



SUPERIOR
Hays,
Kansas

COMPENSATED DENSITY / NEUTRON LOG

Company RITCHIE EXPLORATION, INC.
Well FRAVEL - FISHER #1
Field WILDCAT
County FORD
State KANSAS

Company RITCHIE EXPLORATION, INC.
Well FRAVEL - FISHER #1
Field WILDCAT
County FORD State KANSAS

Location: 240' FNL & 850' FEL
NW - NE - NE
SEC 16 TWP 28S RGE 22W
Permanent Datum GROUND LEVEL Elevation 2409
Log Measured From KELLY BUSHING 11' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services DIL
Elevation K.B. 2420
D.F. 2418
G.L. 2409

Date	11/9/11		
Run Number	ONE		
Depth Driller	5210		
Depth Logger	5210		
Bottom Logged Interval	5186		
Top Log Interval	3400		
Casing Driller	8 5/8" @ 361'		
Casing Logger	360		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 13,800 PPM	
Density / Viscosity	9.1/55		
pH / Fluid Loss	9.0/13.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.400 @ 74F		
Rmt @ Meas. Temp	.300 @ 74F		
Rmc @ Meas. Temp	.480 @ 74F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	.233 @ 127F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	4:30 P.M.		
Maximum Recorded Temperature	127F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	MIKE ENGELBRECHT		

<<< Fold Here >>>

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
FORD, KS. 1 1/2 S.E. ON HWY 400 W. INTO

