



COMPENSATED DENSITY/NEUTRON LOG

Company L. D. DRILLING, INC.

Well #1-2 CARTER

Field BROUGHTON NORTH

County LANE State KANSAS

Location: API #: 15-101-22690-0000

540' FNL & 1833' FWL

SEC 2 TWP 16S RGE 27W

Permanent Datum GROUND LEVEL Elevation 2445
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING

Other Services
DILMEL
SONIC

Elevation
K.B. 2450
D.F. 2448
G.L. 2445

Date 1/3/24

Run Number ONE

Depth Driller 4424

Depth Logger 4426

Bottom Logged Interval 4402

Top Log Interval 3200

Casing Driller 8.625@304

Casing Logger 304

Bit Size 7.785

Type Fluid in Hole CHEMICAL MUD

Density / Viscosity 9.4/57

pH / Fluid Loss 10.0/7.6

Source of Sample FLOWLINE

Rm @ Meas. Temp .800@80F

Rmf @ Meas. Temp .600@80F

Rmc @ Meas. Temp .960@80F

Source of Rmf / Rmc MEASUREMENT

Rm @ BHT .533@120F

Time Circulation Stopped 2.5 HOURS

Time Logger on Bottom 2:30 P.M.

Maximum Recorded Temperature 120F

Equipment Number 922339

Location HAYS, KANSAS

Recorded By JEFF LUEBBERS

Witnessed By KIM SHOEMAKER

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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.

15-101-22690-0000 Comments

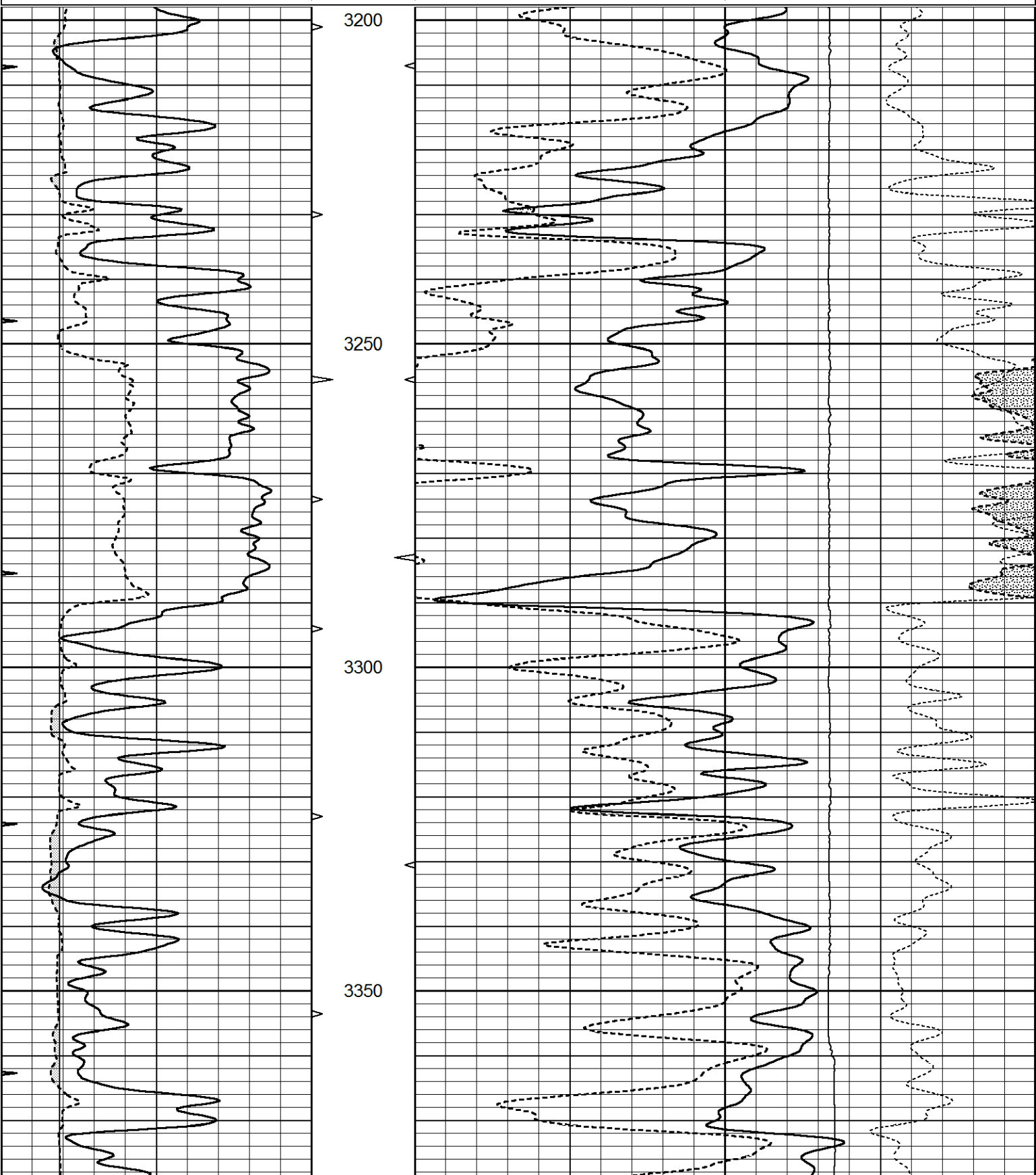
THANK YOU FOR USING ELI WIRELINE HAYS. KANSAS (785) 628-6395
DIRECTIONS
UTICA, KS., 3W. ON HWY 4 TO "RD. A" (CASTLE ROCK RD.) 4N. TO VESS TANK BATTERY, W. ON
LEASE RD. TO CATTLE GUARD, S. TO CURVE W. THEN BACK N. & W. PAST TANK BATTERY 3 1/2
MILES TOTAL

