



SUPERIOR
Hays,
Kansas

COMPENSATED
DENSITY / NEUTRON
LOG

Company	HERMAN L. LOEB, LLC.	Company	HERMAN L. LOEB, LLC.
Well	BEETZ "A" #3-28	Well	BEETZ "A" #3-28
Field	TRAPP	Field	TRAPP
County	BARTON	County	BARTON
State	KANSAS	State	KANSAS
Location:	AP1 # : 15-009-25694-0000	Other Services	DIL/MEL SONIC
Permanent Datum	GROUND LEVEL	Elevation	1918
Log Measured From	KELLY BUSHING 9' A.G.L.	Elevation	K.B. 1927 D.F. 1925 G.L. 1918
Drilling Measured From	KELLY BUSHING		
SEC 28 TWP 17S RGE 13W			
Date	6/24/12		
Run Number	ONE		
Depth Driller	3395		
Depth Logger	3394		
Bottom Logged Interval	3370		
Top Log Interval	2700	1900-1600	
Casing Driller	8 5/8"@869'		
Casing Logger	868		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4,700 PPM	
Density / Viscosity	9.0/58		
pH / Fluid Loss	11.0/8.4		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.850@90F		
Rmt @ Meas. Temp	.636@90F		
Rmc @ Meas. Temp	1.02@90F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	.689@111F		
Time Circulation Stopped	8 HOURS		
Time Logger on Bottom	7:15 P.M.		
Maximum Recorded Temperature	111F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	TOM PRONOLD		

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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
HOISINGTON, KS. 1N. OF "DAIRY QUEEN" ON (SUSANK BLKTOP), 1/2E., N. INTO

