



PIONEER

Pioneer Energy Services

**Sonic Cement
Bond Log**

API No.	Company Herman L Loeb LLC.			Other Services
	Well Temple B No.4 SWD			
	Field Cooper			
	County Rooks			State Kansas
Location 4290' FEL & 330 FSL				
Sec: 7 Twp: 10 S Rge: 20 W				
Permanent Datum	Ground Level	Elevation 2165		Elevation K.B. 2170 D.F. 2169 G.L. 2160
Log Measured From	Kelly Bushing	5' Ft. Above Perm. Datum		
Drilling Measured From	Kelly Bushing			
Run Number	One			
Date Survey	5/7/2014			
Date Cementing	10/29/2014			
Type Cementing Operation	Primary			
Depth Driller	3890			
Depth Logger	3838			
Logged Interval	3840 to 2300			
Casing Driller	5.5" @ 3833			
Float Collar -- D.V. Tool	1718			
Squeeze Depth	////			
Amount & Type Cement	////			
Amount & Type Admix	////			
Type Fluid In Hole	Water			
Fluid Level	1130'			
Salinity PPM CL	////			
Weight lb/gal -- Vis.	////			
Approx. Logged Cement Top	3000			
Calculated Cement Top	////			
Max. Hole Temperature	116			
Tool No.	RBT 4-4			
Spacing Recorded	3-5			
Equipment -- Location	12	Days		
Recorded By	A Dreiling			
Witnessed By	Mr Roland Nyp			

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, 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. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

Thank you for using Pioneer Energy Services
785.625.3858

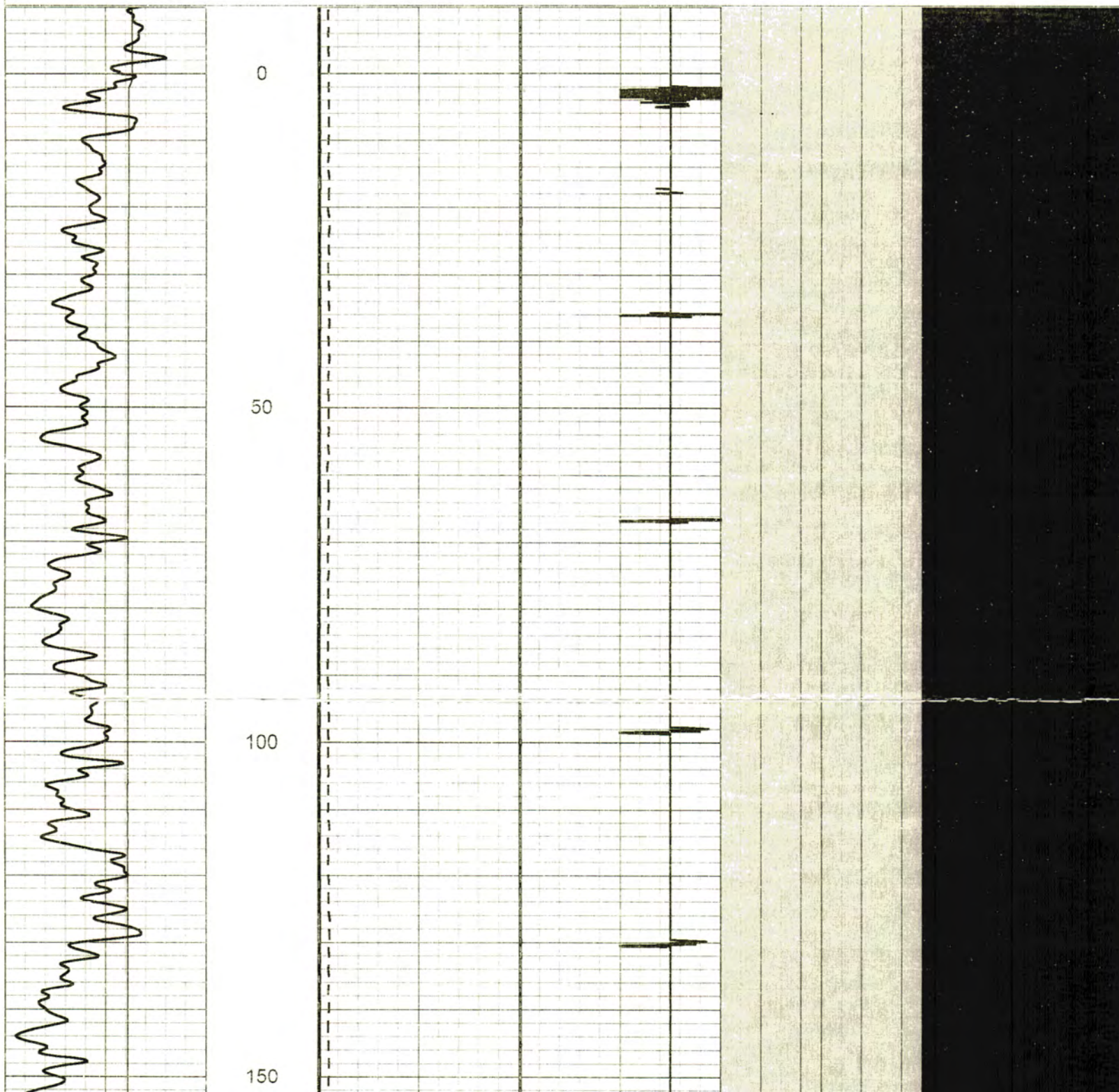
Palco Ks.,
S to AA Rd.
1 3/4 W,N into

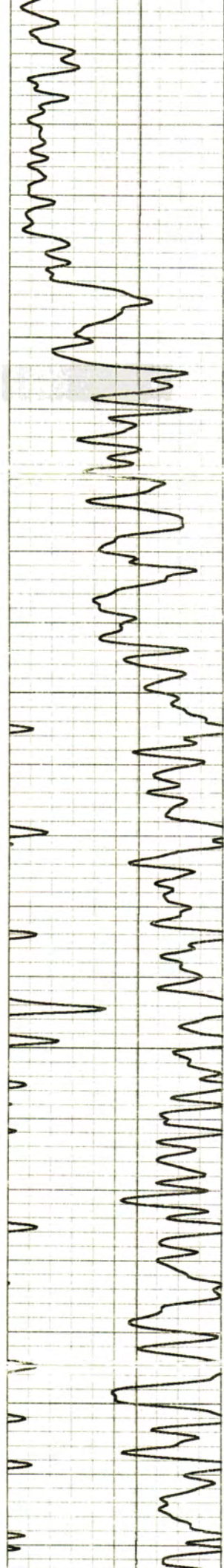


D.V. Tool 1718

Database File: herman-loeb-sgrcbl.db
 Dataset Pathname: sgrcbl/pass3
 Presentation Format: scbl
 Dataset Creation: Wed May 07 08:31:26 2014 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240

TT3FT			Amplitude		0	AMPAVG	150	200	VDL	1200	1	Sector Map	8
700	(usec)	235	0	(mV)	100	0	AMPMAX	150			25		75
LTEN			Amplified Amplitude		0	AMPMIN	150						
0	GR	150	0	(mV)	20	3	CCL	-1					





