

**COMPLETION
& PRODUCTION
SERVICES CO.**

**COMPENSATED
DENSITY / NEUTRON
LOG**

Company MAI OIL OPERATIONS, INC.
Well SCHMITT #5
Field KENNEBEC
County RUSSELL
State KANSAS

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Location: API # : 15-167-23837-0000
330' FSL & 1985' FEL
E/2 - SW - SW - SE
SEC 4 TWP 15S RGE 14W
Permanent Datum GROUND LEVEL Elevation 1770
Log Measured From KELLY BUSHING 8' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services DIL/MEL
Elevation K.B. 1778
D.F. 1776
G.L. 1770

Date	11/19/12
Run Number	ONE
Depth Driller	3300
Depth Logger	3298
Bottom Logged Interval	3274
Top Log Interval	2200
Casing Driller	8 5/8" @ 473'
Casing Logger	473
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.6/54
pH / Fluid Loss	11.0/10.0
Source of Sample	FLOWLINE
Rim @ Meas. Temp	.600 @ 82F
Rmf @ Meas. Temp	.450 @ 82F
Rmc @ Meas. Temp	.720 @ 82F
Source of Rmf / Rmc	MEASUREMENT
Rim @ BHT	.447 @ 110F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	10:15 A.M.
Maximum Recorded Temperature	110F
Equipment Number	4854
Location	HAYS, KANSAS
Recorded By	JEFF LUEBBERS
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

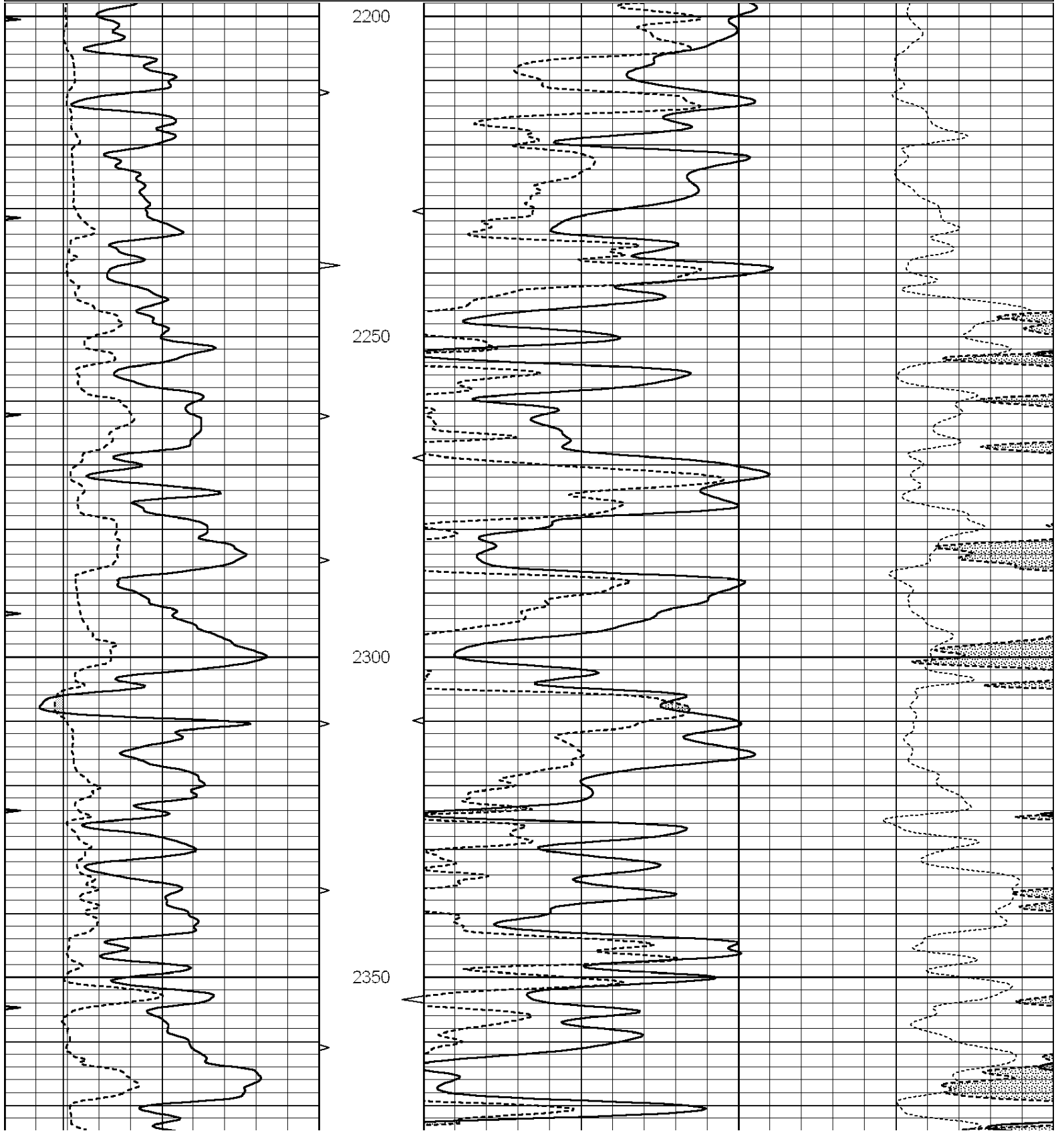
RUSSELL, KS. & I-70, 6S. ON HWY 281 TO "WALTERS RD." (JUST S. OF RIVER BRIDGE), 1W., 1/2S., 1/2W., N. INTO

