MICRO LOG

Company L. D. DRILLING, INC.
Well #1-20 McINTYRE
Field OTIS - ALBERT
County RUSH
State KANSAS

Company L. D. DRILLING, INC.
Well #1-20 McINTYRE
Field OTIS - ALBERT
County RUSH State KANSAS
Location: API # : 15-165-22163-0000
1980' FSL & 990' FEL
W/2 - NE - SE
SEC 20 TWP 18S RGE 16W

Other Services
CDL/CNL
DIL/SON

Permanent Datum GROUND LEVEL Elevation 1998
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING

Elevation
K.B. 2003
D.F. 2001
G.L. 1998

Date	2/9/19		
Run Number	TWO		
Depth Driller	3705		
Depth Logger	3695		
Bottom Logged Interval	3679		
Top Log Interval	2700		
Casing Driller	8 5/8"@1040'		
Casing Logger	1040		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 9,100 PPM	
Density / Viscosity	9.3/51		
pH / Fluid Loss	9.5/11.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.20@60F		
Rmf @ Meas. Temp	.900@60F		
Rmc @ Meas. Temp	1.44@60F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.637@113F		
Time Circulation Stopped	5.5 HOURS		
Time Logger on Bottom	8:00 P.M.		
Maximum Recorded Temperature	113F		
Equipment Number	922339		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	KIM SHOEMAKER		

<<< 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.

