



COMPENSATED DENSITY / NEUTRON LOG

Company SHELBY RESOURCES, LLC.

Well M - B UNIT #1-26

Field WILDCAT

County PAWNEE State KANSAS

Location: API # : 15-145-21860-0000

2630' FNL & 1950' FEL
SW - SE - SW - NE

SEC 26 TWP 21S RGE 17W

Permanent Datum GROUND LEVEL Elevation 2068
Log Measured From KELLY BUSHING 11" A.G.L.
Drilling Measured From KELLY BUSHING

Other Services
DIL/MEL
SONIC

Elevation

K.B. 2079
D.F. 2077
G.L. 2068

Date 8/2/20

Run Number ONE

Depth Driller 4050

Depth Logger 4051

Bottom Logged Interval 4027

Top Log Interval 1900

Casing Driller 8 5/8" @ 1087'

Casing Logger 1087

Bit Size 7 7/8"

Type Fluid in Hole CHEMICAL MUD

Density / Viscosity 9.5/44

pH / Fluid Loss 10.0/12.0

Source of Sample FLOWLINE

Rm @ Meas. Temp .530 @ 89F

Rmf @ Meas. Temp .398 @ 89F

Rmc @ Meas. Temp .636 @ 89F

Source of Rmf / Rmc MEASUREMENT

Rm @ BHT .403 @ 117F

Time Circulation Stopped 2 HOURS

Time Logger on Bottom 5:00 A.M.

Maximum Recorded Temperature 117F

Equipment Number 922339

Location HAYS, KANSAS

Recorded By JEFF LUEBBERS

Witnessed By JEREMY SCHWARTZ

<<< Fold Here >>>

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

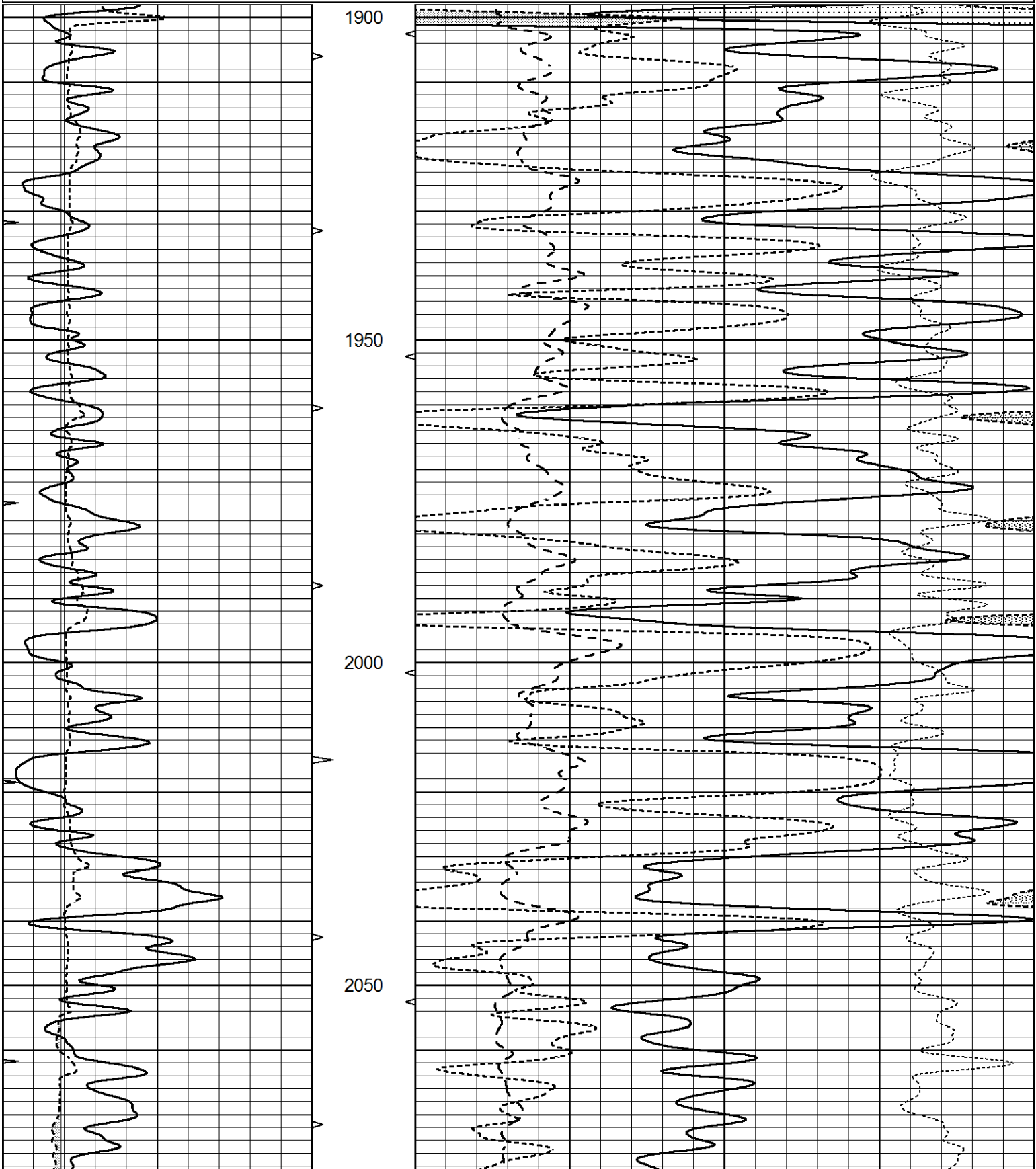
THANK YOU FOR USING E.L.I. WIRELINE SERVICES HAYS, KANSAS (785)628-6395
DIRECTIONS
LARNED, KS., 2W. ON HWY 156 TO "RD. 140", 1/2N., W. INTO

