



SUPERIOR
Hays,
Kansas

MICRO LOG

Company	MAI OIL OPERATIONS, INC.	Company	MAI OIL OPERATIONS, INC.
Well	LUDWIG #2	Well	LUDWIG #2
Field	CARROLL	Field	CARROLL
County	BARTON	County	BARTON
State	KANSAS	State	KANSAS
Location:	API # : 15-009-25704-0000 2310' FSL & 660' FWL N/2 - NW - SW	Other Services CDL/CNL DIL	
Permanent Datum	GROUND LEVEL	Elevation	1859
Log Measured From	KELLY BUSHING 8' A.G.L.	K.B. 1867 D.F. 1865 G.L. 1859	
Drilling Measured From	KELLY BUSHING		
SEC 28 TWP 17S RGE 14W			
Date	7/3/12		
Run Number	TWO		
Depth Driller	3425		
Depth Logger	3422		
Bottom Logged Interval	3420		
Top Log Interval	2700		
Casing Driller	8 5/8"@839'		
Casing Logger	839		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 9,000 PPM	
Density / Viscosity	8.9/5.1		
pH / Fluid Loss	10.0/10.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.400@90F		
Rmt @ Meas. Temp	.300@90F		
Rmc @ Meas. Temp	.480@90F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	.324@111F		
Time Circulation Stopped	3.5 HOURS		
Time Logger on Bottom	12:45 A.M.		
Maximum Recorded Temperature	111F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	KURT TALBOTT		

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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 SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395
DIRECTIONS

