

HALLIBURTON

ACOUSTIC CEMENT BOND LOG

Company	ORION ENERGY PARTNERS		
Well	JOLLEY 21-3D		
Field	KOKOPELLI		
County	GARFIELD	State	CO

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API No.:	050451457700	Serv #:	5561199
Location:	SURFACE HOLE: 1927' FNL & 2215' FWL		
BOTTOM HOLE: 2225' FNL & 1995' FWL Sec: 21 Twp:06S Rge: 91W		TEMPERATURE	

Permanent Datum	GROUND LEVEL	Elevation	6892'
Log Measured From	K.B. ,	18 Ft. above perm. datum	K.B. 6910' D.F. 6909' G.L. 6892'
Drilling Measured From	K.B.		

Date @ Time Logged	16 DEC 2007	1100 HRS	Type Fluid in Hole	FRESH WATER
Run No.	ONE		Density of Fluid	8.4 PPG
Depth - Driller	8950'		Fluid Level	40'
Depth - Logger	8856'		Cement Top Est. Logged	5730'
Bottom - Logged Interval	8848'		Equipment / Location	10026060 / GU
Top - Log Interval	SURFACE		Recorded by	C. JOHNSEN
Max. Recorded Temp.	250 F		Witnessed by	N/A

CEMENTING DATA	Surface	Protection	Production	Liner
	String	String	String	

Date / Time Cemented			
Primary / Squeeze			
Expected Compressive Strength	psi@	hrs	psi@
Cement Volume			
Cement Type / Weight	/		/
Formulation			
Mud Type / Mud Wgt.	/		/

Borehole Record				Casing & Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	SURFACE	1050'	8.625"	32#	SURFACE	1050'
TWO	7.875"	1050'	8950'	4.5"	11.6#	SURFACE	N/A

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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

CBL-GR-CCL RAN IN COMBINATION.

CORRELATED TO HES HRI LOG DATED 09-DEC-2007.

TRAVEL TIME SKIP WHEN GOOD BOND IS PRESENT.
SHORT JOINTS AT: 4896' - 4915' & 6909' - 6932'

YOUR CREW: M. SHEA, K. VAN DOORN

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES, GRAND JUNCTION, CO
(970) 523 - 3600

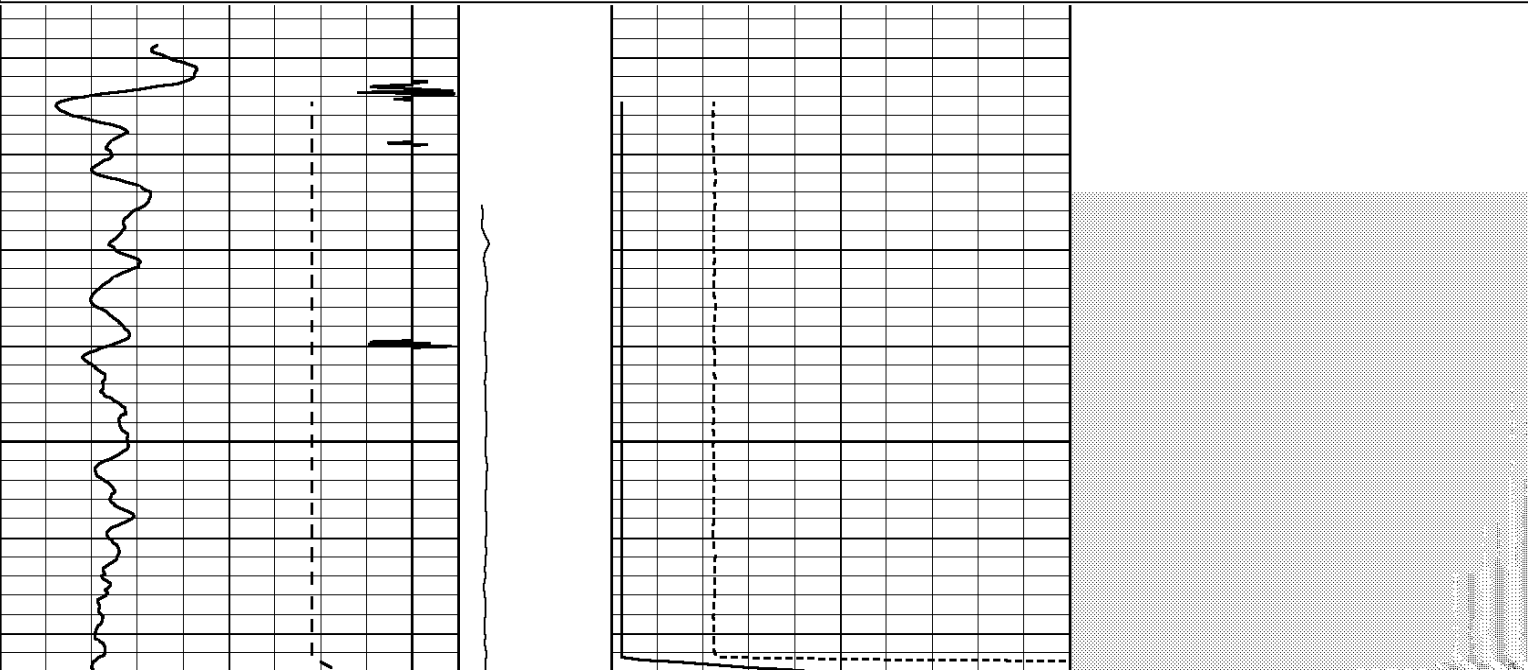
GAMMA RAY		CCL		CBL-MSG			
Run No.	ONE	Run No.	ONE	Run No.	ONE	Run No.	
Serial No.	397	Serial No.	397	Serial No.	397	Serial No.	
Model No.	CBL_DC	Model No.	CBL_DC	Model No.	CBL_DC	Model No.	
Diameter	3.25"	Diameter	3.25"	Diameter	3.25"	Diameter	
LOGGING DATA							
General Data							
Pass	Depths		Well Head	Speed	Logging Run Comments		
No.	From	To	Pressure	Ft/Min			
ONE	8856'	SURFACE	0 PSI	60	MAIN LOG SECTION		
TWO	8856'	8650'	0 PSI	60	REPEAT LOG SECTION		
	GAMMA RAY		CCL		MSG		
Pass	Scale		Scale		Scale		Scale
No.	L	R	L	R	L	R	L
ONE	0	200	-9	1	200	1200	
DIRECTIONAL INFORMATION							
Maximum Deviation			deg. @		KOP		

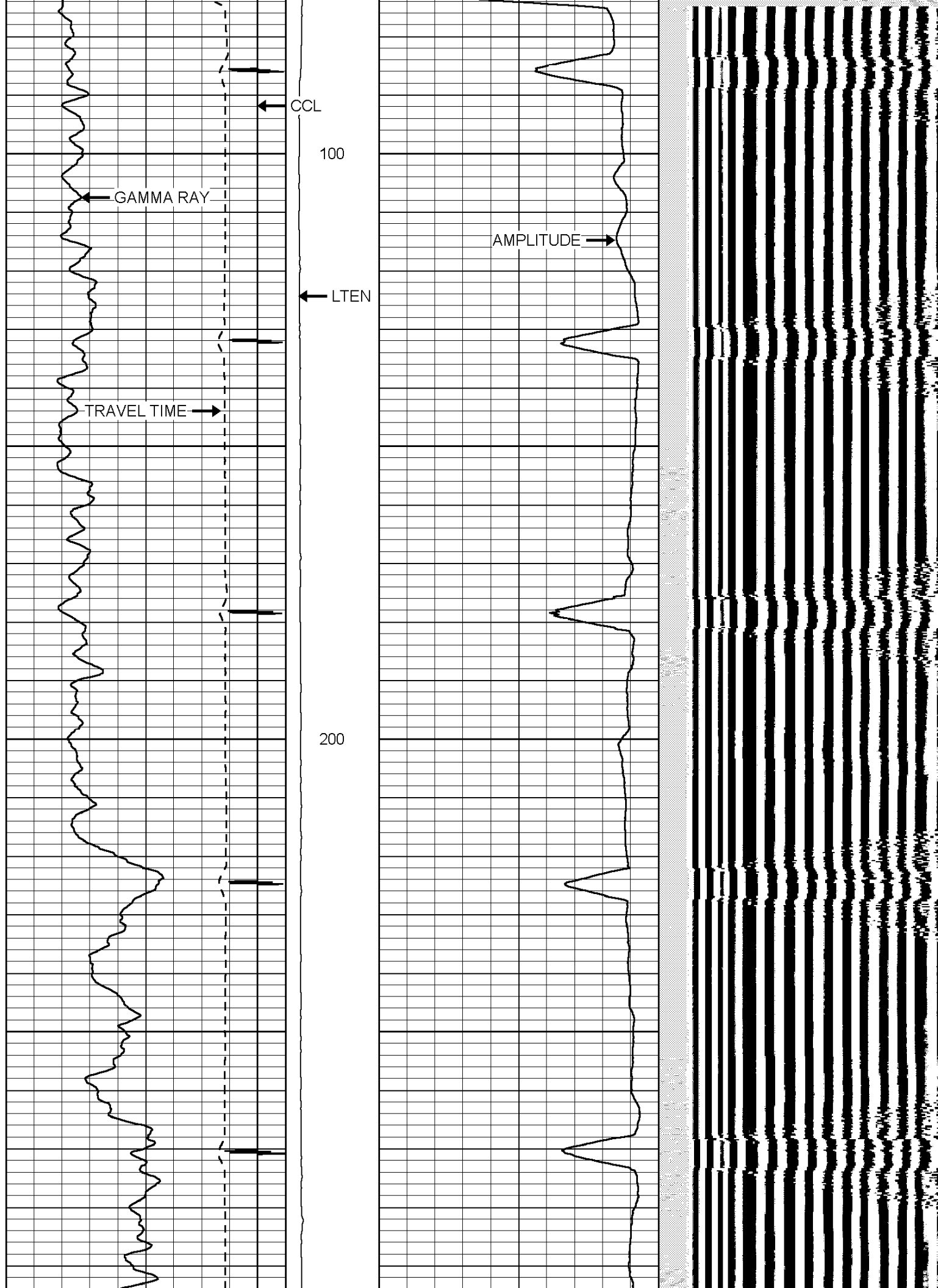
HALLIBURTON

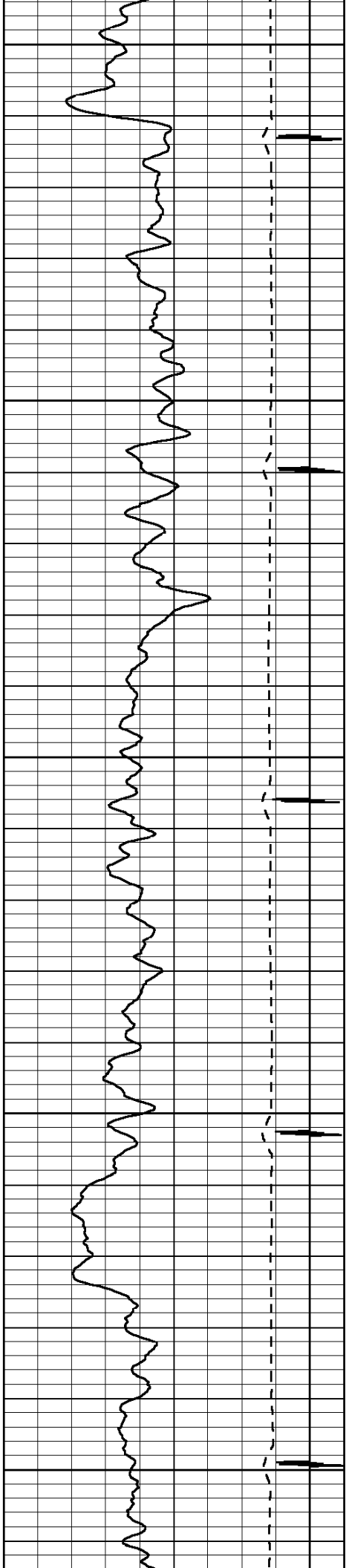
ACOUSTIC CEMENT BOND LOG
MAIN LOG SECTION
5"=100'

Database File:	jolley_21_3d_cbl.db
Dataset Pathname:	CBL/MAINF
Presentation Format:	cbl_main
Dataset Creation:	Sun Dec 16 13:54:04 2007
Charted by:	Depth in Feet scaled 1:240

360	TRAVEL TIME (usec)	160	LTEN	0	AMP AMPLITUDE (mV)	10	200	MSG	1200
-9	Collar Locator	1	0 (lb)3000	0	AMPLITUDE (mV)	100			
0	Gamma Ray (GAPI)	200							



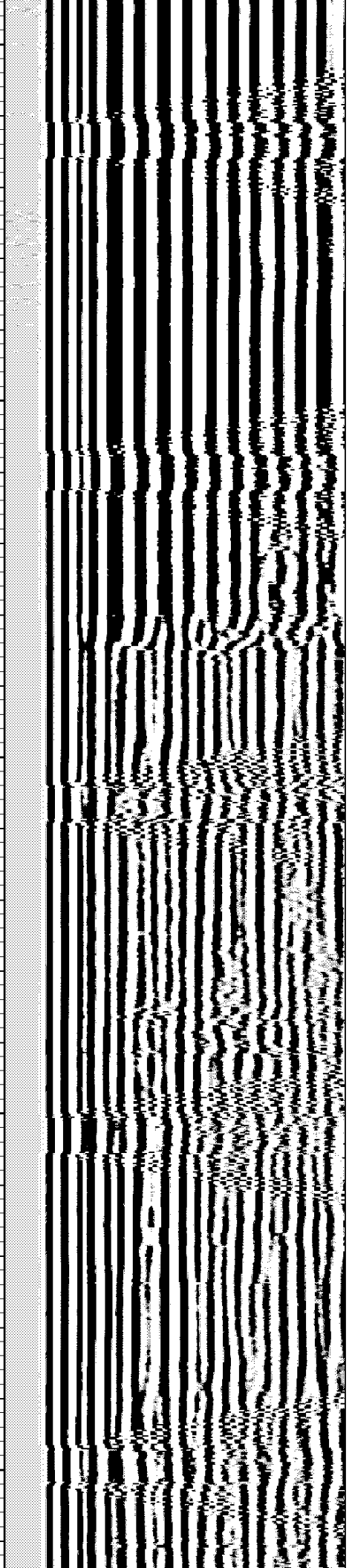
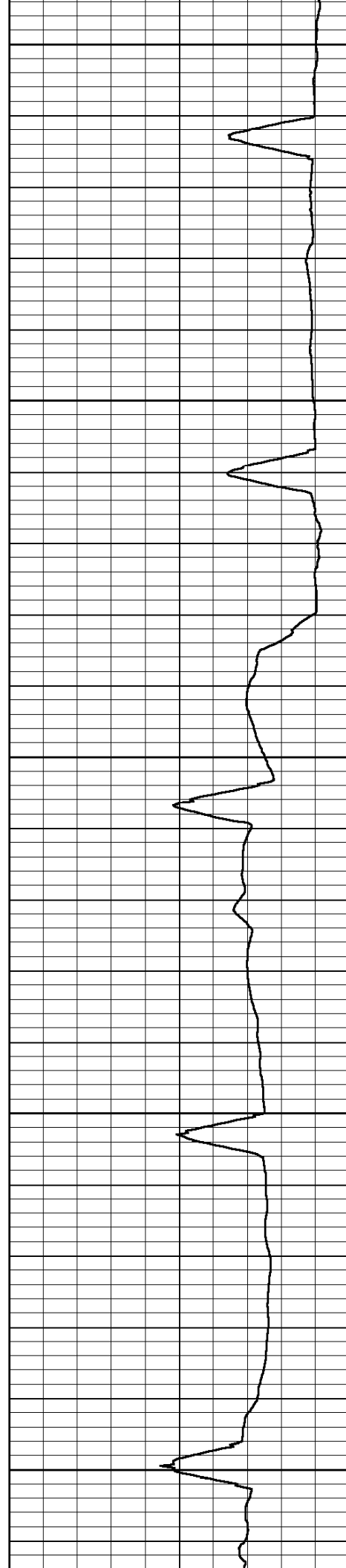


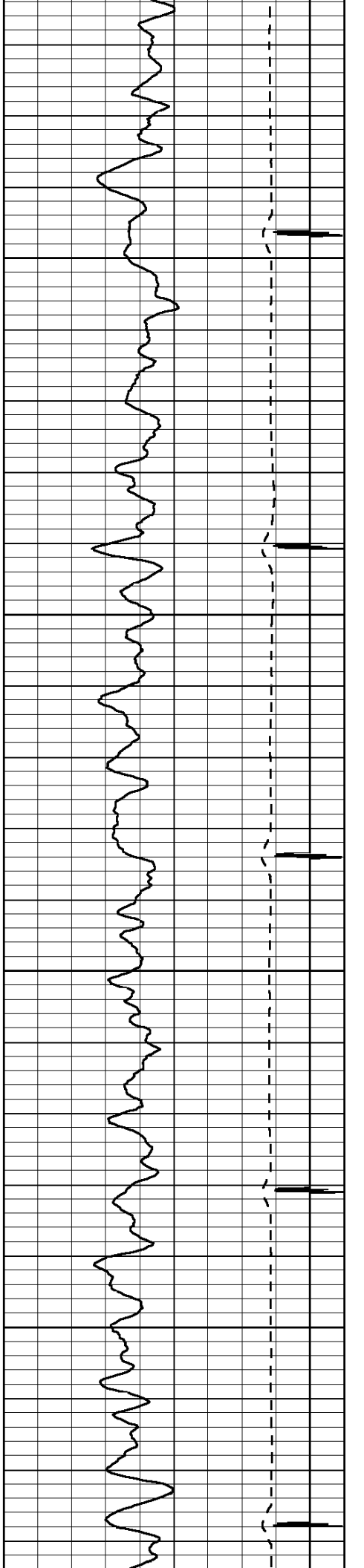


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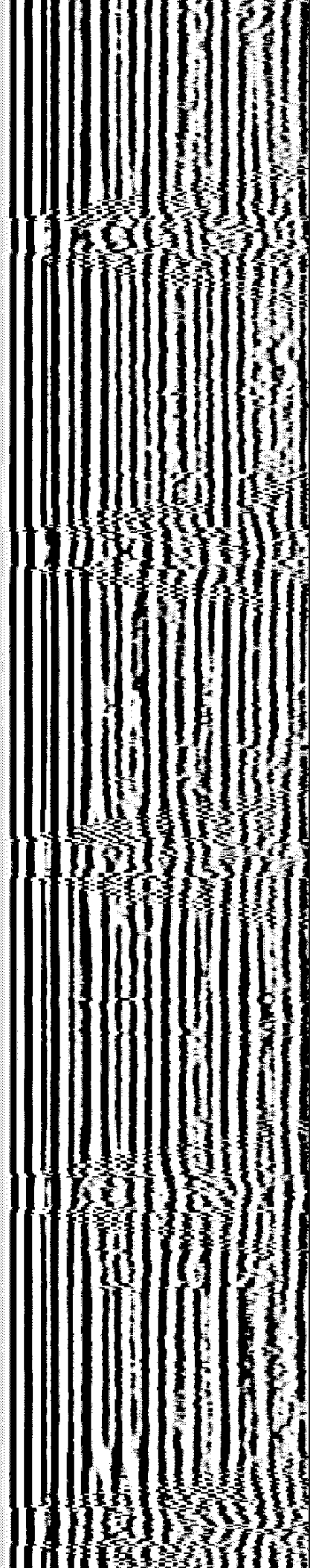
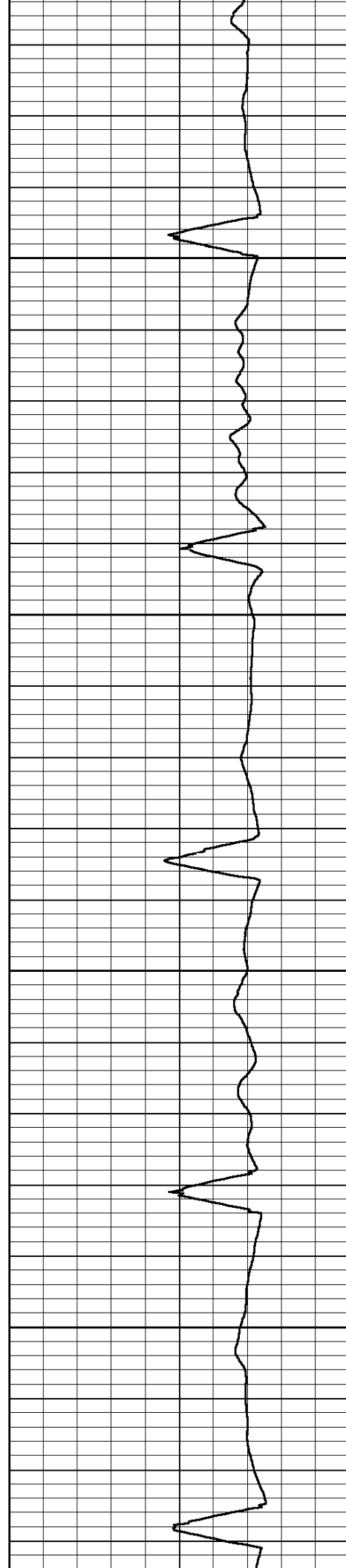
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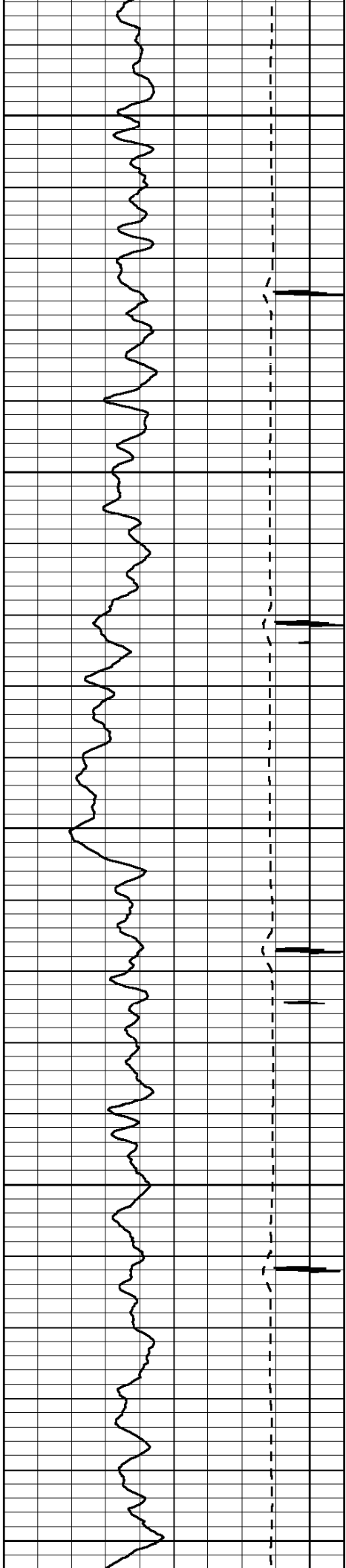




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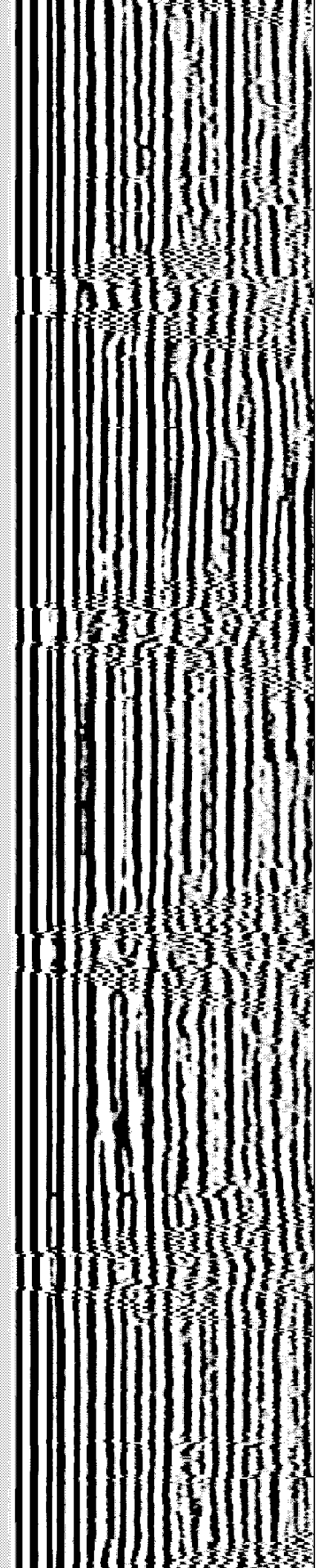
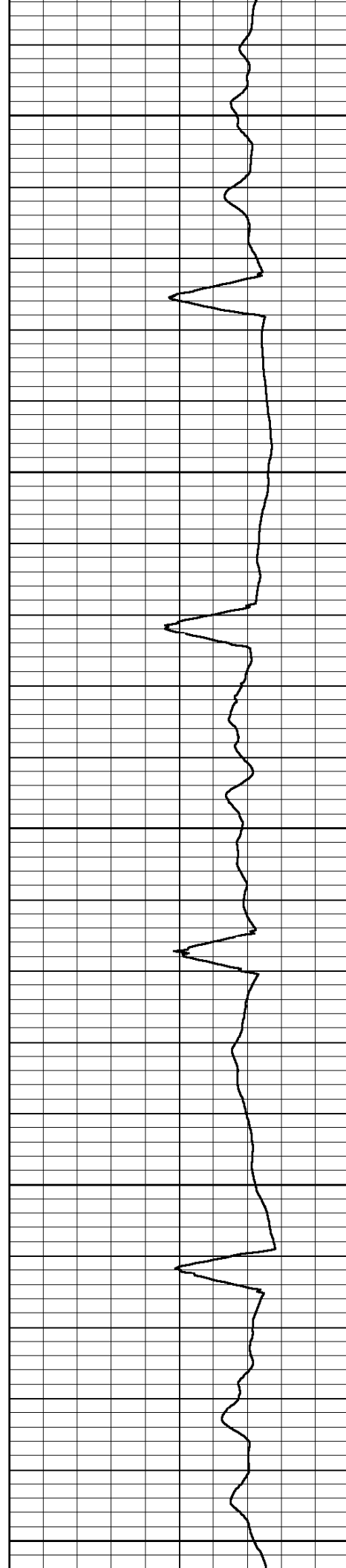
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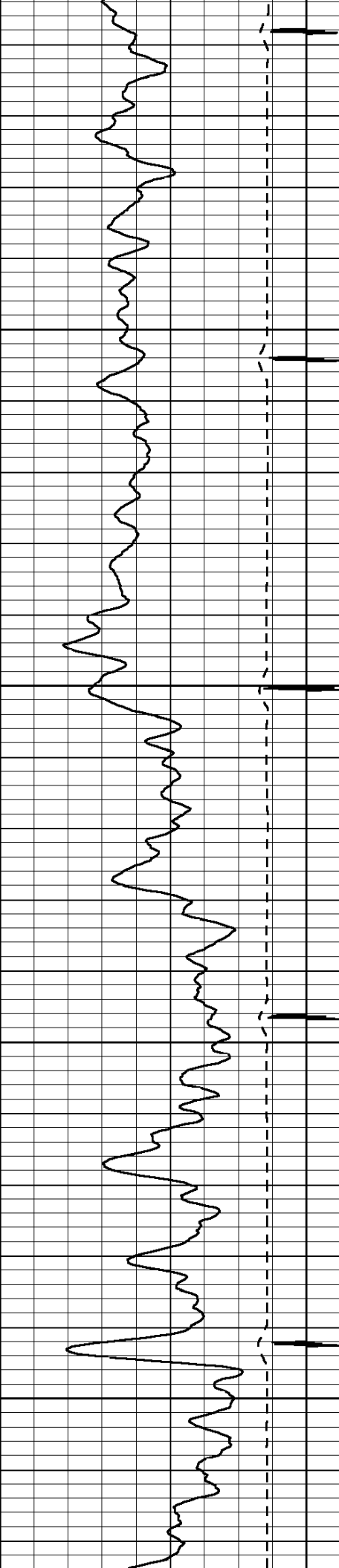




