



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

COMPENSATED DENSITY/NEUTRON LOG

Company VAL ENERGY, INC.		Company VAL ENERGY, INC.	
Well KIRK V#2-7	Well KIRK V#2-7	Well KIRK V#2-7	
Field FRICK	Field FRICK	Field FRICK	
County SCOTT	County SCOTT	County SCOTT	
State KANSAS	State KANSAS	State KANSAS	
Location: API # : 15-171-21129-00-00		Other Services	
1043' FSL & 1764' FEL NW - NE - SW - SE		DIL	
SEC 7 TWP 17S RGE 33W		Elevation	
Permanent Datum	GROUND LEVEL	Elevation	3082
Log Measured From	KELLY BUSHING 14' A.G.L.	K.B. 3096	
Drilling Measured From	KELLY BUSHING	D.F. 3094	
		G.L. 3082	
Date 4/5/15			
Run Number ONE			
Depth Driller 4830			
Depth Logger 4834			
Bottom Logged Interval 4810			
Top Log Interval 3500			
Casing Driller 8 5/8" @ 228'			
Casing Logger 226'			
Bit Size 7 7/8"			
Type Fluid in Hole CHEMICAL MUD	CHLORIDES 5000 PPM		
Density / Viscosity 9.2/56			
pH / Fluid Loss 10.5/8.8			
Source of Sample FLOWLINE			
Rm @ Meas. Temp 1.2 @ 56F			
Rmt @ Meas. Temp .90 @ 56F			
Rmc @ Meas. Temp 1.44 @ 56F			
Source of Rmt / Rmc MEASUREMENT			
Rm @ BHT .59 @ 123F			
Time Circulation Stopped 2 HOURS			
Time Logger on Bottom			
Maximum Recorded Temperature 123F			
Equipment Number 4010			
Location HAYS, KANSAS			
Recorded By IAN MABB			
Witnessed By HARLEY SAYLES			

<<< 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 NABORS, HAYS, KS. (785) 628-6395
DIRECTIONS:

HEALY, KS. - WEST TO HWY 4 & 83 - 5 MILES WEST ON RD 230 - SOUTH 1 MILE - WEST INTO

Database File:

26549ddn.db

Dataset Pathname:

pass5.2

Presentation Format:

den_neu

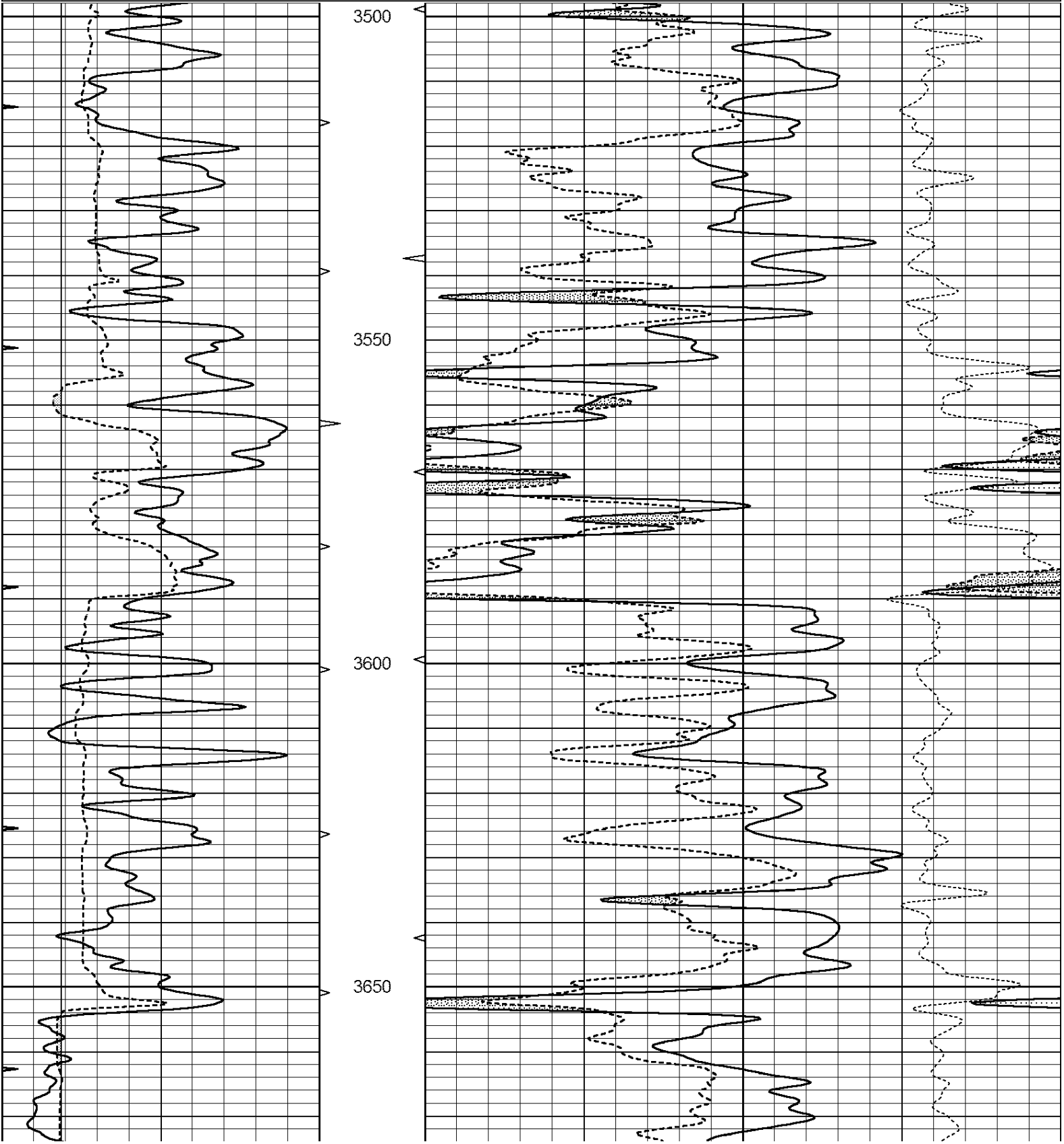
Dataset Creation:

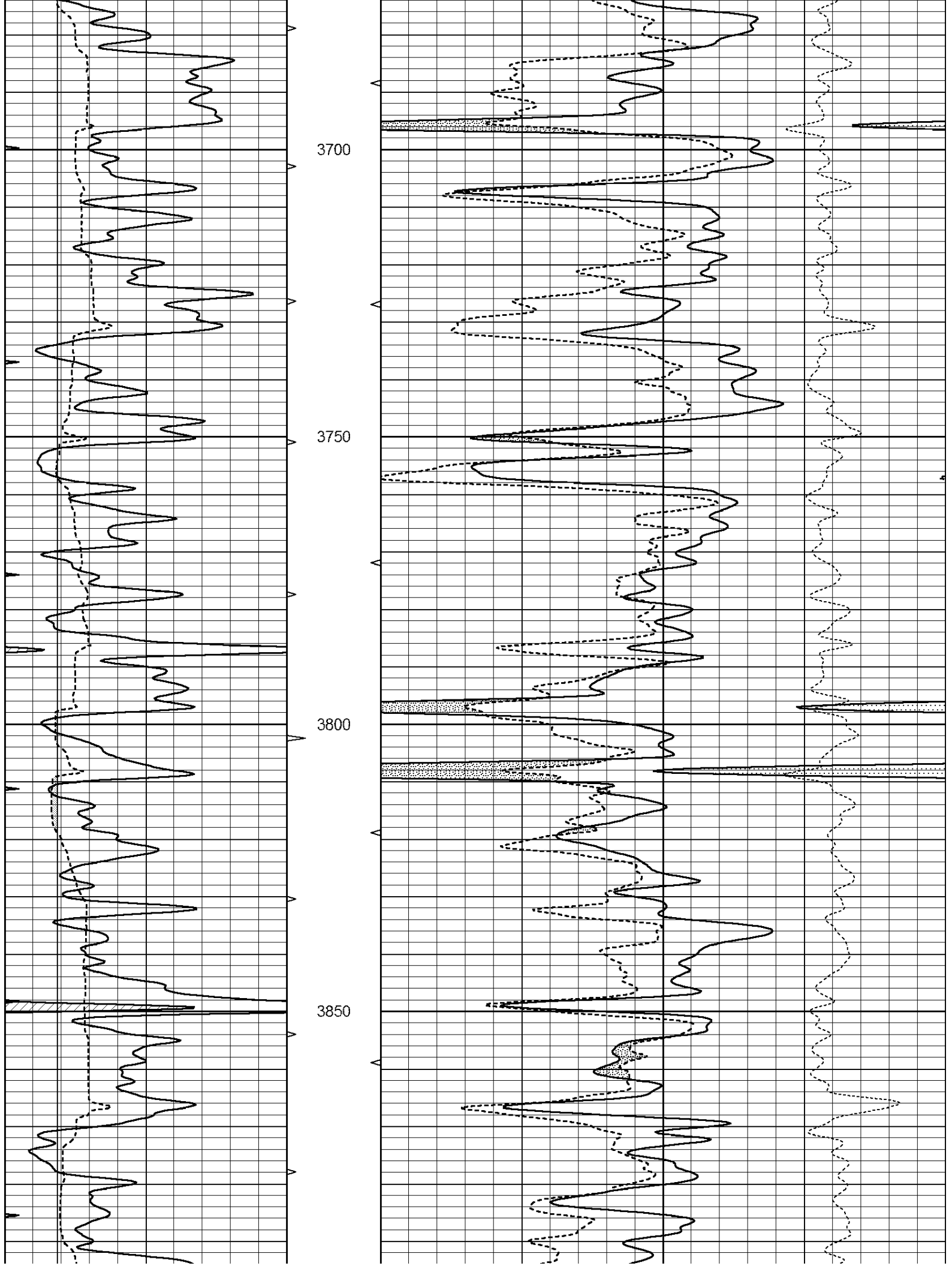
Sun Apr 05 03:28:22 2015 by Calc Open-Cased 090629

