

LOG-TECH



Dual Induction Log

DIGITAL LOG

(785) 625-3858

API No.

15-109-21,008-00-00

Company Pioneer Resources

Well Knopp No. 2

Field Wildcat

County Logan

State

Kansas

Location

2070' FSL & 2132' FEL

Sec: 13 Twp: 14 S Rge: 32 W

Permanent Datum Ground Level Elevation 2812
Log Measured From Kelly Bushing 5 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Other Services
CNL/CDL
Elevation
K.B. 2817
D.F.
G.L. 2812

Date 6/8/2011

Run Number One

Depth Driller 4650

Depth Logger 4653

Bottom Logged Interval 4652

Top Log Interval 200

Casing Driller 8.625 @ 219

Casing Logger 215

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 4.000

Density / Viscosity 9.3 54

pH / Fluid Loss 9.5 8.8

Source of Sample Flowline

Rm @ Meas. Temp 0.80 @ 60

Rmf @ Meas. Temp 0.60 @ 60

Rmc @ Meas. Temp 1.08 @ 60

Source of Rmf / Rmc Charts

Rm @ BHT 0.39 @ 123

Operating Rig Time 3 Hours

Max Rec. Temp. F 123

Equipment Number 15

Location Hays

Recorded By B. Becker

Witnessed By Steve Murphy

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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

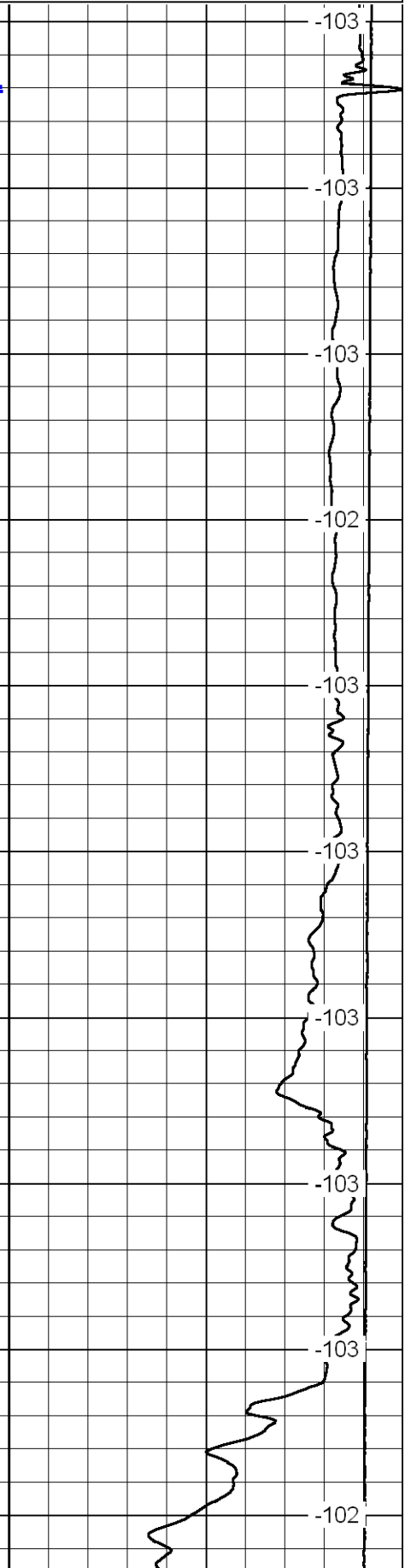
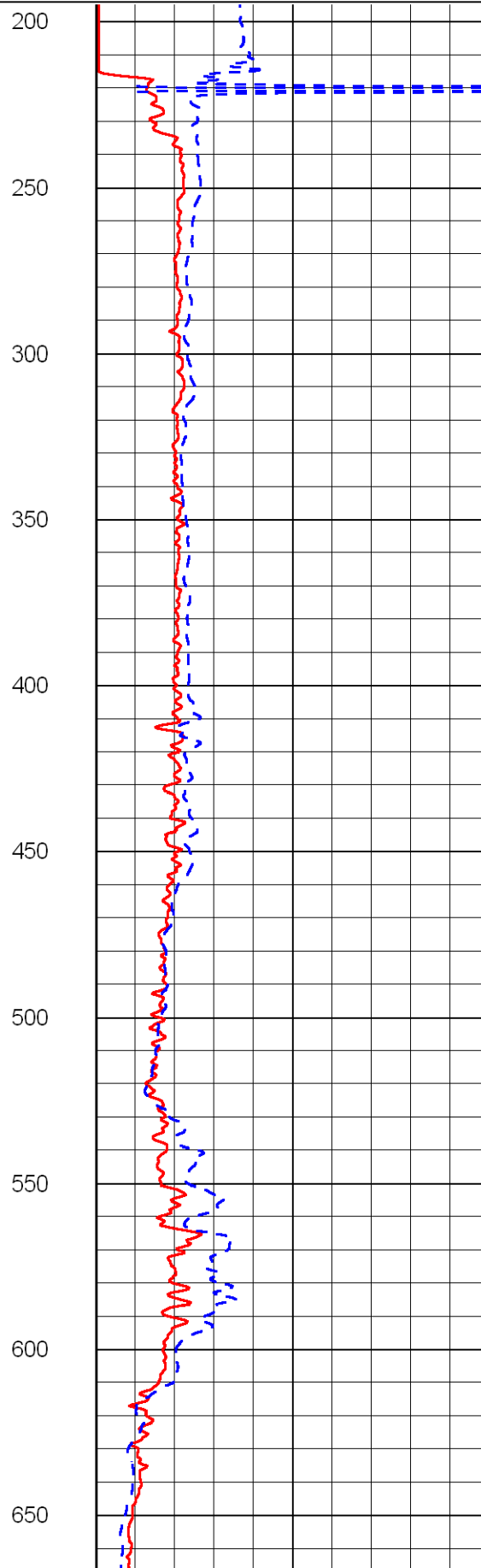
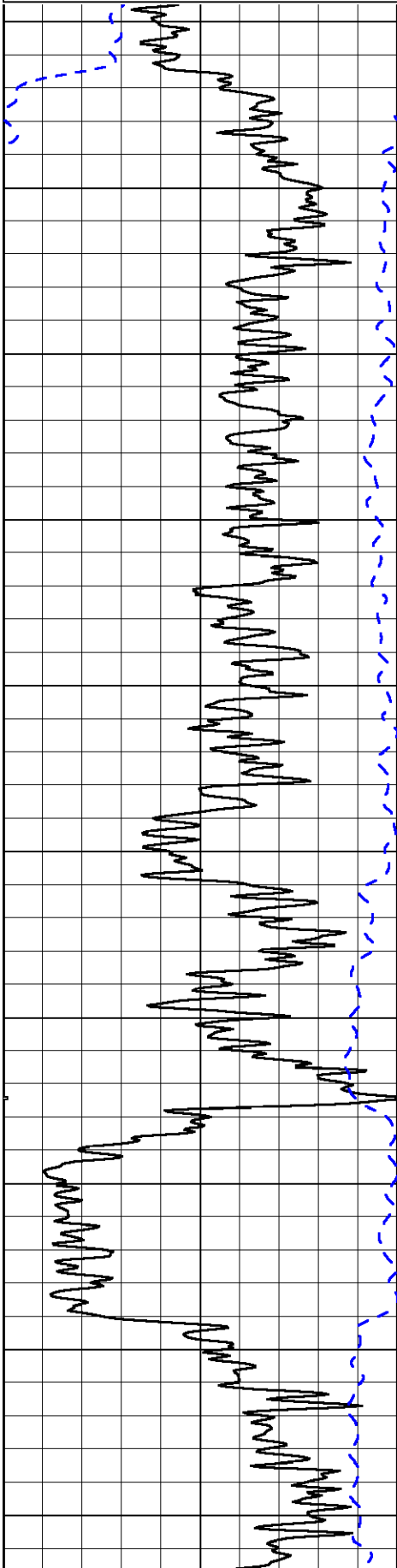
Thank you for using Log-Tech, Inc.
(785) 625-3858

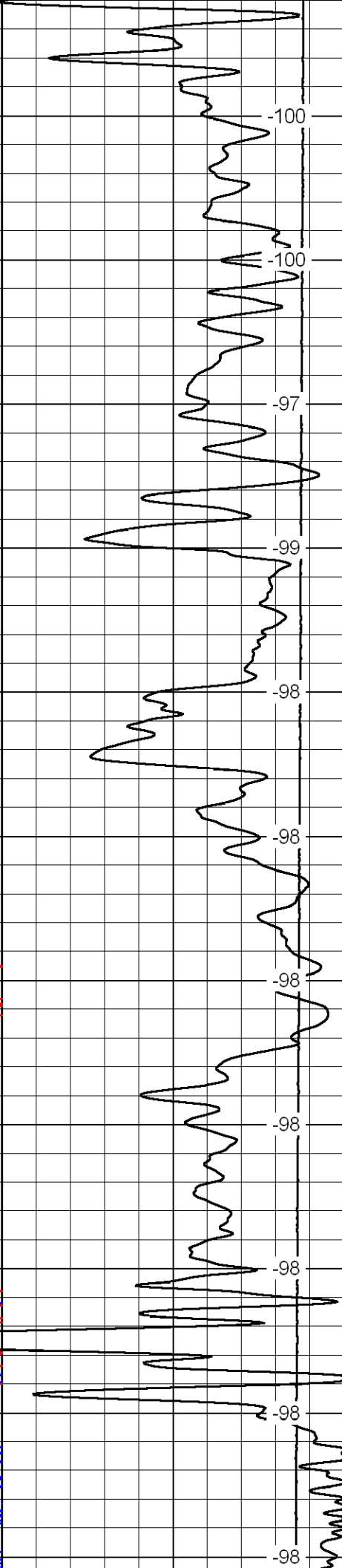
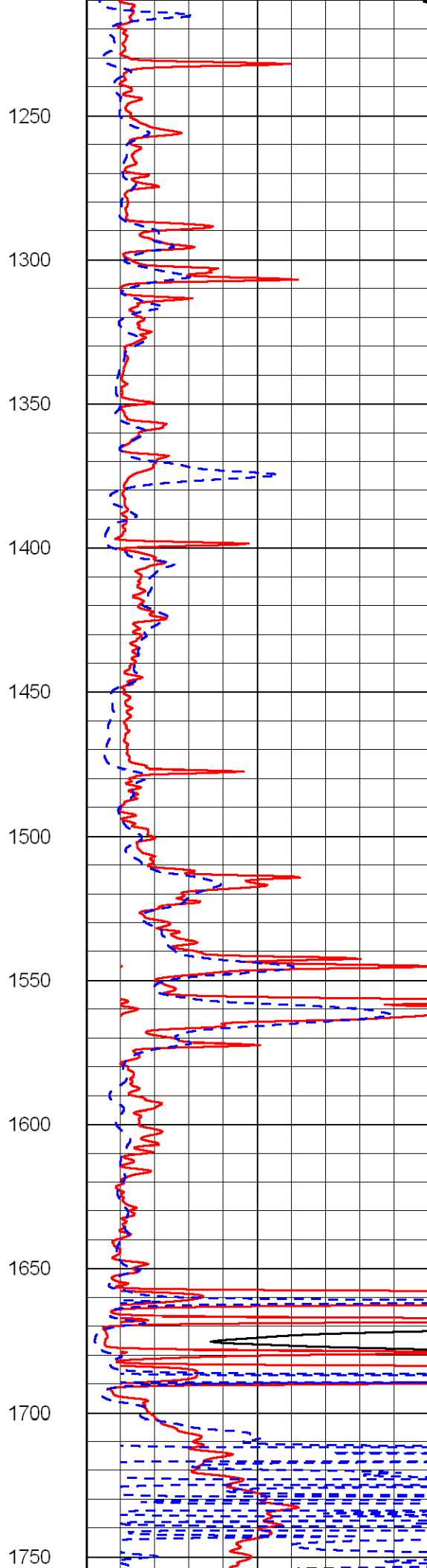
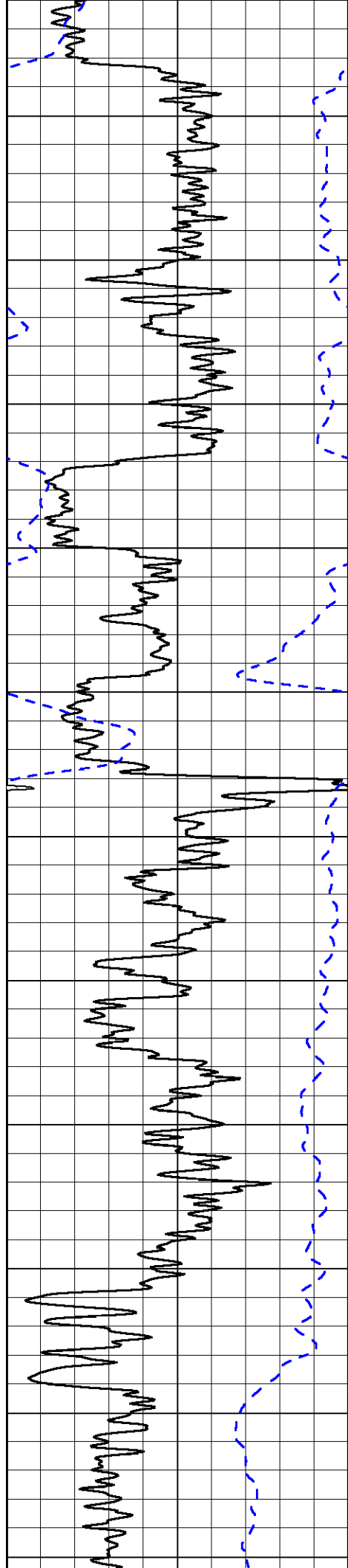
Oakley, Ks; 20 South to Jayhawk Rd;
1-3/4 East; North Into