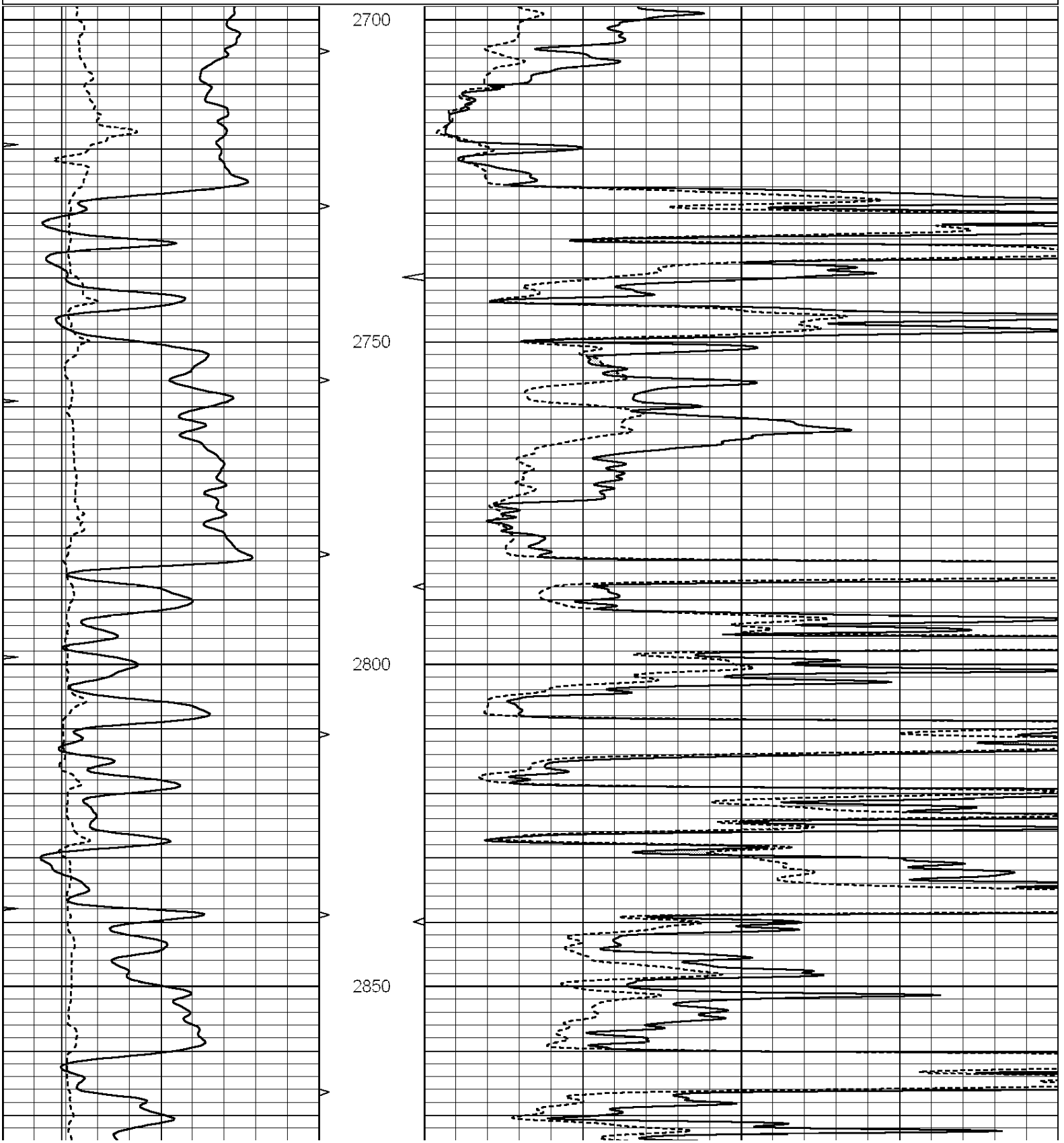
Comments

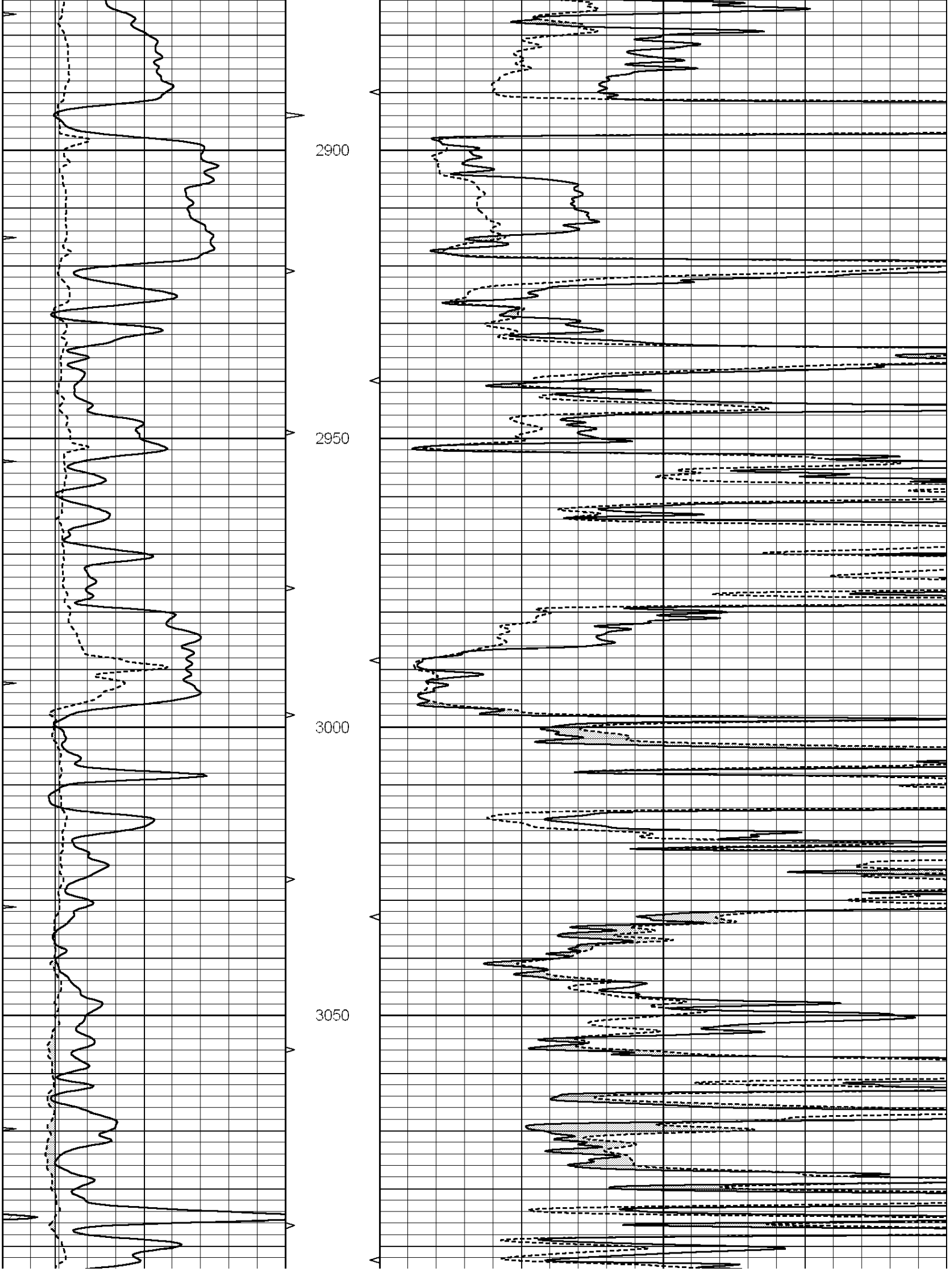
THANK YOU FOR USING ELI WIRELINE HAYS, KANSAS (785) 628-6395
DIRECTIONS
TIMKEN, KS., 3 1/2E. ON HWY 96, PAST MM #160, N. INTO PASTURE

