

HALLIBURTON

CEMENT
BOND LOG

Company

URSA OPERATING COMPANY

Well

YATER 43D-18-07-95

Field

PARACHUTE

County

GARFIELD

State

CO

Company

URSA OPERATING COMPANY

Well

YATER 43D-18-07-95

Field

PARACHUTE

County

GARFIELD

State

CO

API No.: 5045227810000

Serv #: 902311419

Other Services

Location: SHL: 1679' FSL & 1107 FWL

Sec: 17

Twp: 7S

Rge: 95W

JUNK BASKET

RMT3D

Permanent Datum

GROUND LEVEL

Elevation

5519

Log Measured From

KB

17 Ft. above perm. datum

K.B. 5536
D.F. 5536
G.L. 5519

Drilling Measured From

KB

Date @ Time Logged

04/12/2015 @ 10:30

Type Fluid in Hole

FRESH WATER

Run No.

ONE

Density of Fluid

8.4#

Depth - Driller

7037

Fluid Level

47

Depth - Logger

6784

Cement Top Est. Logged

SEE LOG

Bottom - Logged Interval

6773

Equipment / Location

11072147 / BRIGHTON

Top - Log Interval

3570

Recorded by

J. SCHMIDT

Max. Recorded Temp.

232 F

Witnessed by

J. CORNETT

CEMENTING DATA

Surface

Protection

Production

Liner

String

String

String

Date / Time Cemented

Primary / Squeeze

Expected

Compressive Strength

psi@ hrs

psi@ hrs

psi@ hrs

psi@ hrs

Cement Volume

Cement Type / Weight

/

/

/

/

Formulation

Mud Type / Mud Wgt.

/

/

/

/

Borehole Record

Run Number

Bit

From

To

Size

Weight

From

To

CONDUCTOR

24

0

60

16

0

60

SURFACE

12.25

60

1818

8.625

0

1818

PRODUCTION

7.875

1818

6862

4.5

11.6

0

6862

Casing & Tubing Record

<<< 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

TOOLS WERE RAN IN 4.5" 11.6# CASING.

RMT3D-A RAN IN SIGMA MODE WITH A GENERATOR VOLTAGE OF 80.

YOUR CREW: L. SIMONS & M. MEYER

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES.

Service Ticket No.

902311419

API No.

5045227810000

PGM Ver

WARRIOR 8

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

EQUIPMENT DATA

GAMMA

Run No.

ONE

Run No.

ONE

Run No.

ONE

Run No.

Serial No.

12105787

Serial No.

12386763

Serial No.

12210524

Serial No.

Model No.

TTTCU-002

Model No.

CBL-M

Model No.

RMT3D-A

Model No.

Diameter

1.69"

Diameter

2.75"

Diameter

2.125"

Diameter

LOGGING DATA

General Data

Pass

Depths

Well Head

Speed

Logging Run Comments

No

From

To

Pressure

Ft/Min

No.	MAIN	TD	SURFACE	Pressure	0 psi	Flow Rate	15 fpm		
	GAMMA		CBL		RMT3D				
Pass	Scale		Scale		Scale		Scale		
No.	L	R	L	R	L	R	L	L	
	0	200	0	100	60	0			
DIRECTIONAL INFORMATION									
Maximum Deviation			deg. @		KOP				

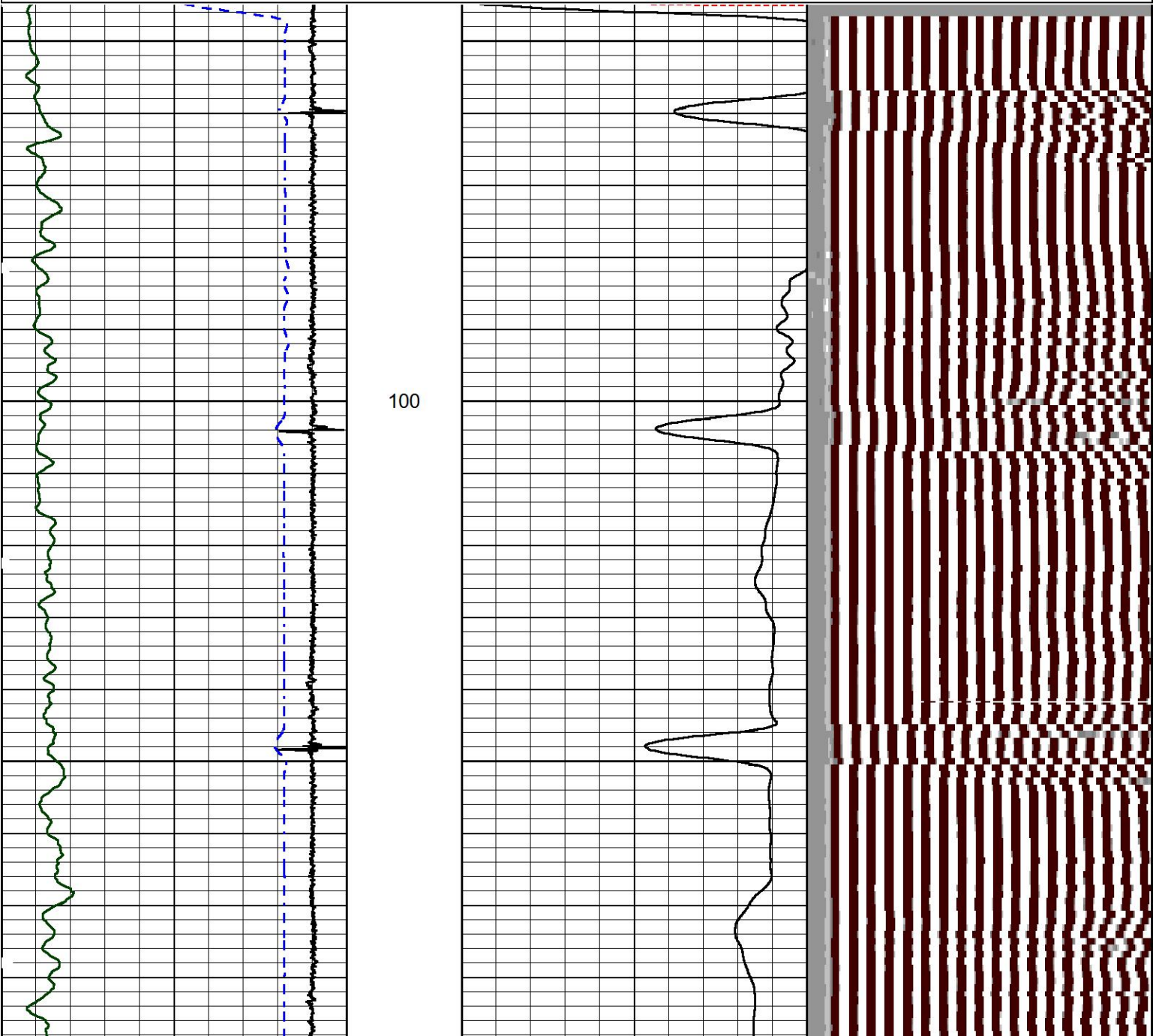
HALLIBURTON

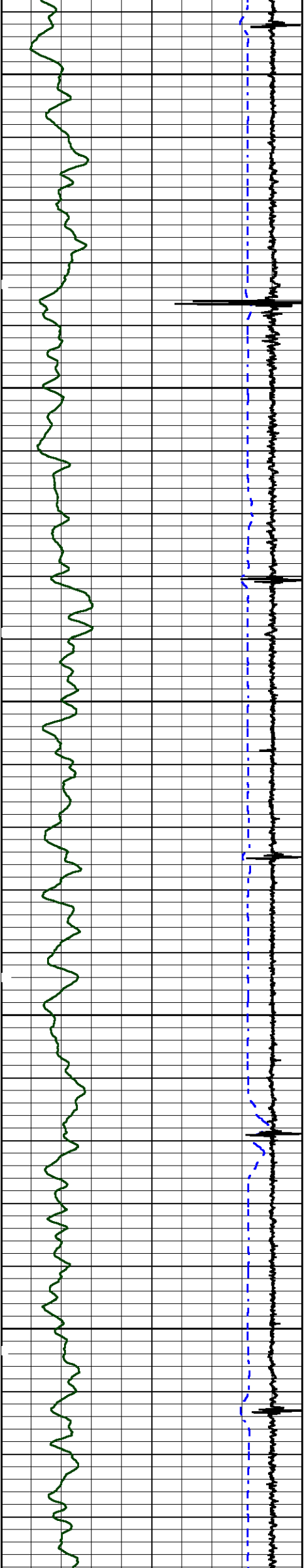
MAIN PASS

5" = 100'

Database File	d:\jobs\yater_43d.db
Dataset Pathname	MAIN1
Presentation Format	1_URSA~1
Dataset Creation	Sun Apr 12 04:55:28 2015
Charted by	Depth in Feet scaled 1:240

3' Travel Time (usec)			LTEN	0		3' Amplitude (mV)		100	200	MSG				1060
-1660	CCL	180		0	(lb,4000	0	Amplified Amplitude (mV)			10	<div></div>			
0			Gamma Ray (GAPI)		200									

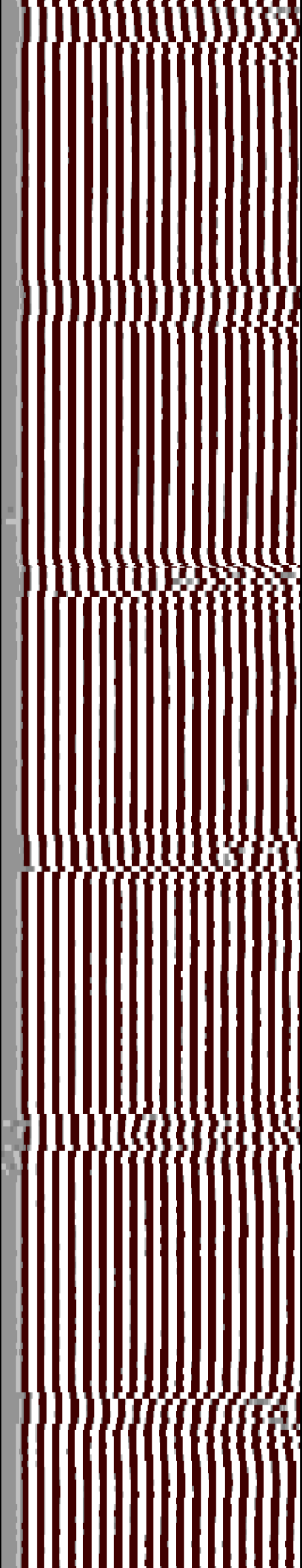
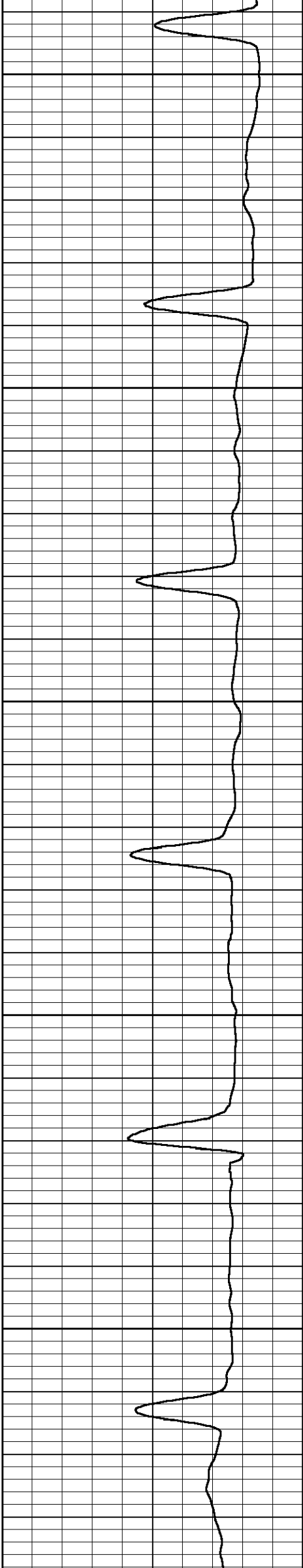


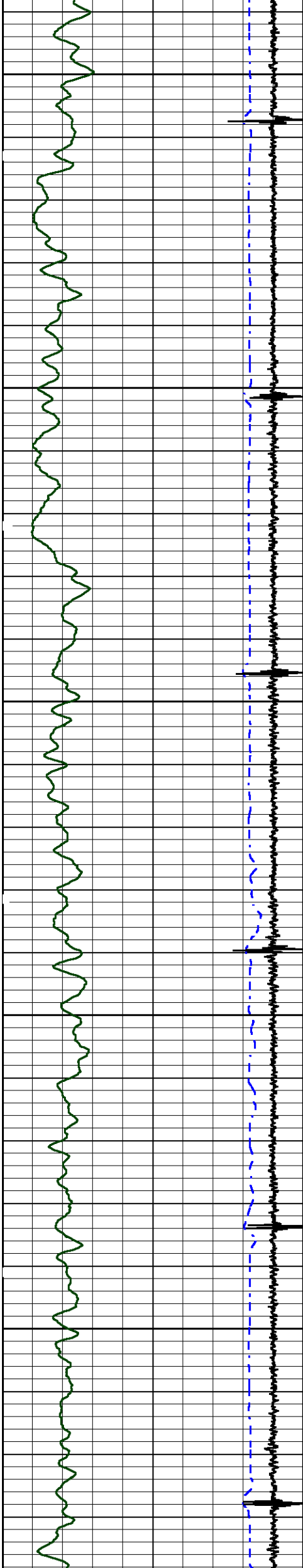


200

300

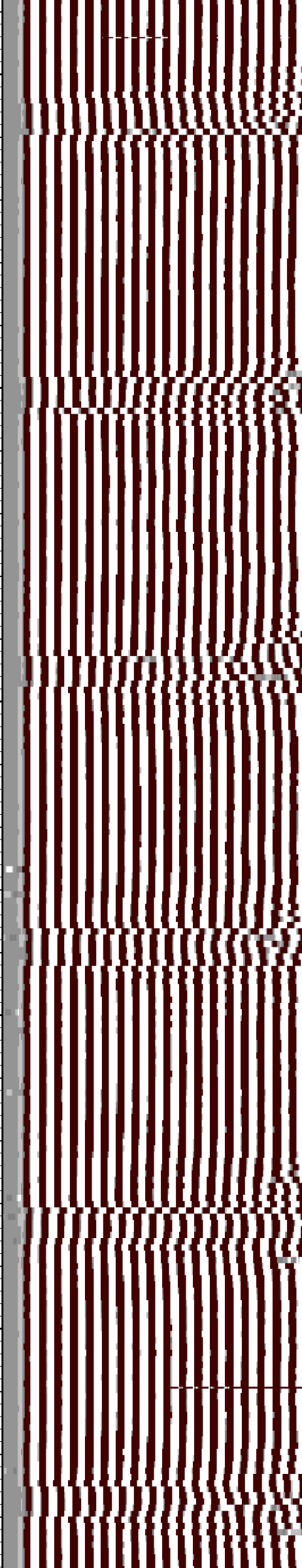
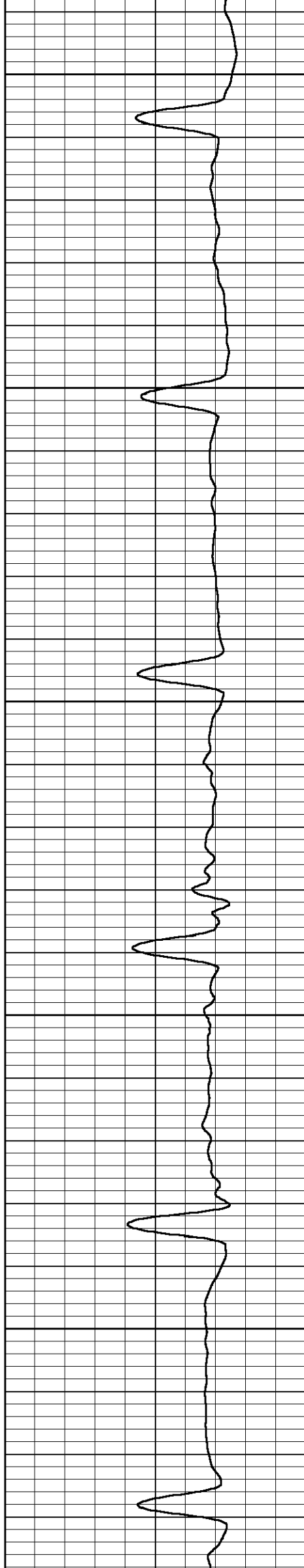
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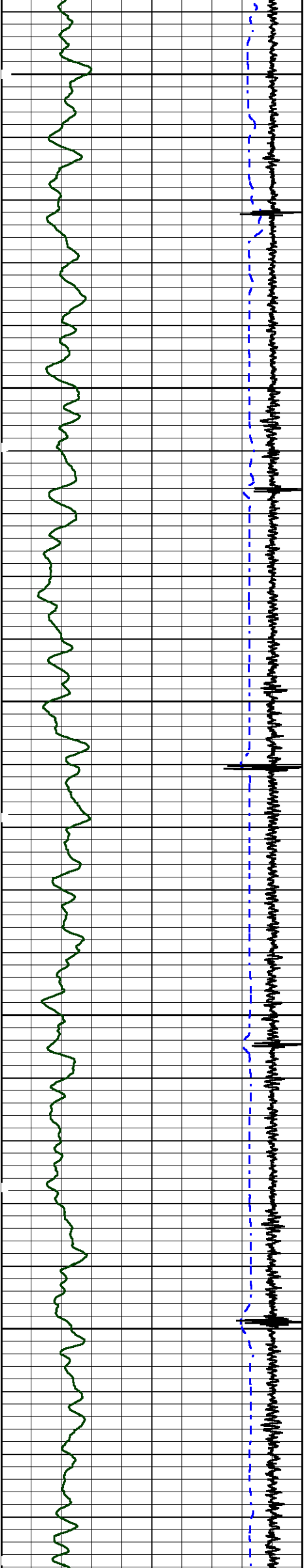




