



SUPERIOR
Hays,
Kansas

MICRO
LOG

Company PIONEER RESOURCES
Well KNOPP #4
Field WILDCAT
County LOGAN
State KANSAS

Company PIONEER RESOURCES
Well KNOPP #4
Field WILDCAT
County LOGAN State KANSAS

Location: API # : 15-109-21084-0000
SEC 13 TWP 14S RGE 32W
GROUND LEVEL Elevation 2816
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
CDL/CNL
DIL
Elevation
K.B. 2821
D.F. 2819
G.L. 2816

Date	5/16/12
Run Number	TWO
Depth Driller	4570
Depth Logger	4572
Bottom Logged Interval	4570
Top Log Interval	3500
Casing Driller	8 5/8"@220'
Casing Logger	220
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.2/66
pH / Fluid Loss	10.0/9.8
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.600@90F
Rmt @ Meas. Temp	.450@90F
Rmc @ Meas. Temp	.720@90F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.448@121F
Time Circulation Stopped	4.5 HOURS
Time Logger on Bottom	6:15 A.M.
Maximum Recorded Temperature	121F
Equipment Number	4010
Location	HAYS, KANSAS
Recorded By	JEFF LUEBBERS
Witnessed By	STEVE MURPHY

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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 SING SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395
DIRECTIONS
OAKLEY, KS. (OLD 40 & HWY 83 JUNCTION) 20S. ON HWY 83 TO "JAYHAWK RD.", 1E., 3/4N., E. INTO

