

CompanyKERR-MCGEE OIL AND GAS				CompanyKERR-MCGEE OIL AND GAS	
WellGRAHAM E C 1				WellGRAHAM E C 1	
FieldWATTENBERG				FieldWATTENBERG	
CountyWELD				CountyWELD	
StateCOLORADO				StateCOLORADO	
Location:		API # : 05123096560000		Other Services	
LAT: 40.06970		LONG: -104.94720		NONE	
SEC 12		TWP 1N		RGE 68W	
Permanent Datum		GROUND LEVEL		Elevation 5076'	
Log Measured From		KELLY BUSHING		12'	
Drilling Measured From		KELLY BUSHING		K.B. 5088'	
				D.F. 5087'	
				G.L. 5076'	
Date of Service	5-FEBRUARY 2015				
Run Number	ONE				
Depth Driller or PBTD	8341'				
Depth Logger	8114'				
Bottom Log Interval	8112'				
Top Log Interval	SURFACE				
Open Hole Size	7.875"				
Type Fluid	FSW				
Fluid Level	SURFACE				
Fluid Density	N/A				
Max. Recorded Temperature	N/A				
Max. Wellhead Pressure	0 PSI				
Wellhead Connection	N/A				
Estimated Cement Top	7305'				
Unit Number	24				
Wireline Size	9/32"				
Location	FORT MORGAN				
Recorded By	B.FONSECA			W.DOLPH	
Witnessed By	MR. TRAUX DEAL				
Size	Wt/Ft	Top	Bottom		
Tubing Record					
Surface Casing					
Production Casing	4.5"	10.5	SURFACE		
Liner Record					

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.
CORRELATED TO 12' KB

YOUR CREW TODAY B. FONSECA, W. DOLPH, J. KING, M. ODOHERTY

THANK YOU FOR CHOOSING PIONEER ENERGY SERVICES

THANK YOU FOR USING PIONEER ENERGY SERVICES

Your Pioneer Energy Services Crew

Engineer:

Operator:

Operator:

Operator:

Tool Data - Services

Serial Number

Database File 05123096560000_graham_e_c_1_cbl.db
 Dataset Pathname pass6
 Dataset Creation Thu Feb 05 08:19:45 2015

Gamma Ray Calibration Report

Serial Number: 111211
 Tool Model: Probe
 Performed: (Not Performed)

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

Sensitivity: 1.0000 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: 111205
 Tool Model: Probe

Calibration Casing Diameter: 4.500 in
 Calibration Depth: 4400.992 ft

Master Calibration, performed Thu Feb 05 07:52:13 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.016	0.684	3.000	81.196	117.057	1.154
CAL	0.016	0.727				
5'	0.044	0.552	3.000	81.196	153.835	-3.775
SUM						
S1	0.029	0.691	0.000	100.000	151.122	-4.379
S2	0.011	0.671	0.000	100.000	151.591	-1.675
S3	0.010	0.654	0.000	100.000	155.234	-1.582
S4	0.007	0.657	0.000	100.000	153.861	-1.131
S5	0.009	0.667	0.000	100.000	151.898	-1.331
S6	0.009	0.680	0.000	100.000	148.951	-1.282
S7	0.009	0.701	0.000	100.000	144.543	-1.267
S8	0.004	0.682	0.000	100.000	147.577	-0.659

Internal Reference Calibration, performed Thu Feb 05 08:12:52 2015:



	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.016	0.710	0.016	0.727	1.023	-0.000

Air Zero Calibration, performed Thu Feb 05 07:12:22 2015:

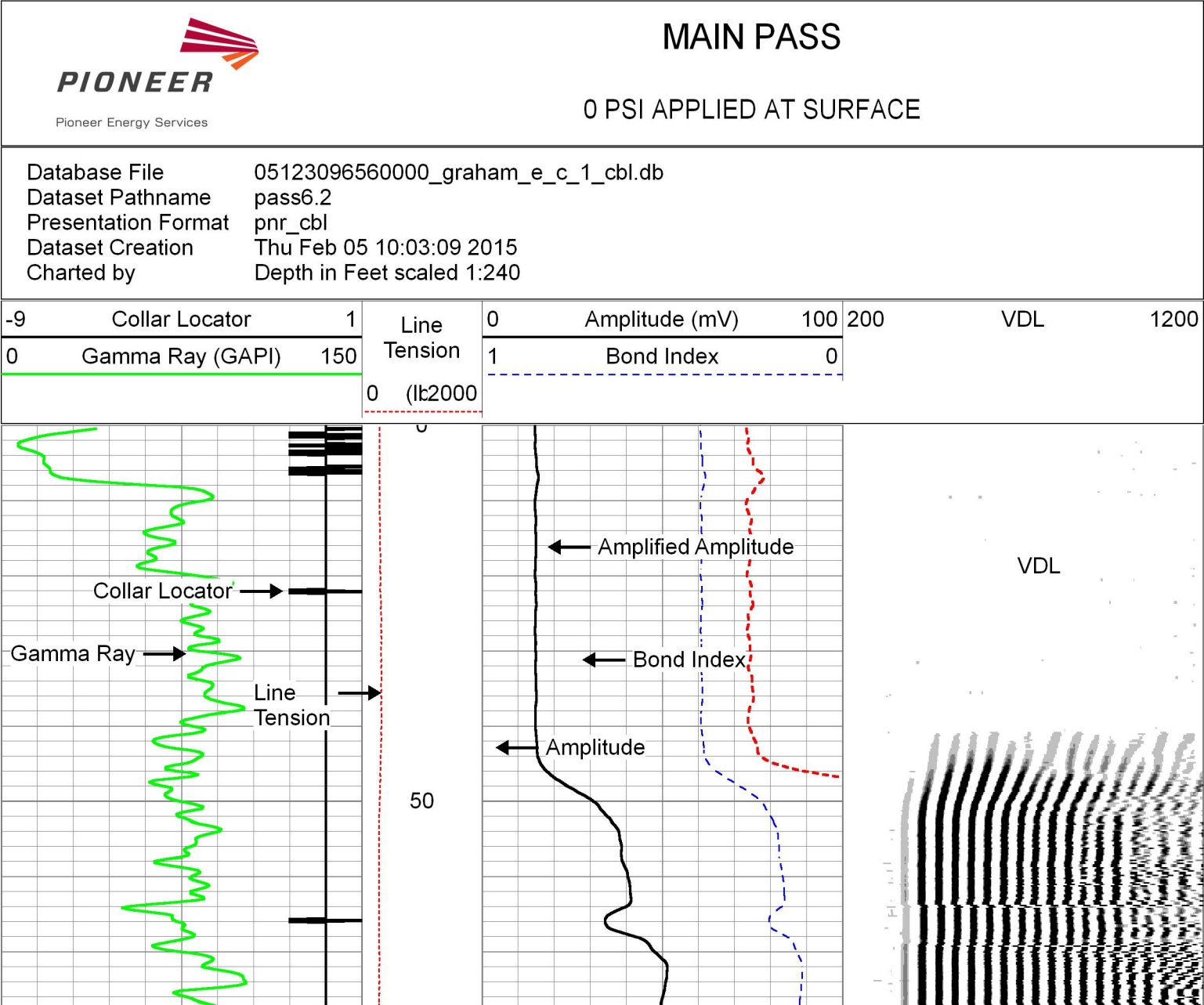
	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.000		0.000			0.000
5'	0.000		0.000			0.000
SUM						
S1	0.000		0.000			0.000

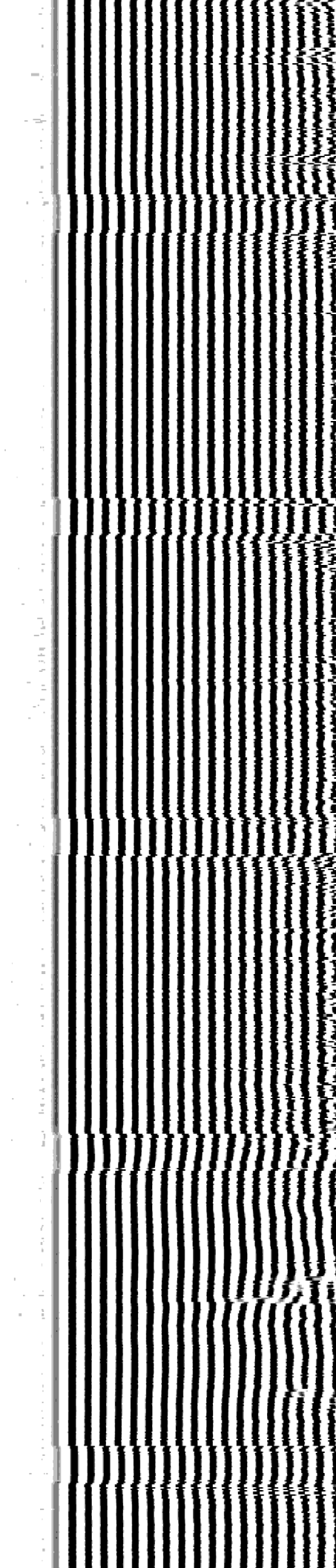
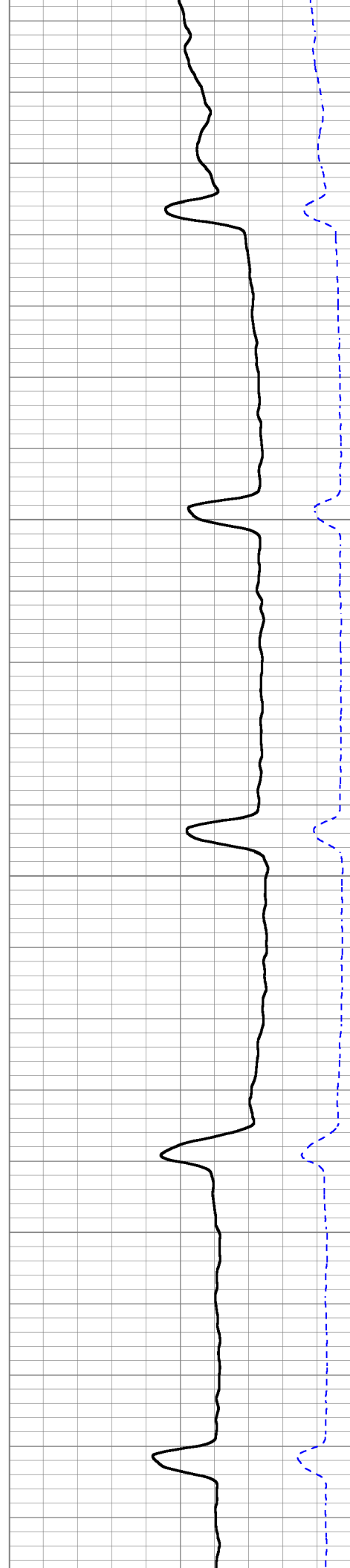
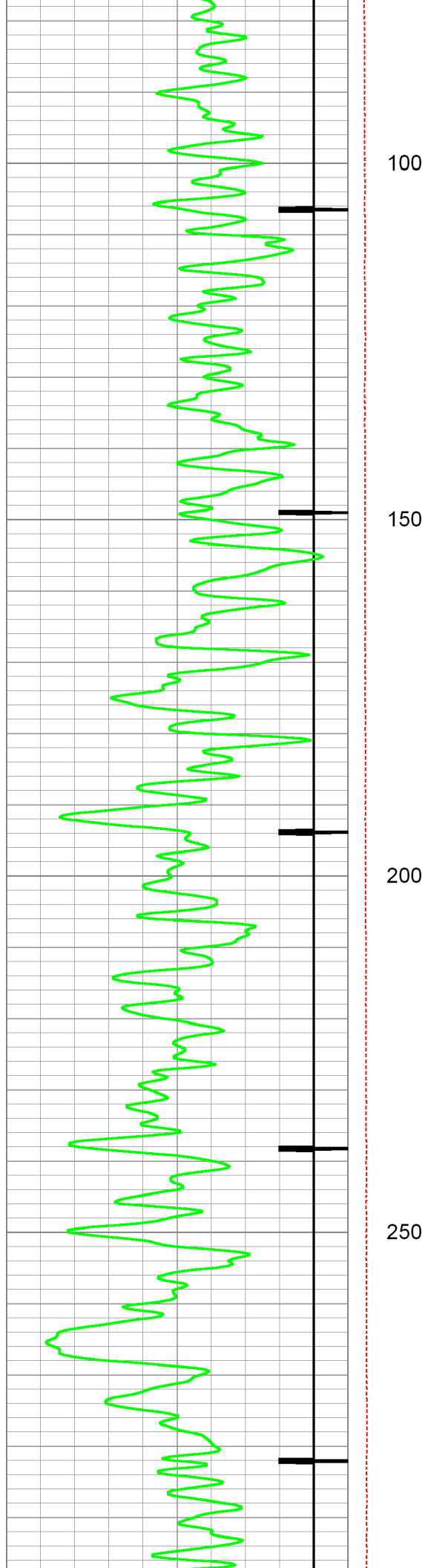
S2	0.000	0.000	0.000
S3	0.000	0.000	0.000
S4	0.000	0.000	0.000
S5	0.000	0.000	0.000
S6	0.000	0.000	0.000
S7	0.000	0.000	0.000
S8	0.000	0.000	0.000

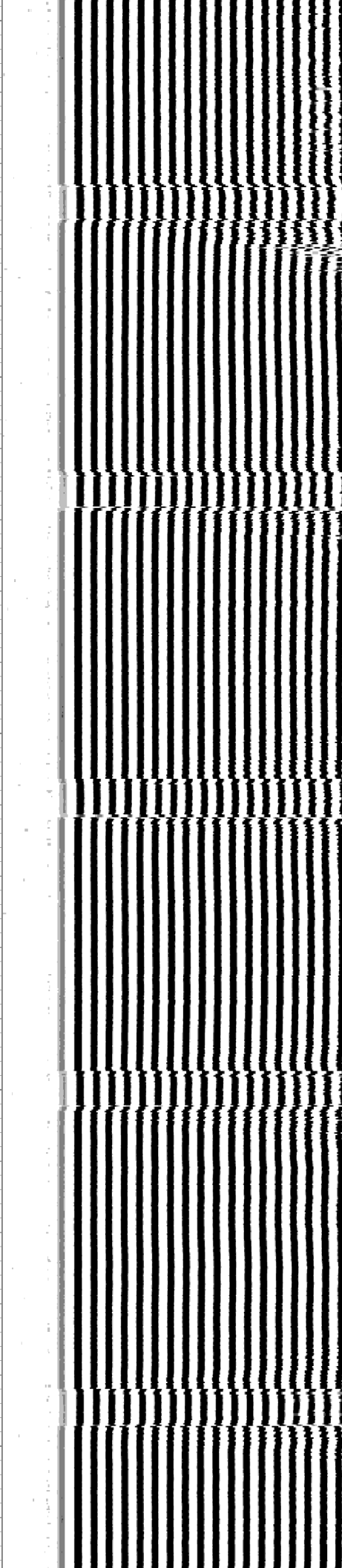
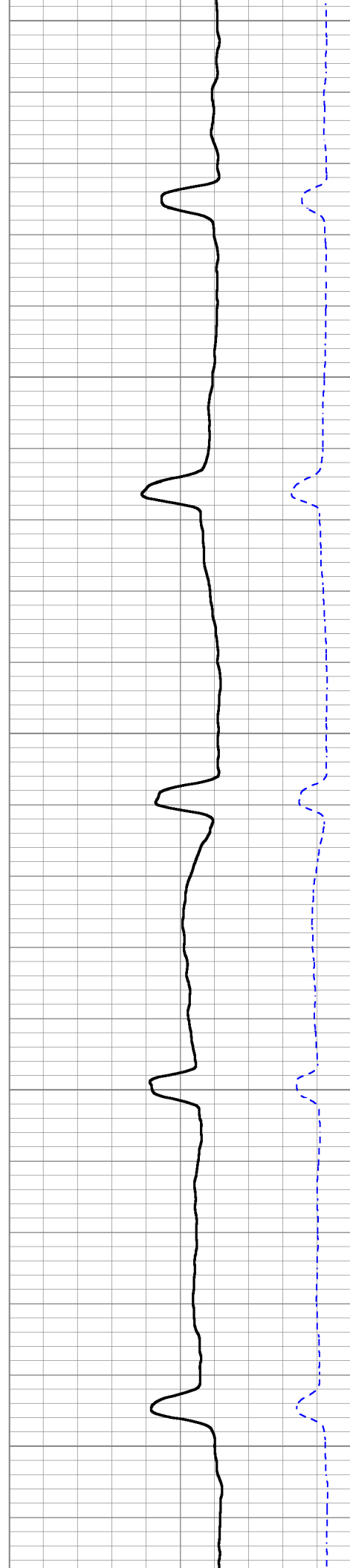
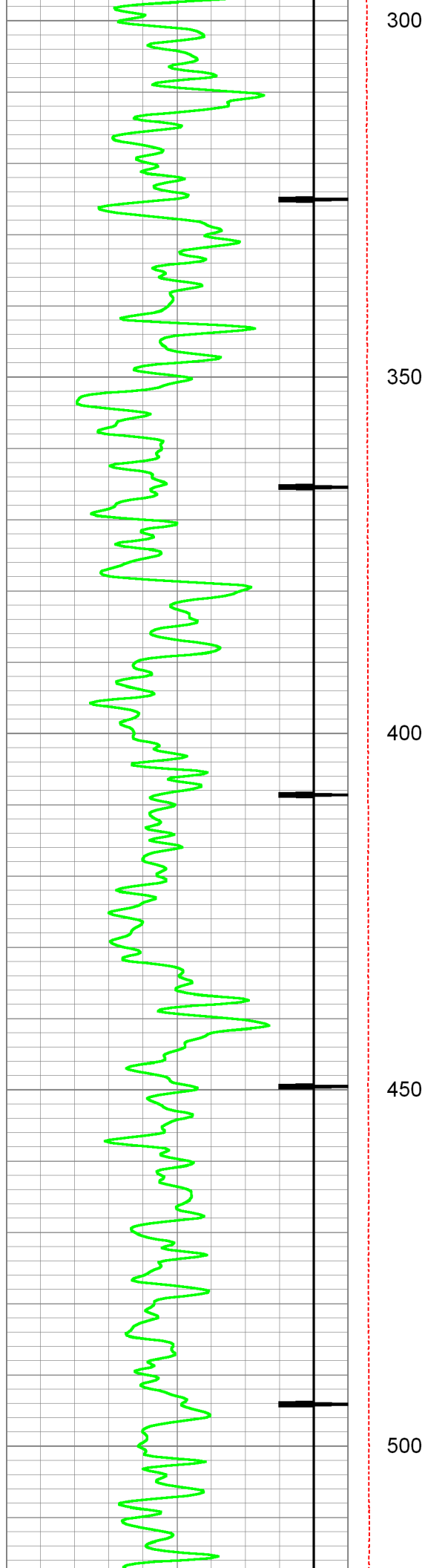
Log Variables						
DatabaseC:\ProgramData\Warrior\Data\05123096560000_graham_e_c_1_cbl.db						
Dataset field/well/run1/pass6/_vars_						
Top - Bottom						
PPT usec 0	CASEWGHT lb/ft 10.5	MAXAMPL mV 82	MINAMPL mV 1	MINATTN db/ft 0.08	SRFTEMP degF 0	CASETHCK in 0.224
CASEOD in 4.5	PERFS 0	TDEPTH ft 8354	BOTTEMP degF 100	BOREID in 7.875		

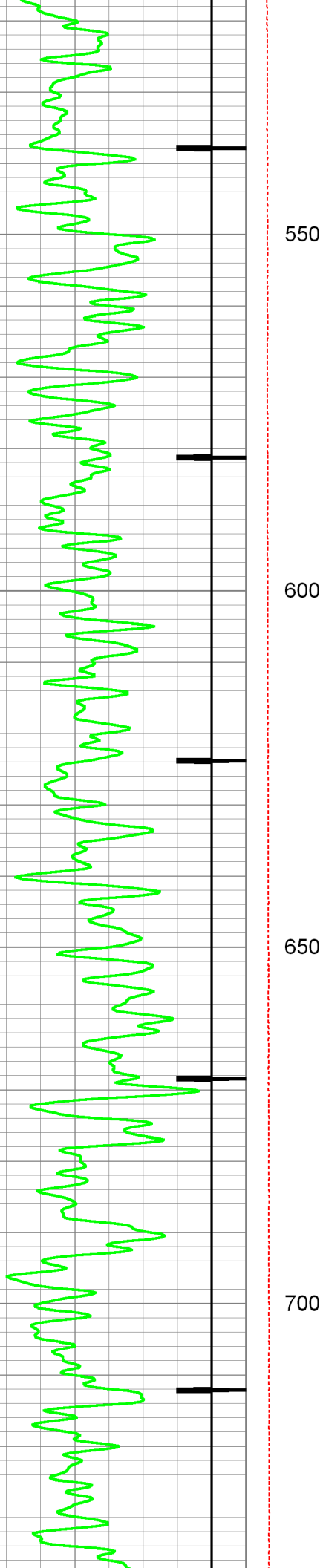
Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			CHD-Titan 1 7/16" Titan Cable Head	1.00	1.44	2.00
			CENT-Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
			RBT-Probe (111205) Probe Radii Bond Tool with Digital Telemetry	8.75	2.75	90.00
WVFS8	11.60					
WVFS7	11.60					
WVFS6	11.60					
WVFS5	11.60					
WVFS4	11.60					
WVFS3	11.60					
WVFS2	11.60					
WVFS1	11.60					
WVFCAL	11.60					
WVF3FT	11.60					
WVF5FT	10.60					

			CENT-Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
CCL	3.64					
			GR-Probe (111211) Probe 2.75" 4 Channel Pulse	4.54	2.75	30.00
GR	0.89					
Dataset: 05123096560000_graham_e_c_1_cbl.db: field/well/run1/pass6 Total length: 20.04 ft Total weight: 152.00 lb O.D.: 2.75 in						







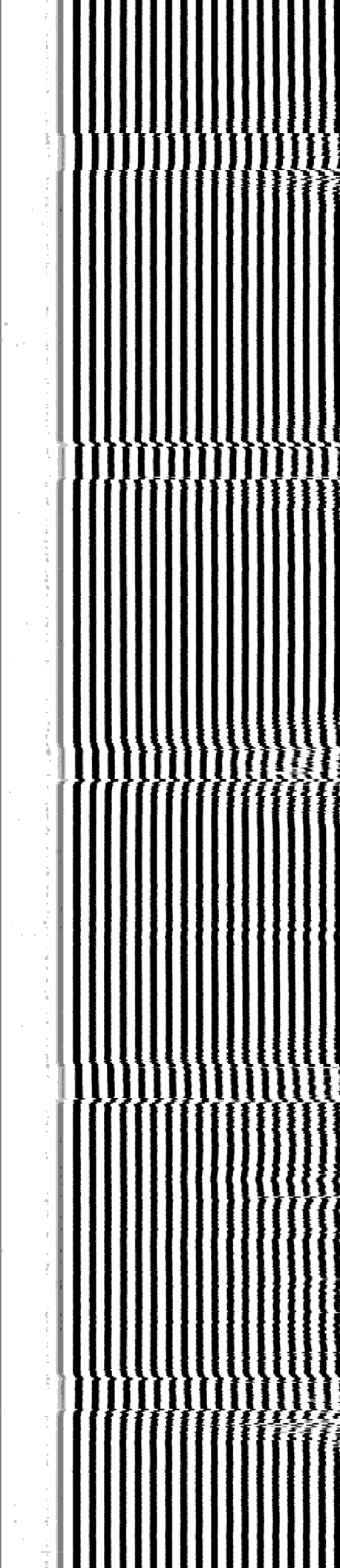
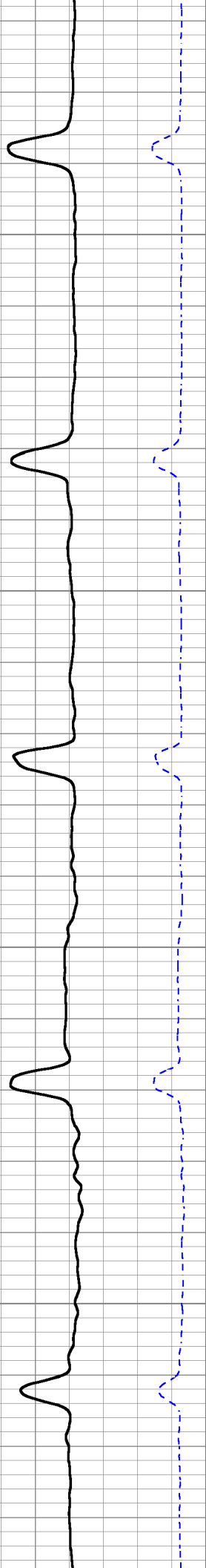


