SUPERIOR WELL SERVICES

SUPERIOR
Hays, Kansas

COMPENSATED DENSITY NEUTRON LOG

Company RAYMOND OIL COMPANY, INC.

Well ROSE "B" #2

Field

County LOGAN State KANSAS

Location: API # : 15-109-20870

2041' FSL & 1615' FWL

SEC 11 TWP 14S RGE 32W

Other Services
DIL
MICRO

Elevation
K.B. 2763
D.F.
G.L. 2758

Permanent Datum GROUND LEVEL Elevation 2758
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING

Company RAYMOND OIL COMPANY, INC.
Well ROSE "B" #2
Field
County LOGAN
State KANSAS

Date	11-14-09		
Run Number	ONE		
Depth Driller	4520		
Depth Logger	4520		
Bottom Logged Interval	4496		
Top Log Interval	3300		
Casing Driller	261		
Casing Logger	NA		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.4 / 54		
pH / Fluid Loss	9.5 / 10.4		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.10 @ 65F		
Rmf @ Meas. Temp	0.83 @ 65F		
Rmc @ Meas. Temp	1.32 @ 65F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	.600 @ 120F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	4:30 P.M.		
Maximum Recorded Temperature	120F		
Equipment Number	860		
Location	HAYS, KS.		
Recorded By	RUPP		
Witnessed By	KIM SHOEMAKER		

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Comments

SUPERIOR WELL SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: OAKLEY, 18S TO MM #133, 1/2E.