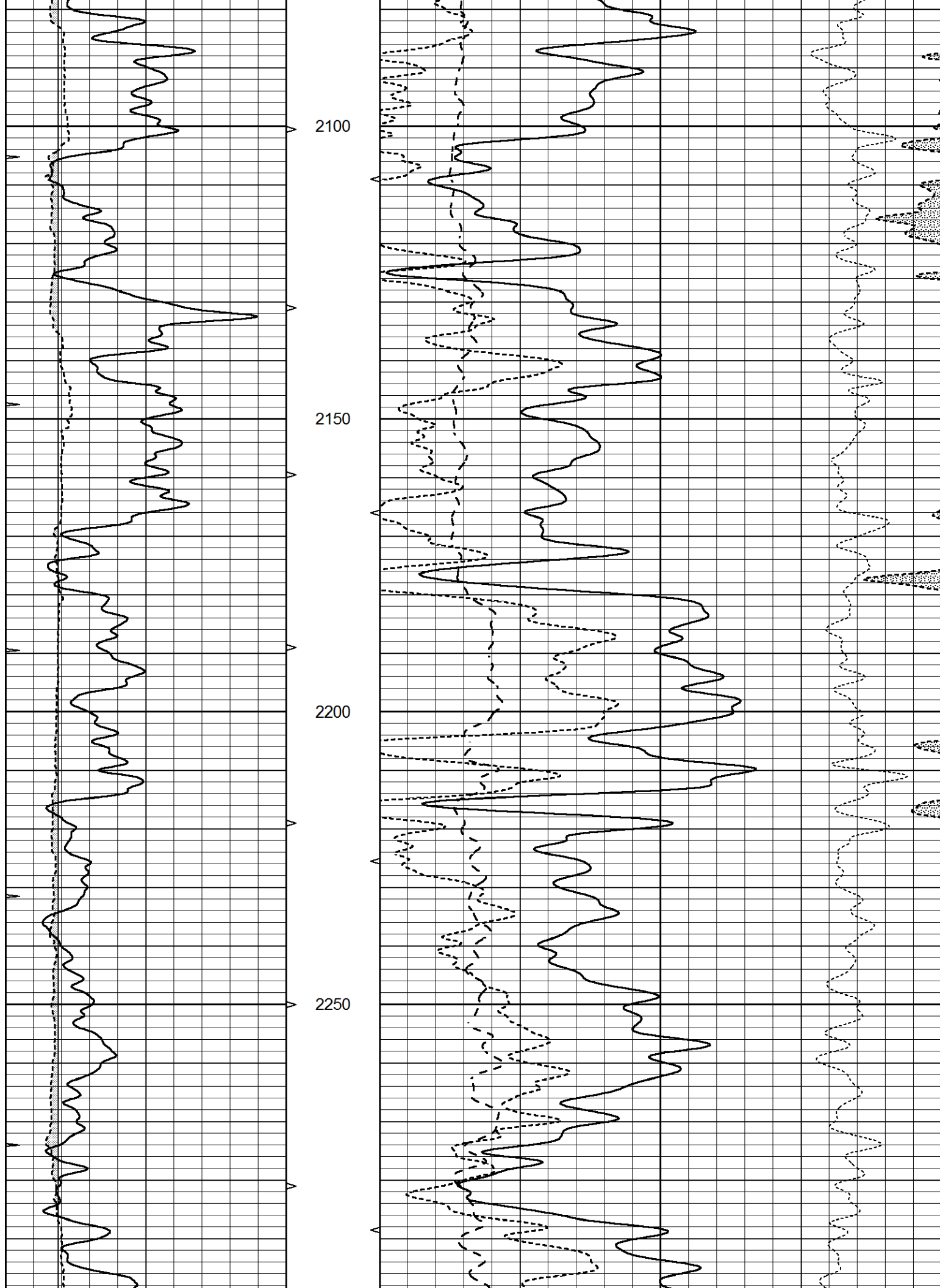


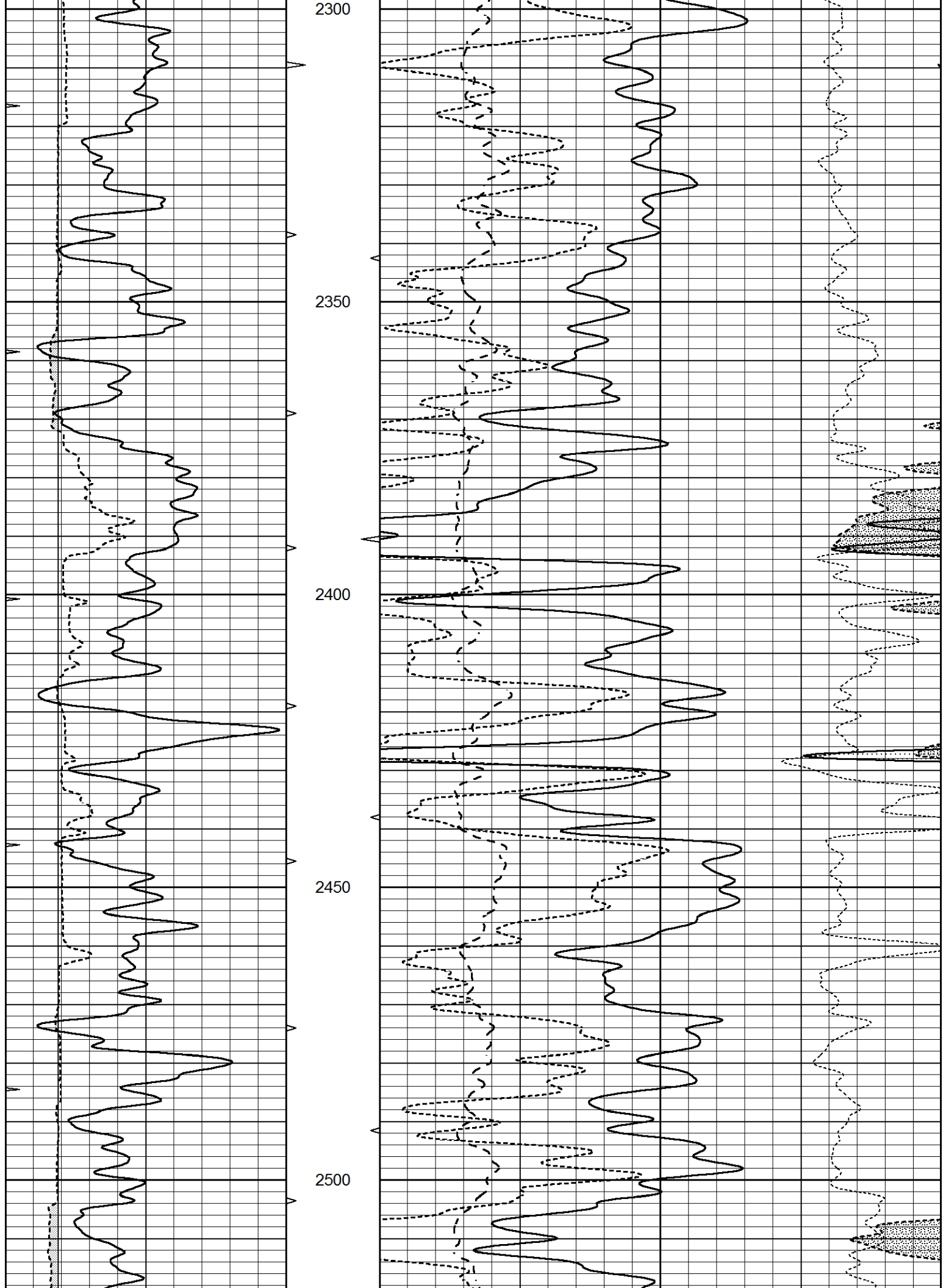
MAIN SECTION

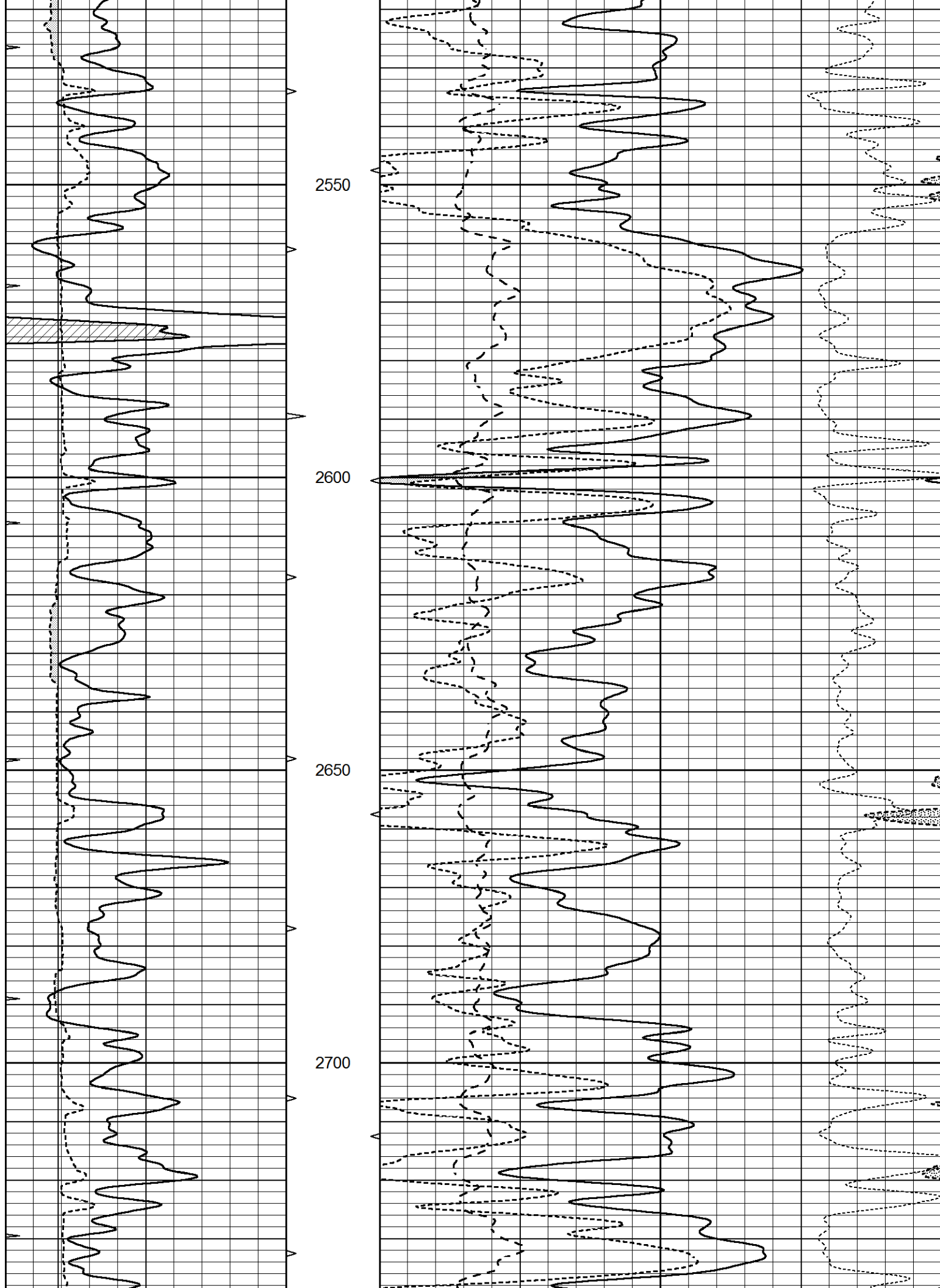
Database File	4804ddn.db
Dataset Pathname	pass5.6M
Presentation Format	ldt_neu
Dataset Creation	Sun Aug 02 07:30:34 2020
Charted by	Depth in Feet scaled 1:240

