



**SUPERIOR
Hays,
Kansas**

**COMPENSATED
DENSITY
NEUTRON LOG**

Company RITCHIE EXPLORATION, INC.
Well #2 HESS 29 "A"
Field
County GOVE
State KANSAS

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Well #2 HESS 29 "A"
Field
County GOVE State KANSAS

Location: API #: 15-063-21819
1525' FNL & 900' FEL
SEC 29 TWP 13S RGE 31W
Permanent Datum GROUND LEVEL Elevation 2857
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
DIL
Elevation
K.B. 2862
D.F.
G.L. 2857

Date	12-8-09		
Run Number	ONE		
Depth Driller	4635		
Depth Logger	4635		
Bottom Logged Interval	4611		
Top Log Interval	3600		
Casing Driller	219		
Casing Logger	NA		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.3 / 48		
pH / Fluid Loss	10.0 / 7.2		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	1.20 @ 58F		
Rinf @ Meas. Temp	0.90 @ 58F		
Rmc @ Meas. Temp	1.44 @ 58F		
Source of Rinf / Rmc	MEASURED		
Rim @ BHT	.580 @ 121F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	8:45 P.M.		
Maximum Recorded Temperature	121F		
Equipment Number	860		
Location	HAYS, KS.		
Recorded By	RUPP		
Witnessed By	JEFF CHRISTIAN		

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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: OAKLEY, S TO THE GOVE RD., 3E, 4S, 1E TO EAST OF THE TANK BATTERIES, S INTO.

