



SUPERIOR
Hays,
Kansas

**COMPENSATED
DENSITY / NEUTRON
LOG**

Company: BUFFALO RESOURCES, LLC.
Well: NEY #2-23
Field: ELASSER
County: RUSSELL
State: KANSAS

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Location: API #: 15-167-23597-0000
335' FNL & 1490' FEL, NE/4
SEC 23 TWP 12S RGE 15W
Permanent Datum: GROUND LEVEL Elevation: 1681
Log Measured From: KELLY BUSHING 8' A.G.L.
Drilling Measured From: KELLY BUSHING
Other Services: DIL/MEL SONIC
Elevation: K.B. 1689, D.F. 1687, G.L. 1681

Date	9/29/09
Run Number	ONE
Depth Driller	3200
Depth Logger	3201
Bottom Logged Interval	3177
Top Log Interval	2500
Casing Driller	8 5/8" @ 355'
Casing Logger	350
Bit Size	7 7/8
Type Fluid In Hole	CHEMICAL MUD
Density / Viscosity	9.2/52
pH / Fluid Loss	8.4/8.8
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.520 @ 82F
Rmf @ Meas. Temp	.390 @ 82F
Rmc @ Meas. Temp	.624 @ 82F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.391 @ 109F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	12:15 P.M.
Maximum Recorded Temperature	109F
Equipment Number	0836
Location	HAYS, KANSAS
Recorded By	JEFF LUEBBERS
Witnessed By	CURTIS COVEY
	DARON 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 SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395
DIRECTIONS
RUSSELL, KS. & I-70, 9N. ON HWY 281 TO MELLARD RD., 3W., 1/2N., 2 1/4W. TO STOP SIGN, JOG S. W. INTO GATE