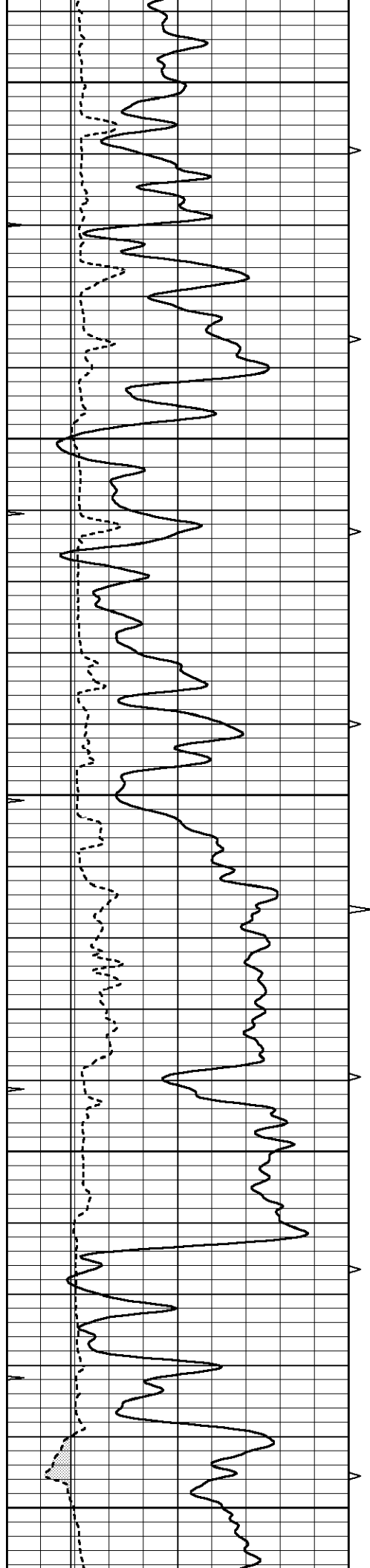
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)				-10	
6	CALIPER (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)				-10
0	MINMK	20	TBHV	0	PE	10	-0.25	CORRECTION (g/cc)	0.25	
			0 (ft3)	10						











