



**SUPERIOR
Hays,
Kansas**

**COMPENSATED
DENSITY / NEUTRON
PE LOG**

Company LOTUS OPERATING COMPANY, LLC.
Well MOLZ "L" #4
Field STRANATHAN
County BARBER
State KANSAS

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Location: API #: 15-007-23693
3960' FSL & 1485' FEL
SEC 1 TWP 35S RGE 12W
Permanent Datum GROUND LEVEL Elevation 1417
Log Measured From KELLY BUSHING 13' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
DIL
SONIC/MEL
Elevation
K.B. 1430
D.F.
G.L. 1417

Date	1-9-12
Run Number	ONE
Depth Driller	5540
Depth Logger	5536
Bottom Logged Interval	5512
Top Log Interval	3700
Casing Driller	270
Casing Logger	270
Bit Size	7.875
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.4 / 50
pH / Fluid Loss	11.0 / 9.2
Source of Sample	FLOWLINE
Rim @ Meas. Temp	0.85 @ 74F
Rmf @ Meas. Temp	0.64 @ 74F
Rmc @ Meas. Temp	1.02 @ 74F
Source of Rmf / Rmc	MEASURED
Rim @ BHT	.480 @ 130F
Time Circulation Stopped	3 HOURS
Time Logger on Bottom	2:45 P.M.
Maximum Recorded Temperature	130F
Equipment Number	860
Location	HAYS, KS.
Recorded By	RUPP
Witnessed By	TIM HELLMAN

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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

SUPERIOR WELL SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: MEDICINE LODGE, S TO DRIFTWOOD RD., 1/2W. S INTO.



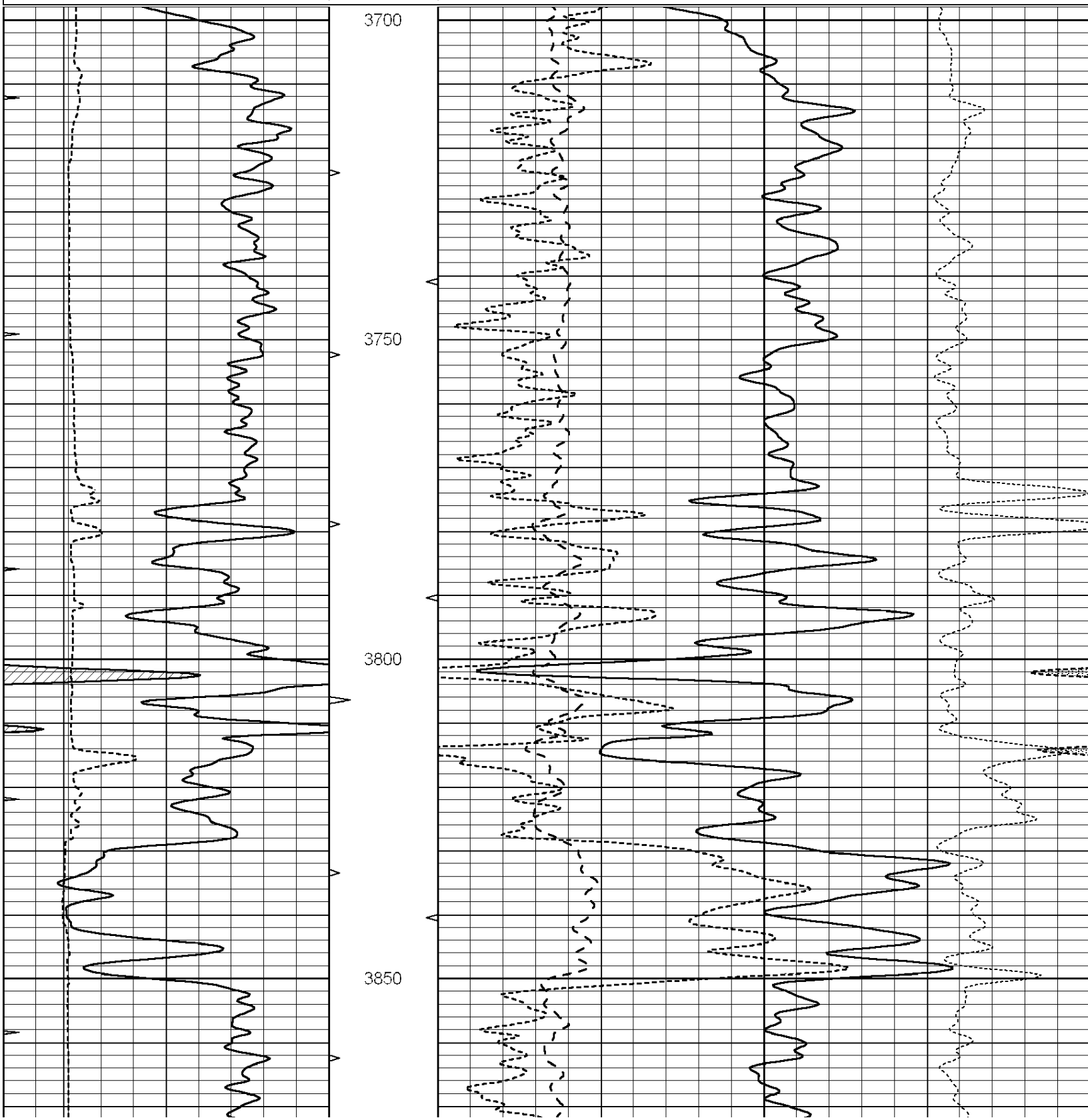
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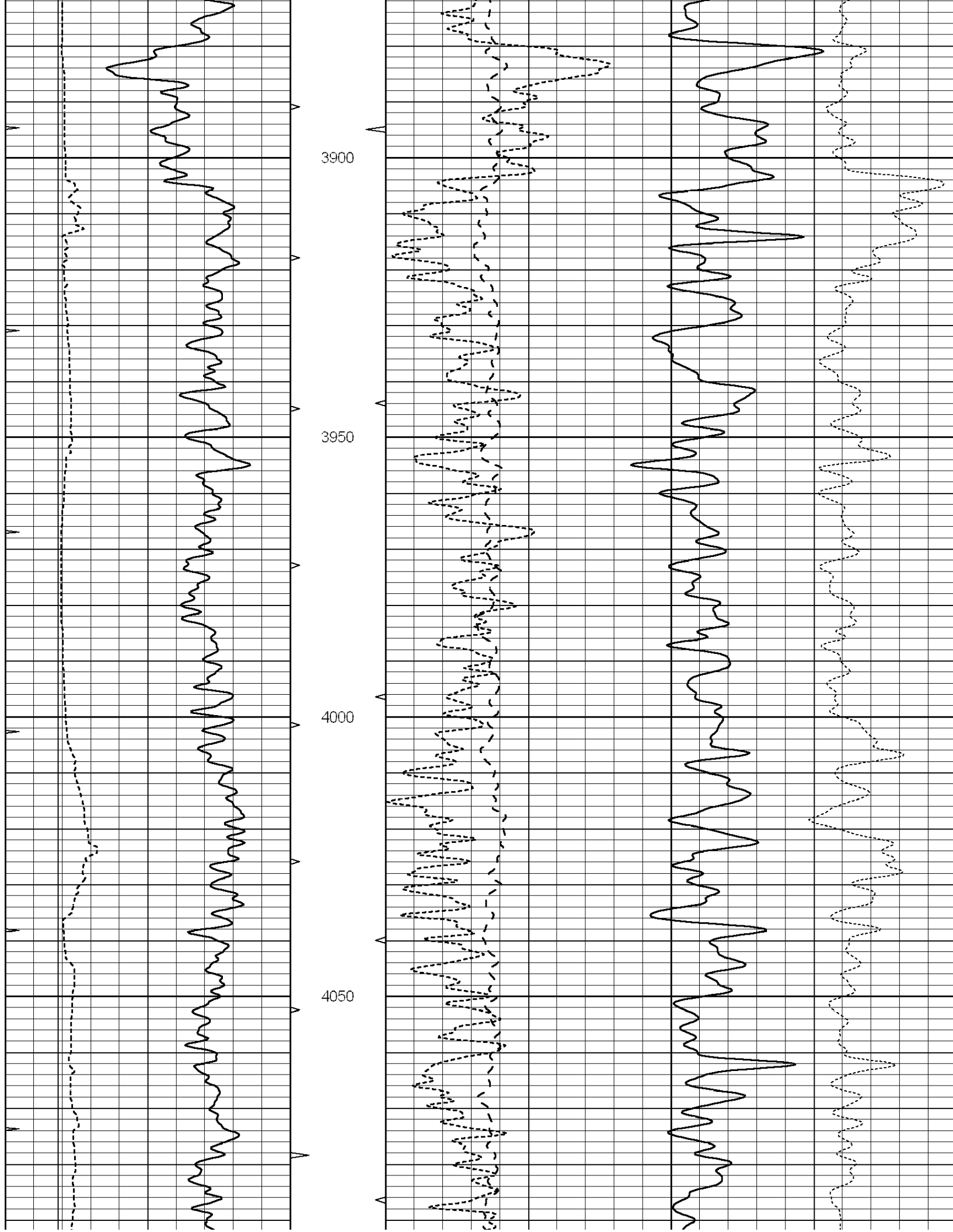
MAIN SECTION

