



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

**COMPENSATED
DENSITY / NEUTRON
PE LOG**

Company	MULL DRILLING COMPANY, INC.	Company	MULL DRILLING COMPANY, INC.
Well	SCHERLER #1-10	Well	SCHERLER #1-10
Field		Field	
County	KIOWA	County	KIOWA
State	COLORADO	State	COLORADO
Location:	AP1 # : 05-061-06893-00	Other Services	
	849' FNL & 952' FEL	DIL/MEL SONIC	
Permanent Datum	SEC 10 TWP 17S RGE 45W	Elevation	
Log Measured From	GROUND LEVEL	K.B. 4159	
Drilling Measured From	KELLY BUSHING 11' A.G.L.	D.F. 4157	
	KELLY BUSHING	G.L. 4148	
Date	8/28/14		
Run Number	ONE		
Depth Driller	5450		
Depth Logger	5457		
Bottom Logged Interval	5429		
Top Log Interval	3600		
Casing Driller	341		
Casing Logger	340		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 1800 PPM	
Density / Viscosity	9.360		
pH / Fluid Loss	9.5/7.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.10 @ 87F		
Rmt @ Meas. Temp	.82 @ 87F		
Rmc @ Meas. Temp	1.32 @ 87F		
Source of Rmt / Rmc	MEASURED		
Rm @ BHT	.74 @ 129F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	129F		
Equipment Number	4010		
Location	HAYS, KS.		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	PHIL ASKEY		

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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

NABORS COMPLETION & PRODUCTION SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
BRANDON, CO. - 10 NORTH - WEST INTO

Database File:

25860pe.db

Dataset Pathname:

pass3.1

Presentation Format:

_ldt_neu

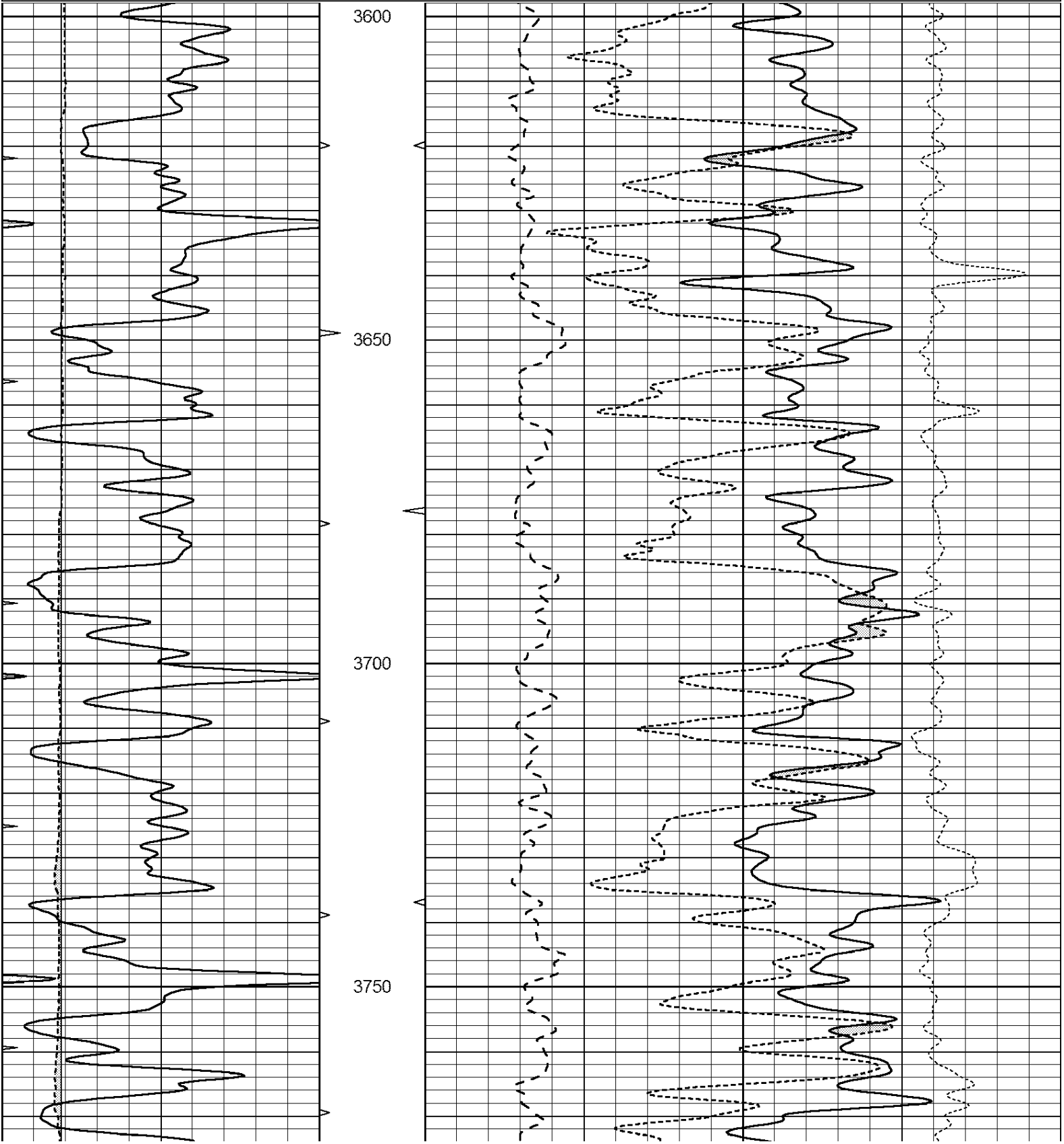
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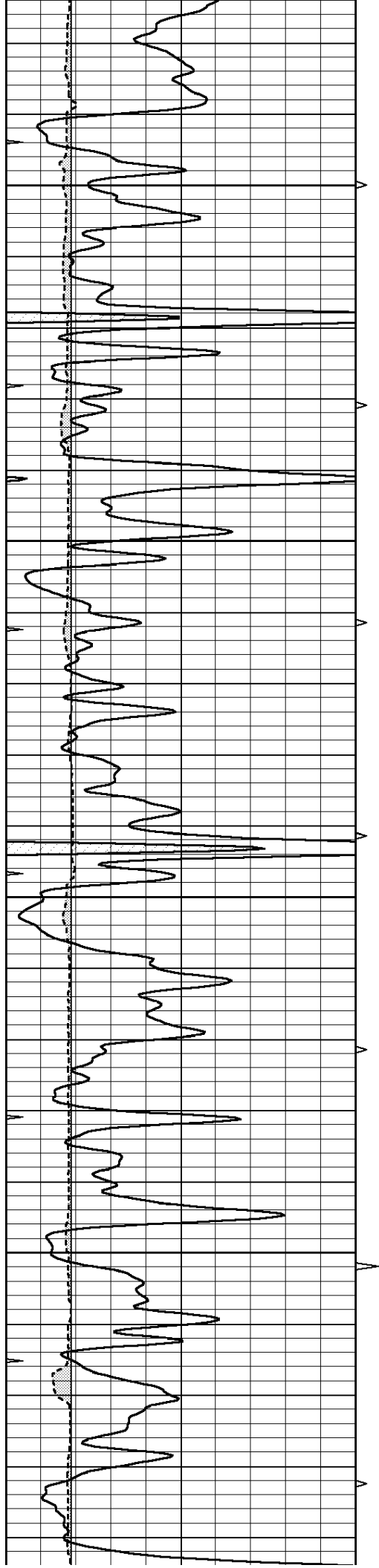
Thu Aug 28 05:23:19 2014 by Calc Open-Cased 090629

