



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

**COMPENSATED
DENSITY / NEUTRON
PE LOG**

Company		WOOLSEY OPERATING CO. LLC.	
Well		CUNDIFF A-1	
Field		HARDTNER	
County		BARBER	
State		KANSAS	
Company		WOOLSEY OPERATING COMPANY, LLC.	
Well		CUNDIFF A-1	
Field		HARDTNER	
County		BARBER	
State		KANSAS	
Location:		API # : 15-007-240555-0000	
SEC 25 TWP 34S RGE 13W		DIL	
1025' FNL & 2170' FEL			
Permanent Datum		GROUND LEVEL	
Log Measured From		KELLY BUSHING 12' A.G.L.	
Drilling Measured From		KELLY BUSHING	
Elevation		1501	
K.B. 1513			
D.F. 1511			
G.L. 1501			
Date	9/4/13		
Run Number	ONE		
Depth Driller	5525		
Depth Logger	5525		
Bottom Logged Interval	5501		
Top Log Interval	1600		
Casing Driller	13 3/8" @ 223'		
Casing Logger	225		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 5,000 PPM	
Density / Viscosity	9.1/53		
pH / Fluid Loss	10.0/9.2		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.650 @ 100F		
Rmf @ Meas. Temp	.488 @ 100F		
Rmc @ Meas. Temp	.780 @ 100F		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	.500 @ 130F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	2:30 P.M.		
Maximum Recorded Temperature	130F		
Equipment Number	4854		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	BILL KLAVER		

<<< 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 "NABORS" HAYS, KANSAS (785) 628-6395
DIRECTIONS

MEDICINE LODGE, KS., 2.6 W. ON HWY 160 TO "GYF HILL RD.", 16S. TO "RATTLESNAKE RD., .6 MILE.
E. & S. TO LEASE RD. E. INTO

Database File:

011665pe.db

Dataset Pathname:

pass3.5

Presentation Format:

ldt_neu

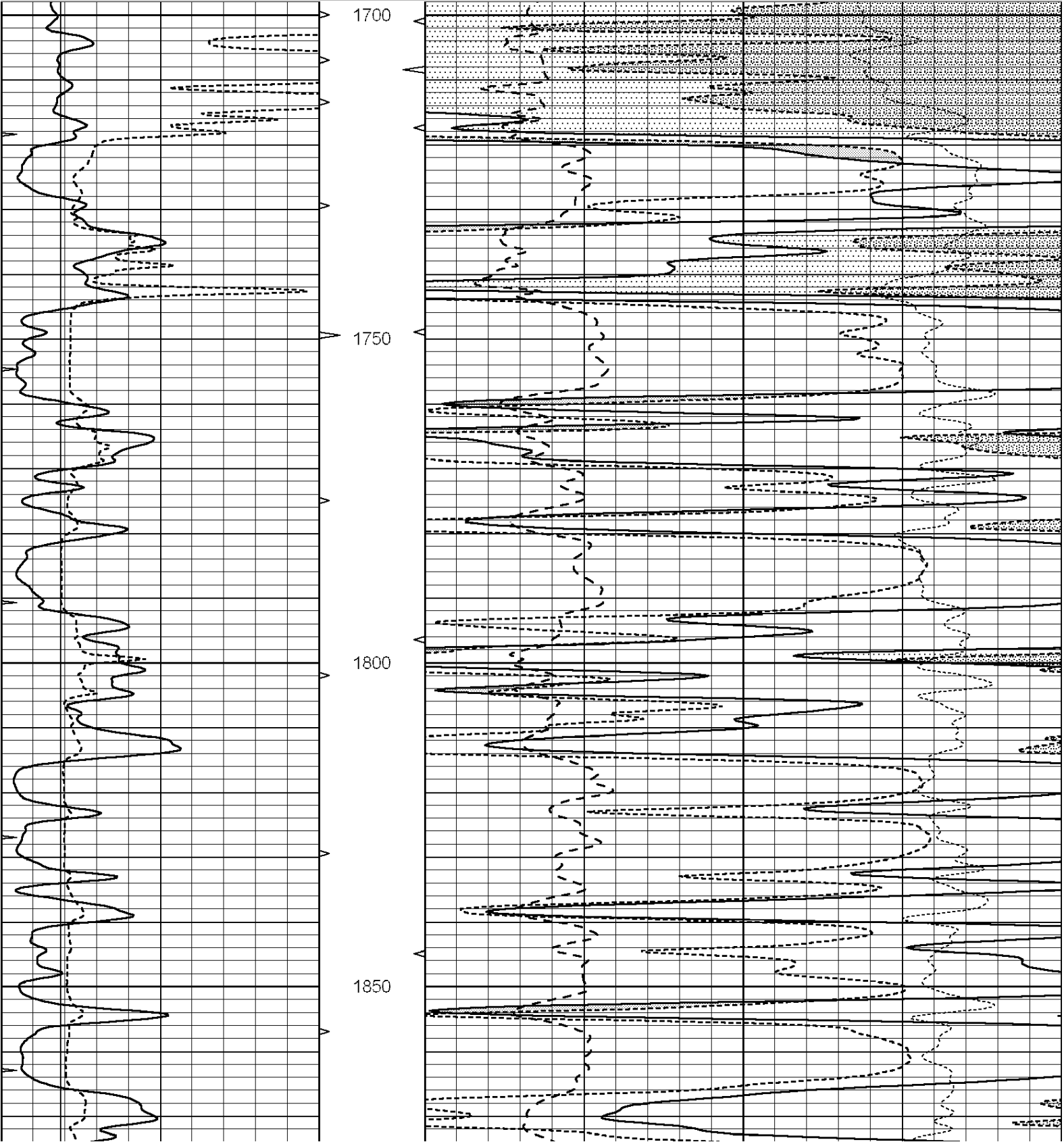
Dataset Creation:

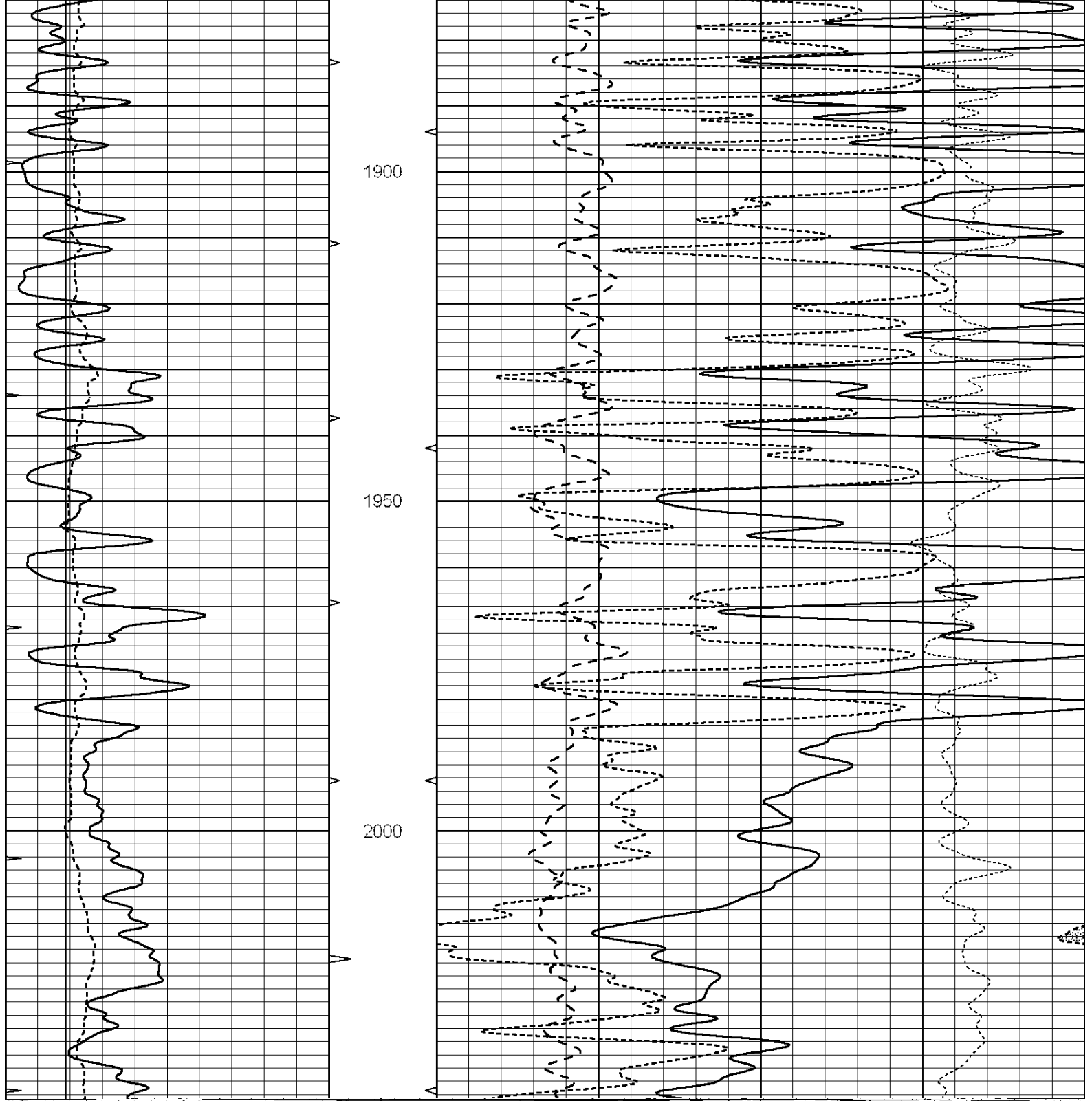
Wed Sep 04 16:43:18 2013 by Calc SOC 120430

