



SUPERIOR
Hays,
Kansas

COMPENSATED
DENSITY / NEUTRON
PE LOG

Company	MAI OIL OPERATIONS, INC.		
Well	3 SISTERS #3		
Field	CLARA		
County	PRATT	State	KANSAS
Location:	APL # : 15-151-22383-0000		Other Services DIL/MEL SONIC
Well	3 SISTERS #3		
Field	CLARA		
County	PRATT	State	KANSAS
Permanent Datum	GROUND LEVEL		Elevation 1964
Log Measured From	500' FSL & 845' FEL NE - SW - SE - SE		
Drilling Measured From	SEC 35 TWP 29S RGE 14W		Elevation K.B. 1976 D.F. 1974 G.L. 1964
Date	12/19/11		
Run Number	ONE		
Depth Driller	4625		
Depth Logger	4626		
Bottom Logged Interval	4602		
Top Log Interval	2000		
Casing Driller	13 3/8" @ 285'		
Casing Logger	283		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 9,000 PPM	
Density / Viscosity	9.1/94		
pH / Fluid Loss	9.5/14.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.420 @ 80F		
Rmt @ Meas. Temp	.315 @ 80F		
Rmc @ Meas. Temp	.504 @ 80F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	.275 @ 122F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	8:30 A.M.		
Maximum Recorded Temperature	122F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	KURT TALBOTT	ALLEN BANGERT	

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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
COATS, KS., 1E., 3S., W. INTO

