



**COMPENSATED  
DENSITY/NEUTRON  
LOG**

Company MAI OIL OPERATIONS, INC.

Well KULTGEN #18

Field CHEYENNE VIEW

County BARTON State KANSAS

Location: API #: 15-009-26272-0000

1280' FNL & 1350' FWL  
SW - SW - NE - NW

Other Services  
DILMEL

SEC 12 TWP 19S RGE 12W

Elevation

Permanent Datum GROUND LEVEL Elevation 1799  
Log Measured From KELLY BUSHING 9' A.G.L  
Drilling Measured From KELLY BUSHING

K.B. 1808  
D.F. 1806  
G.L. 1799

Date	9/10/19	
Run Number	ONE	
Depth Driller	3460	
Depth Logger	3458	
Bottom Logged Interval	3434	
Top Log Interval	2650	
Casing Driller	8 5/8" @ 392'	
Casing Logger	392'	
Bit Size	7 7/8	
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 10000 PPM
Density / Viscosity	9.4/62	
pH / Fluid Loss	8.5/16.0	
Source of Sample	FLOWLINE	
Rm @ Meas. Temp	.25 @ 94F	
Rmf @ Meas. Temp	.18 @ 94F	
Rmc @ Meas. Temp	.30 @ 94F	
Source of Rmf / Rmc	MEASUREMENT	
Rm @ BHT	.21 @ 111F	
Time Circulation Stopped	2 HOURS	
Time Logger on Bottom	////	
Maximum Recorded Temperature	111F	
Equipment Number	3802	
Location	HAYS, KANSAS	
Recorded By	JASON CAPPELLUCCI	
Witnessed By	JIM MUSGROVE	

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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

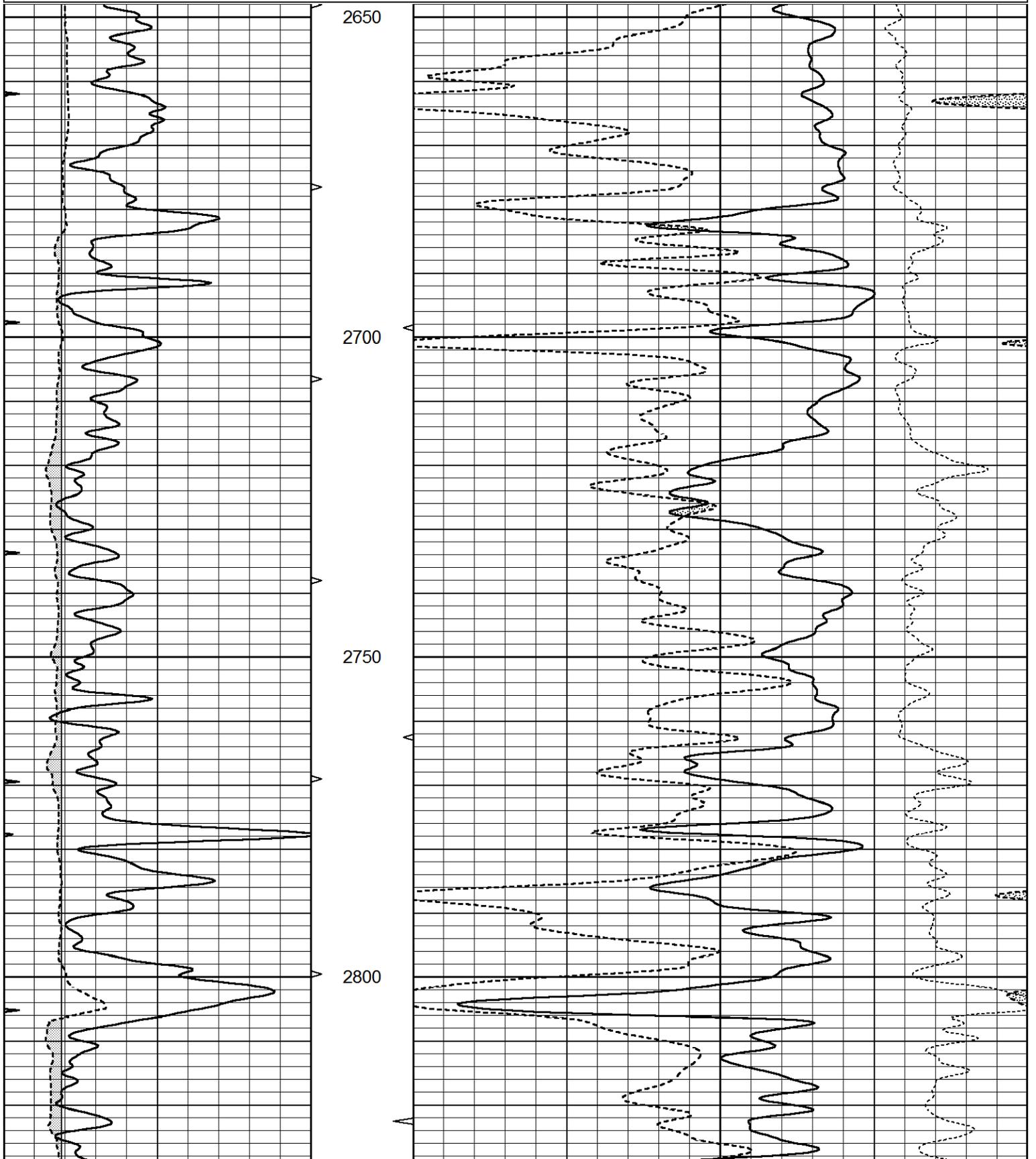
THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. ( 785 ) 628-6395  
DIRECTIONS  
ELLINWOOD, KS. - 4 NORTH ON 100TH AVE TO 40 RD. - 3/4 WEST - SOUTH INTO

