



SUPERIOR
Hays,
Kansas

**DUAL INDUCTION
LOG**

Company RITCHIE EXPLORATION, INC.
Well #1 SCHNEWEIS - TURLEY
Field WILDCAT
County FORD
State KANSAS

Company RITCHIE EXPLORATION, INC.
Well #1 SCHNEWEIS - TURLEY
Field WILDCAT
County FORD State KANSAS

Location: API # : 15-057-20836-0000
82' FNL & 1459' FEL
SEC 19 TWP 27S RGE 25W
Permanent Datum GROUND LEVEL Elevation 2594
Log Measured From KELLY BUSHING 11' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
CDL/CNL
Elevation
K.B. 2605
D.F. 2603
G.L. 2594

Date	8/30/12
Run Number	ONE
Depth Driller	5230
Depth Logger	5224
Bottom Logged Interval	5222
Top Log Interval	00
Casing Driller	8 5/8"@353'
Casing Logger	353
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.4/52
pH / Fluid Loss	9.0/11.6
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.650@72F
Rmt @ Meas. Temp	.488@72F
Rmc @ Meas. Temp	.780@72F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.369@127F
Time Circulation Stopped	2.5 HOURS
Time Logger on Bottom	1:30 A.M.
Maximum Recorded Temperature	127F
Equipment Number	4010
Location	HAYS, KANSAS
Recorded By	JEFF LUEBBERS
Witnessed By	BOB PETERSEN

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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

THANK YOU FOR USING SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395
DIRECTIONS
DODGE CITY, KS., W. ON HWY 56, 2 MILES PAST HWY 400 OVER PASS TO "RD. 106", 1S., 1/2E., S. INTO



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MAIN SECTION

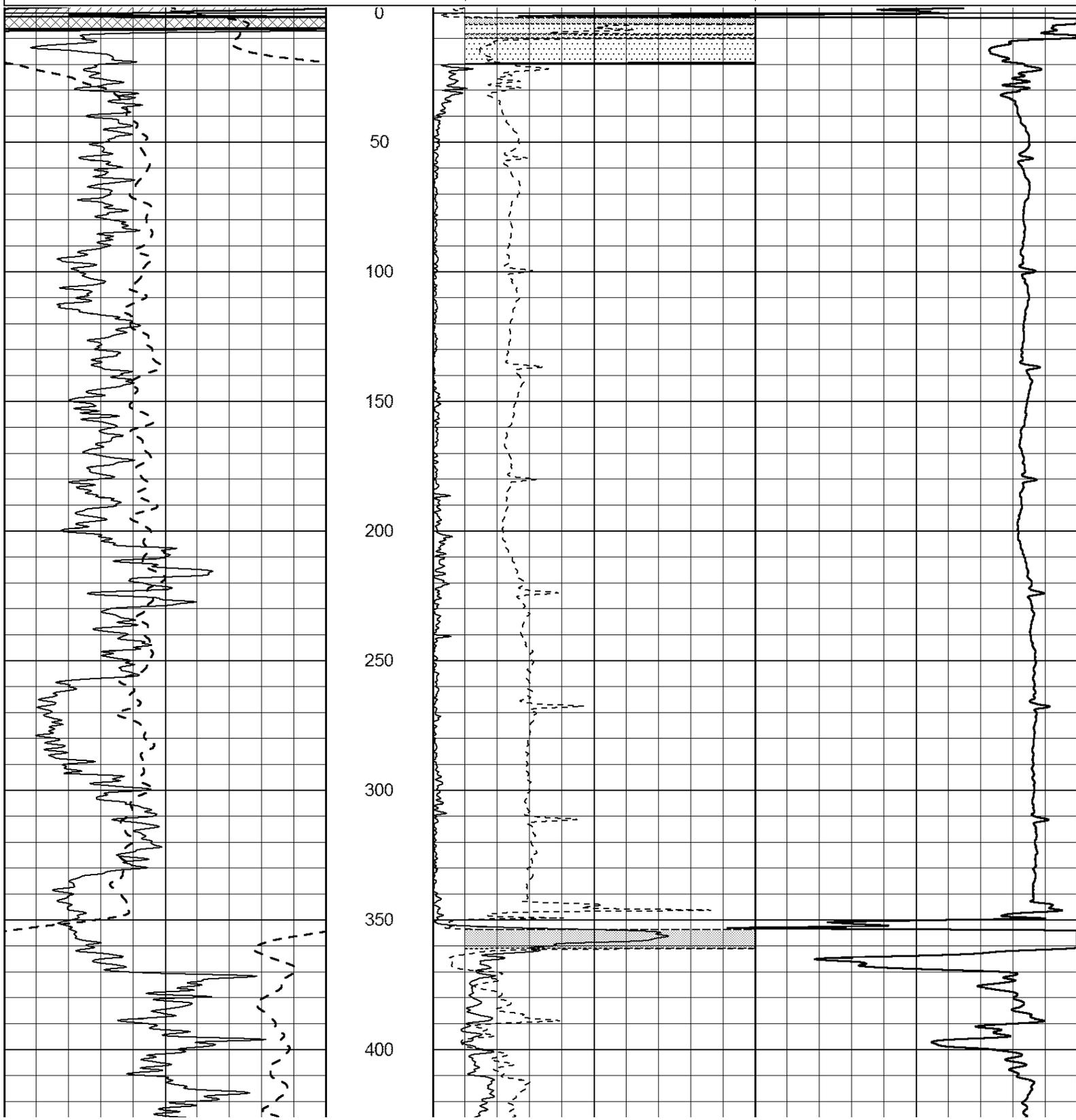
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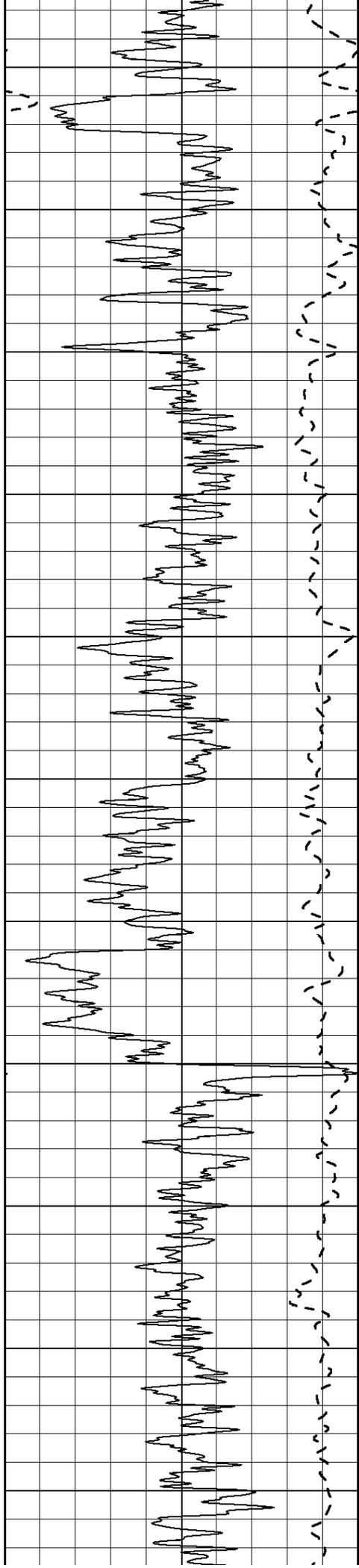
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-100	SP (mV)	100

0	RLL3 (Ohm-m)	50
0	RILD (Ohm-m)	50

1000	CILD (mmho/m)	0
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50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500





