



SUPERIOR
Hays,
Kansas

MICRO LOG

Company CORTEZ HEARTLAND, LLC.
Well SNODGRASS #1-30
Field WILDCAT
County PAWNEE
State KANSAS

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Well SNODGRASS #1-30
Field WILDCAT
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State KANSAS

Location: API # : 15-145-21592-0000

660' FSL & 660' FWL

Other Services
CDL/CNL
DIL

SEC 12 TWP 21S RGE 20W

Permanent Datum GROUND LEVEL Elevation 2116
Log Measured From KELLY BUSHING 13' A.G.L.
Drilling Measured From KELLY BUSHING

Elevation
K.B. 2129
D.F. 2127
G.L. 2116

Date	9/27/09		
Run Number	TWO		
Depth Driller	4364		
Depth Logger	4367		
Bottom Logged Interval	4365		
Top Log Interval	2150		
Casing Driller	8 5/8"@408'		
Casing Logger	407		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 15,800PPM	
Density / Viscosity	9.6/45		
pH / Fluid Loss	7.0/10.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.300@85F		
Rmf @ Meas. Temp	.225@85F		
Rmc @ Meas. Temp	.360@85F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.214@119F		
Time Circulation Stopped	5 HOURS		
Time Logger on Bottom	9:45 P.M.		
Maximum Recorded Temperature	119F		
Equipment Number	0836		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	JAMES ROE	ROD ANDERSEN	

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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 SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395
DIRECTIONS
RUSH CENTER, KS. S. ON HWY 183 TO CURVE "RD. T", 9 W. TO RD. 320., 1 1/2 S., E. INTO

