



SUPERIOR
Hays,
Kansas

COMPENSATED
DENSITY / NEUTRON
PE LOG

Company	WOOLSEY OPERATING COMPANY, LLC.		
Well	SWARTZ A #3		
Field	KOCHIA		
County	BARBER	State	KANSAS
Location:	AP1 # : 15-007-23903-0000		Other Services
	1320' FNL & 660' FEL E/2 - NE		DIL
	SEC 1 TWP 34S RGE 11W		
Permanent Datum	GROUND LEVEL	Elevation	1423
Log Measured From	KELLY BUSHING 10' A.G.L.		
Drilling Measured From	KELLY BUSHING		
		Elevation	KB. 1433 D.F. 1431 G.L. 1423
Date	7/14/12		
Run Number	ONE		
Depth Driller	5135		
Depth Logger	5134		
Bottom Logged Interval	5110		
Top Log Interval	1700		
Casing Driller	10 3/4" @ 216		
Casing Logger	215		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 3,500 PPM	
Density / Viscosity	8.9/49		
pH / Fluid Loss	9.5/9.6		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.70@90F		
Rmt @ Meas. Temp	0.53@90F		
Rmc @ Meas. Temp	0.84@90F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	0.50@126F		
Time Circulation Stopped	2.5 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	126F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF GRONEWEG		
Witnessed By	SCOTT ALBERG		

<<< 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.

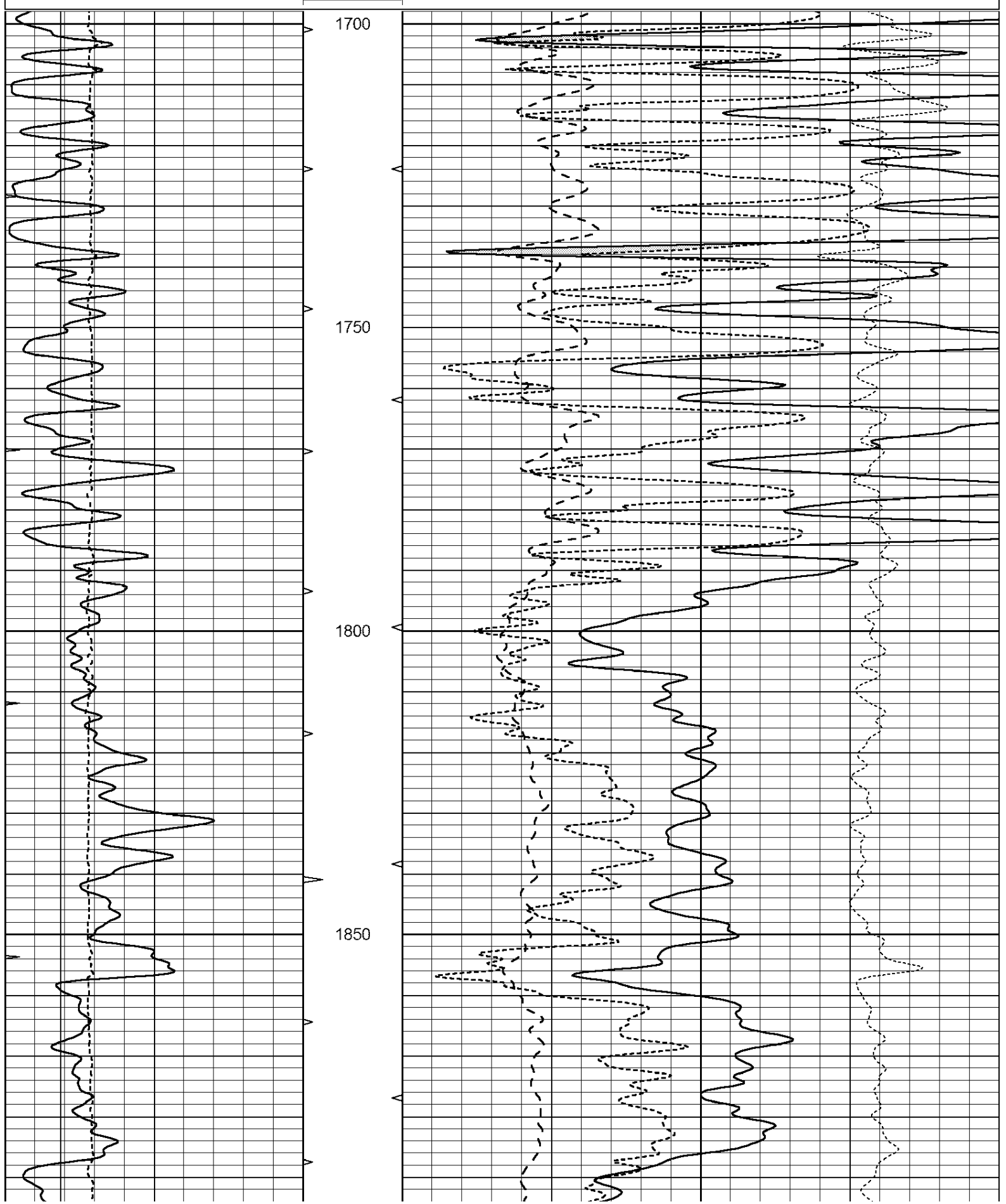
Comments

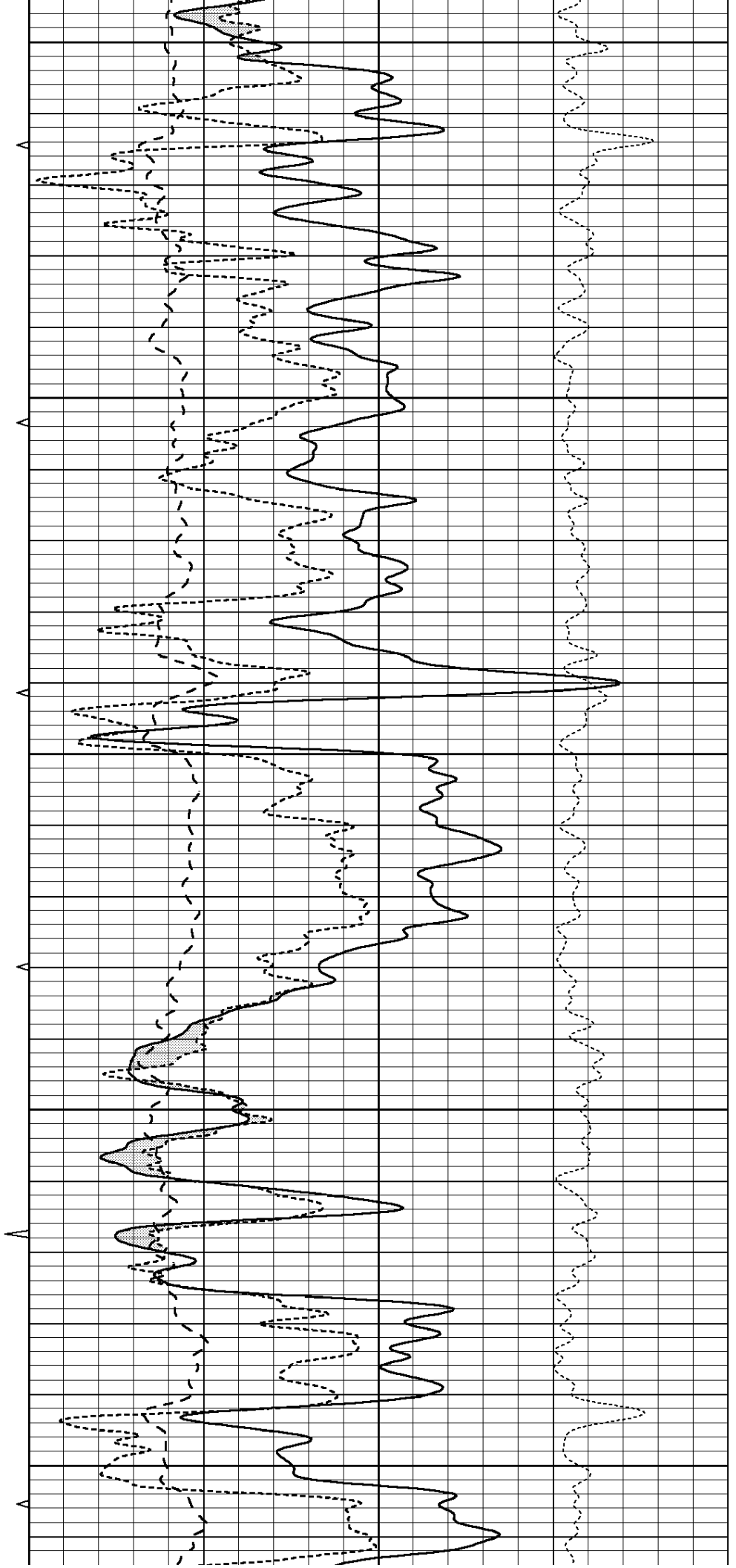
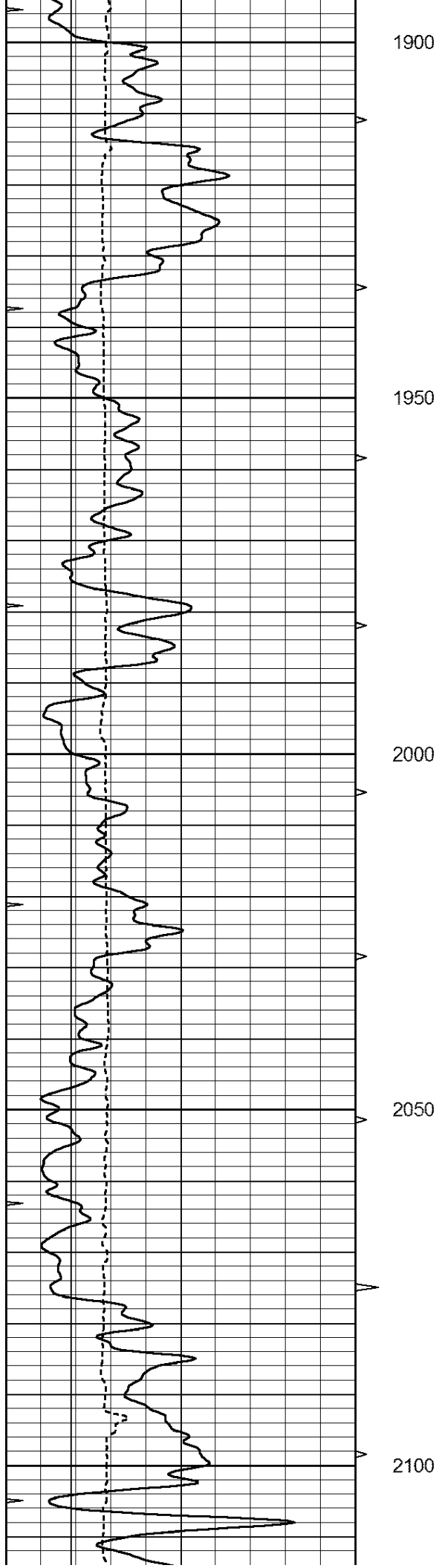
THANK YOU FOR USING SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395
DIRECTIONS
MEDICINE LODGE, KS - 9 MILES SOUTH TO GERLANE RD
7 1/2 MILES EAST - SOUTH AND EAST INTO AT TANK BATTERY

