



SUPERIOR
Hays,
Kansas

COMPENSATED
DENSITY / NEUTRON
PE LOG

Company HESS OIL COMPANY
Well WOOD #1-7
Field FREY
County STAFFORD
State KANSAS

Company HESS OIL COMPANY
Well WOOD #1-7
Field FREY
County STAFFORD State KANSAS

Location: API # : 15-185-23674-0000
330' FNL & 2310' FEL
SEC 7 TWP 21S RGE 14W
Permanent Datum GROUND LEVEL Elevation 1927
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
DIL/MEL
SONIC
Elevation
K.B. 1932
D.F. 1930
G.L. 1927

Date	3/29/11		
Run Number	ONE		
Depth Driller	3840		
Depth Logger	3842		
Bottom Logged Interval	3818		
Top Log Interval	2300		
Casing Driller	8 5/8"@900'		
Casing Logger	900		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 5,000 PPM	
Density / Viscosity	9.2/50		
pH / Fluid Loss	11.0/9.0		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.850@62F		
Rmf @ Meas. Temp	.638@62F		
Rmc @ Meas. Temp	1.02@62F		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	.458@115F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	6:15 P.M.		
Maximum Recorded Temperature	115F		
Equipment Number	0836		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	DEREK PATTERSON		

<<< 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
PAWNEE ROCK, KS. 2 N.E. ON HWY 156 TO "RADIUM RD." 7S. ON BLKTOP TO "RD. 200", 1/2W., S. INTO

