



ONE	6075'	SURFACE	0	REC	MAIN LOG SECTION			
	GAMMA RAY		TRAVEL TIME		AMPLITUDE		MSG	
Pass	Scale		Scale		Scale		Scale	
No.	L	R	L	R	L	R	L	L
ONE	0	200	410	210	0	100	200	1060
DIRECTIONAL INFORMATION								
Maximum Deviation	N/A	deg. @	N/A	KOP	N/A			

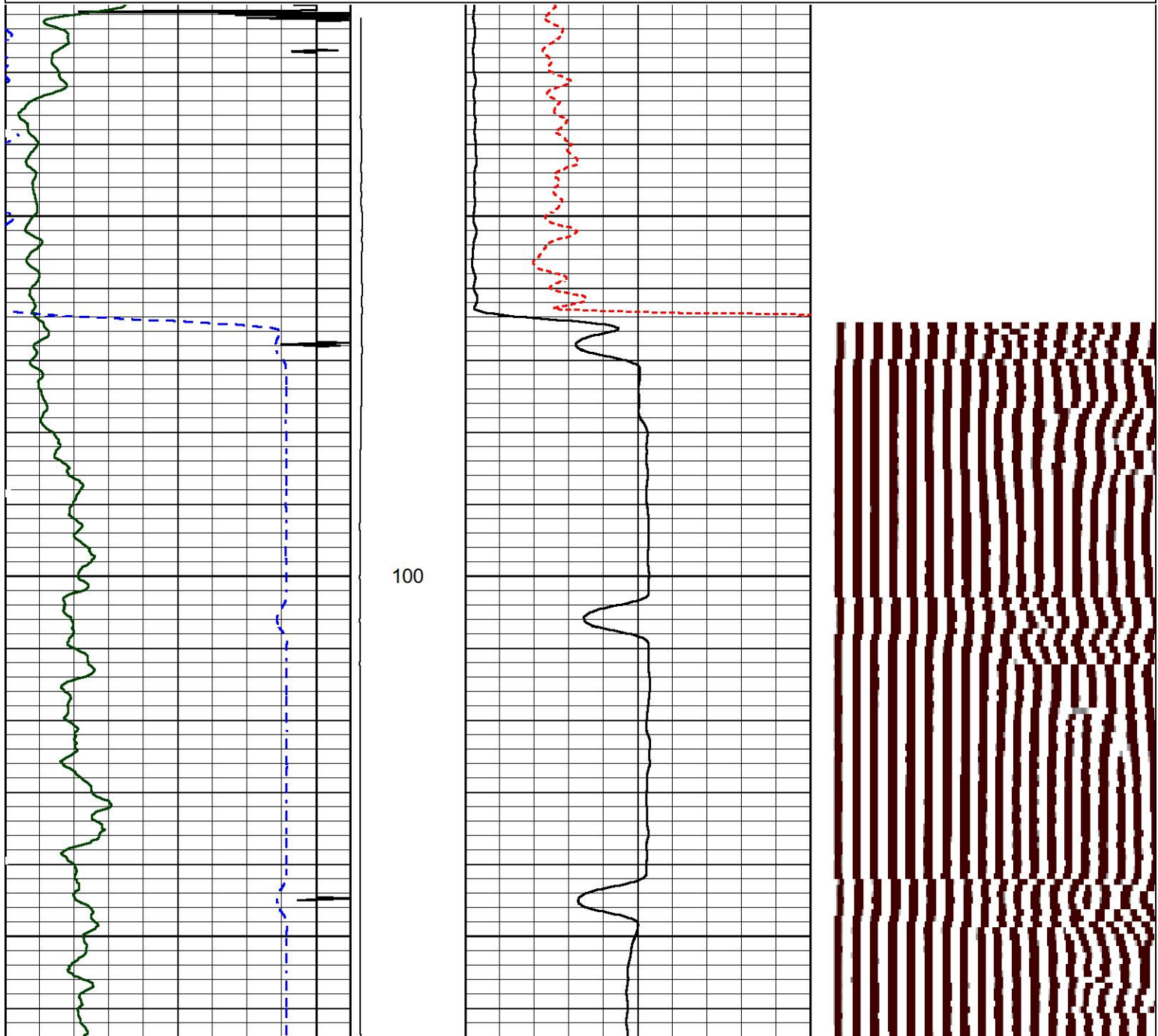
# MAIN LOG SECTION

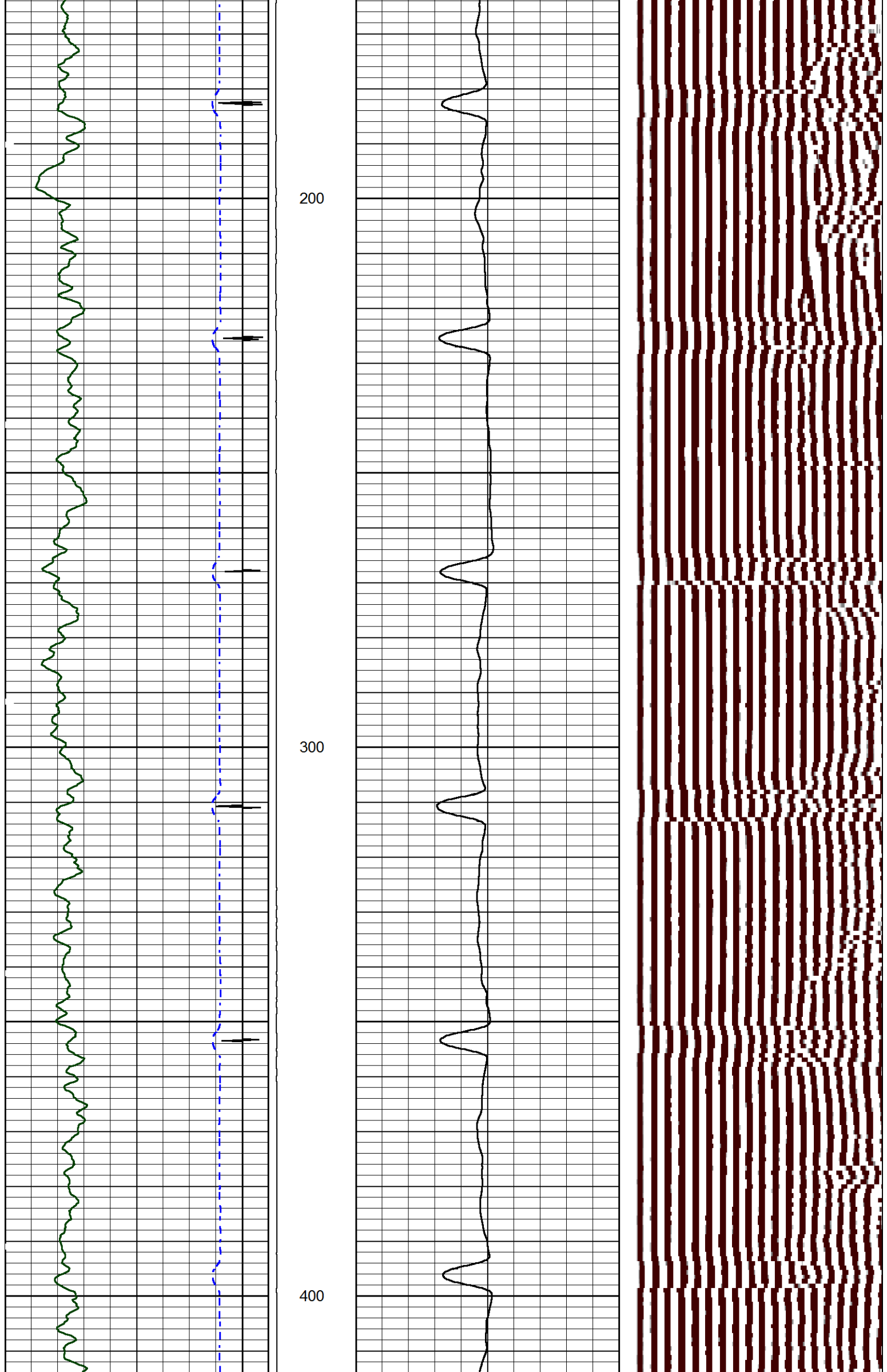
**HALLIBURTON**

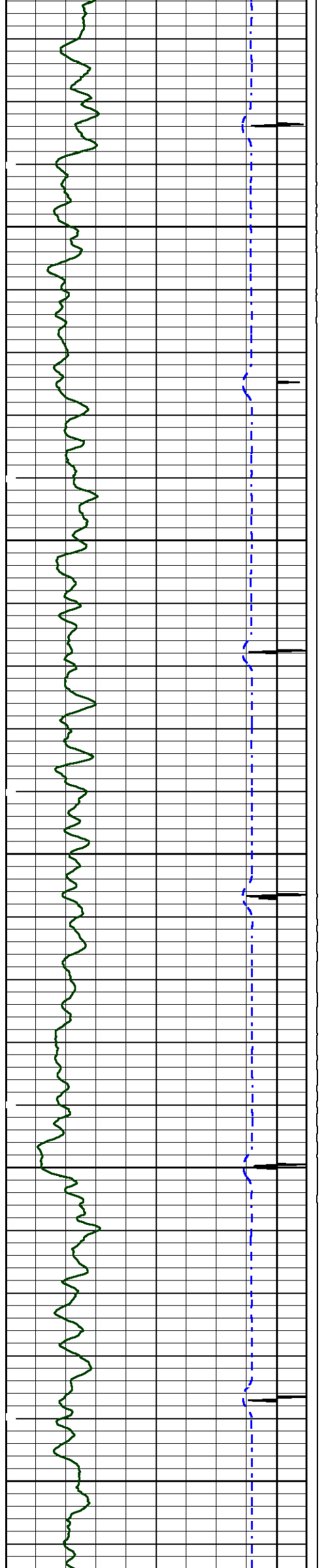
5"=100'

Database File      ir\_24c\_cmb.db  
Dataset Pathname    MAIN1  
Presentation Format   hcbl  
Dataset Creation    Thu Jul 17 09:45:26 2014  
Charted by          Depth in Feet scaled 1:240

410	3' Travel Time (usec)	210	LTEN	0	3' Amplitude (mV)	100	200	MSG	1060
-1660	CCL	180	0	(lb.4000	0	Amplified Amplitude (mV)	10		
0	Gamma Ray (GAPI)	200							

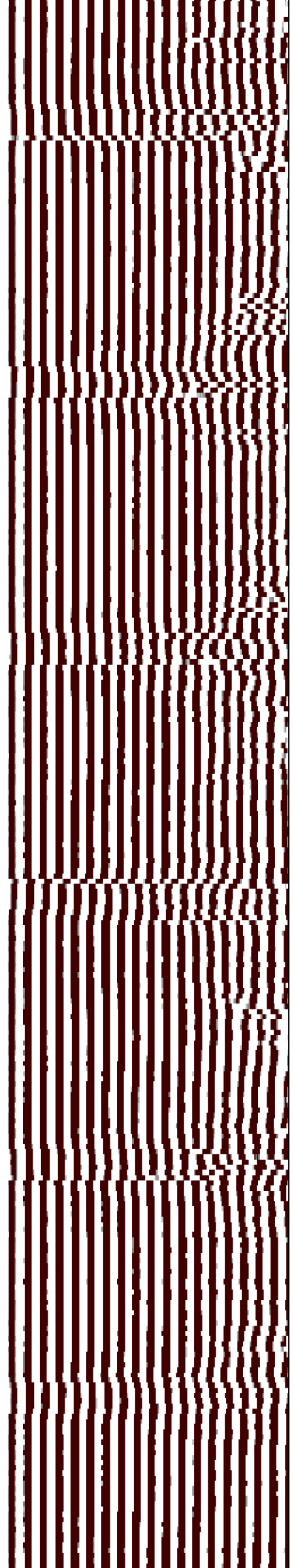
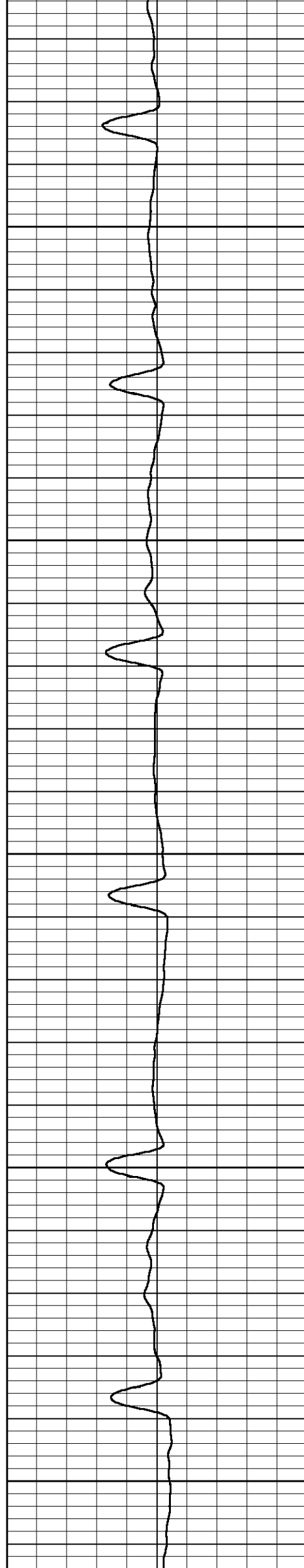


