



SUPERIOR
Hays,
Kansas

COMPENSATED DENSITY / NEUTRON LOG

Company RITCHIE EXPLORATION, INC.
Well ARCH #3
Field WILDCAT
County FORD
State KANSAS

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Well ARCH #3
Field WILDCAT
County FORD State KANSAS

Location: API # : 15-057-20776-0000

1875' FSL & 354' FEL

DIL

SEC 32 TWP 28S RGE 23W

Permanent Datum GROUND LEVEL Elevation 2507
Log Measured From KELLY BUSHING 11' A.G.L.
Drilling Measured From KELLY BUSHING

Elevation
K.B. 2518
D.F. 2516
G.L. 2507

Date

1/9/12

Run Number

ONE

Depth Driller

5325

Depth Logger

5325

Bottom Logged Interval

5301

Top Log Interval

3600

Casing Driller

8 5/8" @ 350'

Casing Logger

346

Bit Size

7 7/8"

Type Fluid in Hole

CHEMICAL MUD

CHLORIDES 3,400 PPM

Density / Viscosity

9.3/53

pH / Fluid Loss

9.5/9.6

Source of Sample

FLOWLINE

Rm @ Meas. Temp

.600 @ 64F

Rmt @ Meas. Temp

.450 @ 64F

Rmc @ Meas. Temp

.720 @ 64F

Source of Rmt / Rmc

MEASUREMENT

Rm @ BHT

.300 @ 128F

Time Circulation Stopped

3 HOURS

Time Logger on Bottom

8:45 A.M.

Maximum Recorded Temperature

128F

Equipment Number

4010

Location

HAYS, KANSAS

Recorded By

JEFF LUEBBERS

Witnessed By

MAX LOVELY

GARY ROWE

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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
FORD, KS., 1/2N. ON HWY 400 TO "SADDLE RD.", 5W. TO "120 RD.", 6S., W. INTO

