



SUPERIOR  
Hays,  
Kansas

COMPENSATED  
DENSITY / NEUTRON  
PE LOG

Company MULL DRILLING COMPANY, INC.  
Well #1-14 TALLMAN FARMS "A"  
Field WILDCAT  
County KIOWA  
State COLORADO

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Field WILDCAT  
County KIOWA State COLORADO

Location: API # : 05-061-06836-0000  
1294' FSL & 605' FWL  
SEC 14 TWP 18S RGE 45W  
Permanent Datum GROUND LEVEL Elevation 3937  
Log Measured From KELLY BUSHING 13' A.G.L.  
Drilling Measured From KELLY BUSHING  
Other Services  
DIL/MEL  
SONIC  
Elevation  
K.B. 3950  
D.F. 3948  
G.L. 3937

Date	12/23/09		
Run Number	CNE		
Depth Driller	5050		
Depth Logger	5050		
Bottom Logged Interval	5026		
Top Log Interval	3200		
Casing Driller	8 5/8"@335'		
Casing Logger	336		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 2,700 PPM	
Density / Viscosity	9.2/84		
pH / Fluid Loss	10.5/8.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.20@60F		
Rmf @ Meas. Temp	.900@60F		
Rmc @ Meas. Temp	1.44@60F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.576@125F		
Time Circulation Stopped	2.5 HOURS		
Time Logger on Bottom	7:00 P.M.		
Maximum Recorded Temperature	125F		
Equipment Number	0836		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	KEVIN KESSLER		

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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 SERVICES HAYS, KANSAS (785) 628-6395  
DIRECTIONS  
BRANDON, CO. & HWY 96 E. EDGE @MM #186, 3 N. ON RD. #59, 1/4 E., N. INTO

