



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

**COMPENSATED
DENSITY / NEUTRON
LOG**

Company DOWNING - NELSON OIL CO., INC.	
Well MWE #1-7	
Field	
County ELLIS	
State KANSAS	
Location: API # : 15-051-26422-00-00	
1890' FSL & 1920' FEL	
NW - SE - NW - SE	
SEC 7 TWP 13S RGE 18W	
Permanent Datum	GROUND LEVEL Elevation 2163.5
Log Measured From	KELLY BUSHING 8' A.G.L.
Drilling Measured From	KELLY BUSHING
Other Services	
DIL	
MICRO	
Elevation	
K.B. 2171.5	
D.F. 2169.5	
G.L. 2163.5	
Date 11/26/12	
Run Number ONE	
Depth Driller 3889	
Depth Logger 3890	
Bottom Logged Interval 3866	
Top Log Interval 3000	
Casing Driller 220	
Casing Logger 222	
Bit Size 7.875	
Type Fluid in Hole CHEMICAL MUD	
Density / Viscosity 8.9/55	CHLORIDES 6.000
pH / Fluid Loss 10.0/8.0	
Source of Sample FLOWLINE	
Rim @ Meas. Temp 0.90 @ 54F	
Rmf @ Meas. Temp 0.68 @ 54F	
Rmc @ Meas. Temp 1.08 @ 54F	
Source of Rmf / Rmc MEASURED	
Rim @ BHT 0.42 @ 115F	
Time Circulation Stopped 2 HOURS	
Time Logger on Bottom	
Maximum Recorded Temperature 115F	
Equipment Number 860	
Location HAYS, KS.	
Recorded By IAN MABB	JEFF GRONIEWEG
Witnessed By AL DOWNING	

