



**SUPERIOR
Hays,
Kansas**

**DUAL
INDUCTION
LOG**

Company **WHITE EXPLORATION, INC.**
Well **RJD UNIT #1**
Field
County **HODGEMAN** State **KANSAS**

Location: **API # : 05-083-21713-00**
200' FNL & 1970' FWL
N/2 - N/2 - NE - NW
SEC 1 TWP 23S RGE 24W
Permanent Datum **GROUND LEVEL** Elevation **2325**
Log Measured From **KELLY BUSHING 5' A.G.L.**
Drilling Measured From **KELLY BUSHING**

Company **WHITE EXPLORATION, INC.**
Well **RJD UNIT #1**
Field
County **HODGEMAN**
State **KANSAS**

Other Services
CDL/CNL/PE
MEL/SON
Elevation
K.B. 2330
D.F. 2328
G.L. 2325

Date	7-6-11
Run Number	ONE
Depth Driller	4718
Depth Logger	4721
Bottom Logged Interval	4719
Top Log Interval	0
Casing Driller	261
Casing Logger	259
Bit Size	7.875
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.7 / 46
pH / Fluid Loss	9.5 / 11.6
Source of Sample	FLOWLINE
Rim @ Meas. Temp	0.70 @ 92F
Rmf @ Meas. Temp	0.53 @ 92F
Rmc @ Meas. Temp	0.84 @ 92F
Source of Rmf / Rmc	MEASURED
Rim @ BHT	0.53 @ 122F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	122F
Equipment Number	860
Location	HAYS, KS.
Recorded By	JEFF GRONEWEG
Witnessed By	LARRY FRIEND

<<< Fold Here >>>

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.

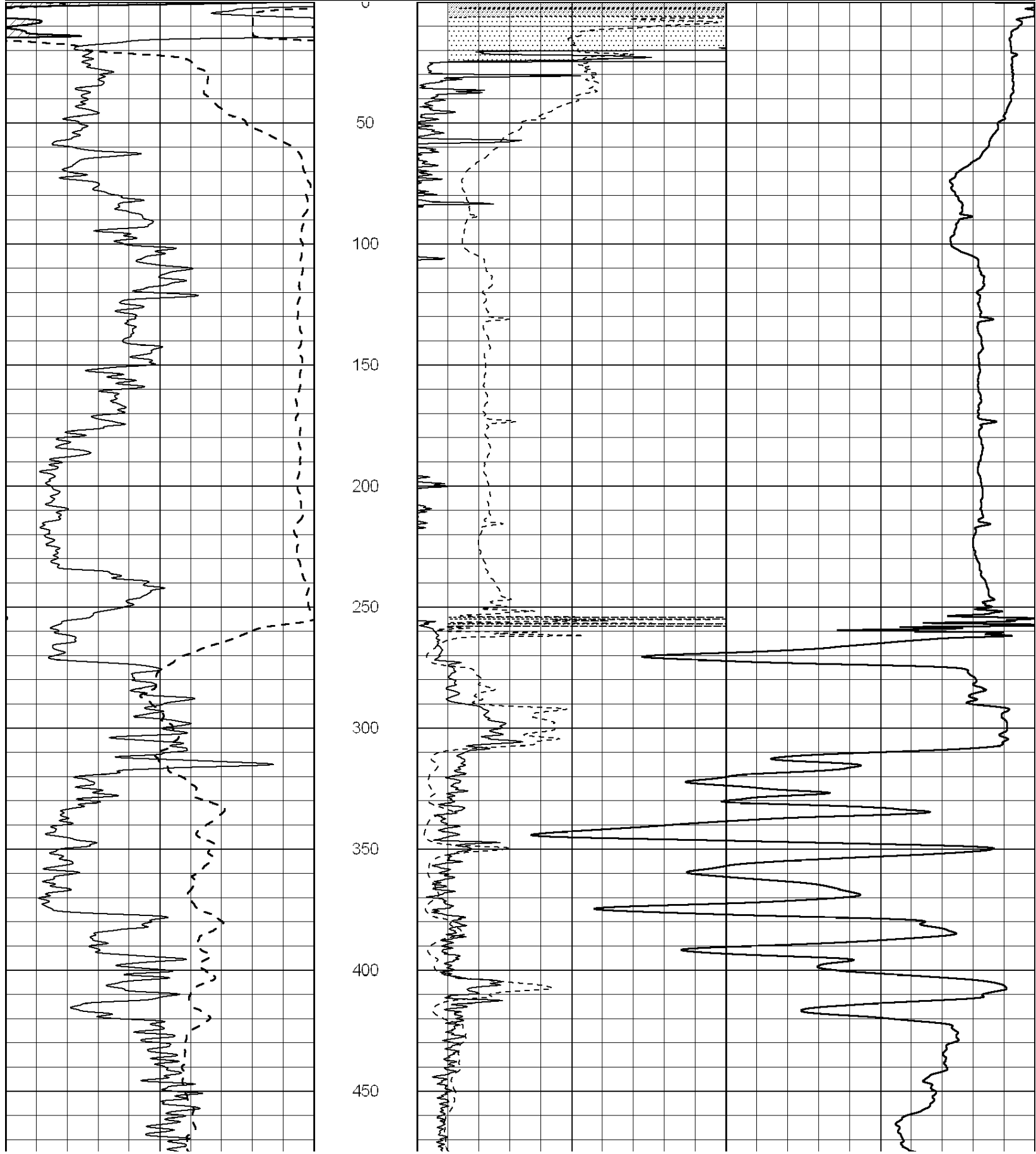
Comments

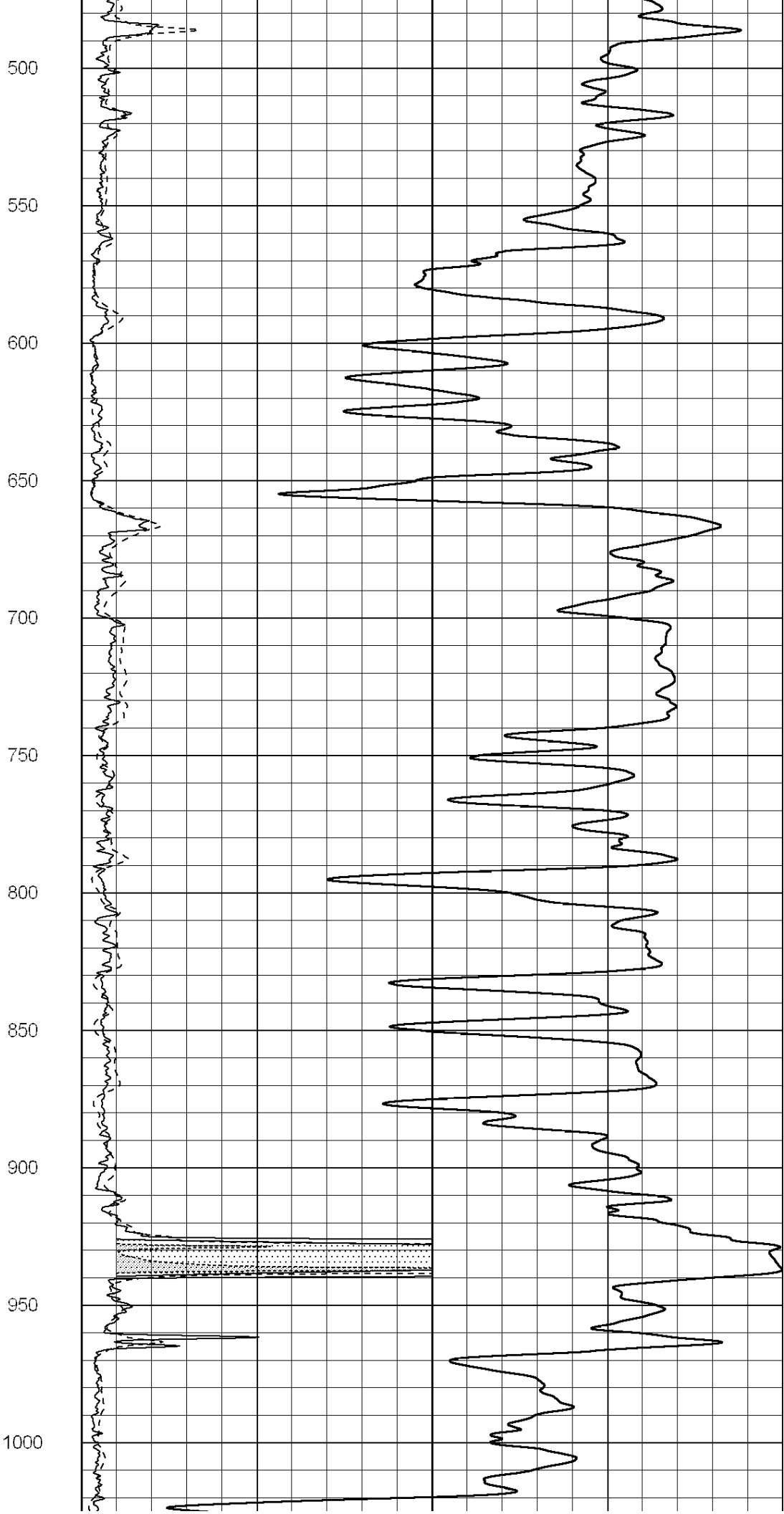
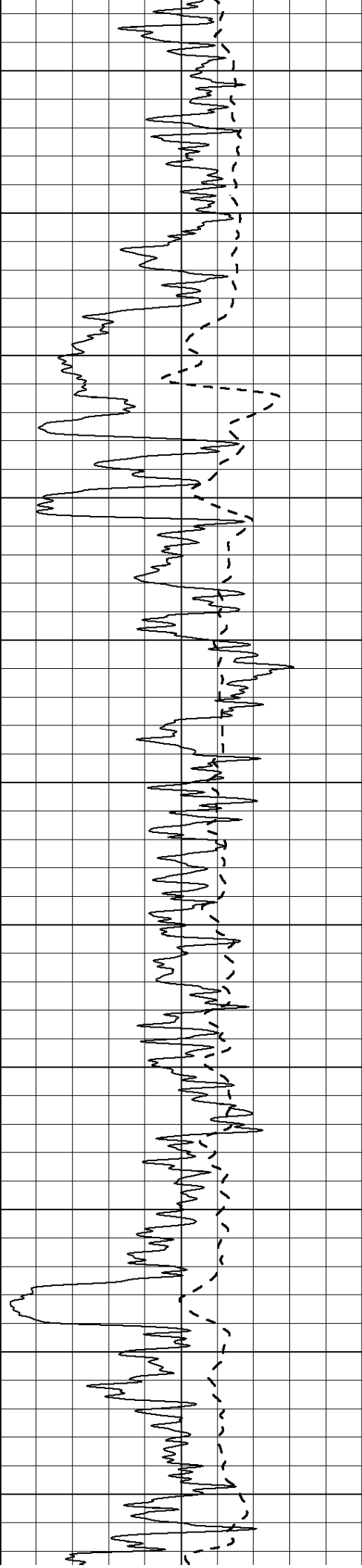
SUPERIOR WELL SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: WEST EDGE OF JETMORE, KS - 1/2 MILE SOUTH TO T IN ROAD - 1/4 MILE WEST
NORTH & WEST INTO

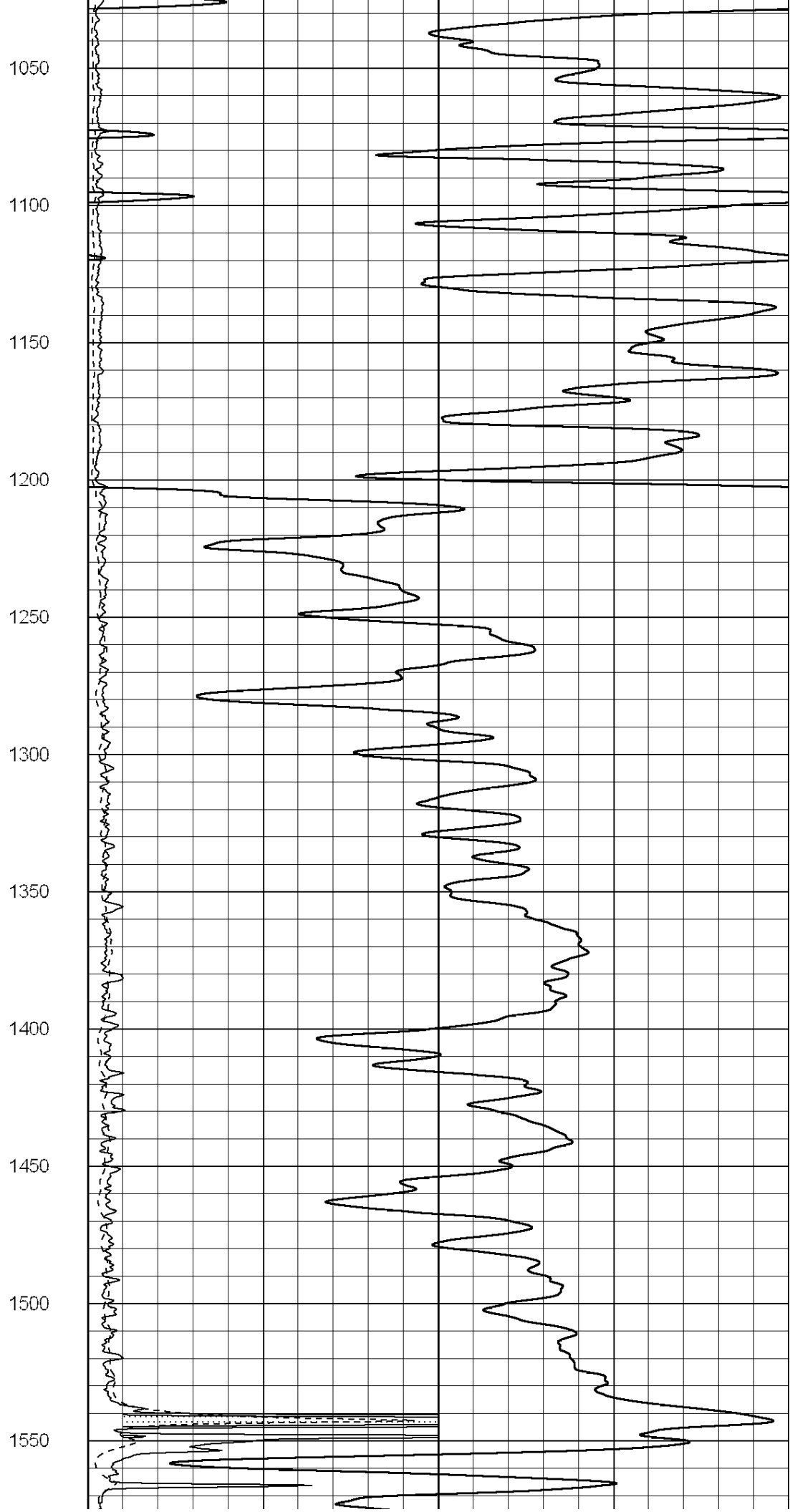
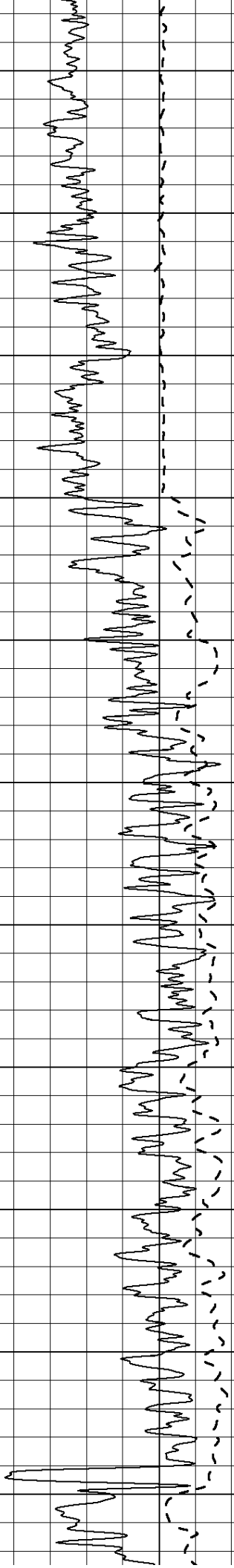
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-100	SP (mV)	100