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		



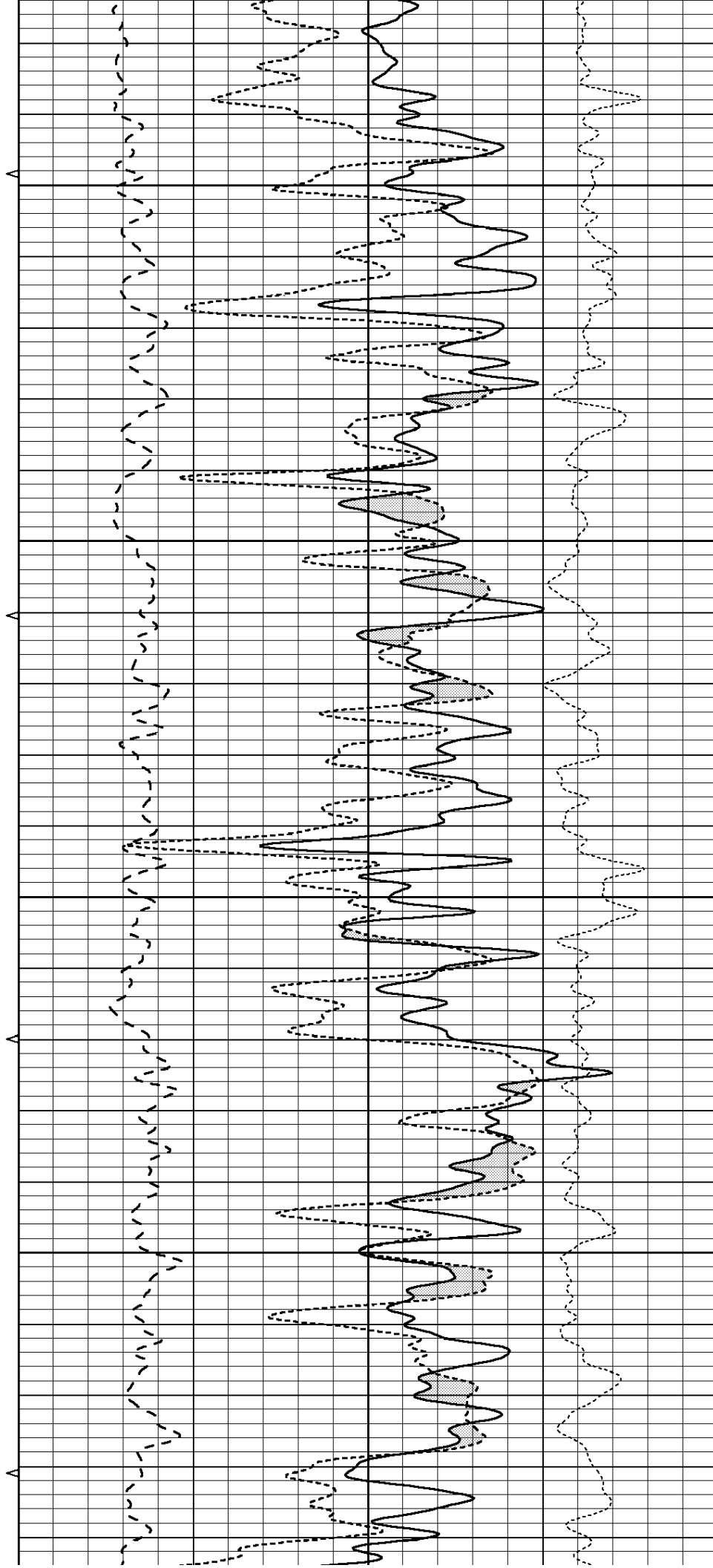


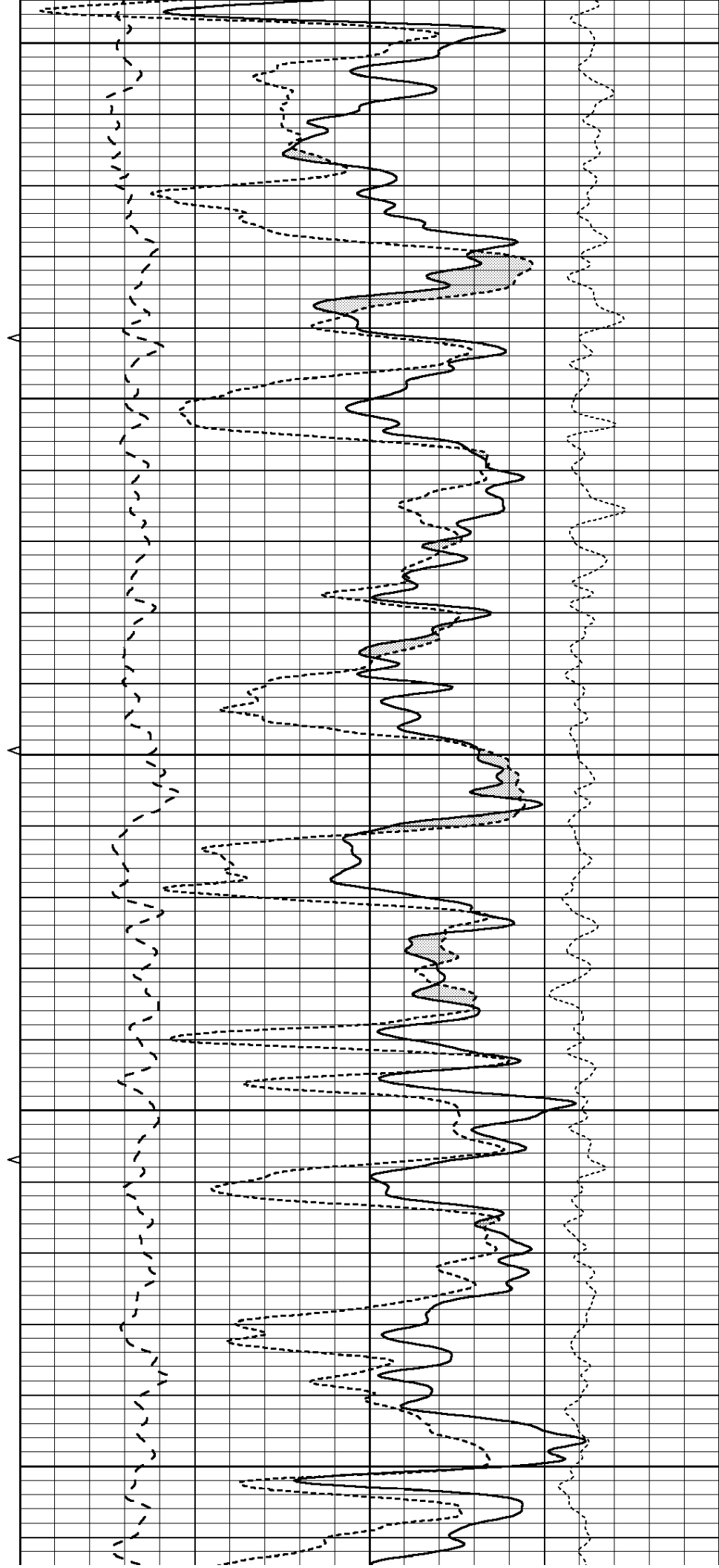