MAIN SECTION

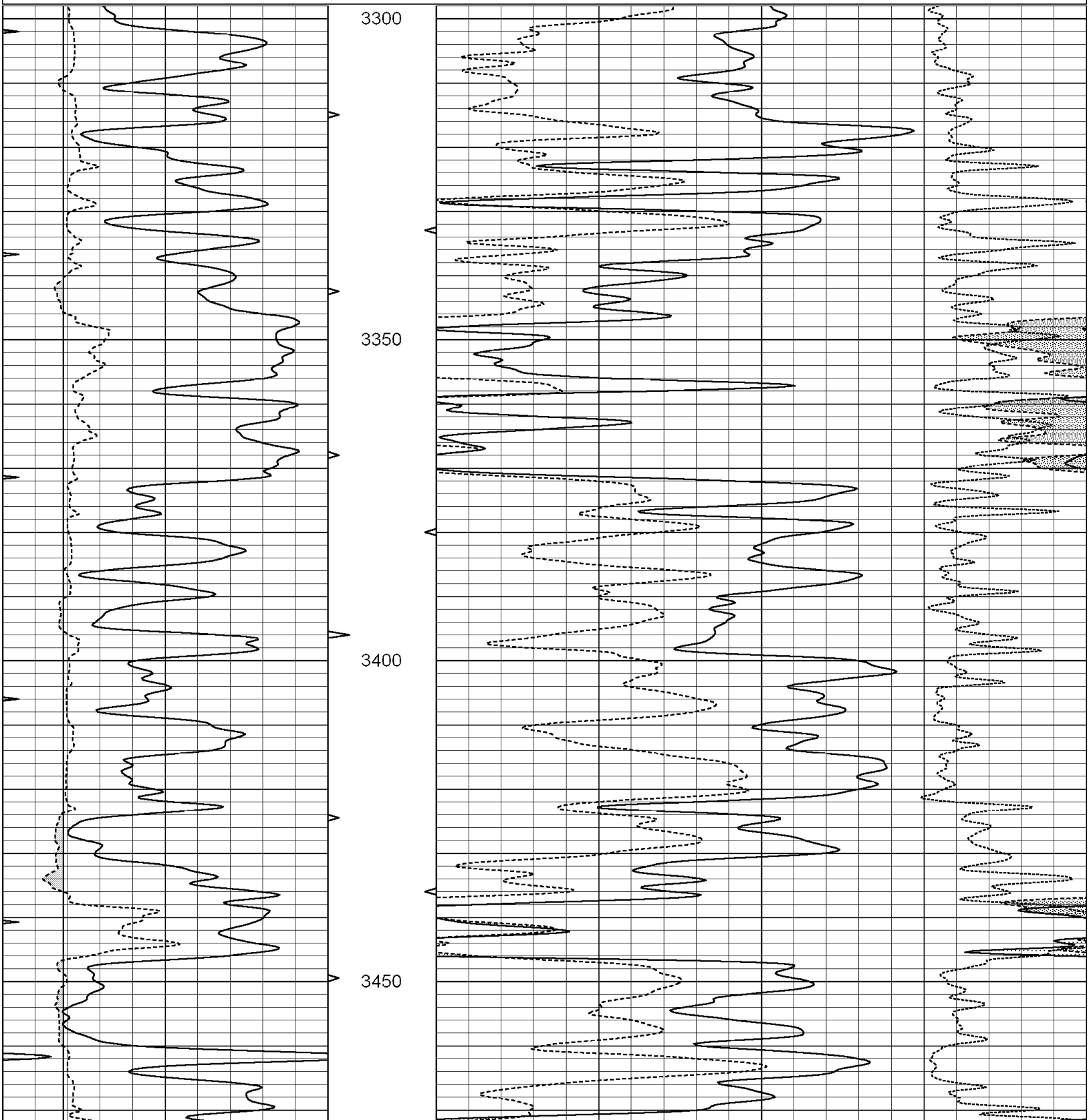
SUPERIOR
Hays, Kansas

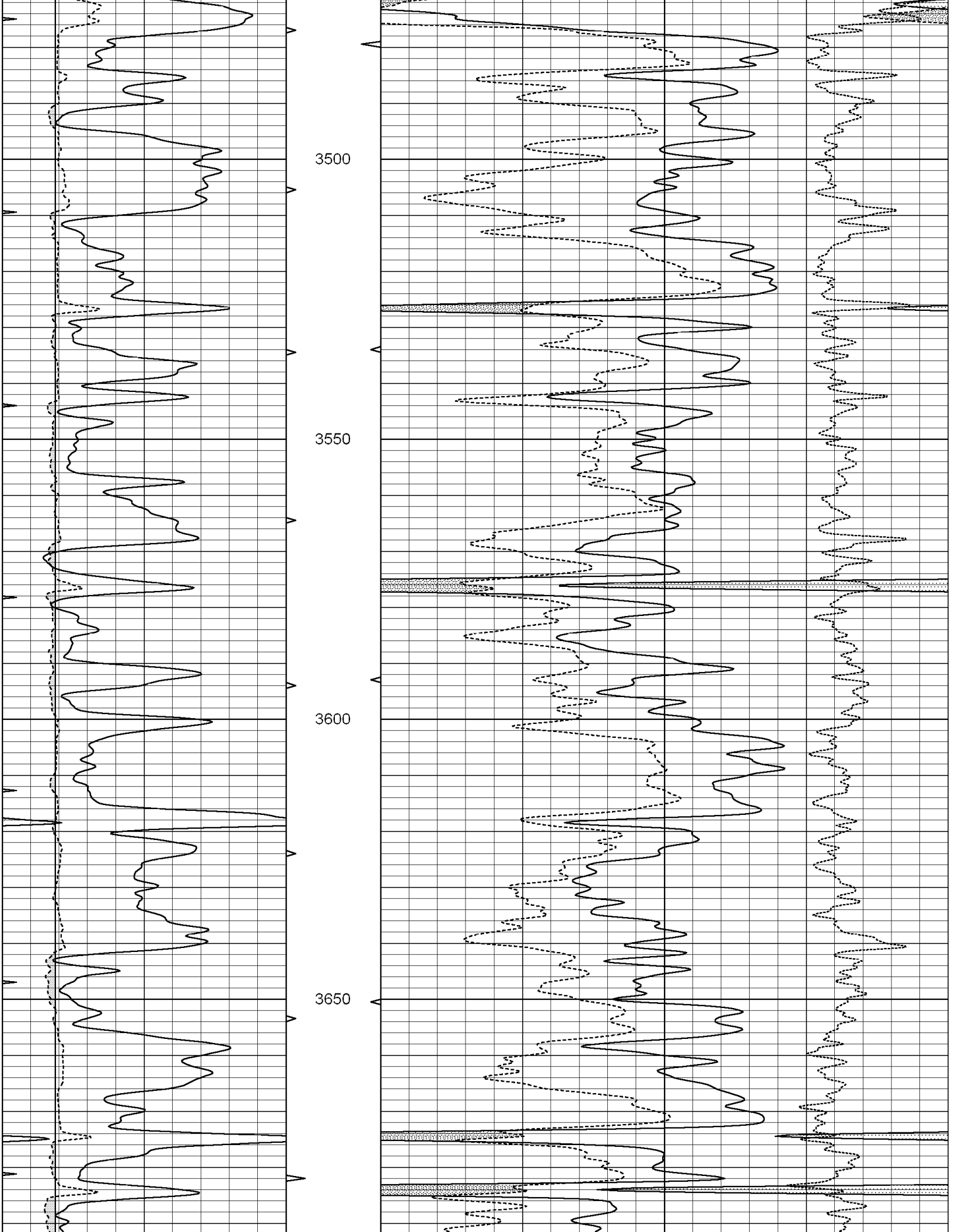
SUPERIOR WELL SERVICES

