



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

**COMPENSATED
DENSITY / NEUTRON
PE LOG**

Company LOTUS OPERATING COMPANY, LLC. Well #4 ROSE Field STRANATHAN / HARDTNER County BARBER State KANSAS		Company LOTUS OPERATING COMPANY, LLC. Well #4 ROSE Field STRANATHAN / HARDTNER County BARBER State KANSAS		Location: API # : 15-007-24236-0000 N/2 - NW - SE SEC 25 TWP 34S RGE 12W Permanent Datum GROUND LEVEL Elevation 1383 Log Measured From KELLY BUSHING 13' A.G.L. Drilling Measured From KELLY BUSHING Other Services DIL/MEL SON/FF Elevation K.B. 1396 D.F. 1394 G.L. 1383
Date	10/10/14			
Run Number	ONE			
Depth Driller	5385			
Depth Logger	5390			
Bottom Logged Interval	5366			
Top Log Interval	3700			
Casing Driller	10 3/4" @ 298'			
Casing Logger	298			
Bit Size	7 7/8"			
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 3,500 PPM		
Density / Viscosity	9.4/44			
pH / Fluid Loss	8.0/10.0			
Source of Sample	FLOWLINE			
Rm @ Meas. Temp	.800 @ 85F			
Rmf @ Meas. Temp	.600 @ 85F			
Rmc @ Meas. Temp	.960 @ 85F			
Source of Rmf / Rmc	MEASUREMENT			
Rm @ BHT	.531 @ 128F			
Time Circulation Stopped	3 HOURS			
Time Logger on Bottom	10:30 P.M.			
Maximum Recorded Temperature	128F			
Equipment Number	4854			
Location	HAYS, KANSAS			
Recorded By	JEFF LUEBBERS			
Witnessed By	TIM HELLMAN			

<<< 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., 15 1/2S. ON HWY 281 PAST "HAWKINS RD.", 1/2 W. INTO

Database File:

25893pe.db

Dataset Pathname:

pass3.9

Presentation Format:

ldt_neu

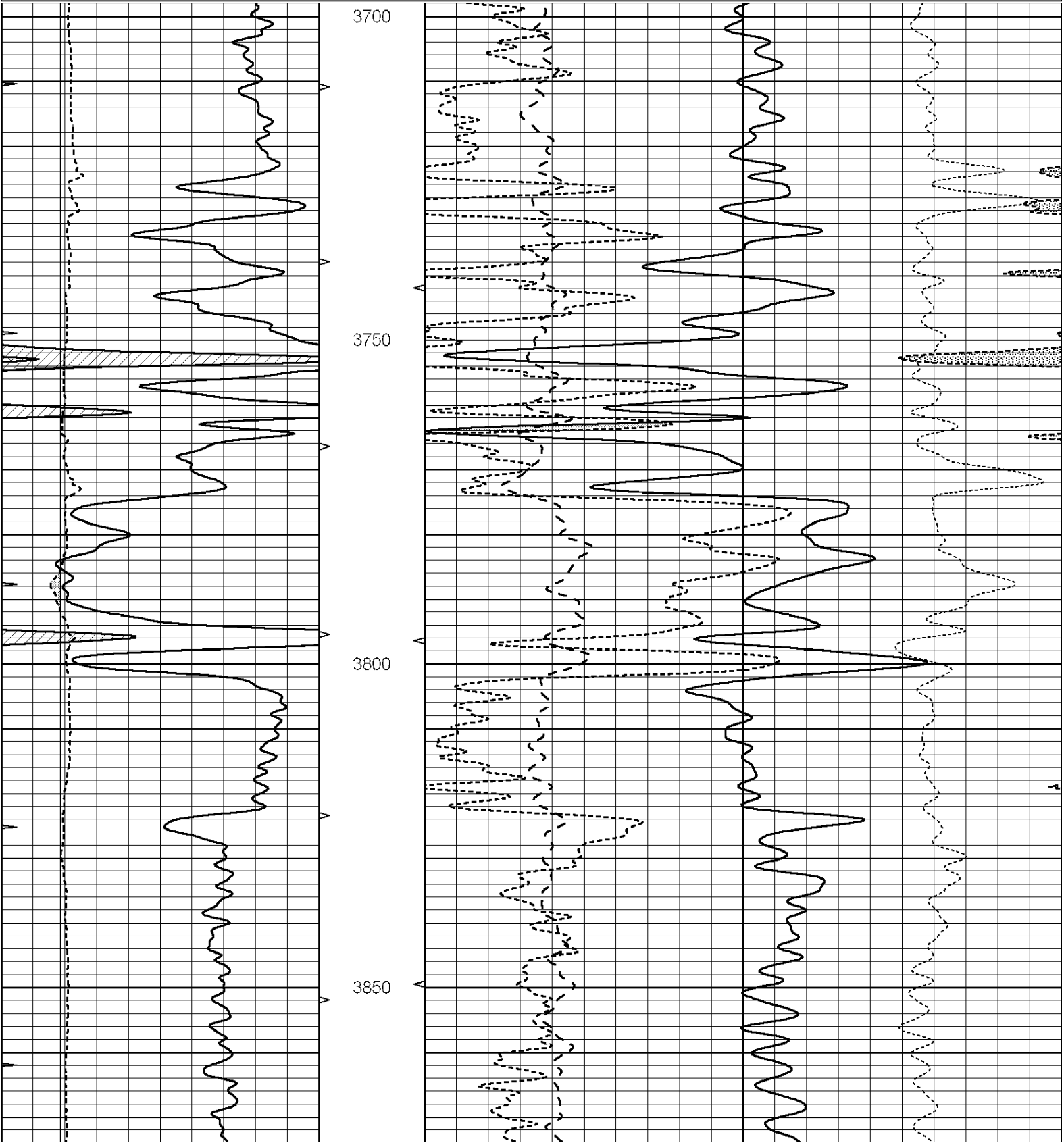
Dataset Creation:

