



**COMPENSATED  
DENSITY / NEUTRON  
PE LOG**

Company KNIGHTON OIL COMPANY, INC.  
Well BGM #1-2  
Field SMITH NORTHEAST  
County COWLEY  
State KANSAS

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Field SMITH NORTHEAST  
County COWLEY State KANSAS

Location: API #: 15-035-24787-0000  
990' FSL & 330' FWL  
NW - SW - SW  
SEC 2 TWP 31S RGE 3E  
Permanent Datum GROUND LEVEL Elevation 1230  
Log Measured From KELLY BUSHING 9' A.G.L.  
Drilling Measured From KELLY BUSHING  
Other Services  
DILMEL  
SONIC  
Elevation  
K.B. 1239  
D.F. 1237  
G.L. 1230

Date	8/18/23
Run Number	ONE
Depth Driller	3487
Depth Logger	3486
Bottom Logged Interval	3462
Top Log Interval	2000
Casing Driller	13 3/8"@342'
Casing Logger	342
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	8.9/45
pH / Fluid Loss	11.0/9.6
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.900@97F
Rmf @ Meas. Temp	.675@97F
Rmc @ Meas. Temp	1.08@97F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.786@111F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	5.45 P.M.
Maximum Recorded Temperature	111F
Equipment Number	922339
Location	HAYS, KANSAS
Recorded By	JEFF LUEBBERS
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.

15-035-24787-0000 Comments

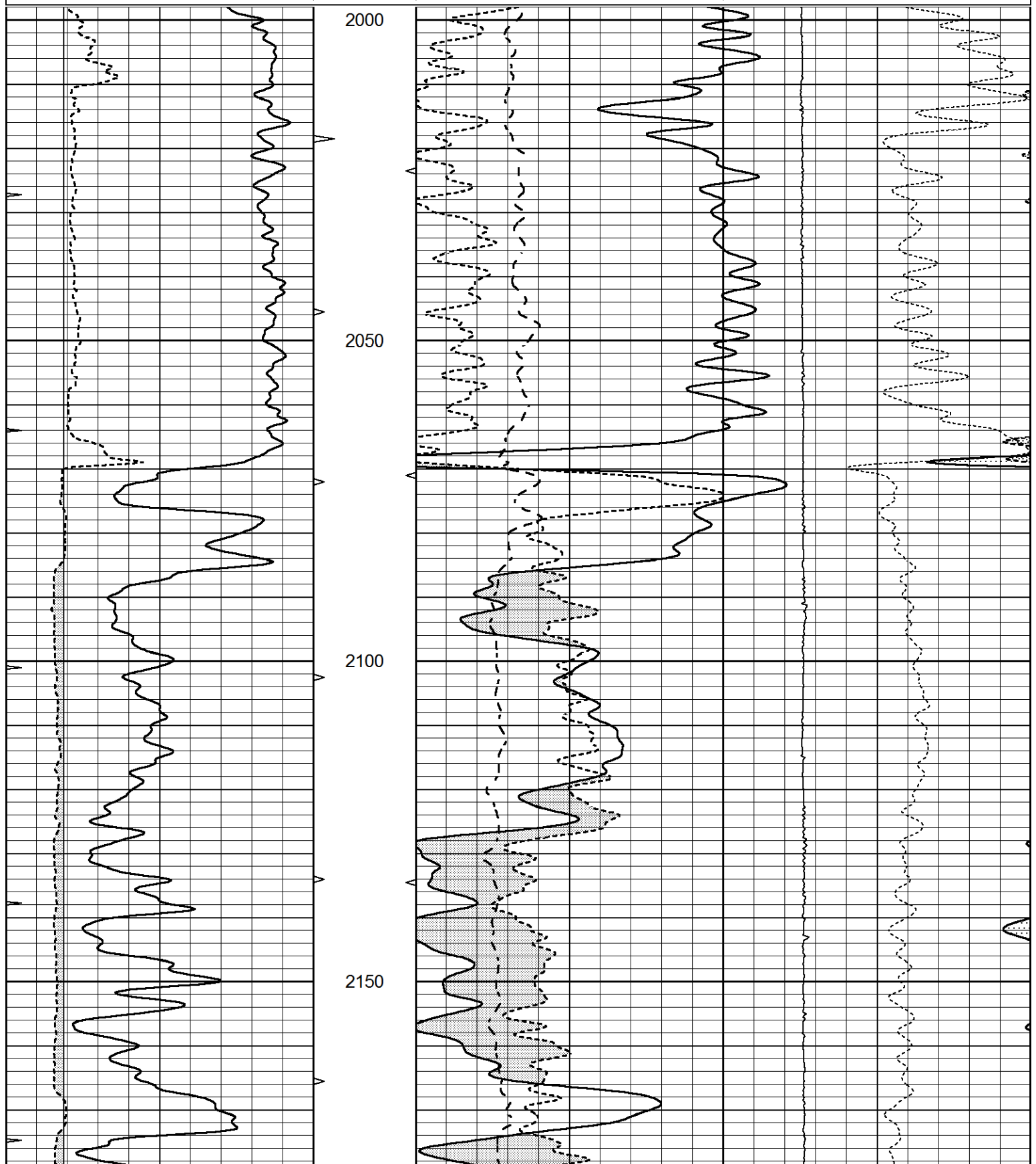
THANK YOU FOR USING ELI WIRELINE HAYS, KANSAS (785) 628-6395  
DIRECTIONS  
UDALL, KS., 2W. ON HWY 15 TO "41ST ST.", 3/4S., E. INTO