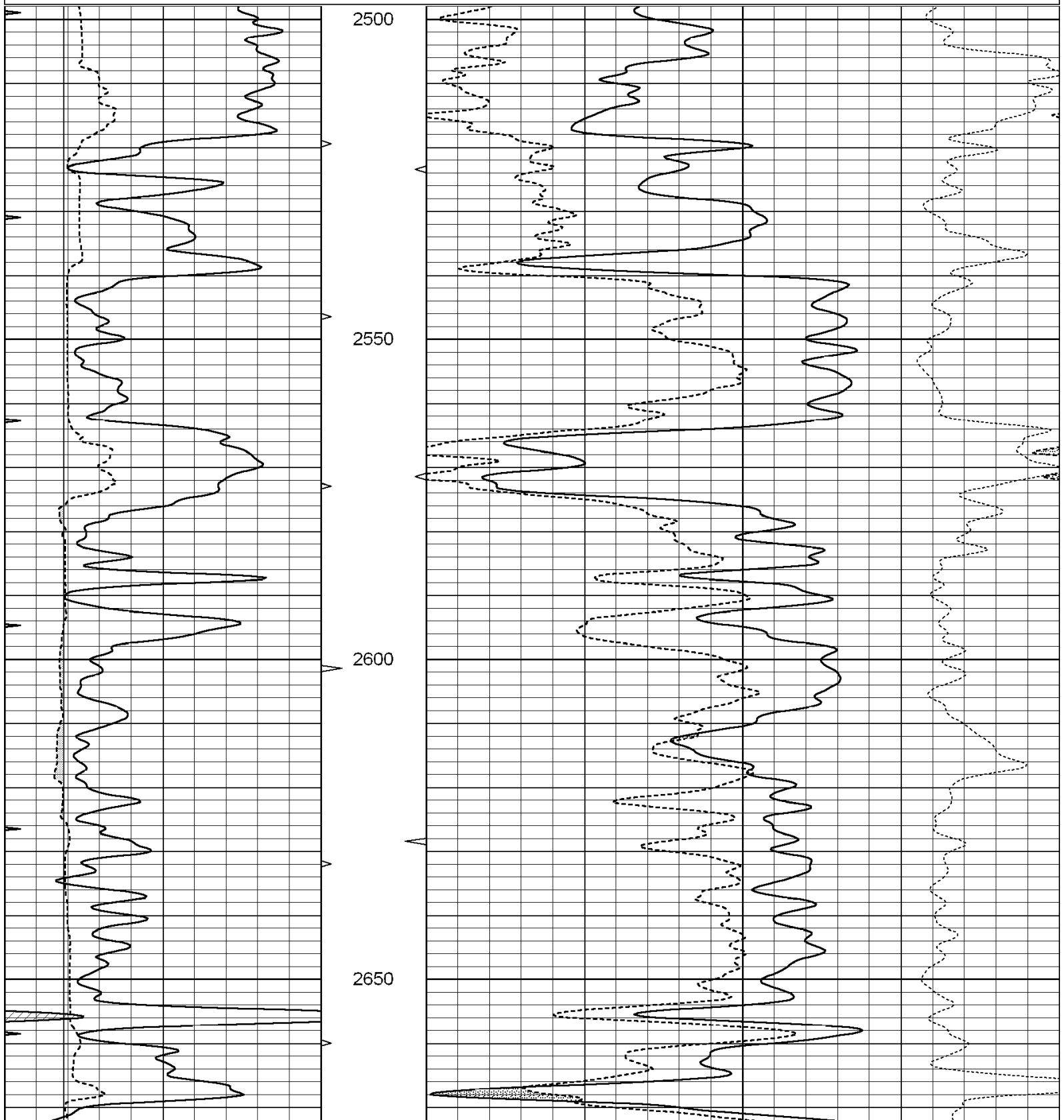


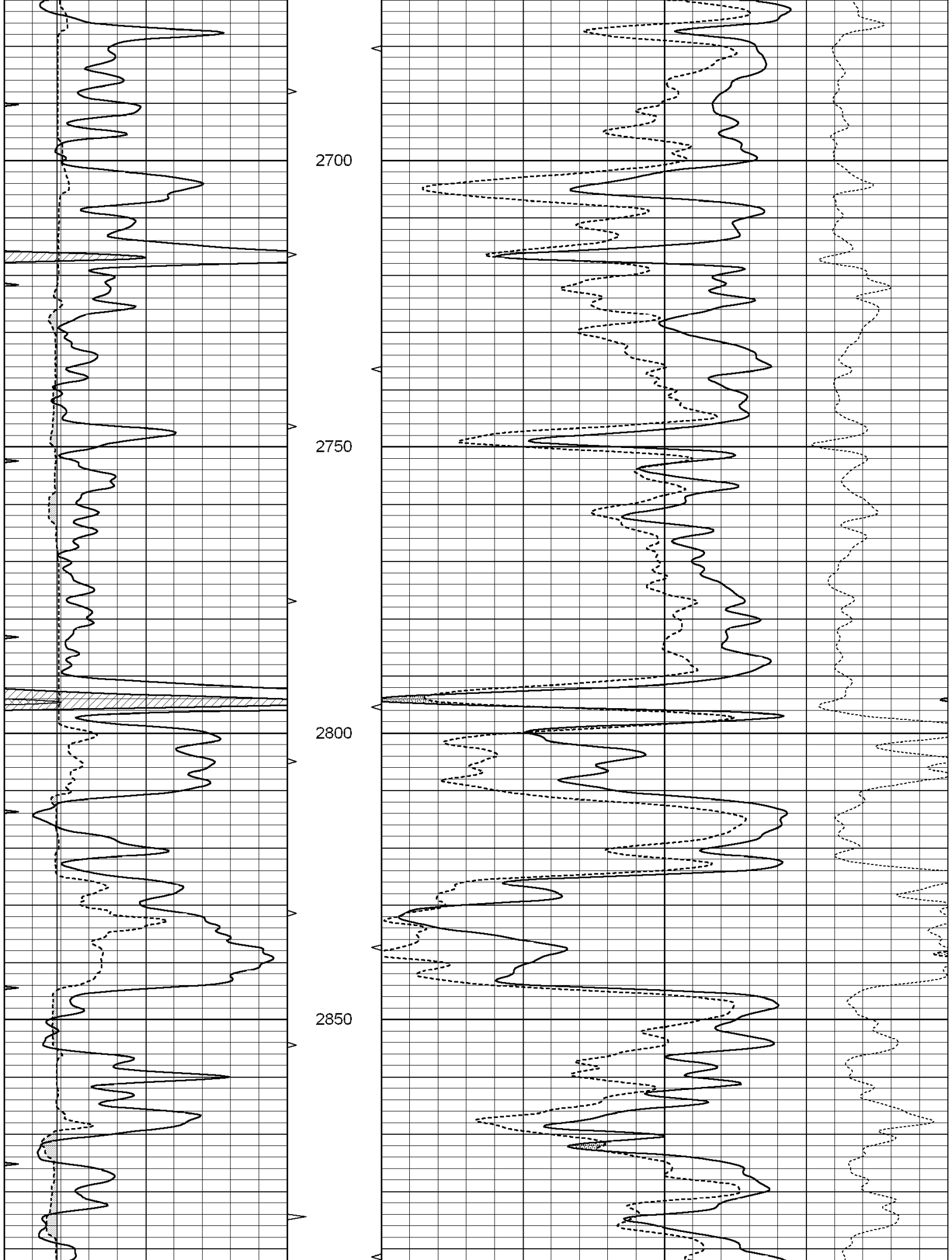
