



**SUPERIOR**  
**Hays,**  
**Kansas**

**COMPENSATED**  
**NEUTRON / DENSITY**  
**LOG**

Company RL INVESTMENTS, LLC.  
 Well HOBBS #1  
 Field MARTHA WASHINGTON EAST  
 County GRAHAM  
 State KANSAS

Company RL INVESTMENTS, LLC.  
 Well HOBBS #1  
 Field MARTHA WASHINGTON EAST  
 County GRAHAM State KANSAS

Location: 335' FSL & 1153' FEL  
 API # : 15-065-23812-0000  
 Other Services DIL/MEL  
 SEC 24 TWP 10S RGE 25W  
 Permanent Datum GROUND LEVEL Elevation 2480  
 Log Measured From KELLY BUSHING & A.G.L.  
 Drilling Measured From KELLY BUSHING  
 Elevation K.B. 2488  
 D.F. 2486  
 G.L. 2480

Date	3/22/12	
Run Number	ONE	
Depth Driller	4095	
Depth Logger	4099	
Bottom Logged Interval	4075	
Top Log Interval	3400	
Casing Driller	8 5/8" @ 220	
Casing Logger	222	
Bit Size	7 7/8	
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4000 PPM
Density / Viscosity	9.2/46	
pH / Fluid Loss	9.5/9.6	
Source of Sample	FLOWLINE	
Rim @ Meas. Temp	1.2 @ 65F	
Rmf @ Meas. Temp	.90 @ 65F	
Rmc @ Meas. Temp	1.44 @ 65F	
Source of Rmf / Rmc	MEASURED	
Rim @ BHT	.67 @ 116F	
Time Circulation Stopped	2 HOURS	
Time Logger on Bottom		
Maximum Recorded Temperature	116F	
Equipment Number	680	
Location	HAYS, KS.	
Recorded By	JASON CAPPELLUCCI	
Witnessed By	PAT DEENIHAN	

<<< 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 (785) 628-6395  
 DIRECTIONS  
 WAKEENEY, KS. - N. TO COUNTY LINE - 2 MORE NORTH TO RD. C  
 10 1/4 W. - N. INTO