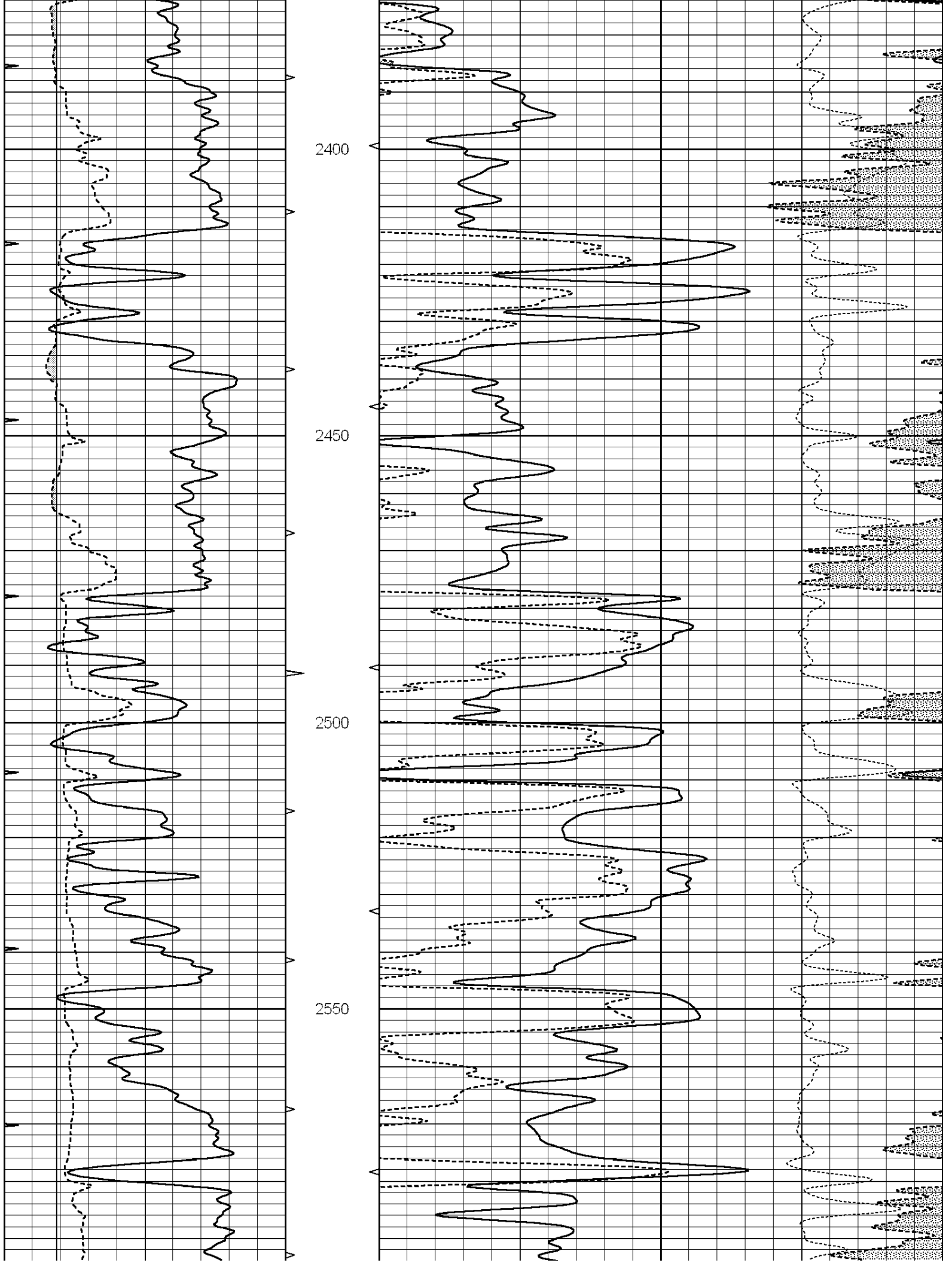


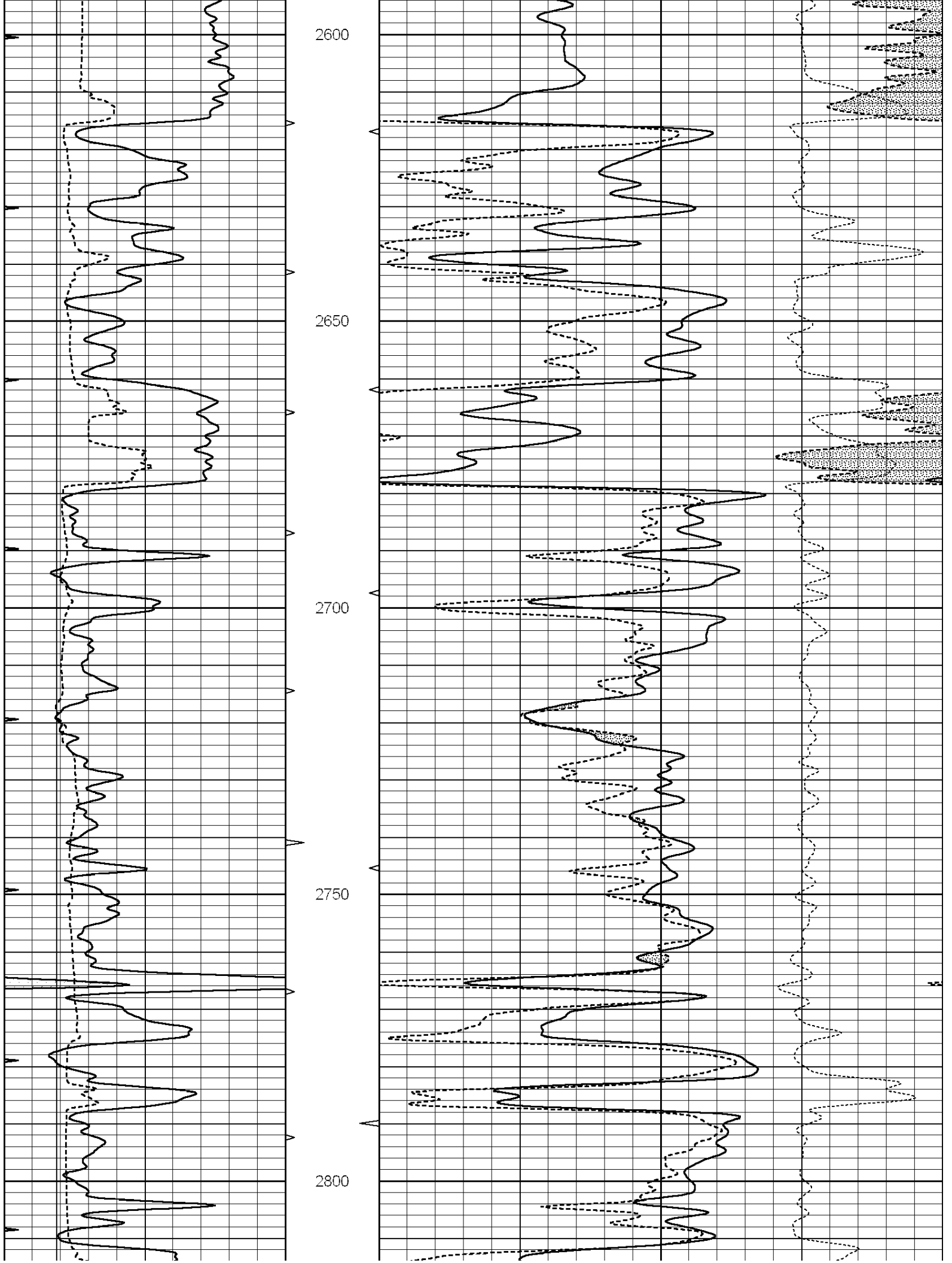
MAIN SECTION

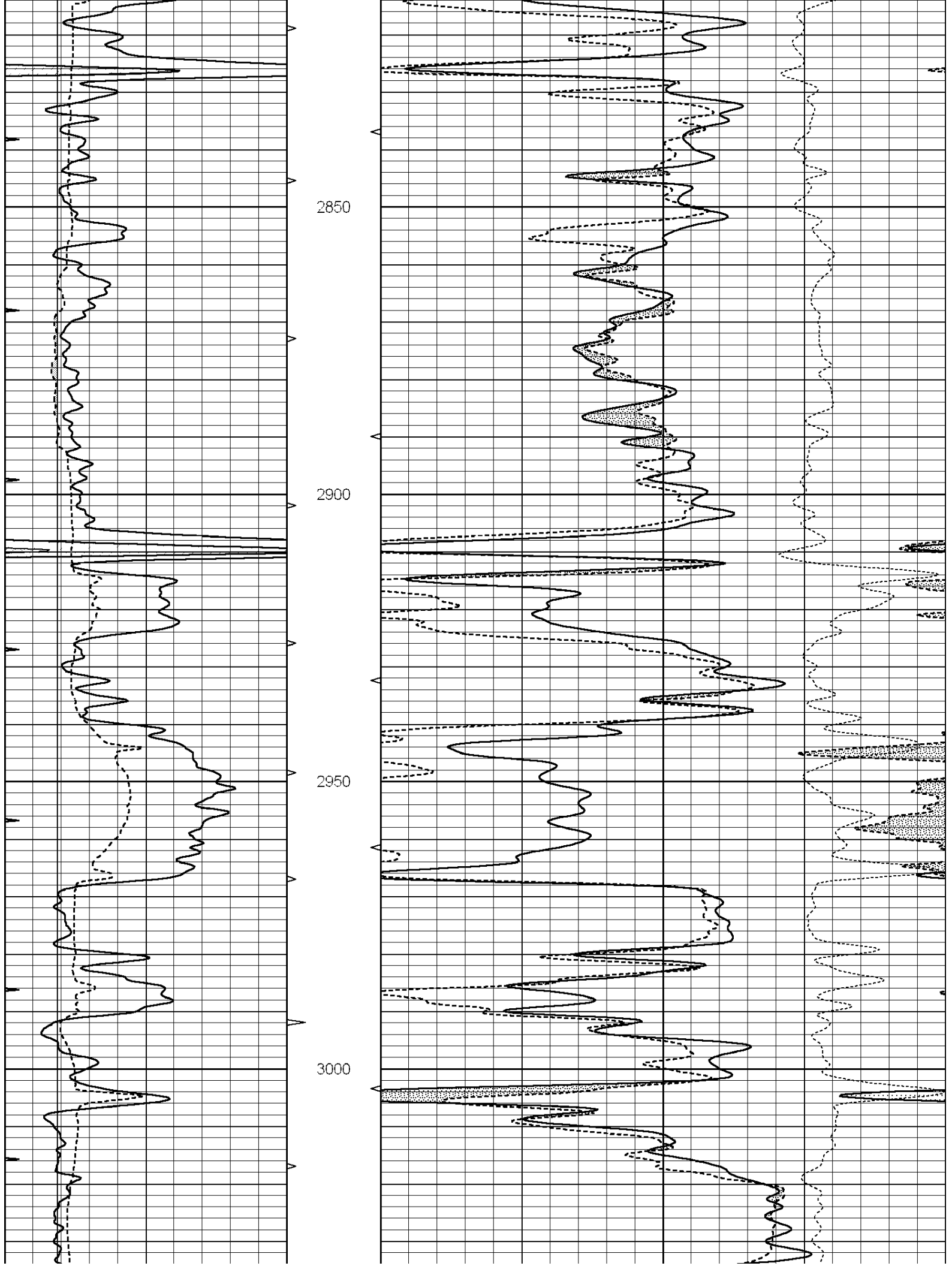
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 Dataset Pathname: pass3.4
 Presentation Format: den_neu
 Dataset Creation: Mon Nov 19 11:34:32 2012 by Calc SOC 120430
 Charted by: Depth in Feet scaled 1:240