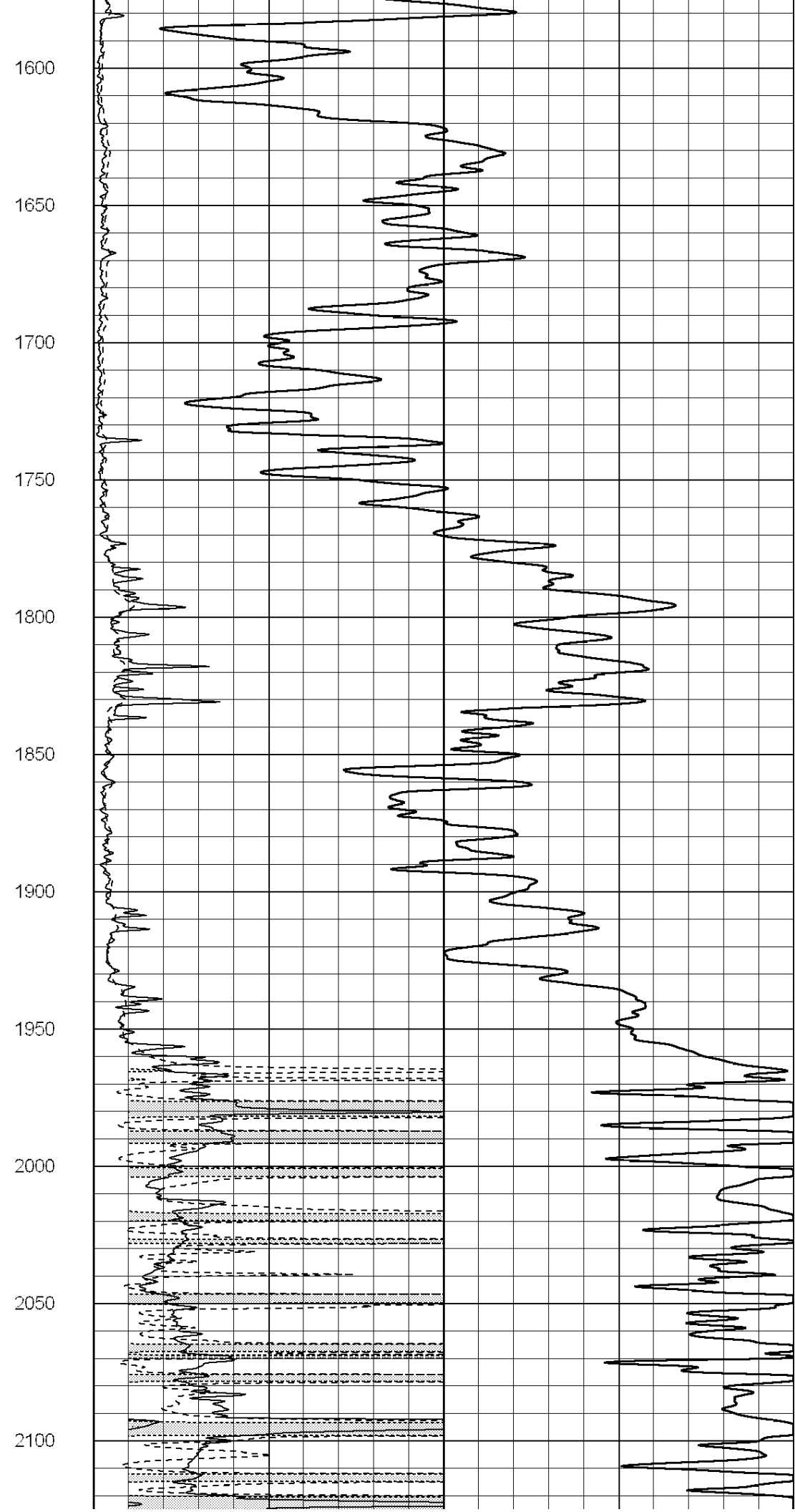
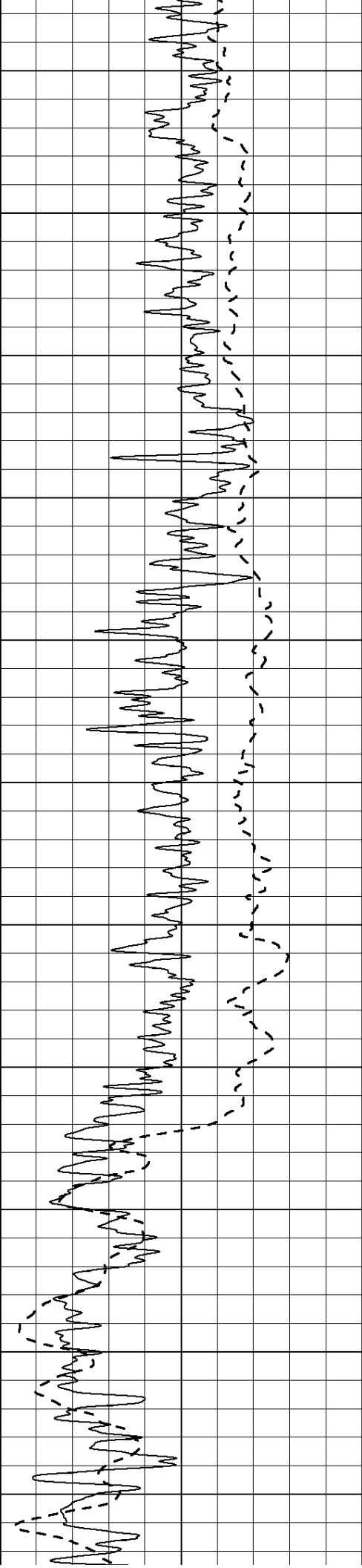
0	RLL3 (Ohm-m)	50
0	Deep Induction (Ohm-m)	50

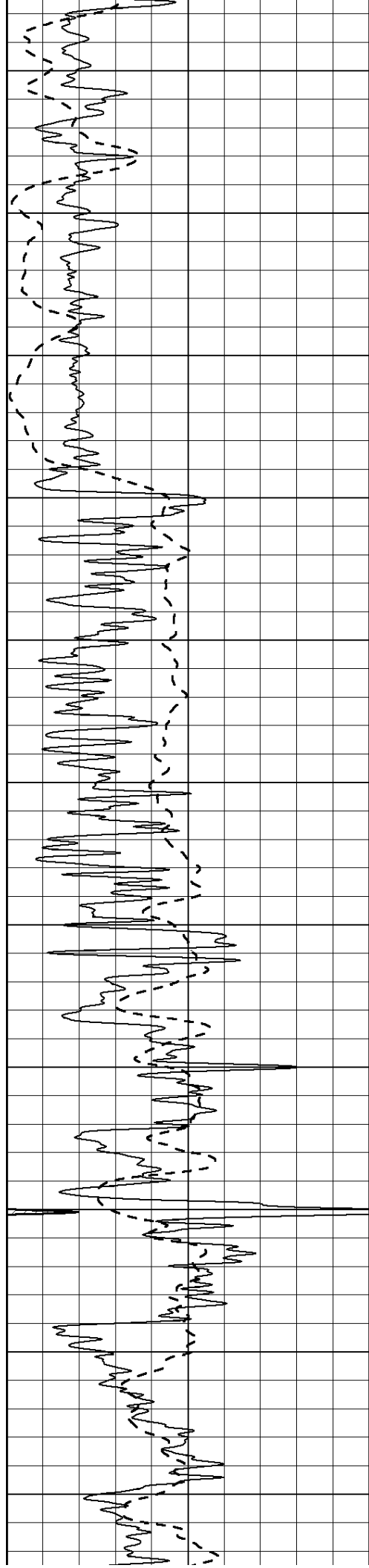
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50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500



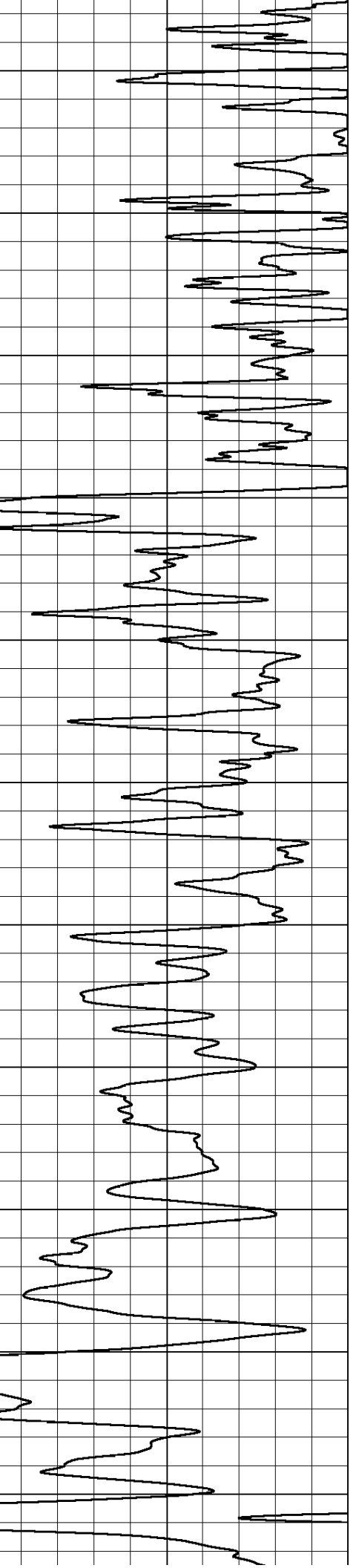
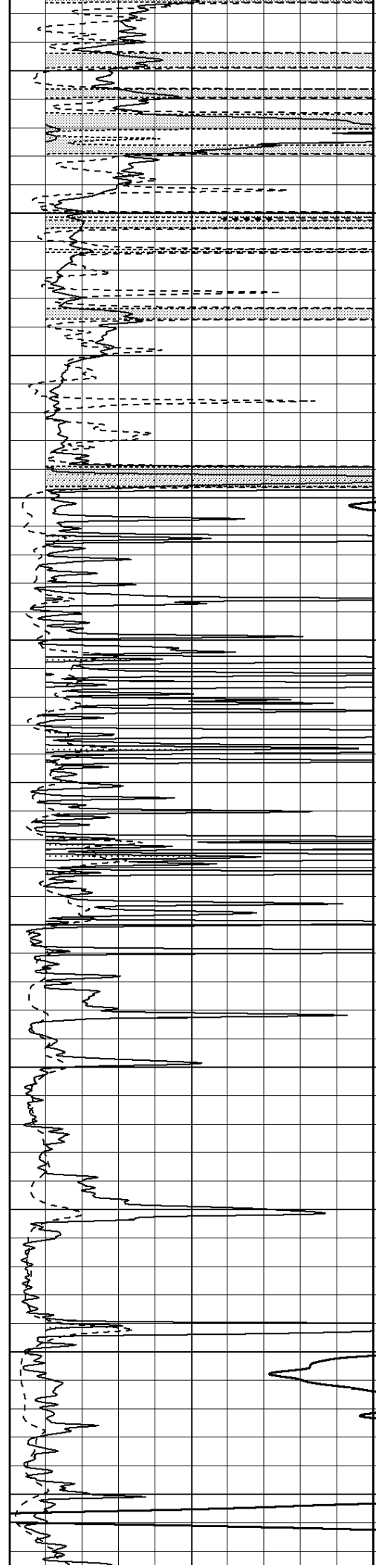


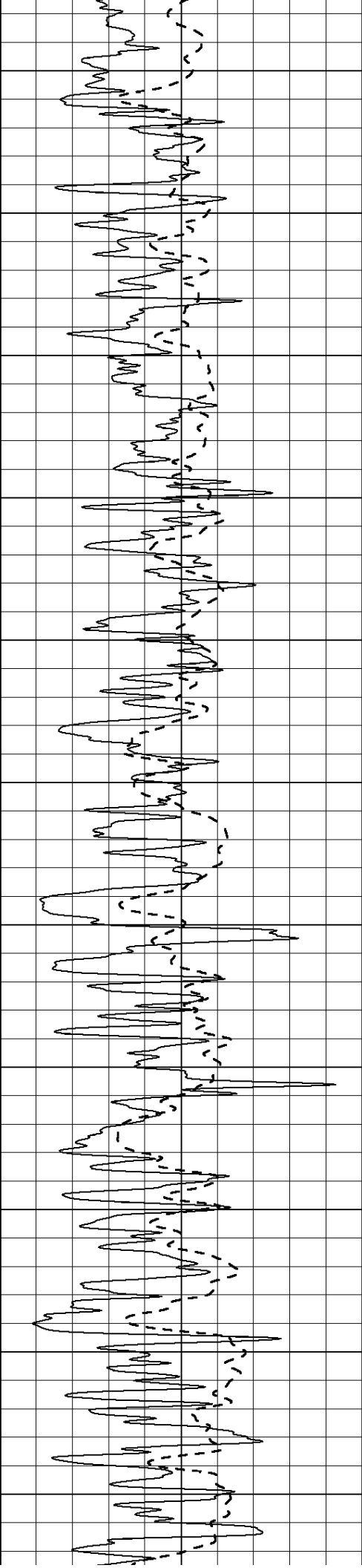




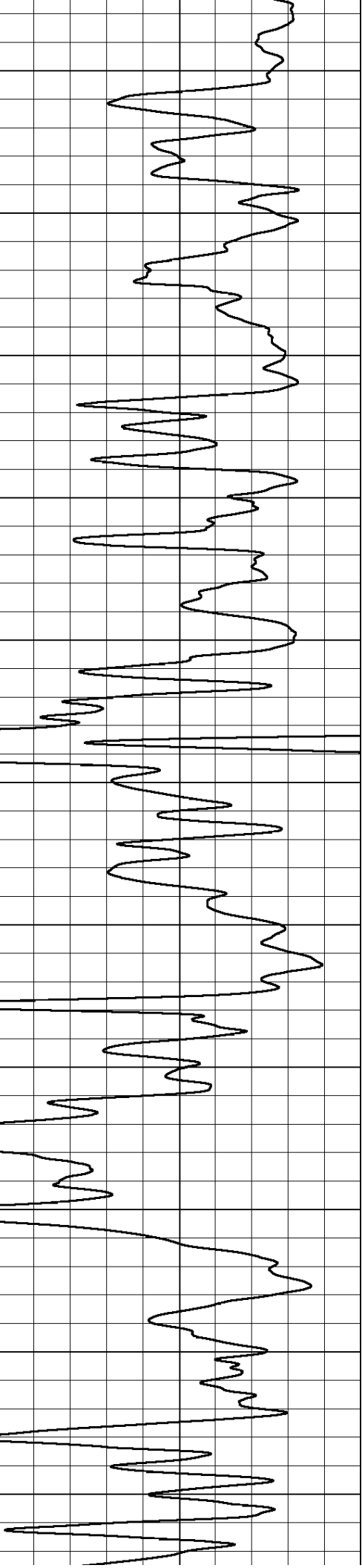
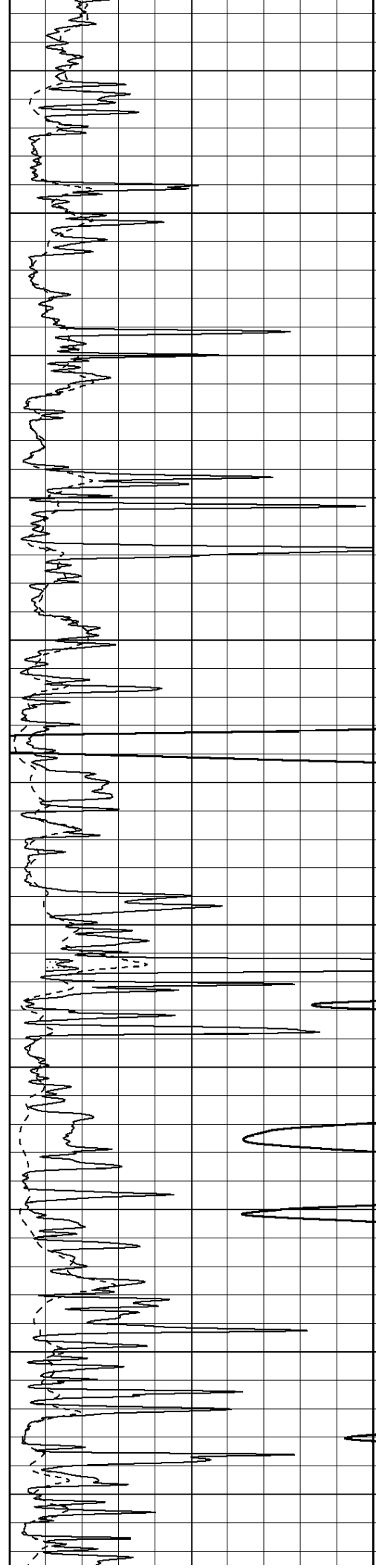


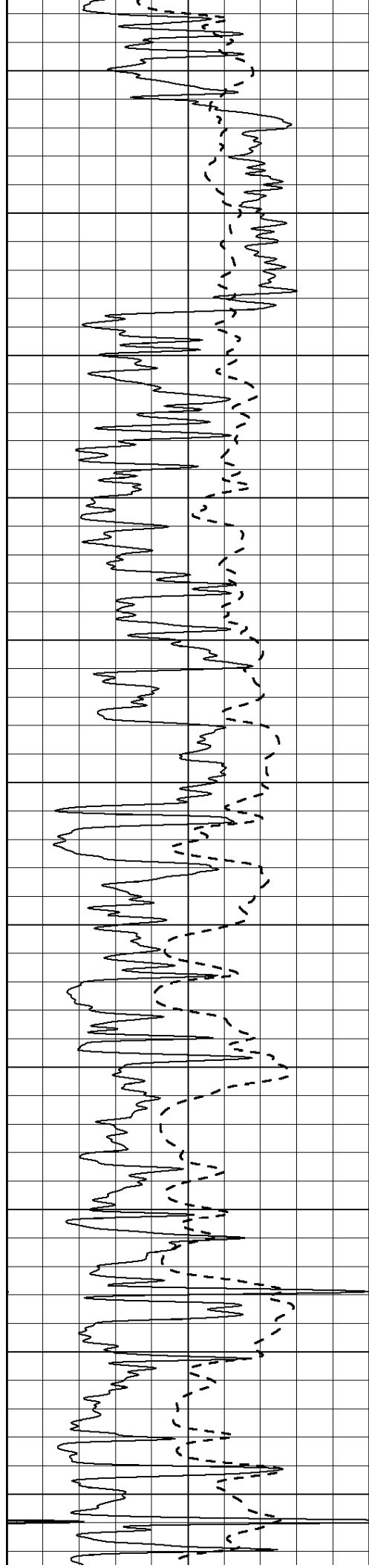
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2250
2300
2350
2400
2450
2500
2550
2600
2650



