



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

**MICRO
LOG**

Company	MULL DRILLING COMPANY, INC.	Company	MULL DRILLING COMPANY, INC.
Well	#1-21 HENNING - McDONALD UNIT	Well	#1-21 HENNING - McDONALD UNIT
Field	WILDCAT	Field	WILDCAT
County	TREGO	County	TREGO
State	KANSAS	State	KANSAS
Location:	API # : 15-195-22890-0000 1360' FNL & 2515' FEL	Other Services CDL/CNL/PE DIL/SONIC	
Permanent Datum	GROUND LEVEL	Elevation	2347
Log Measured From	KELLY BUSHING 5' A.G.L.		
Drilling Measured From	KELLY BUSHING		
SEC 21 TWP 15S RGE 23W			
Date	11/16/13		
Run Number	TWO		
Depth Driller	4430		
Depth Logger	4433		
Bottom Logged Interval	4411		
Top Log Interval	3600		
Casing Driller	8 5/8"@205'		
Casing Logger	206		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 8,300 PPM	
Density / Viscosity	9.4/49		
pH / Fluid Loss	8.5/8.8		
Source of Sample	FLOWLINE		
Rin @ Meas. Temp	.650@81F		
Rinf @ Meas. Temp	.488@81F		
Rinc @ Meas. Temp	.780@81F		
Source of Rinf / Rinc	MEASUREMENT		
Rin @ BHT	.439@120F		
Time Circulation Stopped	4.5 HOURS		
Time Logger on Bottom	4:15 A.M.		
Maximum Recorded Temperature	120F		
Equipment Number	4854		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	KEVIN KESSLER		

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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
WAKEENEY, KS. & I-70, 20S. ON HWY 283 TO "RD. CC", 1E. TO "T", 1N., 1/2 W. & S. INTO

Database File:

011808pe.db

Dataset Pathname:

pass7.2

Presentation Format:

micro

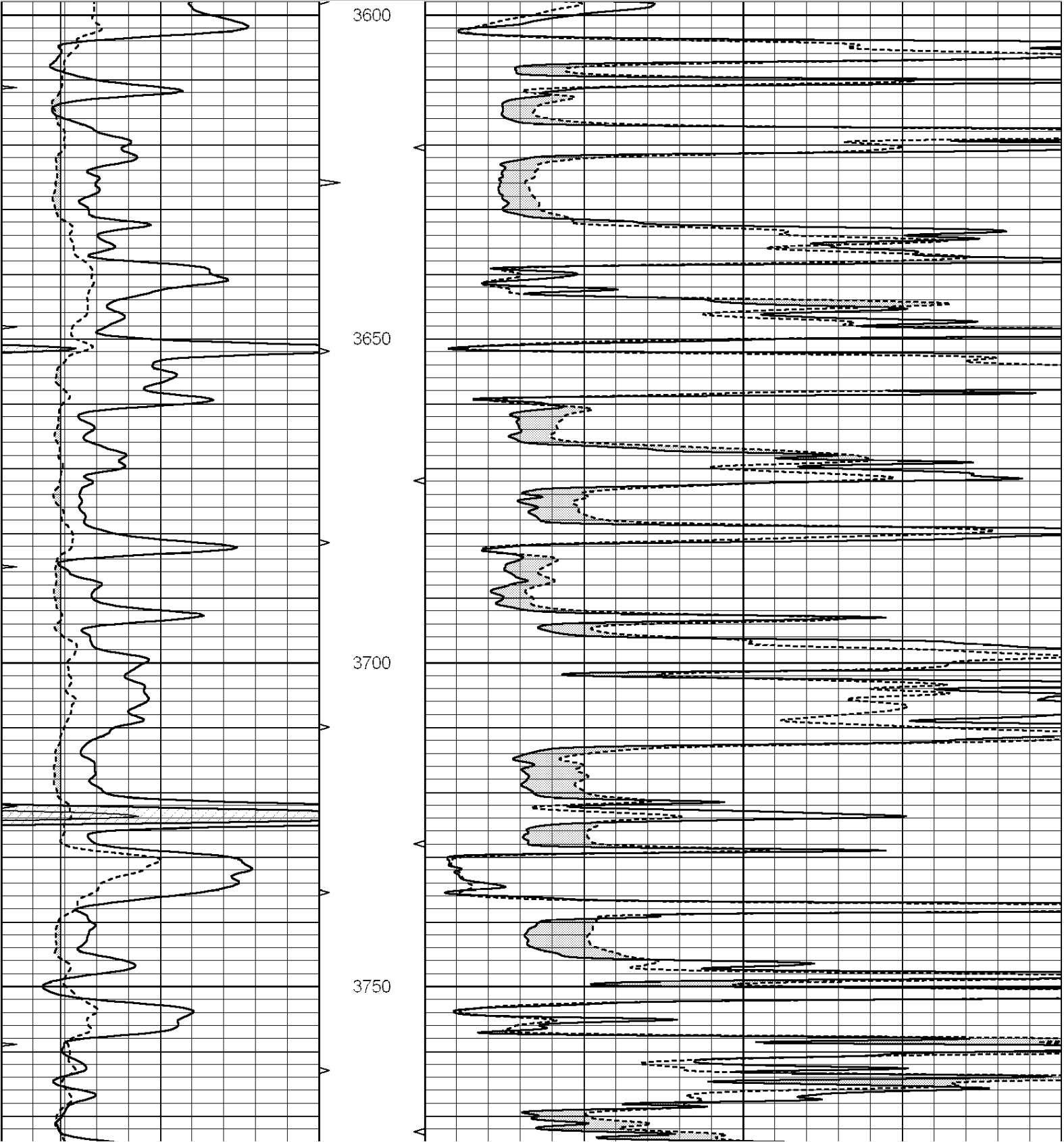
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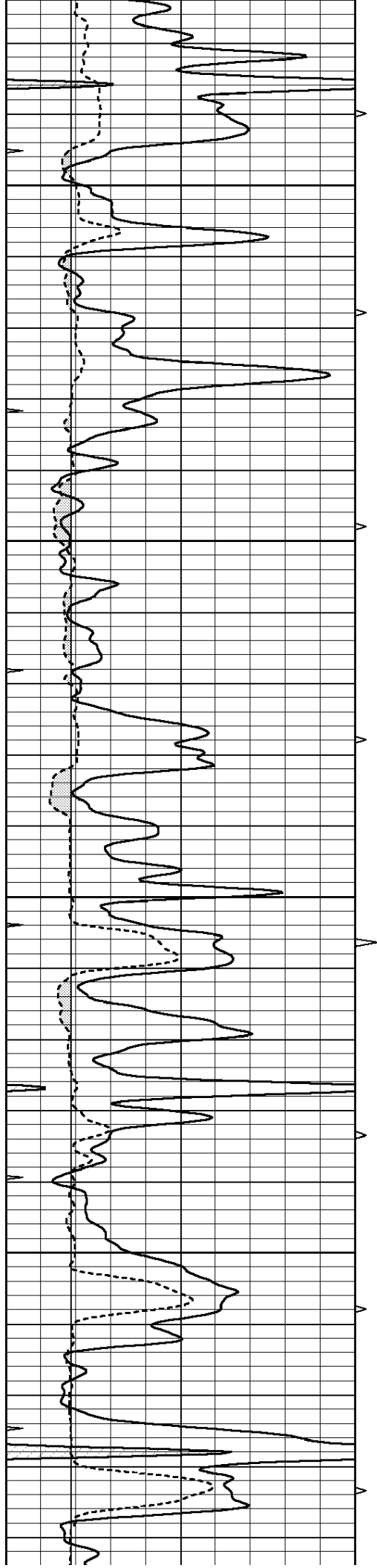
Sat Nov 16 07:31:54 2013

