



**COMPLETION
& PRODUCTION
SERVICES CO.**

**COMPENSATED
DENSITY / NEUTRON
PE LOG**

Company EDISON OPERATING COMPANY, LLC.
Well CHARLES #1-25
Field KISMET
County SEWARD
State KANSAS

Company EDISON OPERATING COMPANY, LLC.
Well CHARLES #1-25
Field KISMET
County SEWARD State KANSAS

Location: API # : 15-175-22202-0000
2310' FNL & 330' FWL
SW - SW - NW
SEC 25 TWP 33S RGE 31W
Permanent Datum GROUND LEVEL Elevation 2728
Log Measured From KELLY BUSHING 10' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services DIL/MEL
Elevation
K.B. 2738
D.F. 2736
G.L. 2728

Date	5/18/13		
Run Number	ONE		
Depth Driller	5913		
Depth Logger	5910		
Bottom Logged Interval	5886		
Top Log Interval	2600		
Casing Driller	8 5/8" @ 1598'		
Casing Logger	1594		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 3,200 PPM	
Density / Viscosity	9.2/60		
pH / Fluid Loss	11.0/8.0		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.850 @ .85F		
Rmf @ Meas. Temp	.638 @ .85F		
Rmc @ Meas. Temp	1.02 @ .85F		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	.543 @ 133F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	10:30 P.M.		
Maximum Recorded Temperature	133F		
Equipment Number	4854		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	PAUL GERLACH		

<<< 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

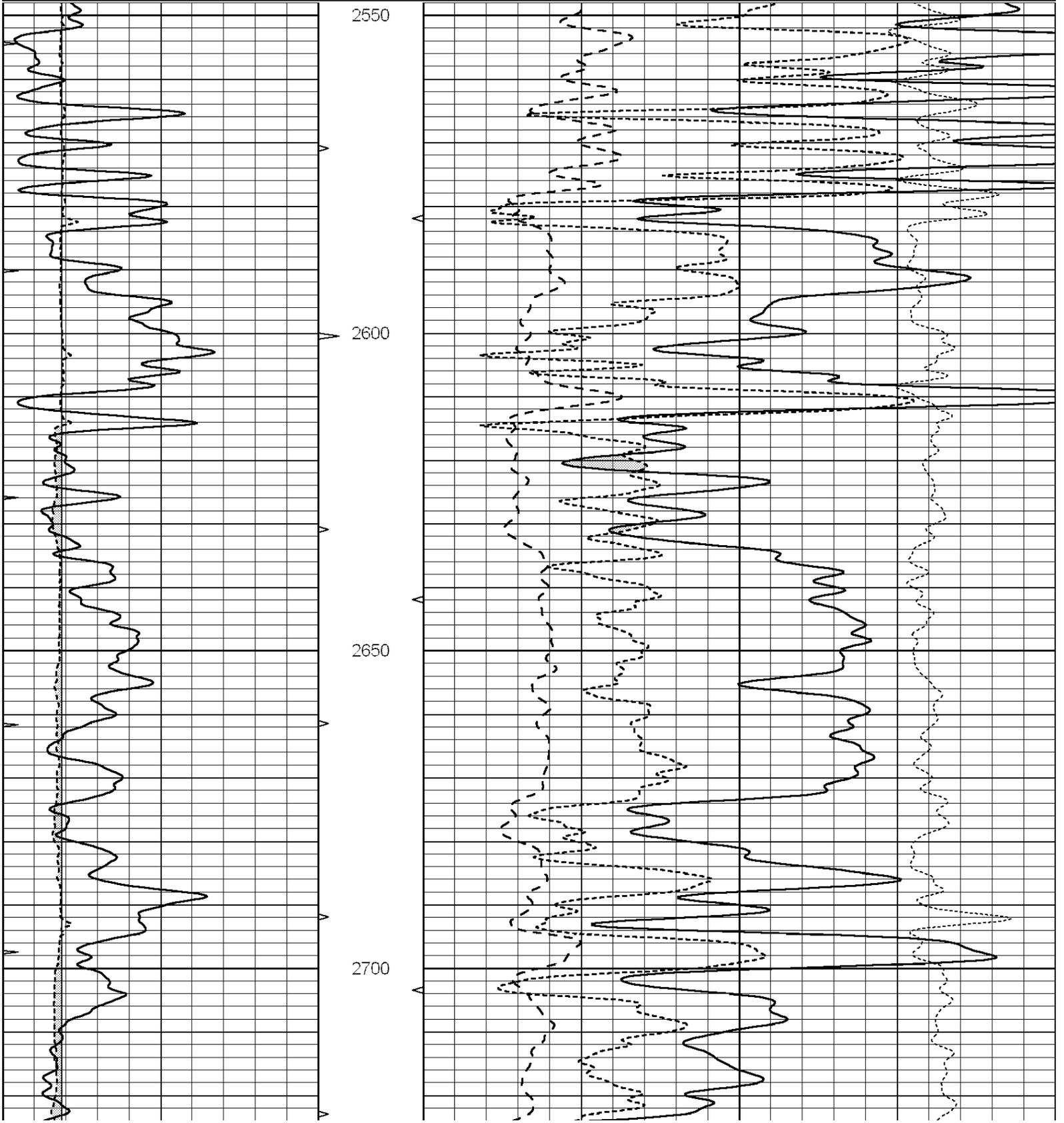
THANK YOU FOR USING "NABORS" HAYS, KANSAS (785) 628-6395
DIRECTIONS
KISMET, KS. 3S. ON BLKTOP TO "RD. 13", 1 1/2E., 1S., 2E., N. INTO