500

600

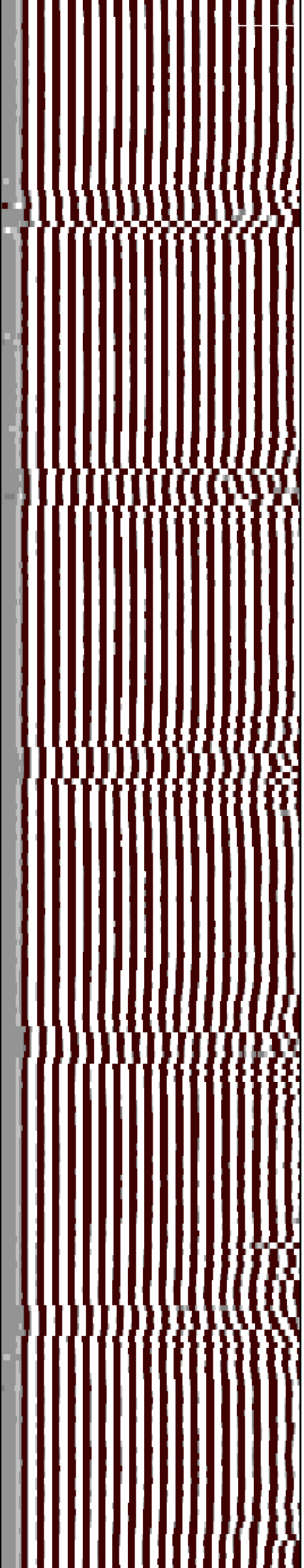
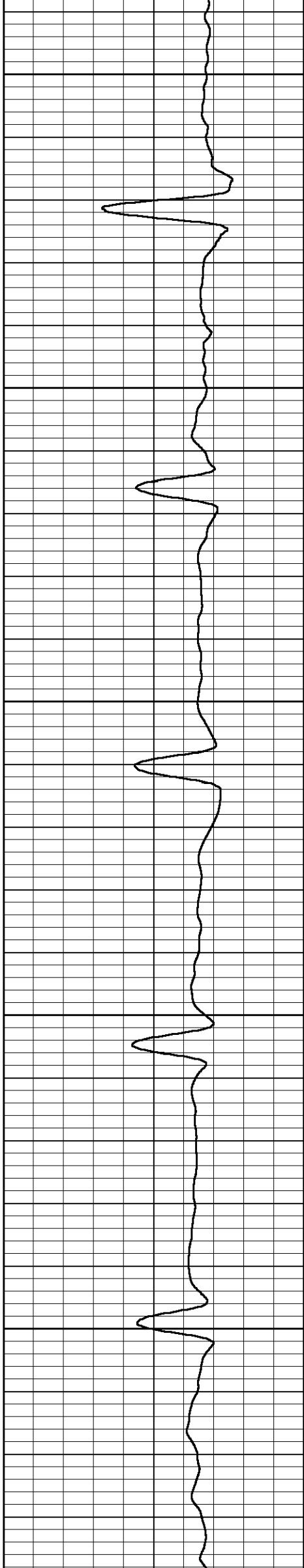


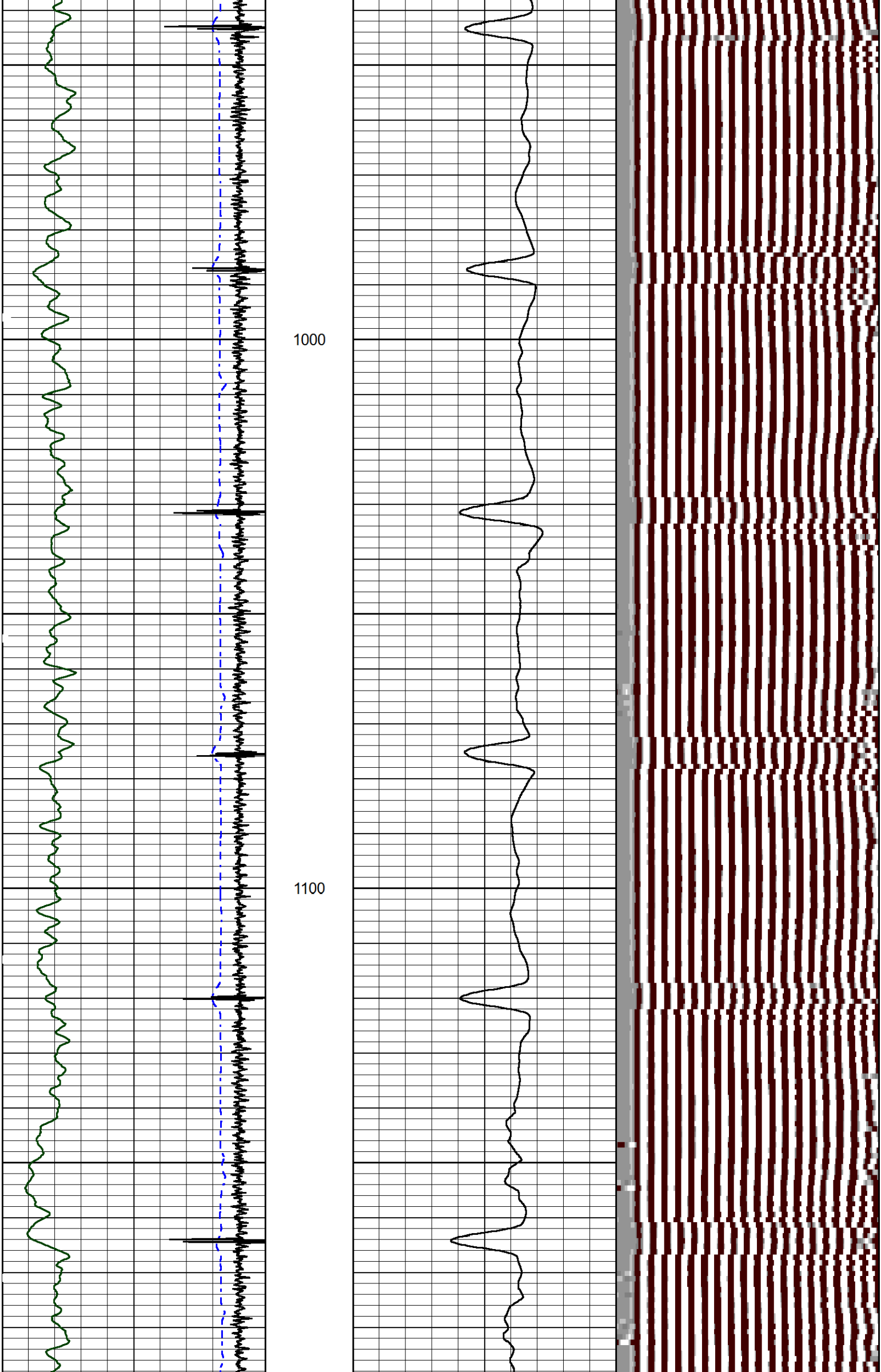


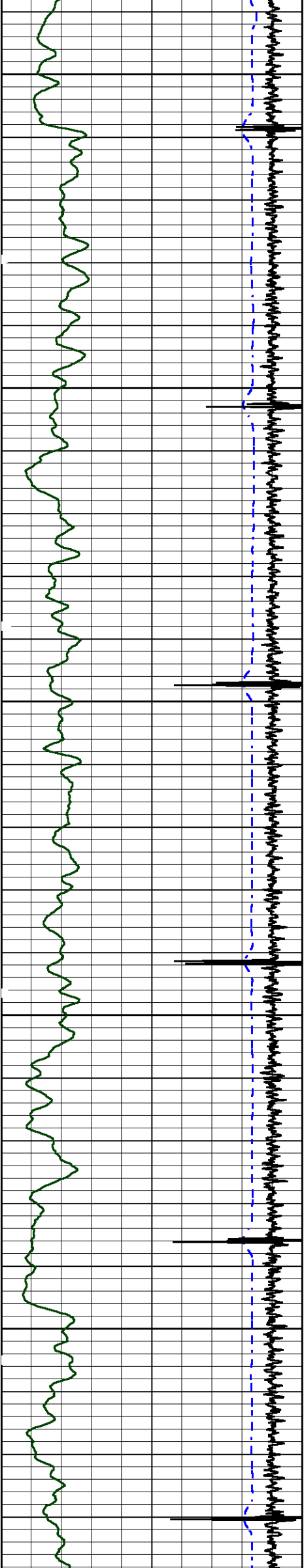
700

800

900



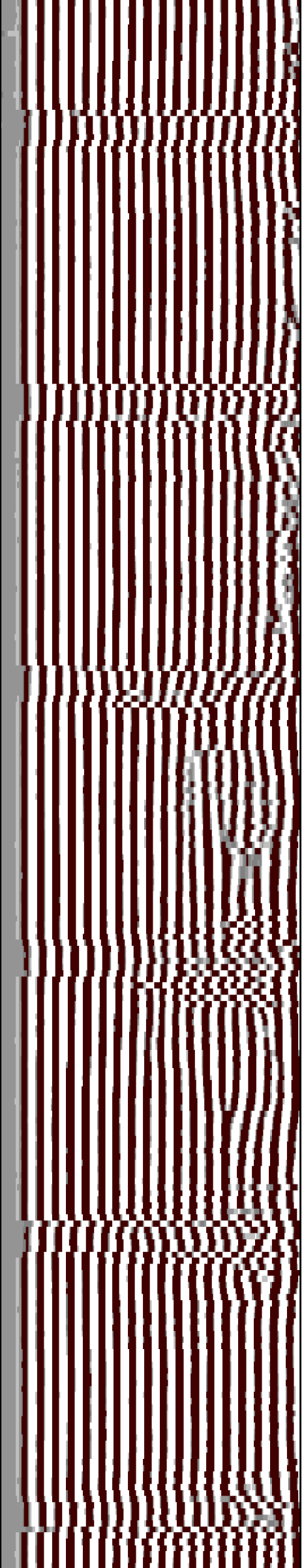
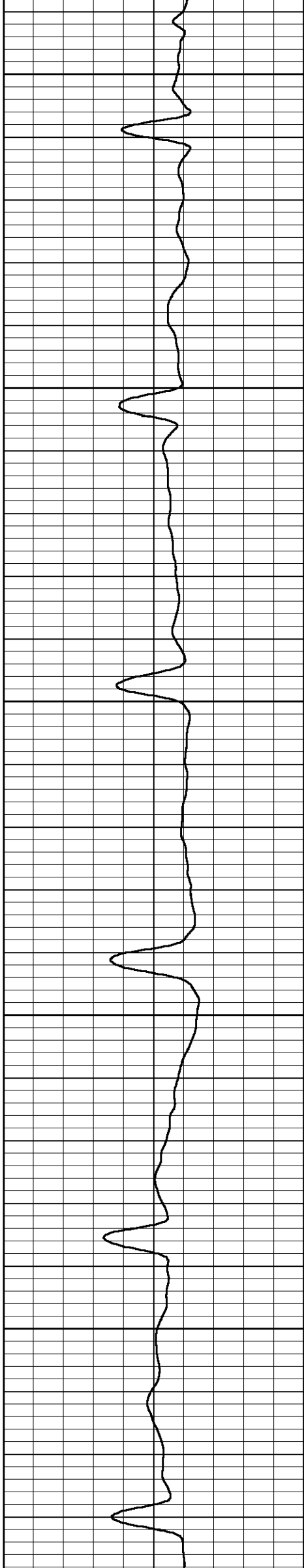


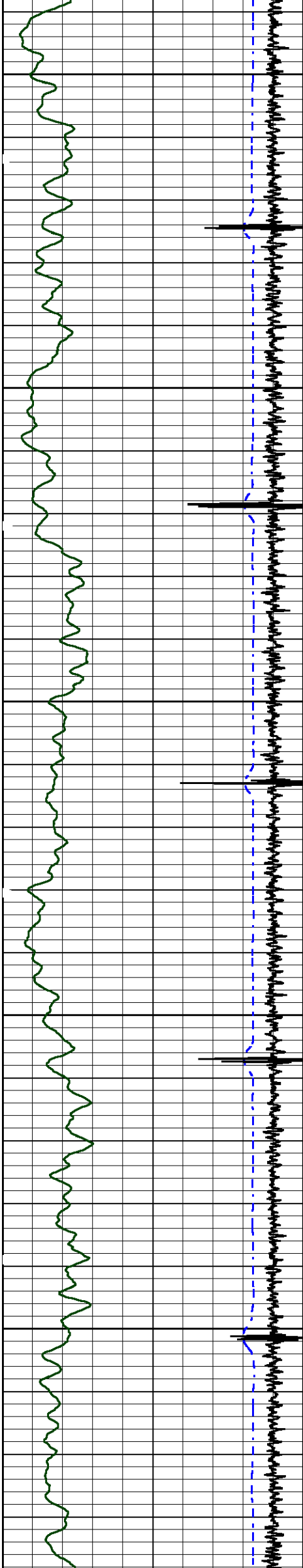


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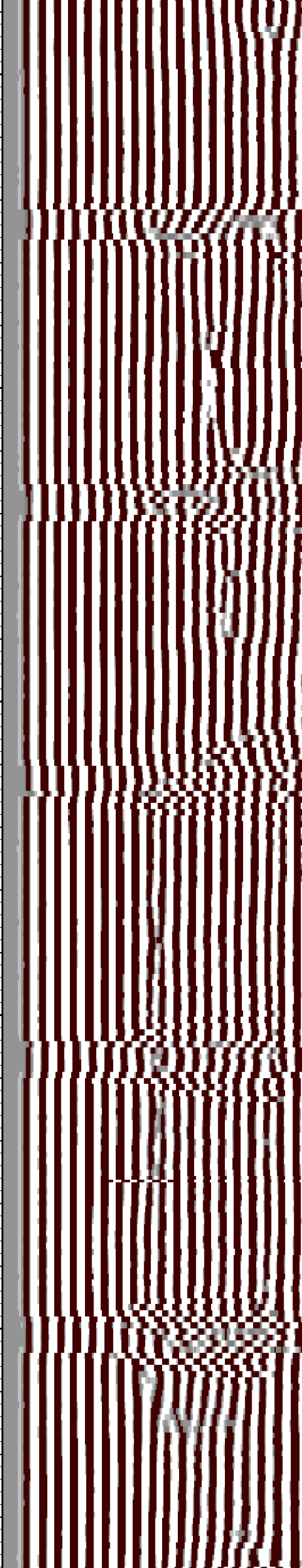
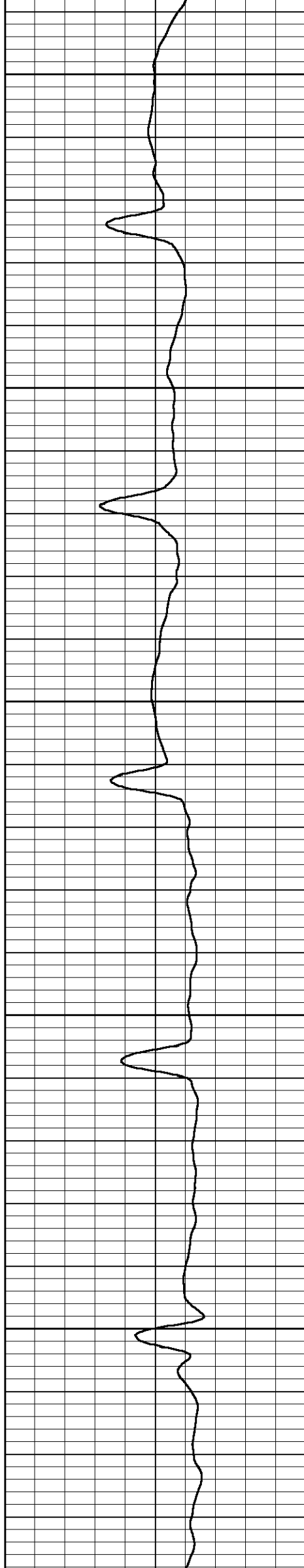
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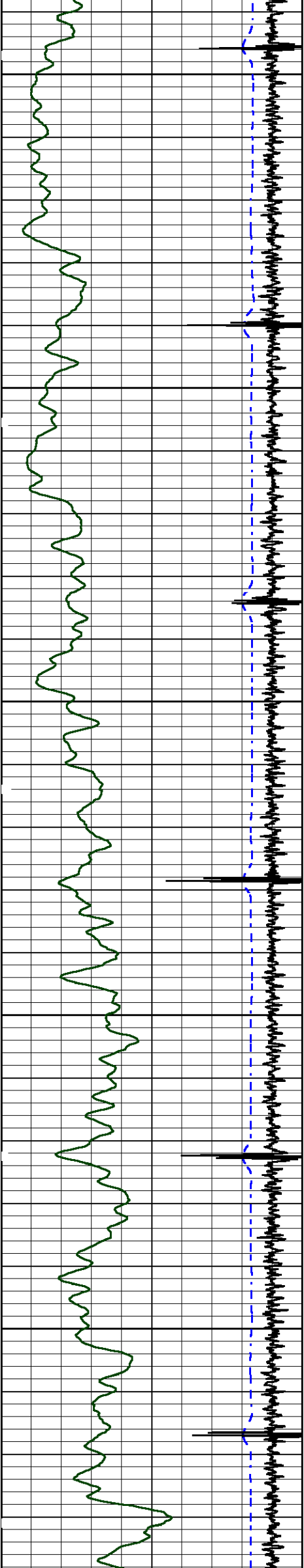