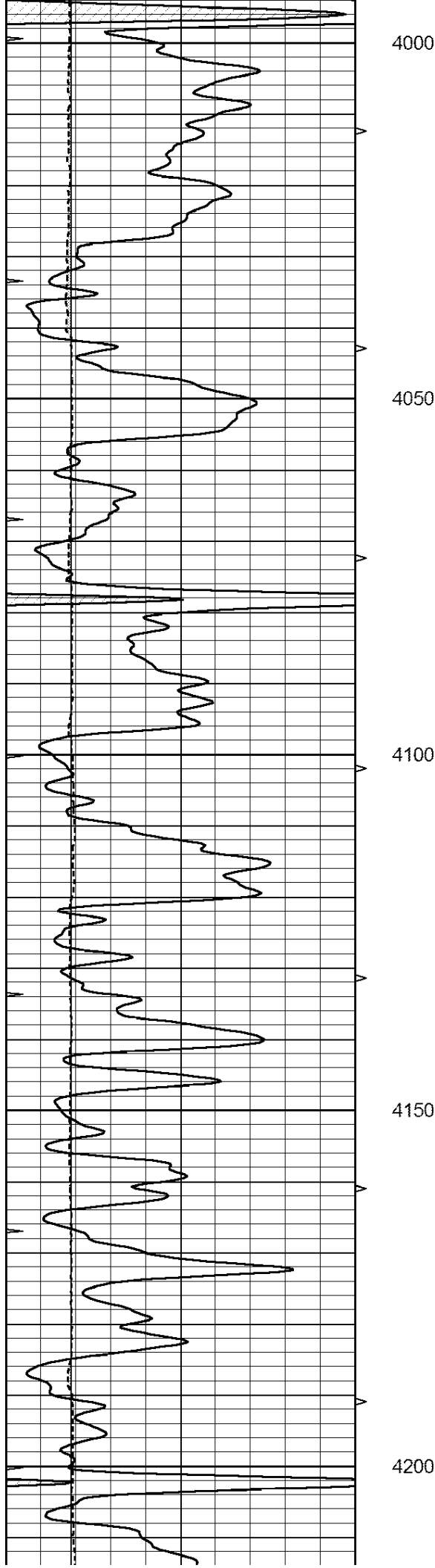
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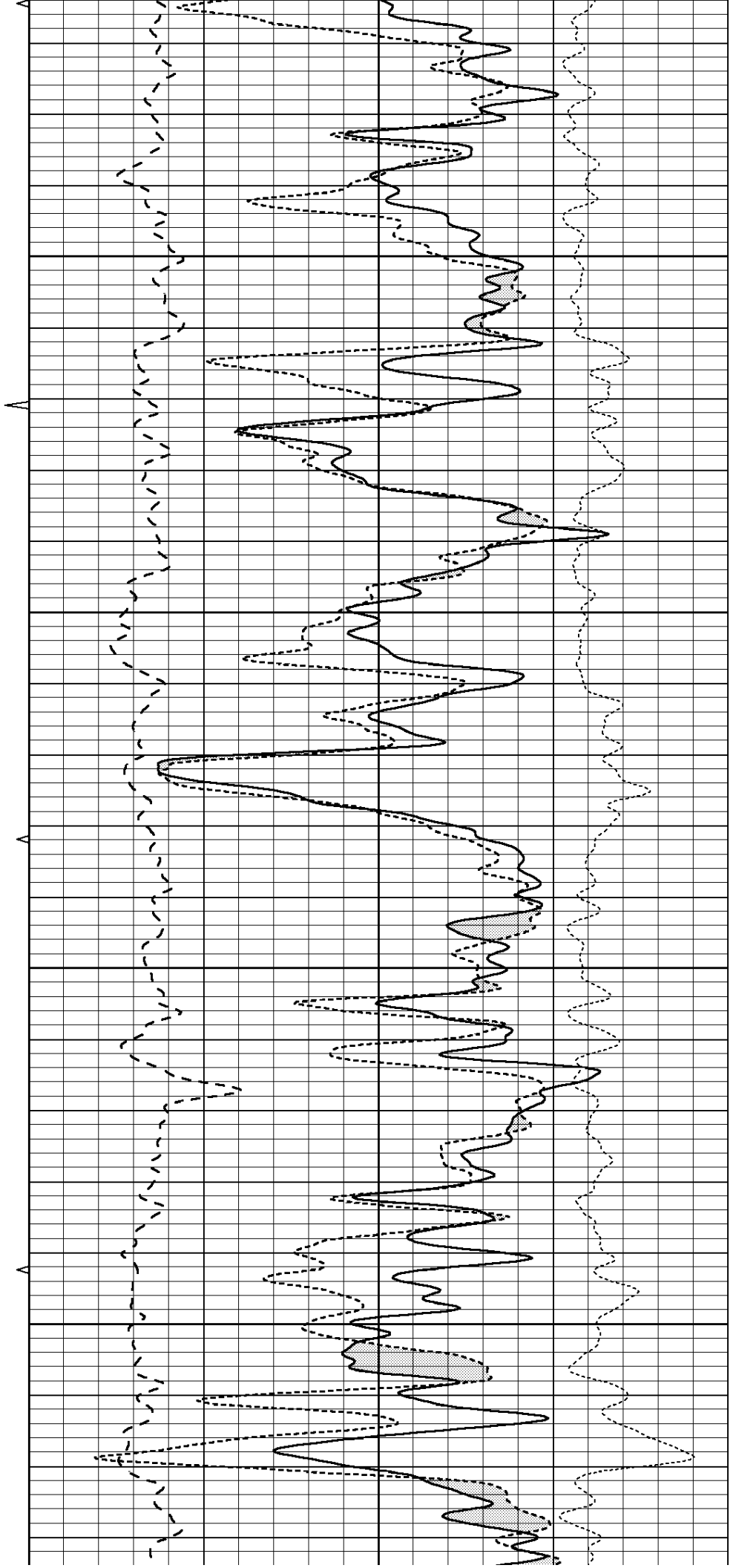
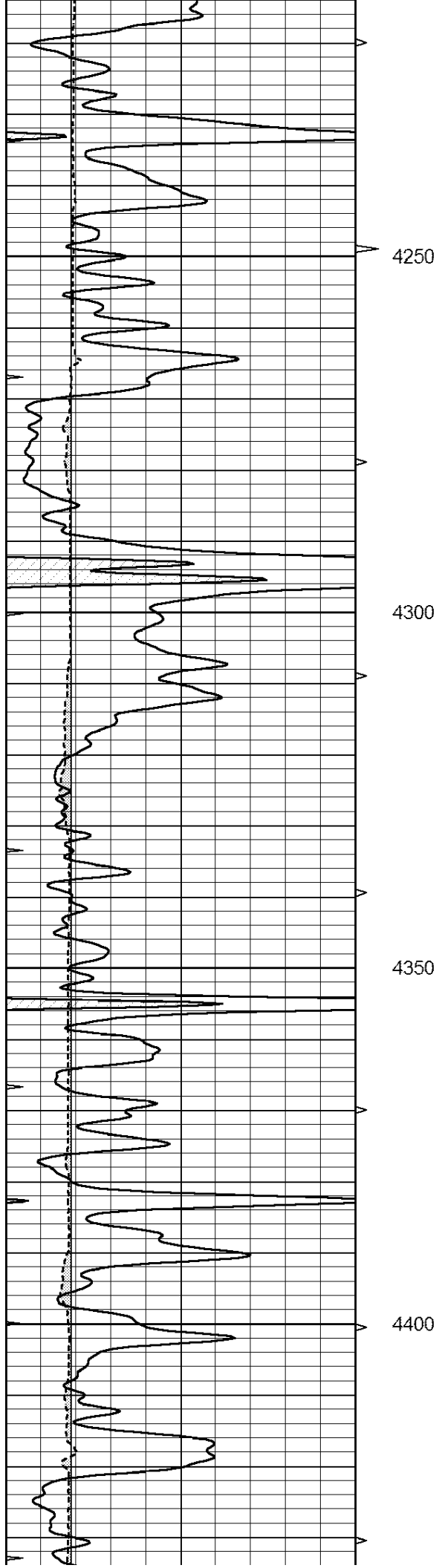
