



**COMPLETION
& PRODUCTION
SERVICES CO.**

**MICRO
LOG**

Company	LIBERTY OPER. & COMPL. INC.		
Well	CHAROLAIS #1		
Field	BEMIS - SHUTTS		
County	ELLIS		
State	KANSAS		
Company	LIBERTY OPERATIONS & COMPLETIONS, INC.		
Well	CHAROLAIS #1		
Field	BEMIS - SHUTTS		
County	ELLIS		
State	KANSAS		
Location:	API # : 15-051-26607-0000		Other Services CDL/CNL/PE DIL/SONIC
Permanent Datum	GROUND LEVEL		Elevation 1957
Log Measured From	KELLY BUSHING 5' A.G.L.		K.B. 1962 D.F. 1960 G.L. 1957
Drilling Measured From	KELLY BUSHING		
Date	10/4/13		
Run Number	TWO		
Depth Driller	3610		
Depth Logger	3606		
Bottom Logged Interval	3584		
Top Log Interval	2700		
Casing Driller	8 5/8"@222'		
Casing Logger	222		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 7,500 PPM	
Density / Viscosity	9.3/55		
pH / Fluid Loss	10.0/8.8		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.850@80F		
Rmf @ Meas. Temp	.638@80F		
Rmc @ Meas. Temp	1.02@80F		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	.602@113F		
Time Circulation Stopped	4 HOURS		
Time Logger on Bottom	10:45 A.M.		
Maximum Recorded Temperature	113F		
Equipment Number	4854		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	TONY RICHARDSON	ROGER COMEAU	

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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
TURKVILLE SCHOOL, E. SIDE TO "TOULON RD.", 2 1/2N., E. INTO UP HILL

Database File:

011681pe.db

Dataset Pathname:

pass6.7

Presentation Format:

micro

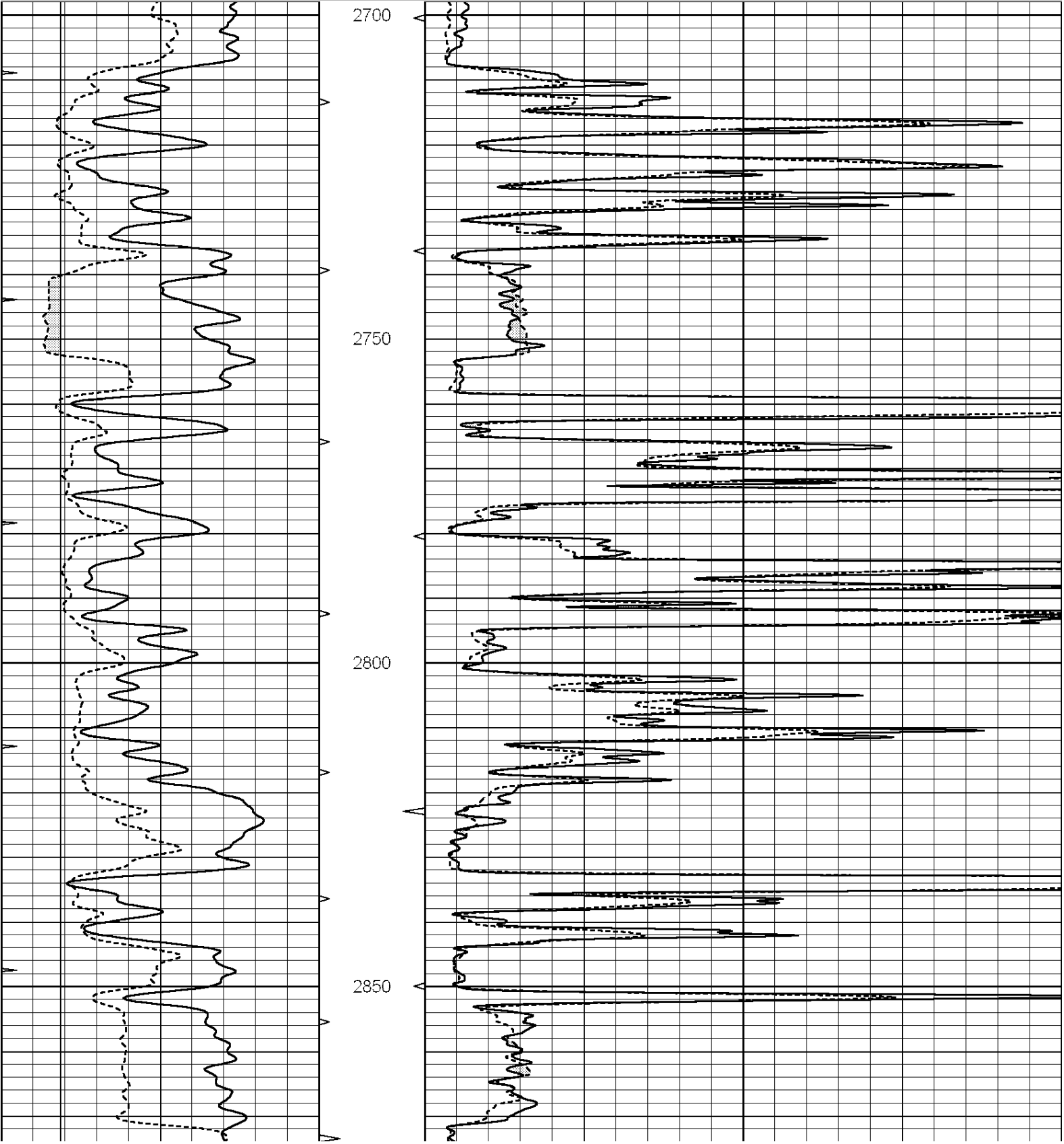
Dataset Creation:

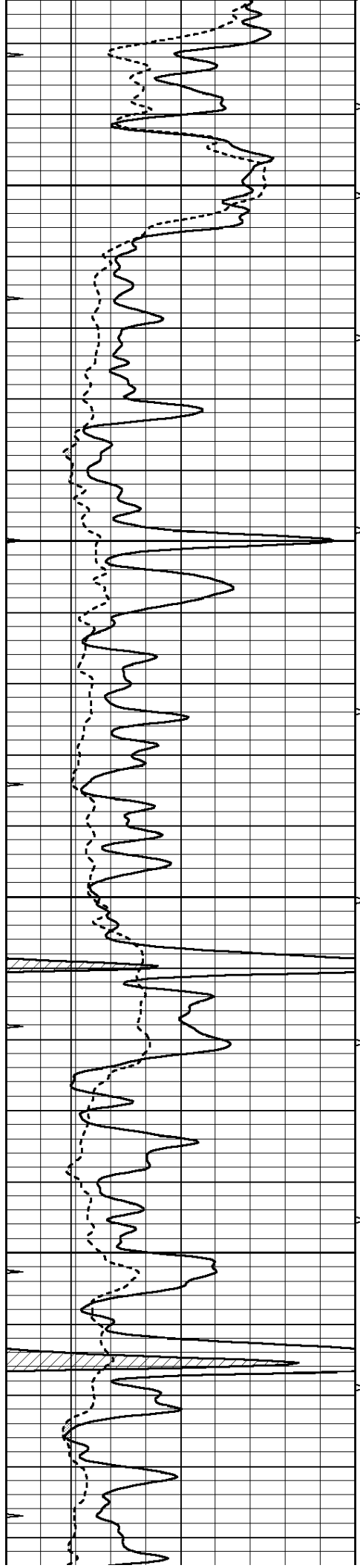
Fri Oct 04 13:31:17 2013

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 0	MEL2.0 (Ohm-m)	40
0	MINMK	20	TBHV			
			0 (ft3)	10		



