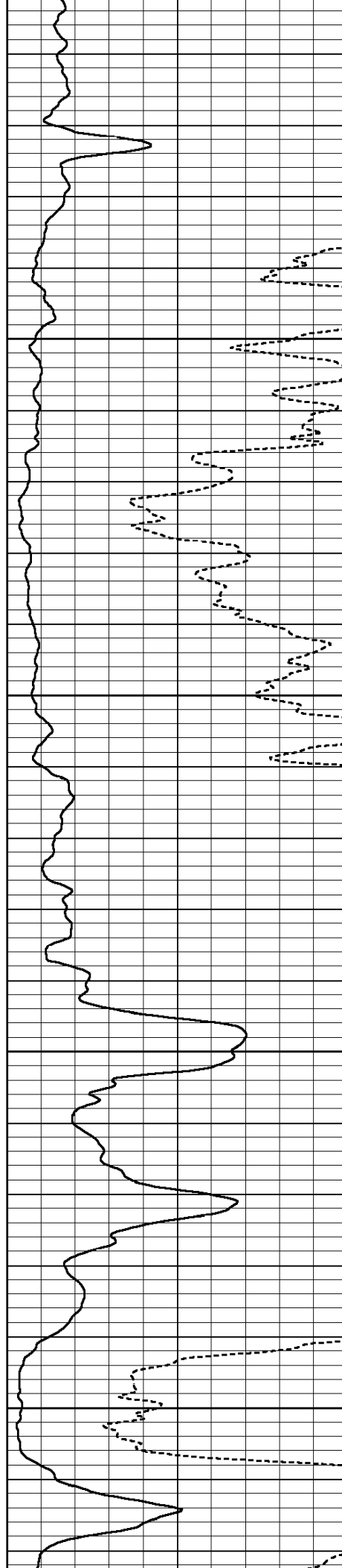


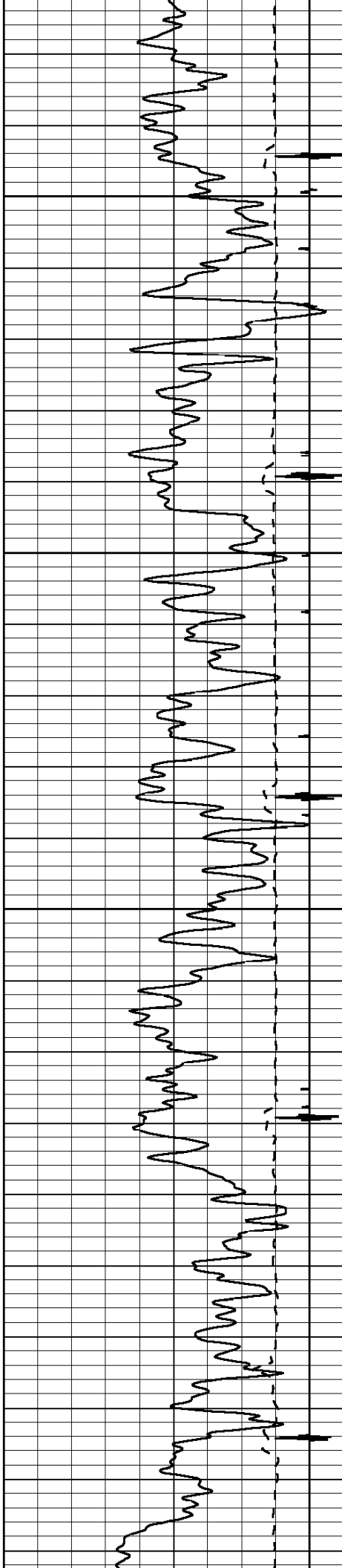




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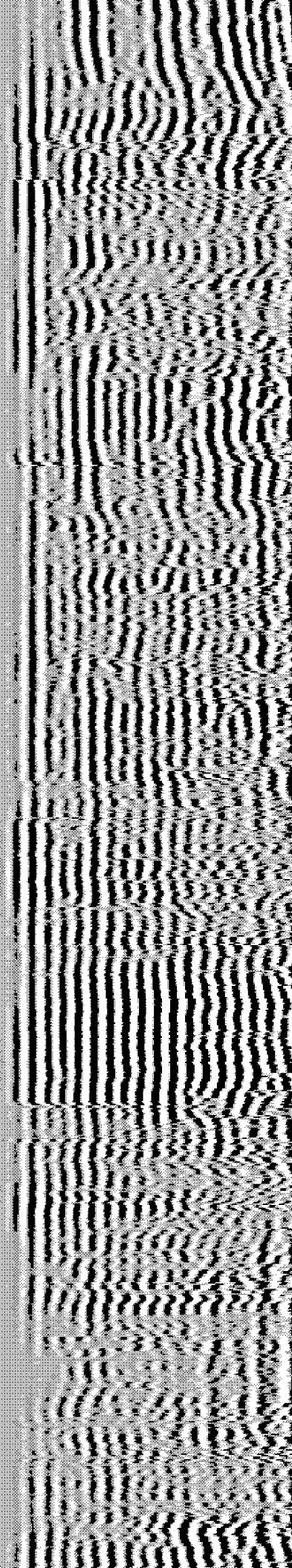
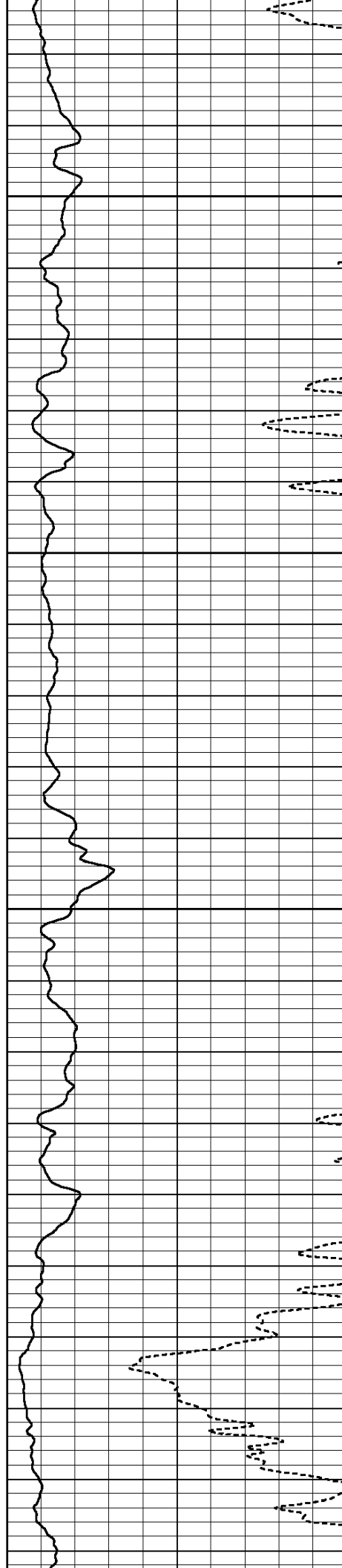
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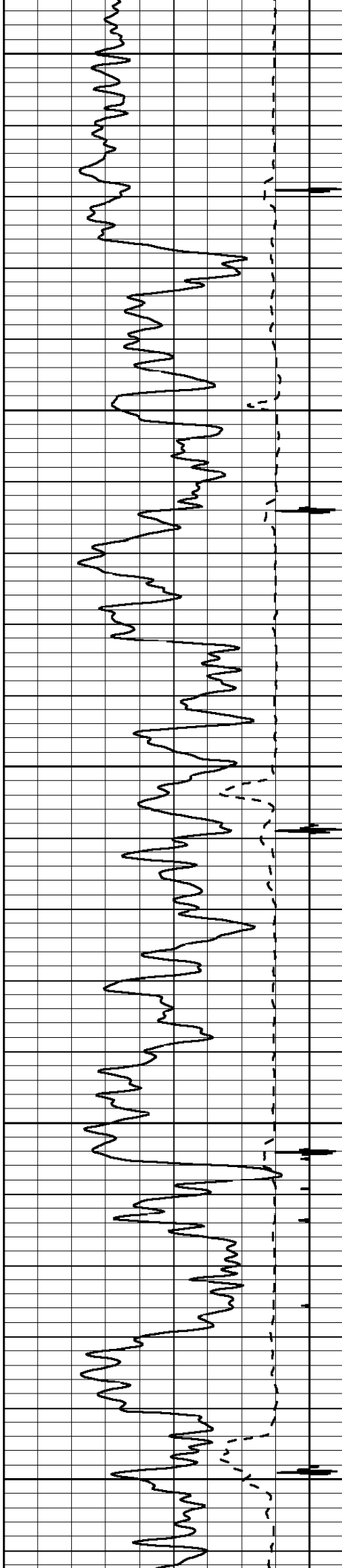




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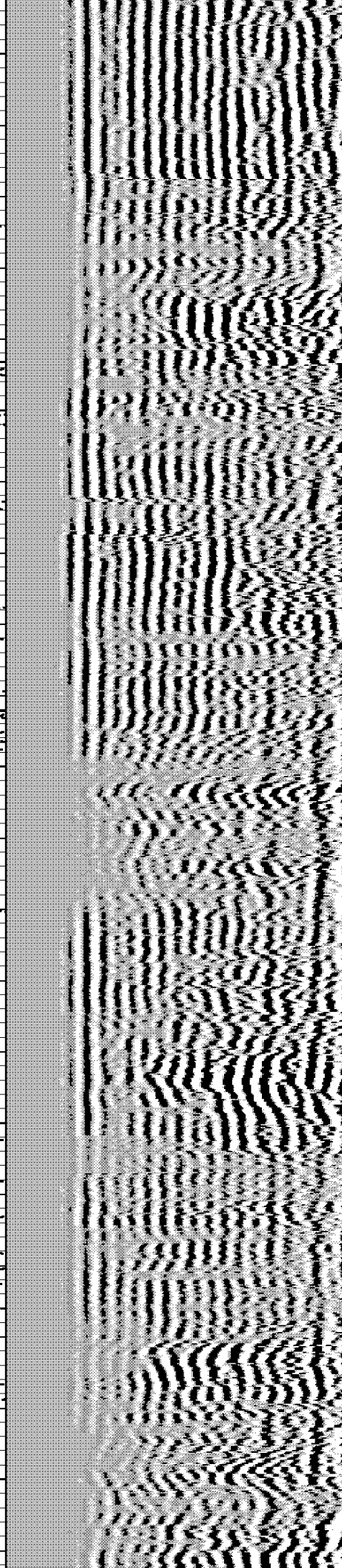
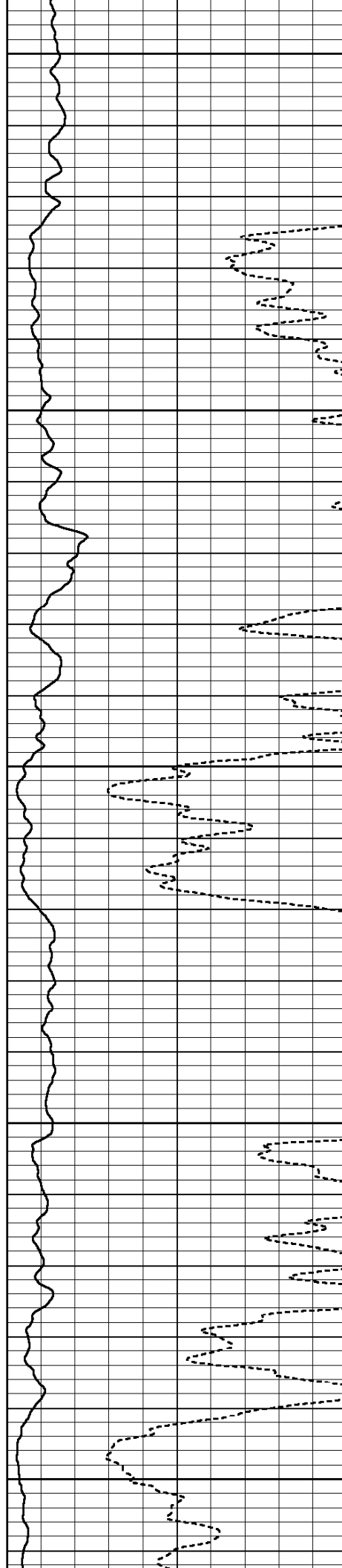
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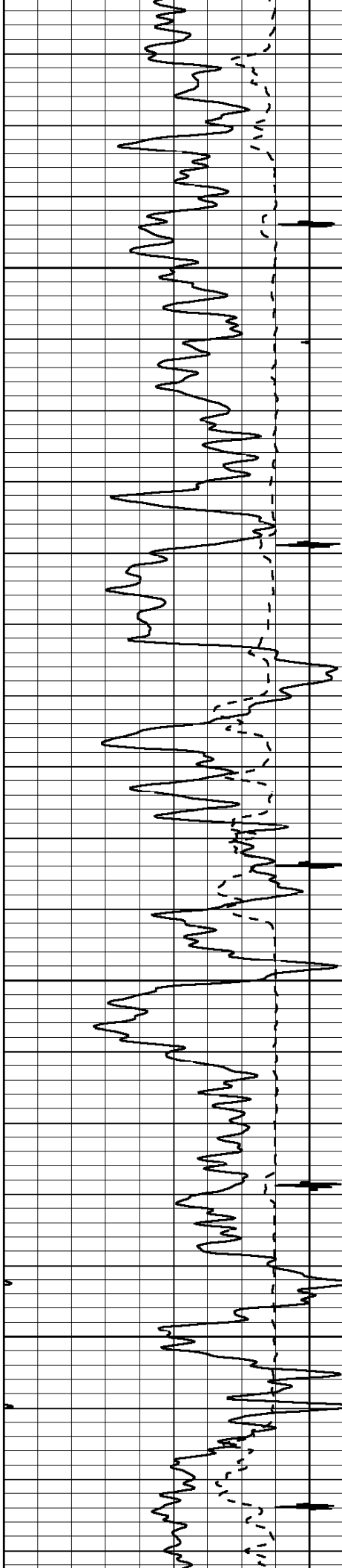