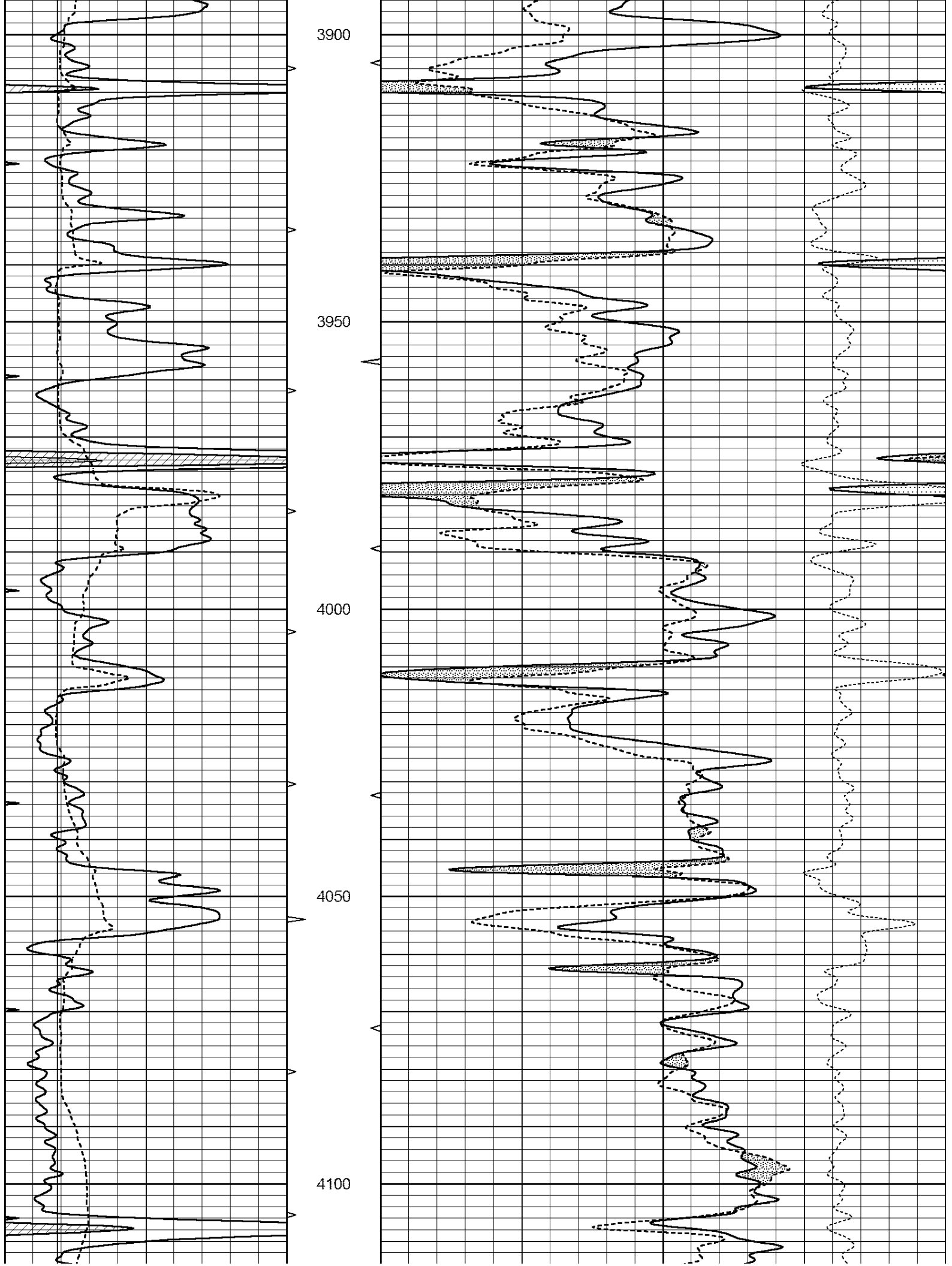
Charted by:

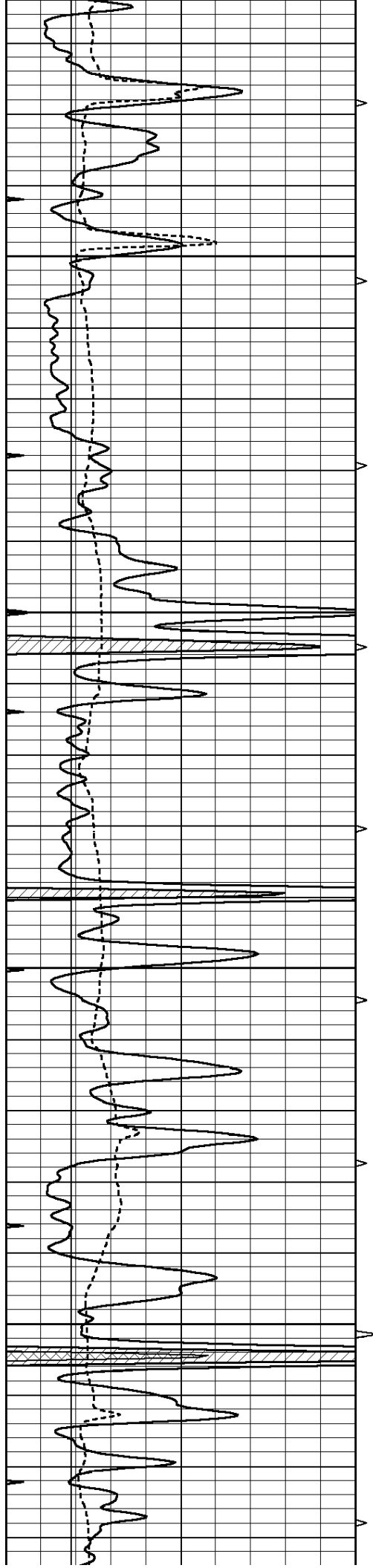
Depth in Feet scaled 1:240

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		







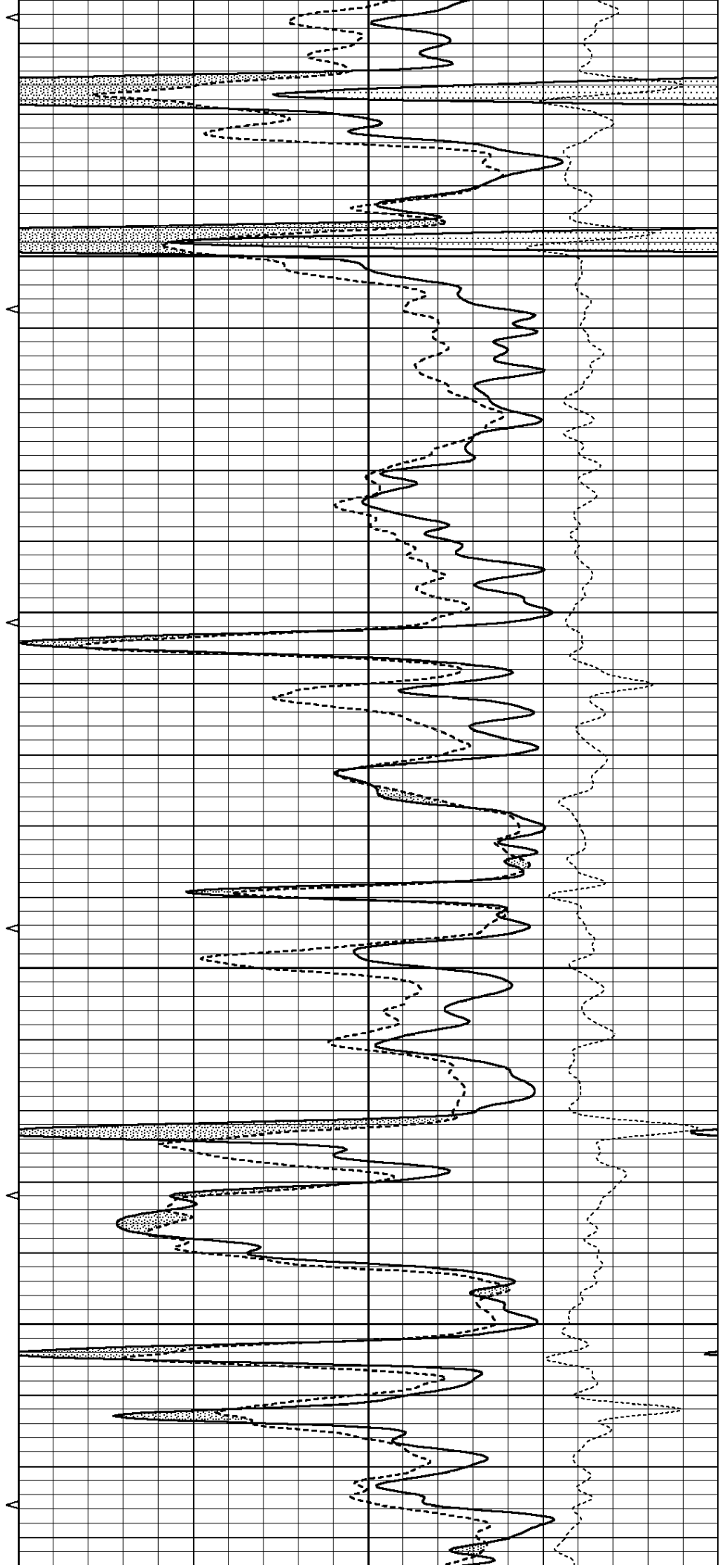