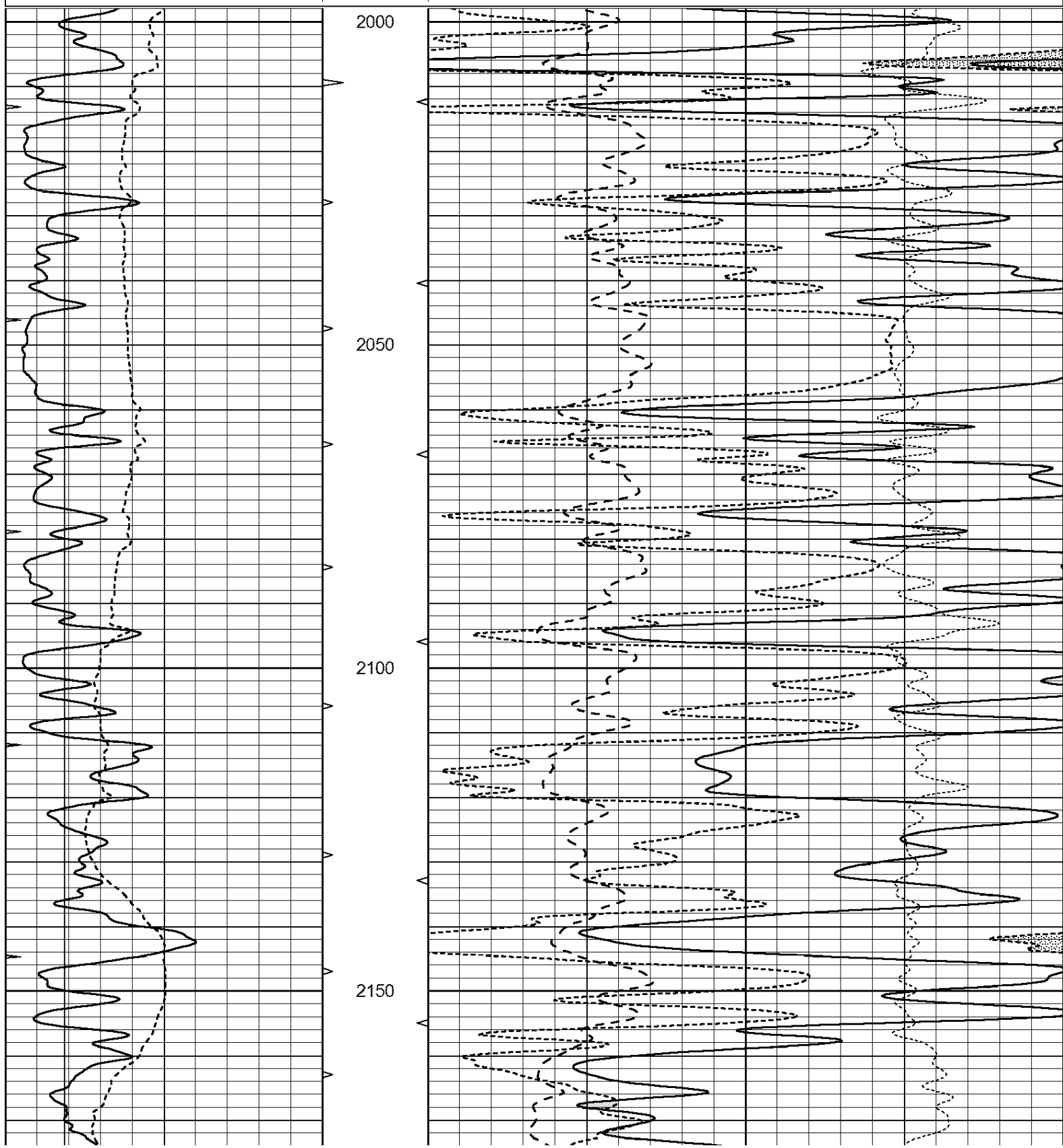


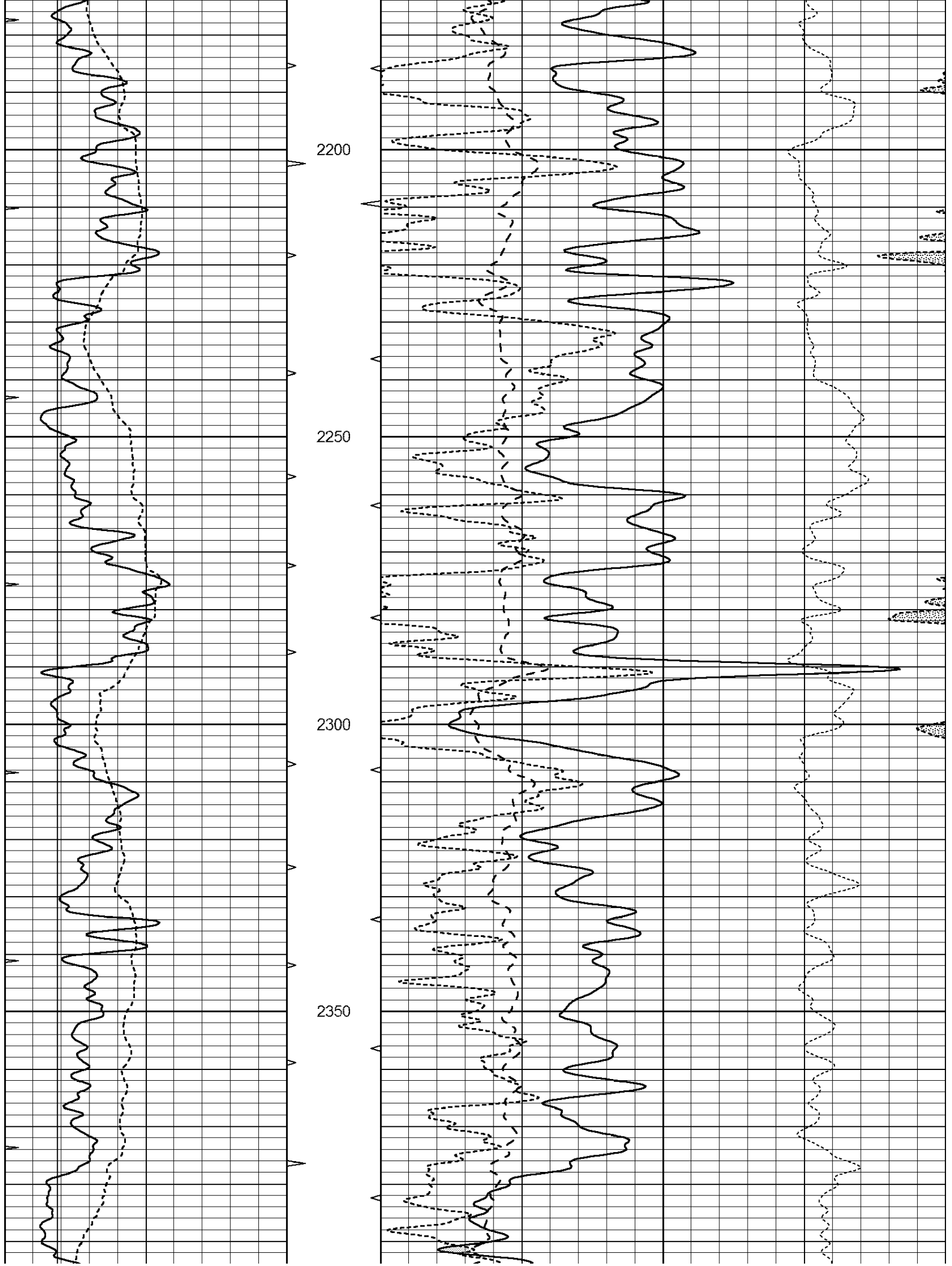
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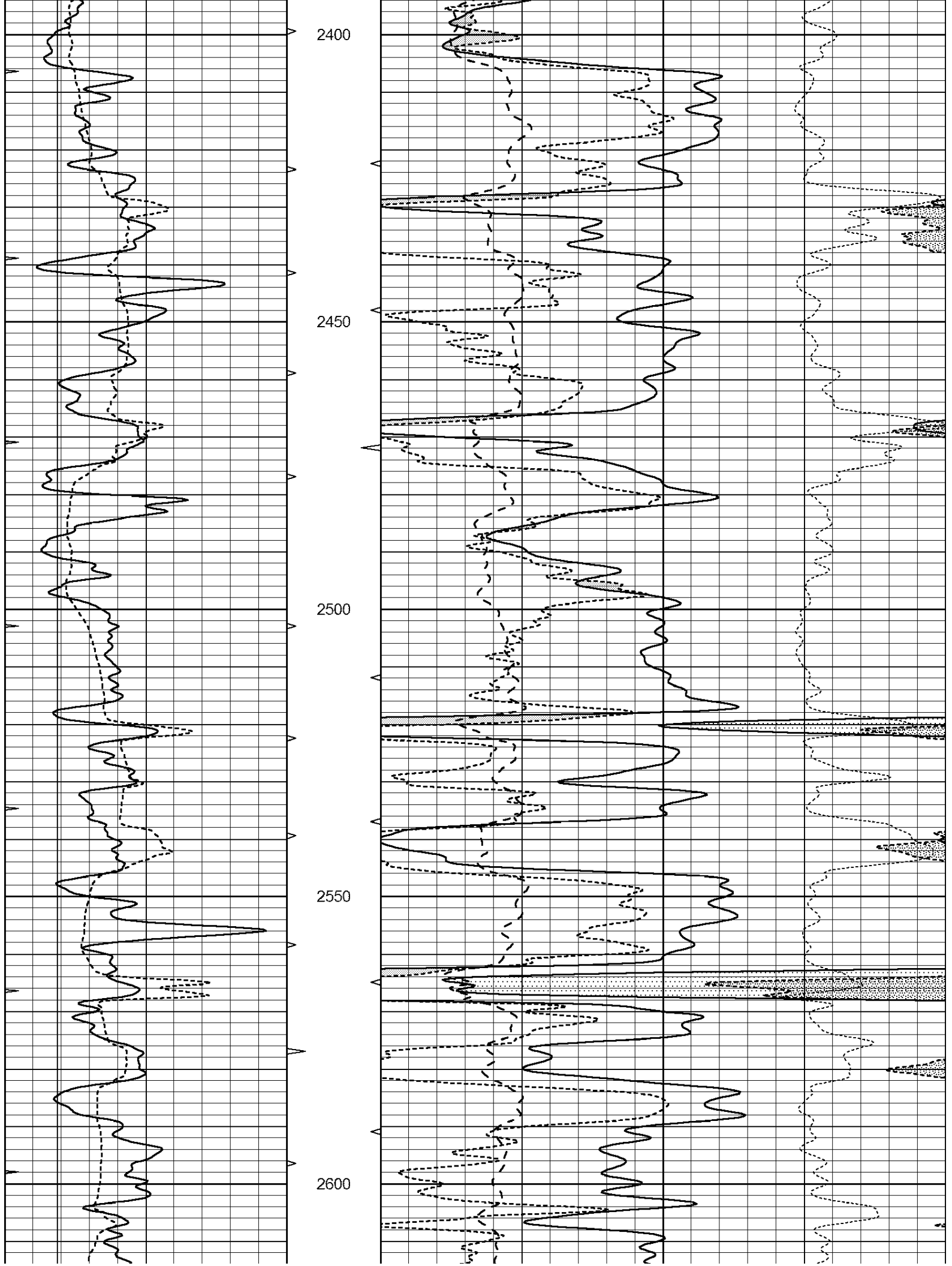
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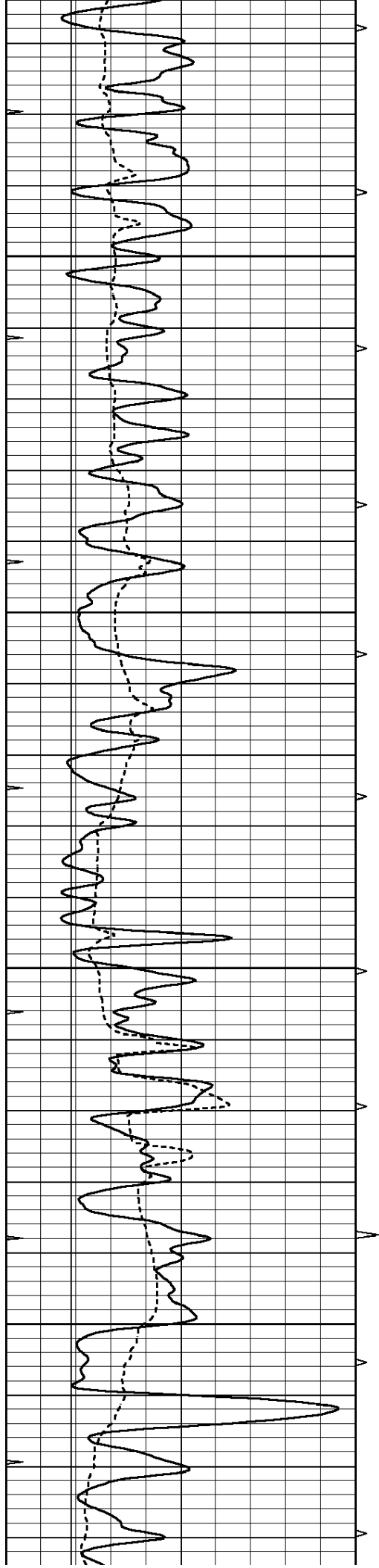