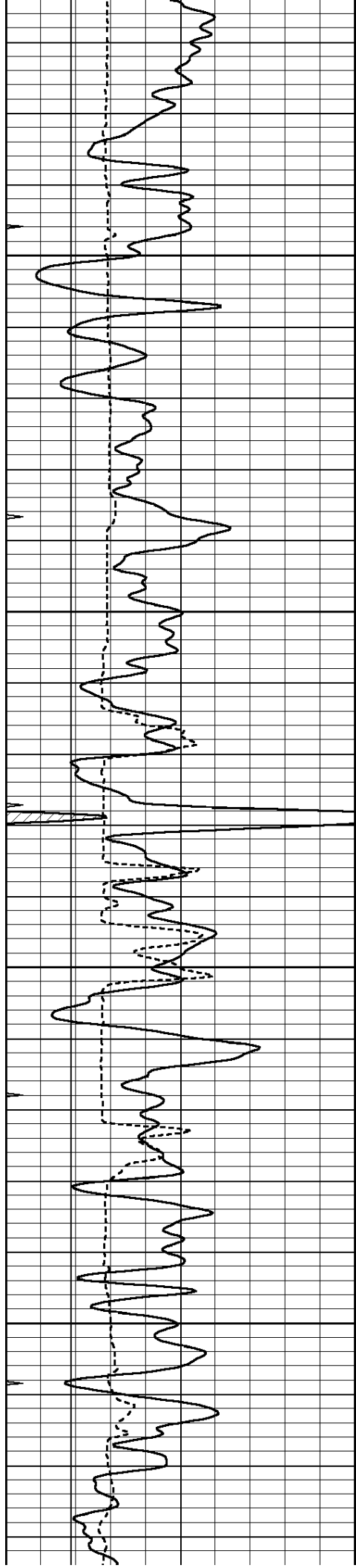
Database File: 409432pe.db
Dataset Pathname: pass3.4
Presentation Format: _ldt_neu
Dataset Creation: Sat Jul 14 08:42:23 2012 by Calc Open-Cased 110302
Charted by: Depth in Feet scaled 1:240

Charted by: _____			Depth in Feet scaled 1:2.10						
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					





