



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

COMPENSATED DENSITY/NEUTRON LOG

Company		DOWNING-NELSON OIL CO INC.	
Well	CARL QUINT #1-3		
Field	WILDCAT		
County	GRAHAM	State	KANSAS
Location:	API # : 15-065-23915-00-00		Other Services DIL/MEL SONIC
Permanent Datum Log Measured From Drilling Measured From		2570' FNL & 1100' FEL SW - SW - SE - NE SEC 3 TWP 9S RGE 23W GROUND LEVEL Elevation 2198 KELLY BUSHING 8' A.G.L. KELLY BUSHING	
Date	4/9/13		
Run Number	ONE		
Depth Driller	3788		
Depth Logger	3789		
Bottom Logged Interval	3765		
Top Log Interval	3000		
Casing Driller	8 5/8" @ 218		
Casing Logger	216		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 2,000 PPM	
Density / Viscosity	9.1/58		
pH / Fluid Loss	9.5/8.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.85 @ 79F		
Rmt @ Meas. Temp	0.64 @ 79F		
Rmc @ Meas. Temp	1.02 @ 79F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	0.59 @ 114F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	114F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	IAN MABB		
Witnessed By	RON NELSON		

<<< 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.

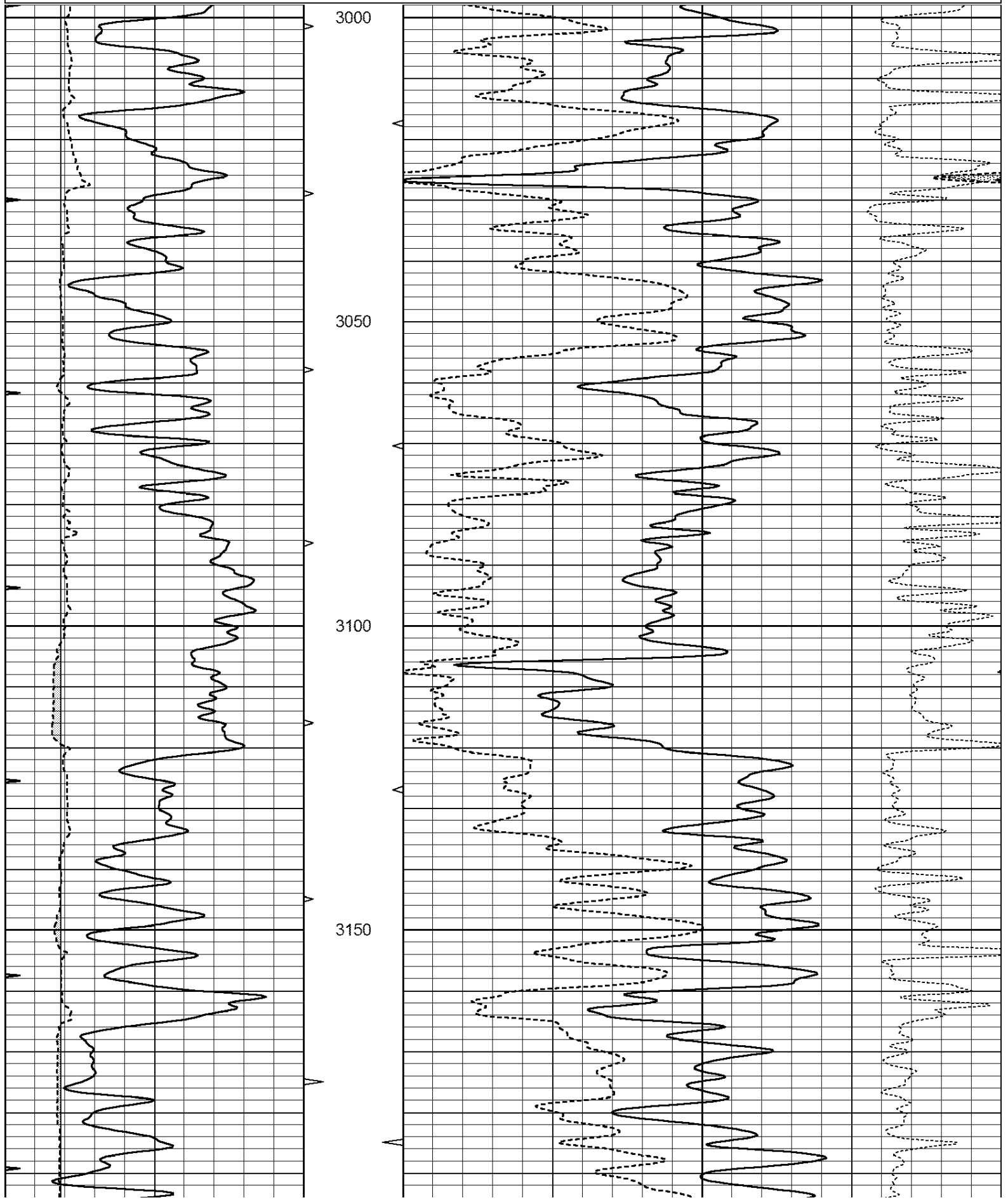
Comments

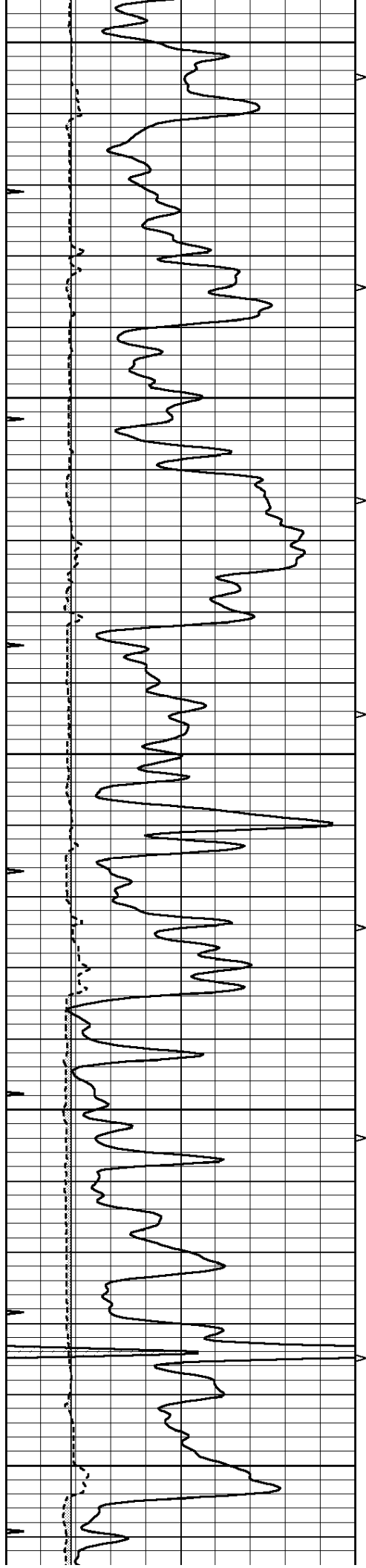
THANK YOU FOR USING NABORS, HAYS, KS. (785) 628-6395
DIRECTIONS:

WAKEENEY, KS. - 21 MILES NORTH TO RD. M -1 WEST TO THE BEND SOUTH 1/2 MILE - WEST INTO

Database File: 010868ddn.db
 Dataset Pathname: pass3.2
 Presentation Format: den_neu
 Dataset Creation: Tue Apr 09 12:56:43 2013 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

Charted by:		Depth in Feet scaled 1:2.10					
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		-0.25	CORRECTION (g/cc)	0.25
			0 (ft3)	10			