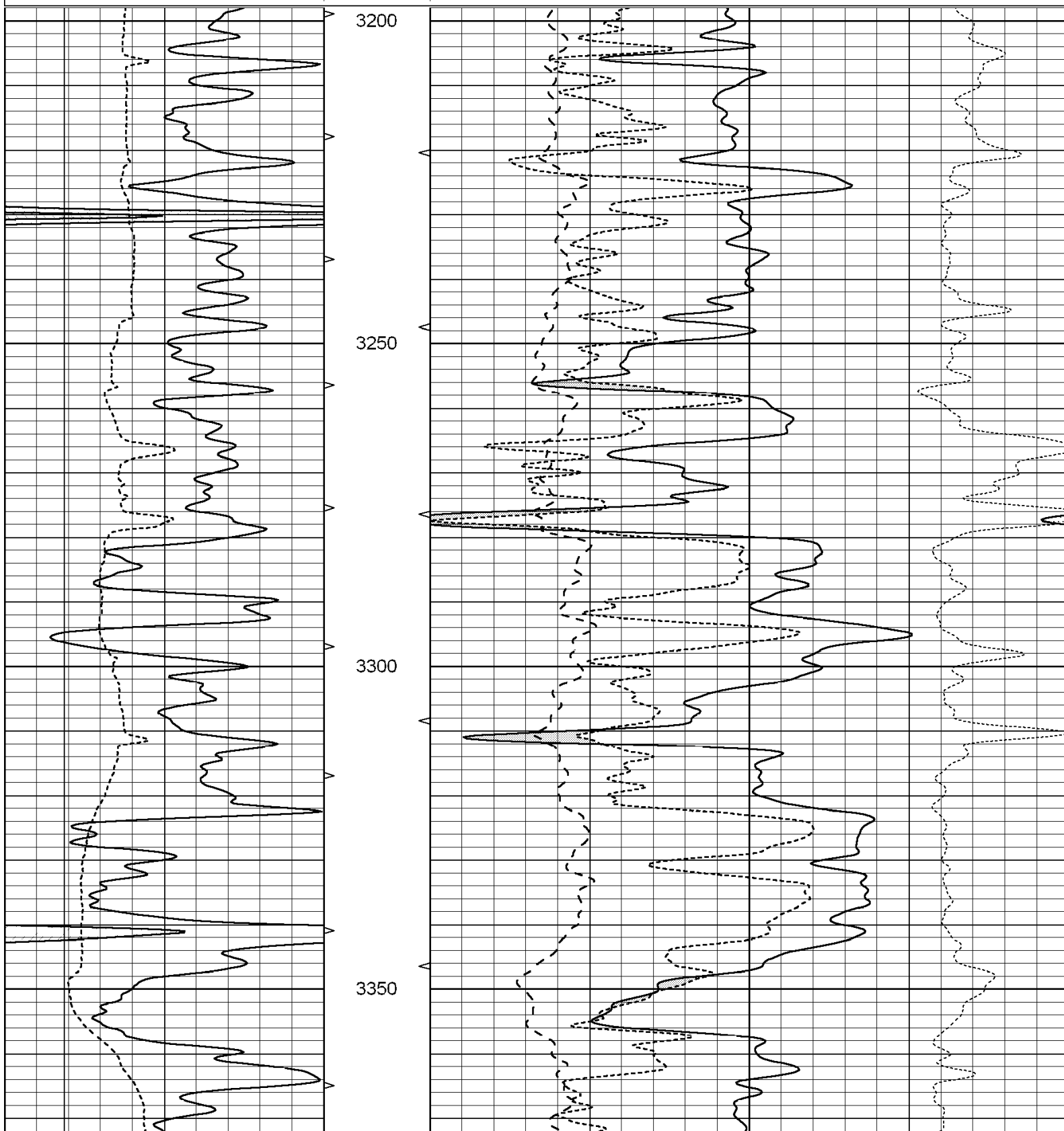


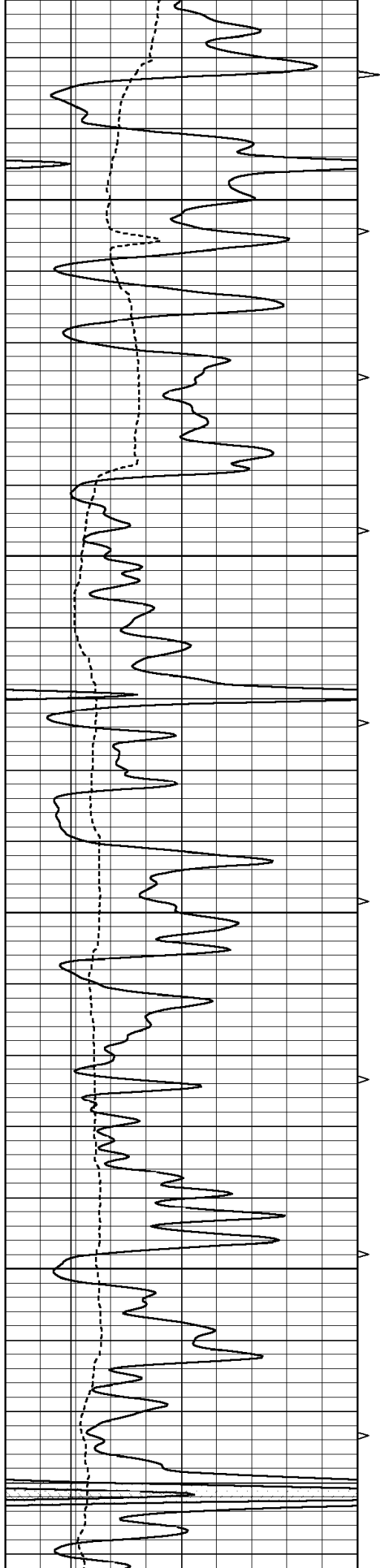
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MAIN SECTION

Database File: 004396pe.db  
Dataset Pathname: pass3.5  
Presentation Format: ldt\_neu  
Dataset Creation: Tue Dec 22 20:15:27 2009  
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
			TBHV	0	PE	10 -0.25 CORRECTION (g/cc) 0.25
			0 (ft3) 10			