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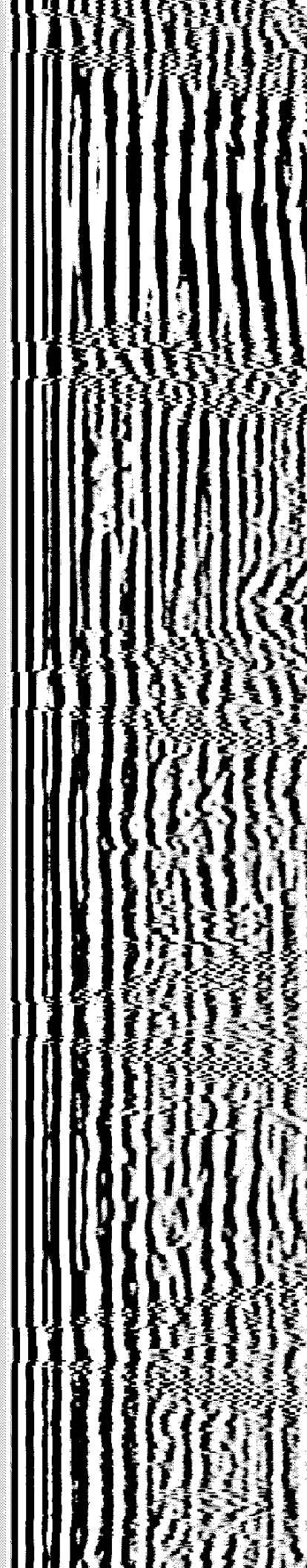
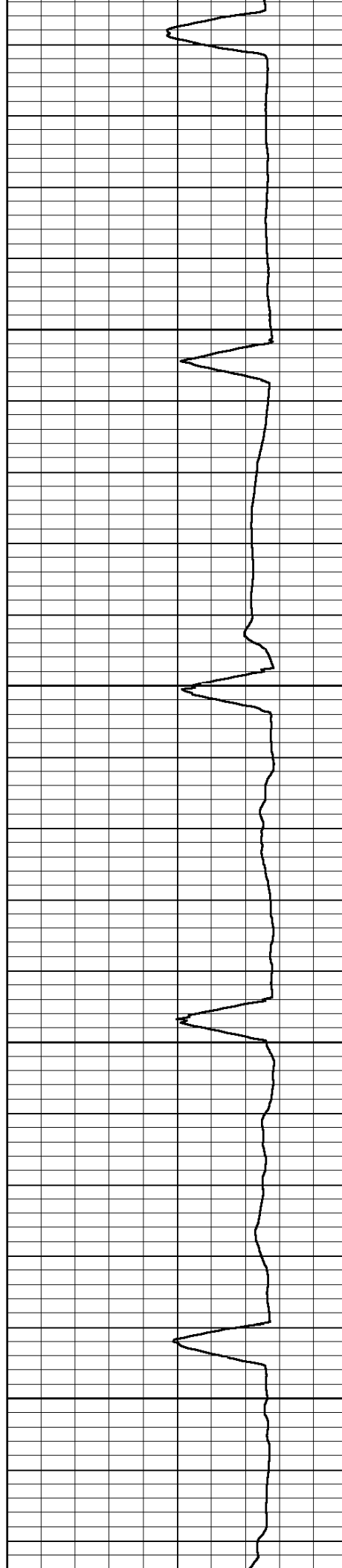
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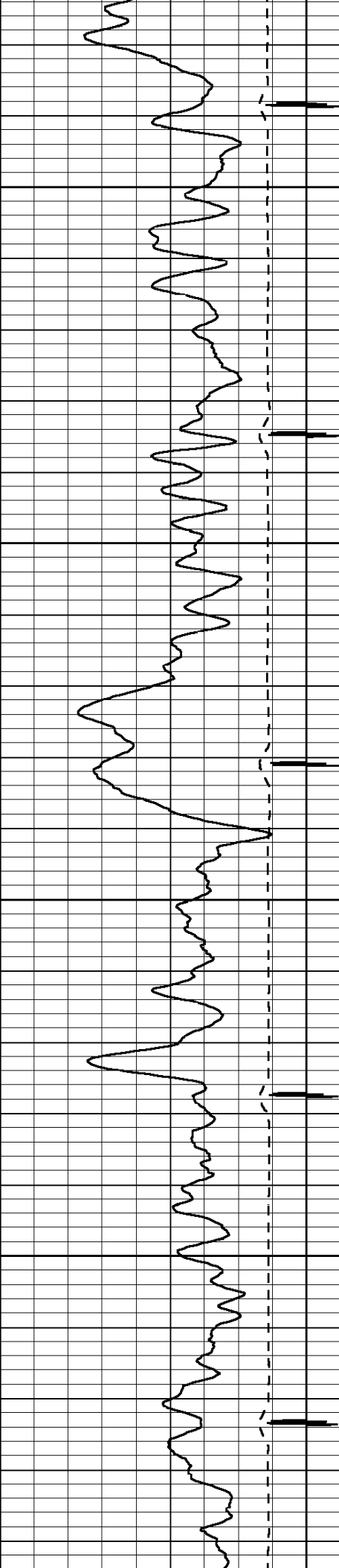




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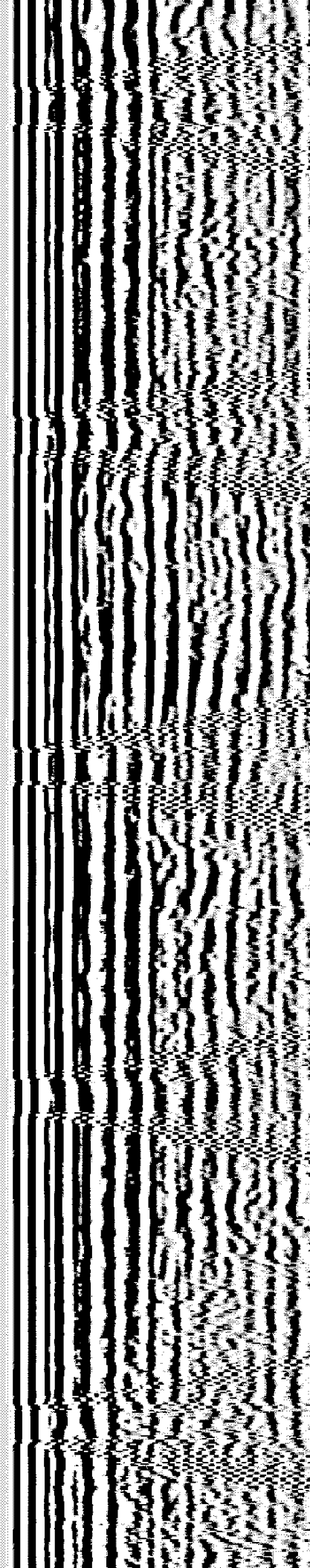
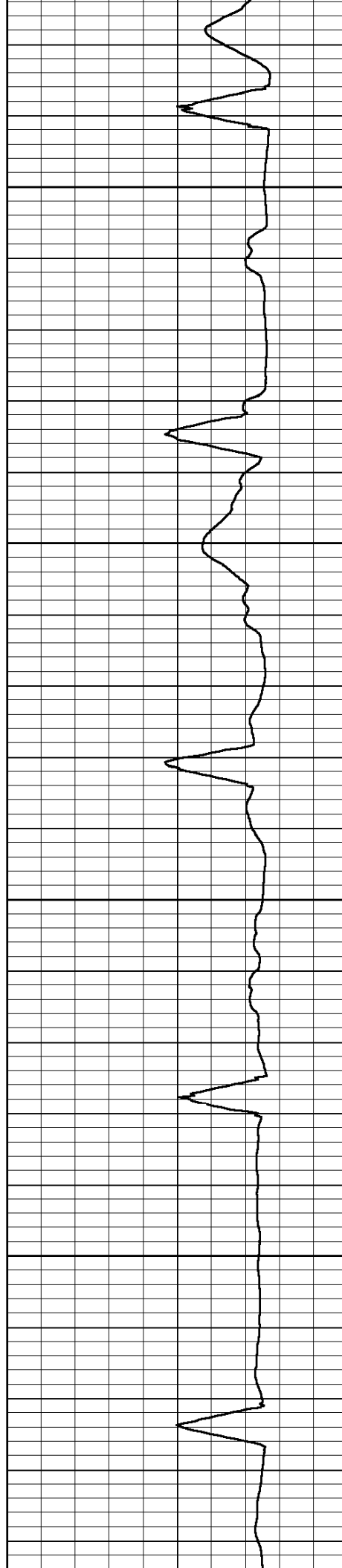
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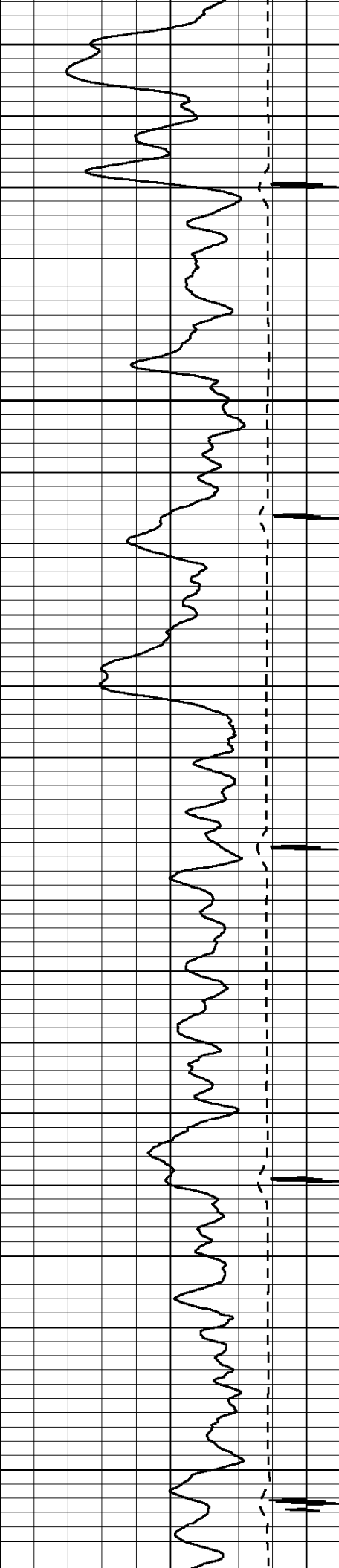




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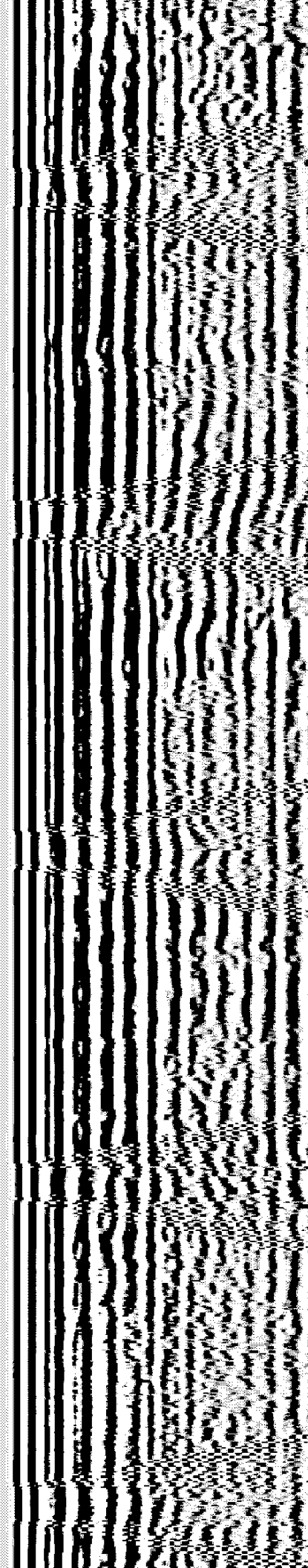
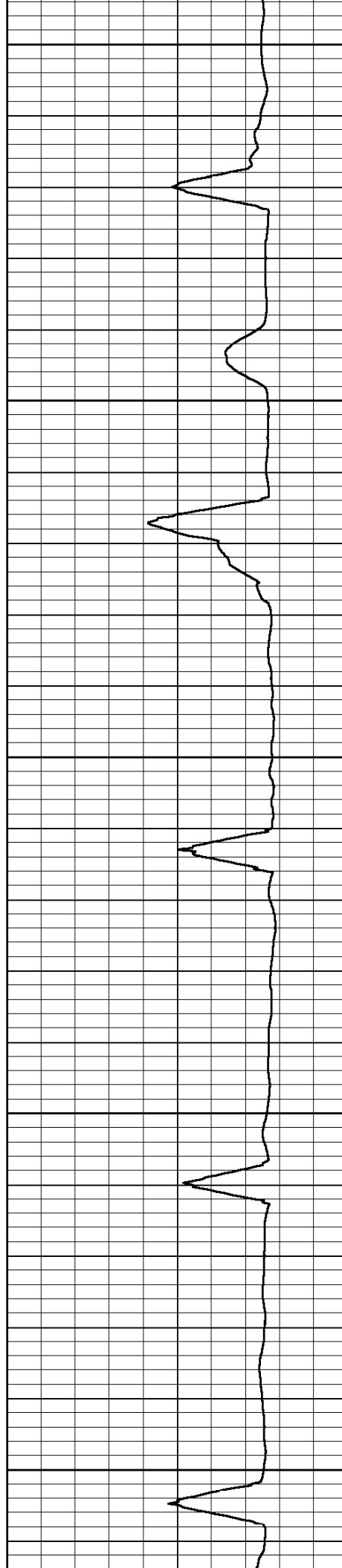


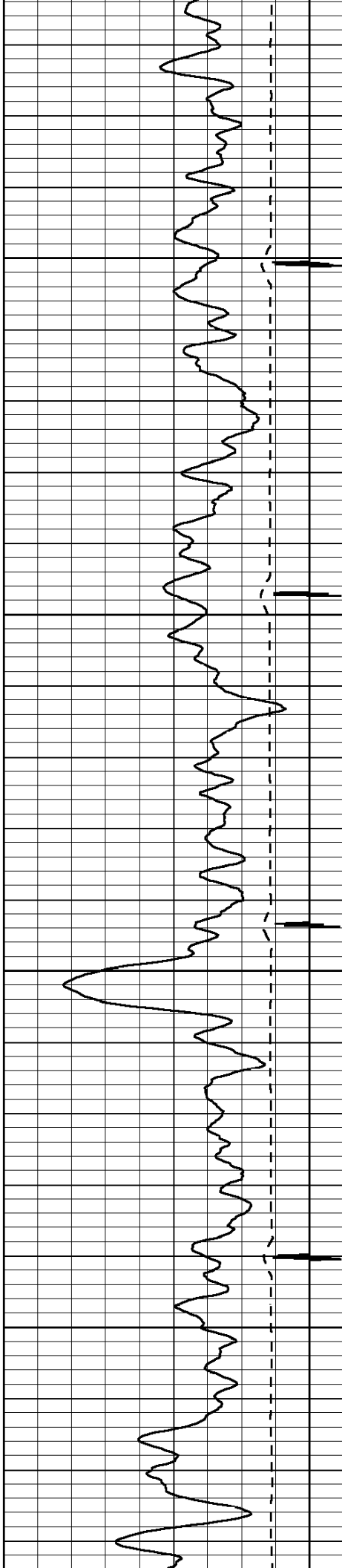


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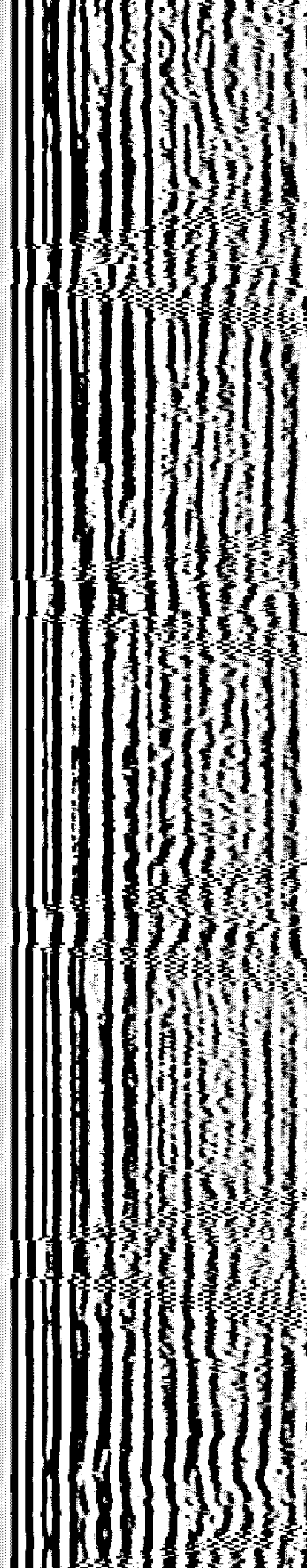
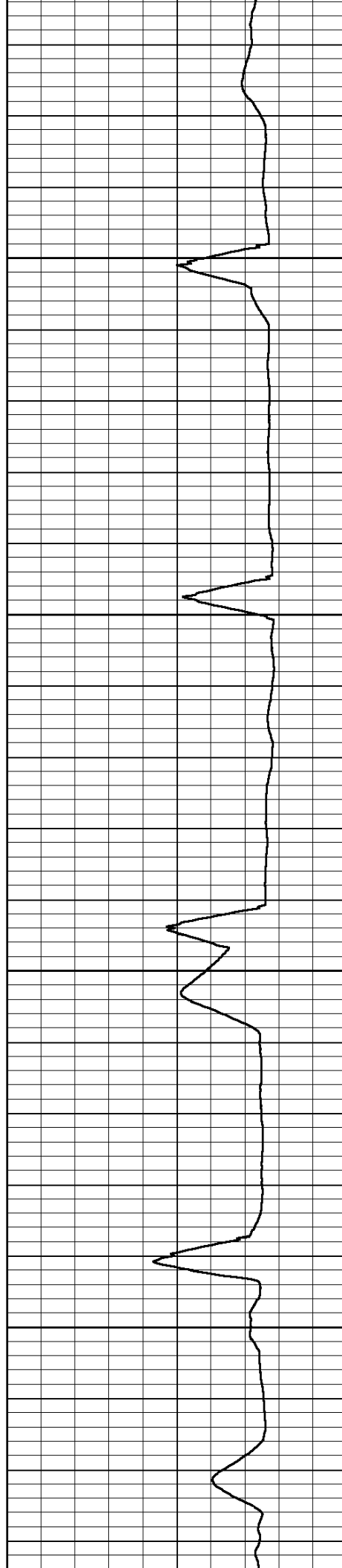
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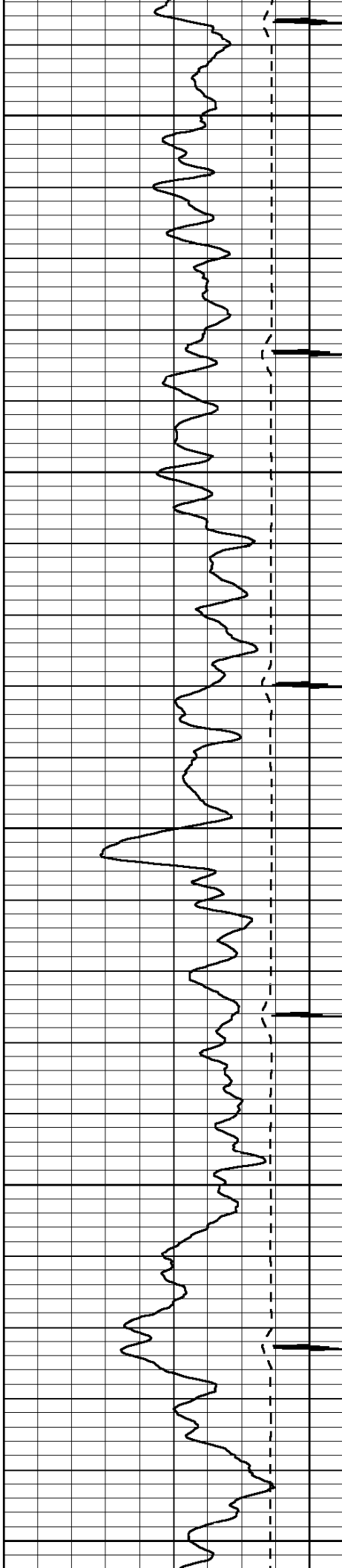




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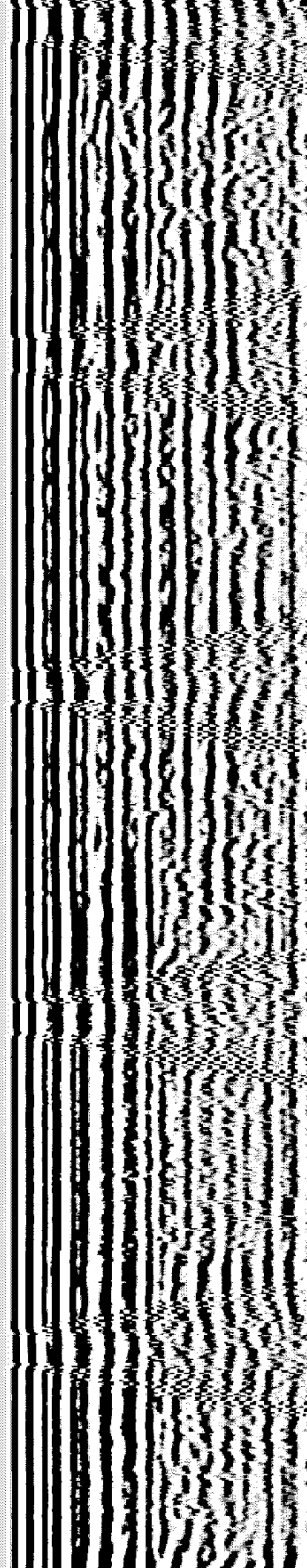
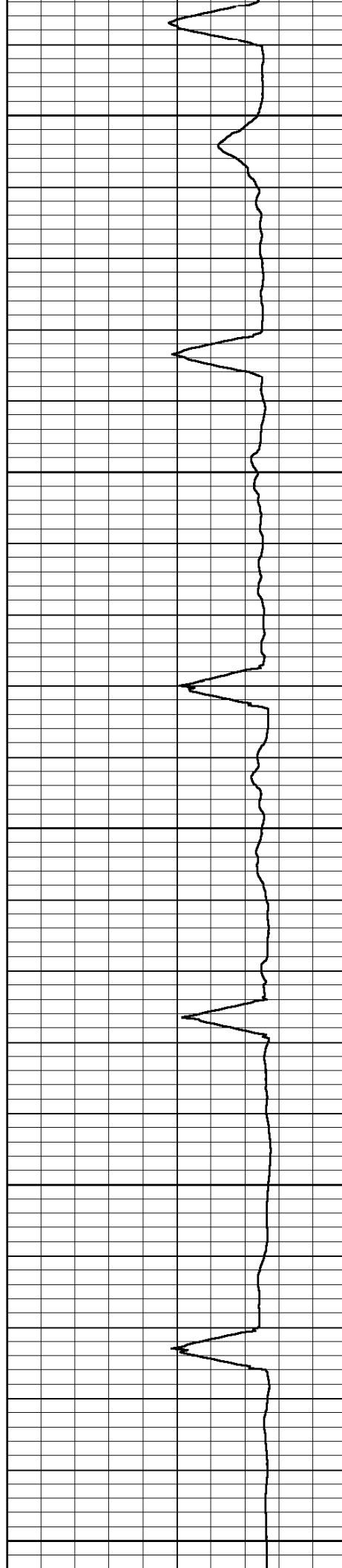
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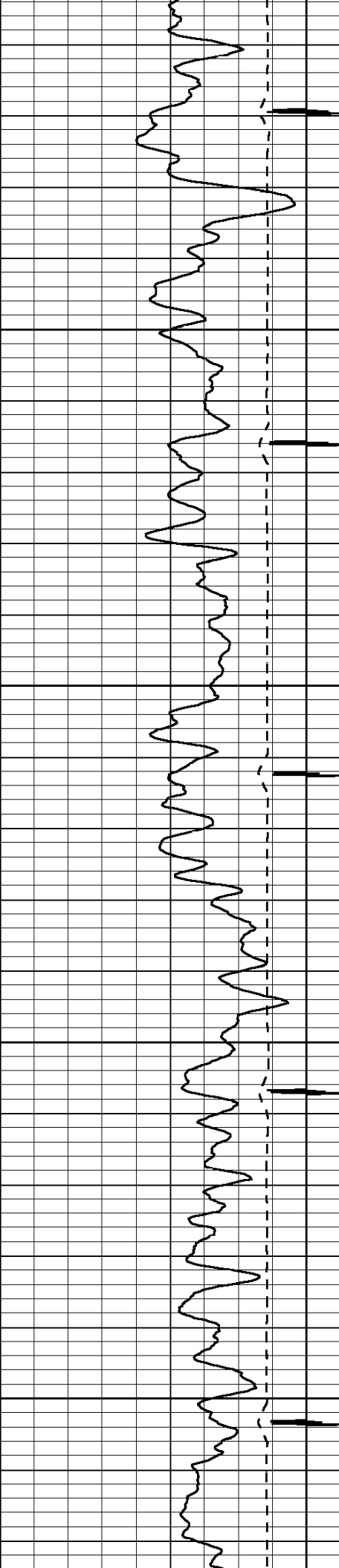