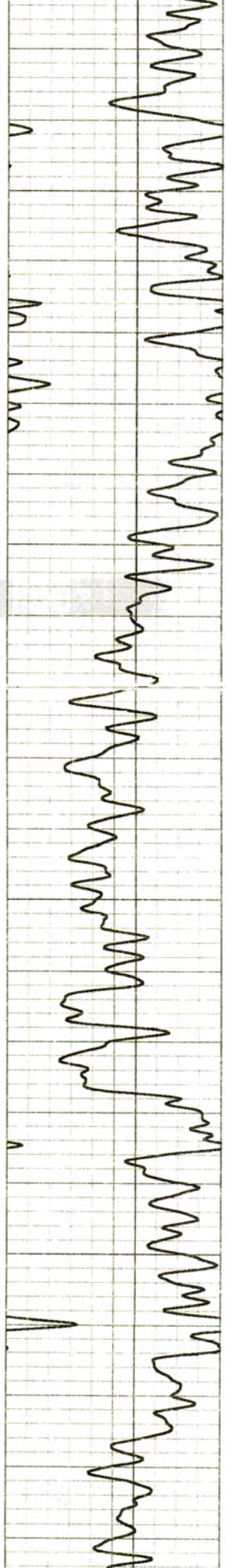
200

250

300

350



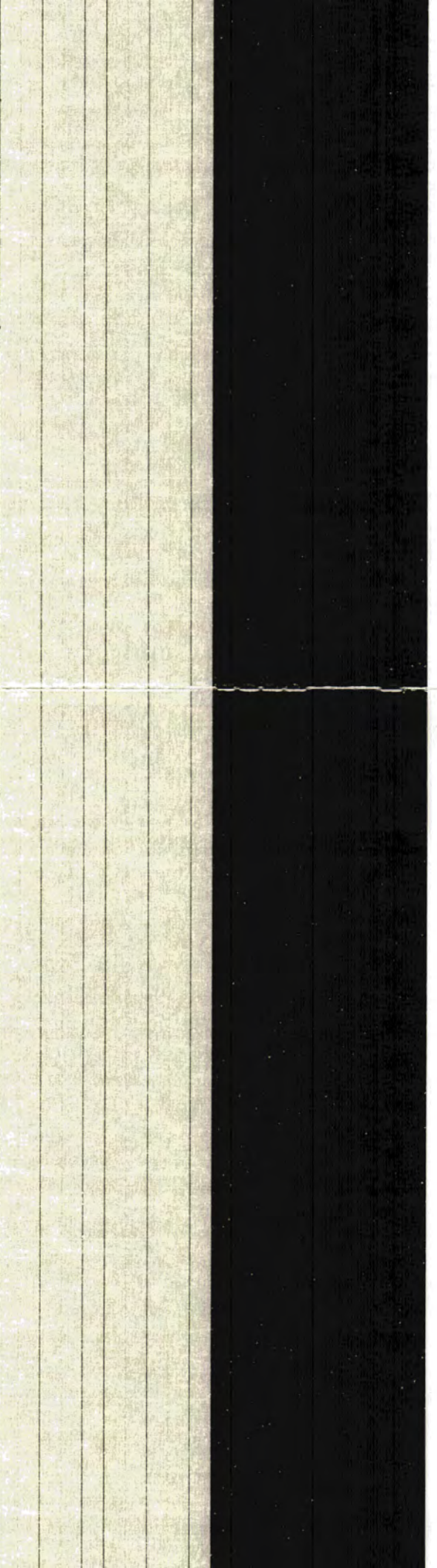
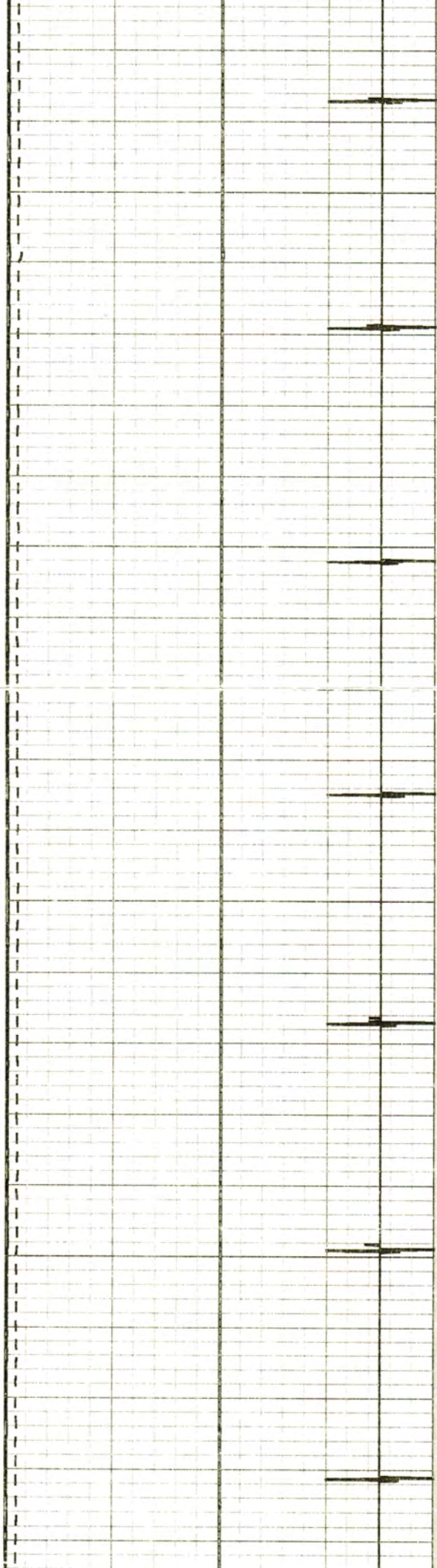


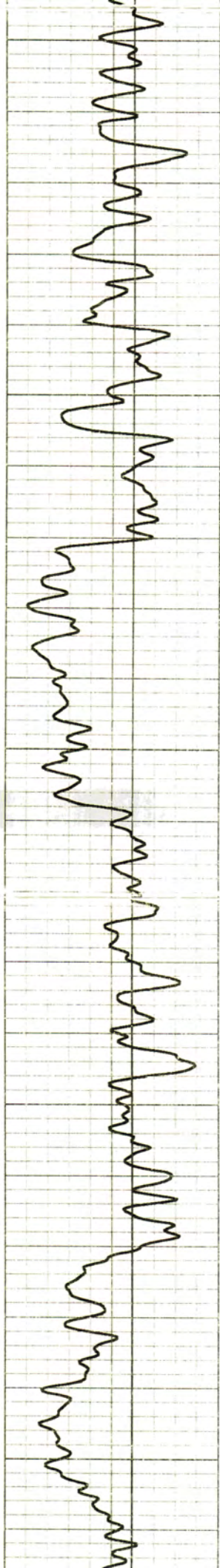
400

450

500

550





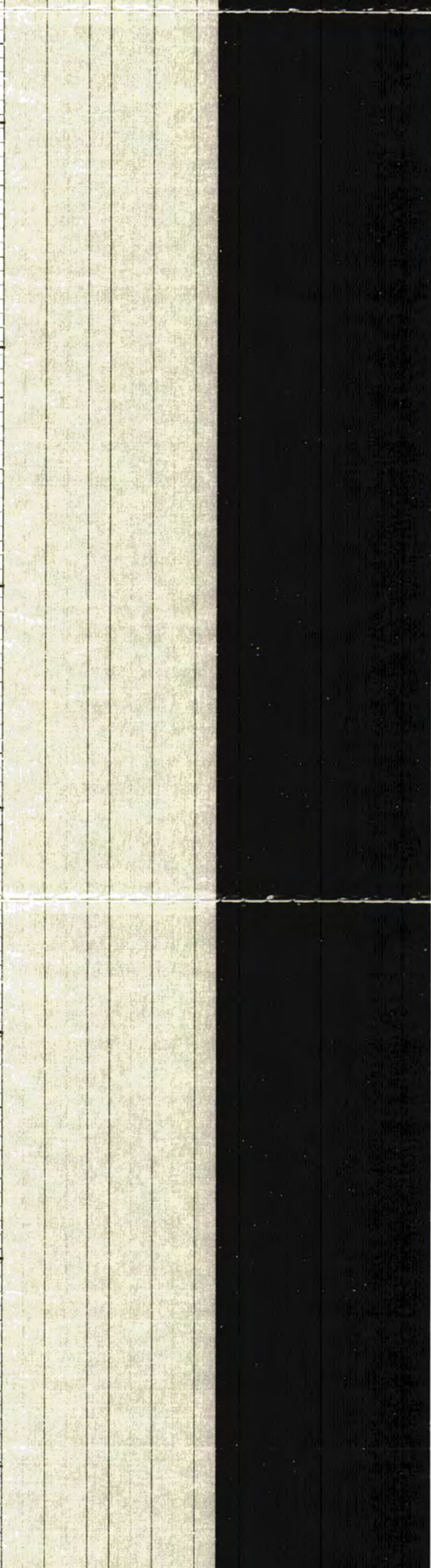
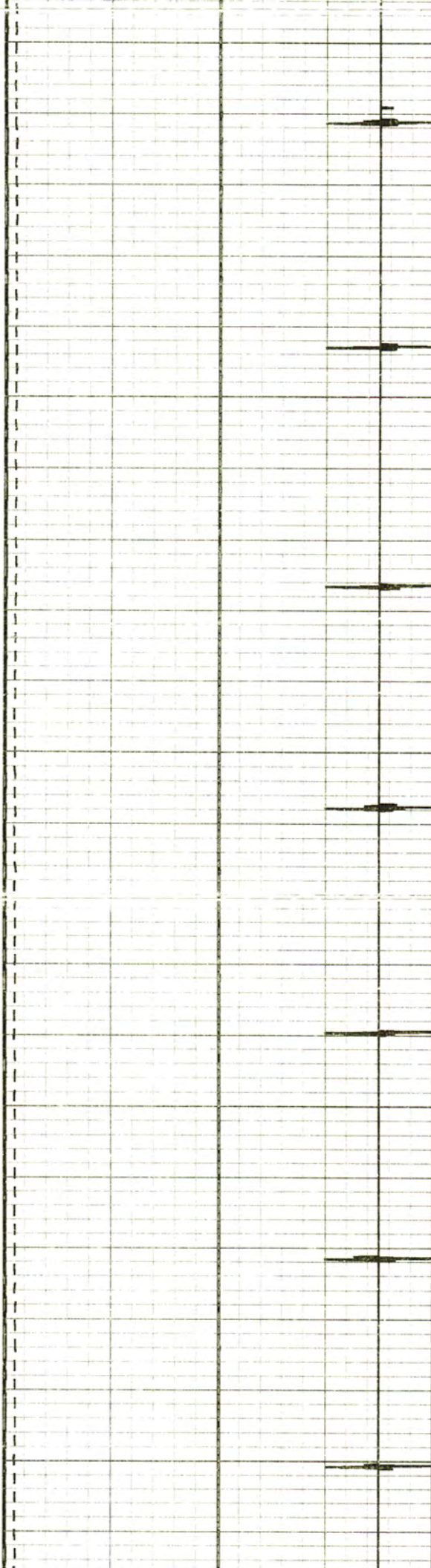
600

