



SUPERIOR
Hays,
Kansas

COMPENSATED
DENSITY / NEUTRON
LOG

Company	DOWNING - NELSON OIL CO. INC.		
Well	ELSIE HERMAN #1-32		
Field	WILDCAT		
County	RUSH		
State	KANSAS		
Company	DOWNING - NELSON OIL COMPANY, INC.		
Well	ELSIE HERMAN #1-32		
Field	WILDCAT		
County	RUSH		
State	KANSAS		
Location:	API # : 15-165-21962-0000		Other Services DIL/MEL SONIC
	1820' FNL & 2180' FWL SW - NE - SE - NW		
Permanent Datum	GROUND LEVEL		Elevation
Log Measured From	KELLY BUSHING 8' A.G.L.		2087
Drilling Measured From	KELLY BUSHING		K.B. 2095 D.F. 2093 G.L. 2087
Date	2/22/12		
Run Number	ONE		
Depth Driller	3893		
Depth Logger	3893		
Bottom Logged Interval	3869		
Top Log Interval	3000		
Casing Driller	8 5/8"@1271'		
Casing Logger	1270		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD		CHLORIDES 2,400 PPM
Density / Viscosity	9.4/53		
pH / Fluid Loss	10.0/8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.700@76F		
Rmt @ Meas. Temp	.525@76F		
Rmc @ Meas. Temp	.840@76F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	.463@115F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	5:00 P.M.		
Maximum Recorded Temperature	115F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	AL DOWNING		

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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
LACROSSE, KS., 1W. ON HWY 4 TO RR TRACKS, 1S., 1/2W., 1/2N. INTO

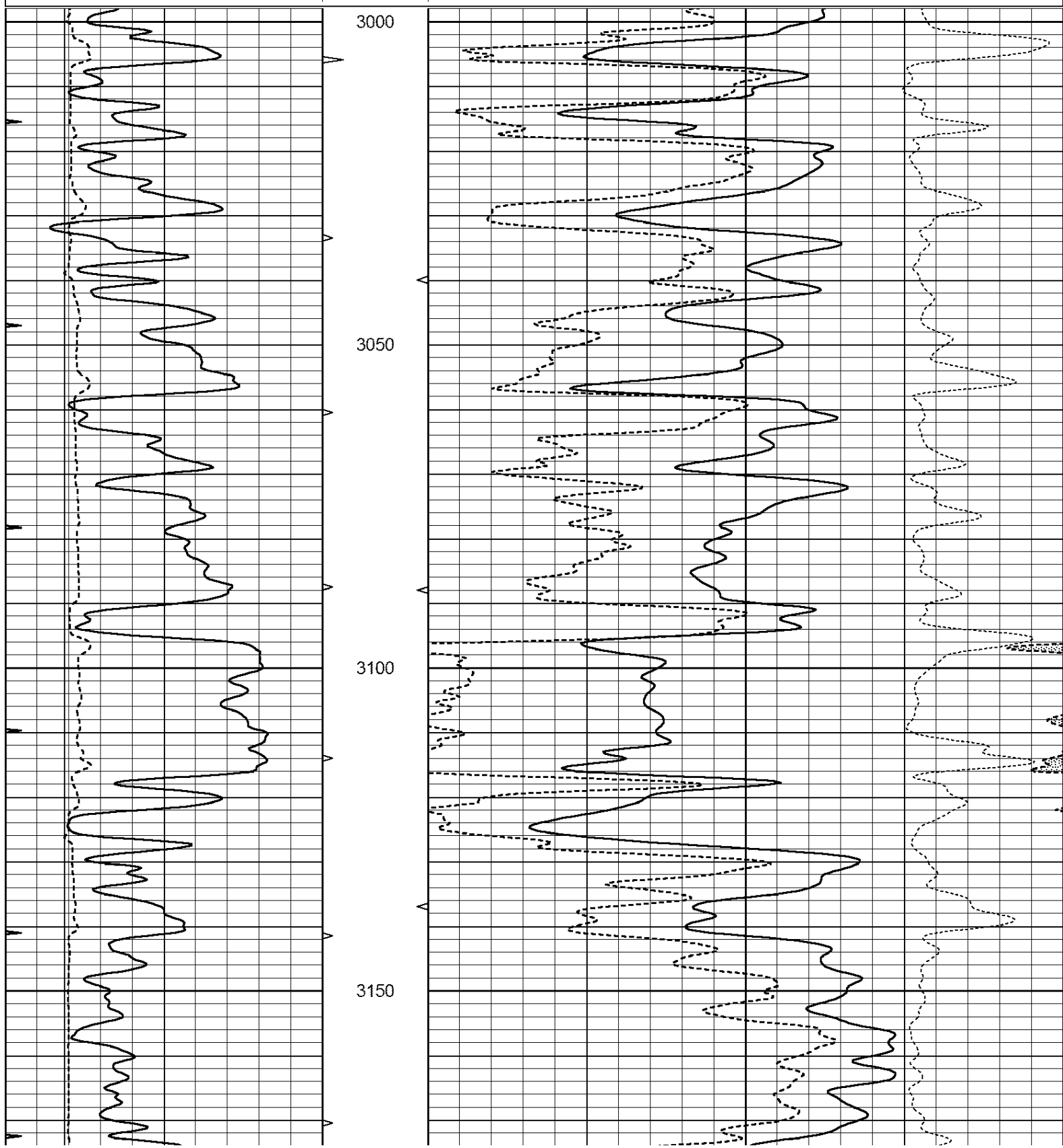


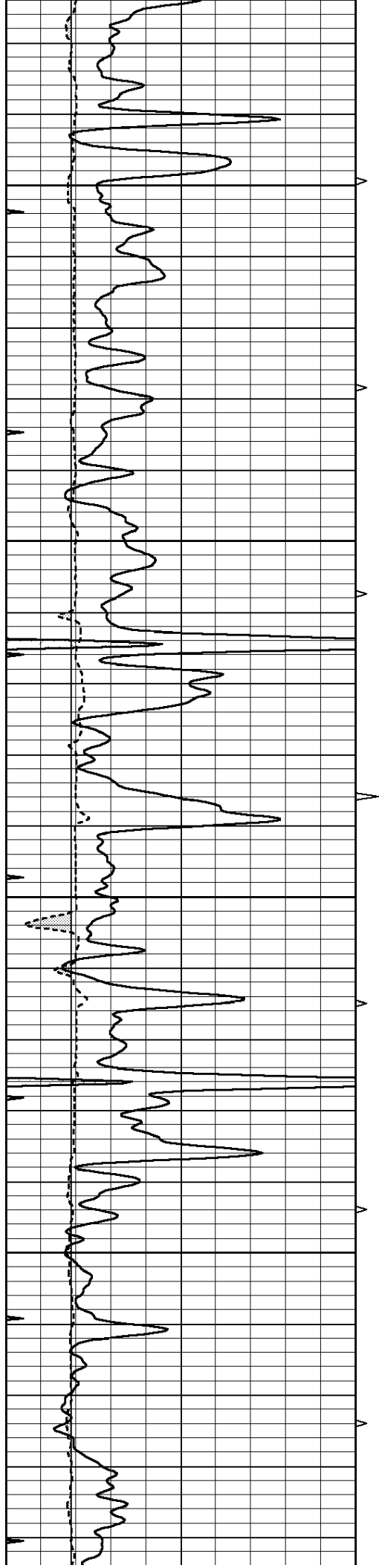
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MAIN SECTION

Database File: 408416ddn.db
Dataset Pathname: pass3.10
Presentation Format: den_neu
Dataset Creation: Wed Feb 22 18:20:43 2012
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		



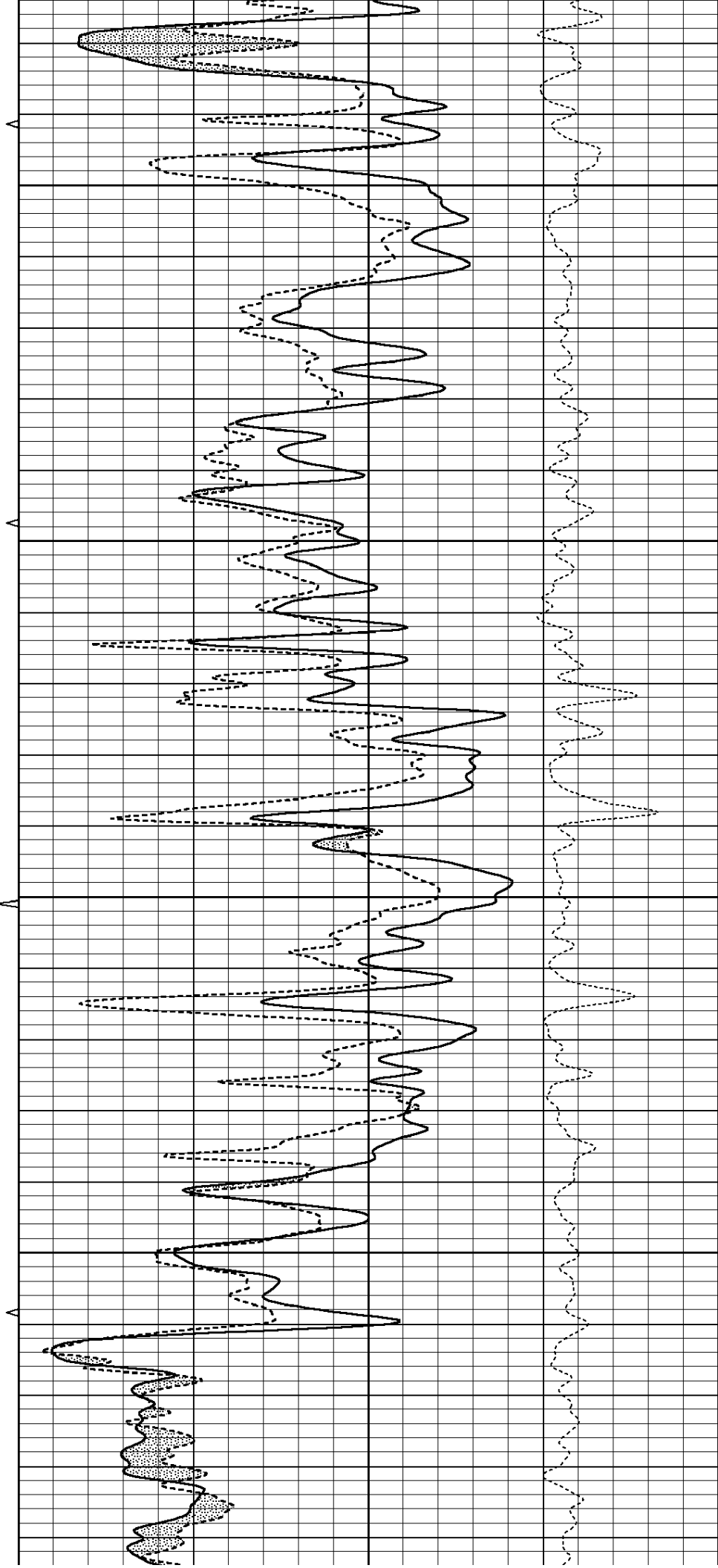


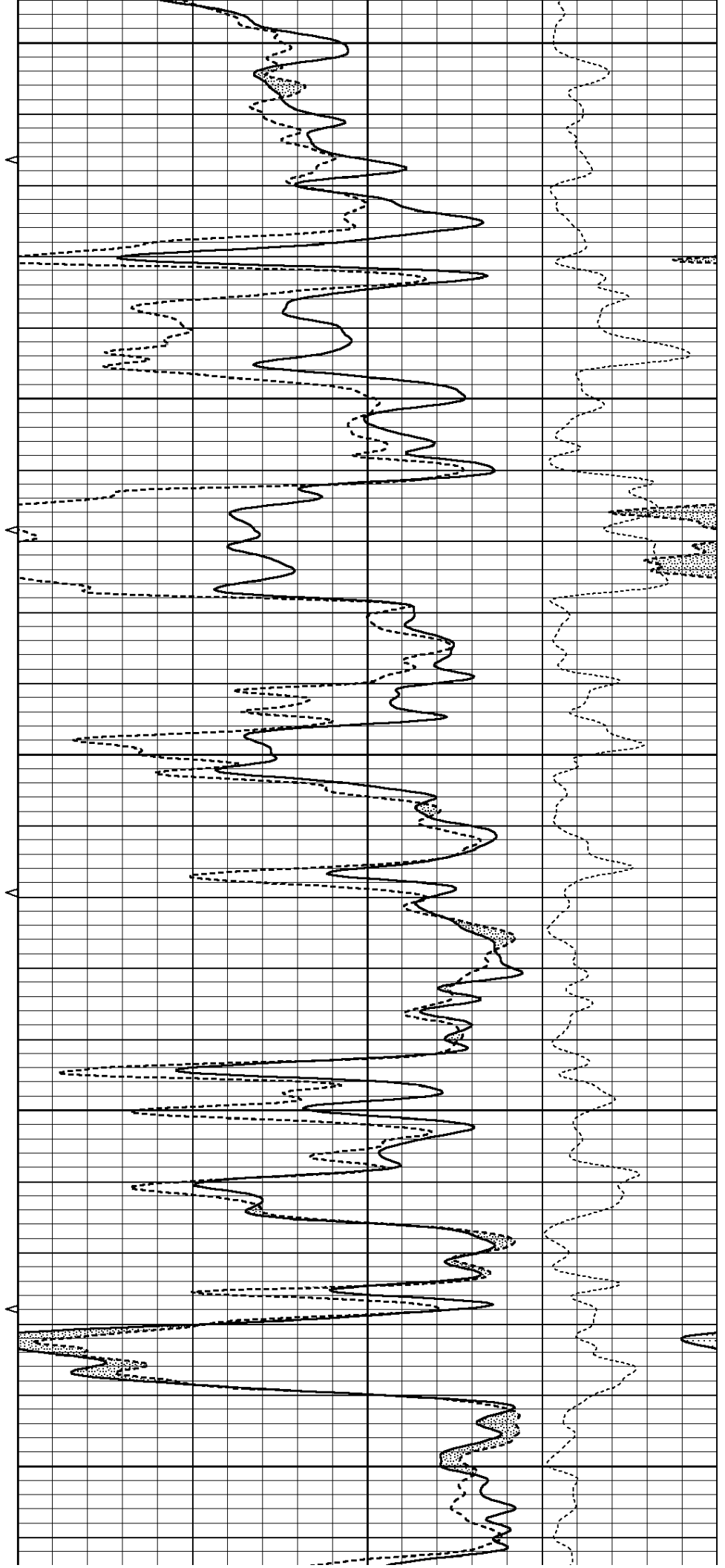
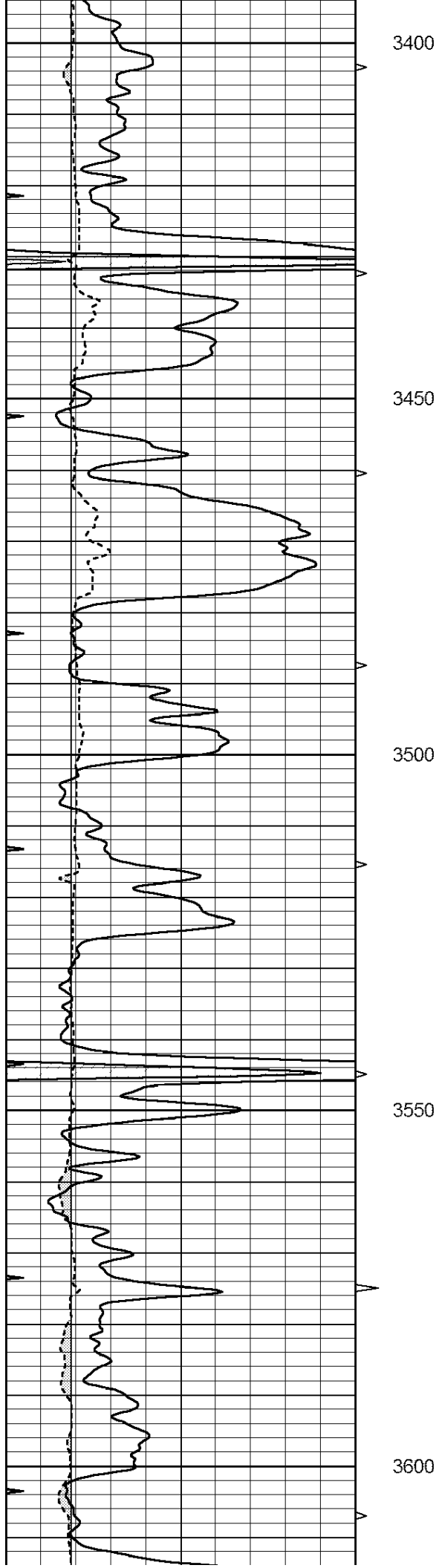
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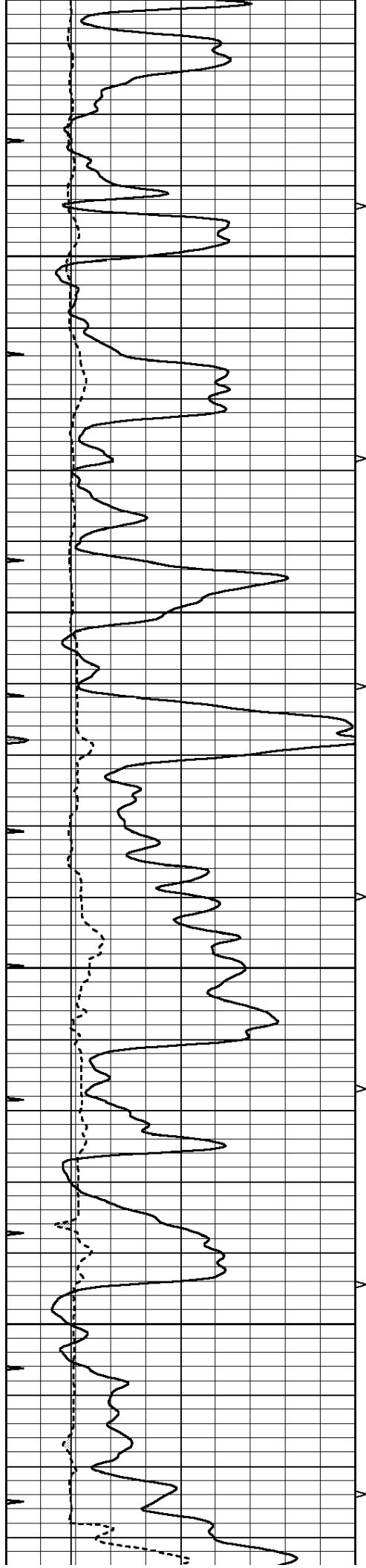
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3350





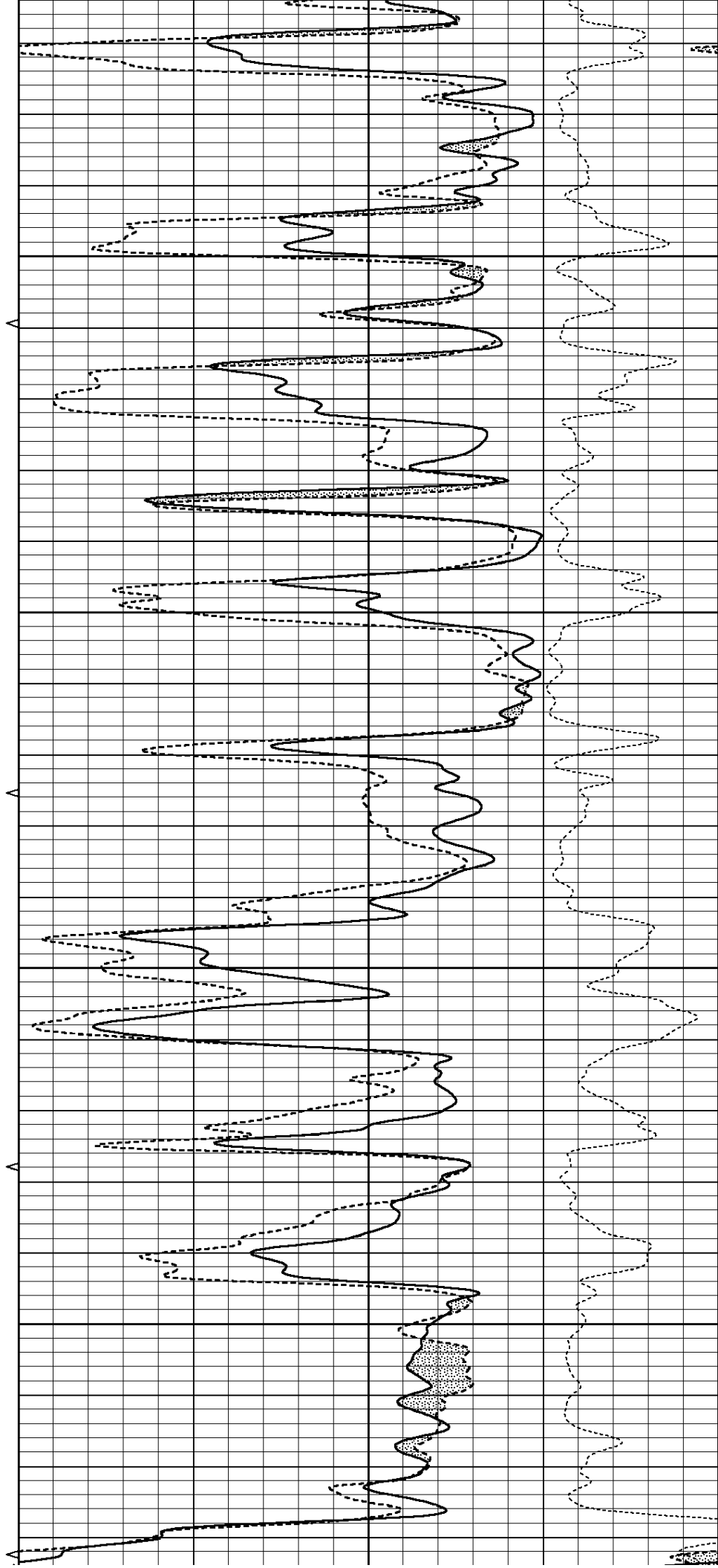


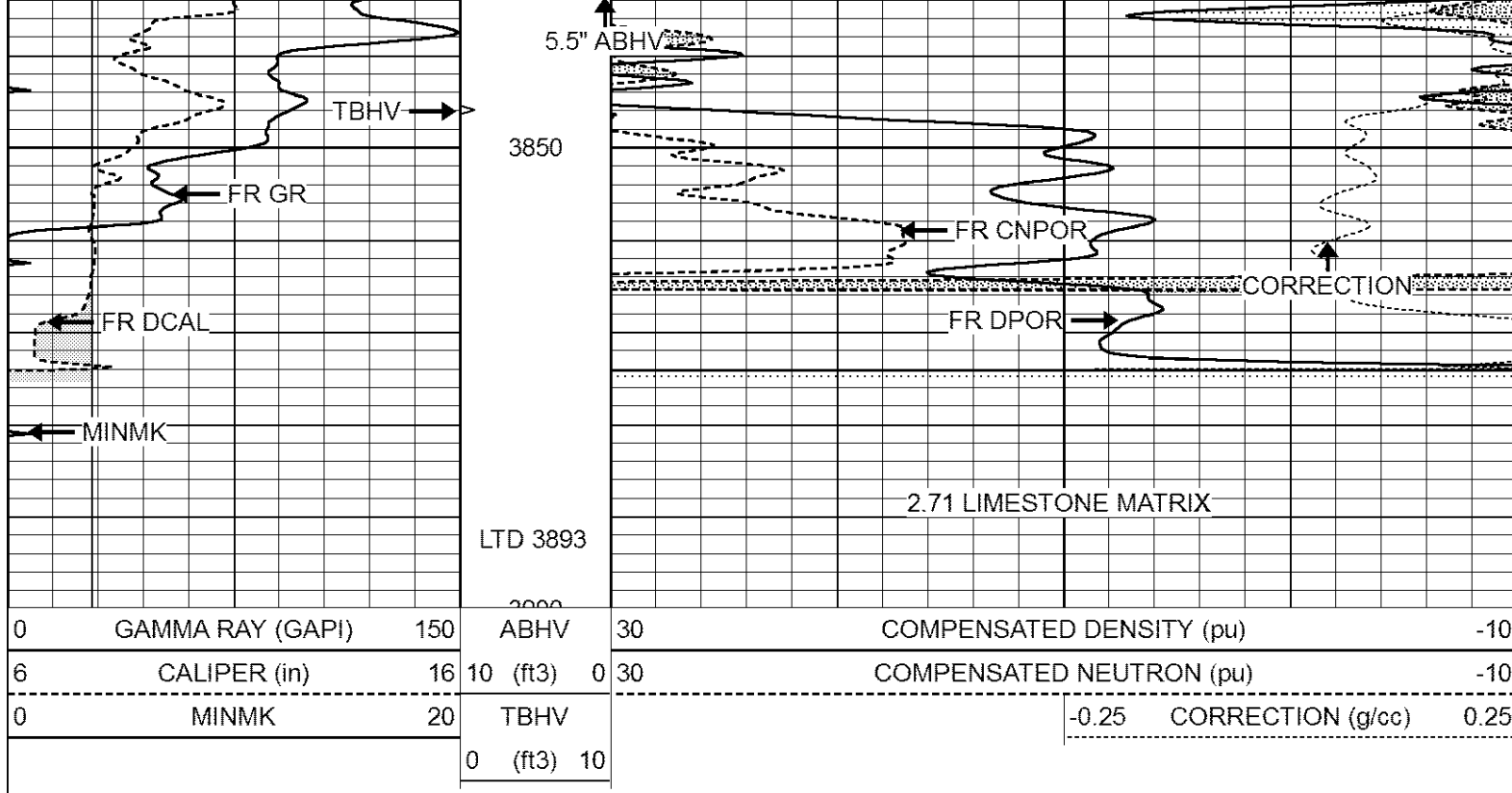
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3800



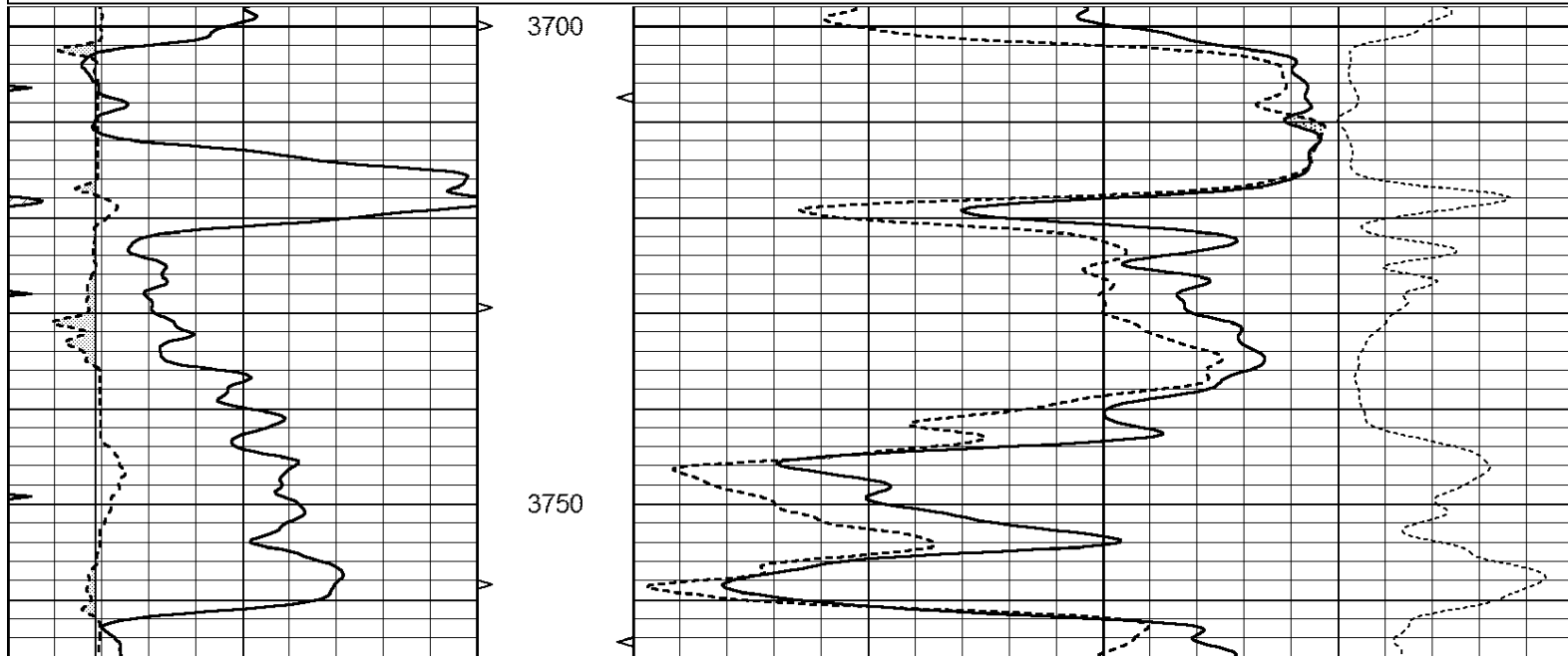


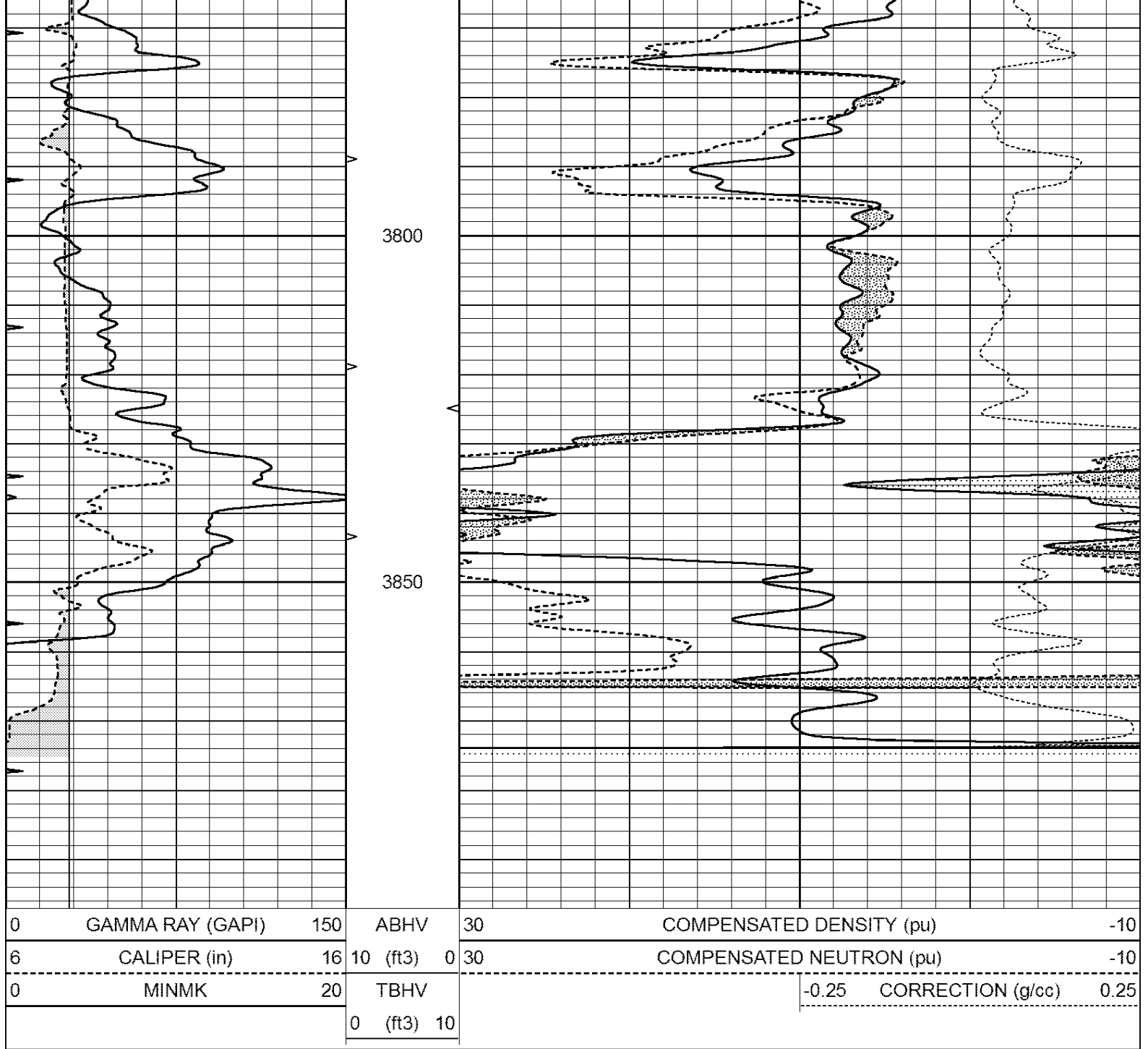
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REPEAT SECTION

Database File: 408416ddn.db
 Dataset Pathname: pass2.5
 Presentation Format: den_neu
 Dataset Creation: Wed Feb 22 17:28:16 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: 408416ddn.db
 Dataset Pathname: pass3.10
 Dataset Creation: Wed Feb 22 18:20:43 2012

Dual Induction Calibration Report

Serial-Model:
 Performed:

DIL4-GEAR
 Wed Feb 22 16:20:07 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	2.000
Medium	-0.003	0.769	V	0.000	462.500	mmho/m	560.000	4.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.012	0.651	V	0.000	400.000	mmho/m	607.511	0.265

Deep	0.015	0.631	V	0.000	400.000	mmho/m	627.341	-8.363
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								
	Readings	Reference						
Low Ref	2.0	7.5						
High Ref	4.0	15.0						
	Gain: 3.7			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:	Tue Feb 21 13:32:46 2012						
	Calibrator Value:	1.0		GAPI				
	Background Reading:	0.0		cps				
	Calibrator Reading:	1.0		cps				
	Sensitivity:	0.3000		GAPI/cps				