



SUPERIOR
Hays,
Kansas

MICRO
LOG

Company		PHILLIPS EXPLORATION CO.	
Well		SANDIFORD #1-25	
Field		COWLEY	
County		COWLEY	
State		KANSAS	
Company		PHILLIPS EXPLORATION COMPANY	
Well		SANDIFORD #1-25	
Field		COWLEY	
County		COWLEY	
State		KANSAS	
Location:		AP1 # : 15-035-24455-0000	
Permanent Datum		GROUND LEVEL	
Log Measured From		KELLY BUSHING 10' A.G.L.	
Drilling Measured From		KELLY BUSHING	
SEC 25 TWP 32S RGE 5E		Elevation	
990' FNL & 1650' FEL		CDL/CNL	
		DIL	
		Elevation	
		K.B. 1302	
		D.F. 1300	
		G.L. 1292	
Date	3/24/12		
Run Number	TWO		
Depth Driller	3600		
Depth Logger	3600		
Bottom Logged Interval	3598		
Top Log Interval	1800		
Casing Driller	8 5/8"@214'		
Casing Logger	214'		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 700 PPM	
Density / Viscosity	9.4/50		
pH / Fluid Loss	9.5/7.4		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	2.20@74F		
Rmt @ Meas. Temp	1.65@74F		
Rmc @ Meas. Temp	2.64@74F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	1.45@112F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	112F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF GRONEWEG		
Witnessed By	JOE BAKER		

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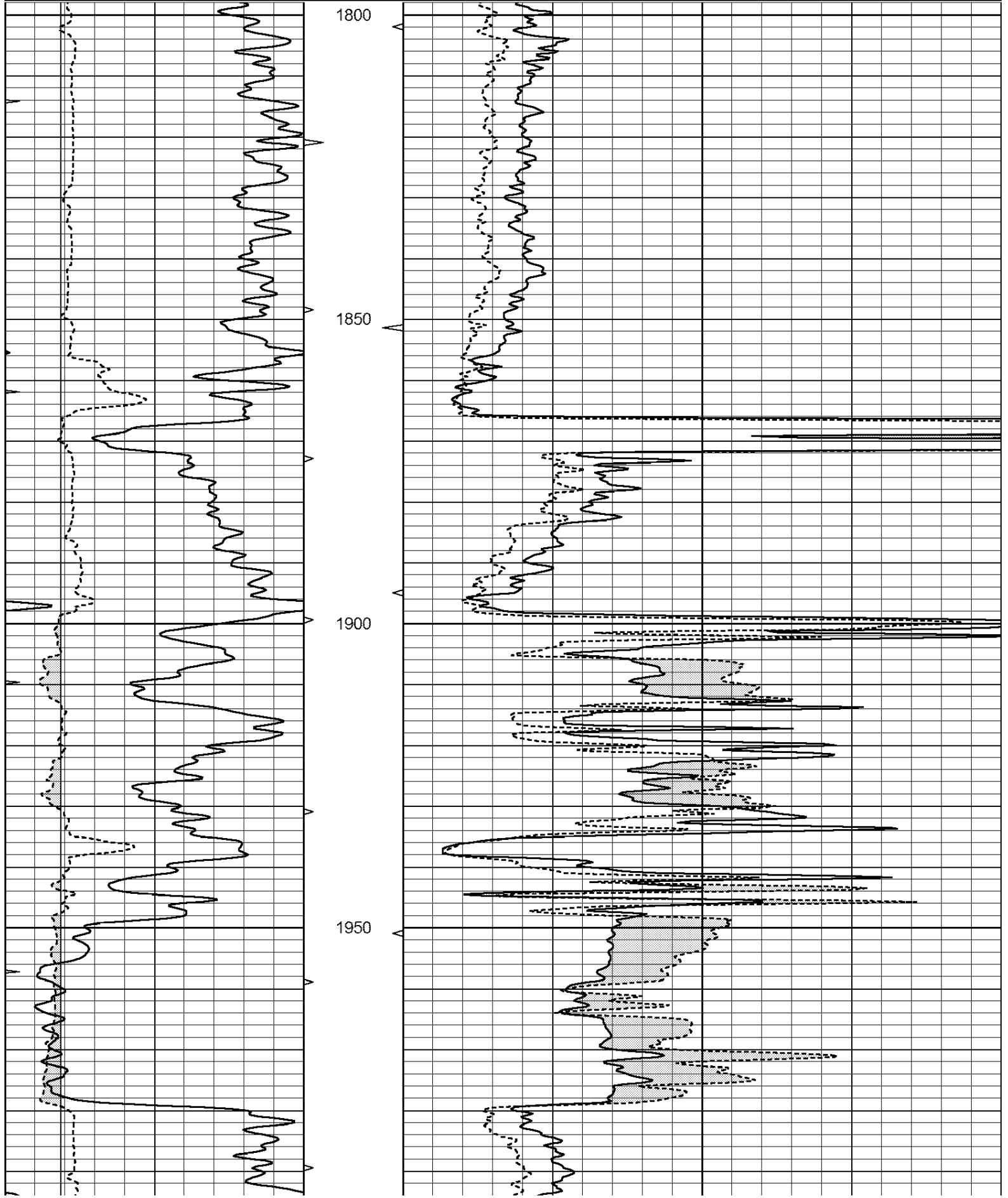
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