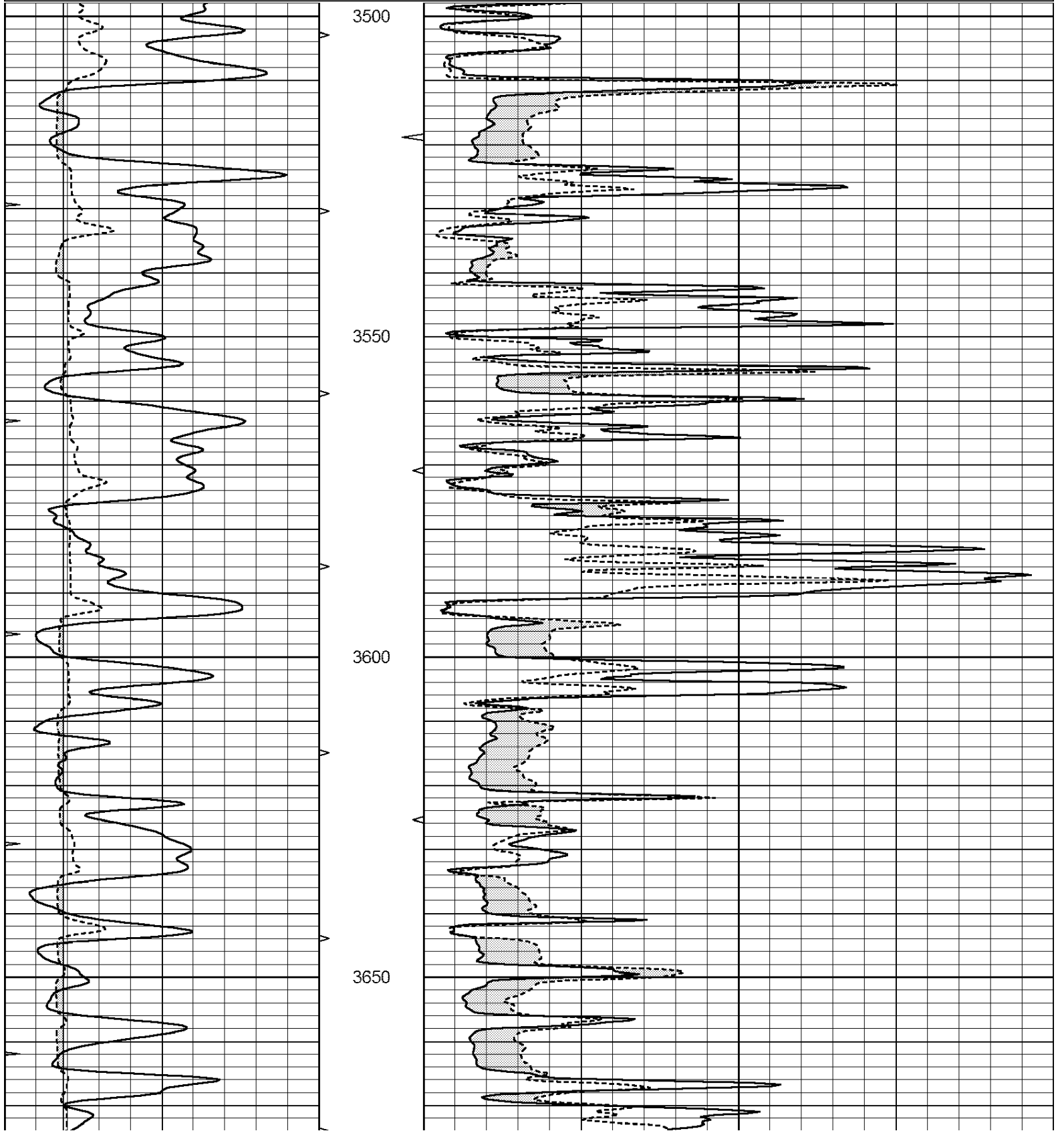


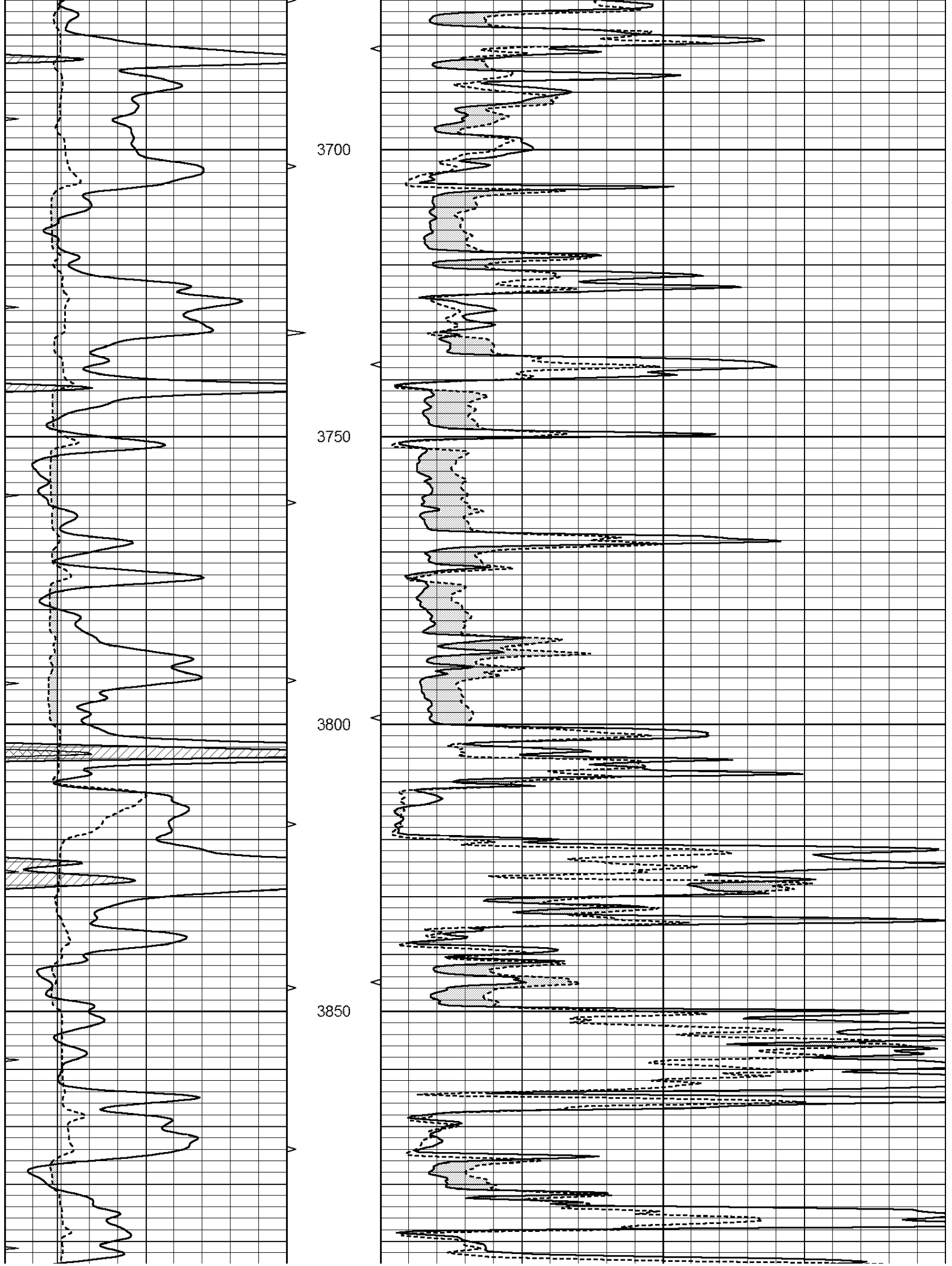