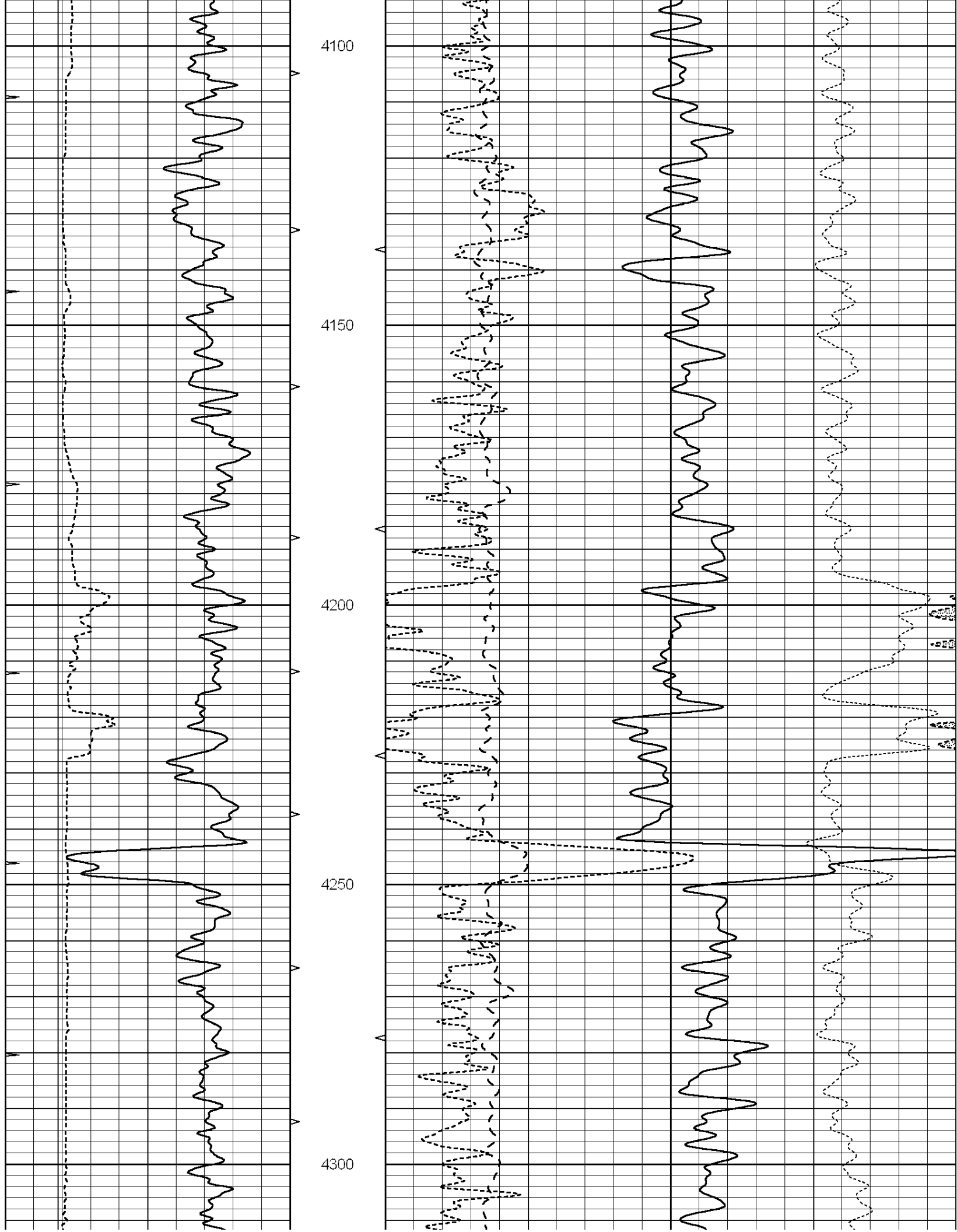


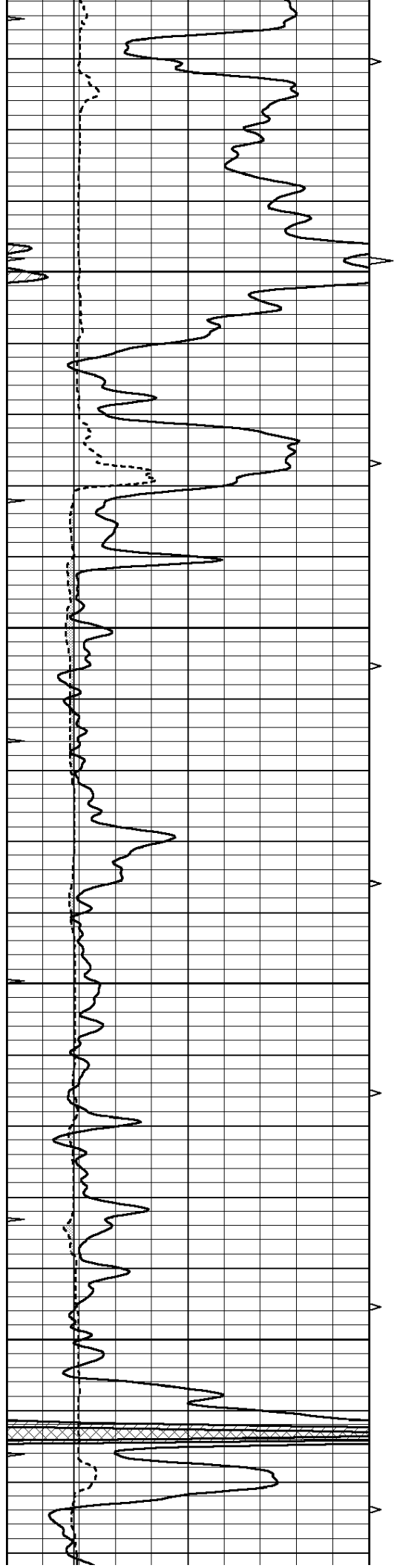
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 Dataset Pathname: pass3.1A
 Presentation Format: ldt_neu
 Dataset Creation: Mon Jan 09 17:00:47 2012
 Charted by: Depth in Feet scaled 1:240