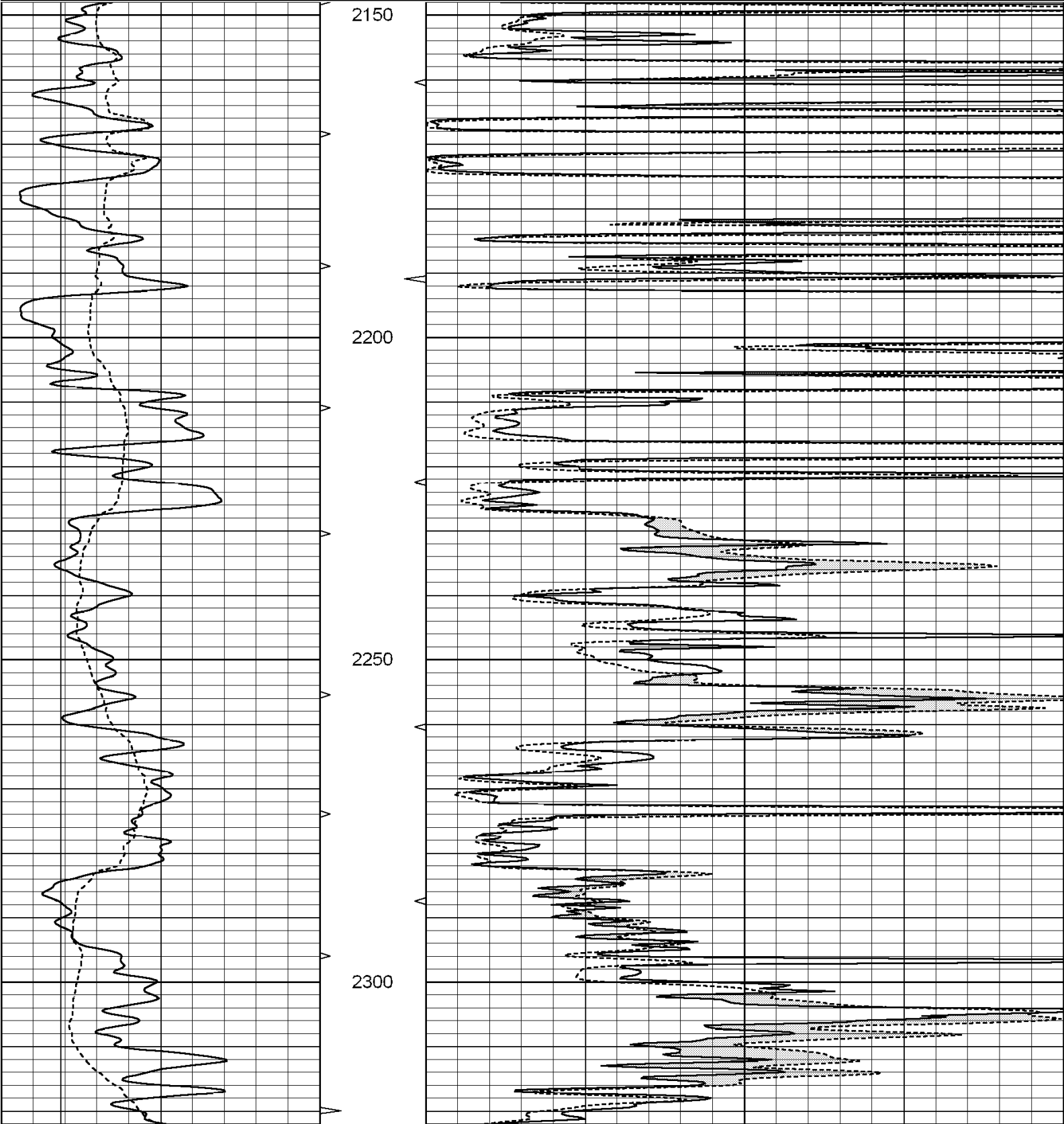


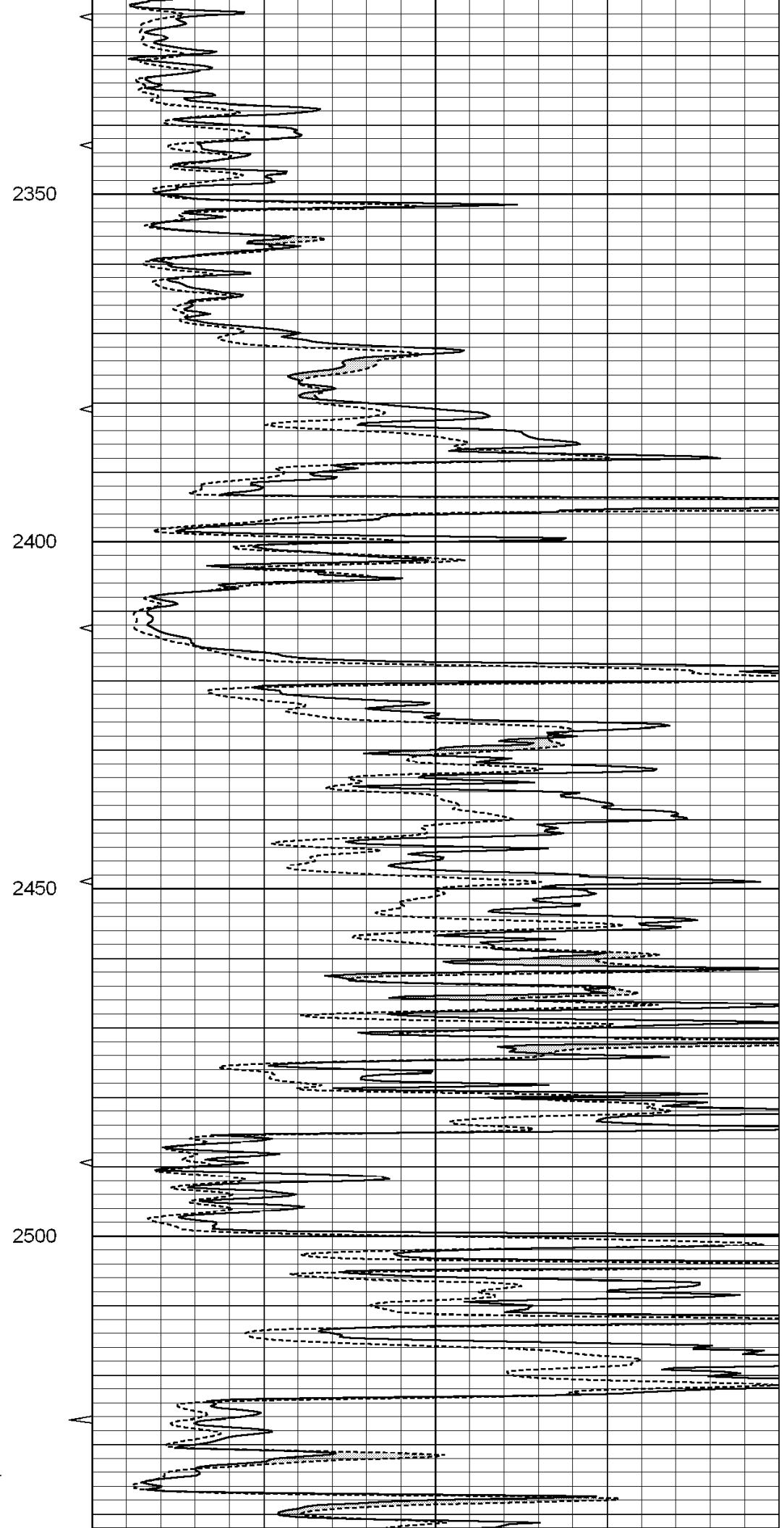
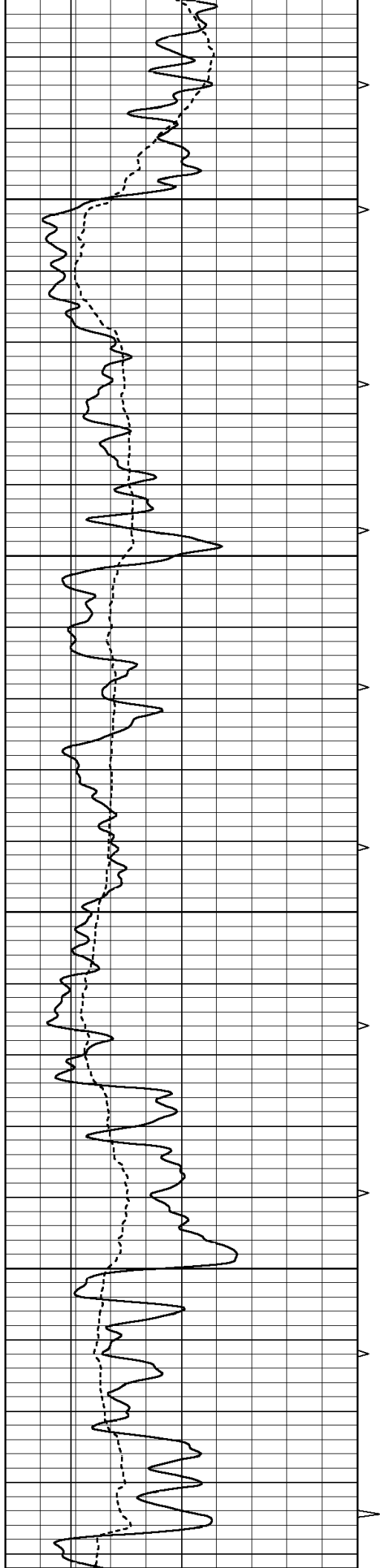
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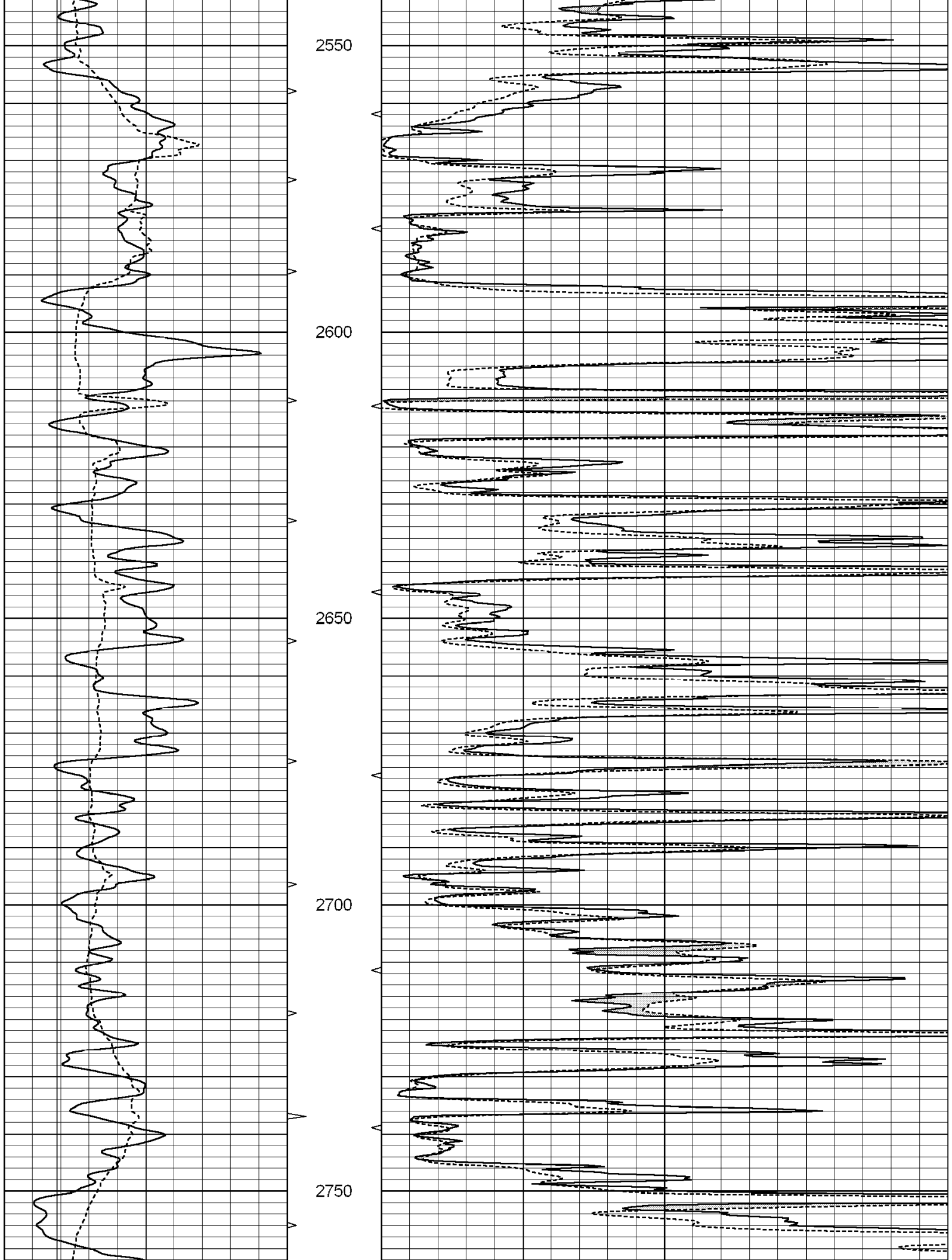
MAIN SECTION