S. OF RUSSELL, KS. TO (HWY 4 & 281) 2W. TO "NW 60 RD.", 1/2N. TO SHELTER BELT, E. & S. INTO

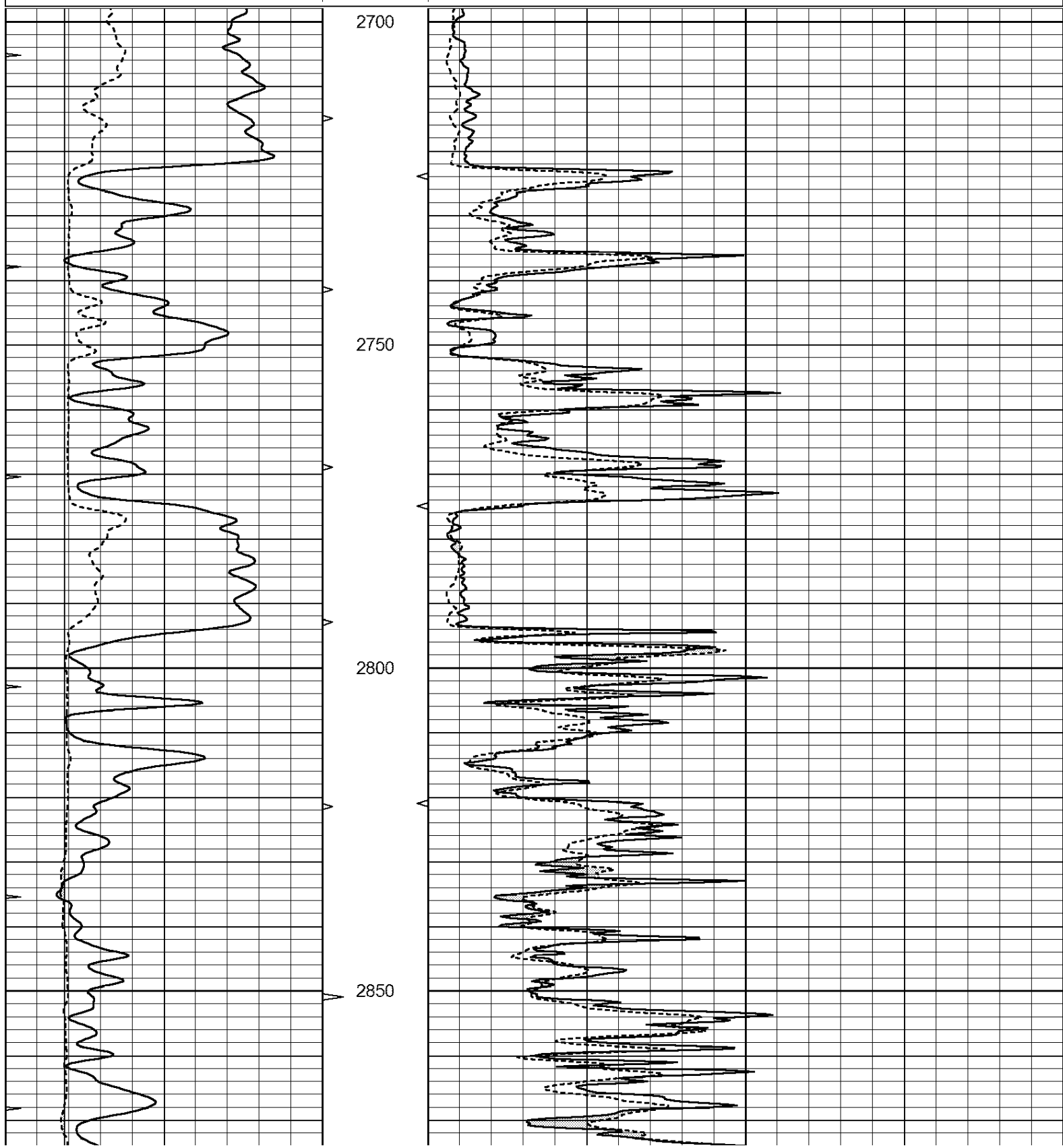


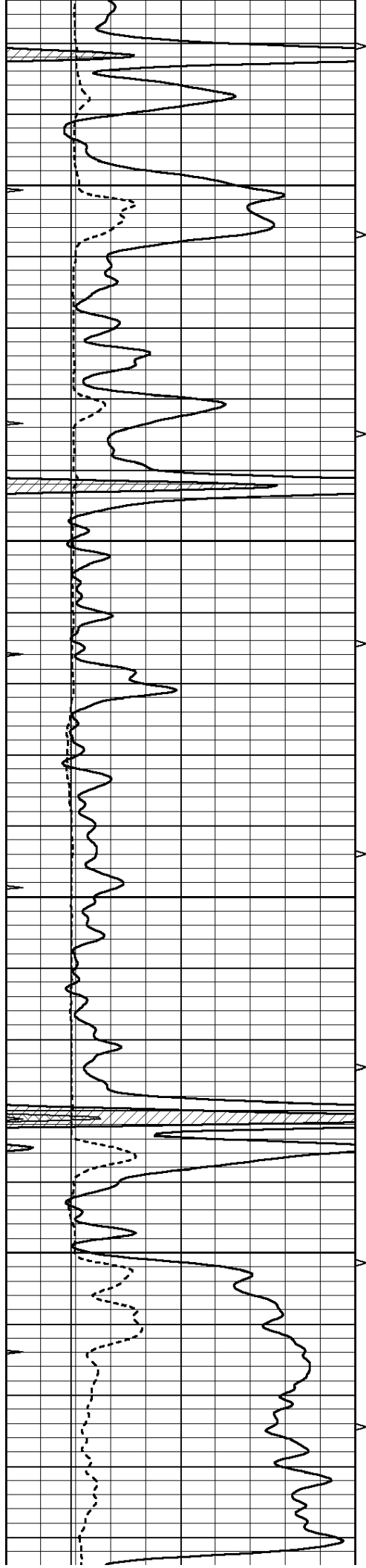
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MAIN SECTION

Database File: 409426ddn.db
Dataset Pathname: pass6.3
Presentation Format: micro
Dataset Creation: Wed Jul 04 03:20:58 2012 by Calc Open-Cased 110302
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		