1500

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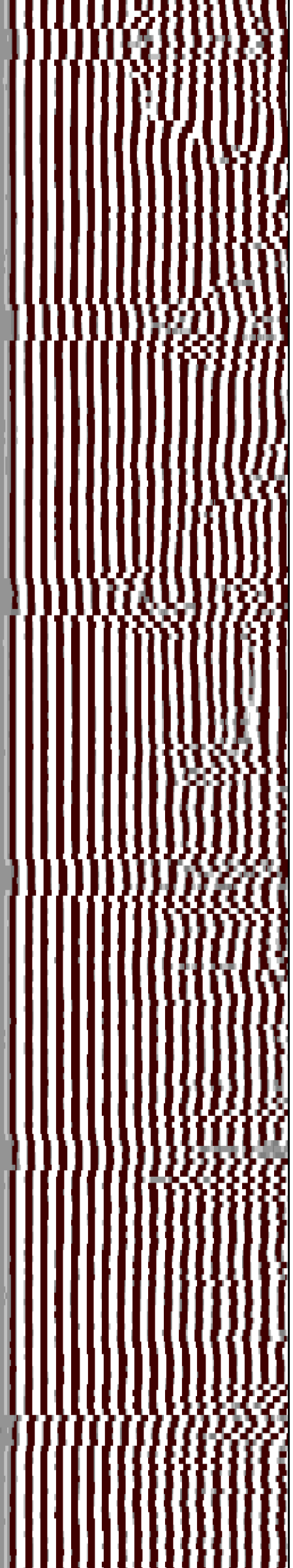
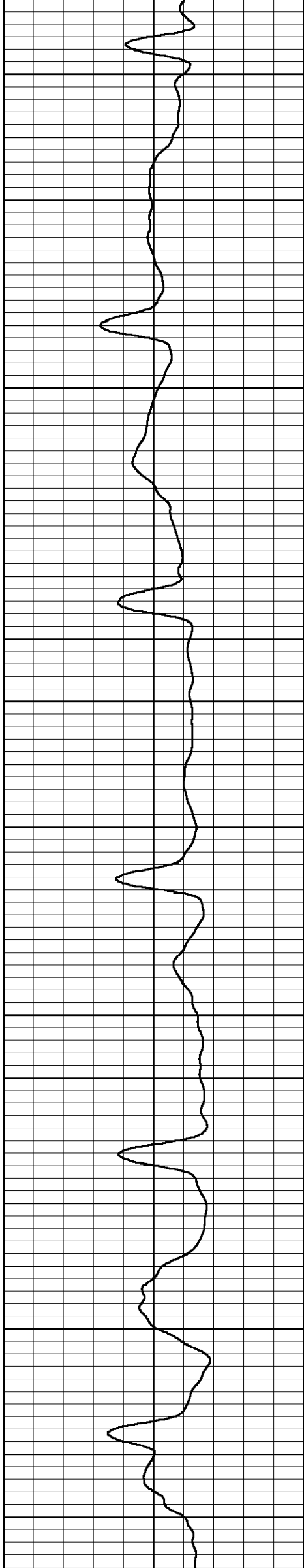


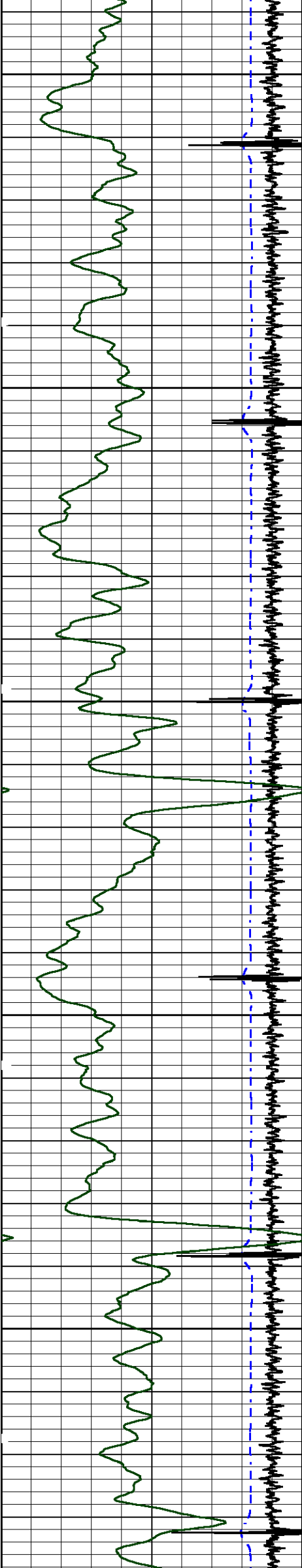


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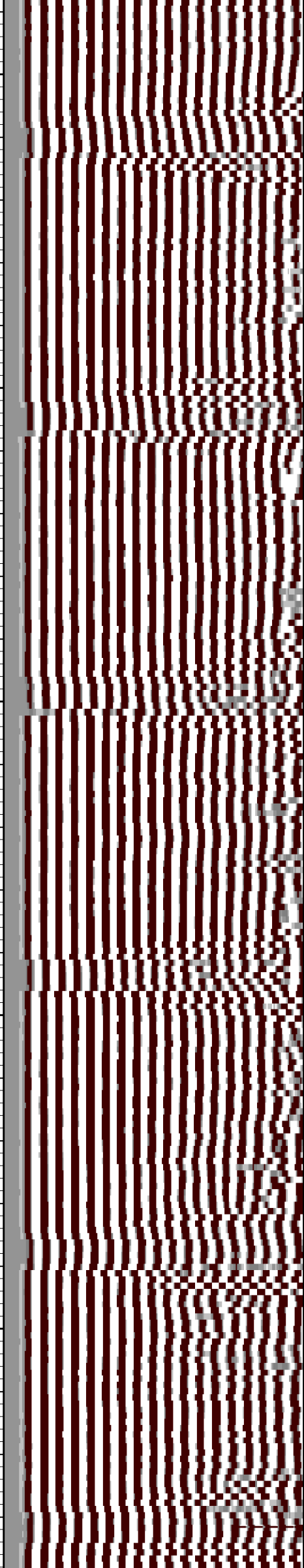
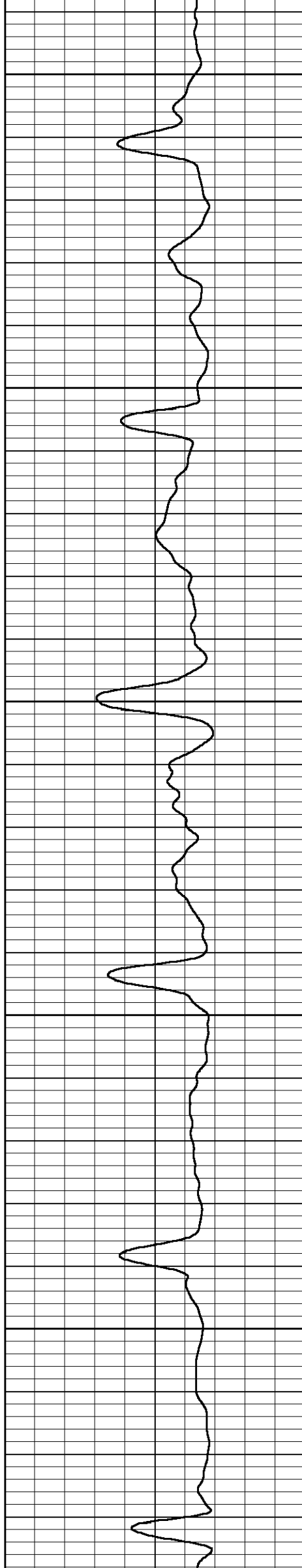
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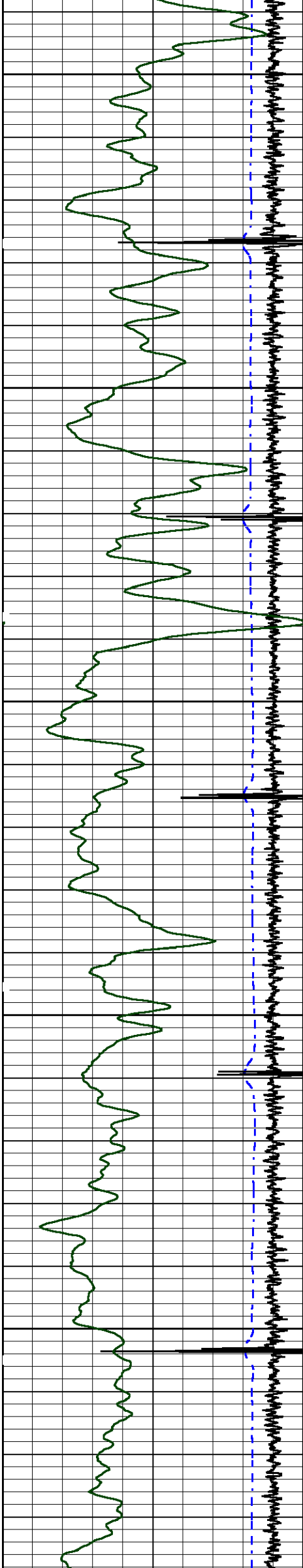




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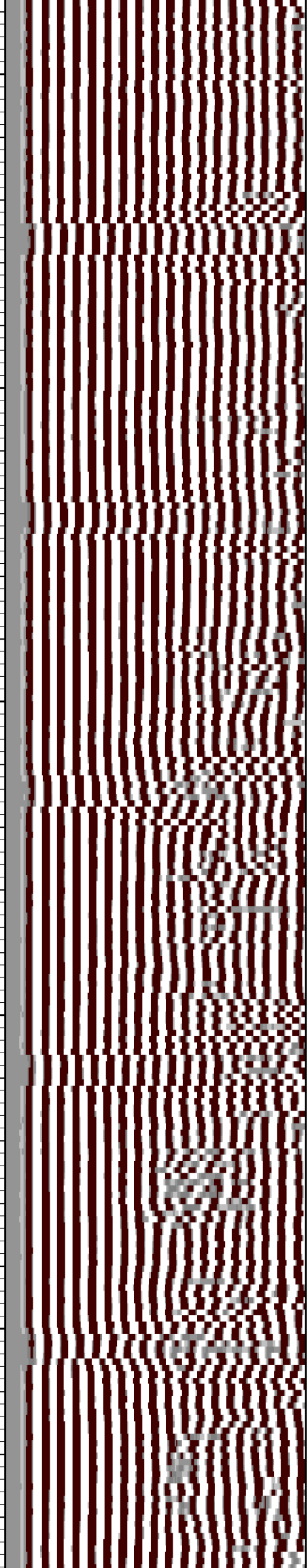
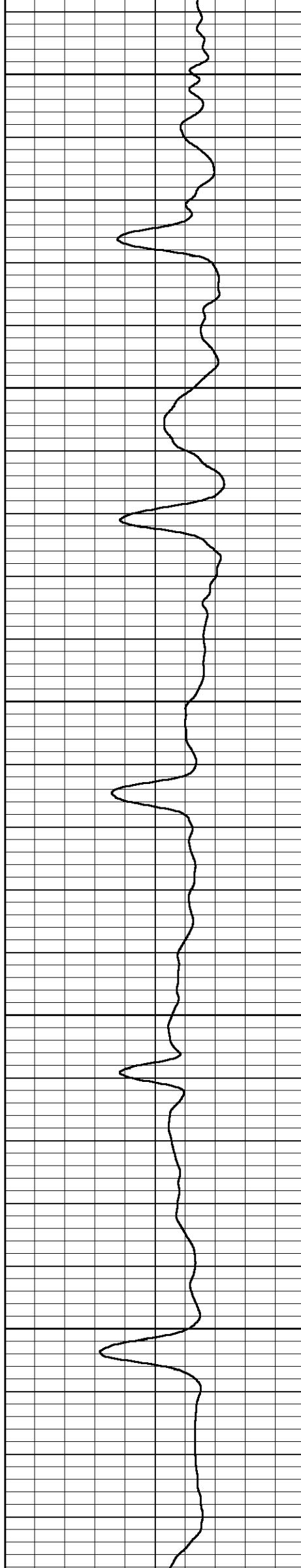


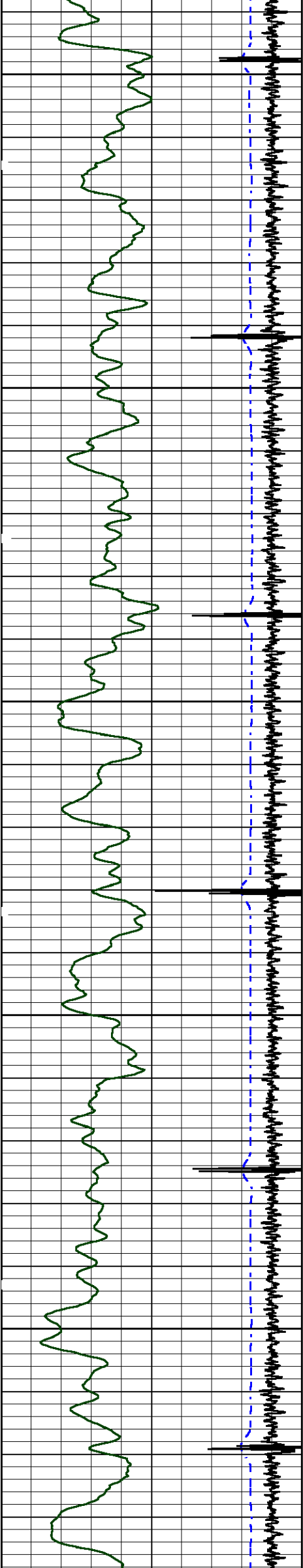


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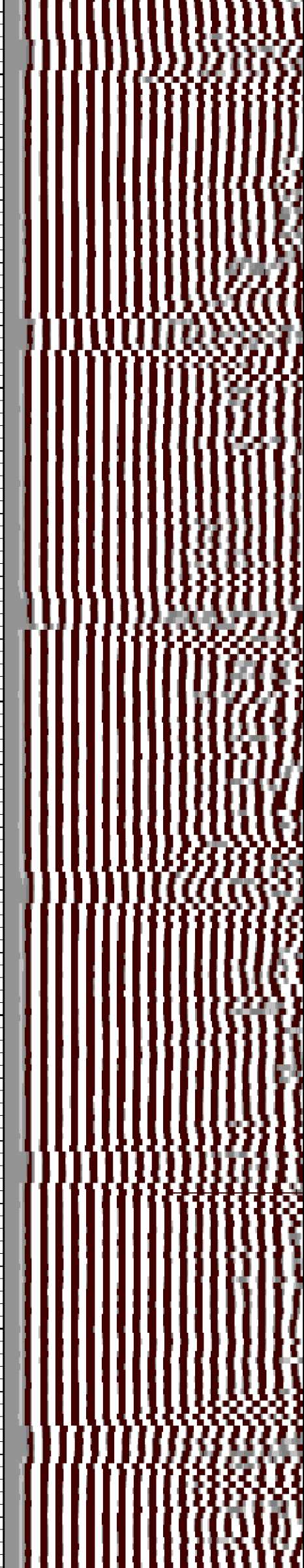
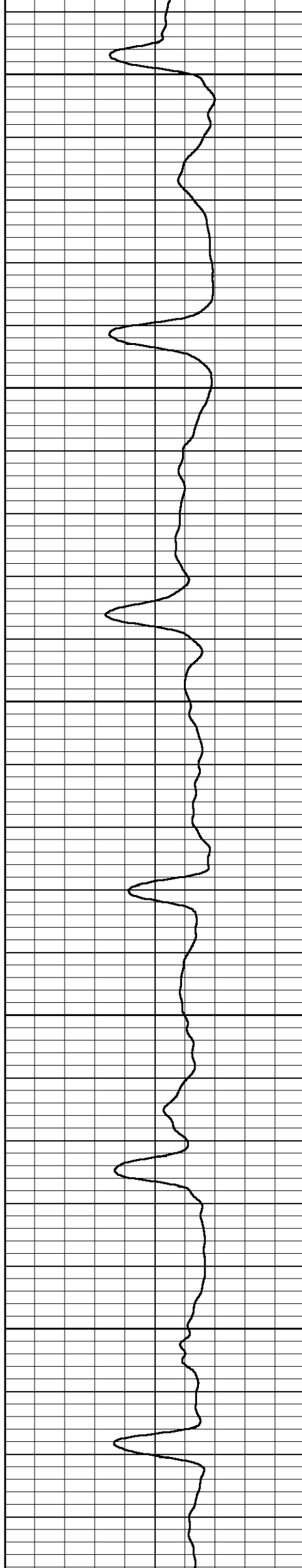
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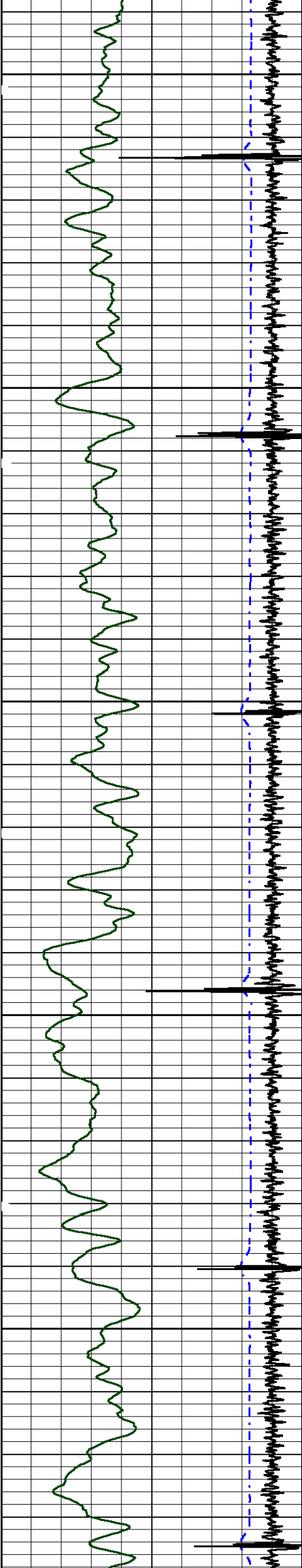