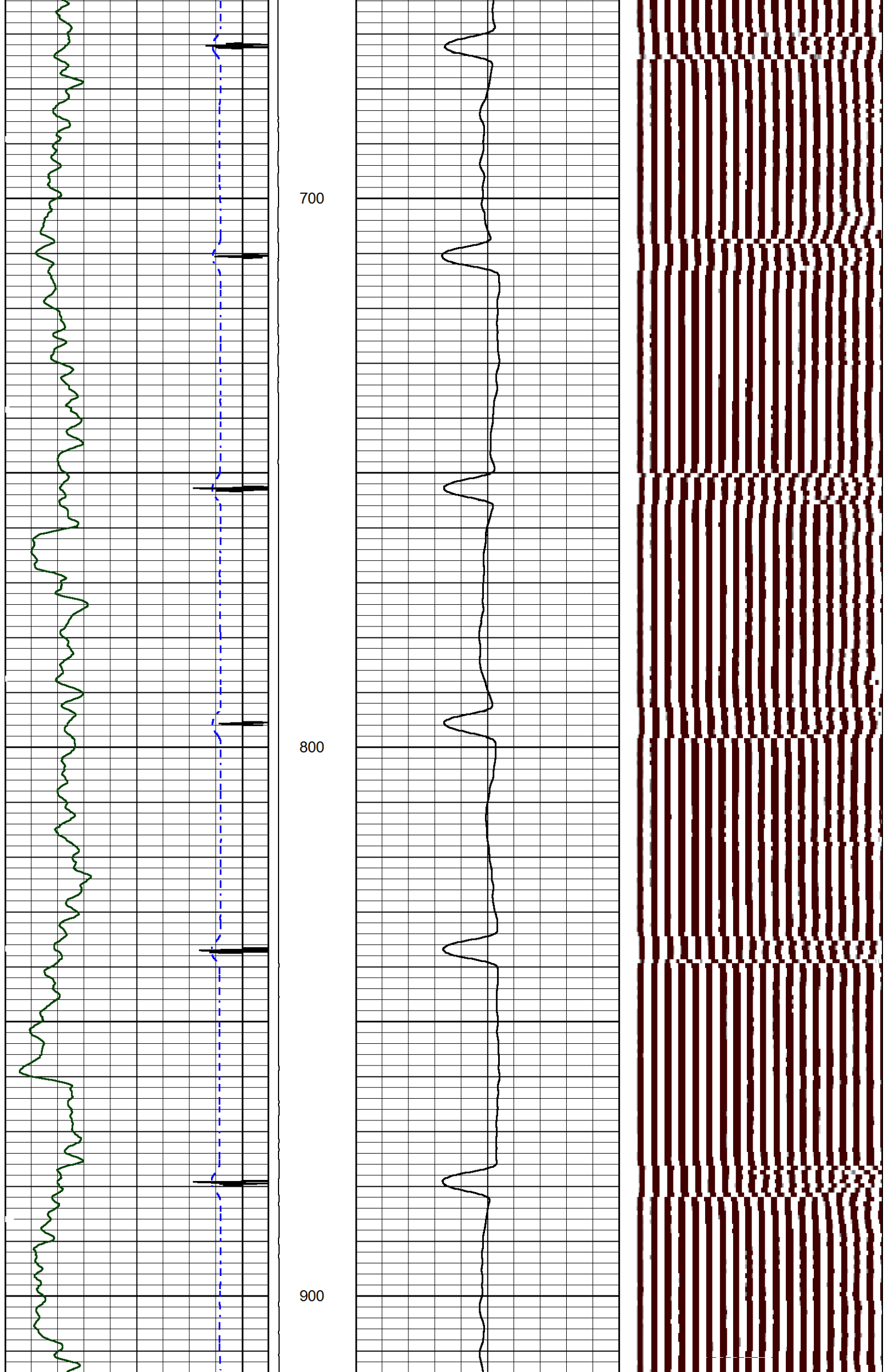


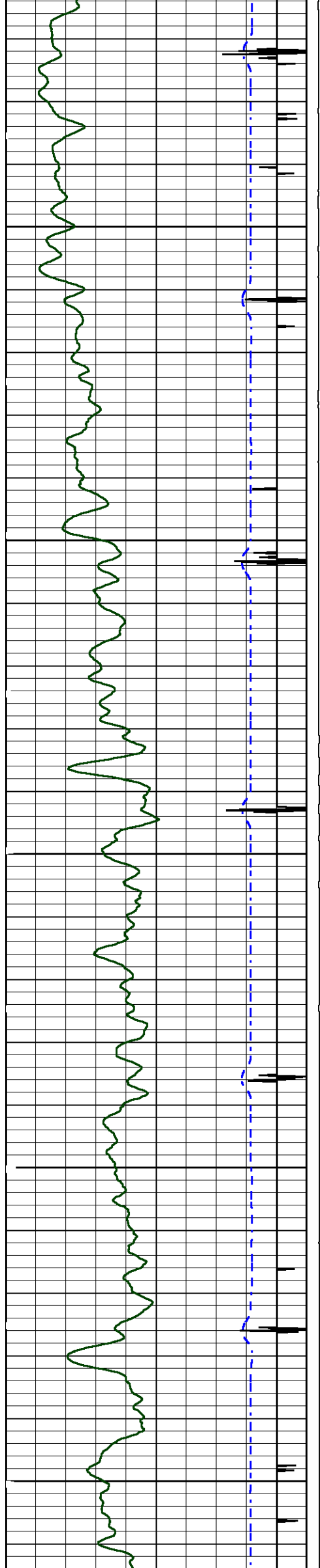


500

600

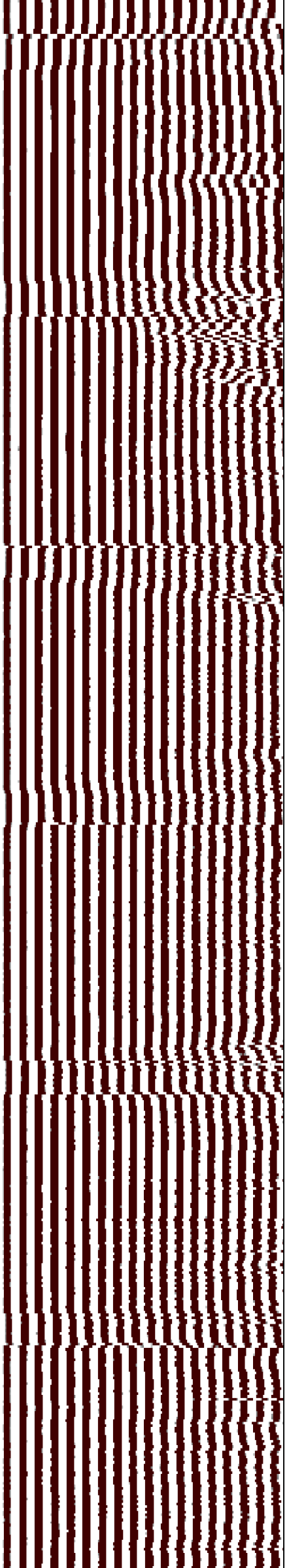
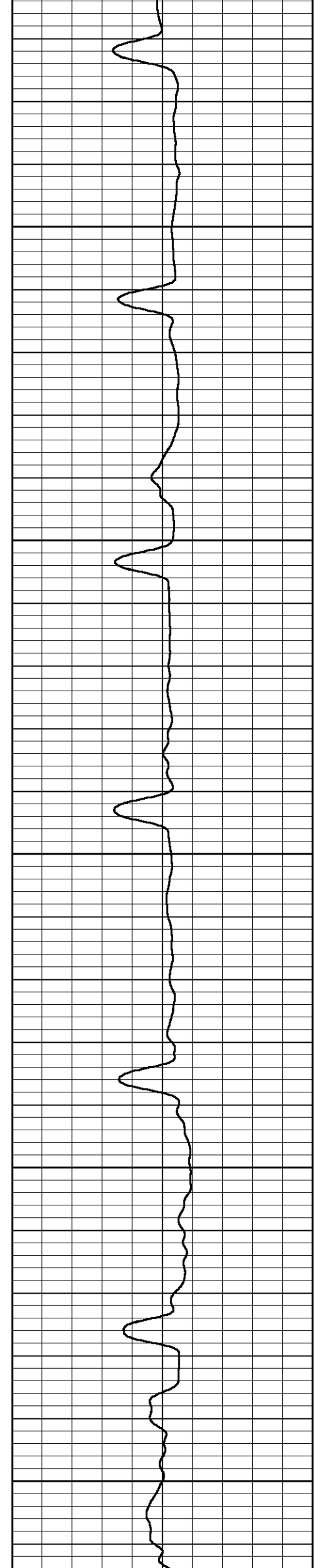


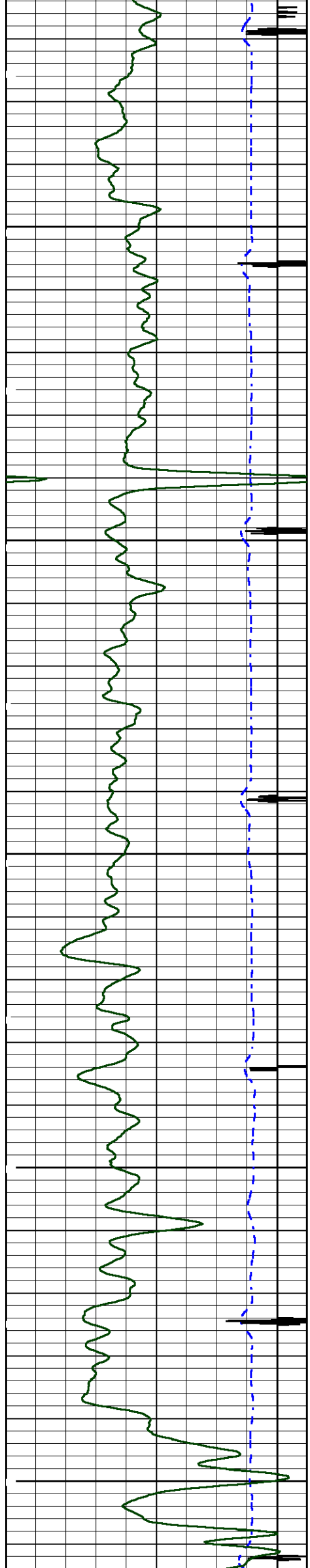




1000

1100

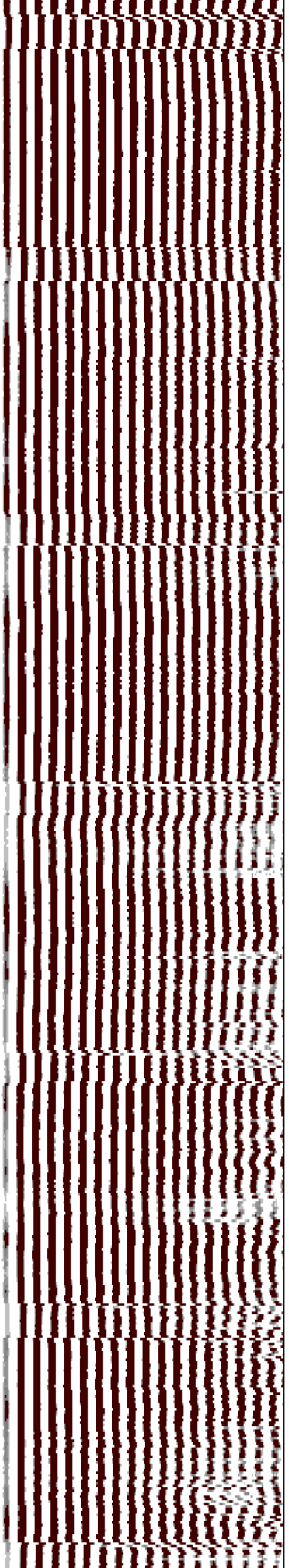
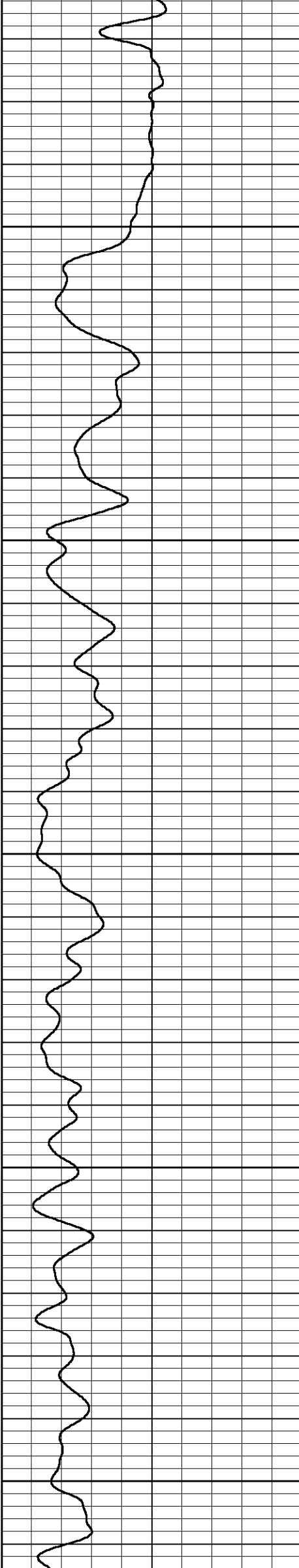


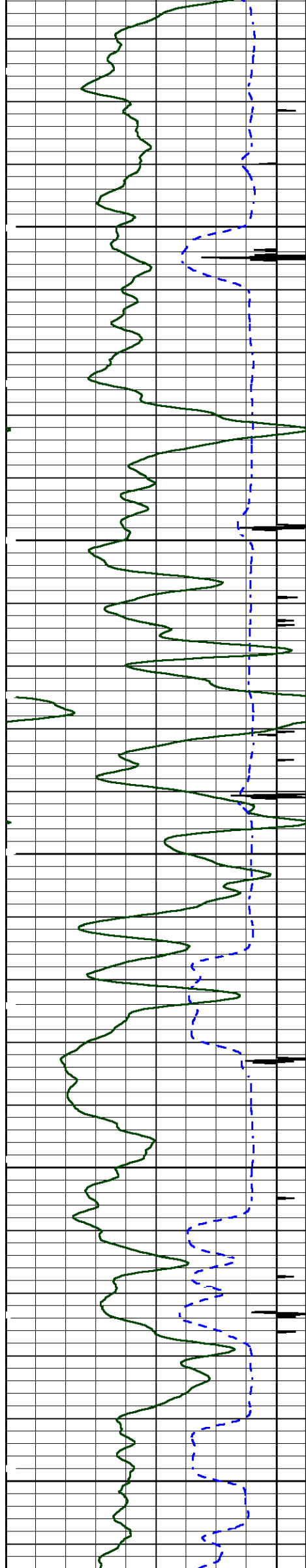


1200

1300

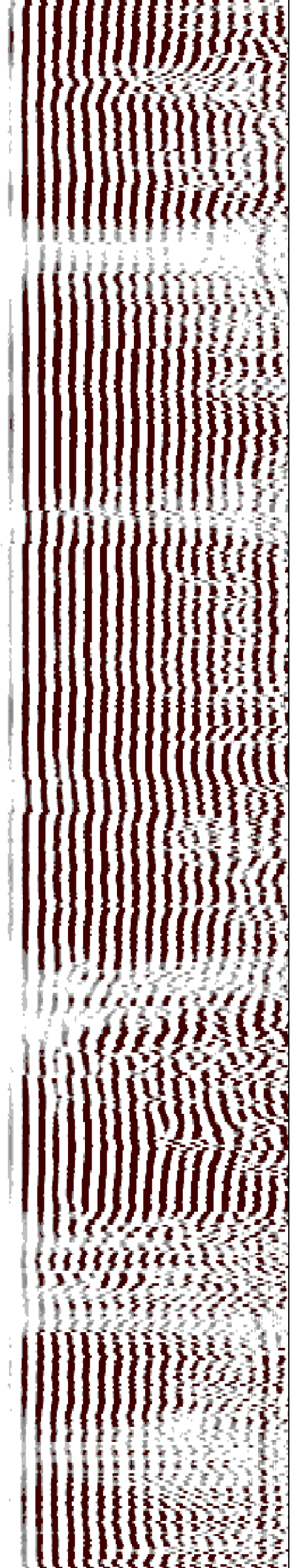
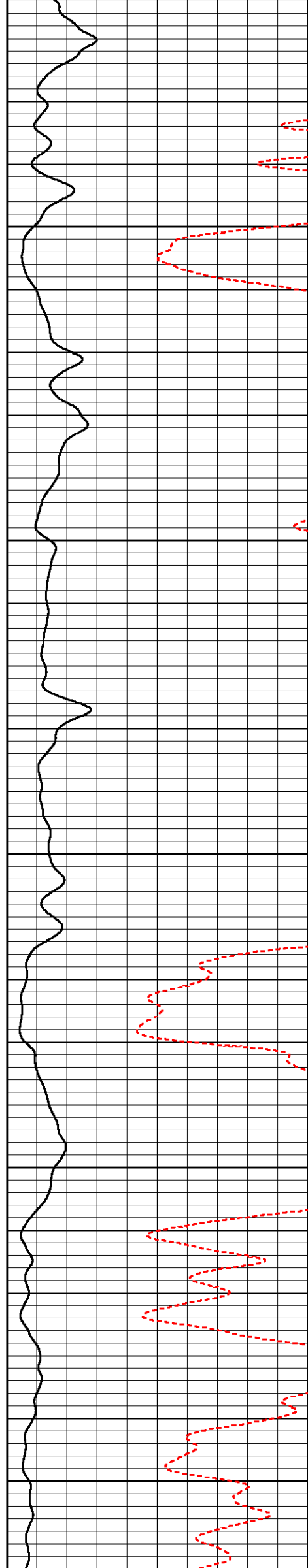
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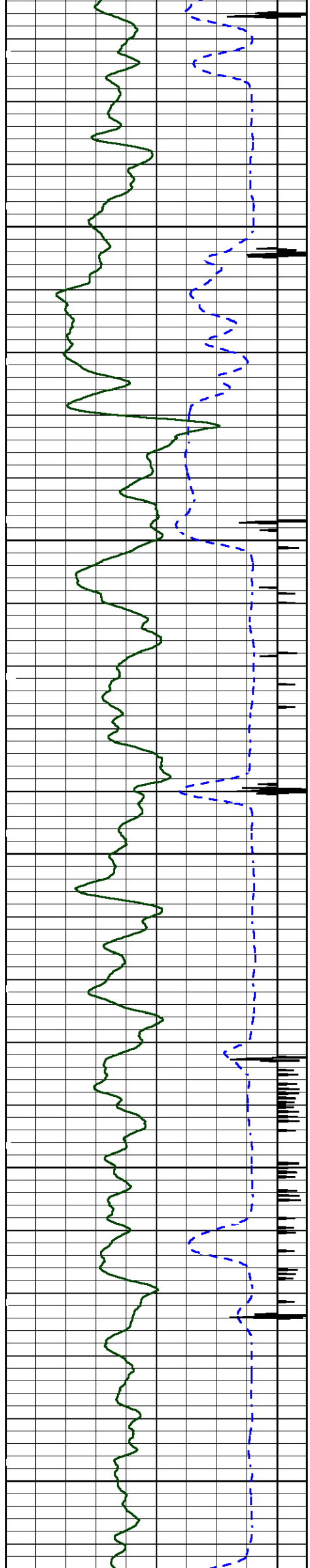




