



**SUPERIOR
Hays,
Kansas**

**COMPENSATED
DENSITY / NEUTRON
LOG**

Company MULL DRILLING COMPANY, INC.
Well KENT "A" #1-28
Field
County LANE
State KANSAS

Company MULL DRILLING COMPANY, INC.
Well KENT "A" #1-28
Field
County LANE State KANSAS

Location: API #: 15-101-22263
2158' FSL & 2582' FEL
SEC 28 TWP 17S RGE 29W
Permanent Datum GROUND LEVEL Elevation 2811
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
DIL
SONIC/MEL
Elevation
K.B. 2816
D.F.
G.L. 2811

Date	12-4-10
Run Number	ONE
Depth Driller	4650
Depth Logger	4652
Bottom Logged Interval	4628
Top Log Interval	3700
Casing Driller	226
Casing Logger	226
Bit Size	7.875
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.3 / 53
pH / Fluid Loss	9.5 / 6.4
Source of Sample	FLOWLINE
Rm @ Meas. Temp	1.50 @ 73F
Rmf @ Meas. Temp	1.13 @ 73F
Rmc @ Meas. Temp	1.80 @ 73F
Source of Rmf / Rmc	MEASURED
Rm @ BHT	.900 @ 121F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	1:15 P.M.
Maximum Recorded Temperature	121F
Equipment Number	860
Location	HAYS, KS.
Recorded By	RUPP
Witnessed By	KEVIN KESSLER

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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

SUPERIOR WELL SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: DIGHTON, 4N TO RD. #190, 2W, 1/2N, W INTO.

