



SUPERIOR
Hays,
Kansas

**COMPENSATED
DENSITY / NEUTRON
LOG**

Company	RITCHIE EXPLORATION, INC.	Company	RITCHIE EXPLORATION, INC.
Well	#2 HESS 29D	Well	#2 HESS 29D
Field	ANTELOPE RIDGE	Field	ANTELOPE RIDGE
County	GOVE	County	GOVE
State	KANSAS	State	KANSAS
Location:	API # : 15-063-21928-0000	Other Services	DIL
	1055' FSL & 1800' FEL NE - SW - SE		
	SEC 29 TWP 13S RGE 31W		
Permanent Datum	GROUND LEVEL	Elevation	2932
Log Measured From	KELLY BUSHING 10' A.G.L.	K.B.	2942
Drilling Measured From	KELLY BUSHING	D.F.	2940
		G.L.	2932

Date	7/20/11
Run Number	ONE
Depth Driller	4710
Depth Logger	4711
Bottom Logged Interval	4687
Top Log Interval	3500
Casing Driller	8 5/8"@215'
Casing Logger	215
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.169
pH / Fluid Loss	9.5/8.8
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.650@94F
Rmt @ Meas. Temp	.486@94F
Rmc @ Meas. Temp	.780@94F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.501@122F
Time Circulation Stopped	3 HOURS
Time Logger on Bottom	11:45 A.M.
Maximum Recorded Temperature	122F
Equipment Number	4010
Location	HAYS, KANSAS
Recorded By	JEFF LUEBBERS
Witnessed By	MIKE ENGELBRECHT

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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
 OAKLEY, KS.(JUNCTION OF OLD 40 & HWY 83) 13S. ON HWY 83 TO "QUAIL RD.", 3E., 3S., 1E. INTO PAS

