



SUPERIOR
Hays,
Kansas

COMPENSATED
DENSITY / NEUTRON
LOG

Company	MAI OIL OPERATIONS, INC.		
Well	HOLLAND #2		
Field	TRAPP		
County	BARTON	State	KANSAS
Location:	AP1 # : 15-009-25710-0000		Other Services
	2310' FNL & 1185' FWL E/2 - SE - SW - NW		DIL/MEL
	SEC 21 TWP 16S RGE 13W		Elevation
Permanent Datum	GROUND LEVEL	Elevation	1946
Log Measured From	KELLY BUSHING 8' A.G.L.		K.B. 1954 D.F. 1952 G.L. 1946
Drilling Measured From	KELLY BUSHING		
Date	7/11/12		
Run Number	ONE		
Depth Driller	3460		
Depth Logger	3460		
Bottom Logged Interval	3436		
Top Log Interval	2700		
Casing Driller	8 5/8"@450'		
Casing Logger	405		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 10,000 PPM	
Density / Viscosity	9.4/47		
pH / Fluid Loss	11.0/1.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.500@90F		
Rmt @ Meas. Temp	.375@90F		
Rmc @ Meas. Temp	.600@90F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	.405@111F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	3:30 P.M.		
Maximum Recorded Temperature	111F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	KURT TALBOTT	ALLEN BANGERT	BRENT HOMEIER

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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
SUSANK, KS. 1/2N. TO TANK BATTERY, E. INTO

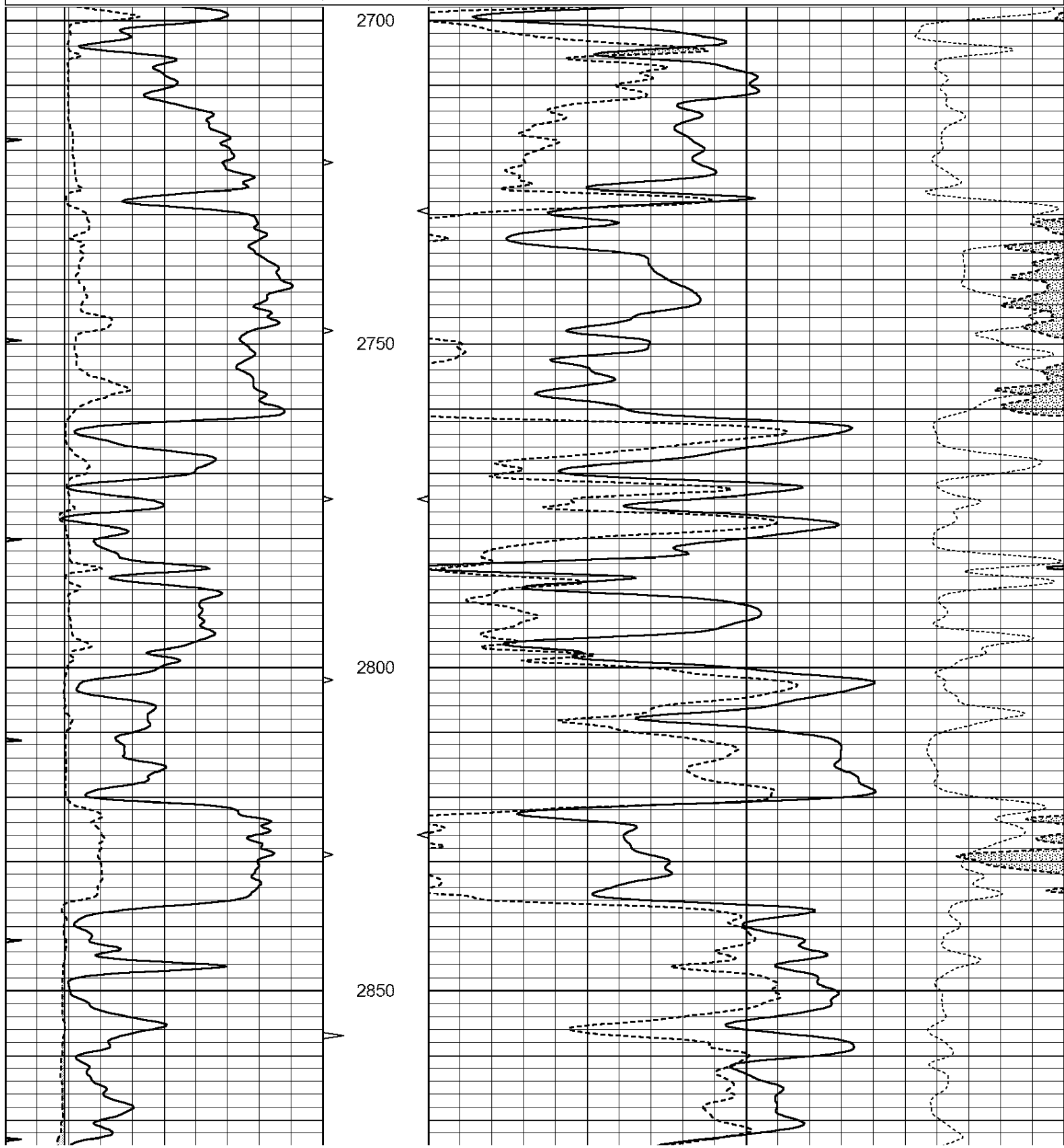


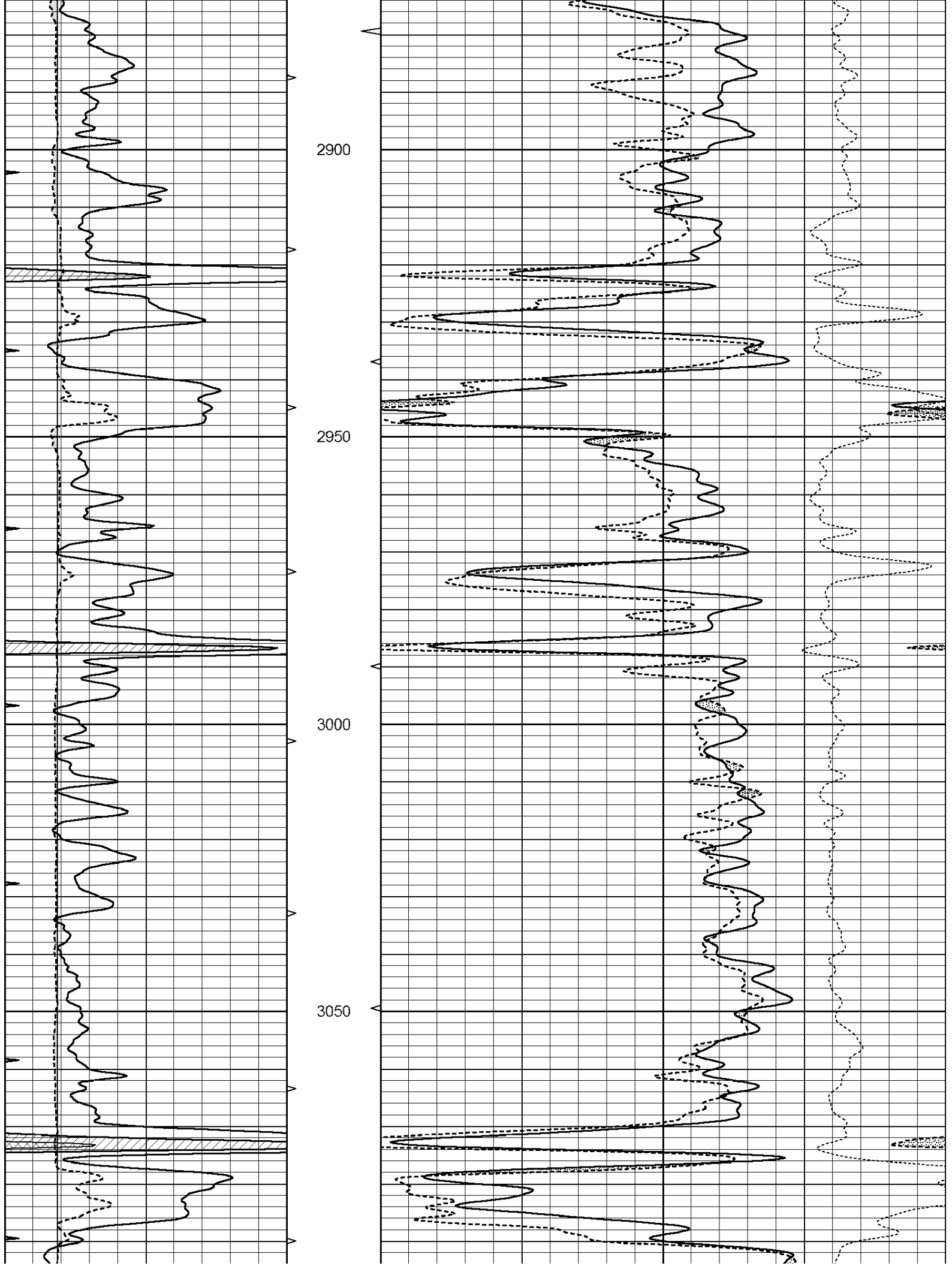
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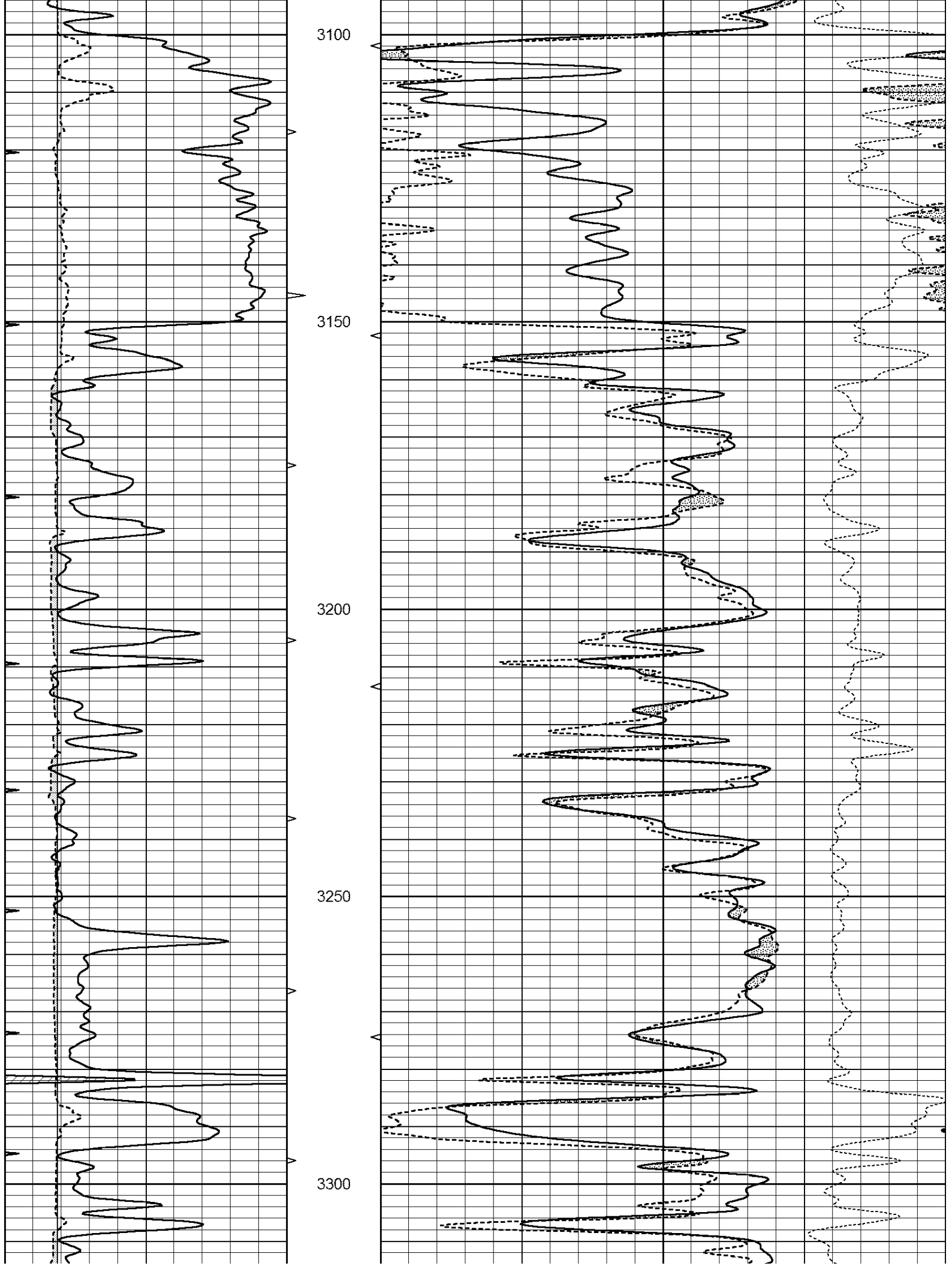
MAIN SECTION

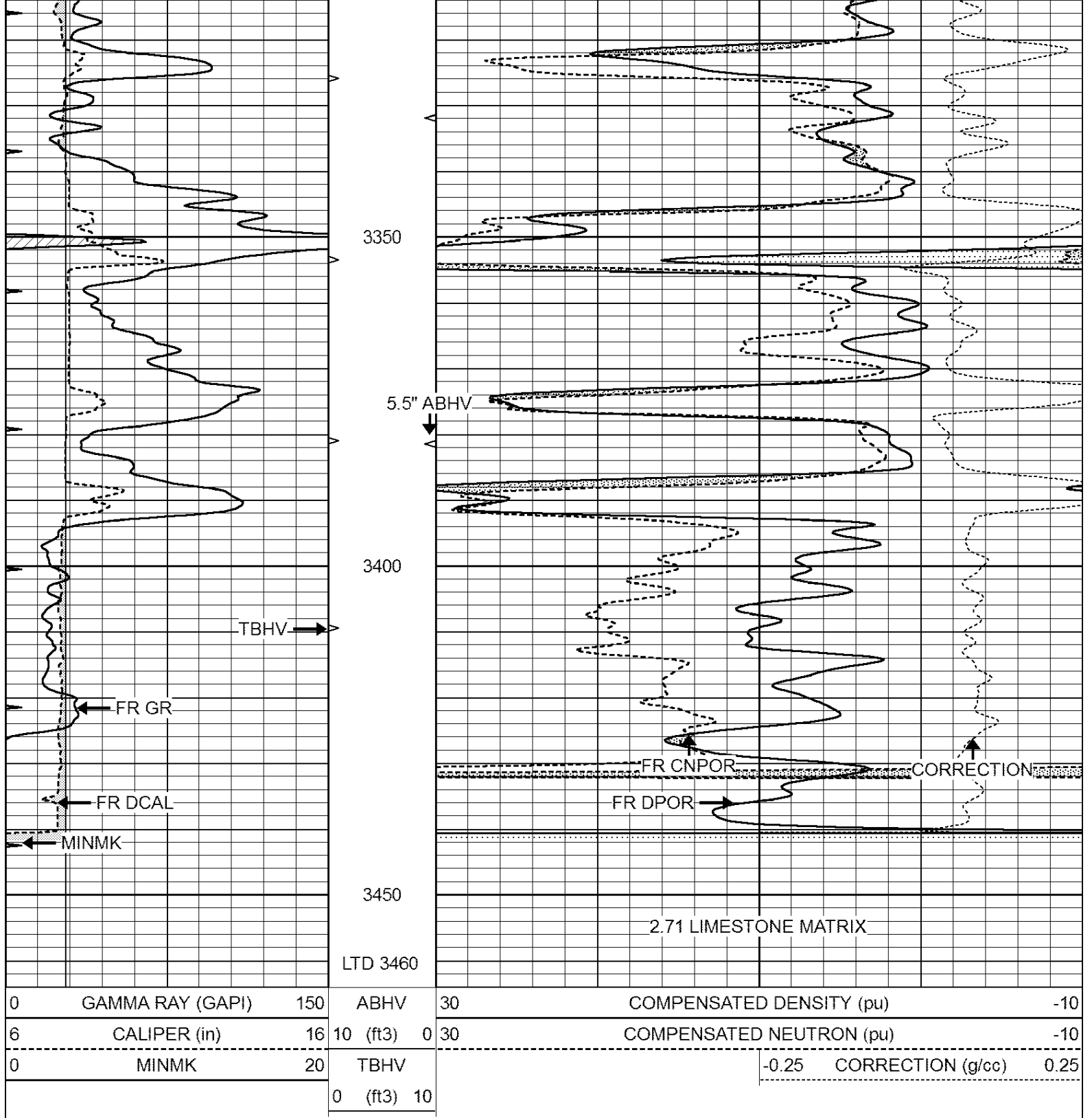
Database File: 409430ddn.db
Dataset Pathname: pass3.7
Presentation Format: den_neu
Dataset Creation: Wed Jul 11 16:47:01 2012 by Calc Open-Cased 110302
Charted by: Depth in Feet scaled 1:240

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		









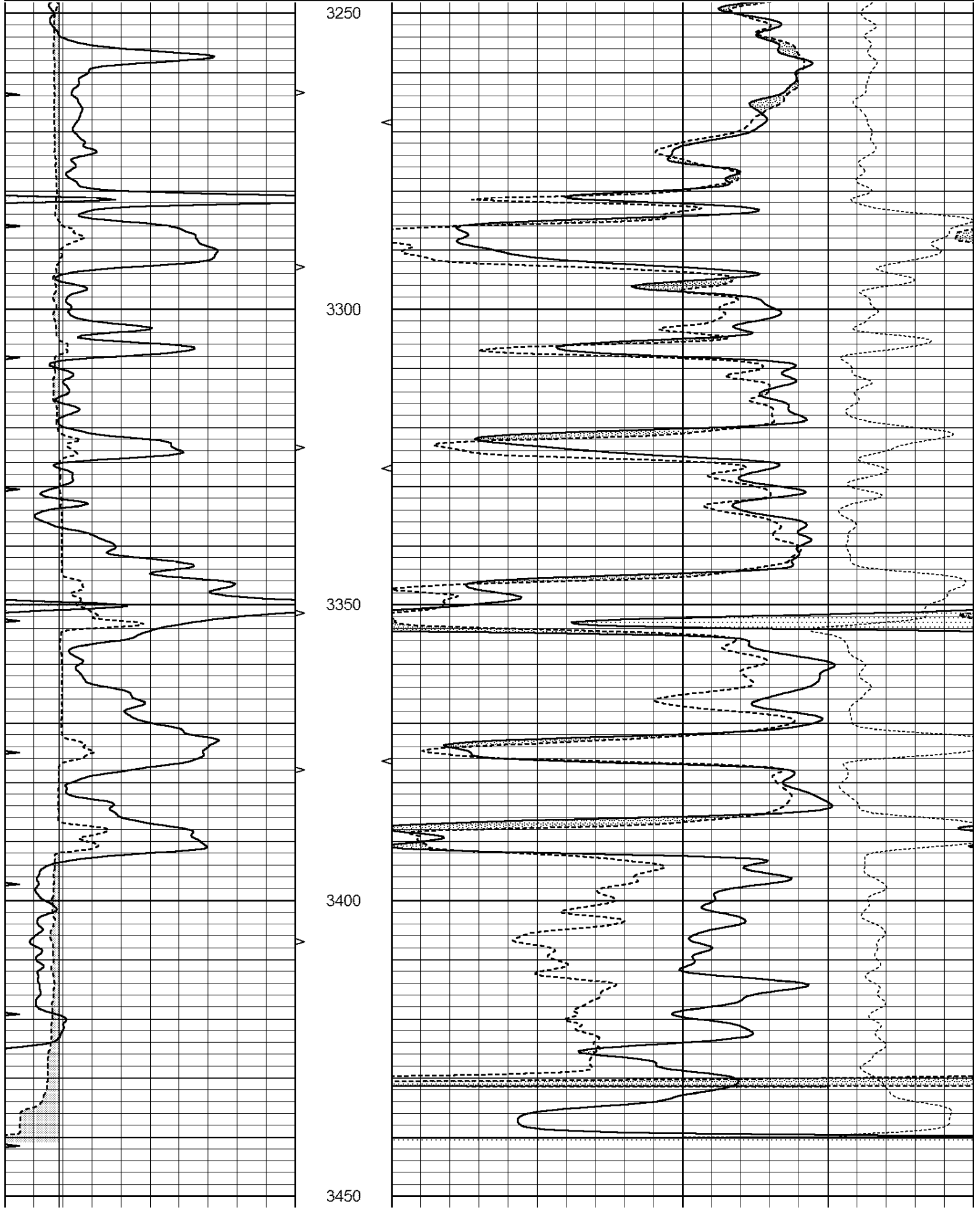
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REPEAT SECTION

Database File: 409430ddn.db
 Dataset Pathname: pass2.2
 Presentation Format: den_neu
 Dataset Creation: Wed Jul 11 15:46:45 2012 by Calc Open-Cased 110302
 Charted by: Depth in Feet scaled 1:240



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					



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		

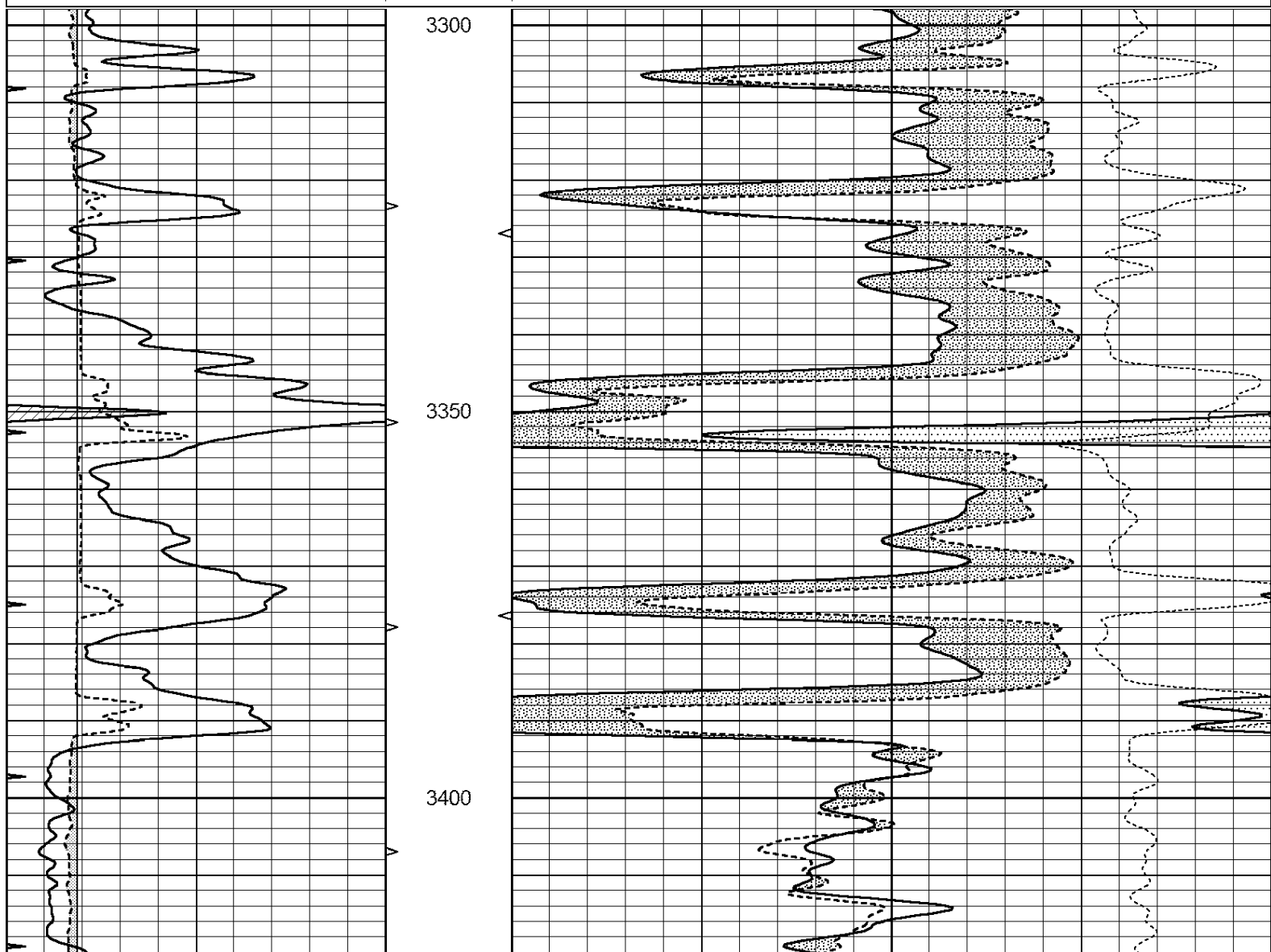


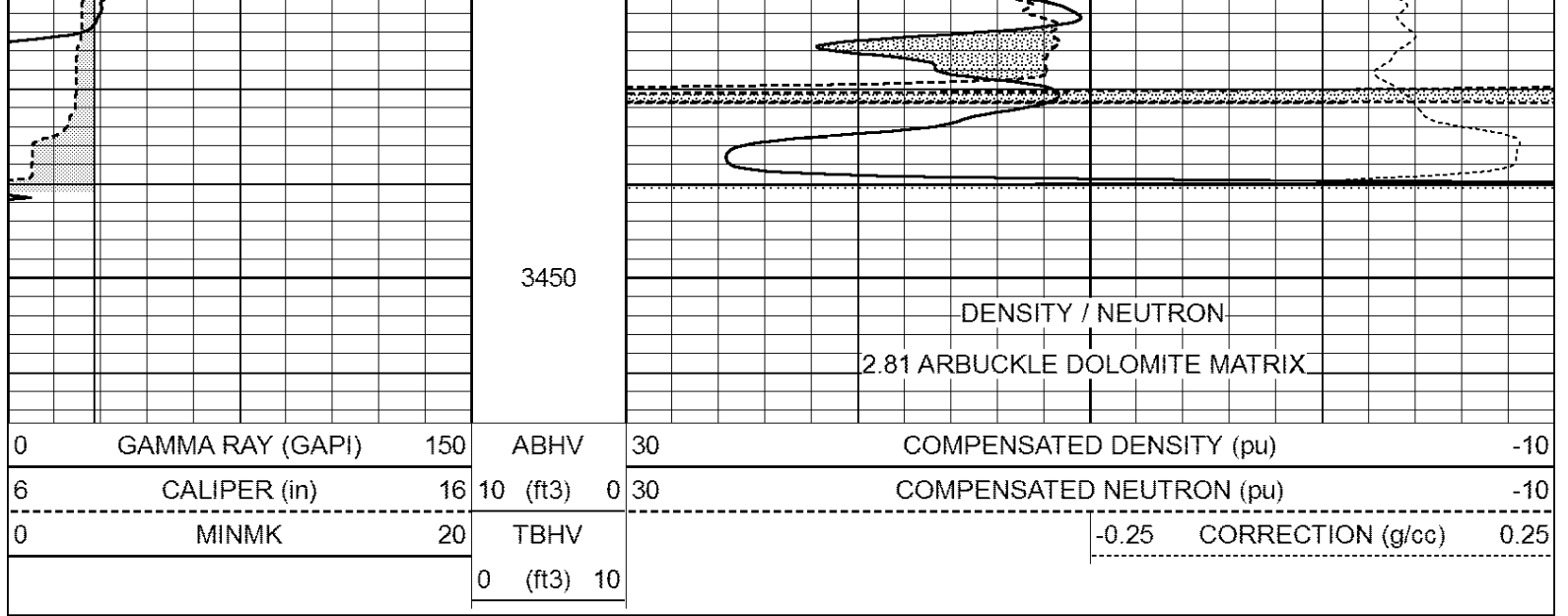
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DOLOMITE MATRIX

Database File: 409430ddn.db
Dataset Pathname: pass2.4
Presentation Format: den_neu
Dataset Creation: Wed Jul 11 15:50:37 2012
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:		409430ddn.db						
Dataset Pathname:		pass3.7						
Dataset Creation:		Wed Jul 11 16:47:01 2012 by Calc Open-Cased 110302						
Dual Induction Calibration Report								
Serial-Model:			DIL4-GEAR					
Performed:			Wed Jul 11 15:47:41 2012					
Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.008	0.666	V	0.000	400.000	mmho/m	570.000	-2.000
Medium	-0.003	0.769	V	0.000	462.500	mmho/m	560.000	-6.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.013	0.651	V	0.000	400.000	mmho/m	627.541	-8.365
Medium	0.020	0.754	V	0.000	462.500	mmho/m	630.311	-12.549

Litho Density Calibration Report					
Serial: 003N		Model: PRB			
Performed Tue Sep 08 14:14:44 2009					
Litho Density Calibration					
	Background	Magnesium	Aluminum	Sandstone	
Window 1	2042.6	12312.8	4225.8	13758.4	cps
Window 2	1855.8	10134.7	3624.2	11113.1	cps
Window 3	1639.4	6760.2	2716.3	7260.3	cps
Window 4	466.4	469.2	466.1	476.5	cps
Long Space	0.0	8278.9	1768.4	9257.4	cps
Short Space	2.2	2377.3	1544.1	2574.2	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	
Rib Angle	: 44.4	Rib Slope	: 0.979	Density/Spine Ratio	: 0.549
Spine Angle	: 74.4	Spine Slope	: 3.577	Spine Intercept	: -18.8

Caliper		
	Readings	Reference
Low Ref	3.4	7.9
Hinh Ref	5.5	15.0

Gain: 3.4		Offset: -3.5	
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:		Tue Jul 03 02:09:35 2012	
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.3000	GAPI/cps	