



SUPERIOR
Hays,
Kansas

**MICRO
LOG**

Company DOWNING-NELSON OIL COMPANY, INC.
Well WARD #1-31
Field POHO
County RUSH
State KANSAS

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Location: API # : 15-165-21991-00-00
1800' FNL & 350' FWL
SE - NW - SW - NW
SEC 31 TWP 18S RGE 17W
Permanent Datum GROUND LEVEL Elevation 2002
Log Measured From KELLY BUSHING & A.G.L.
Drilling Measured From KELLY BUSHING
Elevation
K.B. 2010
D.F. 2008
G.L. 2002

Date	9/21/12
Run Number	TWO
Depth Driller	3851
Depth Logger	3852
Bottom Logged Interval	3832
Top Log Interval	2900
Casing Driller	8 5/8" @ 1130'
Casing Logger	1130
Bit Size	7 7/8
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.3/6.0
pH / Fluid Loss	9.5/10.4
Source of Sample	FLOWLINE
Rin @ Meas. Temp	0.65 @ 85F
Rmf @ Meas. Temp	0.49 @ 85F
Rmc @ Meas. Temp	0.78 @ 85F
Source of Rmf / Rmc	MEASURED
Rin @ BHT	0.48 @ 115F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	115F
Equipment Number	680
Location	HAYS, KS.
Recorded By	IAN MABB
Witnessed By	AL DOWNING
	JEFF GRONEMEG

