SUPERIOR WELL SERVICES

SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

Company LOTUS OPERATING COMPANY, LLC.

Well C.R. WETZ #5

Field STRANATHAN

County BARBER State KANSAS

Location: API # : 15-007-23581

50' FSL & 1880' FEL

SEC 36 TWP 34S RGE 12W

Other Services
CDL/CNL/PE
SONIC/MEL

Elevation
K.B. 1420
D.F.
G.L. 1411

Permanent Datum GROUND LEVEL Elevation 1411
Log Measured From KELLY BUSHING 9' A.G.L.
Drilling Measured From KELLY BUSHING

Company LOTUS OPERATING CO., LLC.
Well C.R. WETZ #5
Field STRANATHAN
County BARBER
State KANSAS

Date	8-10-10		
Run Number	ONE		
Depth Driller	5160		
Depth Logger	5159		
Bottom Logged Interval	5157		
Top Log Interval	00		
Casing Driller	268		
Casing Logger	268		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.5 / 47		
pH / Fluid Loss	10.0 / 12.4		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.60 @ 93F		
Rmf @ Meas. Temp	0.45 @ 93F		
Rmc @ Meas. Temp	0.72 @ 93F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	.440 @ 126F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	1:00 P.M.		
Maximum Recorded Temperature	126F		
Equipment Number	860		
Location	HAYS, KS.		
Recorded By	RUPP		
Witnessed By	TIM HELLMAN		

<<< Fold Here >>>

Comments

SUPERIOR WELL SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: MEDICINE LODGE, S TO MM#7, 1/2W, N INTO.