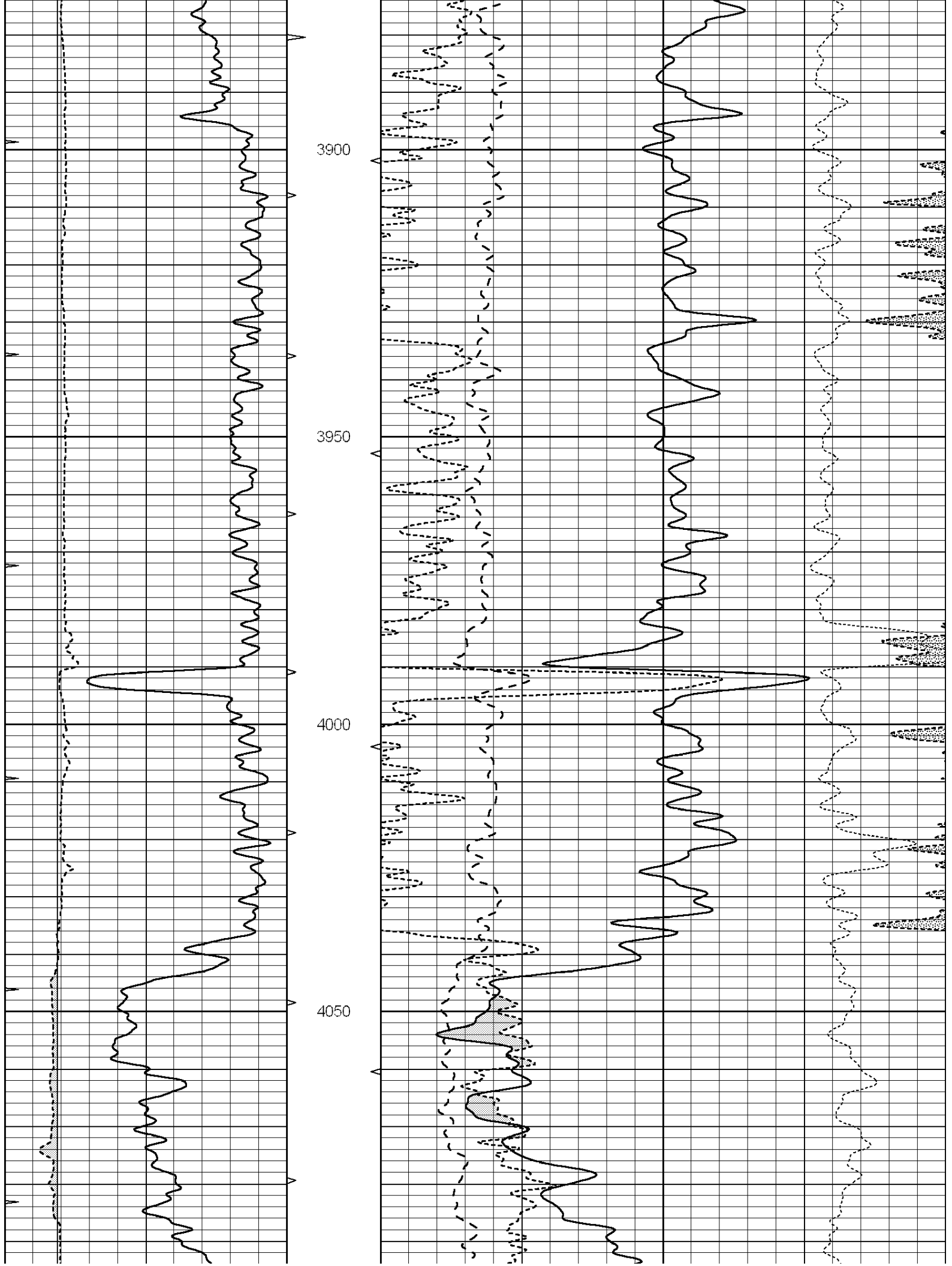
Sat Oct 11 00:25:26 2014

