SUPERIOR WELL SERVICES

SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

Company	LOTUS OPERATING CO., LLC.
Well	SUZIE #6
Field	STRANATHAN
County	BARBER
State	KANSAS

Company LOTUS OPERATING COMPANY, LLC.

Well SUZIE #6

Field STRANATHAN

County BARBER State KANSAS

Location: API # : 15-007-23766-0000
330' FSL & 2145' FWL
W/2 - SE - SE - SW
SEC 30 TWP 34S RGE 11W

Other Services
CDL/CNL/PE
MEL/SON

Permanent Datum	GROUND LEVEL	Elevation 1398	Elevation
Log Measured From	KELLY BUSHING 13' A.G.L.		K.B. 1411
Drilling Measured From	KELLY BUSHING		D.F. 1409
			G.L. 1398

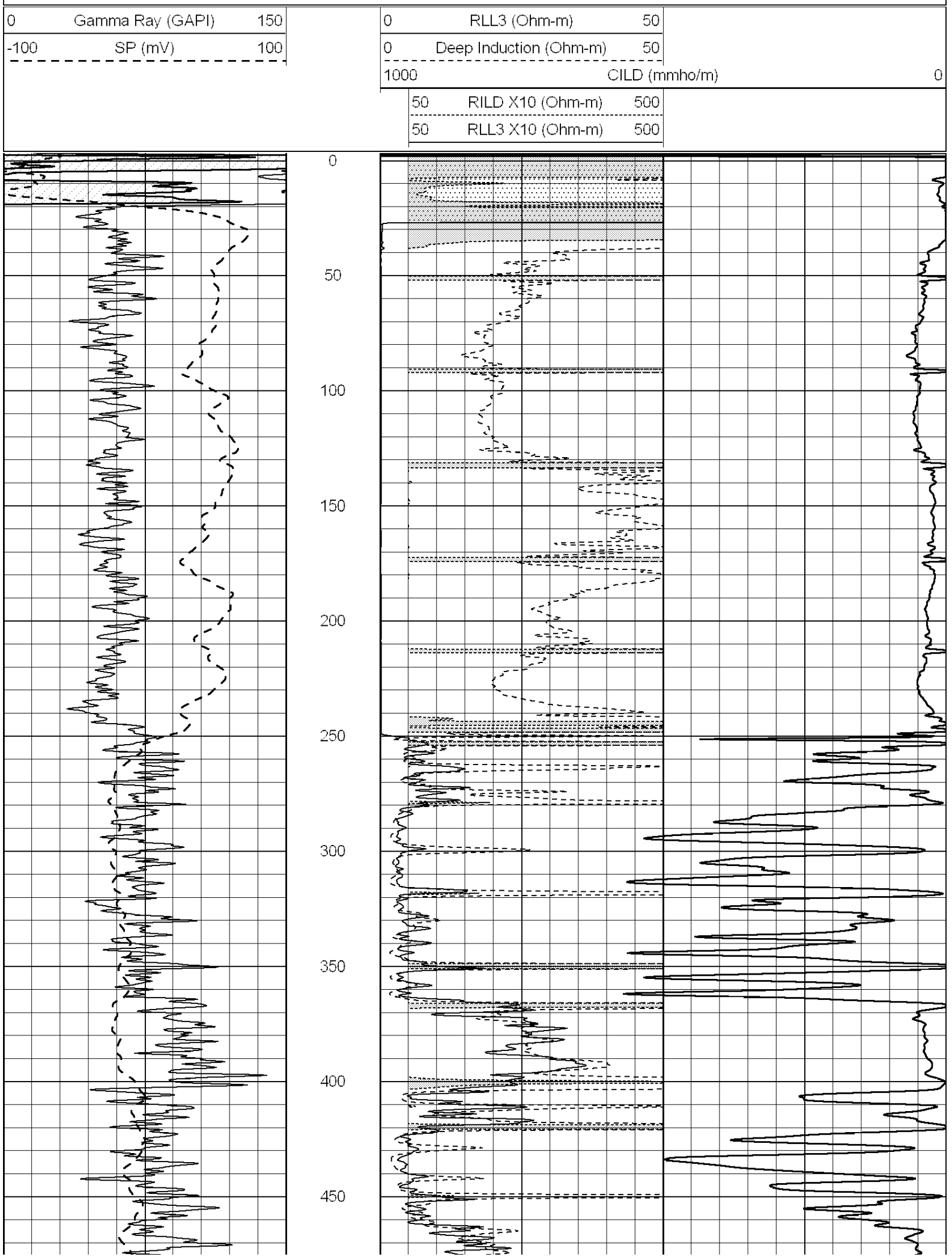
Date	9/20/11		
Run Number	ONE		
Depth Driller	5450		
Depth Logger	5454		
Bottom Logged Interval	5452		
Top Log Interval	0		
Casing Driller	10 3/4" @ 255		
Casing Logger	252		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 2000 PPM	
Density / Viscosity	9.4/52		
pH / Fluid Loss	10.0/9.6		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.65 @ 97F		
Rmf @ Meas. Temp	0.49 @ 97F		
Rmc @ Meas. Temp	0.78 @ 97F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	0.49 @ 129F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	129F		
Equipment Number	680		
Location	HAYS, KS.		
Recorded By	JEFF GRONEWEG		
Witnessed By	WES HANSEN		

<<< Fold Here >>>

Comments

THANK YOU FOR USING SUPERIOR WELL SERVICE (785) 628-6395
DIRECTIONS
MEDICINE LODGE, KS - 16 MILES SOUTH TO RATTLESNAKE RD
3/8 MILE EAST - NORTH INTO