MAIN SECTION

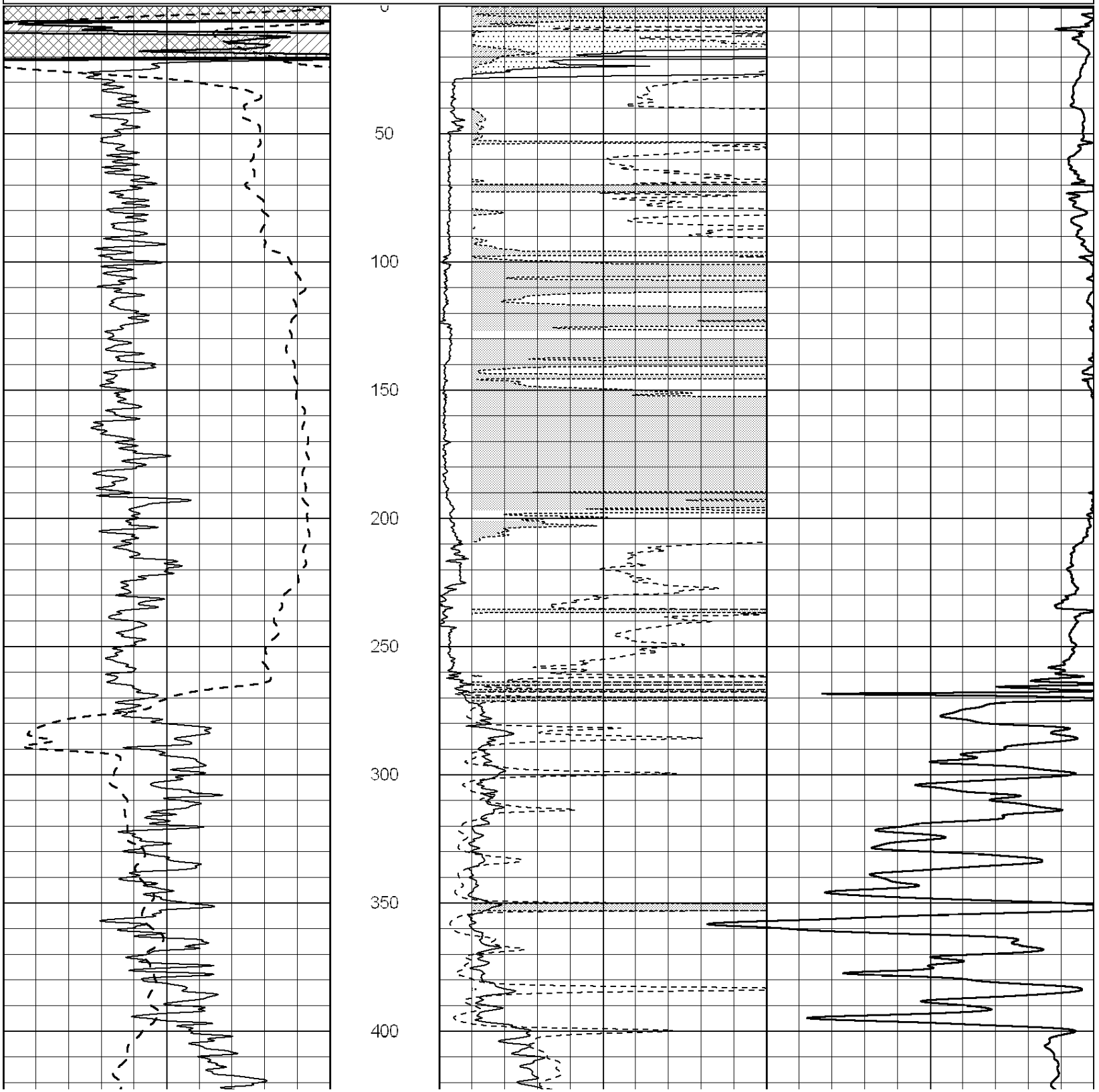
SUPERIOR
Hays,

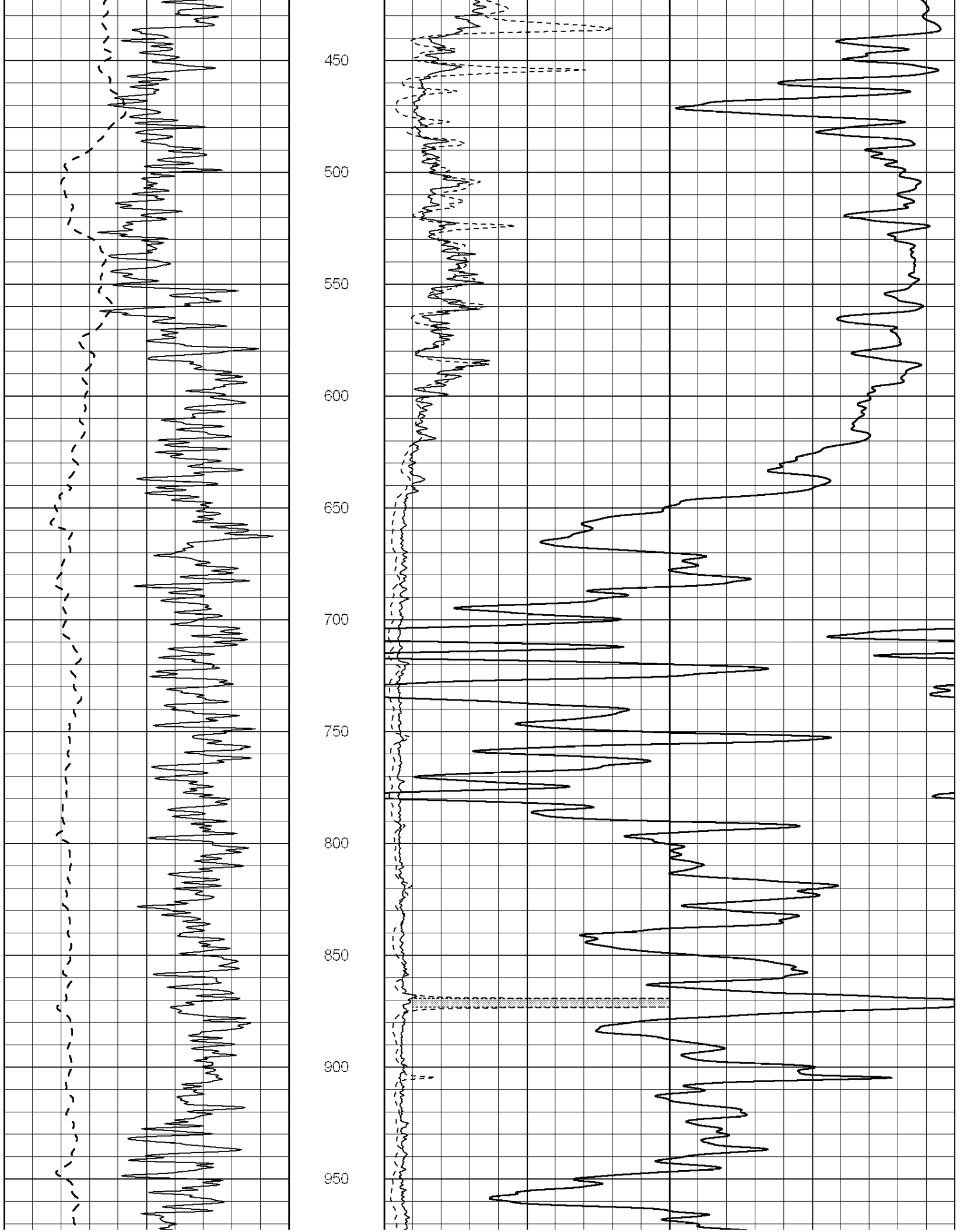
Kansas

Database File:	005639pdn.db
Dataset Pathname:	pass3.2A
Presentation Format:	dil2
Dataset Creation:	Tue Aug 10 16:08:07 2010 by Calc Open-Cased 090629
Charted by:	Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150
