



Radiation Guard Log

Pioneer Energy Services

API No.

15-065-23,856-00-00

Company Spiral Energy Corp., LLC

Well Desair No.1

Field Cooper

County Graham State Kansas

Location

660' FSL & 2310' FEL

Other Services
MEL

Sec: 34 Twp: 9S Rge: 21W

Permanent Datum Ground Level Elevation 2310

Log Measured From Kelly Bushing 8 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing K.B. 2318
D.F. 2310
G.L. 2310

Date 9/25/2012

Run Number One

Depth Driller 3919

Depth Logger 3914

Bottom Logged Interval 3913

Top Log Interval 250

Casing Driller 8.625 @ 244

Casing Logger 251

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 1,300

Density / Viscosity 9.2 50

pH / Fluid Loss 11.0 7.2

Source of Sample Flowline

Rm @ Meas. Temp 1.3 @ 65

Rmf @ Meas. Temp .98 @ 65

Rmc @ Meas. Temp 1.76 @ 65

Source of Rmf / Rmc Charts

Rm @ BHT .73 @ 115

Operating Rig Time 3 Hours

Max Rec. Temp. F 115

Equipment Number 17

Location Hays

Recorded By C. Desaire

Witnessed By Ron Amiri

<<< Fold Here >>>

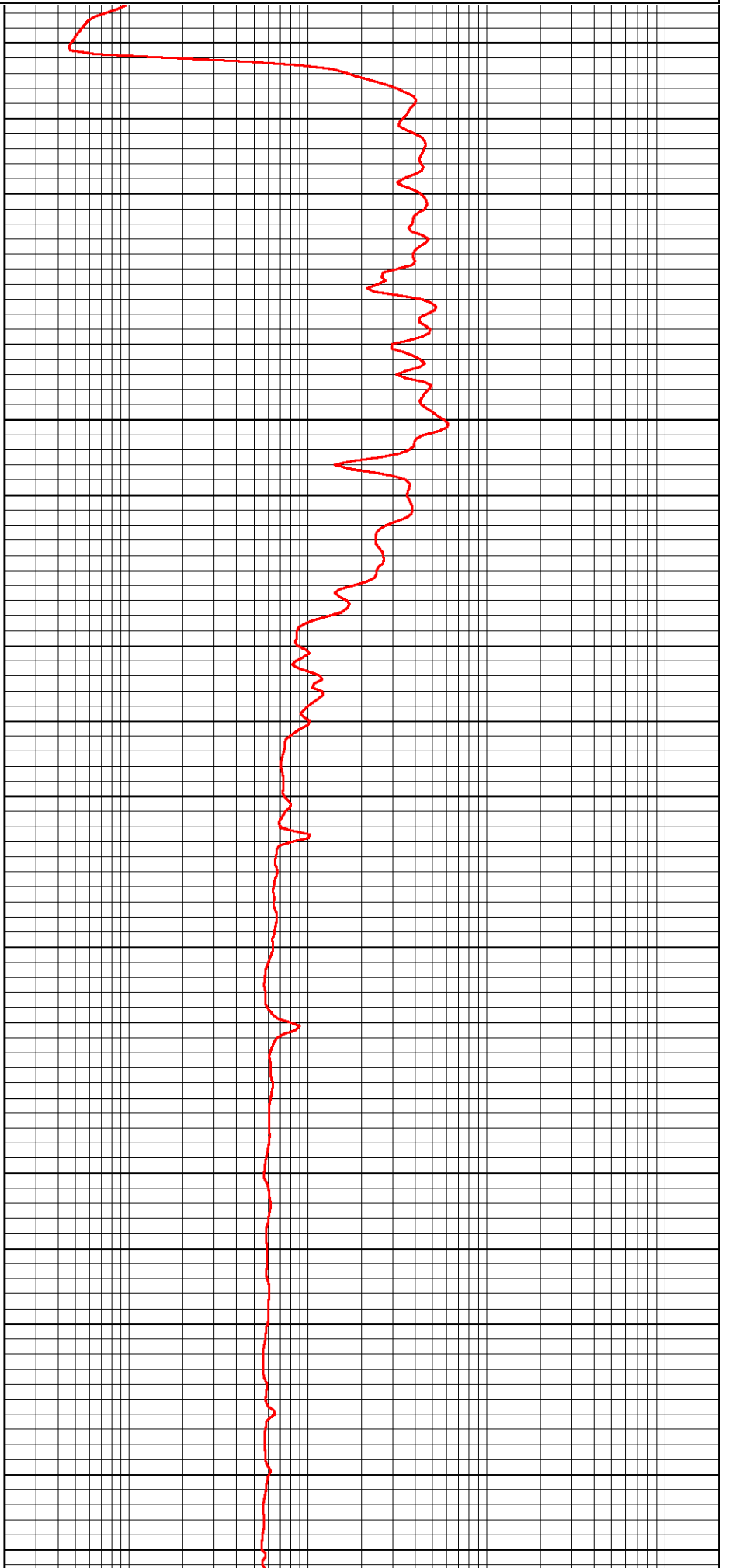
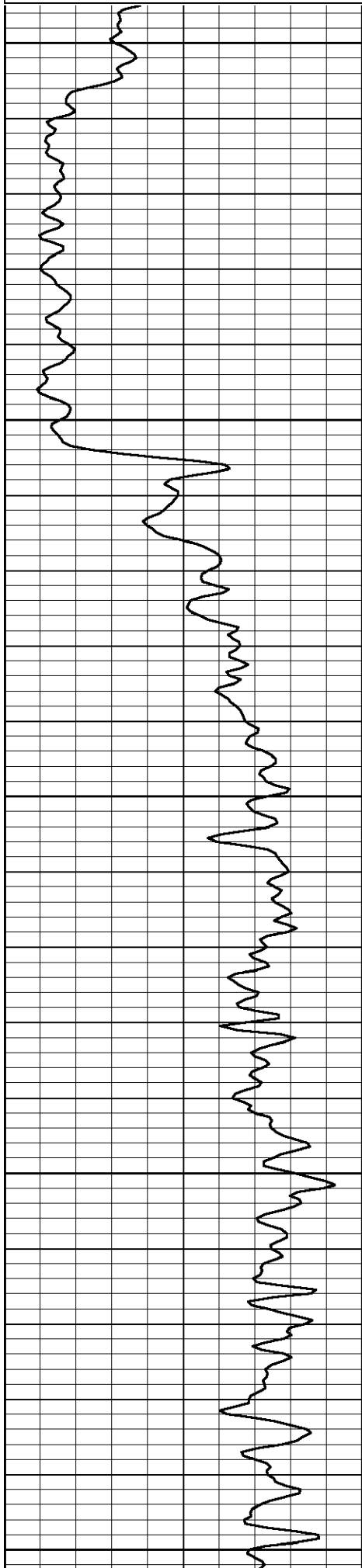
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

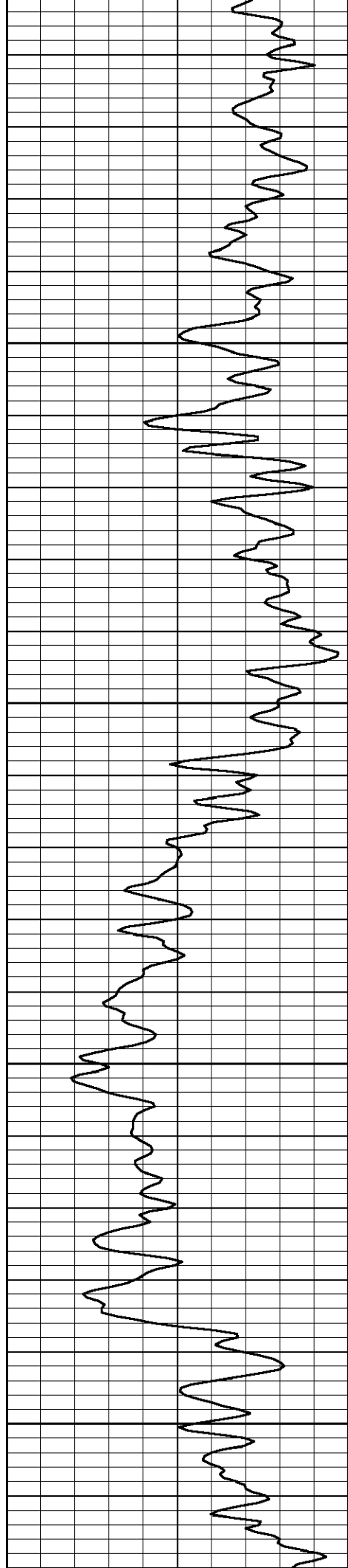
Comments

Thank you for using Log-Tech, Inc.
(785) 625-3858

Palco KS, S to Y Rd,
4 1/2 W, N Into

Database File: spiralhd.db
Dataset Pathname: rag/spirrag
Presentation Format: rag2in
Dataset Creation: Wed Sep 26 06:20:13 2012
Charted by: Depth in Feet scaled 1:240



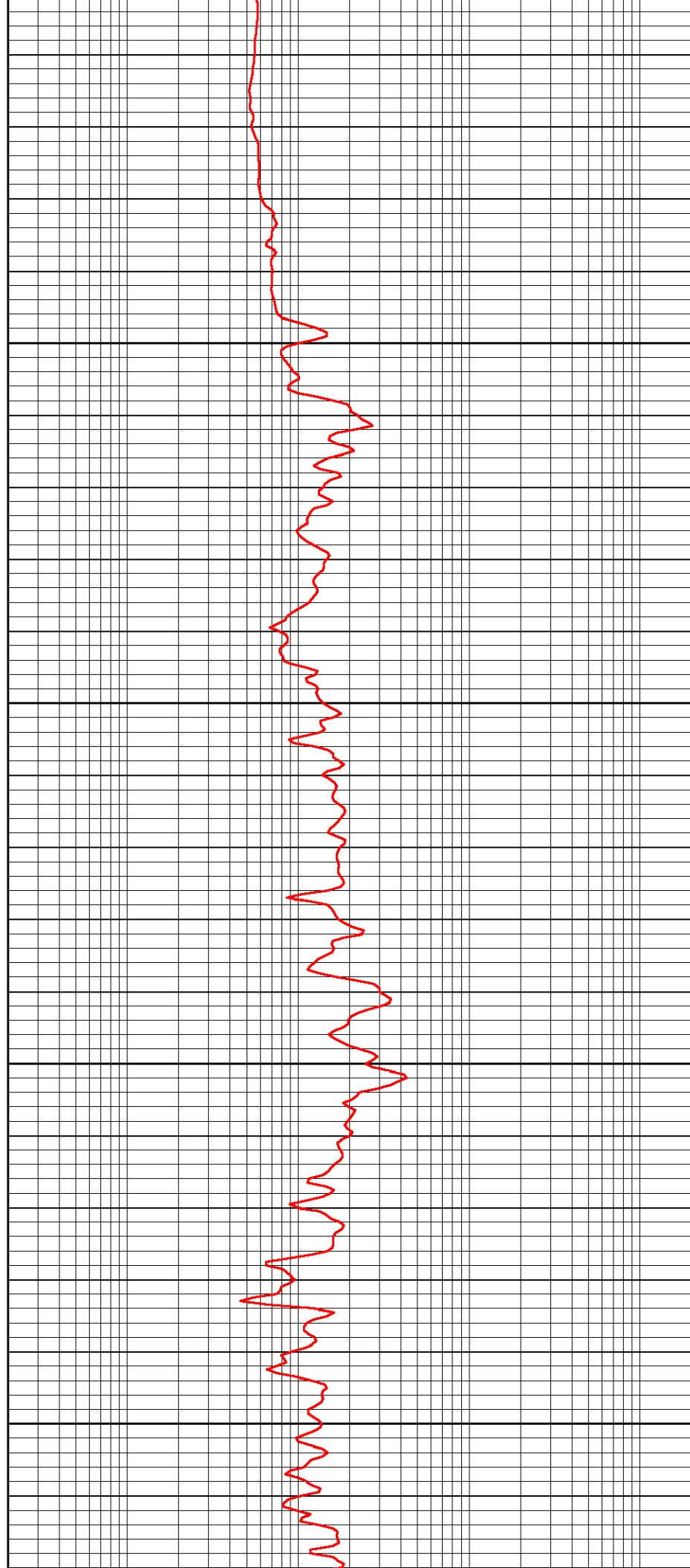


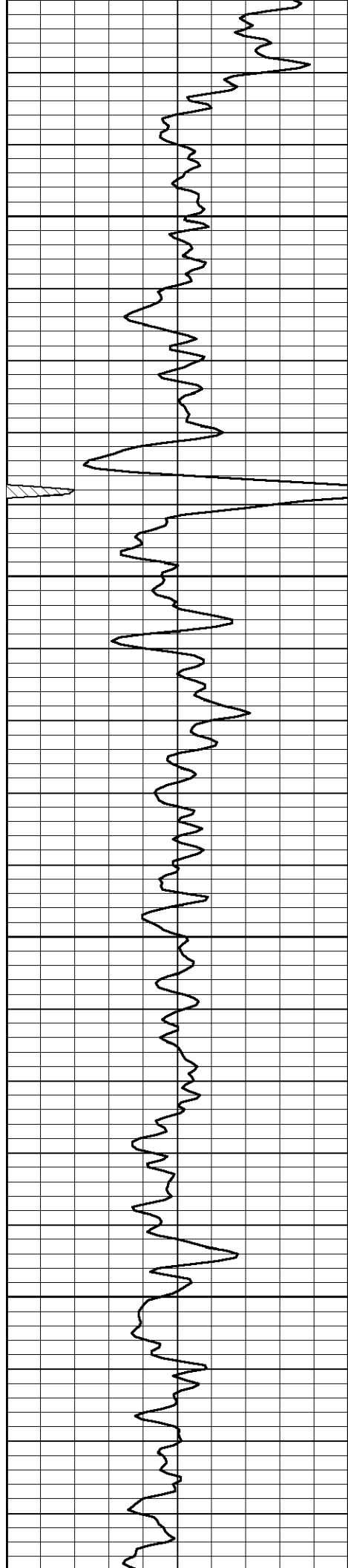
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550