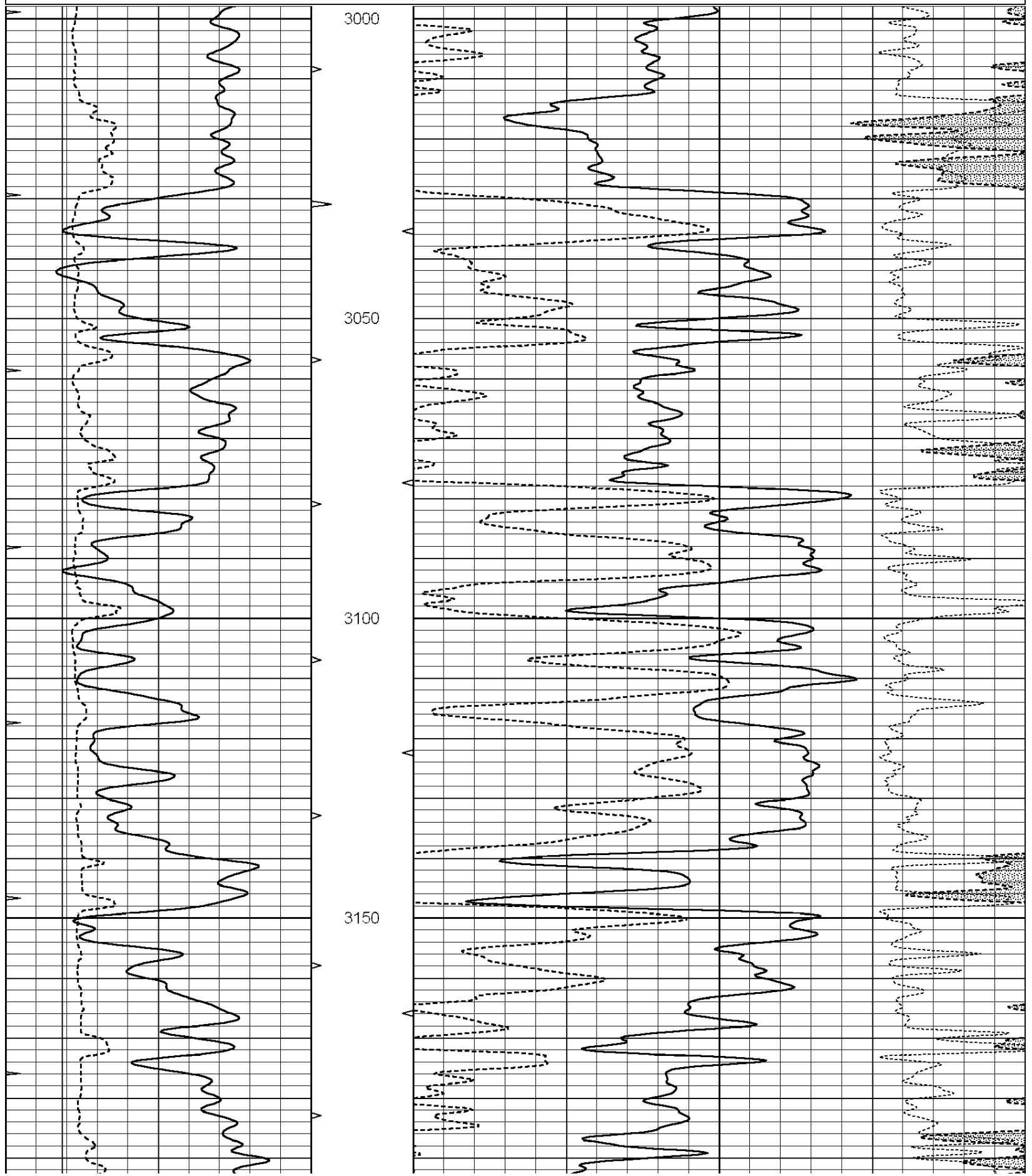
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