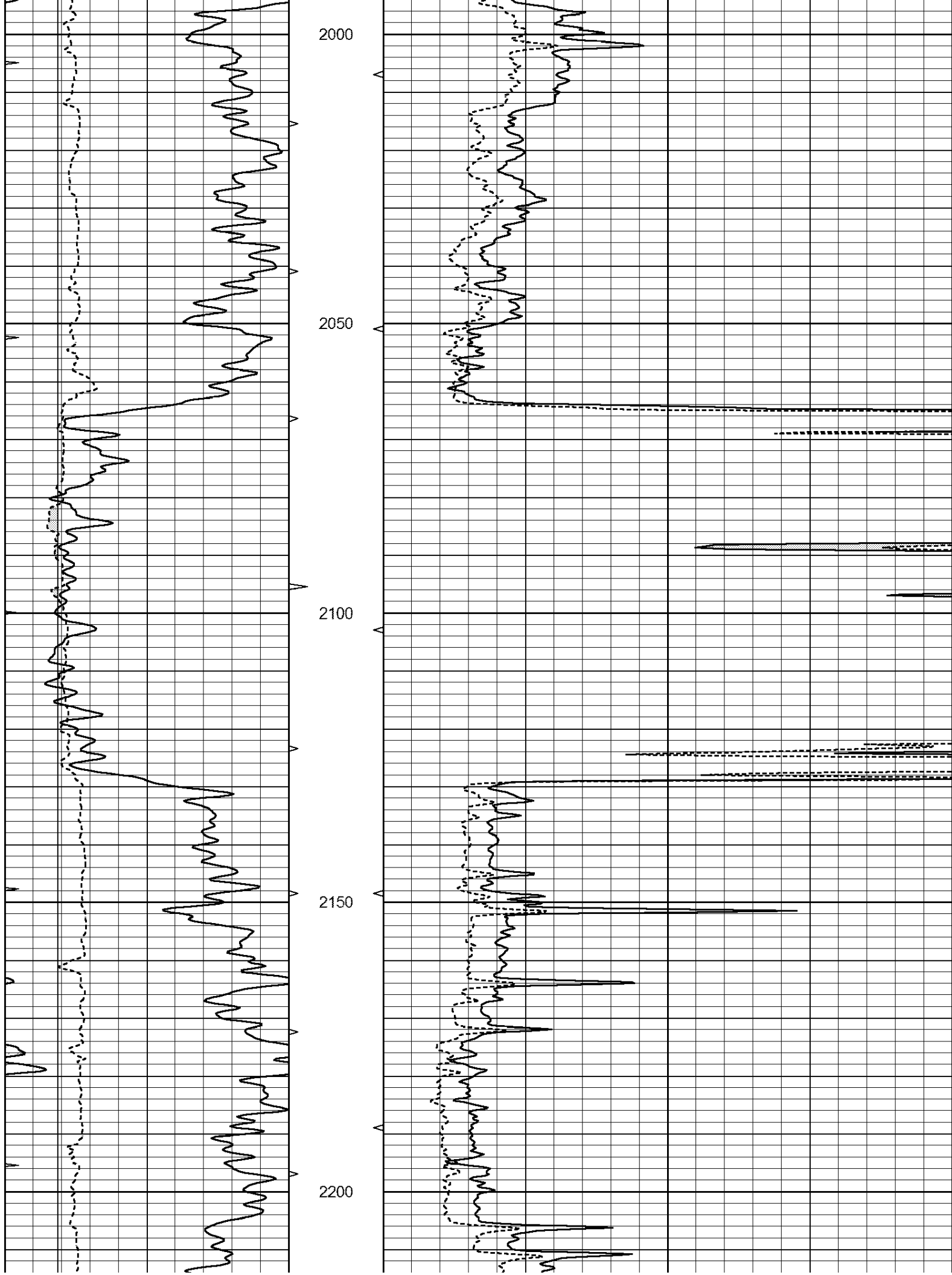
Comments

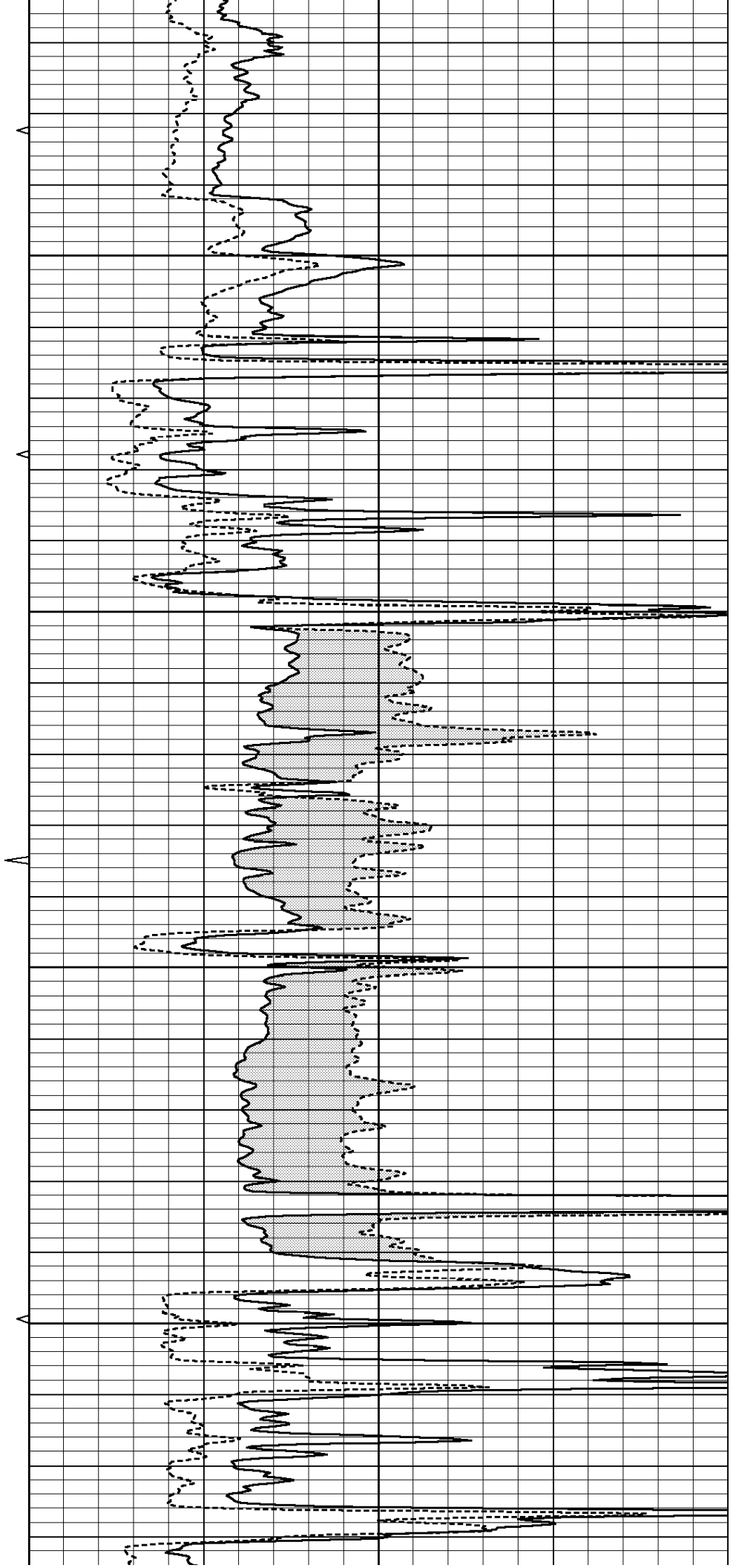
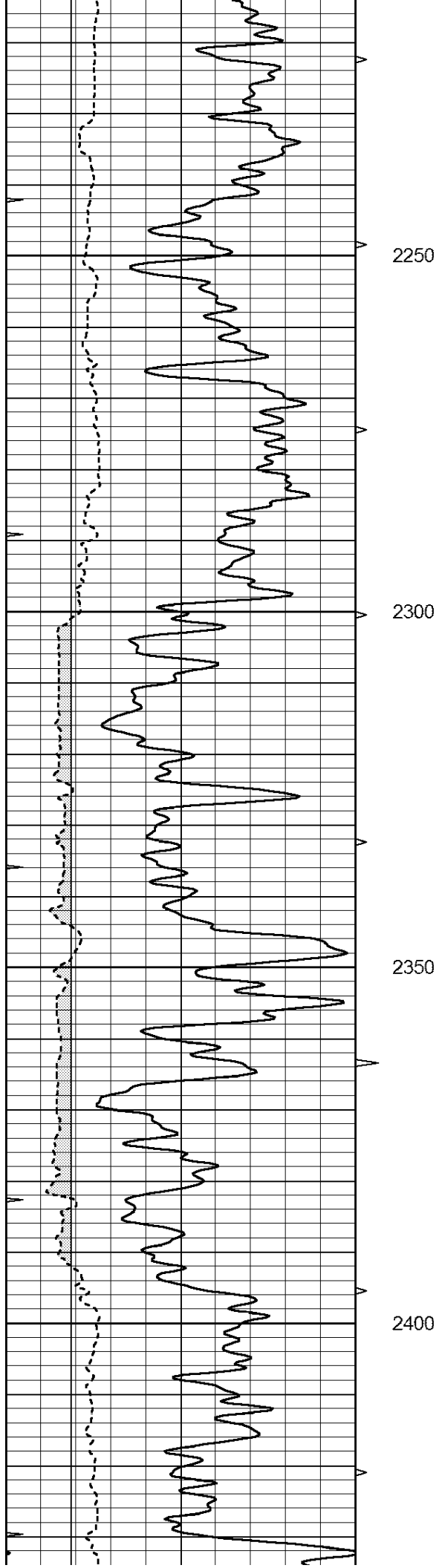
THANK YOU FOR USING SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395
DIRECTIONS
WINFIELD, KS - EAST TO RD 181 - 1/4 MILE SOUTH
WEST INTO