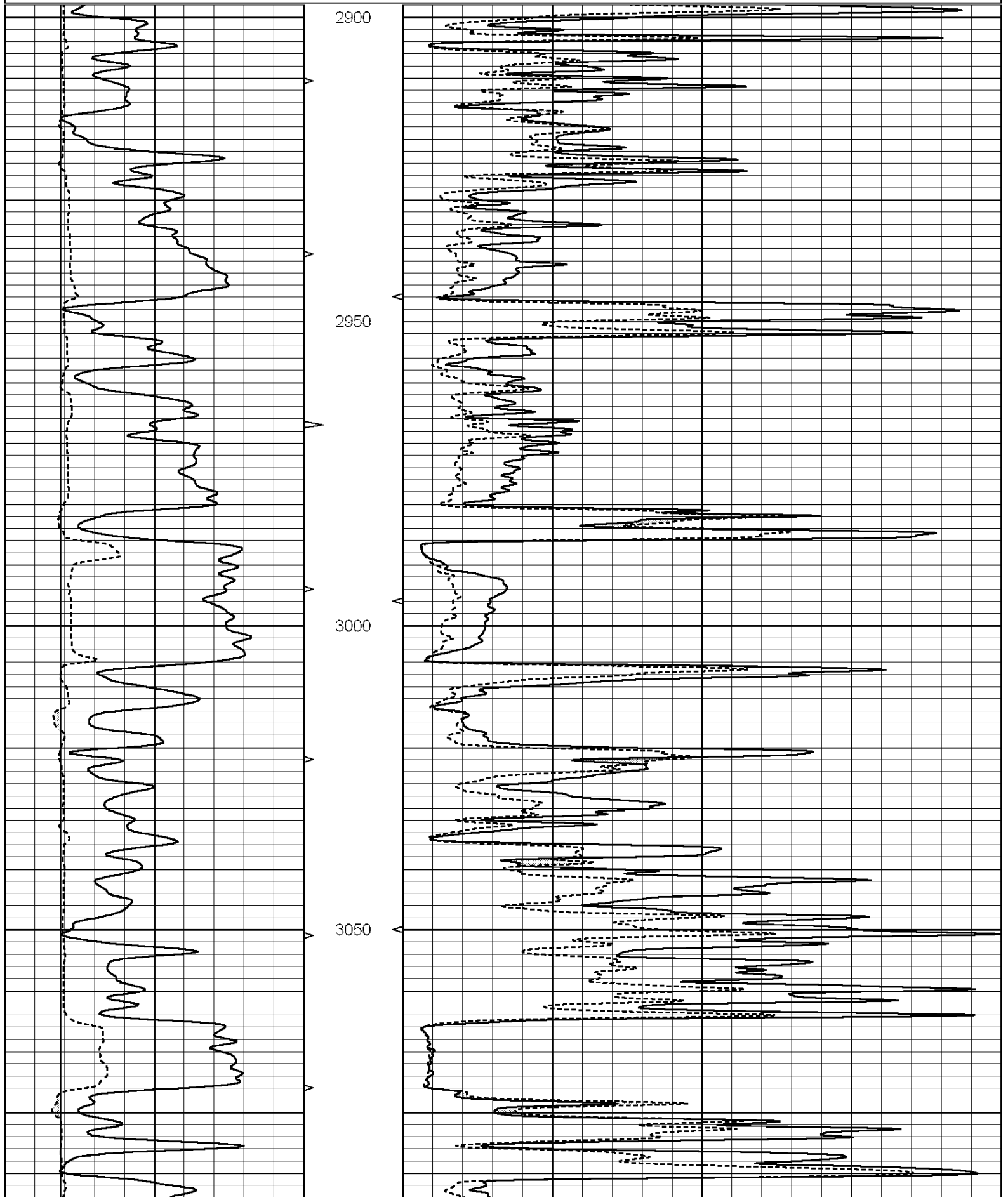
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