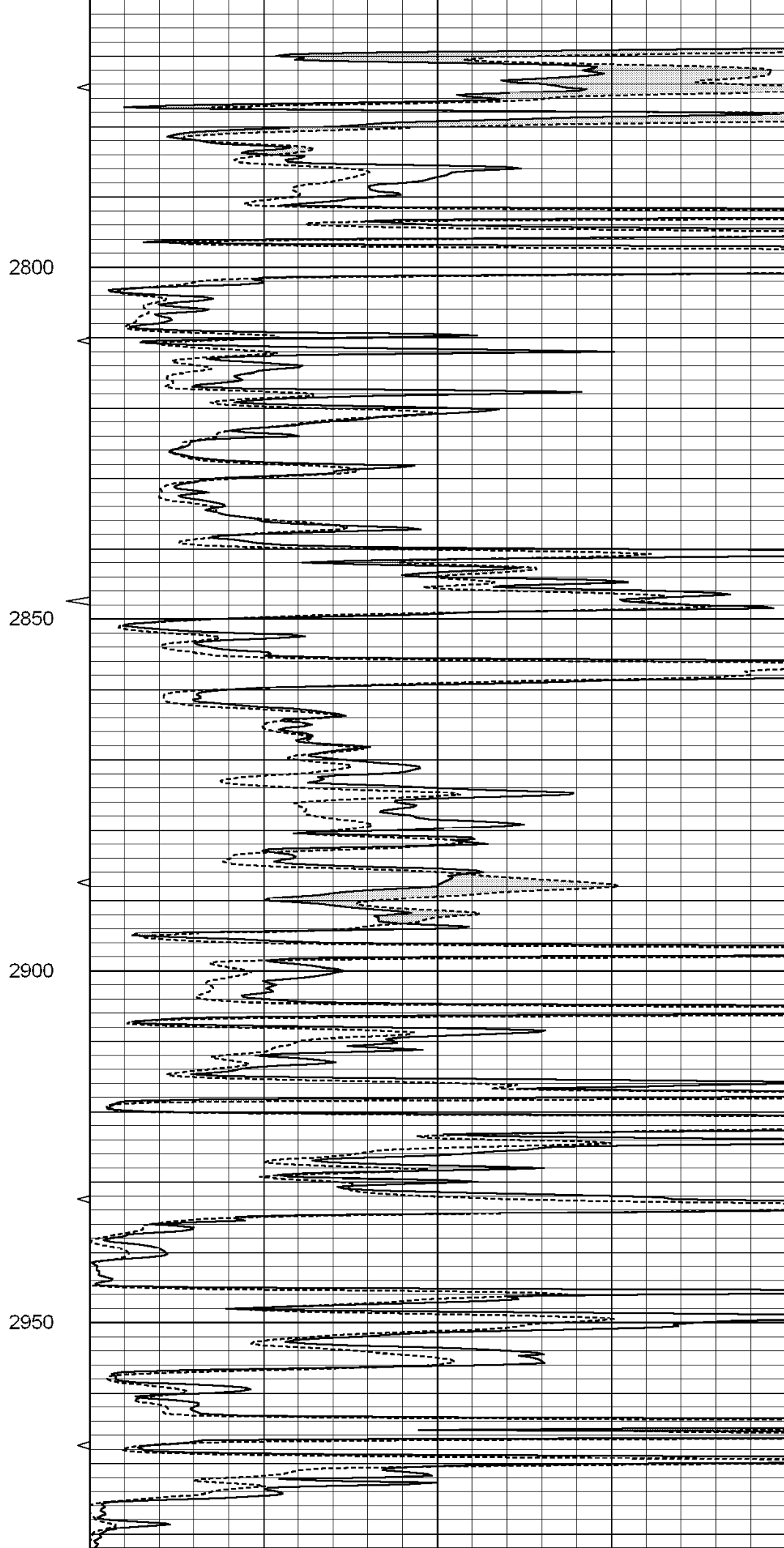
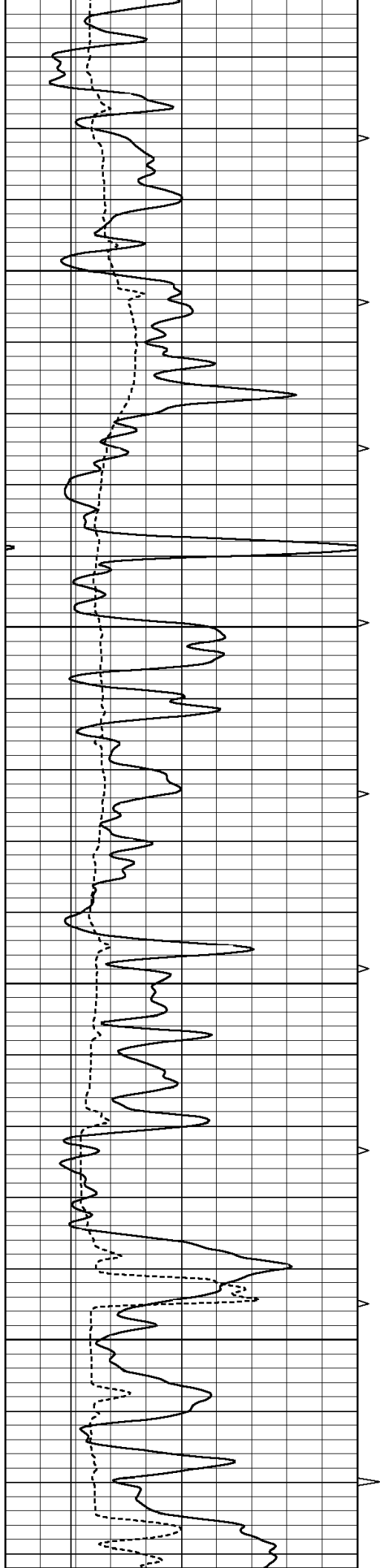
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Dataset Pathname: pass7.2
Presentation Format: micro
Dataset Creation: Mon Sep 28 02:13:32 2009
Charted by: Depth in Feet scaled 1:240