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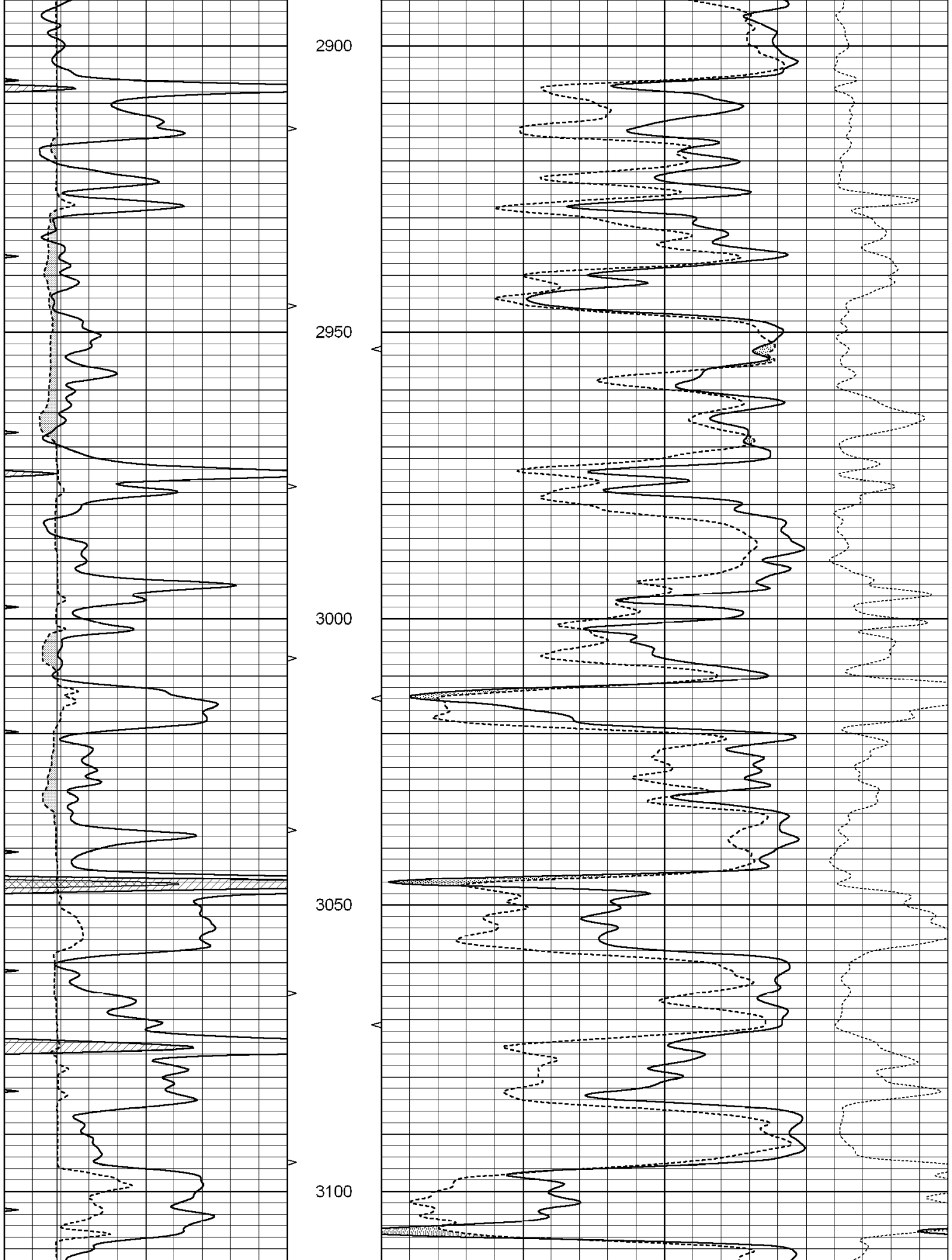
MAIN SECTION