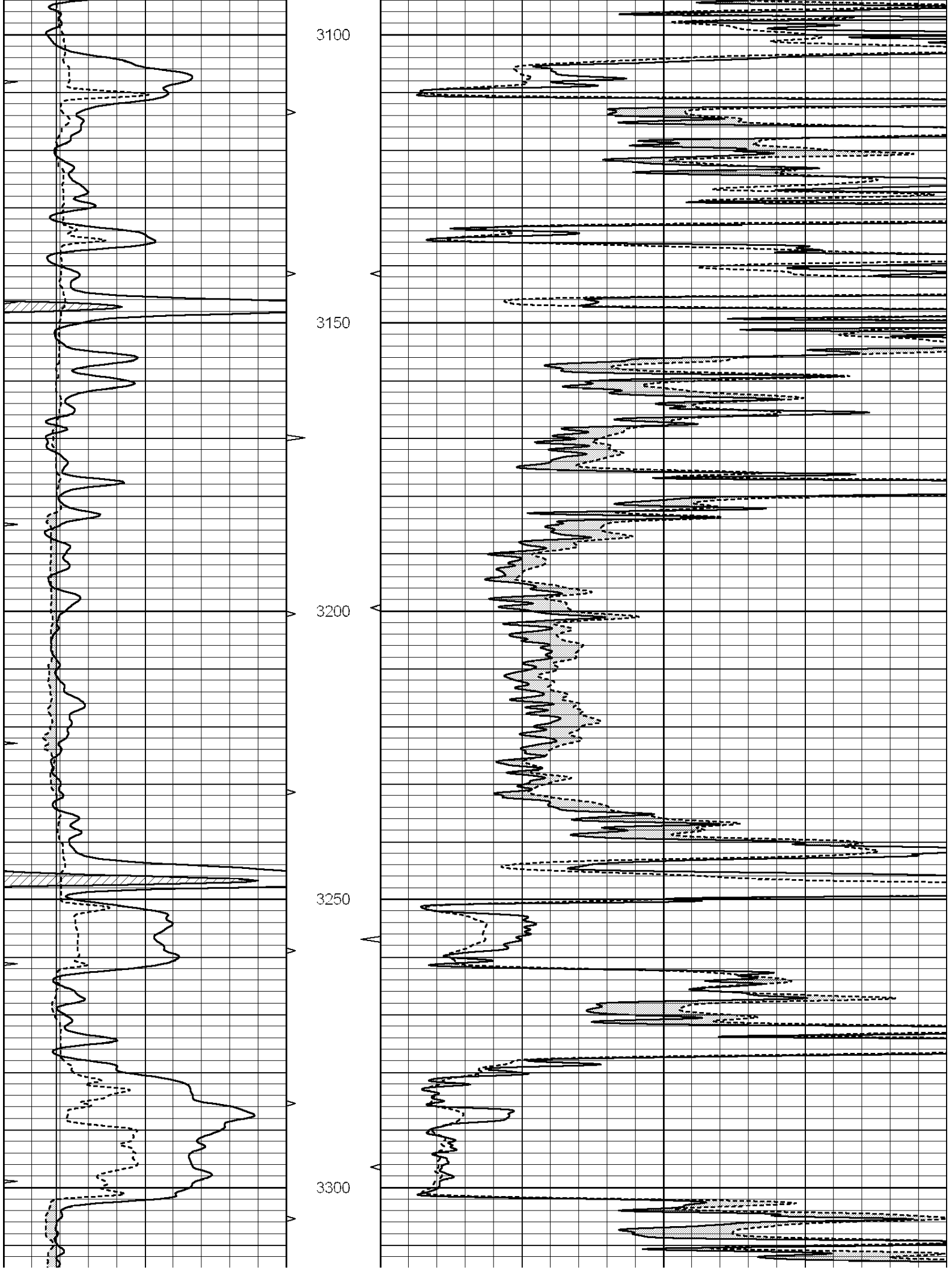
MAIN SECTION

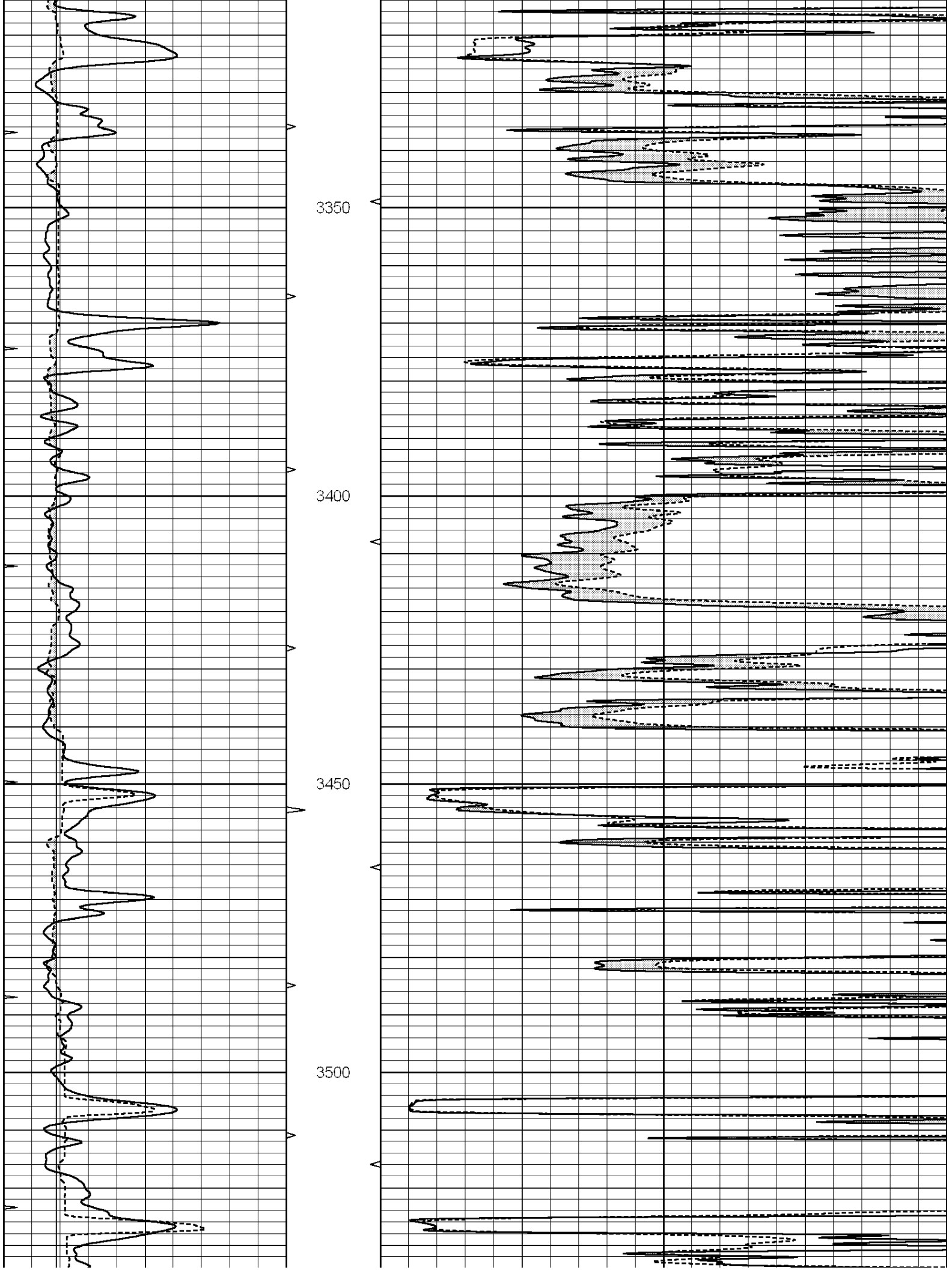
Database File:	3339ddn.db
Dataset Pathname:	pass6.4
Presentation Format:	micro
Dataset Creation:	Sat Feb 09 20:50:16 2019
Charted by:	Depth in Feet scaled 1:240

