



**Casedhole Solutions**

**MICRO LOG**

Company	YOUNGER ENERGY COMPANY	Company	YOUNGER ENERGY COMPANY
Well	SHARTZ #2-34	Well	SHARTZ #2-34
Field	HURRAY	Field	HURRAY
County	PAWNEE	County	PAWNEE
State	KANSAS	State	KANSAS
Location:	1450' FSL & 1100' FEL	API # :	15-145-21814-0000
Permanent Datum	GROUND LEVEL	Elevation	1970
Log Measured From	KELLY BUSHING 8' A.G.L.	Other Services	CDL/CNL
Drilling Measured From	KELLY BUSHING	DIL	
	SEC 34 TWP 21S RGE 15W		

Date	12/8/15
Run Number	TWO
Depth Driller	4000
Depth Logger	3993
Bottom Logged Interval	3991
Top Log Interval	3200
Casing Driller	8 5/8" @ 945
Casing Logger	936
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.2/47
pH / Fluid Loss	10.0/9.6
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.50 @ 60F
Rmt @ Meas. Temp	.37 @ 60F
Rmc @ Meas. Temp	.60 @ 60F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.25 @ 116F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	7:00 P.M.
Maximum Recorded Temperature	116F
Equipment Number	4010
Location	HAYS, KANSAS
Recorded By	JASON CAPPELLUCCI
Witnessed By	KEITH REAVIS

<<< 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**

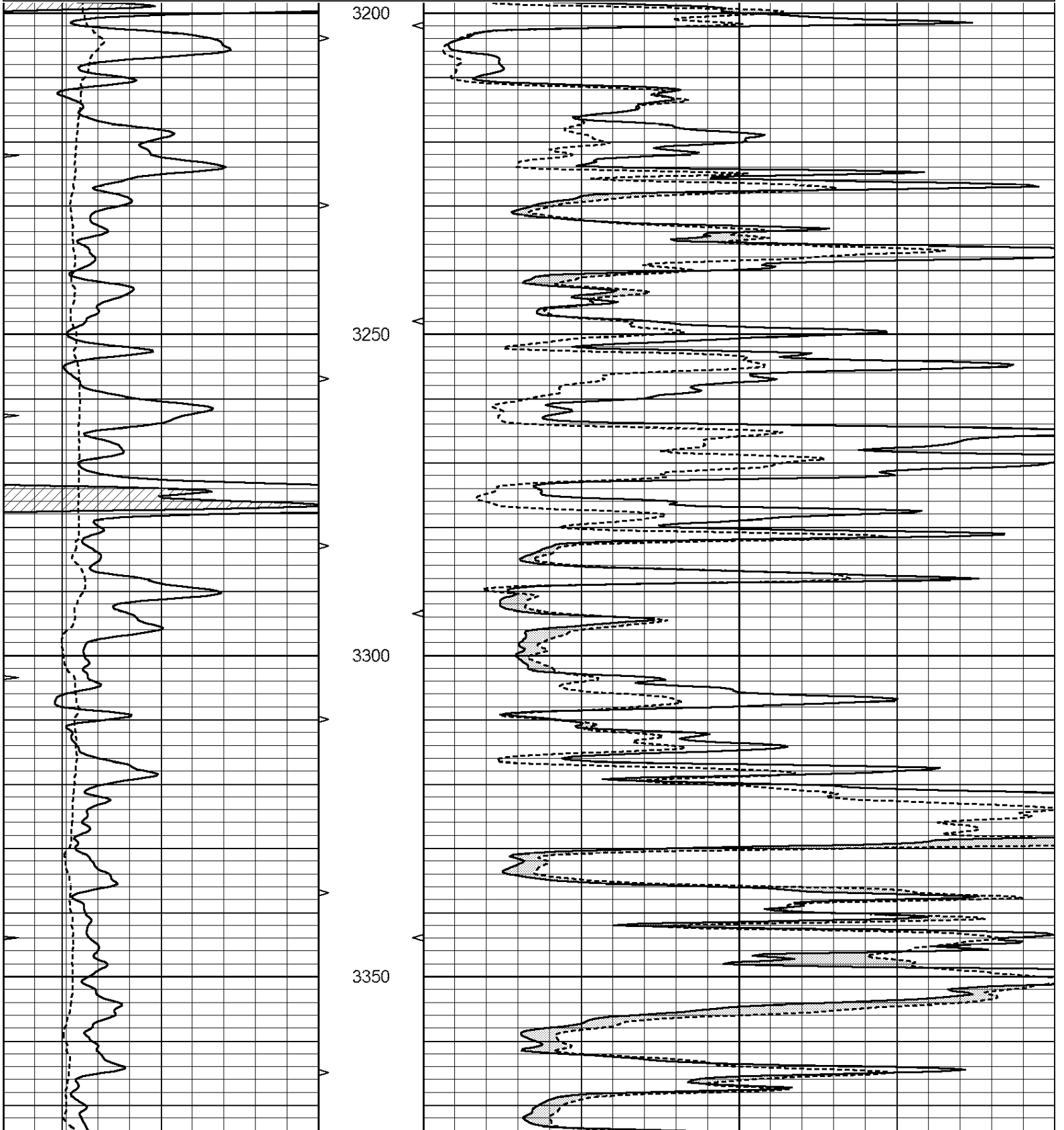
THANK YOU FOR USING CASED HOLE SOLUTIONS, HAYS, KS. (785) 628-6395  
DIRECTIONS:  
LARNED, KS. - 8 EAST ON HWY 19 TO RD. 30 - 1 NORTH - 1/4 WEST - NORTH INTO  
THRU ELECTRIC GATE