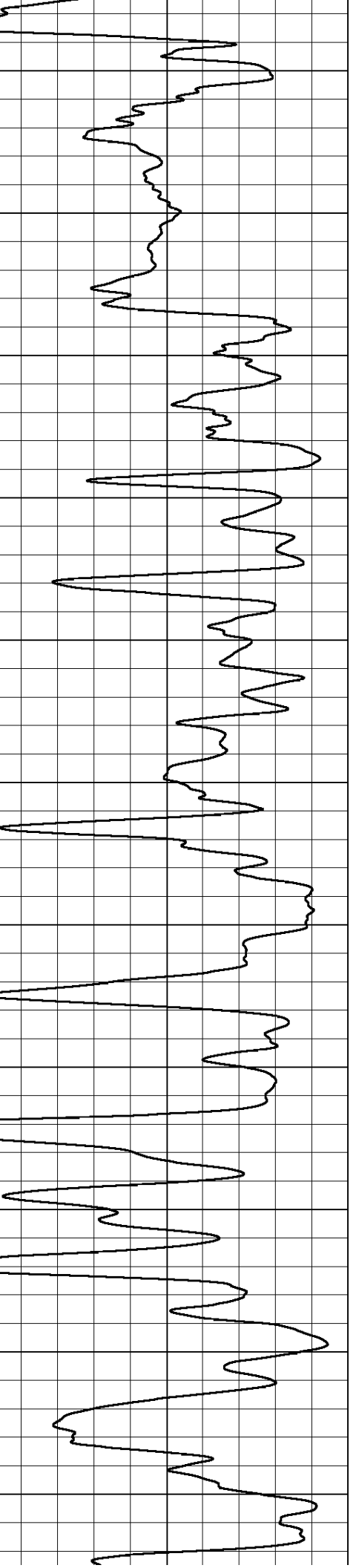
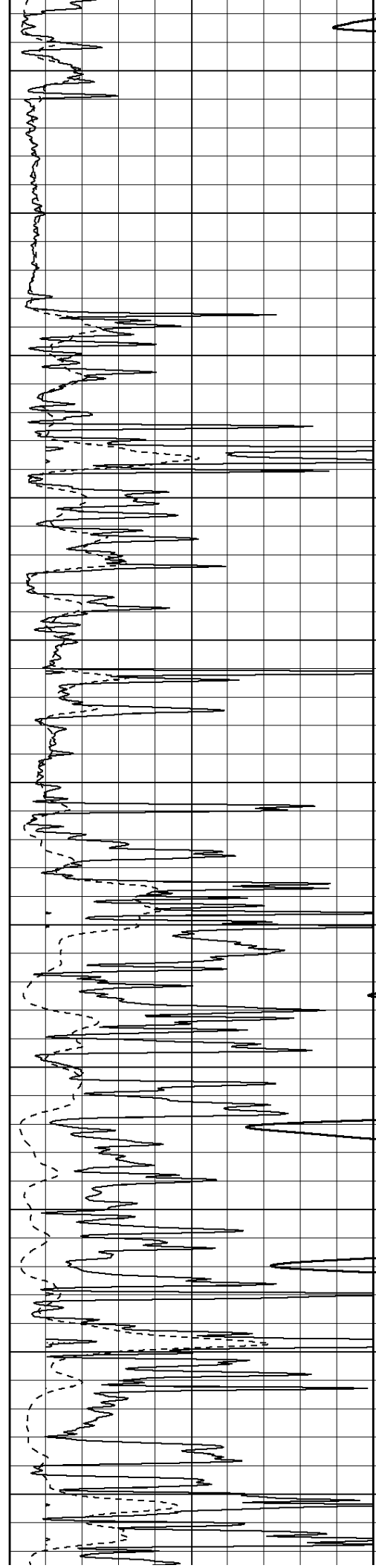


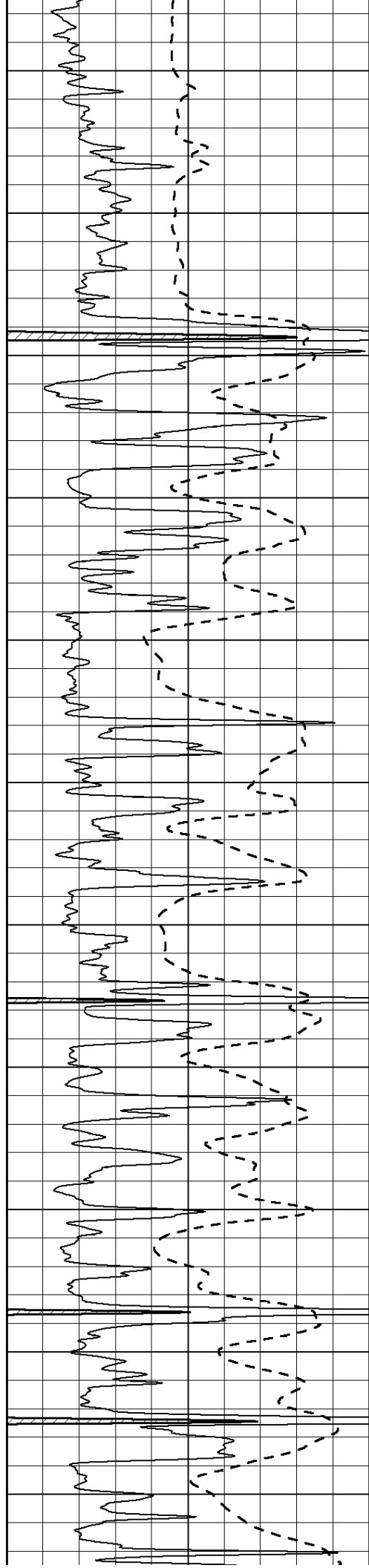
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2850
2900
2950
3000
3050
3100
3150
3200



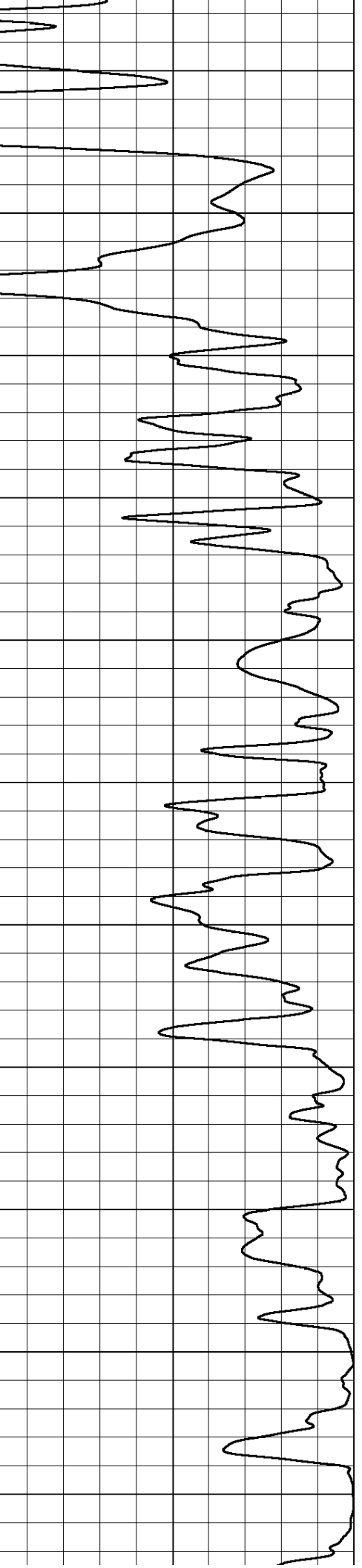
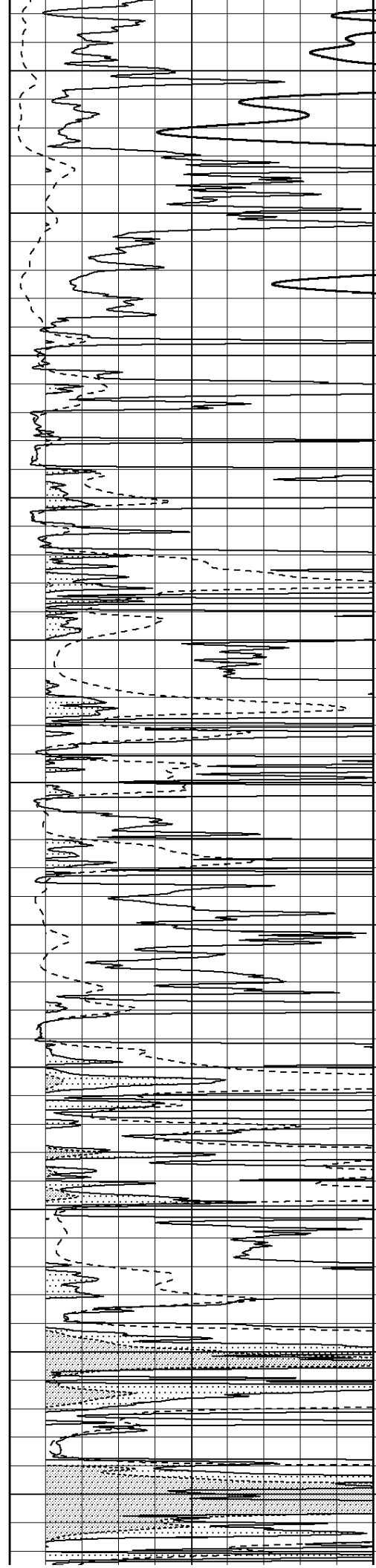


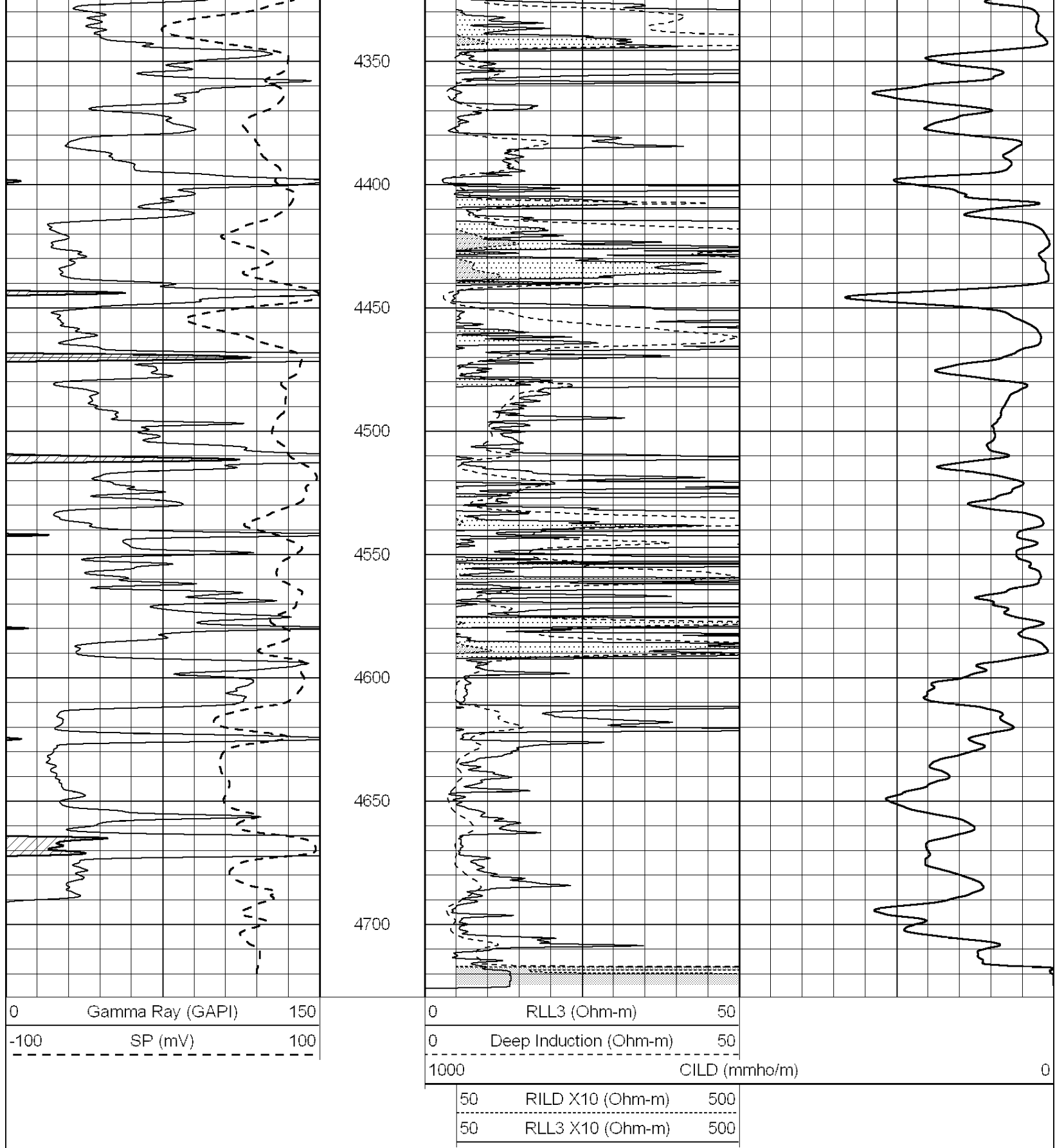
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3350
3400
3450
3500
3550
3600
3650
3700
3750





3800
3850
3900
3950
4000
4050
4100
4150
4200
4250
4300



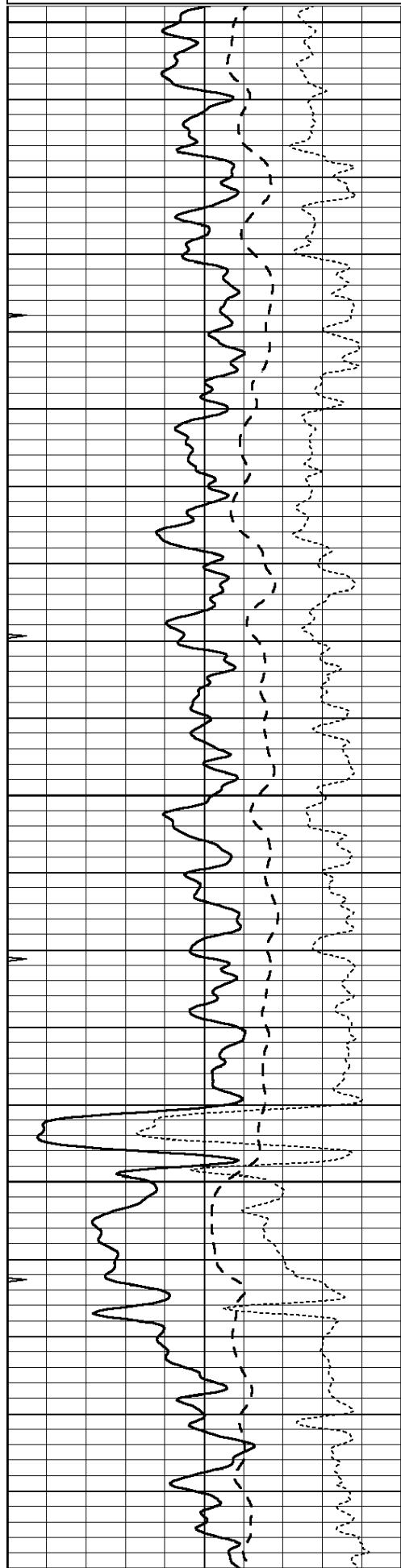


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 Charted by: Depth in Feet scaled 1:240

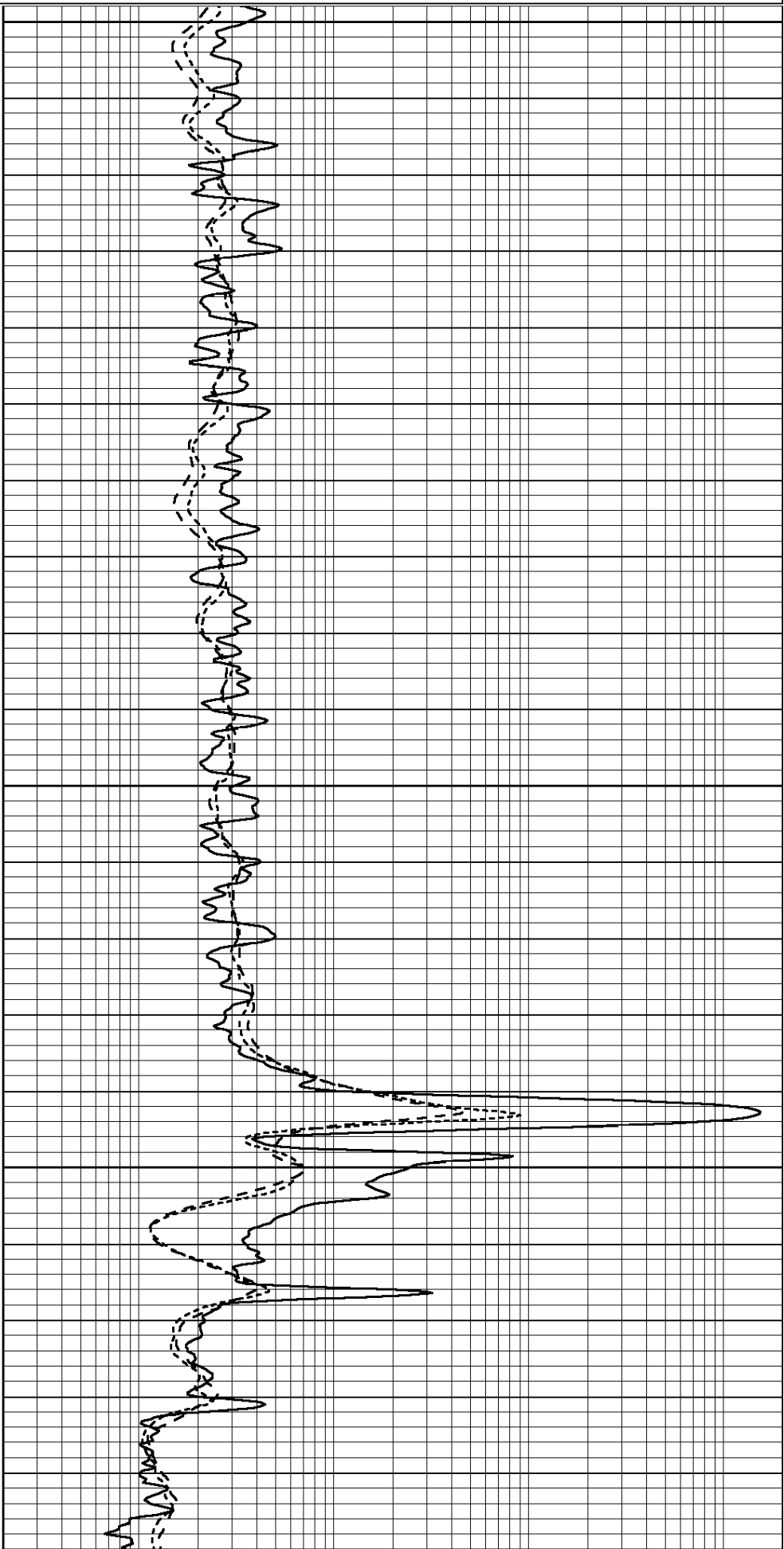
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-100	SP (mV)	100	0.2	DEEP INDUCTION (Ohm-m)	2000