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







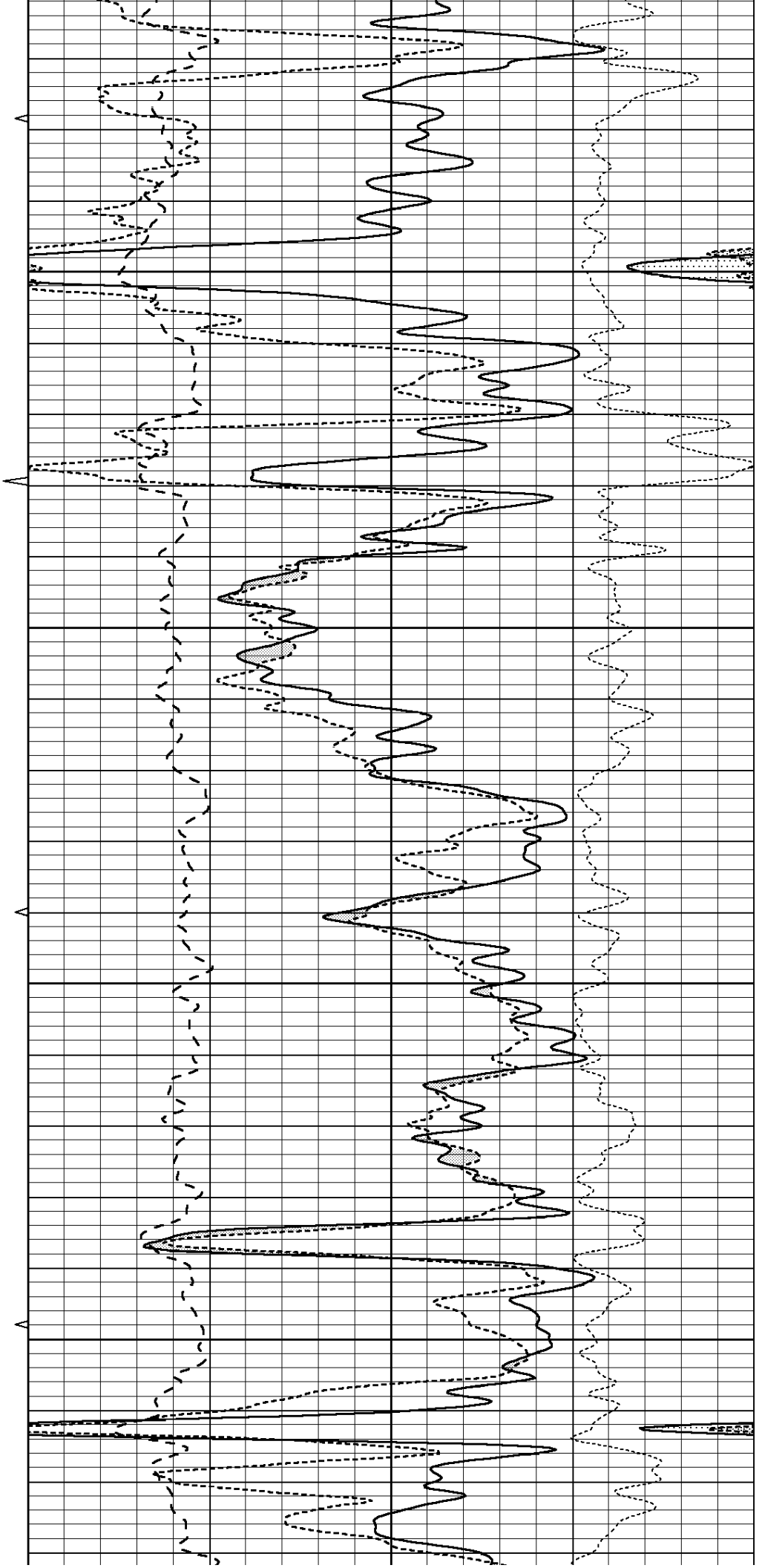


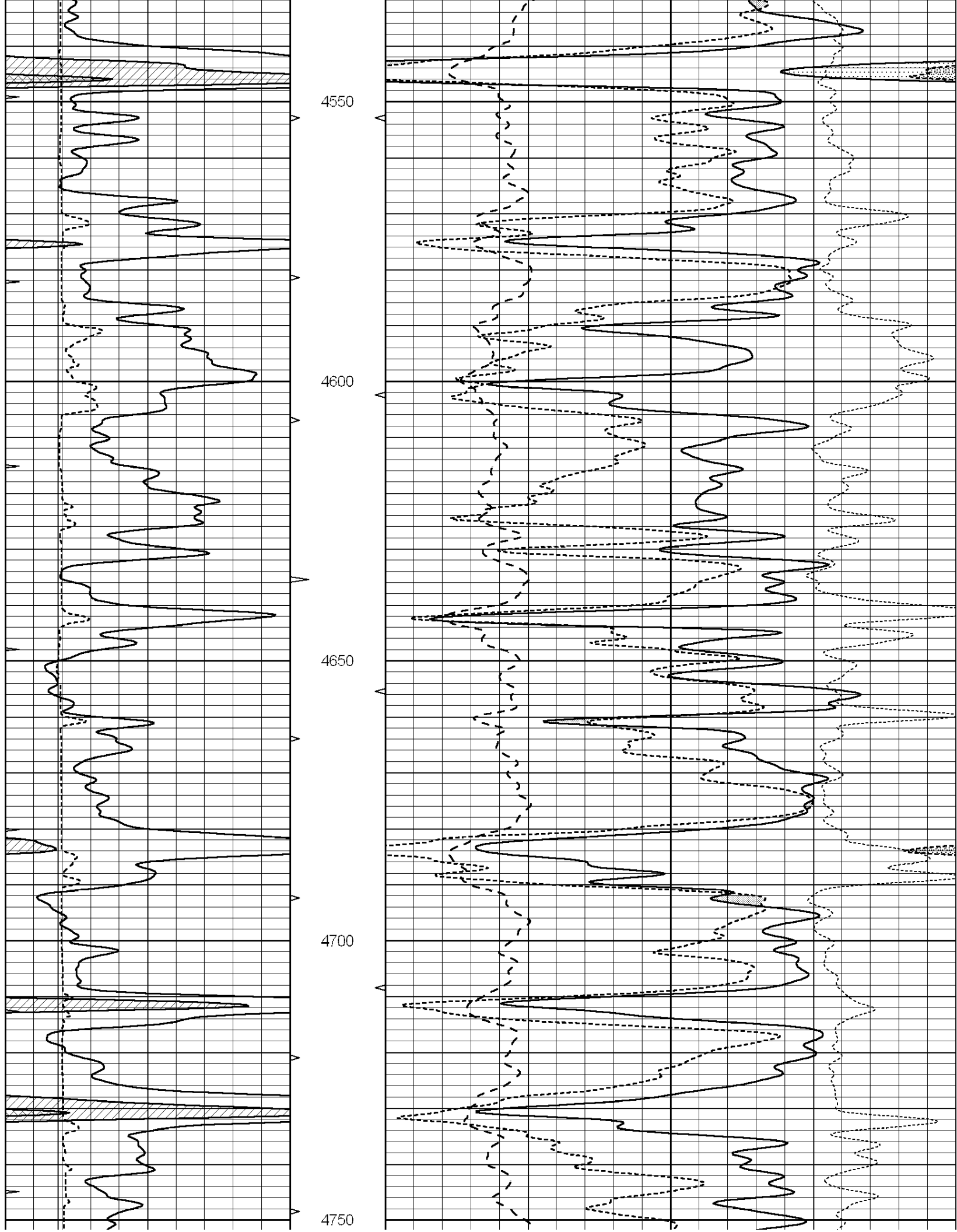