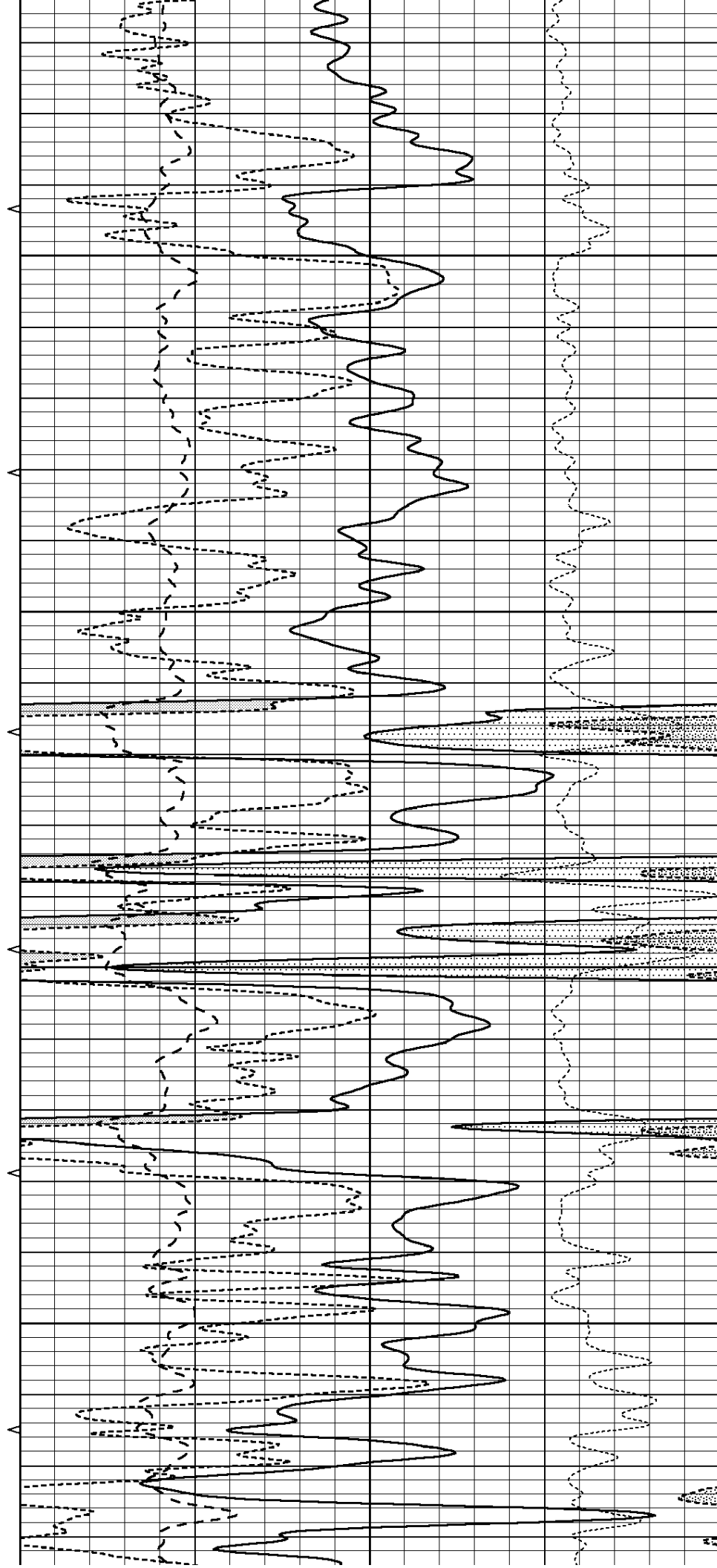


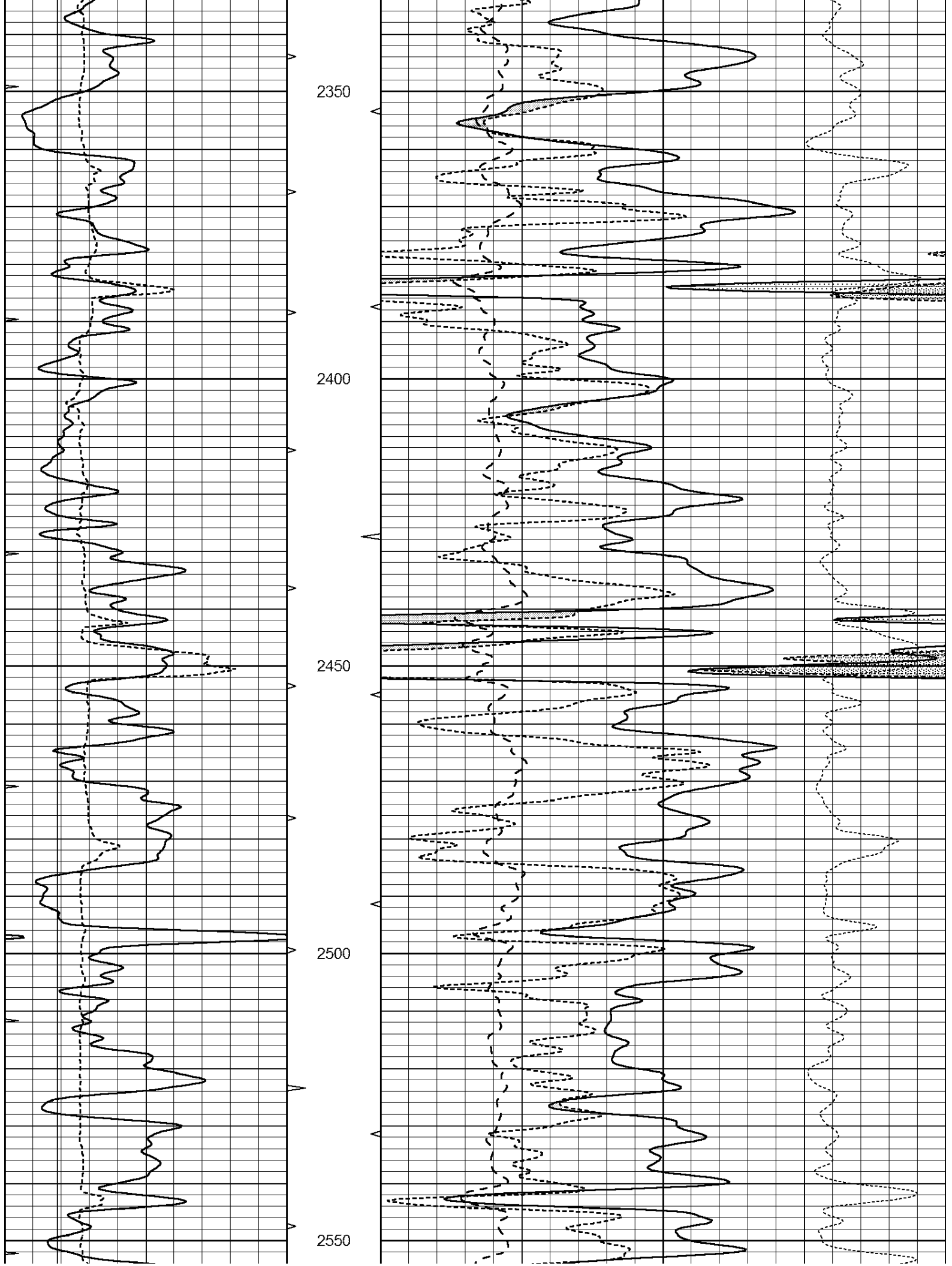
2150

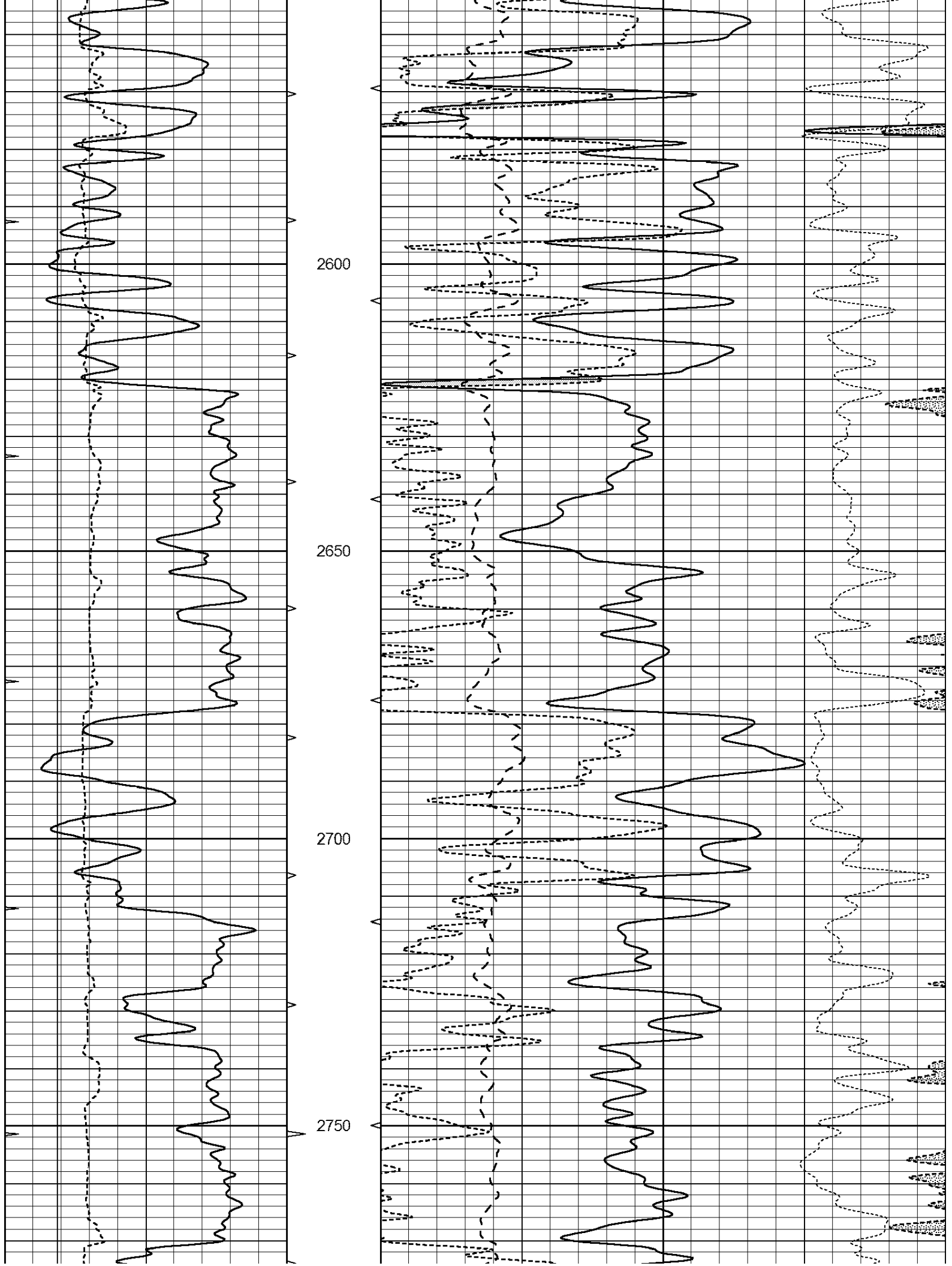
2200

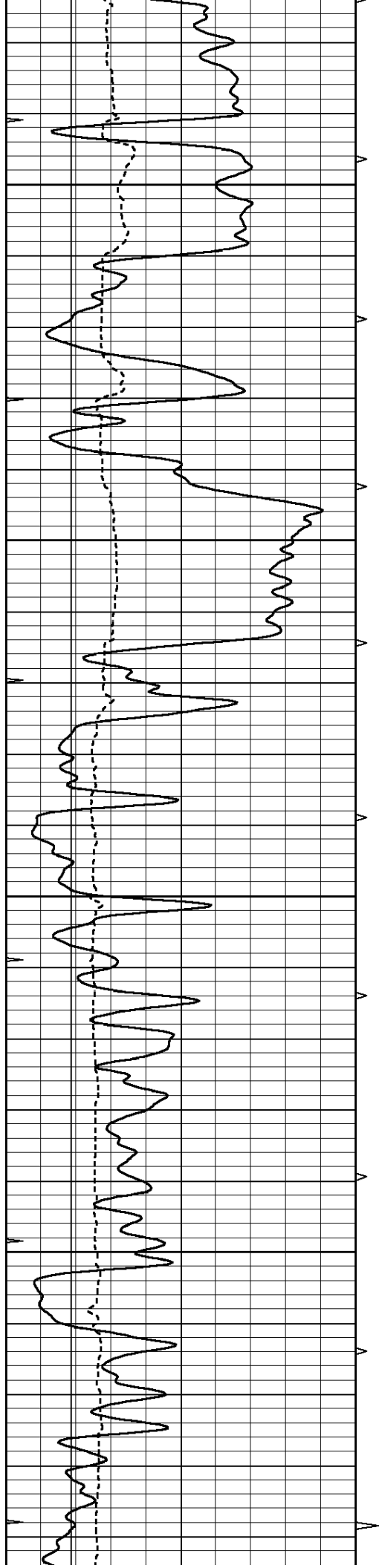