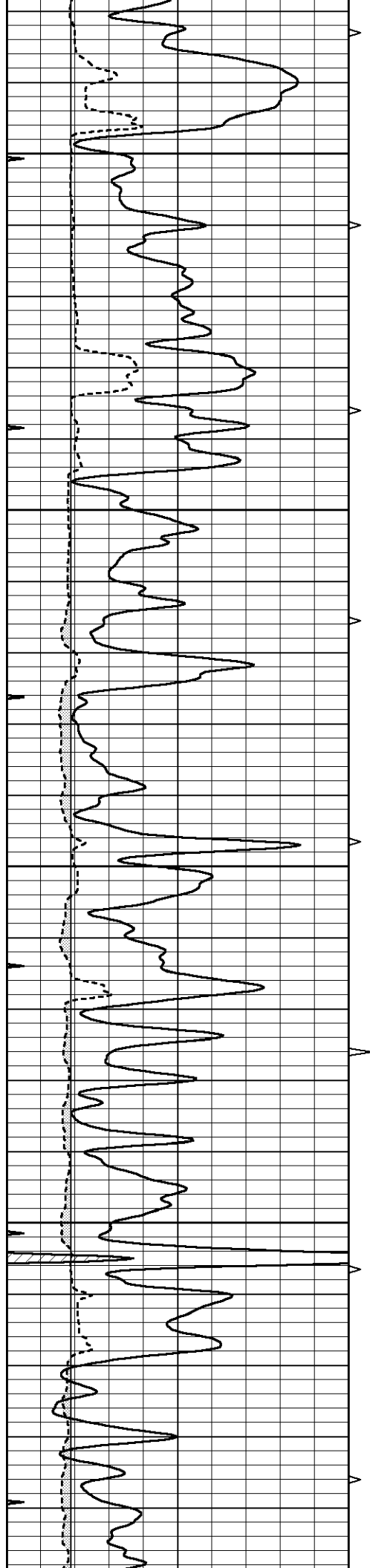


MAIN SECTION

Database File	8403ddn.db
Dataset Pathname	pass3.1M
Presentation Format	_den_neu
Dataset Creation	Wed Jan 03 16:21:56 2024
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)			-10	
6	DCAL (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)			-10
0	MINMK	20	TBHV			-0.25	CORRECTION (g/cc)	0.25	
			0 (ft3)	10		0	LTEN (lb)	5000	