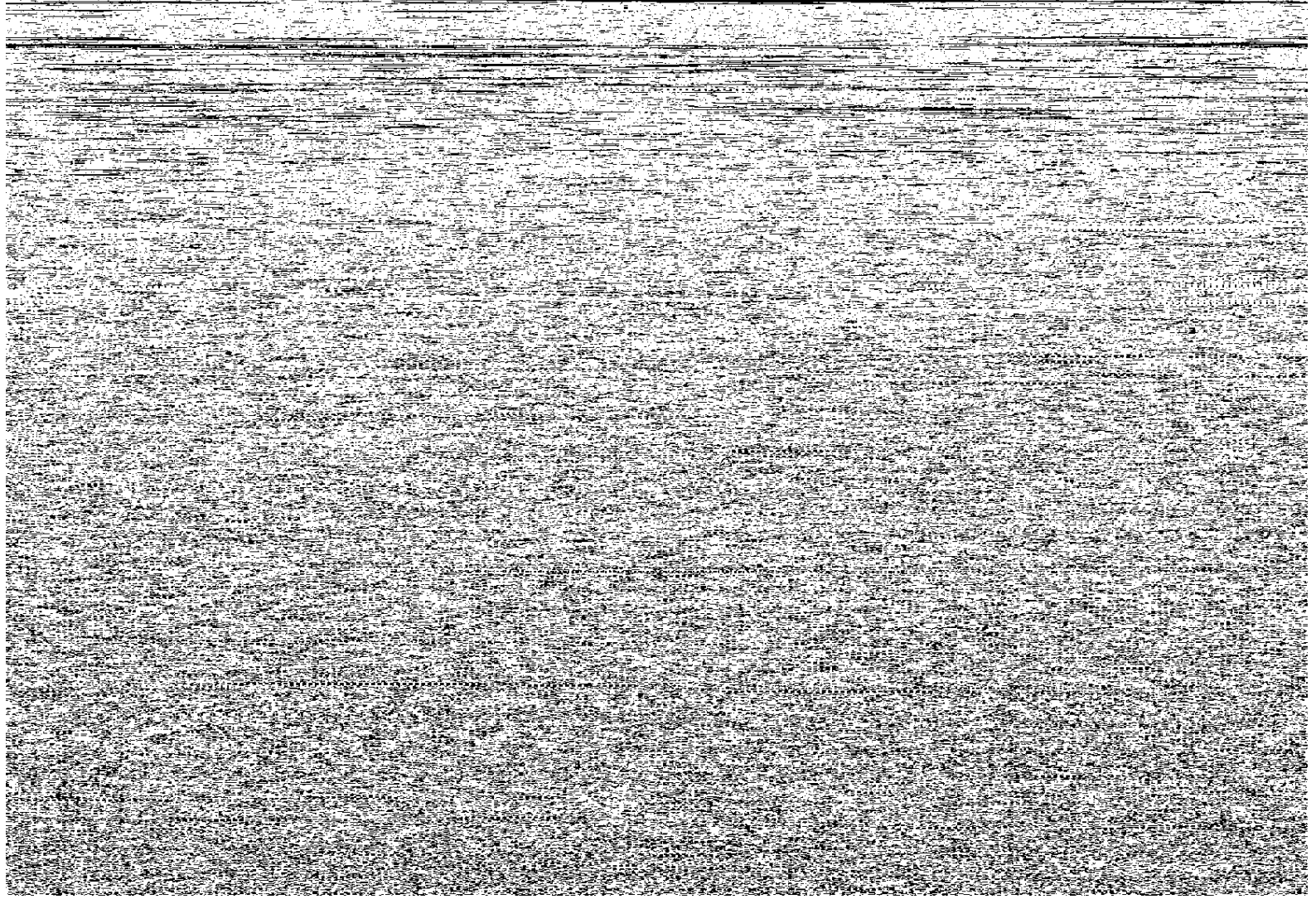
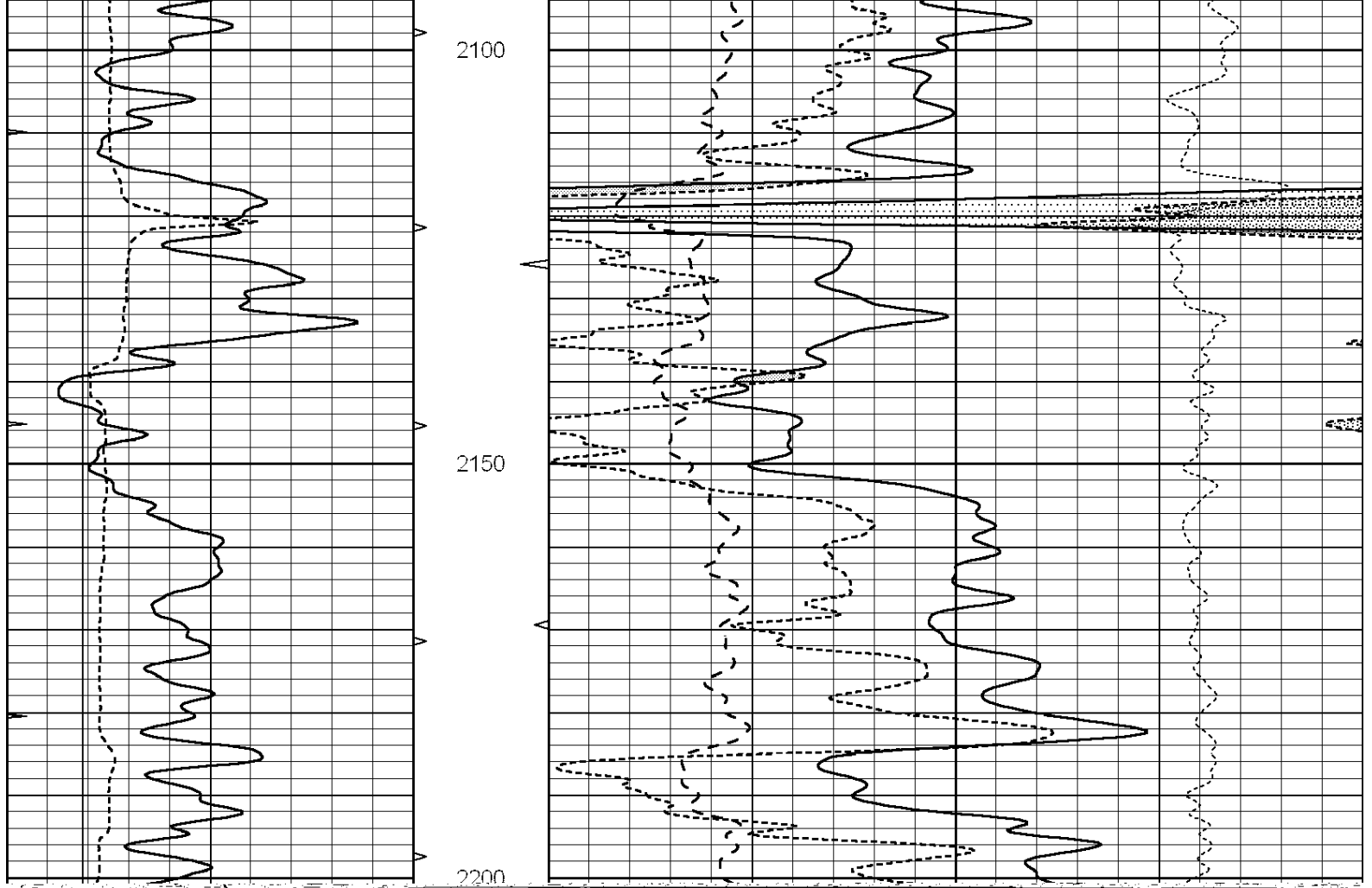
Charted by:

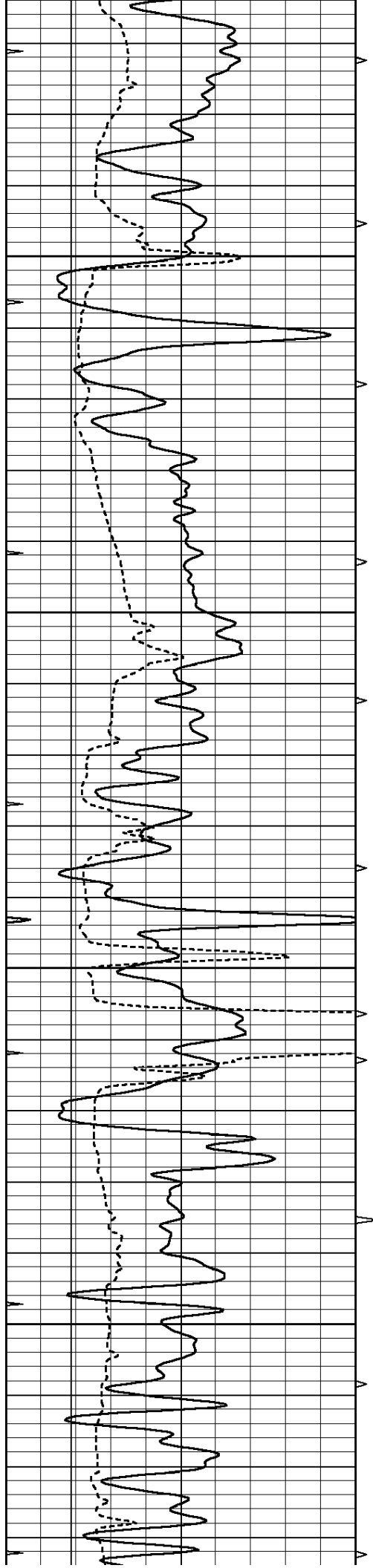
Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)				-10	
6	CALIPER (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)				-10
0	MINMK	20	TBHV	0	PE	10	-0.25	CORRECTION (g/cc)	0.25	
			0 (ft3)	10						