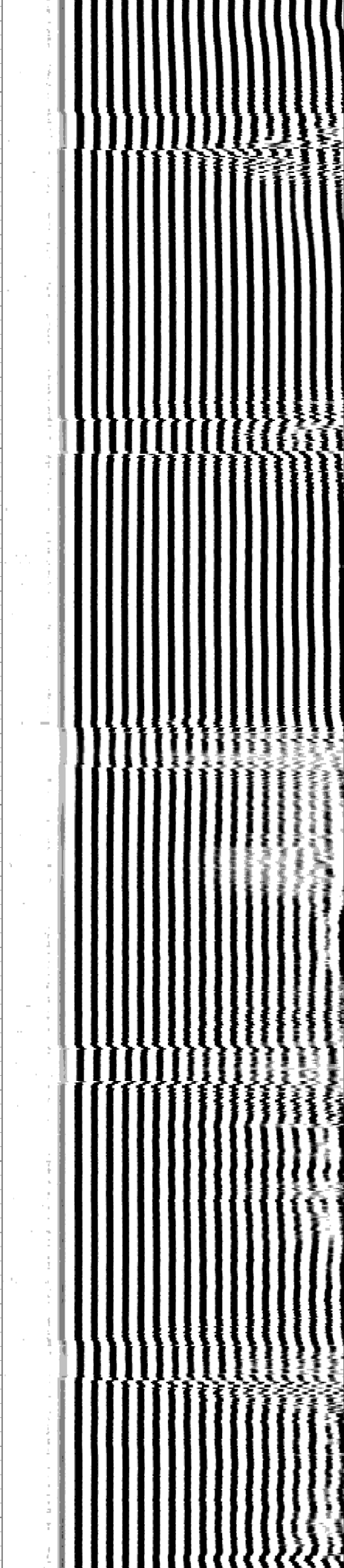
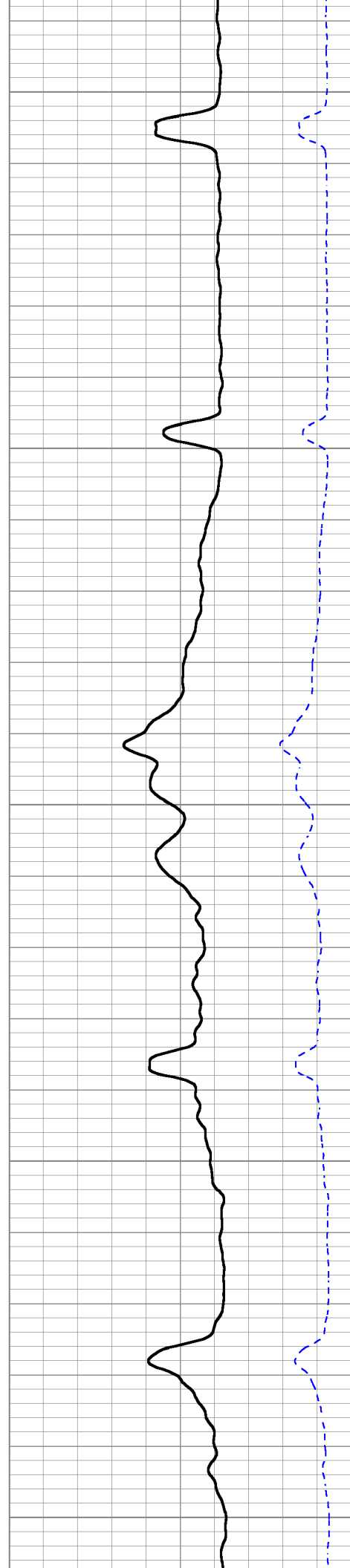
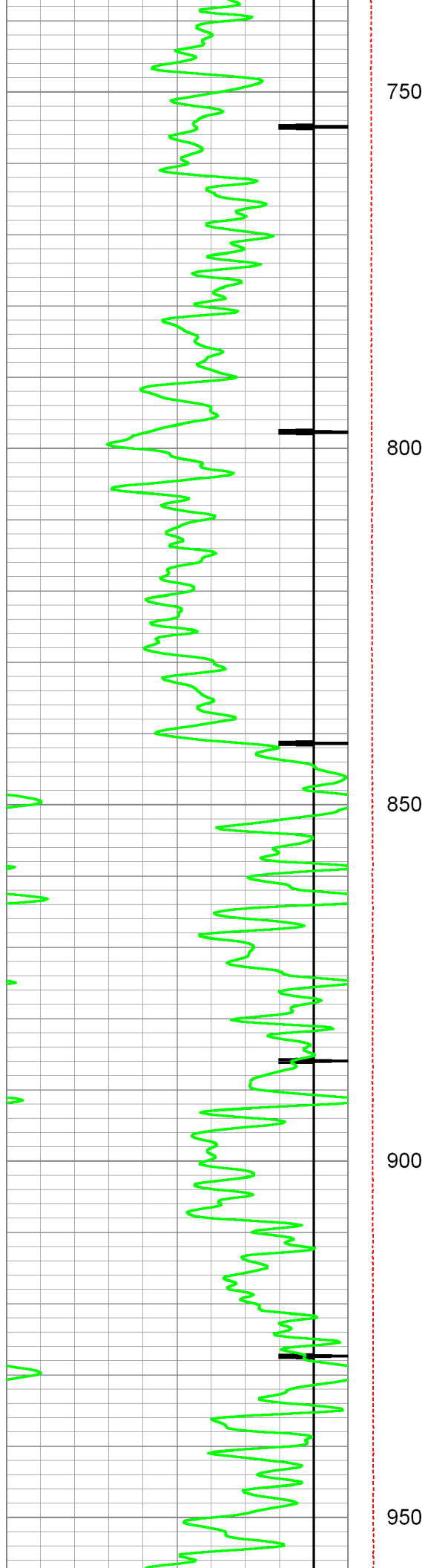
550

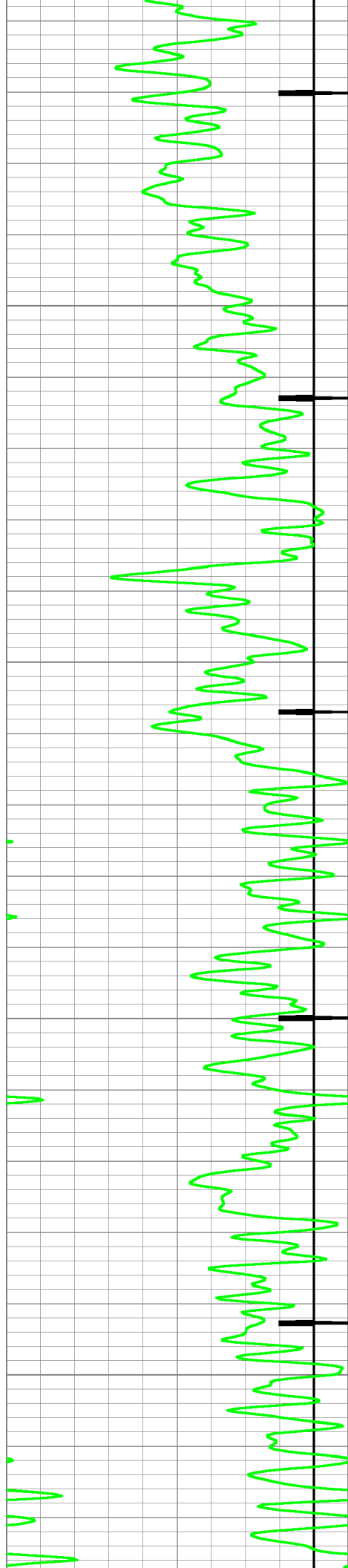
600

650

700





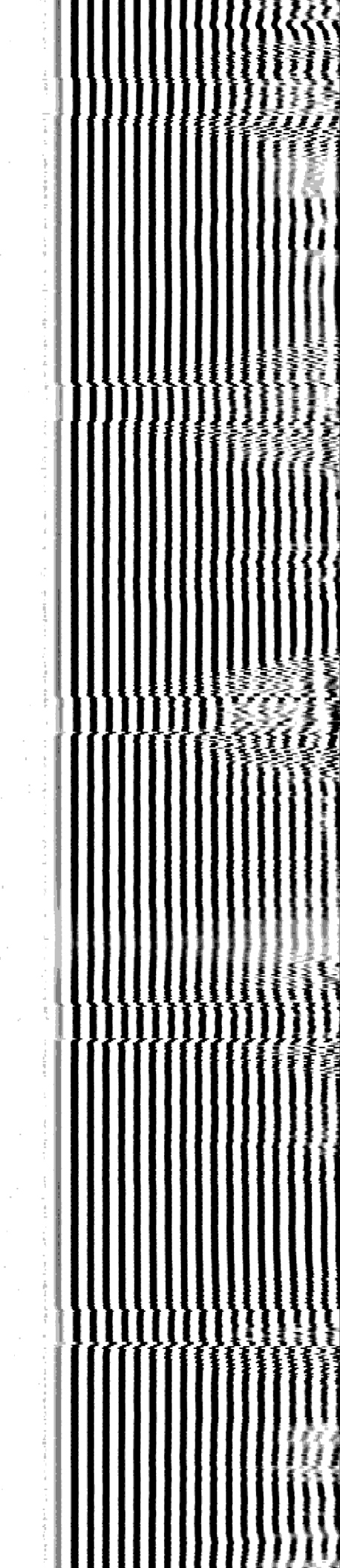
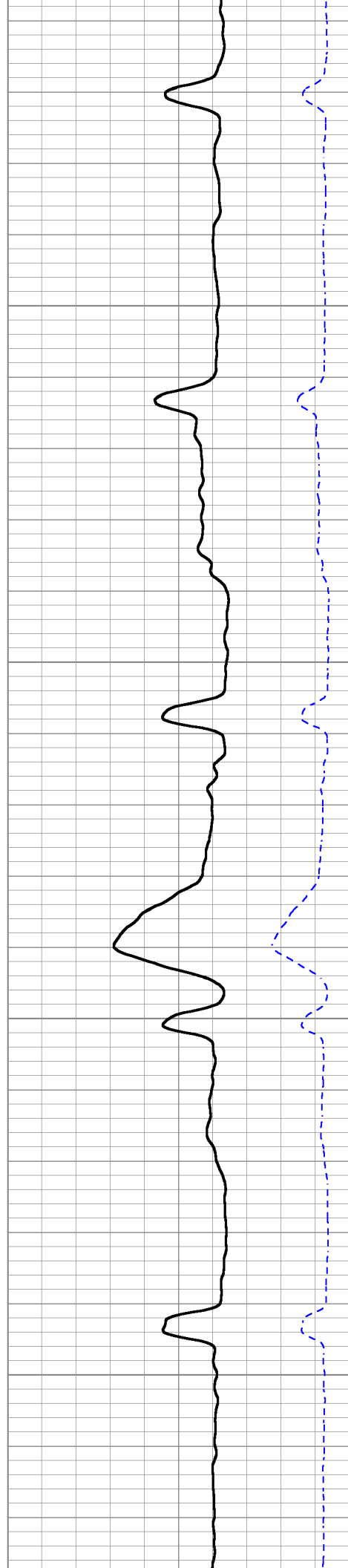


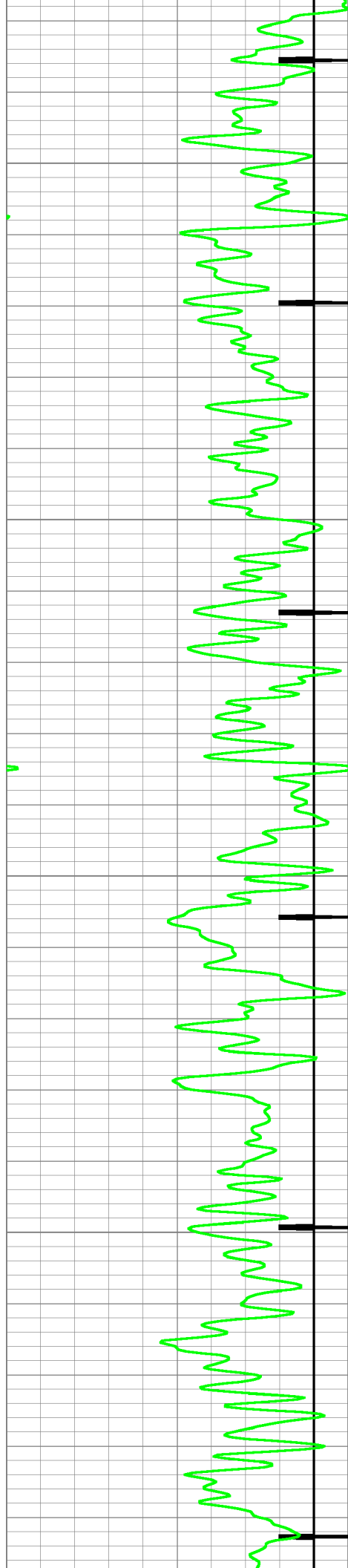
1000

1050

1100

1150



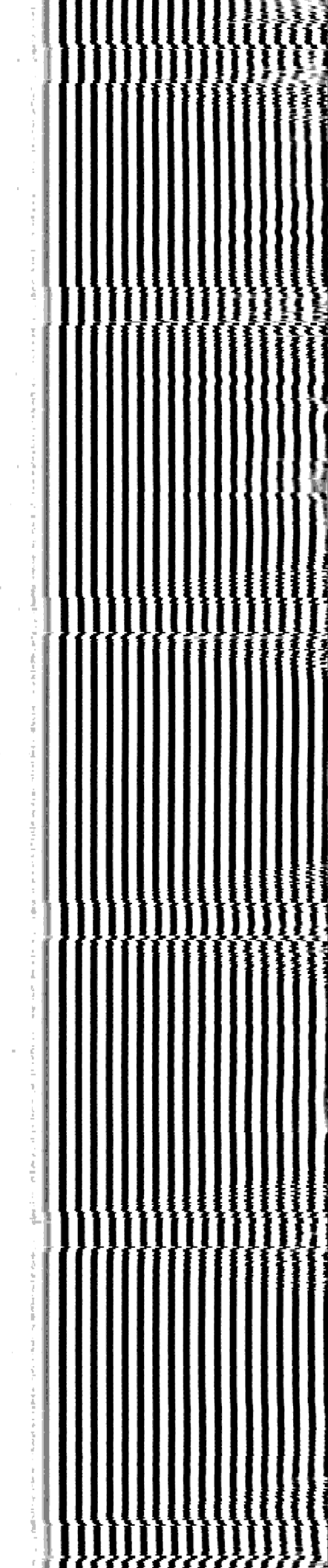
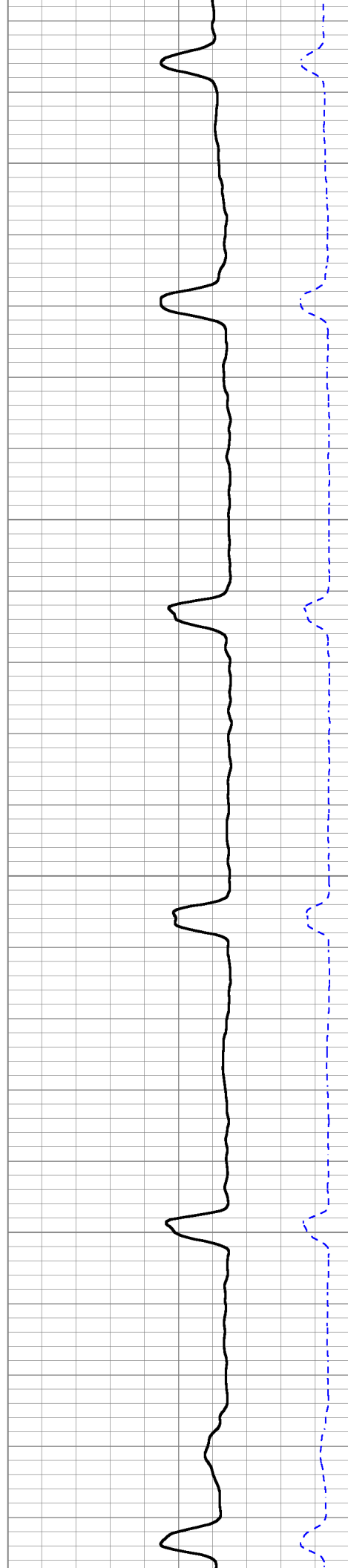


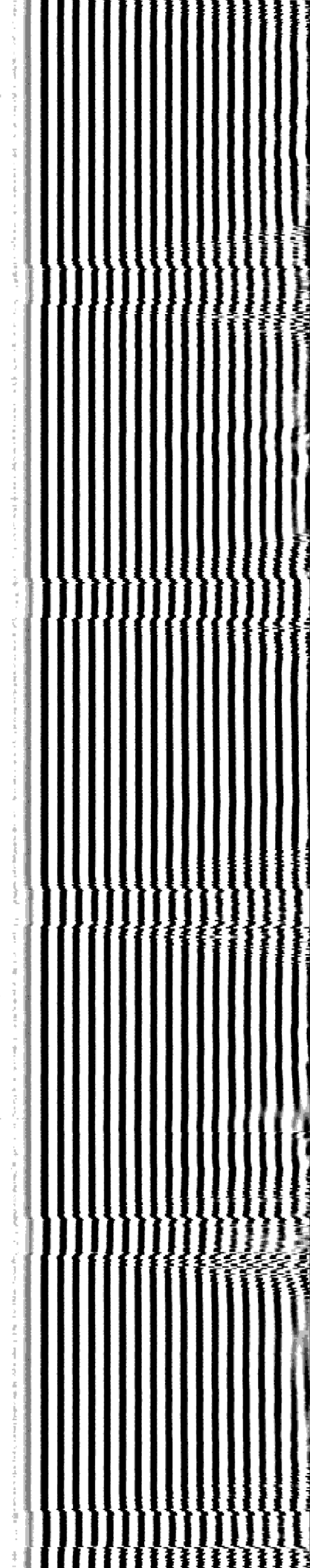
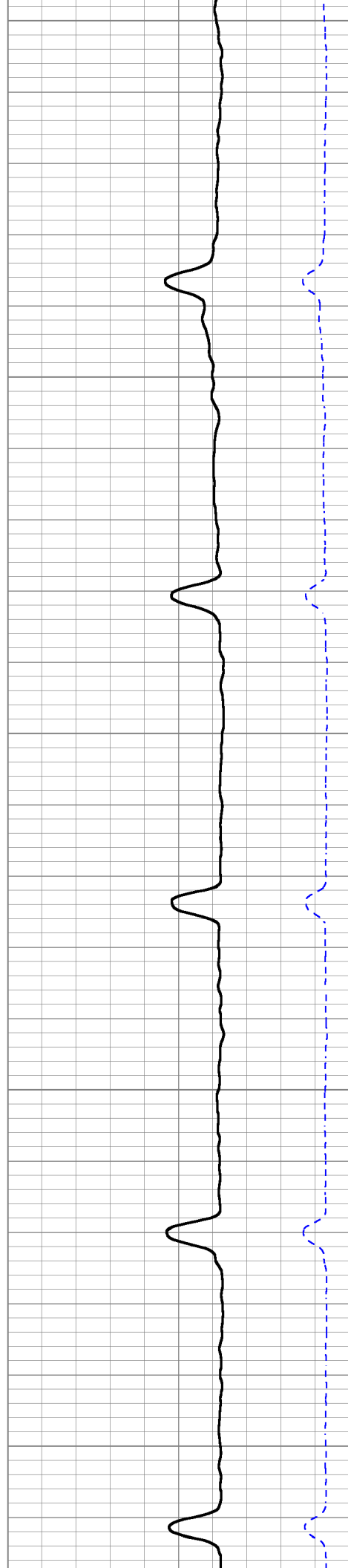
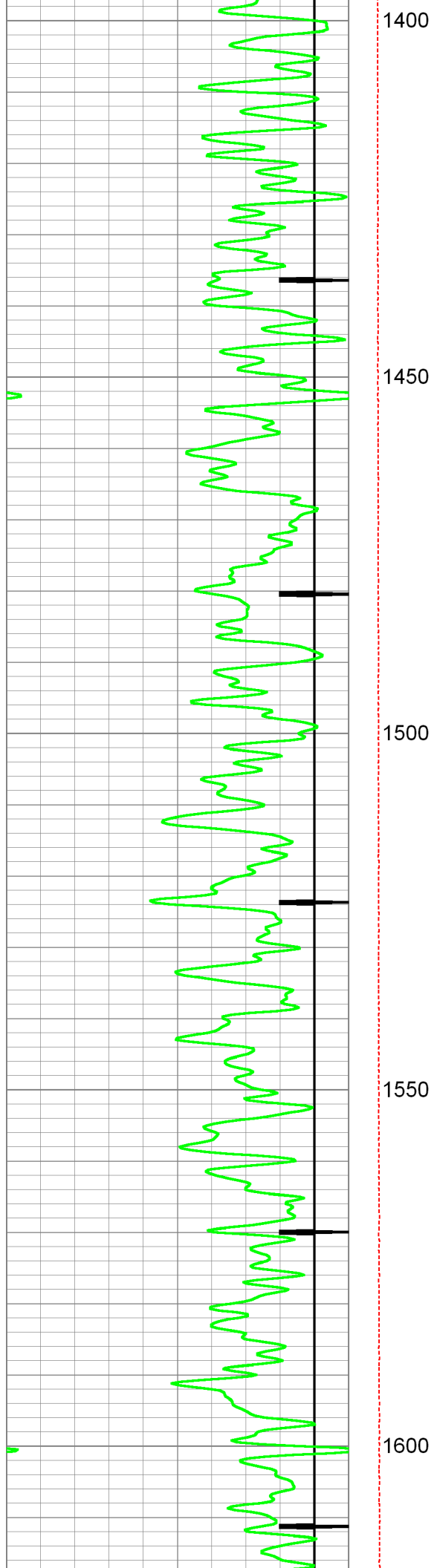
1200

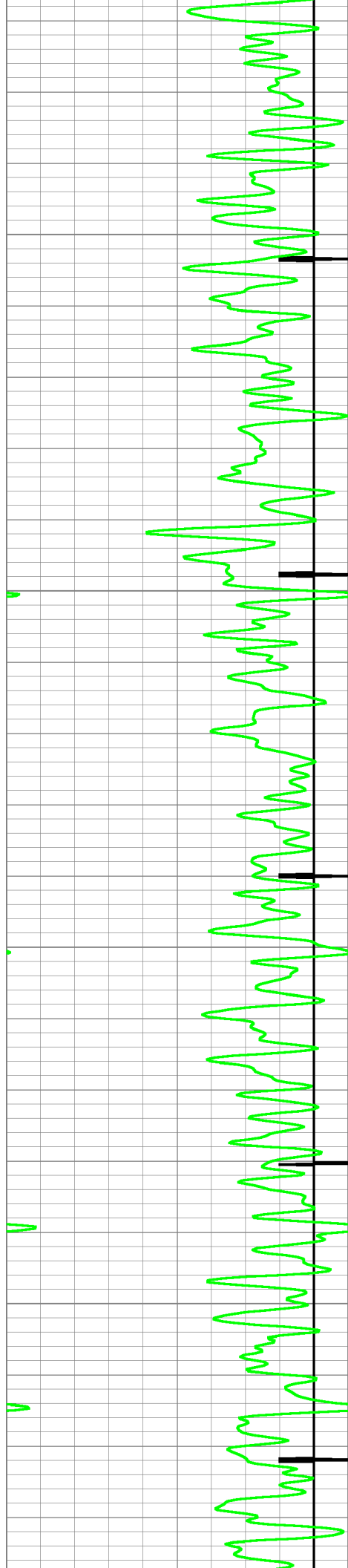
1250

1300

1350





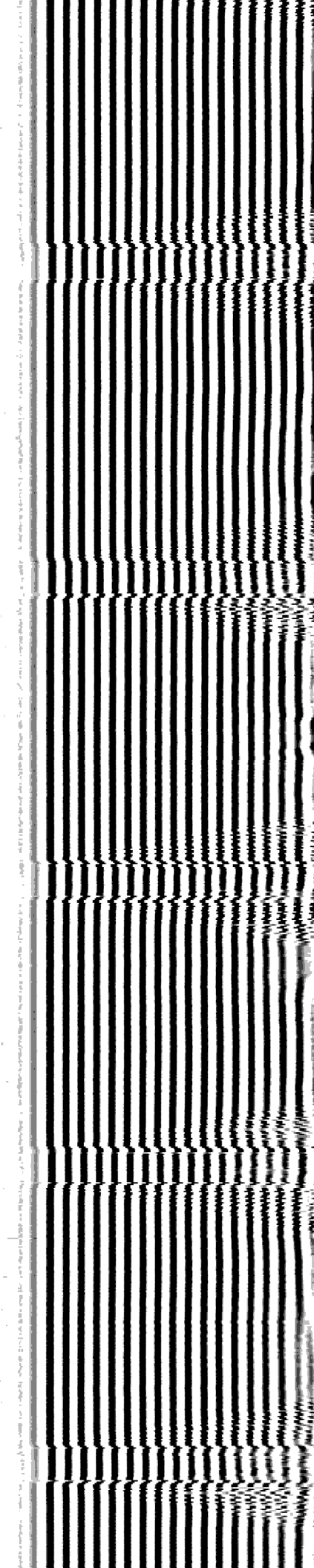
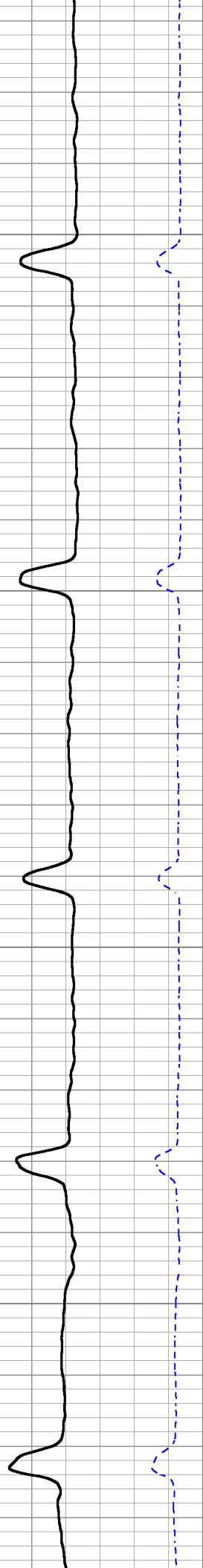