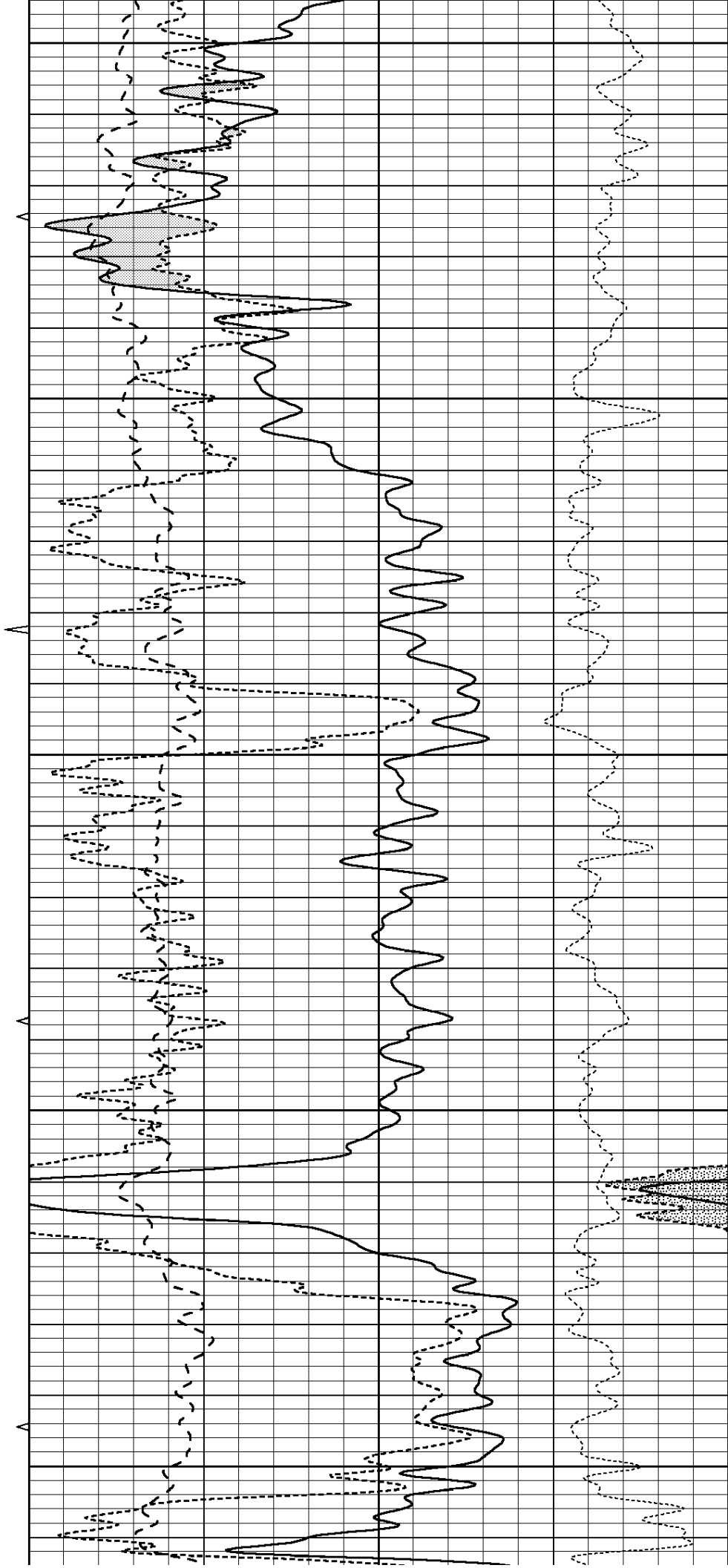
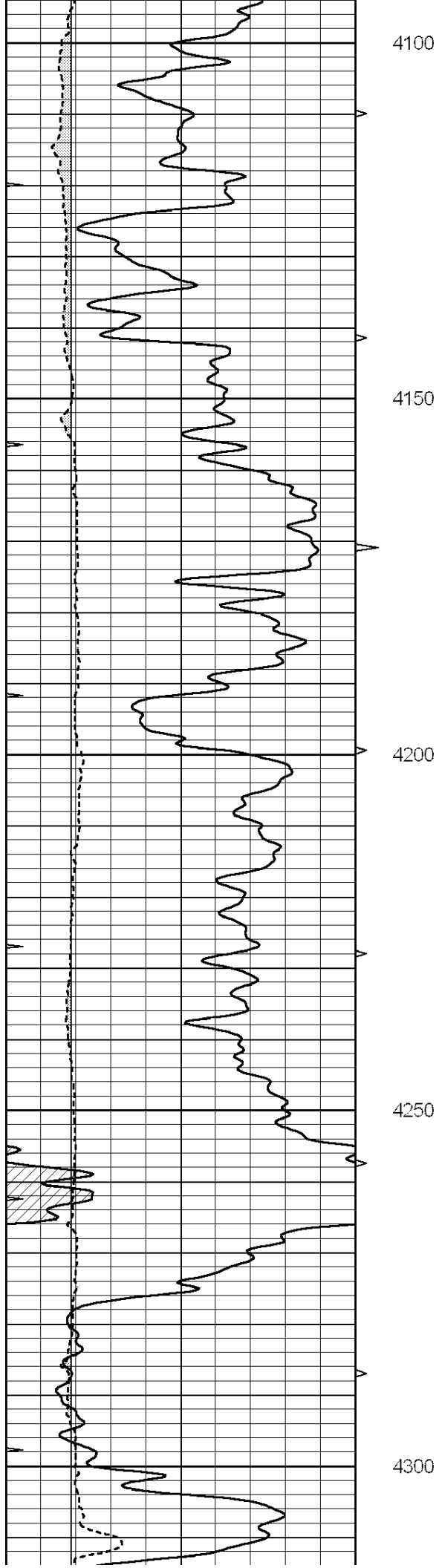
Charted by:

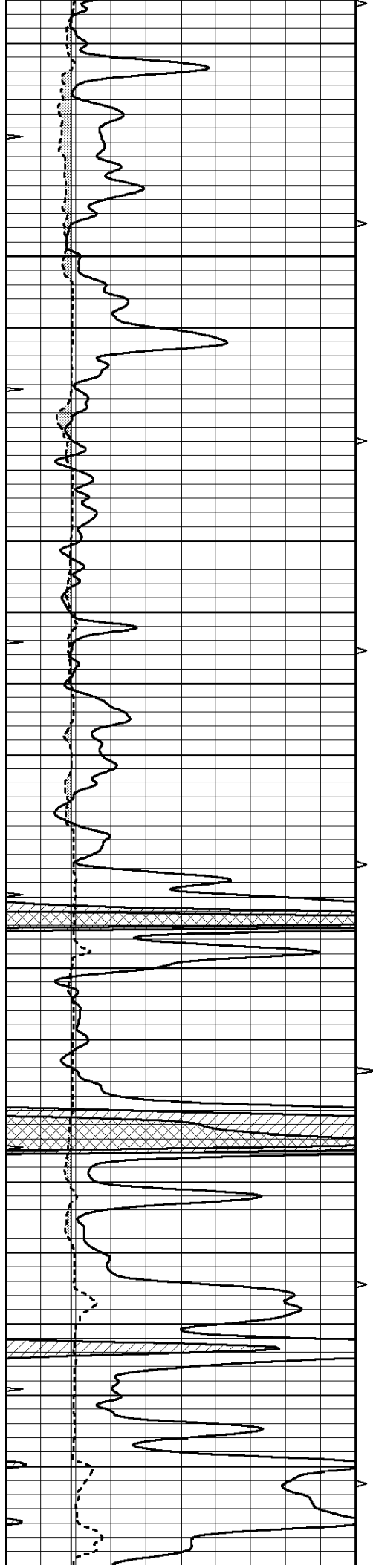
Depth in Feet scaled 1:240

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					







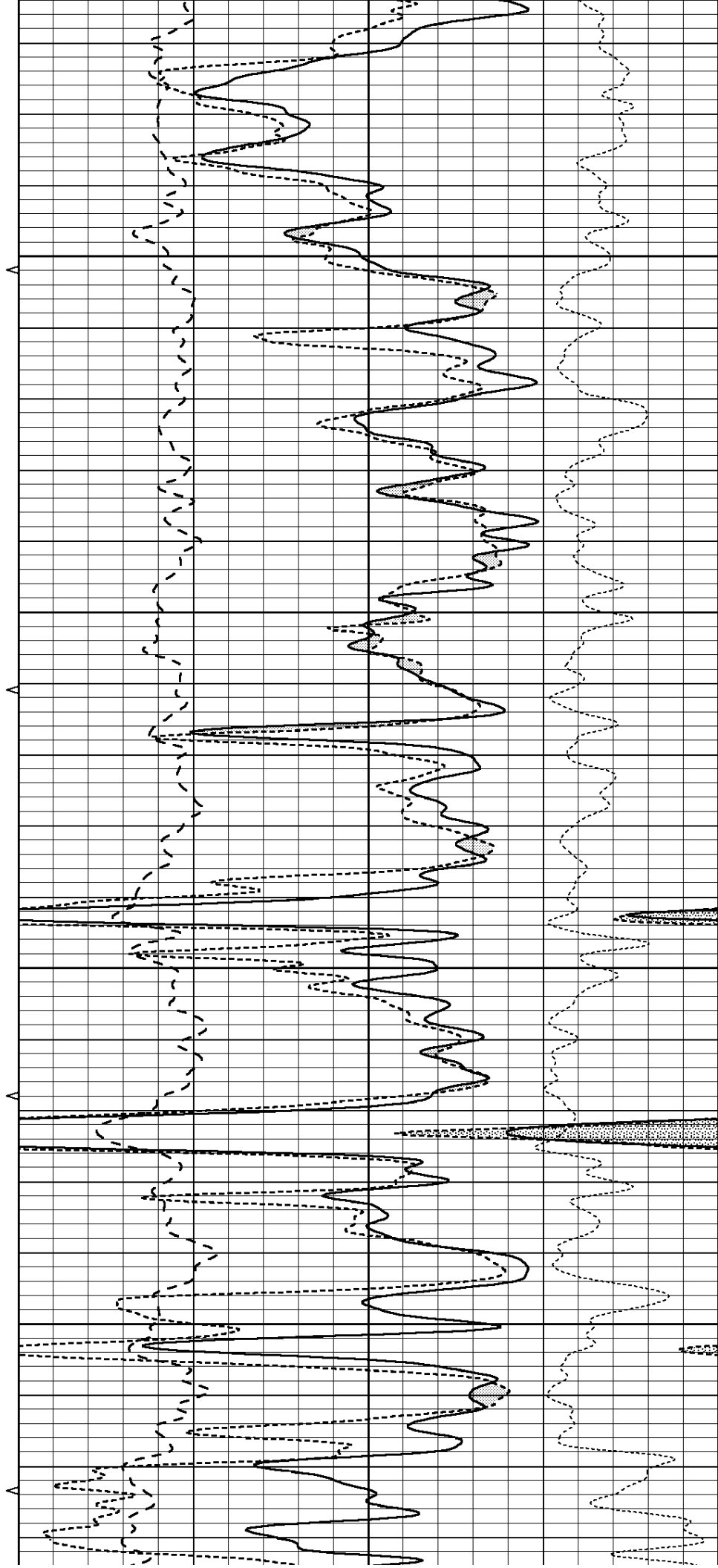


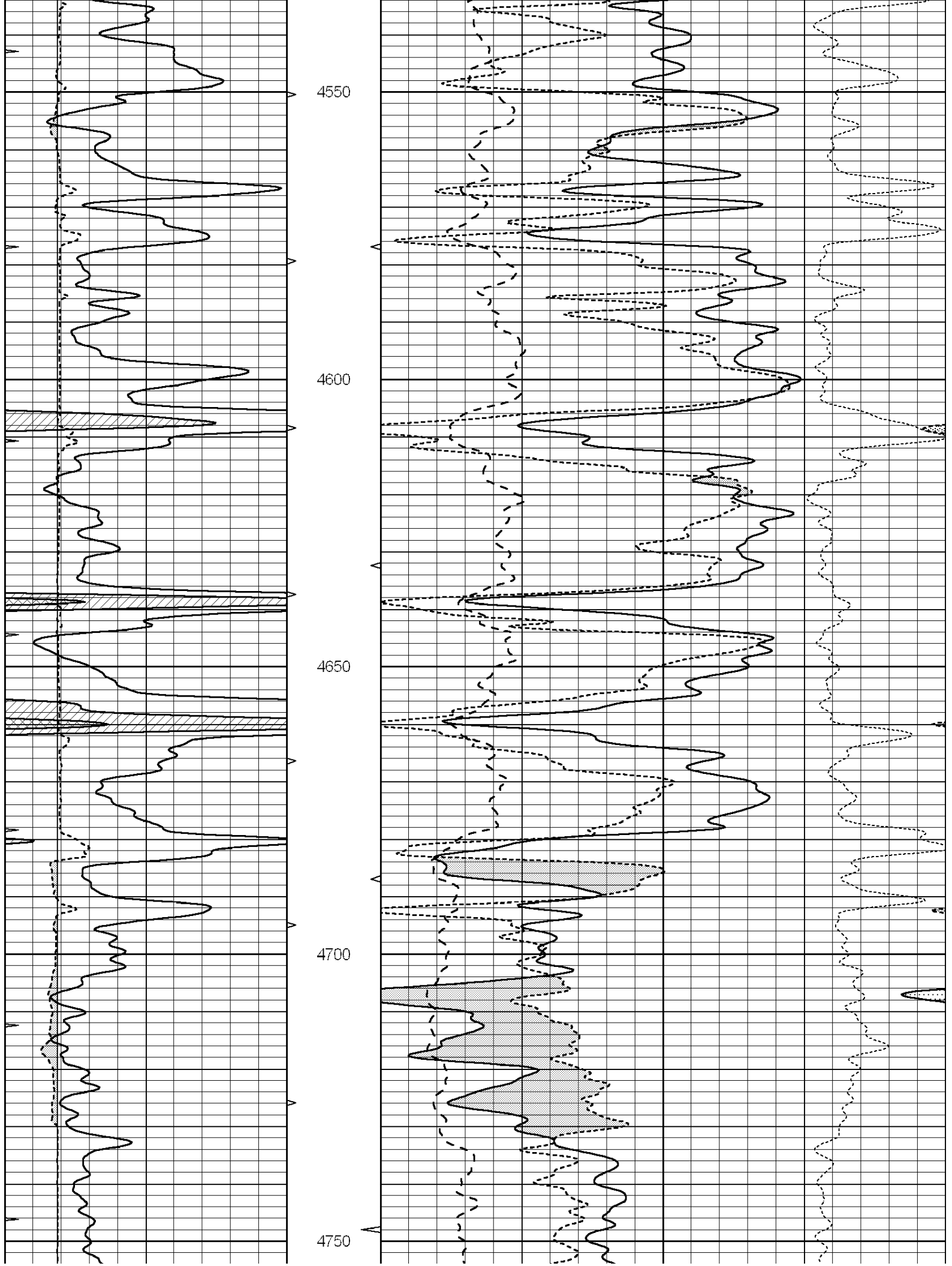
4350

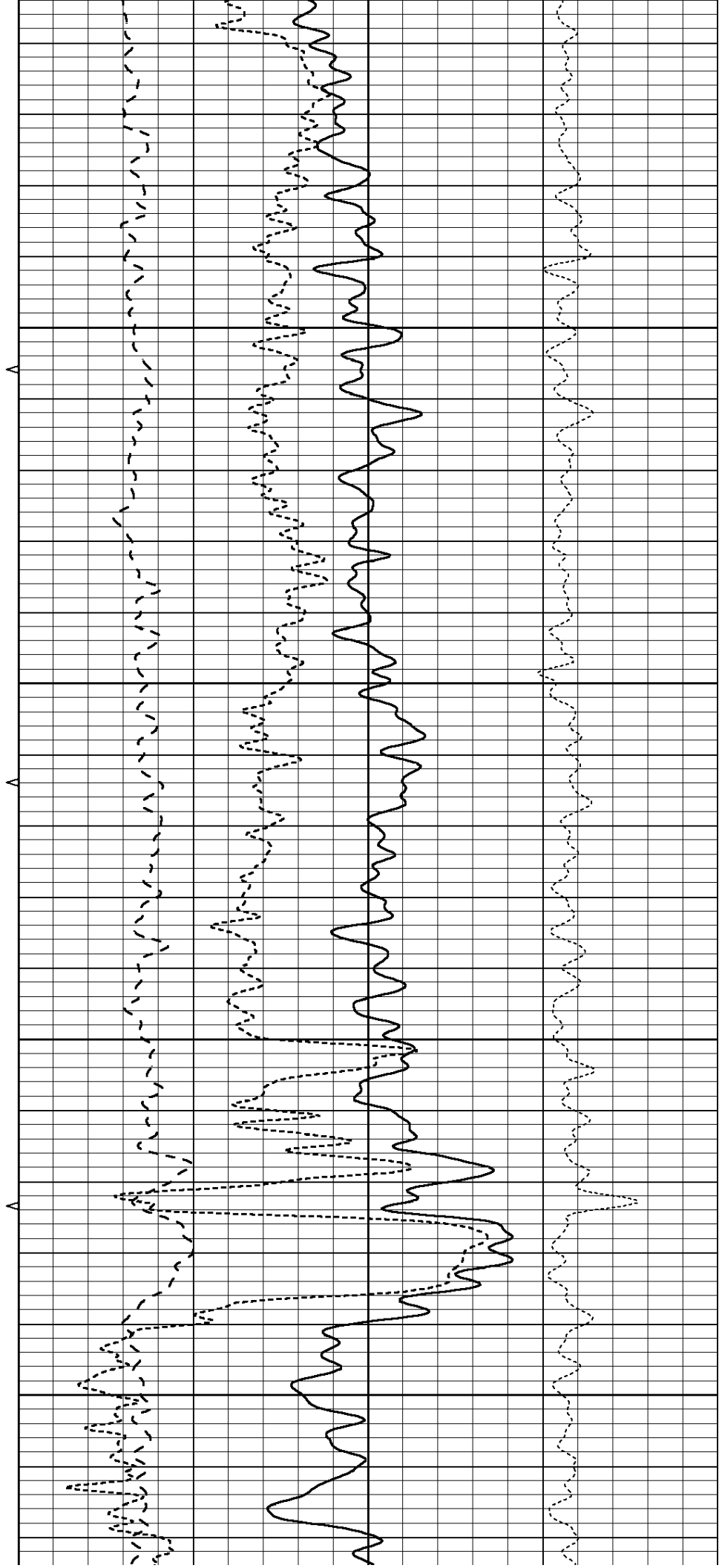
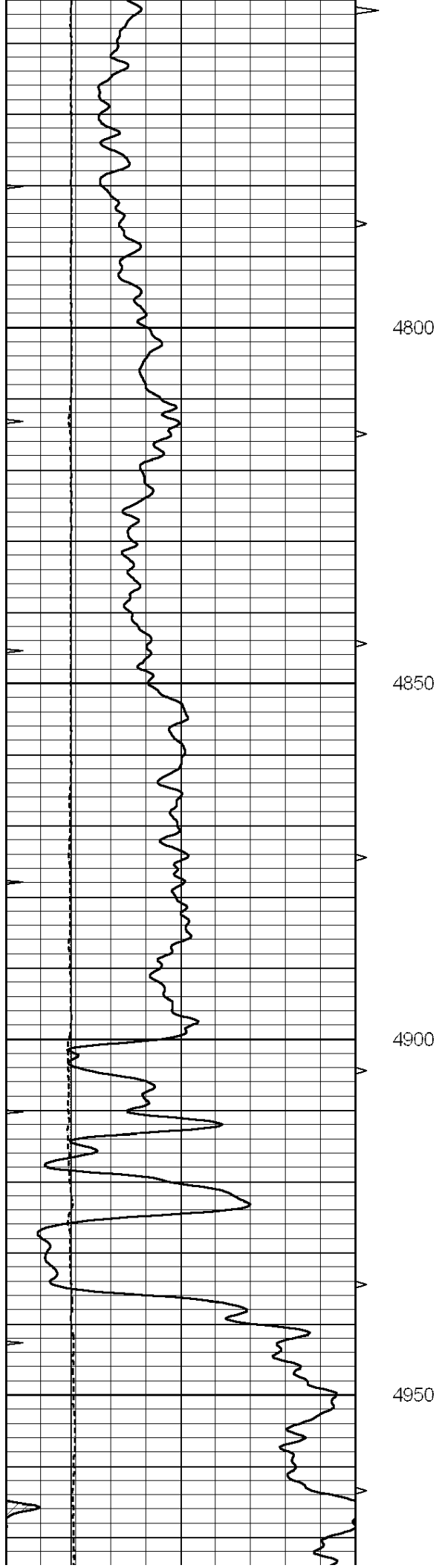
4400

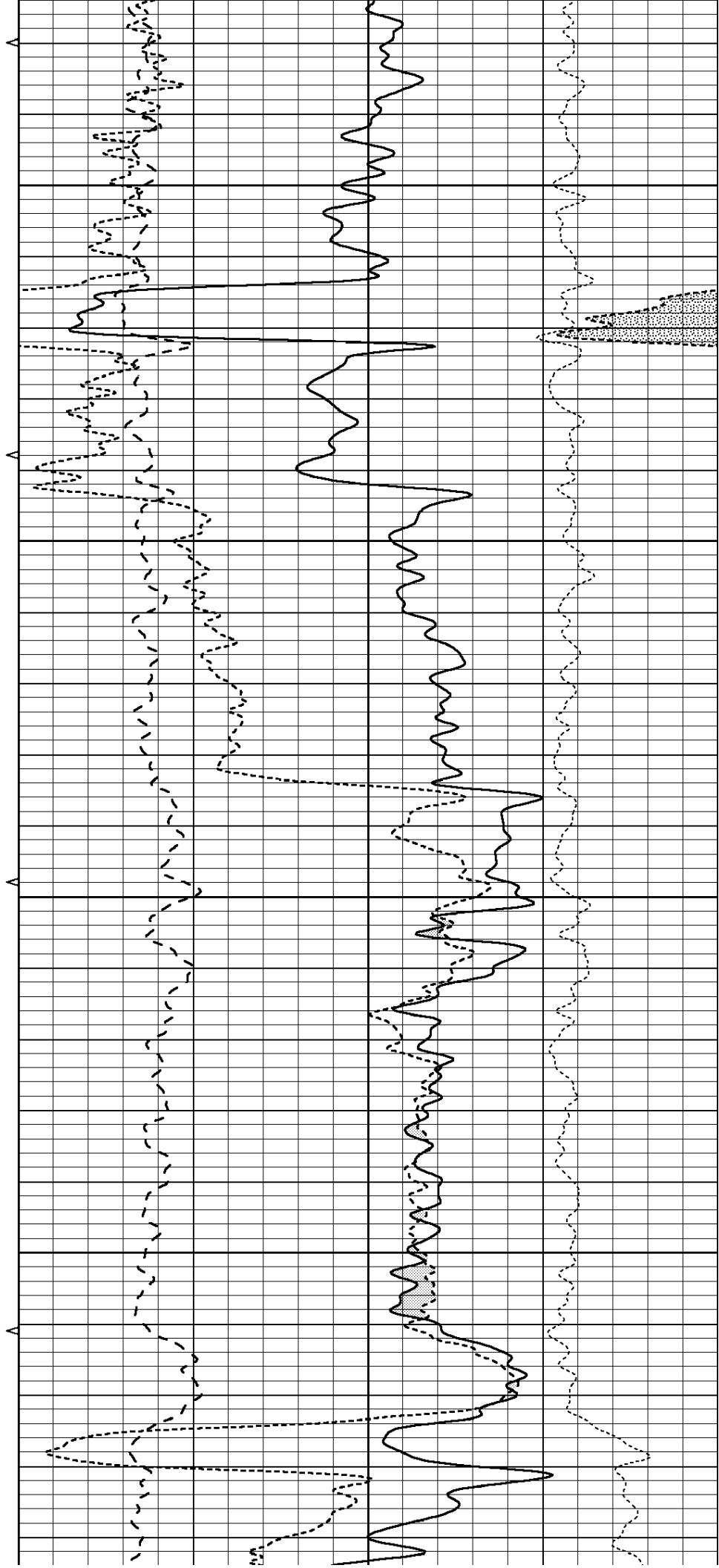
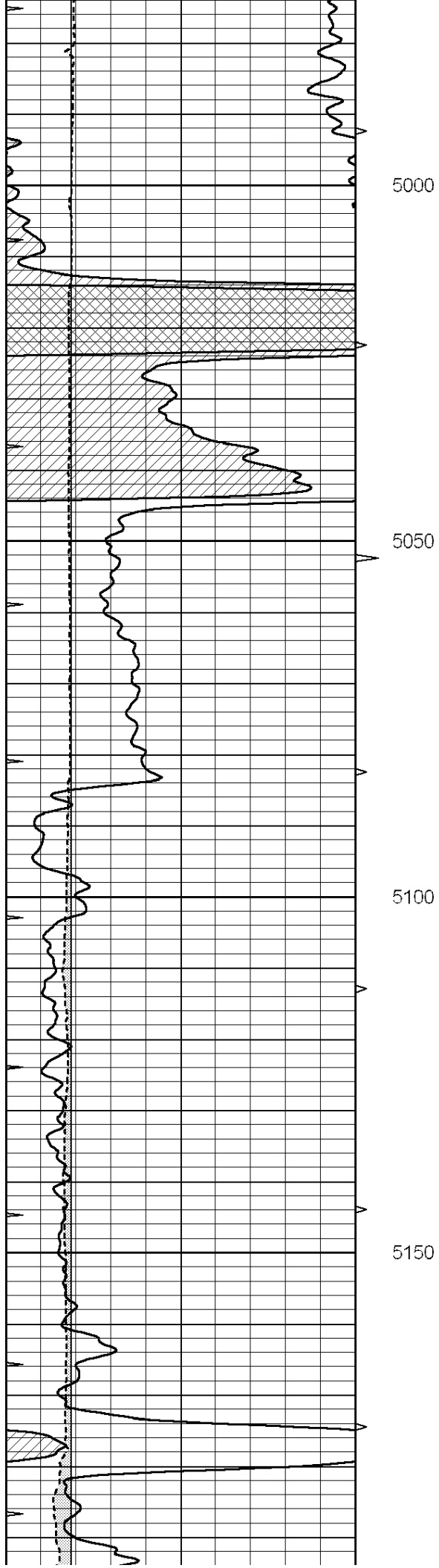
4450

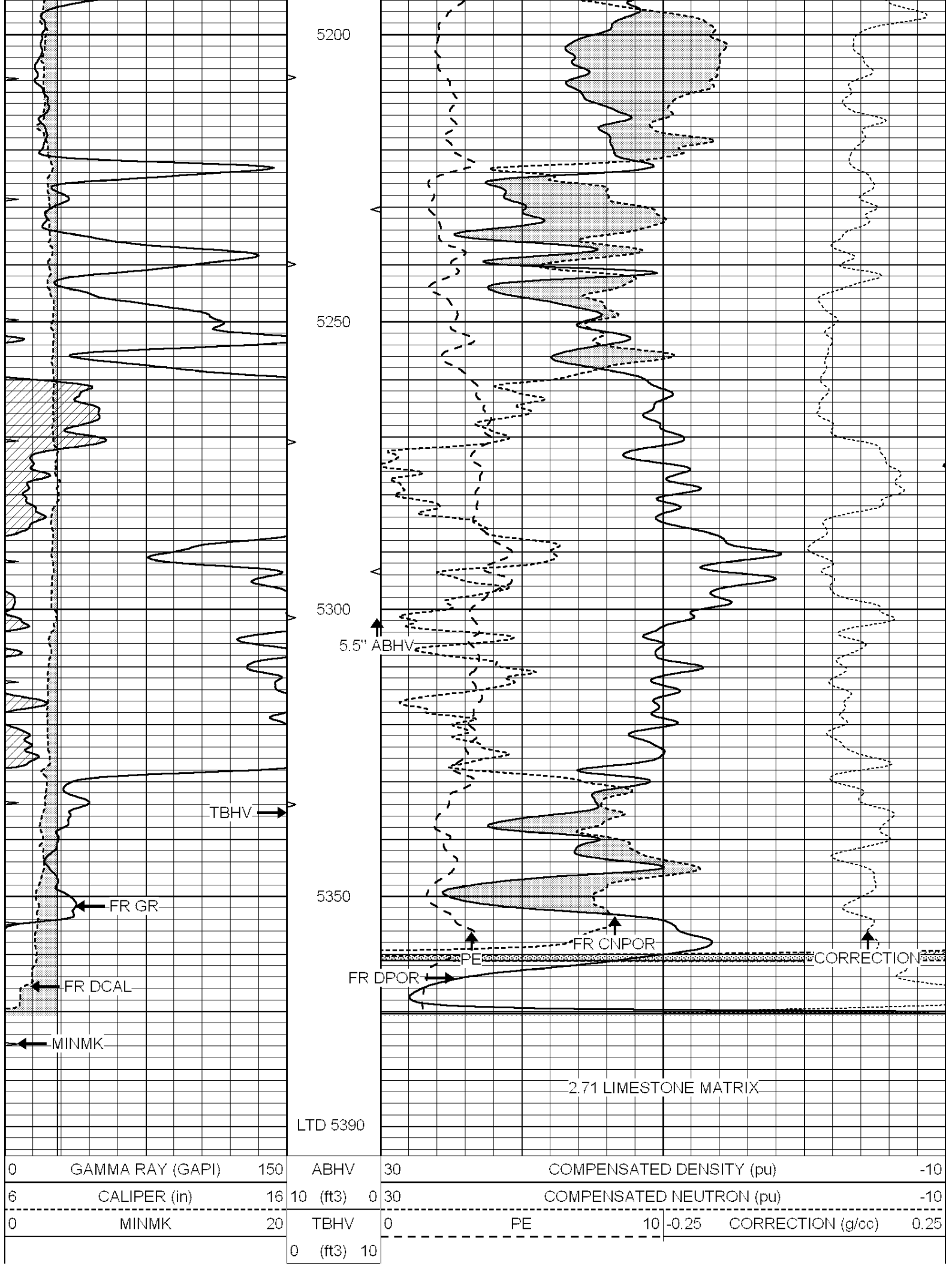
4500









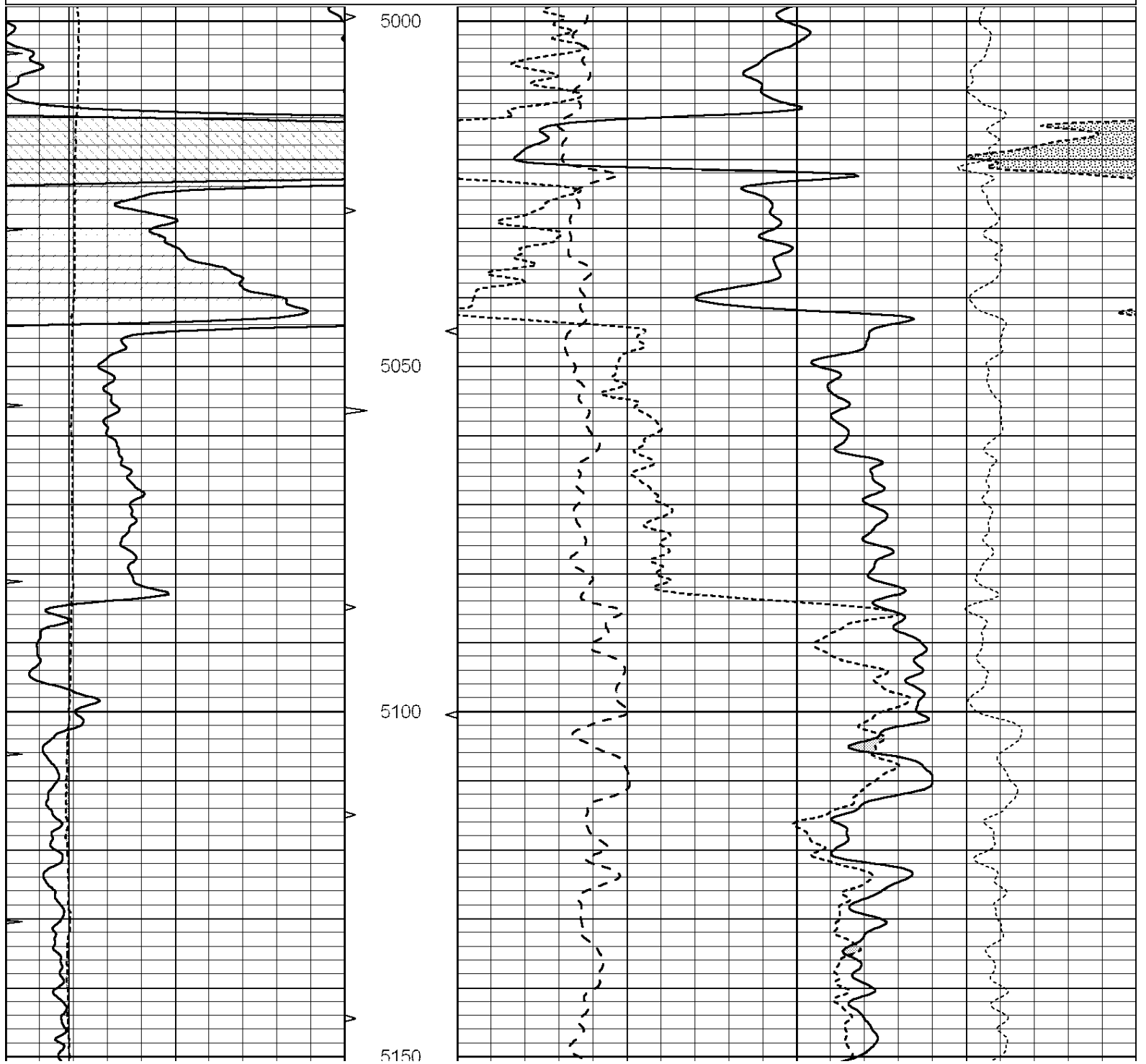


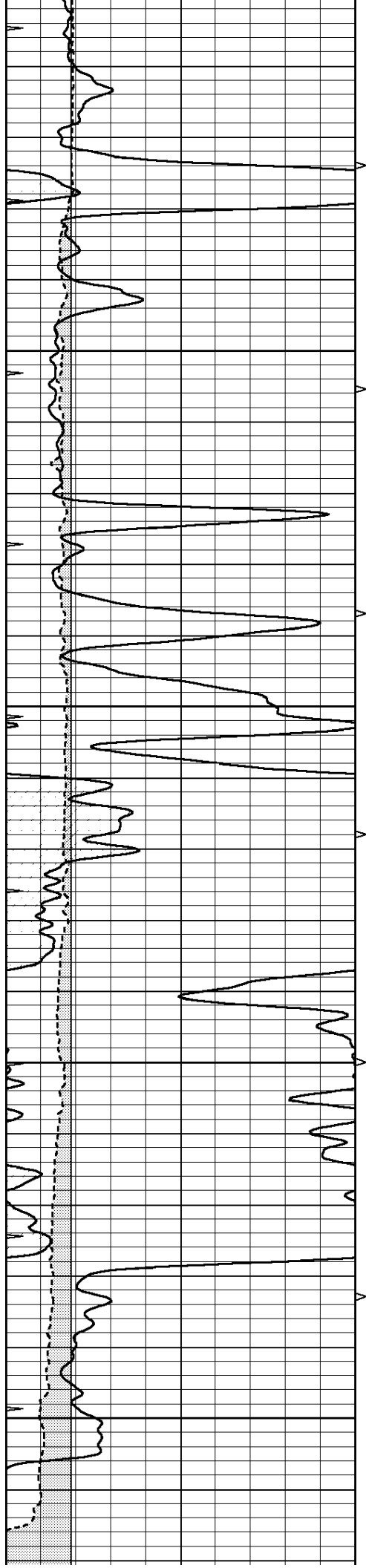


REPEAT SECTION

Database File: 25893pe.db
Dataset Pathname: pass2.4
Presentation Format: ldt_neu
Dataset Creation: Fri Oct 10 23:02:45 2014
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		



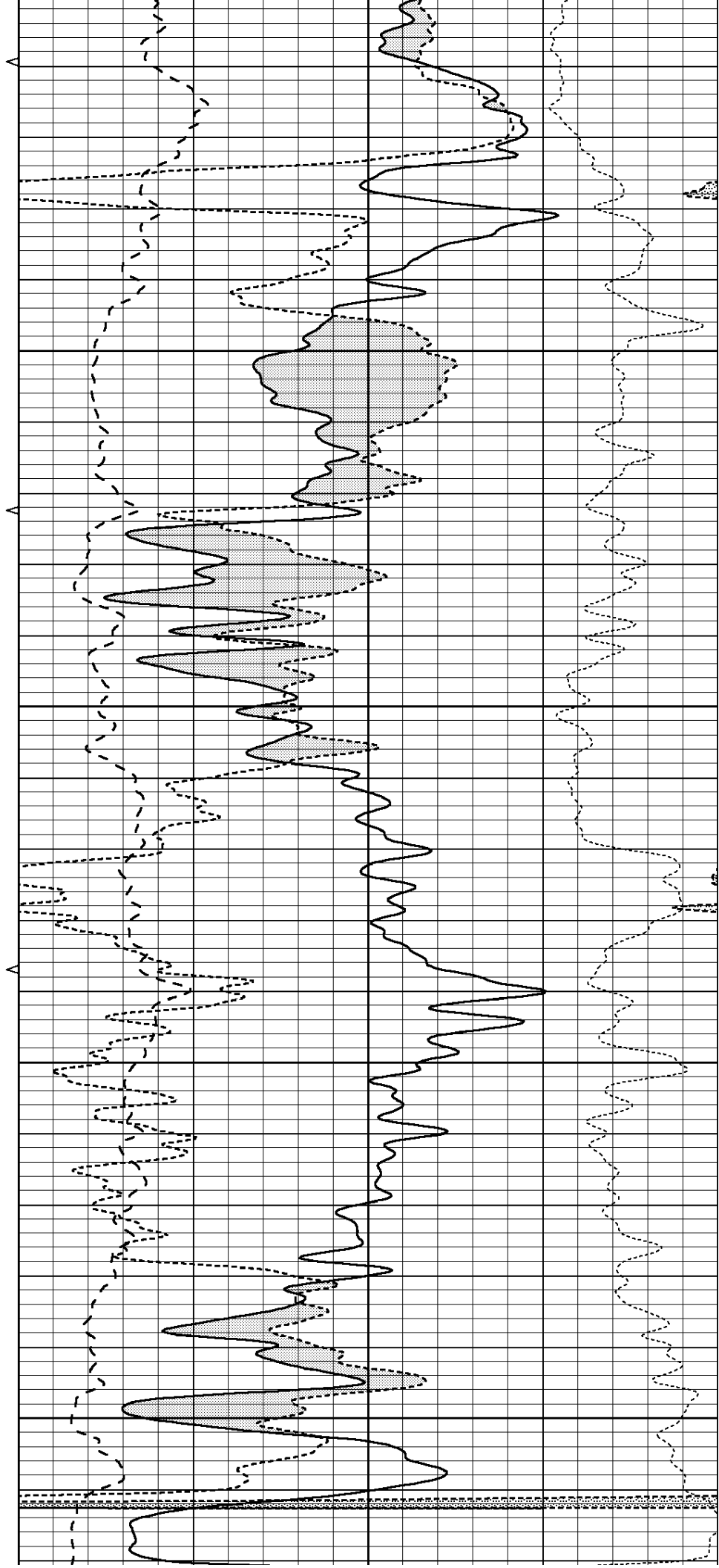


5200

5250

5300

5350



Calibration Report									
Database File:		25893pe.db							
Dataset Pathname:		pass3.9							
Dataset Creation:		Sat Oct 11 00:25:26 2014							
Dual Induction Calibration Report									
Serial-Model:				PROBE9-DILG					
Surface Cal Performed:				Thu Oct 09 11:37:56 2014					
Downhole Cal Performed:				Mon Jul 28 12:02:56 2008					
After Survey Verification Performed:				Mon Jul 28 12:02:56 2008					
Surface Calibration									
Readings				References			Results		
Loop:	Air	Loop		Air	Loop		m	b	
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	650.000	-13.000	
Medium	0.039	0.728	V	0.000	464.000	mmho/m	670.000	-34.000	
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'	
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: 004N				Model: PRB					
Master Calibration									
Performed Fri May 30 11:01:00 2014									
Background		Magnesium		Aluminum		Sandstone			

Window 1	1378.8	10804.6	3492.0	12453.4	cps
Window 2	1262.4	9313.5	3076.7	10594.7	cps
Window 3	1077.6	5668.7	2076.0	6314.8	cps
Window 4	306.4	313.0	306.4	315.6	cps
Long Space	0.0	8051.0	1814.3	9332.3	cps
Short Space	1.9	1706.1	1146.0	1707.6	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe		0.0000	2.5700	1.5500	
Rib Angle	: 45.0	Rib Slope	: 1.002	Density/Spine Ratio	: 0.571
Spine Angle	: 75.0	Spine Slope	: 3.745	Spine Intercept	: -18.9

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:		070558			
Tool Model:		OPEN_GR			
Performed:		Mon Jun 30 21:53:39 2014			

Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.2800	GAPI/cps