



MICRO LOG

Company HARTMAN OIL INC.
 Well LILLIE #5
 Field ARNOLD SOUTHWEST
 County NESS
 State KANSAS

Company HARTMAN OIL INC.
 Well LILLIE #5
 Field ARNOLD SOUTHWEST
 County NESS State KANSAS

Location: API # : 15-135-26026-0000
 1356' FNL & 1299' FEL
 NW - NW - SE - NE
 Permanent Datum GROUND LEVEL Elevation 2577
 Log Measured From KELLY BUSHING 11' A.G.L.
 Drilling Measured From KELLY BUSHING
 SEC 32 TWP 16S RGE 25W
 Other Services CDL/CNL DIL
 Elevation K.B. 2588 D.F. 2586 G.L. 2577

Date	12/5/18
Run Number	TWO
Depth Driller	4625
Depth Logger	4622
Bottom Logged Interval	4620
Top Log Interval	3500
Casing Driller	8 5/8"@267'
Casing Logger	267
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.1/53
pH / Fluid Loss	10.5/6.0
Source of Sample	FLOWLINE
Rim @ Meas. Temp	1.40@58F
Rmf @ Meas. Temp	1.05@58F
Rmc @ Meas. Temp	1.68@58F
Source of Rmf / Rmc	MEASUREMENT
Rim @ BHT	.666@122F
Time Circulation Stopped	4.5 HOURS
Time Logger on Bottom	12:15 A.M.
Maximum Recorded Temperature	122F
Equipment Number	922339
Location	HAYS, KANSAS
Recorded By	JEFF LUEBBERS
Witnessed By	LOREN DEEVER

<<< 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

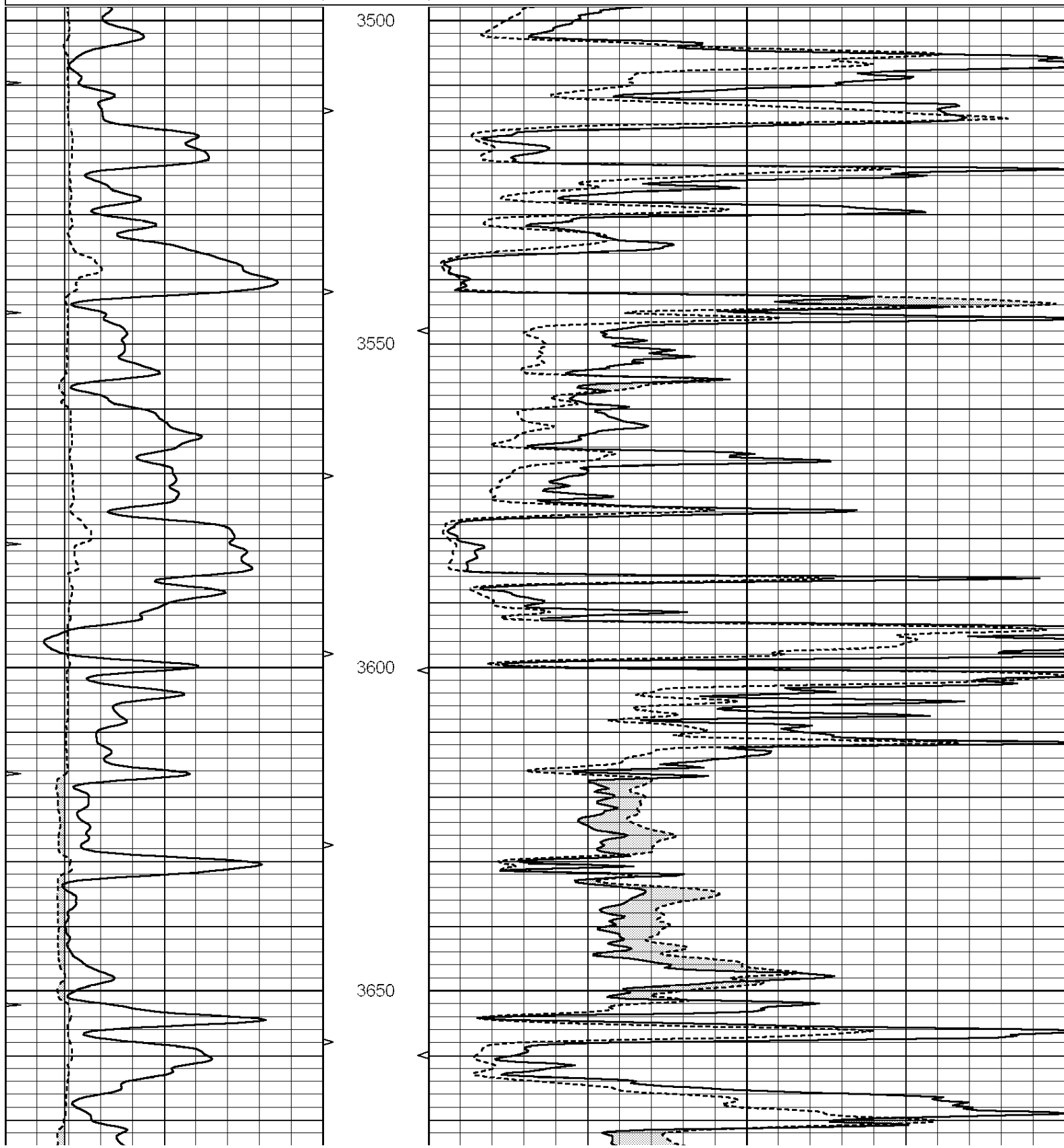
THANK YOU FOR USING ELI WIRELINE HAYS, KANSAS (785) 628-6395
 DIRECTIONS
 ARNOLD, KS., 4W. ON HWY 4 TO"RD. H", 1S., 1/4W., S. INTO

