DUAL INDUCTION LOG

Company	LOTUS OPERATING COMPANY, LLC.
Well	#1 CHARLIE
Field	HARDTNER / STRANATHAN
County	BARBER
State	KANSAS

Company LOTUS OPERATING COMPANY, LLC.

Well #1 CHARLIE

Field HARDTNER / STRANATHAN

County BARBER State KANSAS

Location: API # : 15-007-24321-0000

S/2 - SW - SW

SEC 11 TWP 35S RGE 13W

Permanent Datum	GROUND LEVEL	Elevation 1472	Other Services CDL/CNL/PE MEL/SONIC
Log Measured From	KELLY BUSHING 8' A.G.L.		Elevation K.B. 1480
Drilling Measured From	KELLY BUSHING		D.F. 1478 G.L. 1472

Date	8/6/17			
Run Number	ONE			
Depth Driller	5650			
Depth Logger	5648			
Bottom Logged Interval	5646			
Top Log Interval	00			
Casing Driller	8 5/8"@265'			
Casing Logger	265			
Bit Size	7 7/8"			
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 3,000 PPM		
Density / Viscosity	9.1/47			
pH / Fluid Loss	11.0/10.0			
Source of Sample	FLOWLINE			
Rm @ Meas. Temp	.600@80F			
Rmf @ Meas. Temp	.450@80F			
Rmc @ Meas. Temp	.720@80F			
Source of Rmf / Rmc	MEASUREMENT			
Rm @ BHT	.366@131F			
Time Circulation Stopped	3 HOURS			
Time Logger on Bottom	6:30 A.M.			
Maximum Recorded Temperature	131F			
Equipment Number	922339			
Location	HAYS, KANSAS			
Recorded By	JEFF LUEBBERS			
Witnessed By	TIM HELLMAN			

<<< Fold Here >>>

Comments

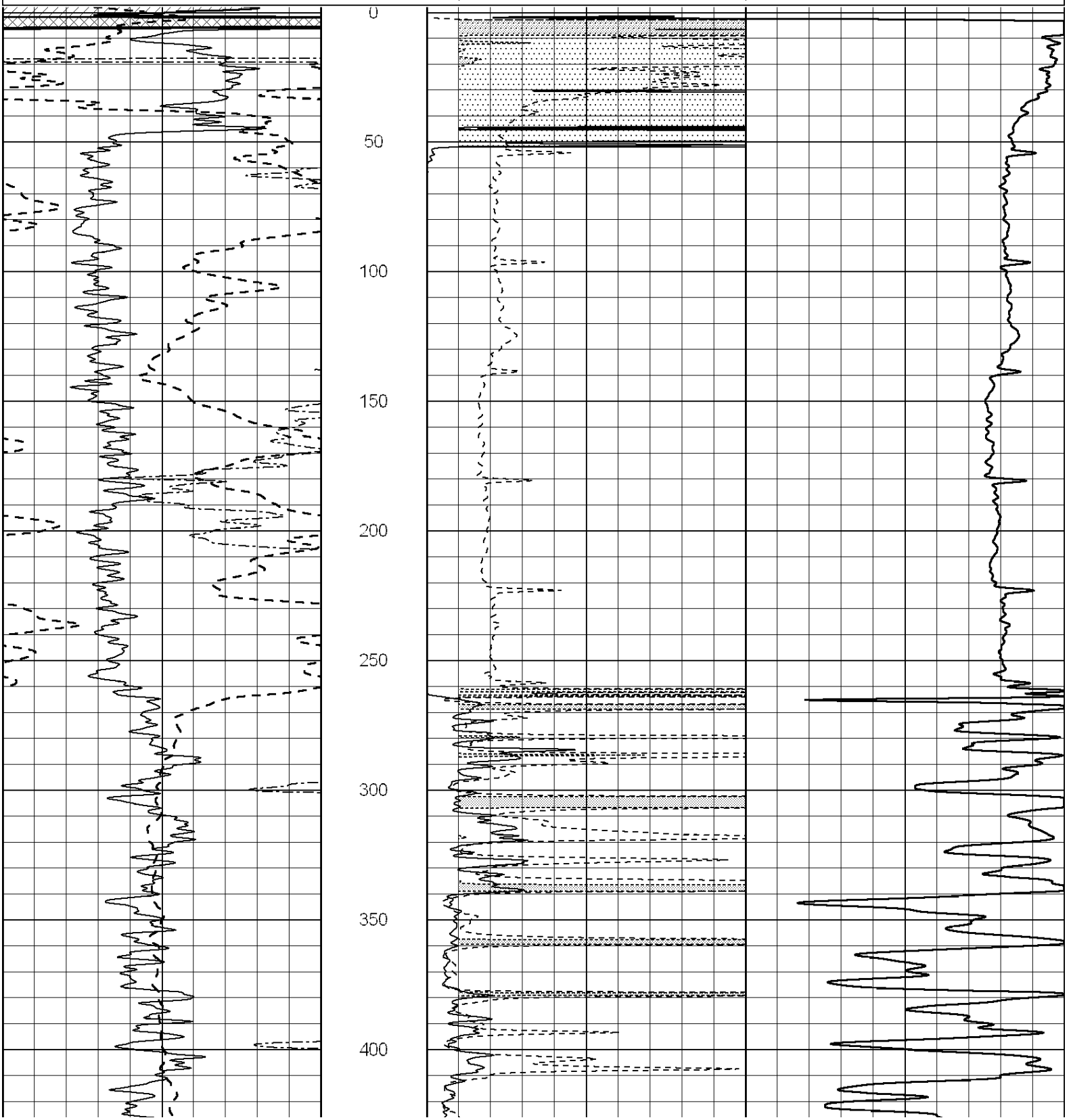
THANK YOU FOR USING ELI WIRELINE HAYS, KANSAS (785) 628-6395

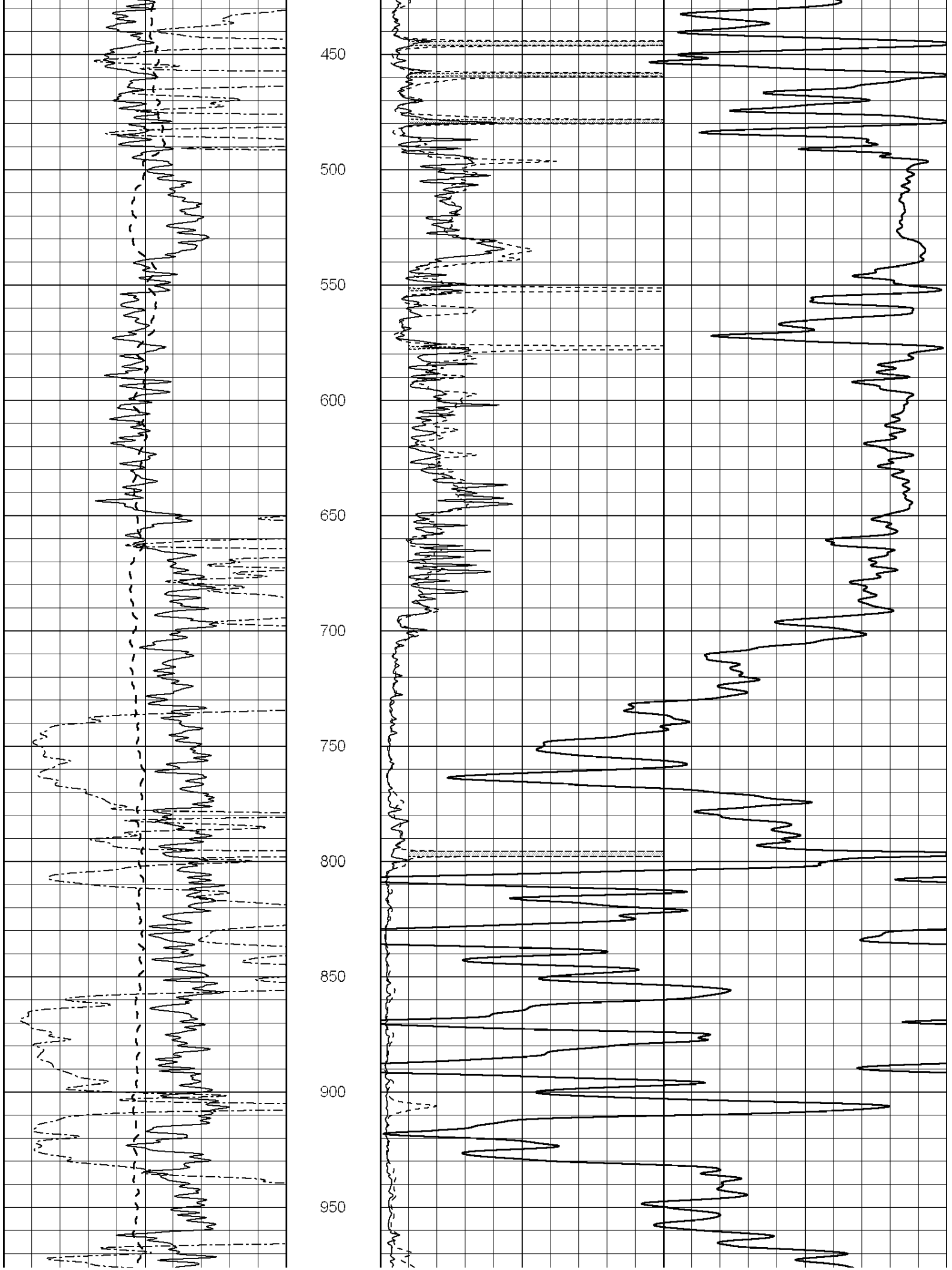
DIRECTIONS

HARDTNER, KANSAS, 3W. PAST "GYP HILL RD", S. INTO

MAIN SECTION

Database File:	1594pe.db
Dataset Pathname:	pass3.6
Presentation Format:	dil2
Dataset Creation:	Sun Aug 06 08:23:28 2017
Charted by:	Depth in Feet scaled 1:600

