



**COMPLETION
& PRODUCTION
SERVICES CO.**

**COMPENSATED
DENSITY/NEUTRON
LOG**

Company MAI OIL OPERATIONS, INC.
Well HAMMEKE "M" #9
Field SYMS SOUTHEAST
County STAFFORD
State KANSAS

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Field SYMS SOUTHEAST
County STAFFORD State KANSAS

Location: 1500' FSL & 1750' FWL
API #: 15-185-23931-0000
Other Services DILMEL
Permanent Datum GROUND LEVEL Elevation 1840
Log Measured From KELLY BUSHING 8' A.G.L.
Drilling Measured From KELLY BUSHING
Elevation
K.B. 1848
D.F. 1846
G.L. 1840

Date	4/2/15		
Run Number	ONE		
Depth Driller	3700		
Depth Logger	3700		
Bottom Logged Interval	3676		
Top Log Interval	2800		
Casing Driller	8 5/8" @ 635'		
Casing Logger	634		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 5000 PPM	
Density / Viscosity	9.2/58		
pH / Fluid Loss	9.5/8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.2 @ 56F		
Rmt @ Meas. Temp	.90 @ 56F		
Rmc @ Meas. Temp	1.44 @ 56F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.59 @ 113F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	113F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JASON CAPPELLUCCI	BLAKE WAGGONER	
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

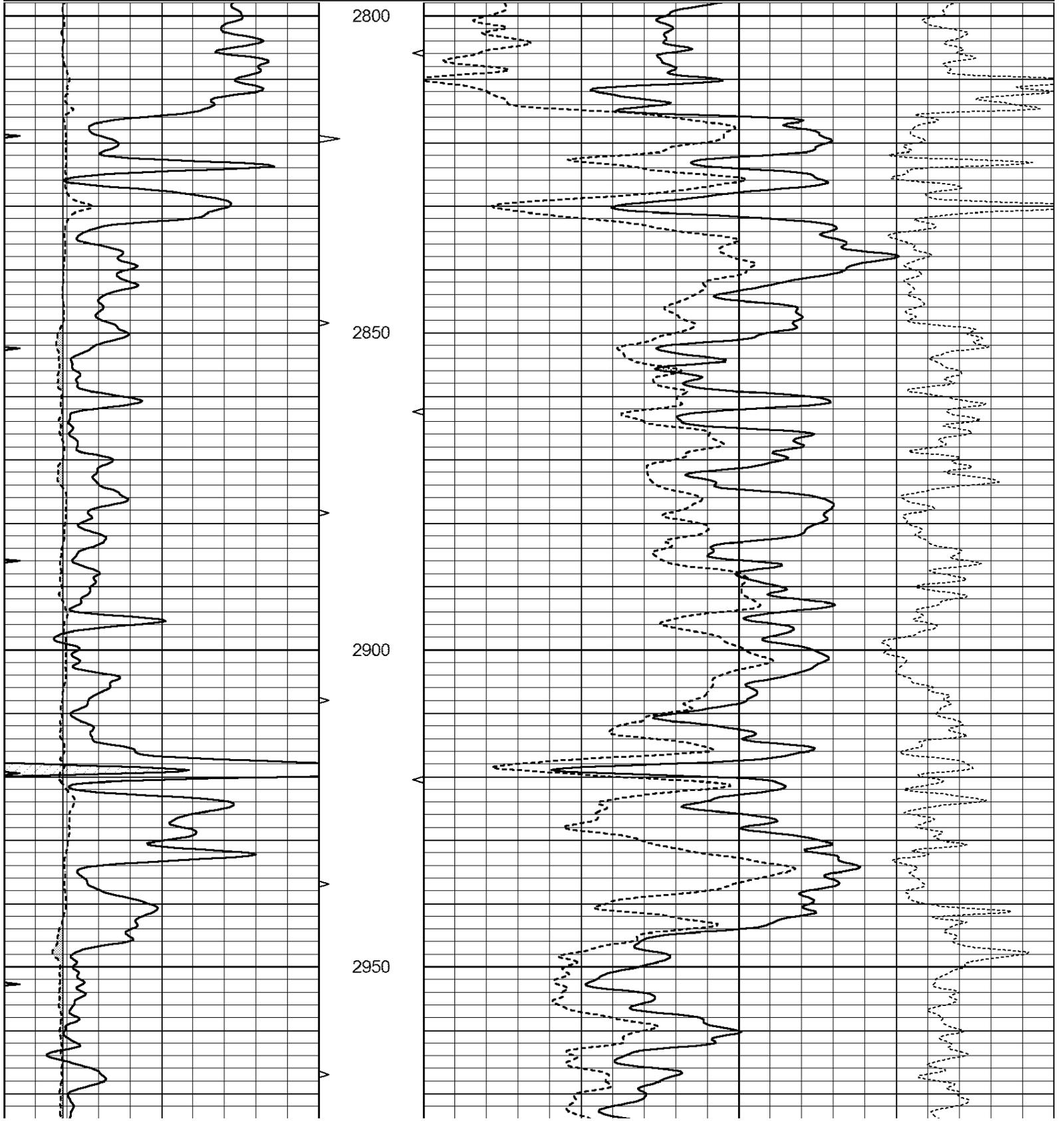
THANK YOU FOR USING NABORS, HAYS, KS. (785) 628-6395
DIRECTIONS:
GREAT BEND, KS. - SOUTH ACROSS COUNTY LINE TO 180TH RD.
6 EAST TO 60TH RD. - 1 SOUTH - 1/2 EAST - NORTH INTO

