



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

COMPENSATED DENSITY/NEUTRON LOG

Company	MAI OIL OPERATIONS, INC.		
Well	SELLENS #4		
Field	TRAPP		
County	RUSSELL	State	KANSAS
Location:	AP1 # : 15-167-24002-0000 2310' FSL & 1650' FWL		Other Services DIL/MEL
Permanent Datum	SEC 33 TWP 15S RGE 13W	Elevation	
Log Measured From	GROUND LEVEL	Elevation	1903
Drilling Measured From	KELLY BUSHING 8' A.G.L. KELLY BUSHING	D.F. 1909 G.L. 1903	
Date	9/30/14		
Run Number	ONE		
Depth Driller	3400		
Depth Logger	3402		
Bottom Logged Interval	3378		
Top Log Interval	2300		
Casing Driller	8 5/8" @ 514		
Casing Logger	514		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4000 PPM	
Density / Viscosity	9.2/61		
pH / Fluid Loss	9.0/8.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.80 @ 75F		
Rmt @ Meas. Temp	.60 @ 75F		
Rmc @ Meas. Temp	.96 @ 75F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	.54 @ 111F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	111F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	WYATT URBAN		

<<< 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:
SUSANK, KS. - 4 NORTH TO THE T - NORTH INTO BY BLUE TANK BATTERY

Database File:

26200ddn.db

Dataset Pathname:

pass3.1

Presentation Format:

den_neu

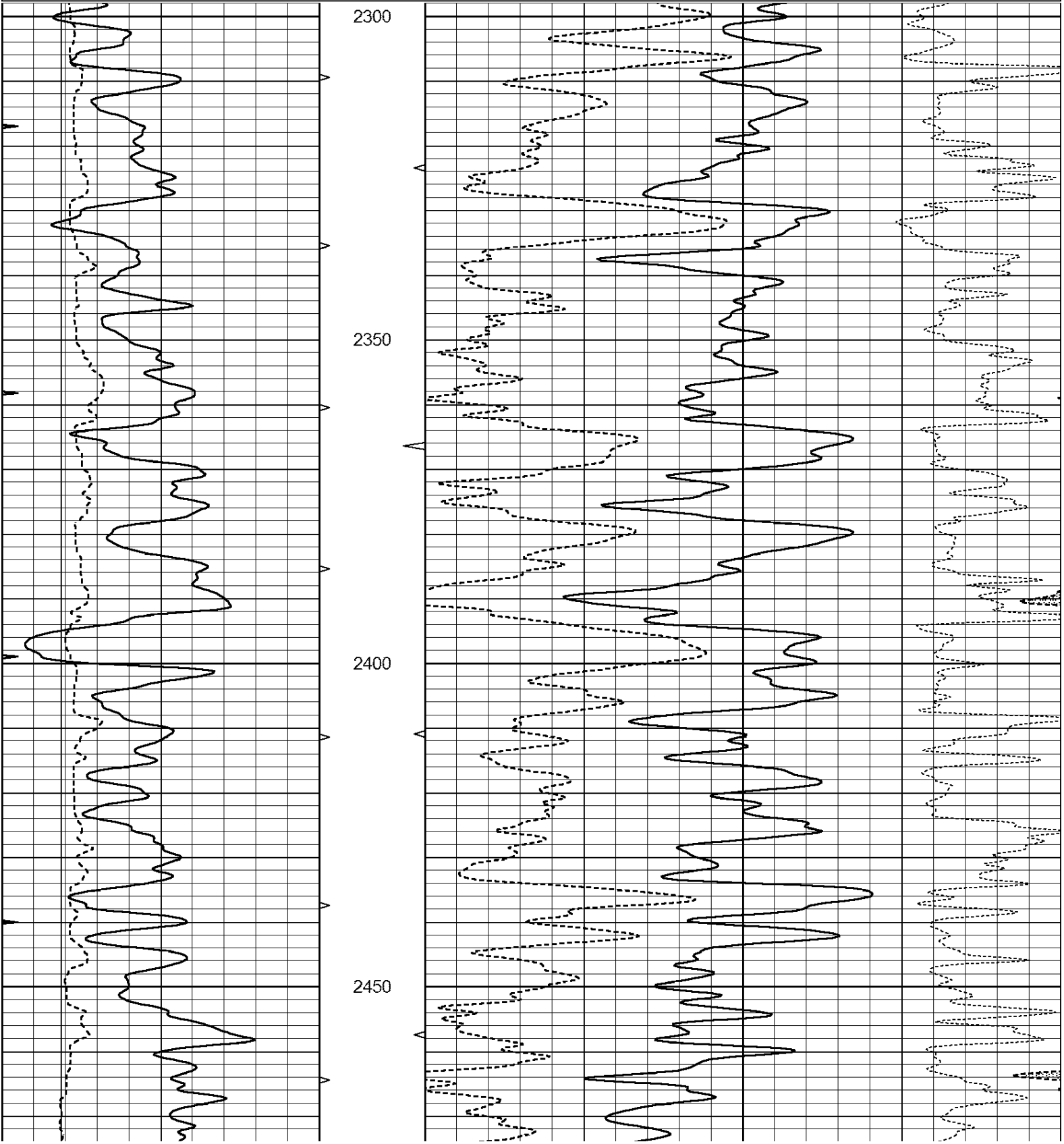
Dataset Creation:

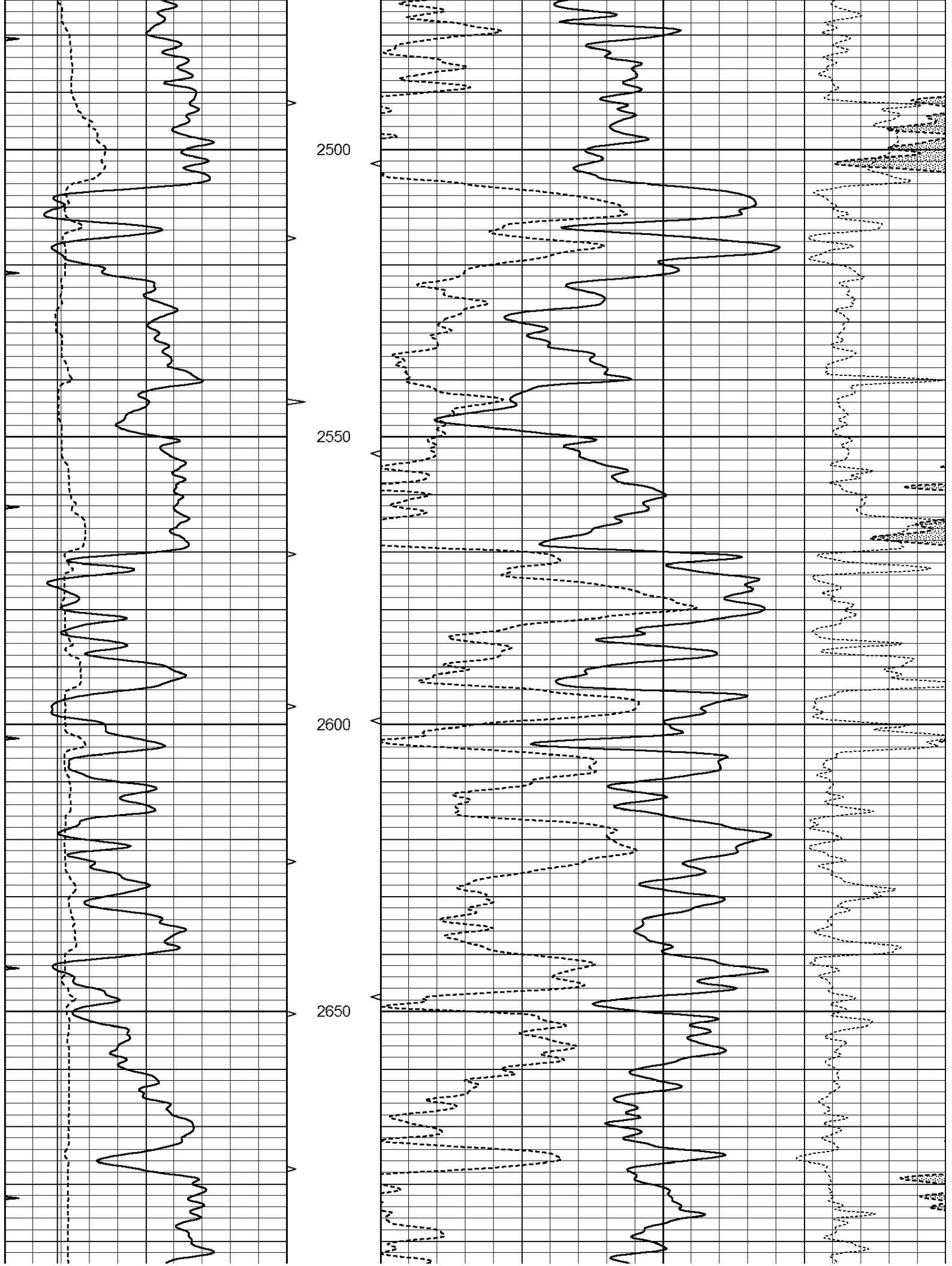
Tue Sep 30 11:01:21 2014 by Calc Open-Cased 090629