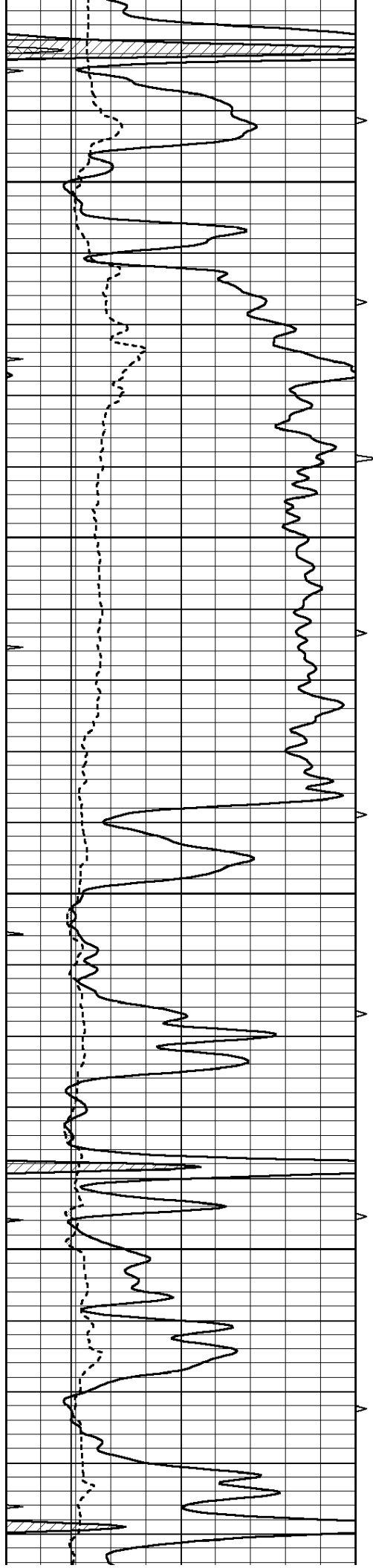


**MAIN SECTION**

Database File: 30887ddn.db  
 Dataset Pathname: pass6.1  
 Presentation Format: \_micro  
 Dataset Creation: Tue Dec 08 21:41:46 2015 by Calc Open-Cased 090629  
 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	MEL2.0 (Ohm-m)	40
0	MINMK	20	TBHV			
			0 (ft3)	10		