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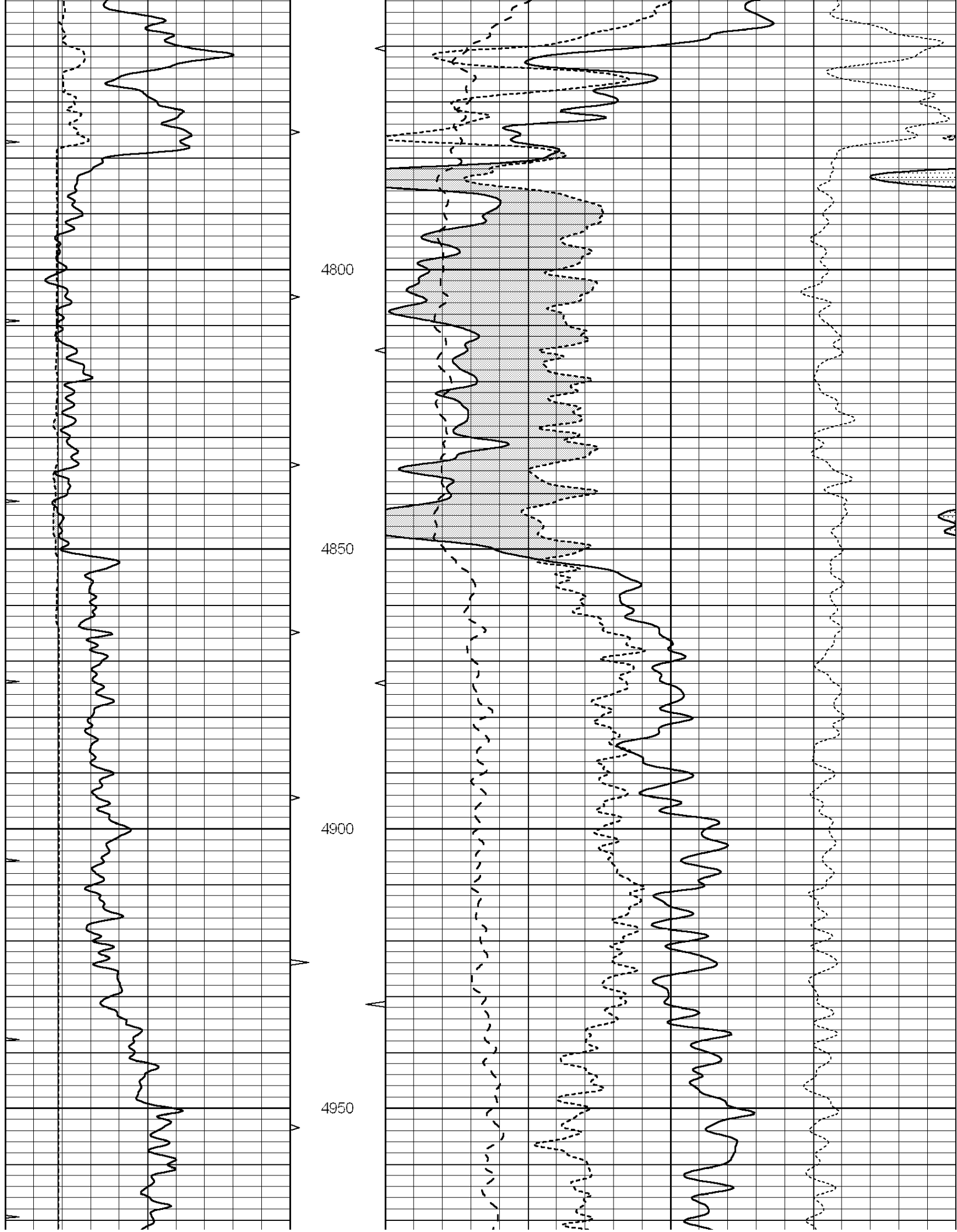
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