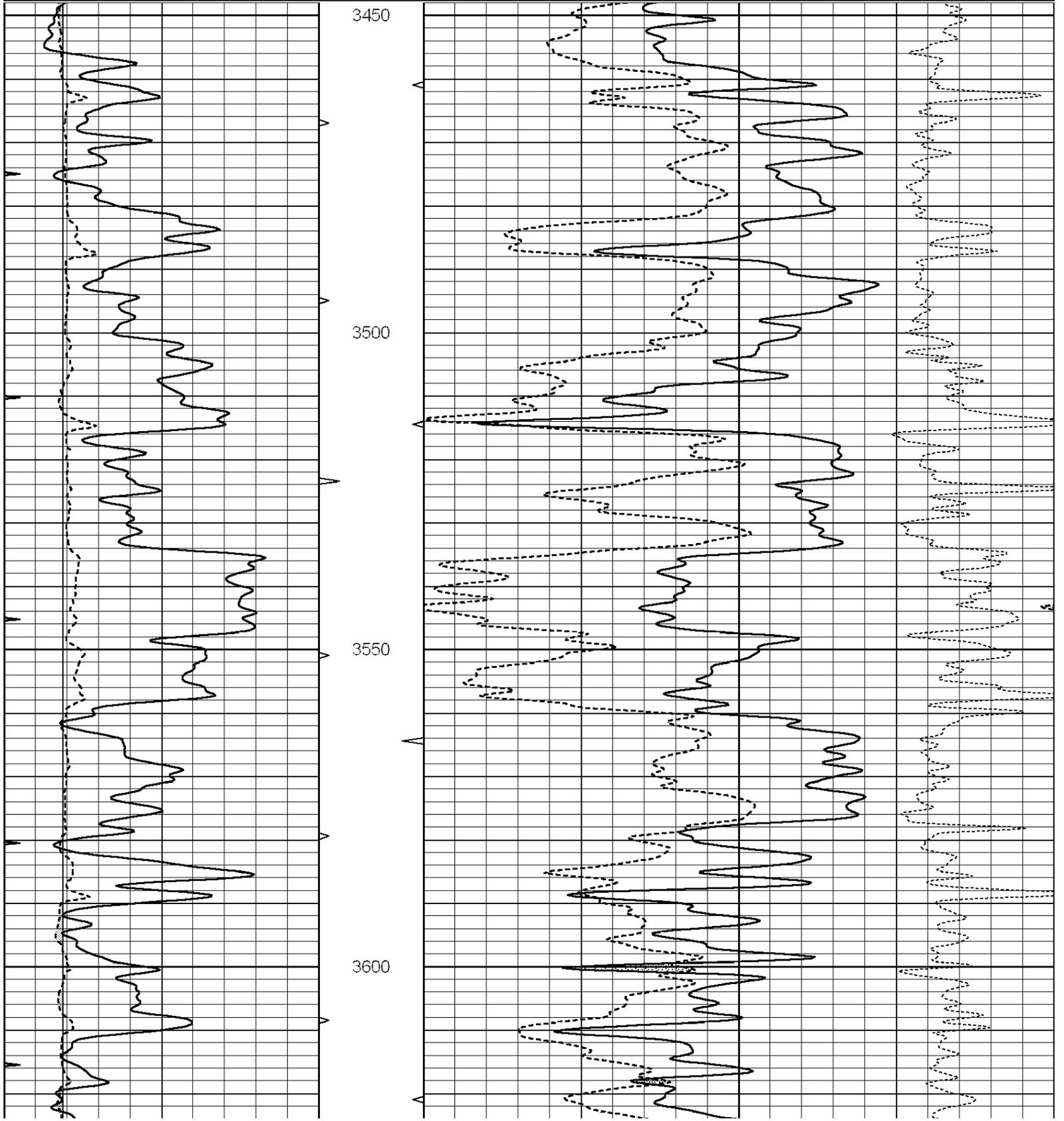


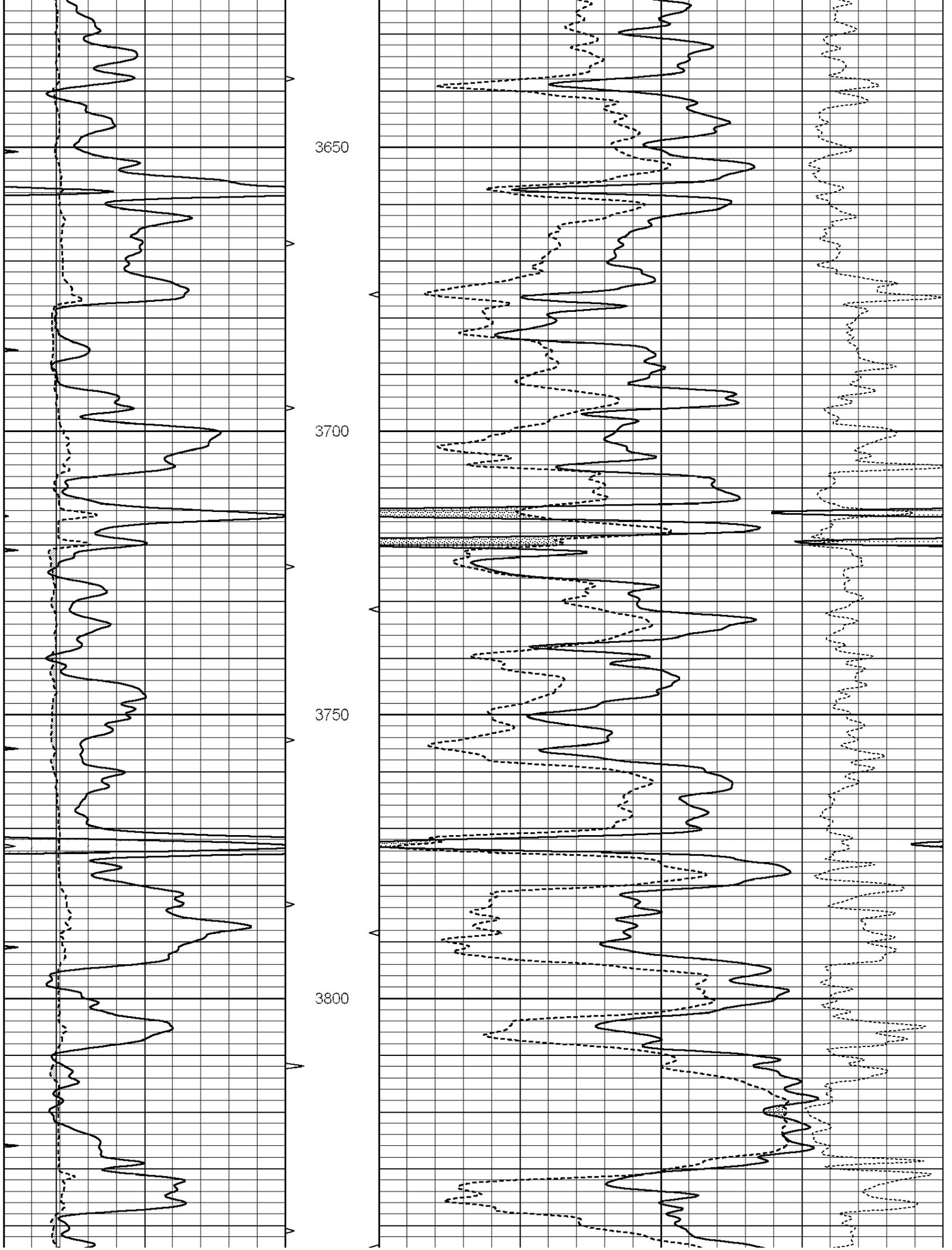
**SUPERIOR**  
**Hays,**  
**Kansas**

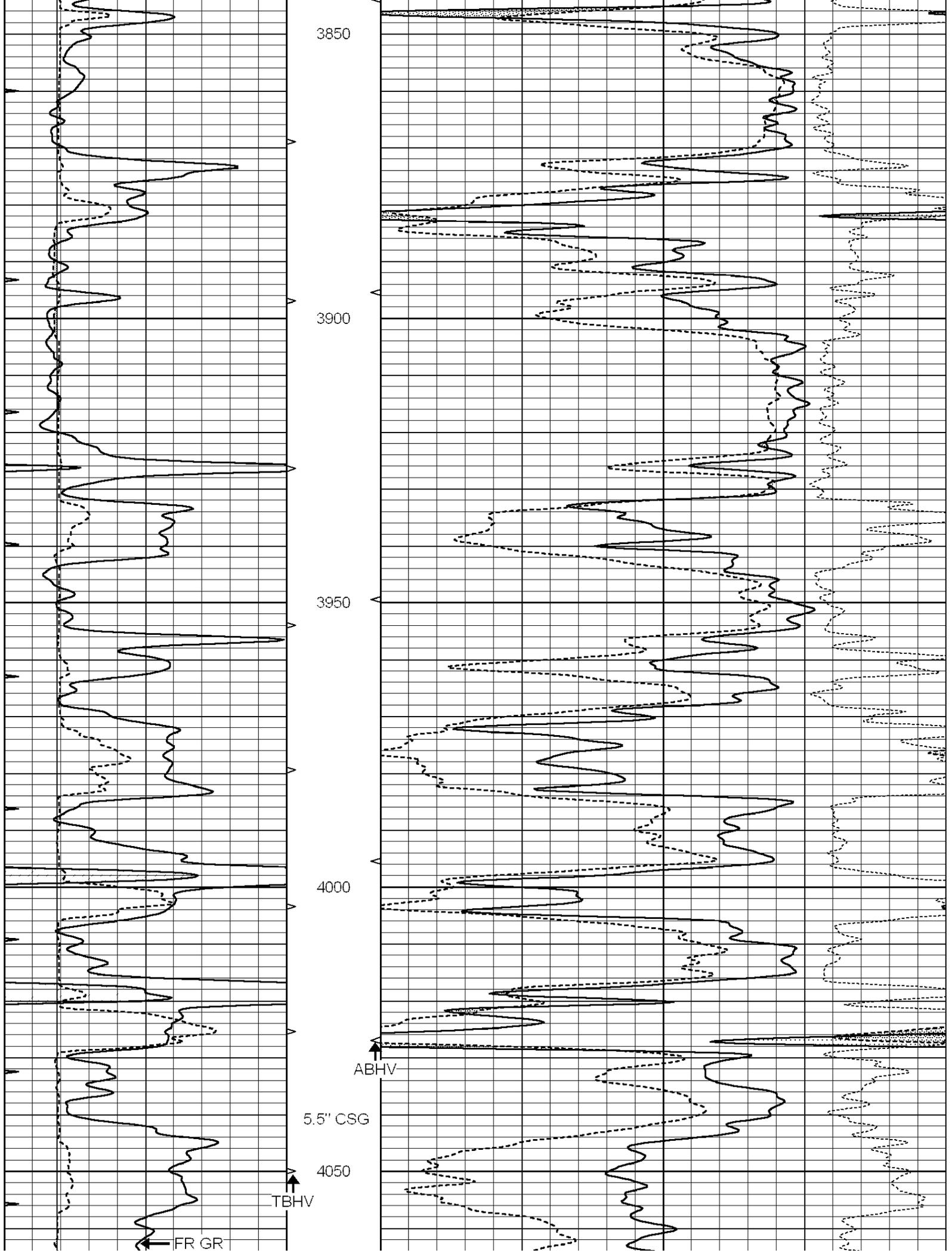