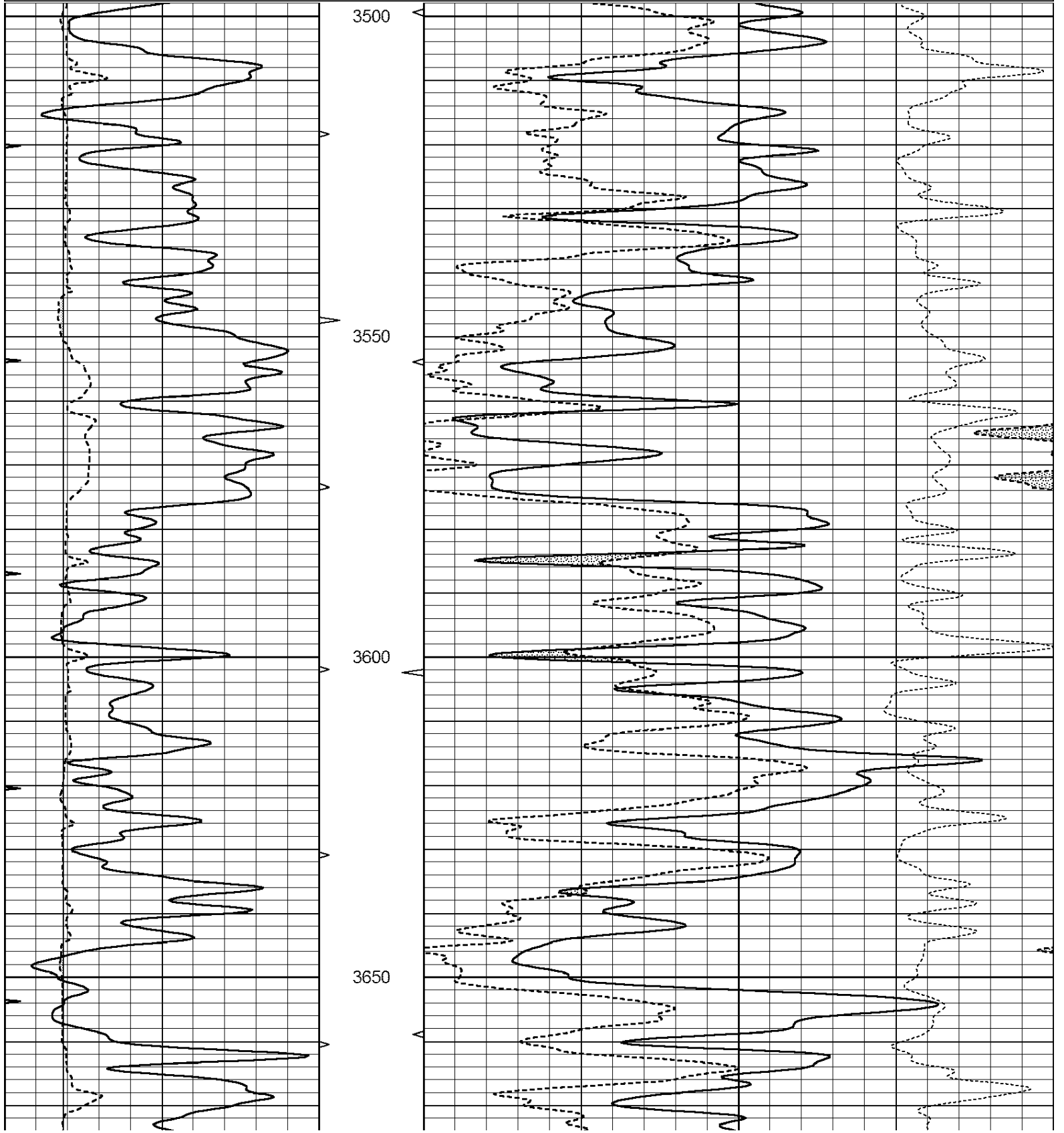


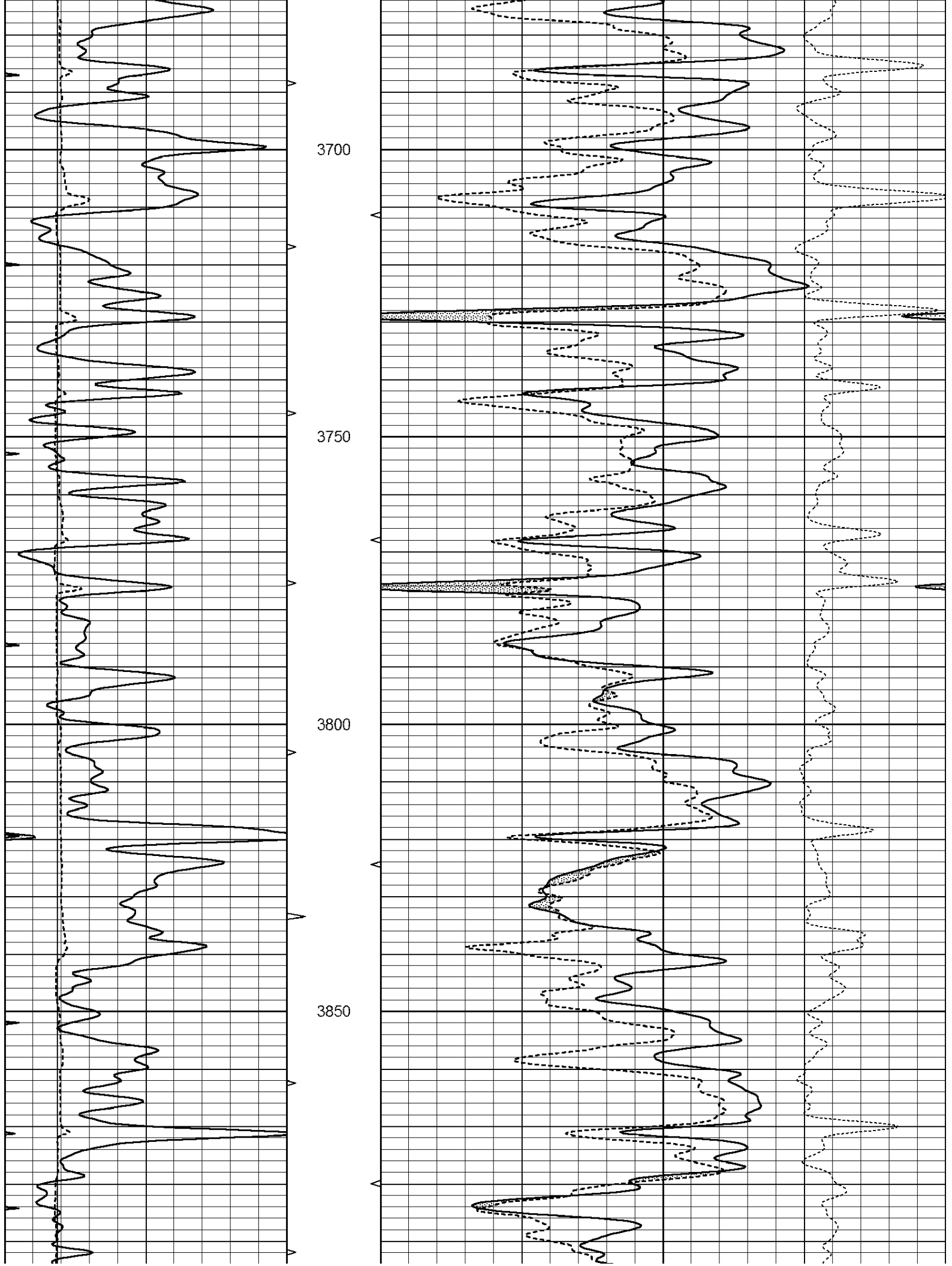