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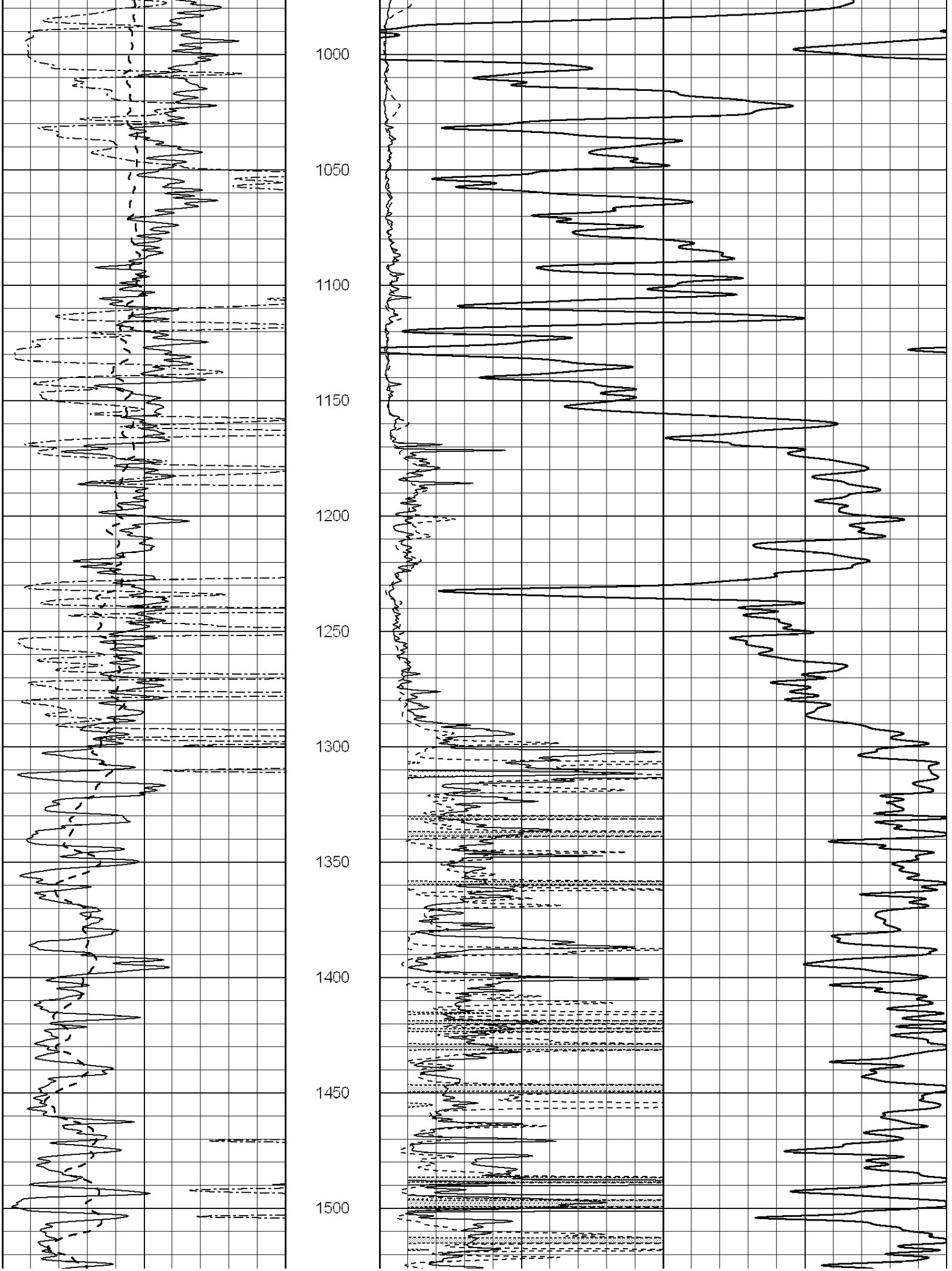
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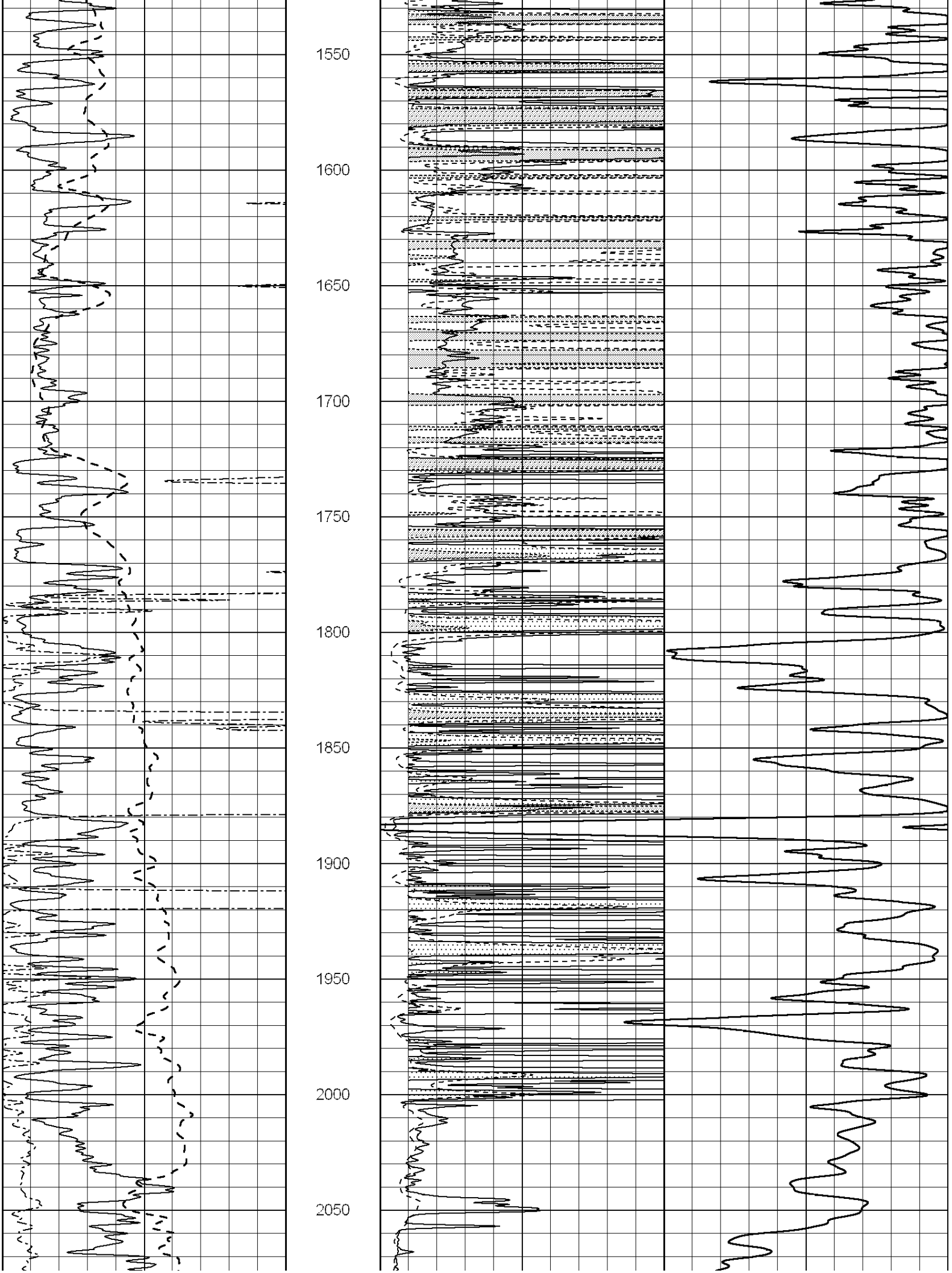
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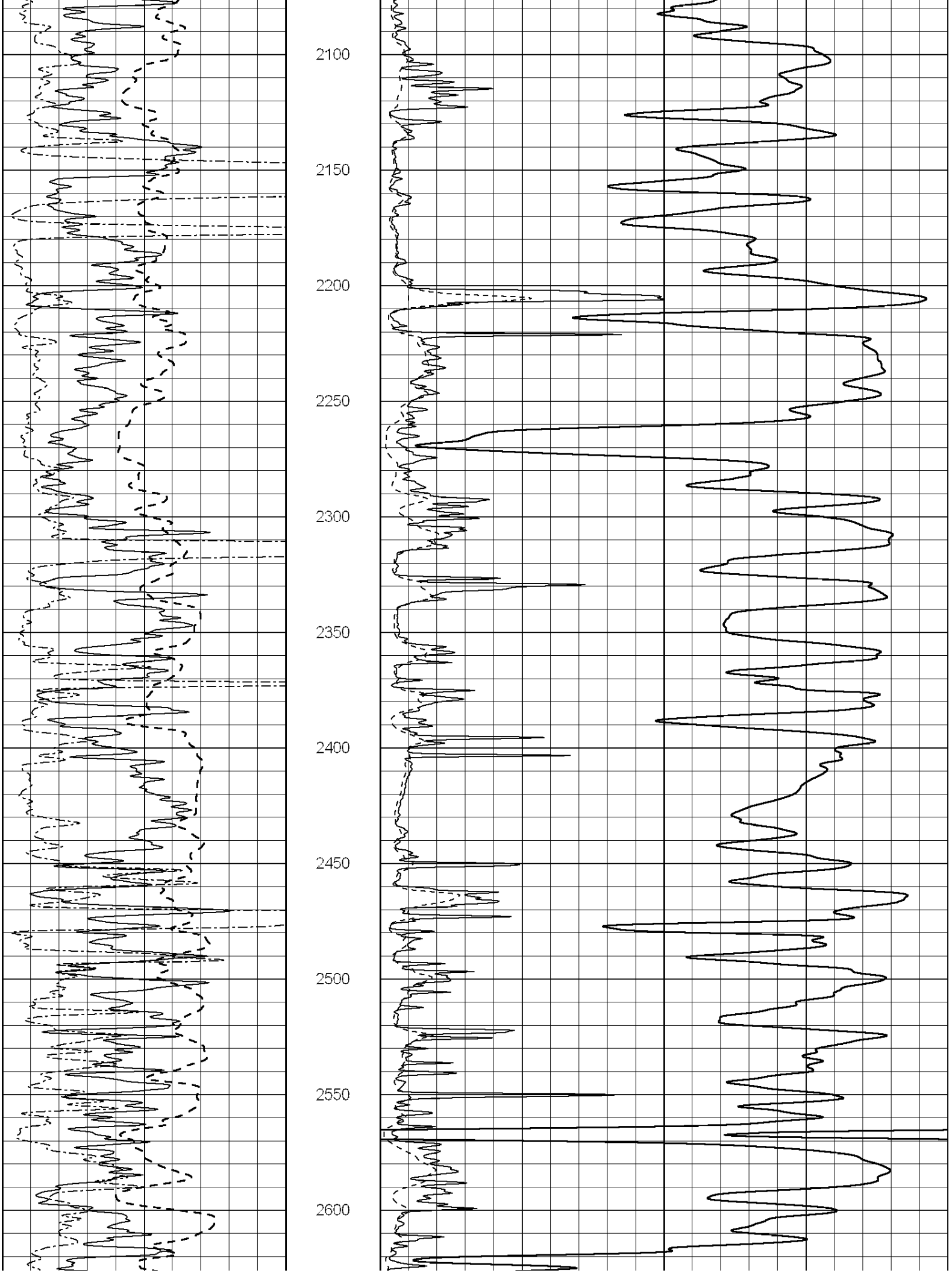
