



**COMPLETION
& PRODUCTION
SERVICES CO.**

**MICRO
LOG**

Company DOWNING - NELSON OIL CO. INC.
Well HEIDI #1-31
Field WILDCAT
County RUSH
State KANSAS

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Field WILDCAT
County RUSH State KANSAS

Location: API # : 15-165-22098-0000
1830' FSL & 1065' FWL
NE - SE - NW - SW
SEC 31 TWP 18S RGE 17W
Permanent Datum GROUND LEVEL Elevation 2036
Log Measured From KELLY BUSHING 8' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
CDL/CNL
DIL/SONIC
Elevation
K.B. 2044
D.F. 2042
G.L. 2036

Date	10/31/14
Run Number	TWO
Depth Driller	3895
Depth Logger	3895
Bottom Logged Interval	3879
Top Log Interval	3000
Casing Driller	8 5/8" @ 1169'
Casing Logger	1169
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	8.9/52
pH / Fluid Loss	10.0/8.8
Source of Sample	FLOWLINE
Rim @ Meas. Temp	.900 @ .65F
Rmf @ Meas. Temp	.675 @ .65F
Rmc @ Meas. Temp	1.08 @ .65F
Source of Rmf / Rmc	MEASUREMENT
Rim @ BHT	.509 @ 115F
Time Circulation Stopped	4 HOURS
Time Logger on Bottom	4:45 A.M.
Maximum Recorded Temperature	115F
Equipment Number	4854
Location	HAYS, KANSAS
Recorded By	JEFF LUEBBERS
Witnessed By	MARC DOWNING

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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.

Comments

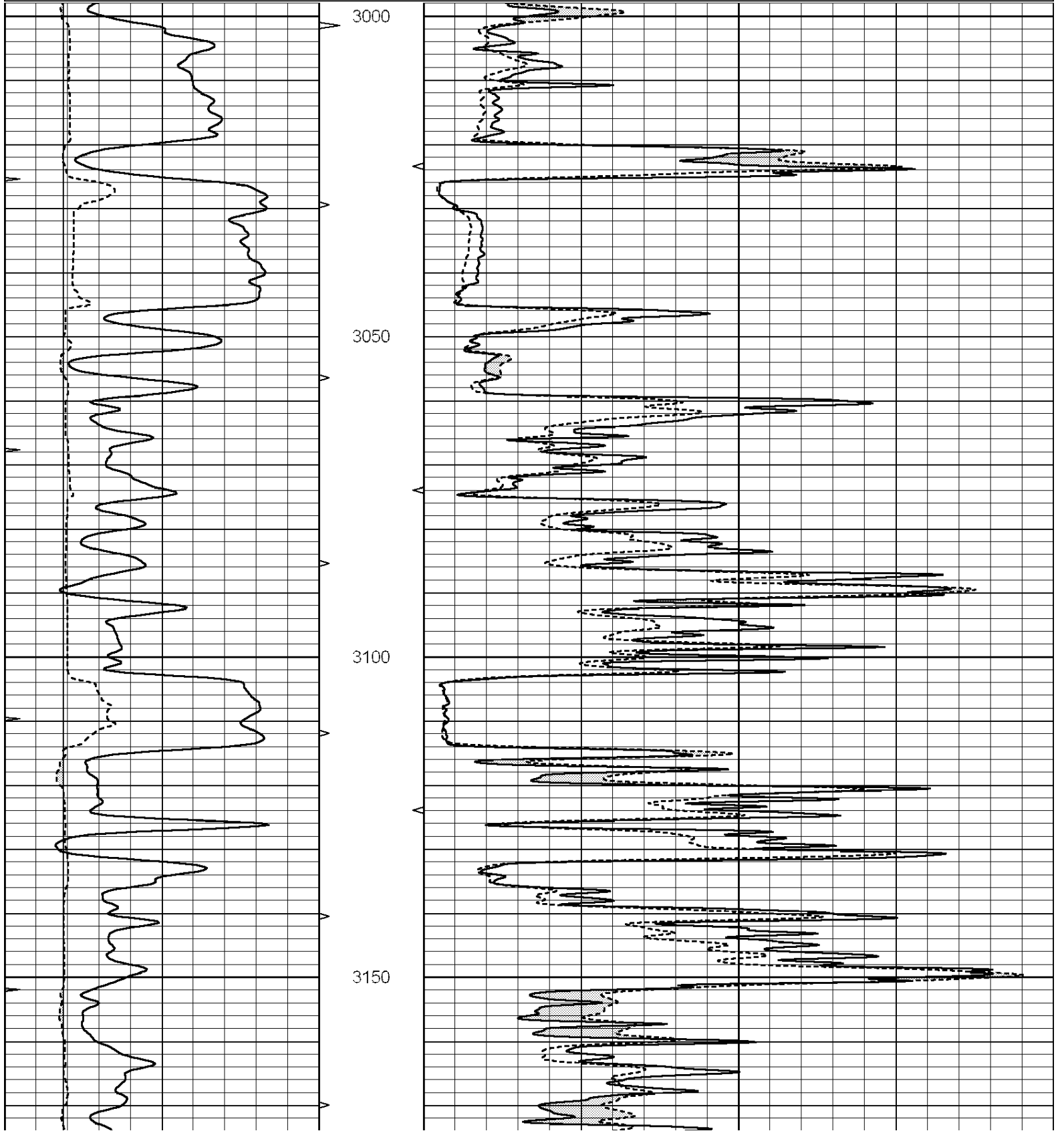
THANK YOU FOR USING "NABORS" HAYS, KANSAS (785) 628-6395
DIRECTIONS
RUSH CENTER, KS., 3E. ON HWY 96, 1 1/2S., E. INTO