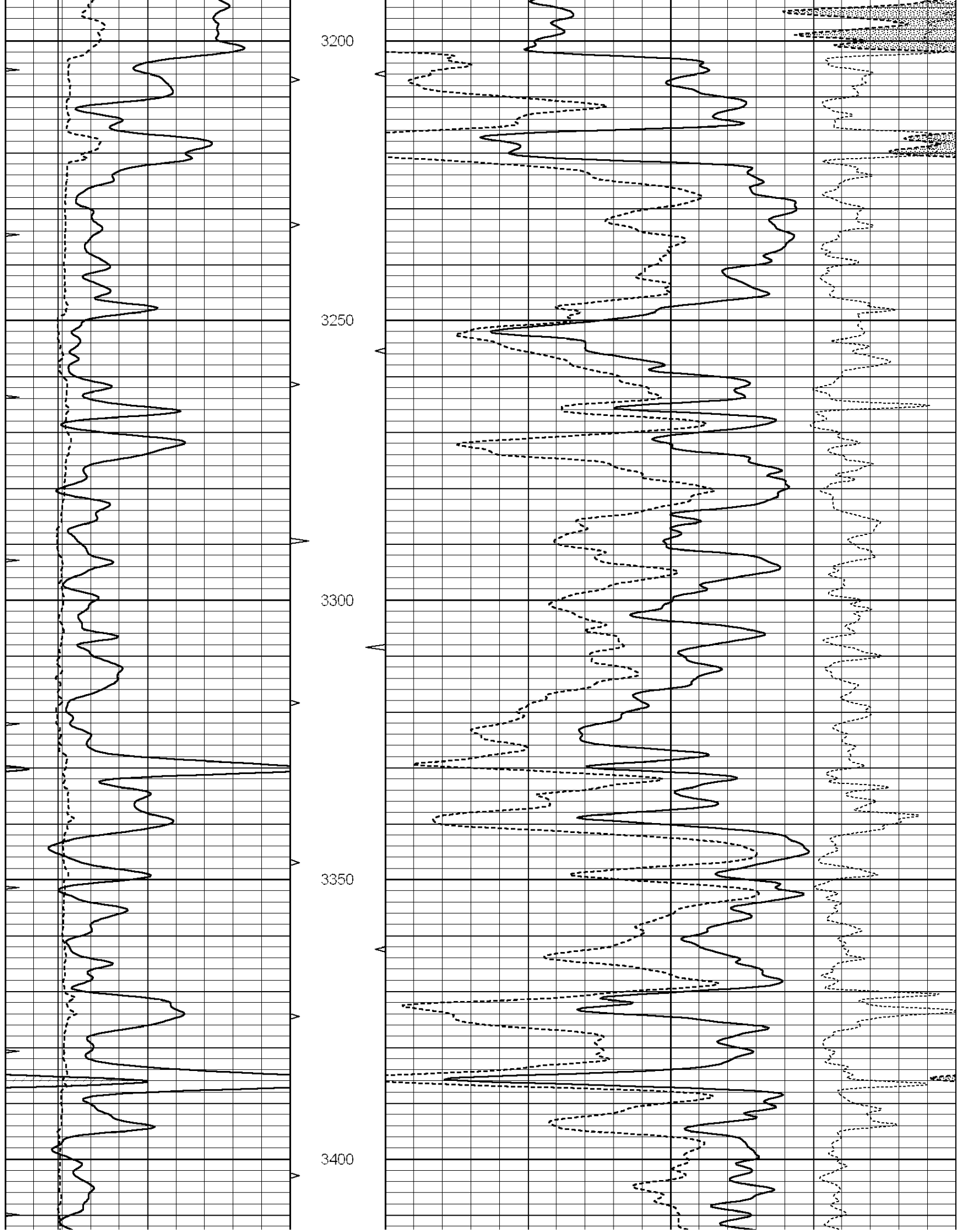
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