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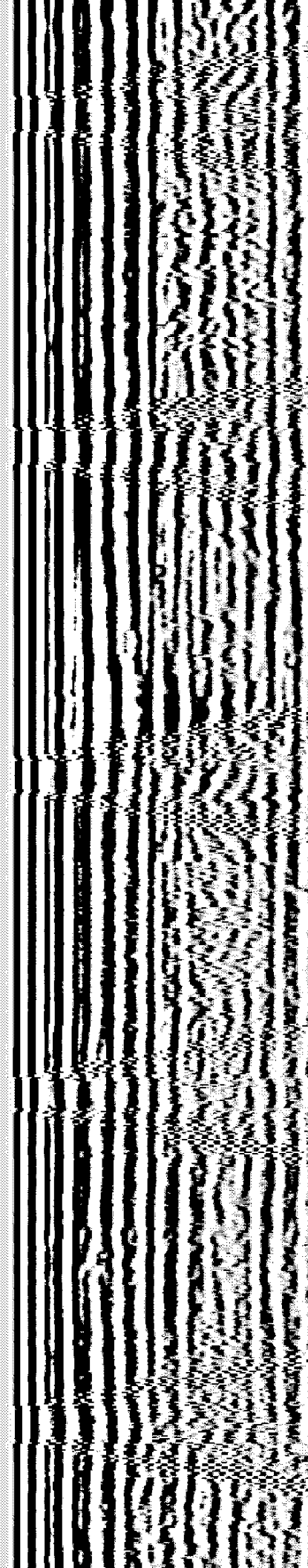
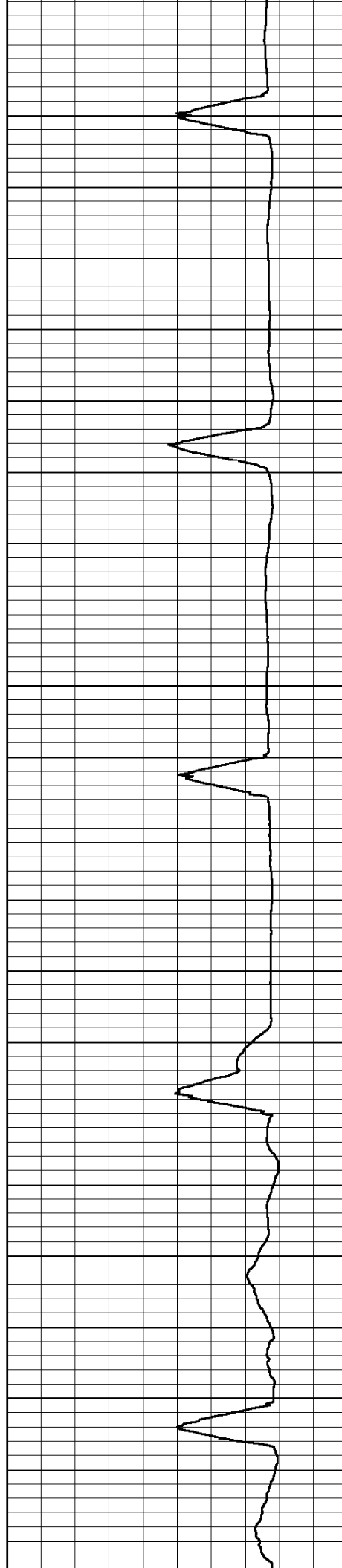
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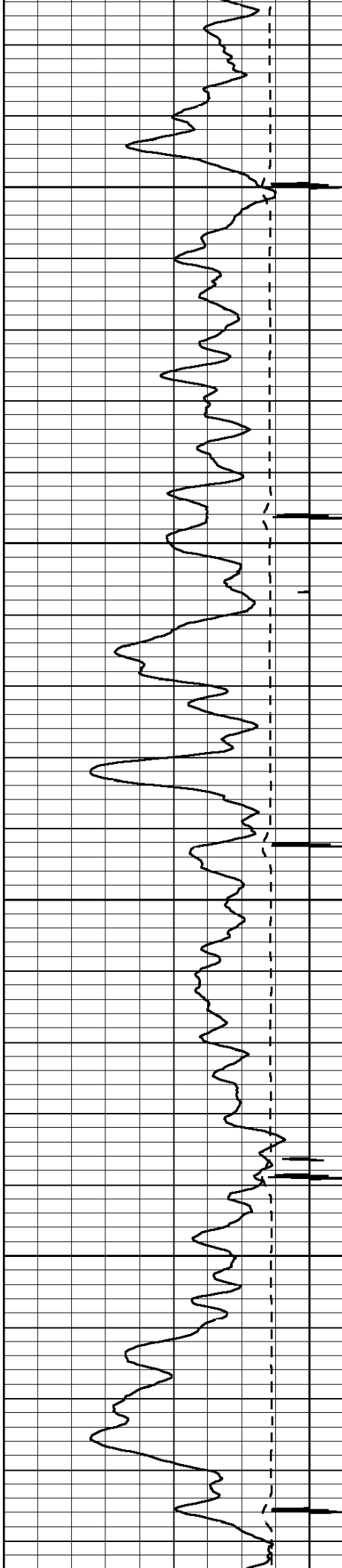




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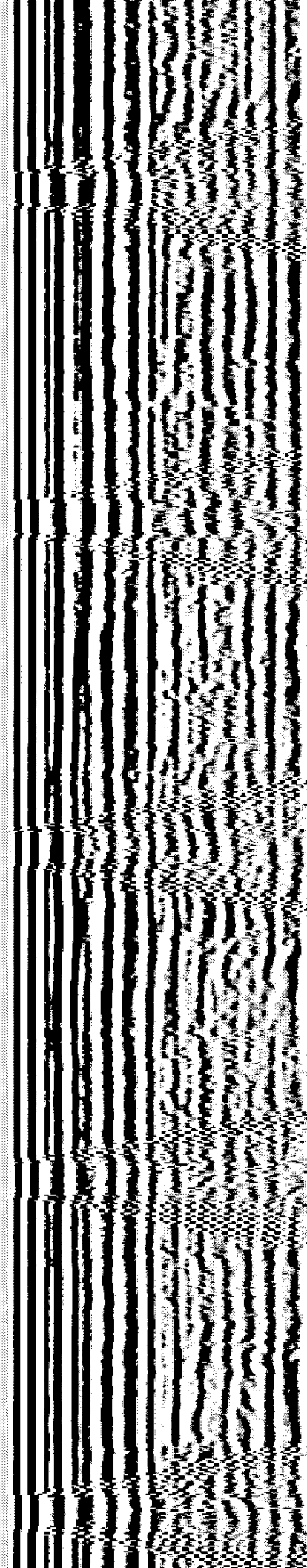
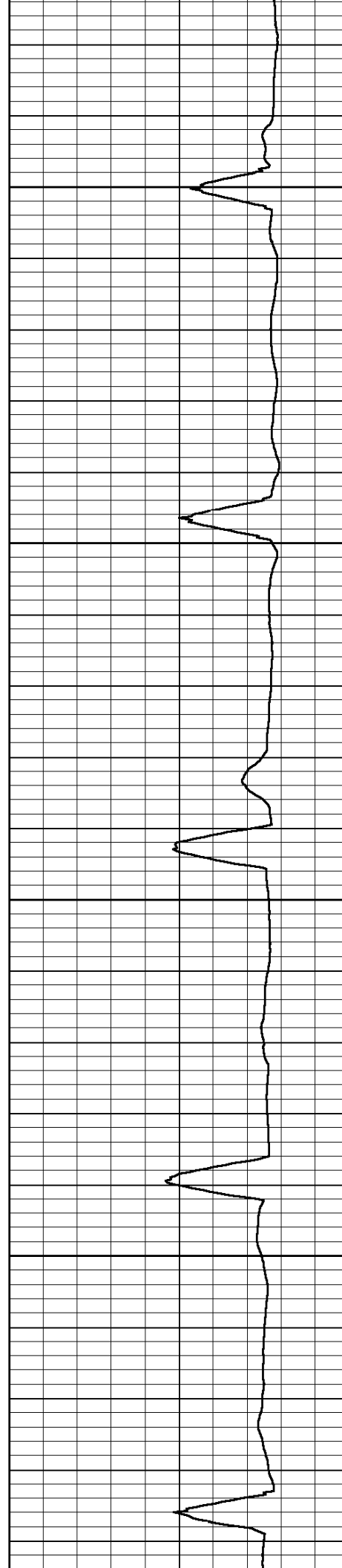
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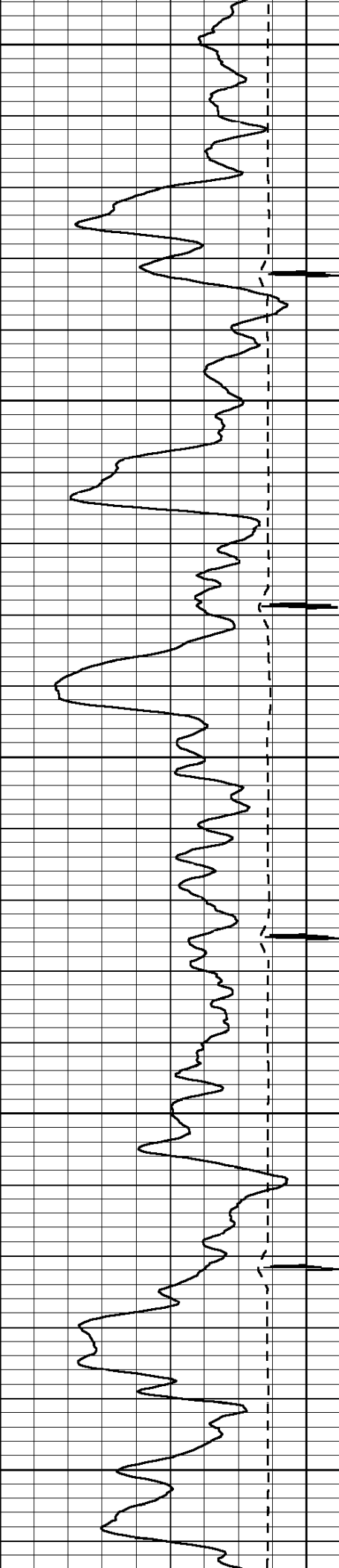




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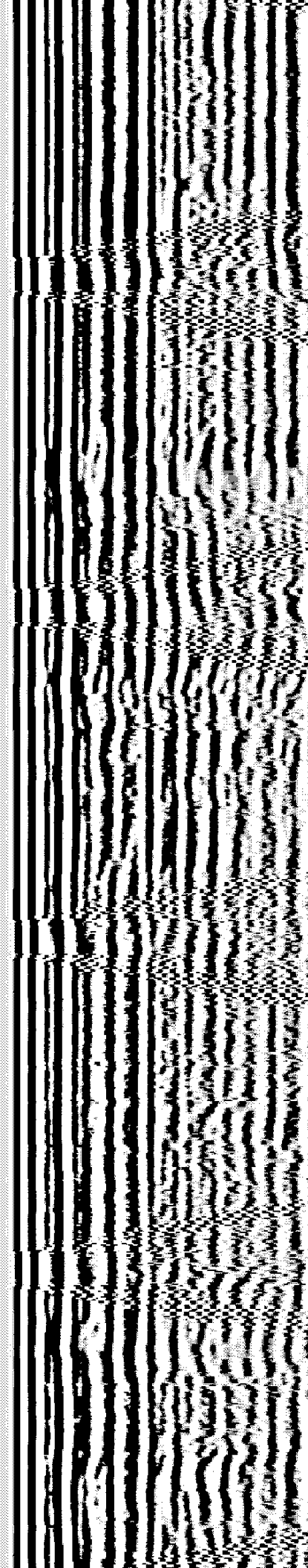
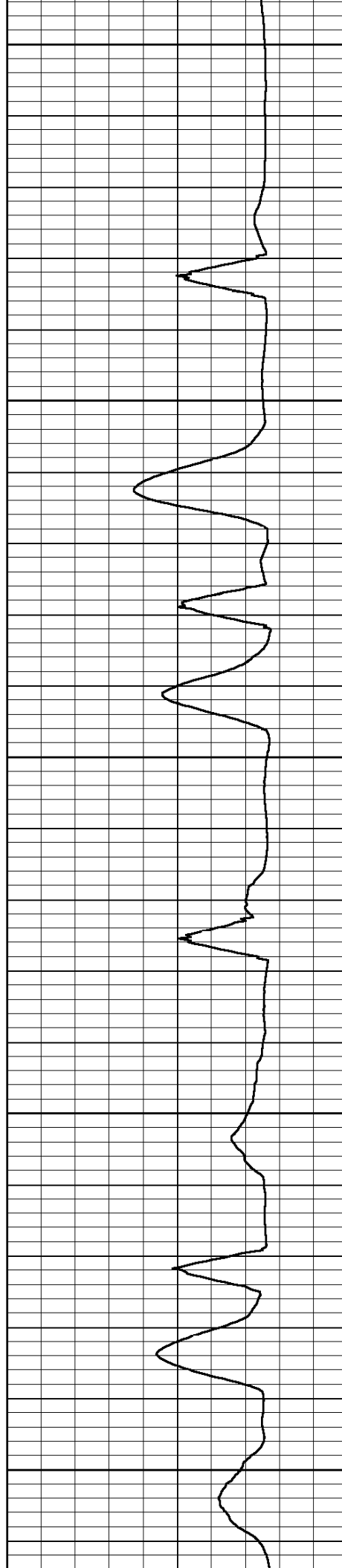


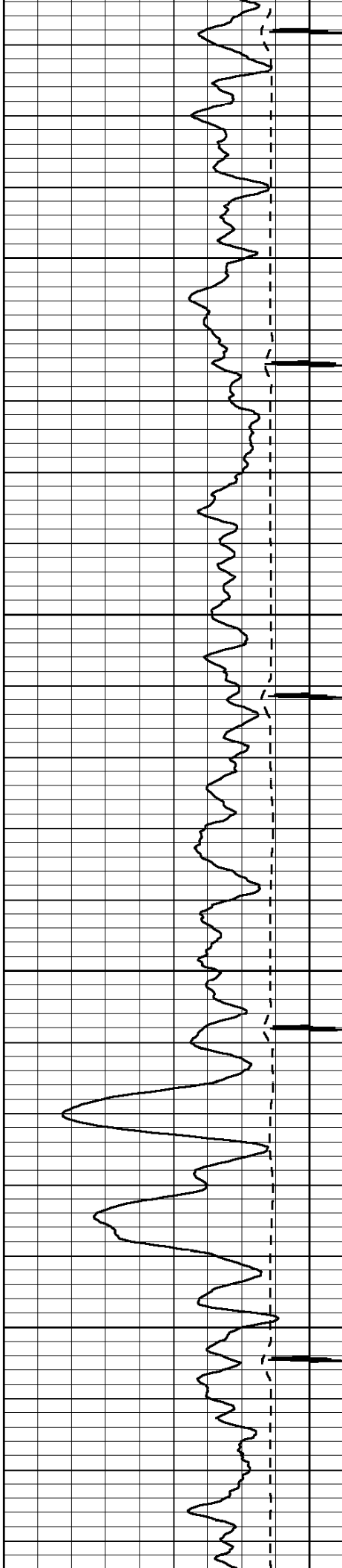


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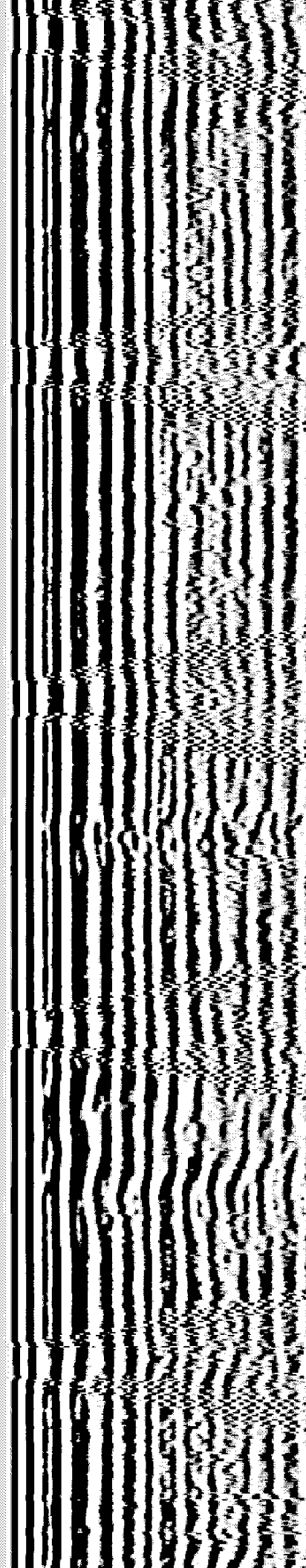
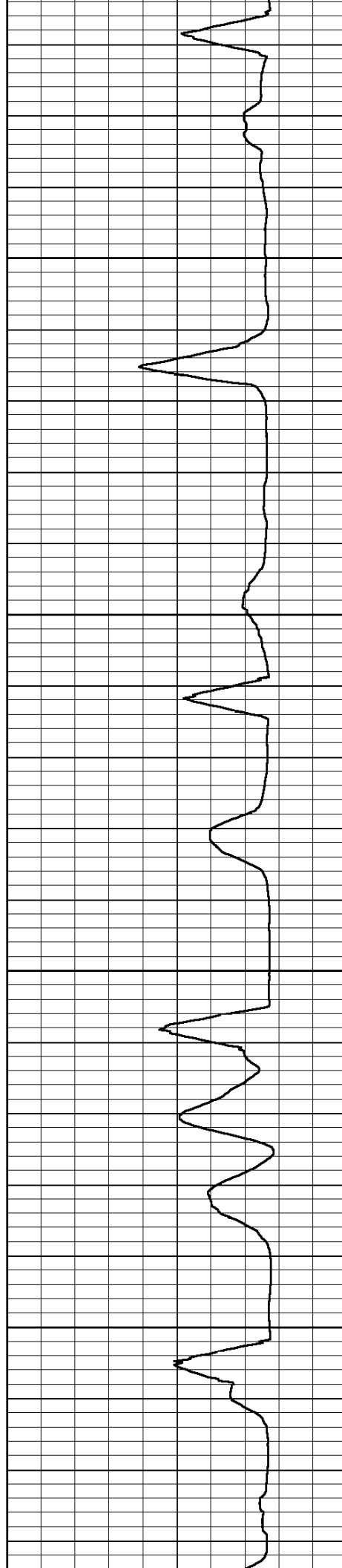
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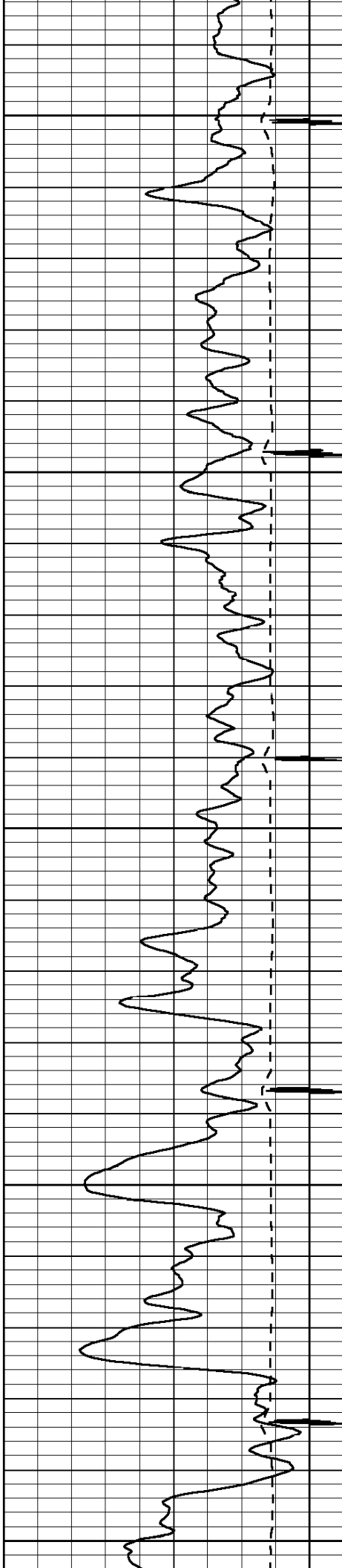




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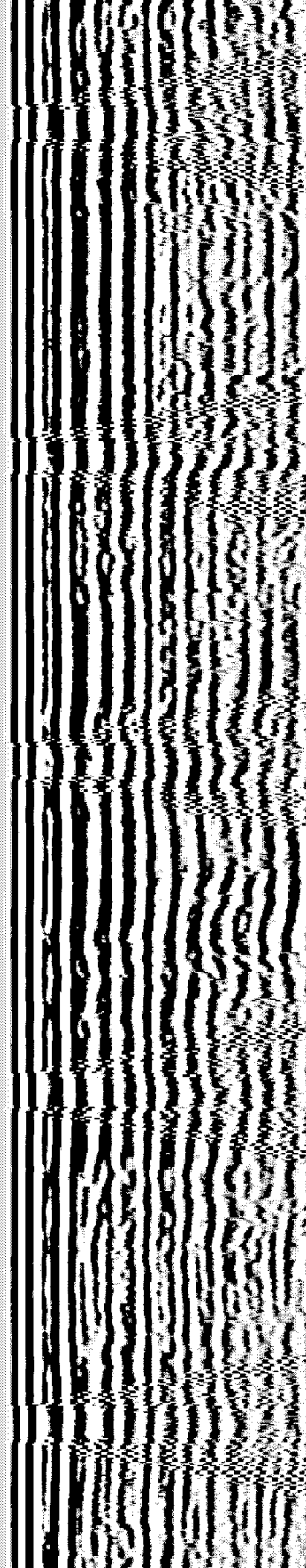
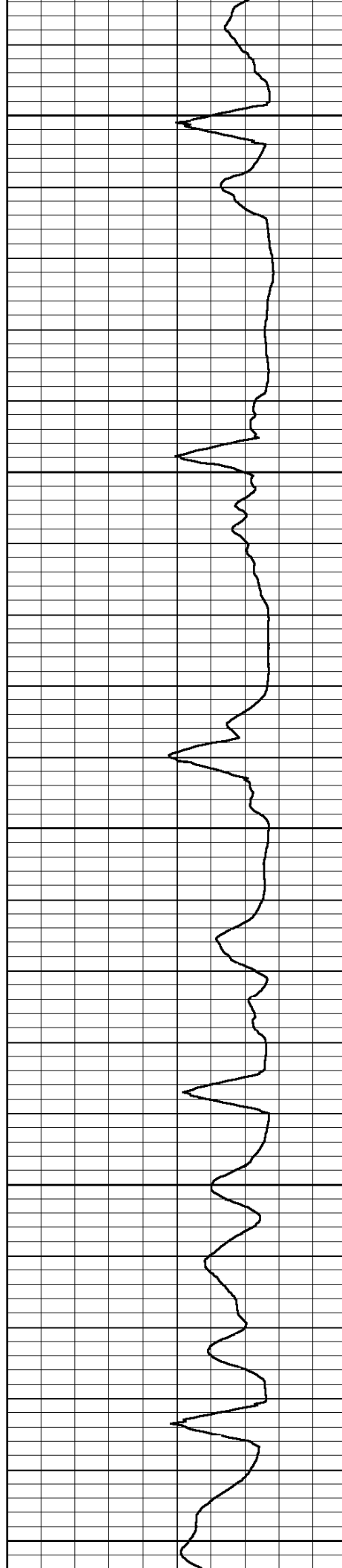
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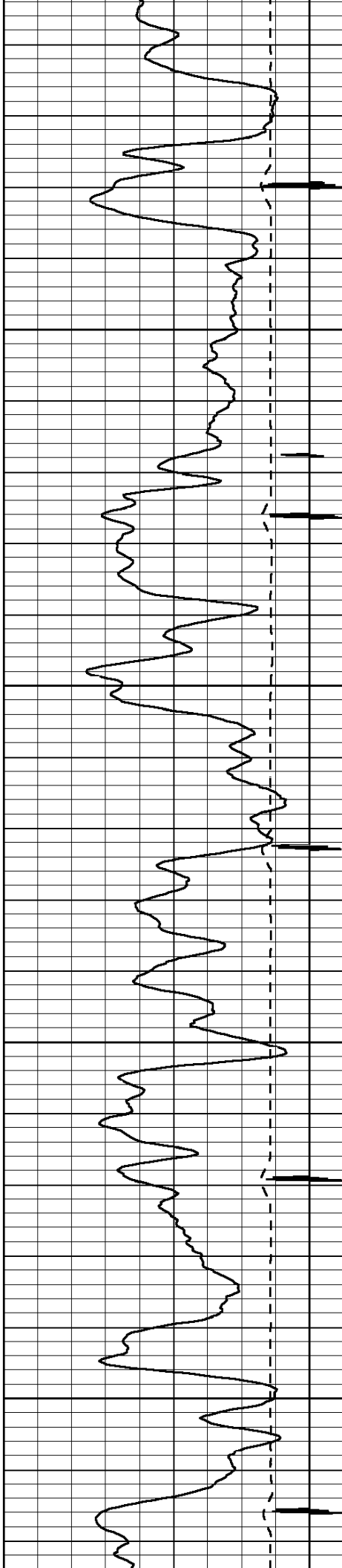




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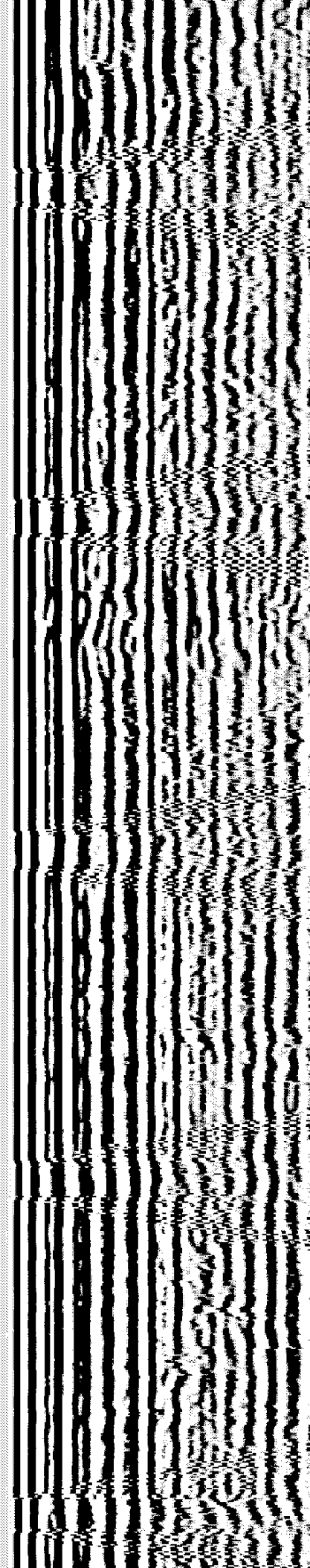
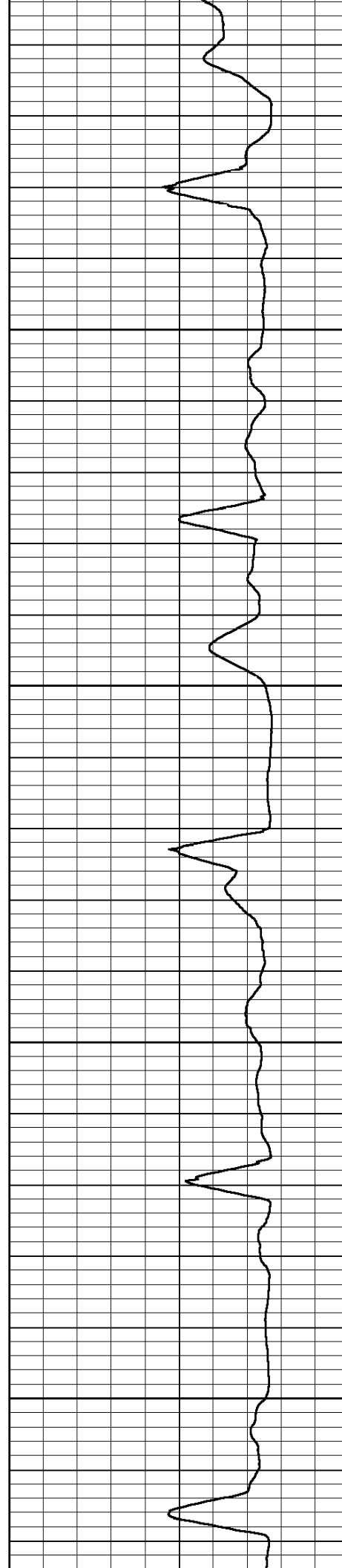
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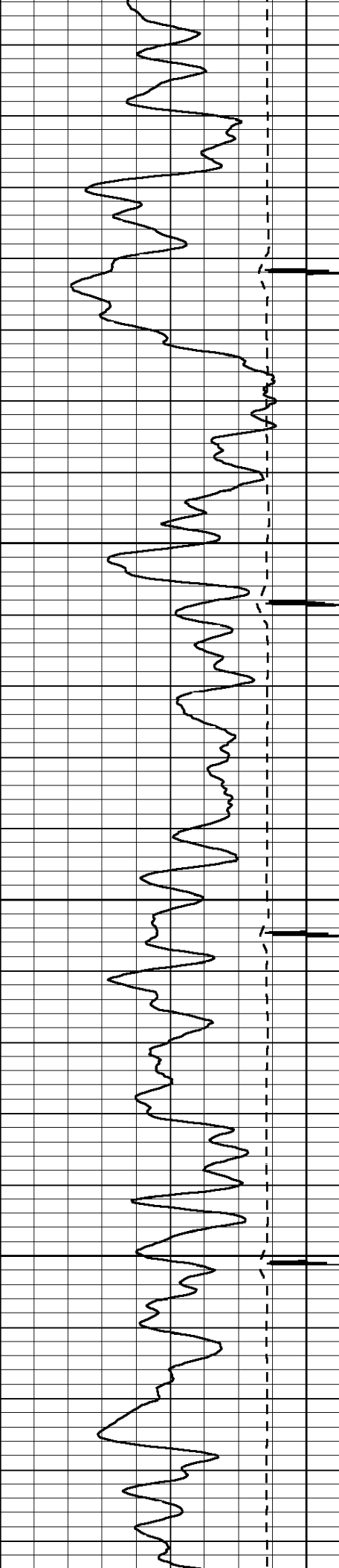