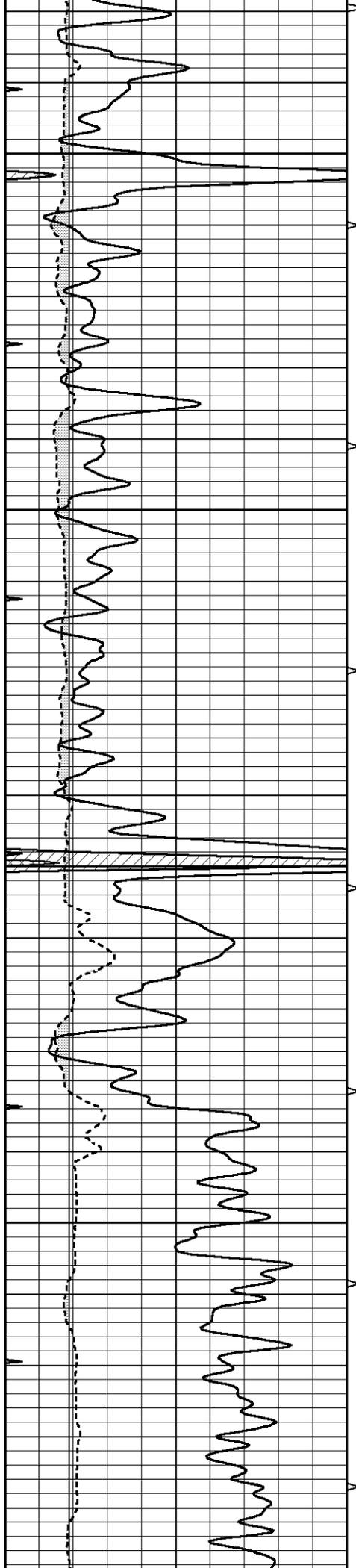


# MAIN SECTION

Database File 3992ddn8.db  
 Dataset Pathname pass3.1  
 Presentation Format \_den\_neu  
 Dataset Creation Tue Sep 10 13:39:51 2019  
 Charted by Depth in Feet scaled 1:240