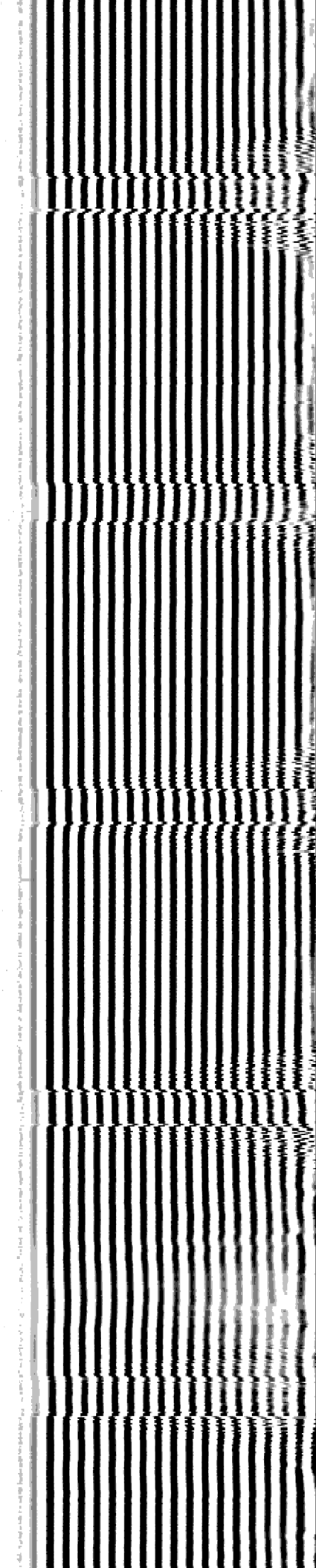
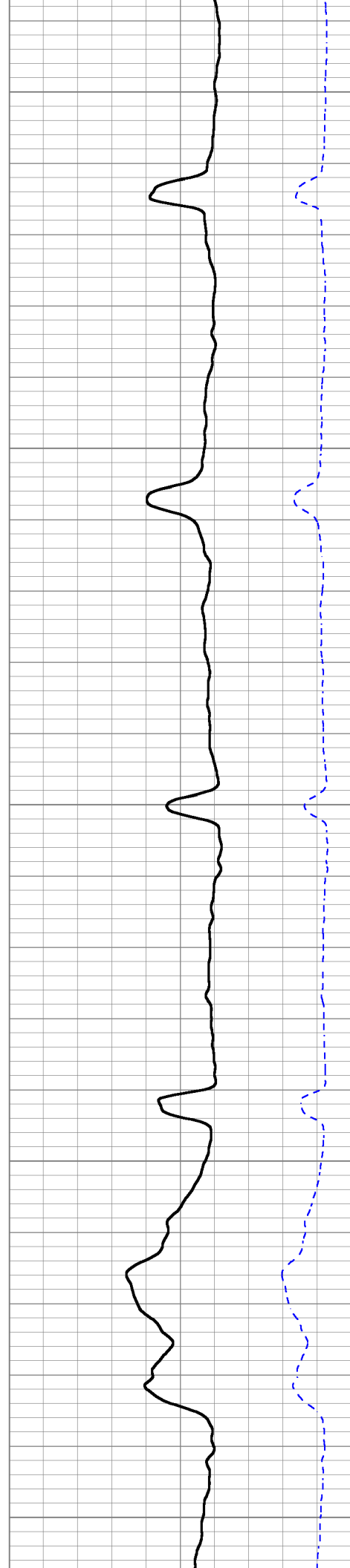
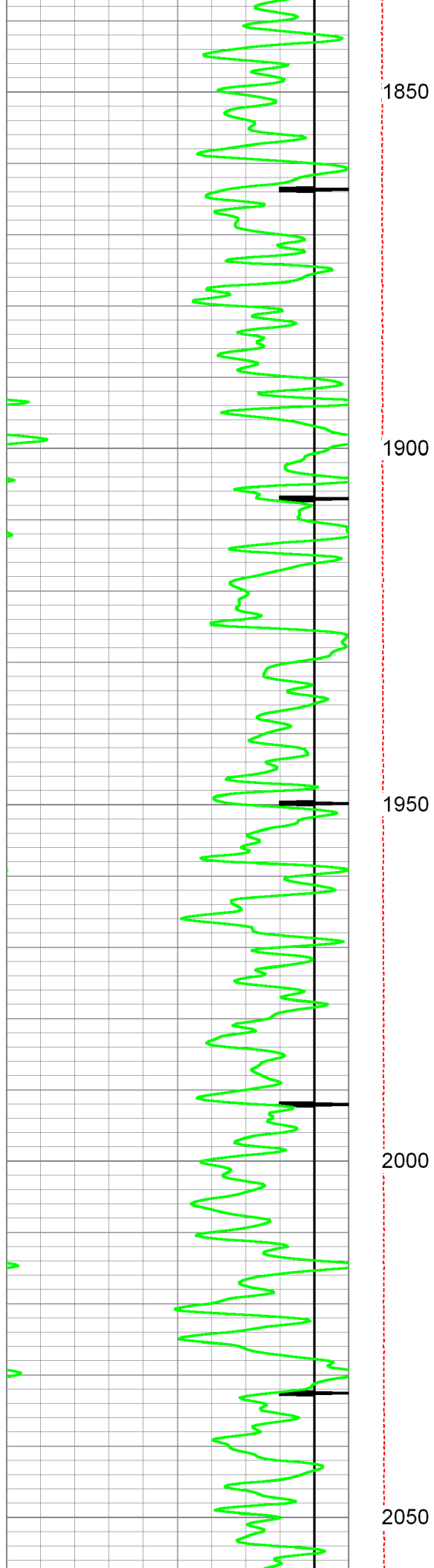
1650

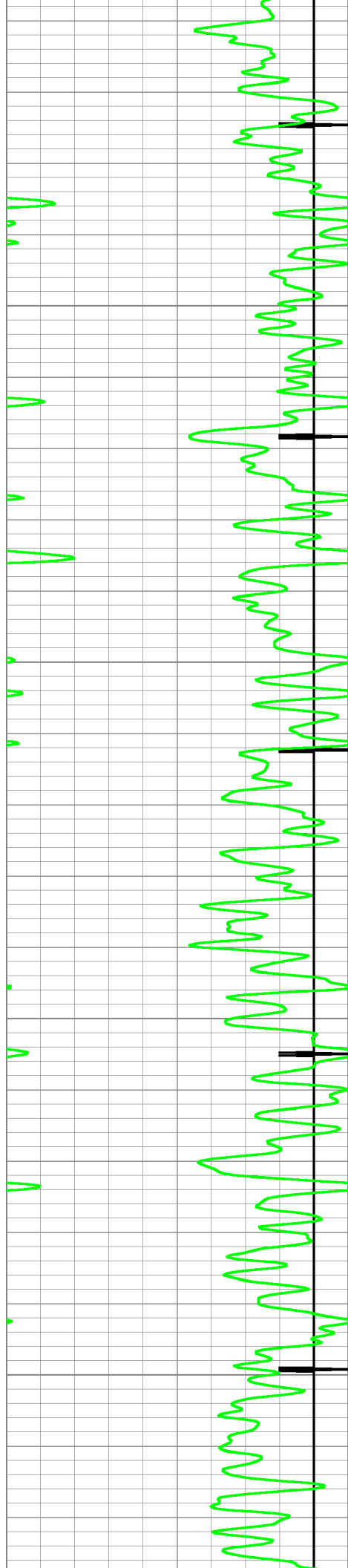
1700

1750

1800





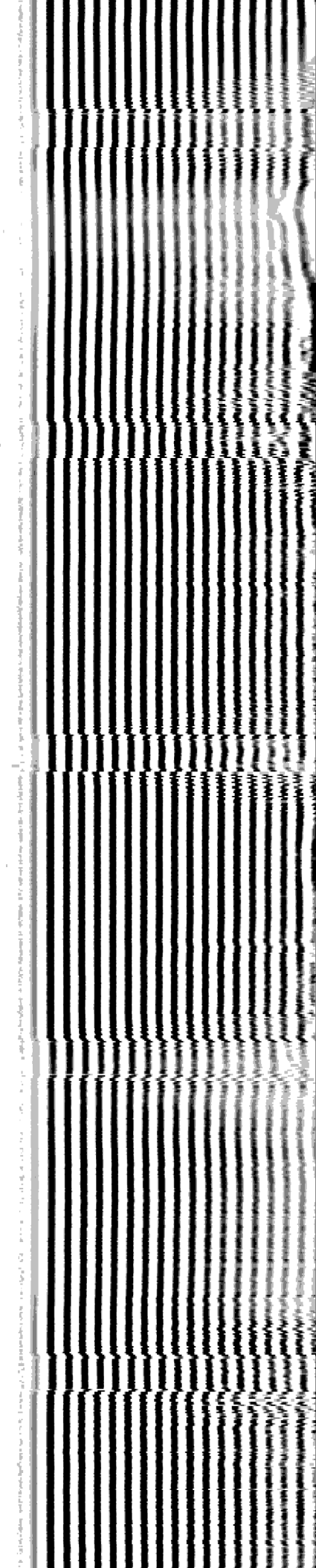
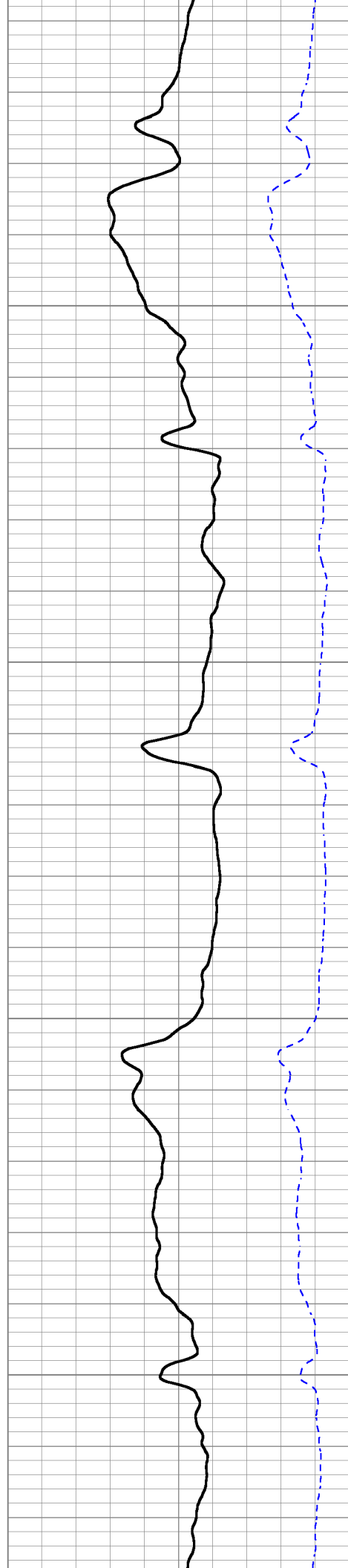


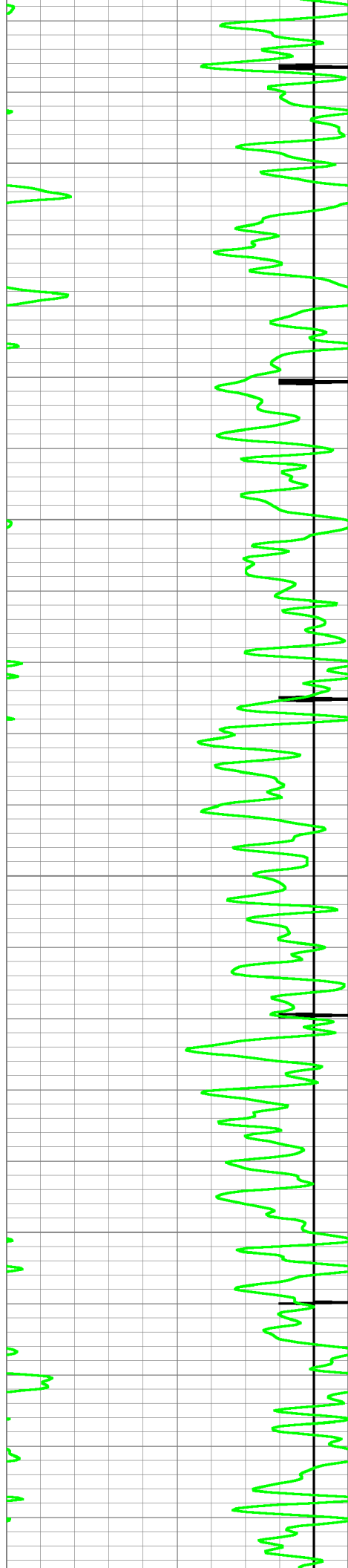
2100

2150

2200

2250



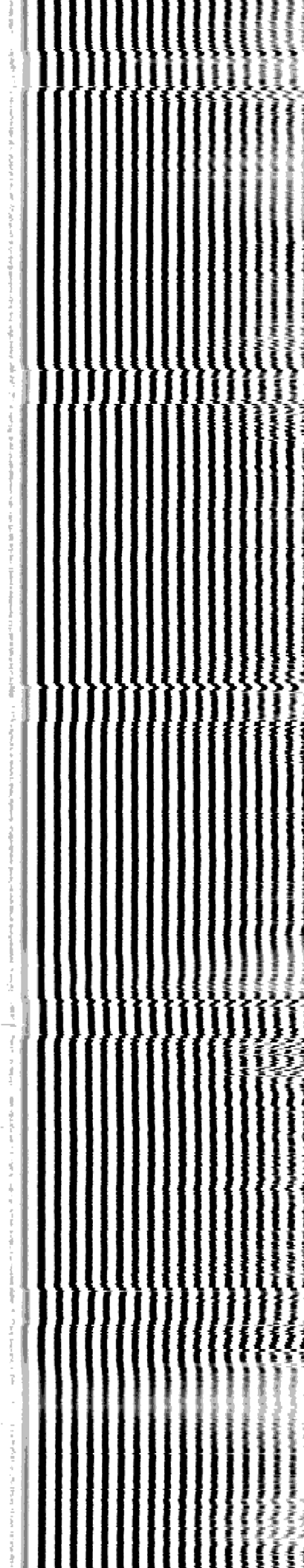
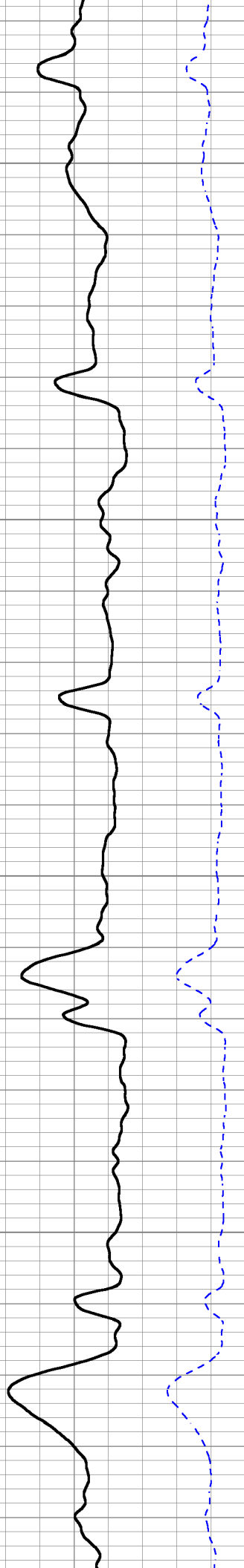


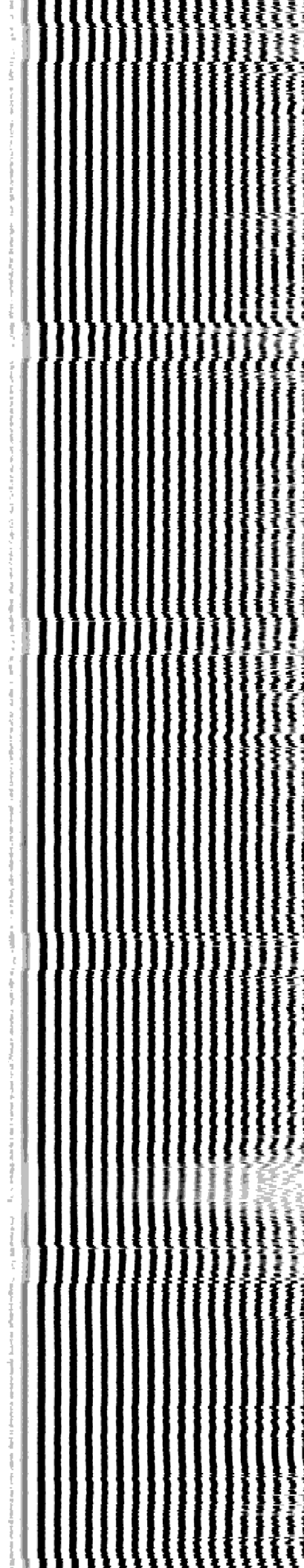
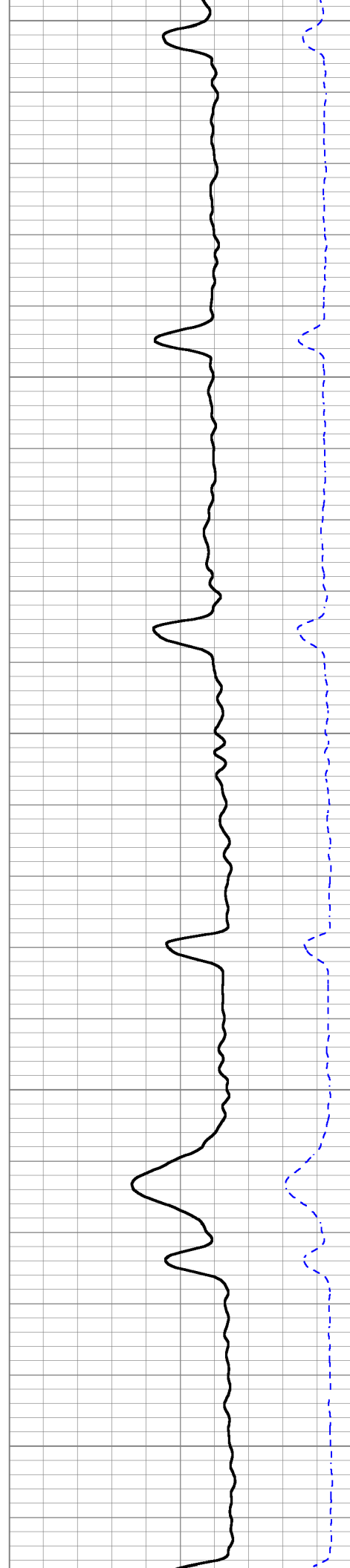
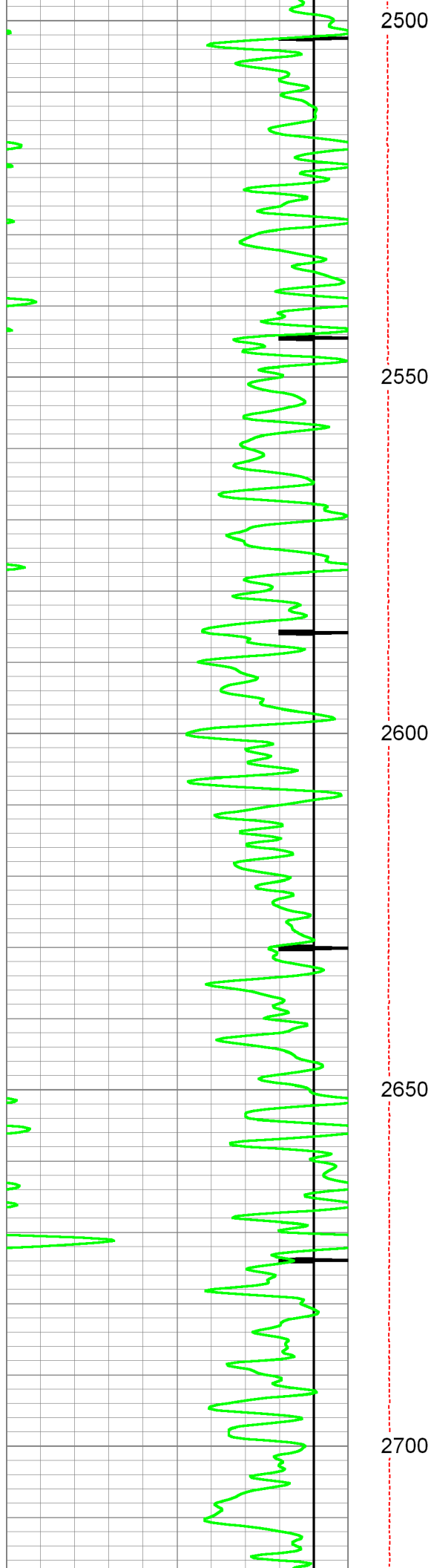
2300

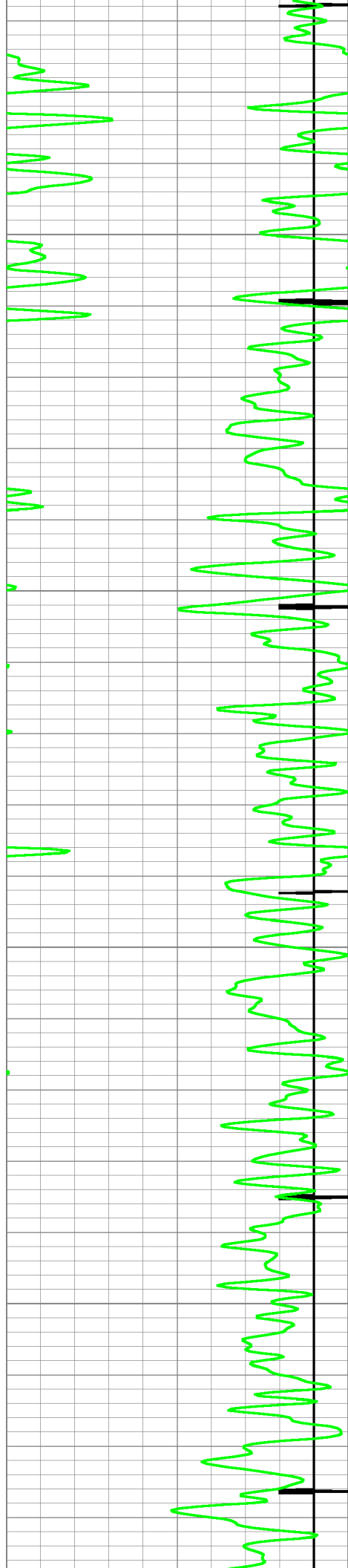
2350

2400

2450





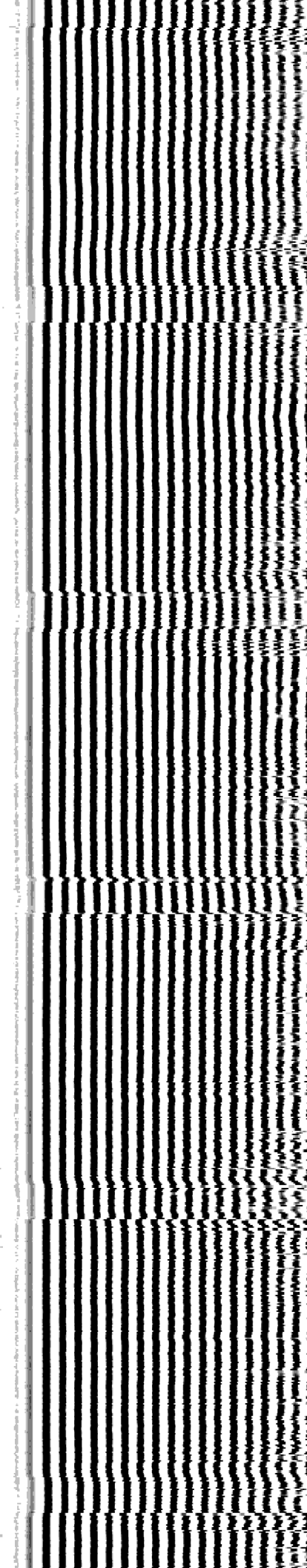
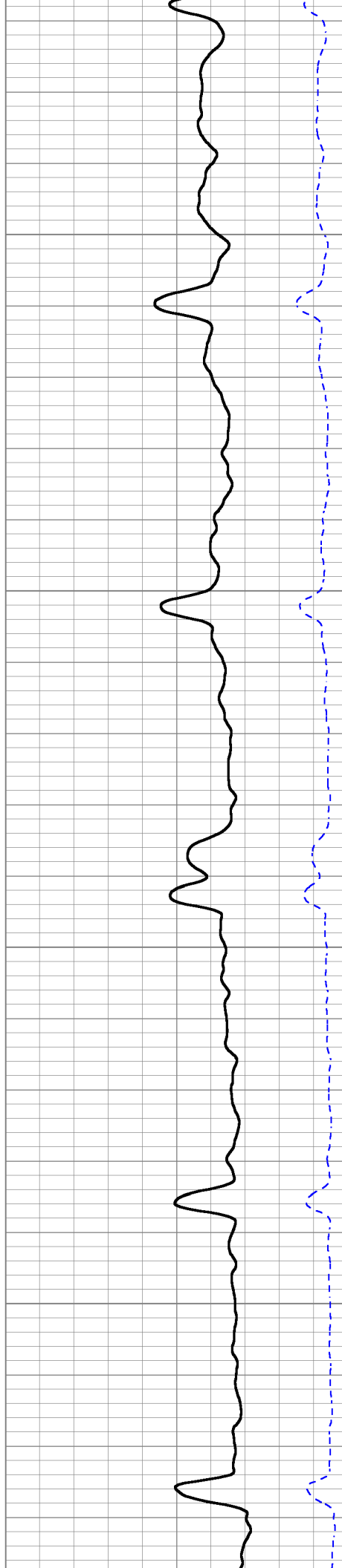