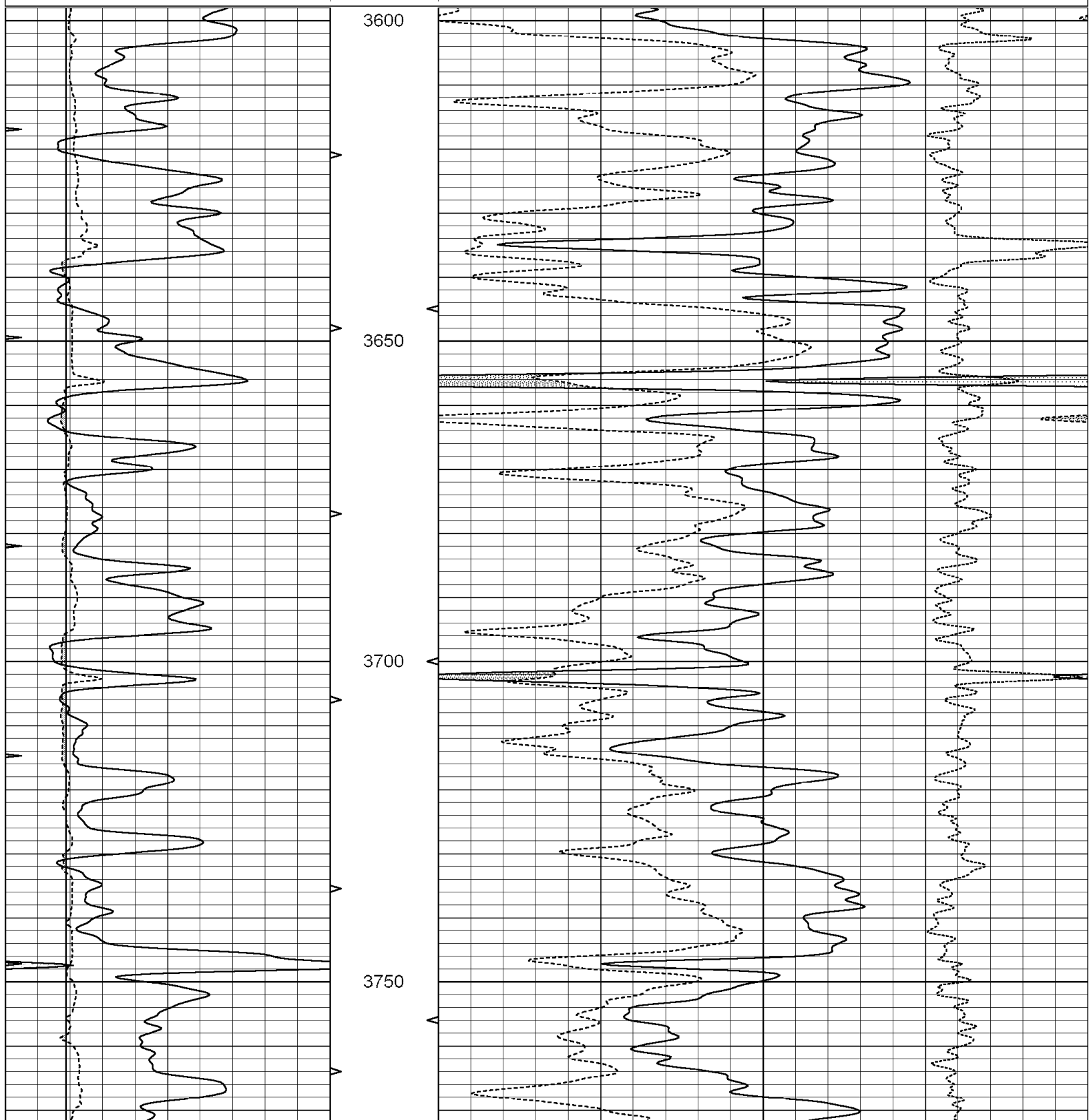


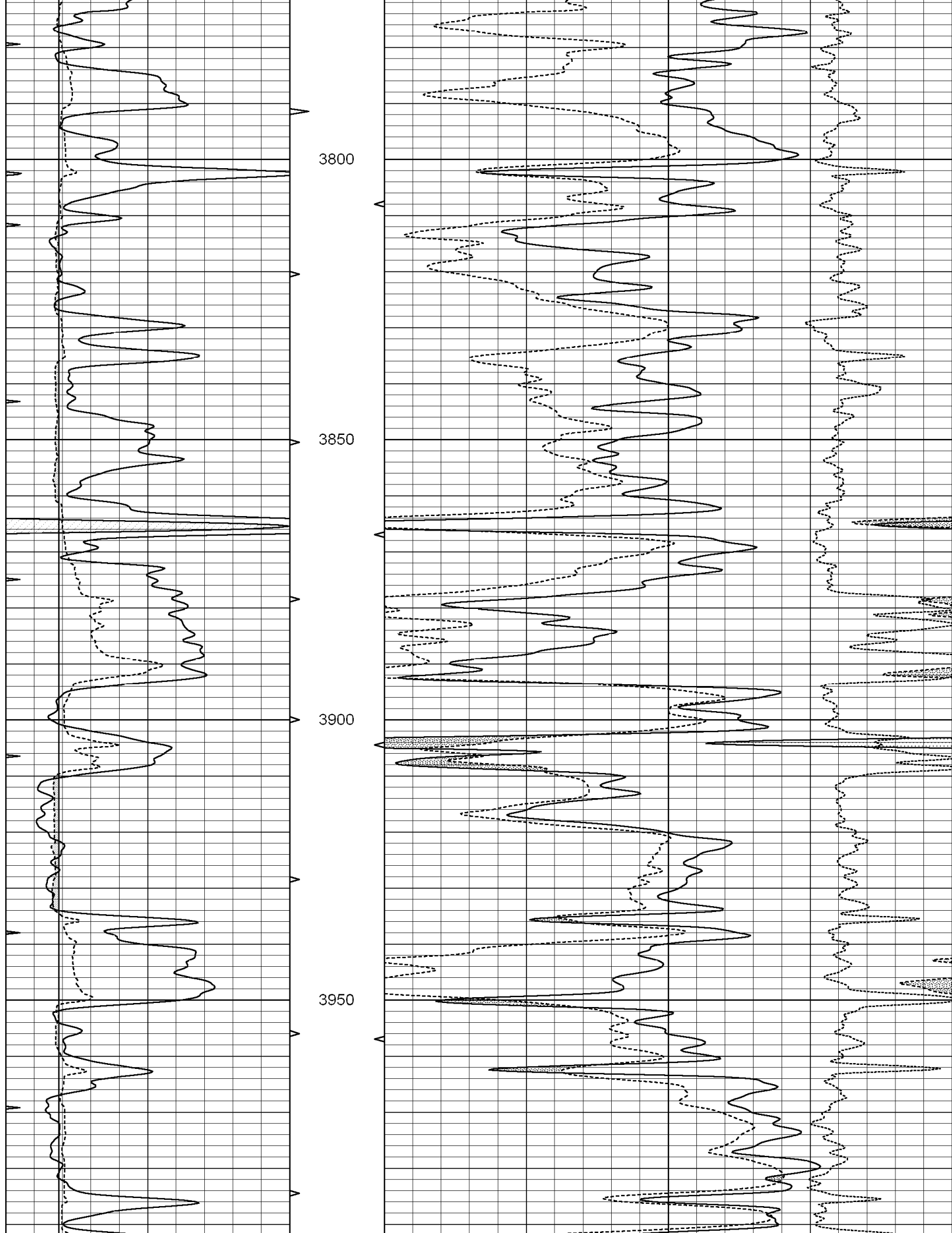