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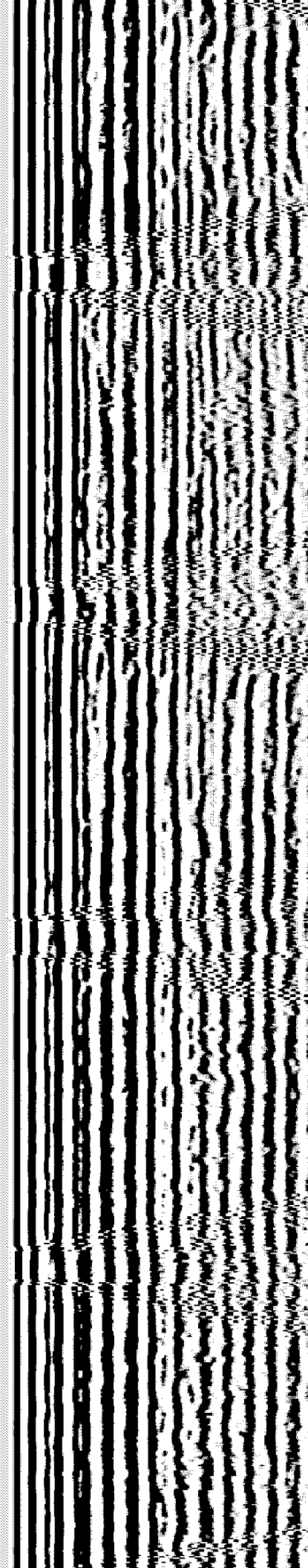
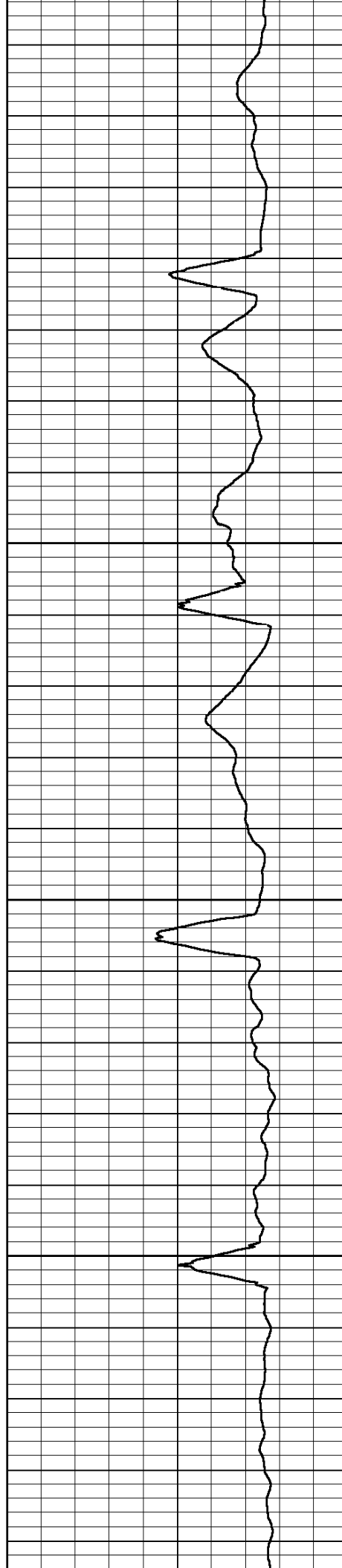
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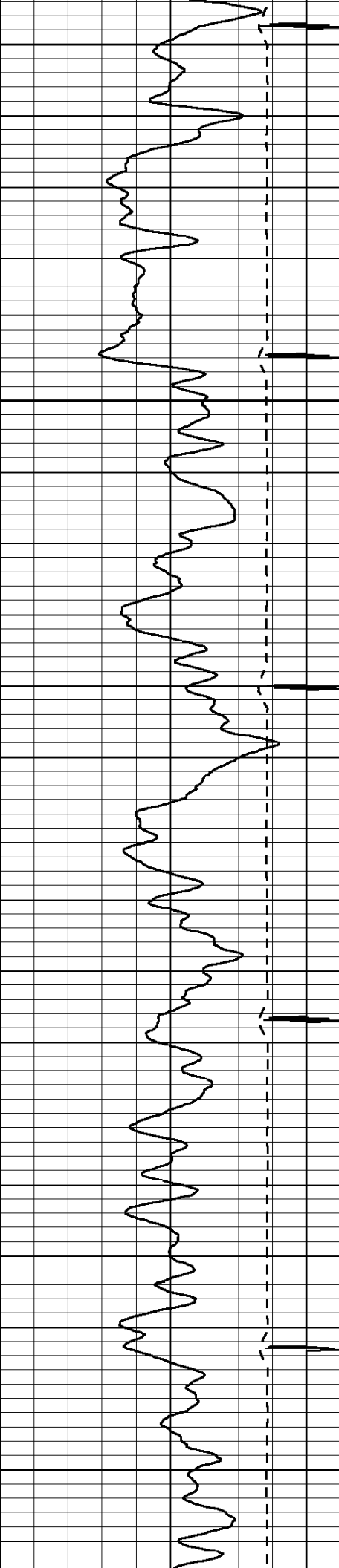




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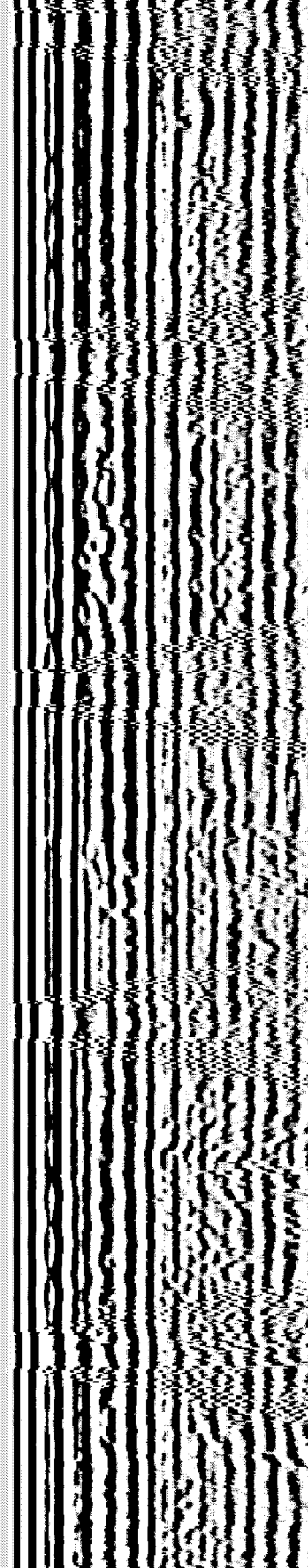
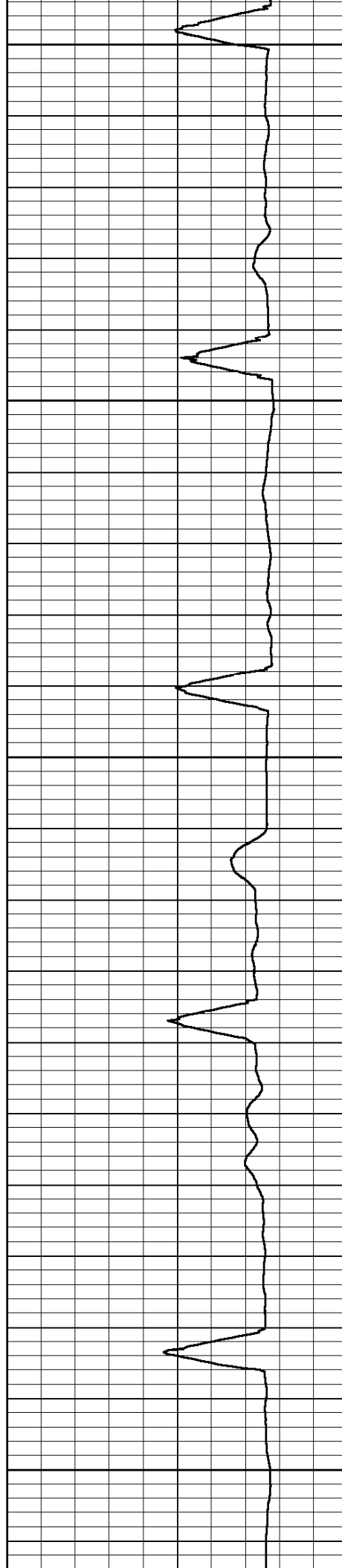


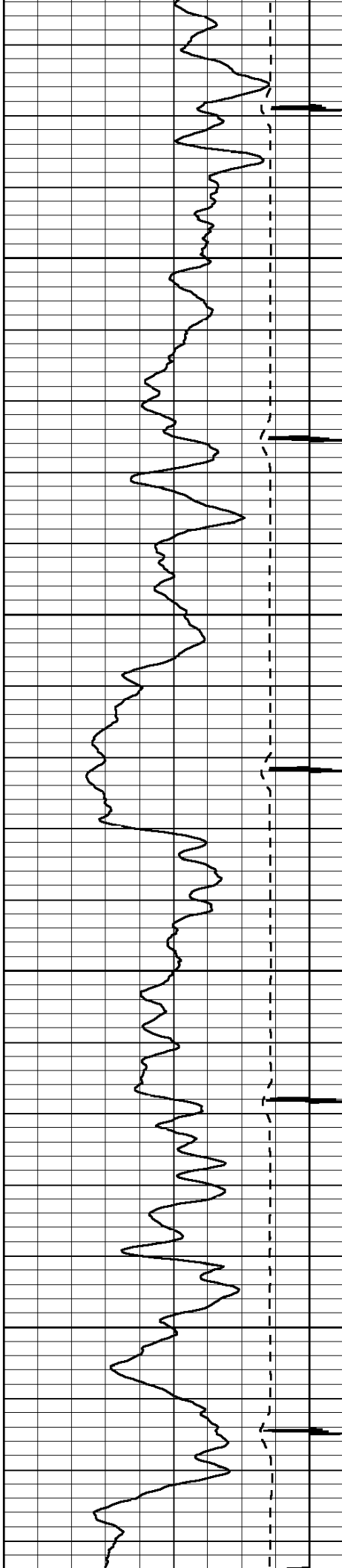


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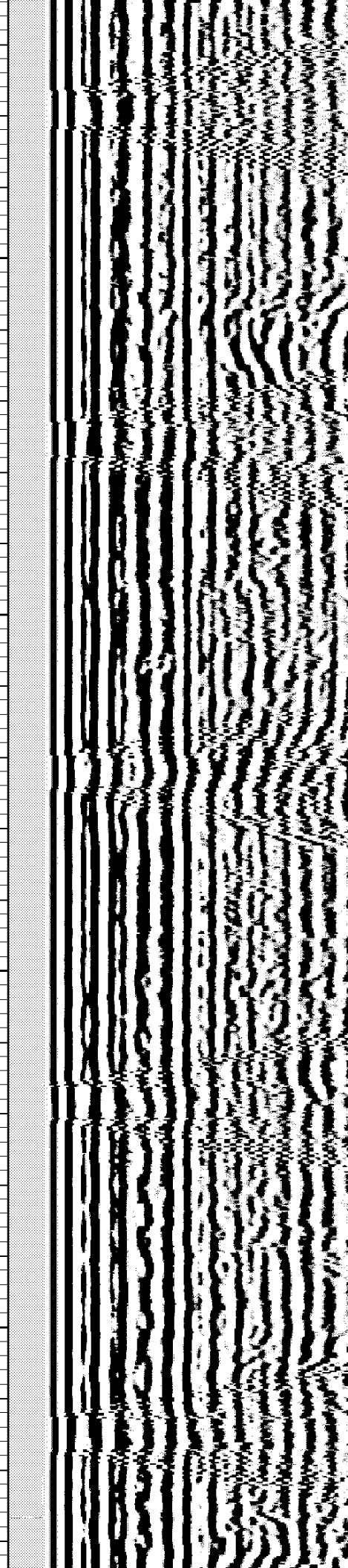
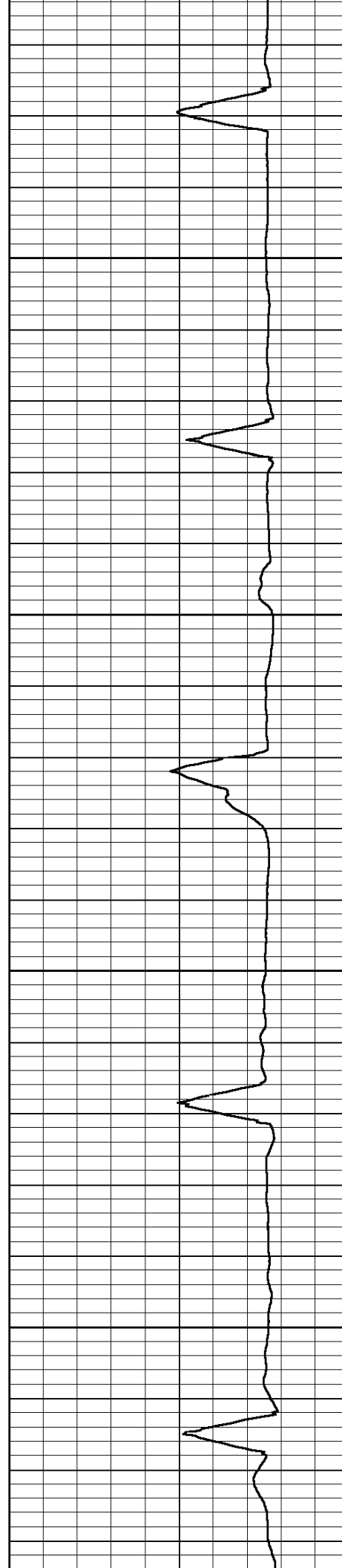
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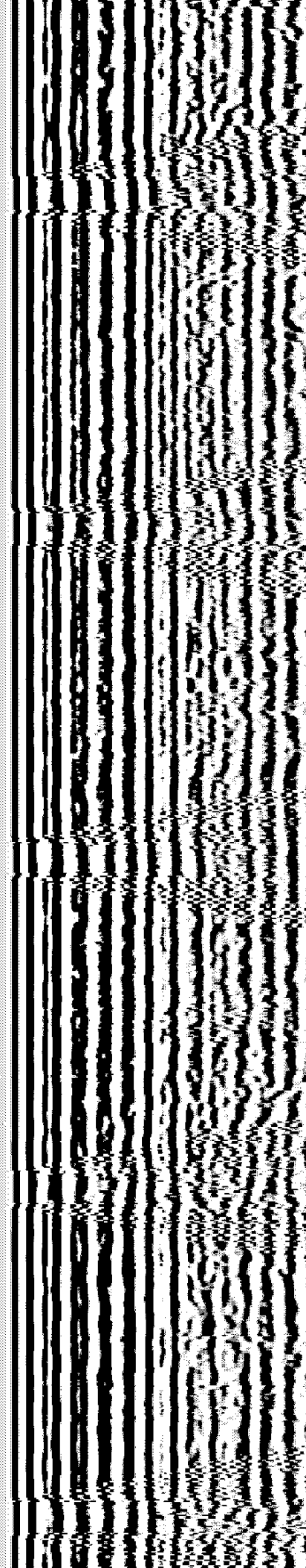
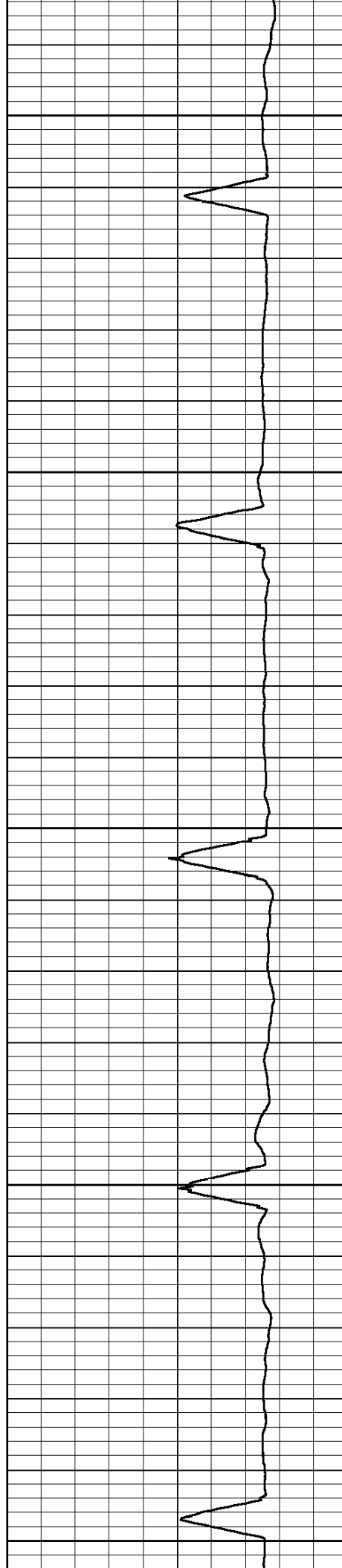
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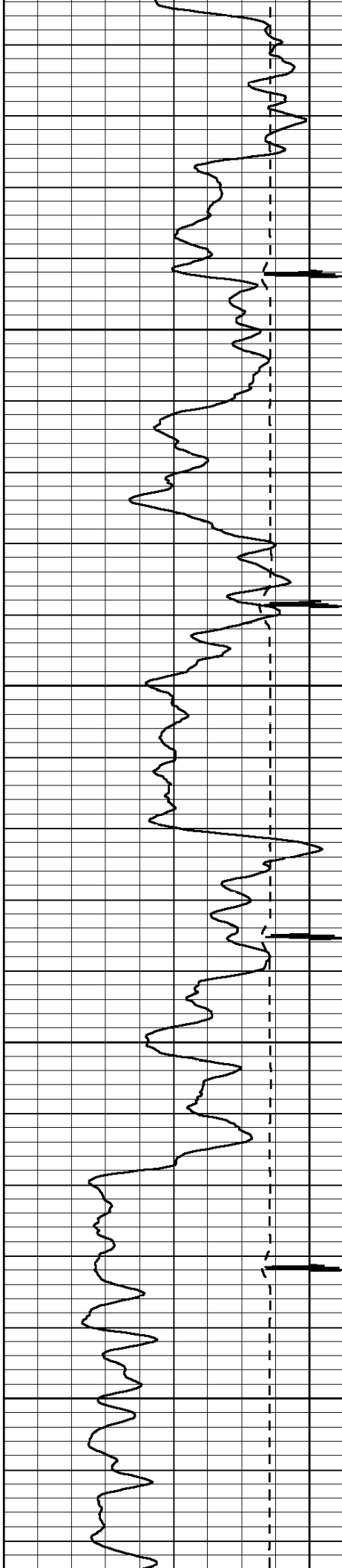




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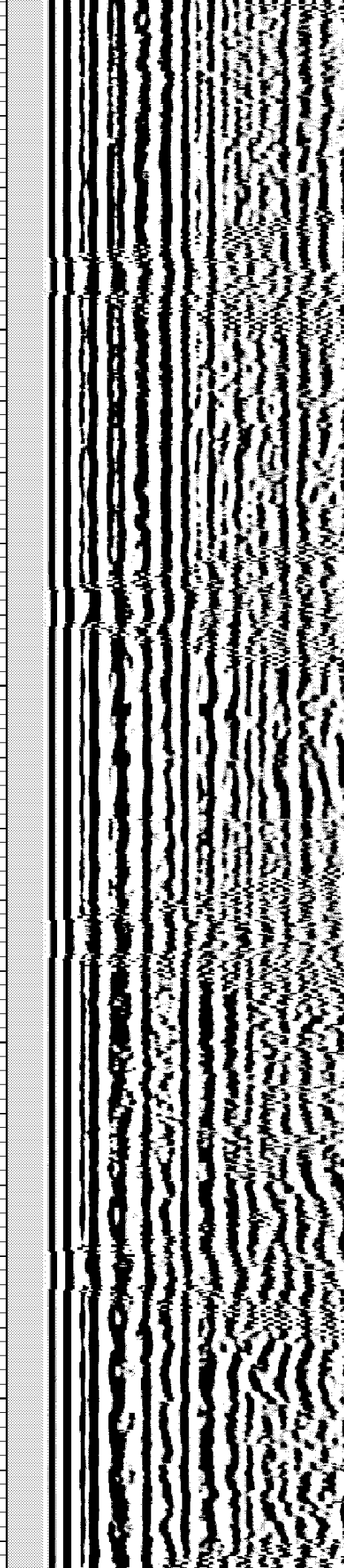
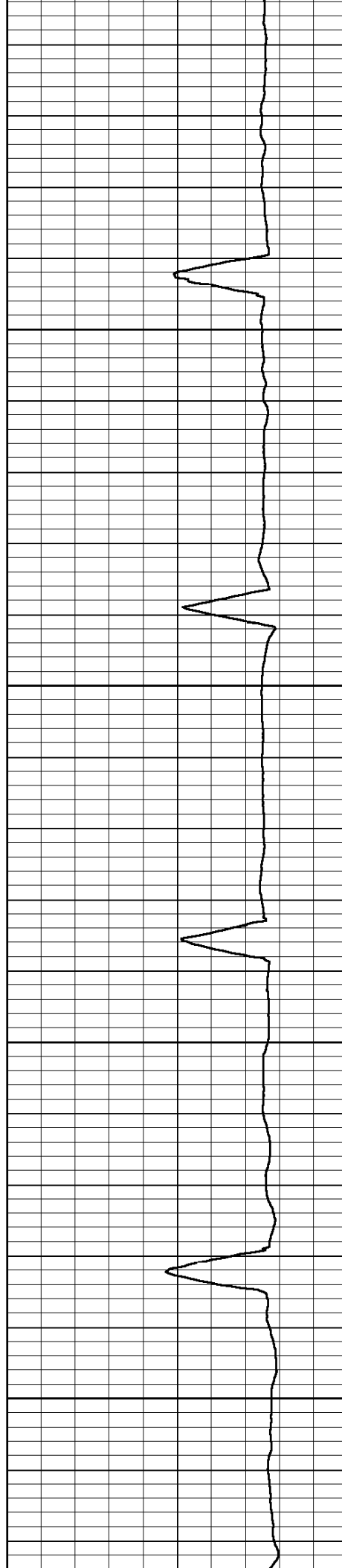
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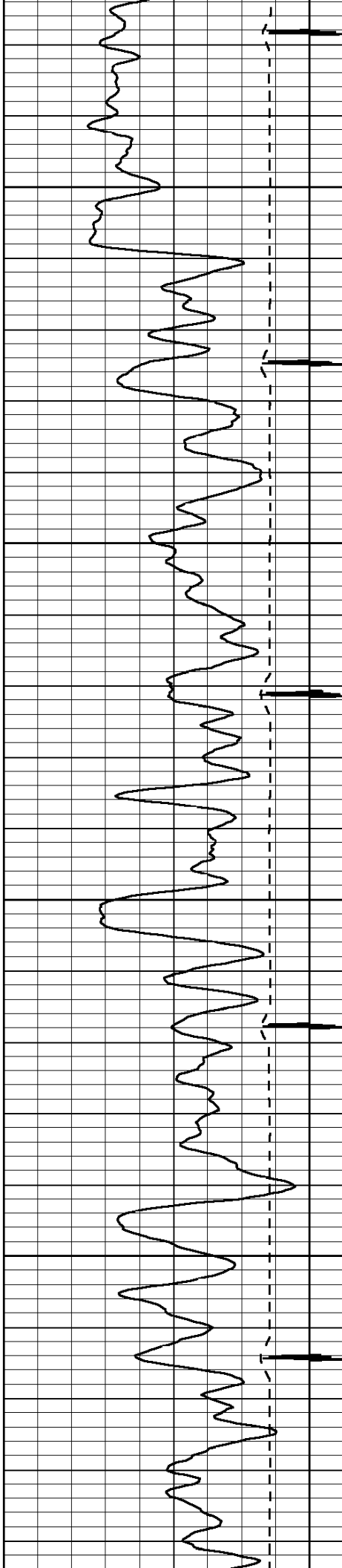