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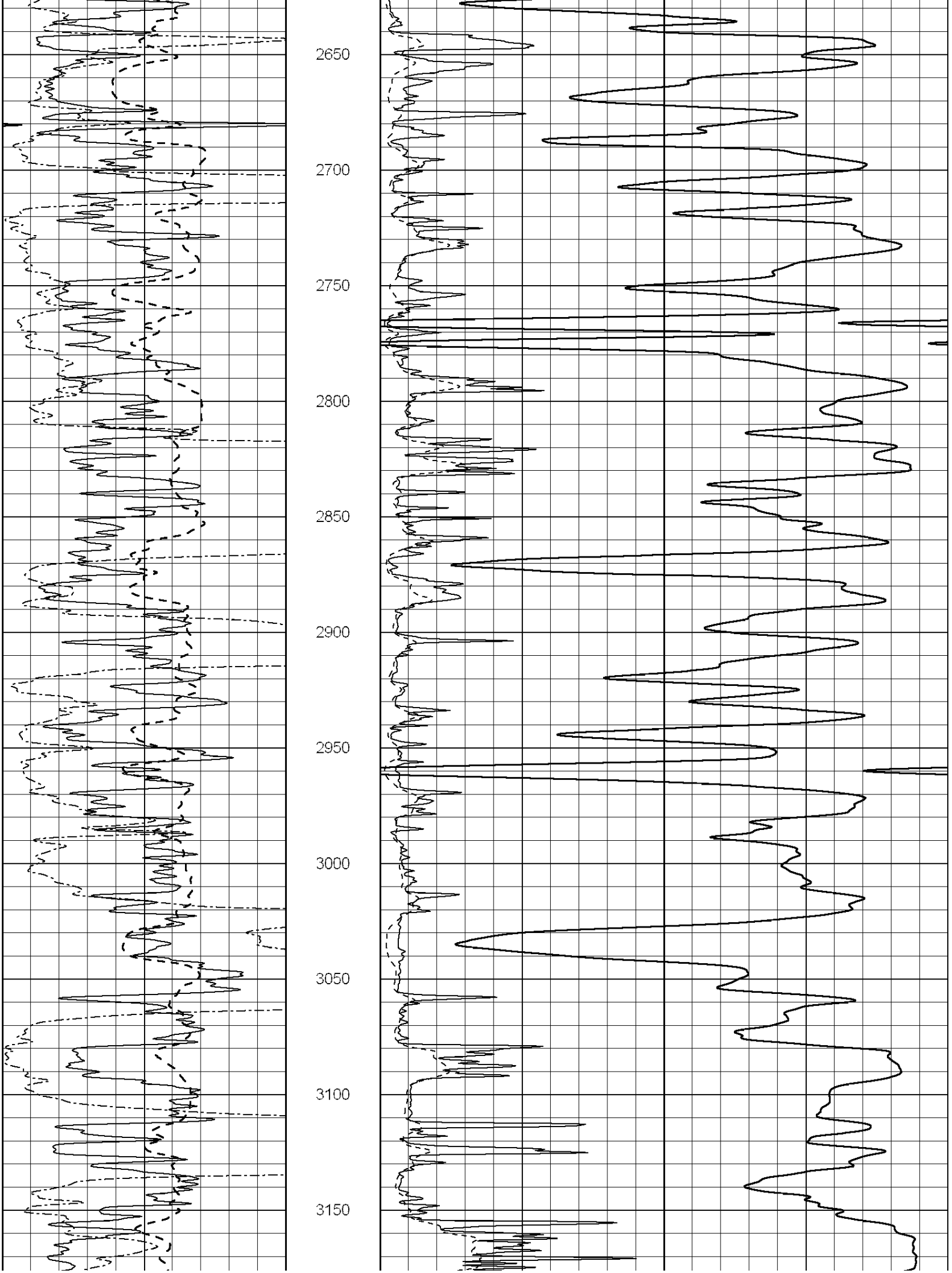
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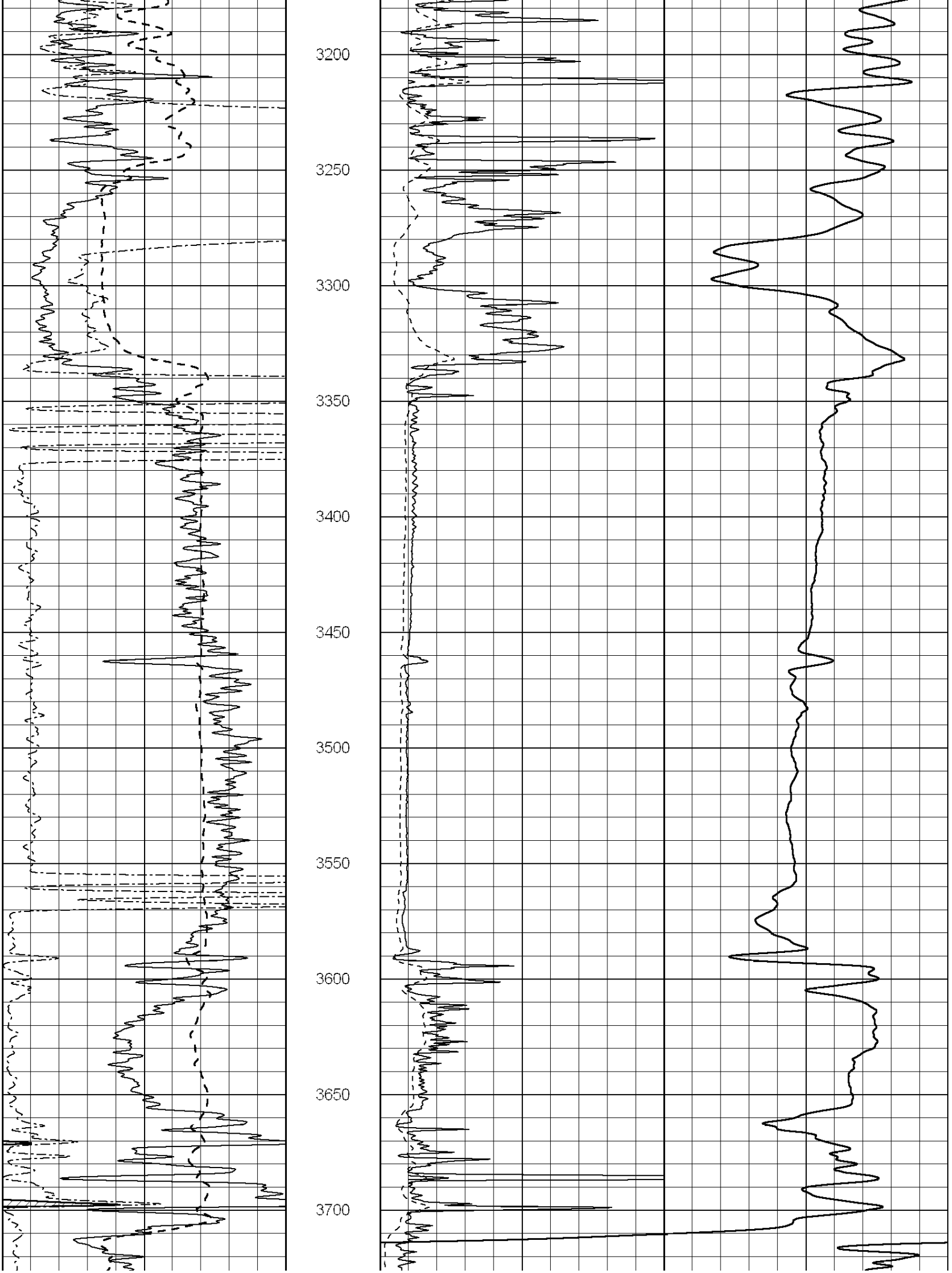
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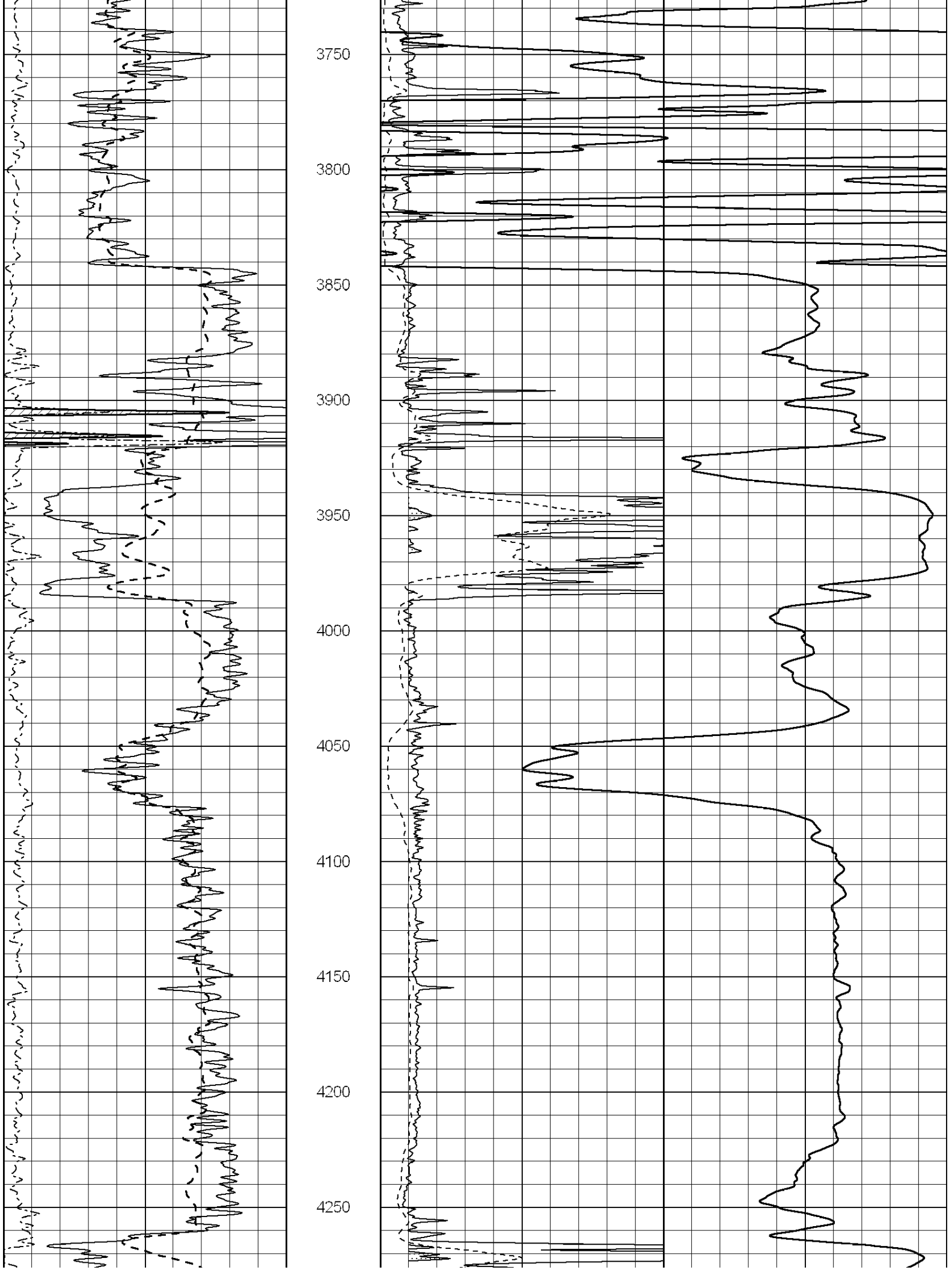