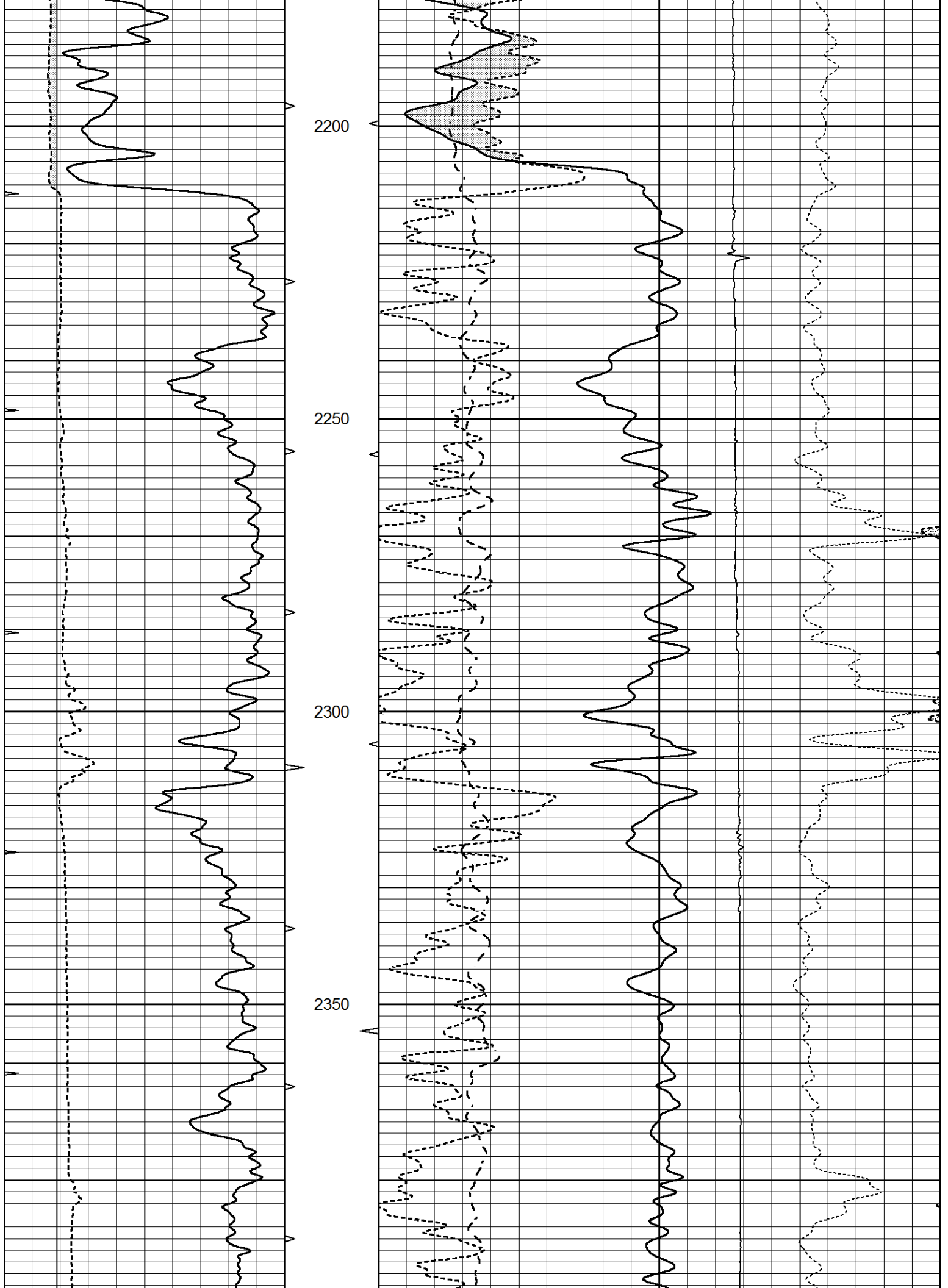


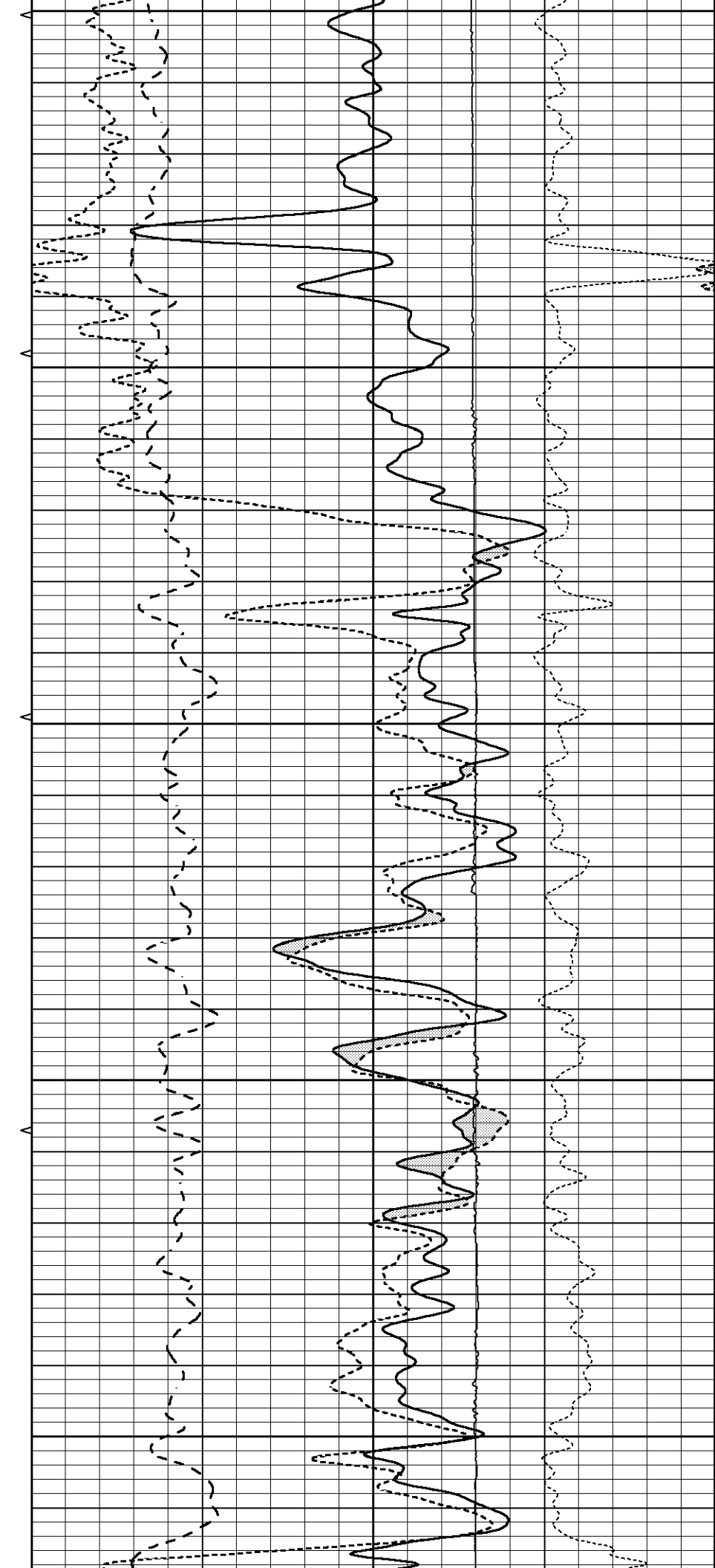
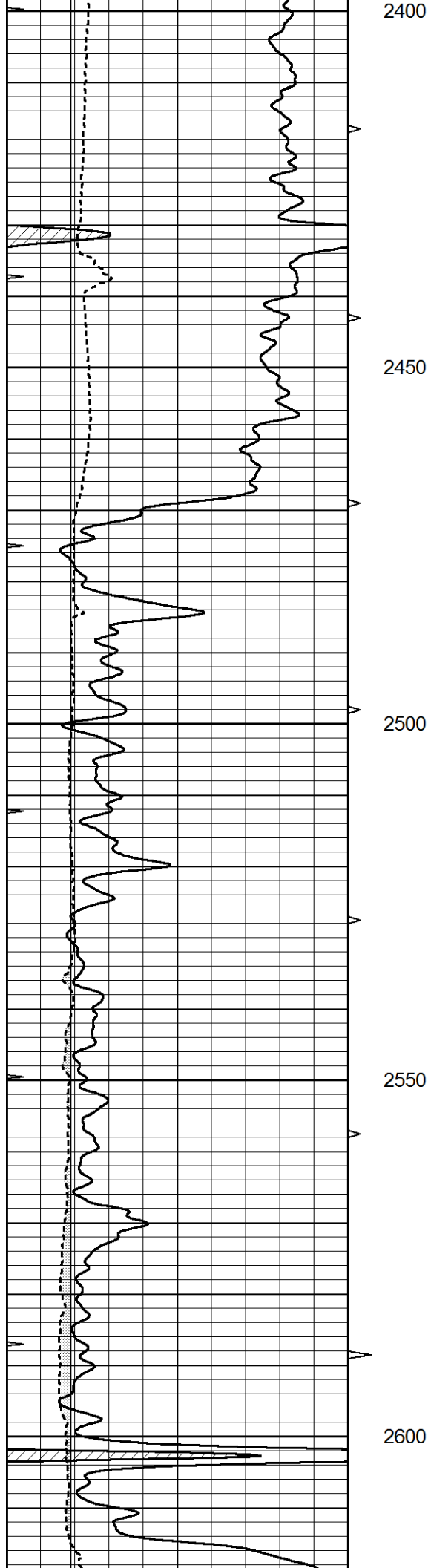
# MAIN SECTION

