



**COMPLETION
& PRODUCTION
SERVICES CO.**

**COMPENSATED
DENSITY/NEUTRON
PE LOG**

Company EDISON OPERATING COMPANY, LLC.
Well MILLER TRUST #1-13
Field WILDCAT
County GOVE
State KANSAS

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County GOVE State KANSAS

Location: 880' FSL & 1580' FWL
(SW NW SE SW)
AP1 # : 15-063-22096-0000
Other Services DIL/SON
Permanent Datum GROUND LEVEL Elevation 2612
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING
Elevation
K.B. 2617
D.F. 2615
G.L. 2612

Date	4/24/13		
Run Number	ONE		
Depth Driller	4351		
Depth Logger	4350		
Bottom Logged Interval	4326		
Top Log Interval	3550		
Casing Driller	8 5/8" @ 259		
Casing Logger	259		
Bit Size	7 7/8		
Type Fluid In Hole	CHEMICAL MUD		
Density / Viscosity	9.4/49	CHLORIDES 2000 PPM	
pH / Fluid Loss	10.0/7.2		
Source of Sample	FLOWLINE		
Rin @ Meas. Temp	1.0 @ 71F		
Rmf @ Meas. Temp	.75 @ 71F		
Rmc @ Meas. Temp	1.20 @ 71F		
Source of Rmf / Rmc	MEASURED		
Rin @ BHT	.59 @ 119F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	119F		
Equipment Number	680		
Location	HAYS, KS.		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	DEREK PATTERSON		

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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 COMPLETION & PRODUCTION SVCS. (785) 628-6395

DIRECTIONS:

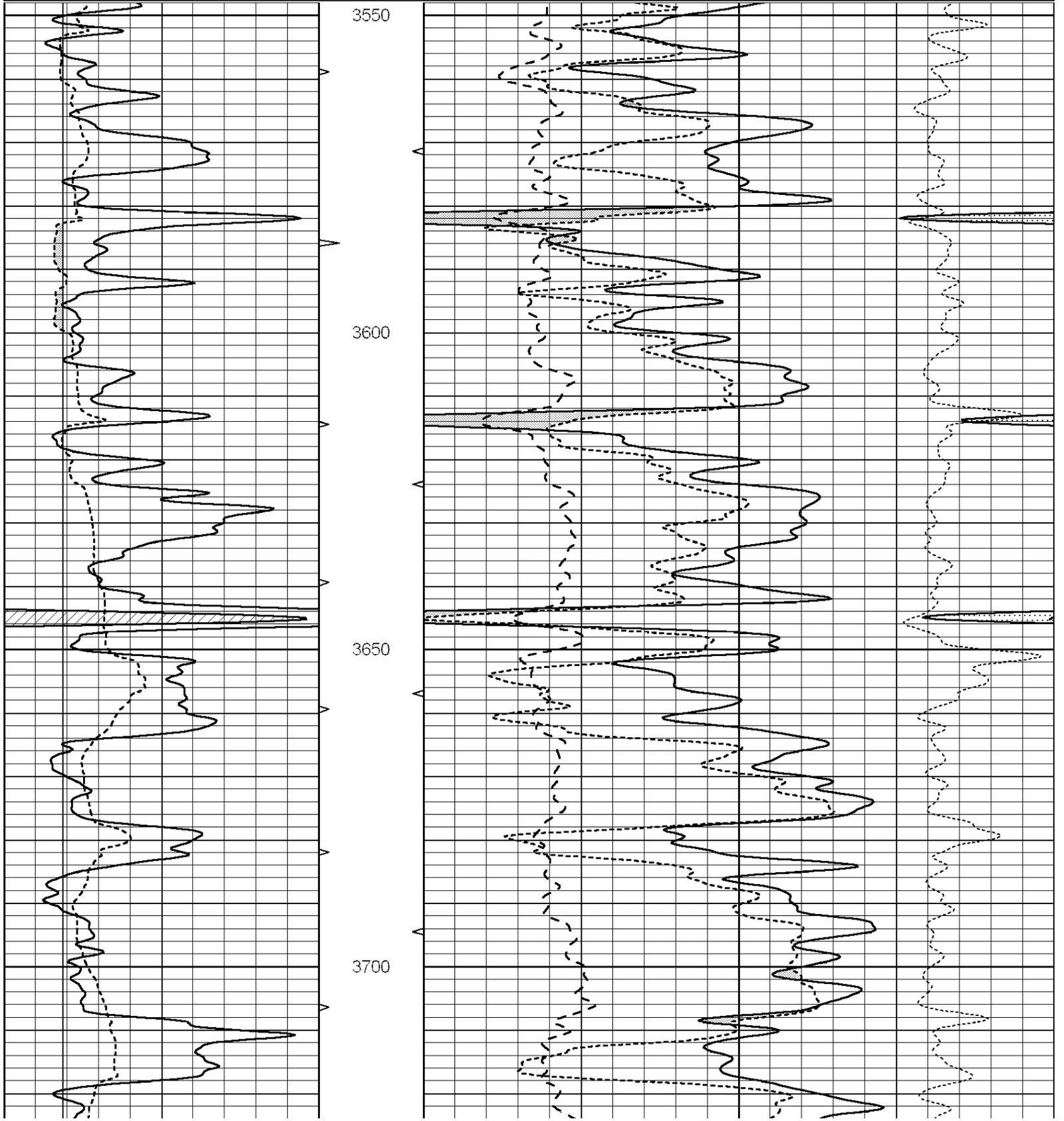
HEALY, KS. - 1 1/2 W. TO BISON RD. - 3 N. TO BISON II RD. - W. & N. 1 3/4 MILES TO CURVE WEST
GO WEST FOR 1/4 MILE TO FARM AND BACK NORTH TO RD. 290 - W. TO WILLOW RD.
N. 3 MILES TO CATTLE GUARD - NW. INTO ON TRAIL