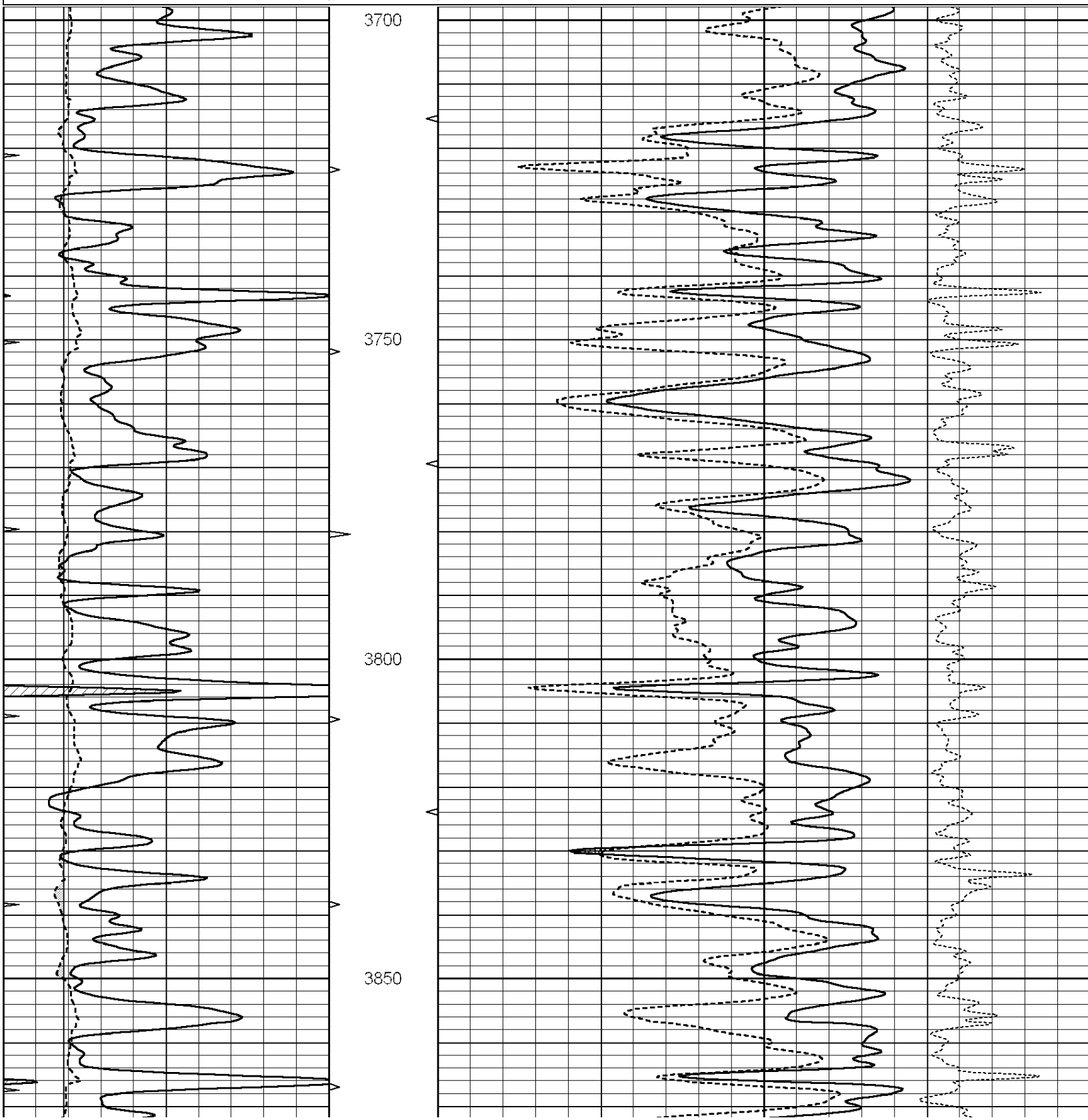


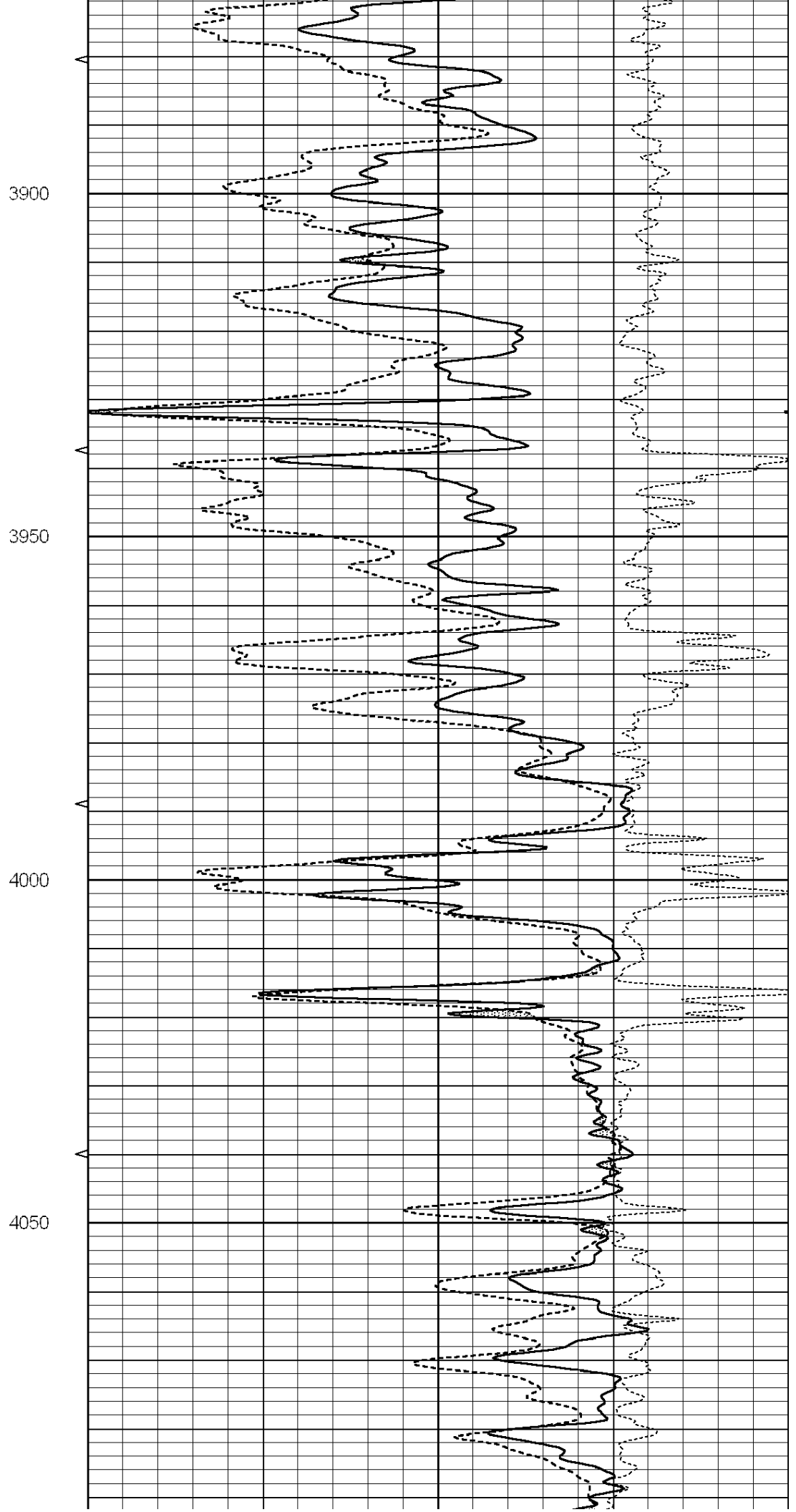