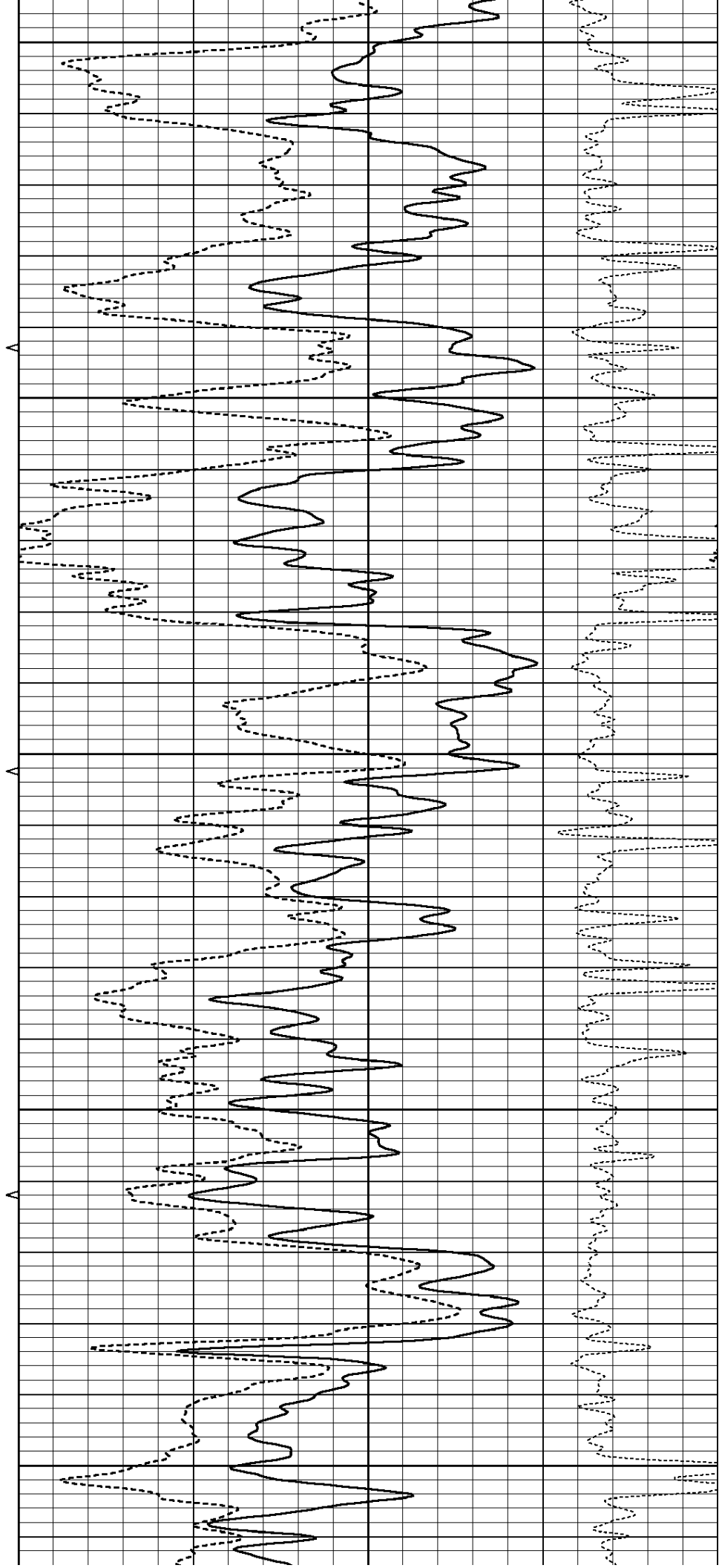
3200

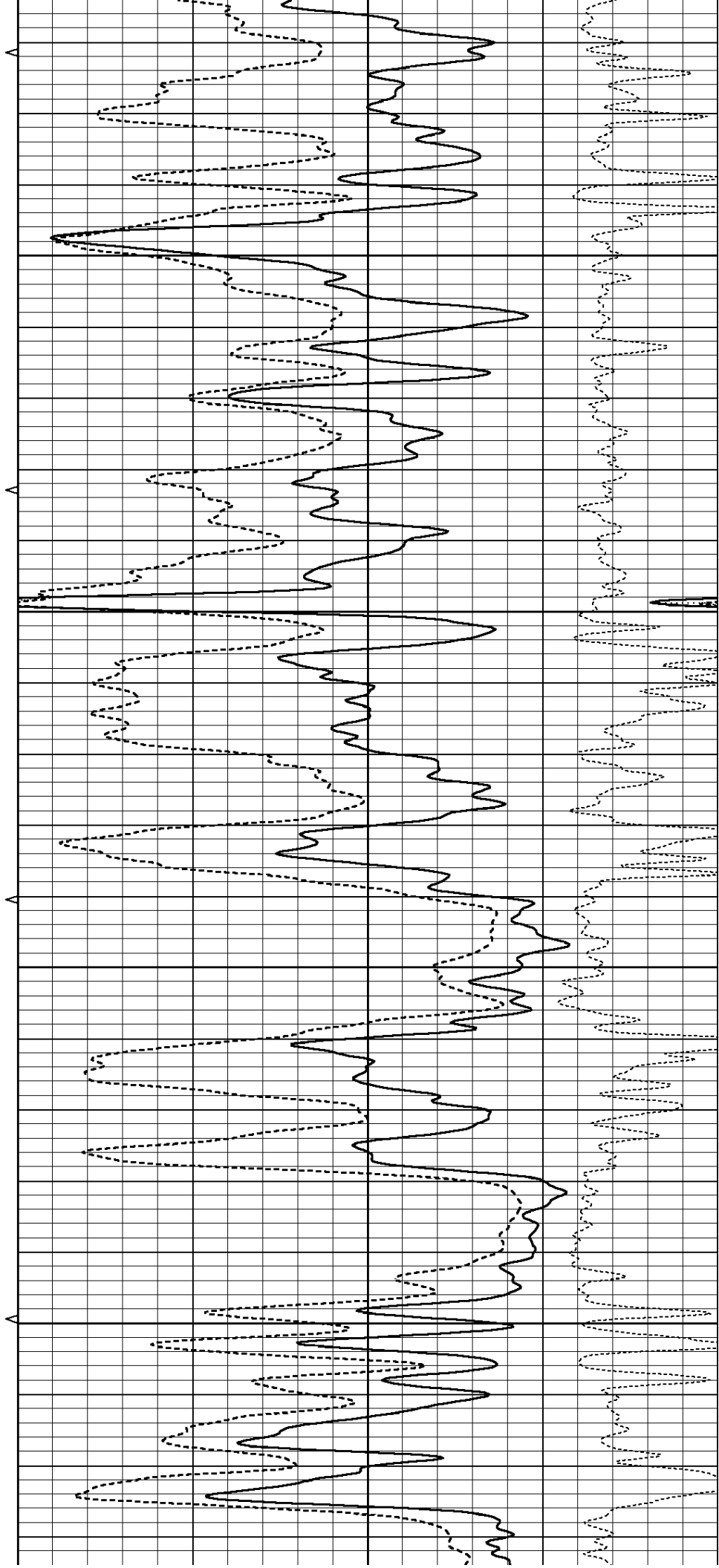