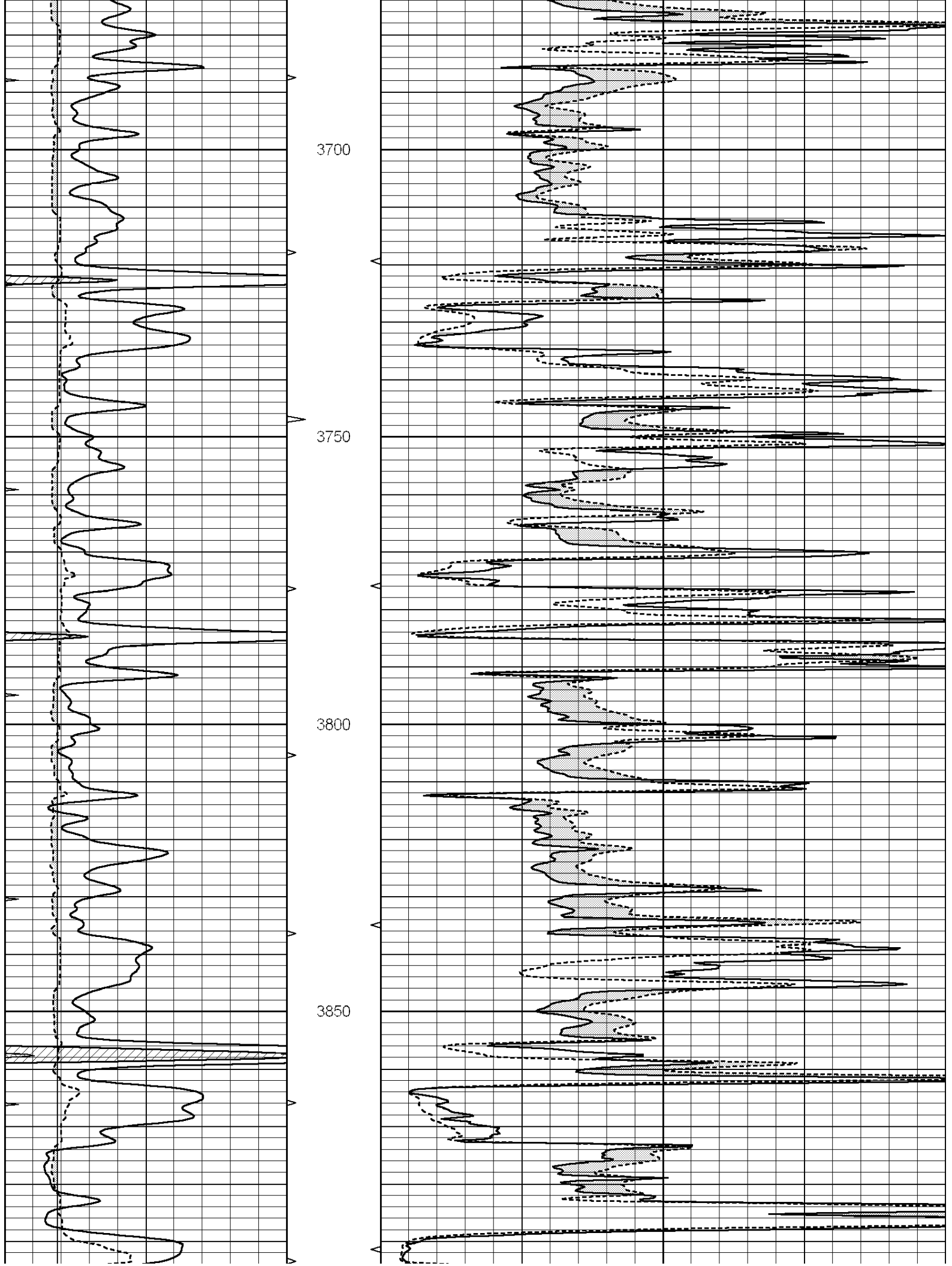


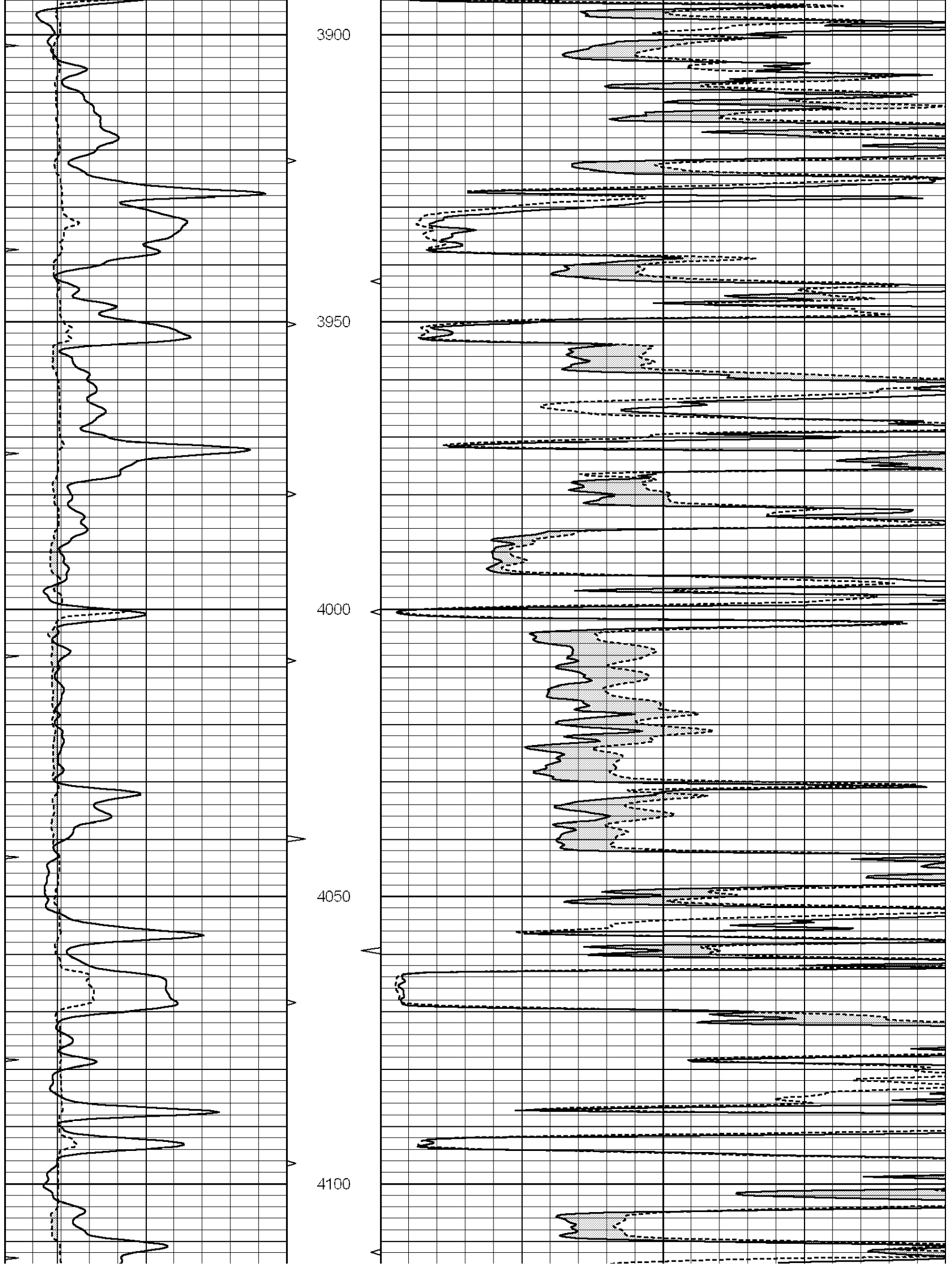
MAIN SECTION

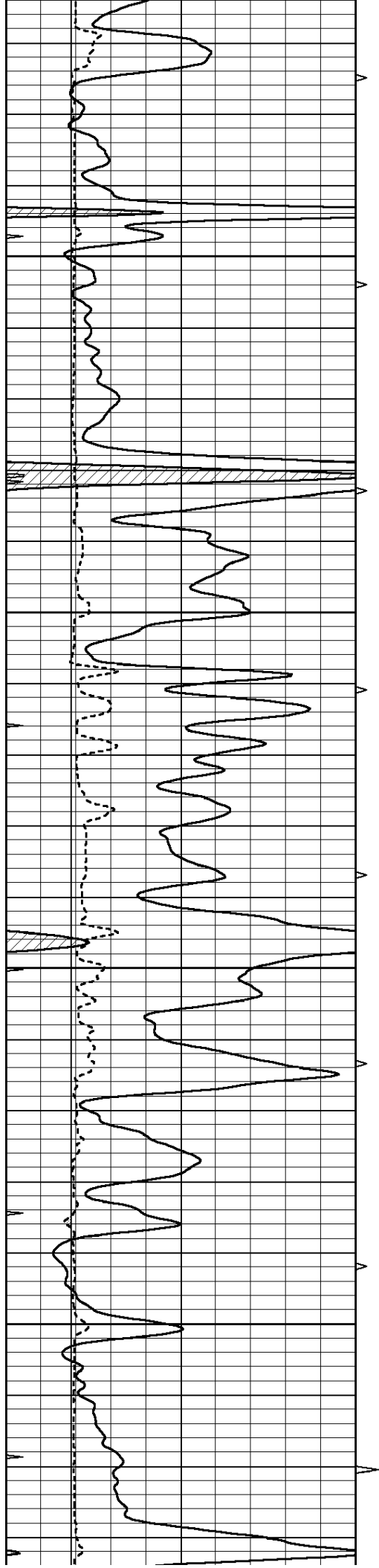
Database File: 3068ddn.db
 Dataset Pathname: pass6.2
 Presentation Format: micro
 Dataset Creation: Wed Dec 05 00:54:45 2018 by Calc SOC 120430
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	40
6	CALIPER (in)	16	10 (ft3)	0	MEL 20 (Ohm-m)	40
0	MINMK	20	TBHV			
			0 (ft3)	10		