Database File:	007715pe.db
Dataset Pathname:	pass3.6
Presentation Format:	_dil2
Dataset Creation:	Tue Sep 20 20:35:36 2011 by Calc Open-Cased 090629
Charted by:	Depth in Feet scaled 1:600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-100 SP (mV) 100
0 RLL3 (Ohm-m) 50
0 Deep Induction (Ohm-m) 50
1000 CILD (mmho/m) 0
50 RILD X10 (Ohm-m) 500
50 RLL3 X10 (Ohm-m) 500
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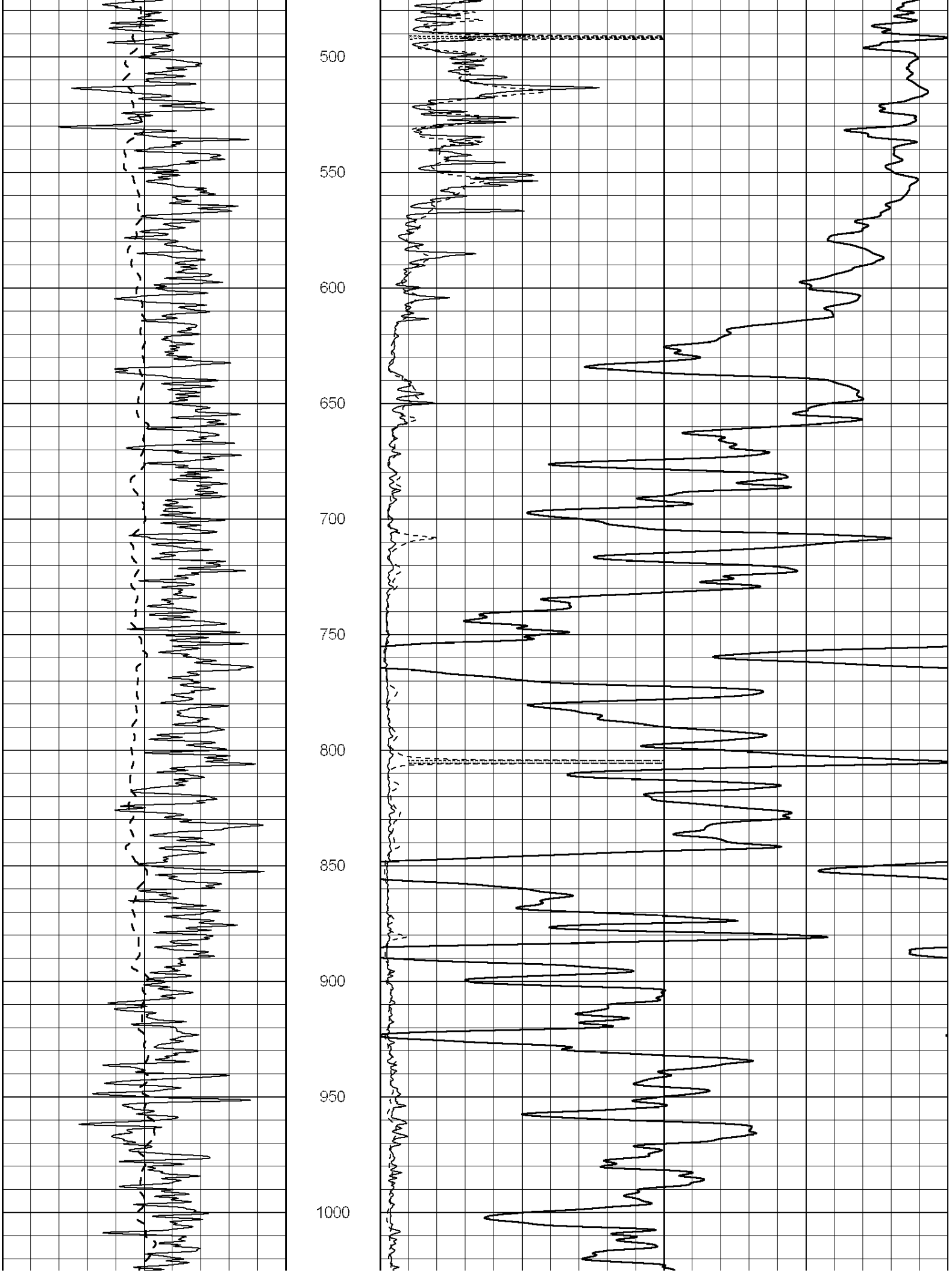
50
100
150
200