Kansas

Database File:	004307ddn.db
Dataset Pathname:	pass4.A
Presentation Format:	den_neu
Dataset Creation:	Sat Nov 14 18:34:20 2009 by Calc Open-Cased 051020
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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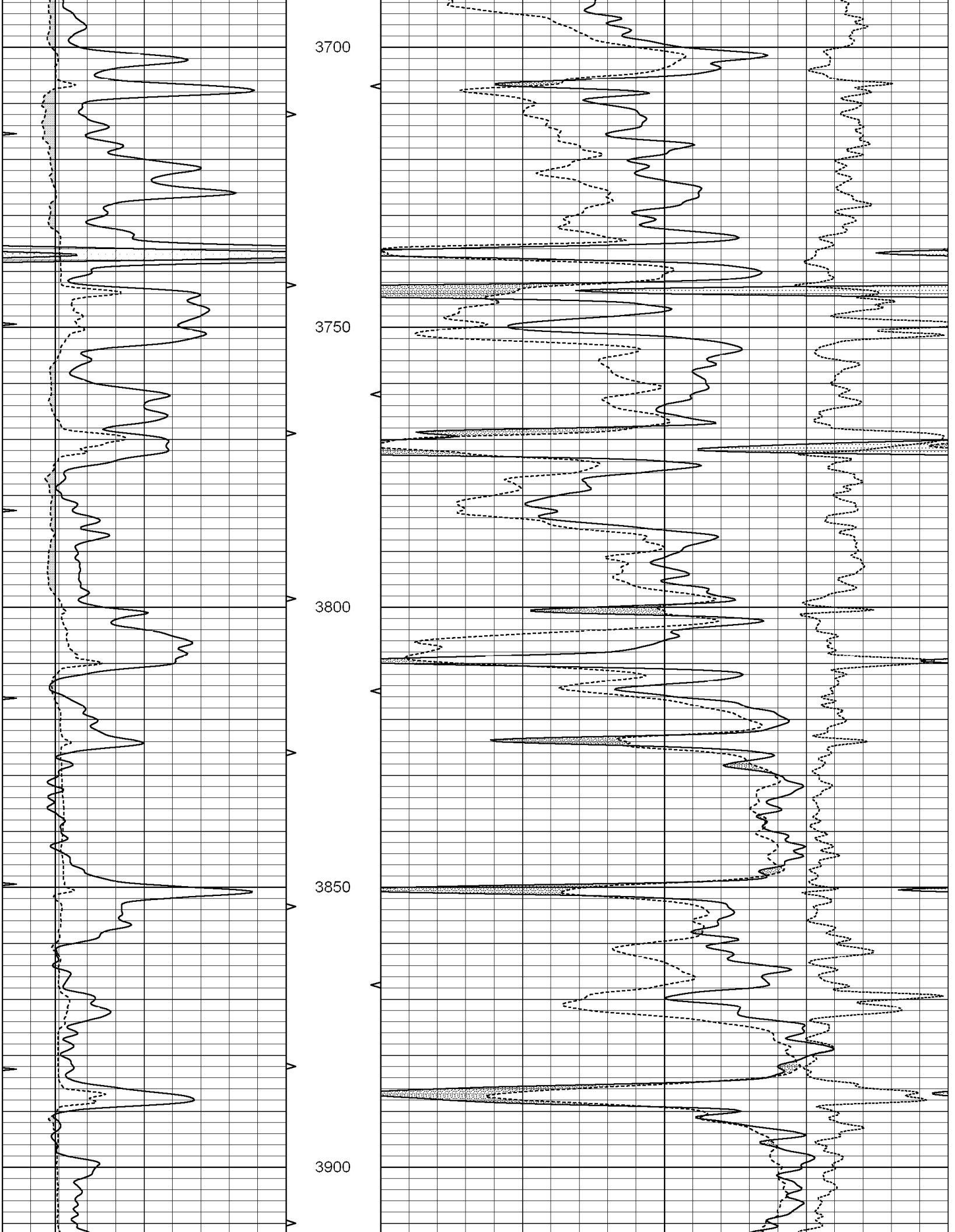