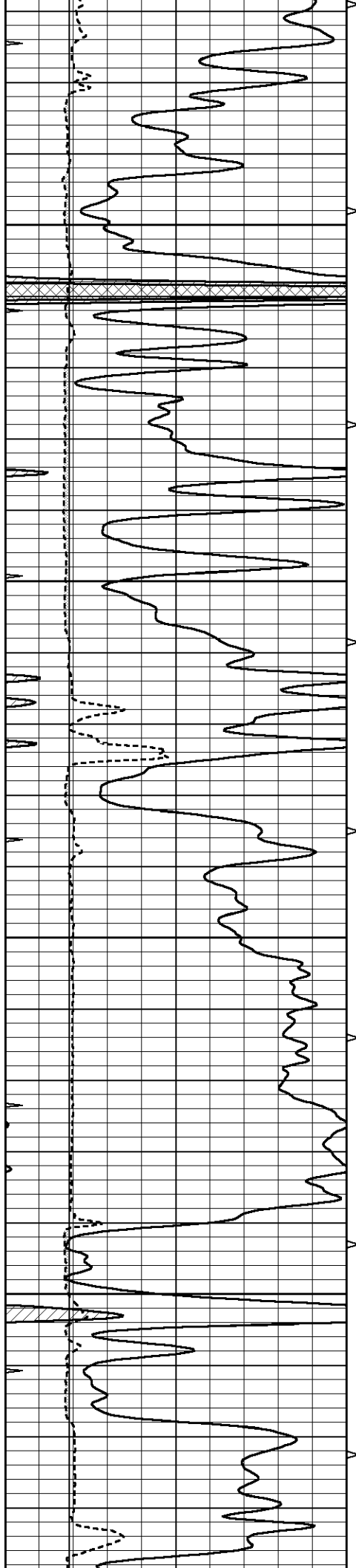
Database File 7321pe.db  
 Dataset Pathname pass3.1M  
 Presentation Format \_ldt\_neu  
 Dataset Creation Fri Aug 18 19:29:08 2023  
 Charted by Depth in Feet scaled 1:240