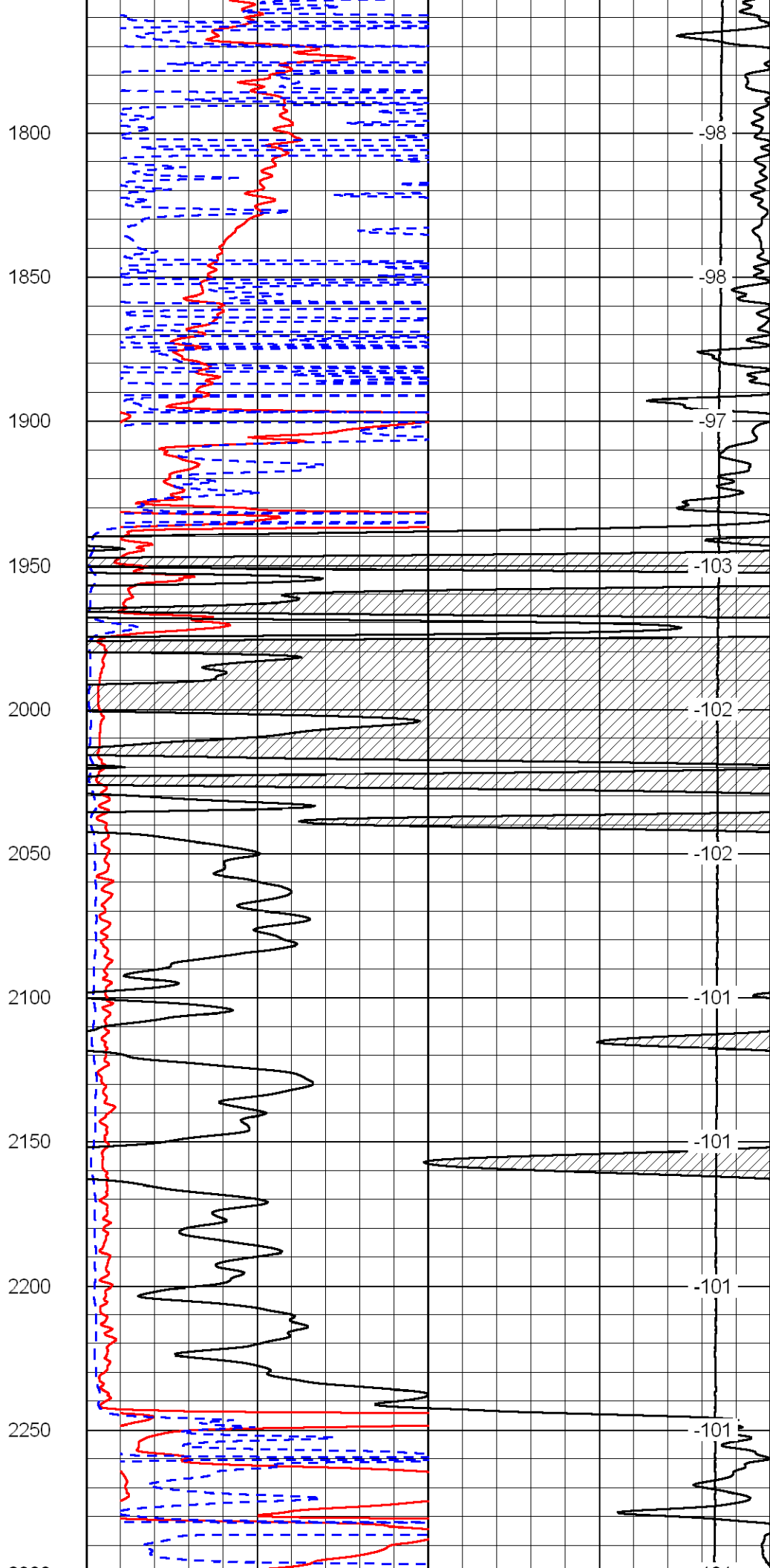
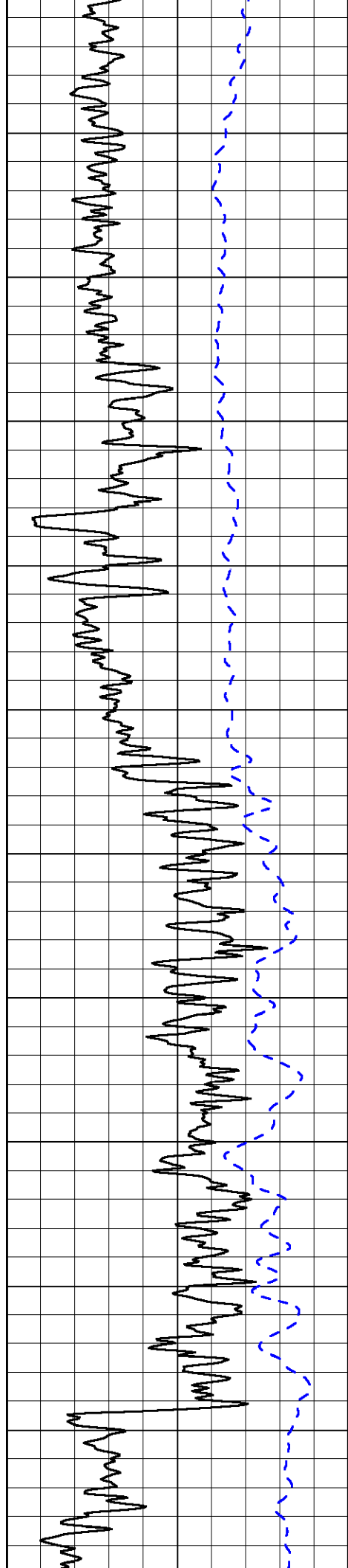
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Charted by: Depth in Feet scaled 1:600