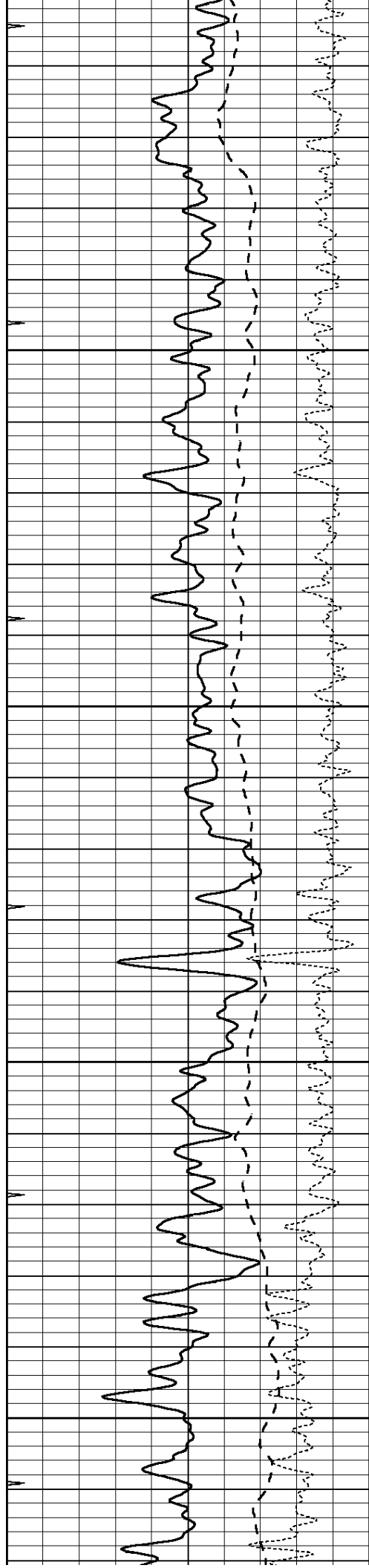
-250	RxoRt	50
0	MINMK	20

0.2	MEDIUM INDUCTION (Ohm-m)	2000
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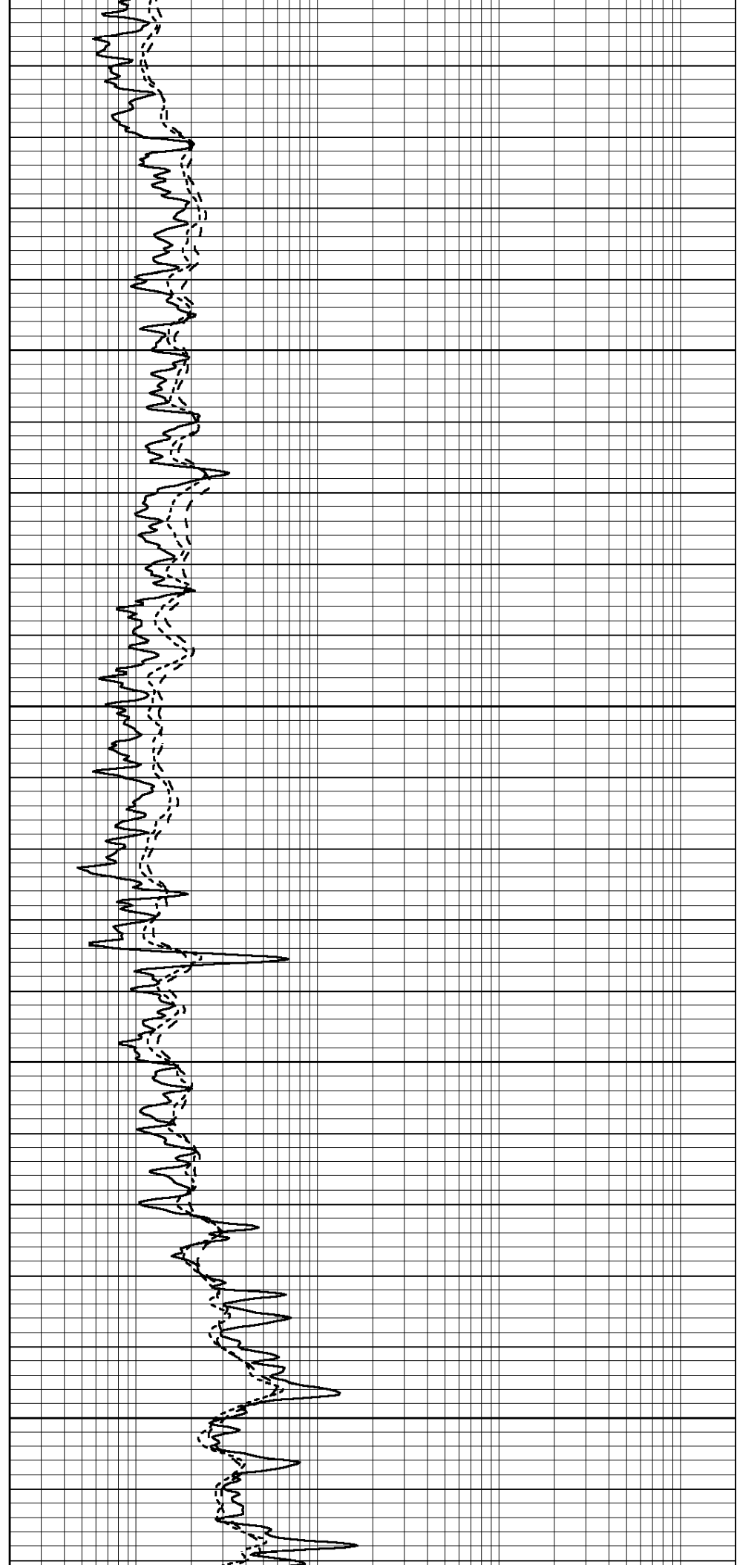


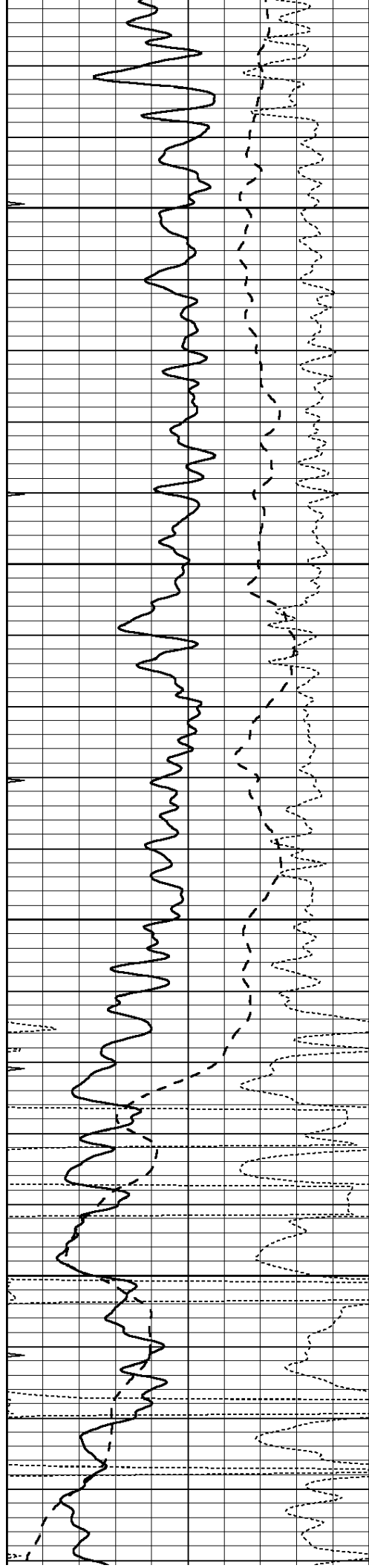
1400
1450
1500
1550
1600





1800
1750
1700
1650



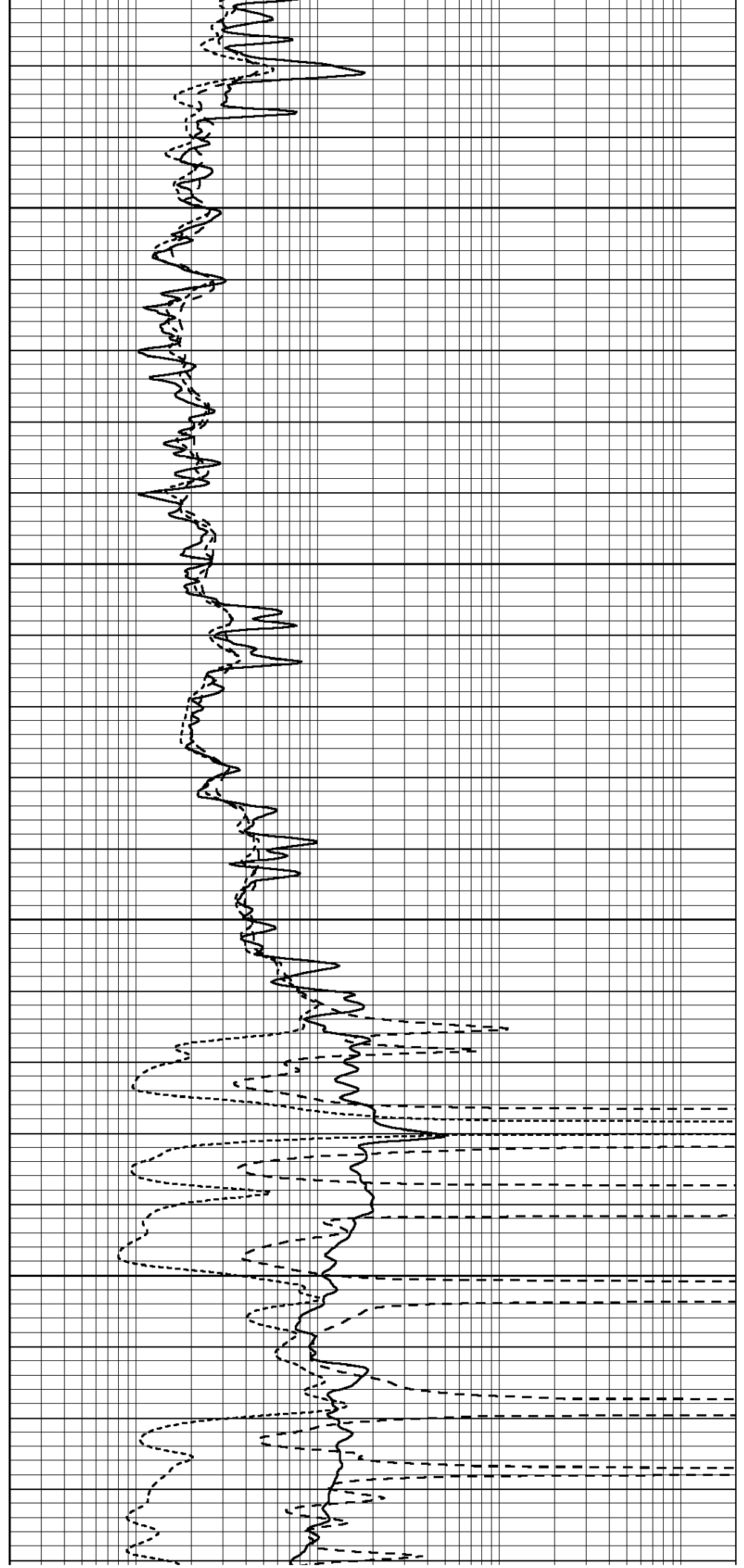


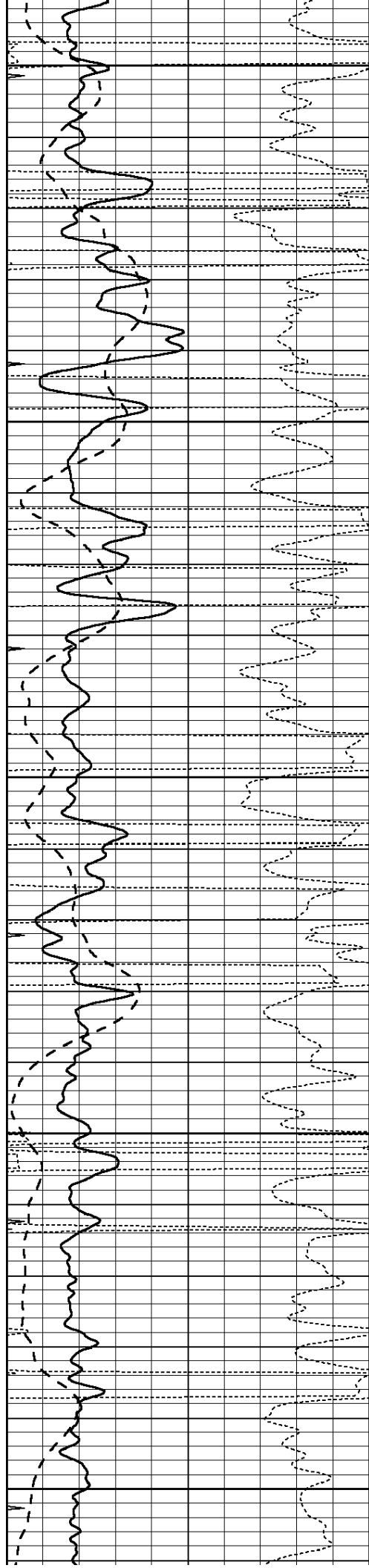
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1900

1950

2000





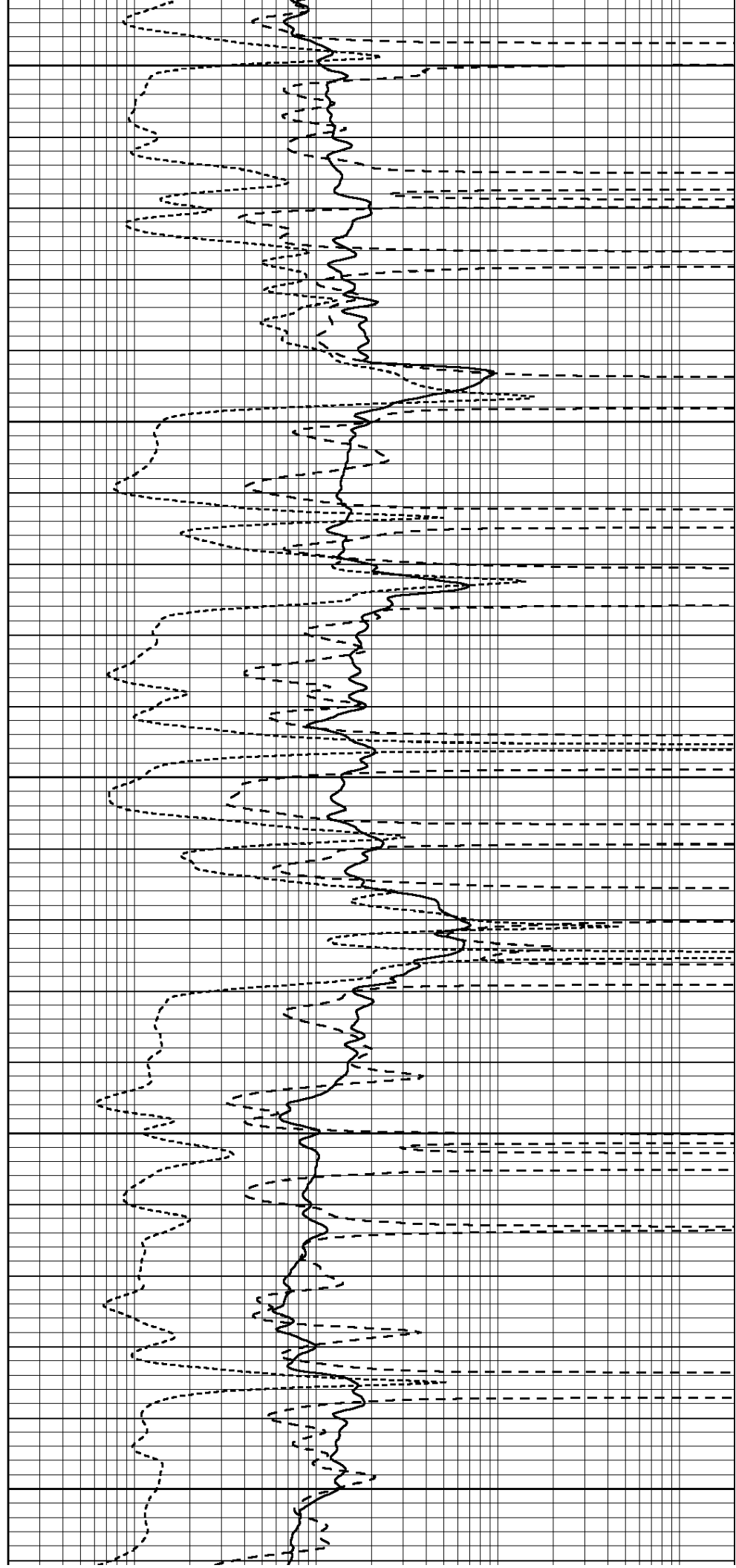
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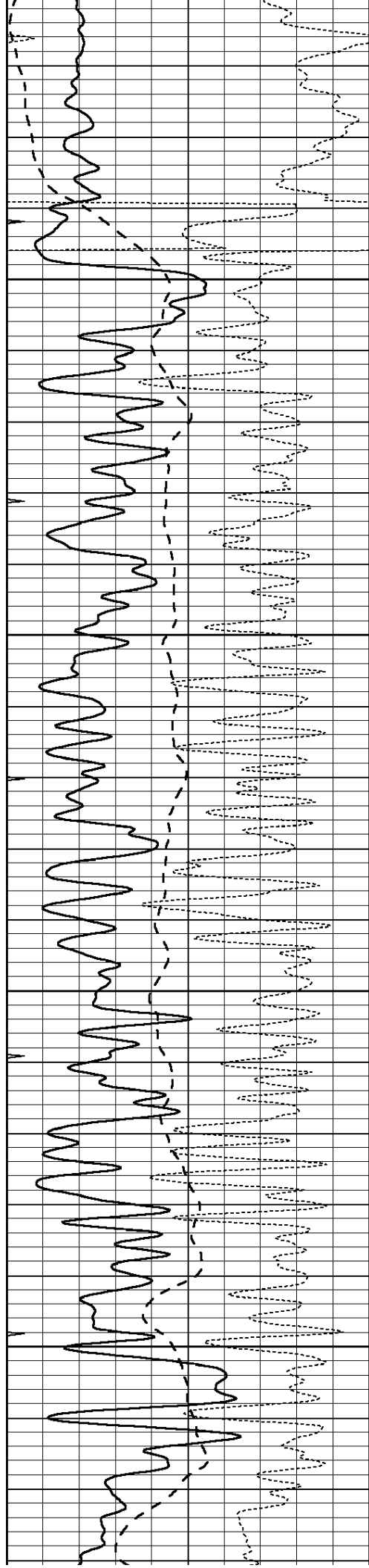
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2150