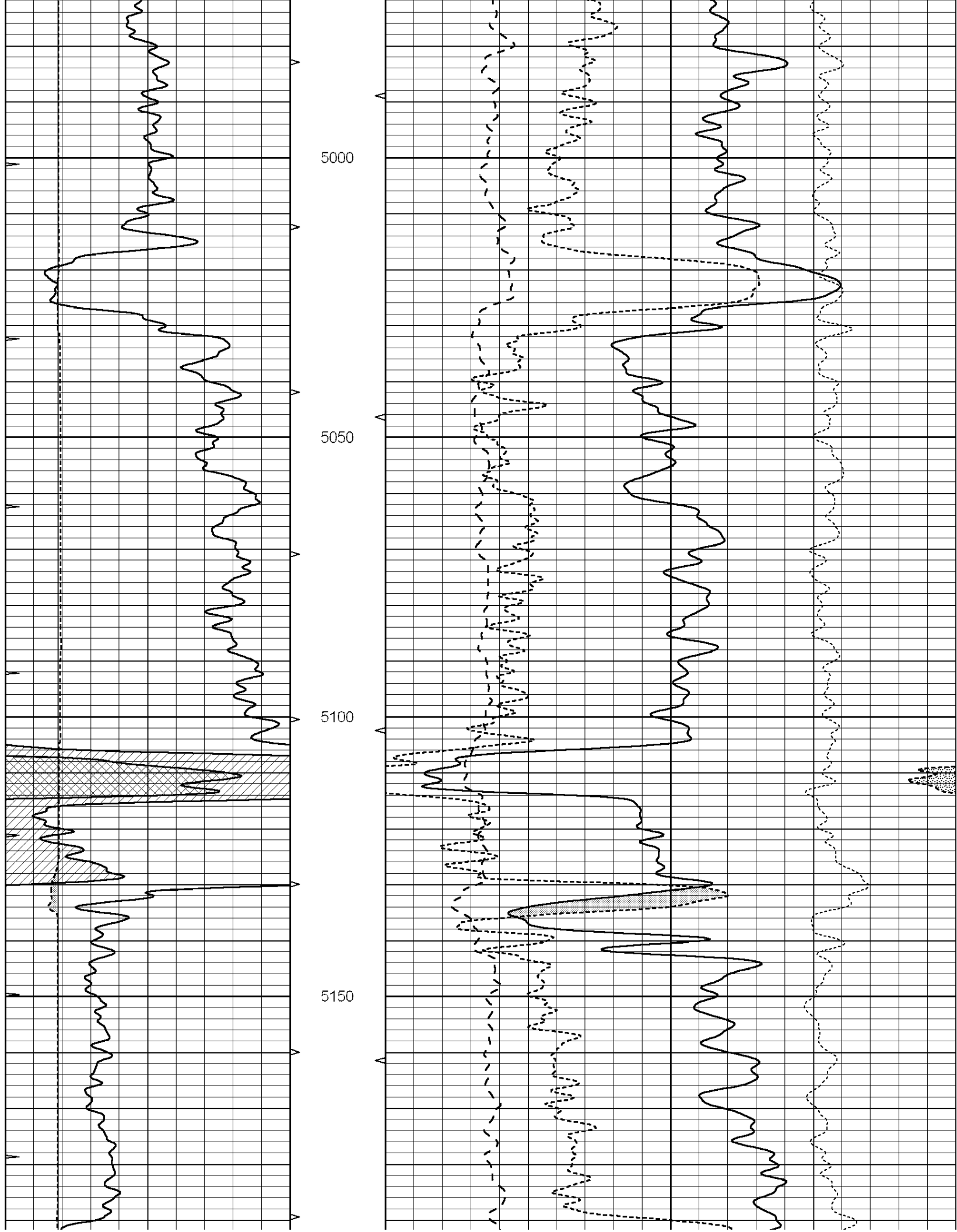
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