1500

1600

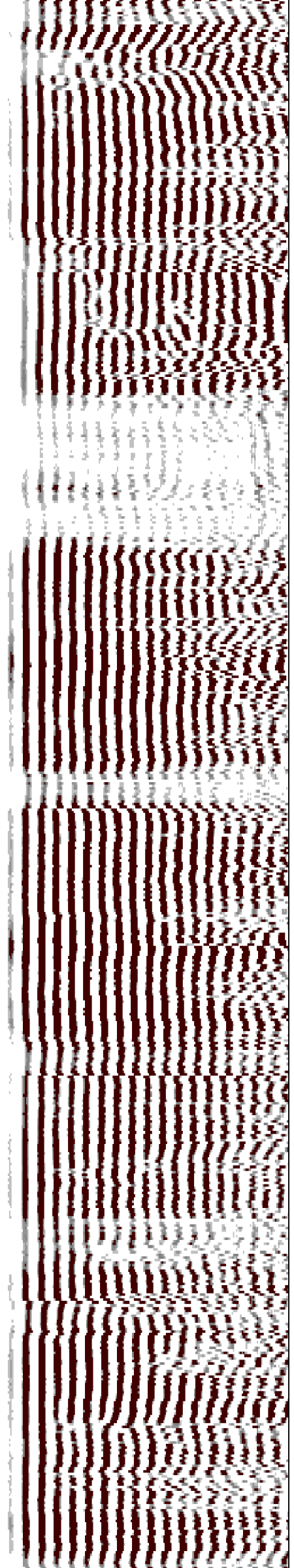
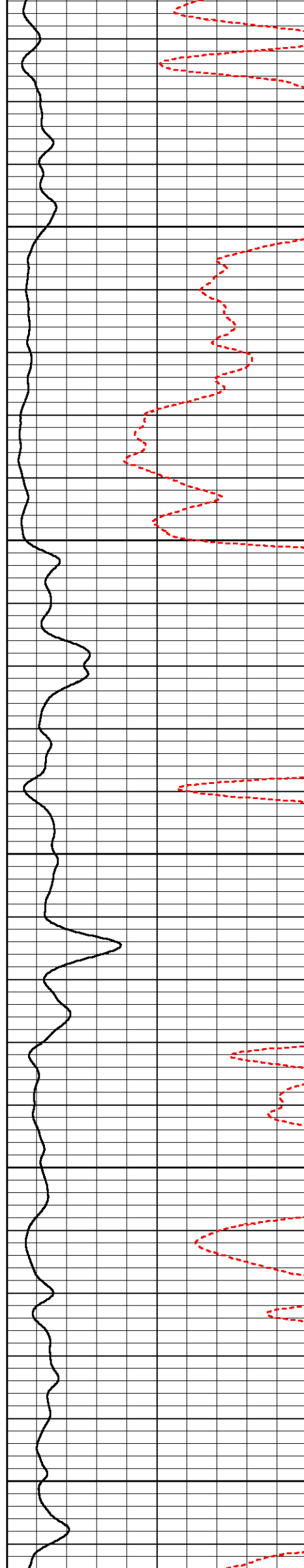


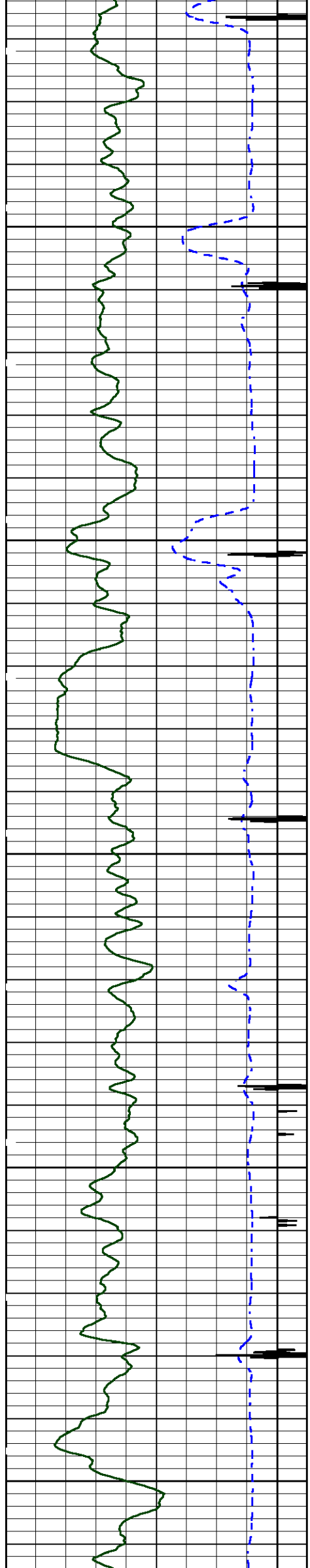


1700

1800

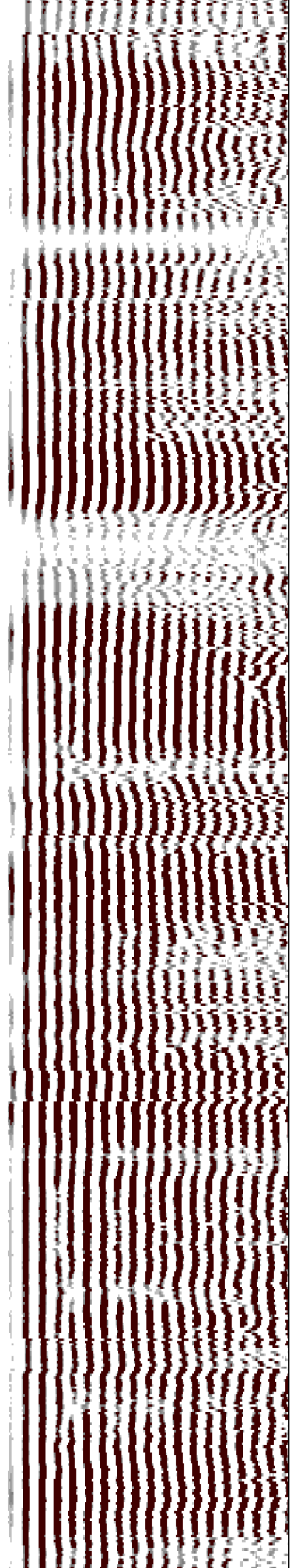
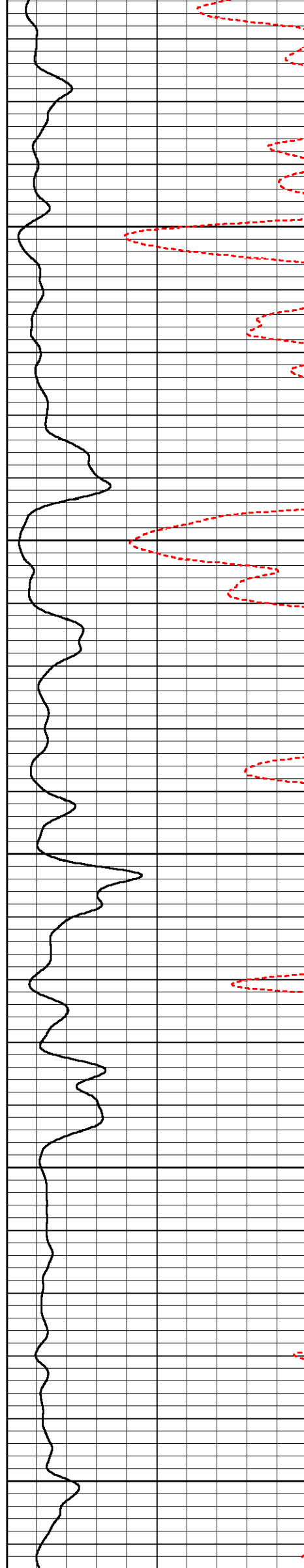
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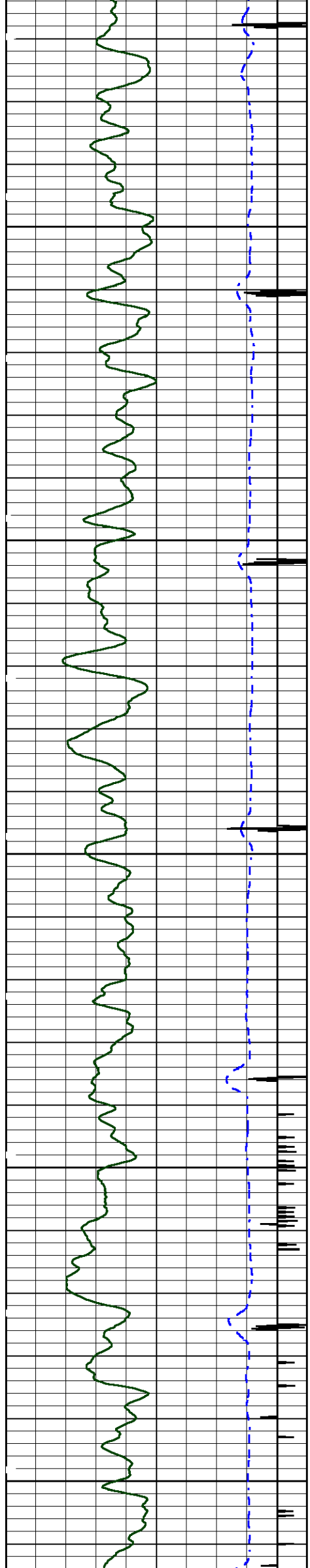




2000

2100

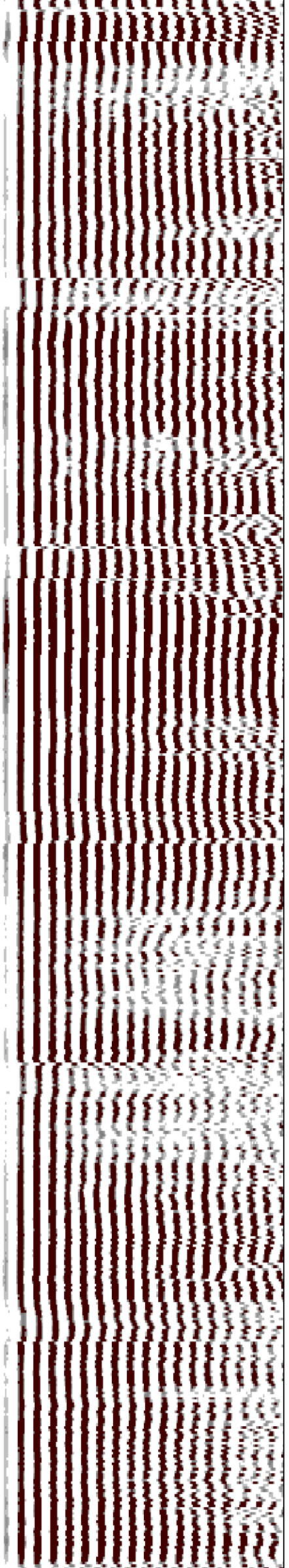
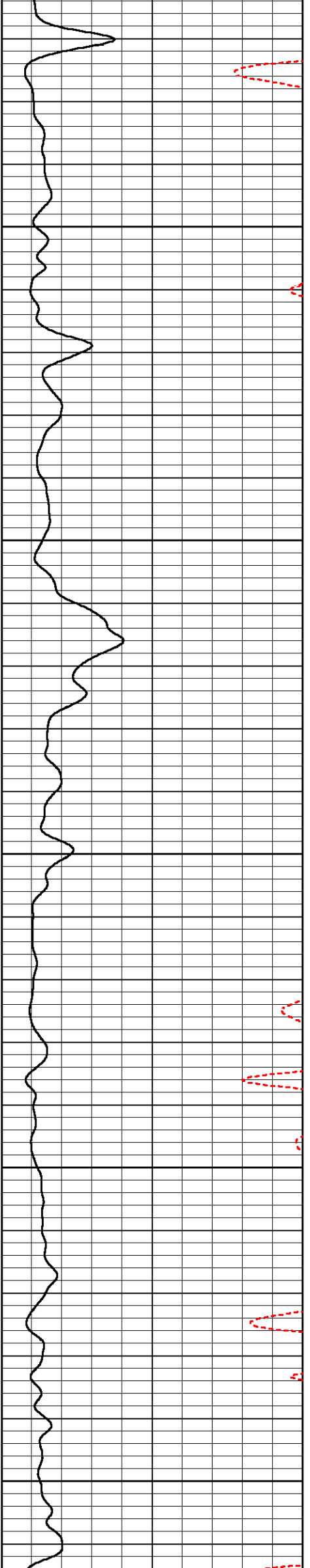