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 Dataset Pathname: pass3.6
 Presentation Format: ldt_neu
 Dataset Creation: Mon Dec 19 10:43:13 2011
 Charted by: Depth in Feet scaled 1:240

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					







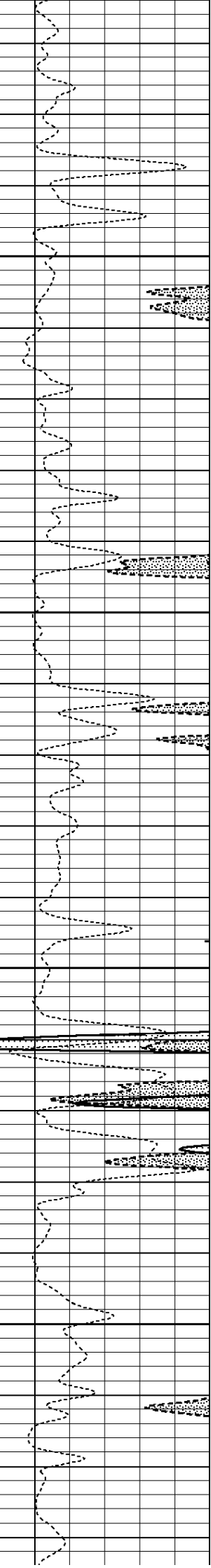
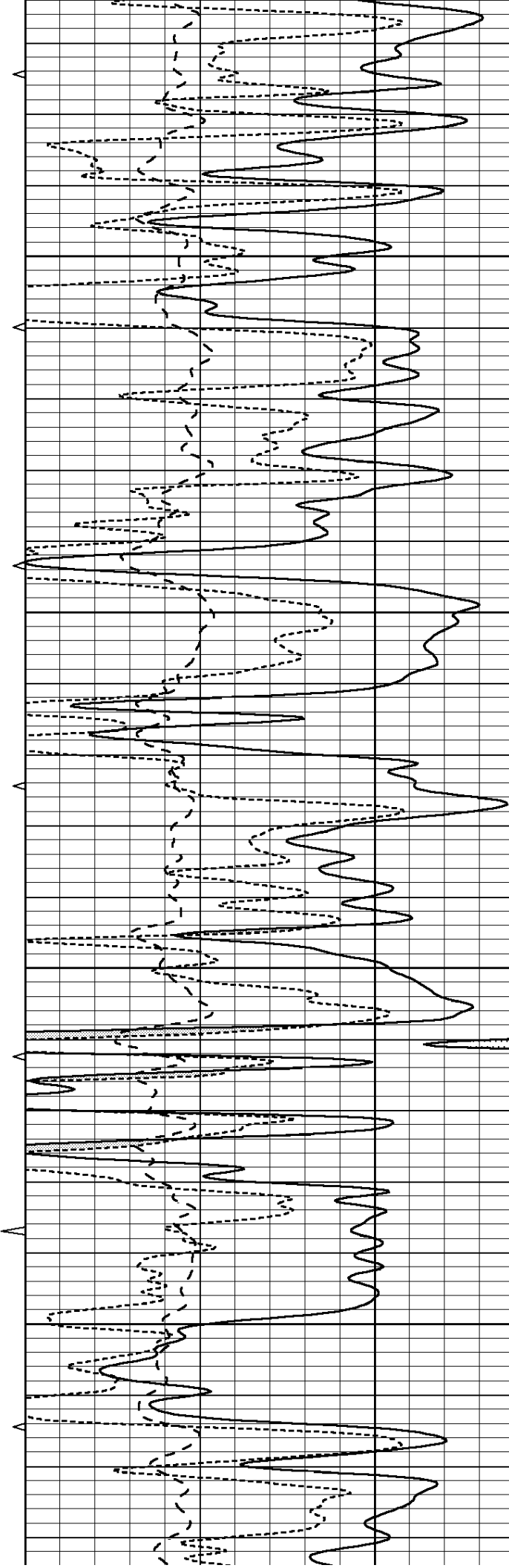