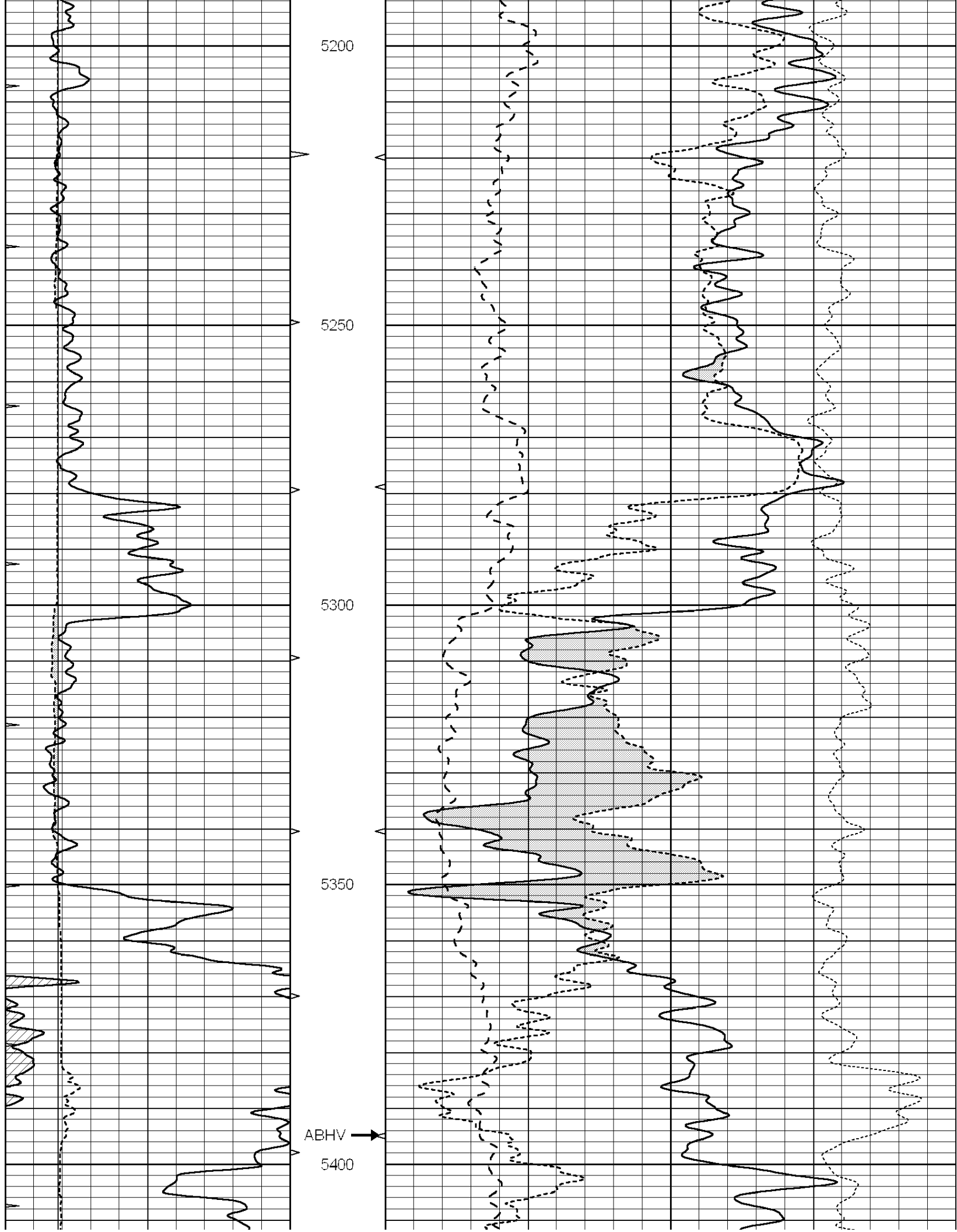
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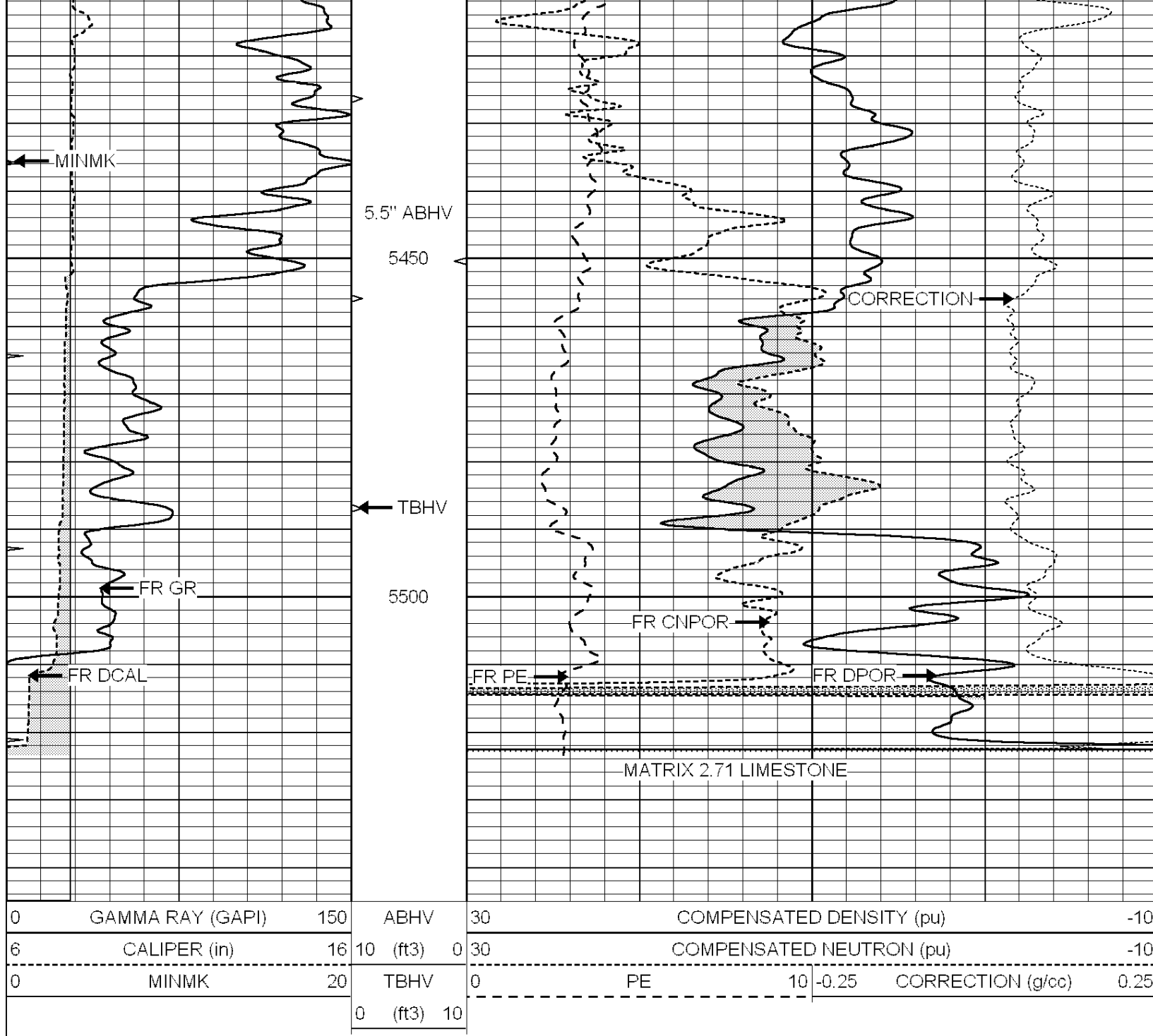