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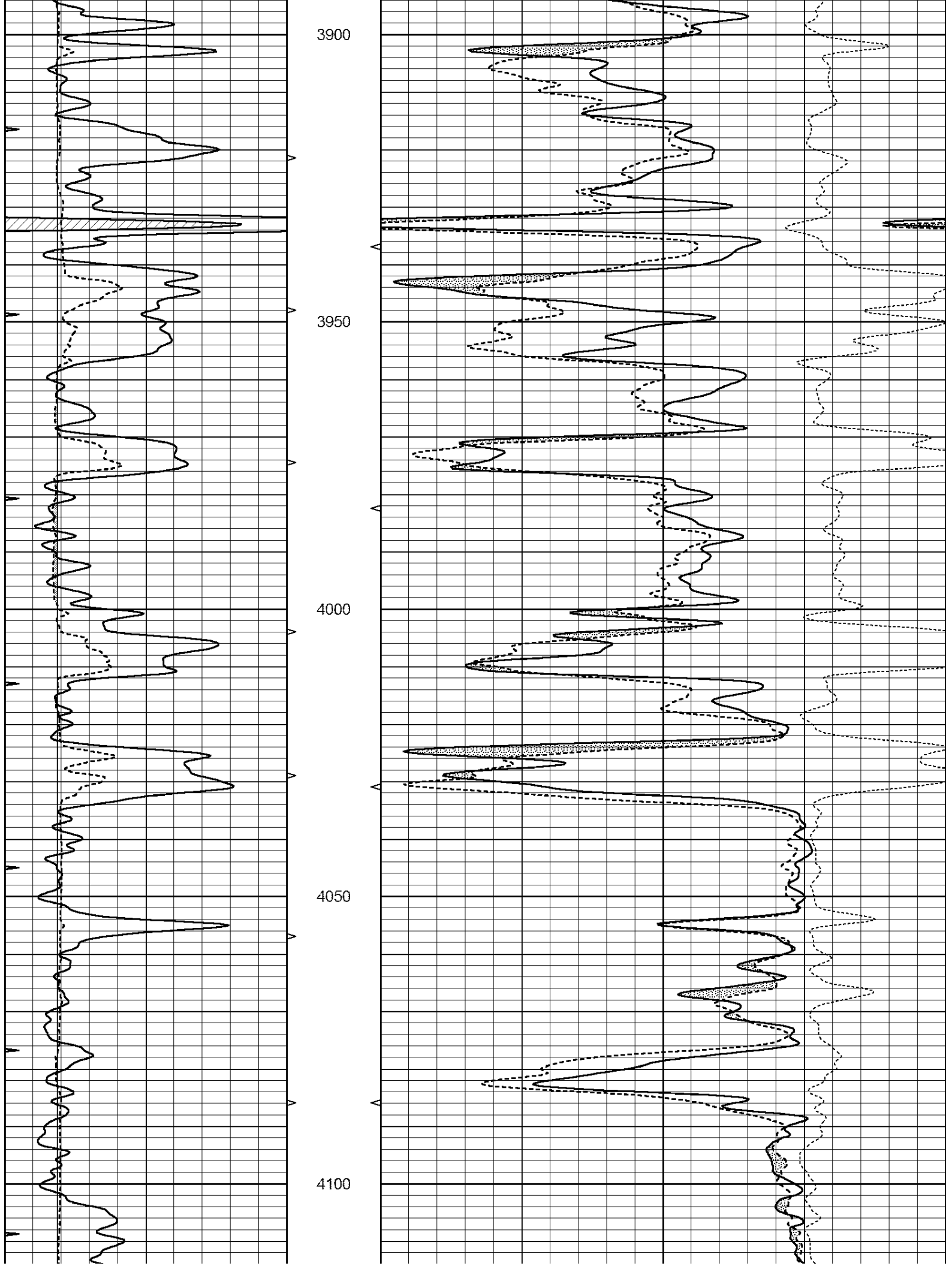
MAIN SECTION

