



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

**COMPENSATED
DENSITY / NEUTRON
PE LOG**

Company LOTUS OPERATING COMPANY, LLC. Well #3 PLATT "A" Field HARDTNER County BARBER State KANSAS		Company LOTUS OPERATING COMPANY, LLC. Well #3 PLATT "A" Field HARDTNER County BARBER State KANSAS		Location: API # : 15-007-23974-0000 1485' FSL & 1320' FEL SEC 1 TWP 35S RGE 13W Permanent Datum GROUND LEVEL Elevation 1461 Log Measured From KELLY BUSHING 17' A.G.L. Drilling Measured From KELLY BUSHING Other Services DIL/MEL SONIC Elevation K.B. 1478 D.F. 1476 G.L. 1461	
Date	12/13/12				
Run Number	ONE				
Depth Driller	5619				
Depth Logger	5518				
Bottom Logged Interval	5494				
Top Log Interval	3700				
Casing Driller	10 3/4" @ 285'				
Casing Logger	282				
Bit Size	7 7/8"				
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 6,000 PPM			
Density / Viscosity	9.3/52				
pH / Fluid Loss	9.5/10.4				
Source of Sample	FLOWLINE				
Rin @ Meas. Temp	.540 @ 85F				
Rinf @ Meas. Temp	.405 @ 85F				
Rinc @ Meas. Temp	.648 @ 84F				
Source of Rinf / Rinc	MEASUREMENT				
Rin @ BHT	.350 @ 131F				
Time Circulation Stopped	3 HOURS				
Time Logger on Bottom	6:00 A.M.				
Maximum Recorded Temperature	131F				
Equipment Number	4854				
Location	HAYS, KANSAS				
Recorded By	JEFF LUEBBERS				
Witnessed By	TIM HELLMAN				

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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
 HARDTNER, KS. 1N. TO "DRIFTWOOD RD.", 1W. TO CURVE, 1/2S., W. INTO



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MAIN SECTION

Database File:

010032pe.db

Dataset Pathname:

pass3.8

Presentation Format:

ldt_neu

Dataset Creation:

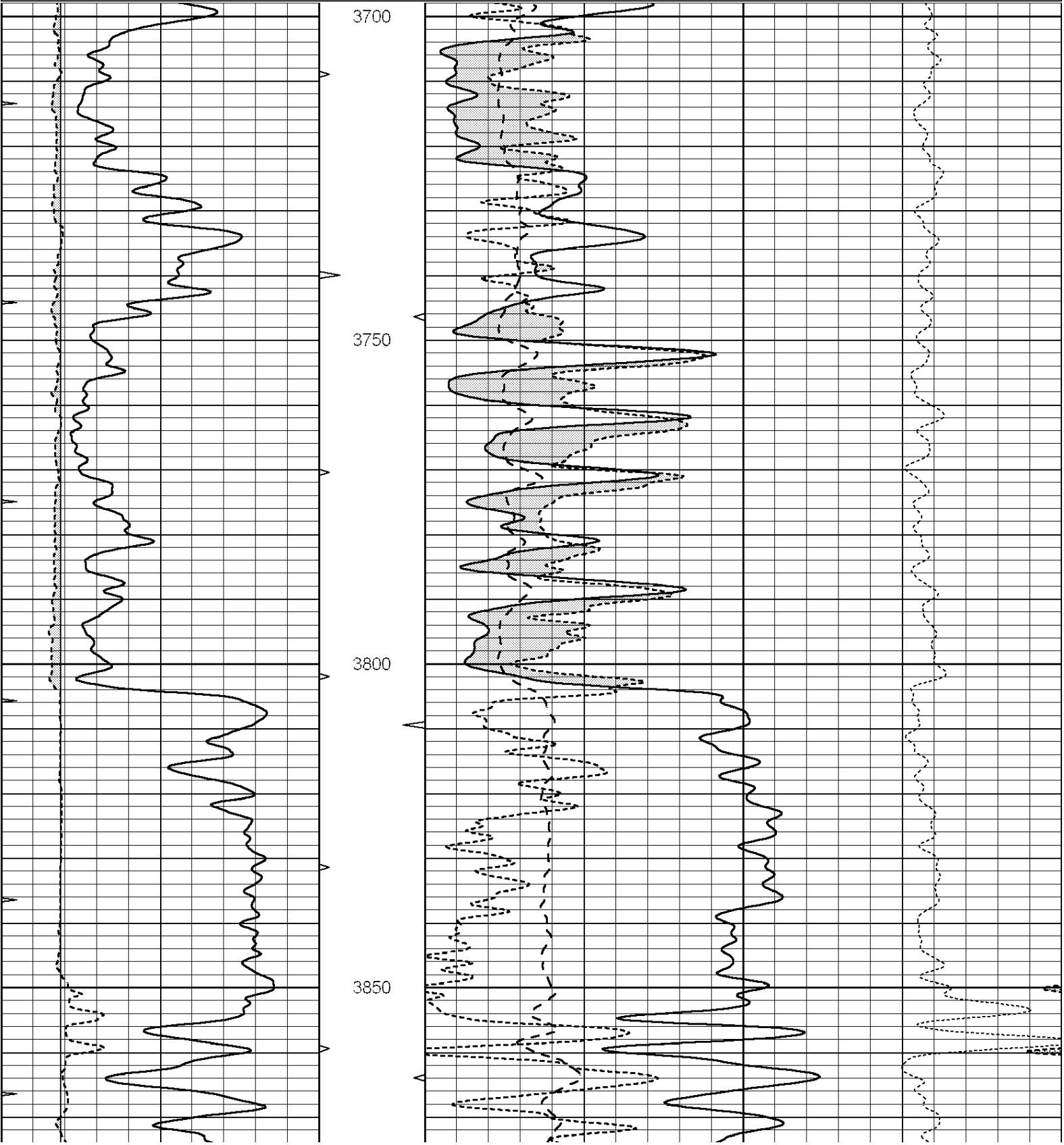
Thu Dec 13 08:10:12 2012

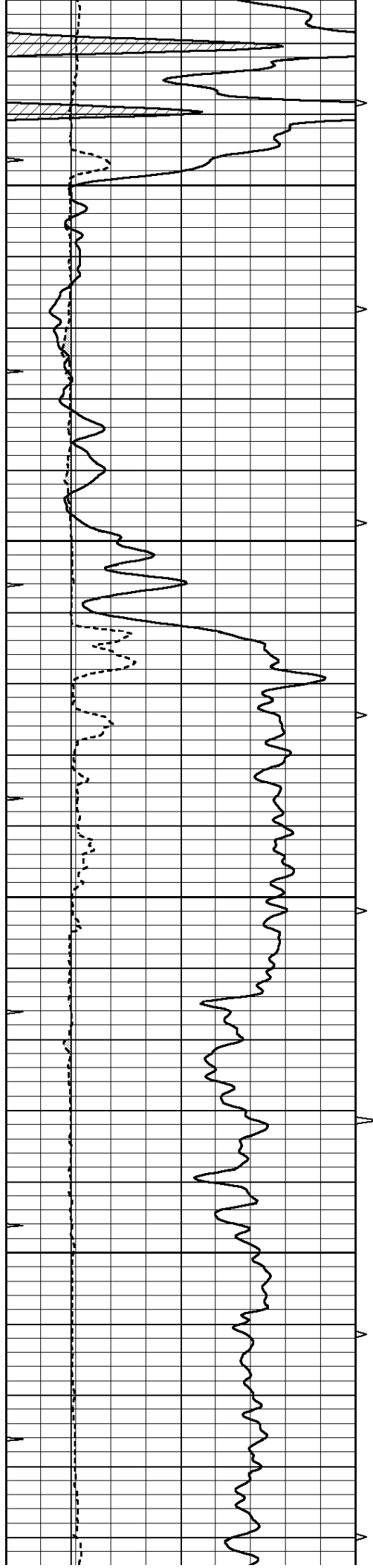
Charted by:

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



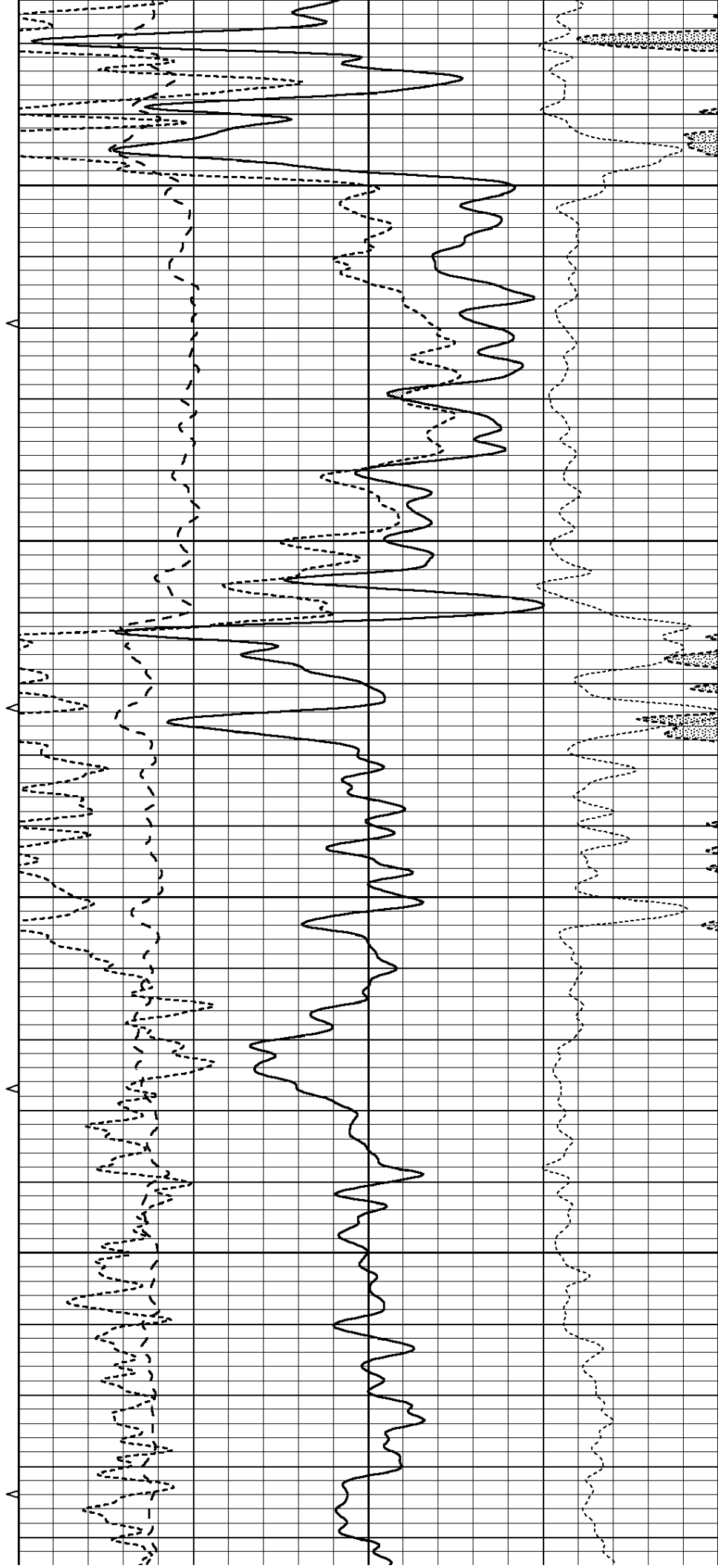


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4000

4050

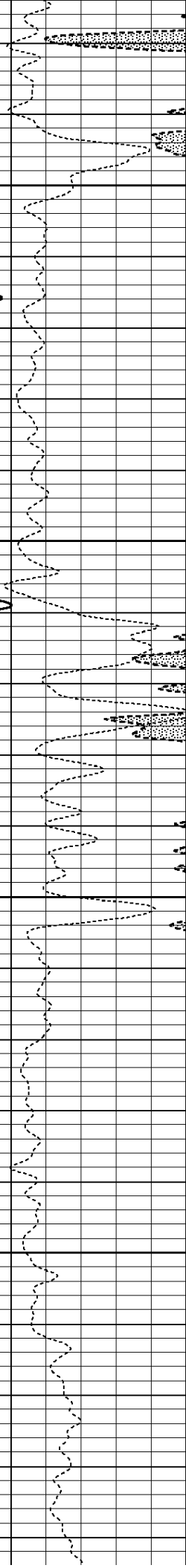


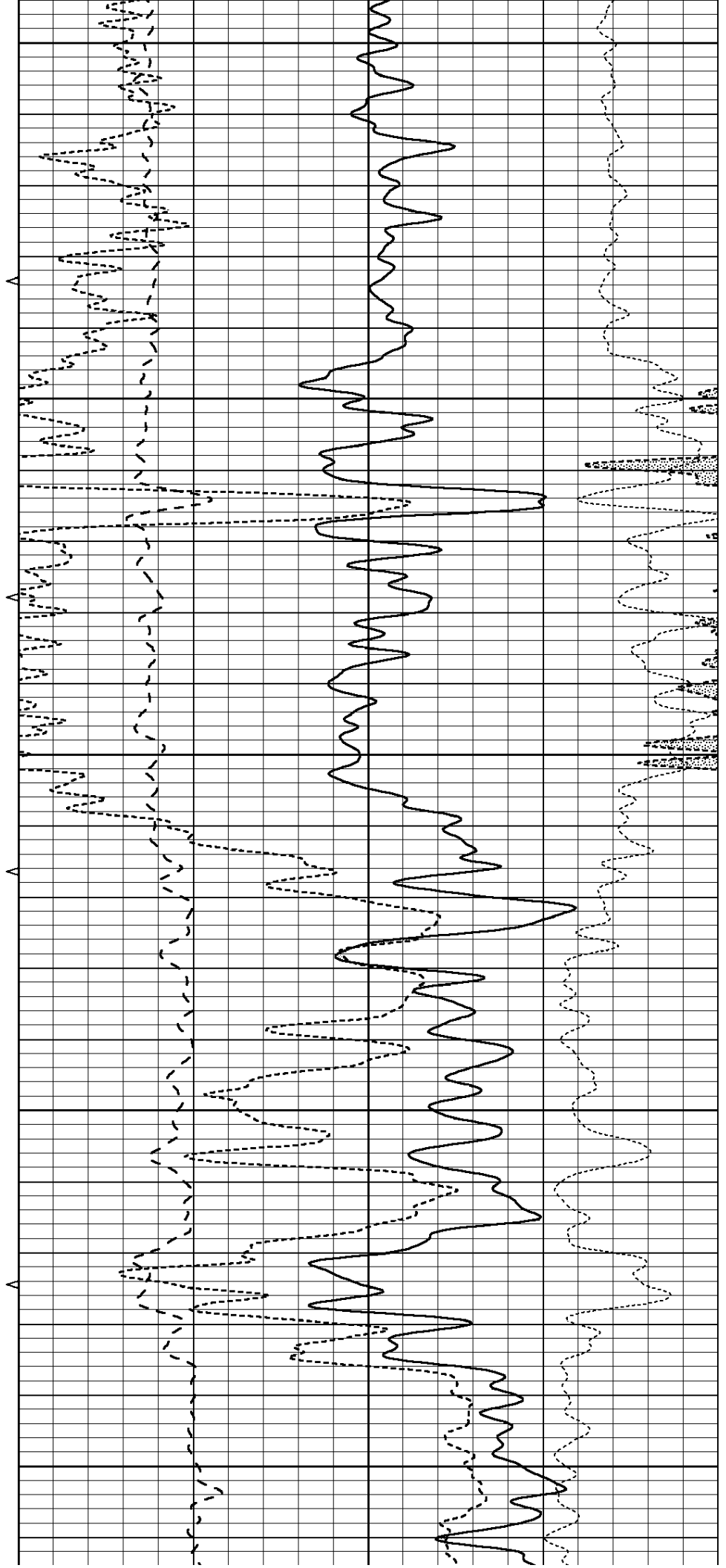