-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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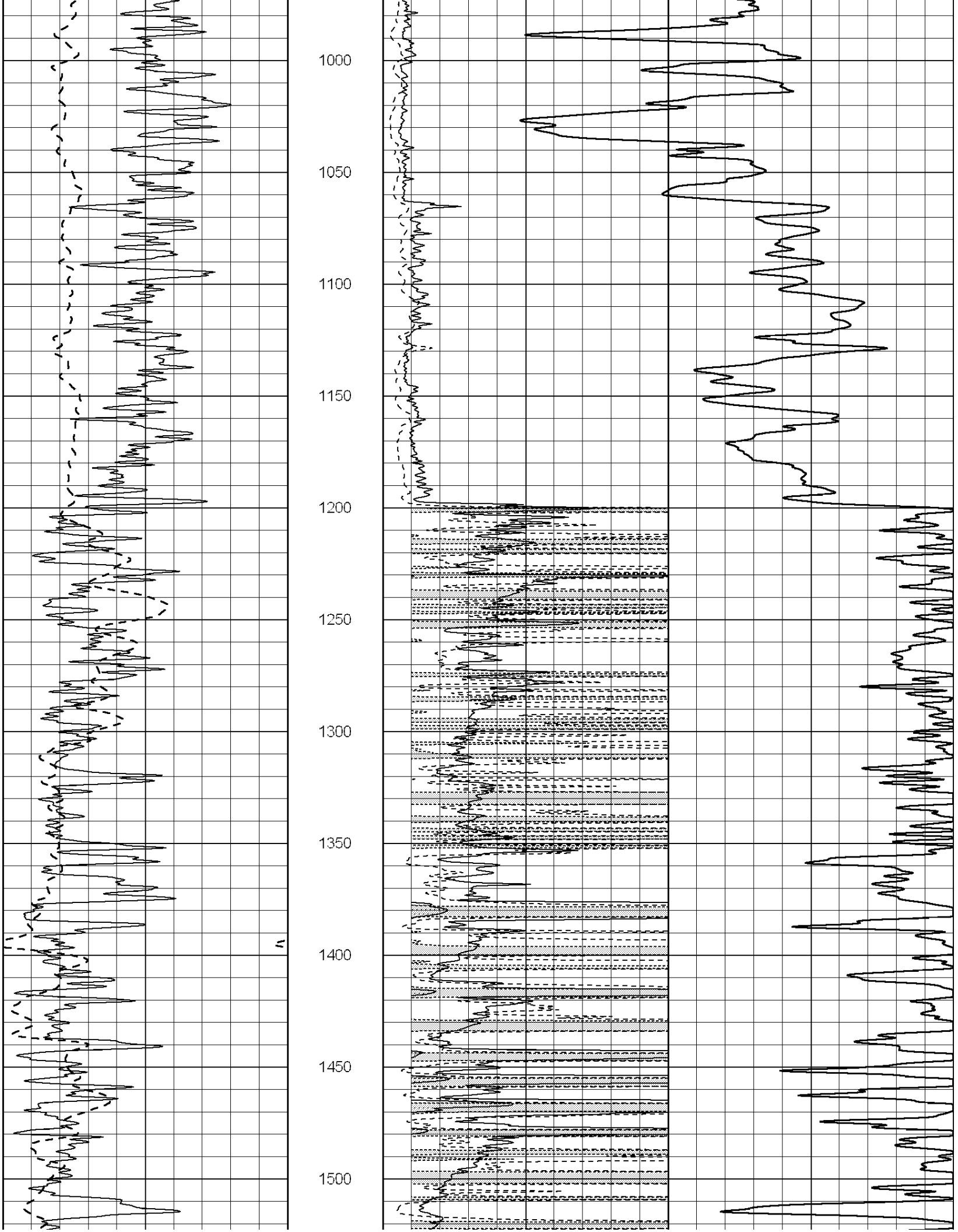
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1250
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1400
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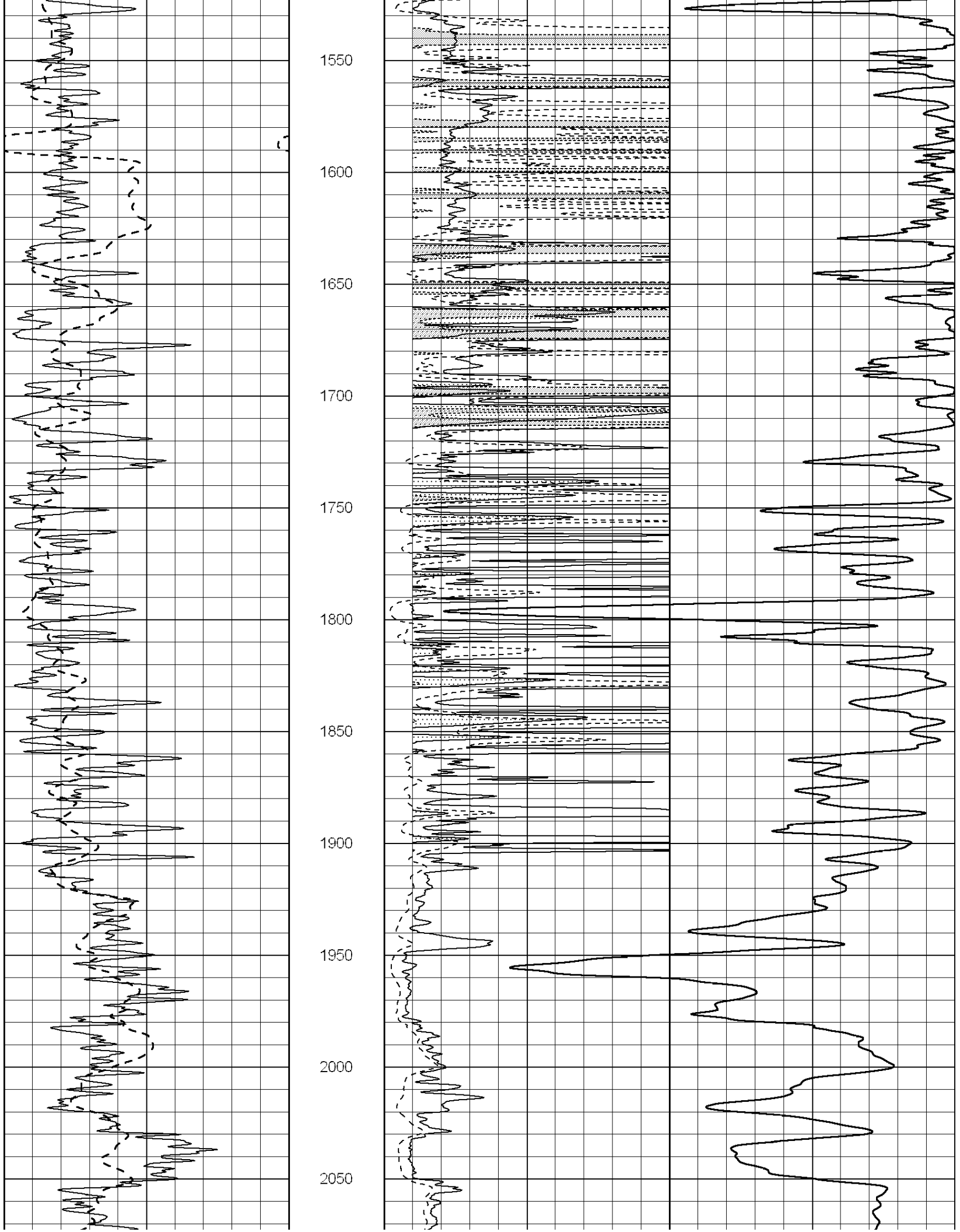