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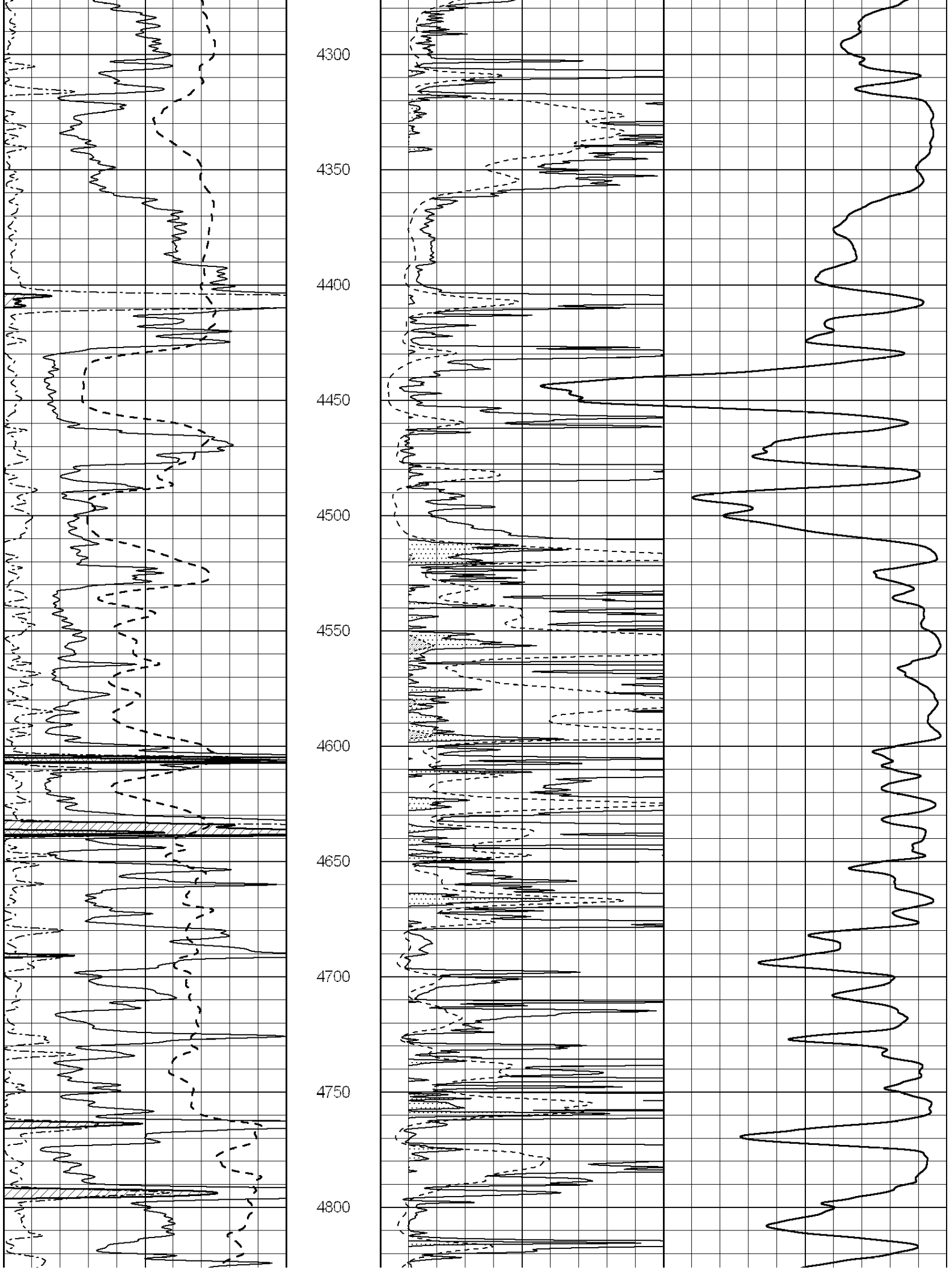
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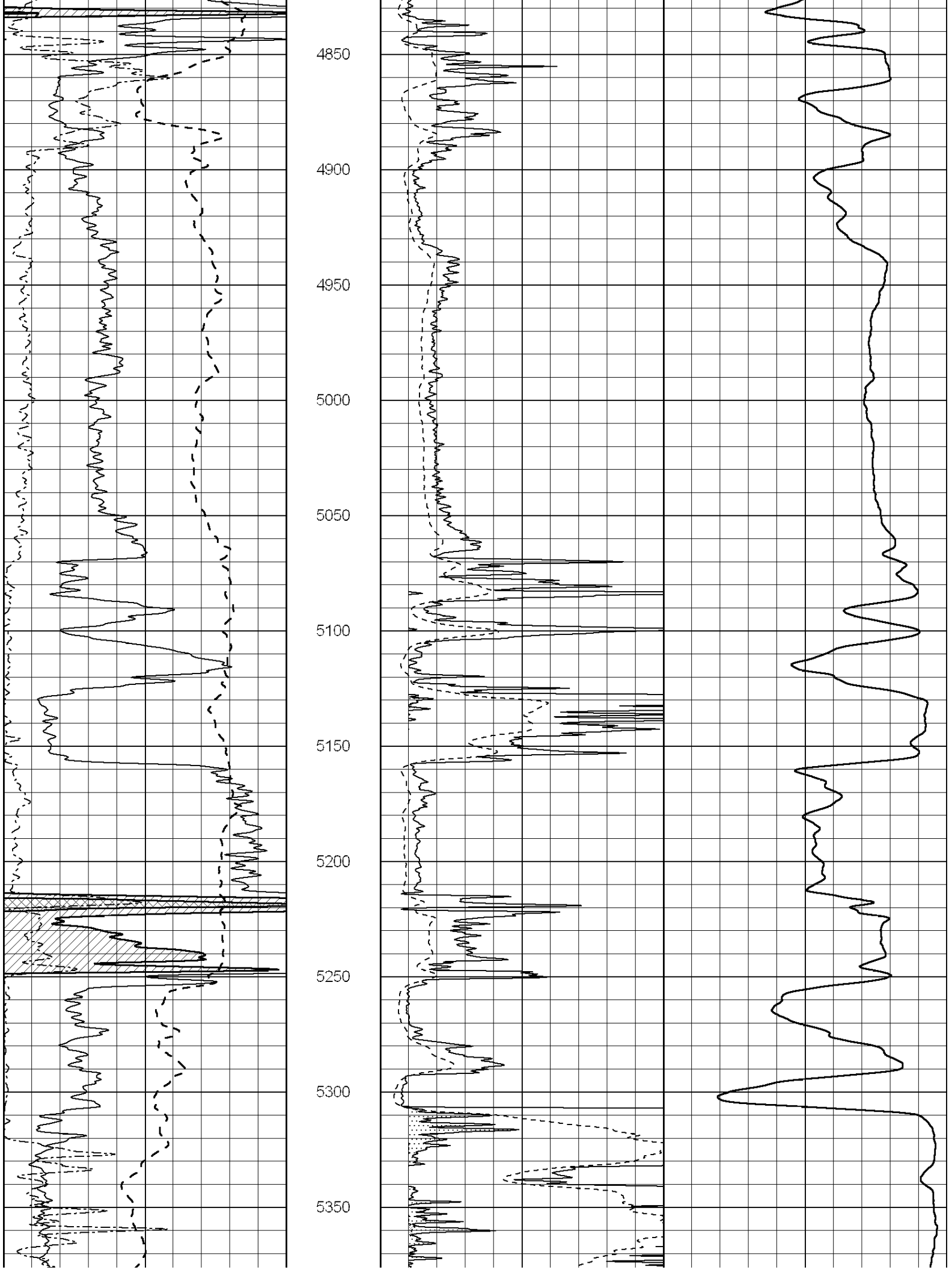
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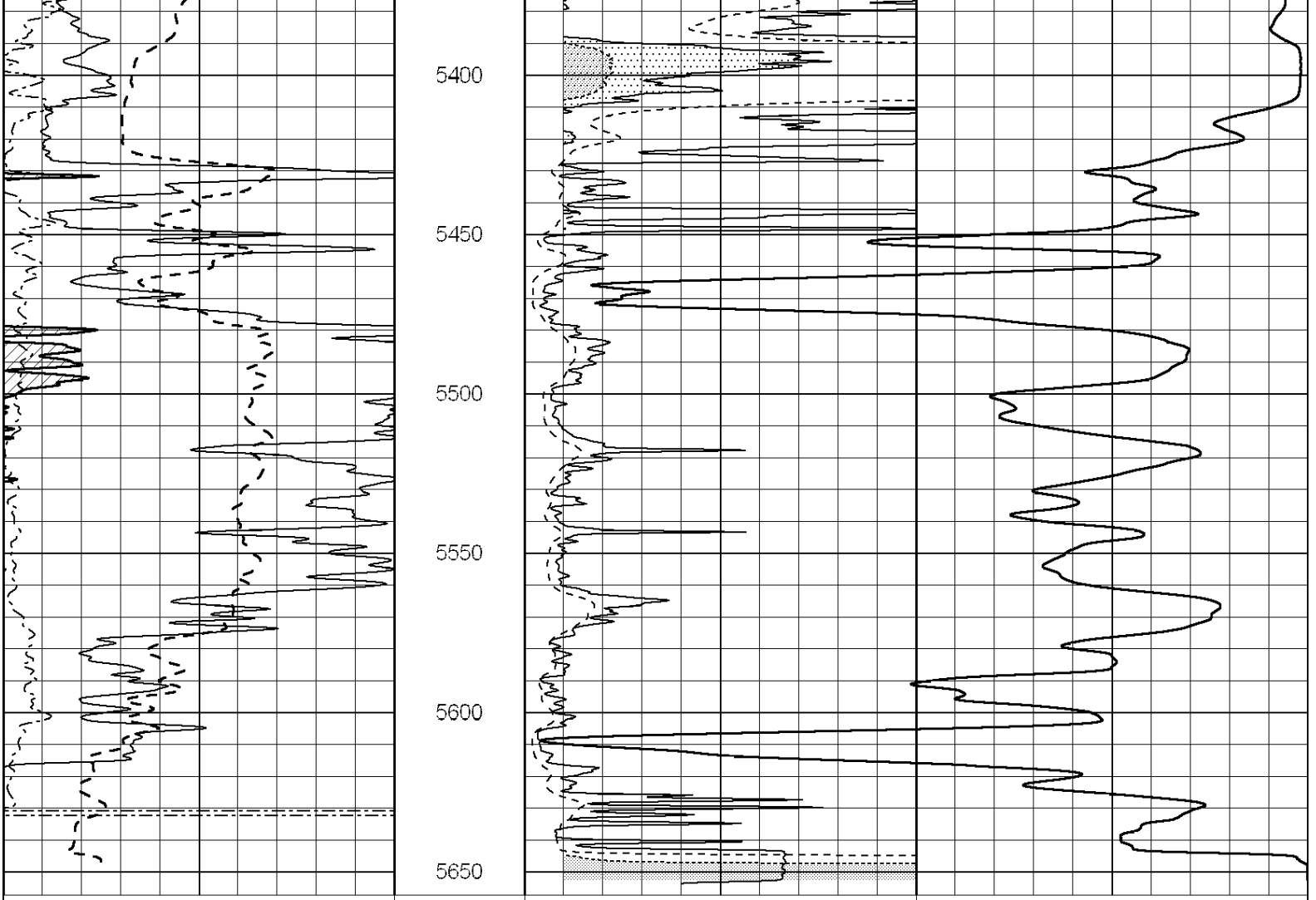
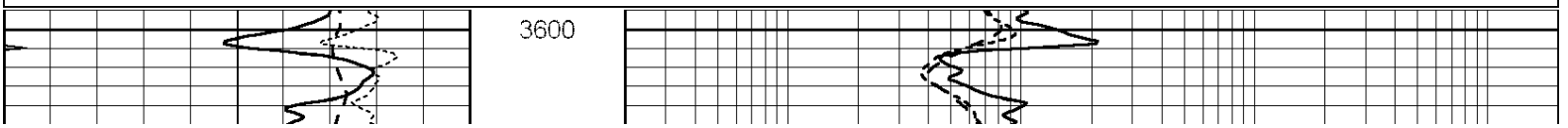