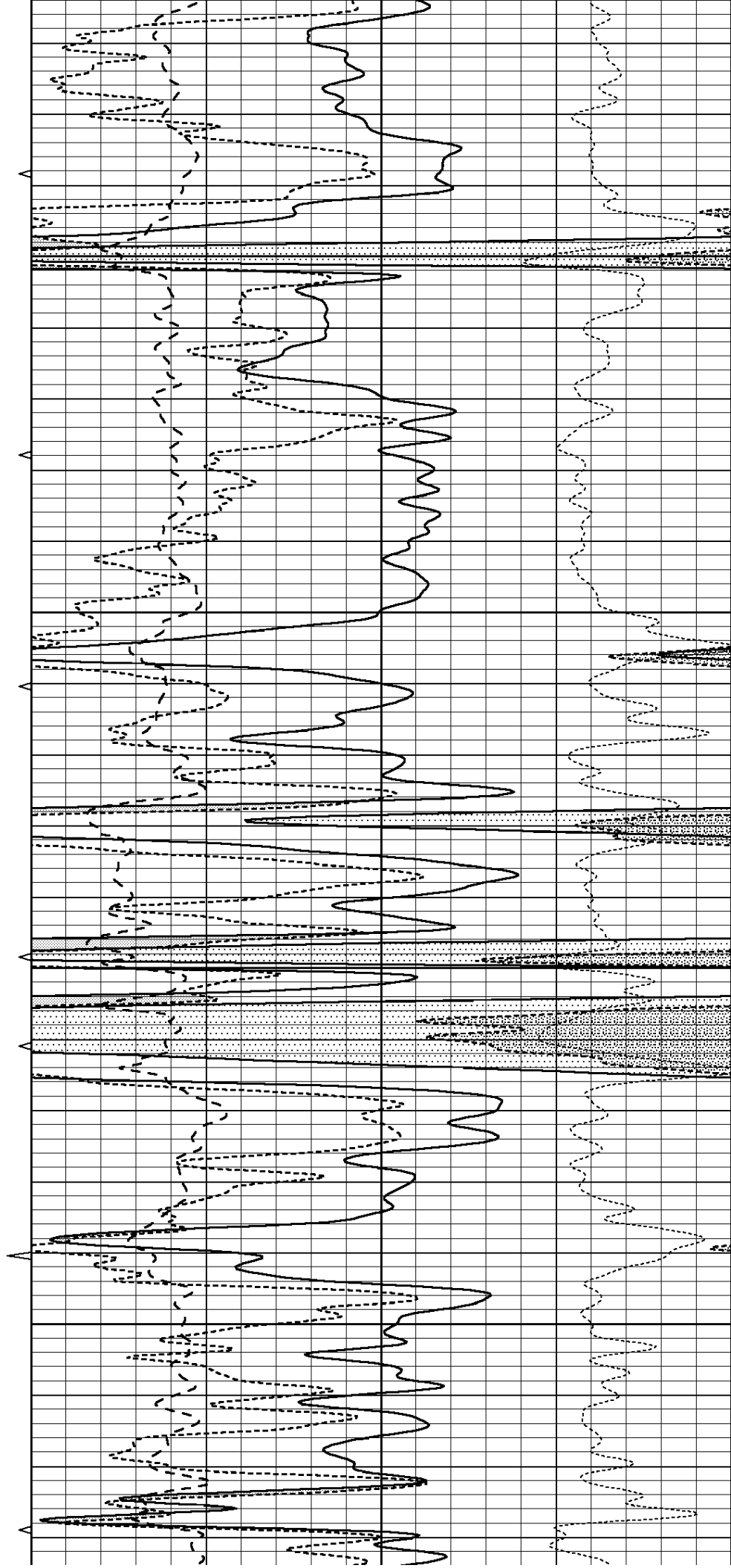


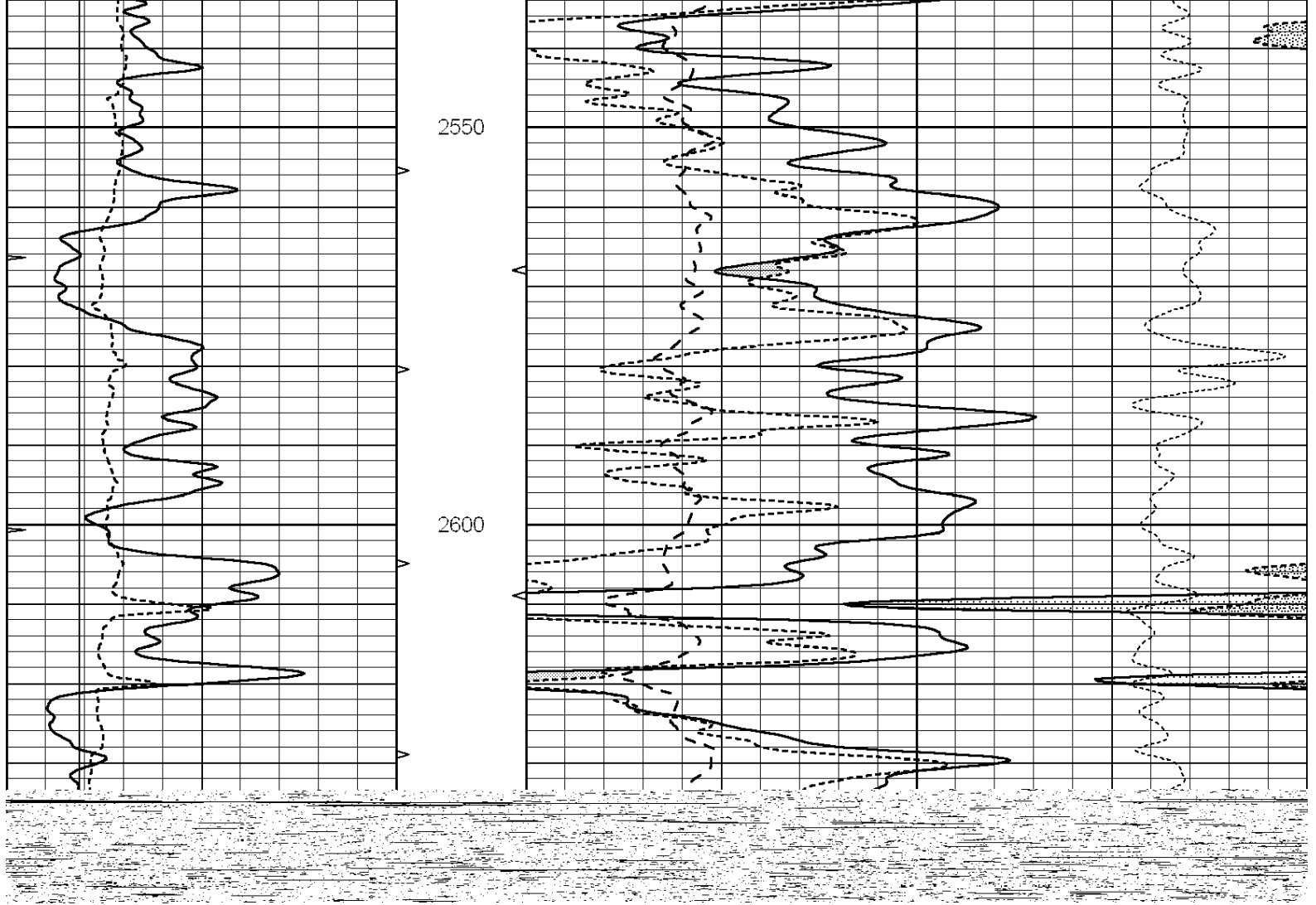
2350

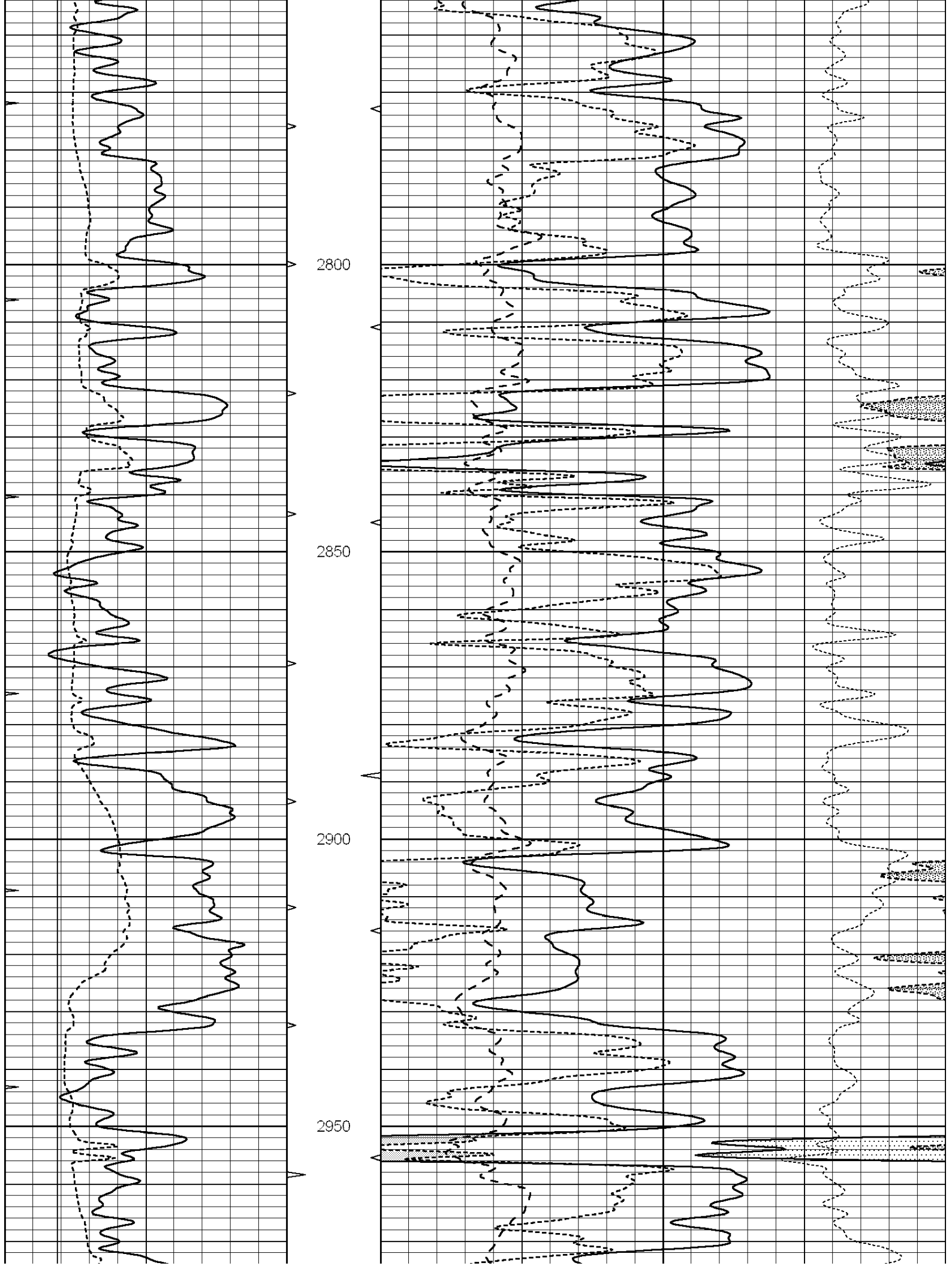
2400