250
300
350
400
450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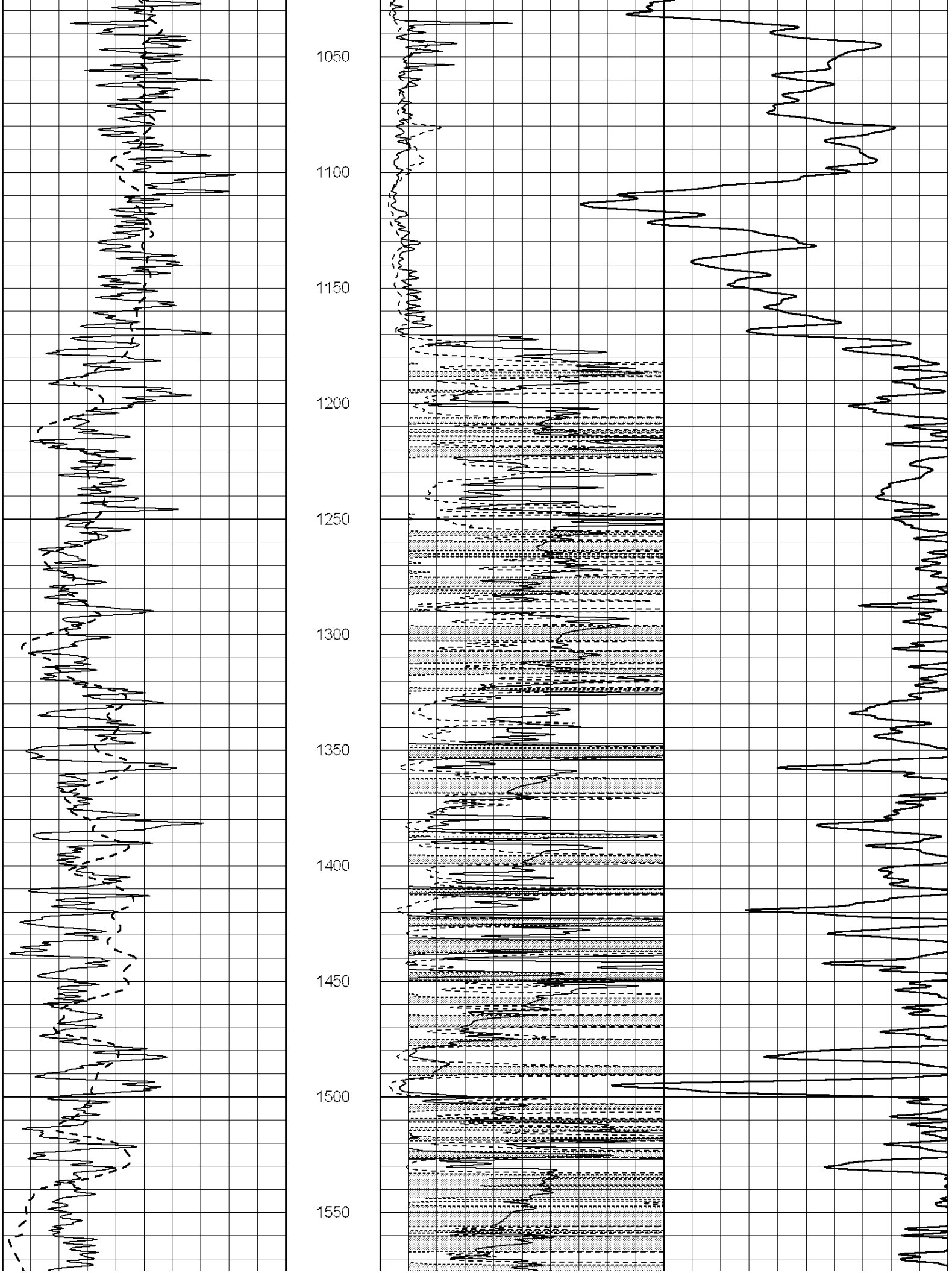
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1200
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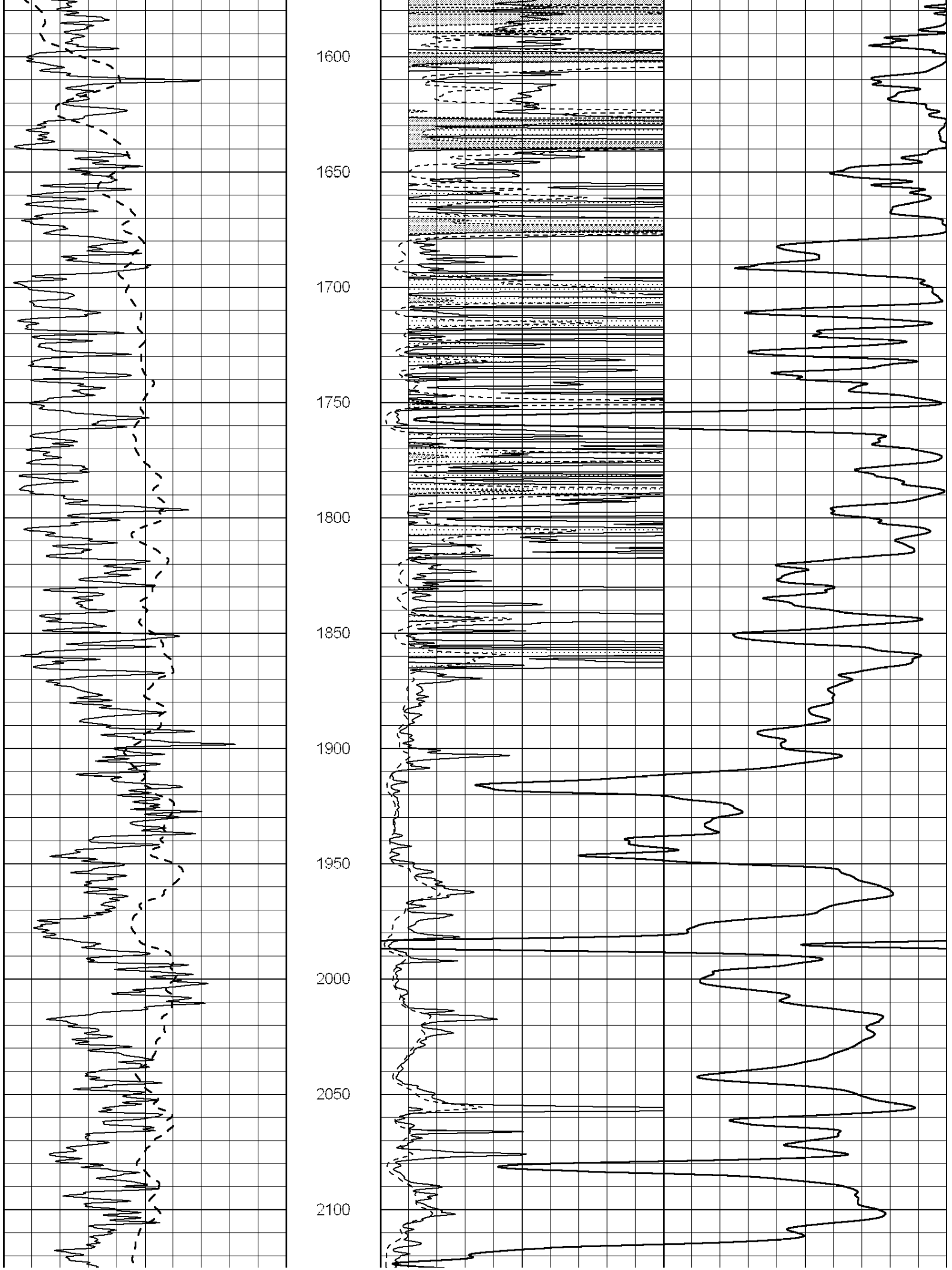
1300
1350
1400
1450
1500
1550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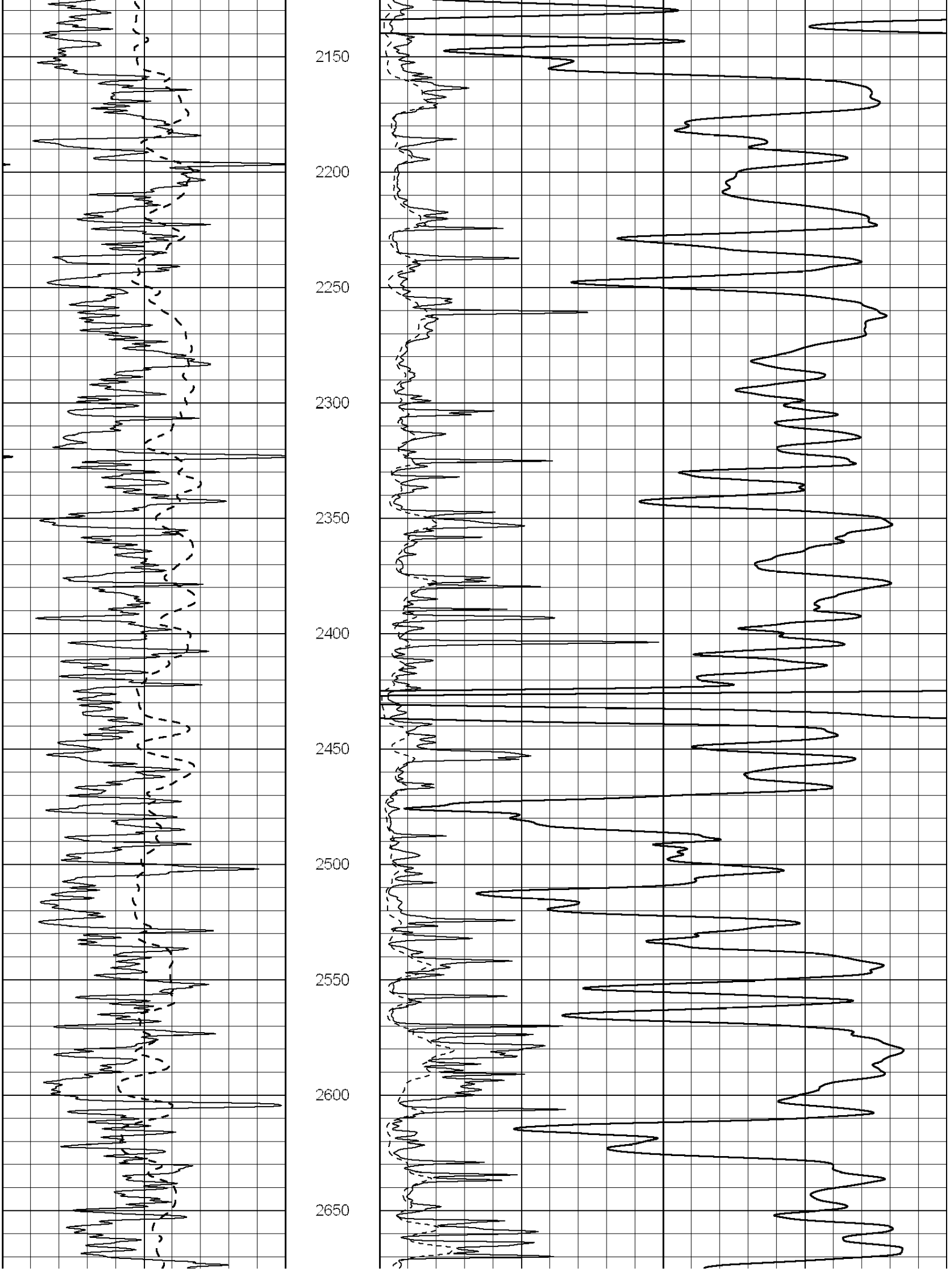
2050
2100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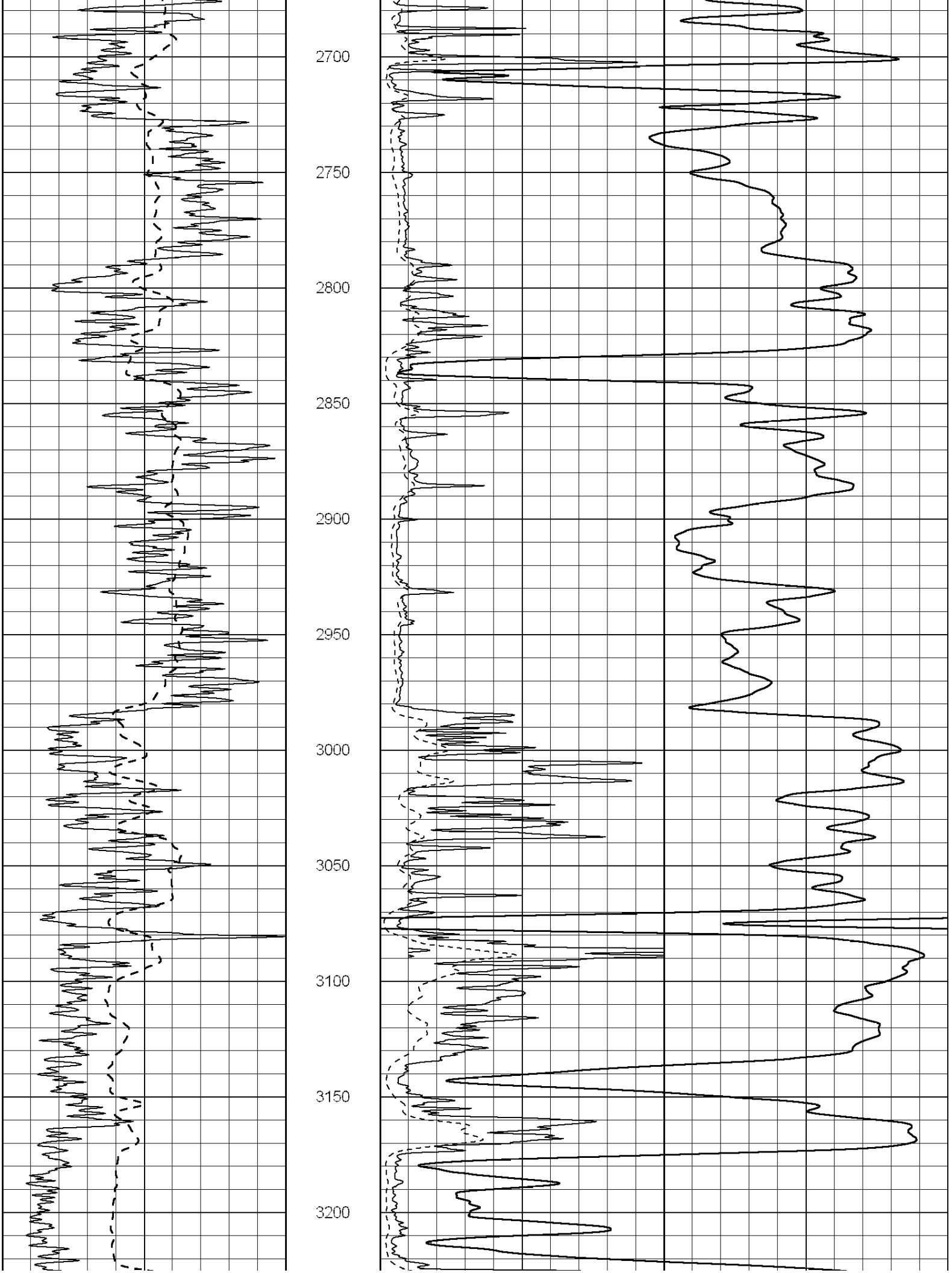