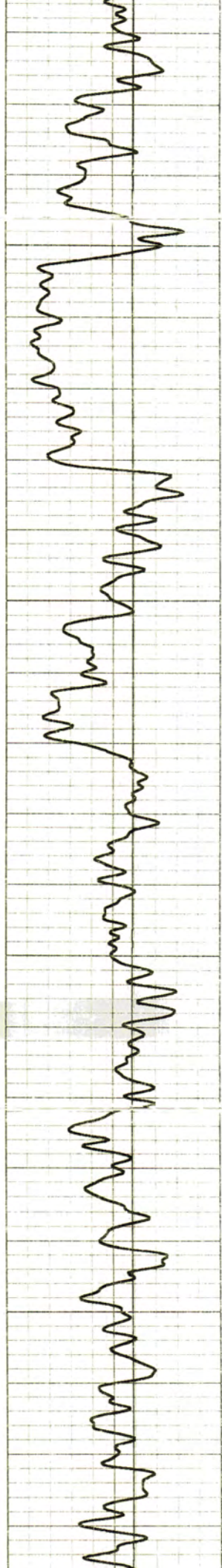
650

700

750

800



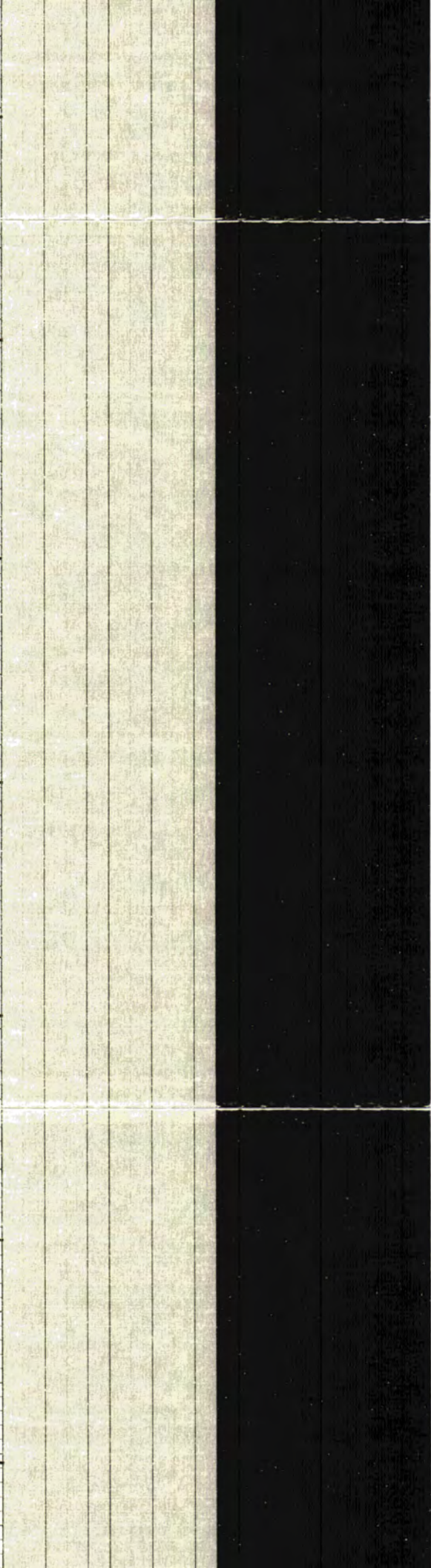
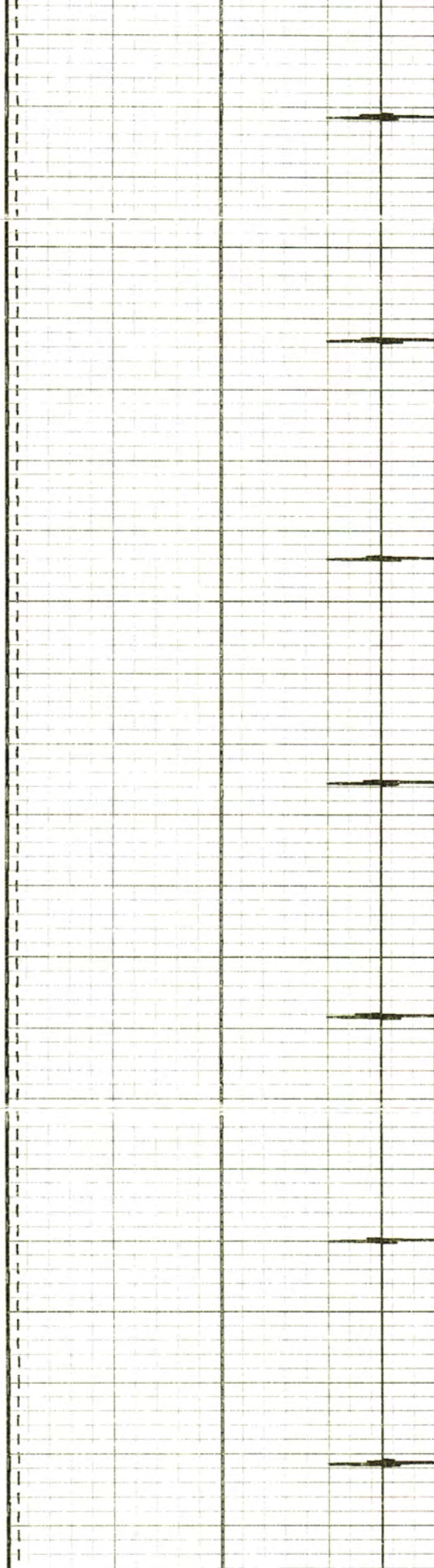