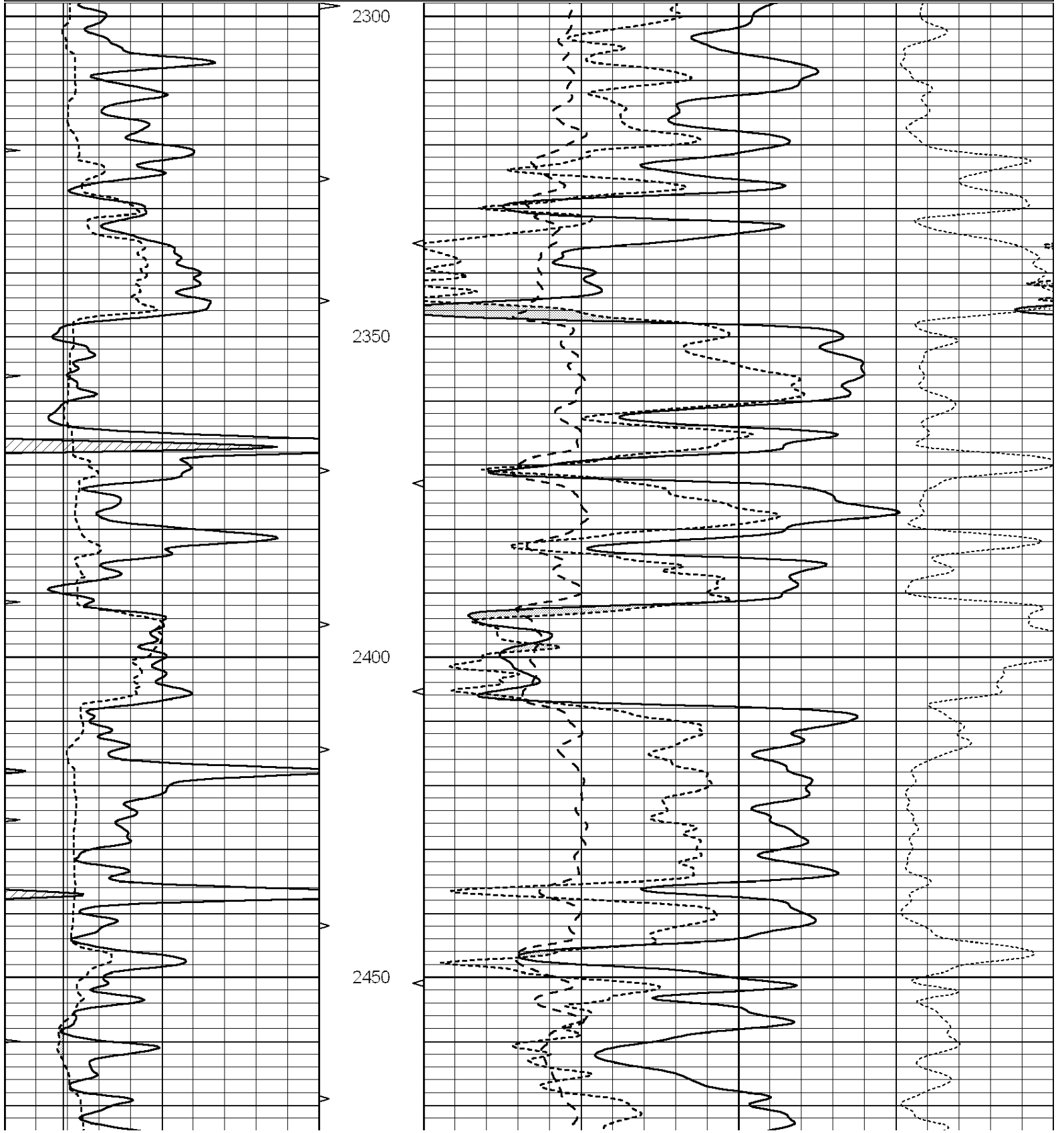


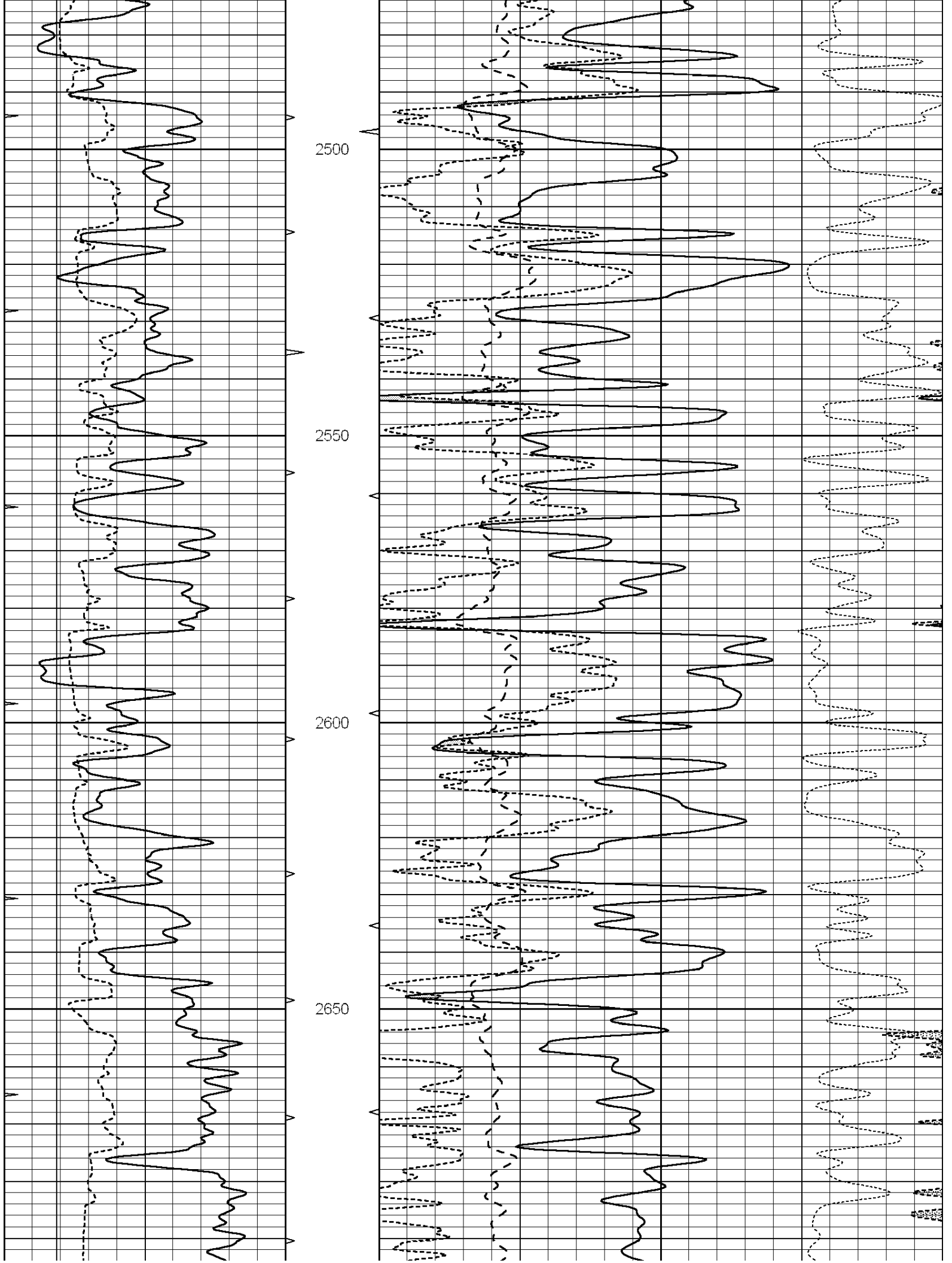
SUPERIOR
Hays,
Kansas

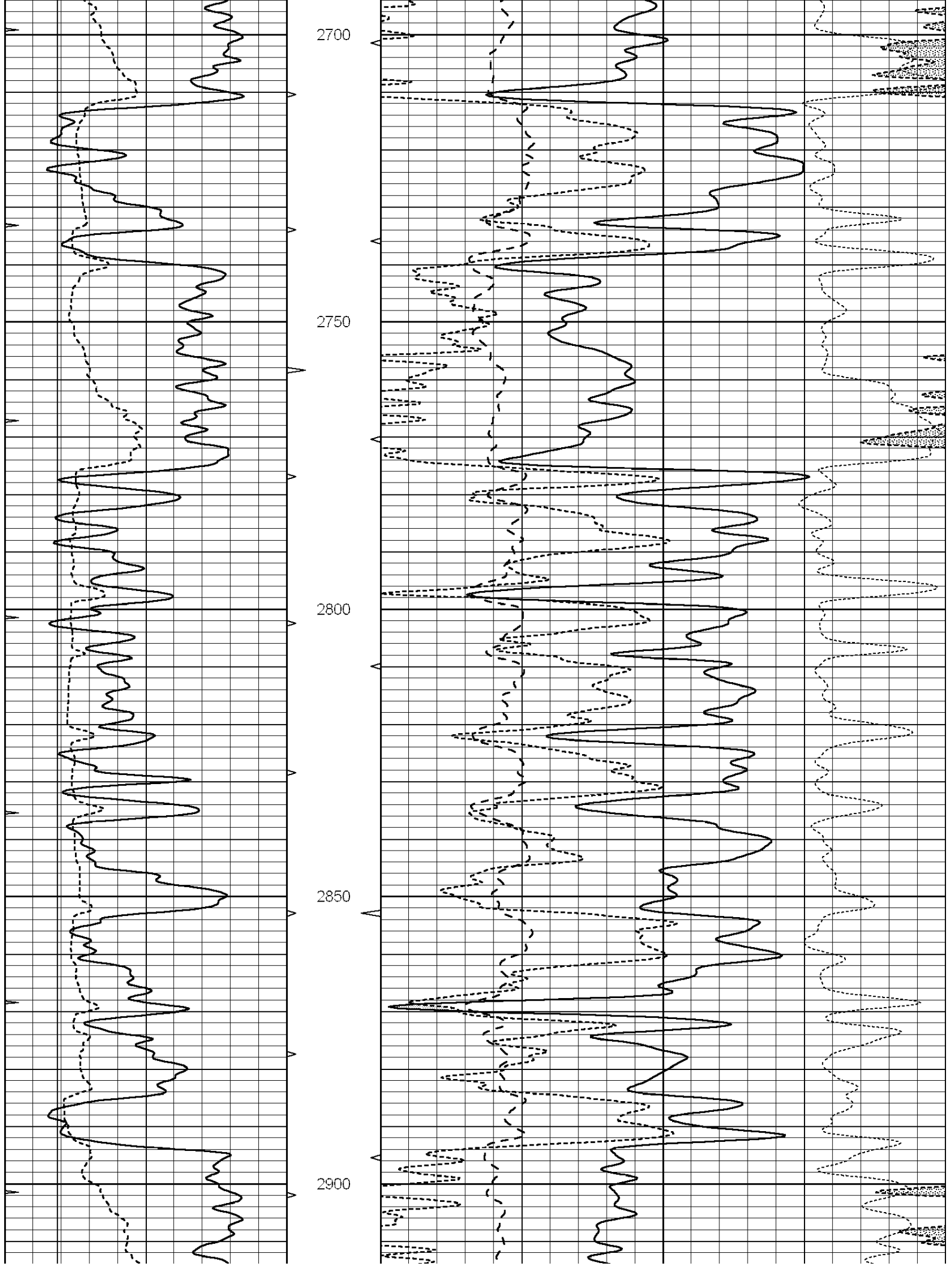
MAIN SECTION

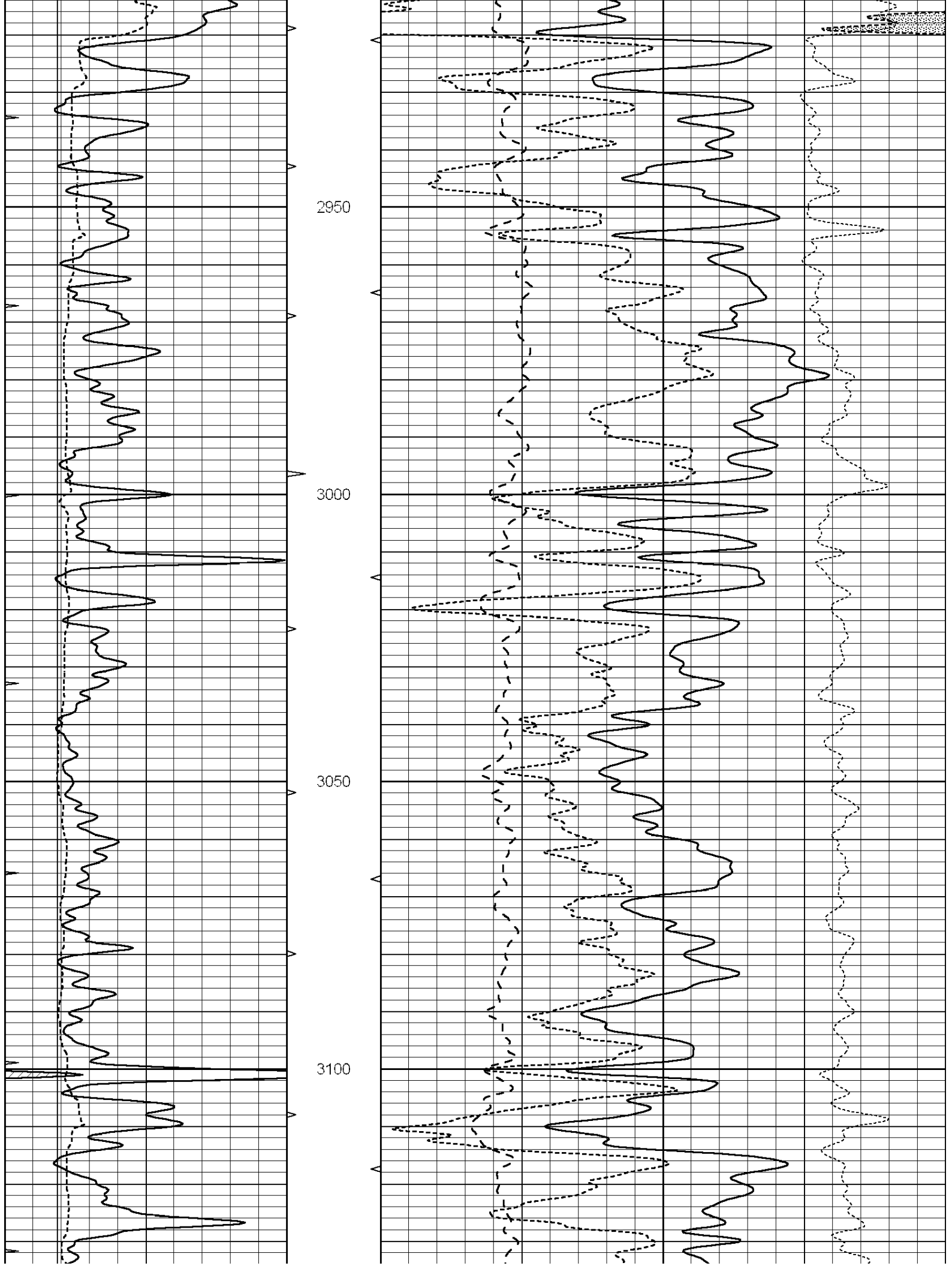
Database File: 006624pe.db
 Dataset Pathname: pass3.1
 Presentation Format: ldt_neu
 Dataset Creation: Tue Mar 29 19:24:04 2011 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