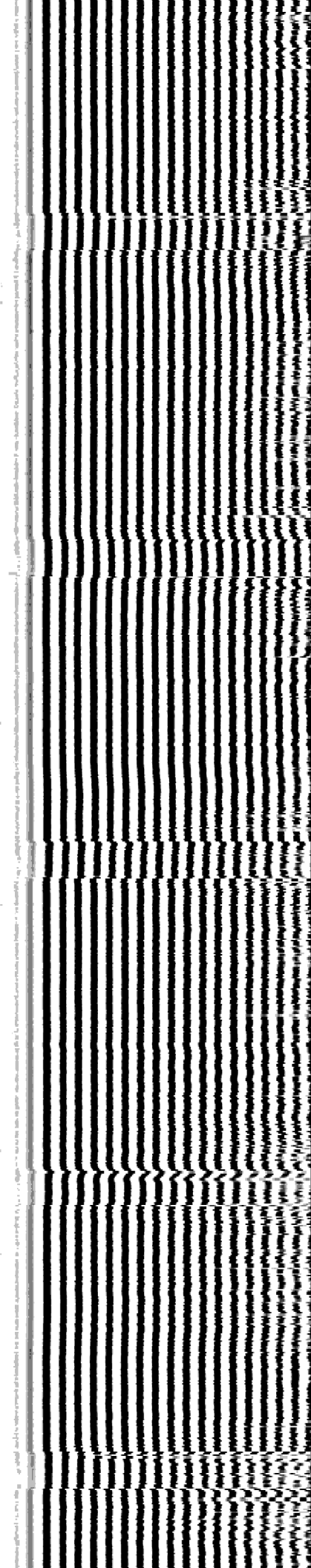
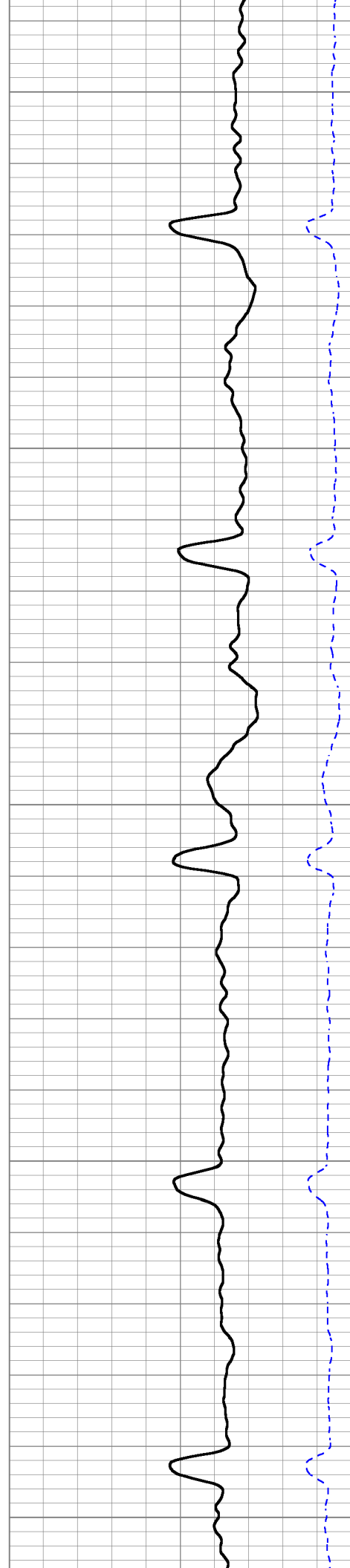
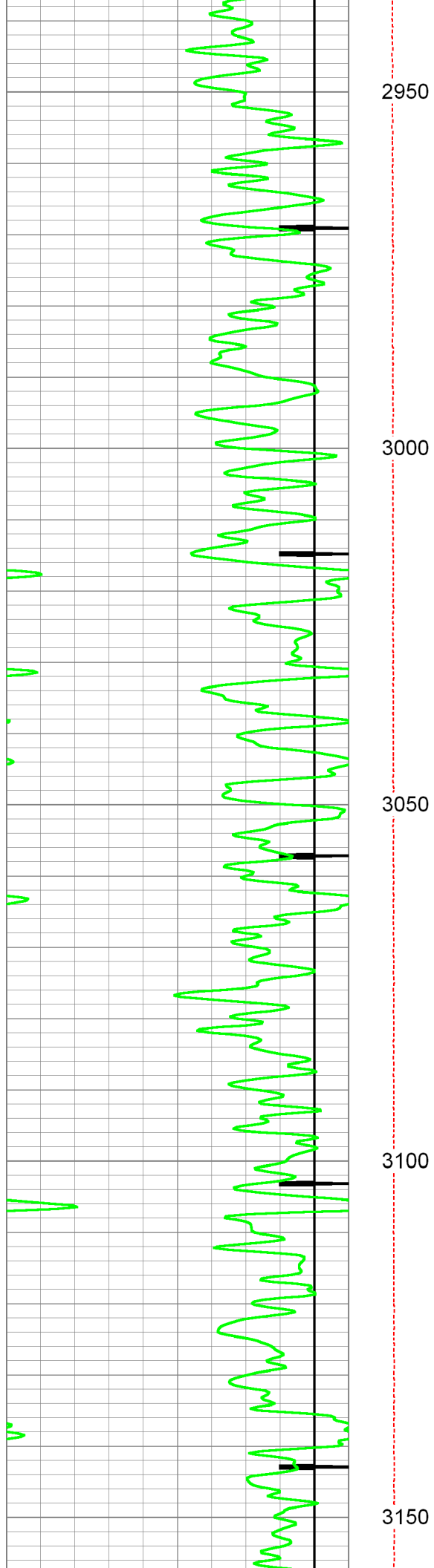
2750

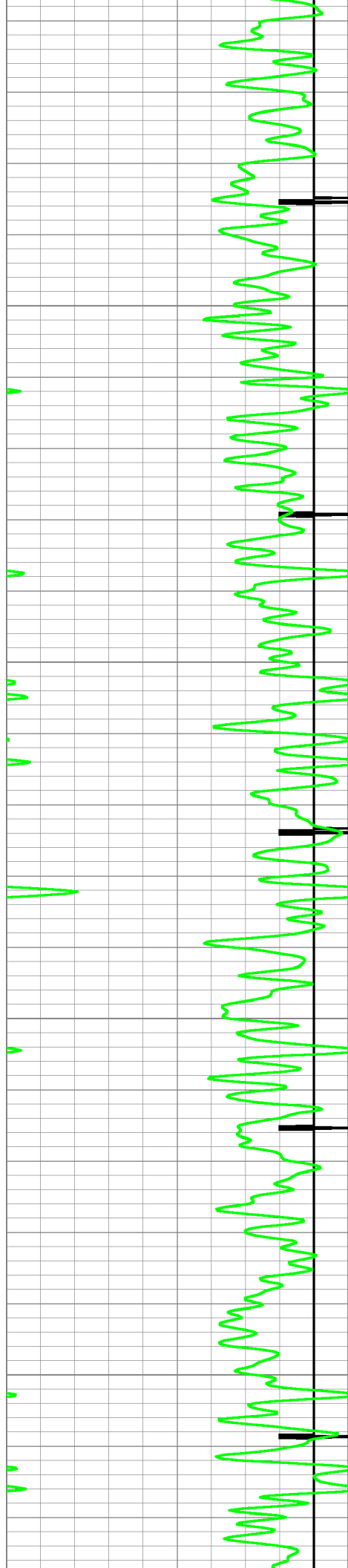
2800

2850

2900





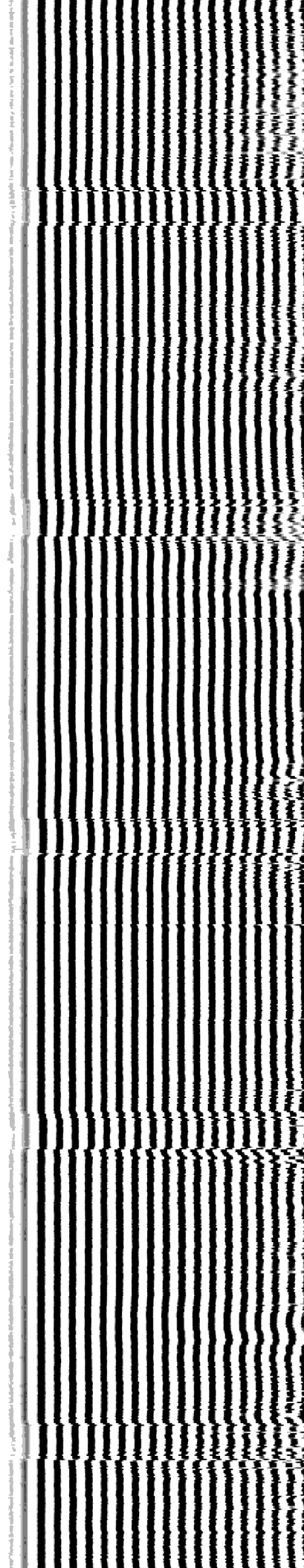
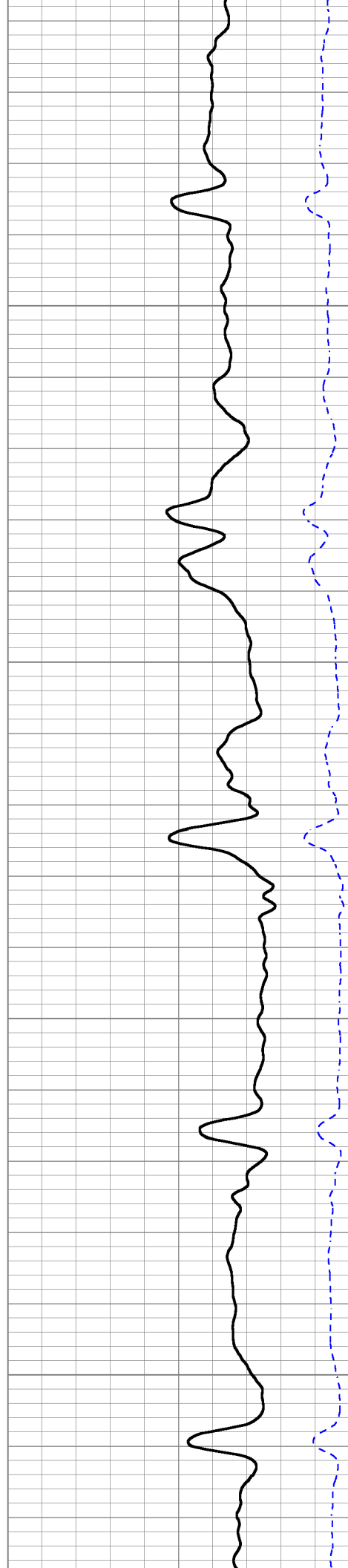


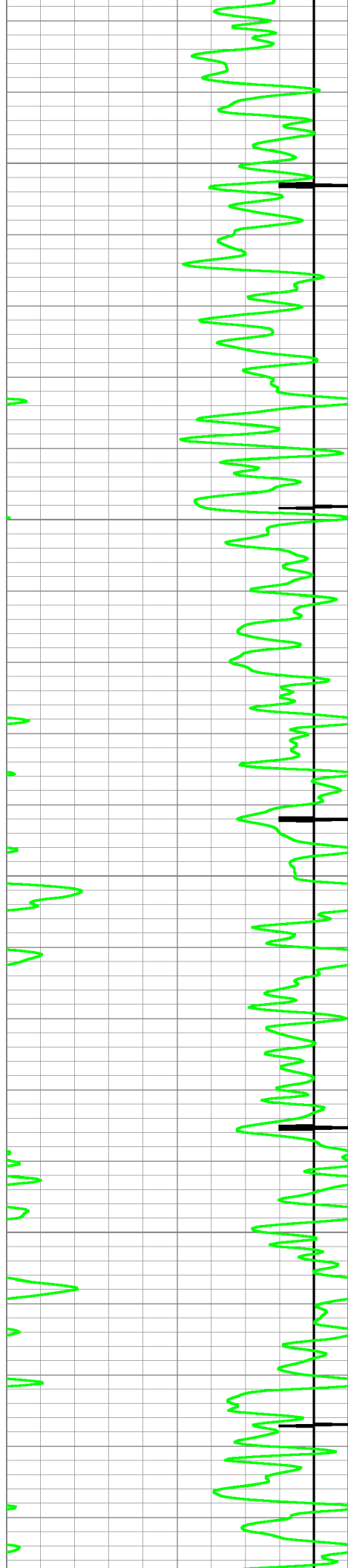
3200

3250

3300

3350



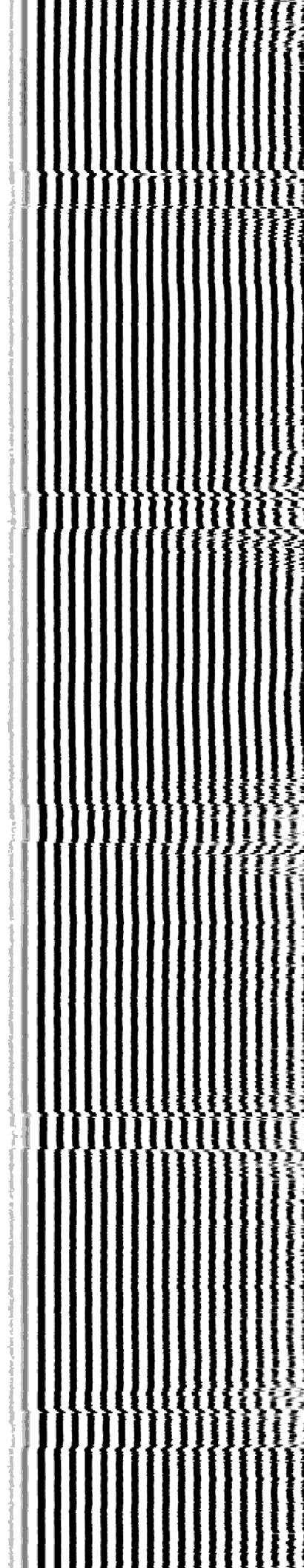
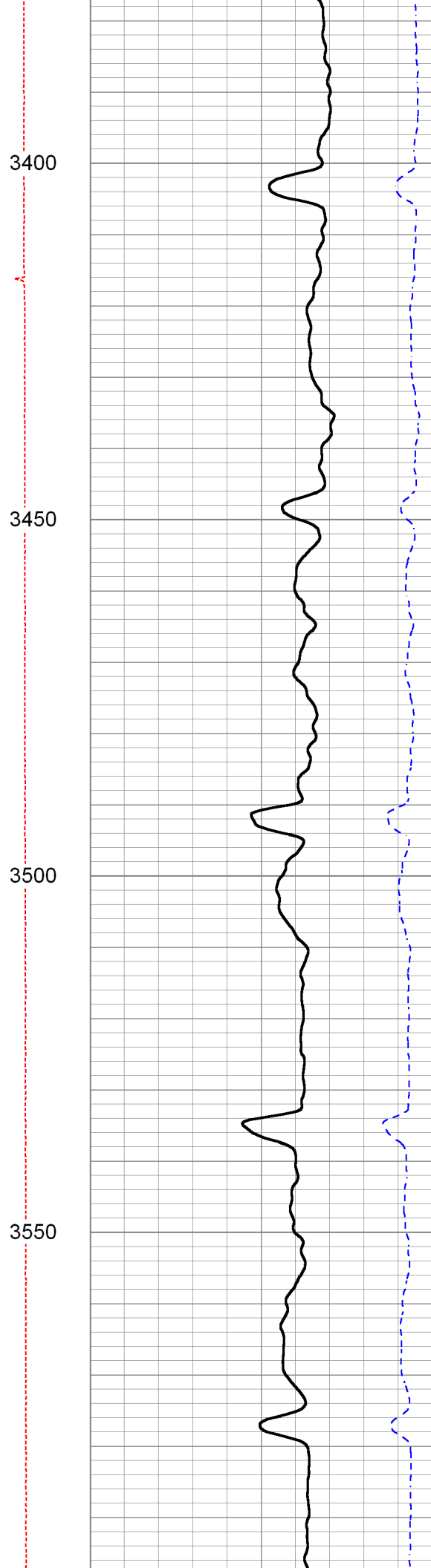


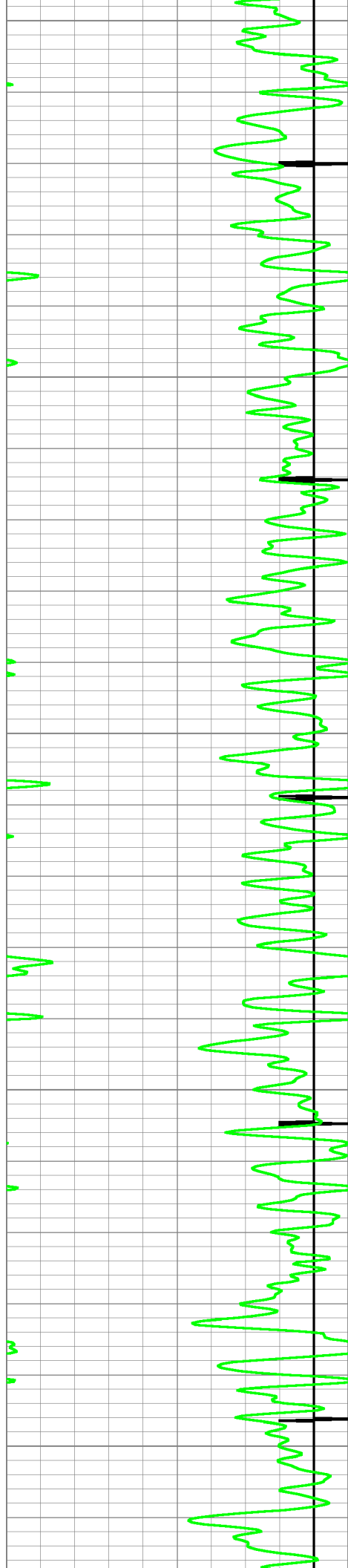
3400

3450

3500

3550





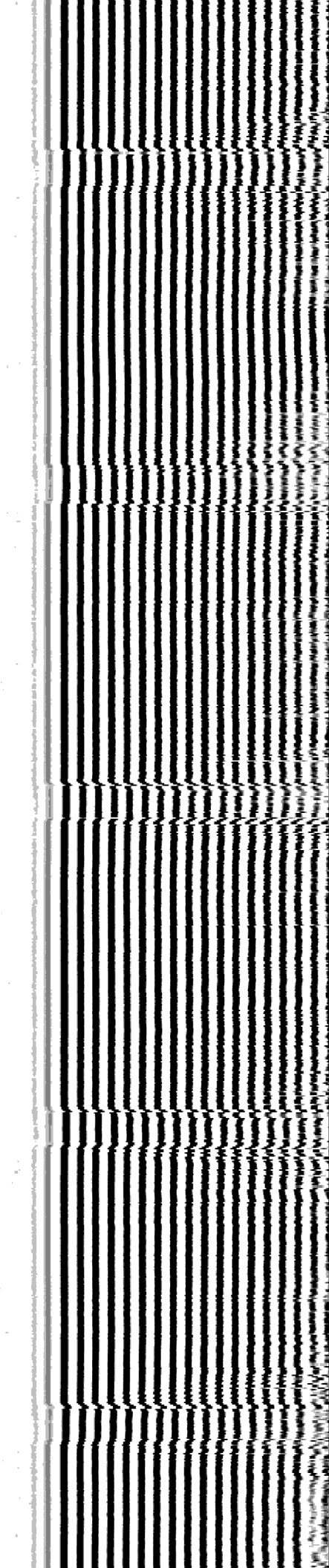
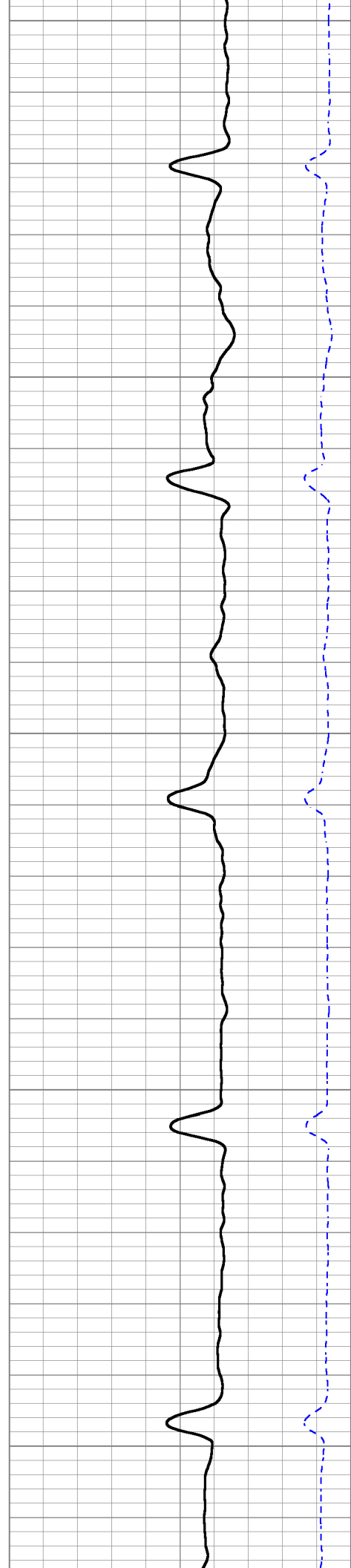
3600

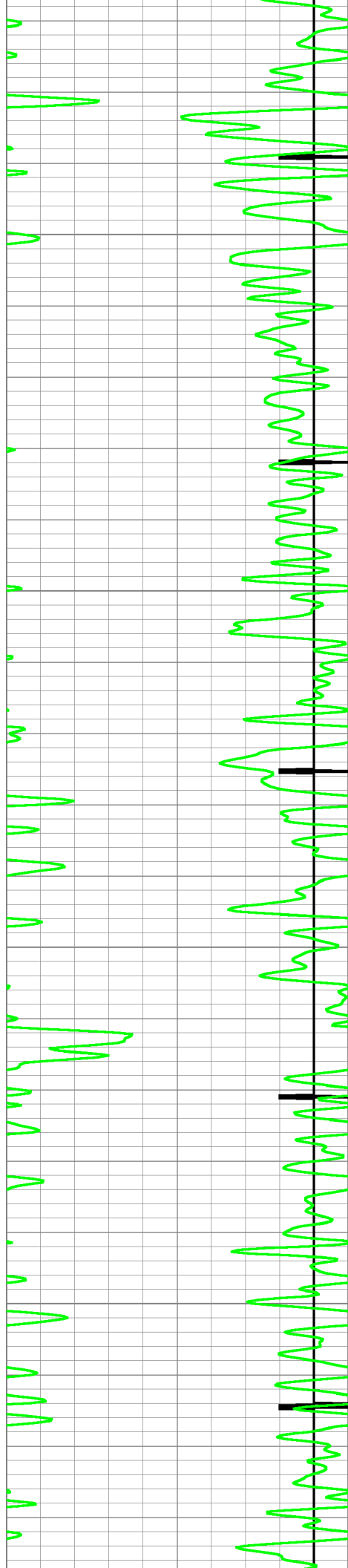
3650

3700

3750

3800



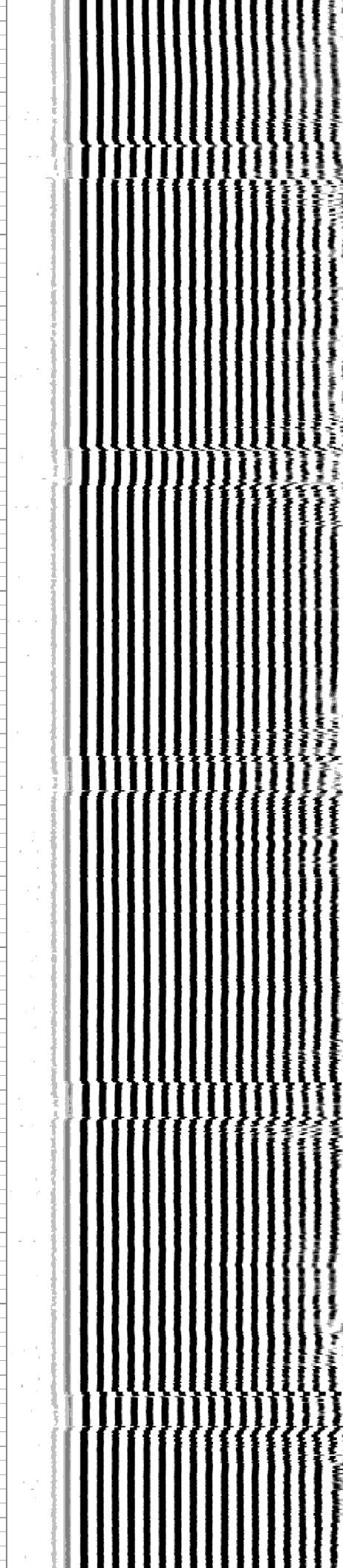
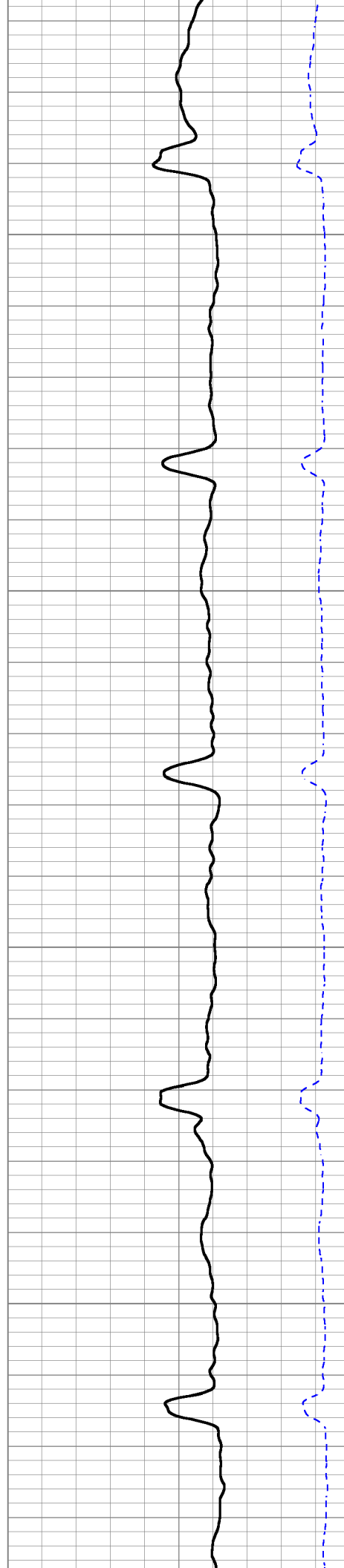