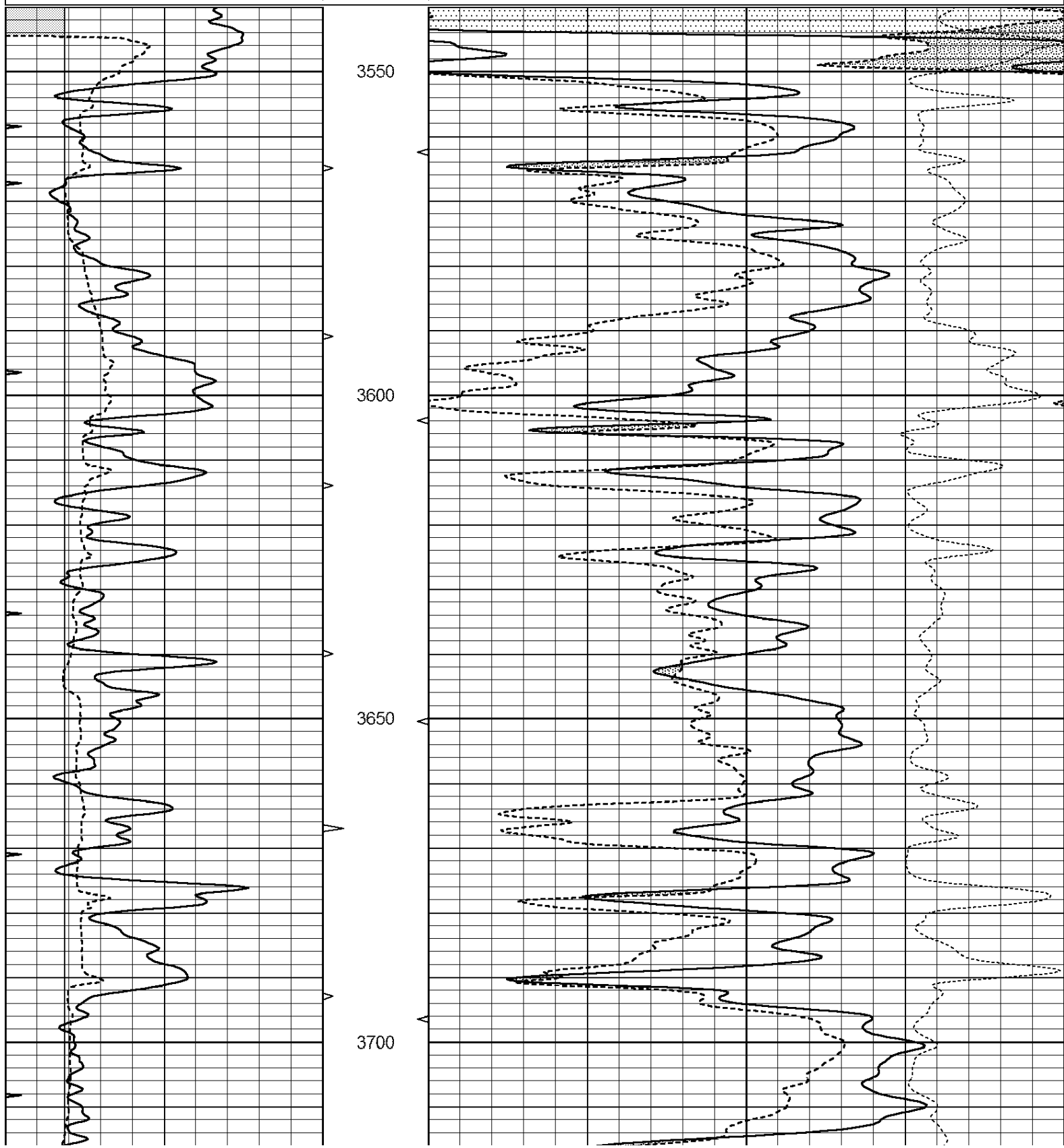


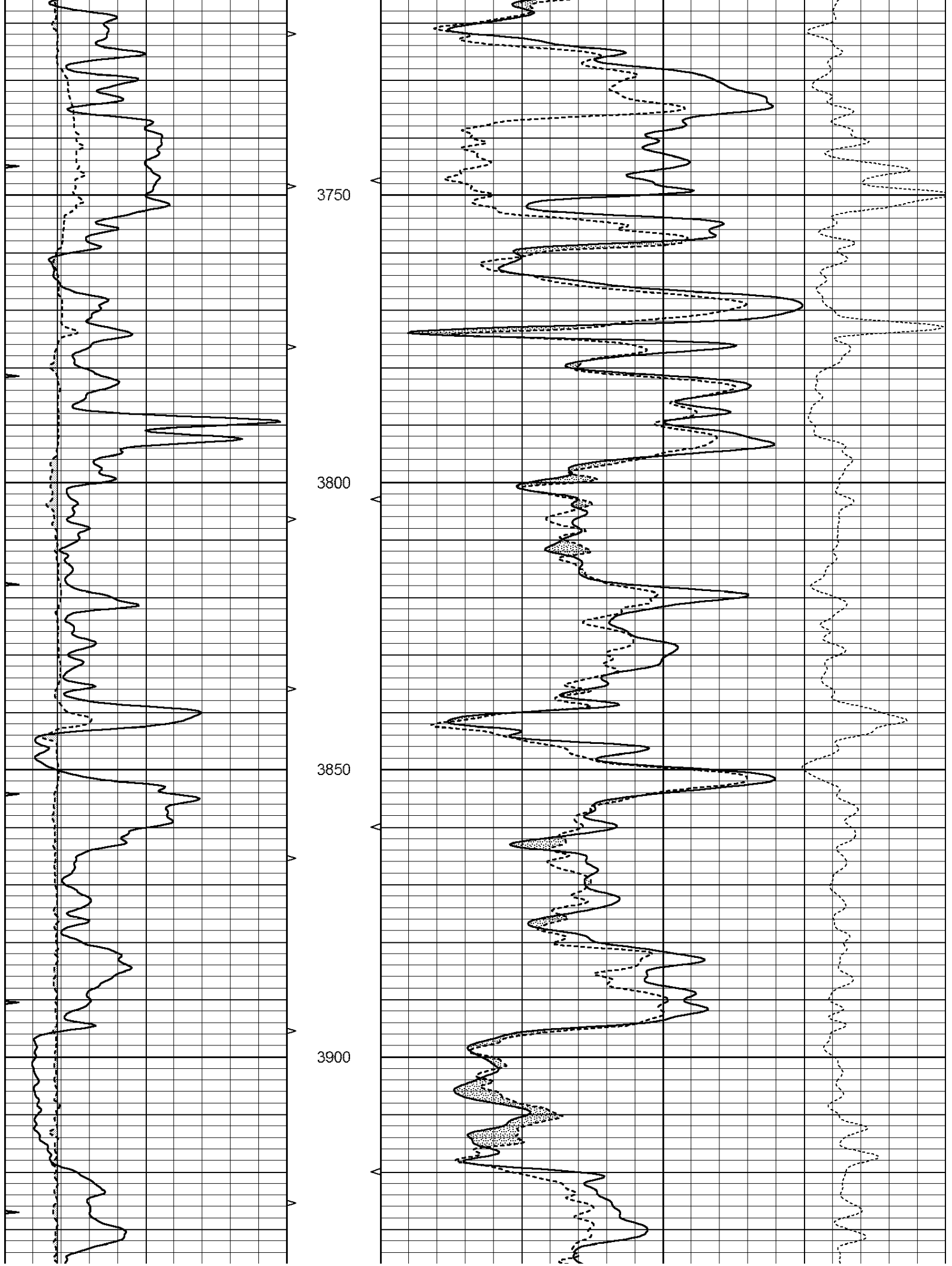
SUPERIOR
Hays,
Kansas

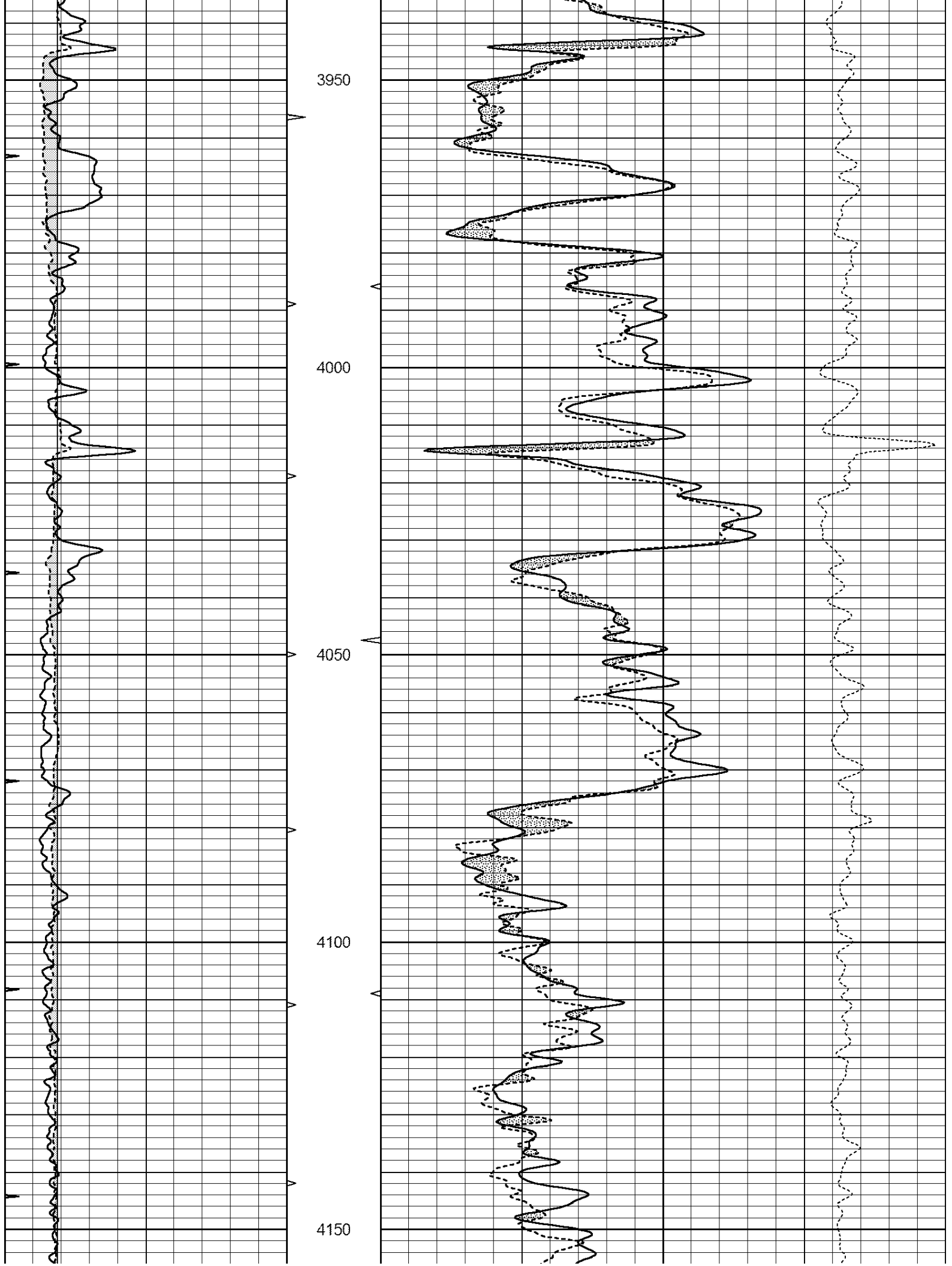
MAIN SECTION

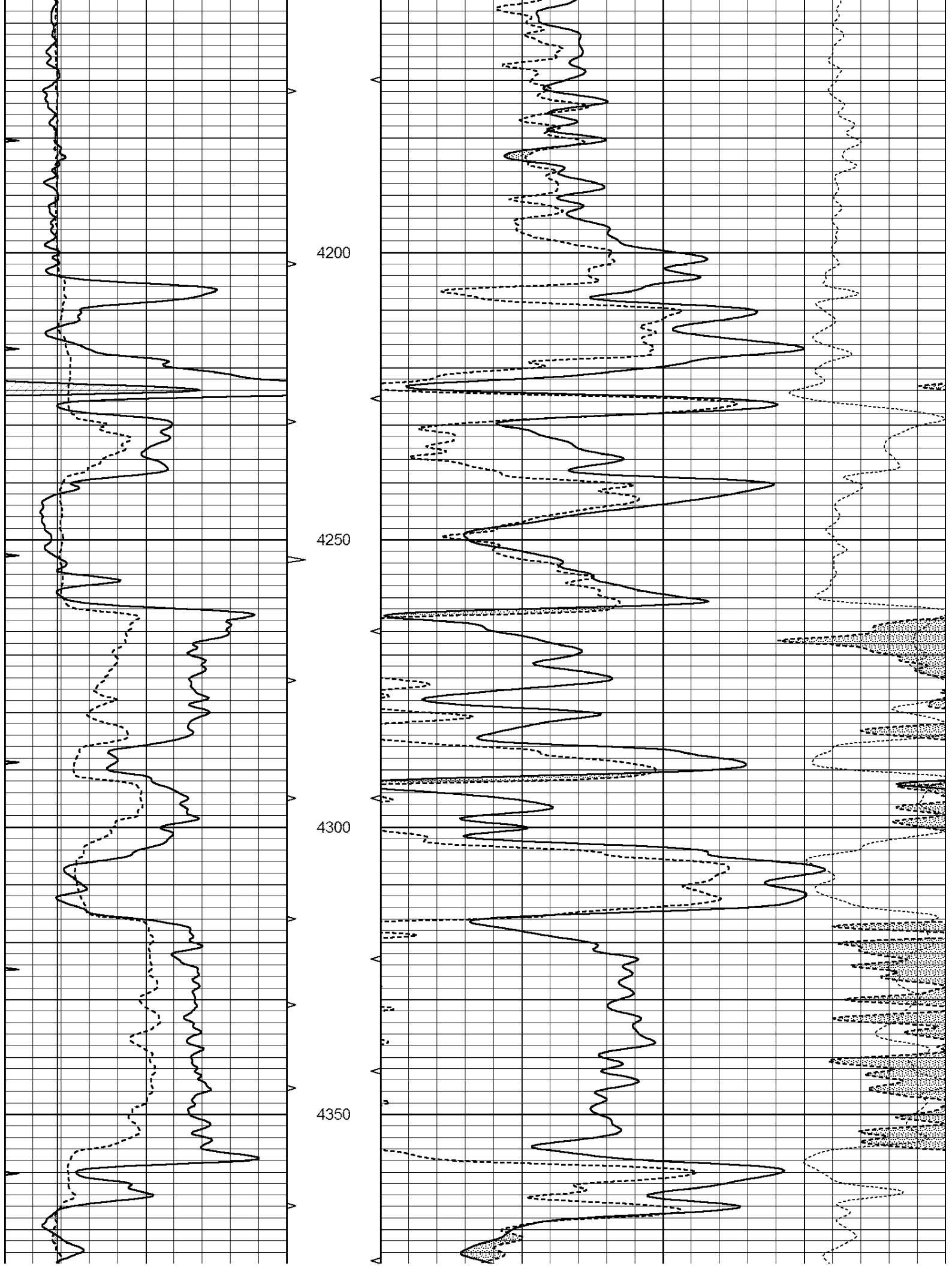
Database File: 007826ddn.db
Dataset Pathname: pass4.6
Presentation Format: den_neu
Dataset Creation: Wed Nov 09 18:22:45 2011
Charted by: Depth in Feet scaled 1:240