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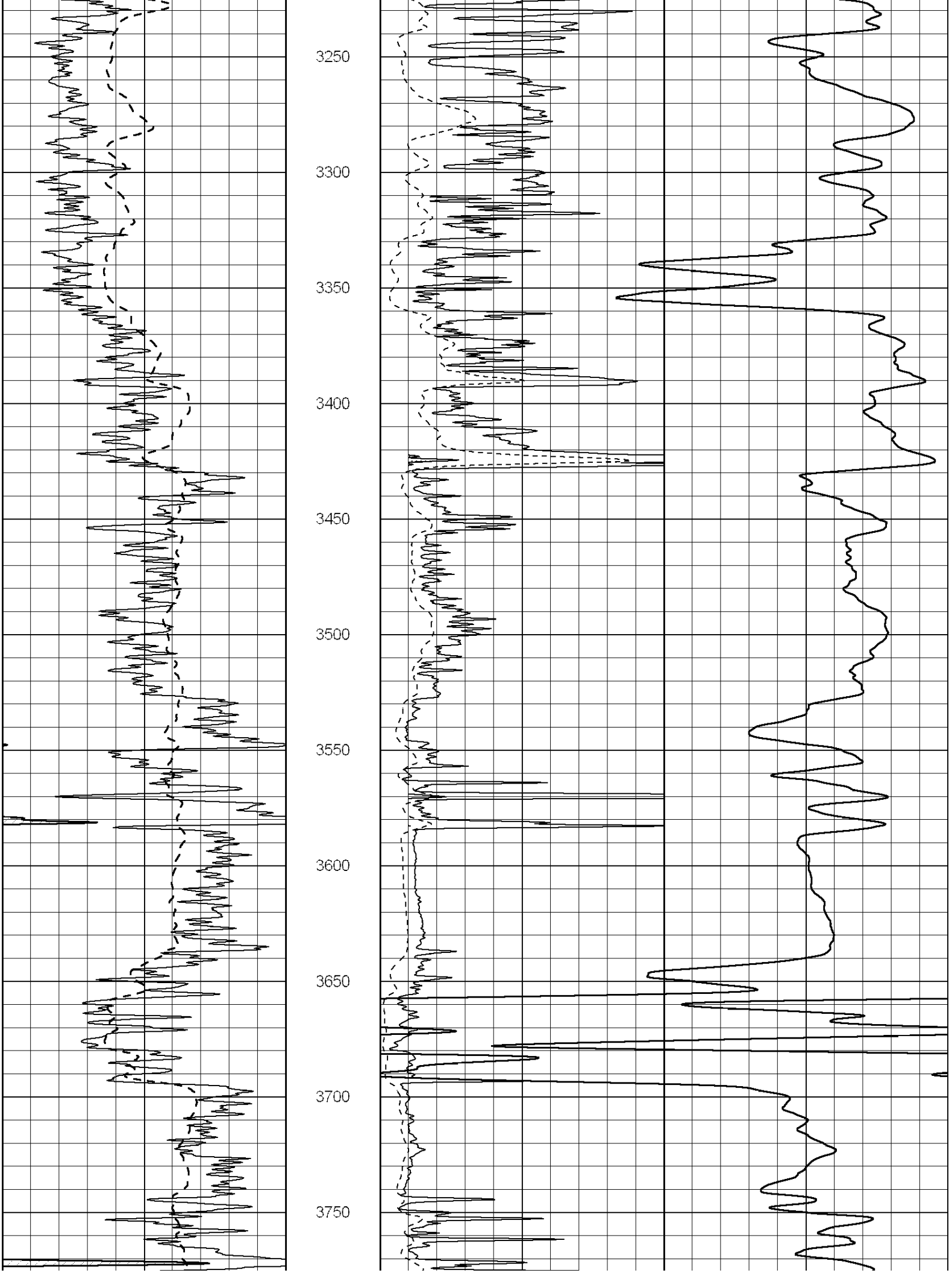
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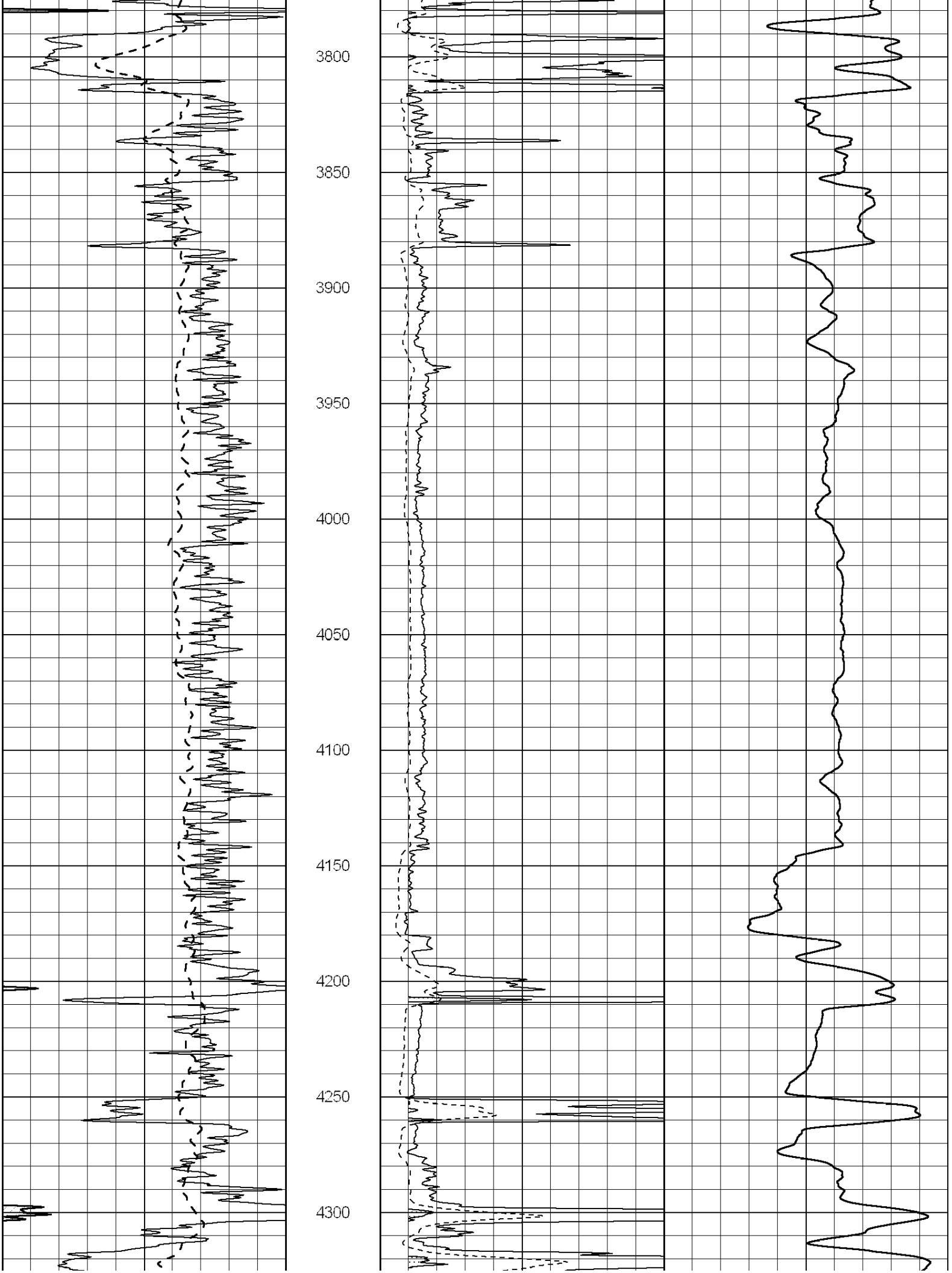
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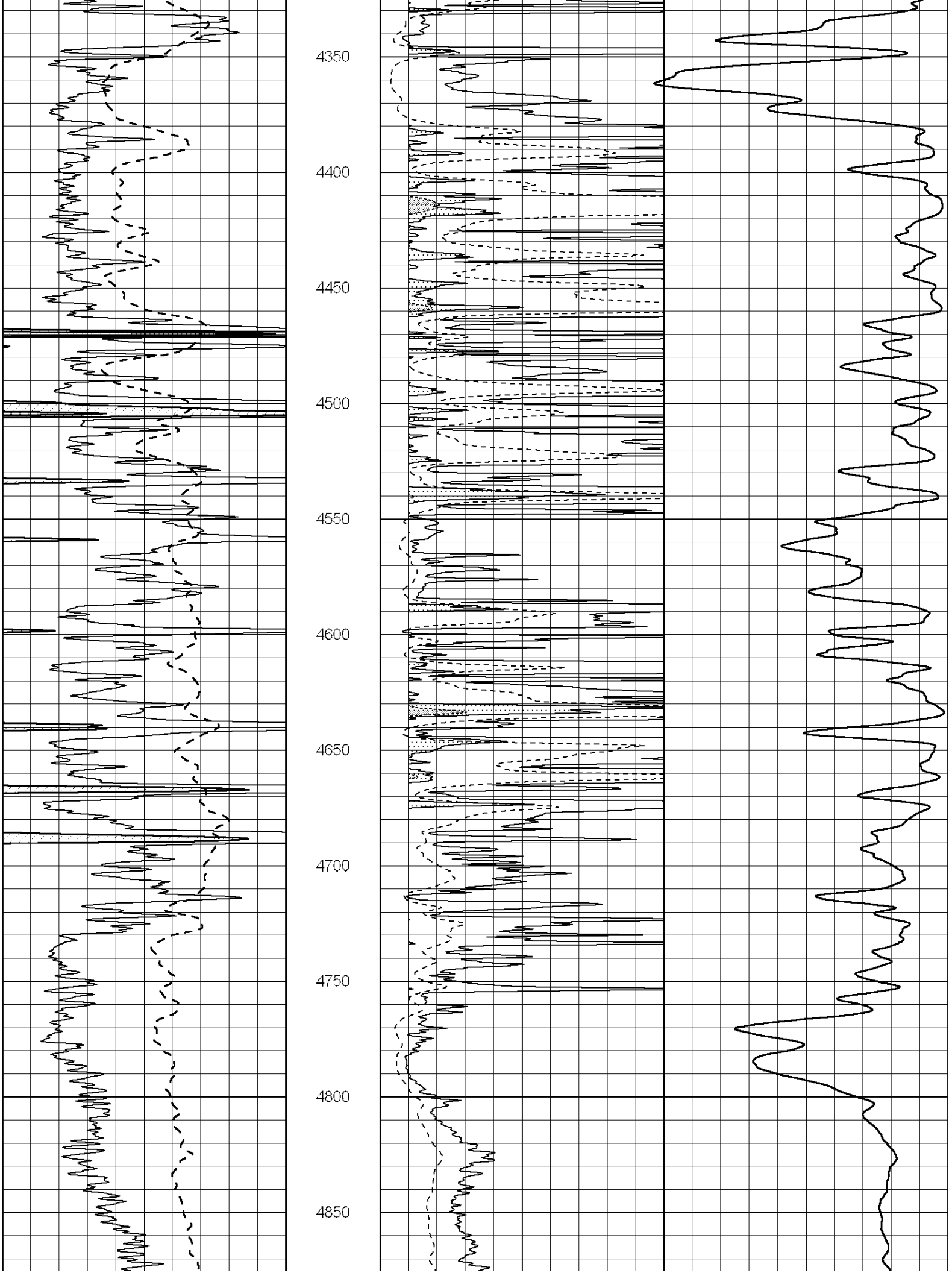
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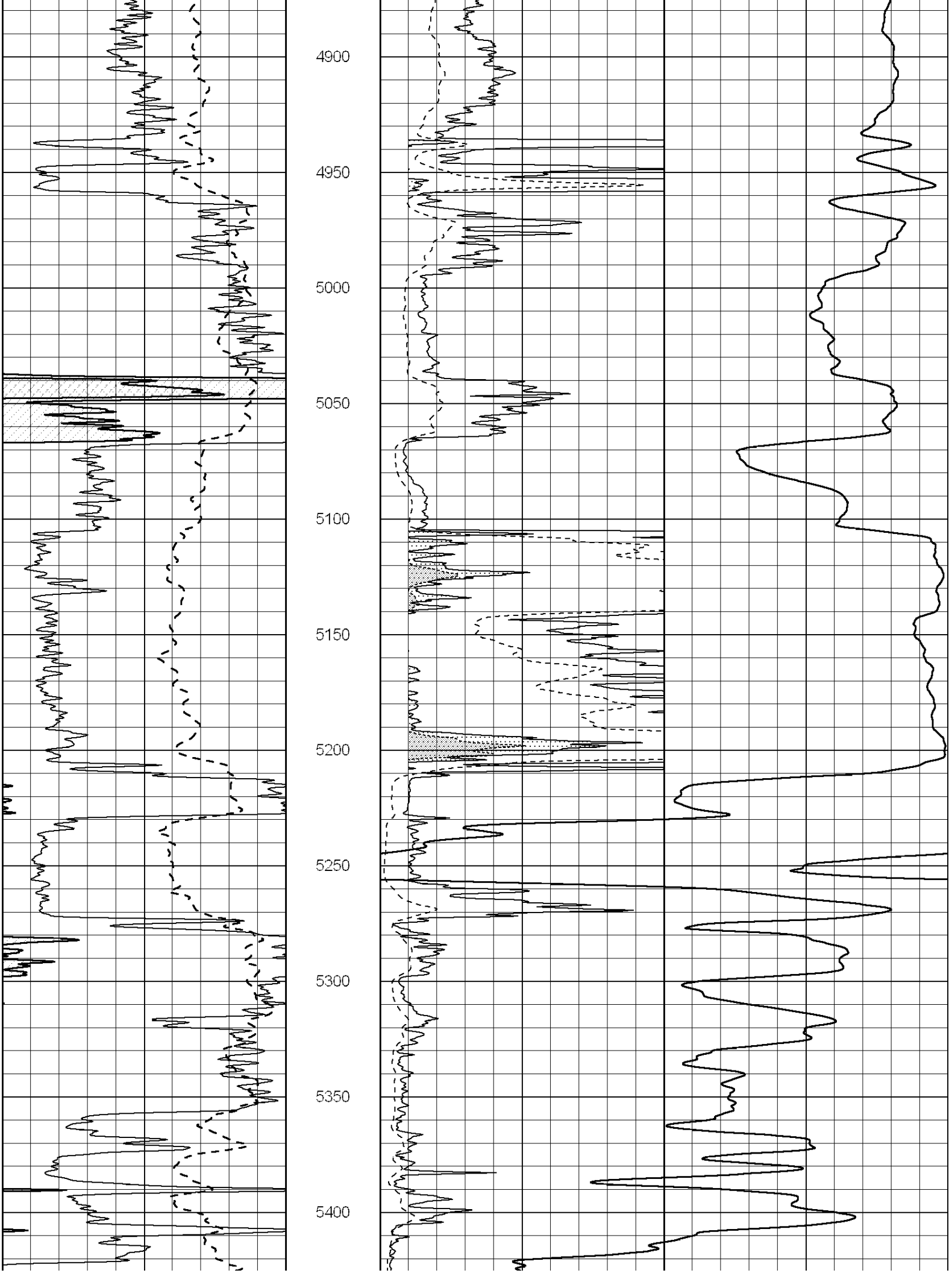
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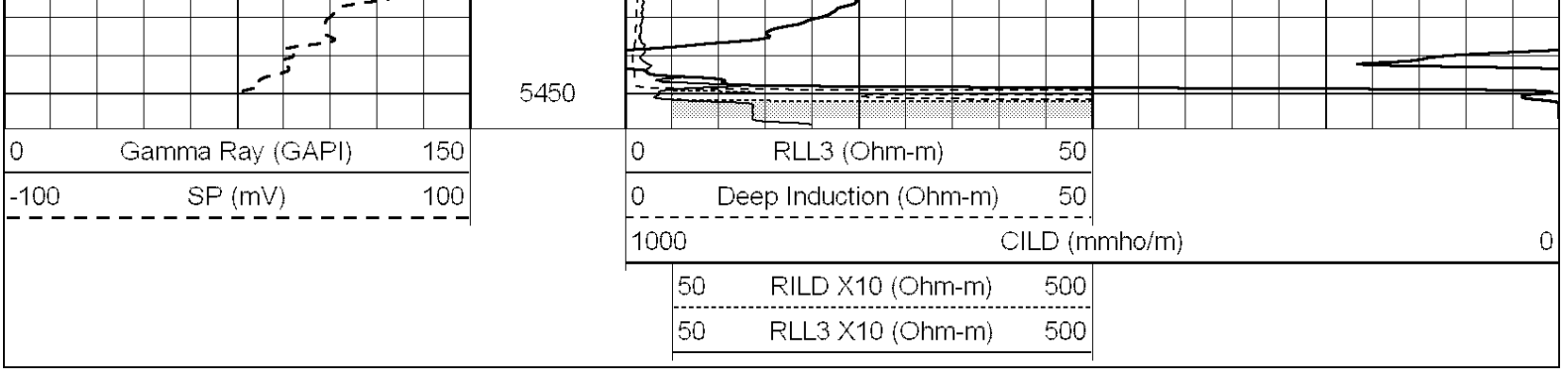