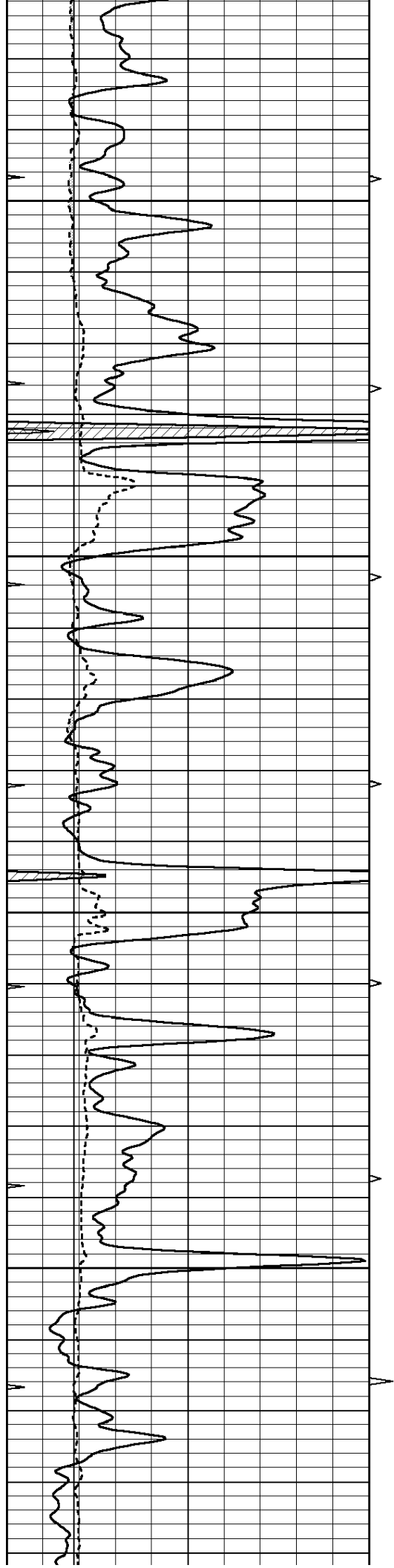
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