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1700
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1850
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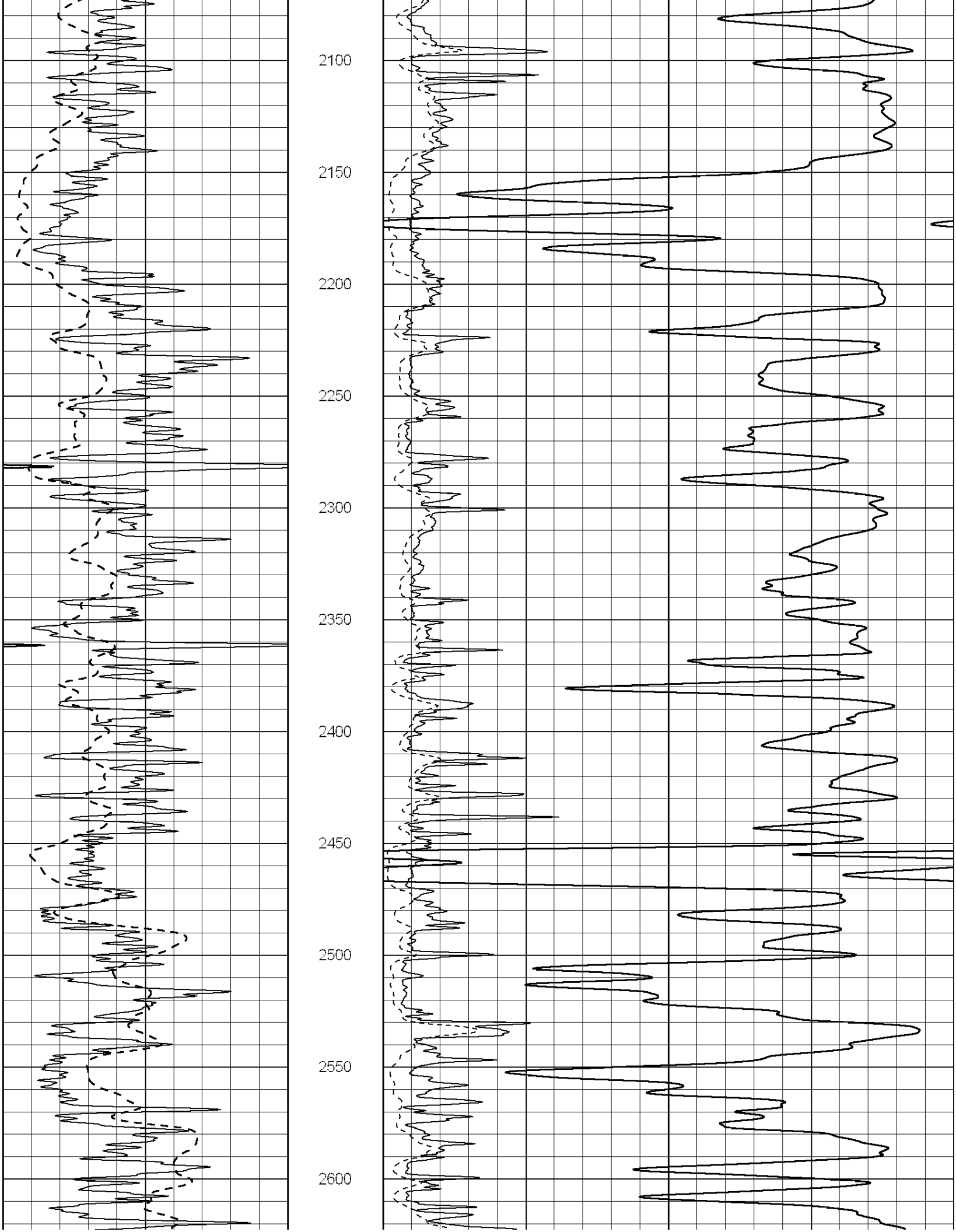
2000
2050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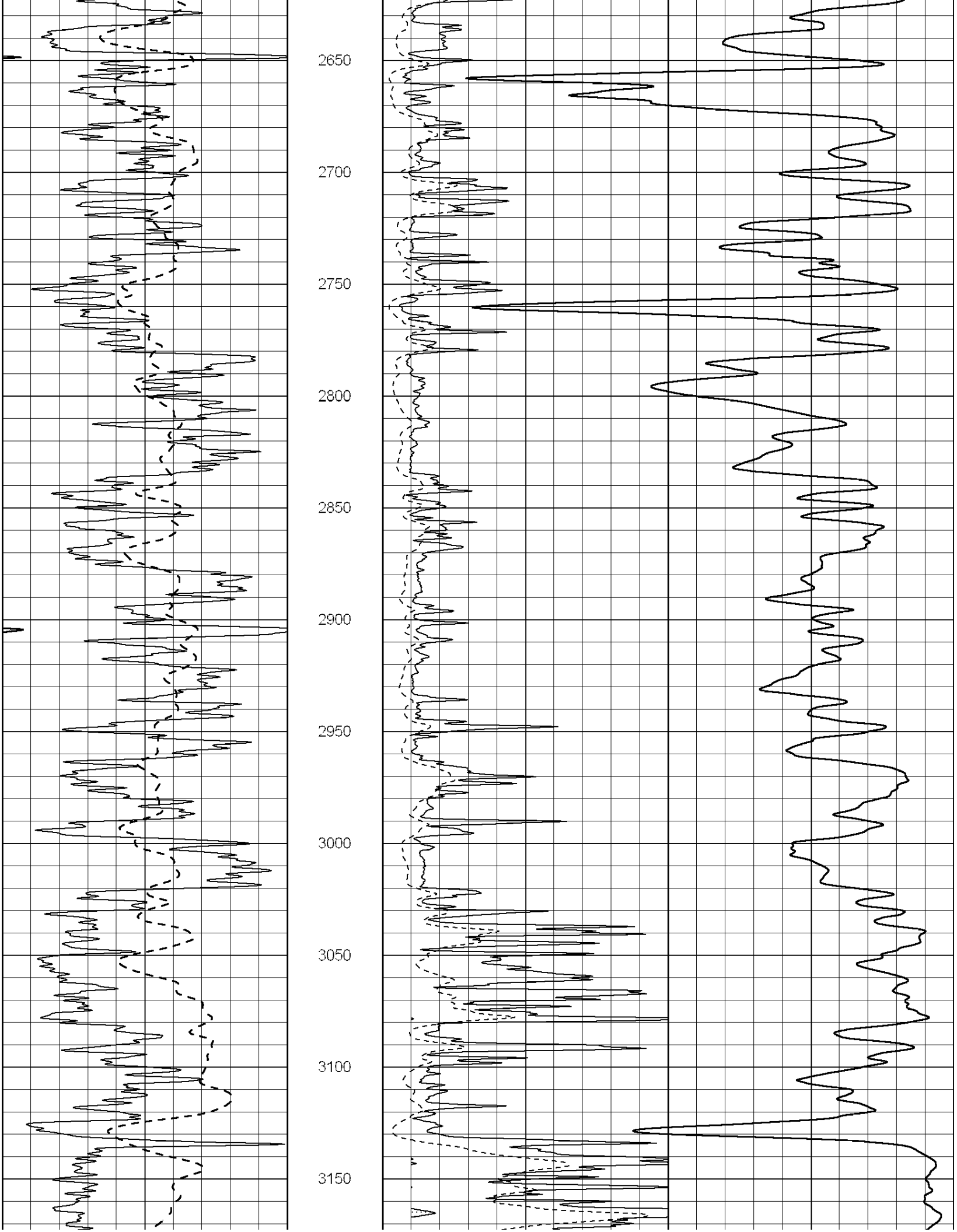
2550
