



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

COMPENSATED DENSITY / NEUTRON LOG

Company	DREILING OIL COMPANY, INC.		
Well	ROME #3		
Field	SUGARLOAF SOUTHEAST		
County	ELLIS	State	KANSAS
Company	DREILING OIL COMPANY, INC.		
Well	ROME #3		
Field	SUGARLOAF SOUTHEAST		
County	ELLIS	State	KANSAS
Location:	API # : 15-051-26585-0000		Other Services
	335' FNL & 2310' FEL		DIL
	S/2 - NW - NW - NE/4		
	SEC 26 TWP 13S RGE 17W		
Permanent Datum	GROUND LEVEL	Elevation	1976
Log Measured From	KELLY BUSHING 8' A.G.L.		
Drilling Measured From	KELLY BUSHING	Elevation	K.B. 1984 D.F. 1982 G.L. 1976
Date	10/14/13		
Run Number	ONE		
Depth Driller	3547		
Depth Logger	3532		
Bottom Logged Interval	3508		
Top Log Interval	2900		
Casing Driller	8 5/8"@219'		
Casing Logger	219		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 6,000 PPM	
Density / Viscosity	8.9/51		
pH / Fluid Loss	10.5/8.0		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.500@70F		
Rmf @ Meas. Temp	.375@70F		
Rmc @ Meas. Temp	.600@70F		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	.313@112F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	4:30 P.M.		
Maximum Recorded Temperature	112F		
Equipment Number	4854		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	ROGER FISHER		

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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

I-70 & VICTORIA, KS. EXIT, 1 1/2N., 1 1/2 W., S. INTO @CATTLE GUARD THEN BACK WEST IN PASTURE



NABORS
COMPLETION
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MAIN SECTION

Database File:

011686ddn.db

Dataset Pathname:

pass3.7

Presentation Format:

den_neu

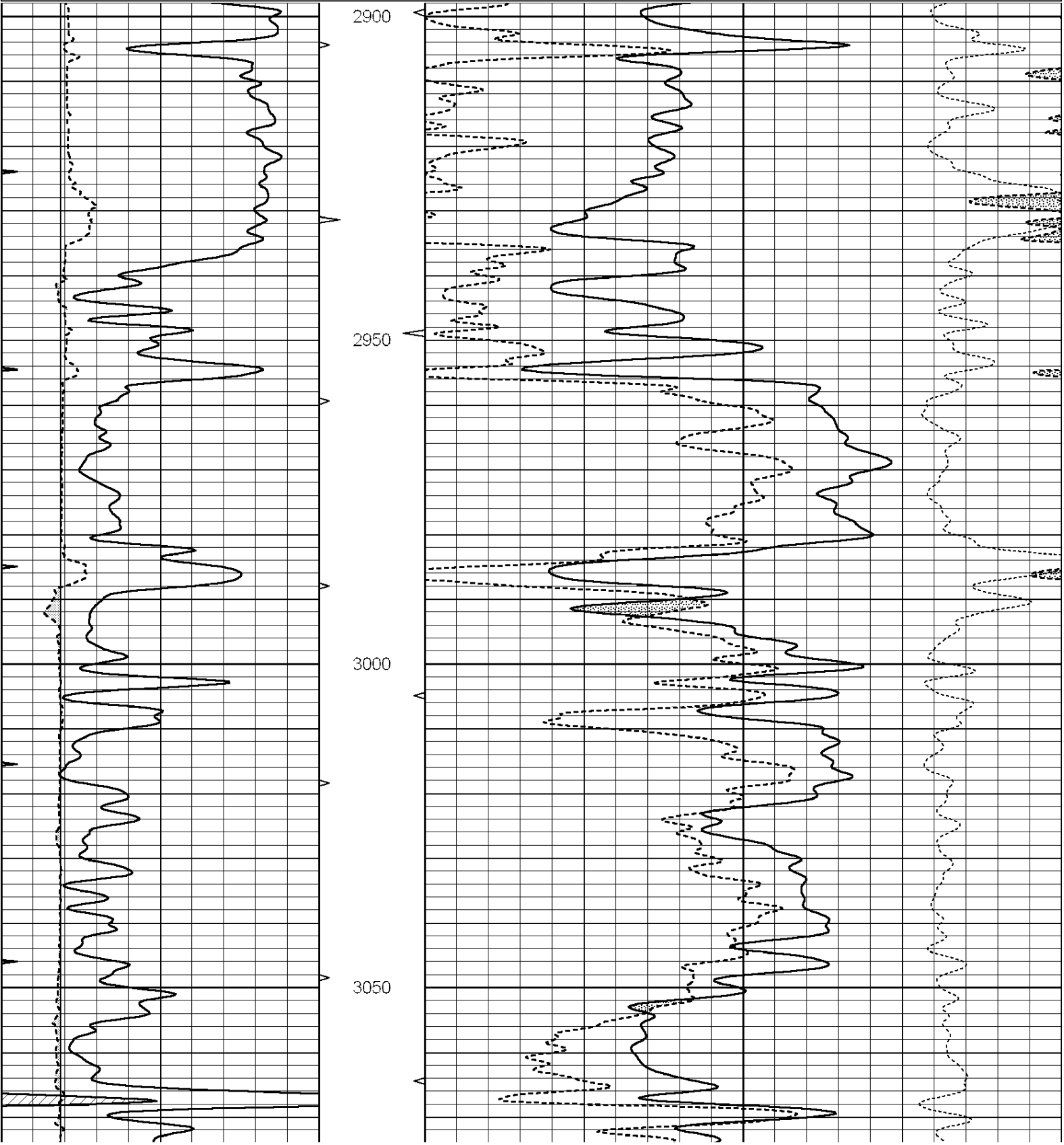
Dataset Creation:

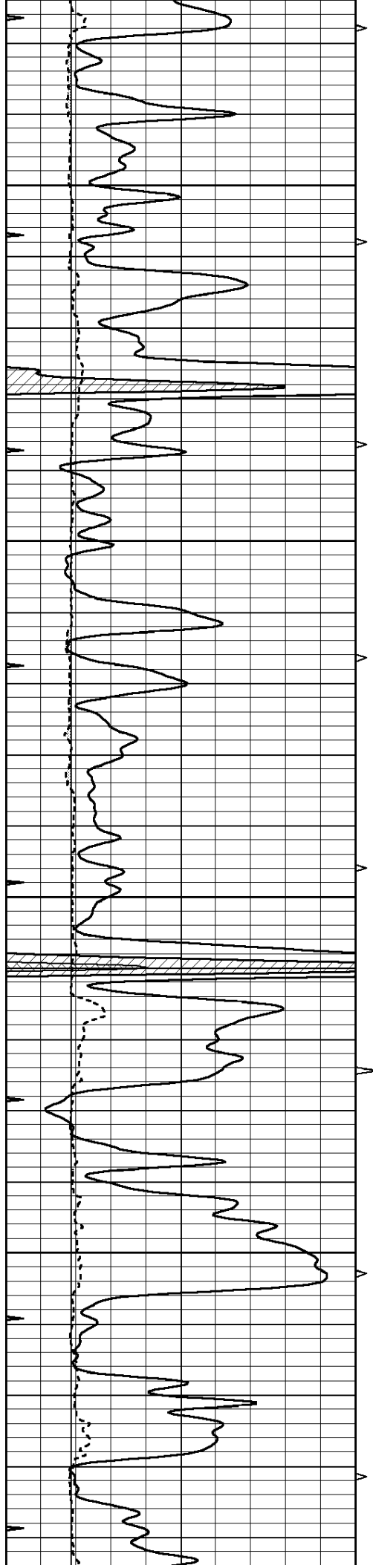
Mon Oct 14 17:54:55 2013 by Calc SOC 120430

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		



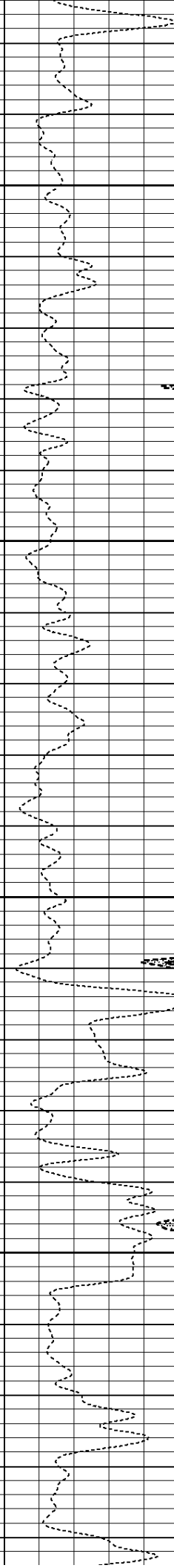
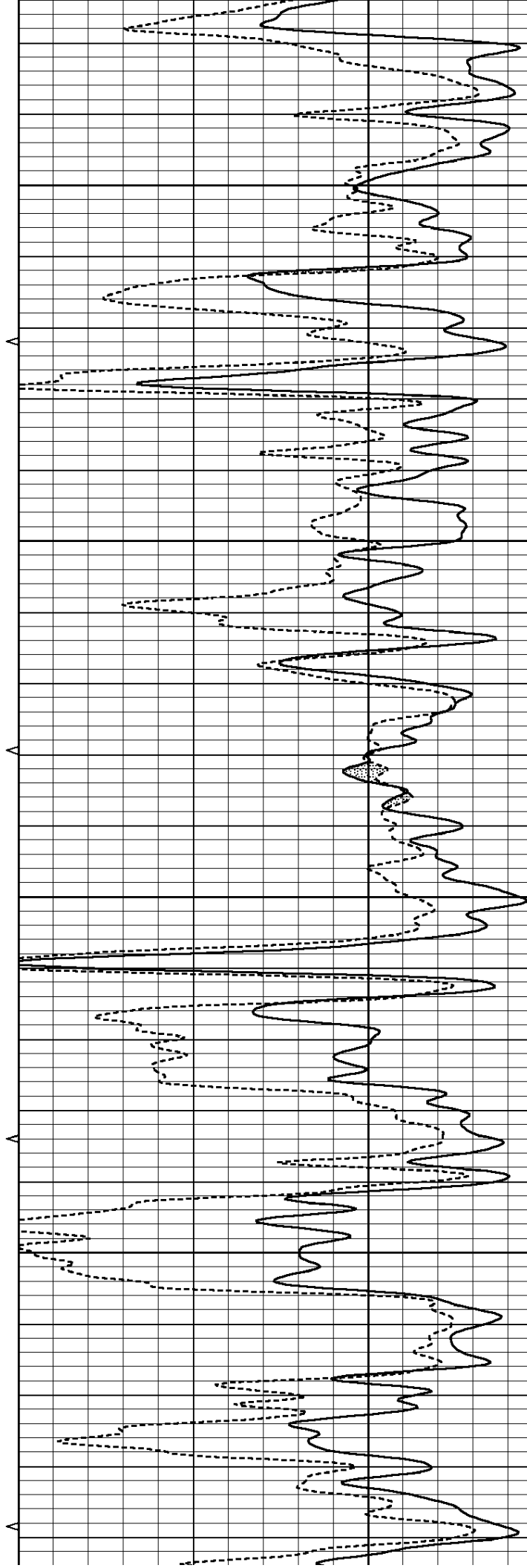


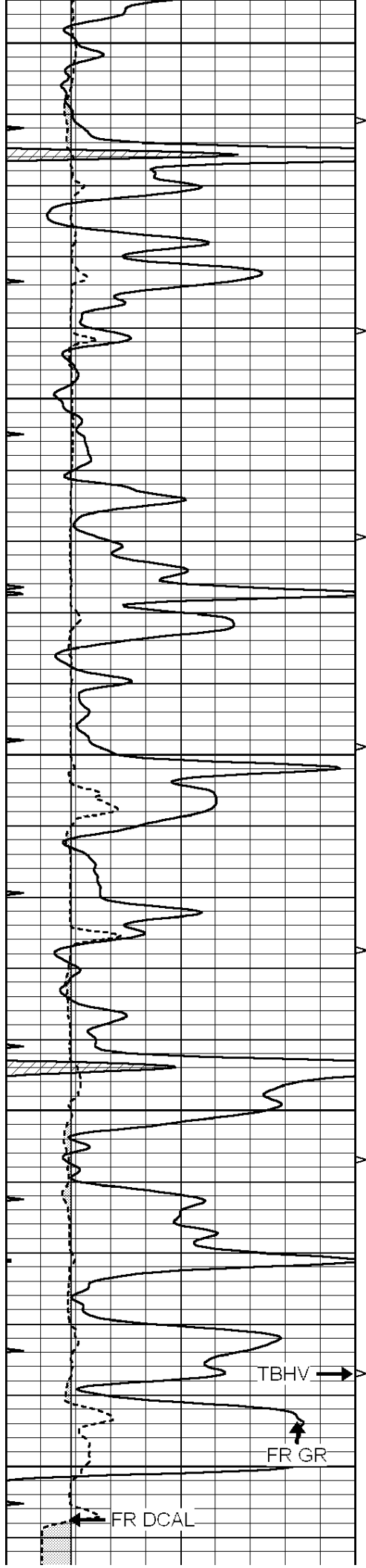
3100

3150

3200

3250





3300

3350

3400

3450

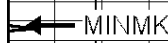
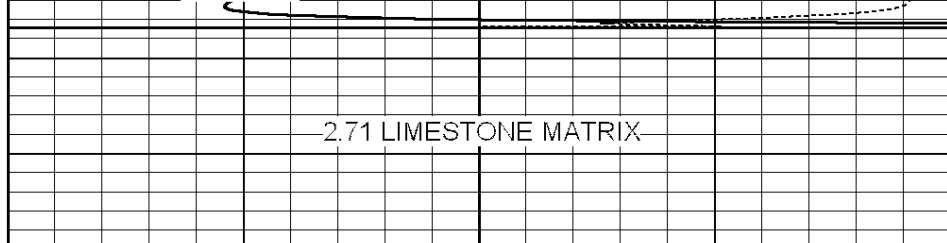
3500

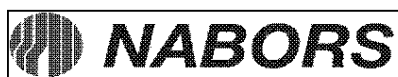
5.5" ABHV

FR CNPOR

FR DPOR

CORRECTION

 MINMK			 2.71 LIMESTONE MATRIX		
LTD 3532					
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		

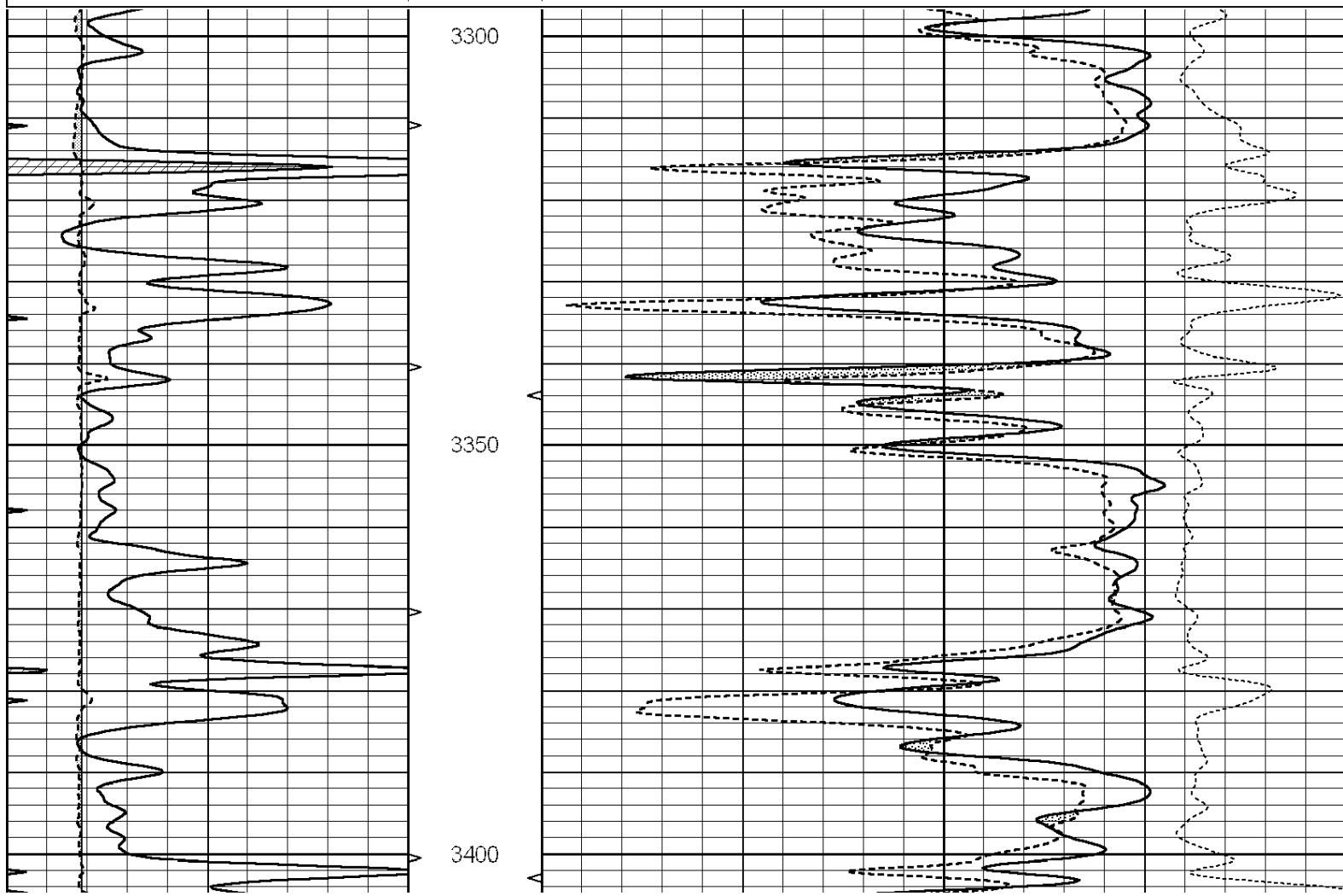


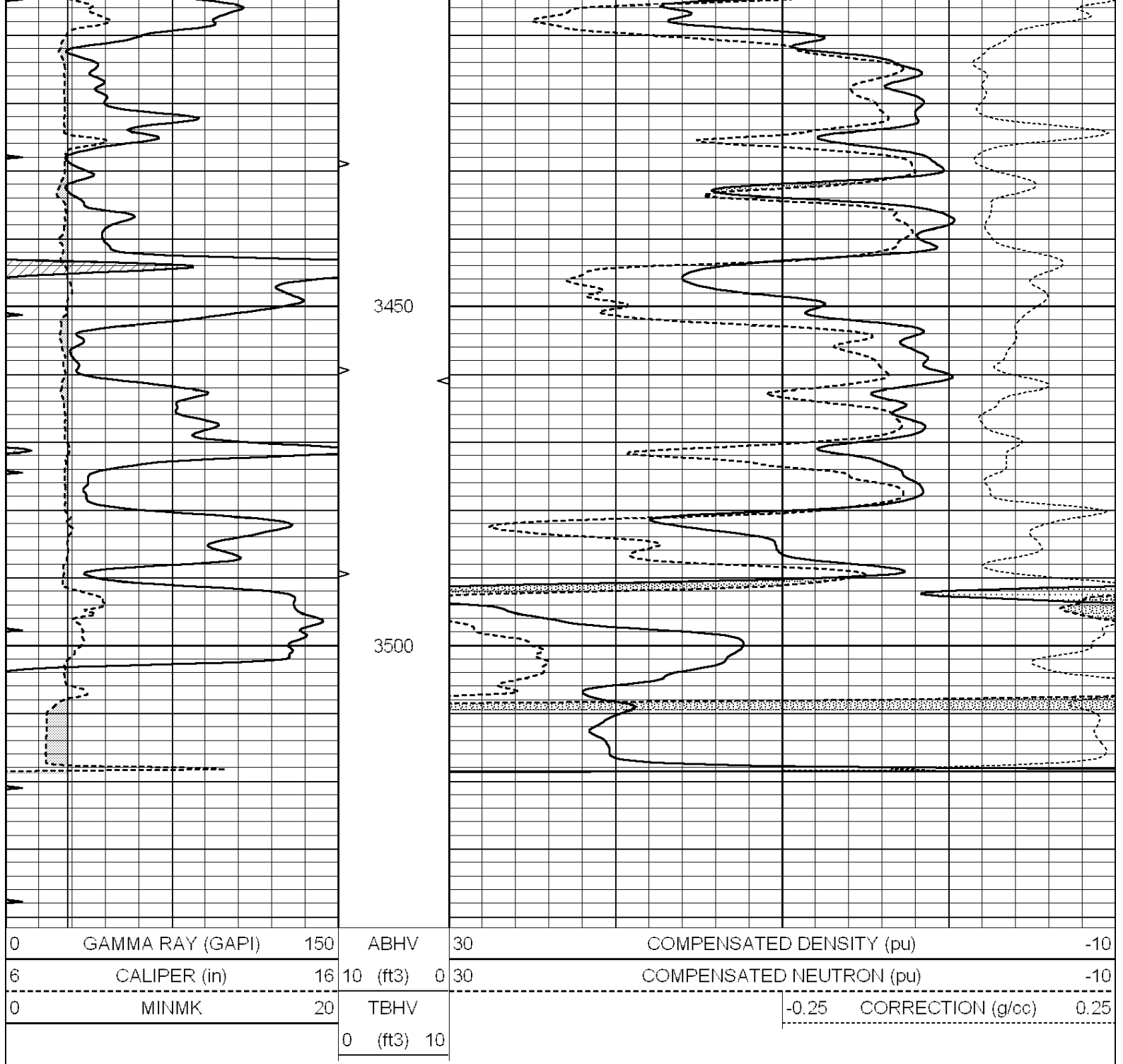
**COMPLETION
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REPEAT SECTION