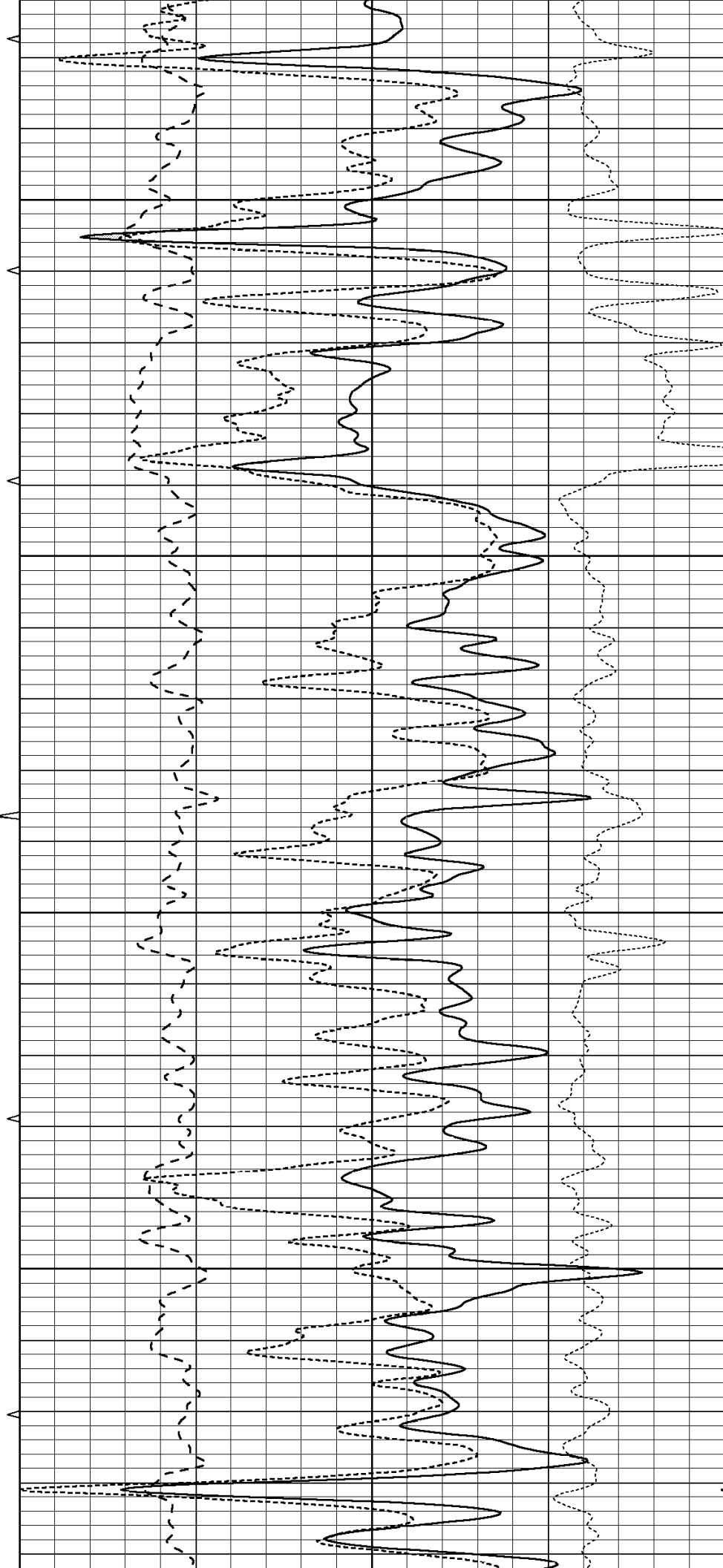


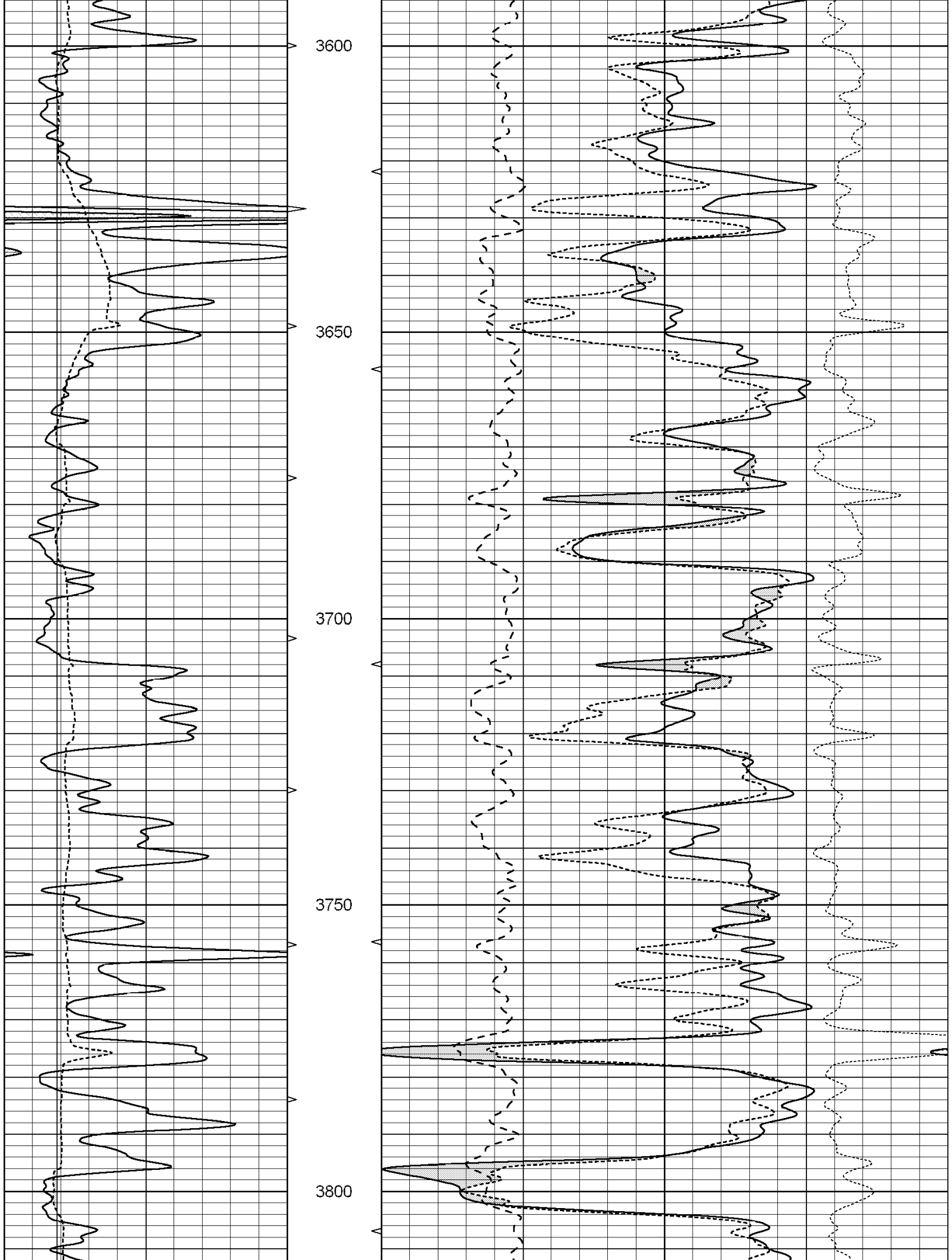
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