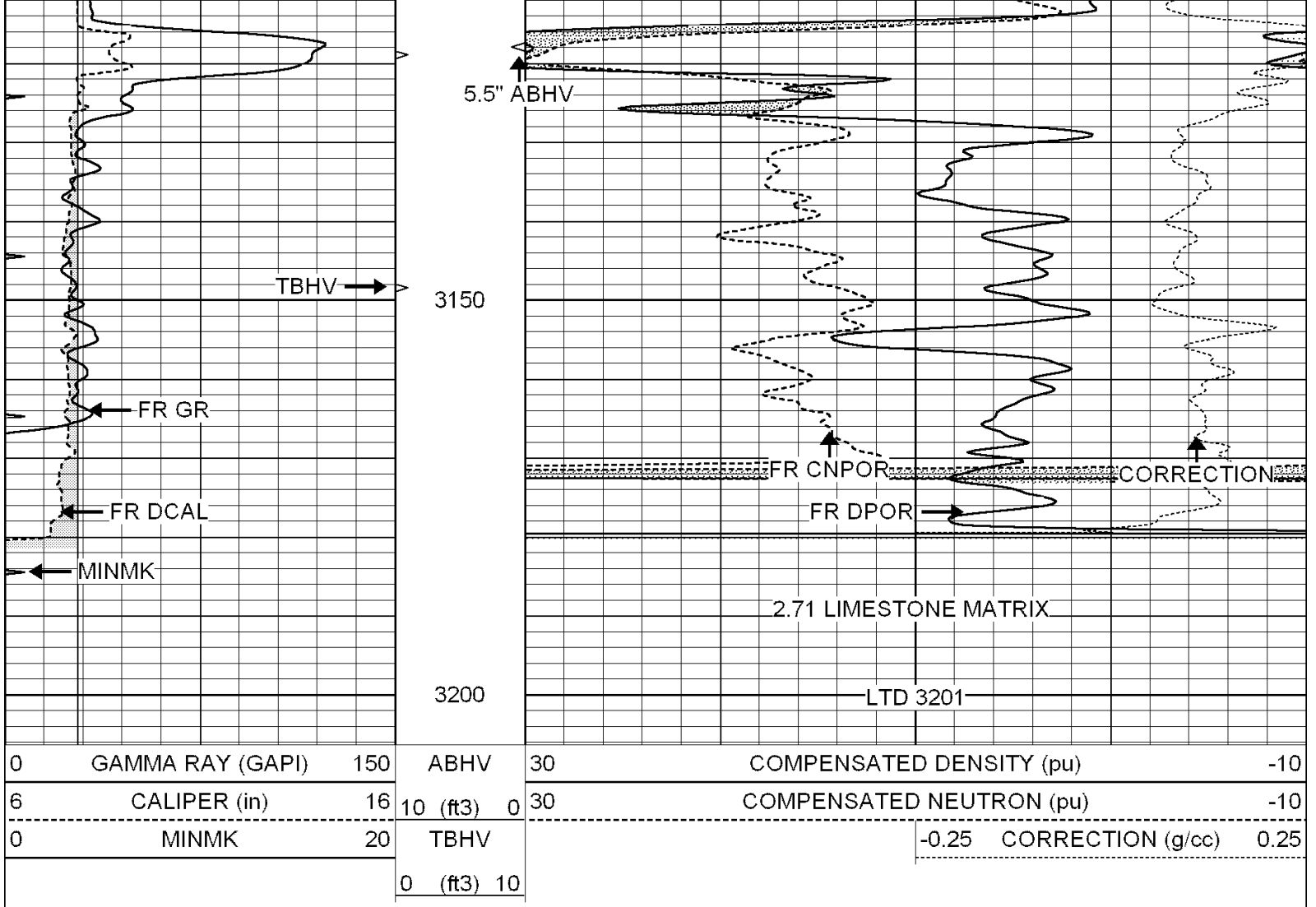
Database File: 004352ddn.db
 Dataset Pathname: pass3.6
 Presentation Format: den_neu
 Dataset Creation: Tue Sep 29 13:10:44 2009
 Charted by: Depth in Feet scaled 1:240