600

650



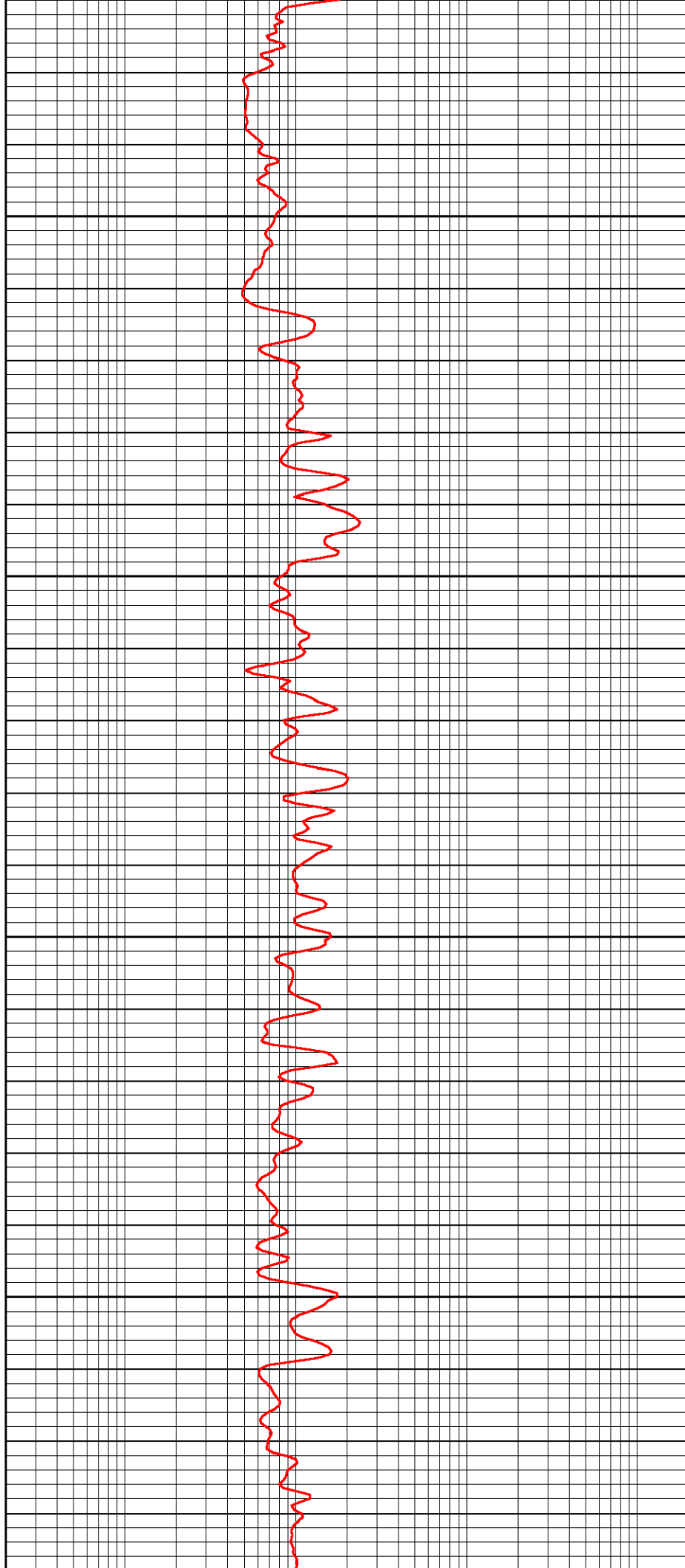


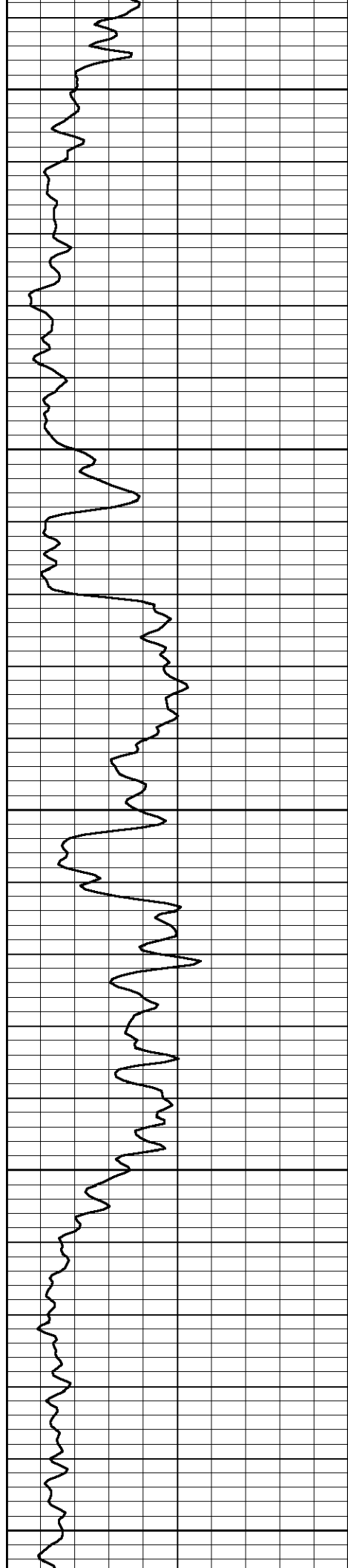
700

750

800

850





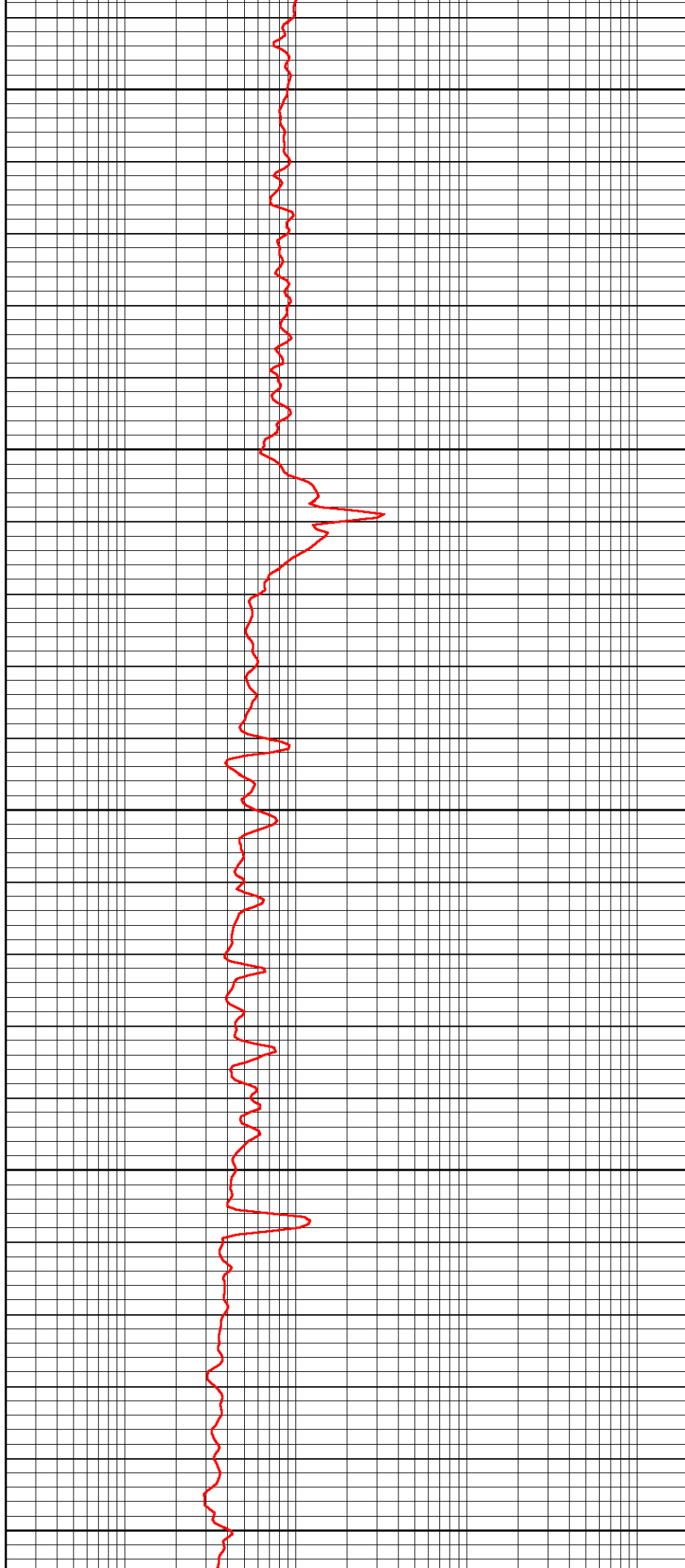
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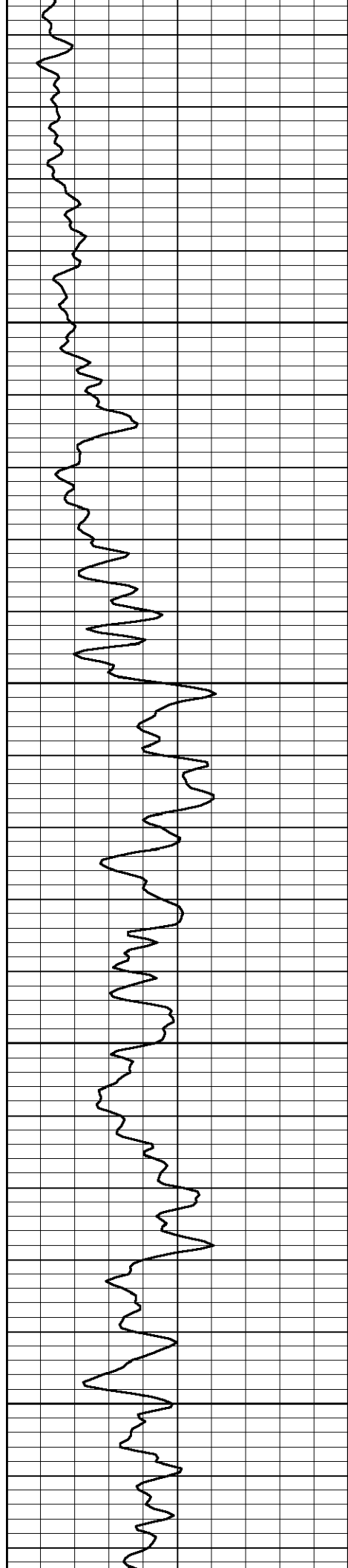
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1000