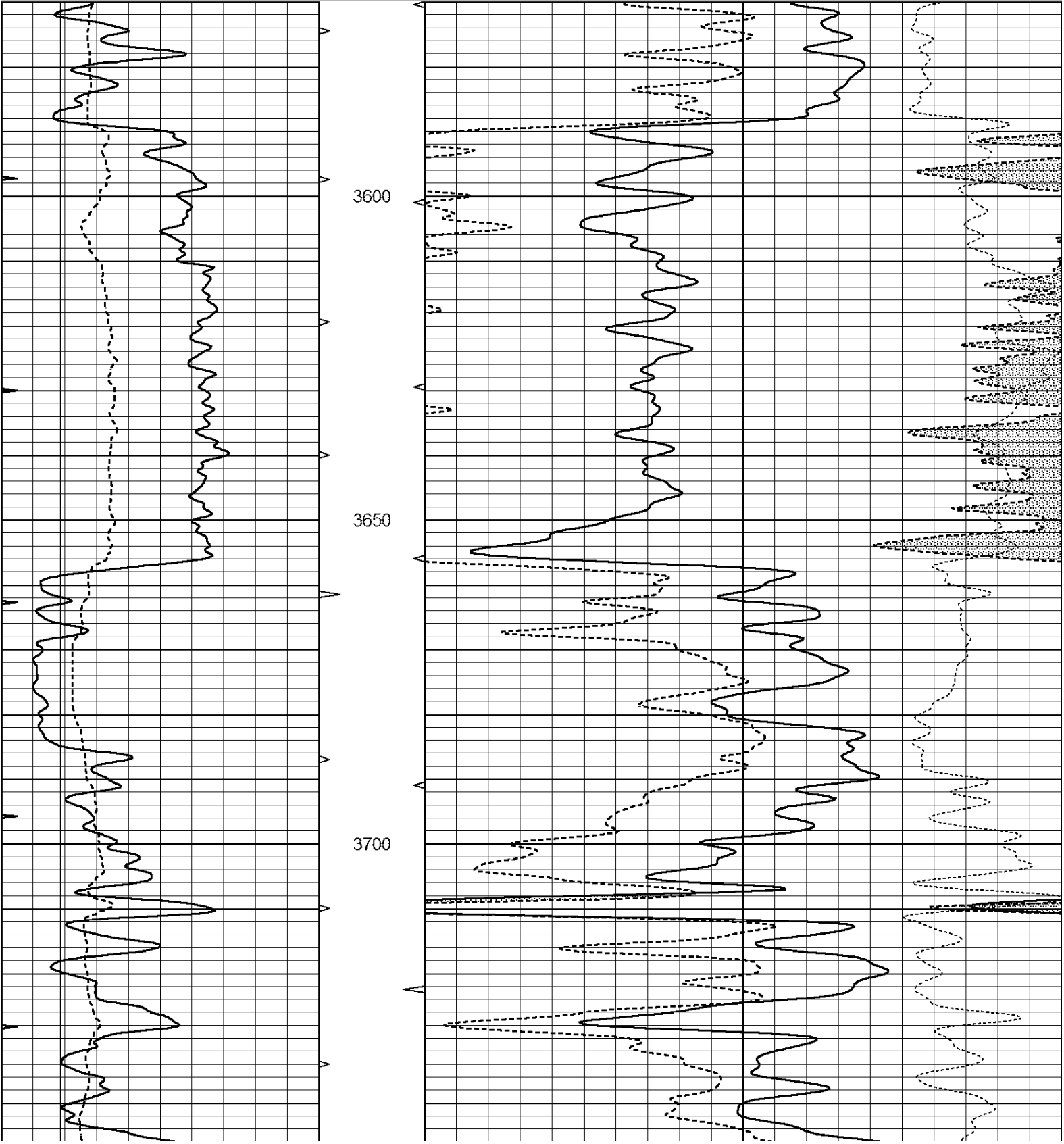


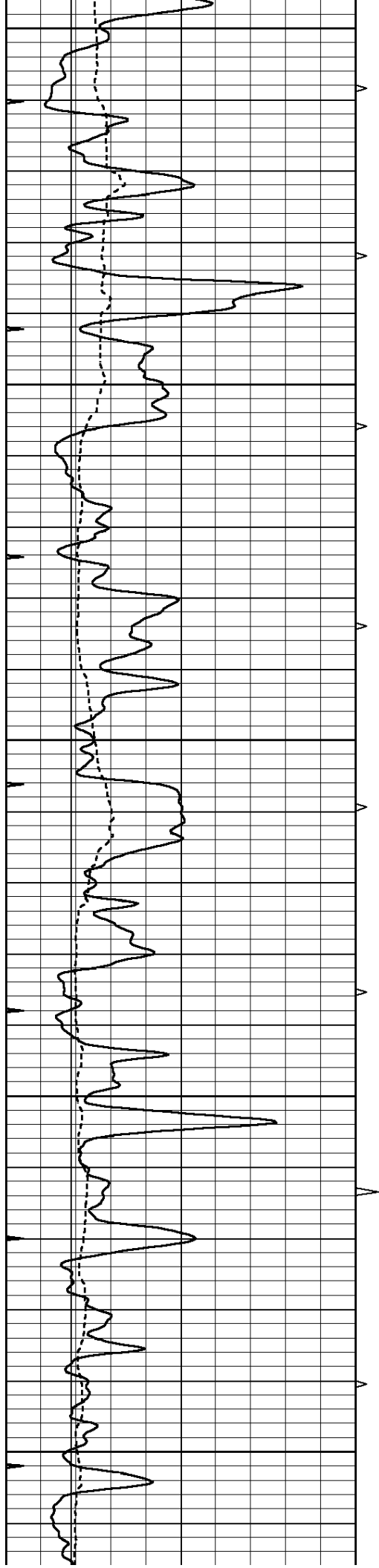
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MAIN SECTION

Database File: 008135ddn.db
Dataset Pathname: pass3.8
Presentation Format: den_neu
Dataset Creation: Mon Jan 09 10:34:40 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		