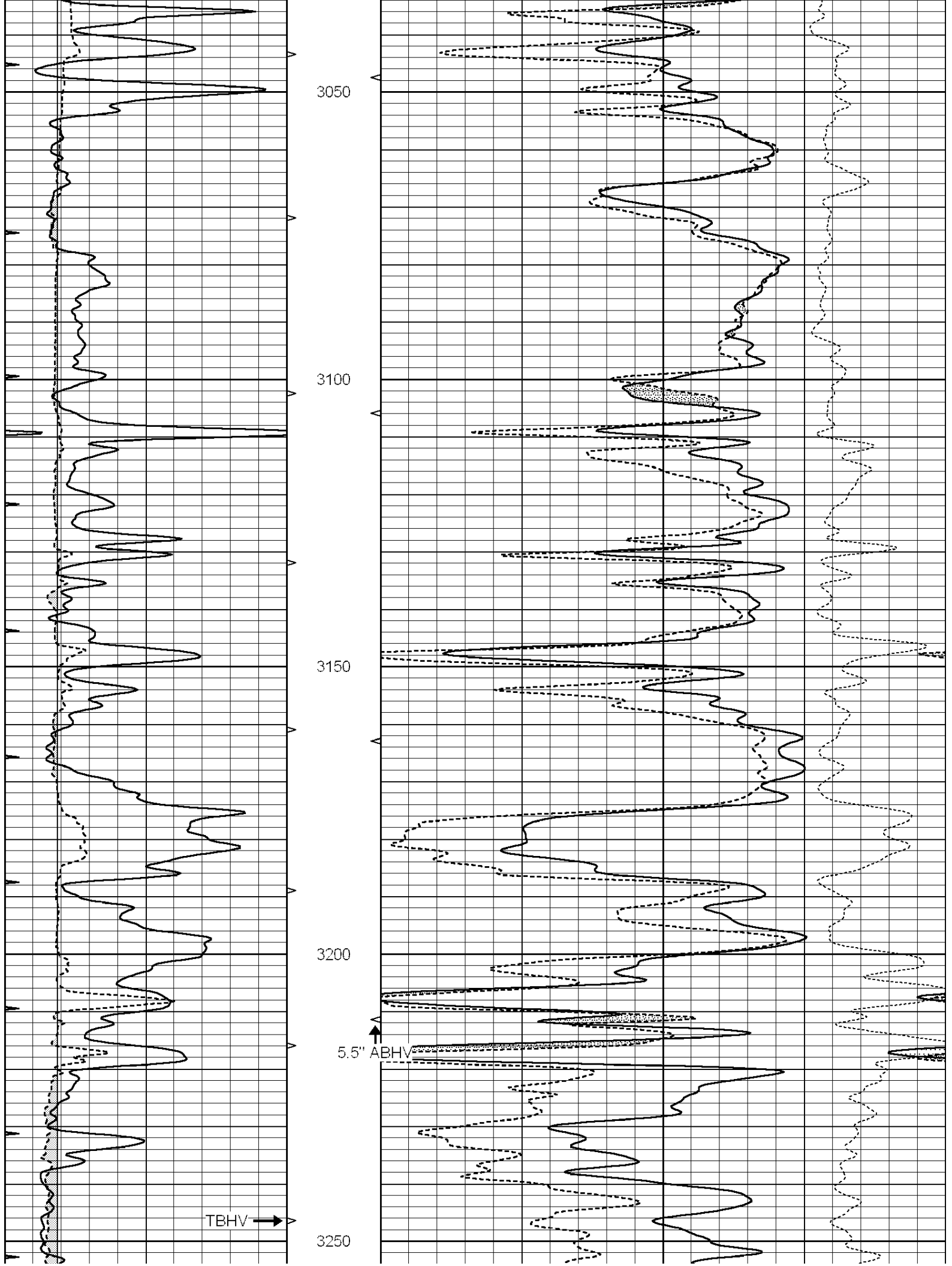
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		