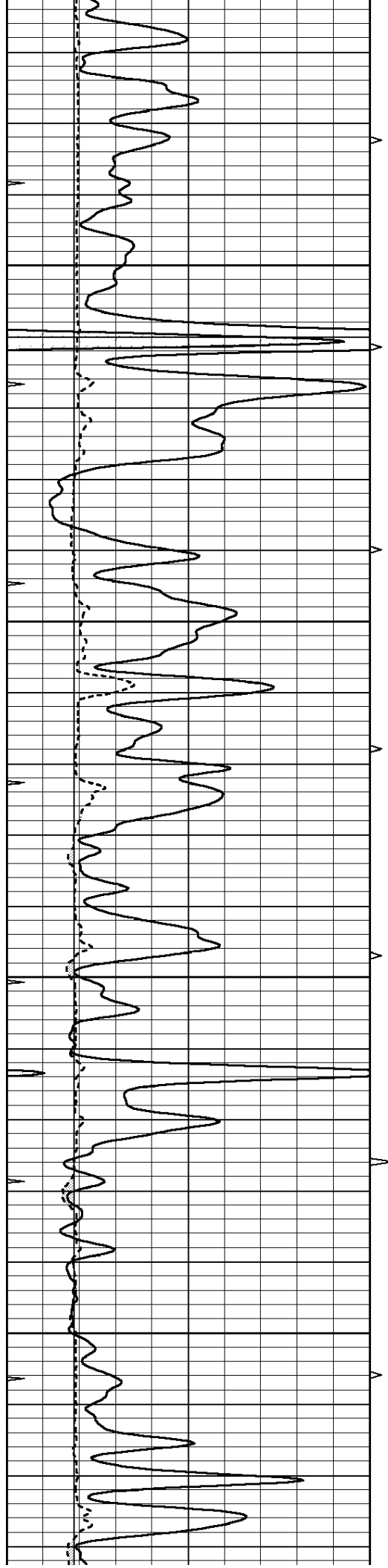
Comments

NABORS COMPLETION & PRODUCTION CO.
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: HAYS, KS. BYPASS & 1-70 - NORTH 2 MILES WEST INTO