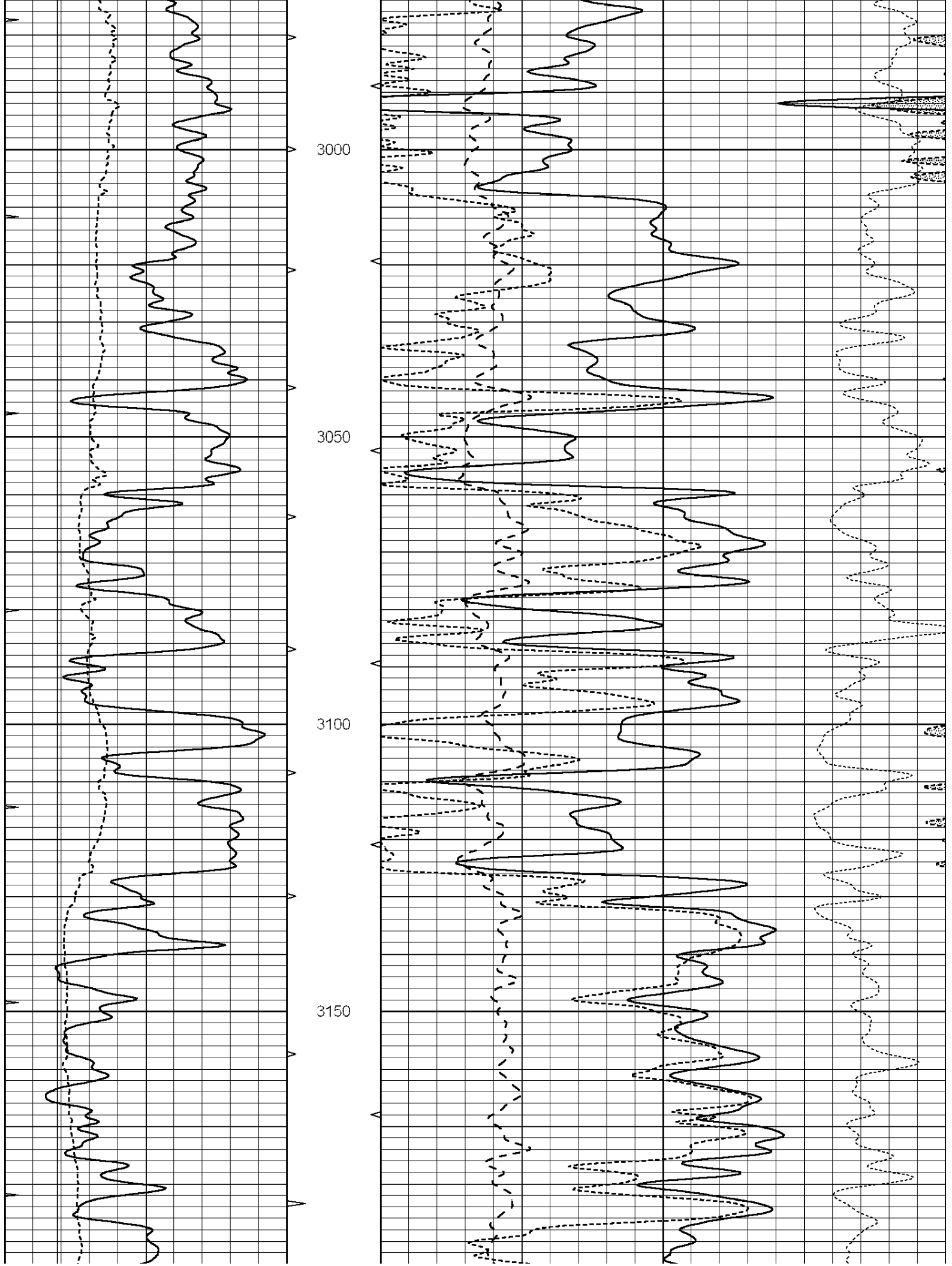
2450

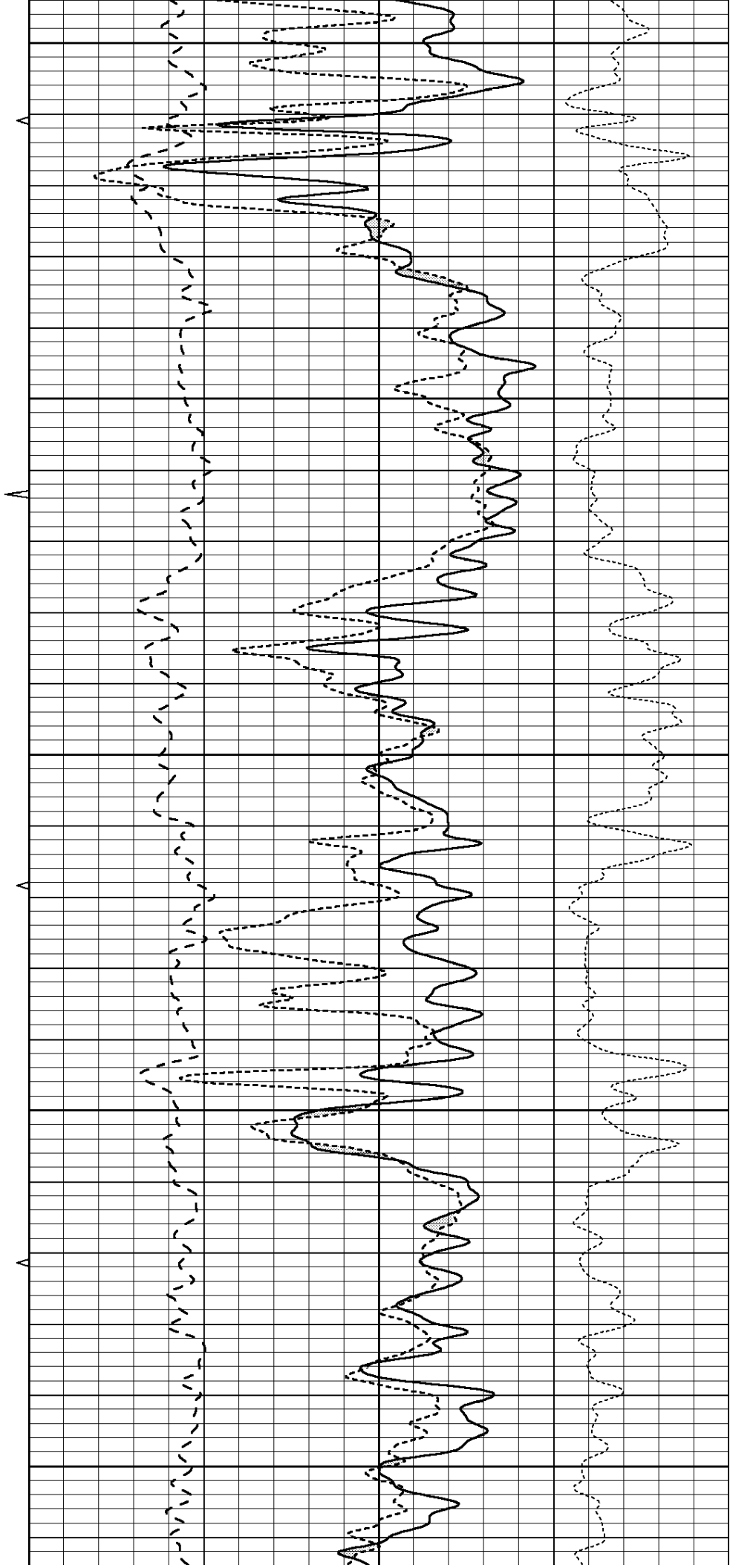
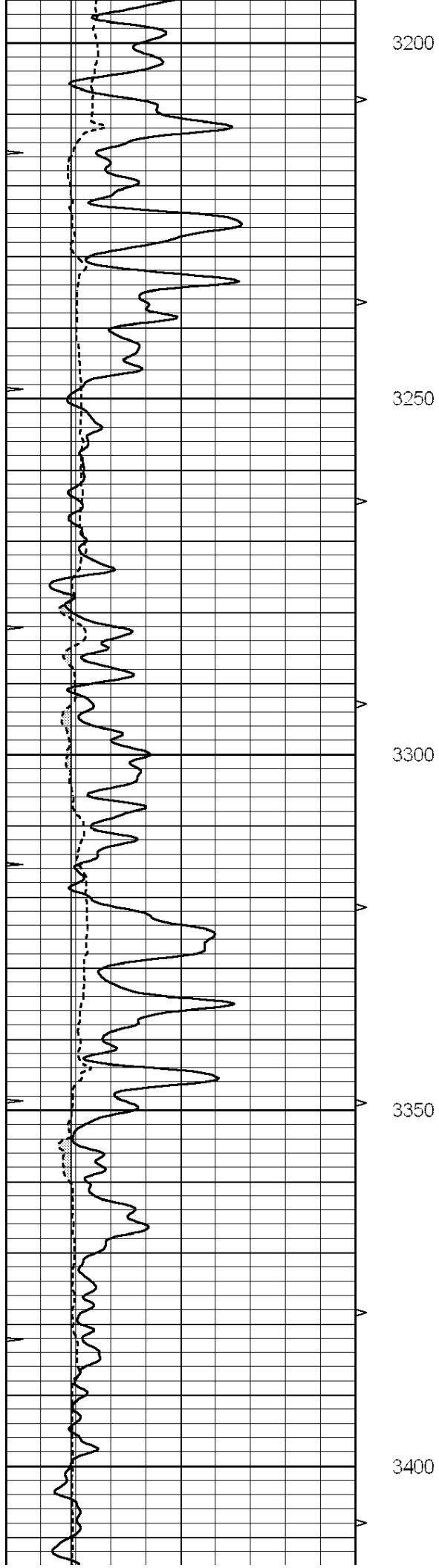
2500