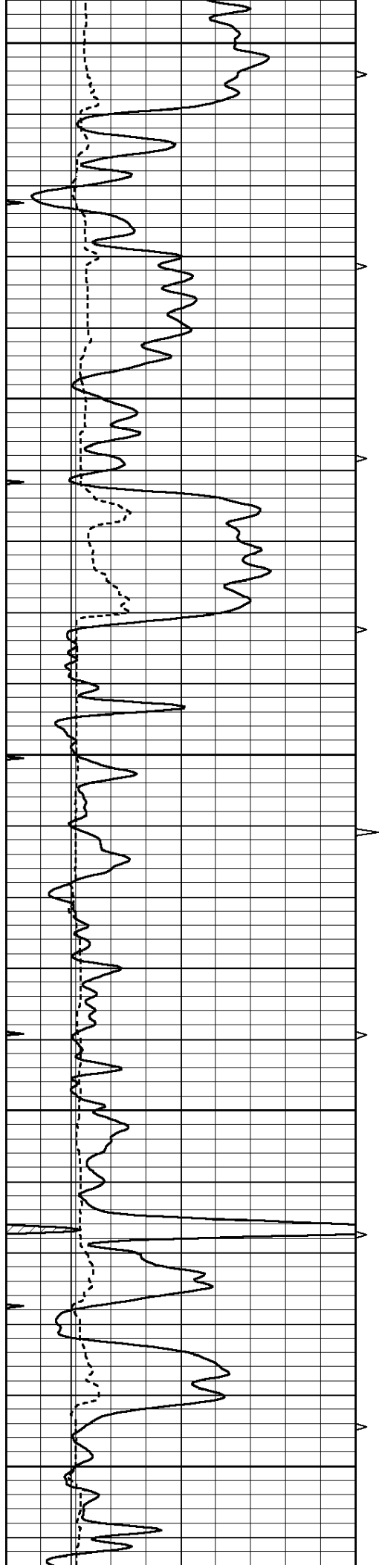
Charted by:

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		







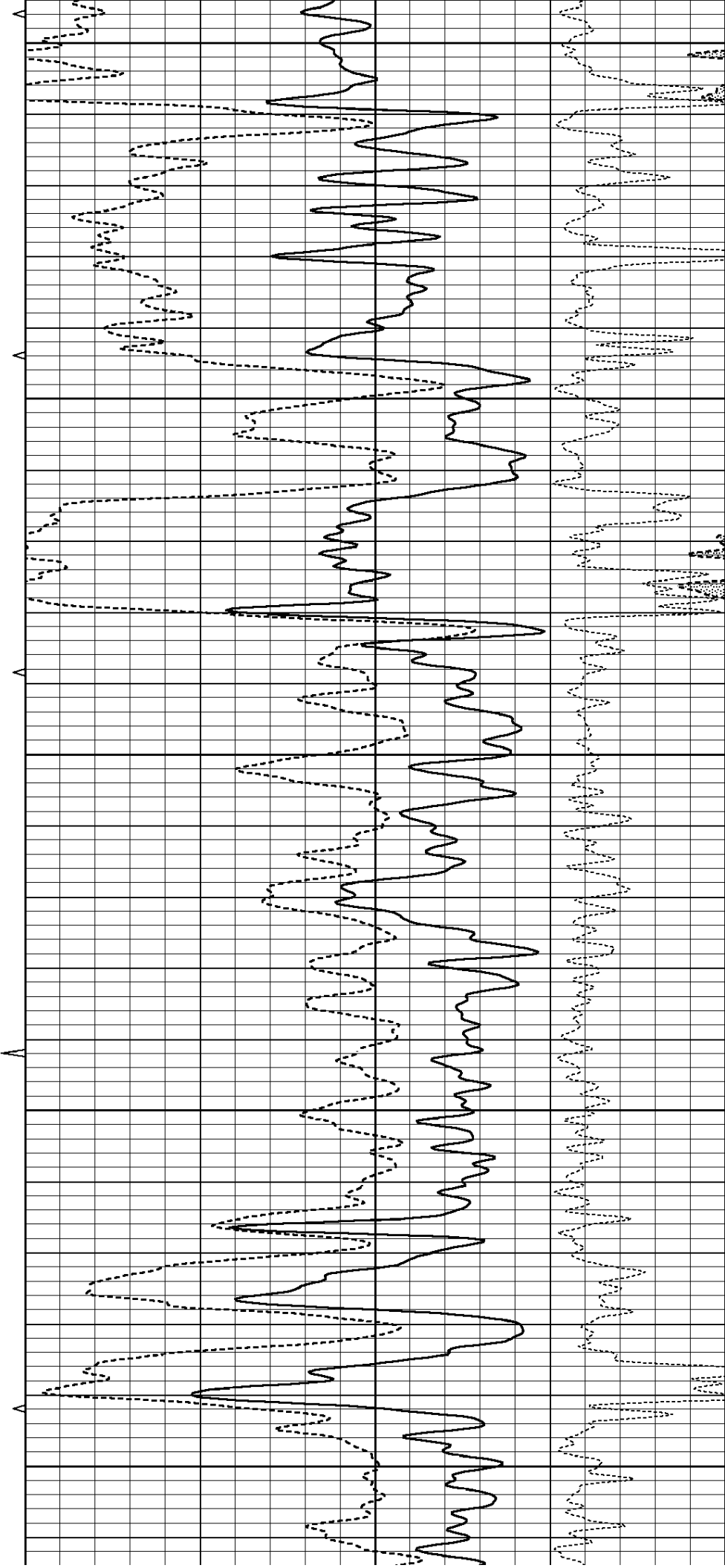