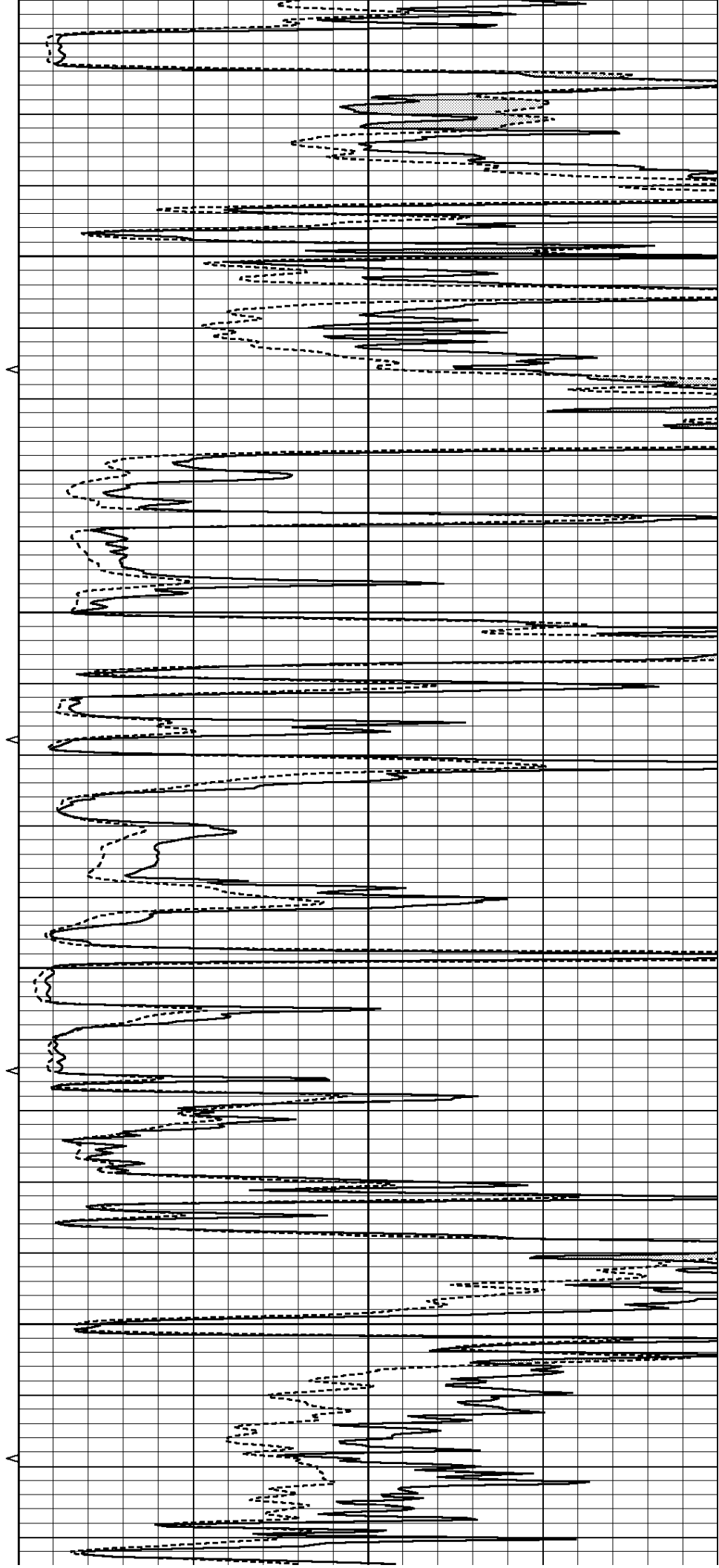


