



**SUPERIOR
Hays,
Kansas**

**COMPENSATED
DENSITY / NEUTRON
LOG**

Company	RITCHIE EXPLORATION, INC.		
Well	MOORE D/P #8		
Field			
County	NESS	State	KANSAS
Location:	API # : 15-135-25355		Other Services DIL BTM. GAMMA
	1340' FNL & 600' FWL		
	SEC 30 TWP 19S RGE 21W		
Permanent Datum	GROUND LEVEL	Elevation	2276
Log Measured From	KELLY BUSHING 10' A.G.L.		K.B. 2286
Drilling Measured From	KELLY BUSHING		D.F. G.L. 2276
Date	2-14-12		
Run Number	ONE		
Depth Driller	4450		
Depth Logger	4451		
Bottom Logged Interval	4427		
Top Log Interval	3700		
Casing Driller	218		
Casing Logger	218		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.2 / 45		
pH / Fluid Loss	10.0 / 8.4		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.55 @ 81F		
Rmf @ Meas. Temp	0.41 @ 81F		
Rmc @ Meas. Temp	0.66 @ 81F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	.370 @ 119F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	3:30 P.M.		
Maximum Recorded Temperature	119F		
Equipment Number	860		
Location	HAYS, KS.		
Recorded By	RUPP		
Witnessed By	MAX LOVELY		

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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: BAZINE 5 1/2S, 1/4E, S INTO.

