



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

**MICRO
LOG**

Company		CHIEFTAIN OIL COMPANY, INC.	
Well	MOLZ #20		
Field	STRANATHAN		
County	BARBER	State	KANSAS
Location:		APL # : 15-007-24042-0000	
Permanent Datum		GROUND LEVEL Elevation 1393	
Log Measured From		KELLY BUSHING 13' A.G.L.	
Drilling Measured From		KELLY BUSHING	
SEC 11 TWP 35S RGE 12W		Other Services CDL/CNL PE/DIL	
Date	9/16/13		
Run Number	TWO		
Depth Driller	5587		
Depth Logger	5586		
Bottom Logged Interval	5584		
Top Log Interval	3700		
Casing Driller	13 3/8" @ 308'		
Casing Logger	306'		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 3800 PPM	
Density / Viscosity	9.3 / 68		
pH / Fluid Loss	10.0 / 7.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.65 @ 93F		
Rmt @ Meas. Temp	0.49 @ 93F		
Rmc @ Meas. Temp	0.78 @ 93F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	0.47 @ 130F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	130F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF GRONEWEG		
Witnessed By	ARDEN RATZLAFF		

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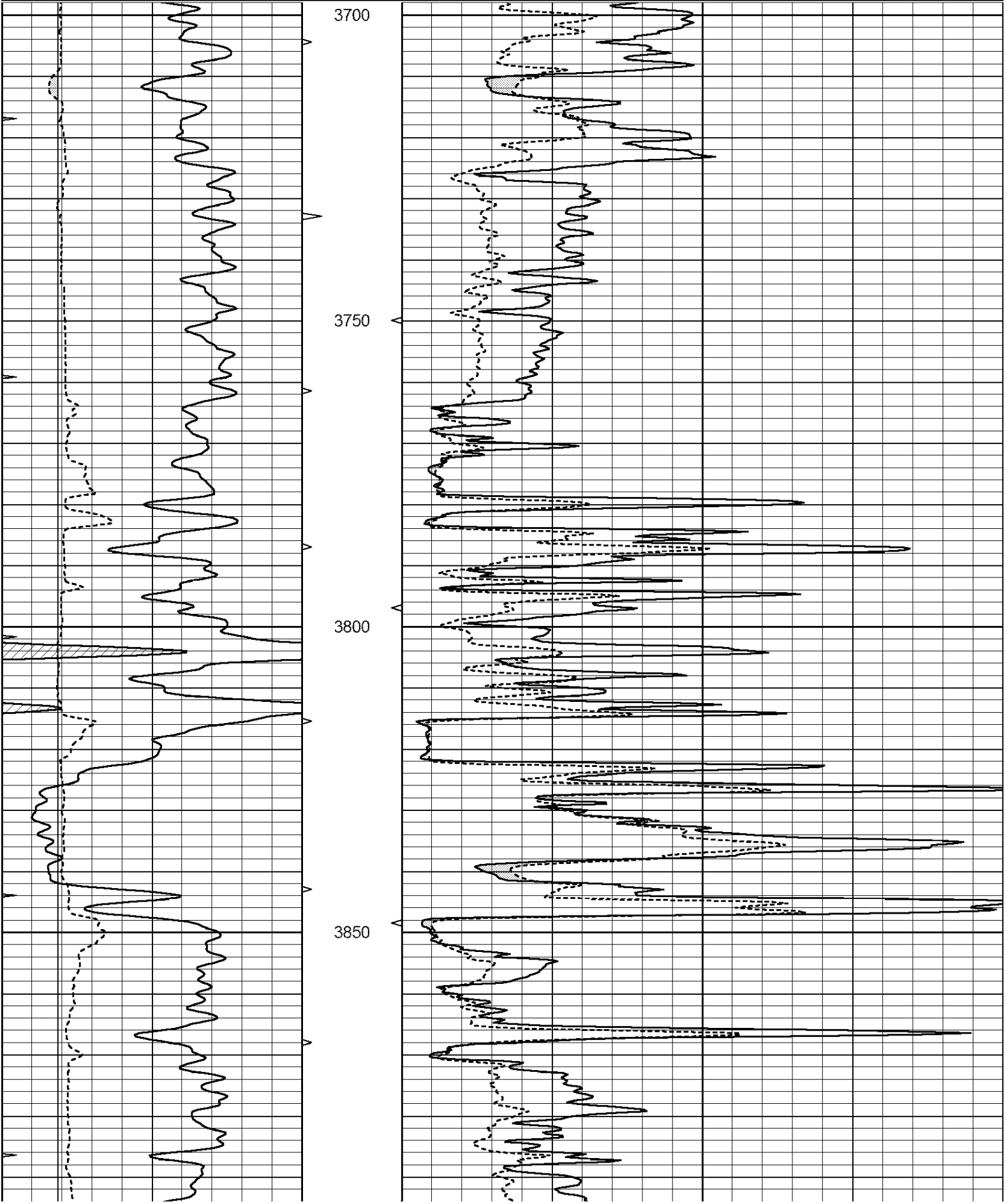
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

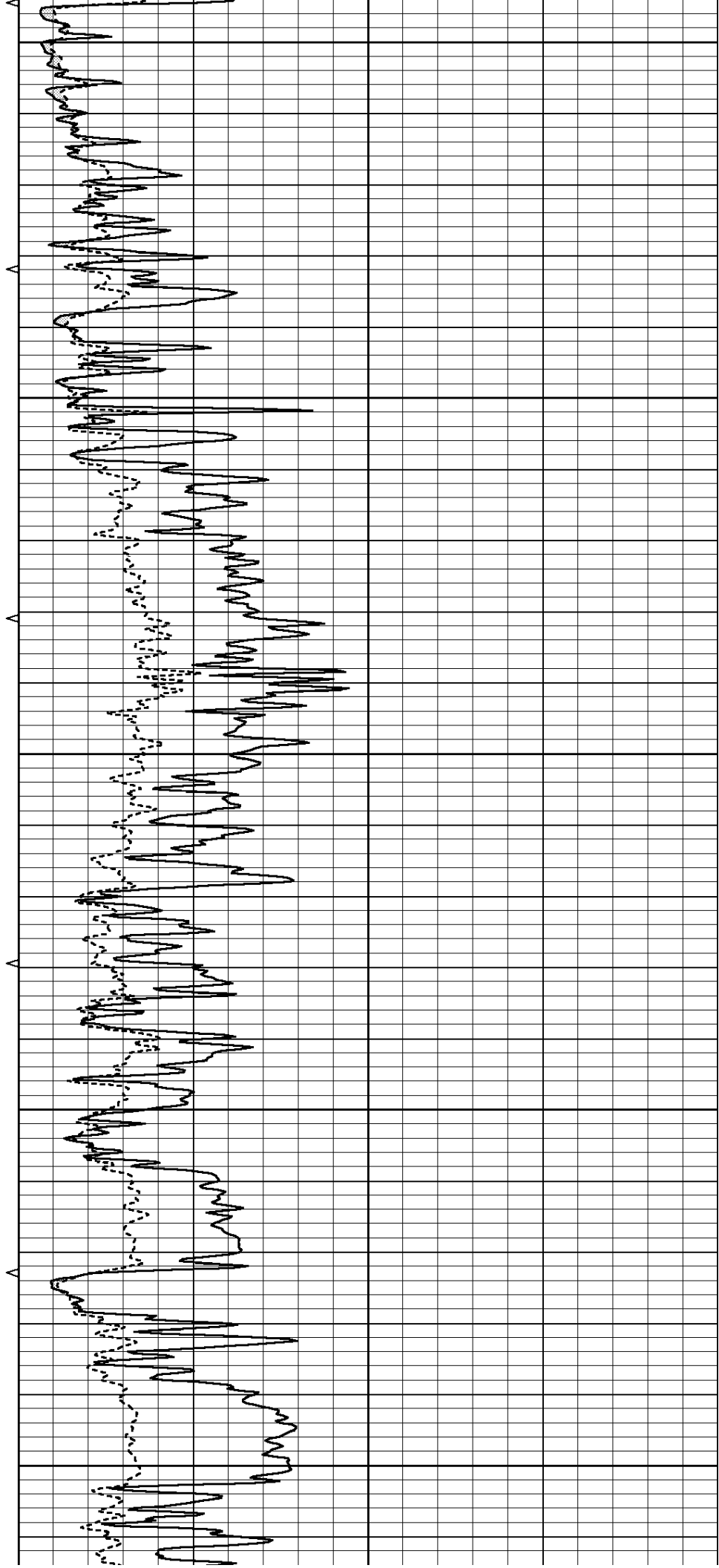
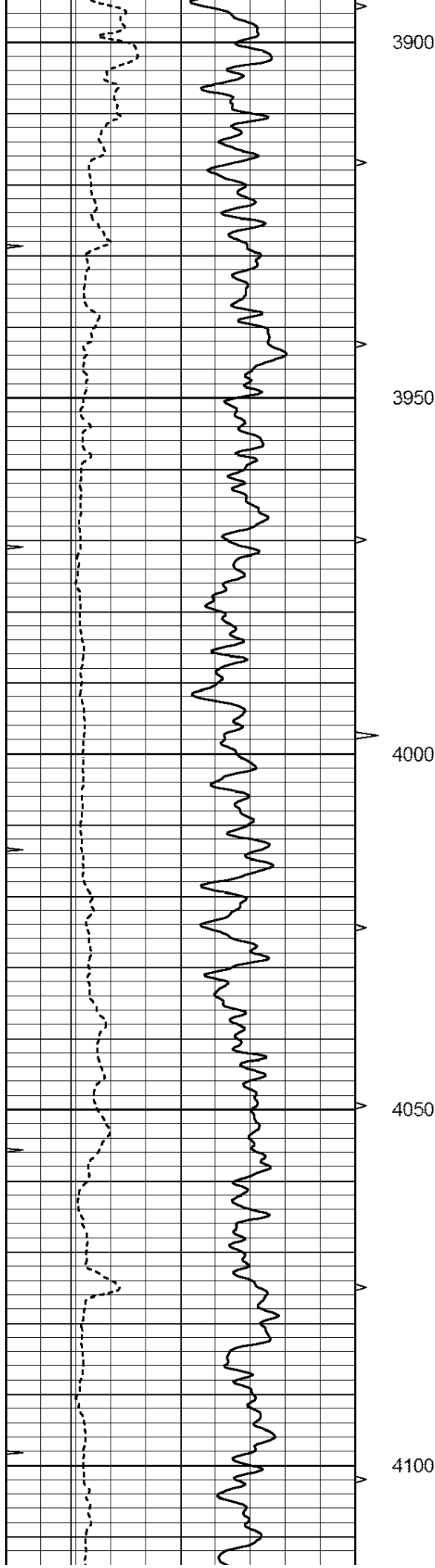
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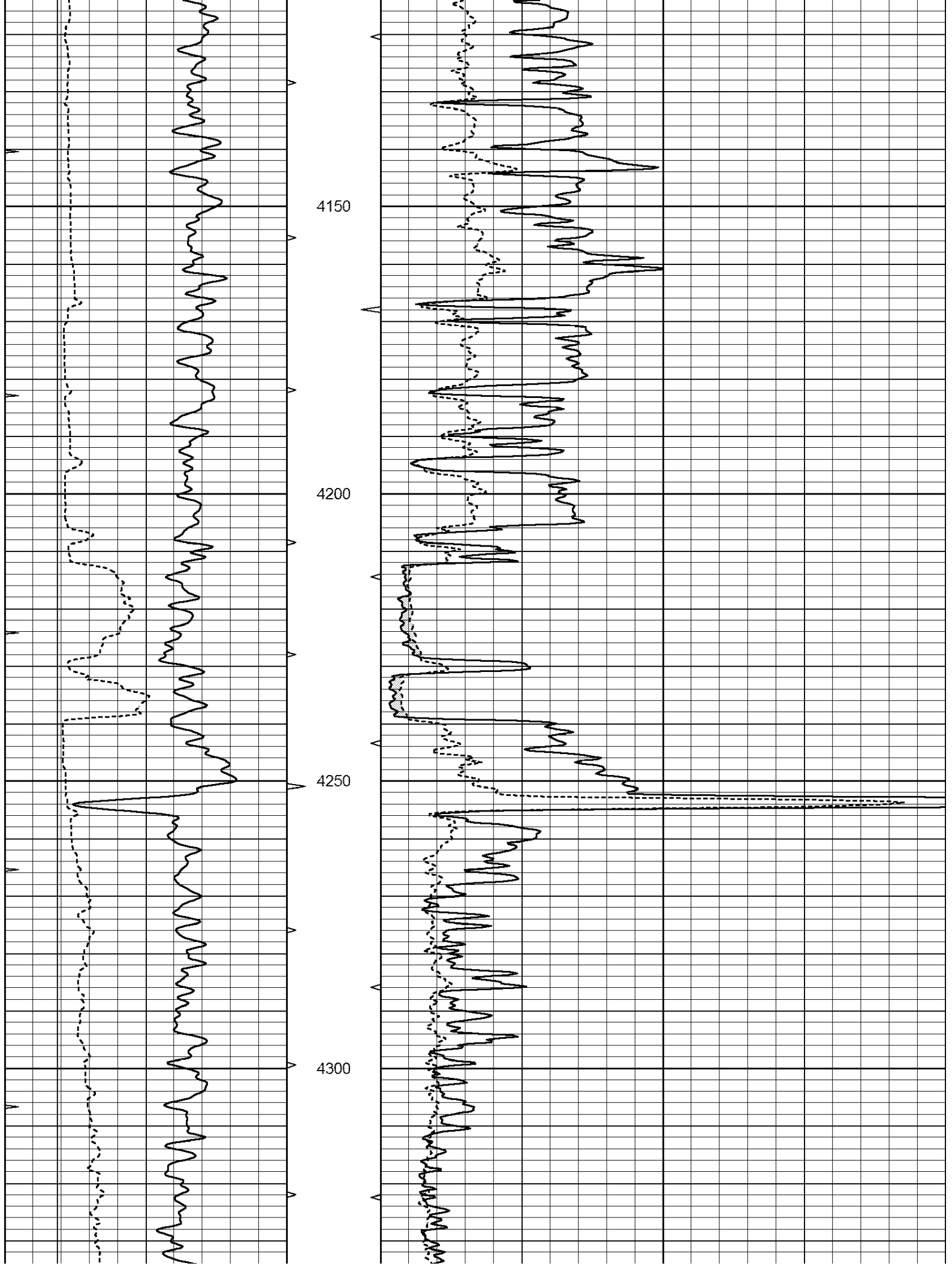
THANK YOU FOR USING NABORS, HAYS, KS. (785) 628-6395
DIRECTIONS:
HARDTNER, KS - 3 1/2 MILES EAST TO CLAIRMONT RD - 1/2 MILE NORTH
WEST INTO

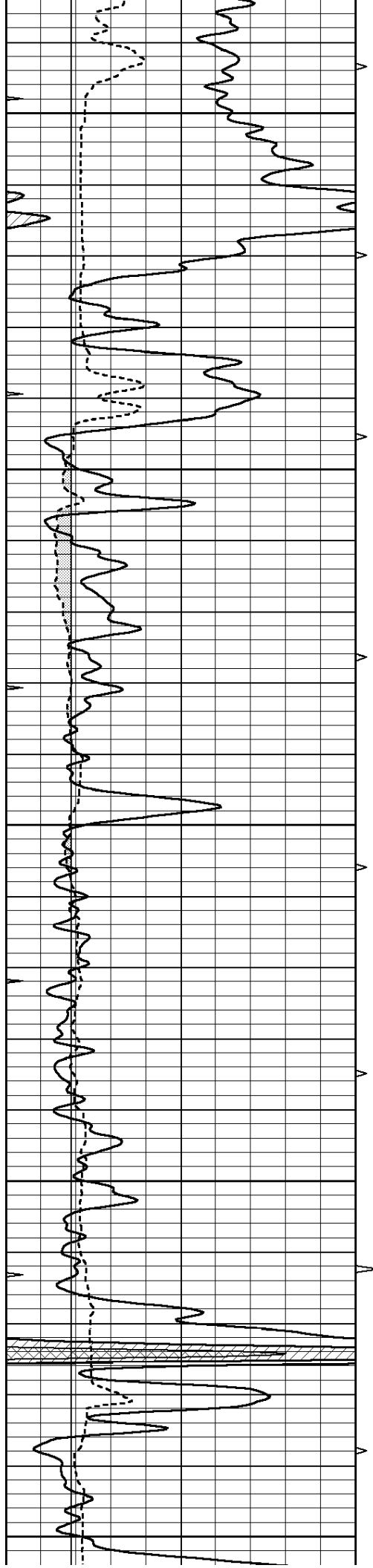
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Dataset Pathname: pass5.1
Presentation Format: _micro
Dataset Creation: Tue Sep 17 02:15:28 2013 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

Charted by: _____			Depth in Feet scaled 1:2.10			
0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	40
6	CALIPER (in)	16		0	MEL2.0 (Ohm-m)	40