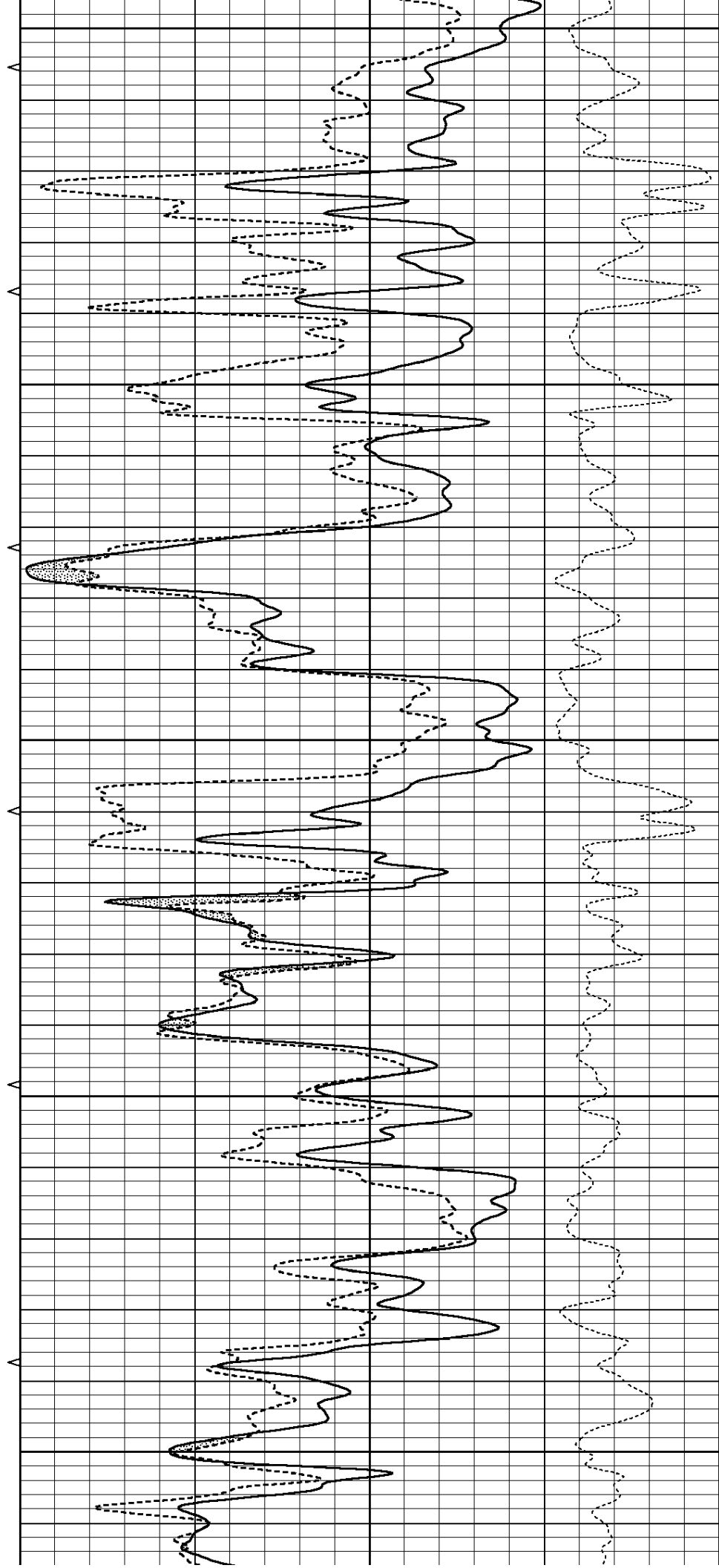
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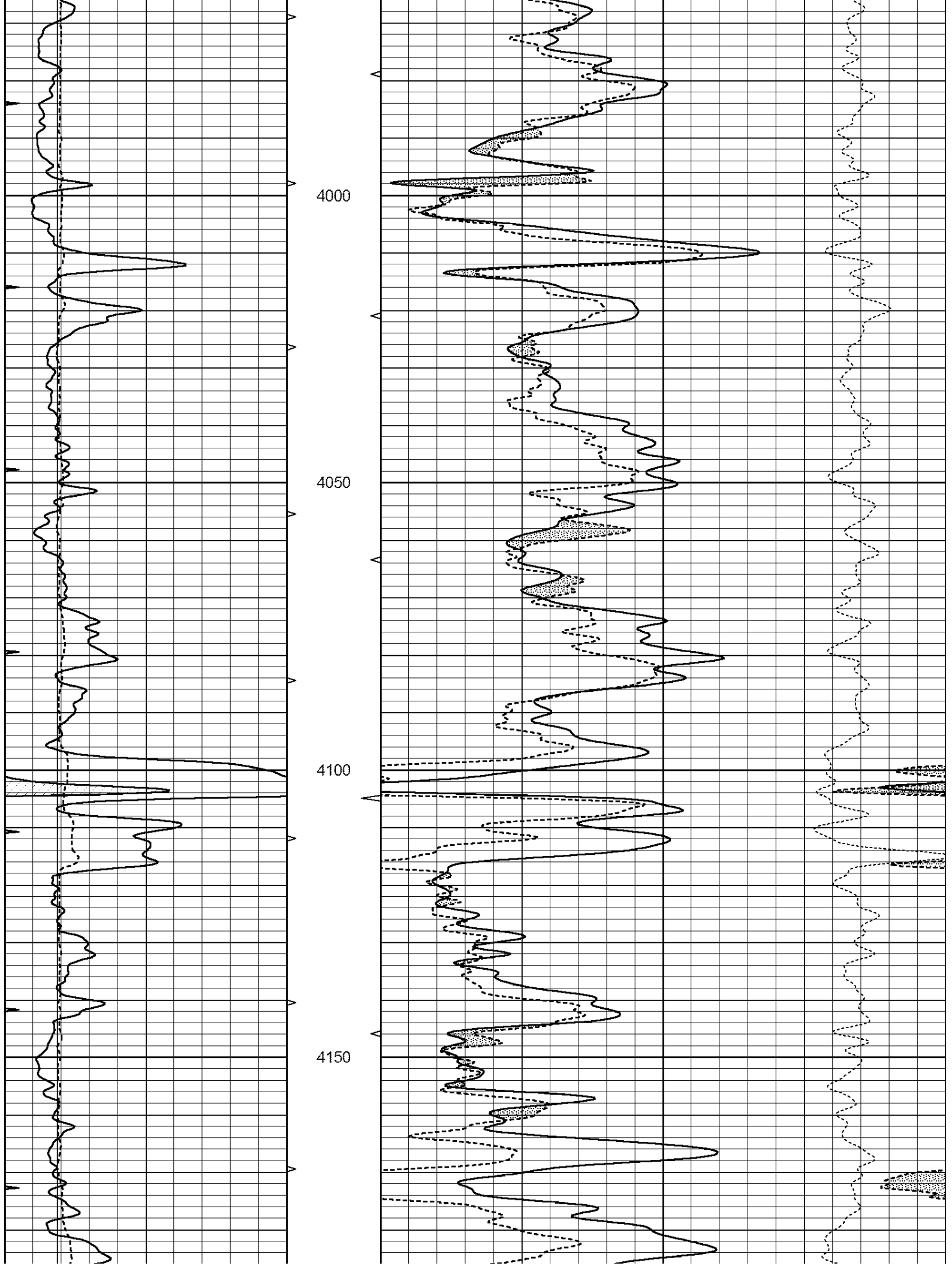
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