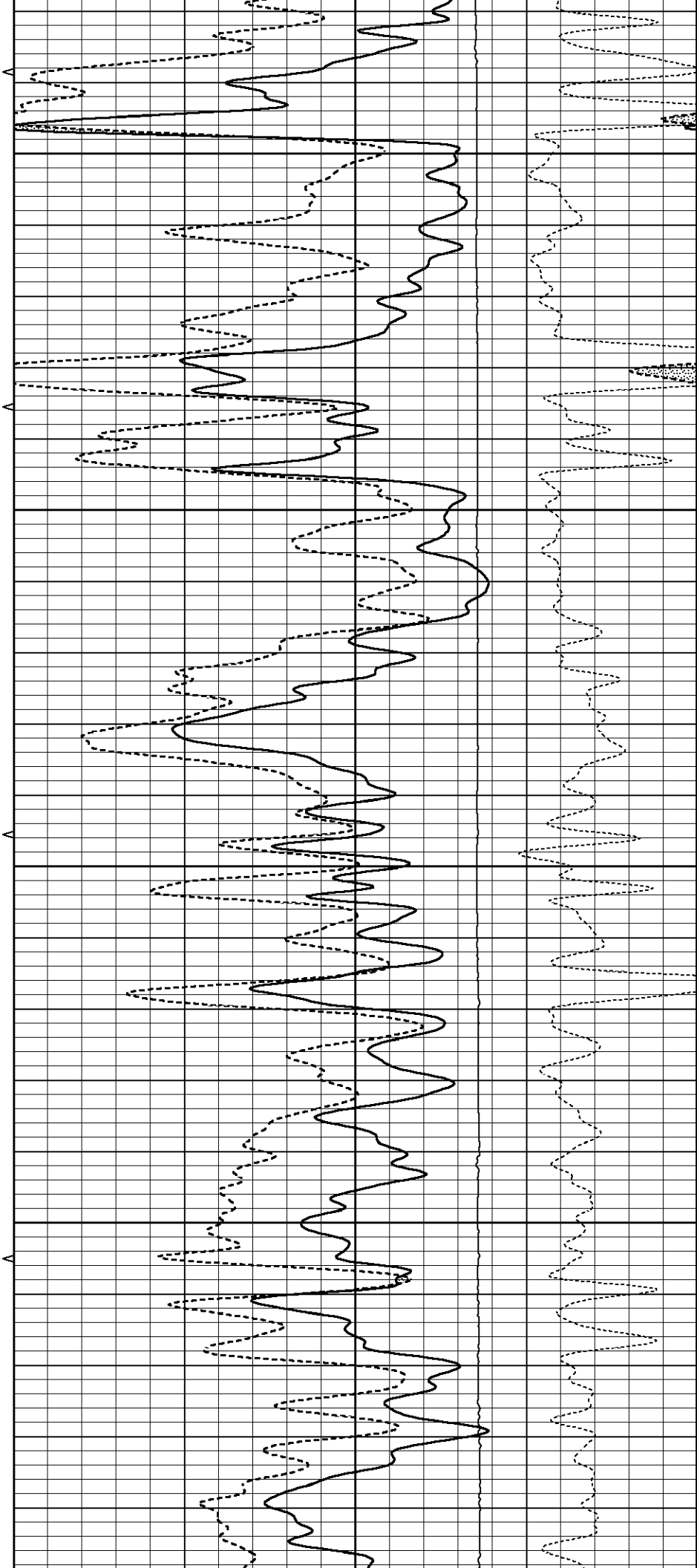


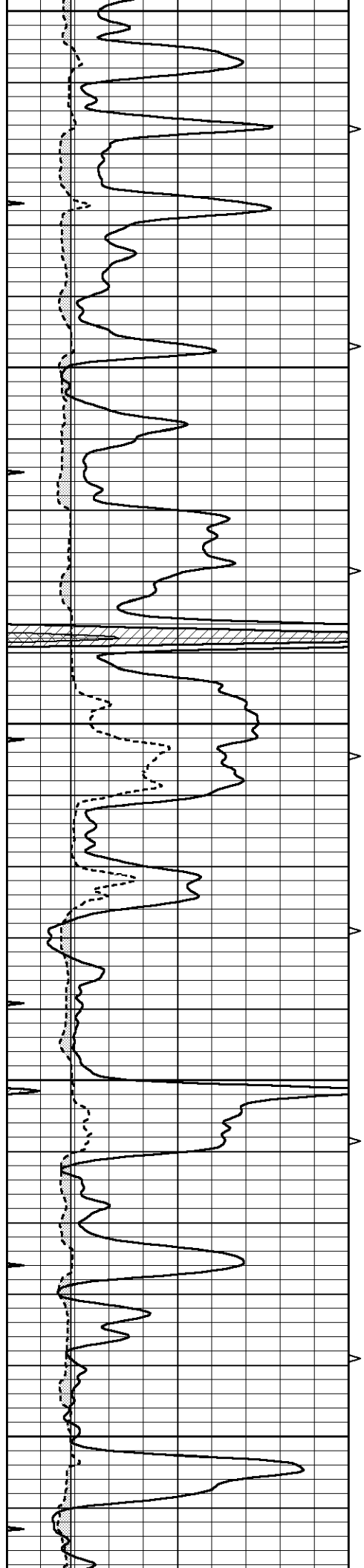
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3450