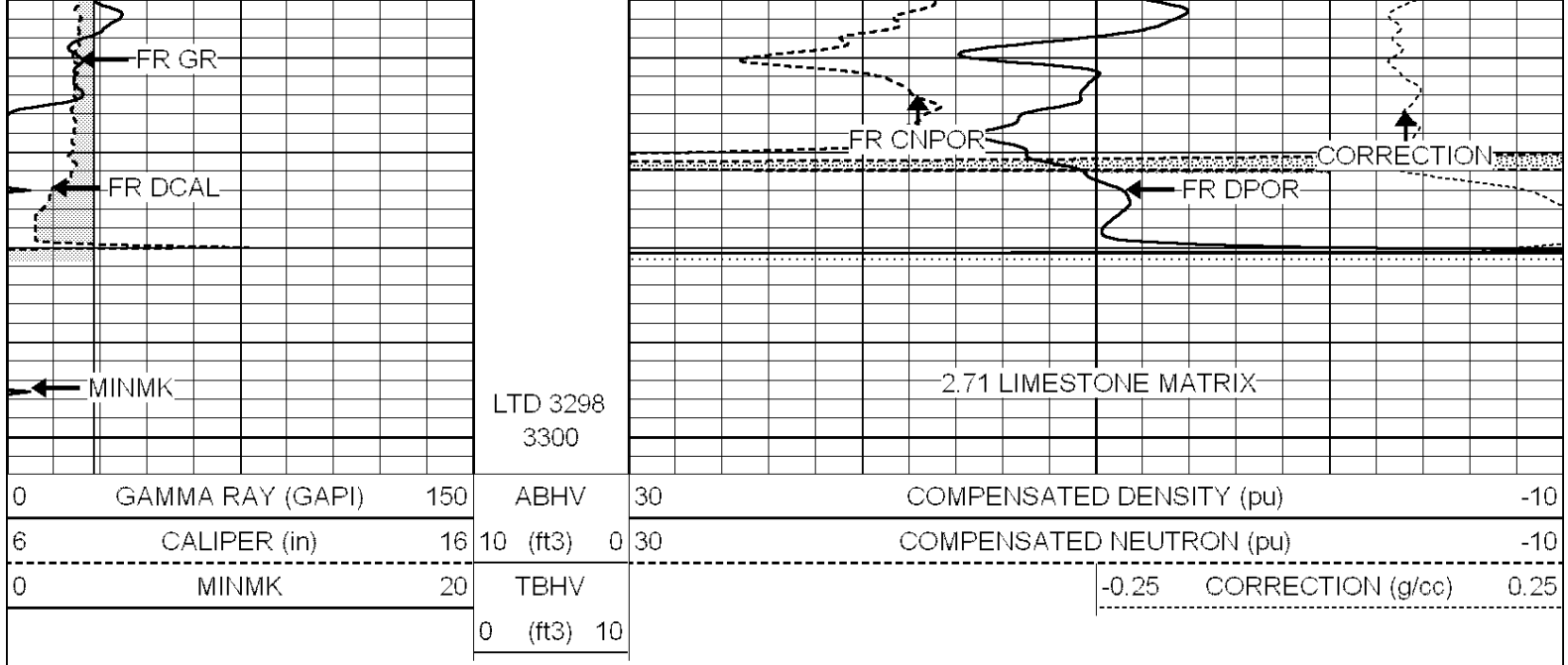








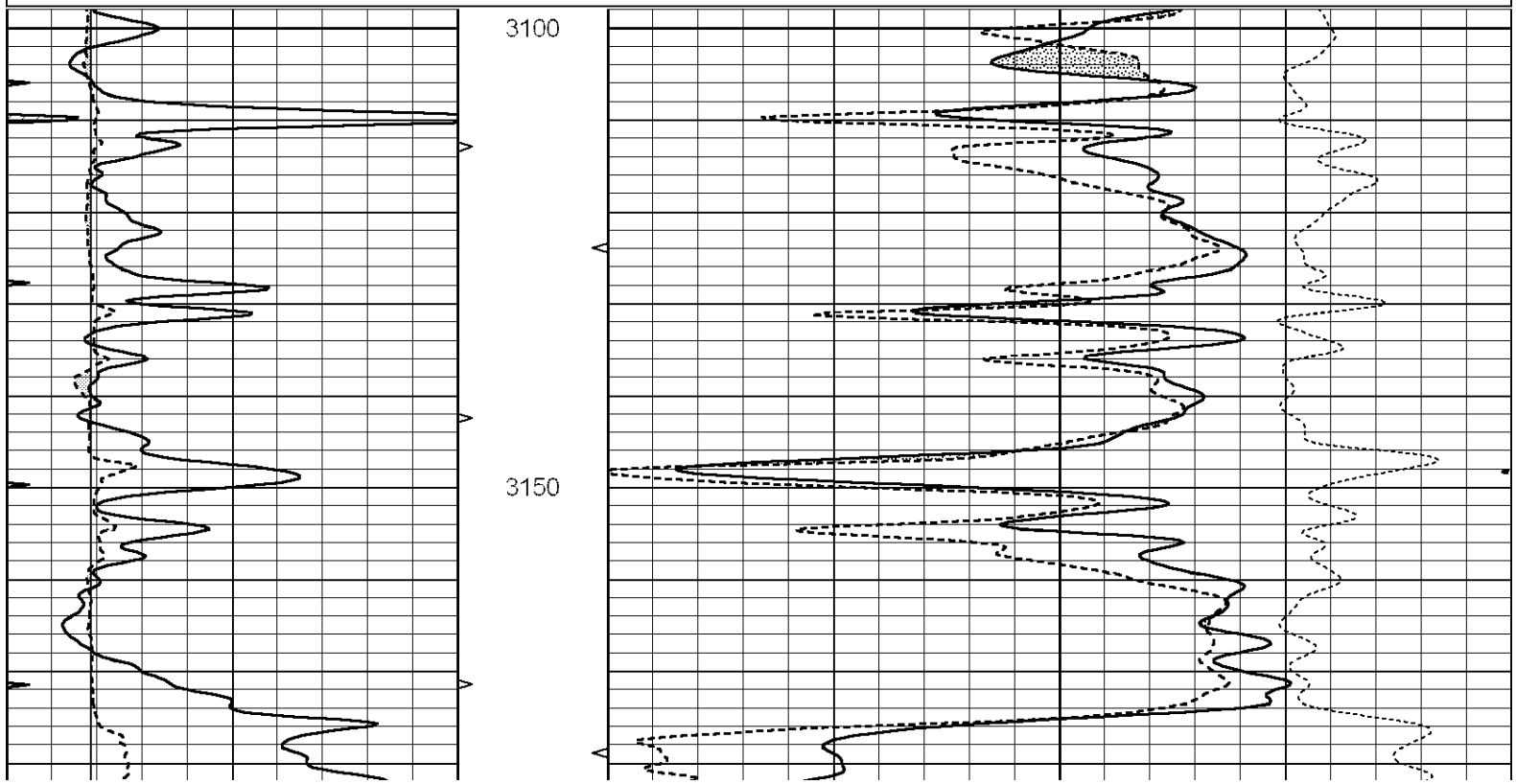


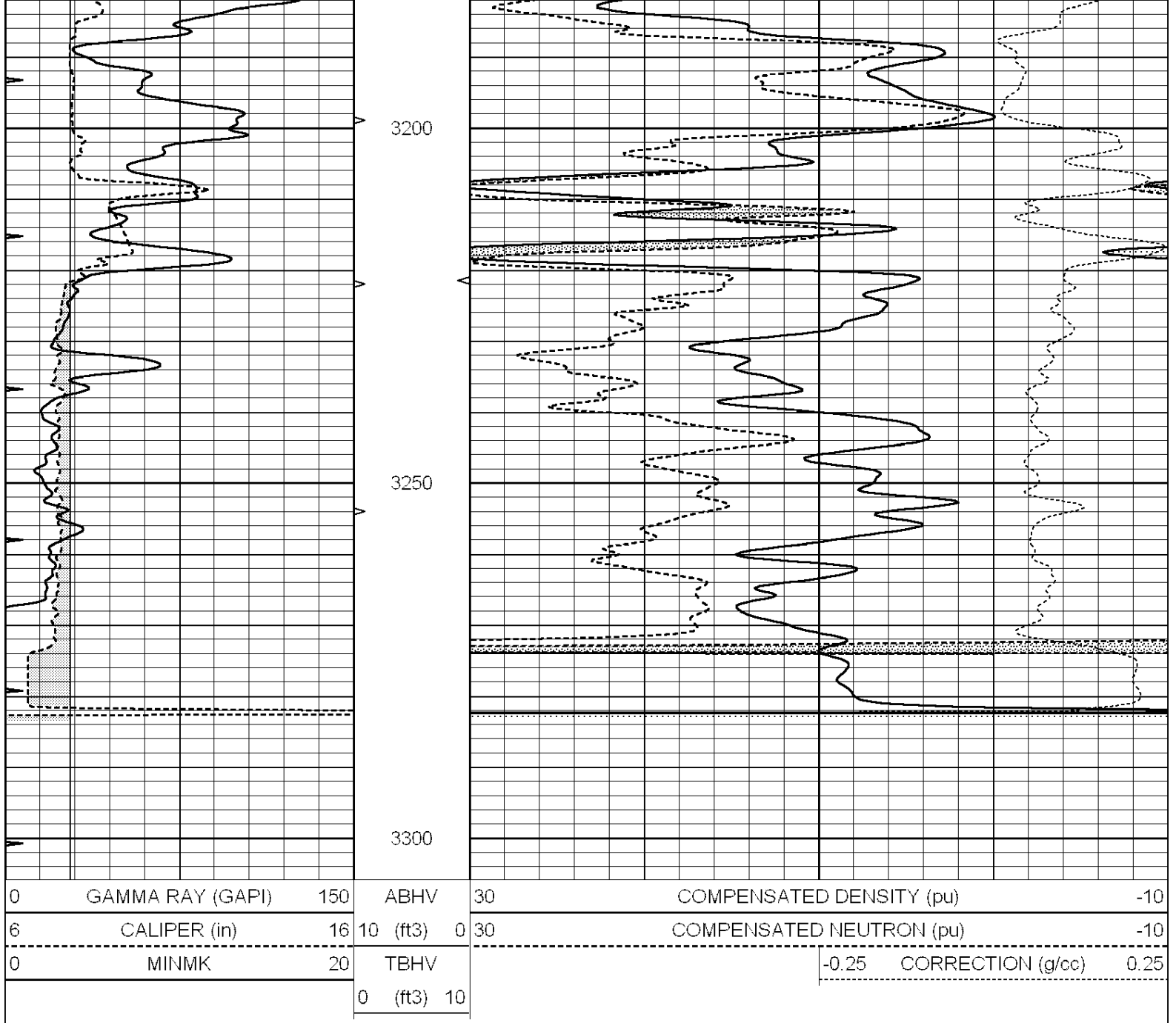