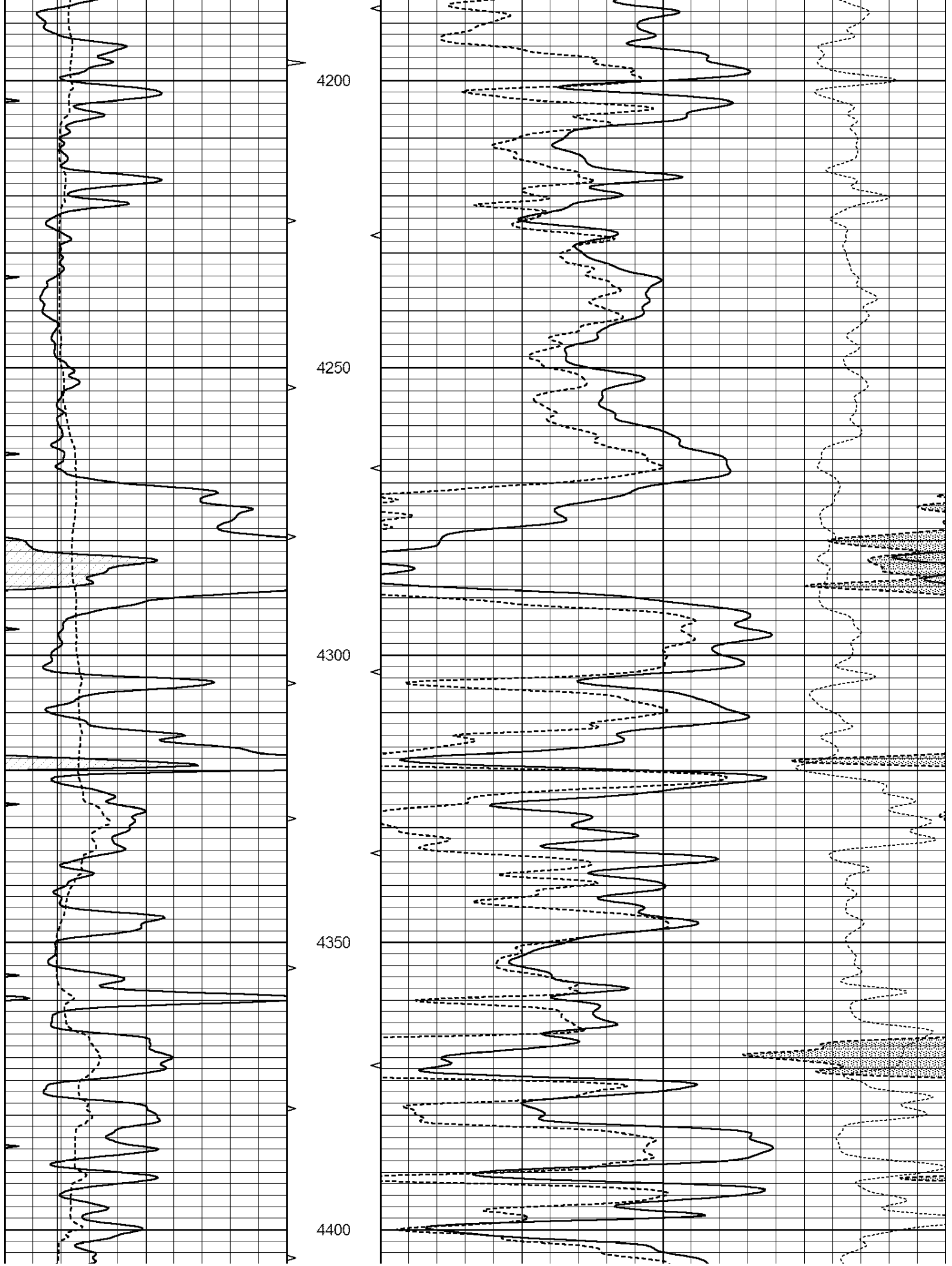
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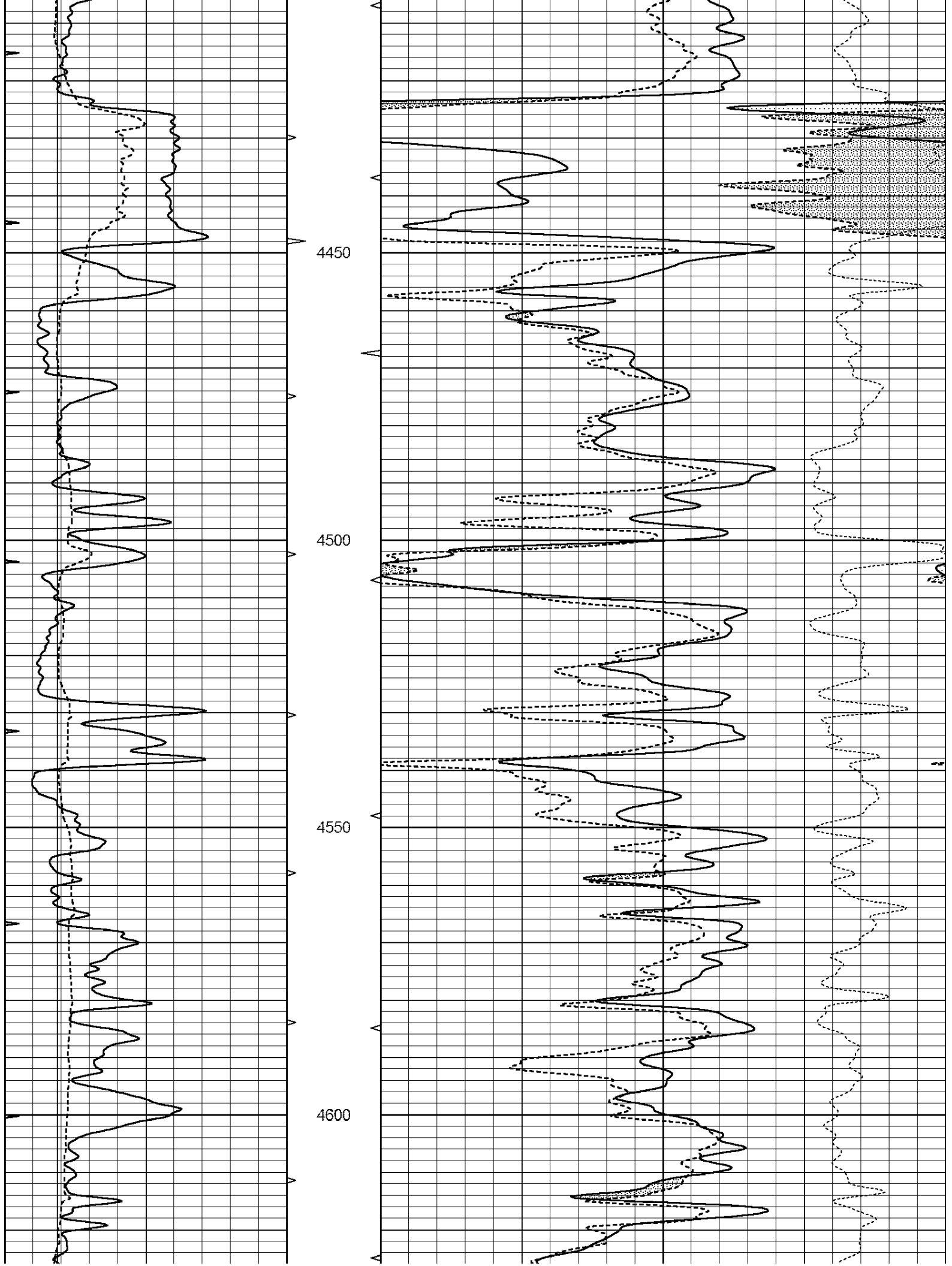