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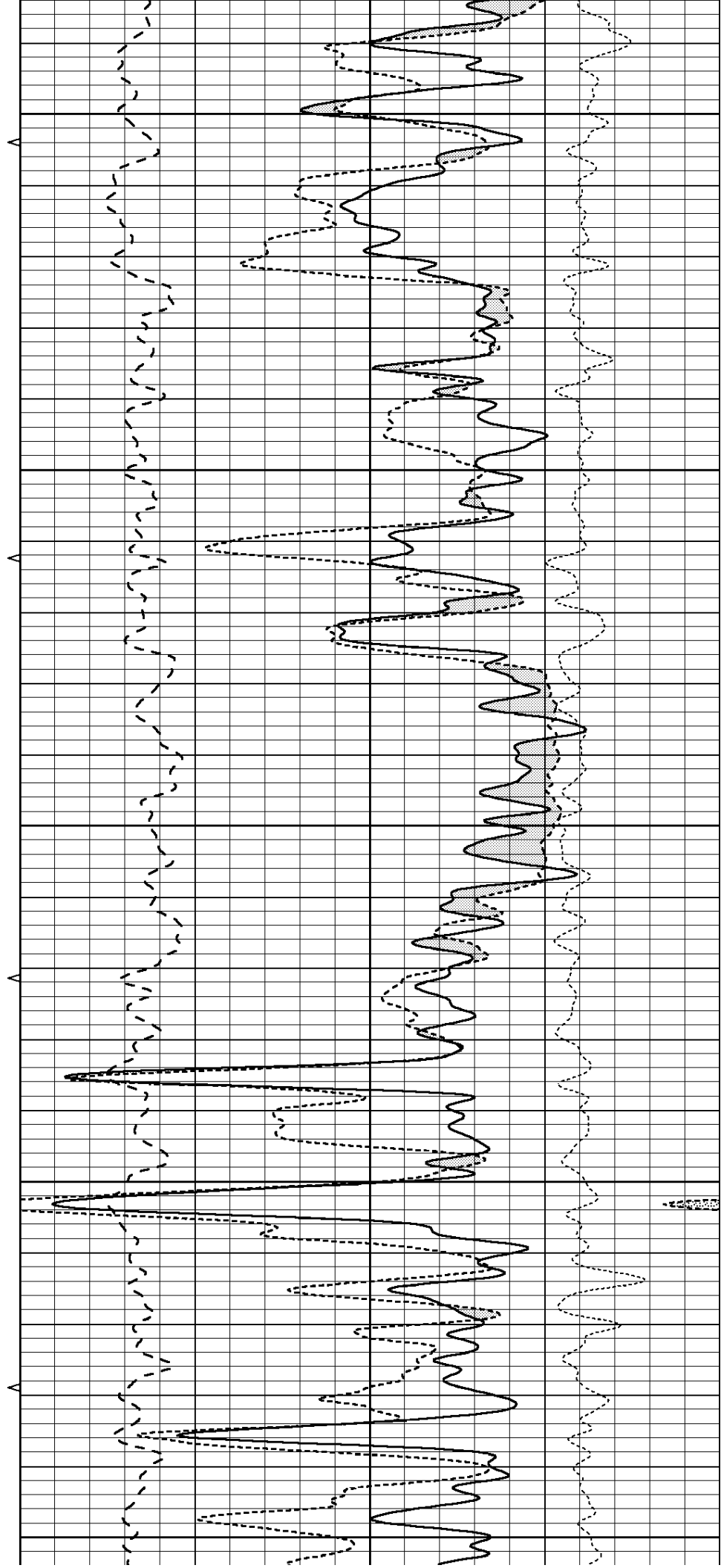
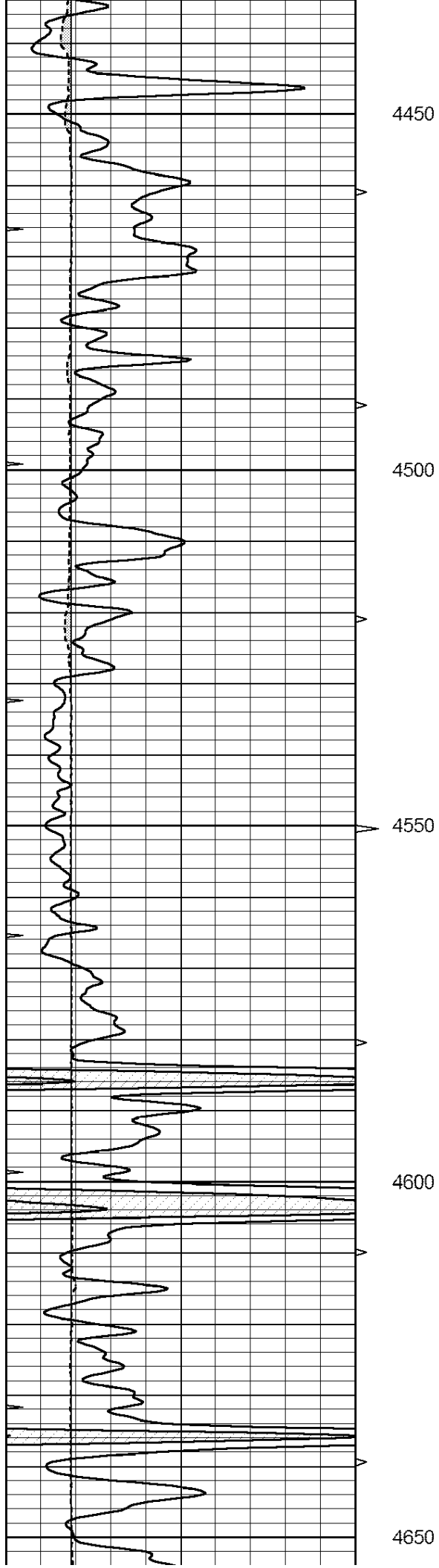
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