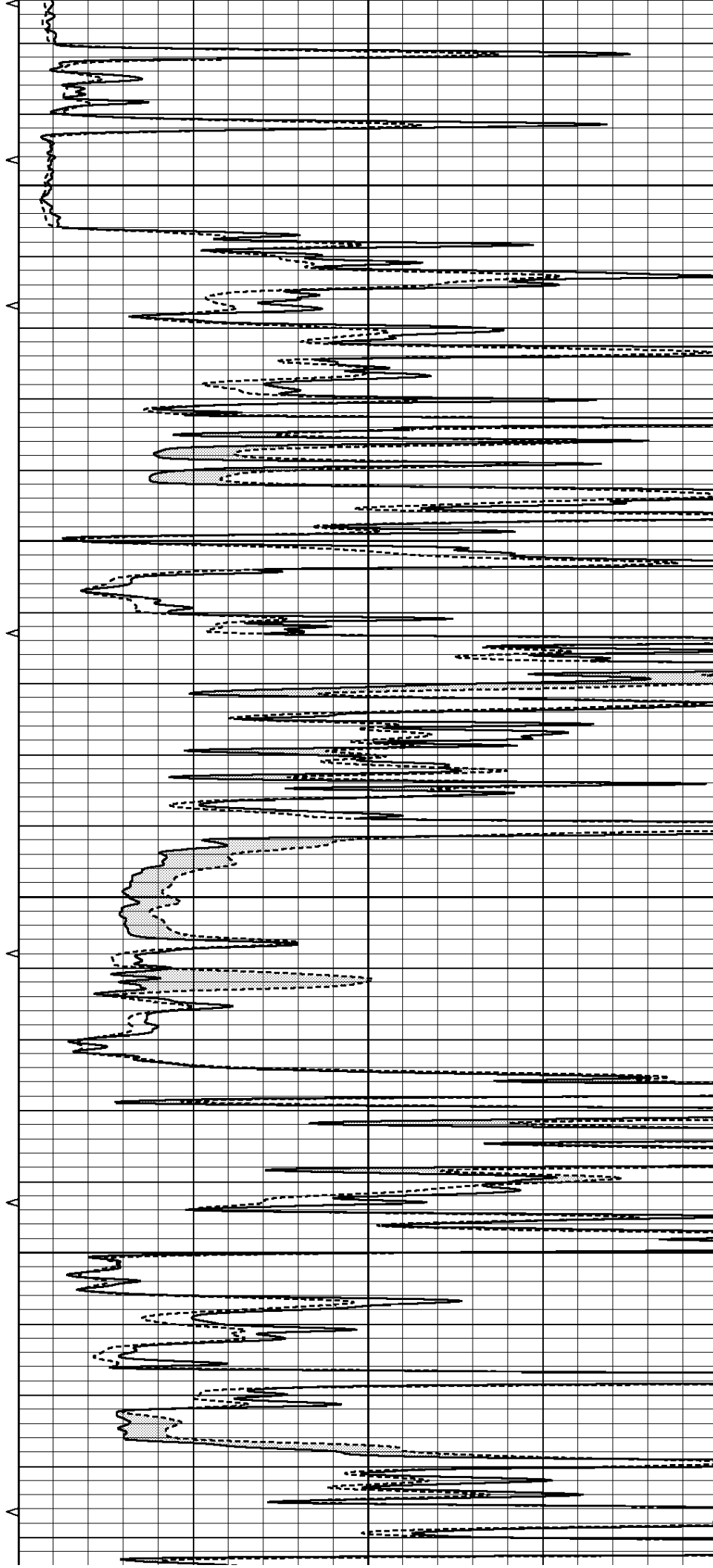


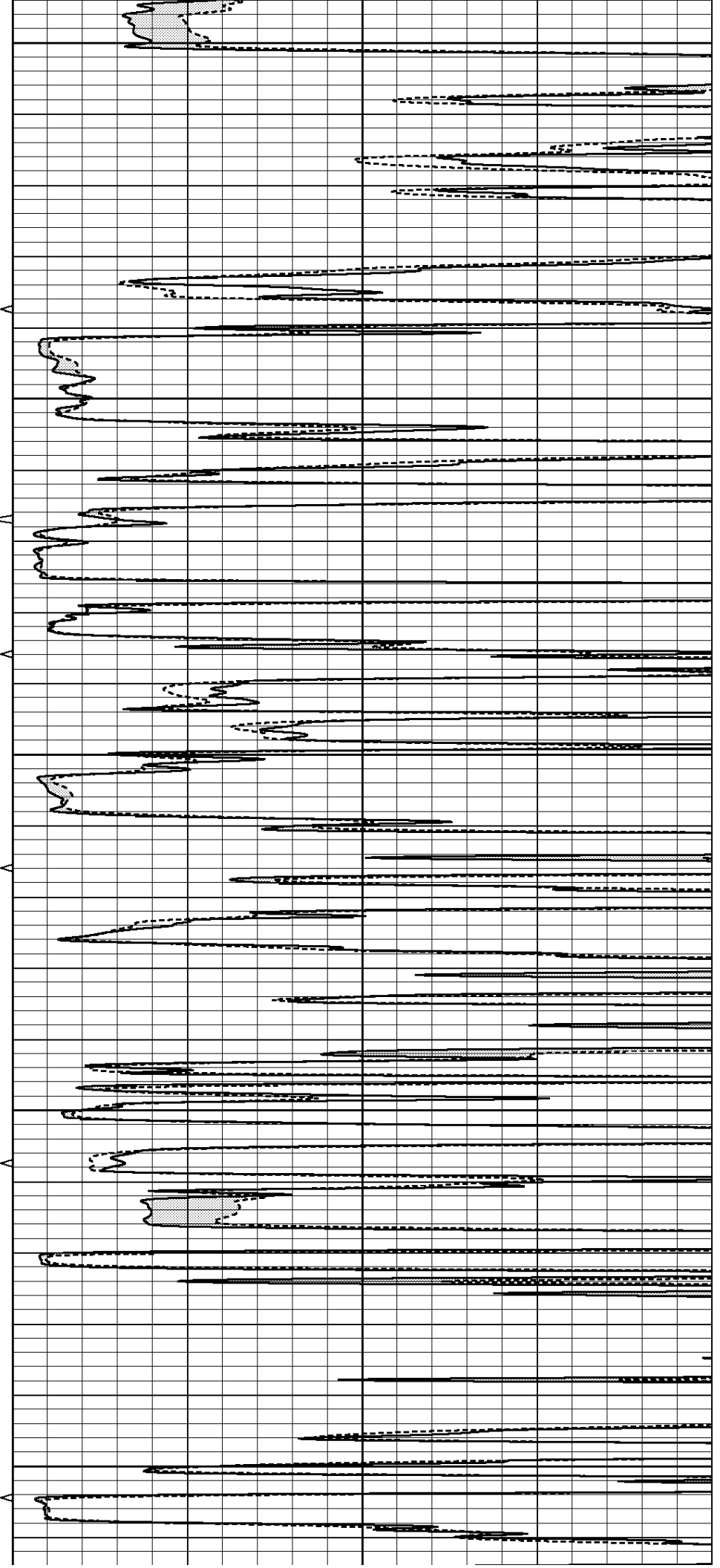