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		0	LTEN (lb) 5000







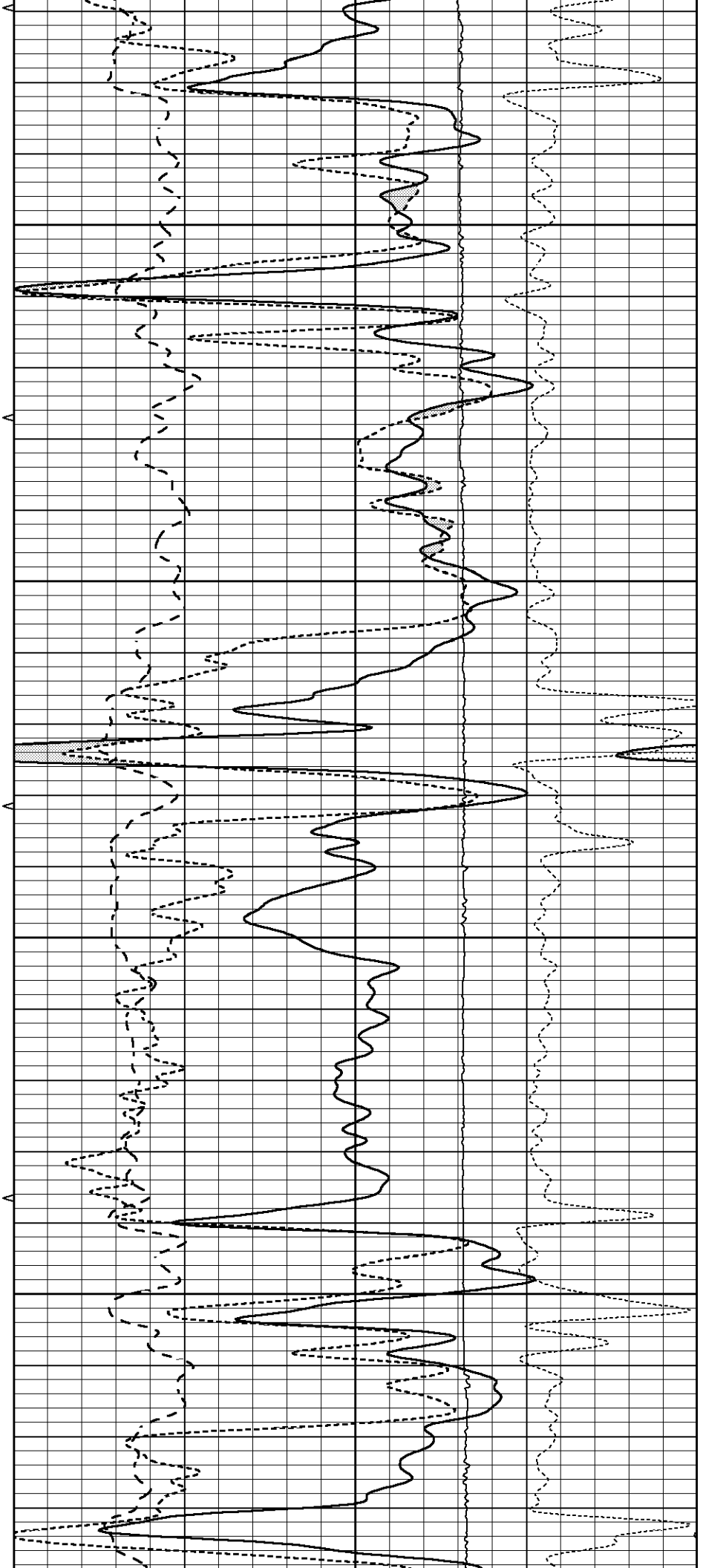


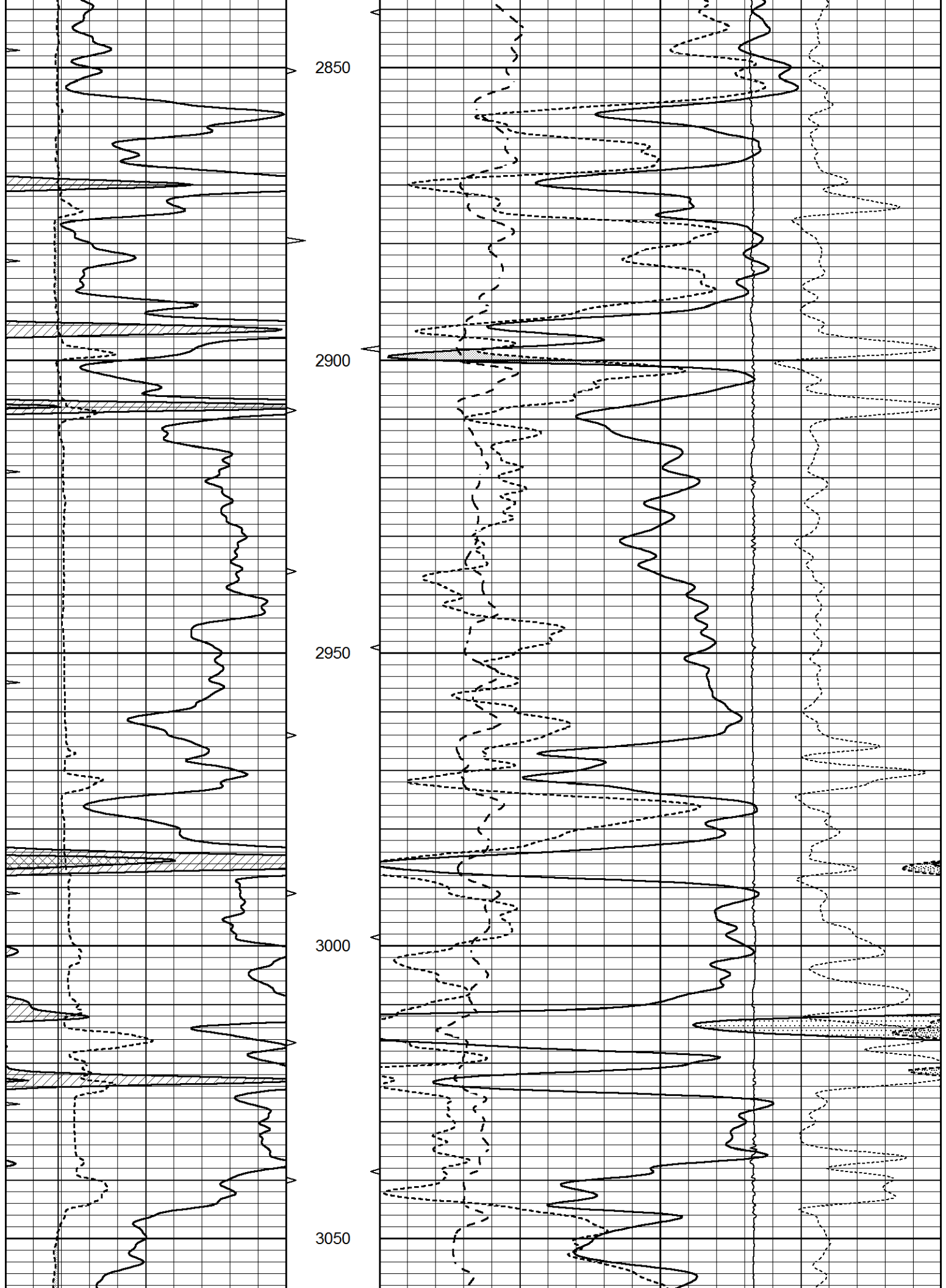
2650

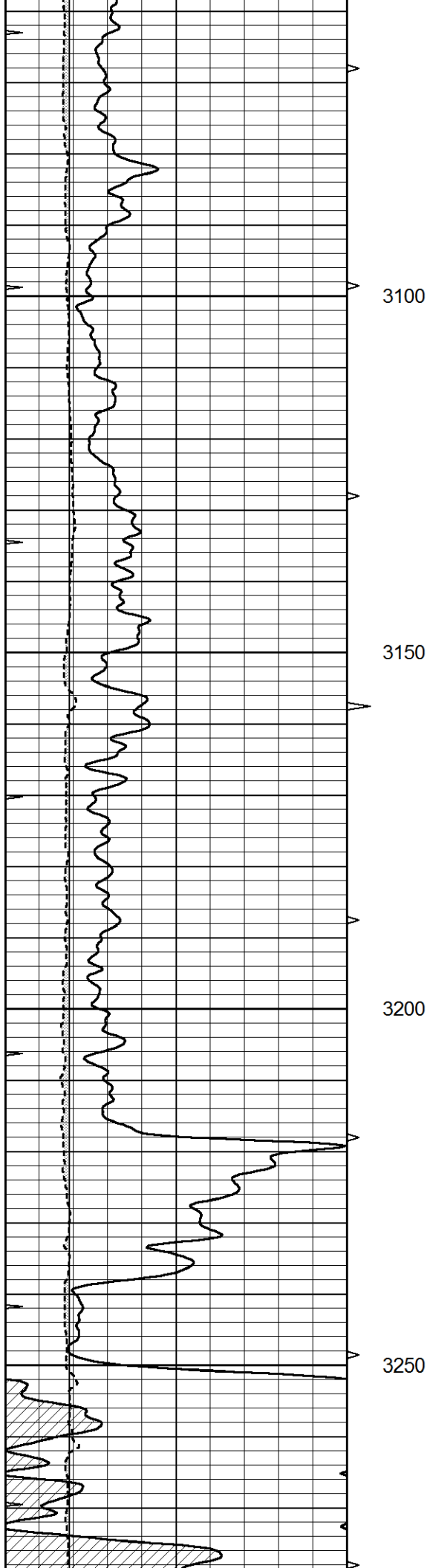