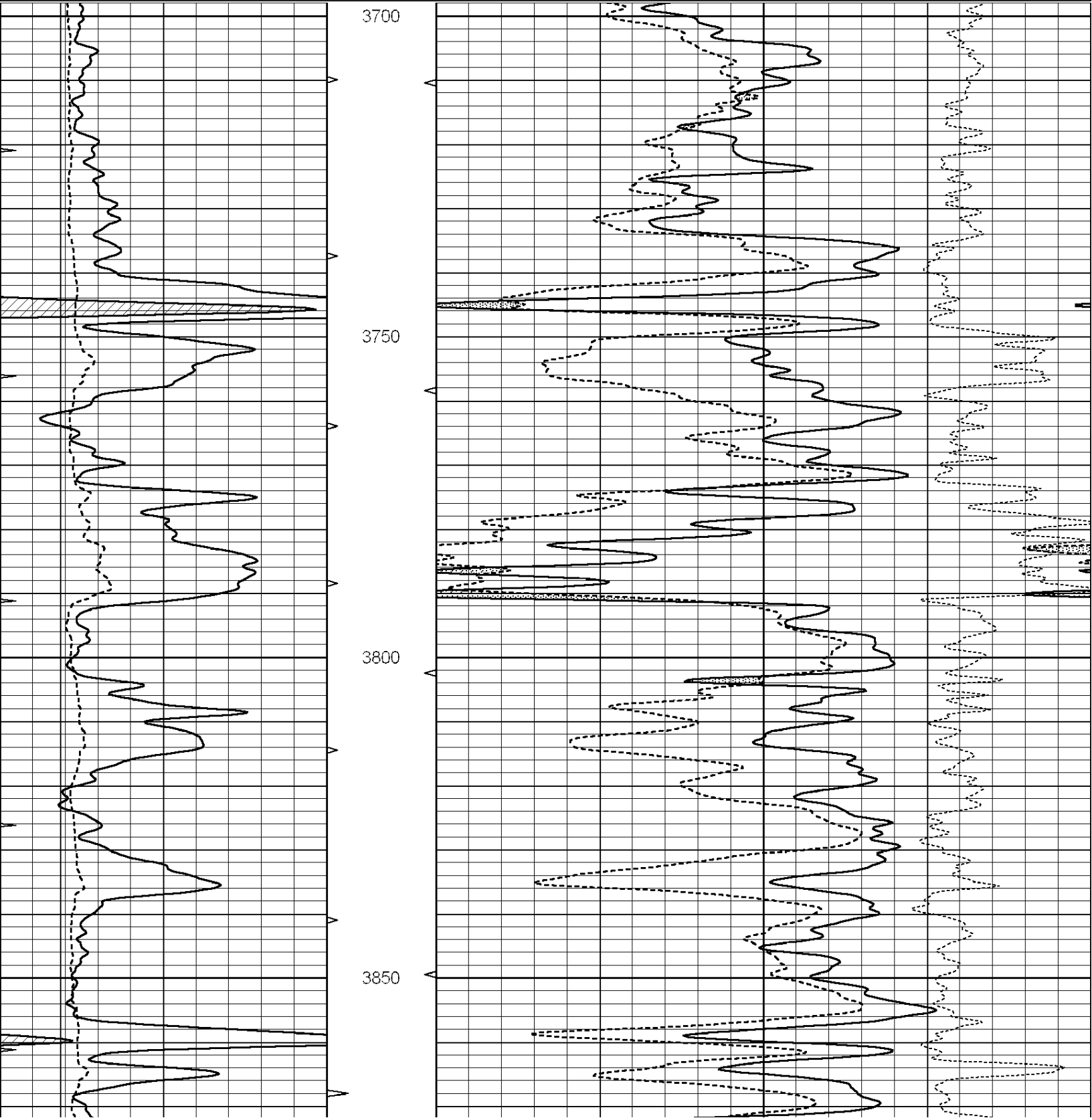


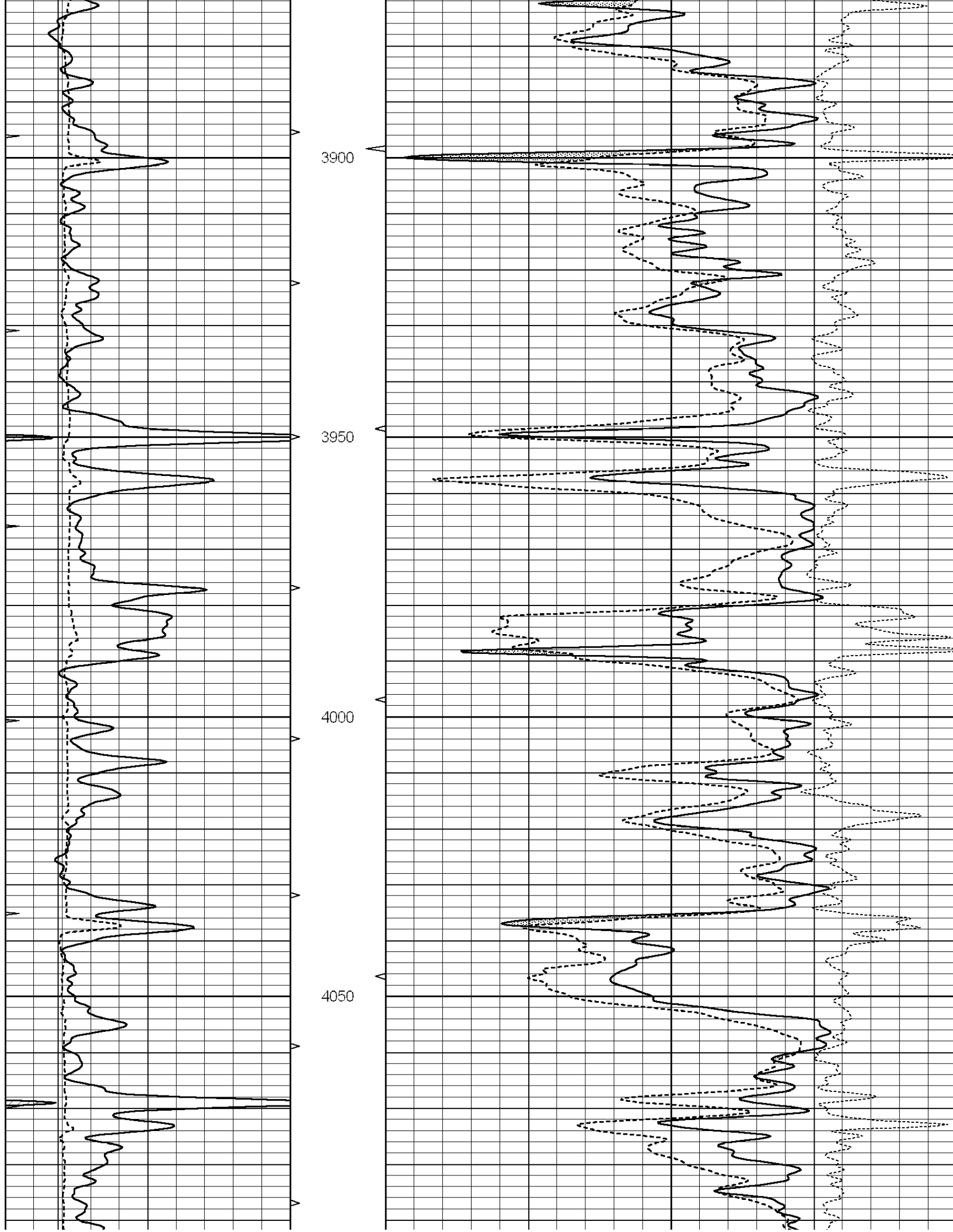