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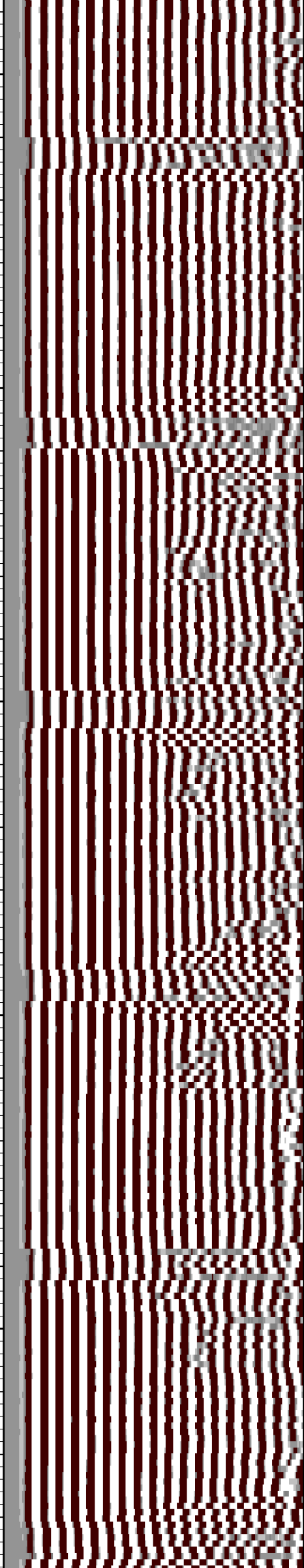
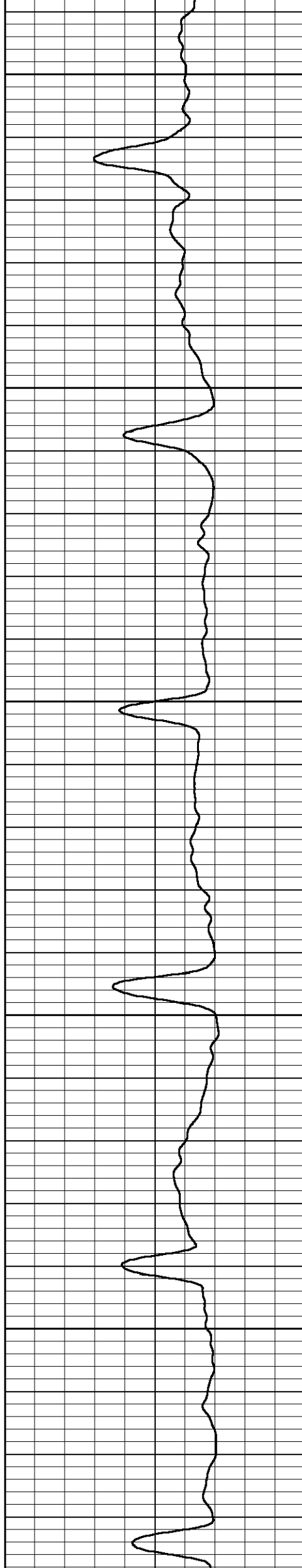


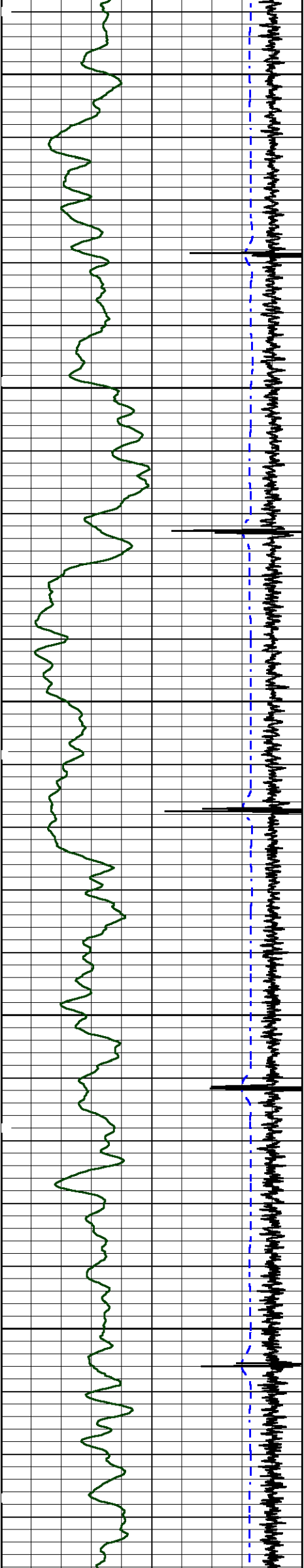


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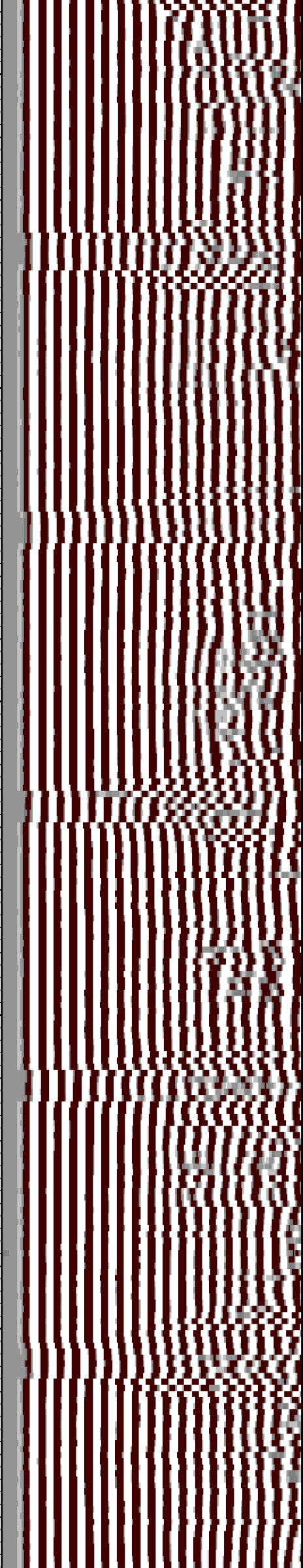
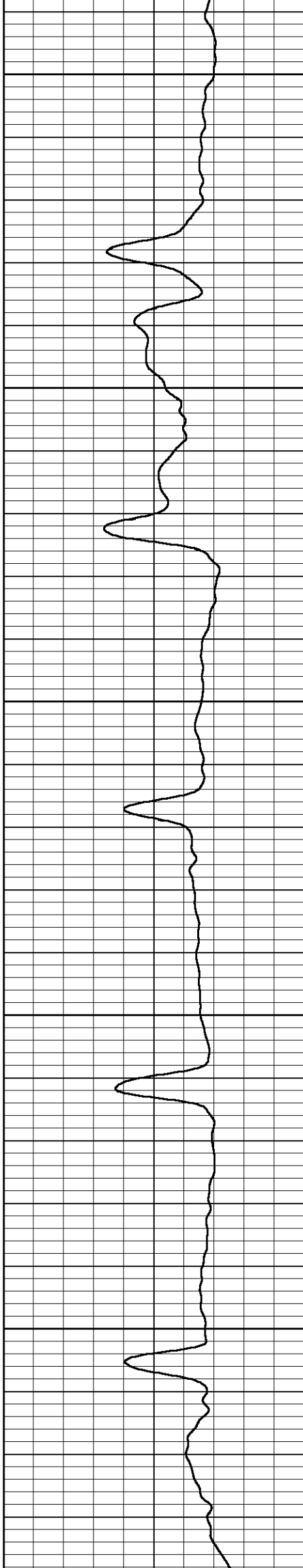
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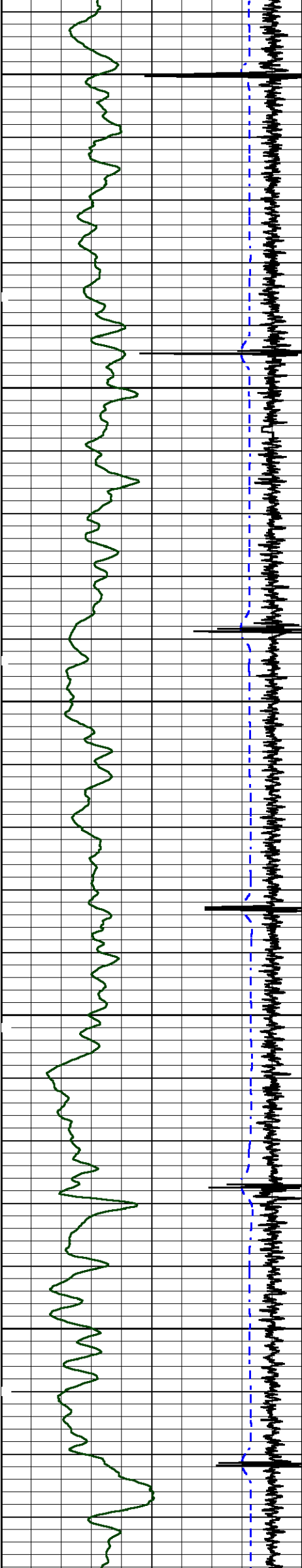




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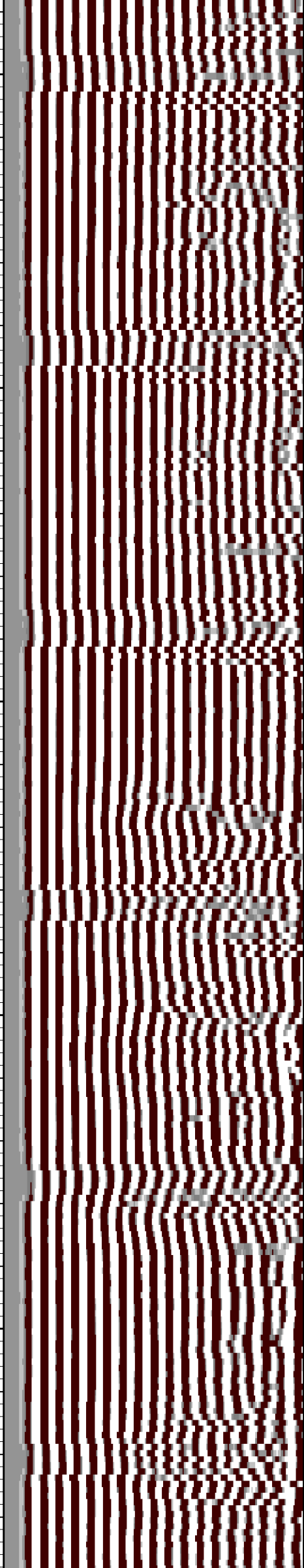
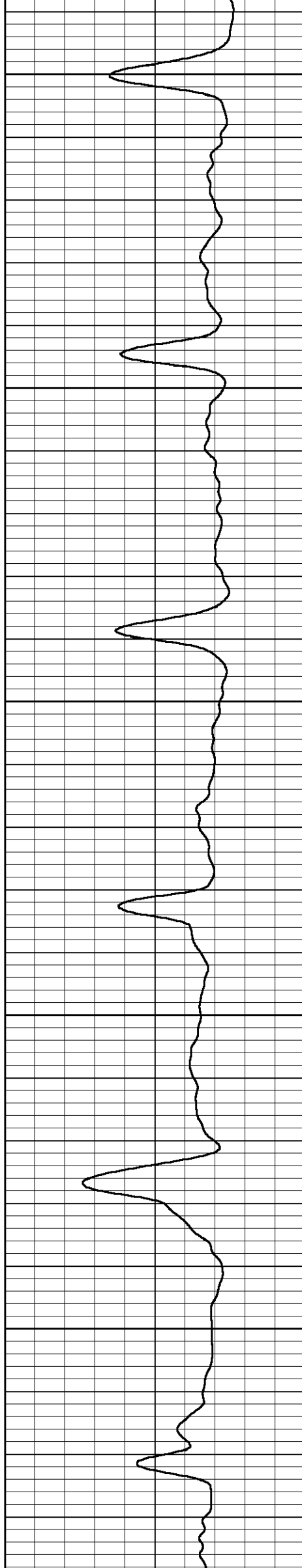