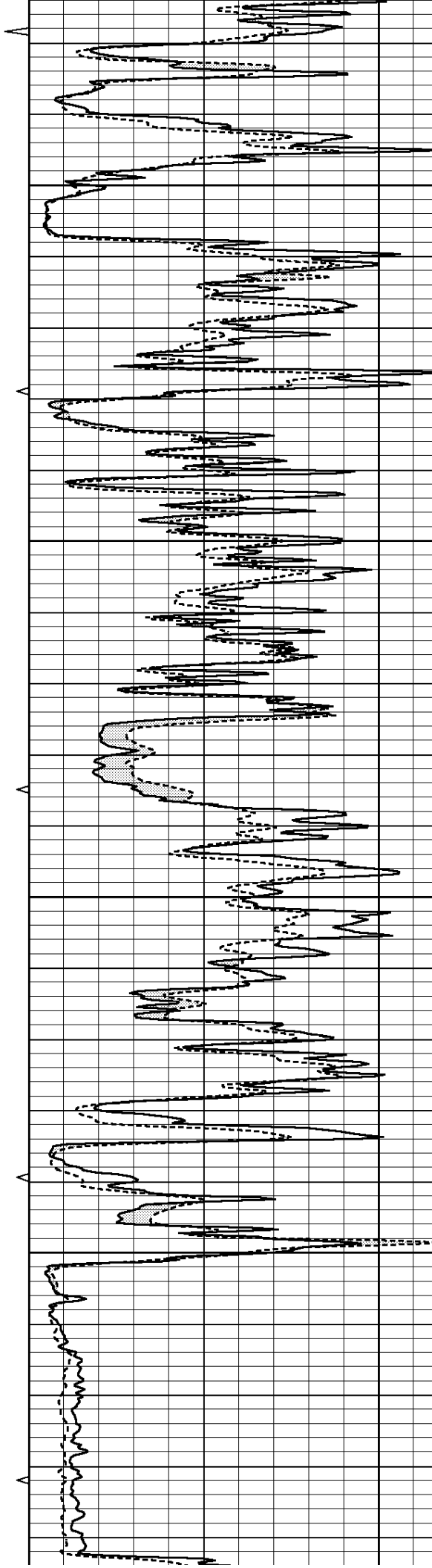


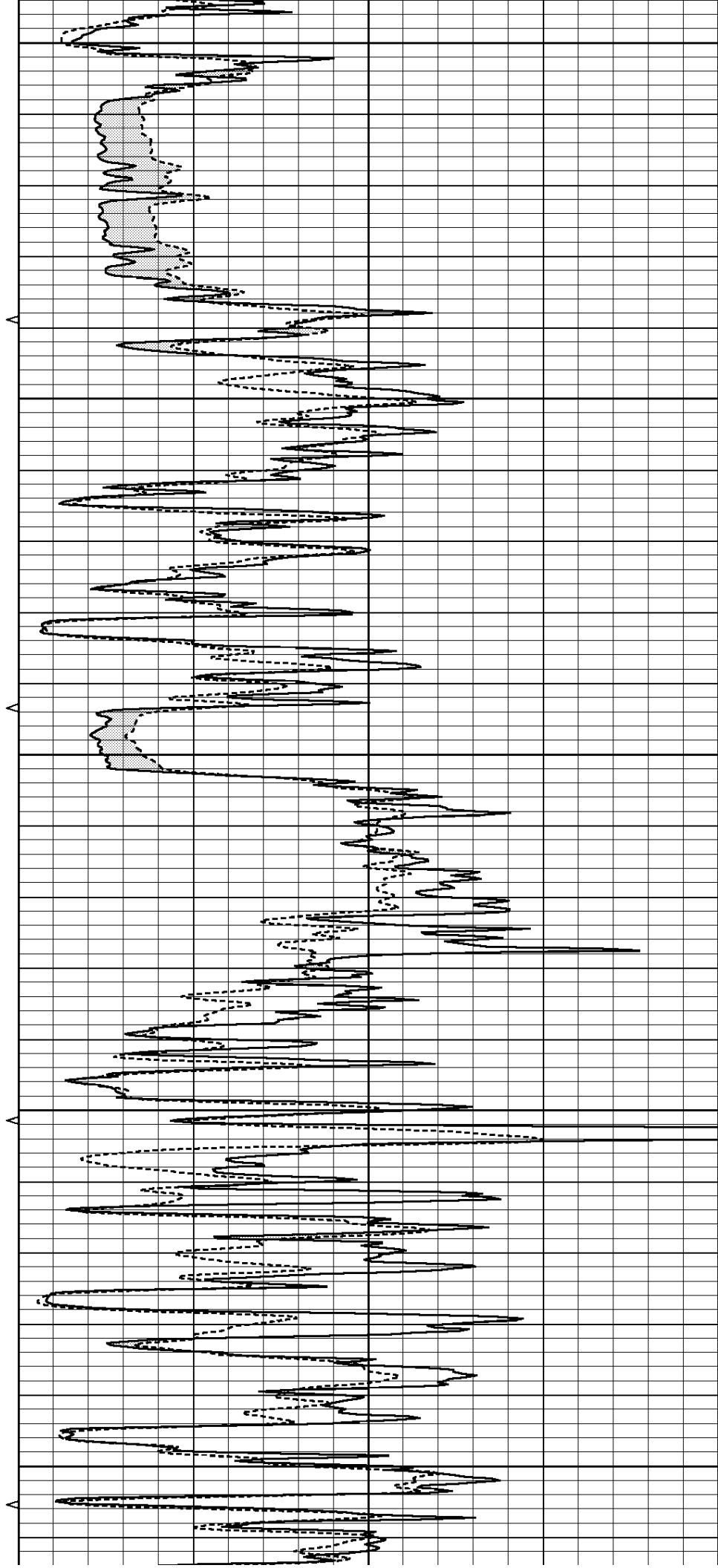