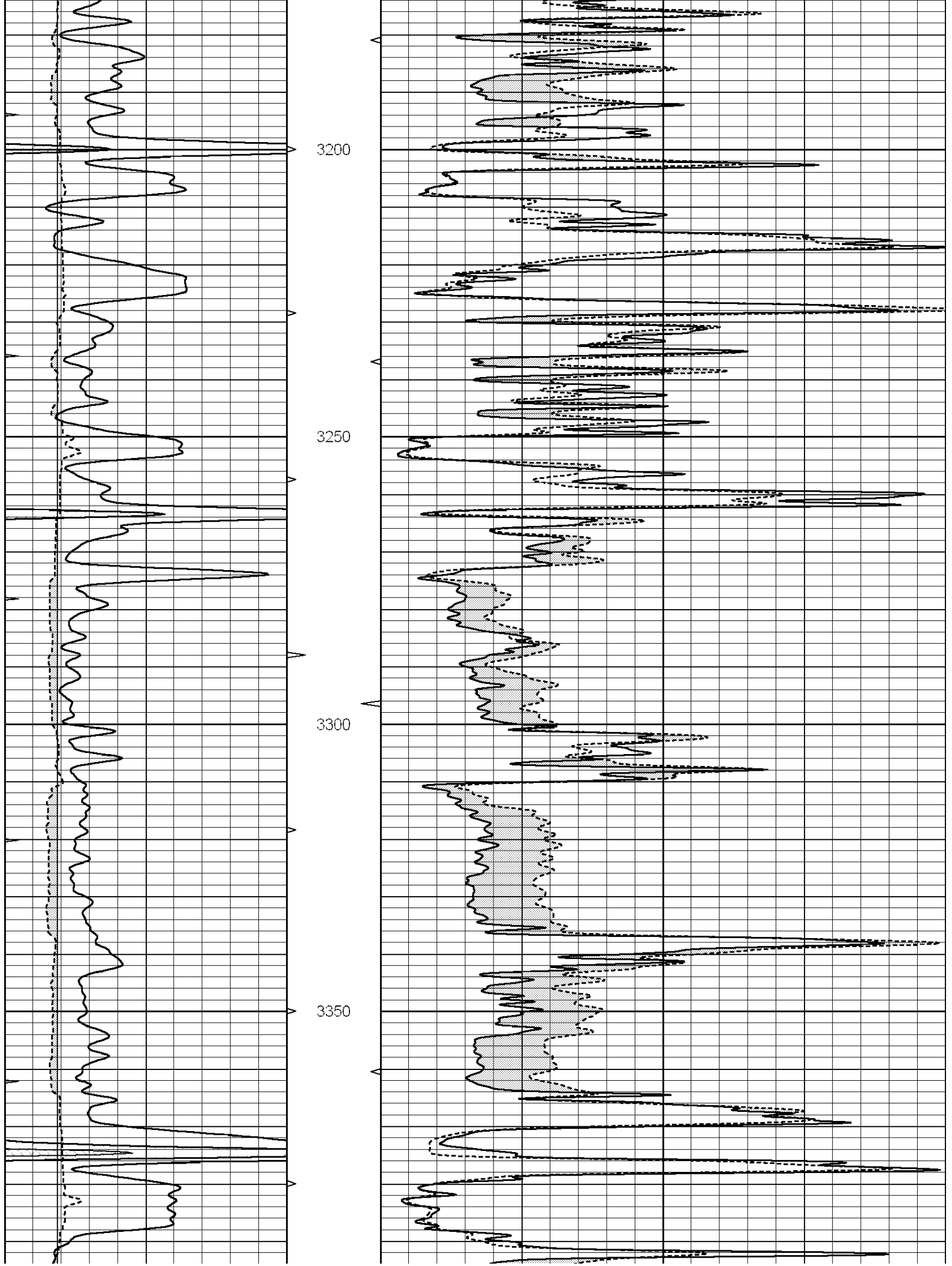


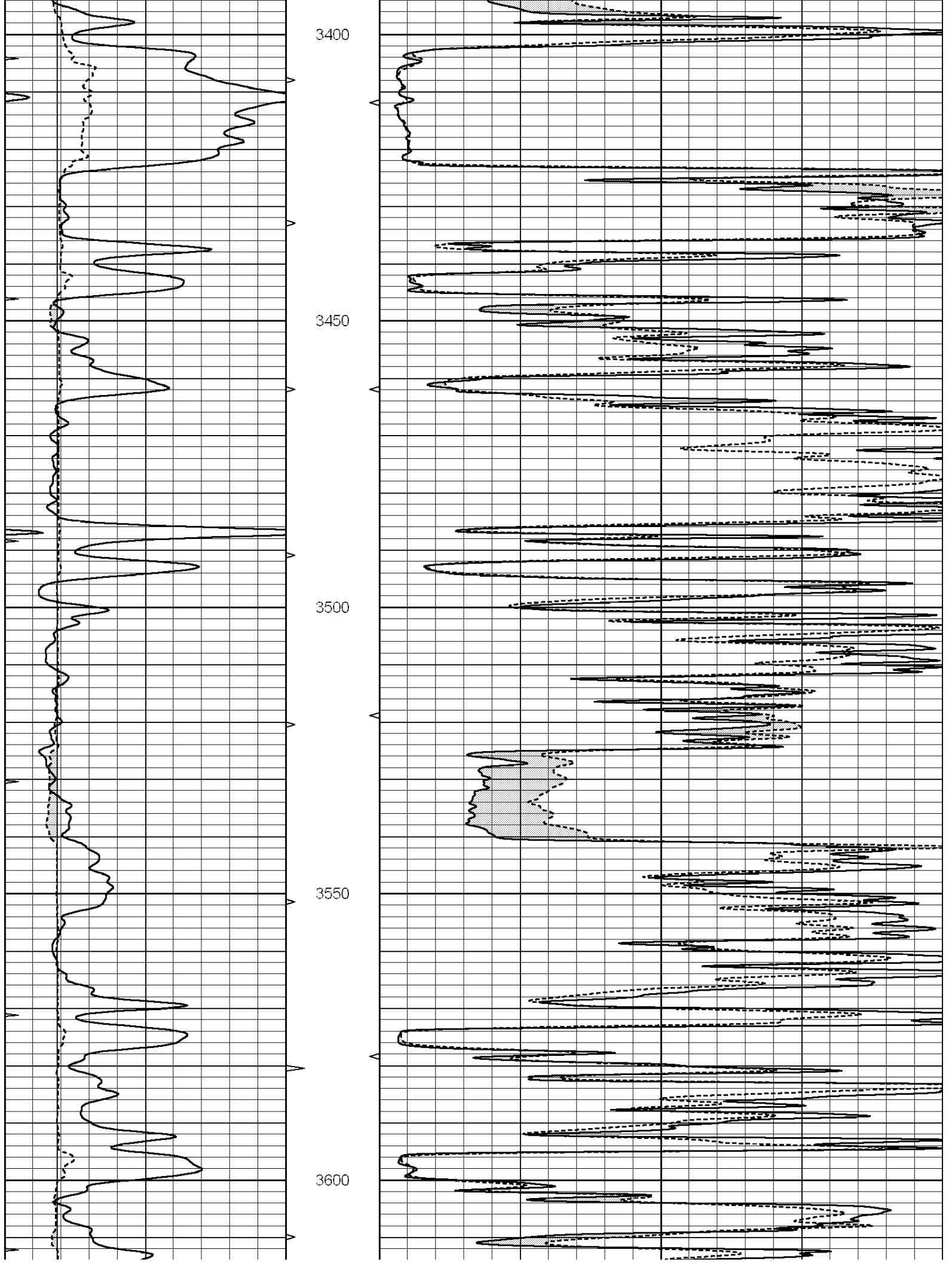
MAIN SECTION