-----			-----			
0	MINMK	20	TBHV			
			0 (ft3) 10			









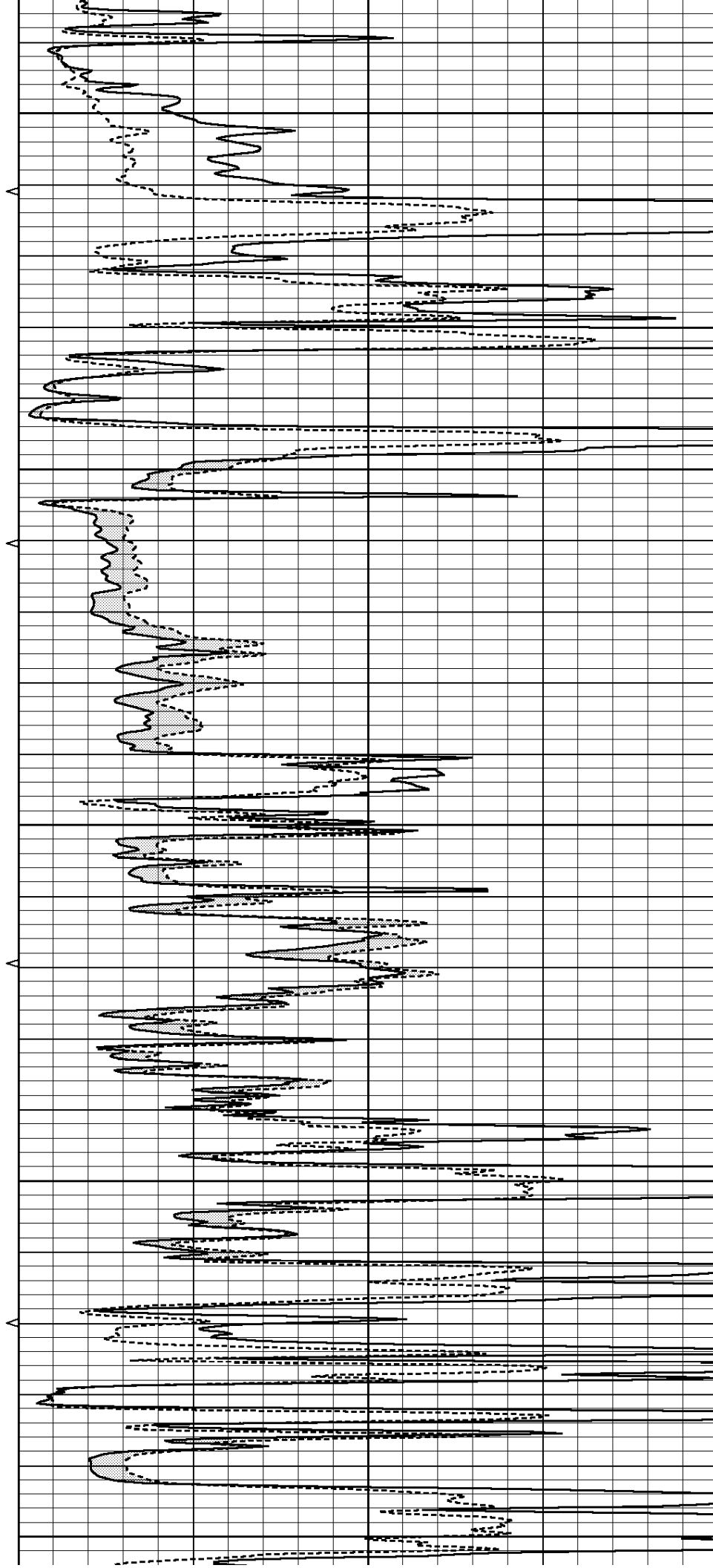
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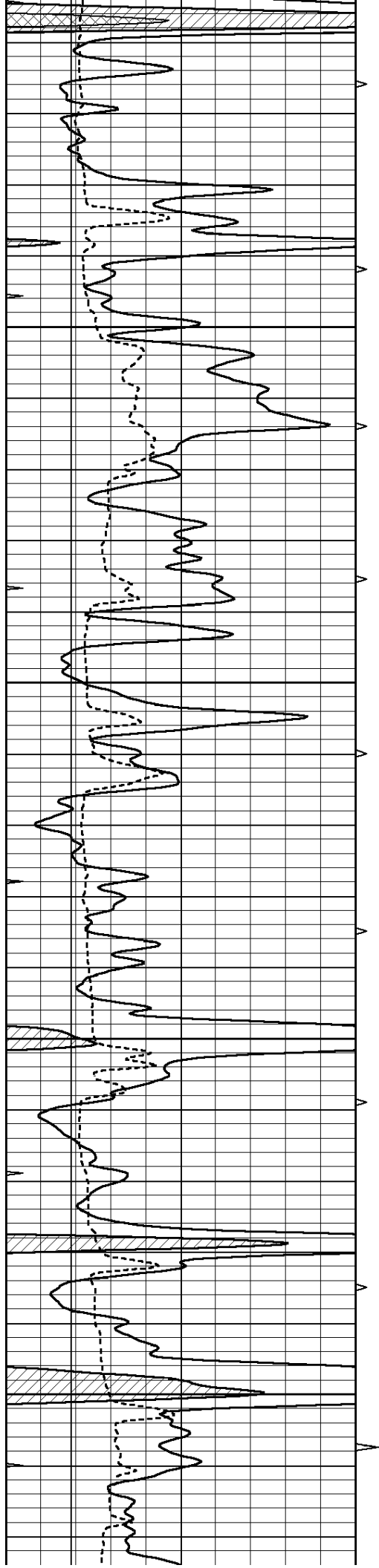
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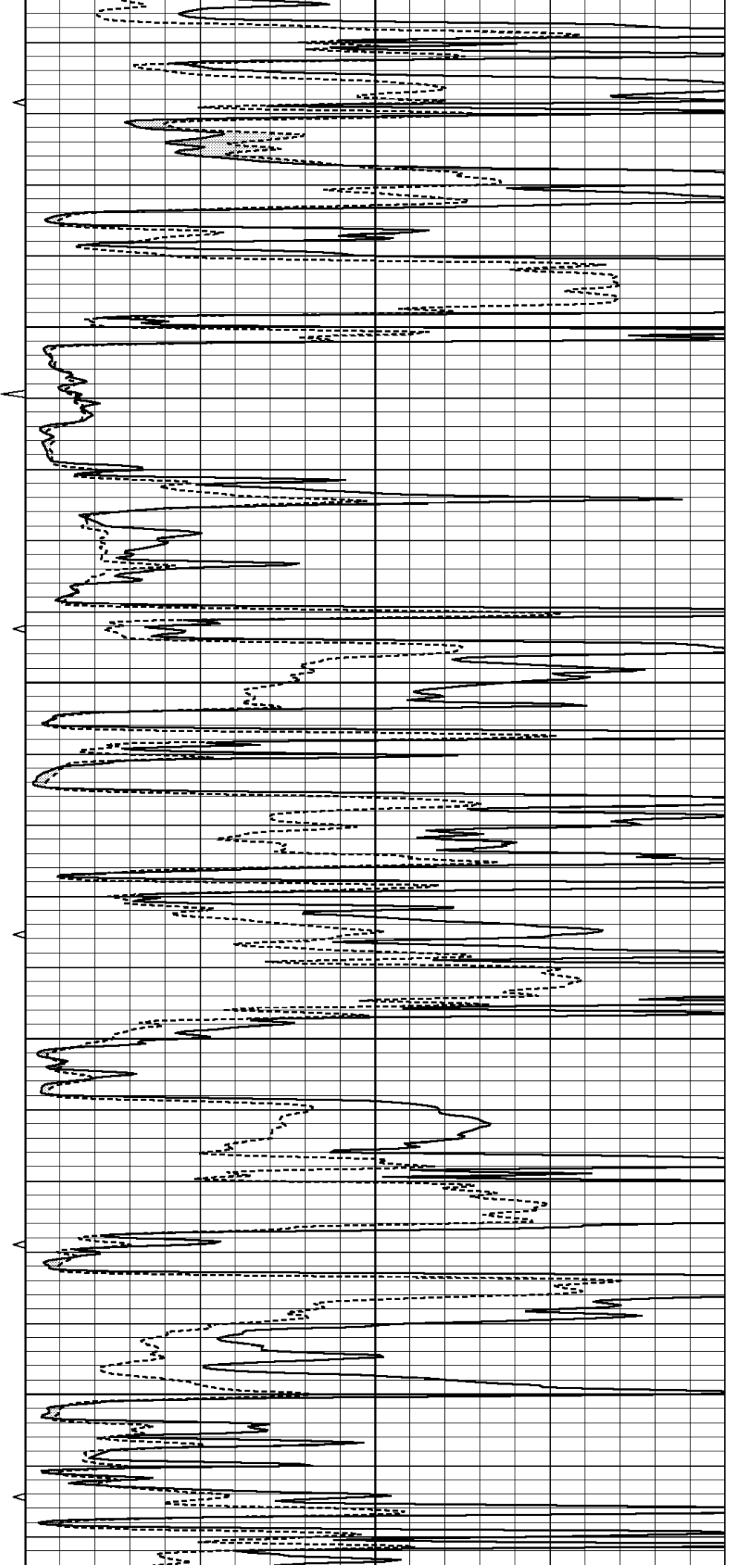


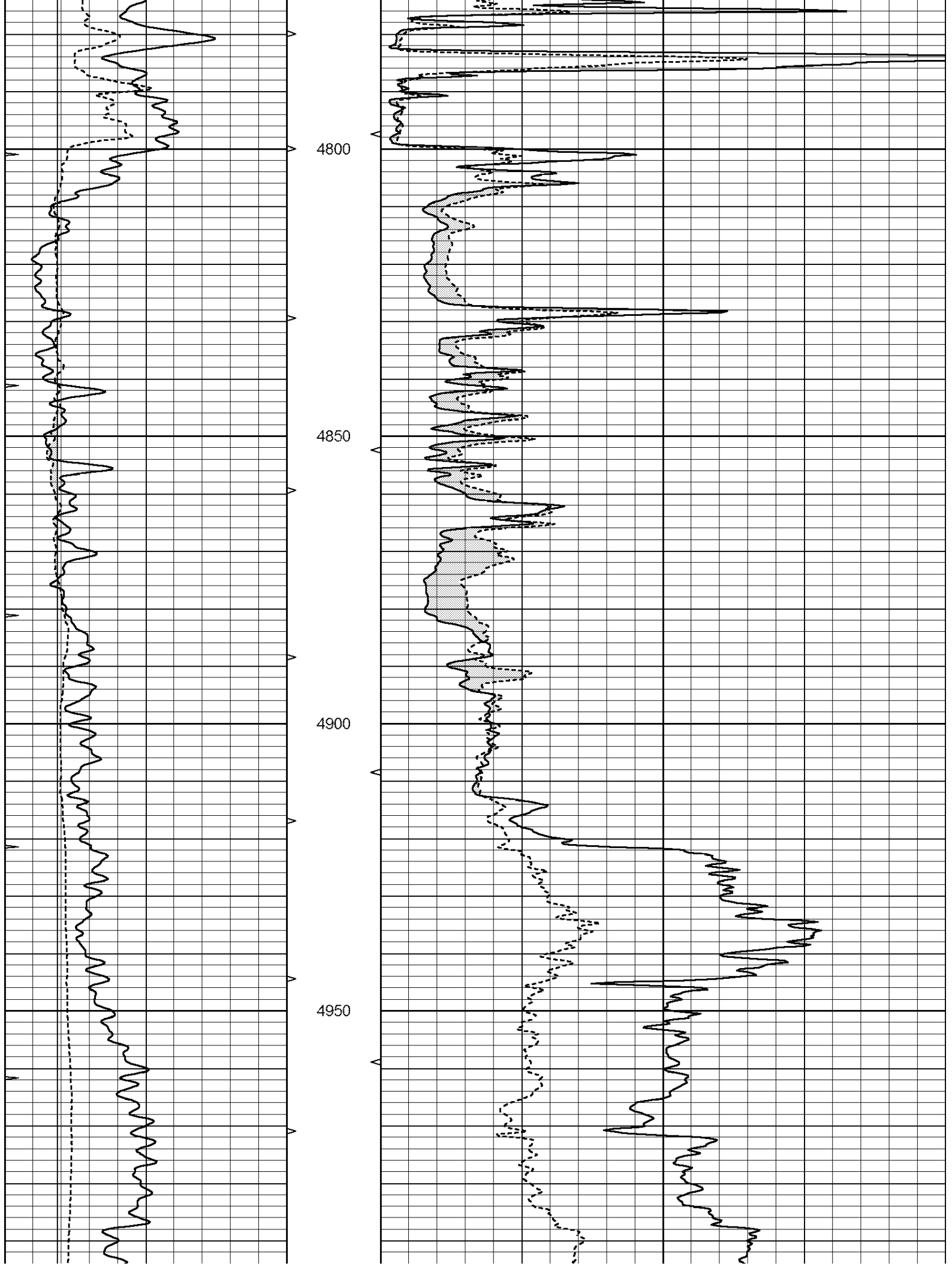
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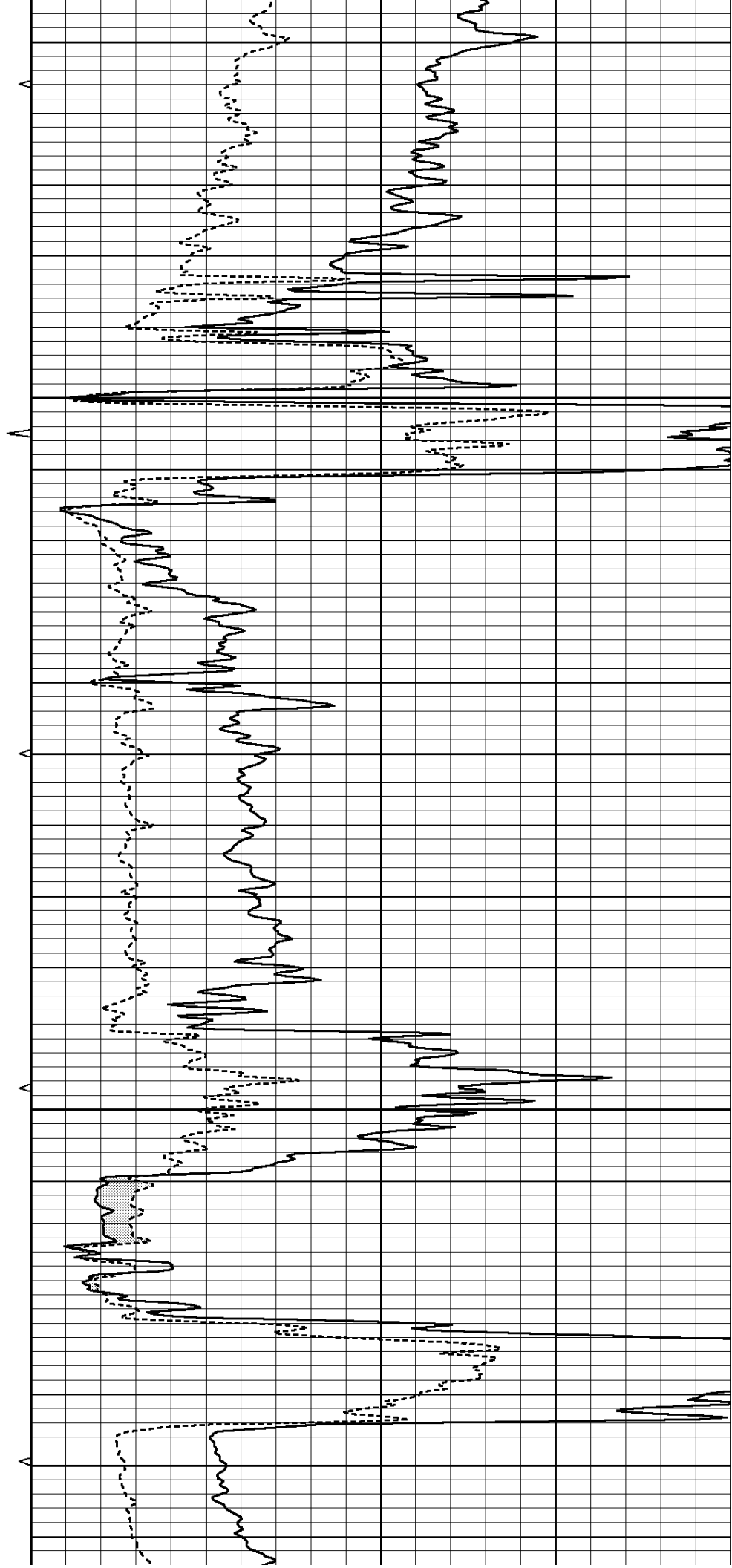
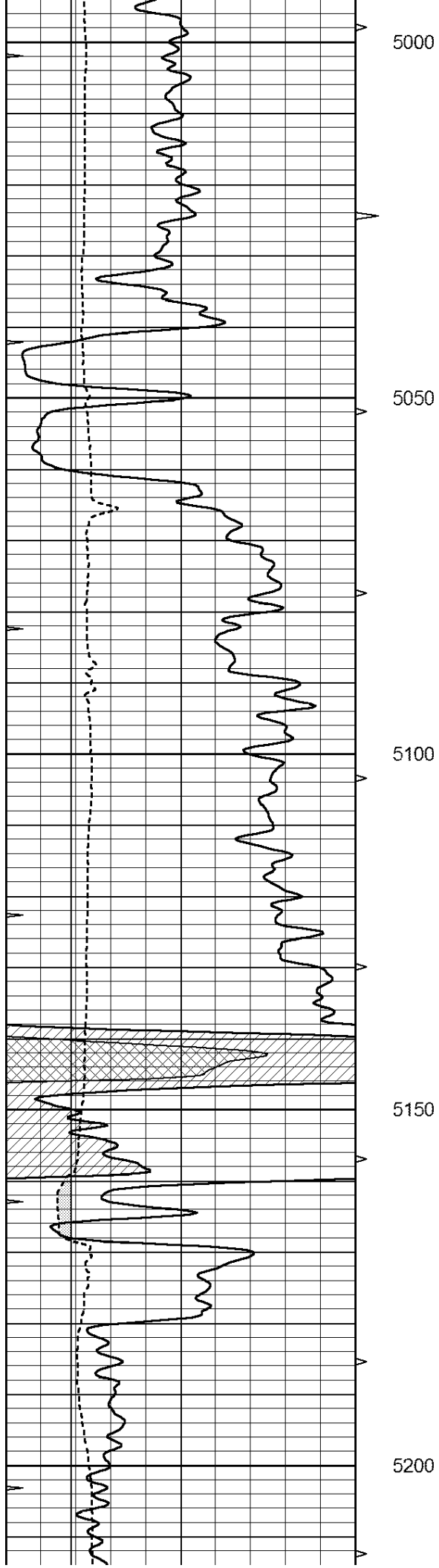