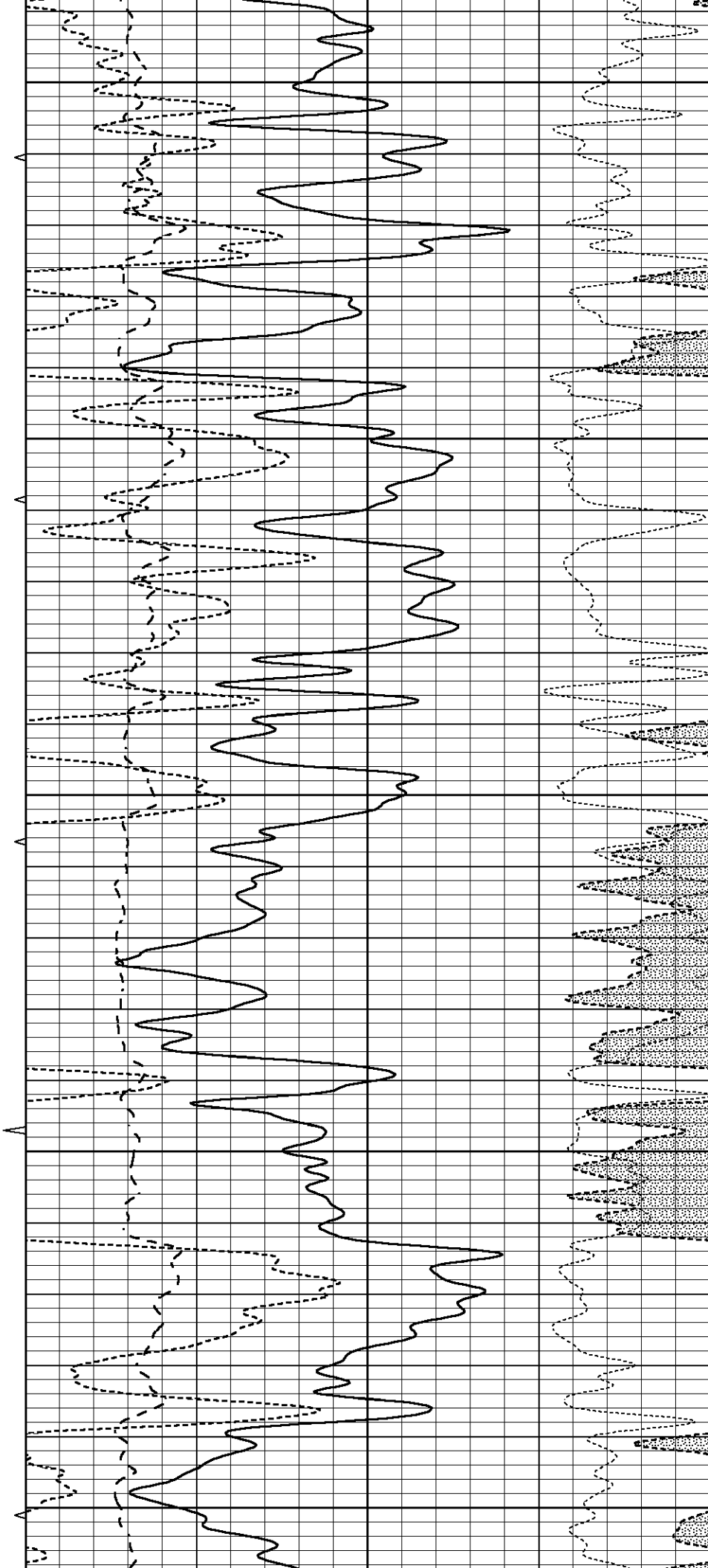
2750

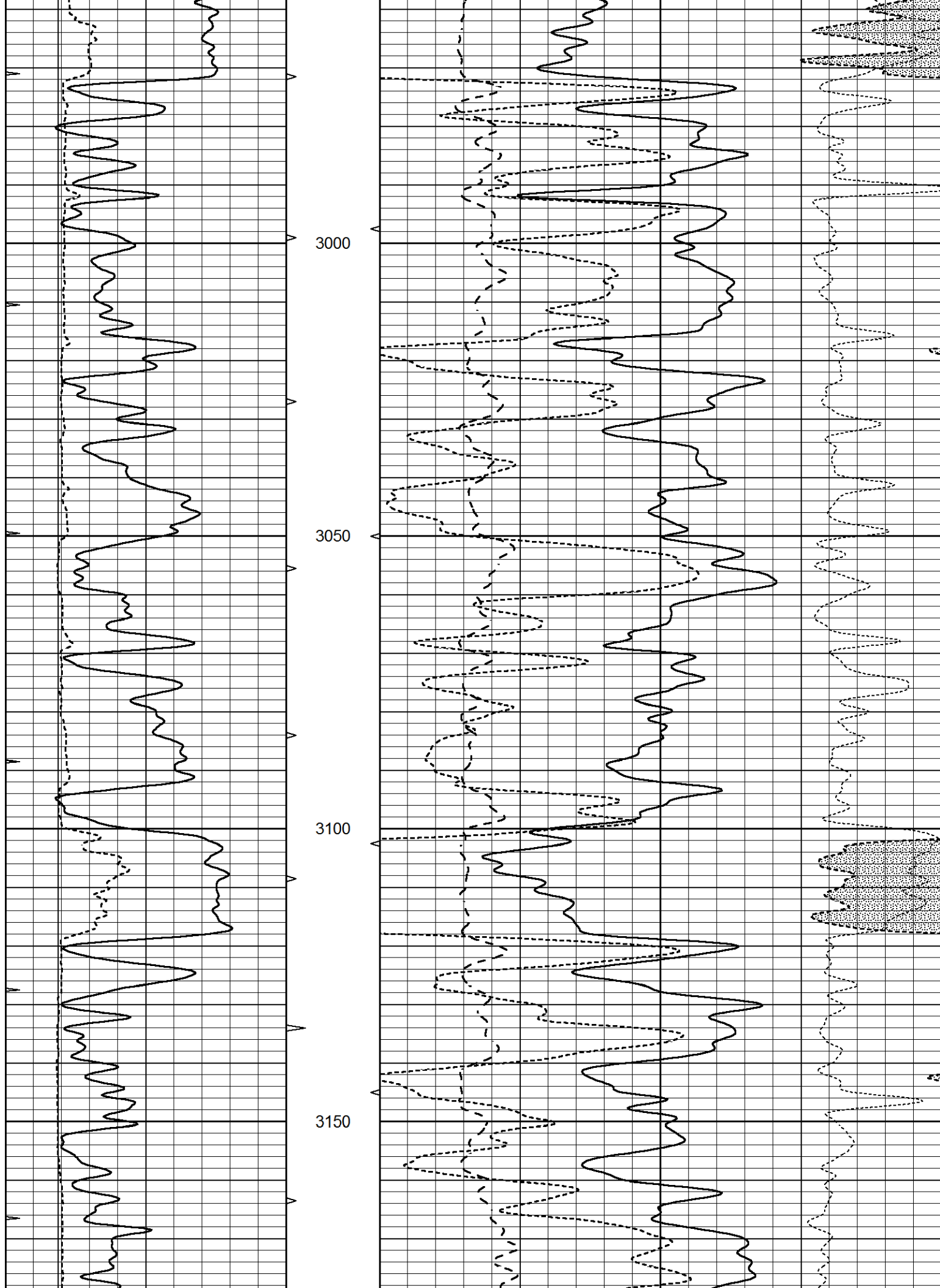
2800

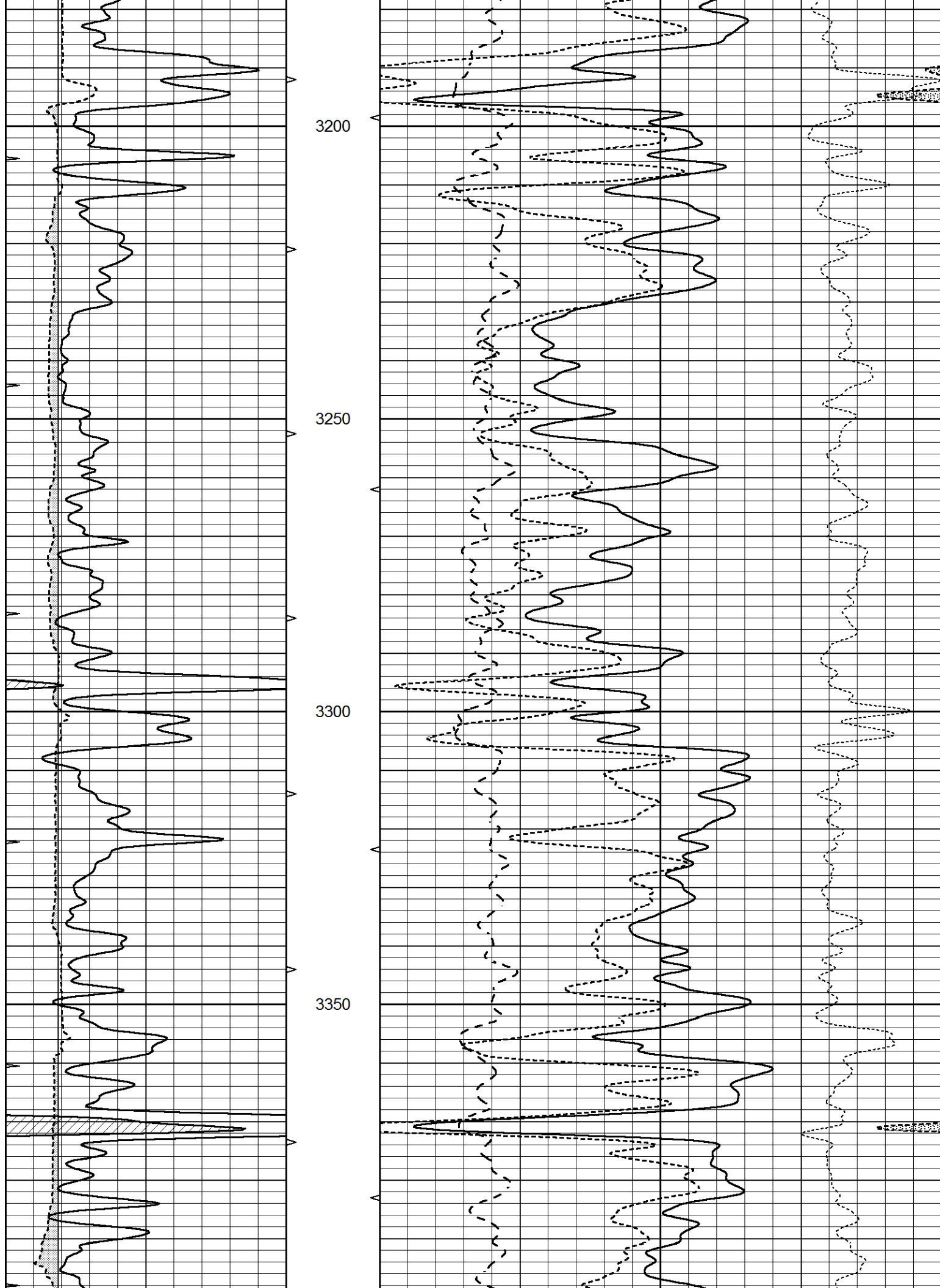
2850

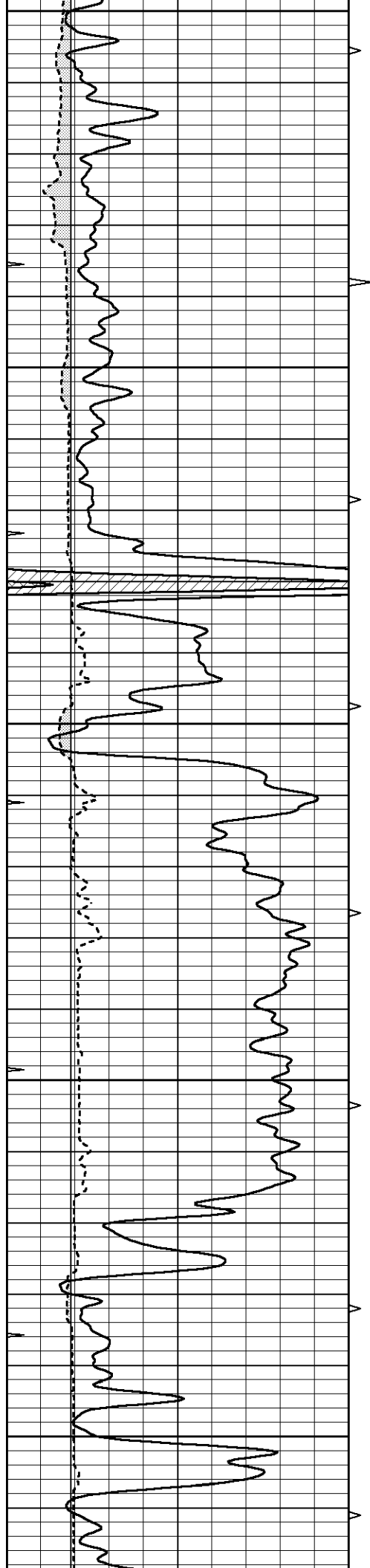
2900

2950









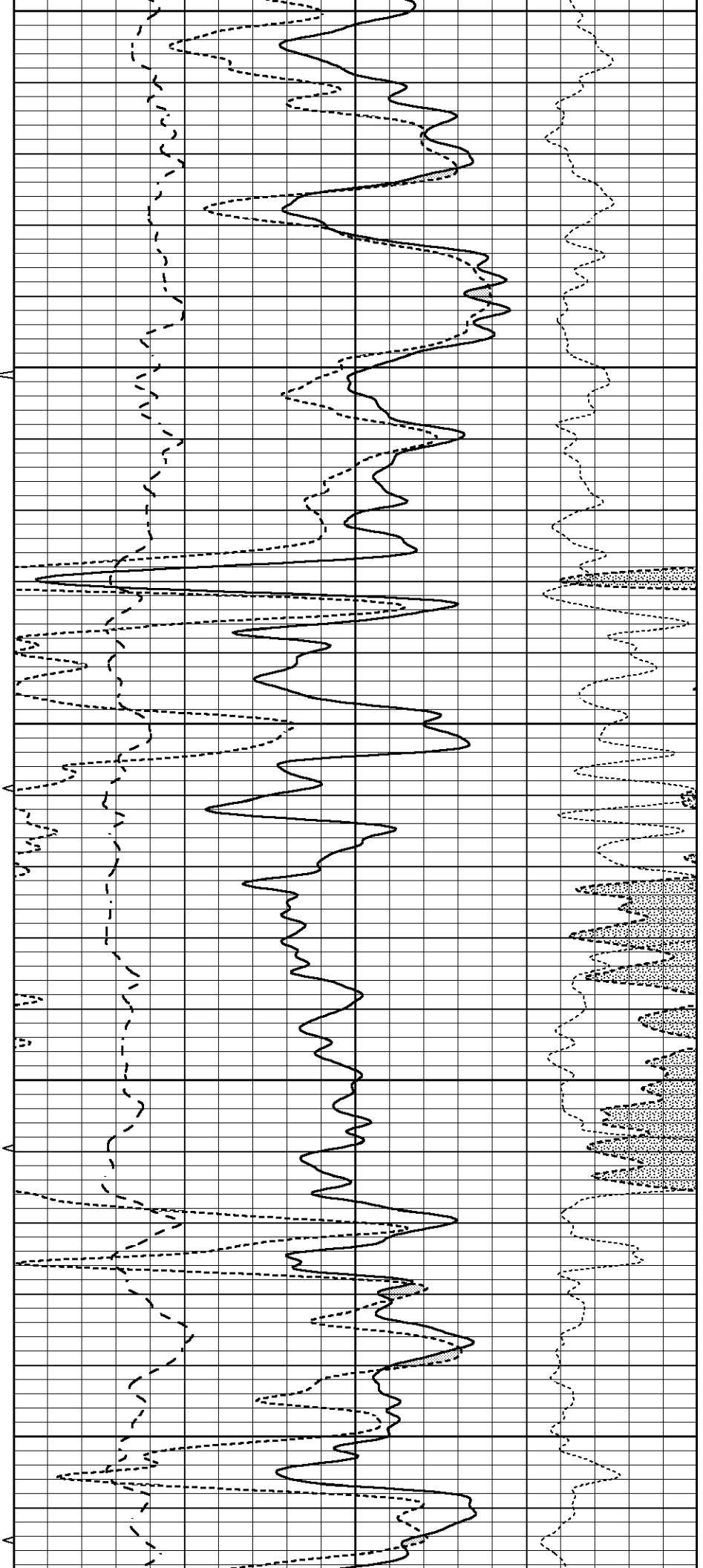