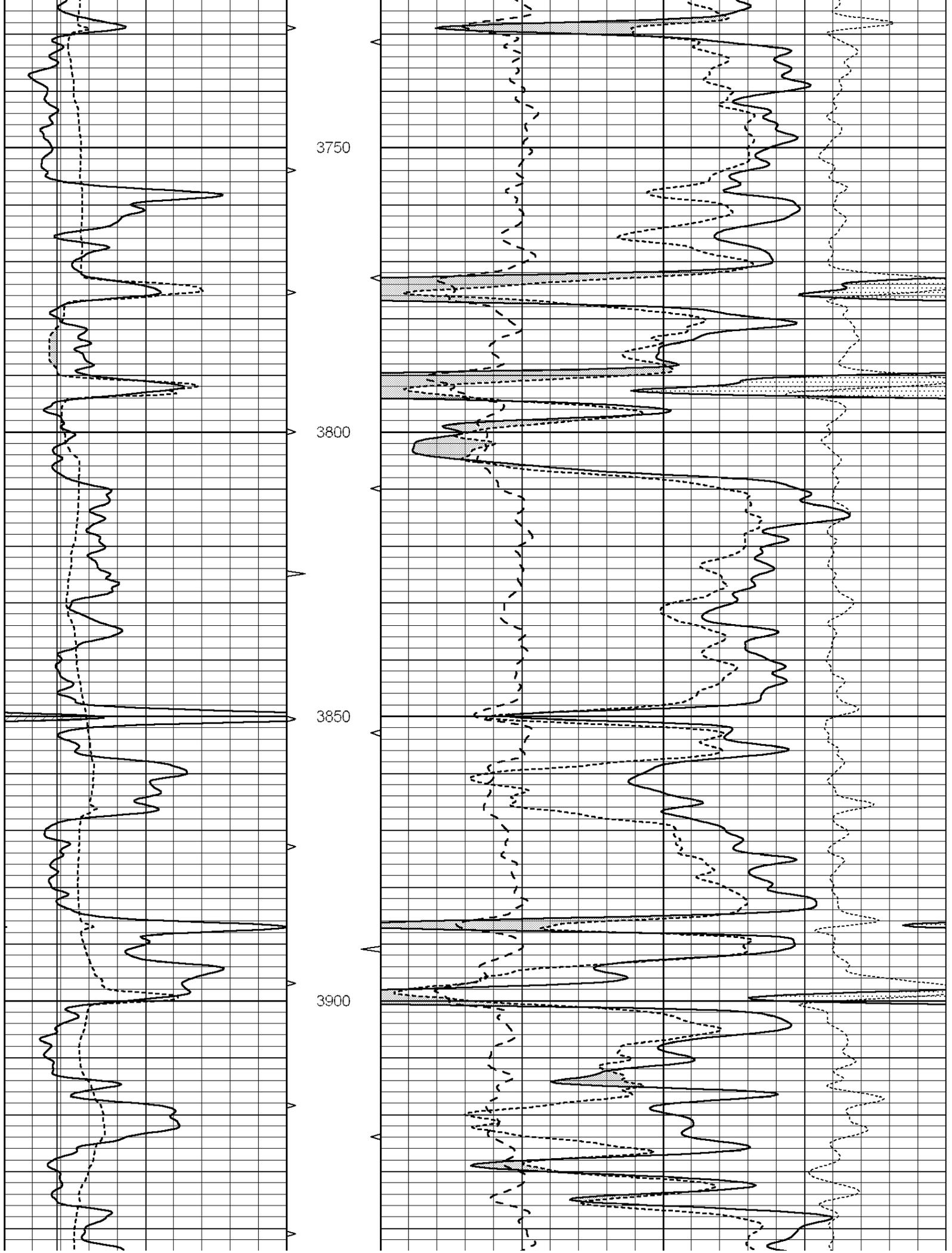


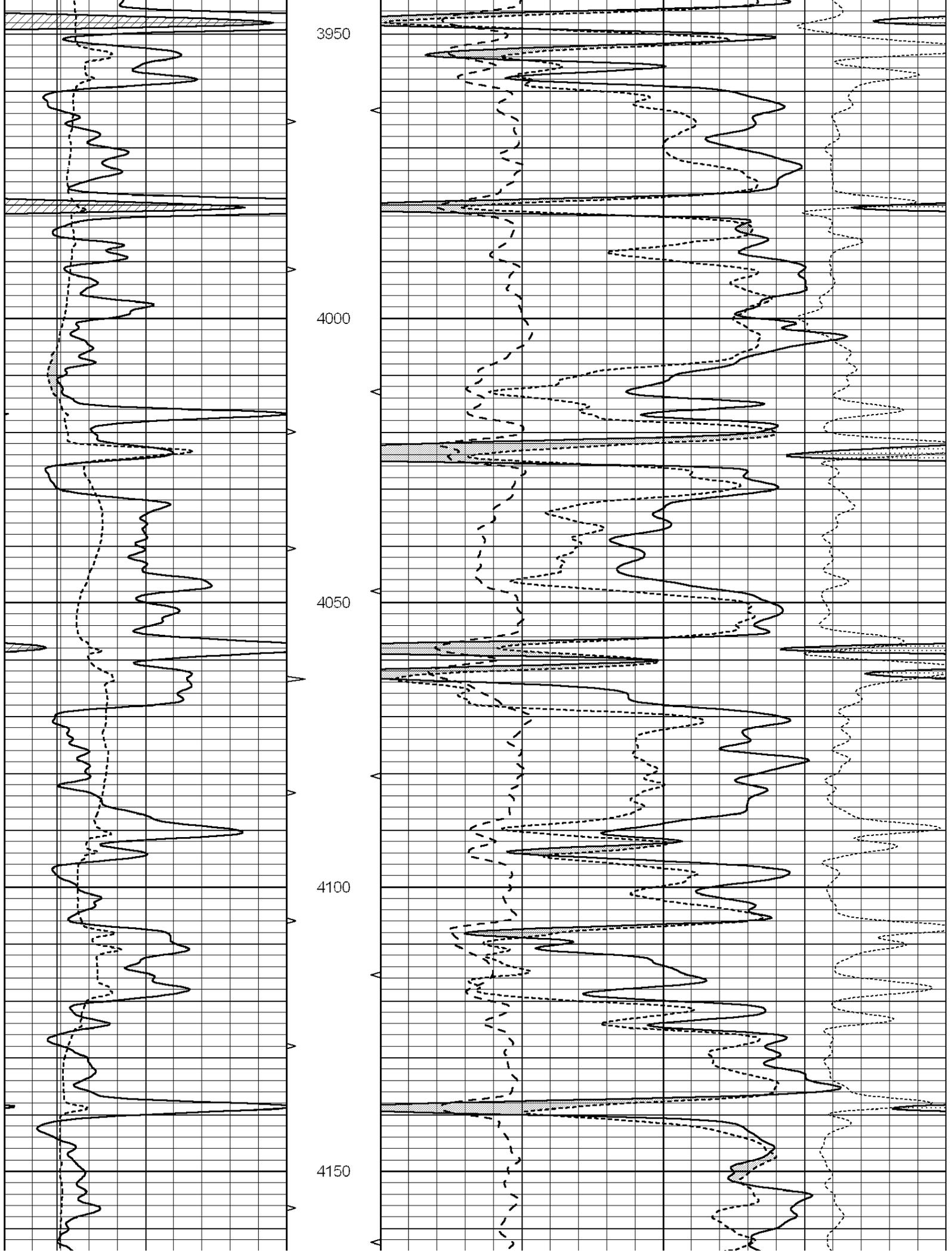
MAIN SECTION