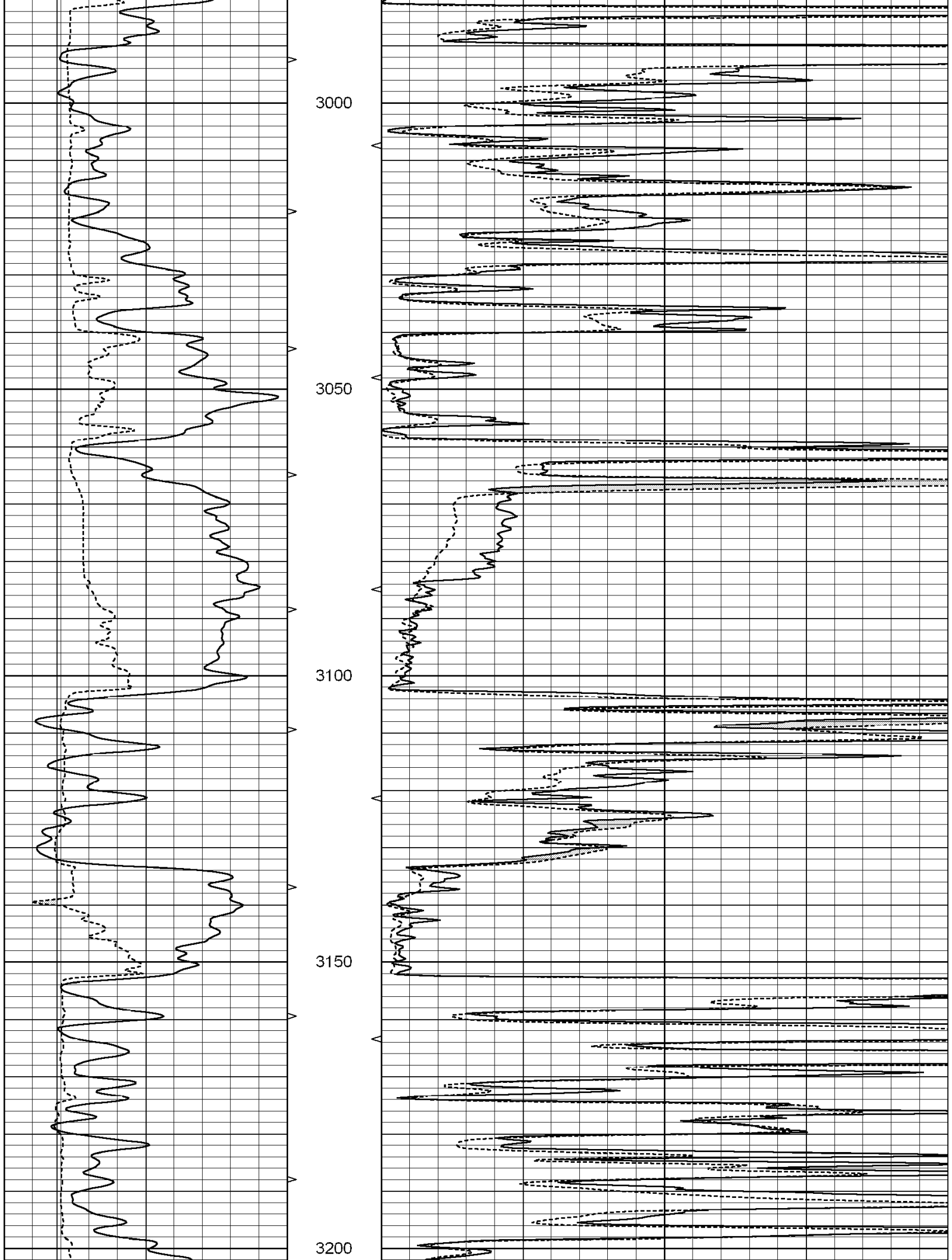
0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	20
6	CALIPER (in)	16	10 (ft3) 0	0	MEL2.0 (Ohm-m)	20
			TBHV			
			0 (ft3) 10			