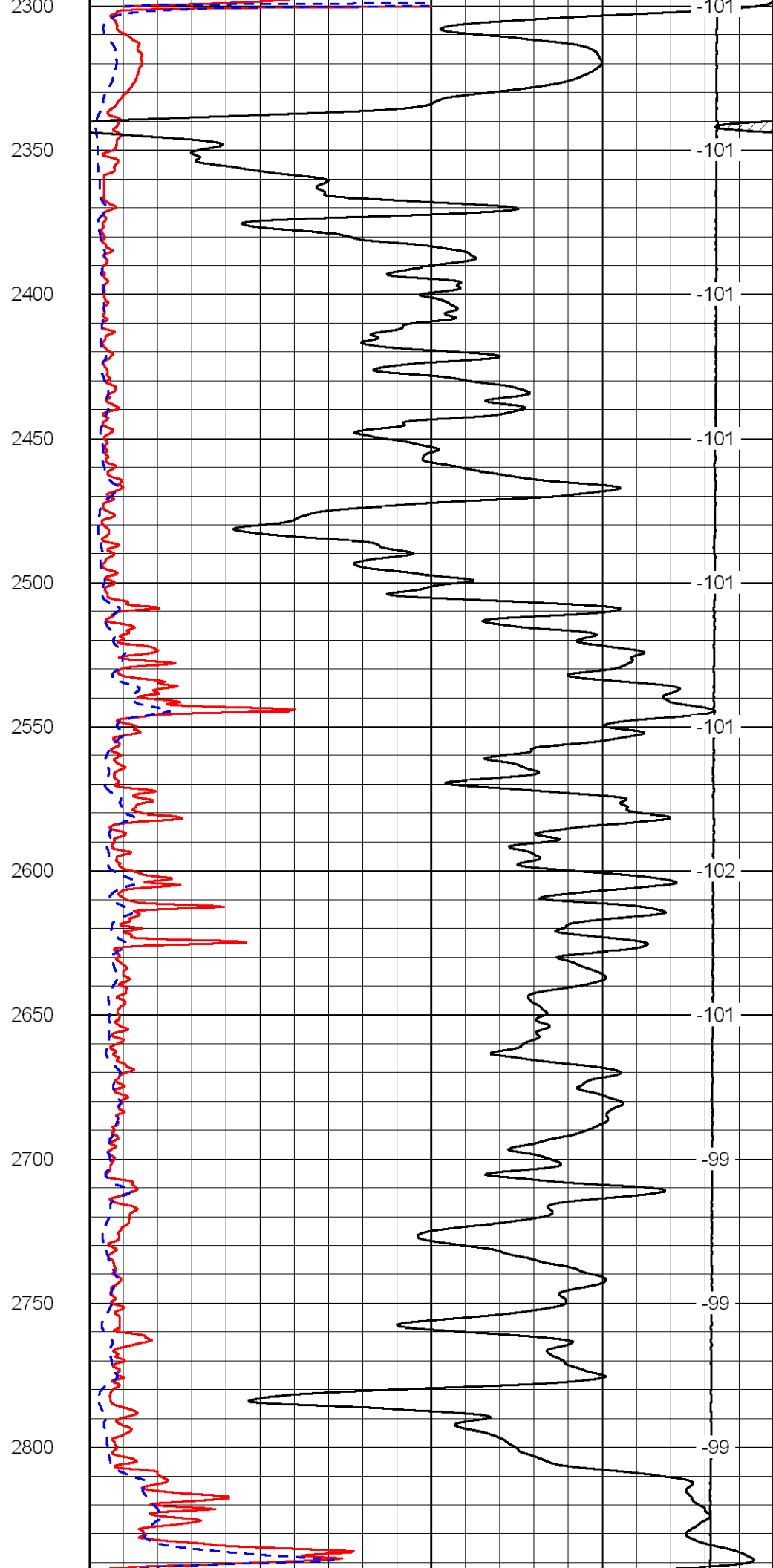
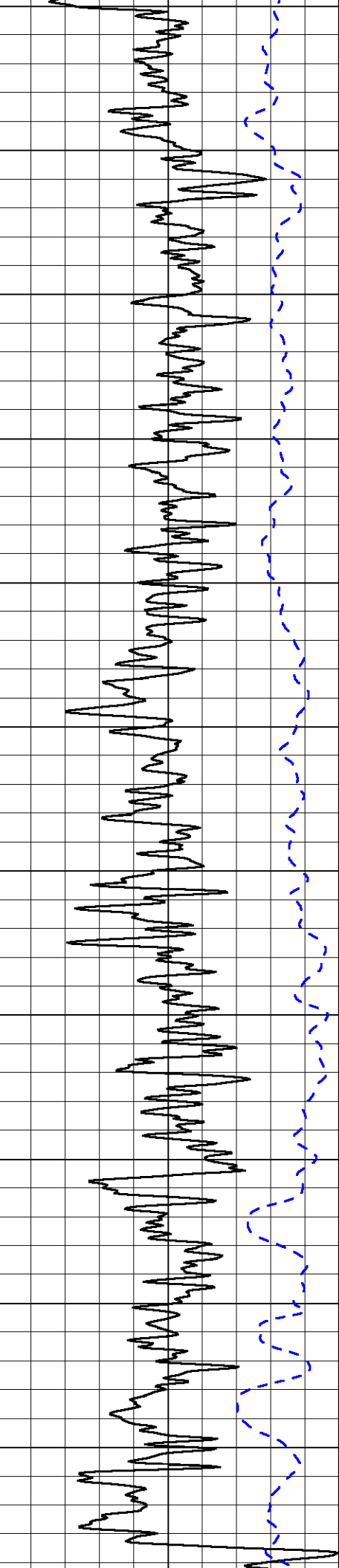
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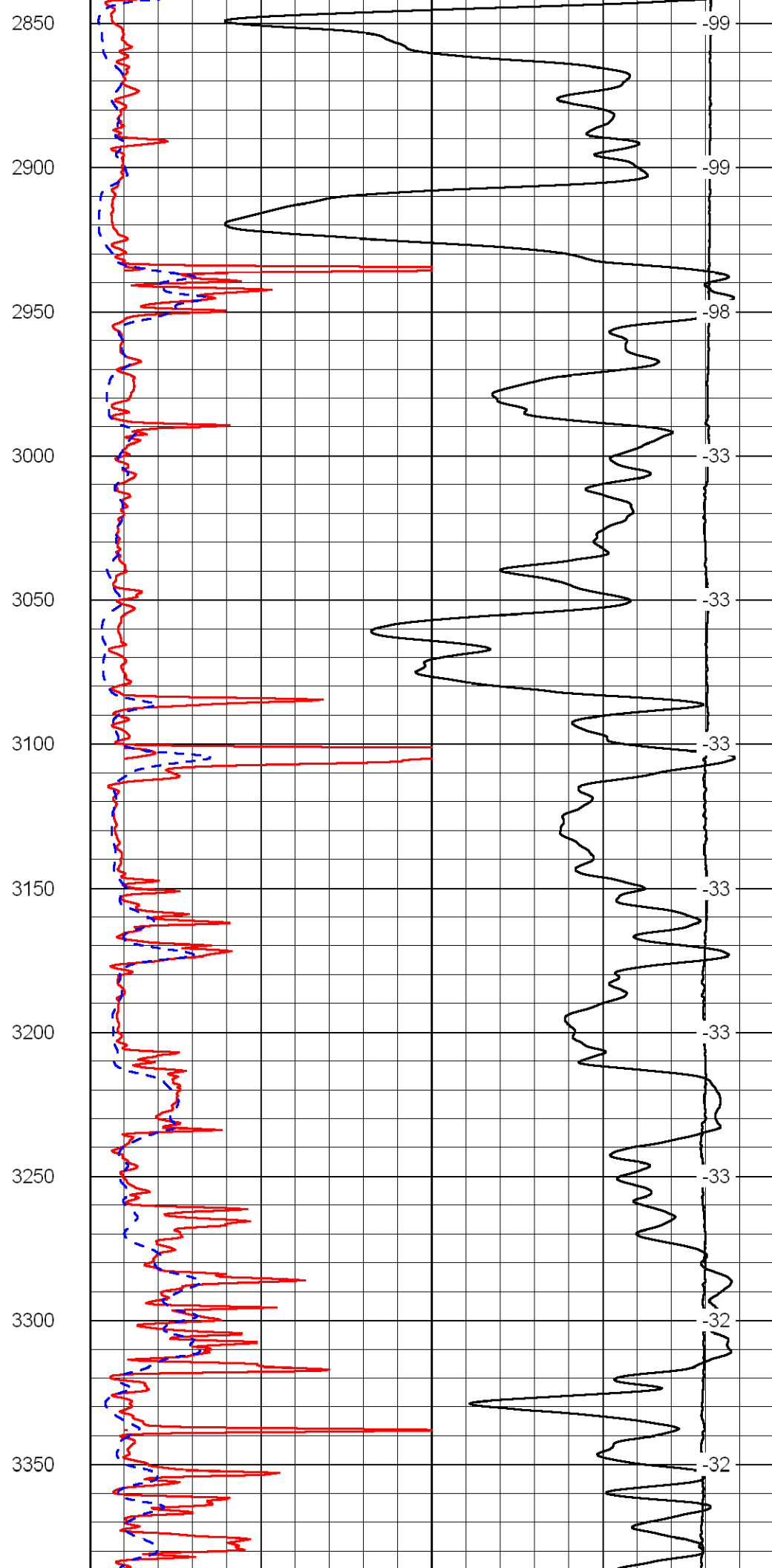
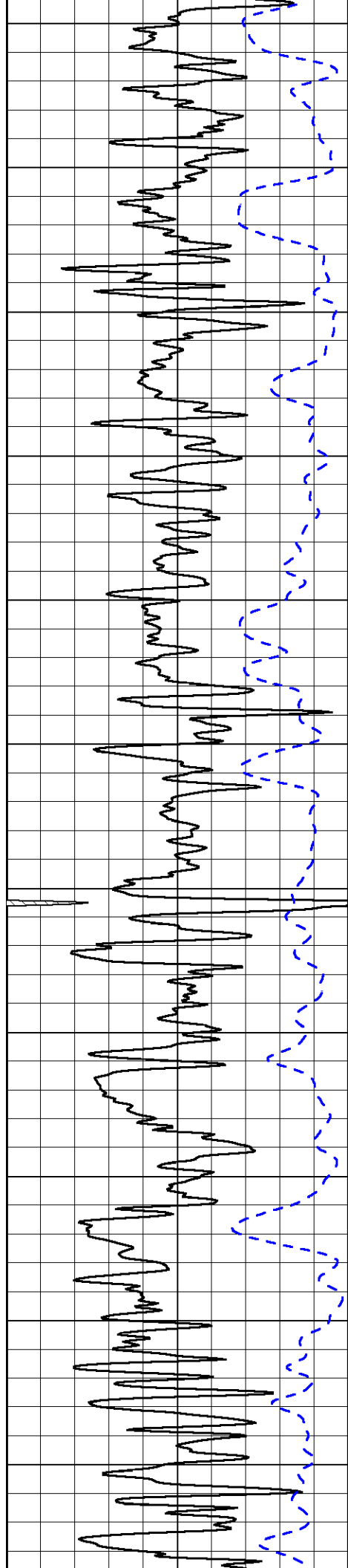
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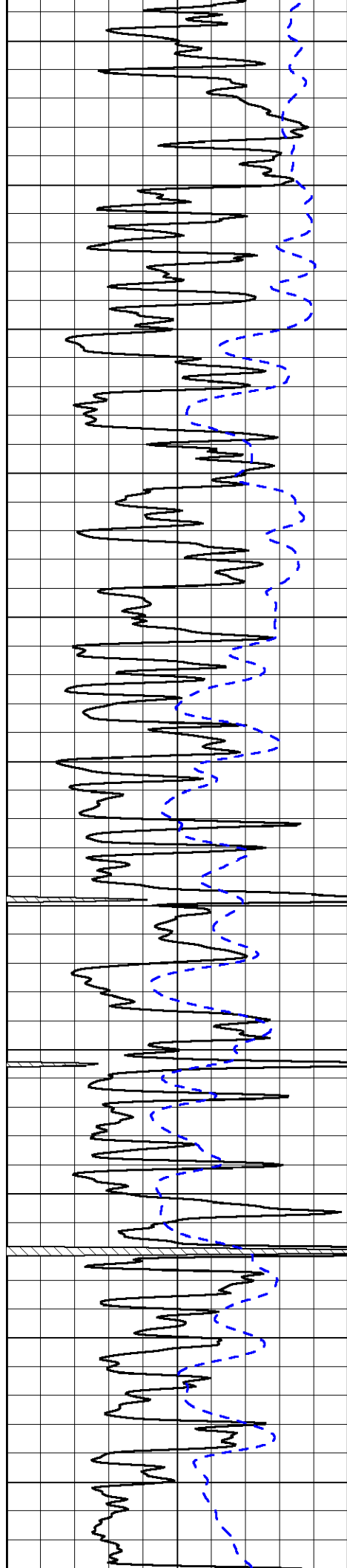












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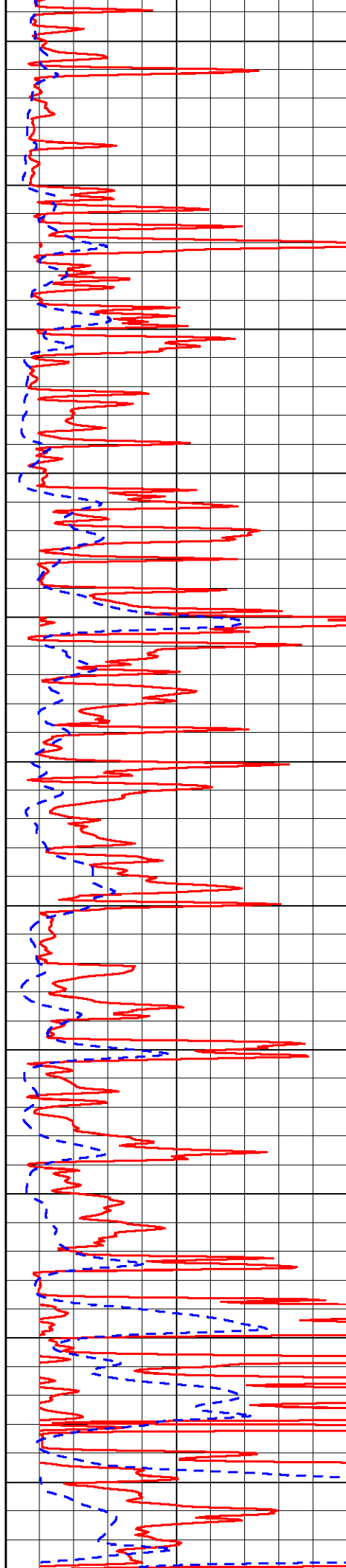
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3850