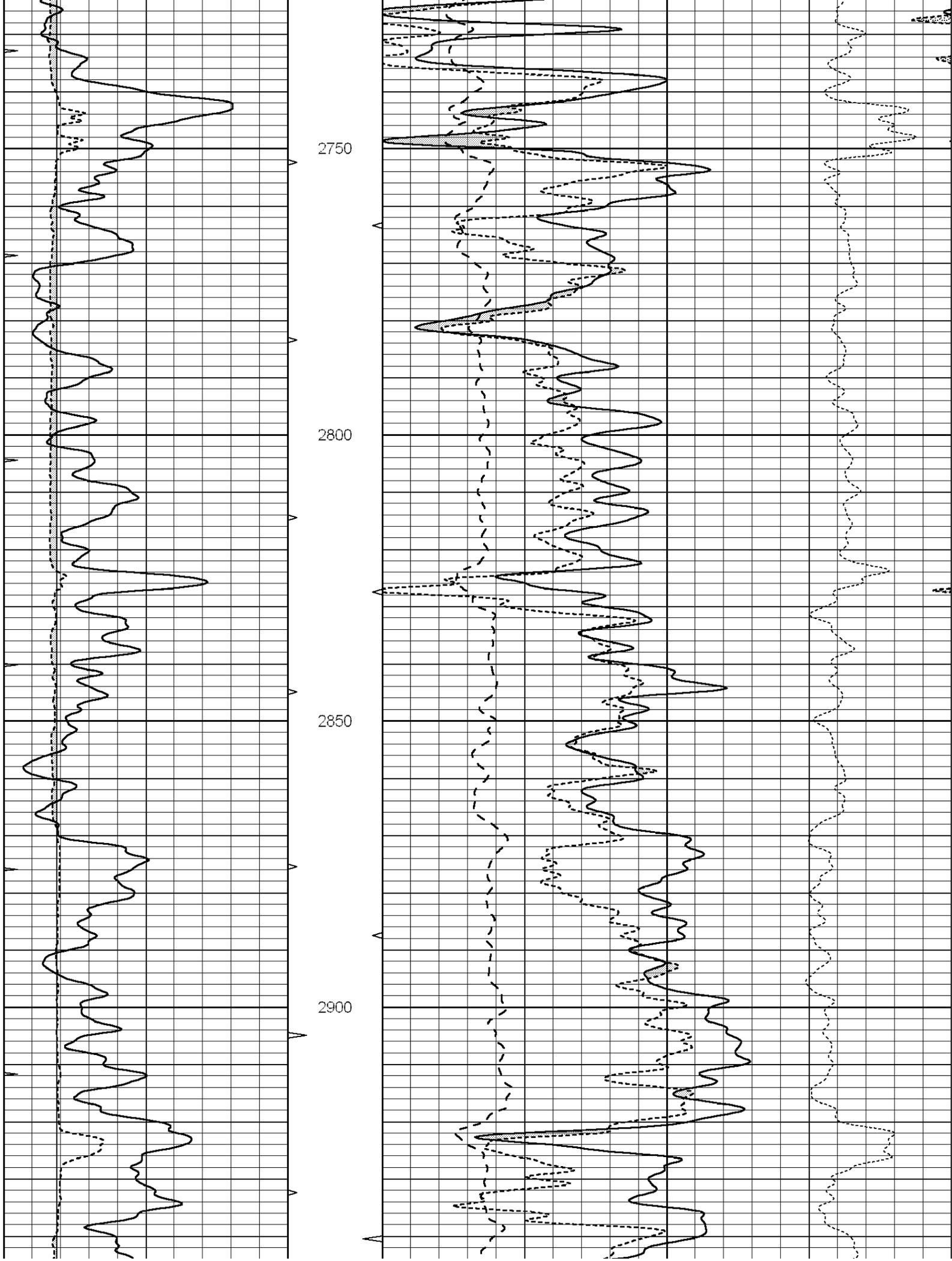


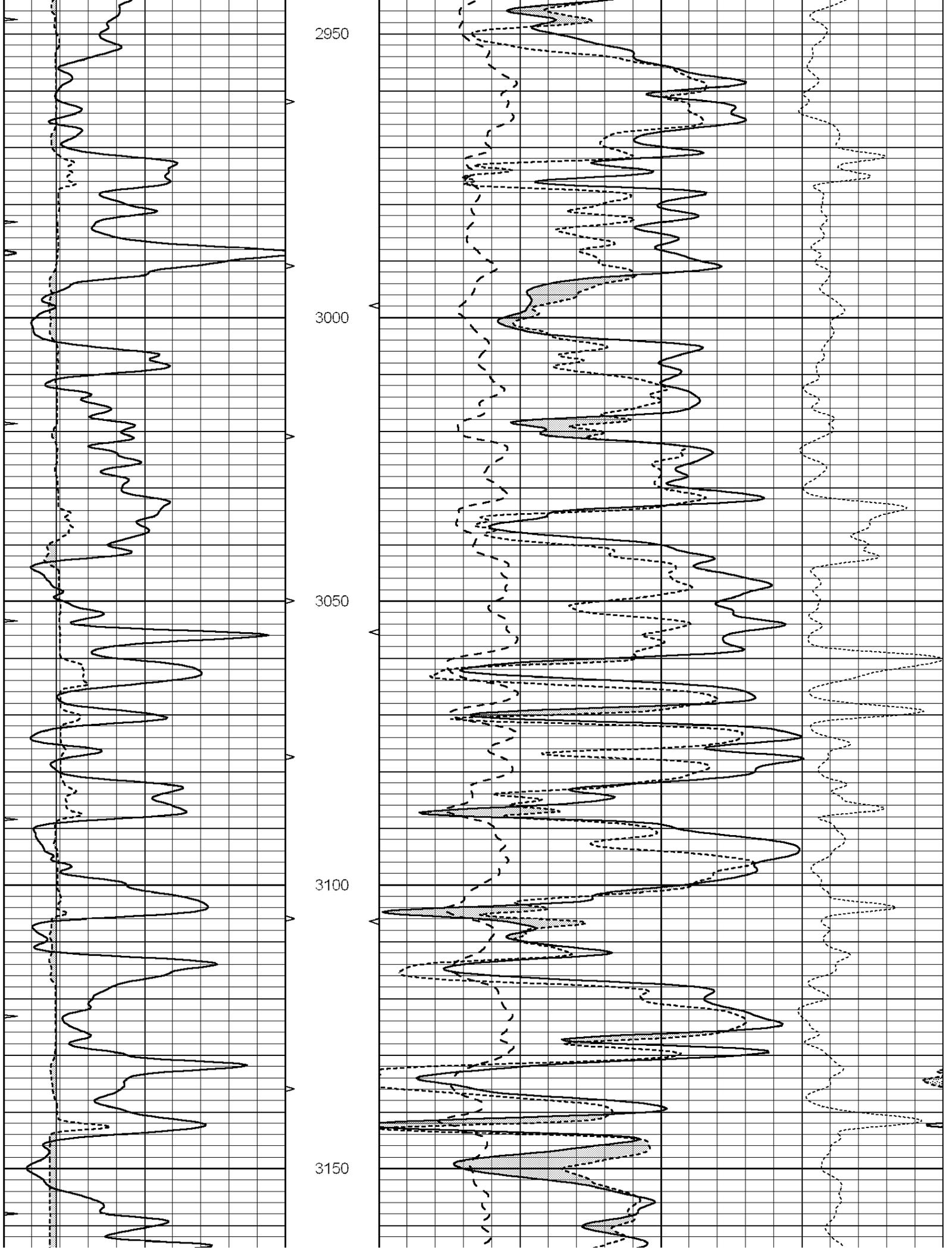
MAIN SECTION

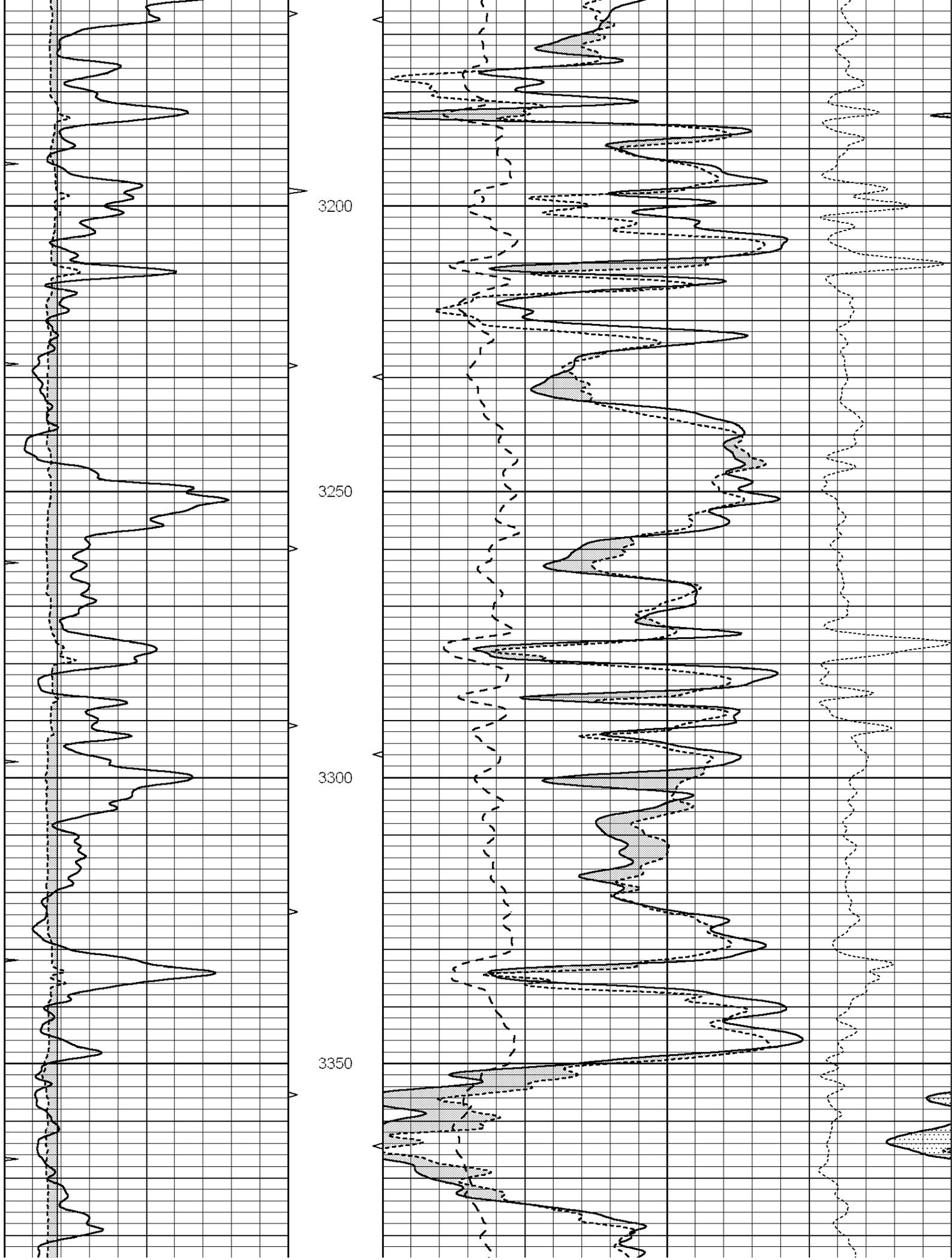
Database File: 010908pe.db
 Dataset Pathname: pass3.6
 Presentation Format: ldt_neu
 Dataset Creation: Sat May 18 01:14:28 2013 by Calc SOC 120430
 Charted by: Depth in Feet scaled 1:240

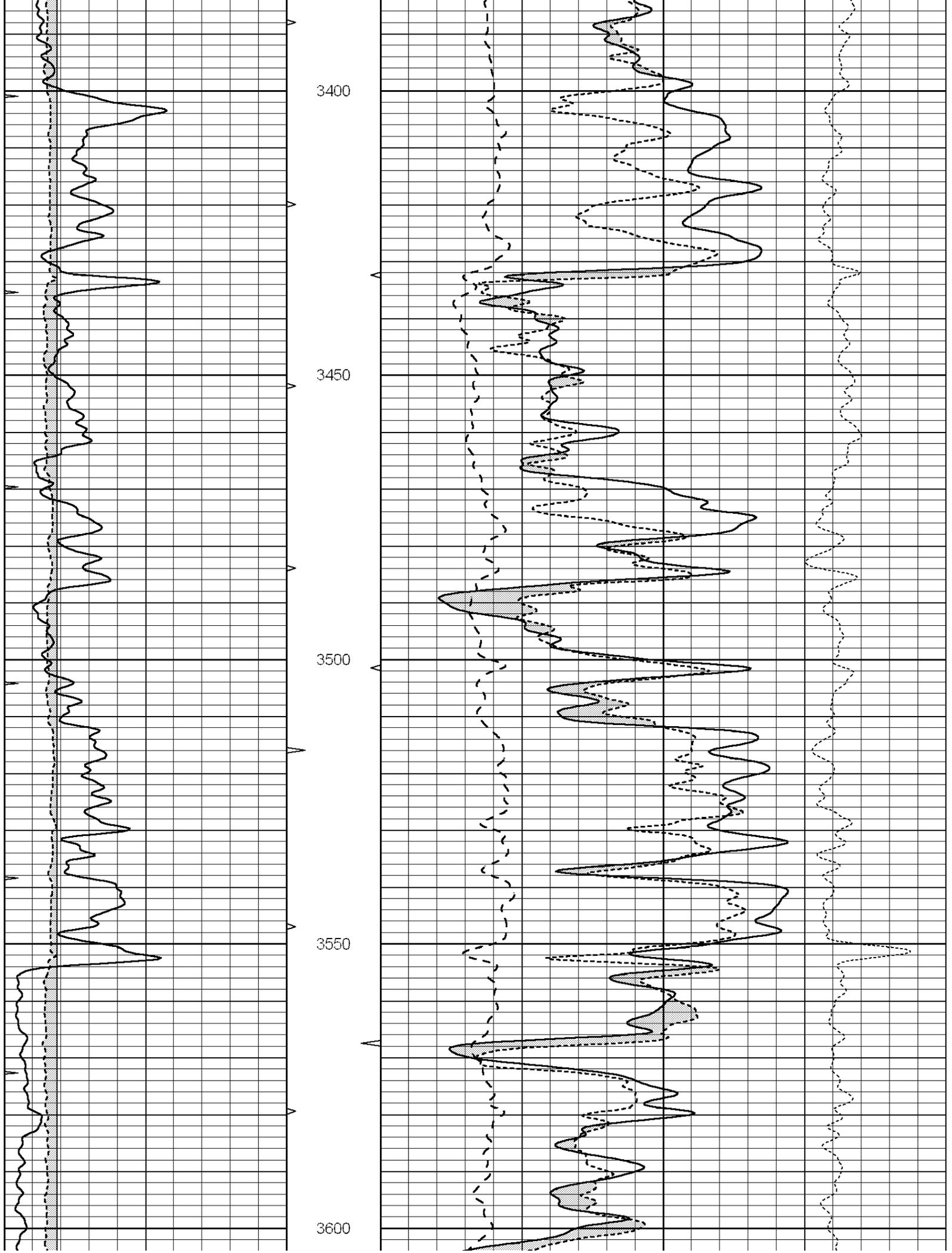
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)		-10
6	CALIPER (in)	16	10 (ft3)	0	COMPENSATED NEUTRON (pu)		-10
0	MINMK	20	TBHV	0	PE	10	-0.25 CORRECTION (g/cc) 0.25
			0 (ft3)	10			

