



**COMPENSATED
DENSITY/NEUTRON
LOG**

Company MAI OIL
Well URBANEK #2
Field PROGRESS
County ELLSWORTH
State KANSAS

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Well URBANEK #2
Field PROGRESS
County ELLSWORTH State KANSAS

Location: API # : 15-053-21360-00-00
NW-SE-NE-SE
1775 FSL & 544 FEL

Permanent Datum GROUND LEVEL Elevation 1894'
Log Measured From KELLY BUSHING & A.G.L.
Drilling Measured From KELLY BUSHING

SEC 15 TWP 16S RGE 10W

Other Services
DIL/MEL

Elevation
K.B. 1902
D.F. 1900
G.L. 1894

Date	05/02/18
Run Number	ONE
Depth Driller	3480
Depth Logger	3483
Bottom Logged Interval	3459
Top Log Interval	2800
Casing Driller	8 5/8@ 428
Casing Logger	428
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.4/48
pH / Fluid Loss	9.0/9.6
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.80@70
Rmt @ Meas. Temp	.60@70
Rmc @ Meas. Temp	.96@70
Source of Rmf / Rmc	MEASURED
Rm @ BHT	.50@111
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	////
Maximum Recorded Temperature	115F
Equipment Number	4010
Location	HAYS, KANSAS
Recorded By	GUS PFANENSTIEL
Witnessed By	WYATT URBAN

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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, HAYS, KS. (785) 628-6395

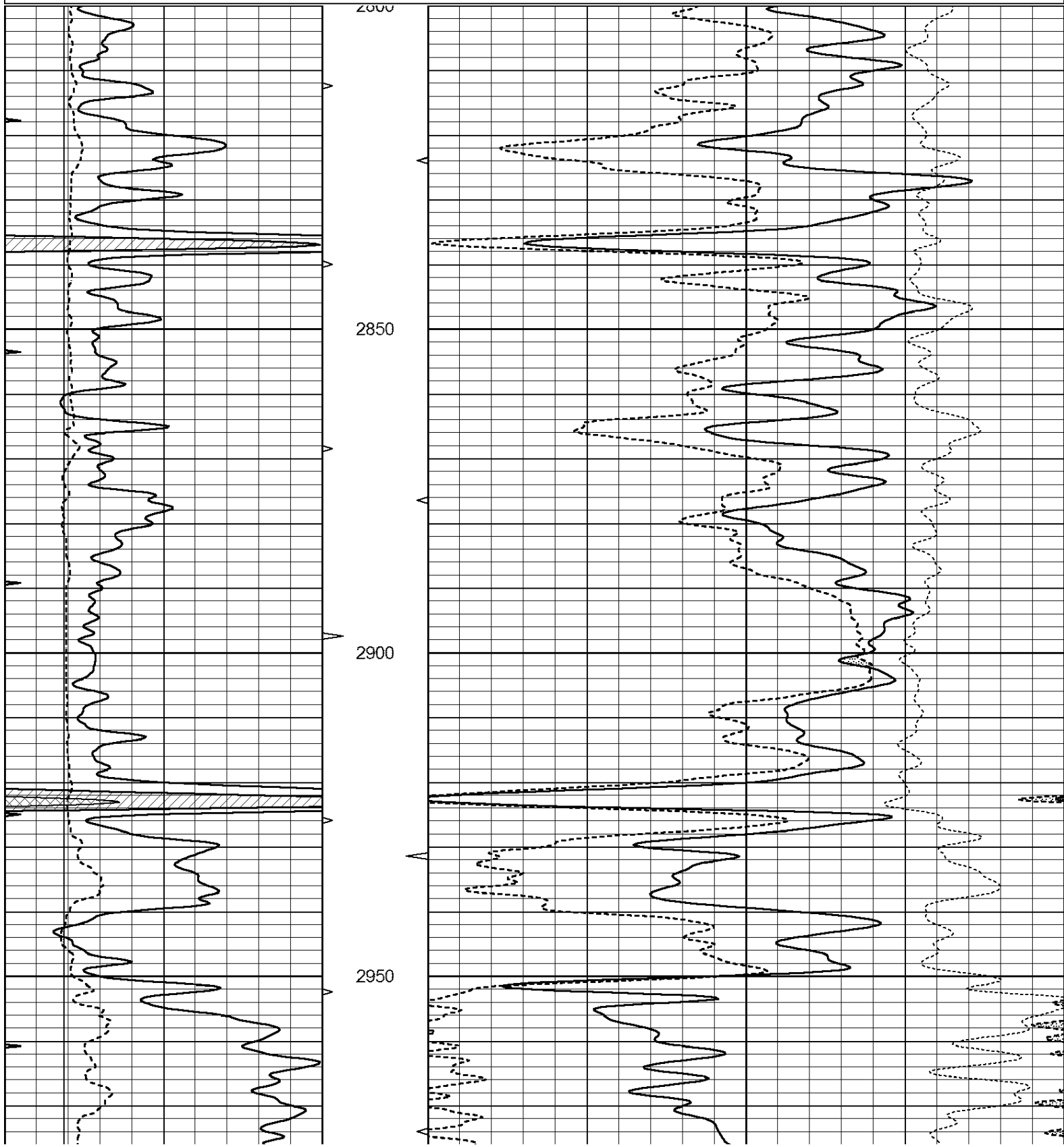
DIRECTIONS
HOLYROOD TO 6 RD. NORTH 4.5 MILES
WEST INTO