1050

1100



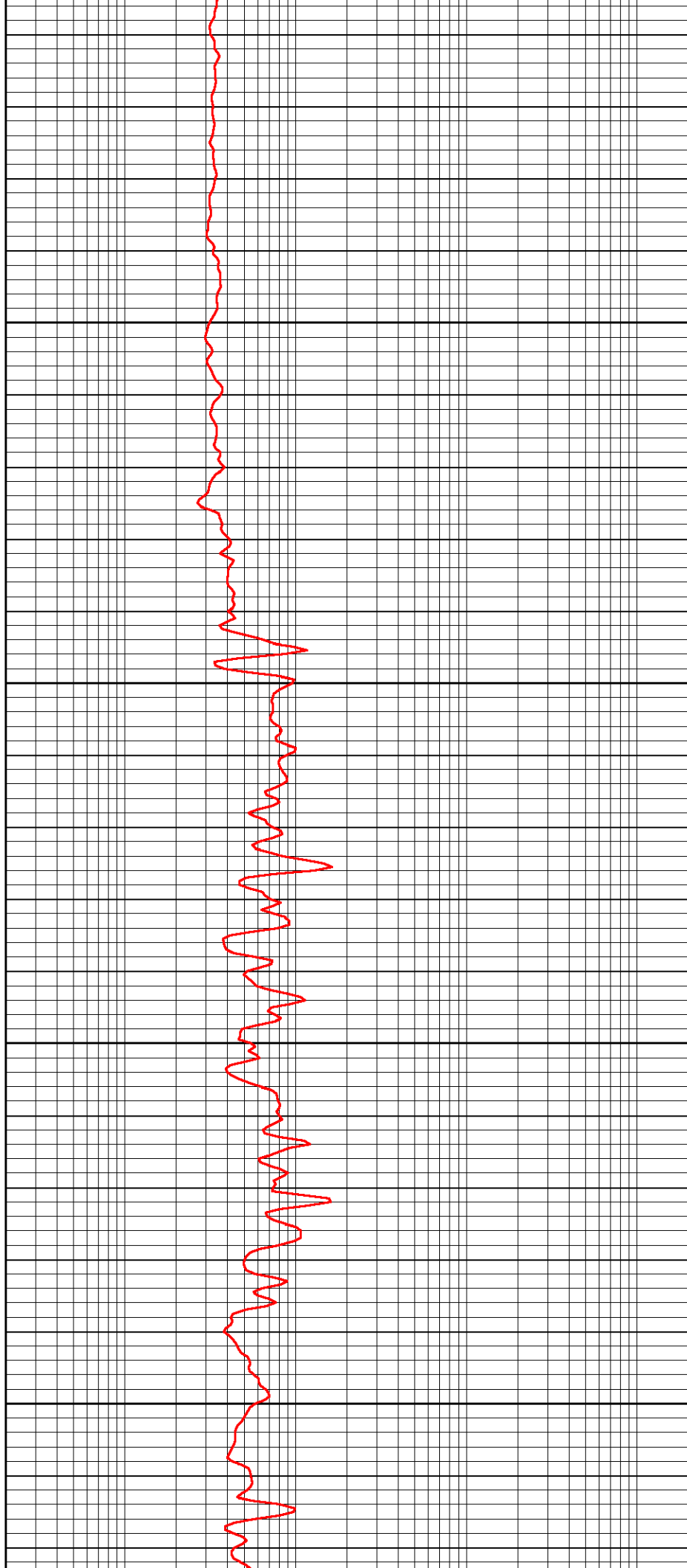


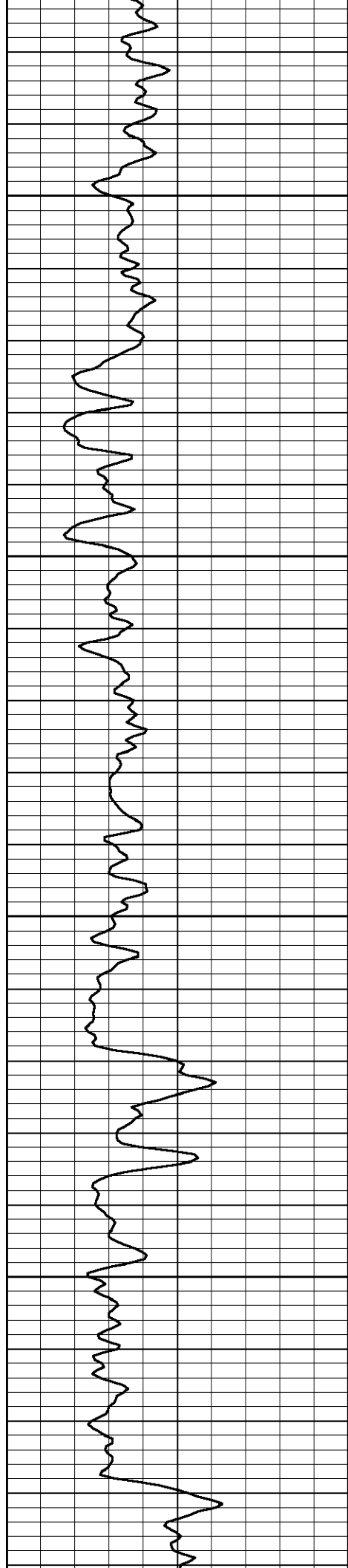
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1200

1250

1300



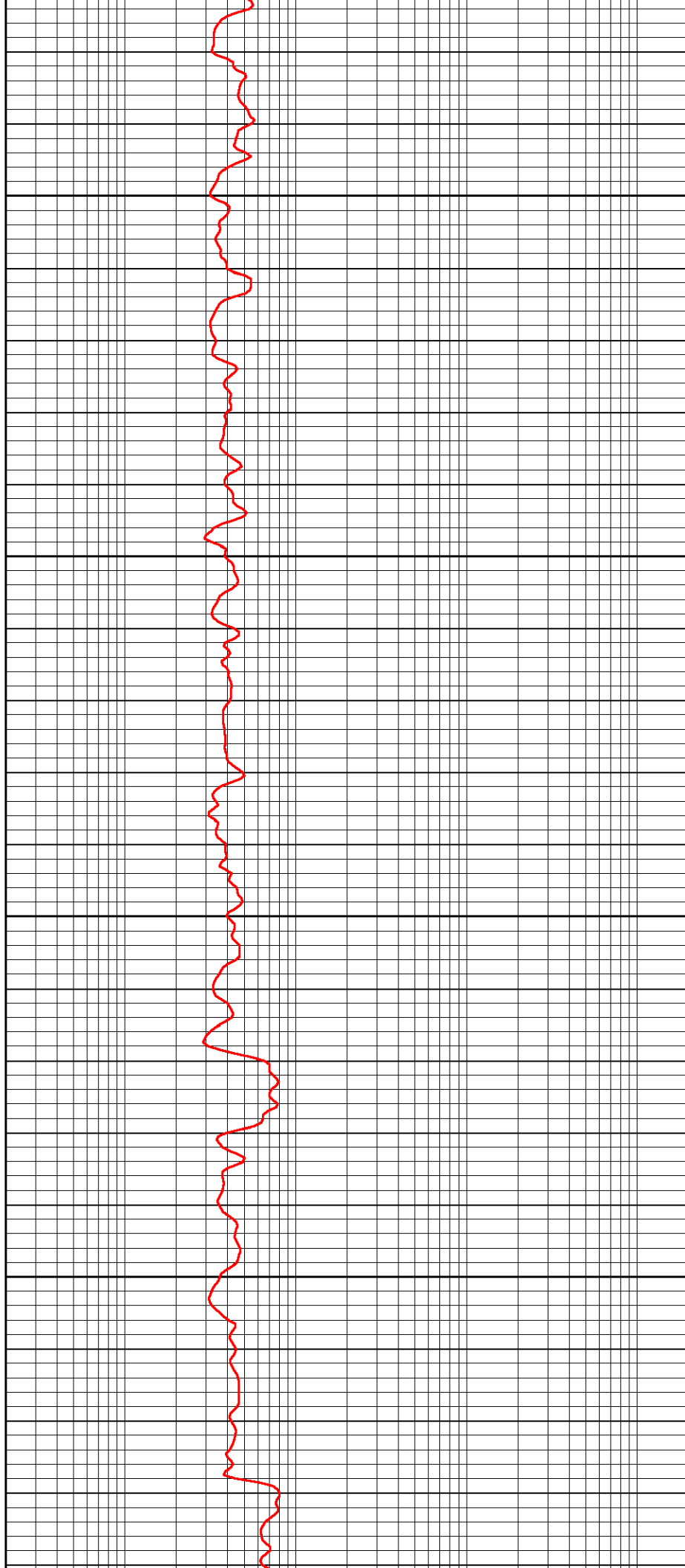


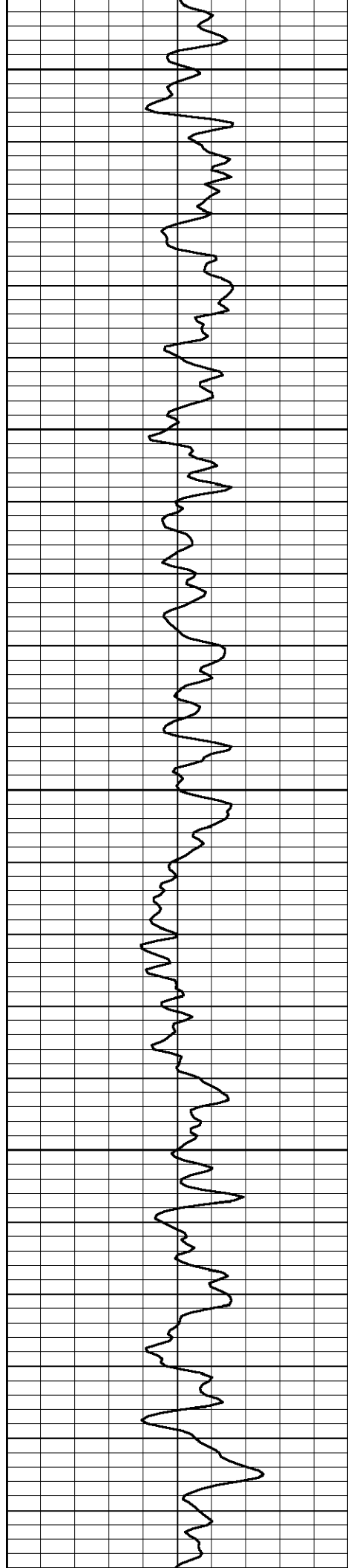
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1400

1450

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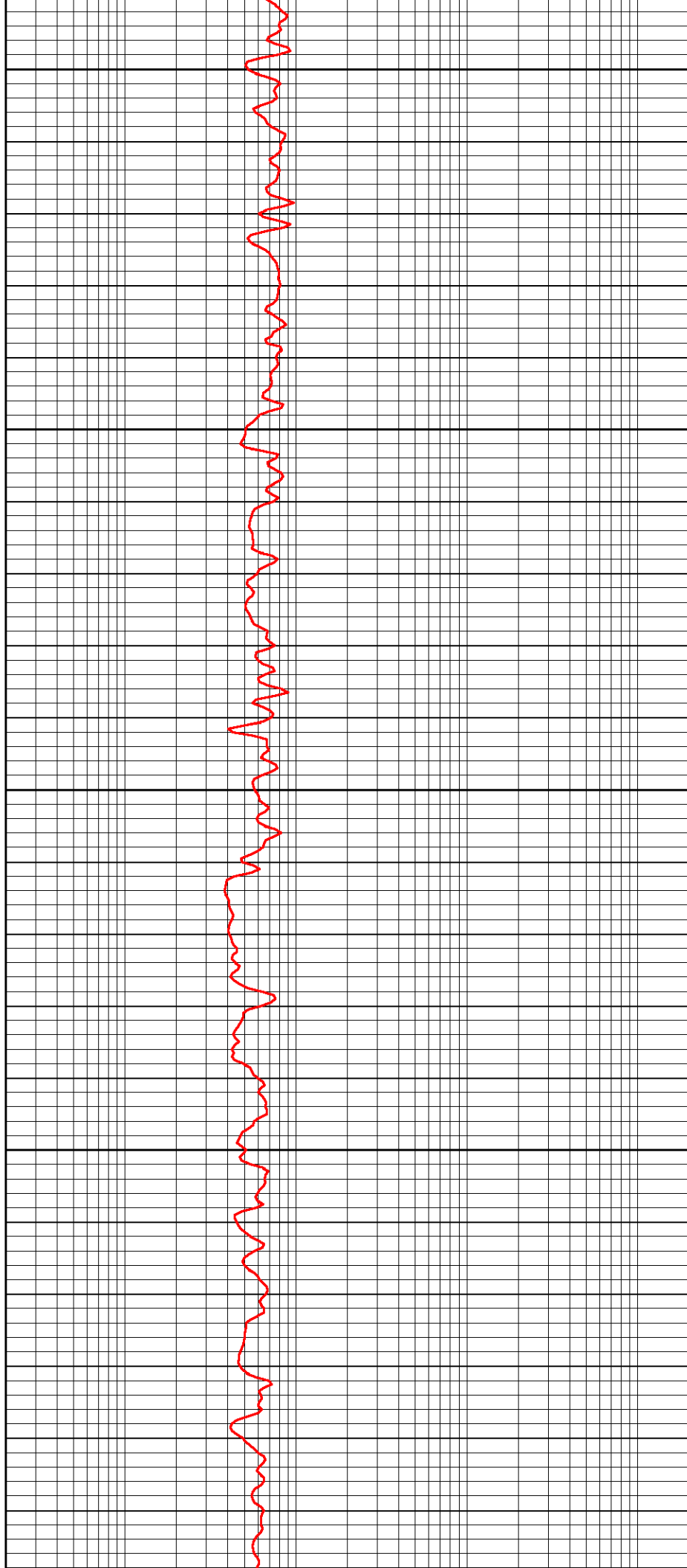
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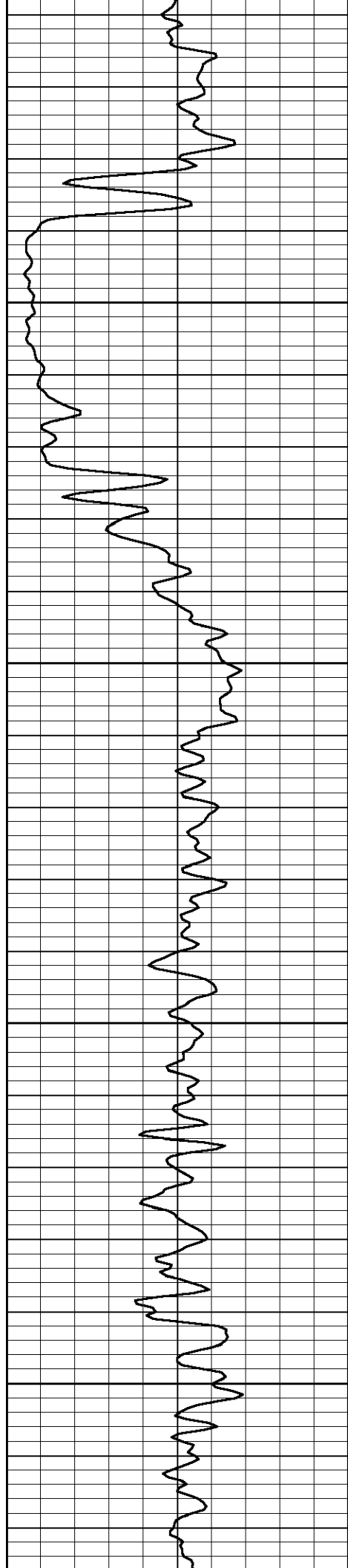
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1650