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			





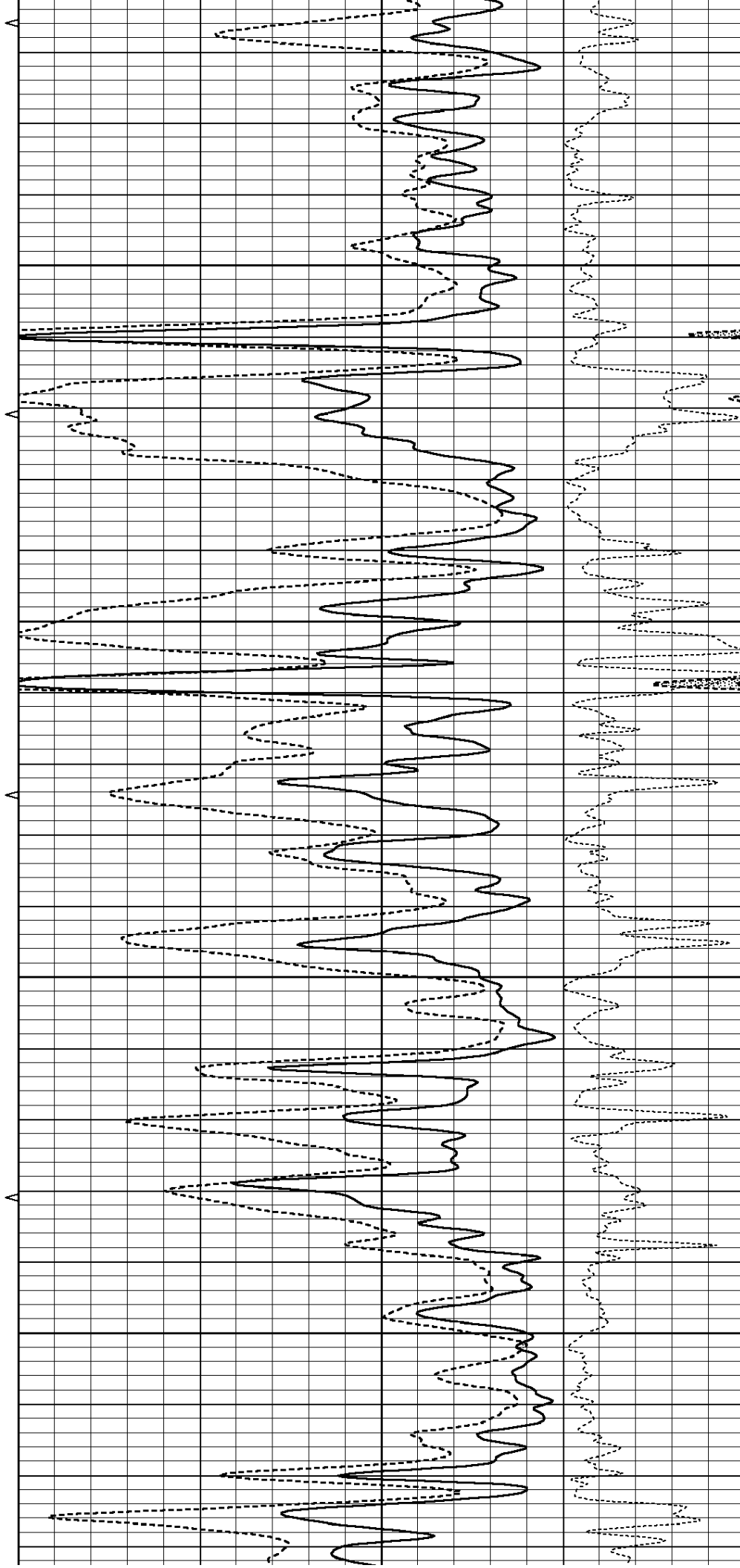