450

500

550

600

650

700

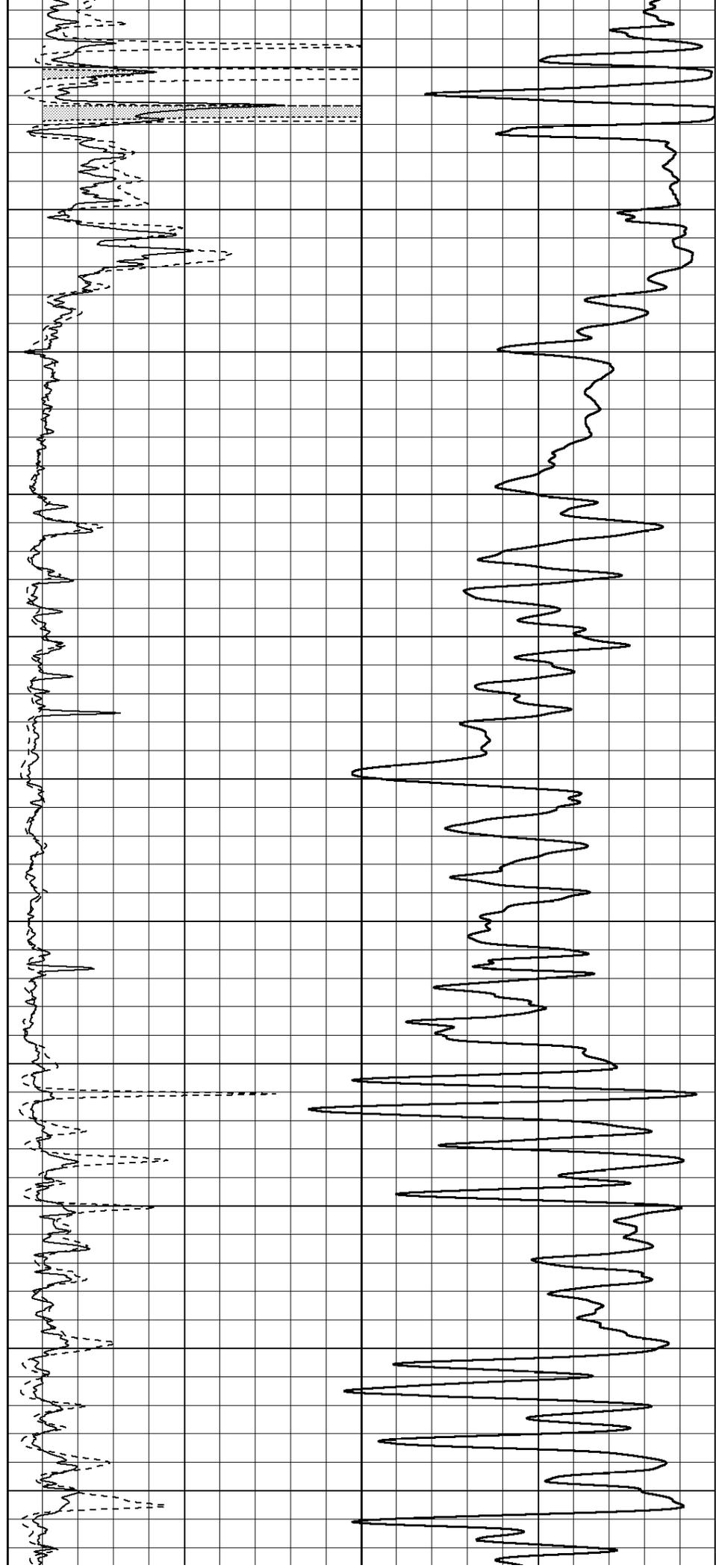
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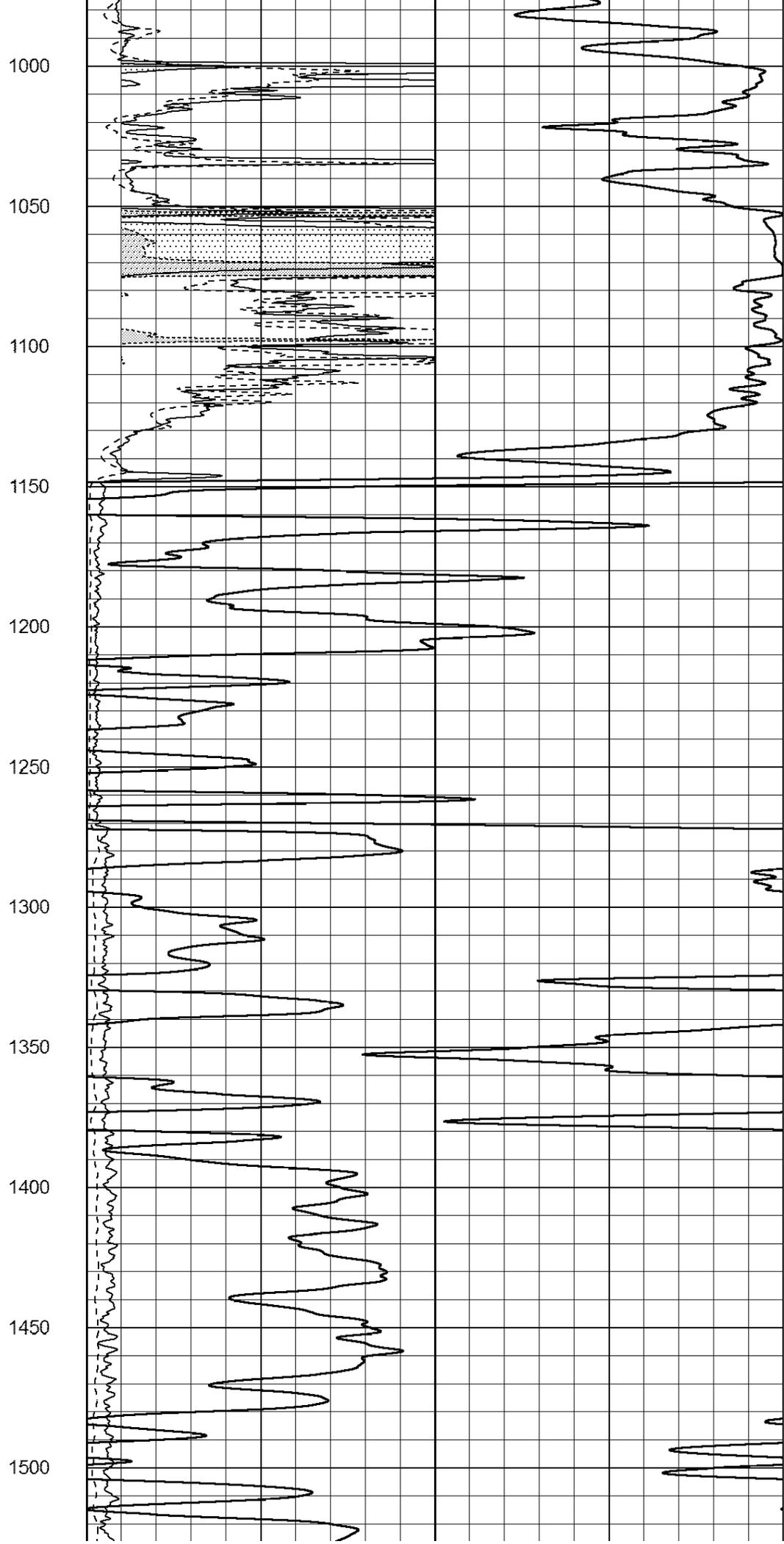
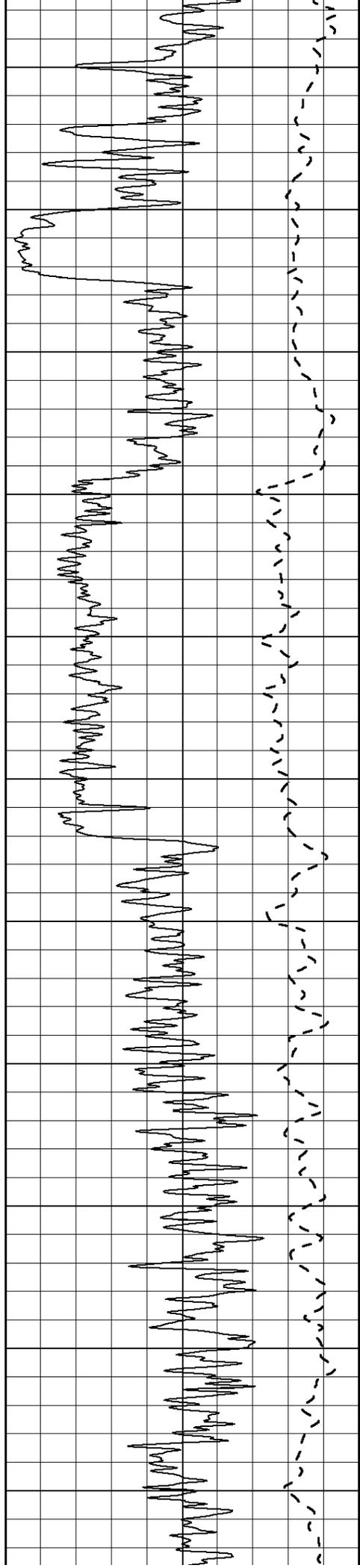
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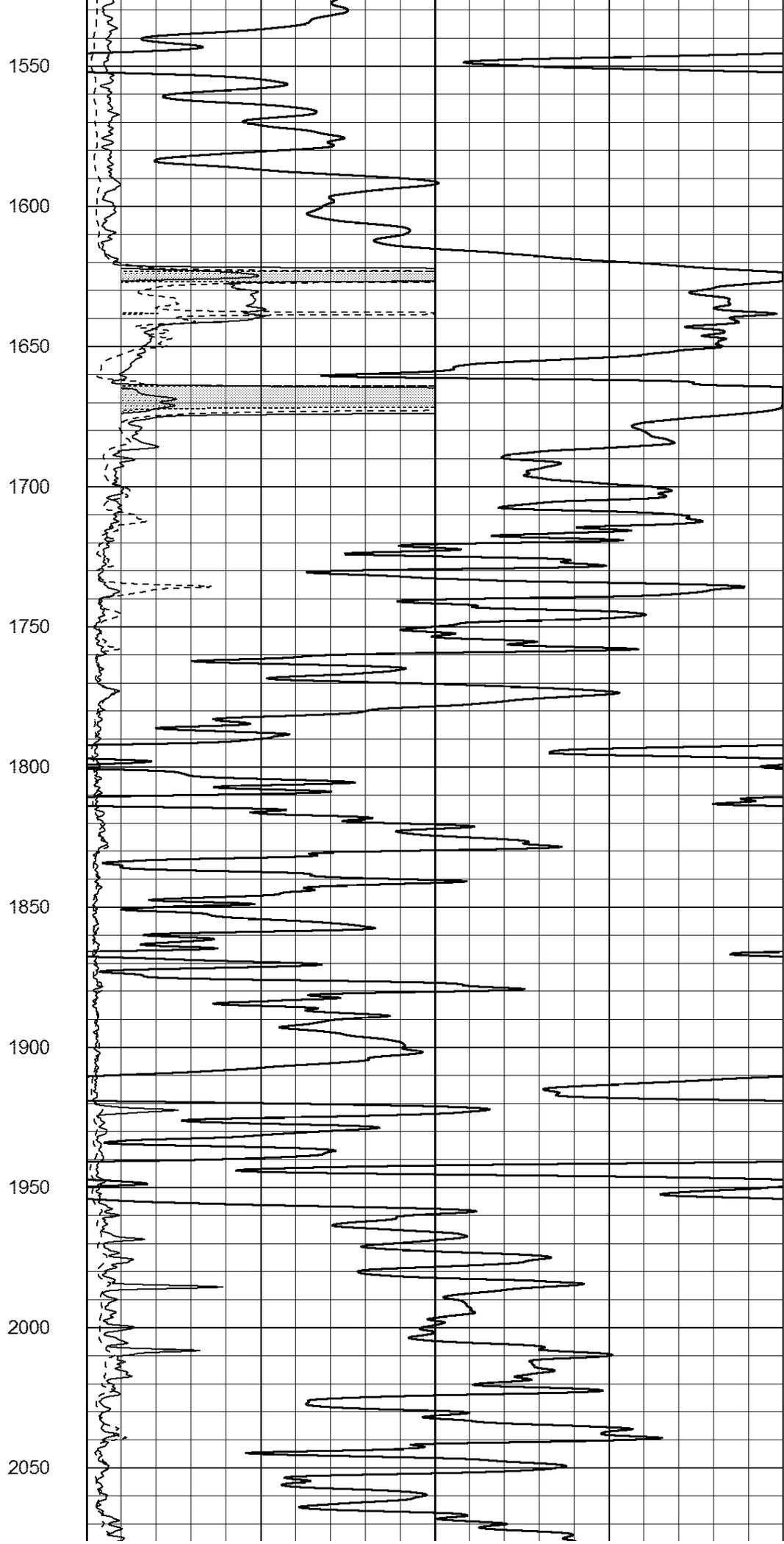
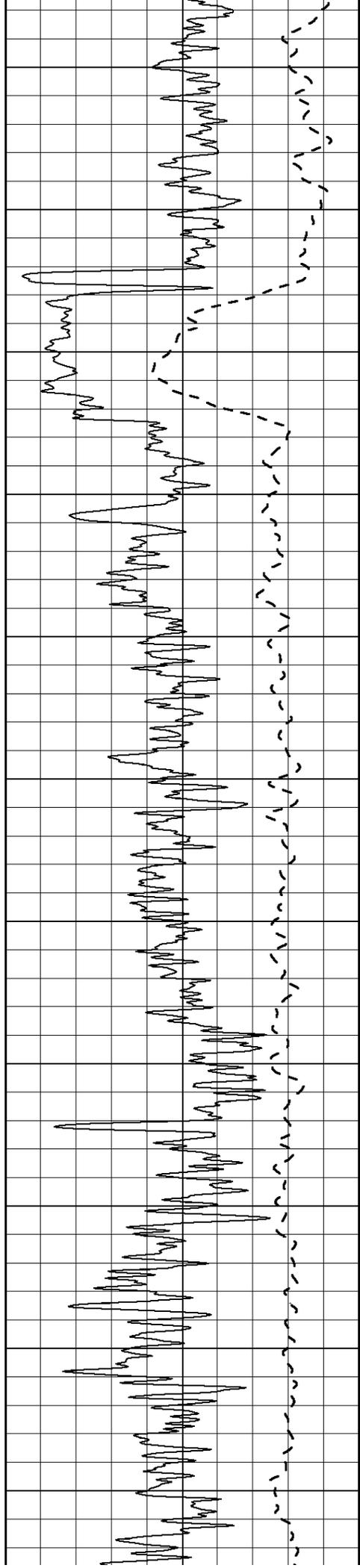
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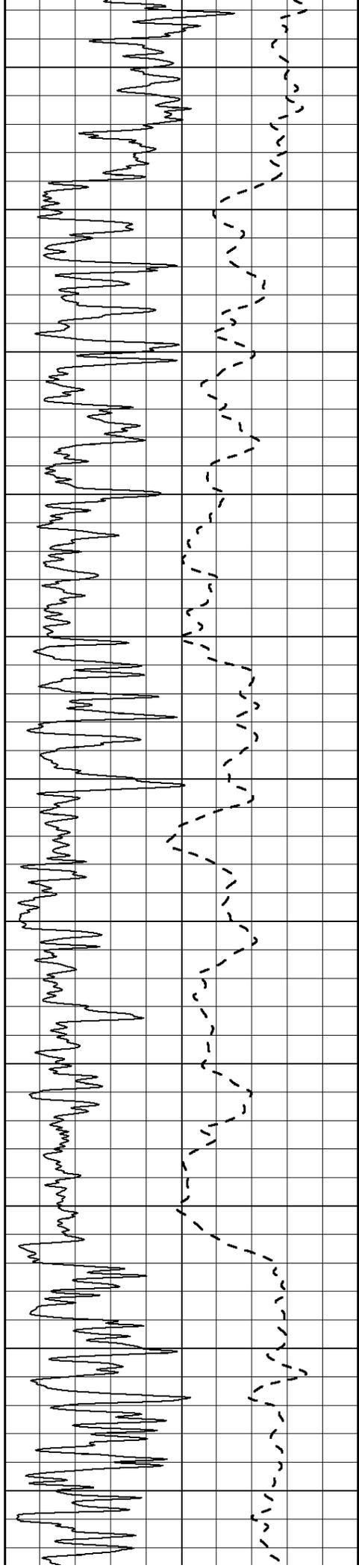
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950









2100

2150

2200

2250

2300

2350

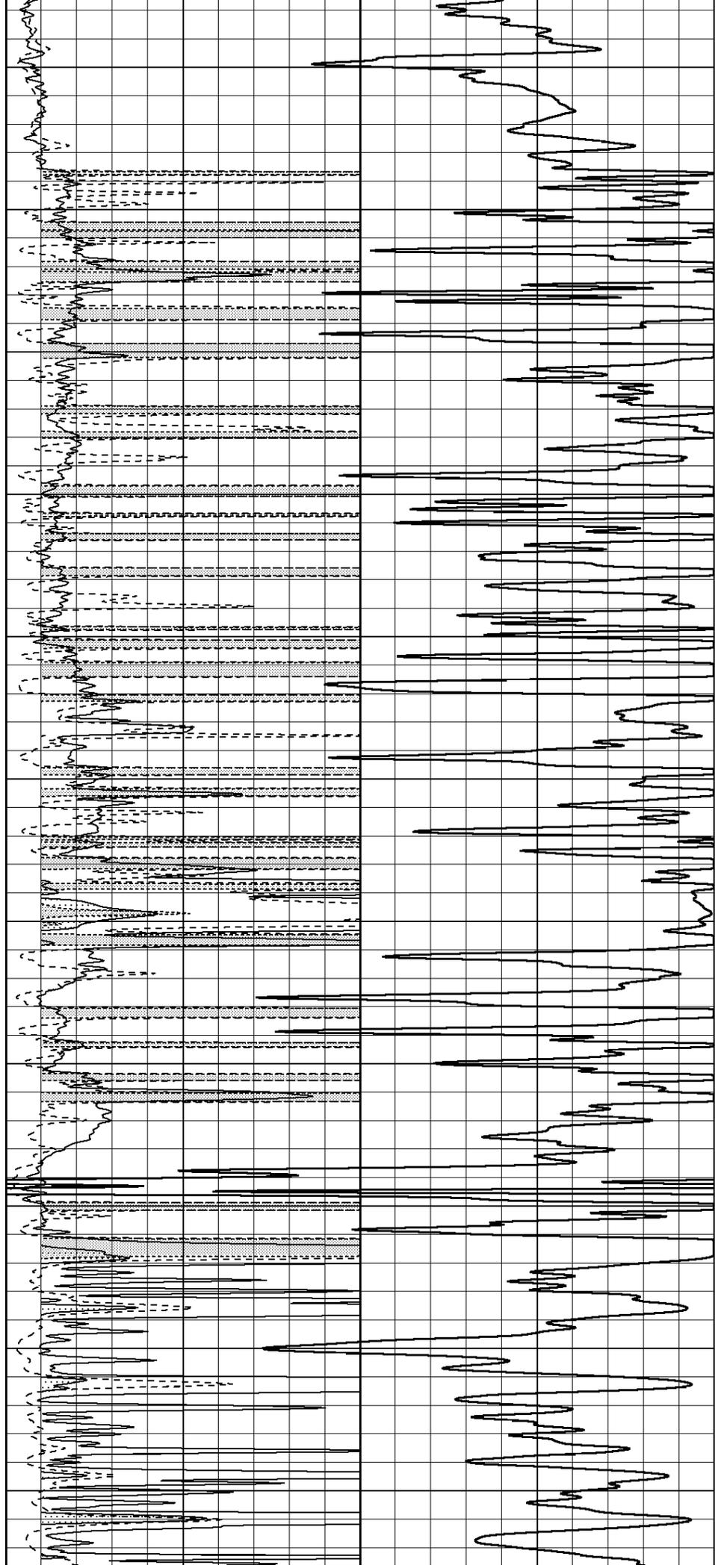
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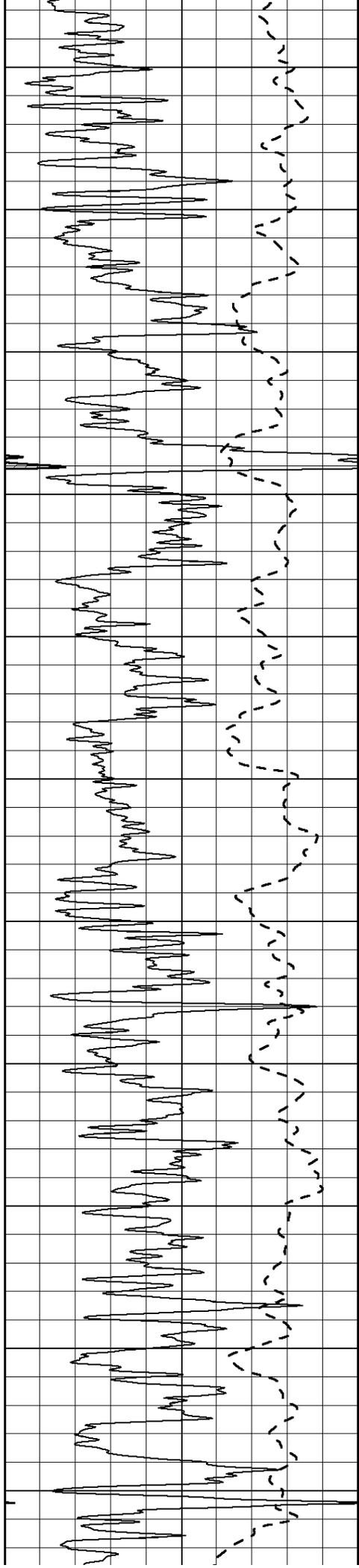
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2500