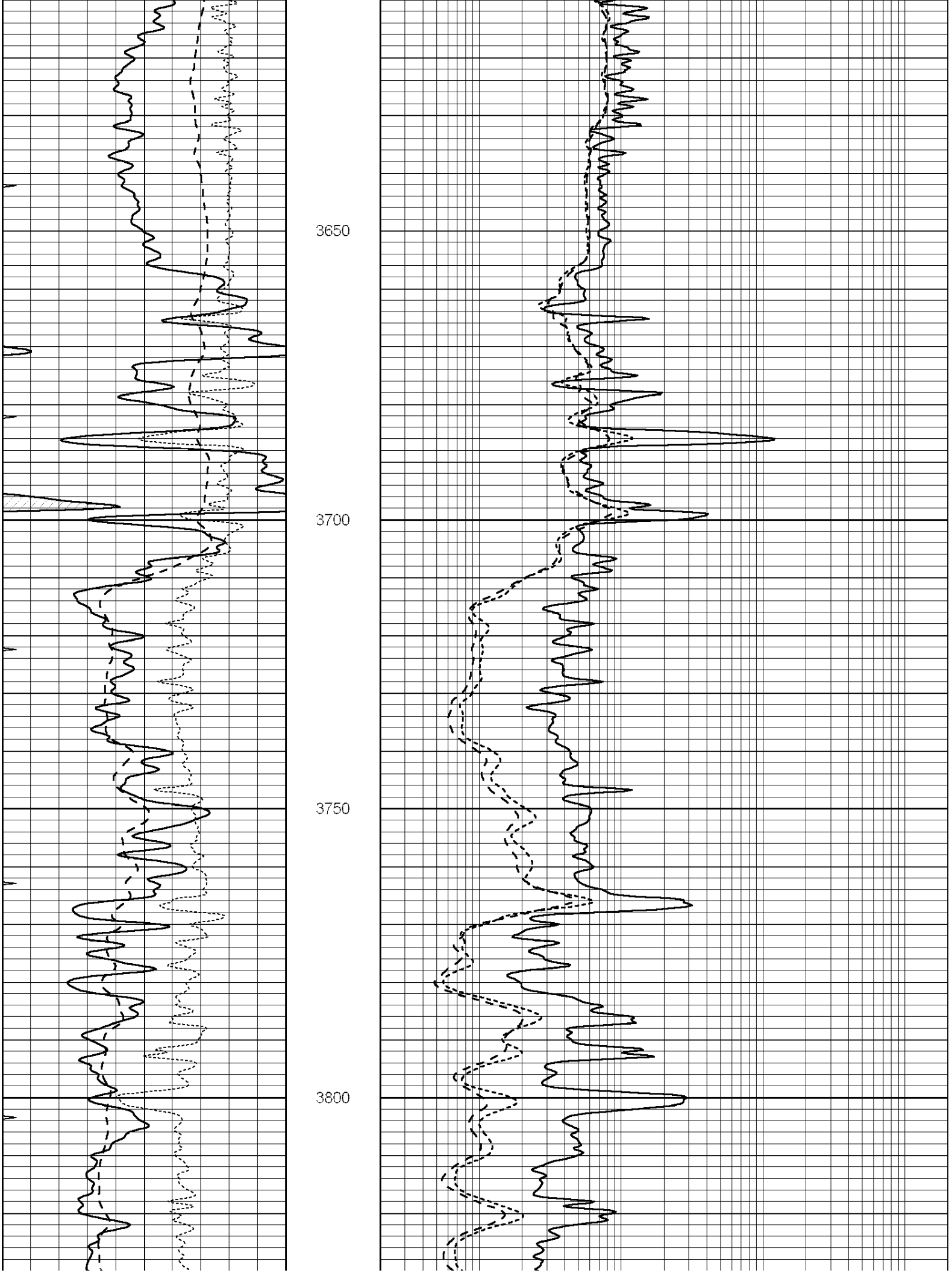
MAIN SECTION

Database File:	1594pe.db
Dataset Pathname:	pass3.6
Presentation Format:	_dil
Dataset Creation:	Sun Aug 06 08:23:28 2017
Charted by:	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