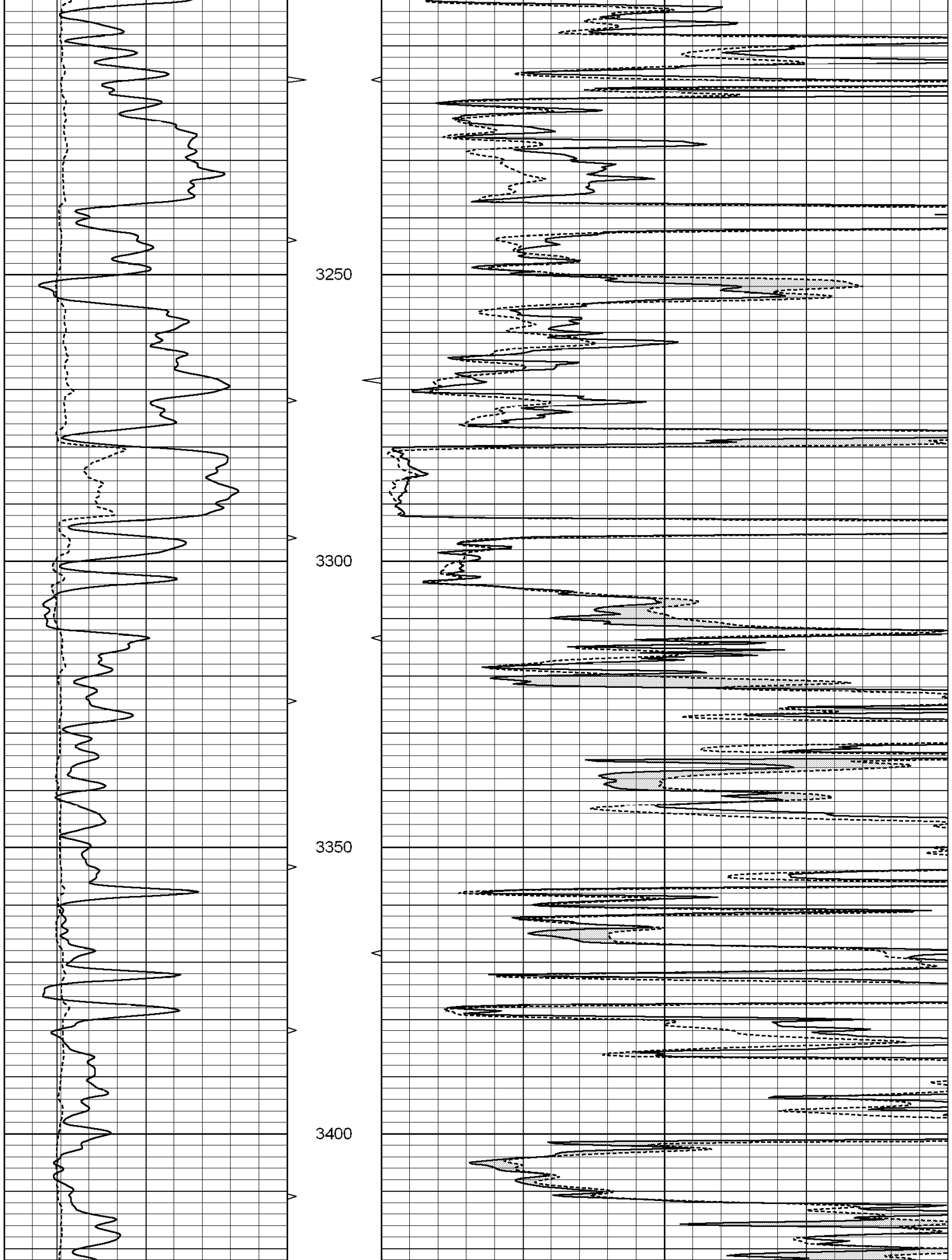


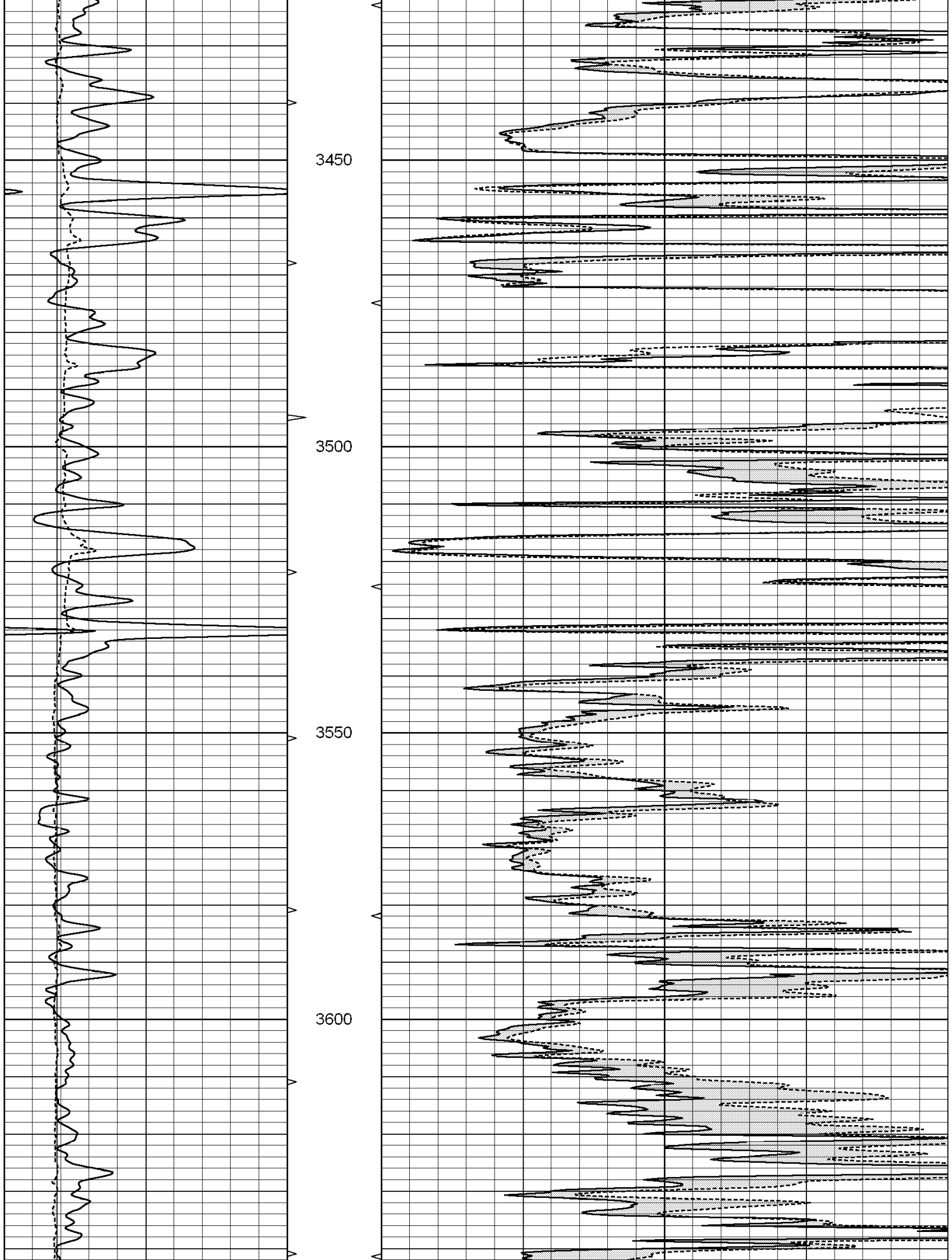


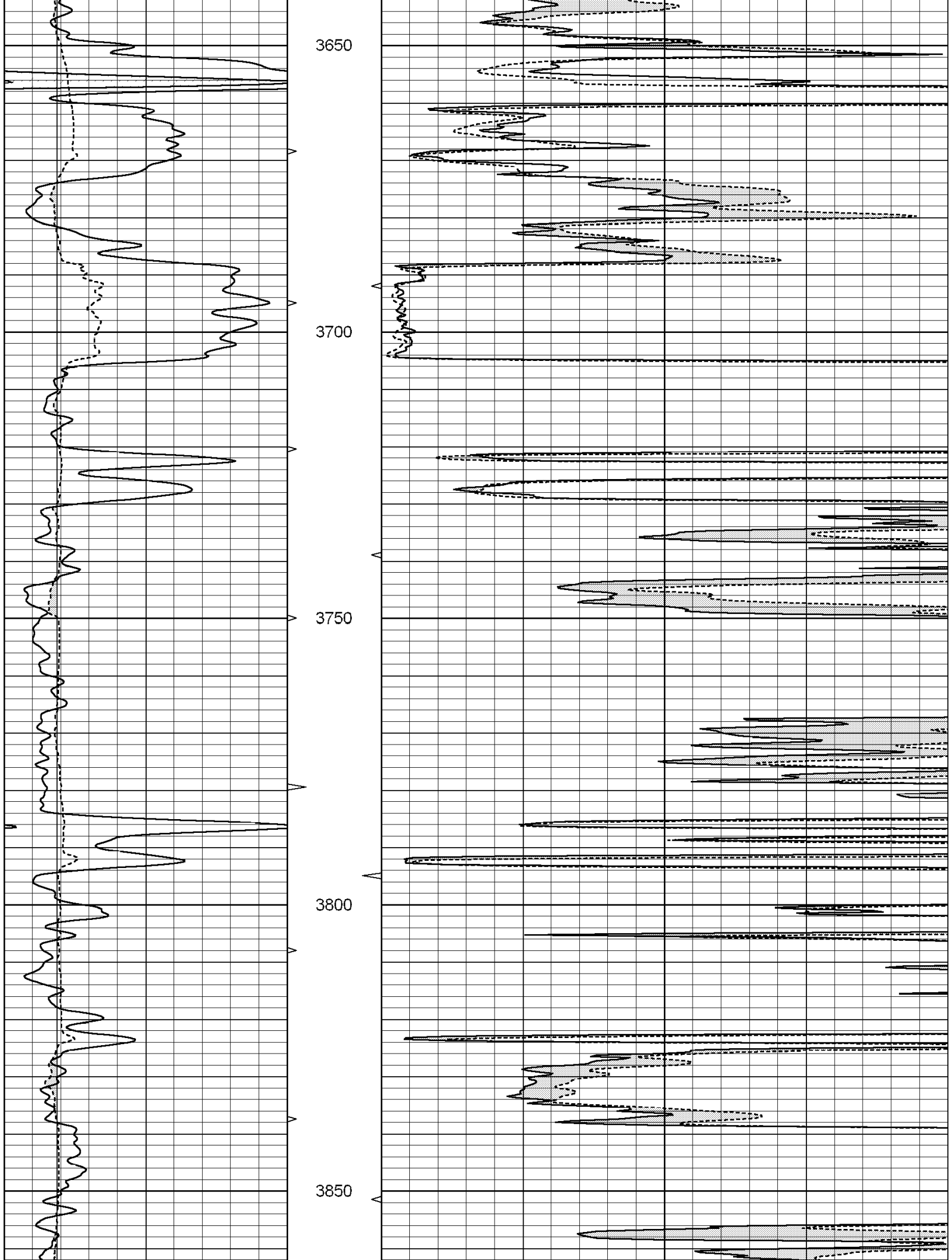


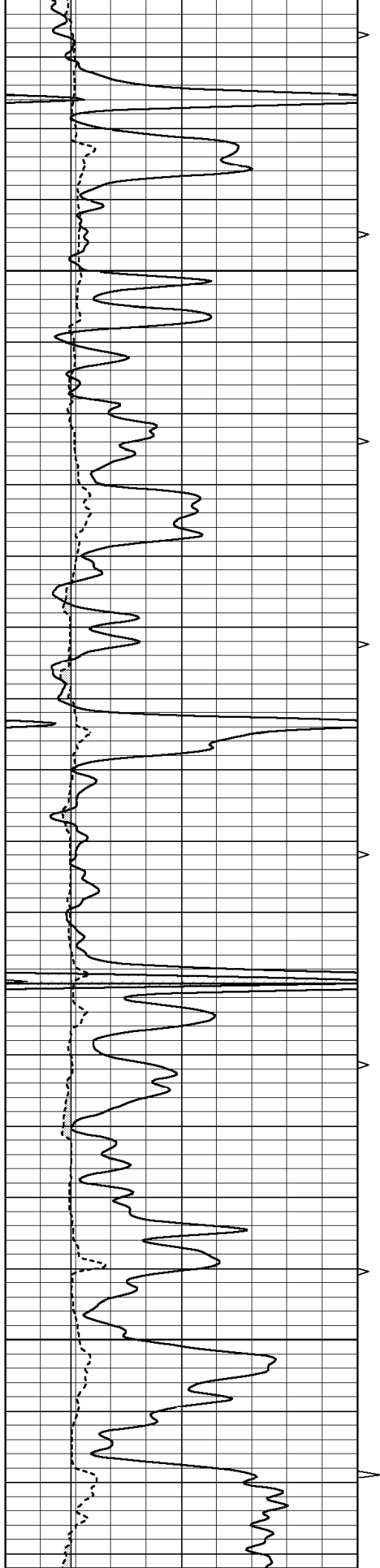










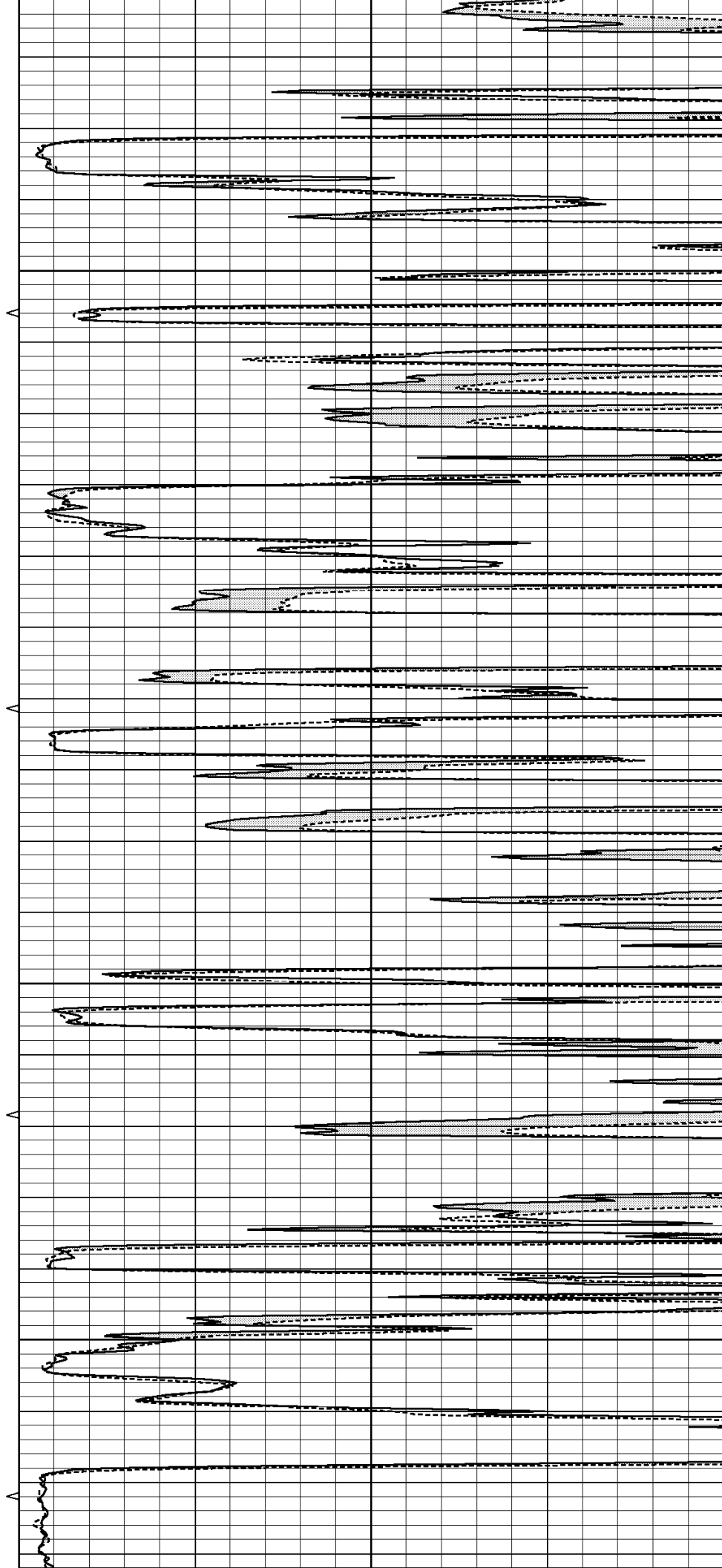


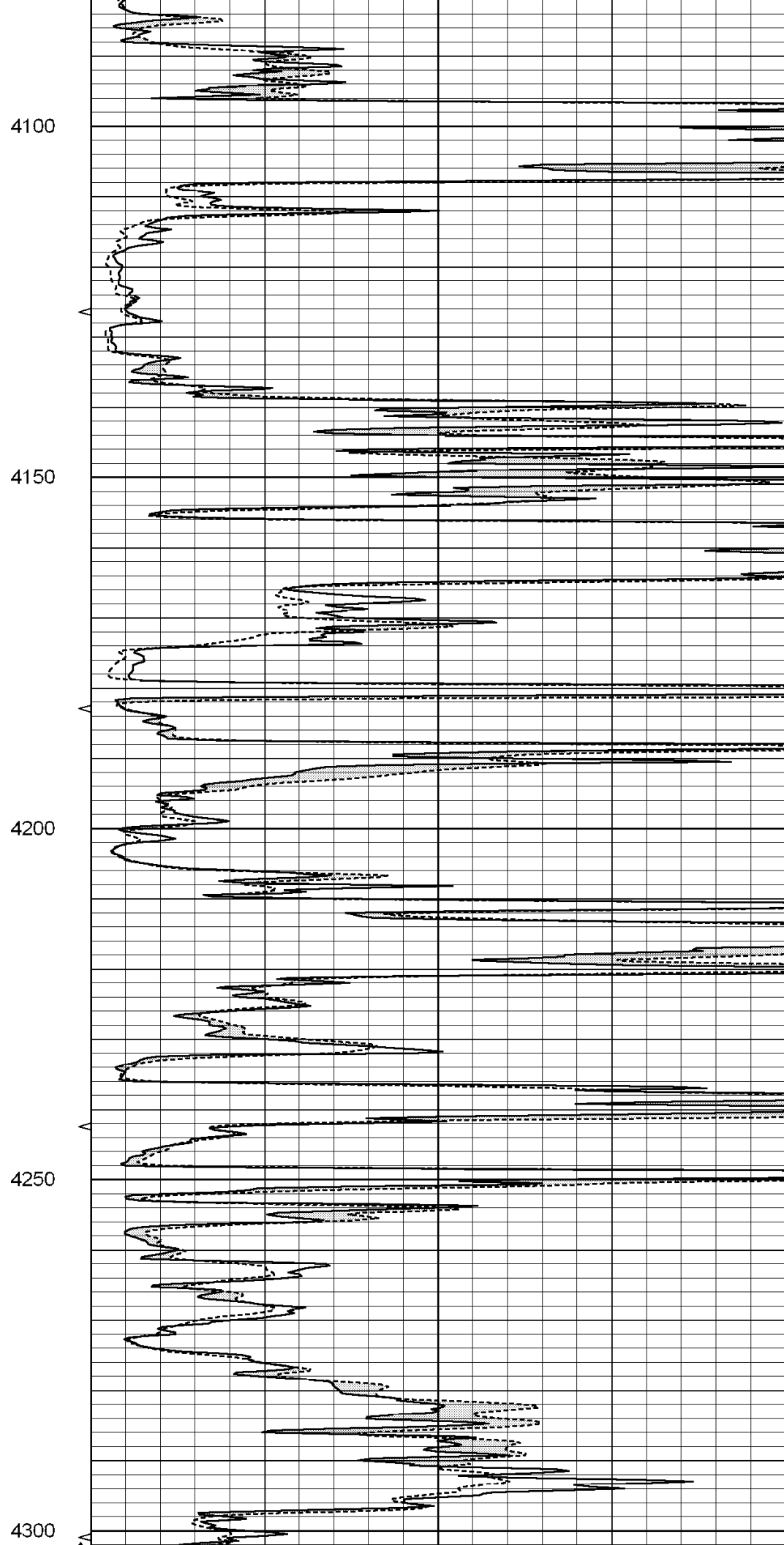
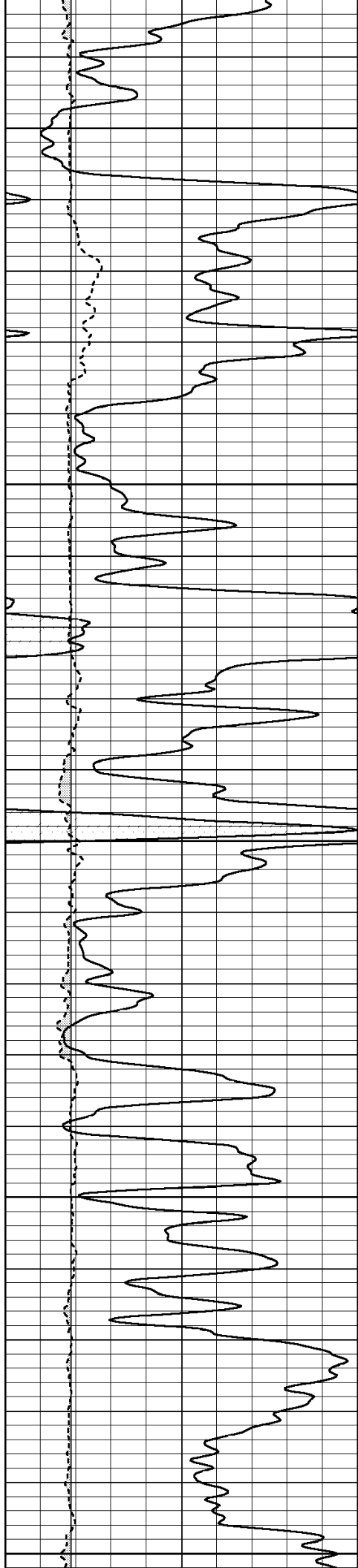