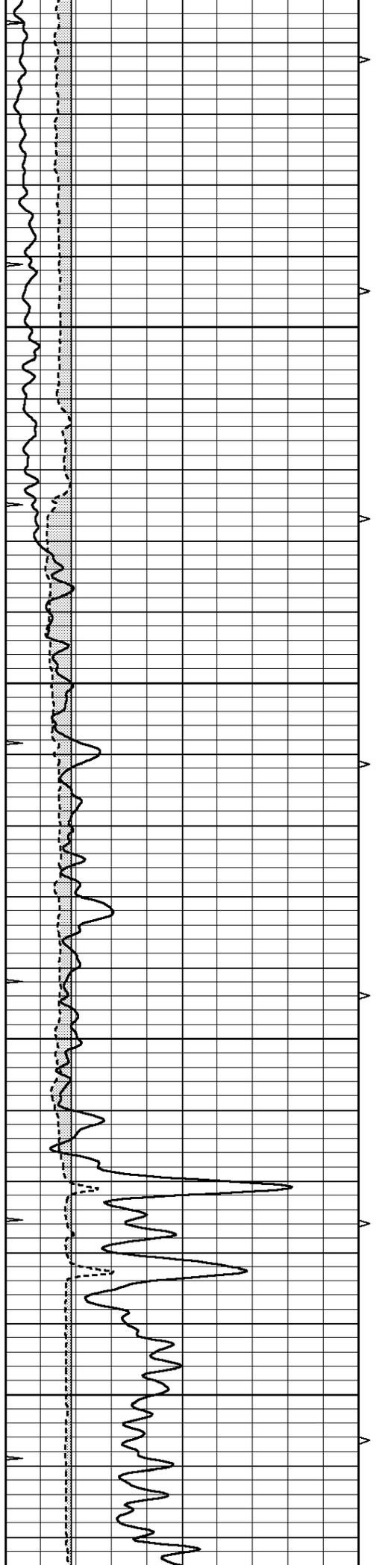










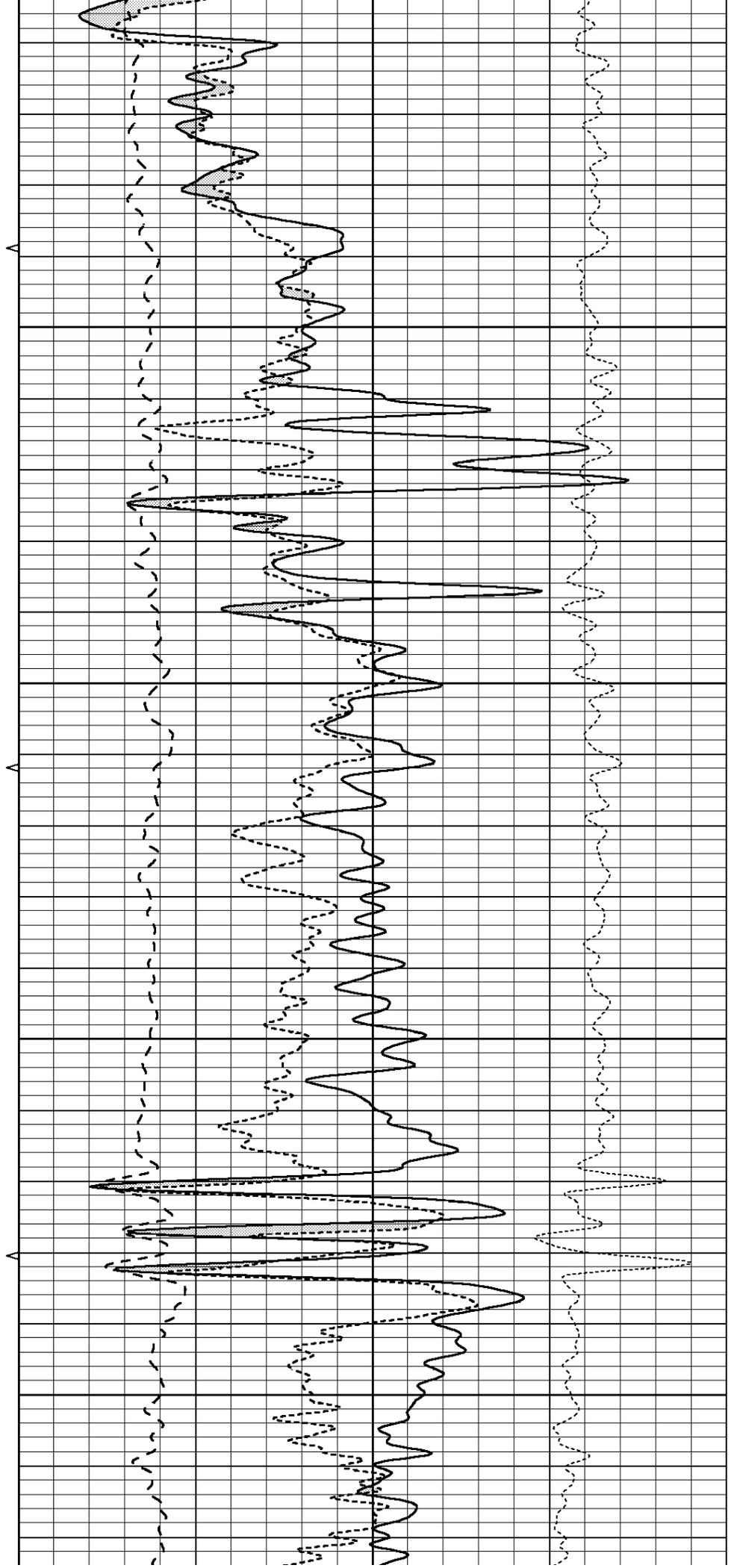


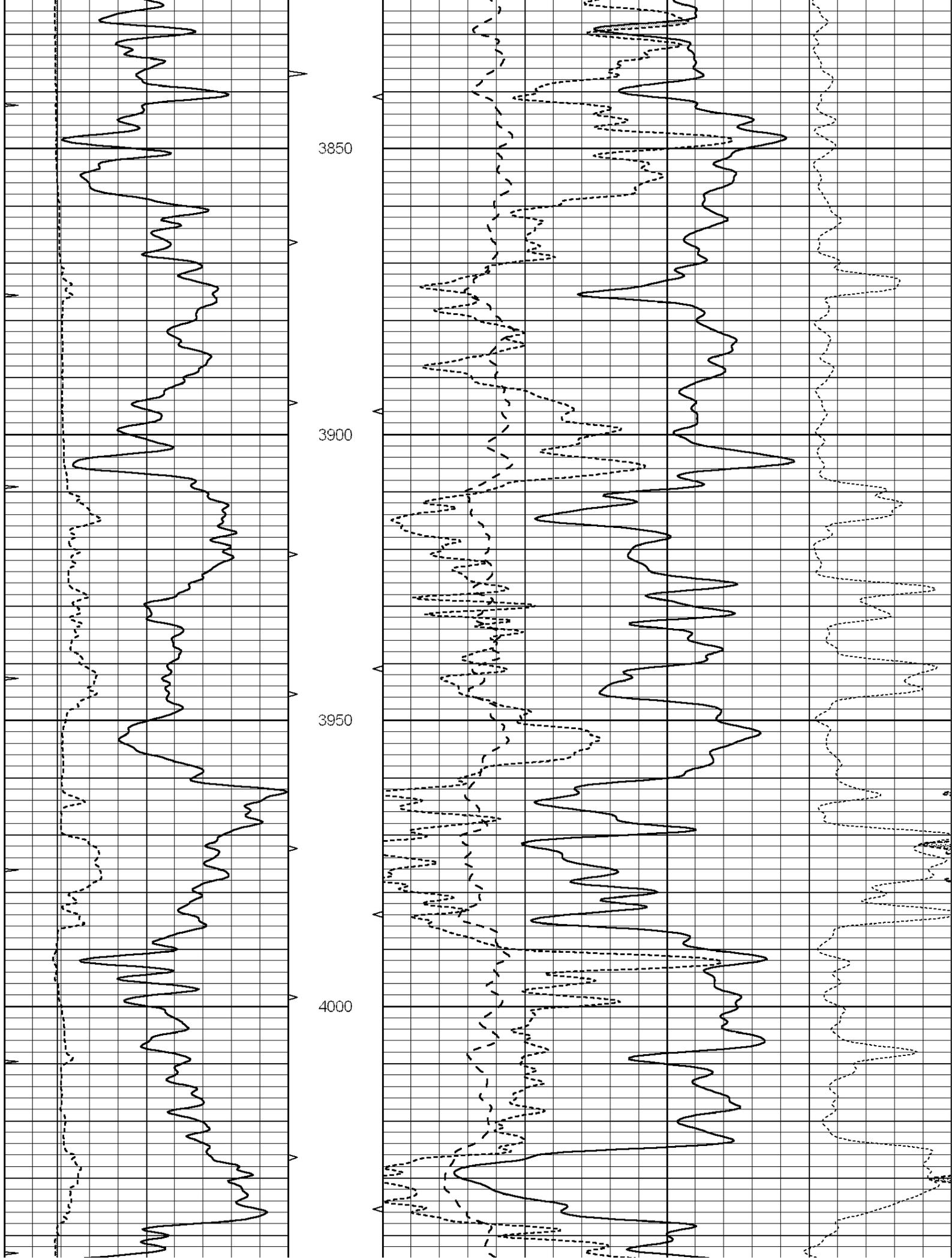
3650

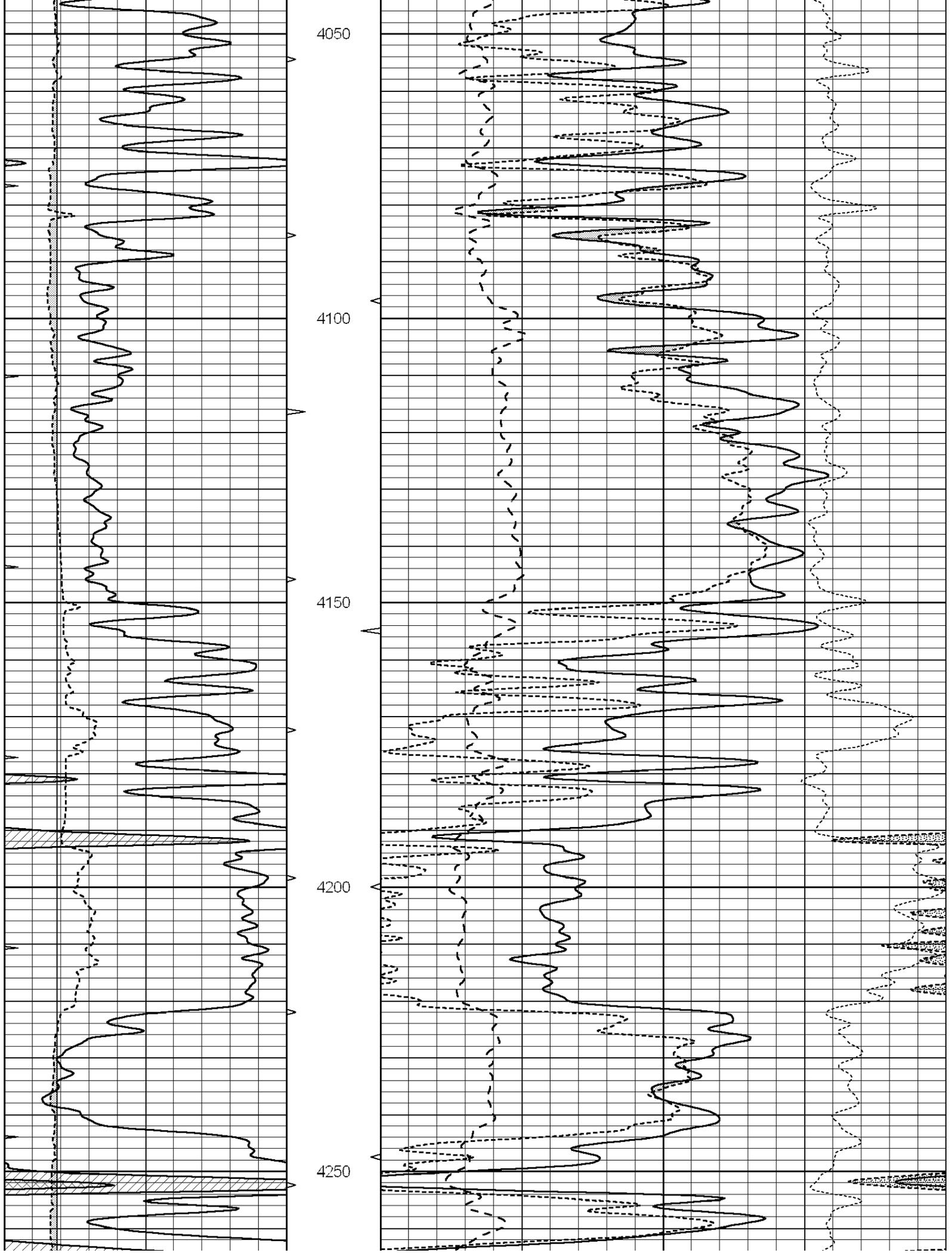
3700

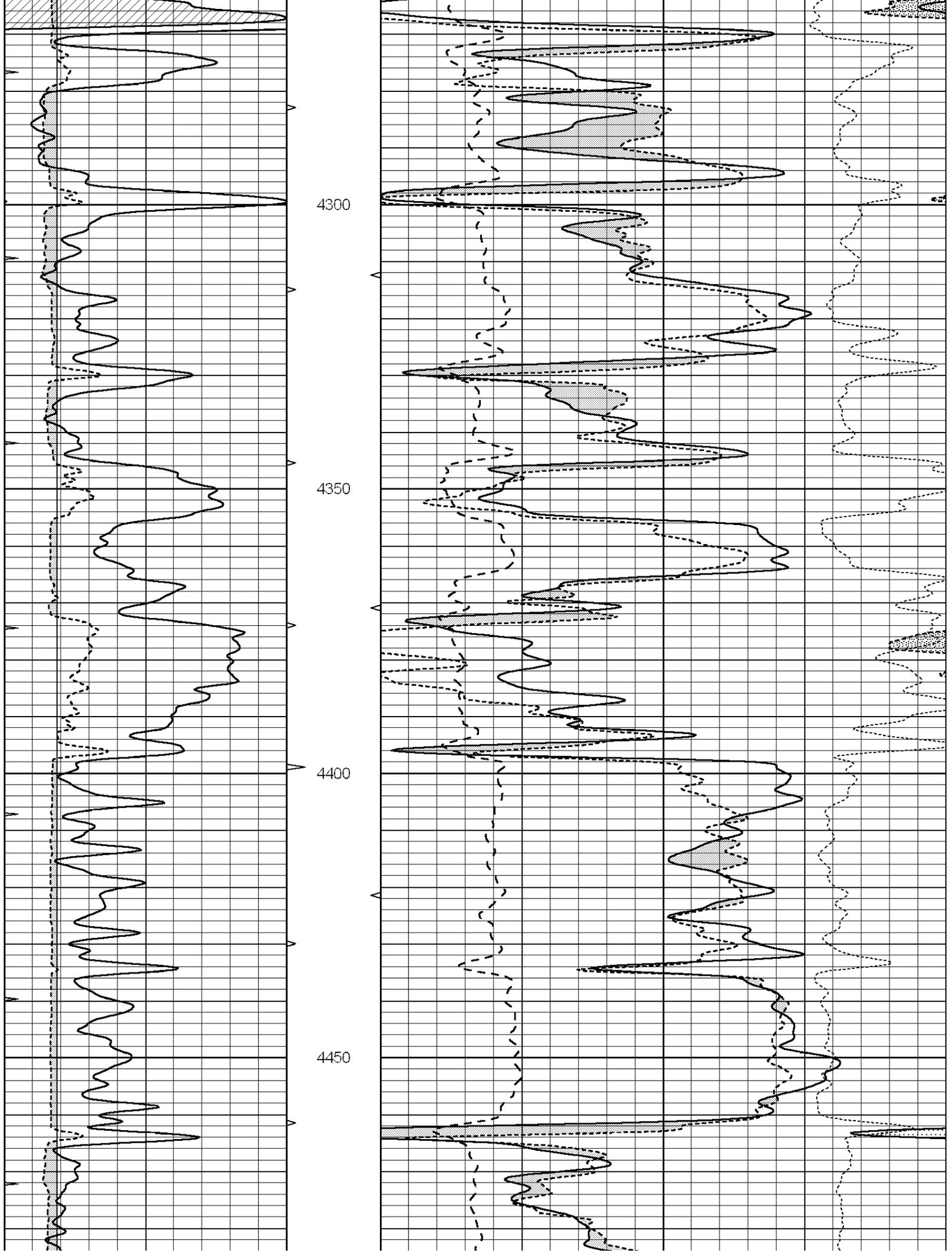
3750

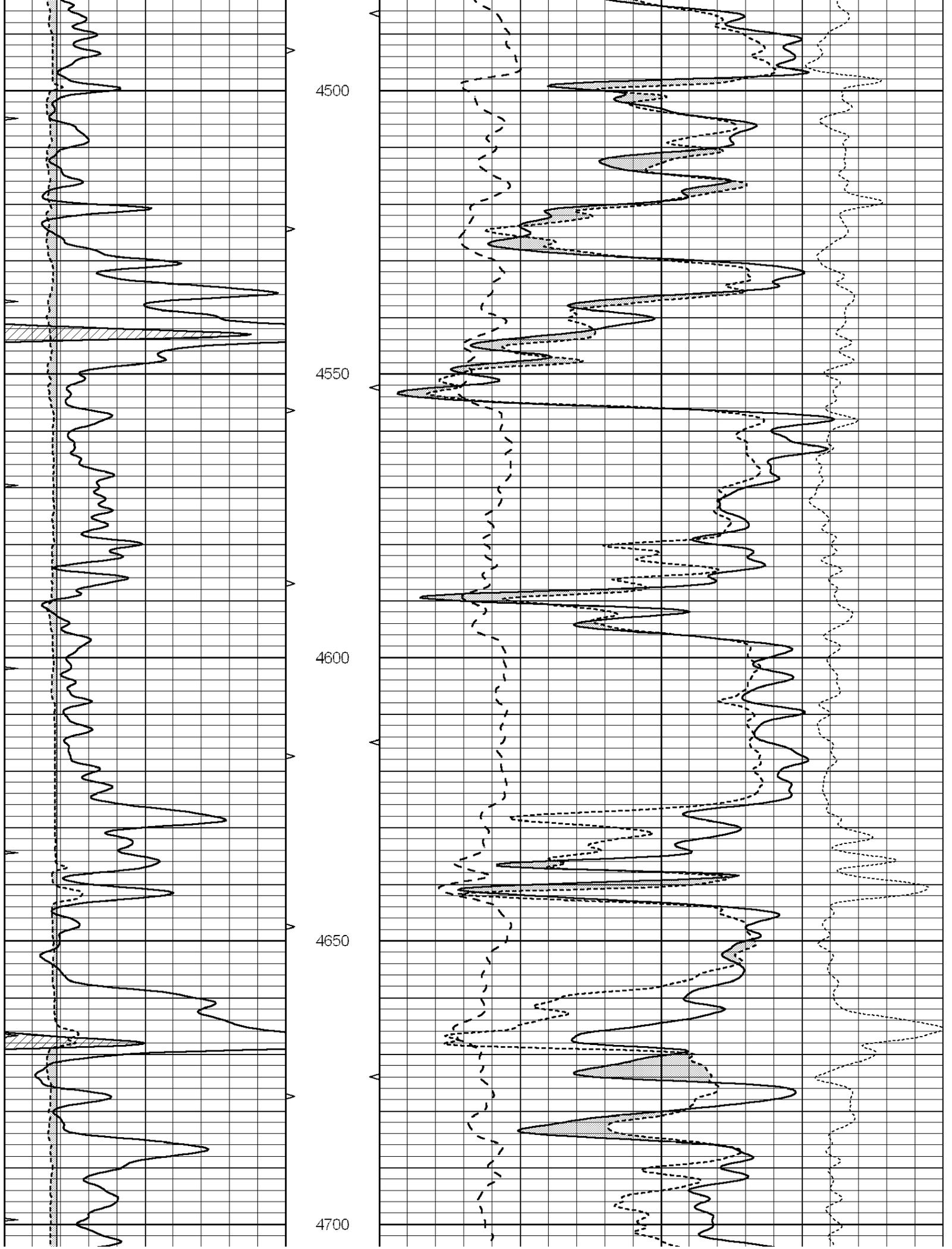
3800

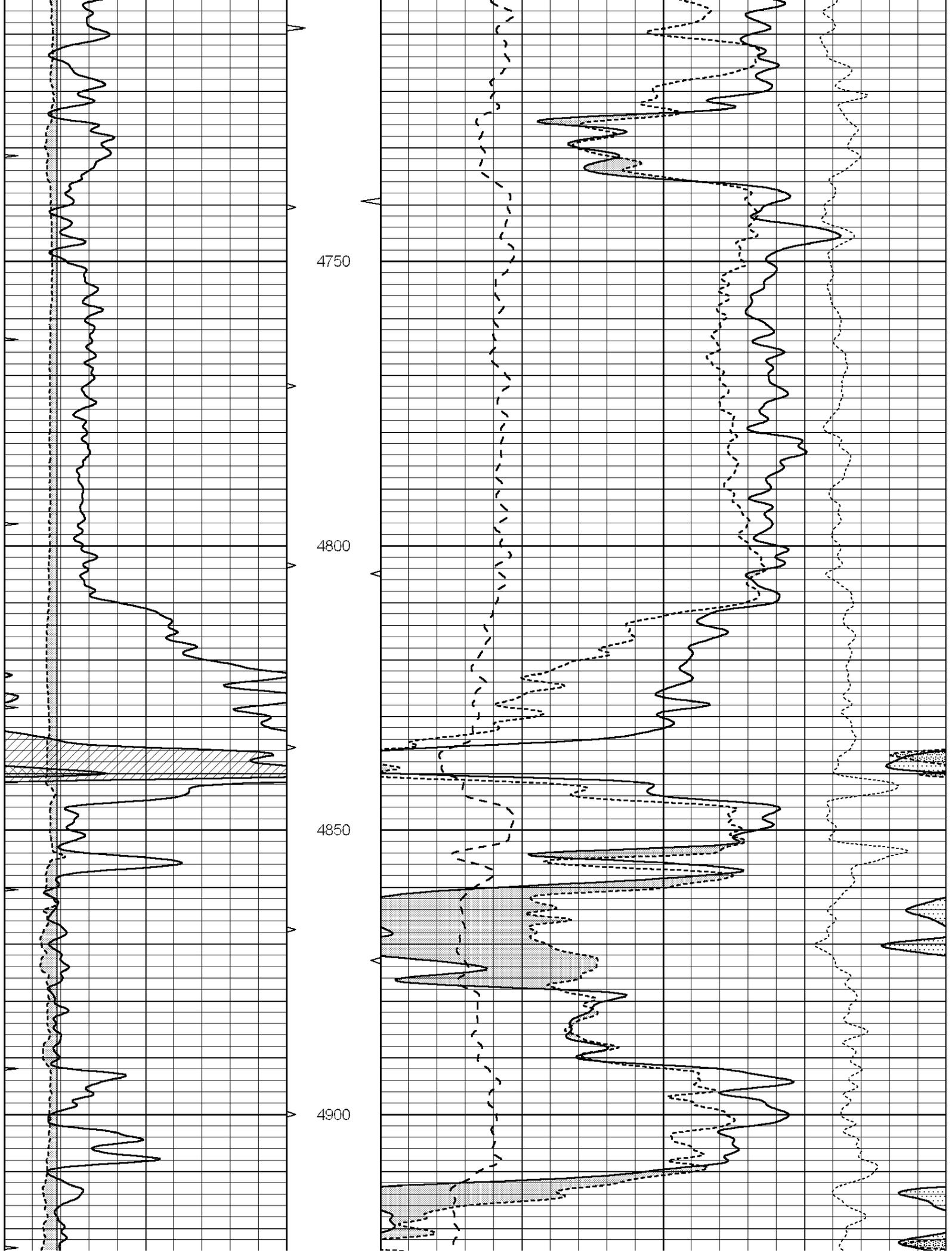


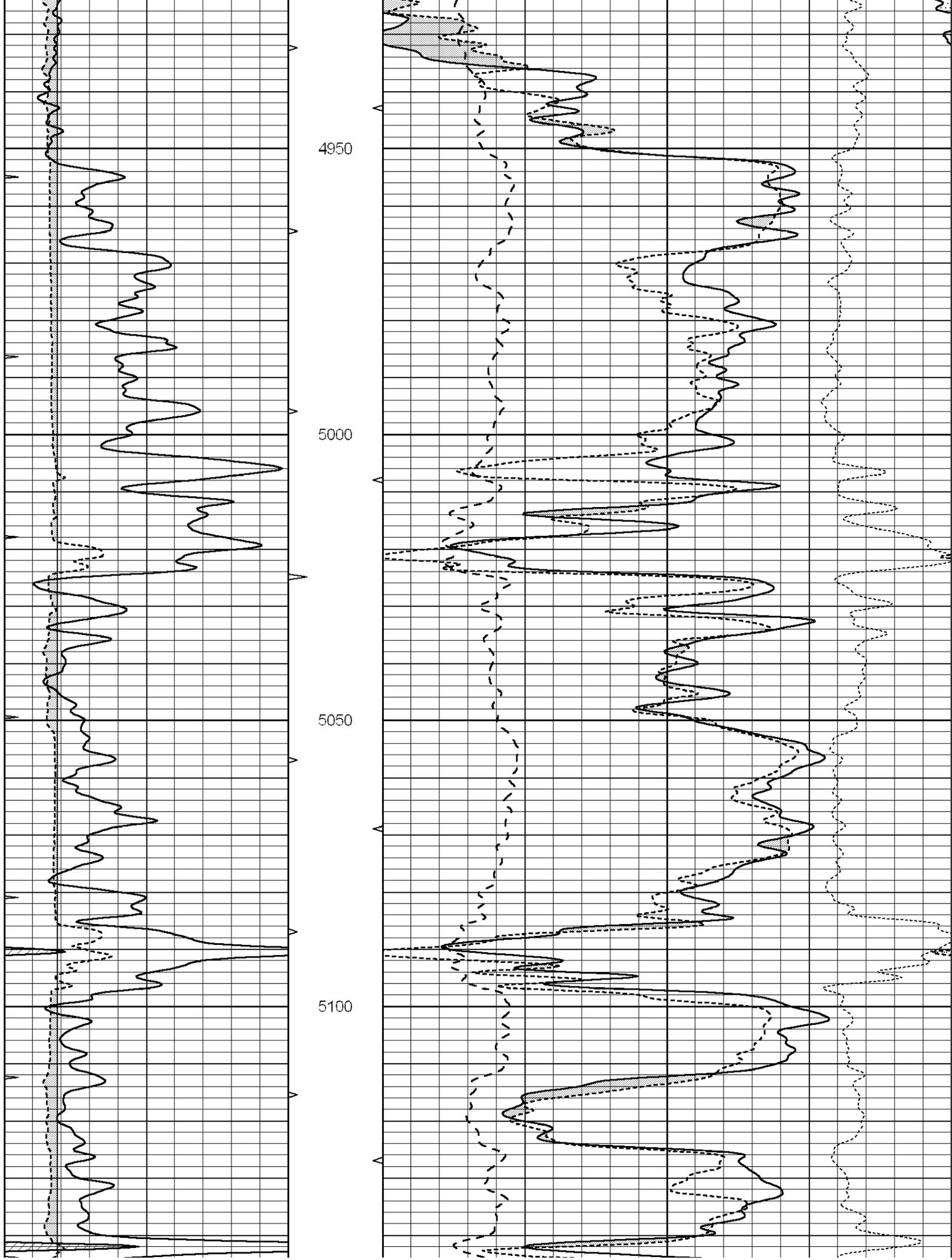


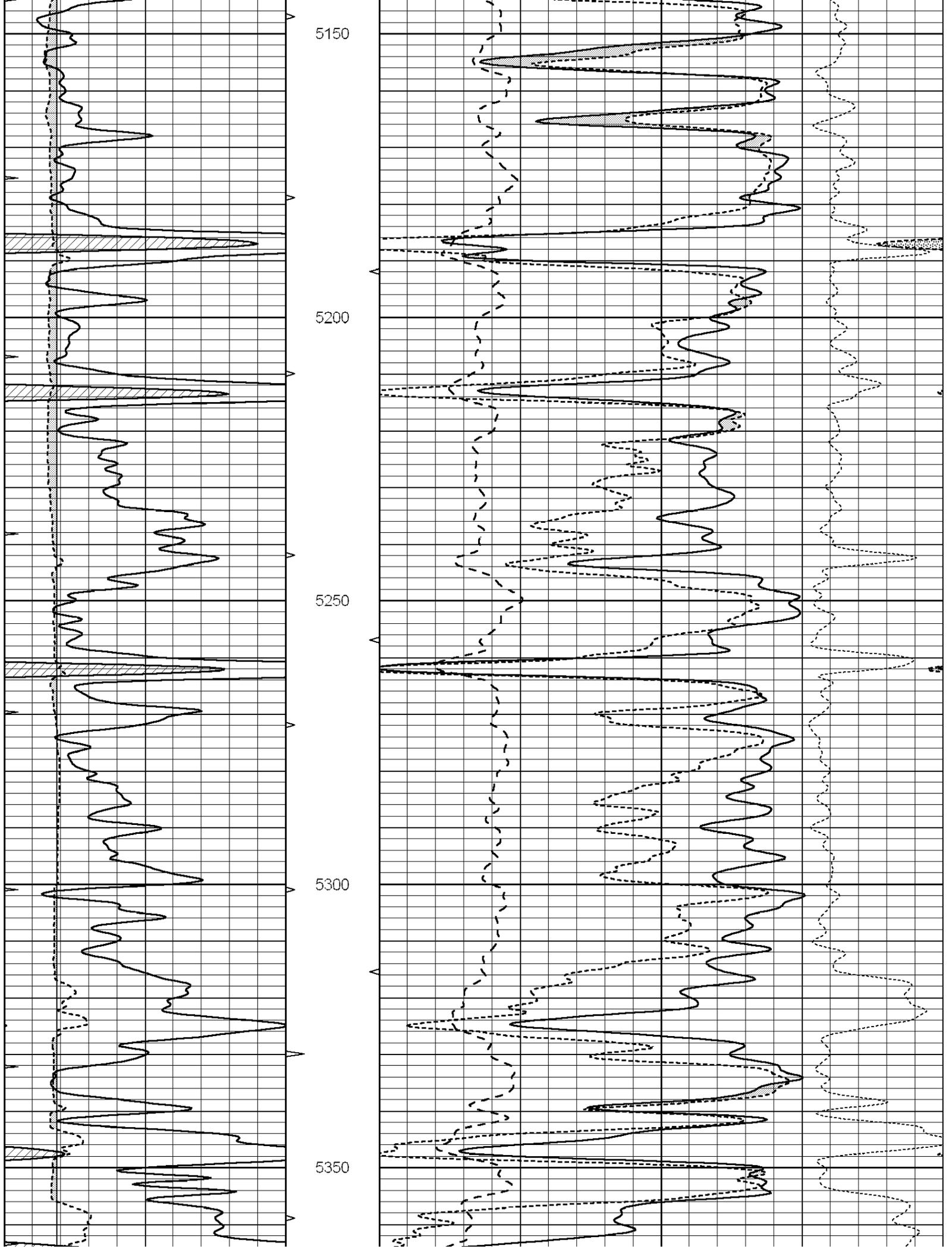


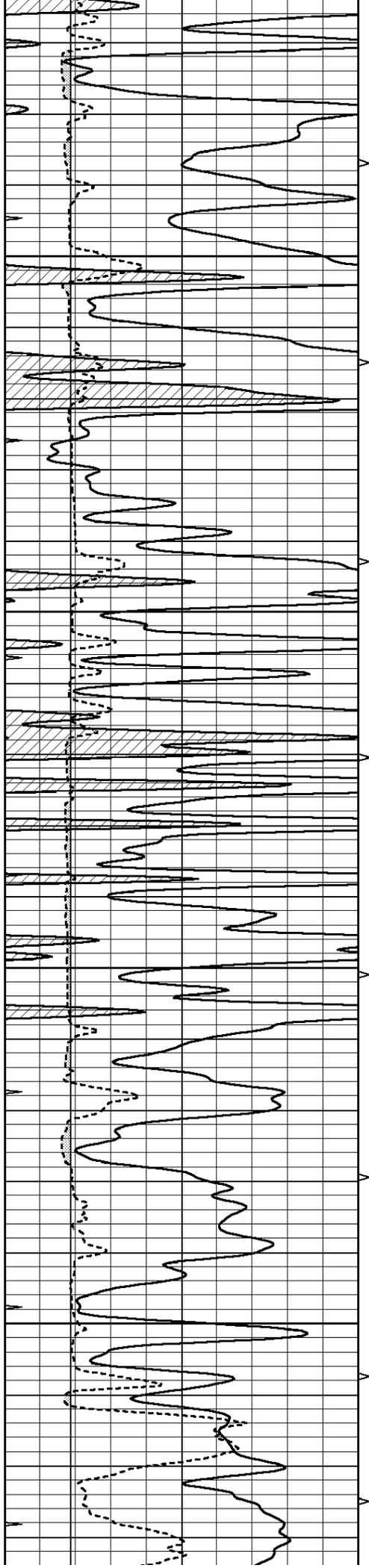










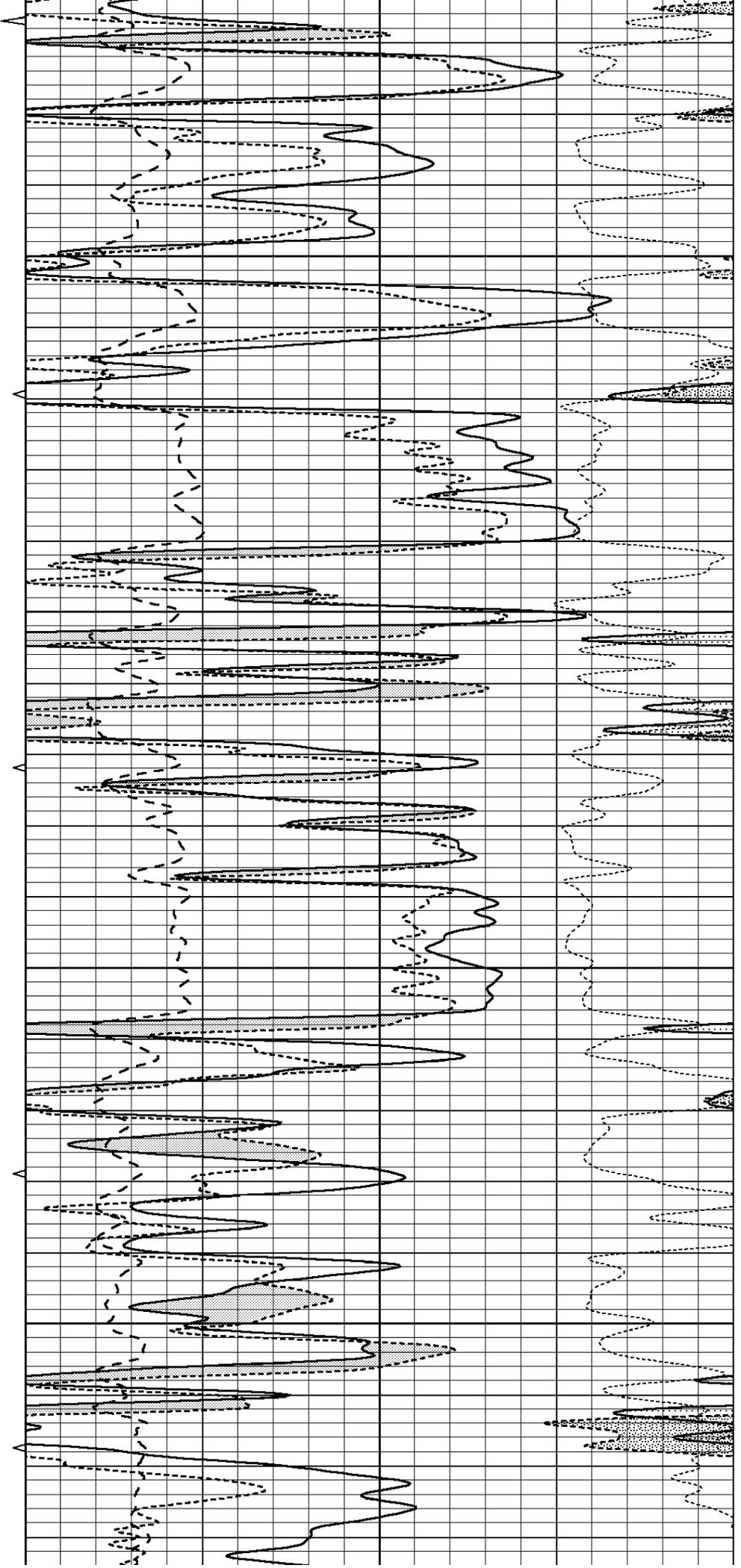


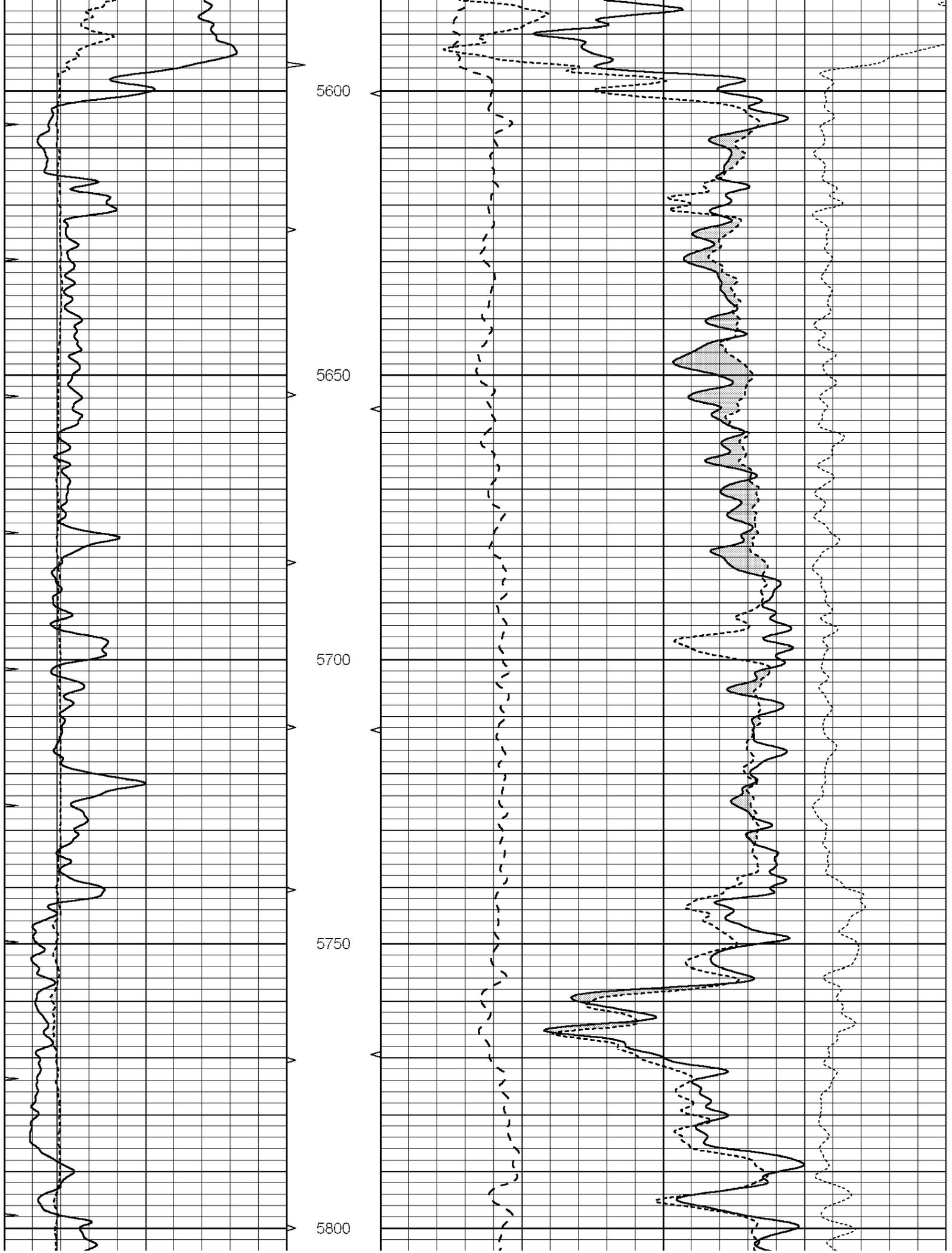
5400

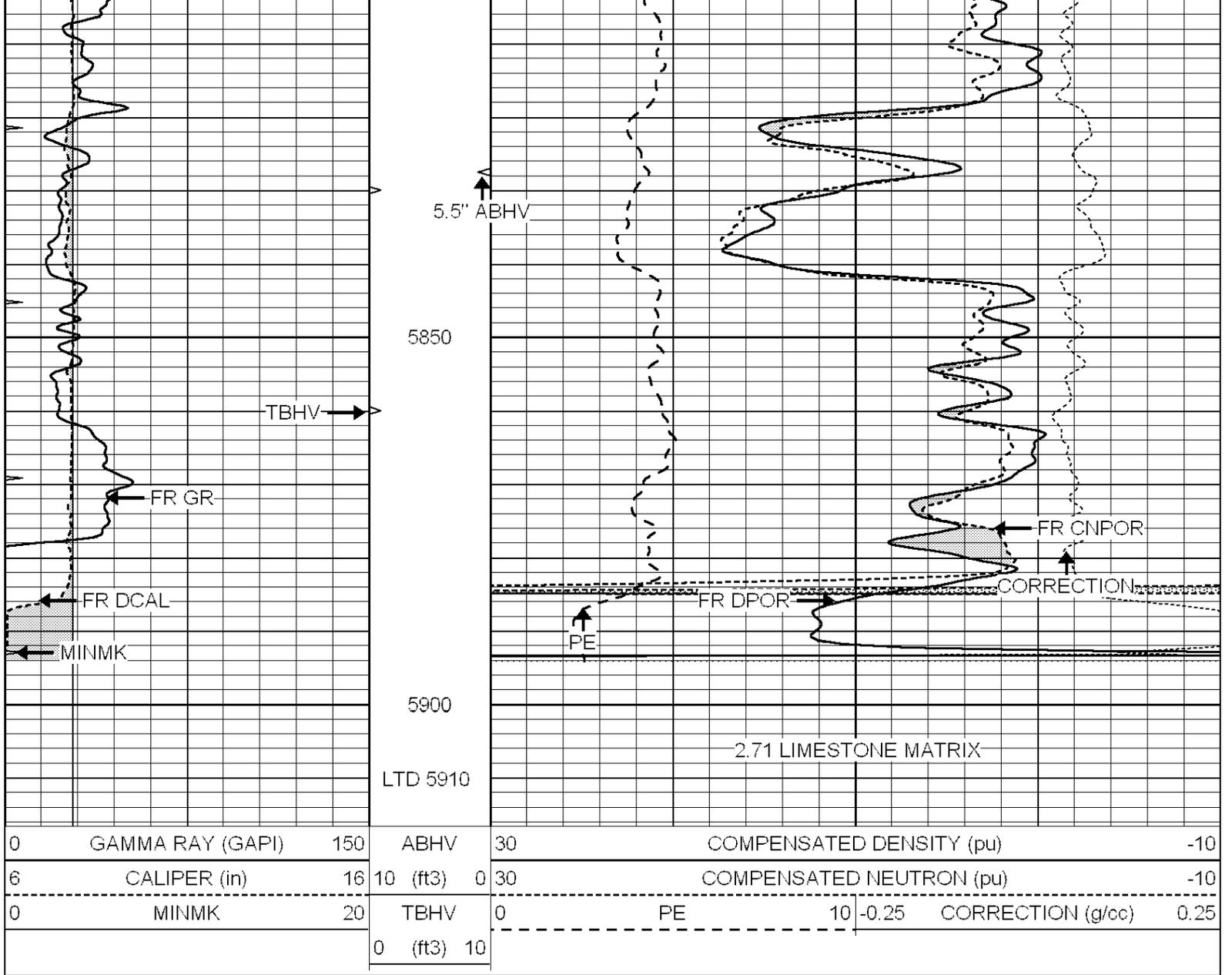
5450

5500

5550