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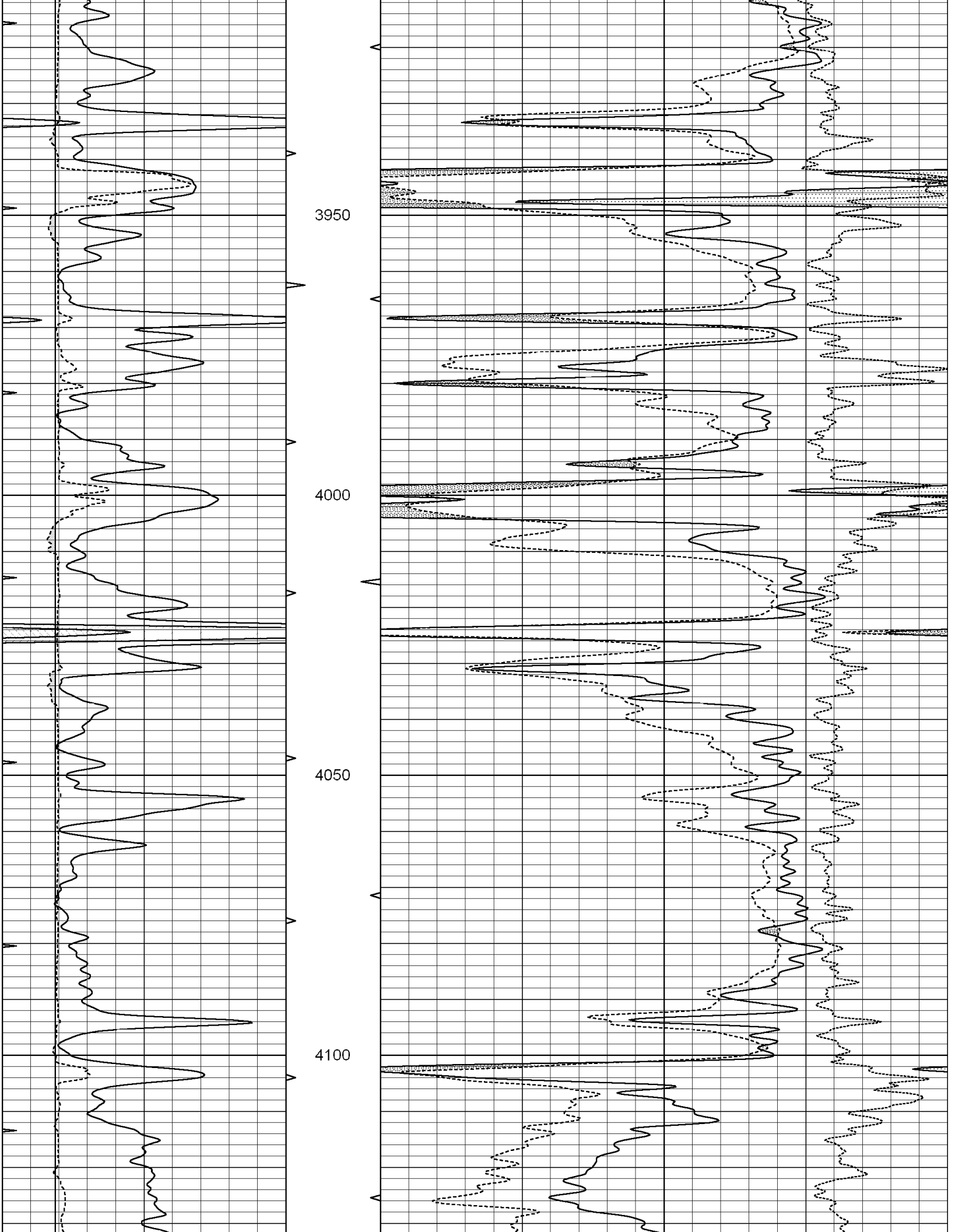
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