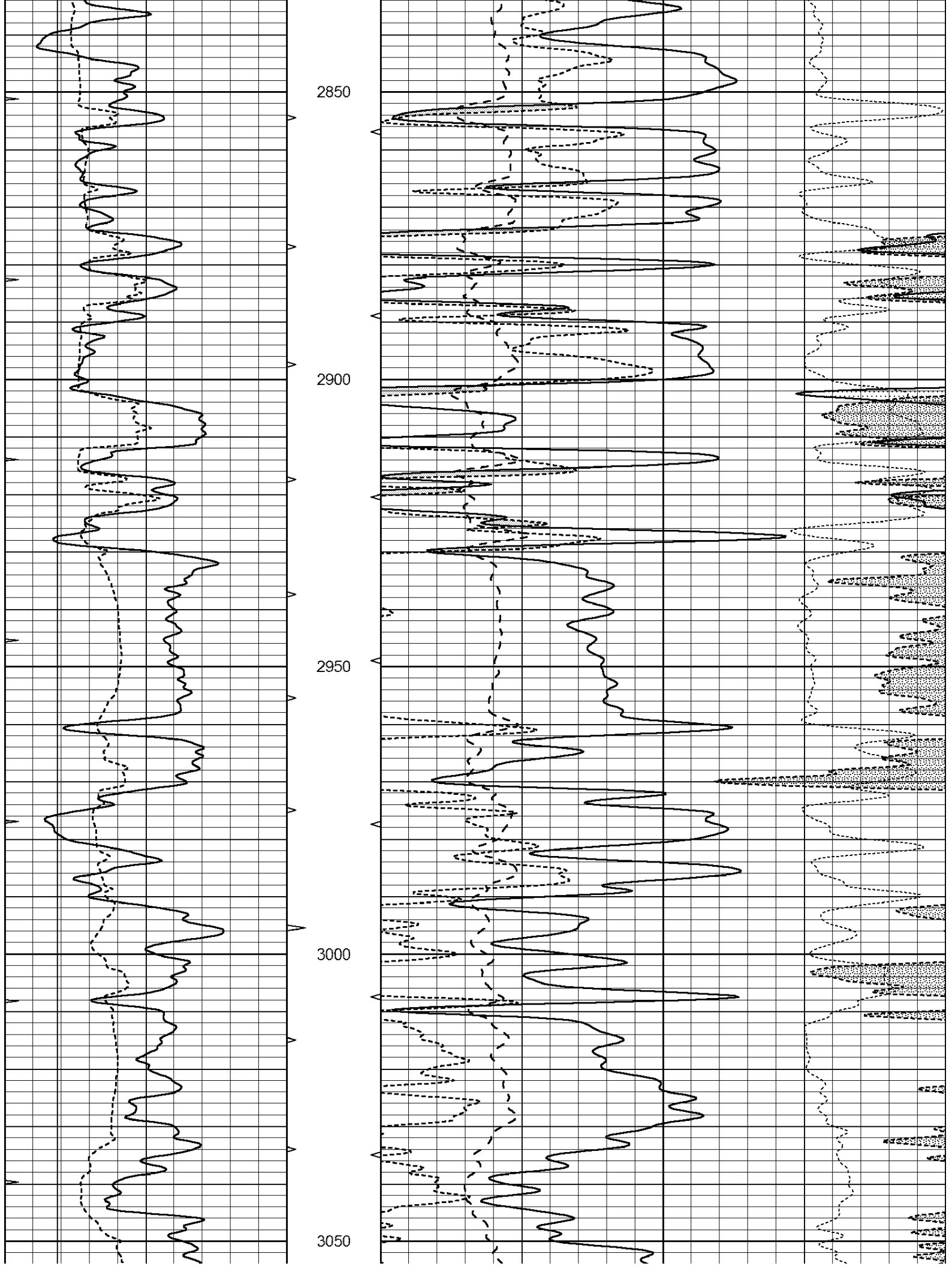
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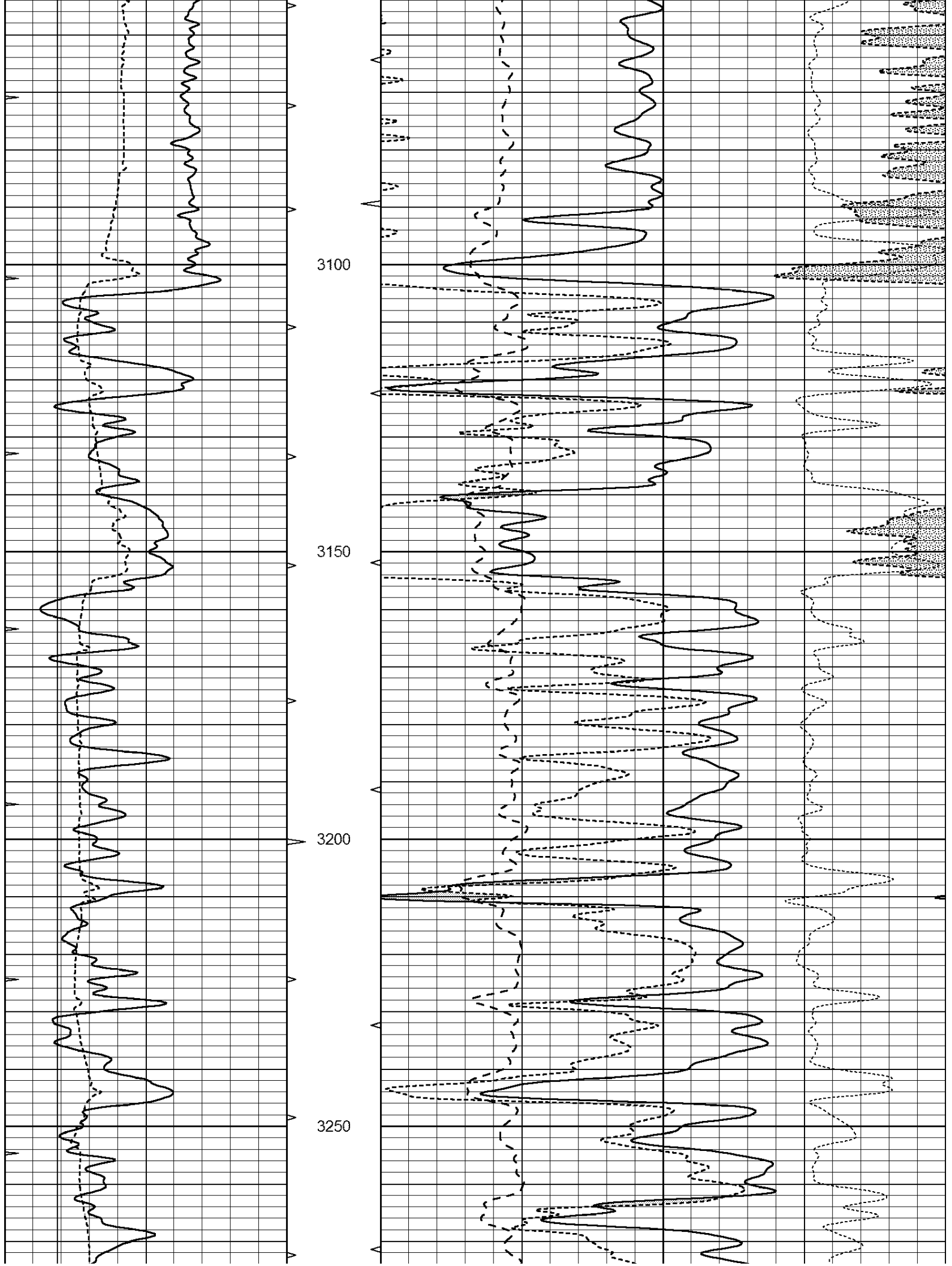
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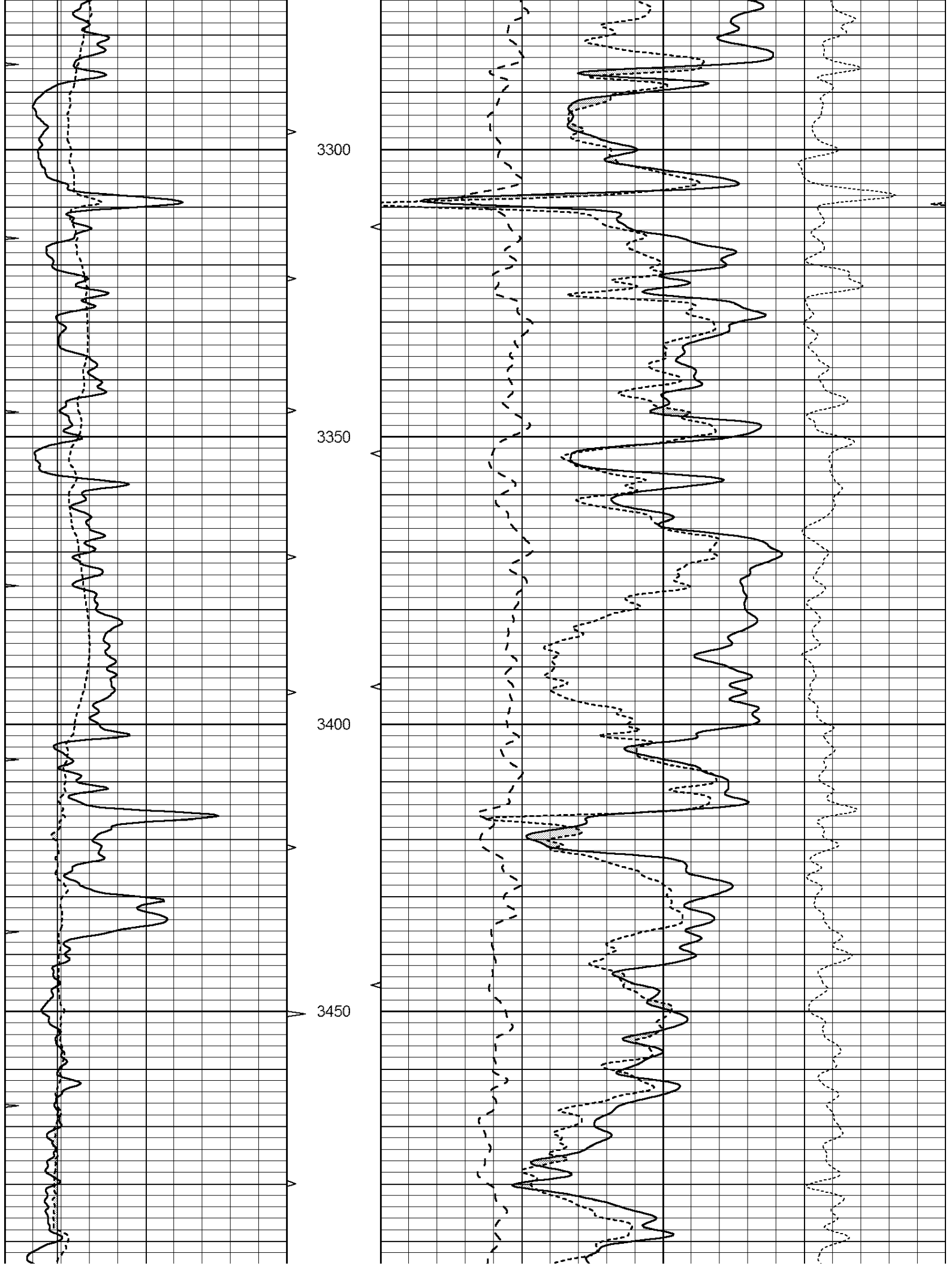