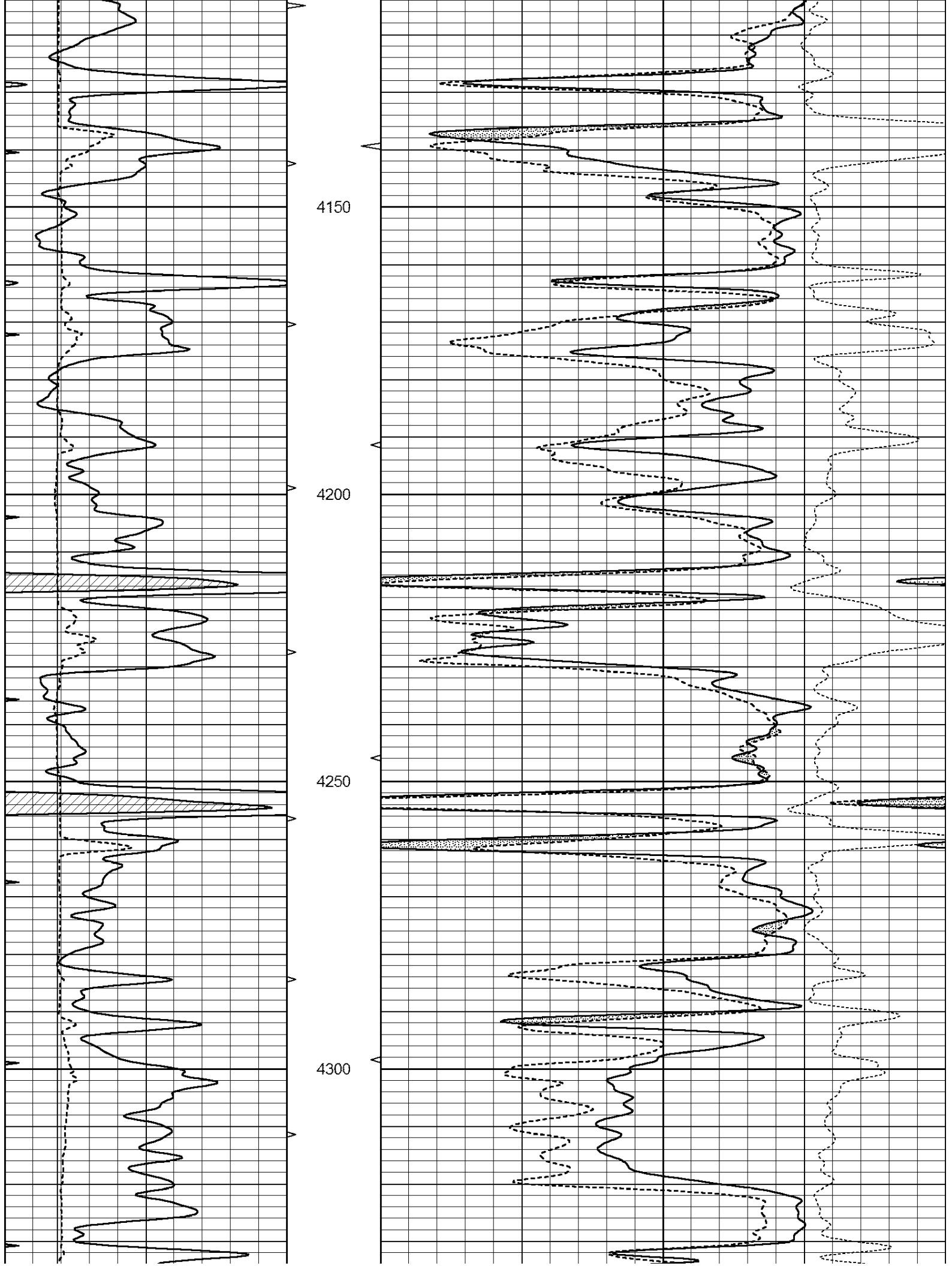
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 Dataset Pathname: pass3.5
 Presentation Format: den_neu
 Dataset Creation: Wed Jul 20 13:19:20 2011
 Charted by: Depth in Feet scaled 1:240