2550

2600





2650

2700

2750

2800

2850

2900

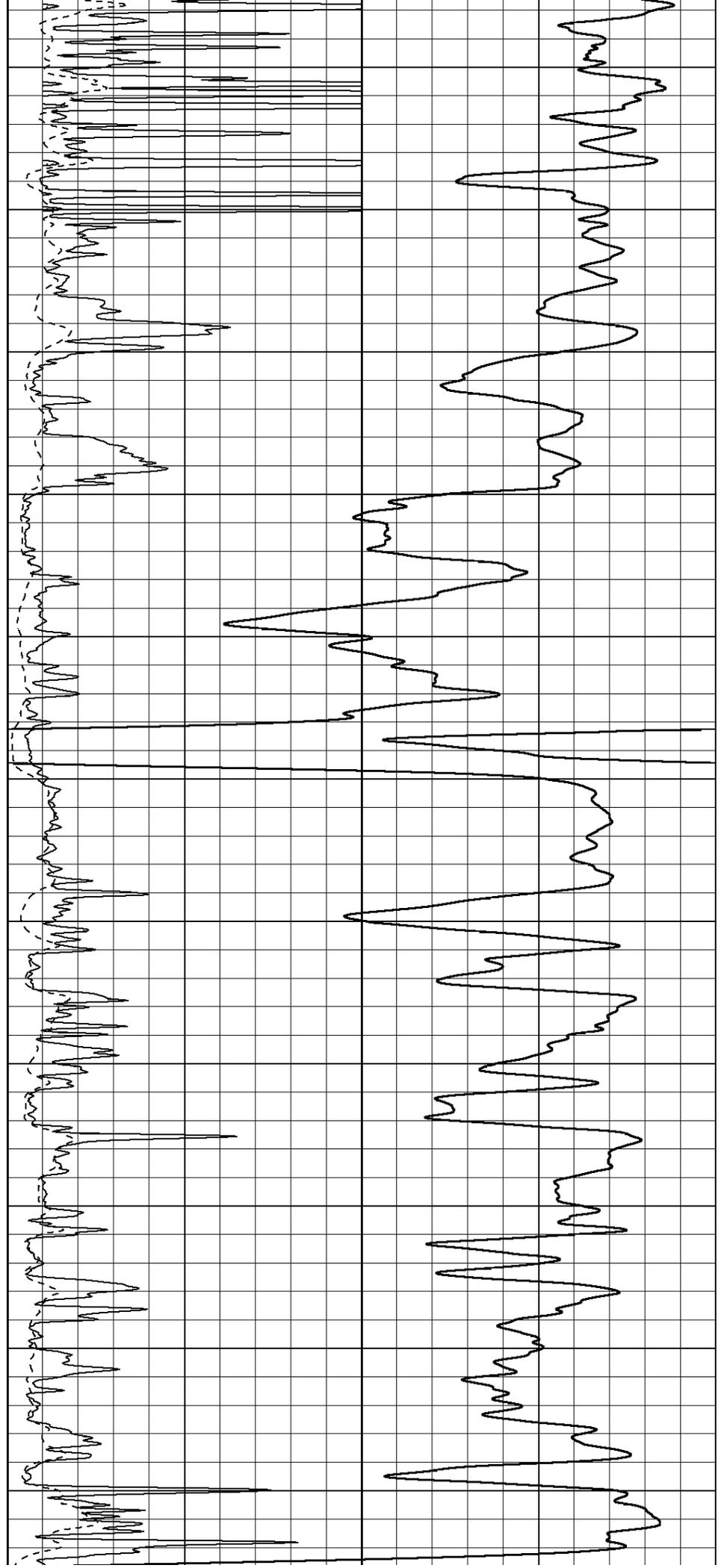
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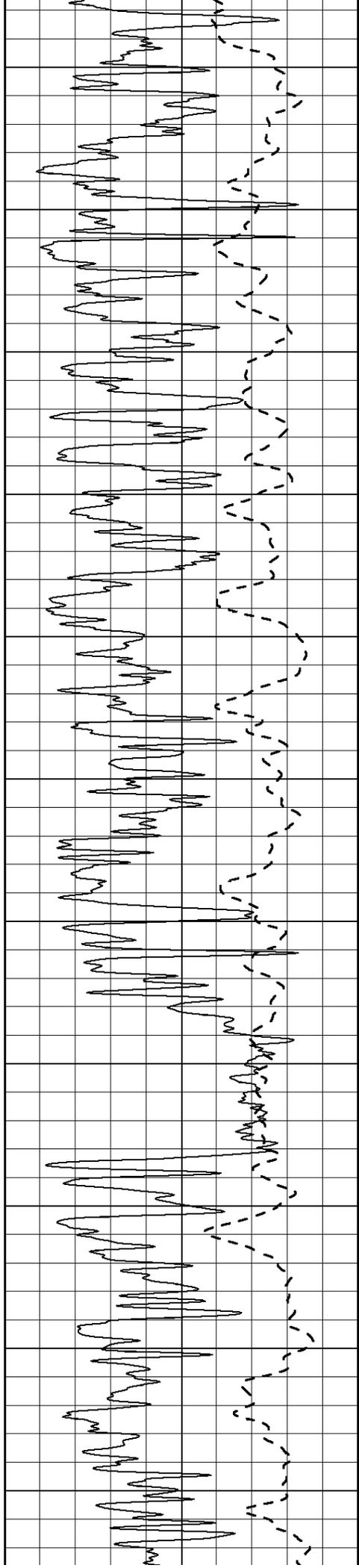
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3050

3100

3150





3200

3250

3300

3350

3400

3450

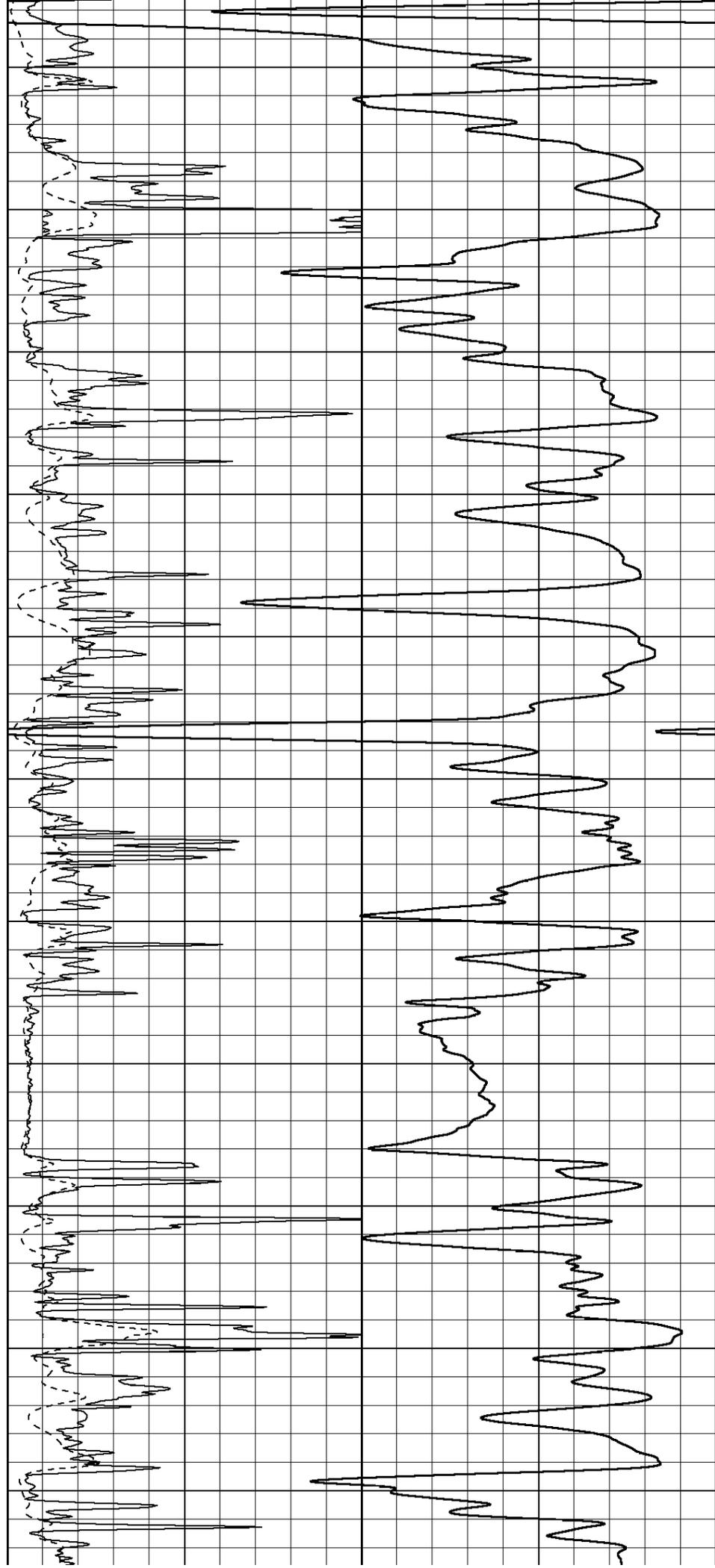
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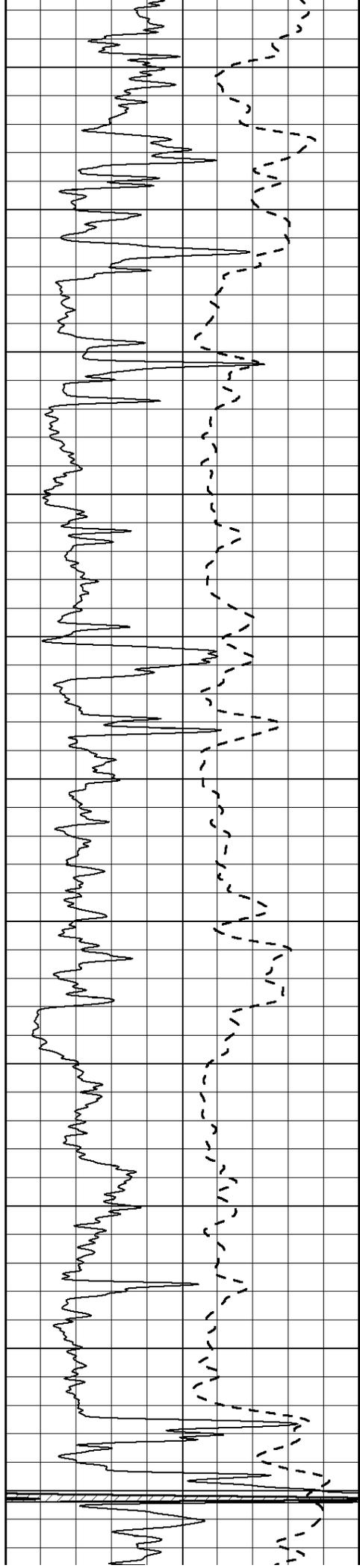
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3650