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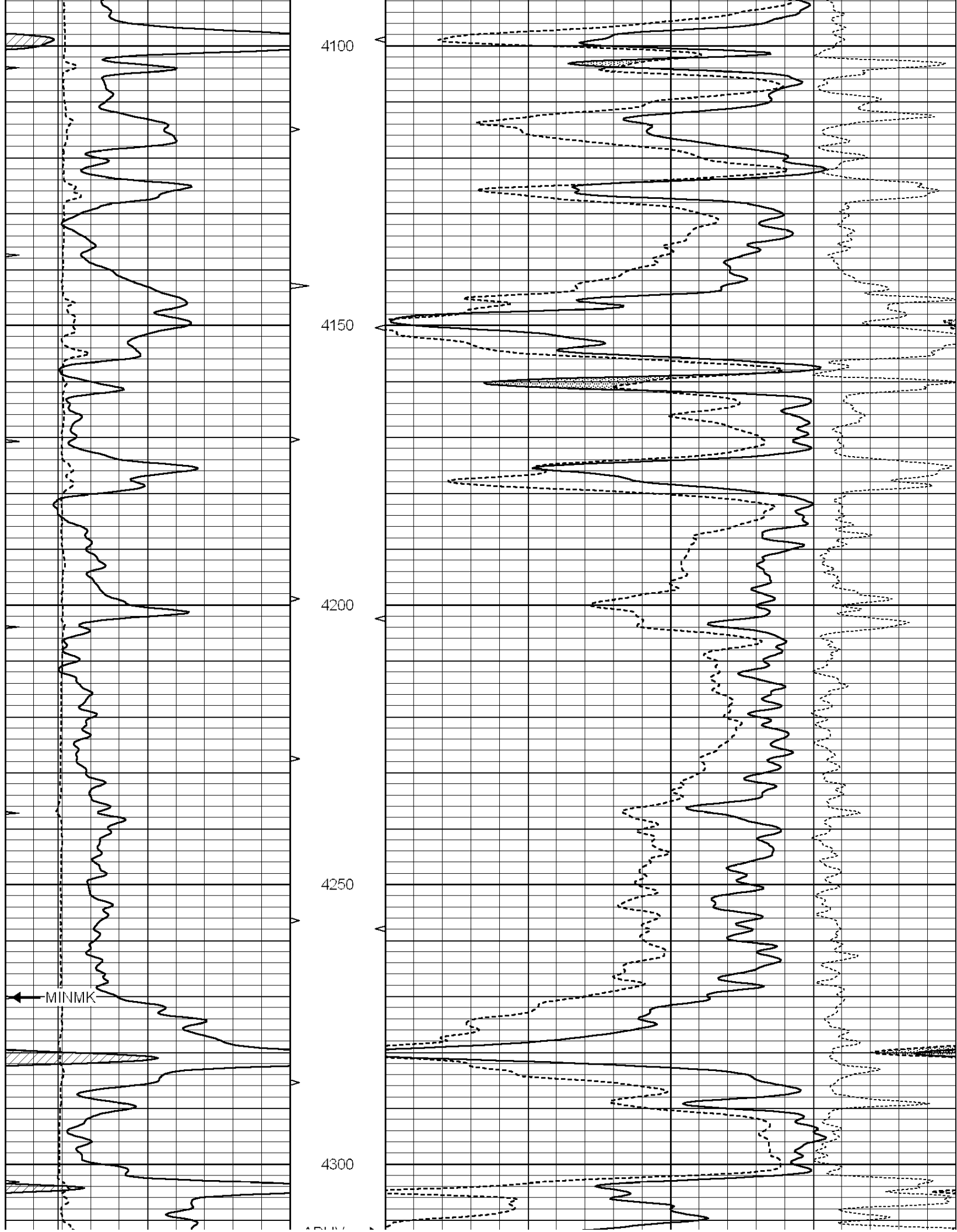
MAIN SECTION