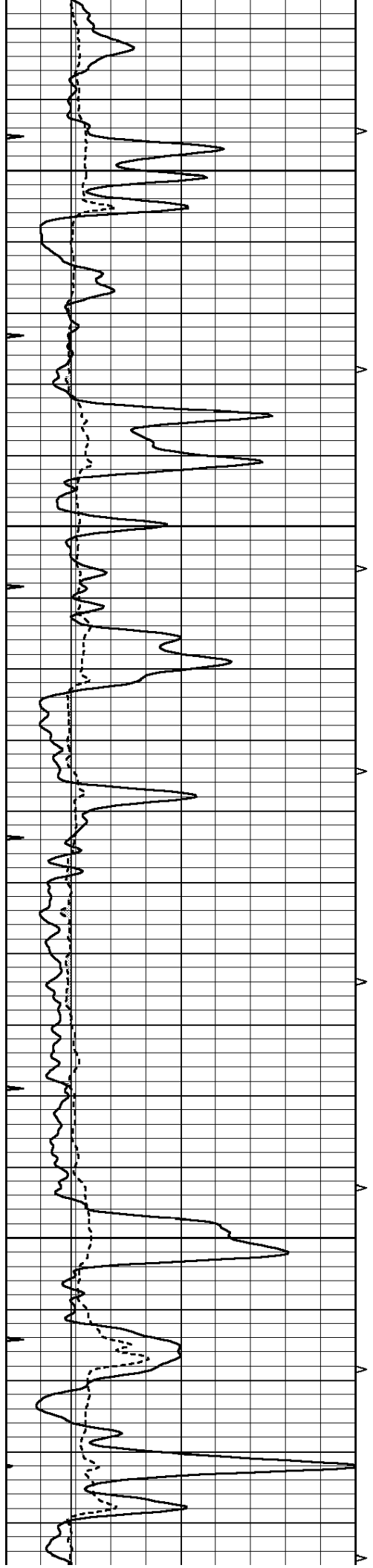
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		