3700





3750

3800

3850

3900

3950

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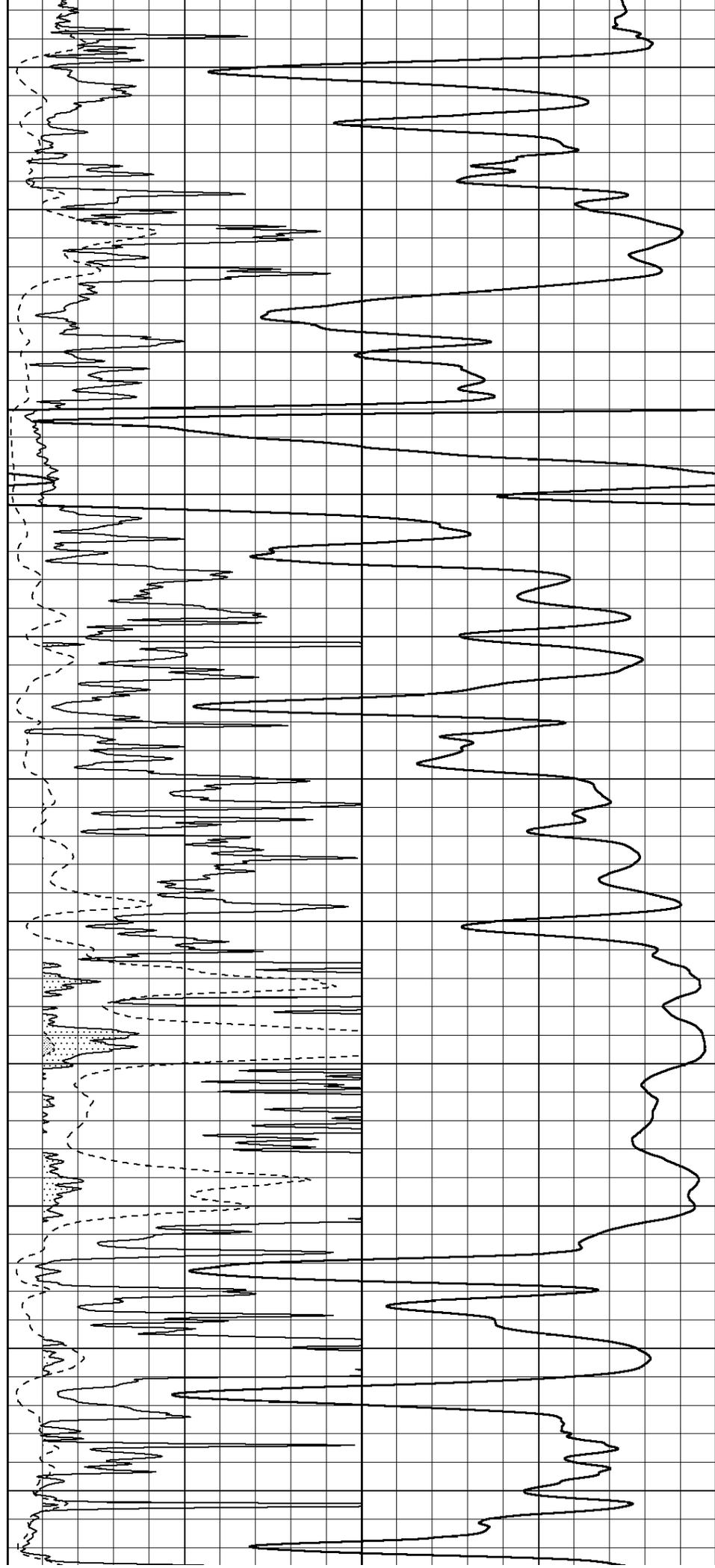
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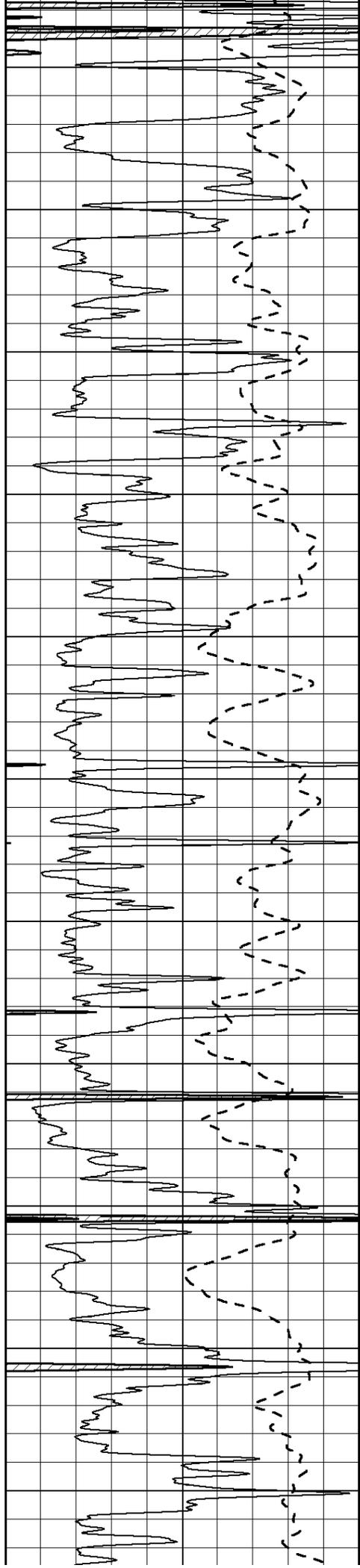
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4150

4200

4250





4300

4350

4400

4450

4500

4550

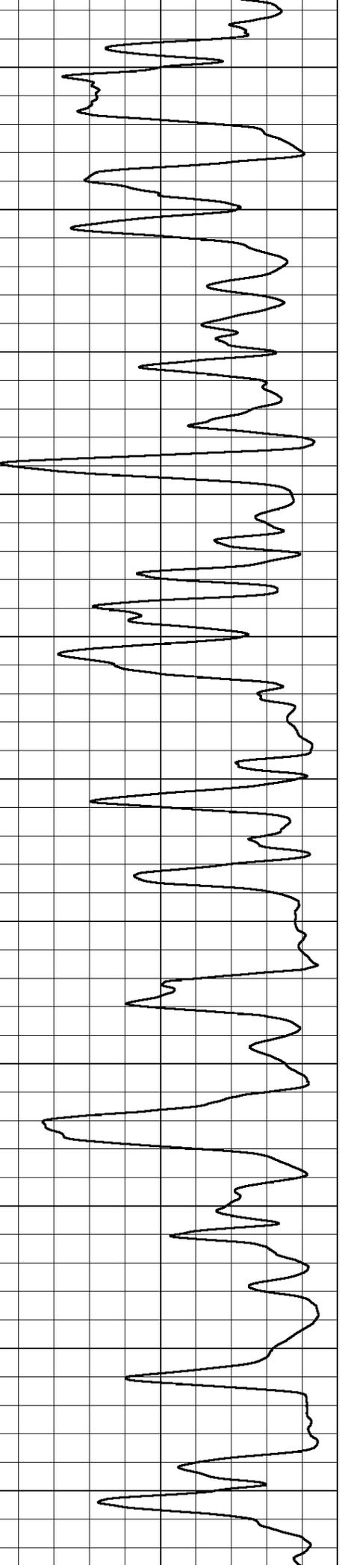
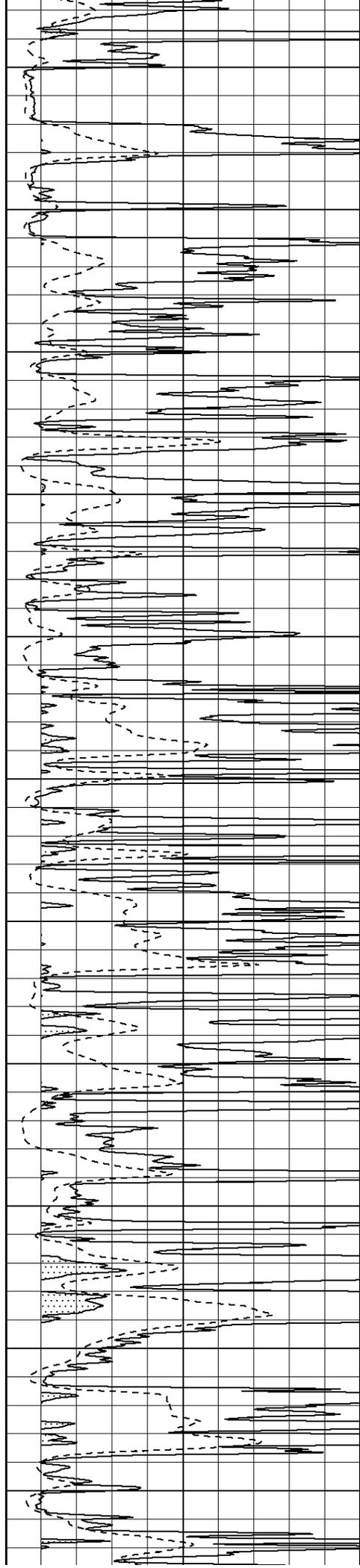
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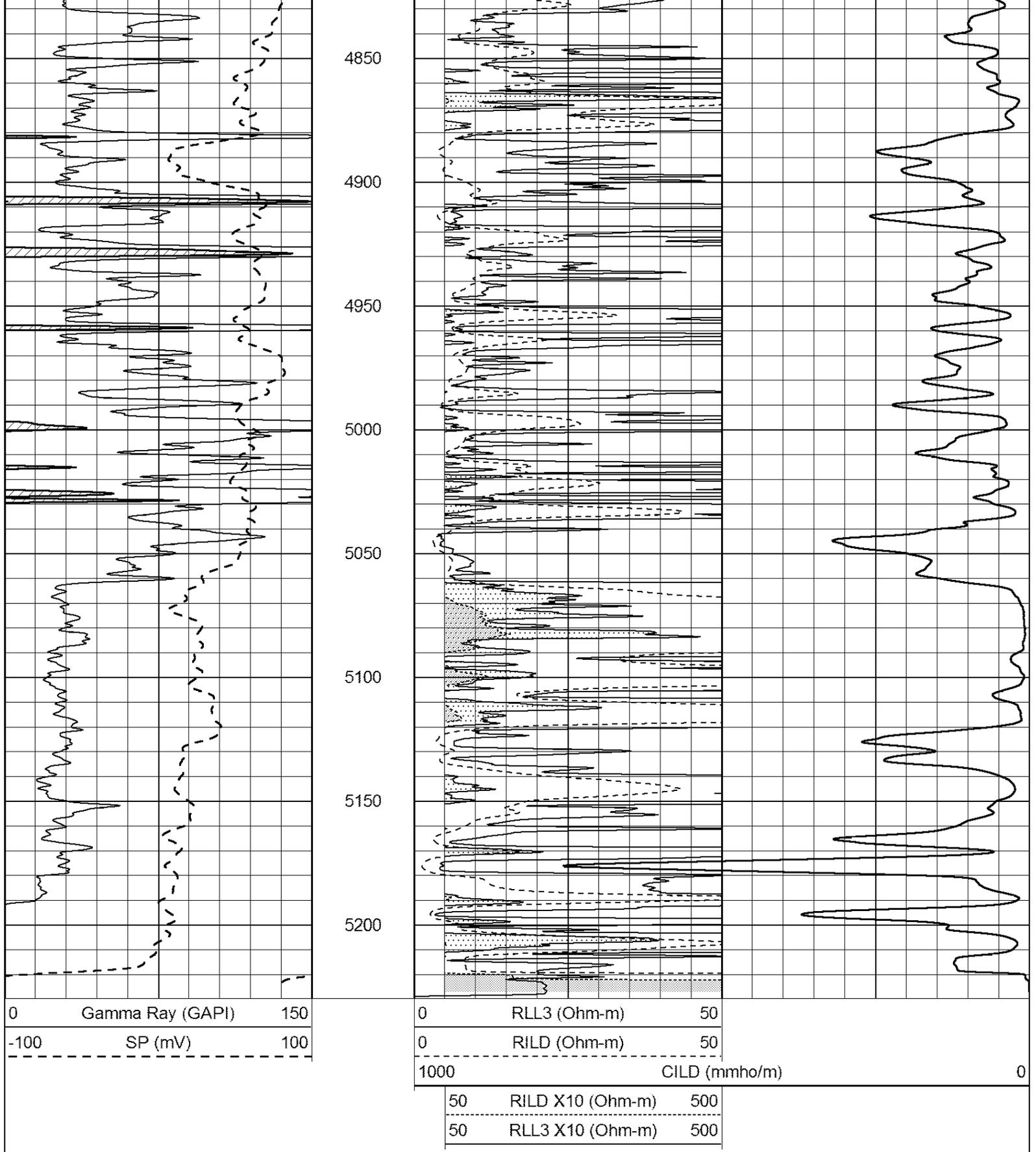
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4700

4750

4800



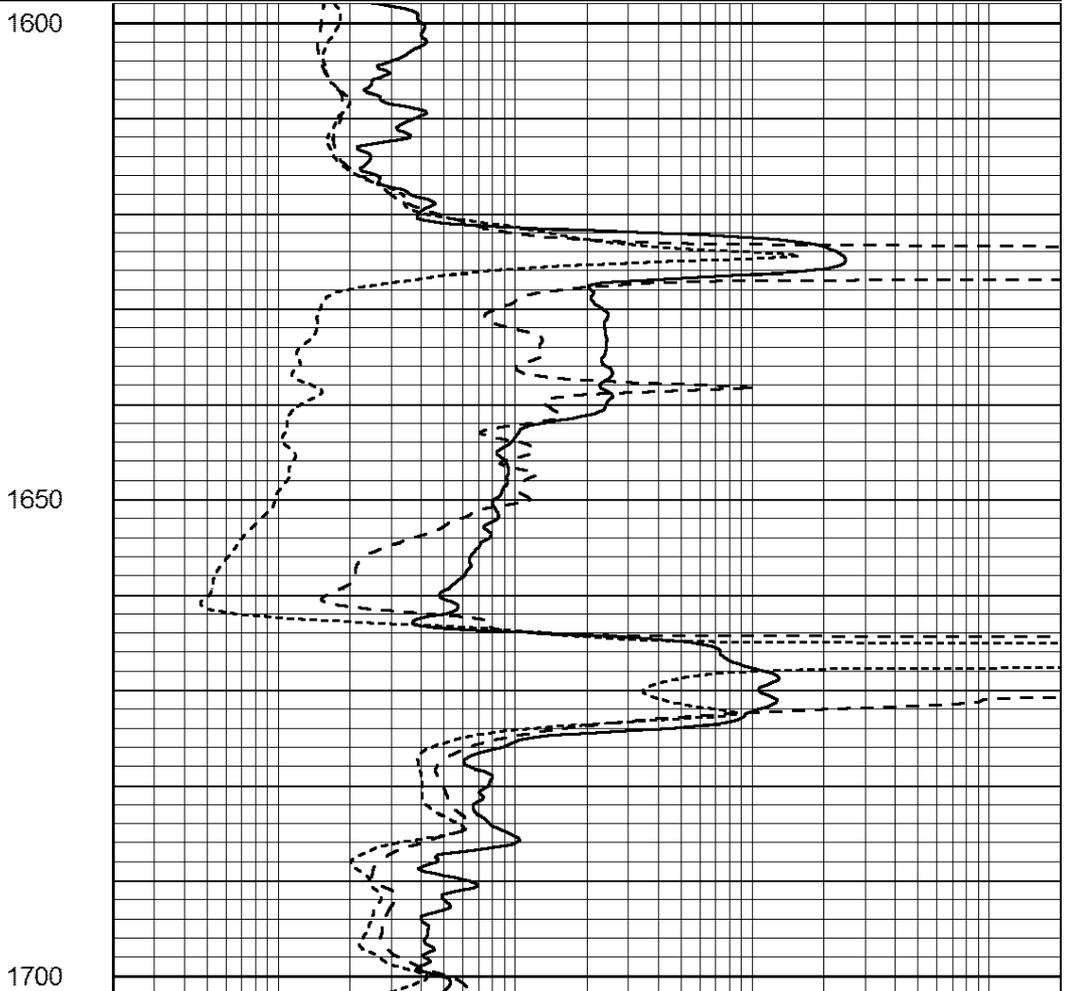
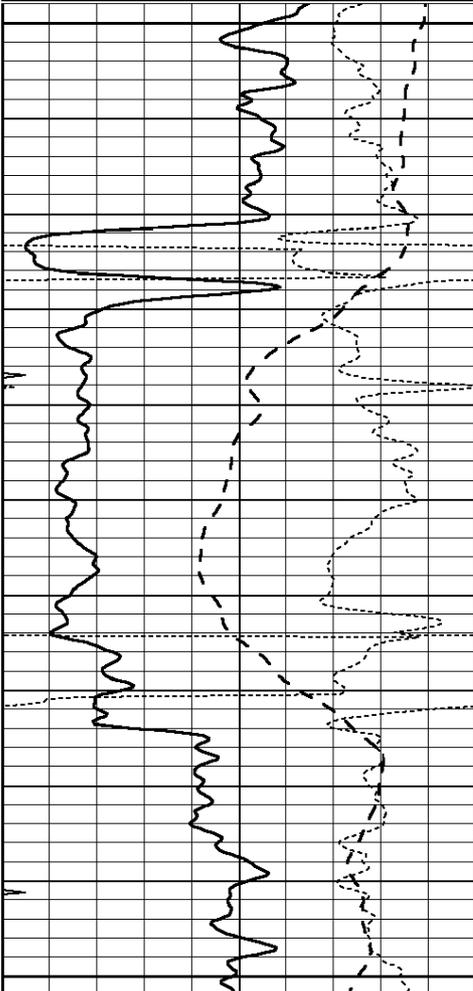