2250

2300







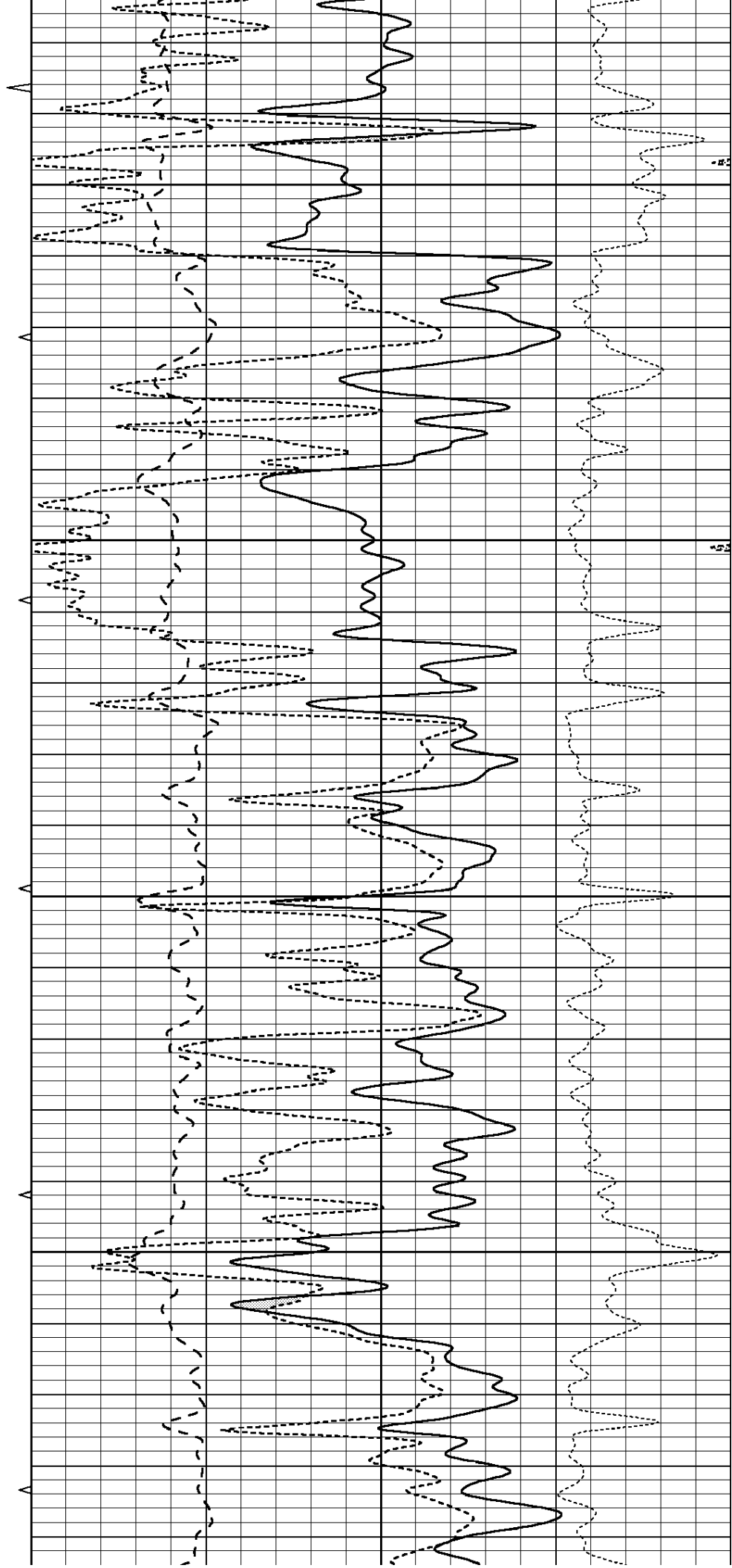


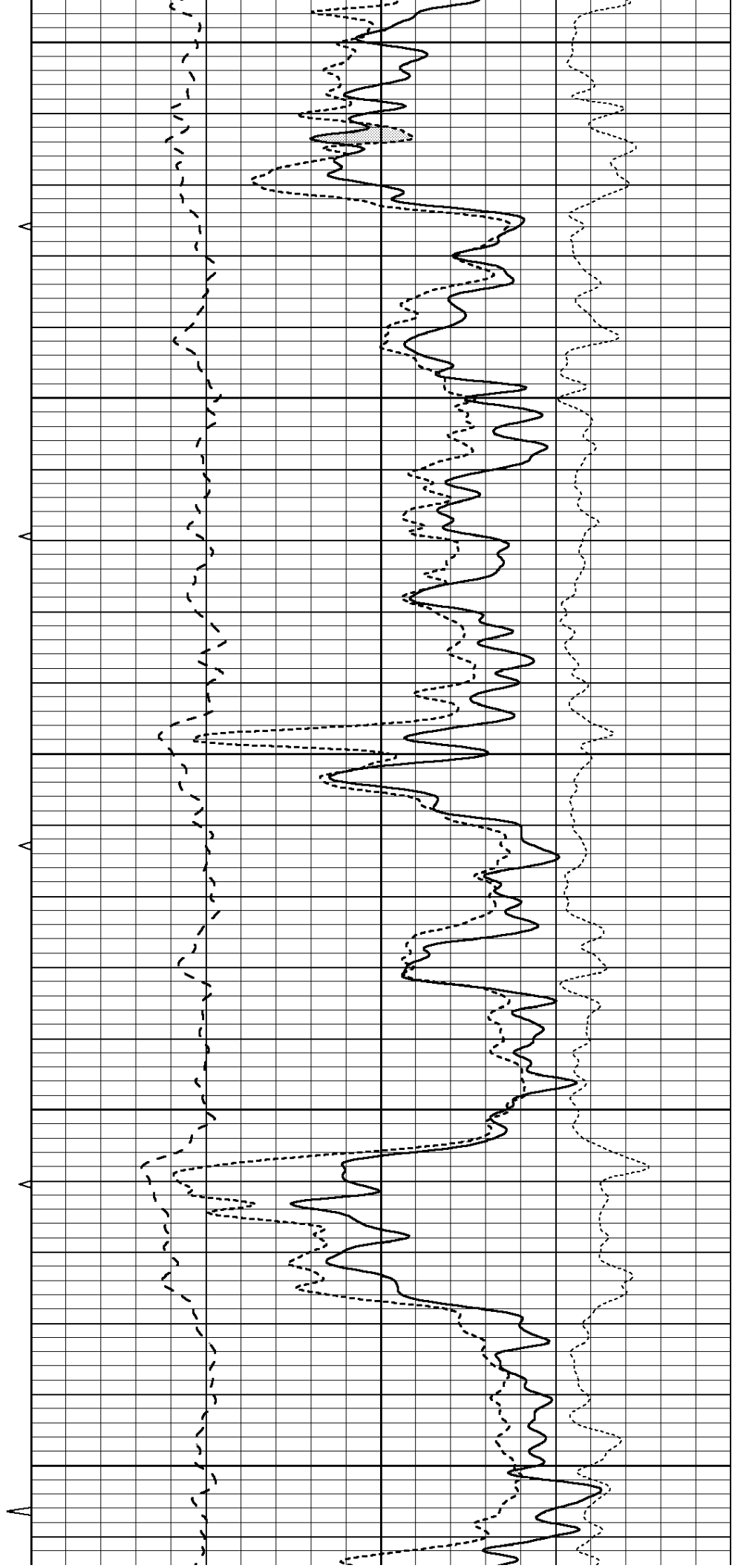
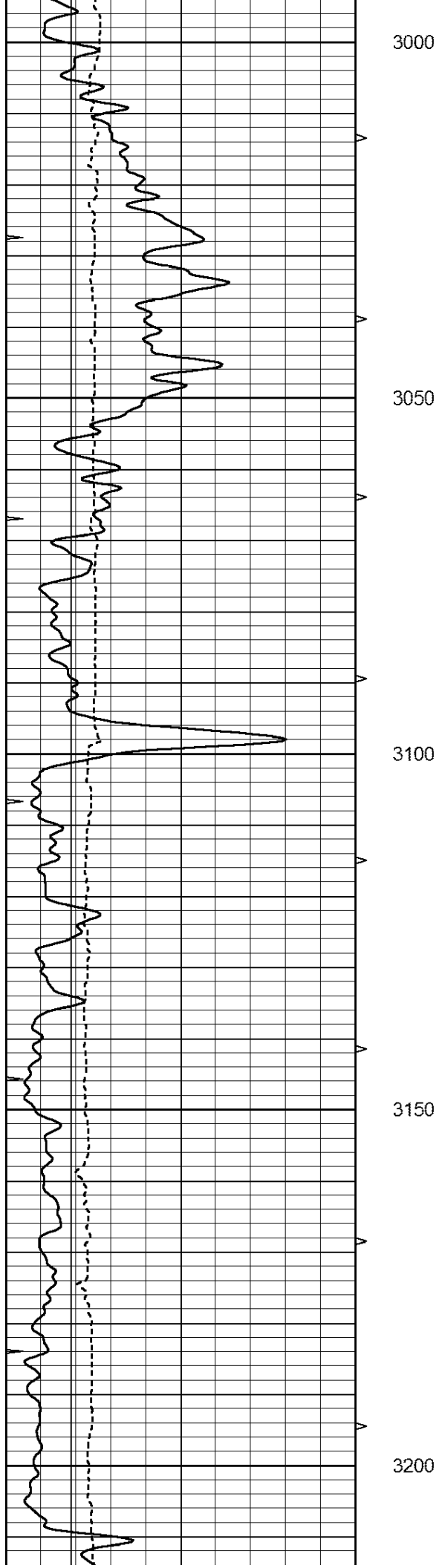
2800