3900



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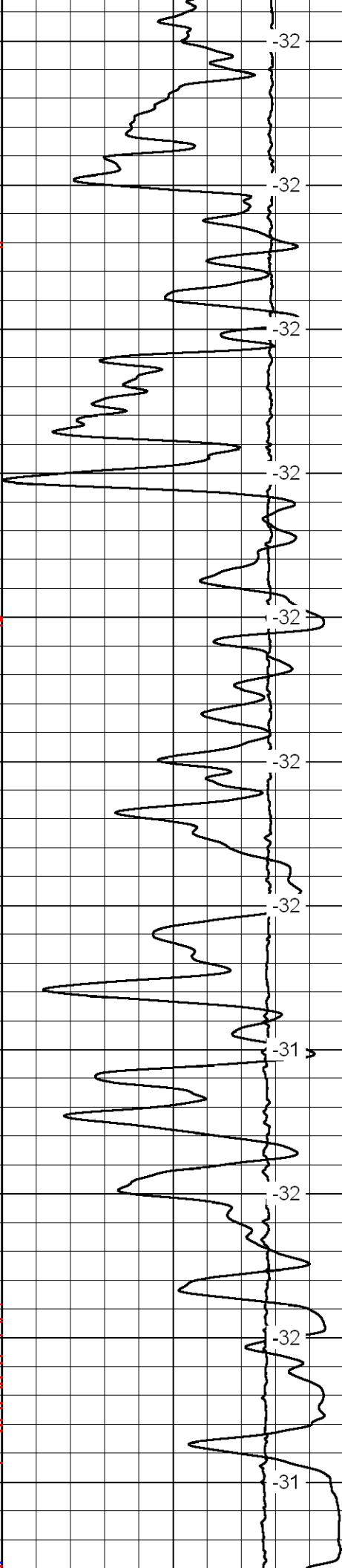
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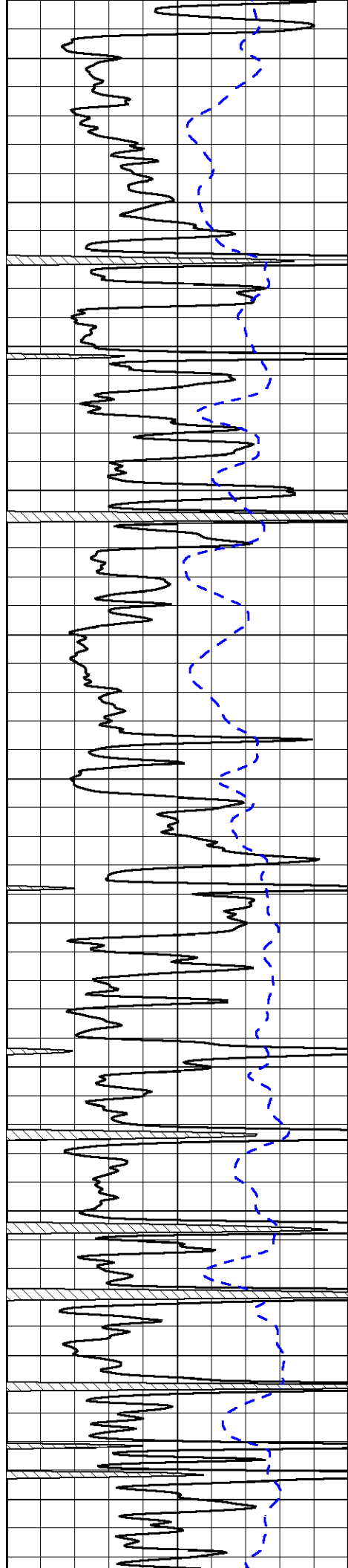
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4150