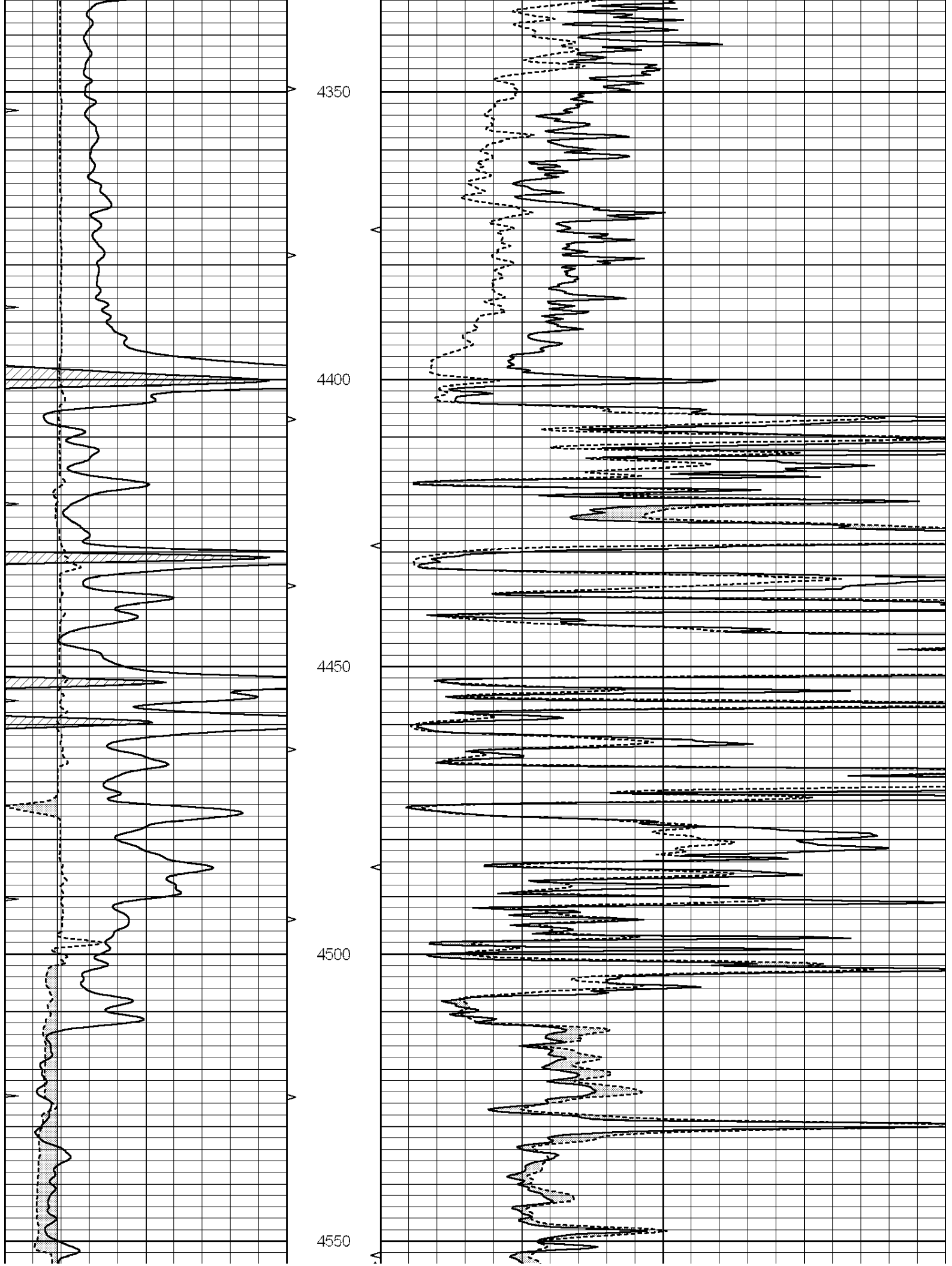
4150

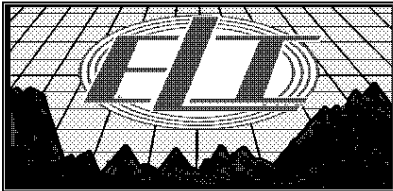