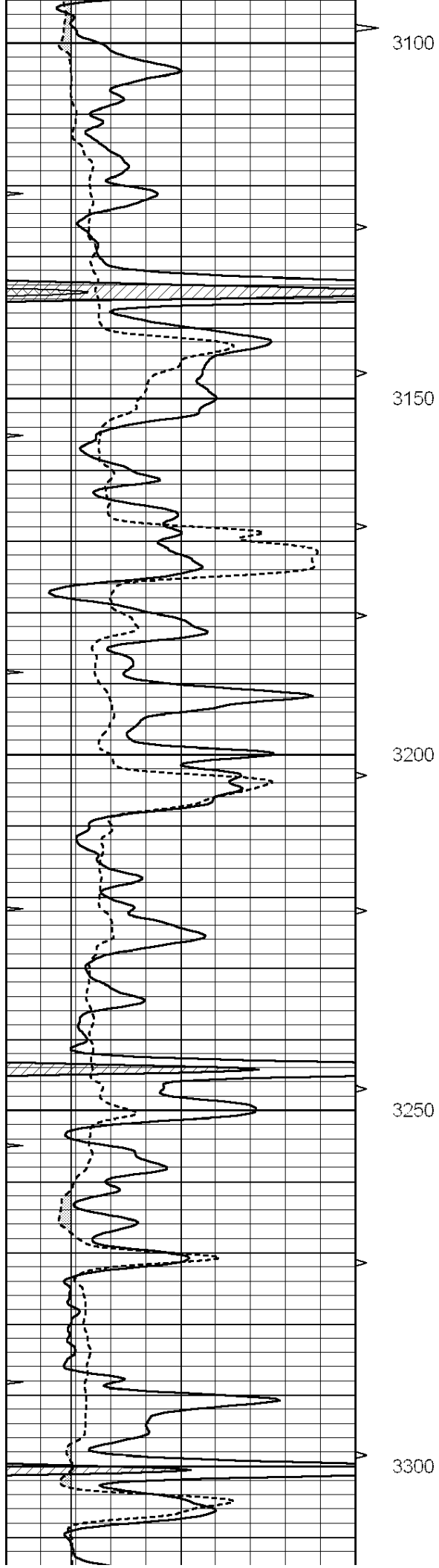
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