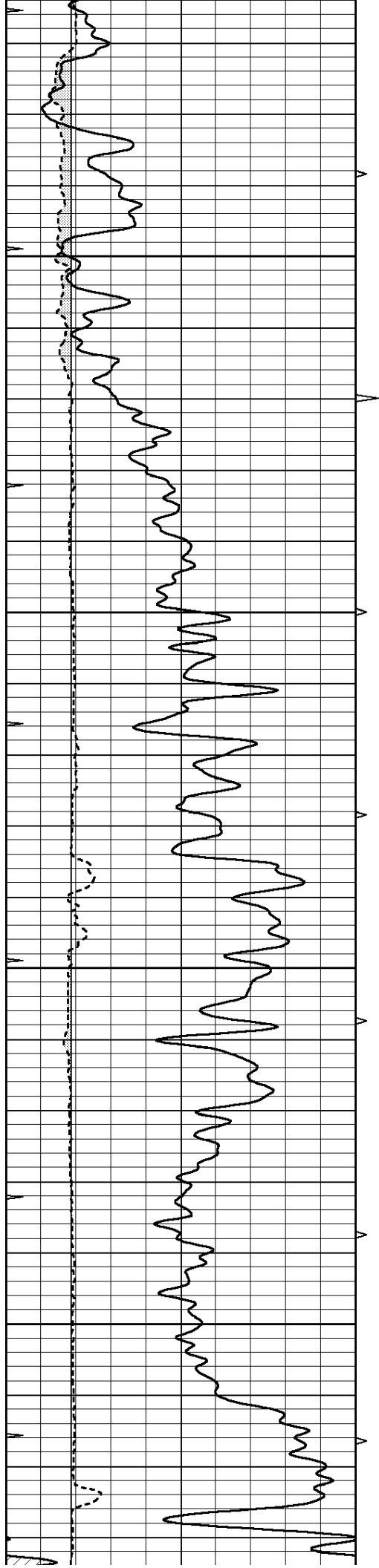










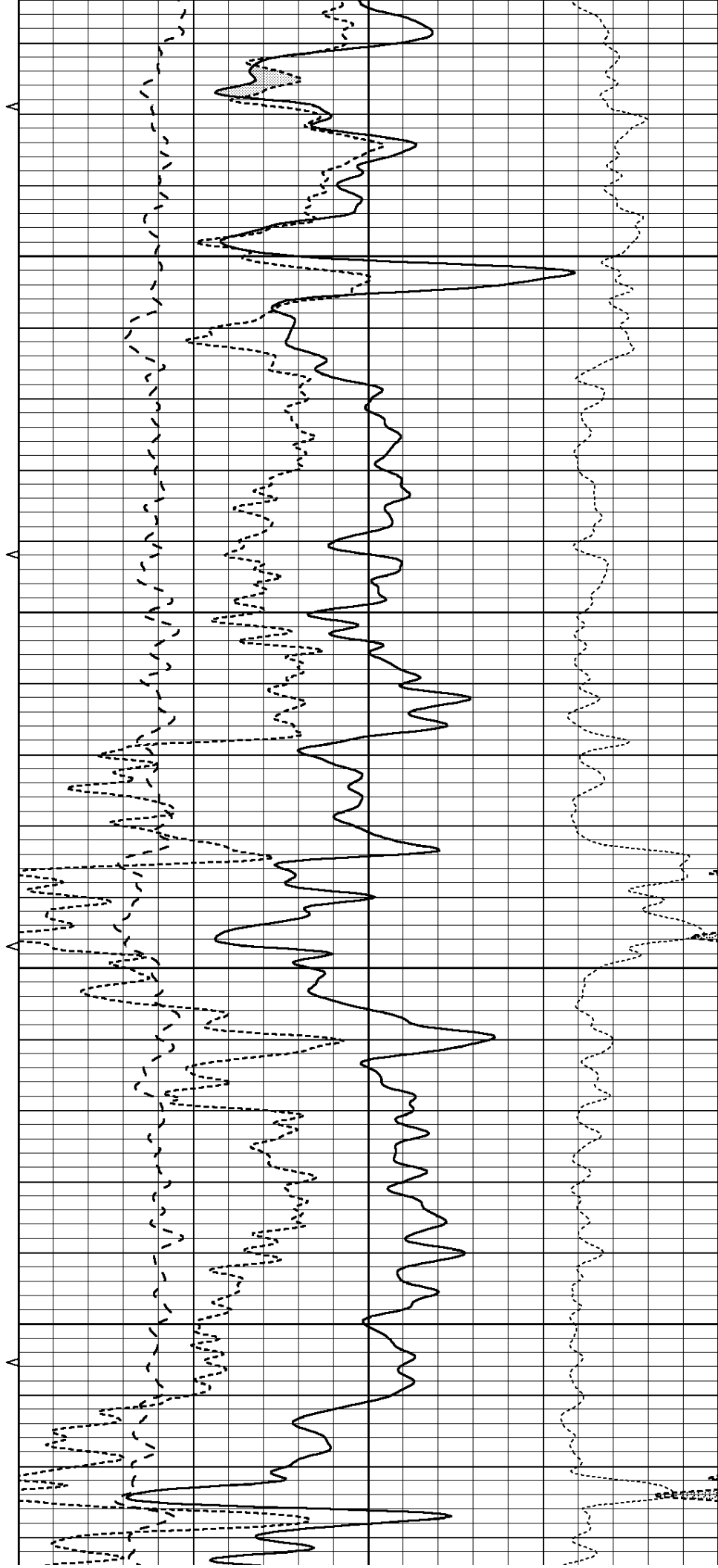


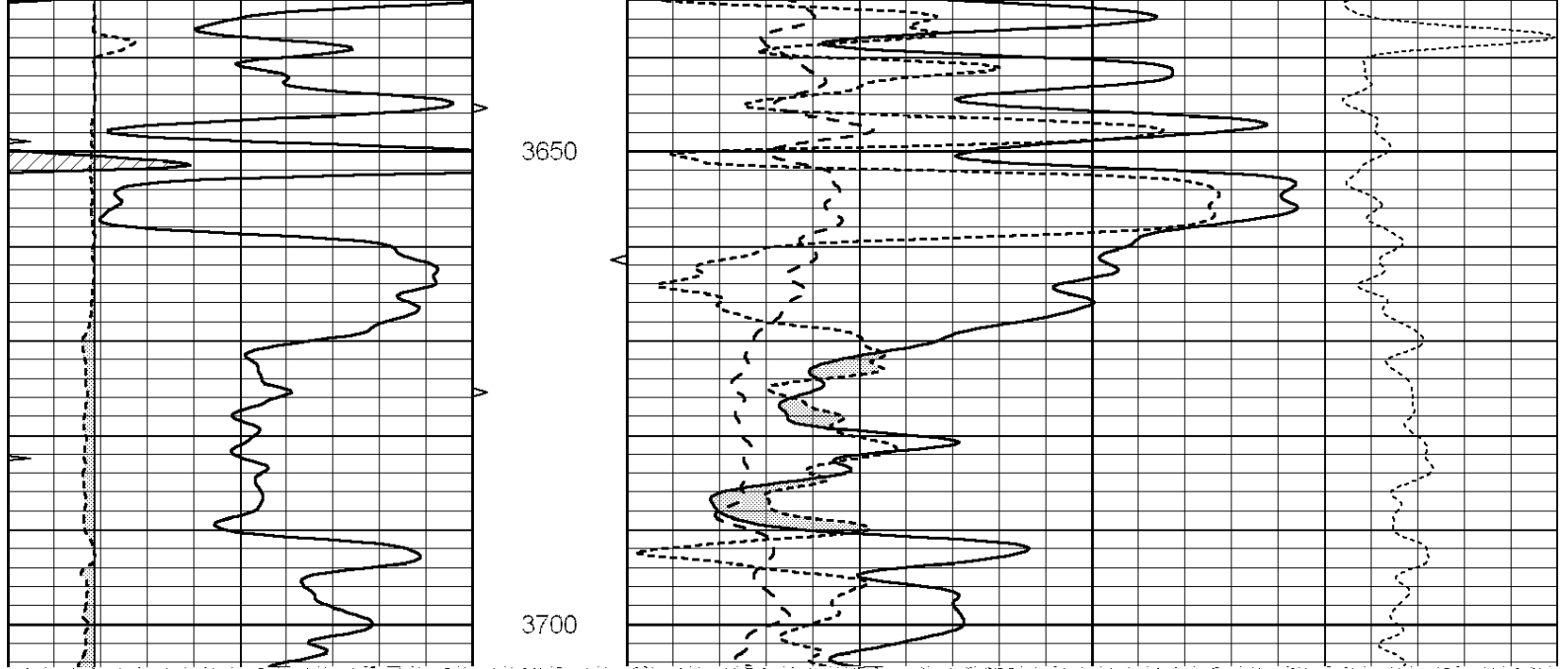
3450

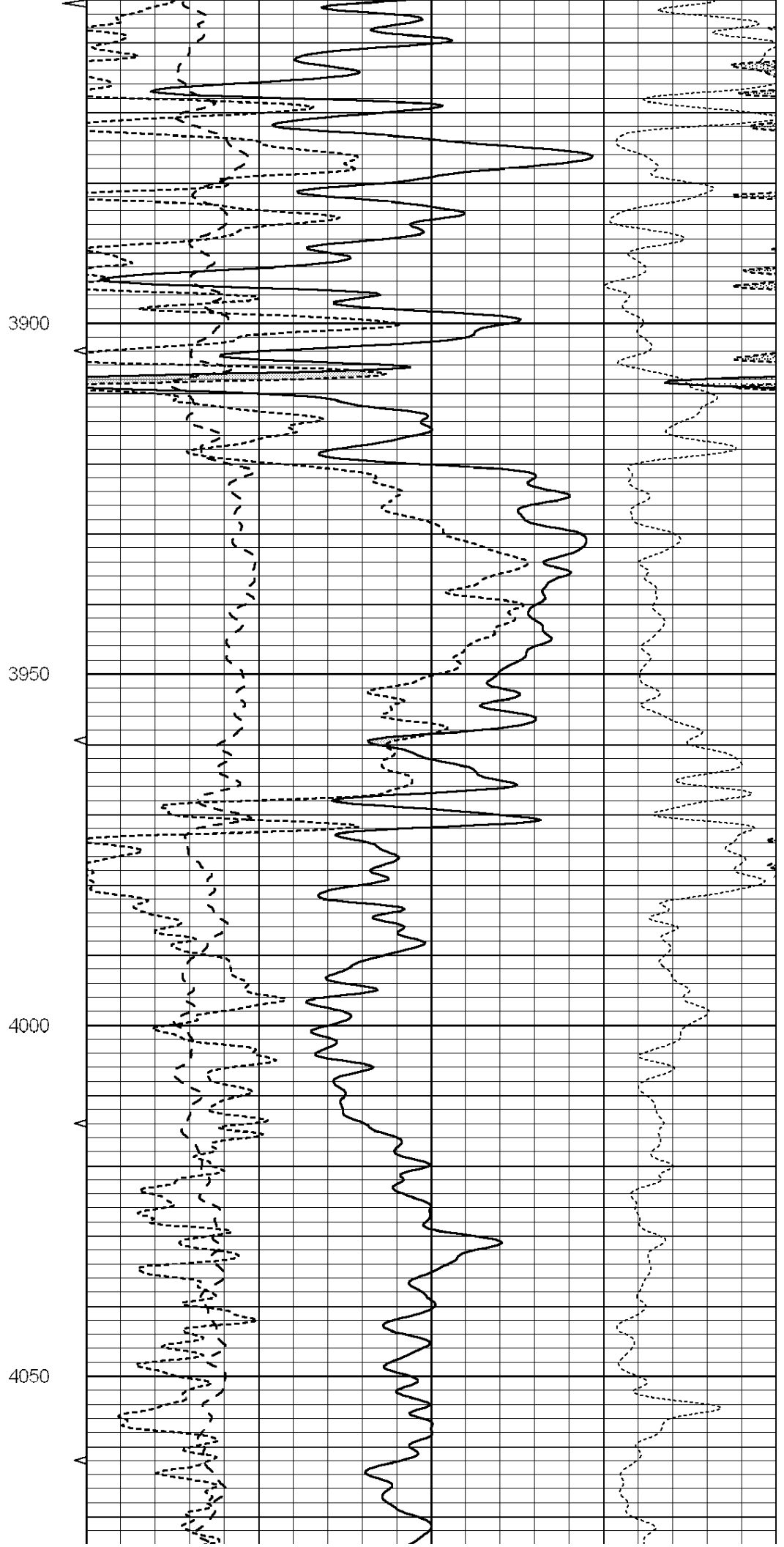
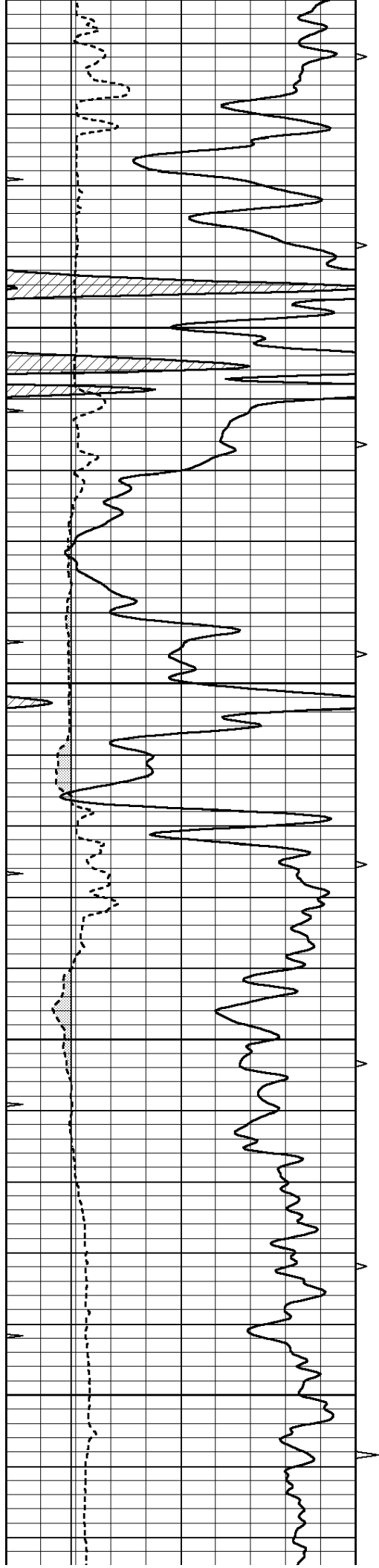
3500