2700

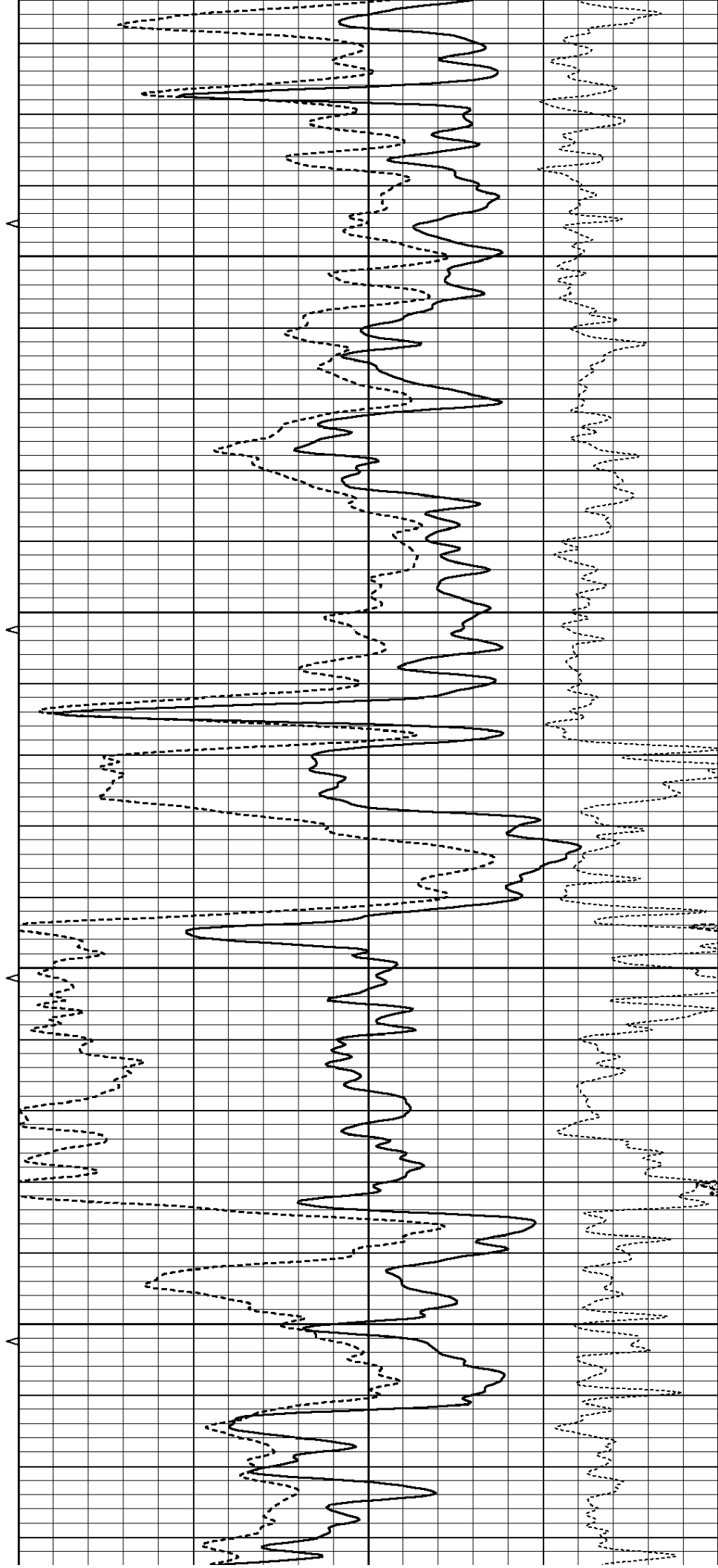
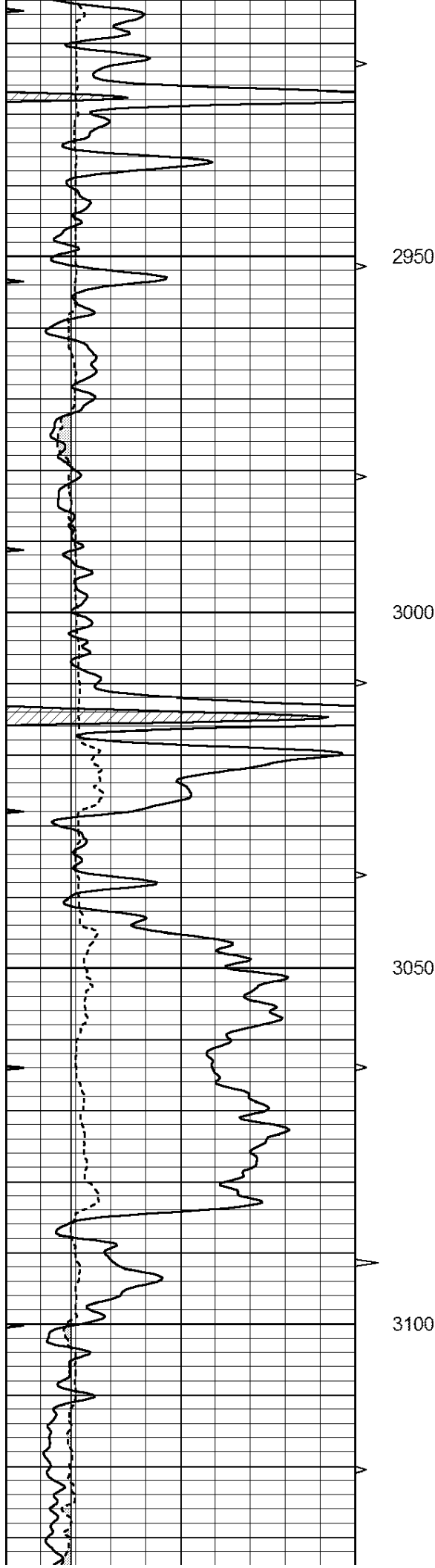
2750