1700

1750



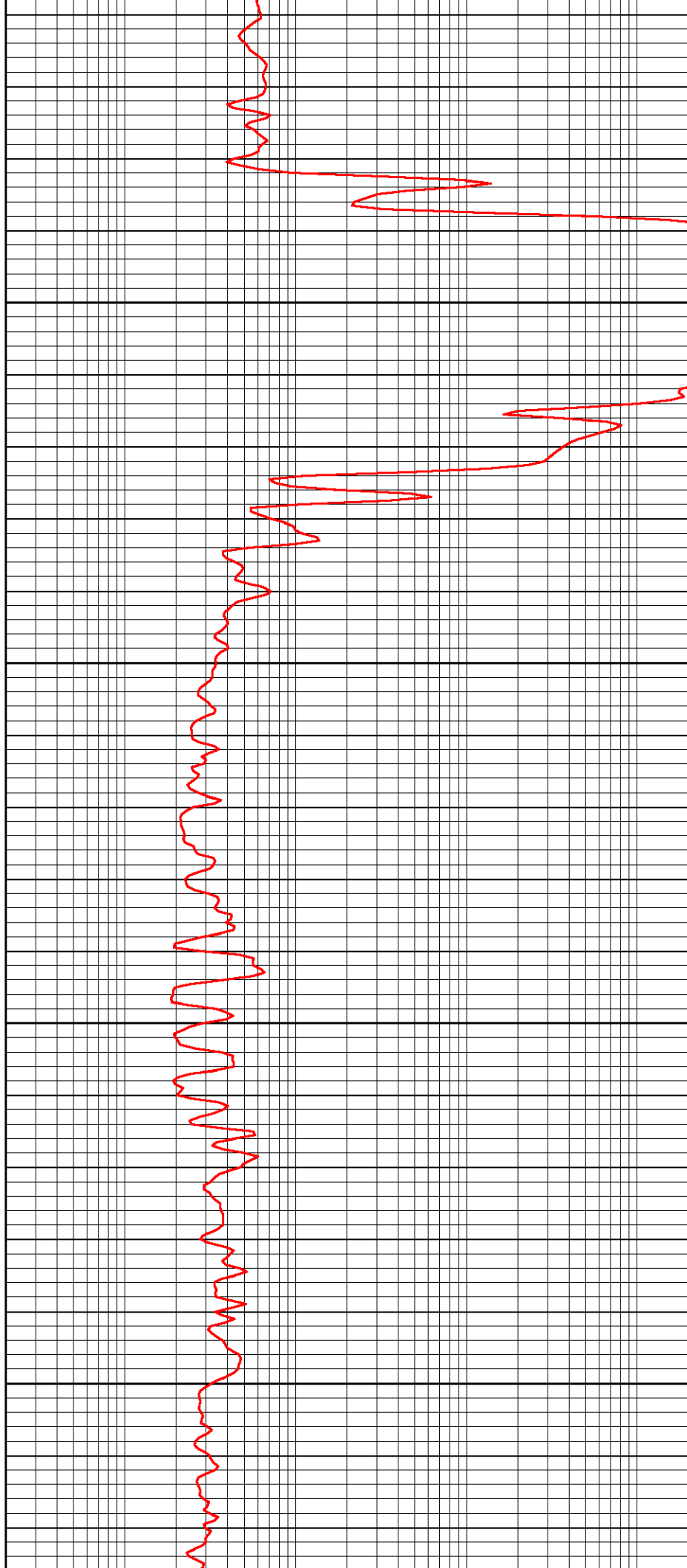


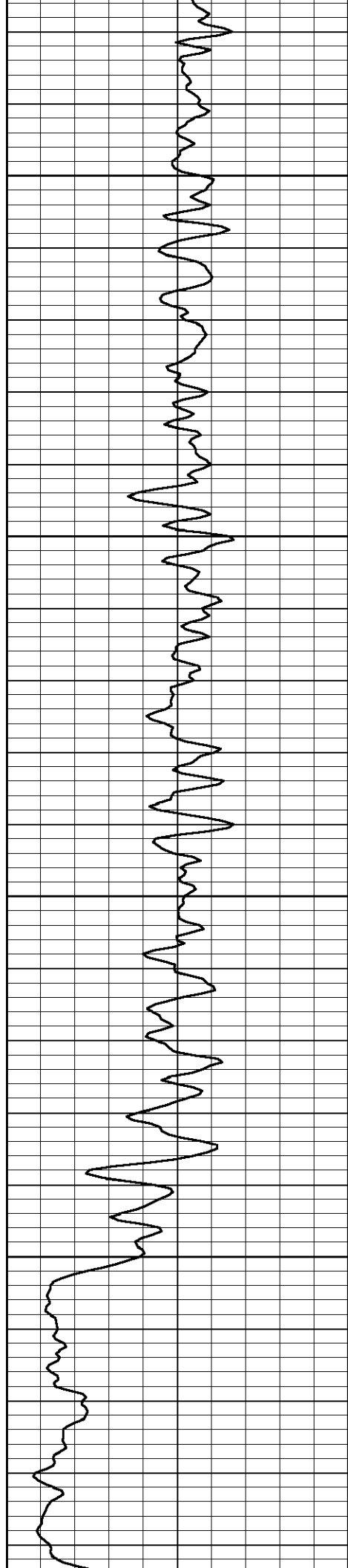
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1850

1900

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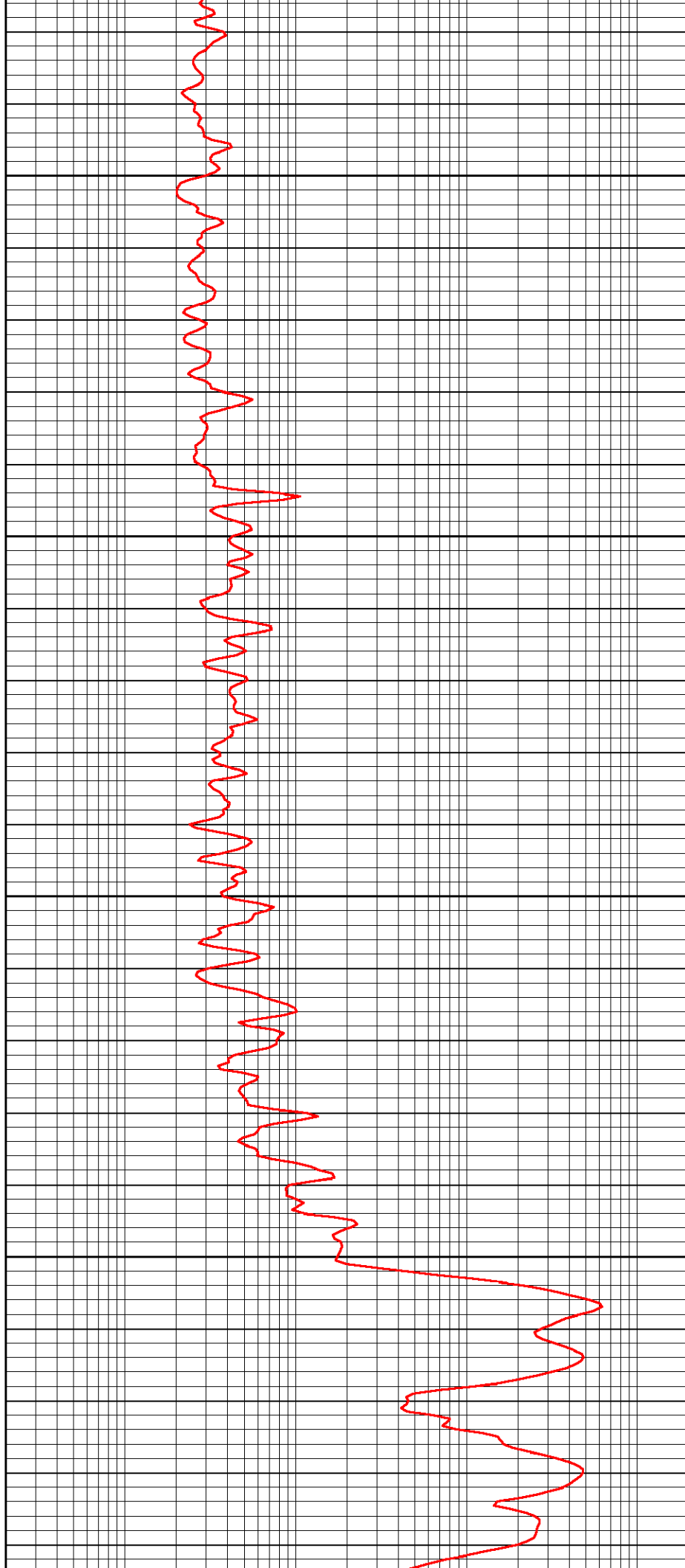


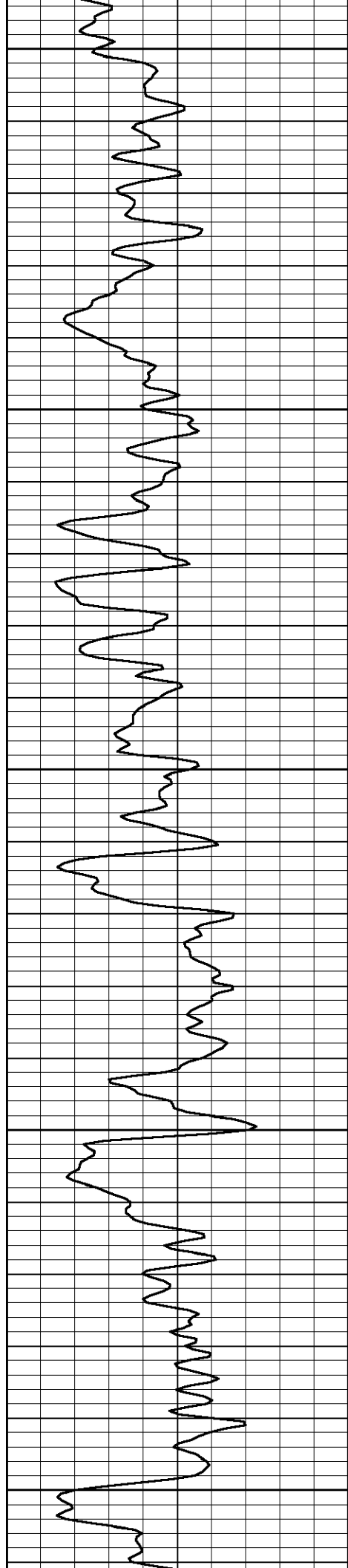
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2150





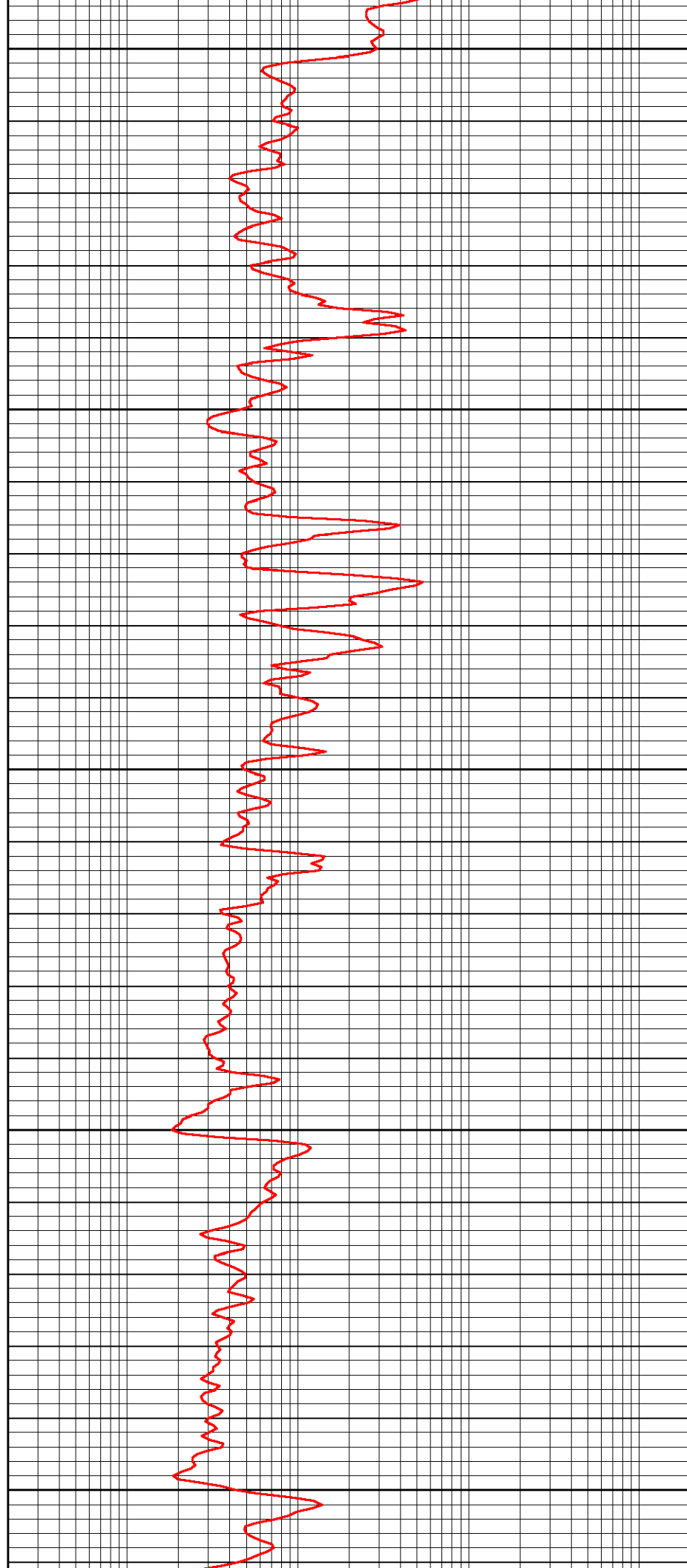
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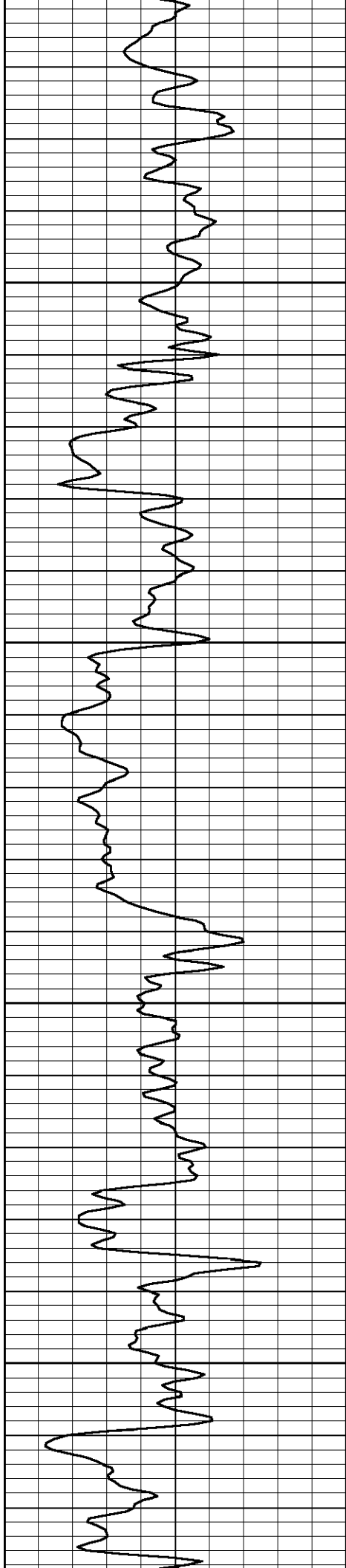
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2300