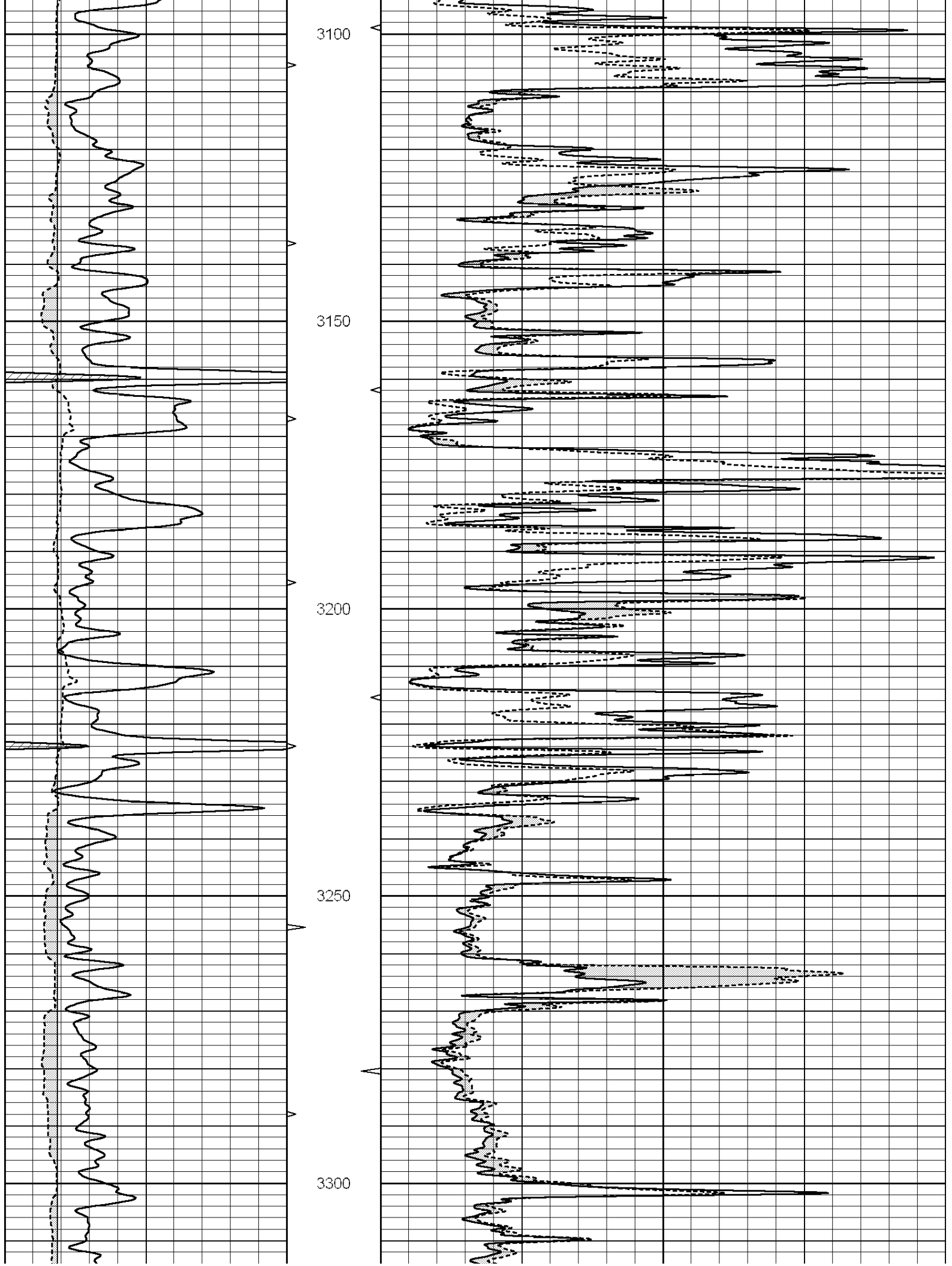
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