4200

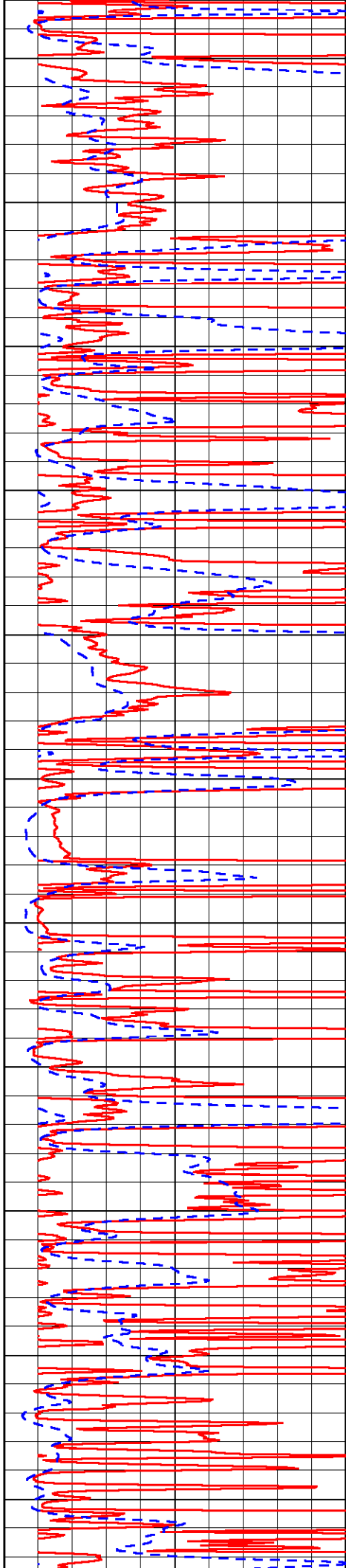
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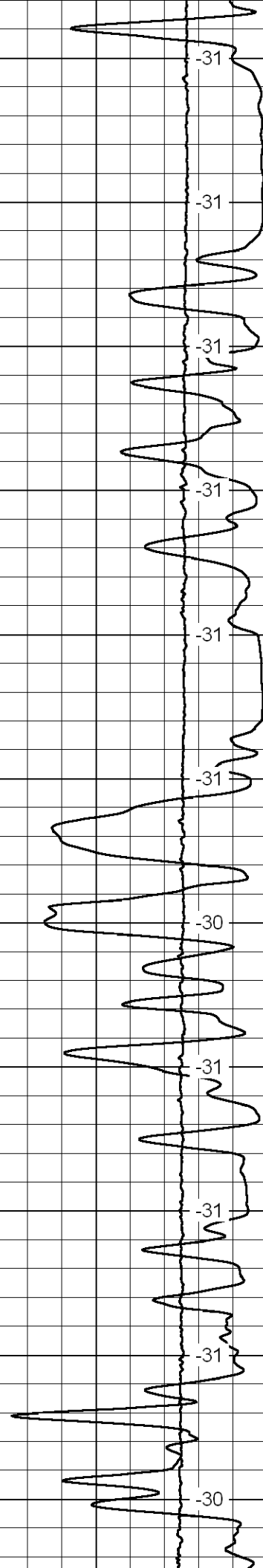
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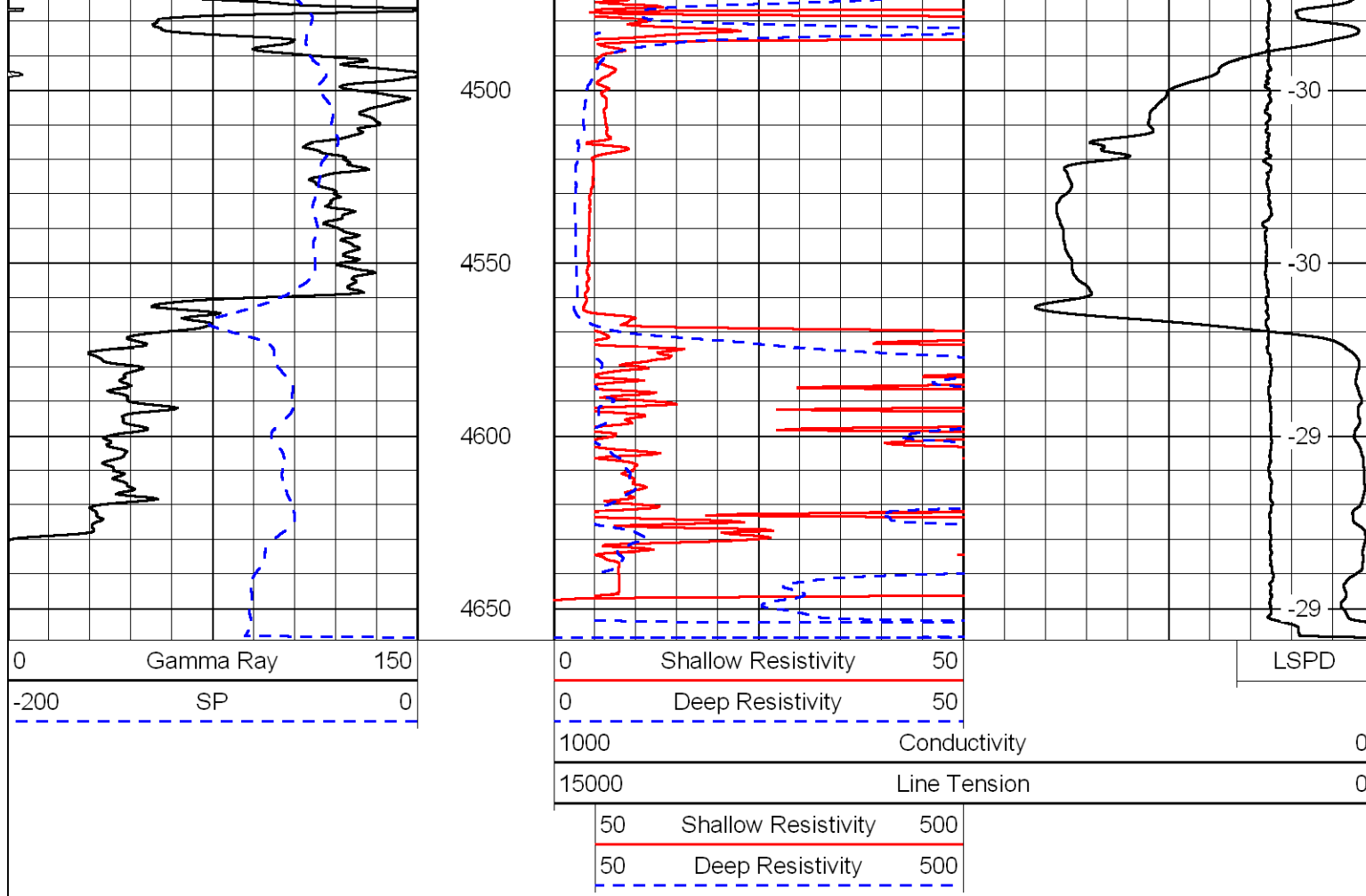
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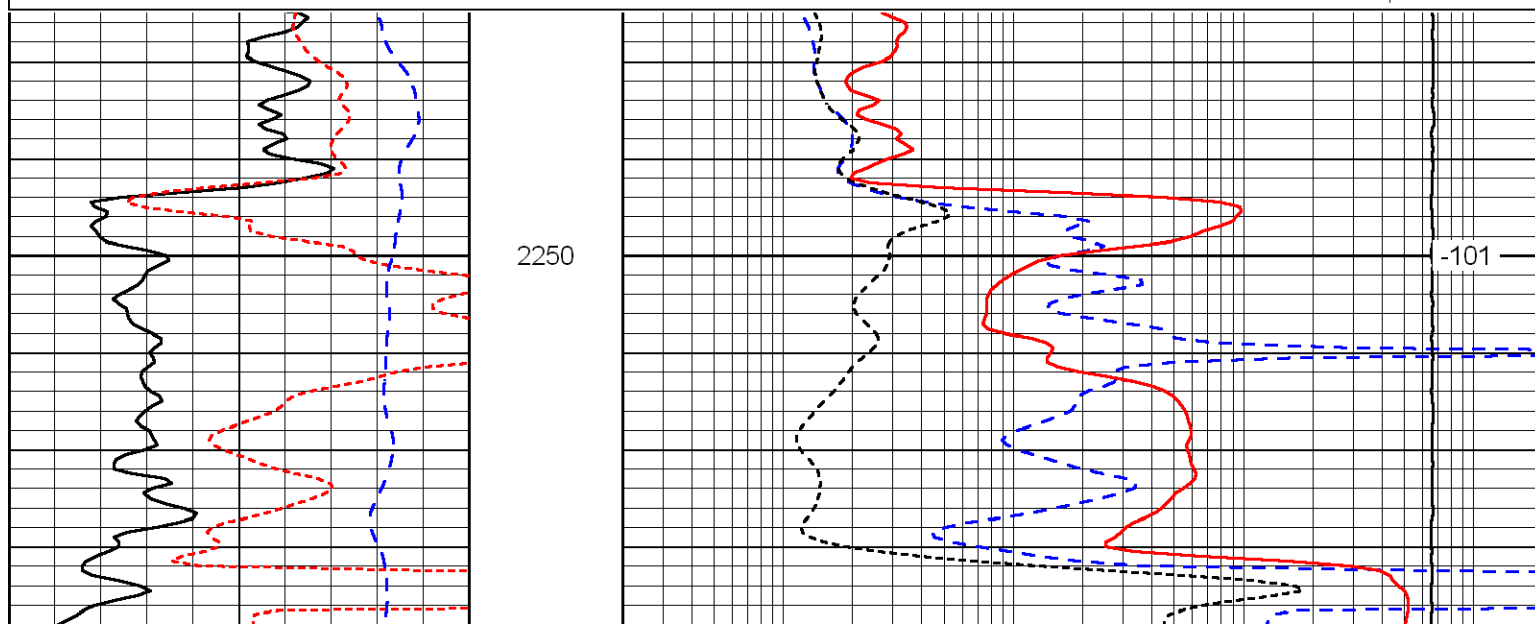
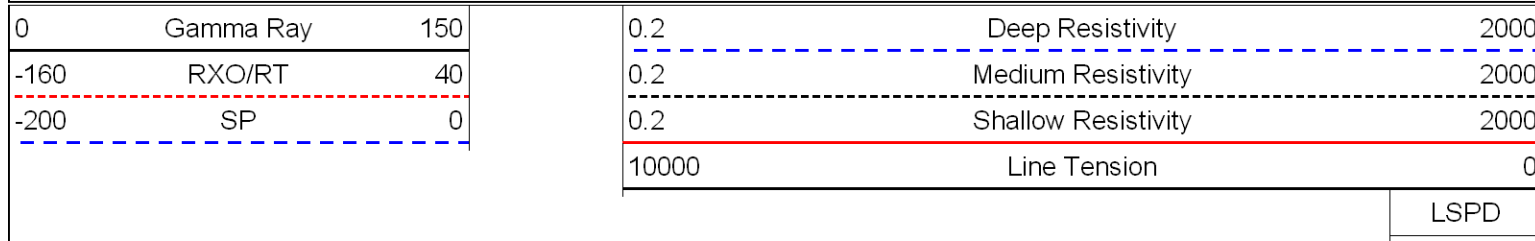
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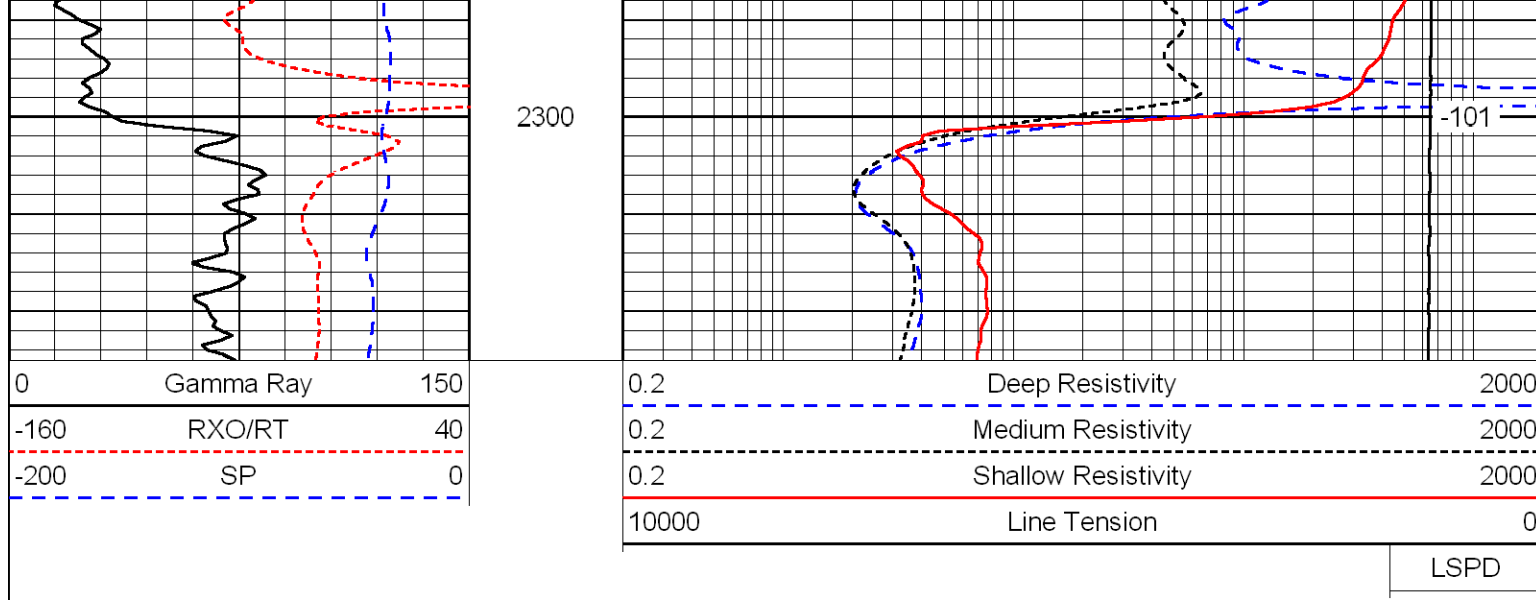
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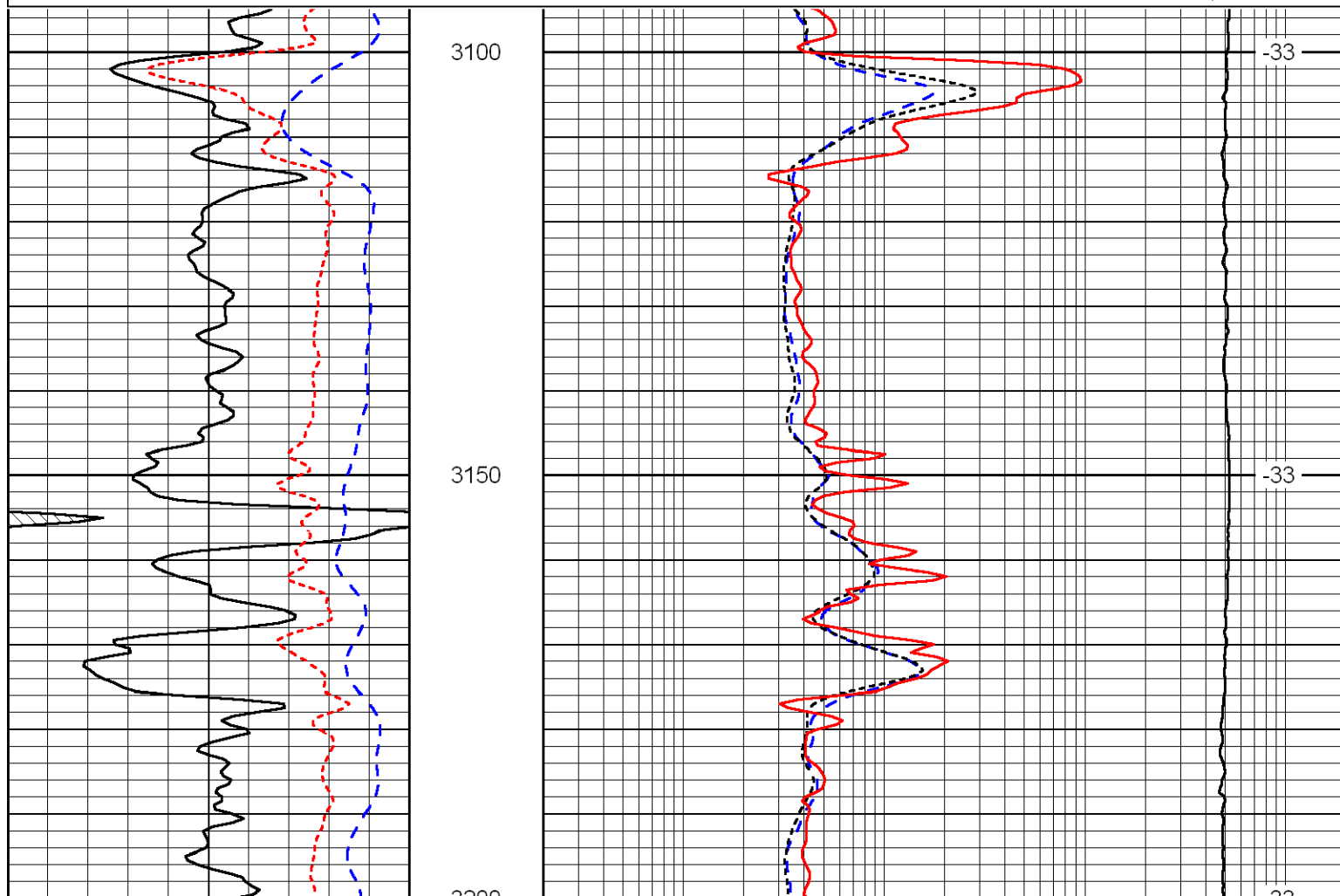
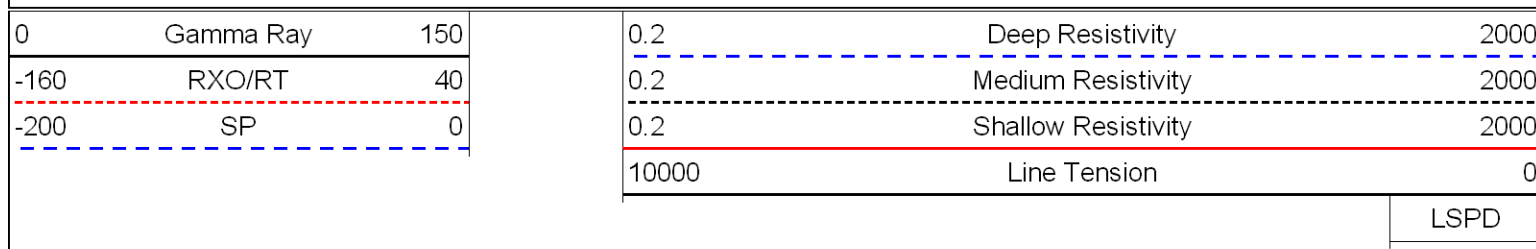