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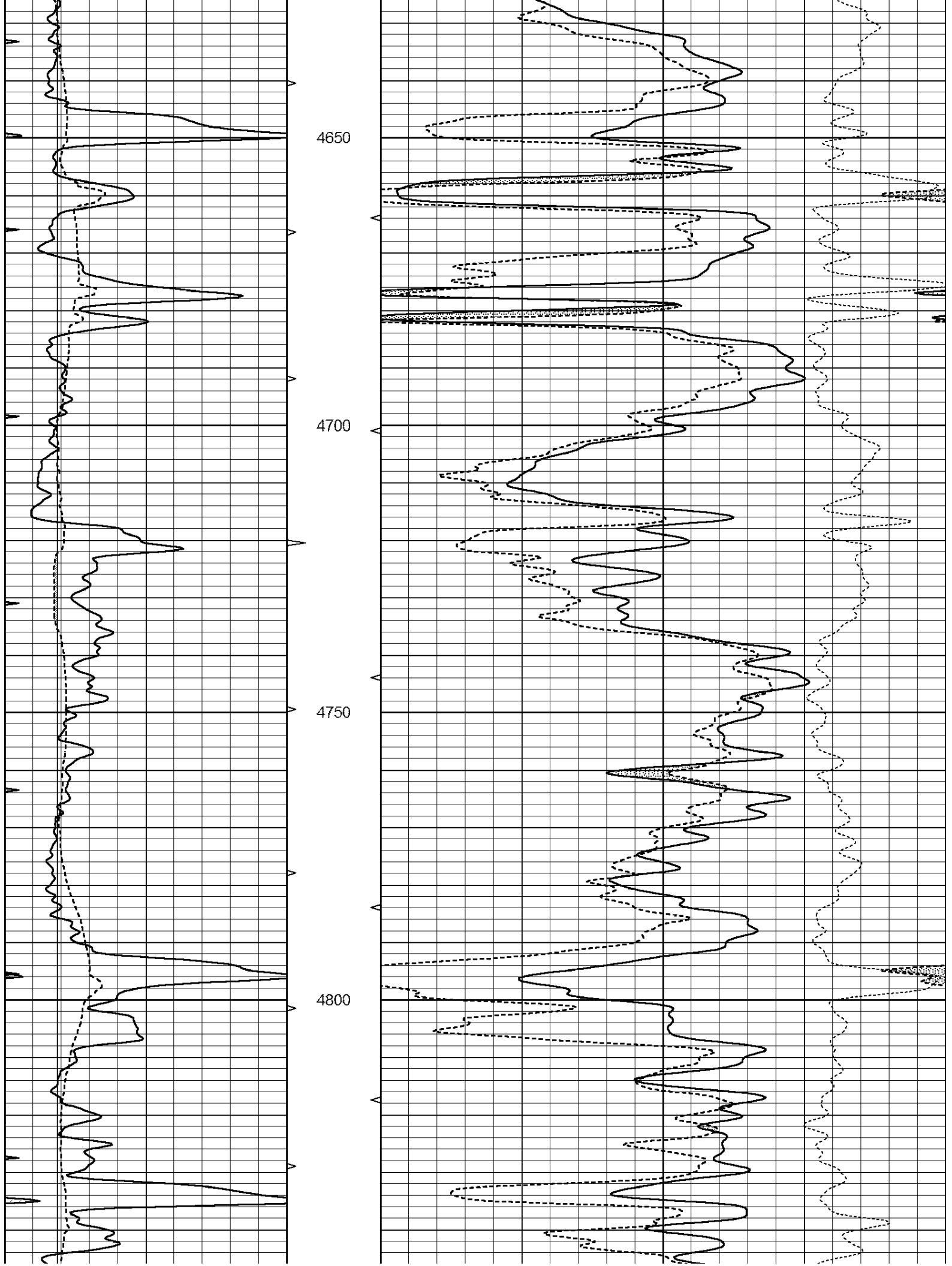
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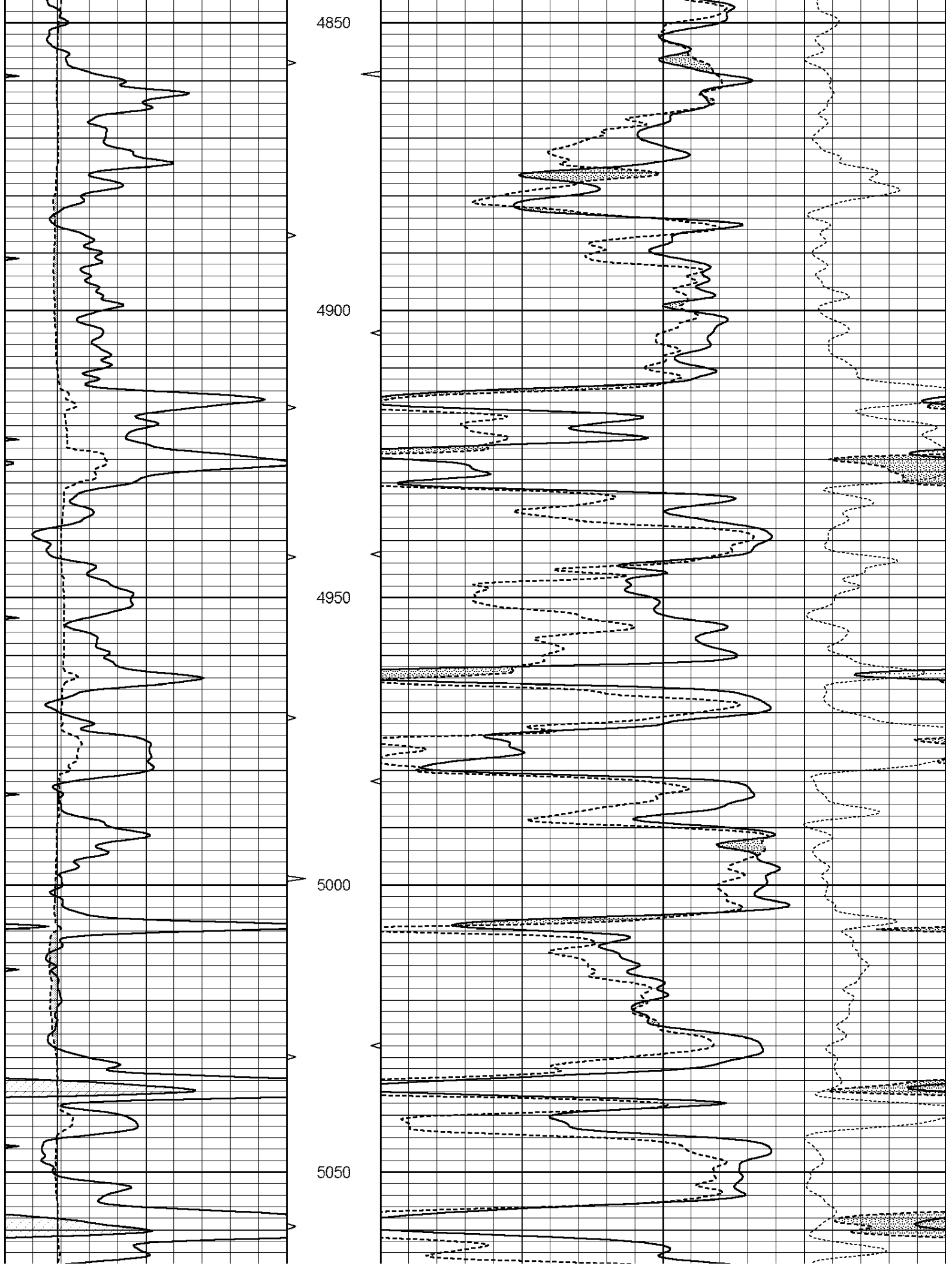


