



**SUPERIOR**  
Hays,  
Kansas

**COMPENSATED  
DENSITY / NEUTRON  
LOG**

Company MAI OIL OPERATIONS  
Well HABERER A #3  
Field  
County RUSSELL  
State KANSAS

Company MAI OIL OPERATIONS  
Well HABERER A #3  
Field  
County RUSSELL State KANSAS

Location: API # : 15-167-23716-0000  
1500' FSL & 2310' FEL  
S/2 - SW - NW - SE  
SEC 14 TWP 12S RGE 15W  
Permanent Datum GROUND LEVEL Elevation 1630  
Log Measured From KELLY BUSHING 8' A.G.L.  
Drilling Measured From KELLY BUSHING  
Other Services DIL/MEL  
Elevation  
K.B. 1638  
D.F. 1636  
G.L. 1630

Date	7/24/11		
Run Number	ONE		
Depth Driller	3150		
Depth Logger	3150		
Bottom Logged Interval	3126		
Top Log Interval	2100		
Casing Driller	8 5/8" @ 700'		
Casing Logger	700		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4100 PPM	
Density / Viscosity	9.1/58		
pH / Fluid Loss	10.0/7.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.55 @ 88F		
Rmt @ Meas. Temp	0.41 @ 88F		
Rmc @ Meas. Temp	0.66 @ 88F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	0.45 @ 108F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	108F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF GRONWEG		
Witnessed By	STEVE MURPHY		

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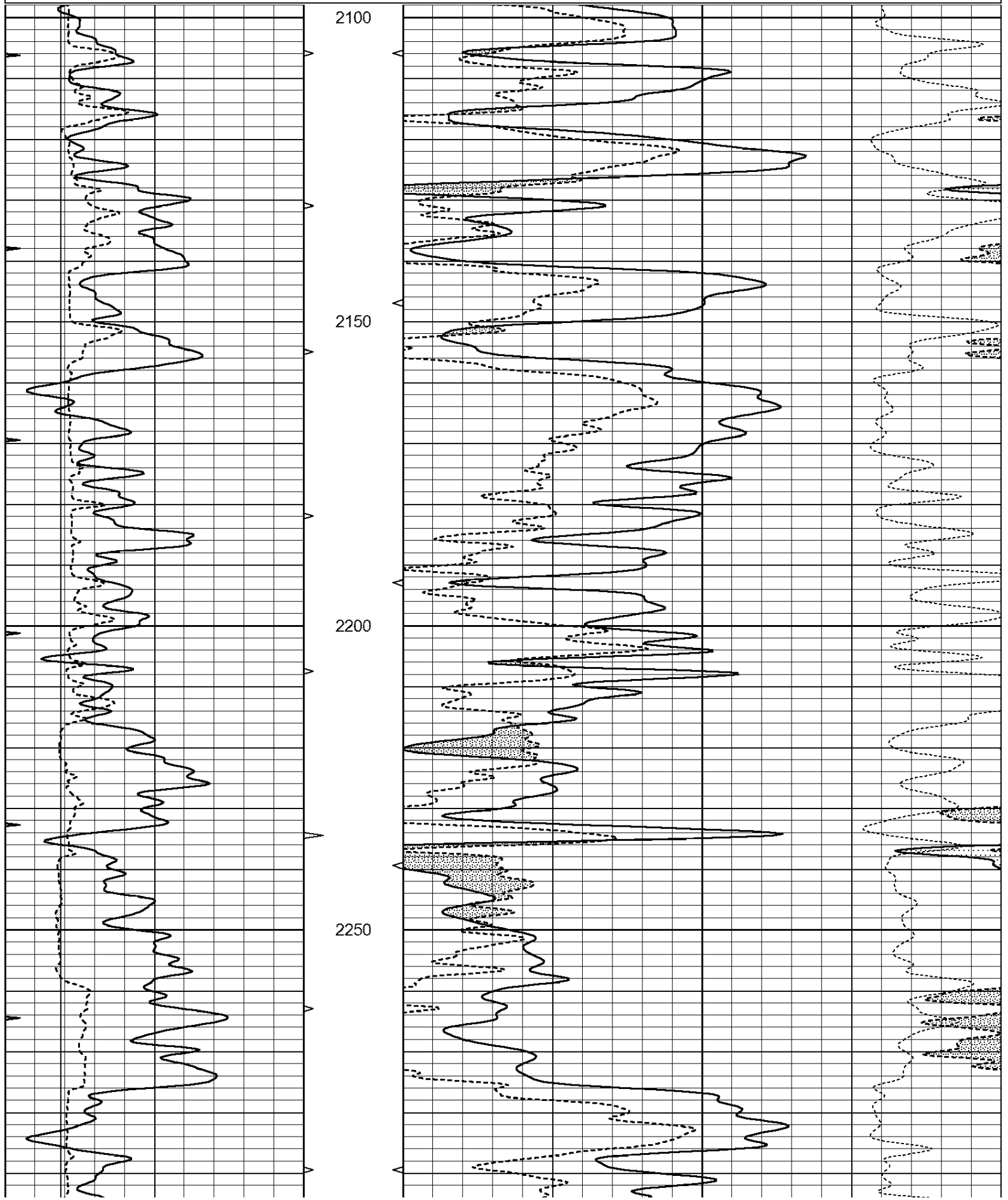
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