2200

2250



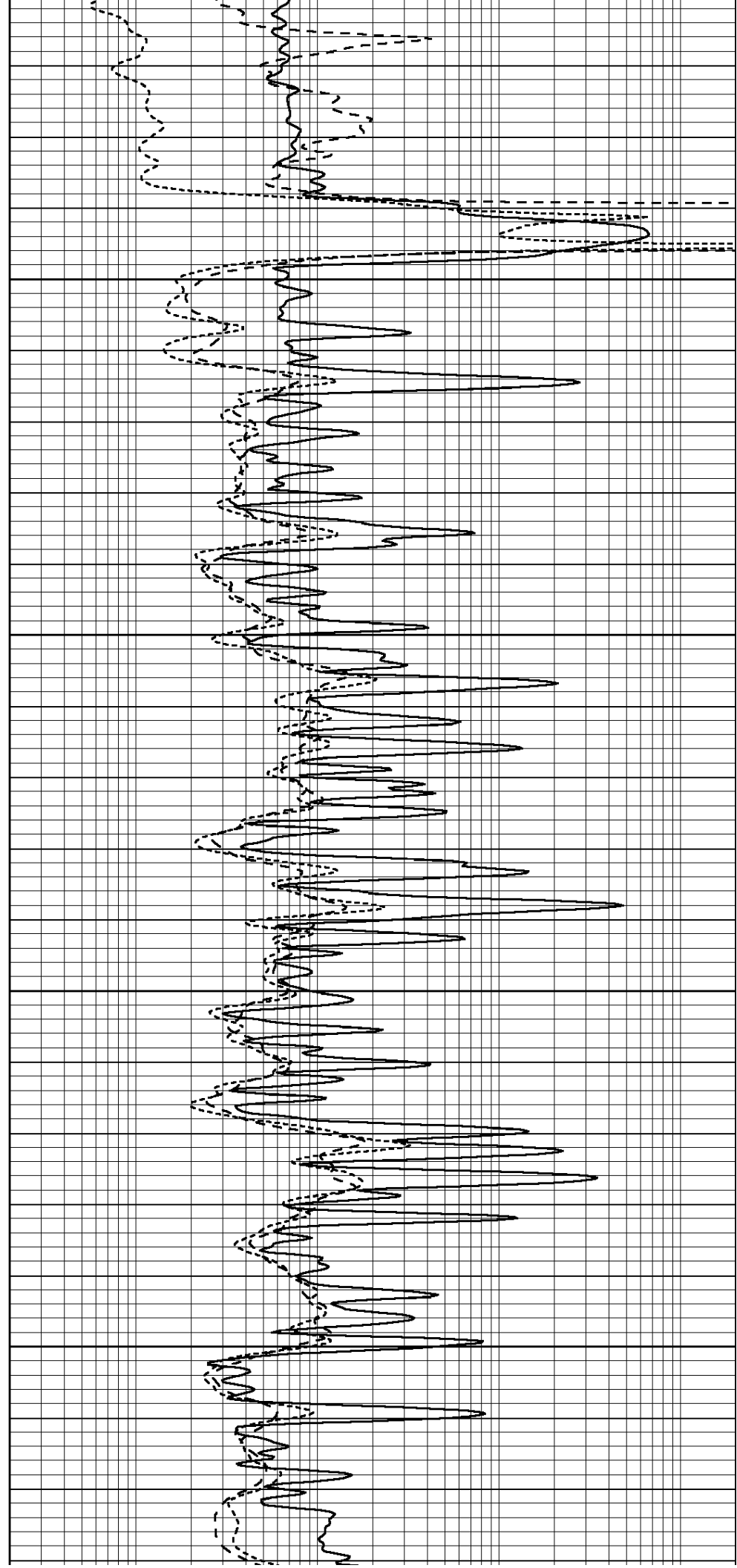


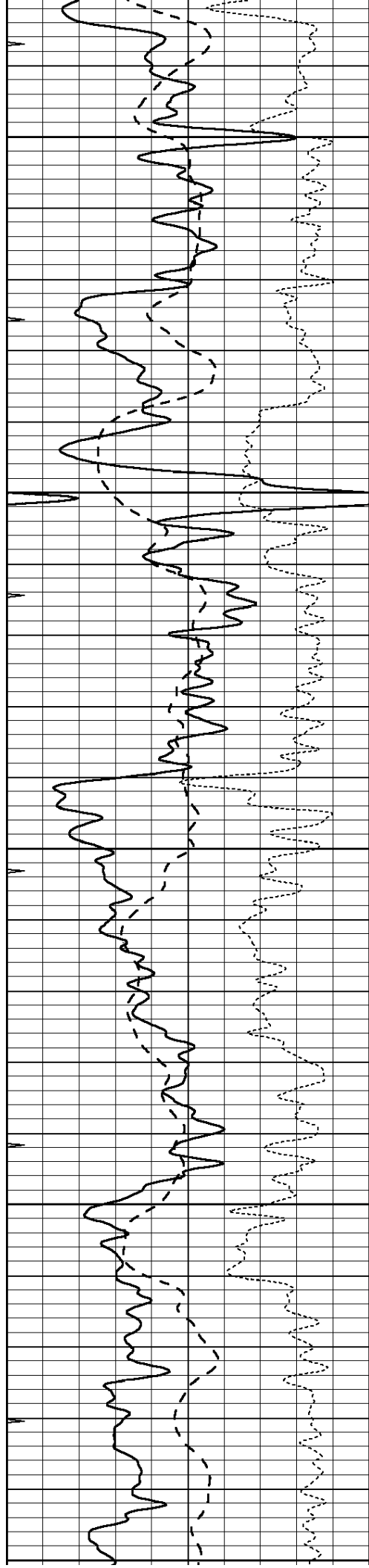
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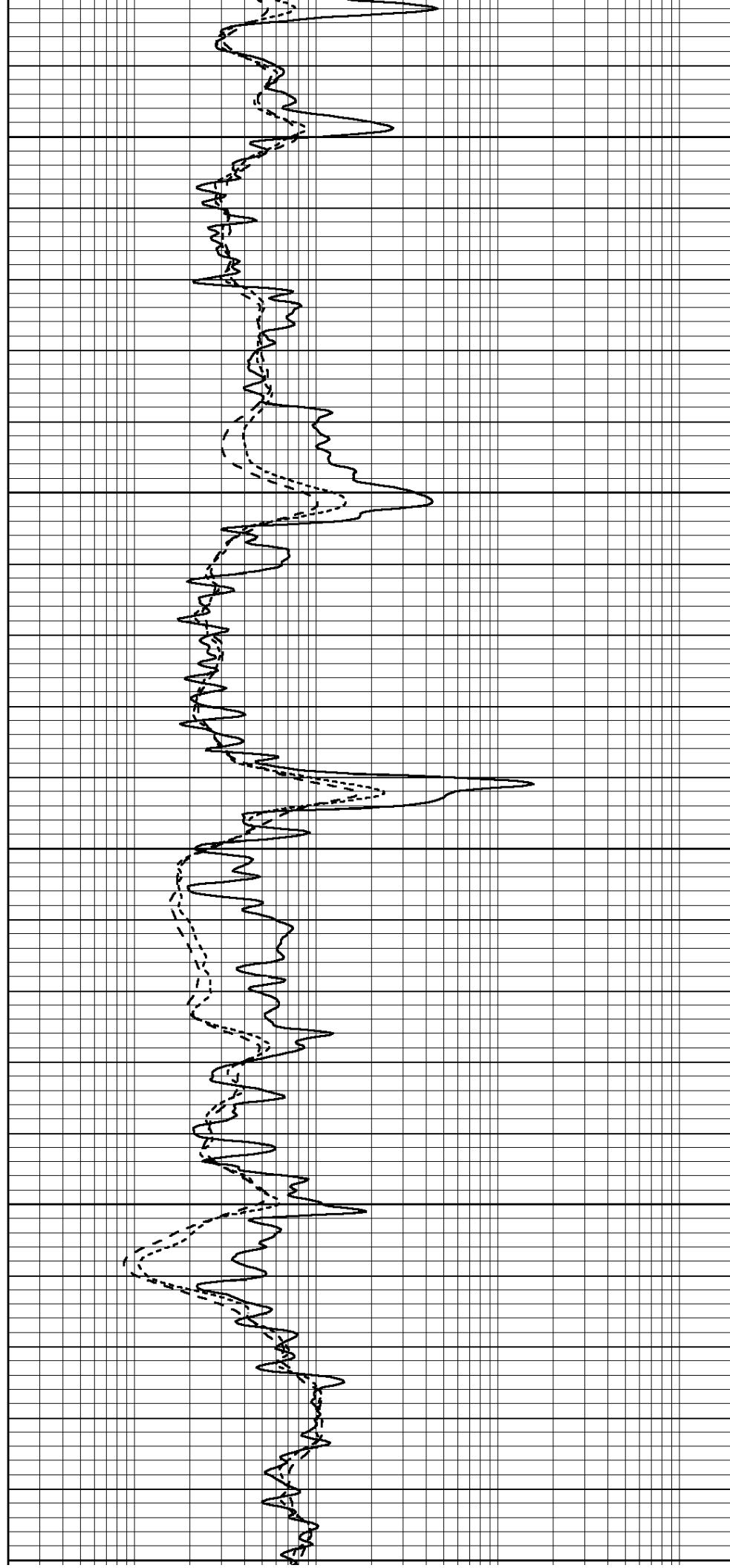
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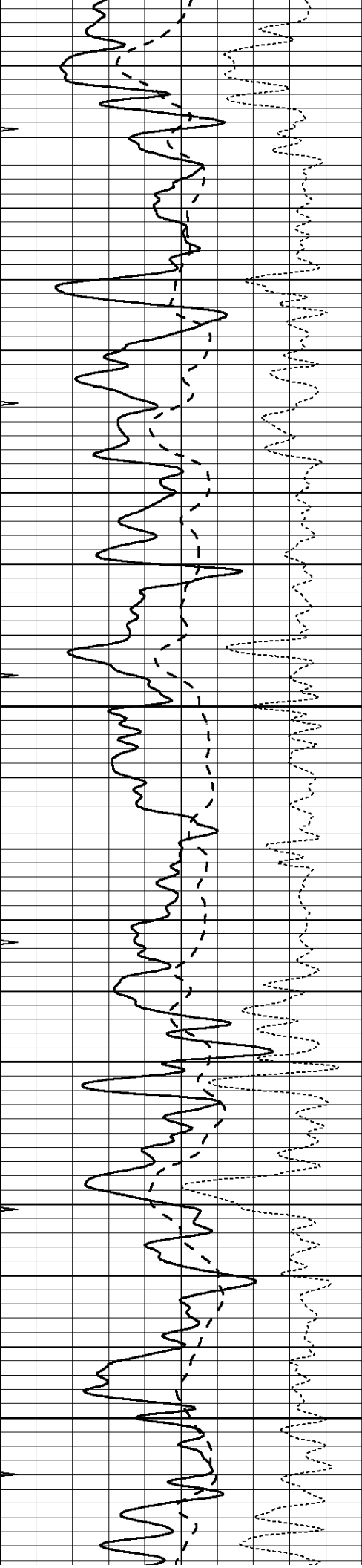
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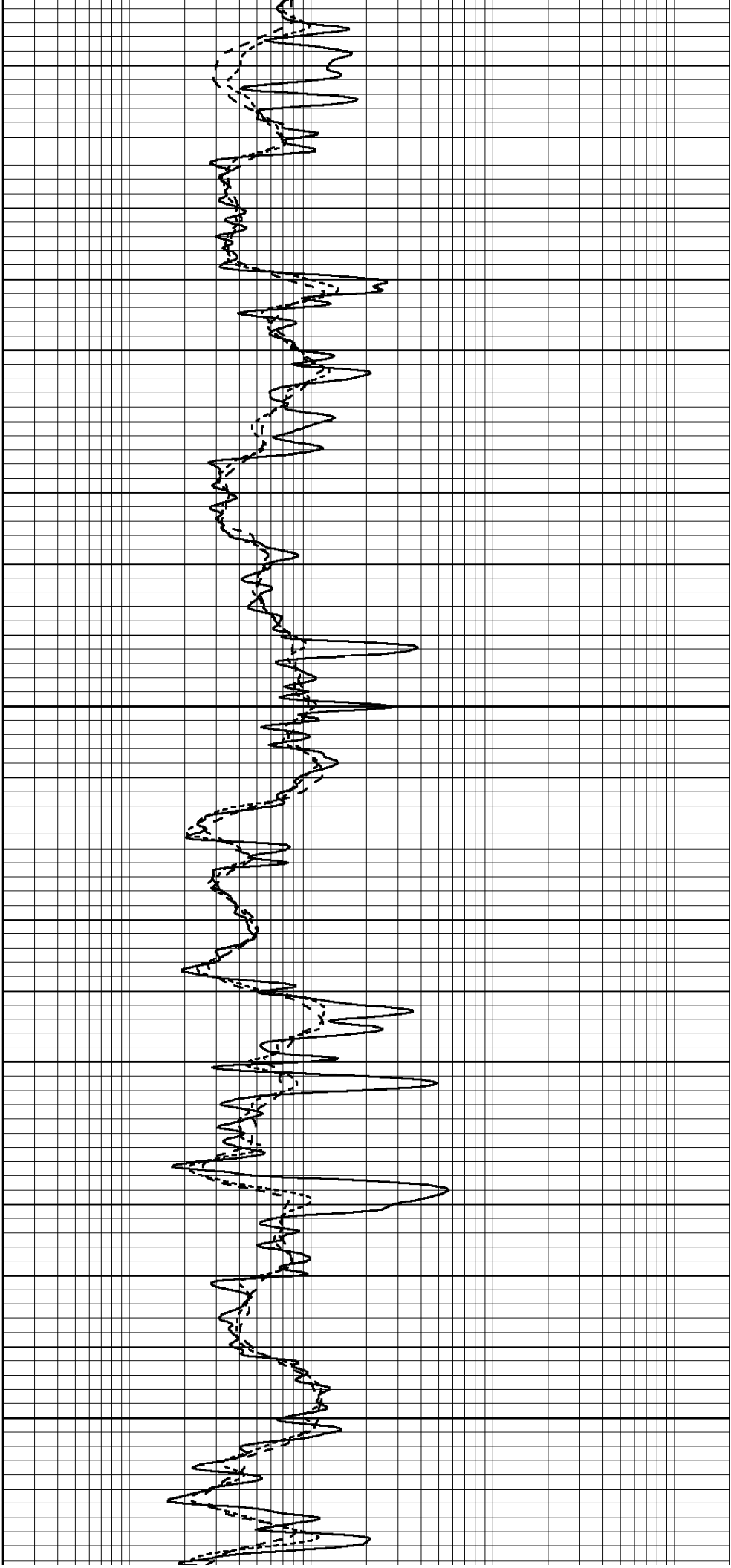


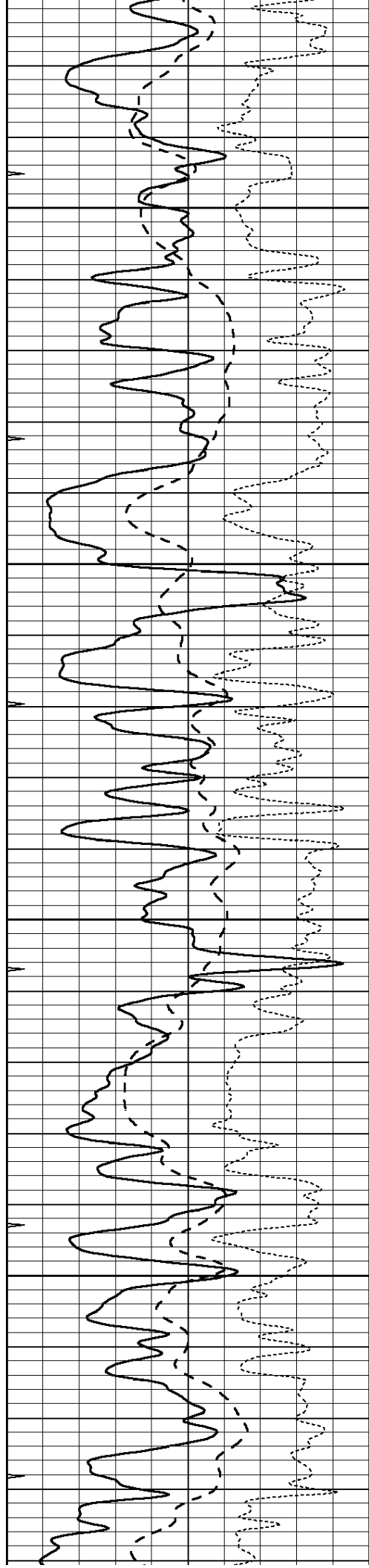
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2900