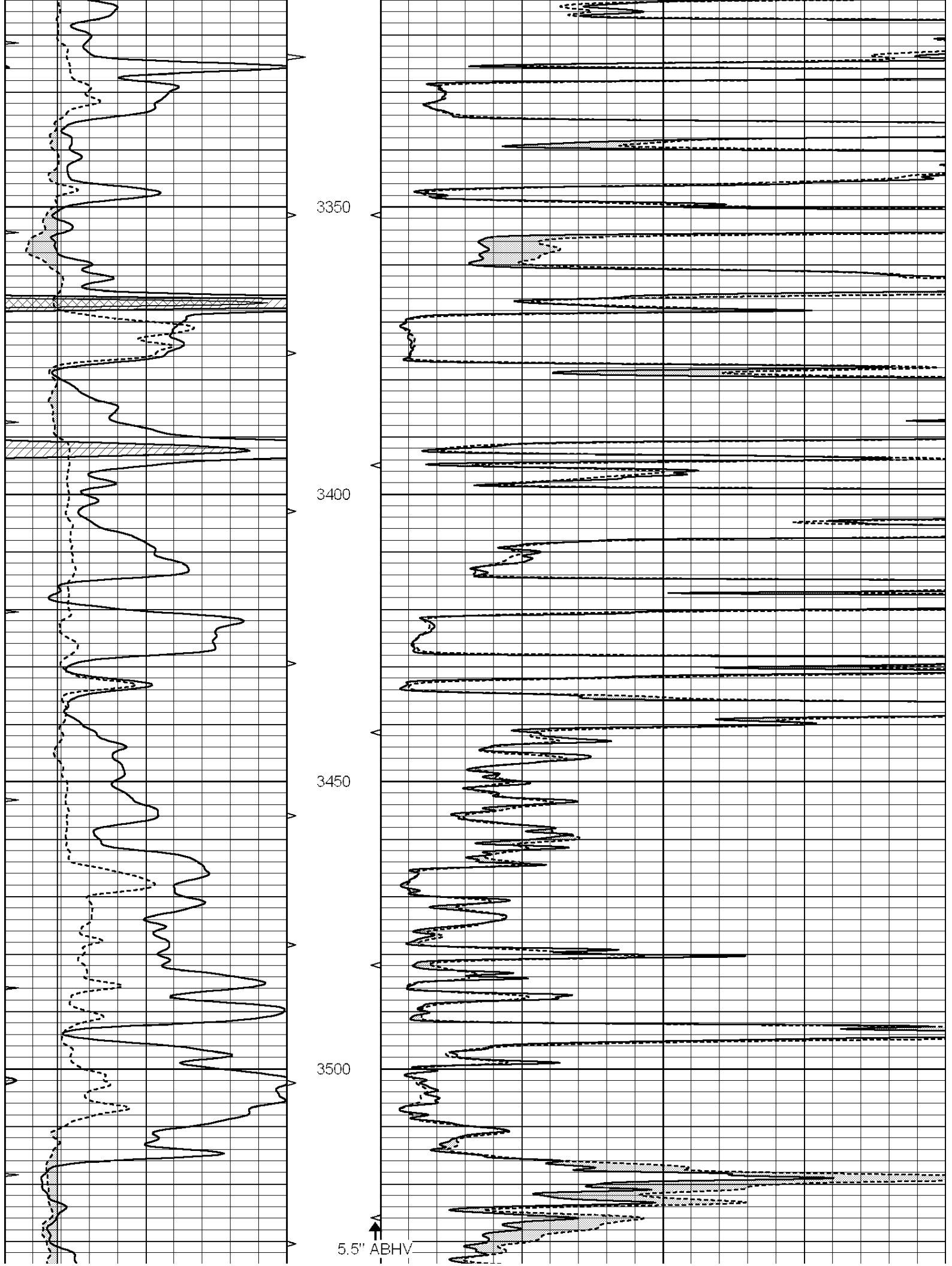