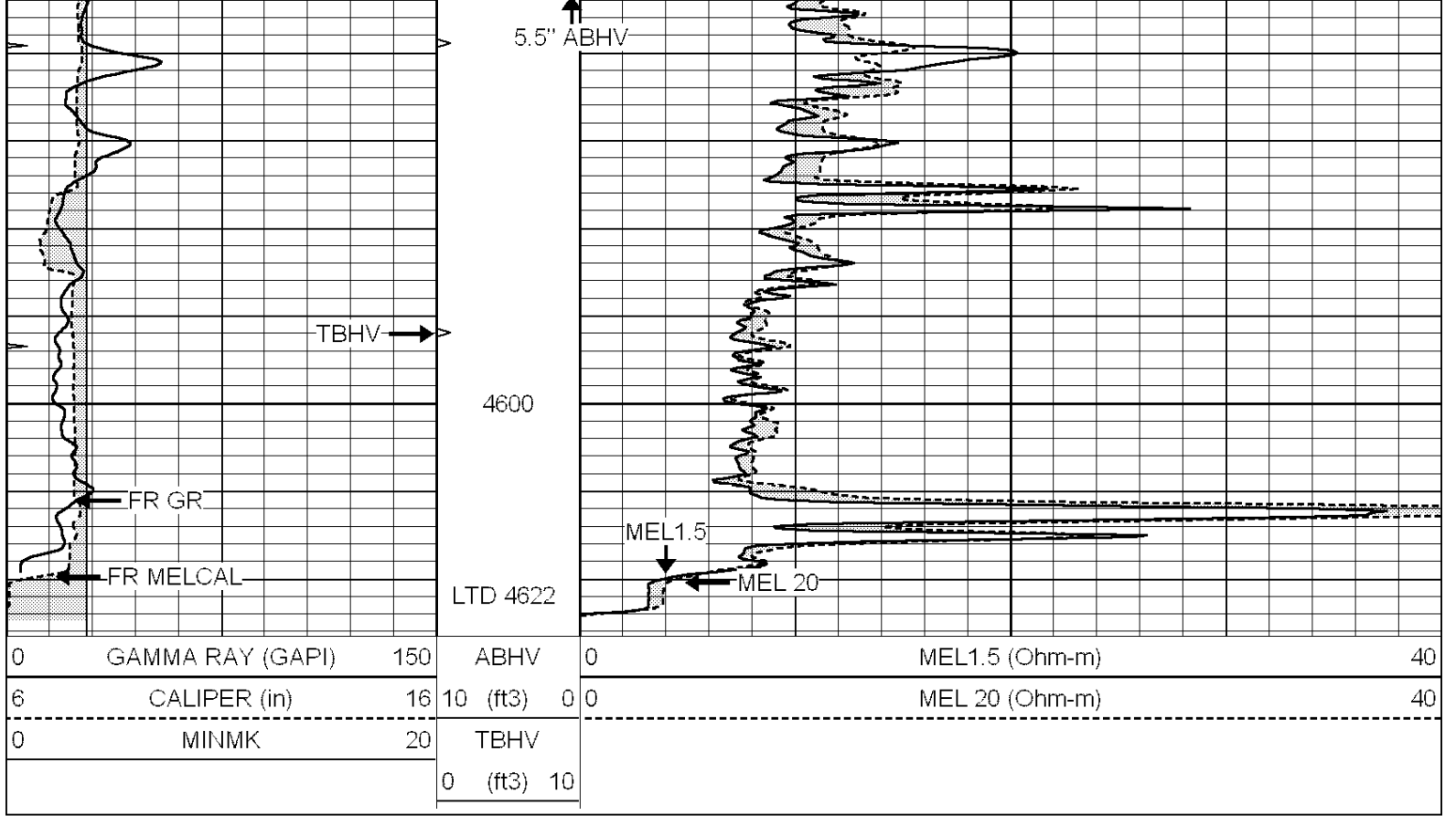
4200