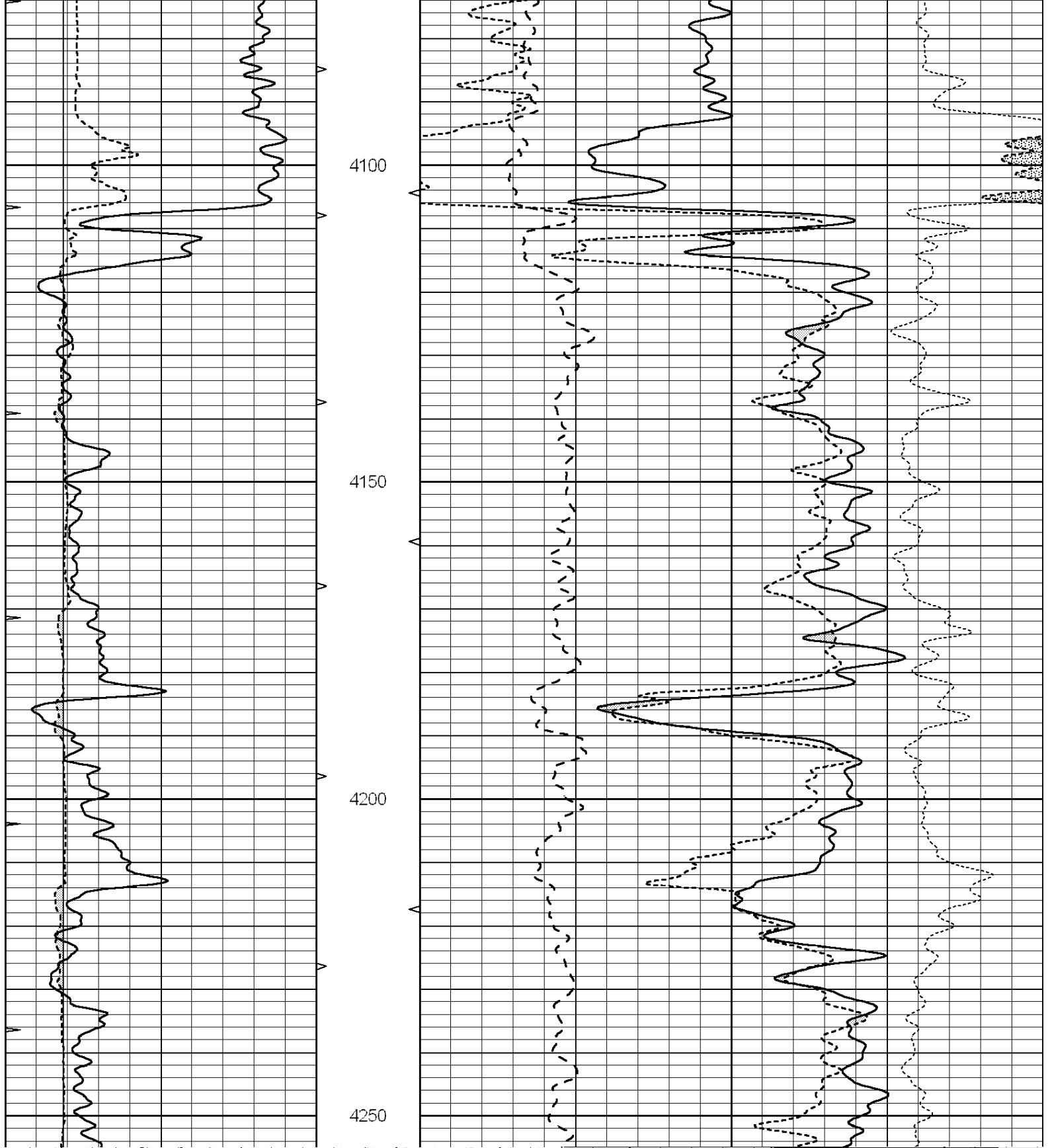
3550

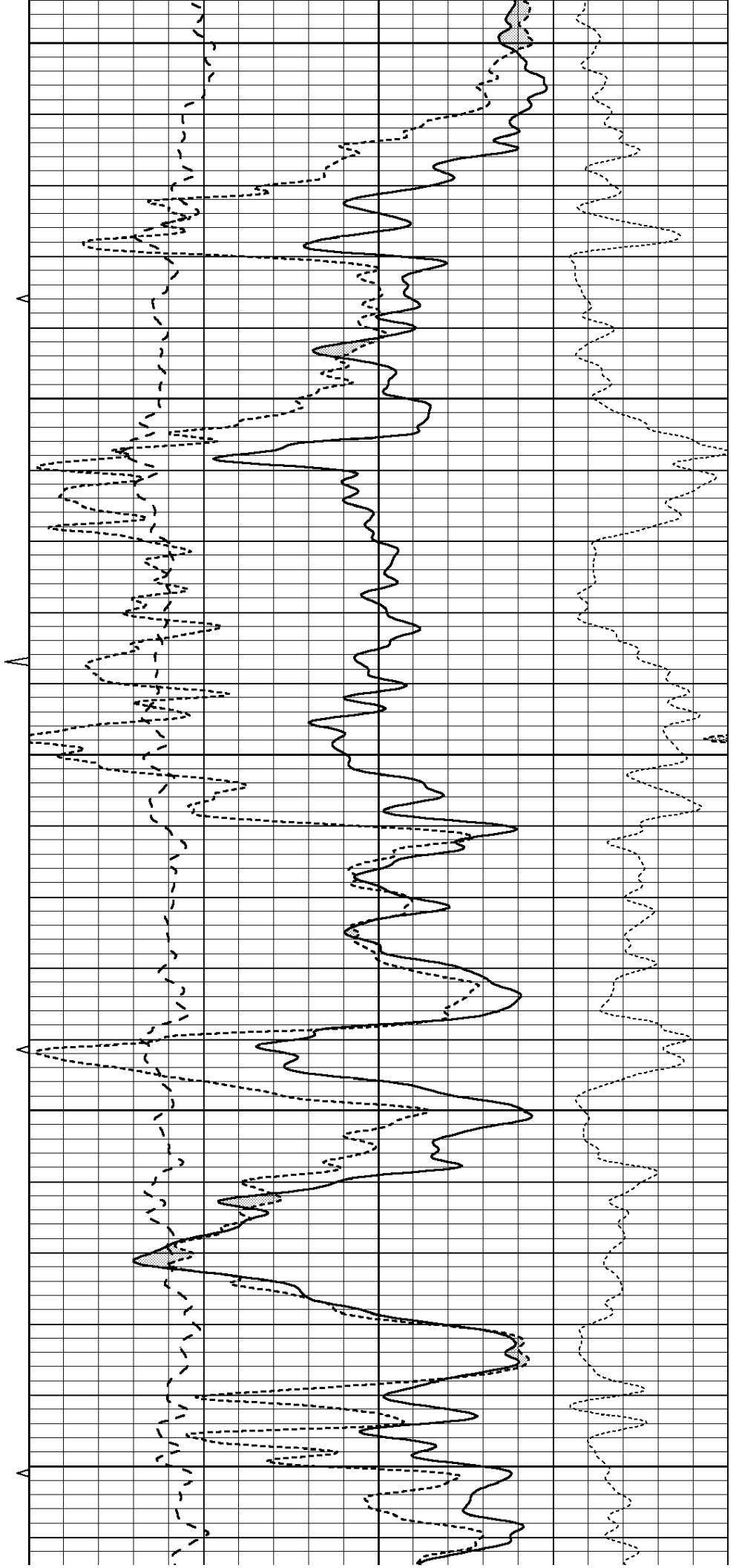
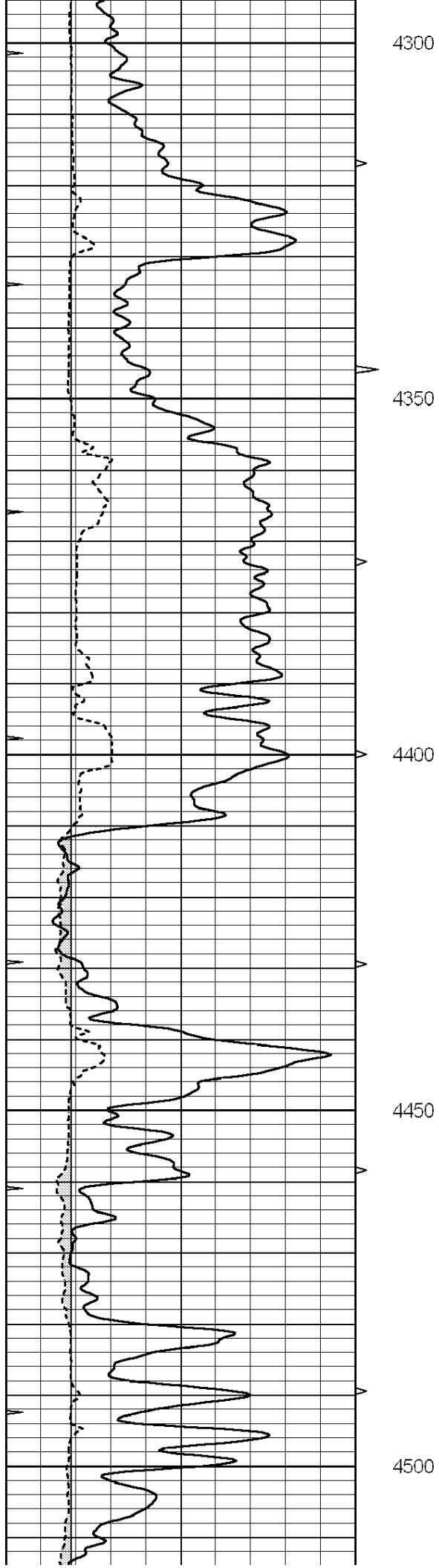
3600