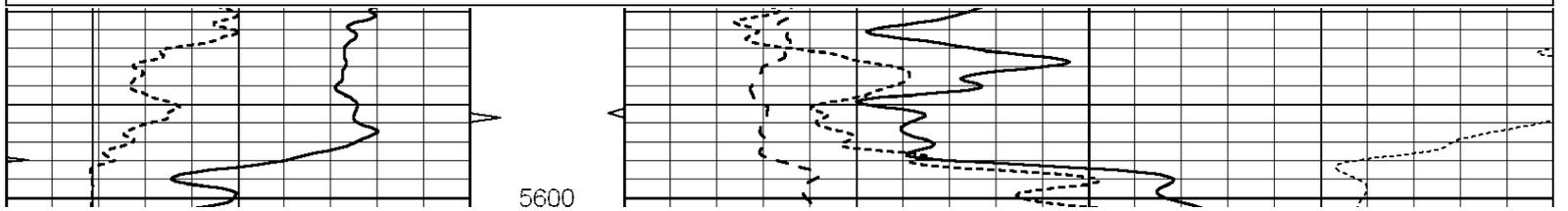


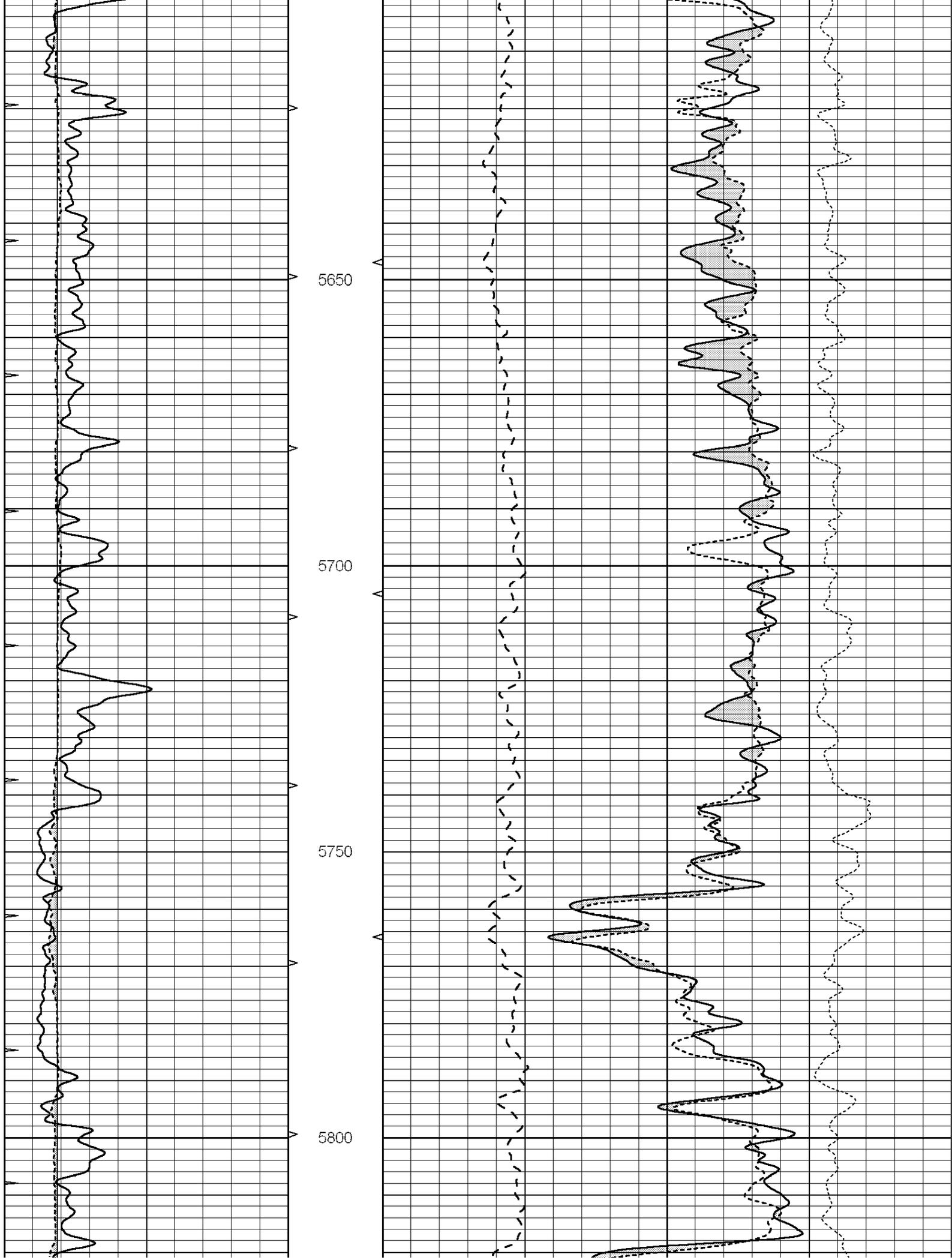
NABORS
COMPLETION & PRODUCTION SERVICES CO.

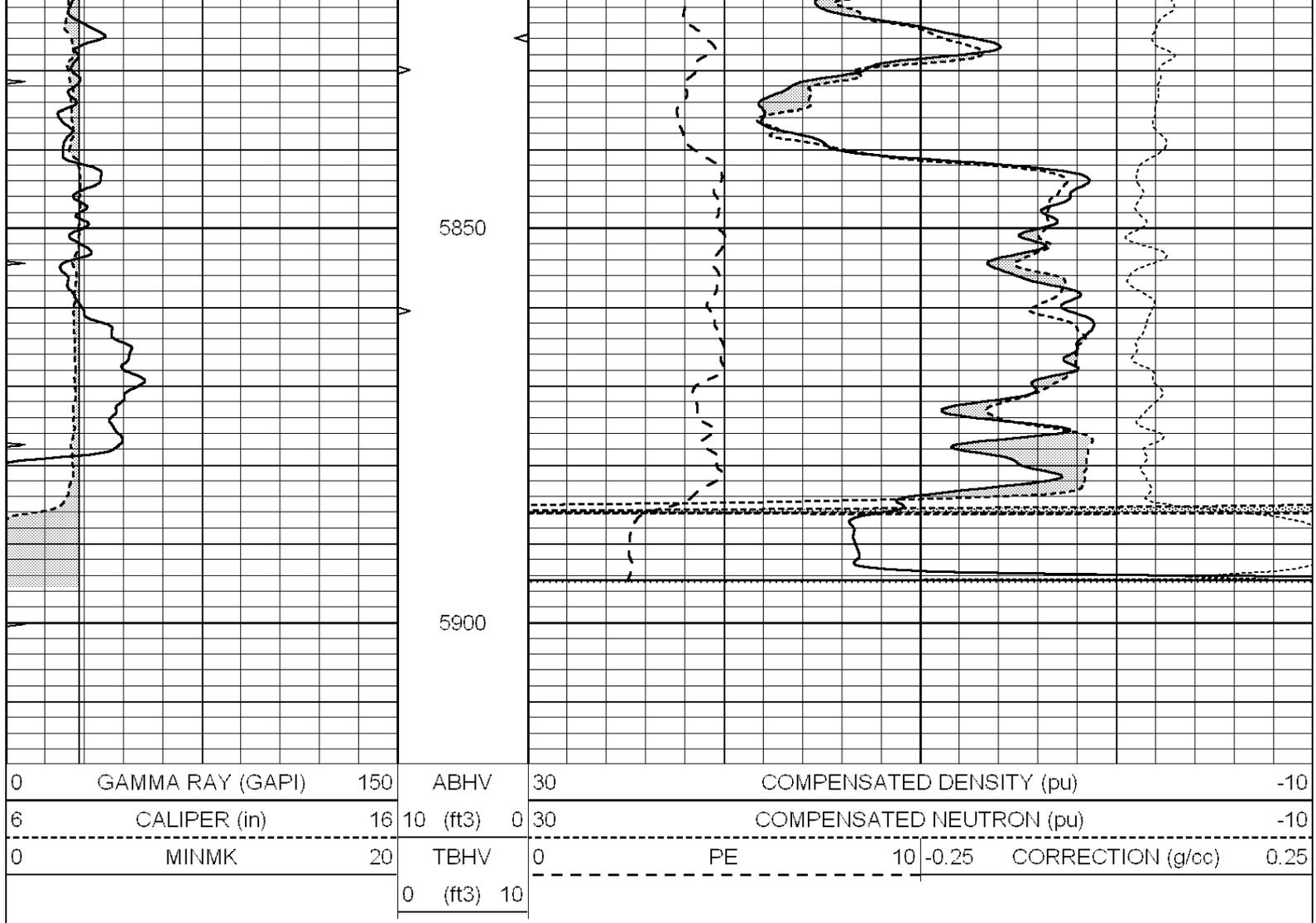
REPEAT SECTION

Database File: 010908pe.db
 Dataset Pathname: pass2.4
 Presentation Format: ldt_neu
 Dataset Creation: Fri May 17 22:56:38 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					







Calibration Report

Database File: 010908pe.db
 Dataset Pathname: pass3.6
 Dataset Creation: Sat May 18 01:14:28 2013 by Calc SOC 120430

Dual Induction Calibration Report

Serial-Model: PROBE9-DILG
 Surface Cal Performed: Fri May 17 21:33:58 2013