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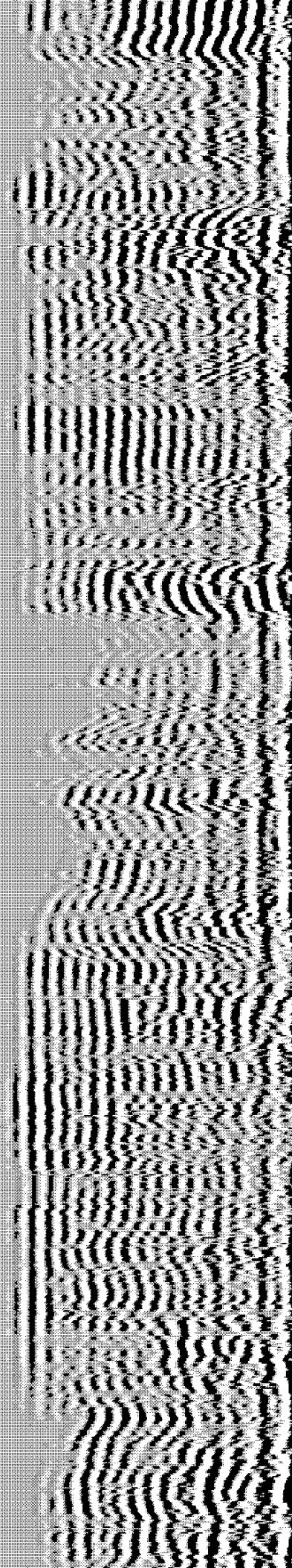
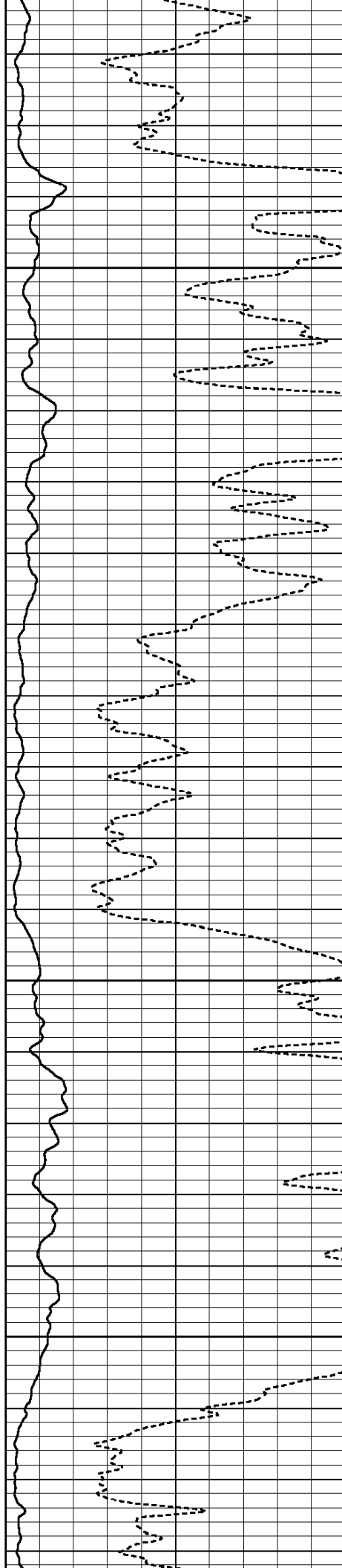
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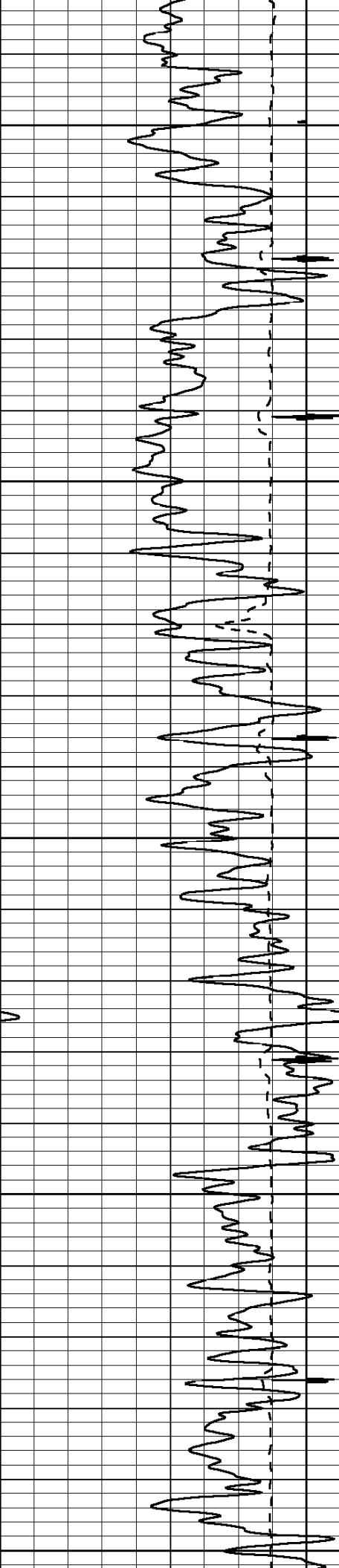


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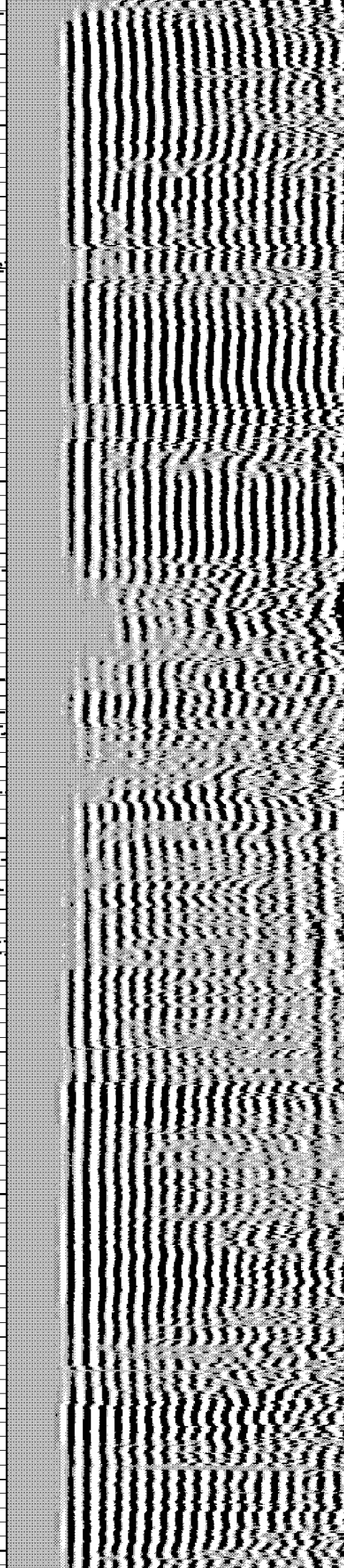
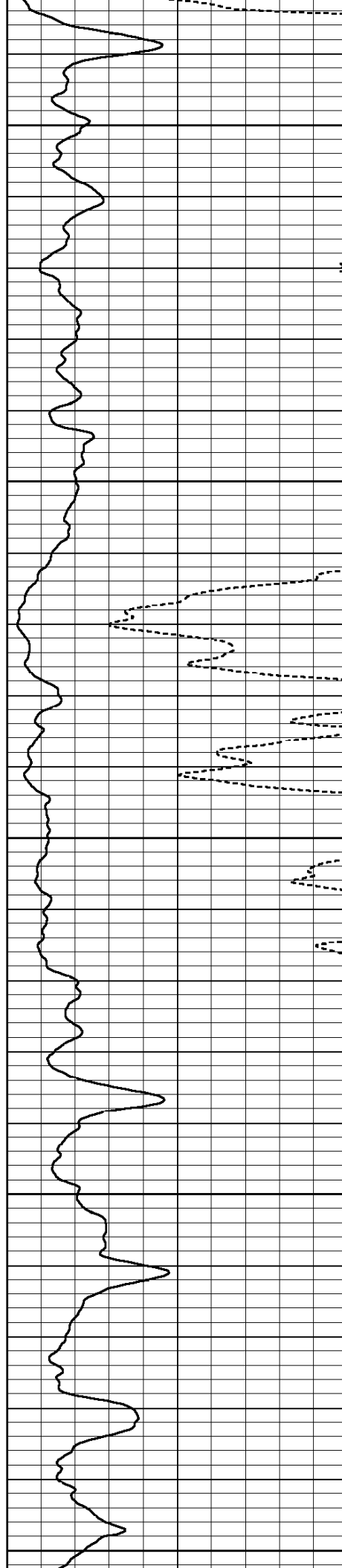


