

COMPENSATED DENSITY / NEUTRON LOG

Company	L. D. DRILLING, INC.	
Well	#1-22 BANNISTER	
Field	BANNISTER	
County	RUSH	State KANSAS
Location:	API # : 15-165-22176-0000 1155' FNL & 2289' FWL SW - SE - NE - NW	
Permanent Datum	GROUND LEVEL	Elevation 2239
Log Measured From	KELLY BUSHING 5' A.G.L.	
Drilling Measured From	KELLY BUSHING	
Other Services	DIL/MEL	
Elevation	K.B. 2244 D.F. 2242 G.L. 2239	
Date	11/23/21	
Run Number	ONE	
Depth Driller	4450	
Depth Logger	4452	
Bottom Logged Interval	4428	
Top Log Interval	3200	
Casing Driller	8 5/8" @ 264'	
Casing Logger	264	
Bit Size	7 7/8"	
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 8,000 PPM
Density / Viscosity	9.2/58	
pH / Fluid Loss	10.0/7.6	
Source of Sample	FLOWLINE	
Rm @ Meas. Temp	.420 @ 80F	
Rmf @ Meas. Temp	.315 @ 80F	
Rmc @ Meas. Temp	.504 @ 80F	
Source of Rmf / Rmc	MEASUREMENT	
Rm @ BHT	.275 @ 122F	
Time Circulation Stopped	2.5 HOURS	
Time Logger on Bottom	1:00 A.M.	
Maximum Recorded Temperature	120F	
Equipment Number	922339	
Location	HAYS, KANSAS	
Recorded By	JEFF LUEBBERS	
Witnessed By	KIM SHOEMAKER	TED McHENRY

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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.

15-165-22176-0000

Comments

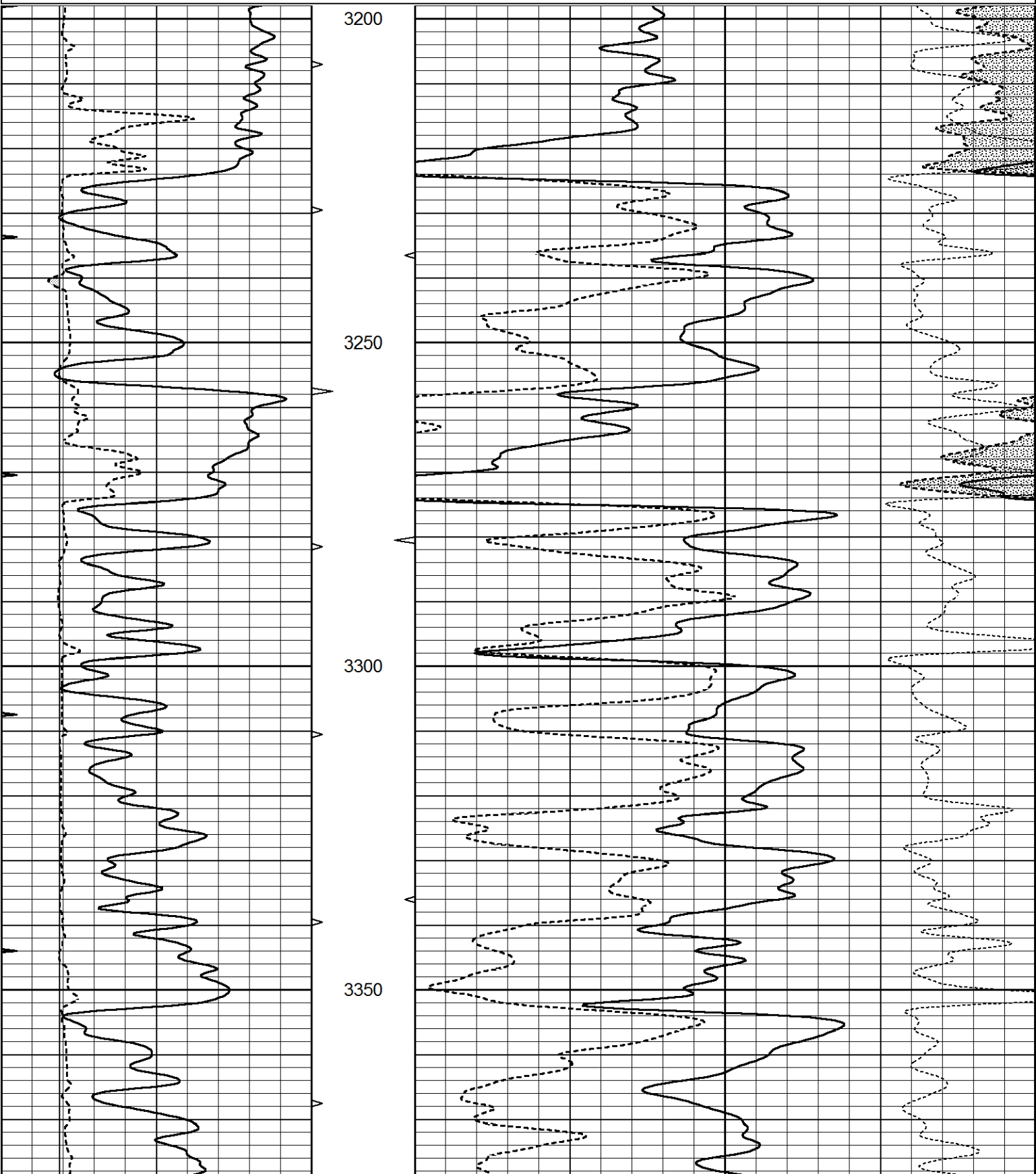
THANK YOU FOR USING ELI WIRELINE HAYS, KANSAS (785) 628-6395
DIRECTIONS
ALEXANDER, KS., 2E. ON HWY 96 TO "RD. 140", 5S. TO "RD. V", 1/2W., S. INTO