4250

4300



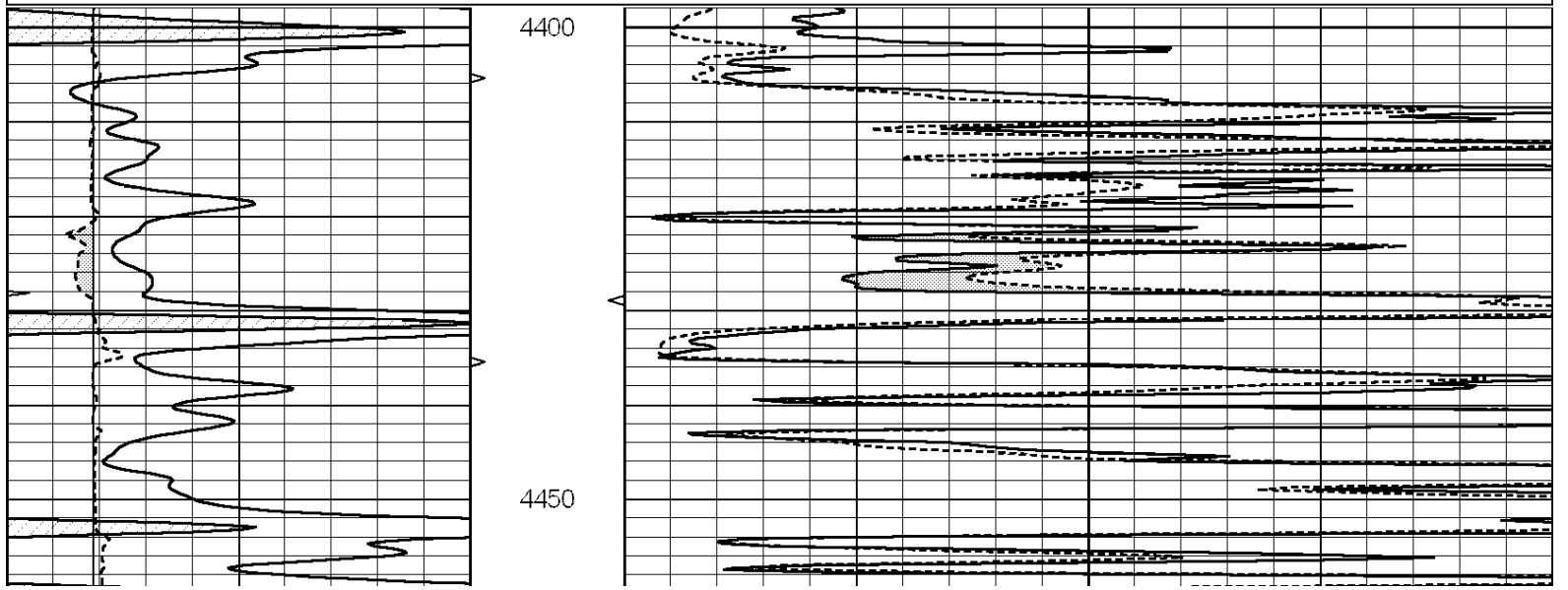


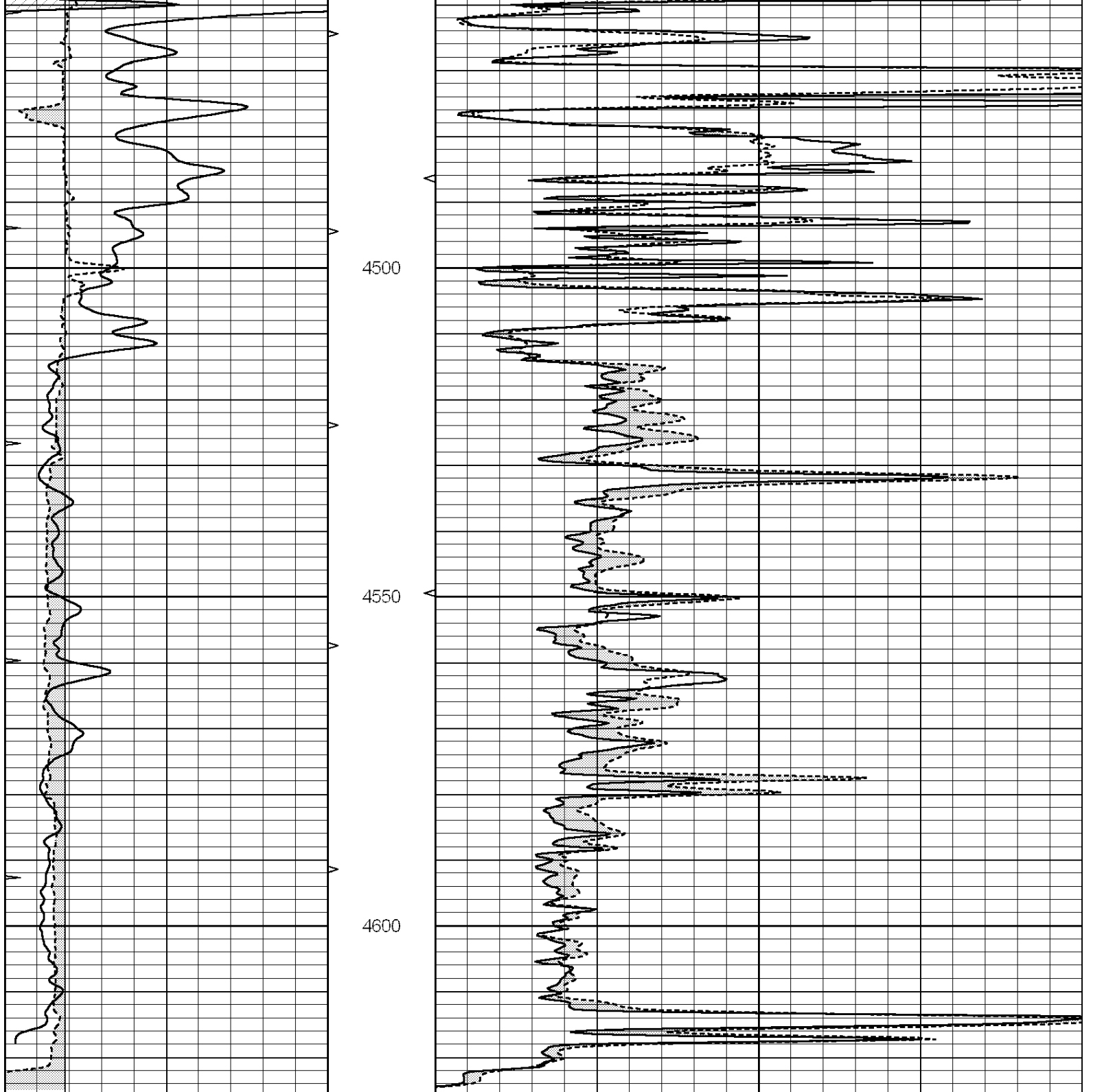


REPEAT SECTION

Database File: 3068ddn.db
 Dataset Pathname: pass5.3
 Presentation Format: micro
 Dataset Creation: Wed Dec 05 00:58:17 2018 by Calc SOC 120430
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	40
6	CALIPER (in)	16	10 (ft3)	0	MEL 20 (Ohm-m)	40
0	MINMK	20	TBHV			
			0 (ft3)	10		





0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	40
6	CALIPER (in)	16	10 (ft3)	0	MEL 20 (Ohm-m)	40
0	MINMK	20	TBHV			
			0 (ft3)	10		

Calibration Report

Database File: 3068ddn.db
 Dataset Pathname: pass6.2
 Dataset Creation: Wed Dec 05 00:54:45 2018 by Calc SOC 120430

MICRO Calibration Report

Serial Number: 070911

Tool Model: Proben
Performed: Sat Nov 24 18:27:47 2018

Caliper Calibration:	Gain=4.612	Offset=1.204
References	Low Cal 7.800	High Cal 20.000
Readings	1.430	4.075

1.5" Calibration:	Gain=30.000	Offset=-1.000
References	Low Cal 0.000	High Cal 20.000
Readings	0.001	1.240

2" Calibration:	Gain=34.000	Offset=-1.000
References	Low Cal 0.000	High Cal 20.000
Readings	0.001	1.076

Gamma Ray Calibration Report

Serial Number: 070559
Tool Model: OPEN_GR
Performed: Fri Nov 16 07:19:53 2018

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.2400 GAPI/cps