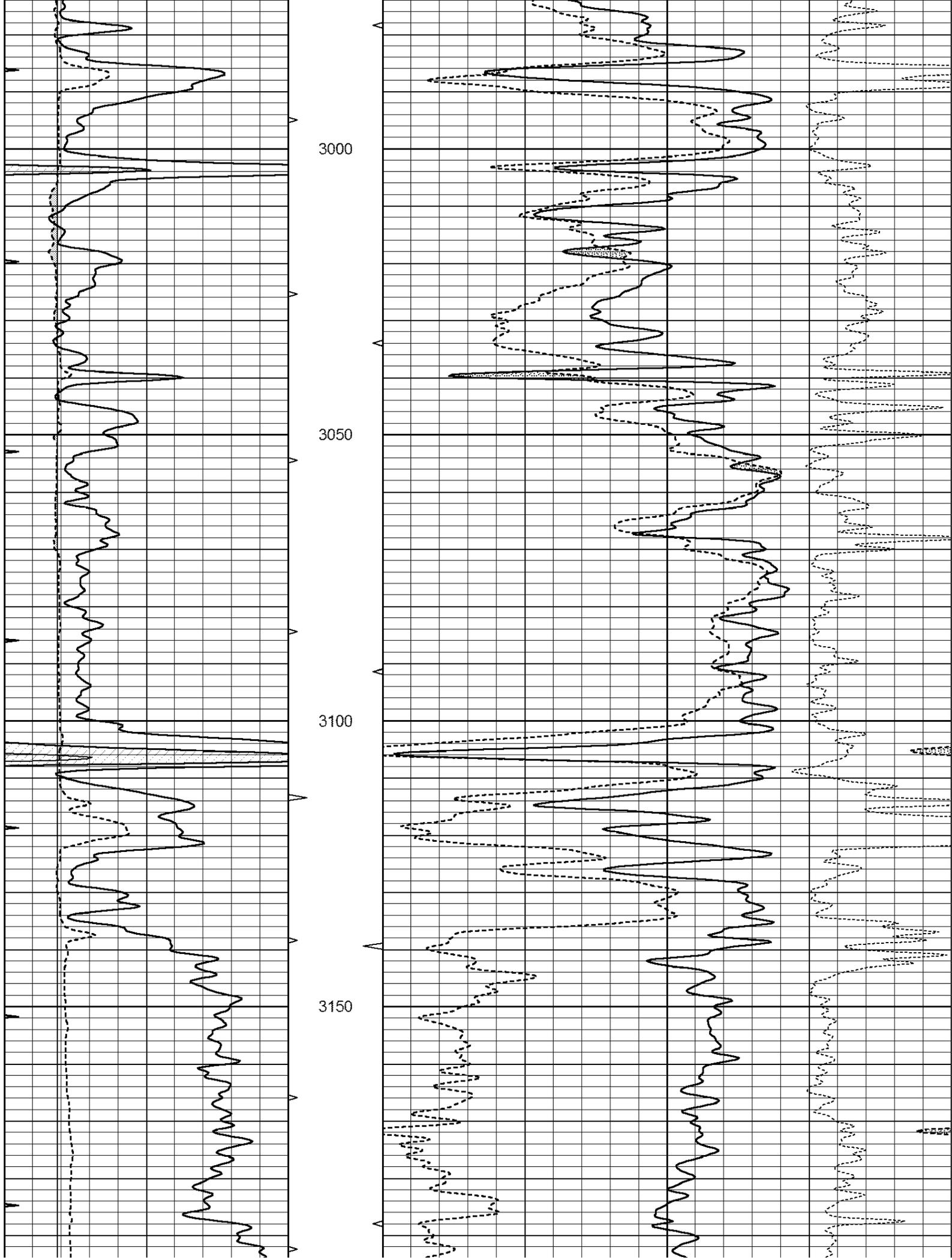


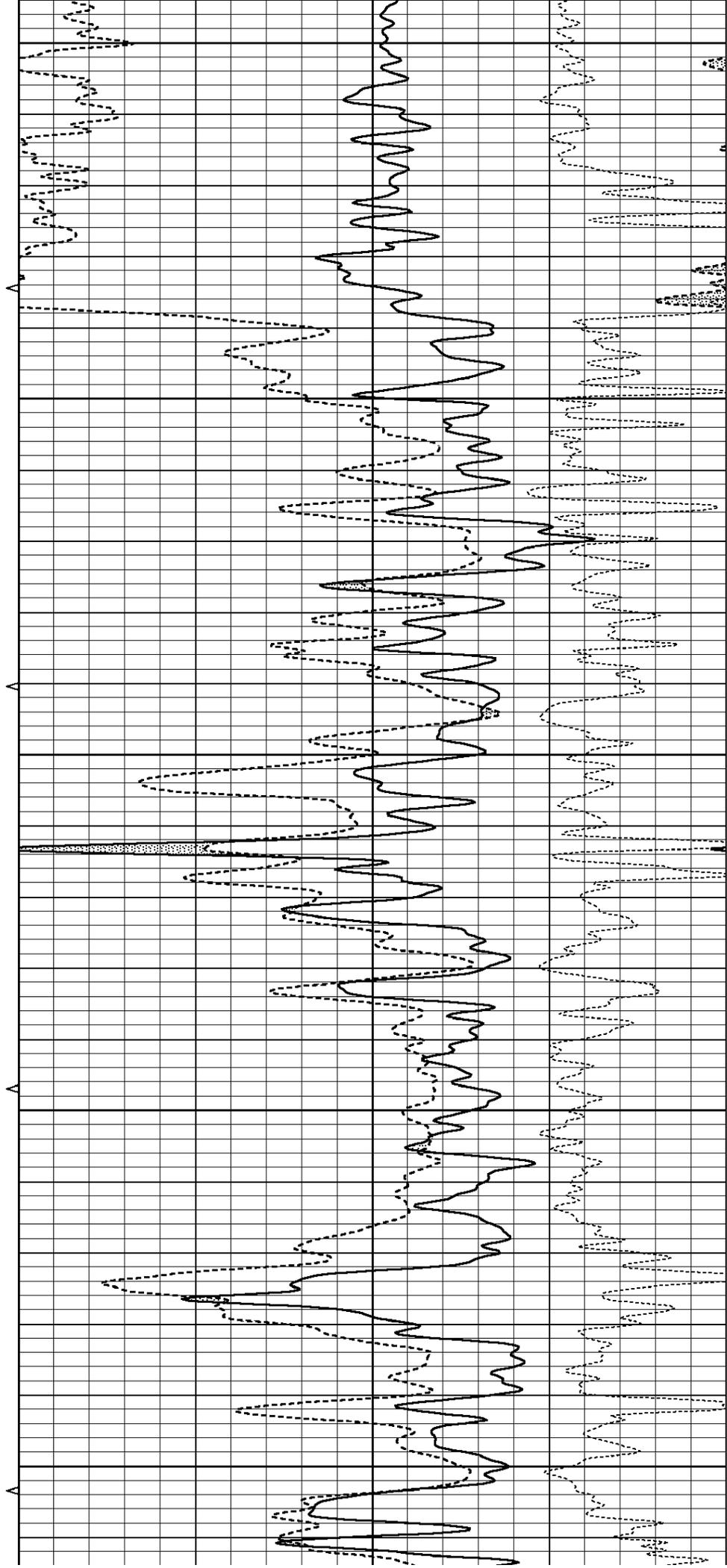
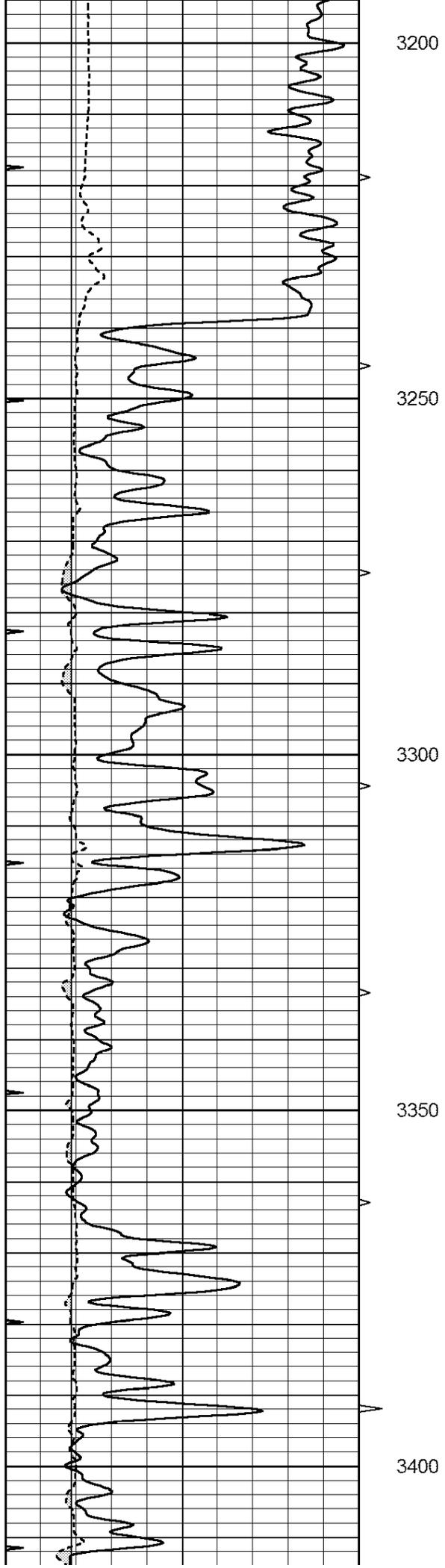
MAIN SECTION

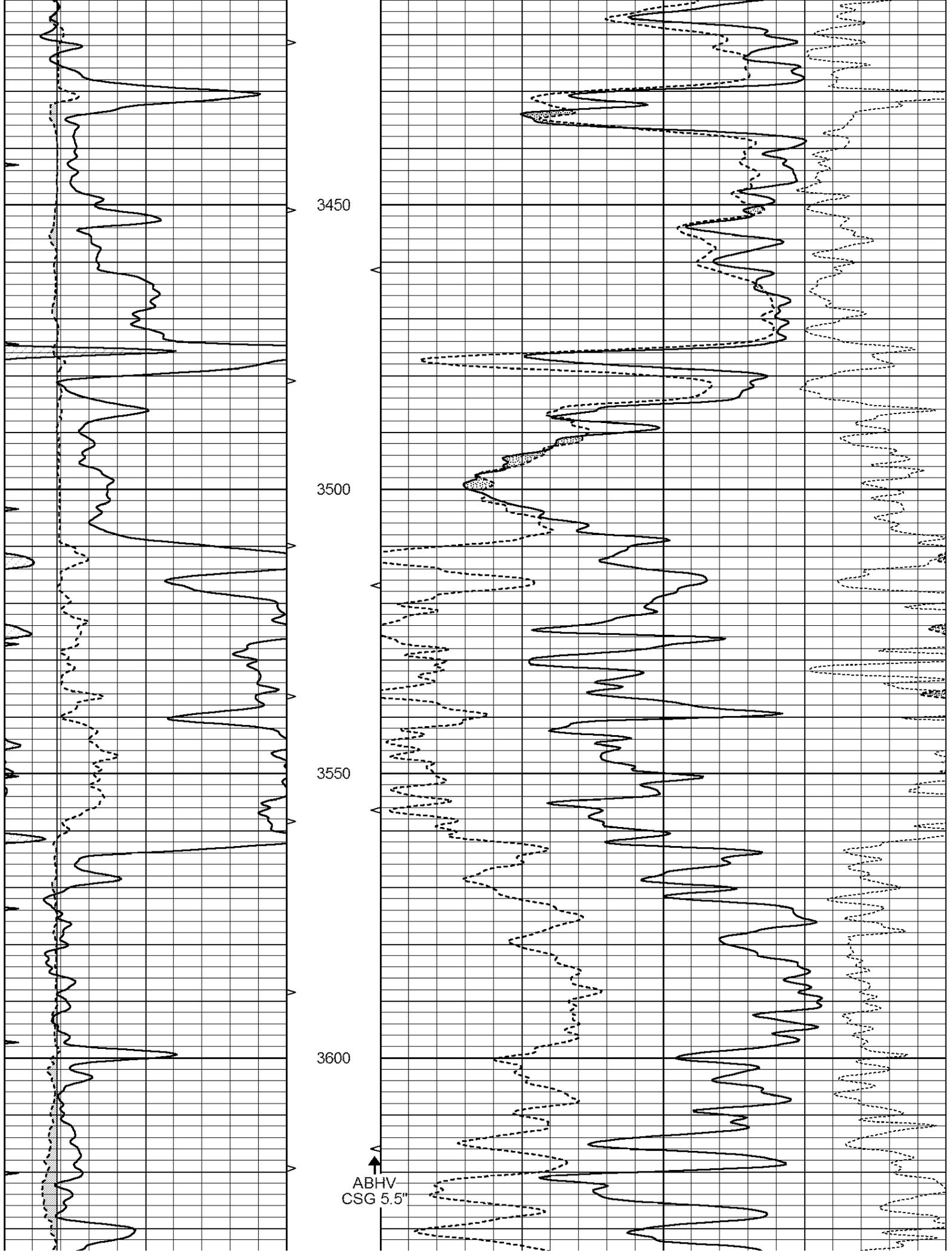
Database File: 26548ddn.db
 Dataset Pathname: pass6.2
 Presentation Format: den_neu
 Dataset Creation: Thu Apr 02 17:00:23 2015 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

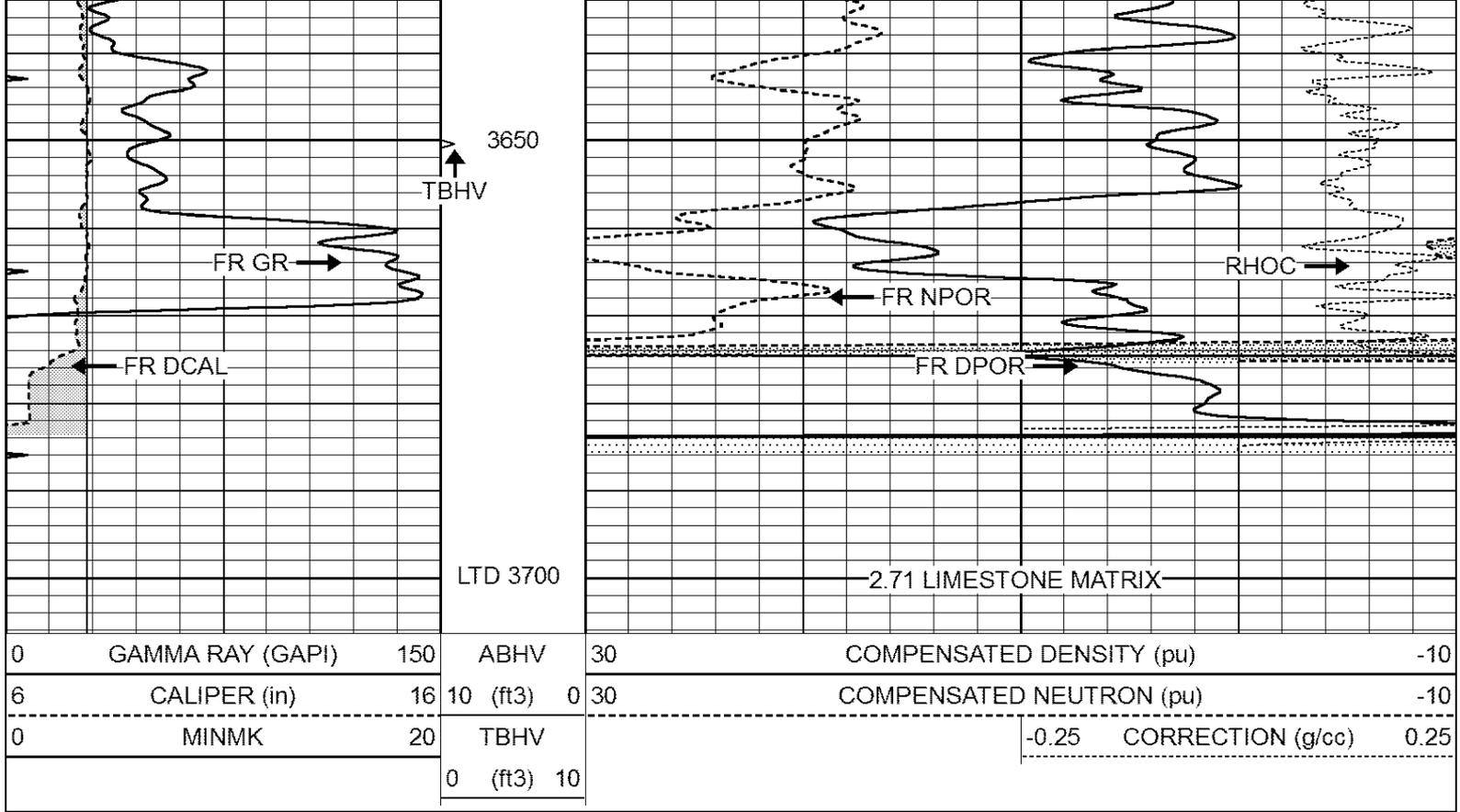
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		







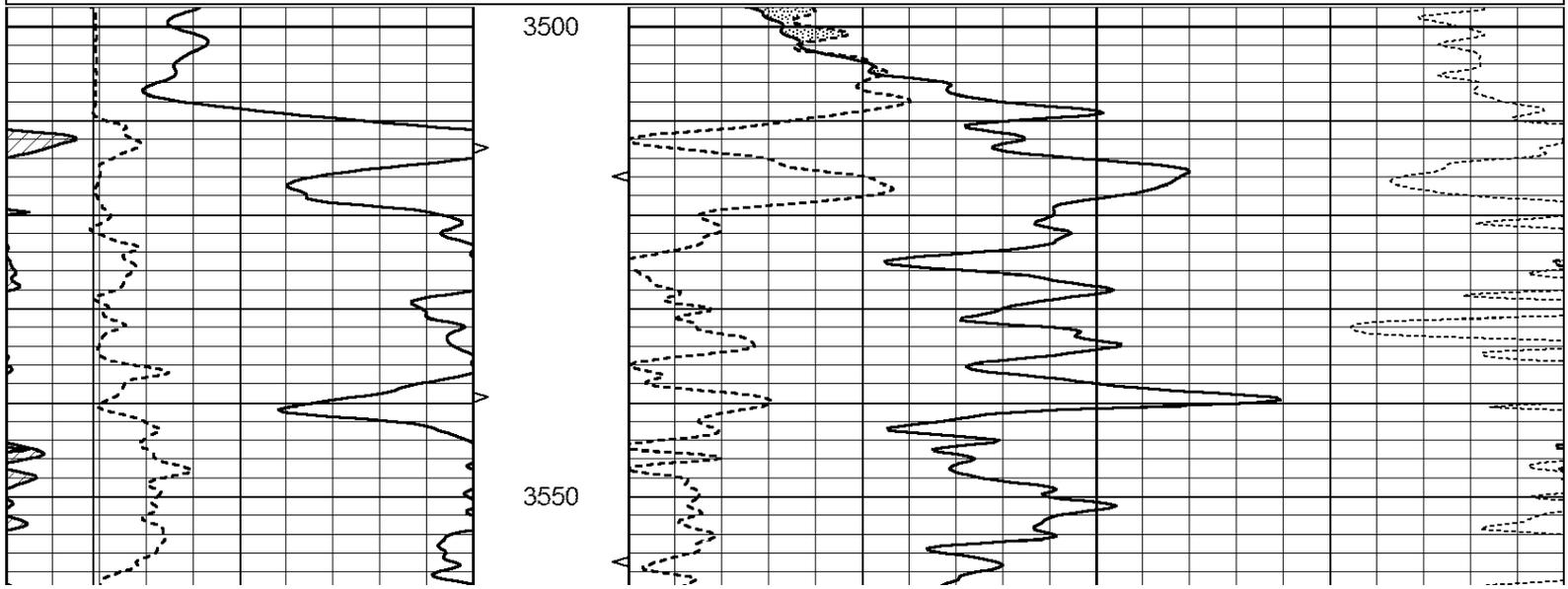


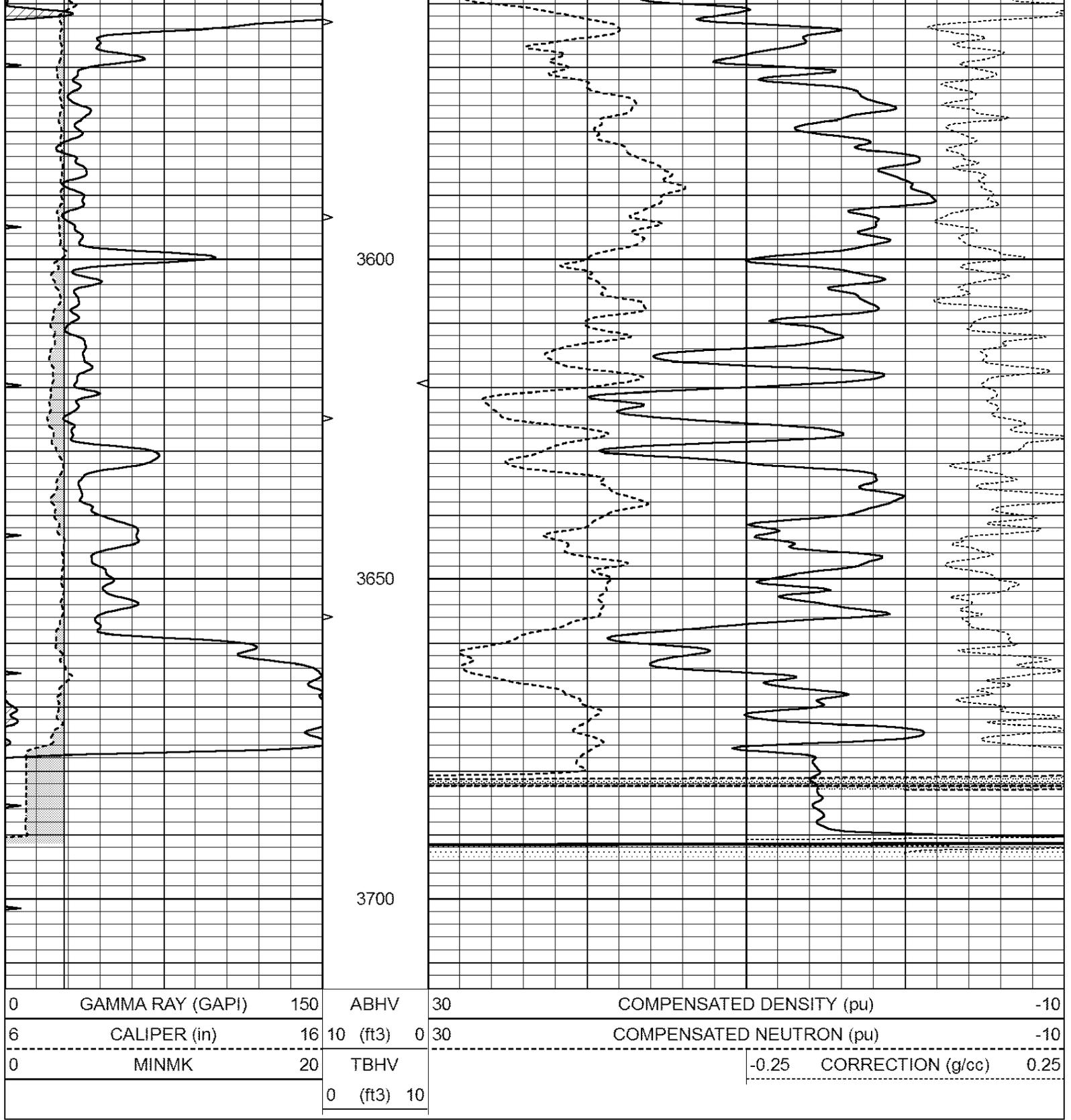


REPEAT SECTION

Database File: 26548ddn.db
 Dataset Pathname: pass5.3
 Presentation Format: den_neu
 Dataset Creation: Thu Apr 02 16:59:11 2015 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: 26548ddn.db
 Dataset Pathname: pass6.2
 Dataset Creation: Thu Apr 02 17:00:23 2015 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			Readings		References		Results	
Loop:	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:	GEAR4-GEARHART
Source / Verifier:	143 / 143
Master Calibration Performed:	Wed Sep 18 03:03:09 2013
Before Survey Verification Performed:	
After Survey Verification Performed:	

Master Calibration			Density		Far Detector	Near Detector
Magnesium	1.710	g/cc			1075.98	532.39 cps
Aluminum	2.560	g/cc			286.51	422.88 cps
Spine Angle = 80.13			Density/Spine Ratio = 0.633			
	Size			Reading		
Small Ring	8.00	in		3.21	V	
Large Ring	14.00	in		5.46	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

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: Sun Mar 08 22:55:40 2015

Calibrator Value: 150.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 276.0 cps

Sensitivity: 0.8000 GAPI/cps