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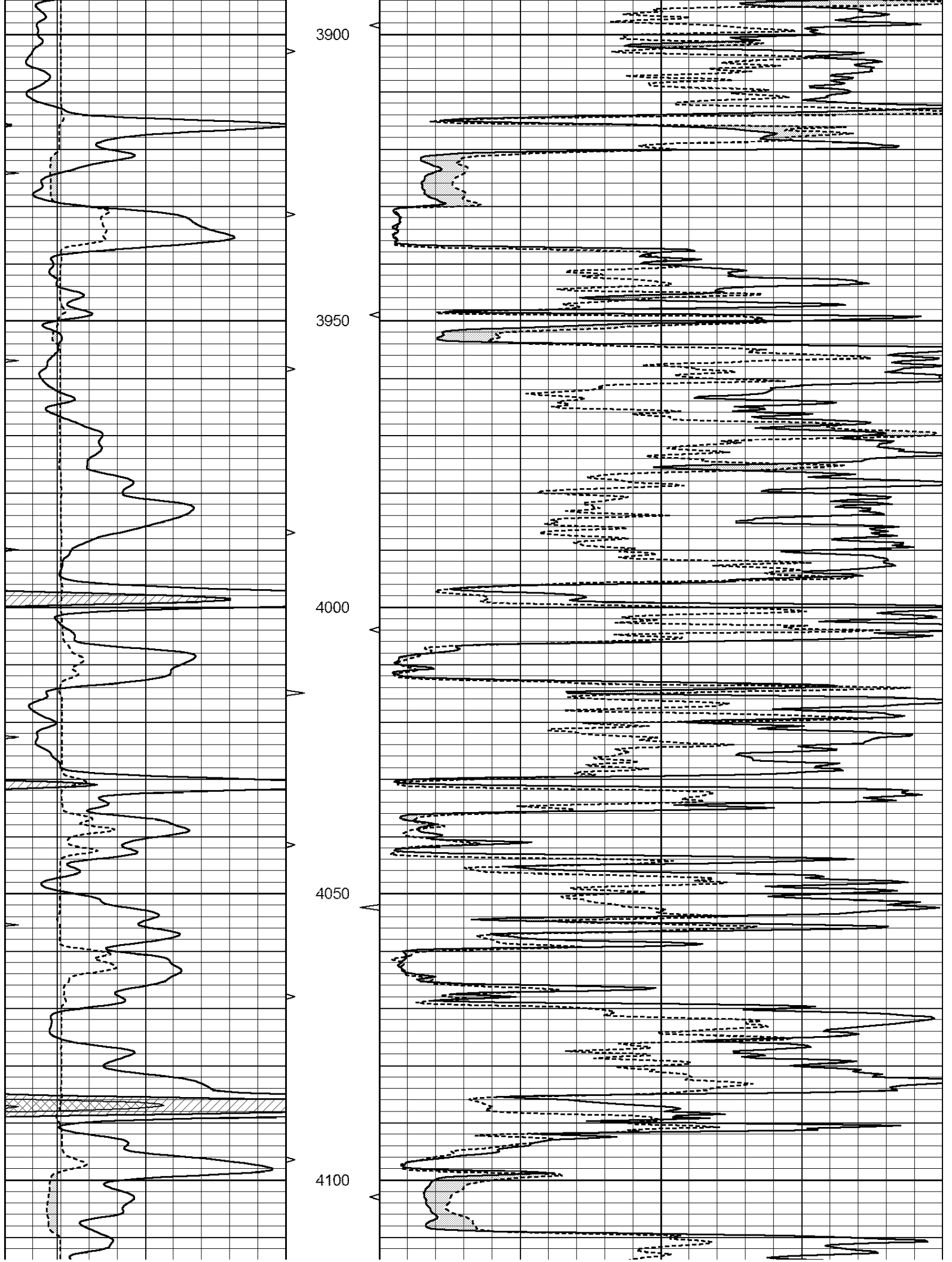
MAIN SECTION