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ANHYDRITE

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



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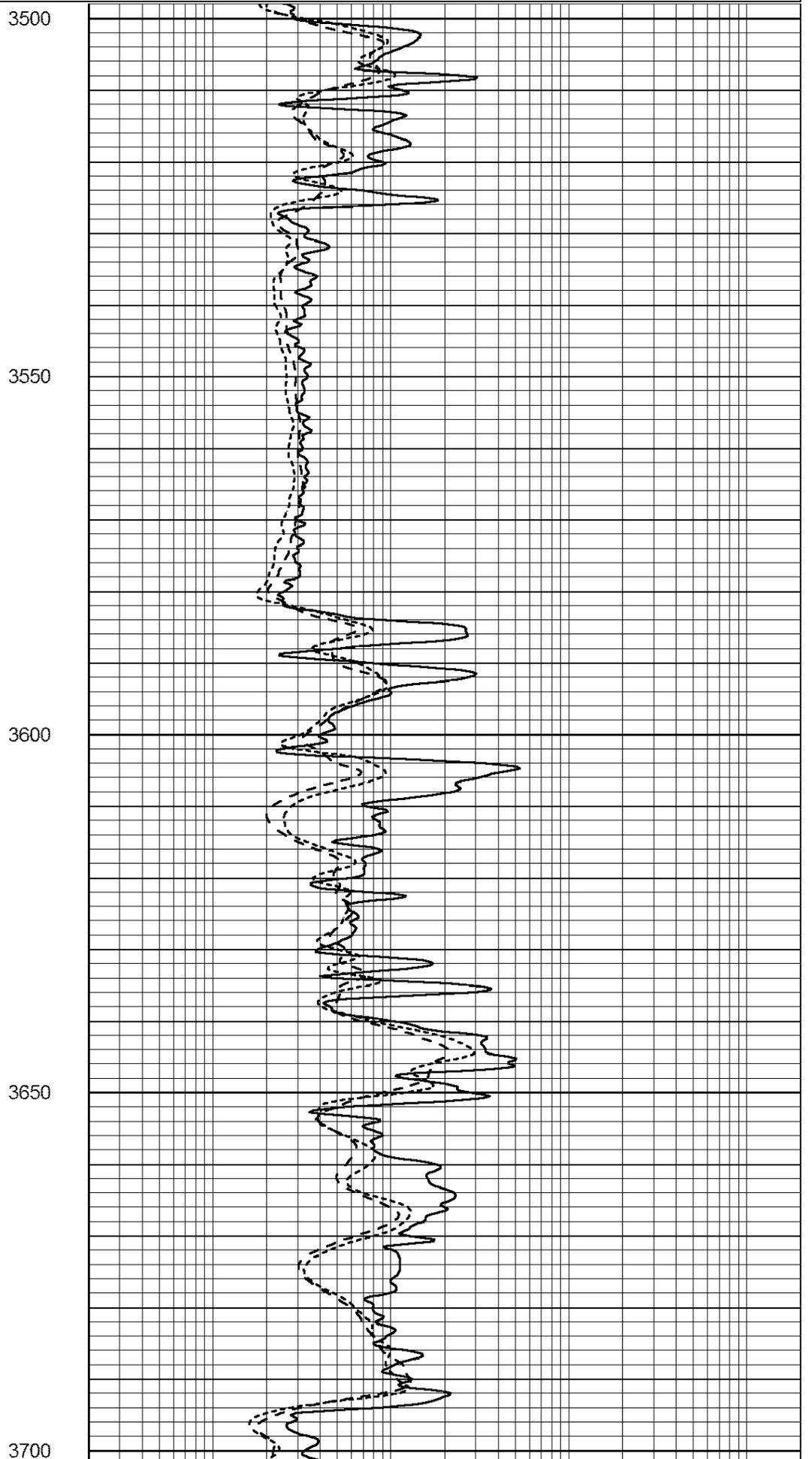
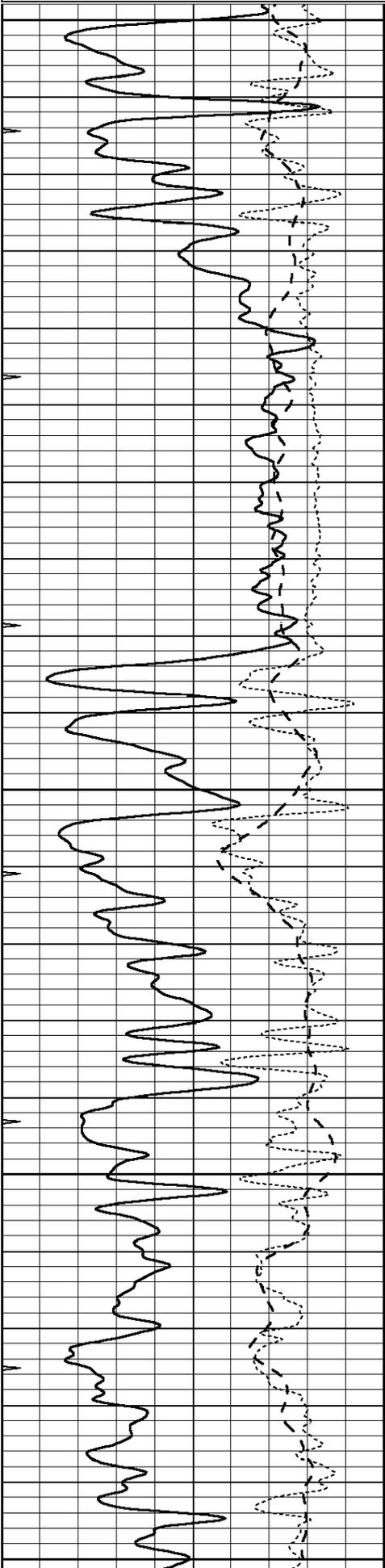
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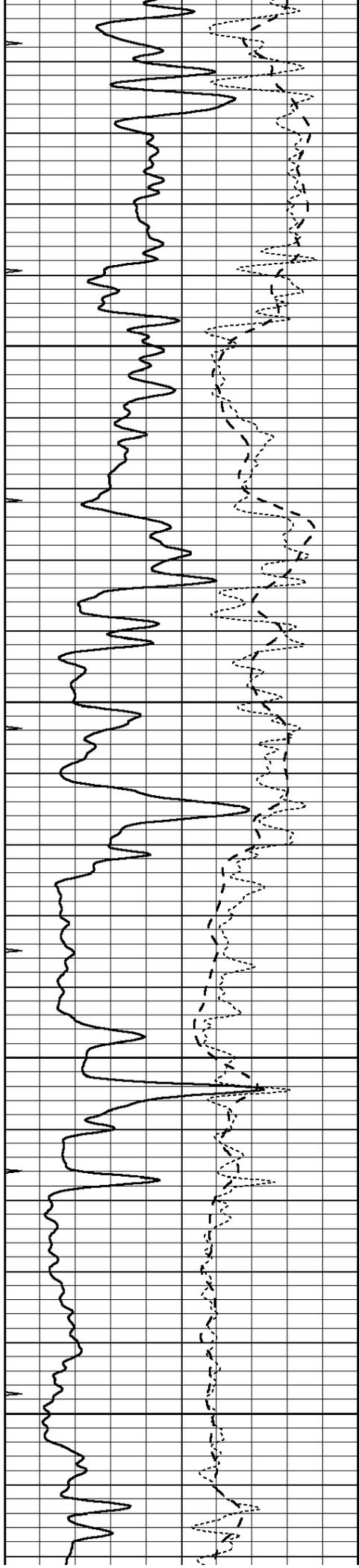
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100

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

-250 Rxo/Rt 50
0 MINMK 20

0.2 MEDIUM INDUCTION (Ohm-m) 2000



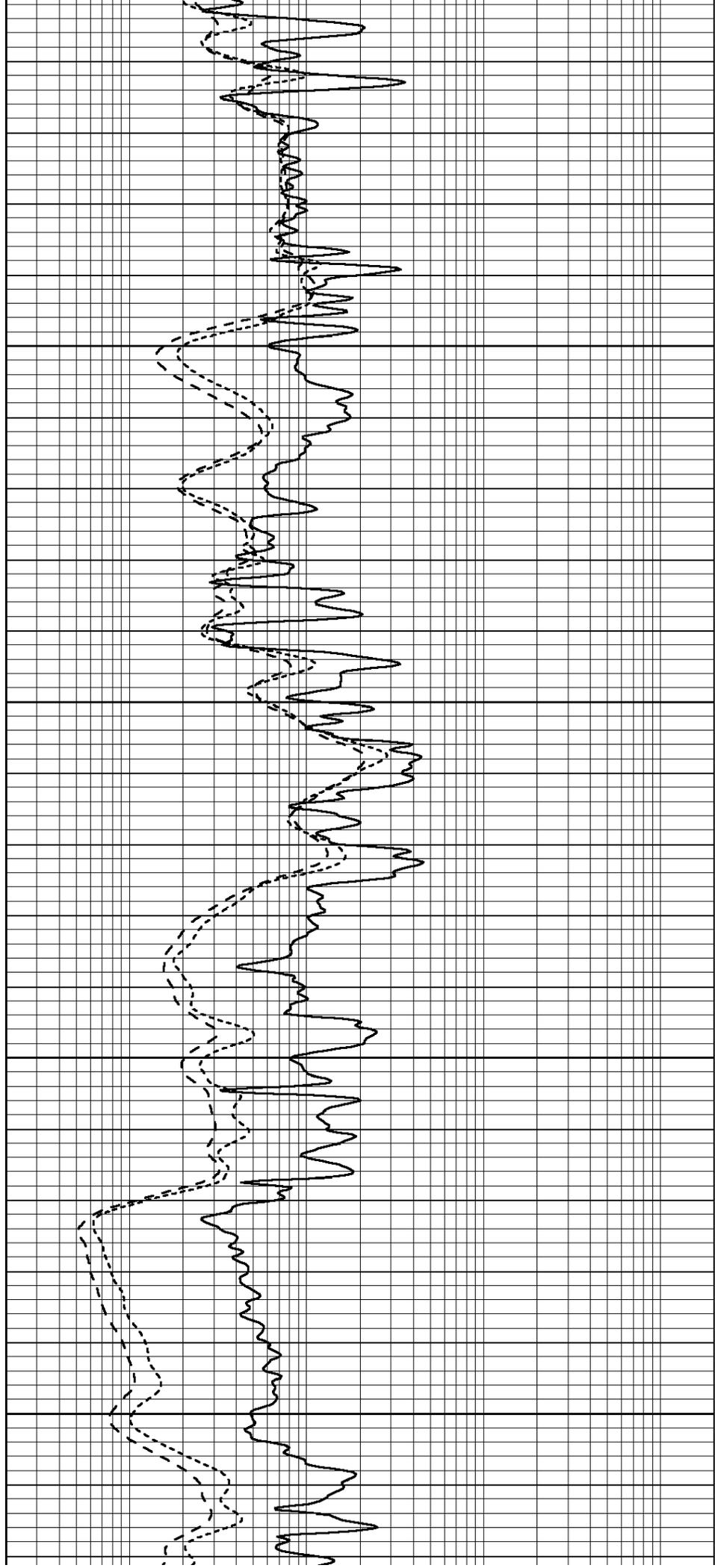


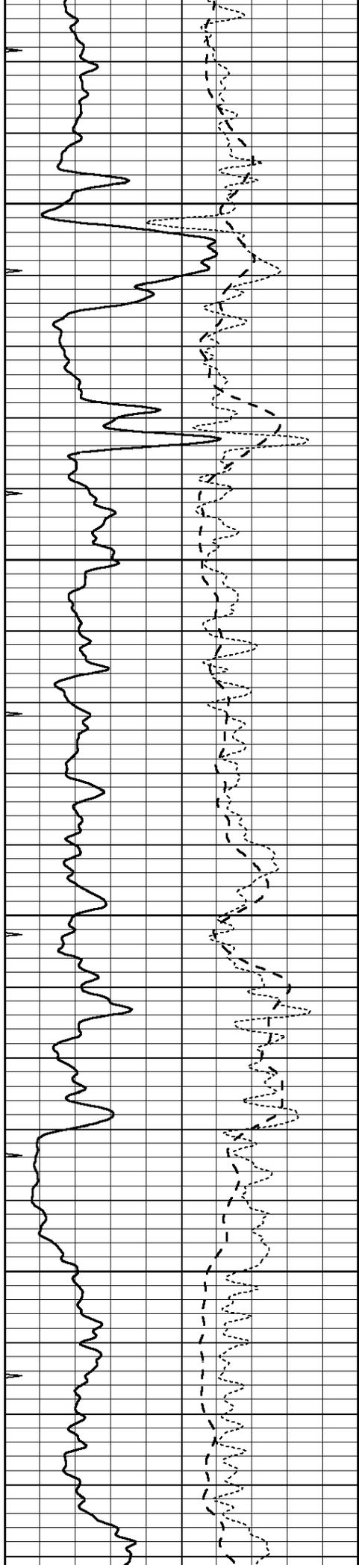
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3800