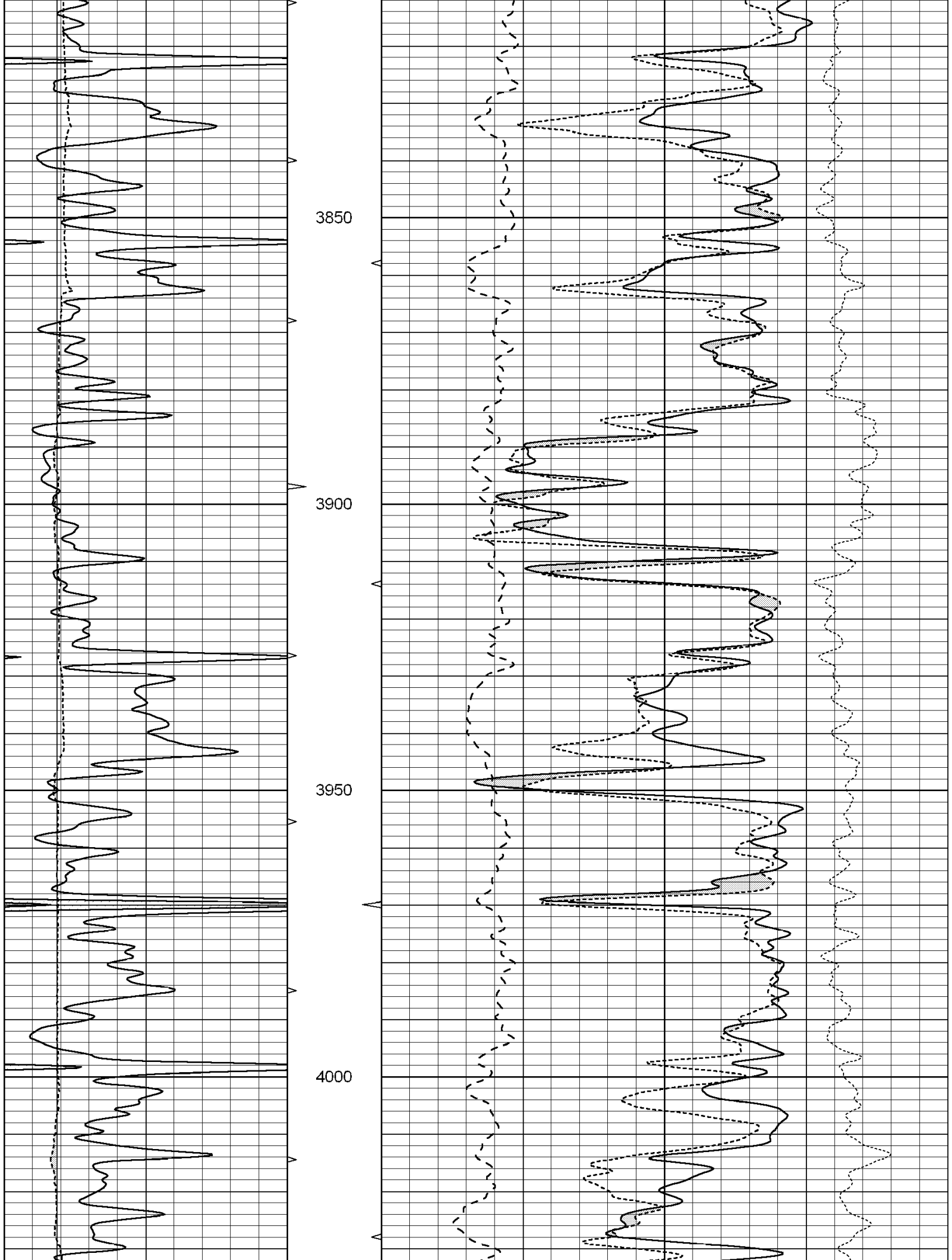
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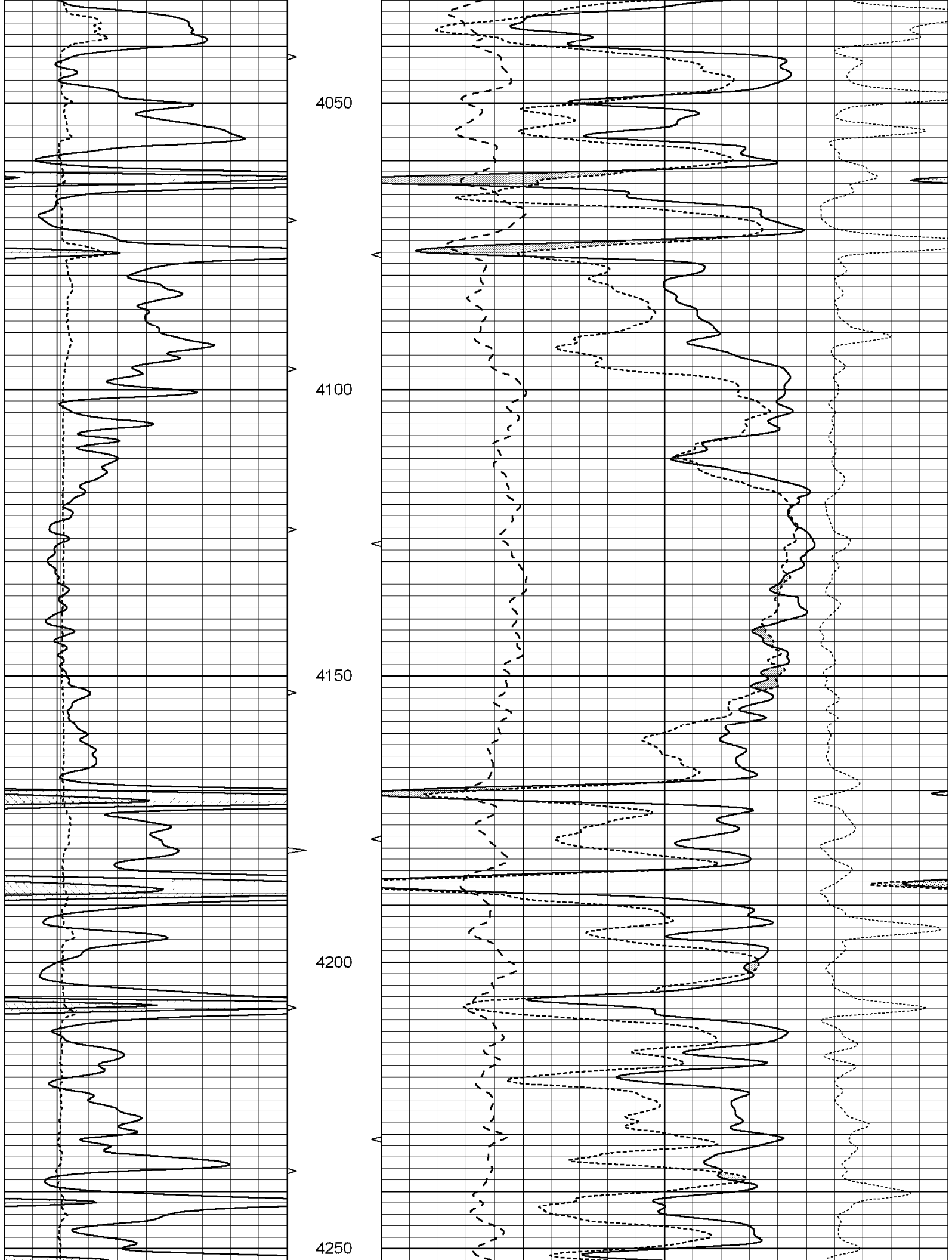
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