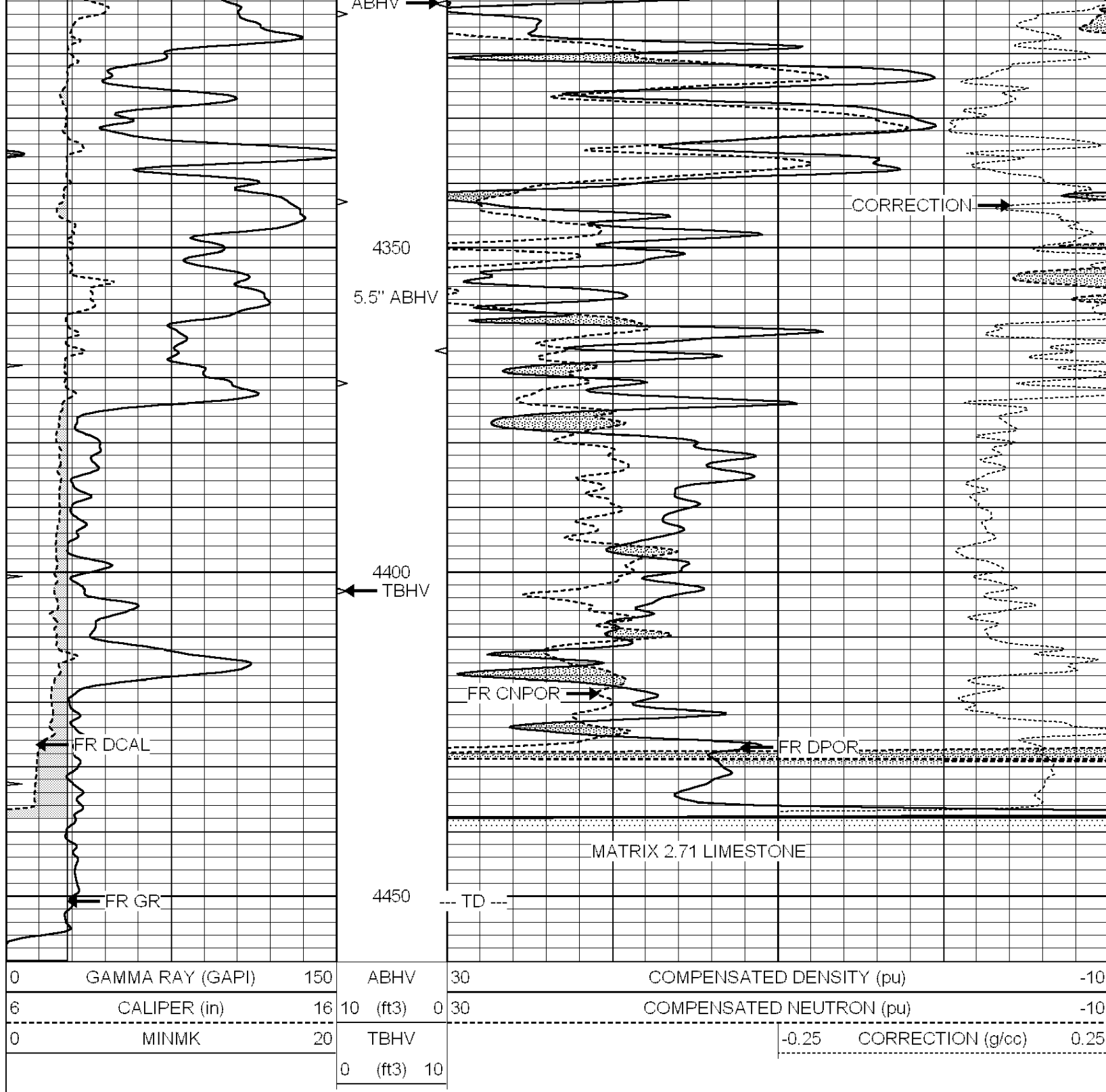
Database File: 008476ddn.db
Dataset Pathname: pass3.A
Presentation Format: den_neu
Dataset Creation: Tue Feb 14 17:49:01 2012
Charted by: Depth in Feet scaled 1:240

