



SUPERIOR
Hays,
Kansas

**COMPENSATED
DENSITY / NEUTRON
LOG**

Company	PFEIFER EXPLORATION, LLC.	Company	PFEIFER EXPLORATION, LLC.
Well	BRAUN - WERTH #3-1	Well	BRAUN - WERTH #3-1
Field	WILDCAT	Field	WILDCAT
County	ELLIS	County	ELLIS
State	KANSAS	State	KANSAS
Location:	API # : 15-051-26286-0000	Other Services	DILMEL
	1400' FNL & 710' FWL		
	SEC 3 TWP 15S RGE 18W		
Permanent Datum	GROUND LEVEL	Elevation	2017
Log Measured From	KELLY BUSHING 8' A.G.L.		
Drilling Measured From	KELLY BUSHING		

Date	3/24/12
Run Number	ONE
Depth Driller	3700
Depth Logger	3702
Bottom Logged Interval	3678
Top Log Interval	2900
Casing Driller	8 5/8"@222'
Casing Logger	222
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.0/49
pH / Fluid Loss	11.5/7.2
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.500@78F
Rmt @ Meas. Temp	.375@78F
Rmc @ Meas. Temp	.600@78F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.345@113F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	6:30 P.M.
Maximum Recorded Temperature	113F
Equipment Number	4010
Location	HAYS, KANSAS
Recorded By	JEFF LUEBBERS
Witnessed By	ROGER MOSES
	JAY PFEIFER

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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 SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395
DIRECTIONS
HAYS, KS. 6 1/4S. ON HWY 183 JUST PAST "ANTONINO RD.", E. INTO