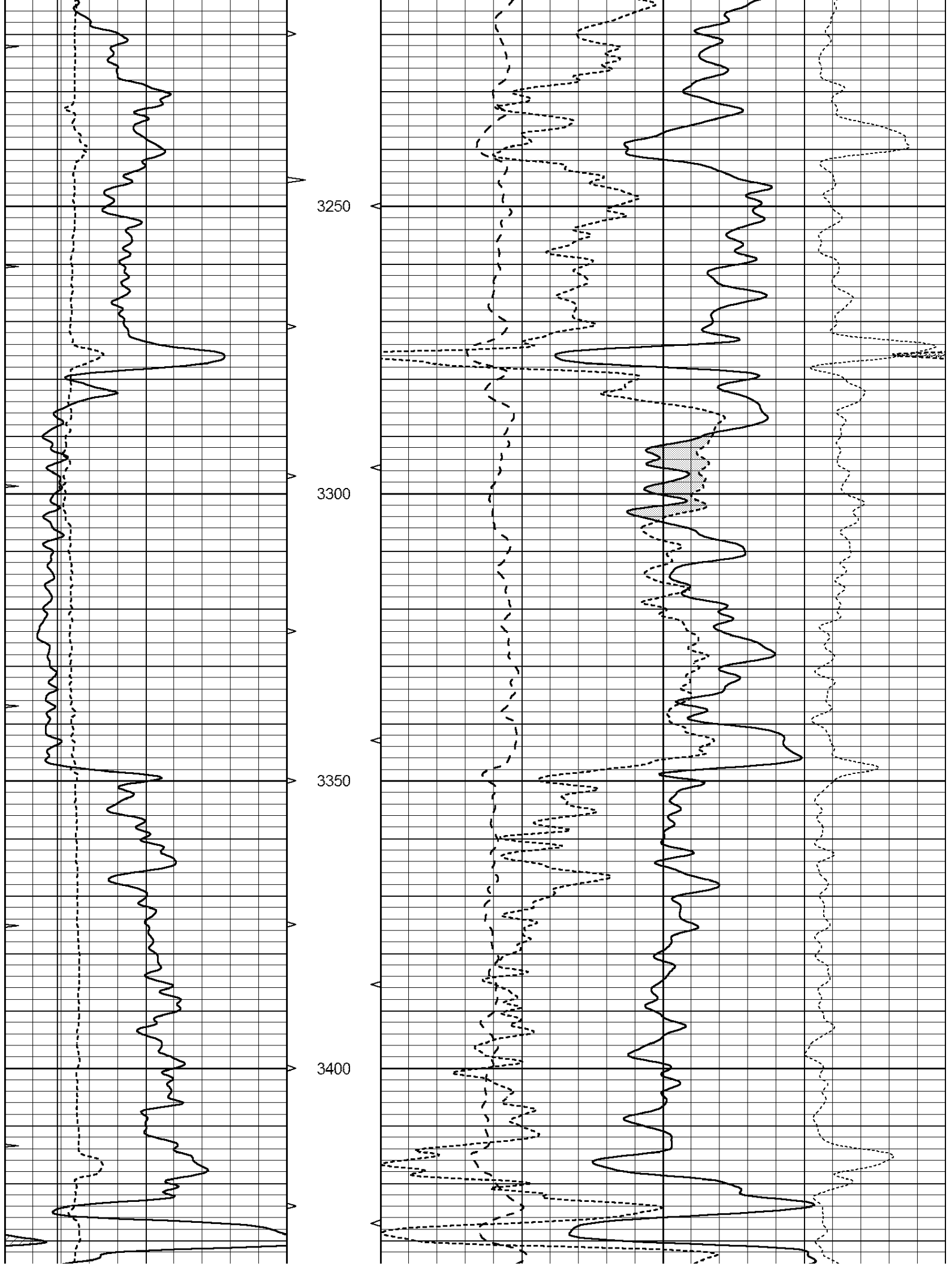
2850

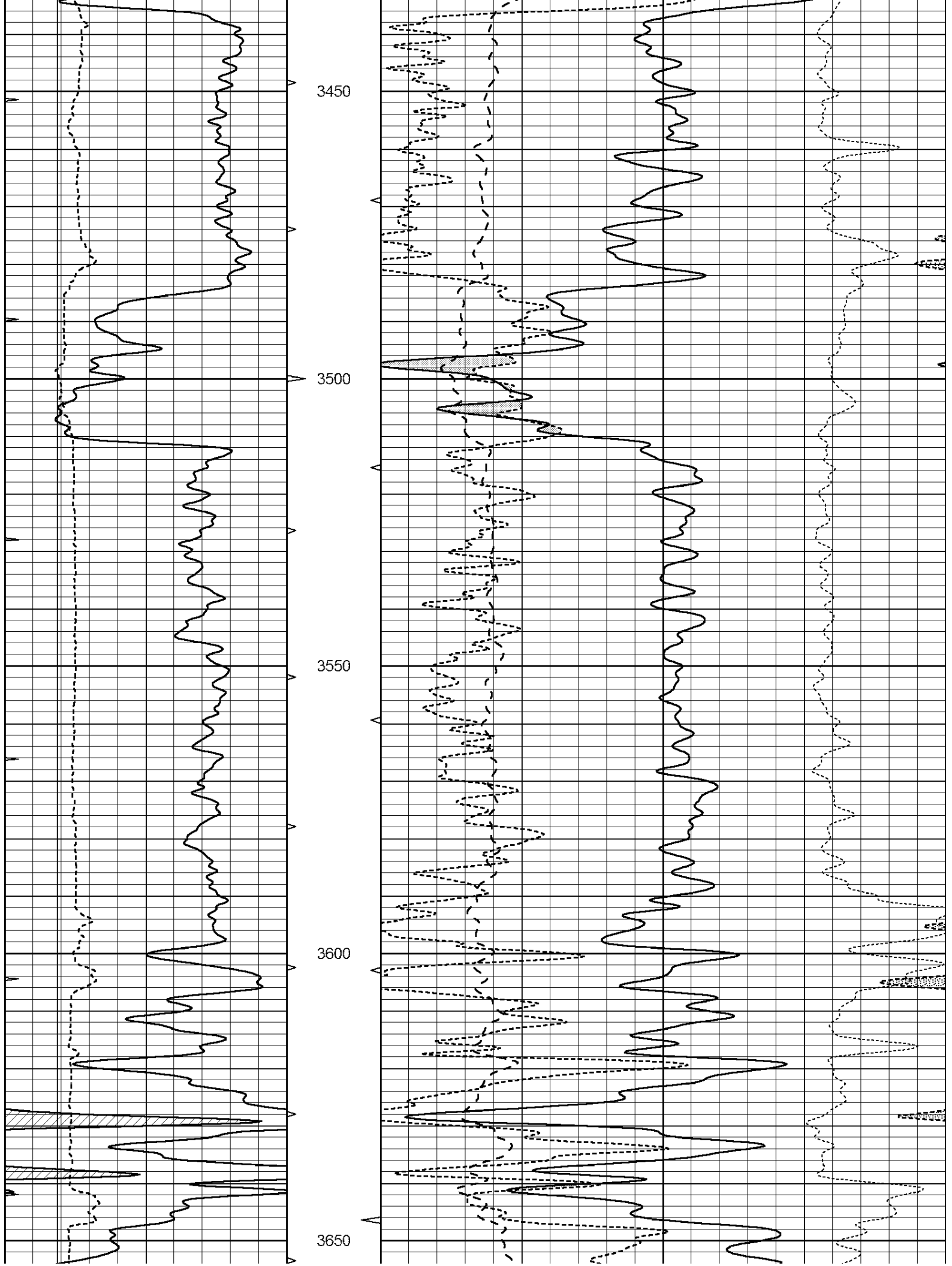
2900

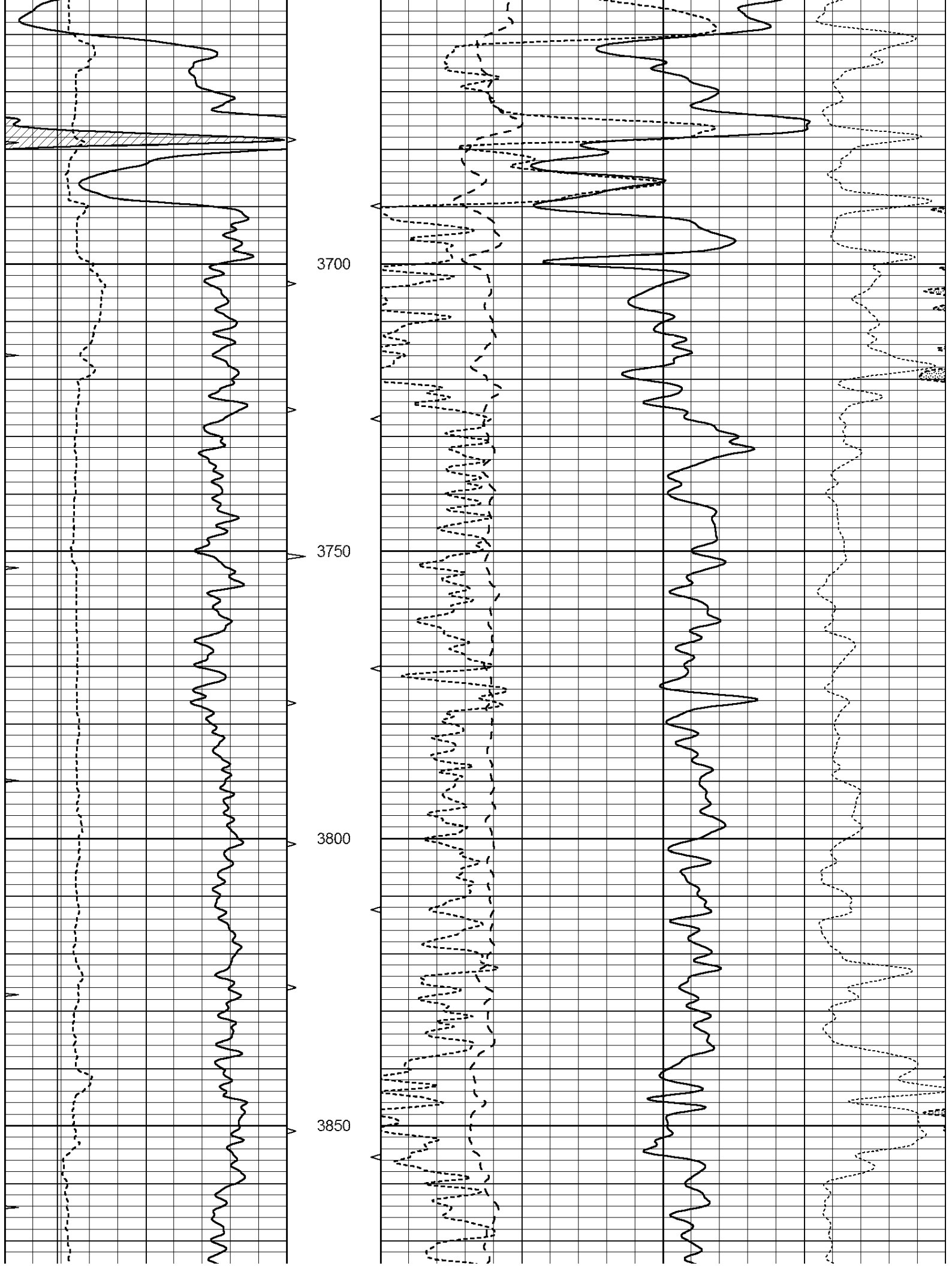
2950

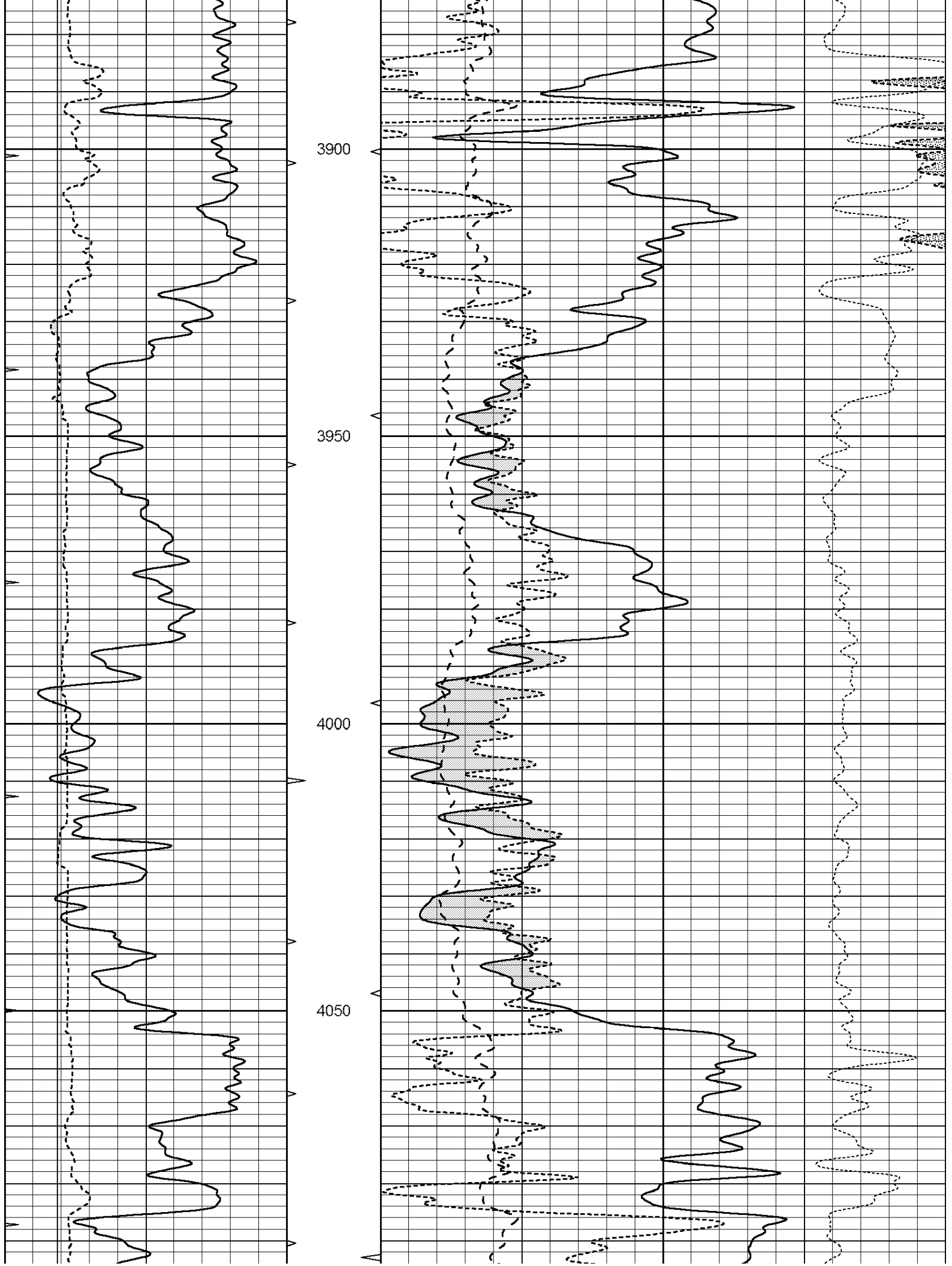