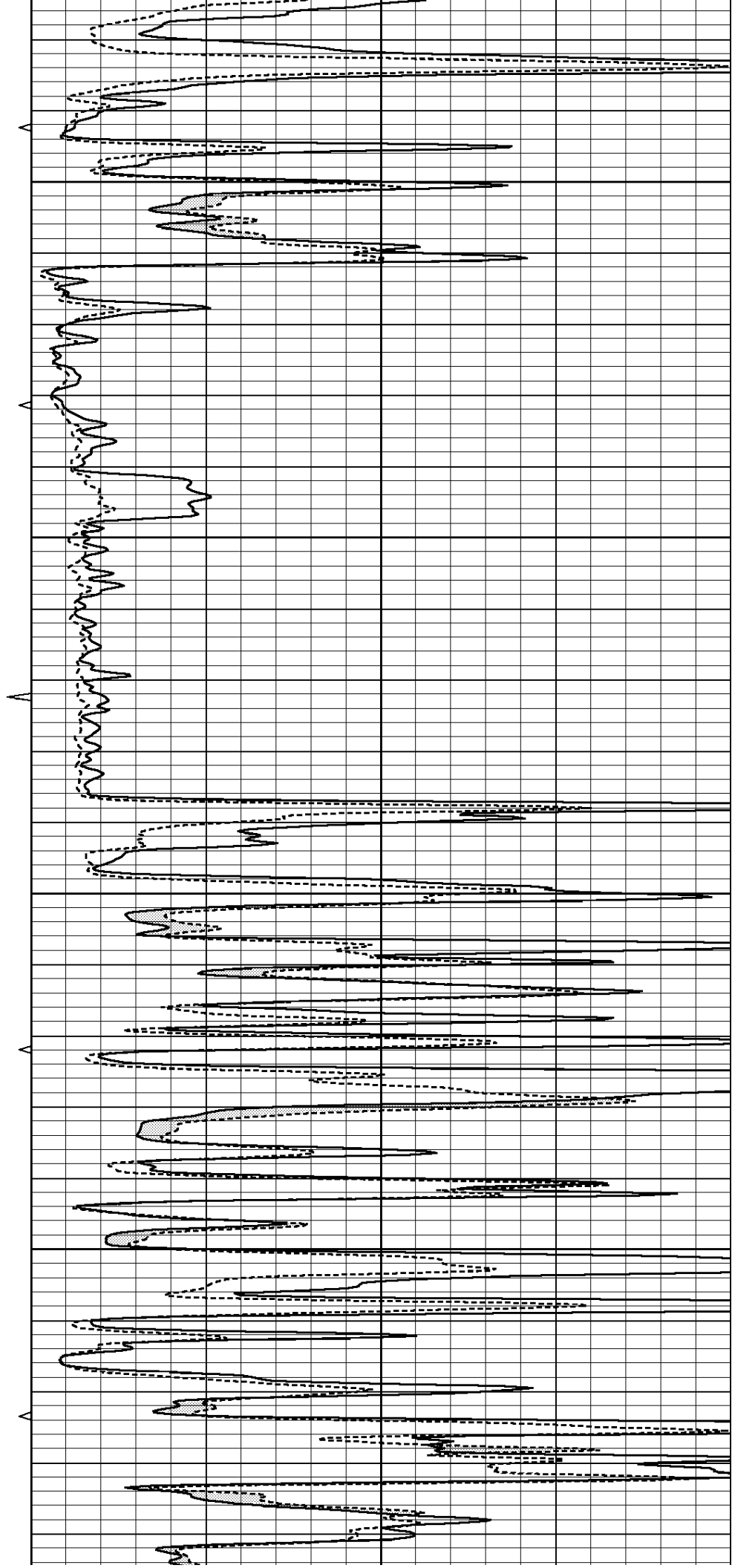


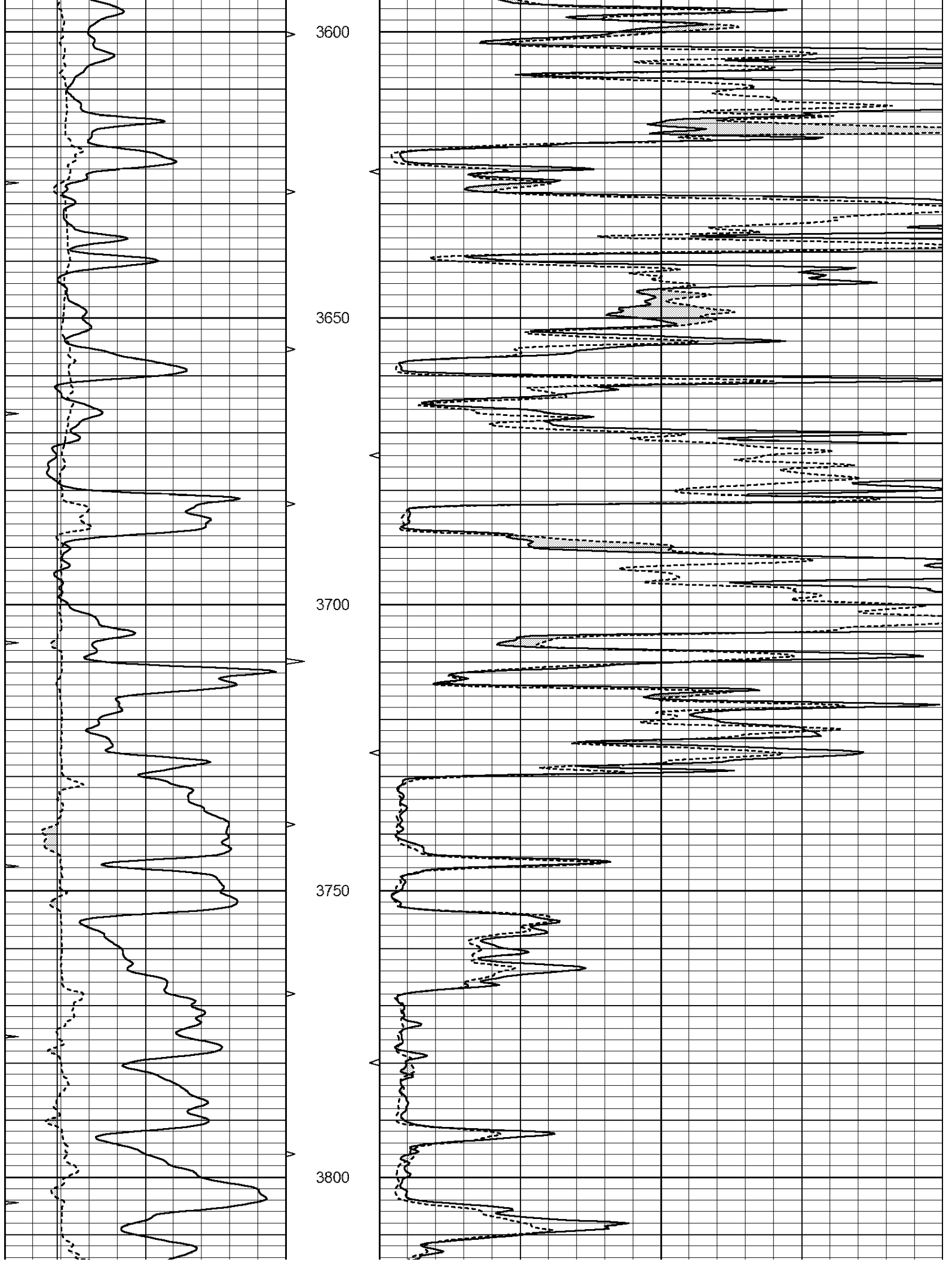