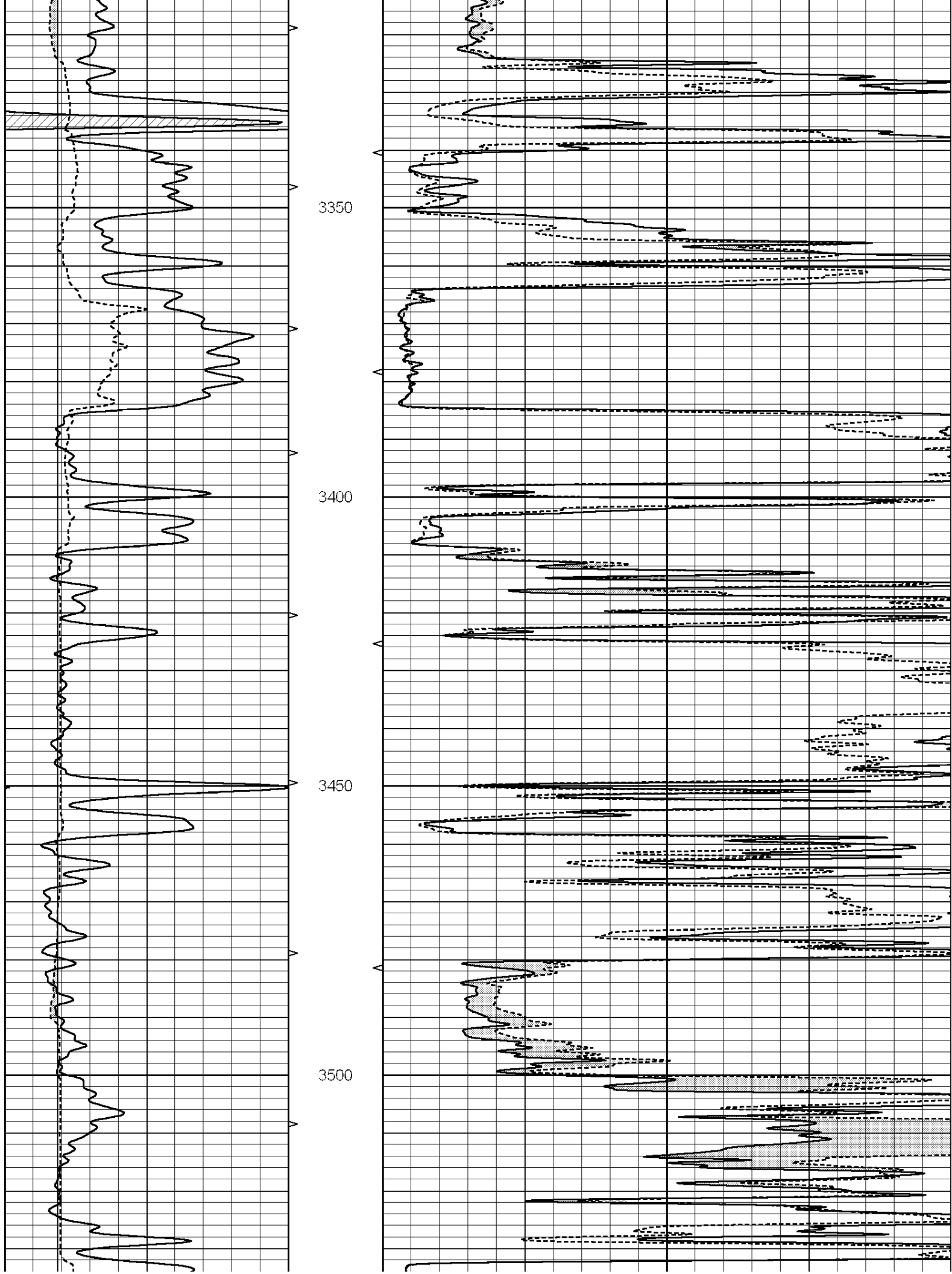
Comments

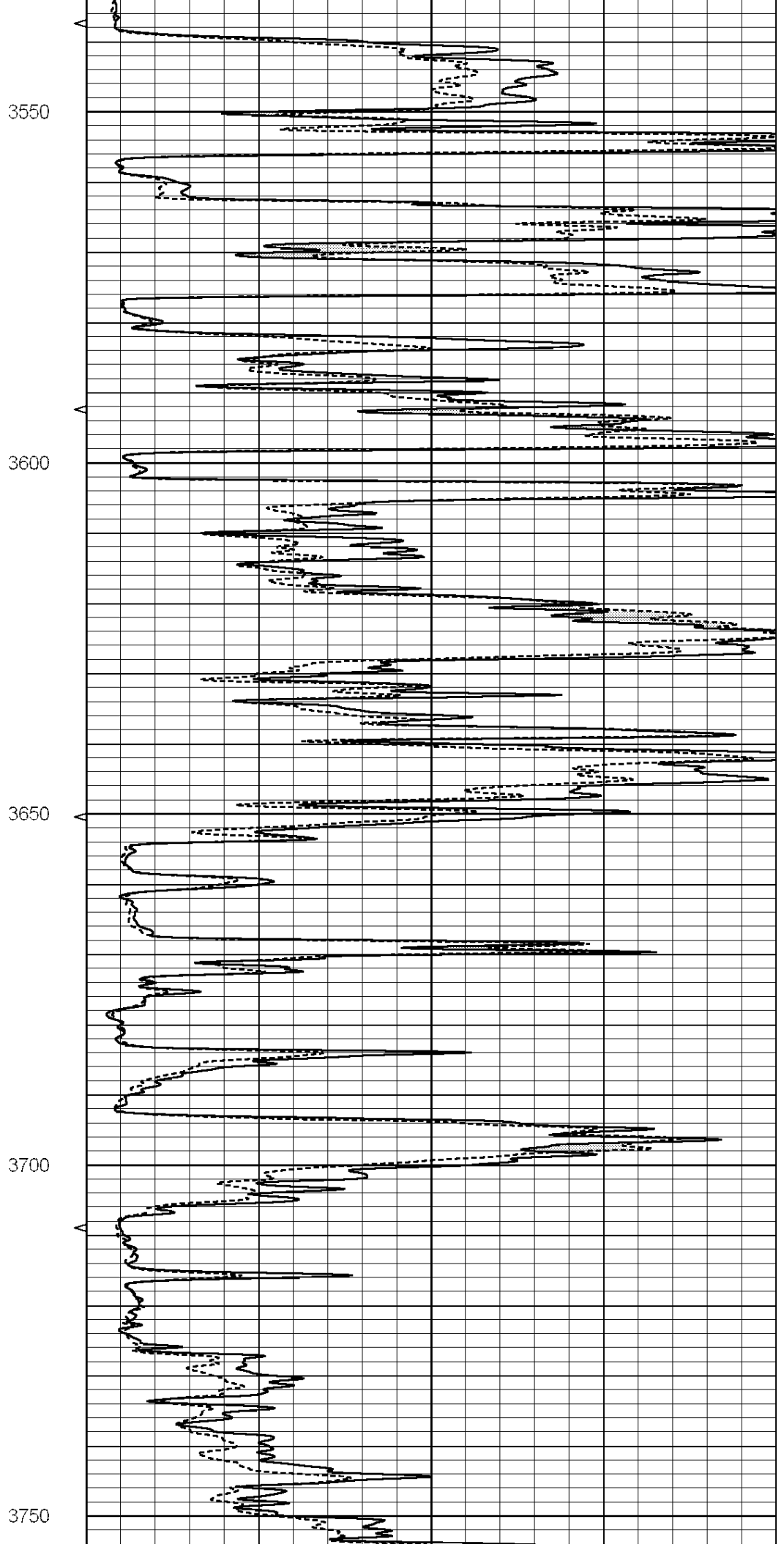
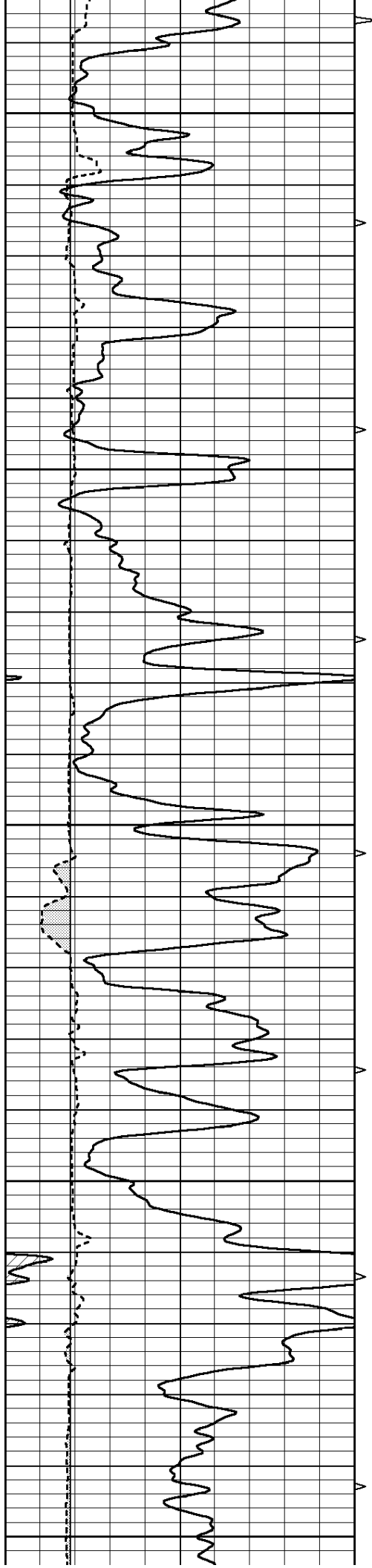
THANK YOU FOR USING SUPERIOR WELL SERVICE (785) 628-6395
DIRECTIONS
RUSH CENTER, KS. 3 MILES EAST TO RD, 280, SOUTH 1.5 EAST INTO