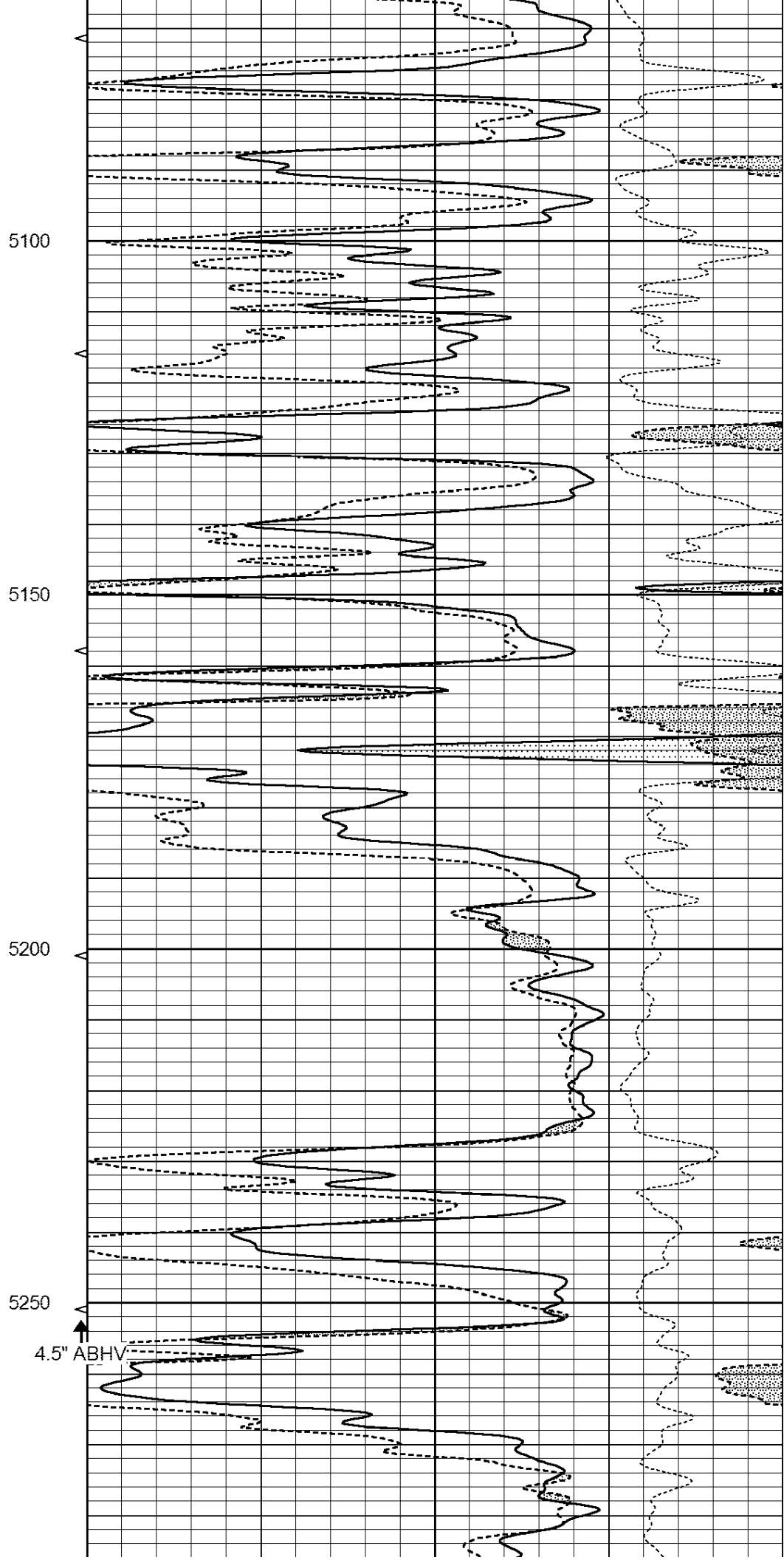
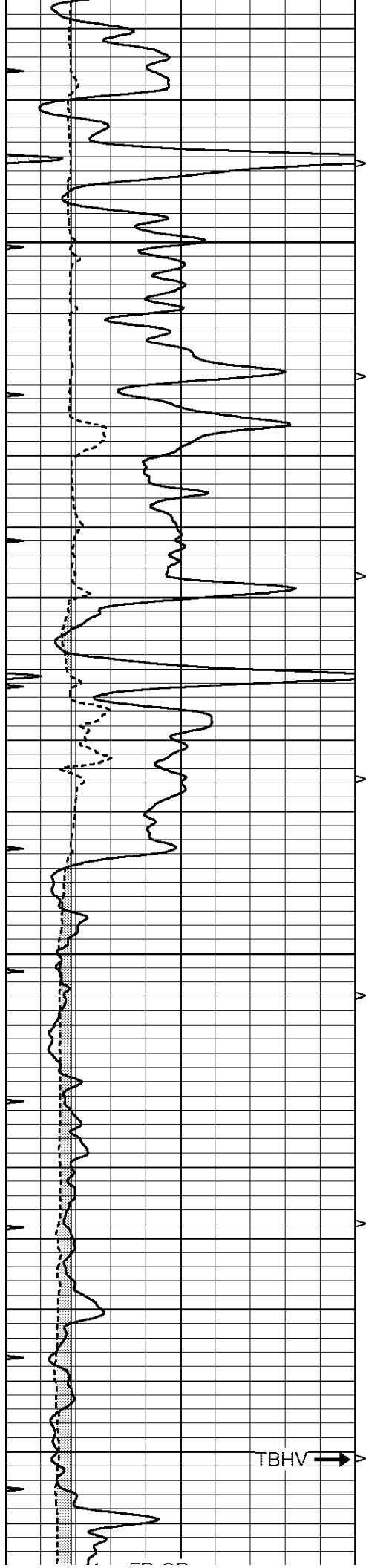