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		



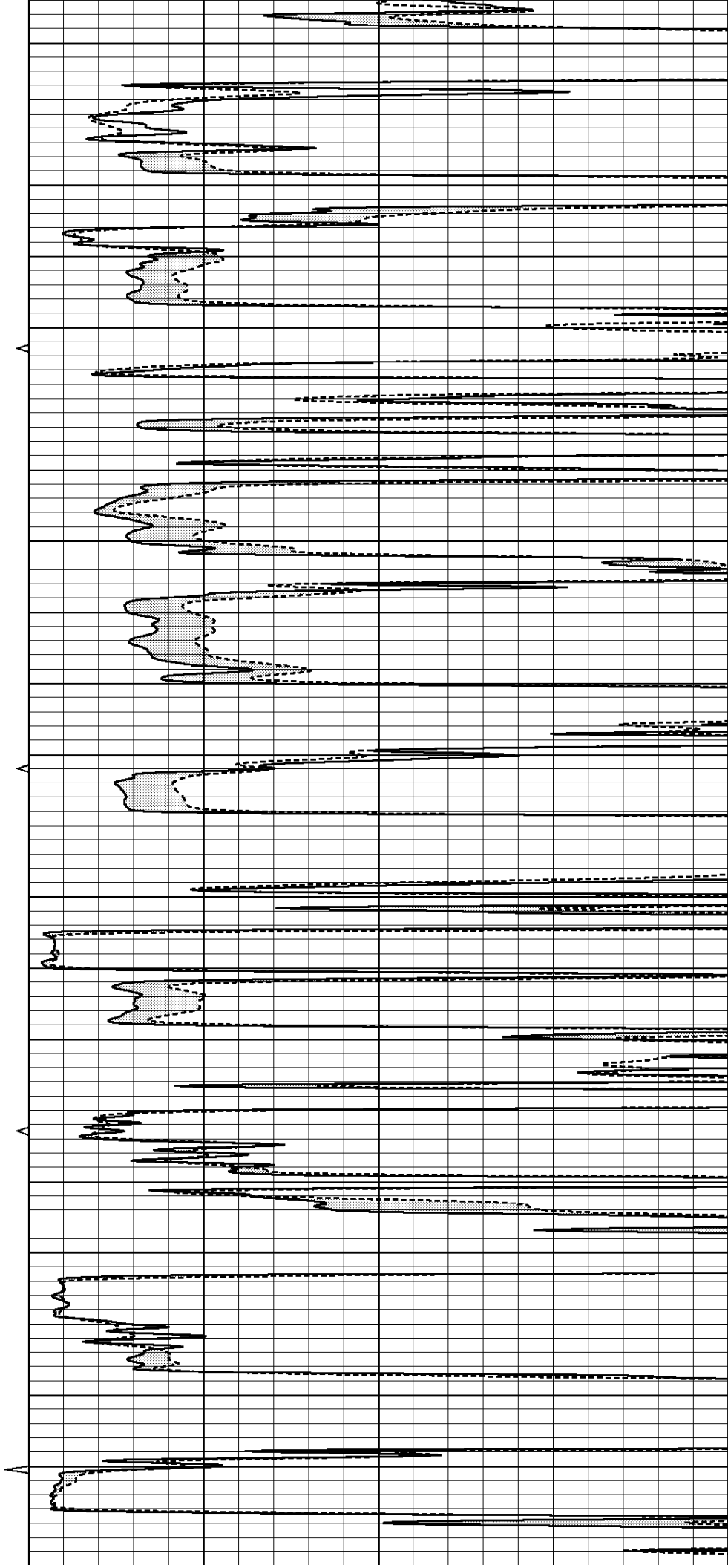