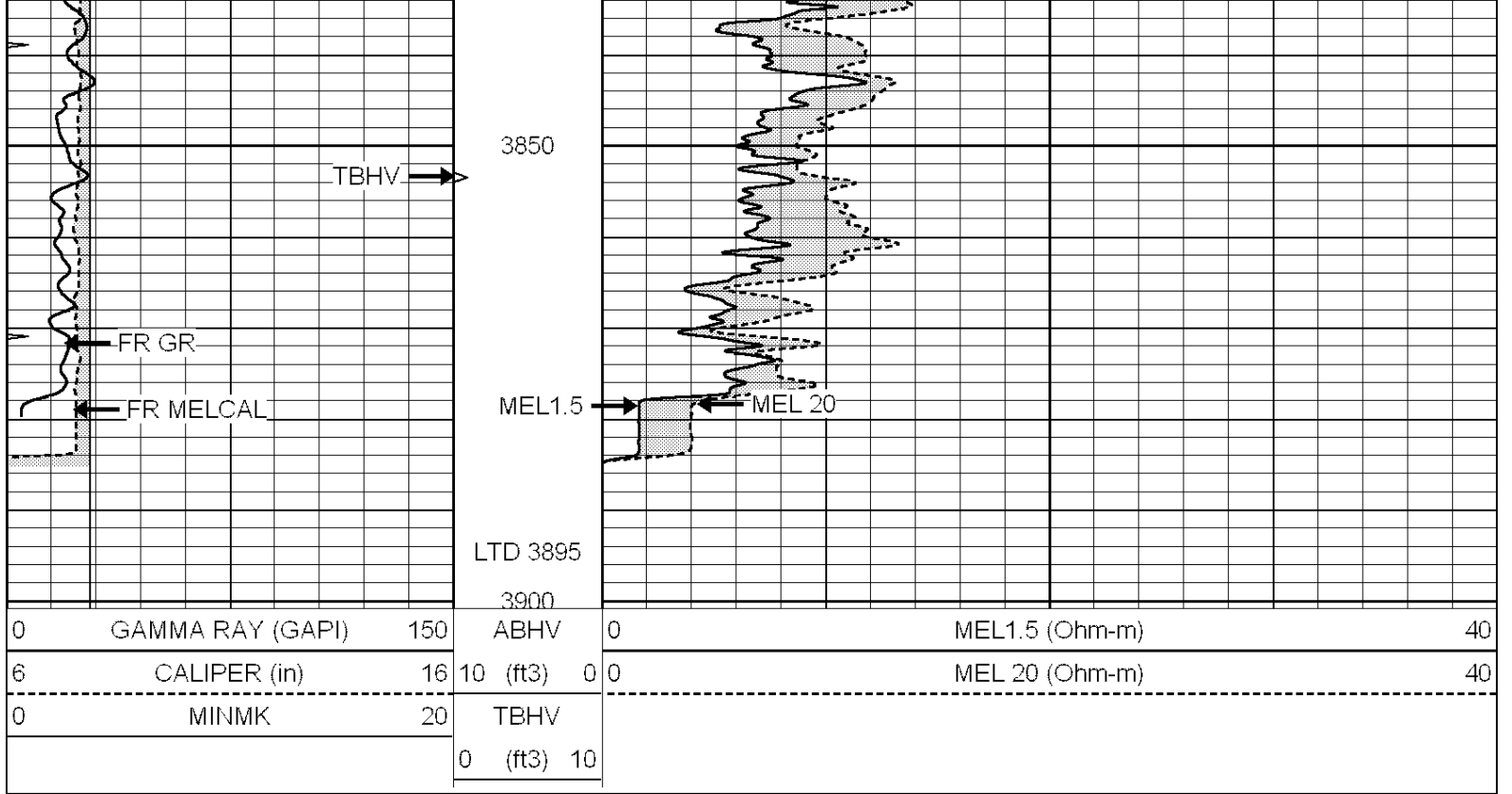
Database File: 25906ddn.db
 Dataset Pathname: pass9.3
 Presentation Format: micro
 Dataset Creation: Fri Oct 31 09:14:01 2014 by Calc SOC 120430
 Charted by: Depth in Feet scaled 1:240