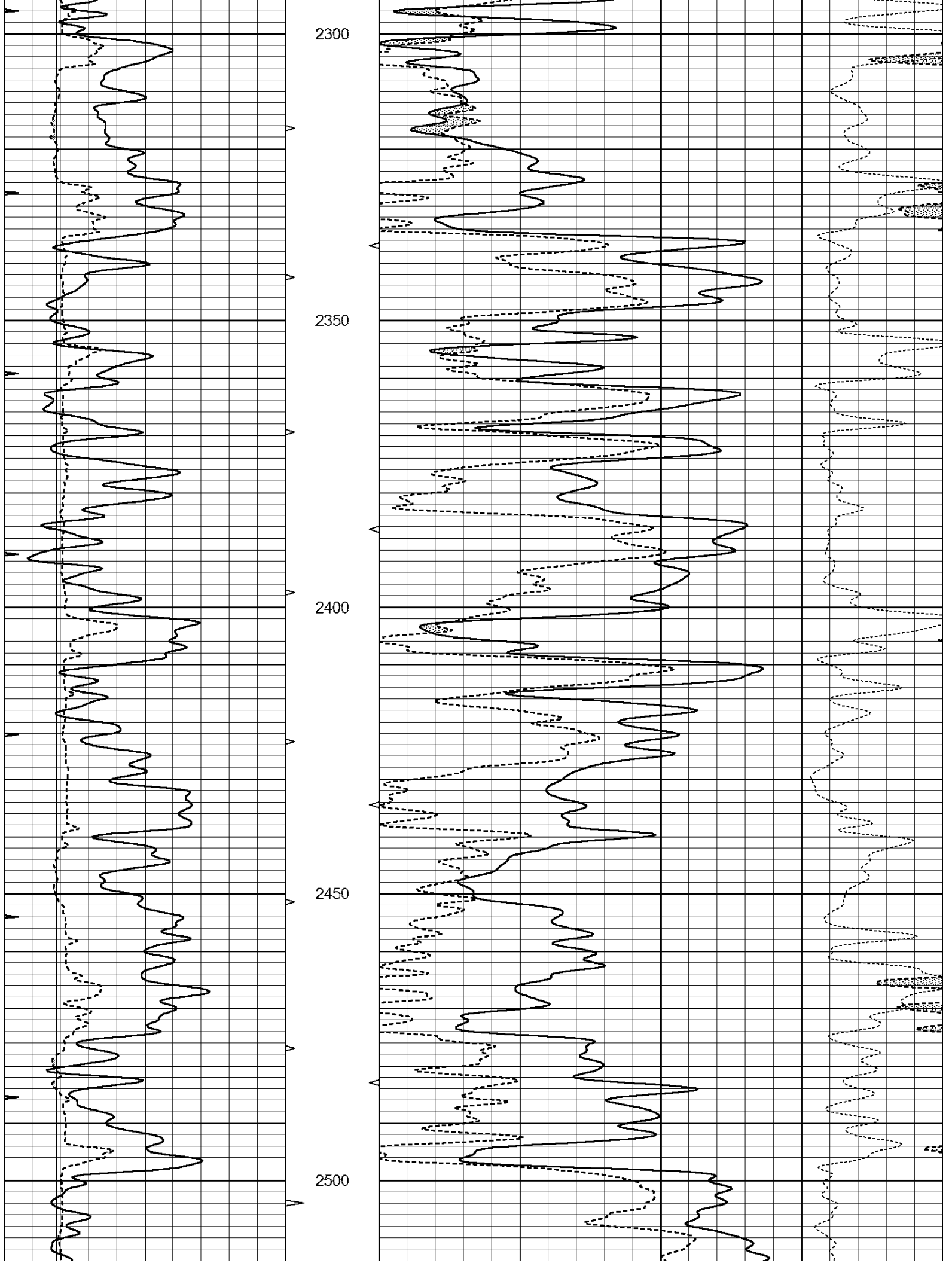
Comments

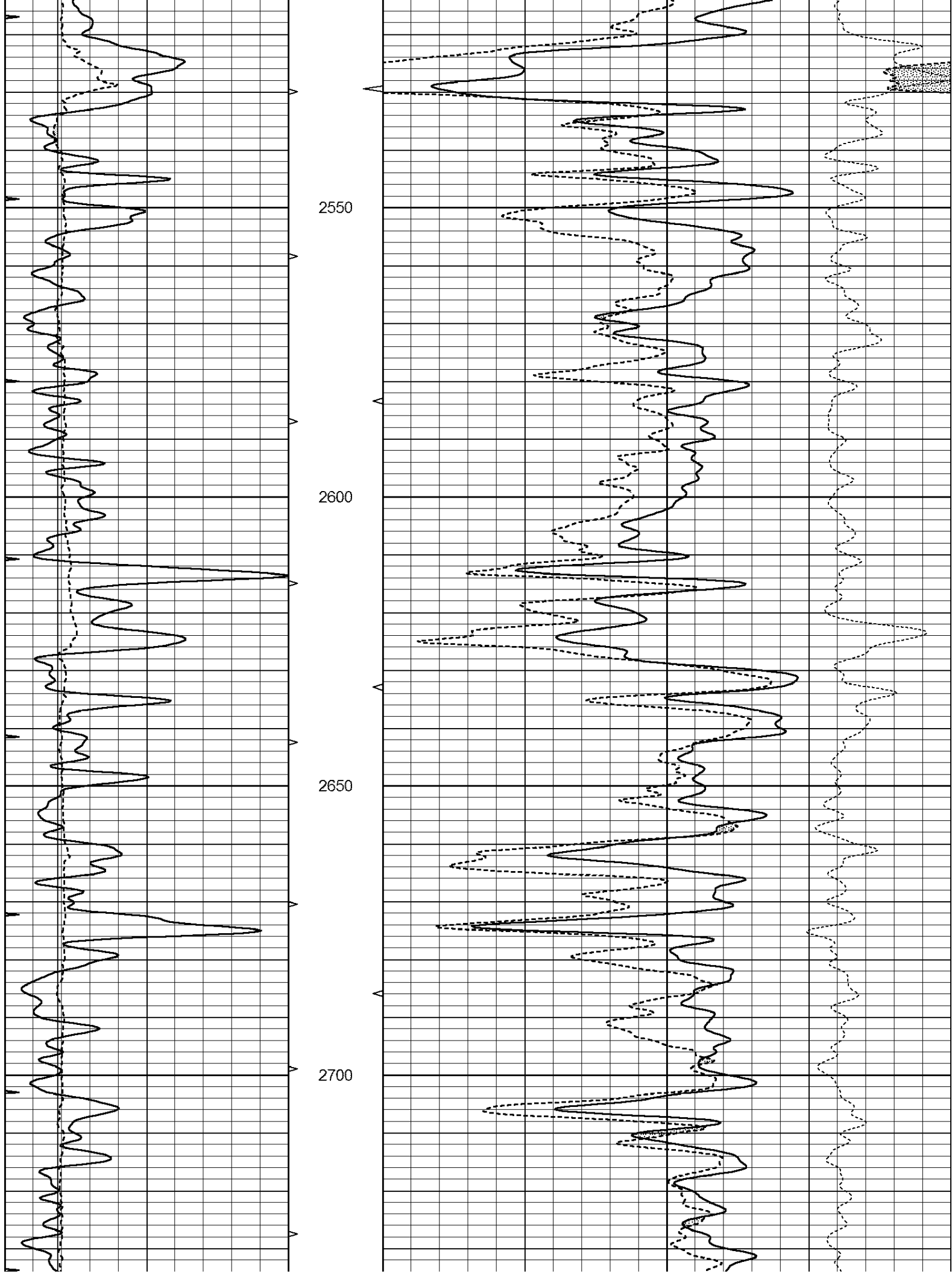
THANK YOU FOR USING SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395  
DIRECTIONS  
GORHAM, KS - 1 MILE EAST - 10 MILES NORTH TO CANYON RD - 3 MILES EAST  
1/4 MILE NORTH - WEST INTO