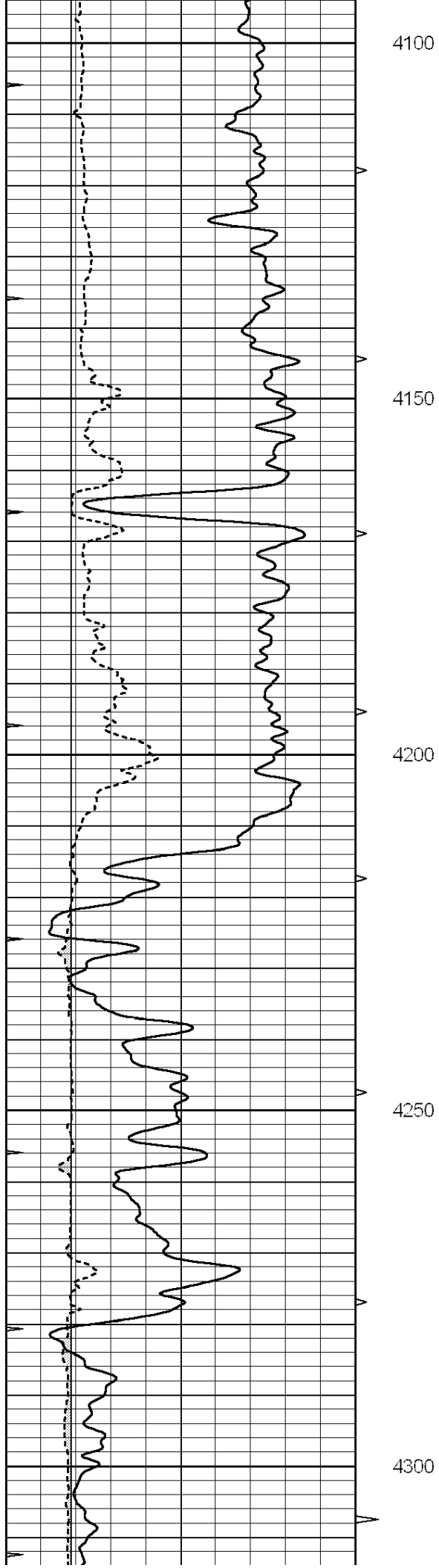
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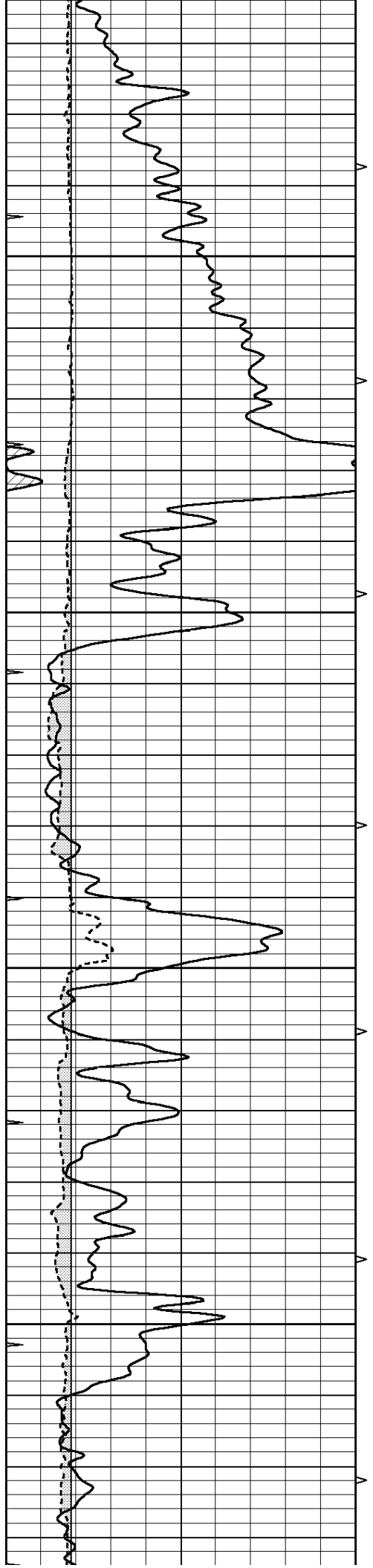
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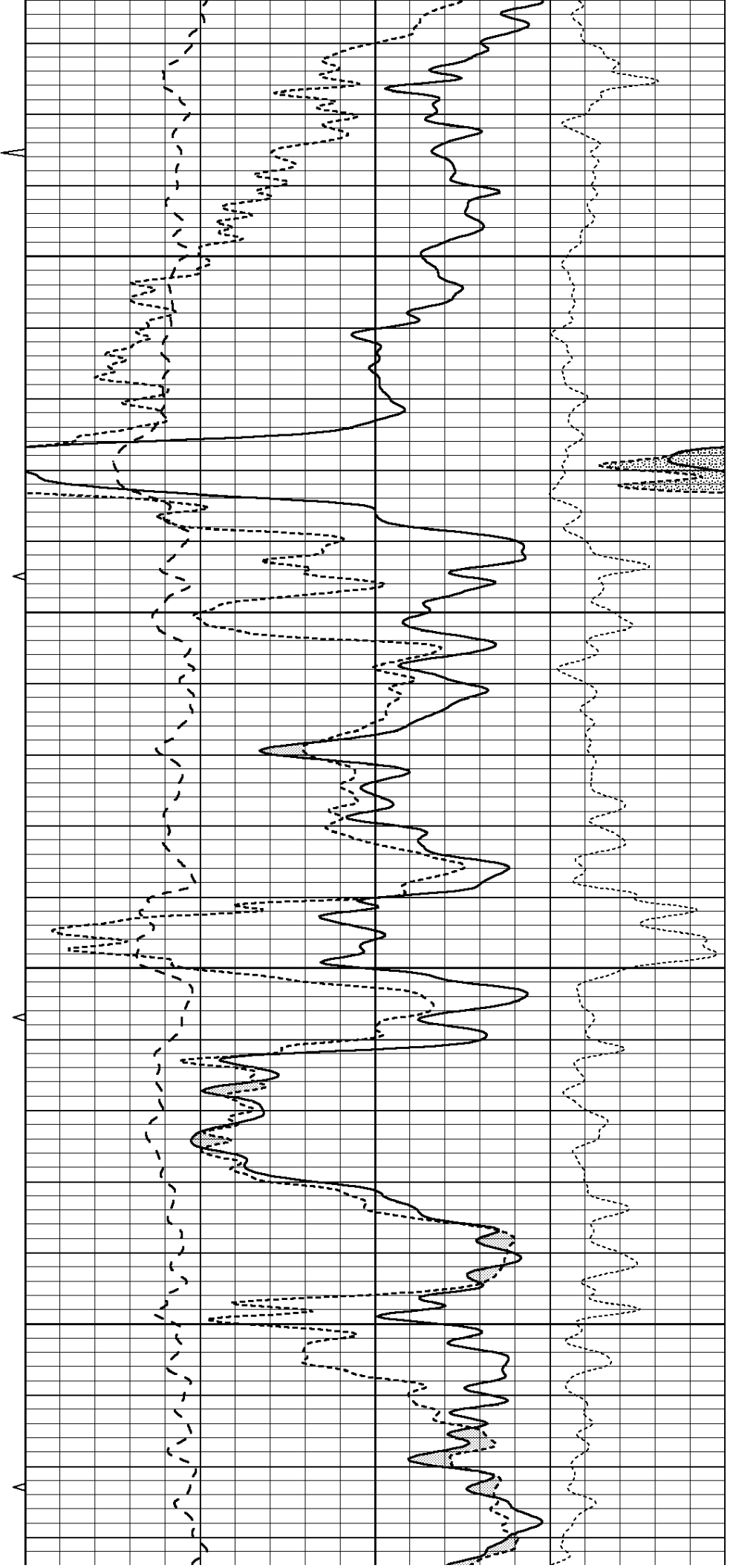