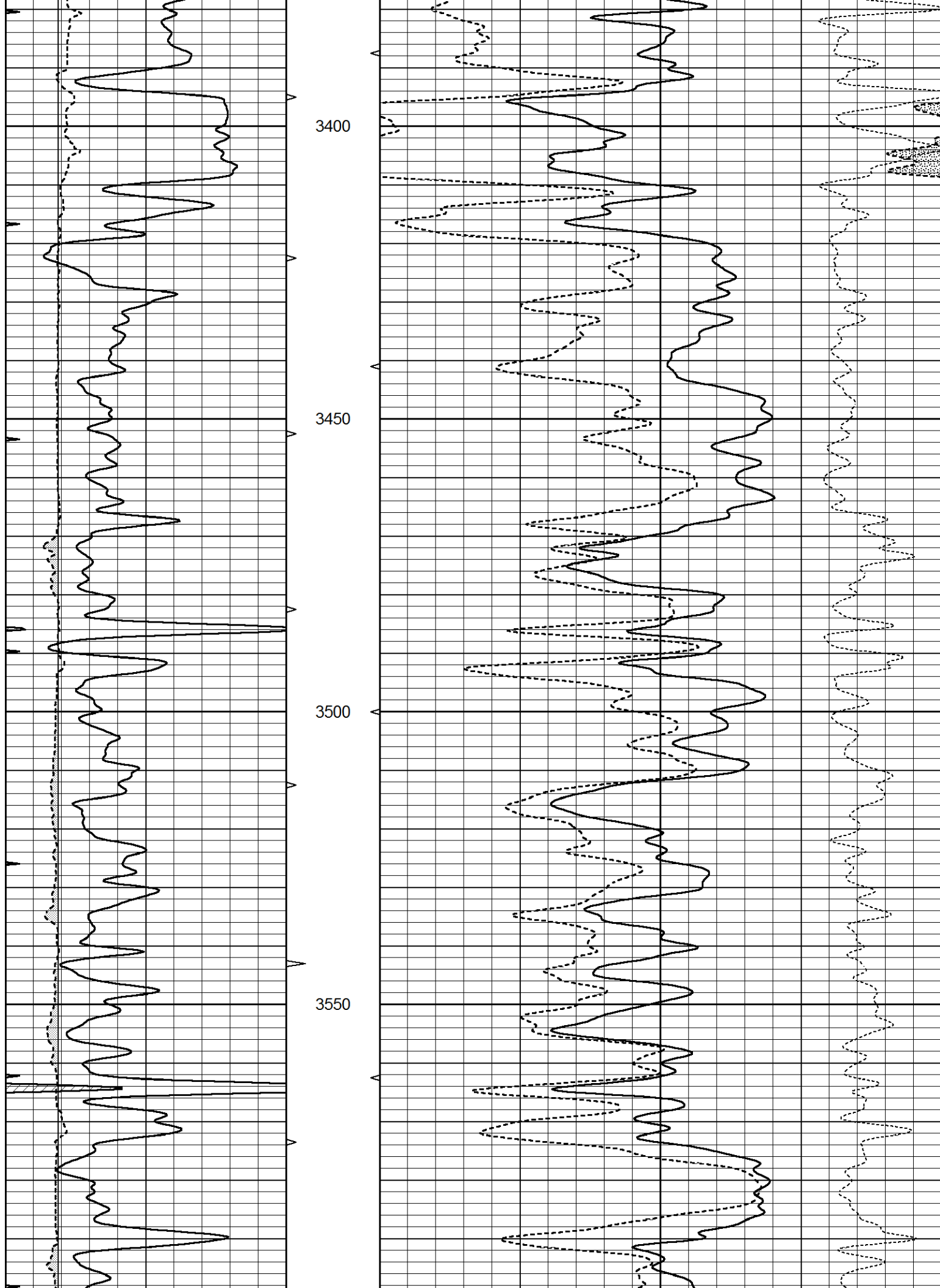


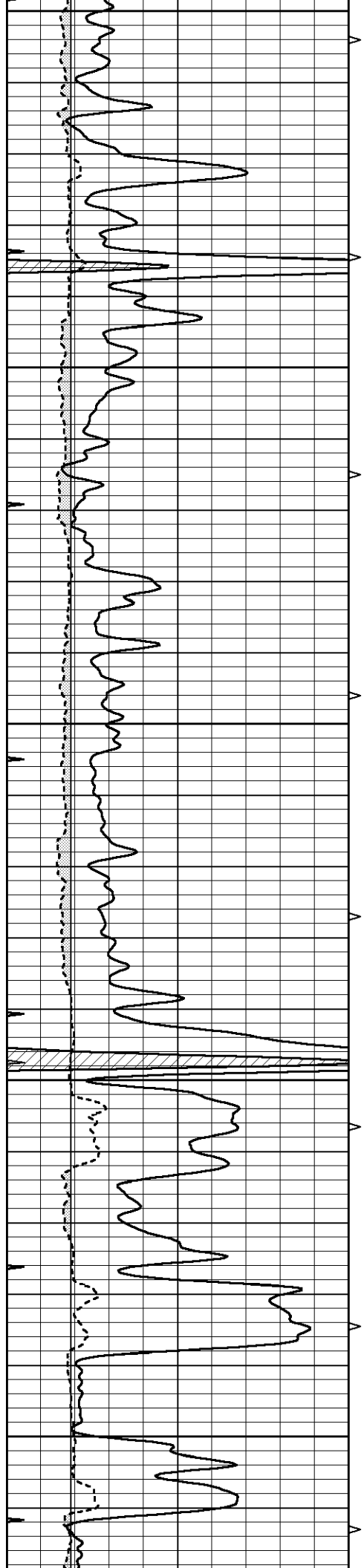
MAIN SECTION

Database File	5836ddn.db
Dataset Pathname	pass3.1M
Presentation Format	den_neu
Dataset Creation	Tue Nov 23 03:31:39 2021
Charted by	Depth in Feet scaled 1:240