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







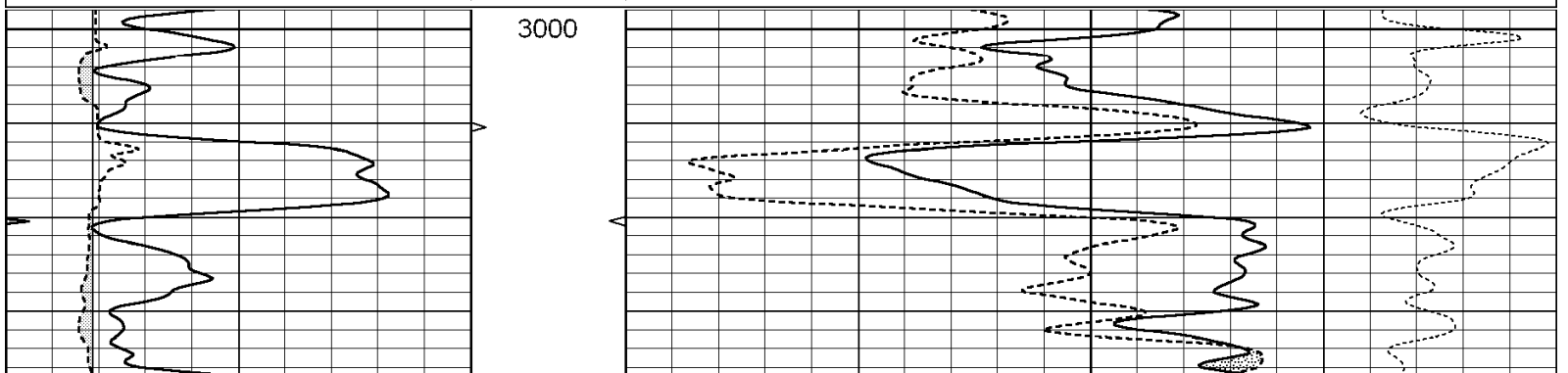


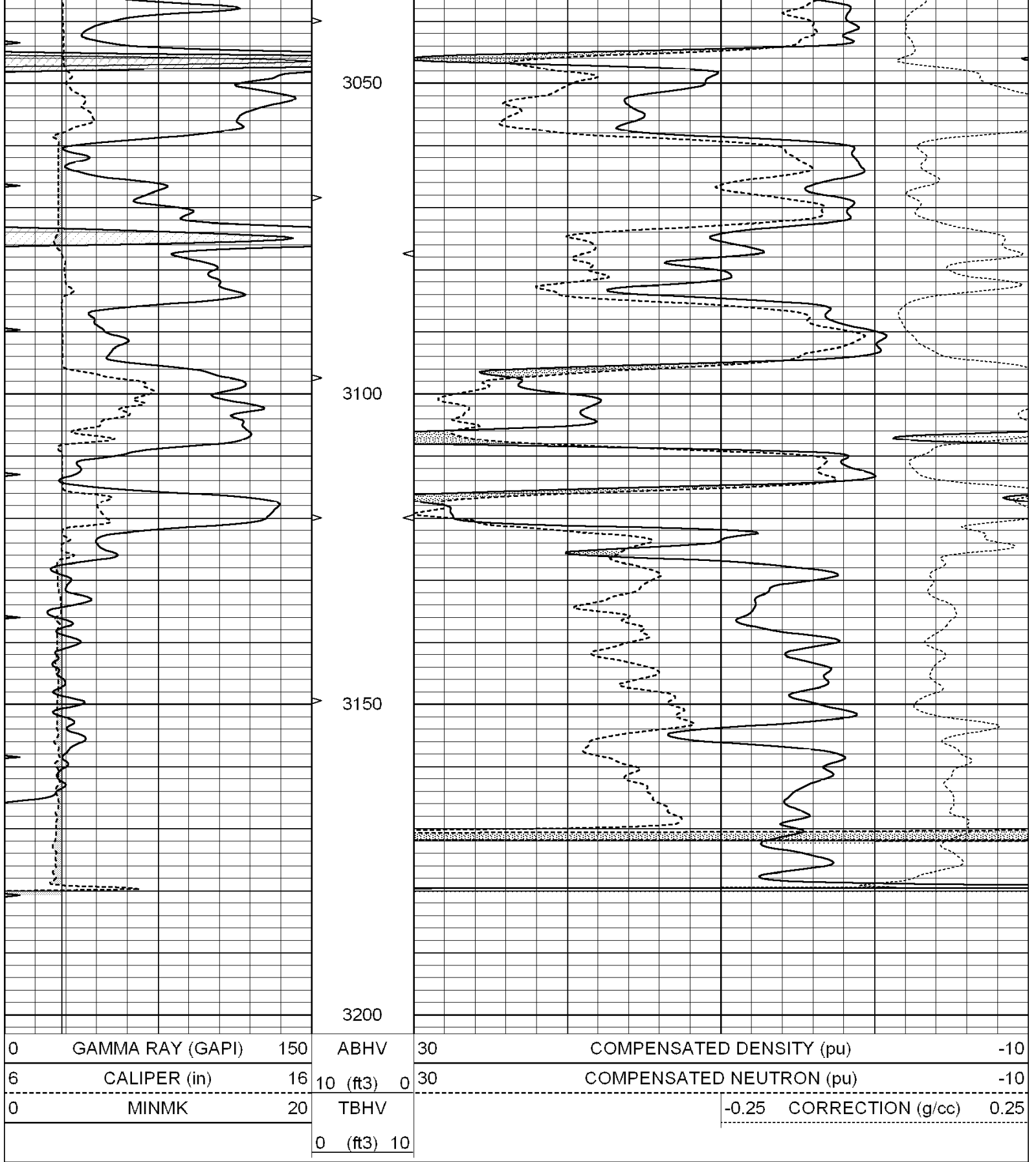
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REPEAT SECTION

Database File: 004352ddn.db
 Dataset Pathname: pass2.6
 Presentation Format: den_neu
 Dataset Creation: Tue Sep 29 12:49:10 2009 by Calc Open-Cased 060407
 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				