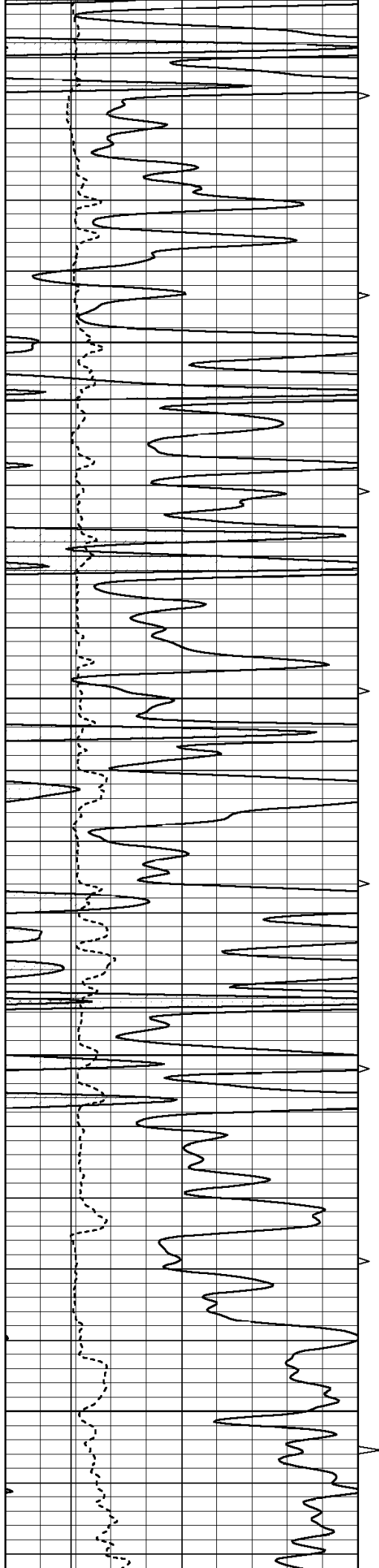
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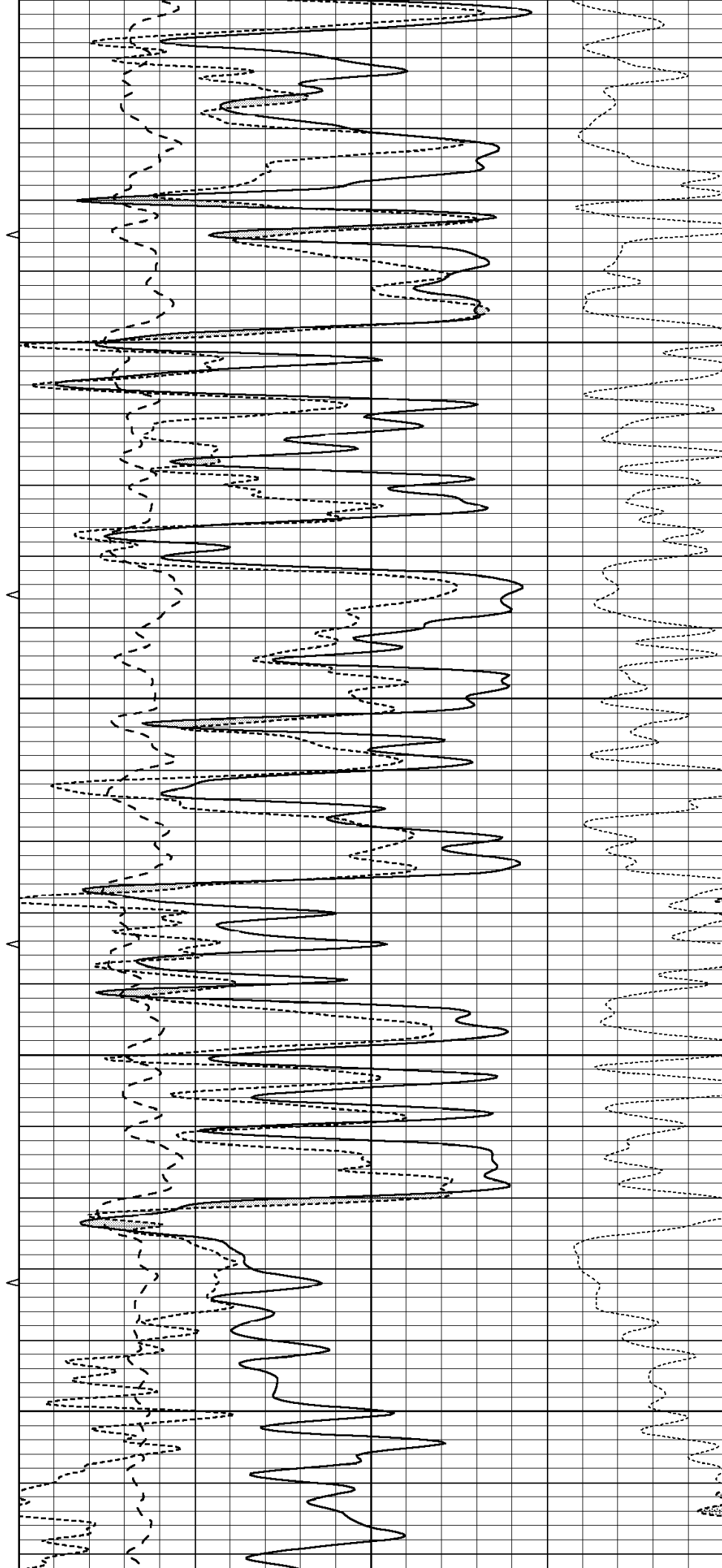