2350

2400



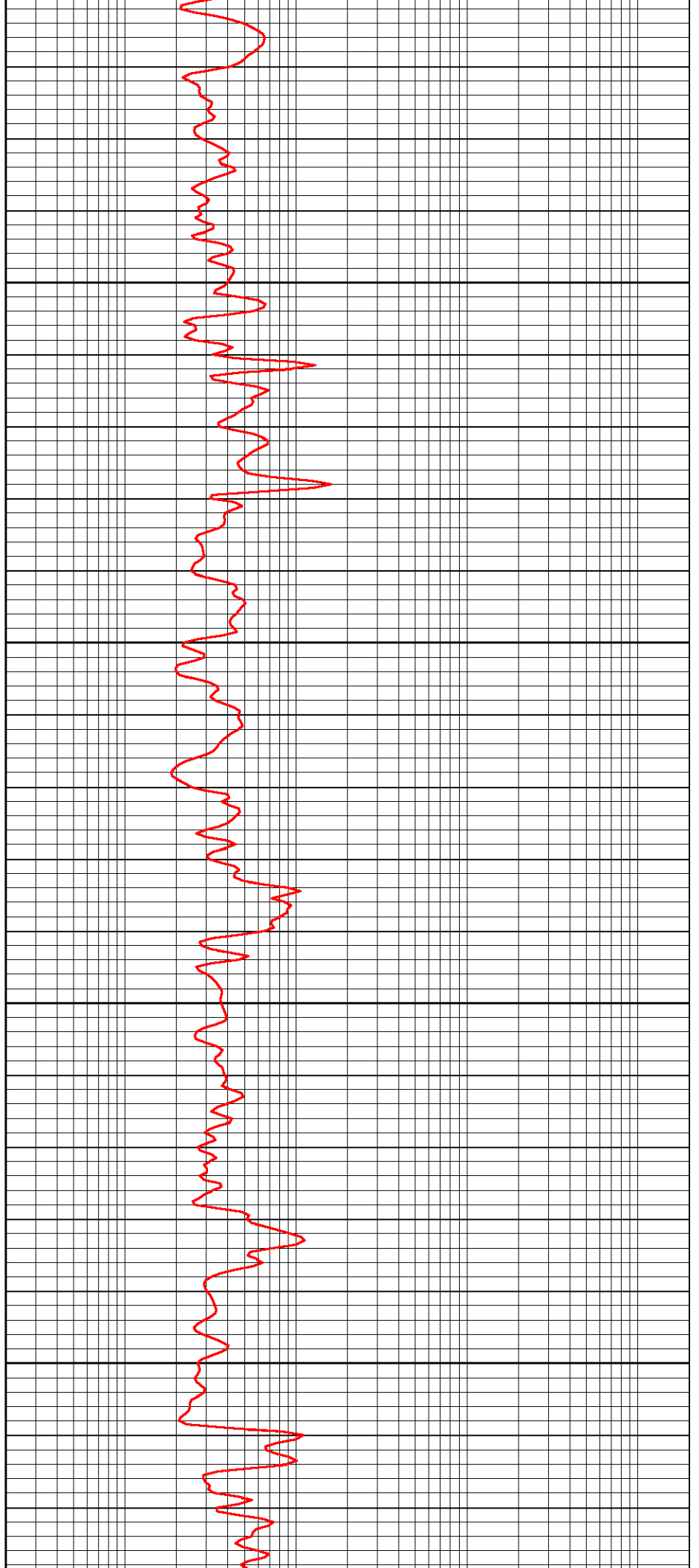


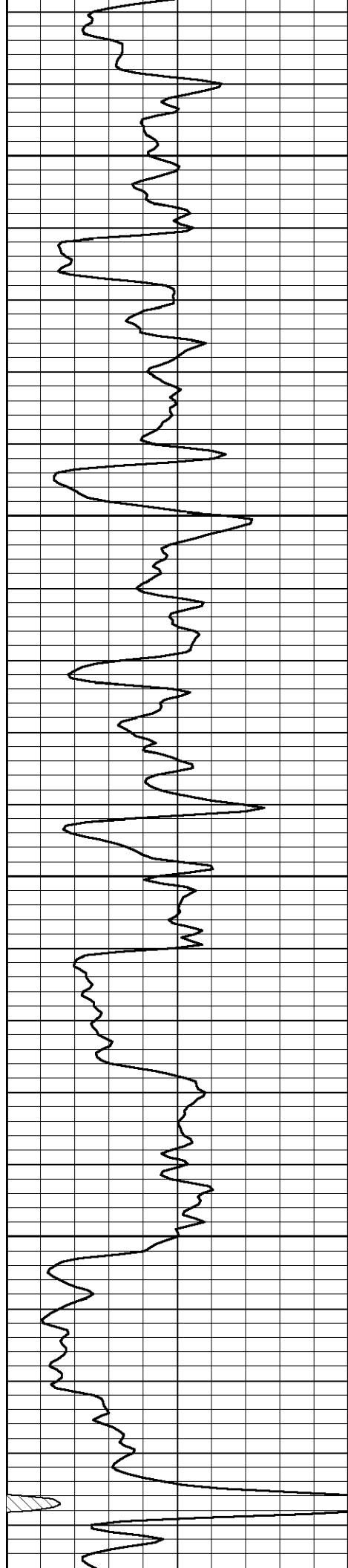
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2600