 Downhole Cal Performed: Mon Jul 28 12:02:56 2008
 After Survey Verification Performed: Mon Jul 28 12:02:56 2008

Surface Calibration

Loop:	Readings				References		Results	
	Air	Loop			Air	Loop	m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	621.923	-9.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	640.000	-13.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.011	0.610	V	0.000	400.000	mmho/m	667.135	-7.256
Medium	0.005	0.712	V	0.000	464.000	mmho/m	655.677	-3.102

Downhole Calibration

	Readings				References		Results	
	Zero	Cal			Zero	Cal	m'	b'
	0.000	0.000	V	0.000	0.000		0.000	0.000

Deep	0.000	0.000	mmho/m	14.508	388.384	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	166.367	504.400	mmho/m	1.000	0.000
LL3		7.500	V		1400.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		4000.000	mmho-m		

After Survey Verification								
	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		

Litho Density Calibration Report
Serial: 006 Model: PRB

Master Calibration		Performed Sun Aug 15 09:48:41 2010						
	Background	Magnesium	Aluminum	Sandstone				
Window 1	1686.6	11612.8	3932.0	12718.8			cps	
Window 2	1531.4	9204.7	3267.8	9851.9			cps	
Window 3	1198.3	4733.6	1952.5	4920.6			cps	
Window 4	317.3	321.2	325.9	303.6			cps	
Long Space	0.0	7673.3	1736.4	8320.4			cps	