REPEAT SECTION

Database File: 010017ddn.db
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 Charted by: Depth in Feet scaled 1:240

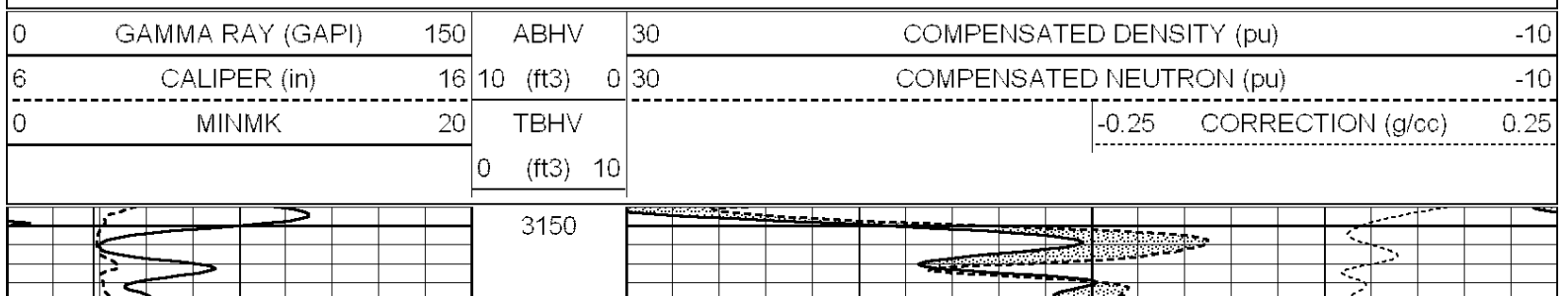
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		