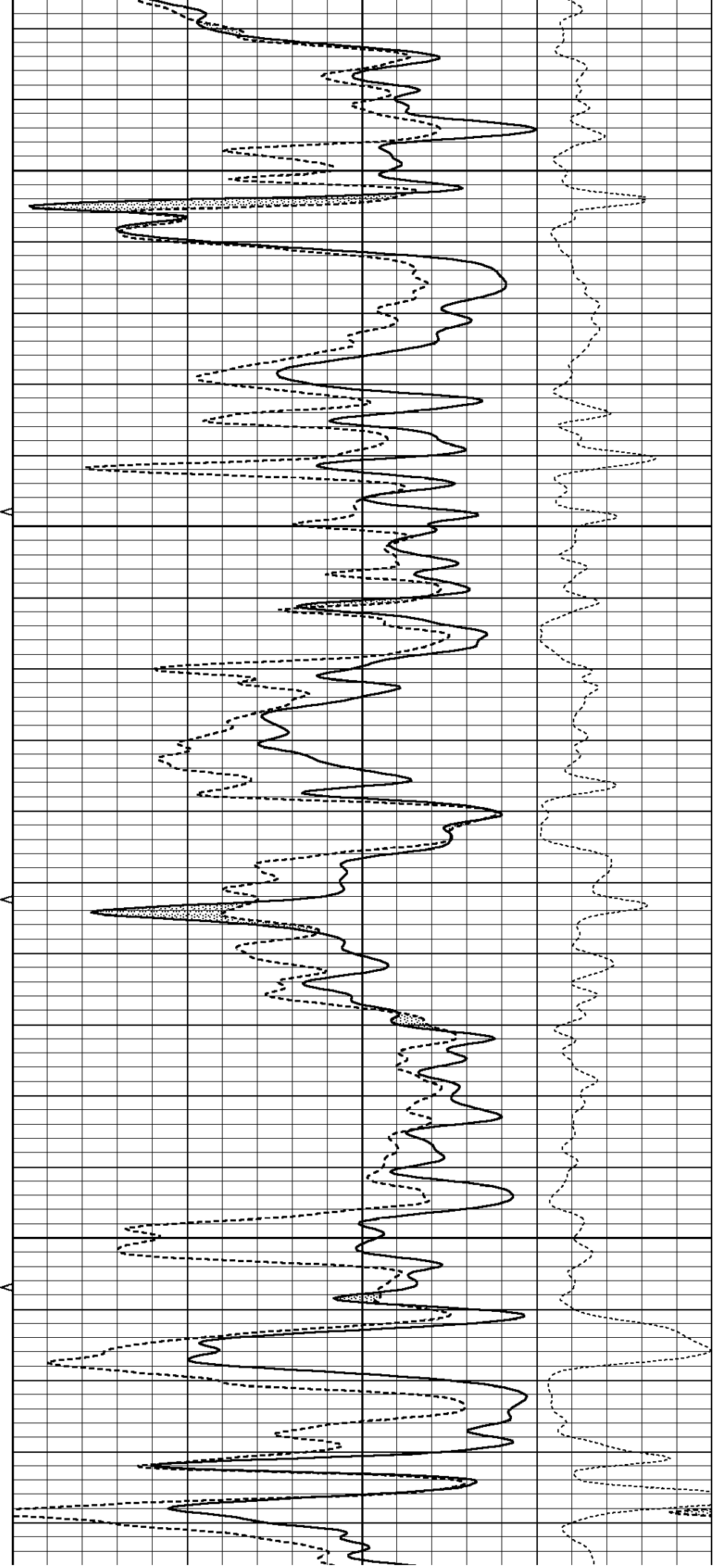


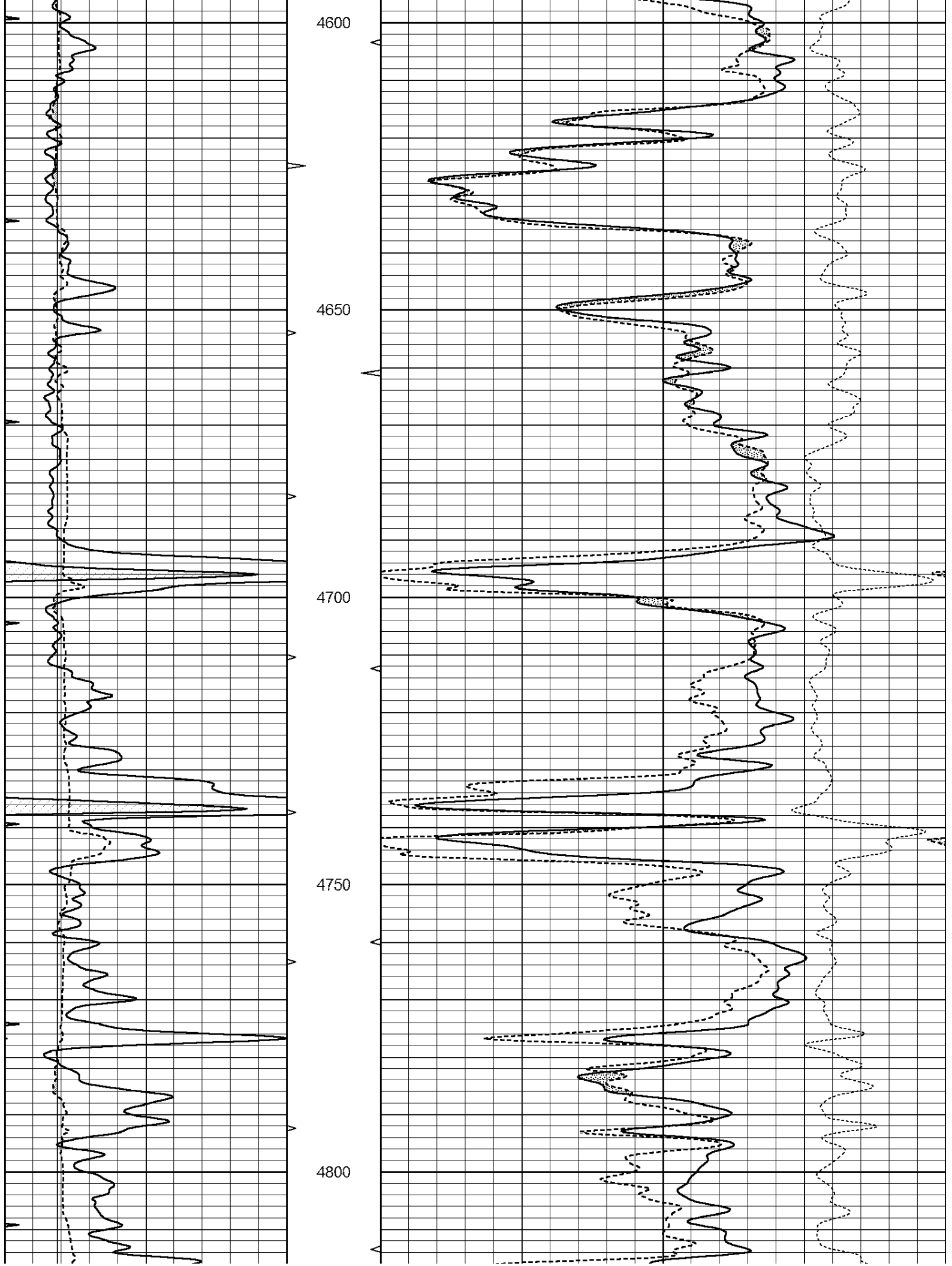
4400

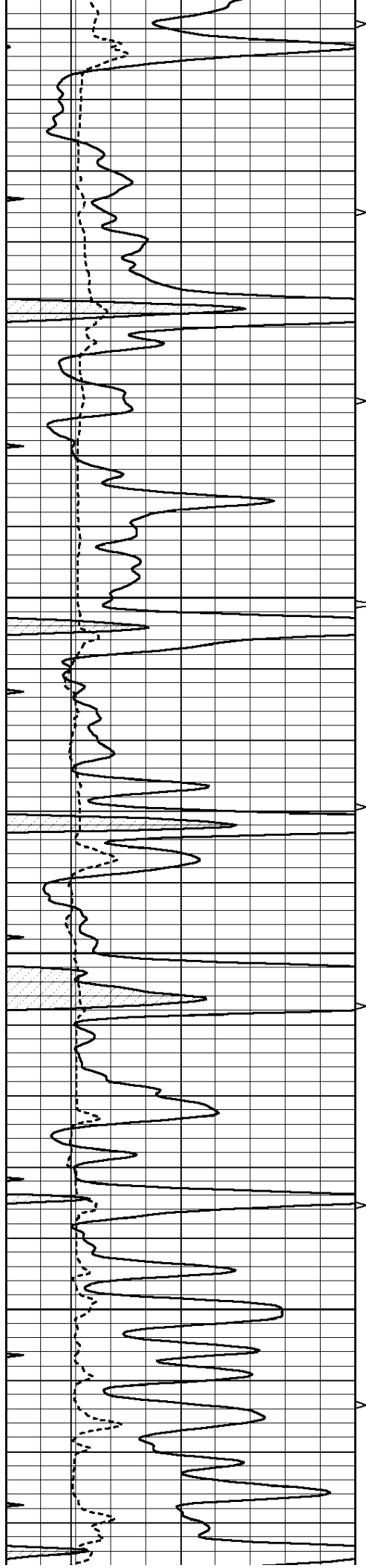
4450

4500

4550





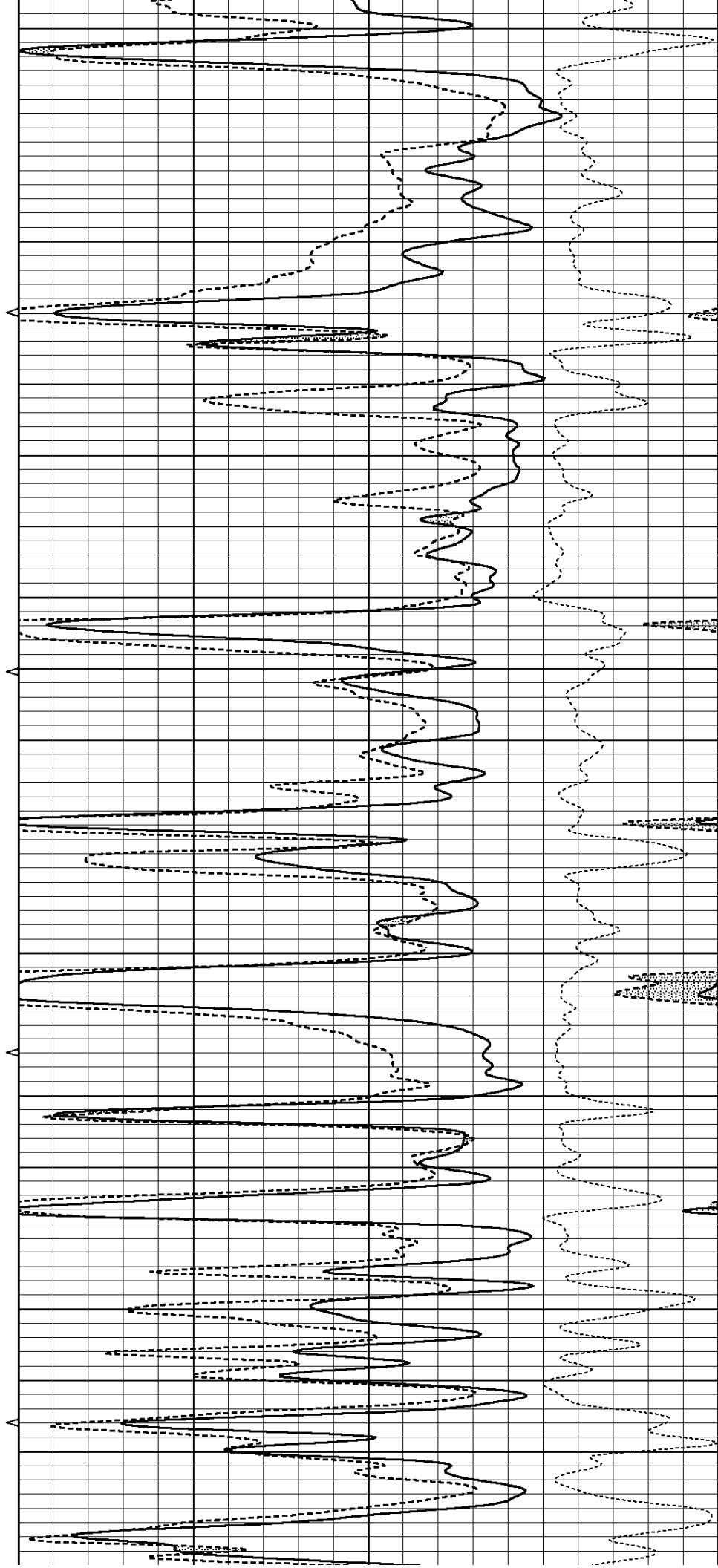


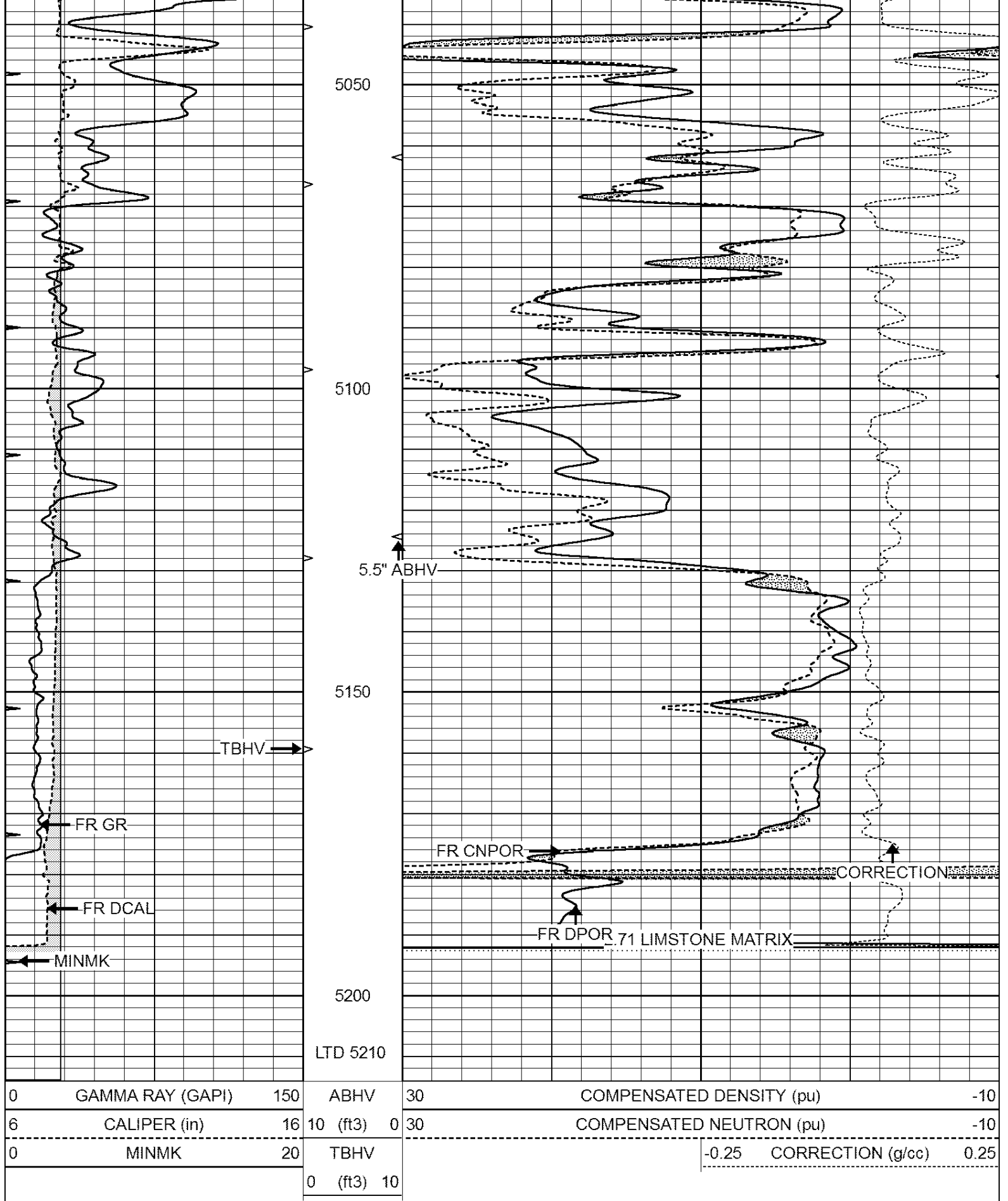
4850

4900

4950

5000



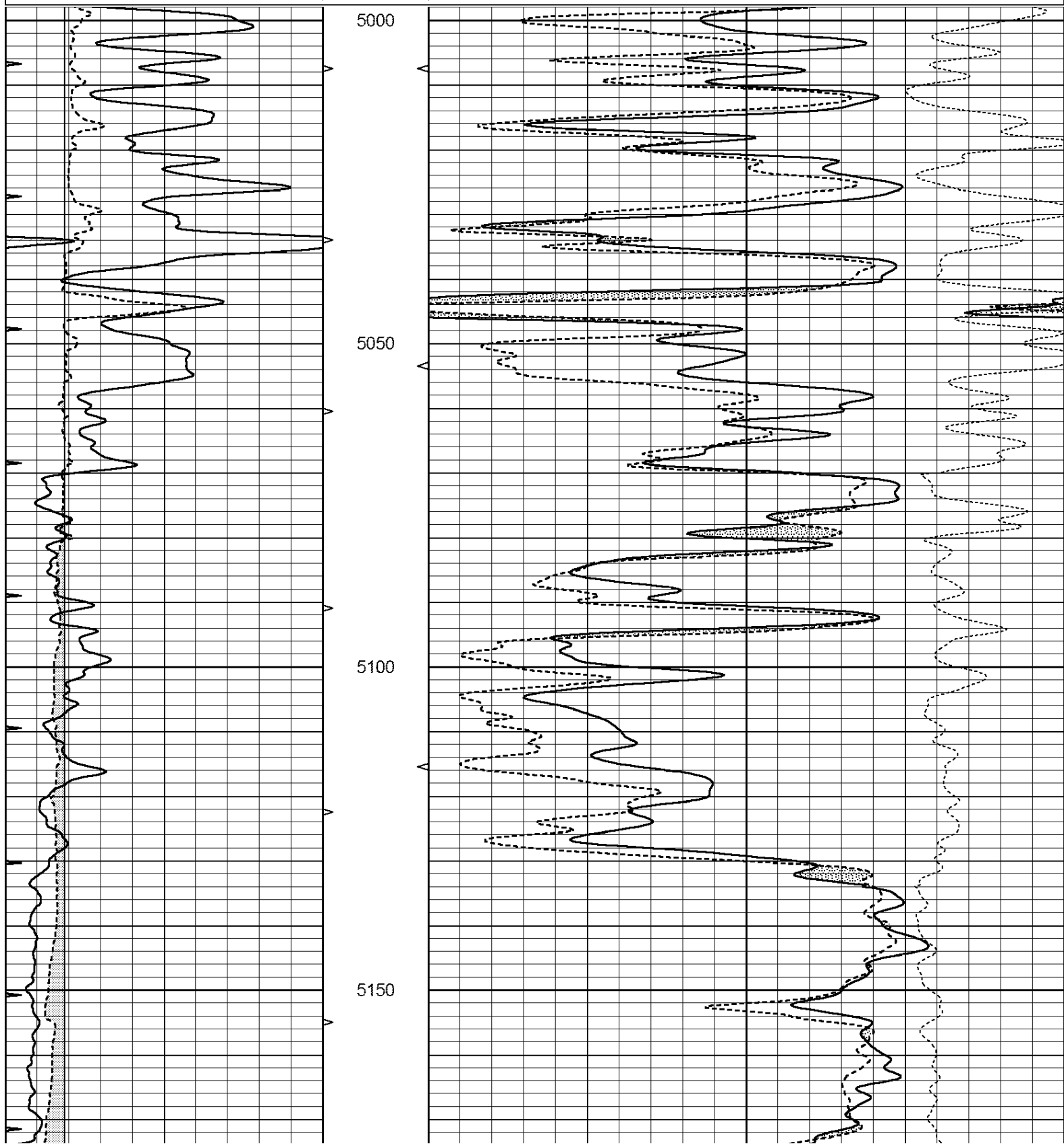


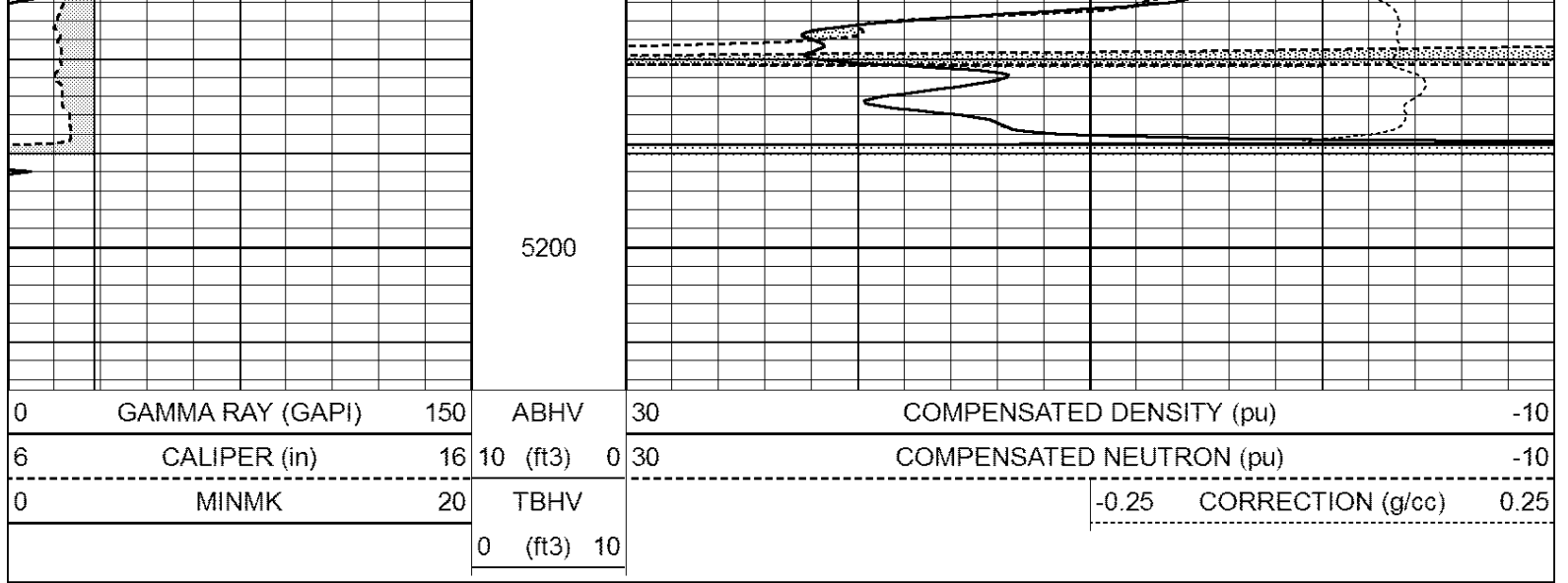
SUPERIOR
Hays,
Kansas

REPEAT SECTION

Database File: 007826ddn.db
Dataset Pathname: pass3.4
Presentation Format: den_neu
Dataset Creation: Wed Nov 09 17:53:18 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		





Calibration Report		
Database File:	007826ddn.db	
Dataset Pathname:	pass4.6	
Dataset Creation:	Wed Nov 09 18:22:45 2011	

Dual Induction Calibration Report

Serial-Model:	DIL3-GEAR
Performed:	Wed Nov 09 16:43:52 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	11.000
Medium	0.013	0.740	V	0.000	462.500	mmho/m	700.000	-5.000
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: 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	2.0	7.6
High Ref	4.0	15.0
Gain: 3.6	Offset: 0.5	

Compensated Neutron Calibration Report			
Serial Number:		070807	
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:	070558		
Tool Model:	OPEN_GR		
Performed:	Wed Nov 09 16:43:36 2011		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.2500	GAPI/cps	