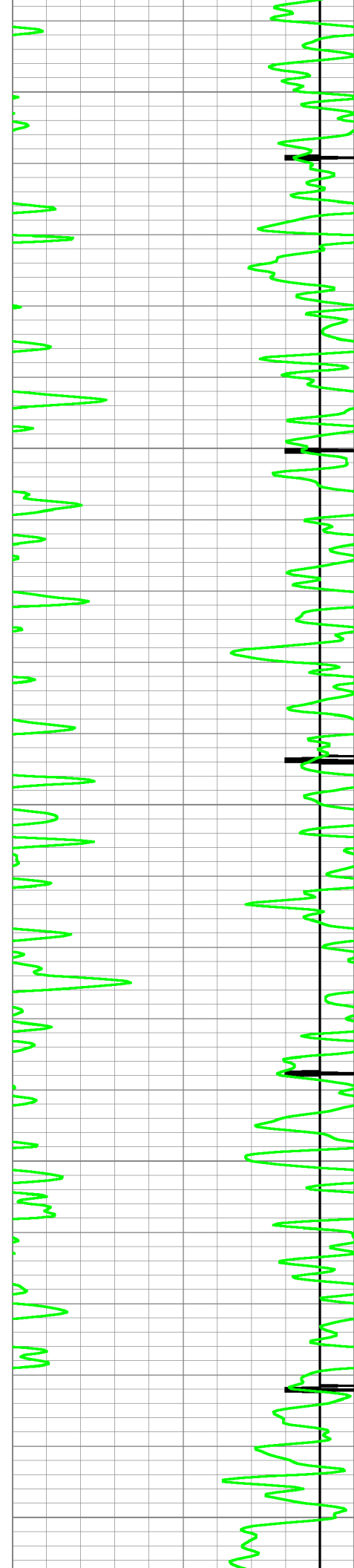
3850

3900

3950

4000





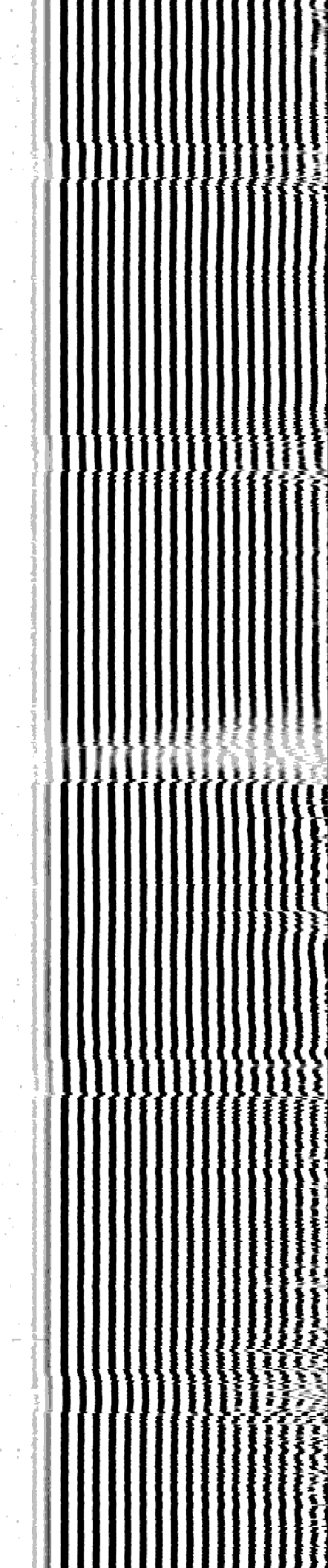
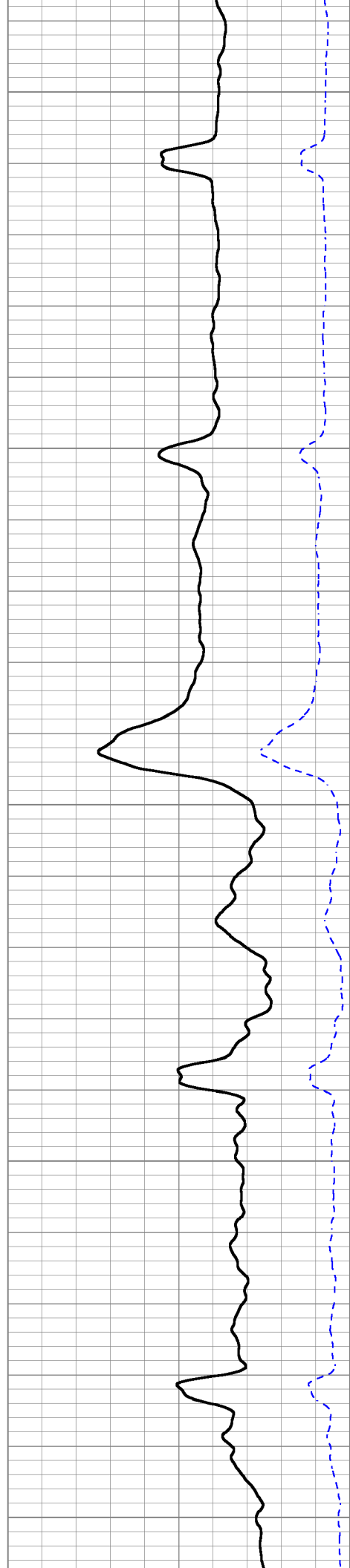
4050

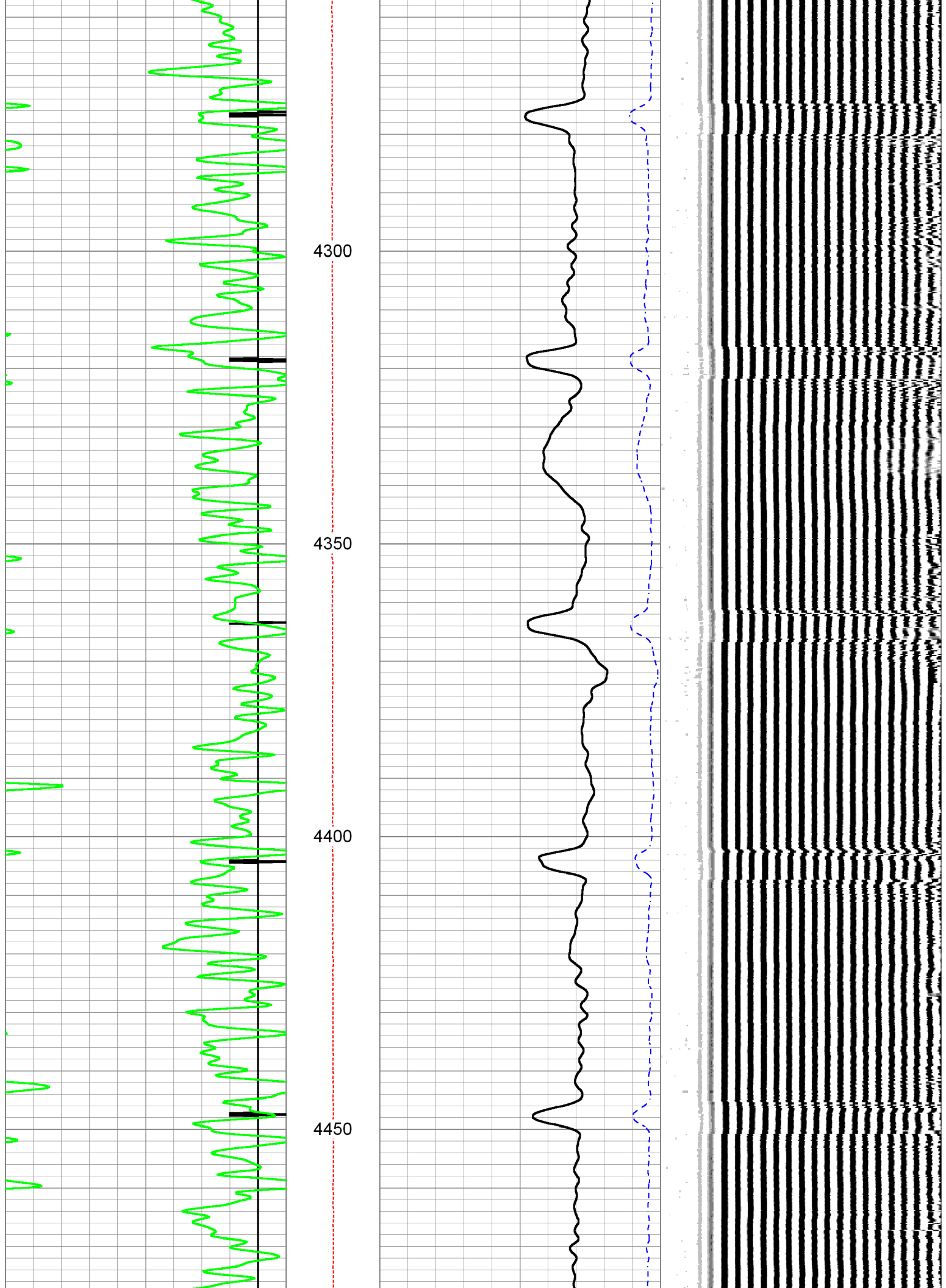
4100

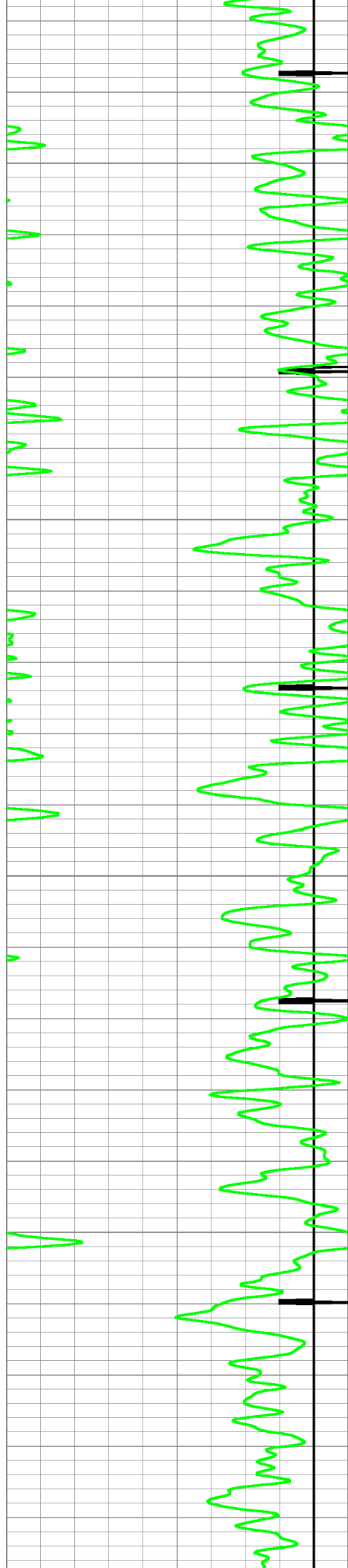
4150

4200

4250





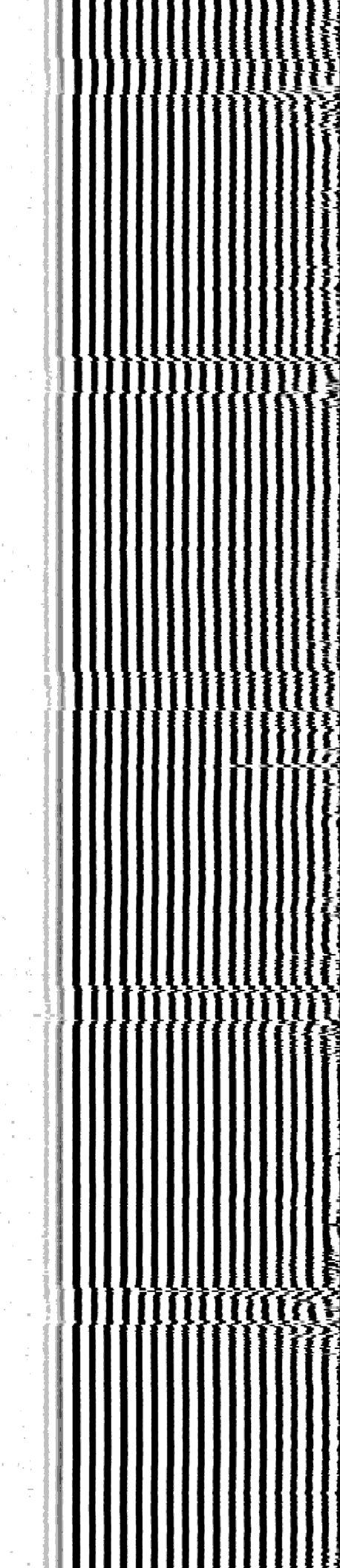
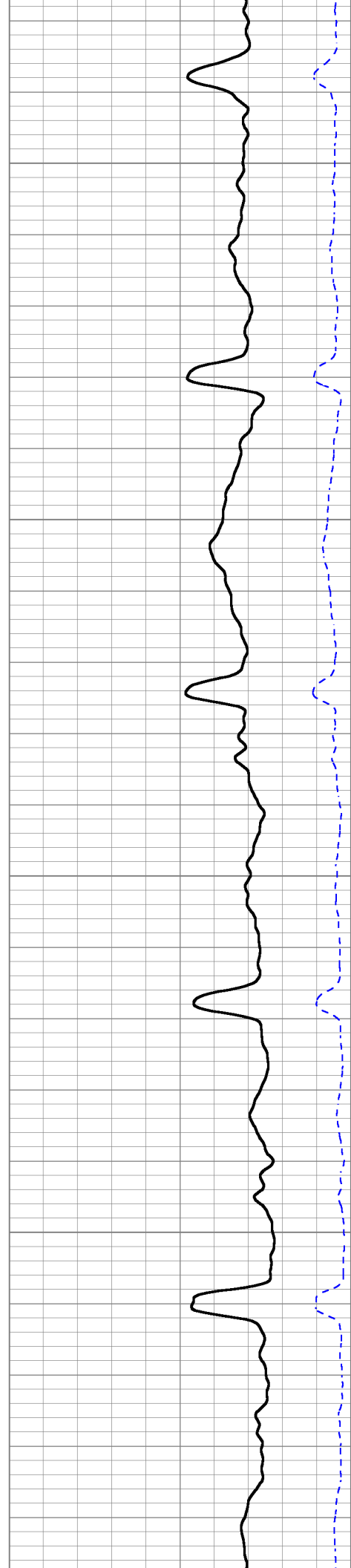


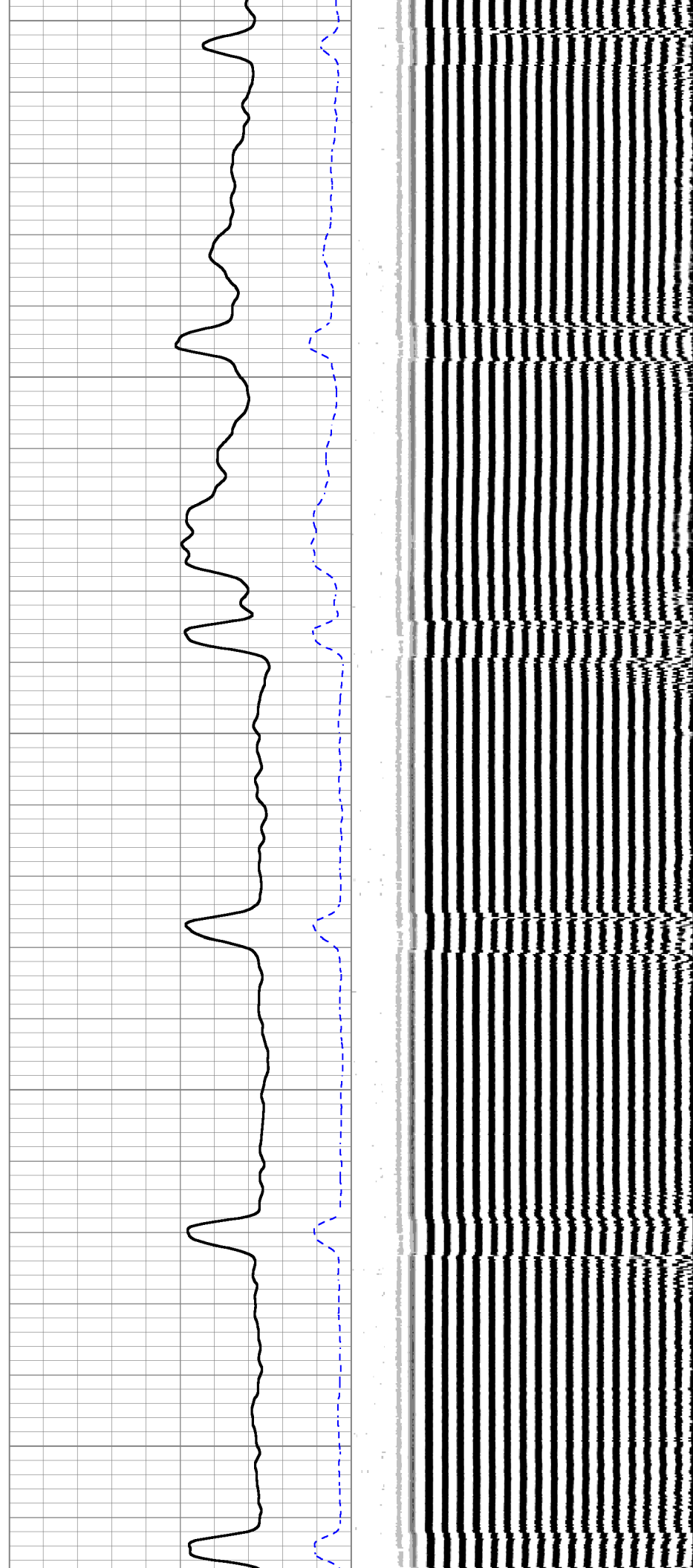
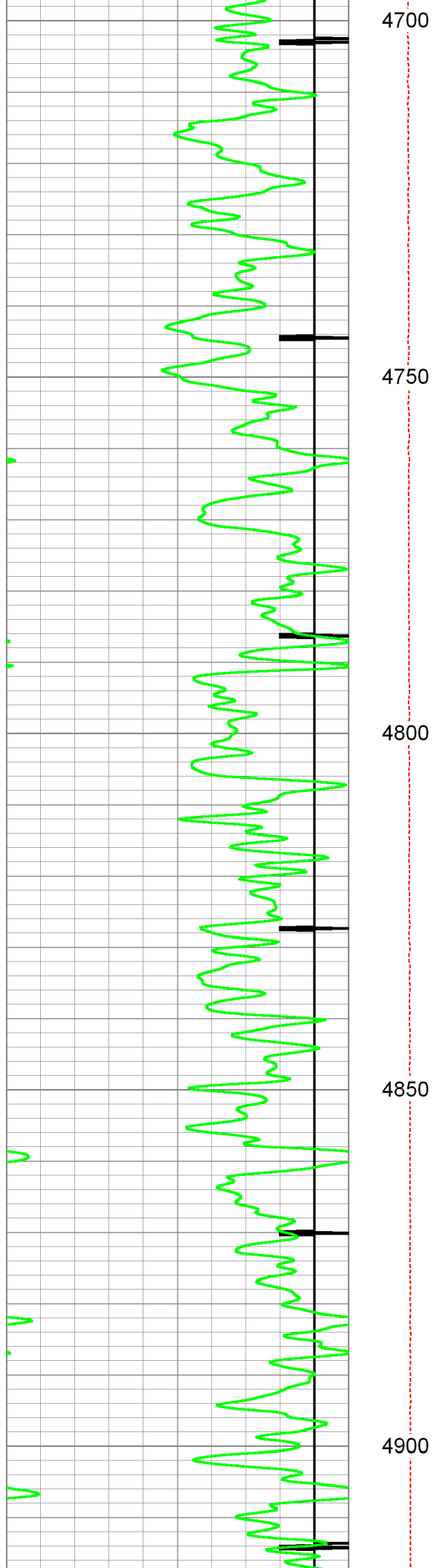
4500

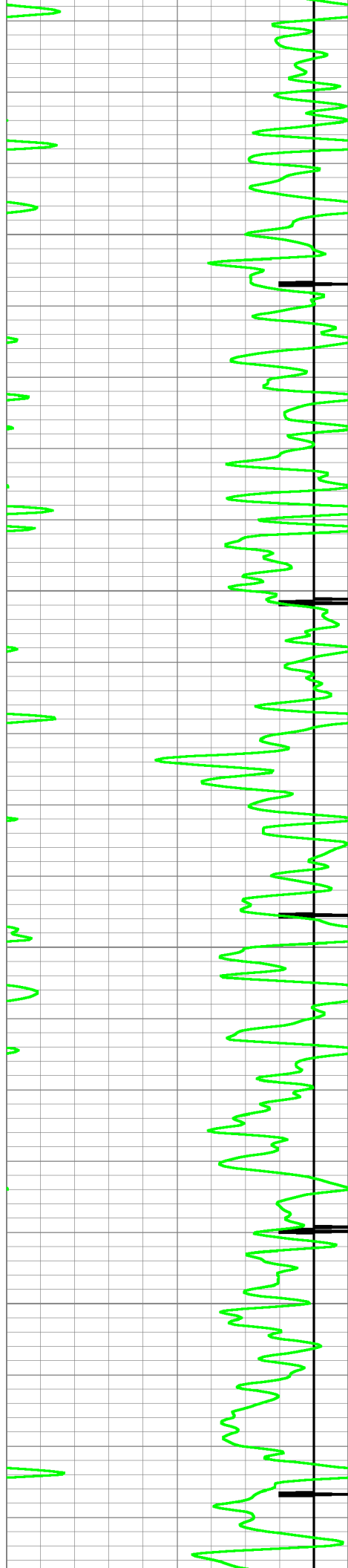
4550

4600

4650





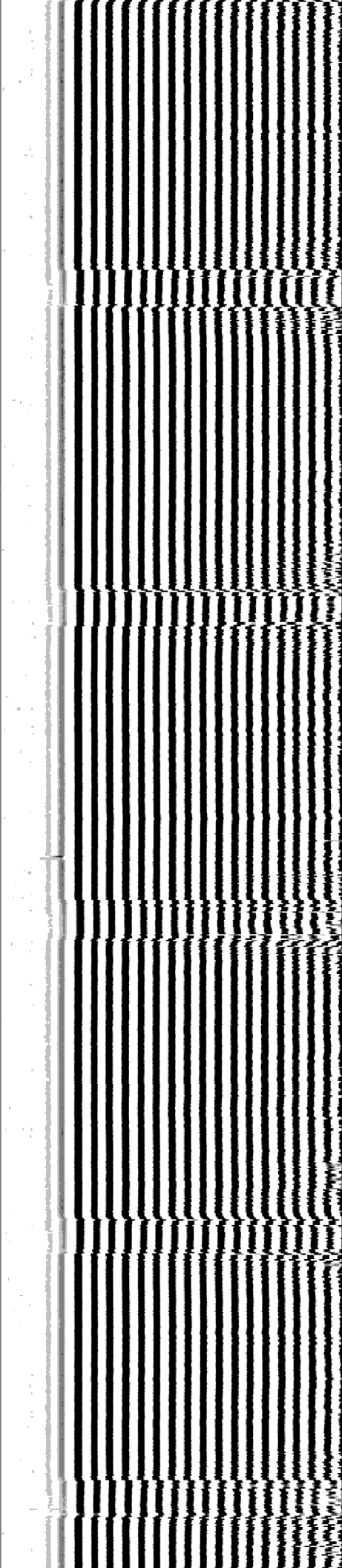
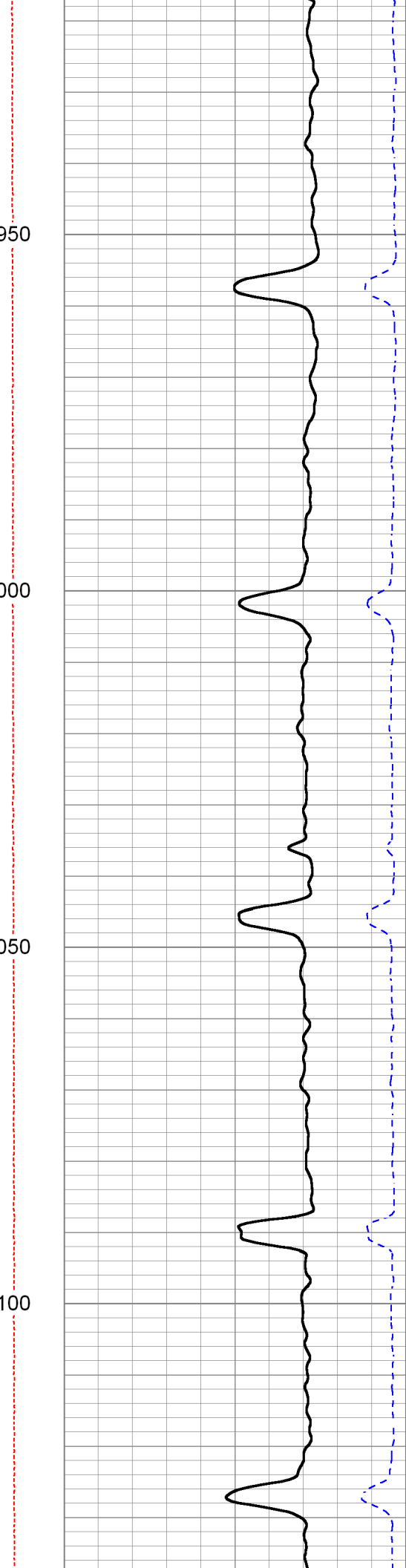