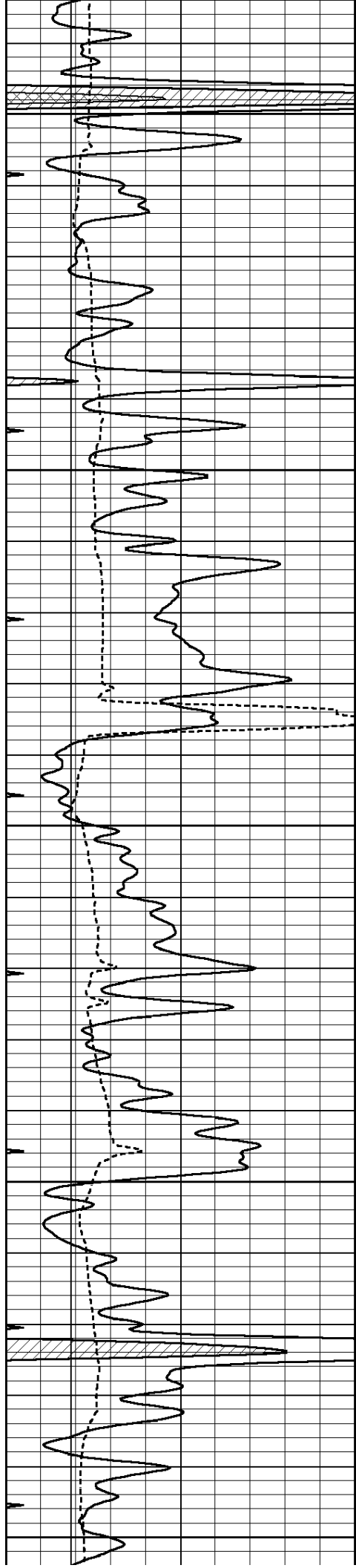
4150

4200

4250

4300





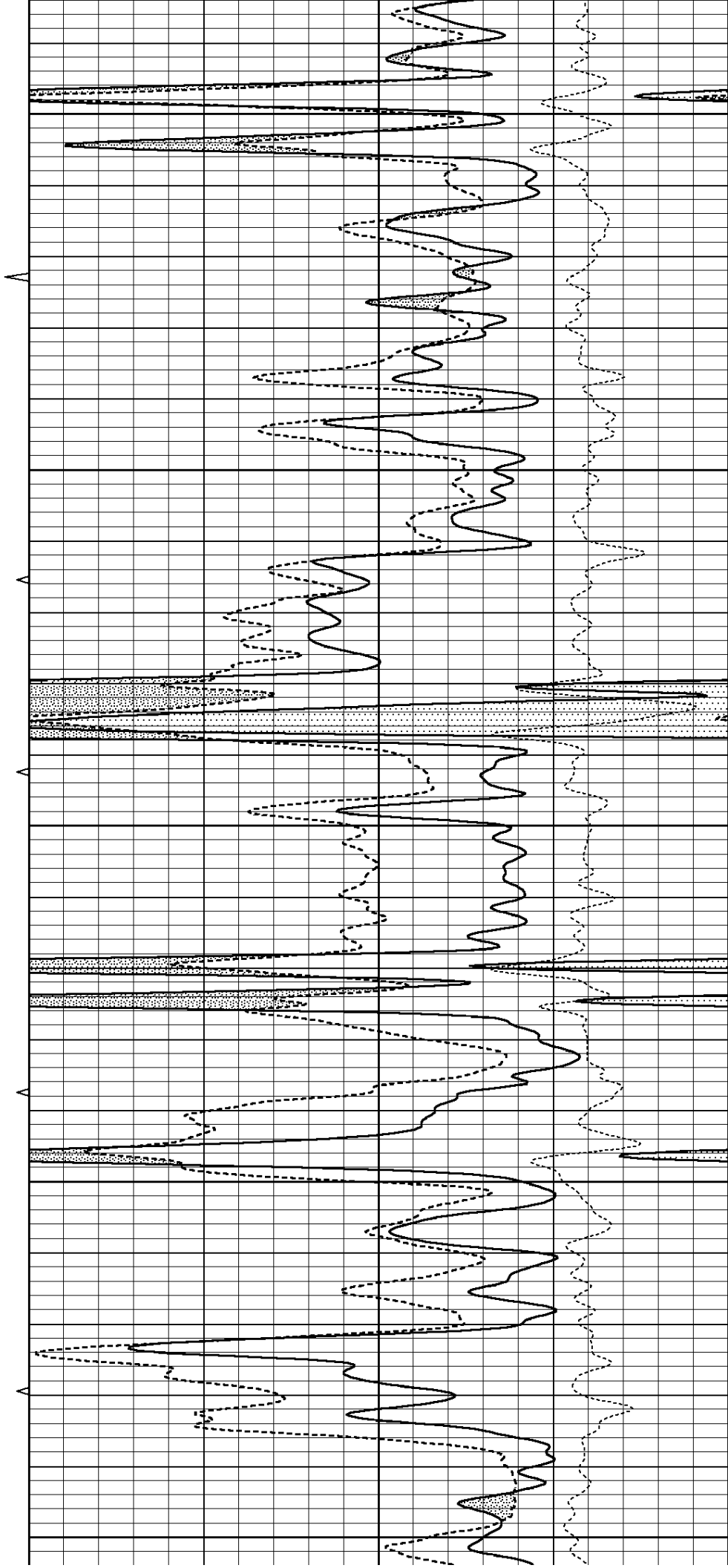
4350

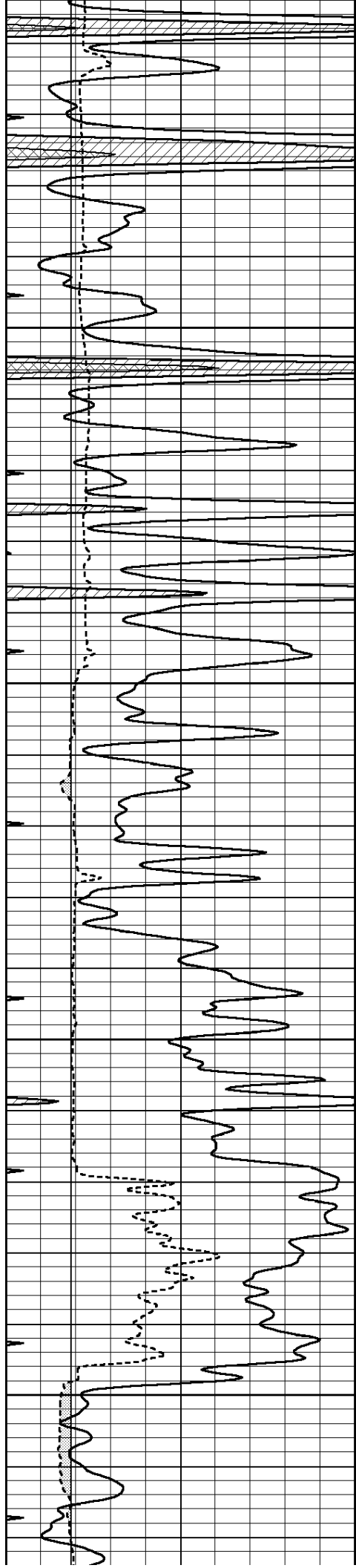