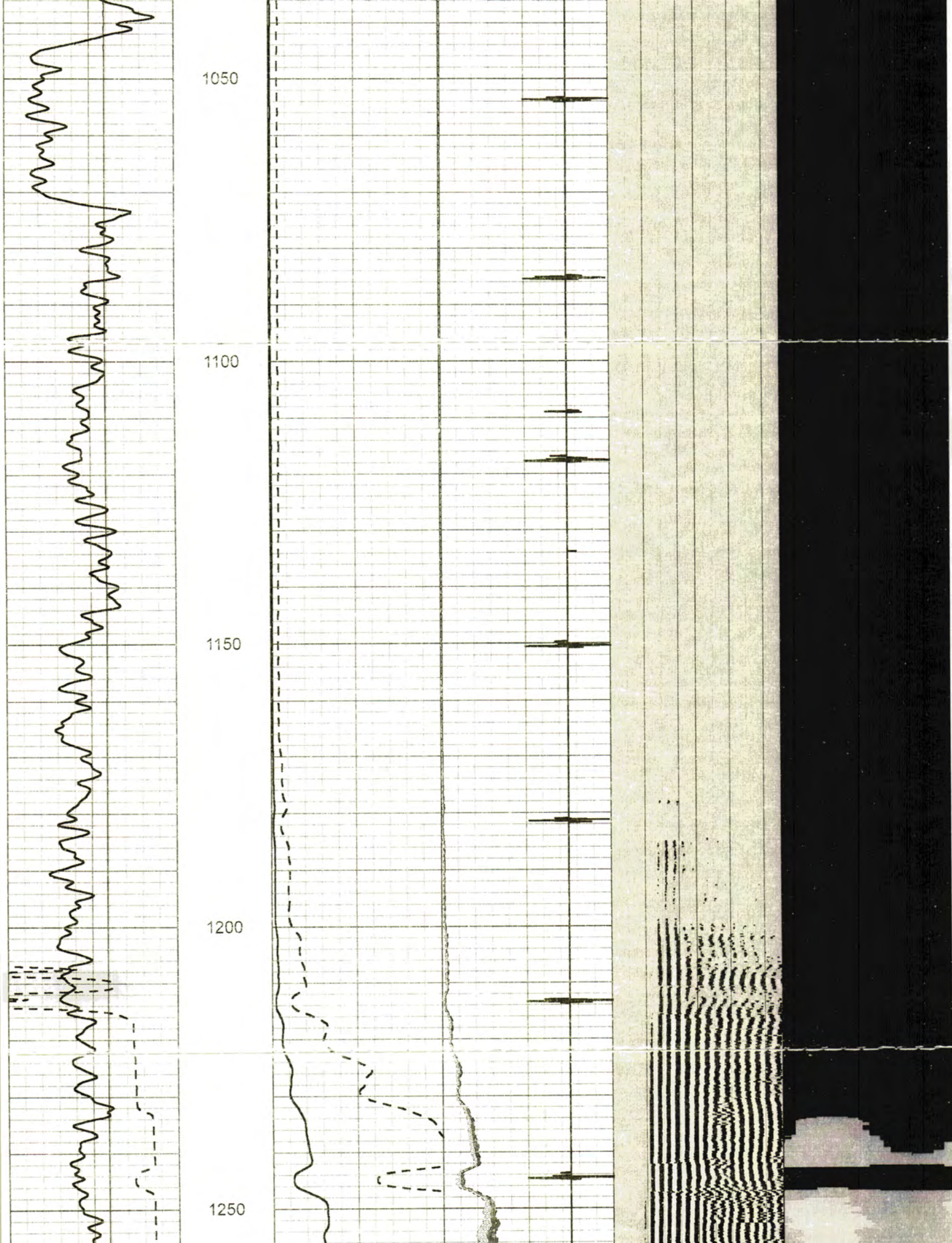
850

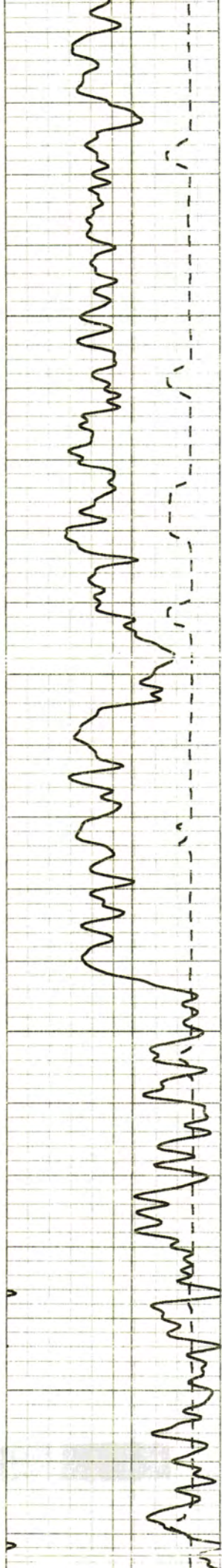
900

950

1000





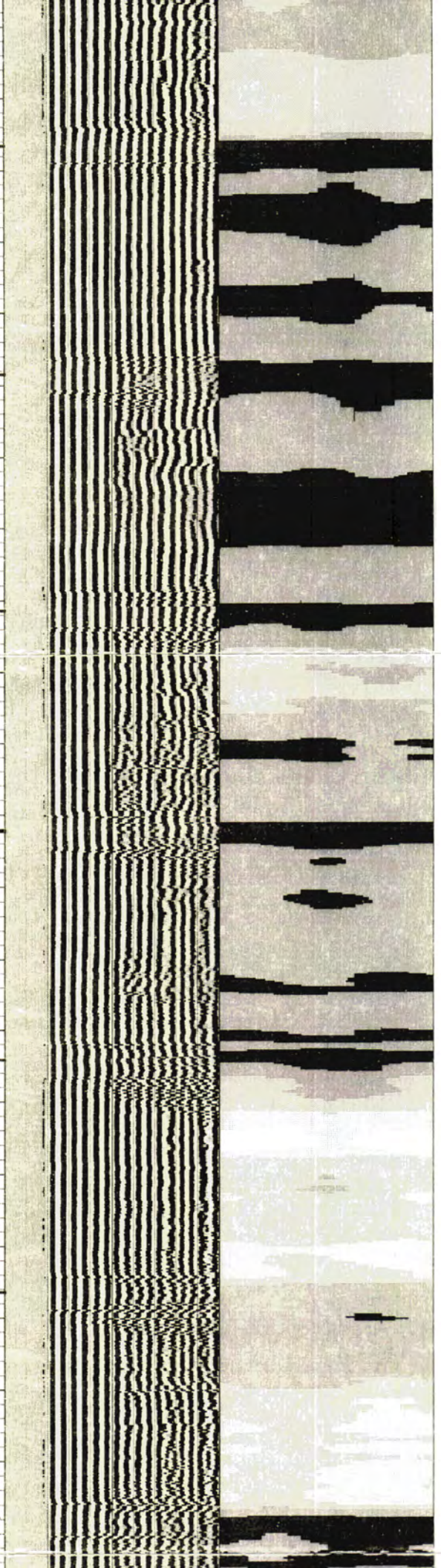
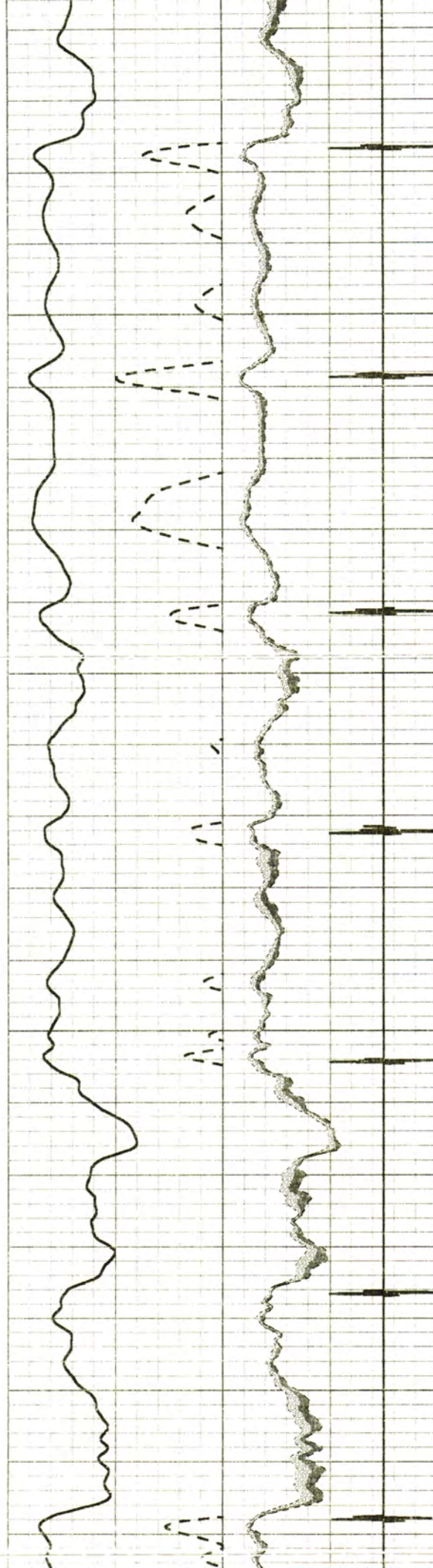


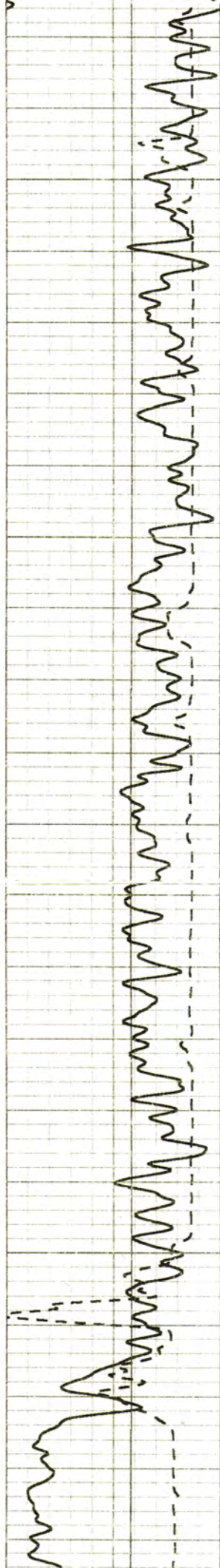
1300

1350

1400

1450



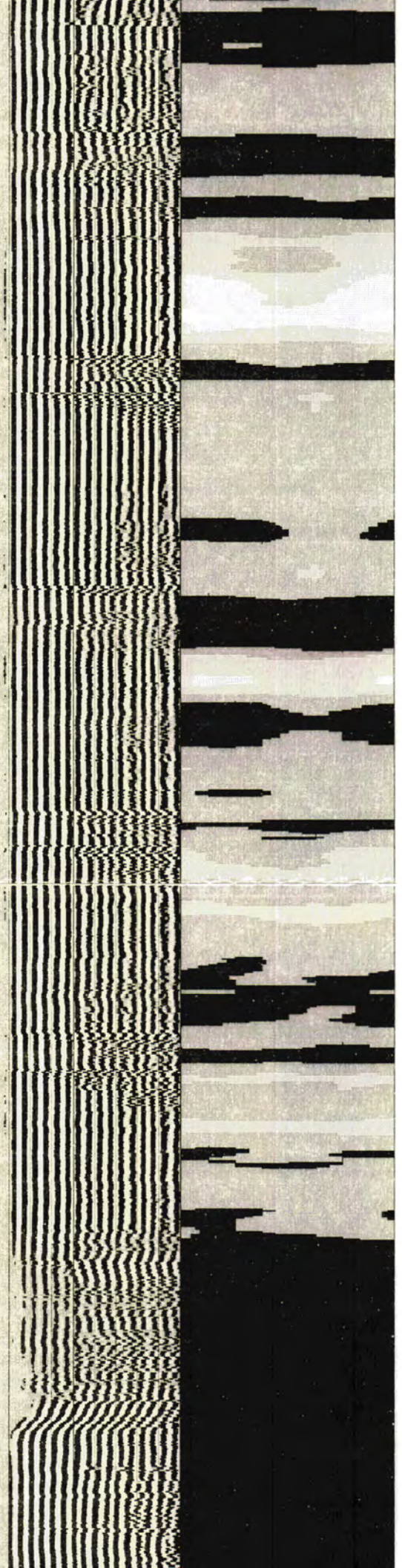
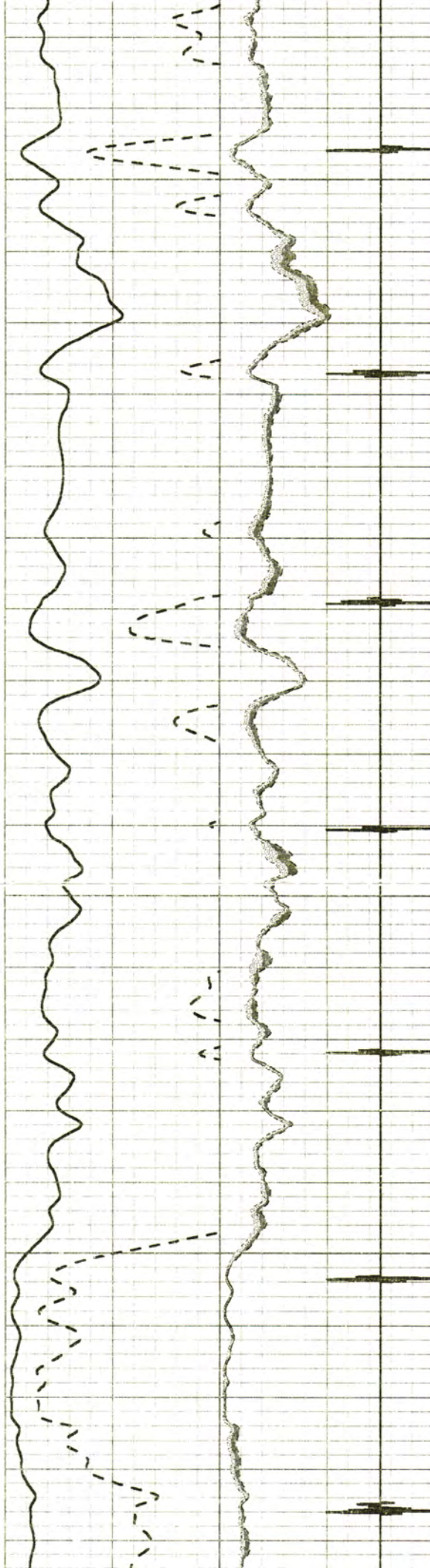