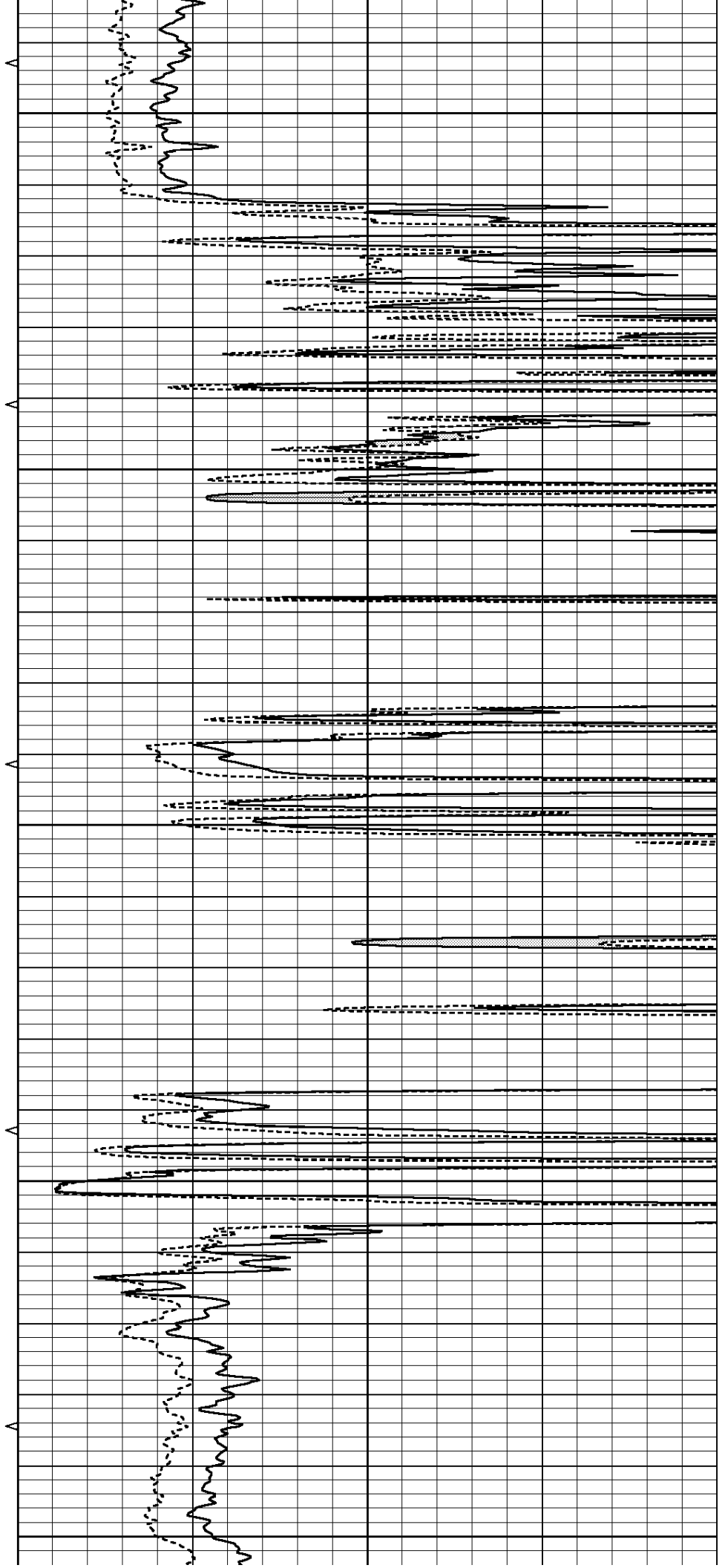
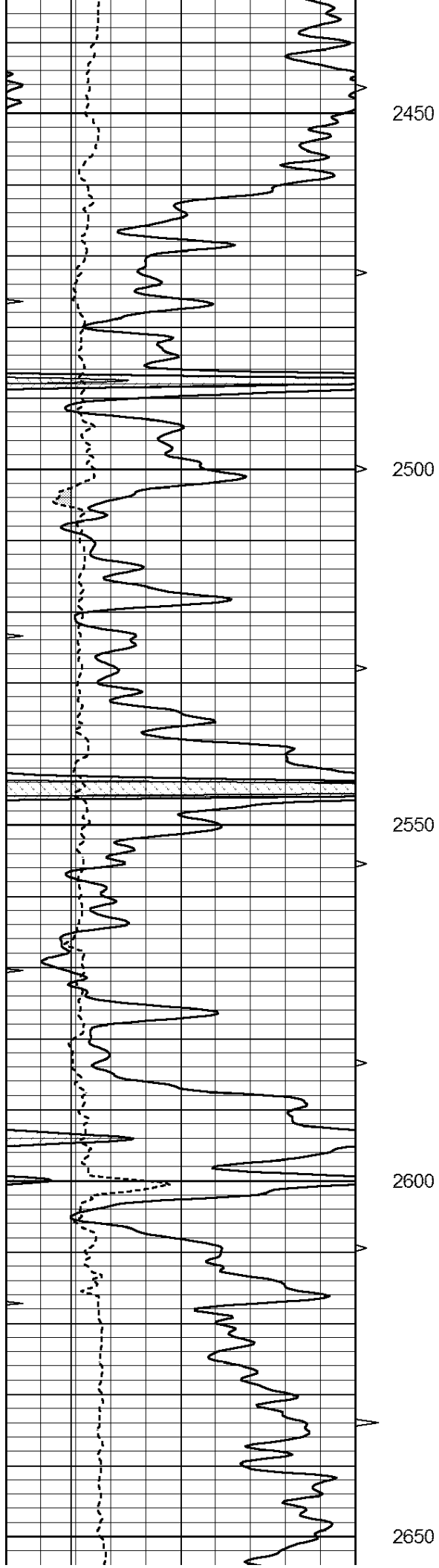
Charted by:		Depth in Feet scaled 1:2.10				
0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	40
6	CALIPER (in)	16	10 (ft3)	0 0	MEL2.0 (Ohm-m)	40