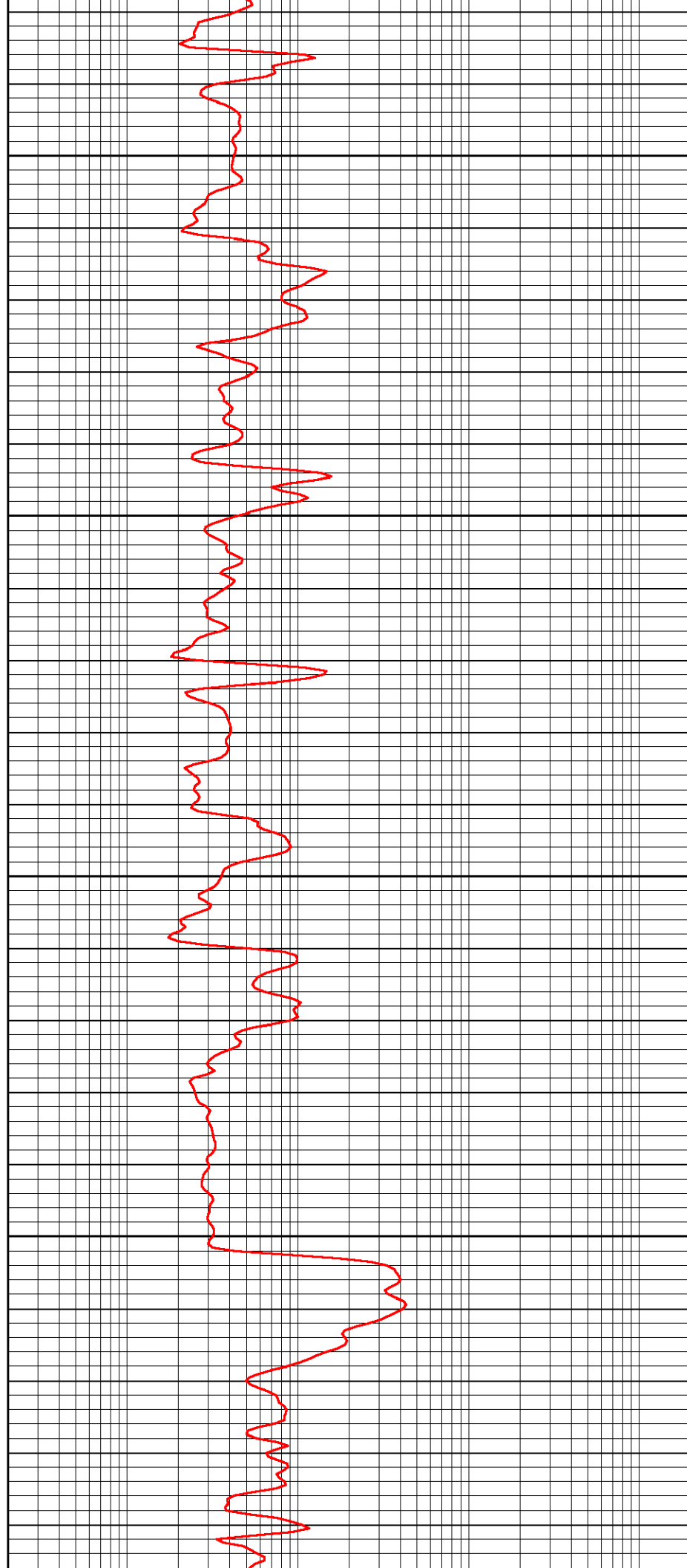


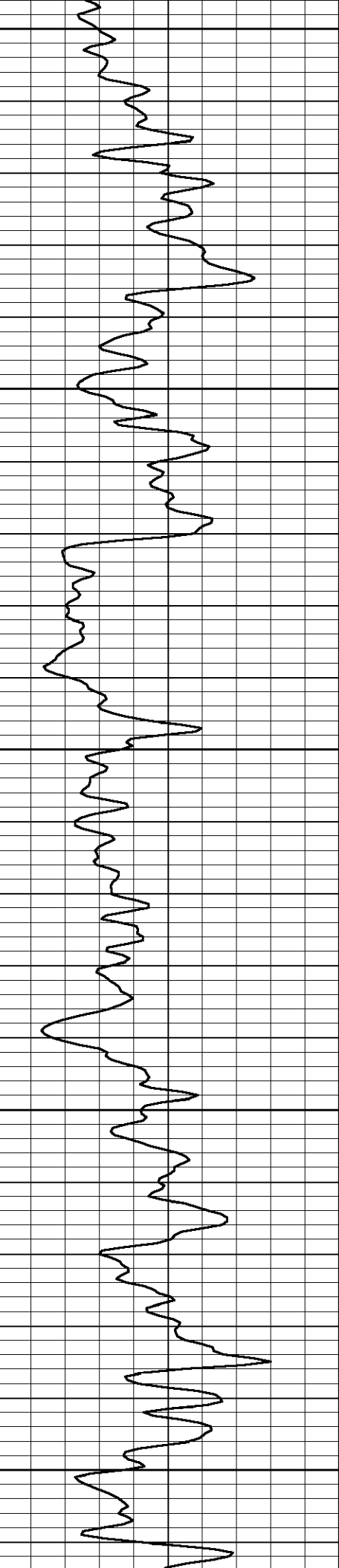
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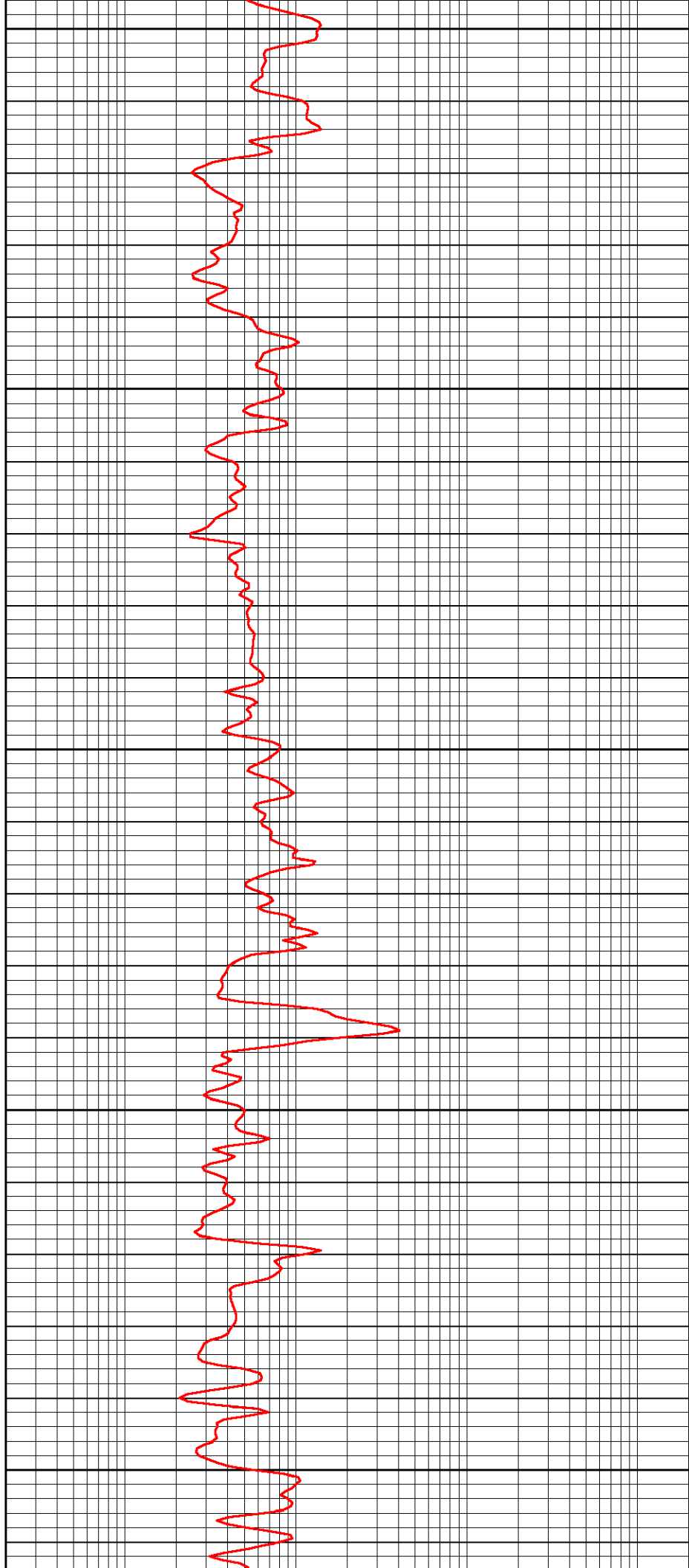
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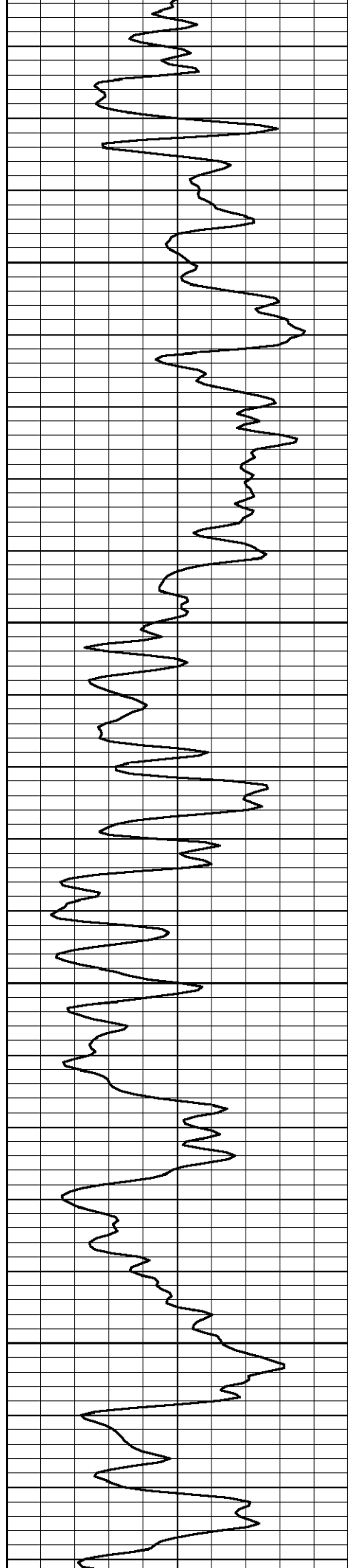
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3050



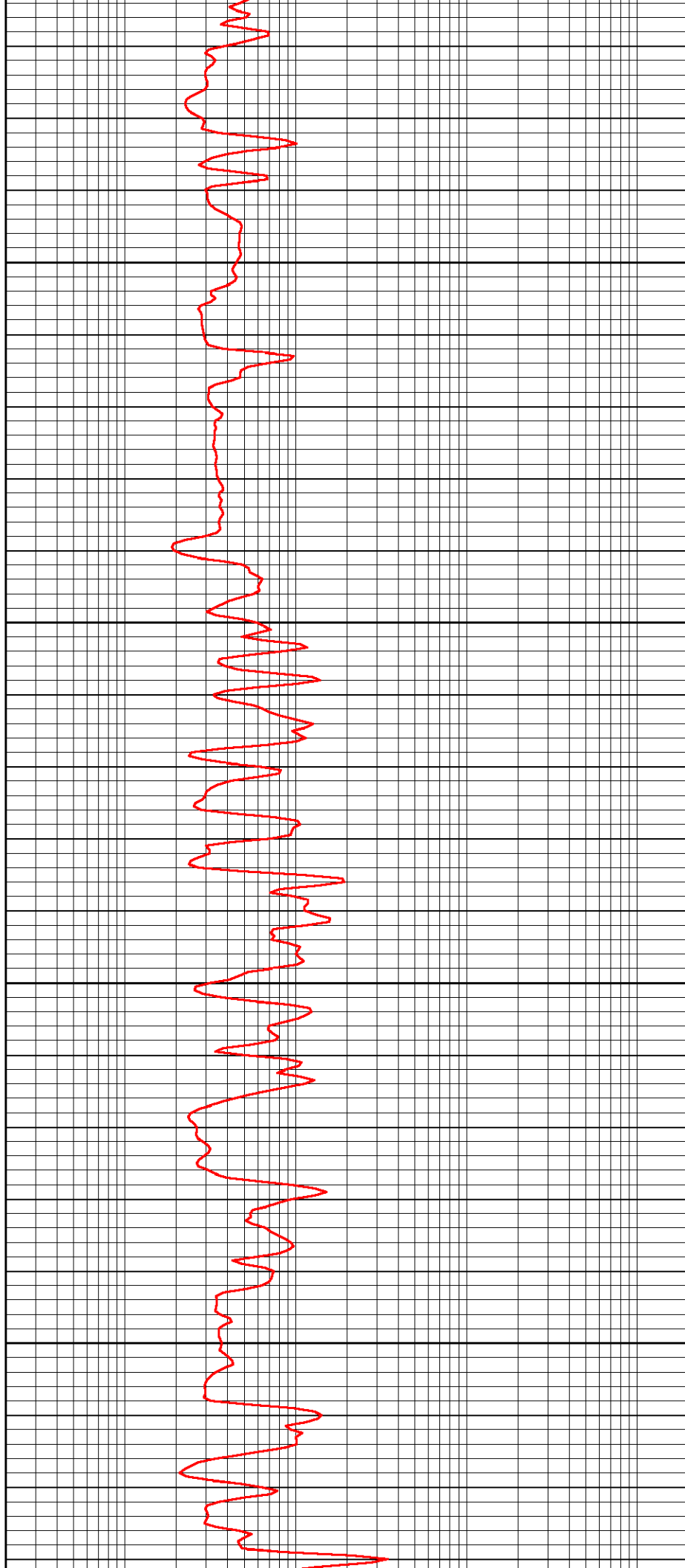


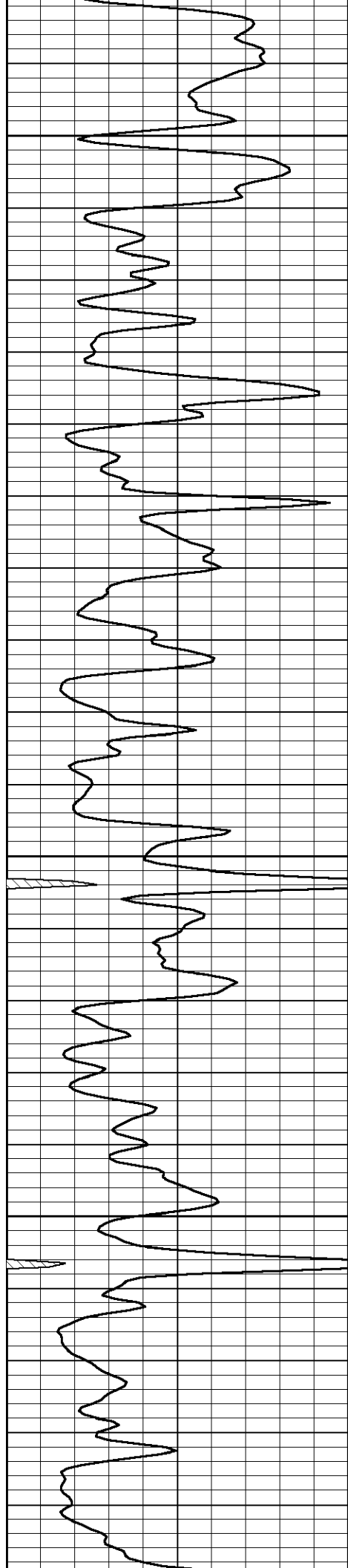
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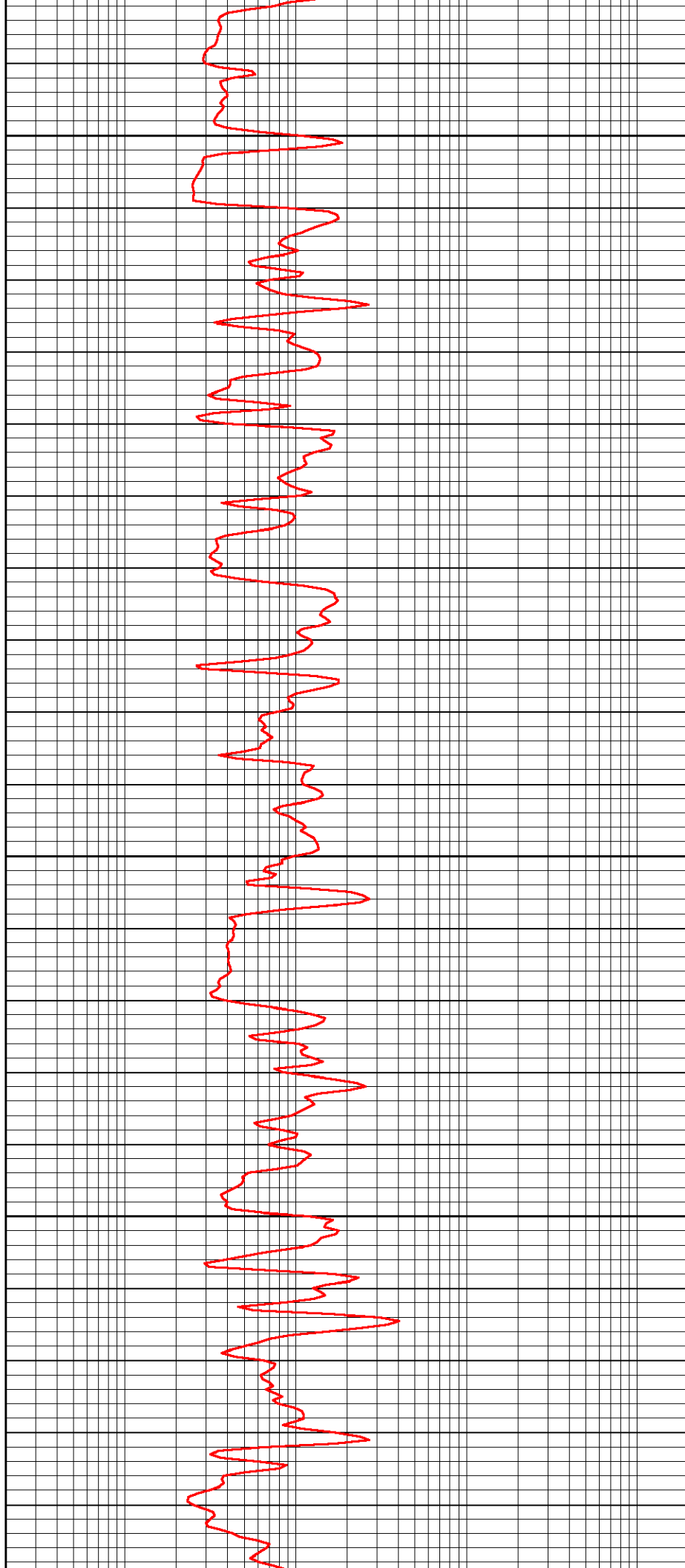