3400

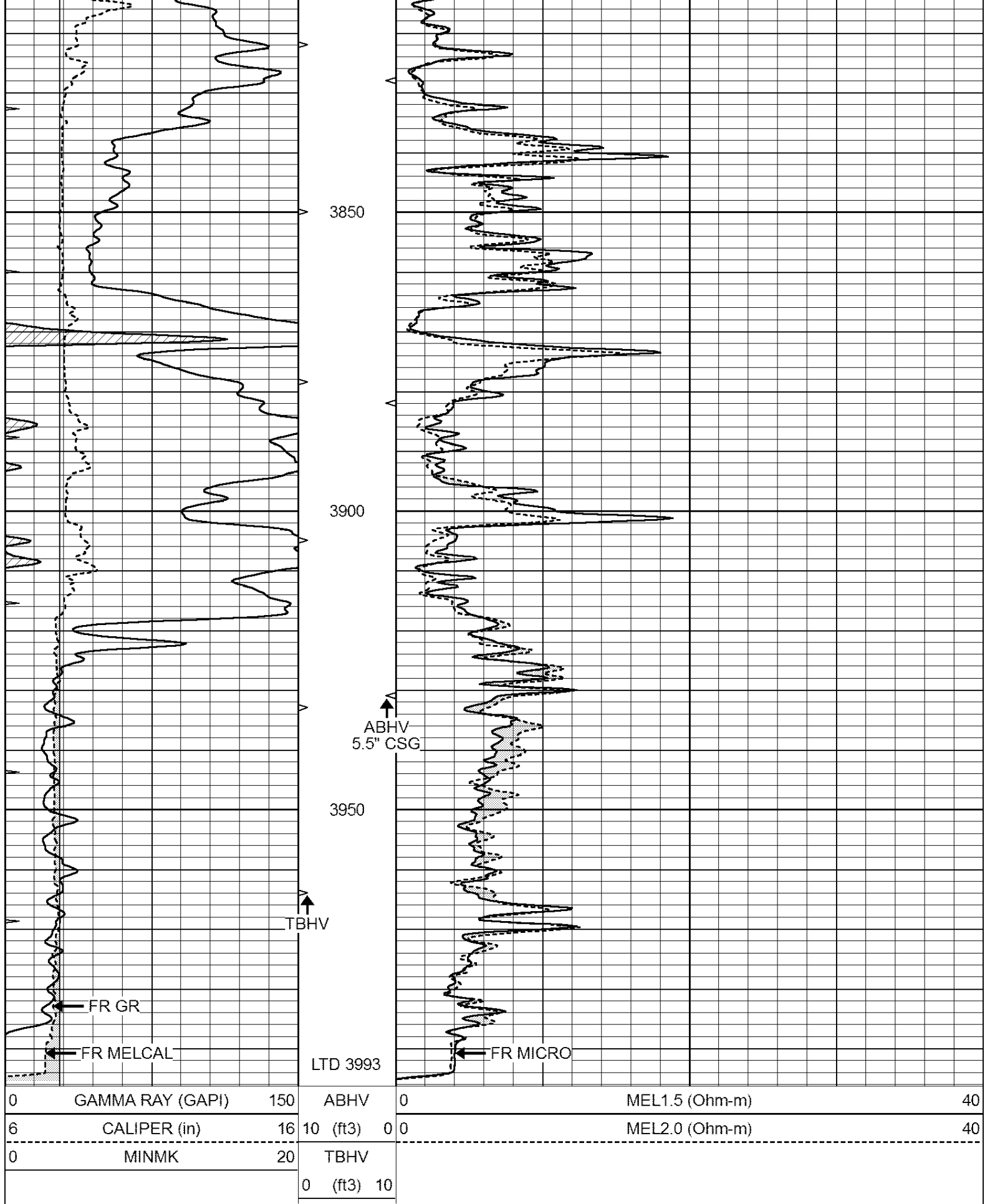
3450

3500

3550







