



**COMPLETION
& PRODUCTION
SERVICES CO.**

**MICRO
LOG**

Company DOWNING-NELSON OIL COMPANY, INC.
Well GROVE #1-32
Field LACROSSE NORTHWEST
County RUSH
State KANSAS

Company DOWNING-NELSON OIL COMPANY, INC.
Well GROVE #1-32
Field LACROSSE NORTHWEST
County RUSH State KANSAS

Location: API # : 15-165-22045-0000
820' FSL & 1355' FEL
SE - NE - SW - SE
Permanent Datum GROUND LEVEL Elevation 2086
Log Measured From KELLY BUSHING & A.G.L.
Drilling Measured From KELLY BUSHING
Elevation
K.B. 2094
D.F. 2092
G.L. 2086

Date	11/15/13
Run Number	TWO
Depth Driller	3917
Depth Logger	3920
Bottom Logged Interval	3902
Top Log Interval	3000
Casing Driller	8 5/8" @ 1269
Casing Logger	1268
Bit Size	7 7/8
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.0 / 65
pH / Fluid Loss	10.5 / 8.4
Source of Sample	FLOWLINE
Rin @ Meas. Temp	0.90 @ 84F
Rmf @ Meas. Temp	0.68 @ 64F
Rmc @ Meas. Temp	1.08 @ 84F
Source of Rmf / Rmc	MEASURED
Rin @ BHT	0.66 @ 115F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	115F
Equipment Number	680
Location	HAYS, KS.
Recorded By	JEFF GRONEMEG
Witnessed By	AL DOWNING

<<< Fold Here >>>

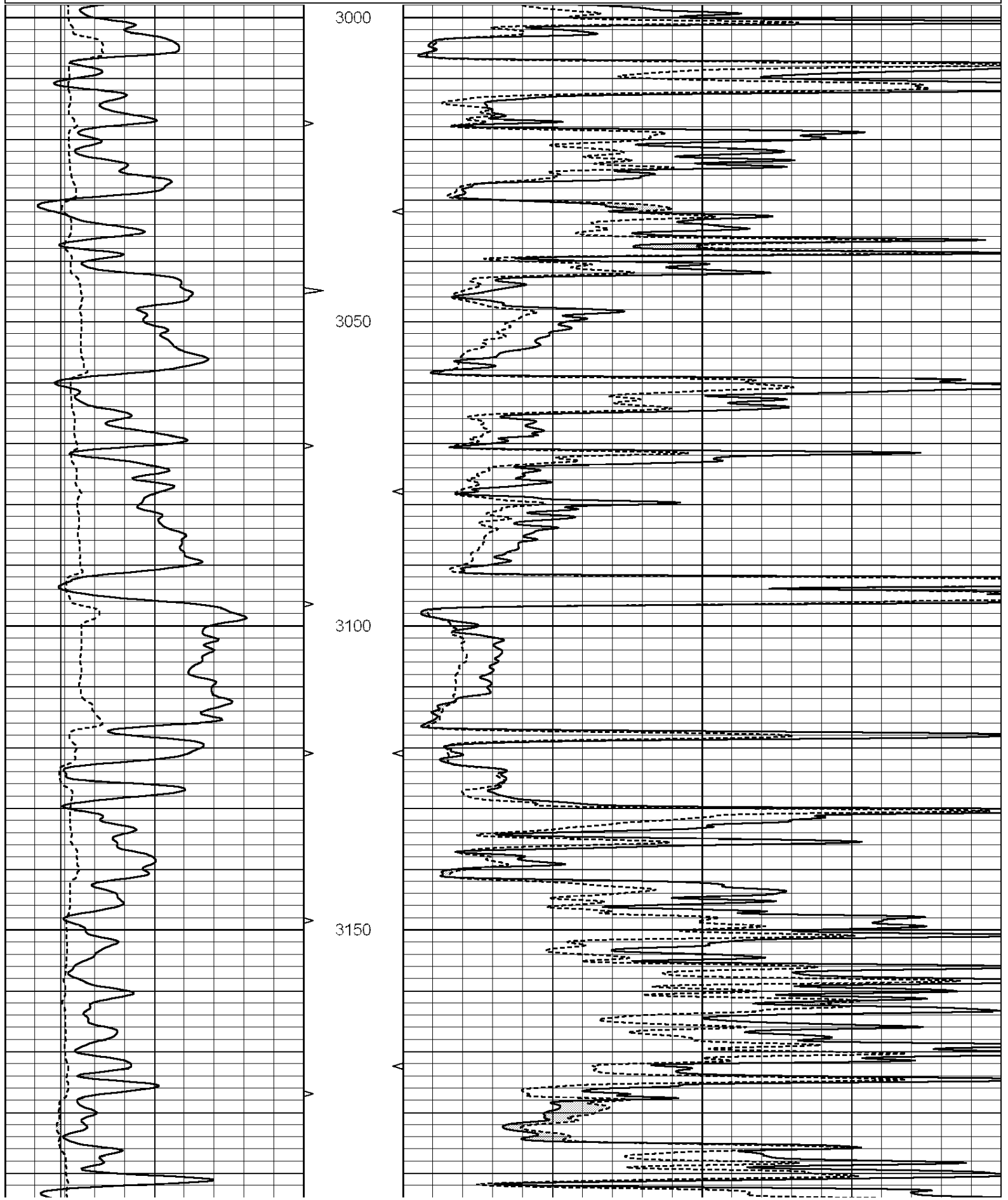
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