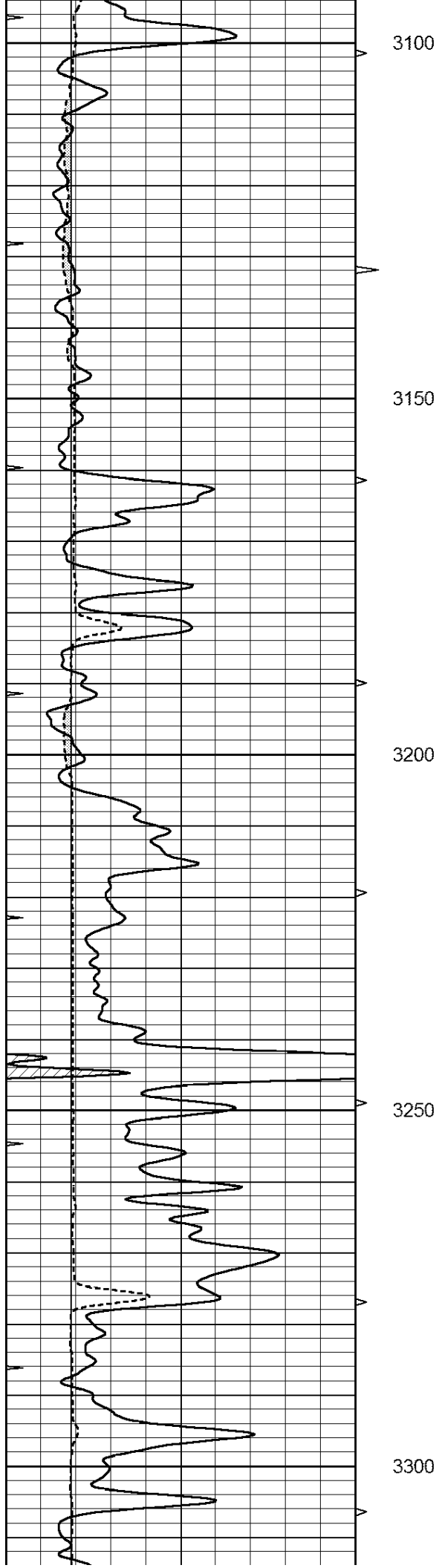
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