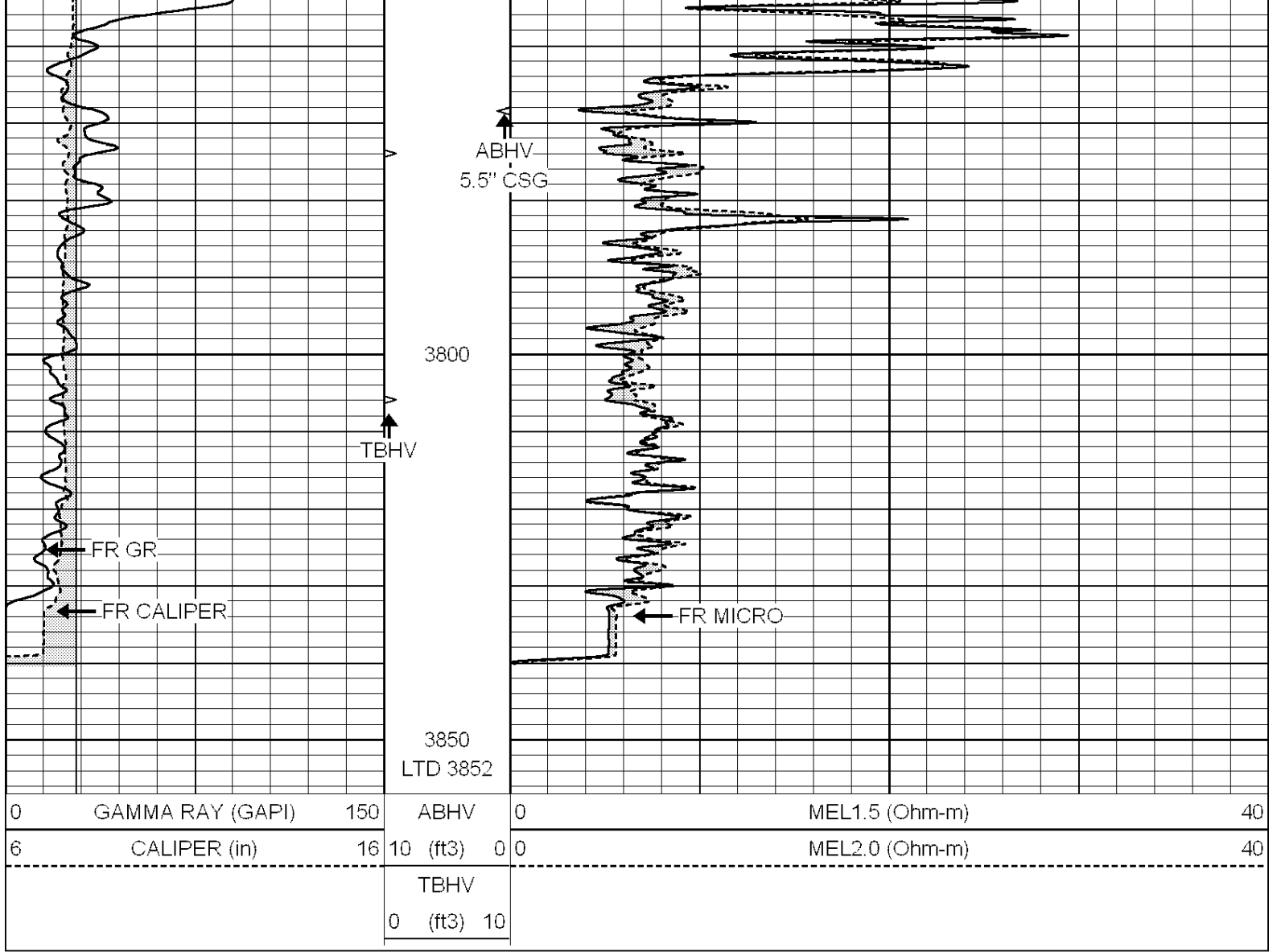
0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	40
6	CALIPER (in)	16	10 (ft3)	0 0	MEL2.0 (Ohm-m)	40
			TBHV			
			0 (ft3)			