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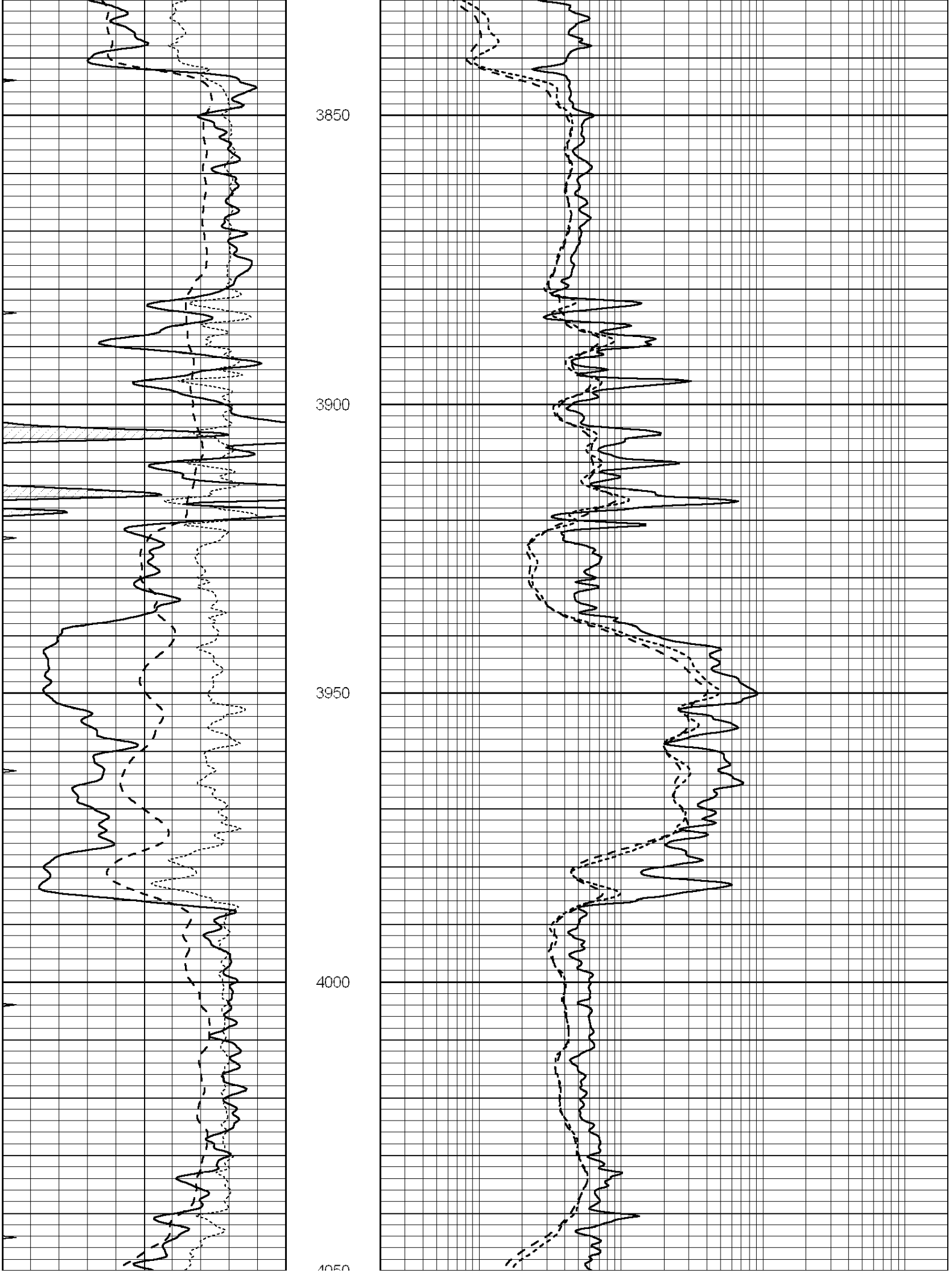
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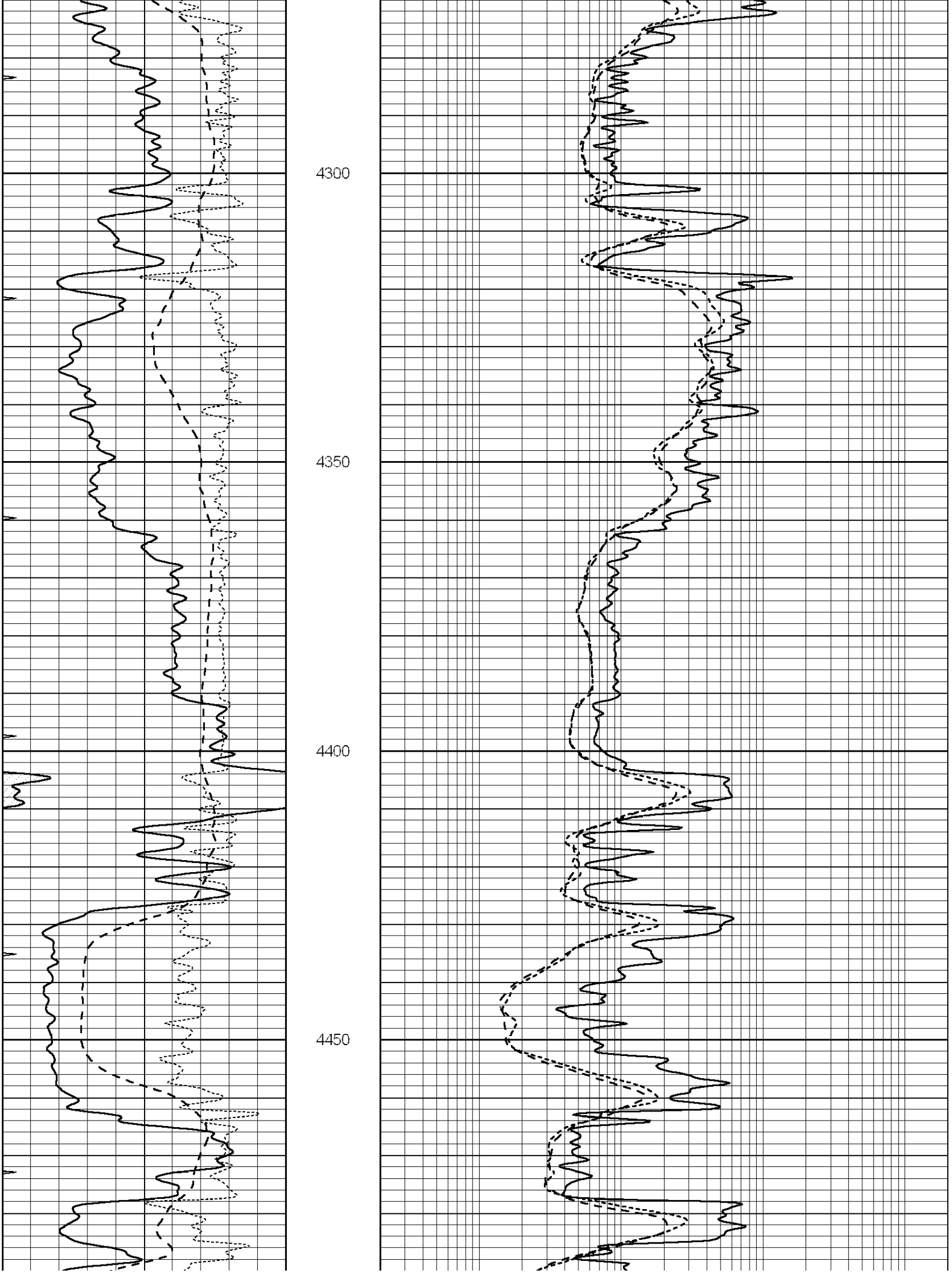
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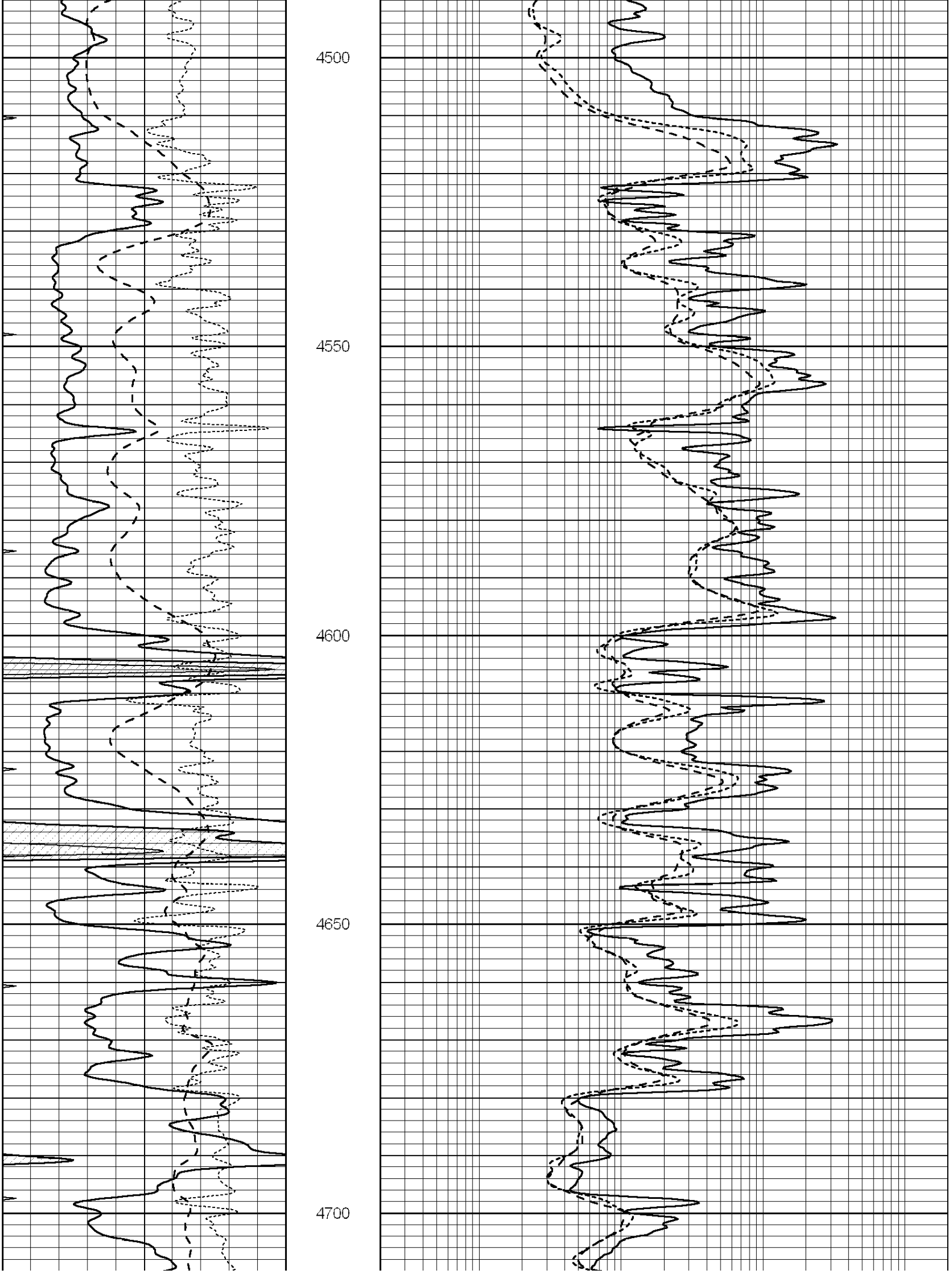
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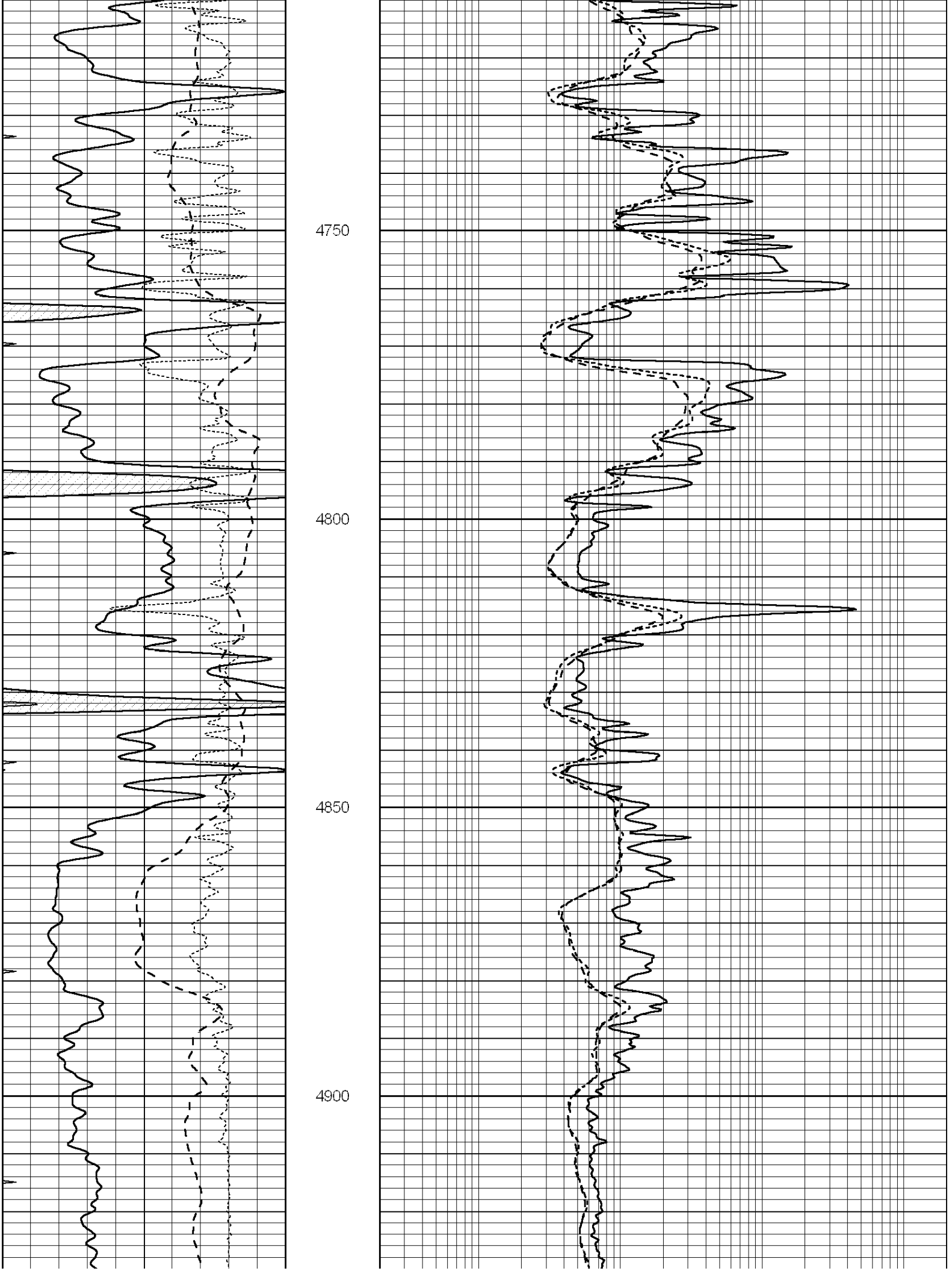