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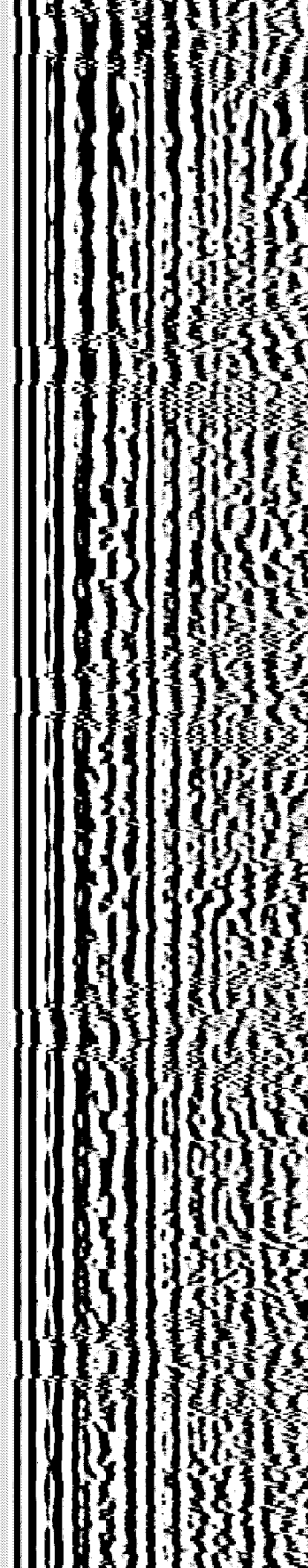
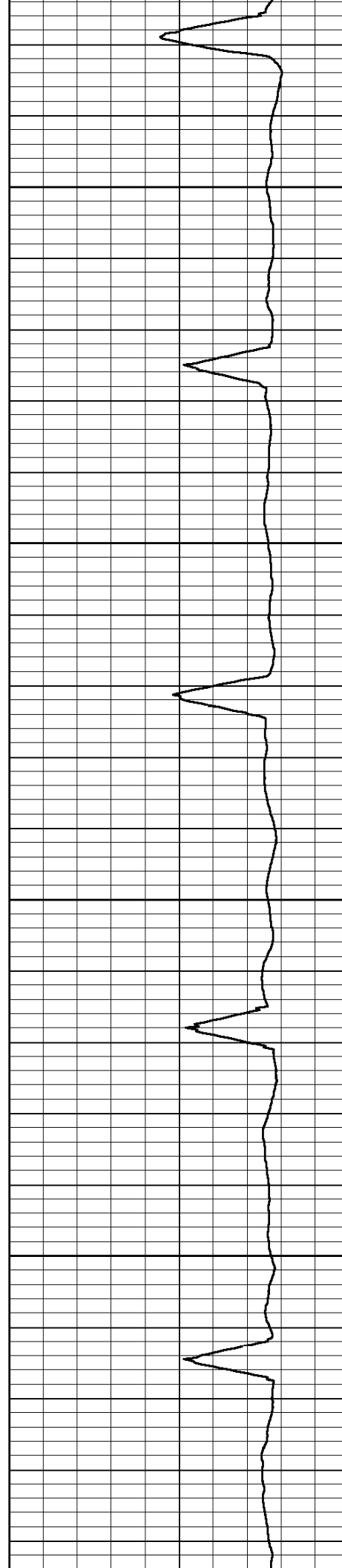
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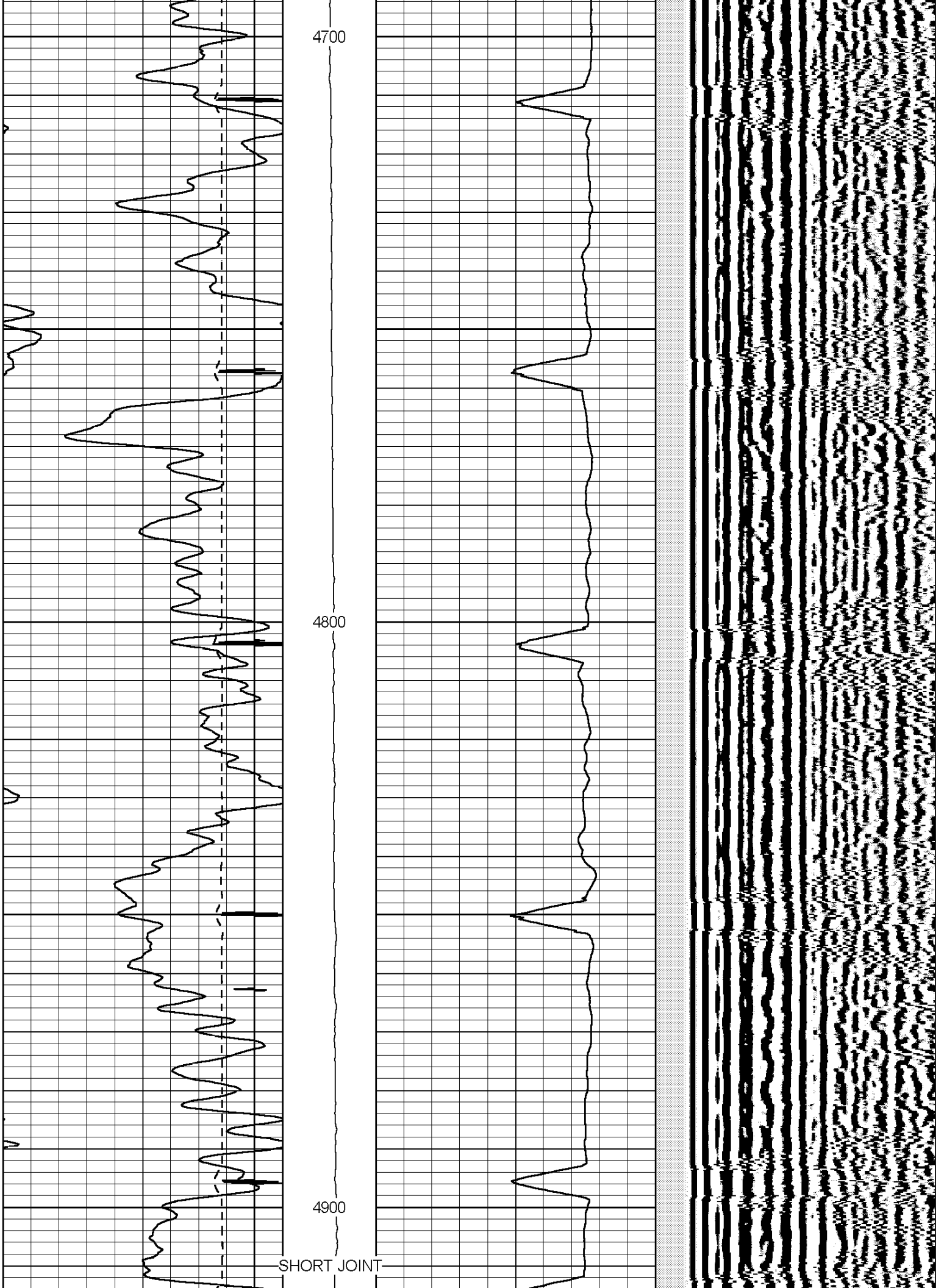


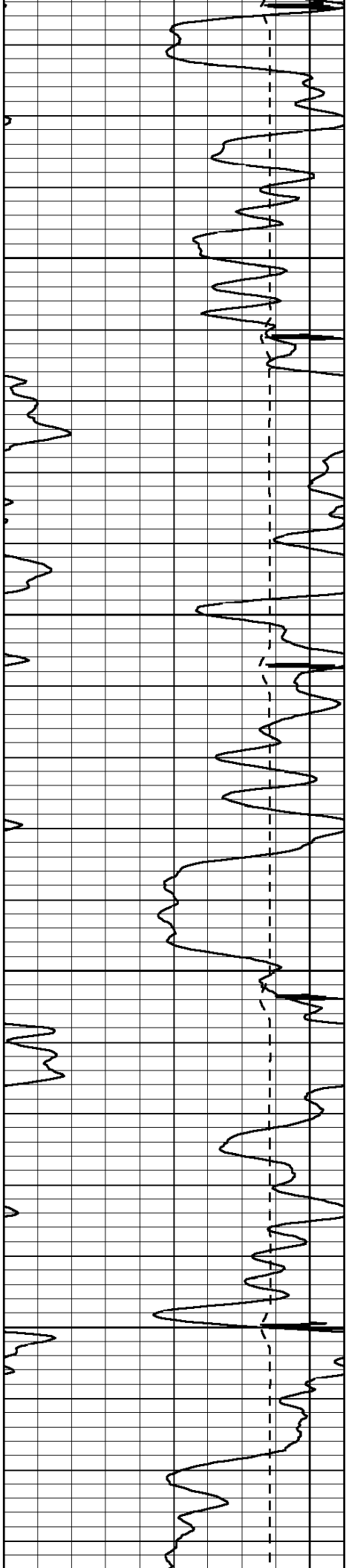
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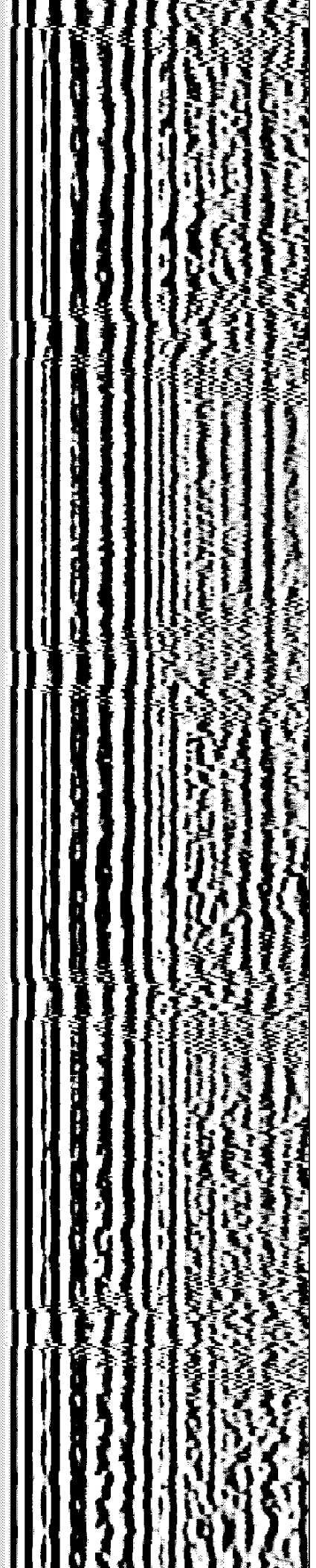
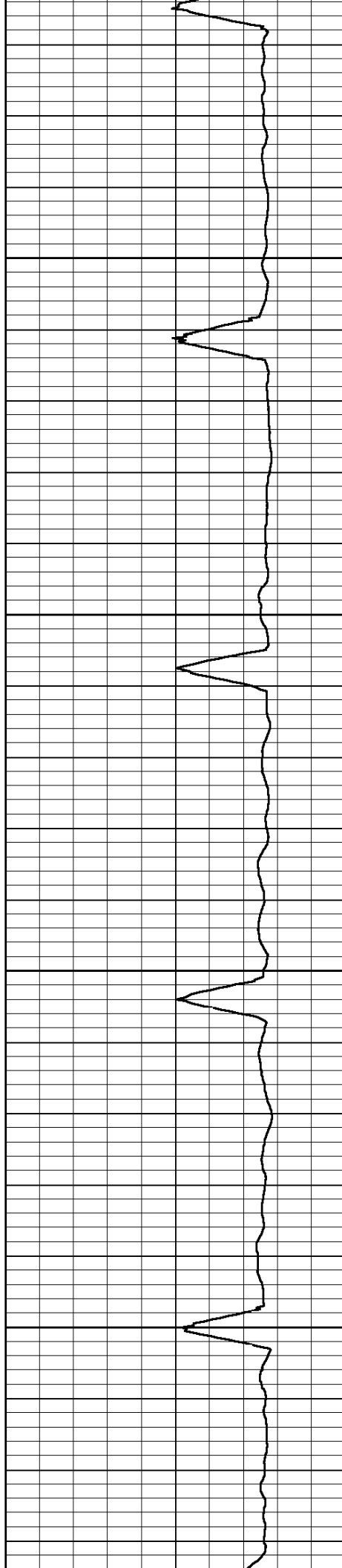
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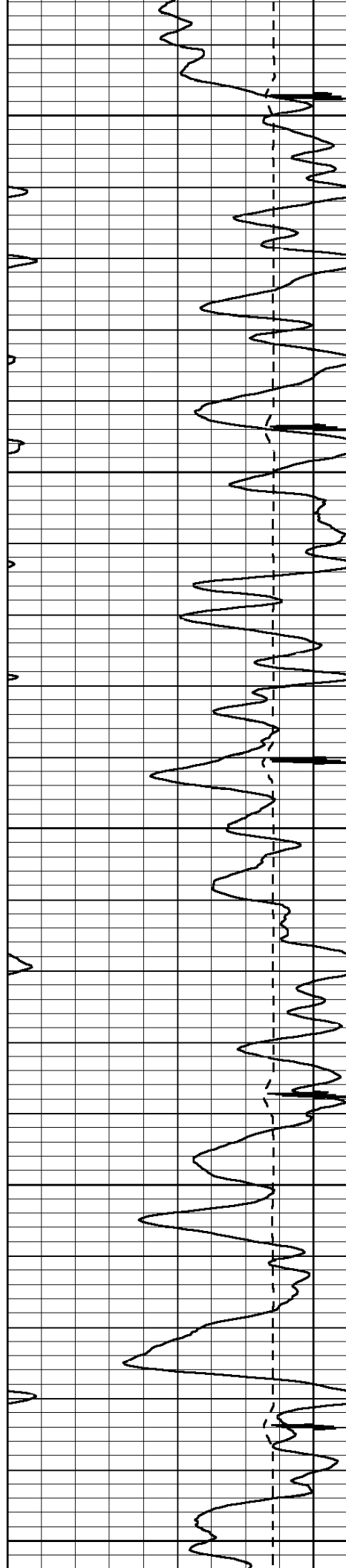




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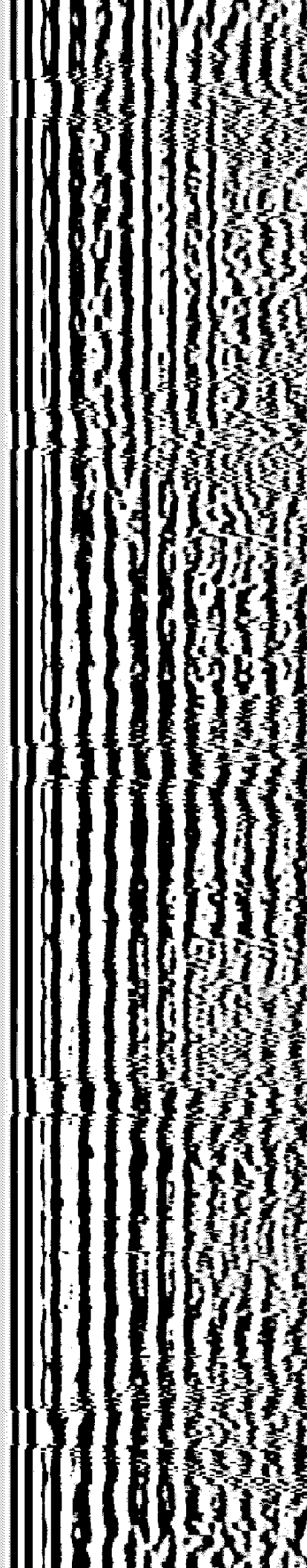
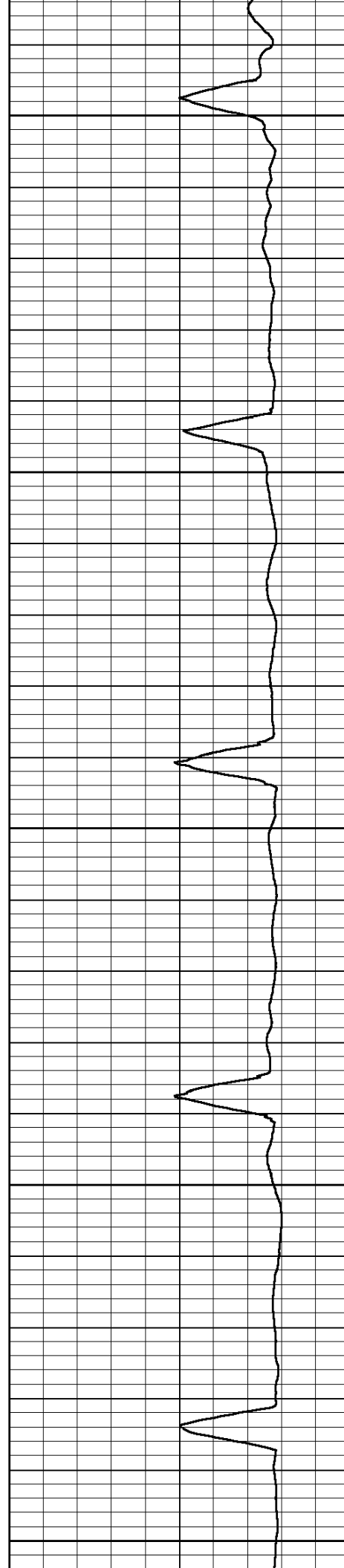
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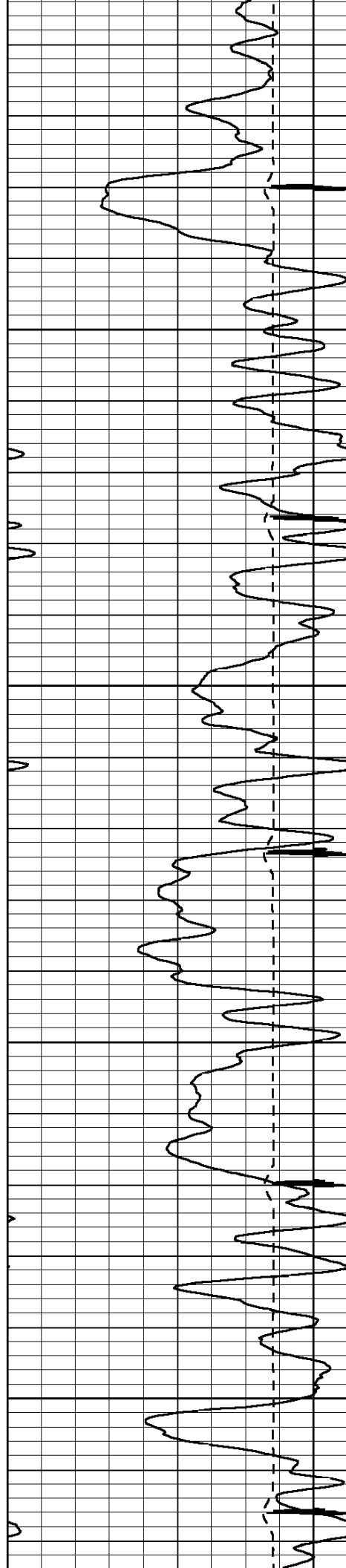




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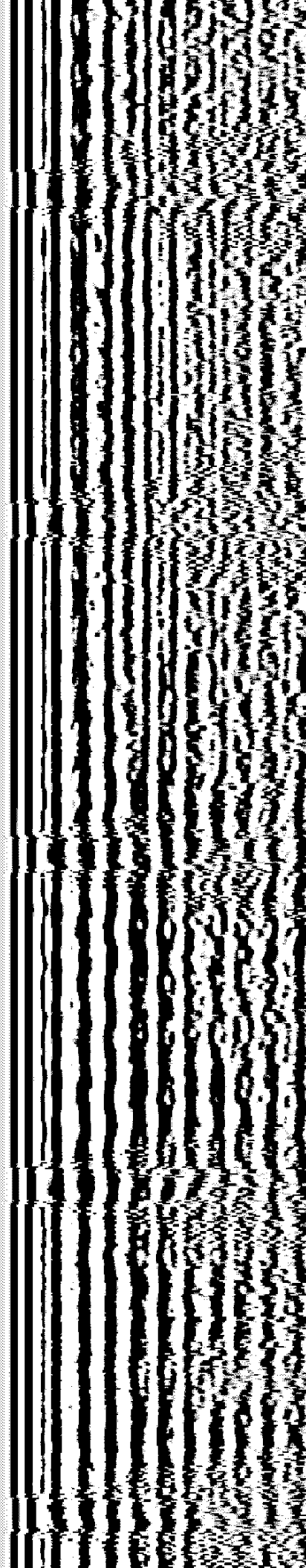
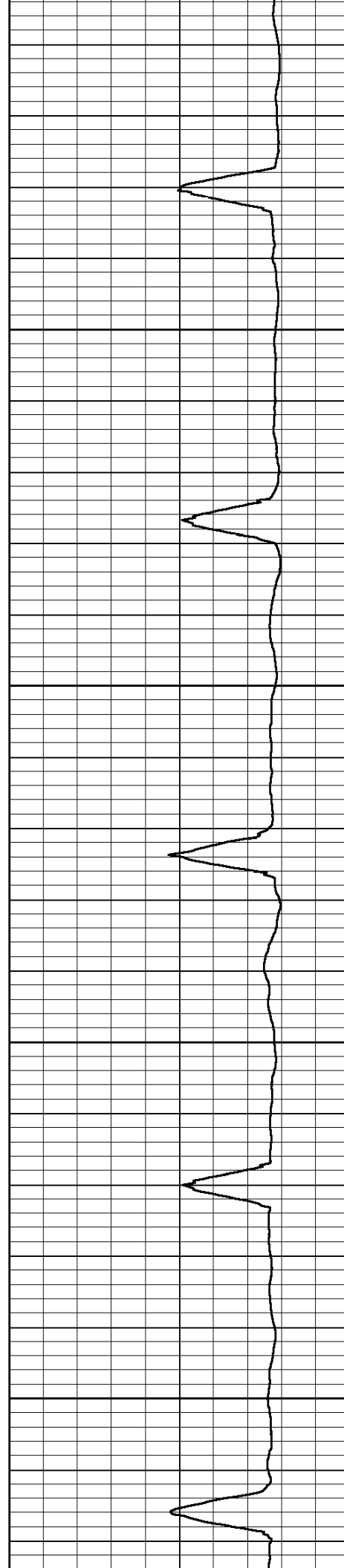
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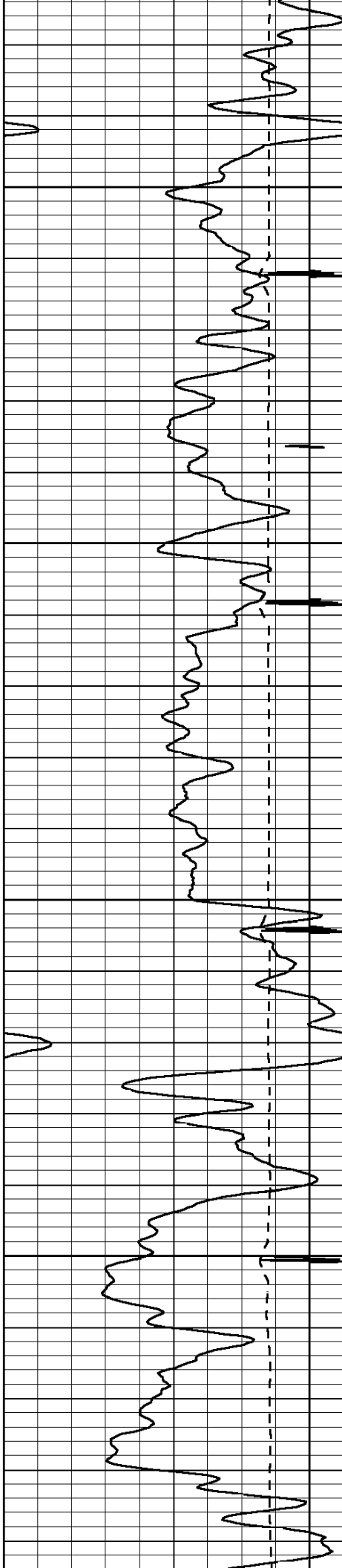




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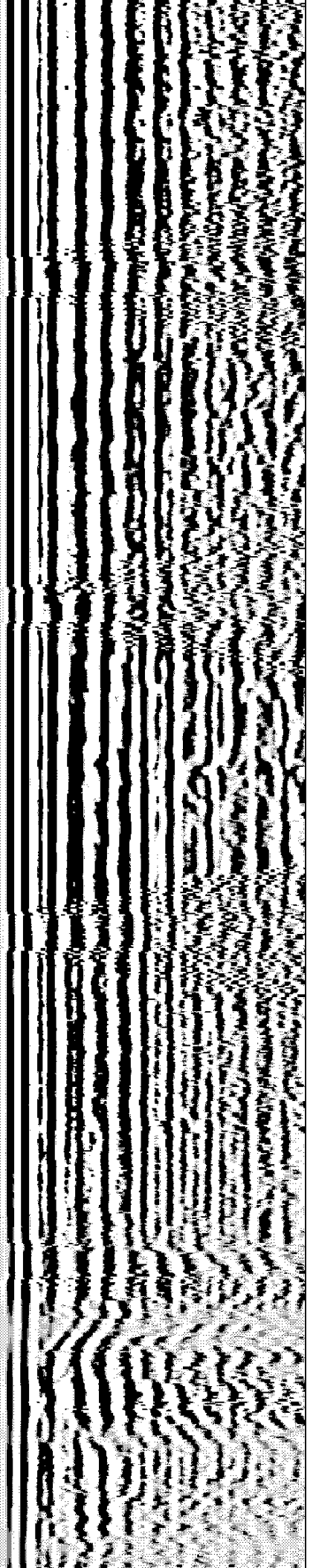
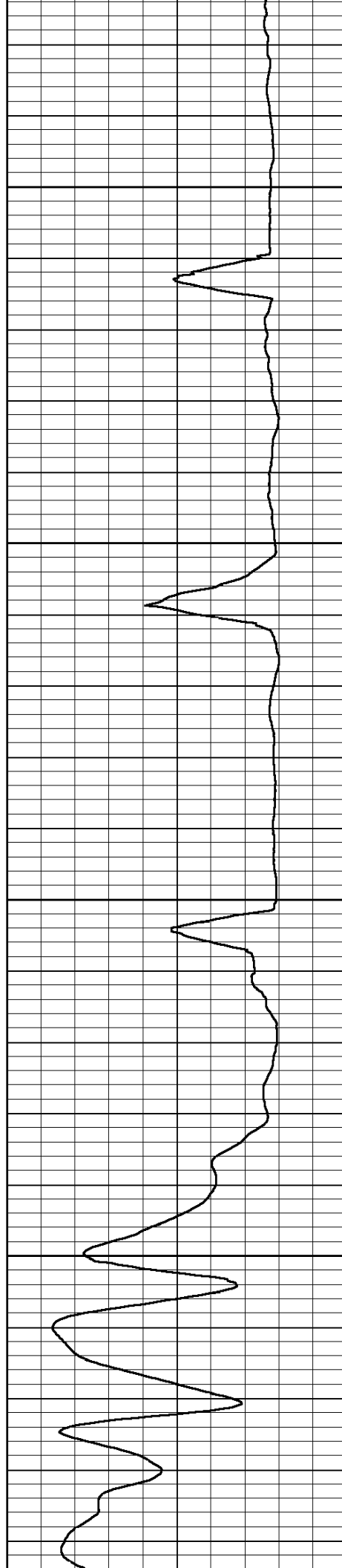
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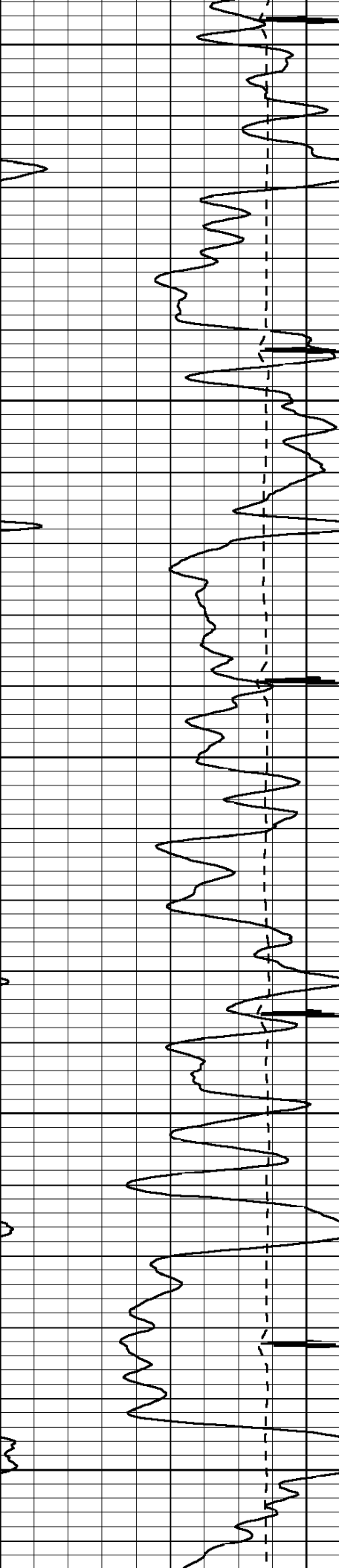