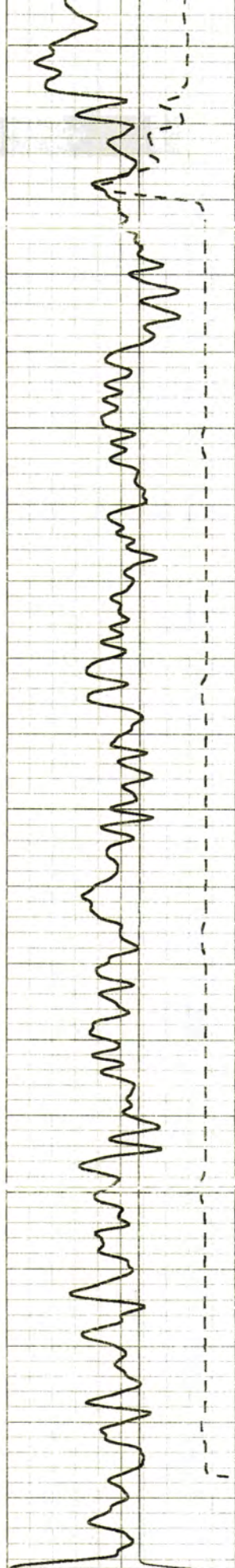
1500

1550

1600

1650





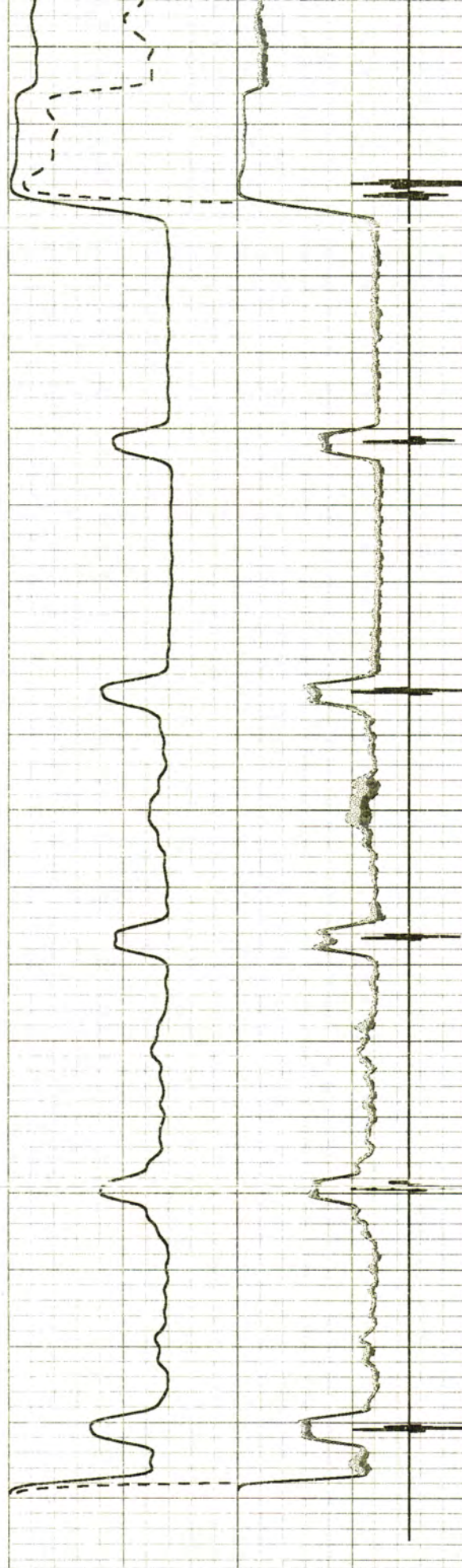
TT3FT
700 (usec) 235
LTEN

1700

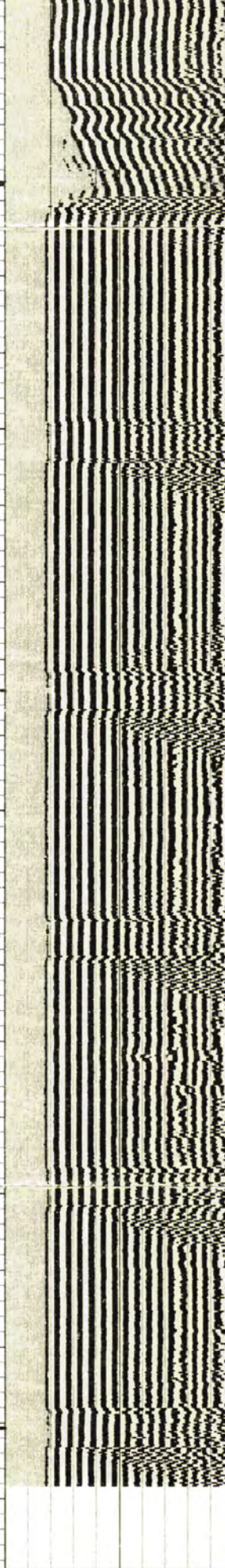
1750

1800

1850



Amplitude 0 AMPAVG 150 200
0 (mV) 100 0 AMPMAX 150
Amplified Amplitude 0 AMPMIN 150



VDL 1200 1
25



Sector Map 8
75

0 GR 150

0 (mV) 20 3 CCL -1

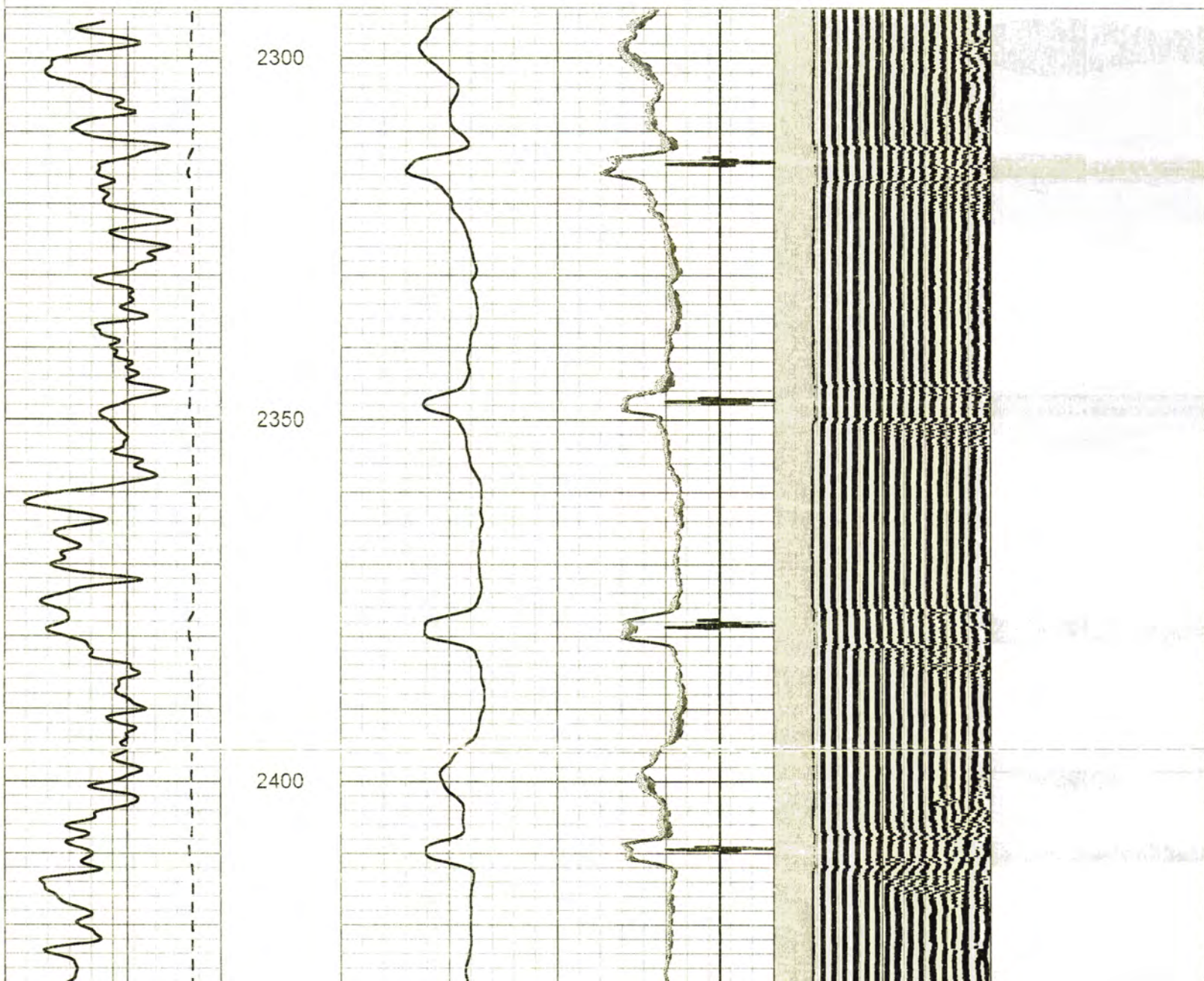


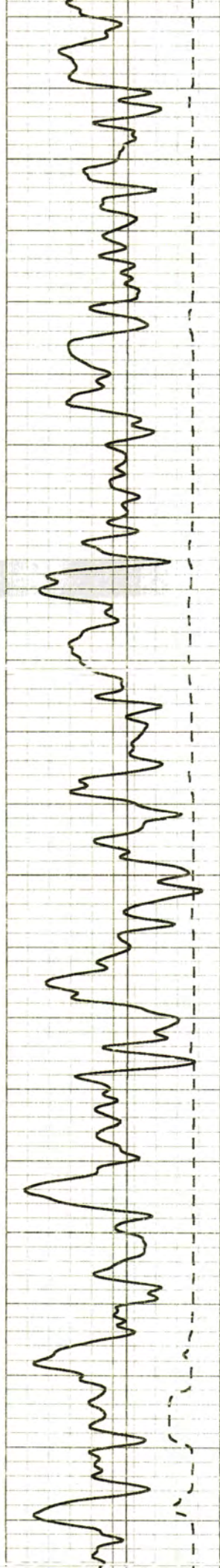
Pioneer Energy Services

Main Pass

Database File: herman-loeb-sgrcbl.db
 Dataset Pathname: sgrcbl/pass2
 Presentation Format: scbl
 Dataset Creation: Wed May 07 08:08:20 2014 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240

TT3FT	Amplitude	0	AMPAVG	150 200	VDI	1200 1	Sector Map	8
700 (usec) 235	0 (mV) 100	0	AMPMAX	150		25		75
LTEN	Amplified Amplitude	0	AMPMIN	150				
0 GR 150	0 (mV) 20 3		CCL	-1				