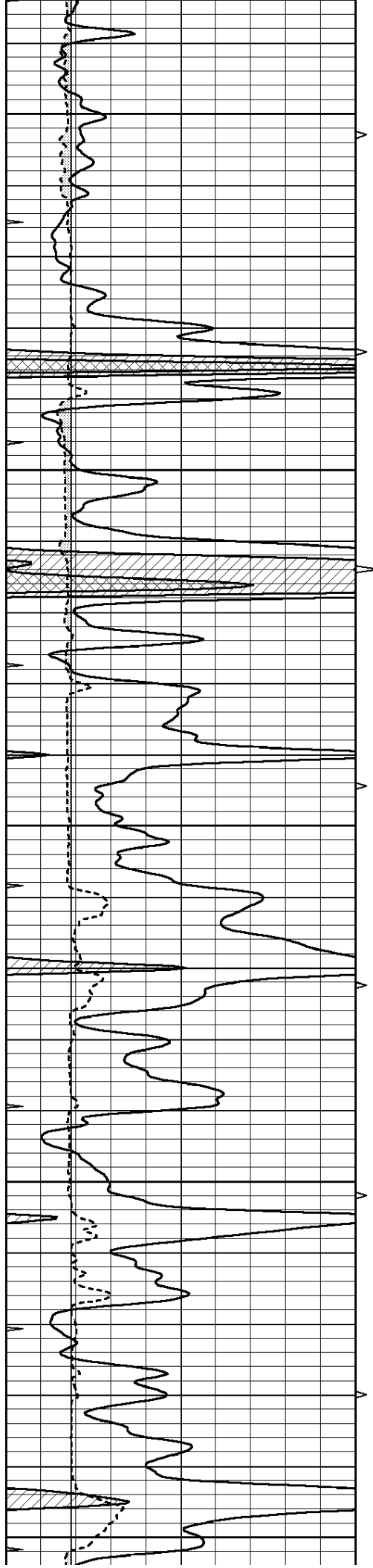
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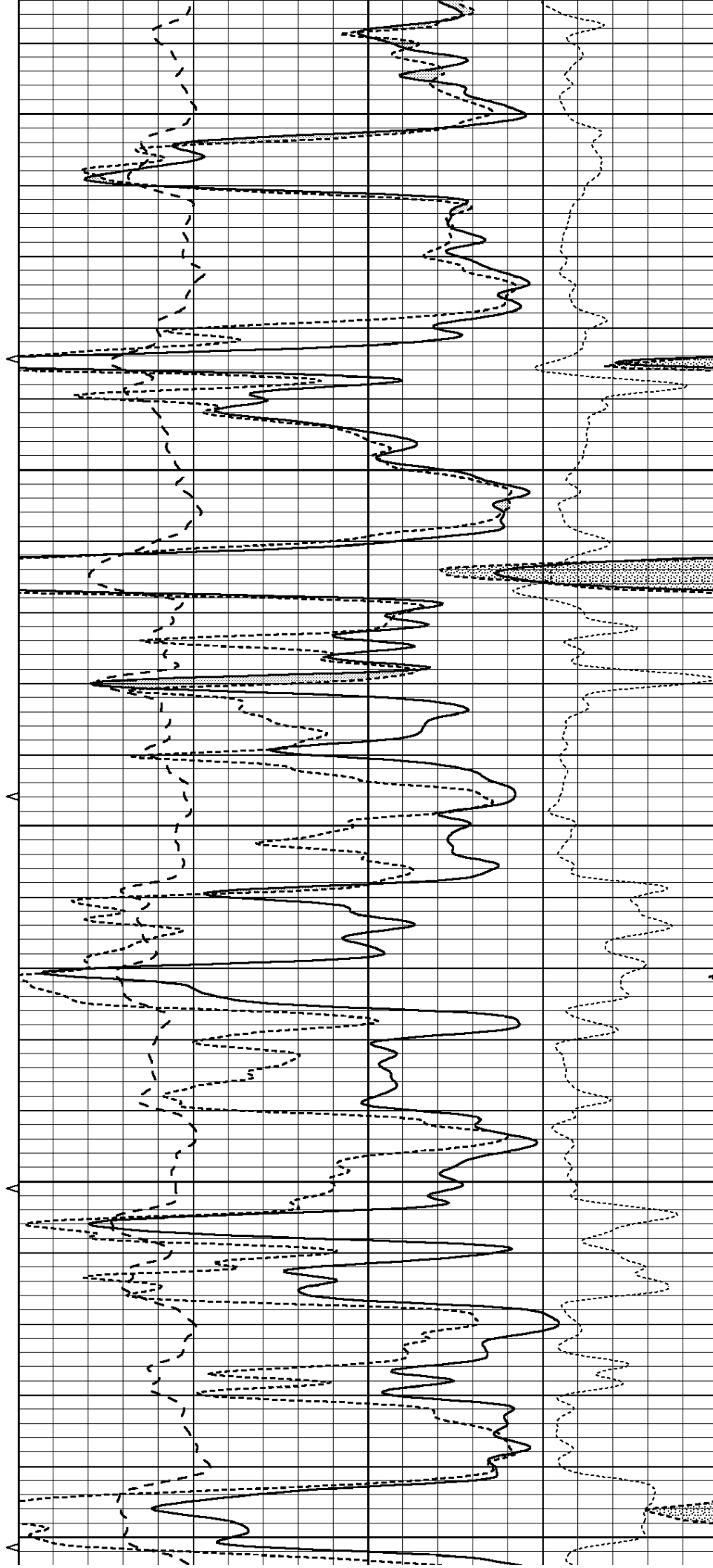
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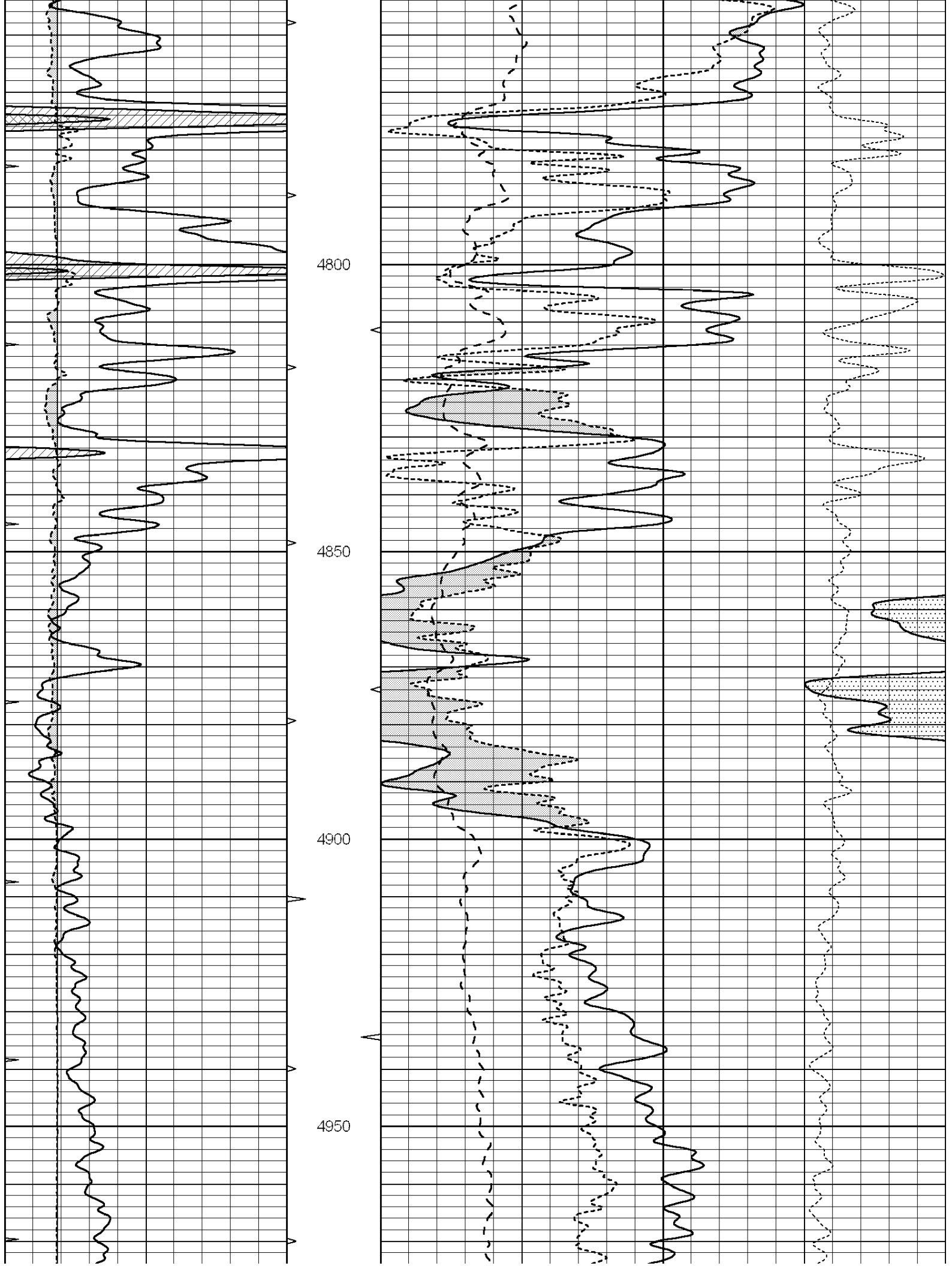