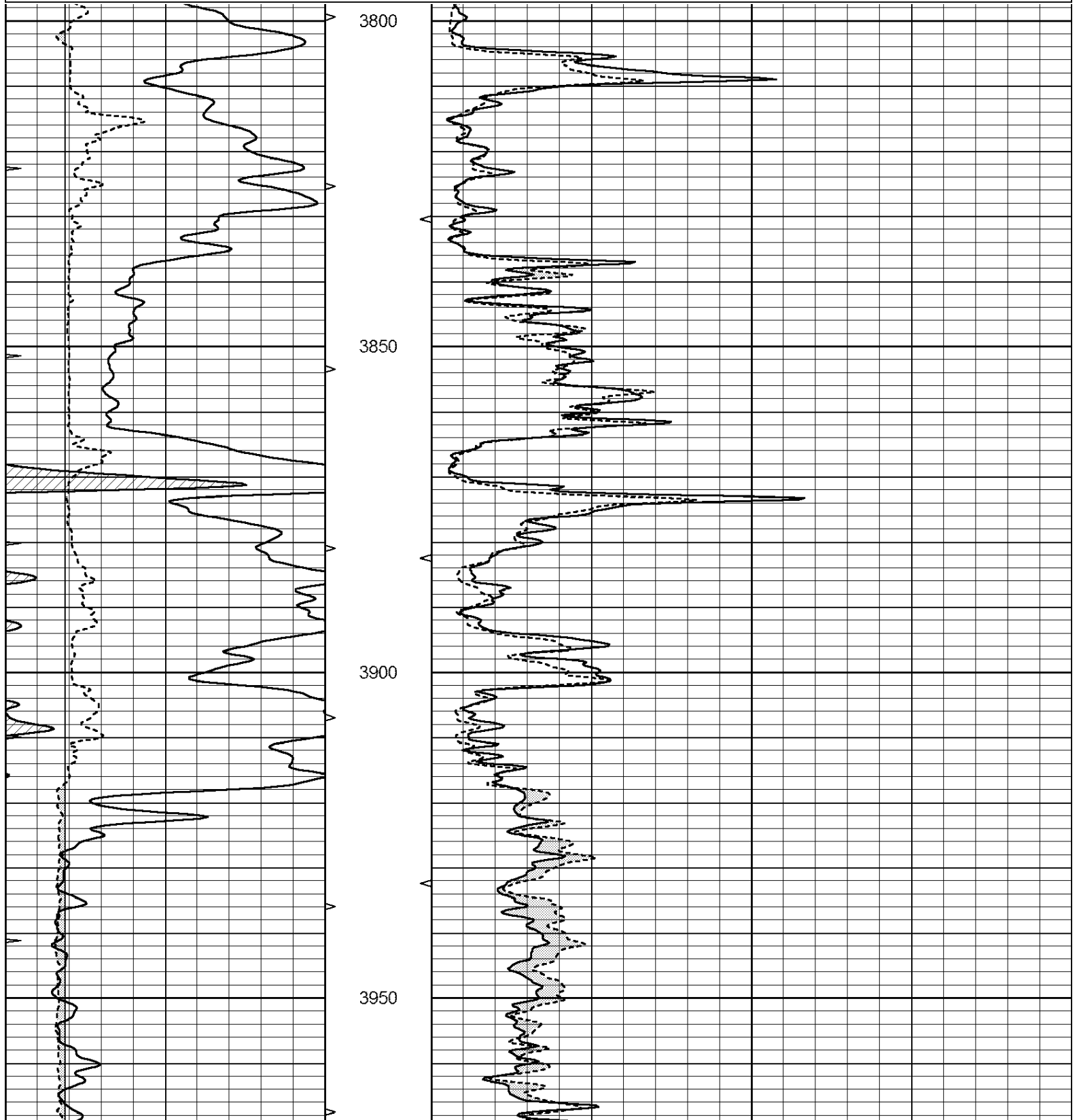
0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	40
6	CALIPER (in)	16	10 (ft3)	0 0	MEL2.0 (Ohm-m)	40
0	MINMK	20	TBHV			
			0 (ft3)	10		