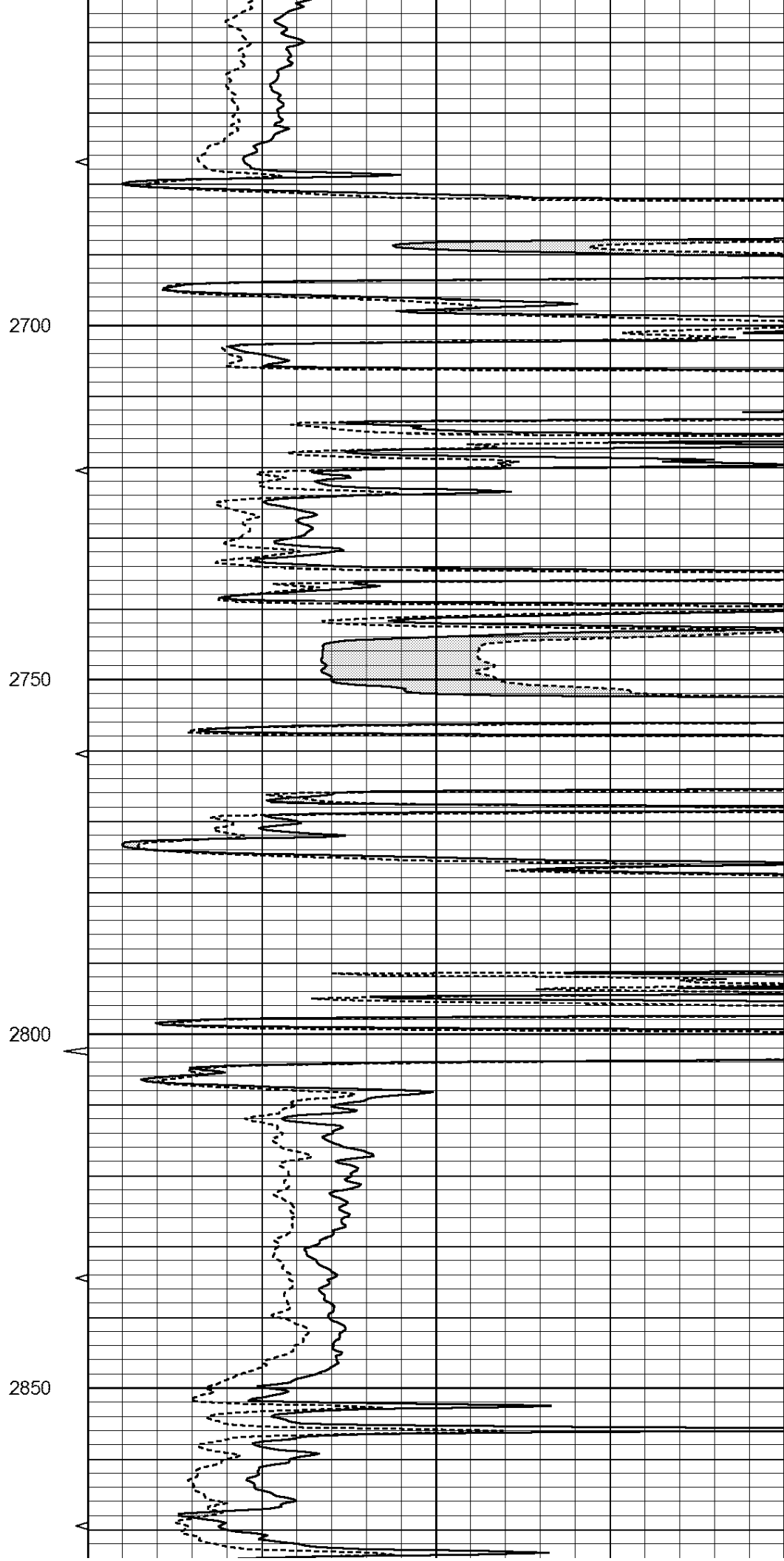
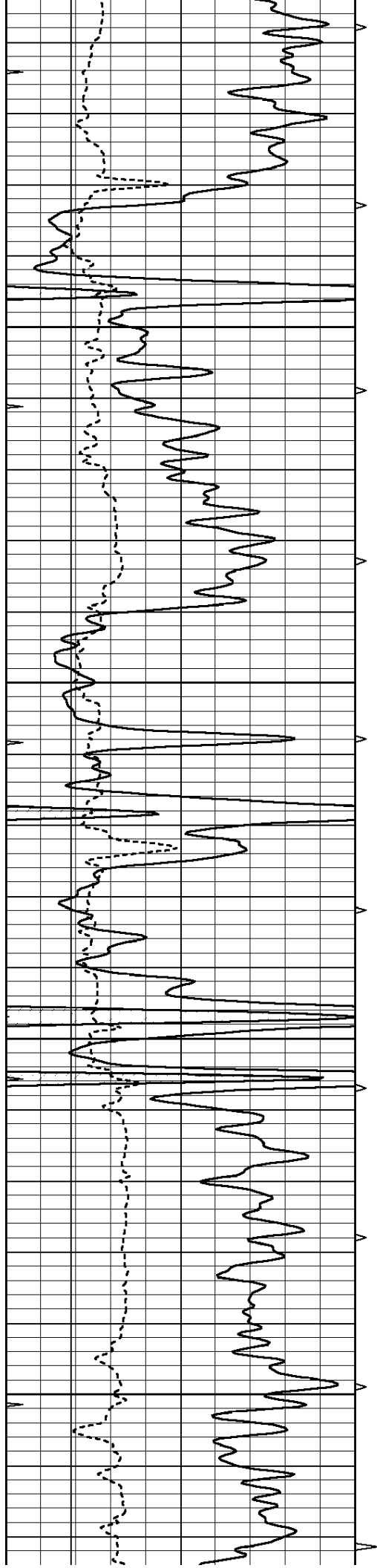
0	MINMK	20	TBHV			
			0 (ft3)	10		