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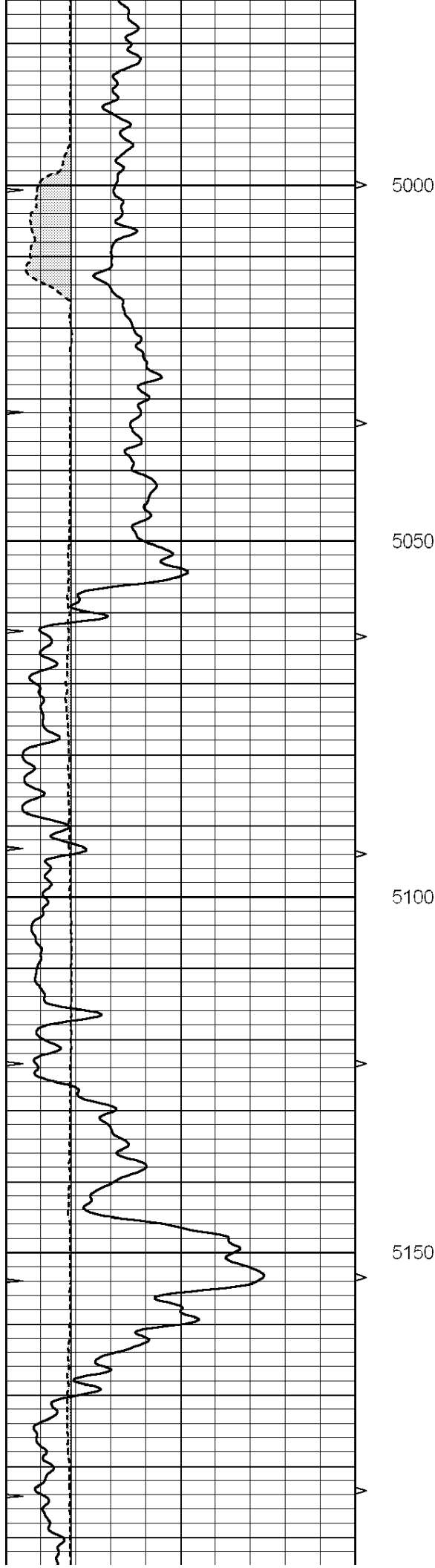
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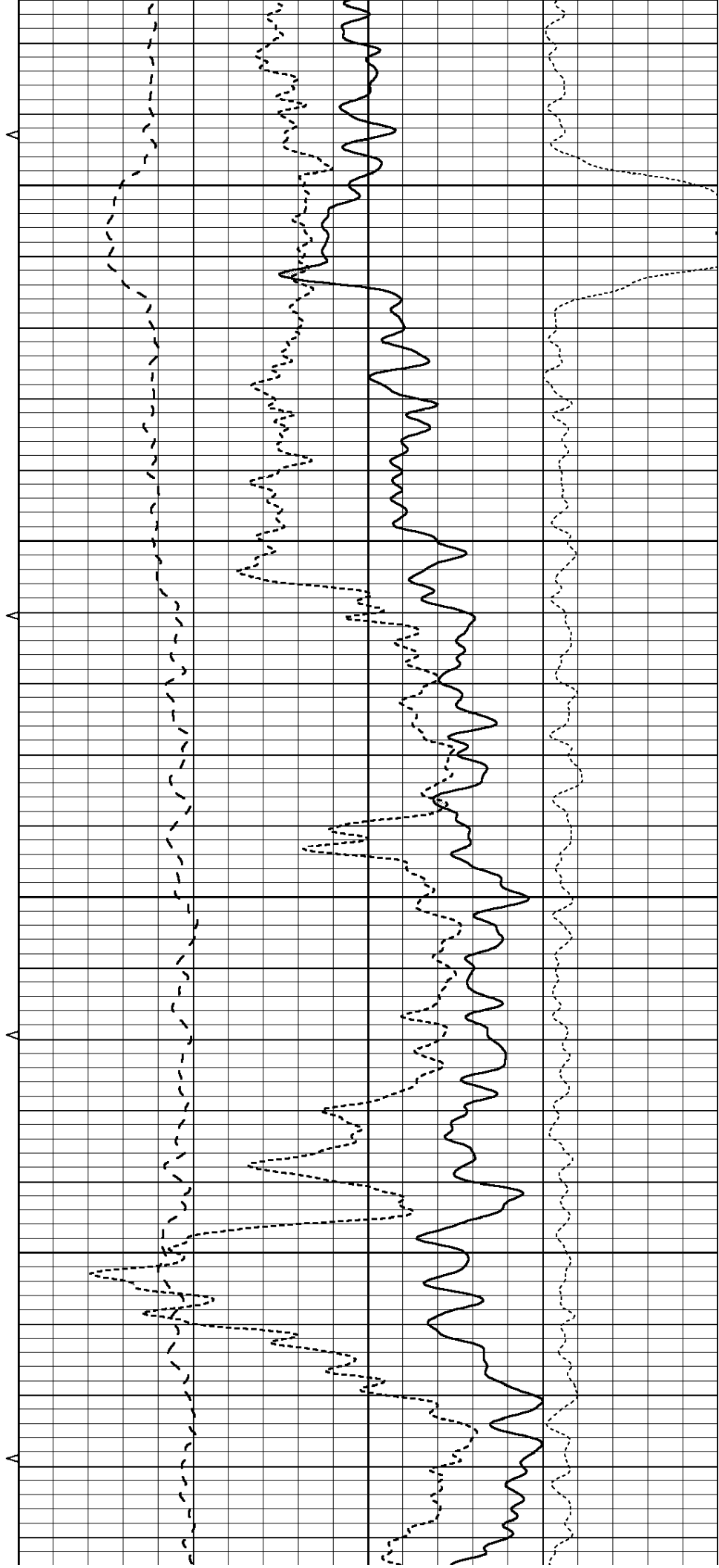