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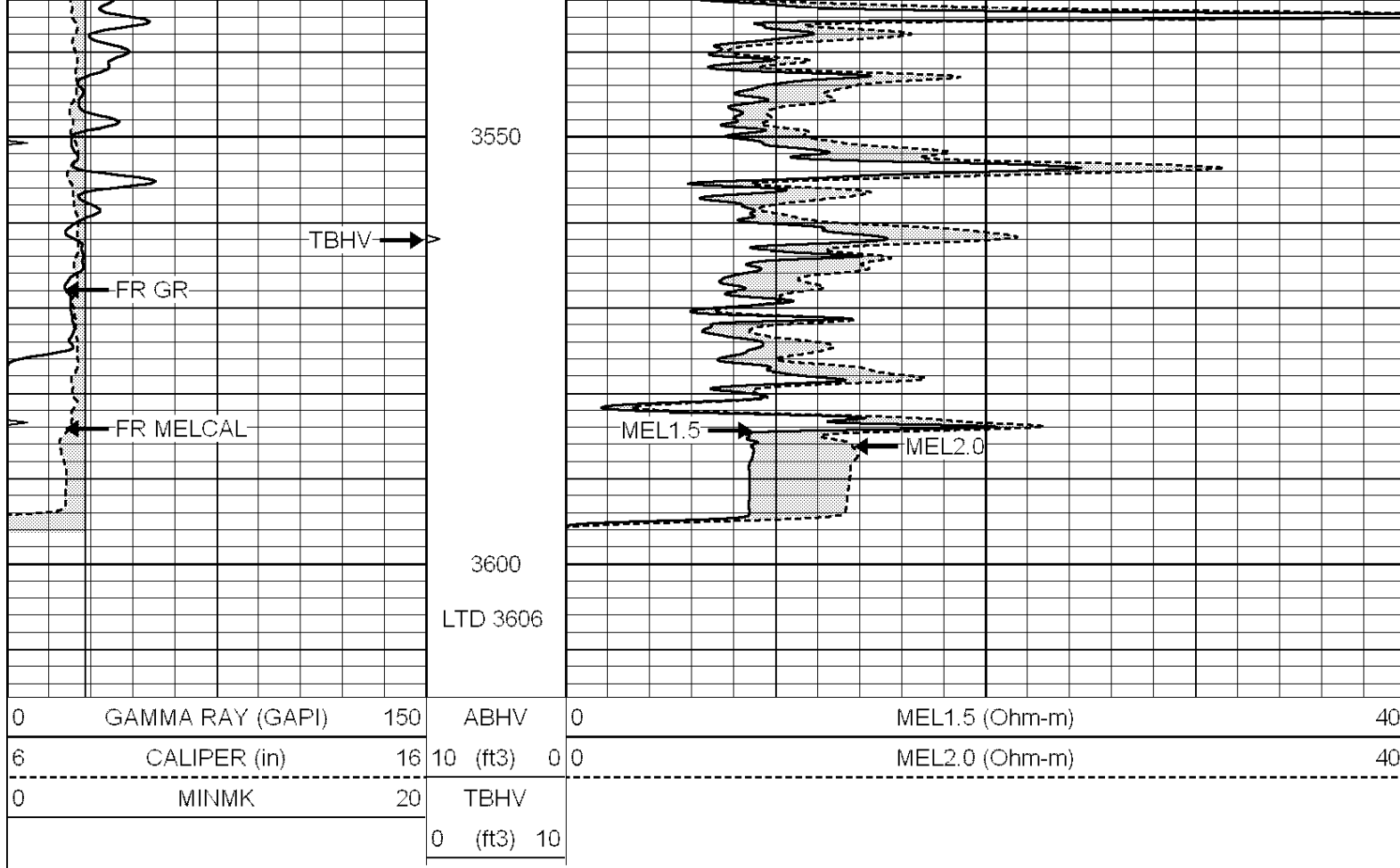