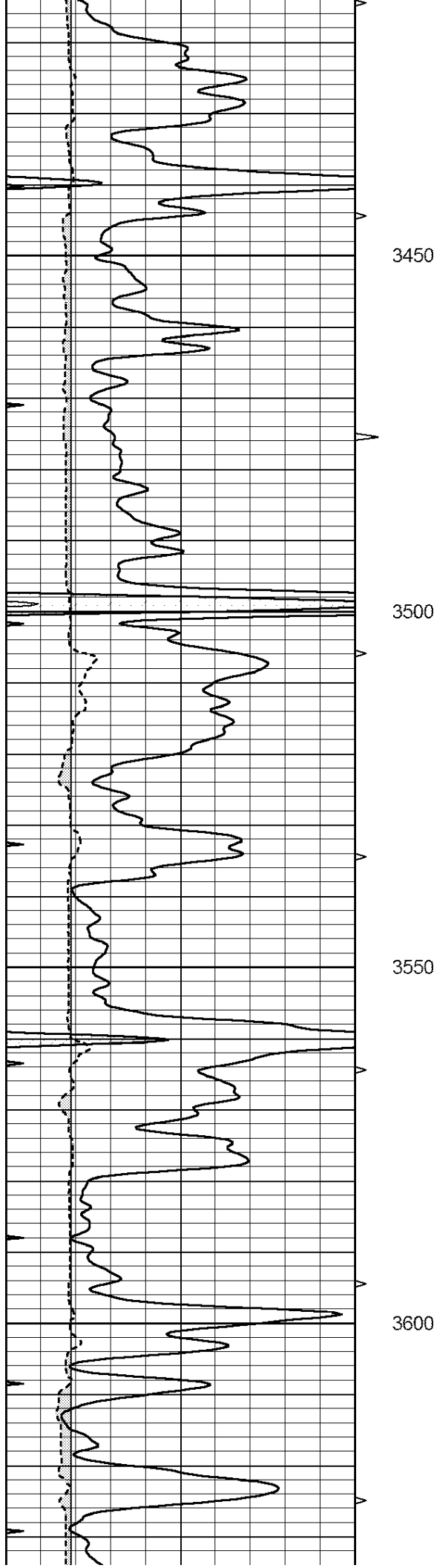
3250