2700

2750

2800





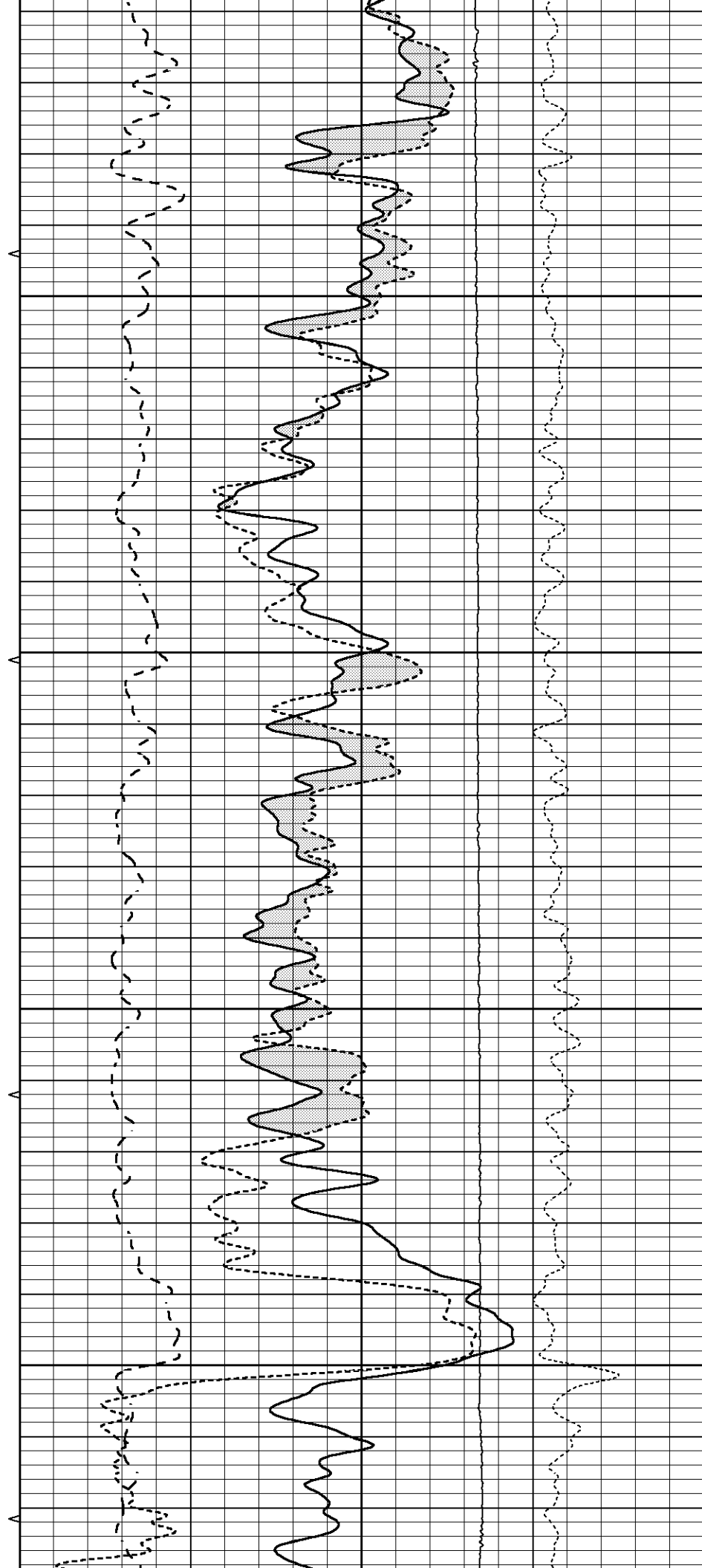


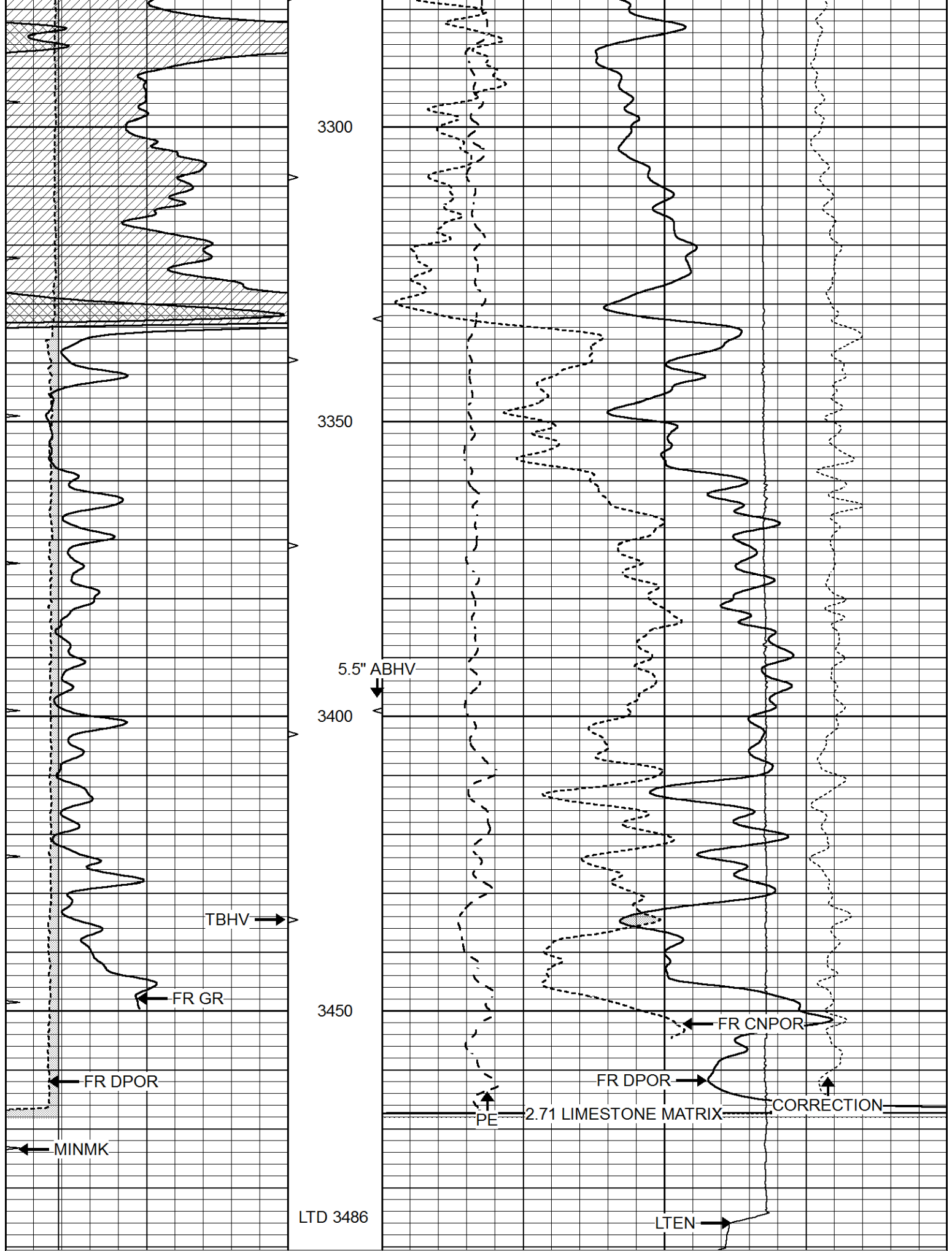
3100

3150

3200

3250





3300

3350

3400

3450

LTD 3486

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CAI IPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10

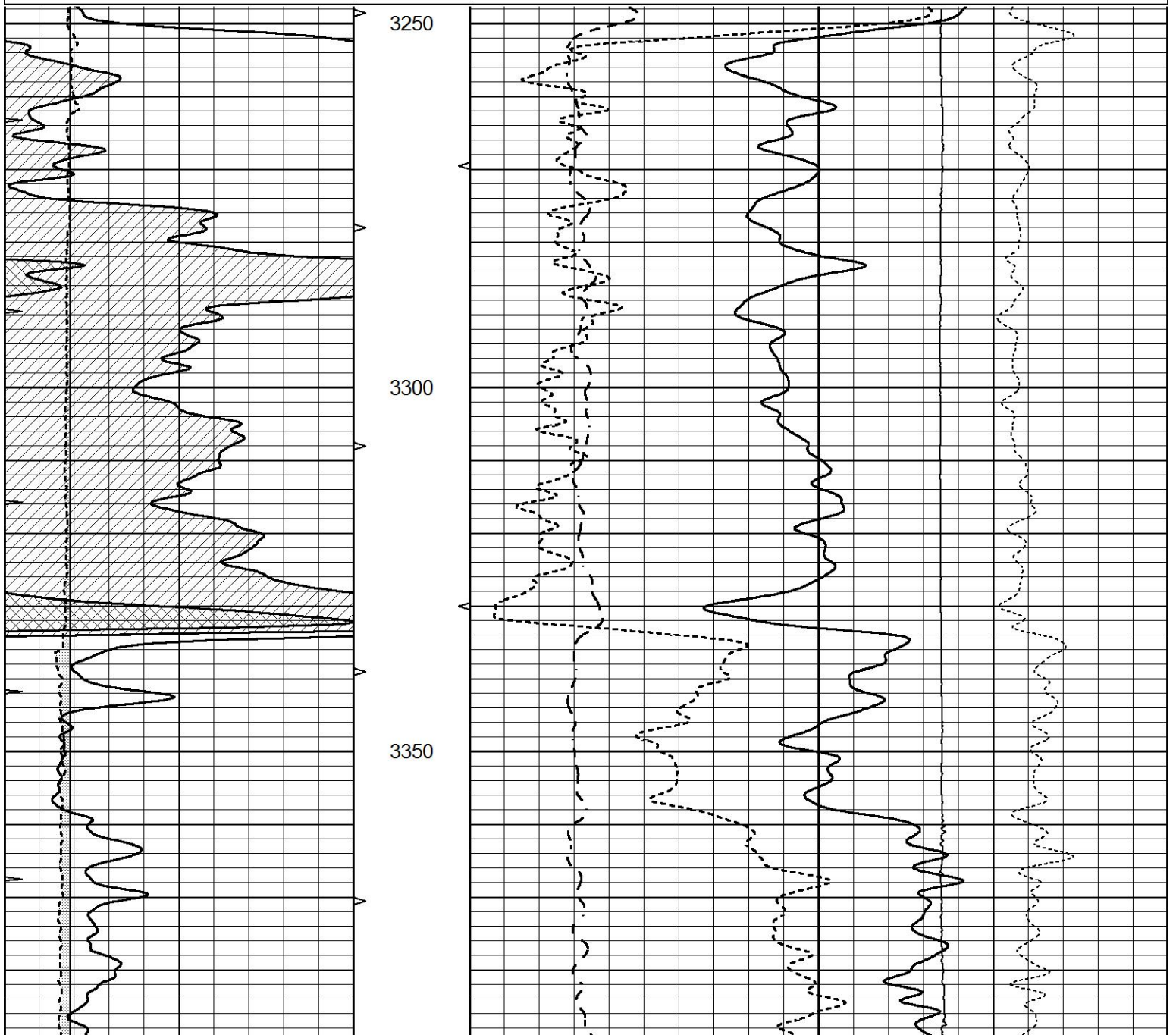
0	MINMK	20	TBHV	0	PE	10	-0.25	CORRECTION (g/cc)	0.25
			0 (ft3)	10			0	LTEN (lb)	5000