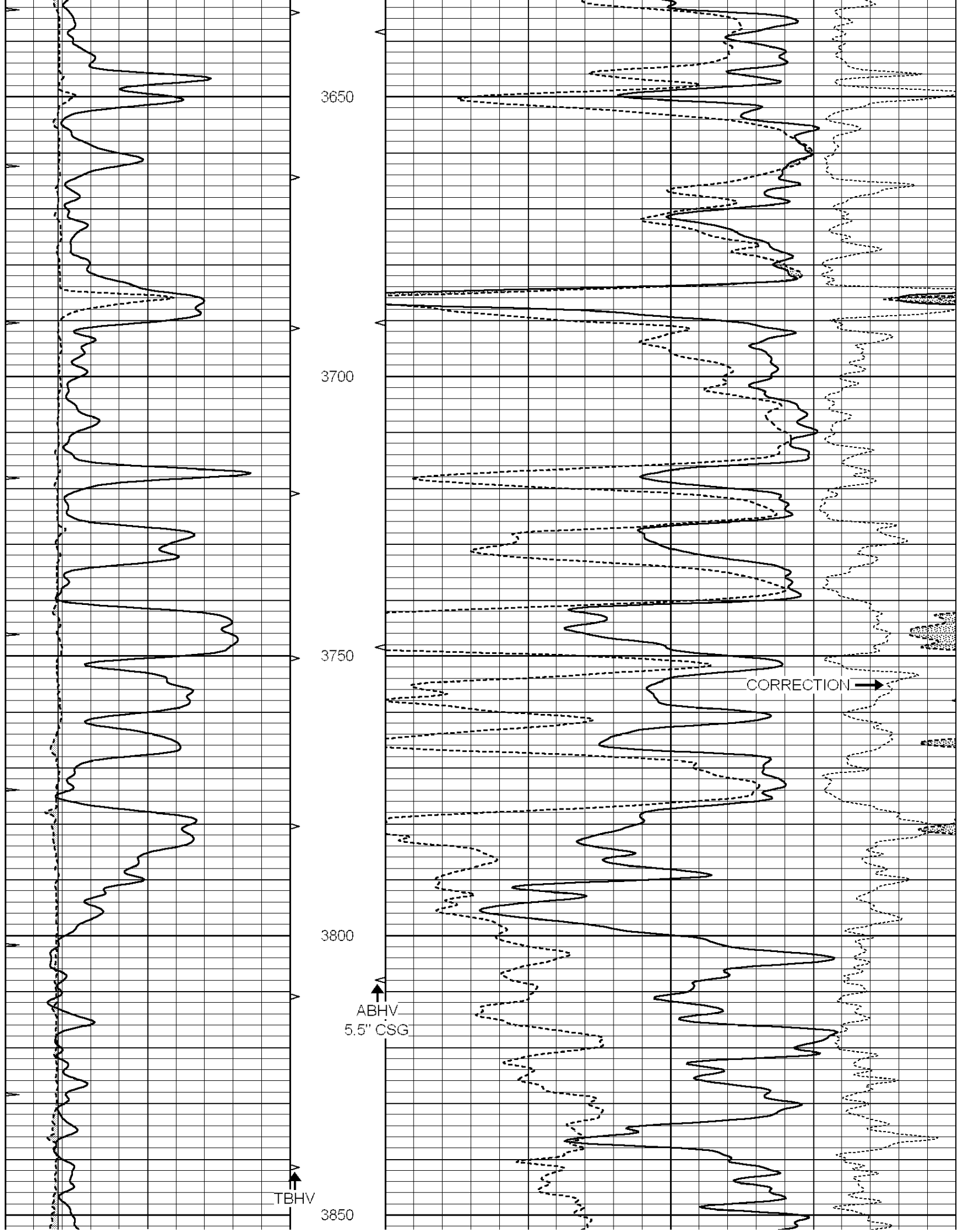
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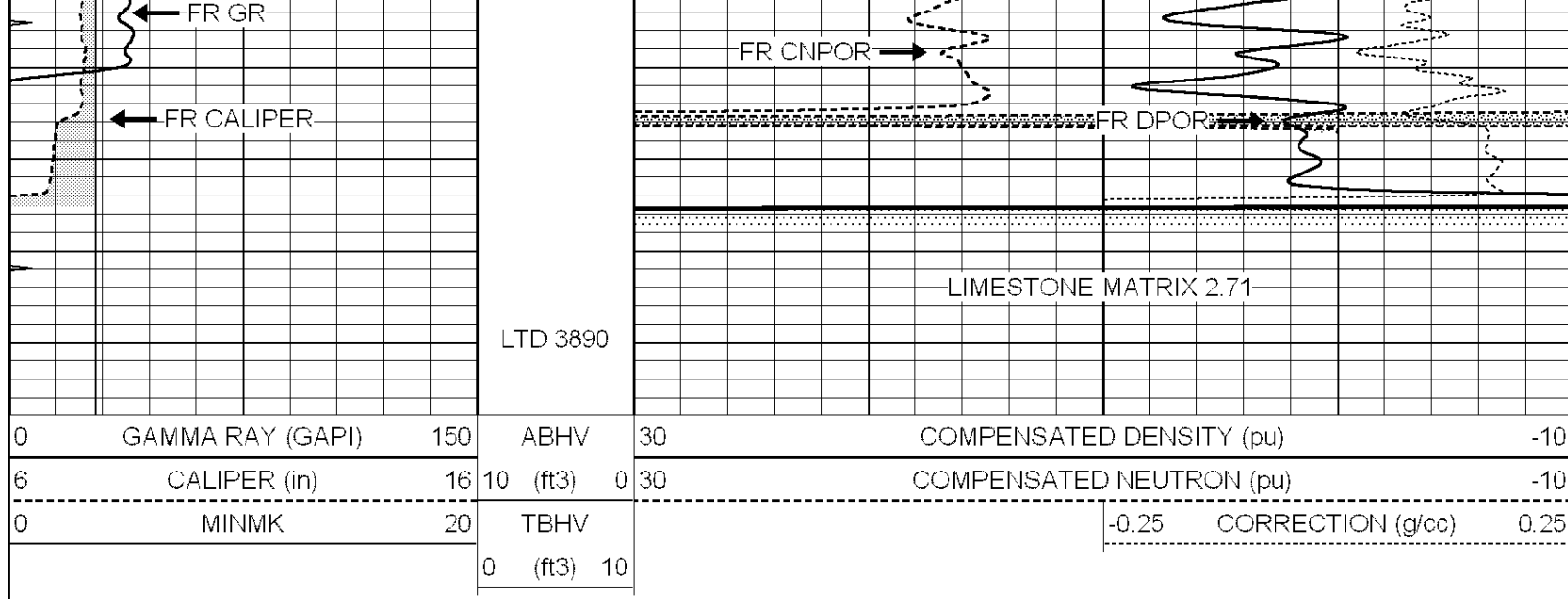