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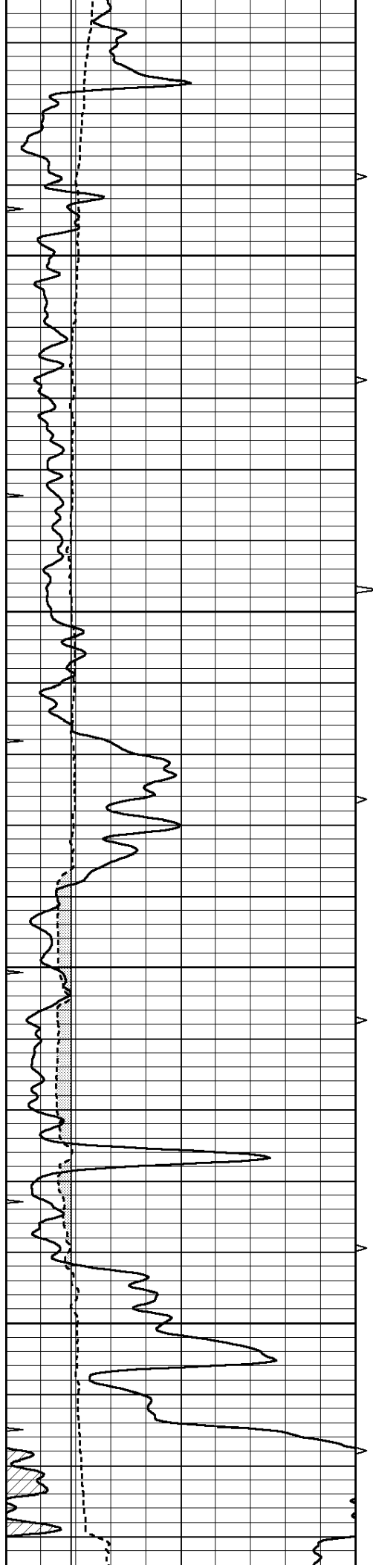
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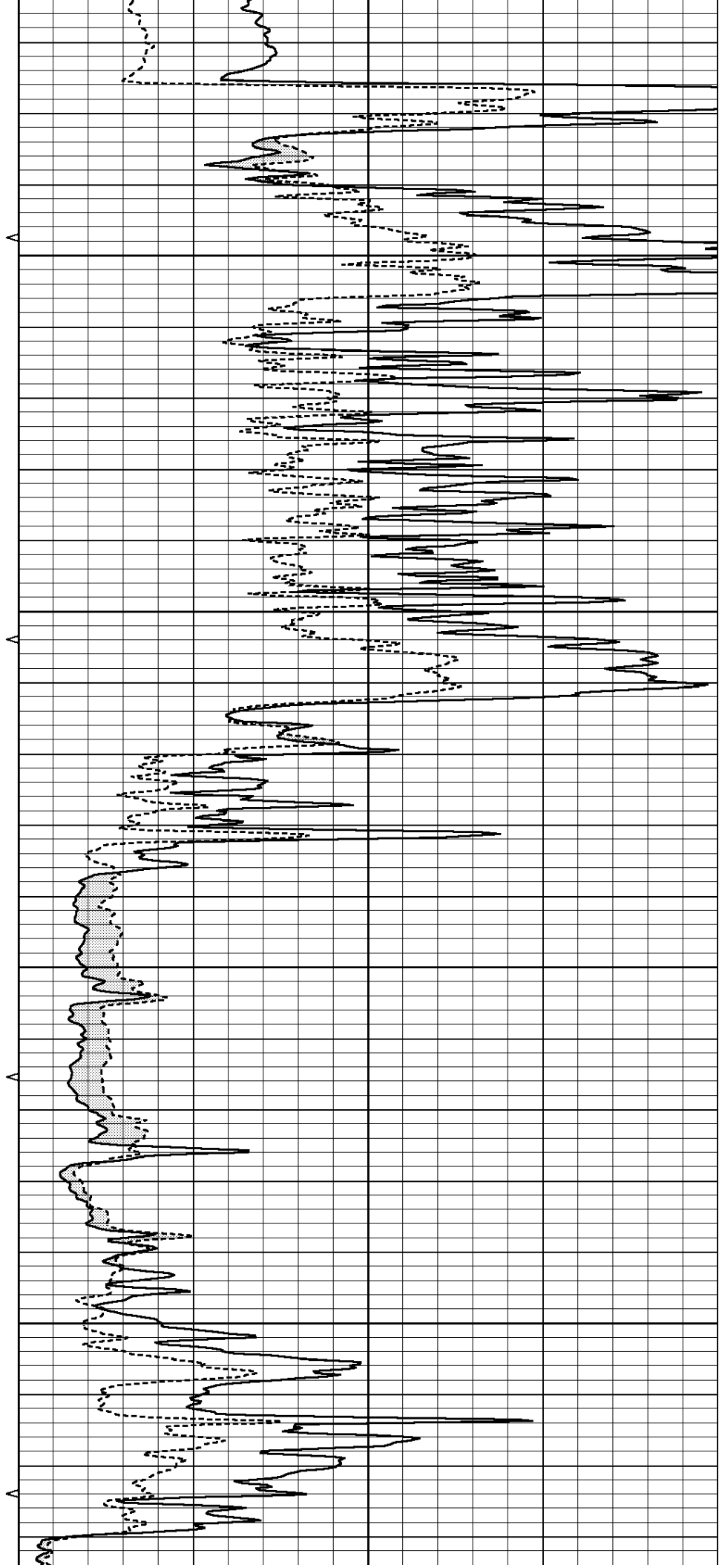


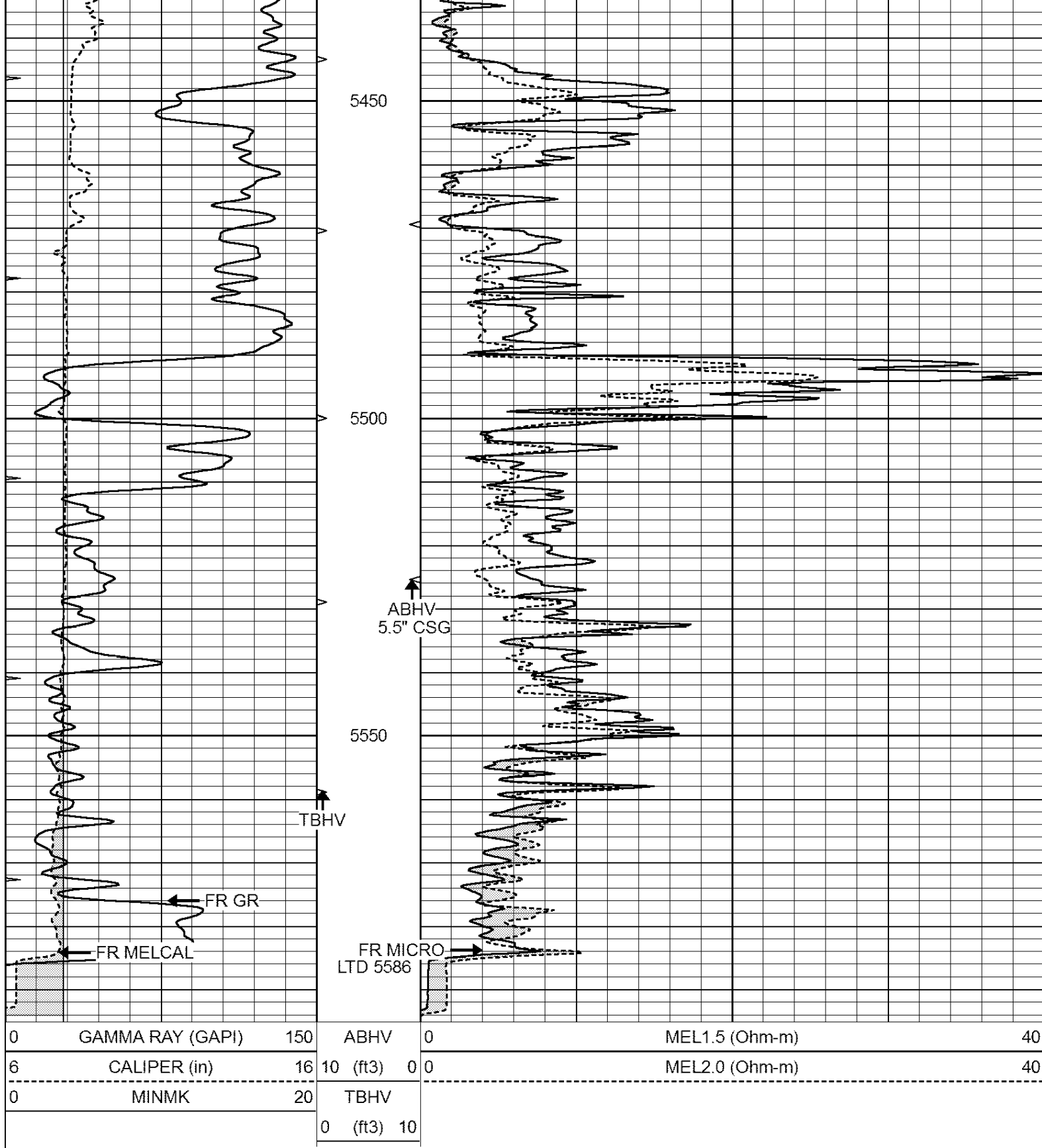
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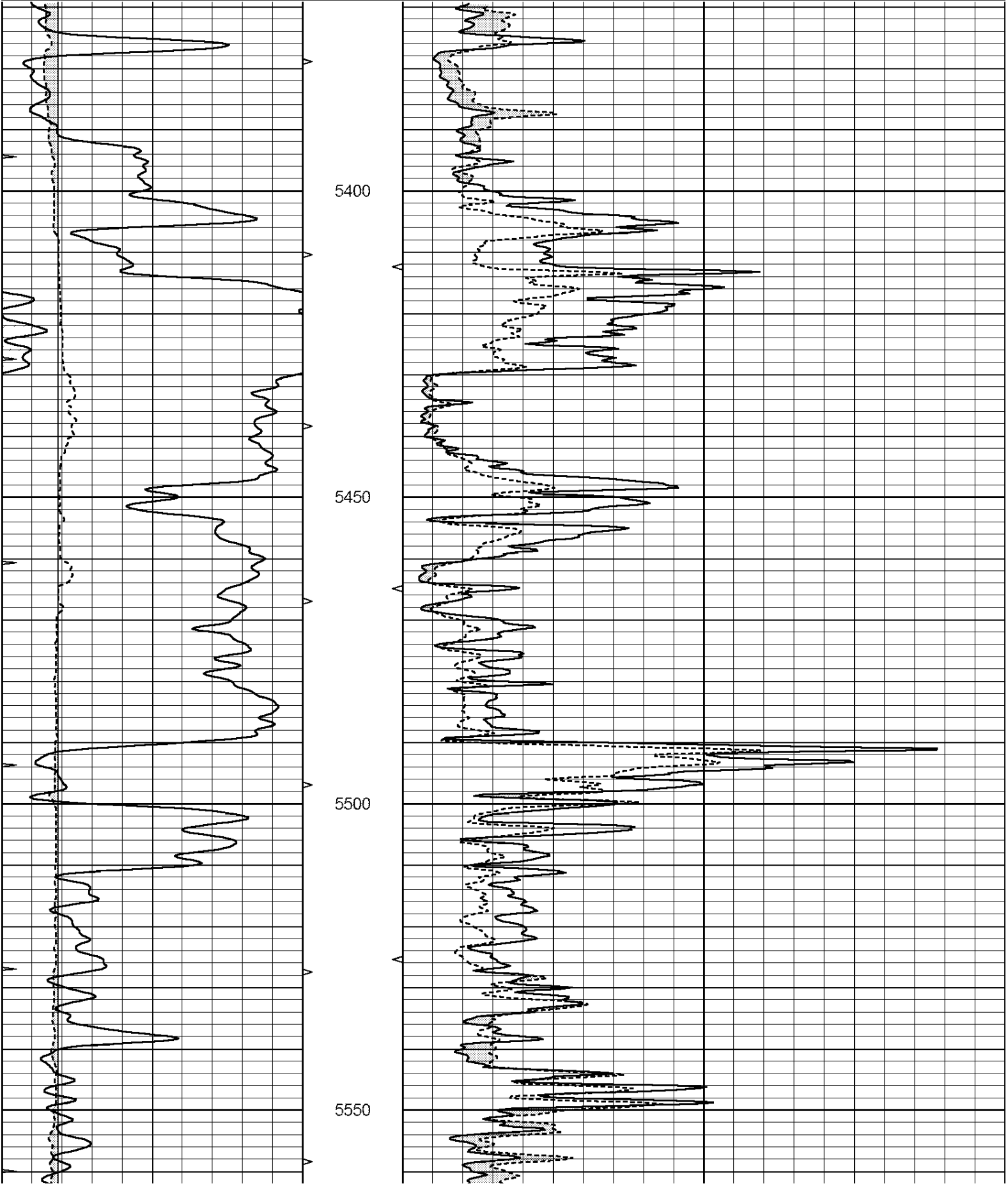
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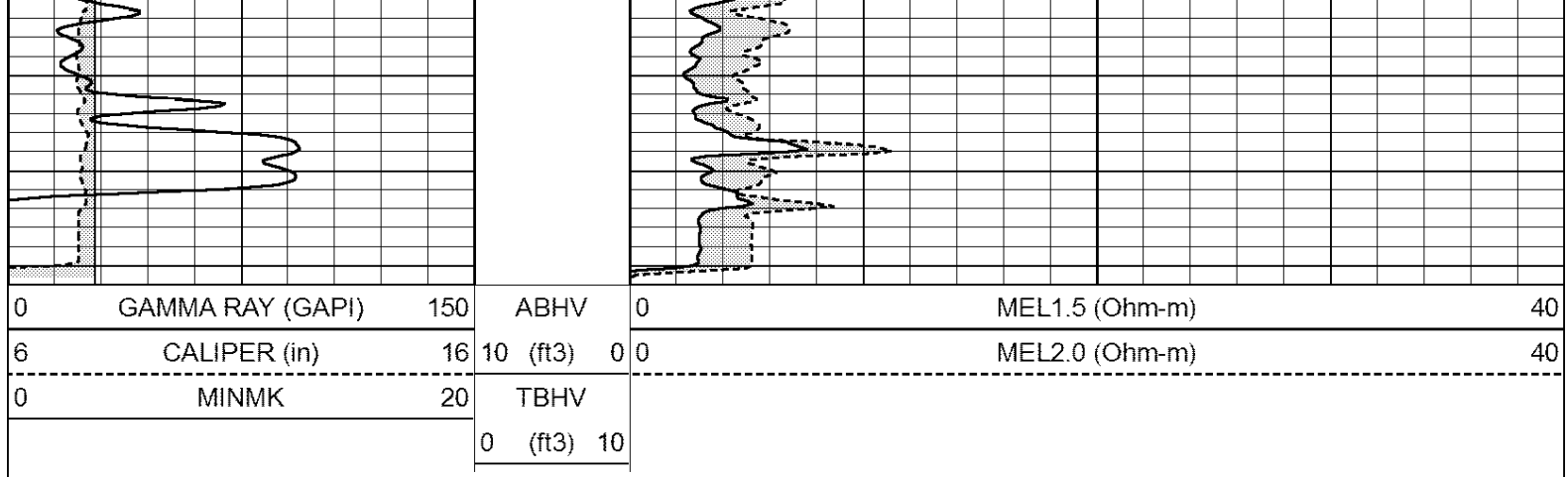
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0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	40
6	CALIPER (in)	16	10 (ft3)	0 0	MEL2.0 (Ohm-m)	40
0	MINMK	20	TBHV			
			0 (ft3)	10		





Calibration Report			
Database File:	011782pe.db		
Dataset Pathname:	pass5.1		
Dataset Creation:	Tue Sep 17 02:15:28 2013 by Calc Open-Cased 090629		
MICRO Calibration Report			
Serial Number:	MICRO6		
Tool Model:	PROBE		
Performed:	Sat Aug 10 00:21:37 2013		
Caliper Calibration:	Gain=5.542	Offset=-1.320	
	Low Cal	High Cal	
References	8.000	14.000	
Readings	1.431	2.513	
1.5" Calibration:	Gain=32.075	Offset=-0.700	
	Low Cal	High Cal	
References	0.000	20.000	
Readings	0.004	1.196	
2" Calibration:	Gain=38.041	Offset=0.000	
	Low Cal	High Cal	
References	0.000	20.000	
Readings	0.006	0.913	
Gamma Ray Calibration Report			
Serial Number:	#8		
Tool Model:	OPEN		
Performed:	Tue Jun 18 19:34:11 2013		
Calibrator Value:	150.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	175.0	cps	
Sensitivity:	0.8371	GAPI/cps	