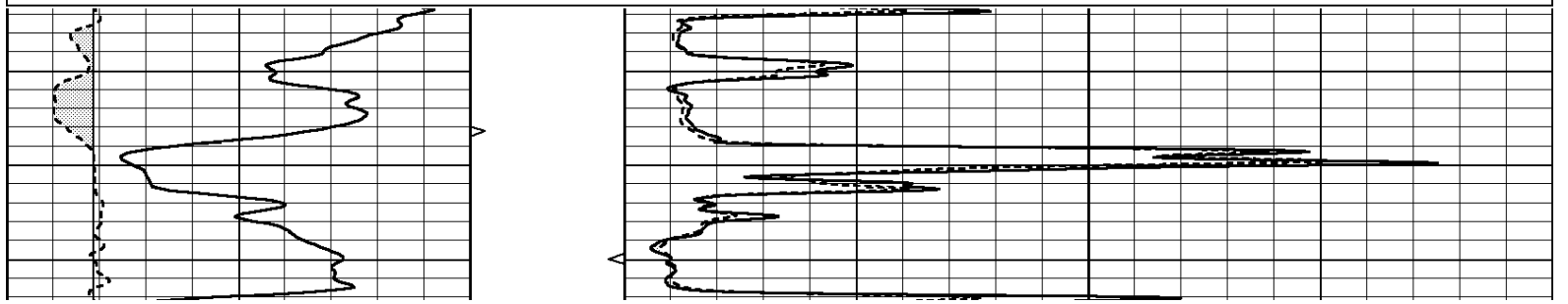


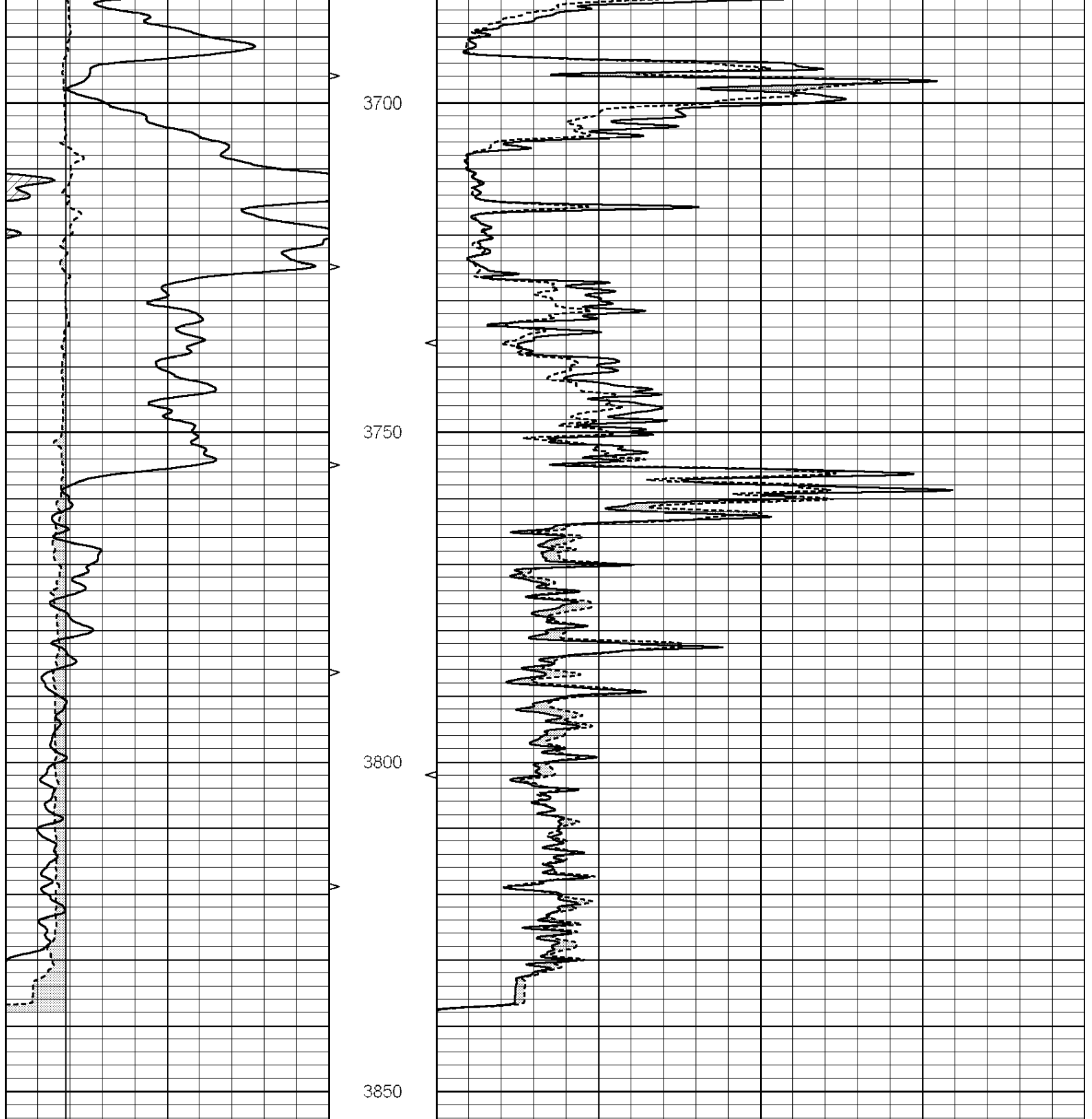
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REPEAT SECTION

Database File: 009735ddn.db
 Dataset Pathname: pass6
 Presentation Format: _micro
 Dataset Creation: Sat Sep 22 01:13:48 2012 by Log Open-Cased 090629
 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
			TBHV			
			0 (ft3)	10		





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

Calibration Report

Database File: 009735ddn.db
 Dataset Pathname: pass7.1
 Dataset Creation: Sat Sep 22 01:51:17 2012 by Calc Open-Cased 090629

MICRO Calibration Report

Serial Number: MICRO6
Tool Model: PROBE
Performed: Thu Aug 16 14:43:41 2012

Caliper Calibration:	Gain=6.253	Offset=-1.608
References	Low Cal	High Cal
Readings	5.800	13.000
	1.178	2.330

1.5" Calibration:	Gain=30.075	Offset=-0.200
References	Low Cal	High Cal
Readings	0.000	20.000
	0.004	1.196

2" Calibration:	Gain=30.041	Offset=0.000
References	Low Cal	High Cal
Readings	0.000	20.000
	0.006	0.913

Gamma Ray Calibration Report

Serial Number: #8
Tool Model: OPEN
Performed: Mon Jun 13 16:56:43 2011

Calibrator Value: 150.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 175.0 cps

Sensitivity: 0.8371 GAPI/cps