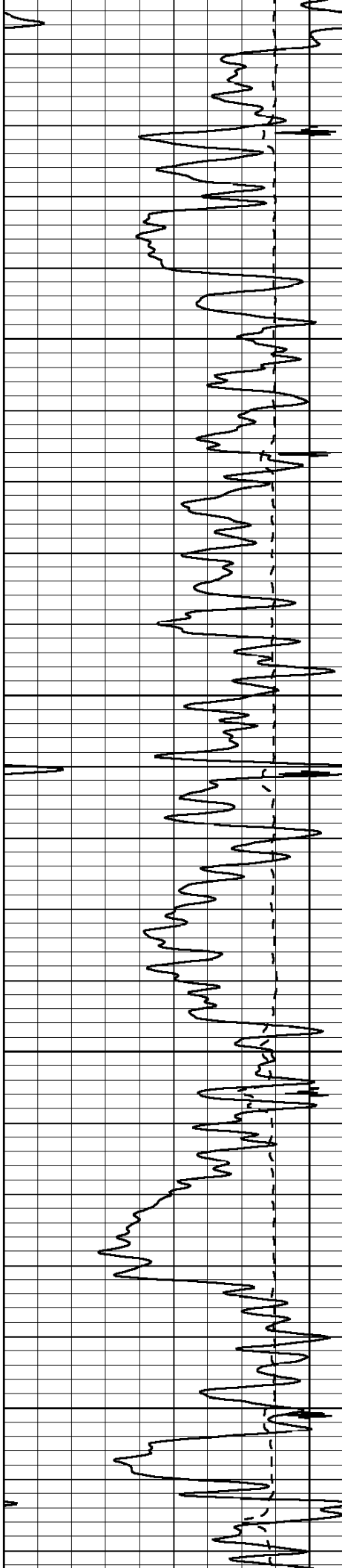


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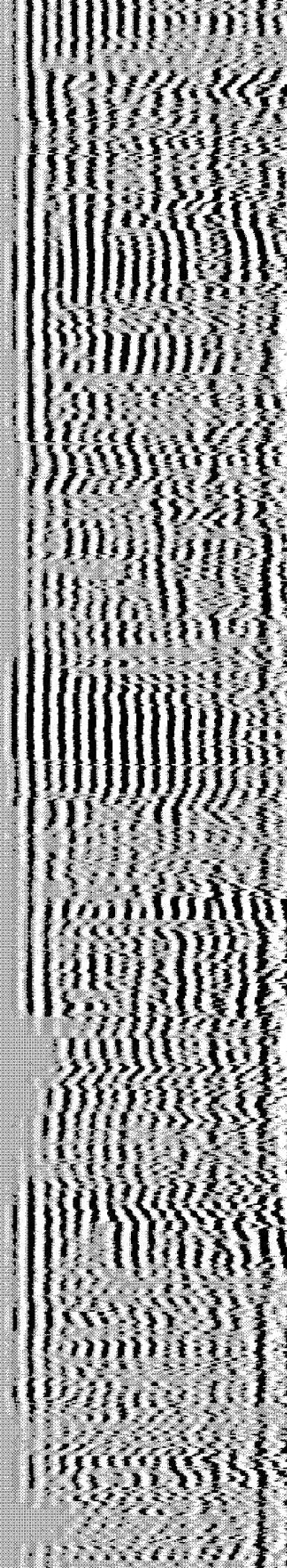
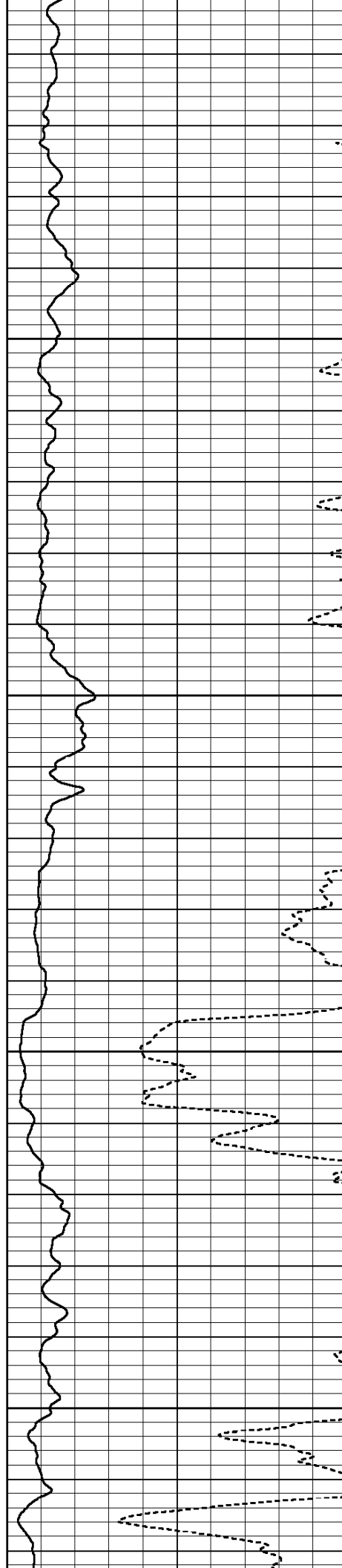
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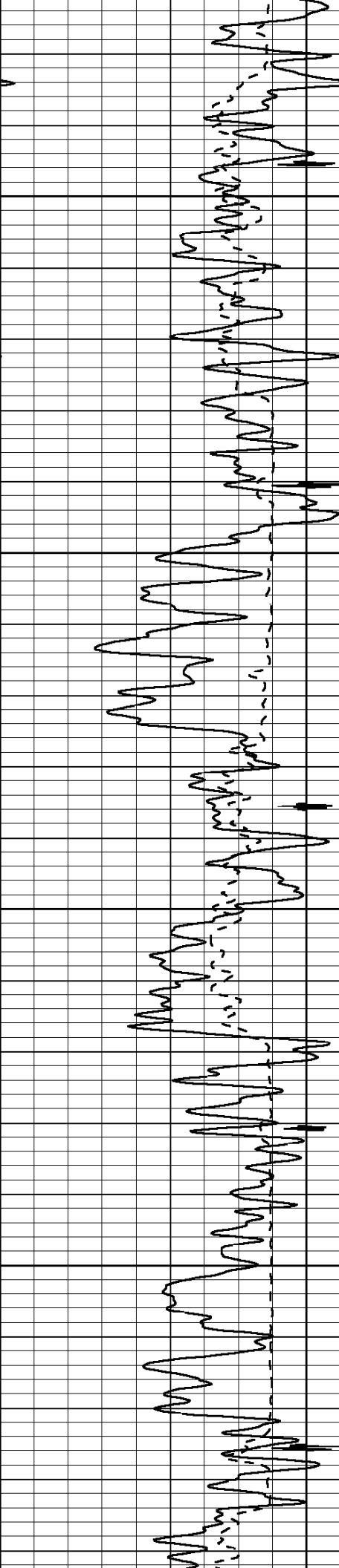




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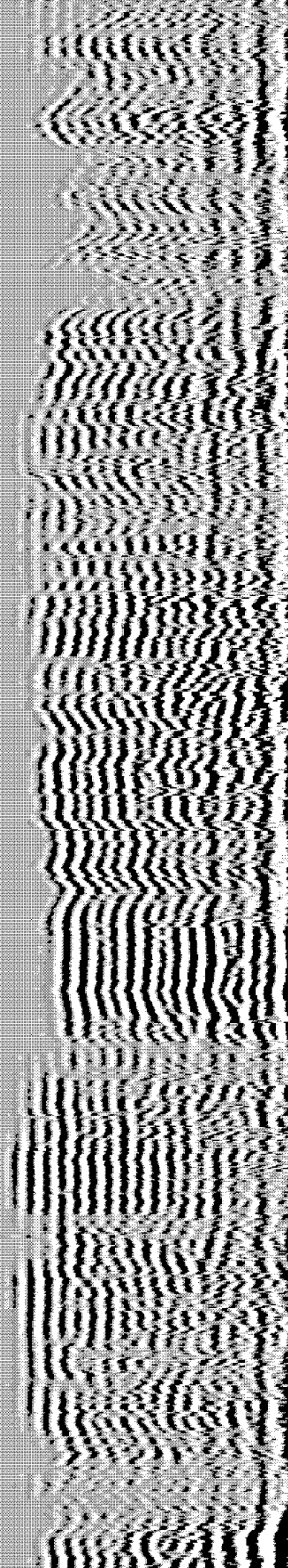
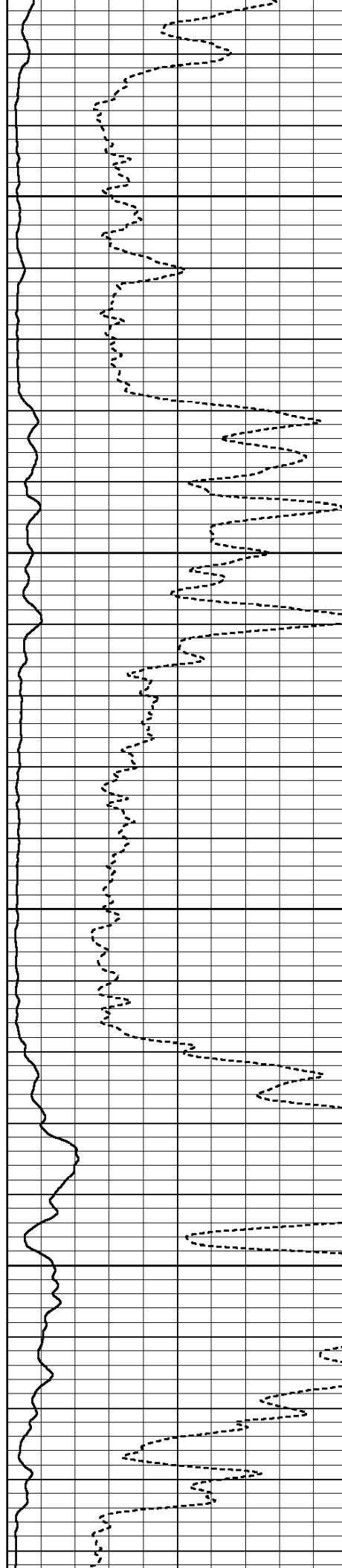
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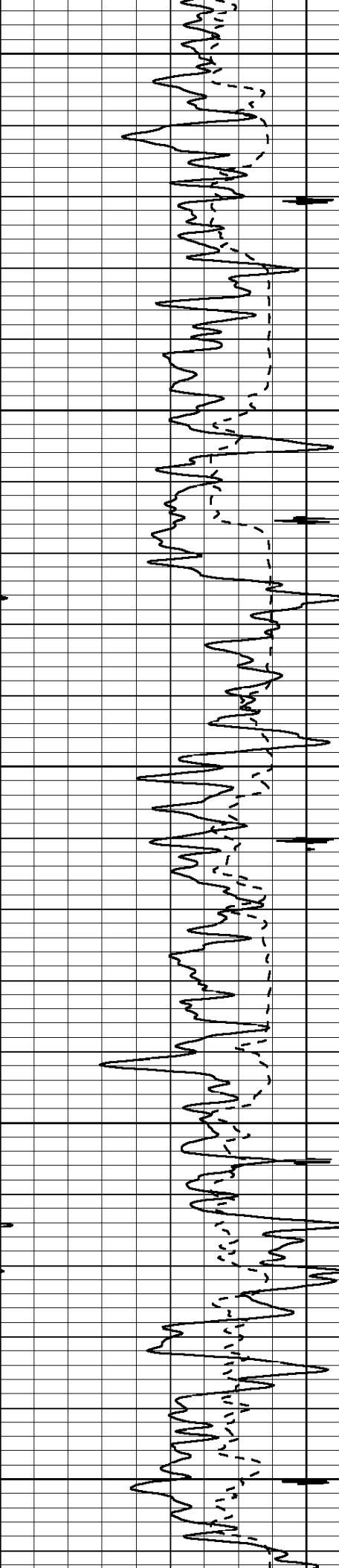




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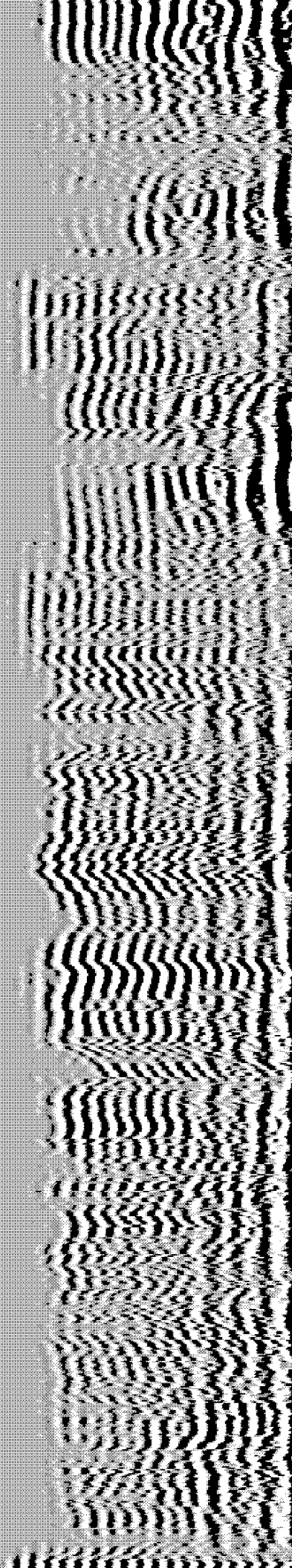
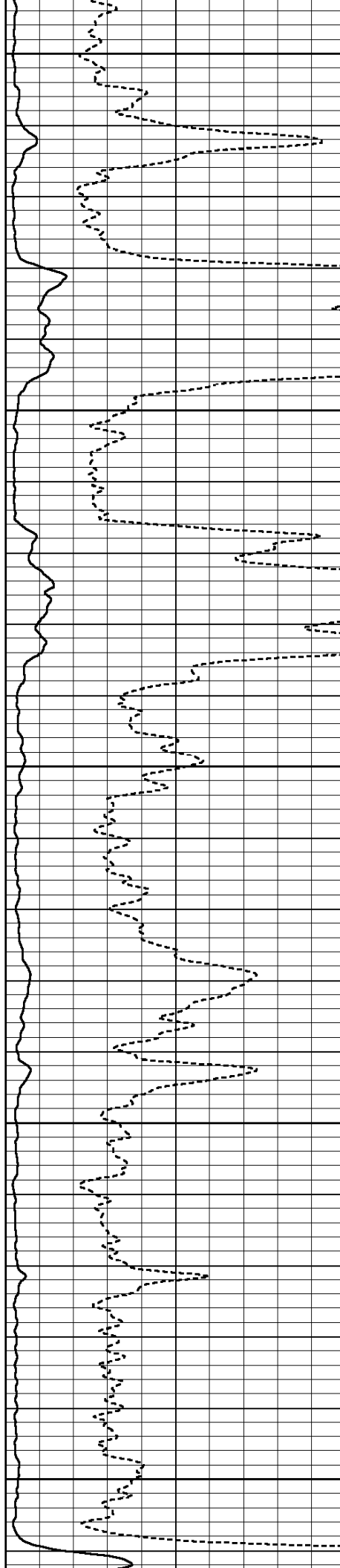
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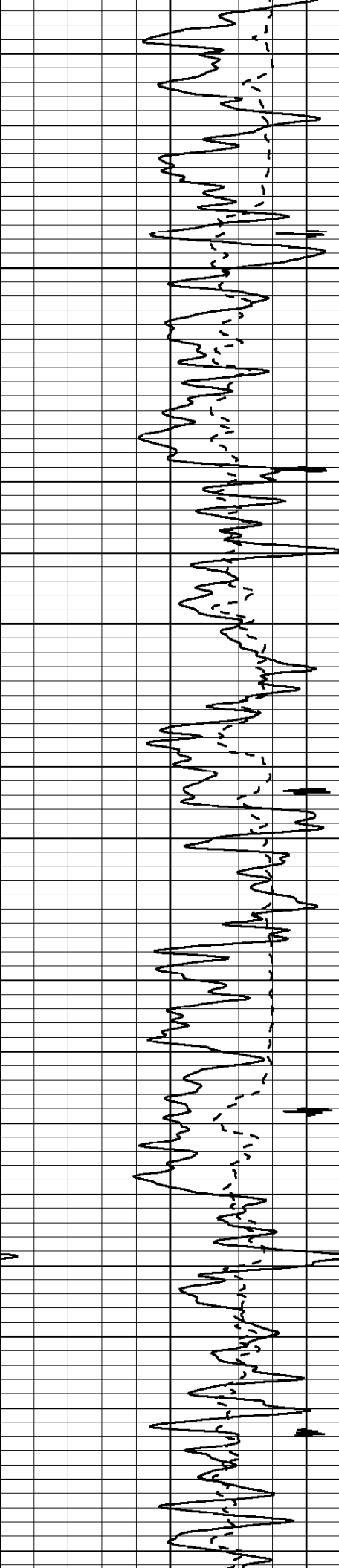