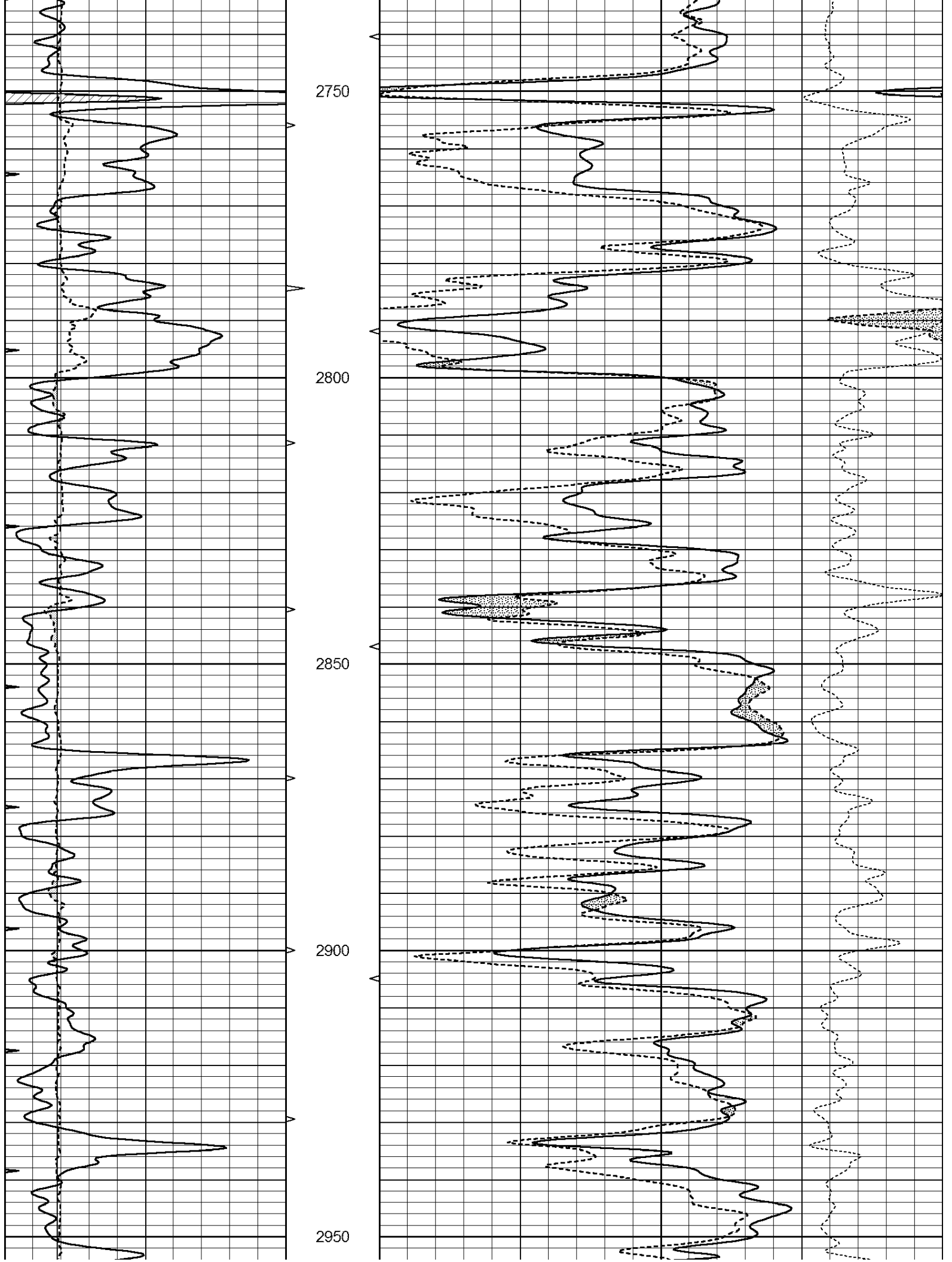
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Presentation Format: den\_neu  
Dataset Creation: Tue Jul 26 02:49:16 2011  
Charted by: Depth in Feet scaled 1:240