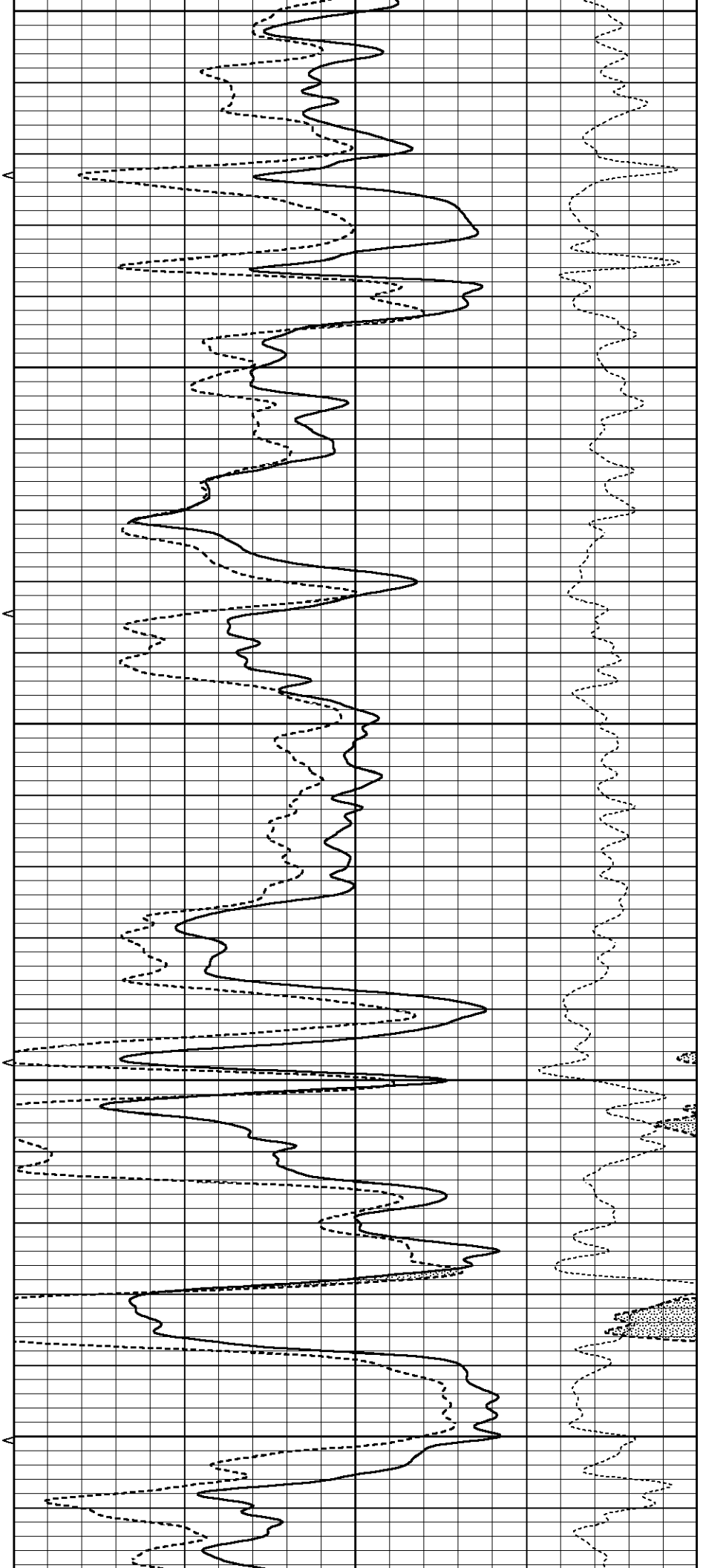
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)			-10	
6	DCAL (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)			-10
0	MINMK	20	TBHV				-0.25	CORRECTION (g/cc)	0.25
			0 (ft3)	10					

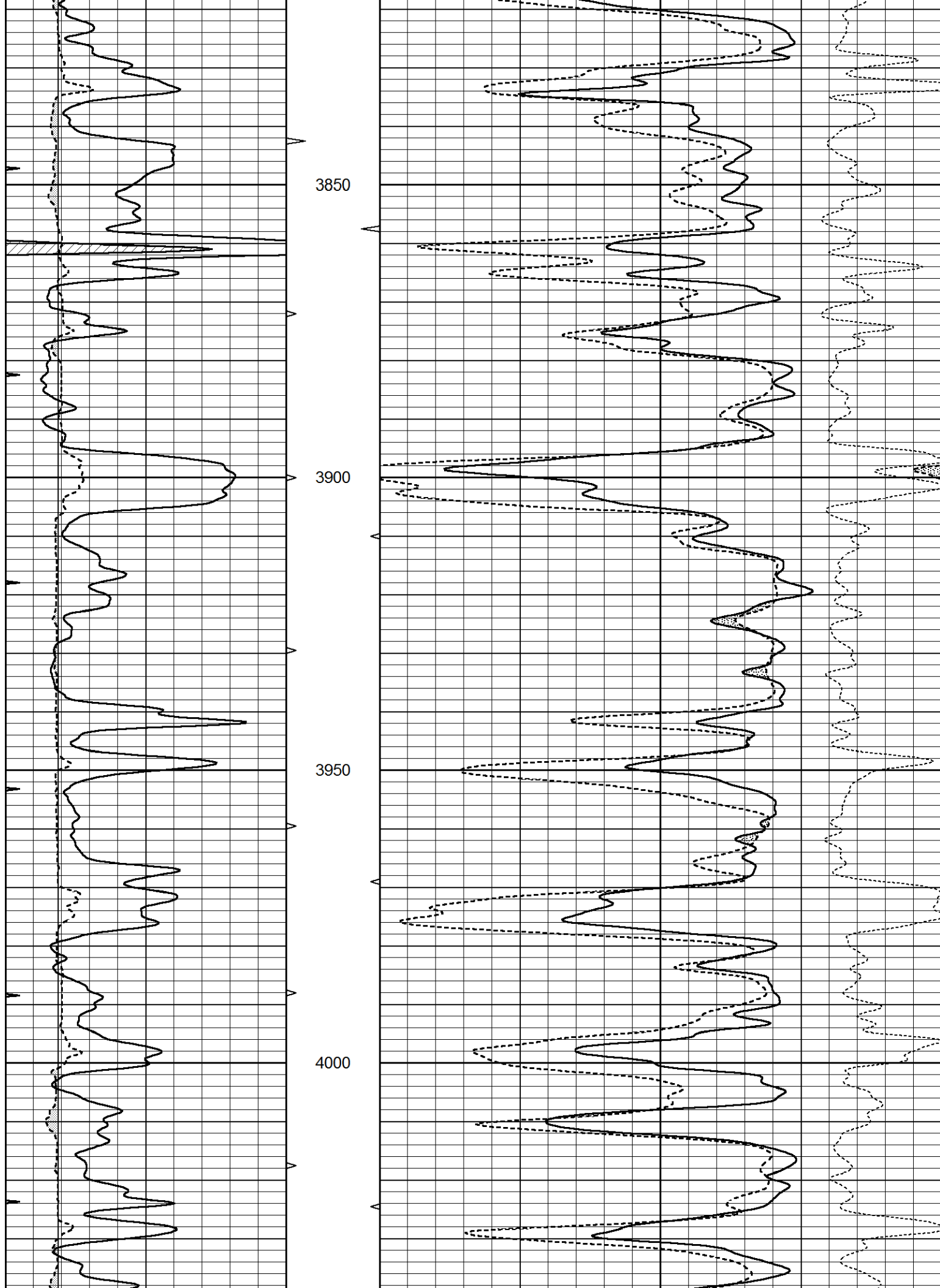


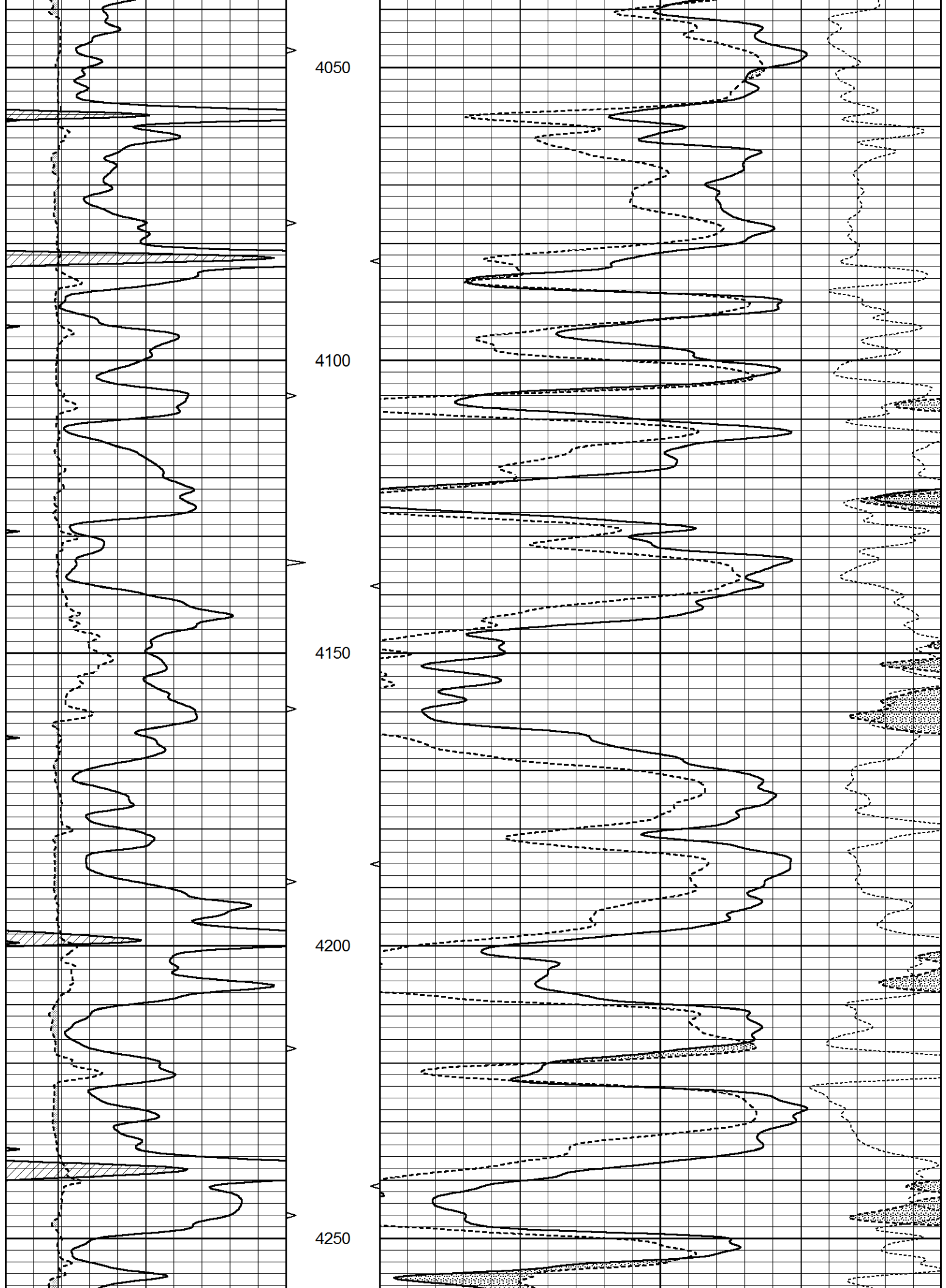


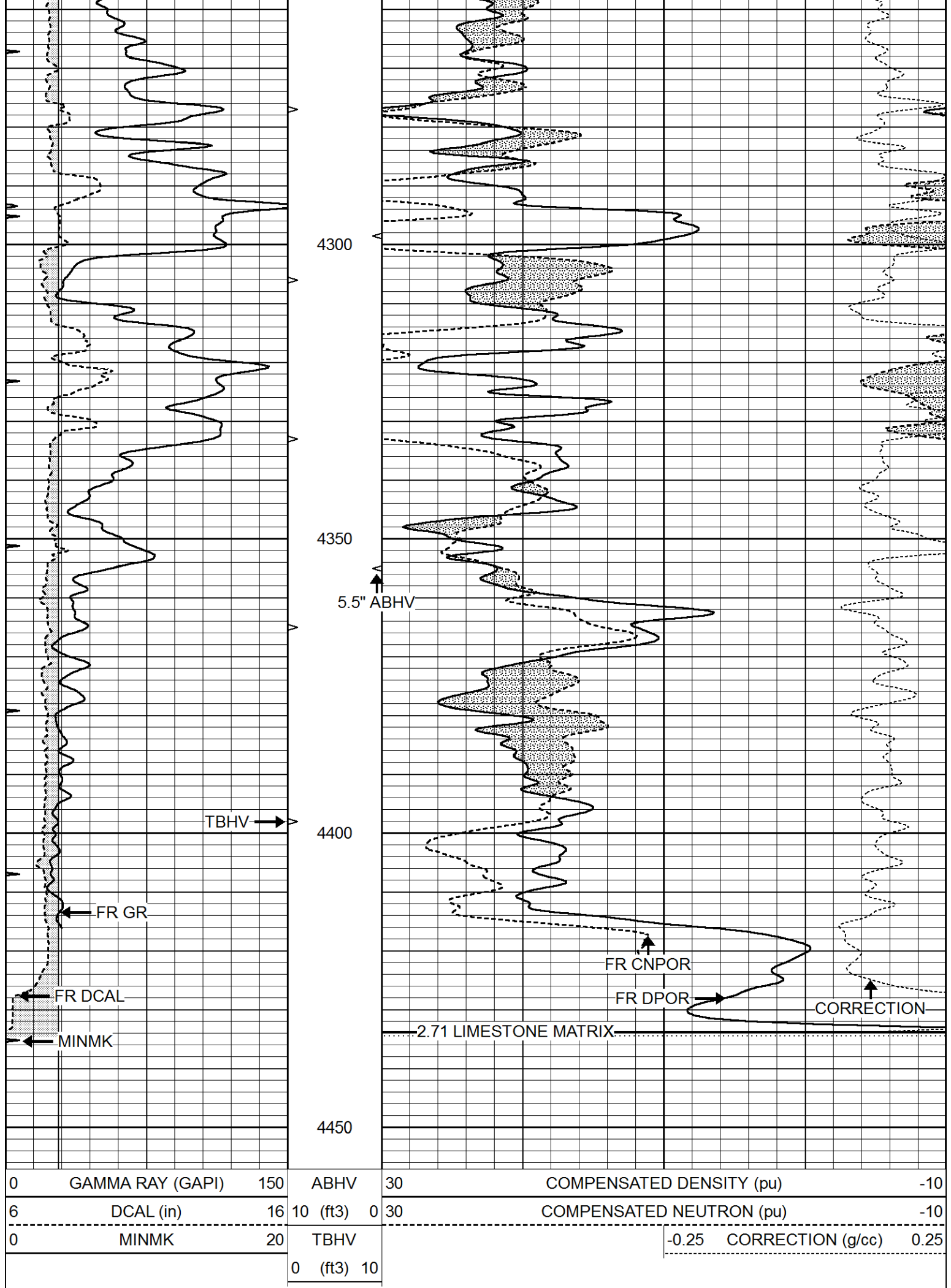


3600
3650
3700
3750
3800







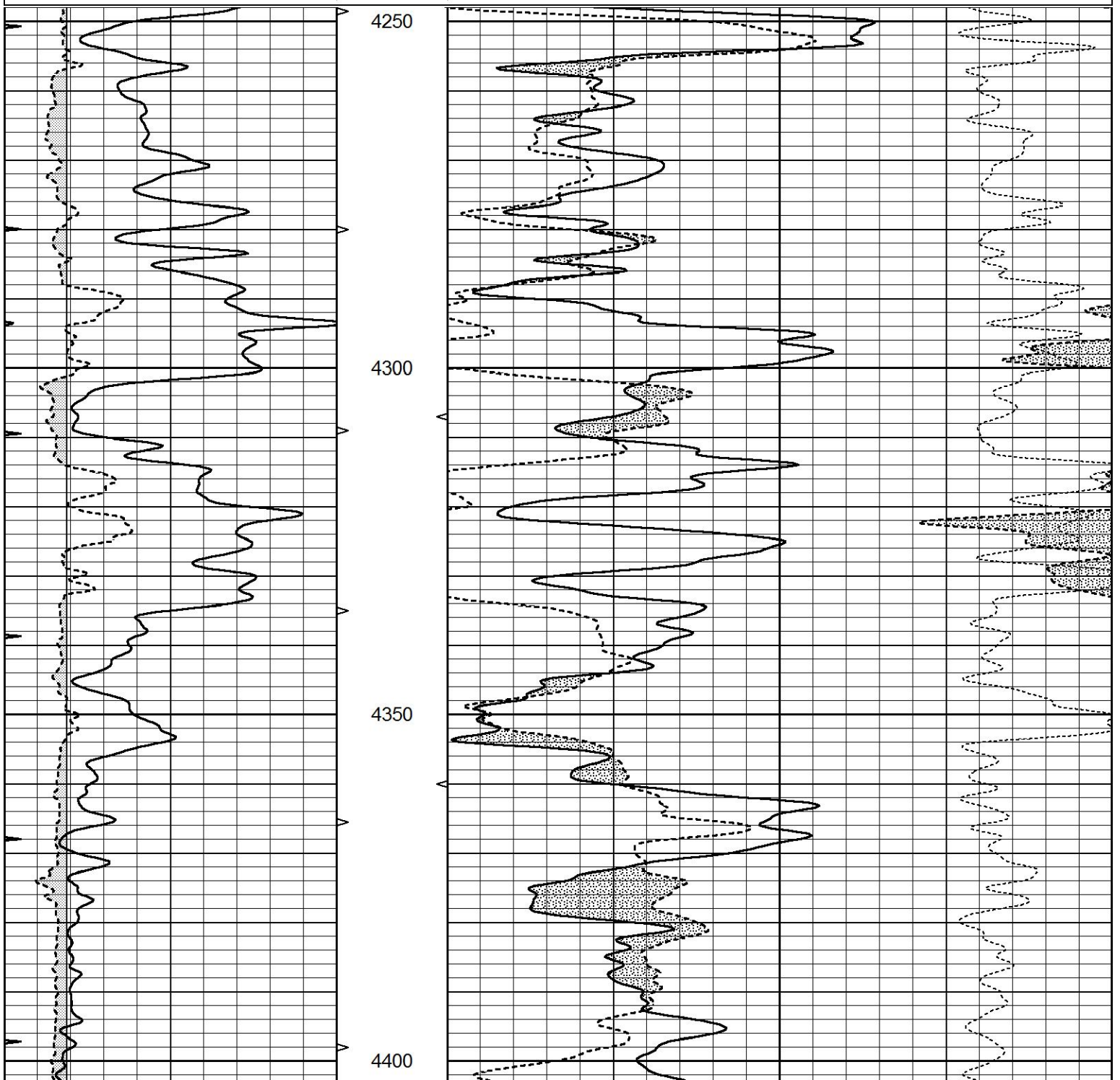


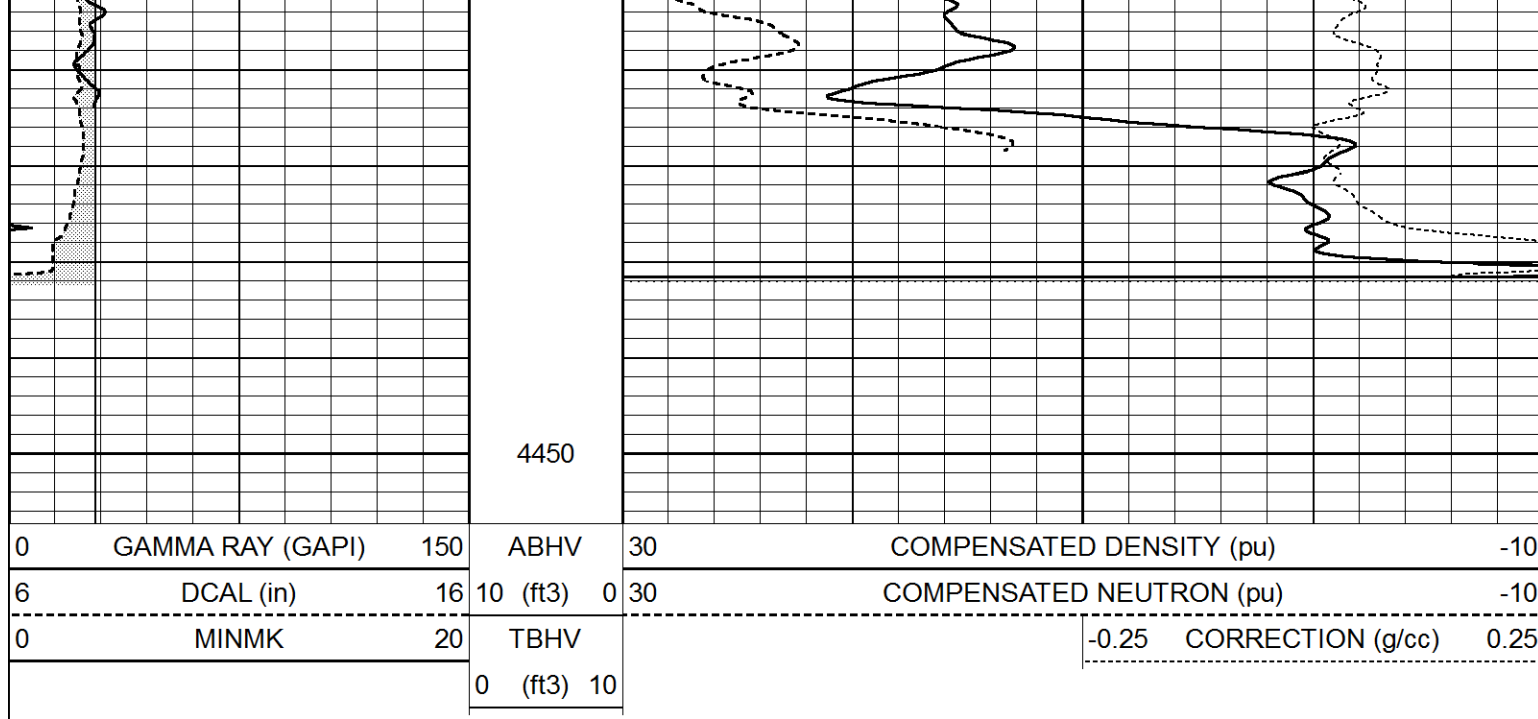


REPEAT SECTION

Database File 5836ddn.db
Dataset Pathname pass2.1R
Presentation Format den_neu
Dataset Creation Tue Nov 23 01:59:45 2021
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			





Calibration Report		
Database File	5836ddn.db	
Dataset Pathname	pass3.1M	
Dataset Creation	Tue Nov 23 03:31:39 2021	

Dual Induction Calibration Report

Serial-Model:	PROBE7-DILG
Surface Cal Performed:	Wed Nov 03 23:37:20 2021
Downhole Cal Performed:	Thu Mar 12 11:45:10 2020
After Survey Verification Performed:	Thu Mar 12 11:45:00 2020

Surface Calibration								
Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	650.000	2.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	680.000	-42.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.011	0.610	V	0.000	400.000	mmho/m	667.135	-7.256
Medium	0.005	0.712	V	0.000	464.000	mmho/m	655.677	-3.102

Downhole Calibration								
	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	14.508	388.384	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	166.367	504.400	mmho/m	1.000	0.000
LL3		7.500	V		1400.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		4000.000	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

LL3	1.000	Ohm-m	1.000	Ohm-m
	0.000	Ohm-m	0.000	Ohm-m
	0.000	mmho-m	4000.000	mmho-m

Litho Density Calibration Report

Serial: 003 Model: PRB

Master Calibration		Performed Fri Mar 05 10:51:07 2021			
	Background	Magnesium	Aluminum	Aluminum+Fe	
Window 1	1570.6	10682.1	3457.0	3096.9	cps
Window 2	1451.7	9432.7	3101.4	2816.5	cps
Window 3	1334.0	7160.6	2532.0	2369.3	cps
Window 4	370.4	373.1	366.4	370.9	cps
Long Space	0.0	7981.0	1649.7	1364.8	cps
Short Space	2.8	3522.0	2211.0	1823.6	cps
Rho		1.7100	2.5900	0.0000	g/cc
Pe		2.0000	2.7500	5.7900	
Rib Angle	: 43.5	Rib Slope	: 0.951	Density/Spine Ratio	: 0.535
Spine Angle	: 73.5	Spine Slope	: 3.386	Spine Intercept	: -18.7

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	

Compensated Neutron Calibration Report

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:	Fri Sep 03 05:25:49 2021		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.2800	GAPI/cps	