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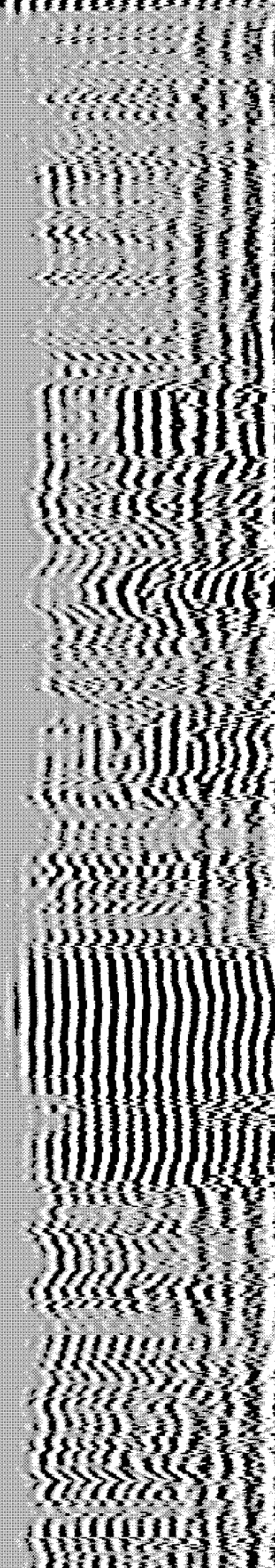
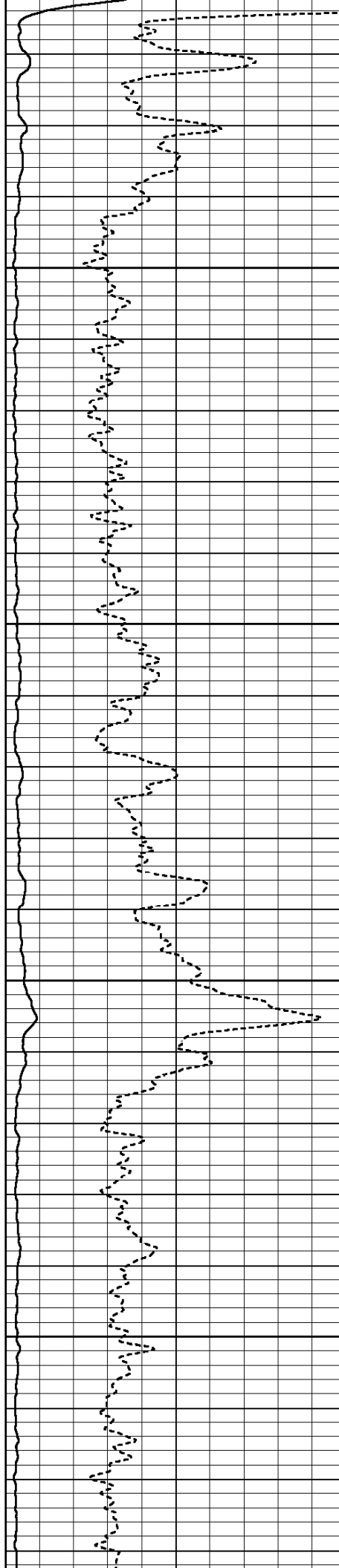


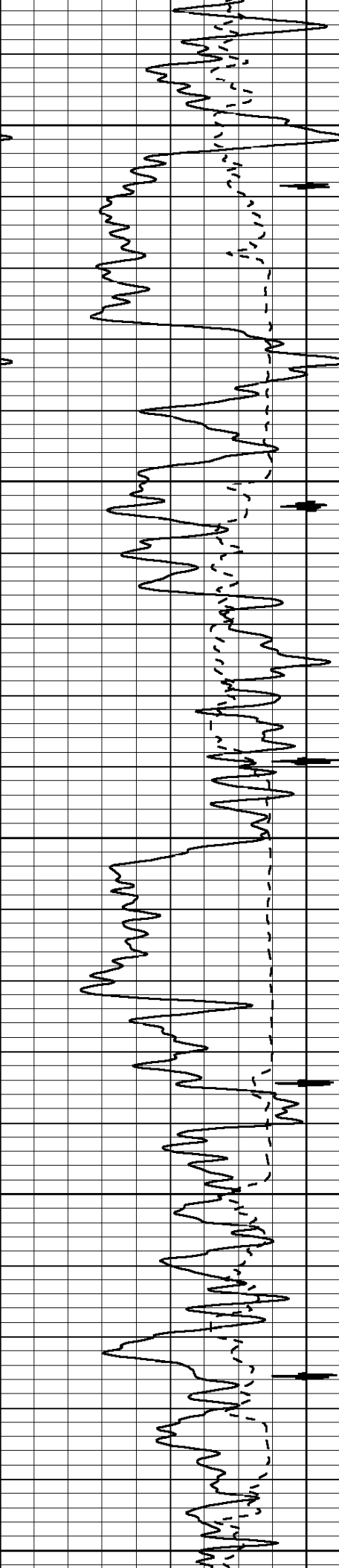




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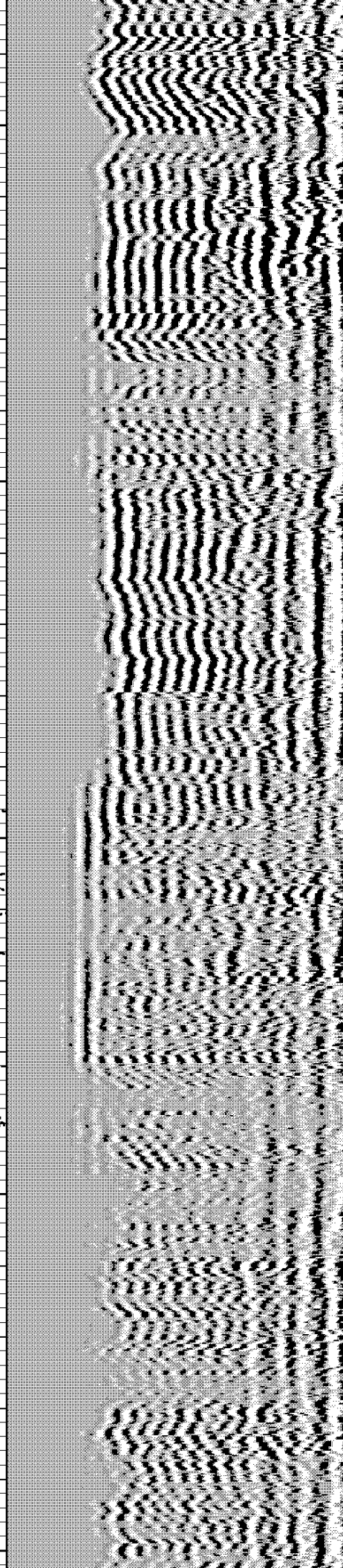
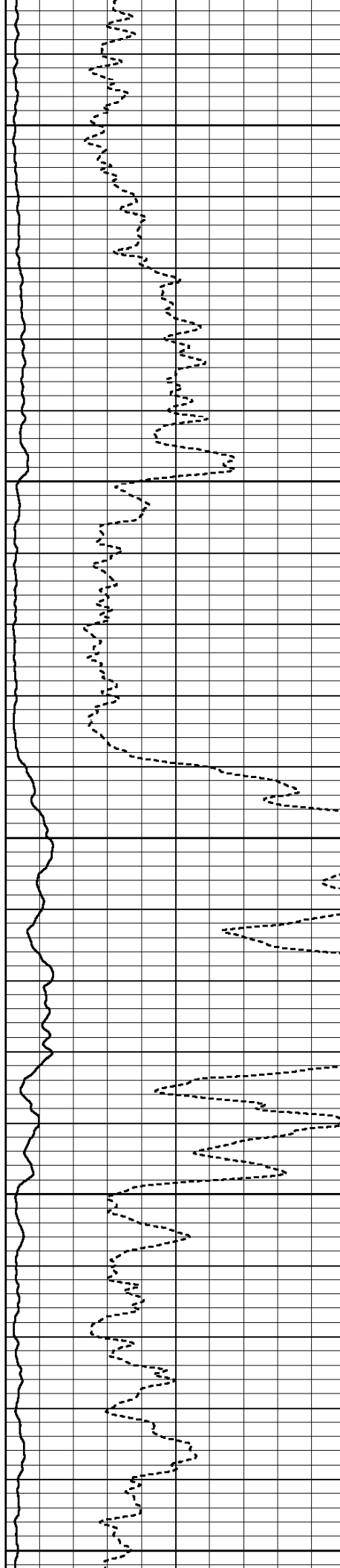