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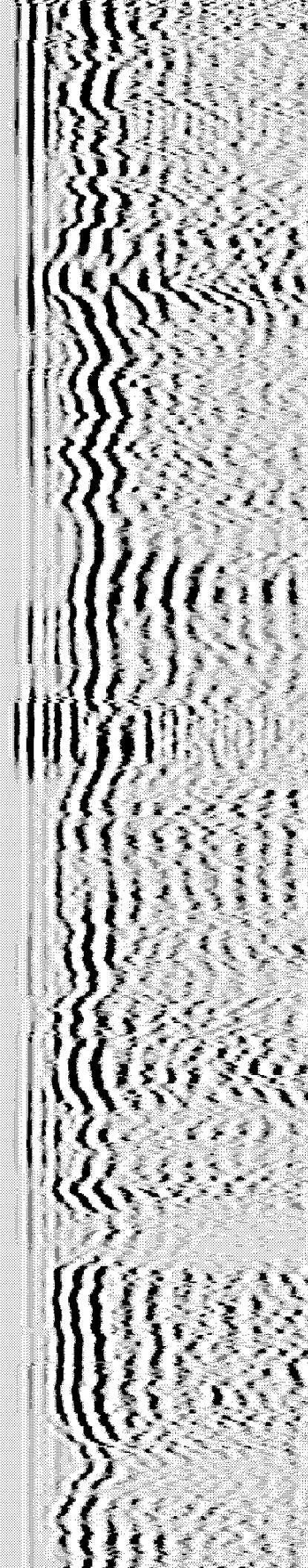
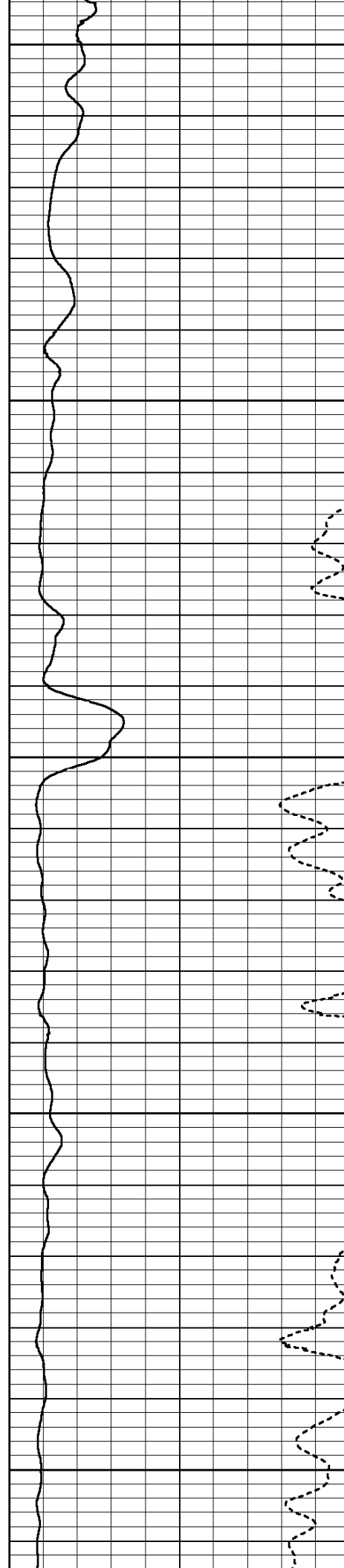


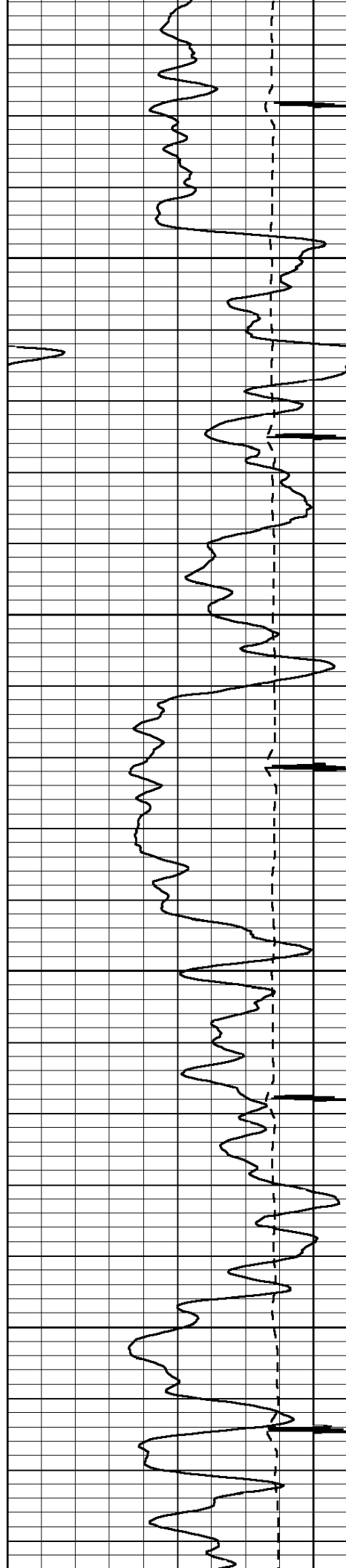


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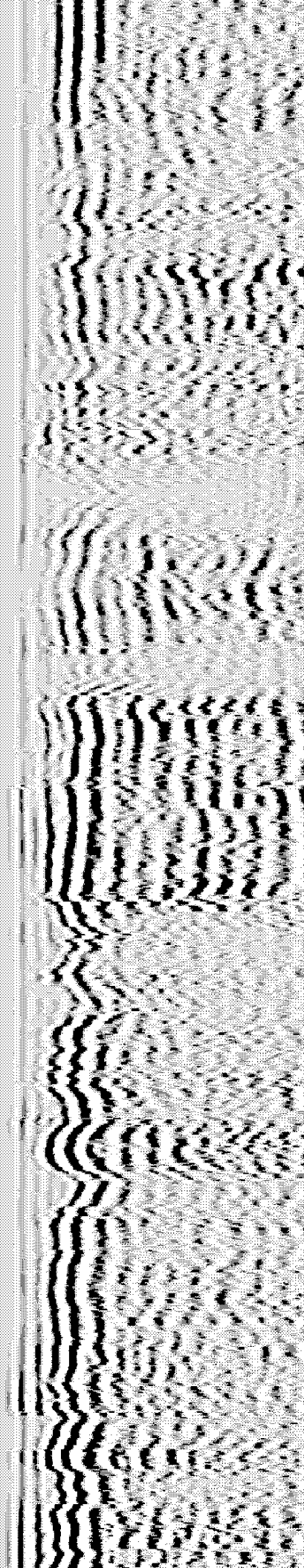
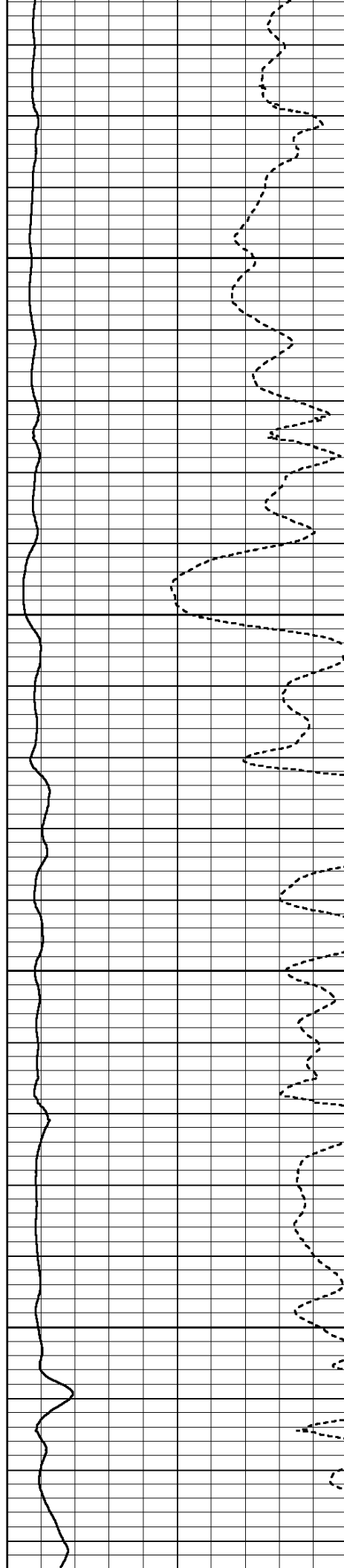
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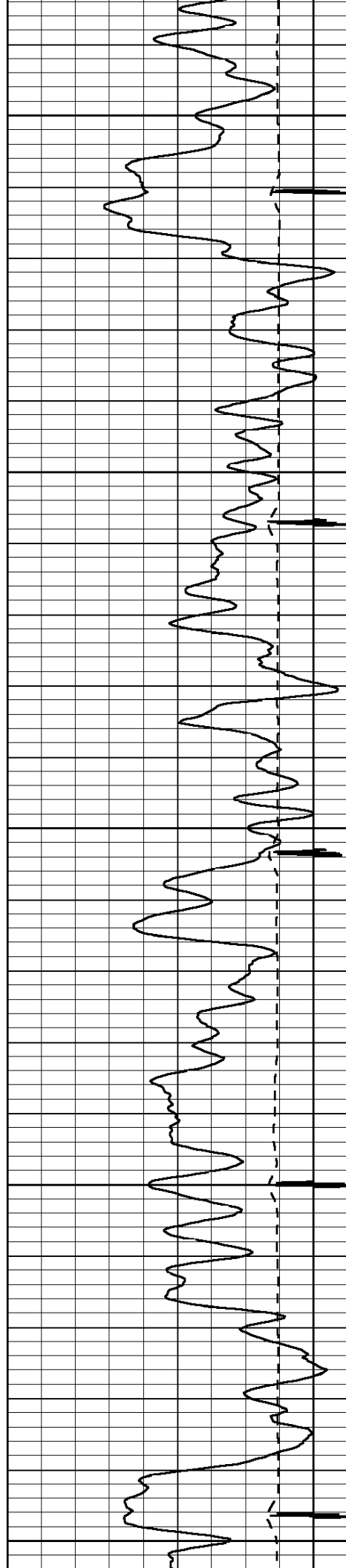




6100

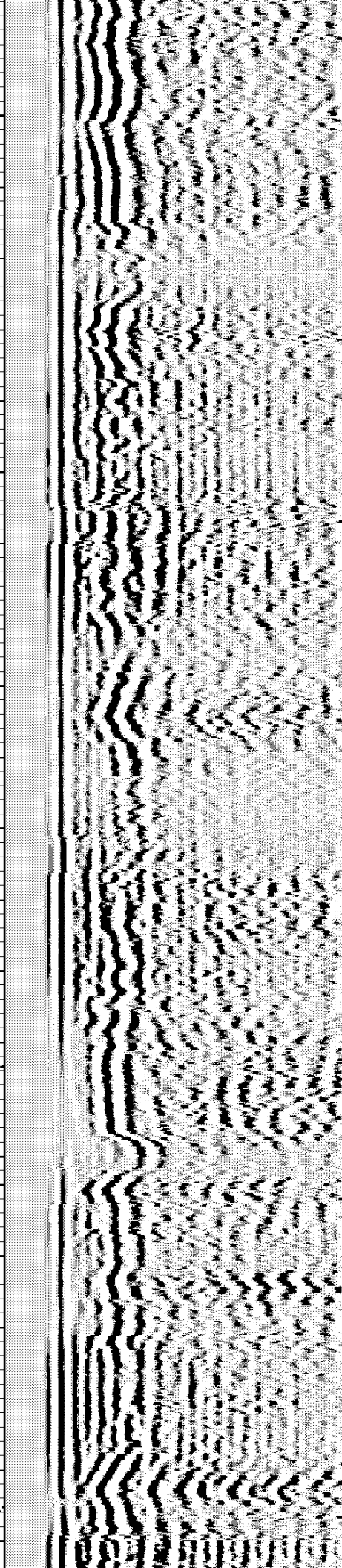
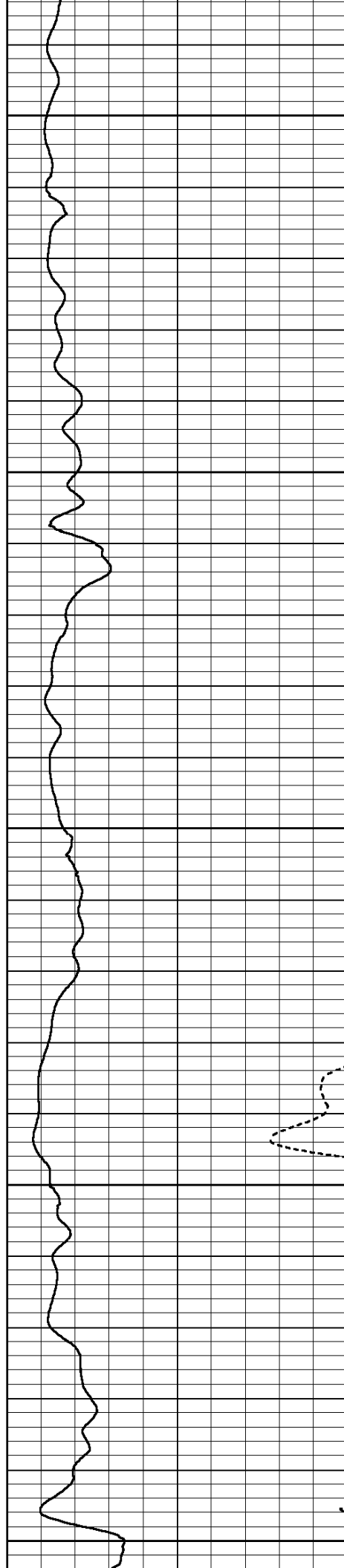
6200

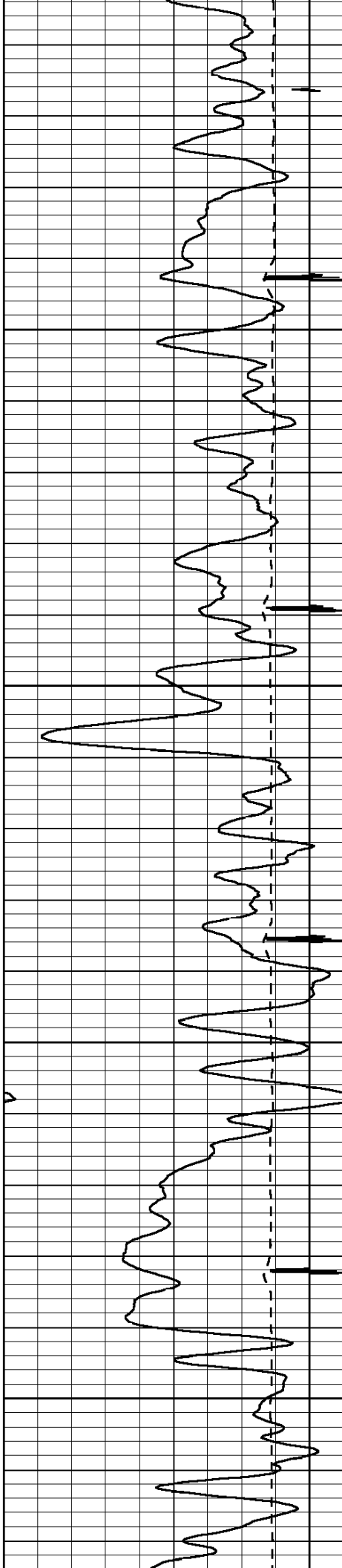




6300

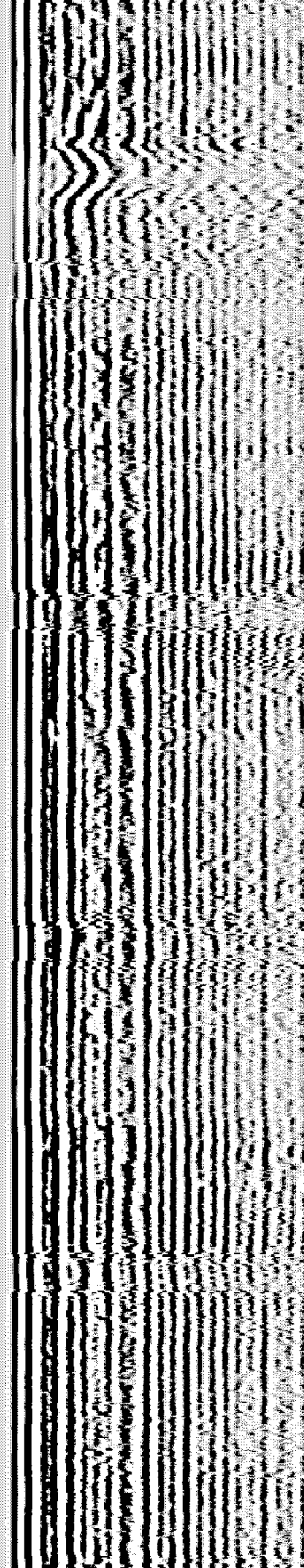
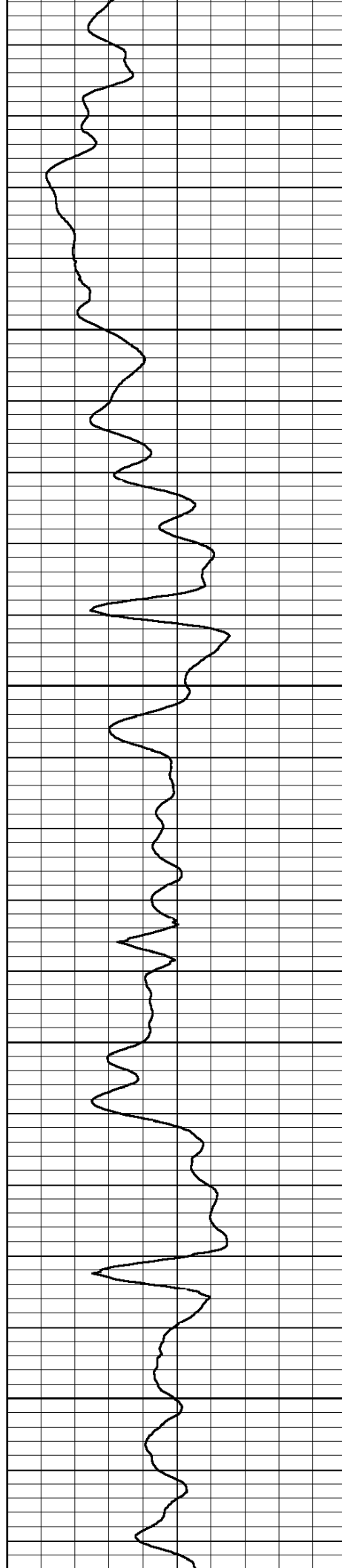
6400

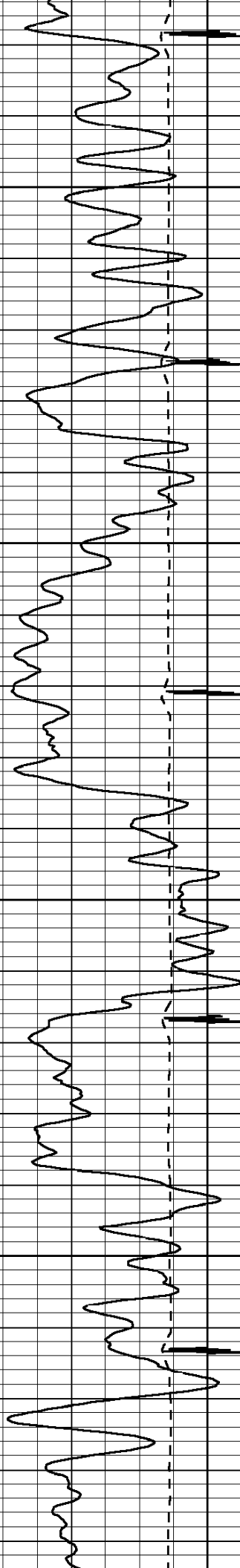




6500

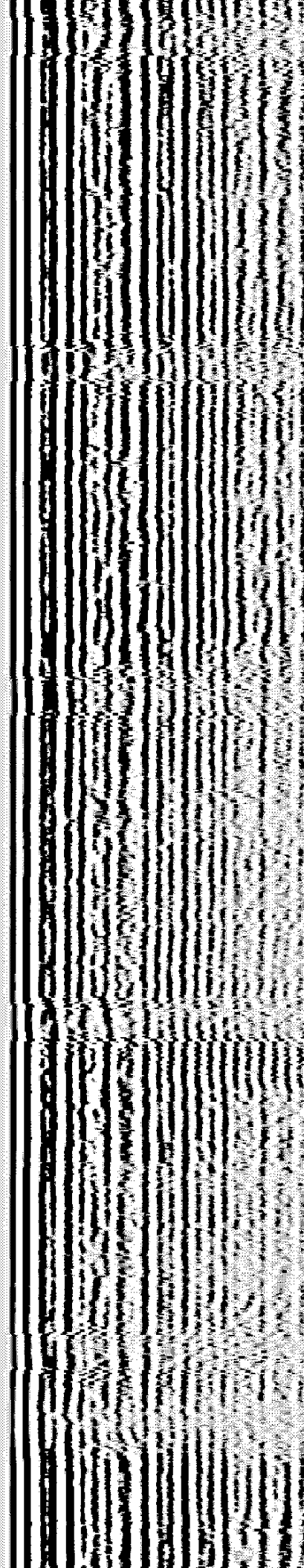
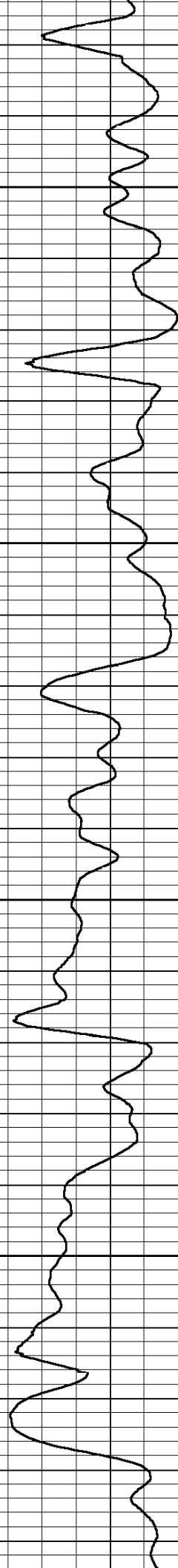
6600





6700

6800

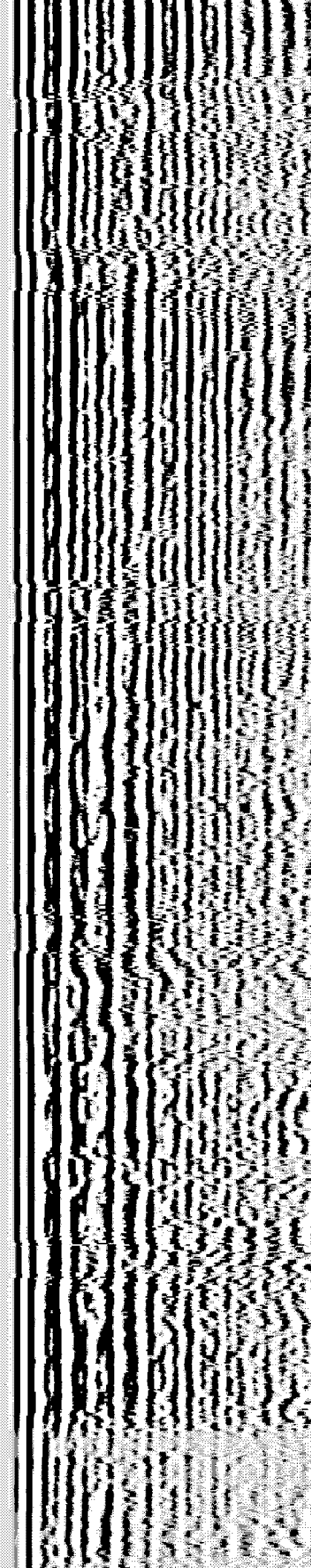
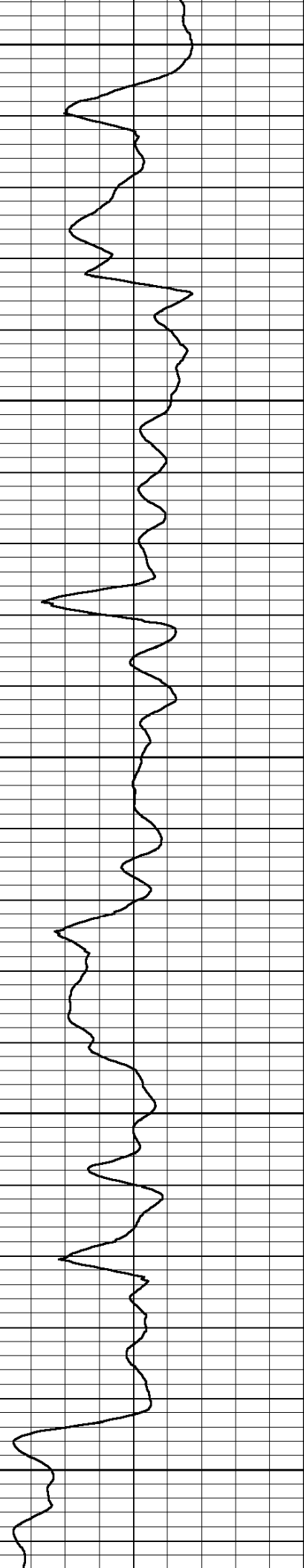
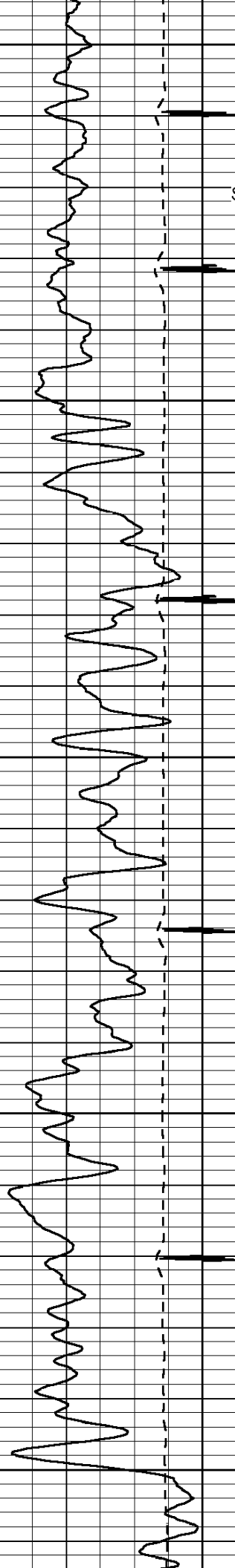