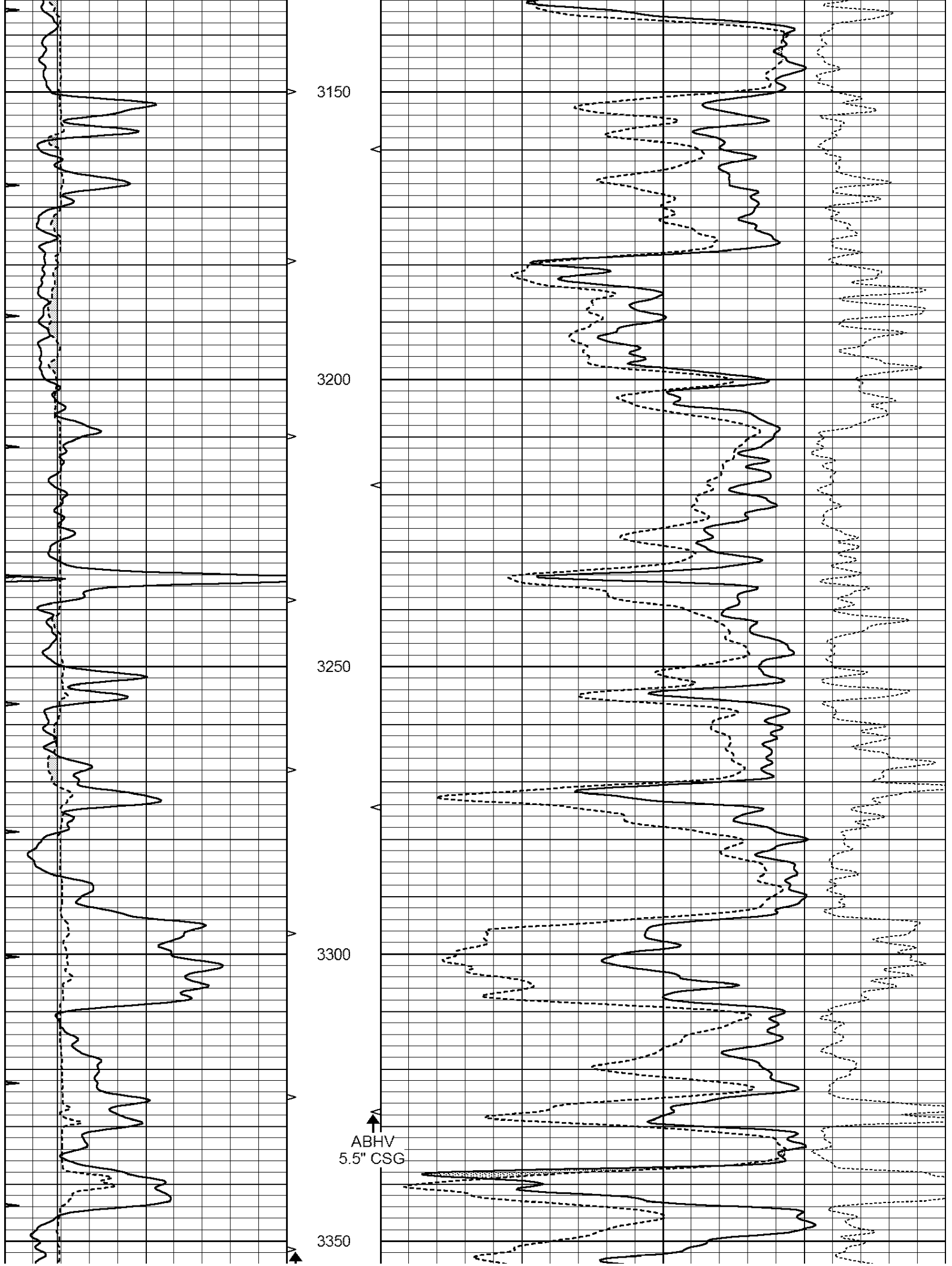
2800

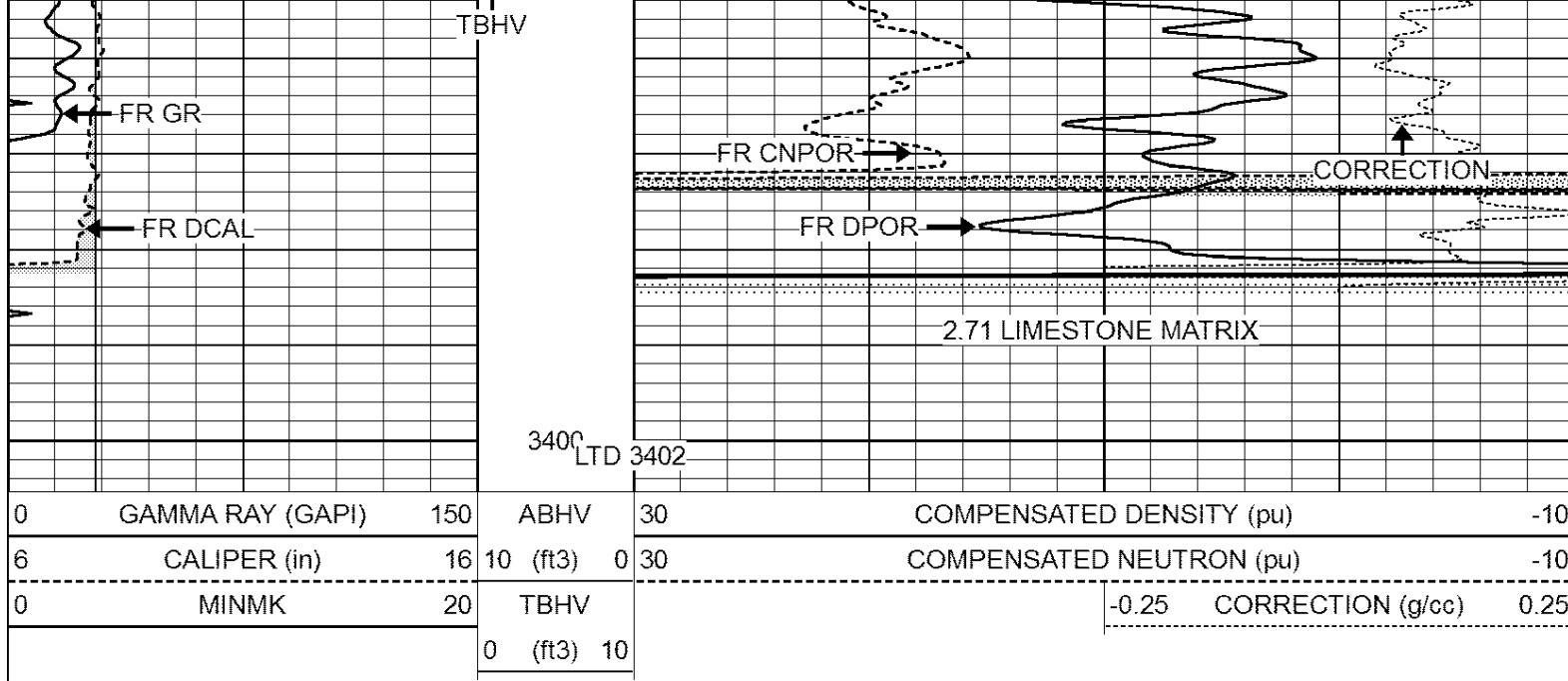
2850

2900





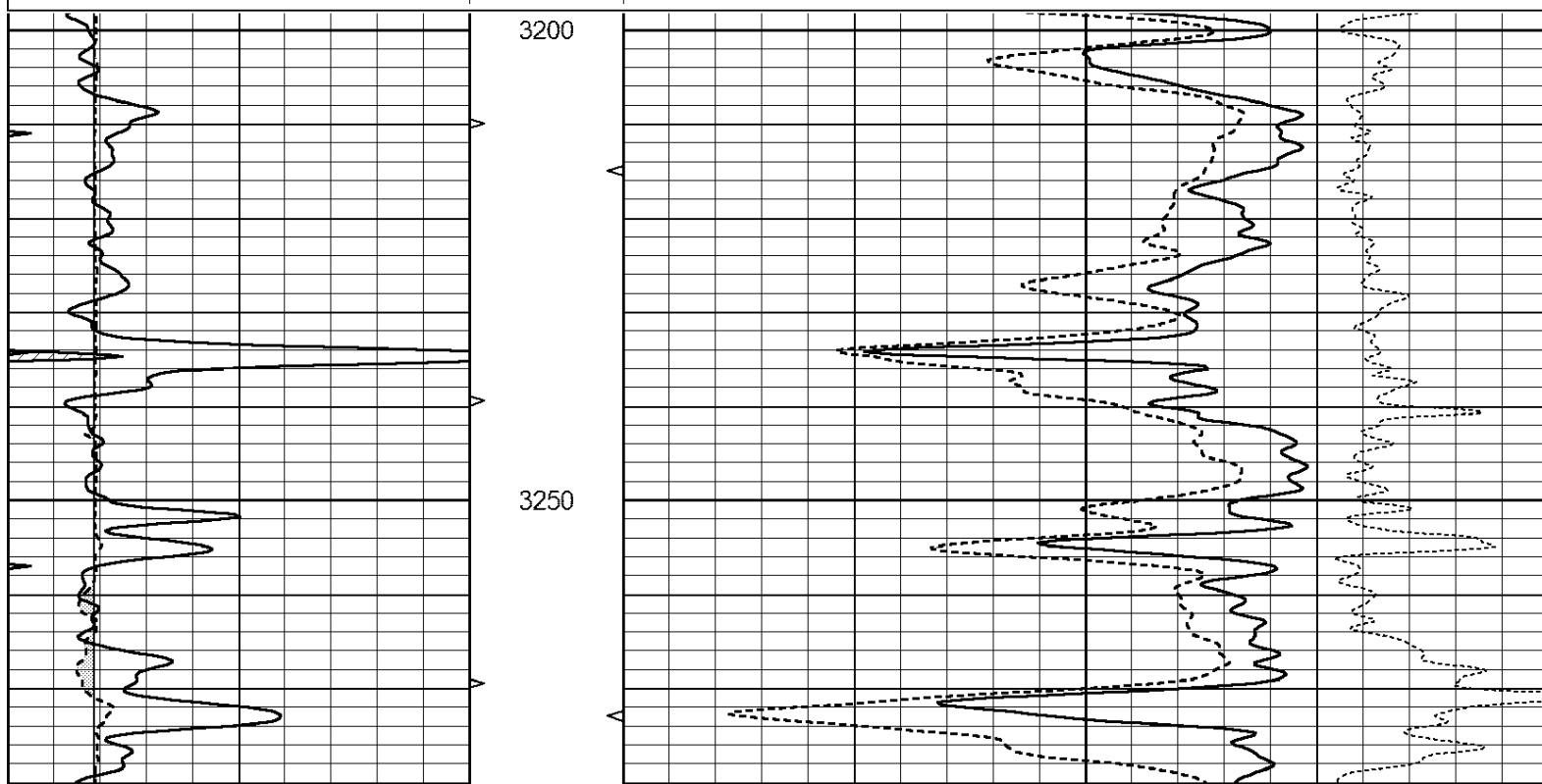


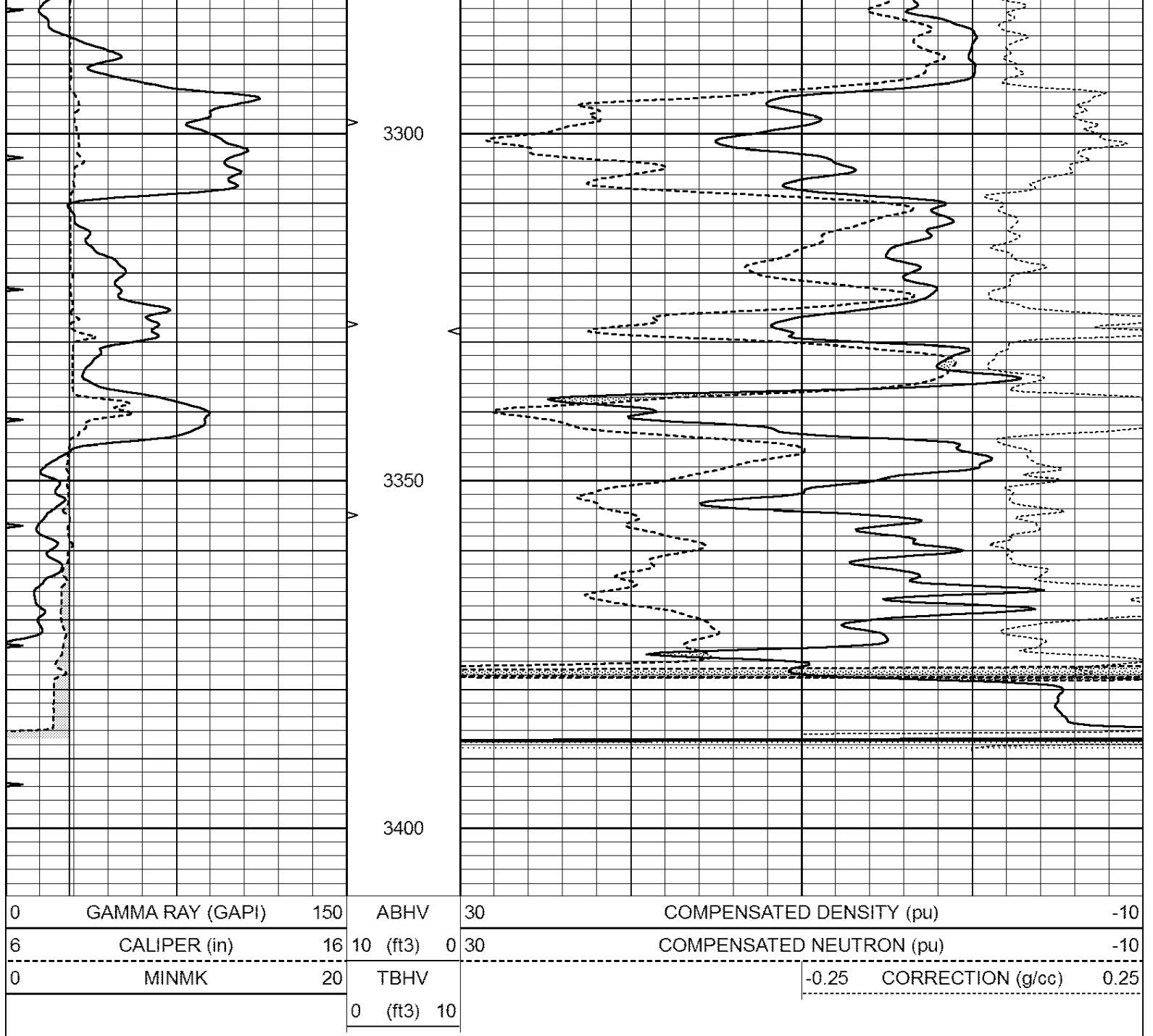


REPEAT SECTION

Database File: 26200ddn.db
 Dataset Pathname: pass2.1
 Presentation Format: den_neu
 Dataset Creation: Tue Sep 30 10:51:32 2014 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: 26200ddn.db
 Dataset Pathname: pass2.1
 Dataset Creation: Tue Sep 30 10:51:32 2014 by Calc Open-Cased 090629

Dual Induction Calibration Report

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