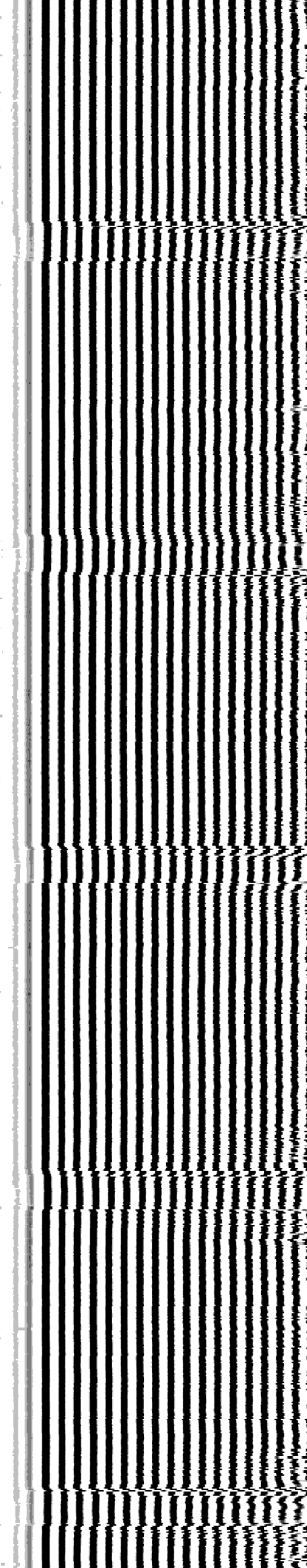
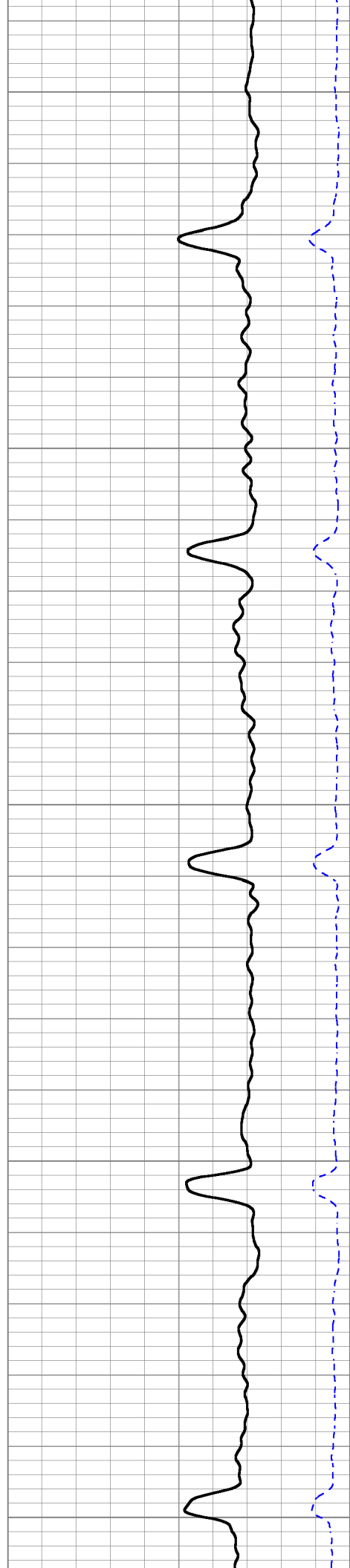
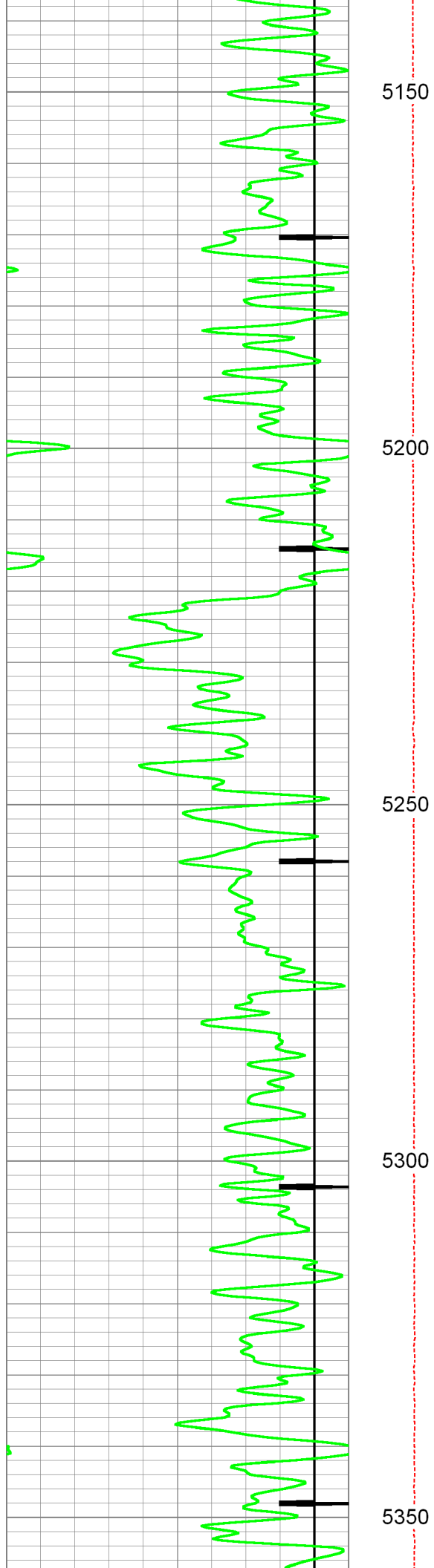
4950

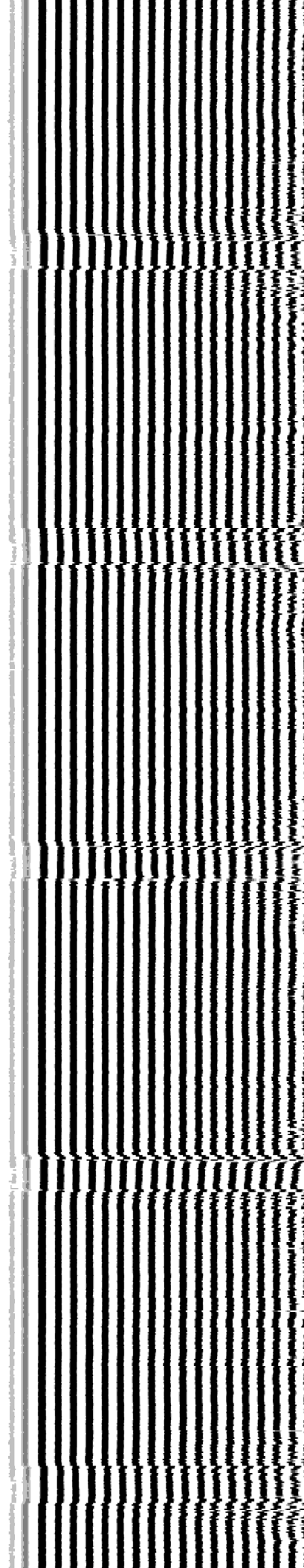
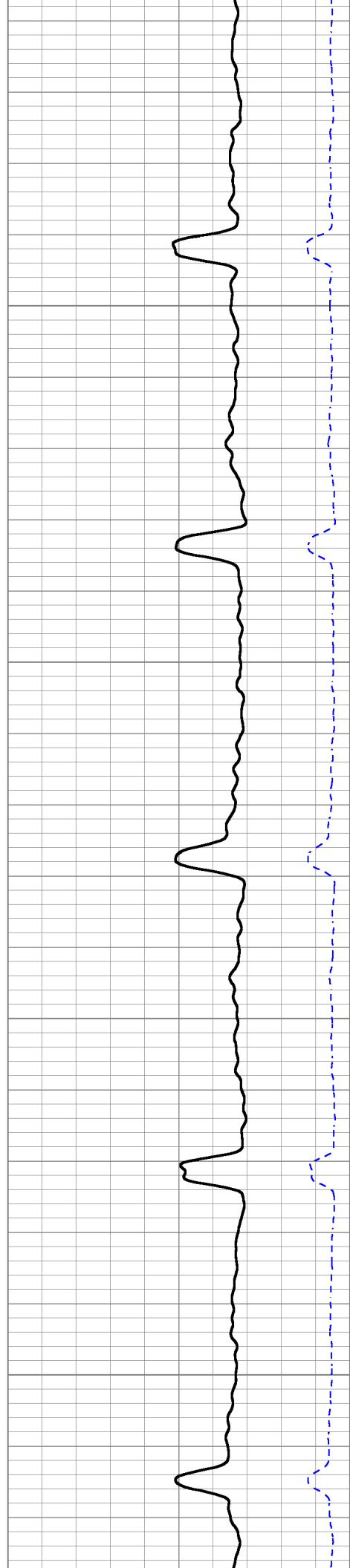
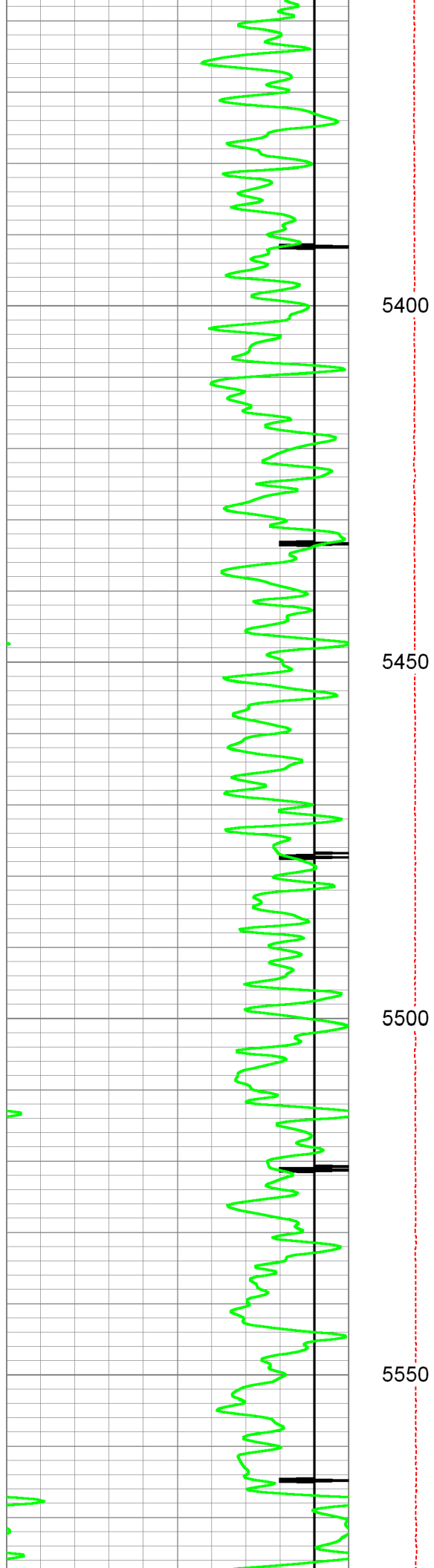
5000

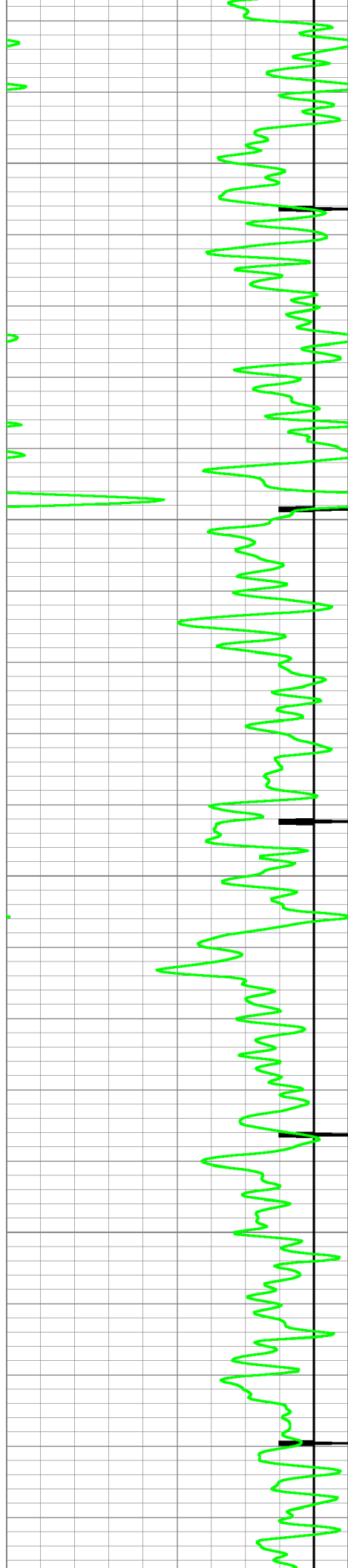
5050

5100







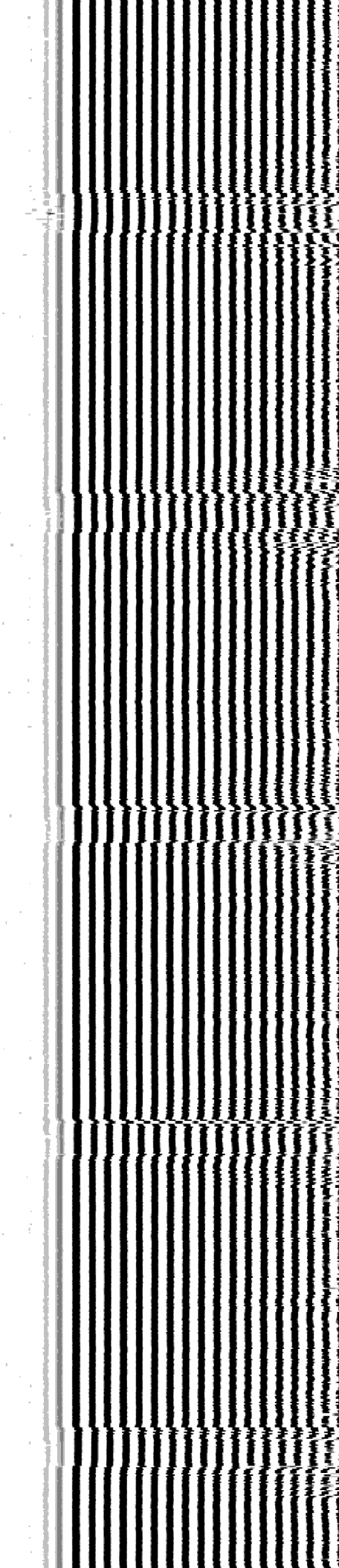
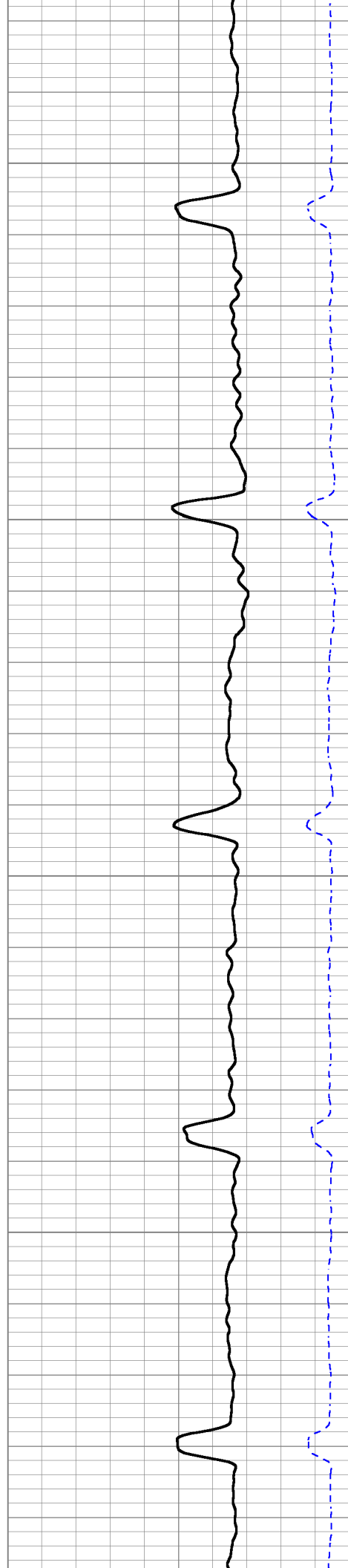


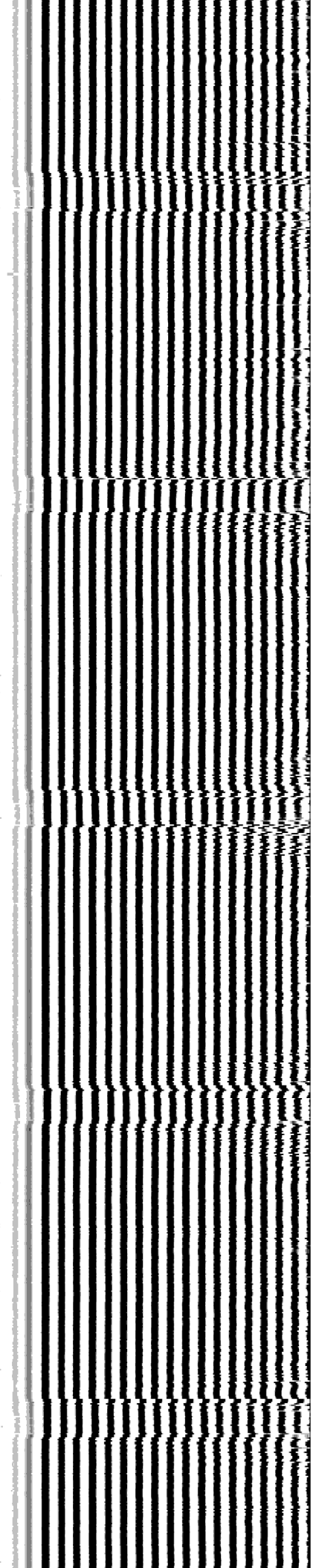
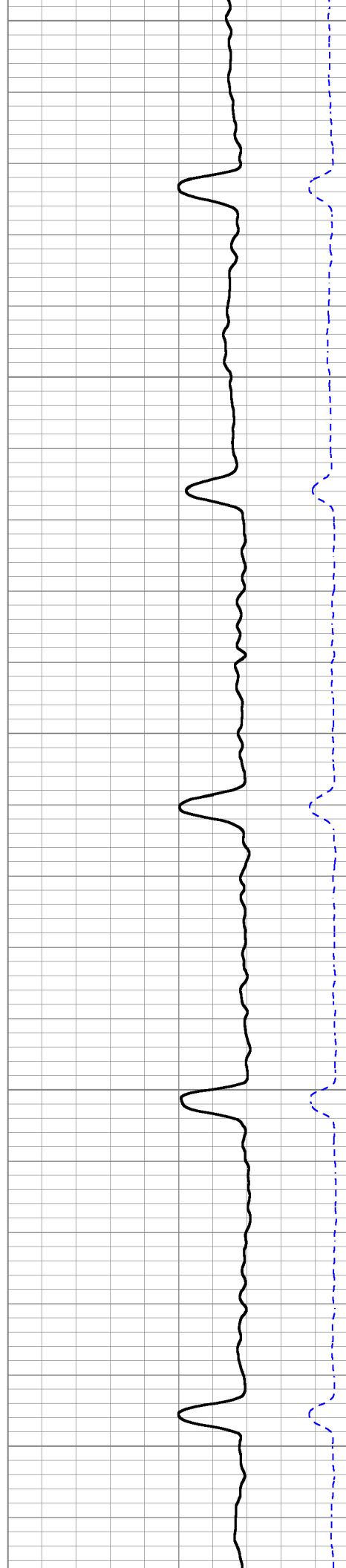
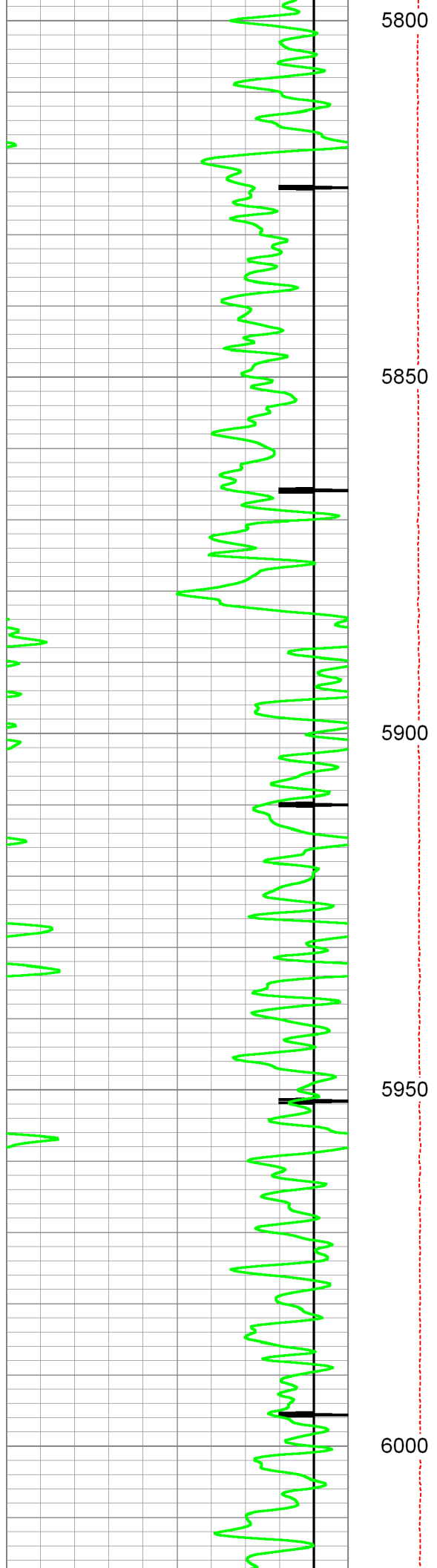
5600

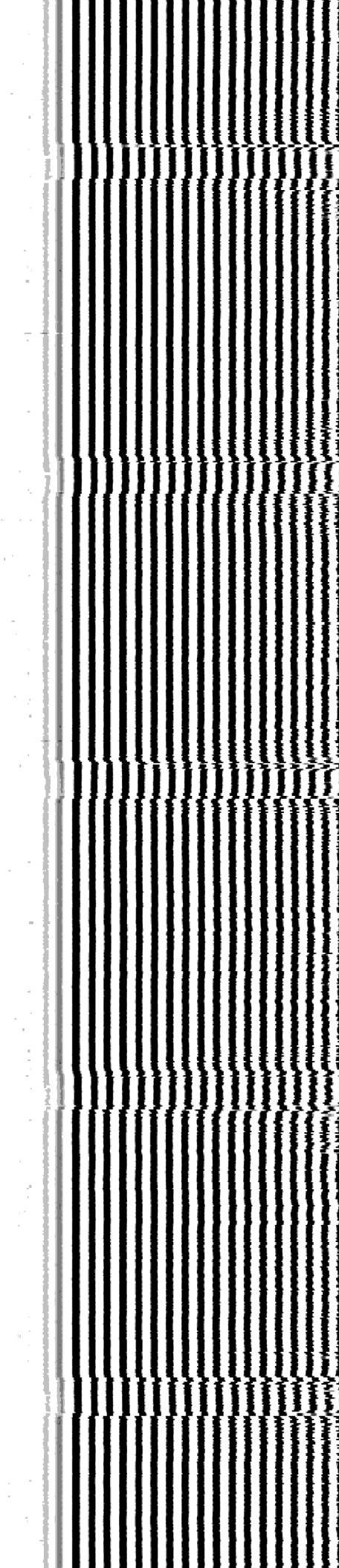
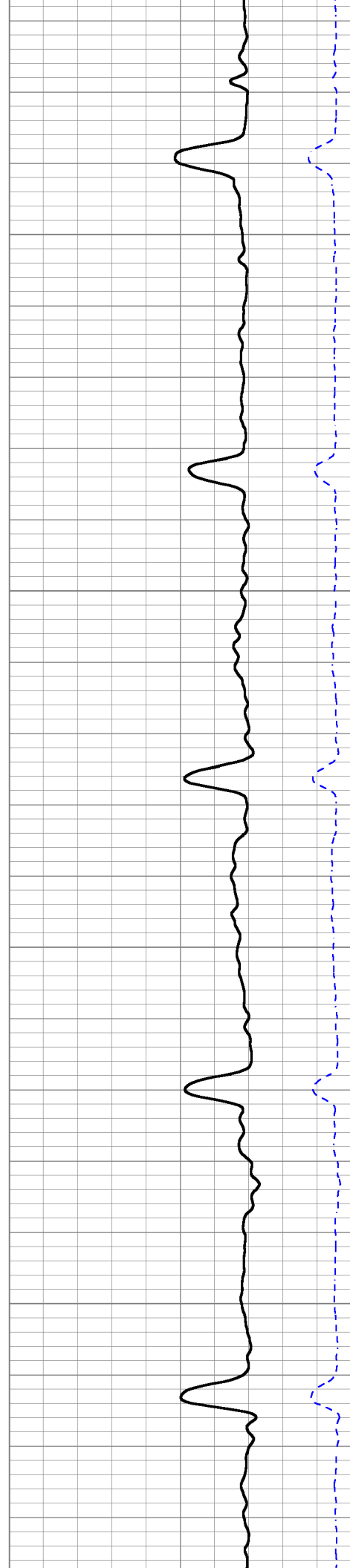
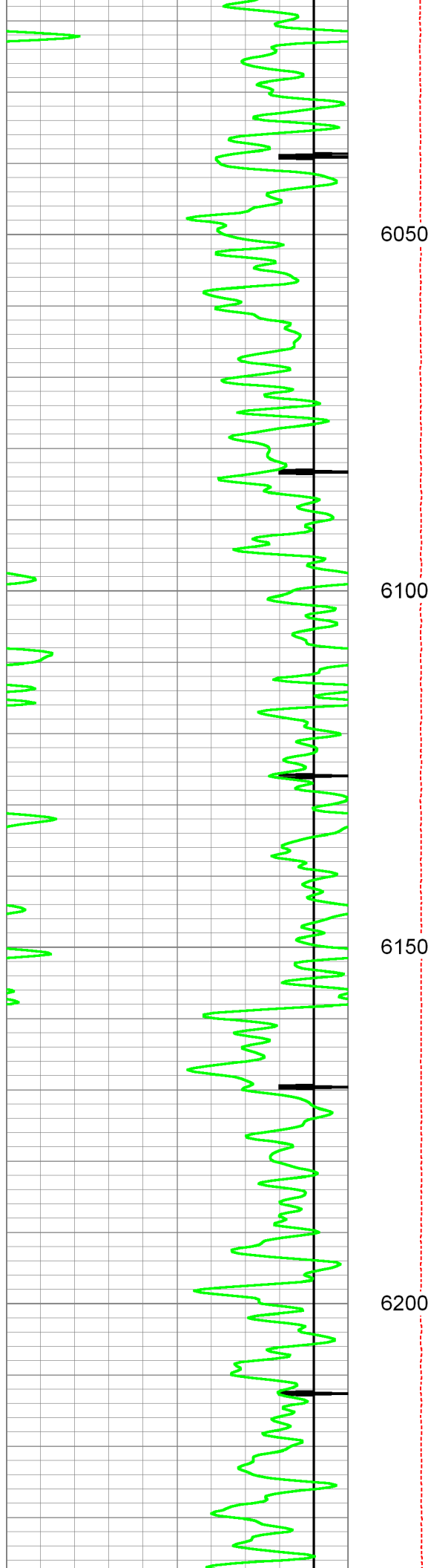
5650