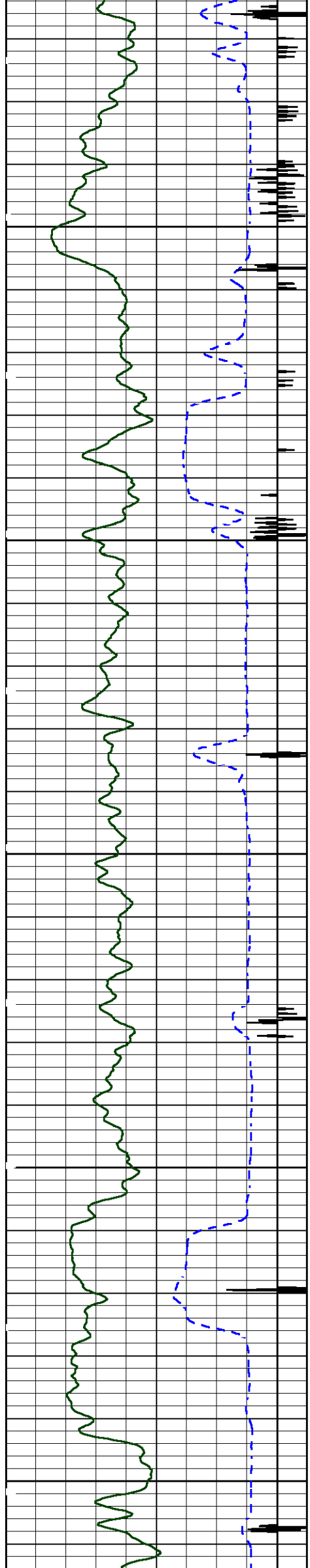


2200

2300

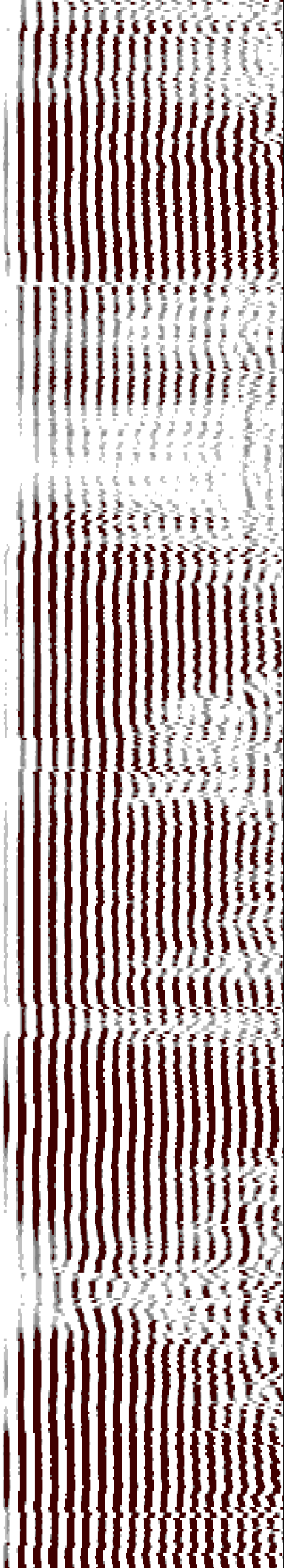
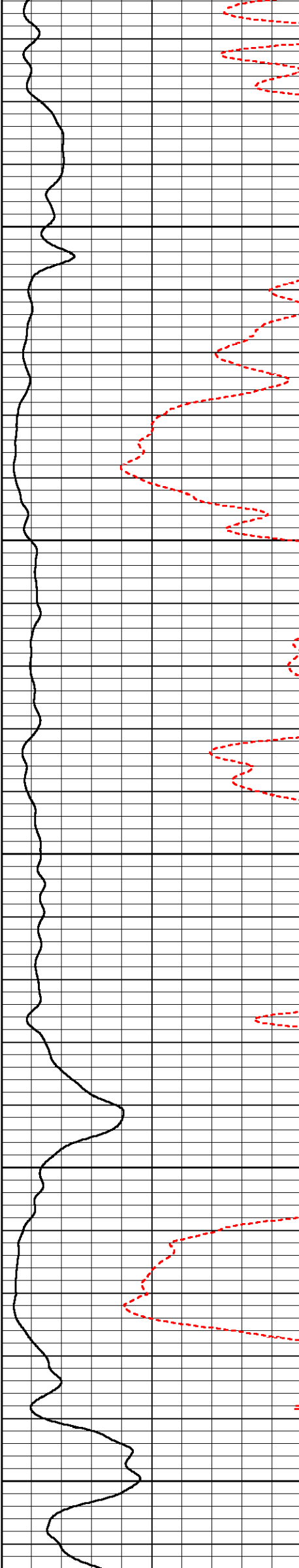
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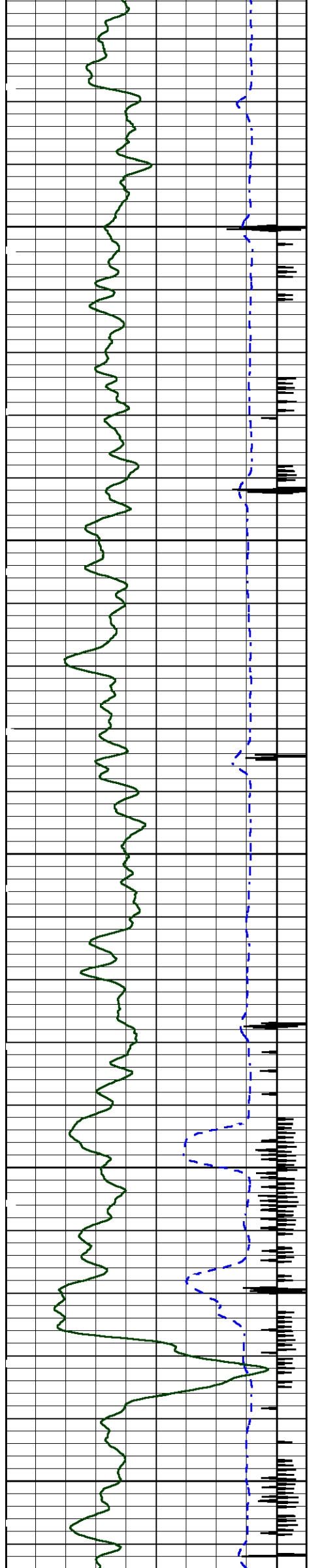




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2600

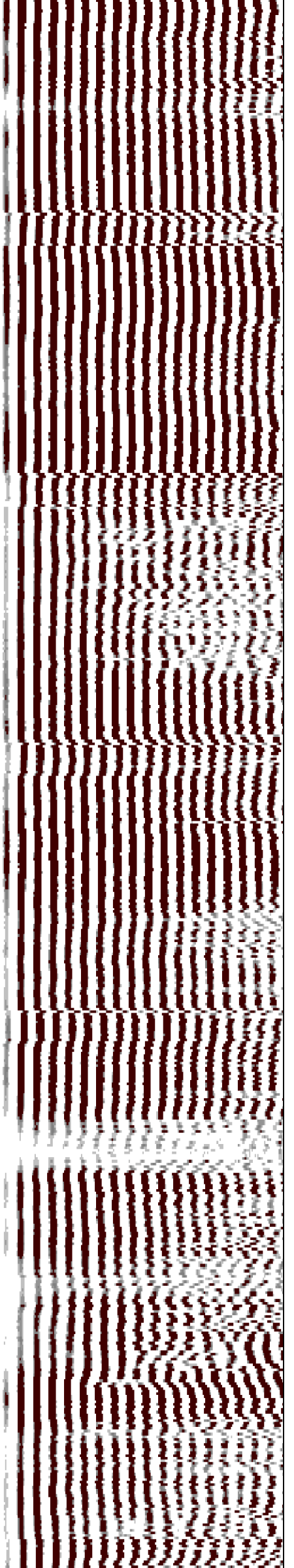
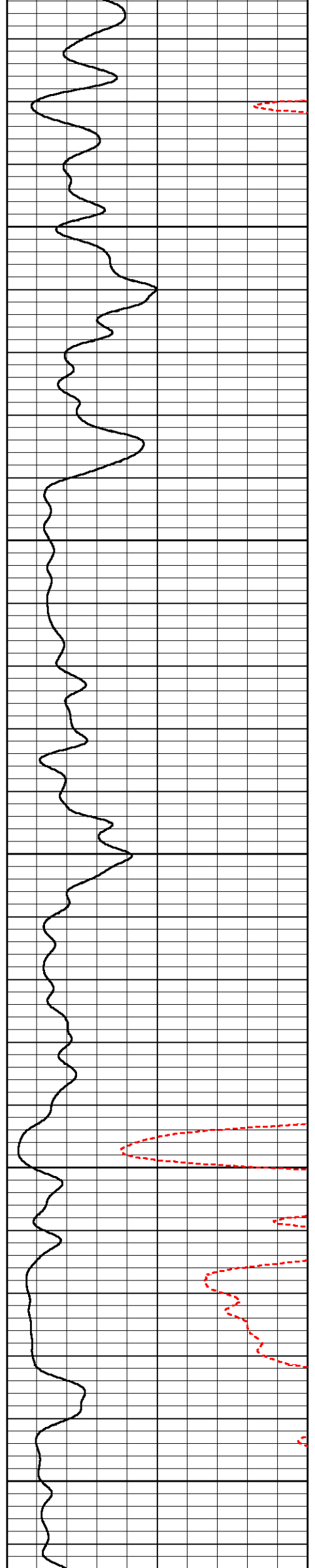


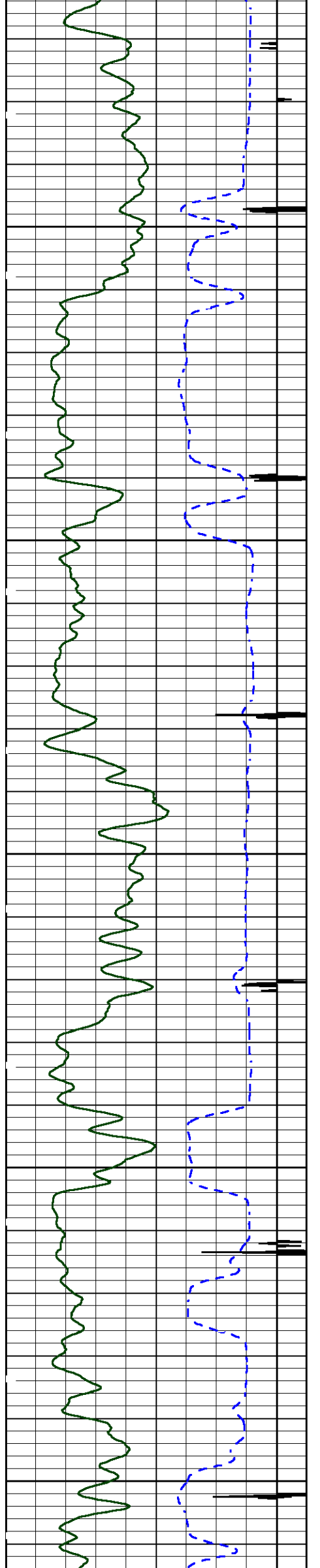


2700

2800

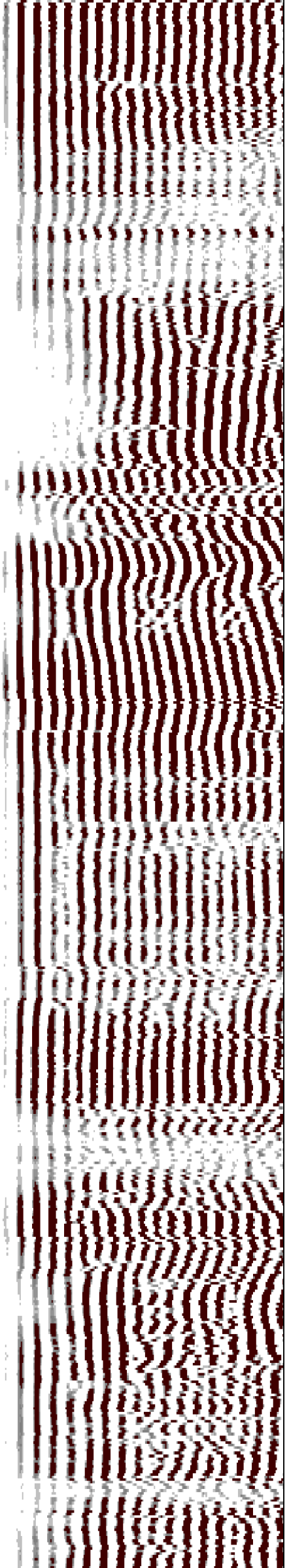
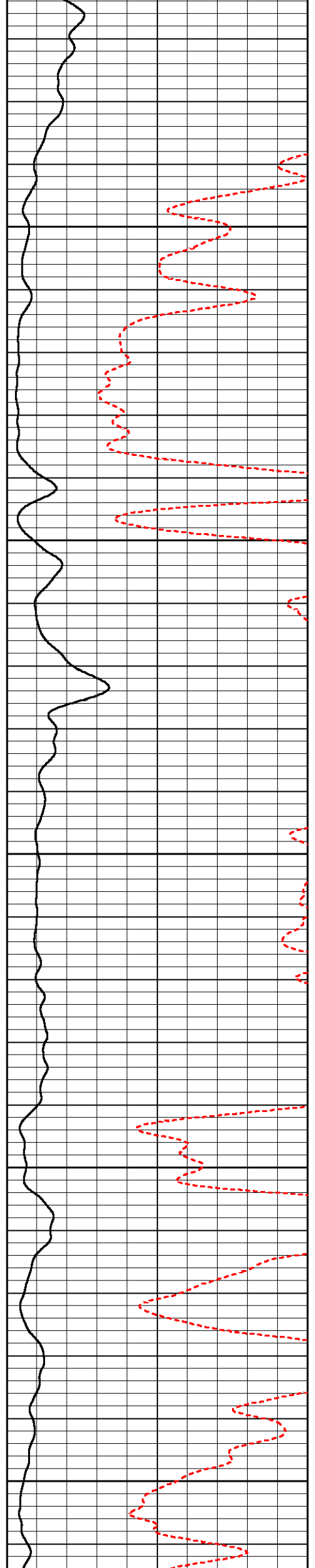
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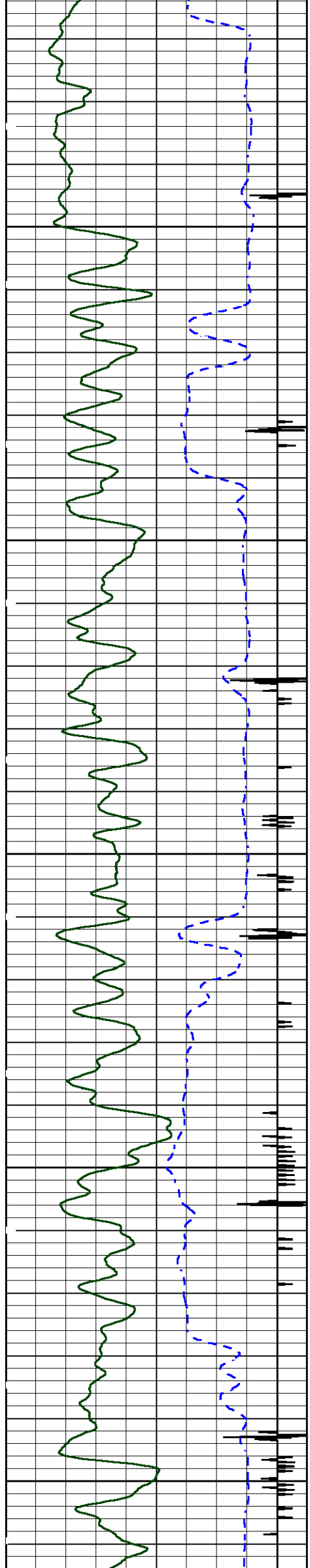