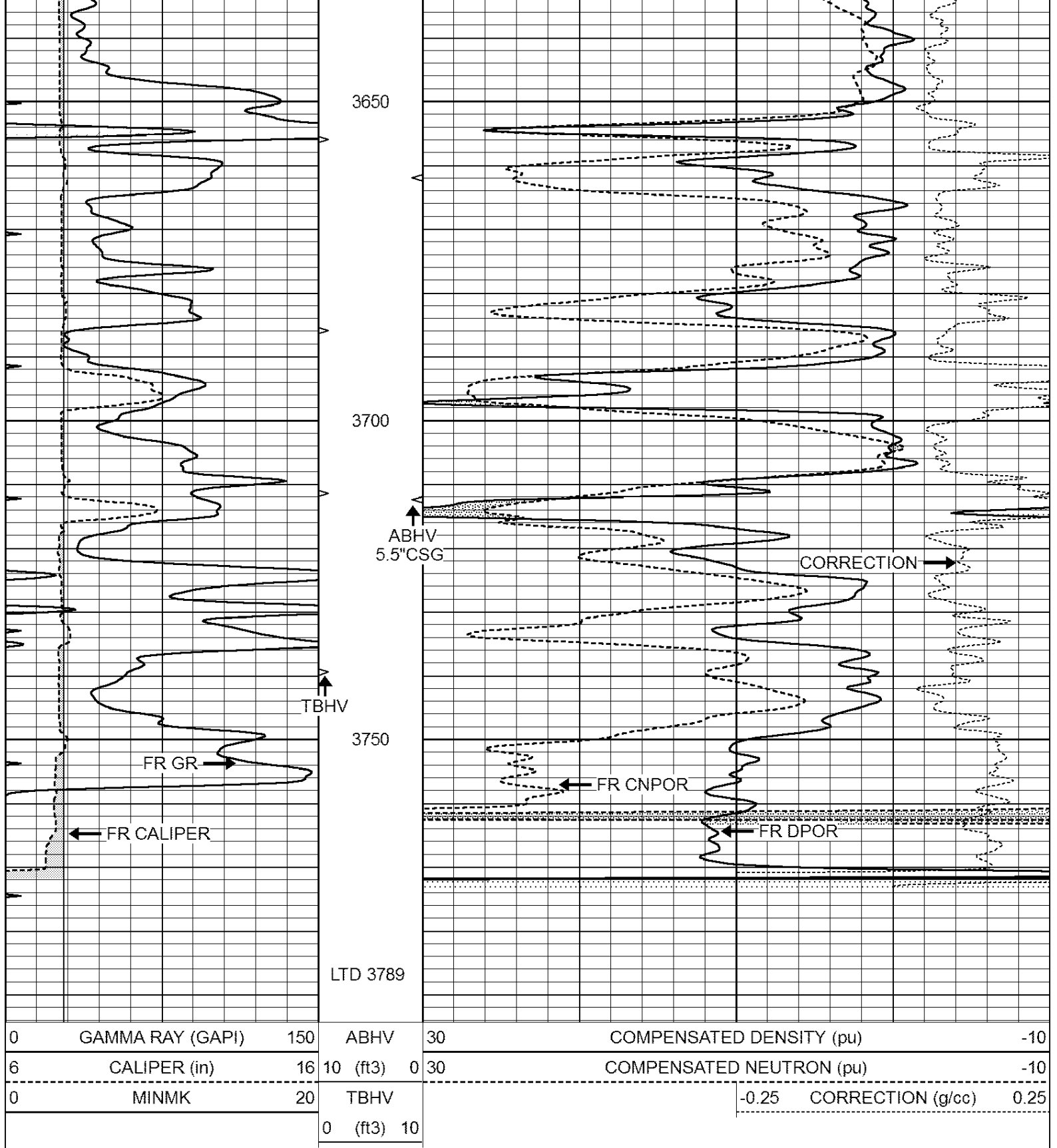
3300

3350

3400







NABORS
COMPLETION
& PRODUCTION
SERVICES CO.