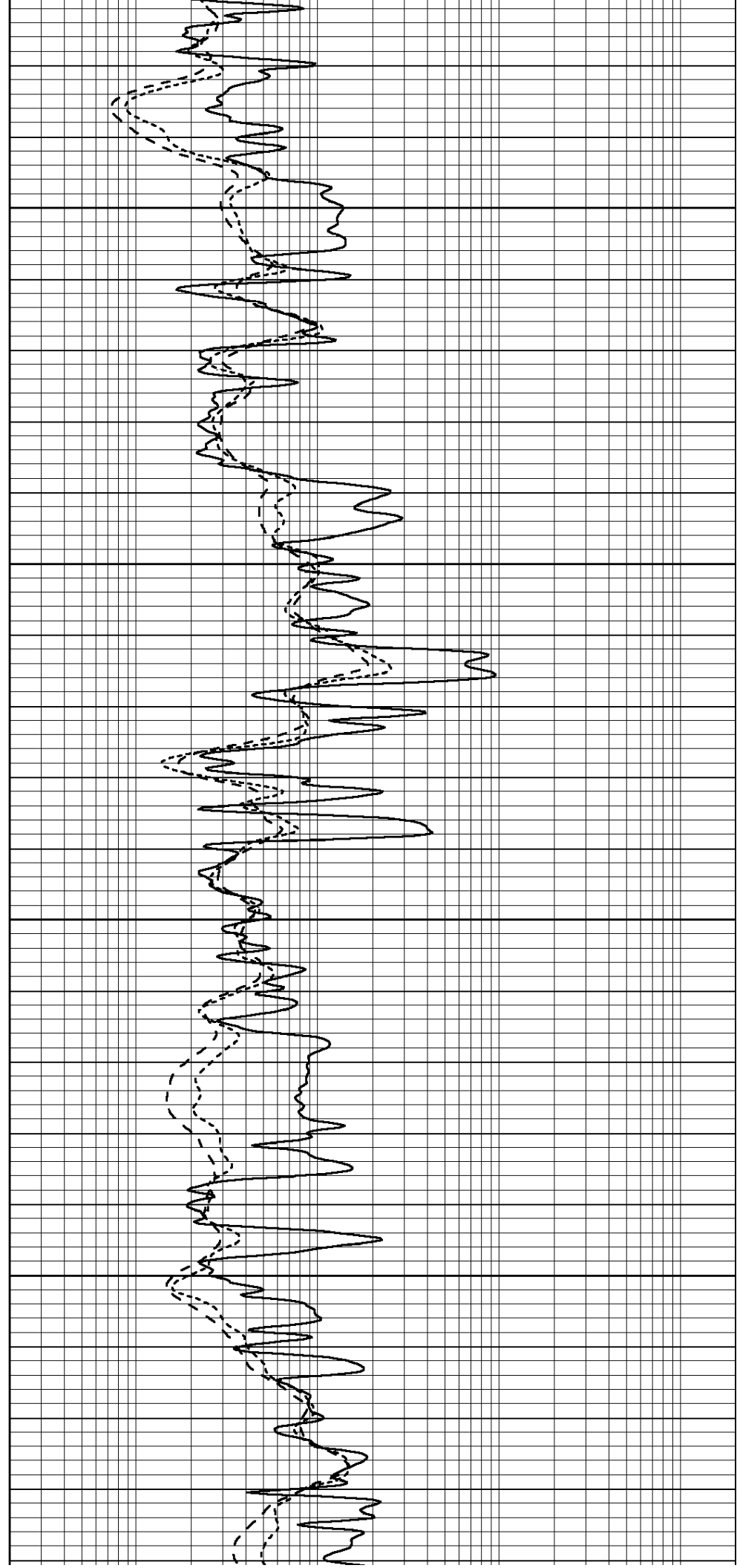


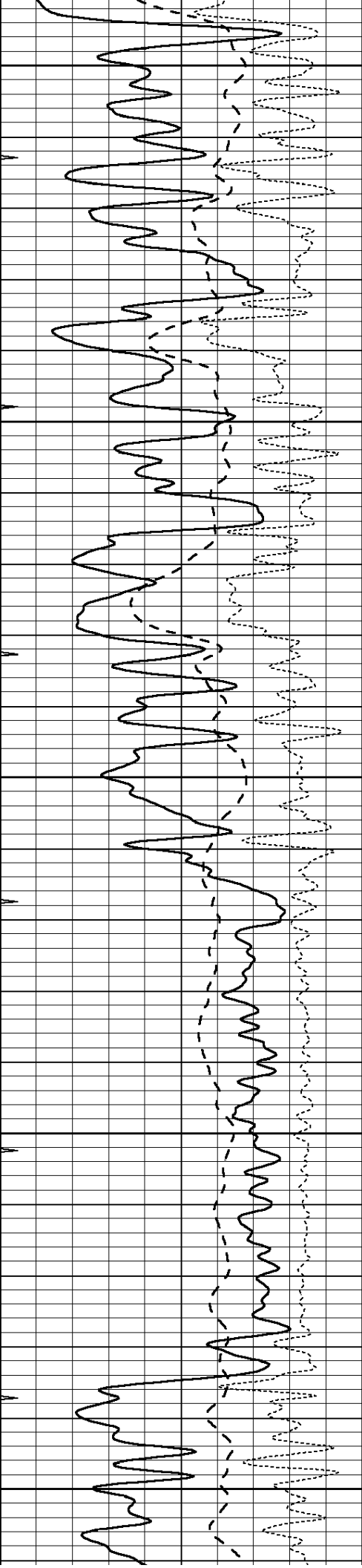
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3050

3100





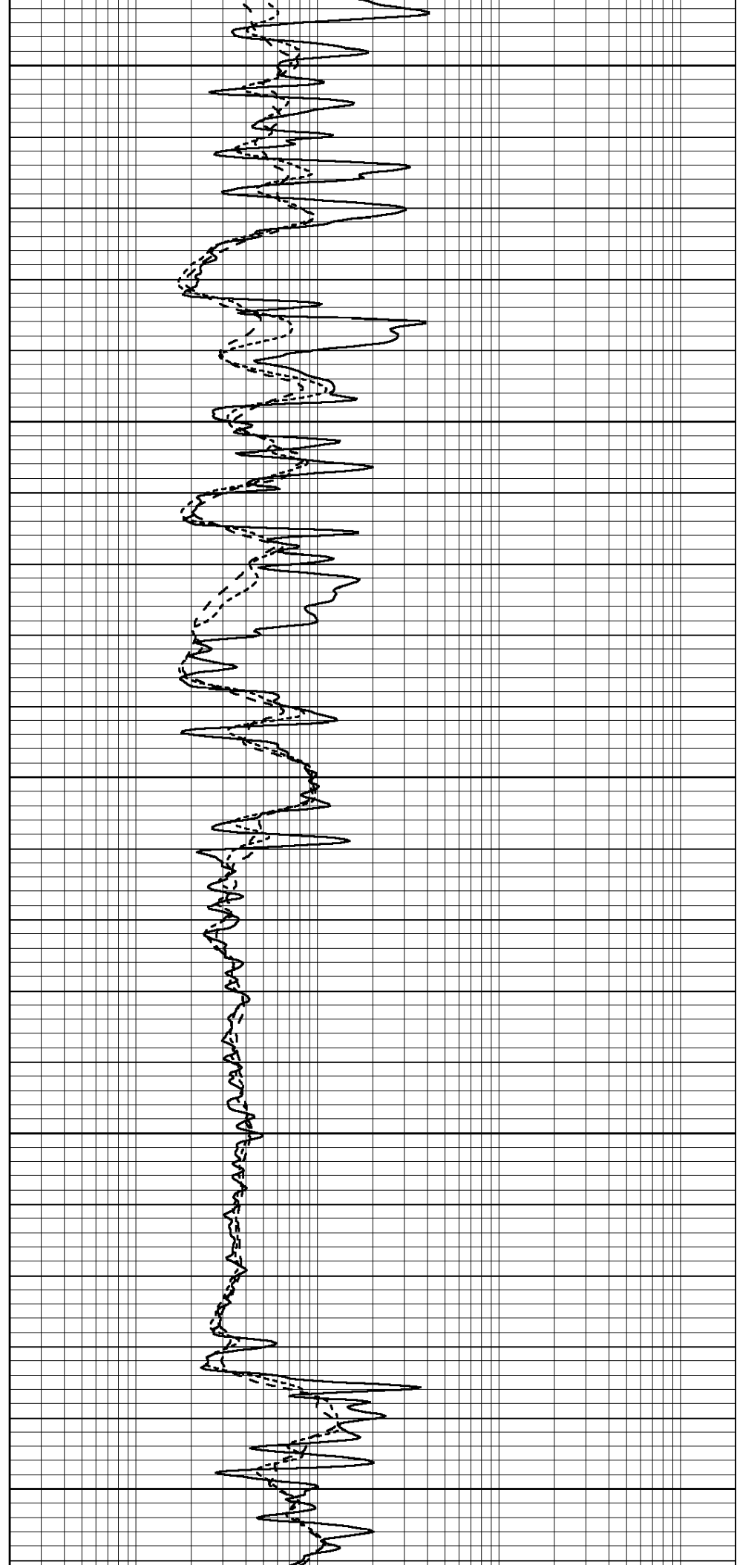
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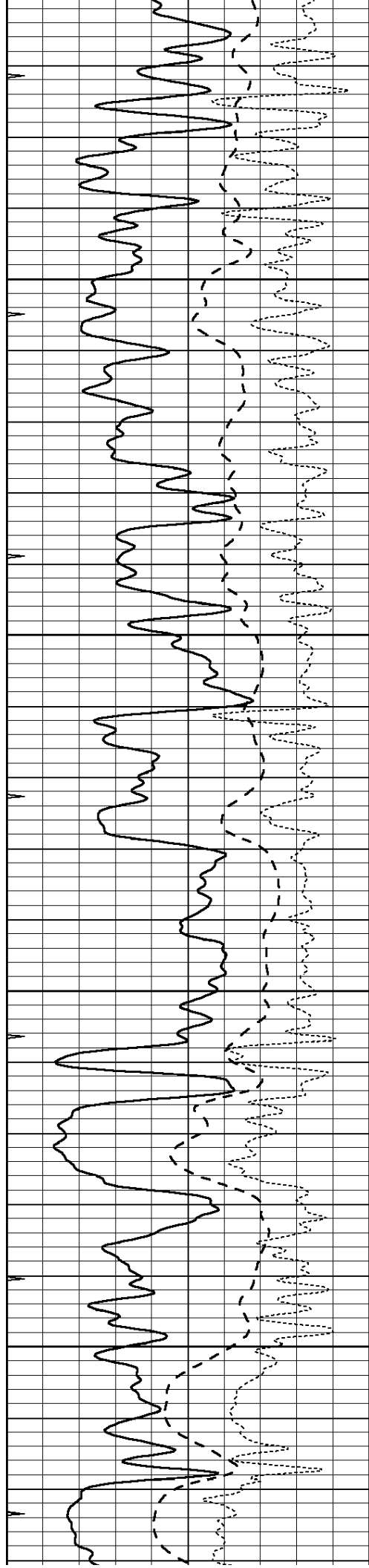
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3250

3300

3350



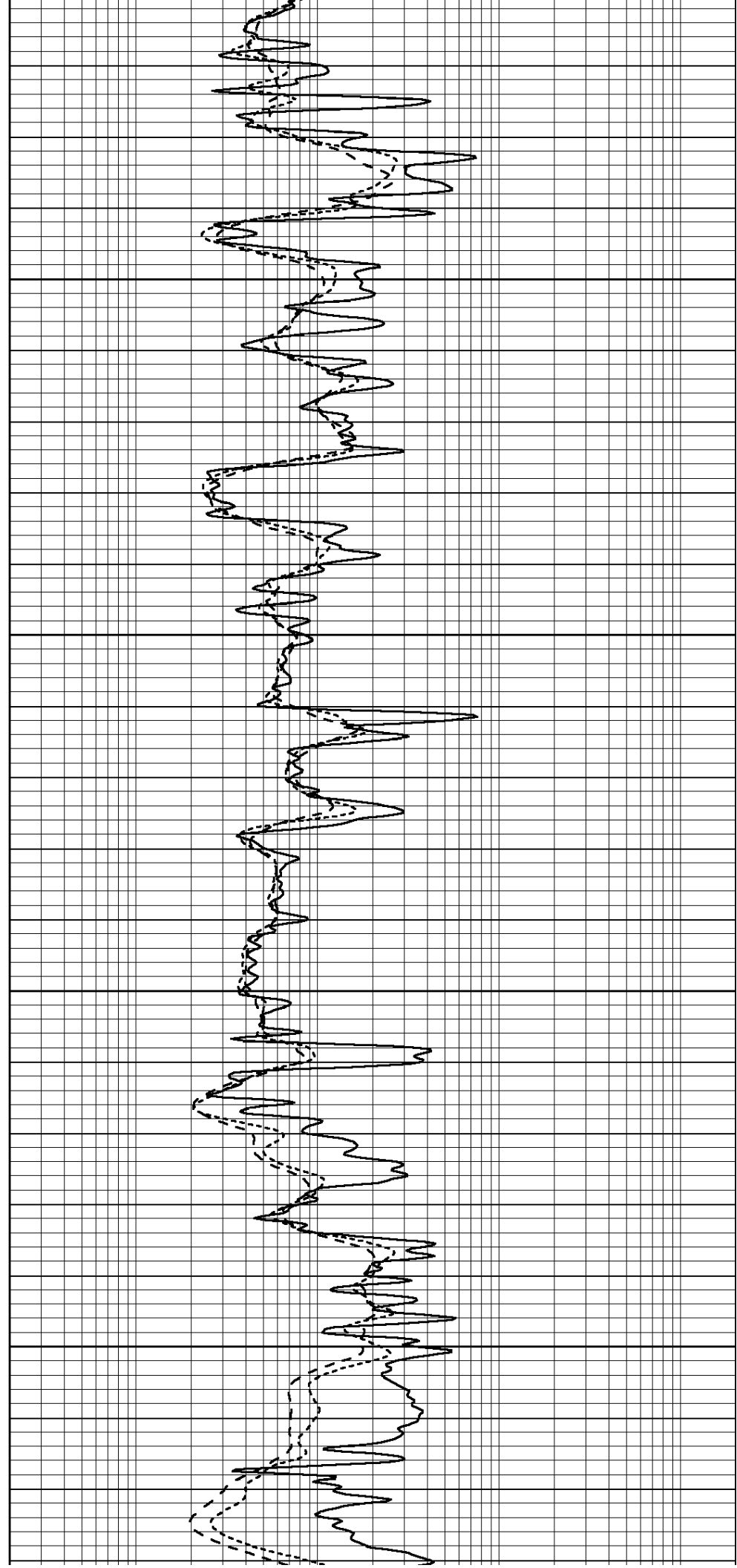


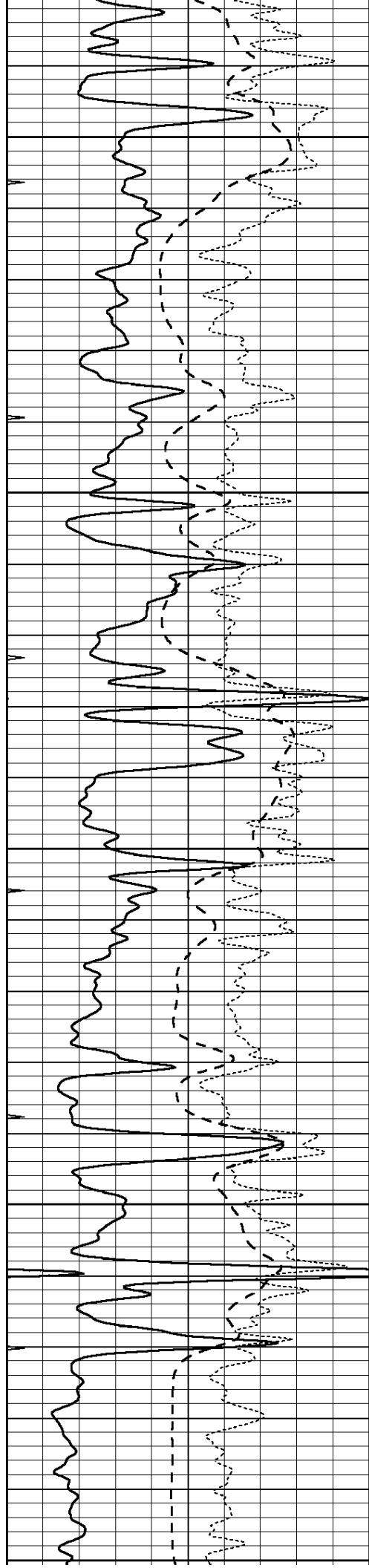
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3500

3550





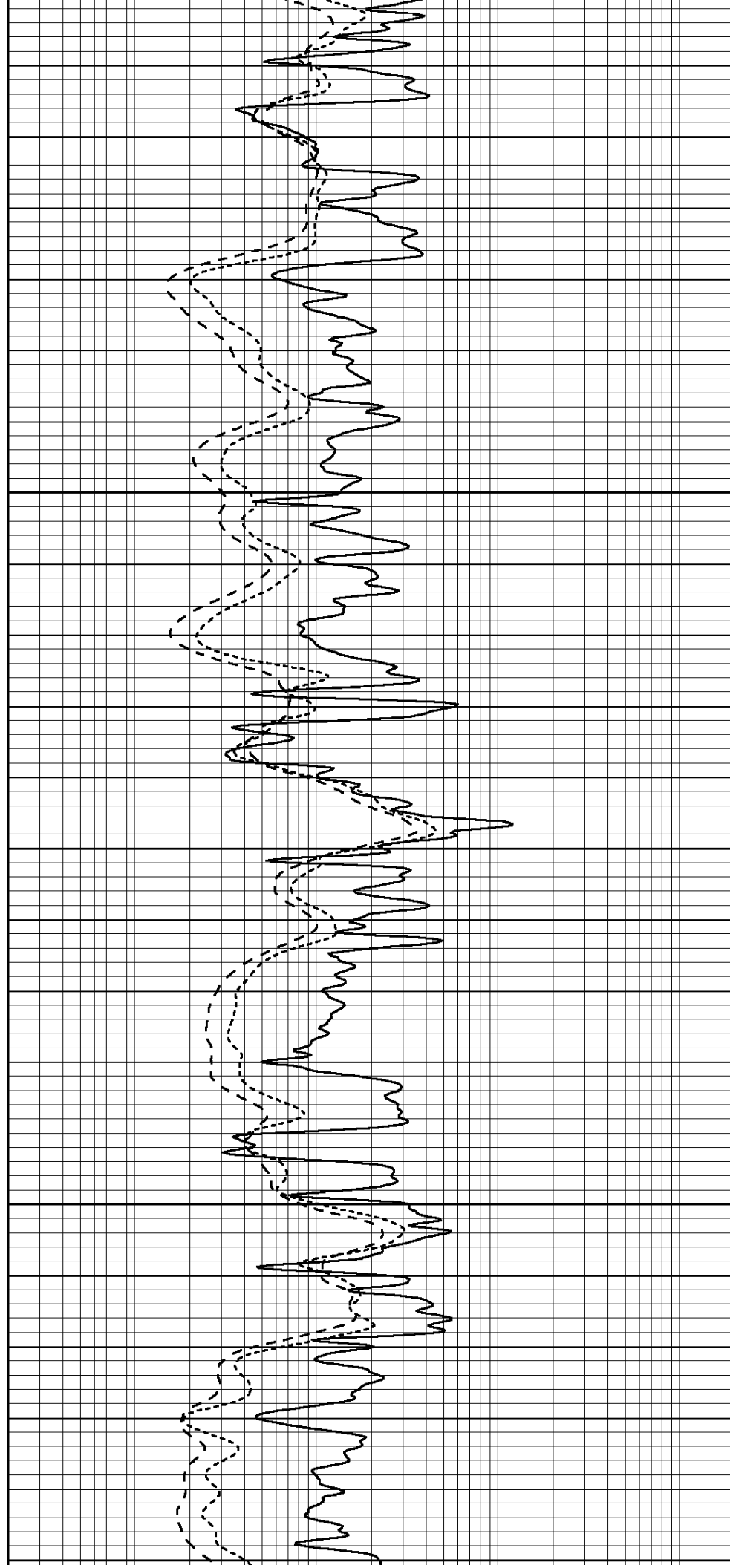
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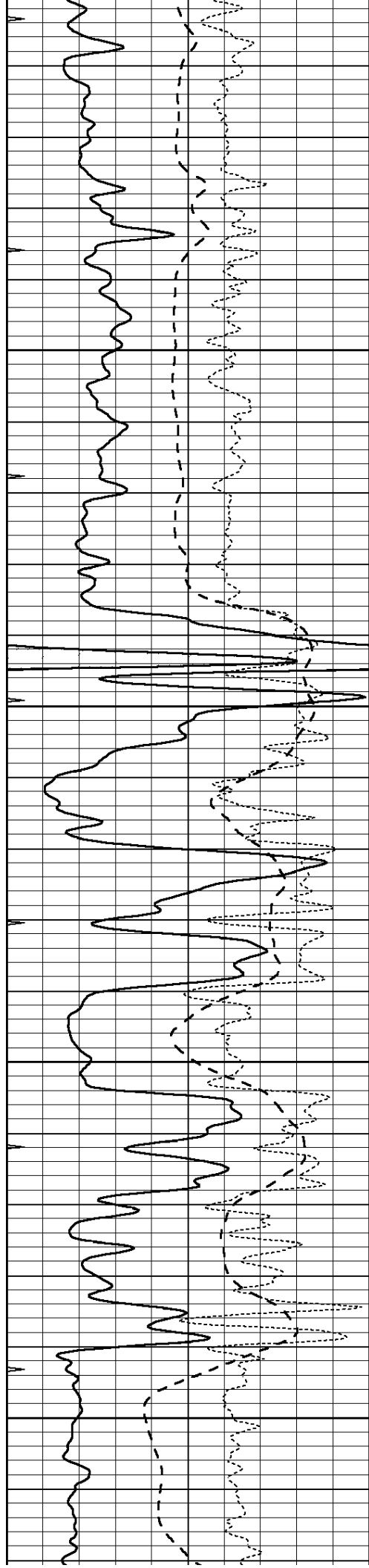
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3700