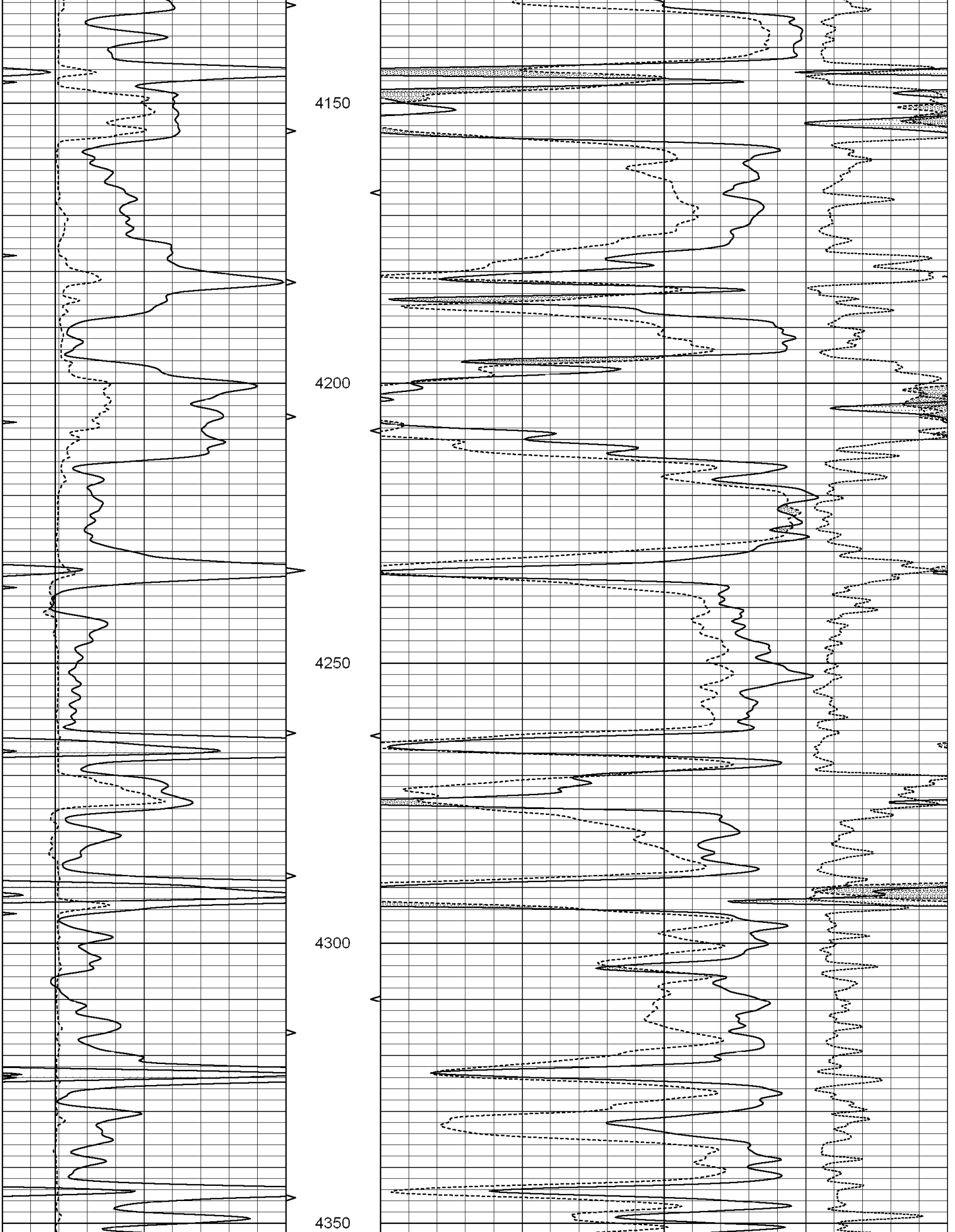
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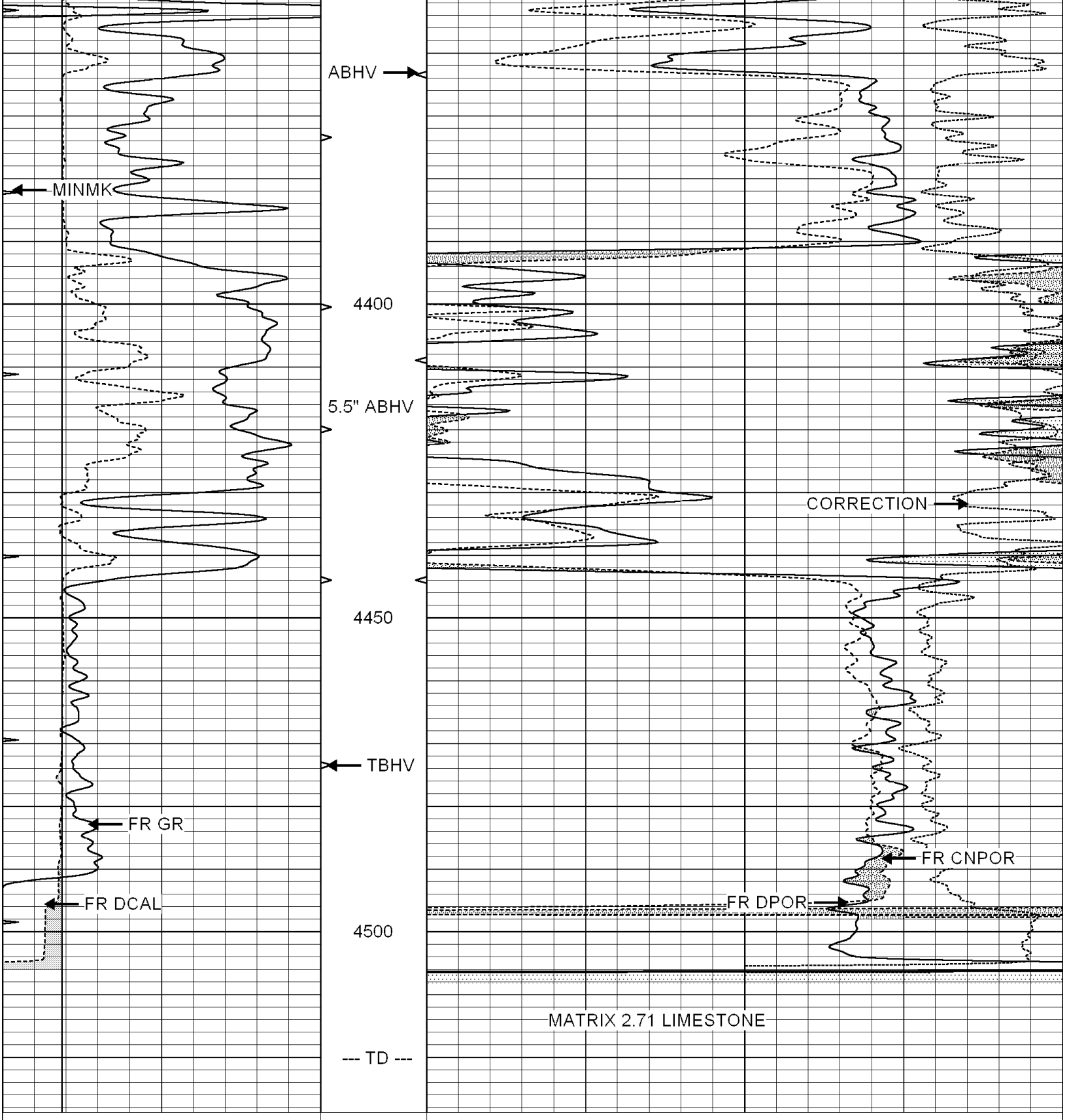