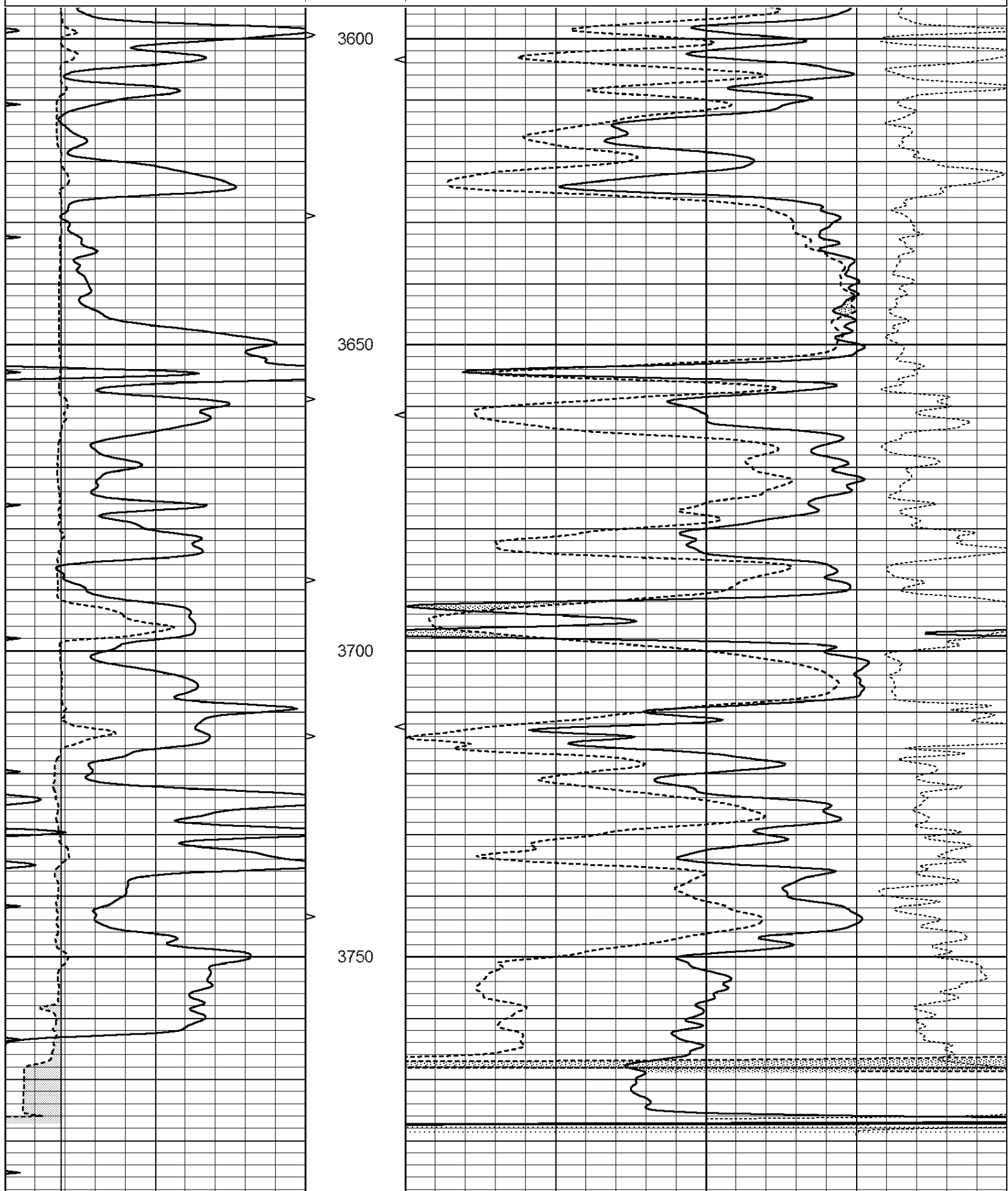
REPEAT SECTION

Database File: 010868ddn.db
Dataset Pathname: pass2.1.4
Presentation Format: den_neu
Dataset Creation: Tue Apr 09 11:45:06 2013 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			



Master Calibration			
	Device Calibration	Field Data Collection	Master Data Collection

	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:	#8
Tool Model:	OPEN

Performed: Mon Jun 13 16:56:43 2011

Calibrator Value: 150.0 GAPI

Background Reading: 0.0 cps

Calibrator Reading: 175.0 cps

Sensitivity: 0.8371 GAPI/cps