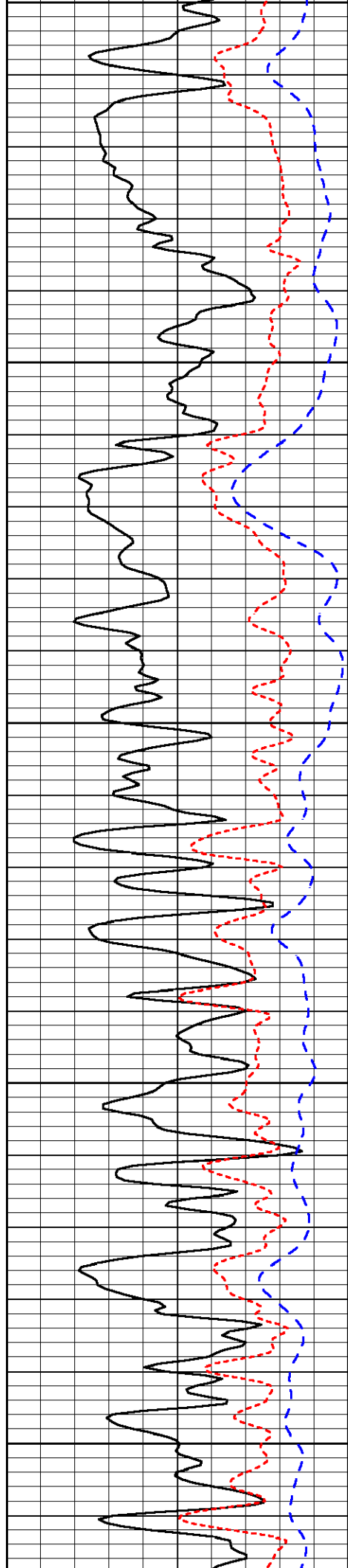
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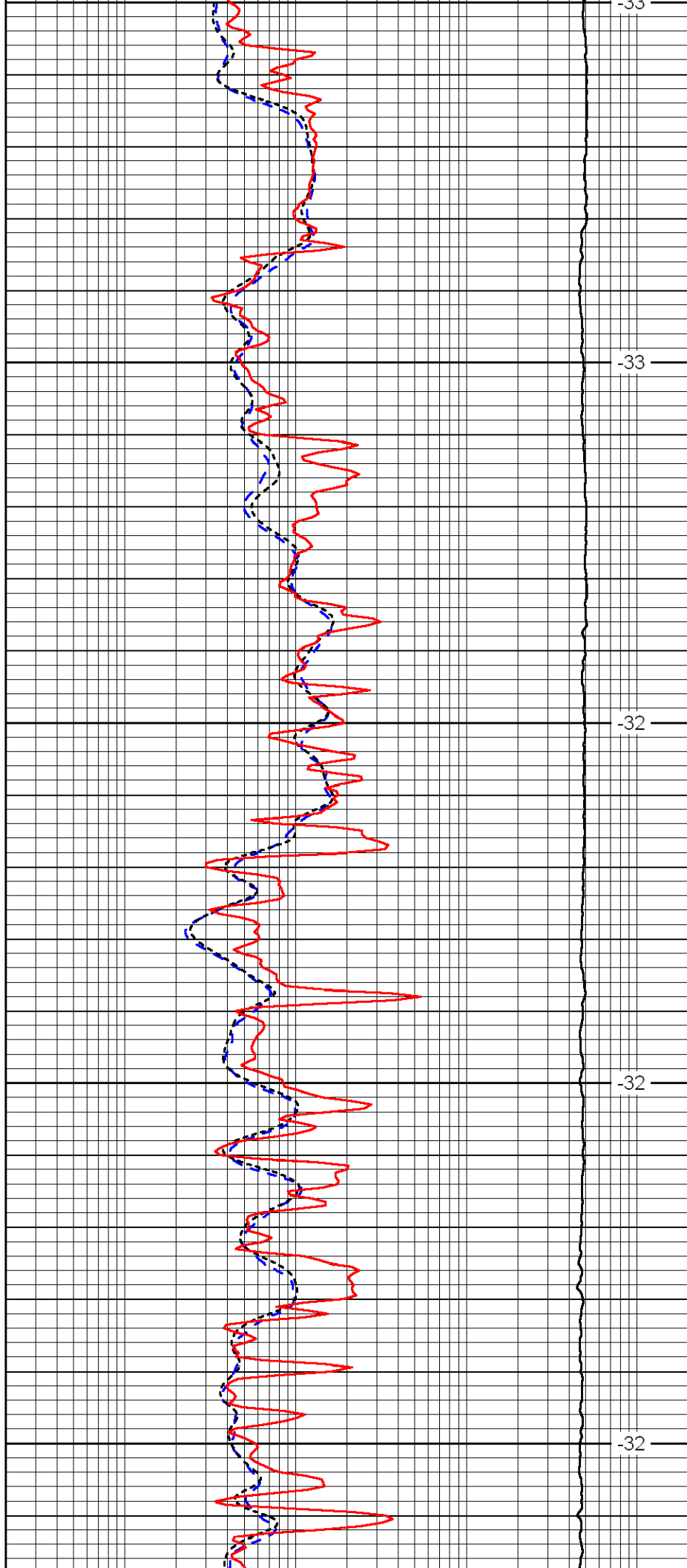
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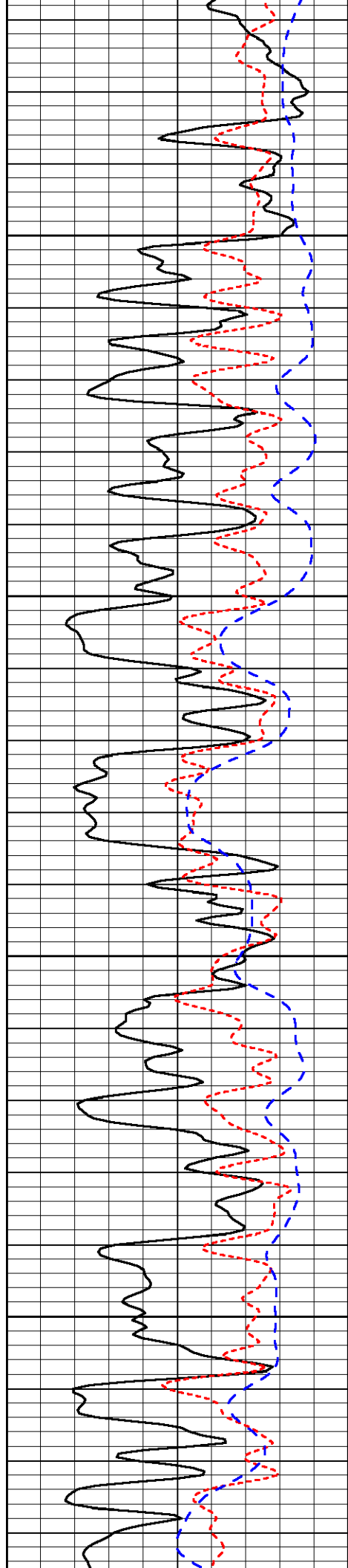
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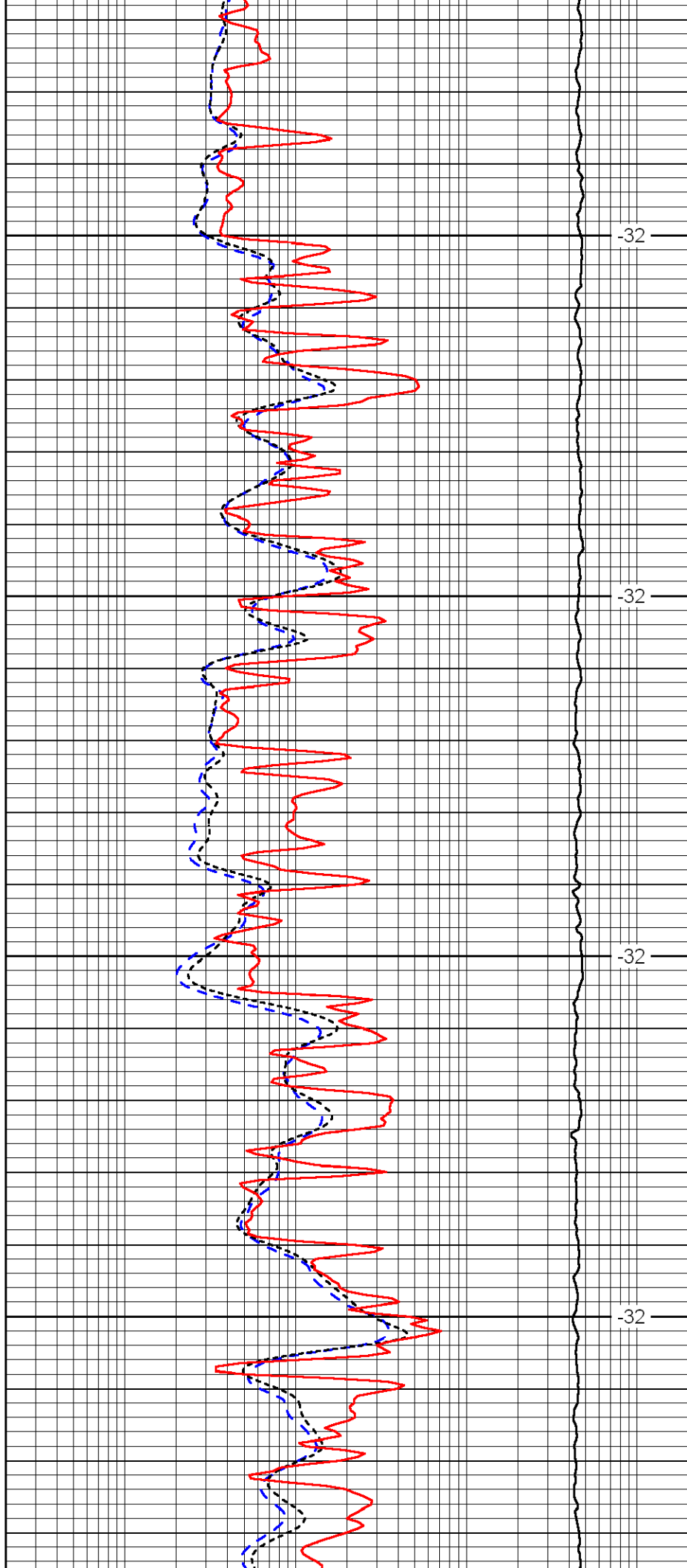


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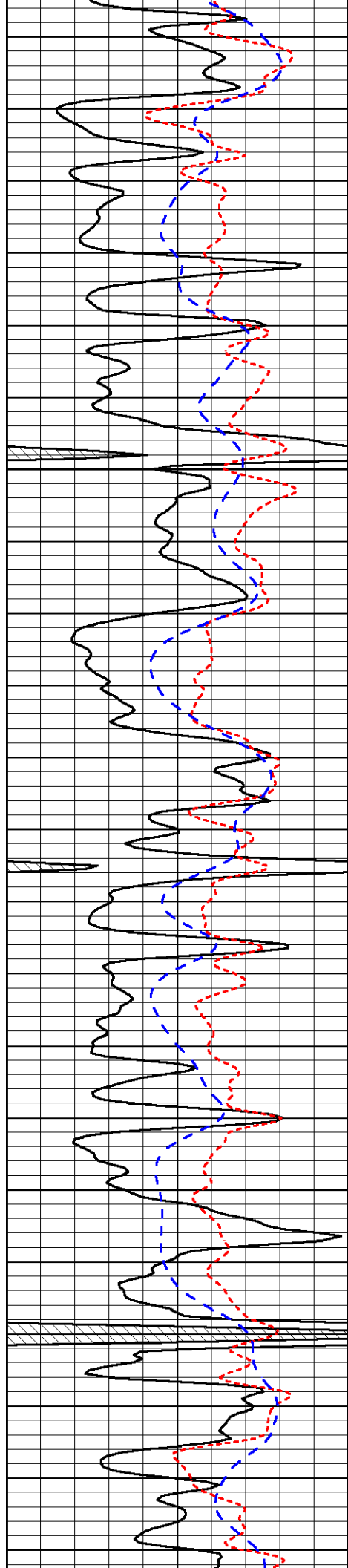