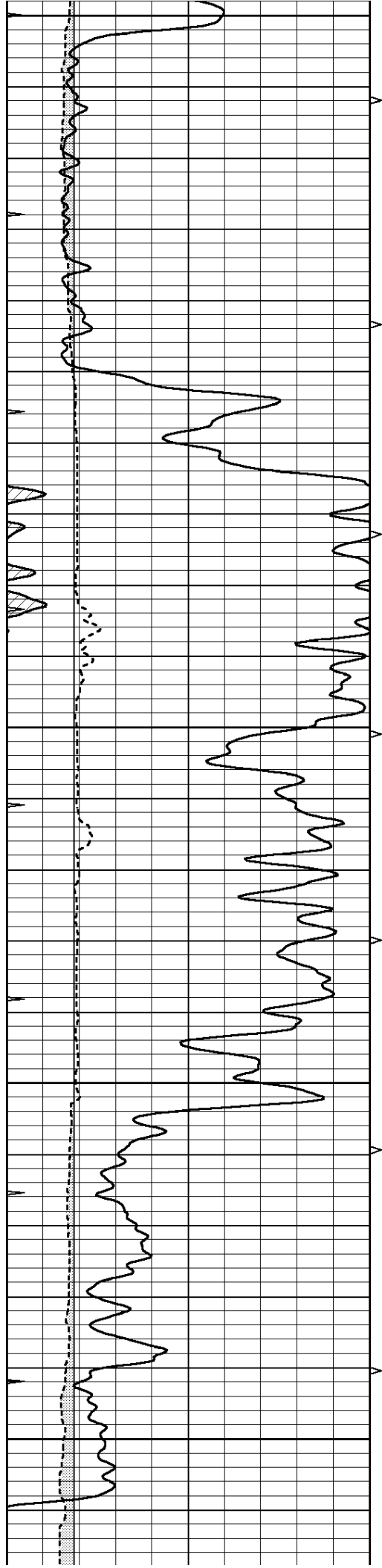


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REPEAT SECTION

Database File: 008453pdm.db
 Dataset Pathname: pass2.1
 Presentation Format: ldt_neu
 Dataset Creation: Mon Jan 09 17:04:50 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	PE	10	-0.25	CORRECTION (g/cc)	0.25
			0 (ft3)	10					