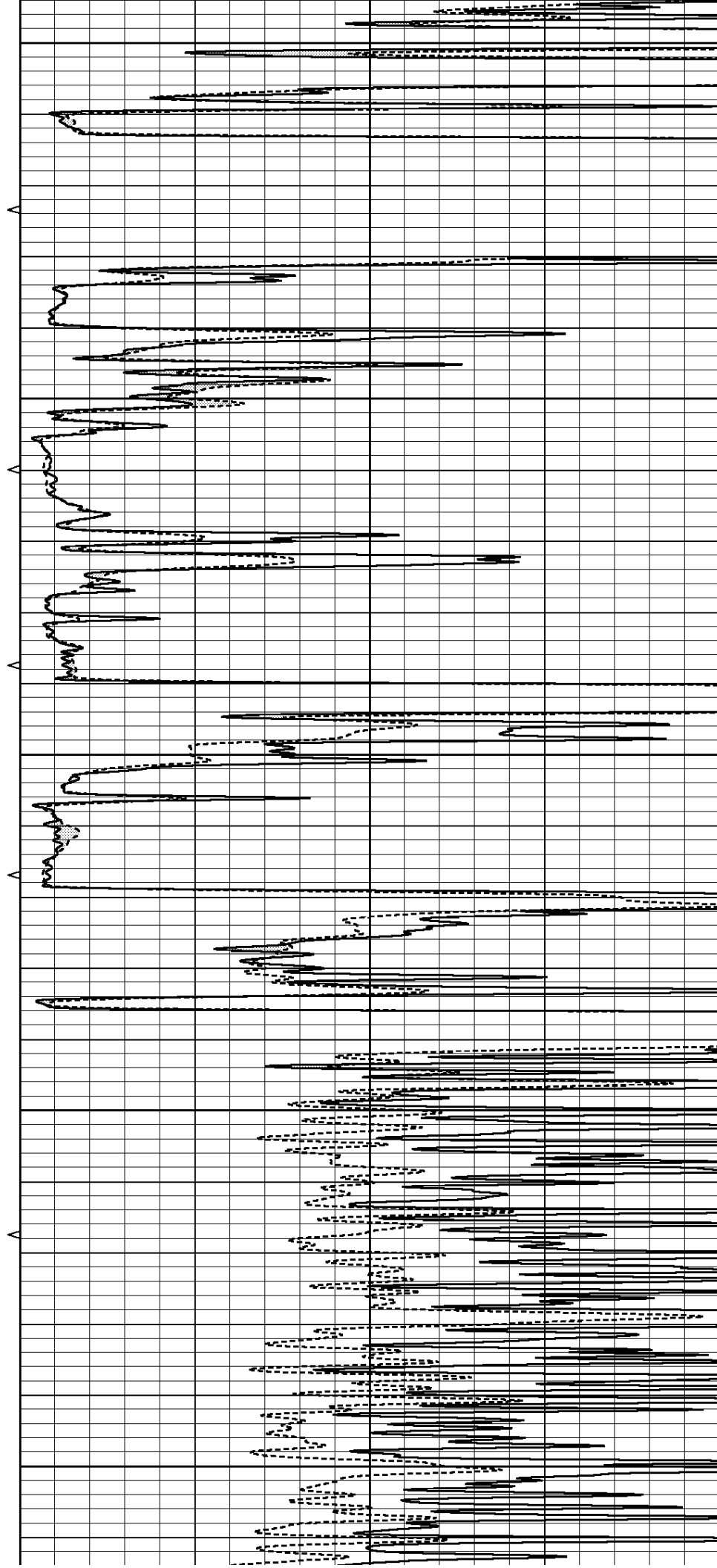
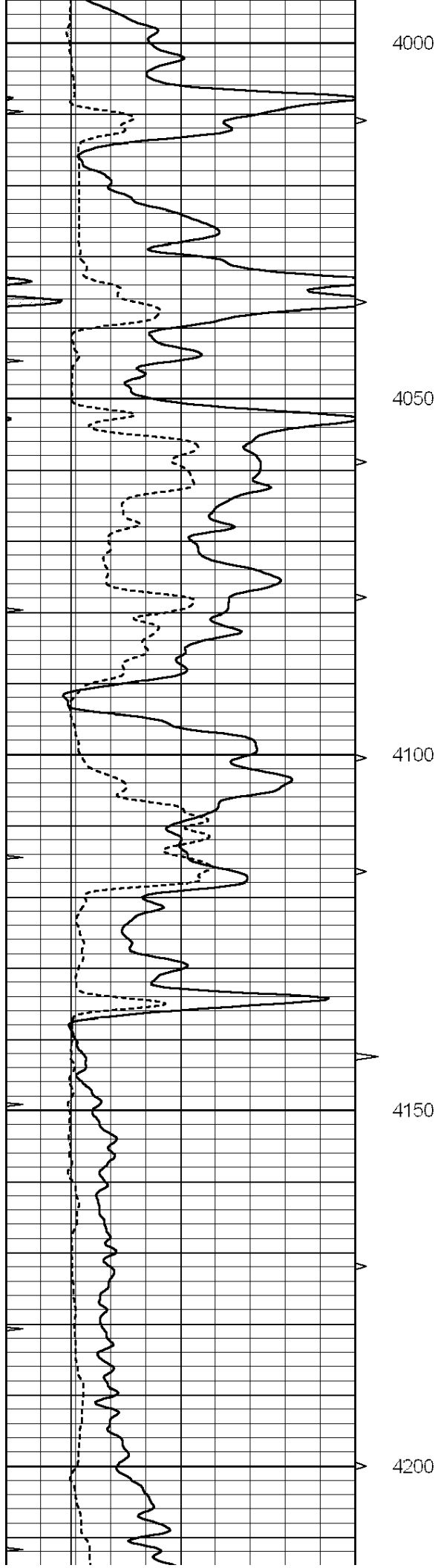
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