3400

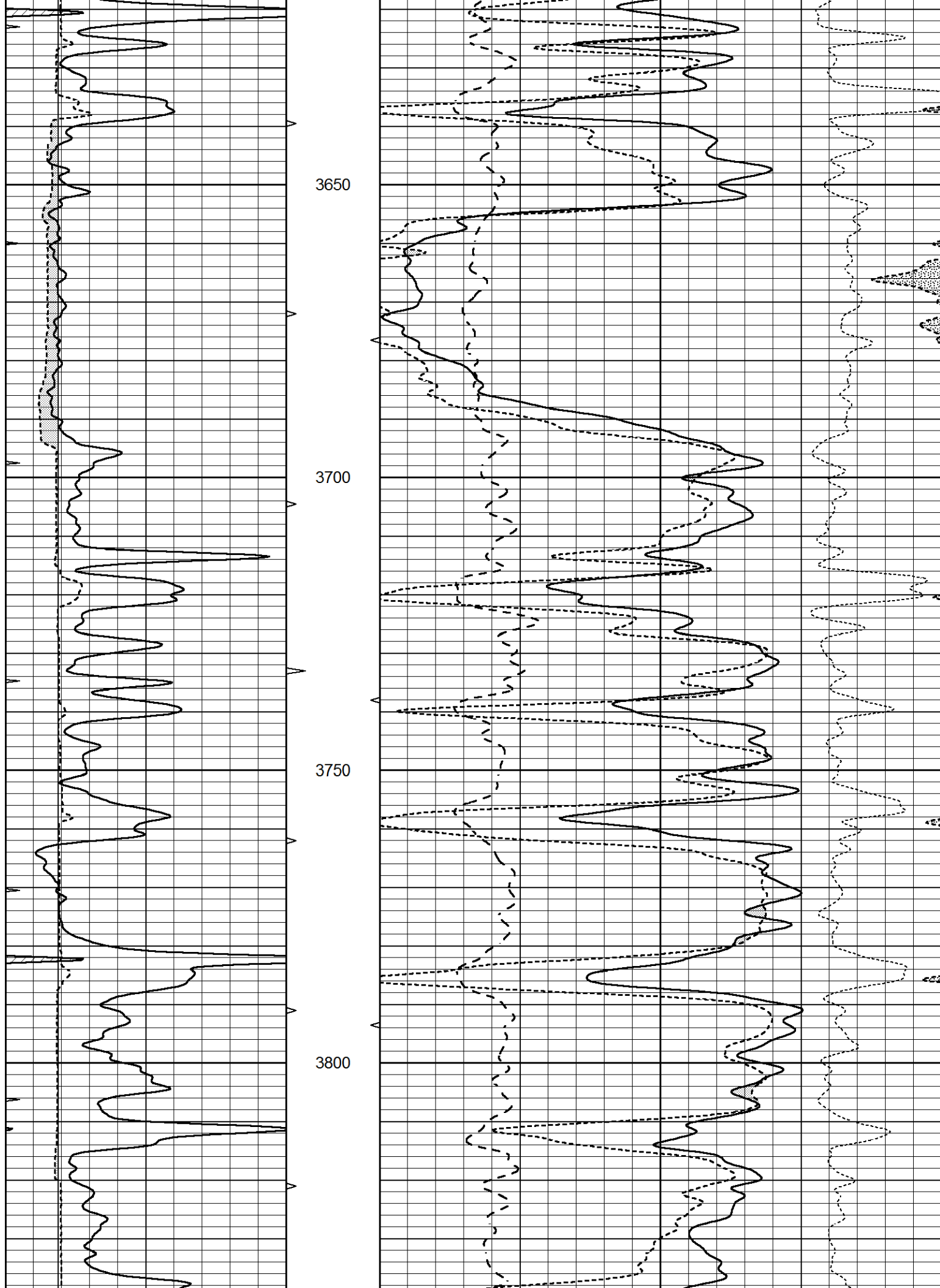
3450

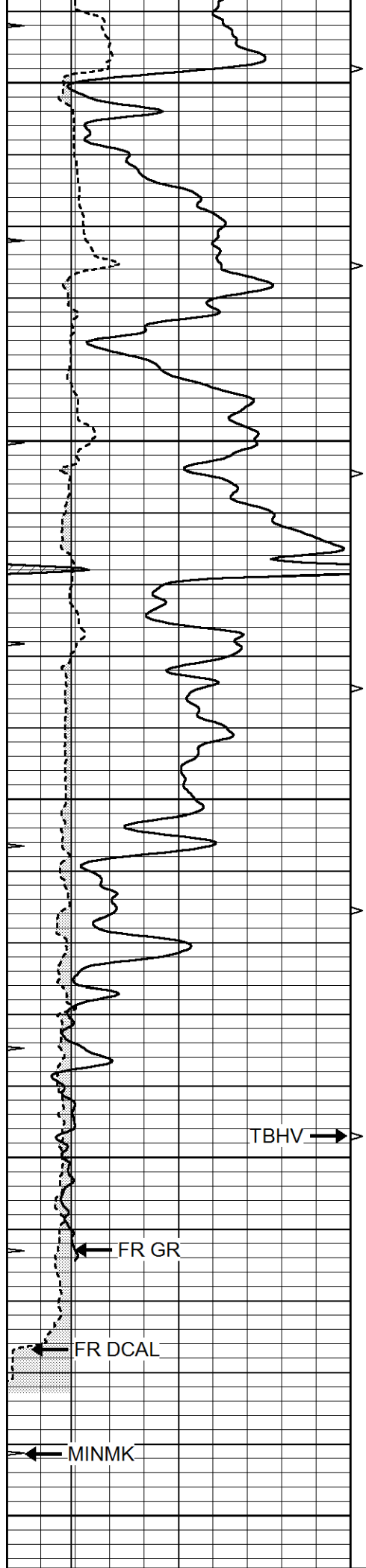
3500

3550

3600







3850

3900

3950

4000

4050

5.5" ABHV

FR CNPOR

PE 2.71 LIMESTONE MATRIX FR DPOR

CORRECTION