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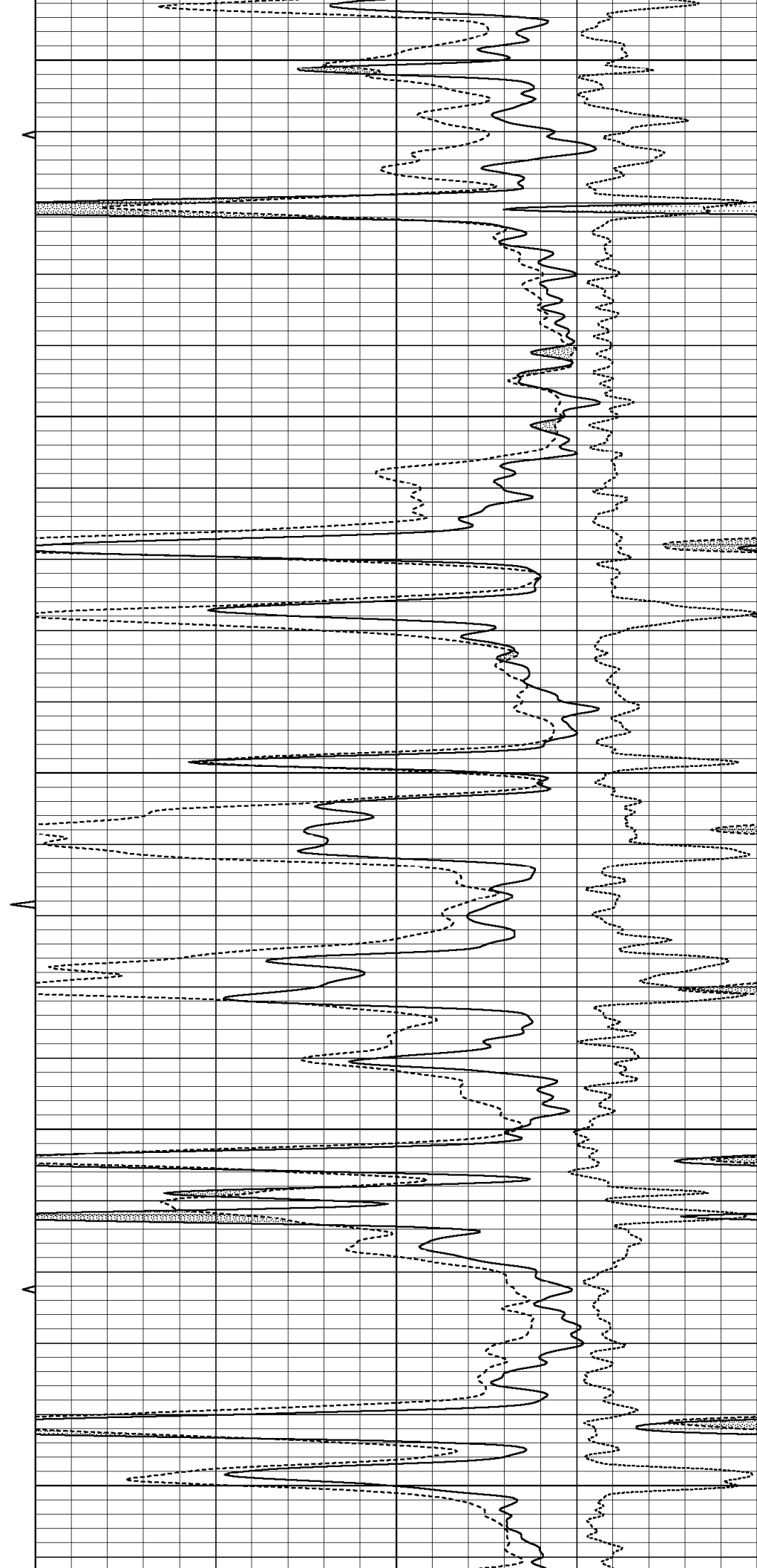
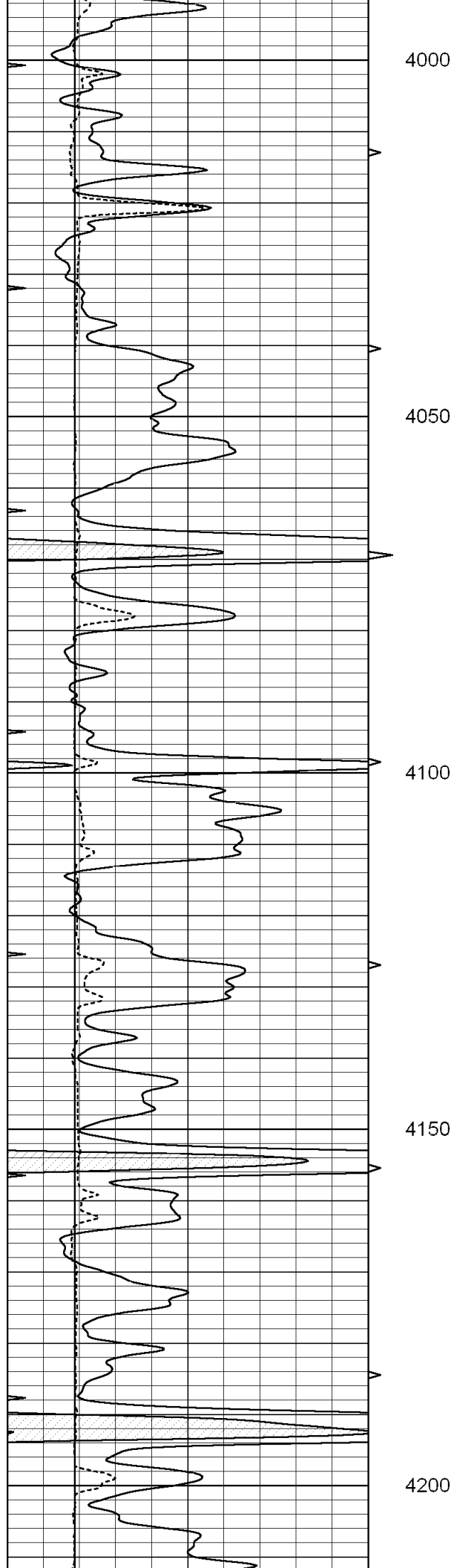
MAIN SECTION