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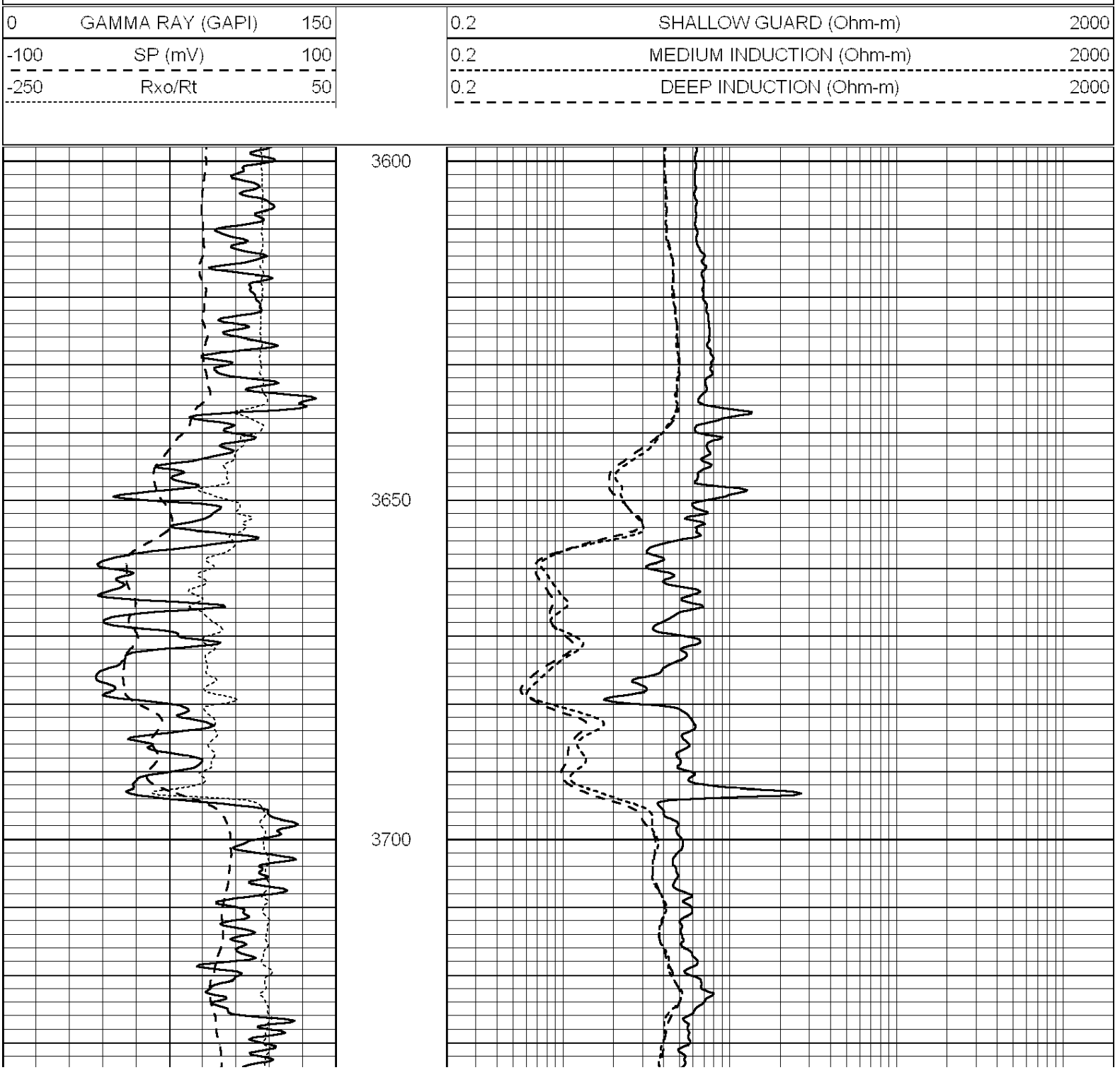
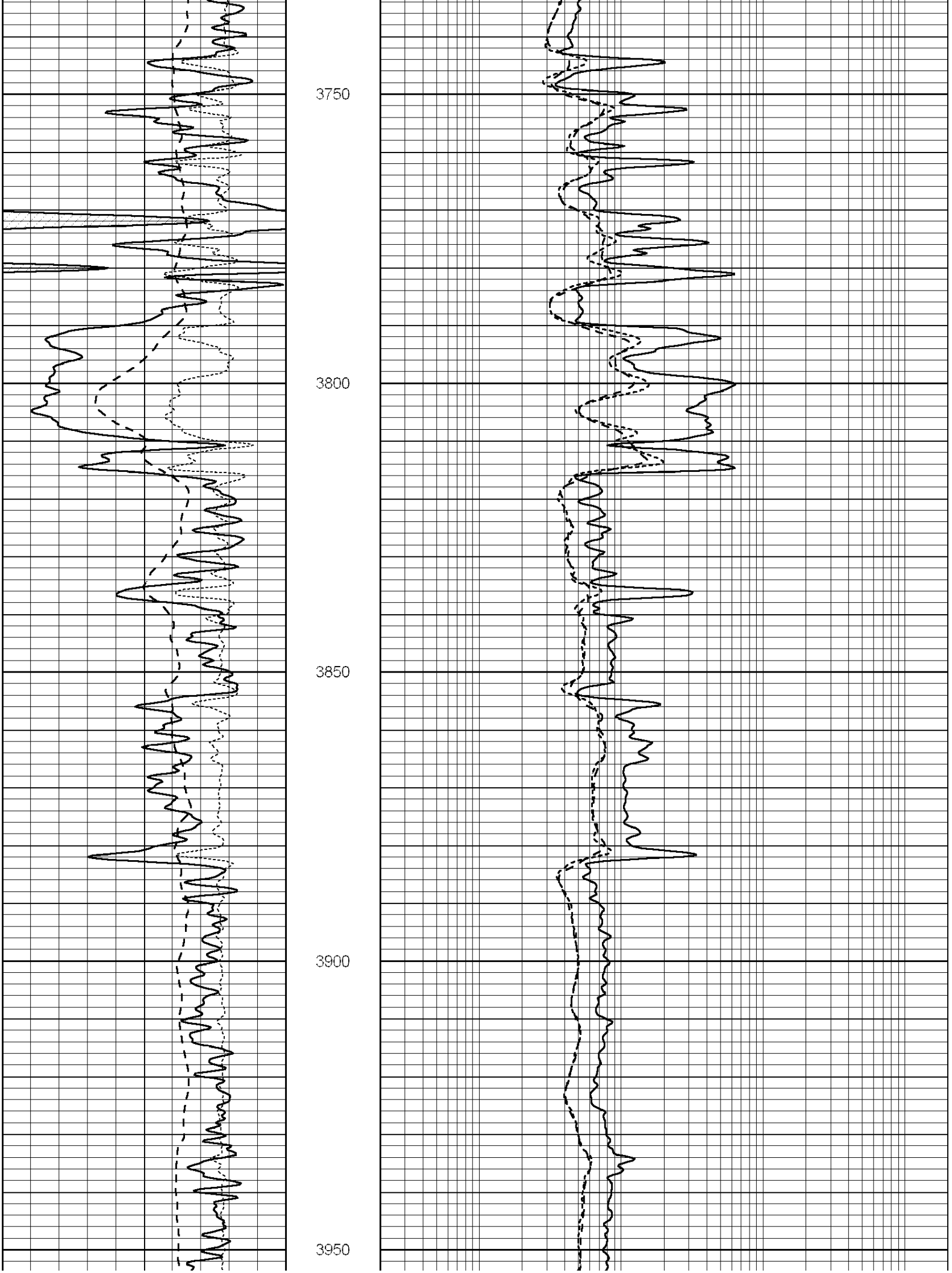
Charted by: Depth in Feet scaled 1:240