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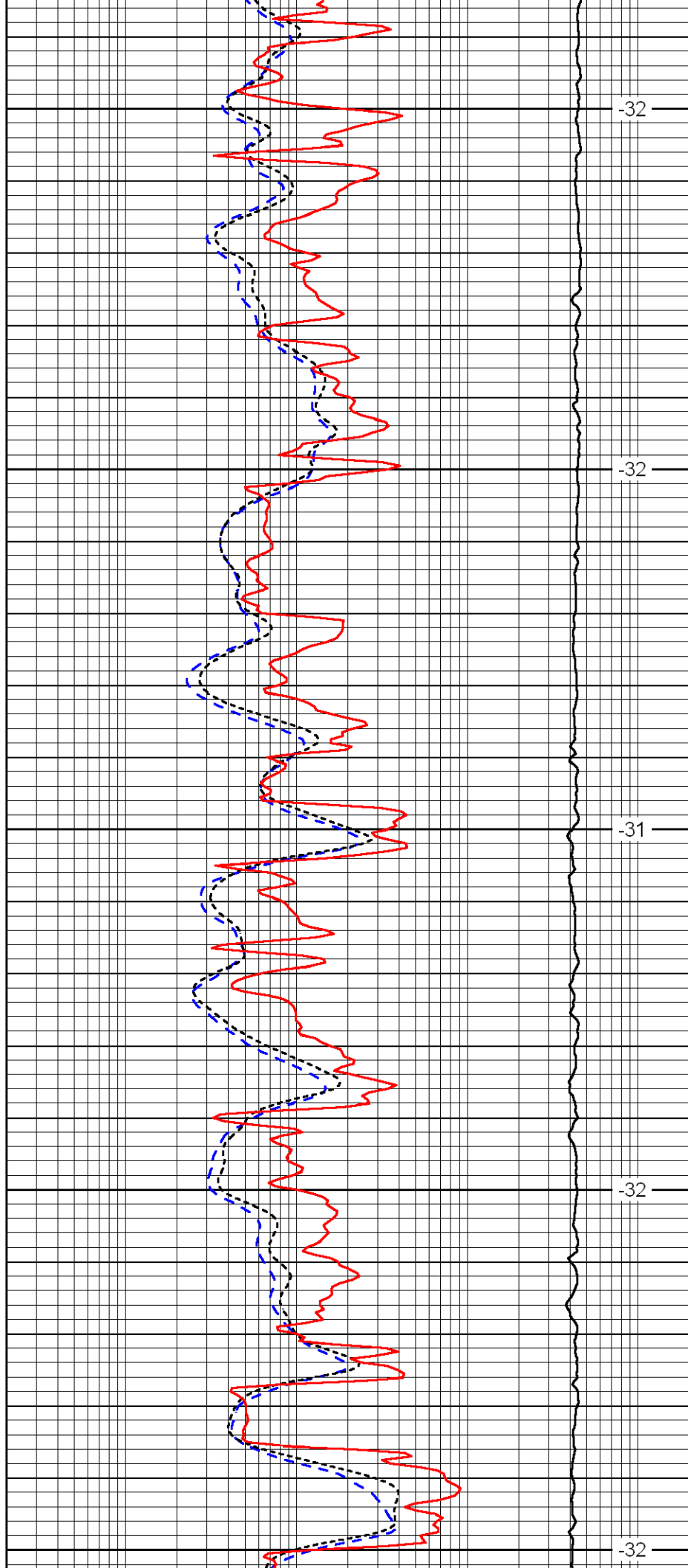
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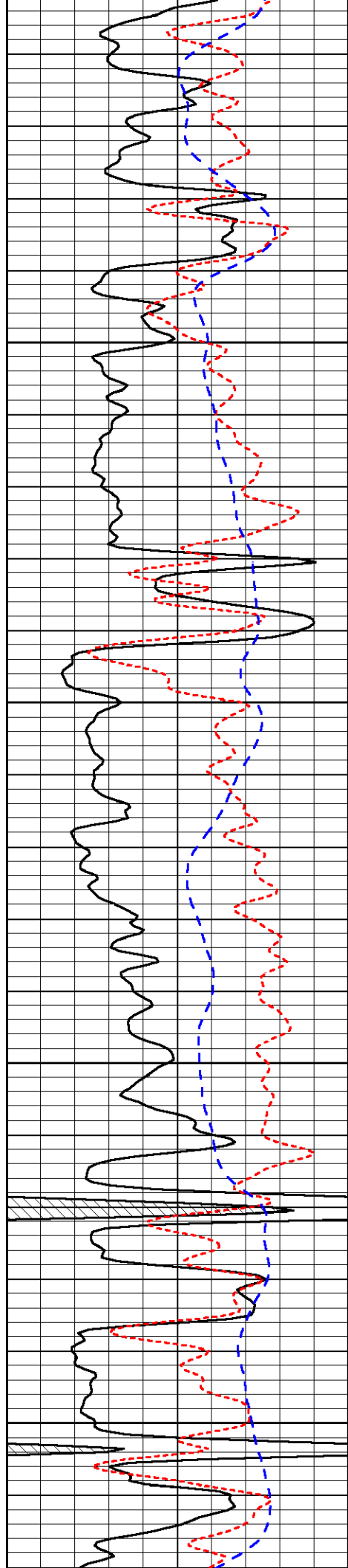
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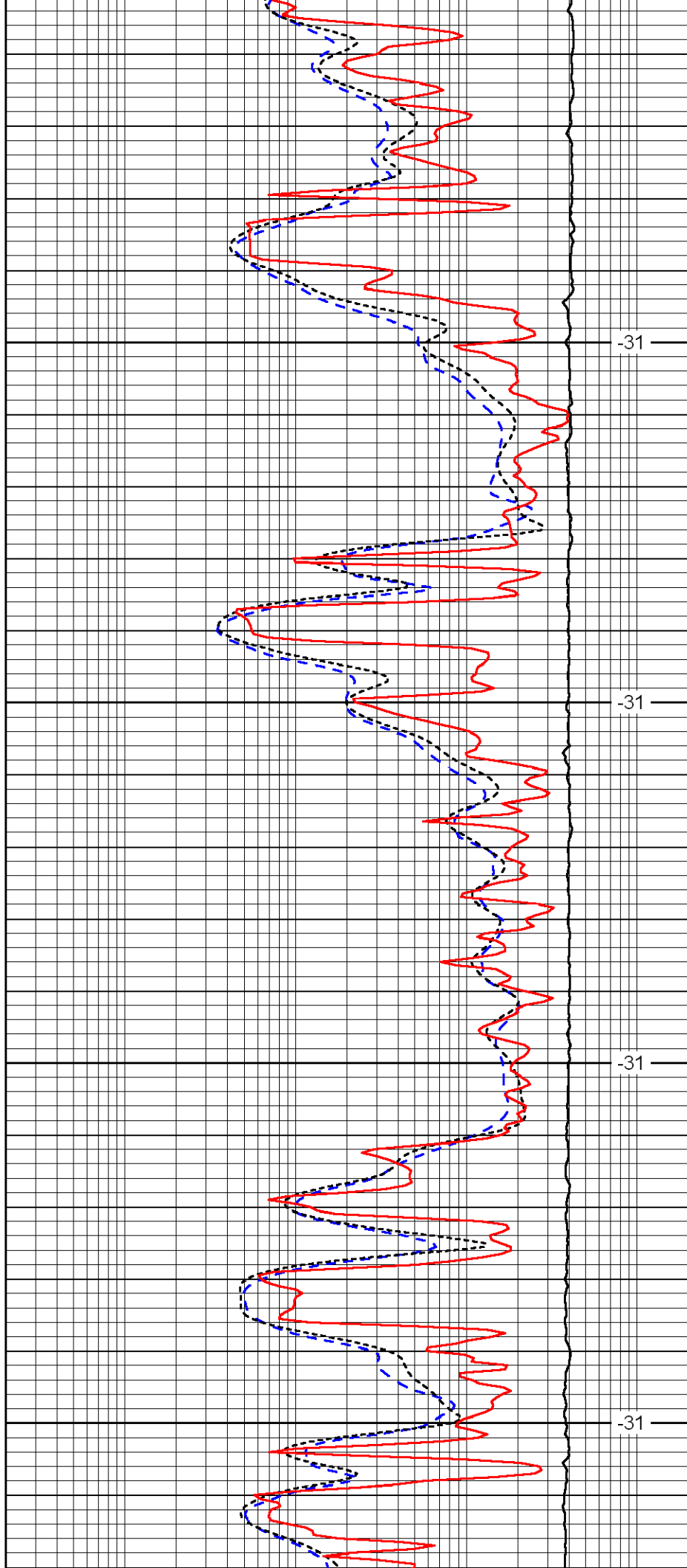


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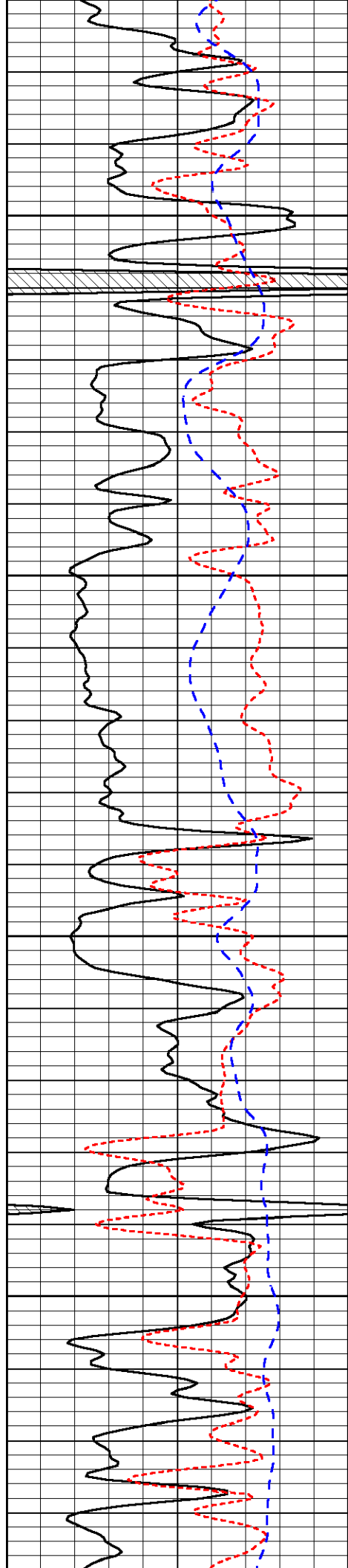


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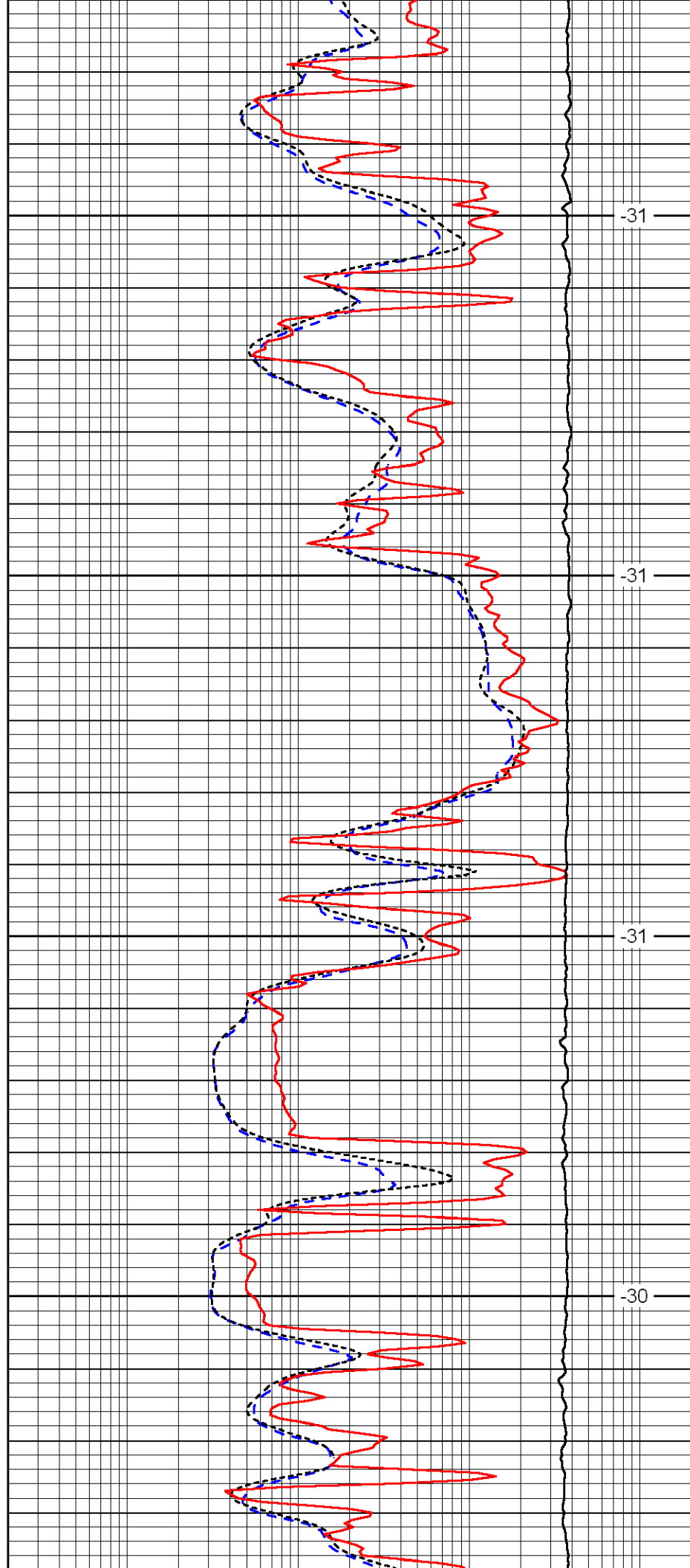