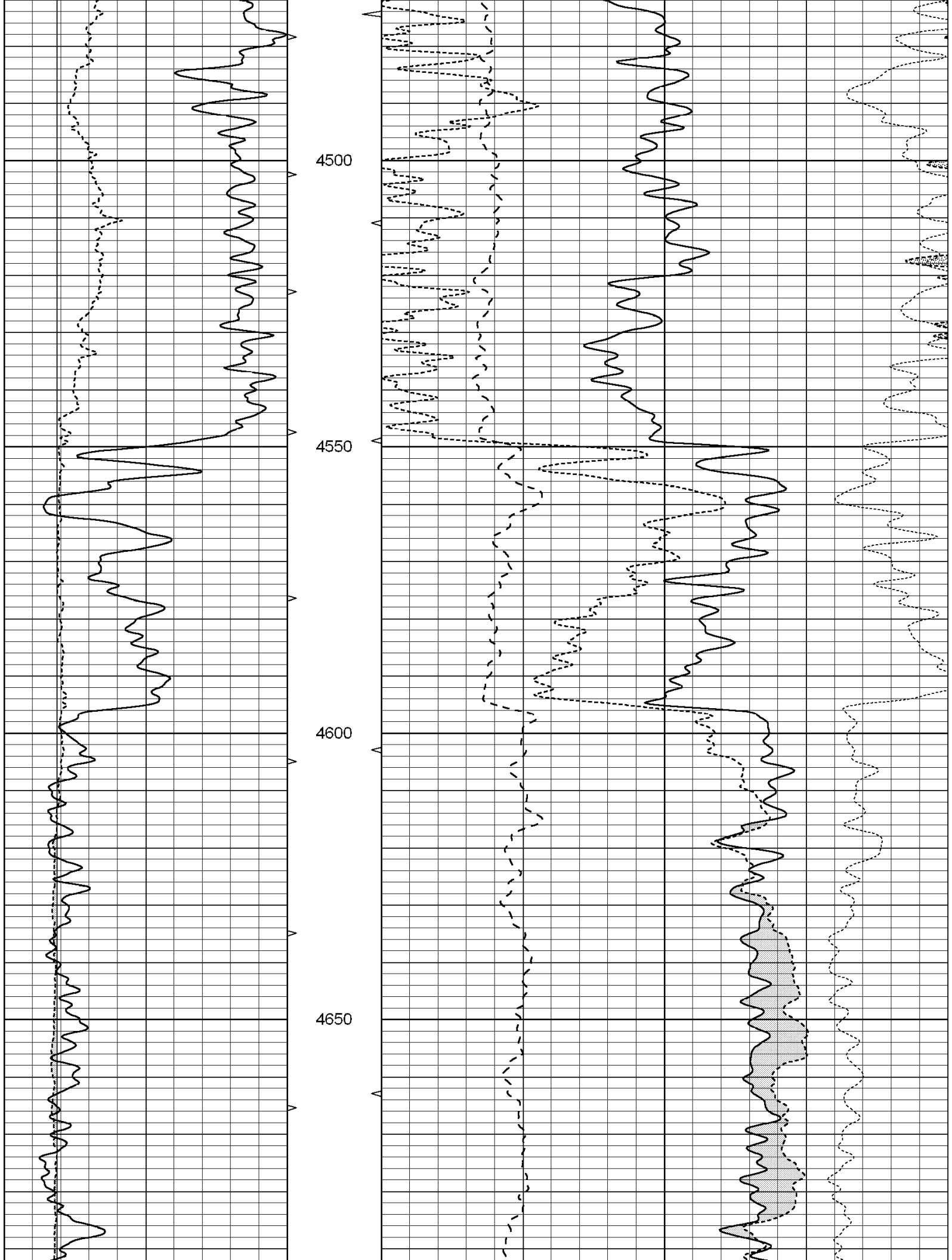
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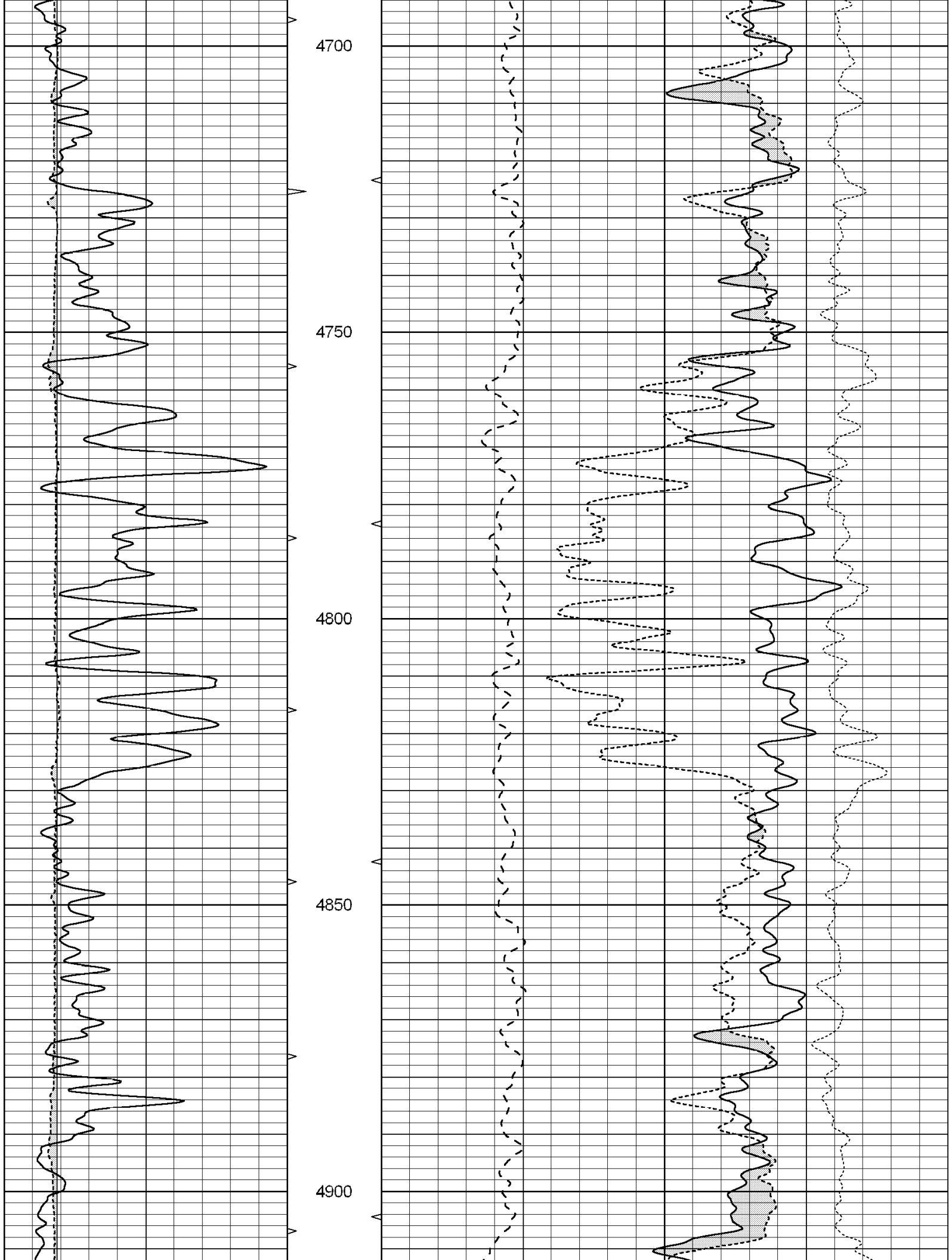
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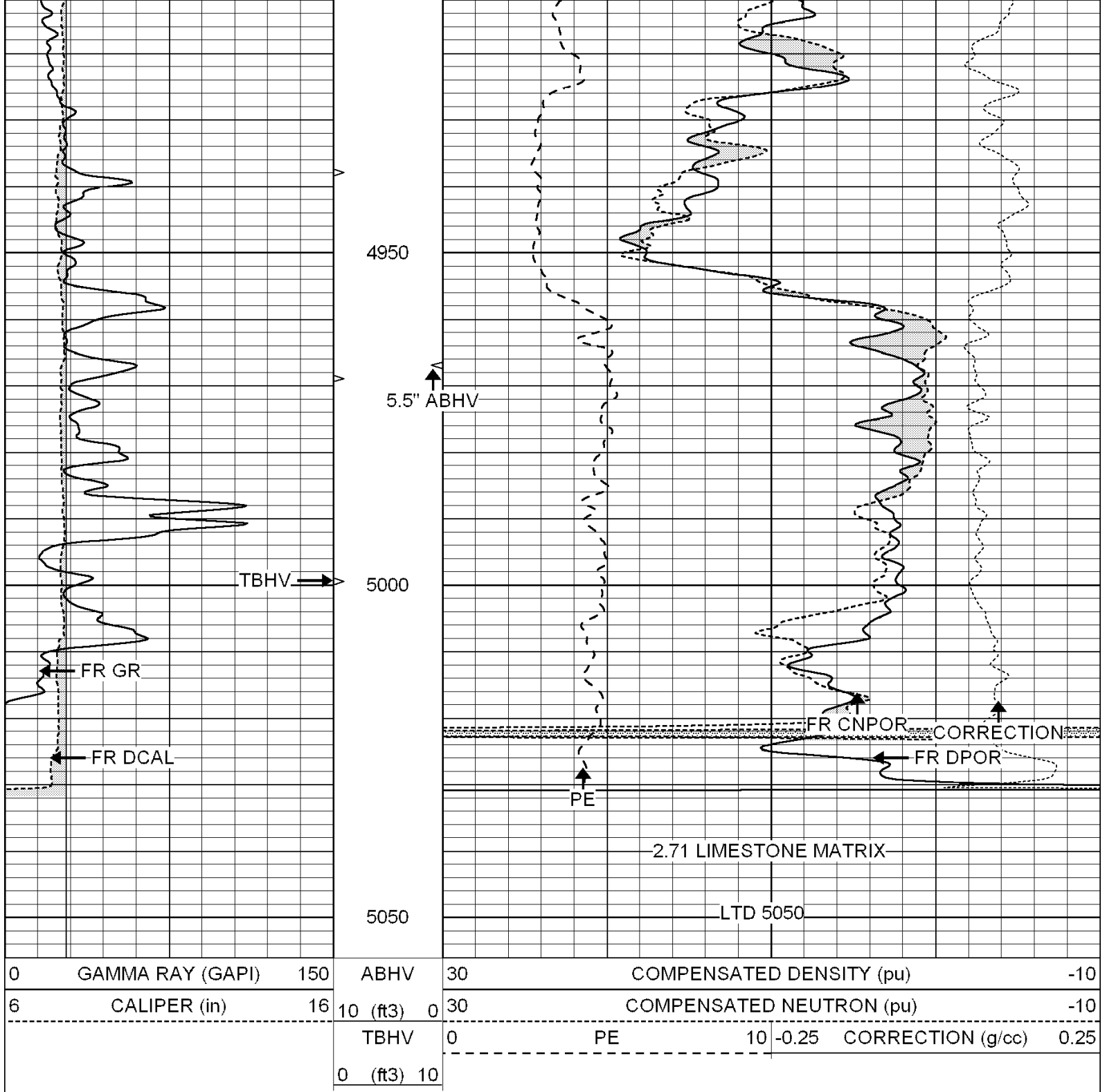