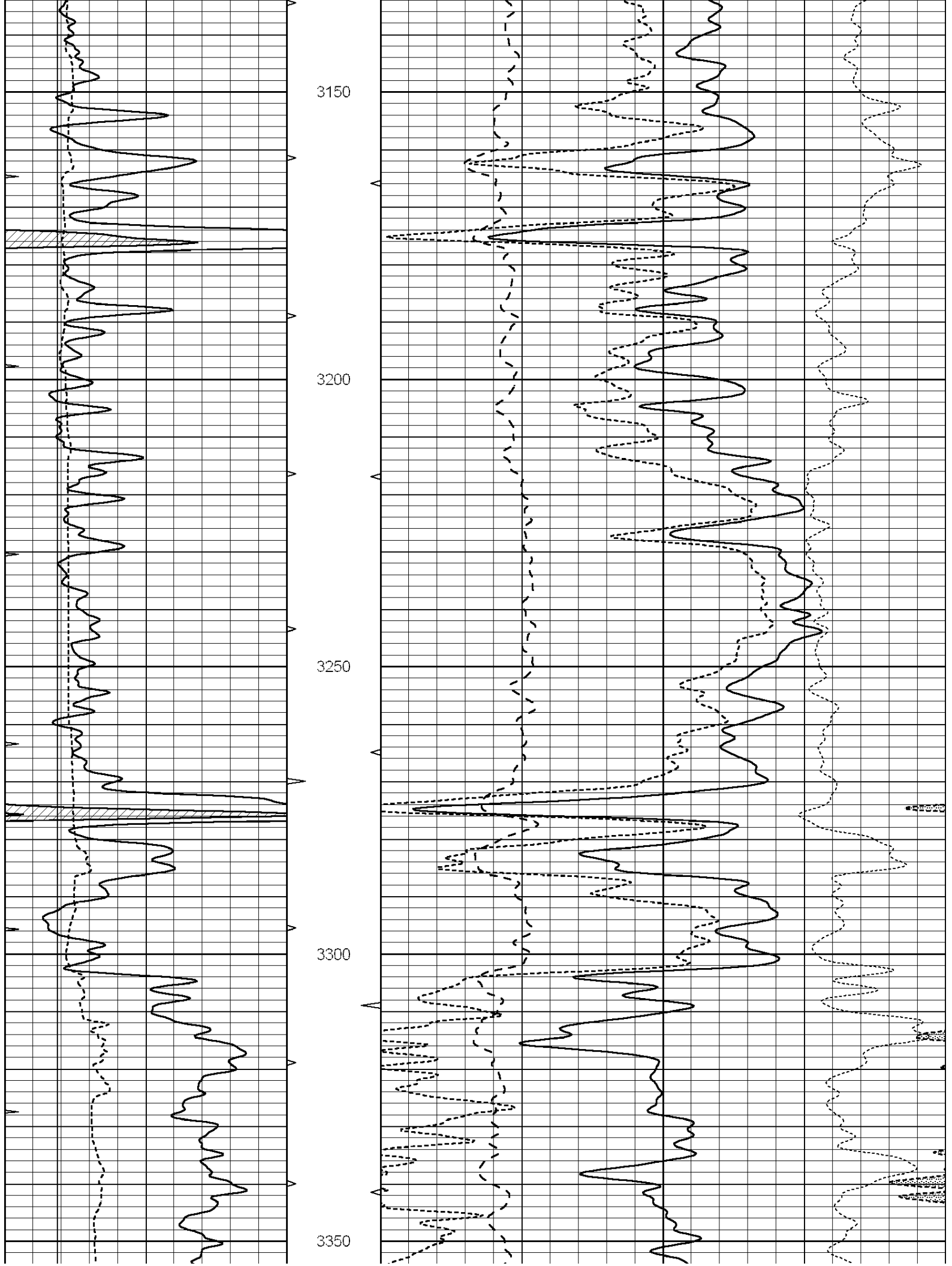
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10			
6	CALIPER (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)	-10		
0	MINMK	20	TBHV	0	PE	10	-0.25	CORRECTION (g/cc)	0.25
			0 (ft3)	10					