3500

3550





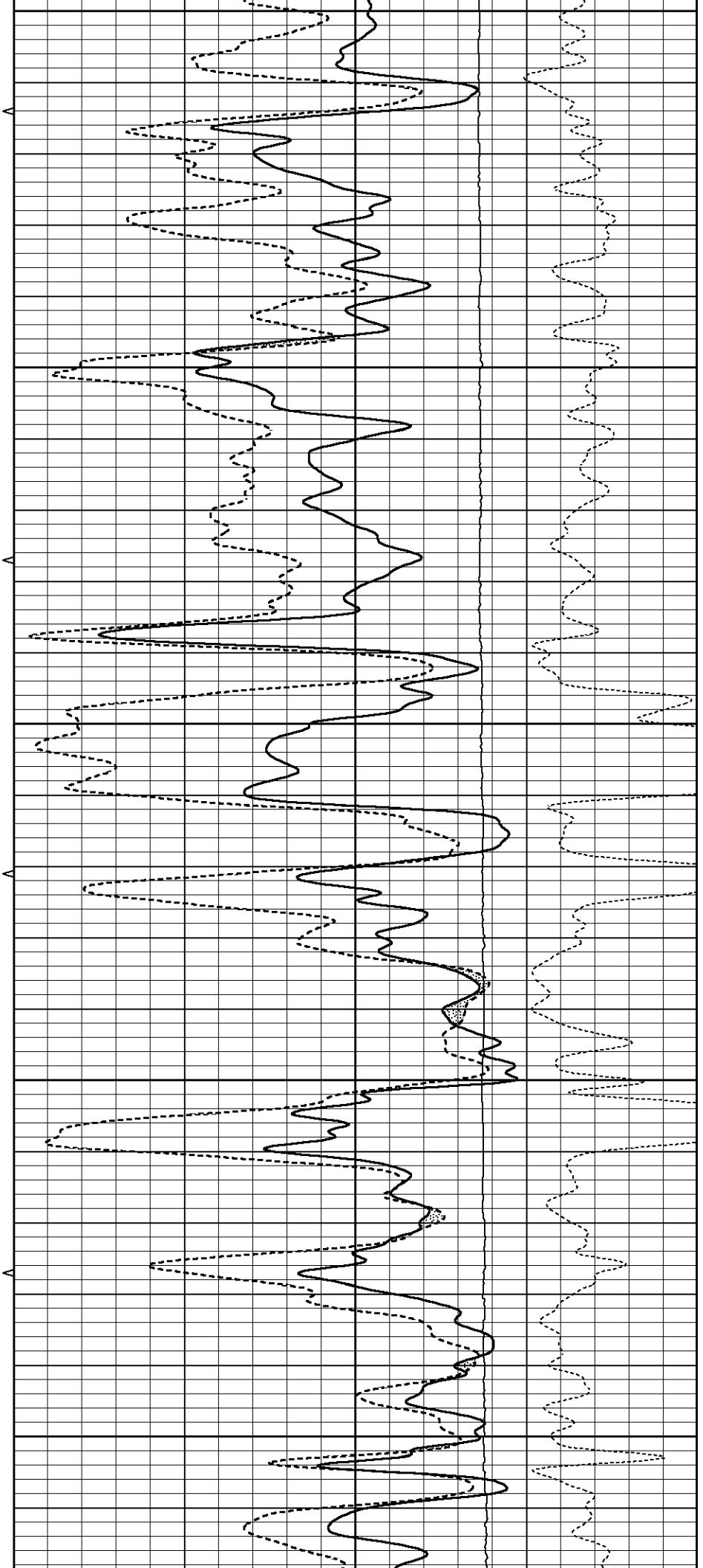
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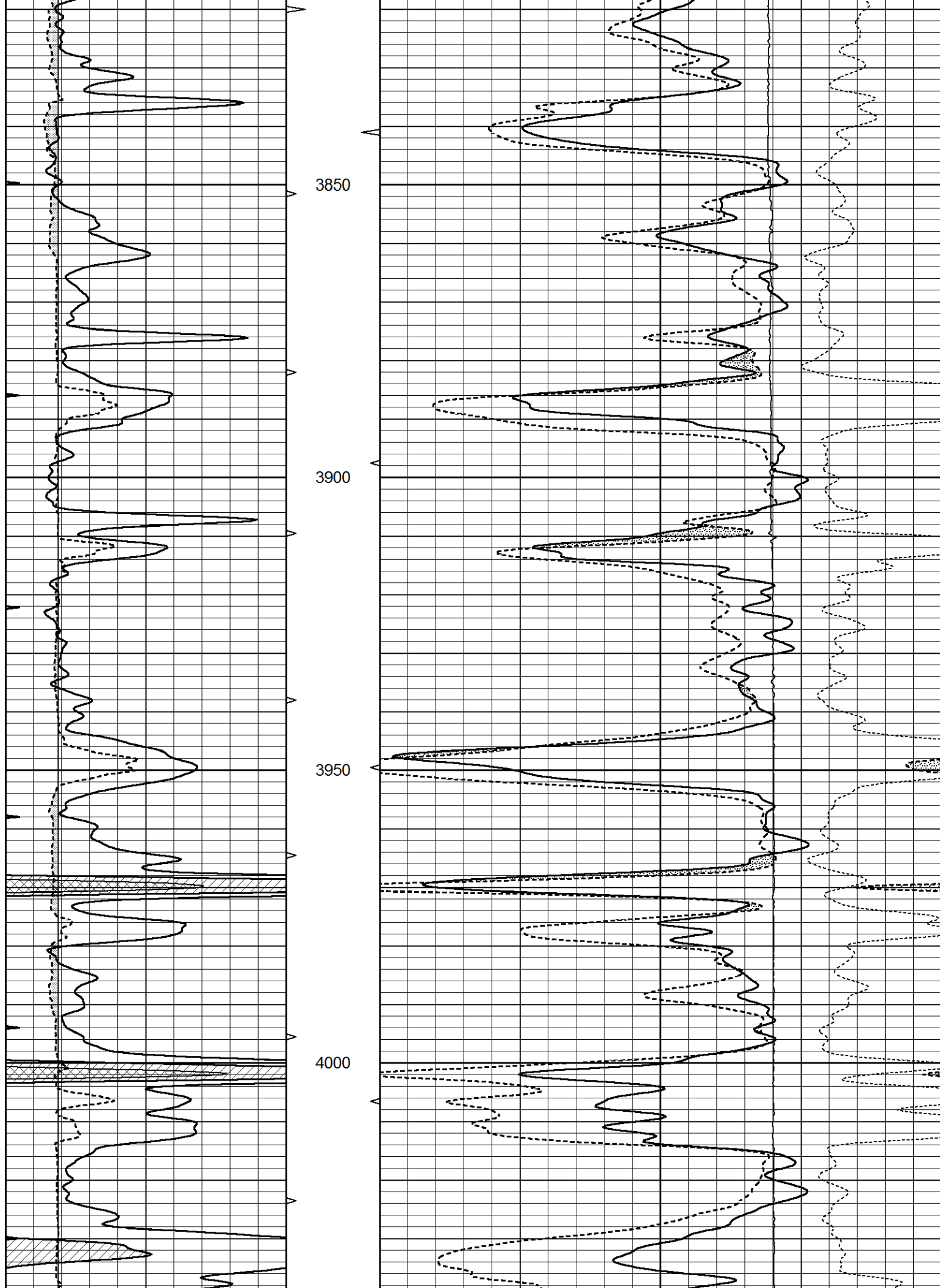
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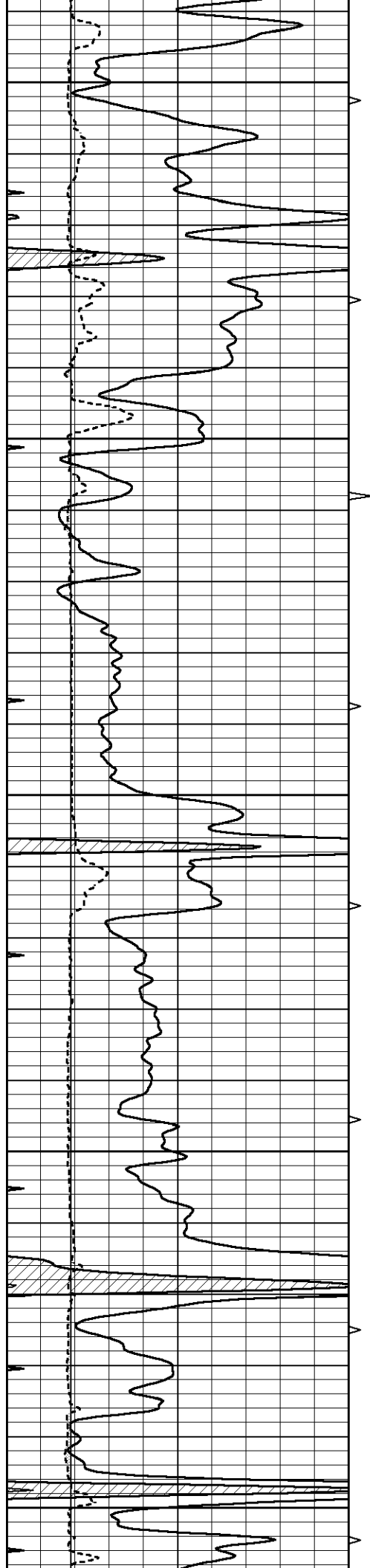
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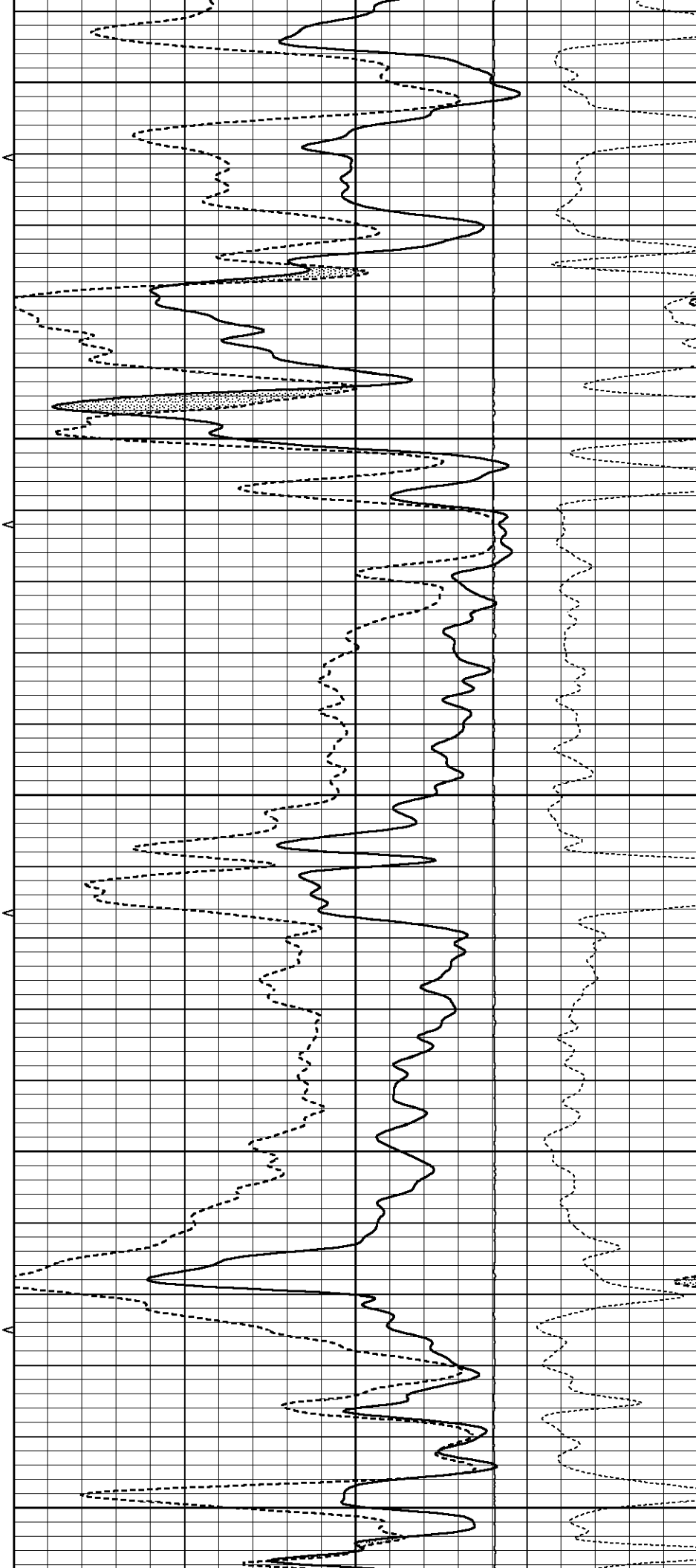
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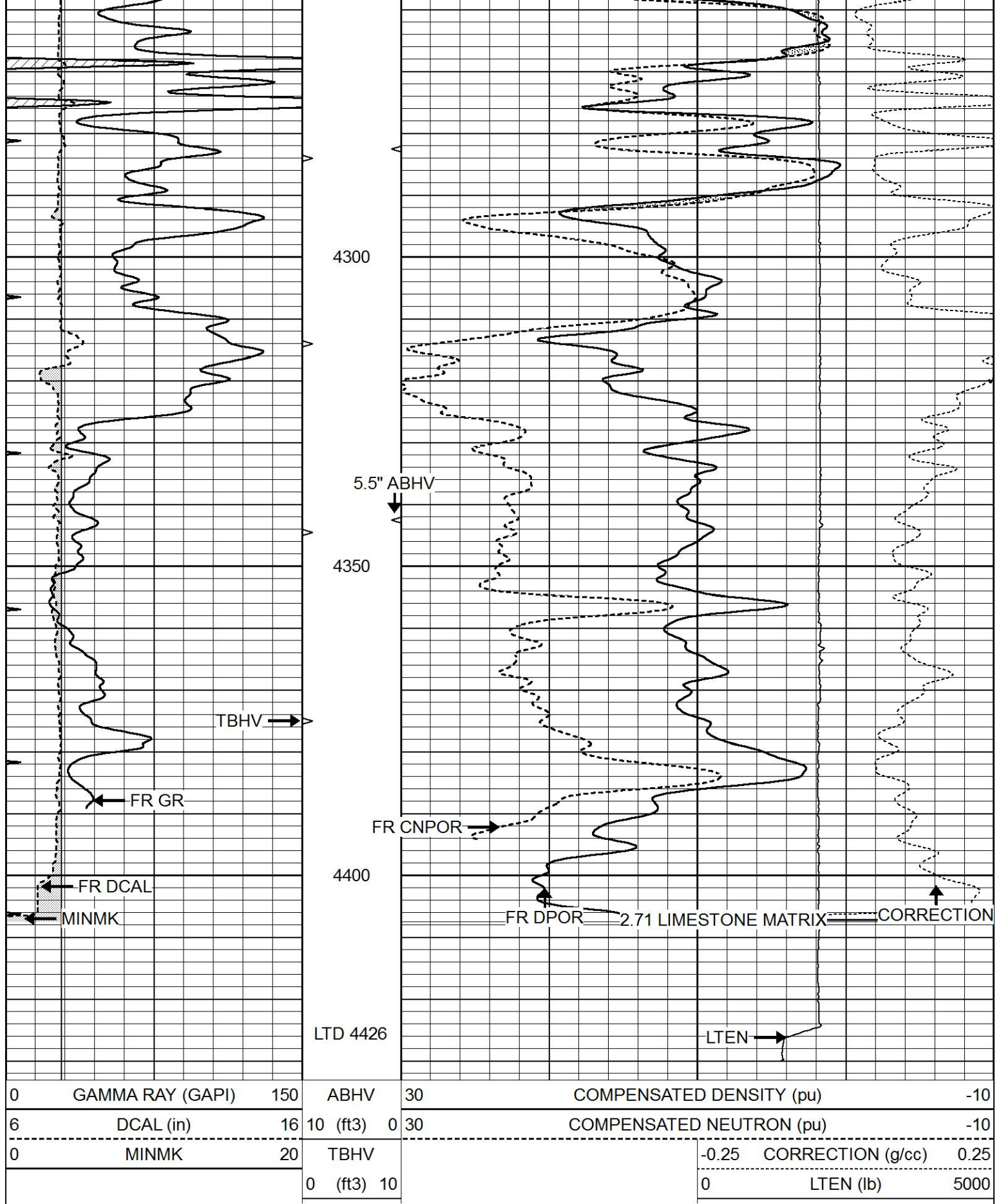
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4150

4200

4250

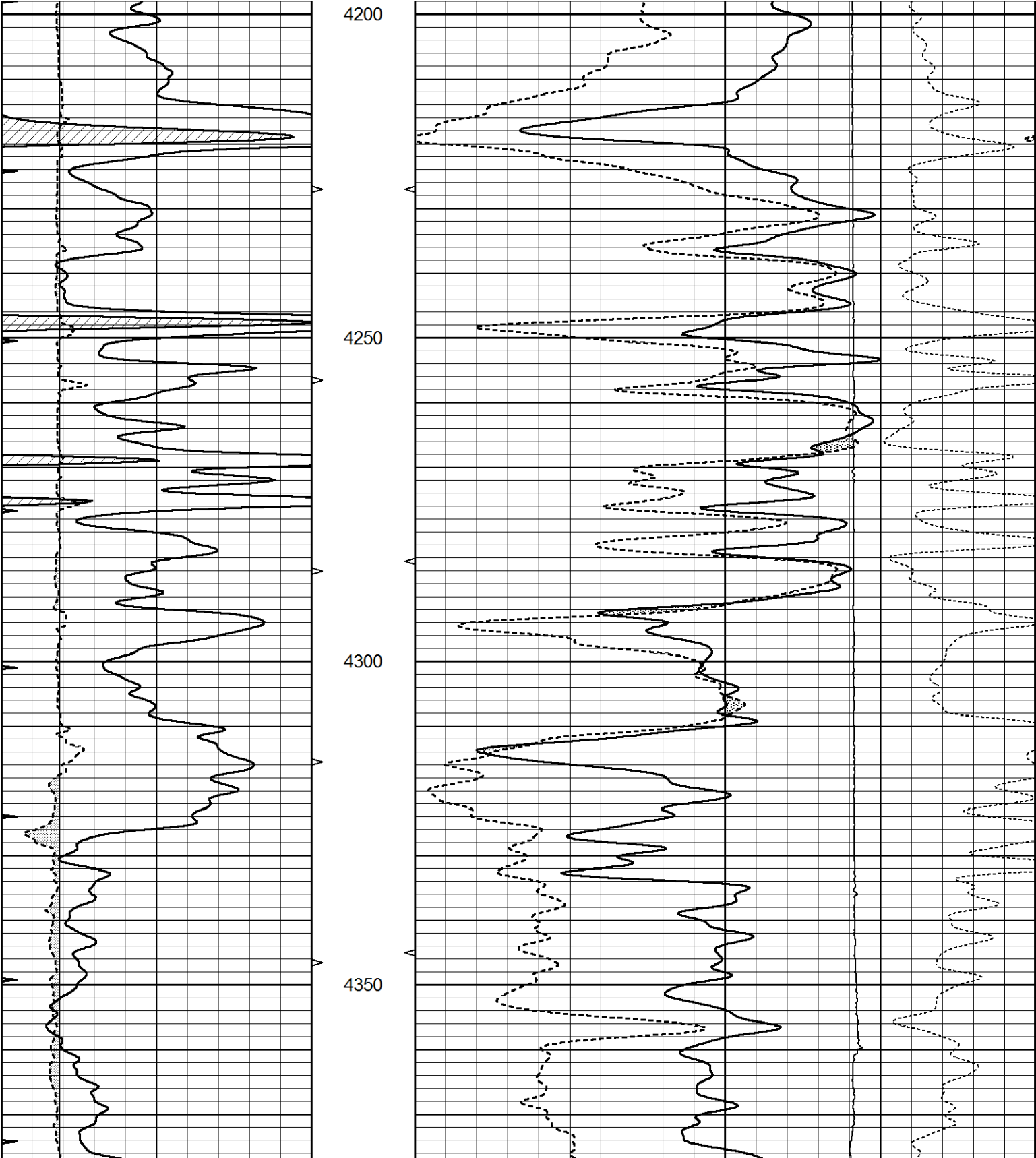


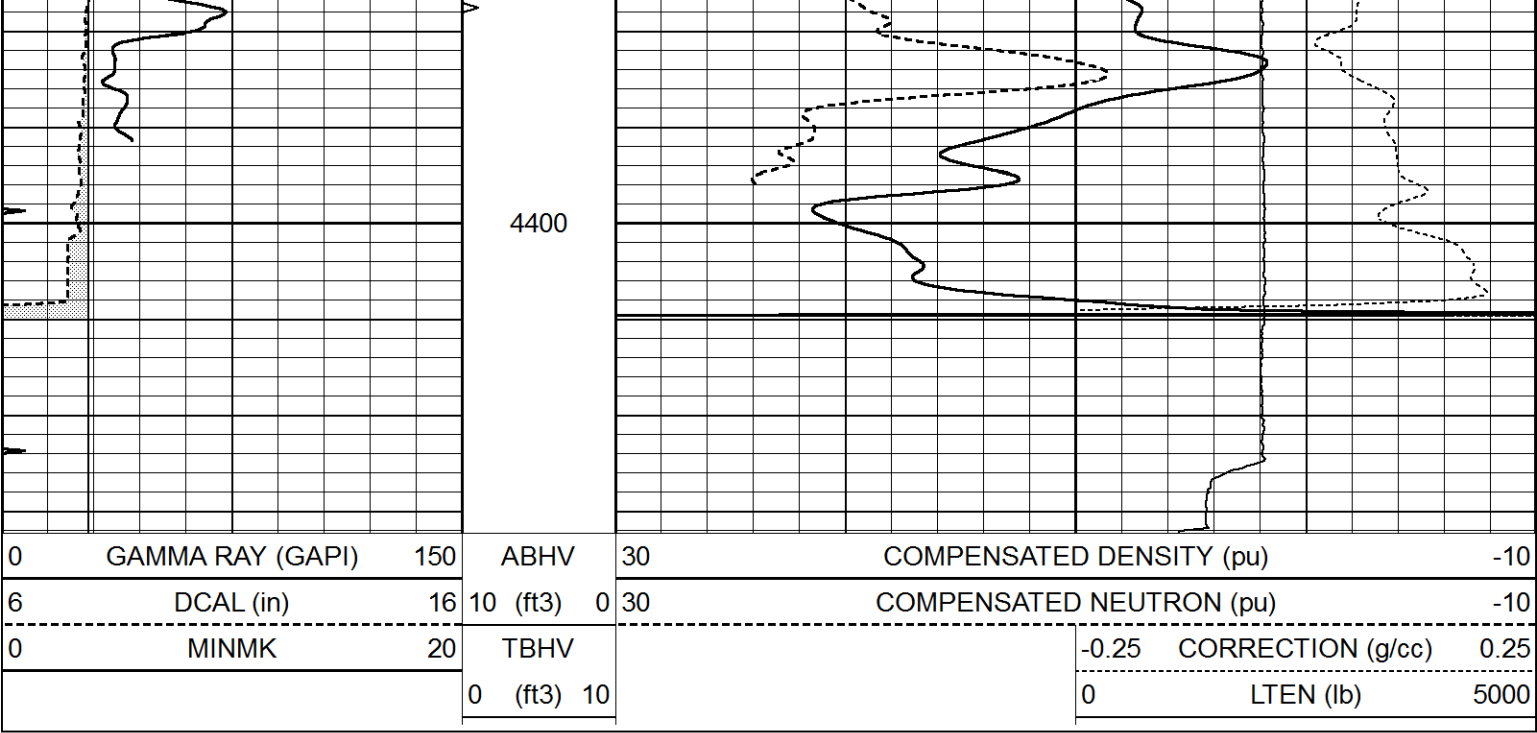


REPEAT SECTION

Database File	8403ddn.db
Dataset Pathname	pass2.1R
Presentation Format	_den_neu
Dataset Creation	Wed Jan 03 16:03:15 2024
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)			-10	
6	DCAL (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)			-10
0	MINMK	20	TBHV			-0.25	CORRECTION (g/cc)	0.25	
			0 (ft3)	10		0	LTEN (lb)	5000	





Calibration Report									
Database File	8403ddn.db								
Dataset Pathname	pass3.1M								
Dataset Creation	Wed Jan 03 16:21:56 2024								
Dual Induction Calibration Report									
Serial-Model:					PROBE8-DILG				
Surface Cal Performed:					Wed Jan 03 15:39:55 2024				
Downhole Cal Performed:					Mon Aug 14 00:39:25 2023				
After Survey Verification Performed:					Mon Jul 28 11:08:27 2008				
Surface Calibration									
Readings				References			Results		
Loop:	Air	Loop		Air	Loop		m	b	
Deep	0.015	0.648	V	0.000	400.000	mmho/m	660.000	4.000	
Medium	0.029	0.796	V	0.000	464.000	mmho/m	650.000	-10.000	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.017	0.657	V	0.000	400.000	mmho/m	625.153	-10.619	
Medium	0.016	0.757	V	0.000	464.000	mmho/m	625.992	-9.739	
Downhole Calibration									
Readings				References			Results		
	Zero	Cal		Zero	Cal		m'	b'	
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m	1.000	0.000	
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m	1.000	0.000	
LL3		7.500	V		1500.000	Ohm-m			
		0.000	V		20.000	Ohm-m			
		-7.200	V		3800.000	mmho-m			
After Survey Verification									
Readings				Targets			Results		
	Zero	Cal		Zero	Cal		m'	b'	
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000	
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000	

Medium	0.000	0.000	mmho-m	0.000	0.000	mmho-m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		

Litho Density Calibration Report Serial: 002 Model: PRB

Master Calibration	Performed Tue Aug 02 15:13:46 2022				
	Background	Magnesium	Aluminum	Aluminum+Fe	
Window 1	756.0	9803.2	2626.7	2317.1	cps
Window 2	695.1	8255.1	2265.2	2043.1	cps
Window 3	550.8	3929.2	1238.3	1173.3	cps
Window 4	165.8	166.7	163.3	164.0	cps
Long Space	0.0	7560.0	1570.1	1348.0	cps
Short Space	1.7	1555.8	1144.9	997.1	cps
Rho		1.7100	2.5900	0.0000	g/cc
Pe		2.0000	2.7500	5.7900	
Rib Angle	: 49.0	Rib Slope	: 1.149	Density/Spine Ratio	: 0.550
Spine Angle	: 79.0	Spine Slope	: 5.125	Spine Intercept	: -28.7

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: 070808PMC
Tool Model: NABORS

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:	070558		
Tool Model:	OPEN_GR		
Performed:	Wed Dec 20 03:59:02 2023		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.3000	GAPI/cps	