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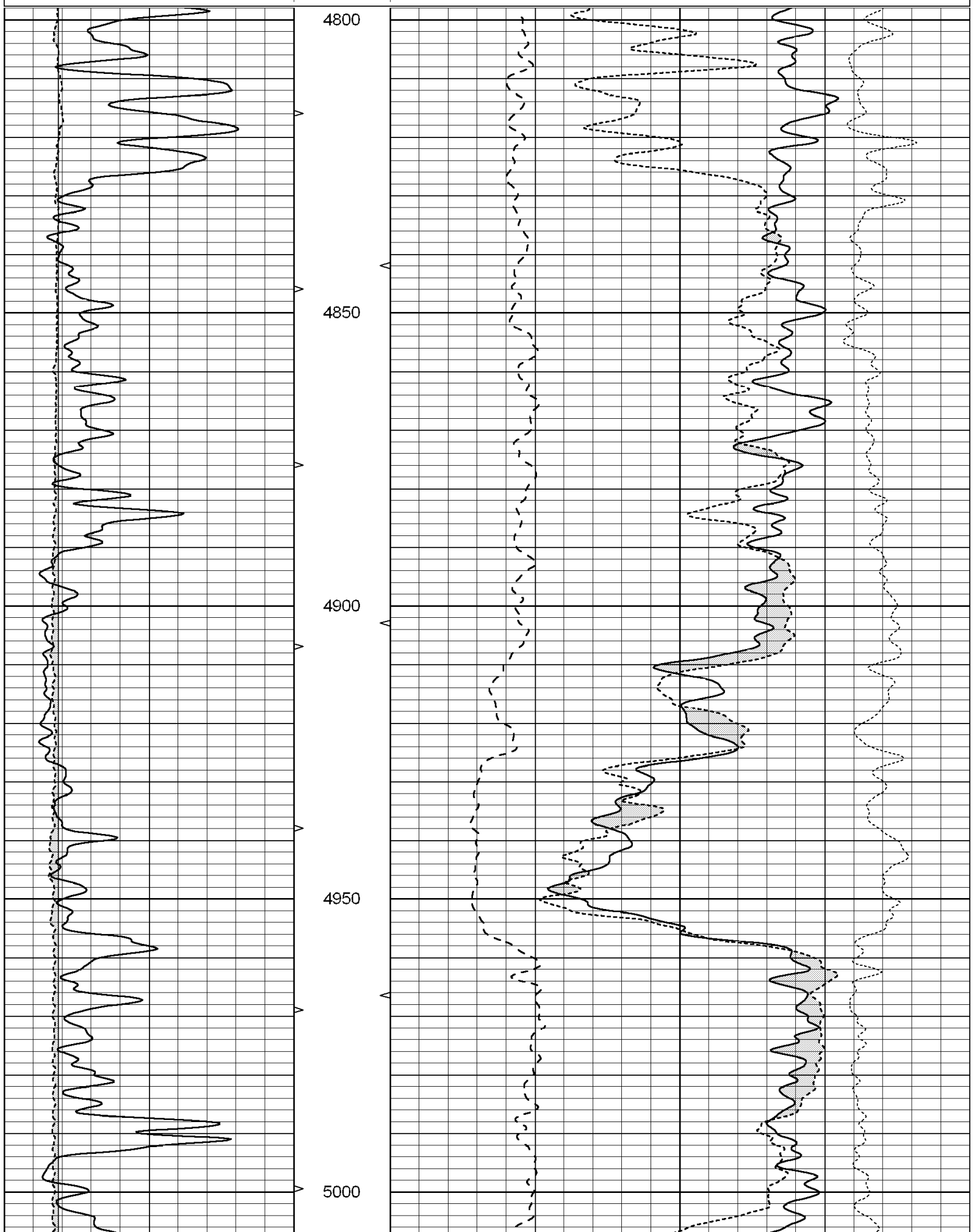
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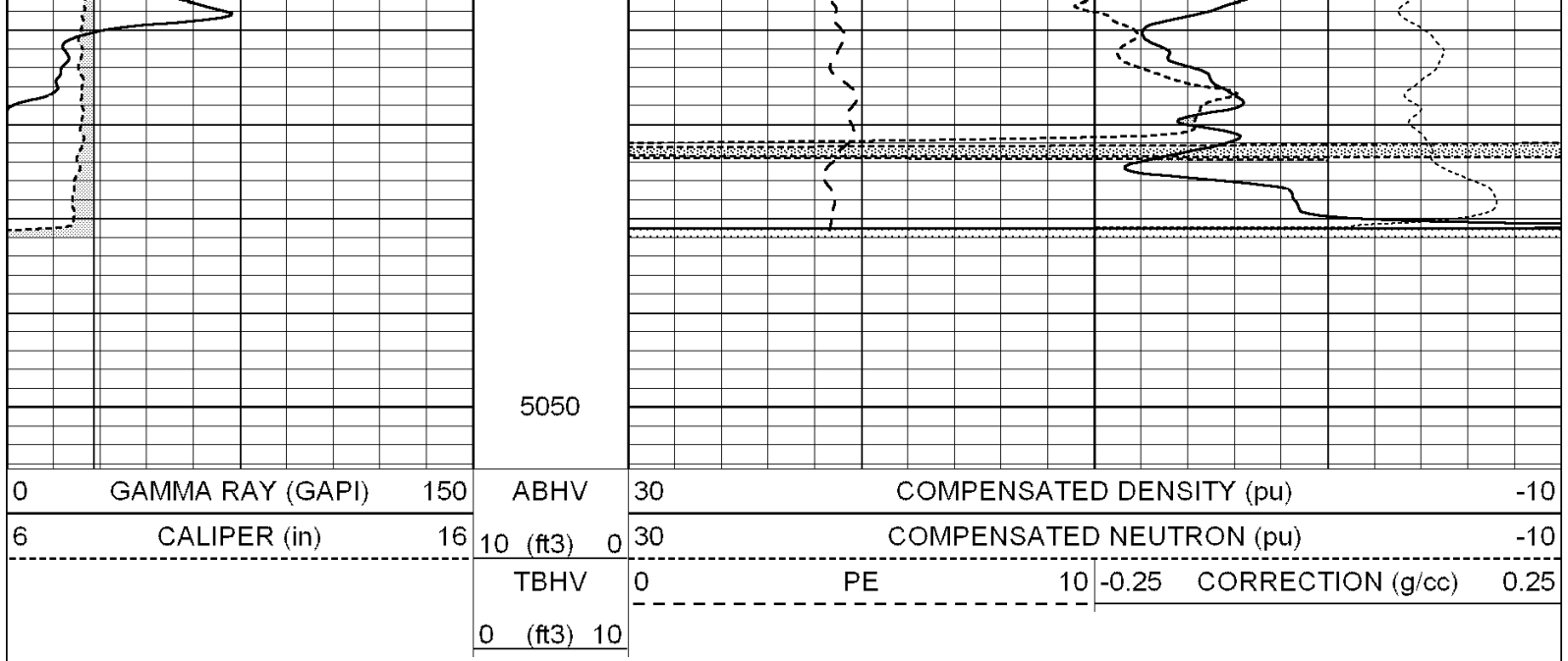
# REPEAT SECTION