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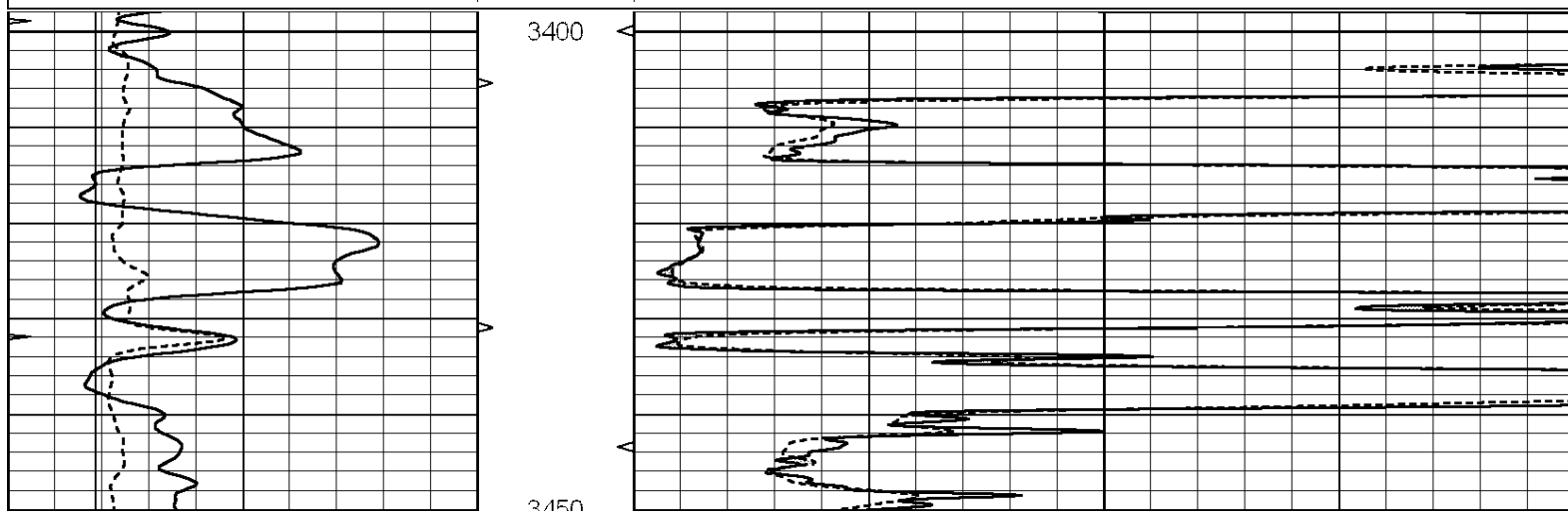