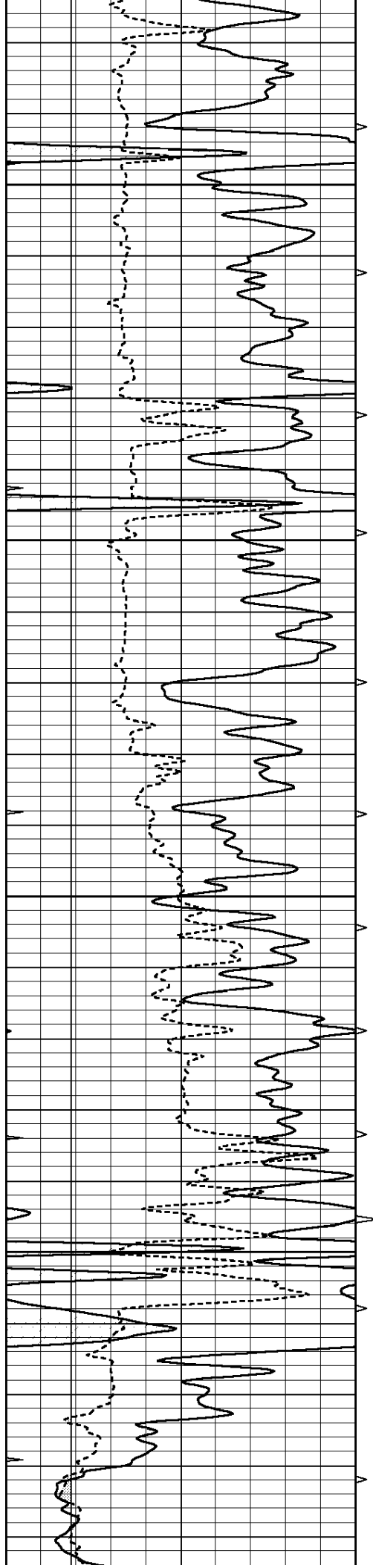










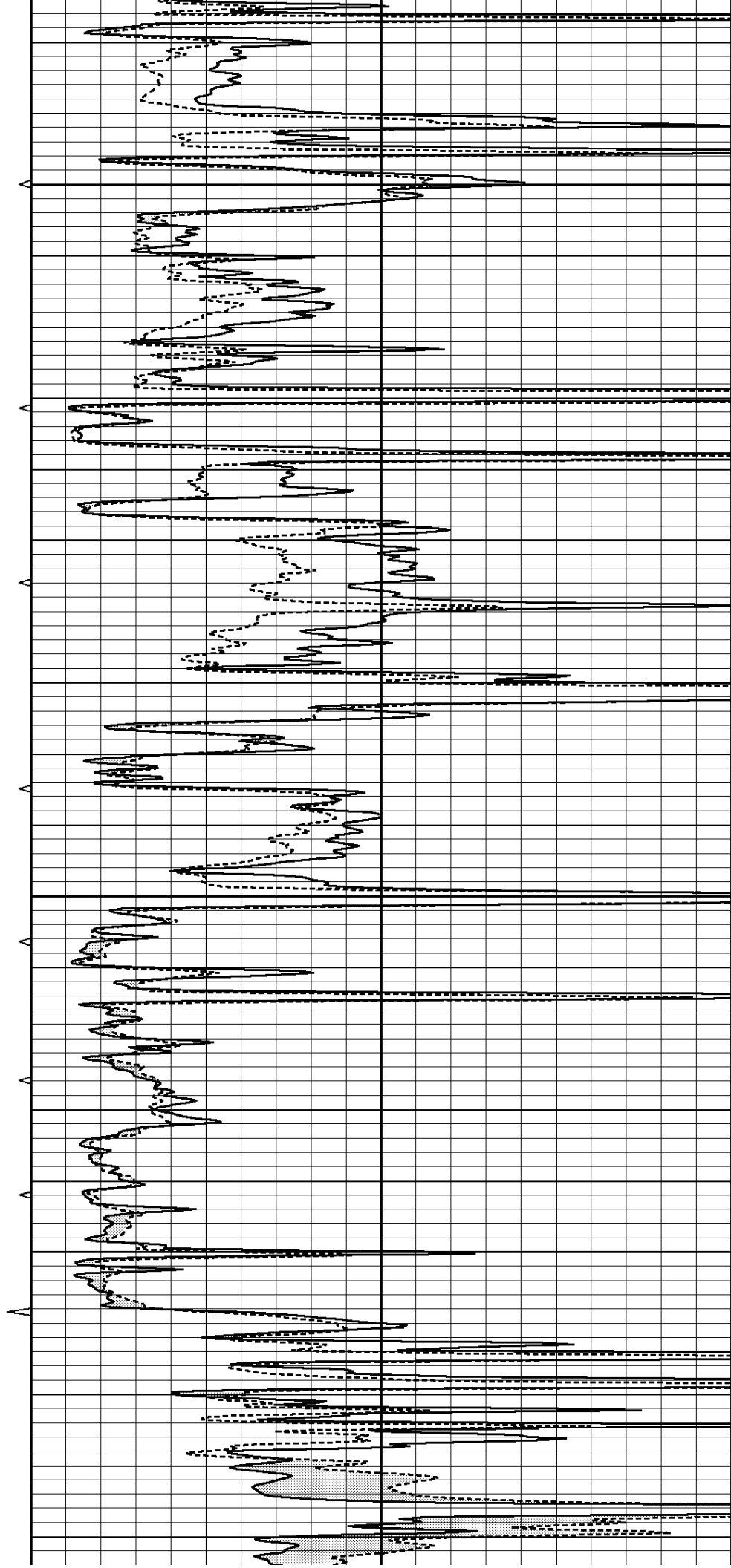


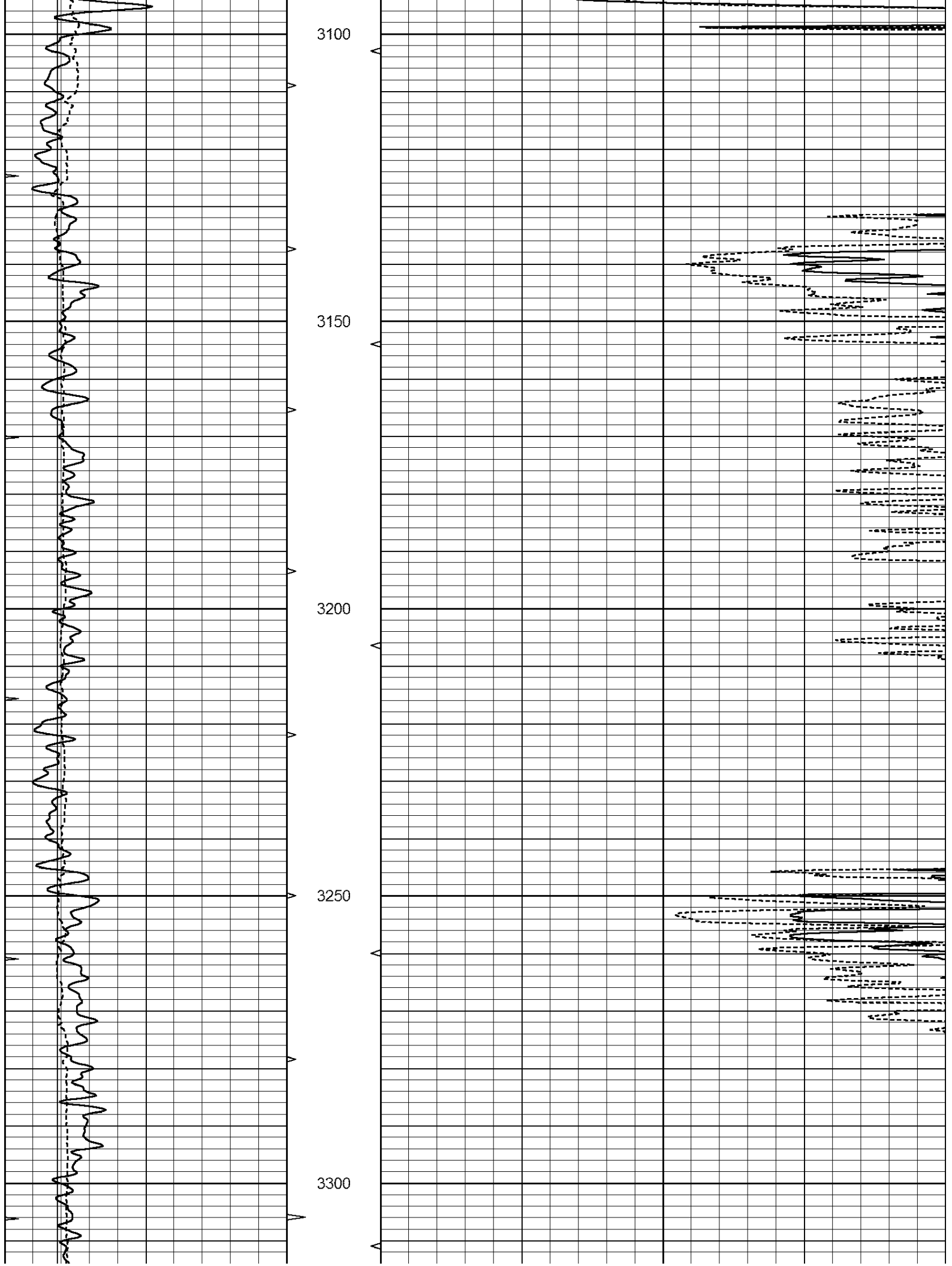