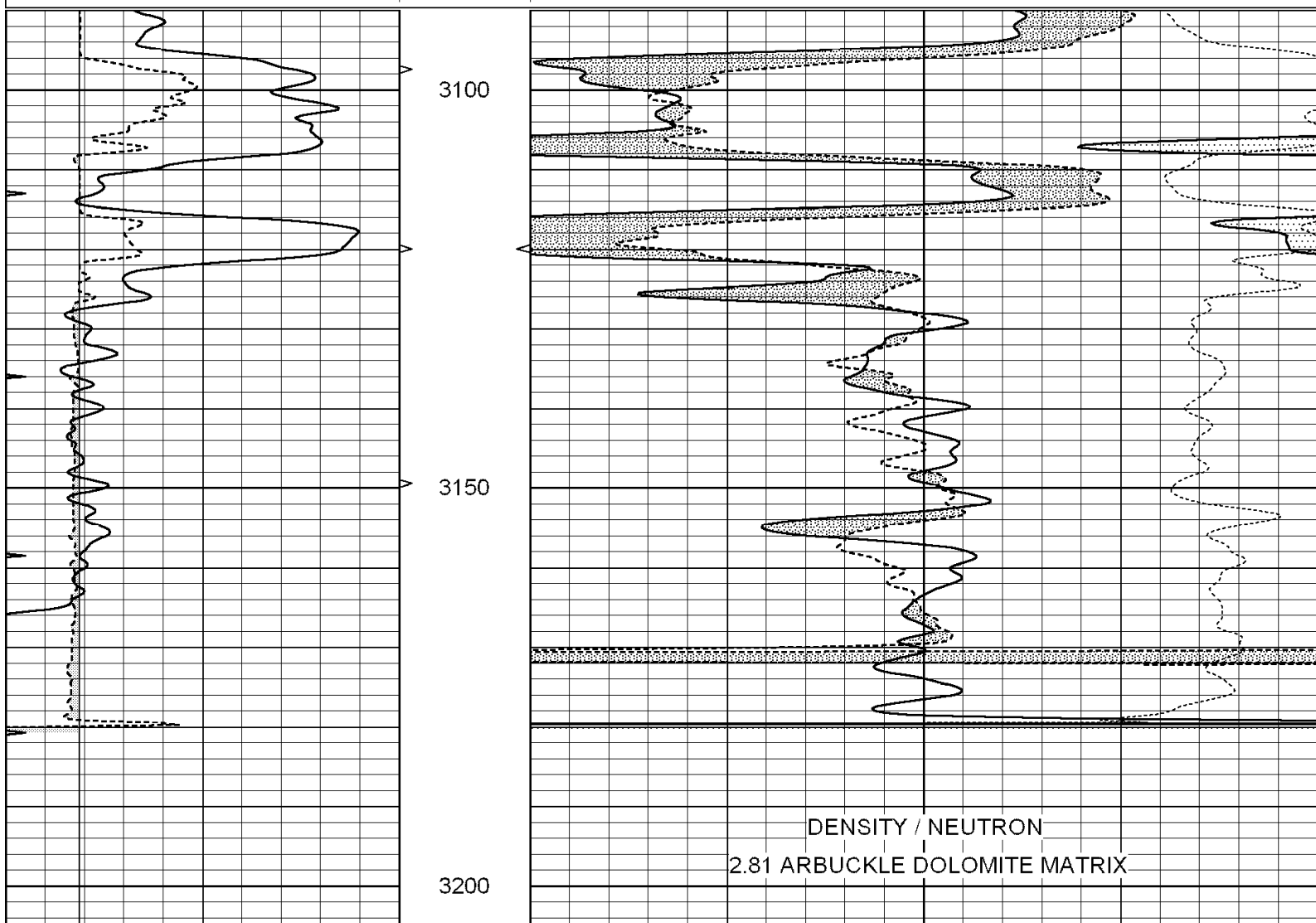




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DOLOMITE MATRIX

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: 004352ddn.db
 Dataset Pathname: pass3.6
 Dataset Creation: Tue Sep 29 13:10:44 2009

Dual Induction Calibration Report

Serial-Model: DIL3-GEAR
 Performed: Tue Sep 29 11:46:39 2009

Readings

References

Results

Loop:	Air	Loop	Air	Loop	m	b
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Deep	0.011	0.656	V	0.000	400.000	mmho-m	640.000	-1.000
Medium	0.013	0.740	V	0.000	462.500	mmho-m	675.000	-9.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.002	0.645	V	0.000	400.000	mmho-m	622.059	-1.071
Medium	0.007	0.740	V	0.000	462.500	mmho-m	631.393	-4.555

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

	Readings	Reference	
Low Ref	1.8	7.0	
High Ref	4.2	14.0	
Gain: 3.0			Offset: 1.6

Compensated Neutron Calibration Report

Serial Number: NEU_3I
Tool Model: G

CALIBRATION

Detector	Readings	Target	Normalization
Short Space	997.00 cps	1000.00 cps	1.0000
Long Space	986.00 cps	1000.00 cps	1.0000

Gamma Ray Calibration Report

Serial Number: GR3
Tool Model: OPEN
Performed: Tue Sep 29 12:32:43 2009

Calibrator Value: 200.0 GAPI

Background Reading: 3.0 cps
Calibrator Reading: 186.0 cps

Sensitivity: 0.5000 GAPI/cps