3750

3800



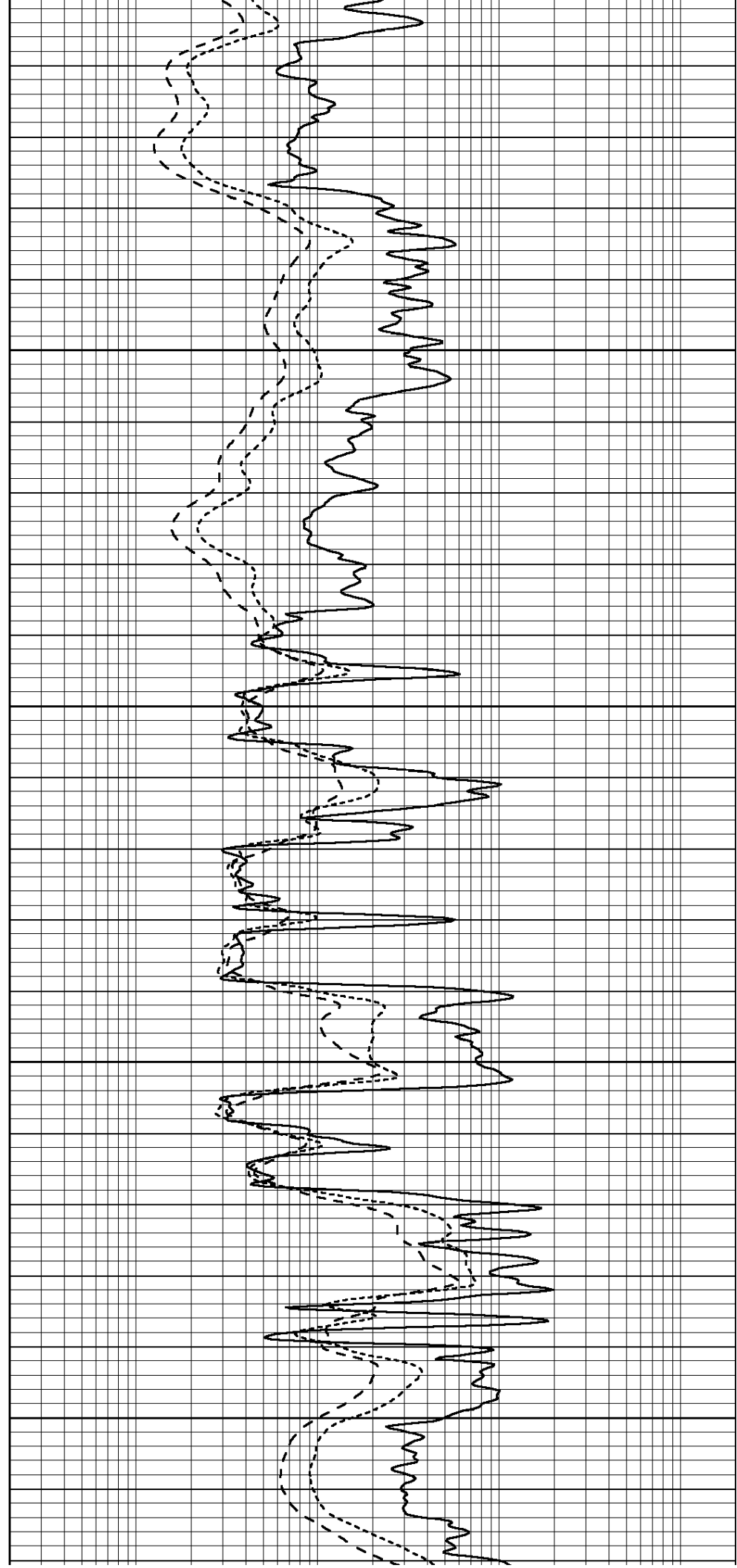


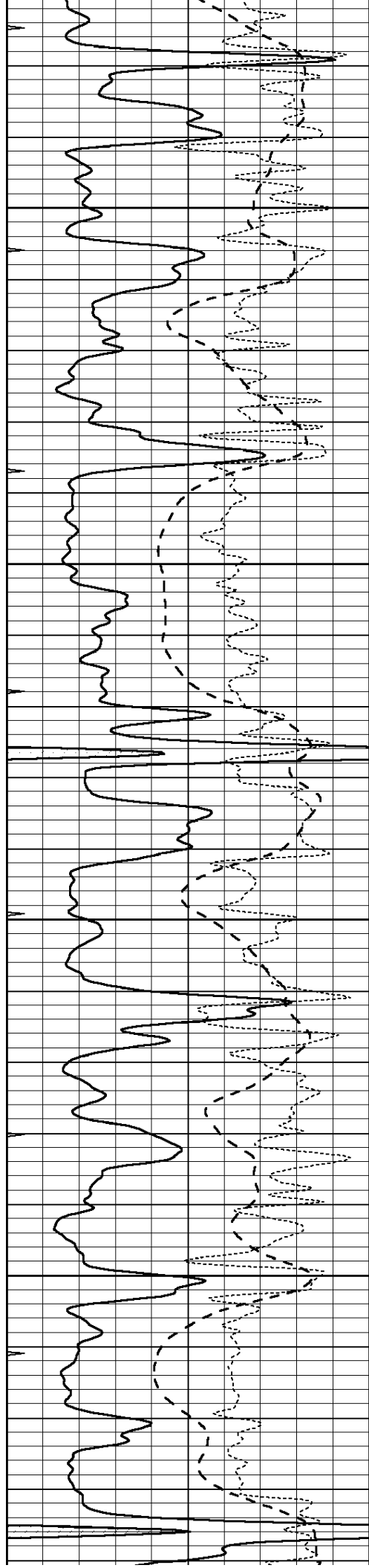
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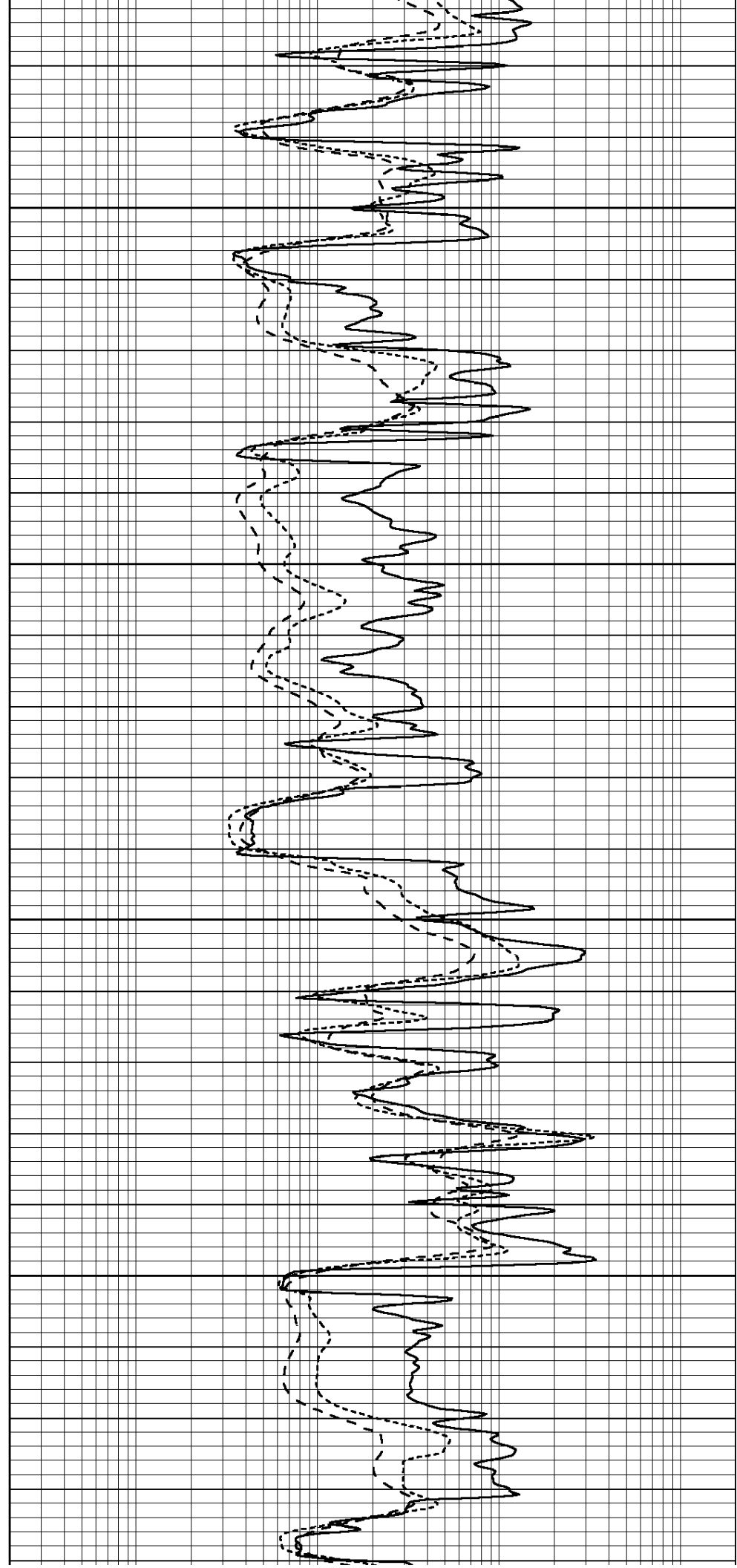


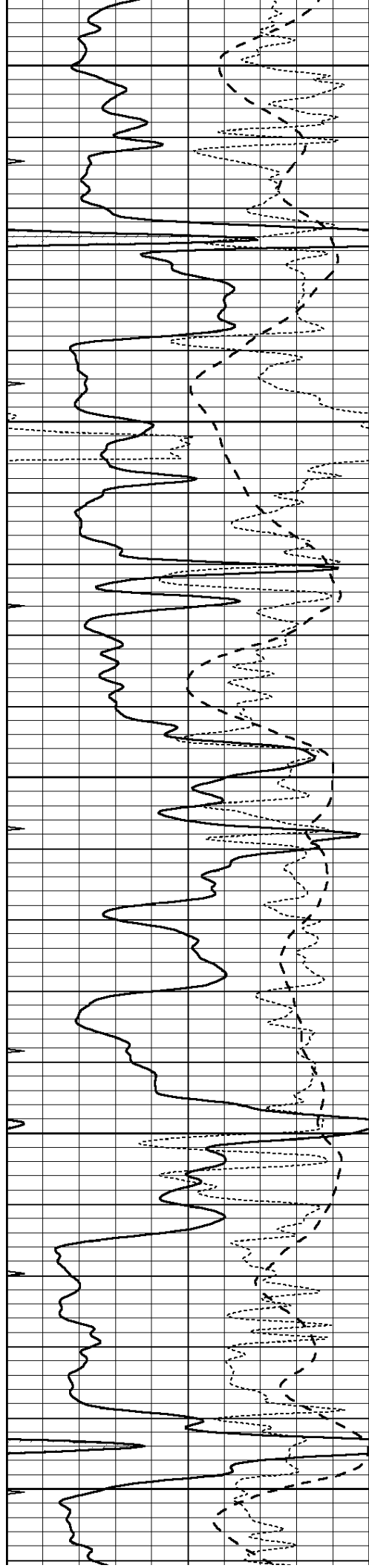
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4200





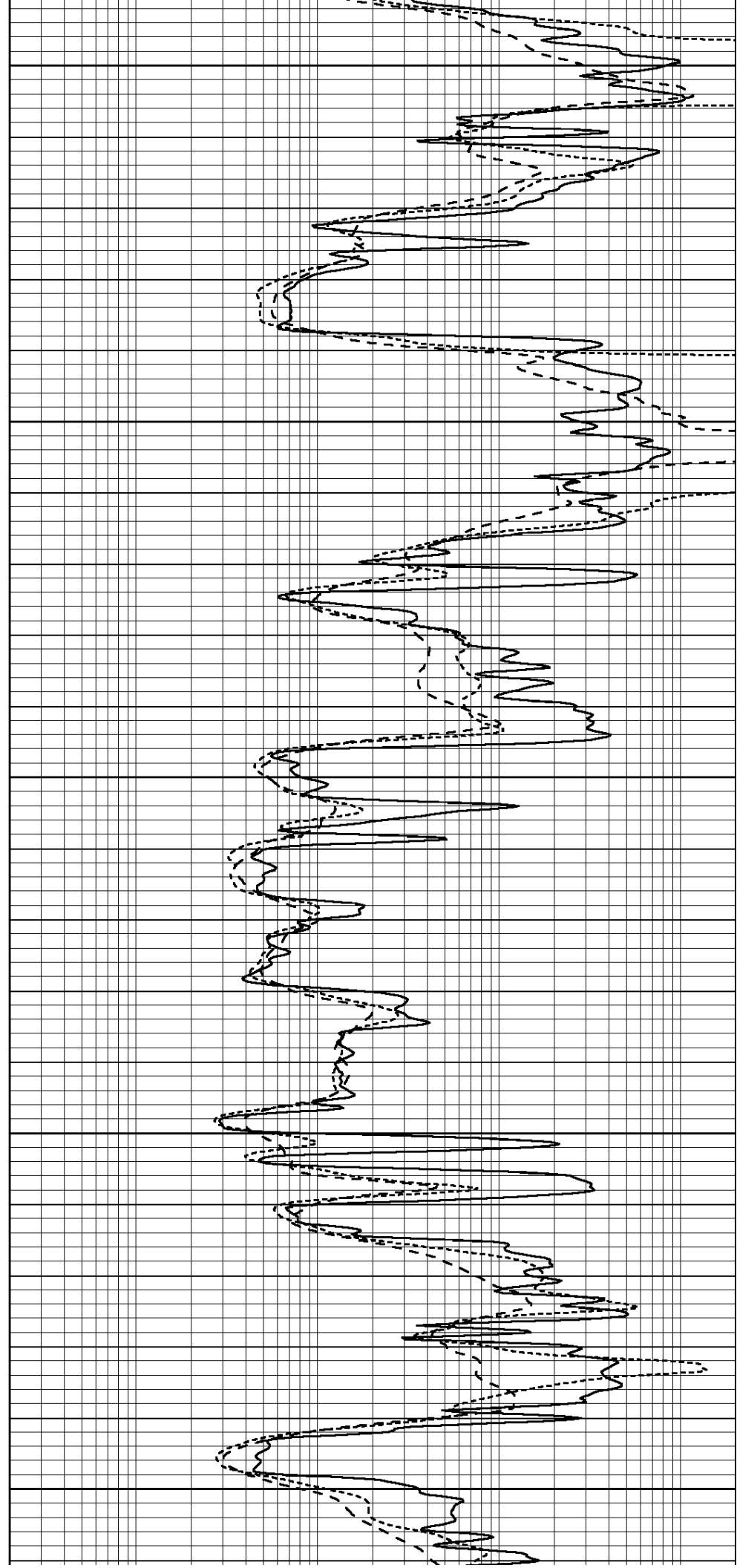
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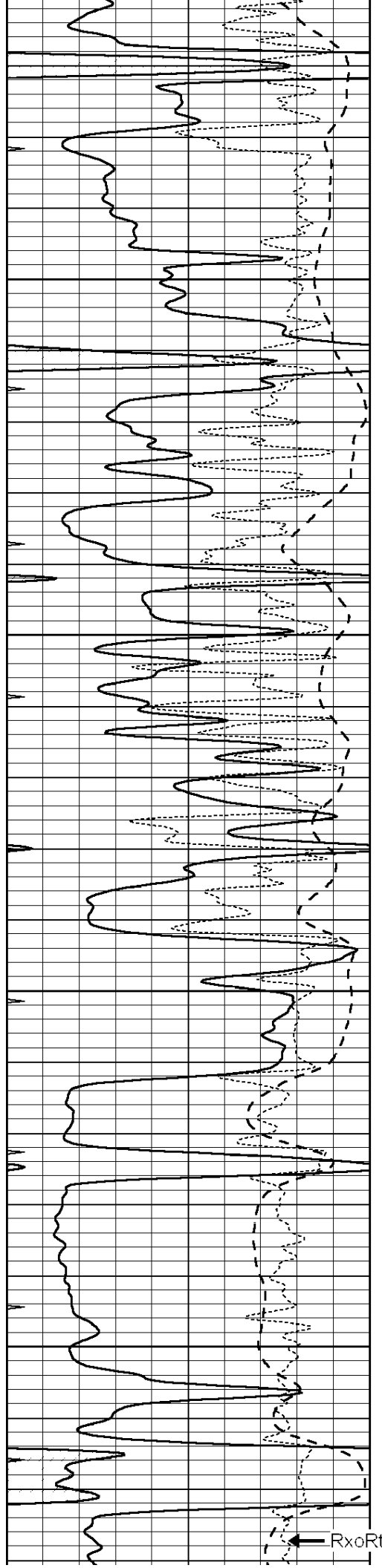
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4450