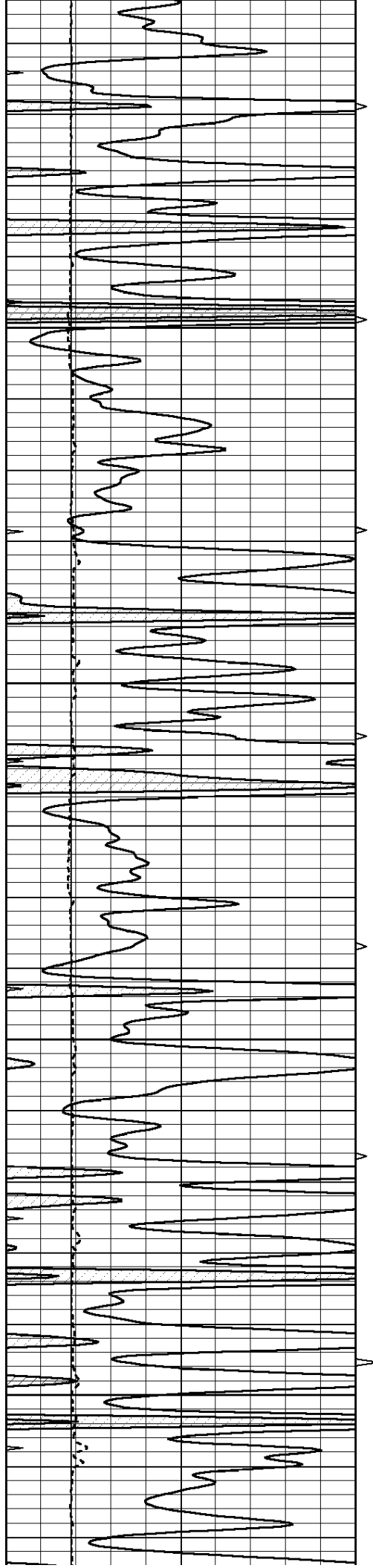
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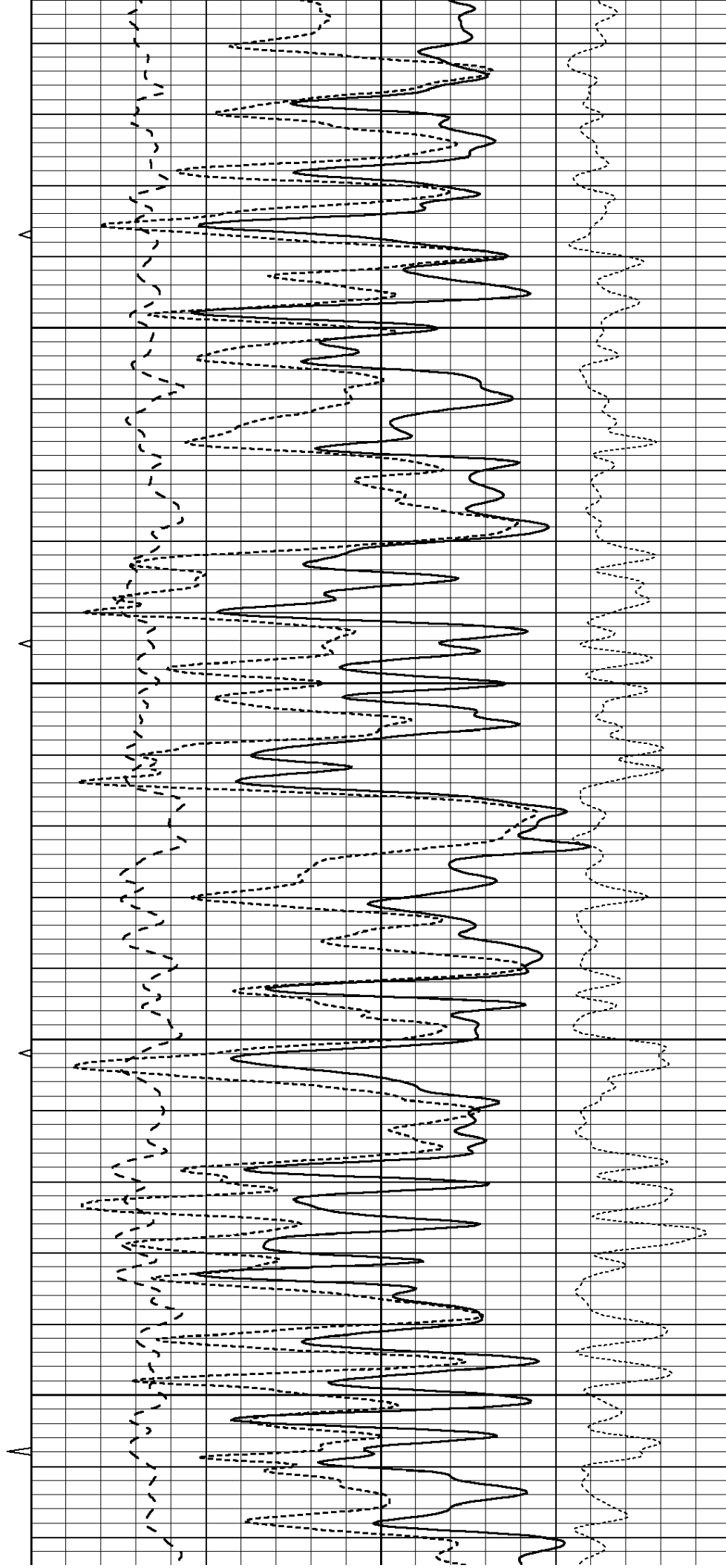