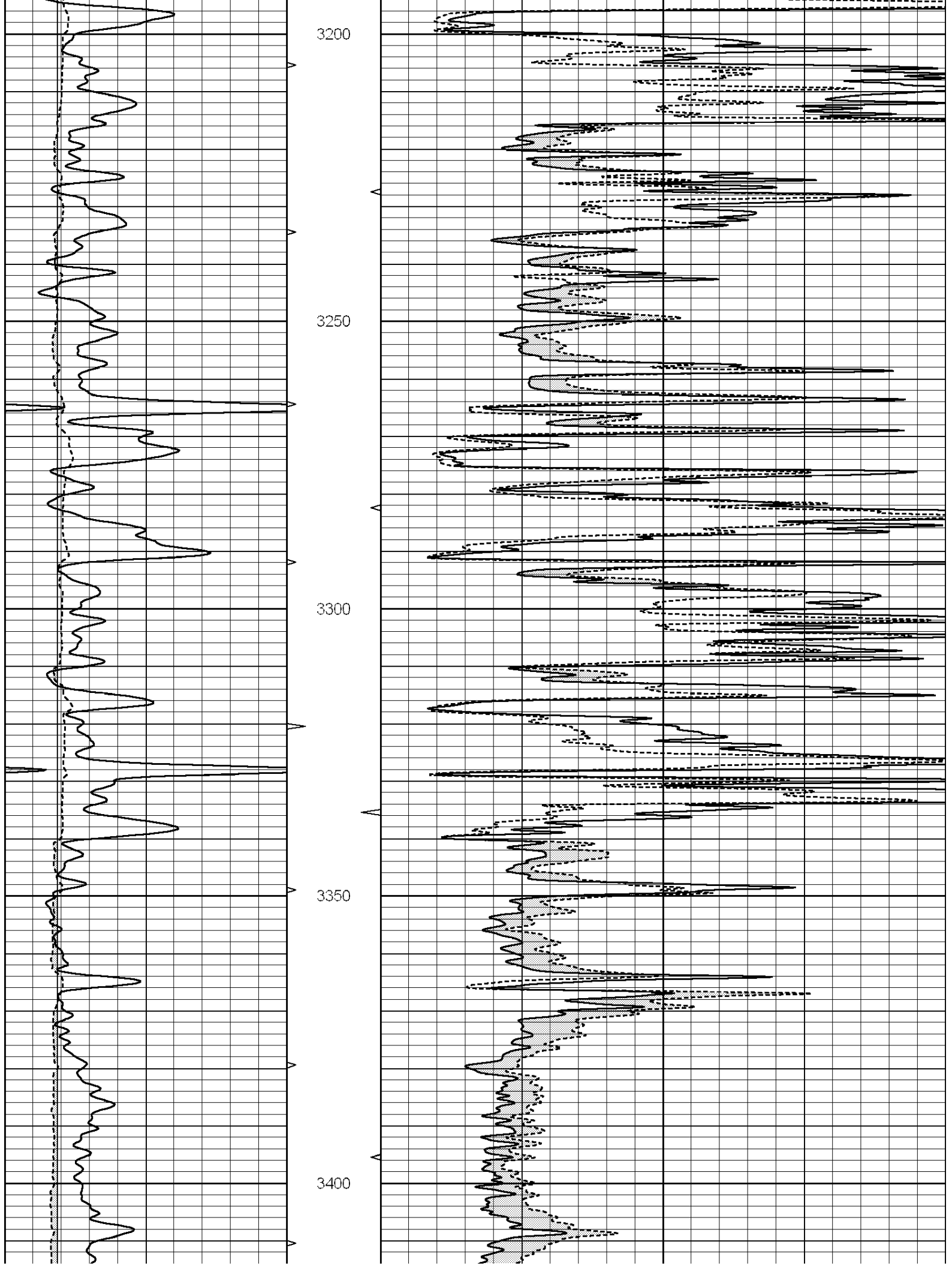
Comments

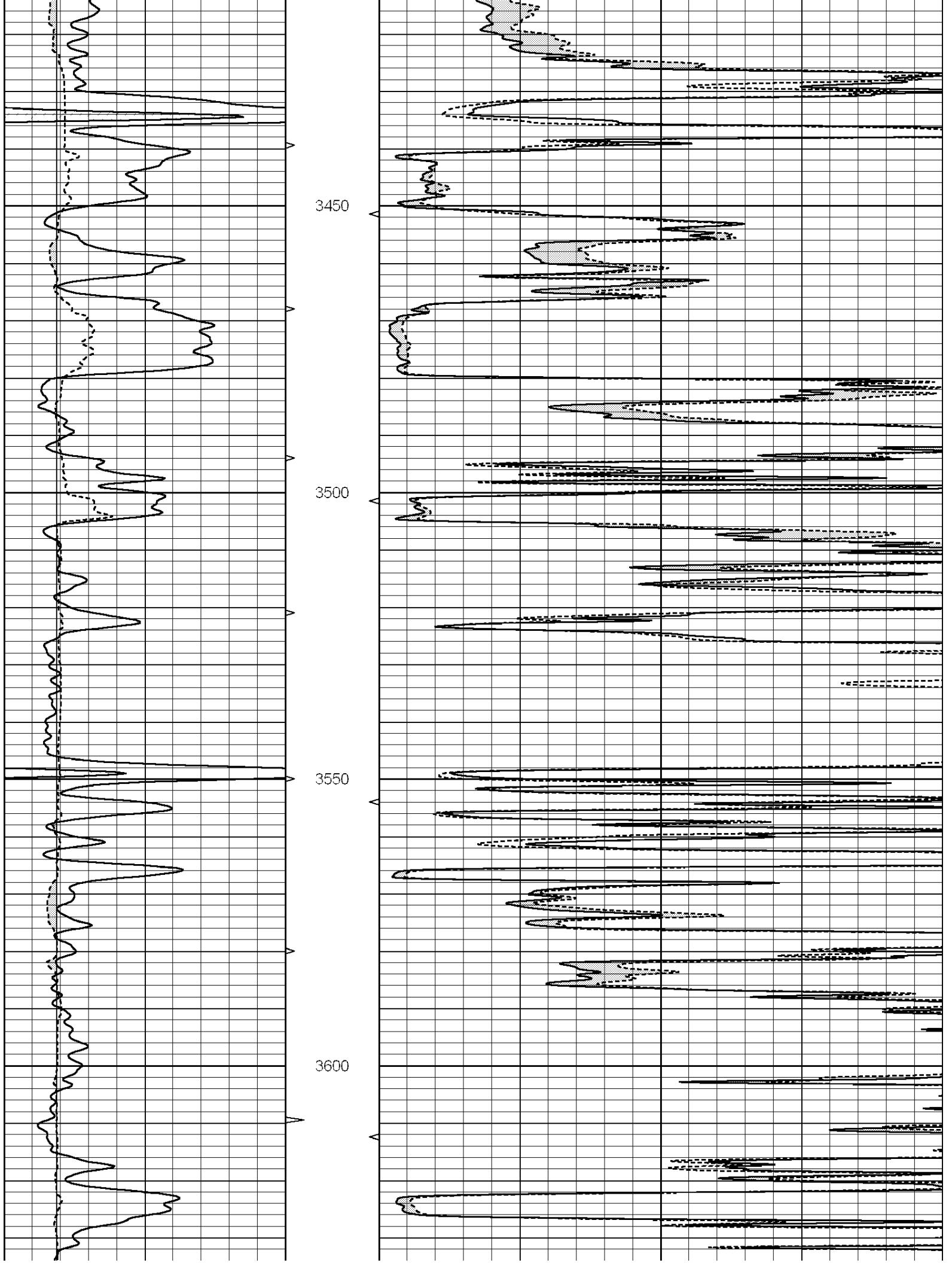
THANK YOU FOR USING NABORS COMPLETION & PRODUCTION SVCS. (785) 628-6395