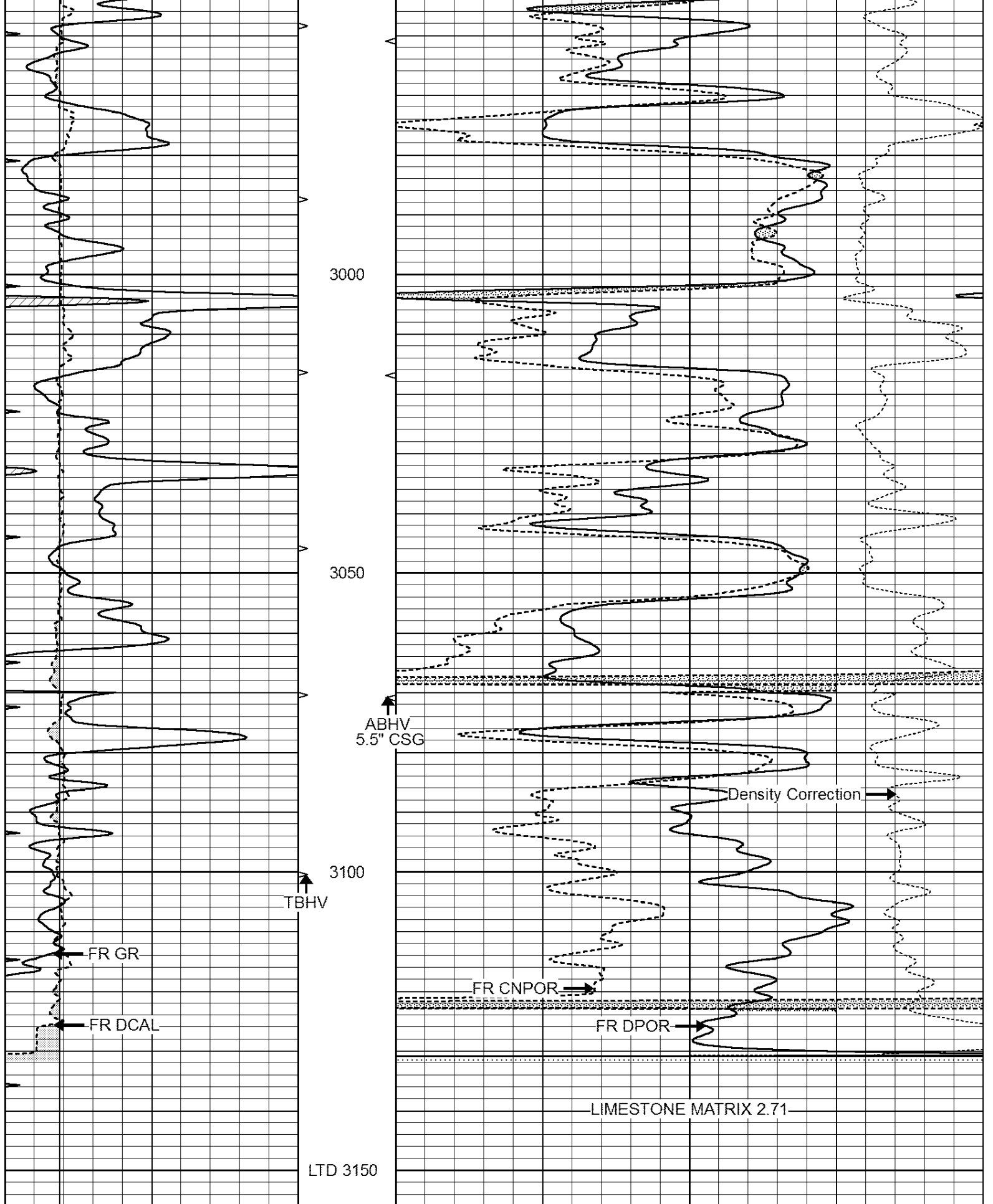
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		