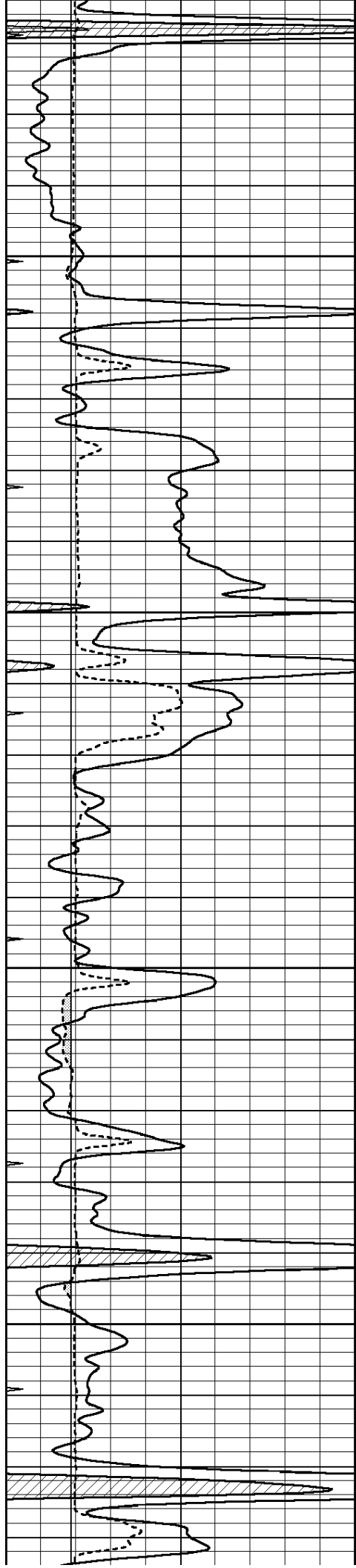
Database File: 408768ddn.db
 Dataset Pathname: pass6.3
 Presentation Format: micro
 Dataset Creation: Wed May 16 09:39:38 2012
 Charted by: Depth in Feet scaled 1:240