2600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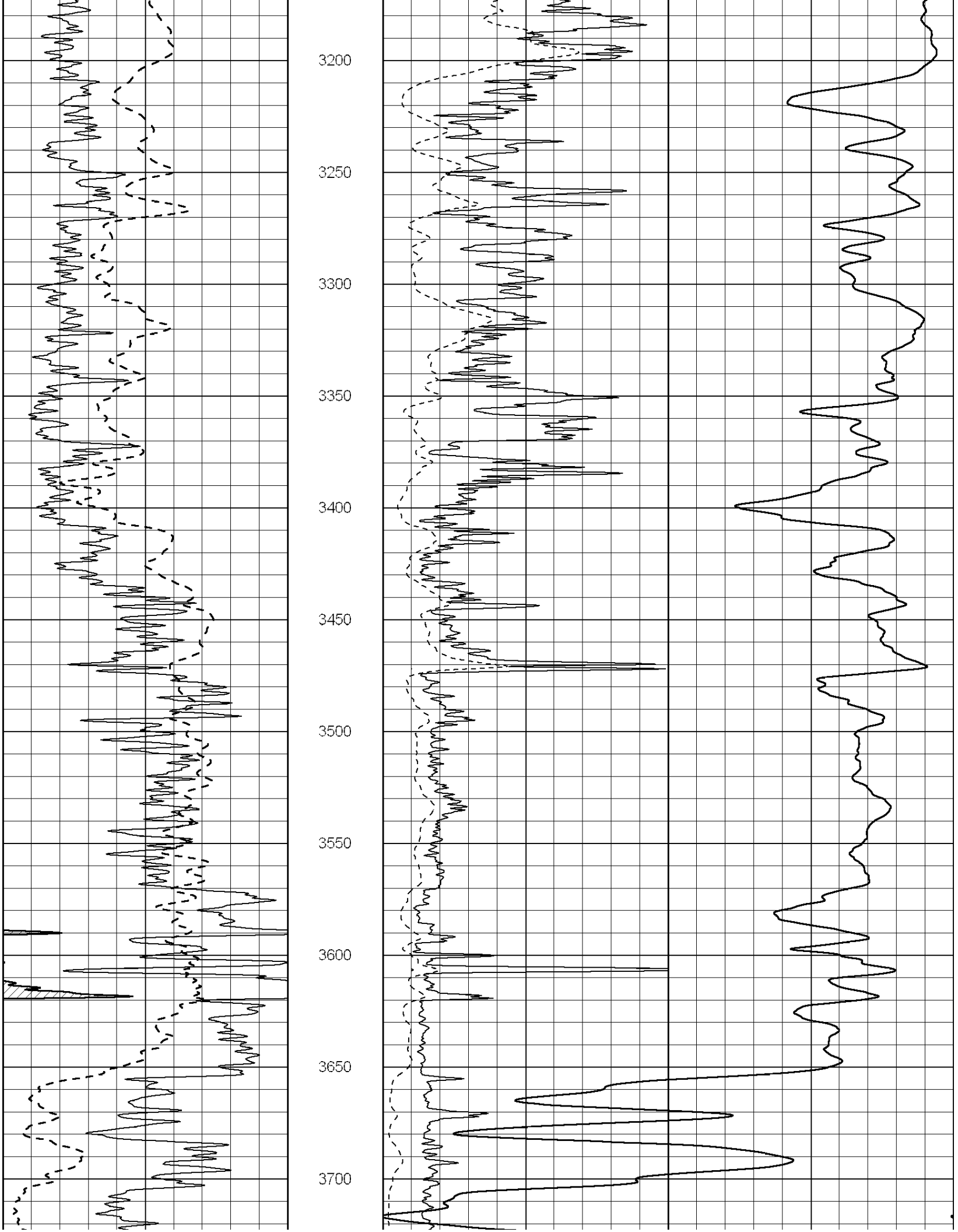
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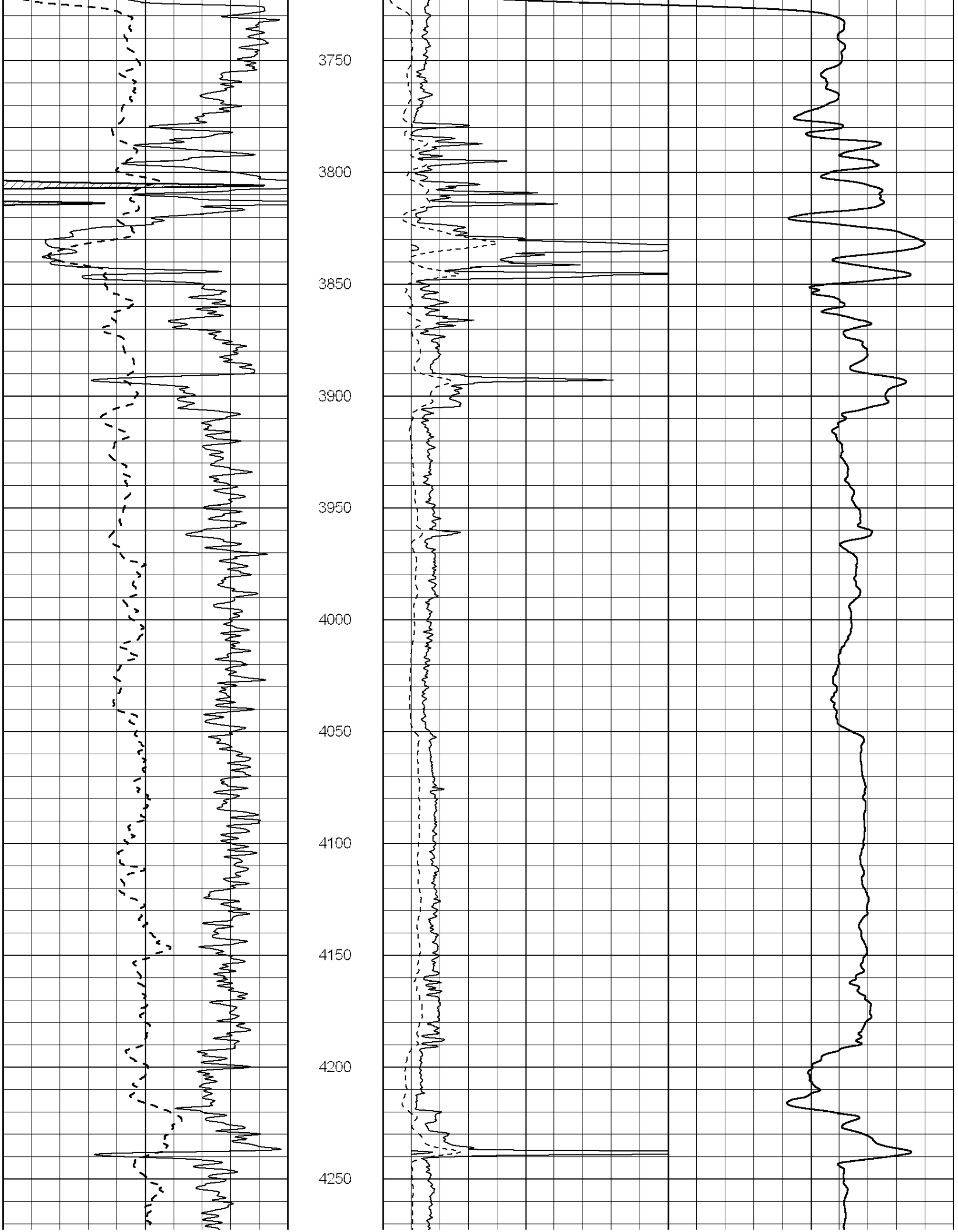
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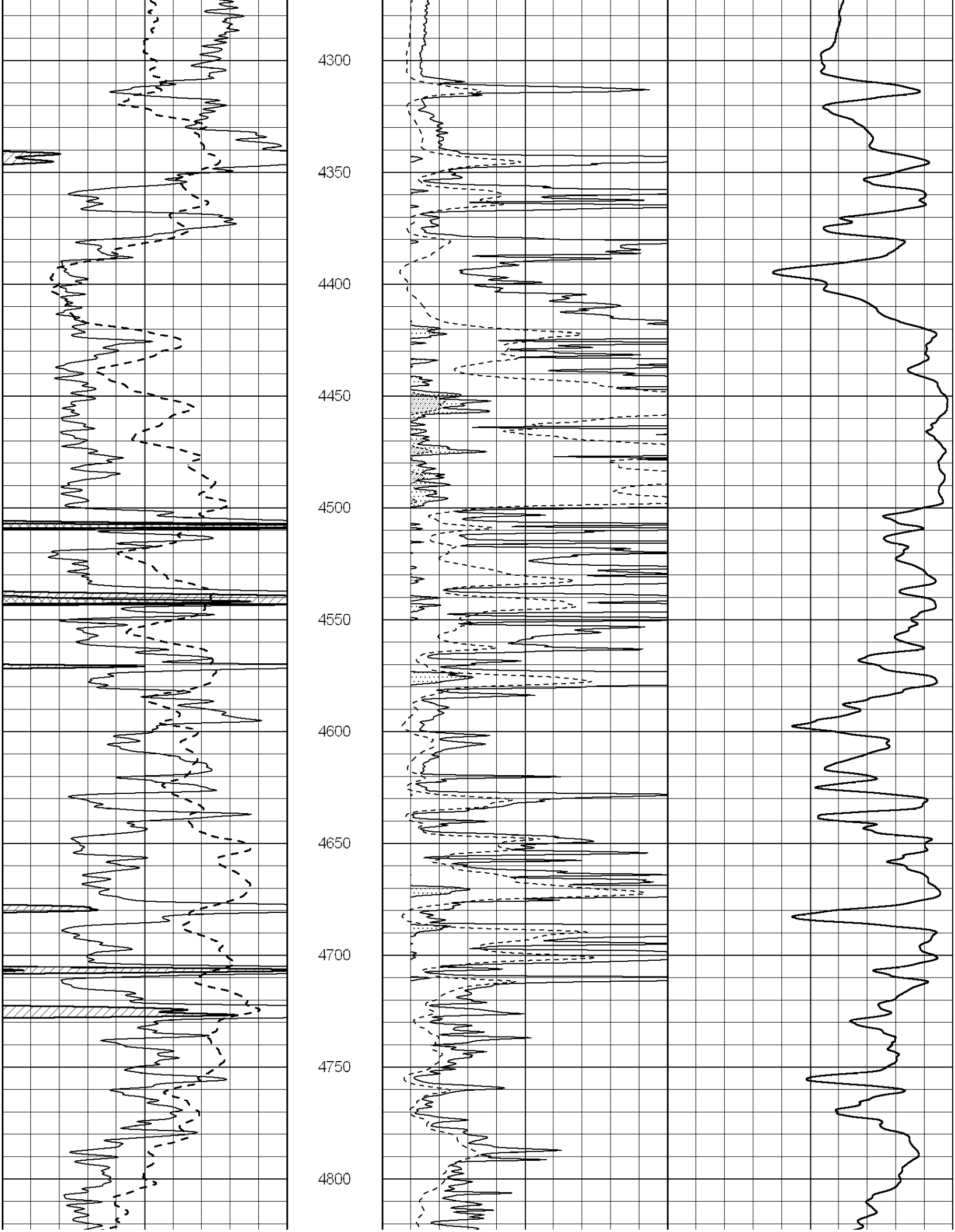
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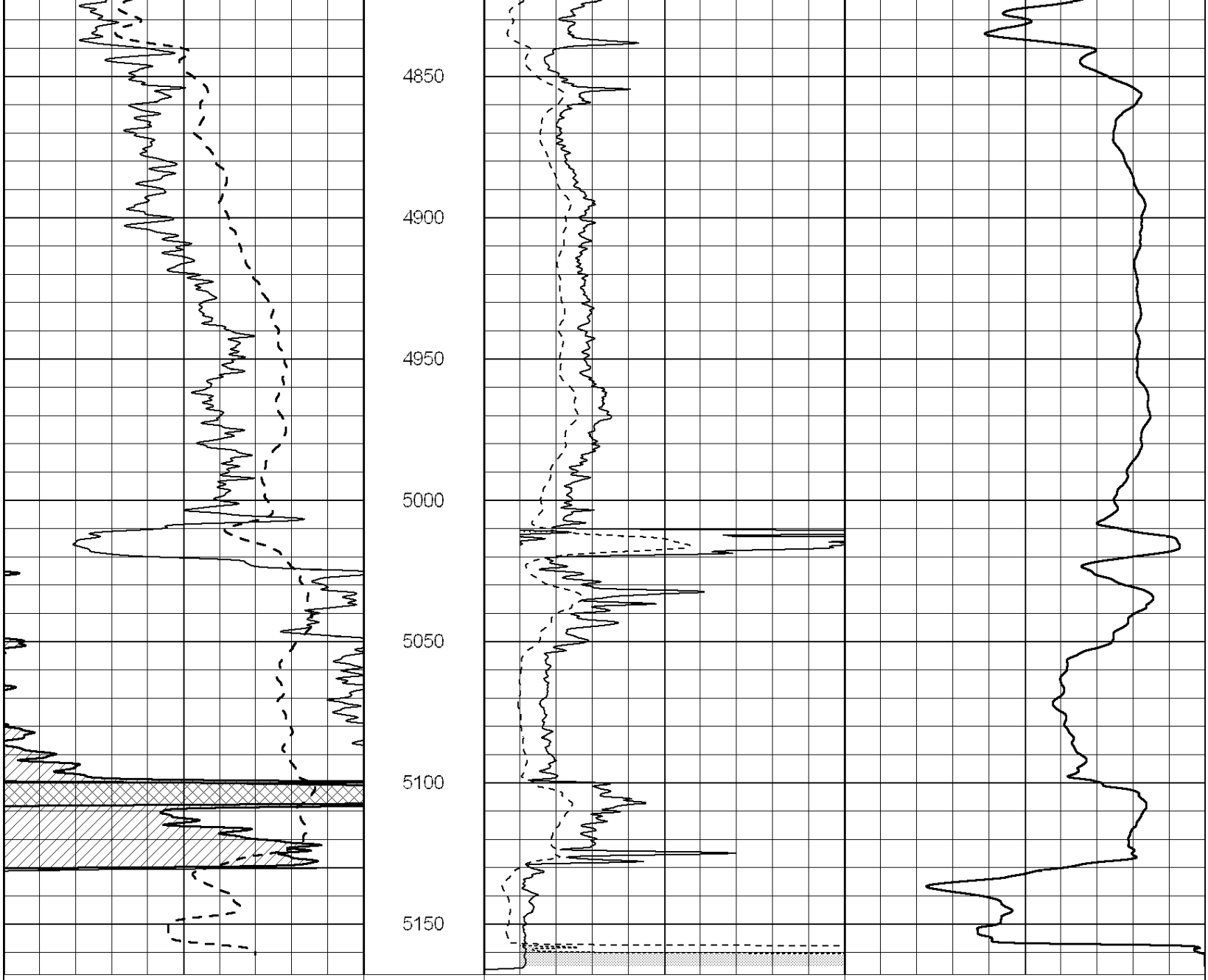