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6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		

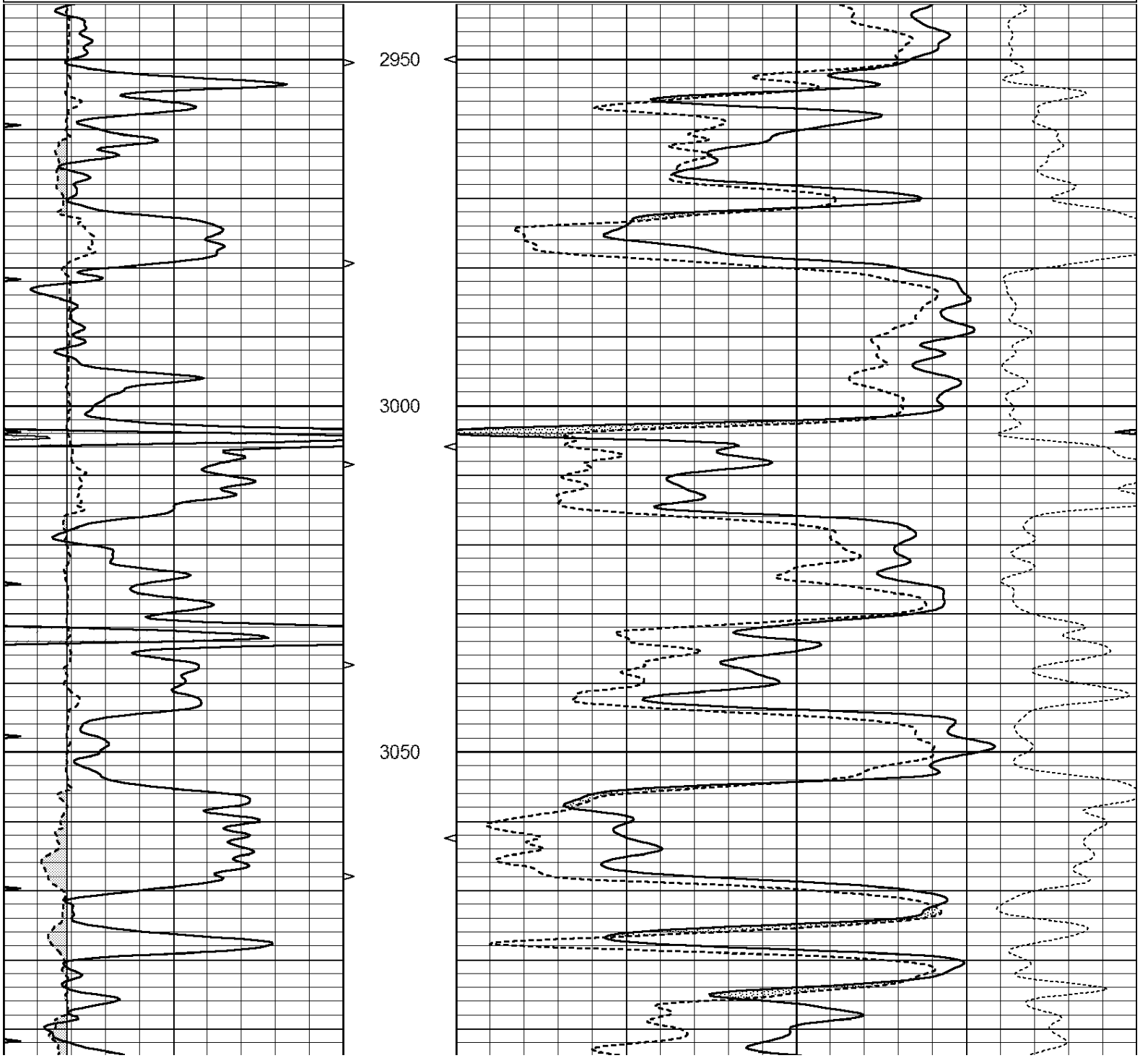


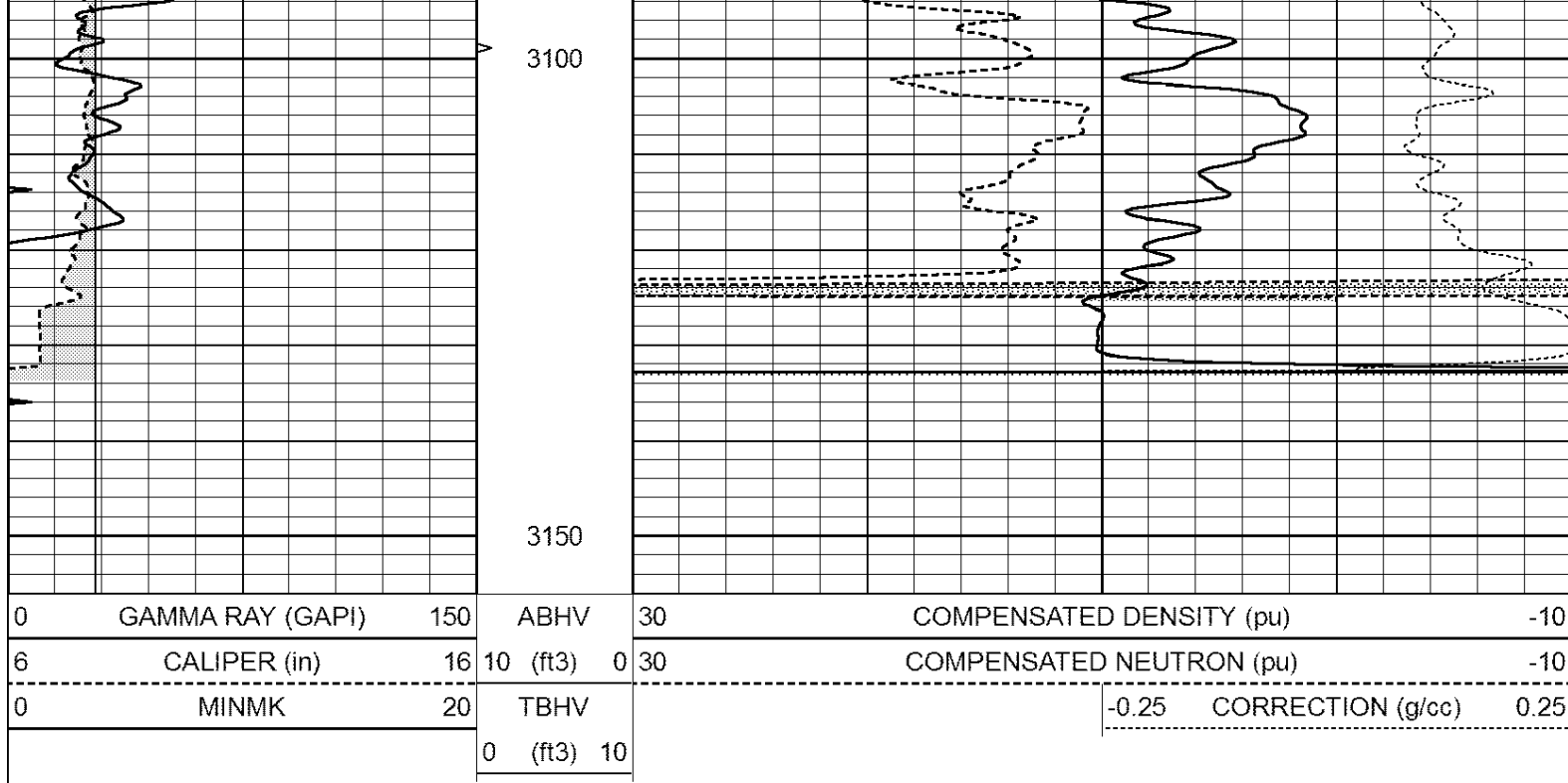
SUPERIOR  
Hays,  
Kansas

# REPEAT SECTION

Database File: 007096ddn.db  
 Dataset Pathname: pass2.1  
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 Dataset Creation: Tue Jul 26 00:20:16 2011 by Calc Open-Cased 110302  
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		





### Calibration Report

Database File: 007096ddn.db  
 Dataset Pathname: pass6.6  
 Dataset Creation: Tue Jul 26 02:41:00 2011

### Dual Induction Calibration Report

Serial-Model: DIL3-GEAR  
 Performed: Wed Jul 20 11:43:45 2011