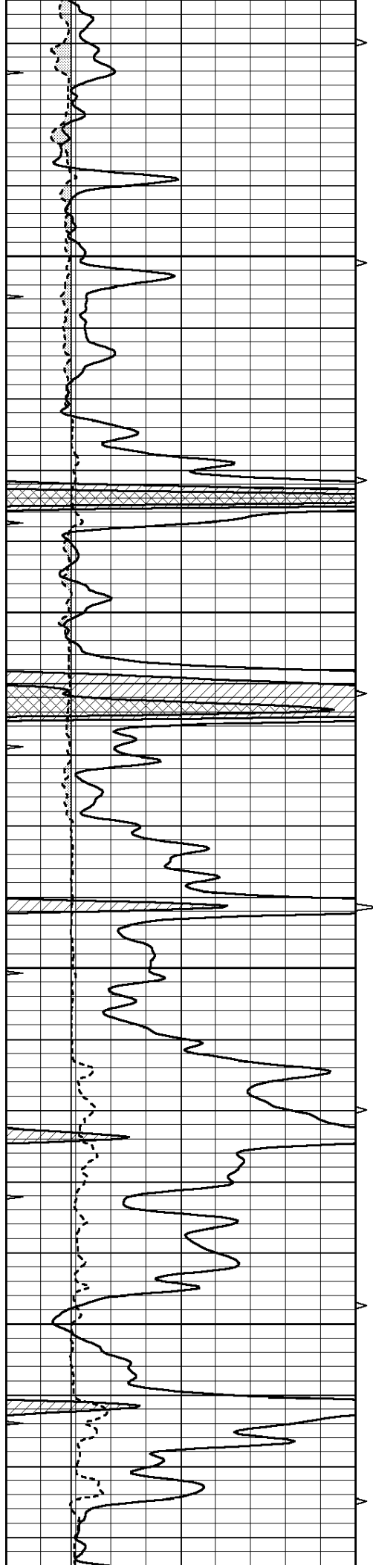










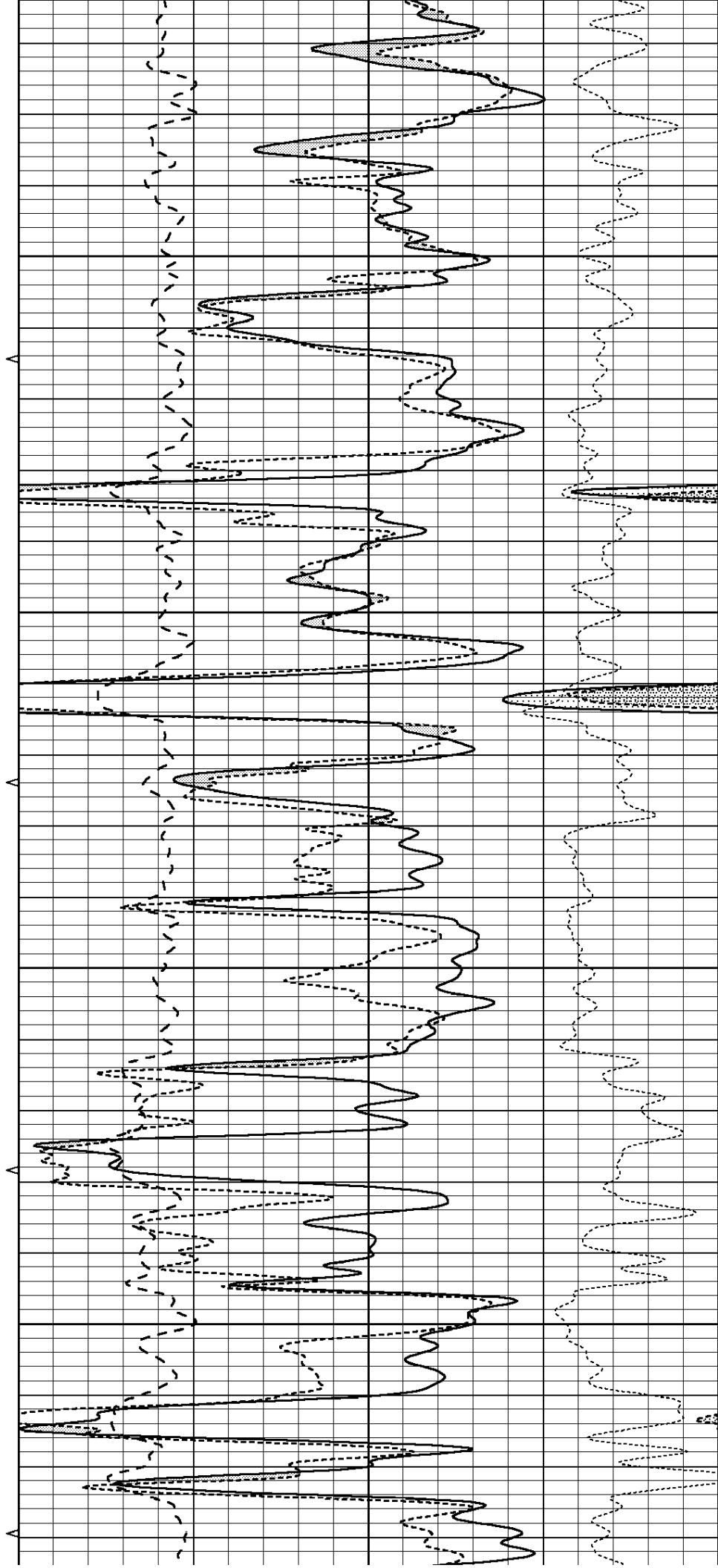


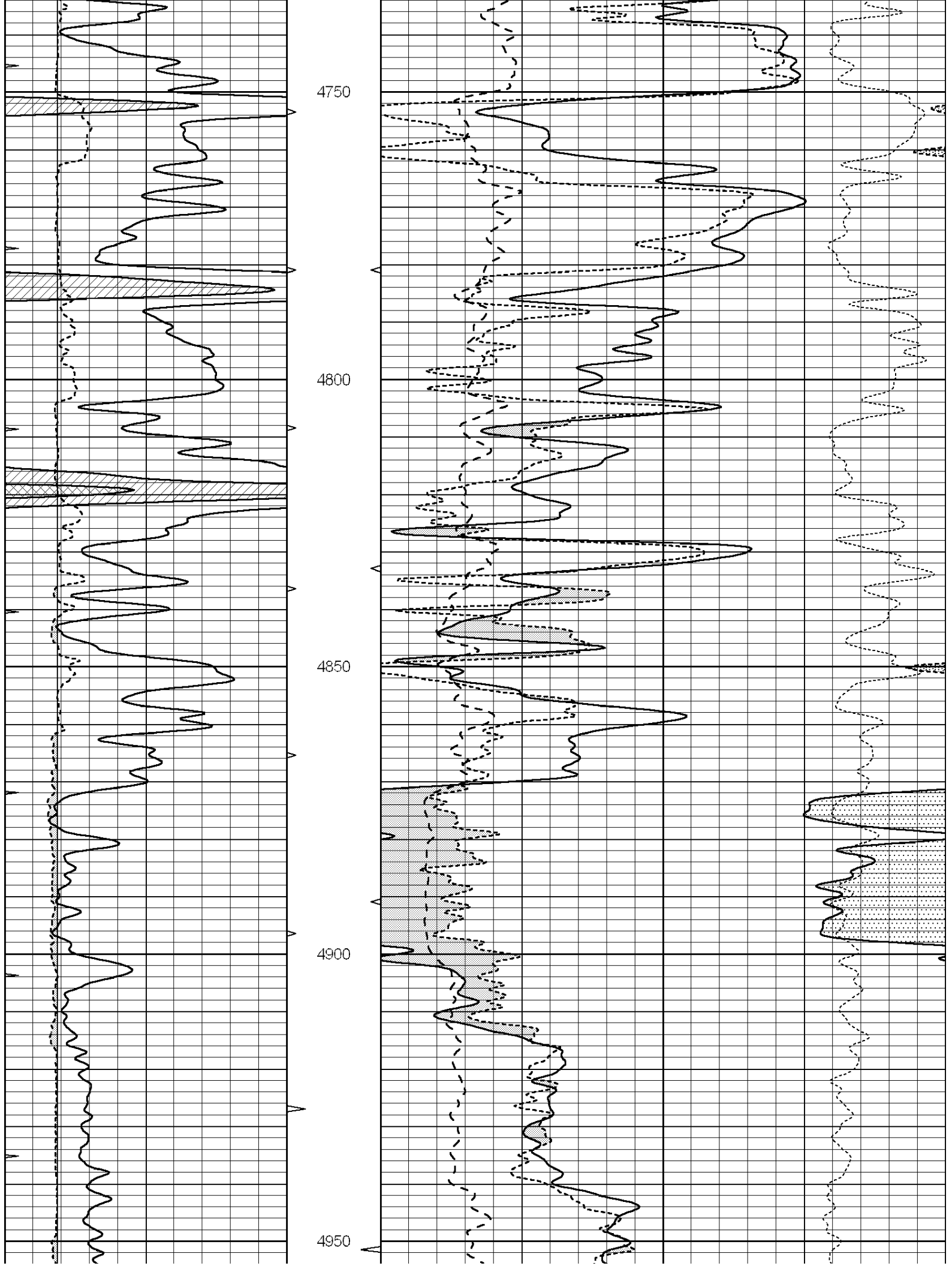
4550

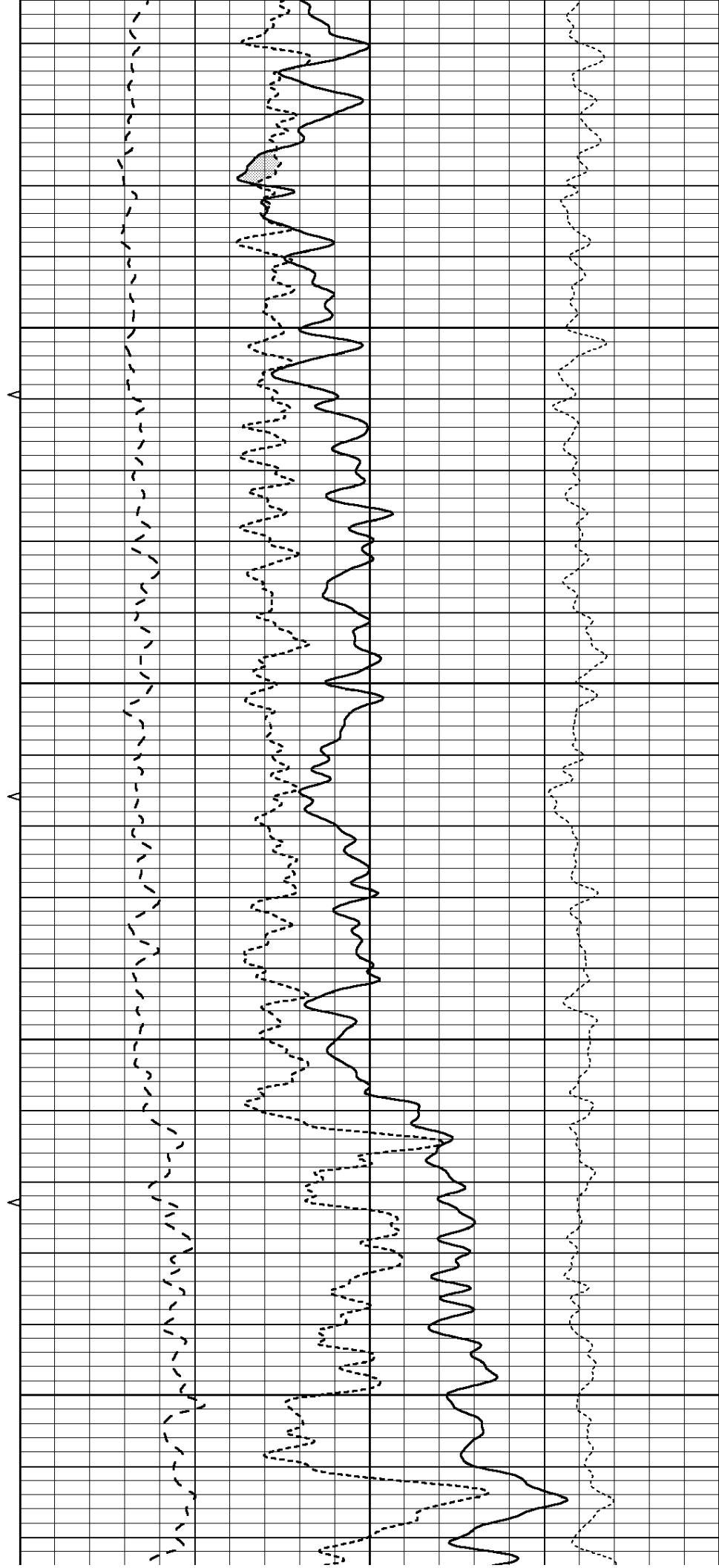
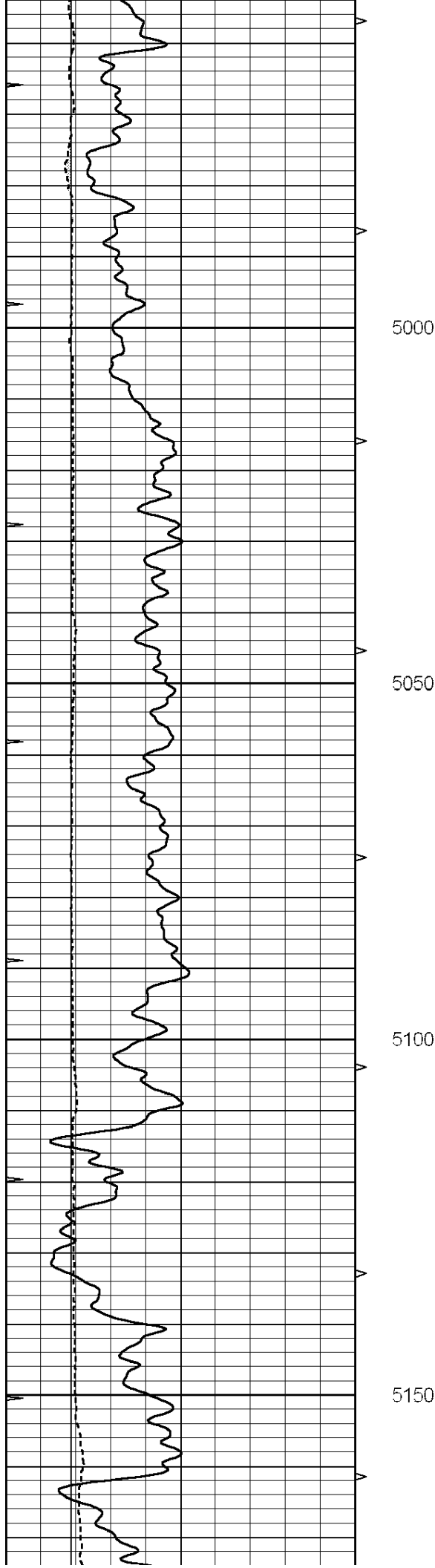
4600