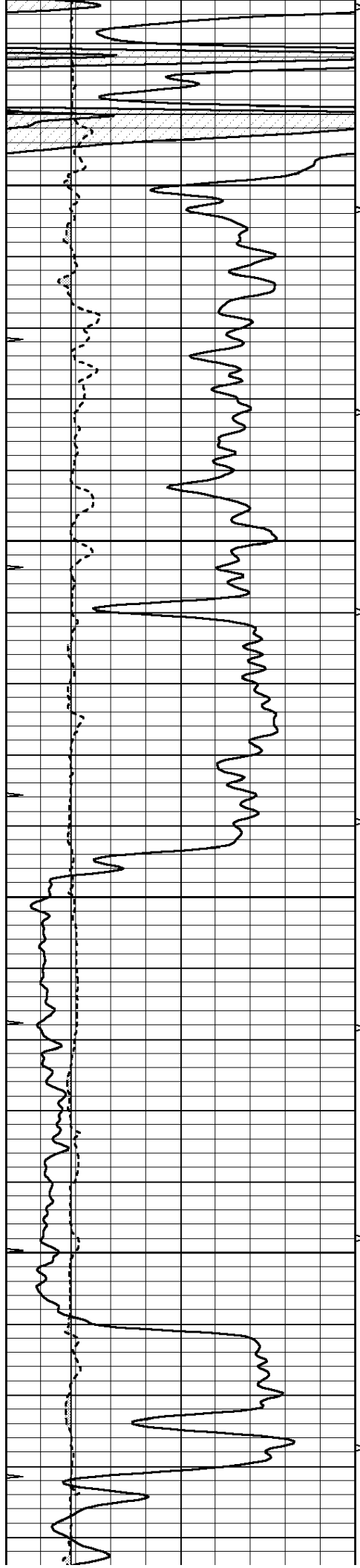
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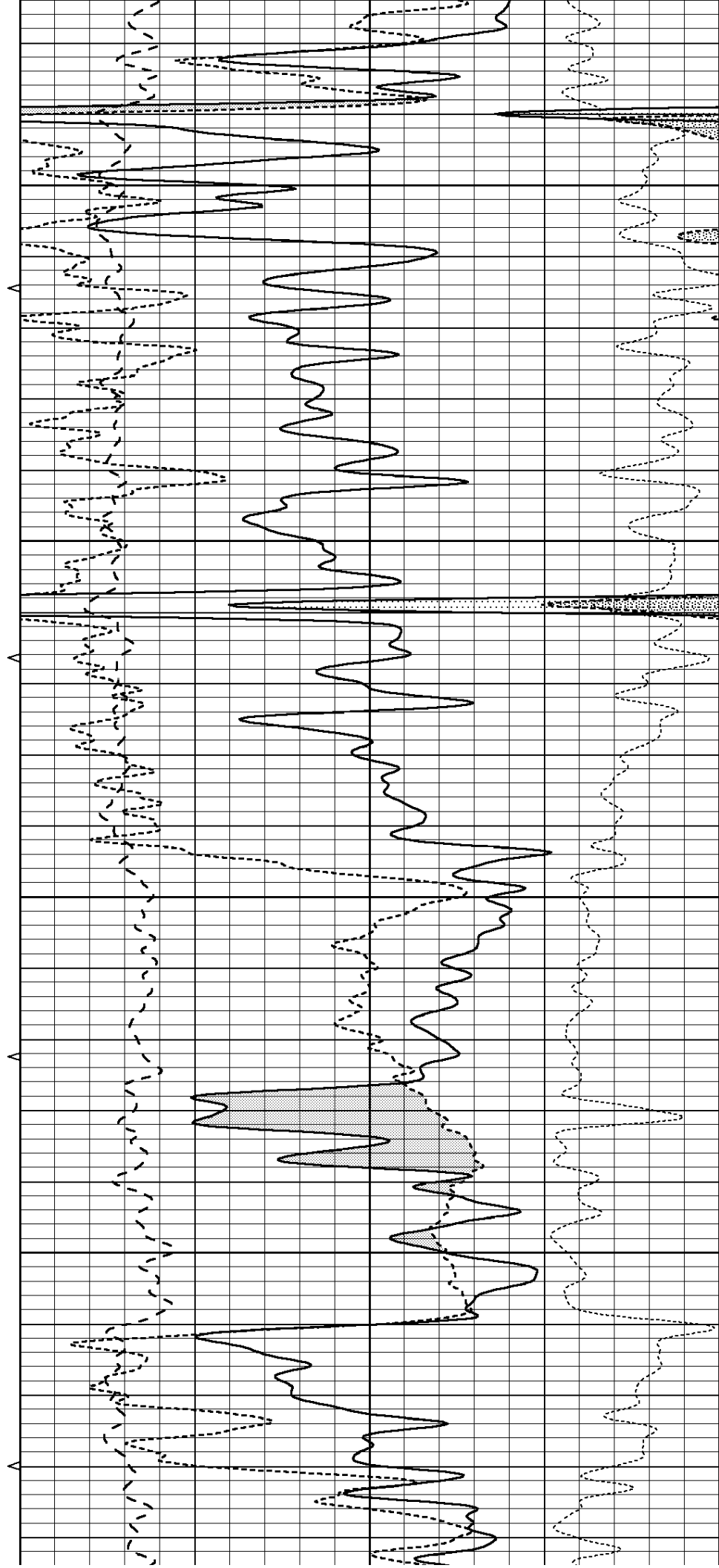