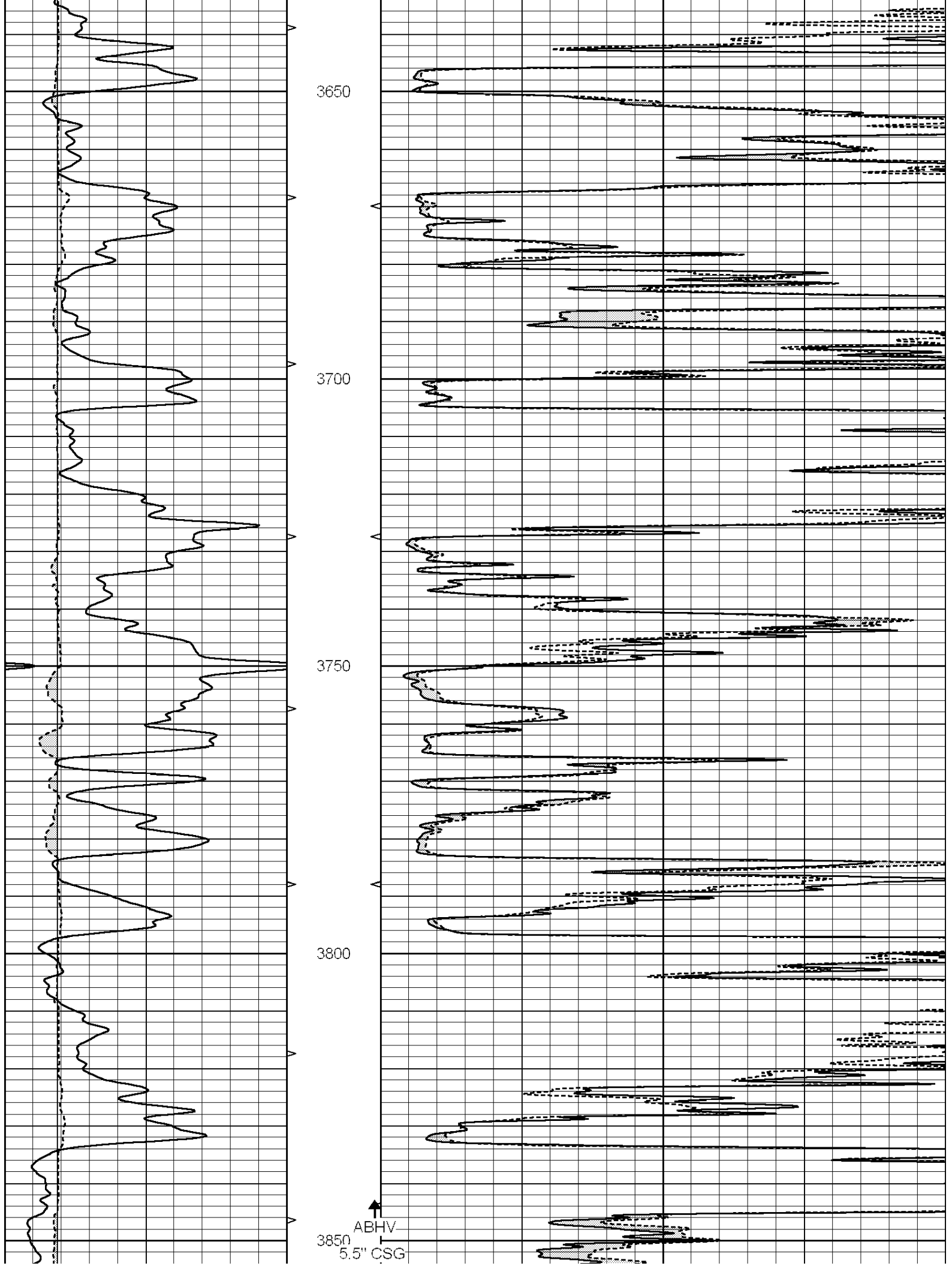
DIRECTIONS:
LACROSSE, KS - 1 MILE WEST TO CR 240 - 1 MILE SOUTH TO RD M
1/4 MILE WEST - NORTH INTO