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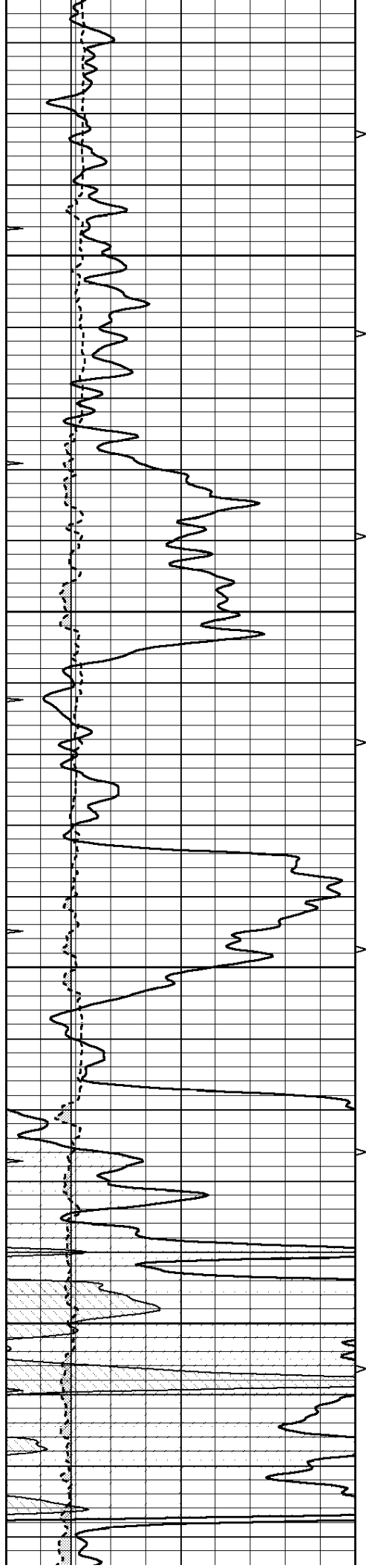
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3000