SUPERIOR WELL SERVICES

SUPERIOR
Hays, Kansas

MAIN SECTION

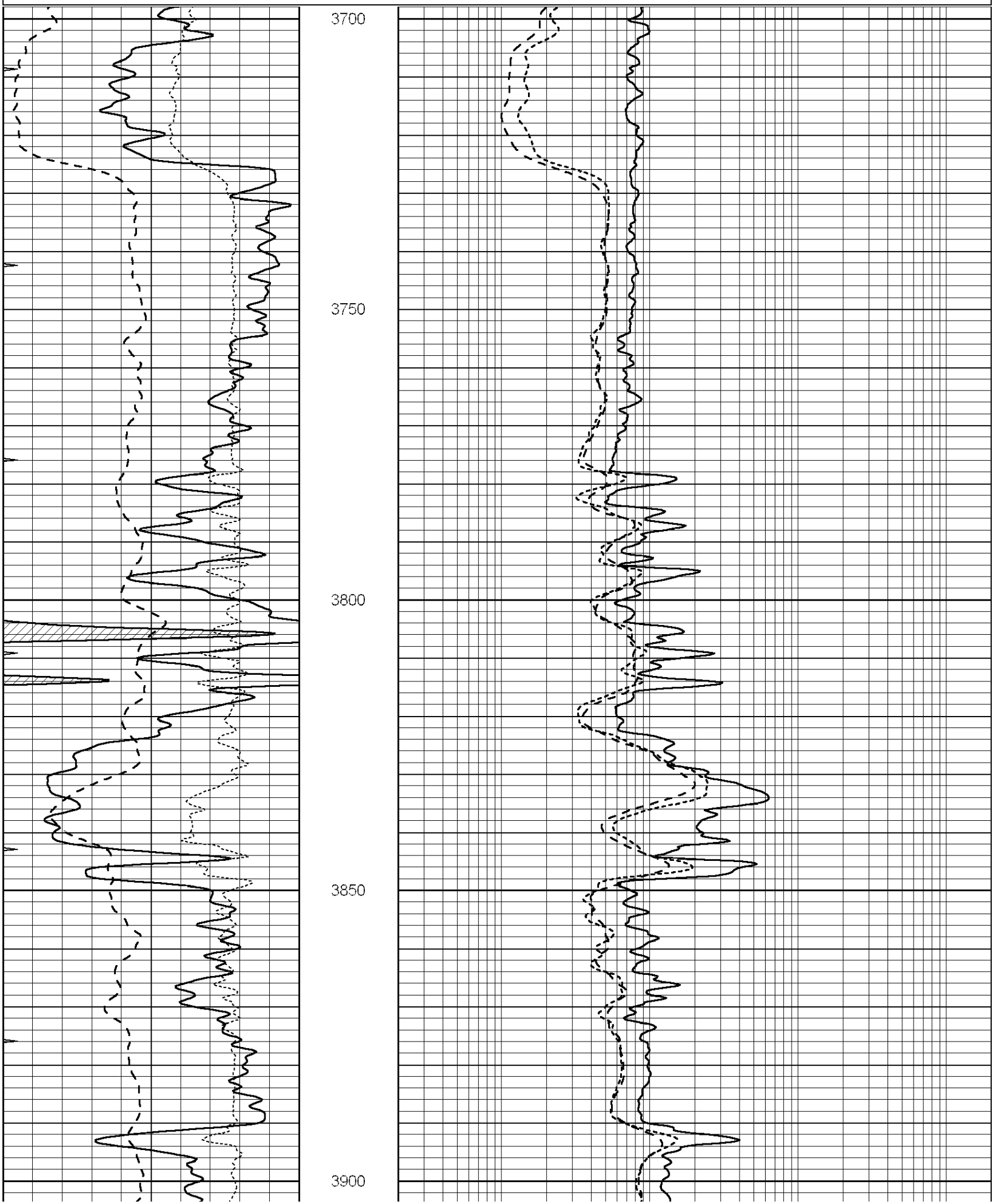
Database File:	005639pdn.db
Dataset Pathname:	pass3.2A
Presentation Format:	dil
Dataset Creation:	Tue Aug 10 16:08:07 2010 by Calc Open-Cased 090629
Charted by:	Depth in Feet scaled 1:240

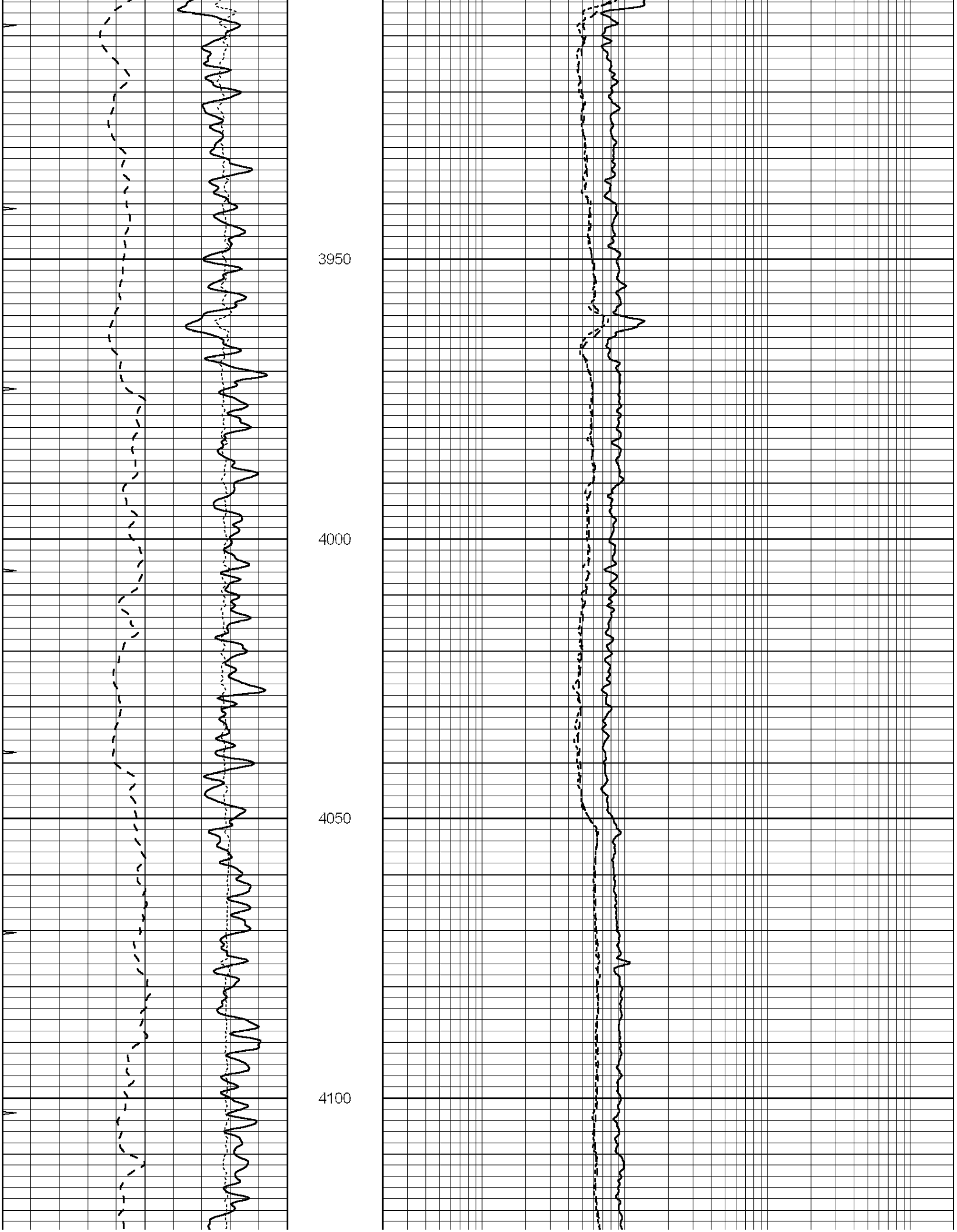
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

