



Pioneer Energy Services

Dual Induction Log

API No.

15-007-24,252-00-00

Company Indian Oil Company, Inc.

Well Banks SWD #1

Field Amber Creek

County Barber State Kansas

Location SW SW NW

2970' FSL & 330' FWL

Sec: 36 Twp: 30S Rge: 12W

Permanent Datum Ground Level Elevation 1638.5
Log Measured From Kelly Bushing 12 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Other Services
CNL/CDL
Elevation
K.B. 1650.5
D.F.
G.L. 1638.5

Date 11/18/2014

Run Number One

Depth Driller 5314

Depth Logger 5314

Bottom Logged Interval 5313

Top Log Interval 250

Casing Driller 8.625 @ 260

Casing Logger 262

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 3200

Density / Viscosity 9.2 60

pH / Fluid Loss 9.5 10.4

Source of Sample Flowline

Rm @ Meas. Temp 0.60 @ 54

Rmf @ Meas. Temp 0.45 @ 54

Rmc @ Meas. Temp 0.81 @ 54

Source of Rmf / Rmc Charts

Rm @ BHT 0.25 @ 129

Operating Rig Time 2 1/2 Hours

Max Rec. Temp. F 129

Equipment Number 15

Location Hays

Recorded By D.Kerr

Witnessed By Scott Alberg

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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

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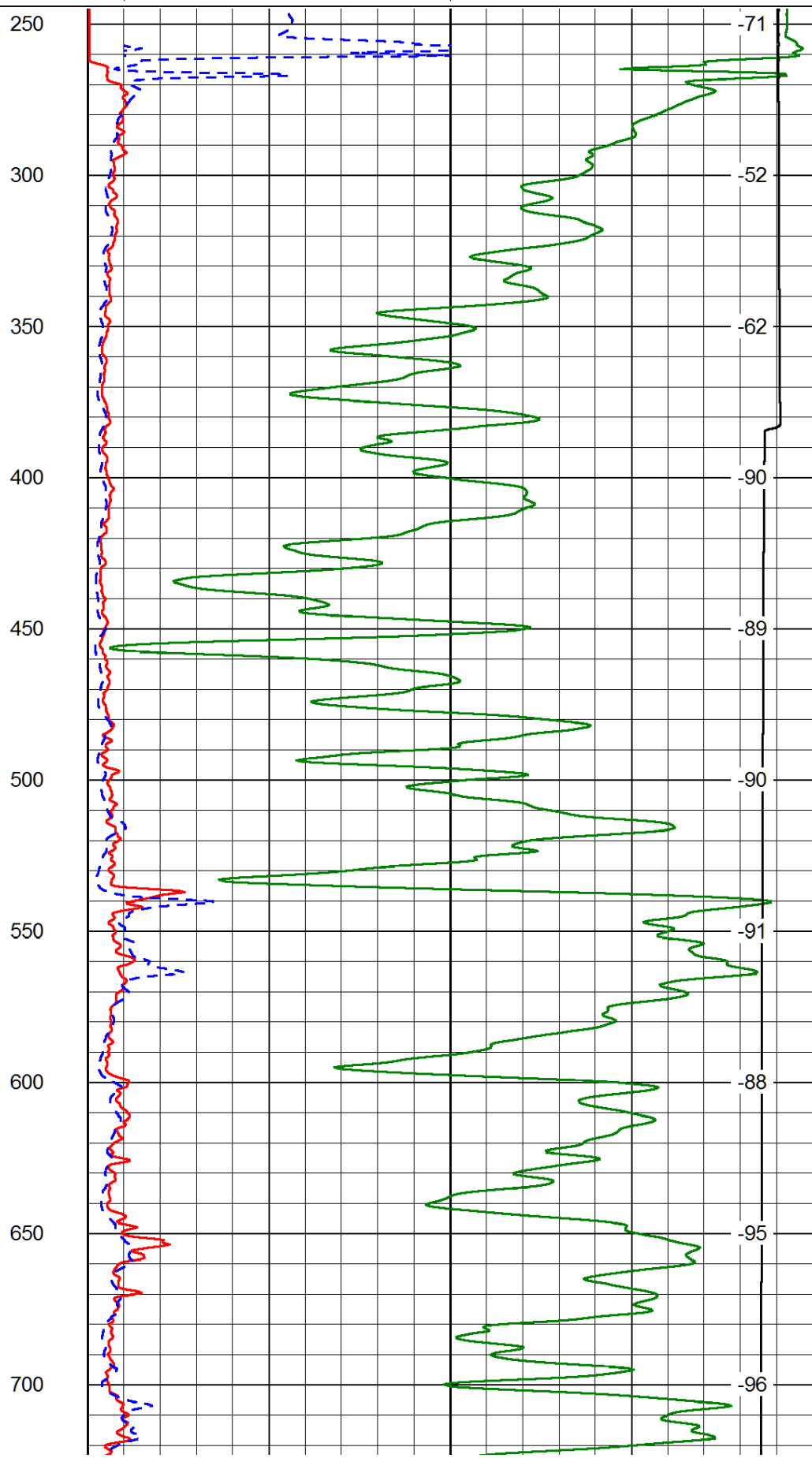
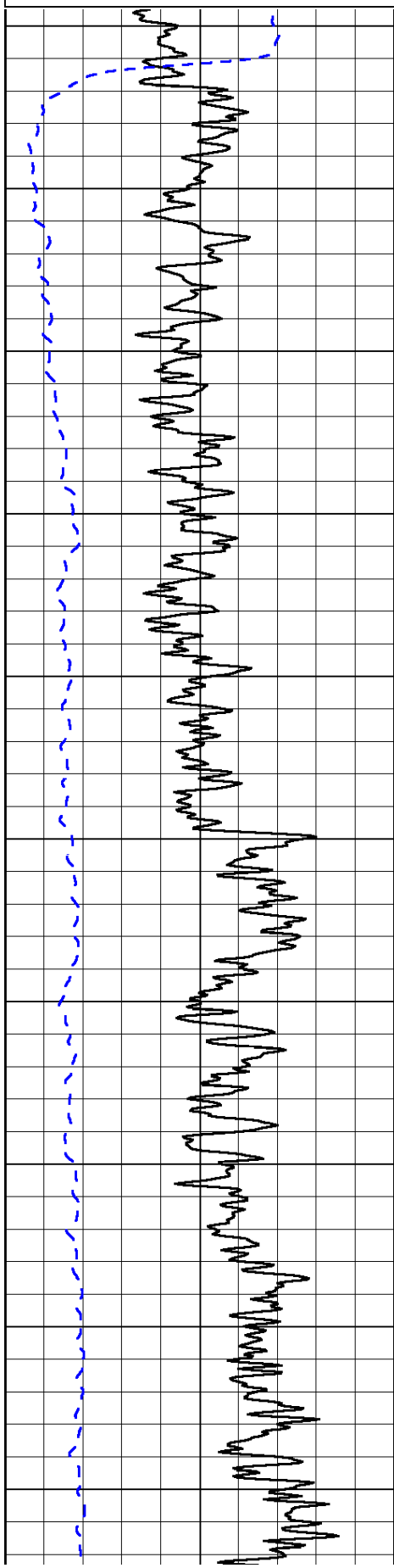
Medicine Lodge KS, North to Resort RD,
1 East and North, East Into