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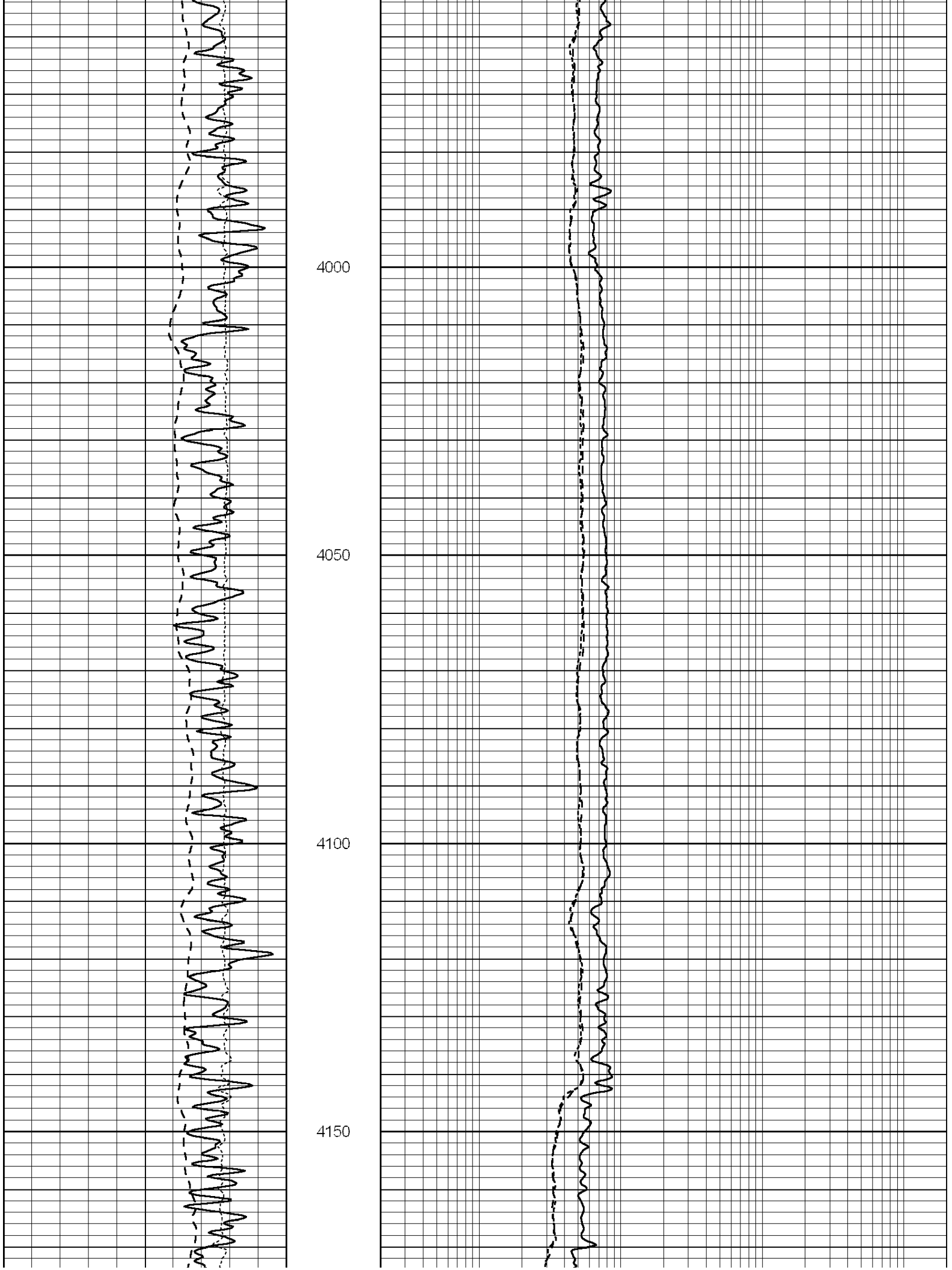
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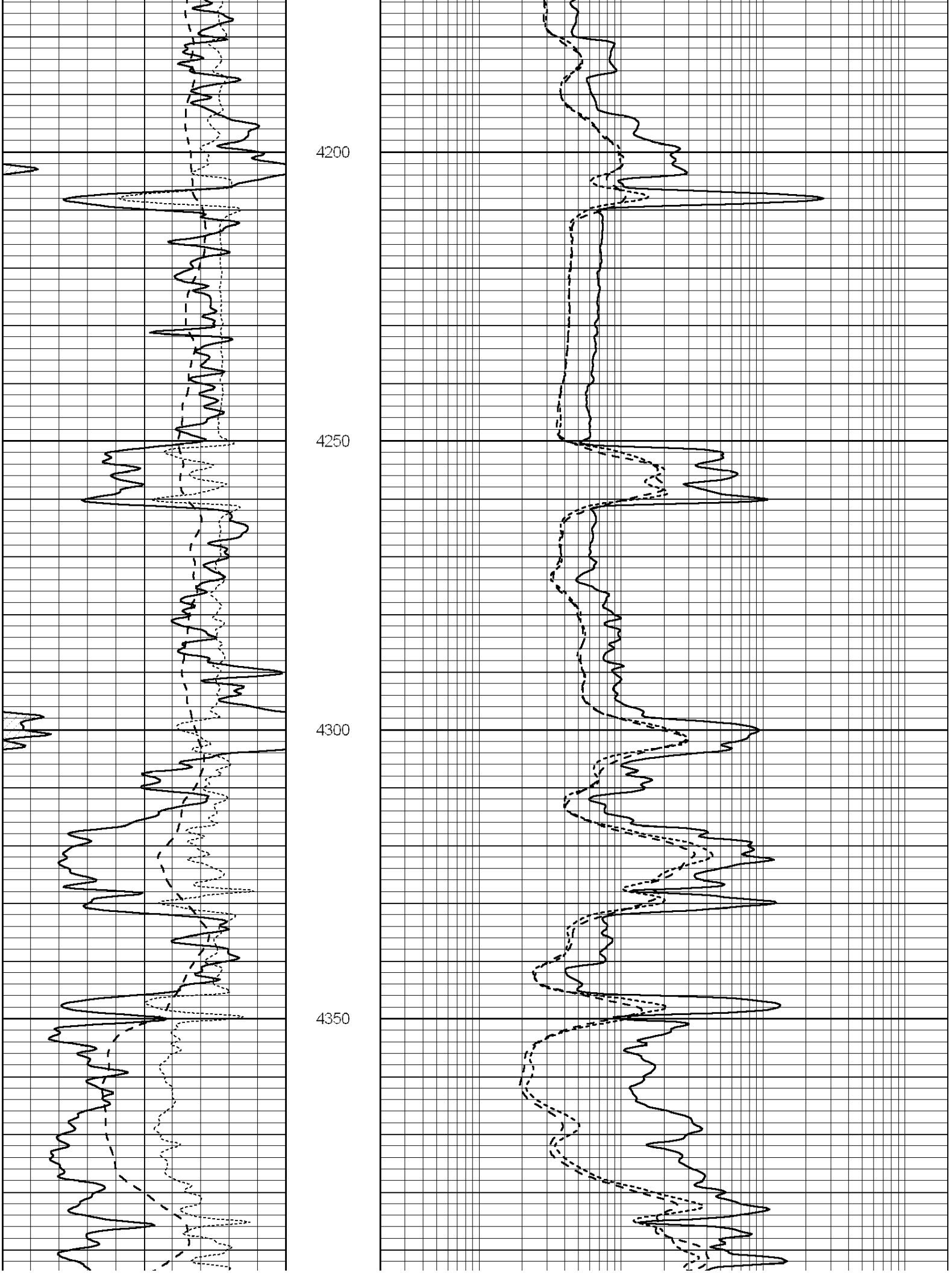
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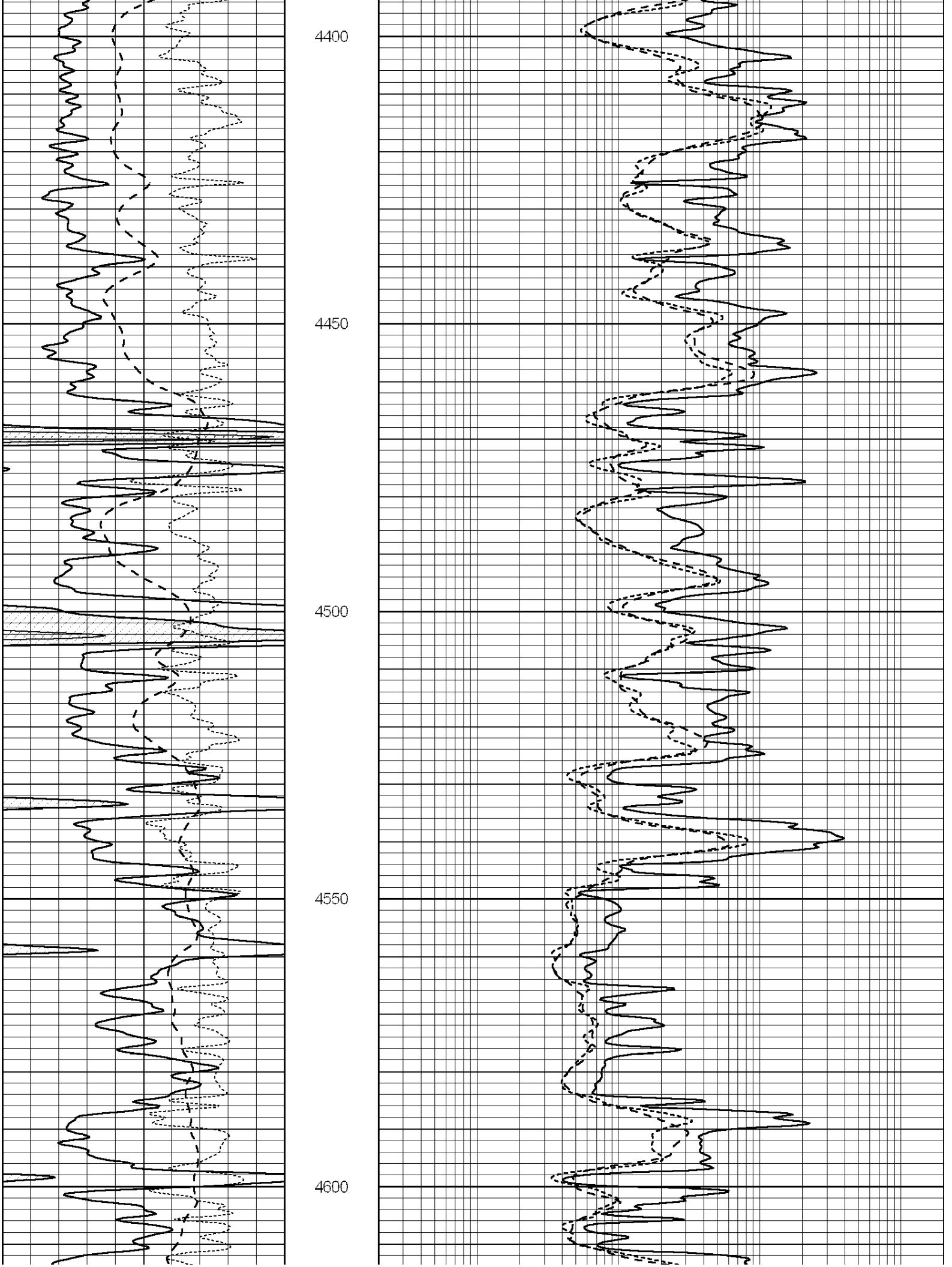
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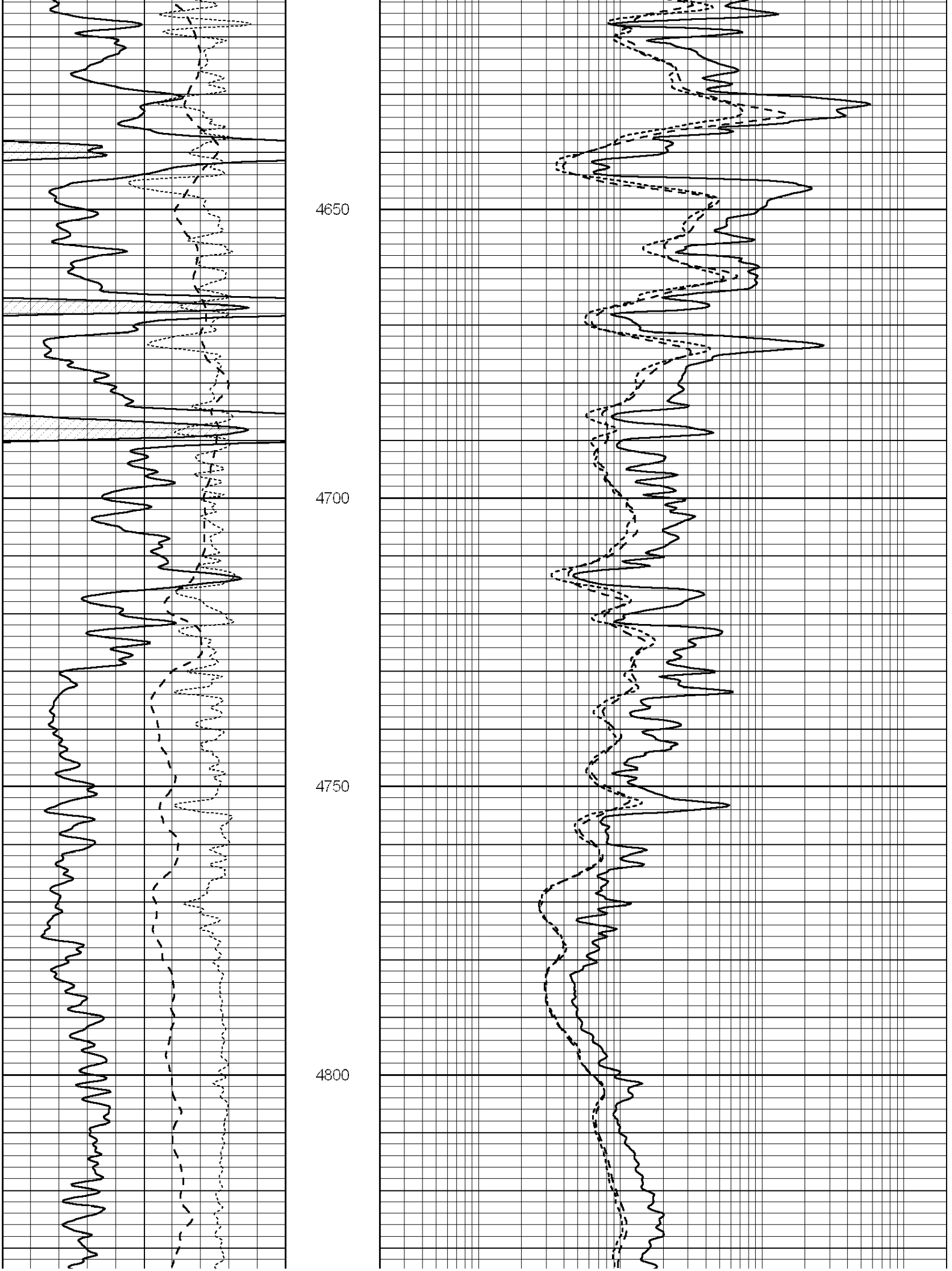