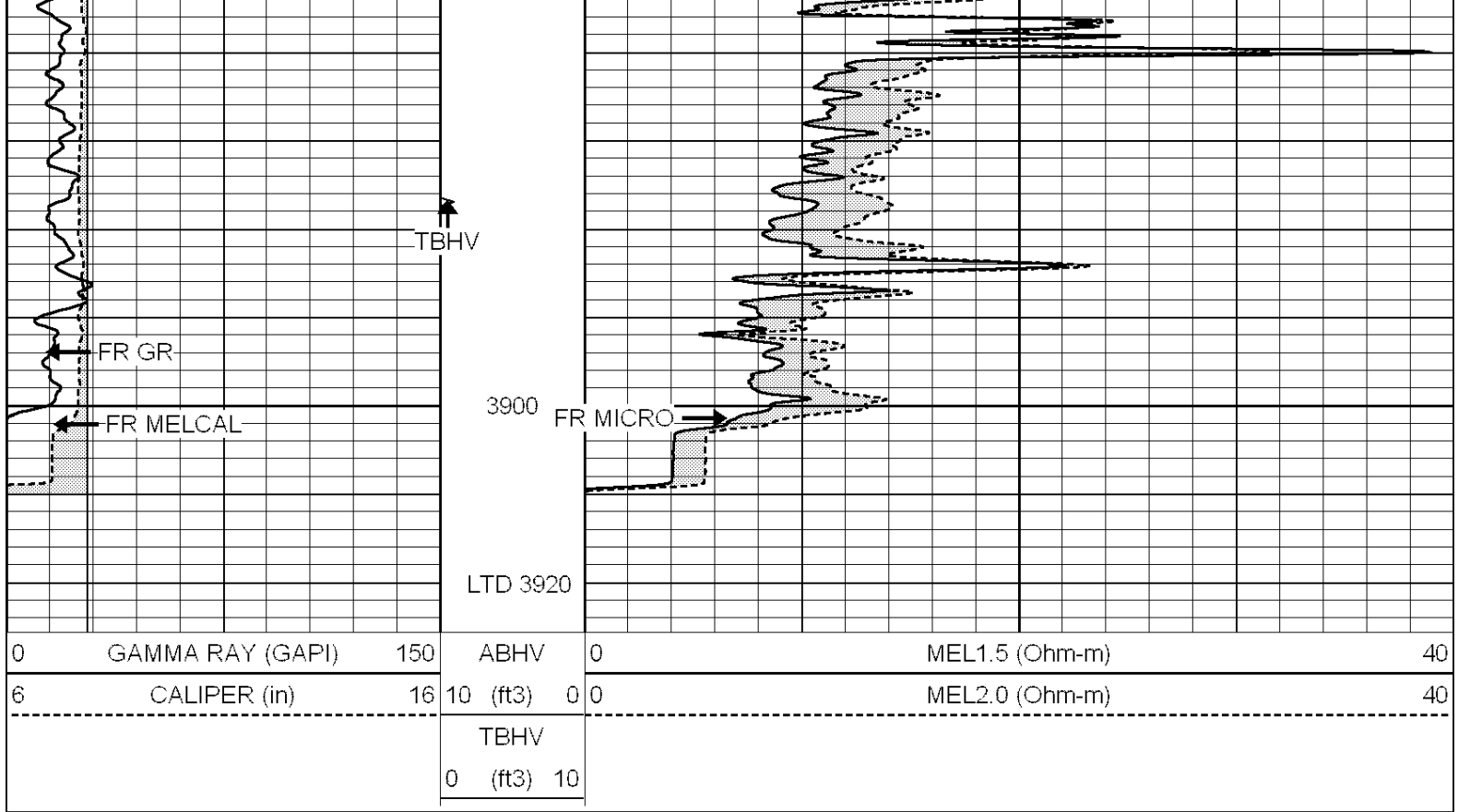
0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	40
6	CALIPER (in)	16	10 (ft3)	0 0	MEL2.0 (Ohm-m)	40
			TBHV			
			0 (ft3)			