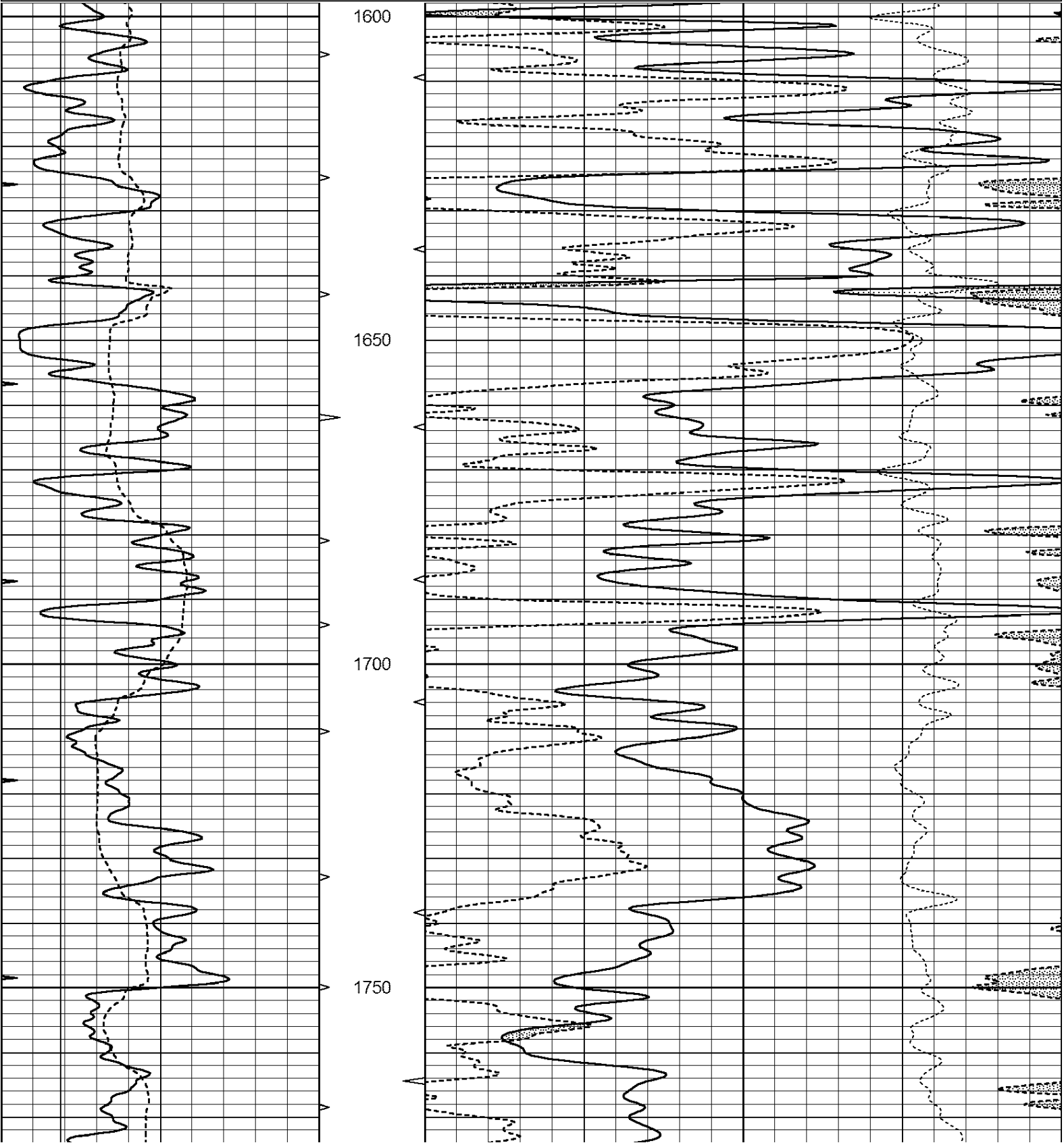


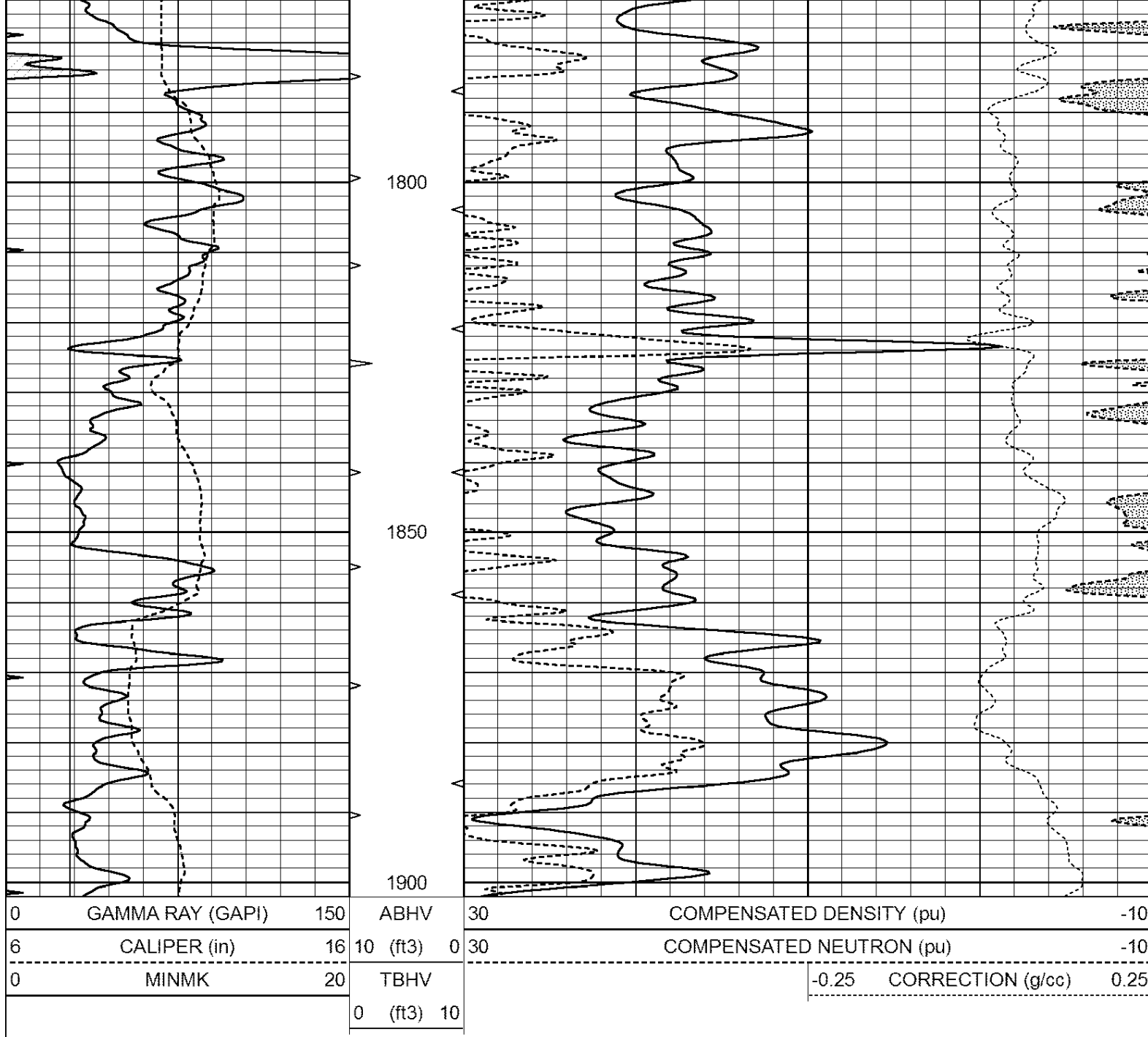
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UPPER SECTION

Database File: 409144ddn.db
Dataset Pathname: pass3.7
Presentation Format: den_neu
Dataset Creation: Sun Jun 24 20:51:10 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		

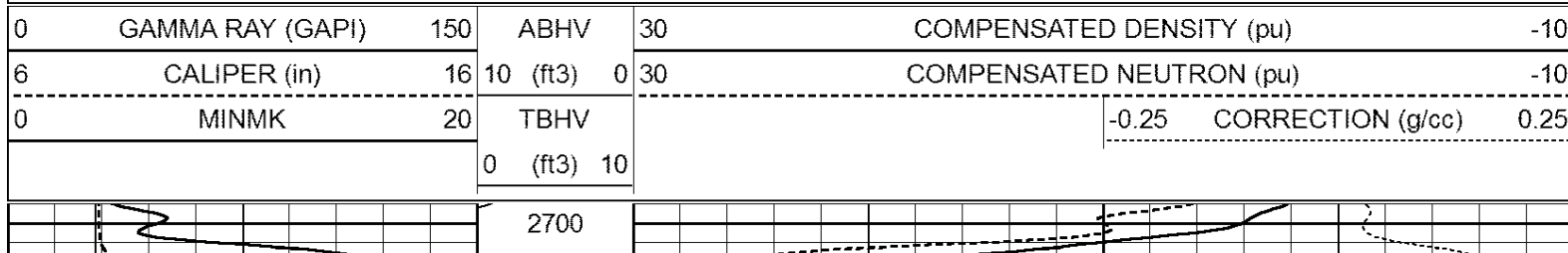


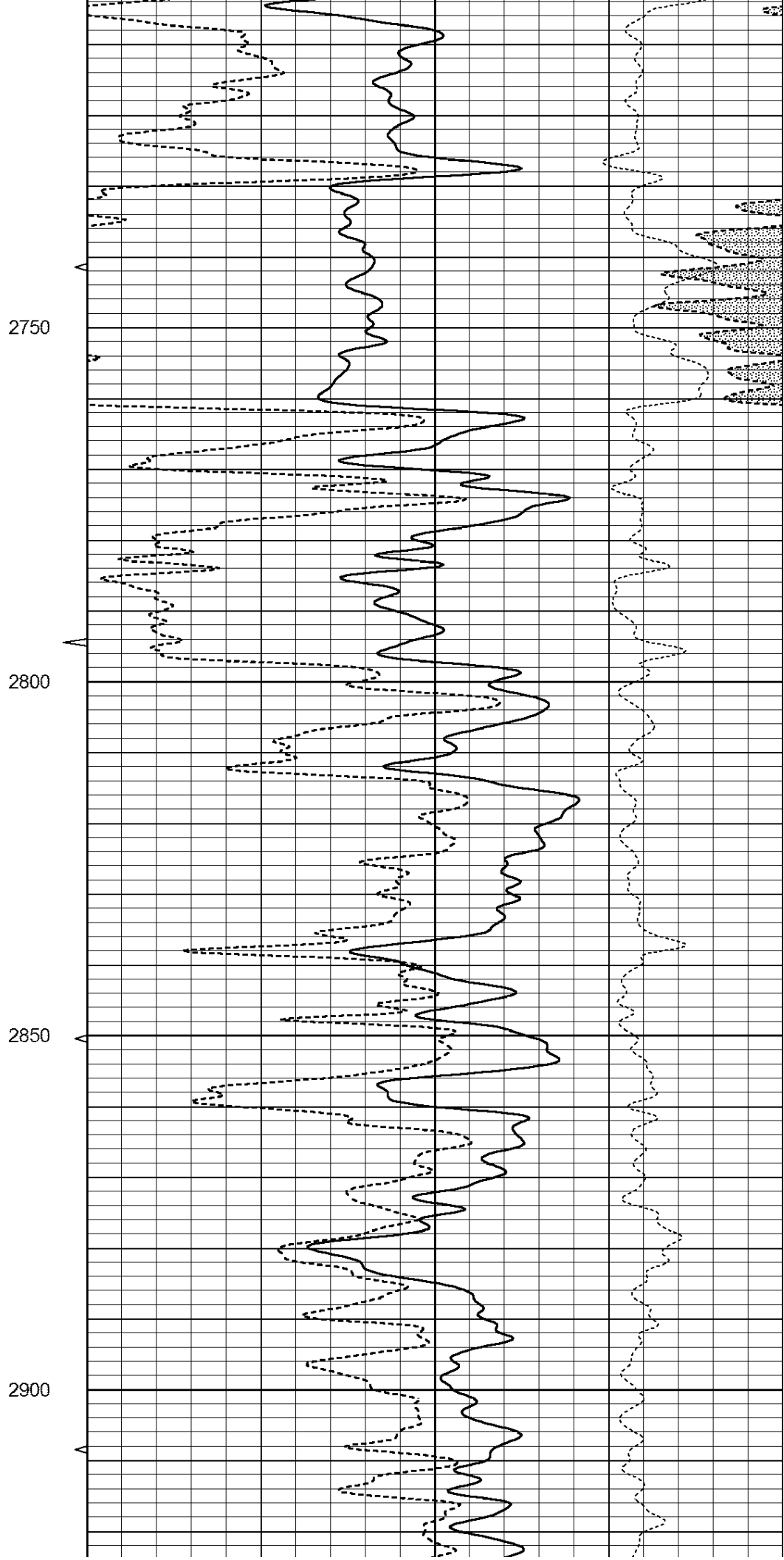
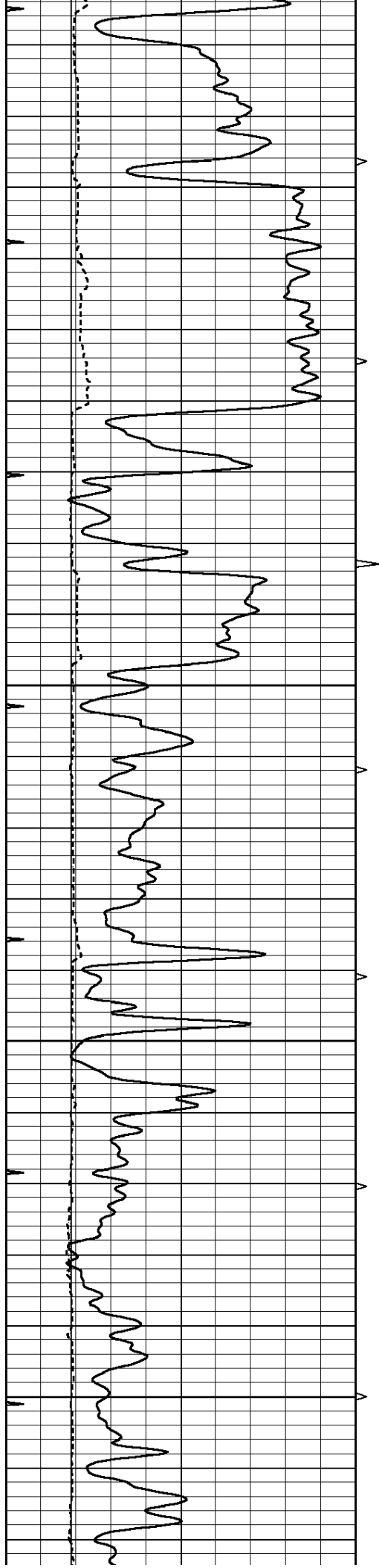


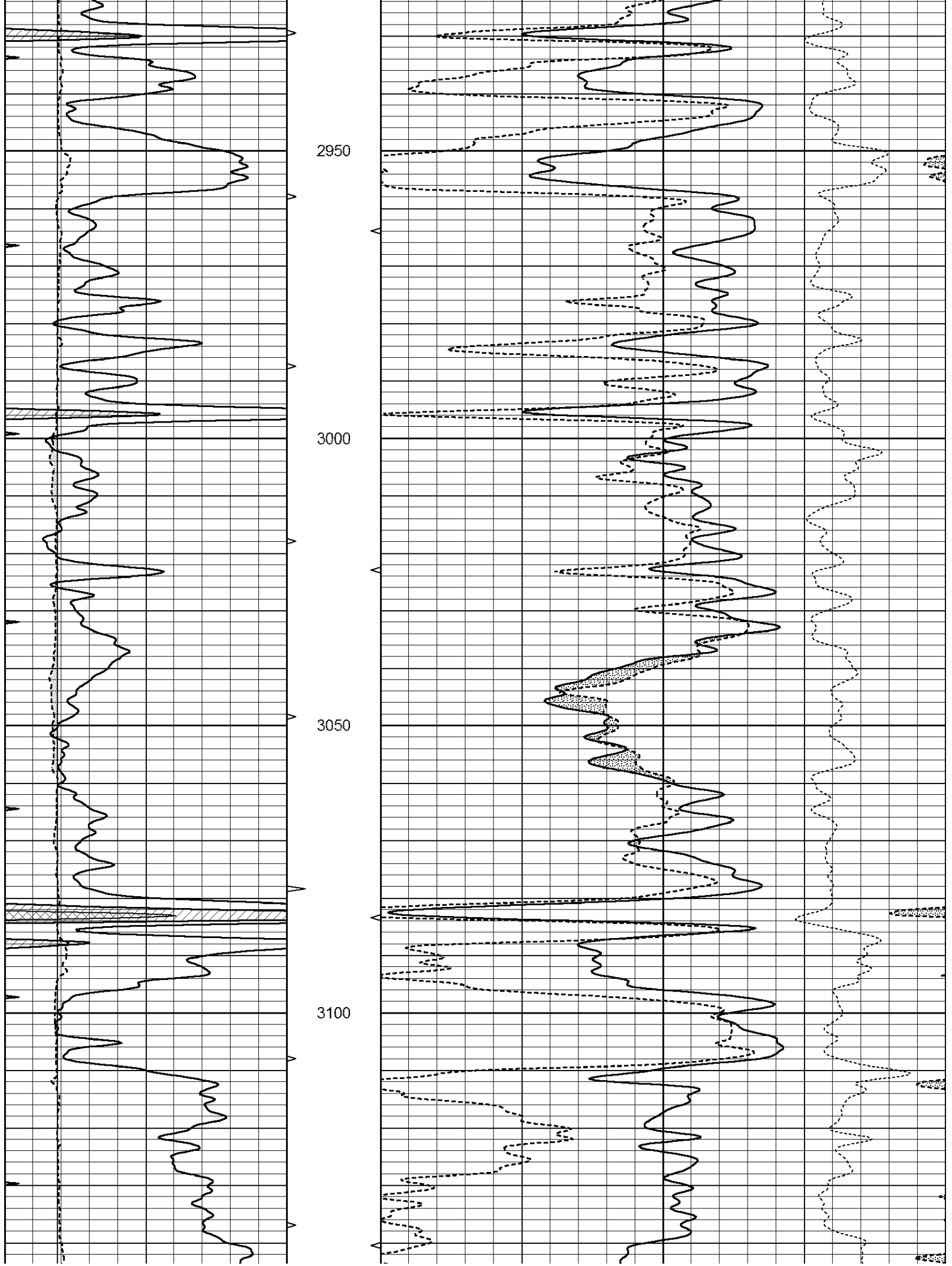
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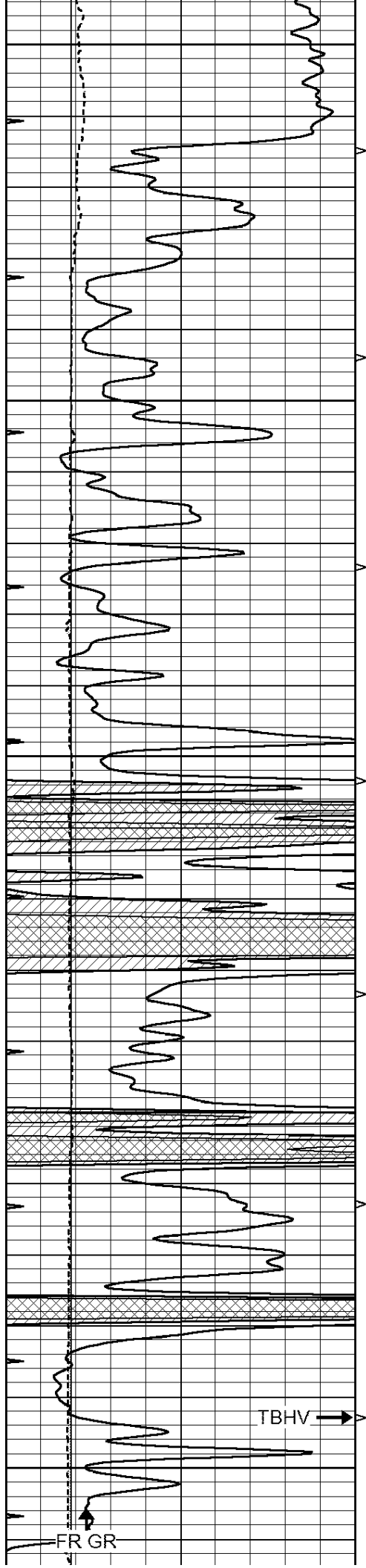
MAIN SECTION

Database File: 409144ddn.db
 Dataset Pathname: pass3.6
 Presentation Format: den_neu
 Dataset Creation: Sun Jun 24 20:50:18 2012 by Calc Open-Cased 110302
 Charted by: Depth in Feet scaled 1:240









3150

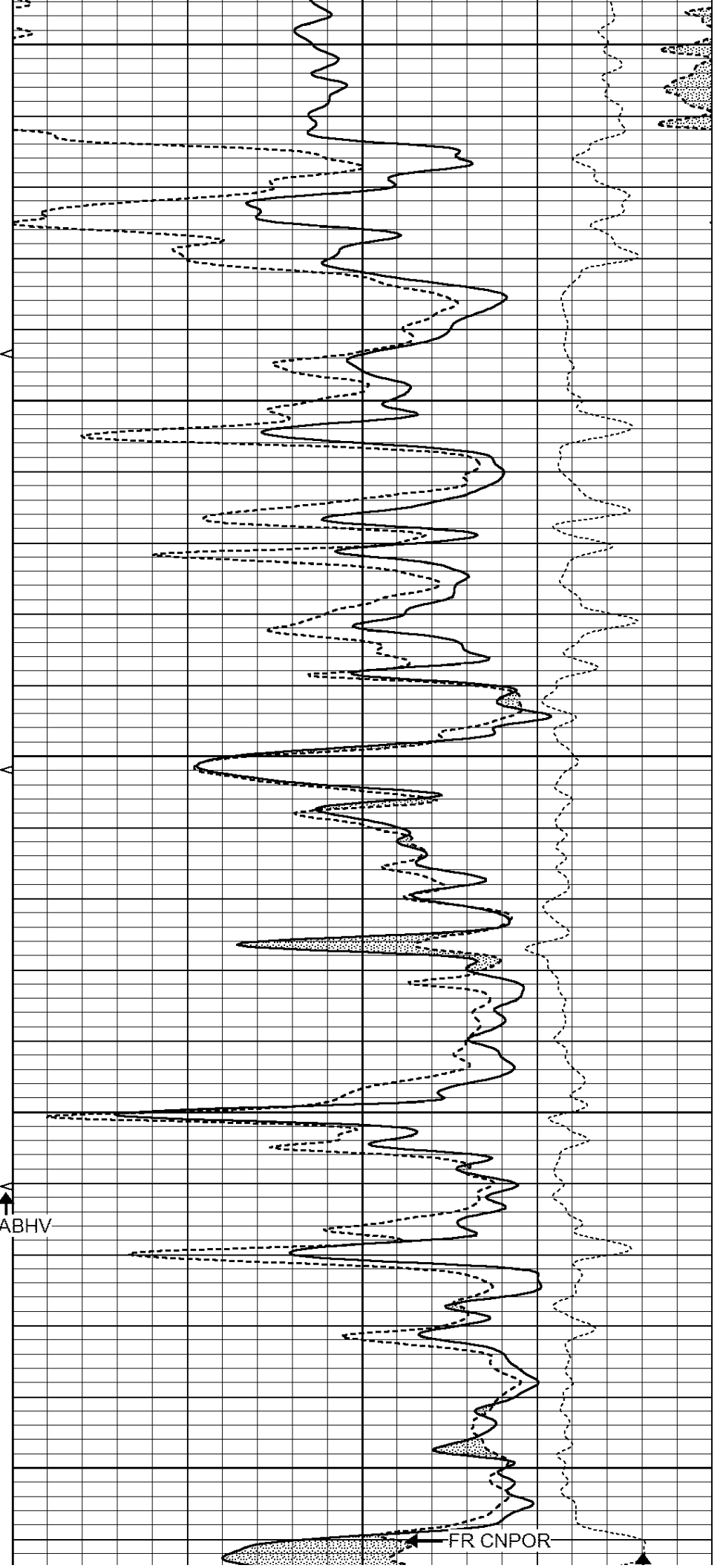
3200

3250

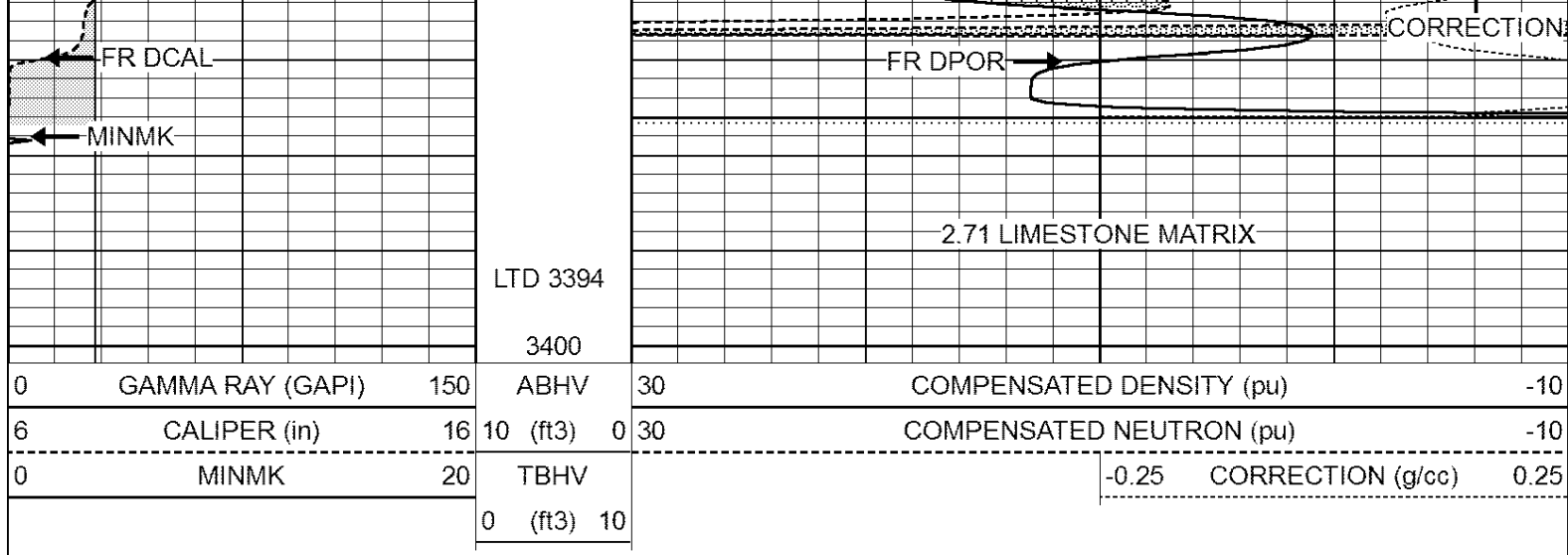
3300

3350

5.5" ABHV



FR CNPOR

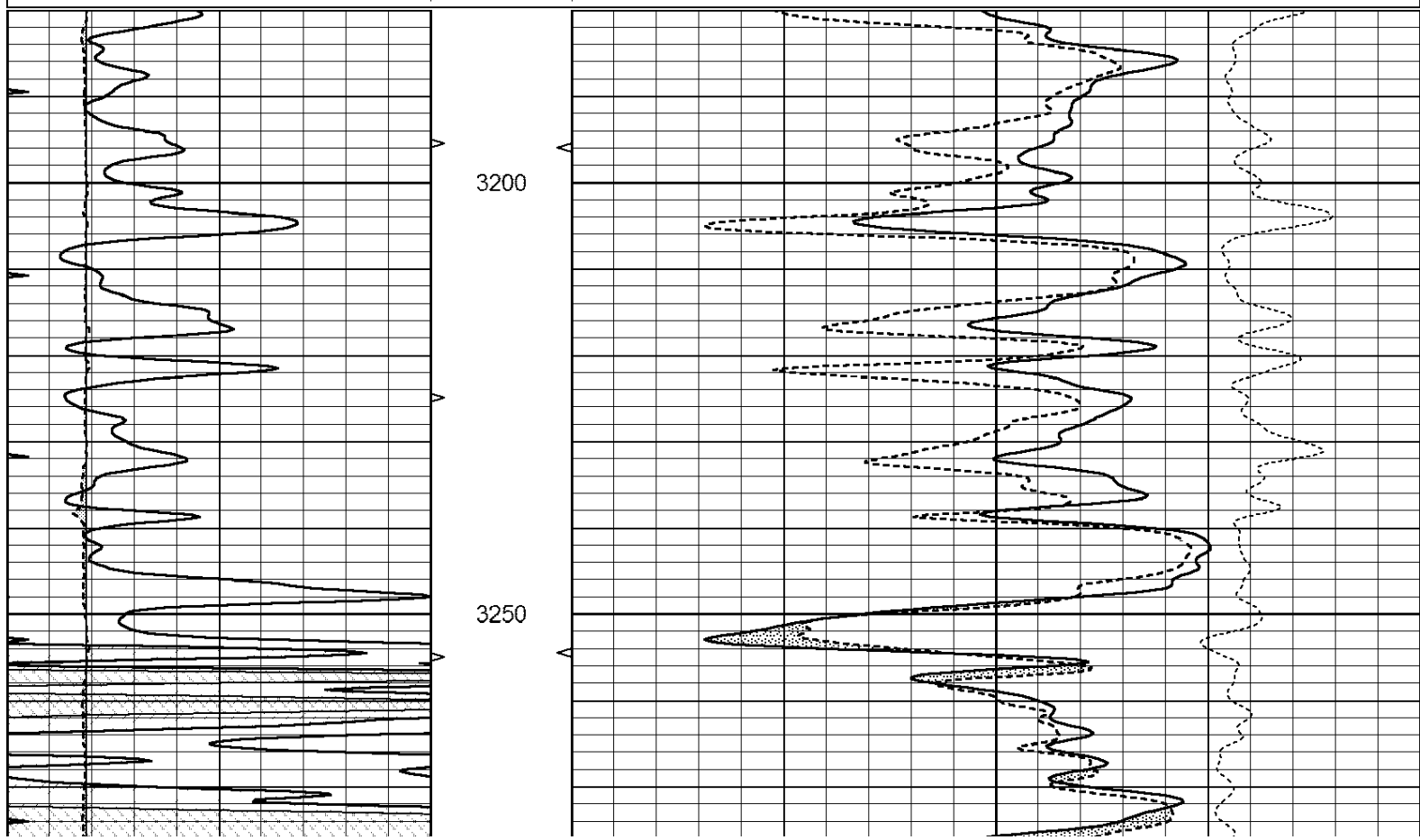


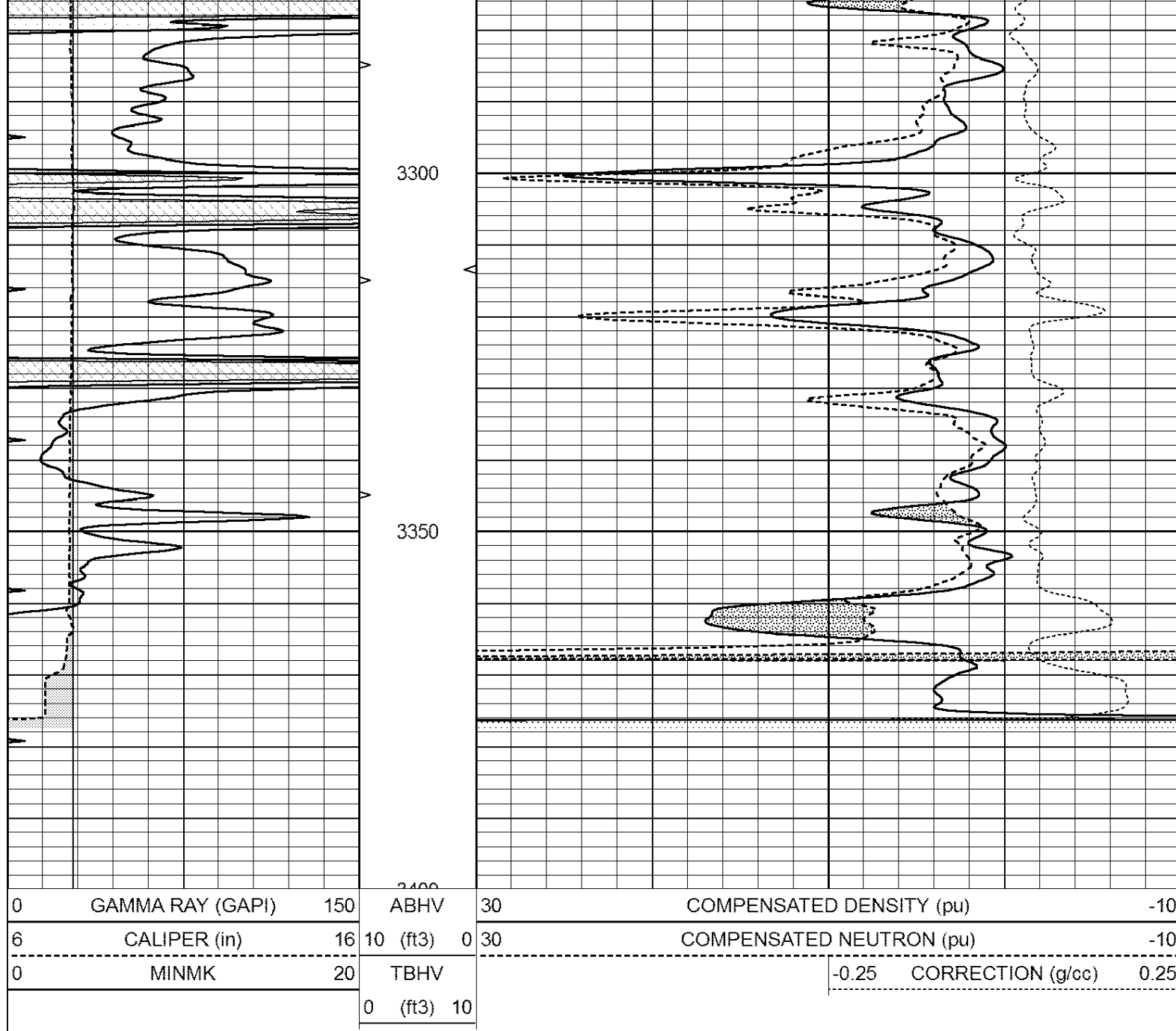
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REPEAT SECTION

Database File: 409144ddn.db
 Dataset Pathname: pass2.5
 Presentation Format: den_neu
 Dataset Creation: Sun Jun 24 20:25:54 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:		409144ddn.db						
Dataset Pathname:		pass3.6						
Dataset Creation:		Sun Jun 24 20:50:18 2012 by Calc Open-Cased 110302						
Dual Induction Calibration Report								
Serial-Model:			DIL4-GEAR					
Performed:			Sun Jun 24 18:53:50 2012					
Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.008	0.666	V	0.000	400.000	mmho/m	570.000	0.000
Medium	-0.003	0.769	V	0.000	462.500	mmho/m	560.000	0.000
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

	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	3.4	7.9
High Ref	5.5	15.0
Gain: 3.4		Offset: -3.5

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: Wed Jun 20 19:26:40 2012

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

Sensitivity: 0.3000 GAPI/cps