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		









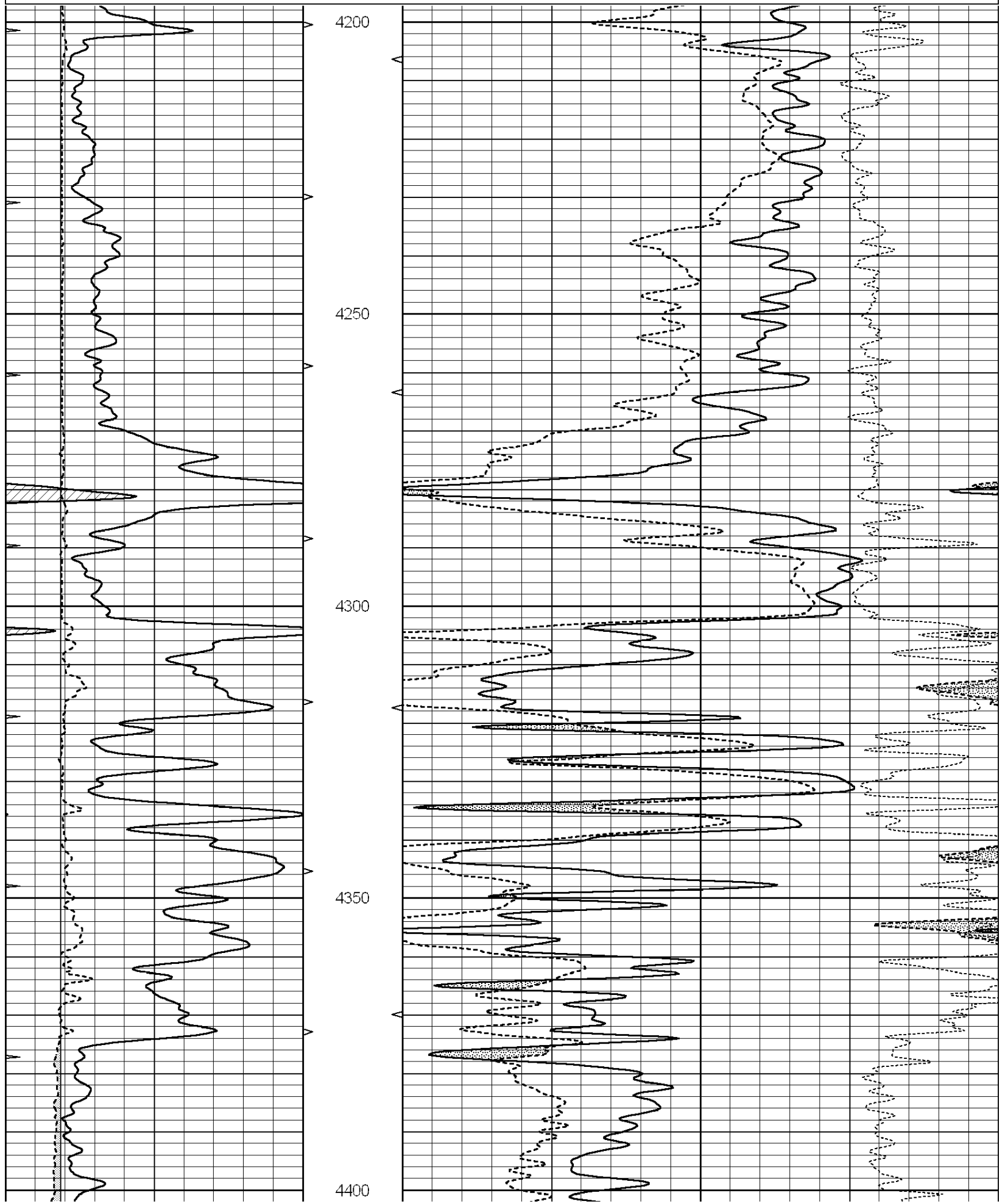
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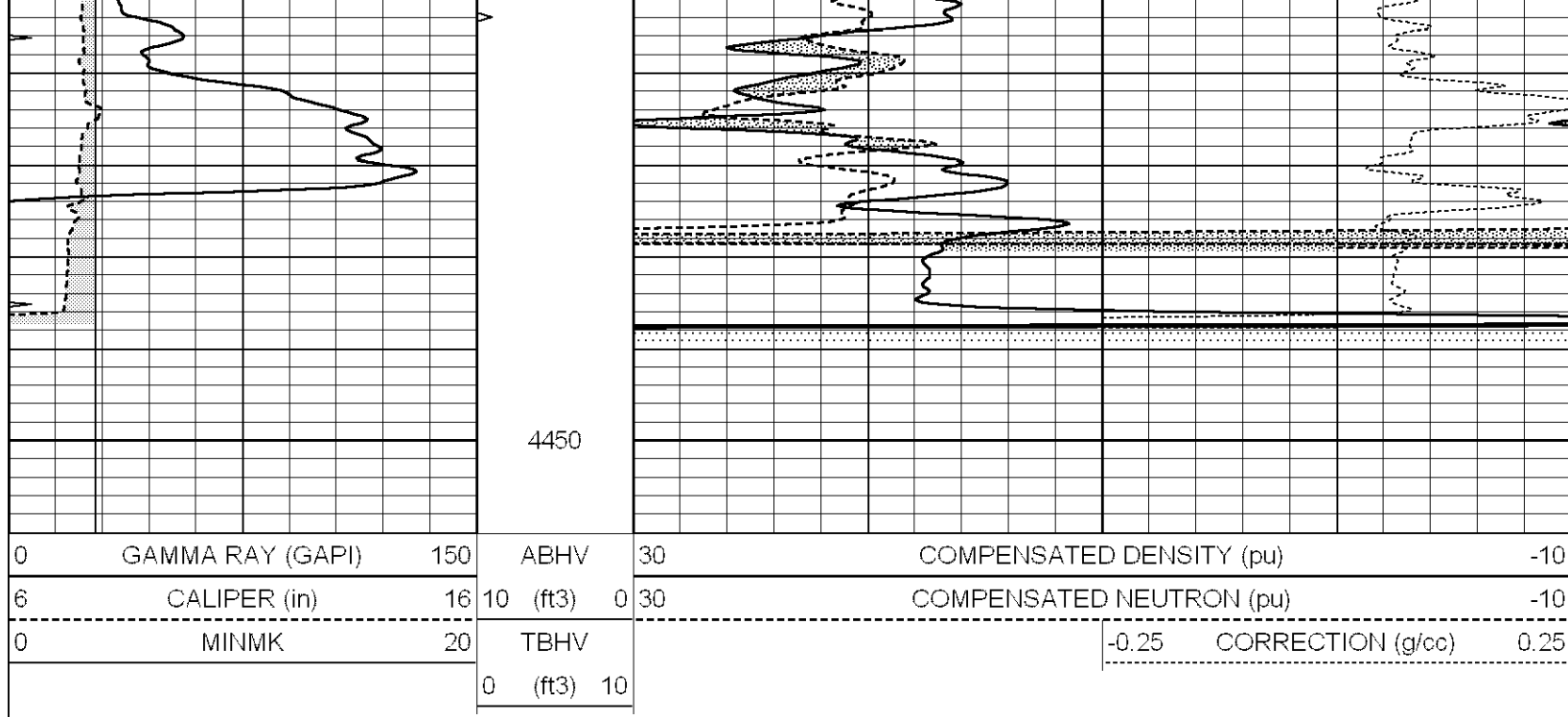
REPEAT SECTION