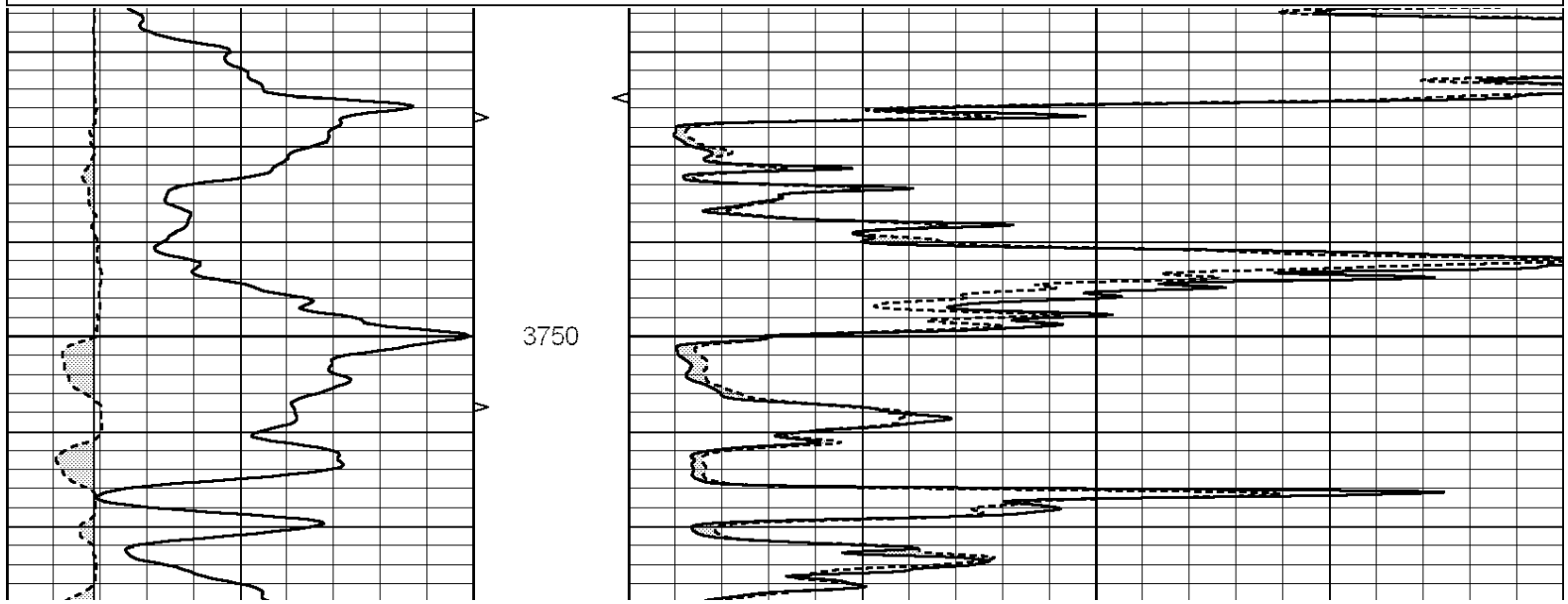
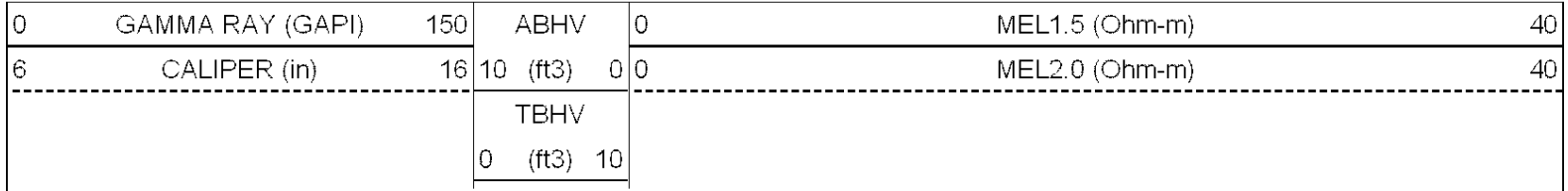