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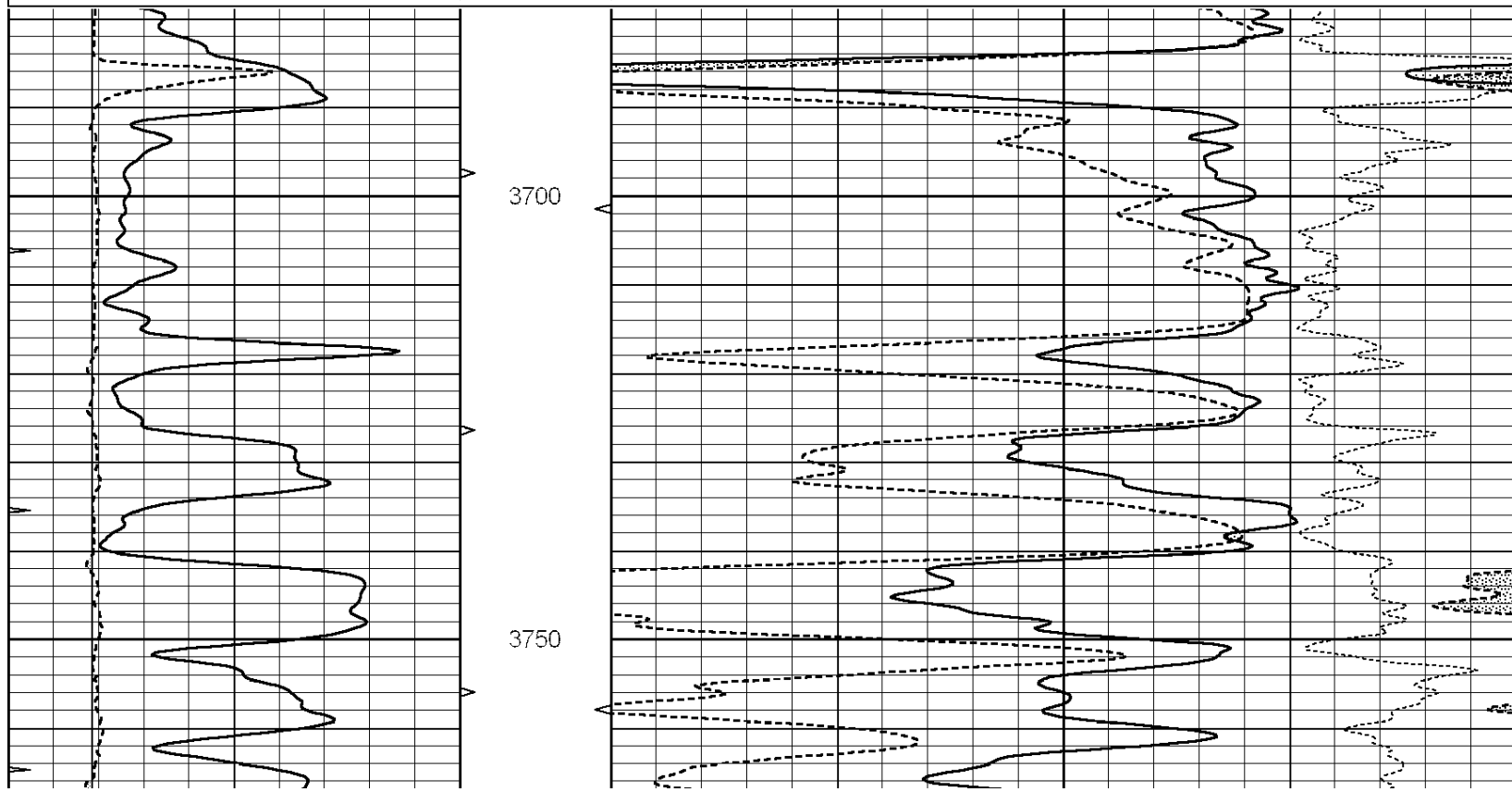