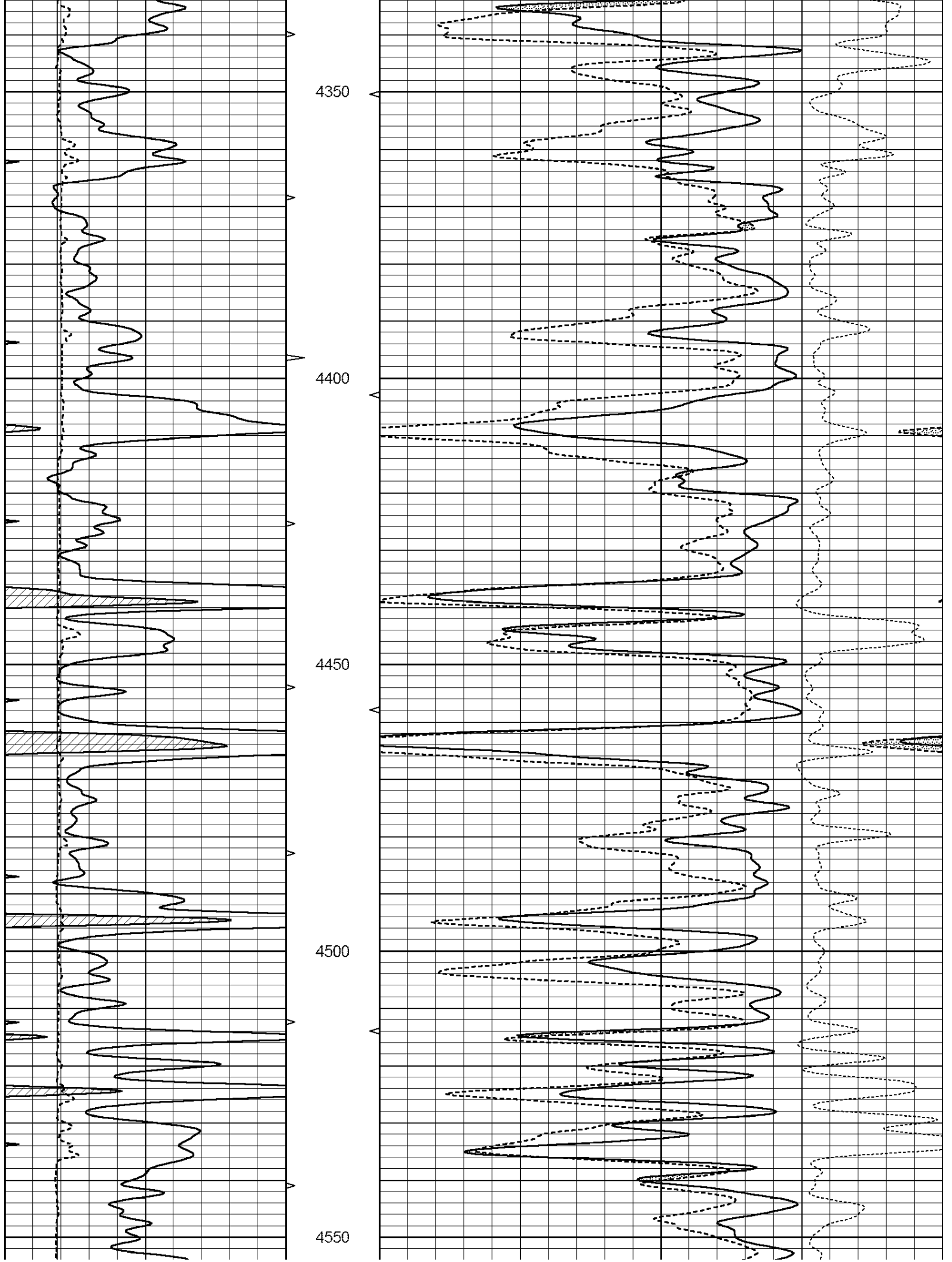
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		