Database File: 004396pe.db  
Dataset Pathname: pass2.8  
Presentation Format: ldt\_neu  
Dataset Creation: Tue Dec 22 19:47:21 2009  
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

TBHV	0	PE	10	-0.25	CORRECTION (g/cc)	0.25
0 (ft3) 10						





# Calibration Report

```
Database File:      004396pe.db
Dataset Pathname:  pass3.5
Dataset Creation:   Tue Dec 22 20:15:27 2009
```

# Dual Induction Calibration Report

Serial-Model: DIL6-GEAR  
Performed: Tue Dec 22 18:38:34 2009

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.001	0.644	V	0.000	400.000	mmho-m	660.000	4.000
Medium	0.020	0.738	V	0.000	462.500	mmho-m	740.000	-20.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.000	1.000	V	0.000	1.000	mmho-m	1.000	0.000
Medium	0.000	1.000	V	0.000	1.000	mmho-m	1.000	0.000

Litho Density Calibration Report  
Serial: 004N      Model: PRB  
Performed Tue Sep 08 13:49:55 2009

## Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1535.8	11161.3	3721.6	12498.8	cps
Window 2	1402.6	9435.7	3219.7	10417.7	cps
Window 3	1077.6	4422.0	1779.2	4753.4	cps
Window 4	337.3	342.8	337.4	343.7	cps
Long Space	0.0	8033.1	1817.0	9015.1	cps
Short Space	1.2	1671.8	1138.1	1813.0	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	

Rib Angle	: 45.5	Rib Slope	: 1.017	Density/Spine Ratio	: 0.573
Spine Angle	: 75.5	Spine Slope	: 3.865	Spine Intercept	: -19.7

## Caliper

Low Ref	Readings	Reference			
High Ref	1.1	6.9			
	3.0	14.0			
	Gain: 3.7		Offset: 2.8		
Compensated Neutron Calibration Report					
		Serial Number:	NEU_4I		
		Tool Model:	G		
CALIBRATION					
	Detector	Readings	Target		Normalization
	Short Space	996.00 cps	1000.00	cps	1.0000
	Long Space	977.00 cps	1000.00	cps	1.0000
Gamma Ray Calibration Report					
Serial Number:		GR4			
Tool Model:		OPEN			
Performed:		Tue Dec 22 18:55:10 2009			
Calibrator Value:		200.0	GAPI		
Background Reading:		0.0	cps		
Calibrator Reading:		189.0	cps		
Sensitivity:		0.7500	GAPI/cps		