**MAIN SECTION**

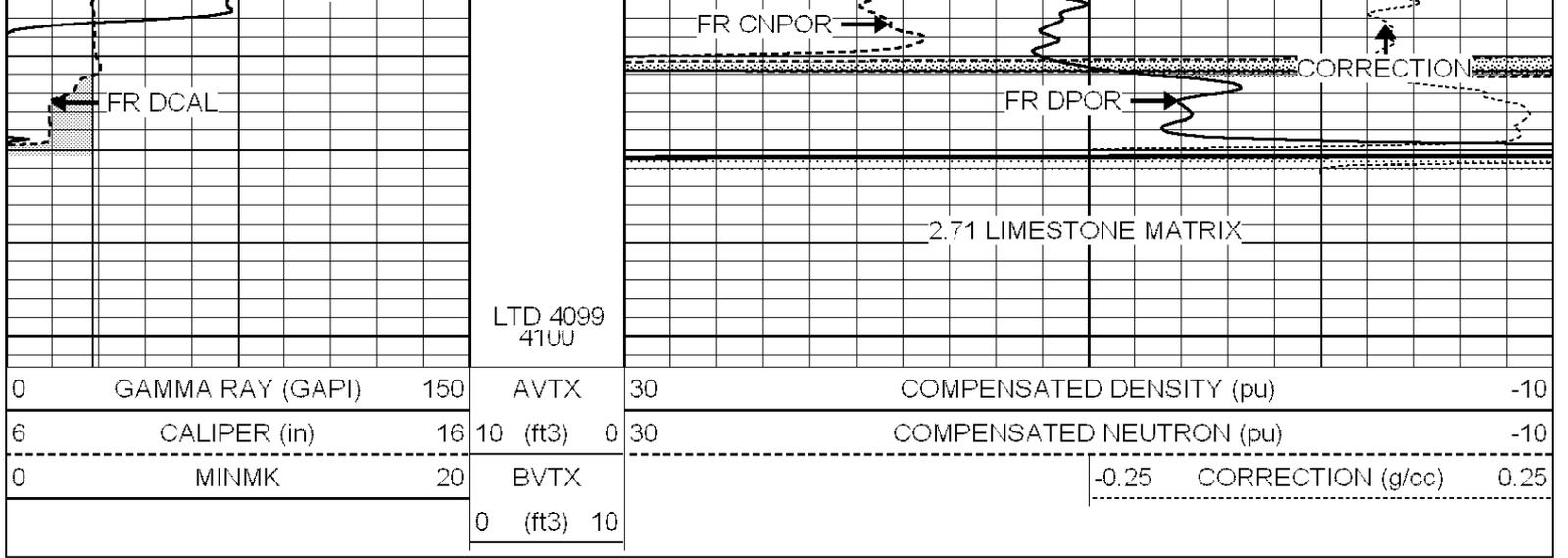
Database File: 008074ddn.db  
 Dataset Pathname: pass3.1  
 Presentation Format: \_den\_neu  
 Dataset Creation: Thu Mar 22 08:29:29 2012 by Calc Open-Cased 090629  
 Charted by: Depth in Feet scaled 1:240