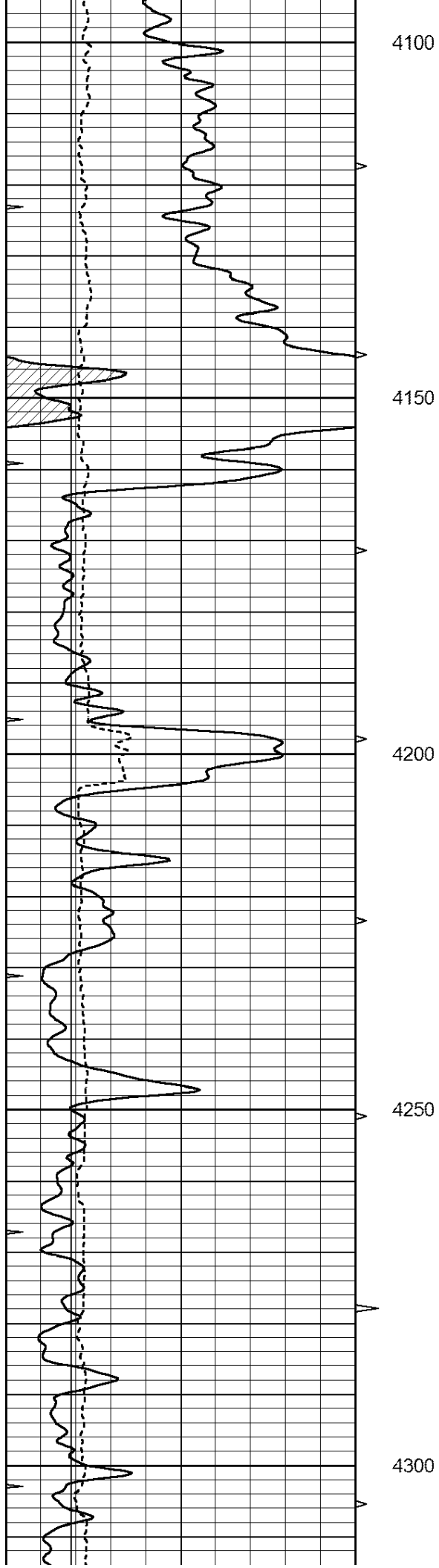












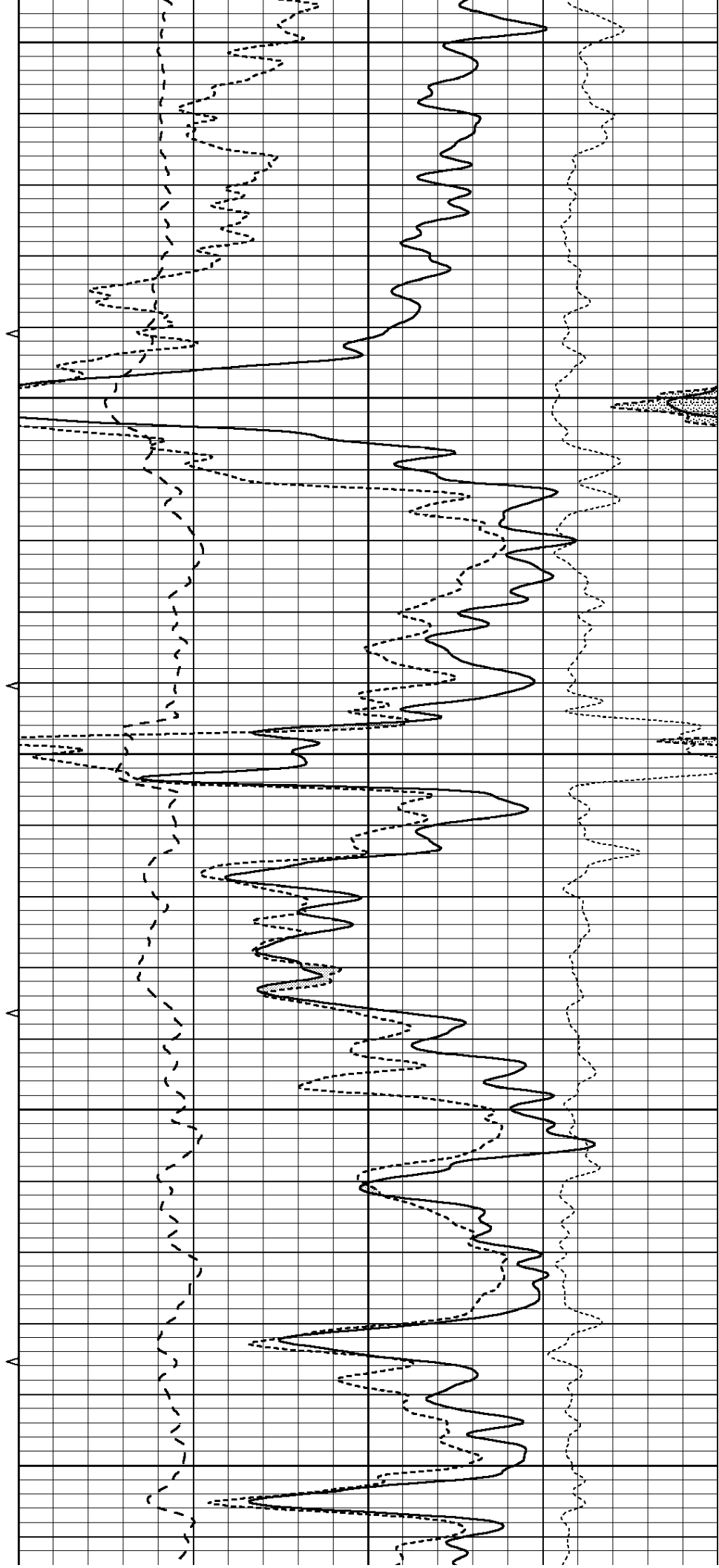
4100

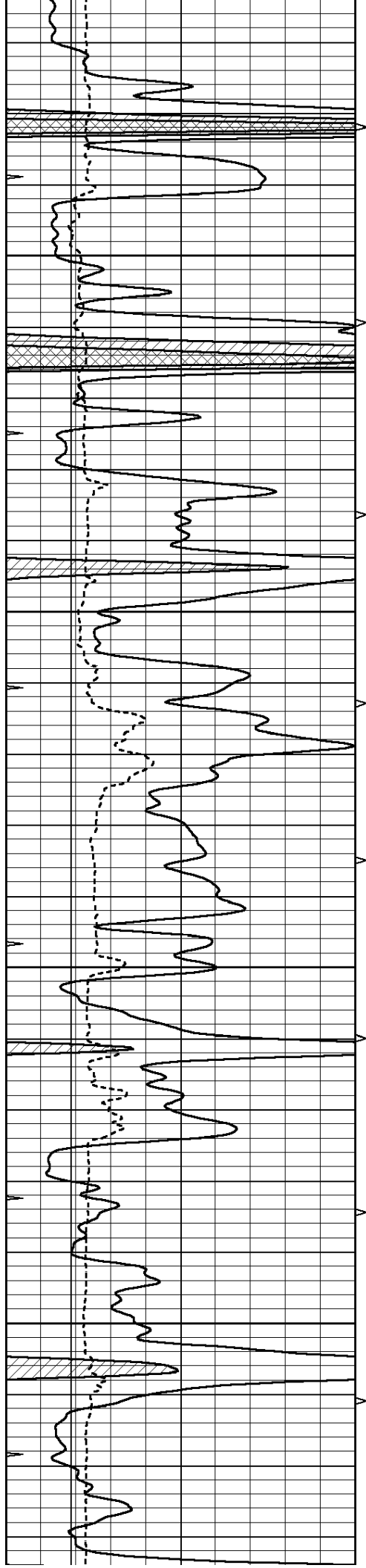
4150

4200

4250

4300