Database File: 008476ddn.db
 Dataset Pathname: pass2.A
 Presentation Format: den_neu
 Dataset Creation: Tue Feb 14 16:47:34 2012 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
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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: 008476ddn.db
 Dataset Pathname: pass3.A
 Dataset Creation: Tue Feb 14 17:49:01 2012

Dual Induction Calibration Report

Serial-Model: DIL5-GEAR
 Performed: Tue Feb 14 16:44:15 2012

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.004	0.654	V	0.000	400.000	mmho/m	510.000	-17.000
Medium	-0.005	0.737	V	0.000	462.500	mmho/m	530.000	-14.000
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: Tue Feb 14 15:19:14 2012

Master Calibration

	Density		Far Detector		Near Detector	
Magnesium	1.710	g/cc	1243.76		629.14	cps
Aluminum	2.590	g/cc	282.16		435.01	cps
Spine Angle = 76.03			Density/Spine Ratio = 0.576			
	Size		Reading			
Small Ring	9.20	in	3.50		V	
Large Ring	14.00	in	5.30		V	

Compensated Neutron Calibration Report

Compensated Neutron Calibration Report

Serial Number:
Tool Model:NUE_2I
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:

Tue Feb 14 16:18:46 2012

Calibrator Value:

1.0

GAPI

Background Reading:

0.0

cps

Calibrator Reading:

1.0

cps

Sensitivity:

0.6500

GAPI/cps