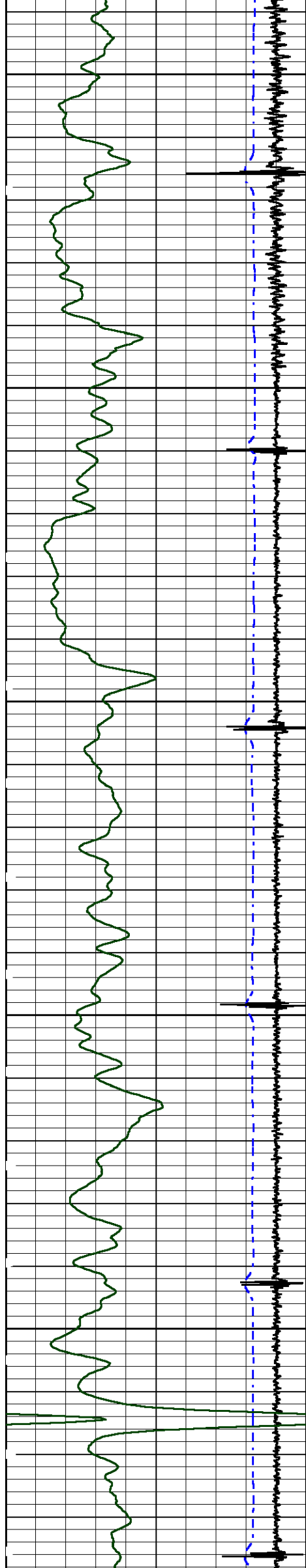


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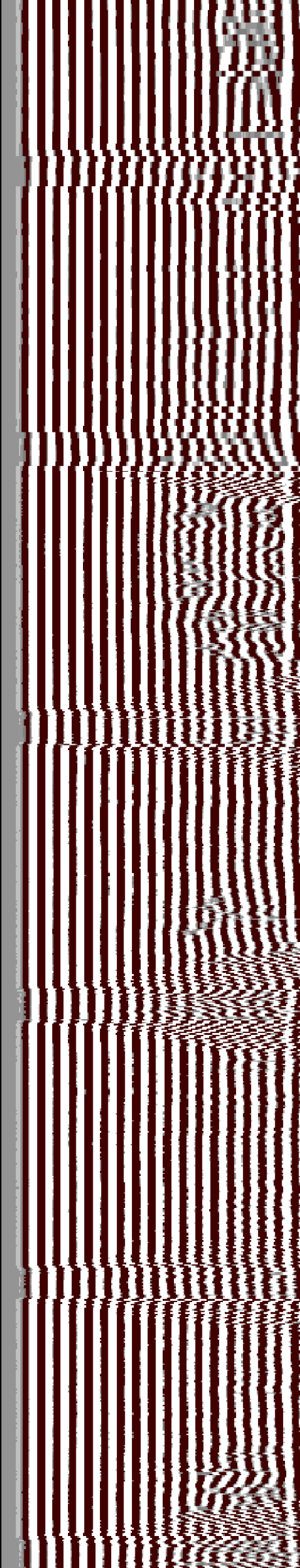
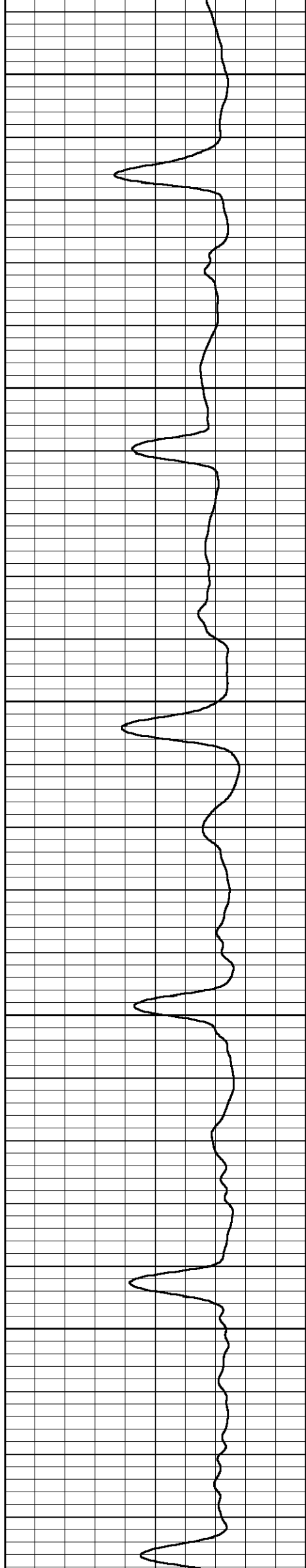
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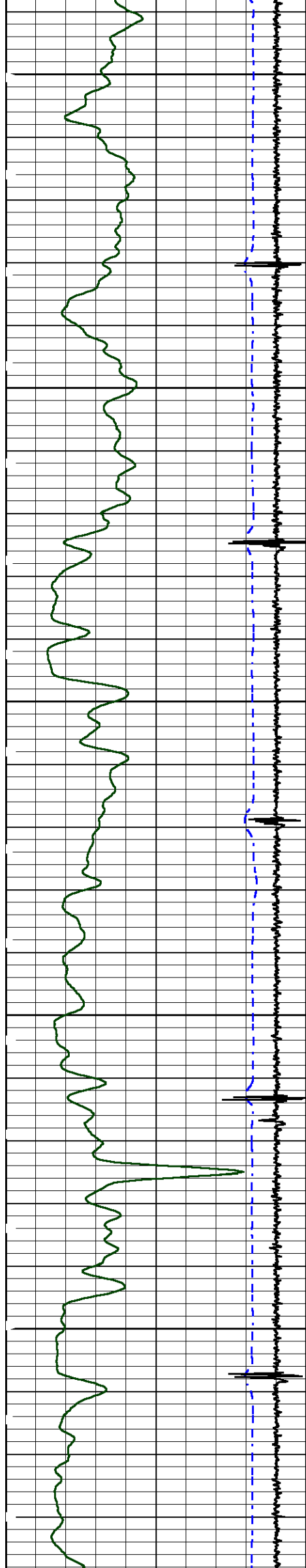




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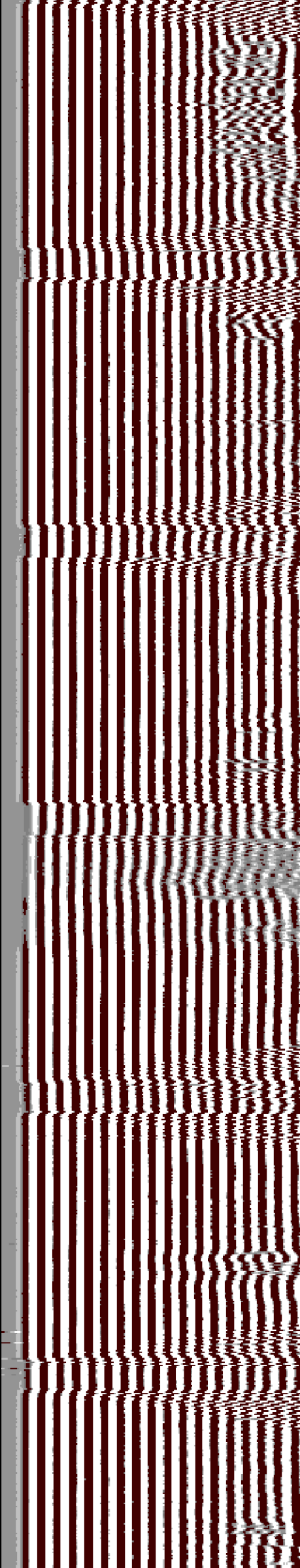
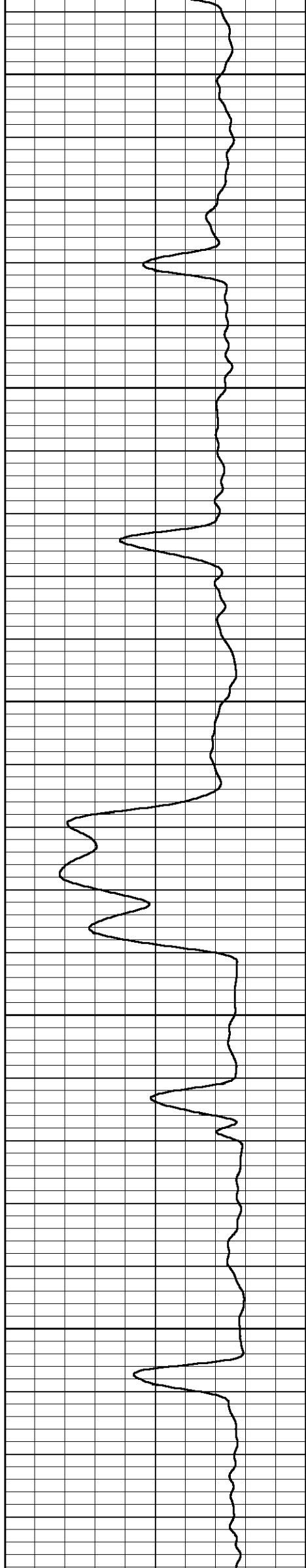


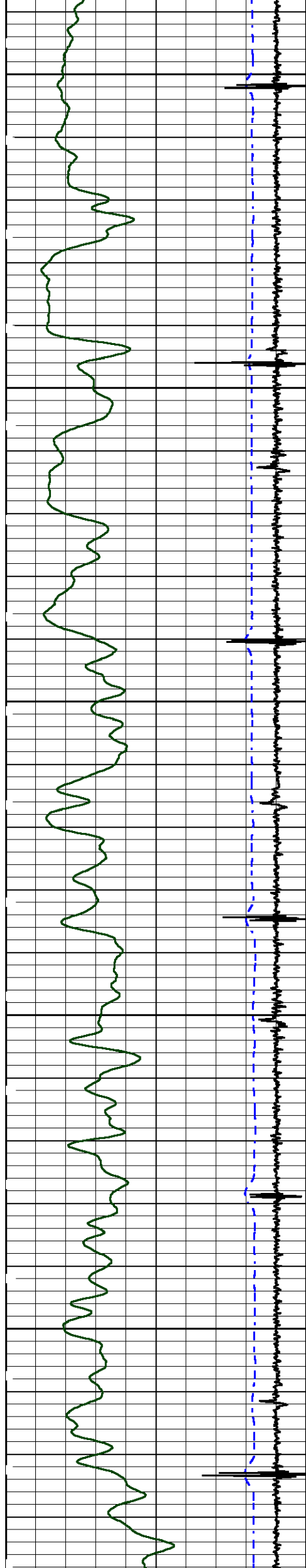


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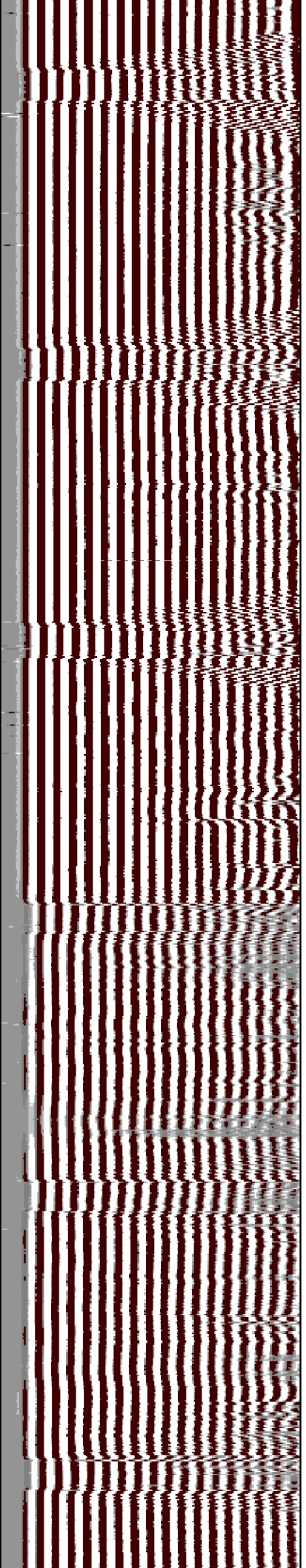
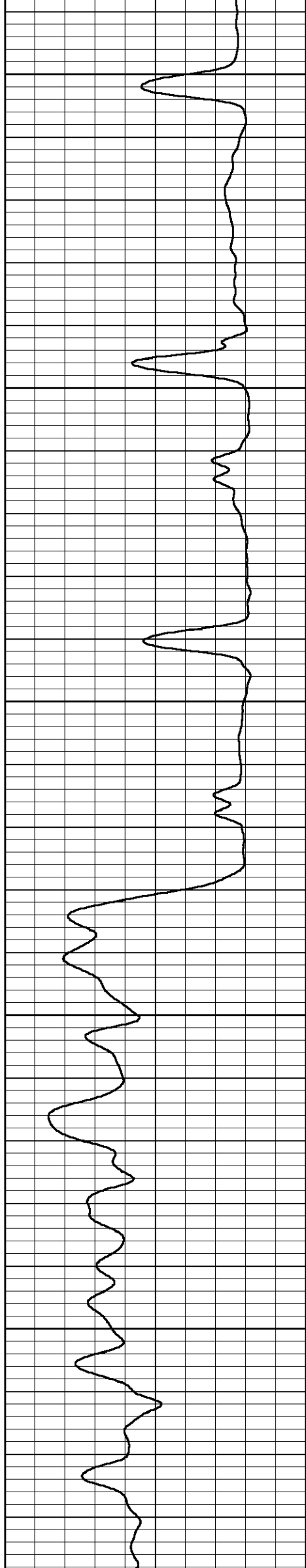
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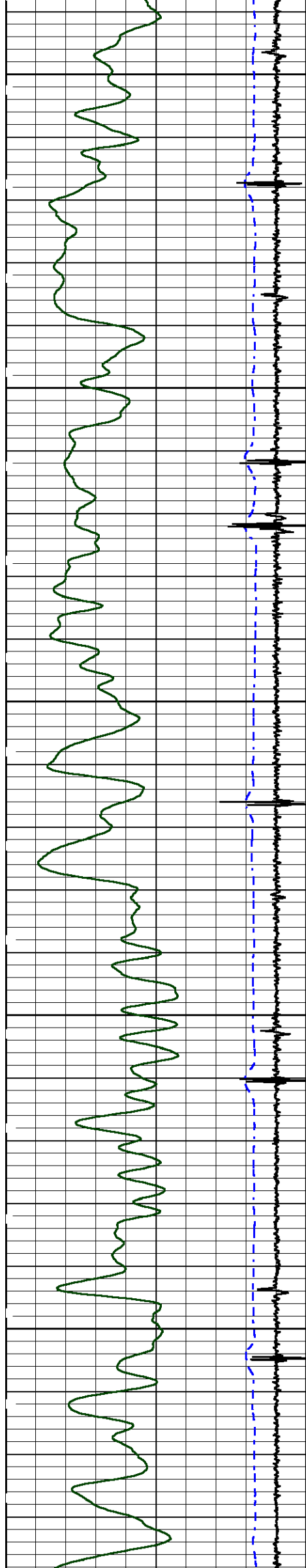




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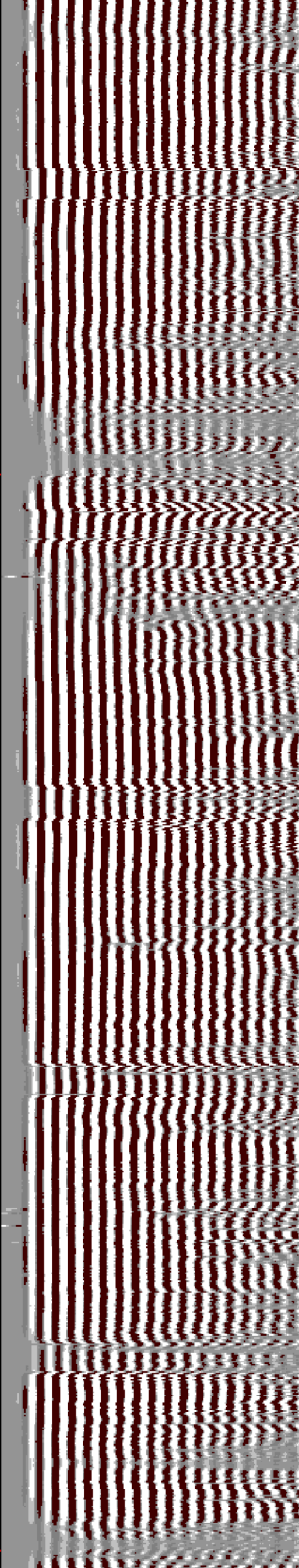
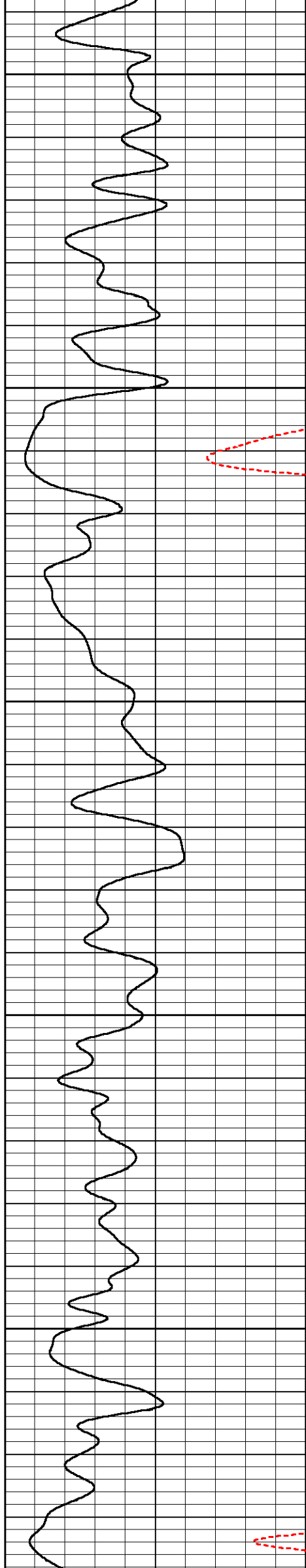