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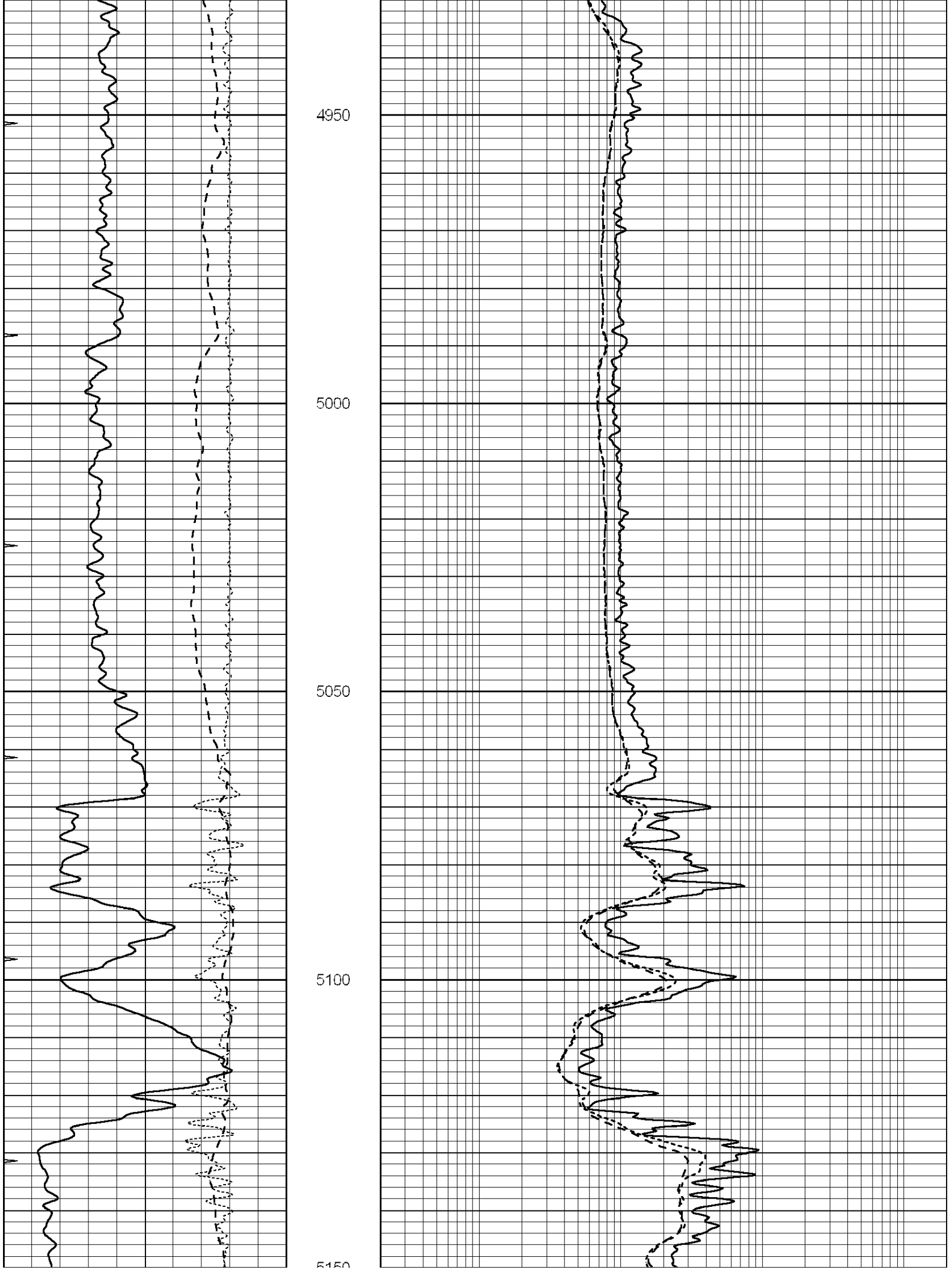
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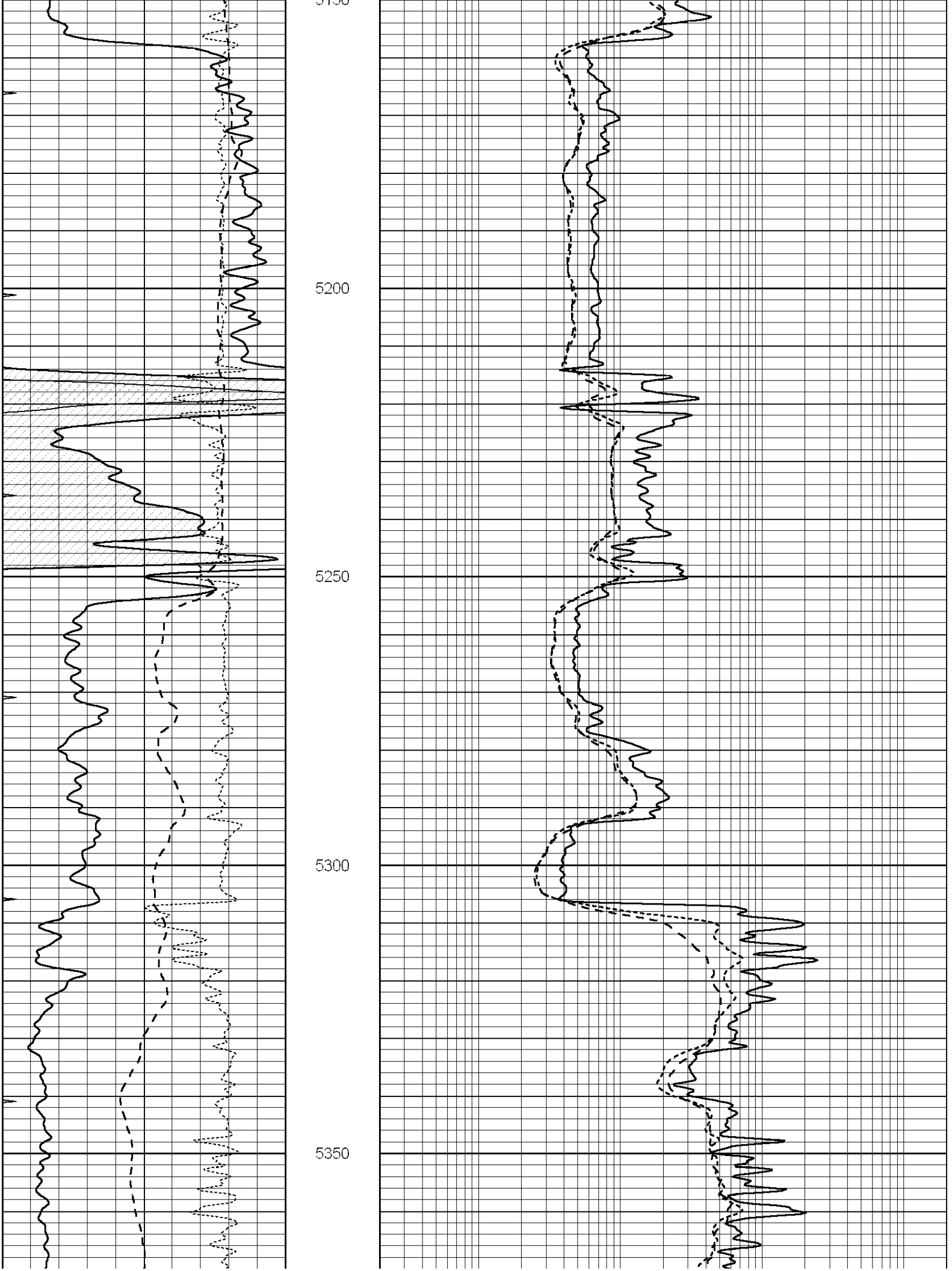
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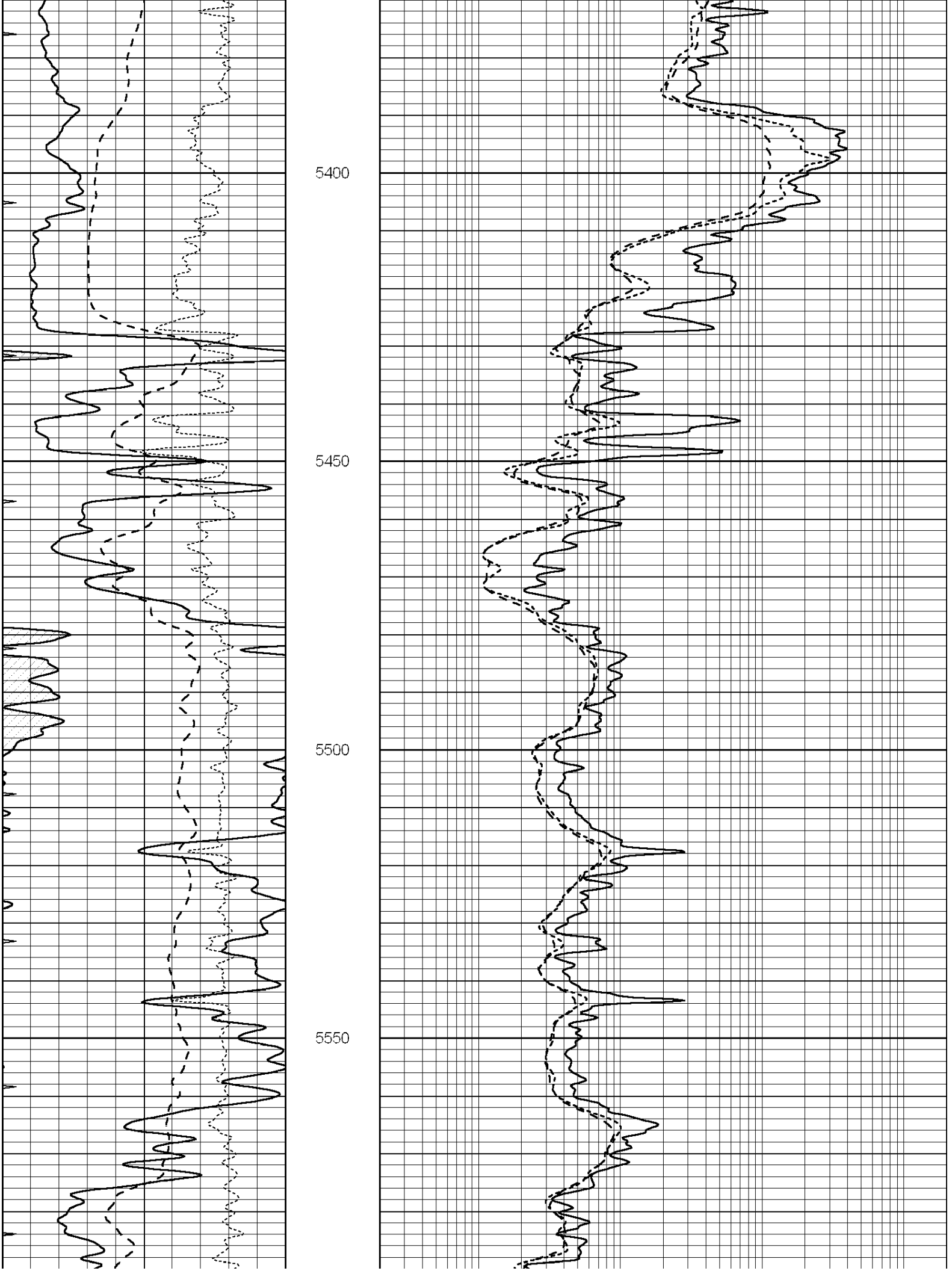
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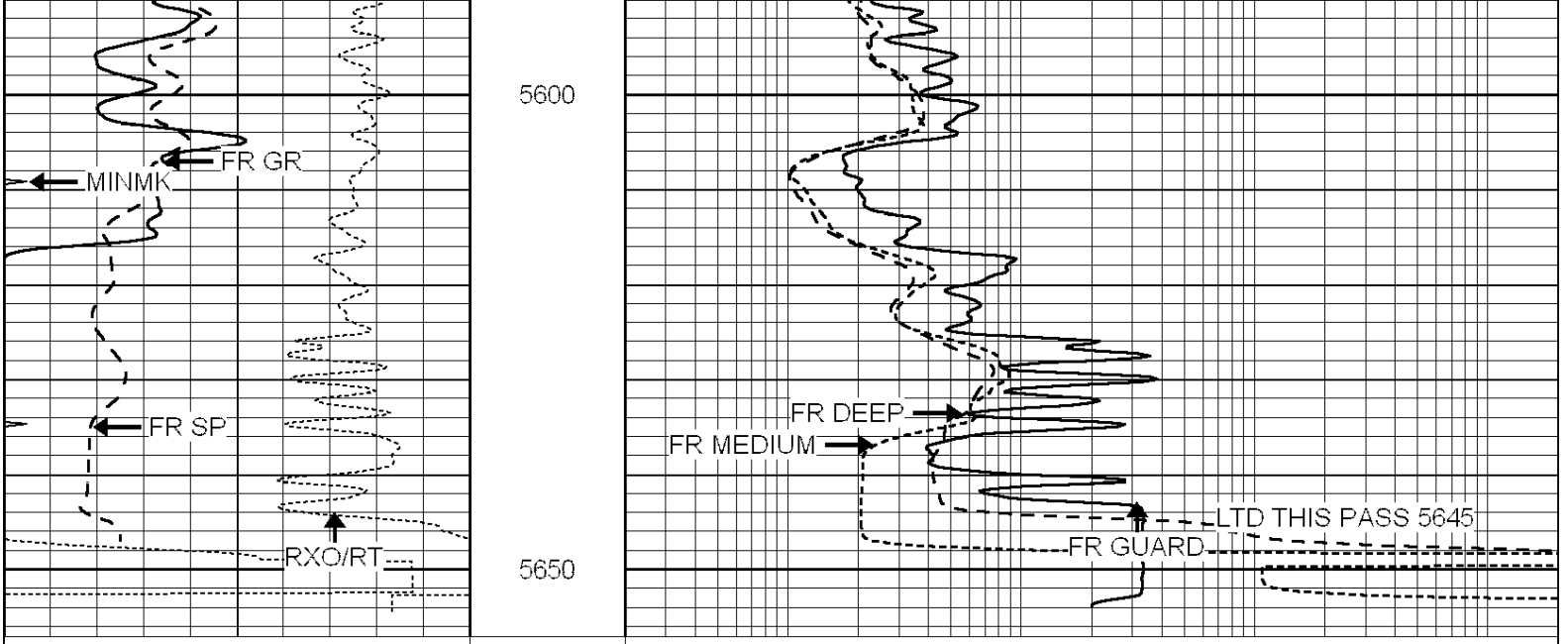