4400

4450

4500

4550





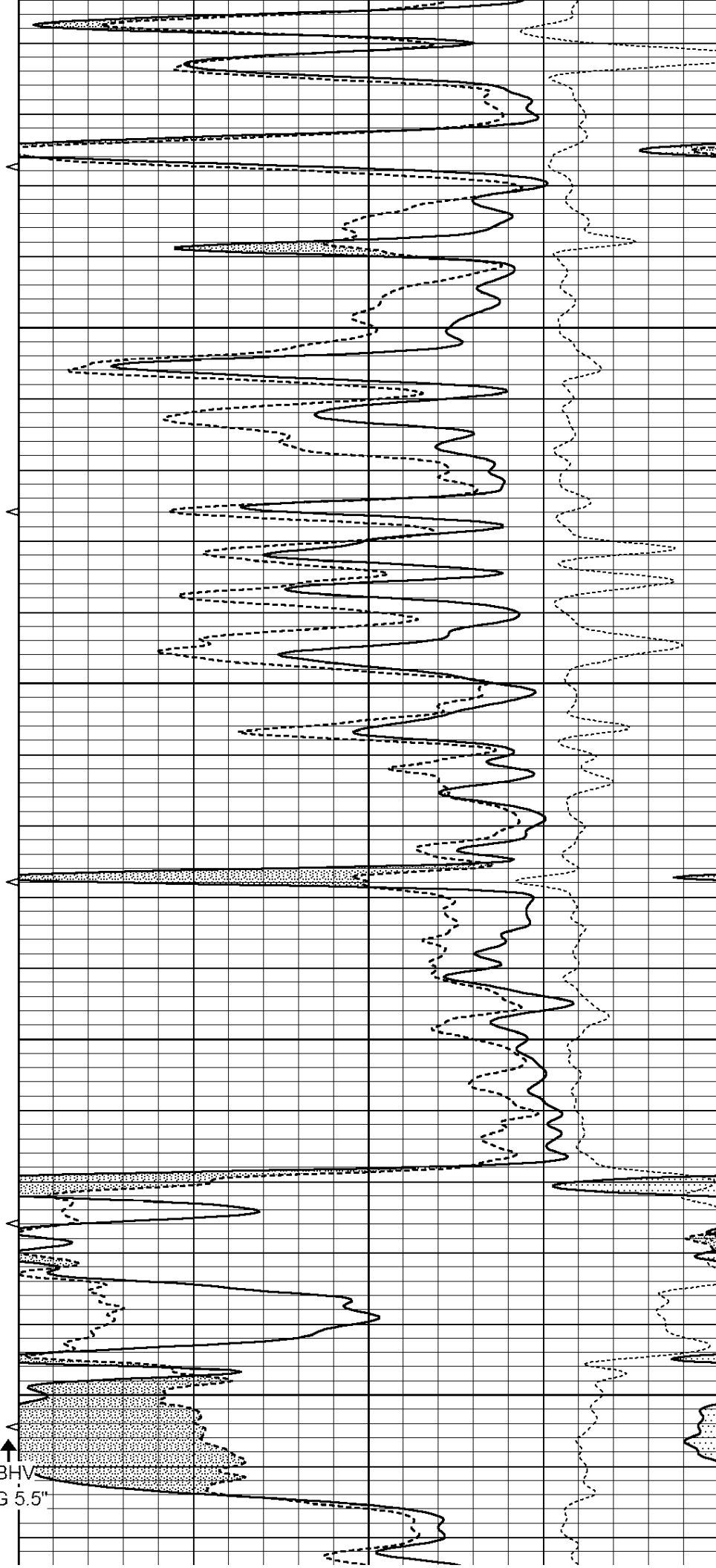
4600

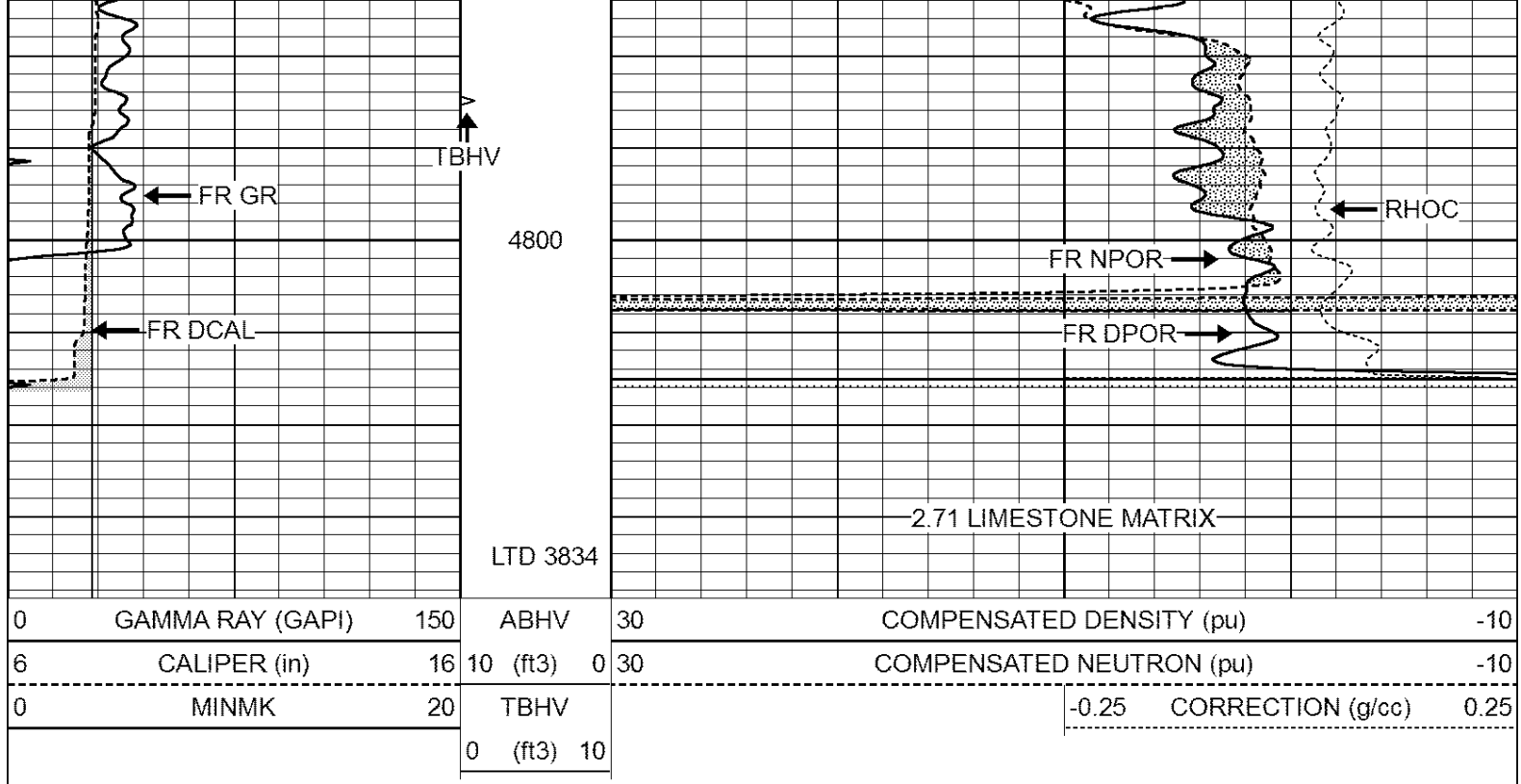
4650

4700

4750

ABHV
CSG 5.5"