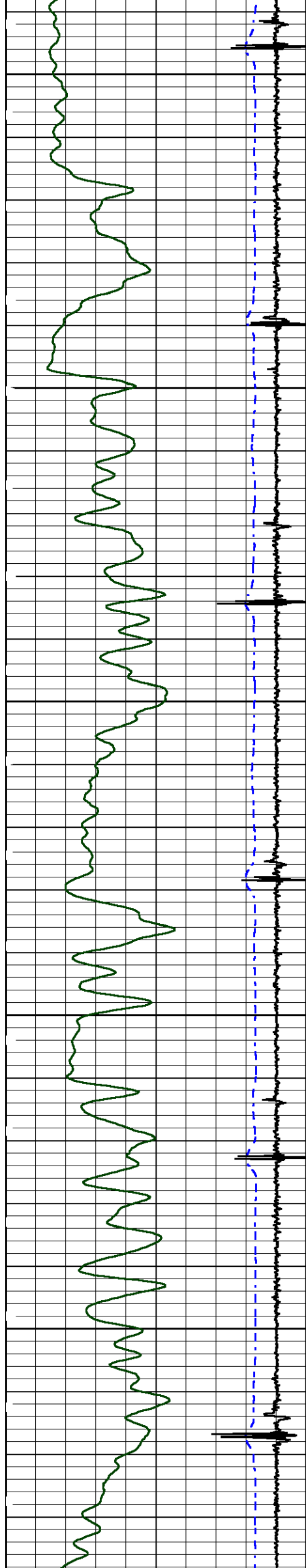


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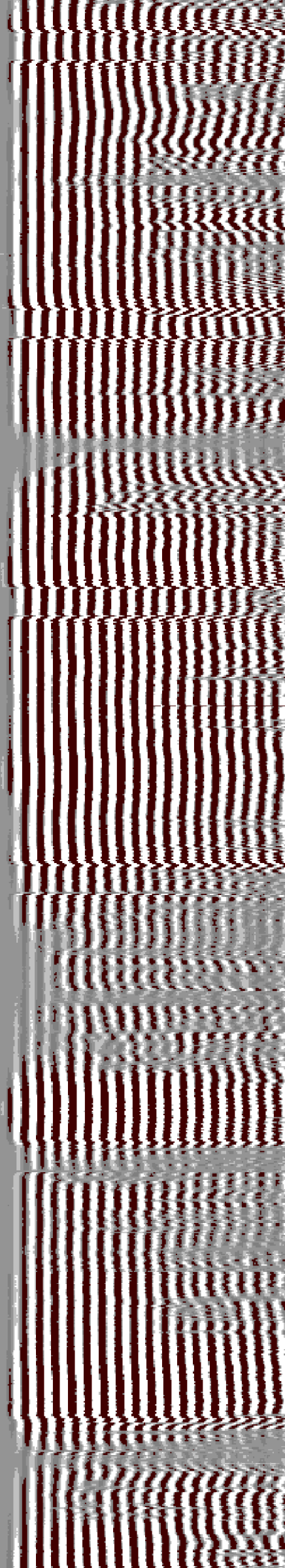
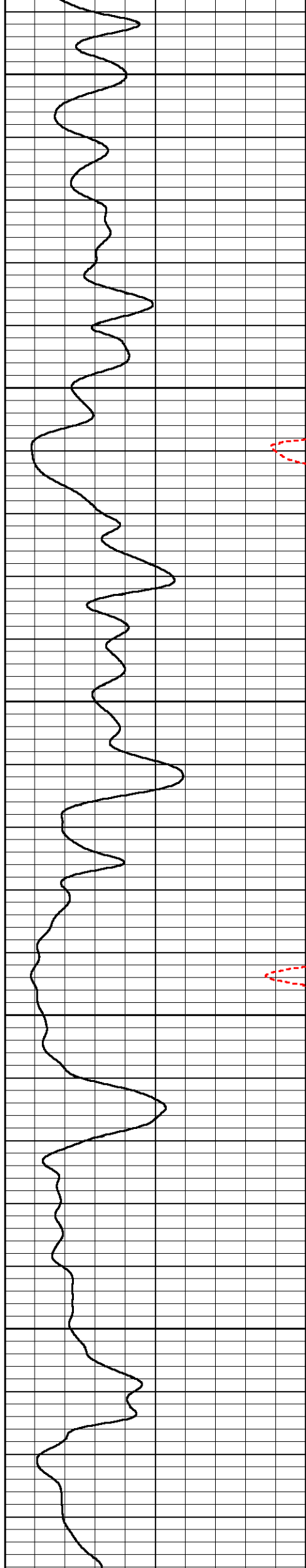
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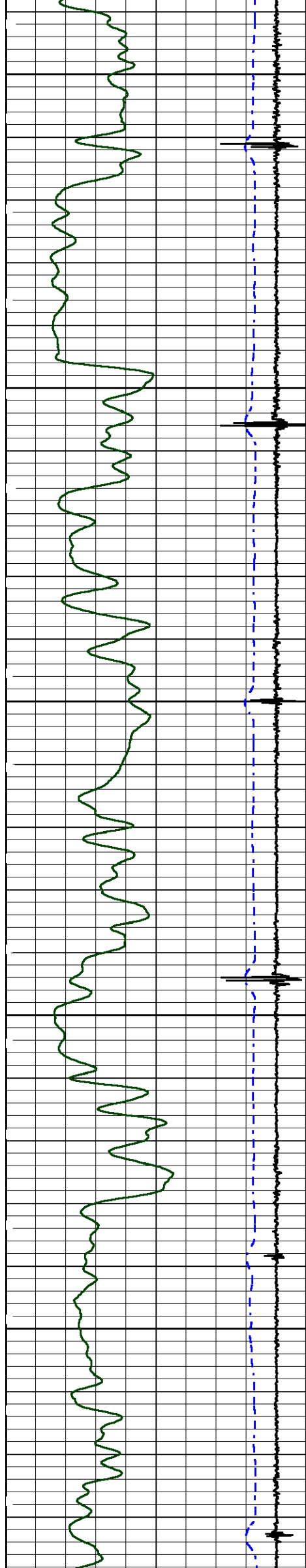




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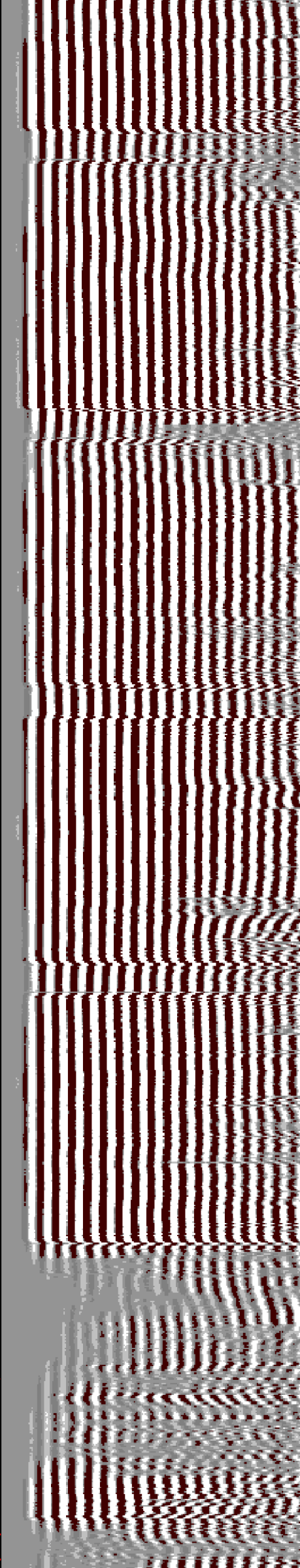
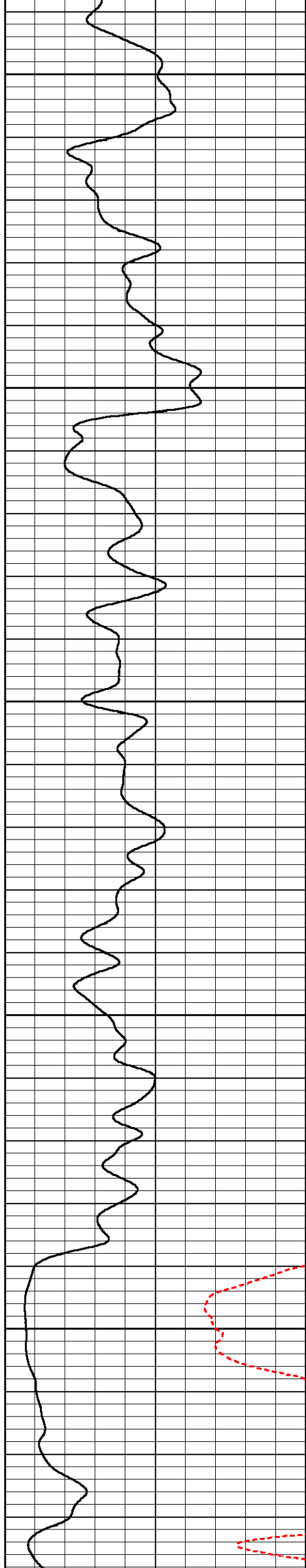


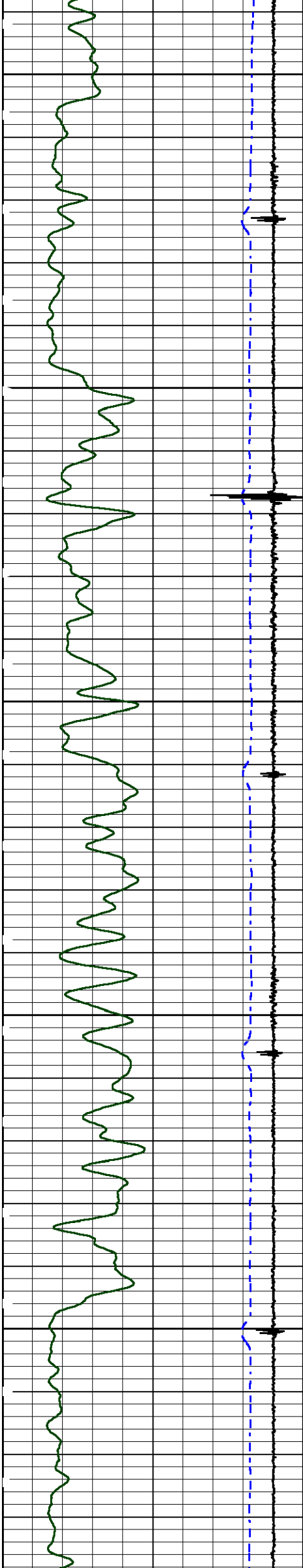


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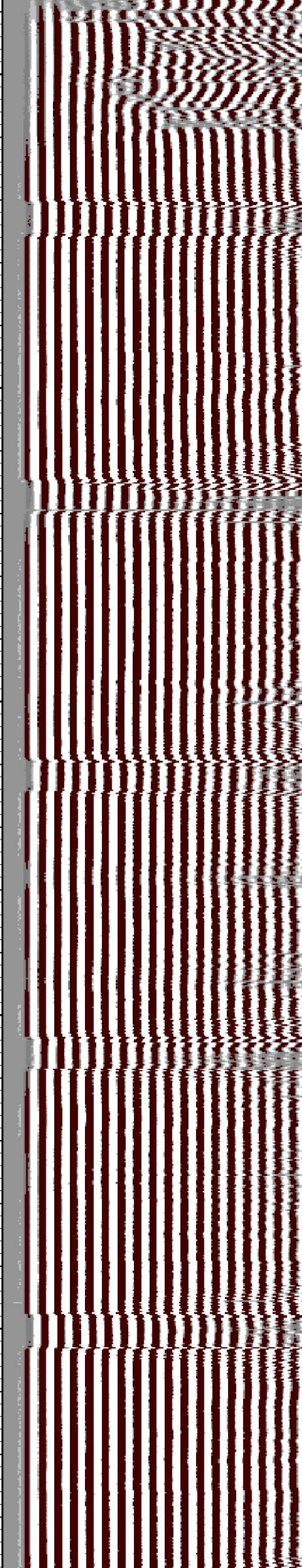
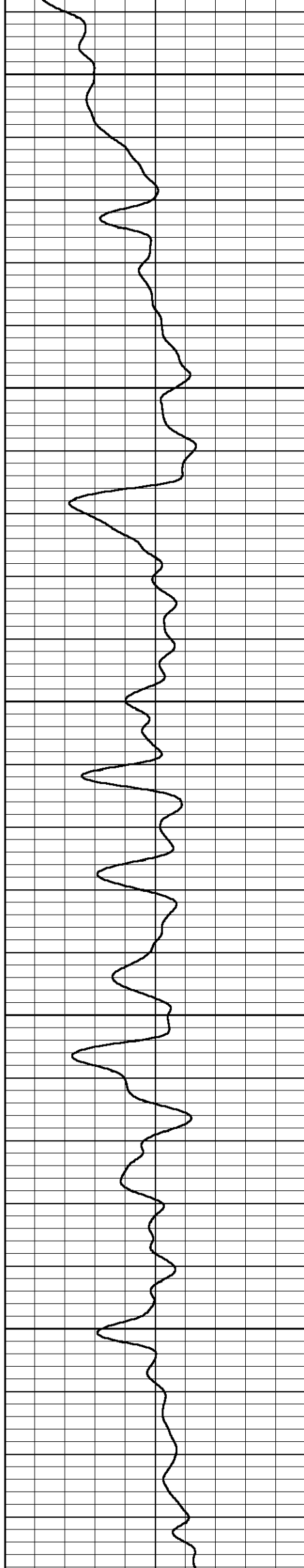
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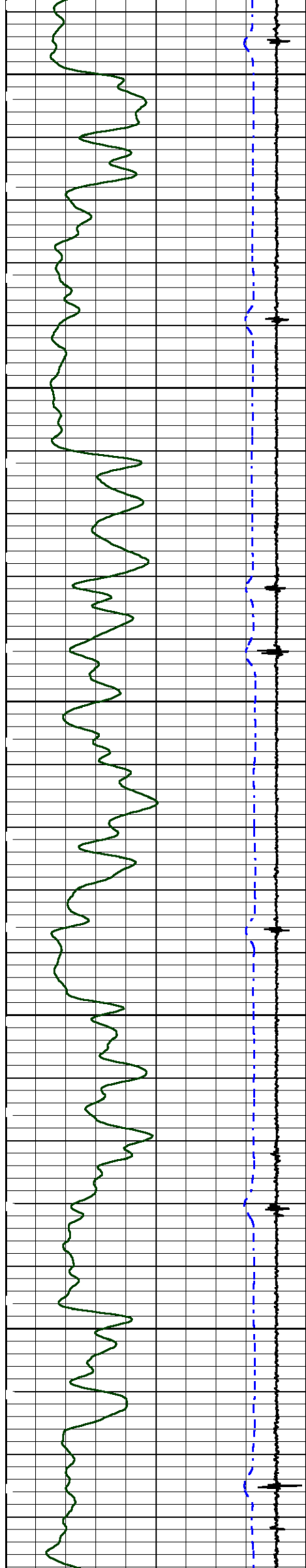




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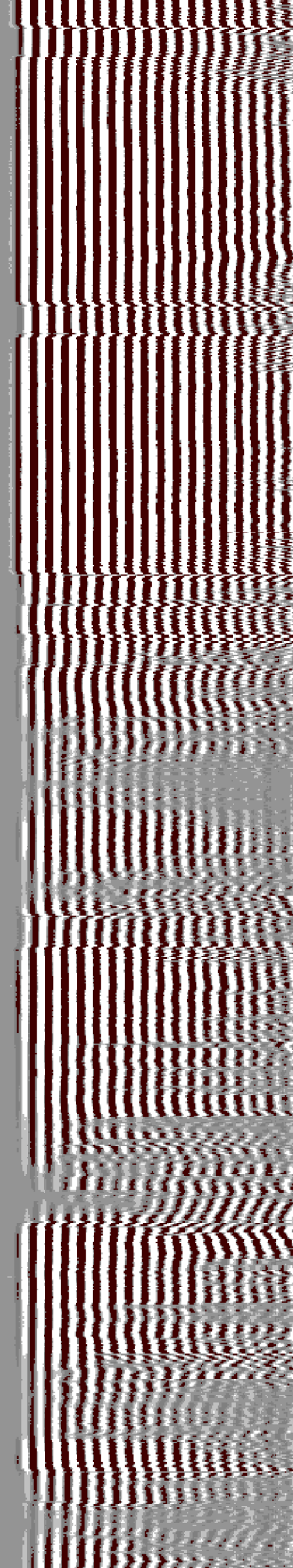
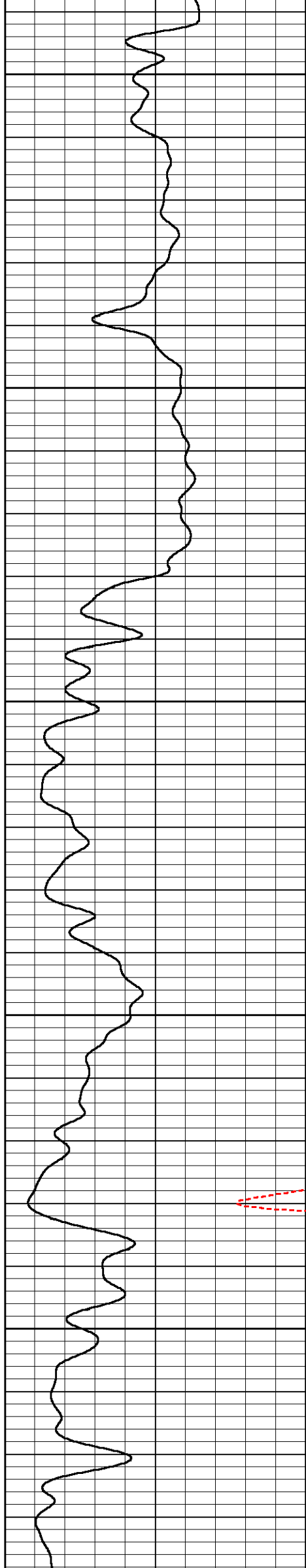