-250	RxoRt	50
0	MINMK	20

0.2	MEDIUM INDUCTION (Ohm-m)	2000

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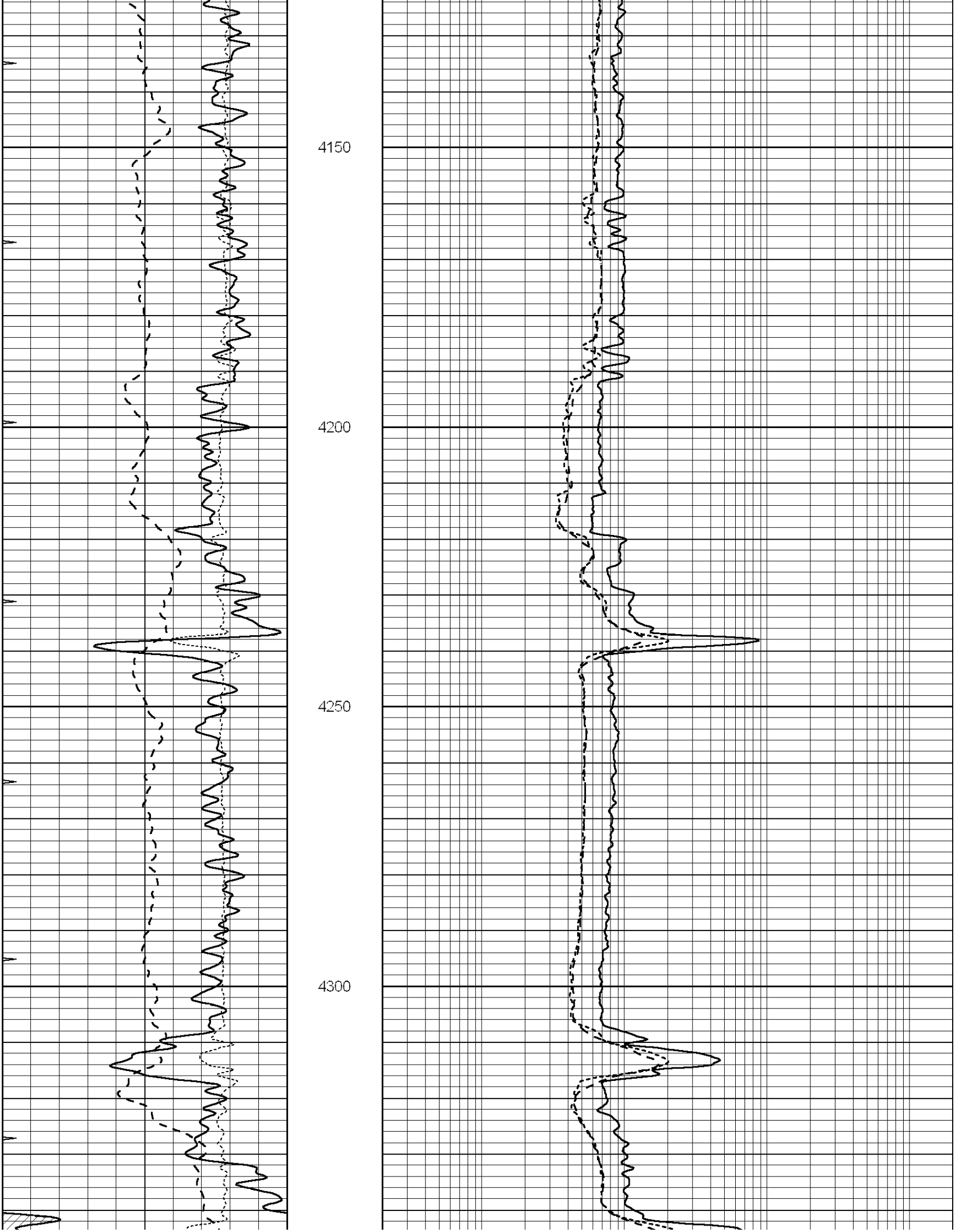
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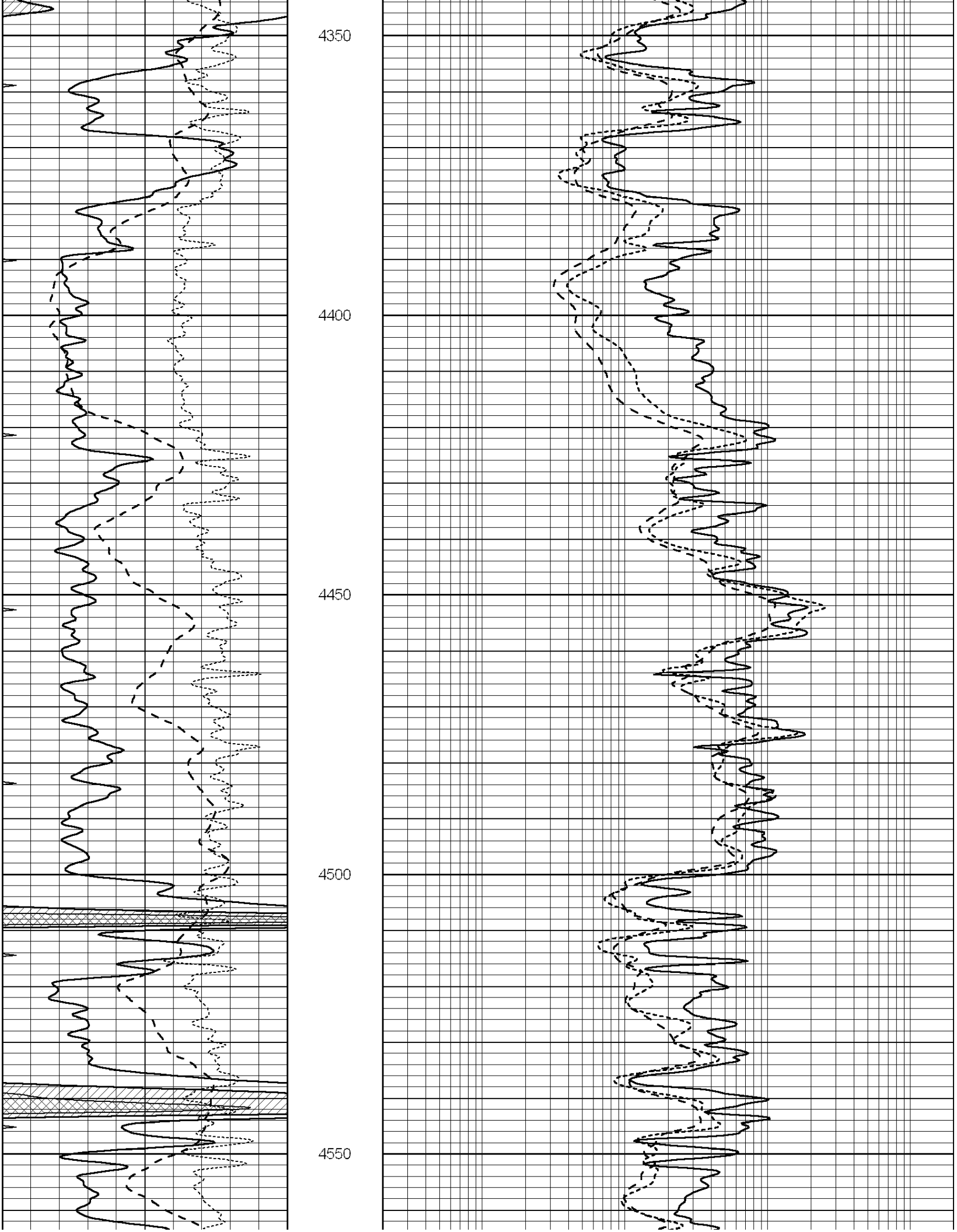
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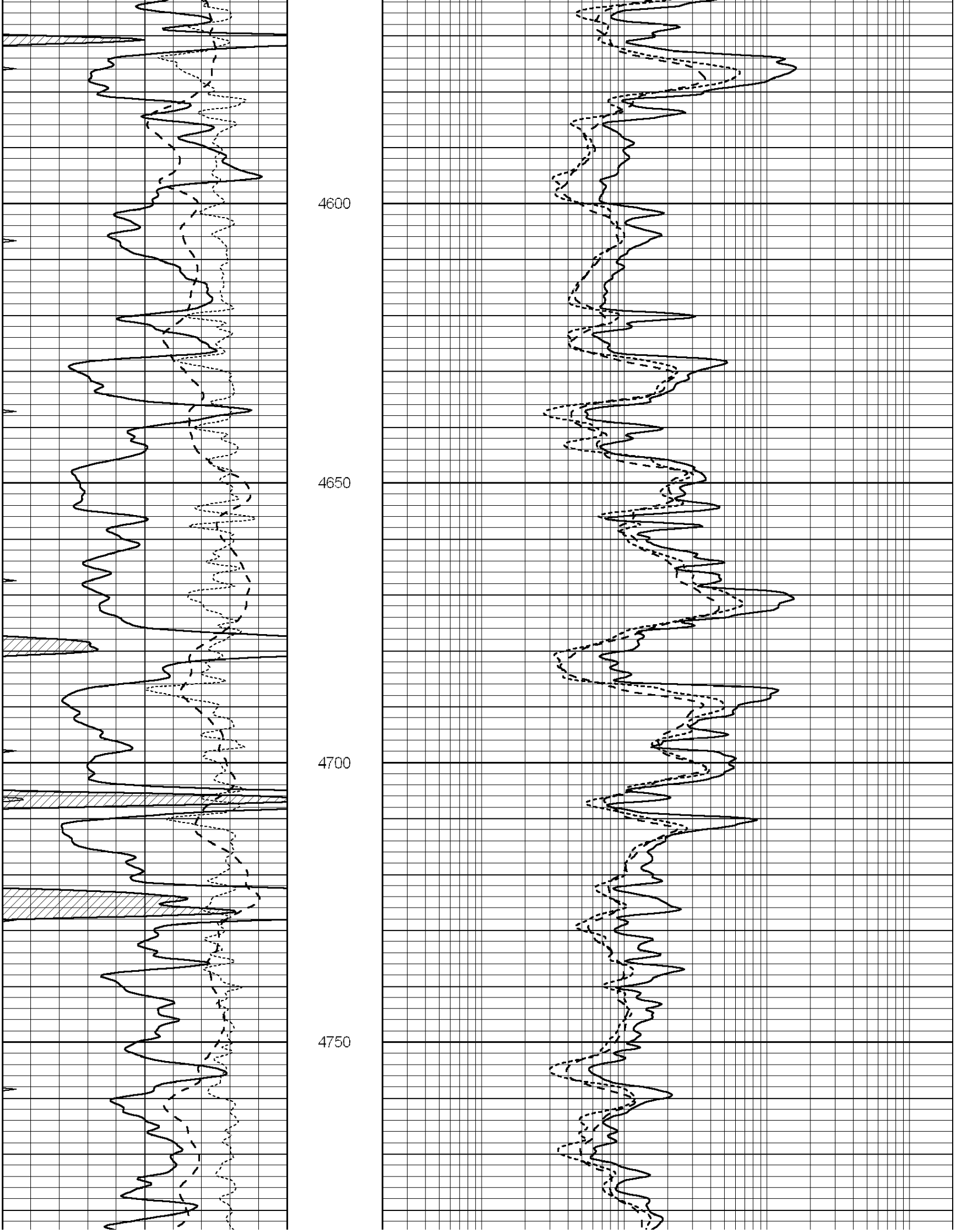
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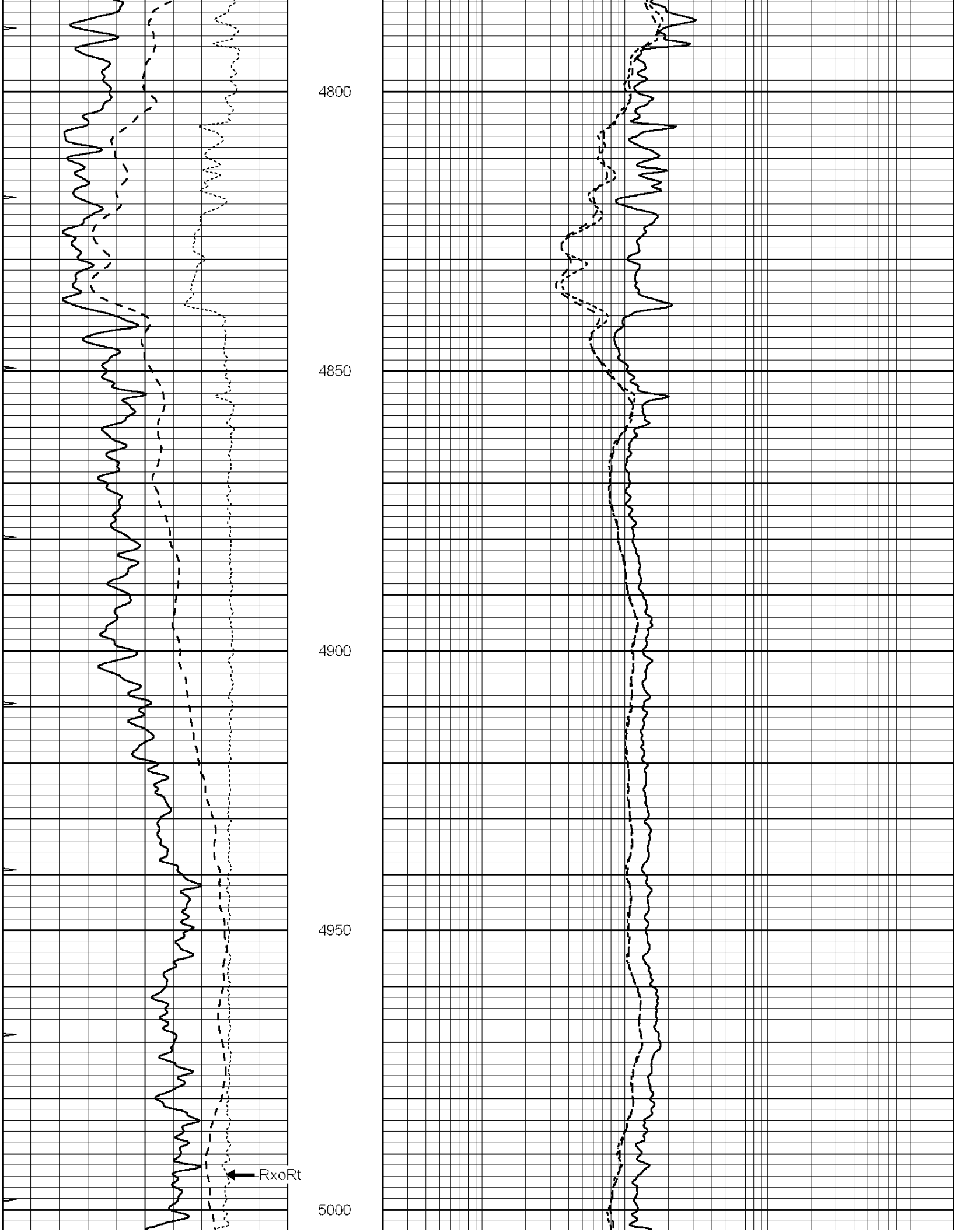
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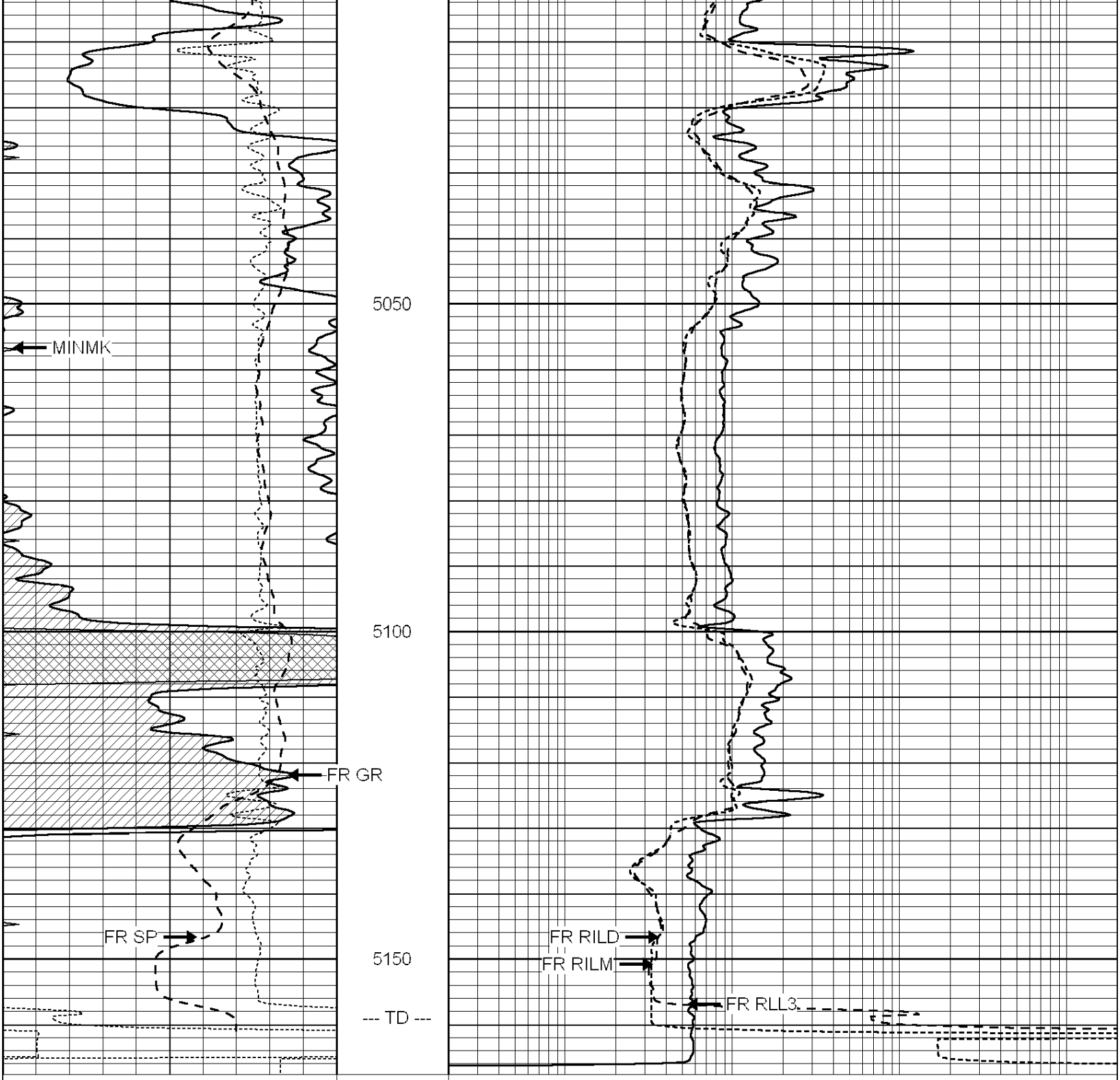
4950
RxoRt
5000