Short Space	1.7	2548.5	1657.2	2628.8			cps	
Rho		1.7100	2.5900	1.3800			g/cc	
Pe		0.0000	2.5700	1.5500				
Rib Angle	: 43.8	Rib Slope	: 0.961	Density/Spine Ratio			: 0.569	
Spine Angle	: 73.8	Spine Slope	: 3.453	Spine Intercept			: -18.1	

Before Survey Verification		Performed Wed Dec 31 18:00:00 1969						
Window 1	0.0	0.0	0.0	0.0			cps	
Window 2	0.0	0.0	0.0	0.0			cps	
Window 3	0.0	0.0	0.0	0.0			cps	
Window 4	0.0	0.0	0.0	0.0			cps	
Long Space	0.0	0.0	0.0	0.0			cps	
Short Space	0.0	0.0	0.0	0.0			cps	
Measured Rho		0.0000	0.0000	0.0000			g/cc	
Measured Correction		0.0000	0.0000	0.0000			g/cc	
Measured Pe			0.0000	0.0000				

After Survey Verification		Performed Wed Dec 31 18:00:00 1969						
Window 1	0.0	0.0	0.0	0.0			cps	
Window 2	0.0	0.0	0.0	0.0			cps	
Window 3	0.0	0.0	0.0	0.0			cps	
Window 4	0.0	0.0	0.0	0.0			cps	
Long Space	0.0	0.0	0.0	0.0			cps	
Short Space	0.0	0.0	0.0	0.0			cps	
Measured Rho		0.0000	0.0000	0.0000			g/cc	
Measured Correction		0.0000	0.0000	0.0000			g/cc	
Measured Pe			0.0000	0.0000				

Compensated Neutron Calibration Report

Serial Number: 070808
Tool Model: 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:	Mon Apr 15 10:30:52 2013	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.3500	GAPI/cps