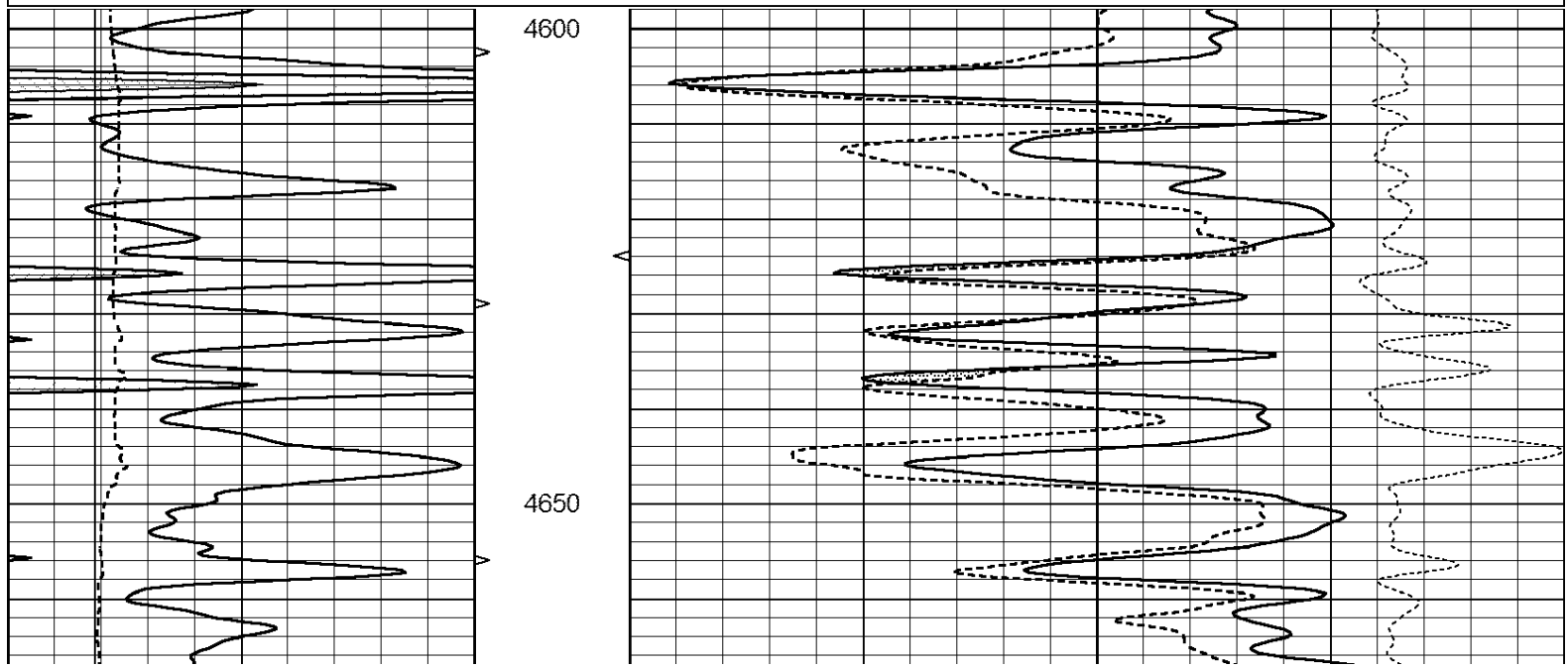


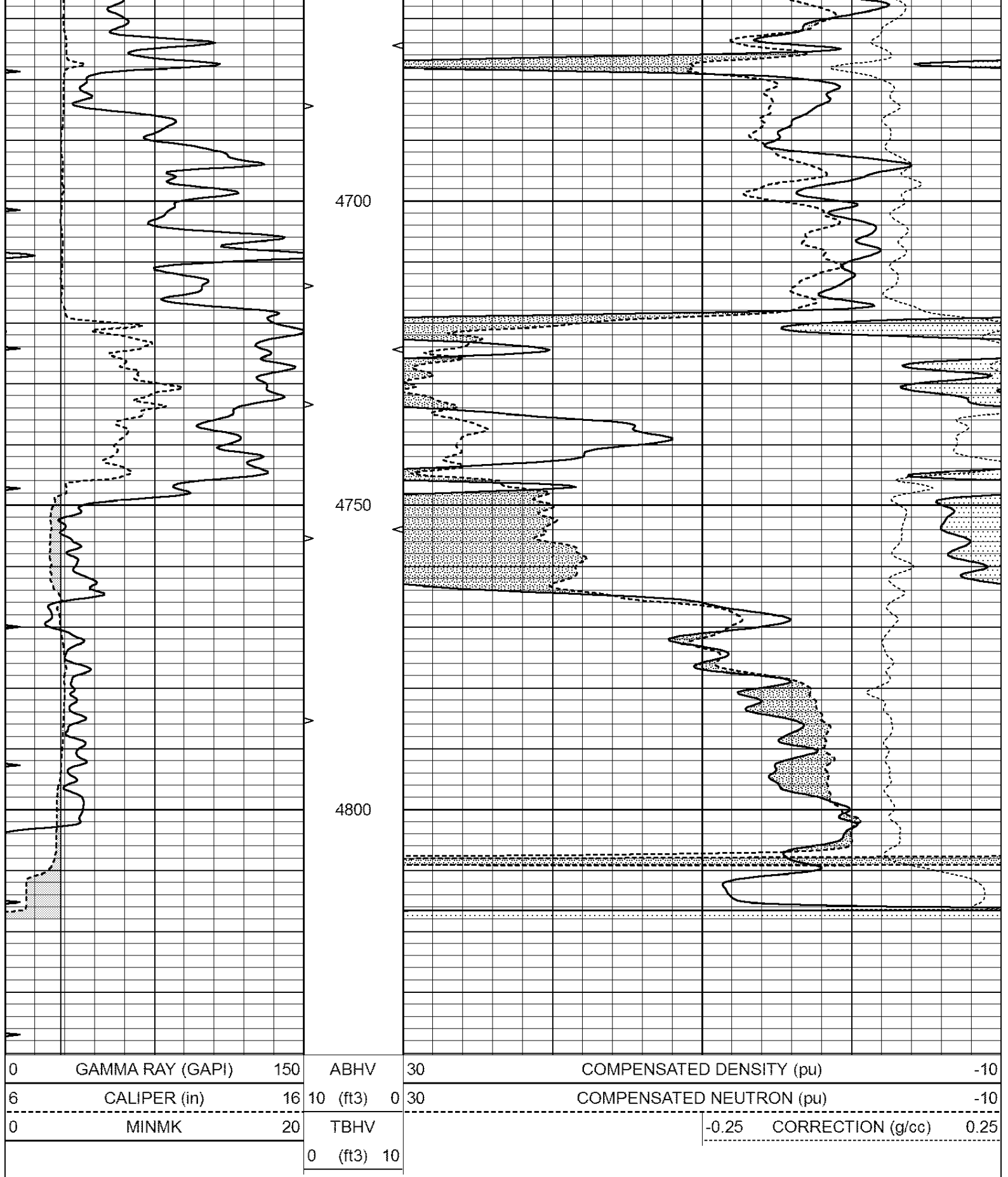


REPEAT SECTION

Database File: 26549ddn.db
 Dataset Pathname: pass3.3
 Presentation Format: den_neu
 Dataset Creation: Sun Apr 05 02:35:08 2015 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		





Calibration Report

Database File: 26549ddn.db
Dataset Pathname: pass5.2
Dataset Creation: Sun Apr 05 03:28:22 2015 by Calc Open-Cased 090629

Serial-Model: PROBE8-DILG
 Surface Cal Performed: Sun Aug 17 08:09:53 2014
 Downhole Cal Performed: Mon Jul 28 11:08:27 2008
 After Survey Verification Performed: Mon Jul 28 11:08:27 2008

Surface Calibration								
Readings			References				Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	620.000	-2.000
Medium	0.029	0.796	V	0.000	464.000	mmho/m	590.000	-16.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.017	0.657	V	0.000	400.000	mmho/m	625.153	-10.619
Medium	0.016	0.757	V	0.000	464.000	mmho/m	625.992	-9.739

Downhole Calibration								
Readings			References				Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m	1.000	0.000
LL3		7.500	V		1500.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		3800.000	mmho-m		

After Survey Verification								
Readings			Targets				Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		

Litho Density Calibration Report								
Serial: 001			Model: PRB					

Master Calibration					Performed Thu Sep 17 09:57:21 2009			
	Background	Magnesium	Aluminum	Sandstone				
Window 1	2056.0	9796.8	3673.1	10821.3	cps			
Window 2	1920.0	8541.1	3303.5	9307.2	cps			
Window 3	1563.1	4735.7	2212.8	5017.5	cps			