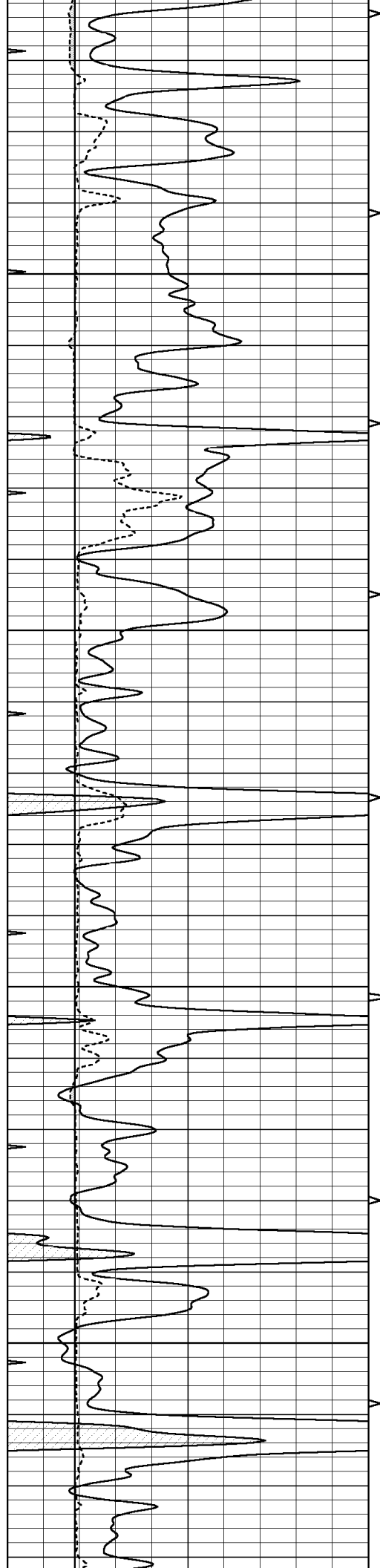
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Dataset Pathname: pass3.1A
Presentation Format: den_neu
Dataset Creation: Tue Dec 08 22:41:49 2009
Charted by: Depth in Feet scaled 1:240