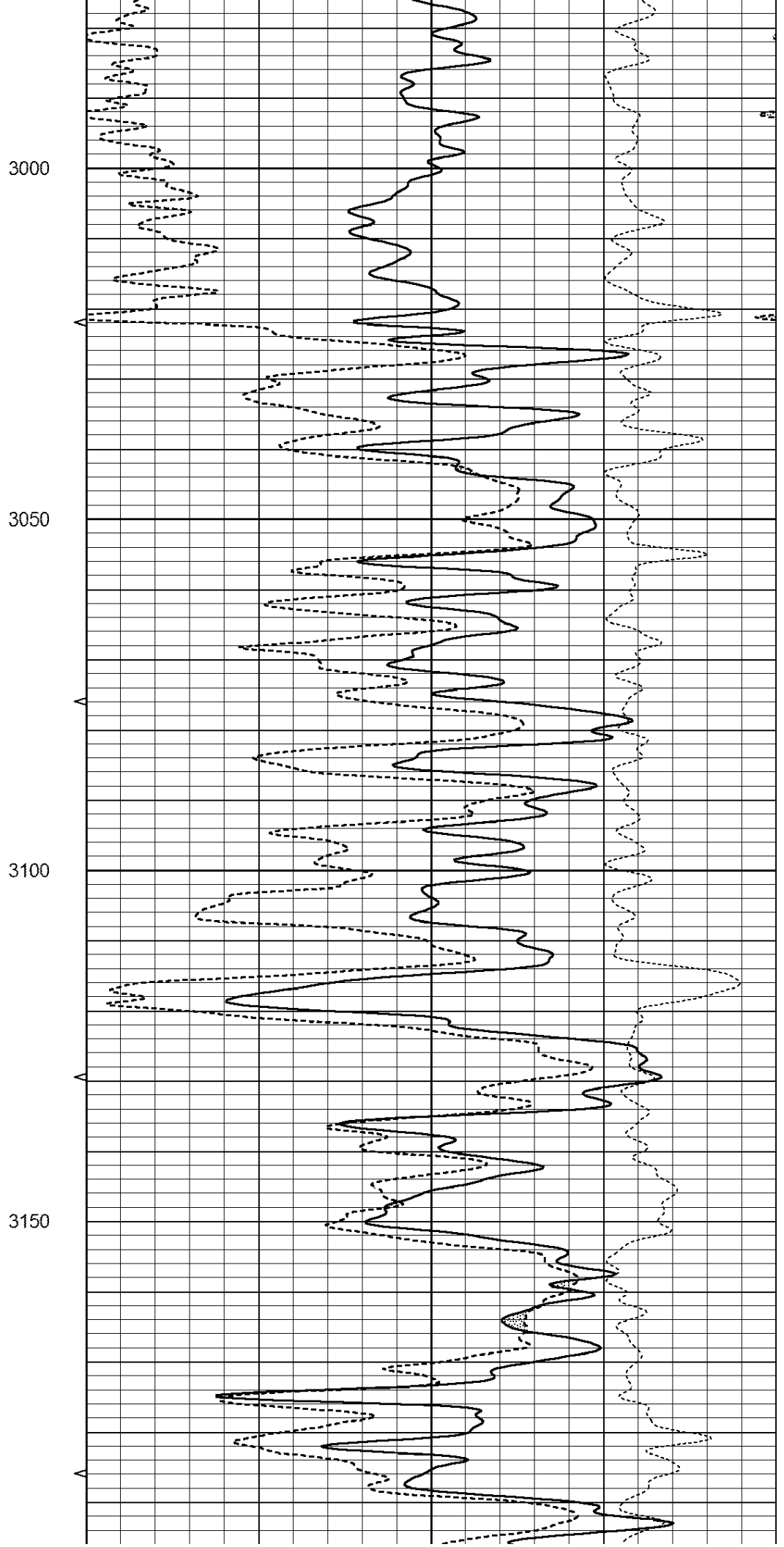