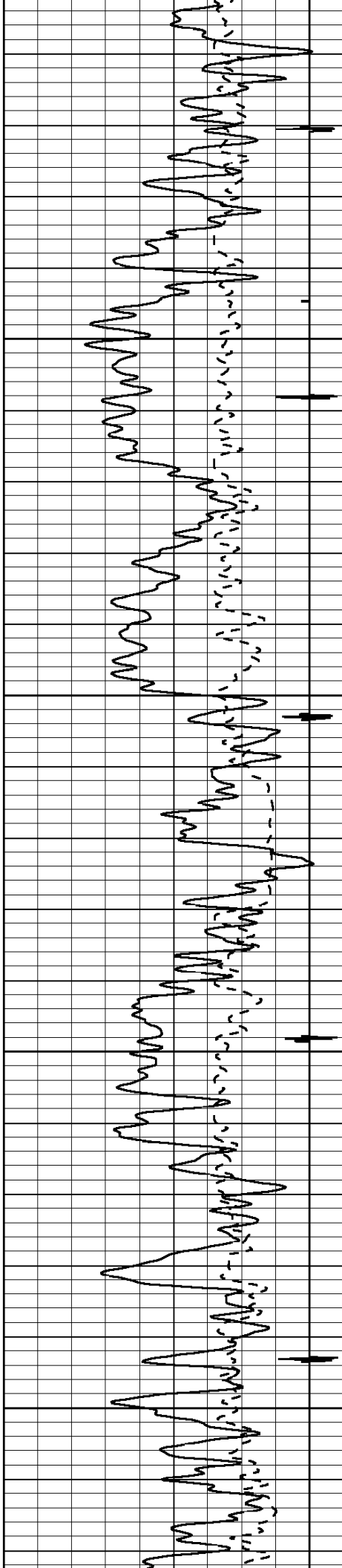


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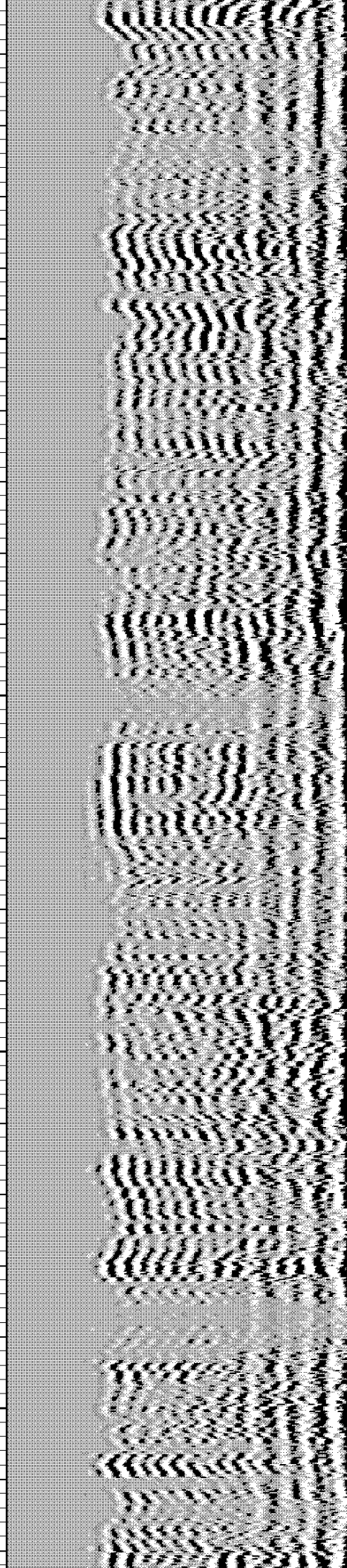
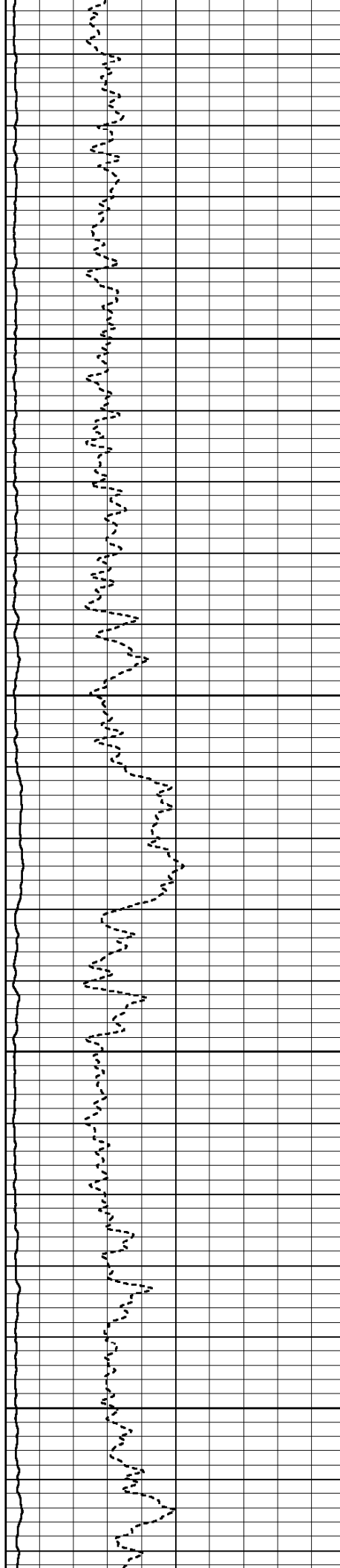
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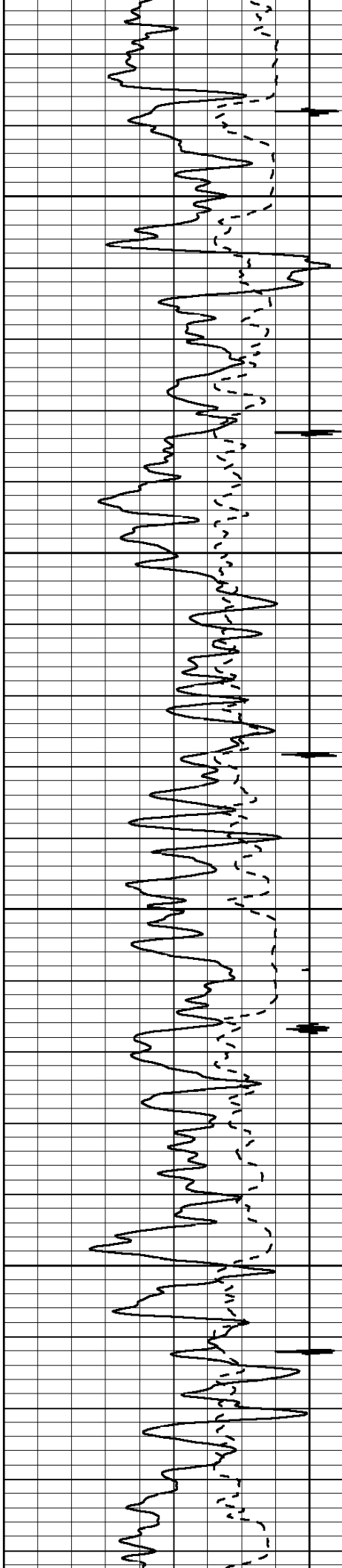




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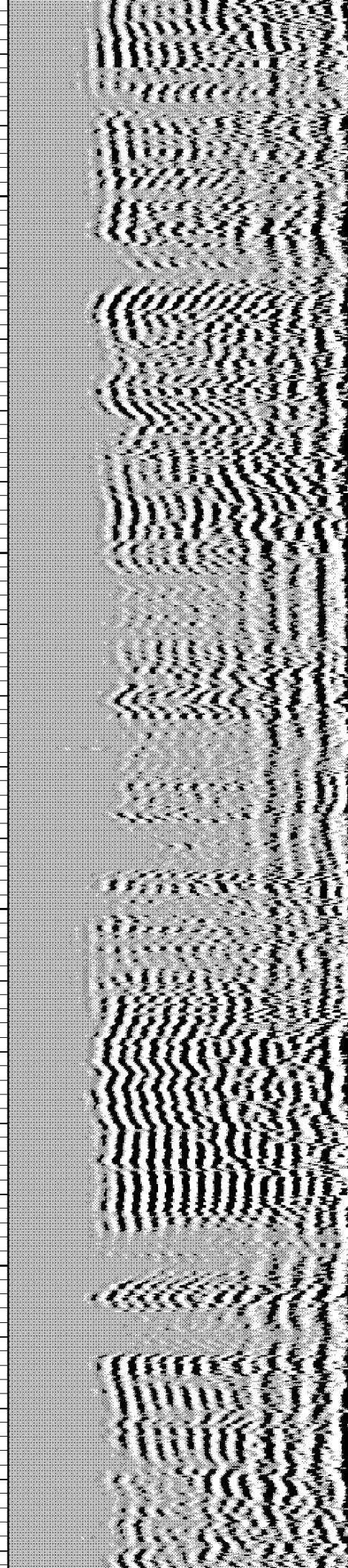
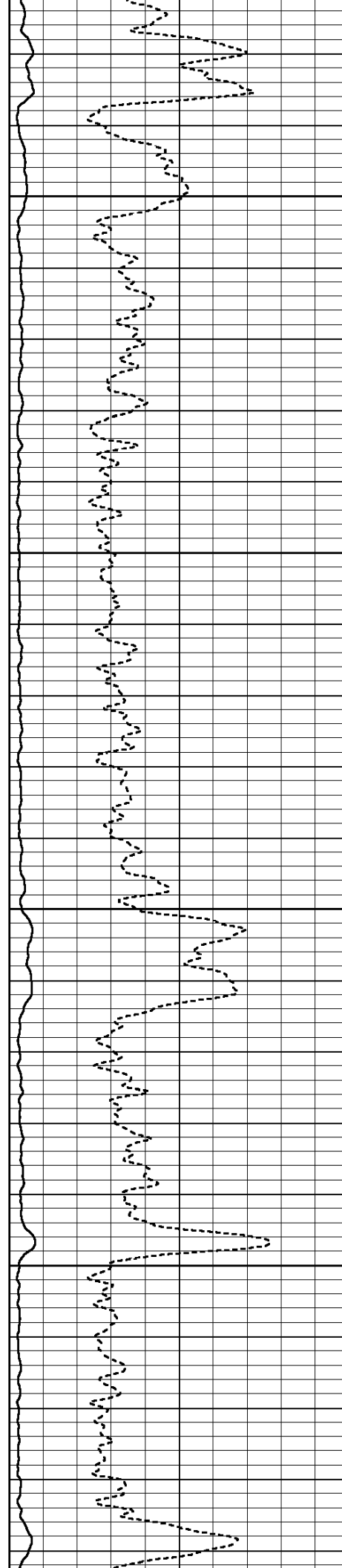
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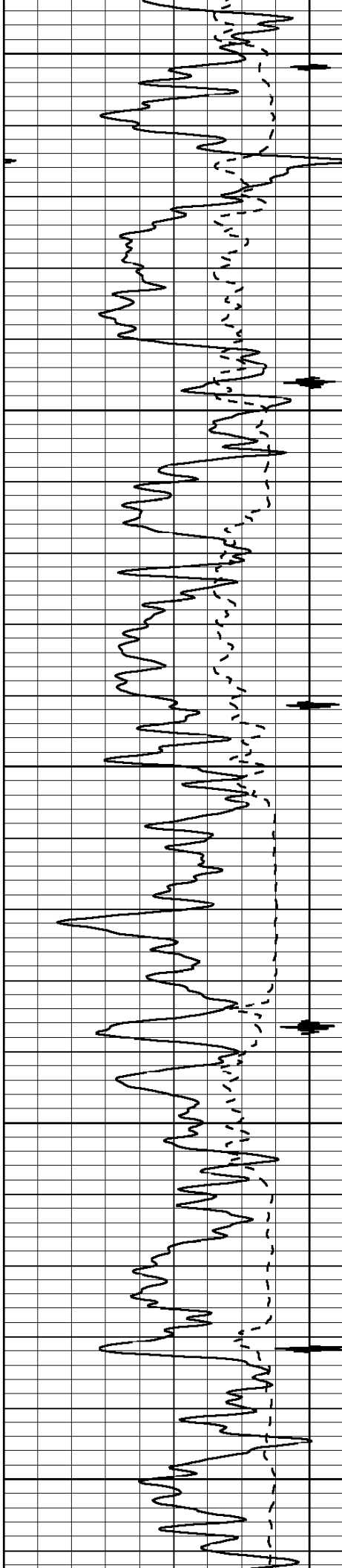


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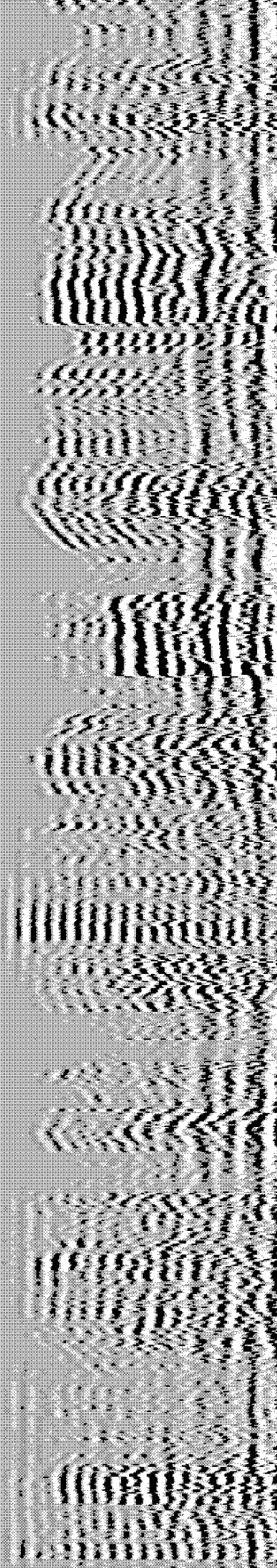
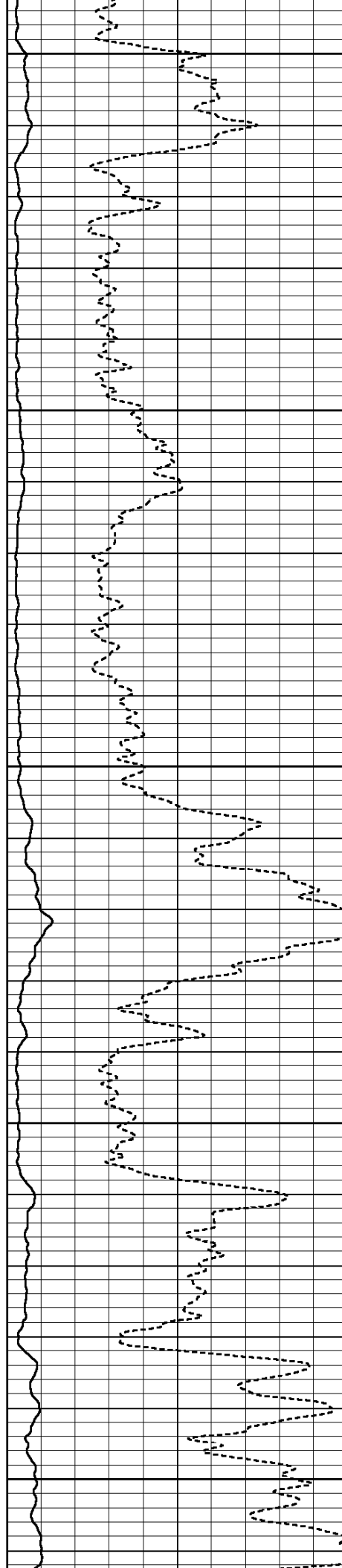