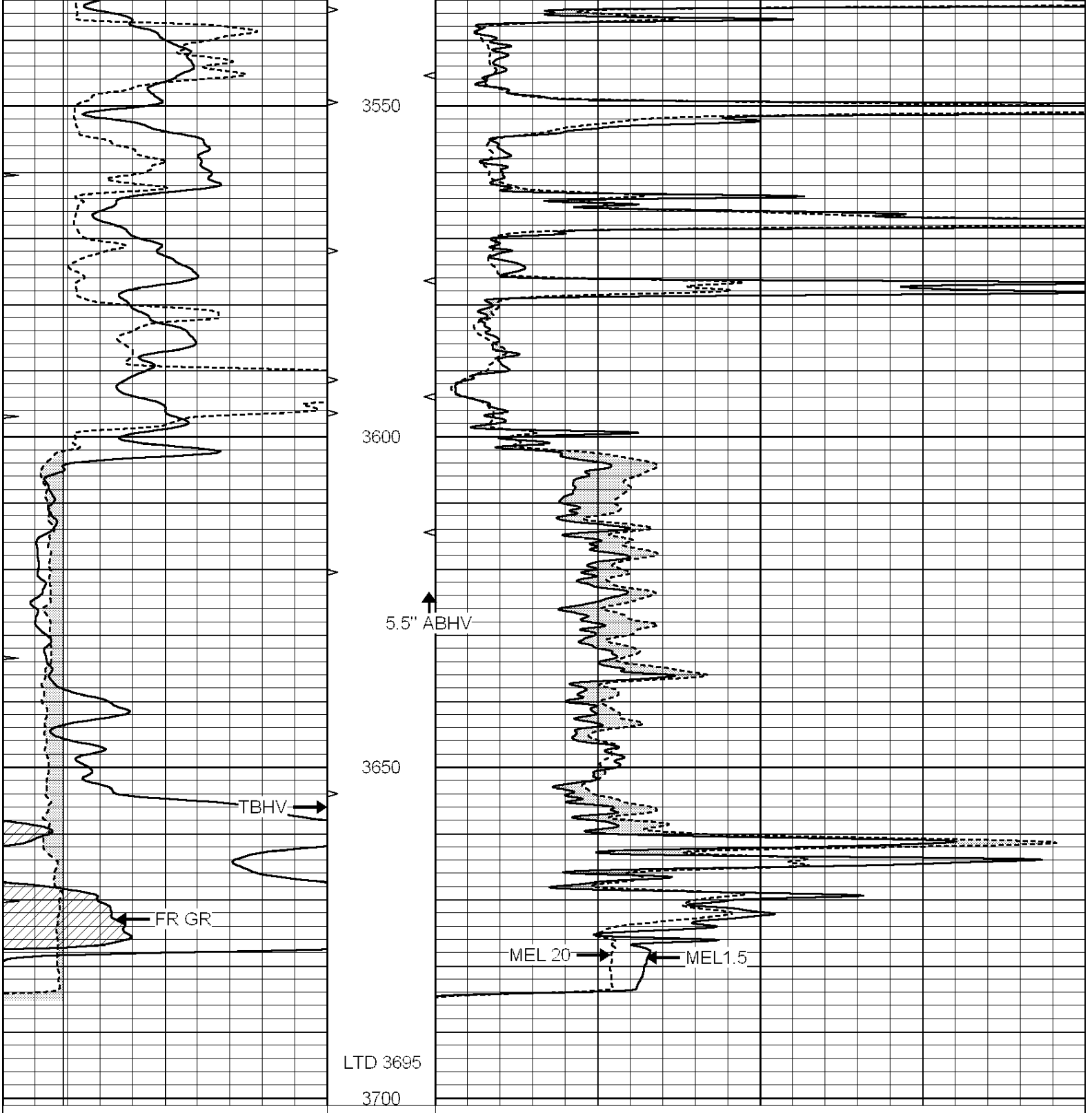
0	GAMMA RAY (GAPI) 150	ABHV		0	MEL1.5 (Ohm-m) 40
6	CALIPER (in) 16	10 (ft3) 0		0	MEL 20 (Ohm-m) 40
0	MINMK 20	TBHV			
		0 (ft3) 10			