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



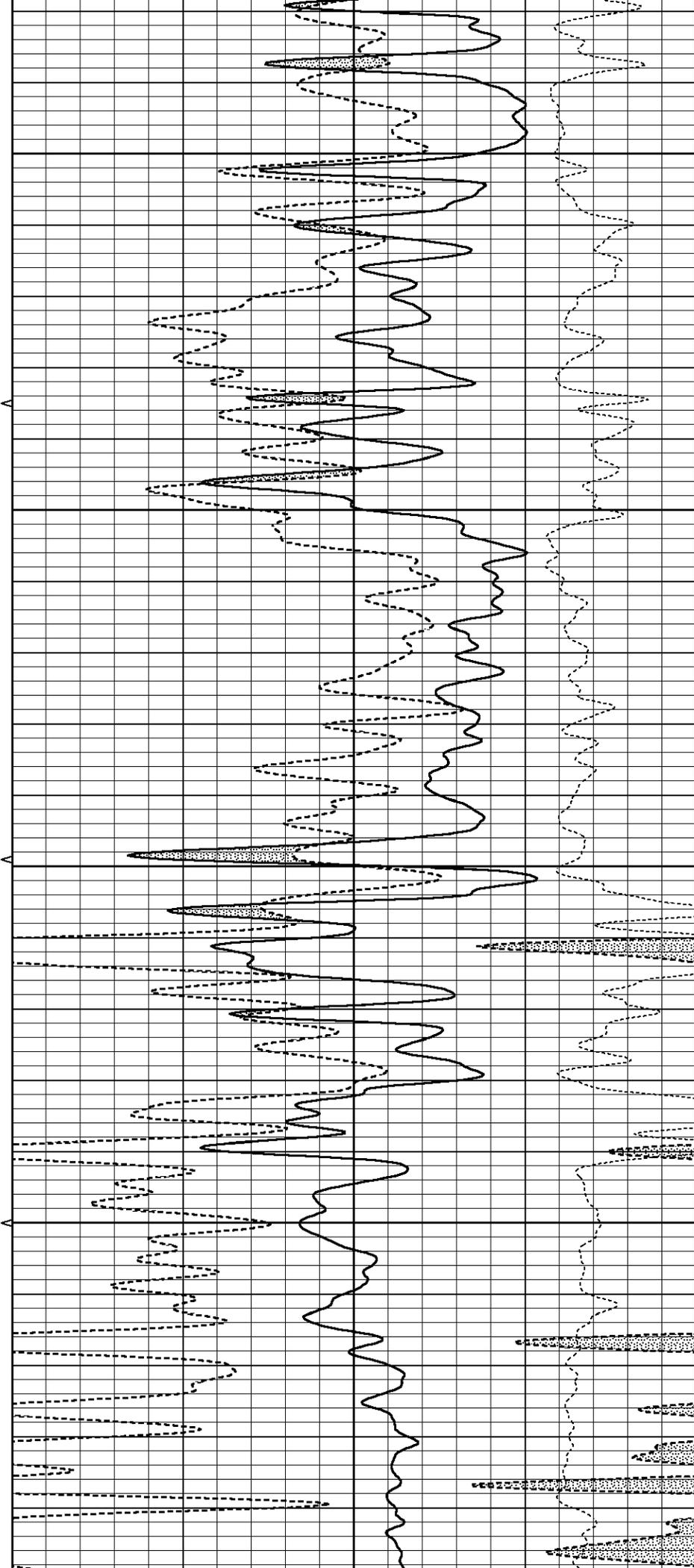


