



**COMPLETION  
& PRODUCTION  
SERVICES CO.**

**MICRO  
LOG**

Company HERMAN L. LOEB, LLC.  
Well SCHMITT #4-23  
Field HALLET EAST  
County HODGEMAN  
State KANSAS

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County HODGEMAN State KANSAS

Location: API # : 15-083-21863-0000  
2310' FNL & 2199' FWL  
W/2 - SE - SE - NW  
SEC 23 TWP 22S RGE 25W  
Permanent Datum GROUND LEVEL Elevation 2507  
Log Measured From KELLY BUSHING 11' A.G.L.  
Drilling Measured From KELLY BUSHING  
Other Services  
CDL/CNL/PE  
DIL  
Elevation  
K.B. 2518  
D.F. 2516  
G.L. 2507

Date	12/4/12		
Run Number	TWO		
Depth Driller	4730		
Depth Logger	4736		
Bottom Logged Interval	4734		
Top Log Interval	3800		
Casing Driller	8 5/8"@607'		
Casing Logger	607		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 3,800 PPM	
Density / Viscosity	9.1/60		
pH / Fluid Loss	10.5/7.2		
Source of Sample	FLOWLINE		
Rin @ Meas. Temp	.700@100F		
Rmf @ Meas. Temp	.525@100F		
Rmc @ Meas. Temp	.840@100F		
Source of Rmf / Rmc	MEASUREMENT		
Rin @ BHT	.569@123F		
Time Circulation Stopped	4.5 HOURS		
Time Logger on Bottom	8:30 A.M.		
Maximum Recorded Temperature	123F		
Equipment Number	4854		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	JON CHRISTENSEN	GEORGE PAYNE	

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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**

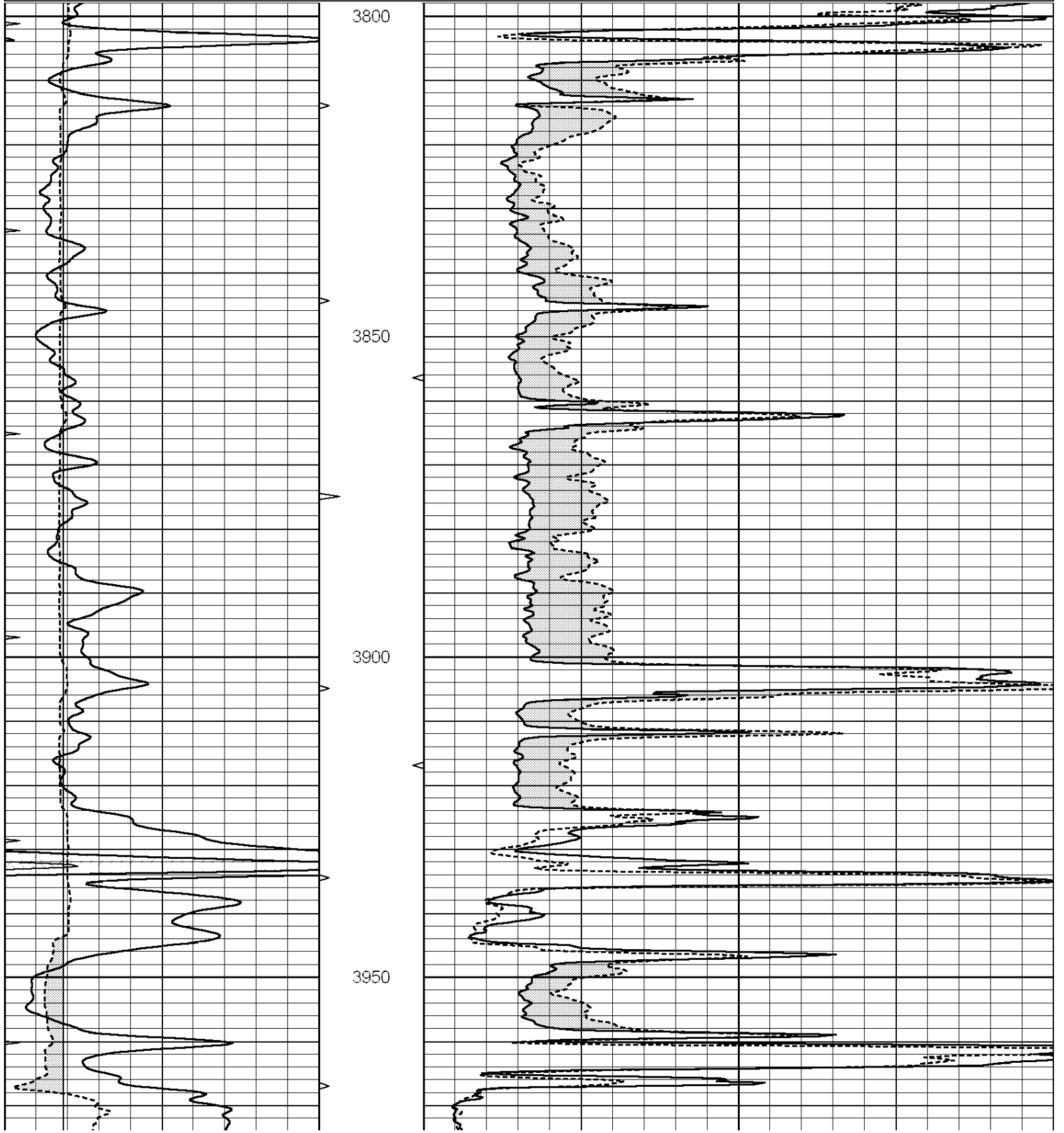
THANK YOU FOR USING "NABORS" HAYS, KANSAS (785) 628-6395  
DIRECTIONS  
JETMORE, KS., 8.7 W. ON HWT 156 TO "RD. 210", 3 1/2 N., 1/2 E. INTO