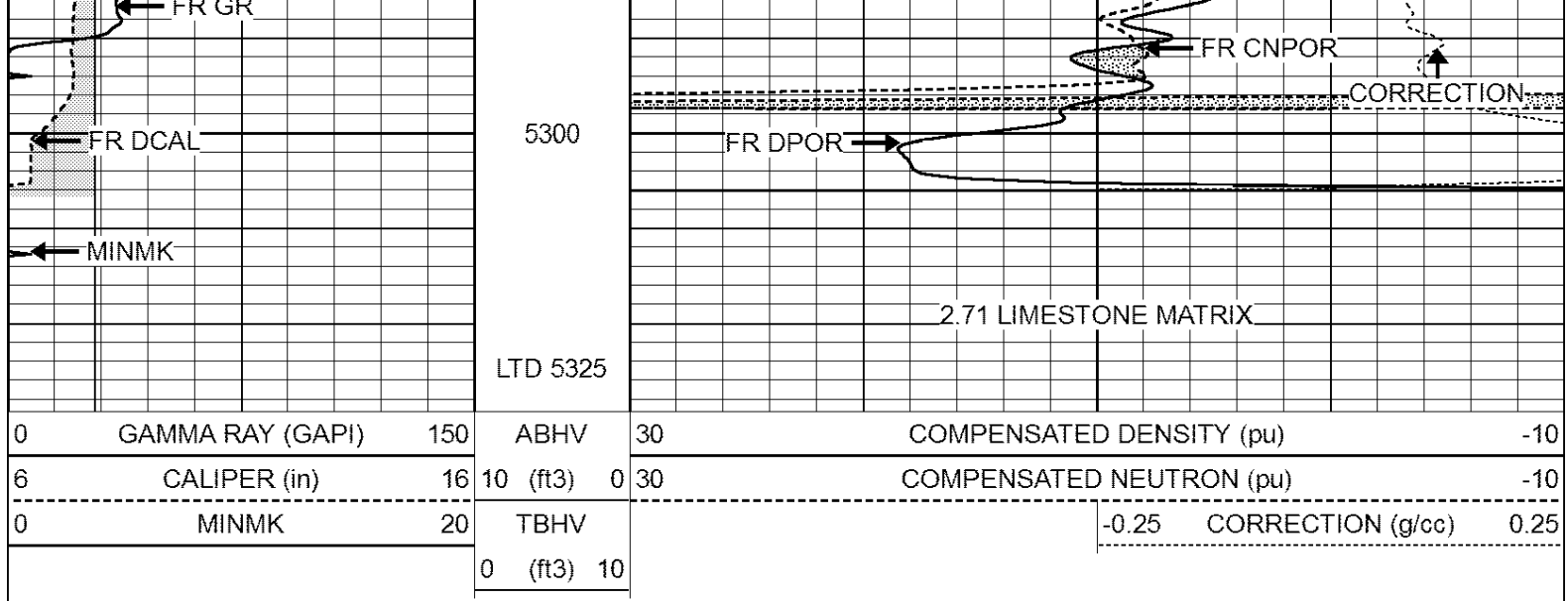








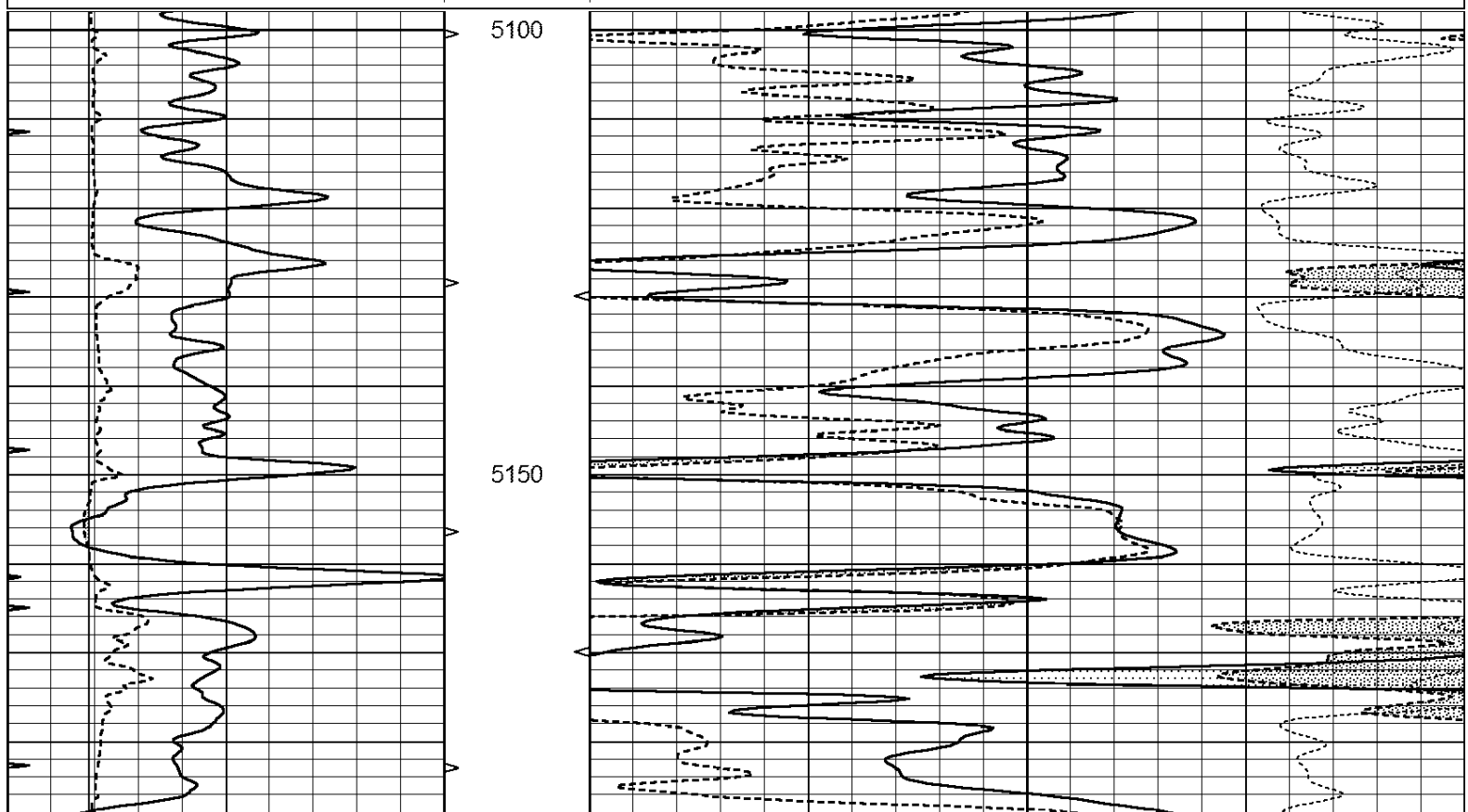
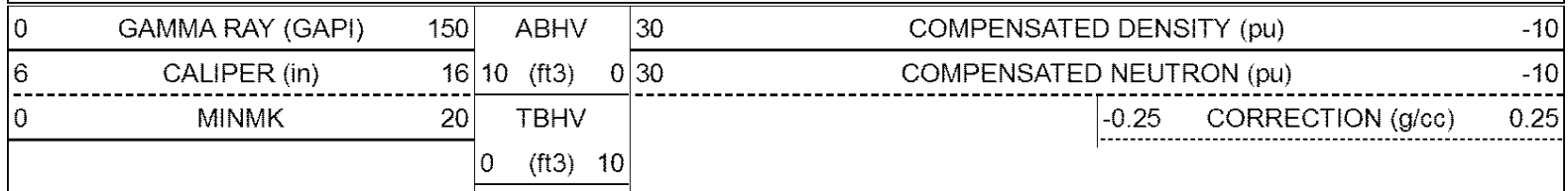


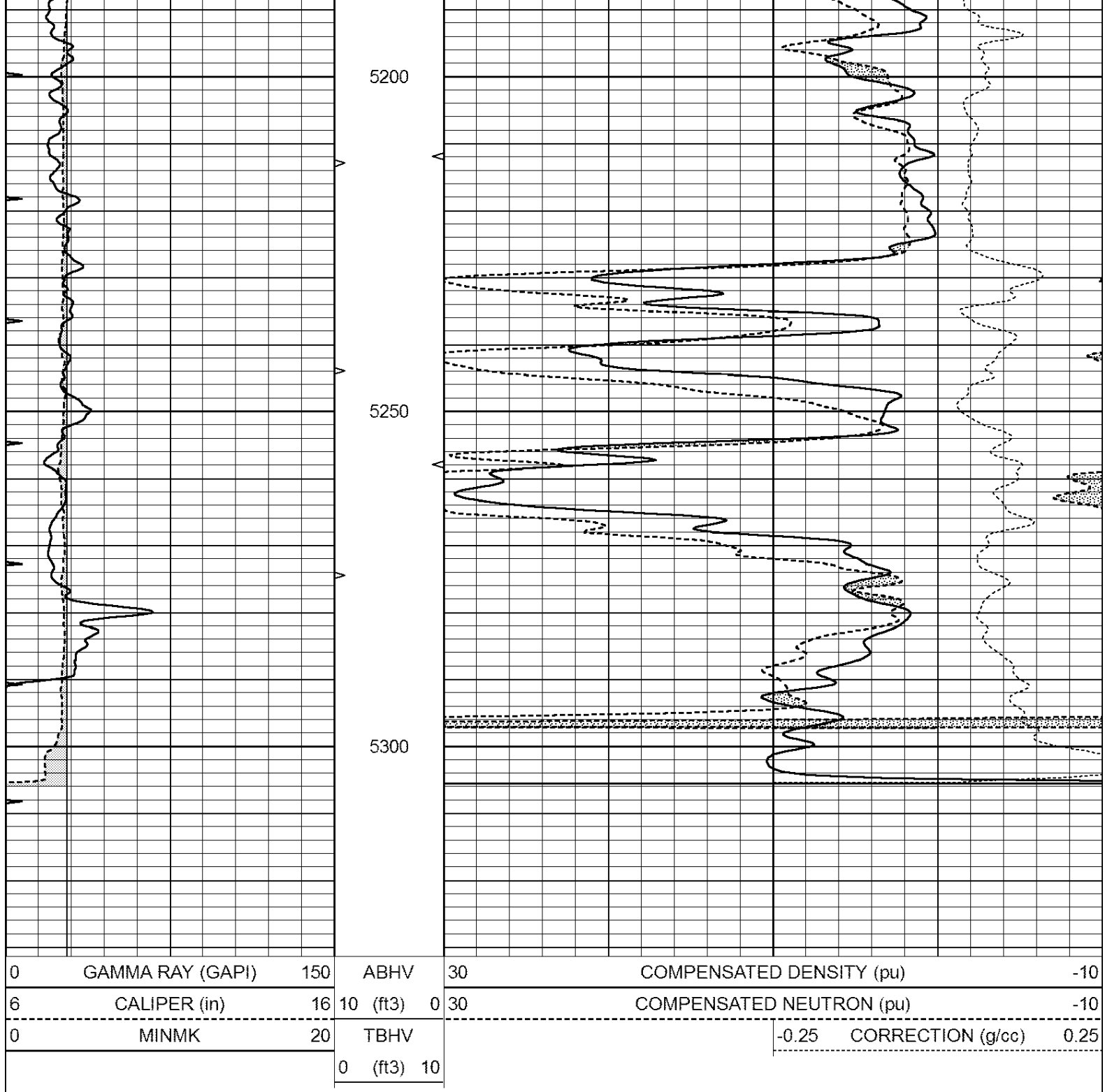


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REPEAT SECTION

Database File: 008135ddn.db
 Dataset Pathname: pass2.4
 Presentation Format: den_neu
 Dataset Creation: Mon Jan 09 09:08:22 2012
 Charted by: Depth in Feet scaled 1:240





Calibration Report

Database File: 008135ddn.db
 Dataset Pathname: pass3.8
 Dataset Creation: Mon Jan 09 10:34:40 2012

Dual Induction Calibration Report

Serial-Model: DIL3-GEAR
 Performed: Mon Jan 09 06:51:29 2012

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	0.000	400.000	mmho/m	640.000	4.000
Medium	0.013	0.740	V	0.000	462.500	mmho/m	700.000	-8.000

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: 004N Model: PRB Performed Tue Sep 08 13:49:55 2009								
Litho Density Calibration								
	Background	Magnesium		Aluminum		Sandstone		
Window 1	1535.8	11161.3		3721.6		12498.8		cps
Window 2	1402.6	9435.7		3219.7		10417.7		cps
Window 3	1077.6	4422.0		1779.2		4753.4		cps
Window 4	337.3	342.8		337.4		343.7		cps
Long Space	0.0	8033.1		1817.0		9015.1		cps
Short Space	1.2	1671.8		1138.1		1813.0		cps
Rho		1.7100		2.5900		1.3800		g/cc
Pe				2.5700		1.5500		
Rib Angle	: 45.5	Rib Slope	: 1.017	Density/Spine Ratio		: 0.573		
Spine Angle	: 75.5	Spine Slope	: 3.865	Spine Intercept		: -19.7		
Caliper								
	Readings	Reference						
Low Ref	2.6	8.6						
High Ref	4.8	15.0						
	Gain: 3.0			Offset: 0.7				
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:	Mon Jan 09 08:35:01 2012							
Calibrator Value:	1.0	GAPI						
Background Reading:	0.0	cps						
Calibrator Reading:	1.0	cps						
Sensitivity:	0.2600	GAPI/cps						