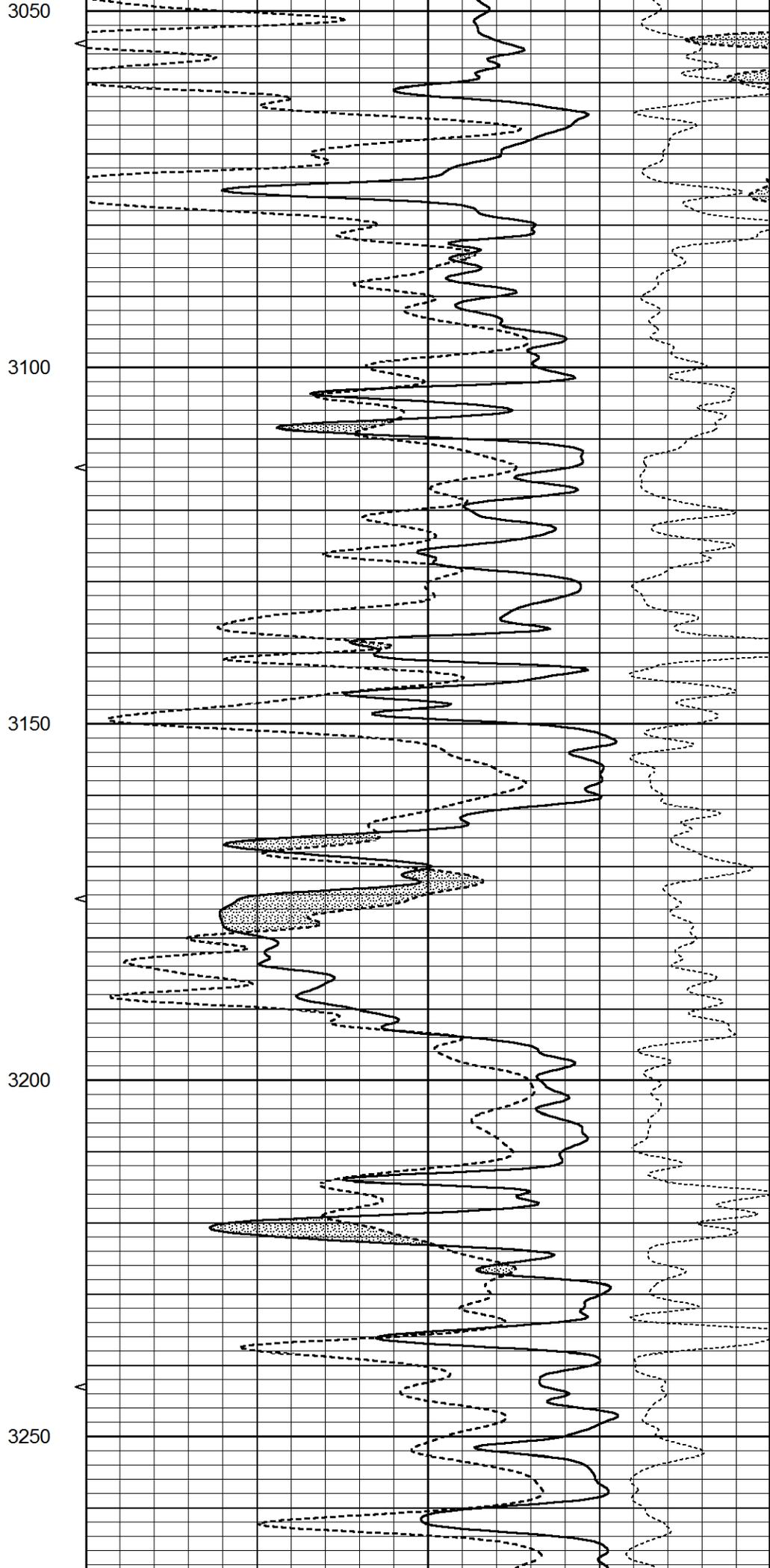
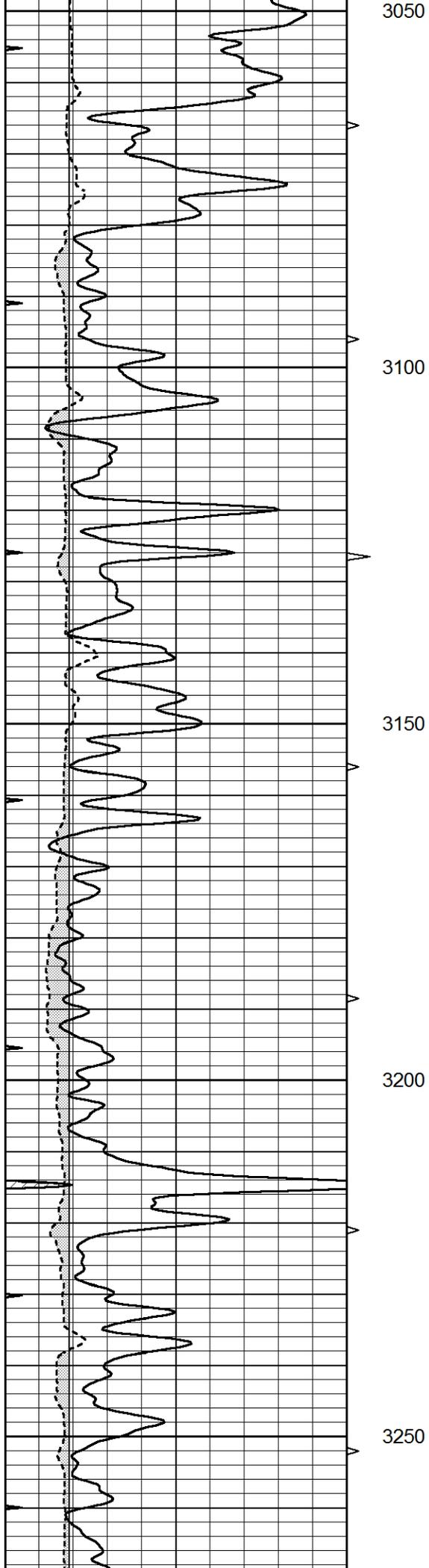
2850