LTD 4051

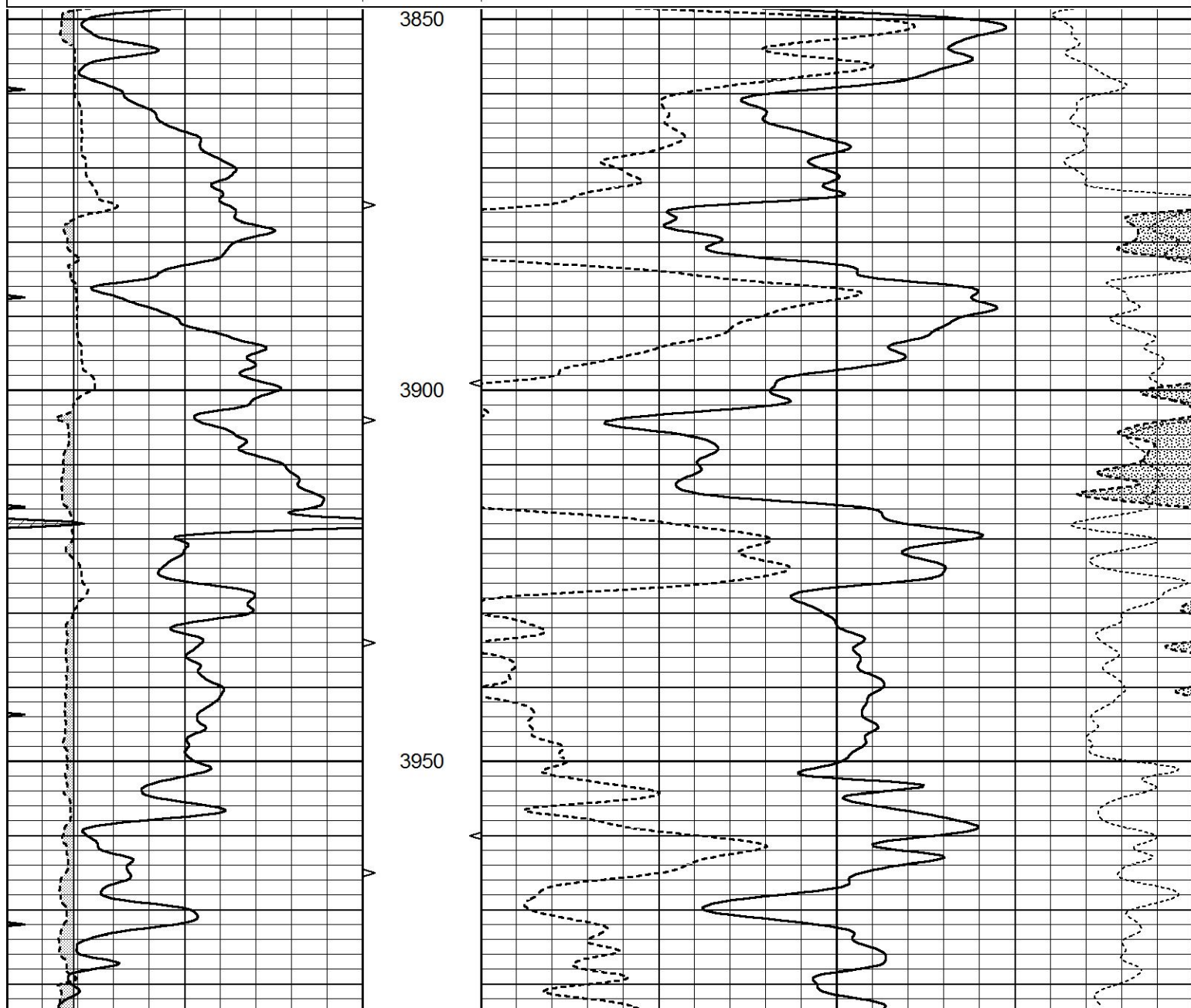
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3) 0	30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV	0	PE	10 -0.25 CORRECTION (g/cc) 0.25
			0 (ft3) 10			