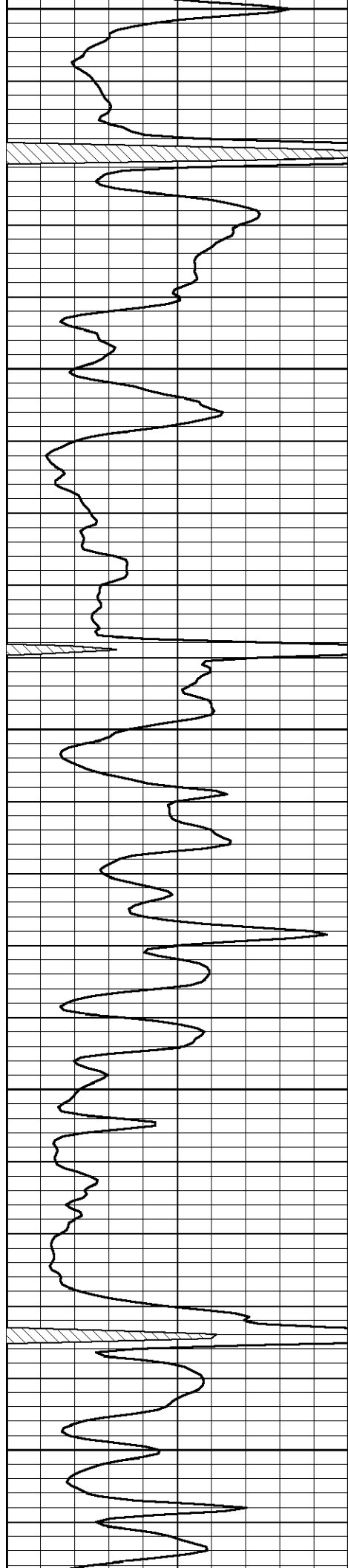
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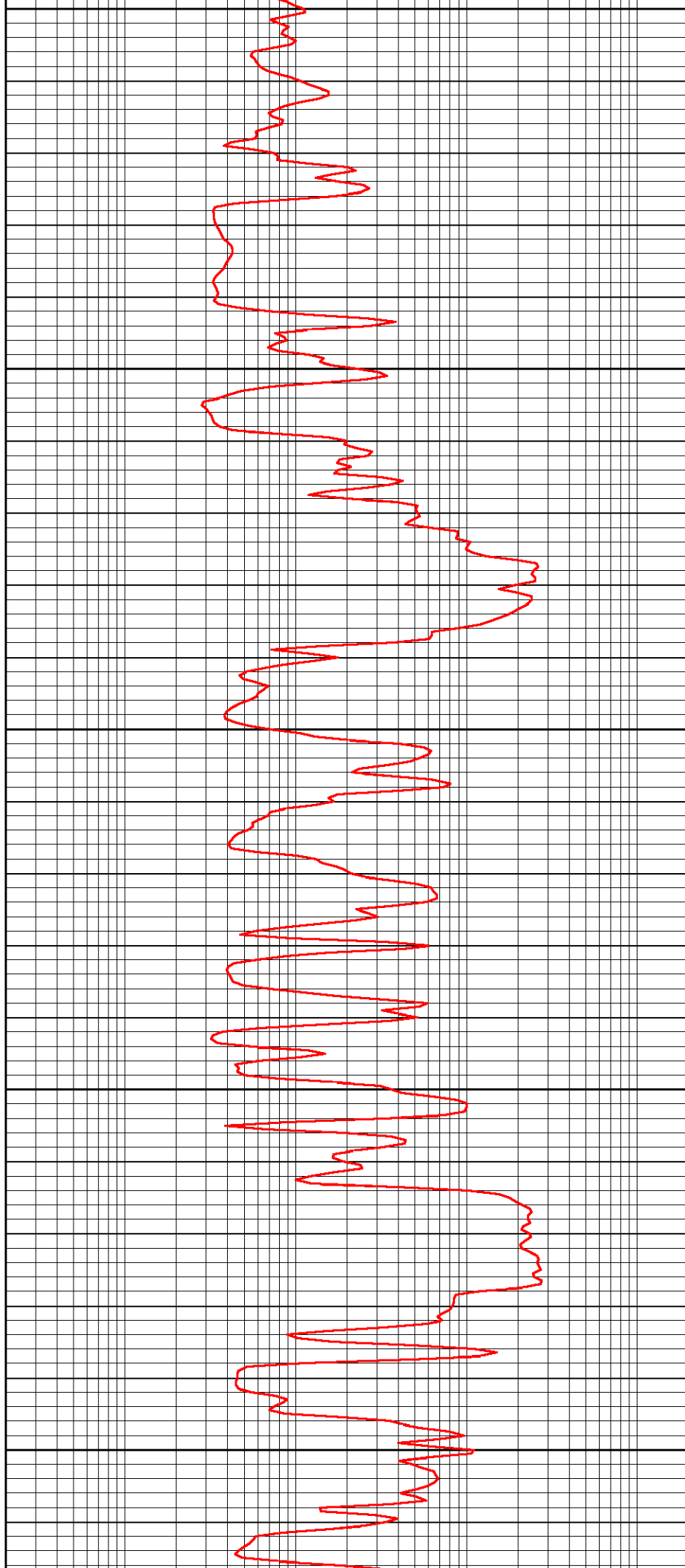
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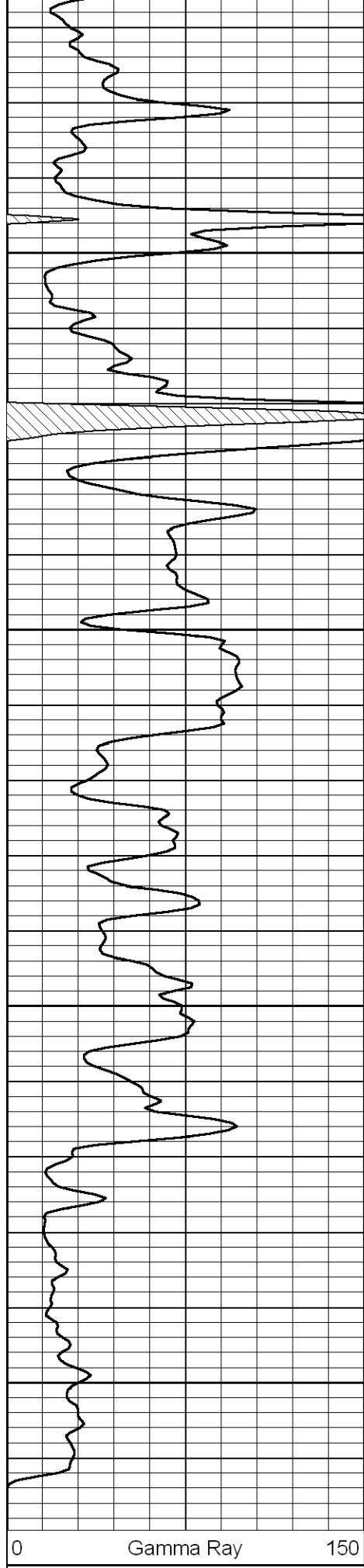
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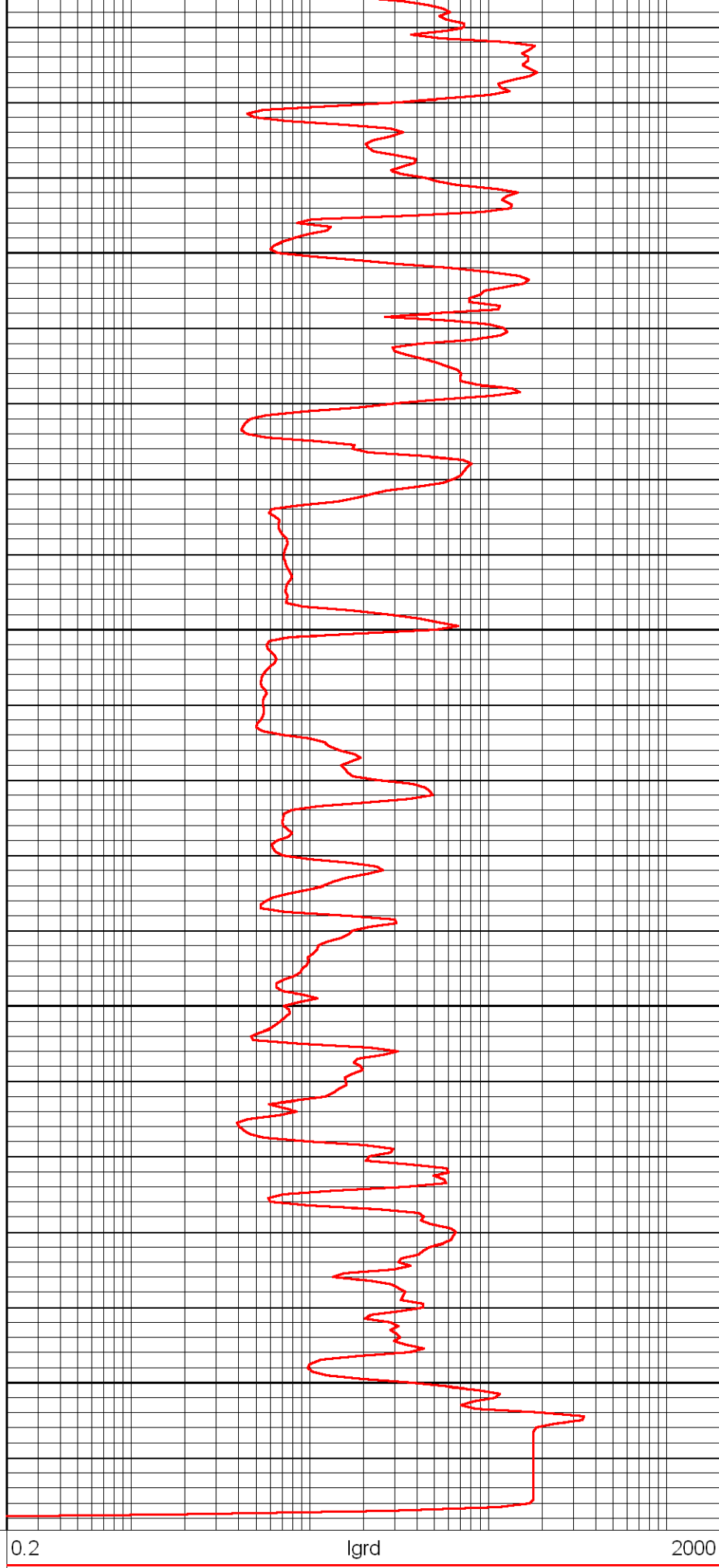
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3800

3850

3900

0 Gamma Ray 150

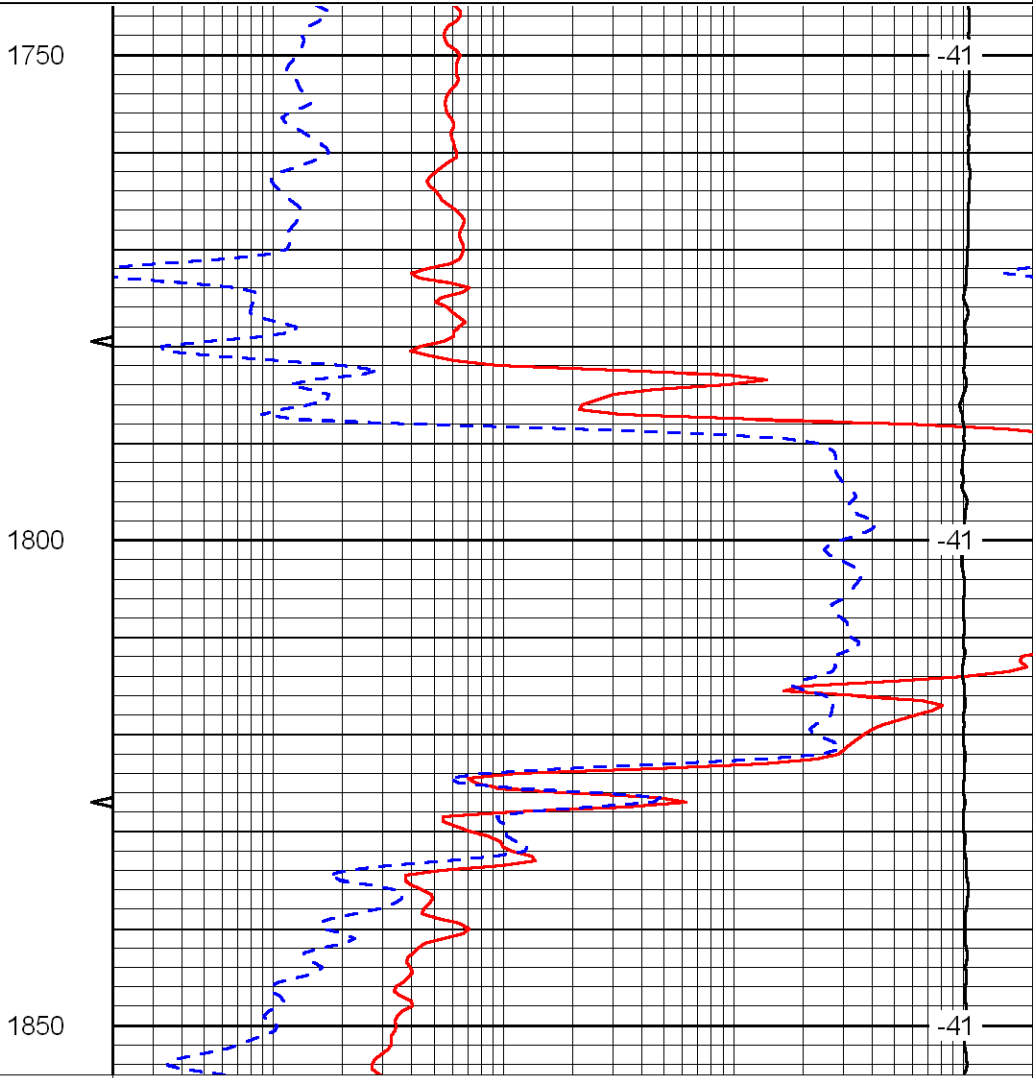
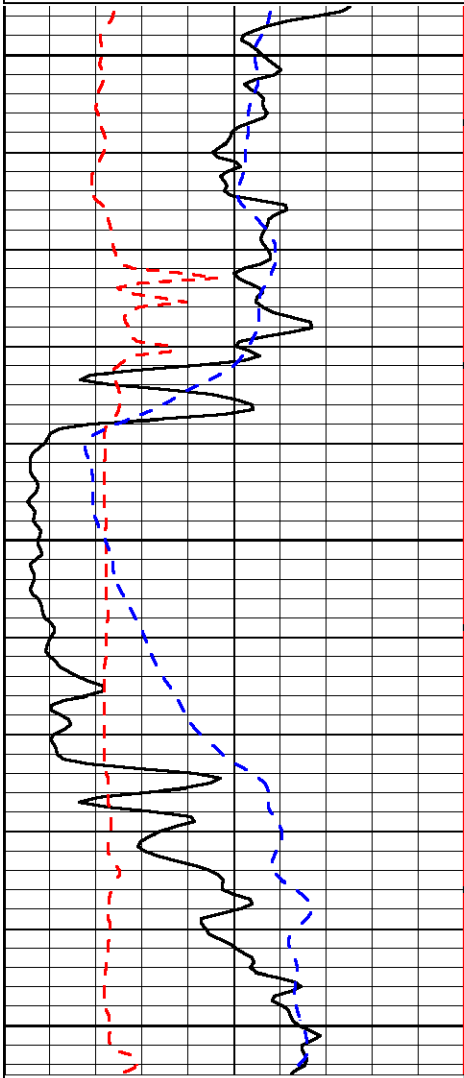