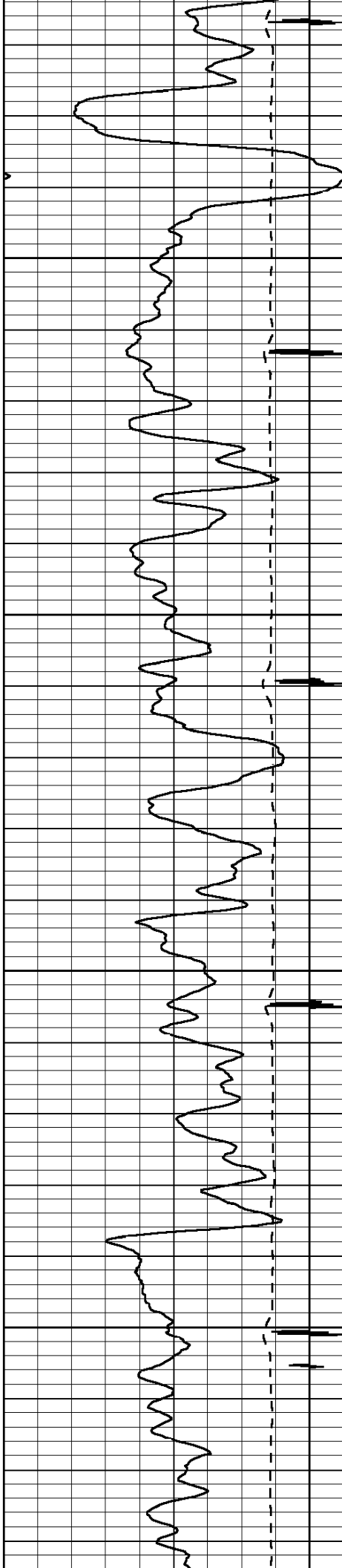
6900

SHORT JOINT

7000

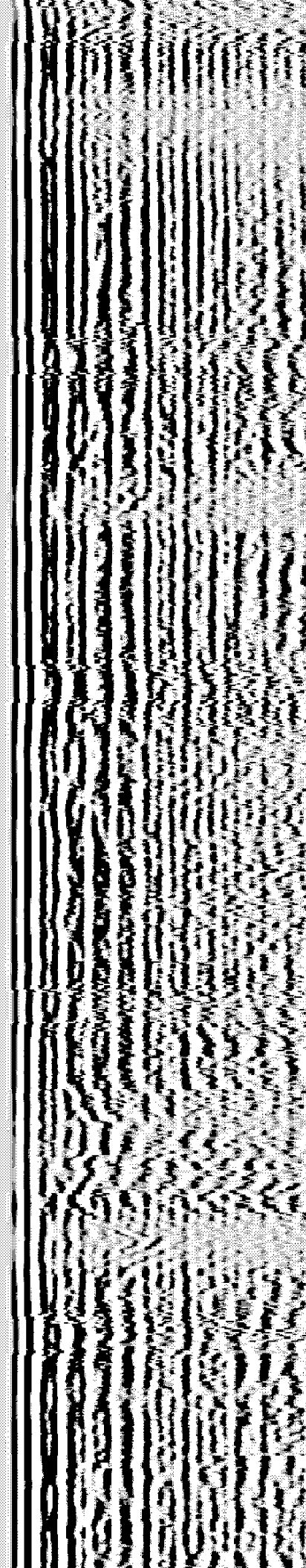
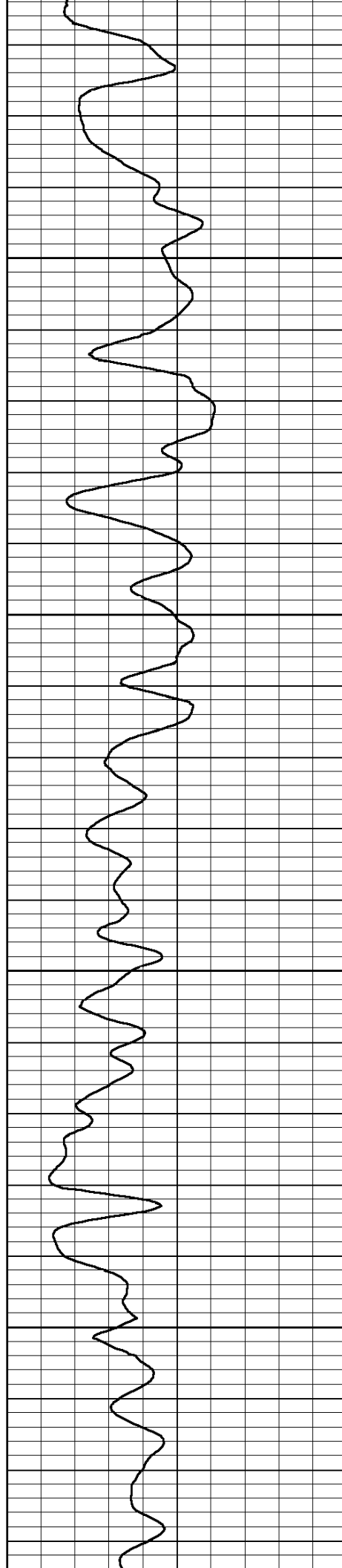
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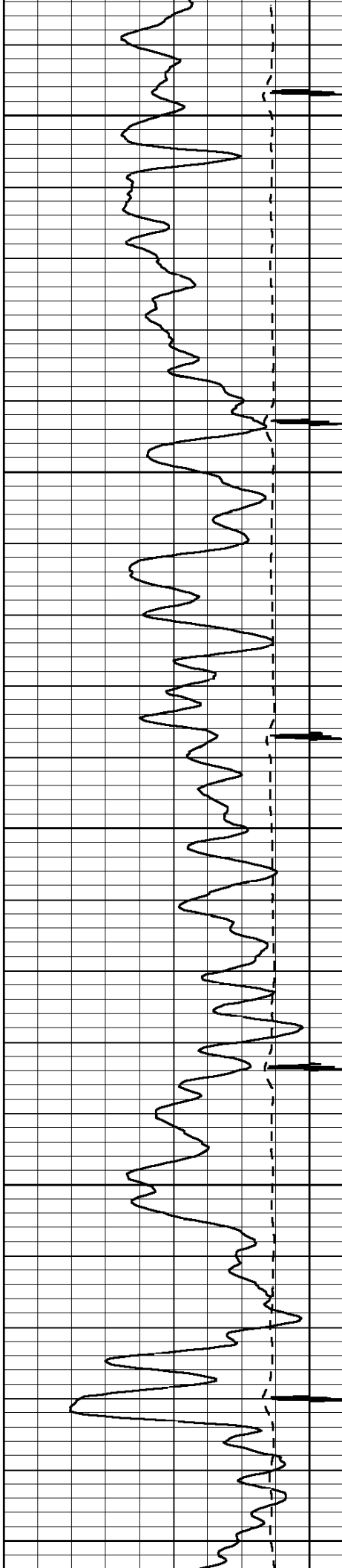




7200

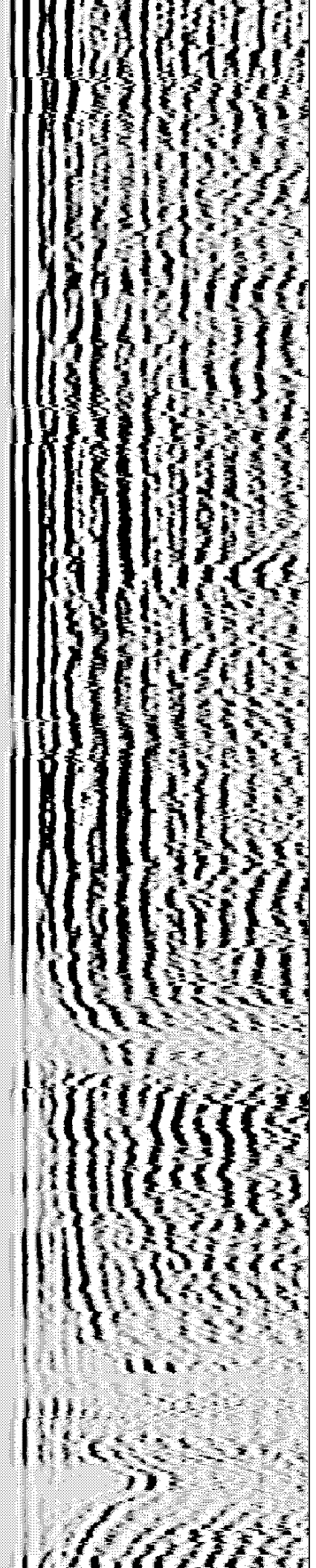
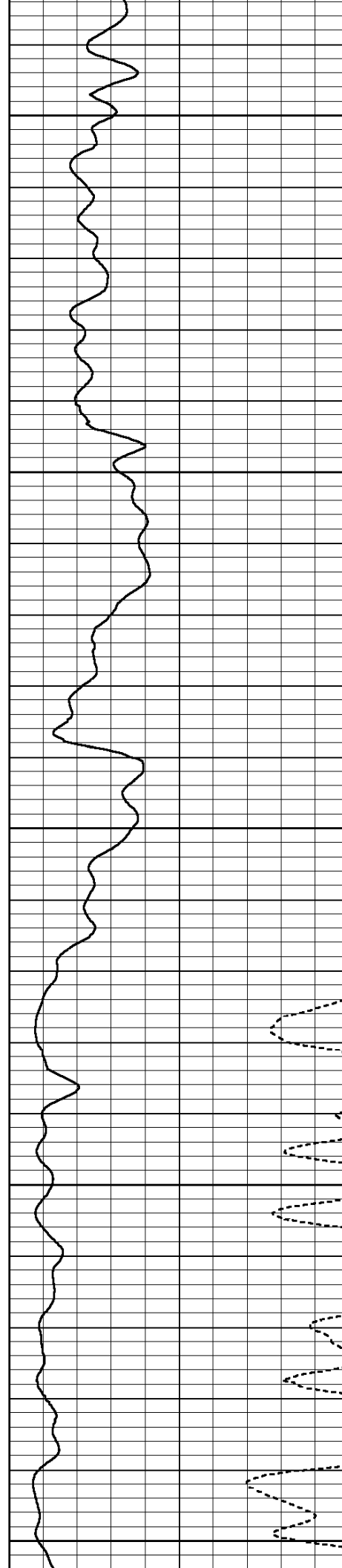
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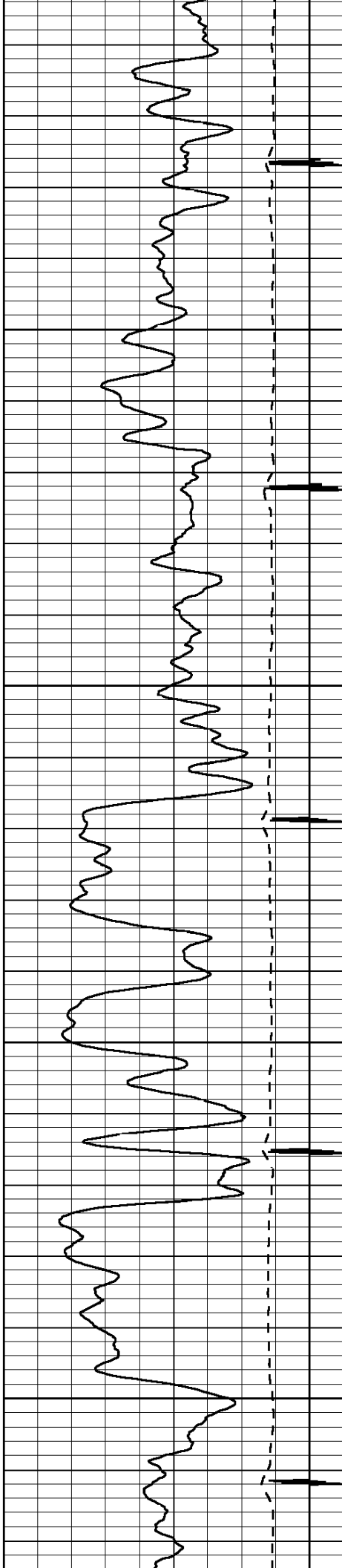




7400

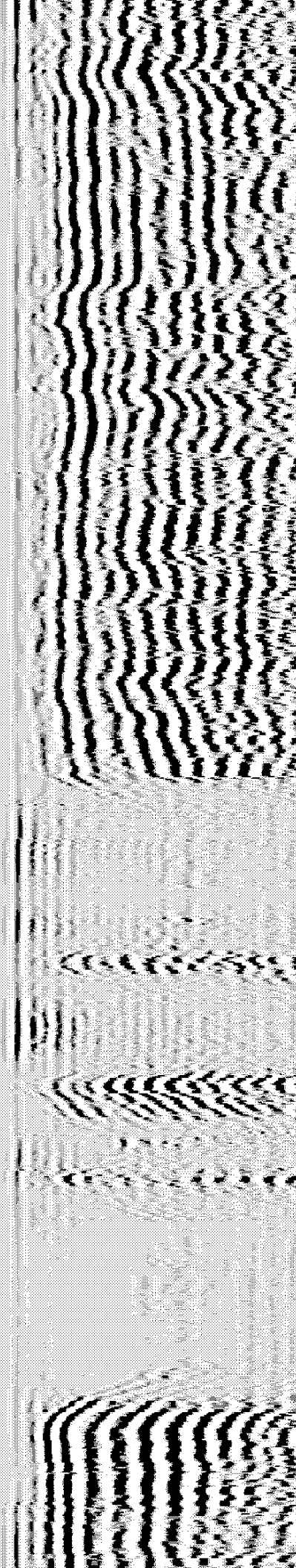
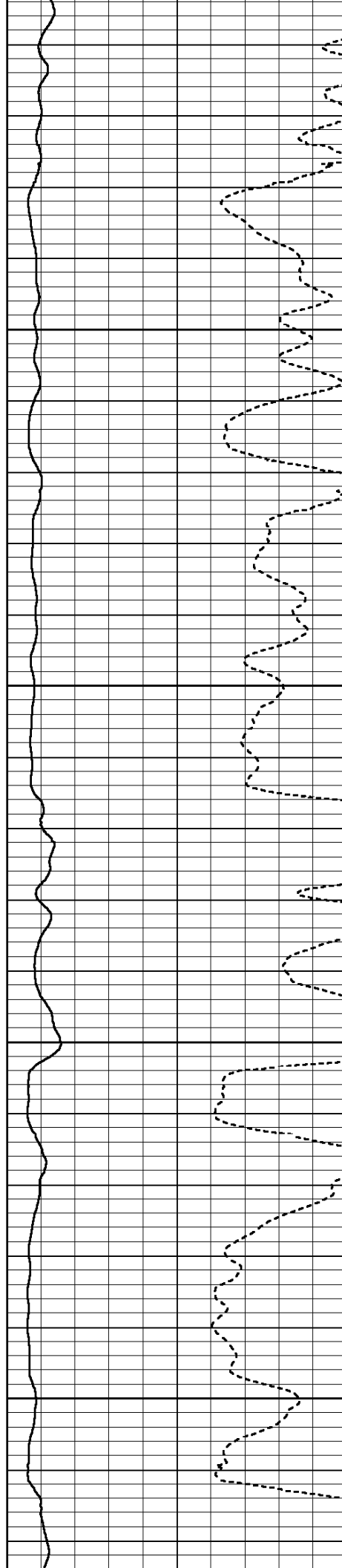
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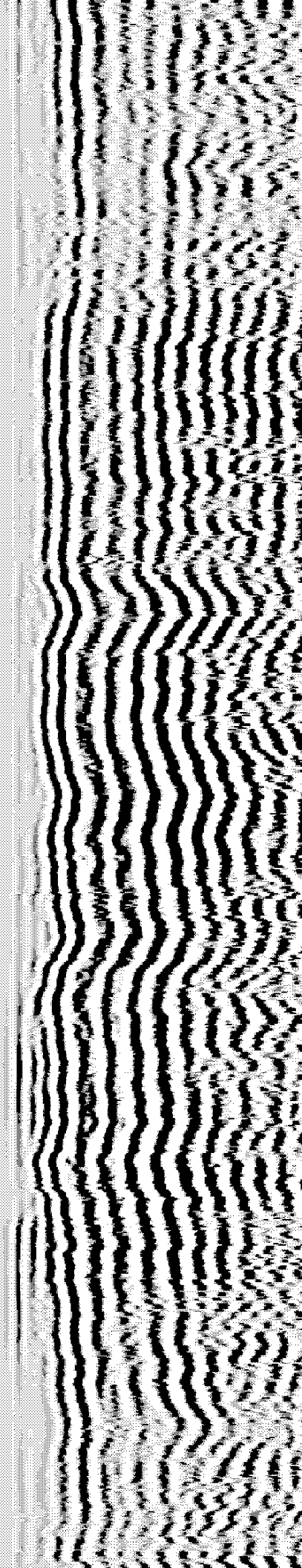
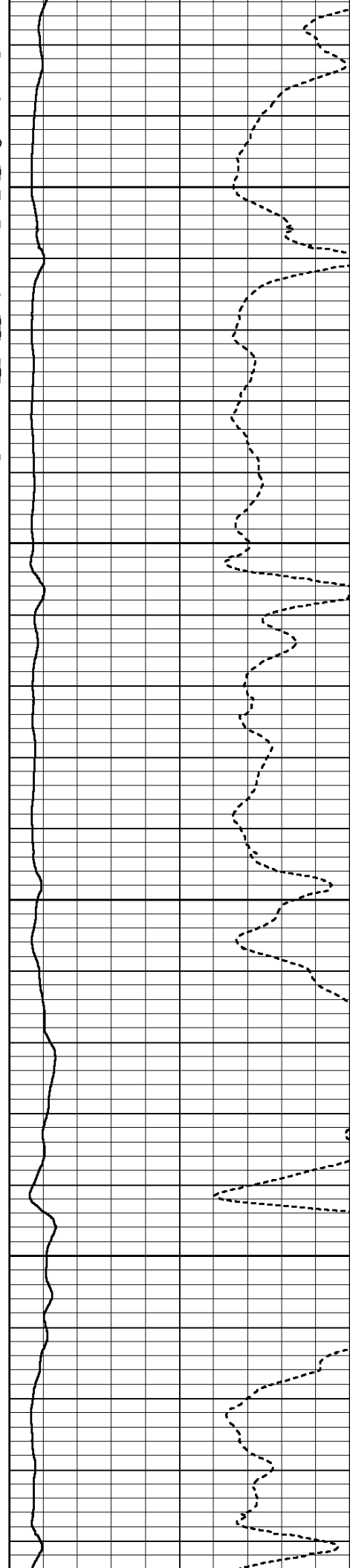
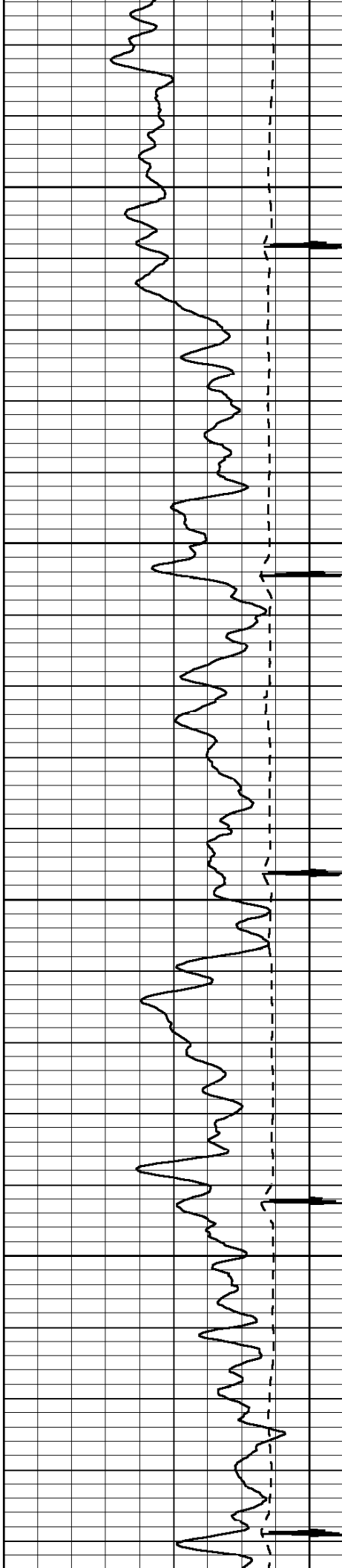
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7700



7800

7900

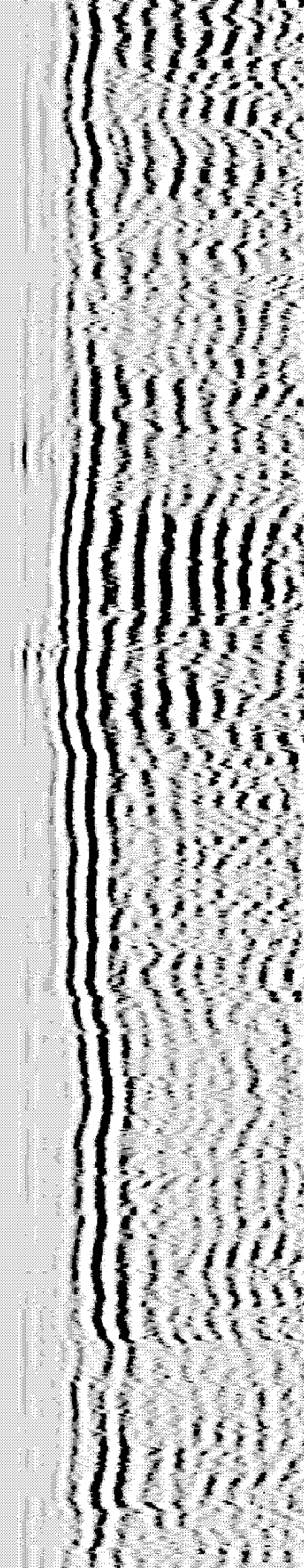
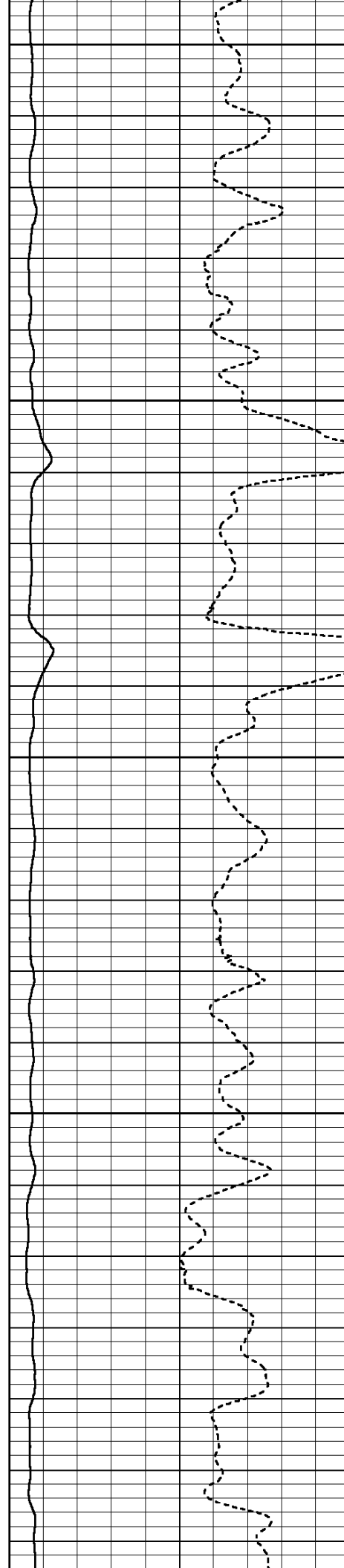


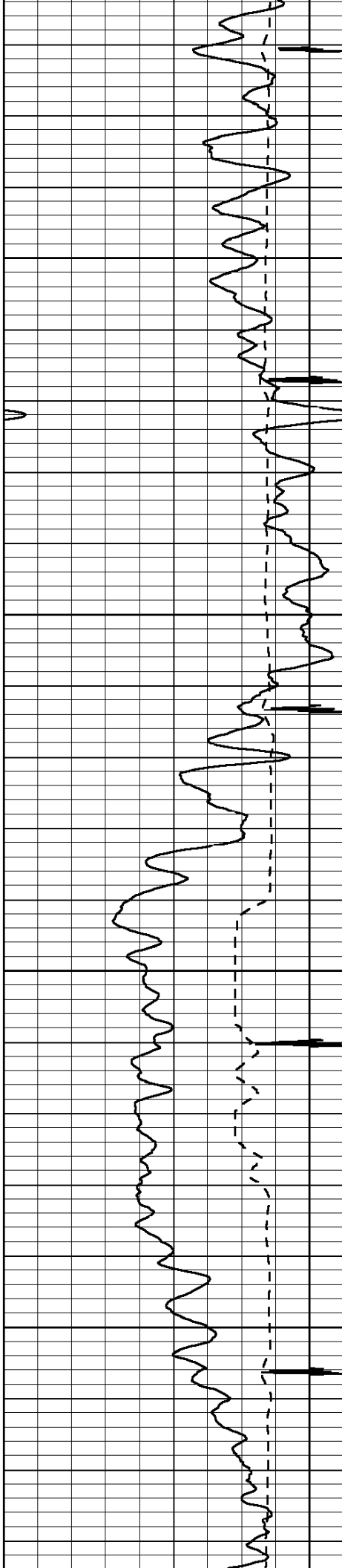


8000

8100

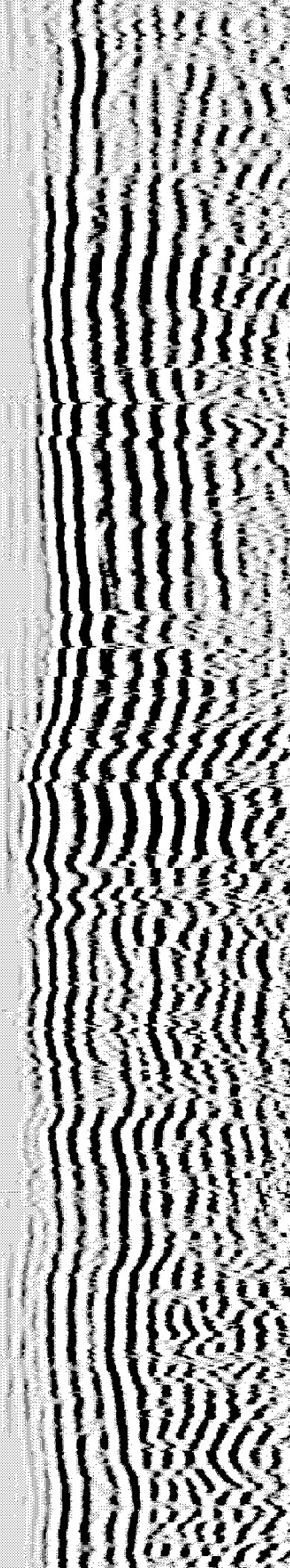
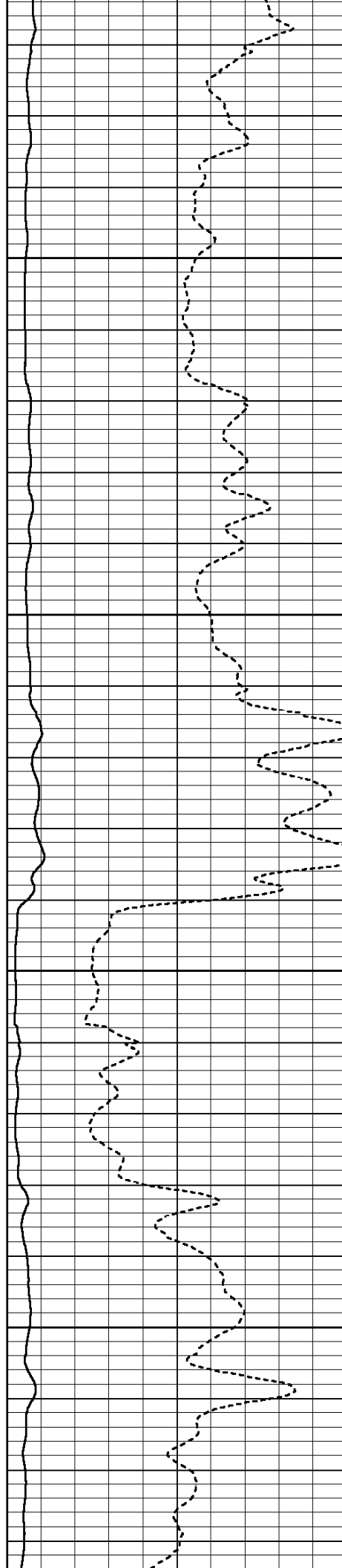
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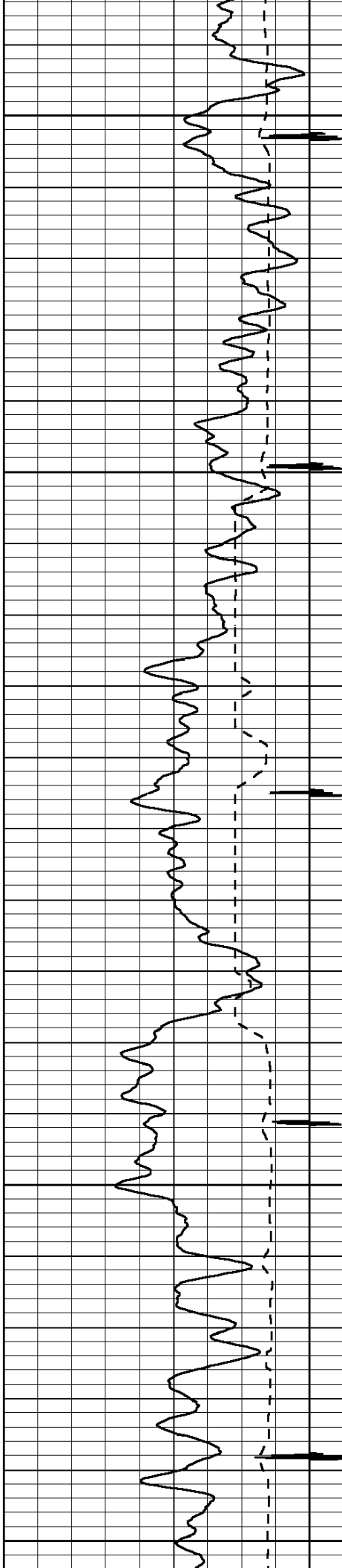