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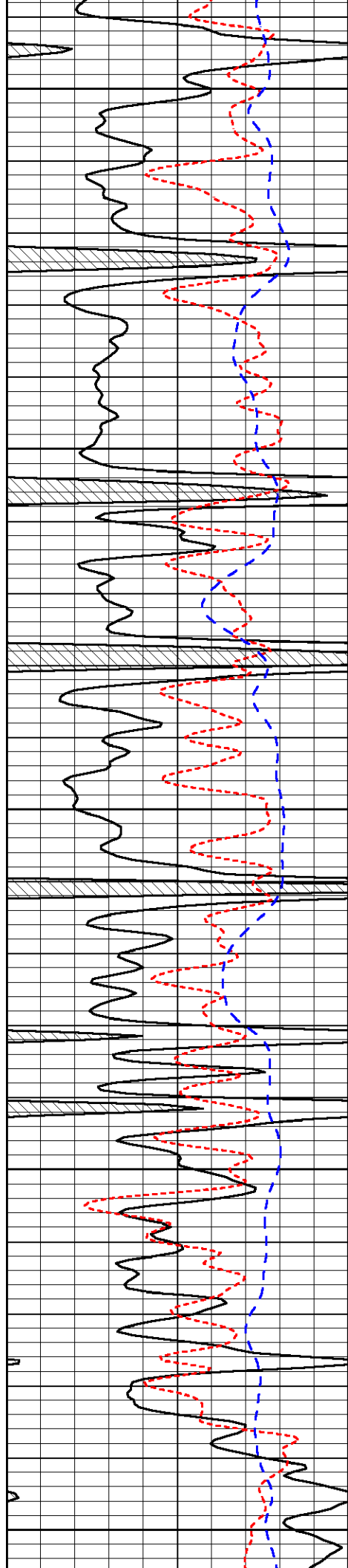


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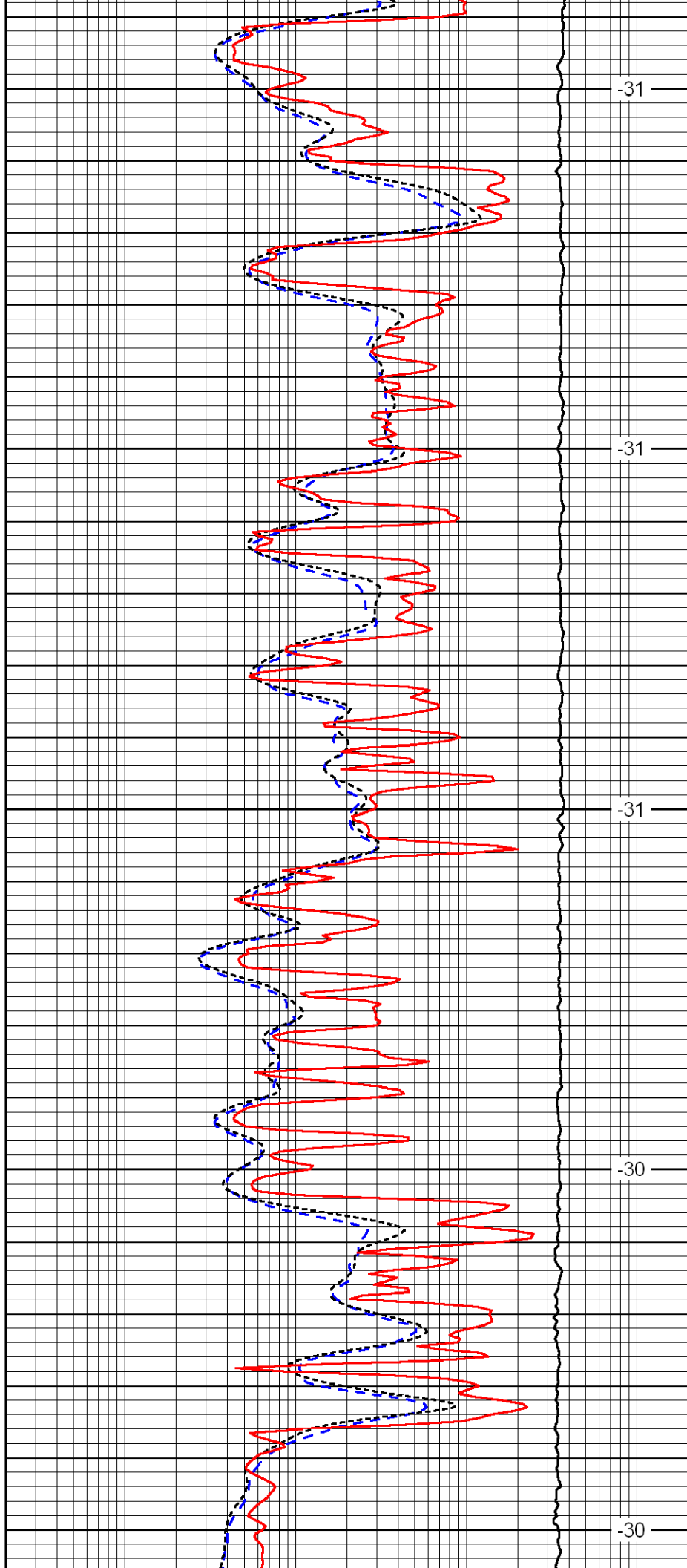
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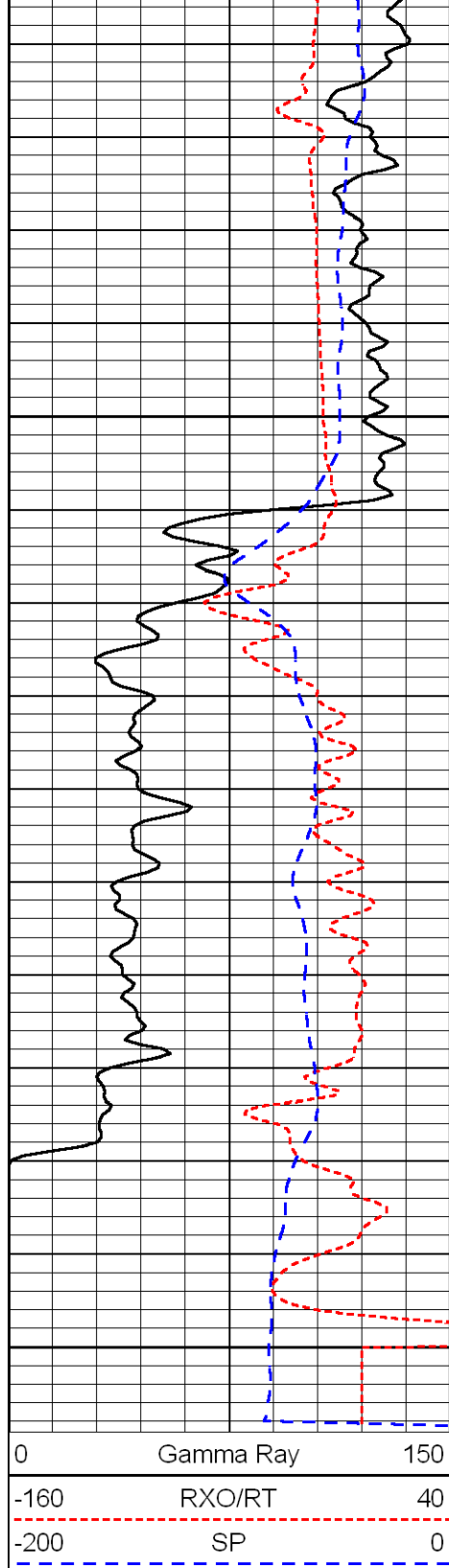
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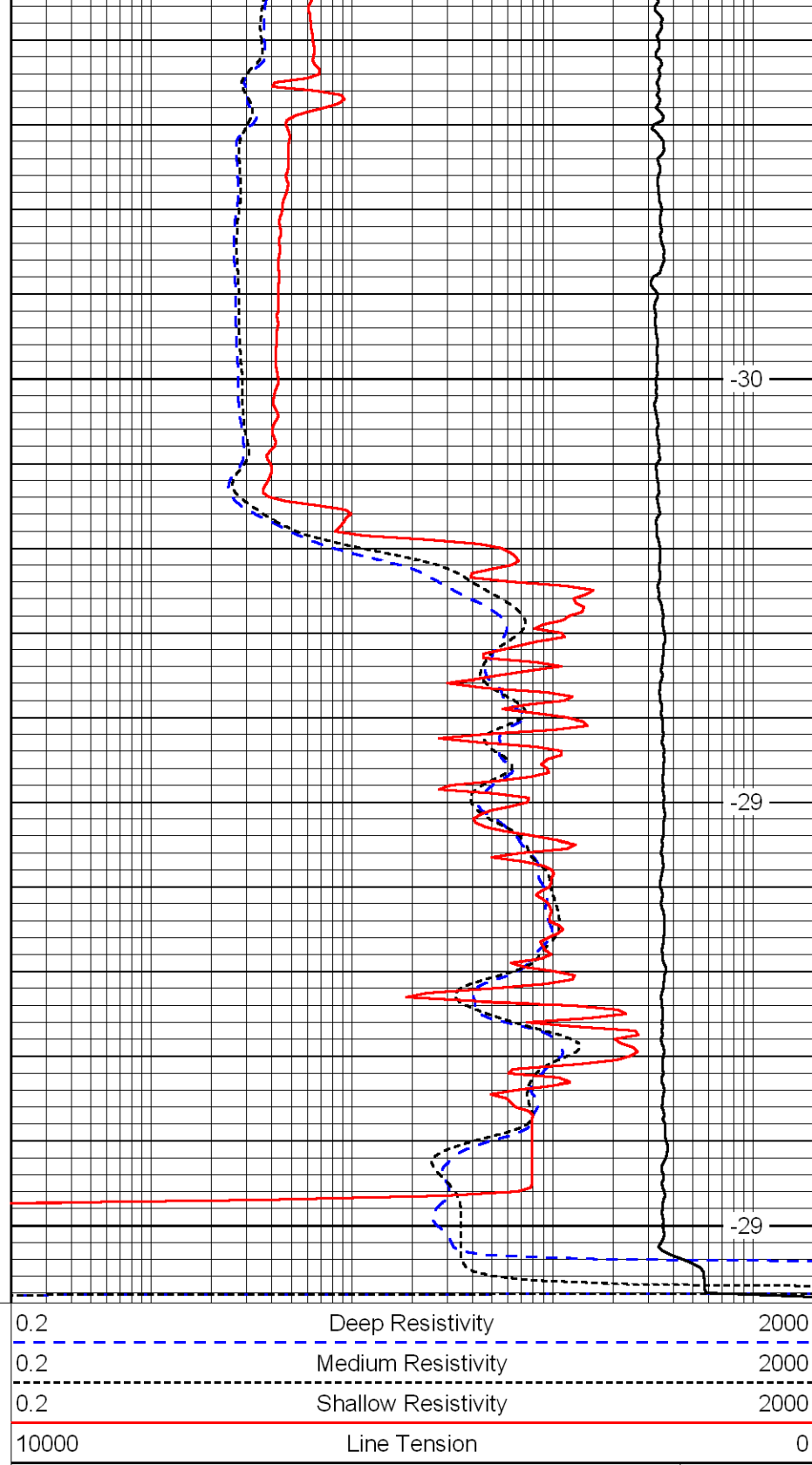


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0	Gamma Ray	150
-160	RXO/RT	40
-200	SP	0



-30

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0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD