

COMPENSATED DENSITY / NEUTRON LOG

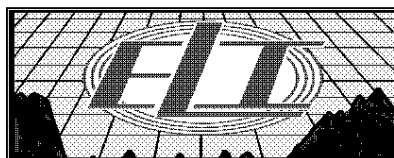
Company	PHILLIPS EXPLORATION, CO. L.C.		
Well	STEINLE NO.1		
Field	GORHAM		
County	RUSSELL		
State	KANSAS		
Company	MAI OIL OPERATIONS, INC.		
Well	STEINLE NO.1		
Field	GORHAM		
County	RUSSELL		
State	KANSAS		
Location:	API # : 15-167-24048-00-00		
	510' FNL & 690' FWL SW-NE-NW-NW		
Permanent Datum	GROUND LEVEL	Elevation	1888
Log Measured From	KELLY BUSHING	8' A.G.L.	
Drilling Measured From	KELLY BUSHING		
SEC 2	TWP 14S	RGE 15W	
Other Services	DIL/MEL	SONIC	
Elevation	K.B. 1896	D.F. 1894	G.L. 1888
Date	11/5/16		
Run Number	ONE		
Depth Driller	3390		
Depth Logger	3391		
Bottom Logged Interval	3367		
Top Log Interval	2300		
Casing Driller	8 5/8"@933'		
Casing Logger	930'		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 5,000PPM	
Density / Viscosity	9.4/50		
pH / Fluid Loss	9.5/8.0		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.95@80		
Rmf @ Meas. Temp	.71@80		
Rmc @ Meas. Temp	1.14@80		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	.69@110		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	110F		
Equipment Number	922339		
Location	HAYS, KANSAS		
Recorded By	JUSTIN HENRICKSON		
Witnessed By	JIM MUSGROVE		

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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

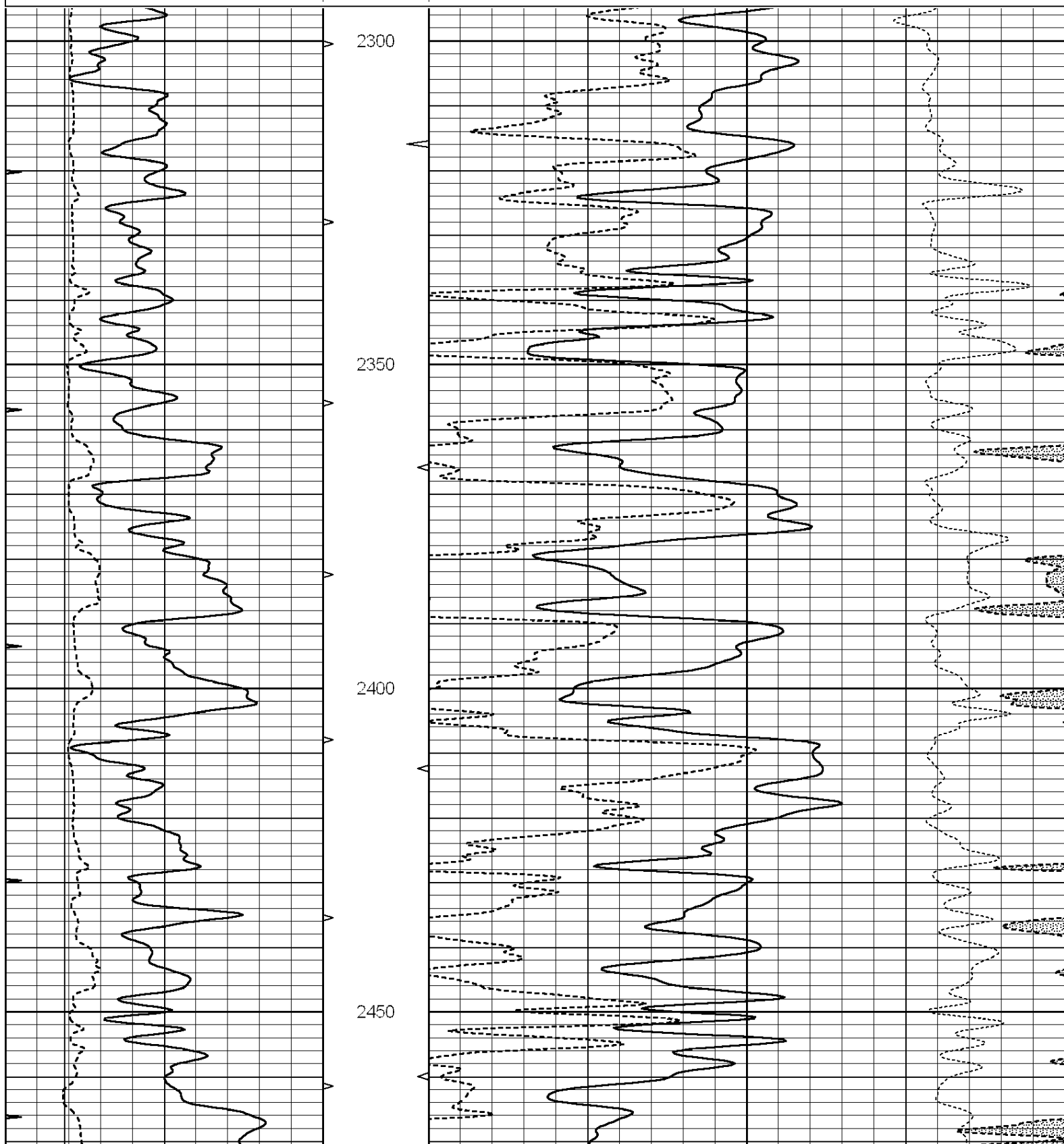
THANK YOU FOR USING ELI WIRELINE HAYS, KANSAS (785) 628-6395
DIRECTIONS
BALTA ROAD EXIT ON I70
1/2 NORTH, 1 1/2 WEST, SOUTH INTO

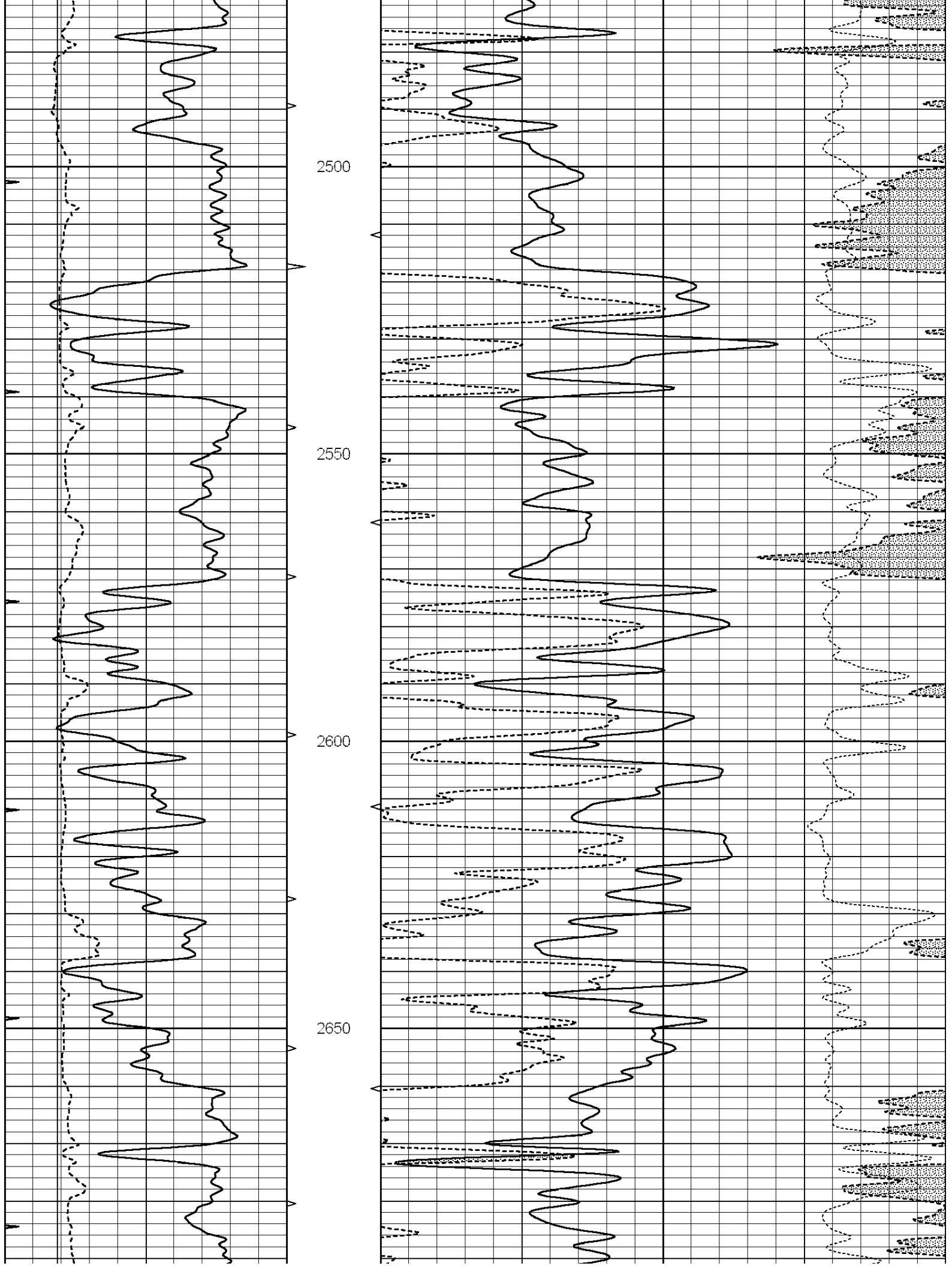


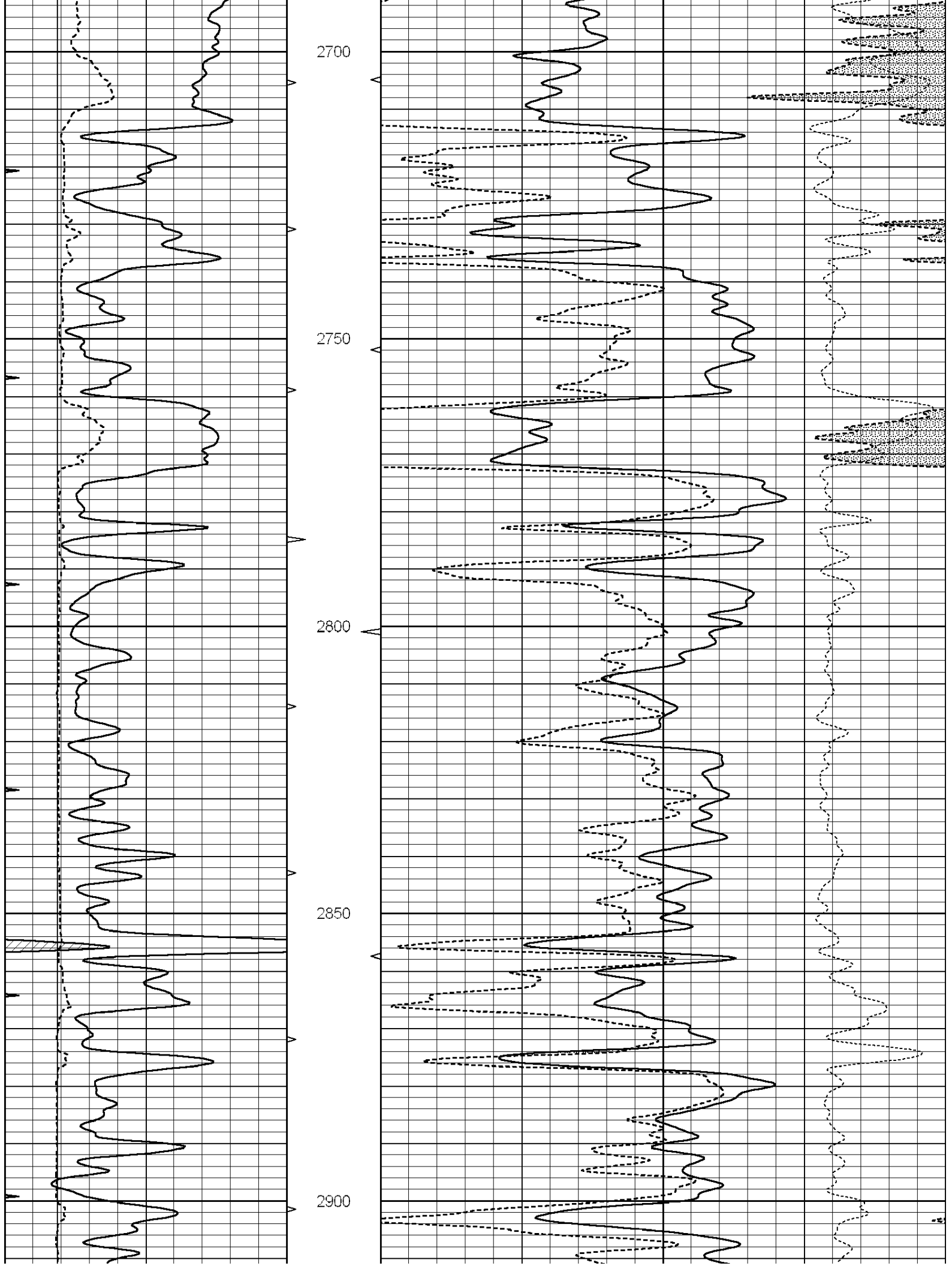
MAIN PASS

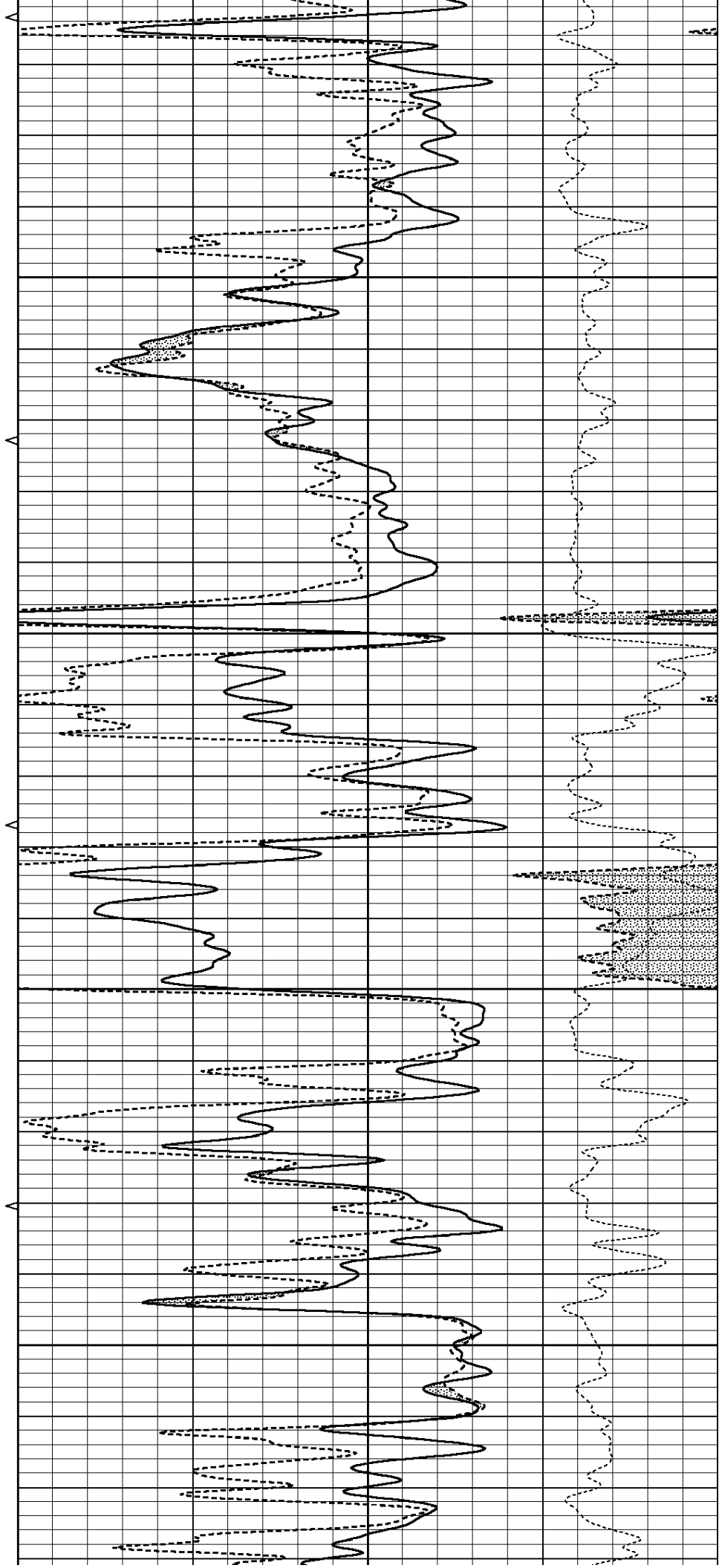
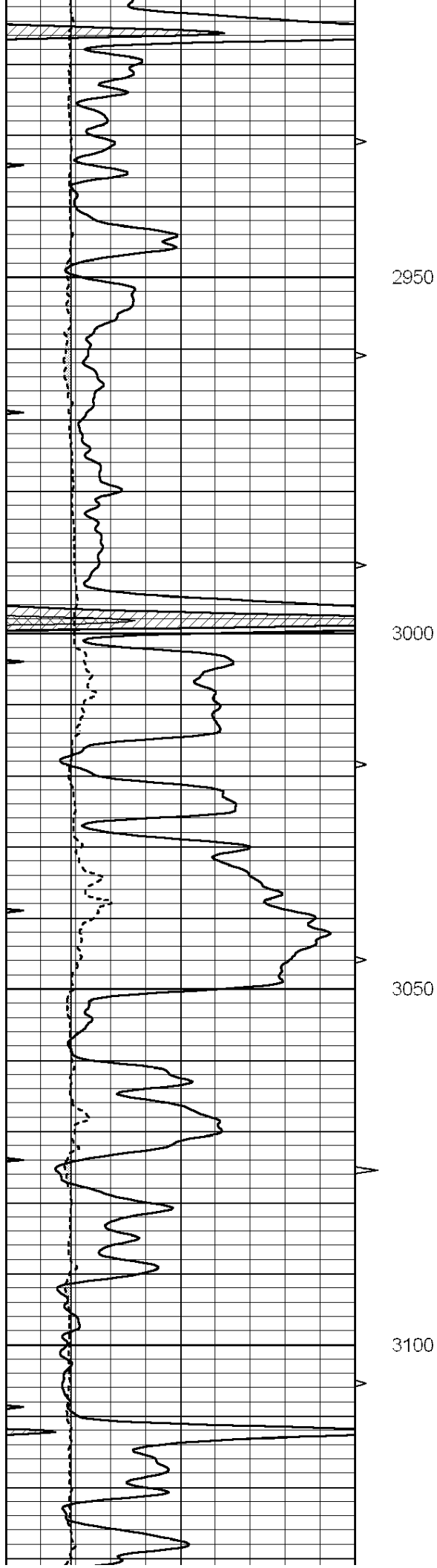
Database File: 31340ddn.db
 Dataset Pathname: pass3.1
 Presentation Format: den_neu
 Dataset Creation: Sat Nov 05 15:50:28 2016 by Calc SOC 120430
 Charted by: Depth in Feet scaled 1:240

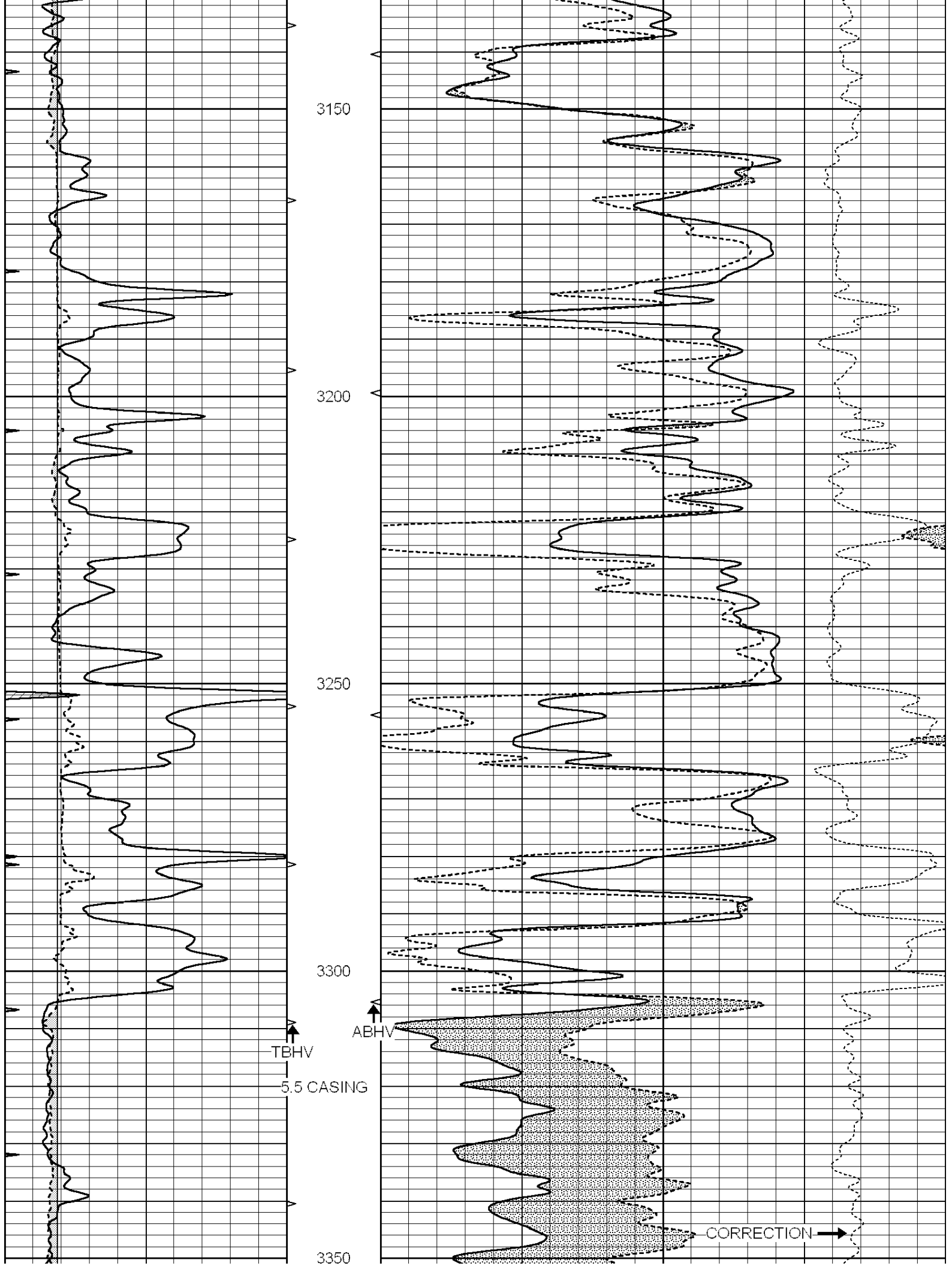
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		

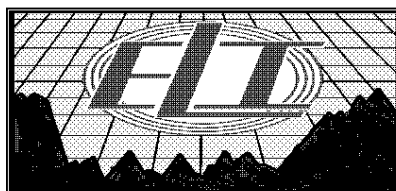
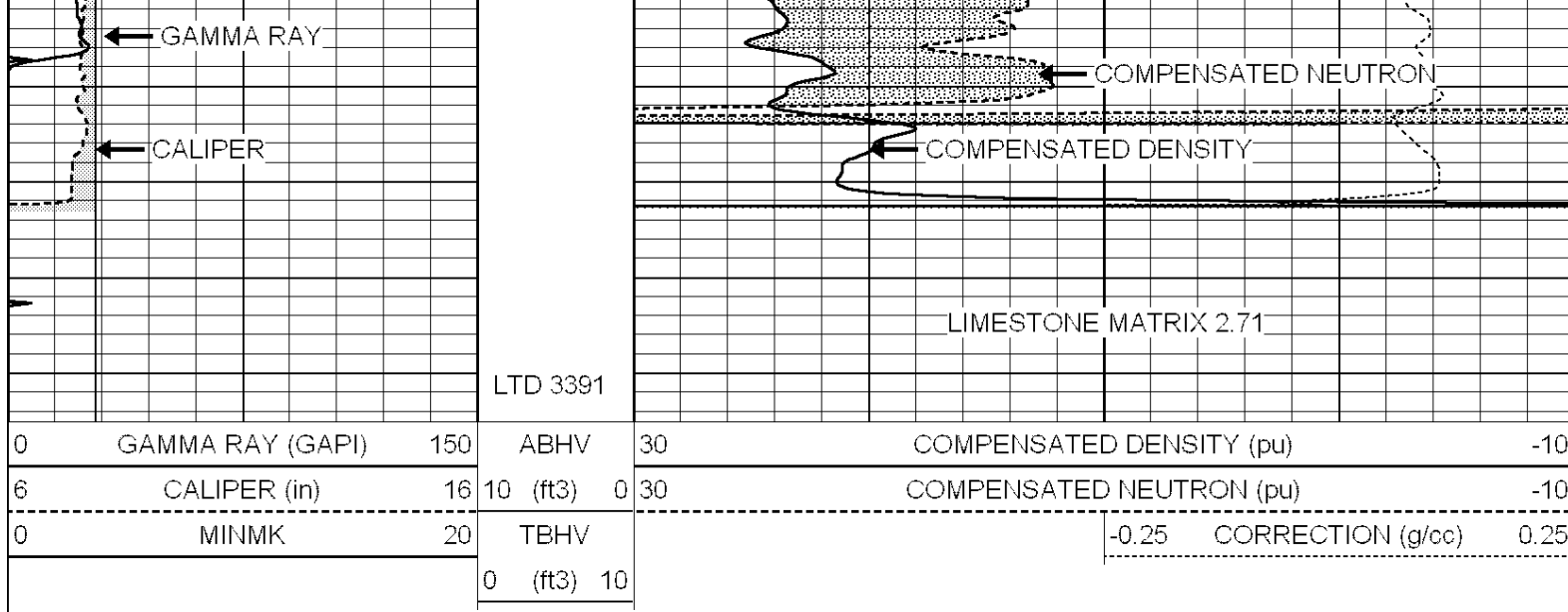








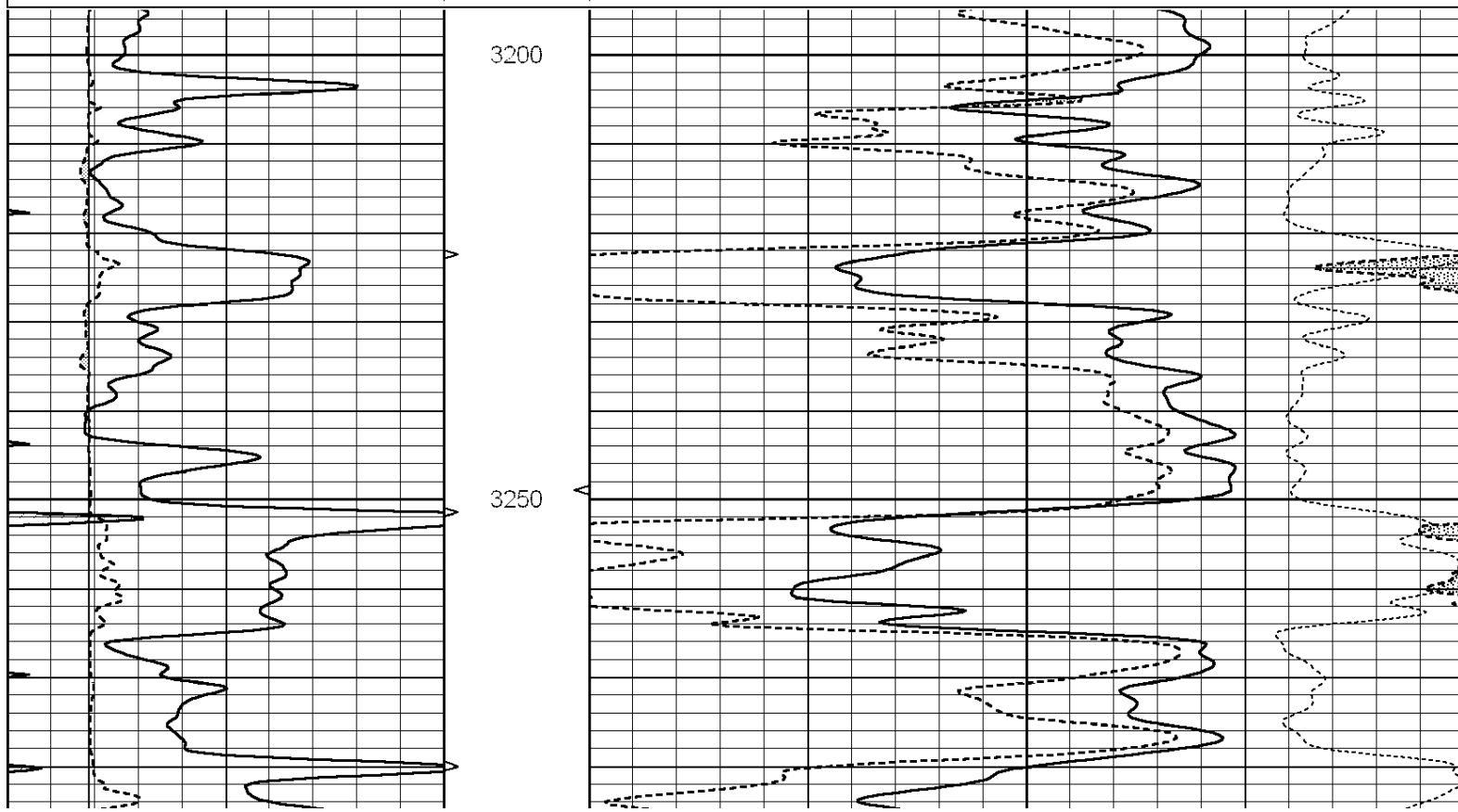




REPEAT SECTION

Database File: 31340ddn.db
 Dataset Pathname: pass2.1
 Presentation Format: den_neu
 Dataset Creation: Sat Nov 05 15:34:06 2016 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		



	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: 003N Model: PRB								

Master Calibration					Performed Mon Mar 14 08:48:13 2016			
	Background		Magnesium		Aluminum		Sandstone	
Window 1	1751.3		11741.0		3857.3		12907.8	
Window 2	1589.4		9536.2		3267.6		10282.0	
Window 3	1413.4		6466.1		2463.2		6828.7	
Window 4	399.5		407.1		405.1		406.5	
Long Space	0.0		7946.7		1678.1		8692.6	
Short Space	2.2		3366.2		2134.1		3410.2	
Rho			1.7100		2.5900		1.3800	
Pe			0.0000		2.5700		1.5500	
Rib Angle	: 43.7		Rib Slope	: 0.954	Density/Spine Ratio		: 0.543	
Spine Angle	: 73.7		Spine Slope	: 3.412	Spine Intercept		: -18.7	

Before Survey Verification					Performed Wed Dec 31 18:00:00 1969			
Window 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	g/cc
Measured Pe				0.0000	0.0000	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	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	g/cc
Measured Pe				0.0000	0.0000	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:	070558		
Tool Model:	OPEN_GR		
Performed:	Mon Aug 22 01:00:15 2016		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.2800	GAPI/cps	