3000

3100

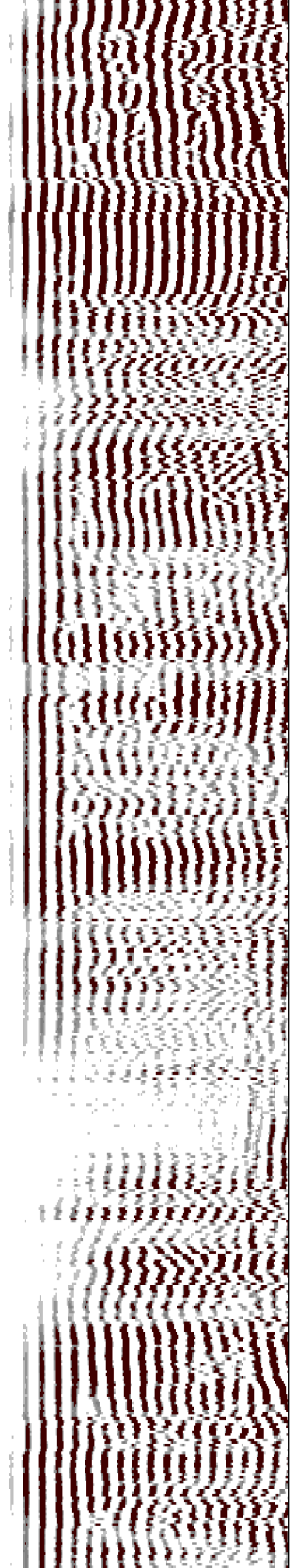
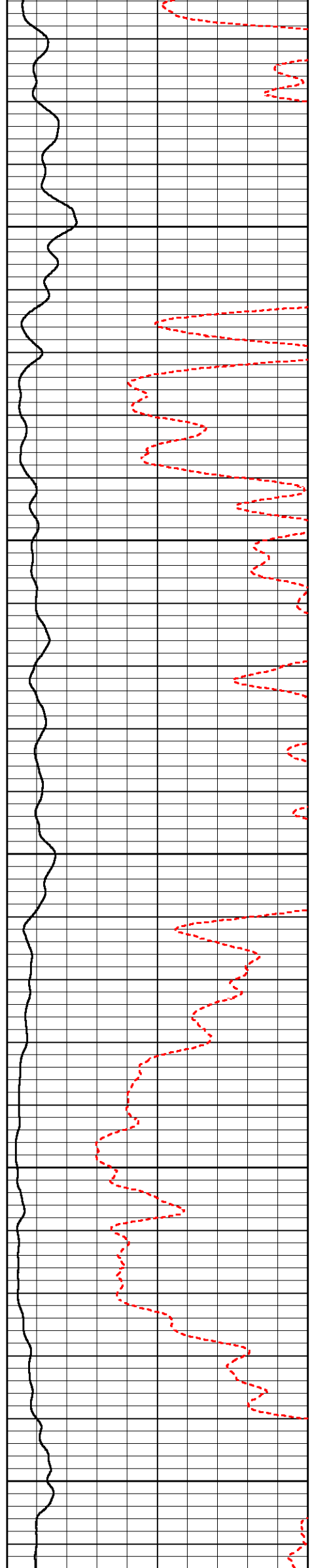


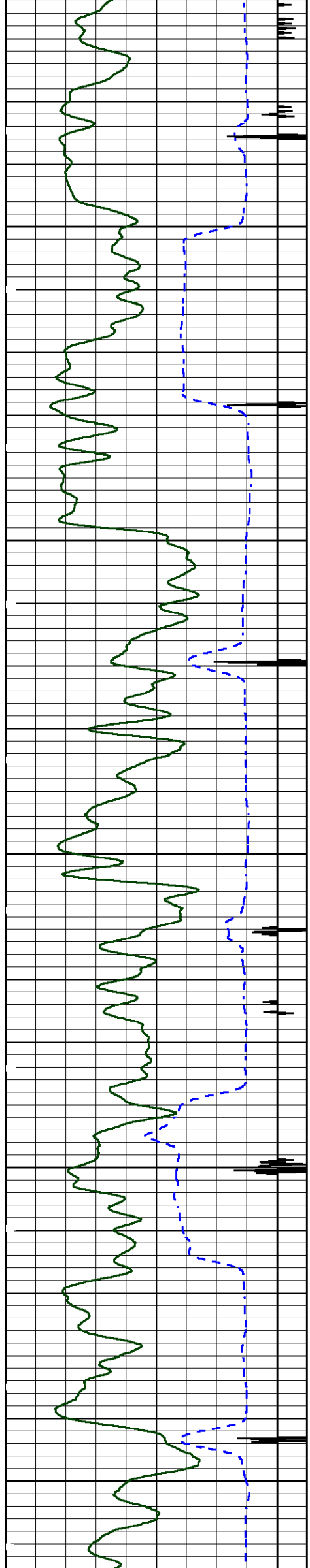


3200

3300

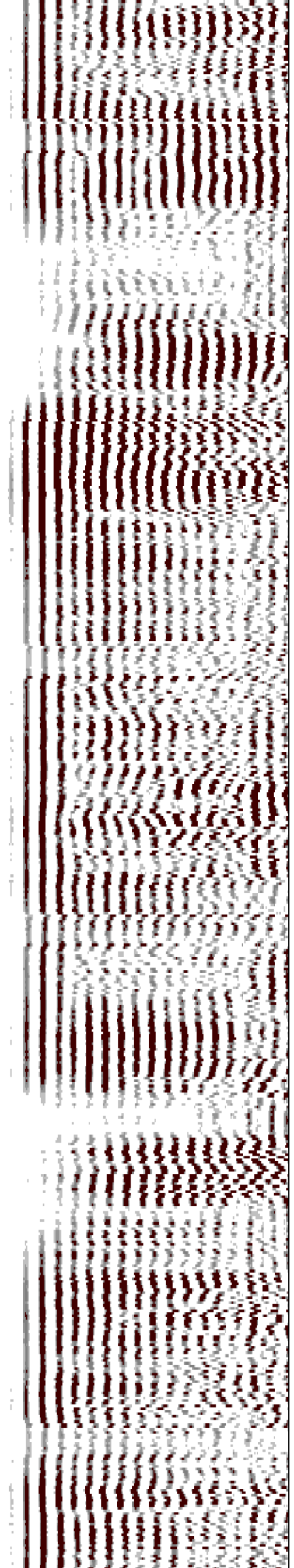
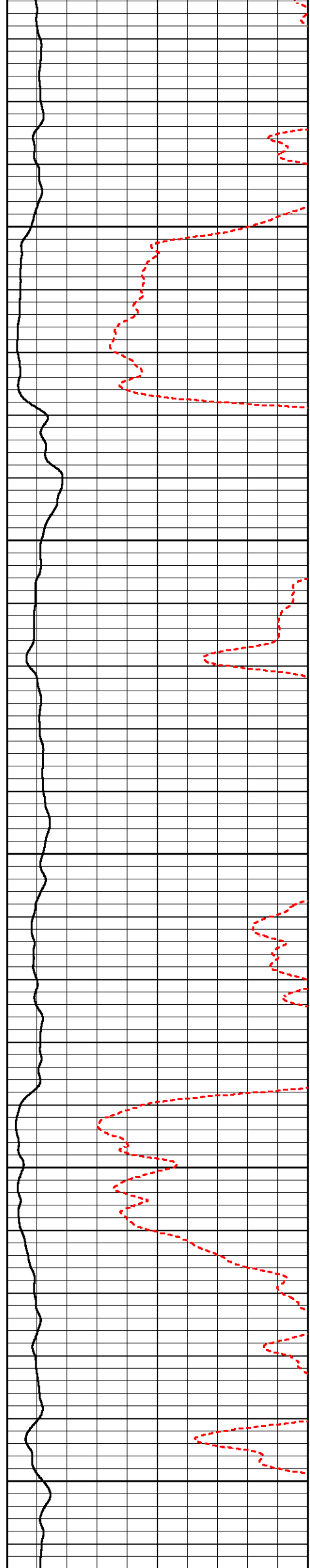
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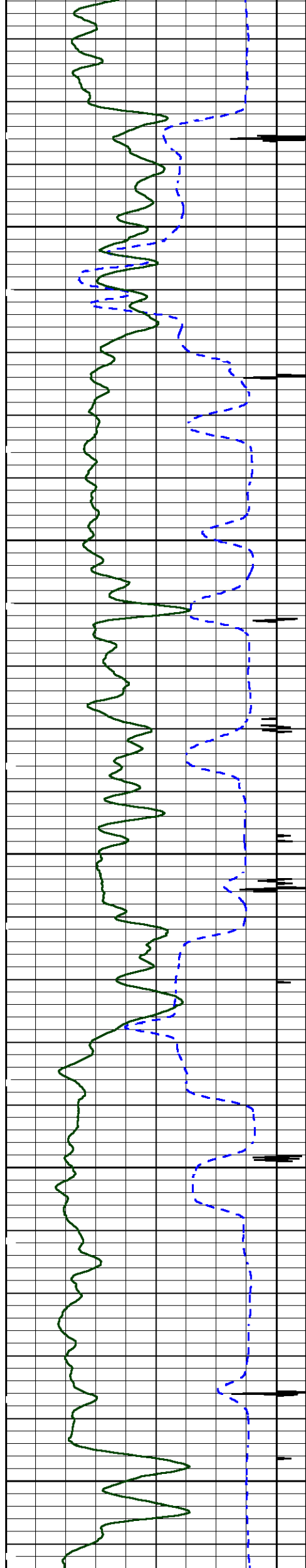




3500

3600

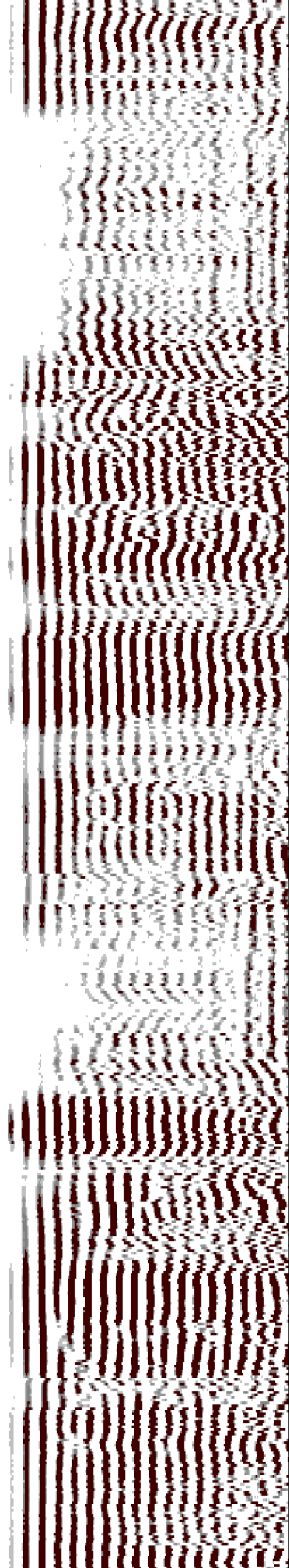
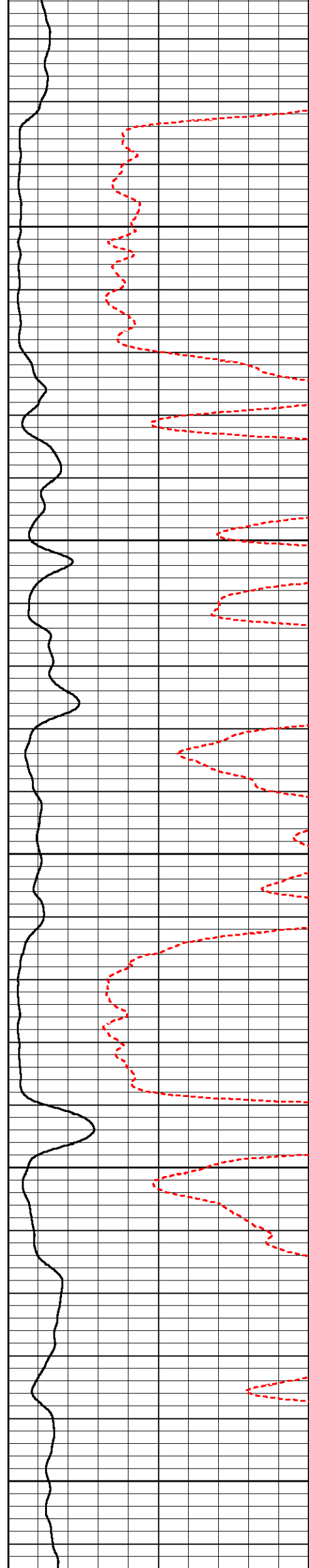