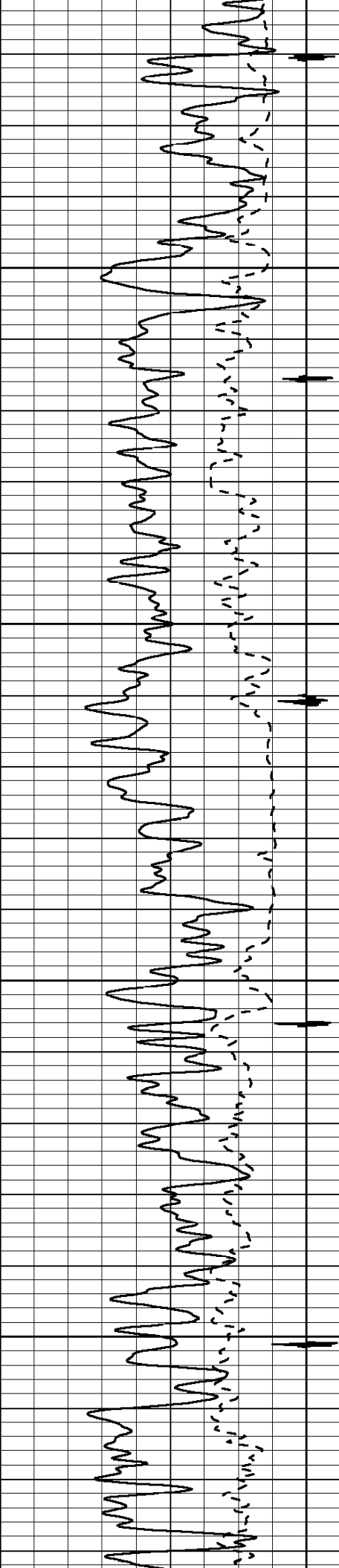




6400

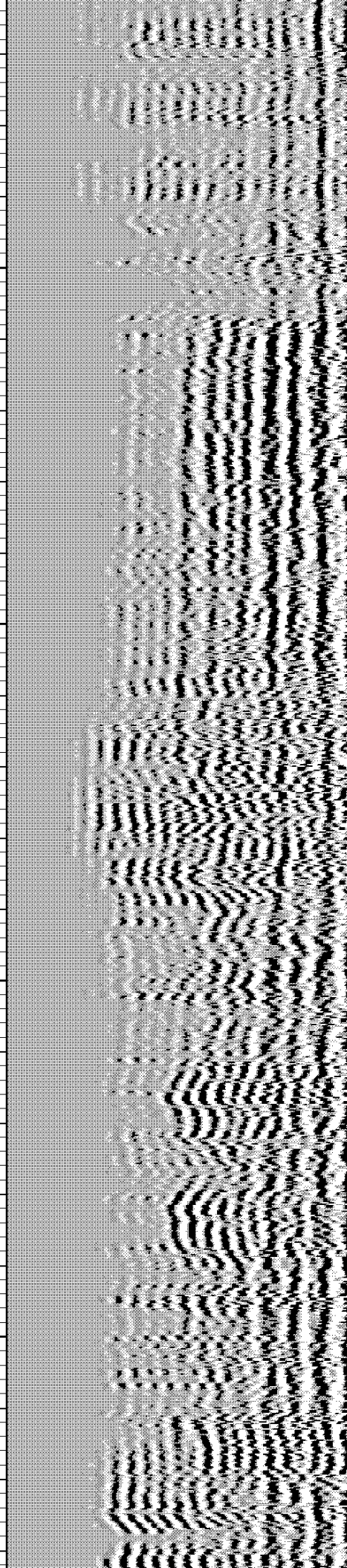
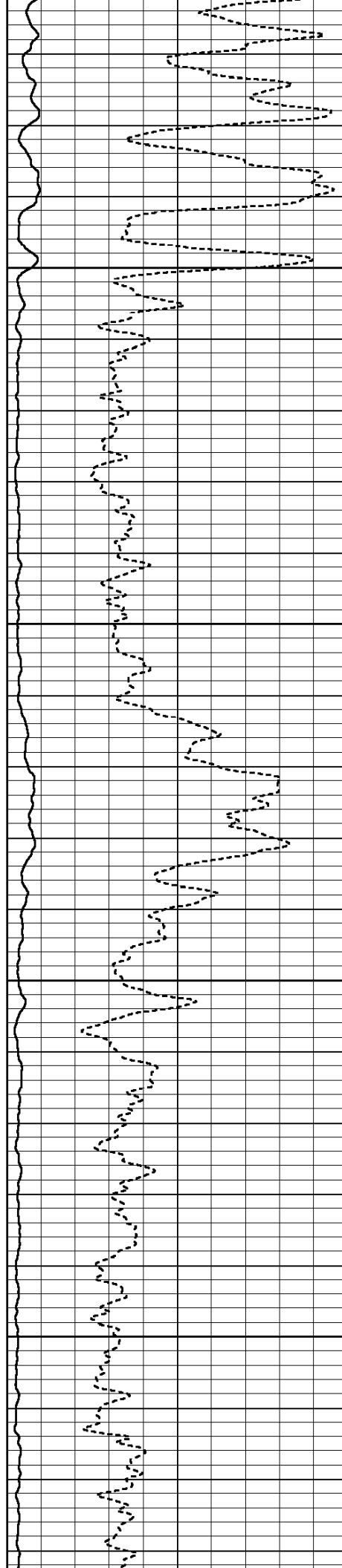
6500

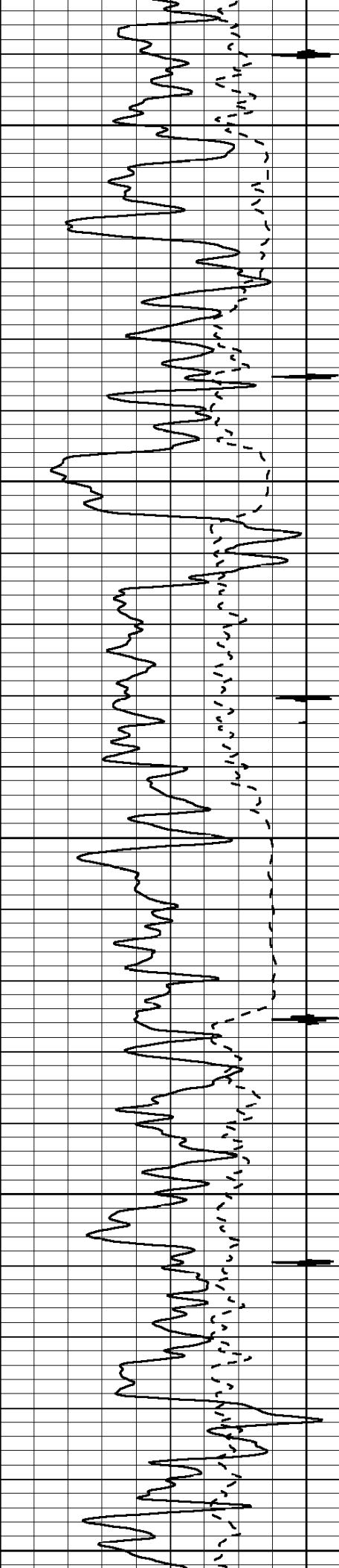




6600

6700

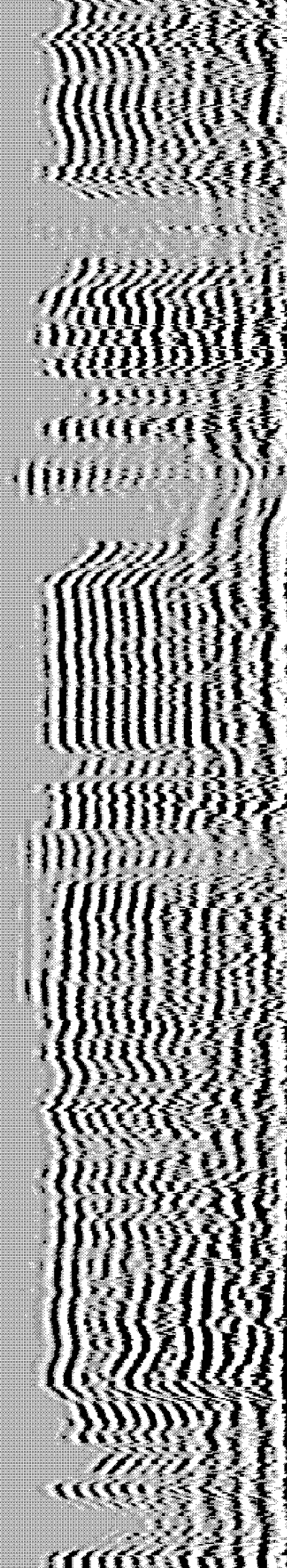
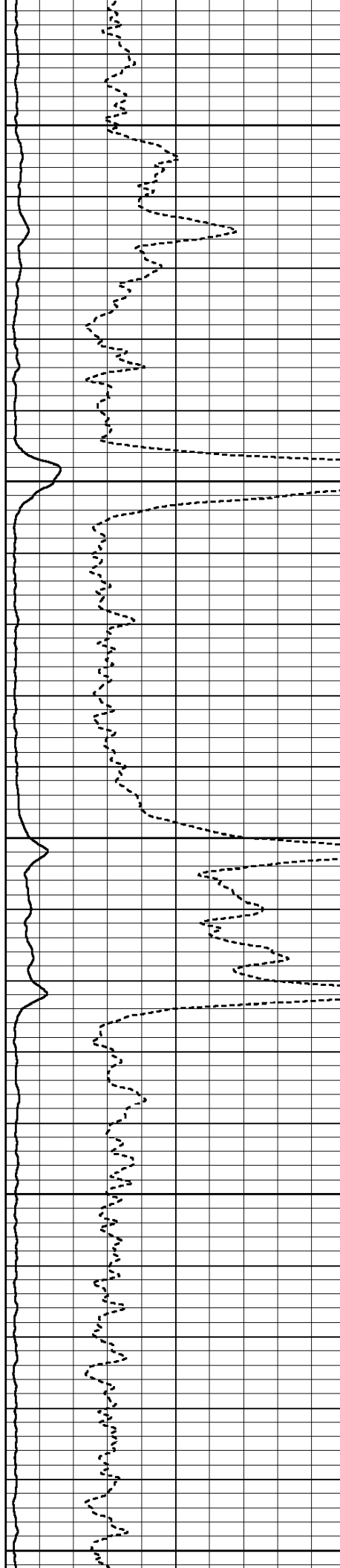


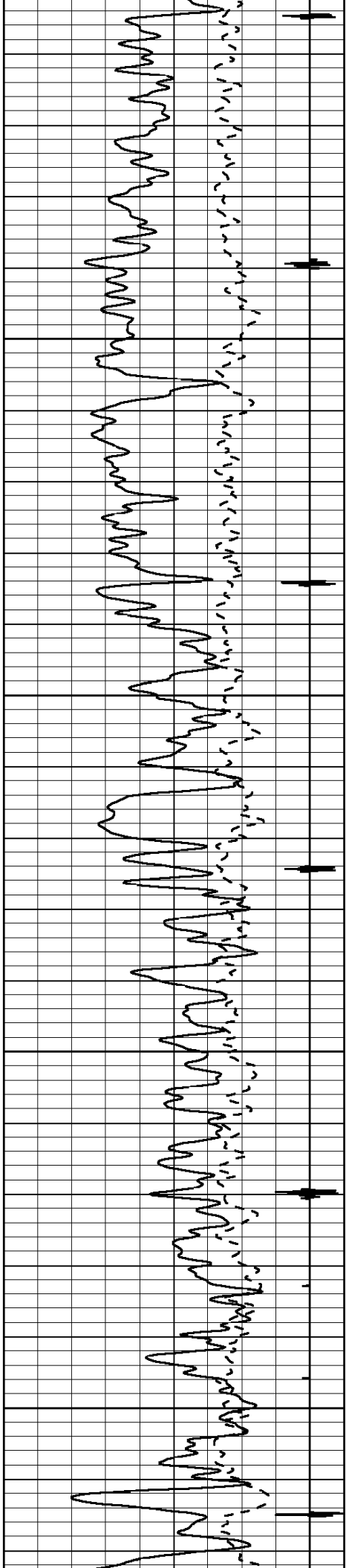


6800

6900

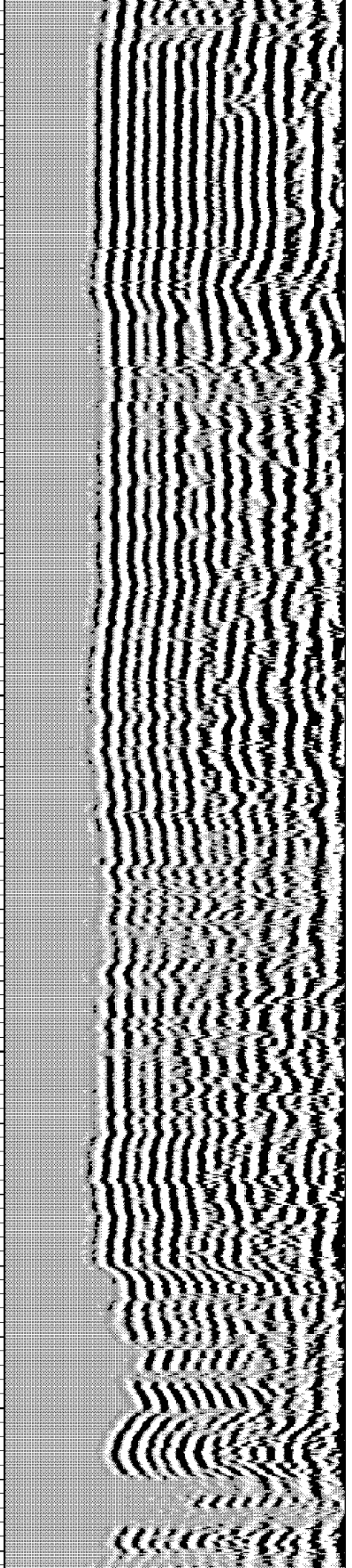
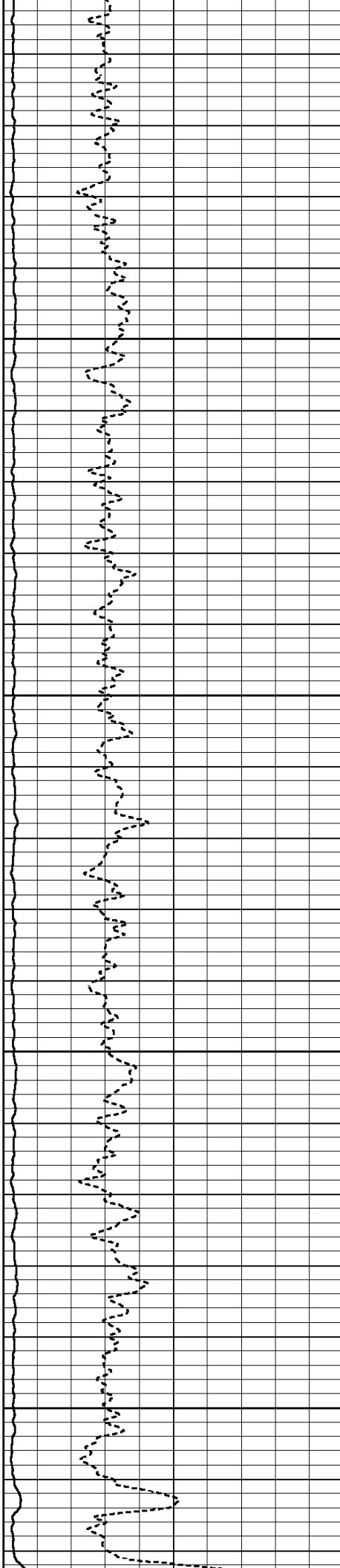
7000