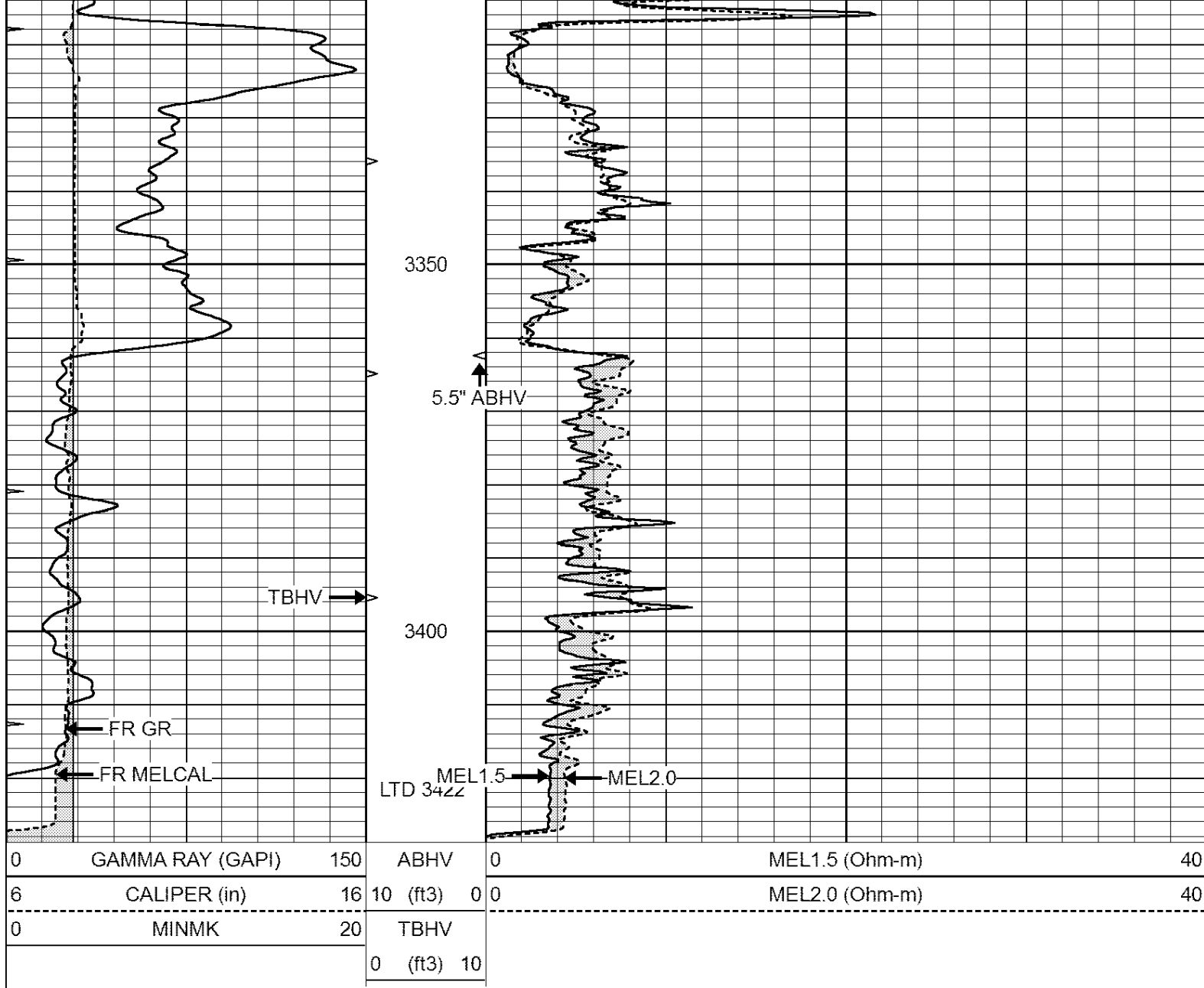
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3000