0.2 lgd 2000

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Presentation Format: rag
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Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
6	Caliper (GAPI)	16
-200	sp	0
0	RWA	0.5

0.2	LGRD	2000
560	SWNC	2160
15000	Line Tension	0
	LSPD	



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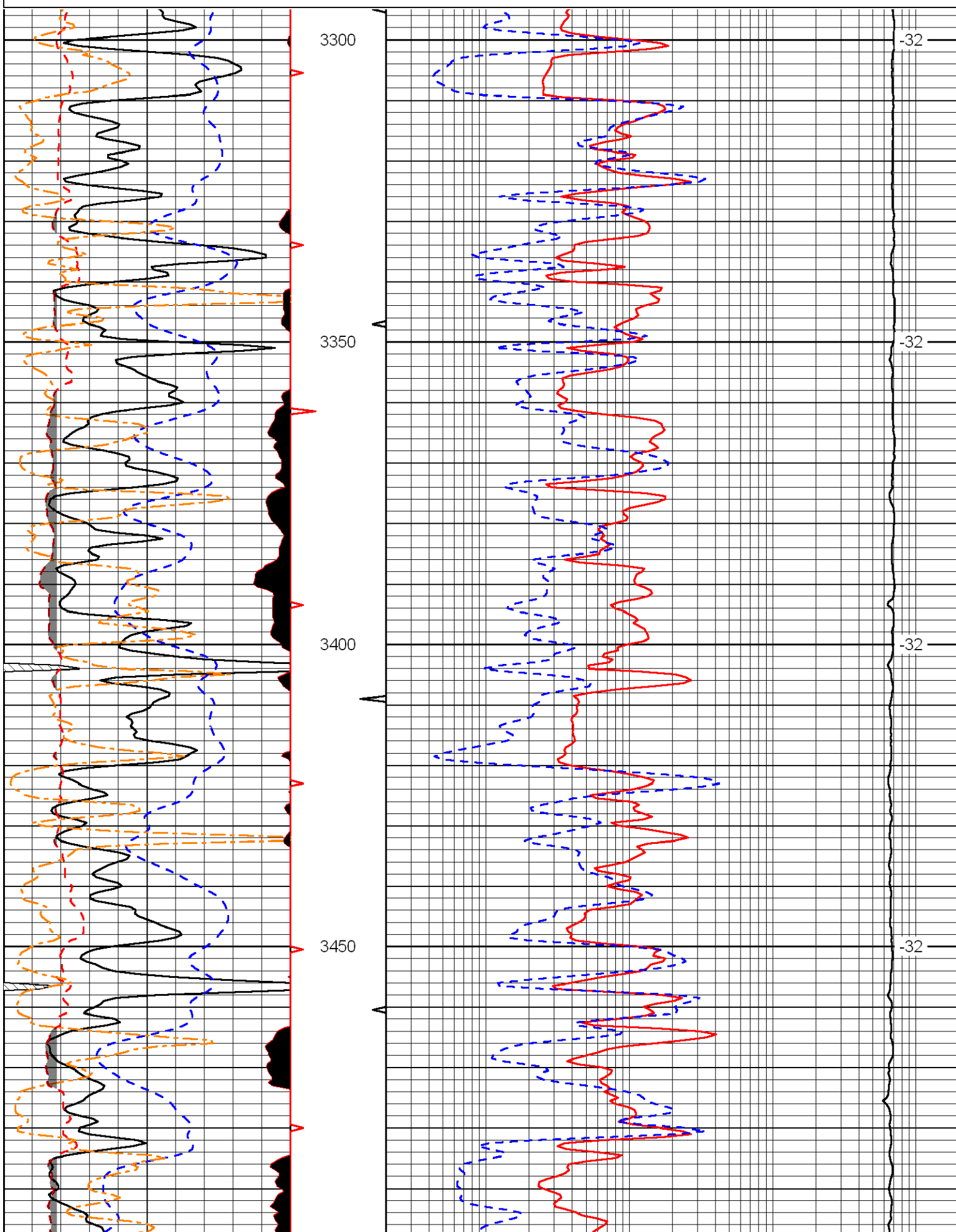
-200 0
sp
0 RWA 0.5

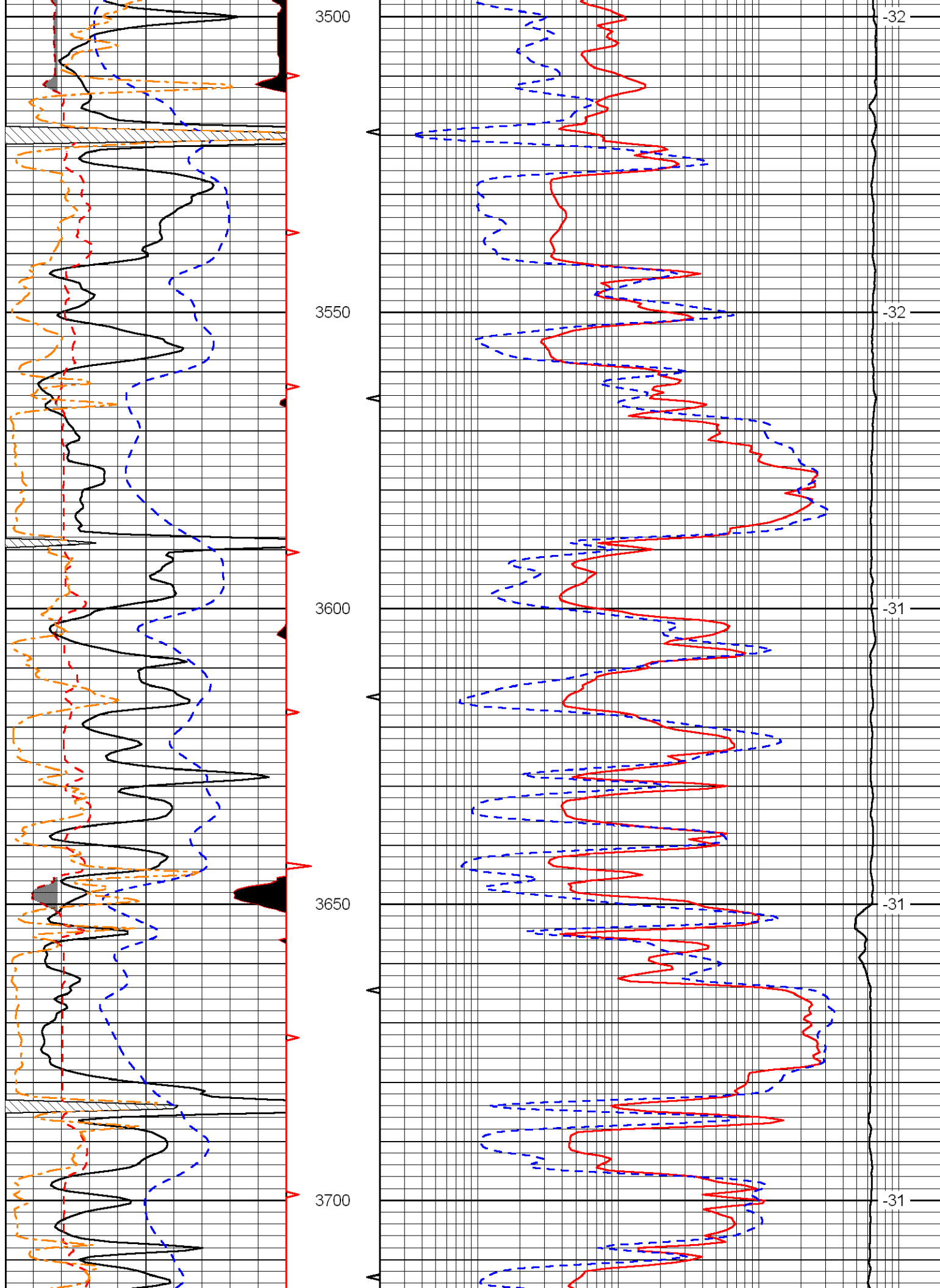
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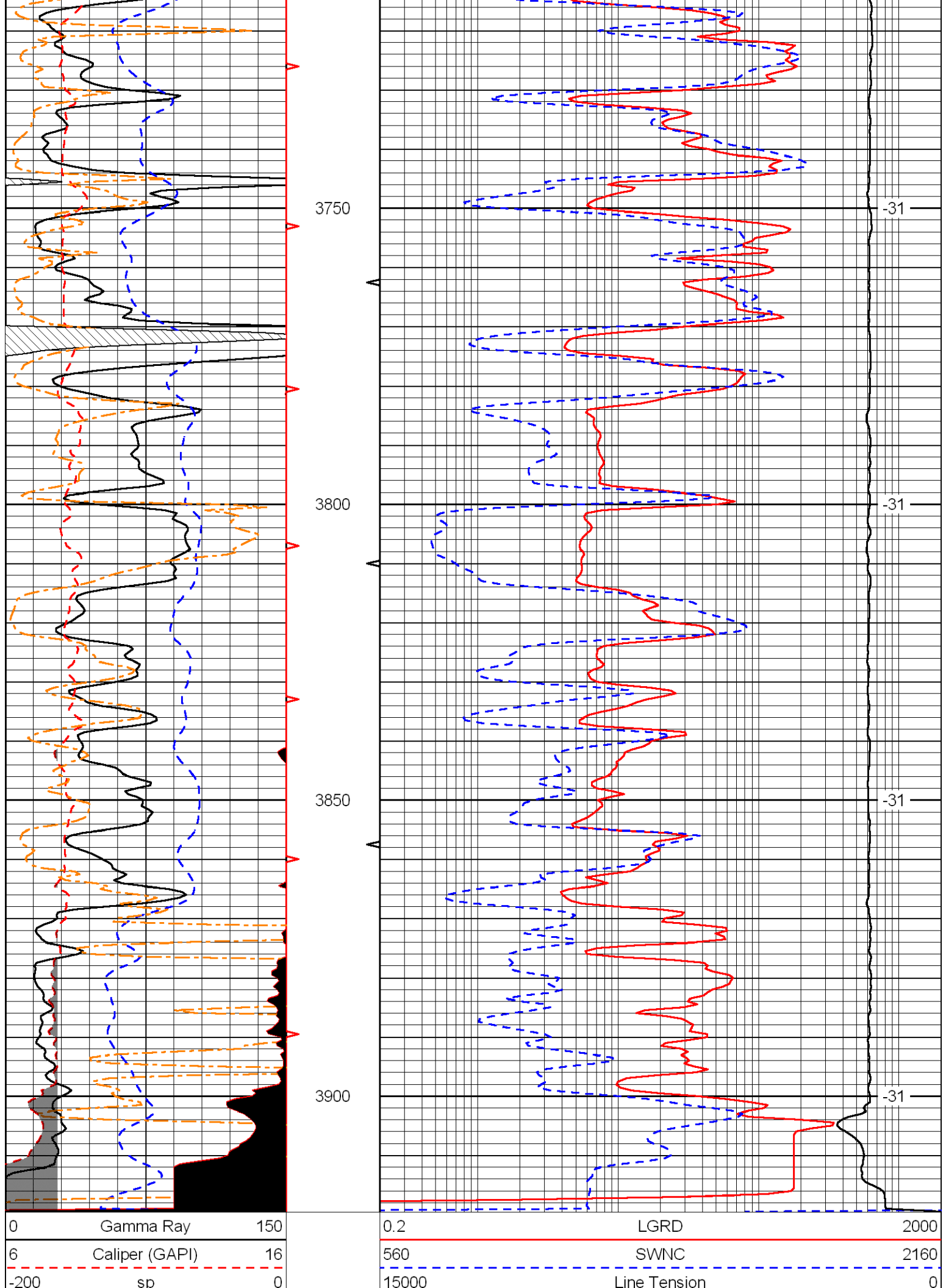
Line Tension

0

LSPD







0 RWA 0.5

LSPD