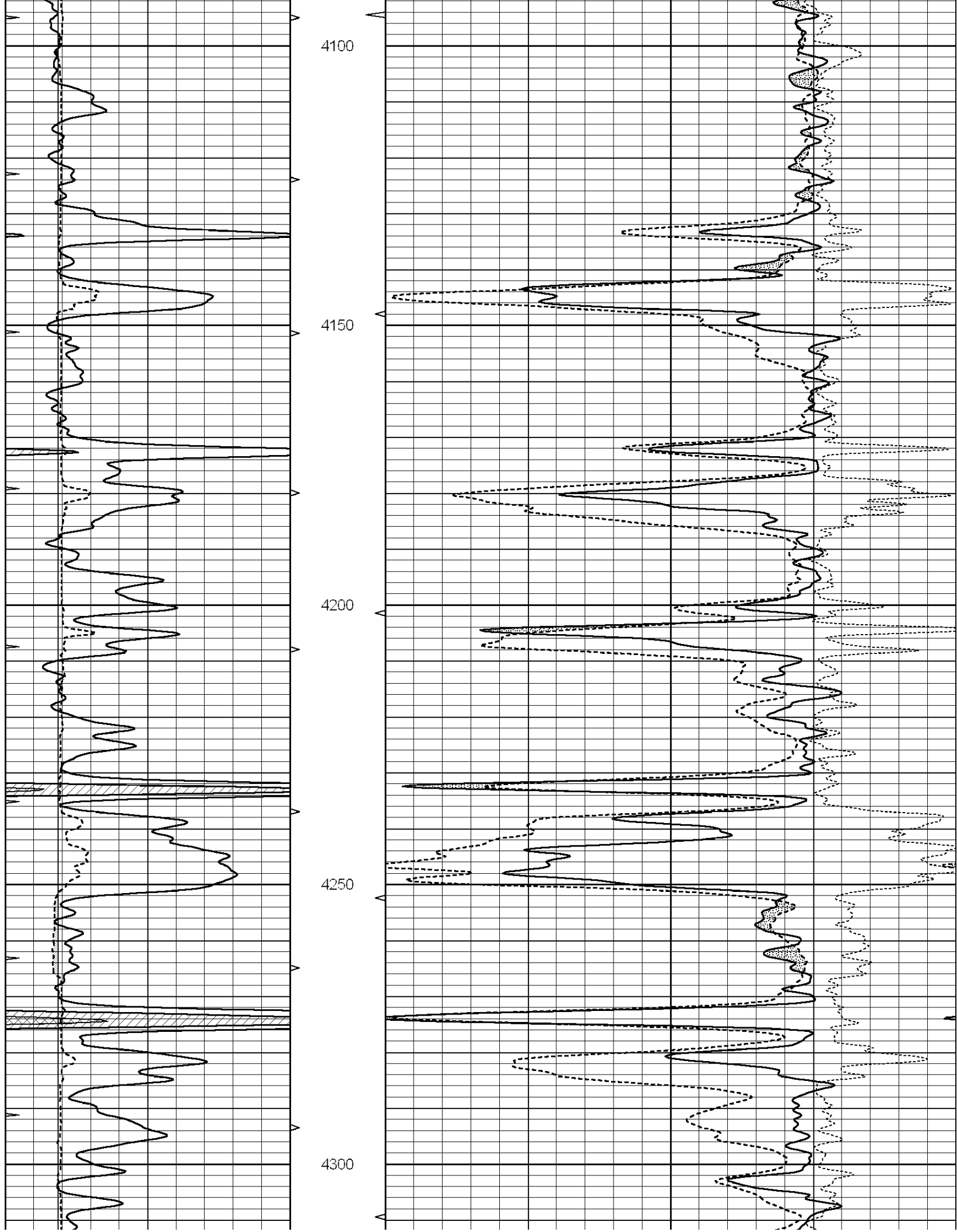
MAIN SECTION