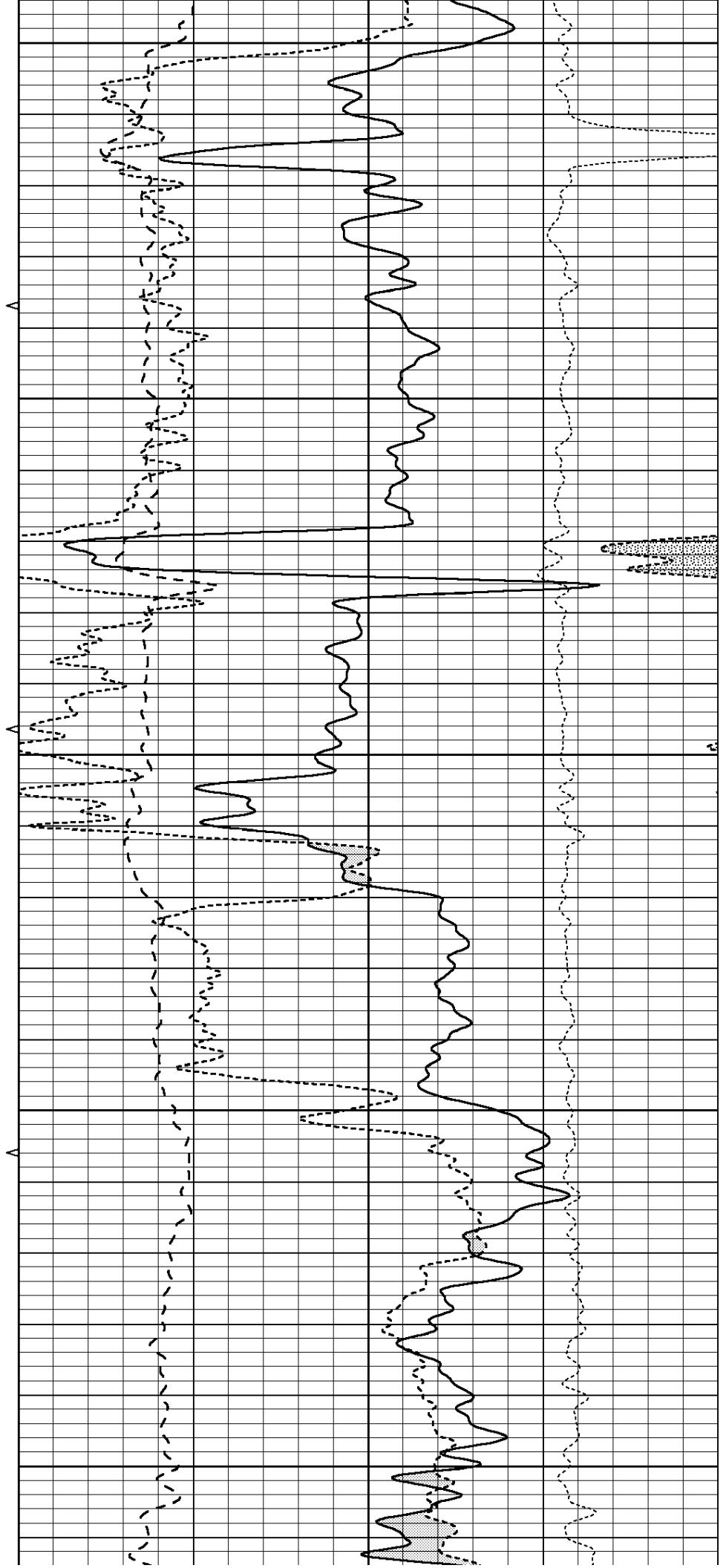
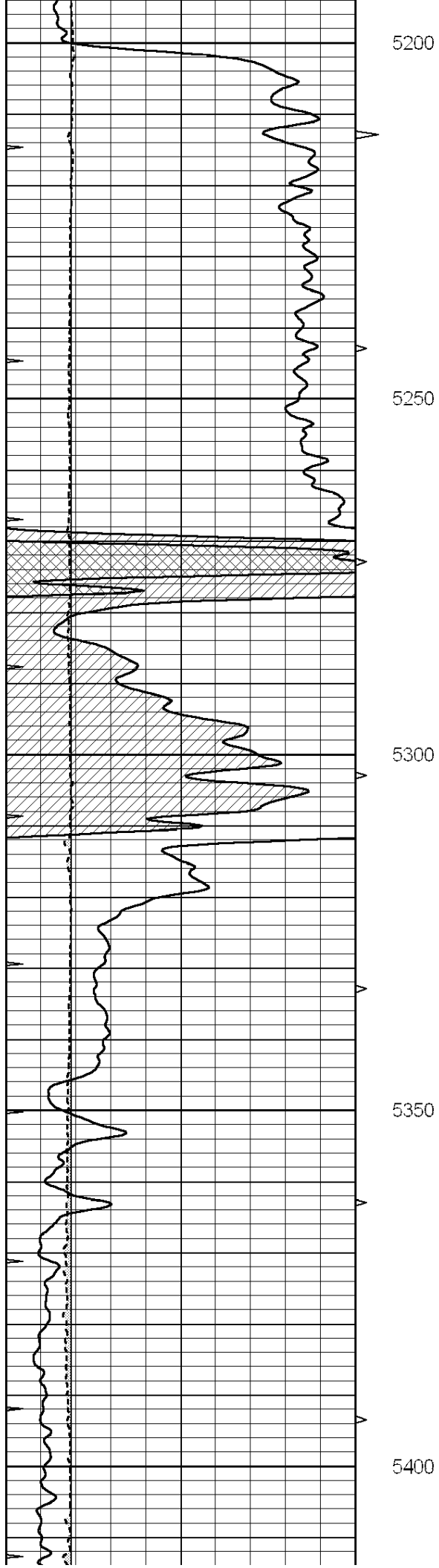
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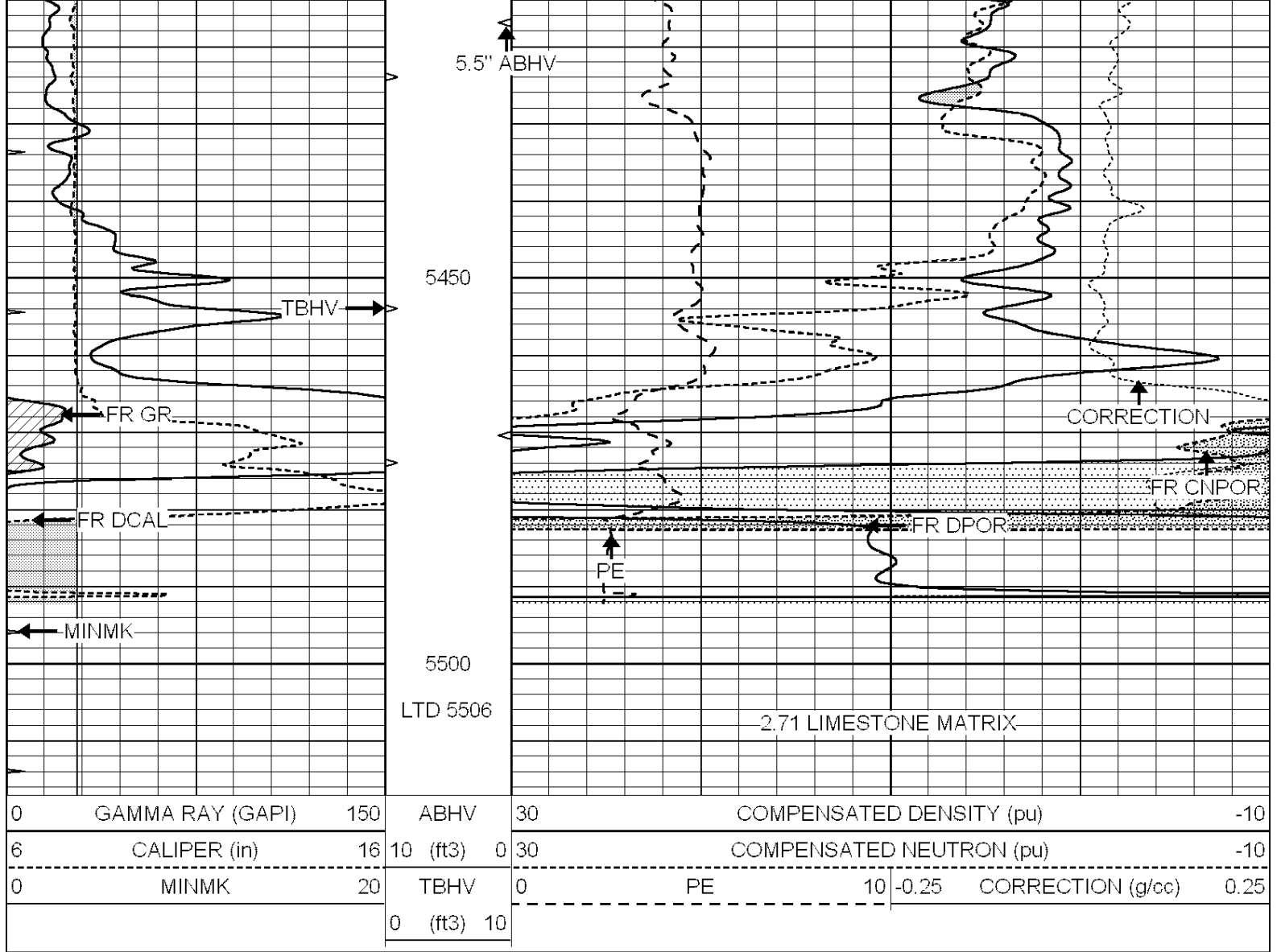
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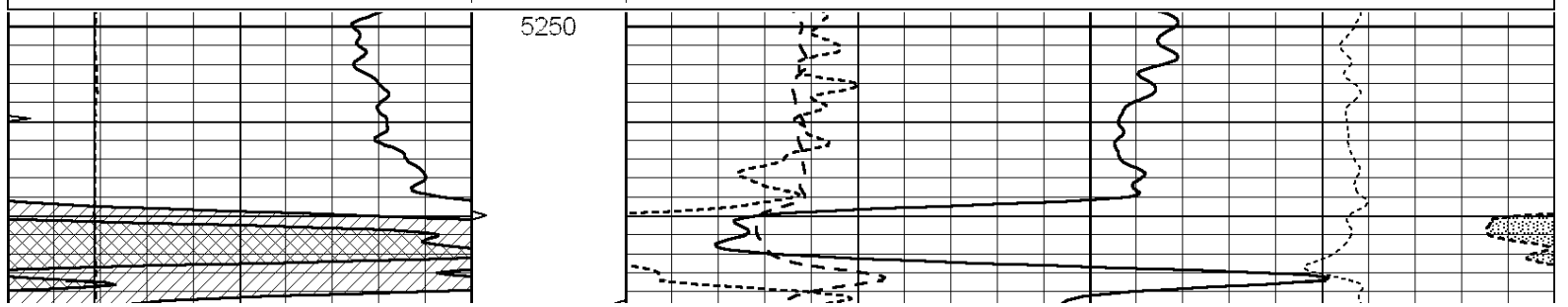