3050





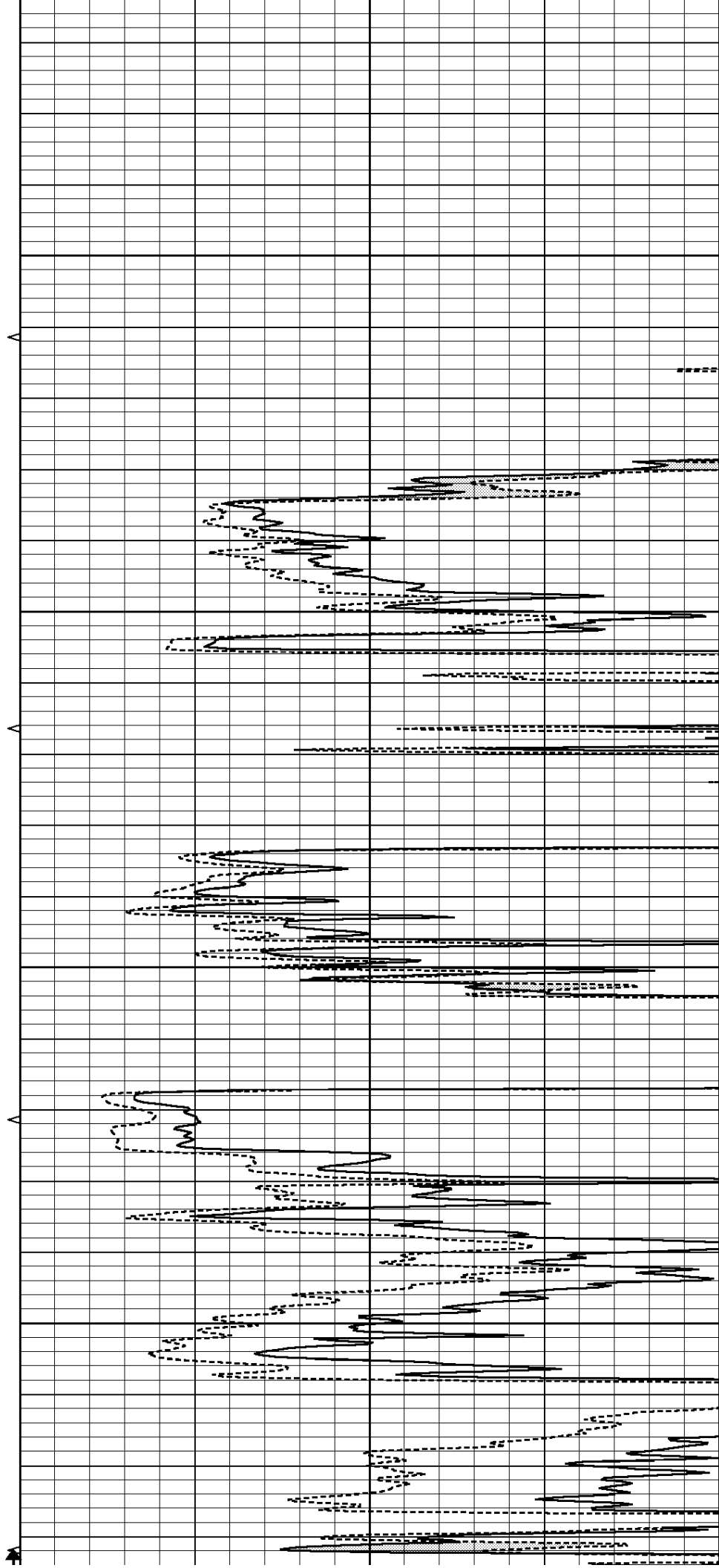


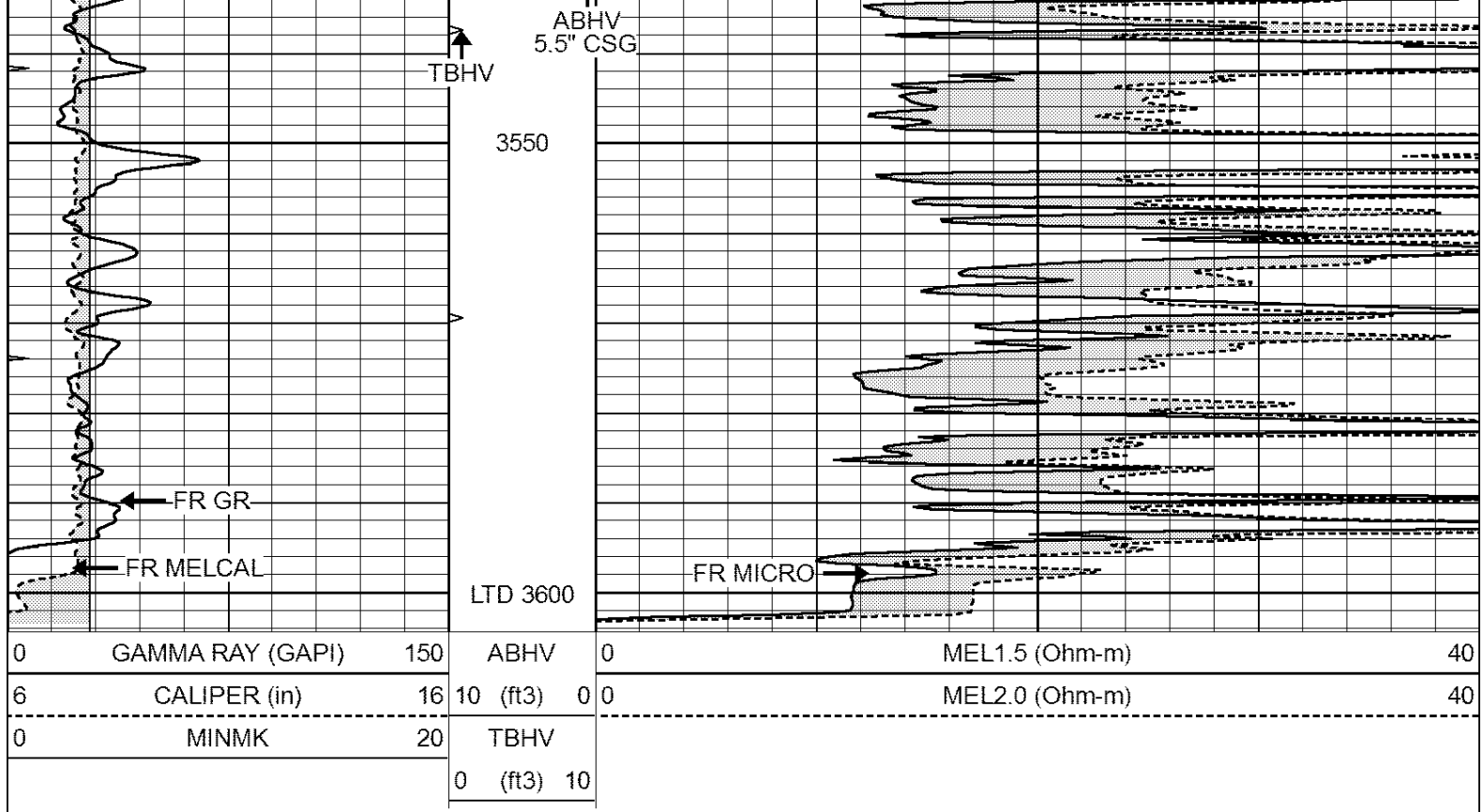
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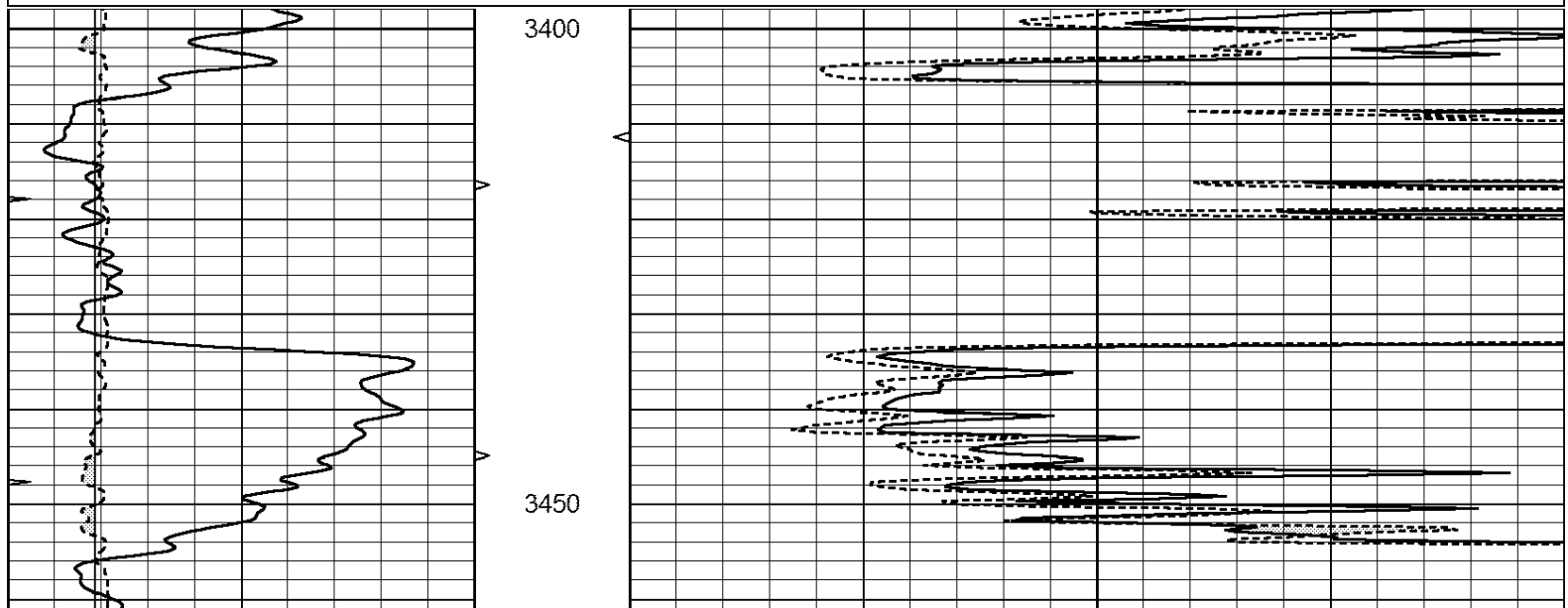