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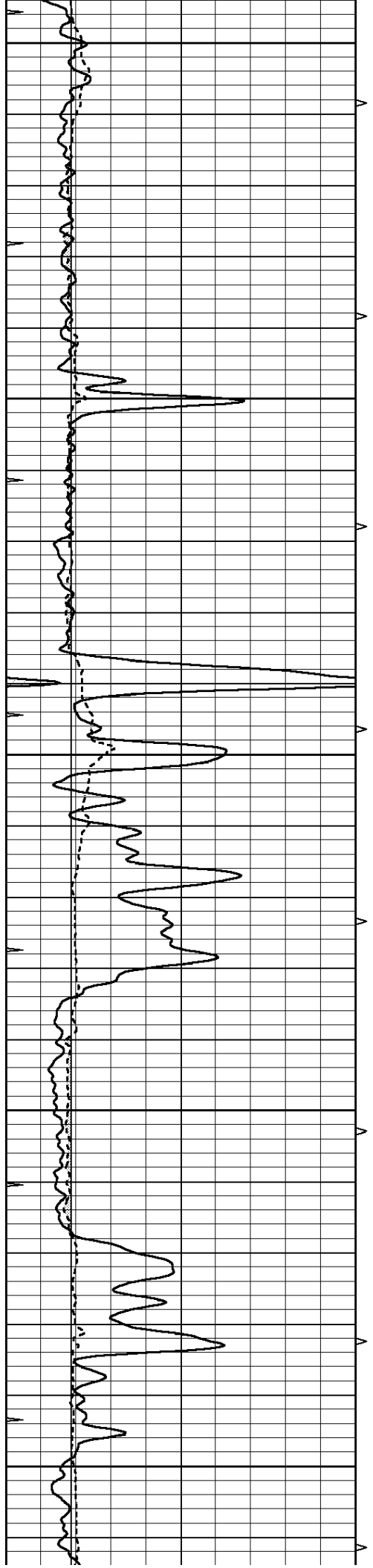
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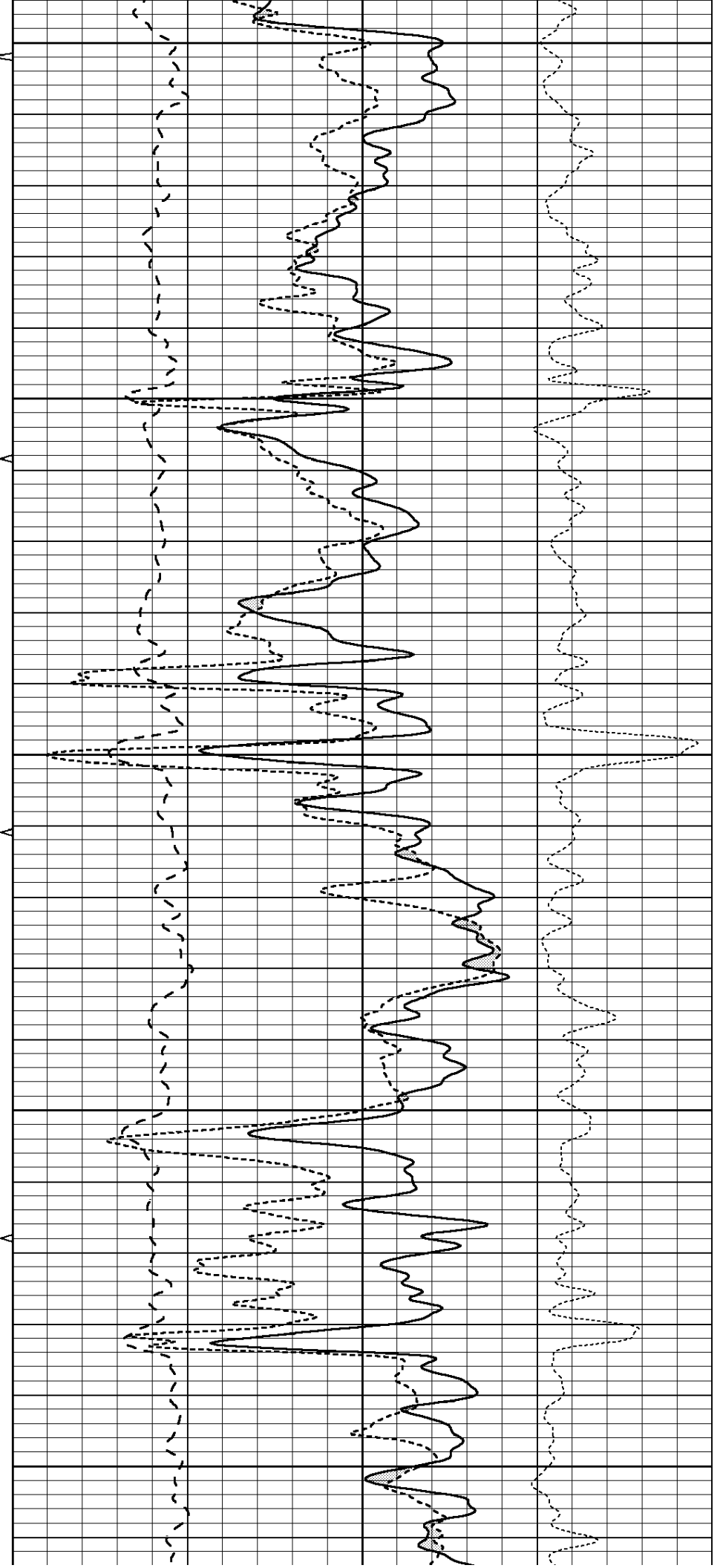