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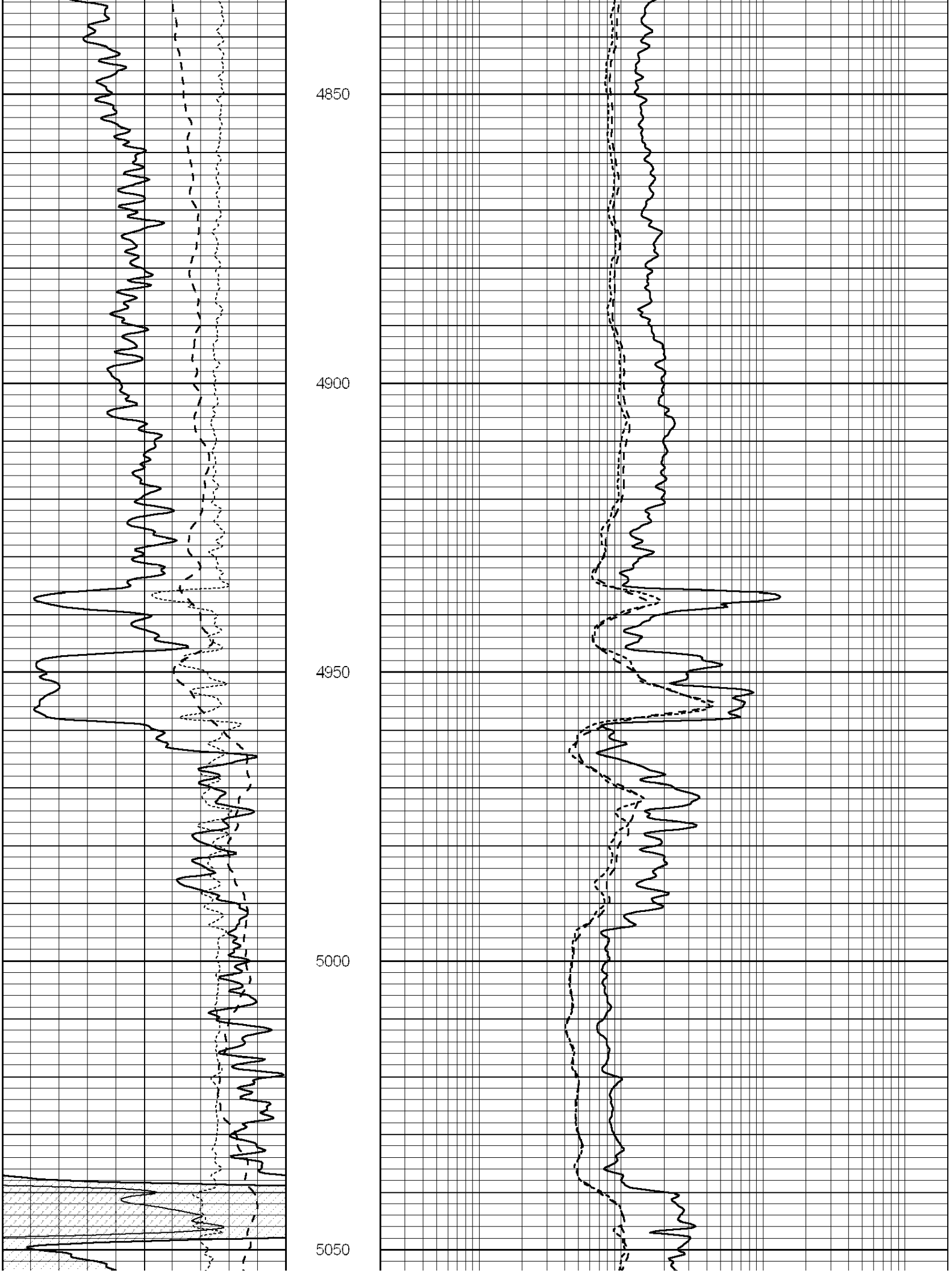
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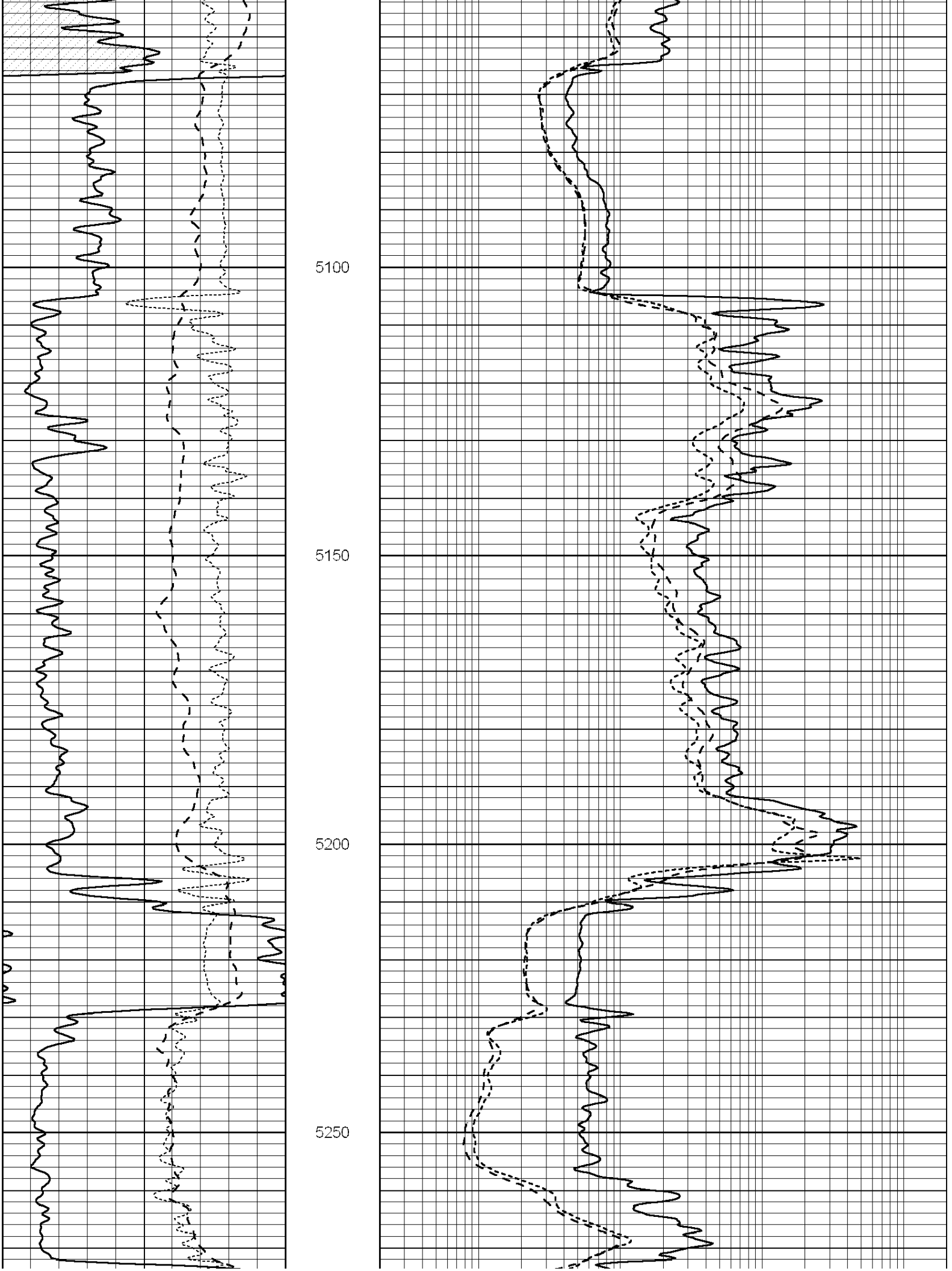
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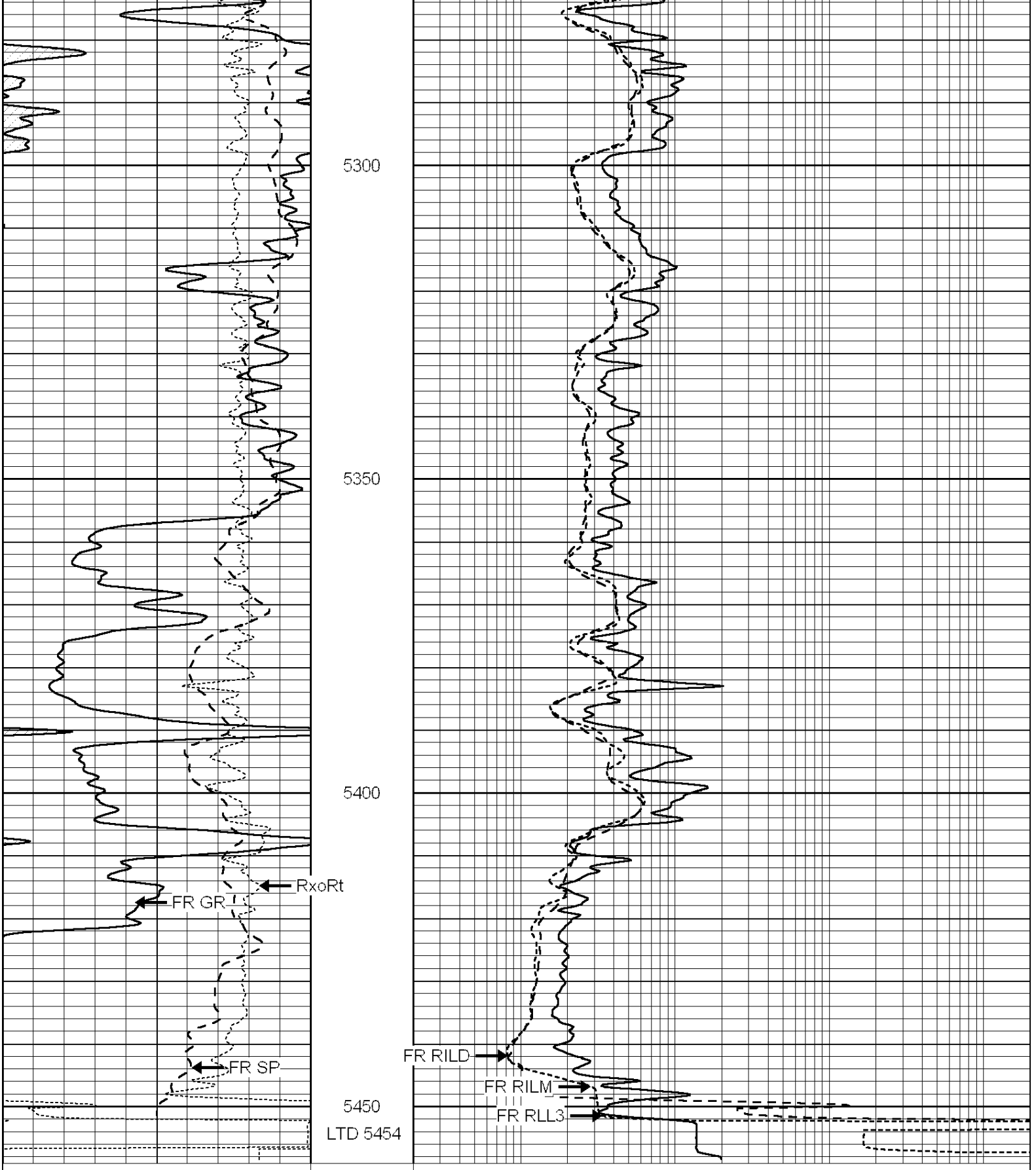