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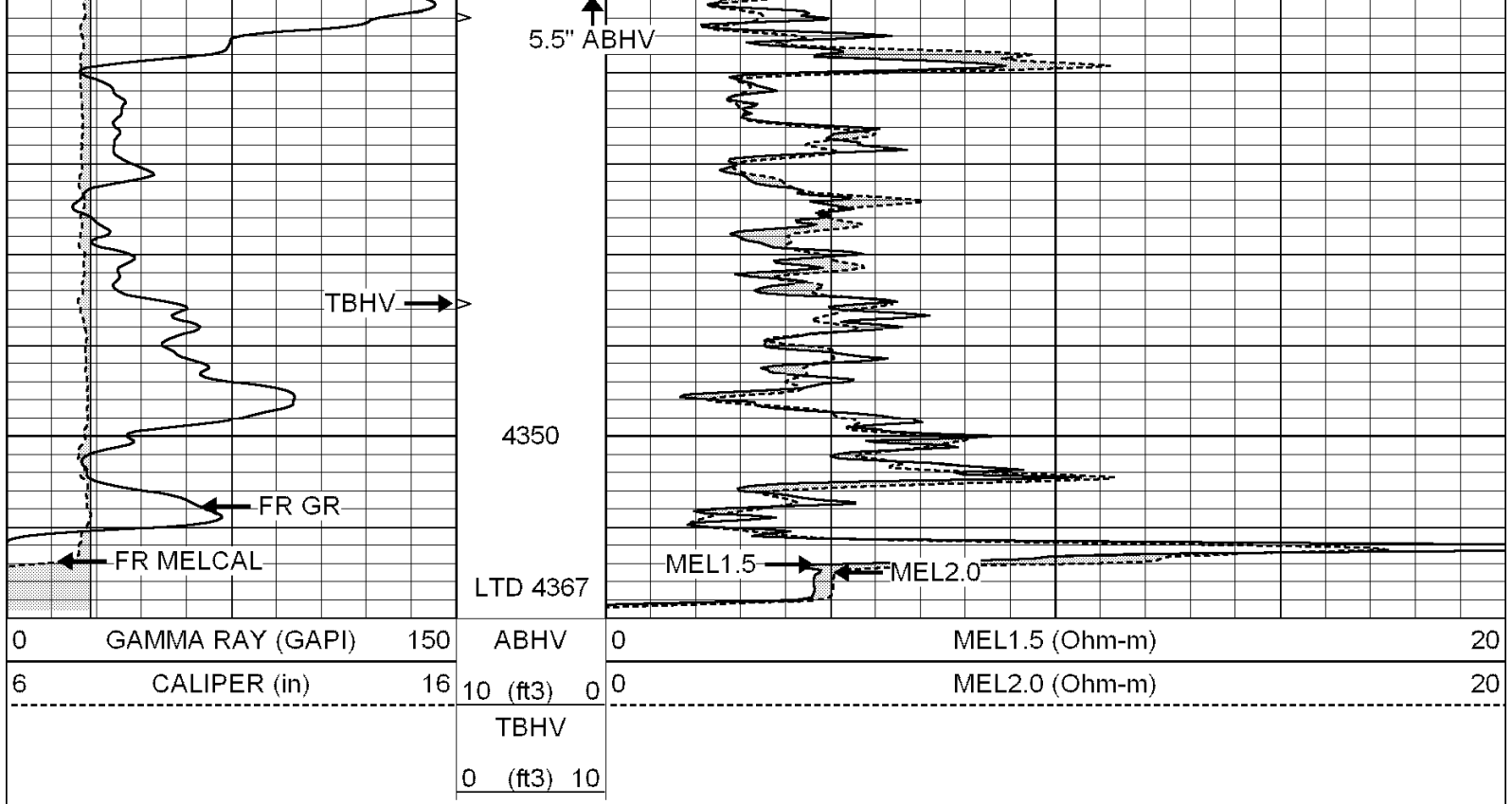
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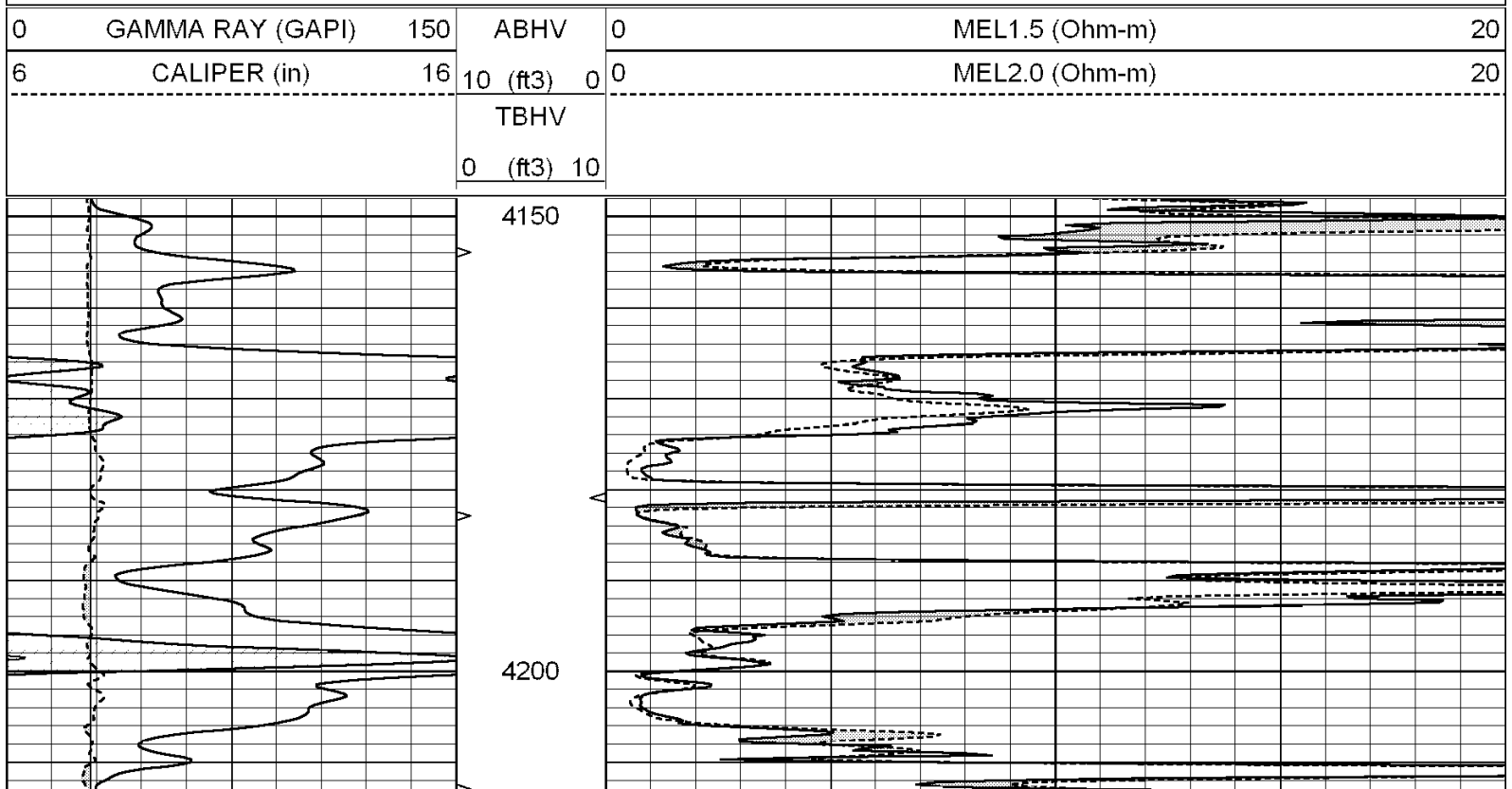




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REPEAT SECTION

Database File: 004351ddn.db
 Dataset Pathname: pass6.1
 Presentation Format: micro
 Dataset Creation: Mon Sep 28 02:18:38 2009 by Calc Open-Cased 060407
 Charted by: Depth in Feet scaled 1:240



Caliper Calibration:	Gain=3.401	Offset=-3.685
References	Low Cal 6.000	High Cal 15.000
Readings	2.848	5.494
1.5" Calibration:	Gain=33.000	Offset=-1.300
References	Low Cal 0.000	High Cal 20.000
Readings	0.027	0.996
2" Calibration:	Gain=50.000	Offset=-2.000
References	Low Cal 0.000	High Cal 20.000
Readings	0.020	0.807
Gamma Ray Calibration Report		
Serial Number:	GR3	
Tool Model:	OPEN	
Performed:	Mon Sep 28 00:56:40 2009	
Calibrator Value:	200.0	GAPI
Background Reading:	3.0	cps
Calibrator Reading:	186.0	cps
Sensitivity:	0.9000	GAPI/cps