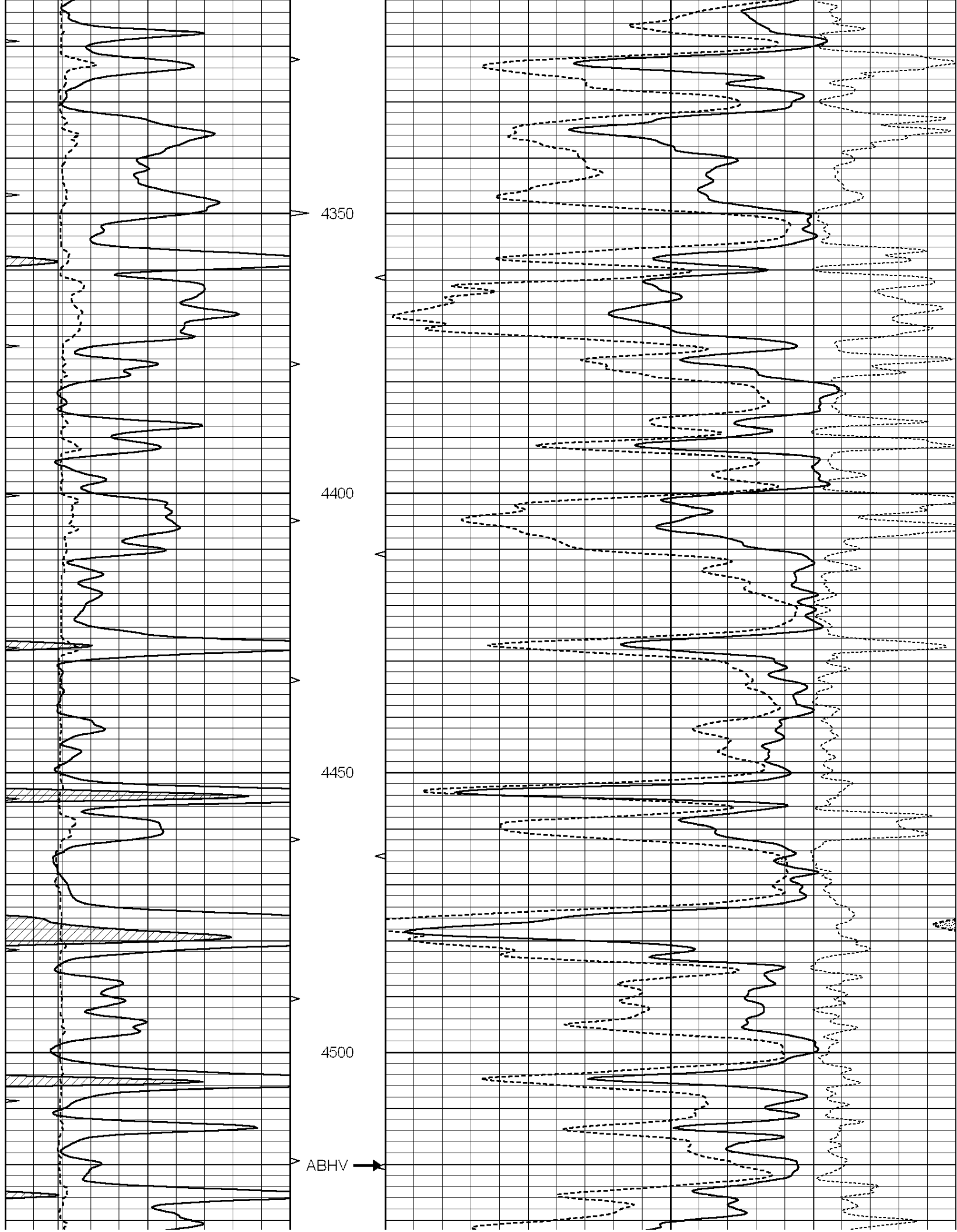
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 Dataset Pathname: pass3.1A
 Presentation Format: den_neu
 Dataset Creation: Sat Dec 04 04:46:50 2010
 Charted by: Depth in Feet scaled 1:240