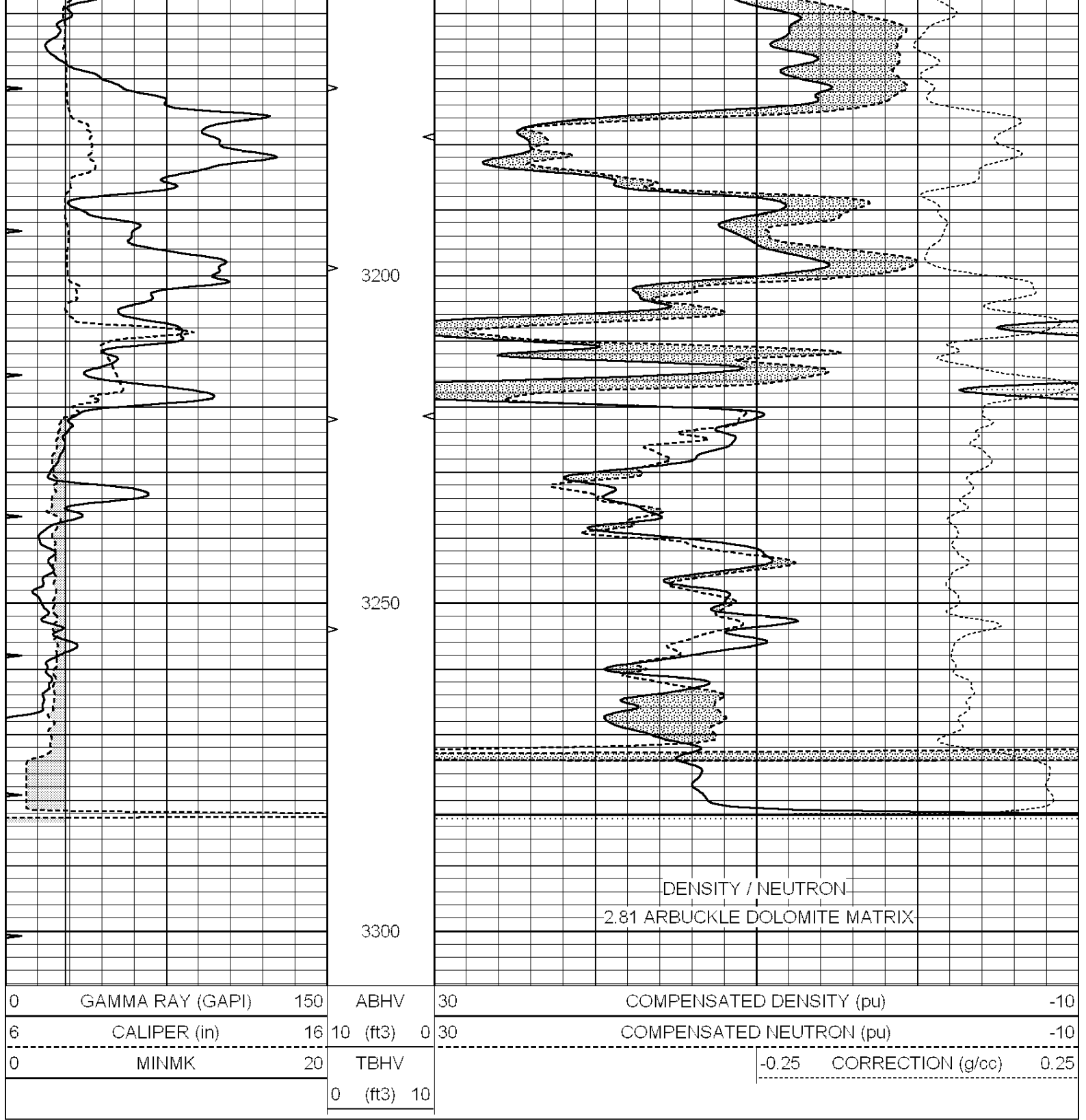




DOLOMITE MATRIX

Database File: 010017ddn.db
 Dataset Pathname: pass2.5
 Presentation Format: den_neu
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 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: 010017ddn.db
 Dataset Pathname: pass3.4
 Dataset Creation: Mon Nov 19 11:34:32 2012 by Calc SOC 120430

Dual Induction Calibration Report

Serial-Model: DIL4-GEAR
 Performed: Thu Nov 15 14:25:31 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	-8.000
Medium	-0.003	0.769	V	0.000	462.500	mmho/m	560.000	-7.000
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
High Ref	5.0	15.0
	Gain: 4.5	Offset: -7.4

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: Wed Sep 19 15:58:00 2012

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.3000 GAPI/cps