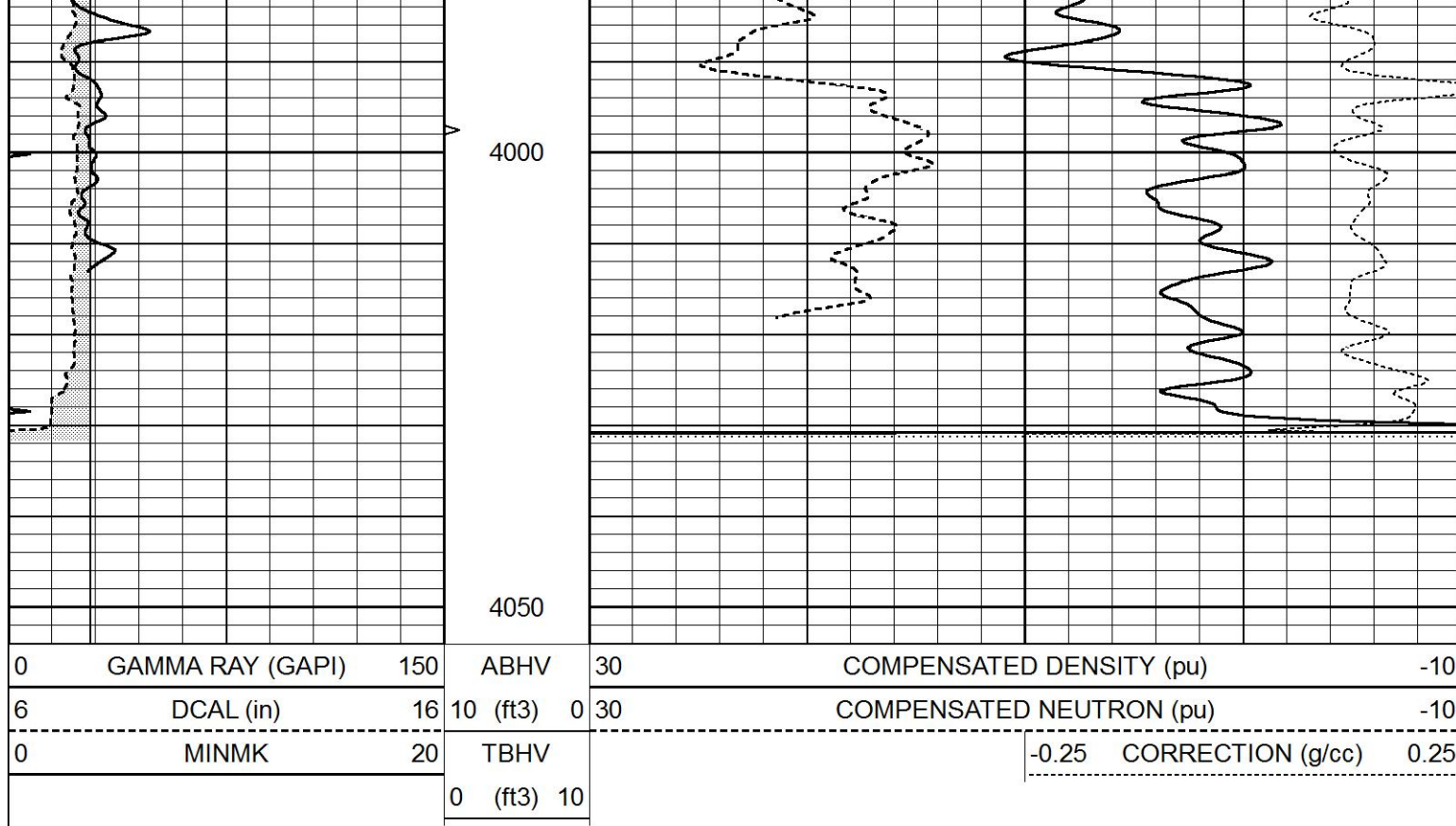


REPEAT SECTION

Database File 4804ddn.db
 Dataset Pathname pass4.2R
 Presentation Format den_neu
 Dataset Creation Sun Aug 02 07:02:48 2020
 Charted by Depth in Feet scaled 1:240

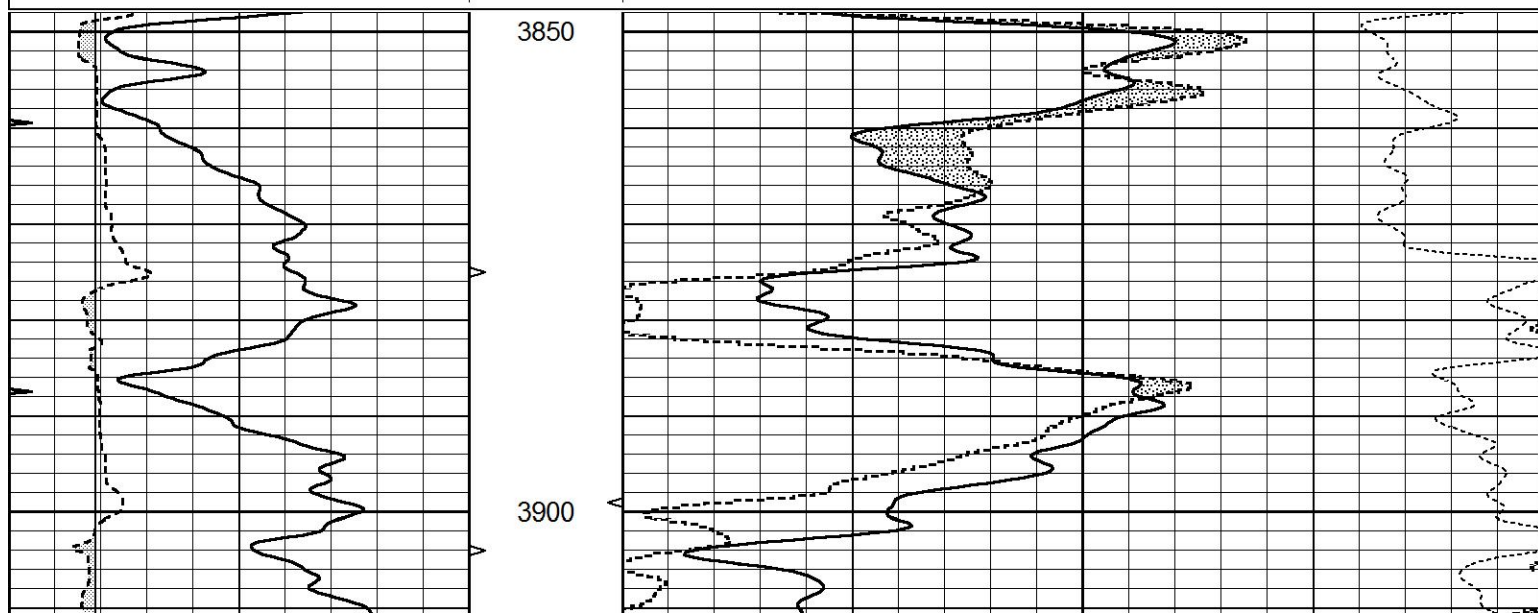
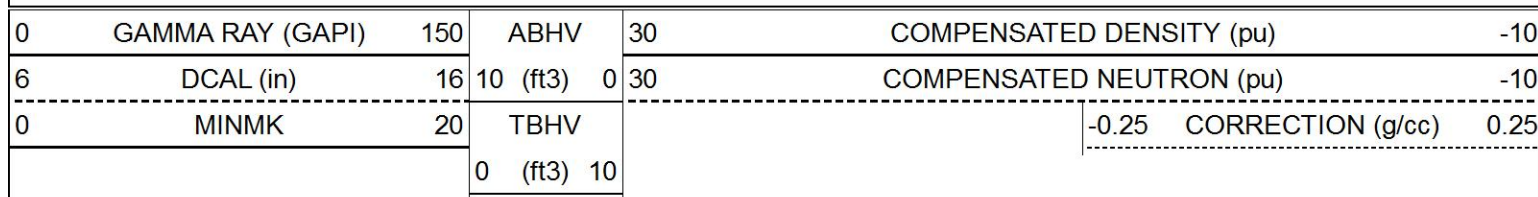
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	DCAL (in)	16	10 (ft3) 0	30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc) 0.25	
			0 (ft3) 10			