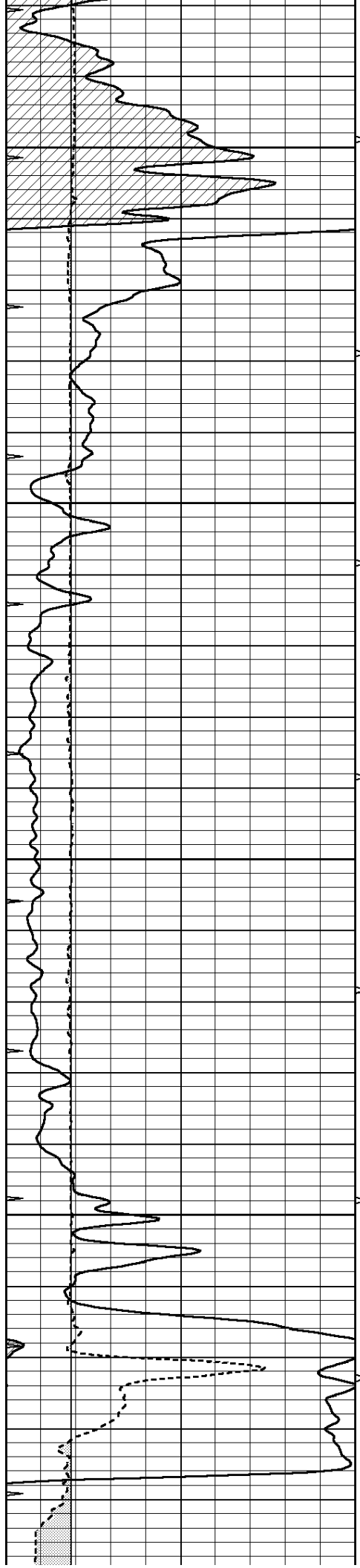
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REPEAT SECTION