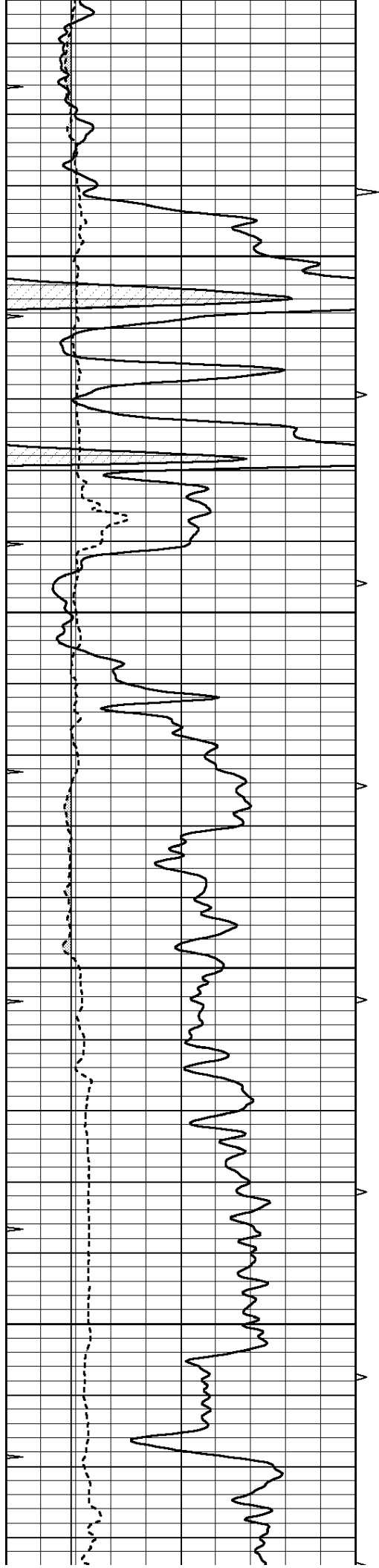






3500
3550
3600
3650
3700



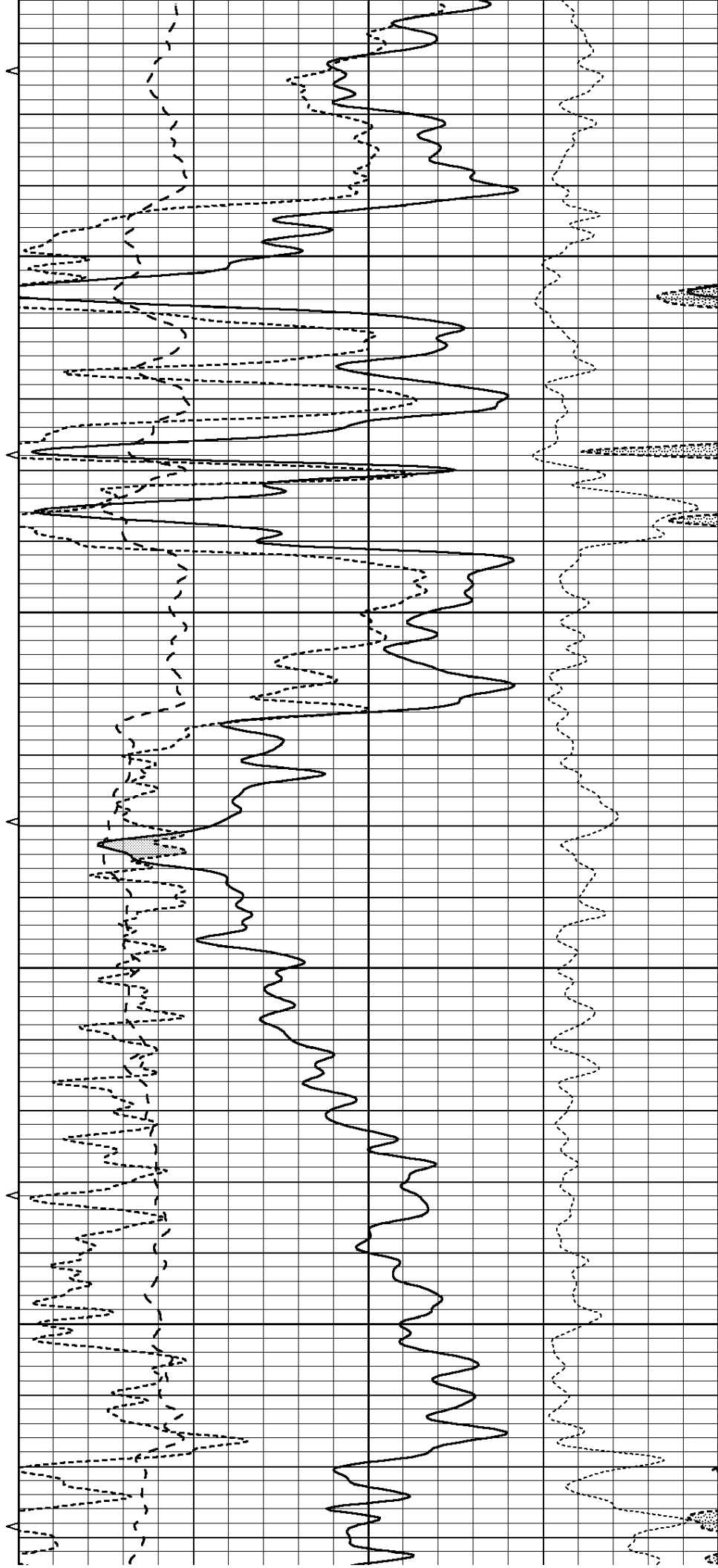


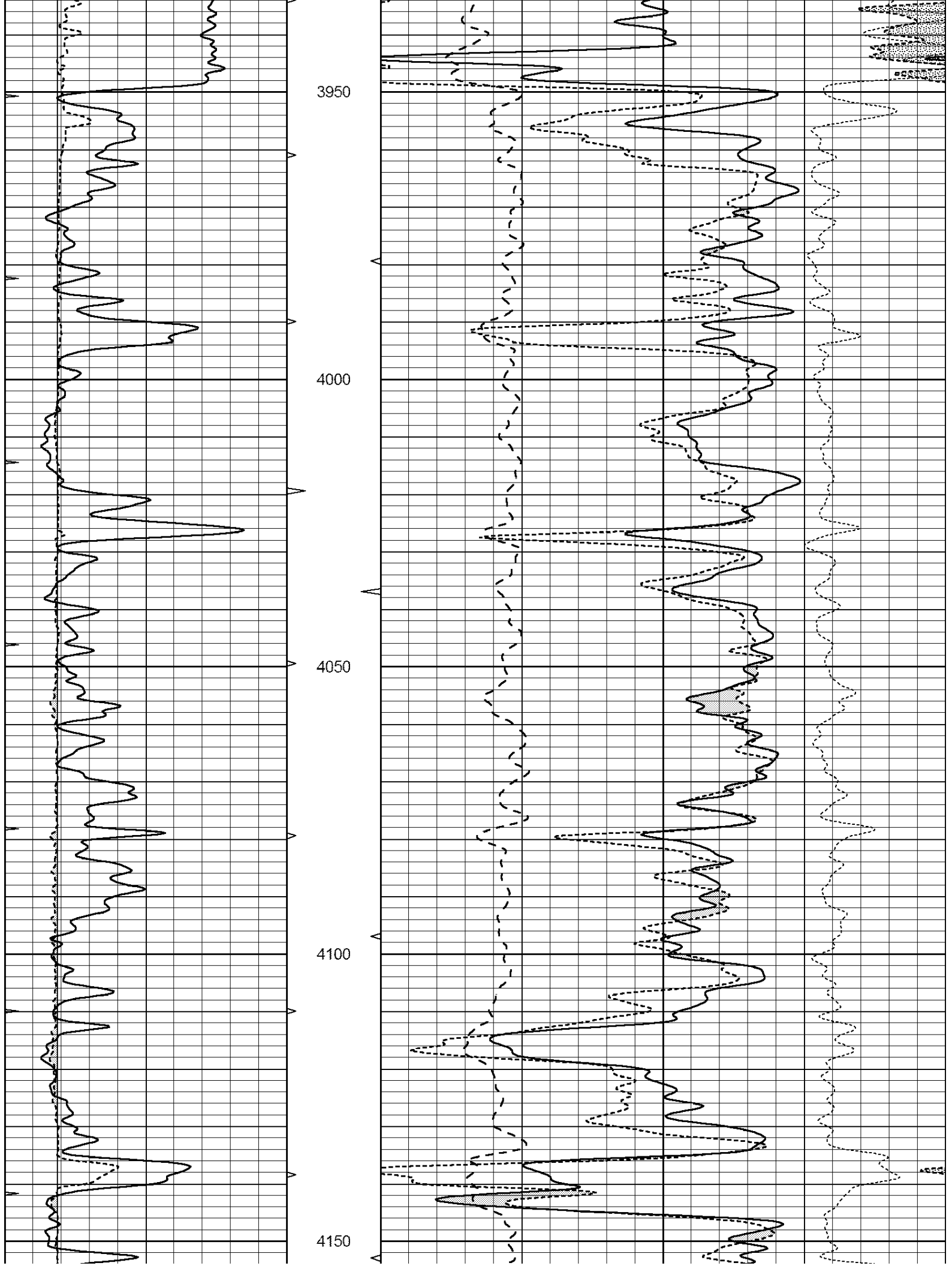
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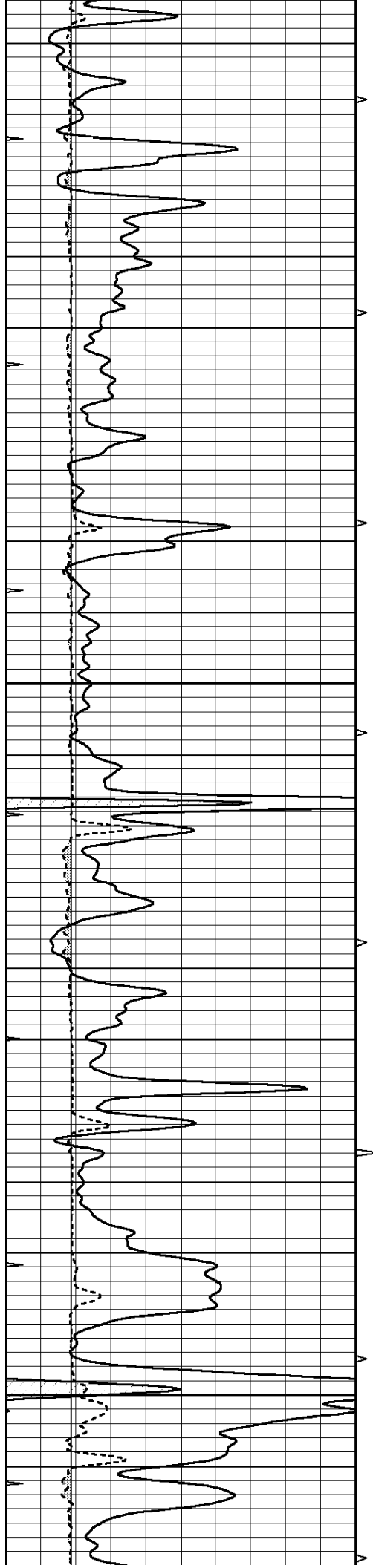
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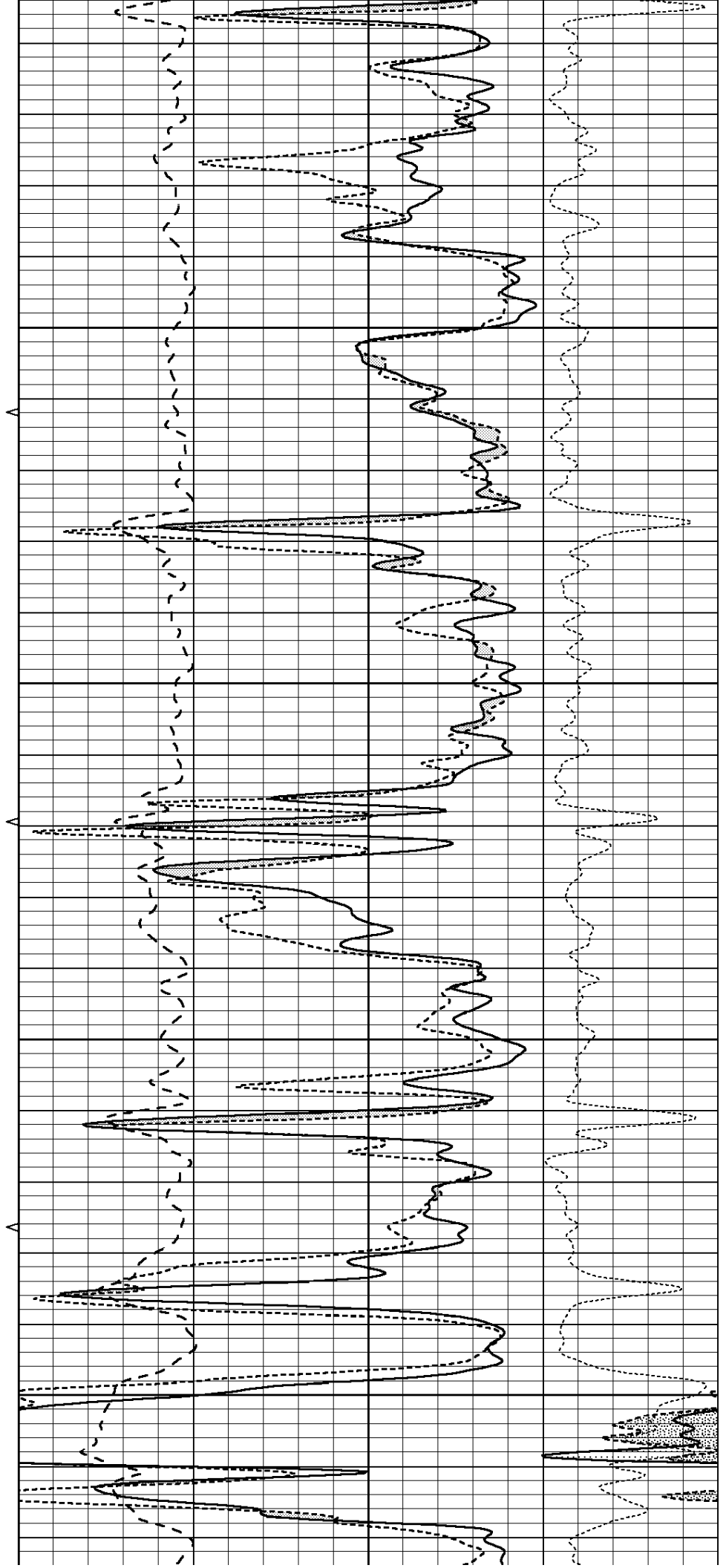