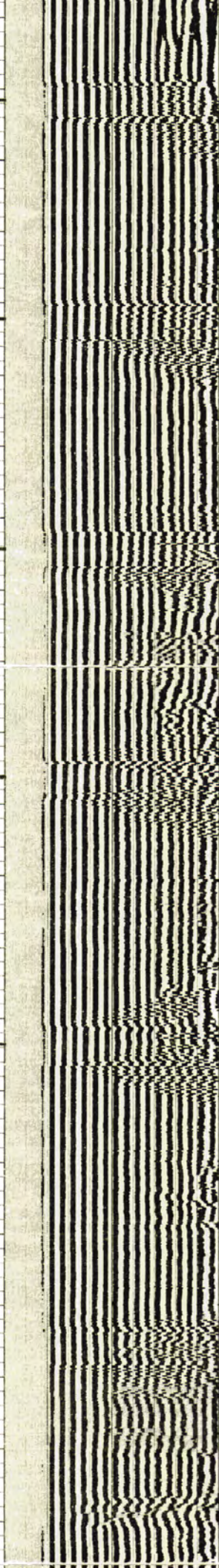
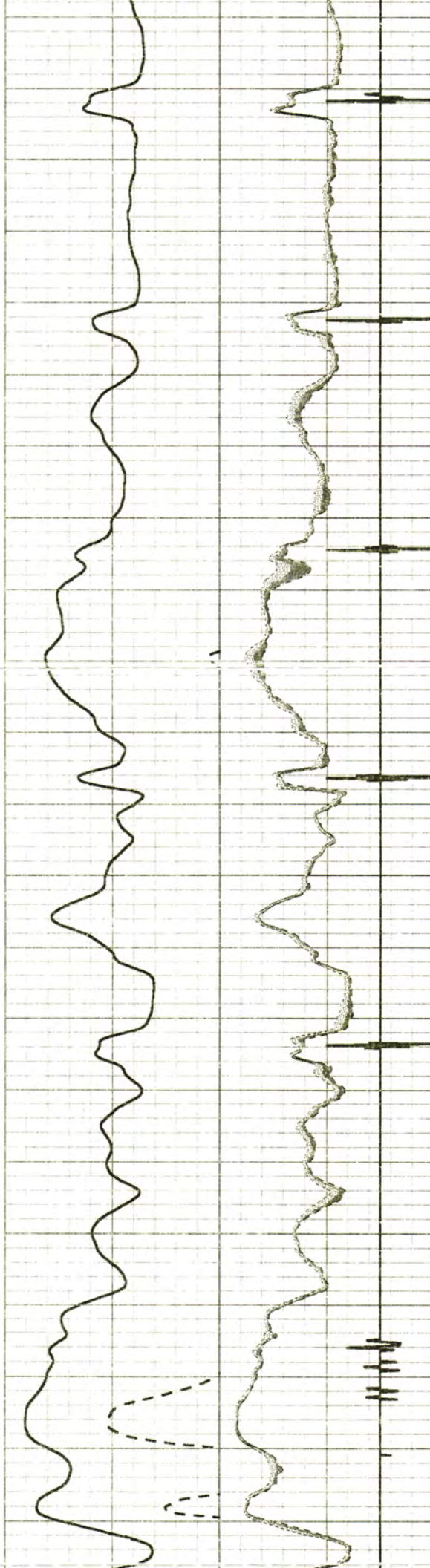


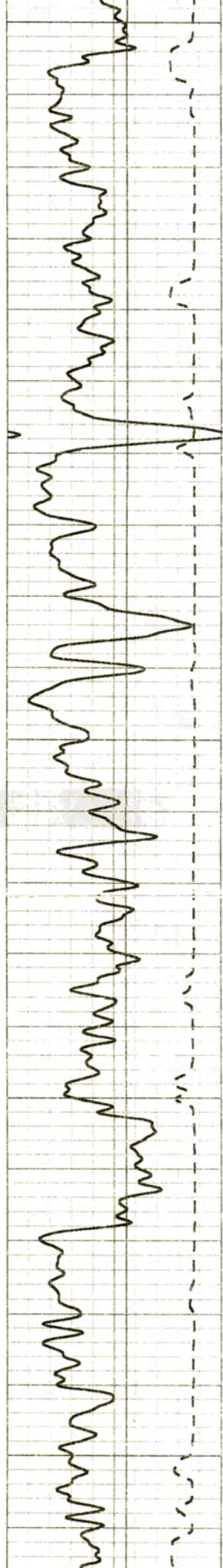
2450

2500

2550

2600





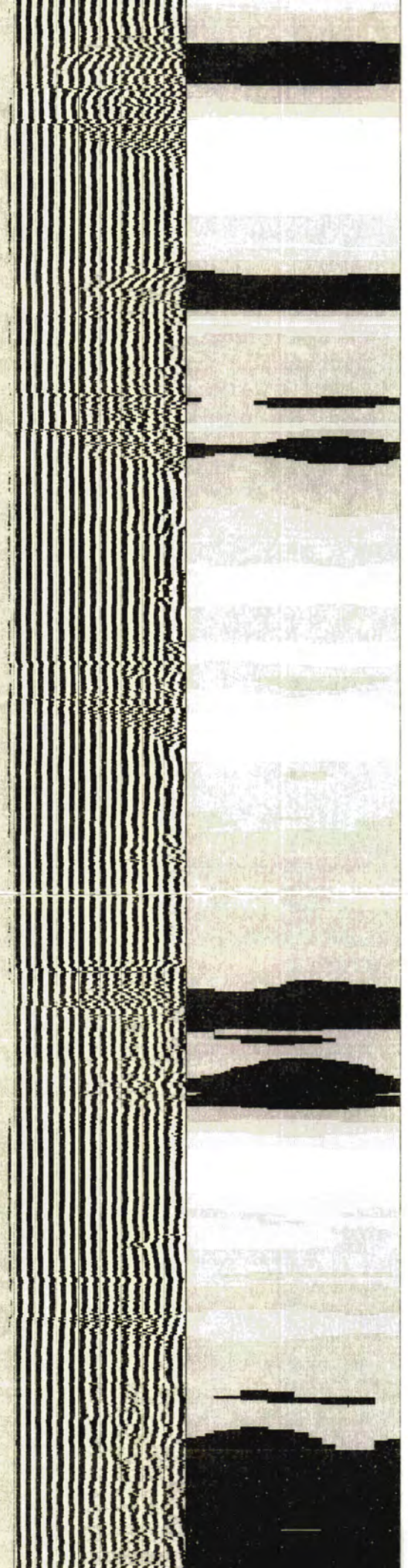
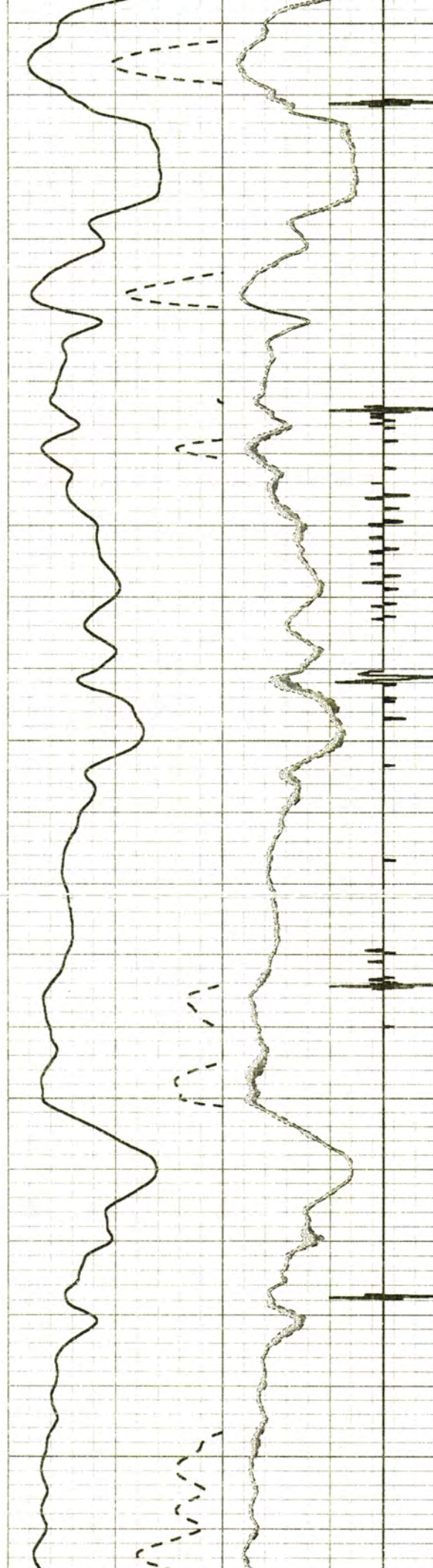
2650