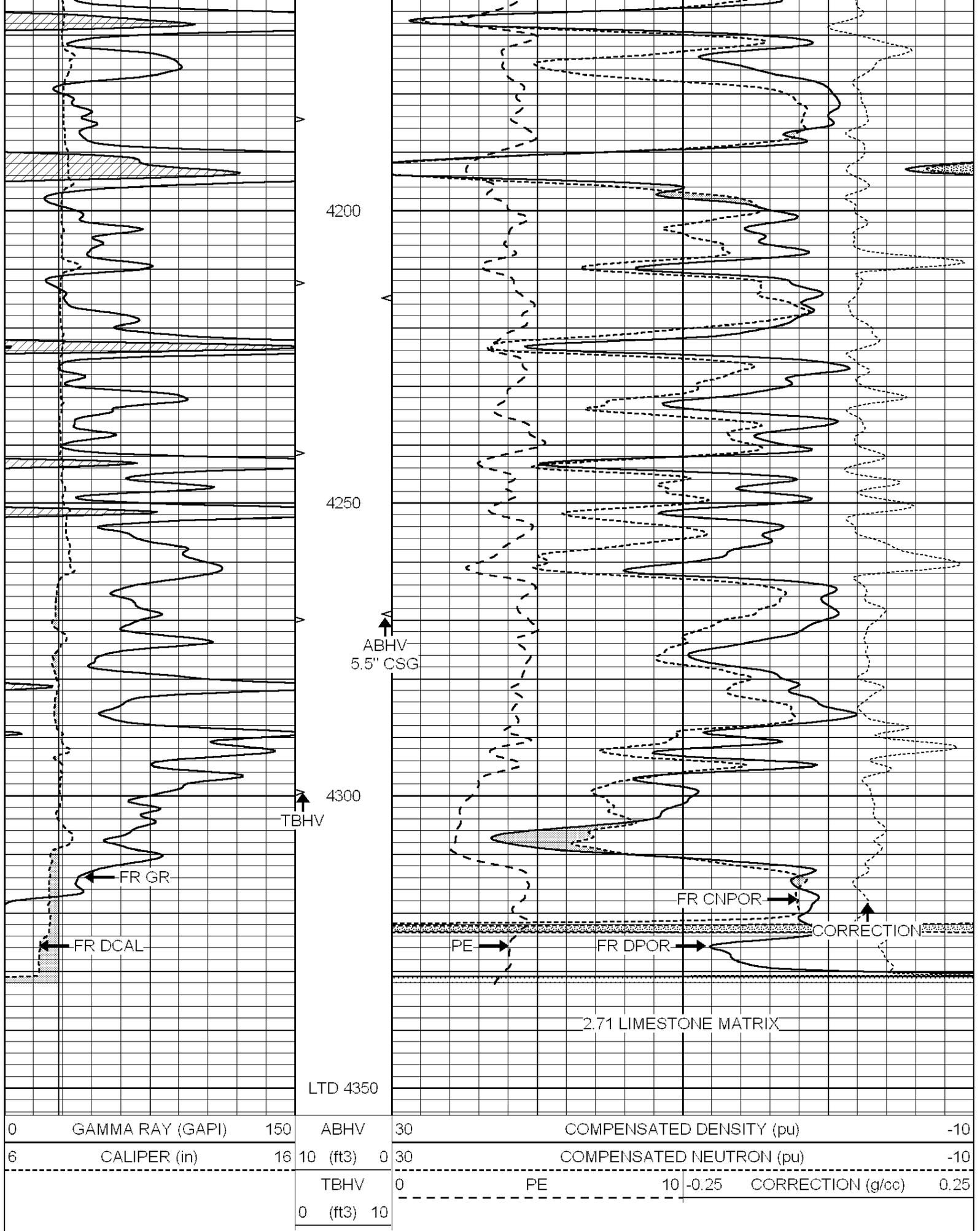
Database File: 010146pe.db
 Dataset Pathname: pass4.1
 Presentation Format: _ldt_neu
 Dataset Creation: Wed Apr 24 07:04:43 2013 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