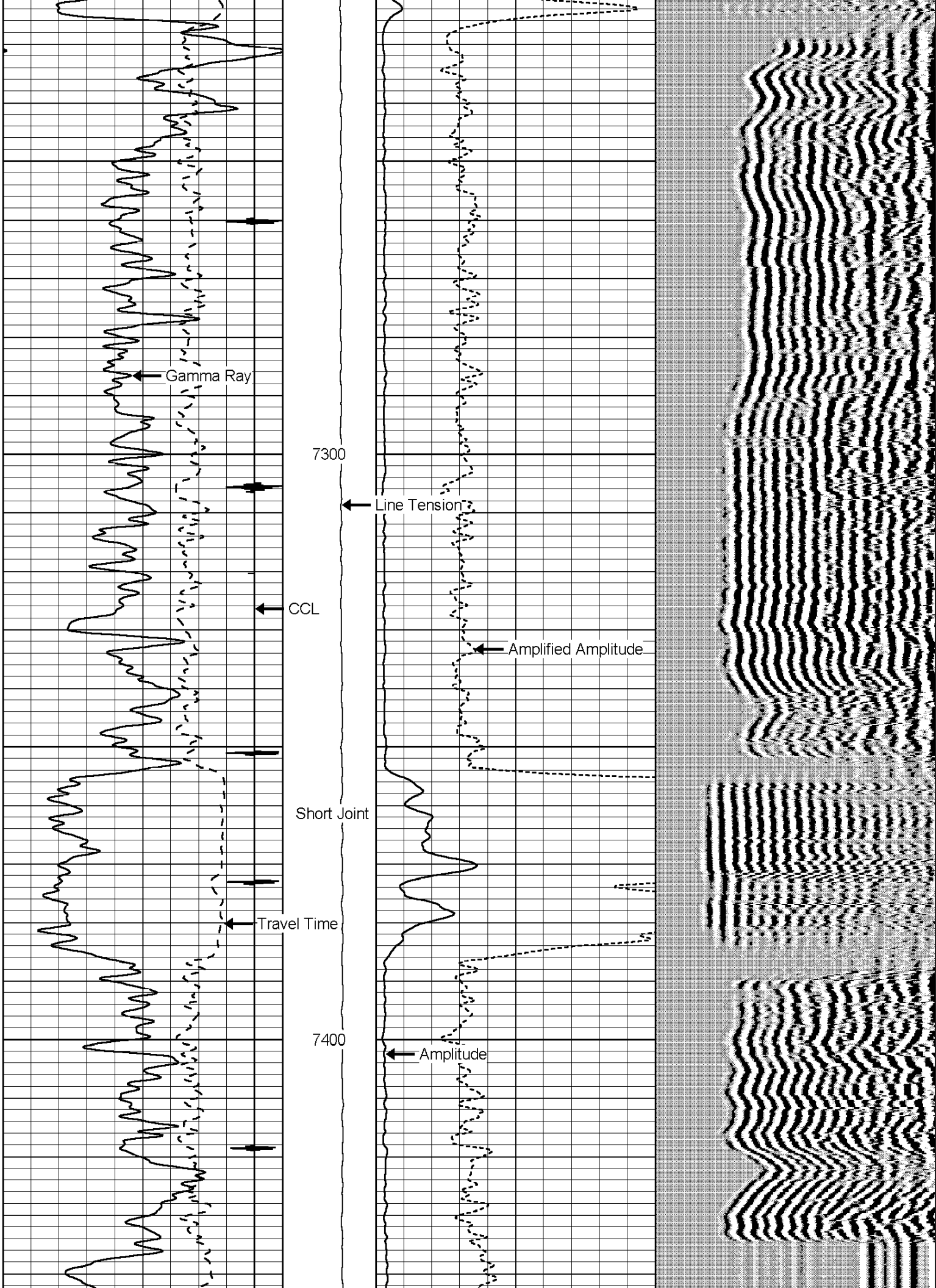


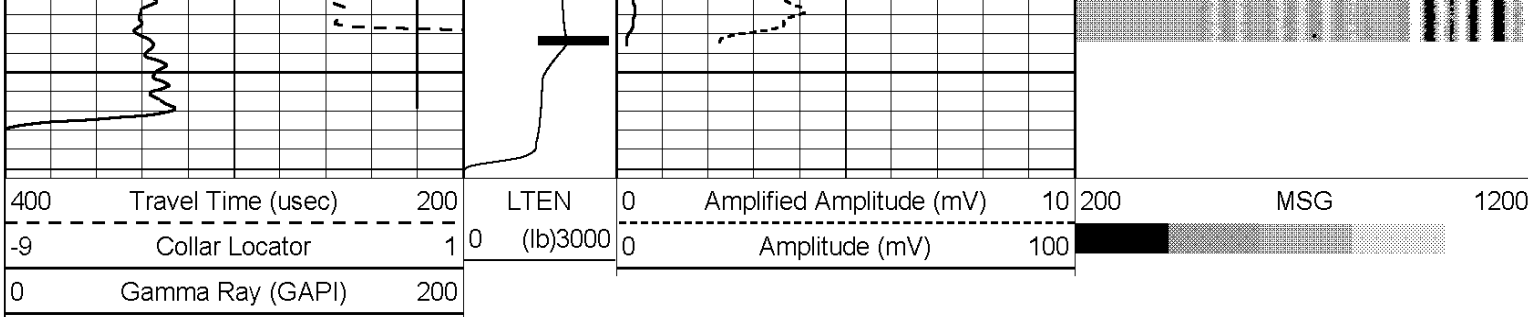
7100

7200









HALLIBURTON

## ACOUSTIC CEMENT BOND LOG

MAIN LOG SECTION

5" = 100'

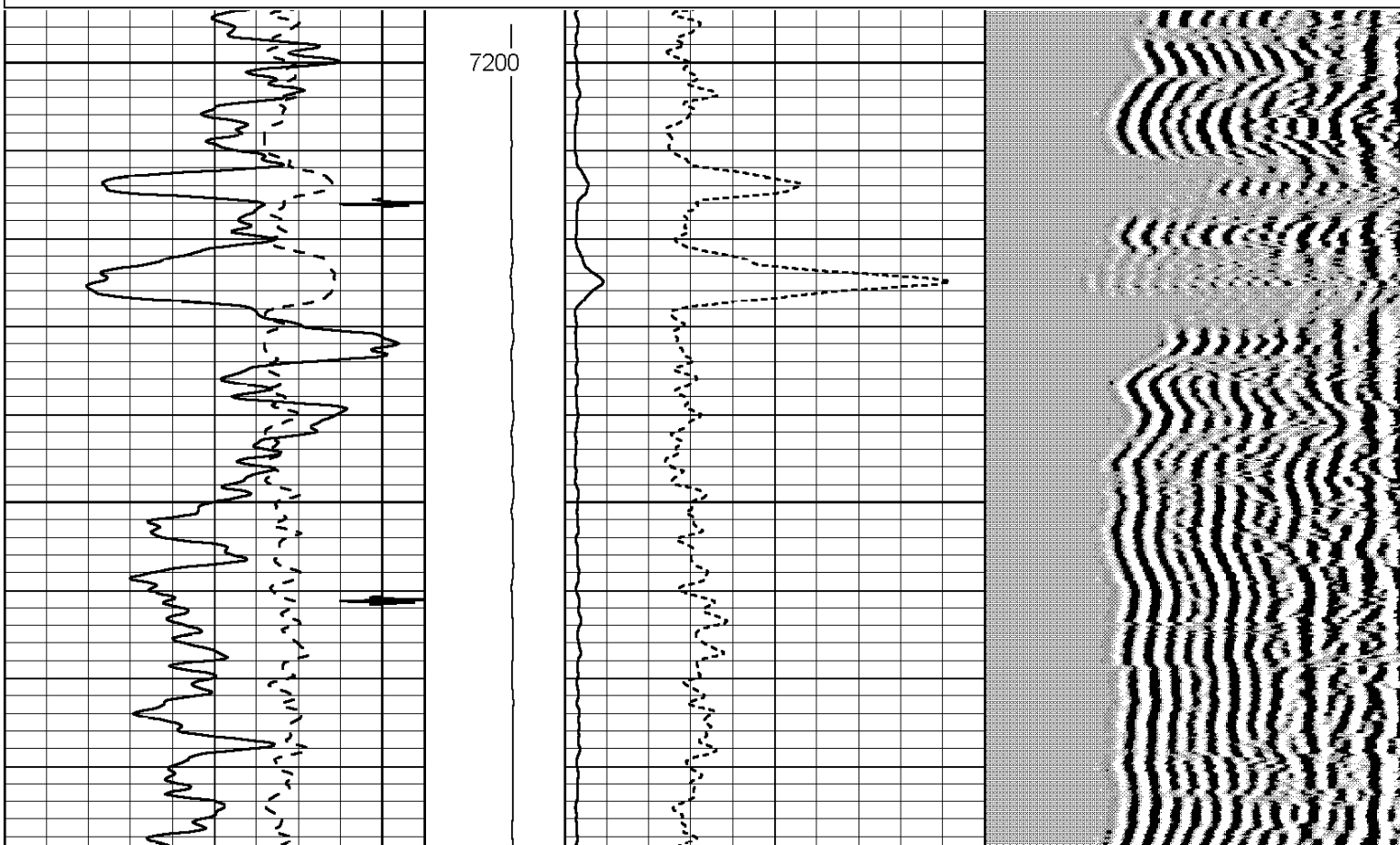
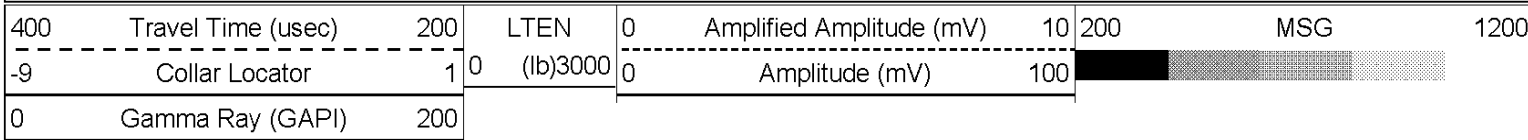
HALLIBURTON

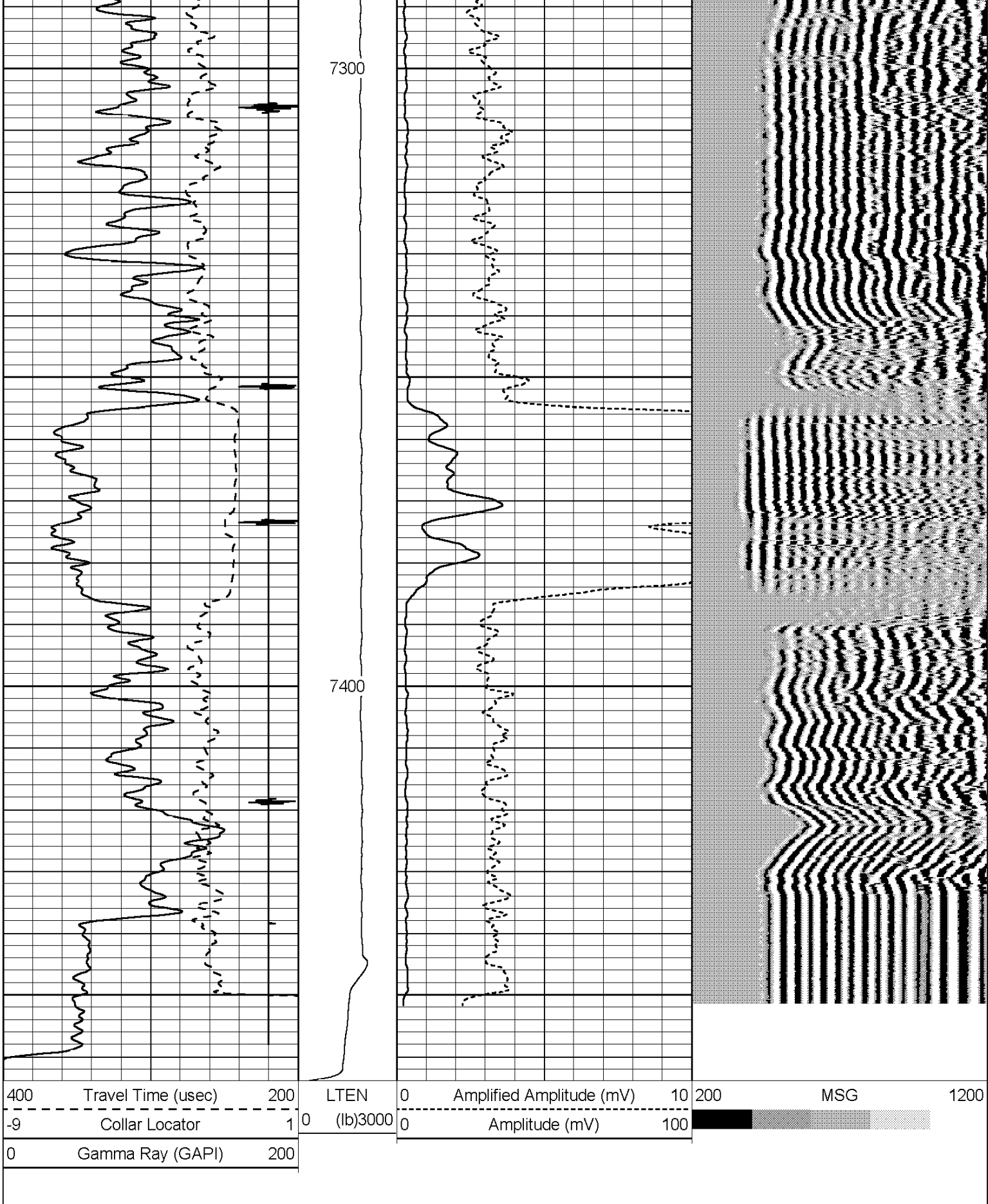
## ACOUSTIC CEMENT BOND LOG

REPEAT LOG SECTION

5" = 100'