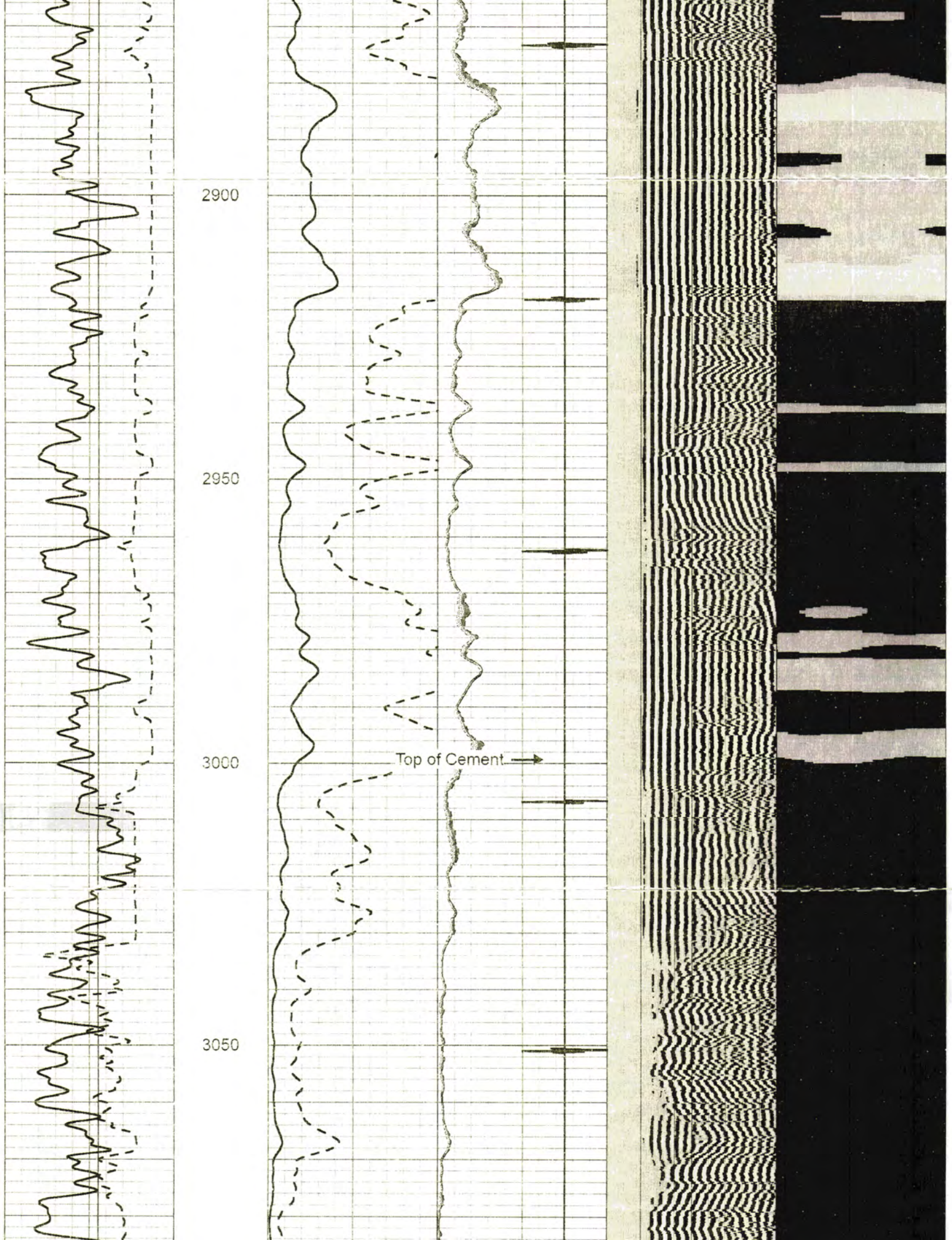
2700

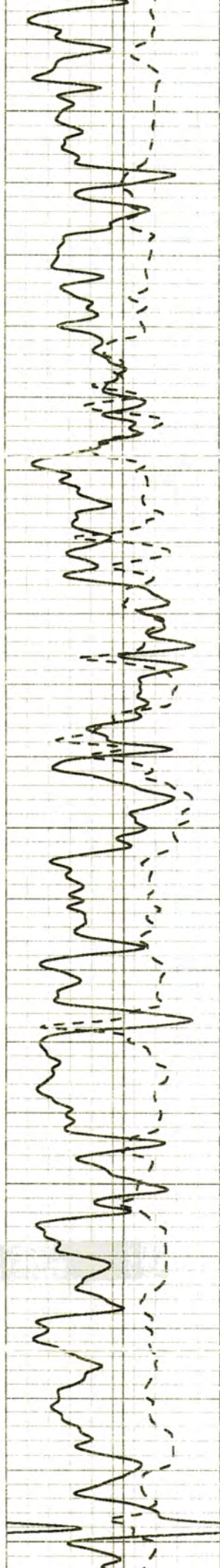
2750

2800

2850







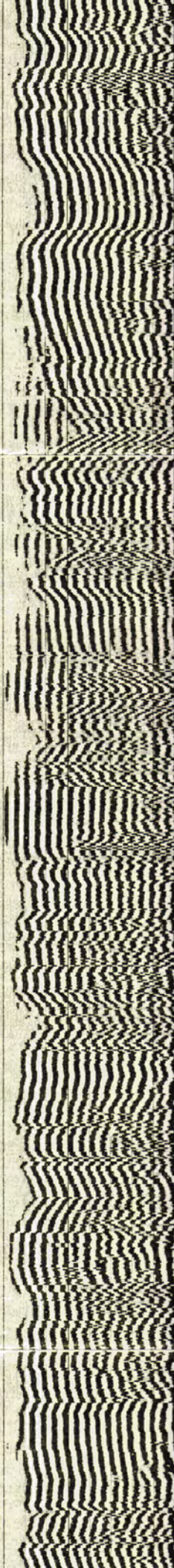
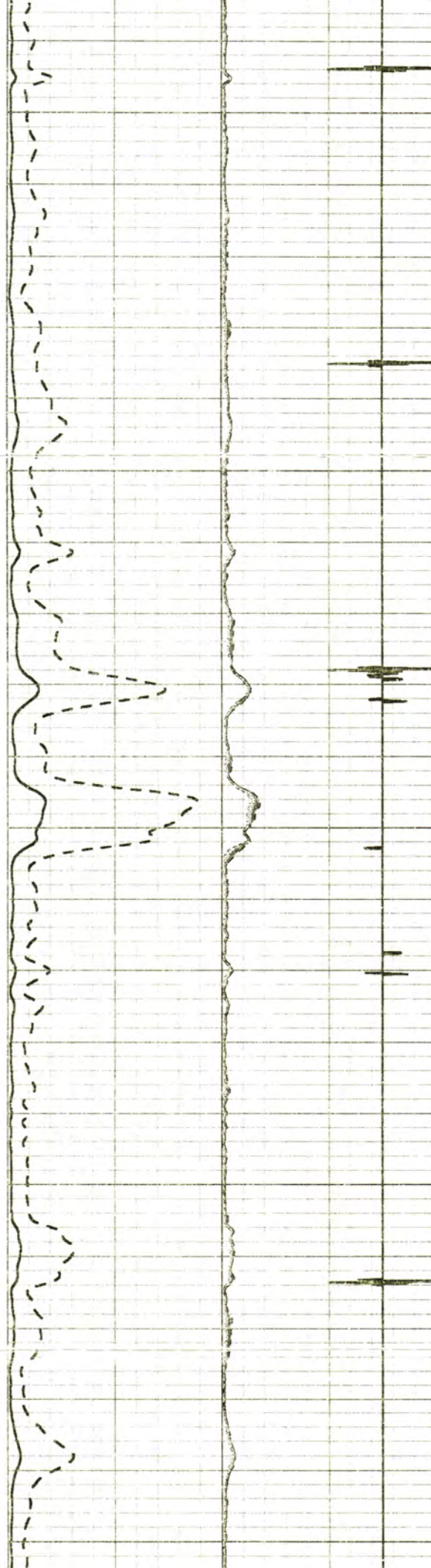
3100

3150

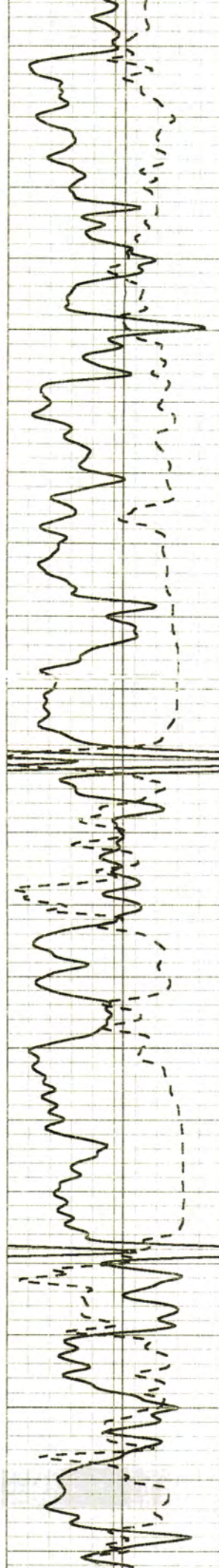
3200

3250

3300



1

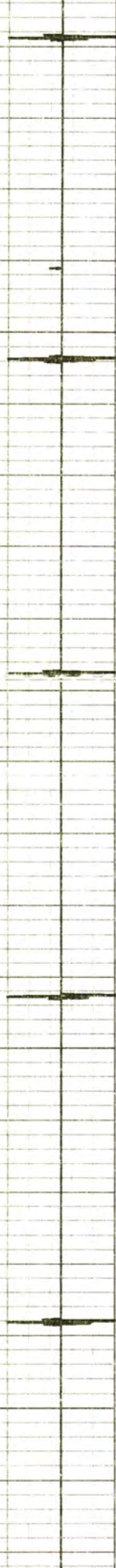
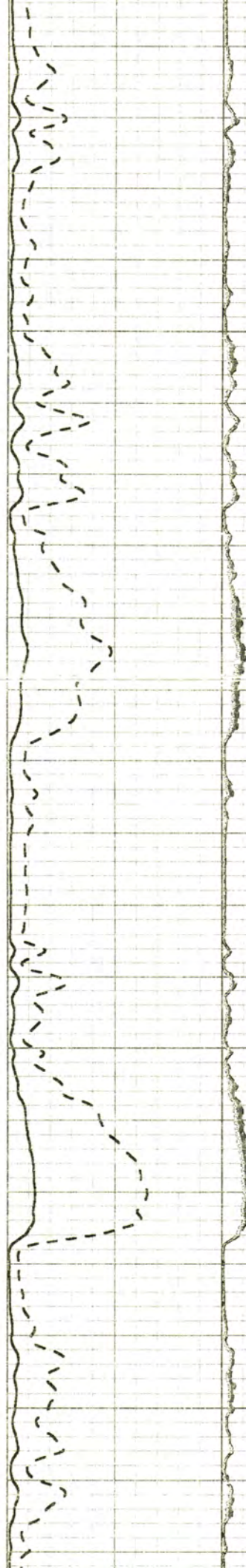