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			







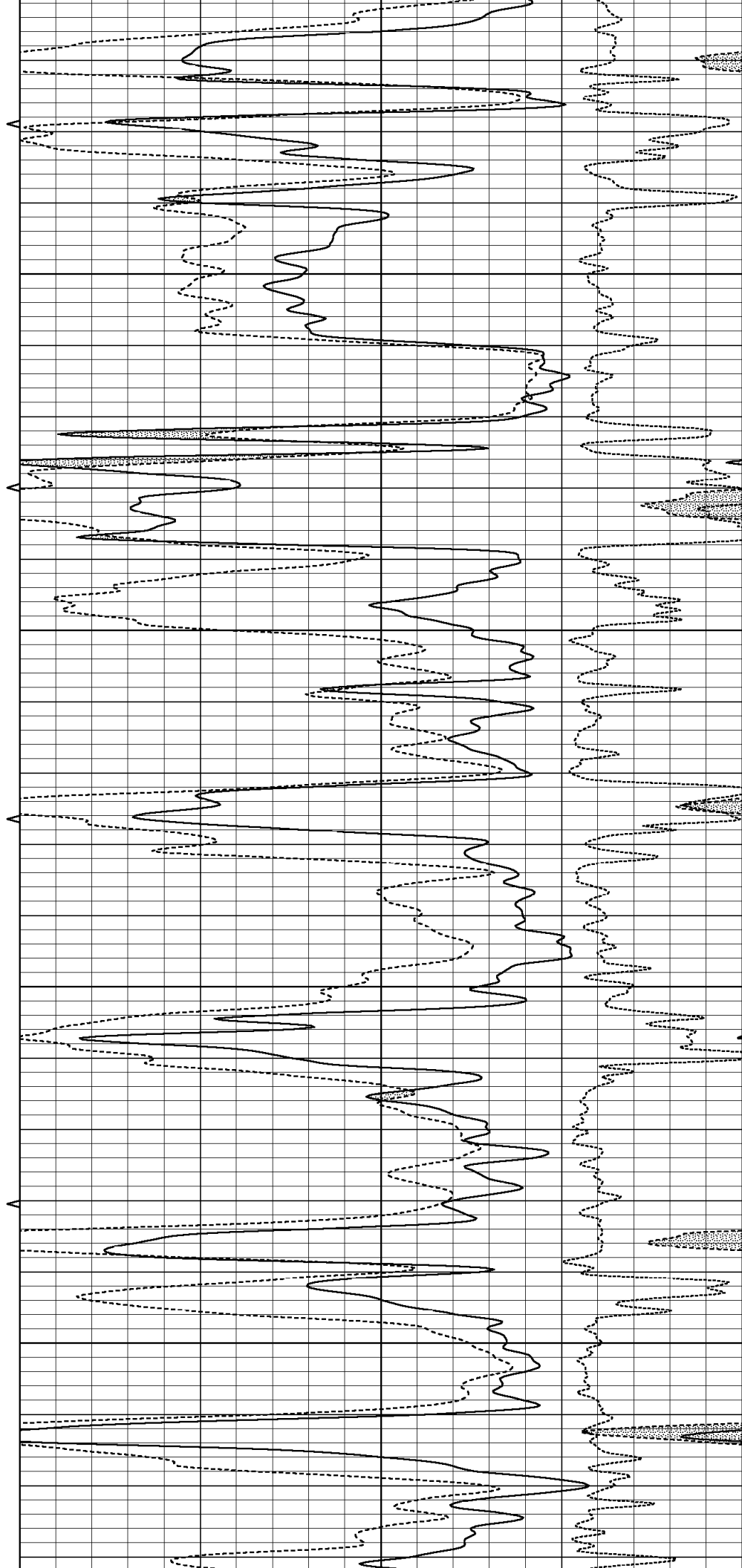


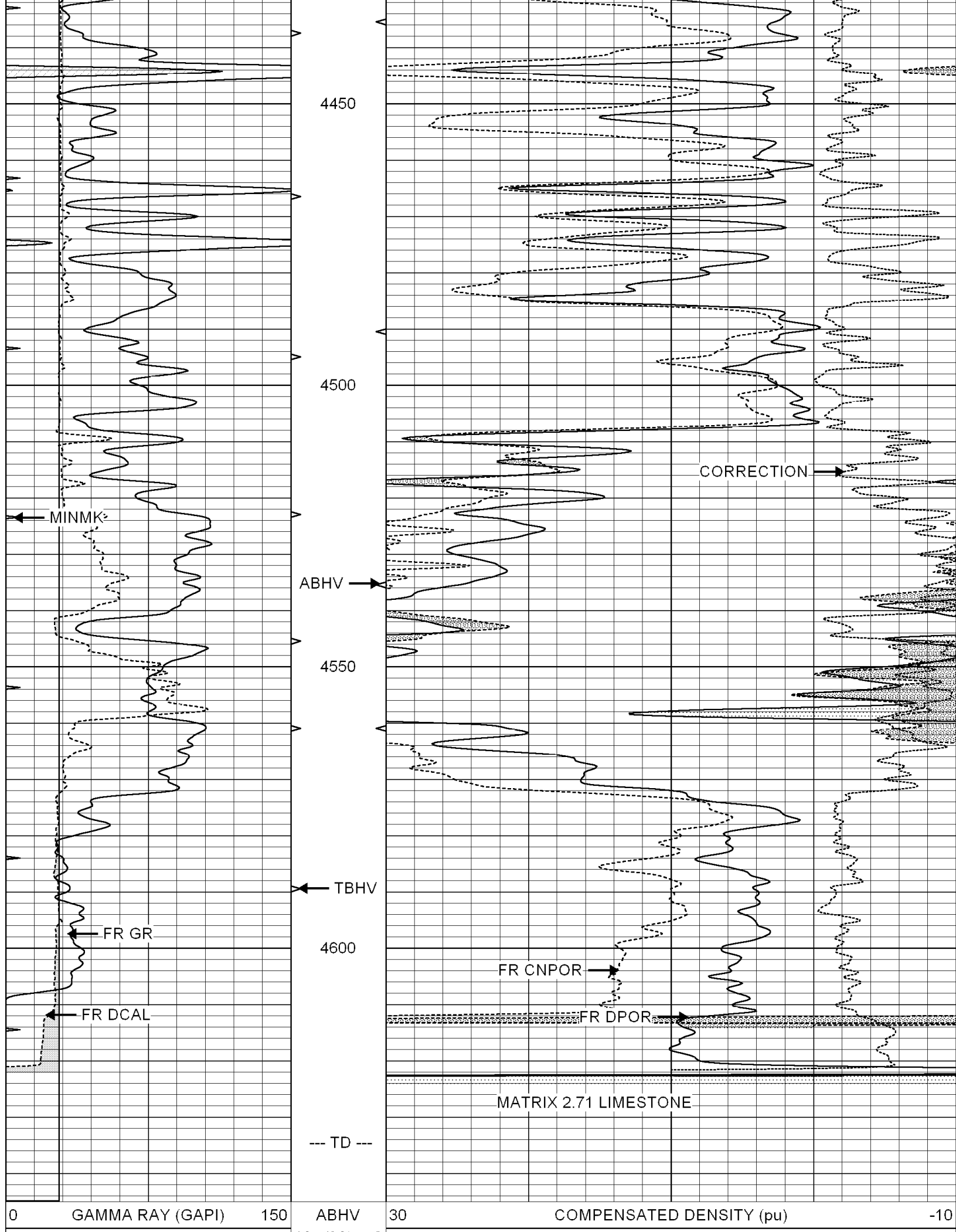
4250

4300

4350

4400





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				



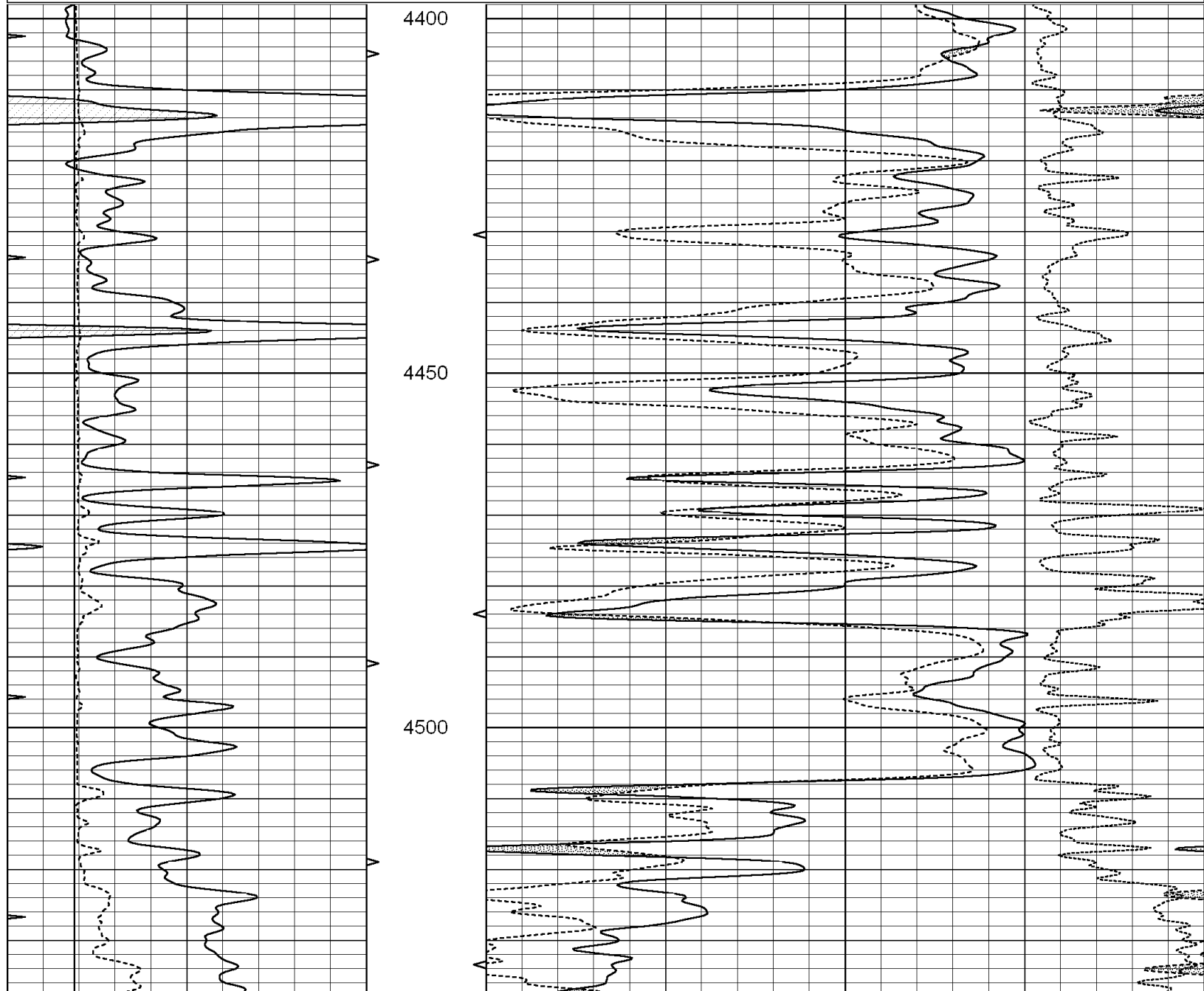
SUPERIOR

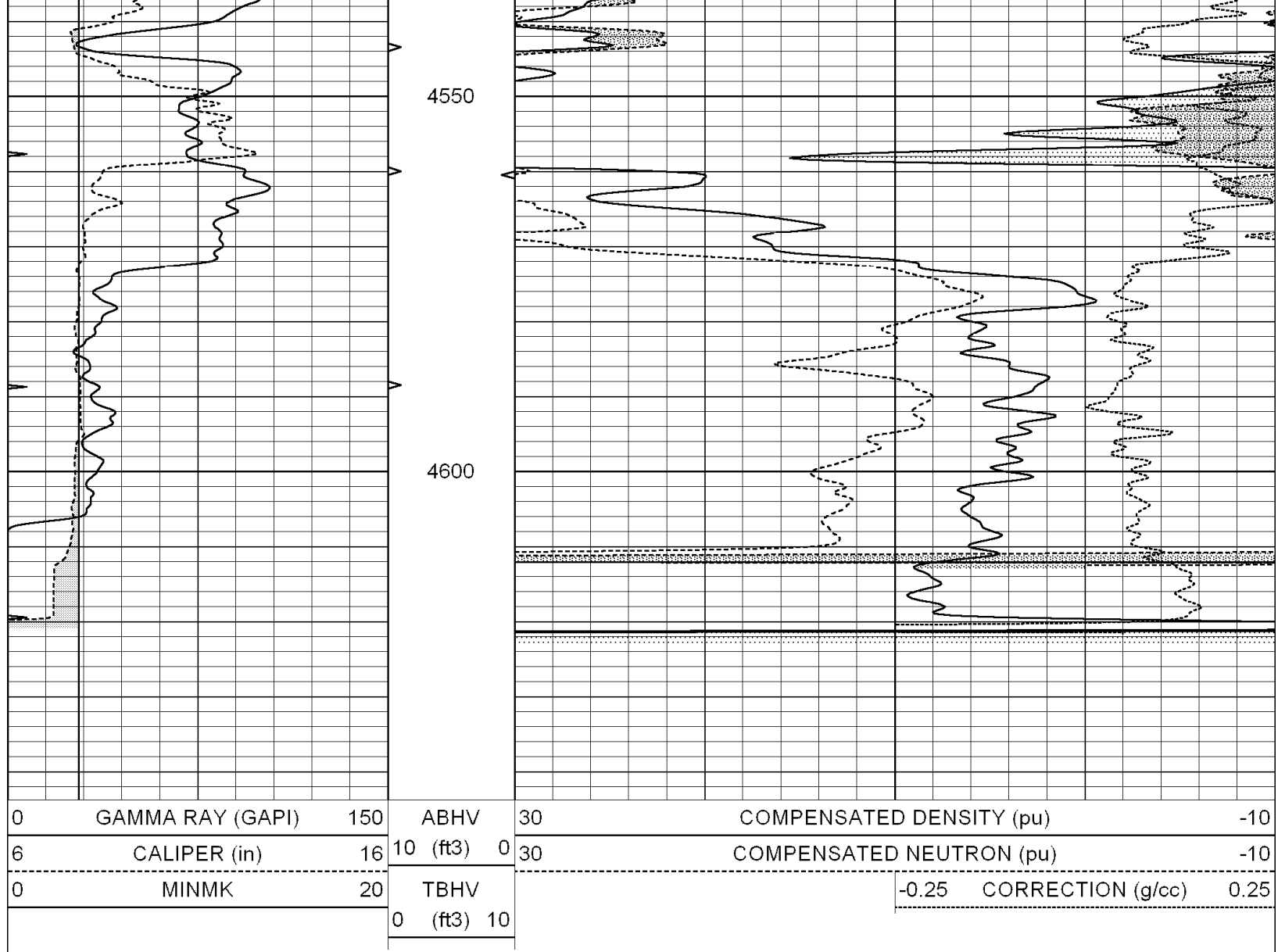
Hays,
Kansas

REPEAT SECTION

Database File:	004320ddn.db
Dataset Pathname:	pass2.1A
Presentation Format:	den_neu
Dataset Creation:	Tue Dec 08 21:51:58 2009 by Calc Open-Cased 051020
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:		004320ddn.db						
Dataset Pathname:		pass3						
Dataset Creation:		Tue Dec 08 21:01:00 2009 by Log Open-Cased 051020						
Dual Induction Calibration Report								
Serial-Model:			DIL5-GEAR					
Performed:			Tue Dec 08 21:50:13 2009					
Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.004	0.654	V	0.000	400.000	mmho-m	560.000	-4.000
Medium	-0.005	0.737	V	0.000	462.500	mmho-m	540.000	-10.000
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 Dec 08 21:23:37 2009					

Master Calibration

	Density		Far Detector		Near Detector	
Magnesium	1.710	g/cc	1006.91		528.07	cps
Aluminum	2.610	g/cc	233.49		355.80	cps
Spine Angle = 74.88			Density/Spine Ratio = 0.594			
	Size		Reading			
Small Ring	8.00	in	3.68		V	
Large Ring	14.00	in	6.06		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: Mon Dec 07 17:19:06 2009

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.5800 GAPI/cps