Window 4	466.0	466.1	465.6	471.5	cps			
Long Space	0.0	6621.1	1383.5	7387.2	cps			
Short Space	2.5	2361.7	1523.2	2534.0	cps			
Rho		1.7100	2.5900	1.3800	g/cc			
Pe		0.0000	2.5700	1.5500				
Rib Angle	: 44.4	Rib Slope	: 0.978	Density/Spine Ratio	: 0.541			
Spine Angle	: 74.4	Spine Slope	: 3.570	Spine Intercept	: -18.9			

Before Survey Verification					Performed Wed Dec 31 18:00:00 1969			
Window 1	0.0	0.0	0.0	0.0	cps			
Window 2	0.0	0.0	0.0	0.0	cps			
Window 3	0.0	0.0	0.0	0.0	cps			
Window 4	0.0	0.0	0.0	0.0	cps			
Long Space	0.0	0.0	0.0	0.0	cps			

Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc
Measured Pe			0.0000	0.0000	
After Survey Verification					
Performed Wed Dec 31 18:00:00 1969					
Window 1	0.0	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc
Measured Pe			0.0000	0.0000	

Compensated Neutron Calibration Report					
Serial Number:		6I			
Tool Model:		G			

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

PRE-SURVEY VERIFICATION					
Detector		Readings		Measured	Target
1)	Short Space		cps		
	Long Space		cps	pu	pu
2)	Short Space		cps		
	Long Space		cps	pu	
3)	Short Space		cps		
	Long Space		cps	pu	

POST-SURVEY VERIFICATION					
Detector		Readings		Measured	Target
1)	Short Space		cps		
	Long Space		cps	pu	pu
2)	Short Space		cps		
	Long Space		cps	pu	pu
3)	Short Space		cps		
	Long Space		cps	pu	pu

Gamma Ray Calibration Report					
Serial Number:		GR6			
Tool Model:		OPEN			
Performed:		Sun Mar 08 22:55:40 2015			
Calibrator Value:		150.0		GAPI	
Background Reading:		0.0		cps	

Calibrator Reading:

276.0

cps

Sensitivity:

0.8000

GAPI/cps