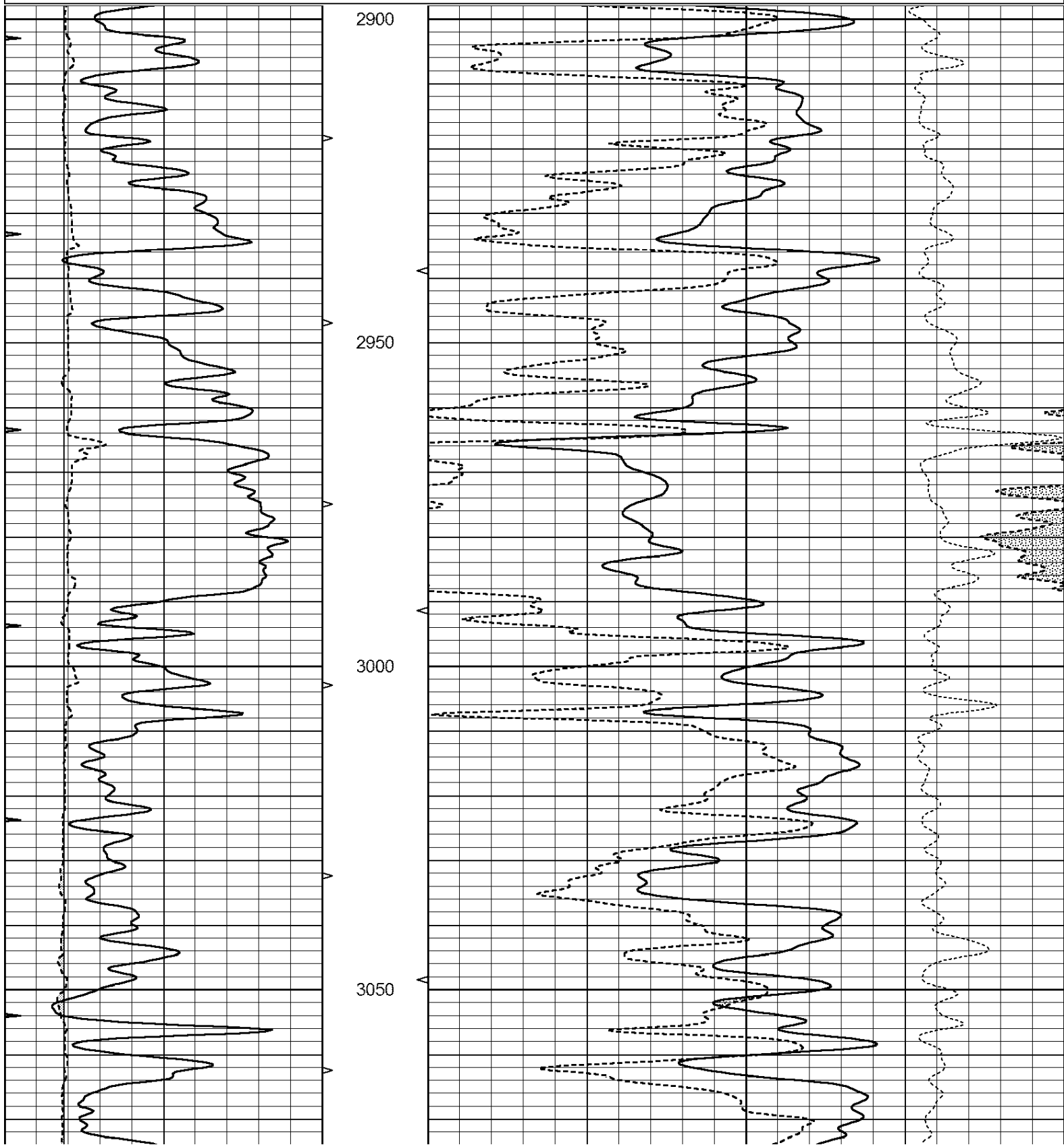


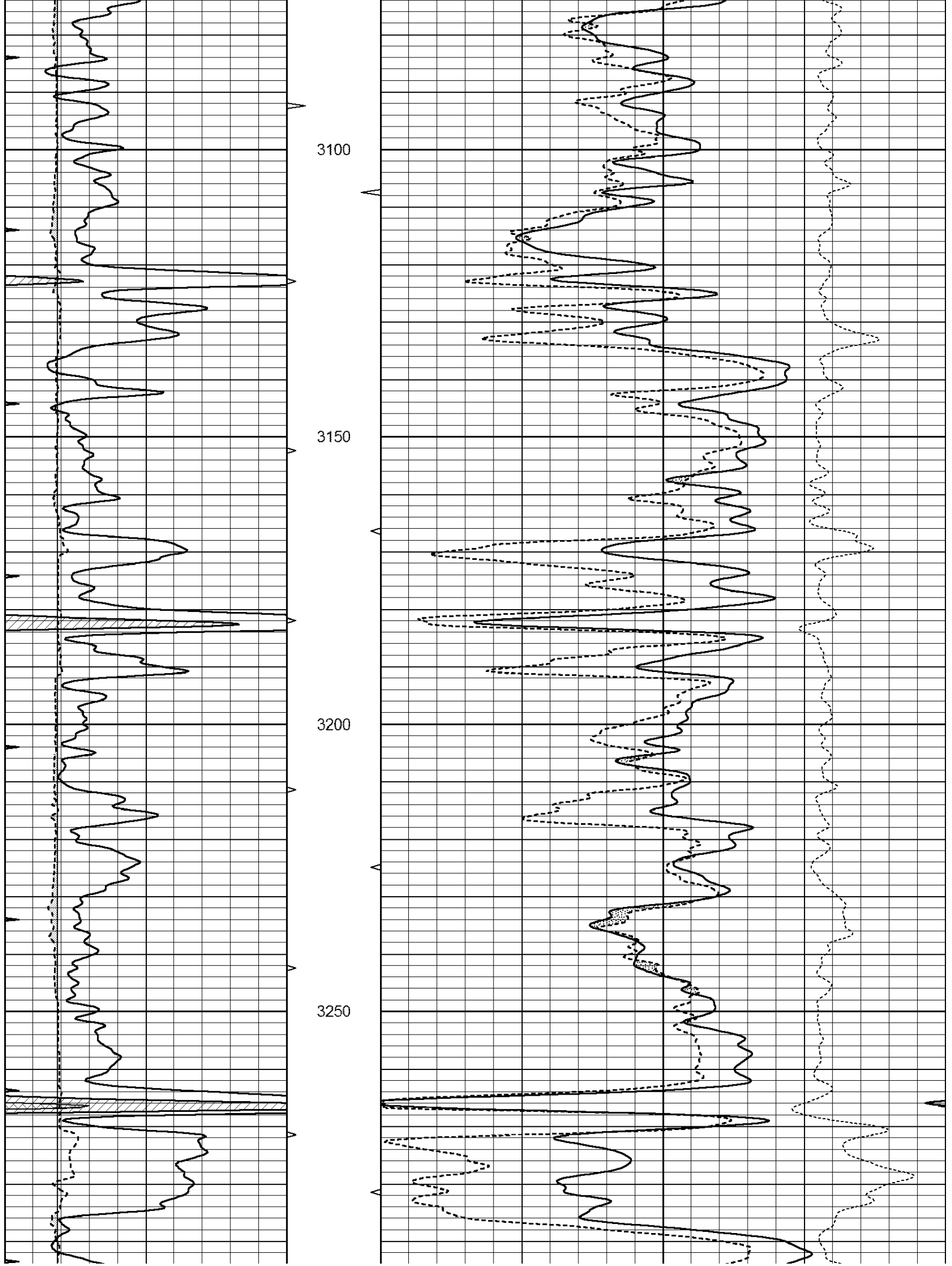
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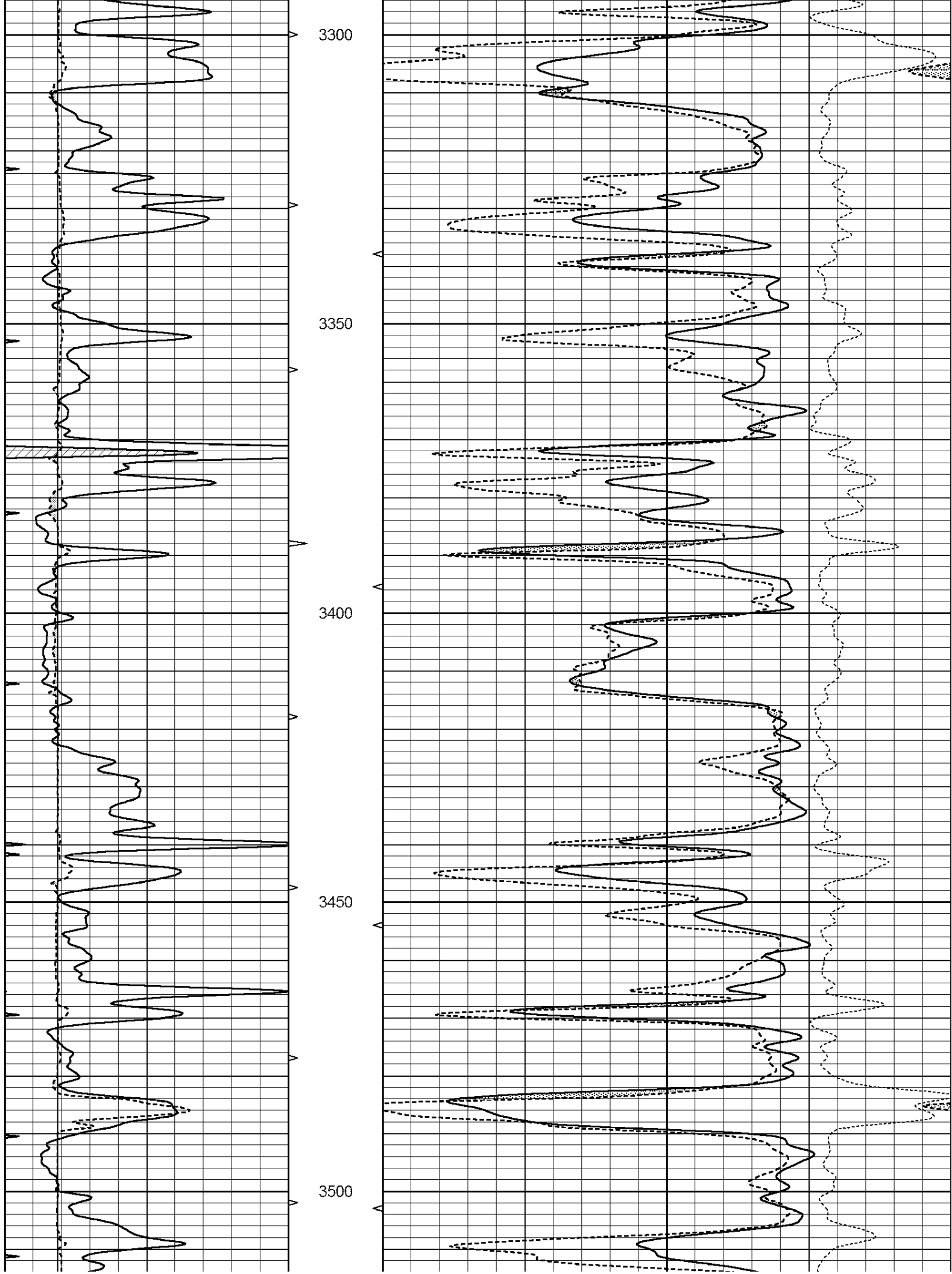
MAIN SECTION

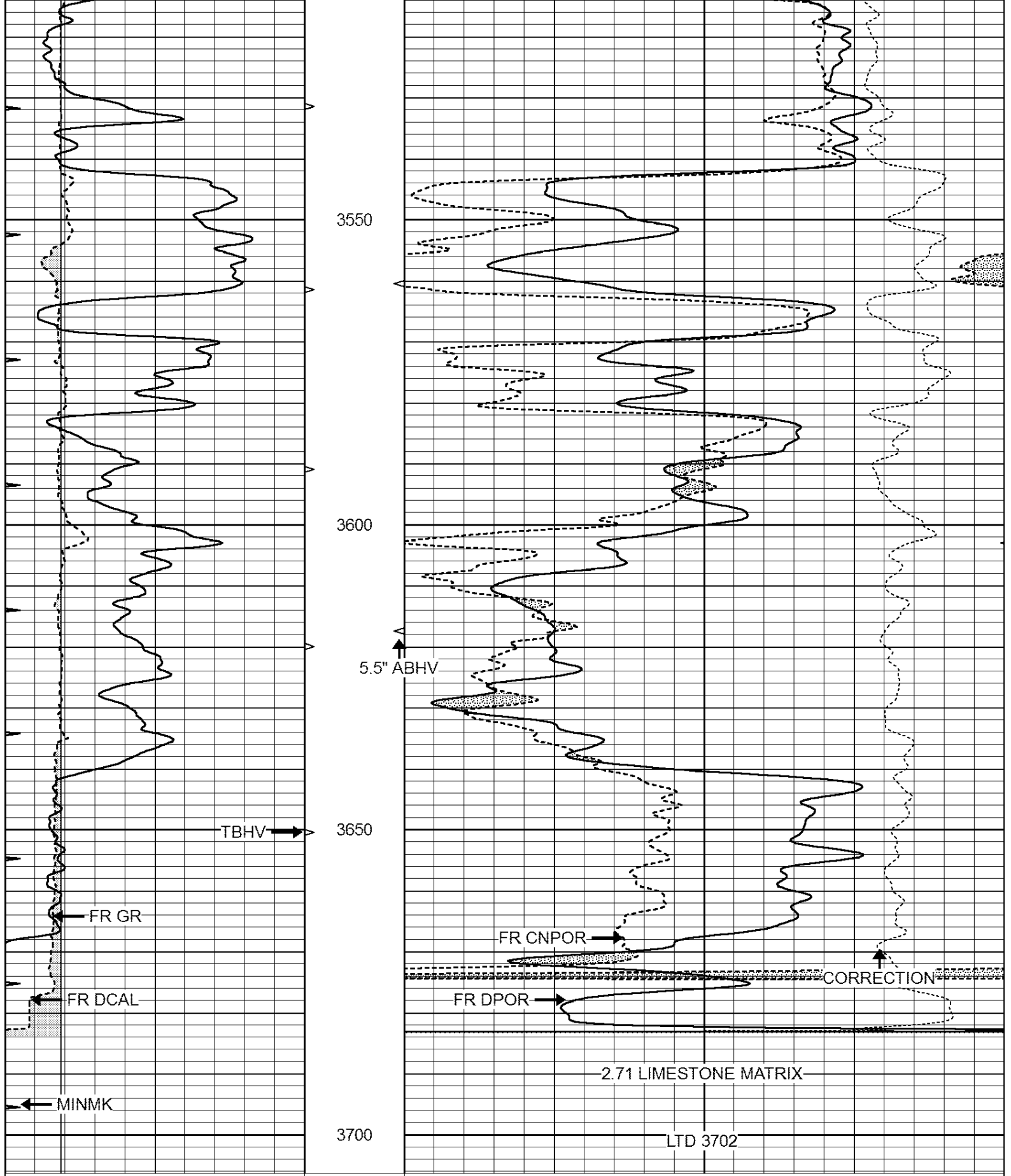
Database File: 408612ddn.db
 Dataset Pathname: pass3.3
 Presentation Format: den_neu
 Dataset Creation: Sat Mar 24 19:54:06 2012 by Calc Open-Cased 110302
 Charted by: Depth in Feet scaled 1:240

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		









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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				



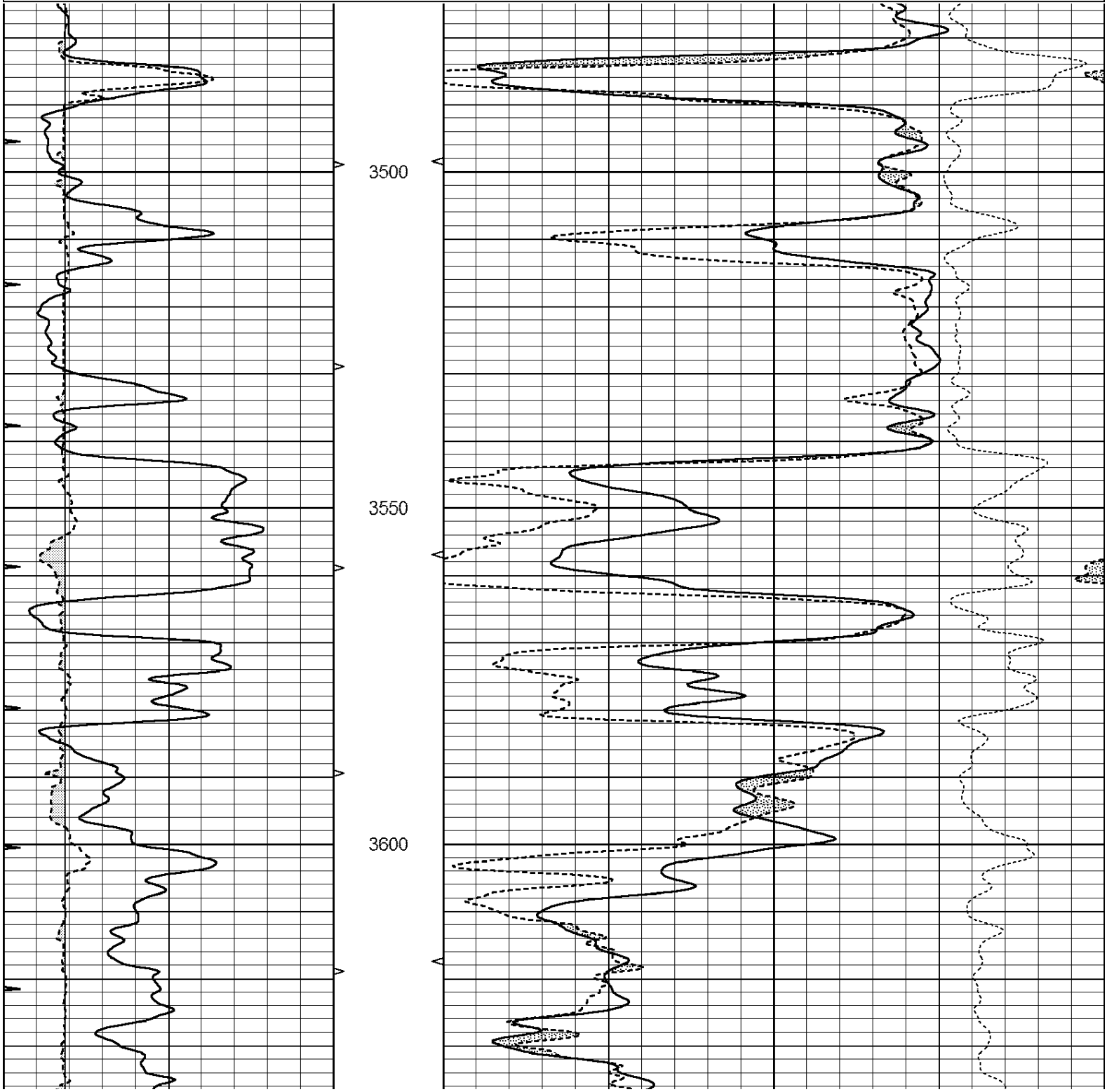
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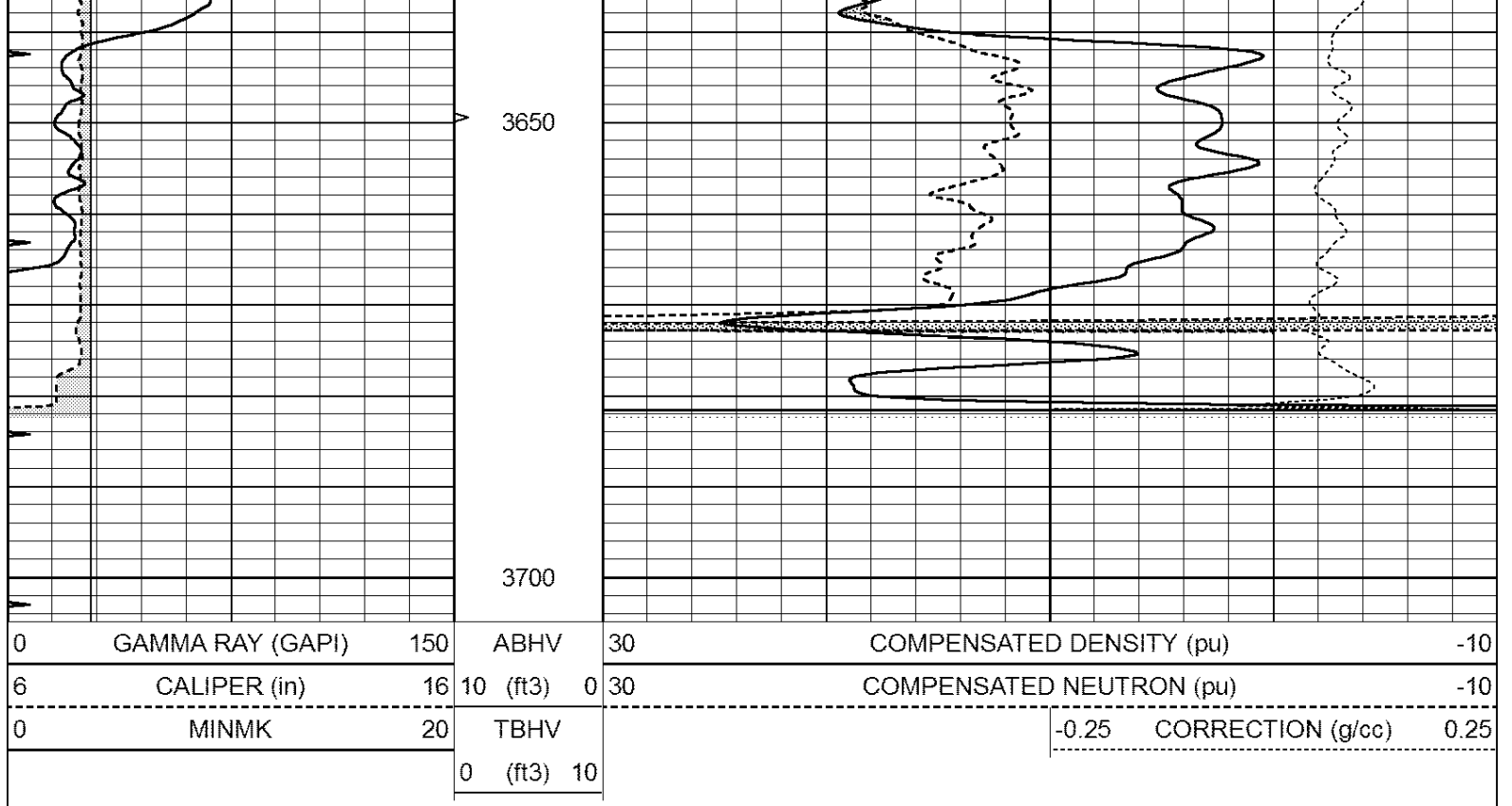
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Kansas

REPEAT SECTION

Database File: 408612ddn.db
 Dataset Pathname: pass2.4
 Presentation Format: den_neu
 Dataset Creation: Sat Mar 24 19:18:16 2012 by Calc Open-Cased 110302
 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: 408612ddn.db
 Dataset Pathname: pass3.3
 Dataset Creation: Sat Mar 24 19:54:06 2012 by Calc Open-Cased 110302

Dual Induction Calibration Report

Serial-Model: DIL4-GEAR
 Performed: Sat Mar 24 18:51:21 2012

Loop:	Readings				References		Results	
	Air	Loop			Air	Loop	m	b
Deep	0.008	0.666	V	0.000	400.000	mmho/m	570.000	4.000
Medium	-0.003	0.769	V	0.000	462.500	mmho/m	560.000	5.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.013	0.651	V	0.000	400.000	mmho/m	627.541	-8.365
Medium	0.020	0.754	V	0.000	462.500	mmho/m	630.311	-12.549

Litho Density Calibration Report

Serial: 003N Model: PRB
 Performed Tue Sep 08 14:14:44 2009

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	2042.6	12312.8	4225.8	13758.4	cps
Window 2	1855.8	10134.7	3624.2	11113.1	cps
Window 3	1639.4	6760.2	2716.3	7260.3	cps
Window 4	466.4	469.2	466.1	476.5	cps
Long Space	0.0	8278.9	1768.4	9257.4	cps
Short Space	2.2	2377.3	1544.1	2574.2	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	

Rib Angle	: 44.4	Rib Slope	: 0.979	Density/Spine Ratio	: 0.549
Spine Angle	: 74.4	Spine Slope	: 3.577	Spine Intercept	: -18.8

Caliper				
Low Ref	Readings	Reference		
High Ref	2.0	7.2		
	4.0	15.0		
	Gain: 3.8		Offset: -0.3	

Compensated Neutron Calibration Report

Serial Number:	070808
Tool Model:	Probe

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:	070559	
Tool Model:	OPEN_GR	
Performed:	Sat Mar 24 18:51:25 2012	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.3000	GAPI/cps