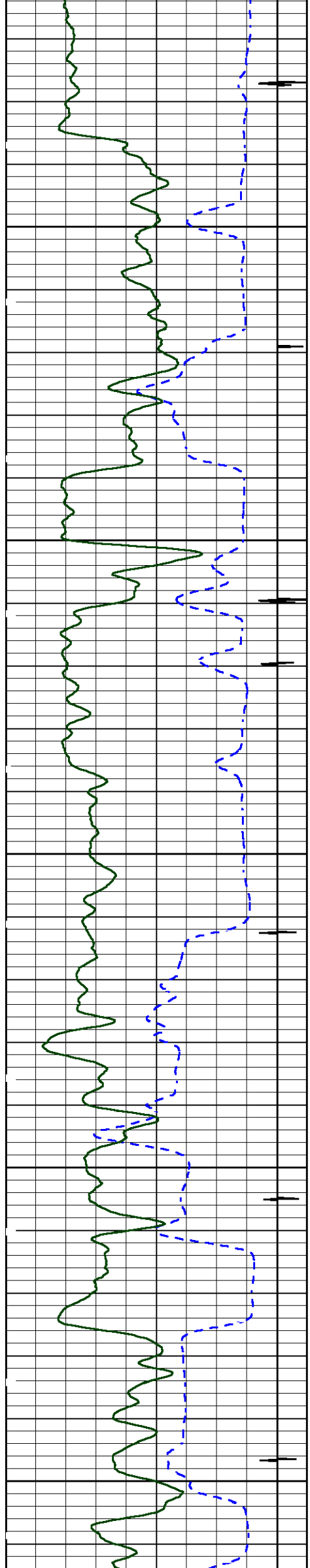


3700

3800

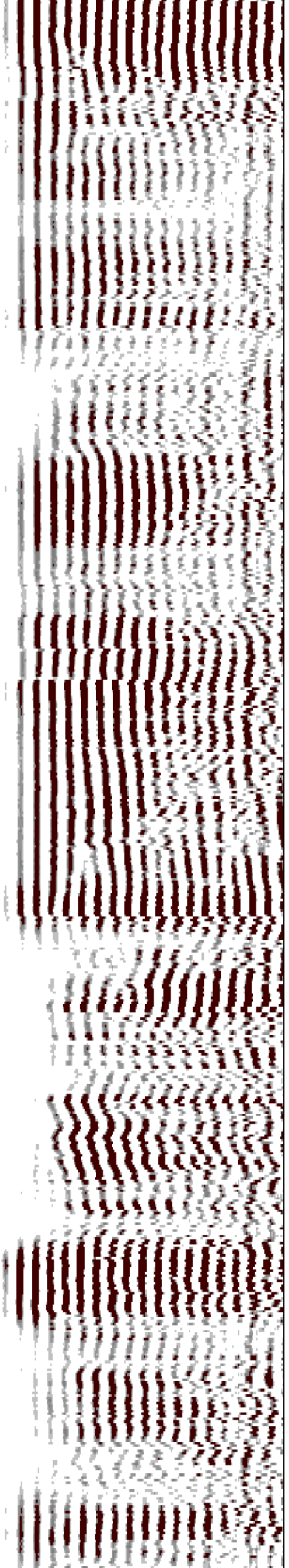
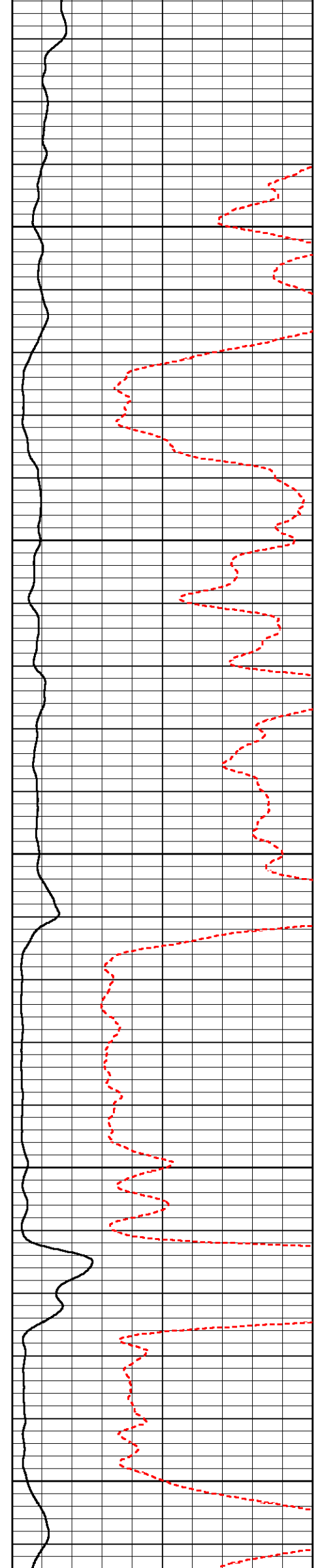
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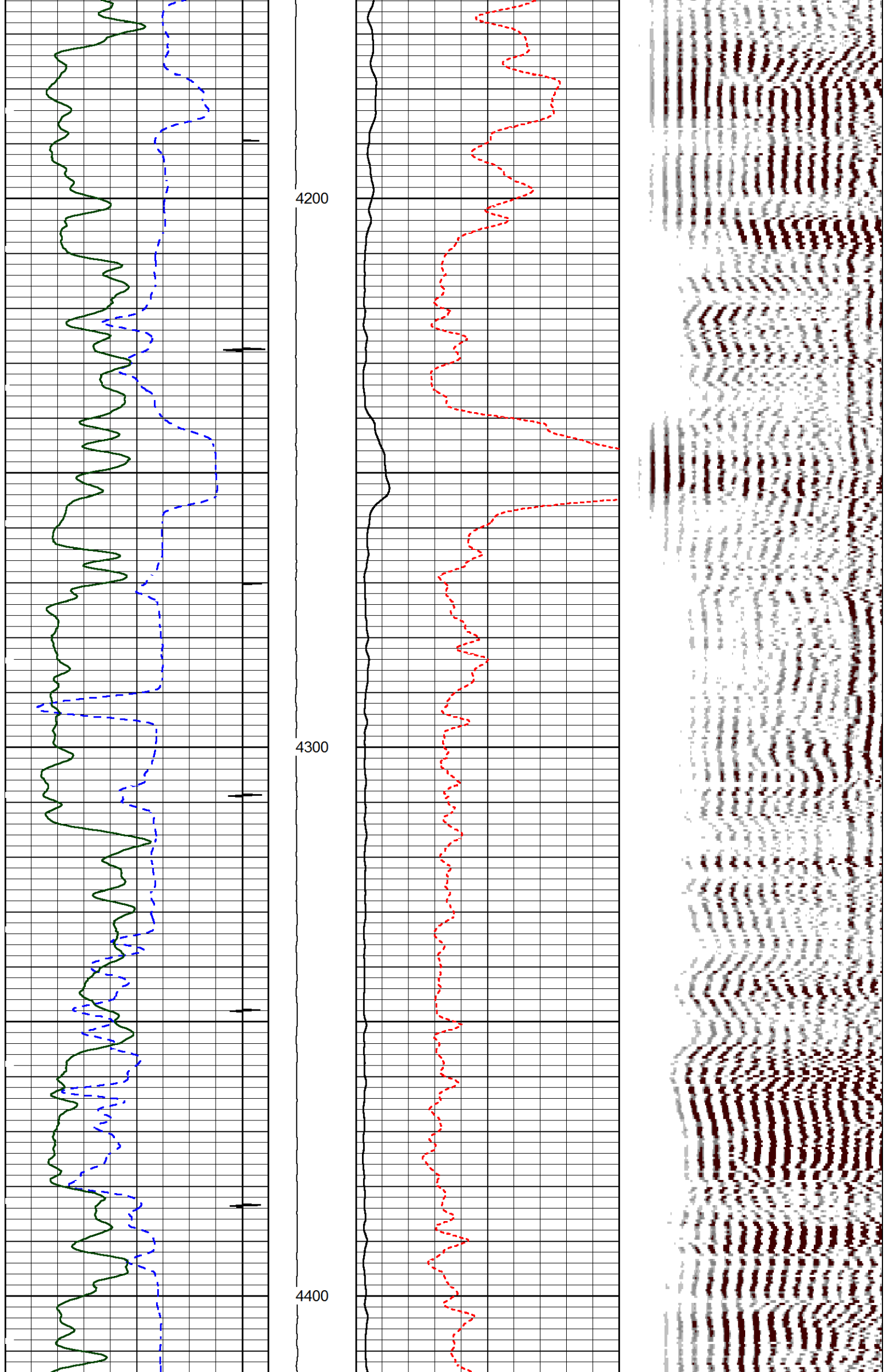


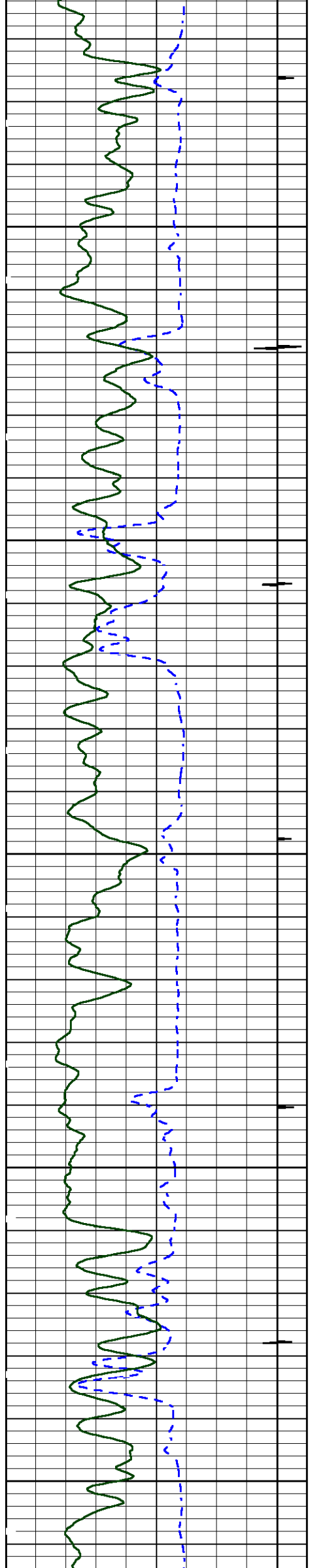


4000

4100

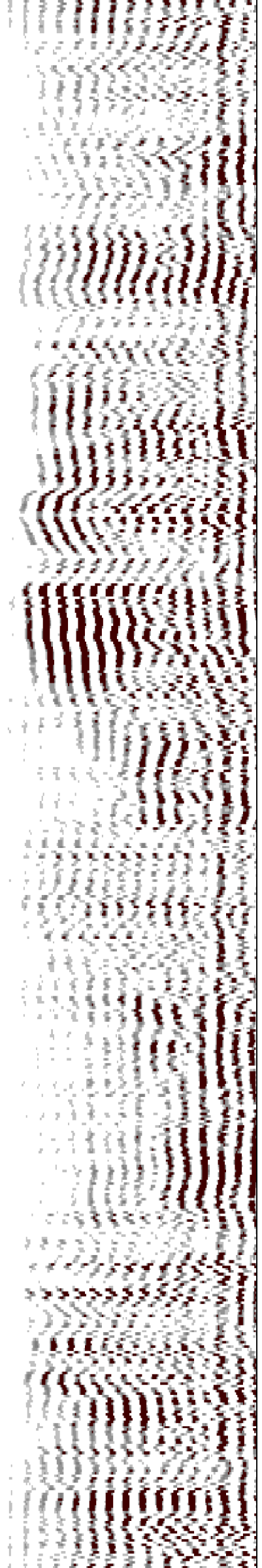
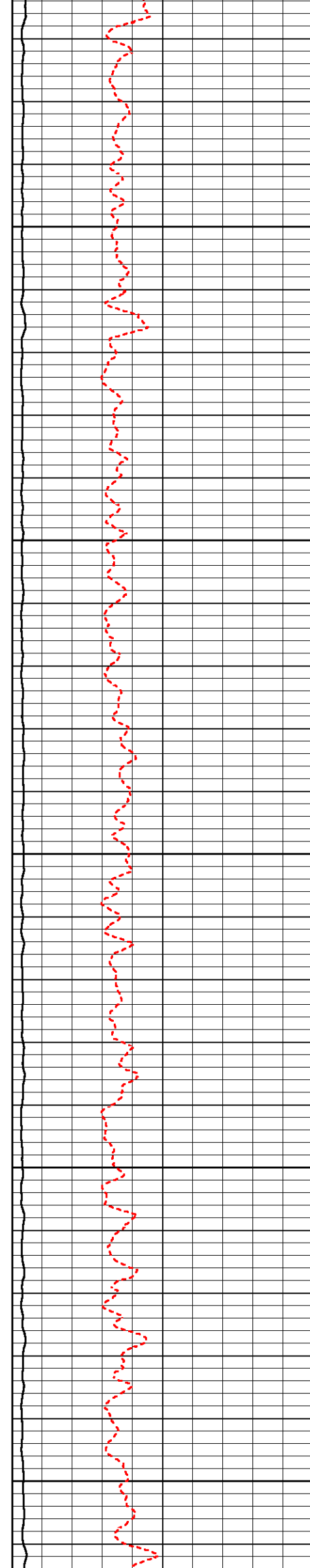


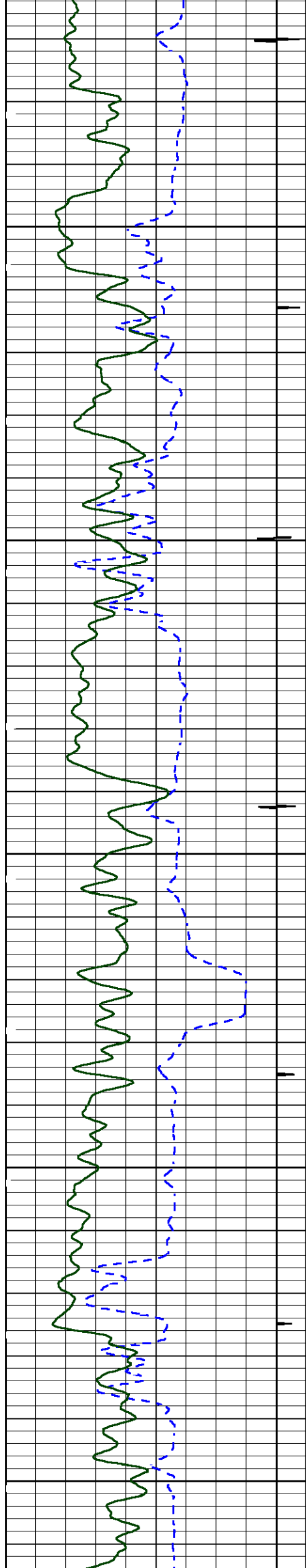




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4600

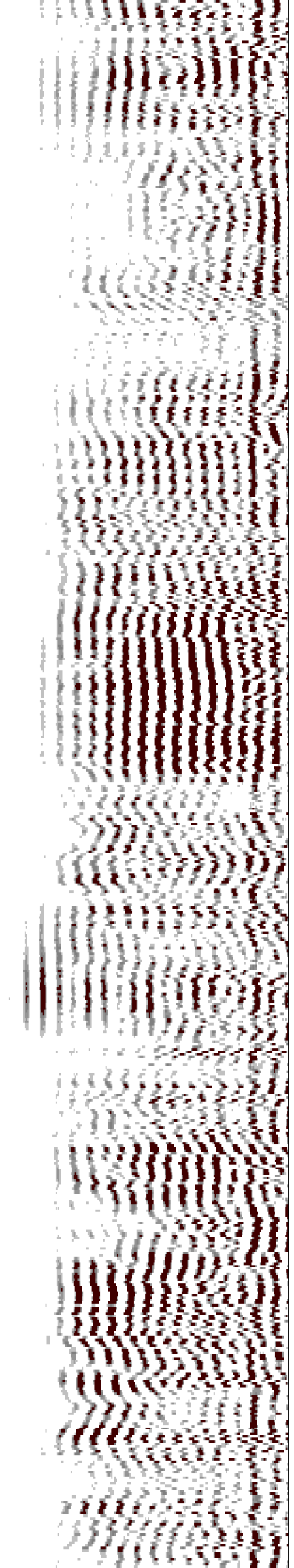
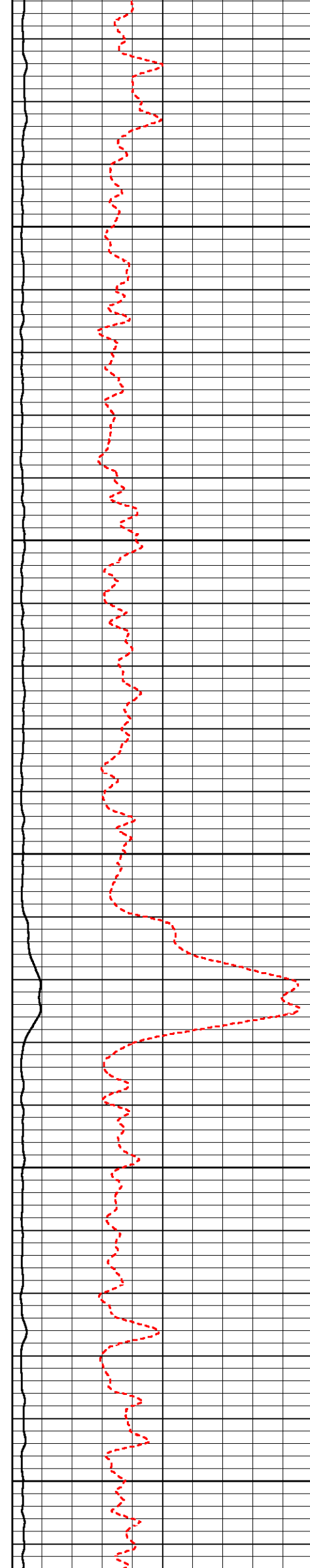