2900
2950
3000
3050


3100
3150
3200
3250
3300


3350
3400
3450
3500

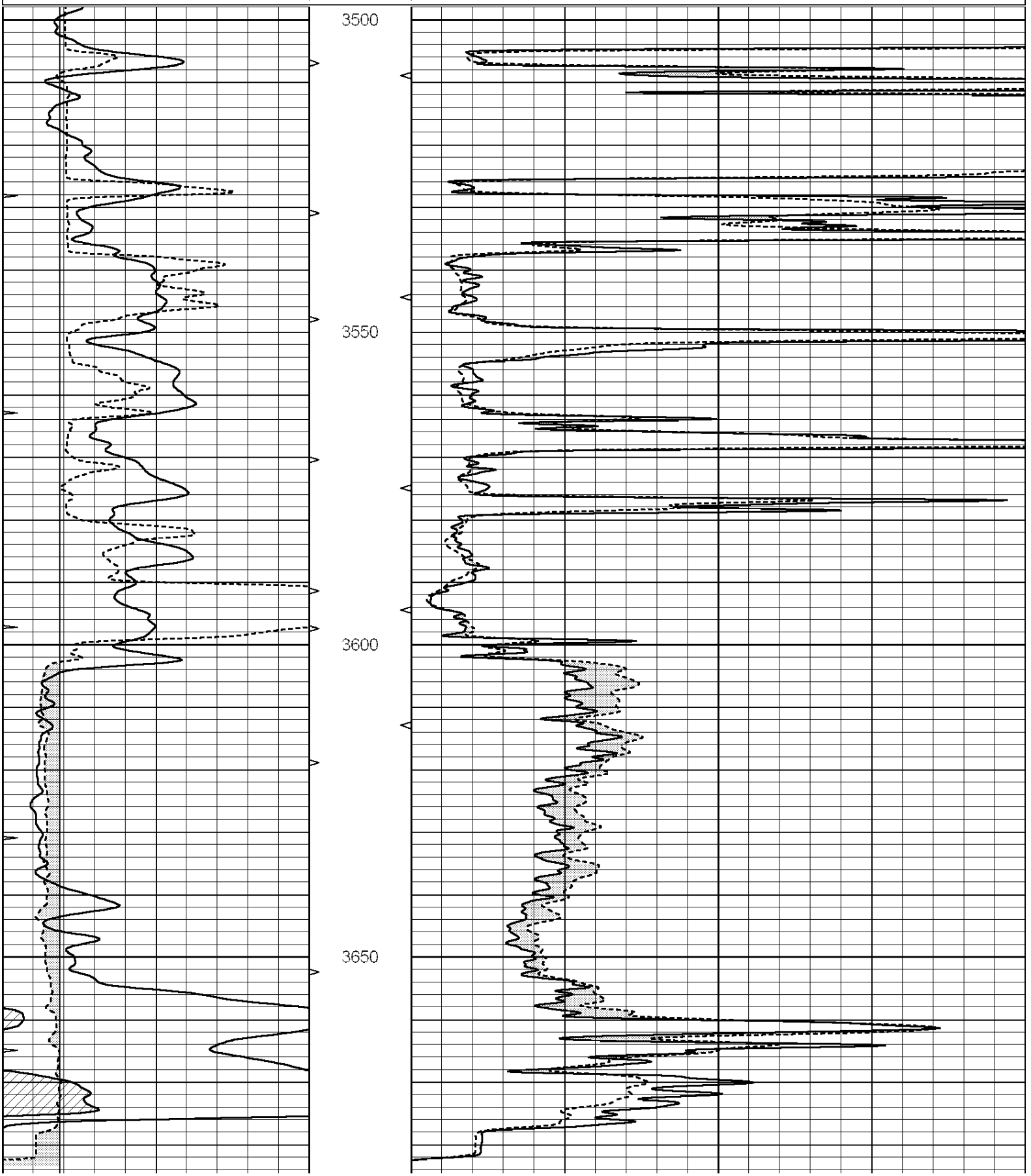


REPEAT SECTION

Database File: 3339ddn.db
Dataset Pathname: pass5.1

Presentation Format:	micro
Dataset Creation:	Sat Feb 09 20:15:49 2019 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	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	0	MEL 20 (Ohm-m) 40
0	MINMK	20	TBHV		
			0 (ft3) 10		

Calibration Report

Database File: 3339ddn.db
Dataset Pathname: pass6.2
Dataset Creation: Sat Feb 09 20:44:07 2019

MICRO Calibration Report

Serial Number: 070911
Tool Model: ProbeN
Performed: Sun Feb 03 00:06:08 2019

Caliper Calibration: Gain=4.917 Offset=1.808

	Low Cal	High Cal
References	8.200	20.000
Readings	1.300	3.700

1.5" Calibration: Gain=60.000 Offset=-0.300

	Low Cal	High Cal
References	0.000	20.000
Readings	0.001	1.240

2" Calibration: Gain=68.000 Offset=-0.500

	Low Cal	High Cal
References	0.000	20.000
Readings	0.001	1.076

Gamma Ray Calibration Report

Serial Number: 110959
Tool Model: OPEN_GR
Performed: Wed Jan 16 04:23:33 2019

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.2300 GAPI/cps