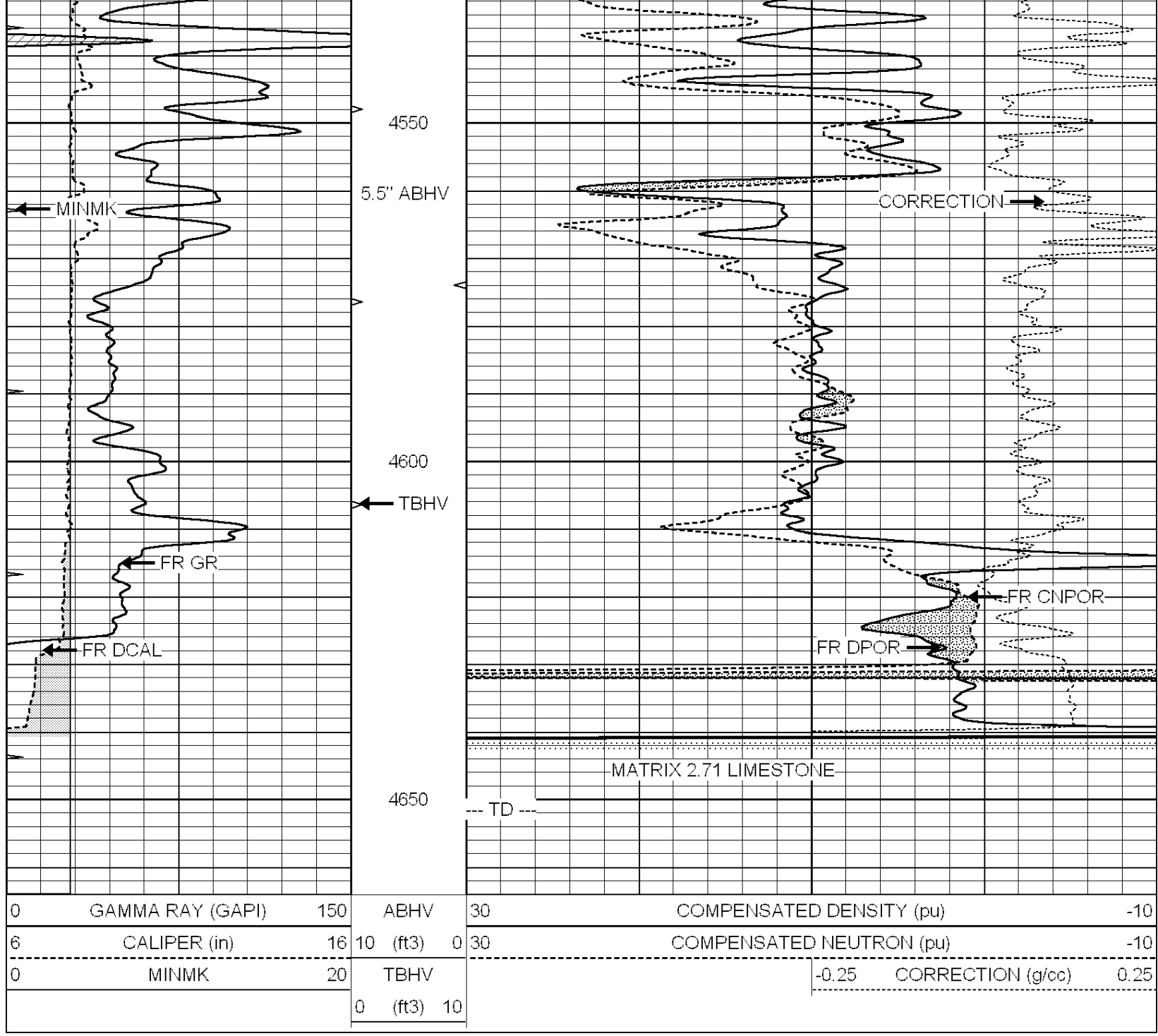
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		