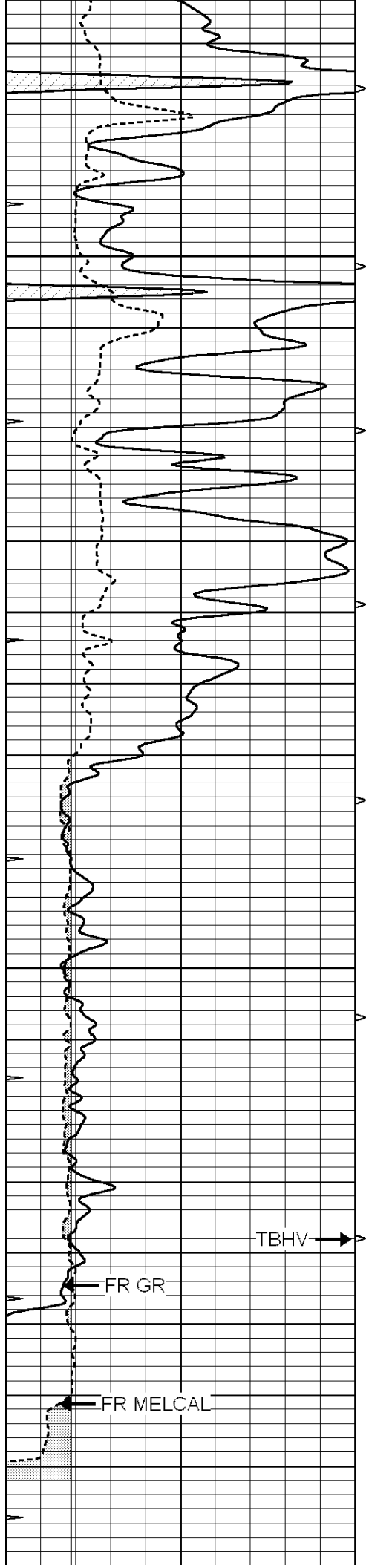
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3900