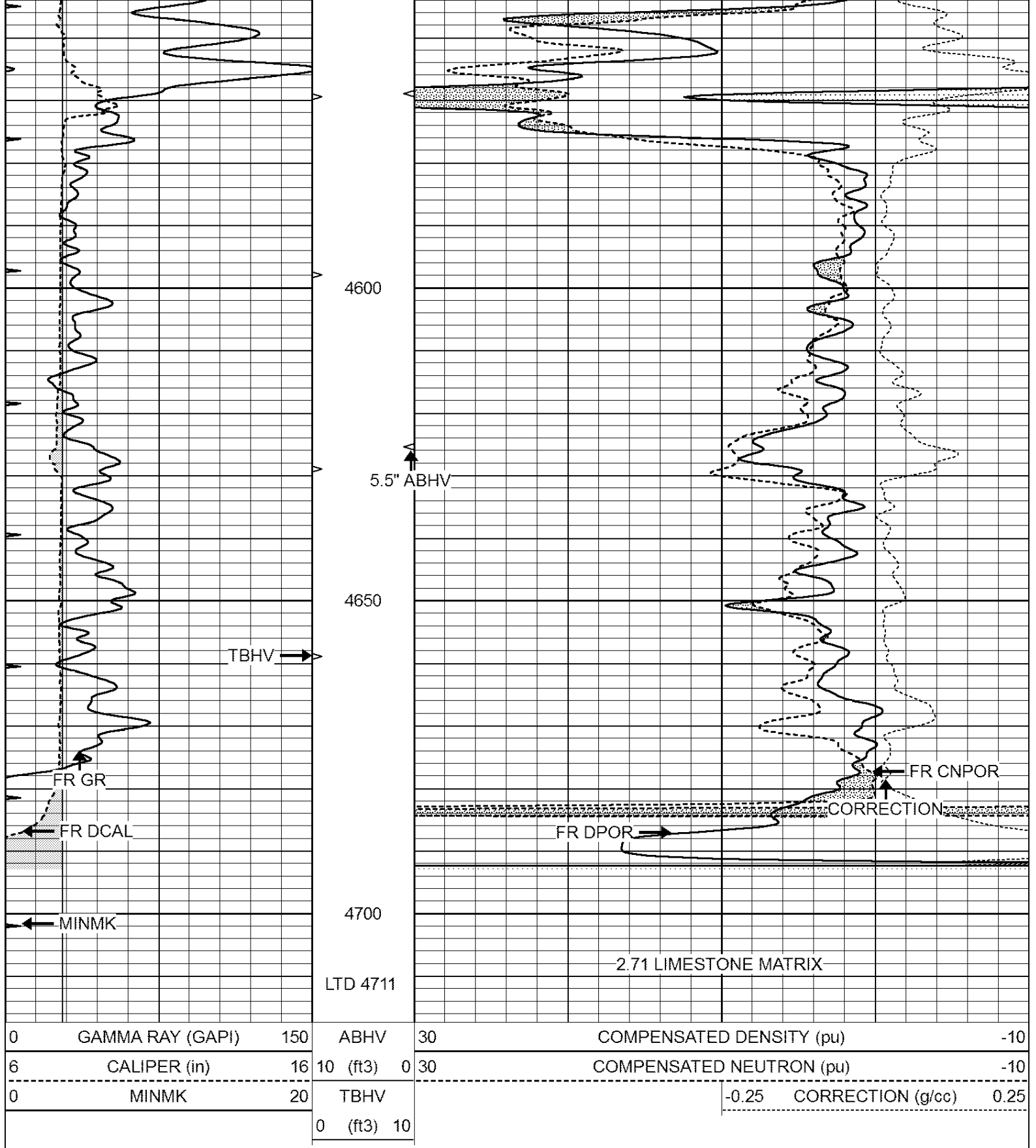










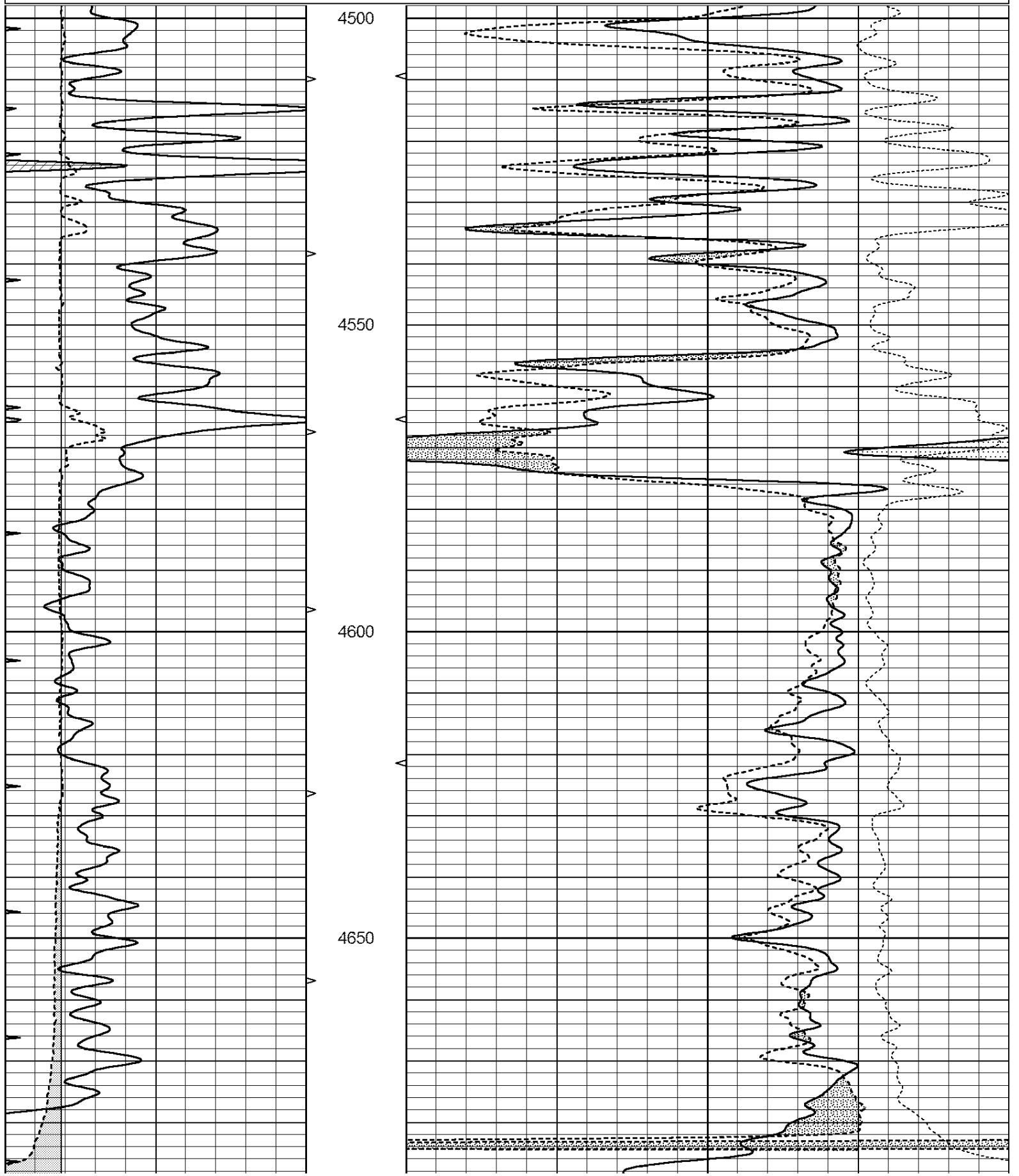


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REPEAT SECTION

Database File: 007094ddn.db
 Dataset Pathname: pass2.5
 Presentation Format: den neu

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		



			4700						
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: 007094ddn.db
 Dataset Pathname: pass3.5
 Dataset Creation: Wed Jul 20 13:19:20 2011

Dual Induction Calibration Report

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

		Readings					References		Results	
Loop:	Air	Loop		Air	Loop		m	b		
Deep	0.011	0.656	V	0.000	400.000	mmho/m	640.000	9.000		
Medium	0.013	0.740	V	0.000	462.500	mmho/m	700.000	-6.000		
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: 006 Model: PRB
 Performed Sun Aug 15 09:48:41 2010

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1686.6	11612.8	3932.0	12718.8	cps
Window 2	1531.4	9204.7	3267.8	9851.9	cps
Window 3	1198.3	4733.6	1952.5	4920.6	cps
Window 4	317.3	321.2	325.9	303.6	cps
Long Space	0.0	7673.3	1736.4	8320.4	cps
Short Space	1.7	2548.5	1657.2	2628.8	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	
Rib Angle	: 43.8	Rib Slope	: 0.961	Density/Spine Ratio	: 0.569
Spine Angle	: 73.8	Spine Slope	: 3.453	Spine Intercept	: -18.1

Caliper

	Readings	Reference	
Low Ref	4.4	8.6	
High Ref	6.5	15.0	
Gain:	3.0		Offset: -4.3

Compensated Neutron Calibration Report

Serial Number: NELL 41

Serial Number: NLO_41
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: 3.5000 GAPI/cps