Loop:	Readings				References		Results	
	Air	Loop			Air	Loop	m	b
Deep	0.011	0.656	V	0.000	400.000	mmho/m	640.000	7.000
Medium	0.013	0.740	V	0.000	462.500	mmho/m	700.000	-7.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.002	0.645	V	0.000	400.000	mmho/m	622.059	-1.071
Medium	0.007	0.740	V	0.000	462.500	mmho/m	631.393	-4.555

### Litho Density Calibration Report

Serial: 004N Model: PRB  
 Performed Tue Sep 08 13:49:55 2009

#### Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1535.8	11161.3	3721.6	12498.8	cps
Window 2	1402.6	9435.7	3219.7	10417.7	cps
Window 3	1077.6	4422.0	1779.2	4753.4	cps
Window 4	337.3	342.8	337.4	343.7	cps
Long Space	0.0	8033.1	1817.0	9015.1	cps
Short Space	1.2	1671.8	1138.1	1813.0	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	

Rib Angle : 45.5 Rib Slope : 1.017 Density/Spine Ratio : 0.573  
 Spine Angle : 75.5 Spine Slope : 3.865 Spine Intercept : -19.7

Caliper

Low Ref	Readings	Reference	
High Ref	2.8	7.8	
	4.6	15.0	
	Gain: 3.9		Offset: -1.5

Compensated Neutron Calibration Report

Serial Number: NEU\_4I  
Tool Model: G

CALIBRATION

Detector	Readings	Target	Normalization
Short Space	996.00 cps	1000.00 cps	1.0000
Long Space	977.00 cps	1000.00 cps	1.0000

Gamma Ray Calibration Report

Serial Number: GR3  
Tool Model: OPEN  
Performed: Wed Jul 20 11:59:38 2011

Calibrator Value: 200.0 GAPI

Background Reading: 3.0 cps  
Calibrator Reading: 186.0 cps

Sensitivity: 5.0000 GAPI/cps