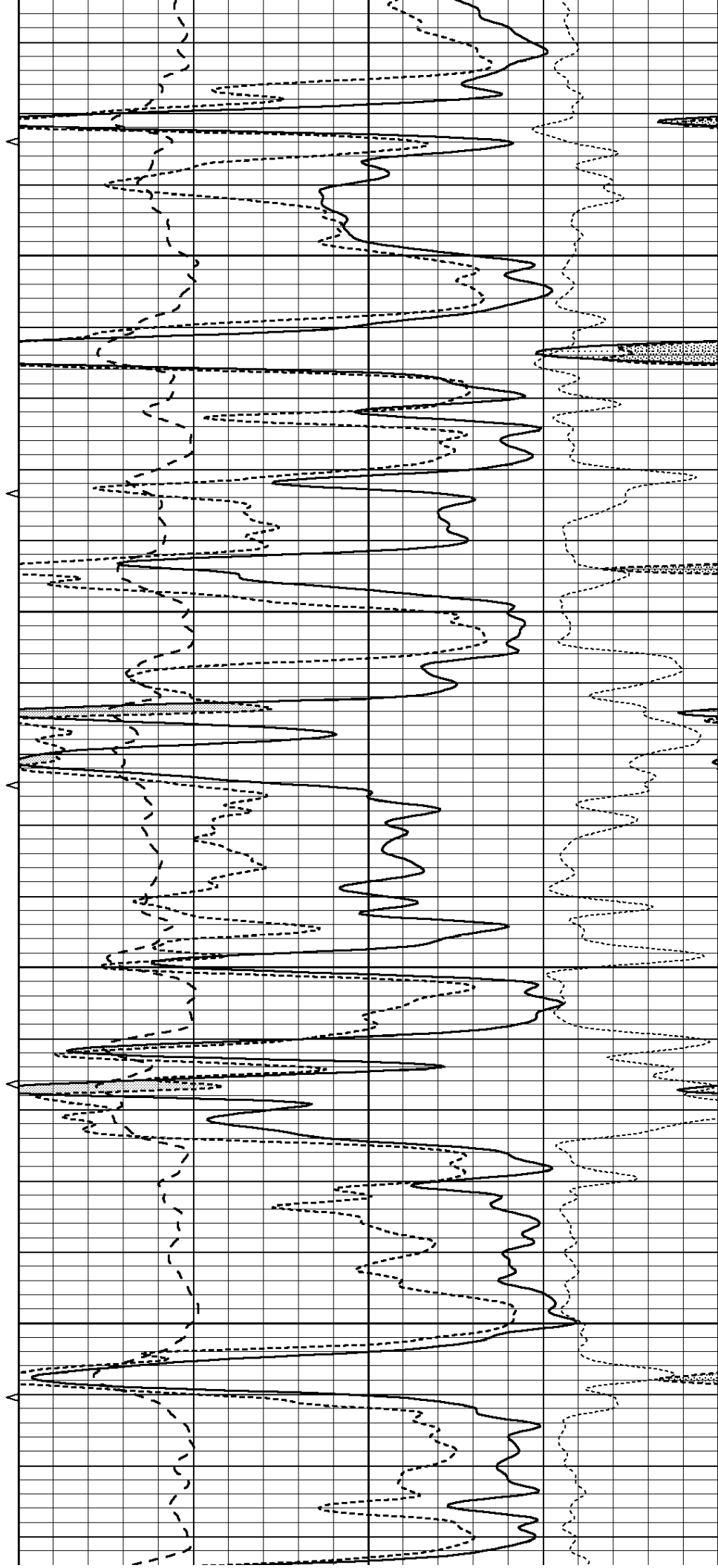


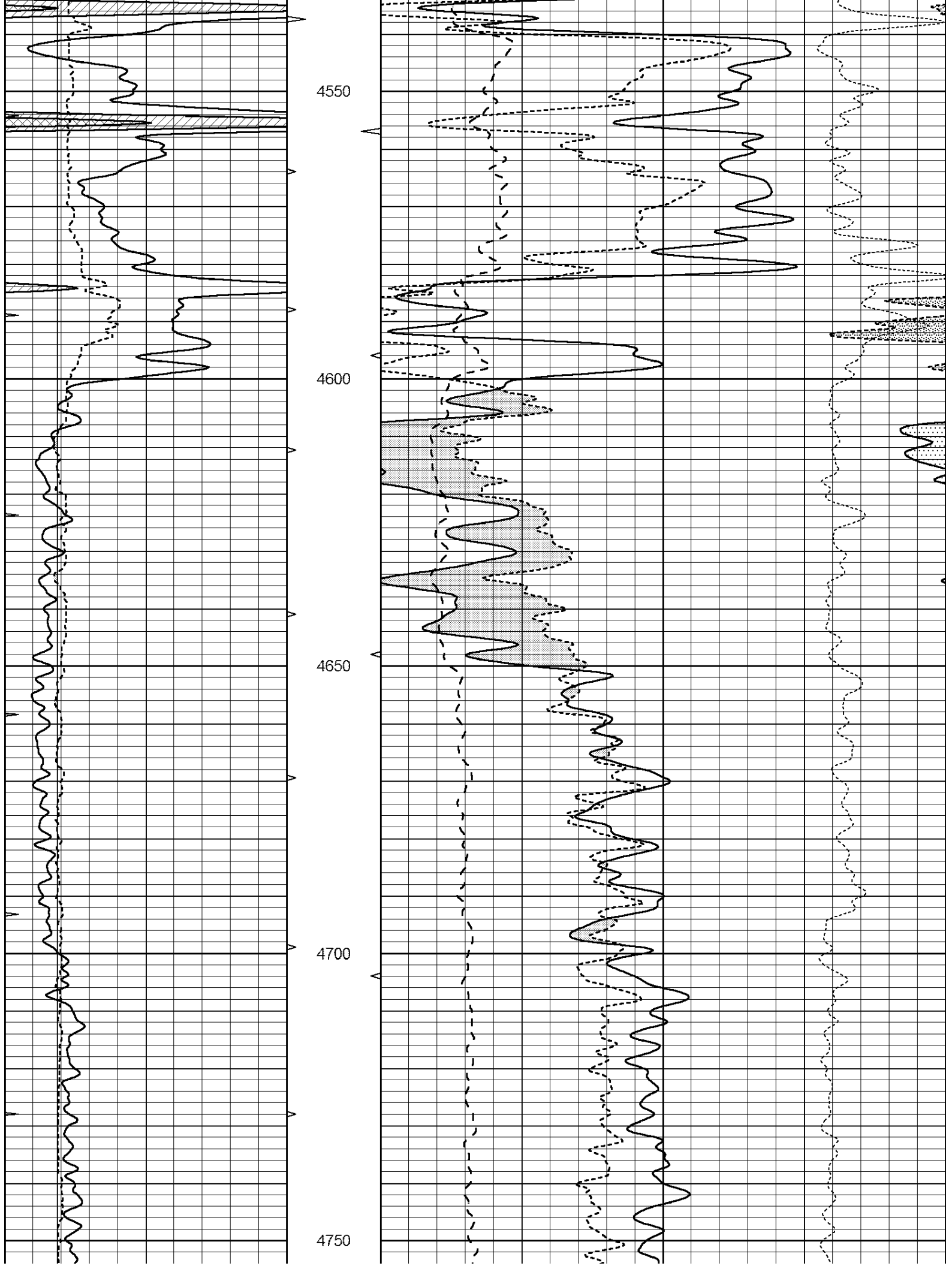
4350

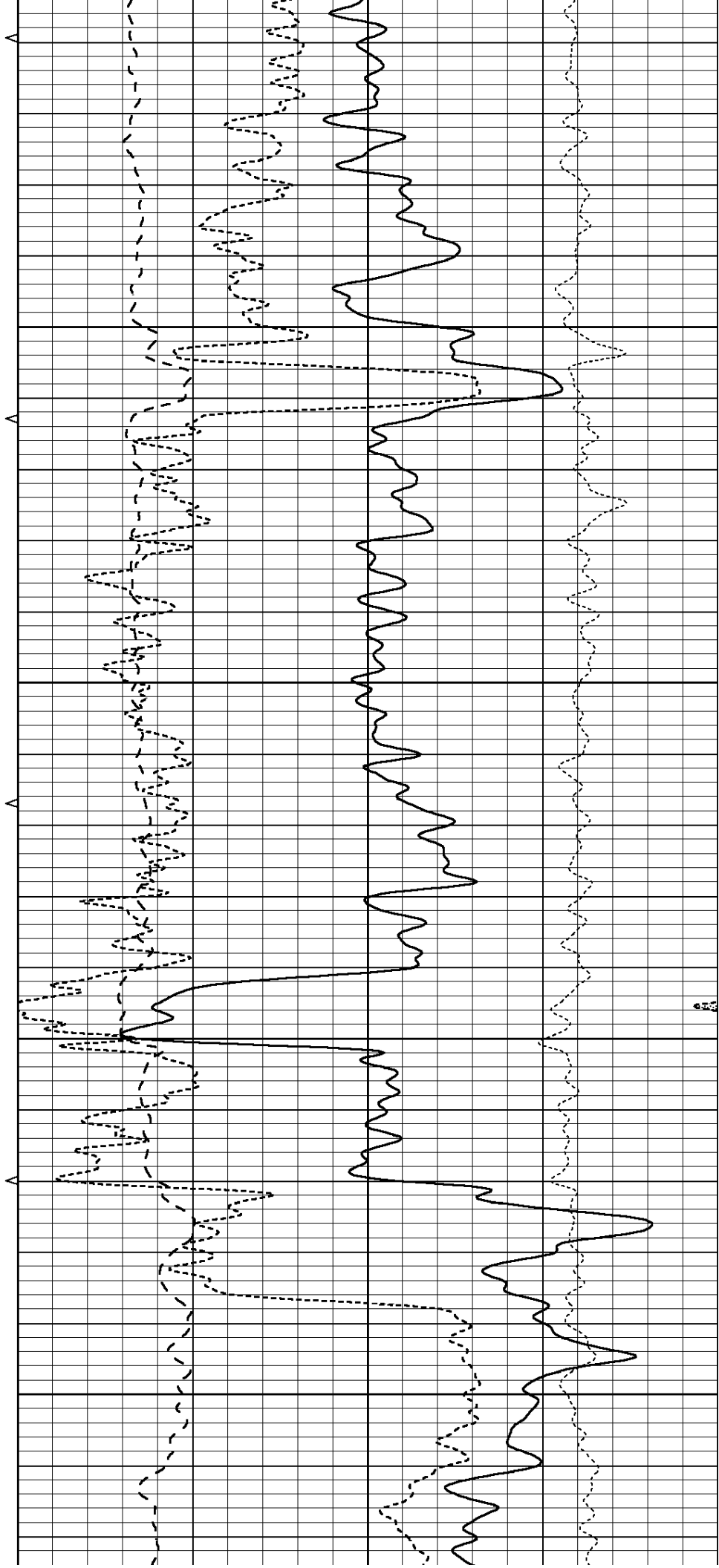
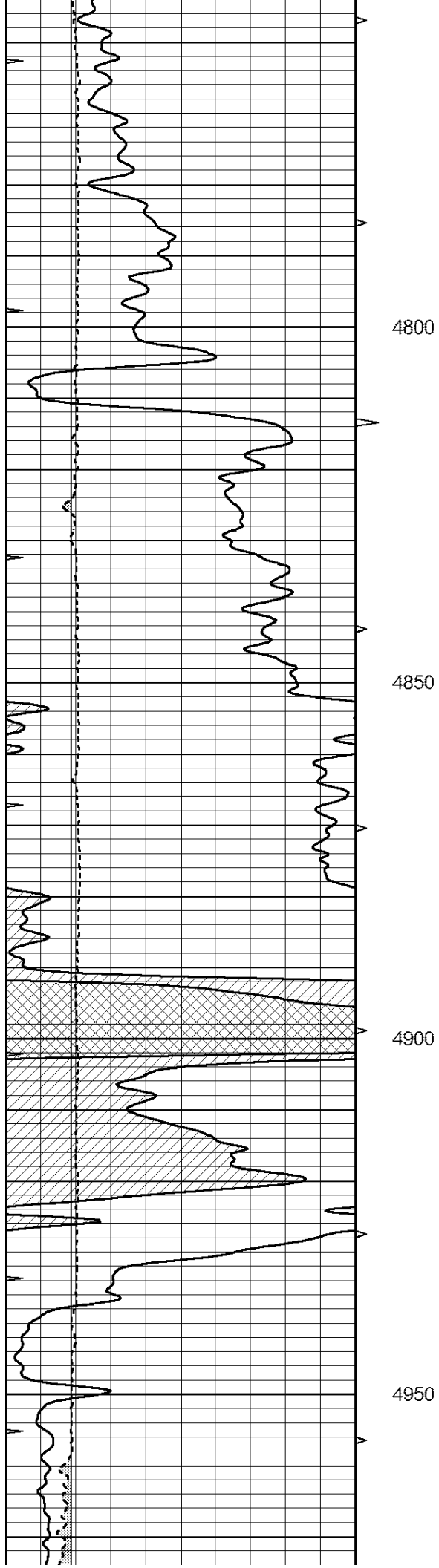
4400