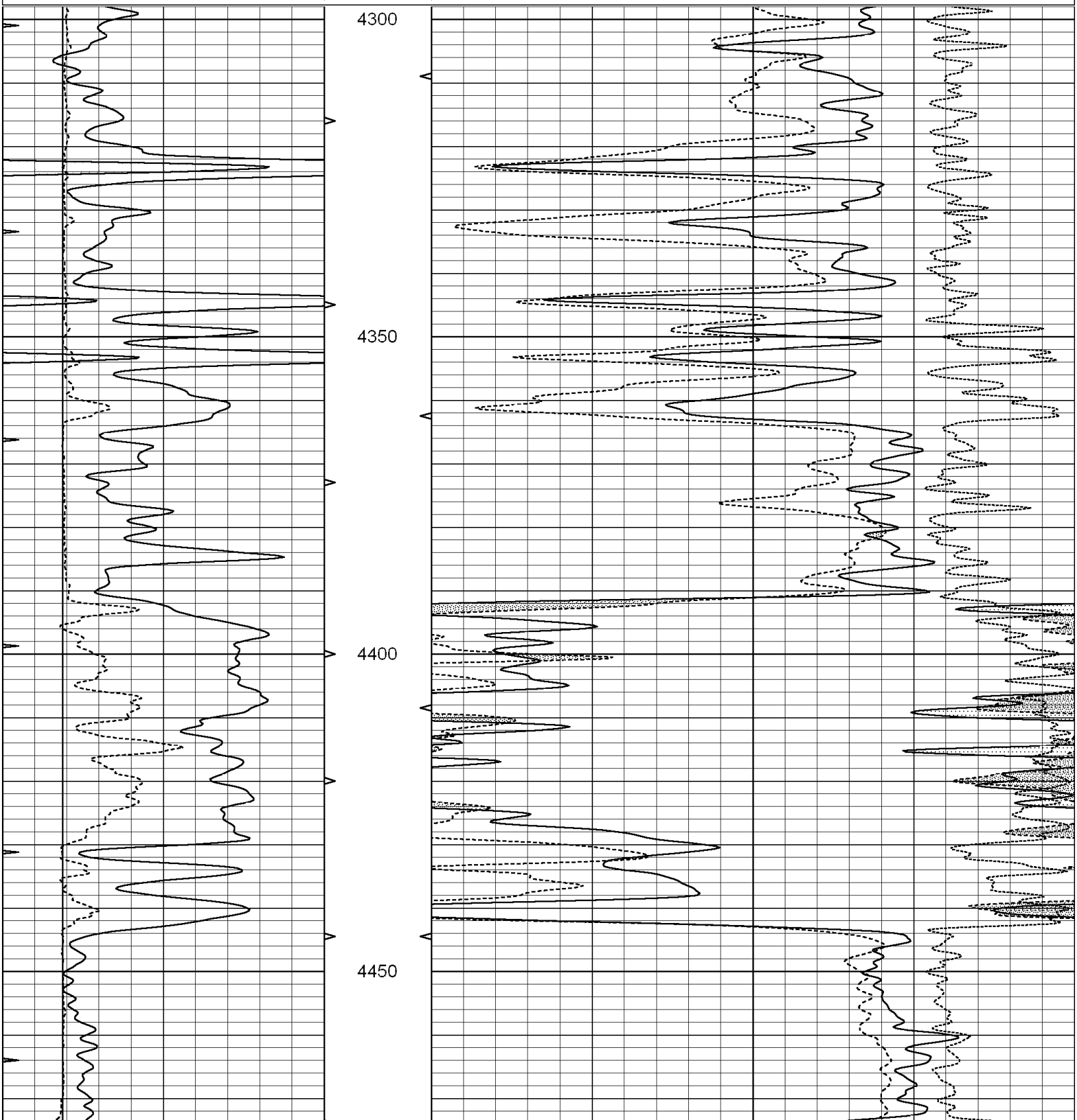
SUPERIOR WELL SERVICES

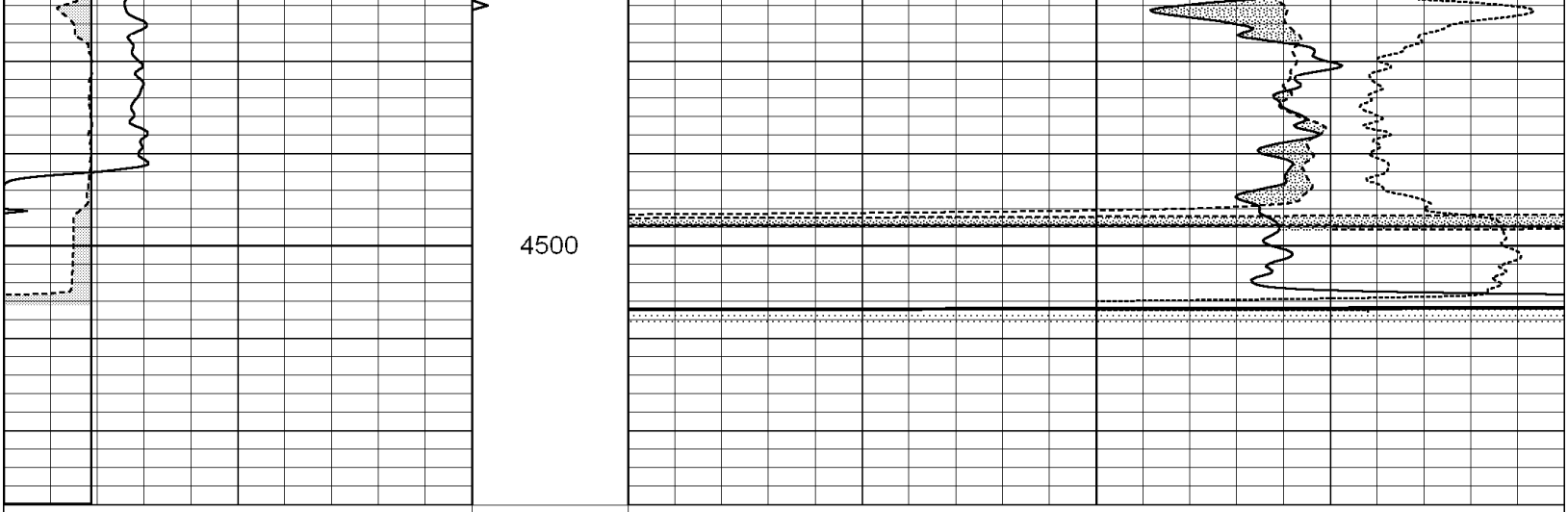
SUPERIOR
Hays,
Kansas

REPEAT SECTION

Database File: 004307ddn.db
Dataset Pathname: pass3.A
Presentation Format: den_neu
Dataset Creation: Sat Nov 14 18:45:54 2009
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		





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: 004307ddn.db
Dataset Pathname: pass4.A
Dataset Creation: Sat Nov 14 18:34:20 2009 by Calc Open-Cased 051020

Dual Induction Calibration Report

Serial-Model: DIL5-GEAR
Performed: Sat Nov 14 17:15:36 2009

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.004	0.654	V	0.000	400.000	mmho-m	580.000	-7.000
Medium	-0.005	0.737	V	0.000	462.500	mmho-m	570.000	-14.000
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

Compensated Density Calibration Report

Serial-Model: GEAR1-GEARHART
Source / Verifier: 147 / 147
Master Calibration Performed: Sat Nov 14 11:33:54 2009

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1006.91	528.07	cps
Aluminum	2.610	g/cc	233.49	355.80	cps

Spine Angle = 74.88

Density/Spine Ratio = 0.594

	Size		Reading	
Small Ring	8.00	in	3.68	V
Large Ring	14.00	in	6.06	V

Compensated Neutron Calibration Report

Serial Number:	NEU_1I
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:	Sat Nov 14 16:52:22 2009	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.5500	GAPI/cps