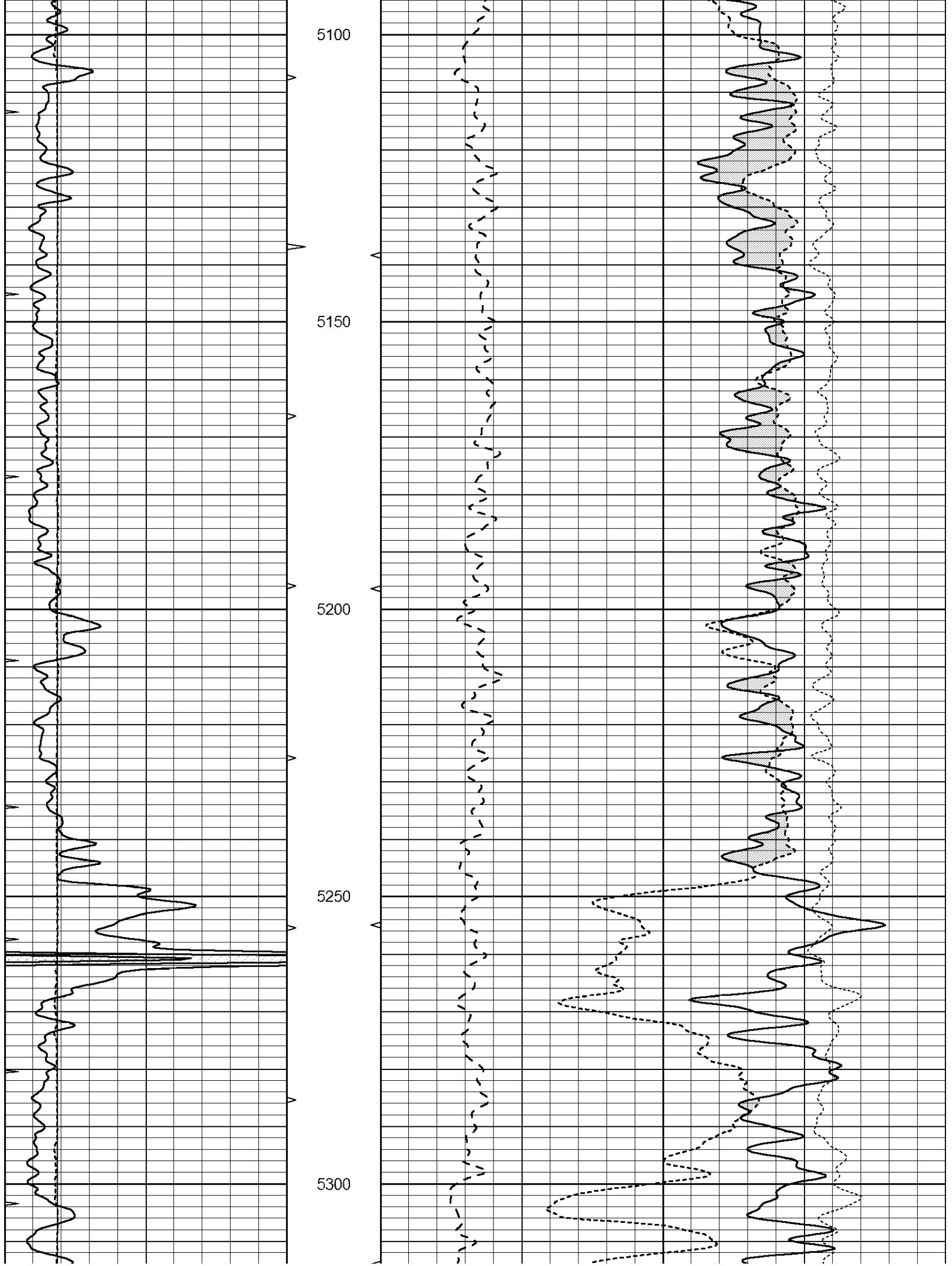
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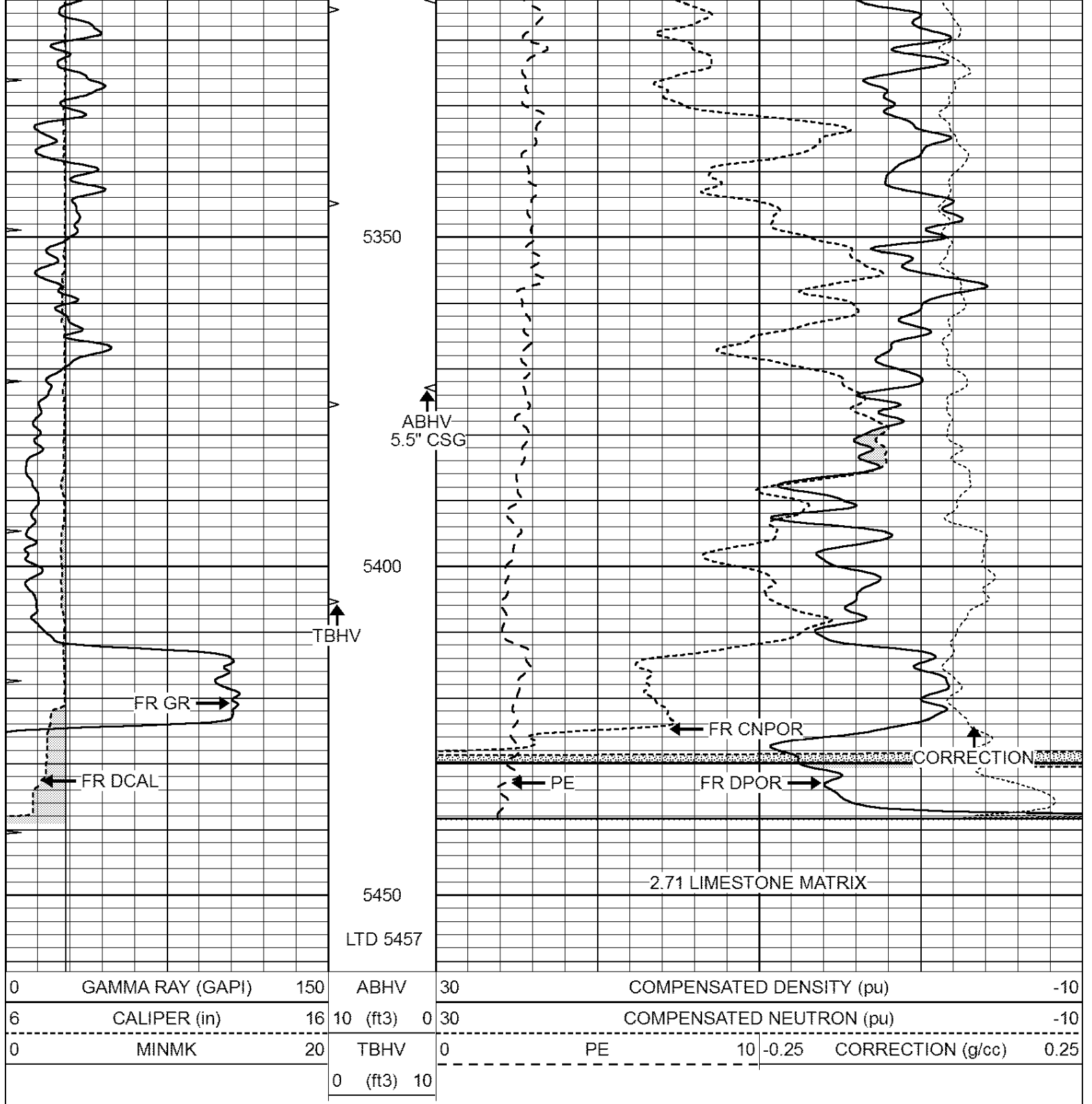
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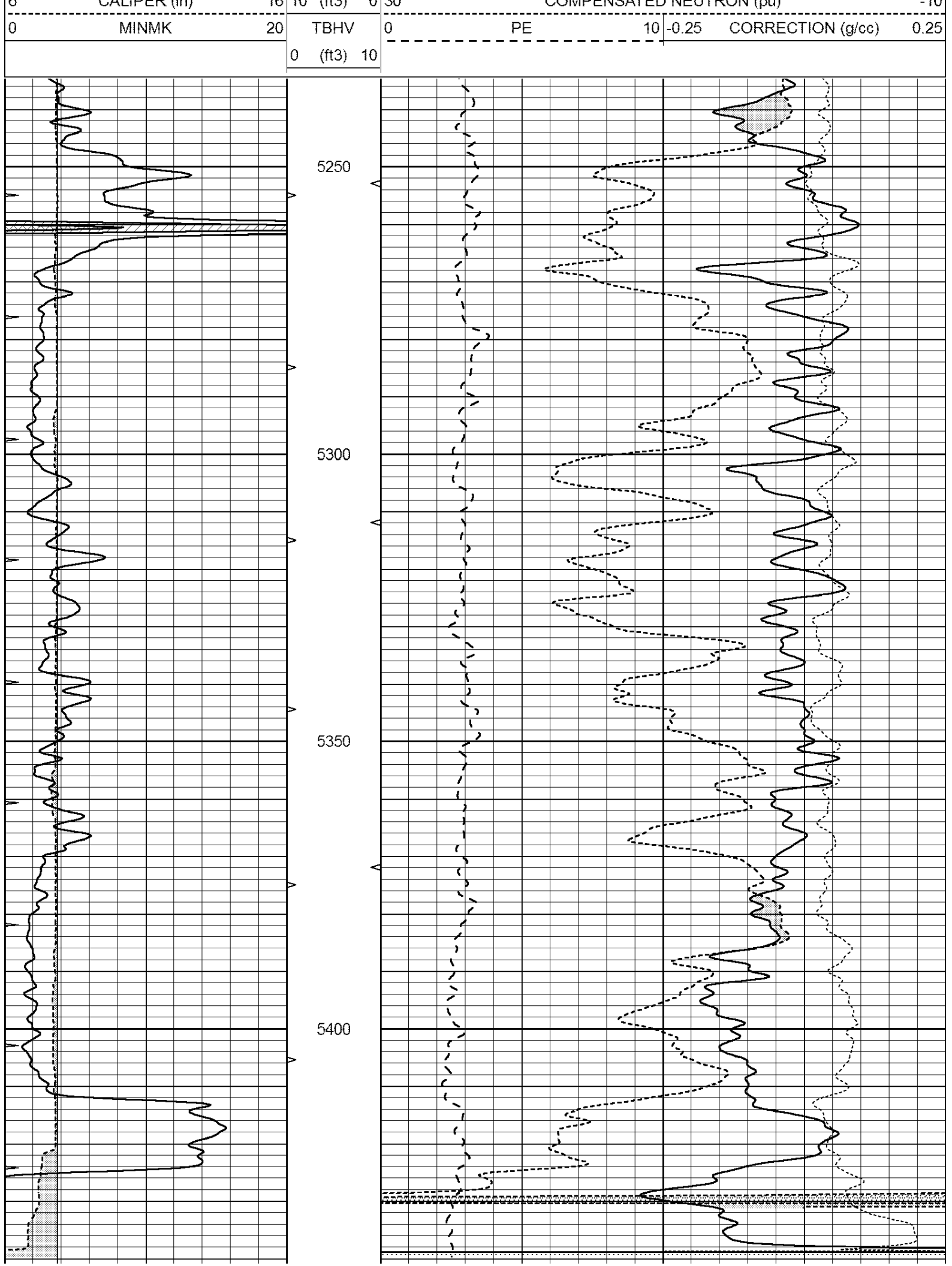