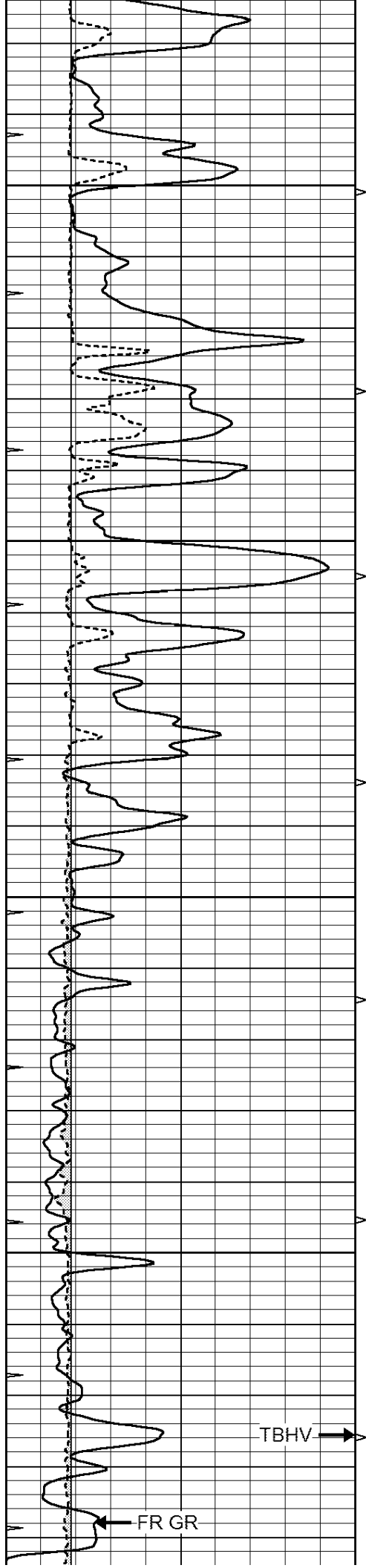
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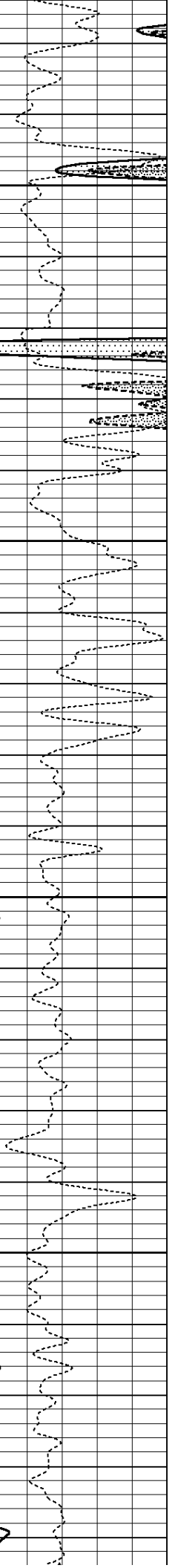
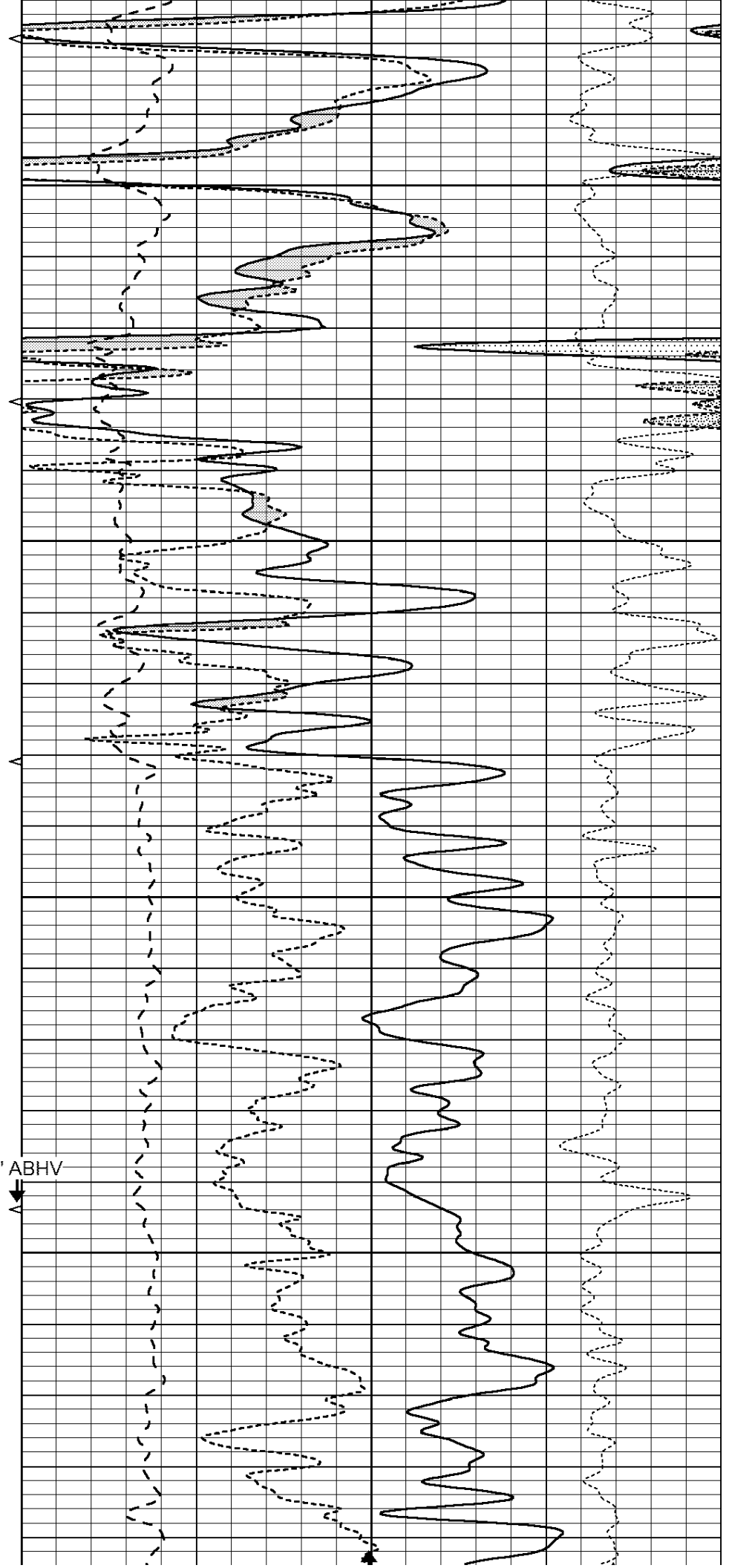
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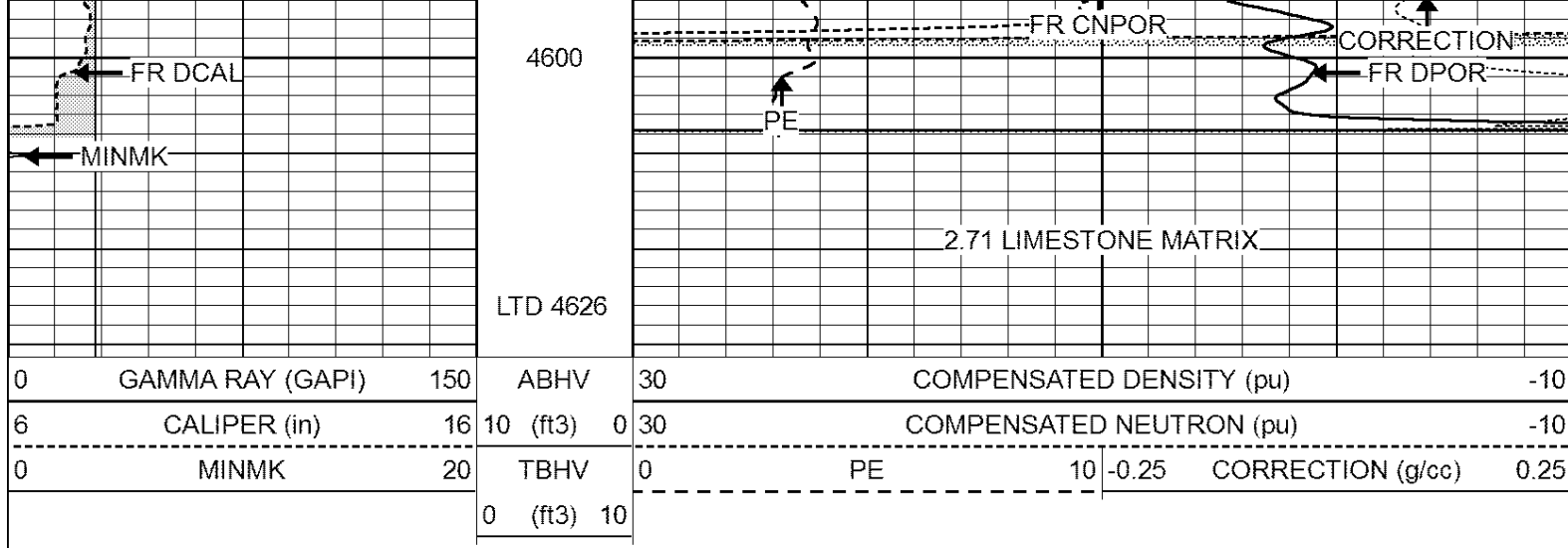
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5.5" ABHV