Database File: jolley\_41d\_20\_691\_cbl.db  
Dataset Pathname: rept1  
Presentation Format: cbl\_main  
Dataset Creation: Thu Sep 04 21:42:08 2008 by Log Halliburton Casedho  
Charted by: Depth in Feet scaled 1:240





HALLIBURTON

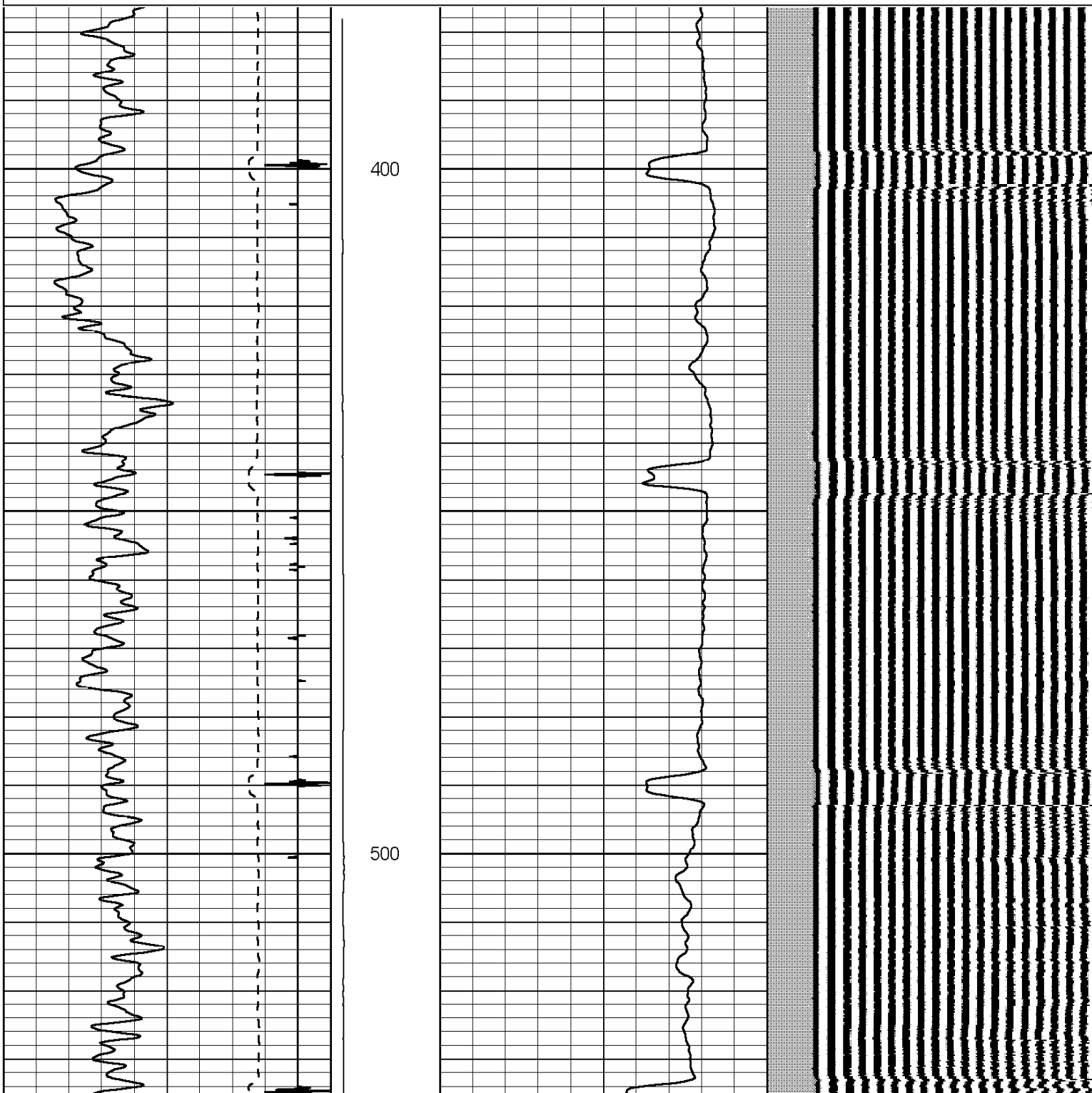
## ACOUSTIC CEMENT BOND LOG

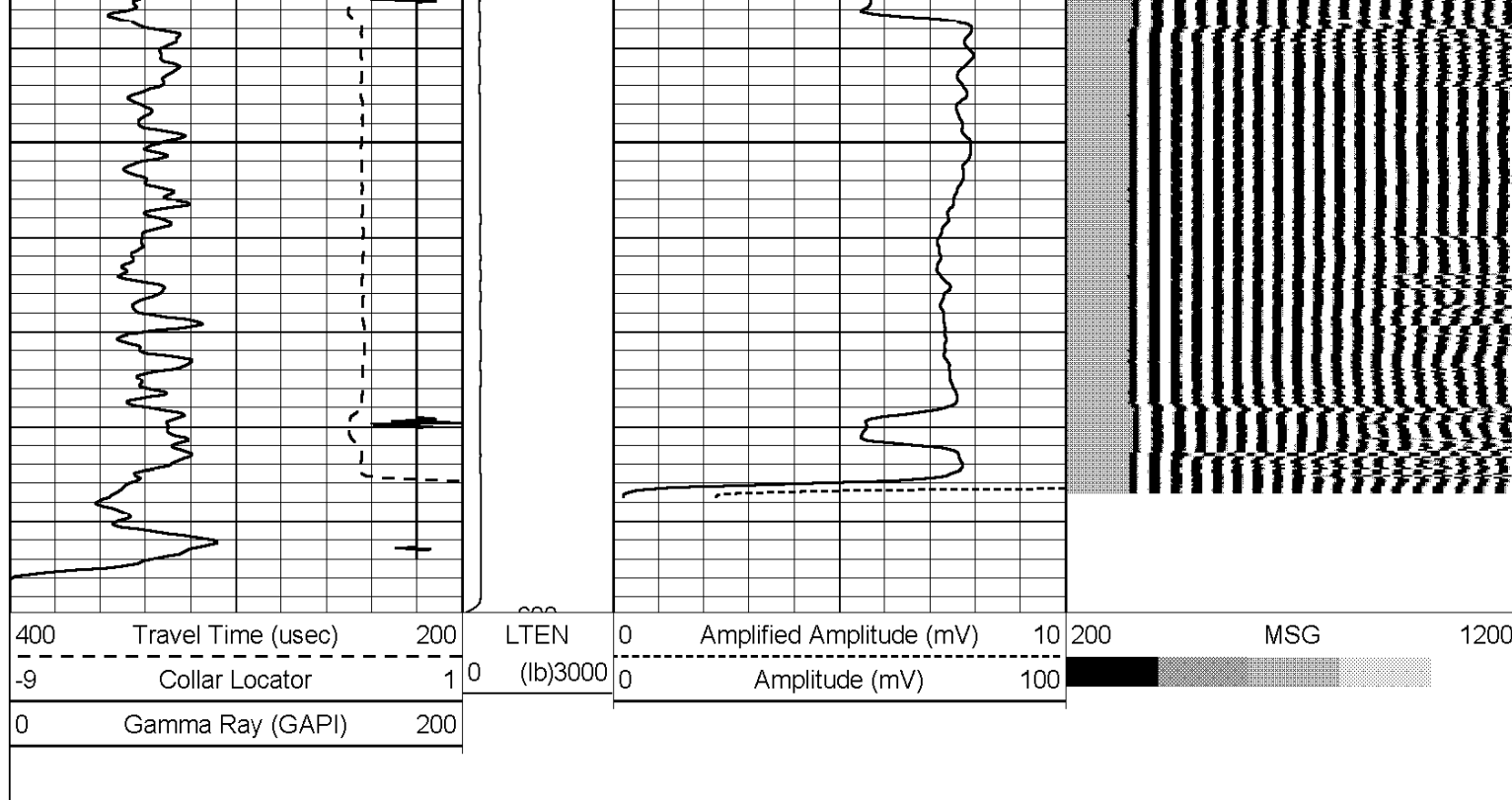
REPEAT LOG SECTION

5" = 100'

Database File: jolley\_41d\_20\_691\_cbl.db  
 Dataset Pathname: free1  
 Presentation Format: cbl\_main  
 Dataset Creation: Thu Sep 04 20:58:47 2008 by Log Halliburton Casedho  
 Charted by: Depth in Feet scaled 1:240

400	Travel Time (usec)	200	LTEN	0	Amplified Amplitude (mV)	10	200	MSG	1200
-9	Collar Locator	1	(lb)3000	0	Amplitude (mV)	100			
0	Gamma Ray (GAPI)	200							





**HALLIBURTON**

## ACOUSTIC CEMENT BOND LOG

FREE PIPE LOG SECTION

5" = 100'

### Calibration Report

Database File: jolley\_41d\_20\_691\_cbl.db  
 Dataset Pathname: mainF  
 Dataset Creation: Fri Sep 05 01:00:57 2008

### Temperature Calibration Report

Serial Number: 080703  
 Tool Model: 1.375TEMP  
 Performed: Thu Aug 28 10:27:18 2008

	Reference	Reading
Low Reference:	0.00 degF	0.00 cps
High Reference:	1.00 degF	1.00 cps
Gain:	0.10	
Offset:	0.00	
Delta Spacing	1	

### Gamma Ray Calibration Report

Type / Serial: Probe / 070859

#### SHOP CALIBRATION

Thu Sep 04 20:37:19 2008

	Counts/Sec.	Gain	Offset	Jig	Units
Background	71.3				cps
Calibrator	331.0				cps
		0.9087			GAPI/cps

#### PRIMARY VERIFICATION


Thu Sep 04 20:42:08 2008

Background	73.3				cps
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Calibrator Difference	300.3	227.0	cps GAPI
BEFORE SURVEY VERIFICATION			
Background	0.0		cps
Calibrator	0.0		cps
Difference		0.0	GAPI
AFTER SURVEY VERIFICATION			
Background	0.0		cps
Calibrator	0.0		cps
Difference		0.0	GAPI

### Cement Bond Log Calibration Report

Serial Number:	061115		
Tool Model:	Probe		
Performed:	Thu Sep 04 20:57:43 2008		
Depth:	506.453	ft	
Casing Diameter:	4.5	in	
	3' Spacing	5' Spacing	
Signal Zero:	2	2	mV
Calibrated Amplitude:	81.1961	81.1961	mV
Reading at Signal Zero:	-0.00566406	-0.0083252	V
Reading in Free Pipe:	1.83552	1.80547	V
Gain:	43.0136	43.6632	
Offset:	2.24363	2.3635	

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			STNDRD Standard Cable Head - F.N. 1 3/8"	1.15	1.44	1.10
			CENT-Probe (PT_MONO2)	2.88	2.75	35.00
WVF3	13.53		CBL-Probe (061115) Probe 2.75" Dual Receiver Bond	8.92	2.75	60.00
WVF5	12.53					

Tool Joint	Tool Joint Length (ft)	Tool Joint Weight (lb)	Tool Joint O.D. (in)	Tool Joint Description	Tool Joint Length (ft)	Tool Joint Weight (lb)	Tool Joint O.D. (in)
CCL	5.67			CENT-Probe (PT_MONO2)	2.88	2.75	35.00
GR	4.08			GR-Probe (070859) Probe 2.75" 4 Channel Pulse	4.92	2.75	30.00
TEMP	0.08			TEMP-1.375TEMP (080703) Temperature Tool	1.54	1.38	5.00
LLMTEN	0.00						

Dataset: jolley\_41d\_20\_691\_cbl.db: field/well/run1/mainF

Total Length: 22.29 ft

Total Weight: 166.10 lb

O.D. 2.75 in