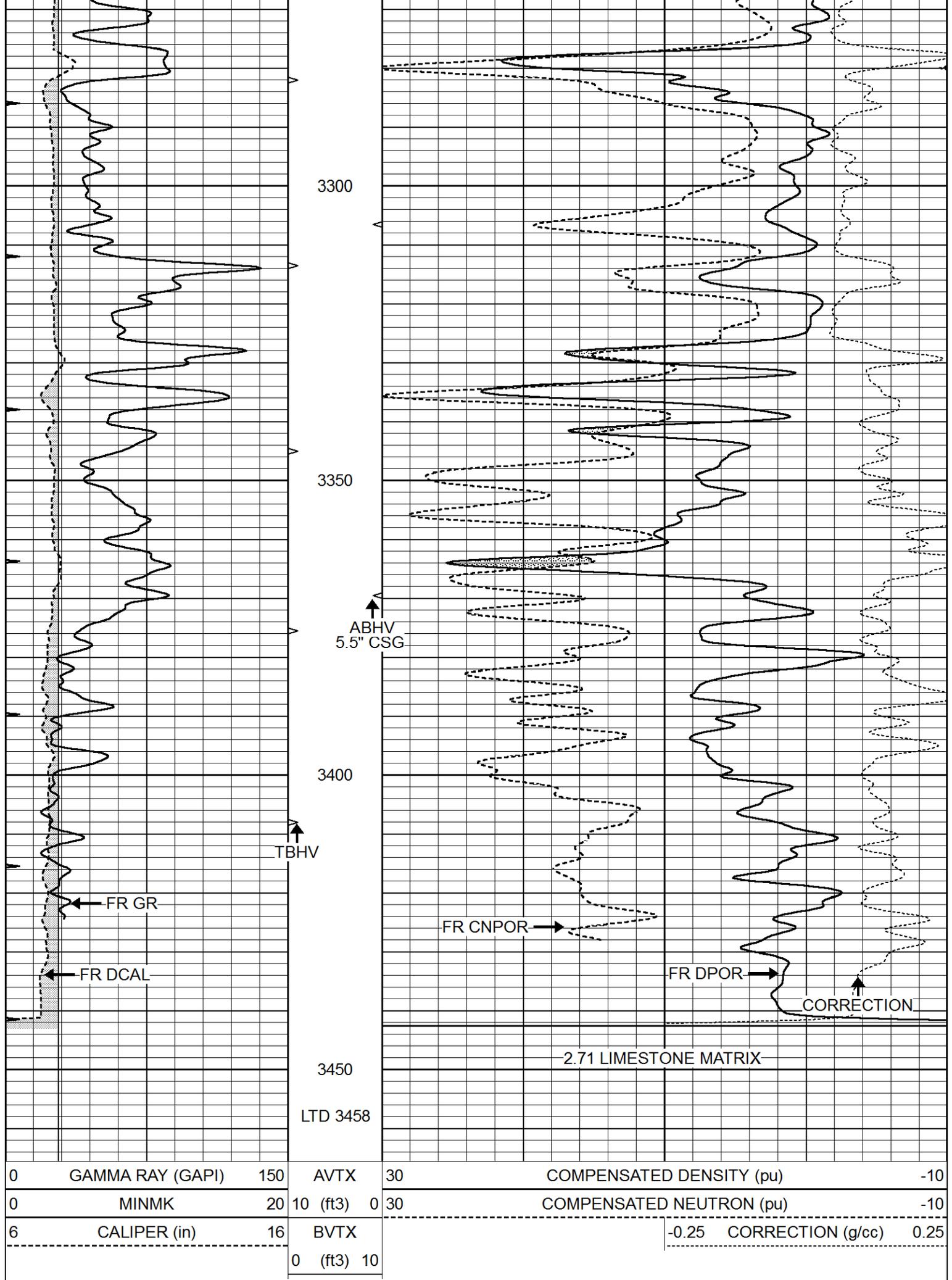
2900

2950

3000







3300

3350

3400

3450

LTD 3458

ABHV  
5.5" CSG

TBHV

FR GR

FR DCAL

FR CNPOR

FR DPOR

CORRECTION

2.71 LIMESTONE MATRIX

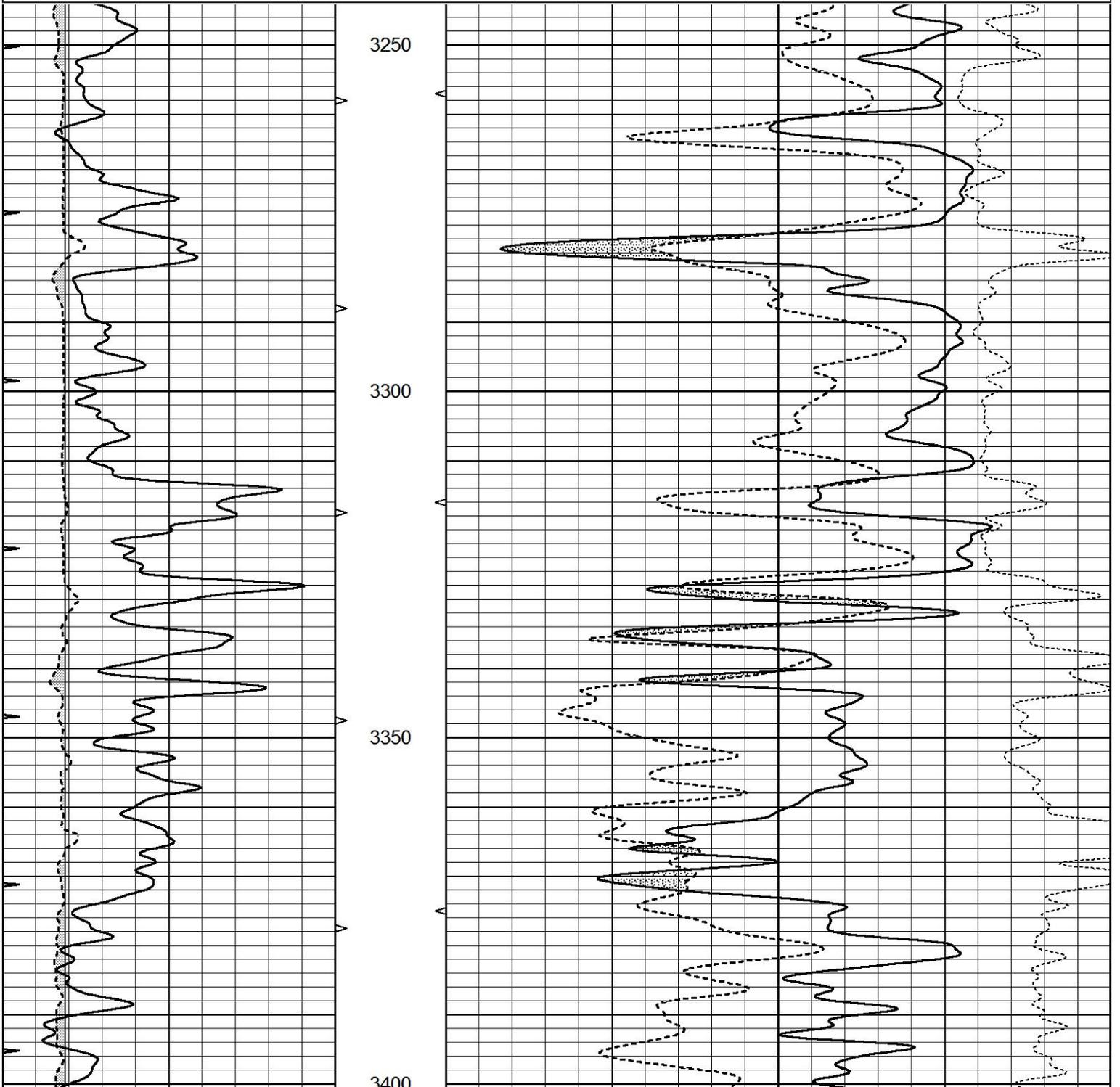
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0	MINMK	20	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
6	CALIPER (in)	16	BVTX		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		