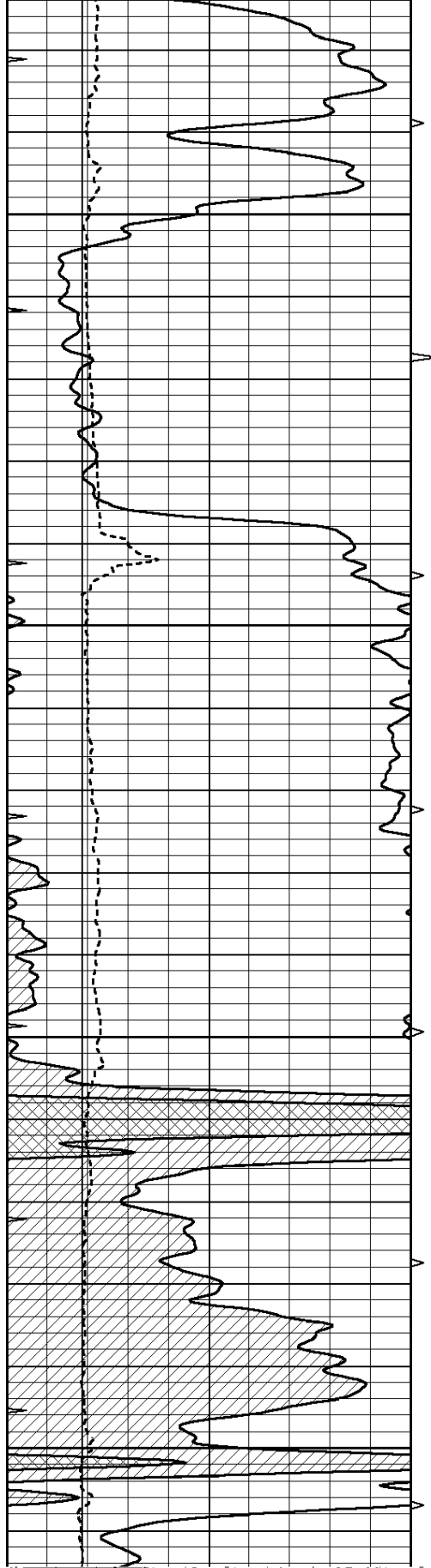
4650

4700







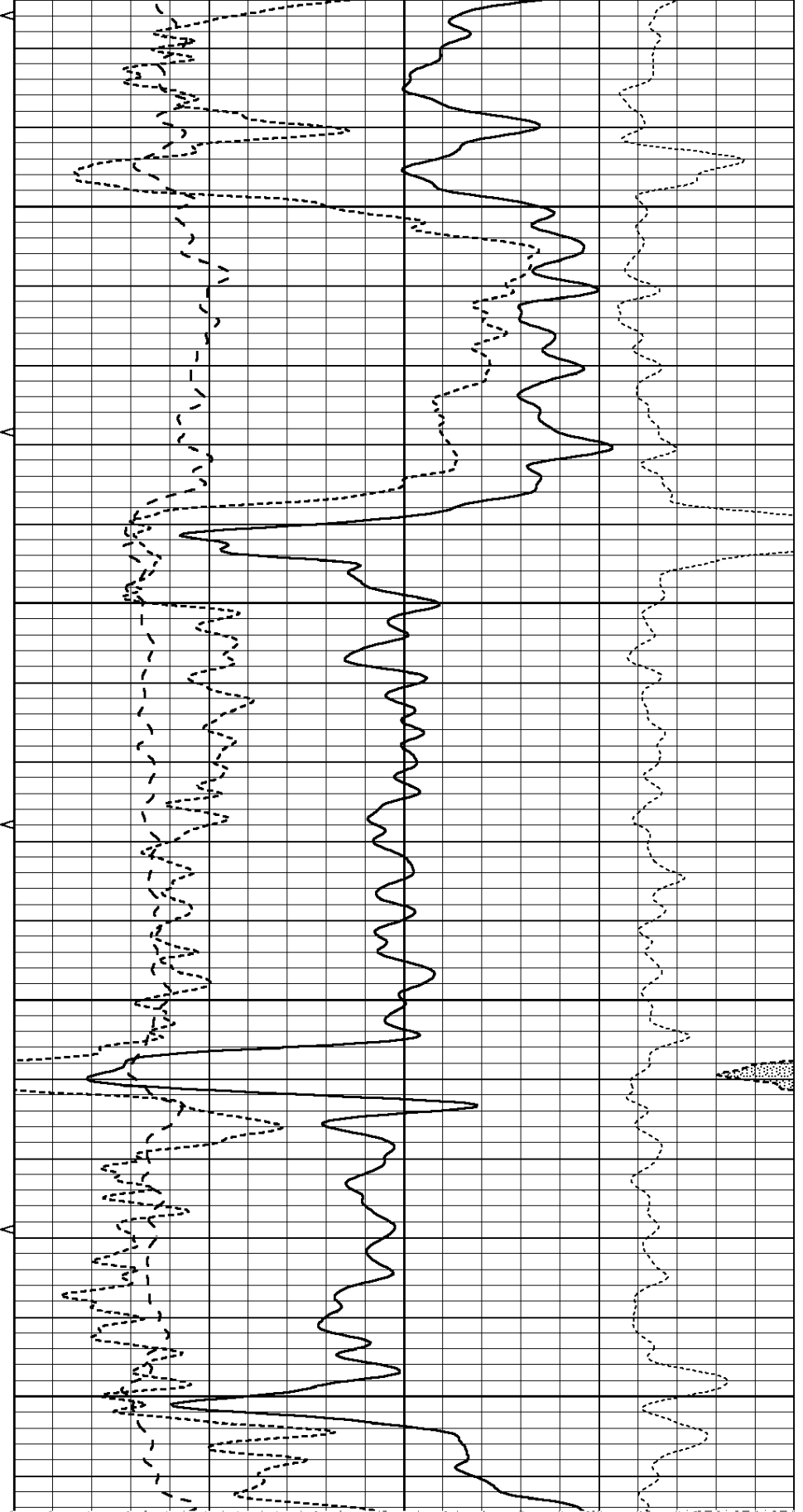


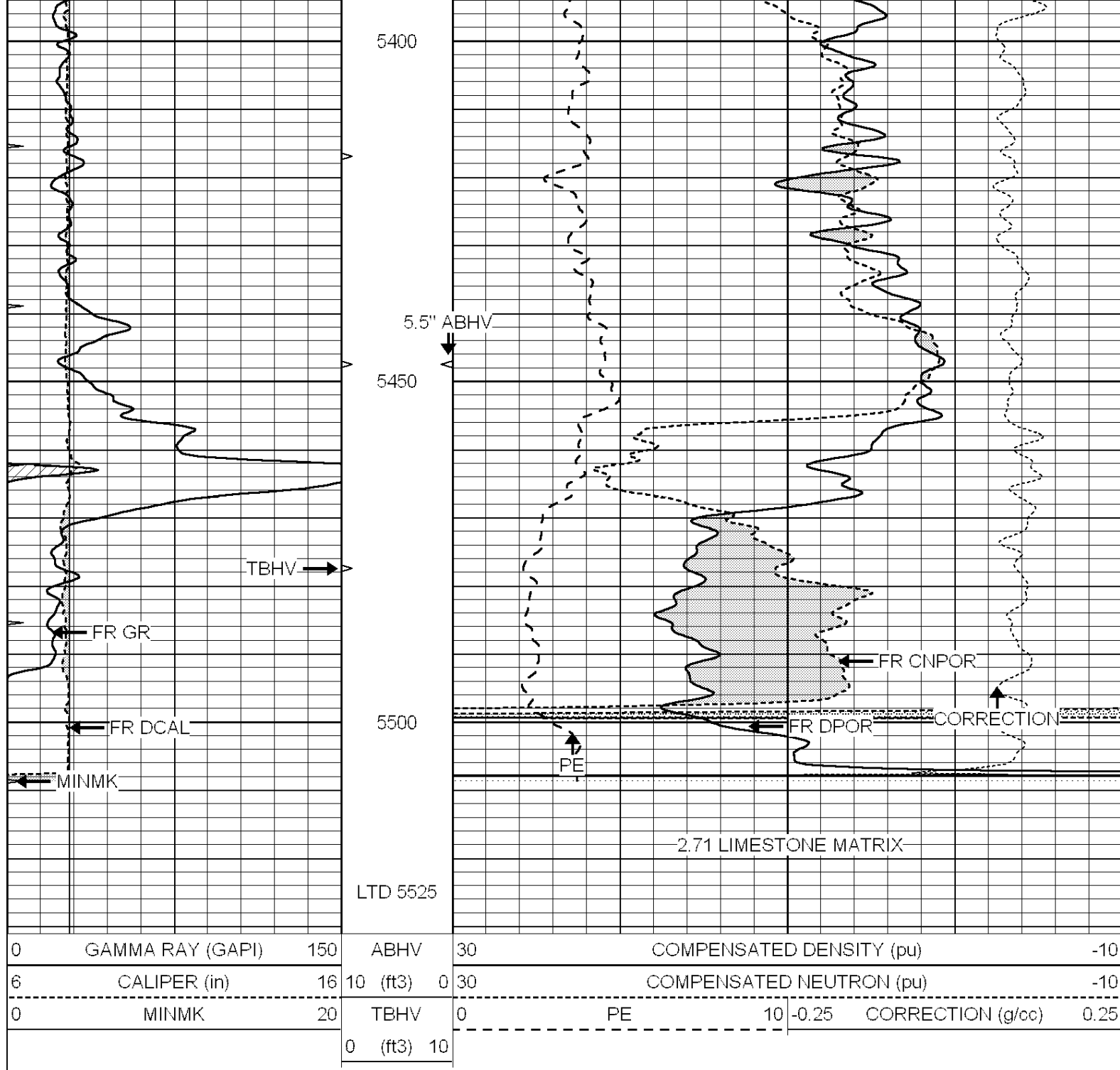
5200

5250

5300

5350



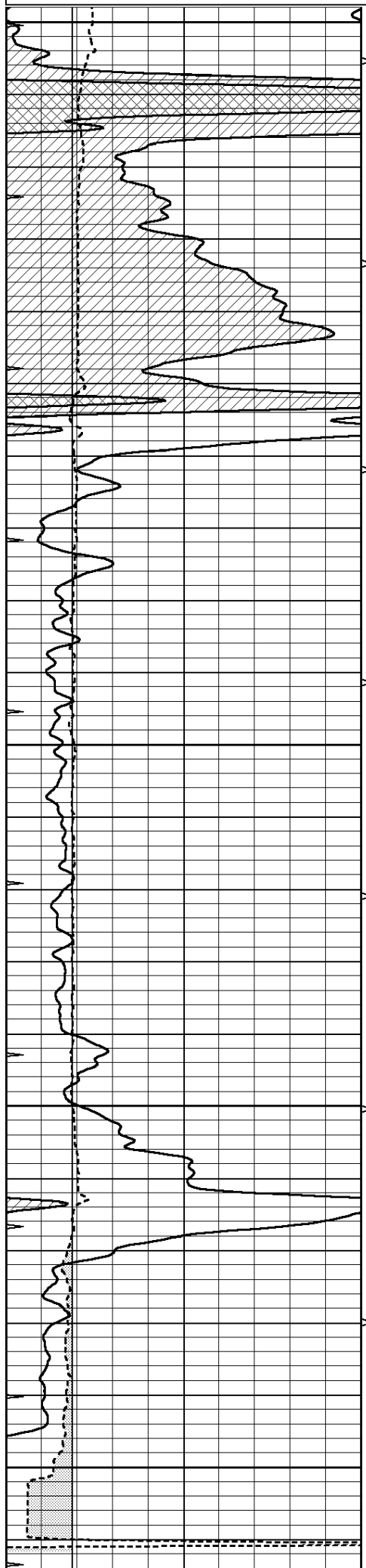


NABORS
COMPLETION
& PRODUCTION
SERVICES CO.

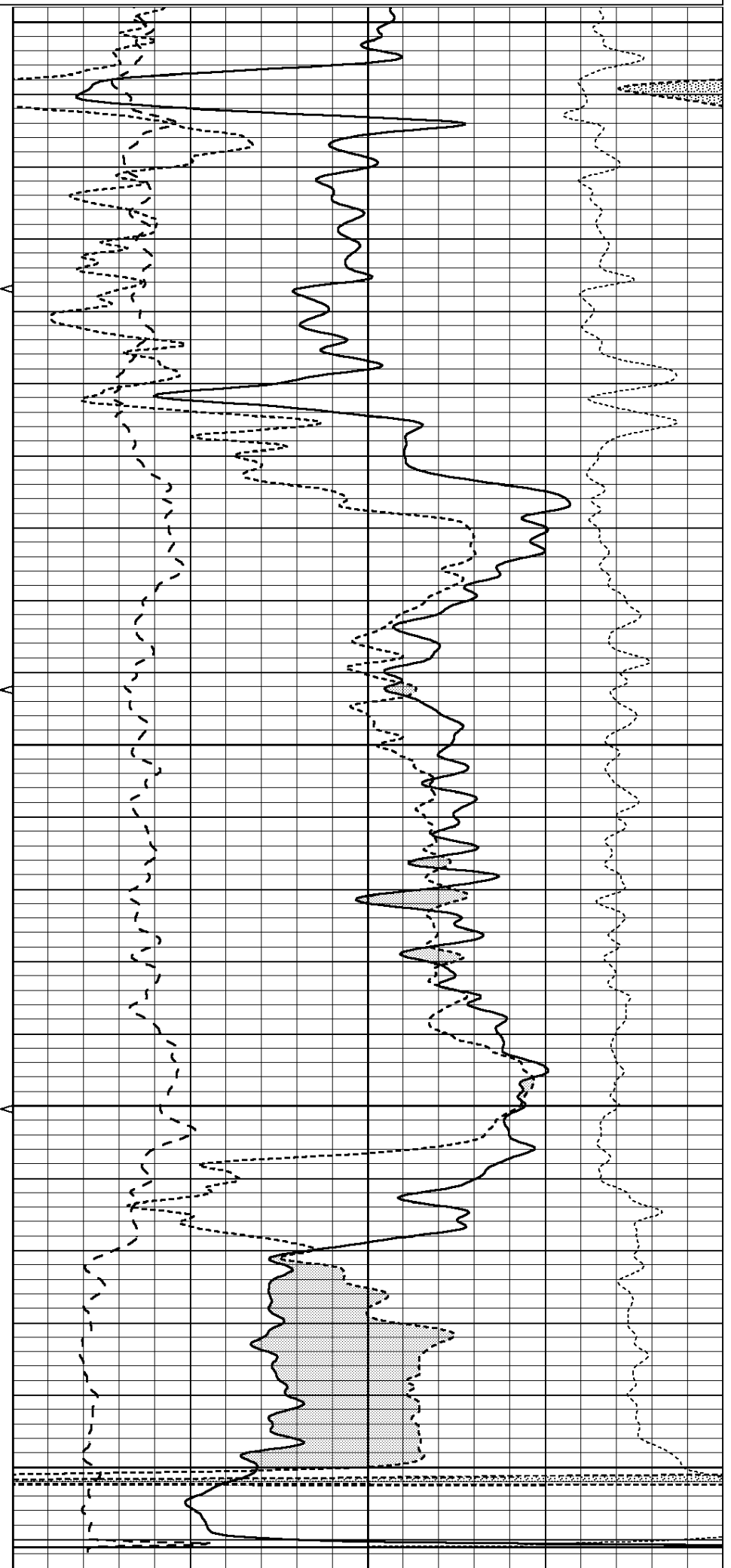
REPEAT SECTION

Database File: 011665pe.db
Dataset Pathname: pass2.3
Presentation Format: ldt_neu
Dataset Creation: Wed Sep 04 14:30:03 2013 by Calc SOC 120430
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV	0	PE	10 -0.25 CORRECTION (g/cc) 0.25
			0 (ft3)	10		



5300
5350
5400
5450
5500



	Background	Magnesium	Aluminum	Sandstone	
Window 1	1417.6	10391.4	3464.6	11537.5	cbs

Window 2	1295.0	8959.7	3050.1	9816.4	cps
Window 3	1105.1	5464.2	2051.0	5838.8	cps
Window 4	315.0	317.7	312.9	319.8	cps
Long Space	0.0	7664.6	1755.0	8521.3	cps
Short Space	1.8	1582.4	1040.8	1600.4	cps

Background Reading:

0.0

cps

Calibrator Reading:

1.0

cps

Sensitivity:

0.3500

GAPI/cps