3850

3900



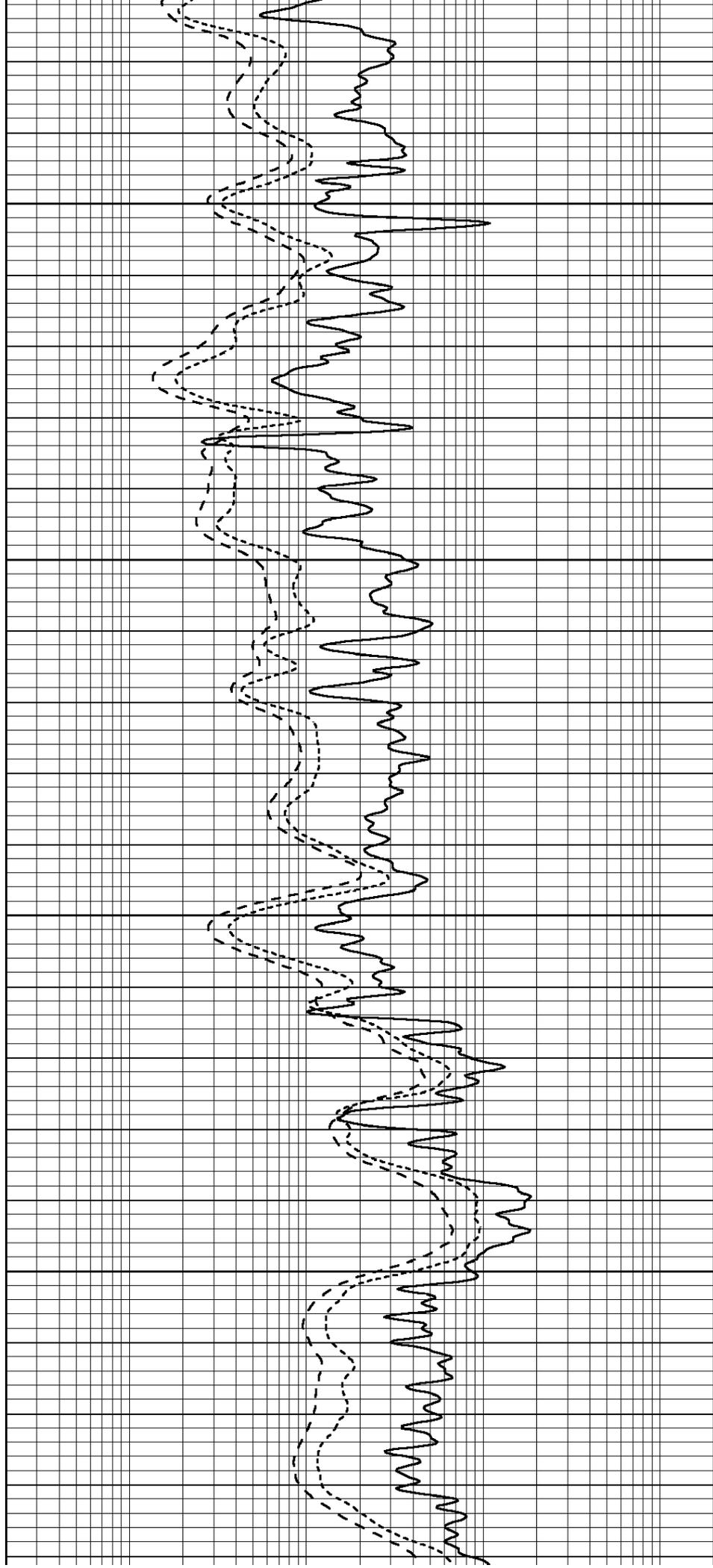


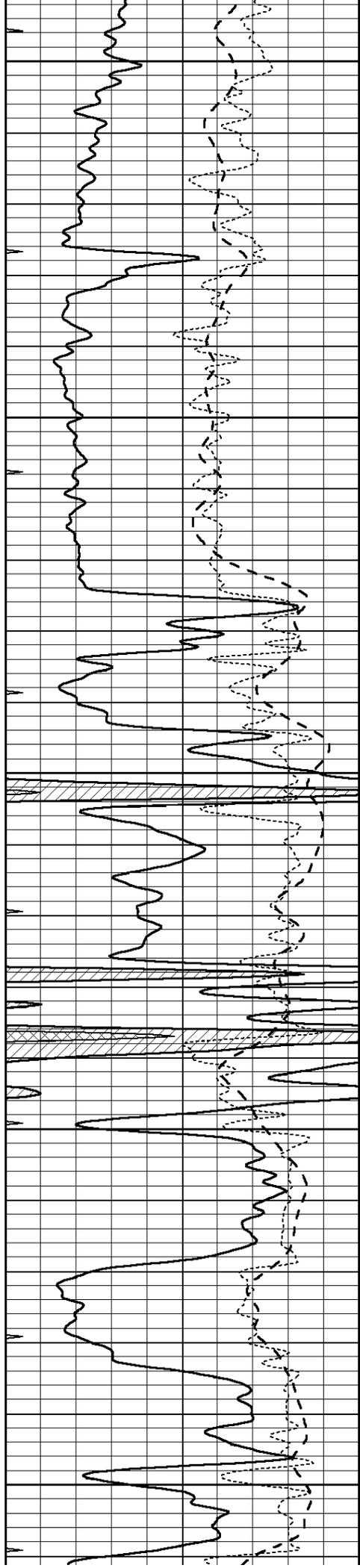
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4050

4100





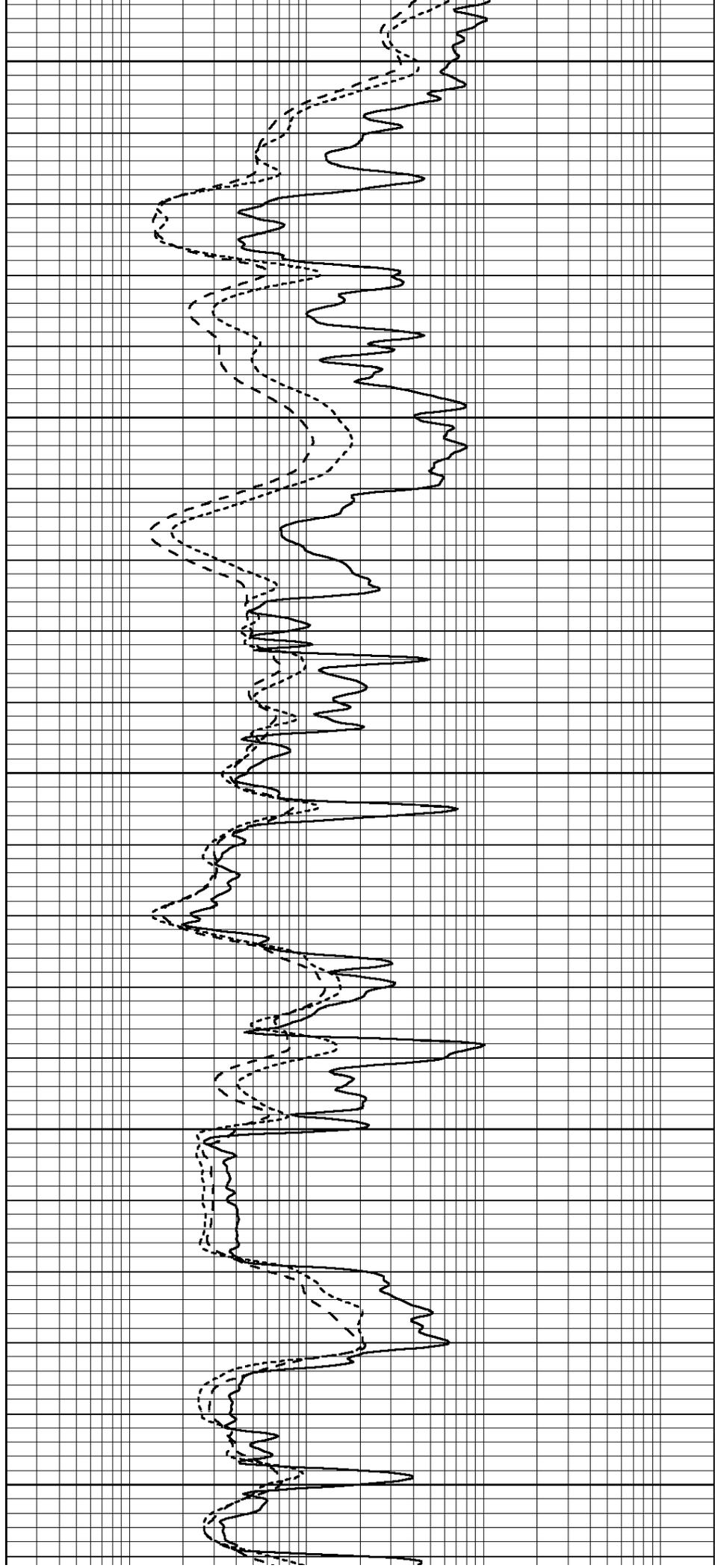
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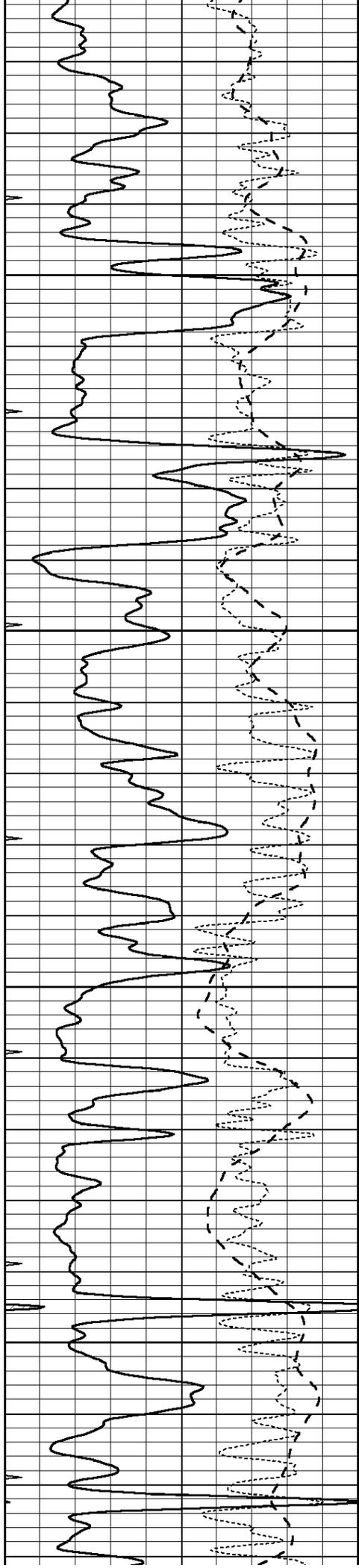
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4350