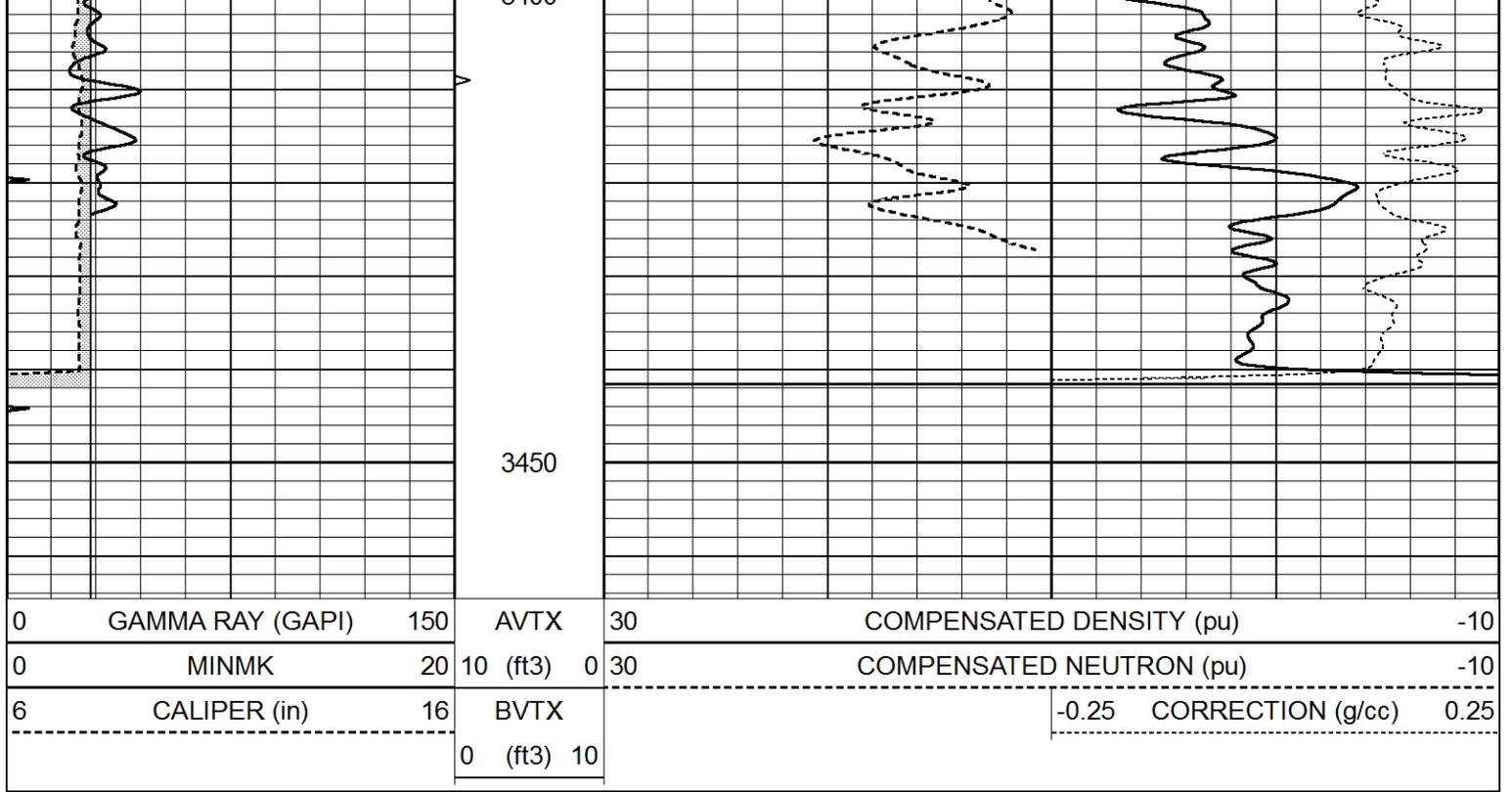


# REPEAT SECTION

Database File 3992ddn8.db  
 Dataset Pathname pass2.1  
 Presentation Format \_den\_neu  
 Dataset Creation Tue Sep 10 13:37:52 2019  
 Charted by Depth in Feet scaled 1:240

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





### Calibration Report

Database File 3992ddn8.db  
 Dataset Pathname pass3.1  
 Dataset Creation Tue Sep 10 13:39:51 2019

### Dual Induction Calibration Report

Serial-Model: FW1410-55-Probe  
 Surface Cal Performed: Tue Feb 19 11:44:18 2019  
 Downhole Cal Performed: Tue Feb 19 11:44:24 2019  
 After Survey Verification Performed: Tue Feb 19 11:44:27 2019

#### Surface Calibration

Loop:	Readings			V	References			Results	
	Air	Loop			Air	Loop	mmho/m	m	b
Deep	0.011	0.656		V	1.000	400.000	mmho/m	618.595	-5.524
Medium	-0.000	0.731		V	1.000	464.000	mmho/m	632.856	1.197
Internal:	Zero	Cal			Zero	Cal		m	b
Deep	0.007	0.649		V	0.000	400.000	mmho/m	623.784	-4.595
Medium	0.004	0.743		V	0.000	464.000	mmho/m	627.284	-2.251

#### Downhole Calibration

	Readings			mmho/m	References			Results	
	Zero	Cal			Zero	Cal	mmho/m	m'	b'
Deep	-0.824	395.917	mmho/m	-0.976	397.550	mmho/m	1.004	-0.149	
Medium	3.565	471.327	mmho/m	3.468	471.590	mmho/m	1.001	-0.099	
LL3		7.503	V		1500.000	Ohm-m			
		0.001	V		20.000	Ohm-m			
		-7.481	V		3745.000	mmho-m			

#### After Survey Verification

	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'

Deep	0.000	0.000	mmho/m	-0.824	395.917	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	3.565	471.327	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1500.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		3745.000	mmho-m		

Compensated Neutron Calibration Report

Serial Number: 080621PMC  
Tool Model: NABORS

PRE-SURVEY VERIFICATION

Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

POST-SURVEY VERIFICATION

Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

Gamma Ray Calibration Report

Serial Number: 7  
Tool Model: Probe1  
Performed: Tue Feb 19 11:45:10 2019

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps  
Calibrator Reading: 1.0 cps

Sensitivity: 0.4300 GAPI/cps