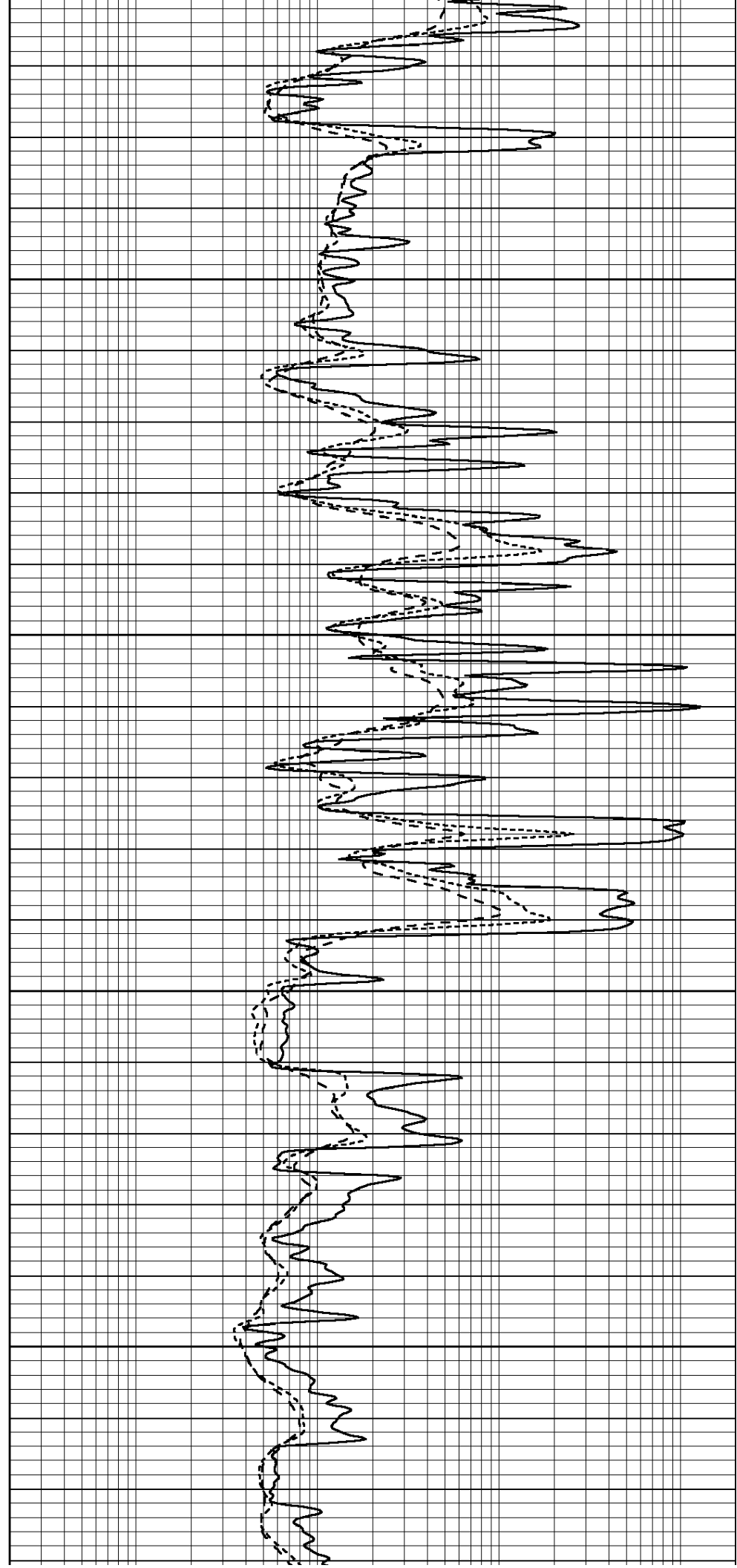
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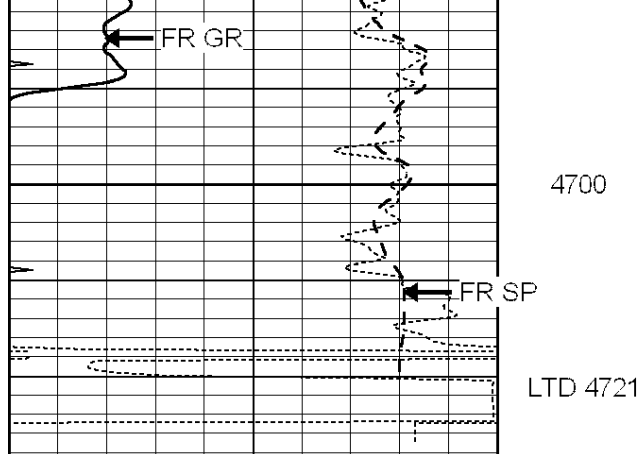
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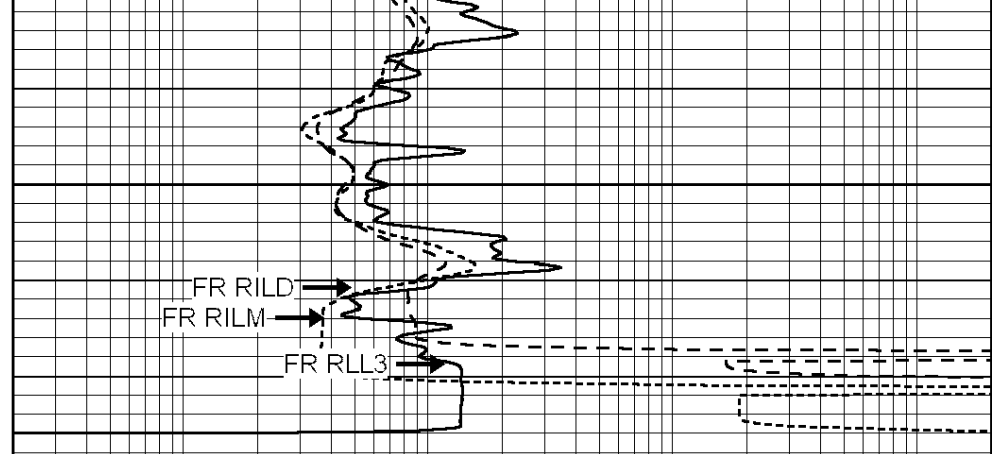
4650

— RxoRt





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



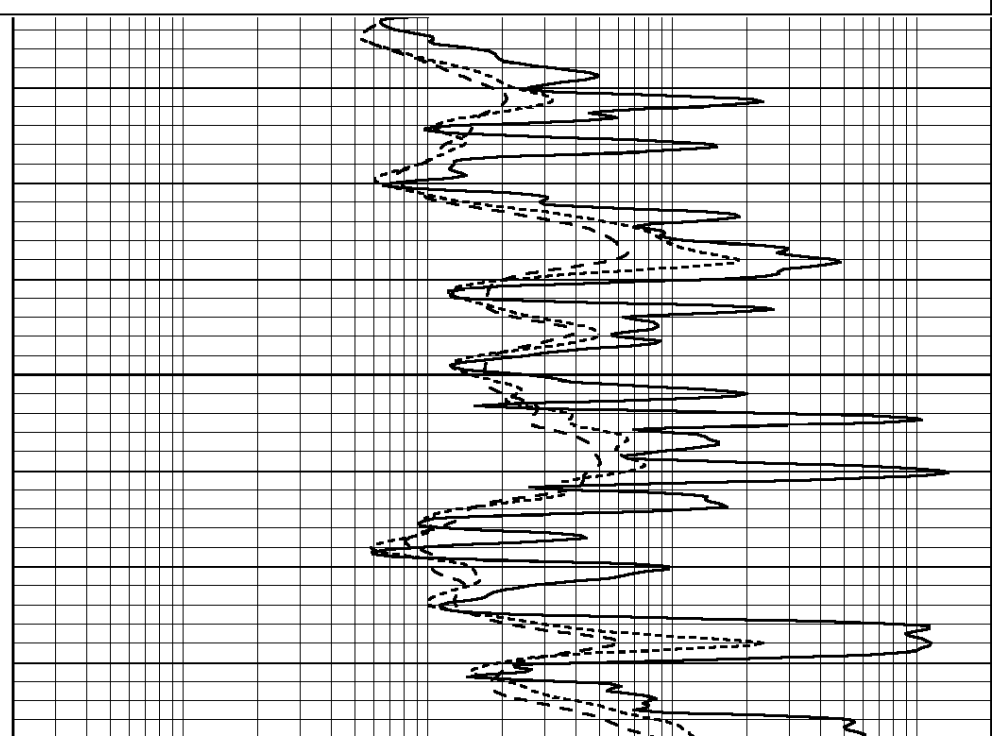
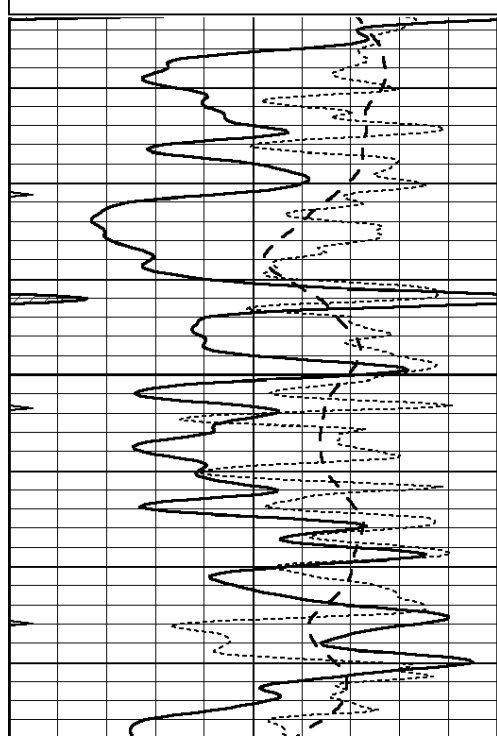
SUPERIOR
Hays,
Kansas

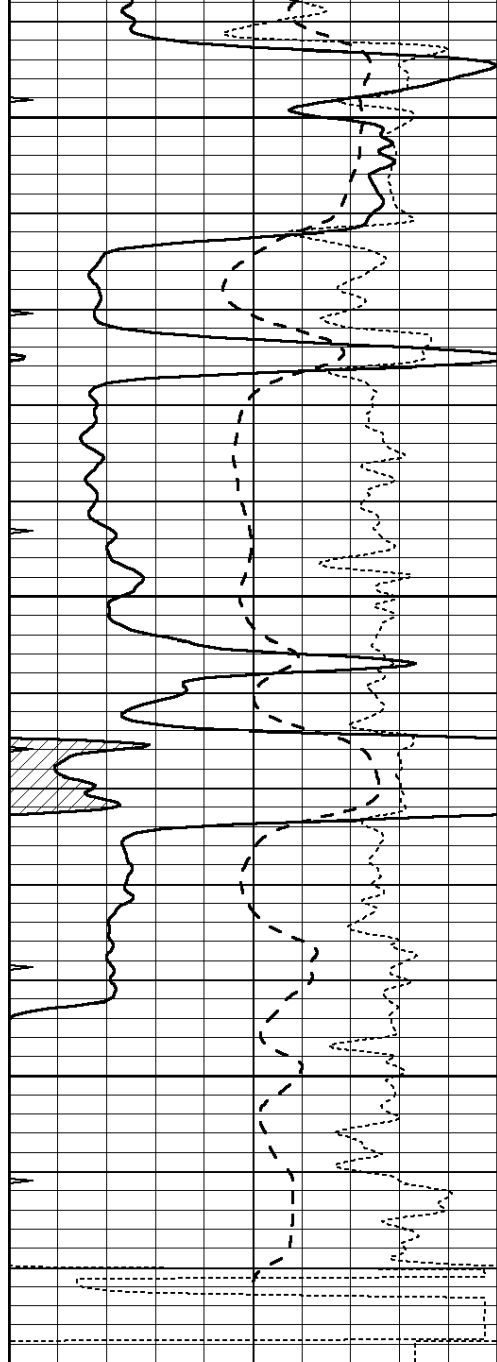
REPEAT SECTION

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 Presentation Format: dil
 Dataset Creation: Wed Jul 06 05:50:11 2011 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

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-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



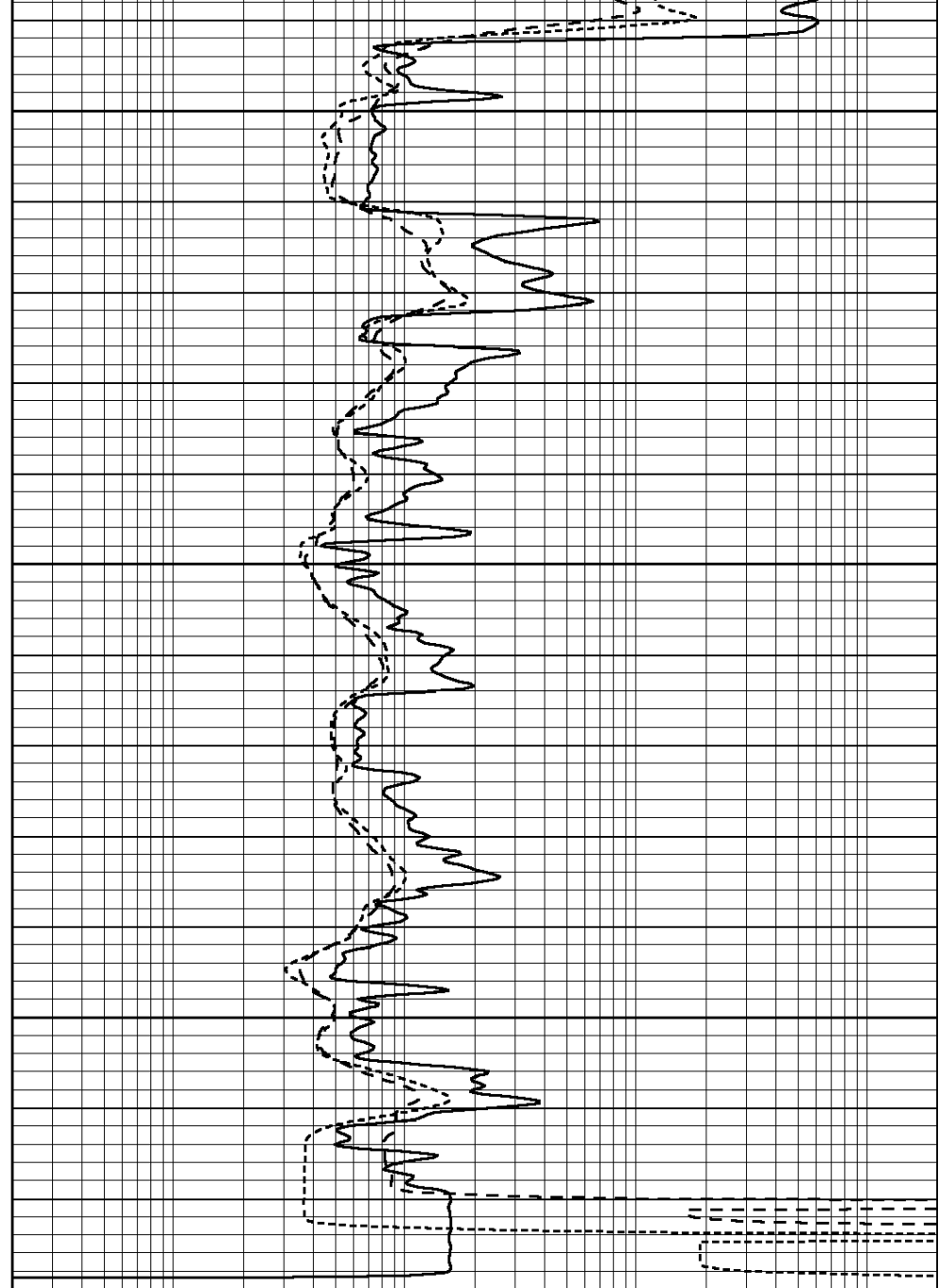


4600

4650

4700

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: 006951pe.db
 Dataset Pathname: pass5.3.1
 Dataset Creation: Wed Jul 06 08:38:32 2011

Dual Induction Calibration Report

Serial-Model: DIL5-GEAR
 Performed: Sun Jul 03 01:35:22 2011

Loop:	Readings		References		Results	
	Air	Loop	Air	Loop	m	b
1	0.004	0.054	0.000	100.000	500.000	10.000

Deep	0.004	0.654	V	0.000	400.000	mmho/m	520.000	-16.000
Medium	-0.005	0.737	V	0.000	462.500	mmho/m	560.000	-12.000

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: 001 Model: PRB
 Performed Tue Jul 03 11:37:32 2007

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	2170.6	9915.1	3855.3	11241.6	cps
Window 2	2029.2	8716.5	3483.5	9750.8	cps
Window 3	1665.0	4929.7	2356.8	5332.0	cps
Window 4	493.3	492.1	490.0	486.8	cps
Long Space	0.0	6687.3	1454.3	7721.6	cps
Short Space	1.9	2149.3	1403.9	2354.5	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	: 0.556
Spine Angle	: 74.4	Spine Slope	: 3.583	Spine Intercept	: -18.7

Caliper	Readings	Reference	
Low Ref	3.5	8.4	
High Ref	5.4	14.0	
	Gain: 2.9		Offset: -1.9

Compensated Neutron Calibration Report

Serial Number: NUE_2I
 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:	GR1
Tool Model:	OPEN
Performed:	Sat Nov 05 02:41:33 2005
Calibrator Value:	1.0 GAPI
Background Reading:	0.0 cps
Calibrator Reading:	1.0 cps
Sensitivity:	0.3200 GAPI/cps