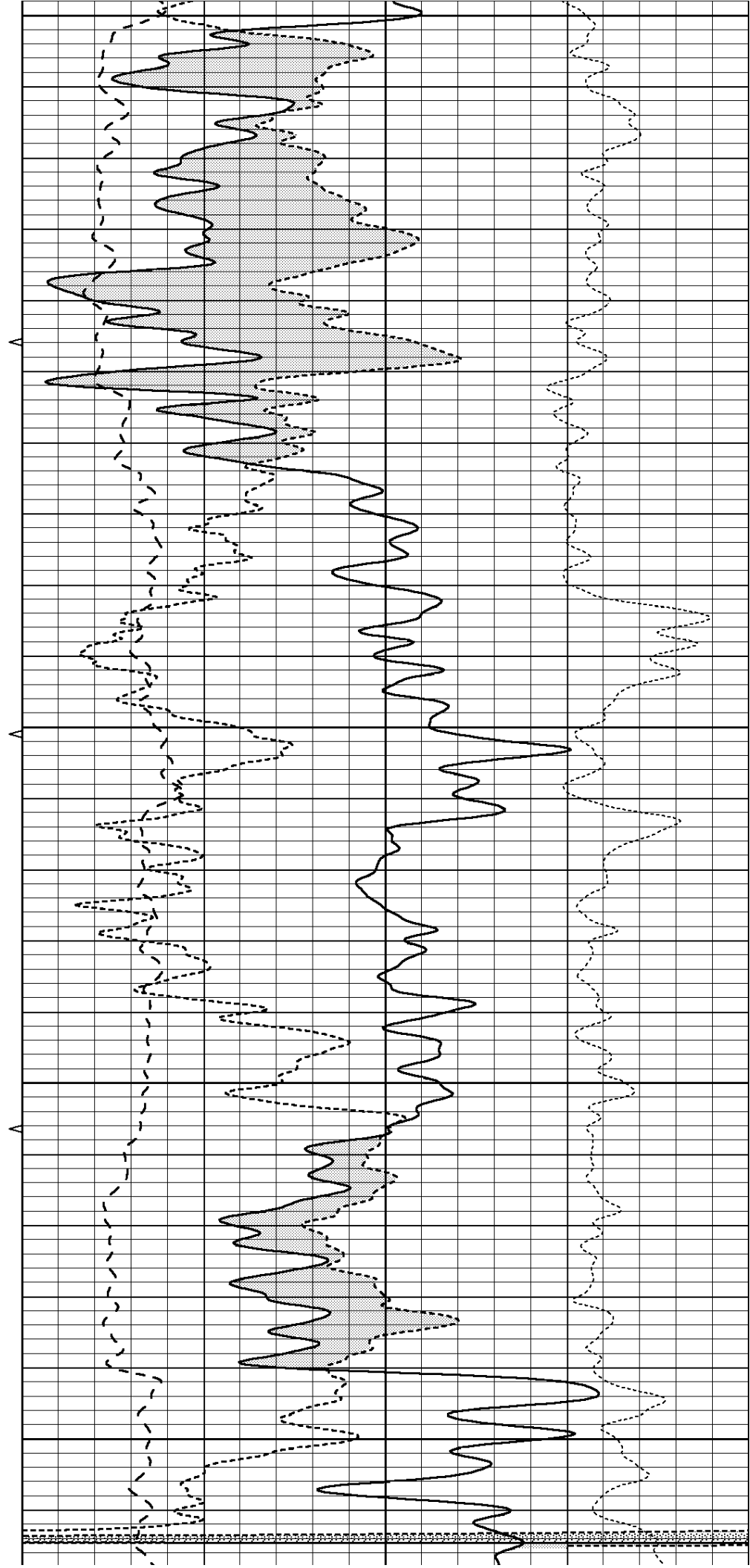
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5350

5400

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5500



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	PE	10	-0.25	CORRECTION (g/cc)	0.25
			0 (ft3) 10						

Calibration Report

Database File: 008453pdn.db
 Dataset Pathname: pass3.1A
 Dataset Creation: Mon Jan 09 17:00:47 2012

Dual Induction Calibration Report

Serial-Model: DIL5-GEAR
 Performed: Mon Jan 09 14:20:30 2012

Loop:	Readings				References		Results	
	Air	Loop			Air	Loop	m	b
Deep	0.004	0.654	V	0.000	400.000	mmho/m	520.000	-18.000
Medium	-0.005	0.737	V	0.000	462.500	mmho/m	550.000	-12.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.006	0.655	V	0.000	400.000	mmho/m	615.668	-3.483
Medium	0.010	0.747	V	0.000	462.500	mmho/m	627.607	-6.064

Litho Density Calibration Report
 Serial: 002 Model: PRB
 Performed Tue Jul 03 11:12:28 2007

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1059.5	9172.0	2859.6	10210.6	cps
Window 2	976.0	7793.2	2486.1	8515.6	cps
Window 3	689.8	2930.5	1159.0	3096.2	cps
Window 4	231.9	237.2	231.1	234.0	cps
Long Space	0.0	6817.1	1510.1	7539.6	cps
Short Space	1.6	1758.1	1188.6	1898.8	cps
Rho		1.7100	2.5960	1.3800	g/cc
Pe			2.5700	1.5500	
Rib Angle	: 45.4	Rib Slope	: 1.015	Density/Spine Ratio	: 0.569
Spine Angle	: 75.4	Spine Slope	: 3.850	Spine Intercept	: -19.9

Caliper	Readings	Reference
Low Ref	3.8	8.4
High Ref	4.9	12.0
	Gain: 3.2	Offset: -3.7

Compensated Neutron Calibration Report

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: Mon Jan 09 14:52:08 2012

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.6500 GAPI/cps