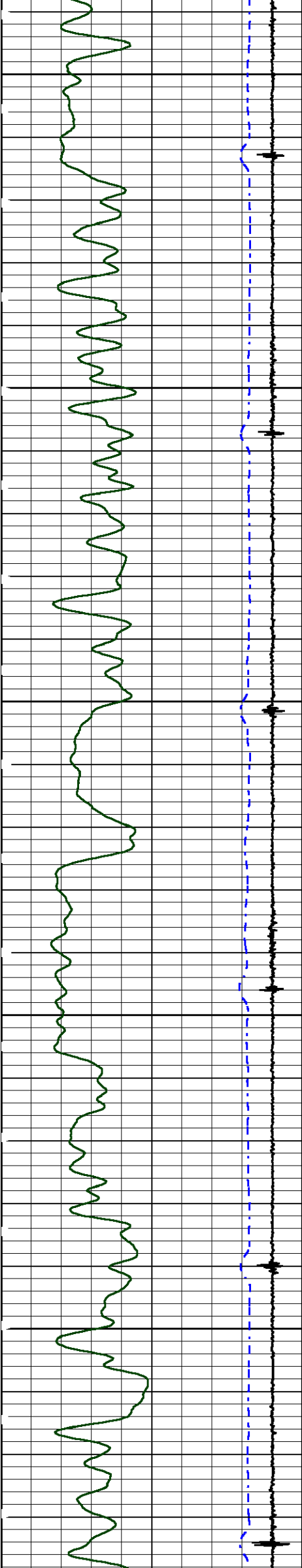


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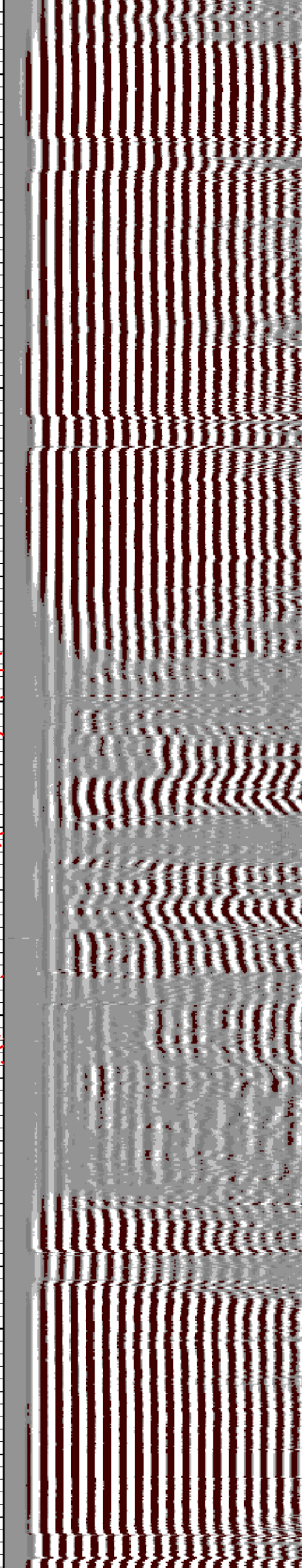
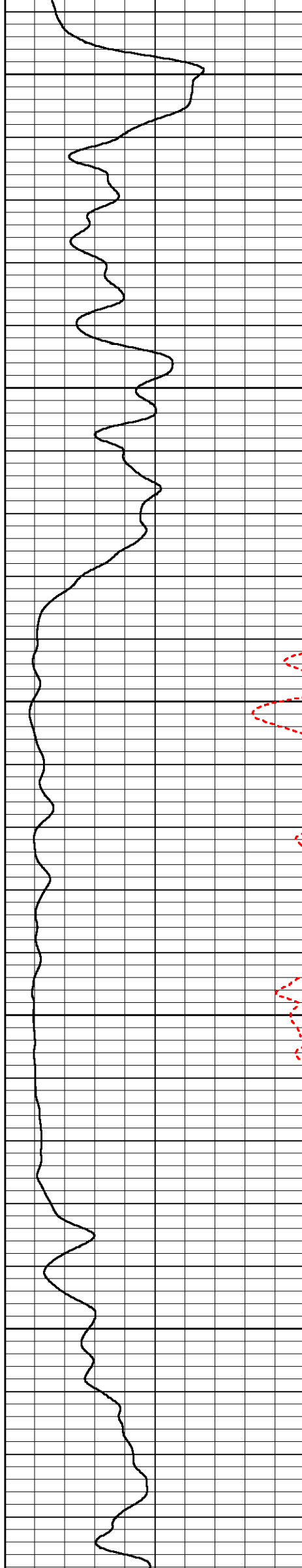
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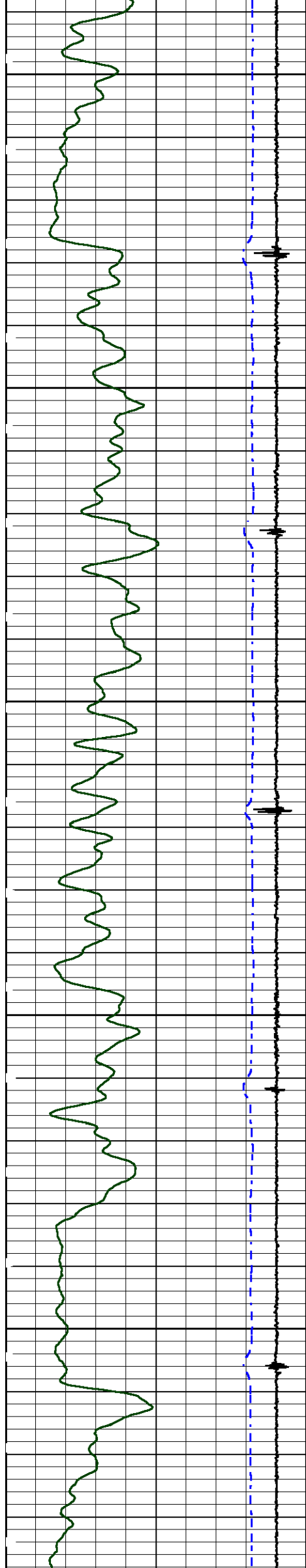




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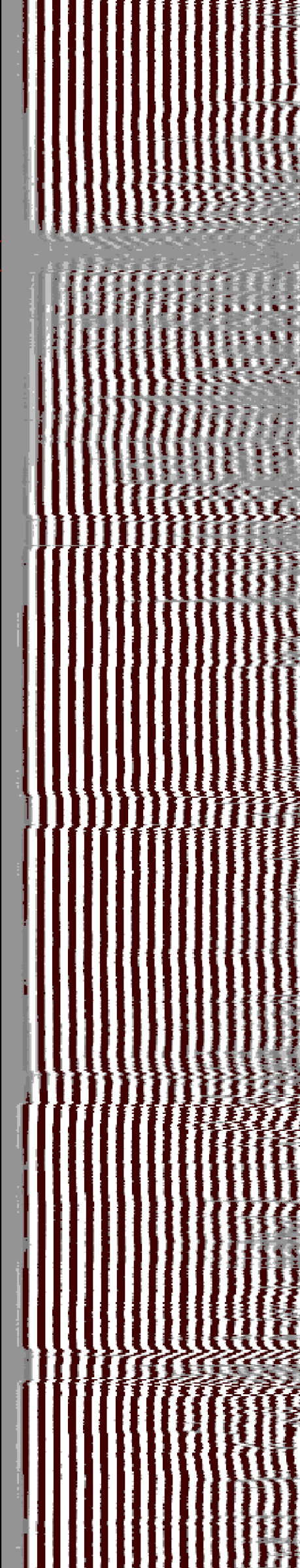
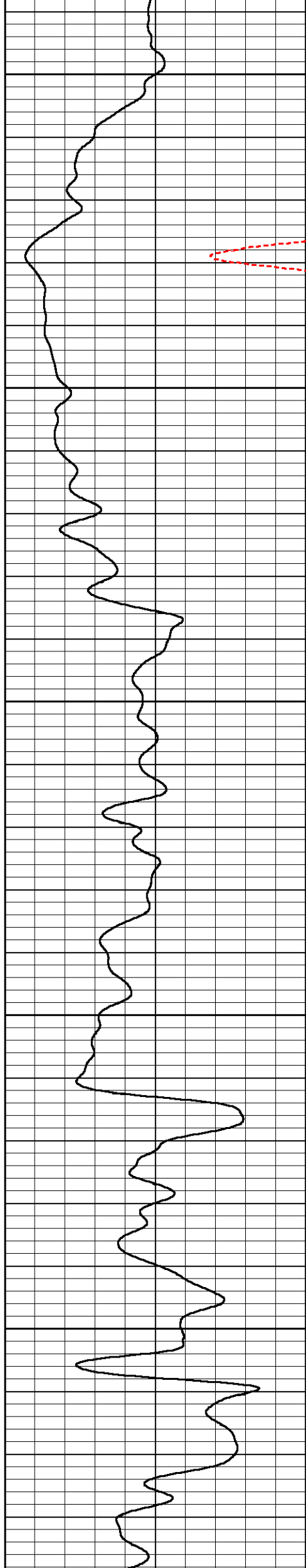


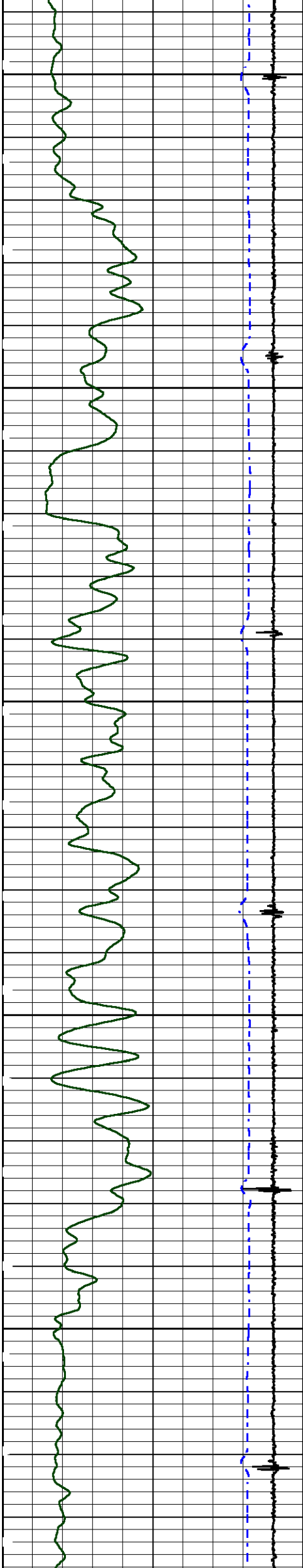


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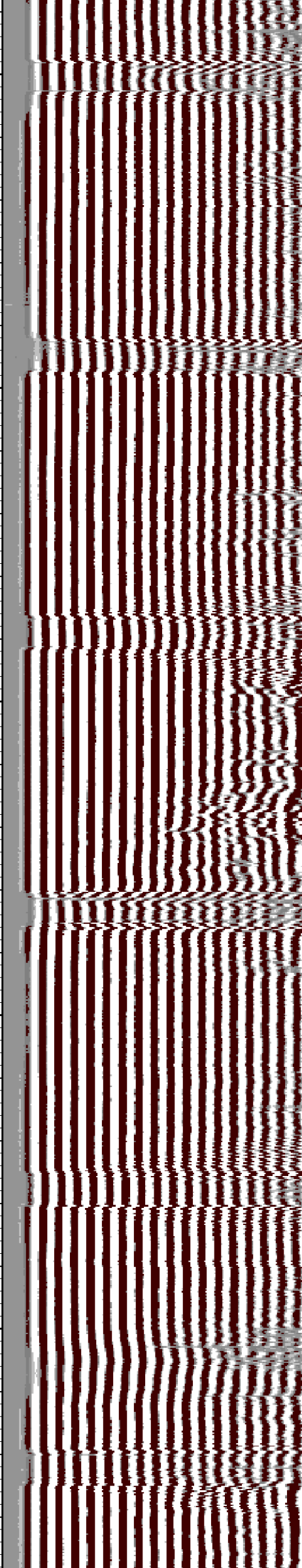
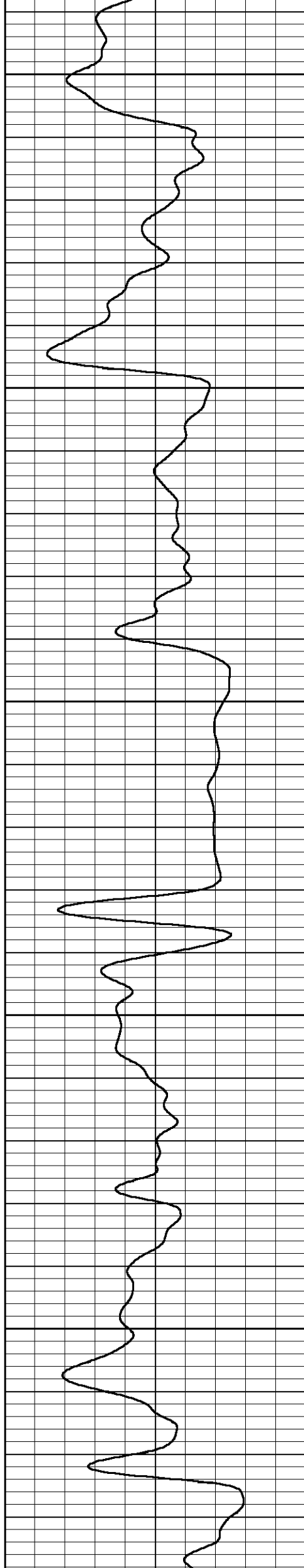
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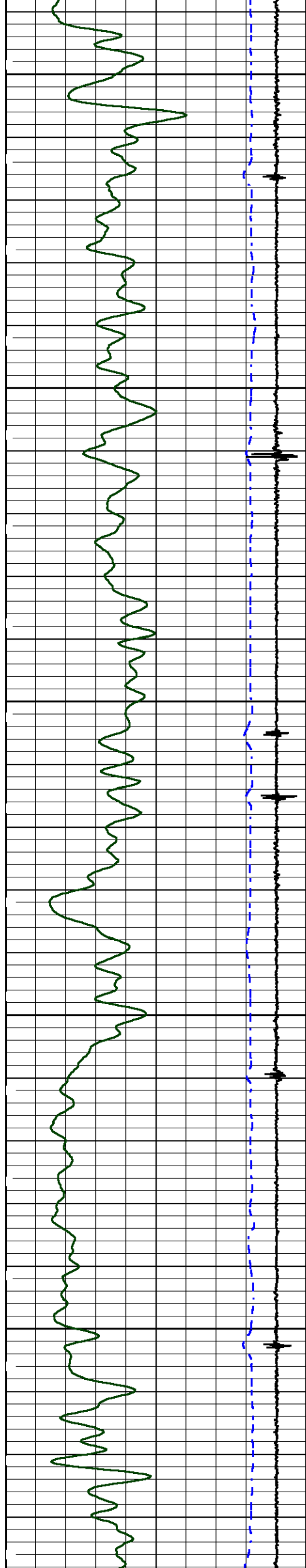




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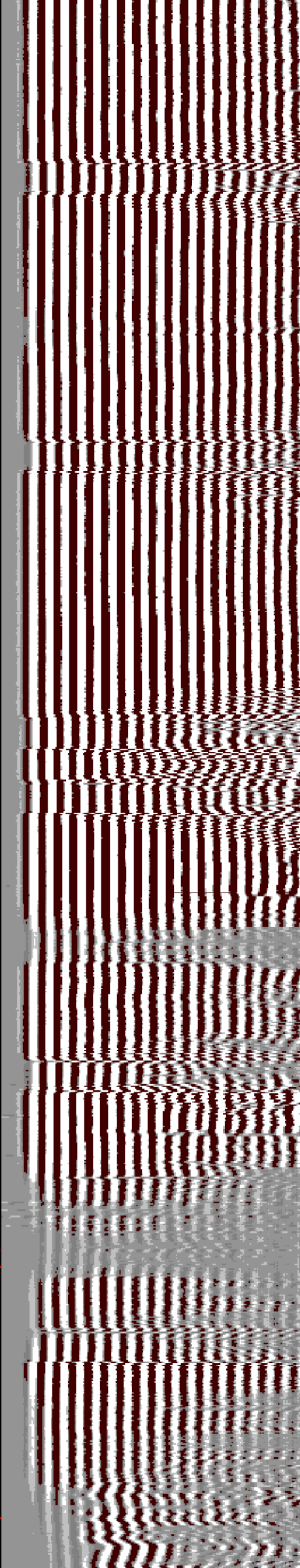
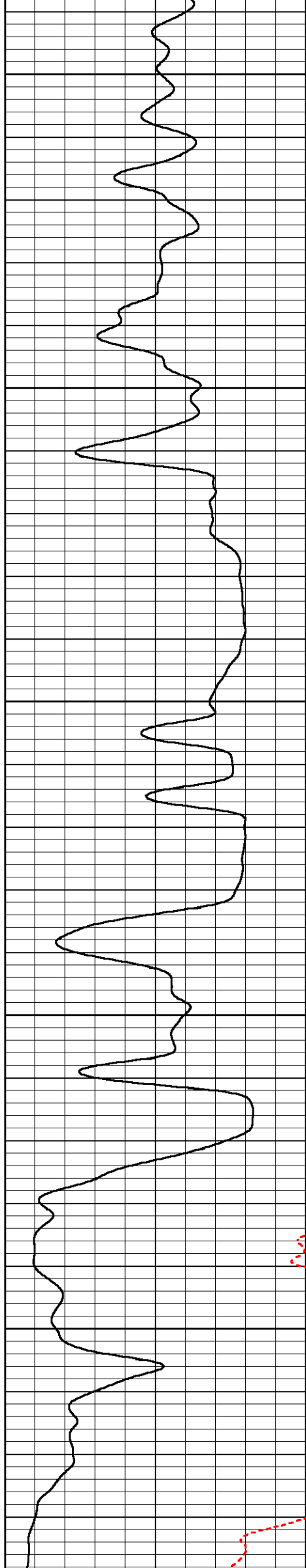