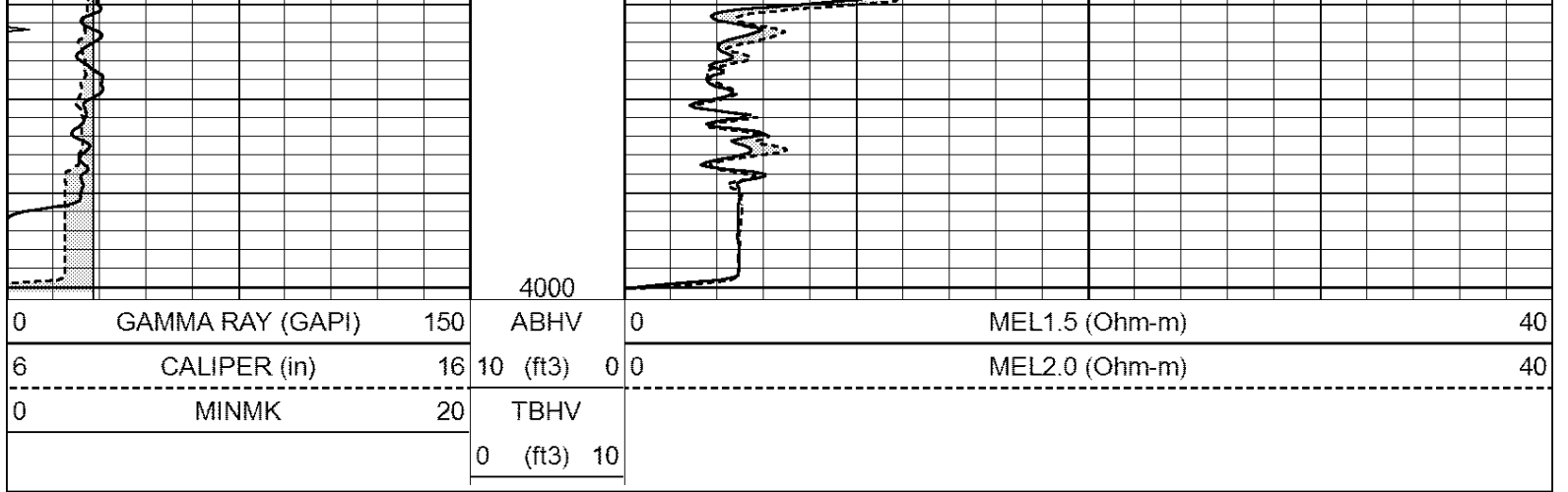


# RFPFAT SFCTION

Database File: 30887ddn.db  
 Dataset Pathname: pass5.1  
 Presentation Format: \_micro  
 Dataset Creation: Tue Dec 08 21:31:55 2015 by Calc Open-Cased 090629  
 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	MEL2.0 (Ohm-m)	40
0	MINMK	20	TBHV			
			0 (ft3)	10		





Calibration Report

Database File: 30887ddn.db  
 Dataset Pathname: pass5.1  
 Dataset Creation: Tue Dec 08 21:31:55 2015 by Calc Open-Cased 090629

MICRO Calibration Report

Serial Number: MICRO6  
 Tool Model: PROBE  
 Performed: Wed Aug 26 00:34:46 2015

Caliper Calibration: Gain=3.960 Offset=4.601

	Low Cal	High Cal
References	7.000	14.000
Readings	0.555	2.323

1.5" Calibration: Gain=38.075 Offset=-0.400

	Low Cal	High Cal
References	0.000	20.000
Readings	0.004	1.196

2" Calibration: Gain=48.000 Offset=-1.000

	Low Cal	High Cal
References	0.000	20.000
Readings	0.006	0.913

Gamma Ray Calibration Report

Serial Number: GR6  
 Tool Model: OPEN  
 Performed: Thu Nov 12 05:47:01 2015

Calibrator Value: 150.0 GAPI

Background Reading:	0.0	cps
Calibrator Reading:	276.0	cps

Sensitivity: 0.4500 GAPI/cps