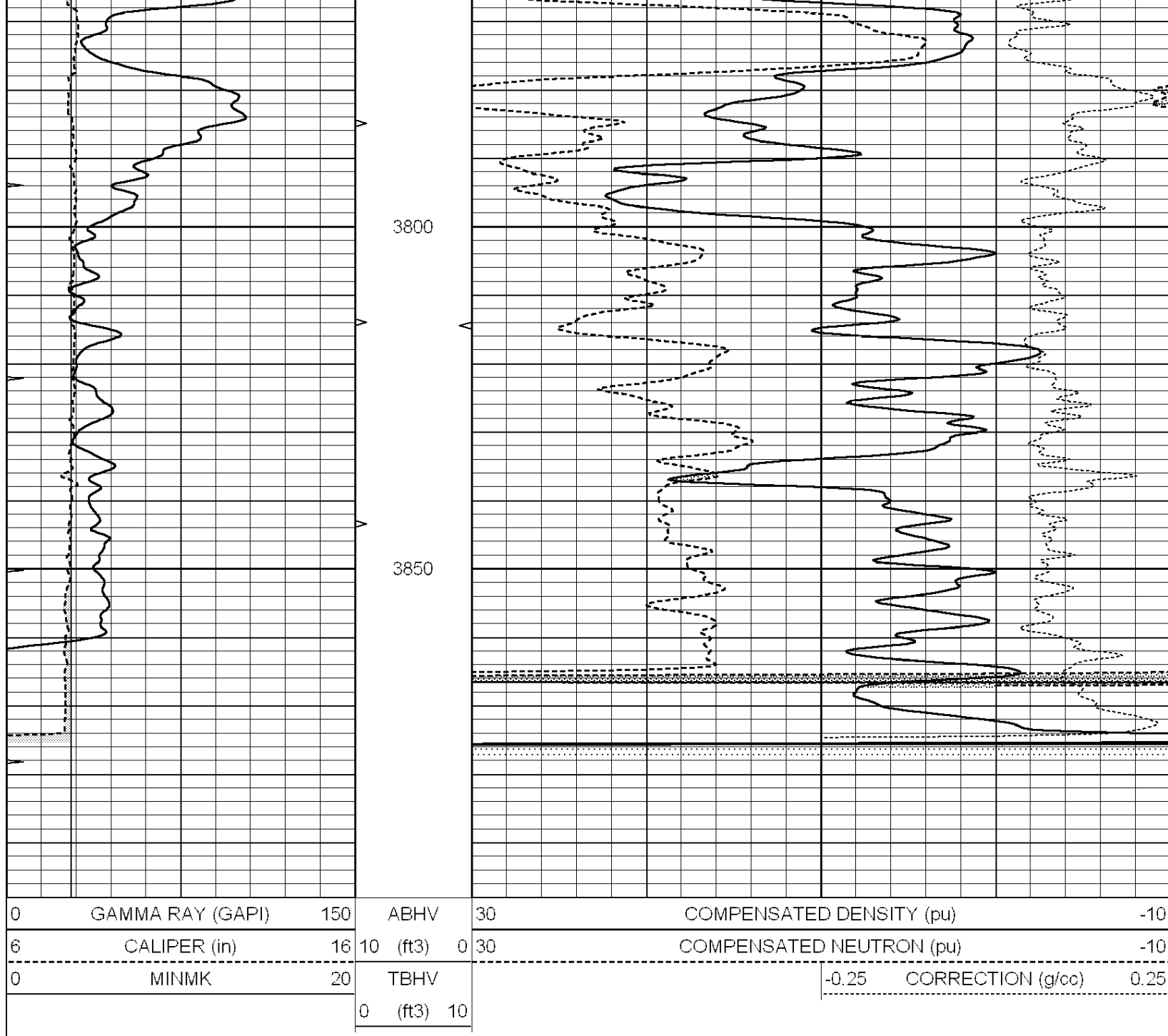


REPEAT SECTION

Database File: 010152ddn.db
 Dataset Pathname: pass2.1.4
 Presentation Format: den_neu
 Dataset Creation: Mon Nov 26 12:14:55 2012 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
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		





Calibration Report

Database File: 010152ddn.db
 Dataset Pathname: pass3.1
 Dataset Creation: Mon Nov 26 12:41:40 2012 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: DIL5-GEAR
 Performed: Sun Nov 18 01:24:45 2012

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.004	0.654	V	0.000	400.000	mmho/m	470.000	-10.000
Medium	-0.005	0.737	V	0.000	462.500	mmho/m	490.000	-7.500
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.000	0.655	V	0.000	400.000	mmho/m	445.000	0.400

Deep	0.006	0.633	V	0.000	400.000	mmho/m	613.666	-3.463
Medium	0.010	0.747	V	0.000	462.500	mmho/m	627.607	-6.064

Compensated Density Calibration Report
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Serial-Model:	GEAR1-GEARHART
Source / Verifier:	147 / 147
Master Calibration Performed:	Sun Nov 18 01:24:34 2012

Master Calibration					
	Density		Far Detector		Near Detector
Magnesium	1.710	g/cc	1205.67	613.10	cps
Aluminum	2.590	g/cc	277.64	430.46	cps
Spine Angle = 76.46			Density/Spine Ratio = 0.583		
	Size		Reading		
Small Ring	8.75	in	4.69	V	
Large Ring	14.00	in	6.52	V	

Compensated Neutron Calibration Report
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Serial Number:	NUE_2I
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:	GR5	
Tool Model:	OPEN	
Performed:	Sun Nov 18 01:33:42 2012	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.7500	GAPI/cps