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		







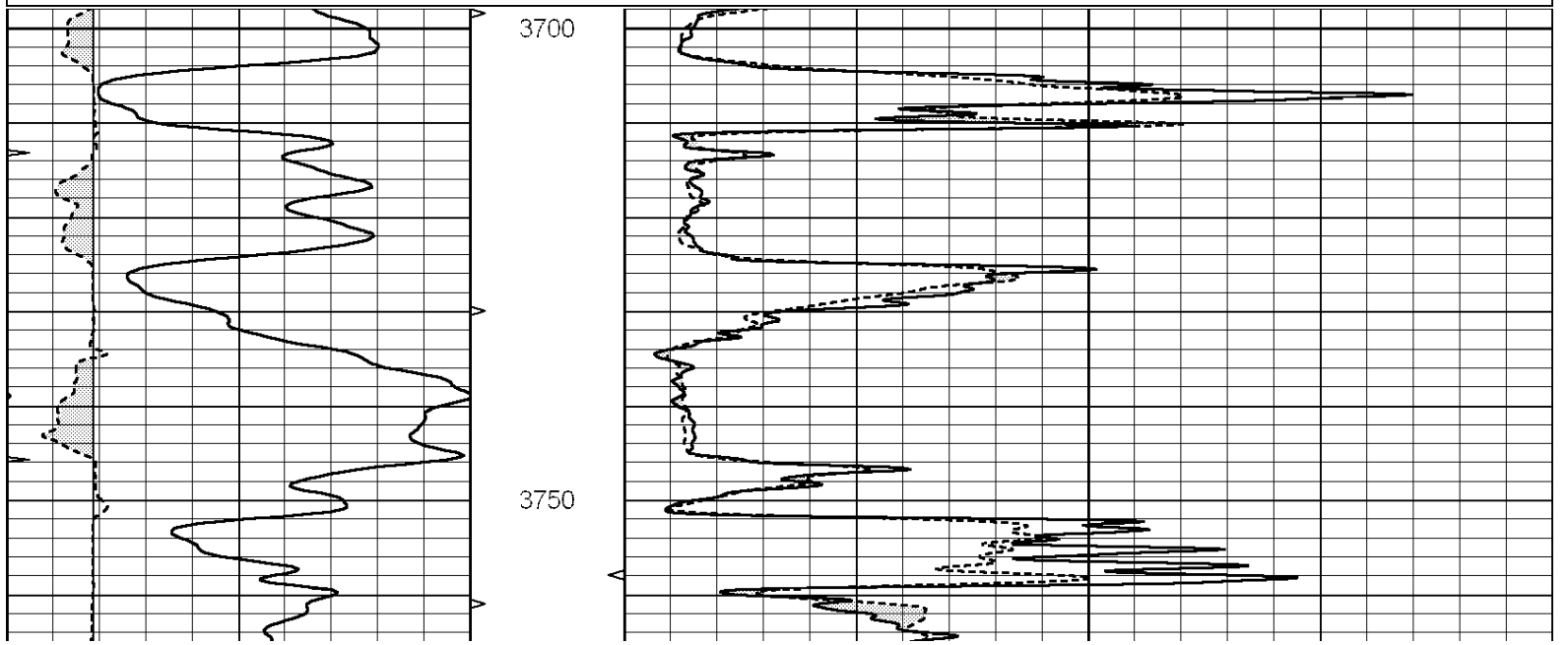


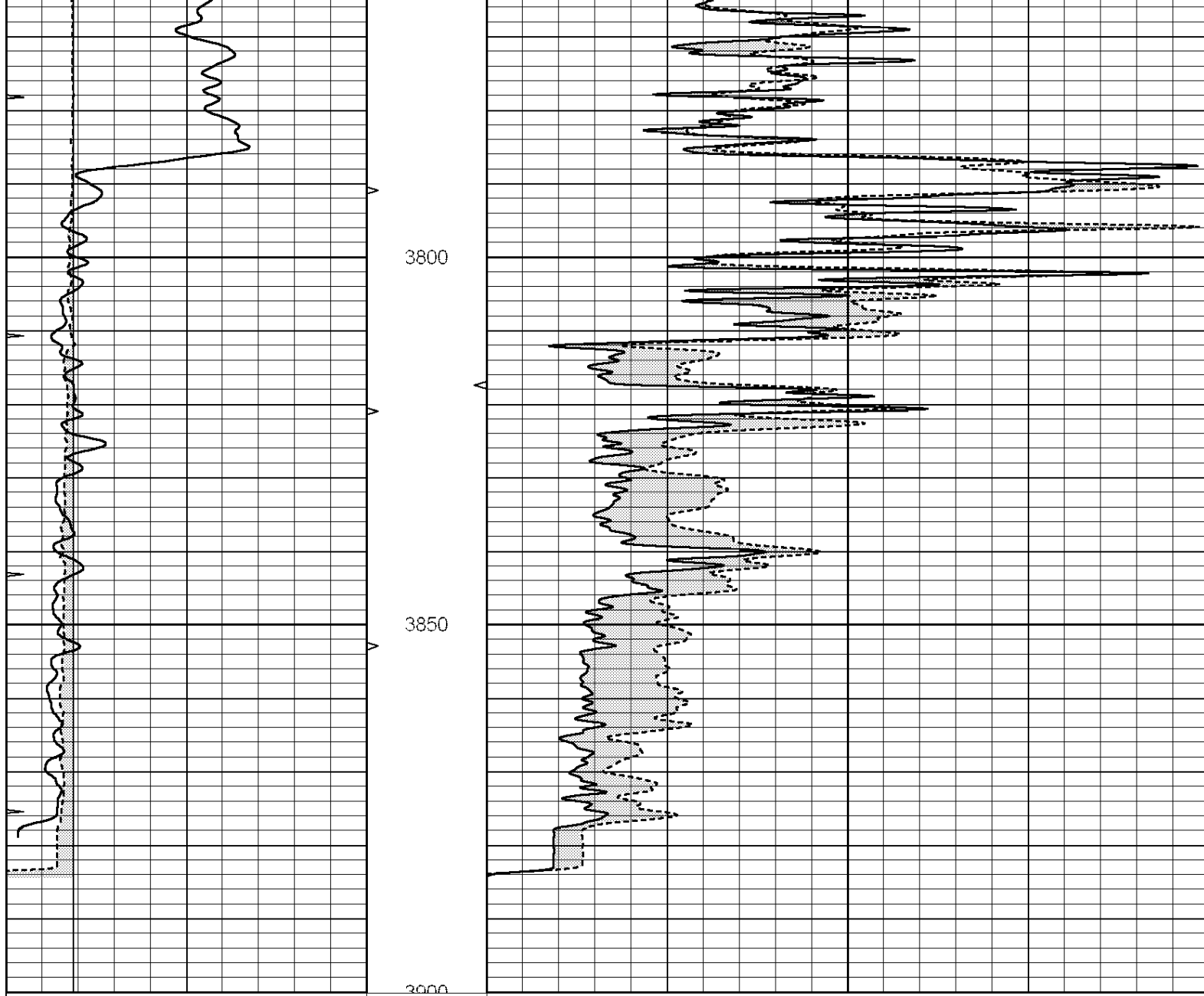
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REPEAT SECTION

Database File: 25906ddn.db
 Dataset Pathname: pass8.1
 Presentation Format: micro
 Dataset Creation: Fri Oct 31 08:25:03 2014 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: 25906ddn.db
 Dataset Pathname: pass9.3
 Dataset Creation: Fri Oct 31 09:14:01 2014 by Calc SOC 120430

MICRO Calibration Report

Serial Number: 070910
 Tool Model: ProbeN
 Performed: Fri Oct 31 07:44:46 2014

Caliper Calibration: Gain=4.092 Offset=1.651
 References Low Cal High Cal
 Readings 8.000 15.000
 1.552 3.263

1.5" Calibration: Gain=22.000 Offset=0.000

References	Low Cal	High Cal
Readings	0.000	20.000
	0.000	1.216
2" Calibration:	Gain=50.000	Offset=-0.800
References	Low Cal	High Cal
Readings	0.000	20.000
	0.002	1.053
Gamma Ray Calibration Report		
Serial Number:	070559	
Tool Model:	OPEN_GR	
Performed:	Fri Oct 31 07:44:44 2014	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.2000	GAPI/cps