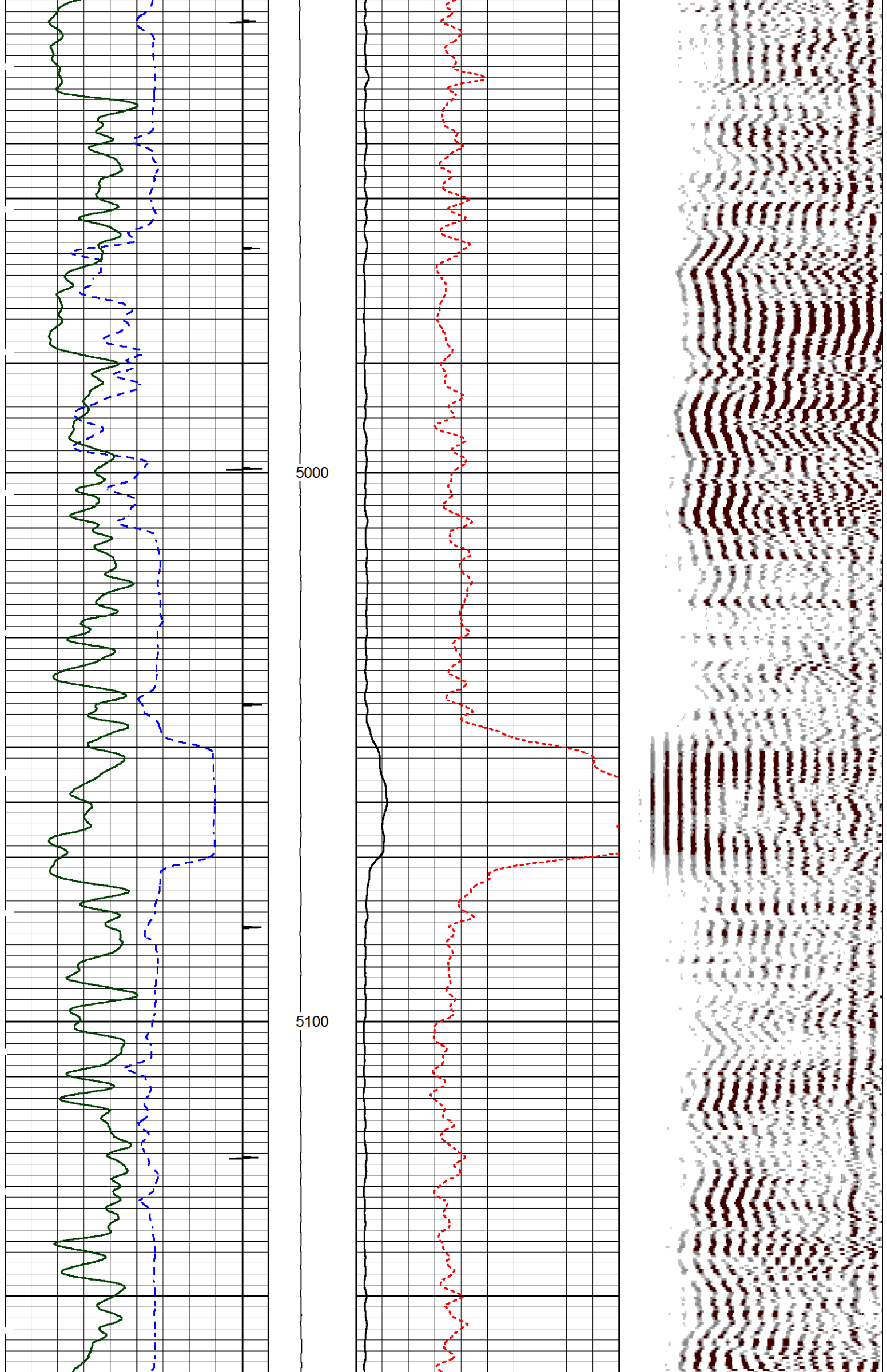


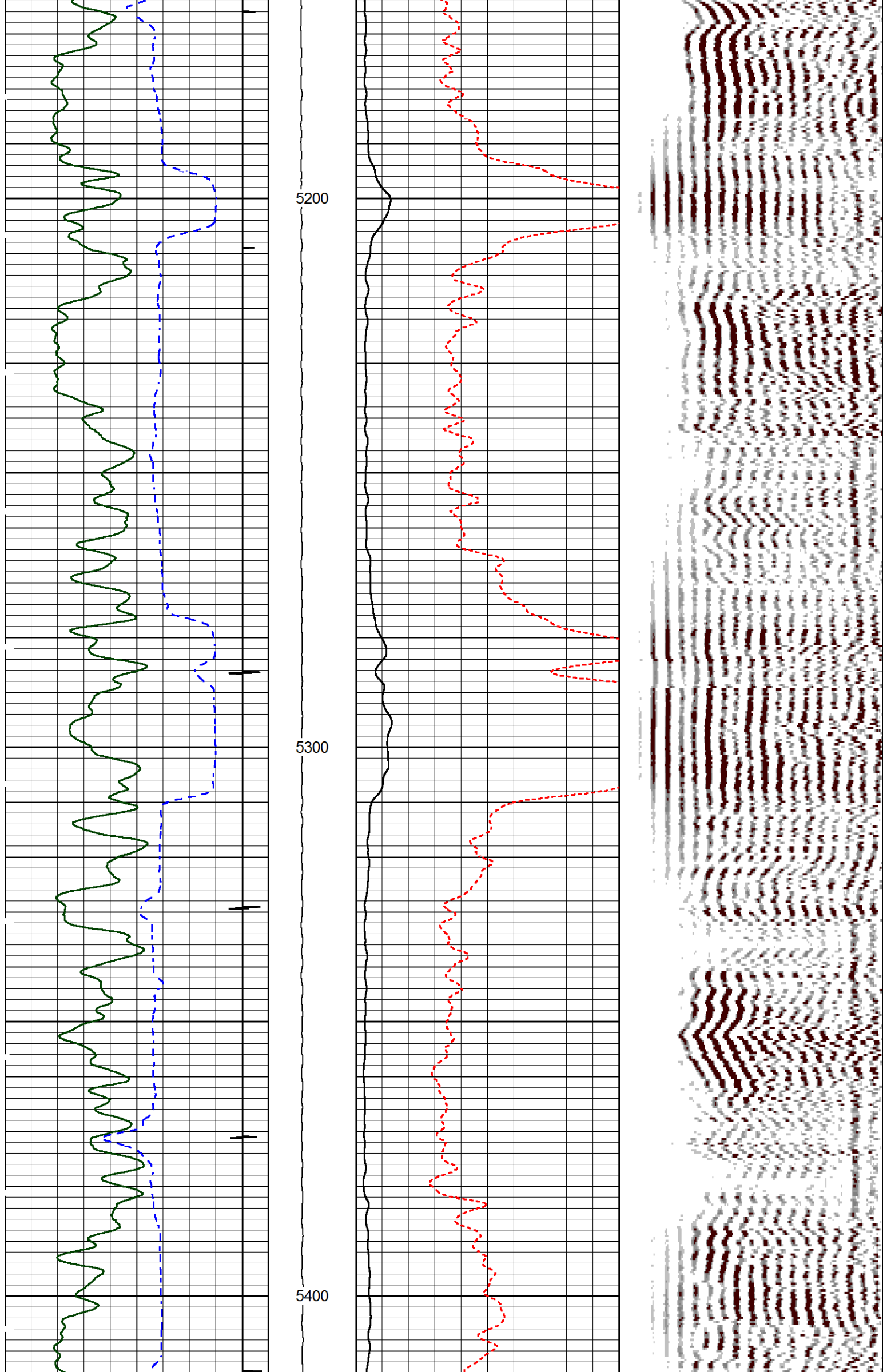
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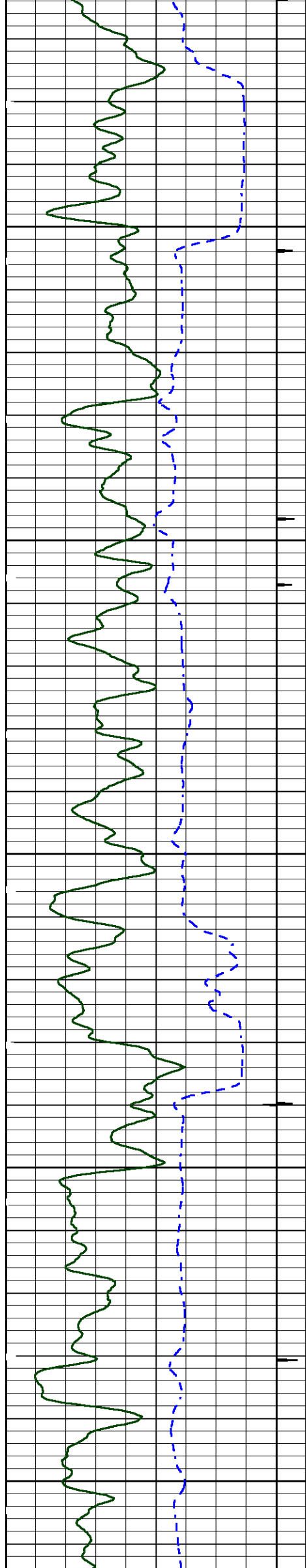
4800

4900



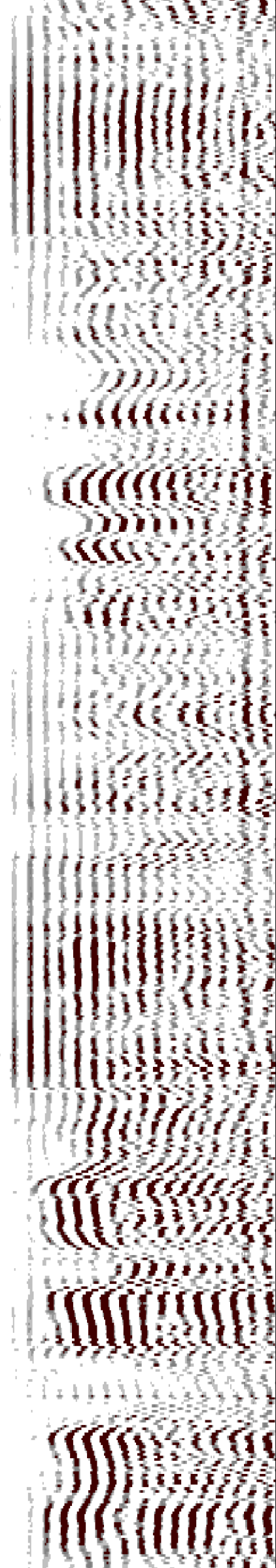
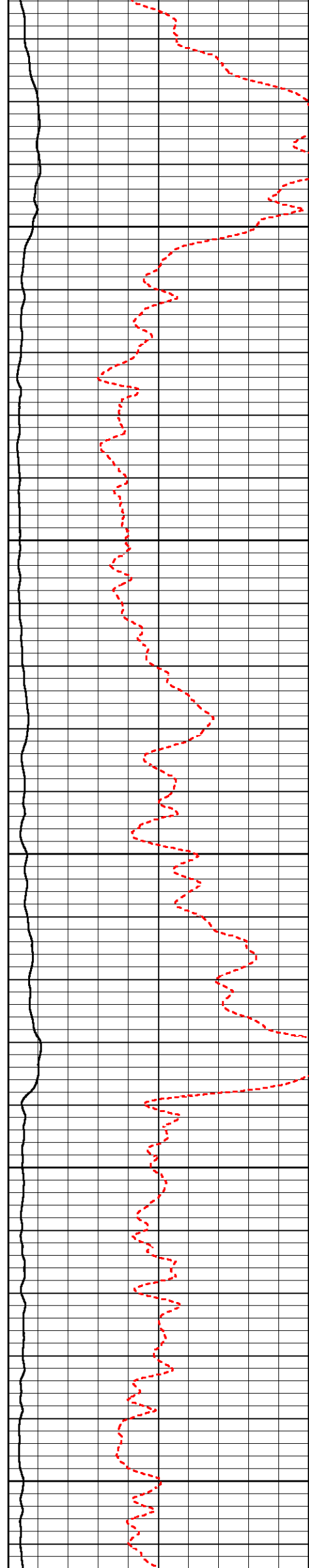