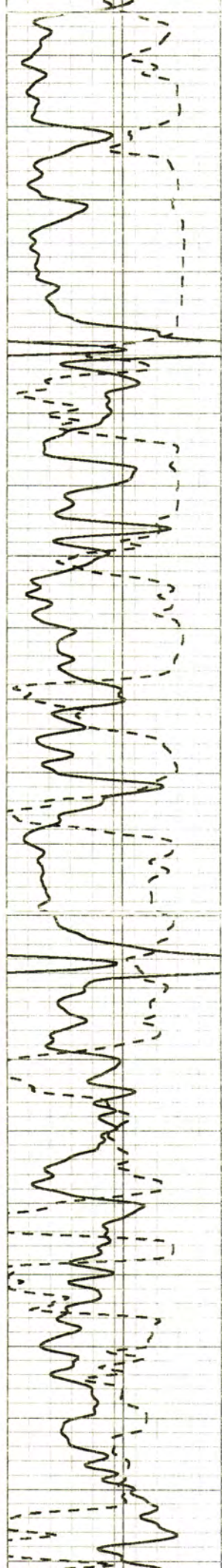
3350

3400

3450

3500



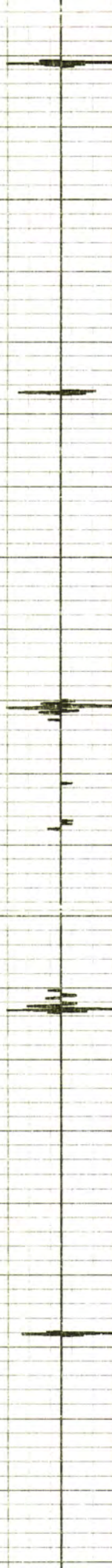


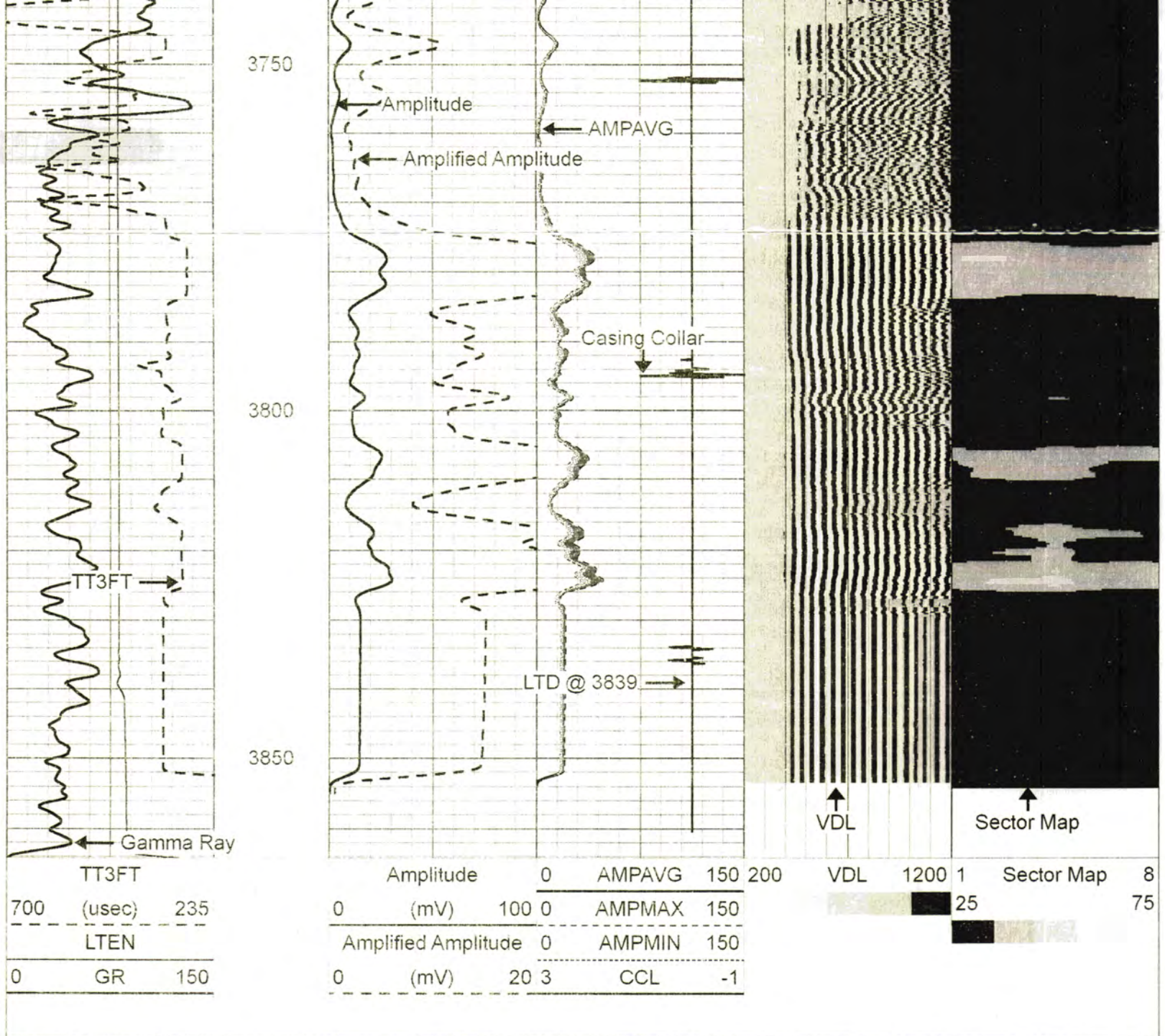
3550

3600

3650

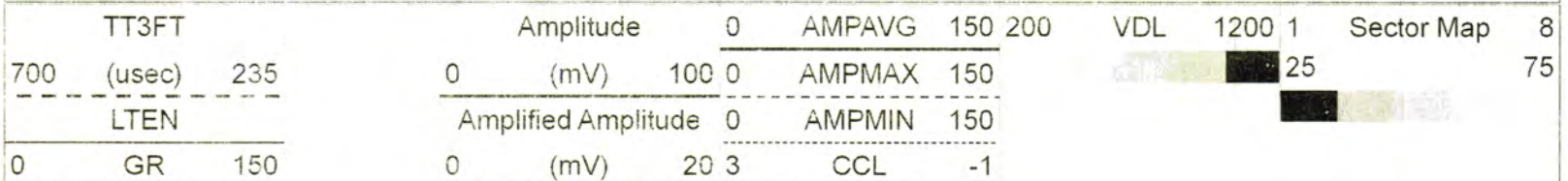
3700

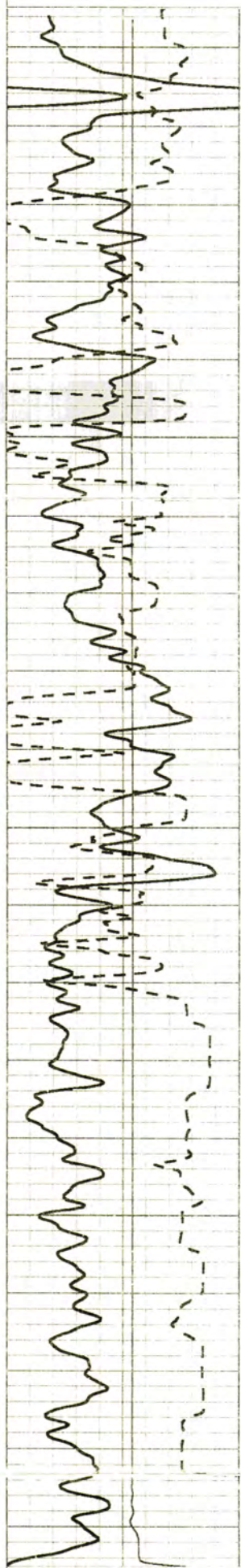




Repeat Section

Database File: herman-loeb-sgrcbl.db
 Dataset Pathname: sgrcbl/pass1.1
 Presentation Format: scbl
 Dataset Creation: Wed May 07 08:26:31 2014 by Calc 7.0 B1
 Charted by: Depth in Feet scaled 1:240



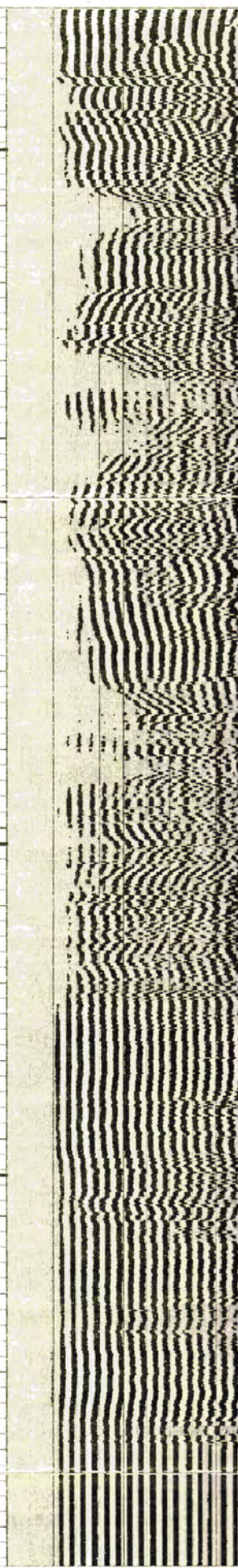


3650

3700

3750

3800



TT3FT
700 (usec) 235
LTEN

Amplitude 0 100 150 200
(mV)
0 100 150
Amplified Amplitude 0 150
AMPAVG 150 200
AMPMAX 150
AMPMIN 150

VDL 1200 1
25

Sector Map 8 75

0	GR	150	0	(mV)	20 3	CCL	-1
---	----	-----	---	------	------	-----	----