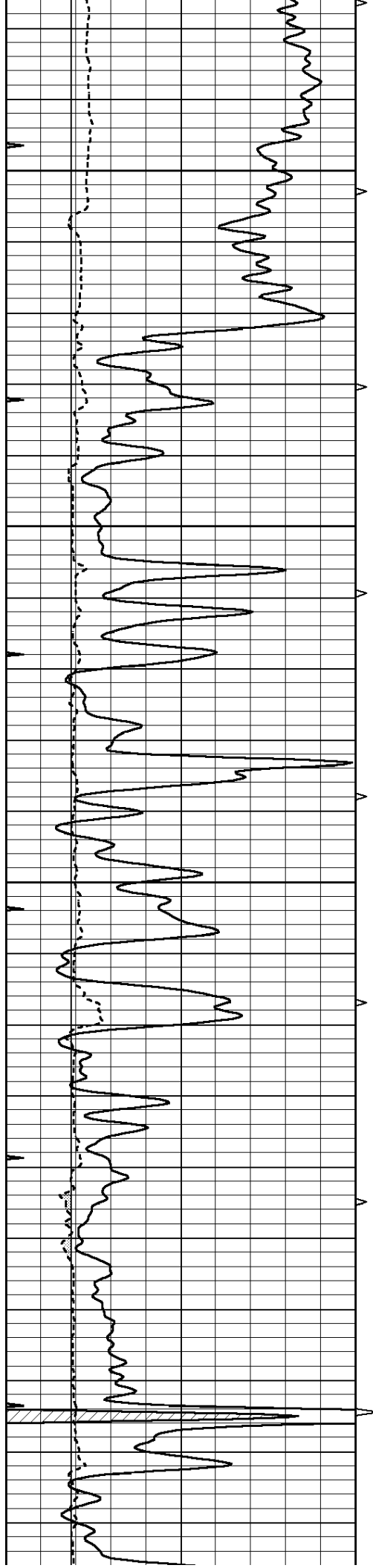


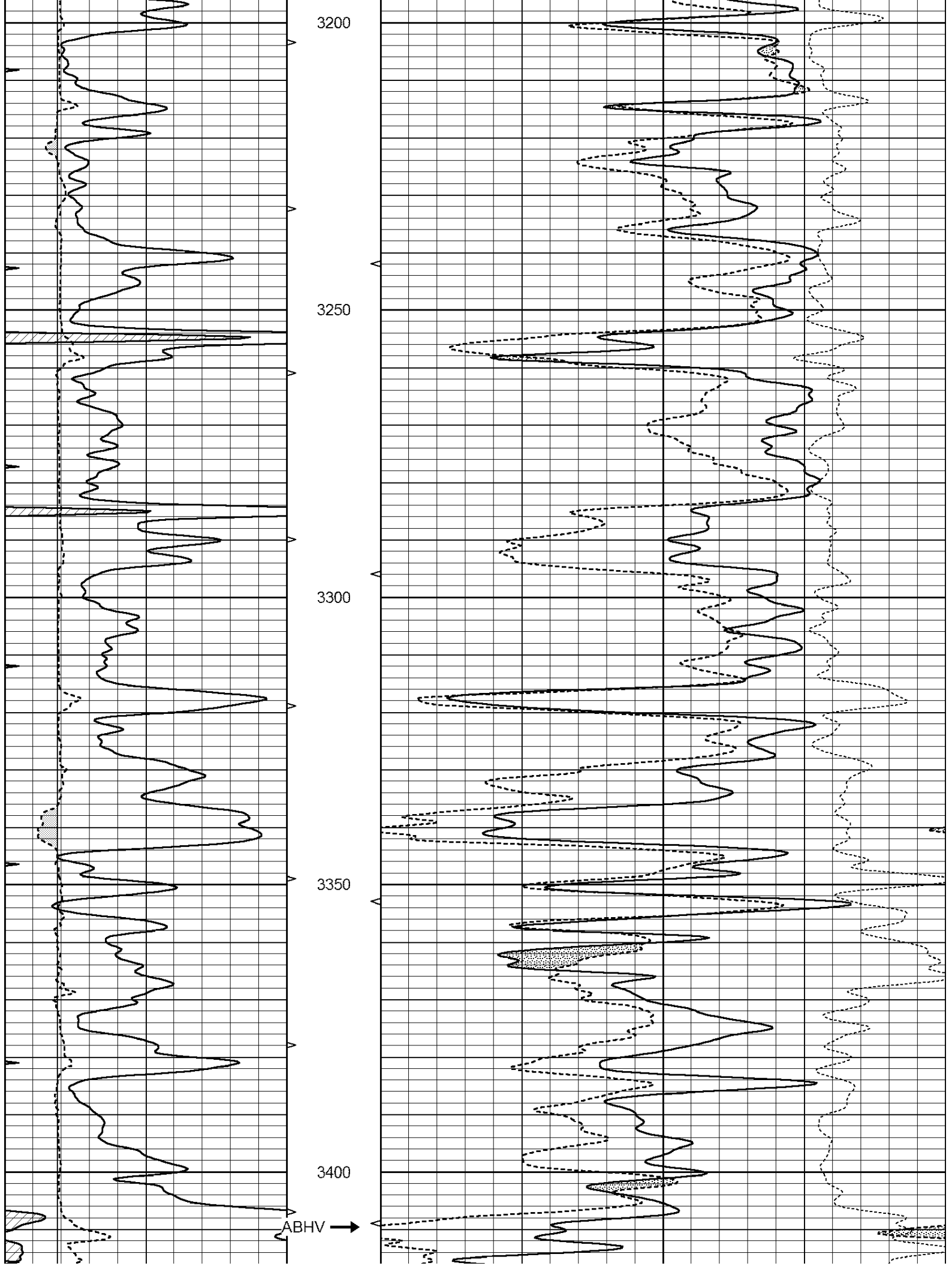
MAIN PASS

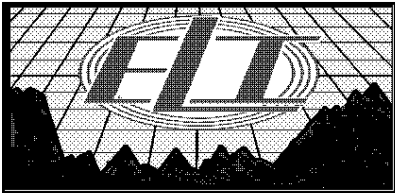
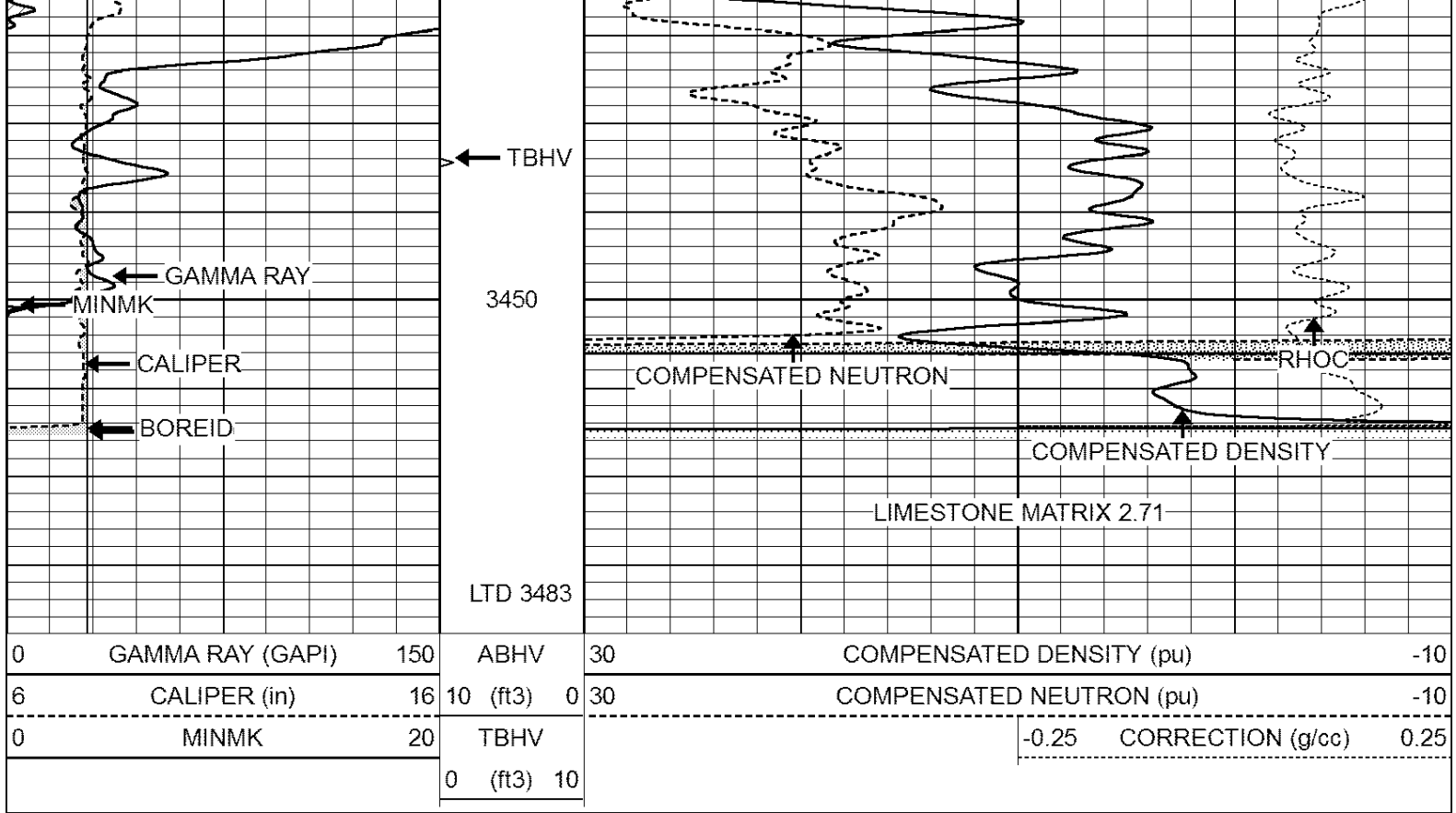
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 Dataset Pathname: pass3.1
 Presentation Format: den_neu
 Dataset Creation: Wed May 02 22:47:31 2018 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

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		





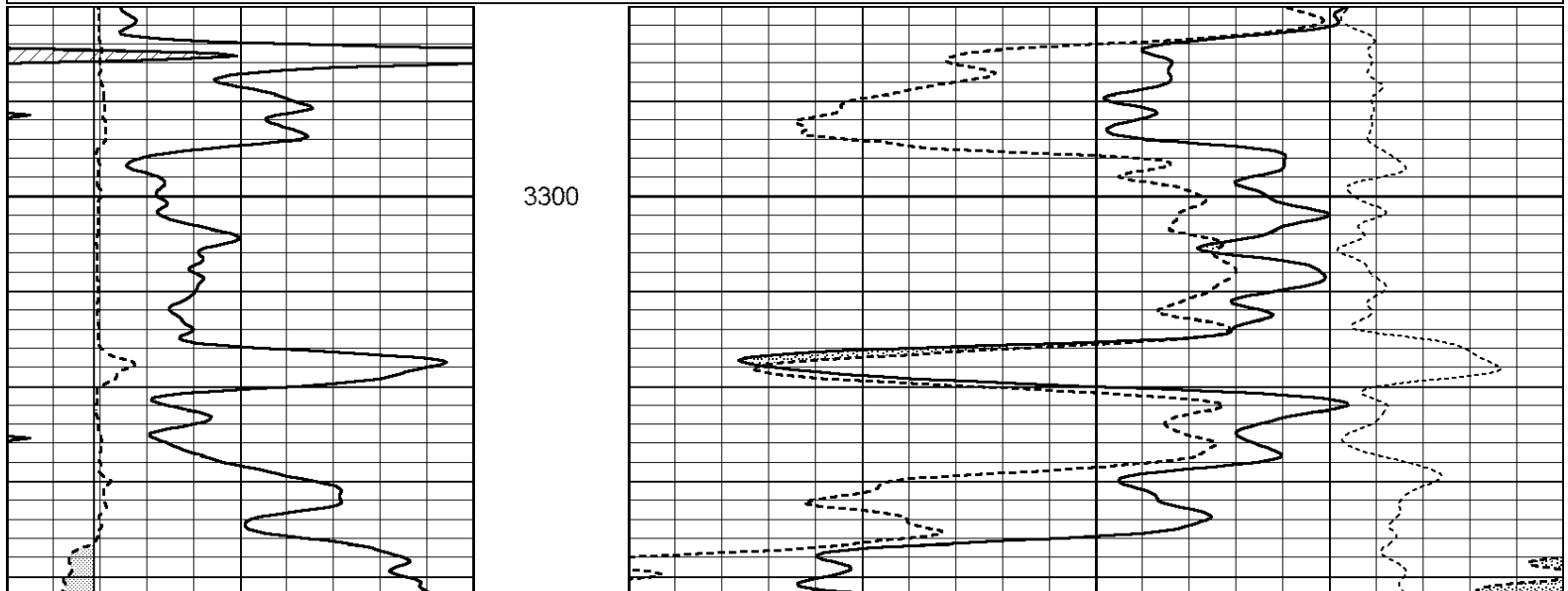


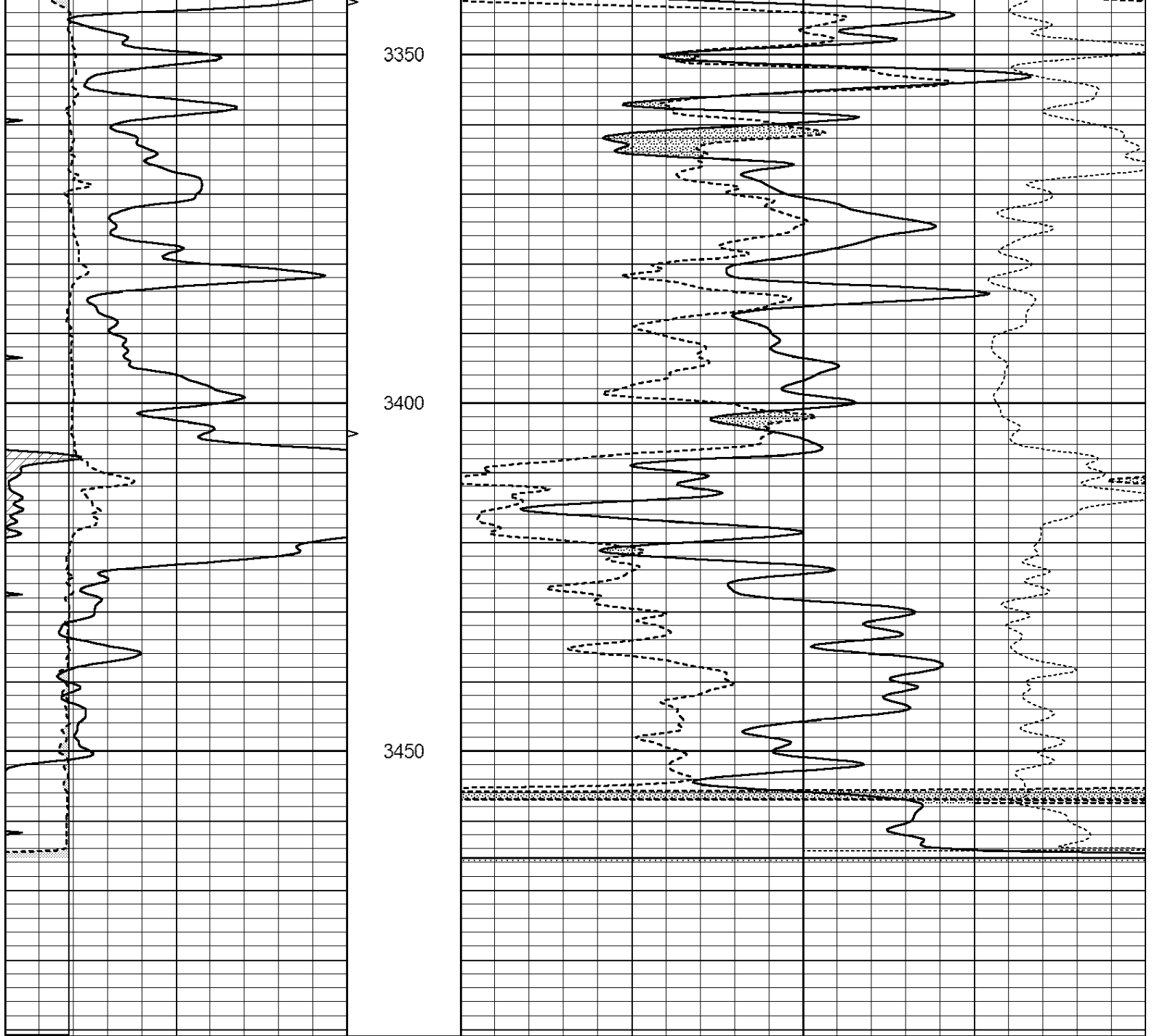


REPEAT SECTION

Database File: 2422ddn.db
 Dataset Pathname: pass2.1
 Presentation Format: den_neu
 Dataset Creation: Wed May 02 22:14:28 2018
 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		





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: pe2.db
 Dataset Pathname: pass2
 Dataset Creation: Mon Aug 21 11:58:02 2017 by Log Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: PROBE8-DILG
 Surface Cal Performed: Mon Aug 21 11:58:18 2017
 Downhole Cal Performed: Mon Aug 21 11:58:21 2017
 After Survey Verification Performed: Mon Aug 21 11:58:23 2017

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	0.000
Medium	0.029	0.796	V	0.000	464.000	mmho/m	590.000	-12.000
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: 002 Model: PRB

Master Calibration		Performed Mon Aug 21 11:56:41 2017					
	Background	Magnesium	Aluminum	Sandstone			
Window 1	833.6	7394.2	2287.3	8111.8			cps
Window 2	768.9	6322.3	1995.6	6800.0			cps
Window 3	621.5	3261.9	1186.4	3380.9			cps
Window 4	184.2	185.7	184.9	184.8			cps
Long Space	0.0	5553.4	1226.6	6031.1			cps
Short Space	1.2	1307.5	903.9	1387.7			cps
Rho		1.7100	2.5900	1.3800			g/cc
Pe		0.0000	2.5700	1.5500			
Rib Angle	: 46.3	Rib Slope	: 1.045	Density/Spine Ratio			: 0.566
Spine Angle	: 76.3	Spine Slope	: 4.090	Spine Intercept			: -20.7

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: 61
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: Mon Aug 21 11:59:01 2017

Calibrator Value: 150.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 276.0 cps

Sensitivity: 0.5500 GAPI/cps