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		

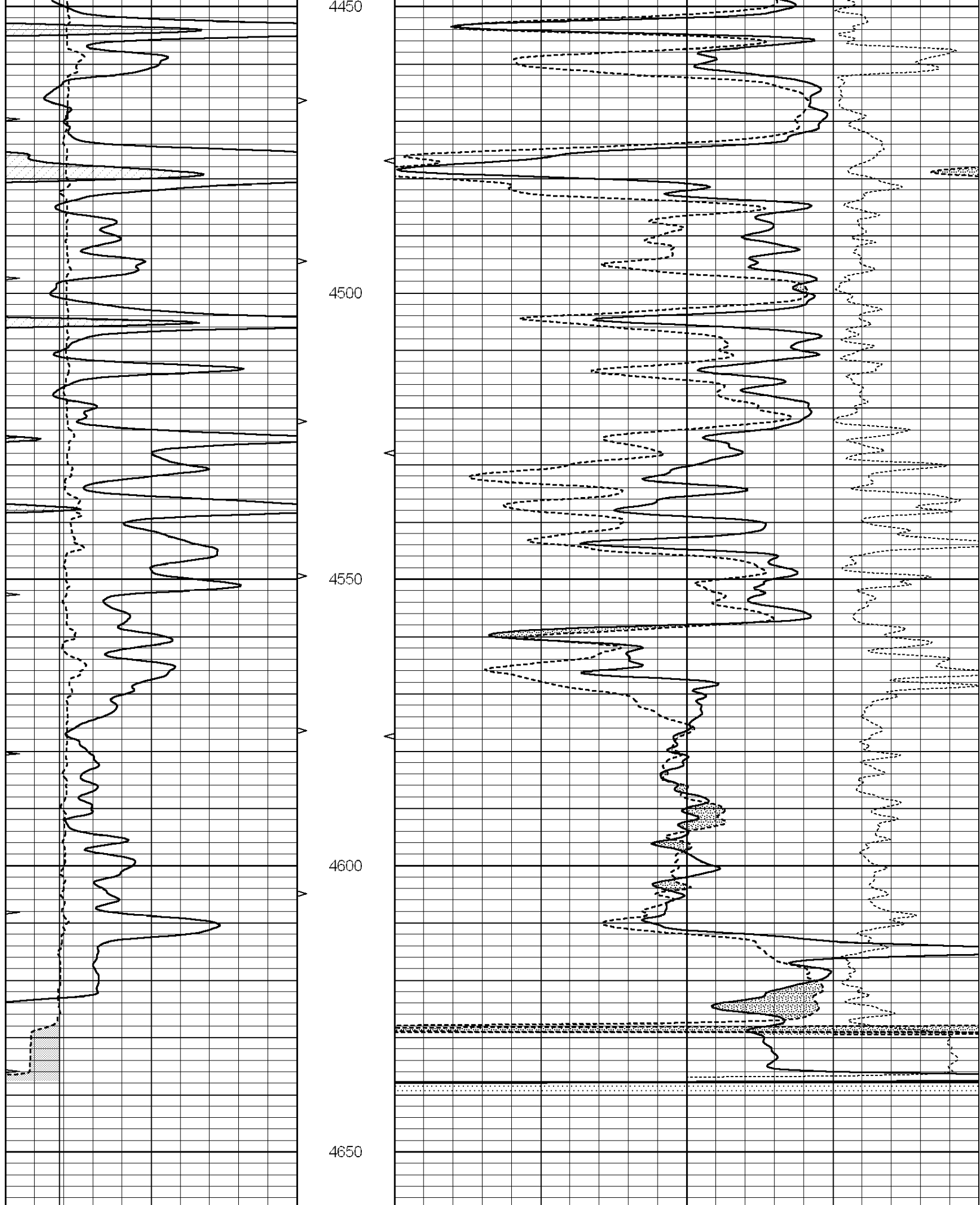


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REPEAT SECTION

Database File: 006304ddn.db
 Dataset Pathname: pass2.1A
 Presentation Format: den_neu
 Dataset Creation: Sat Dec 04 03:55:18 2010 by Calc Open-Cased 090629
 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		



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: 006304ddn.db
 Dataset Pathname: pass3.1A
 Dataset Creation: Sat Dec 04 04:46:50 2010

Dual Induction Calibration Report

Serial-Model: DIL5-GEAR
 Performed: Sat Dec 04 03:53:21 2010

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.004	0.654	V	0.000	400.000	mmho/m	540.000	-7.000
Medium	-0.005	0.737	V	0.000	462.500	mmho/m	520.000	-11.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.006	0.655	V	0.000	400.000	mmho/m	615.668	-3.483
Medium	0.010	0.747	V	0.000	462.500	mmho/m	627.607	-6.064

Compensated Density Calibration Report

Serial-Model: GEAR1-GEARHART
 Source / Verifier: 147 / 147
 Master Calibration Performed: Sat Dec 04 03:29:01 2010

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1243.76	629.14	cps
Aluminum	2.600	g/cc	282.16	435.01	cps
Spine Angle = 76.03			Density/Spine Ratio = 0.582		
	Size		Reading		
Small Ring	7.70	in	3.82	V	
Large Ring	14.00	in	6.37	V	

Compensated Neutron Calibration Report

Serial Number: NEU_11
 Tool Model: G

CALIBRATION

Detector	Readings		Target		Normalization
Short Space	1.00	cps	1.00	cps	1.0000
Long Space	1.00	cps	1.00	cps	1.0000

Gamma Ray Calibration Report

Serial Number: GR5
 Tool Model: OPEN
 Performed: Sat Dec 04 03:51:59 2010

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

Calibrator Reading:

1.0

cps

Sensitivity:

0.6500

GAPI/cps