REPEAT SECTION

Database File: 25860pe.db
 Dataset Pathname: pass2.1
 Presentation Format: _ldt_neu
 Dataset Creation: Thu Aug 28 05:11:33 2014 by Calc Open-Cased 090629
 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		



	Background	Magnesium	Aluminum	Sandstone
1. Background	Background			
2. Magnesium		Magnesium		
3. Aluminum			Aluminum	
4. Sandstone				Sandstone

Window 1	844.3	7247.0	2284.1	7908.3	cps
Window 2	800.5	6081.1	1985.0	6521.4	cps
Window 3	688.8	3783.7	1363.3	3972.6	cps
Window 4	191.6	192.1	191.7	191.4	cps
Long Space	0.0	5280.6	1184.5	5720.9	cps
Short Space	1.1	1287.1	882.6	1385.1	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe		0.0000	2.5700	1.5500	
Rib Angle	: 45.8	Rib Slope	: 1.030	Density/Spine Ratio	: 0.571
Spine Angle	: 75.8	Spine Slope	: 3.962	Spine Intercept	: -19.8

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	

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Compensated Neutron Calibration Report
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Serial Number:	6I
Tool Model:	G

CALIBRATION						
	Detector	Readings		Target		Normalization
	Short Space	1.00	cps	1.00	cps	1.0000
	Long Space	1.00	cps	1.00	cps	1.0000

PRE-SURVEY VERIFICATION						
	Detector	Readings		Measured	Target	
1)	Short Space	cps			pu	
	Long Space	cps		pu	pu	
2)	Short Space	cps				
	Long Space	cps		pu		
3)	Short Space	cps				
	Long Space	cps		pu		

POST-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space Long Space	cps cps	pu	pu
2)	Short Space Long Space	cps cps	pu	pu
3)	Short Space Long Space	cps cps	pu	pu

Gamma Ray Calibration Report				
Serial Number:		GR6		
Tool Model:		OPEN		
Performed:		Sun Aug 17 15:23:09 2014		
Calibrator Value:		150.0	GAPI	
Background Reading:		0.0	cps	
Calibrator Reading:		276.0	cps	
Sensitivity:		0.7000	GAPI/cps	