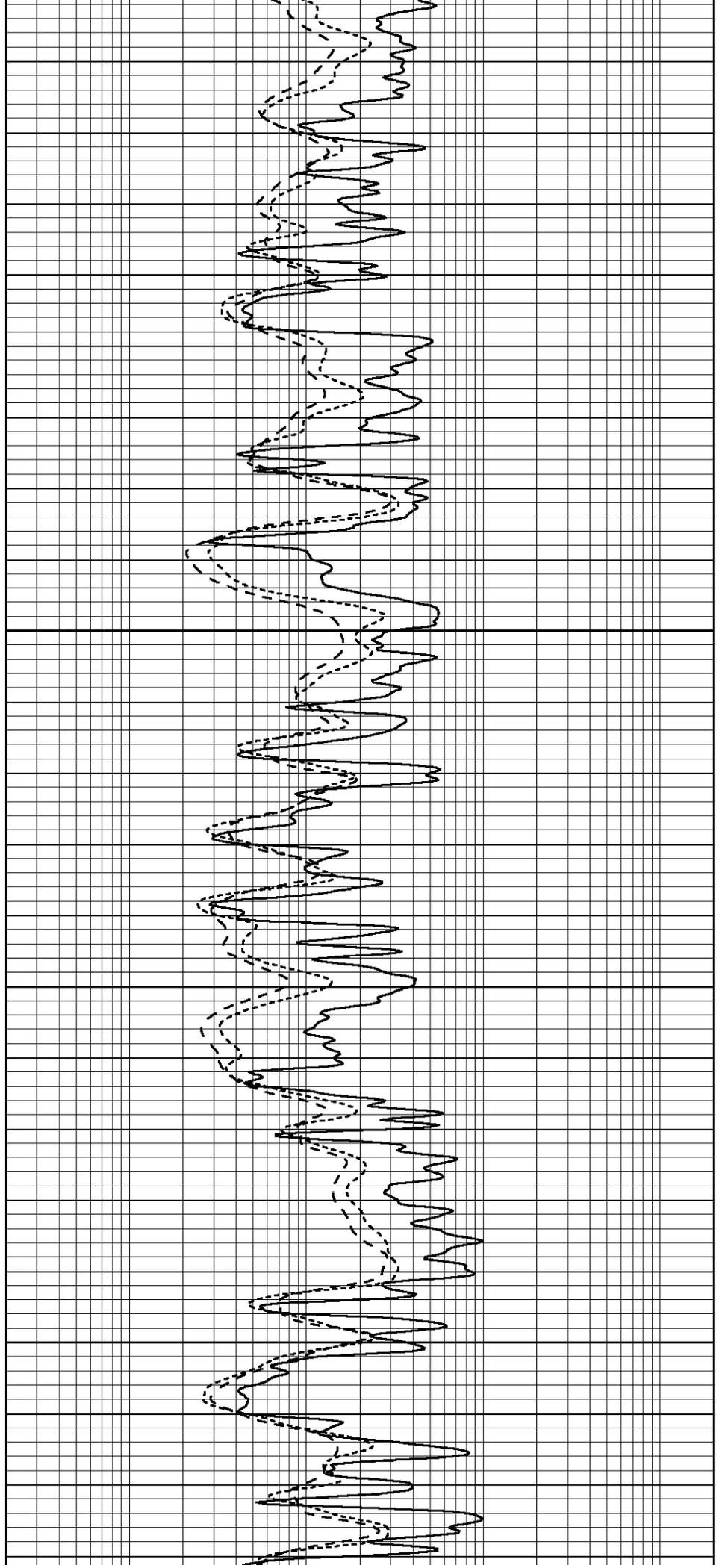


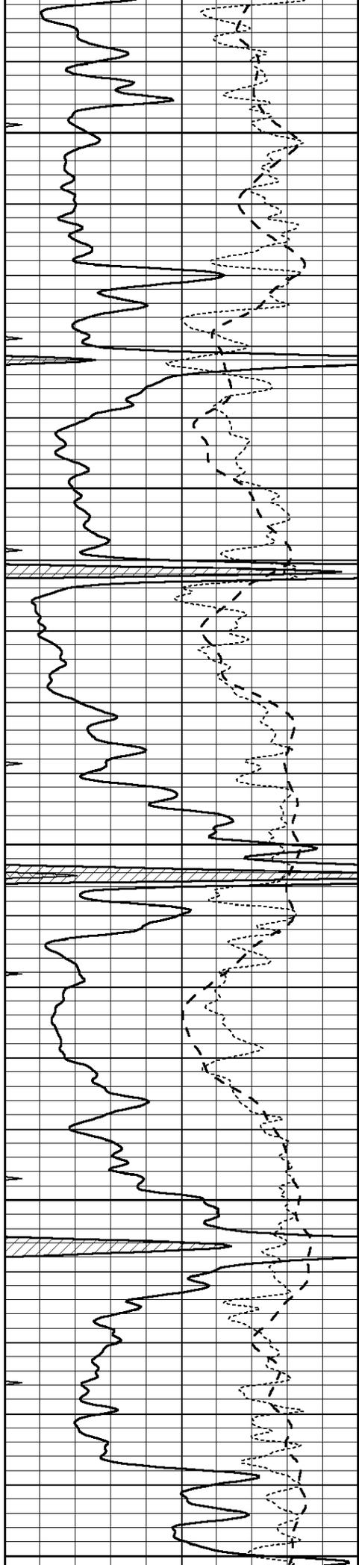
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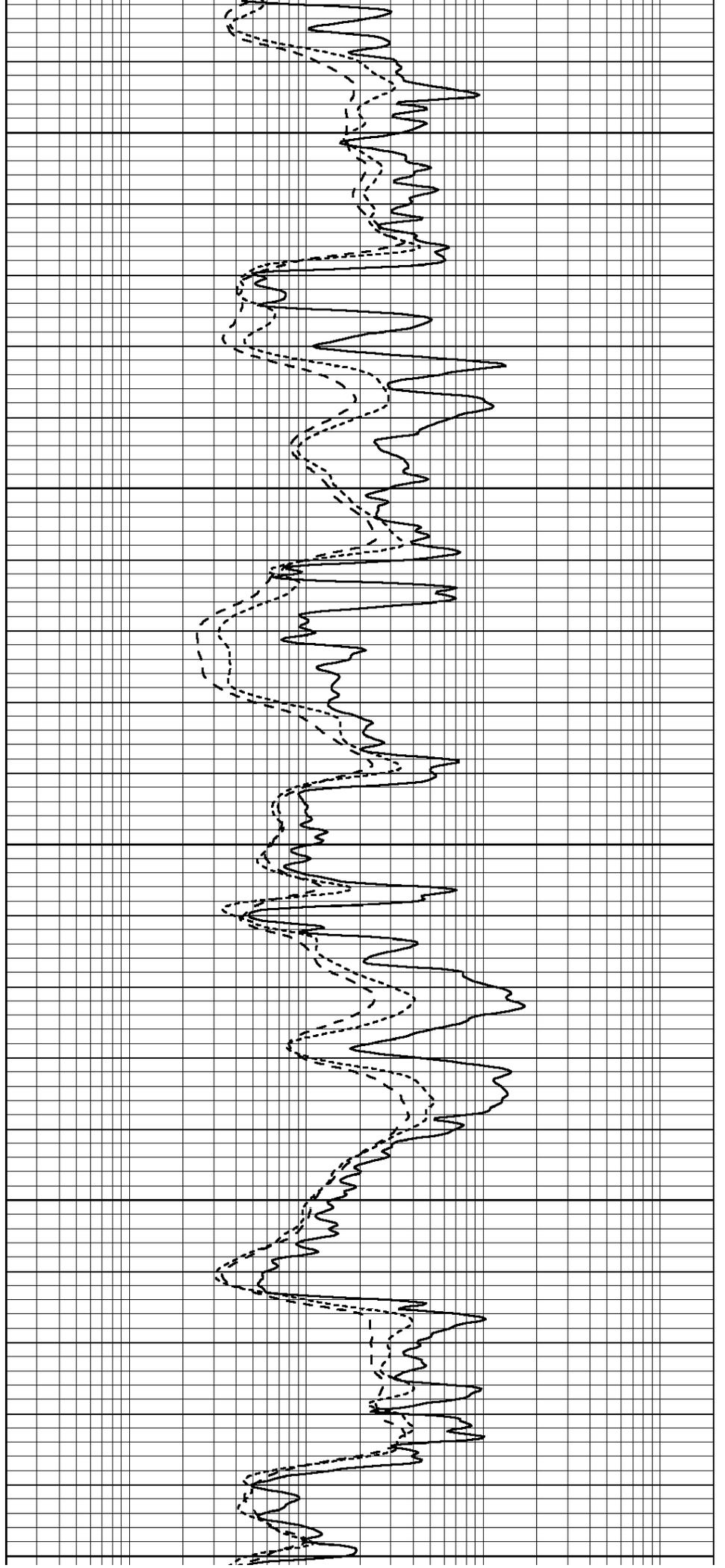
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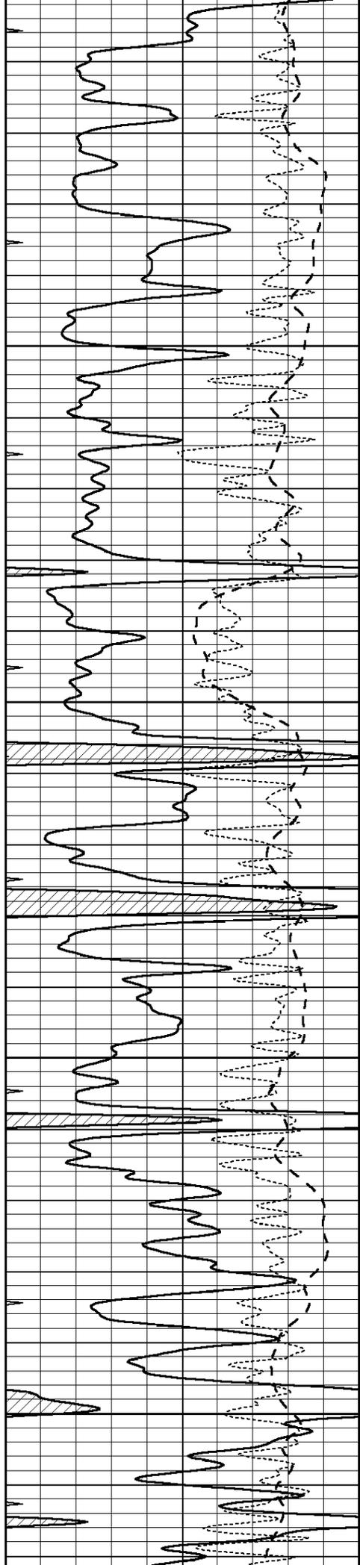
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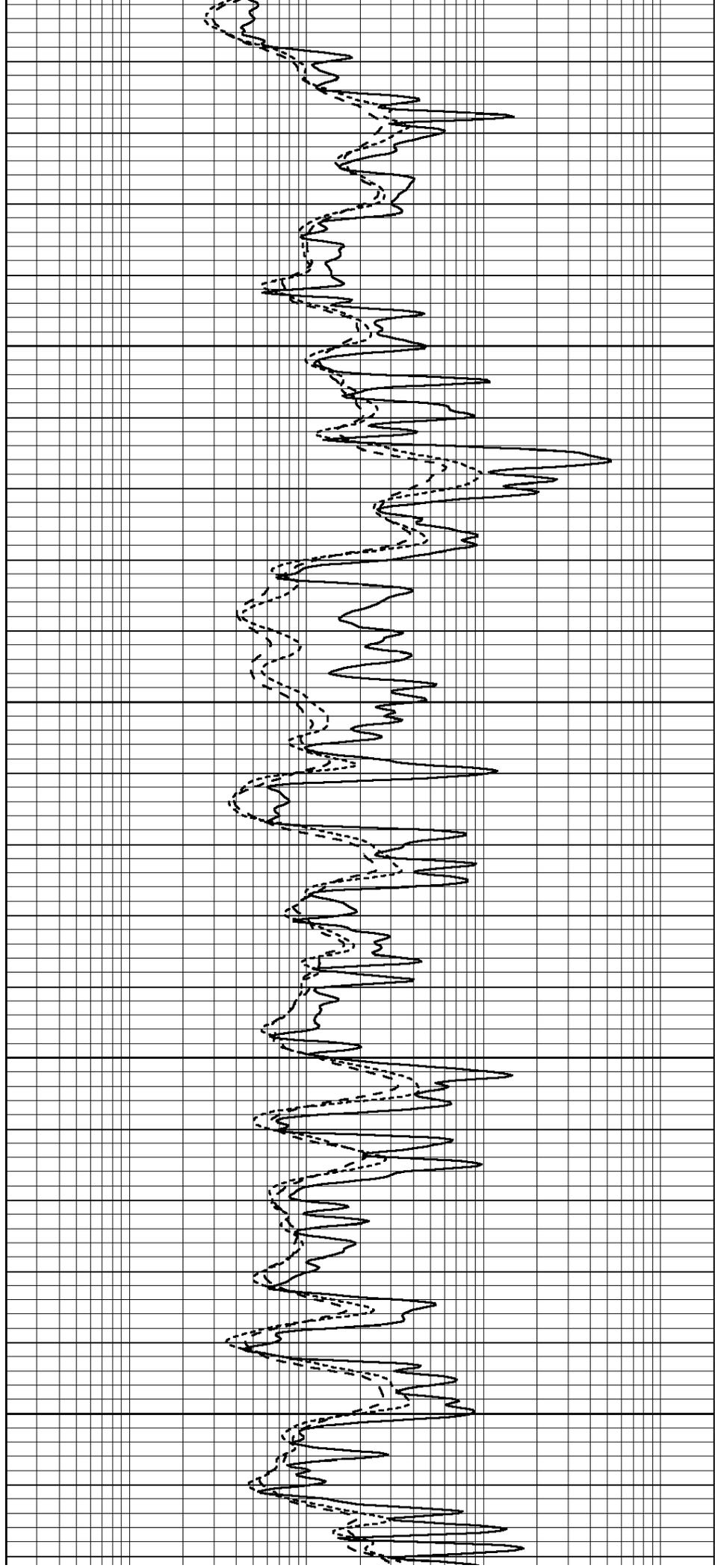


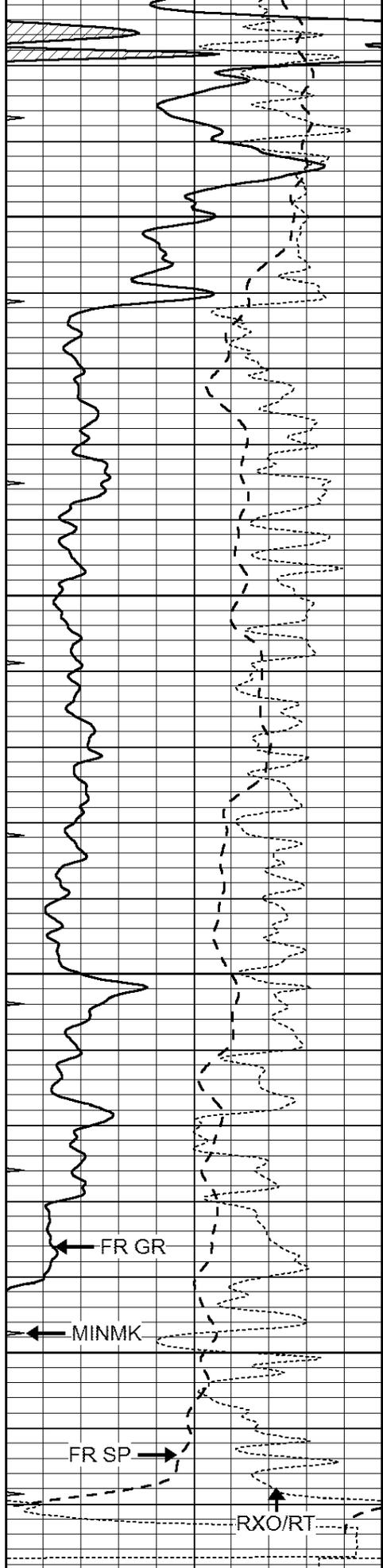
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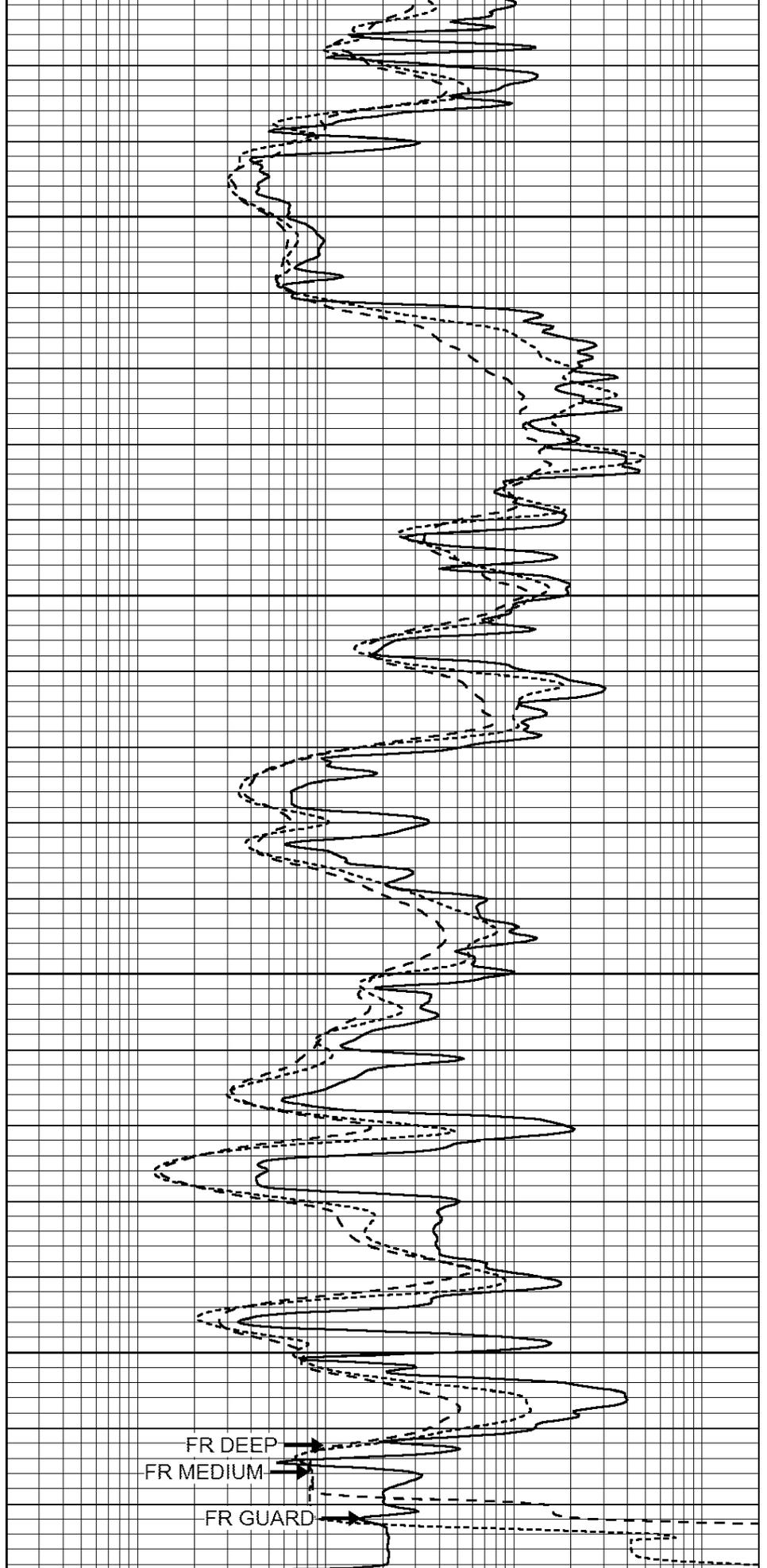
4950