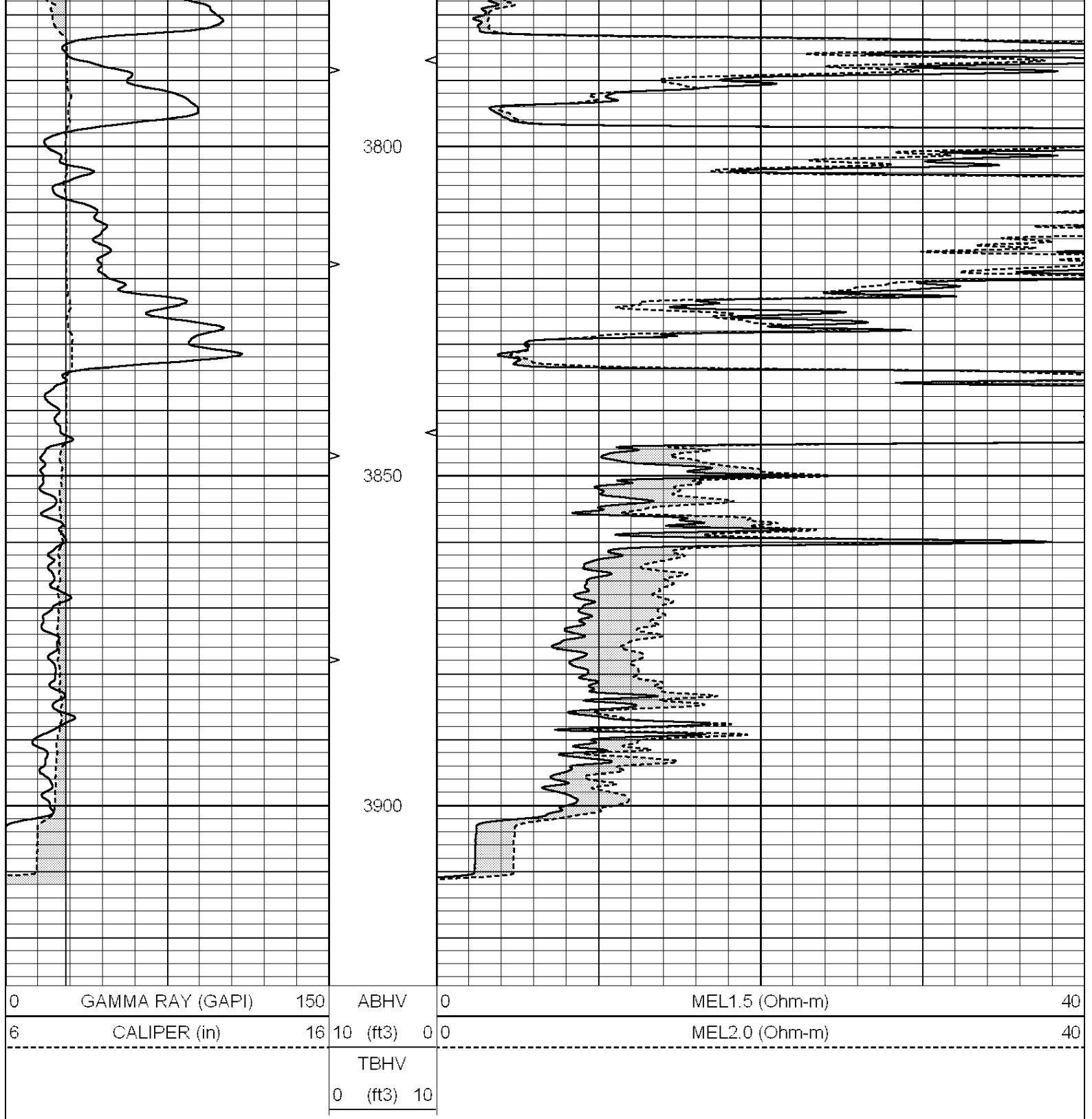




REPEAT SECTION

Database File: 012090ddn.db
 Dataset Pathname: pass5.2.1
 Presentation Format: _micro
 Dataset Creation: Fri Nov 15 03:05:58 2013 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240





Calibration Report

Database File: 012090ddn.db
 Dataset Pathname: pass6.2
 Dataset Creation: Fri Nov 15 03:35:20 2013 by Calc Open-Cased 090629

MICRO Calibration Report

Serial Number: MICRO6
 Tool Model: PROBE
 Performed: Sun Jun 16 11:26:16 2013

Caliper Calibration: Gain=5.542 Offset=-1.220

Low Cal High Cal

References	Low Cal 8.000	High Cal 14.000
Readings	1.431	2.513
1.5" Calibration:	Gain=40.075	Offset=-1.300
References	Low Cal 0.000	High Cal 20.000
Readings	0.004	1.196
2" Calibration:	Gain=50.041	Offset=-0.600
References	Low Cal 0.000	High Cal 20.000
Readings	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