3050





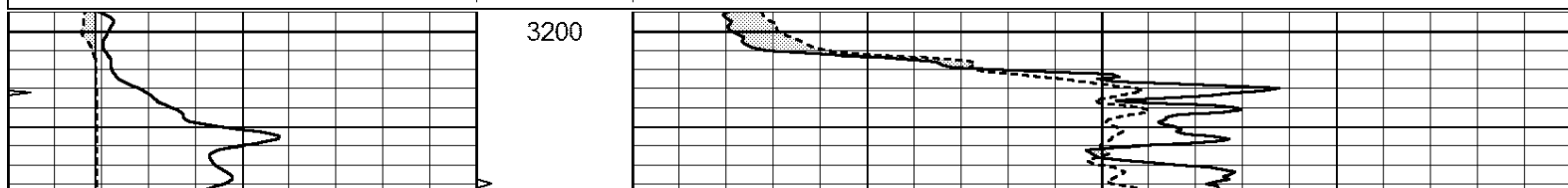


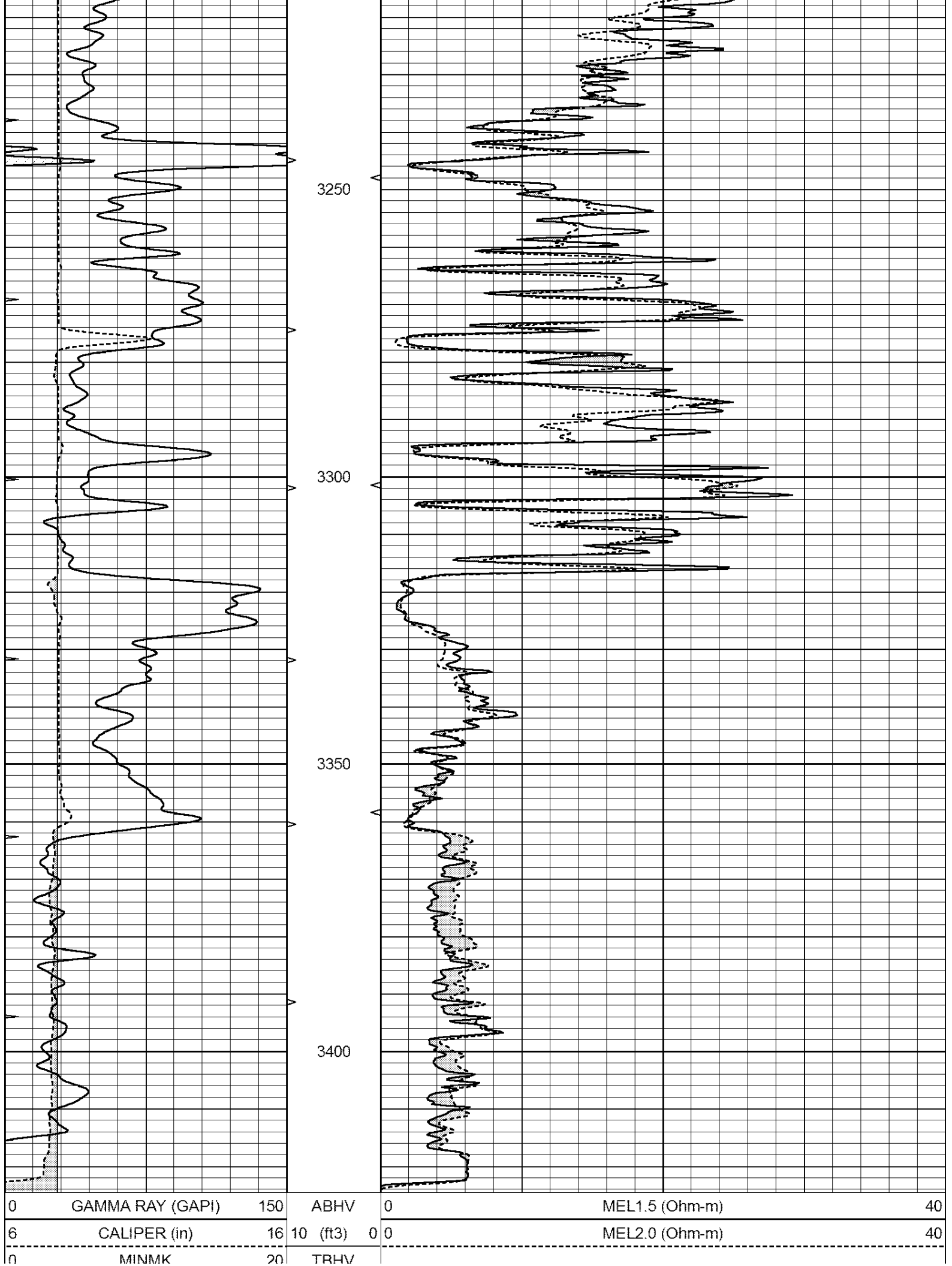
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REPEAT SECTION

Database File: 409426ddn.db
 Dataset Pathname: pass5.2
 Presentation Format: micro
 Dataset Creation: Wed Jul 04 03:23:17 2012 by Calc Open-Cased 110302
 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		





	0	(ft3)	10
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Calibration Report

Database File: 409426ddn.db
Dataset Pathname: pass6.3
Dataset Creation: Wed Jul 04 03:20:58 2012 by Calc Open-Cased 110302

MICRO Calibration Report

Serial Number: 2
Tool Model: PROBE
Performed: Wed Jun 20 22:56:08 2012

Caliper Calibration:	Gain=3.988	Offset=3.692
	Low Cal	High Cal
References	8.200	15.000
Readings	1.130	2.835

1.5" Calibration:	Gain=22.000	Offset=0.000
	Low Cal	High Cal
References	0.000	20.000
Readings	0.065	1.210

2" Calibration:	Gain=42.000	Offset=0.000
	Low Cal	High Cal
References	0.000	20.000
Readings	0.012	1.043

Gamma Ray Calibration Report

Serial Number: GR4
Tool Model: OPEN
Performed: Wed Jul 04 02:54:30 2012

Calibrator Value:	200.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	189.0	cps
Sensitivity:	1.3000	GAPI/cps