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		







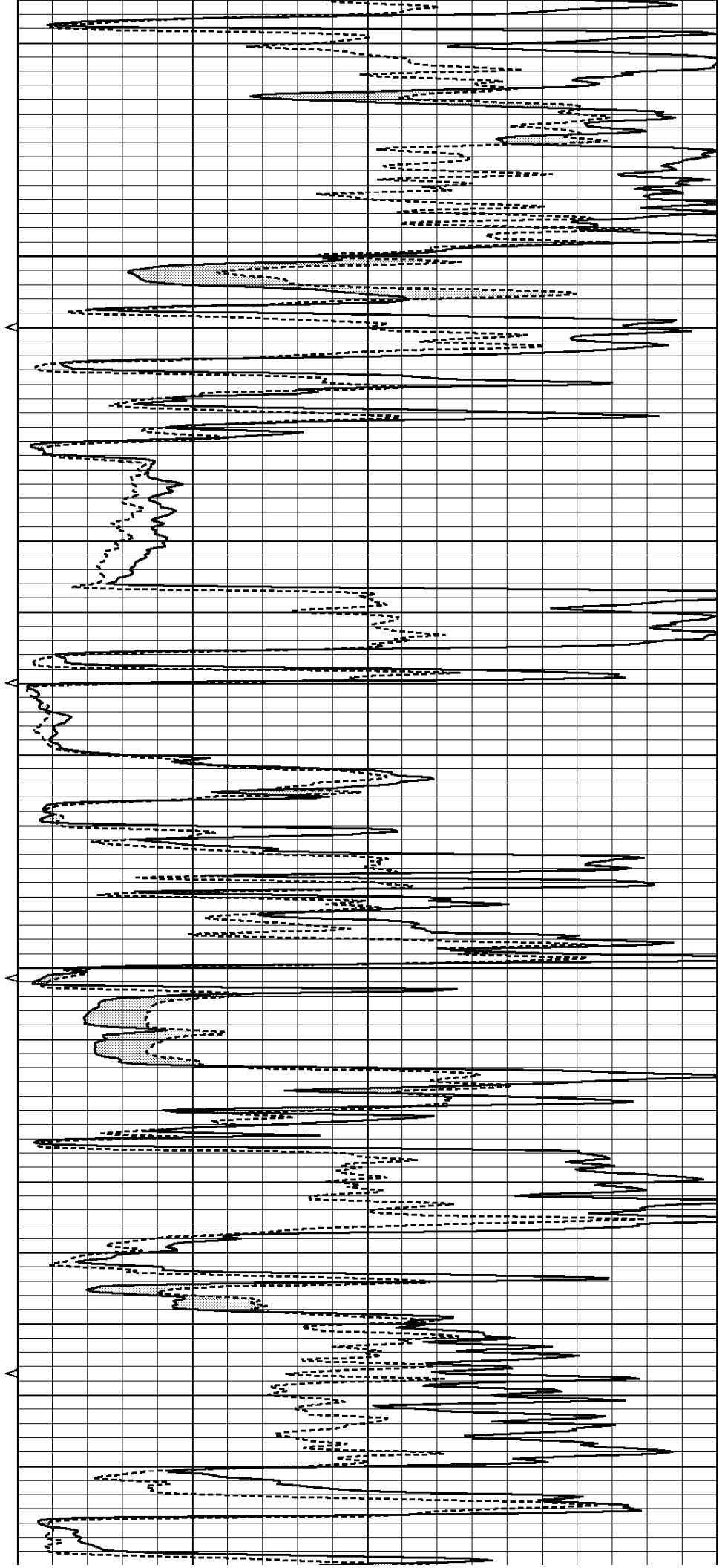


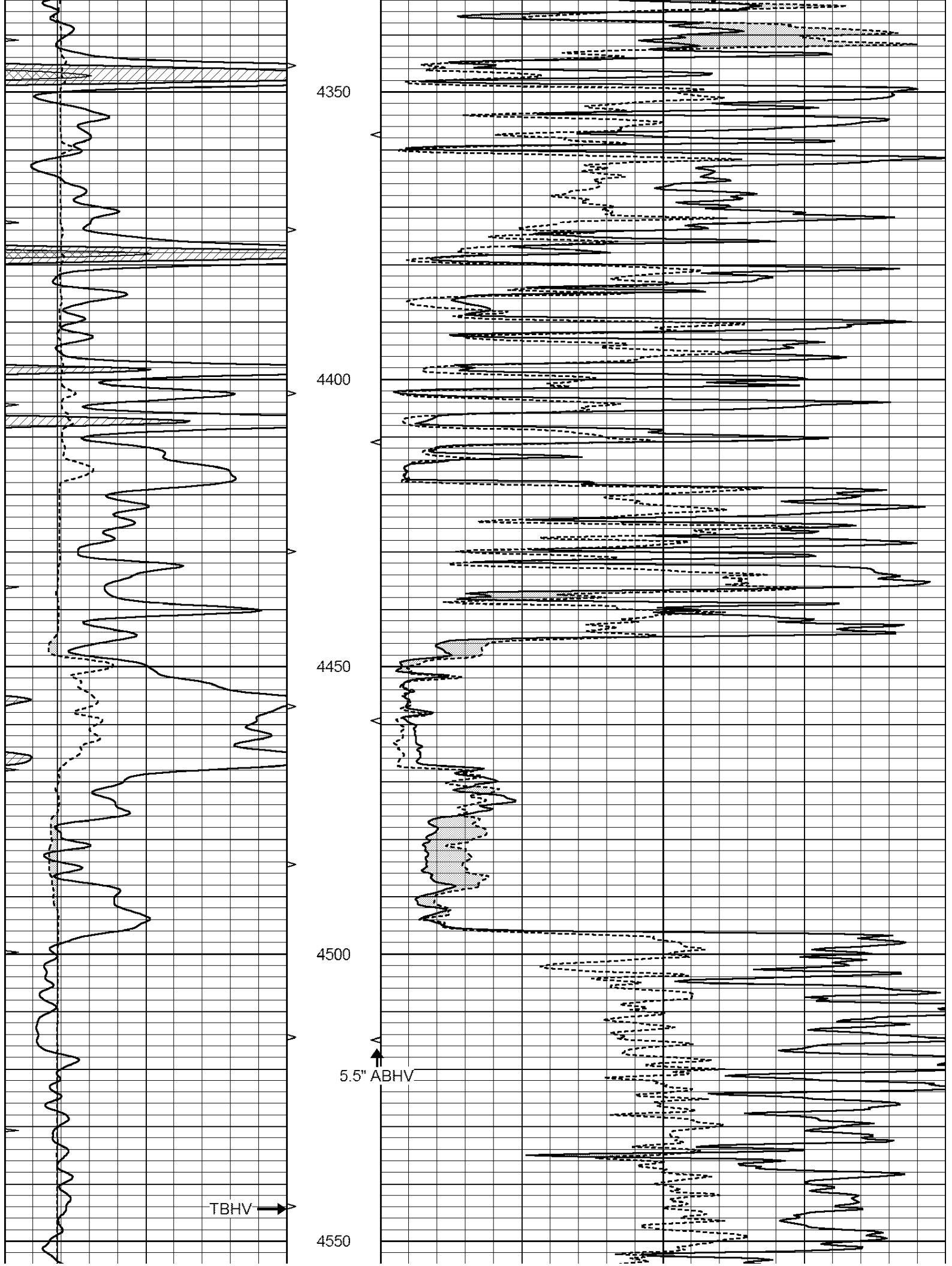