Database File: 010032pe.db
Dataset Pathname: pass2.9
Presentation Format: ldt_neu
Dataset Creation: Thu Dec 13 07:59:23 2012 by Calc SOC 120430
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 (ft3)	10	-0.25	CORRECTION (g/cc) 0.25



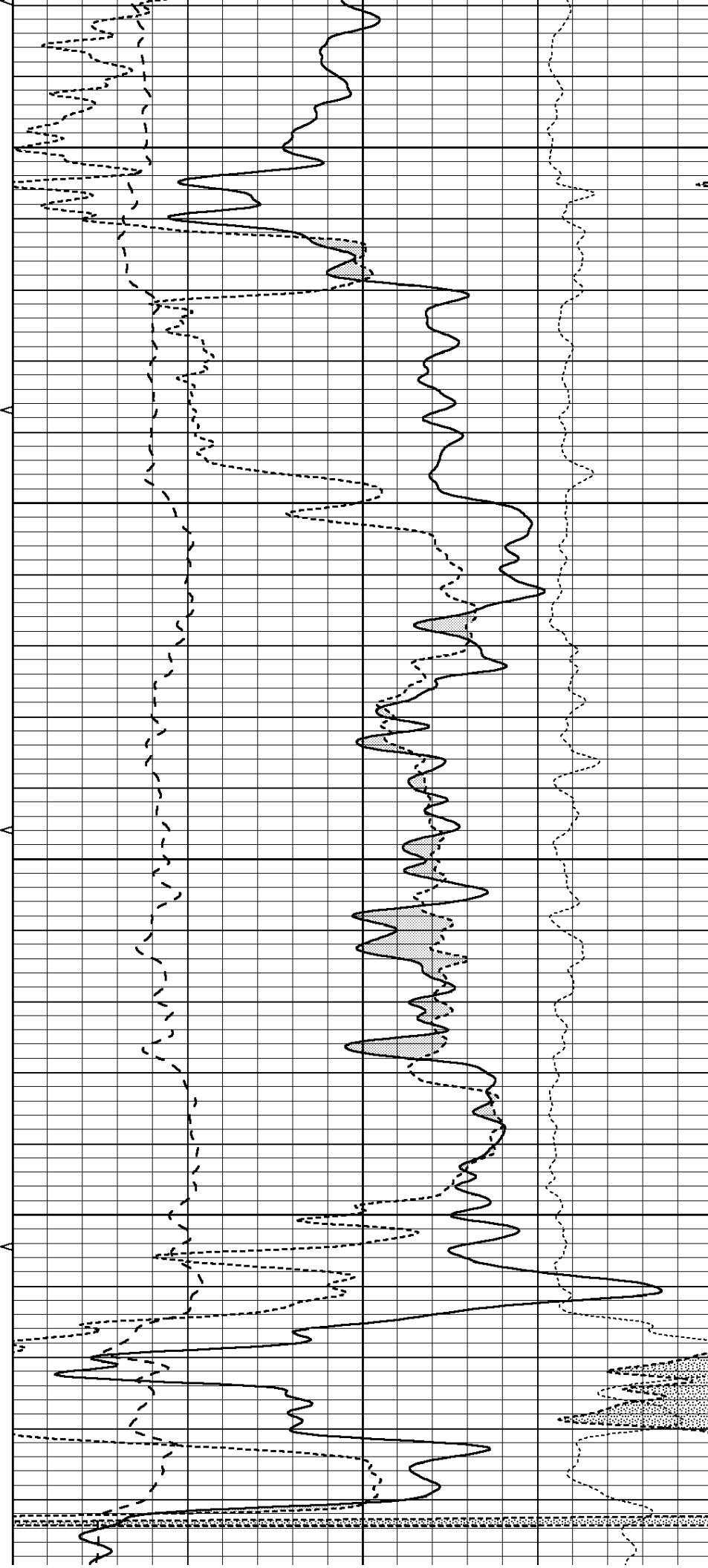


5300

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5400

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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:		010032pe.db																	
Dataset Pathname:		pass3.8																	
Dataset Creation:		Thu Dec 13 08:10:12 2012																	

Dual Induction Calibration Report																			
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Serial-Model:										DIL3-GEAR									
Surface Cal Performed:										Thu Dec 13 07:15:30 2012									
Downhole Cal Performed:										Fri Mar 21 02:34:00 2003									
After Survey Verification Performed:										Tue Apr 13 17:49:23 2010									

Surface Calibration									
Readings				References			Results		
Loop:	Air	Loop		Air	Loop		m	b	
Deep	0.011	0.656	V	0.000	400.000	mmho/m	640.000	10.000	
Medium	0.013	0.740	V	0.000	462.500	mmho/m	740.000	2.000	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.002	0.645	V	0.000	400.000	mmho/m	622.059	-1.071	
Medium	0.007	0.740	V	0.000	462.500	mmho/m	631.393	-4.555	

Downhole Calibration									
Readings				References			Results		
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.000	1.000	mmho/m	0.000	1.000	mmho/m	1.000	0.000	
Medium	0.000	1.000	mmho/m	0.000	1.000	mmho/m	1.000	0.000	
Shallow	2.503	0.050	V	500.000	2.000	Ohm-m	250.000	-4.000	

After Survey Verification									
Readings				Targets			Results		
Internal:	Zero	Cal		Zero	Cal		m'	b'	
Deep	0.000	1.000	mmho/m	0.000	1.000	mmho/m	1.000	0.000	
Medium	0.000	1.000	mmho/m	0.000	1.000	mmho/m	1.000	0.000	
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000	

Litho Density Calibration Report																			
Serial: 006					Model: PRB														

Master Calibration										Performed Sun Aug 15 09:48:41 2010									
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		0.0000	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

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

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:	Wed Nov 28 18:32:17 2012

Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.3000	GAPI/cps