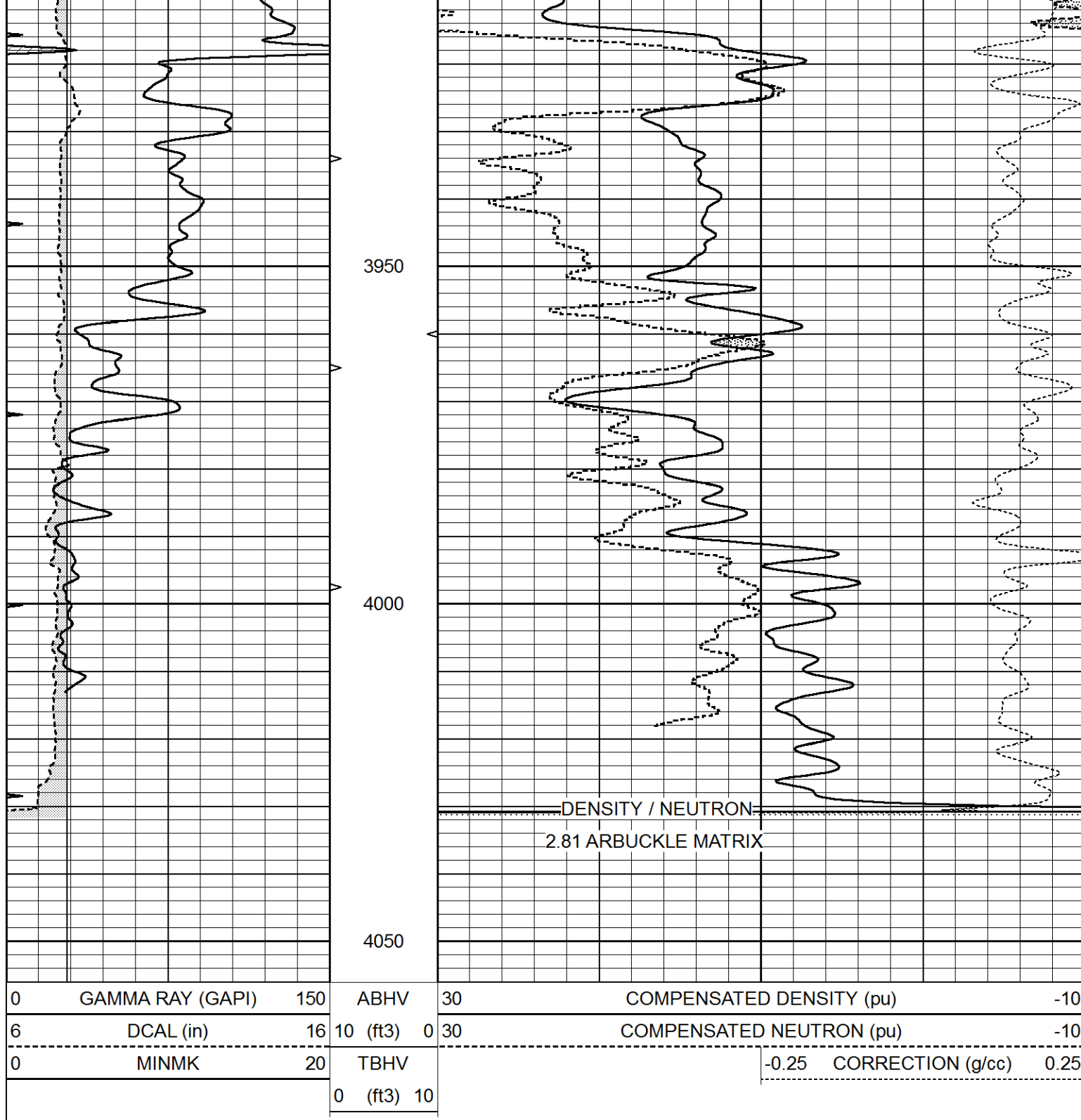




DOLOMITE MATRIX

Database File 4804ddn.db
 Dataset Pathname pass4.2D
 Presentation Format ldtstack
 Dataset Creation Sun Aug 02 06:15:00 2020
 Charted by Depth in Feet scaled 1:240





Calibration Report			
Database File	4804ddn.db		
Dataset Pathname	pass5.5		
Dataset Creation	Sun Aug 02 07:18:06 2020		
Dual Induction Calibration Report			
Serial-Model:	PROBE7-DILG		
Surface Cal Performed:	Sun Aug 02 04:52:13 2020		
Downhole Cal Performed:	Thu Mar 12 11:45:10 2020		
After Survey Verification Performed:	Thu Mar 12 11:45:00 2020		
Surface Calibration	Readings	References	Results

Loop:	Air	Loop		Air	Loop		m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	620.000	-10.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	675.000	-68.000
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: 004			Model: PRB					

Master Calibration					Performed Mon May 11 10:45:58 2020			
	Background	Magnesium	Aluminum	Aluminum+Fe				
Window 1	1199.7	10039.4	3208.4	2838.9				cps
Window 2	1096.3	8590.5	2806.1	2527.9				cps
Window 3	934.1	5176.2	1855.7	1739.5				cps
Window 4	267.0	271.6	264.8	264.9				cps
Long Space	0.0	7494.2	1709.8	1431.6				cps
Short Space	1.1	1784.3	1183.7	971.1				cps
Rho		1.7100	2.5900	0.0000				g/cc
Pe		2.0000	2.7500	5.7900				
Rib Angle	: 44.5	Rib Slope	: 0.982	Density/Spine Ratio				: 0.574
Spine Angle	: 74.5	Spine Slope	: 3.601	Spine Intercept				: -18.0

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: Wed Jul 03 10:25:53 2019

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.3000 GAPI/cps