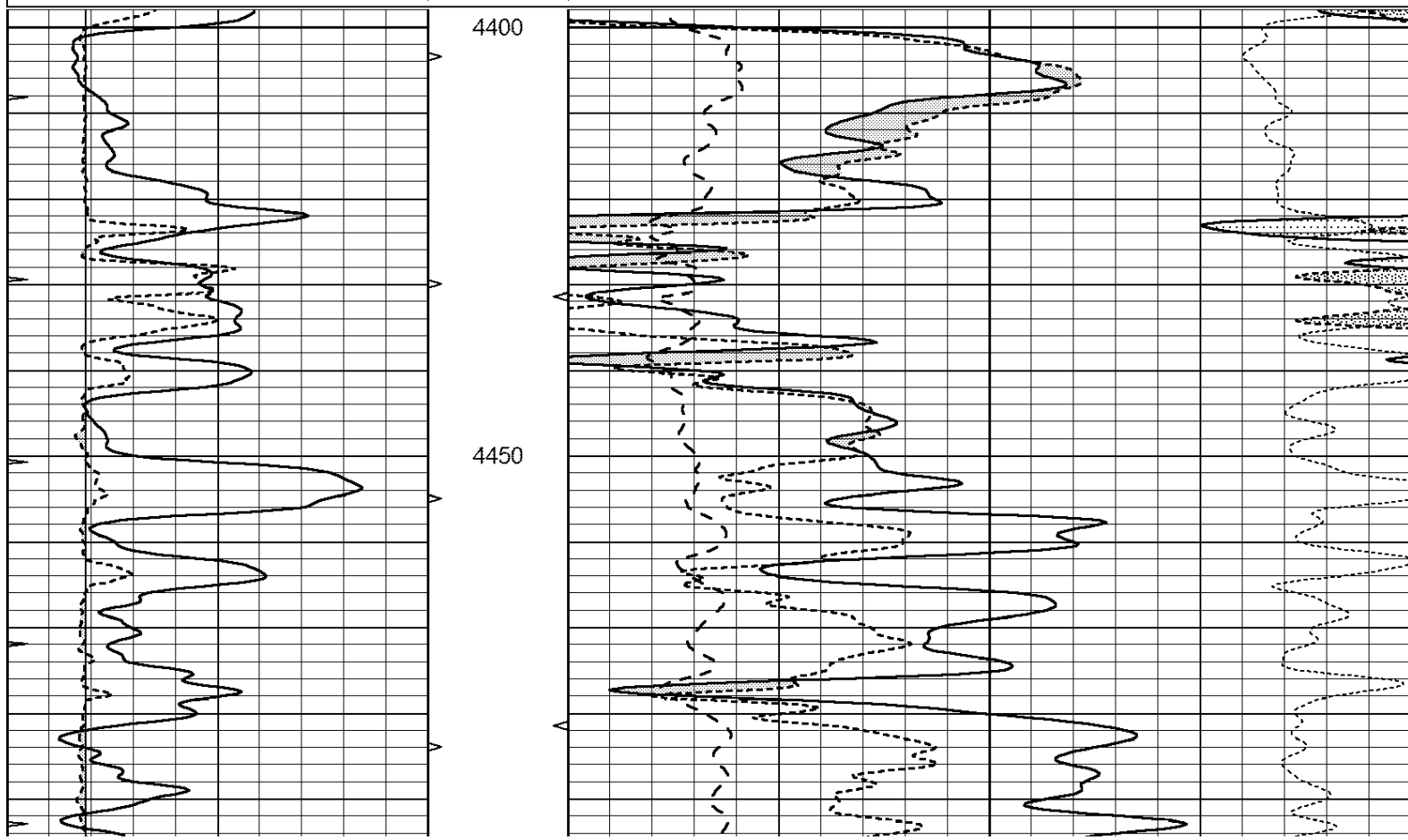


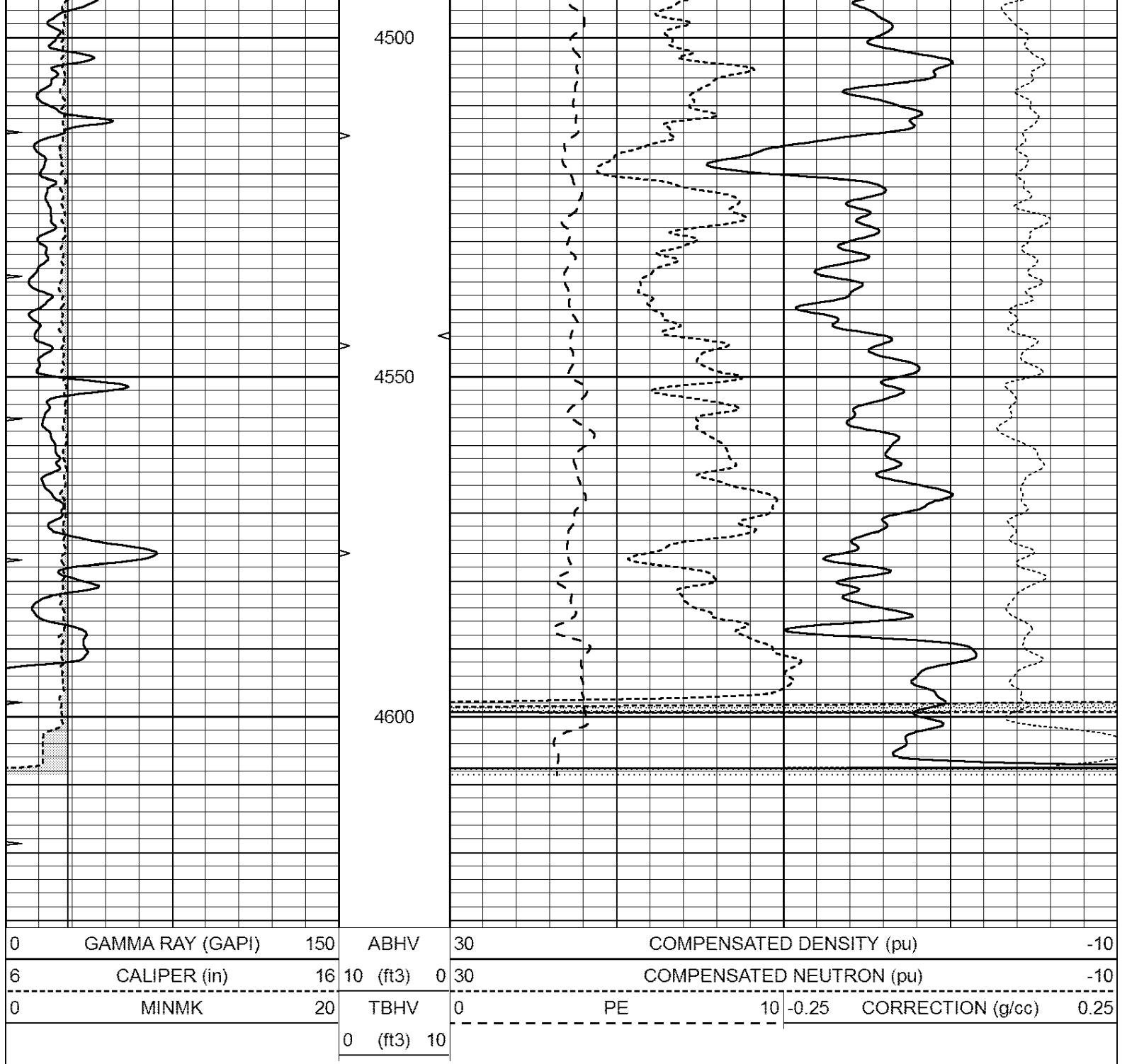
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REPEAT SECTION

Database File: 008126pe.db
 Dataset Pathname: pass2.6
 Presentation Format: ldt_neu
 Dataset Creation: Mon Dec 19 09:07:09 2011 by Calc Open-Cased 110302
 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						





Calibration Report

Database File: 008126pe.db
 Dataset Pathname: pass3.6
 Dataset Creation: Mon Dec 19 10:43:13 2011

Dual Induction Calibration Report

Serial-Model: DIL4-GEAR
 Performed: Mon Dec 19 09:34:15 2011

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.008	0.666	V	0.000	400.000	mmho/m	570.000	-4.000
Medium	-0.003	0.769	V	0.000	462.500	mmho/m	560.000	0.000
Internal:	Zero	Cal		Zero	Cal		m	b

Intermittent	2010	0.013	0.651	V	0.000	400.000	mmho/m	627.541	-8.365
Medium		0.020	0.754	V	0.000	462.500	mmho/m	630.311	-12.549

Litho Density Calibration Report
Serial: 006 Model: PRB
Performed Sun Aug 15 09:48:41 2010

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1686.6	11612.8	3932.0	12718.8	cps
Window 2	1531.4	9204.7	3267.8	9851.9	cps
Window 3	1198.3	4733.6	1952.5	4920.6	cps
Window 4	317.3	321.2	325.9	303.6	cps
Long Space	0.0	7673.3	1736.4	8320.4	cps
Short Space	1.7	2548.5	1657.2	2628.8	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	
Rib Angle	: 43.8	Rib Slope	: 0.961	Density/Spine Ratio	: 0.569
Spine Angle	: 73.8	Spine Slope	: 3.453	Spine Intercept	: -18.1

Caliper

	Readings	Reference	
Low Ref	4.0	8.3	
High Ref	5.9	15.0	
	Gain: 3.5		Offset: -5.5

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: 070559
Tool Model: OPEN_GR
Performed: Mon Dec 19 06:06:38 2011

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.2600 GAPI/cps