0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

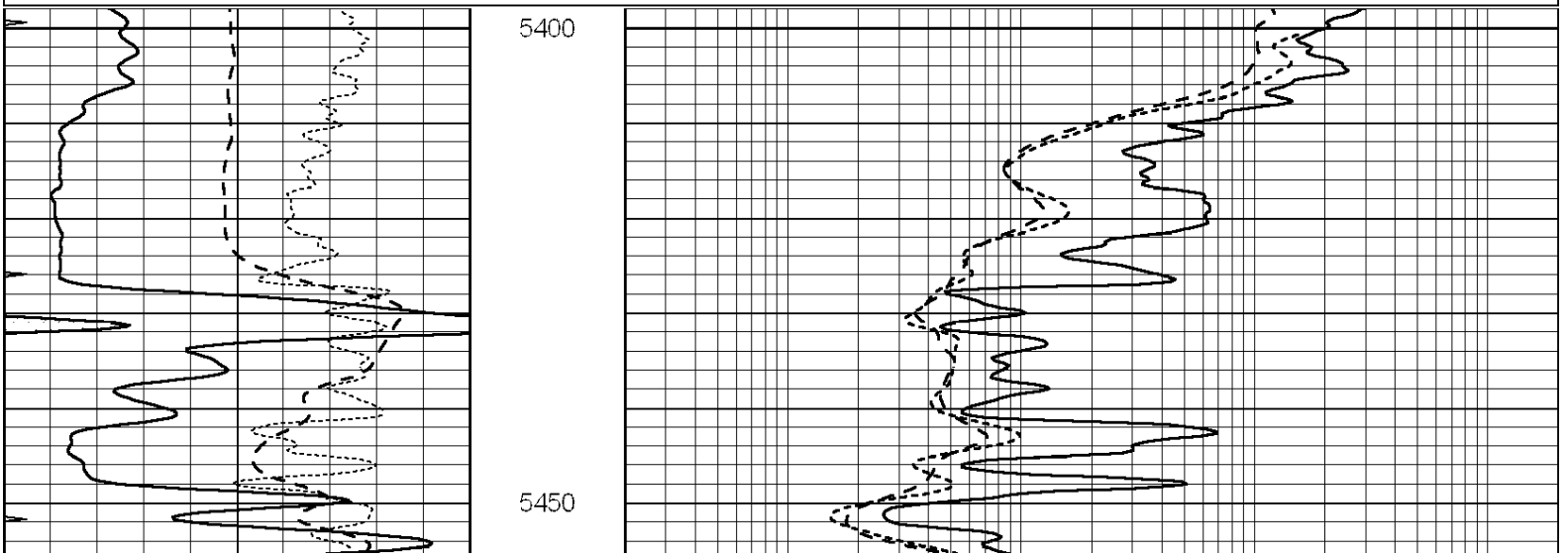
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

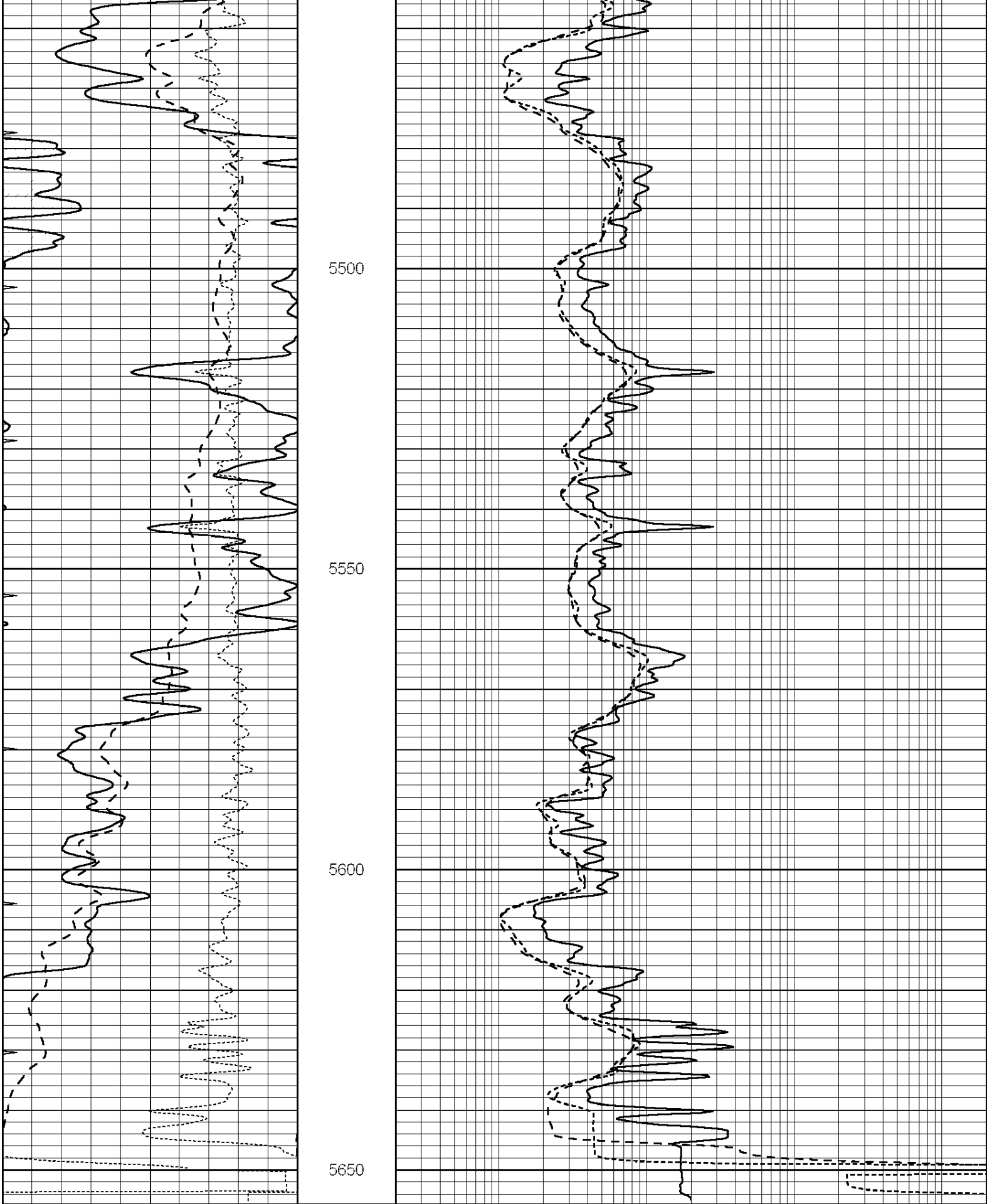
REPEAT SECTION

Database File: 1594pe.db
Dataset Pathname: pass2.4
Presentation Format: _dil
Dataset Creation: Sun Aug 06 08:25:11 2017 by Calc SOC 120430
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000





0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

Calibration Report

Database File: 1594pe.db
Dataset Pathname: pass3.6
Dataset Creation: Sun Aug 06 08:23:28 2017

Dual Induction Calibration Report

Serial-Model:	PROBE7-DILG
Surface Cal Performed:	Sun Aug 06 06:28:46 2017
Downhole Cal Performed:	Mon Jul 28 12:02:56 2008
After Survey Verification Performed:	Mon Jul 28 12:02:56 2008

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	620.000	2.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	675.000	-42.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.011	0.610	V	0.000	400.000	mmho/m	667.135	-7.256
Medium	0.005	0.712	V	0.000	464.000	mmho/m	655.677	-3.102

Downhole Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	14.508	388.384	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	166.367	504.400	mmho/m	1.000	0.000
LL3		7.500	V		1400.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		4000.000	mmho-m		

After Survey Verification

	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		

Litho Density Calibration Report

Serial: 003N Model: PRB

Master Calibration

Performed Mon Mar 14 08:48:13 2016

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1751.3	11741.0	3857.3	12907.8	cps
Window 2	1589.4	9536.2	3267.6	10282.0	cps
Window 3	1413.4	6466.1	2463.2	6828.7	cps
Window 4	399.5	407.1	405.1	406.5	cps
Long Space	0.0	7946.7	1678.1	8692.6	cps
Short Space	2.2	3366.2	2134.1	3410.2	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe		0.0000	2.5700	1.5500	

Rib Angle	: 43.7	Rib Slope	: 0.954	Density/Spine Ratio	: 0.543
Spine Angle	: 73.7	Spine Slope	: 3.412	Spine Intercept	: -18.7

Before Survey Verification — Performed Wed Dec 31 18:00:00 1969

Window 1	0.0	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc
Measured Pe			0.0000	0.0000	

After Survey Verification — Performed Wed Dec 31 18:00:00 1969

Window 1	0.0	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc
Measured Pe			0.0000	0.0000	

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: 070558
Tool Model: OPEN_GR
Performed: Wed May 31 00:09:32 2017

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.2800 GAPI/cps