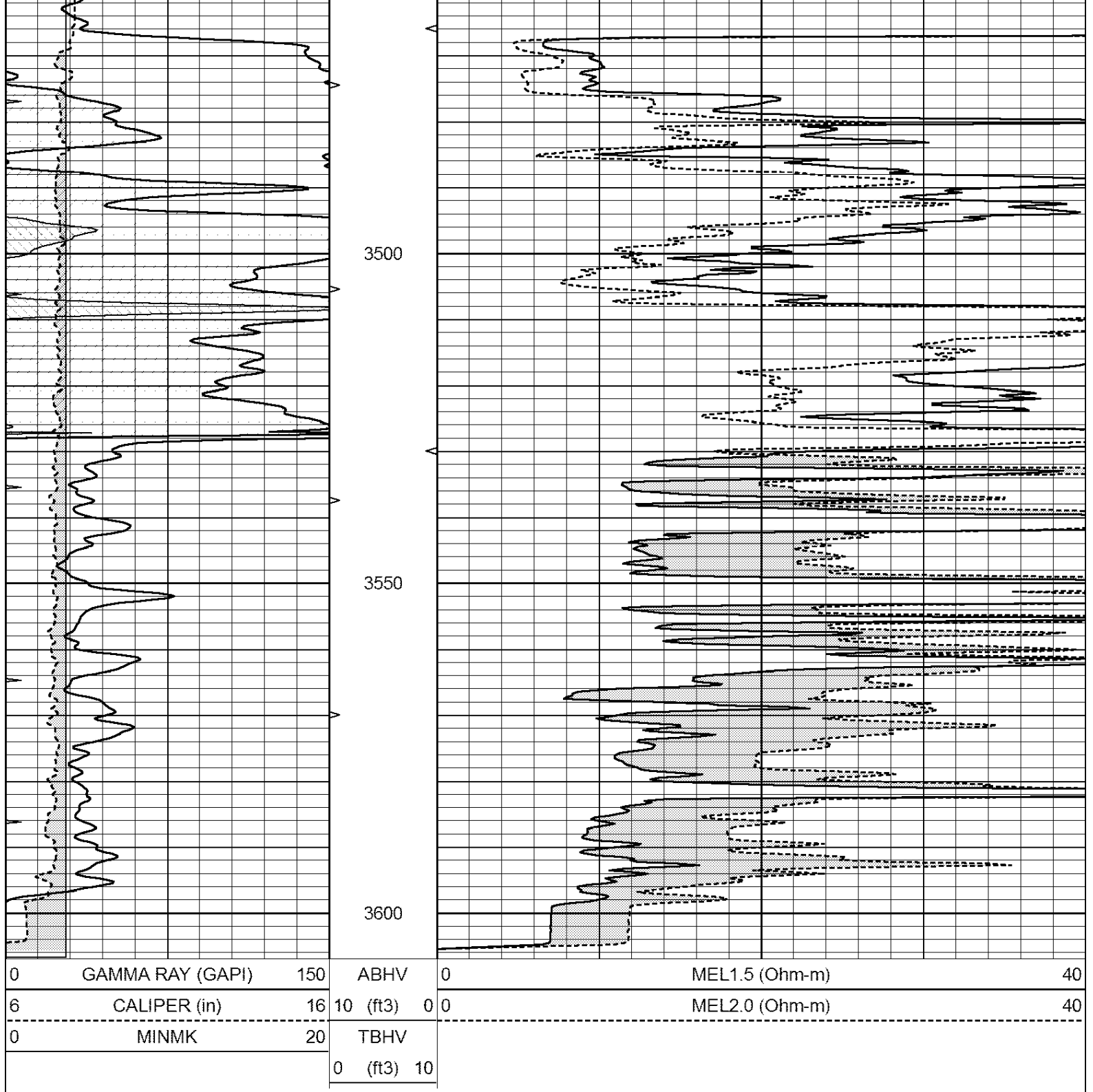
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REPEAT SECTION

Database File: 408611pe.db
Dataset Pathname: pass5.1
Presentation Format: micro
Dataset Creation: Sat Mar 24 02:17:32 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		





Calibration Report

Database File: 408611pe.db
Dataset Pathname: pass6.2
Dataset Creation: Sat Mar 24 02:37:59 2012 by Calc Open-Cased 110302

MICRO Calibration Report

Serial Number: MICRO5
Tool Model: PROBE
Performed: Sun Mar 18 14:38:12 2012

Caliper Calibration: Gain=3.443 Offset=-3.645

References Low Cal 7.000 High Cal 14.500

Readings	3.092	5.270
1.5" Calibration:	Gain=40.000	Offset=-0.600
References	Low Cal 0.000	High Cal 20.000
Readings	-0.002	0.981
2" Calibration:	Gain=55.000	Offset=-1.000
References	Low Cal 0.000	High Cal 20.000
Readings	0.002	0.898
Gamma Ray Calibration Report		
Serial Number:	GR4	
Tool Model:	OPEN	
Performed:	Sun Mar 18 13:00:13 2012	
Calibrator Value:	200.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	189.0	cps
Sensitivity:	2.0000	GAPI/cps