3950







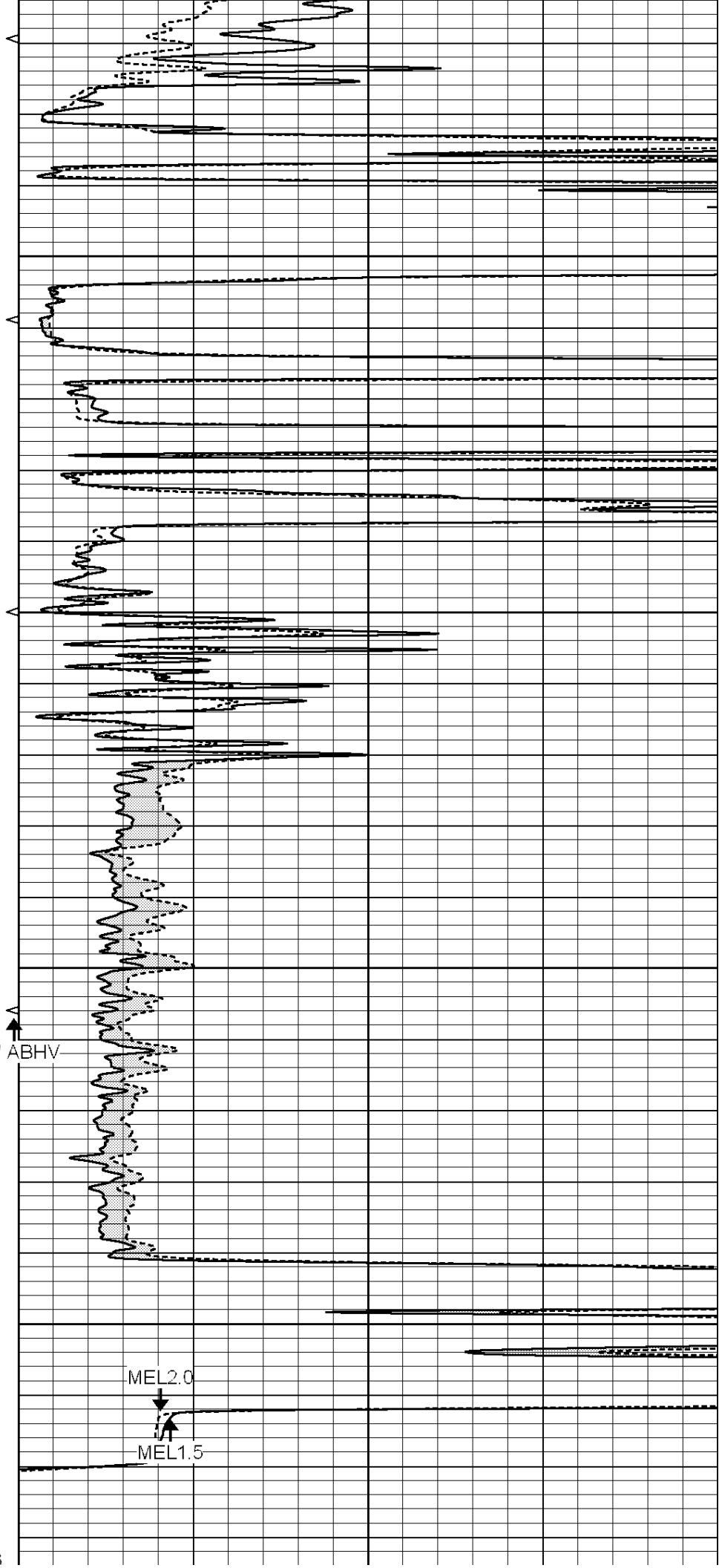
4250

4300

4350

5.5" ABHV

4400



MEL2.0

MEL1.5

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		

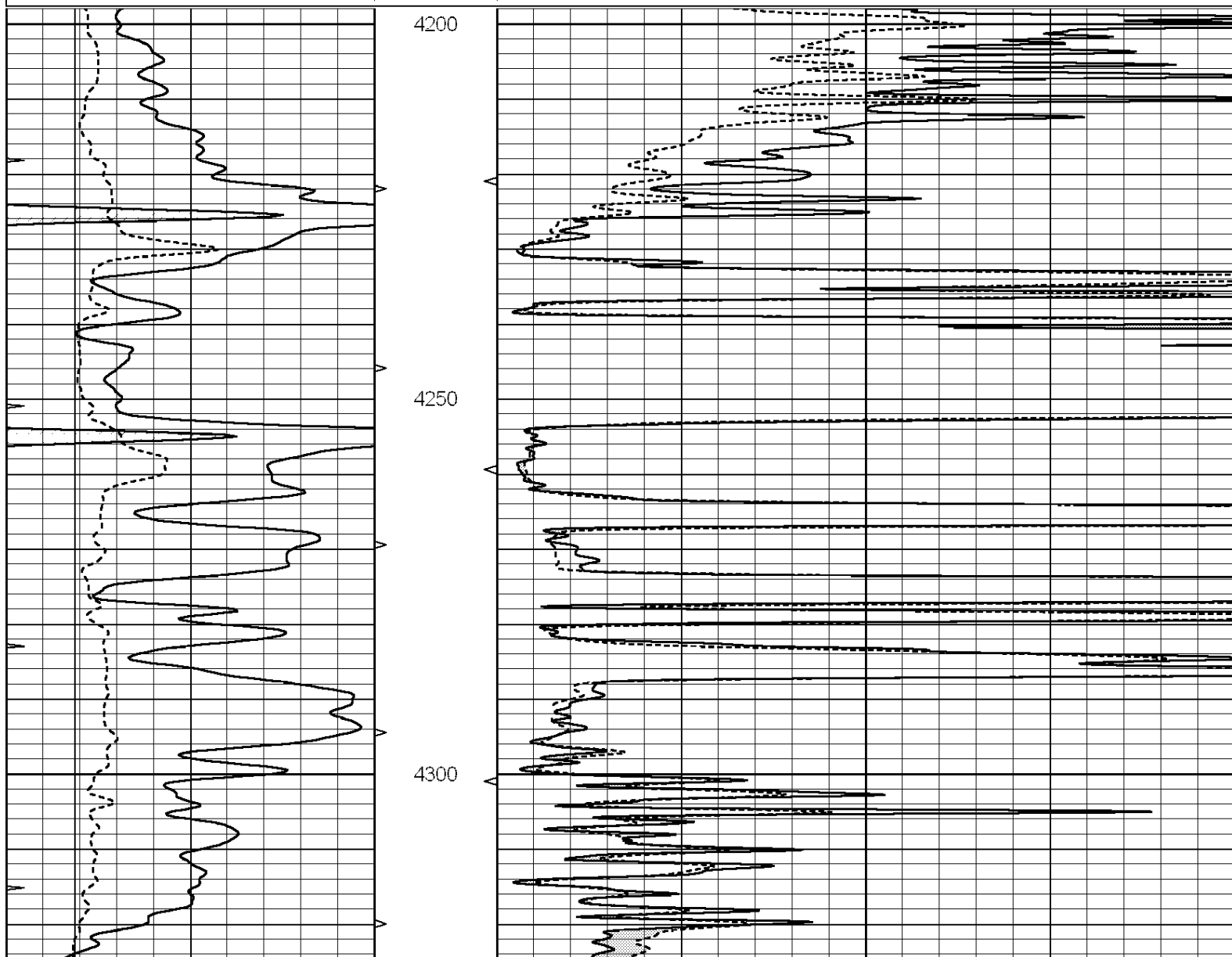


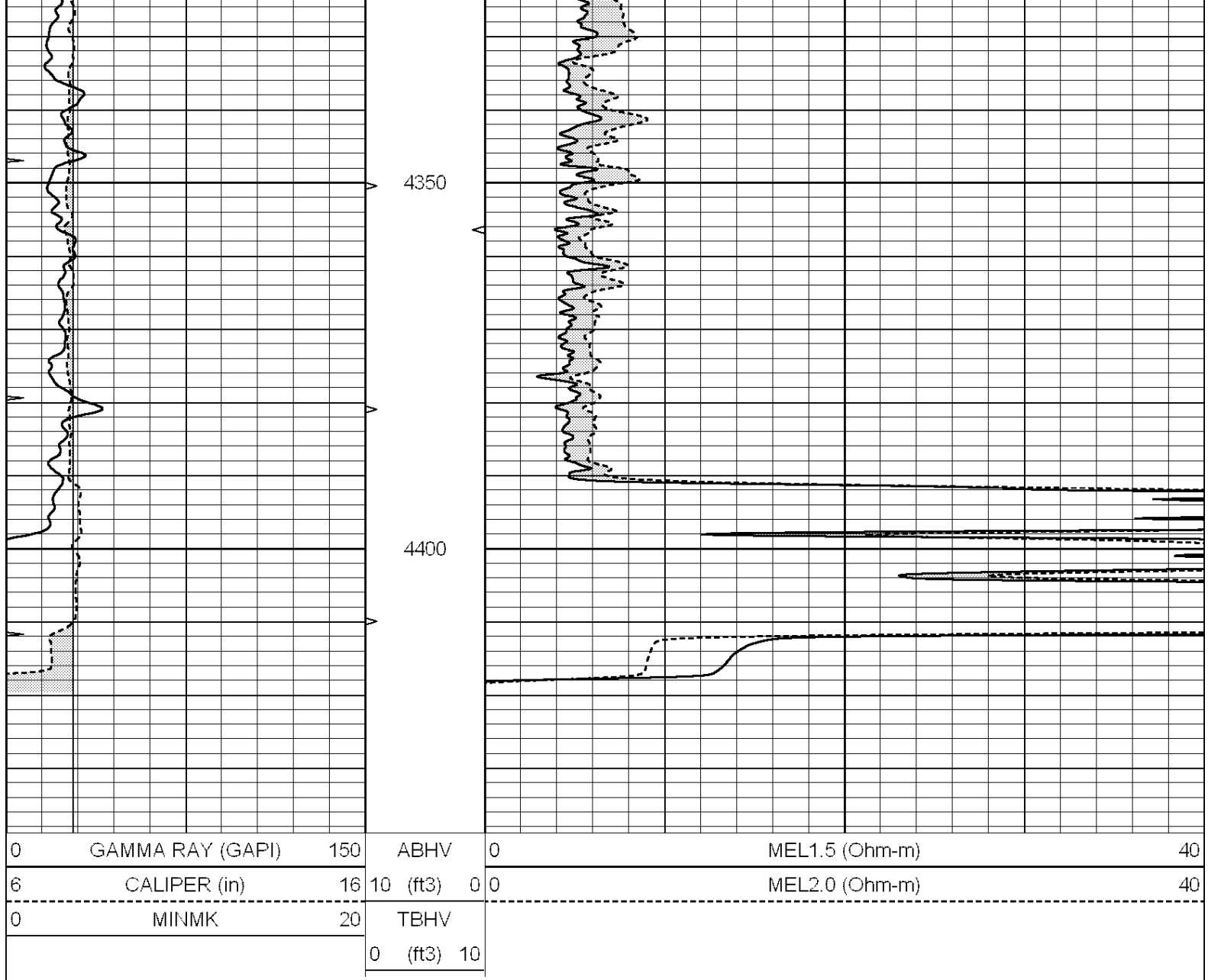
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REPEAT SECTION

Database File: 011808pe.db
Dataset Pathname: pass6.1
Presentation Format: micro
Dataset Creation: Sat Nov 16 07:32:55 2013
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:	011808pe.db		
Dataset Pathname:	pass7.2		
Dataset Creation:	Sat Nov 16 07:31:54 2013		
MICRO Calibration Report			
Serial Number:	MICRO5		
Tool Model:	PROBE		
Performed:	Fri Nov 01 08:18:01 2013		
Caliper Calibration:	Gain=3.399	Offset=-5.556	
	Low Cal	High Cal	
References	8.400	15.000	
Readings	4.106	6.048	
1.5" Calibration:	Gain=42.000	Offset=-1.000	
	Low Cal	High Cal	
References	0.000	20.000	
Readings	0.015	1.005	
2" Calibration:	Gain=54.000	Offset=-1.000	

References	Low Cal	High Cal
Readings	0.000	20.000
	0.009	0.910
Gamma Ray Calibration Report		
Serial Number:	GR3	
Tool Model:	OPEN	
Performed:	Sun Nov 03 23:48:19 2013	
Calibrator Value:	200.0	GAPI
Background Reading:	3.0	cps
Calibrator Reading:	186.0	cps
Sensitivity:	1.5000	GAPI/cps