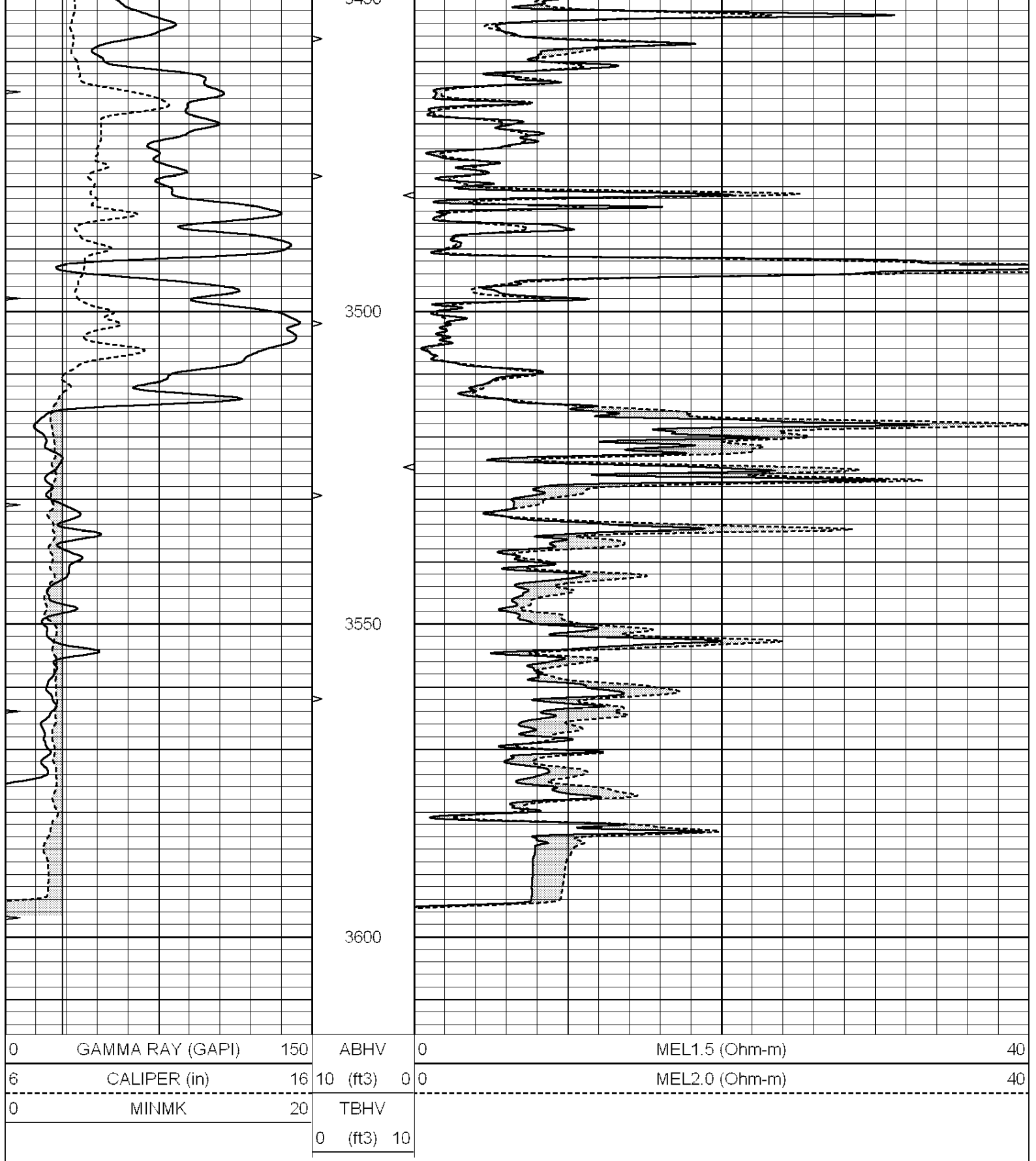


REPEAT SECTION

Database File: 011681pe.db
 Dataset Pathname: pass5.5
 Presentation Format: micro
 Dataset Creation: Fri Oct 04 13:01:58 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 0	MEL2.0 (Ohm-m)	40
0	MINMK	20	TBHV			
			0 (ft3)	10		





Calibration Report

Database File: 011681pe.db
Dataset Pathname: pass6.7
Dataset Creation: Fri Oct 04 13:31:17 2013

MICRO Calibration Report

Serial Number: MICRO5
Tool Model: PROBE

Tool Model: Performed:	PROBE Thu Oct 03 11:02:25 2013
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Caliper Calibration:	Gain=3.605	Offset=-6.802
References	Low Cal	High Cal
Readings	8.000	15.000
	4.106	6.048

1.5" Calibration:	Gain=36.000	Offset=0.000
References	Low Cal	High Cal
Readings	0.000	20.000
	0.015	1.005

2" Calibration:	Gain=54.000	Offset=-0.400
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:	Thu Oct 03 11:02:21 2013	
Calibrator Value:	200.0	GAPI
Background Reading:	3.0	cps
Calibrator Reading:	186.0	cps
Sensitivity:	1.8000	GAPI/cps