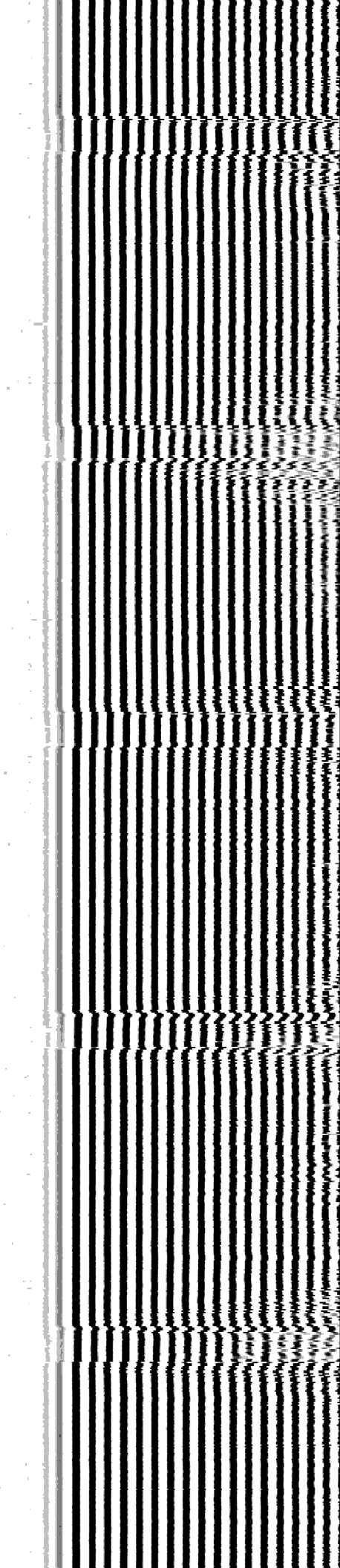
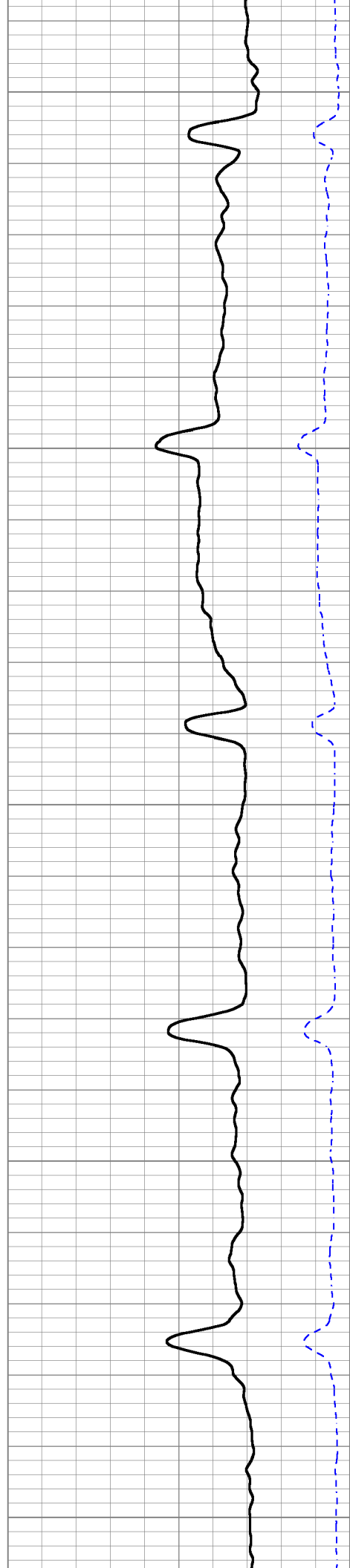
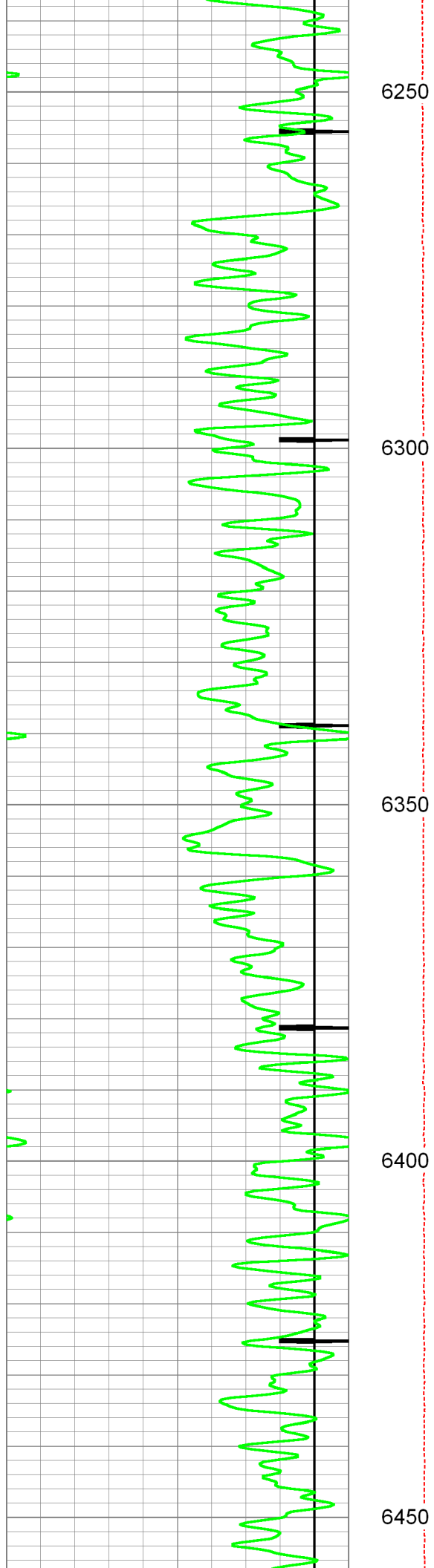
5700

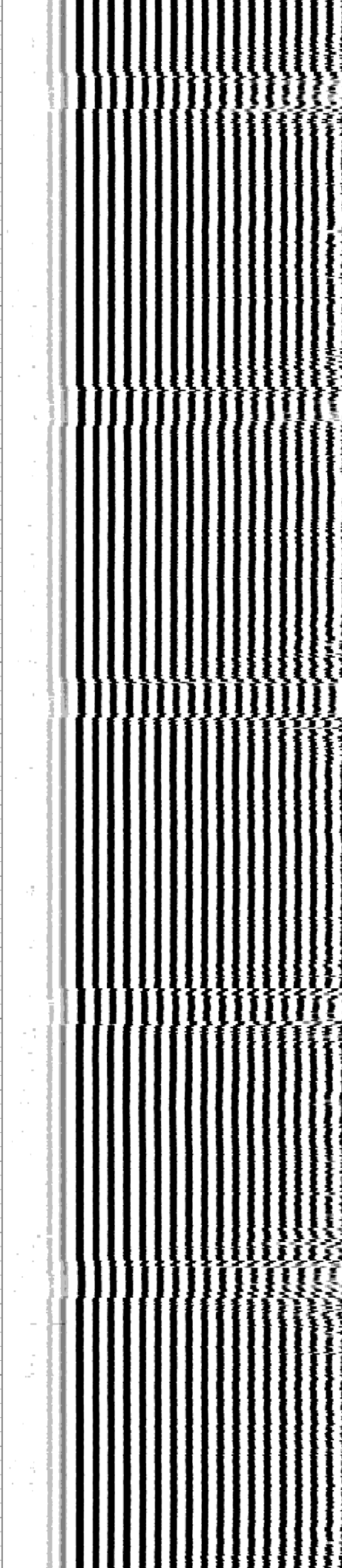
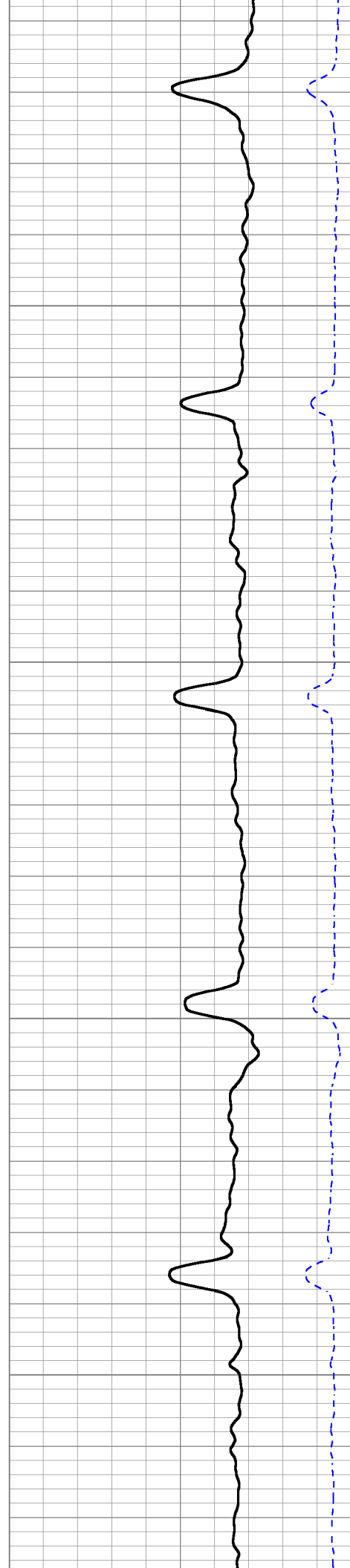
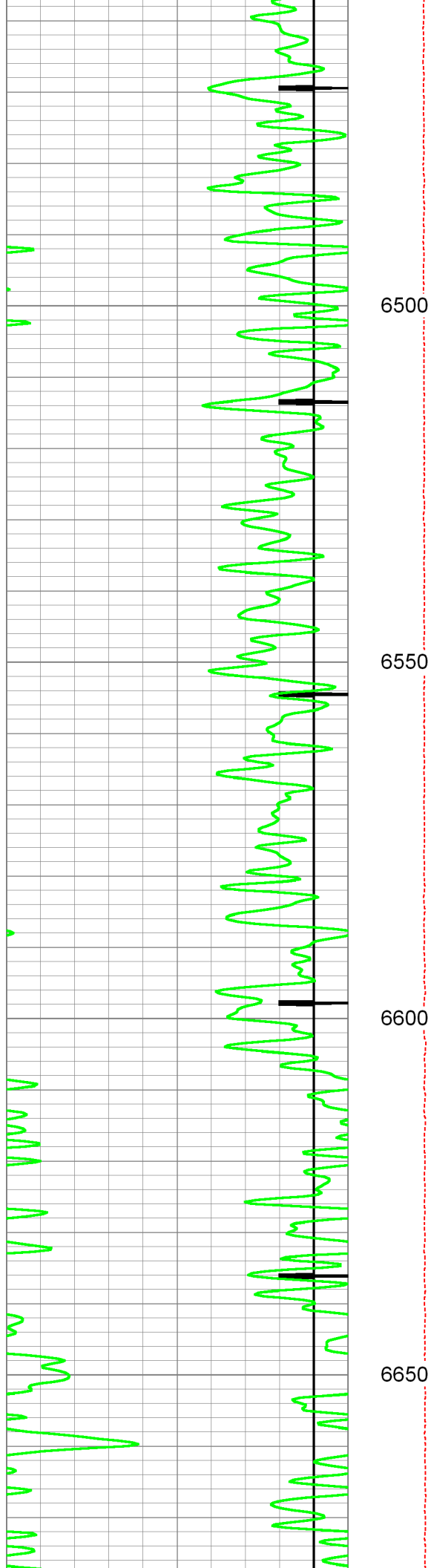
5750

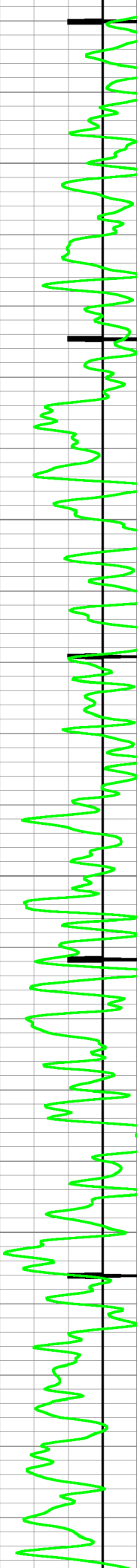










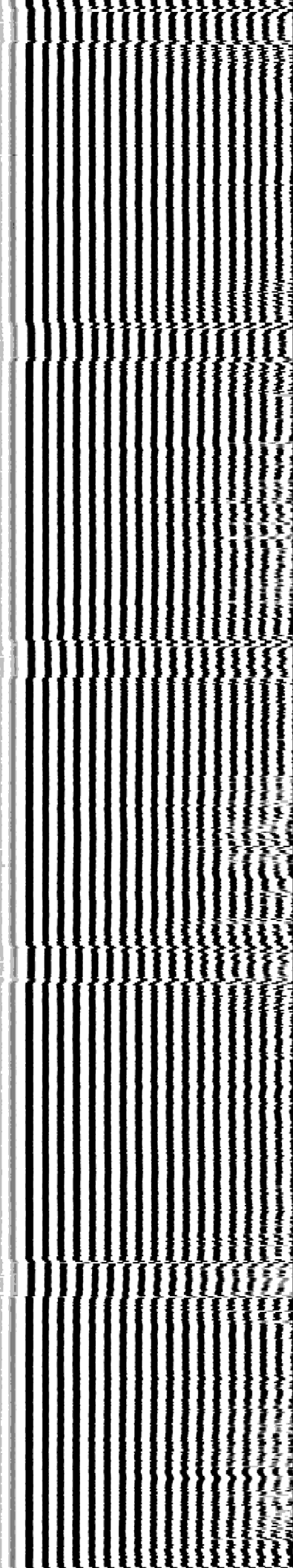
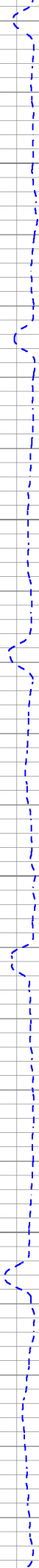


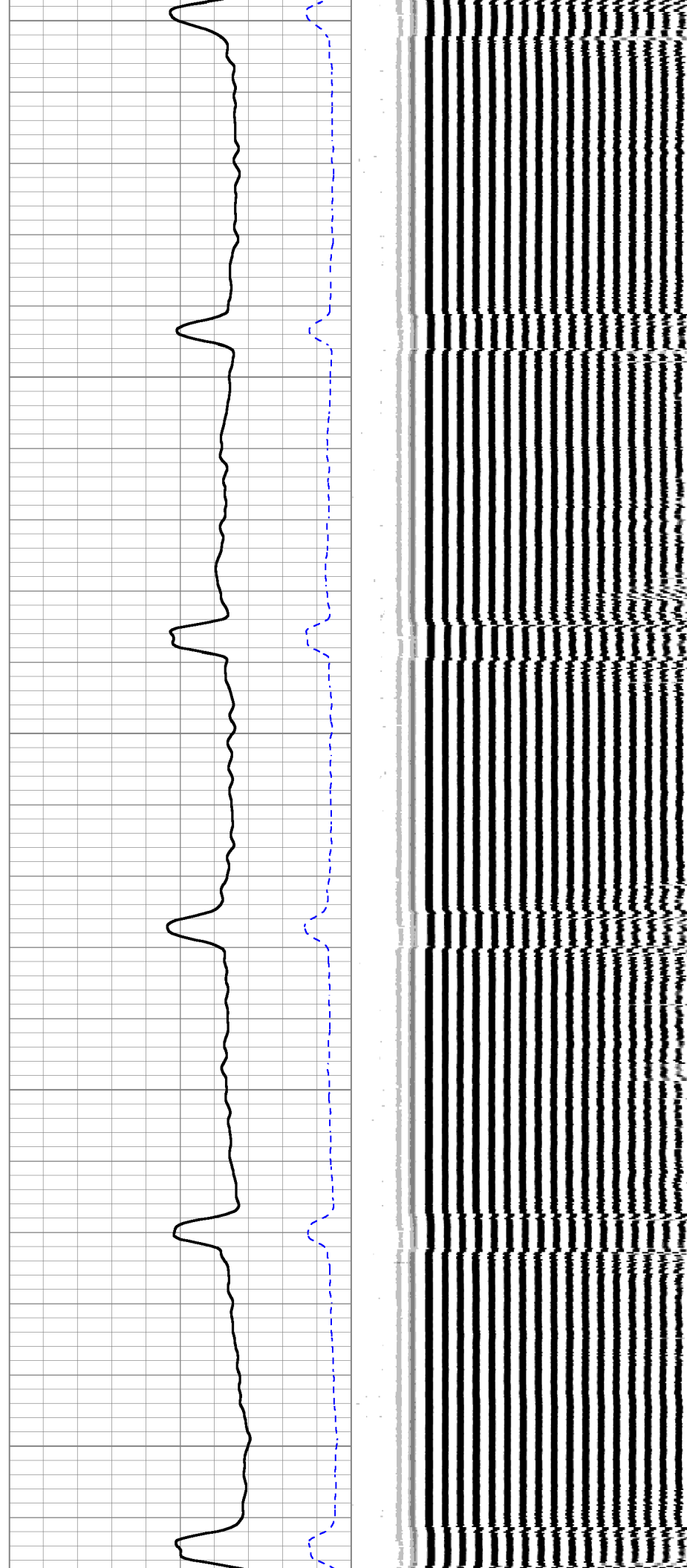
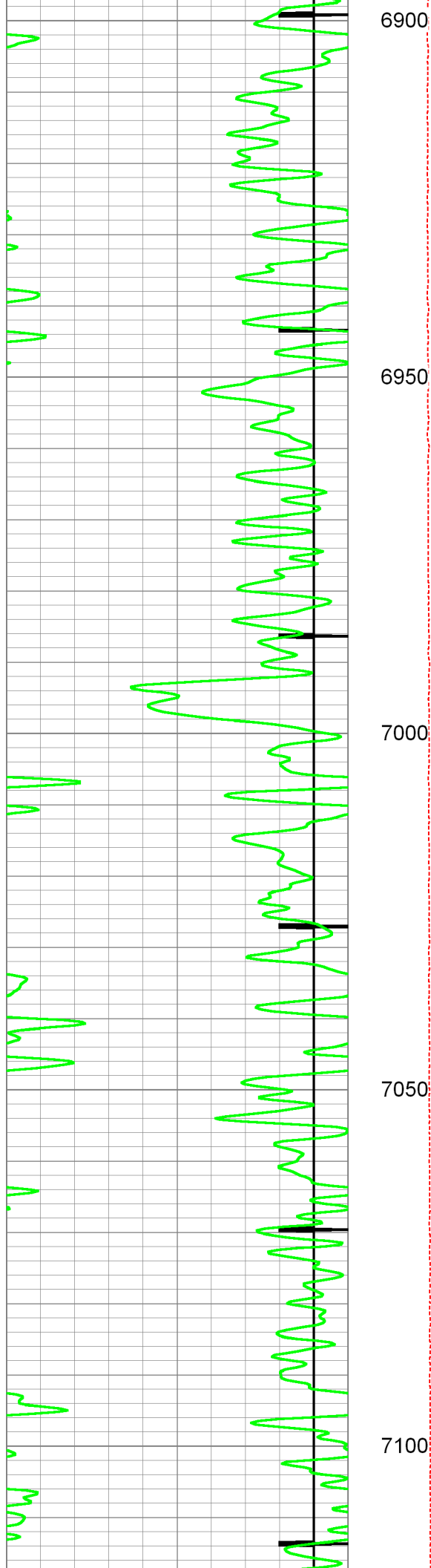
6700