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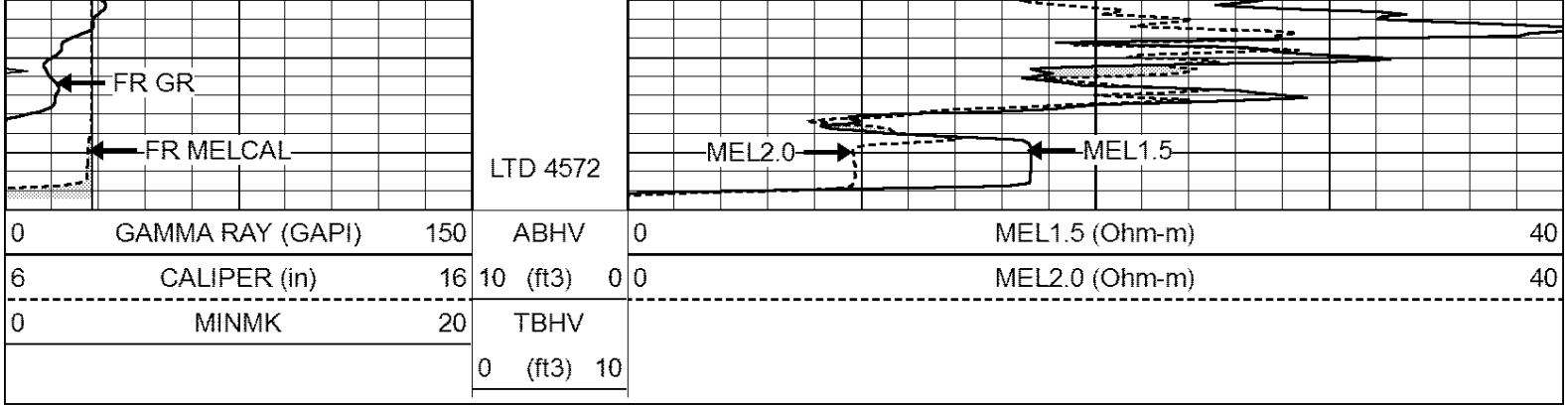
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4250