SUPERIOR

REPEAT SECTION

SUPERIOR WELL SERVICES

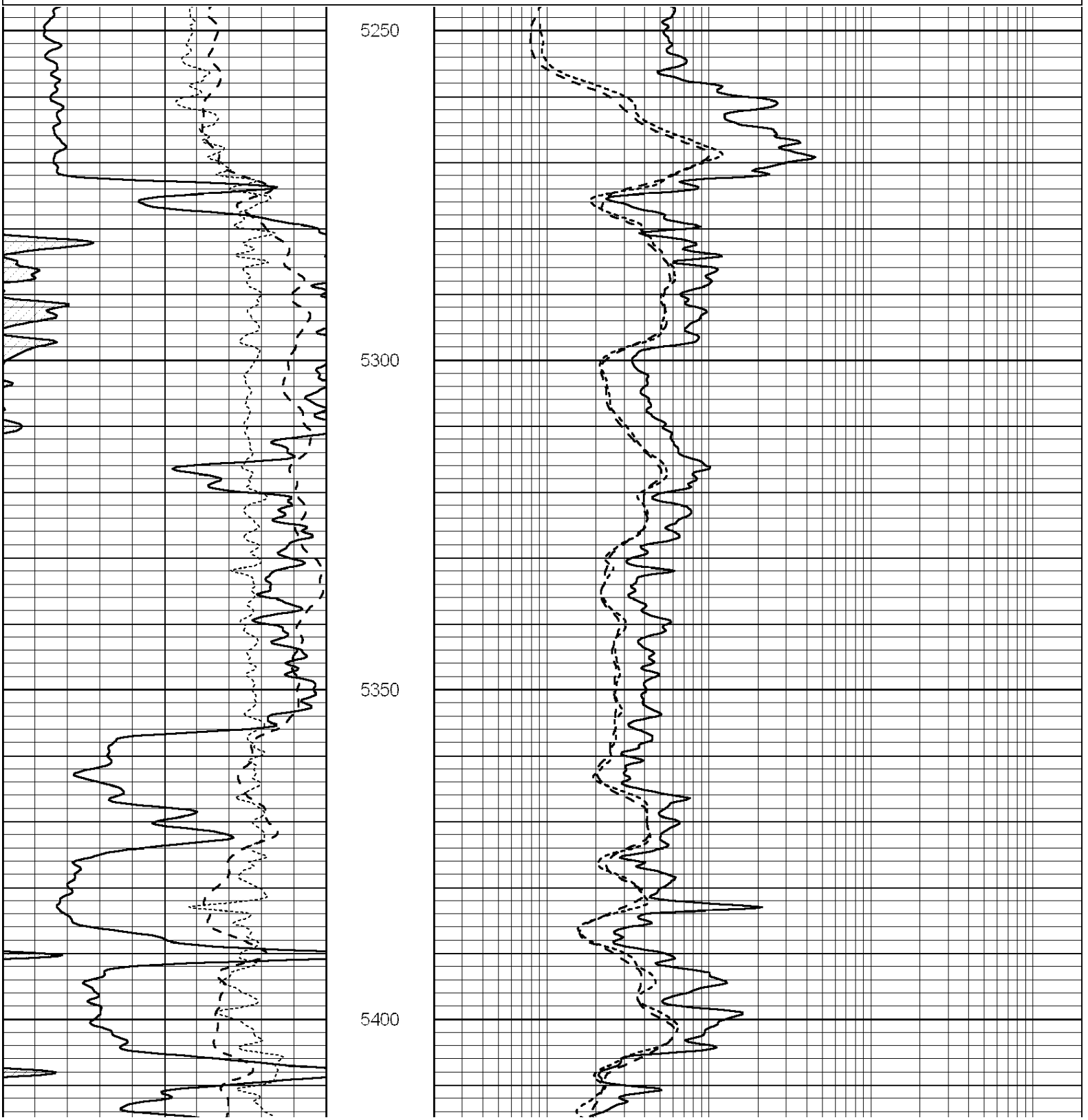
Hays, Kansas

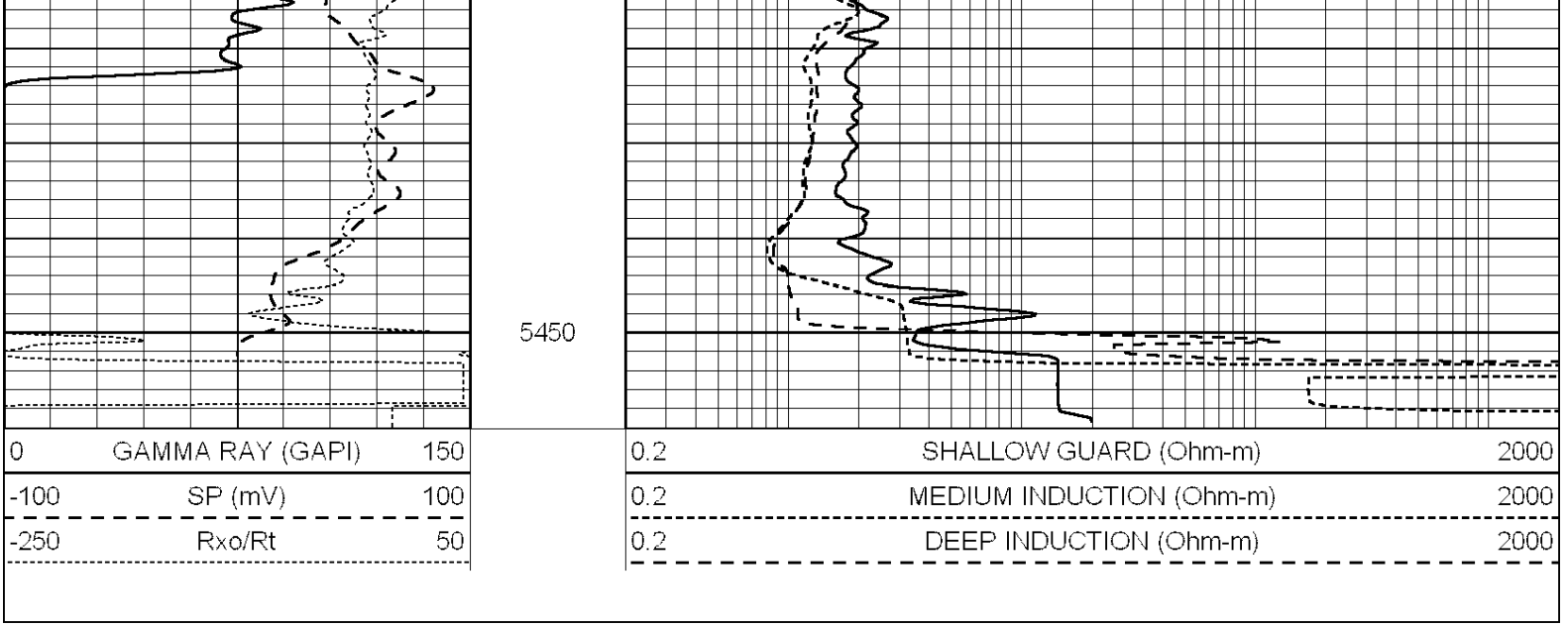
REPEAT SECTION

Database File:	007715pe.db
Dataset Pathname:	pass2.1
Presentation Format:	_dil
Dataset Creation:	Tue Sep 20 20:36:29 2011 by Calc Open-Cased 090629
Charted by:	Depth in Feet scaled 1:240

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

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





Calibration Report

Database File: 007715pe.db
Dataset Pathname: pass3.6
Dataset Creation: Tue Sep 20 20:35:36 2011 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model:	PROBE7-DILG
Surface Cal Performed:	Wed Jul 30 06:14:24 2008
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	621.923	8.759
Medium	0.039	0.728	V	0.000	464.000	mmho/m	673.322	-26.058
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: 002 Model: PRB
Performed Mon Oct 29 15:40:49 2007

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1056.3	9118.0	2809.7	10378.4	cps
Window 2	969.9	7671.9	2431.6	8565.8	cps
Window 3	683.8	2939.8	1161.0	3161.8	cps
Window 4	231.4	231.6	226.7	230.8	cps
Long Space	0.0	6702.0	1461.7	7595.9	cps
Short Space	1.2	1433.6	959.4	1568.6	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	

Rib Angle	: 45.2	Rib Slope	: 1.008	Density/Spine Ratio	: 0.559
Spine Angle	: 75.2	Spine Slope	: 3.791	Spine Intercept	: -18.7

Caliper

	Readings	Reference
Low Ref	3.7	8.0
High Ref	6.1	14.0
	Gain: 2.5	Offset: -1.2

Compensated Neutron Calibration Report

Serial Number: 6I
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: #8
Tool Model: OPEN
Performed: Mon Jun 13 16:56:43 2011

Calibrator Value: 150.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 175.0 cps

Sensitivity: 0.8371 GAPI/cps