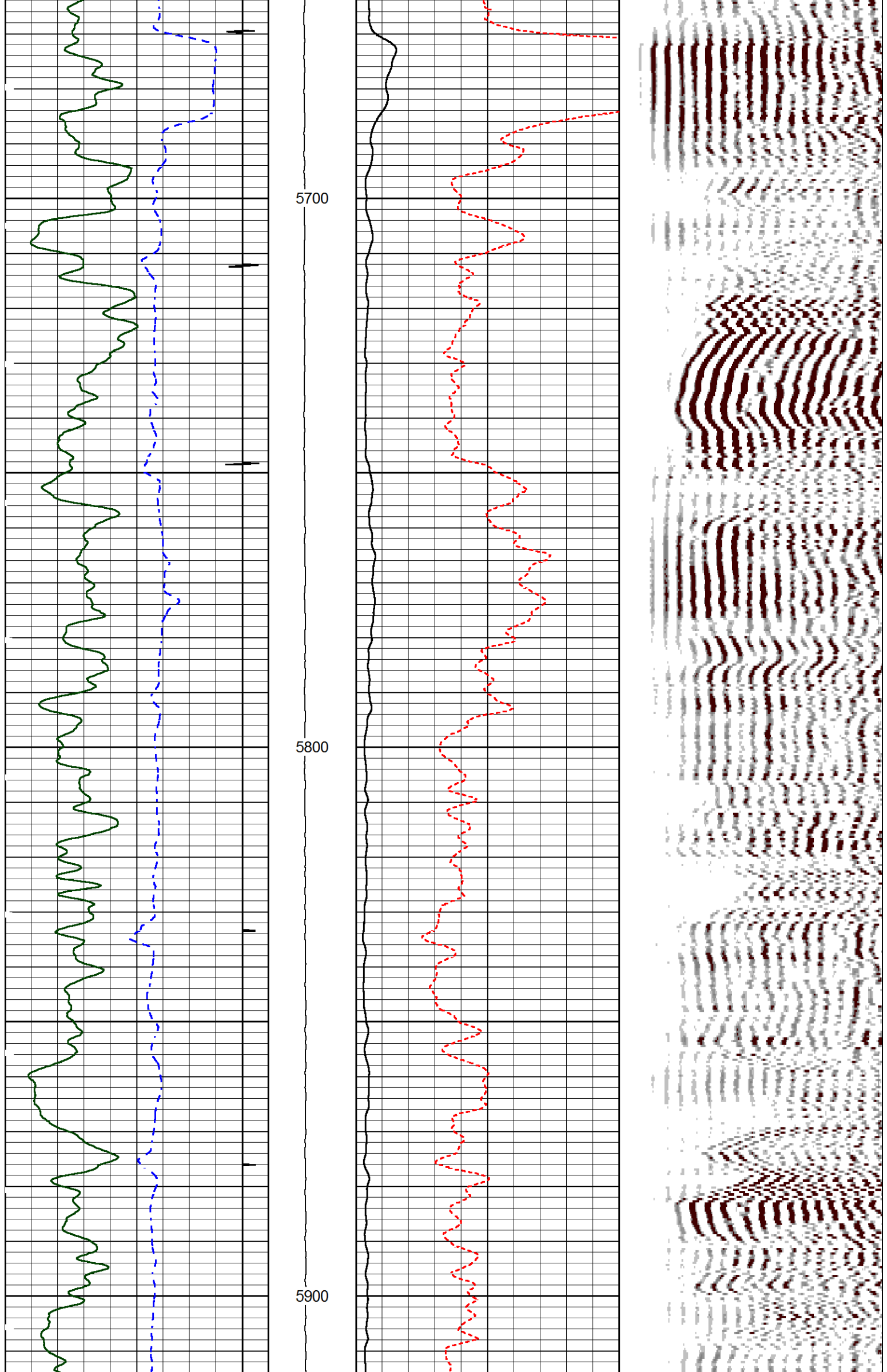


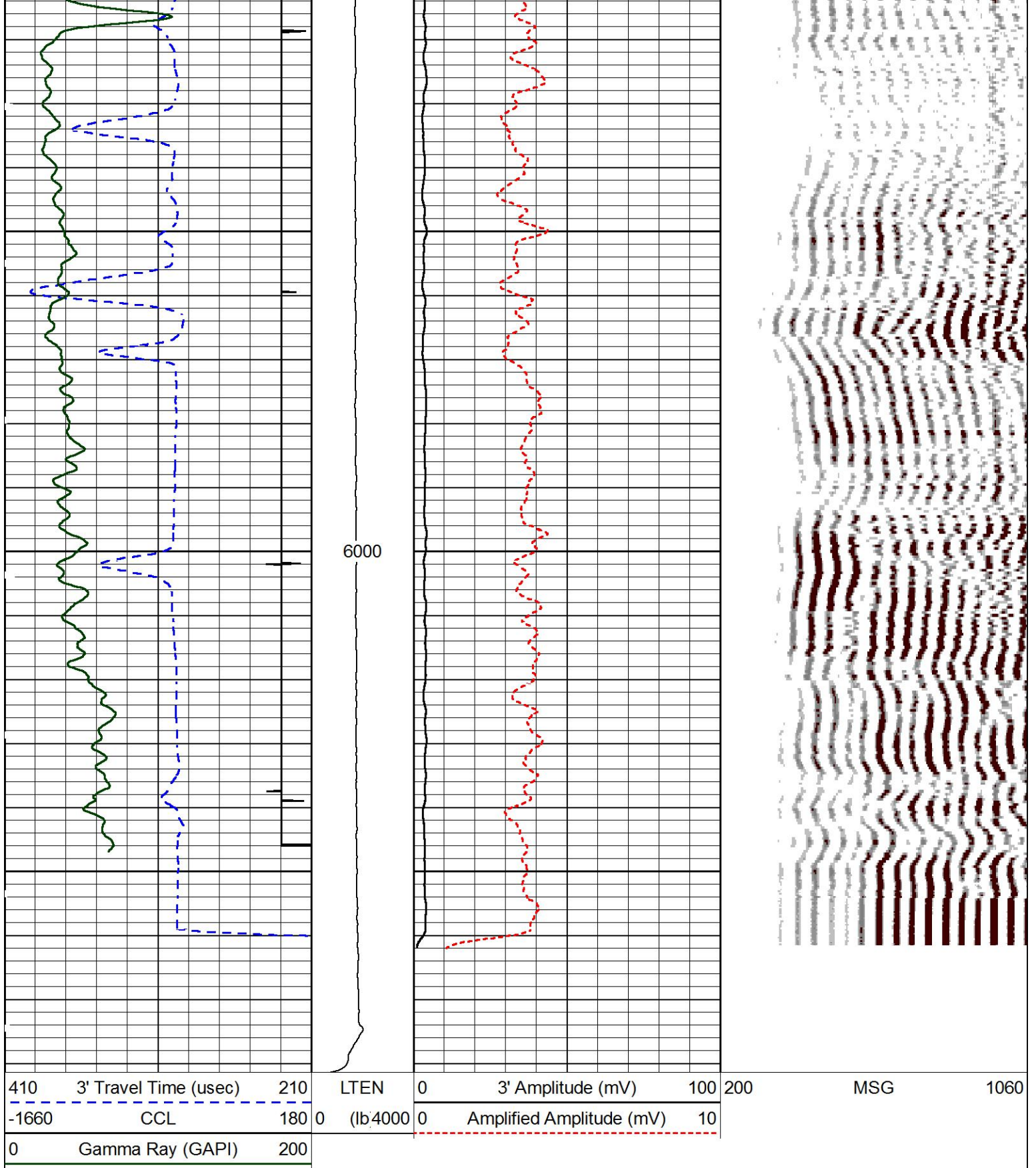


5500

5600







### MAIN LOG SECTION

**HALLIBURTON**

5"=100'

### REPEAT LOG SECTION

**HALLIBURTON**

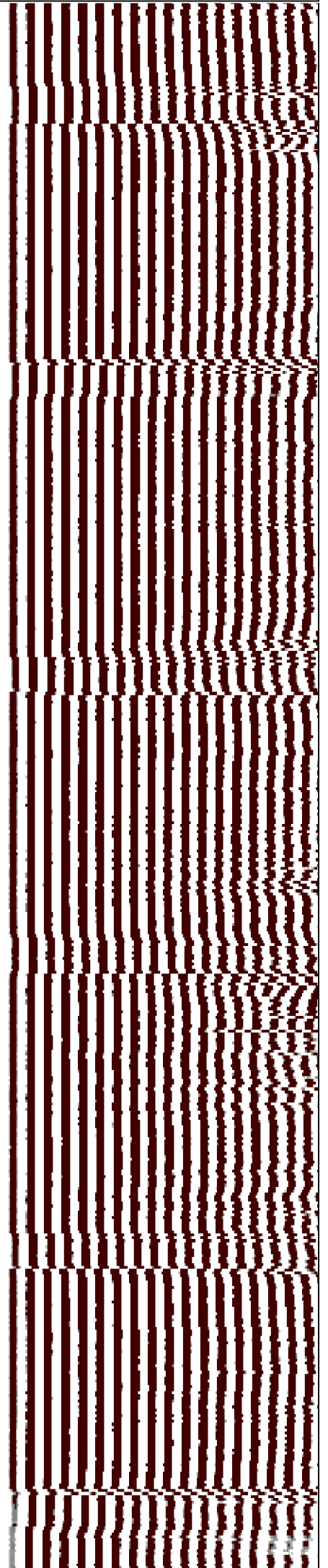
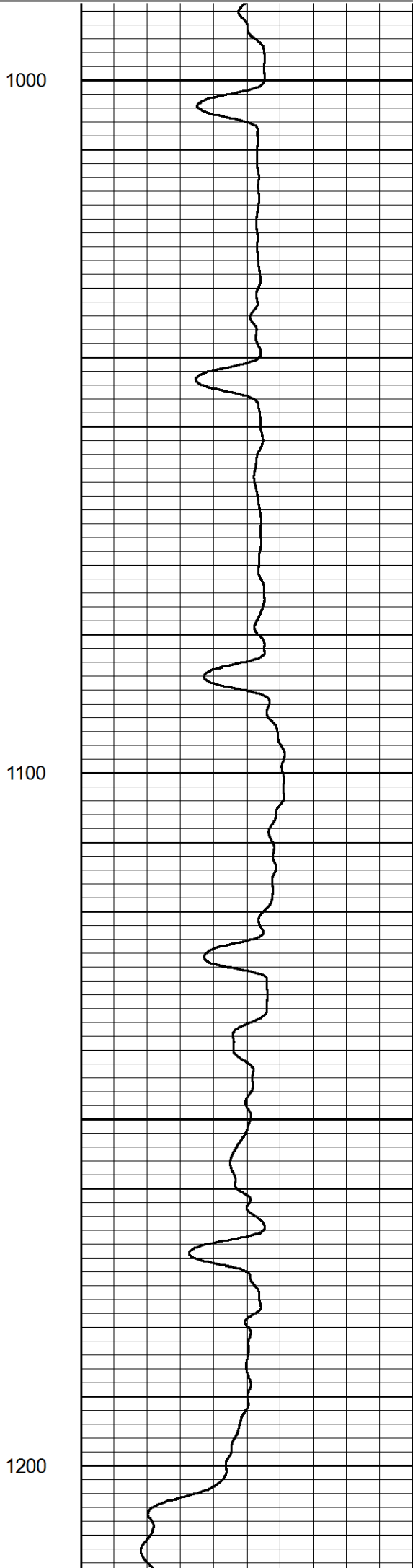
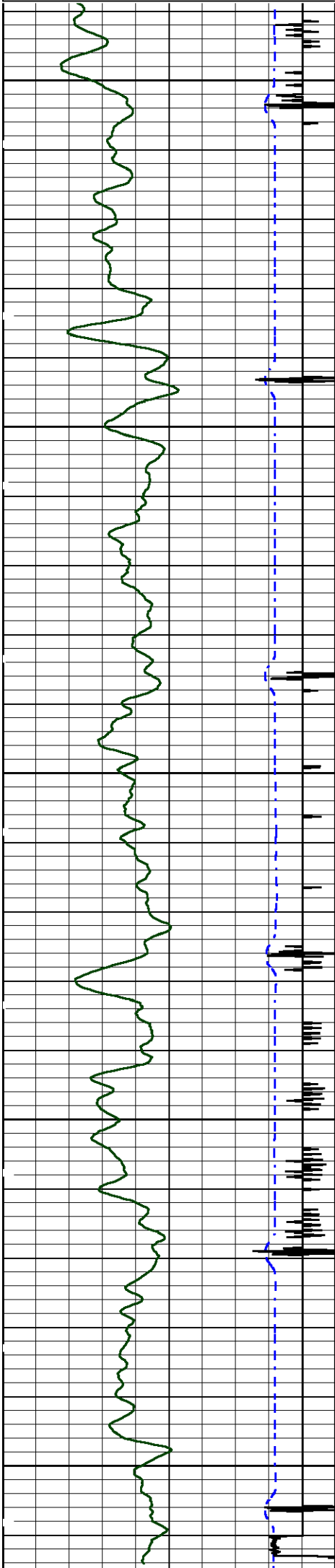
5"=100'

Database File ir\_24c\_cmb.db  
 Dataset Pathname RPT1  
 Presentation Format hcb1  
 Dataset Creation Thu Jul 17 09:04:36 2014  
 Charted by Depth in Feet scaled 1:240

410 3 Travel Time (usec) 210  
-1660 CCL 180 0  
0 Gamma Ray (GAPI) 200

LTEN 0 3 Amplitude (mV) 100 200  
0 (lb4000 0 Amplified Amplitude (mV) 10

MSG 1060



1000

1100

1200

410	3' Travel Time (usec)	210	LTEN	0	3' Amplitude (mV)	100	200	MSG	1060
-1660	CCL	180	0 (lb4000)	0	Amplified Amplitude (mV)	10			
0	Gamma Ray (GAPI)	200							

## REPEAT LOG SECTION

**HALLIBURTON**

5=100'

## Log Variables

DatabaseD:\Warrior\_data\ir\_24c\_cmb.db  
Dataset field/well/run1/MAIN1

### Top - Bottom

BHTEMP_Src	BHSAL2	BHSAL1	POROS2	POROS1	LTH	UHSGC	RHOFC
1	0	1	0	1	Sandstone	NONE	0.25
SO in	BORSAL kppm	CASED?	MSGGN	USERFTT usec/ft	ZREF MRayl	CASEWGHT lb/ft	SRFTEMP degF
0	150	Yes	1	0	1.7	11.6	0
MudWgt lb/gal	CASETHCK in	CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF	BITSIZE in	
8.4	0.25	4.5	0	0	100	8.75	

### Calibration Report

Database File ir\_24c\_cmb.db  
Dataset Pathname MAIN1  
Dataset Creation Thu Jul 17 09:45:26 2014

### Reservoir Monitor Tool I Calibration Report

Serial-Model: 12210614-A  
Shop Calibration Performed: Wed Jul 09 16:17:58 2014

### Carbon/Oxygen Mode

#### Stabilization

Result	Logged	Expected Value	Diff.	Tol.	Units
GENV	81.00	80.00	1.00	+/-15.00	V
ITCR2	3199	3250	-51	+/-250	cps

#### Near Detector

	Channel	Expected Value	Amplitude	FWHM	Tol.
H	60	60 +/-2	0.0266	5.36	<6.00
Fe	206	206 +/-2	0.0969	----	----
NGAIN = 0.996		NZOFF = 0.5			

#### Far Detector

	Channel	Expected Value	Amplitude	FWHM	Tol.
H	60	60 +/-2	0.0359	5.69	<6.50
Fe	209	208 +/-2	0.0915	----	----
FGAIN = 0.993		FZOFF = 0.2			

Flask Temperature 62.3 degF

Result	Logged	Expected Value	Diff.	Tol.	Units
COIR2	0.45	0.45	-0.00	+/-0.02	
LIRI2	1.65	1.64	0.01	+/-0.05	
TCCR2	5003	5000	3	+/-1000	cps
ITCR2	3160	3200	-40	+/-250	cps

Sigma Mode

Stabilization

Result	Logged	Expected Value	Diff.	Tol.	Units
GENV	81.00	80.00	1.00	+/-15.00	V
FCAP	9882	10000	-118	+/-500	cps

Horizontal Water Tank

Result	Logged	Expected Value	Diff.	Tol.	Units
N/F Normalizer	0.94	0.95	-0.01		
N/F Inel Norm	0.61	0.61	-0.00		
RNF	1.06	1.07	-0.01	+/-0.12	
RINC	1.64	1.64	0.00	+/-0.18	
SGFN	24.08	24.00	0.08	+/-0.50	cu
SGFF	22.87	22.85	0.02	+/-0.50	cu
FSIN	23851	24000	-149	+/-2000	cps
FCAP	10021	10000	21	+/-1000	cps
NFTR	0.80			<5.00	
FFTR	0.92			<5.00	
NBKG	179			<500	cps
FBKG	92			<500	cps
RTN	0.40	0.40	0.00	+/-0.10	usec
RTF	0.43	0.40	0.03	+/-0.10	usec

Calibration Software Modules

HRMTI Module 2013.11.14.0  
RMTI Module 2014.5.9.1

Log Data Acquisition Software Modules

HRMTI Module 2013.11.14.0  
RMTI Module 2014.5.9.1

Cement Bond Log Shop Calibration Report

Serial-Model: 12091452-A  
Calibration Performed: Tue Jul 15 09:57:44 2014

Free Pipe Calibration

	Measured	Units
TT	246.1	usec
Amplitude	554.4	mV
Log Base Line	-7.2	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	0.145	

Gamma Ray Calibration Report

Type / Serial: 002 / 11214503



RmtTemp	0.22					
RmtFP5V	0.22					
RmtFPMHV	0.22					
RmtFPMI	0.22					
RmtFPrgSt1	0.22					
RmtFDetStat	0.22					
RmtNTemp	0.22					
RmtNPMHV	0.22		RMTI-A (12210614) Halliburton RMTI Tool	14.00	2.13	77.00
RmtNPMI	0.22					
RmtNPrgSt1	0.22					
RmtNDetStat	0.22					
RmtGenlonl	0.22					
RmtGen15BusV	0.22					
RmtGenLvdsV	0.22					
RmtGenSyncV	0.22					
RmtGenClampV	0.22					
RmtGenP5V	0.22					
RmtGenP33V	0.22		BUL-006 (000002) Bullnose Terminator	0.22	1.69	1.20
RmtGen200V	0.22					
RmtGenP15VI	0.22					
RmtGenTemp	0.22					
RmtGenP5VI	0.22					
		Dataset:	ir_24c_cmb.db: field/well/run1/MAIN1			
		Total length:	38.66 ft			
		Total weight:	352.20 lb			
		O.D.:	3.13 in			

Company	CAERUS PICEANCE, LLC.				
Well	ISLAND RANCH 24D-13				
Field	PARACHUTE				
County	GARFIELD	State	CO		
<b>HALLIBURTON</b>	ACOUSTIC CEMENT BOND LOG				