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







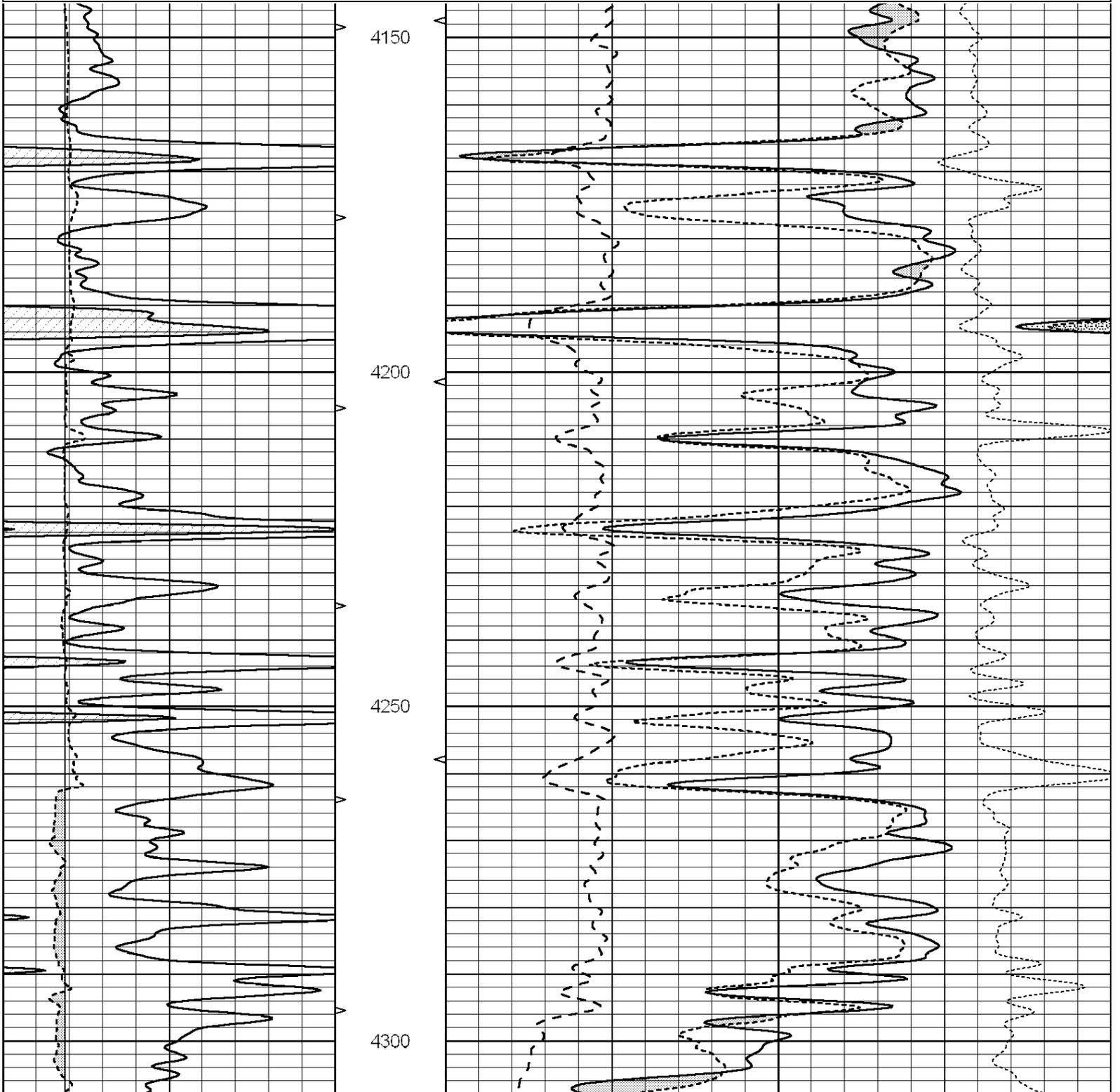


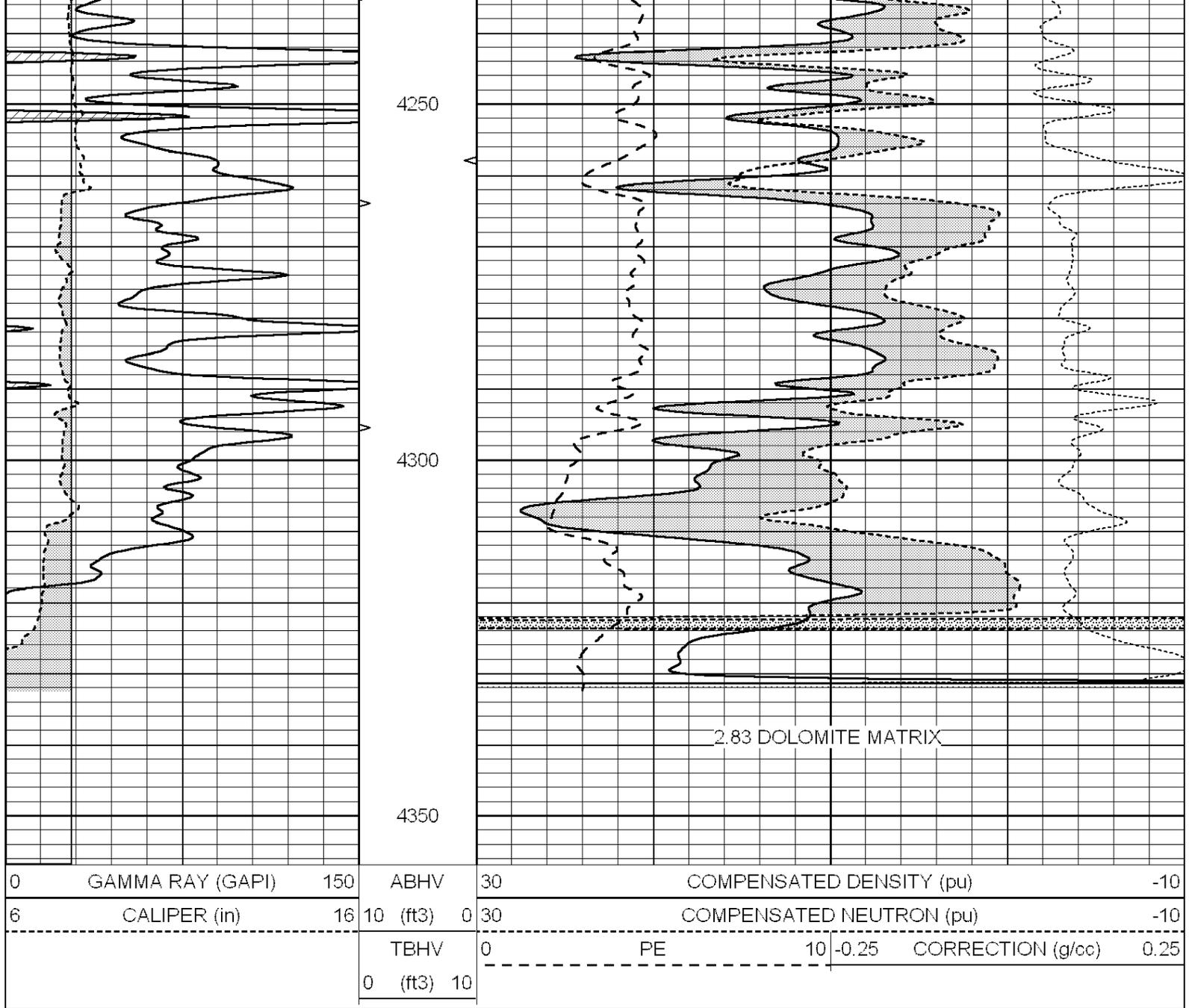
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0	COMPENSATED NEUTRON (pu)	-10
			TBHV	0	PE	10
			0 (ft3)	10	-0.25	CORRECTION (g/cc)
						0.25