4300





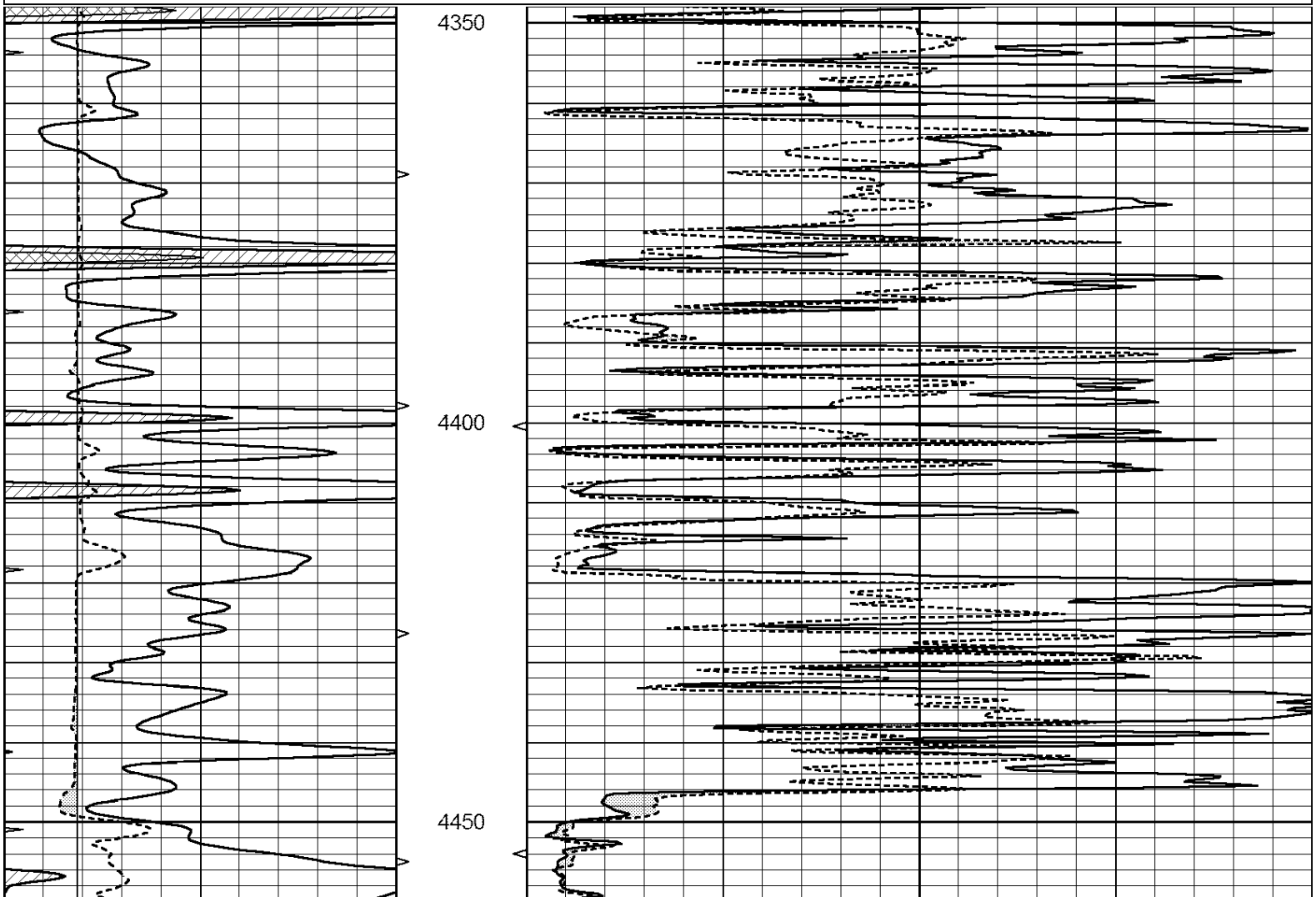


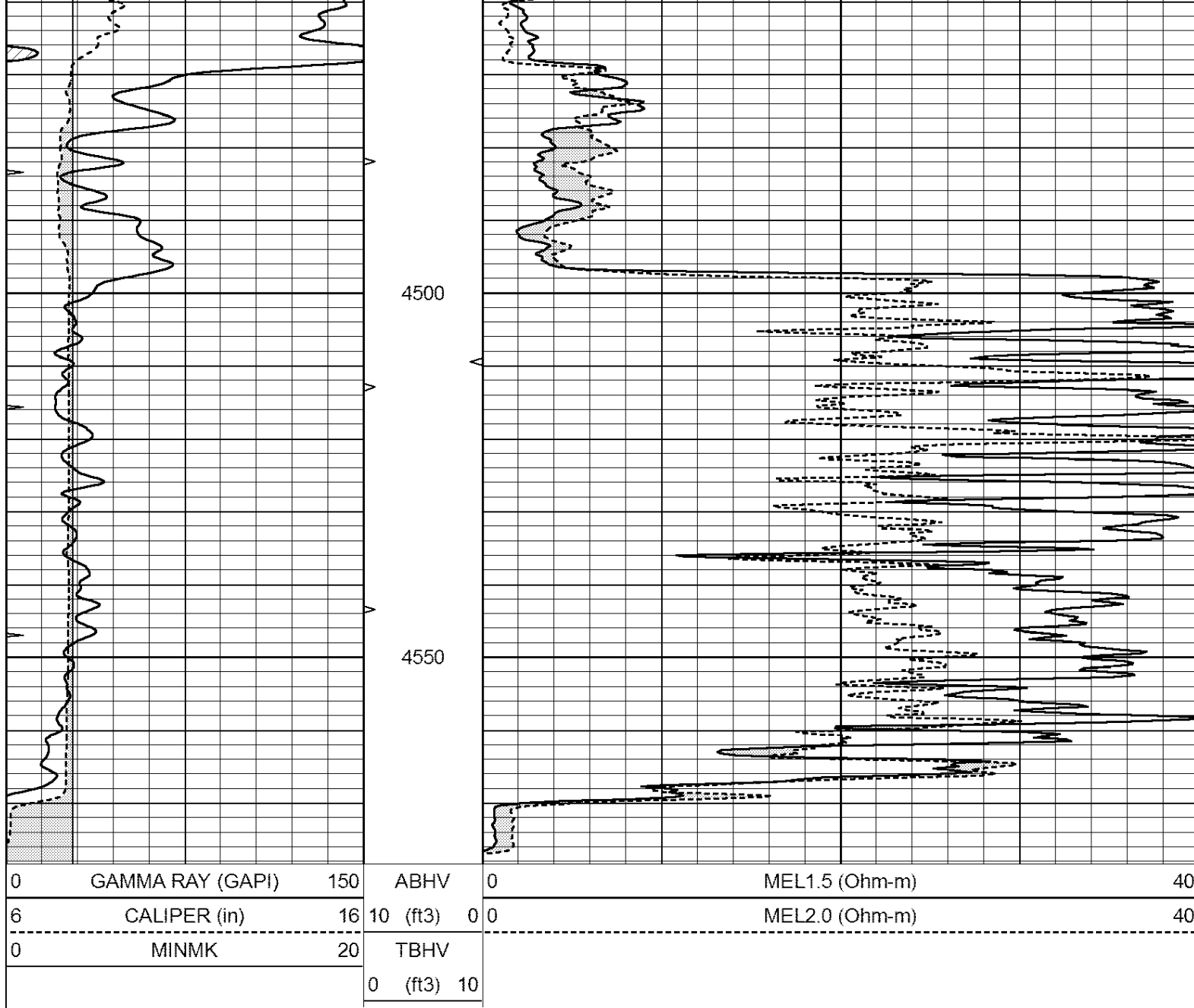
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REPEAT SECTION

Database File: 408768ddn.db
 Dataset Pathname: pass5.2
 Presentation Format: micro
 Dataset Creation: Wed May 16 09:00:44 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		





Calibration Report

Database File: 408768ddn.db
 Dataset Pathname: pass6.3
 Dataset Creation: Wed May 16 09:39:38 2012

MICRO Calibration Report

Serial Number: 2
 Tool Model: PROBE
 Performed: Wed May 16 08:21:27 2012

Caliper Calibration: Gain=4.105 Offset=3.360

References	Low Cal	High Cal
Readings	8.000	15.000
	1.130	2.835

1.5" Calibration: Gain=25.000 Offset=-0.700

References	Low Cal	High Cal
Readings	0.000	20.000
	0.065	1.210

0.5" Calibration: Gain=55.000 Offset=-1.200

Z Calibration:

Gain=33.000

Offset=-1.300

References
Readings

Low Cal
0.000
0.012

High Cal
20.000
1.043

Gamma Ray Calibration Report

Serial Number:
Tool Model:
Performed:

GR4
OPEN
Wed May 16 08:21:24 2012

Calibrator Value:

200.0

GAPI

Background Reading:
Calibrator Reading:

0.0
189.0

cps
cps

Sensitivity:

1.3000

GAPI/cps