Database File: 011686ddn.db
Dataset Pathname: pass2.8
Presentation Format: den_neu
Dataset Creation: Mon Oct 14 18:18:21 2013 by Calc SOC 120430
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:		011686ddn.db					
Dataset Pathname:		pass3.7					
Dataset Creation:		Mon Oct 14 17:54:55 2013 by Calc SOC 120430					
Dual Induction Calibration Report							
Serial-Model:		PROBE9-DILG					
Surface Cal Performed:		Mon Oct 14 16:33:44 2013					
Downhole Cal Performed:		Mon Jul 28 12:02:56 2008					
After Survey Verification Performed:		Mon Jul 28 12:02:56 2008					
Surface Calibration							
		Readings		References		Results	
Loop:	Air	Loop		Air	Loop	m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	650.000
							-8.000

Deep	0.011	0.020	V	0.000	464.000	mmho/m	640.000	-12.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	640.000	-12.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.011	0.610	V	0.000	400.000	mmho/m	667.135	-7.256
Medium	0.005	0.712	V	0.000	464.000	mmho/m	655.677	-3.102
Downhole Calibration								
	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	14.508	388.384	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	166.367	504.400	mmho/m	1.000	0.000
LL3		7.500	V		1400.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		4000.000	mmho-m		
After Survey Verification								
	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		
Litho Density Calibration Report								
Serial: 004N Model: PRB								
Master Calibration			Performed Mon Jun 03 09:36:56 2013					
	Background	Magnesium		Aluminum		Sandstone		
Window 1	1417.6	10391.4		3464.6		11537.5		cps
Window 2	1295.0	8959.7		3050.1		9816.4		cps
Window 3	1105.1	5464.2		2051.0		5838.8		cps
Window 4	315.0	317.7		312.9		319.8		cps
Long Space	0.0	7664.6		1755.0		8521.3		cps
Short Space	1.8	1582.4		1040.8		1699.4		cps
Rho		1.7100		2.5900		1.3800		g/cc
Pe		0.0000		2.5700		1.5500		
Rib Angle	: 44.1	Rib Slope	: 0.970	Density/Spine Ratio			: 0.574	
Spine Angle	: 74.1	Spine Slope	: 3.519	Spine Intercept			: -17.0	
Before Survey Verification			Performed Wed Dec 31 18:00:00 1969					
Window 1	0.0	0.0		0.0		0.0		cps
Window 2	0.0	0.0		0.0		0.0		cps
Window 3	0.0	0.0		0.0		0.0		cps
Window 4	0.0	0.0		0.0		0.0		cps
Long Space	0.0	0.0		0.0		0.0		cps
Short Space	0.0	0.0		0.0		0.0		cps
Measured Rho		0.0000		0.0000		0.0000		g/cc
Measured Correction		0.0000		0.0000		0.0000		g/cc
Measured Pe				0.0000		0.0000		
After Survey Verification			Performed Wed Dec 31 18:00:00 1969					
Window 1	0.0	0.0		0.0		0.0		cps

Window 2	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc
Measured Pe			0.0000	0.0000	

Compensated Neutron Calibration Report

Serial Number:	070808
Tool Model:	Probe

PRE-SURVEY VERIFICATION				
Detector	Readings	Measured	Target	
Short Space	cps			
Long Space	cps	pu	pu	

POST-SURVEY VERIFICATION				
Detector	Readings	Measured	Target	
Short Space	cps			
Long Space	cps	pu	pu	

Gamma Ray Calibration Report

Serial Number:	070559	
Tool Model:	OPEN_GR	
Performed:	Thu Oct 03 09:02:10 2013	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.2800	GAPI/cps