REPEAT SECTION

Database File: 010146pe.db
 Dataset Pathname: pass3.1
 Presentation Format: _ldt_neu
 Dataset Creation: Wed Apr 24 06:41:13 2013 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	COMPENSATED NEUTRON (pu)	-10
			TBHV	0	PE	10 -0.25
			0 (ft3)	10	CORRECTION (g/cc)	0.25





Calibration Report

Database File: 010146pe.db
 Dataset Pathname: pass3.1
 Dataset Creation: Wed Apr 24 06:41:13 2013 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			V	References			Results	
	Air	Loop			Air	Loop	mmho/m	m	b
Deep	0.015	0.648		0.000	400.000	mmho/m	632.616	-9.730	
Medium	0.029	0.796		0.000	464.000	mmho/m	605.049	-17.680	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.017	0.657		0.000	400.000	mmho/m	625.152	10.610	

Deep	0.017	0.037	V	0.000	400.000	mmho/m	625.155	-10.819
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: 001 Model: PRB
 Performed Thu Sep 17 09:57:21 2009

Litho Density Calibration								
	Background		Magnesium		Aluminum		Sandstone	
Window 1	2056.0		9796.8		3673.1		10821.3	cps
Window 2	1920.0		8541.1		3303.5		9307.2	cps
Window 3	1563.1		4735.7		2212.8		5017.5	cps
Window 4	466.0		466.1		465.6		471.5	cps
Long Space	0.0		6621.1		1383.5		7387.2	cps
Short Space	2.5		2361.7		1523.2		2534.0	cps
Rho			1.7100		2.5900		1.3800	g/cc
Pe					2.5700		1.5500	
Rib Angle	: 44.4		Rib Slope	: 0.978	Density/Spine Ratio		: 0.541	
Spine Angle	: 74.4		Spine Slope	: 3.570	Spine Intercept		: -18.9	

Caliper		
	Readings	Reference
Low Ref	3.1	8.4
High Ref	4.3	14.3
	Gain: 4.6	Offset: -7.4

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