5000





5050
 5100
 5150
 5200
 LTD 5224



0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
250	RXO/RT	50

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

-250	Rxo/Rt	50
0	MINMK	20

0.2 MEDIUM INDUCTION (Ohm-ft) 2000



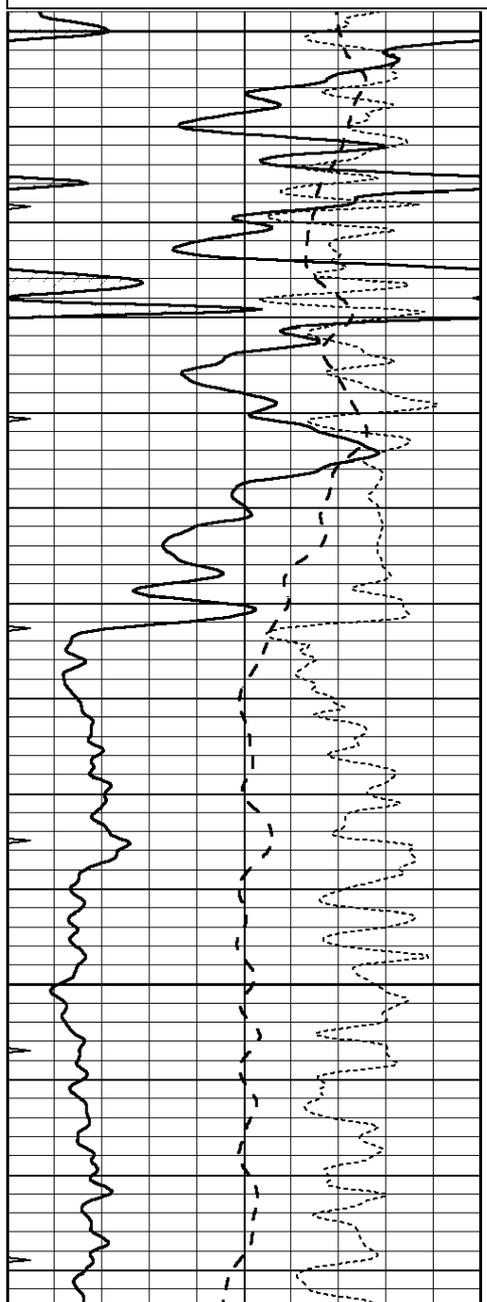
SUPERIOR
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REPEAT SECTION

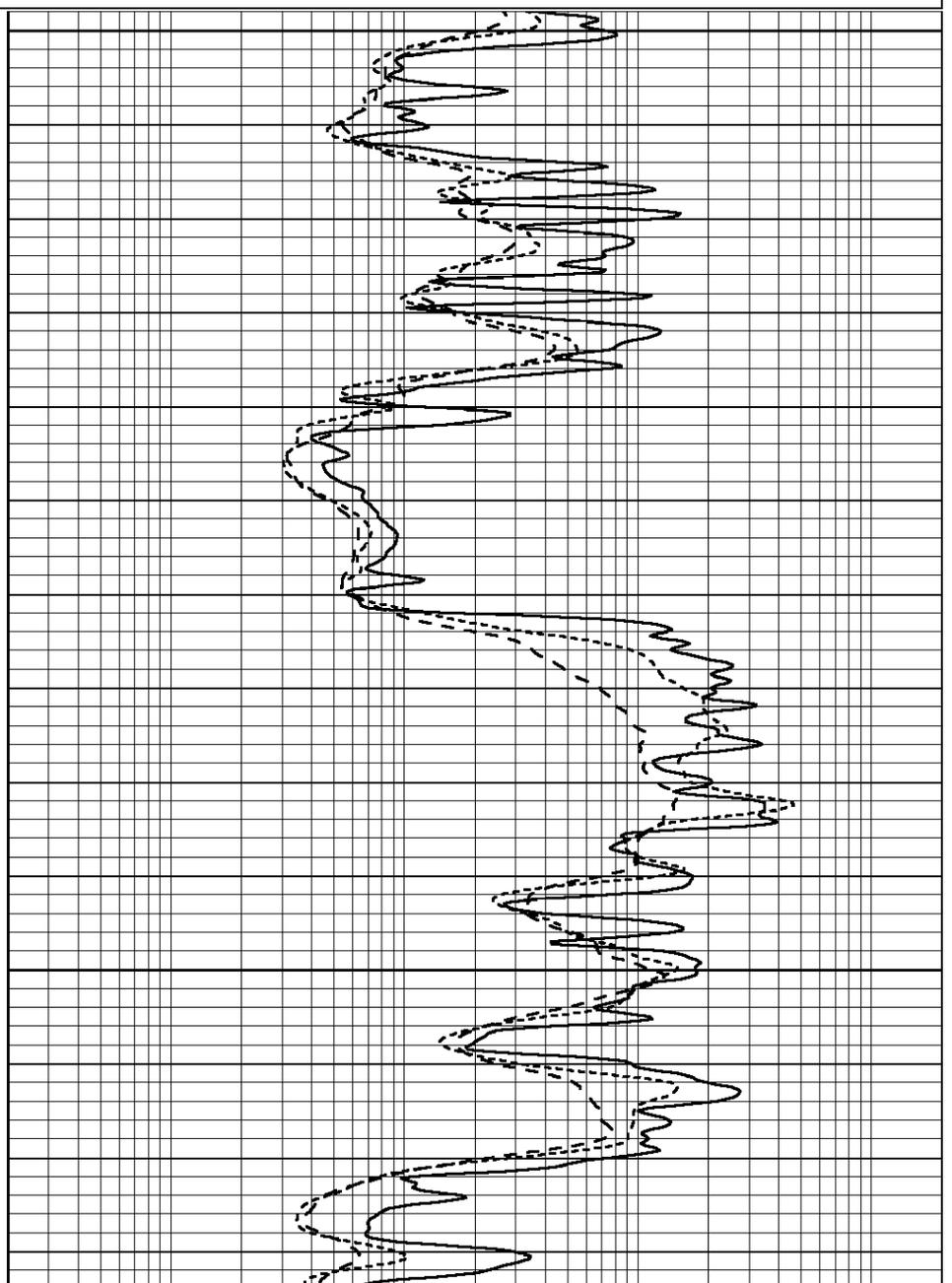
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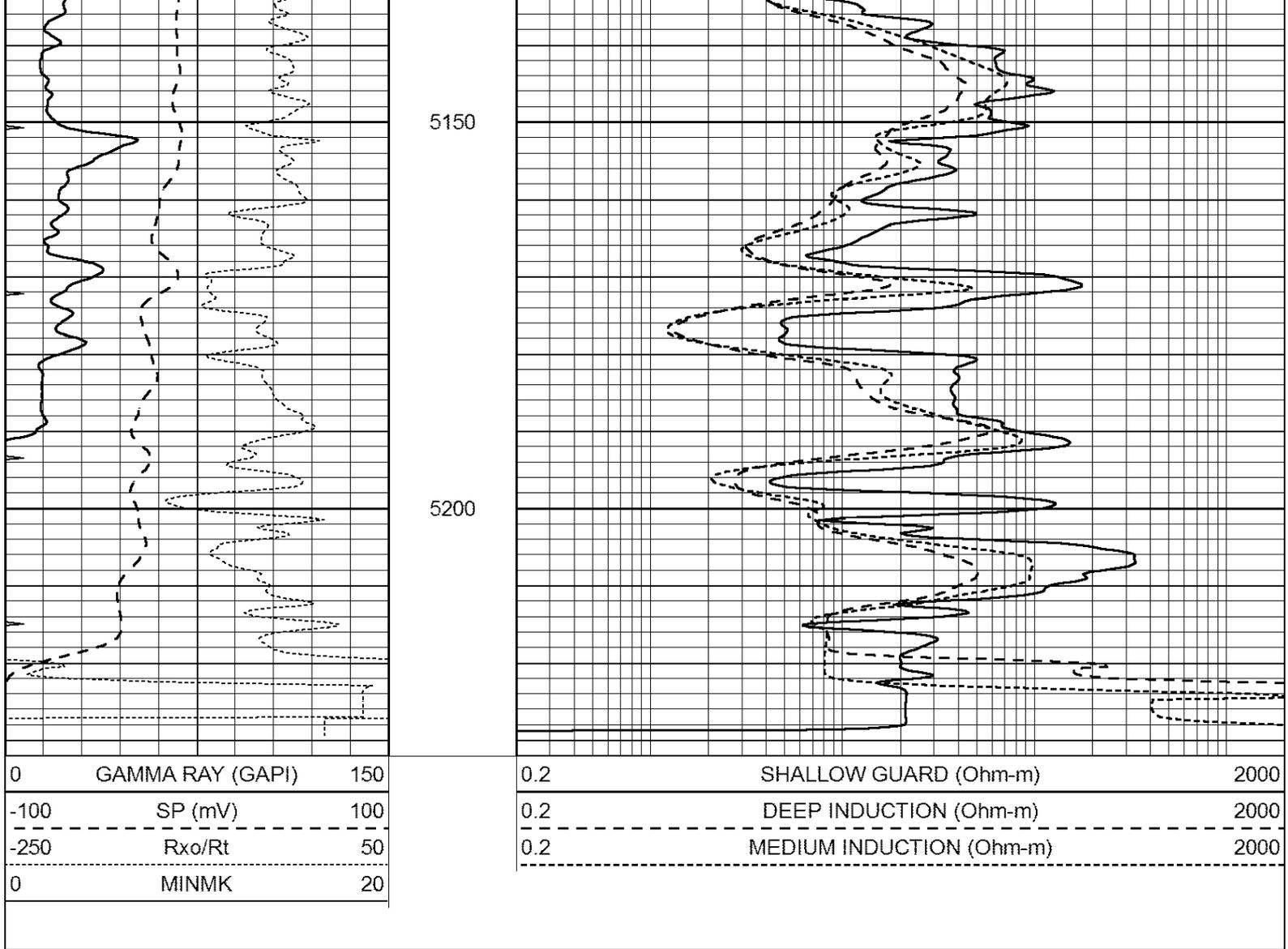
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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



5000
5050
5100





Calibration Report

Database File: 409514ddn.db
 Dataset Pathname: pass3.5
 Dataset Creation: Thu Aug 30 03:30:33 2012 by Calc Open-Cased 110302

Dual Induction Calibration Report

Serial-Model: DIL4-GEAR
 Performed: Tue Aug 21 12:27:33 2012

Loop:	Readings				References		Results	
	Air	Loop			Air	Loop	m	b
Deep	0.008	0.666	V	0.000	400.000	mmho/m	570.000	0.000
Medium	-0.003	0.769	V	0.000	462.500	mmho/m	560.000	-1.000
Internal:	Zero			Zero			m	b
Deep	0.013	0.651	V	0.000	400.000	mmho/m	627.541	-8.365
Medium	0.020	0.754	V	0.000	462.500	mmho/m	630.311	-12.549

Litho Density Calibration Report
 Serial: 003N Model: PRB
 Performed Tue Sep 08 14:14:44 2009

Litho Density Calibration

Depth (m) Mass Density (g/cm³) Absorption Coefficient (cm⁻¹) Conductivity (S/m)

	Background	Magnesium	Aluminum	Sandstone	
Window 1	2042.6	12312.8	4225.8	13758.4	cps
Window 2	1855.8	10134.7	3624.2	11113.1	cps
Window 3	1639.4	6760.2	2716.3	7260.3	cps
Window 4	466.4	469.2	466.1	476.5	cps
Long Space	0.0	8278.9	1768.4	9257.4	cps
Short Space	2.2	2377.3	1544.1	2574.2	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	

Rib Angle	: 44.4	Rib Slope	: 0.979	Density/Spine Ratio	: 0.549
Spine Angle	: 74.4	Spine Slope	: 3.577	Spine Intercept	: -18.8

Caliper				
Low Ref	Readings	Reference		
High Ref	3.4	7.7		
	5.0	15.0		
	Gain: 4.7		Offset: -8.1	

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:	070559	
Tool Model:	OPEN_GR	
Performed:	Thu Jul 26 17:34:29 2012	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.3000	GAPI/cps