Loop:	Readings			References			Results	
	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		
Compensated Density Calibration Report								
	Serial-Model:				GEAR3-GEARHART			
	Source / Verifier:				143 / 143			
	Master Calibration Performed:				Sun Aug 17 08:09:42 2014			
	Before Survey Verification Performed:							
	After Survey Verification Performed:							
Master Calibration								
	Density			Far Detector		Near Detector		
Magnesium	1.710	g/cc		935.36		501.55	cps	
Aluminum	2.580	g/cc		209.32		357.01	cps	
	Spine Angle = 77.21			Density/Spine Ratio = 0.567				
	Size			Reading				
Small Ring	8.00	in		4.29	V			
Large Ring	14.00	in		6.24	V			
Before Survey Verification								
	Target			Measured				
		g/cc			g/cc			
		g/cc			g/cc			
		g/cc			g/cc			
After Survey Verification								
	Target			Measured				
		g/cc			g/cc			
		g/cc			g/cc			
		g/cc			g/cc			
Compensated Neutron Calibration Report								
	Serial Number:				6I			
	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
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 Aug 17 15:23:09 2014				
Calibrator Value:		150.0		GAPI		
Background Reading:		0.0		cps		
Calibrator Reading:		276.0		cps		
Sensitivity:		0.7000		GAPI/cps		