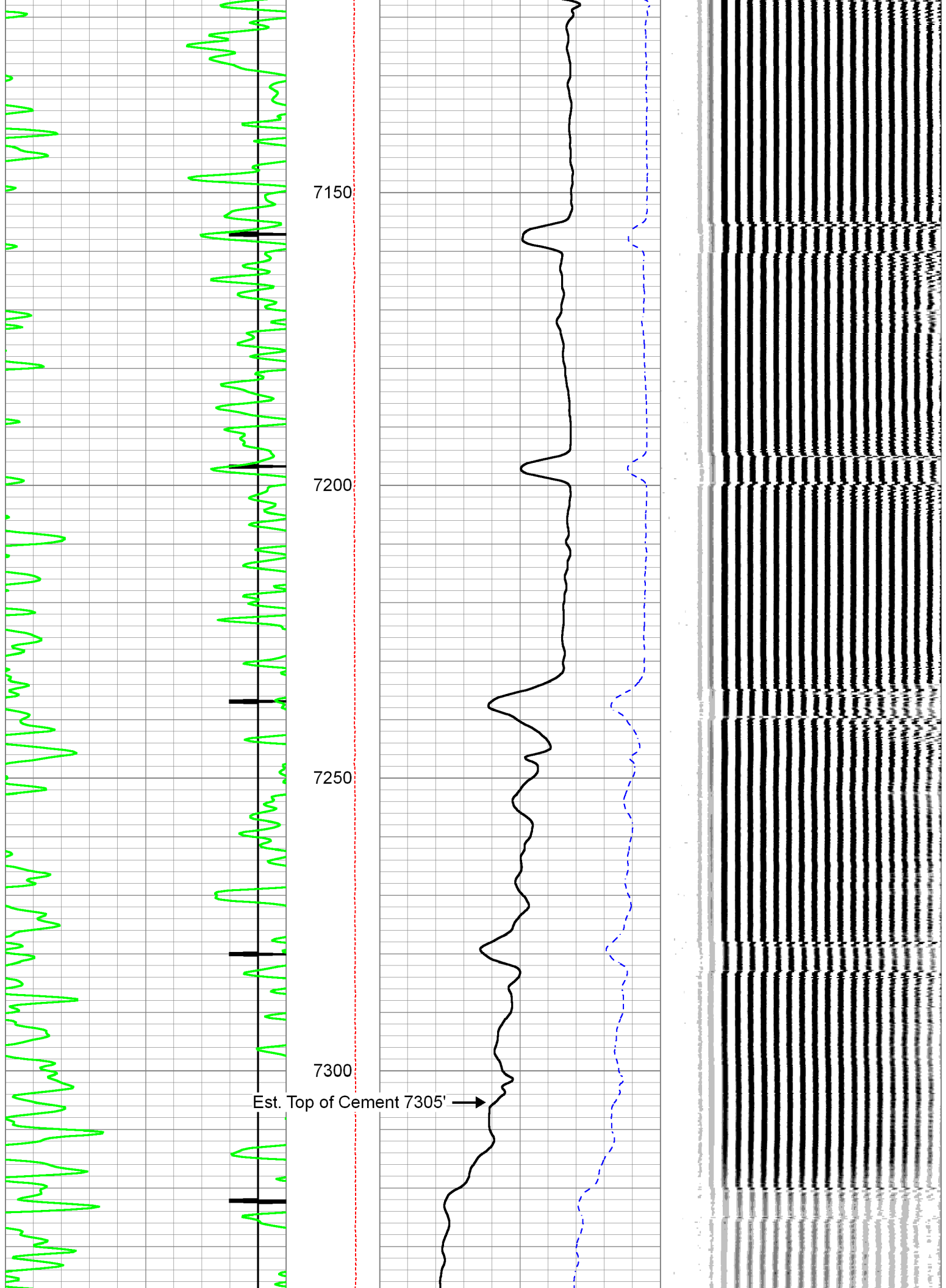
6750

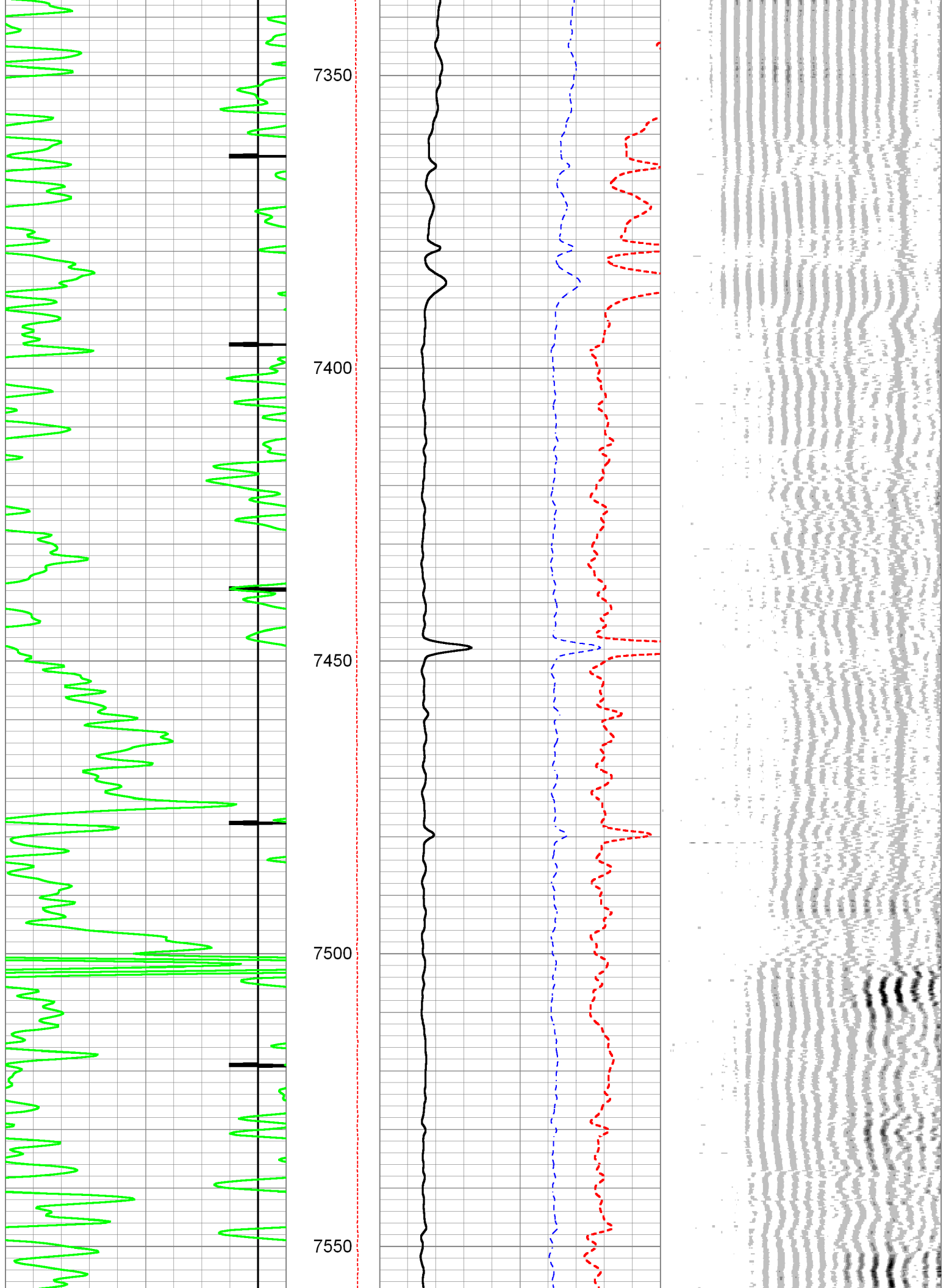
6800

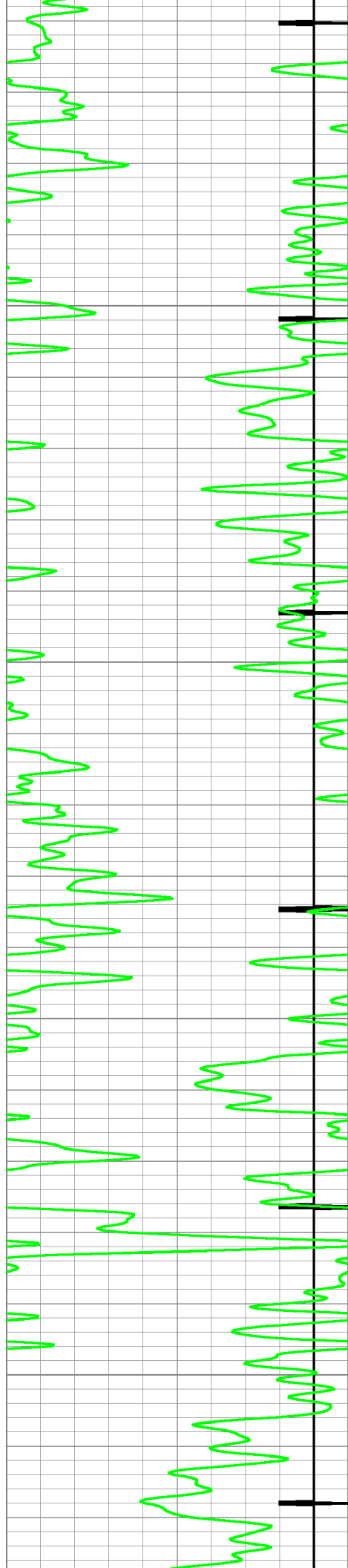
6850









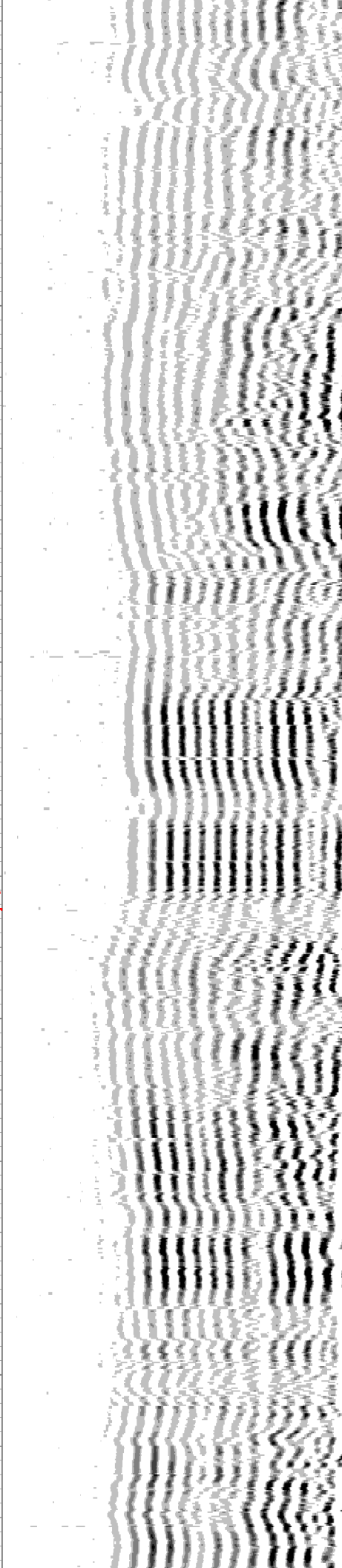
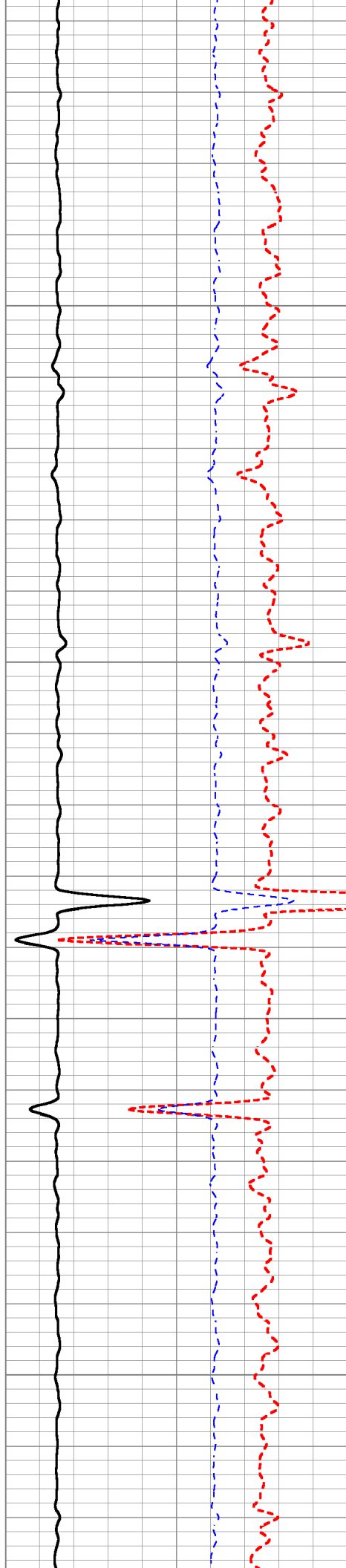


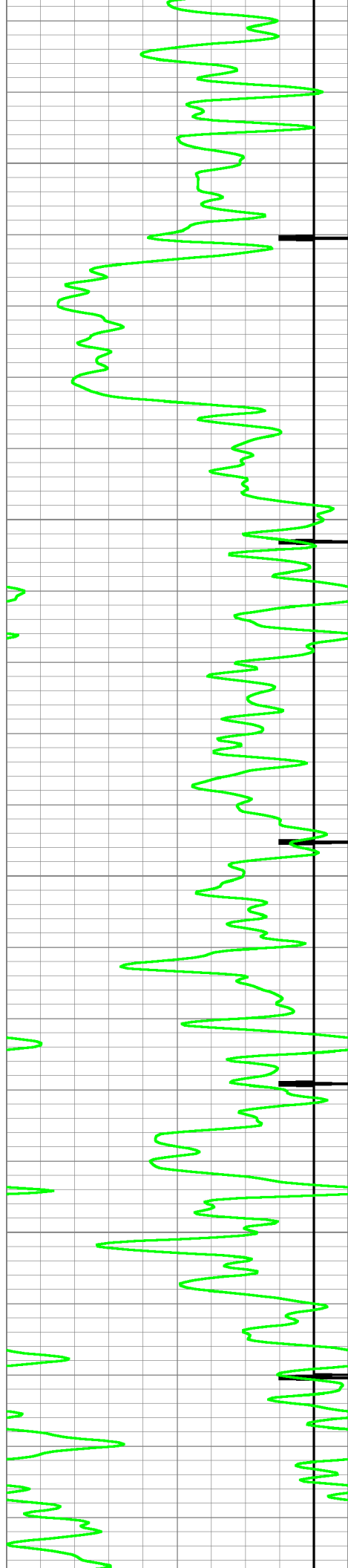
7600

7650

7700

7750



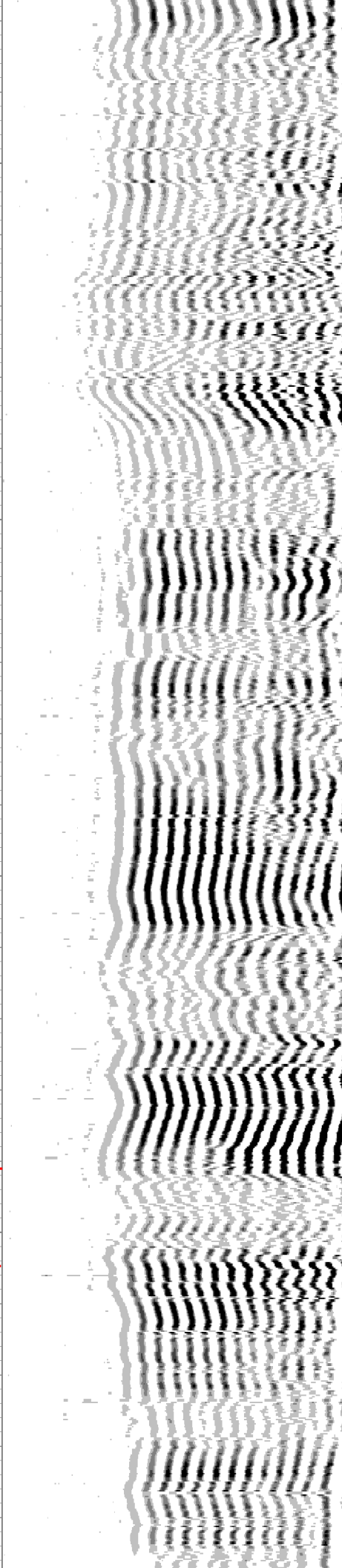
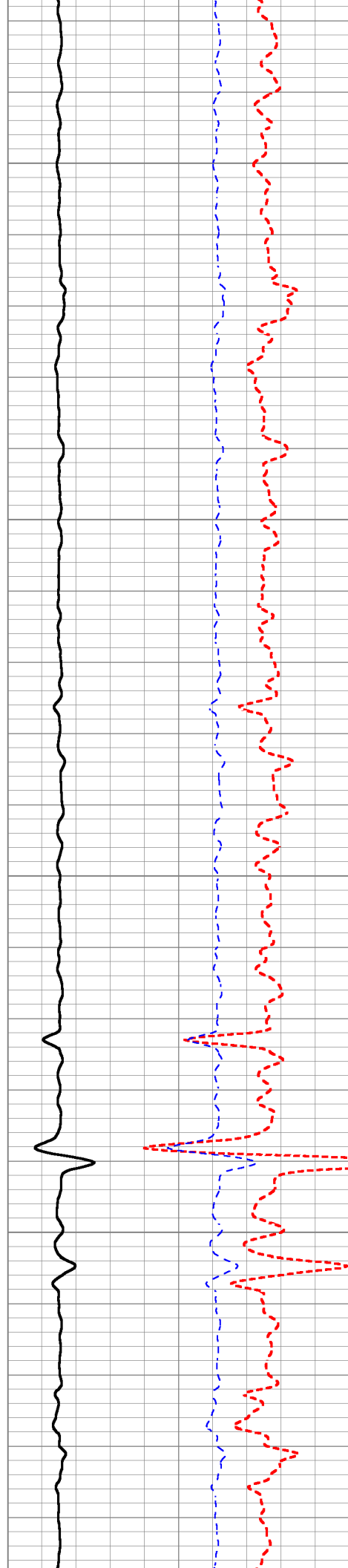


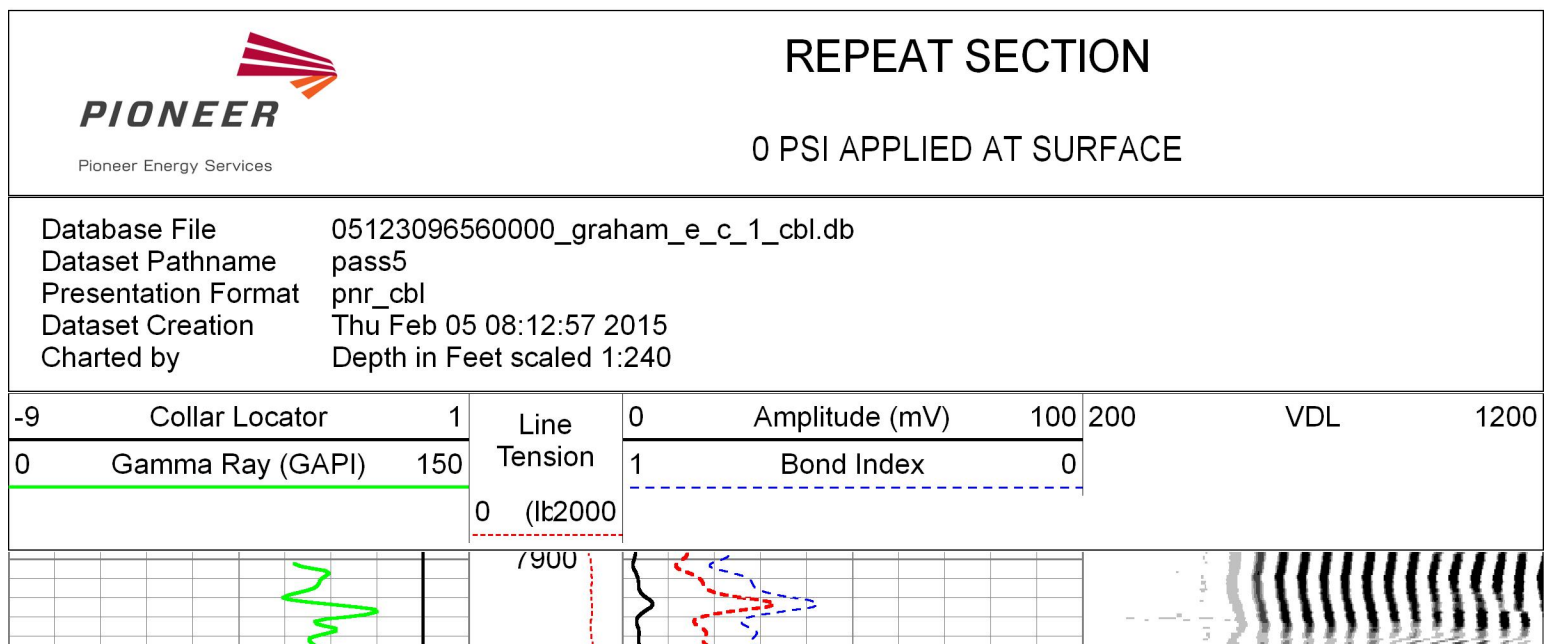
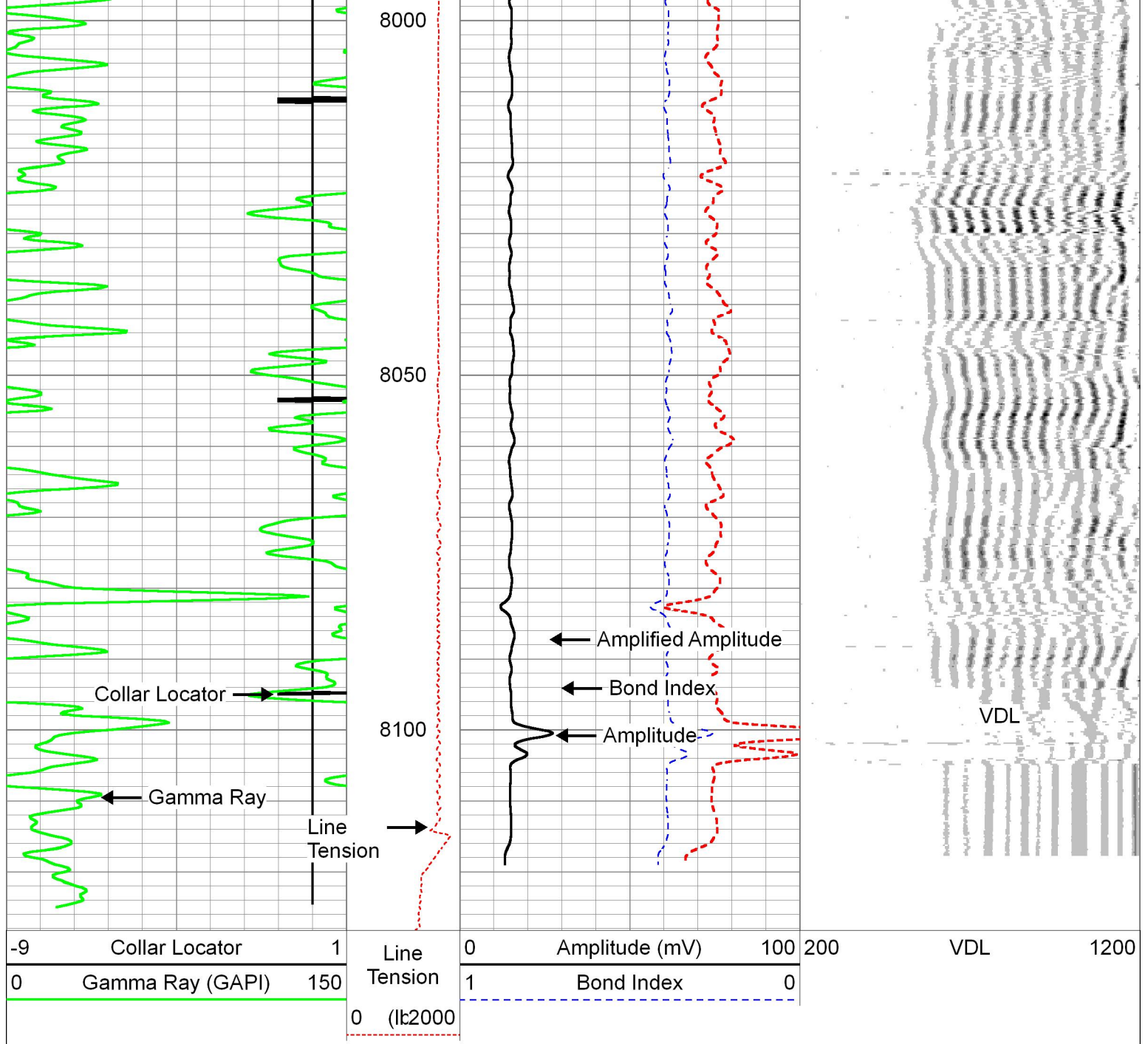
7800

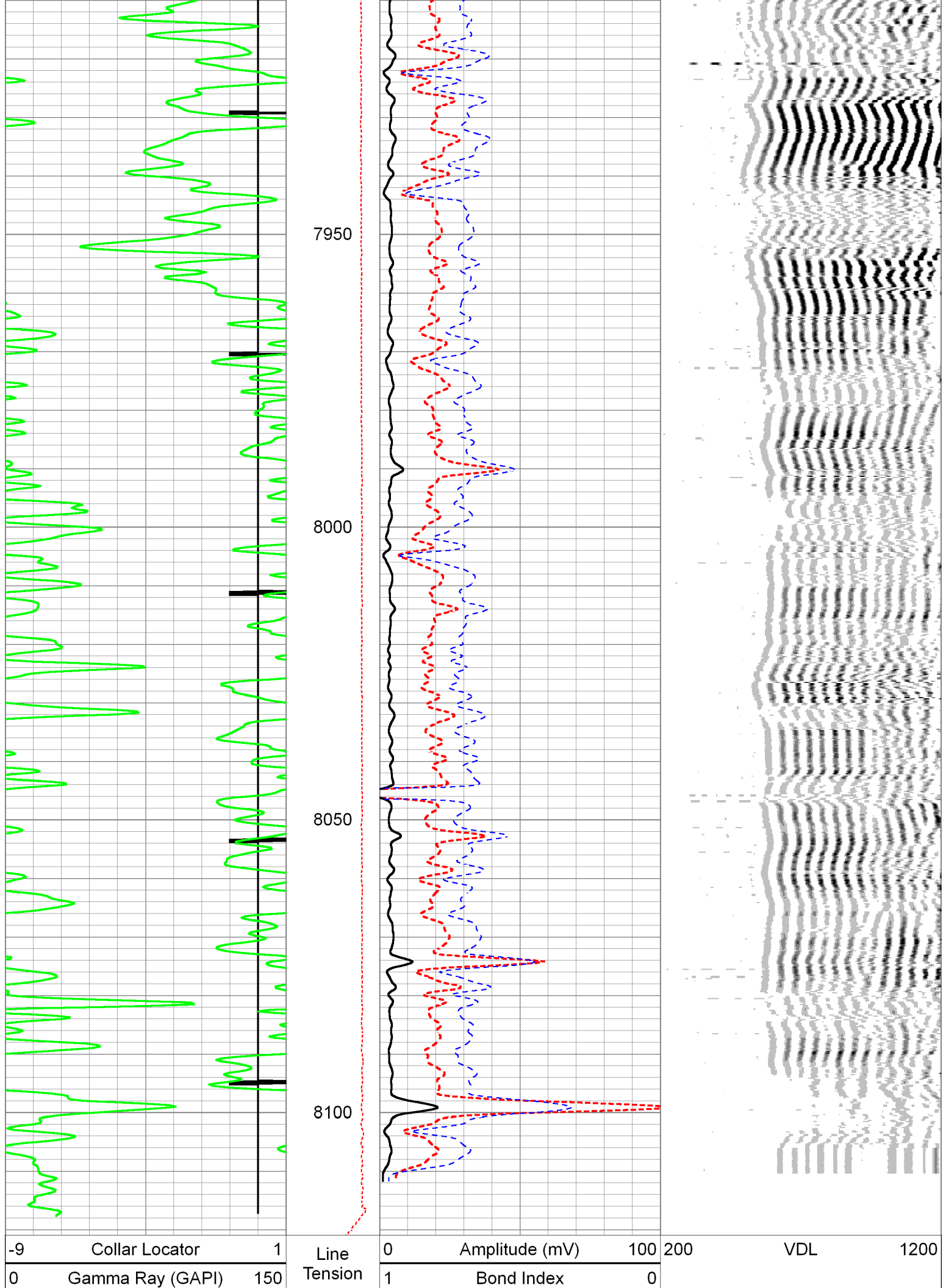
7850

7900

7950







0 (lb2000)

Company	KERR-MCGEE OIL AND GAS ONSHORE LP		
Well	GRAHAM E C 1		
Field	WATTENBERG		
County	WELD	State	COLORADO