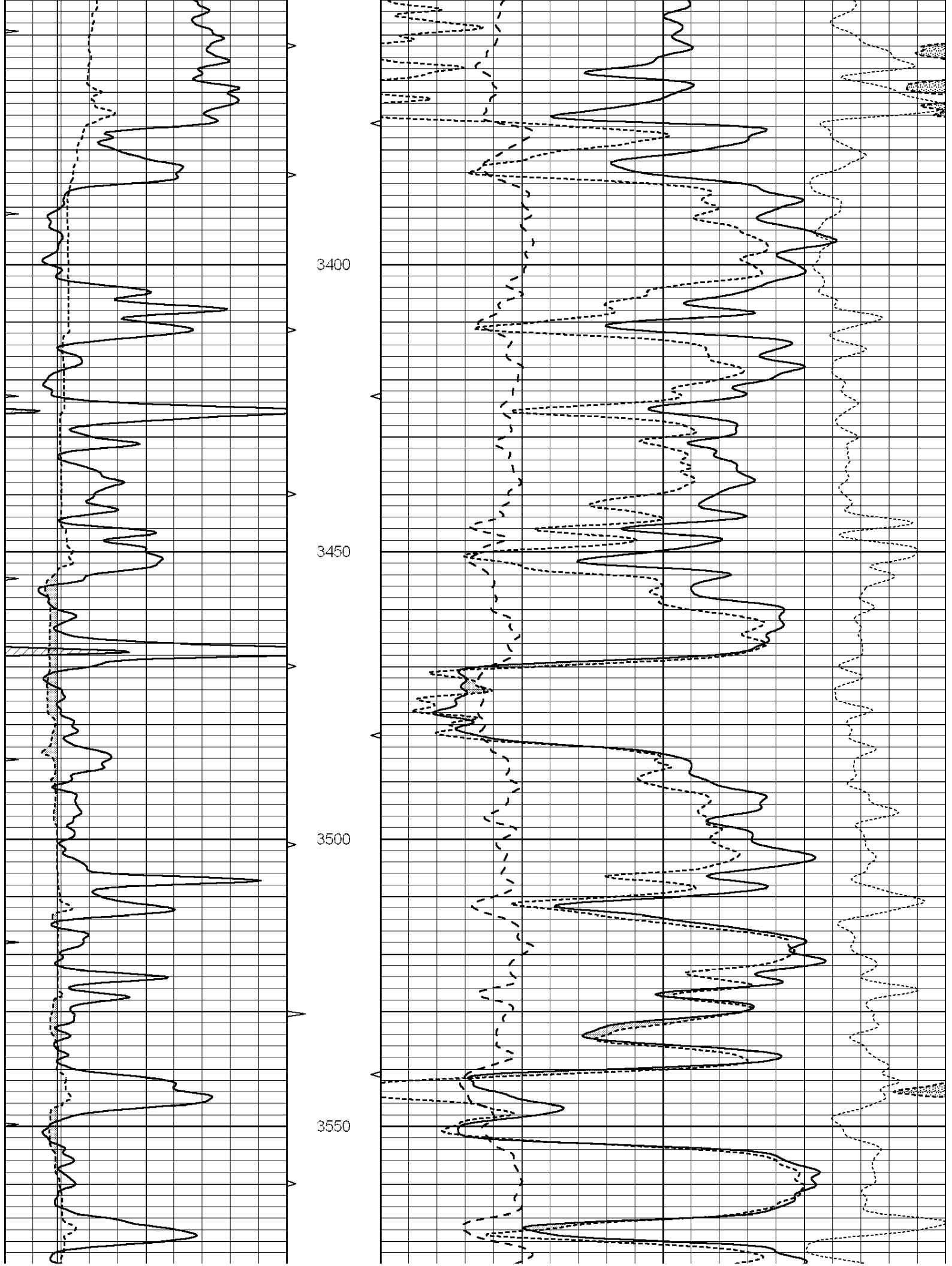


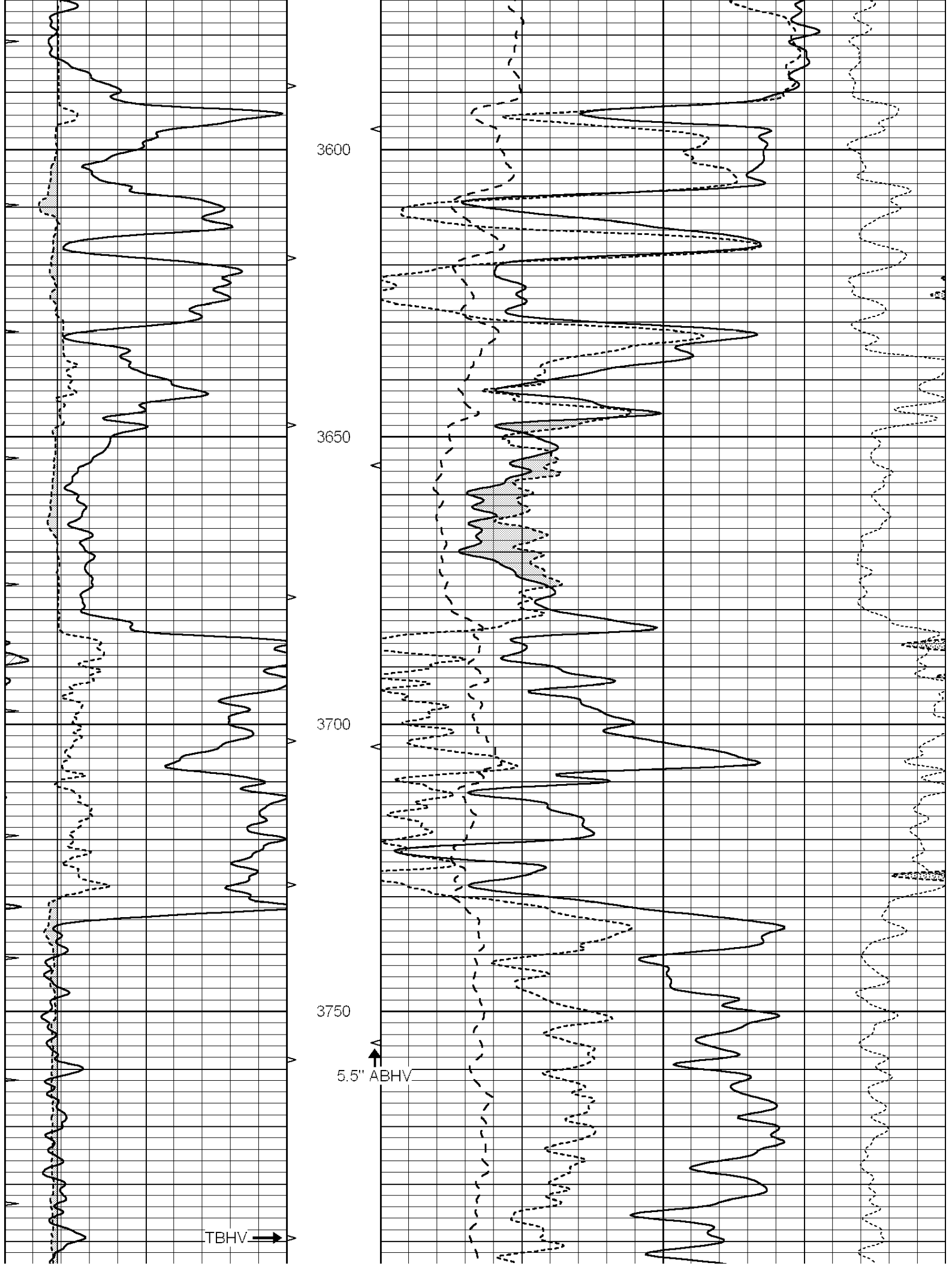


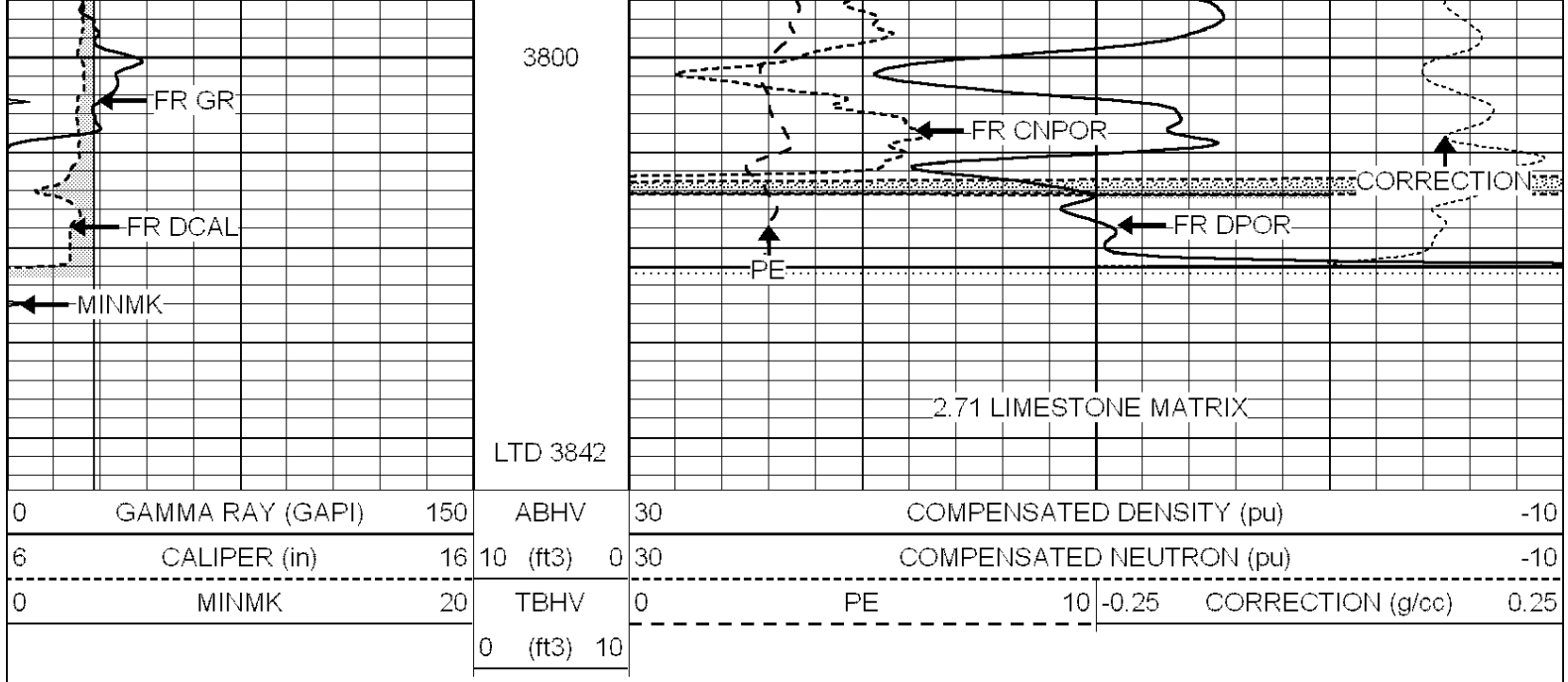










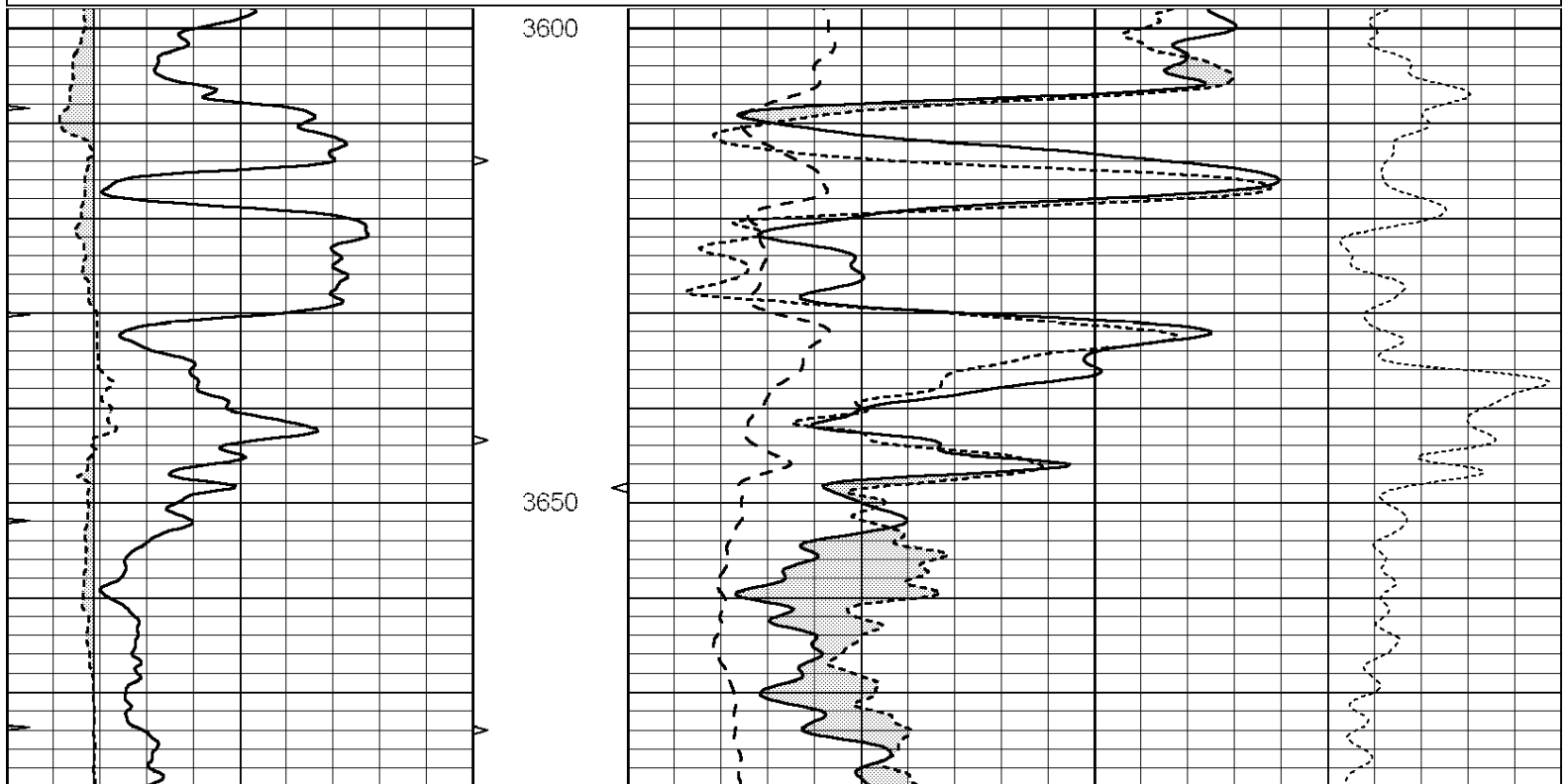


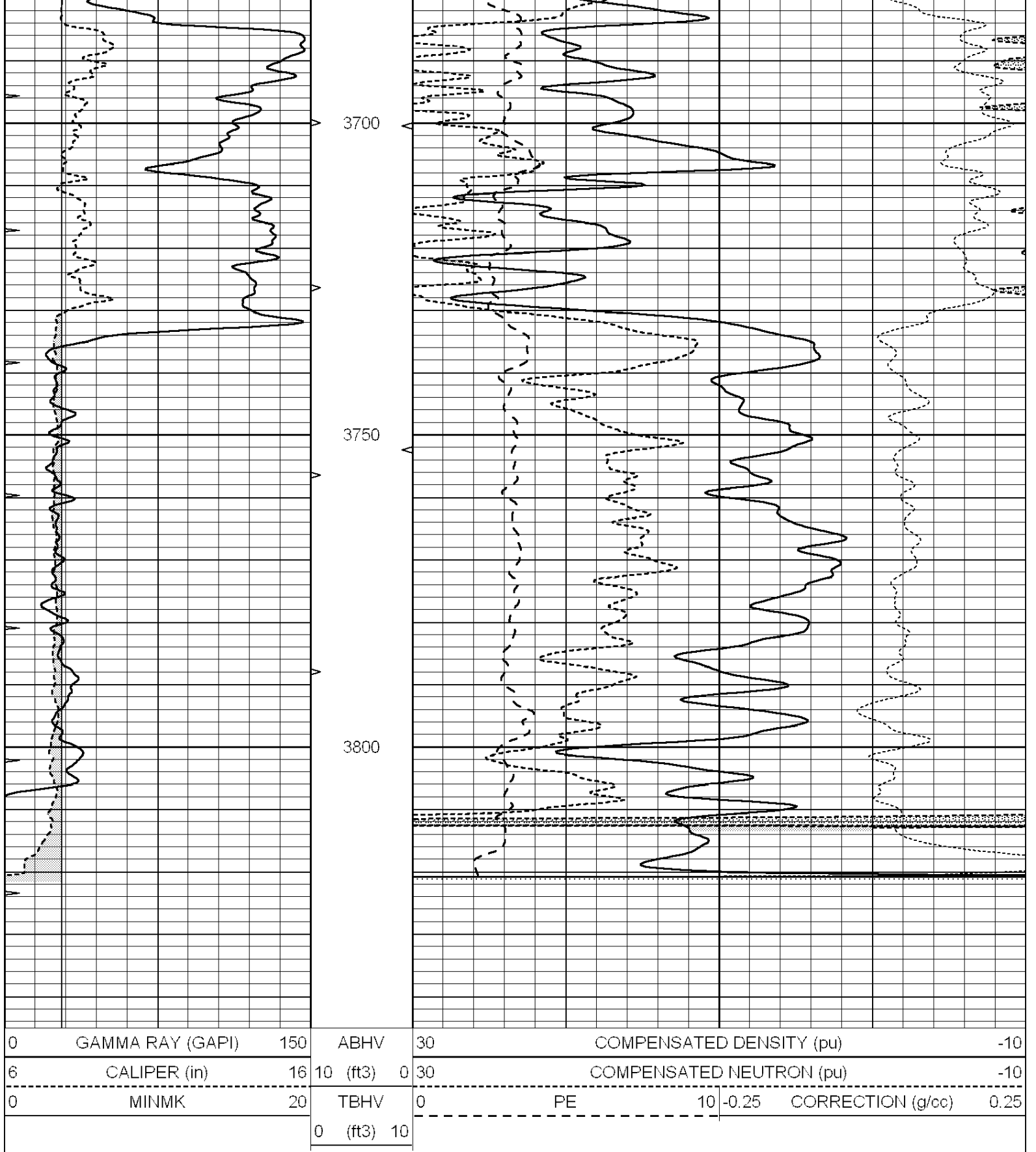
SUPERIOR
Hays,
Kansas

REPEAT SECTION

Database File: 006624pe.db
 Dataset Pathname: pass2.5
 Presentation Format: ldt_neu
 Dataset Creation: Tue Mar 29 18:46:01 2011 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	PE	10	-0.25	CORRECTION (g/cc)	0.25
			0 (ft3)	10					



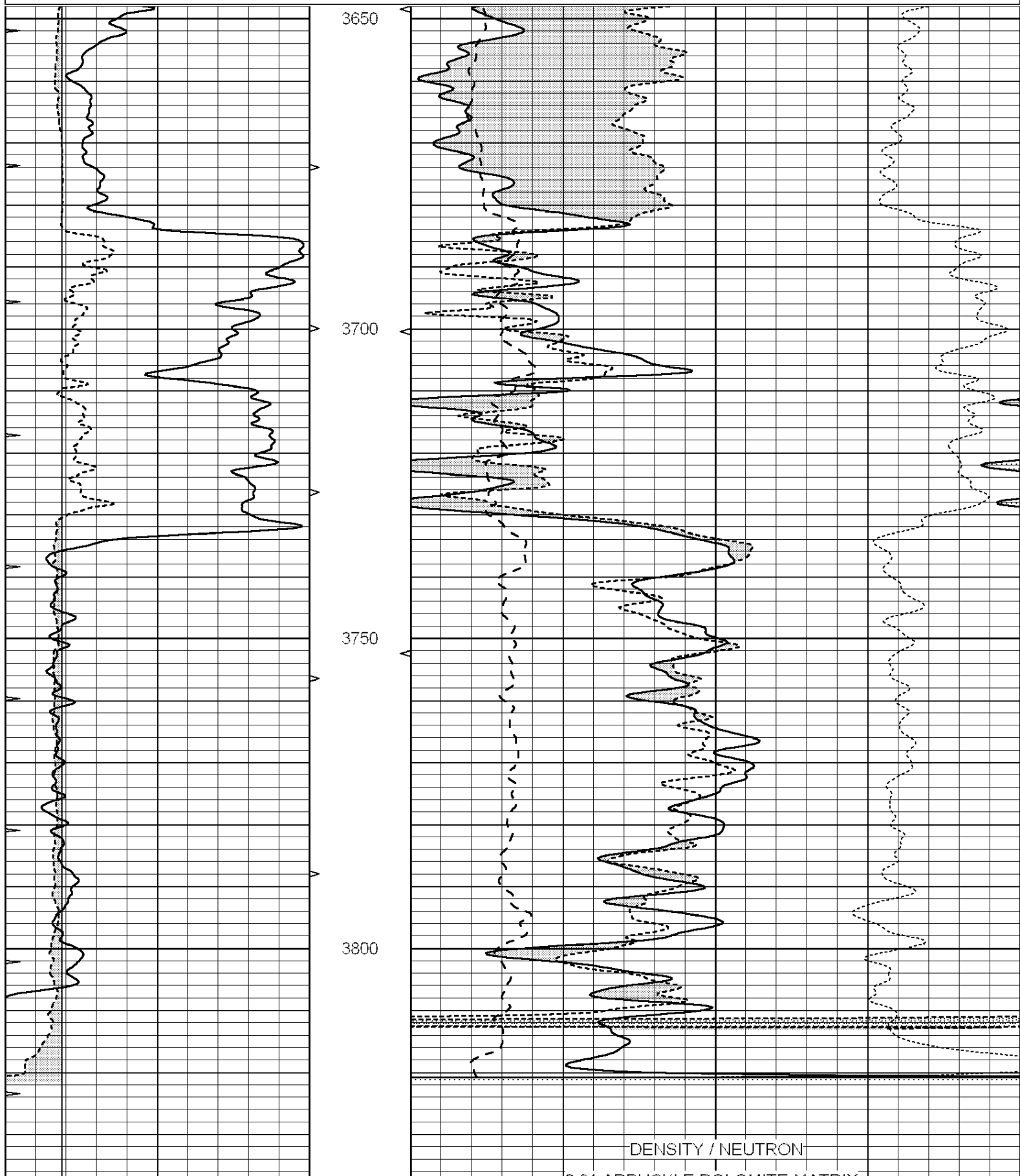


SUPERIOR
Hays,
Kansas

DOLOMITE MATRIX

Database File: 006624pe.db
 Dataset Pathname: pass2.7
 Presentation Format: lft, raw

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

Calibration Report

Database File: 006624pe.db
 Dataset Pathname: pass3.1
 Dataset Creation: Tue Mar 29 19:24:04 2011 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: DIL3-GEAR
 Performed: Tue Mar 29 17:22:15 2011

Loop:	Readings				References			Results	
	Air	Loop			Air	Loop		m	b
Deep	0.011	0.656	V	0.000	400.000	mmho/m	640.000	2.000	
Medium	0.013	0.740	V	0.000	462.500	mmho/m	700.000	-13.000	
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	2.1	7.0
High Ref	4.4	14.0
Gain:	3.0	Offset: 0.7

Compensated Neutron Calibration Report

Serial Number: NEU_4I
 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:	Tue Mar 29 18:31:35 2011	
Calibrator Value:	200.0	GAPI
Background Reading:	3.0	cps
Calibrator Reading:	186.0	cps
Sensitivity:	0.9000	GAPI/cps