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







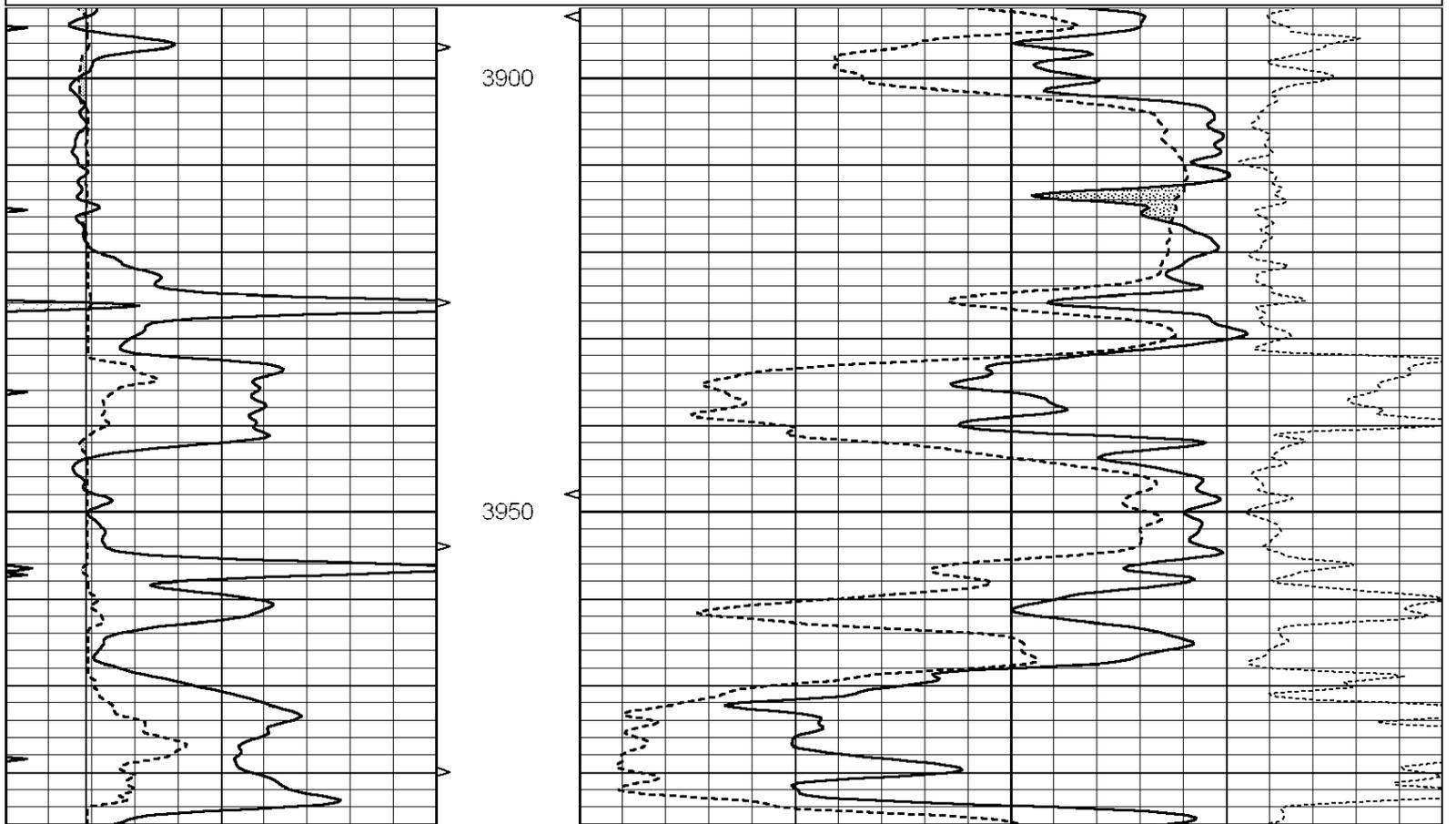


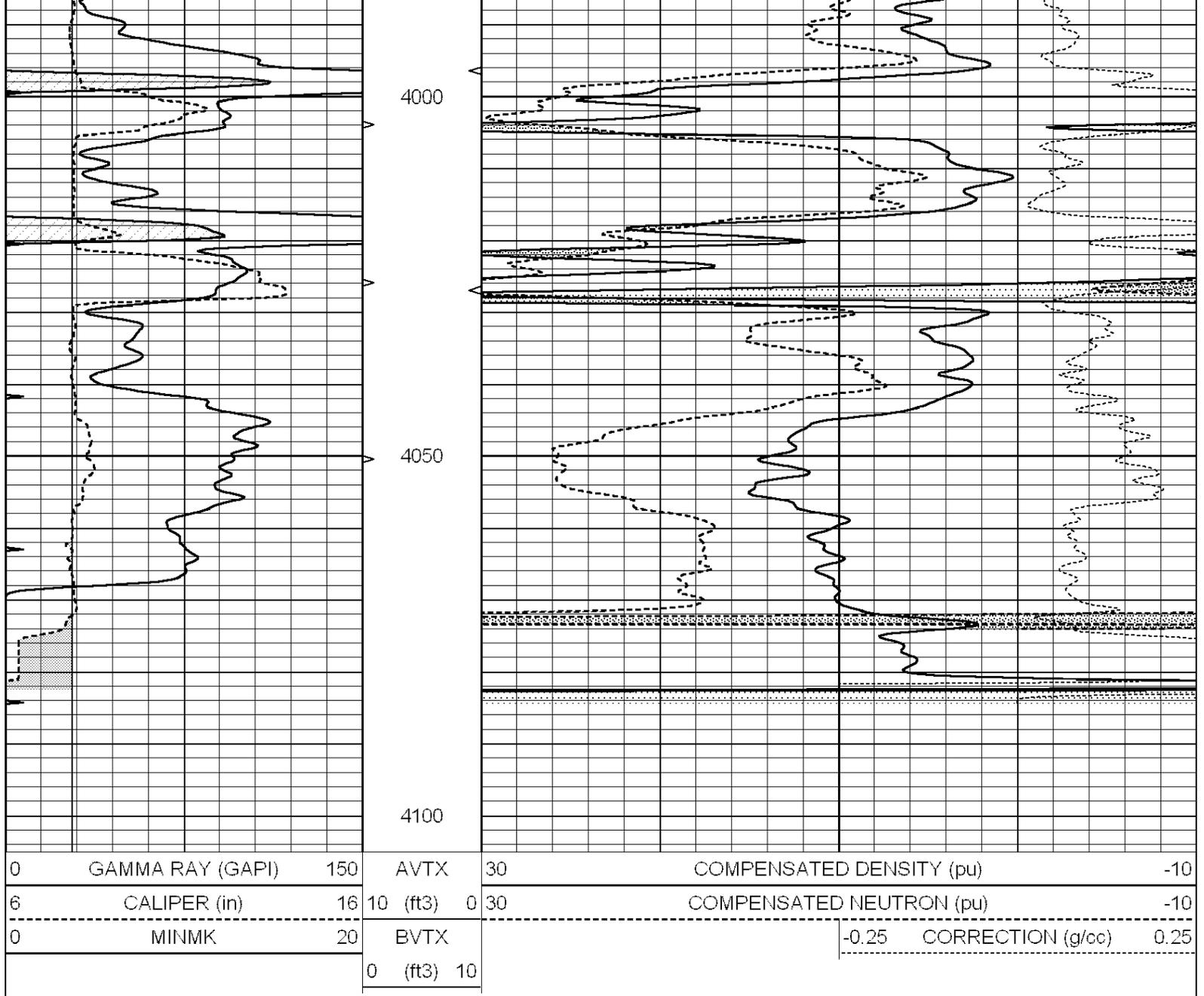
SUPERIOR  
Hays,  
Kansas

# REPEAT SECTION

Database File: 008074ddn.db  
 Dataset Pathname: pass2.1  
 Presentation Format: \_den\_neu  
 Dataset Creation: Thu Mar 22 08:34:49 2012 by Calc Open-Cased 090629  
 Charted by: Depth in Feet scaled 1:240

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





### Calibration Report

Database File: 008074ddn.db  
 Dataset Pathname: pass2.1  
 Dataset Creation: Thu Mar 22 08:34:49 2012 by Calc Open-Cased 090629

### Dual Induction Calibration Report

Serial-Model: PROBE8-DILG  
 Surface Cal Performed: Fri Aug 01 06:33:19 2008  
 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	632.616	-9.730
Medium	0.029	0.796	V	0.000	464.000	mmho/m	605.049	-17.680
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	605.000	-9.730

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:	GEAR4-GEARHART
Source / Verifier:	143 / 143
Master Calibration Performed:	Mon Mar 19 19:07:19 2012

Master Calibration						
	Density			Far Detector	Near Detector	
Magnesium	1.710	g/cc		1015.91	497.51	cps
Aluminum	2.600	g/cc		227.67	350.20	cps
Spine Angle = 76.79			Density/Spine Ratio = 0.579			
	Size		Reading			
Small Ring	8.00	in	2.25	V		
Large Ring	14.00	in	4.37	V		

**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	

**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