8300

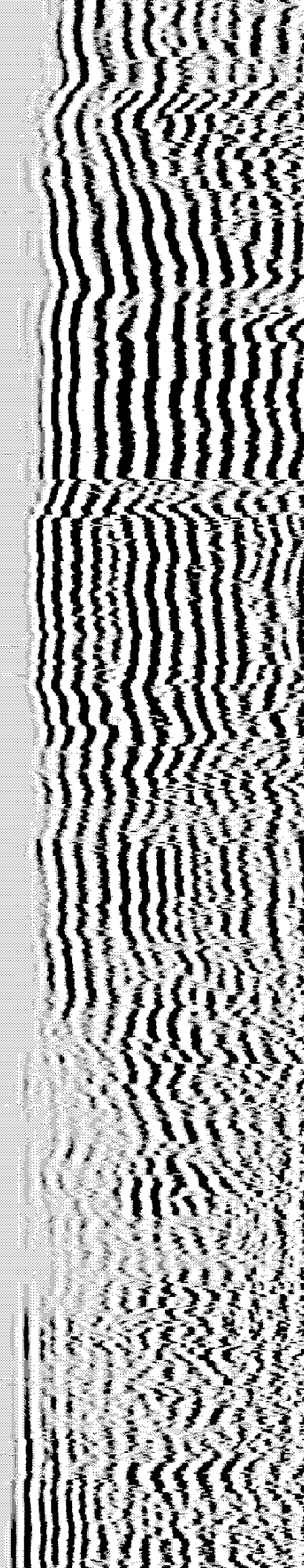
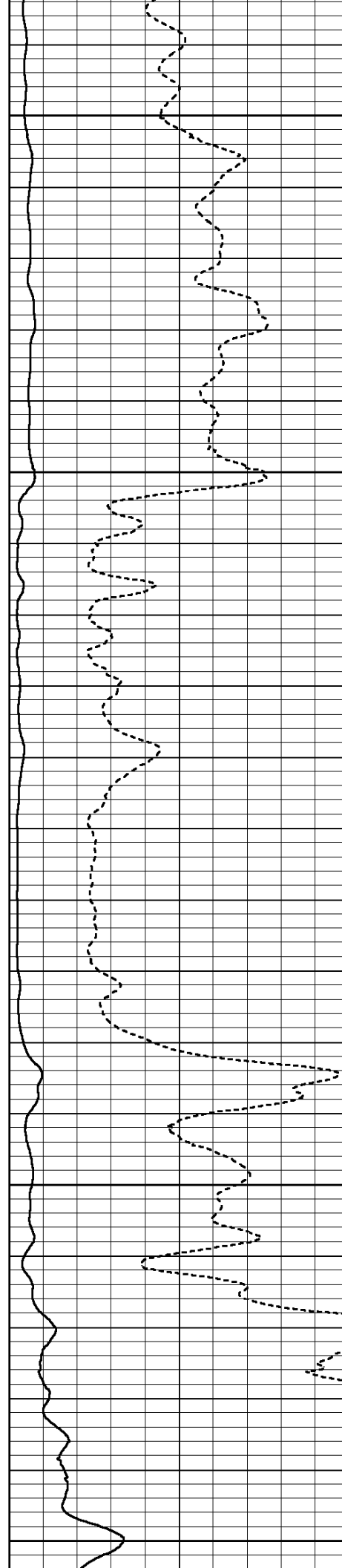
8400

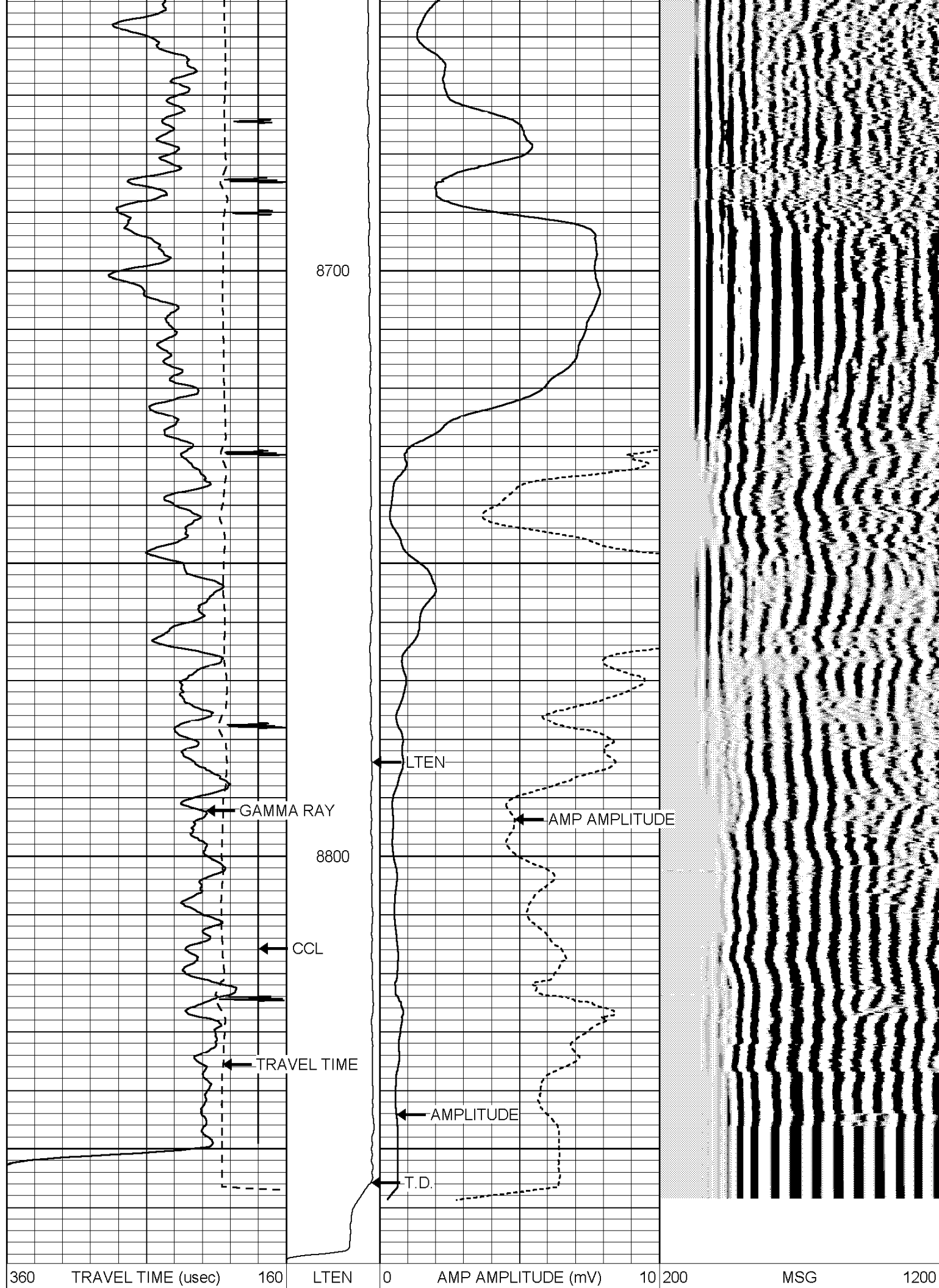




8500

8600





-9	Collar Locator	1	0	(lb)3000	0	AMPLITUDE (mV)	100	
0	Gamma Ray (GAPI)	200						

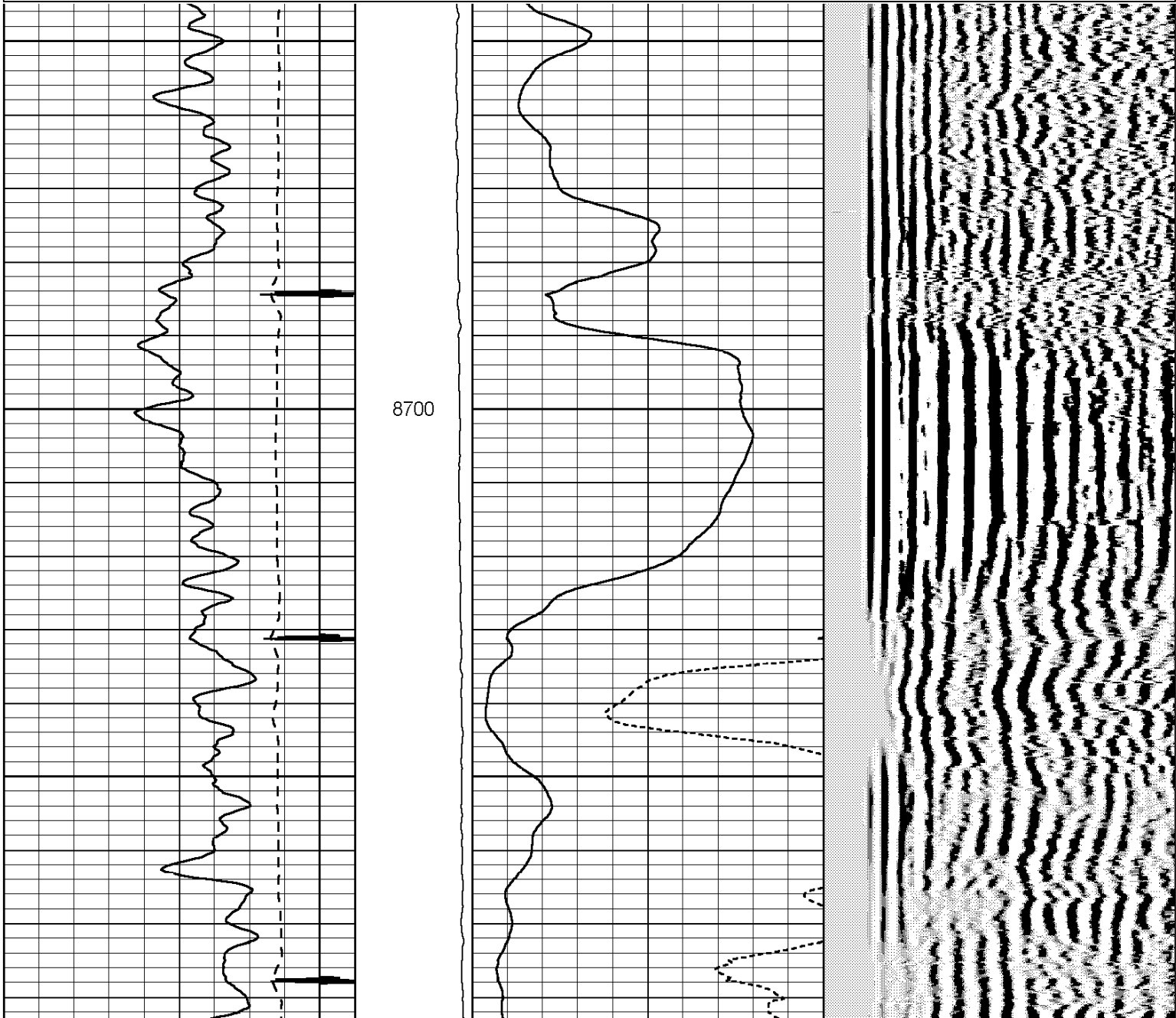
HALLIBURTON

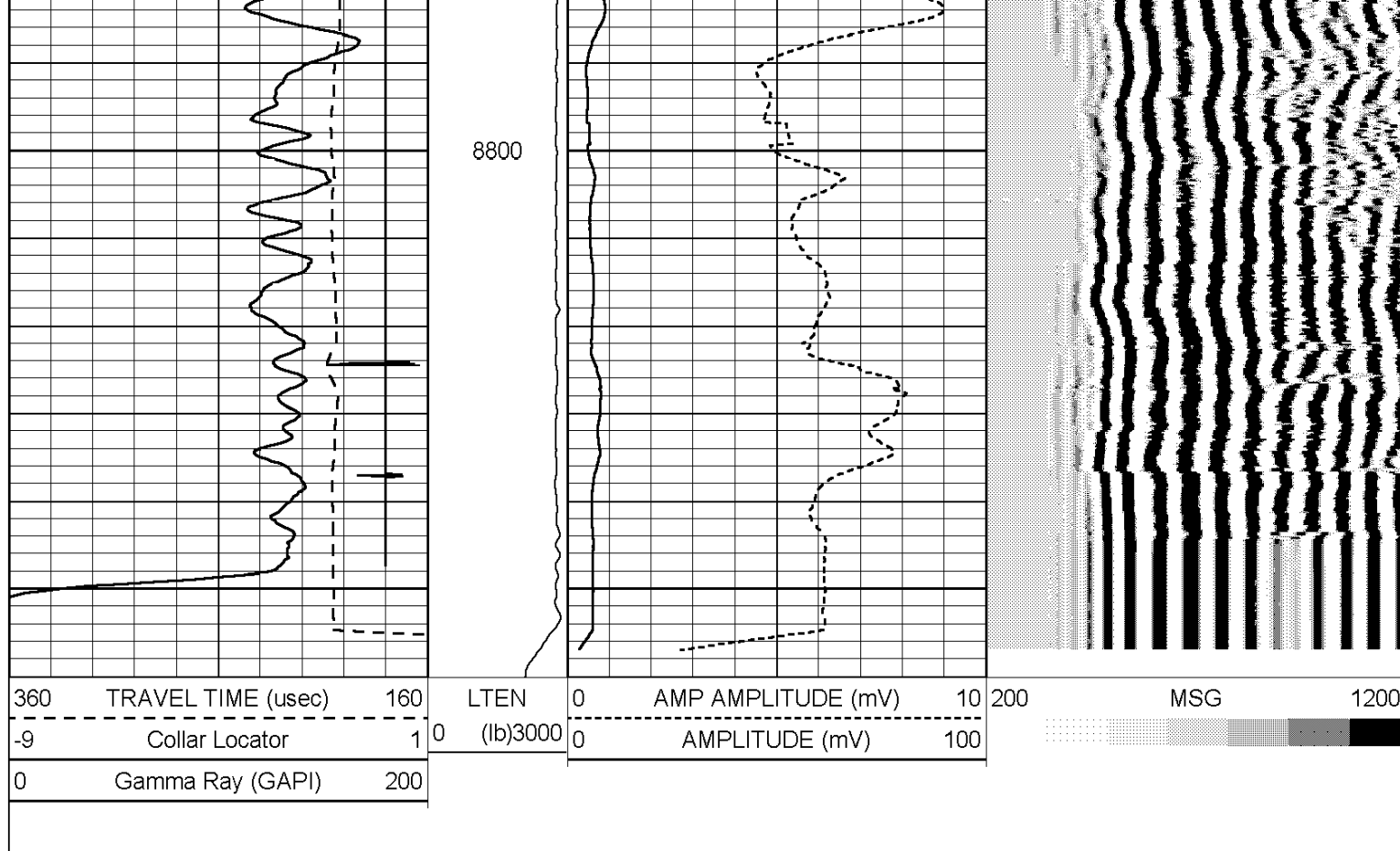
ACOUSTIC CEMENT BOND LOG

REPEAT LOG SECTION
5"=100'

Database File:	jolley_21_3d_cbl.db
Dataset Pathname:	CBL/REPT1
Presentation Format:	cbl_main
Dataset Creation:	Sun Dec 16 11:15:18 2007 by Log Halliburton Casedho
Charted by:	Depth in Feet scaled 1:240

360	TRAVEL TIME (usec)	160	LTEN	0	AMP AMPLITUDE (mV)	10	200	MSG	1200
-9	Collar Locator	1	0	(lb)3000	0	AMPLITUDE (mV)	100		
0	Gamma Ray (GAPI)	200							



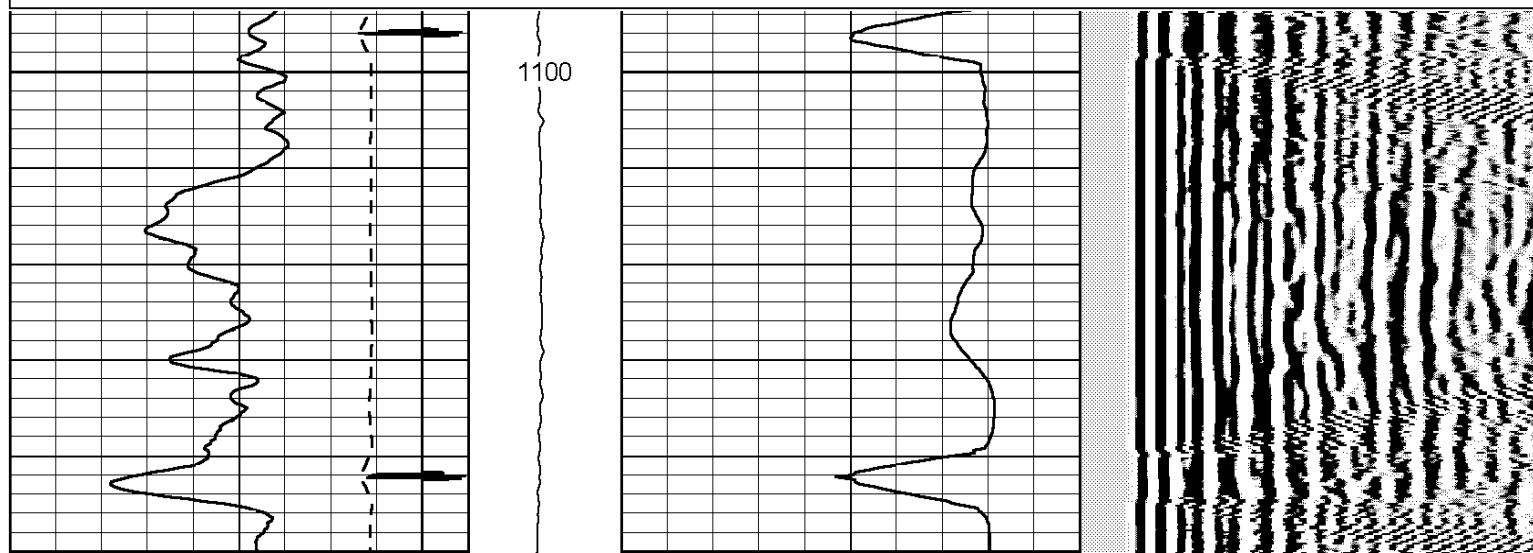
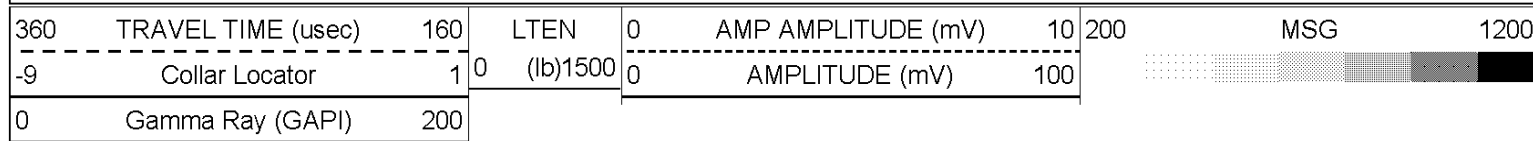


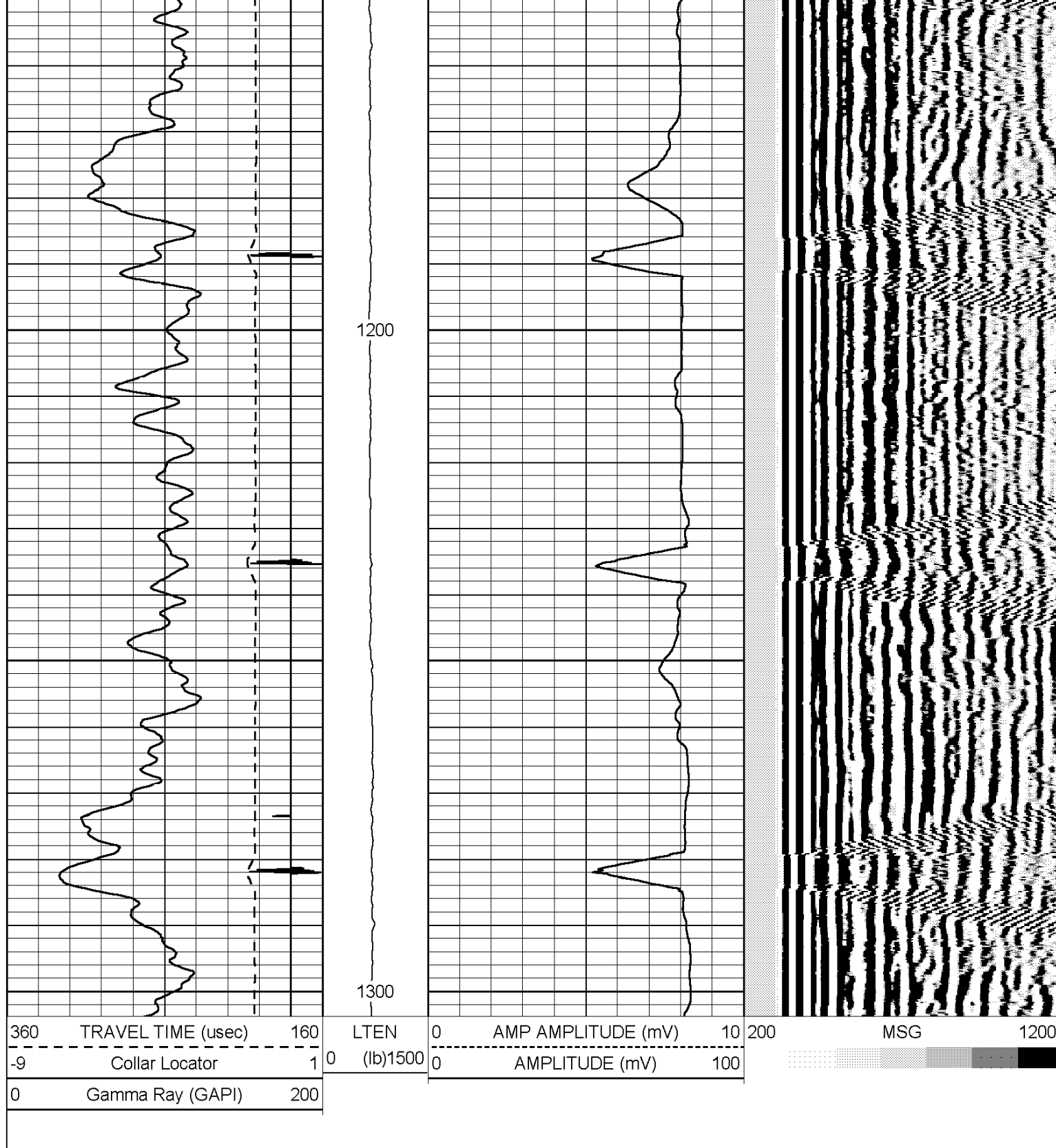
HALLIBURTON

ACOUSTIC CEMENT BOND LOG

FREE PIPE SECTION
5"=100'

Database File: jolley_21_3d_cbl.db
 Dataset Pathname: CBL/FREE1
 Presentation Format: cbl_main
 Dataset Creation: Sun Dec 16 10:33:30 2007 by Log Halliburton Casedho
 Charted by: Depth in Feet scaled 1:240





Calibration Report

Database File: jolley_21_3d_cbl.db
Dataset Pathname: CBL/MAINF
Dataset Creation: Sun Dec 16 13:54:04 2007

Gamma Ray Calibration Report

Type / Serial: CBL_DC / 397

SHOP CALIBRATION

Sun Dec 16 09:54:49 2007

Counts/Sec.	Gain	Offset	Jig	Units
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Background	58.2		cps
Calibrator	286.1		cps
		1.1056	GAPI/cps

PRIMARY VERIFICATION	Sun Dec 16 09:59:05 2007
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Background	65.4		cps
Calibrator	318.8		cps
Difference		253.4	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

Segmented Cement Bond Log Calibration Report

Serial Number:	397	
Tool Model:	CBL_DC	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	1230.392	ft

Master Calibration, performed Sun Dec 16 10:32:34 2007:


	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.004	1.073	2.000	82.000	74.289	2.318
CAL						
5'	-0.004	0.956	2.000	82.000	83.319	2.347

Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL						

Air Zero Calibration, performed Fri Nov 30 12:48:43 2007:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.000		0.000		0.000	
5'	0.000		0.000		0.000	

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			HAL HAL Cable Head	1.92	1.44	10.00

Company	ORIONENERGY PARTNERS		
Well	JOLLEY 21-3D		
Field	KOKOPELLI		
County	GARFIELD	State	CO
HALLIBURTON		ACOUSTIC CEMENT BOND LOG	