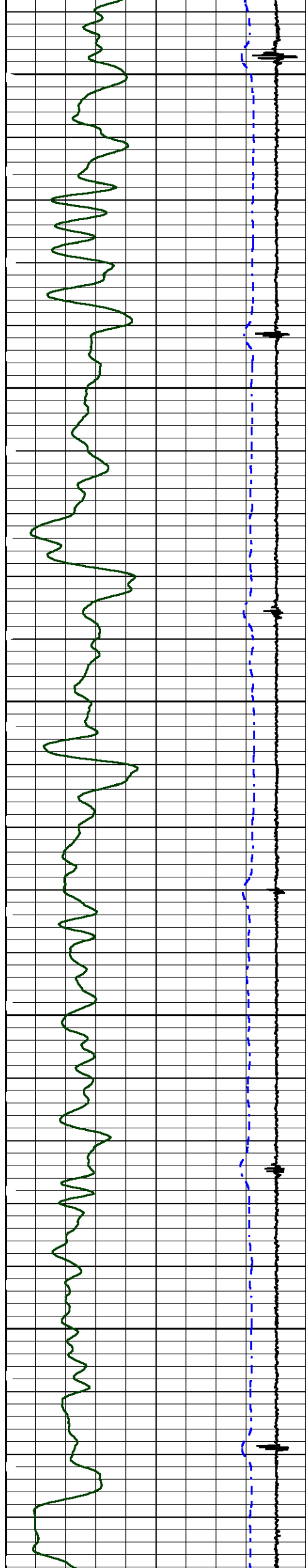


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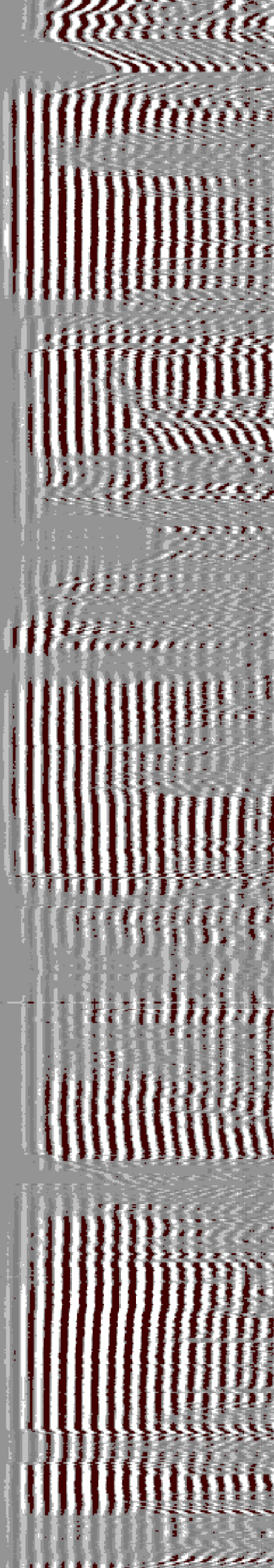
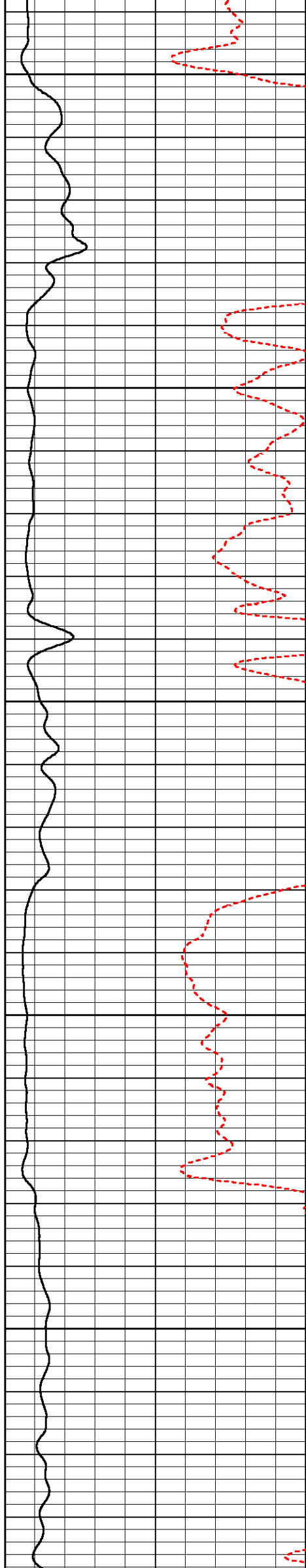
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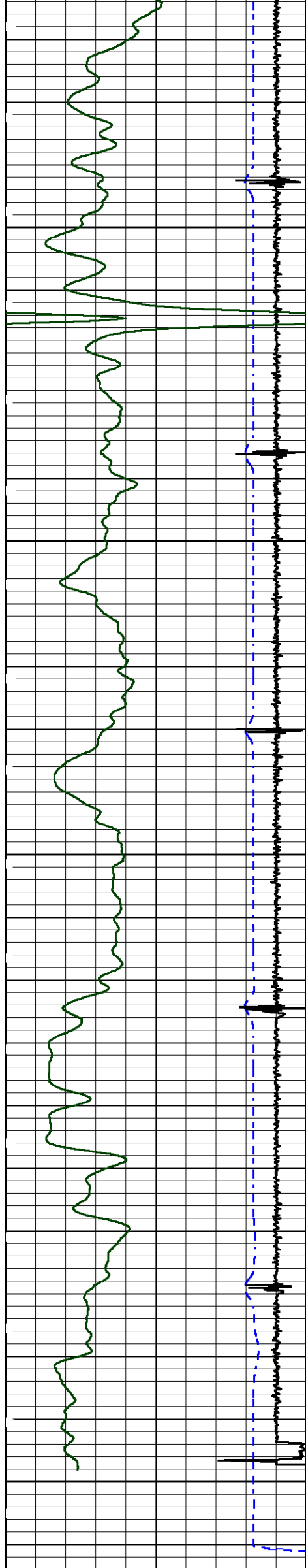




6500

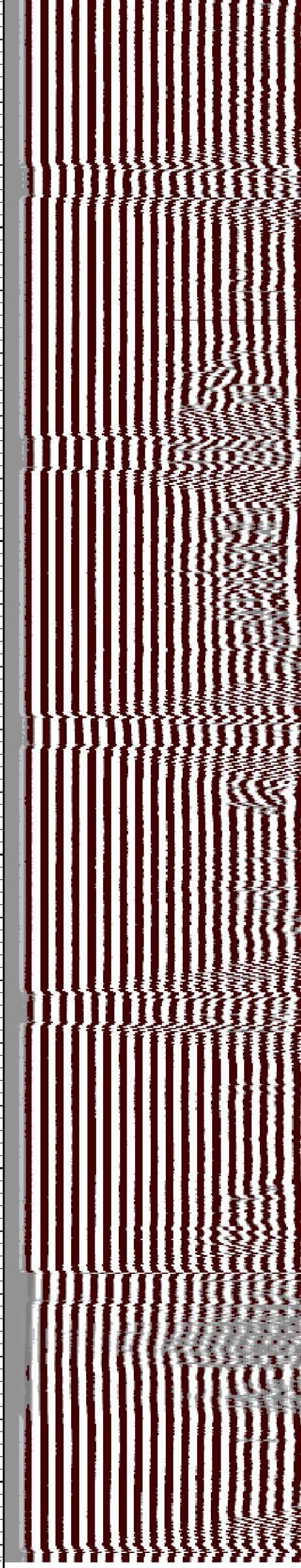
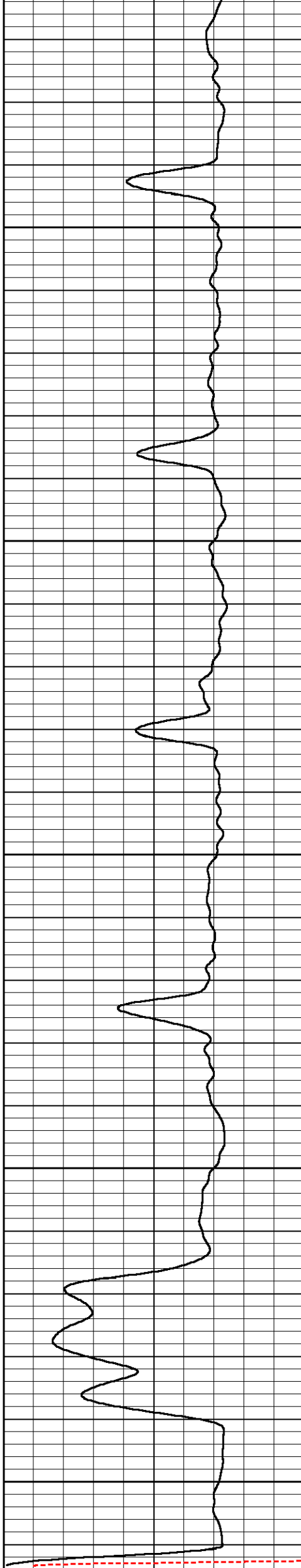
6600





3700

3800



HALLIBURTON REPEAT PASS
5" = 100'

Database File		d:\jobs\yater_43d.db	Calibration Report	
Dataset Pathname		MAIN1		
Dataset Creation		Sun Apr 12 04:55:28 2015		
Reservoir Monitor Tool I (3 Detector) Calibration Report				
Serial-Model:		12210524-A		
Shop Calibration Performed:		Thu Apr 09 16:10:18 2015		

Flock Temperature	62.2 degF
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Flask Temperature 62.2 degF					
Result	Logged	Expected Value	Diff.	Tol.	Units
NFER	2.14	2.10	0.04	+/-0.10	
FFER	1.82	1.80	0.02	+/-0.30	
LFER	1.26	1.60	-0.34	+/-0.60	
COIR2	0.44	0.45	-0.01	+/-0.02	
LIRI2	1.65	1.64	0.01	+/-0.05	
TCCR2	4744	5000	-256	+/-1000	cps
ITCR2	3168	3200	-32	+/-250	cps

Sigma Mode					
Stabilization					
Result	Logged	Expected Value	Diff.	Tol.	Units
GENV	81.00	80.00	1.00	+/-15.00	V
FCAP	10086	10000	86	+/-500	cps
Horizontal Water Tank					
Result	Logged	Expected Value	Diff.	Tol.	Units
NFER	2.10	2.10	-0.00	+/-0.10	
FFER	1.94	1.80	0.14	+/-0.30	
LFER	1.35	1.60	-0.25	+/-0.60	
N/F Normalizer	0.931	0.935	-0.004		
N/L Normalizer	0.106	0.111	-0.005		
N/F Inel Norm	0.601	0.610	-0.009		
N/L Inel Norm	0.056	0.055	0.001		
RNF	1.074	1.070	0.004	+/-0.120	
RNL	9.435	9.000	0.435	+/-1.000	
RINC	1.665	1.640	0.025	+/-0.180	
RINCL	17.945	18.000	-0.055	+/-2.000	
SGFN	24.10	24.00	0.10	+/-0.50	cu
SGFF	22.92	22.85	0.07	+/-0.50	cu
SGFL	22.01	22.00	0.01	+/-1.00	cu
FSIN	23934	24000	-66	+/-2000	cps
LSIN	2264	2400	-136	+/-500	cps
FCAP	10083	10000	83	+/-1000	cps
LCAP	1148	1200	-52	+/-200	cps
NFTR	0.84			<5.00	
FFTR	0.88			<5.00	
LFTR	1.14			<5.00	
NBKG	192			<500	cps
FBKG	110			<500	cps
LBKG	29			<500	cps
RTN	0.421	0.400	0.021	+/-0.100	usec
RTF	0.447	0.400	0.047	+/-0.100	usec


Calibration Software Modules	
HRMT3D Module	2015.3.19.0
RMT3D Module	2015.3.19.1
Log Data Acquisition Software Modules	
HRMT3D Module	2015.3.19.0
RMT3D Module	2015.3.19.1

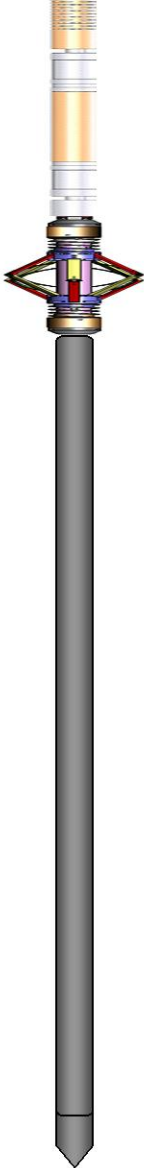
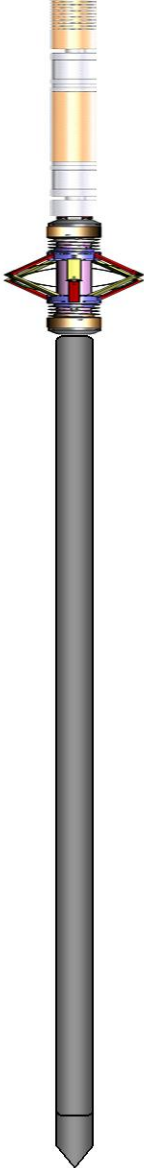
Cement Bond Log Shop Calibration Report	
Serial-Model:	12386763-A
Calibration Performed:	Sun Apr 12 03:38:14 2015

Free Pipe Calibration	
Measured	Units

TT	245.7	Measured	Units
Amplitude	643.0		usec
Log Base Line	-5.7		mV
Calibration References and Gain			
Name	Value	Units	
Pipe O.D.	4.500	in	
Pipe Weight	11.6	lb/ft	
Pipe Ref. Amp.	81.2	mV	
Amp. Gain	0.125		

Gamma Ray Calibration Report						
Type / Serial:			002 / 12105787			
SHOP CALIBRATION		Fri Apr 10 15:01:55 2015				
	Counts/Sec.	Gain	Offset	Jig	Units	
Background	37.7				cps	
Calibrator	384.0				cps	
		1.2112			GAPI/cps	
PRIMARY VERIFICATION						
Background	0.0				cps	
Calibrator	0.0				cps	
Difference				0.0	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	

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
CCL	36.04		STNDCH-STND_CH 1.4375 IN CABLE HEAD	1.50	1.44	1.00
GR	33.78					
Temp	24.06					
TT3FT	21.81					
AMP3FT	21.81					
Rm3TLGT	8.75					
Rm3LBACK	8.75					
Rm3LCAPT	8.75		TTTCU-002 (12105787) Through Tubing Telemetry Cartridge - Ultrawire	7.65	1.69	100.00
Rm3LINEL	8.75					
Rm3TFGT	8.25					
Rm3FBACK	8.25					
Rm3FCAPT	8.25					
Rm3FINEL	8.25					
Rm3TNGT	7.75					
Rm3NBACK	7.75		XHU-003 (000001) Crossover Halliburton 1553 to Ultrawire	1.58	1.69	7.00
Rm3NCAPT	7.75					
Rm3NINEL	7.75		CENT-CASTM-CENT CAST M INLINE CENTRALIZER	2.16	3.13	25.00
Rm3ImpBTEST	0.00					
Rm3ImpBCYC	0.00					
Rm3ImpBRGW	0.00					
Rm3ImpBRGO	0.00					
Rm3ImpState	0.00					
Rm3ImpPhase	0.00					
Rm3ImpCyc	0.00					
Rm3GenClamp	0.00					
Rm3LTemp	0.00		HCBLM-A (12386763) Halliburton HCBLM Tool	9.38	2.75	116.00

Rm3LPMHV	0.00		CENT-CASTM-CENT CAST M INLINE CENTRALIZER	2.16	3.13	25.00				
Rm3LPMI	0.00									
Rm3LPrgSt1	0.00									
Rm3LDetStat	0.00									
Rm3FTemp	0.00									
Rm3FPMHV	0.00									
Rm3FPMI	0.00									
Rm3FPrgSt1	0.00									
Rm3FDetStat	0.00									
Rm3NTemp	0.00									
Rm3NPMHV	0.00		RMT3D-A (12210524) RMT3D - 3 Detector RMT-I	15.17	2.13	86.00				
Rm3NPMI	0.00									
Rm3NPrgSt1	0.00									
Rm3NDetStat	0.00									
Rm3Genlonl	0.00									
Rm3Gen15Busv	0.00									
Rm3GenLvdsV	0.00									
Rm3GenSyncV	0.00									
Rm3GenClampv	0.00									
Rm3GenP5V	0.00									
Rm3GenP33V	0.00									
Rm3Gen200V	0.00									
Rm3GenP15VI	0.00									
Rm3GenTemp	0.00									
Rm3GenP5VI	0.00									
Rm3GenI	0.00									
Rm3GenPv	0.00									
Rm3GenCmd	0.00									
Rm3GenIspl	0.00									
Rm3GenIsplPv	0.00									
Rm3GenIsplCmc	0.00									
Rm3GenRepPv	0.00	Dataset: yater_43d.db: field/well/run1/MAIN1 Total length: 39.61 ft Total weight: 360.00 lb O.D.: 3.13 in								
Rm3GenRepV	0.00									
Rm3GenRepSv	0.00									
Rm3GenContSt	0.00									

Company	URSA OPERATING COMPANY				
Well	YATER 43D-18-07-95				
Field	PARACHUTE				
County	GARFIELD		State	CO	
HALLIBURTON	CEMENT BOND LOG				