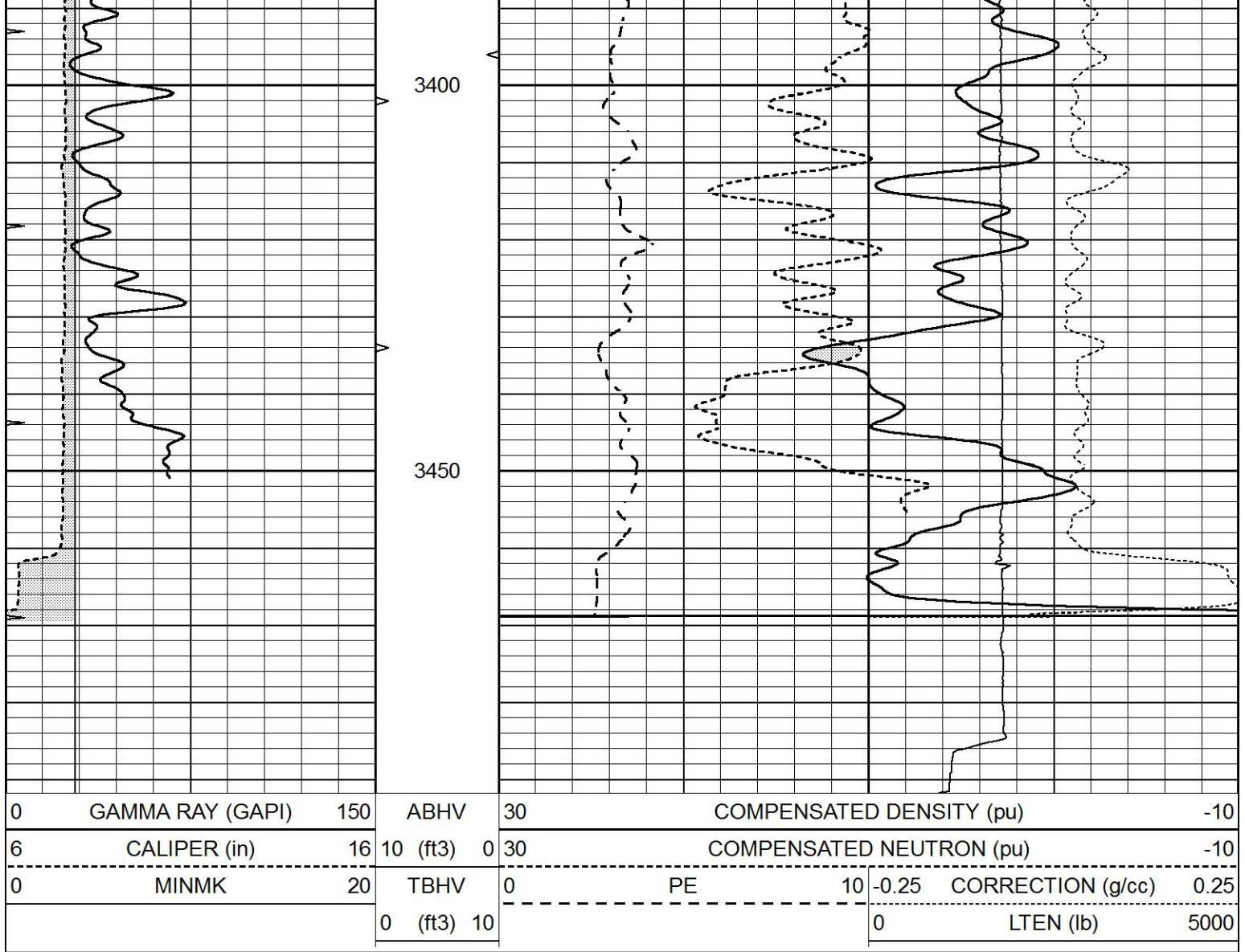


# REPEAT SECTION

Database File 7321pe.db  
 Dataset Pathname pass2.1R  
 Presentation Format \_ldt\_neu  
 Dataset Creation Fri Aug 18 19:33:14 2023  
 Charted by Depth in Feet scaled 1:240

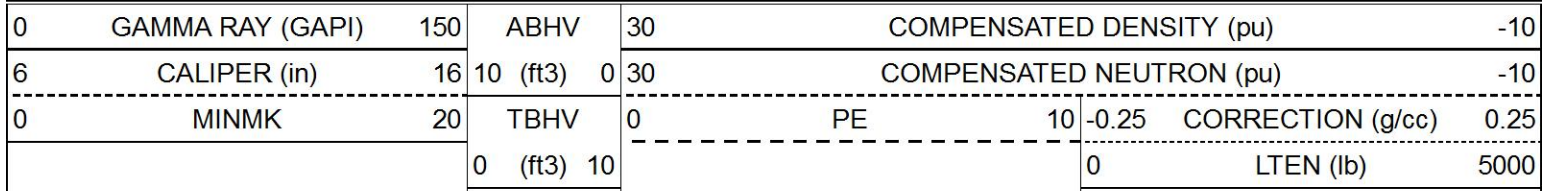
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10			
6	CALIPER (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)	-10		
0	MINMK	20	TBHV	0	PE	10	-0.25	CORRECTION (g/cc)	0.25
			0 (ft3)	10			0	LTEN (lb)	5000