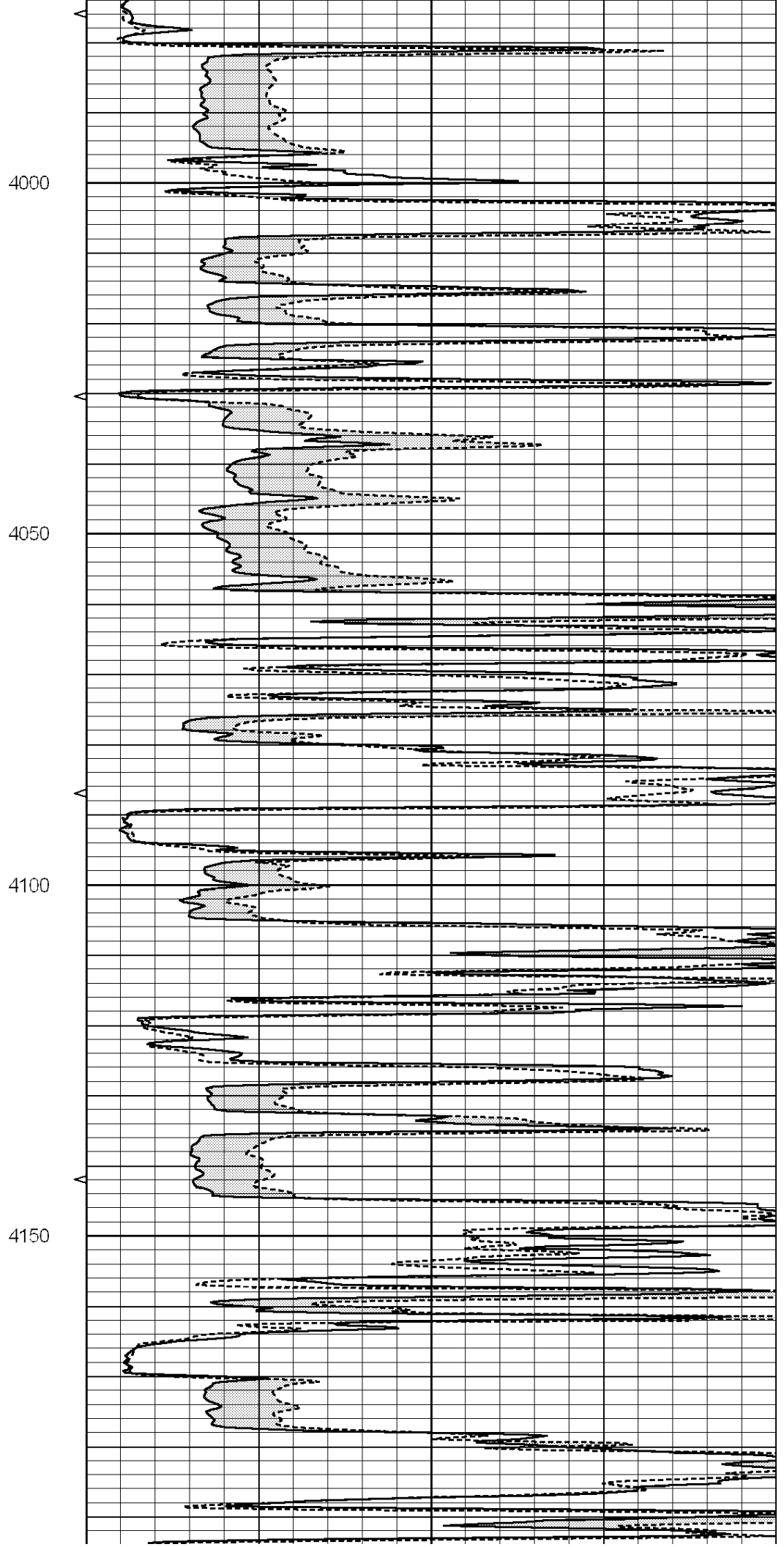
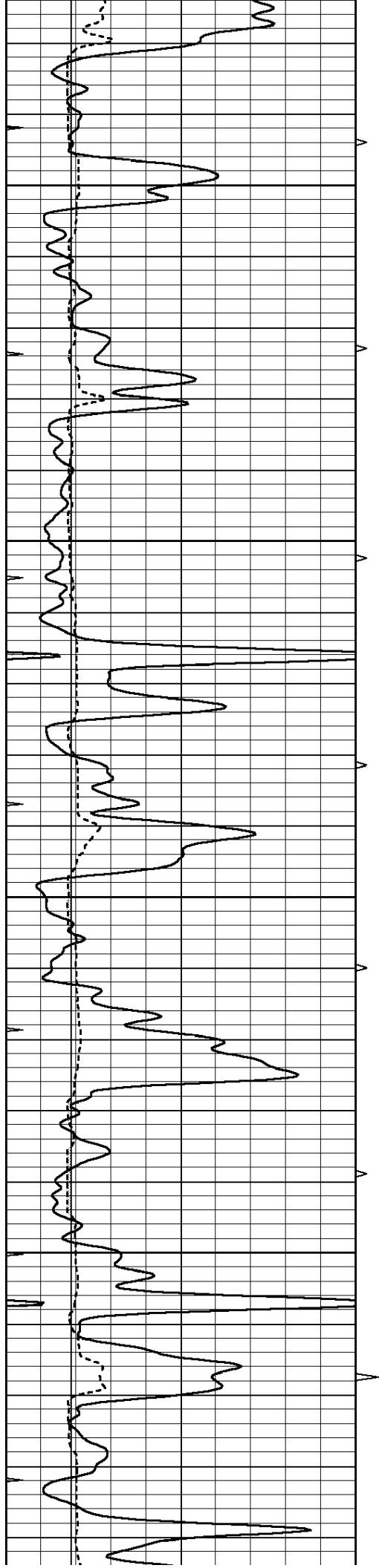


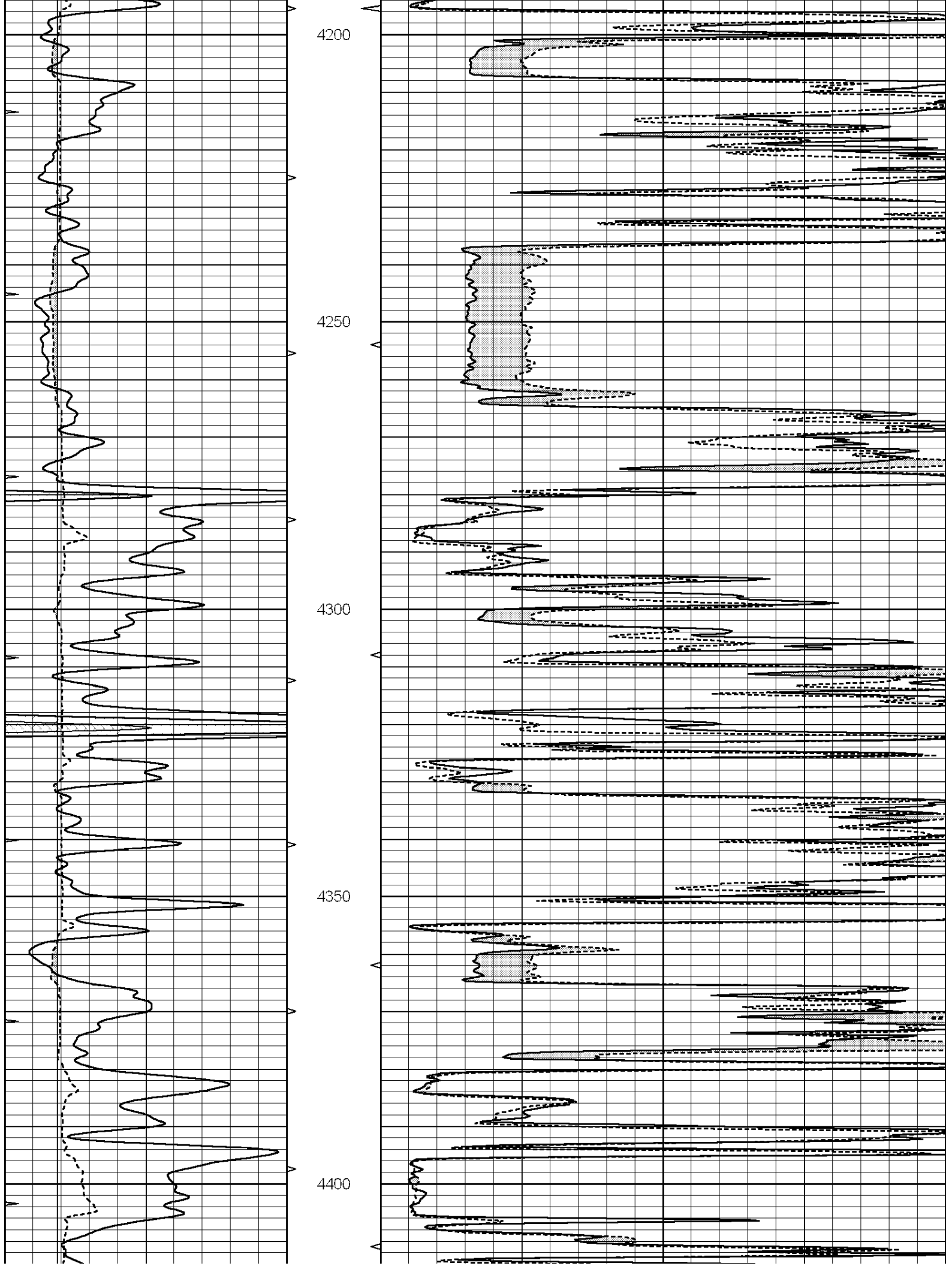
**MAIN SECTION**

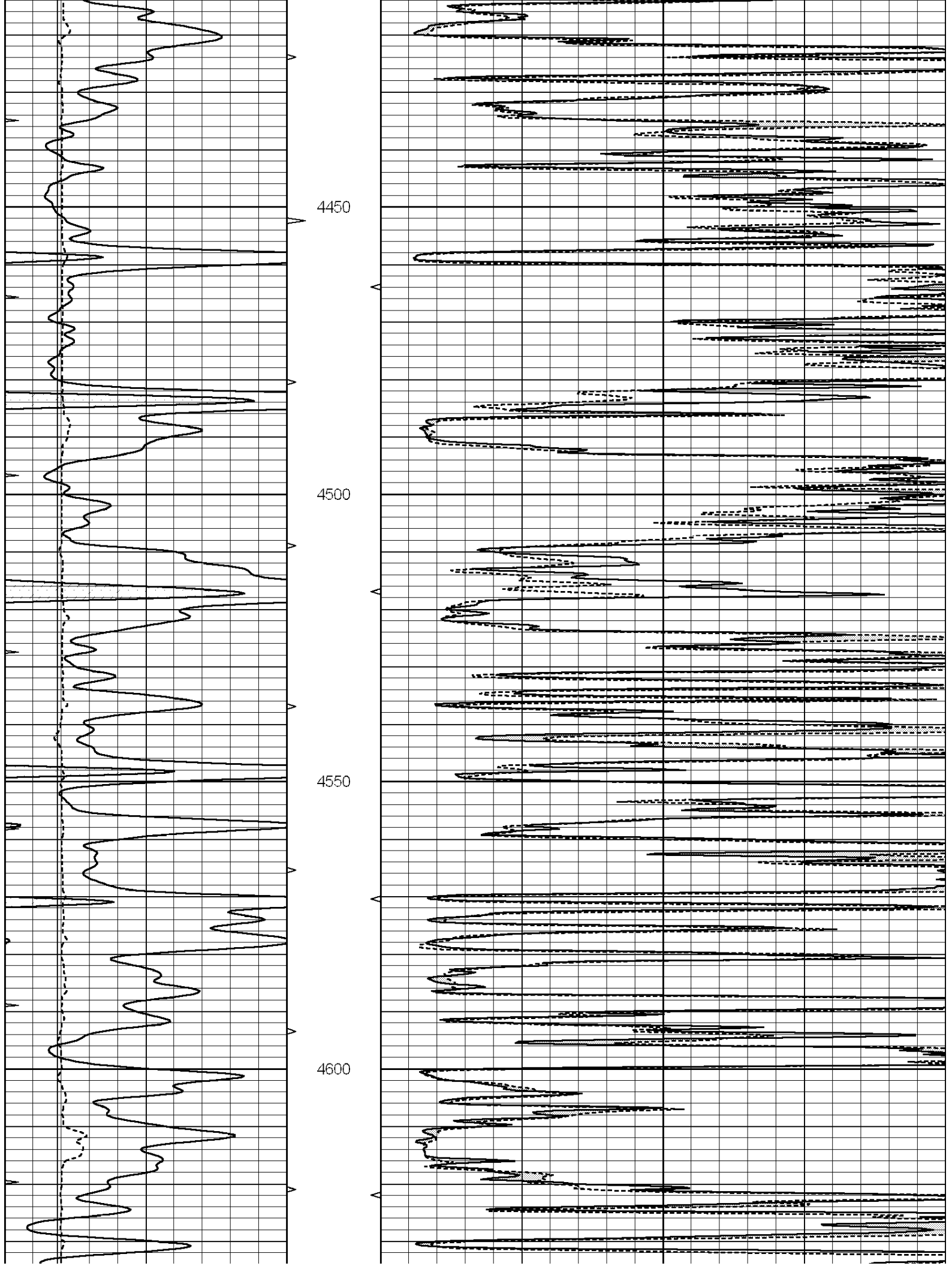
Database File: 010027pe.db  
 Dataset Pathname: pass6.3  
 Presentation Format: micro  
 Dataset Creation: Tue Dec 04 11:27:33 2012 by Calc SOC 120430  
 Charted by: Depth in Feet scaled 1:240

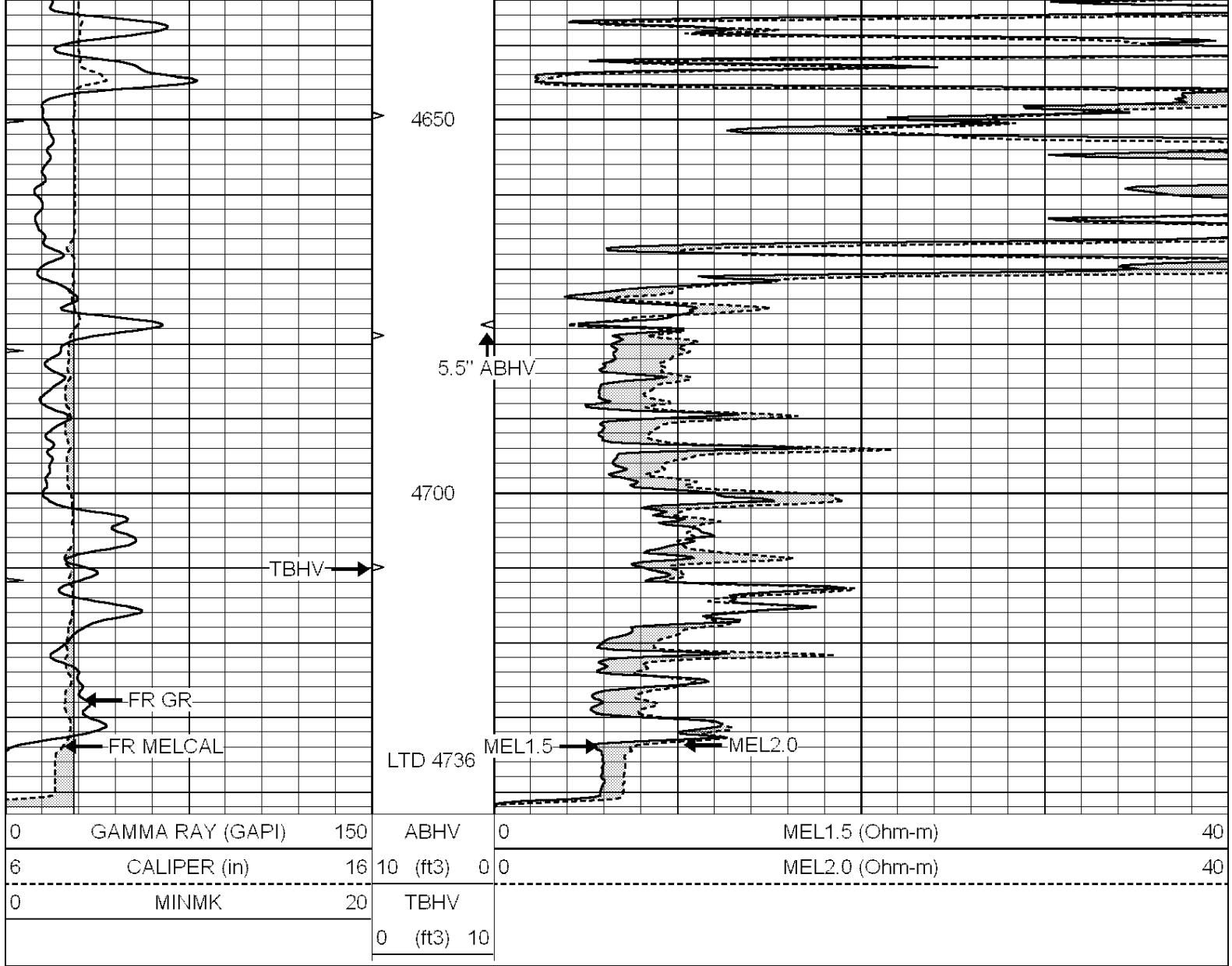
0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	40
6	CALIPER (in)	16	10 (ft3)	0	MEL2.0 (Ohm-m)	40
0	MINMK	20	TBHV			
			0 (ft3)	10		







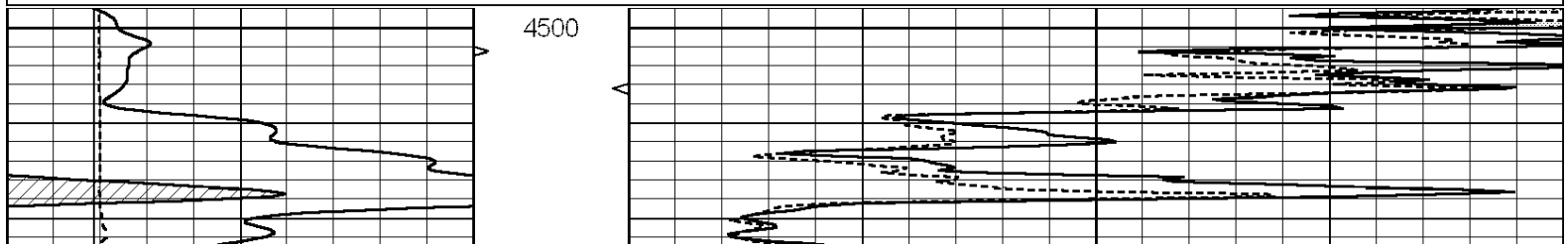


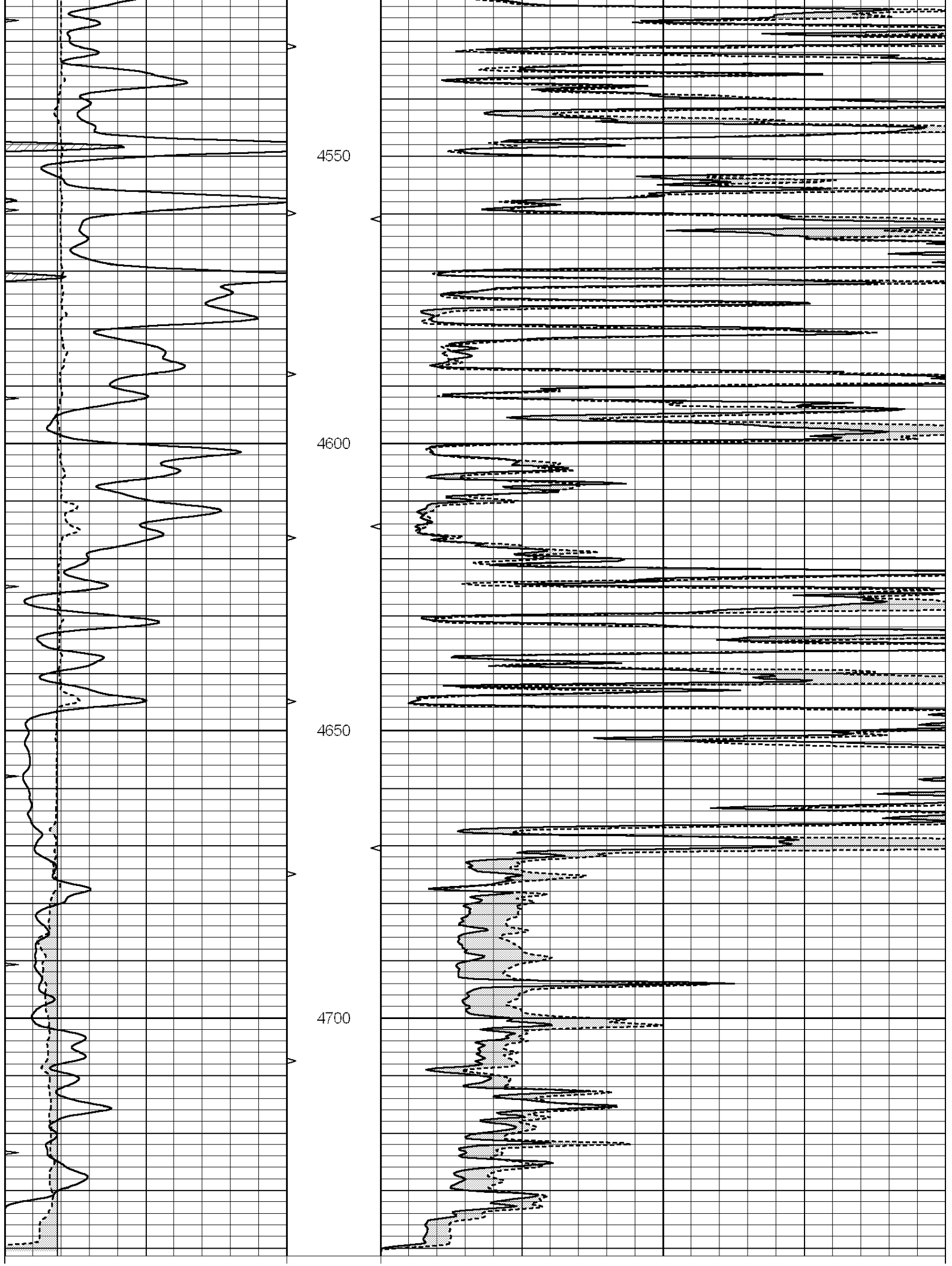


# REPEAT SECTION

Database File: 010027pe.db  
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 Presentation Format: micro  
 Dataset Creation: Tue Dec 04 10:51:23 2012 by Calc SOC 120430  
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	40
6	CALIPER (in)	16	10 (ft3)	0 0	MEL2.0 (Ohm-m)	40
0	MINMK	20	TBHV			
			0 (ft3)	10		





0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	40
6	CALIPER (in)	16	10 (ft3)	0	MEL2.0 (Ohm-m)	40
0	MINMK	20	TBHV			
			0 (ft3)	10		

### Calibration Report

Database File: 010027pe.db  
Dataset Pathname: pass6.3  
Dataset Creation: Tue Dec 04 11:27:33 2012 by Calc SOC 120430

#### MICRO Calibration Report

Serial Number:	2	
Tool Model:	PROBE	
Performed:	Mon Nov 12 13:35:11 2012	
Caliper Calibration:	Gain=3.929	Offset=3.858
References	Low Cal	High Cal
Readings	8.300	15.000
	1.130	2.835
1.5" Calibration:	Gain=25.000	Offset=0.000
References	Low Cal	High Cal
Readings	0.000	20.000
	0.065	1.210
2" Calibration:	Gain=40.000	Offset=0.000
References	Low Cal	High Cal
Readings	0.000	20.000
	0.012	1.043

#### Gamma Ray Calibration Report

Serial Number:	GR4	
Tool Model:	OPEN	
Performed:	Tue Dec 04 10:19:27 2012	
Calibrator Value:	200.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	189.0	cps
Sensitivity:	1.6500	GAPI/cps