SUPERIOR WELL SERVICES

SUPERIOR
Hays,
Kansas

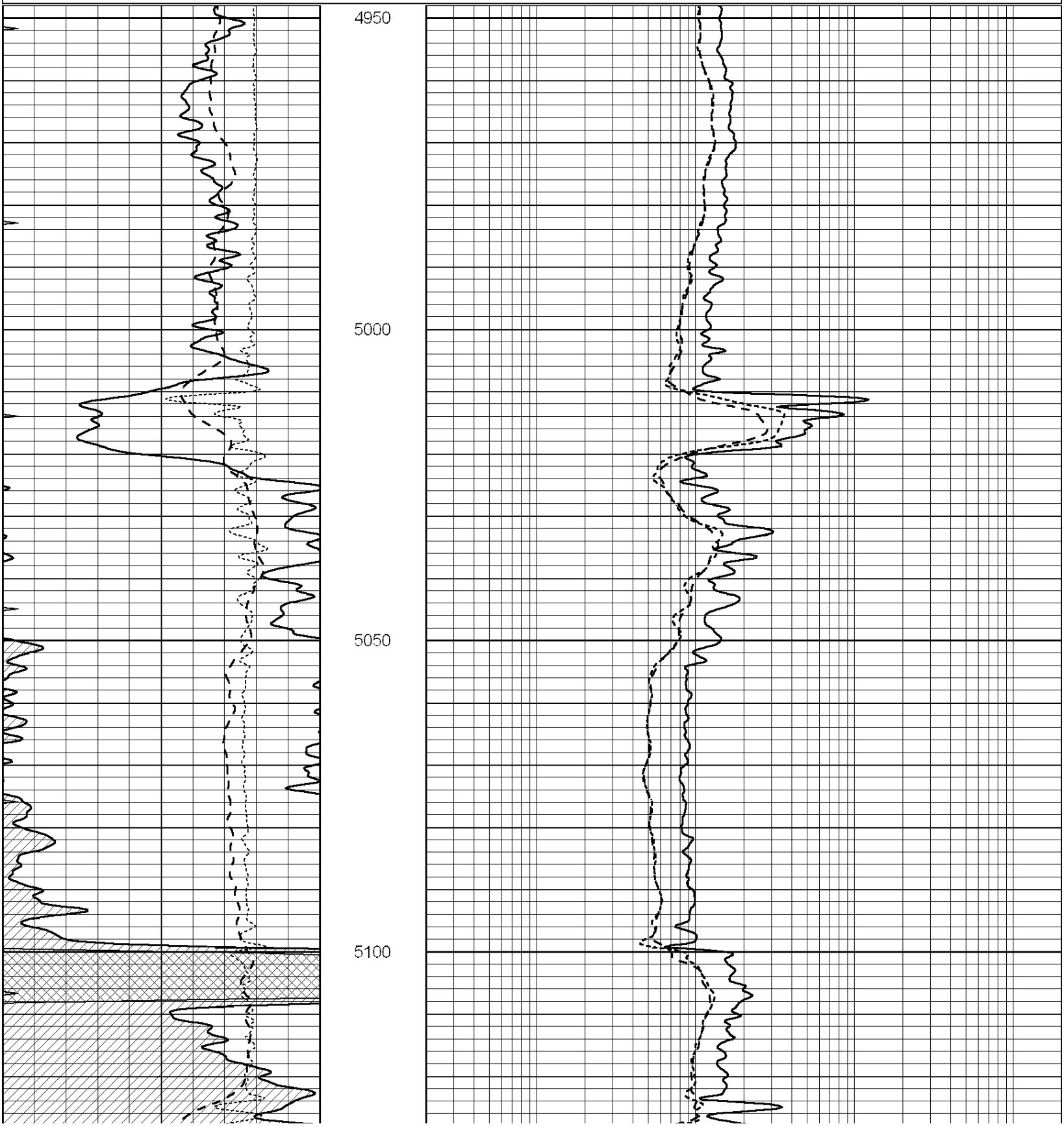
REPEAT SECTION

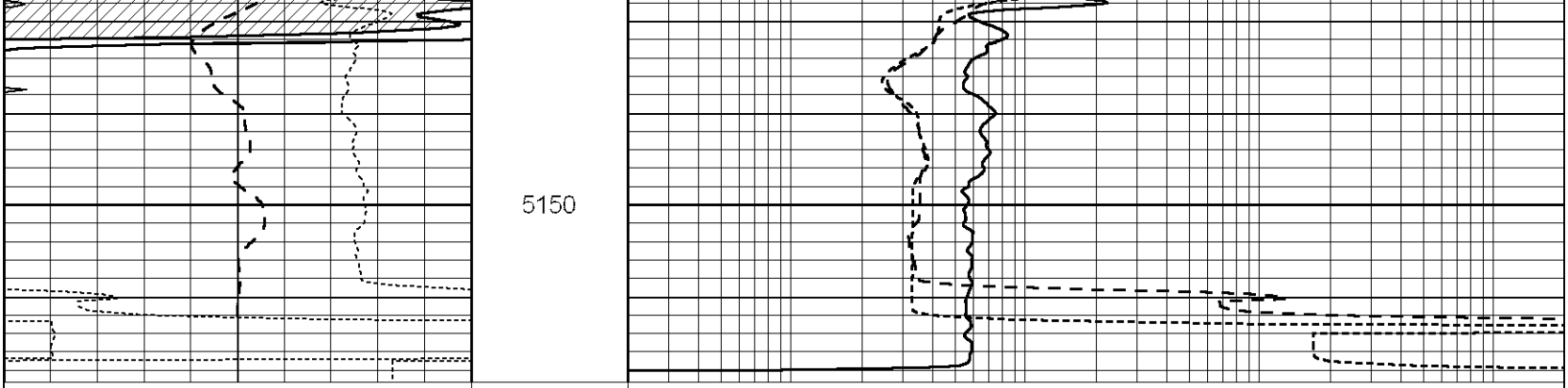
Database File: 005639pdn.db

Dataset Pathname: pass2.2A
Presentation Format: dil
Dataset Creation: Tue Aug 10 16:15:08 2010 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

0.2	RLL3 (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	RxoRt	50
0	MINMK	20

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

Calibration Report

Database File: 005639pdn.db
Dataset Pathname: pass3.2A
Dataset Creation: Tue Aug 10 16:08:07 2010 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: DIL5-GEAR
Performed: Tue Aug 10 15:21:03 2010

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.004	0.654	V	0.000	400.000	mmho/m	510.000	-7.000
Medium	-0.005	0.737	V	0.000	462.500	mmho/m	500.000	-10.000
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	2.8	8.8

High Ref	4.8	14.0	
	Gain: 2.6		Offset: 1.7

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:	Tue Aug 10 13:45:11 2010	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.6400	GAPI/cps