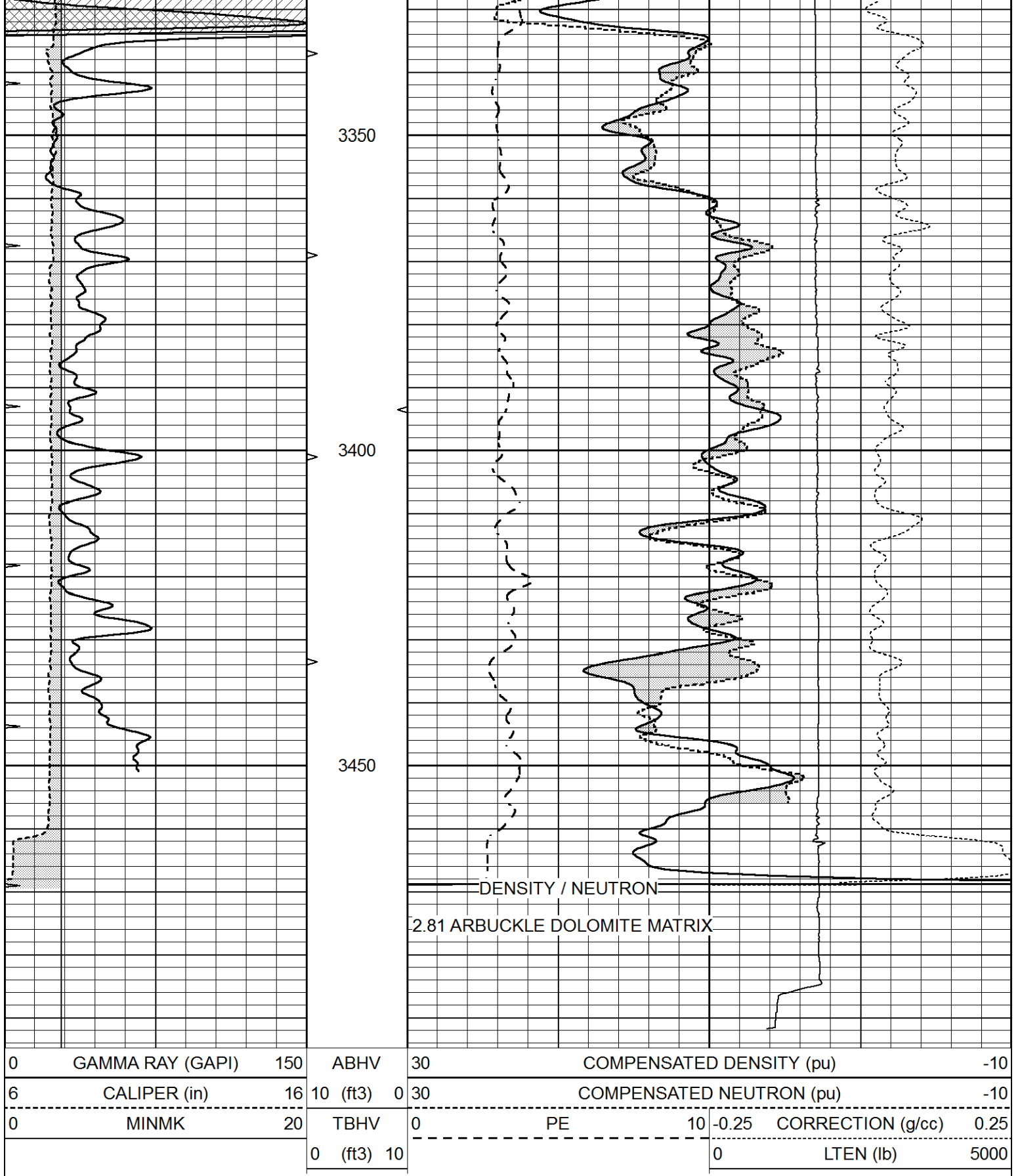




# DOLOMITE MATRIX

Database File 7321pe.db  
 Dataset Pathname pass2.1D  
 Presentation Format \_ldt\_neu  
 Dataset Creation Fri Aug 18 19:35:24 2023  
 Charted by Depth in Feet scaled 1:240





Calibration Report

Database File      7321pe.db  
 Dataset Pathname    pass3.1M  
 Dataset Creation    Fri Aug 18 19:29:08 2023

Dual Induction Calibration Report

Serial-Model:

DIL7-GEAR

Surface Cal Performed:  
 Downhole Cal Performed:  
 After Survey Verification Performed:

Fri Aug 18 16:47:08 2023  
 Tue Apr 17 15:38:44 2007  
 Tue Apr 17 15:38:40 2007

Surface Calibration

		Readings			References			Results	
Loop:	Air	Loop	V	Air	Loop	mmho/m	m	b	
Deep	0.019	0.660	V	0.000	400.000	mmho/m	660.000	16.000	
Medium	-0.006	0.655	V	0.000	462.500	mmho/m	720.000	-26.000	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.010	0.665	V	0.000	400.000	mmho/m	610.018	-5.925	
Medium	0.009	0.655	V	0.000	400.000	mmho/m	618.983	-5.564	

Downhole Calibration

		Readings			References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	3.372	400.834	mmho/m	0.556	401.206	mmho/m	1.008	-2.843	
Medium	13.557	467.446	mmho/m	9.465	462.114	mmho/m	0.997	-4.055	
Shallow	2.521	0.019	V	500.000	2.000	Ohm-m	225.000	2.000	

After Survey Verification

		Readings			Targets			Results	
Internal:	Zero	Cal		Zero	Cal		m'	b'	
Deep	0.000	0.000	mmho/m	3.372	400.834	mmho/m	1.008	-2.843	
Medium	0.000	0.000	mmho/m	13.557	467.446	mmho/m	0.997	-4.055	
Shallow	2.500	0.000	Ohm-m	500.000	2.000	Ohm-m	225.000	0.000	

Litho Density Calibration Report  
 Serial: 004 Model: PRB

Master Calibration

Performed Tue Aug 02 11:29:35 2022

	Background	Magnesium	Aluminum	Aluminum+Fe	
Window 1	1154.2	10019.5	3137.9	2795.6	cps
Window 2	1054.4	8597.6	2733.4	2469.5	cps
Window 3	902.3	5241.4	1832.1	1719.3	cps
Window 4	251.9	261.1	255.8	252.9	cps
Long Space	0.0	7543.2	1679.0	1415.0	cps
Short Space	4.4	2049.3	1321.7	1116.8	cps
Rho		1.7100	2.5900	0.0000	g/cc
Pe		2.0000	2.7500	5.7900	
Rib Angle	: 43.7	Rib Slope	: 0.957	Density/Spine Ratio	: 0.562
Spine Angle	: 73.7	Spine Slope	: 3.426	Spine Intercept	: -17.2

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 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:	Mon Aug 14 04:12:15 2023
Calibrator Value:	1.0 GAPI
Background Reading:	0.0 cps
Calibrator Reading:	1.0 cps
Sensitivity:	0.3000 GAPI/cps