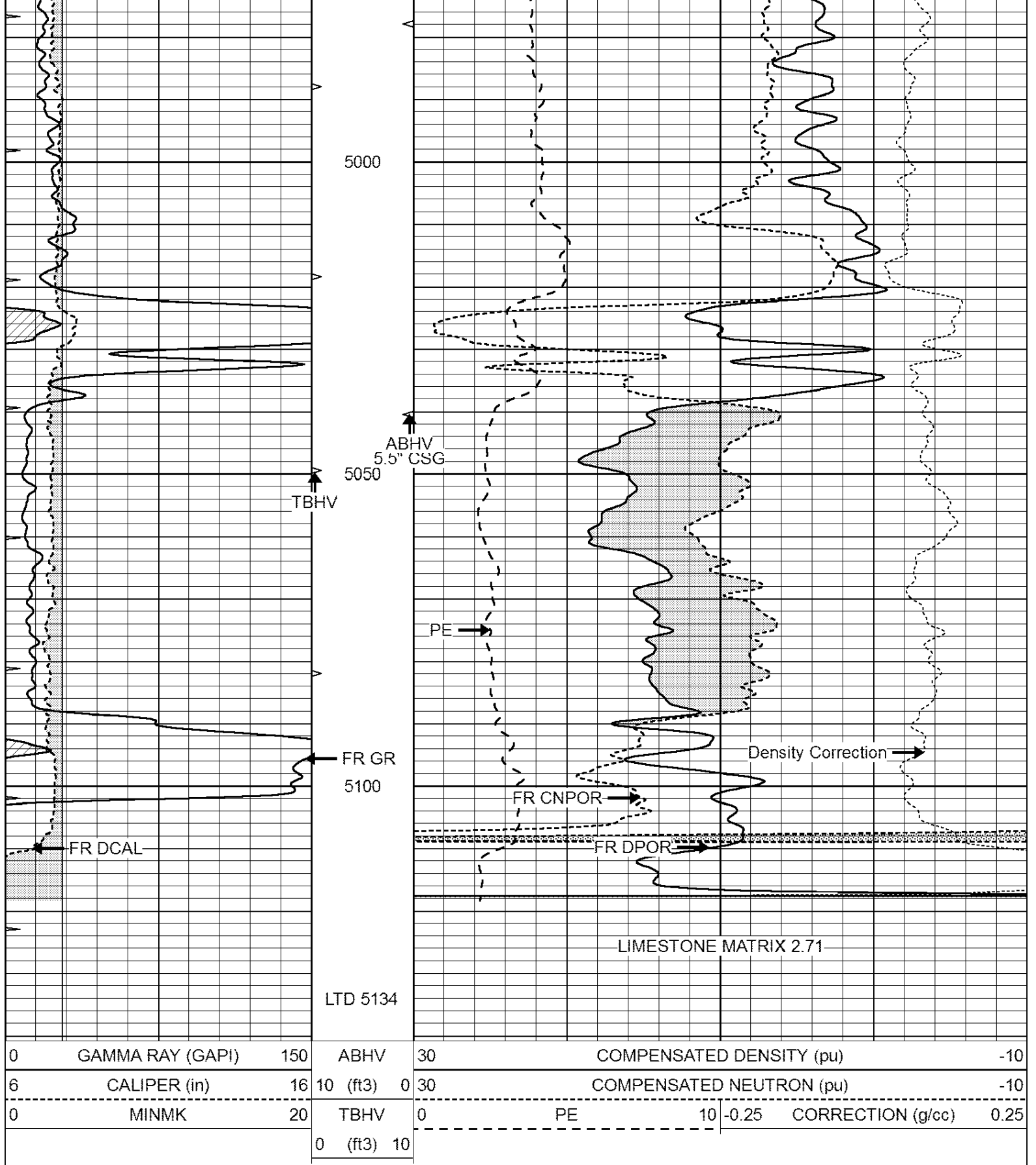
4450

4500





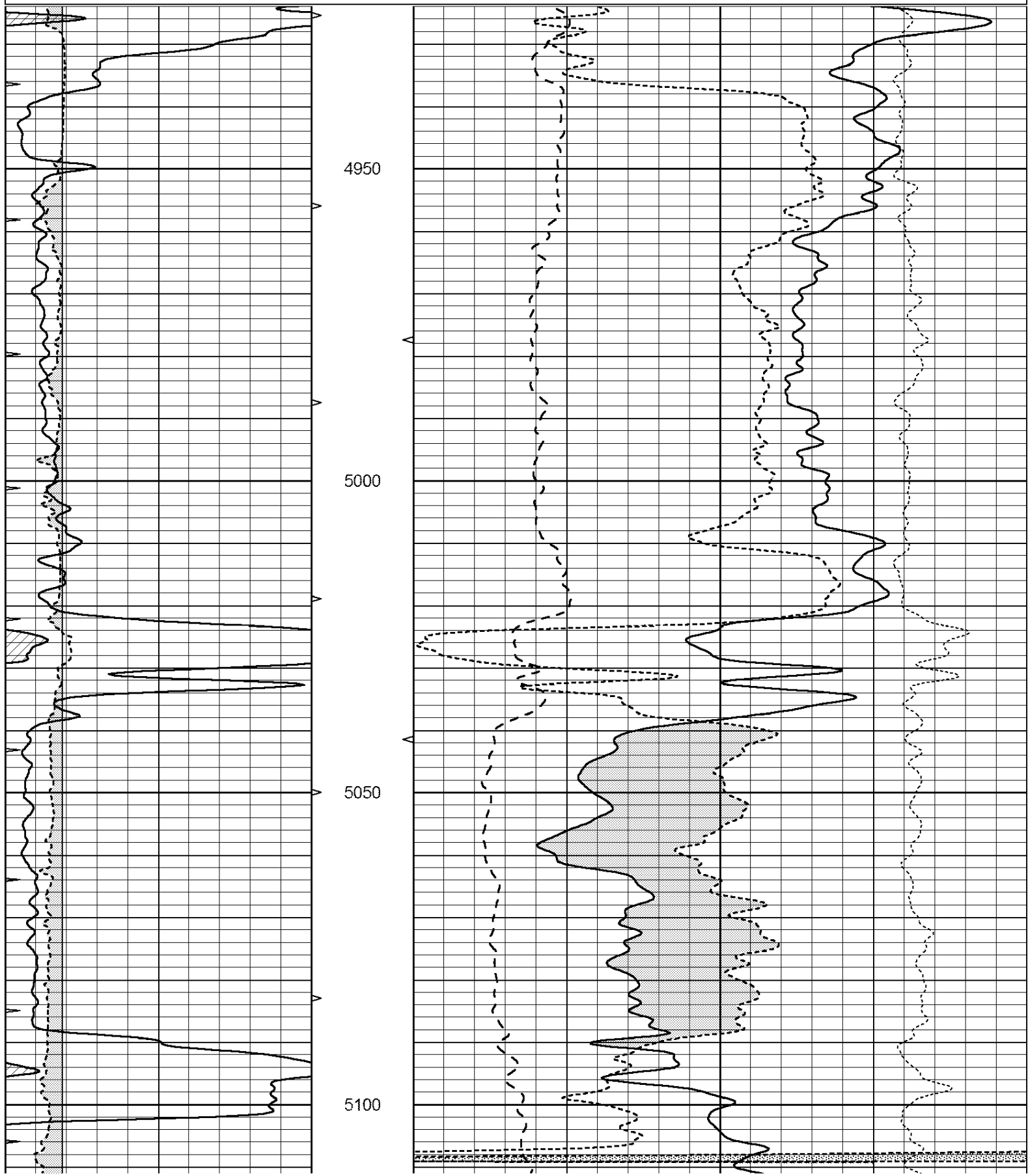




SUPERIOR
Hays,
Kansas

REPEAT SECTION

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			



Compensated Neutron Calibration Report

		Serial Number: Tool Model:	070808 Probe
PRE-SURVEY VERIFICATION			
Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu
POST-SURVEY VERIFICATION			
Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu
Gamma Ray Calibration Report			
Serial Number:	070559		
Tool Model:	OPEN_GR		
Performed:	Tue Jul 03 02:09:35 2012		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.3000	GAPI/cps	