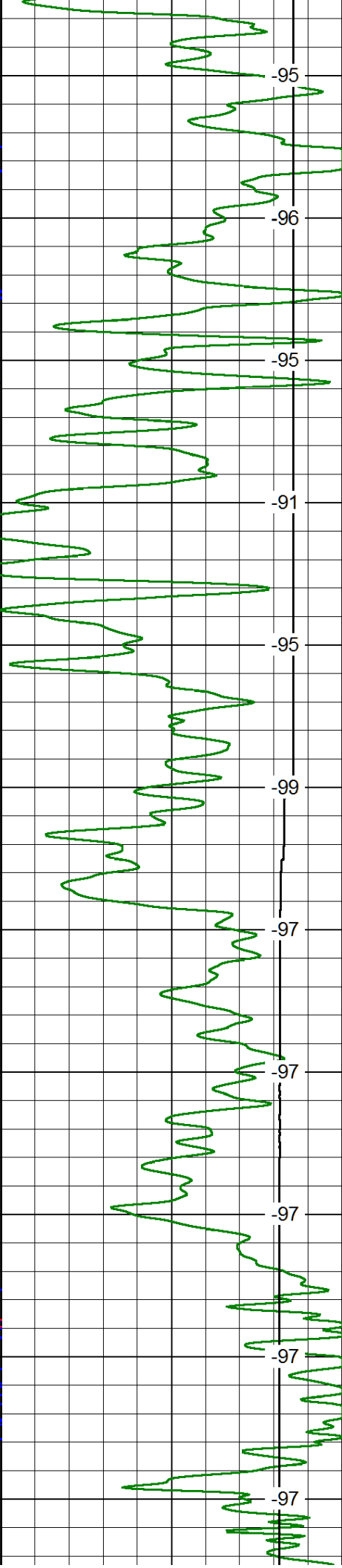
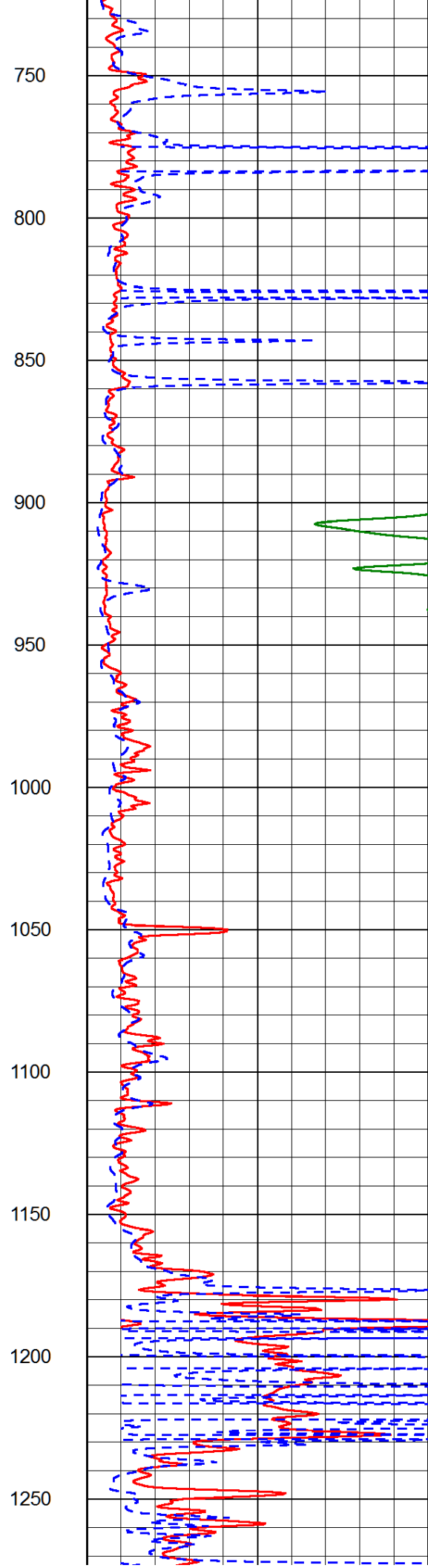
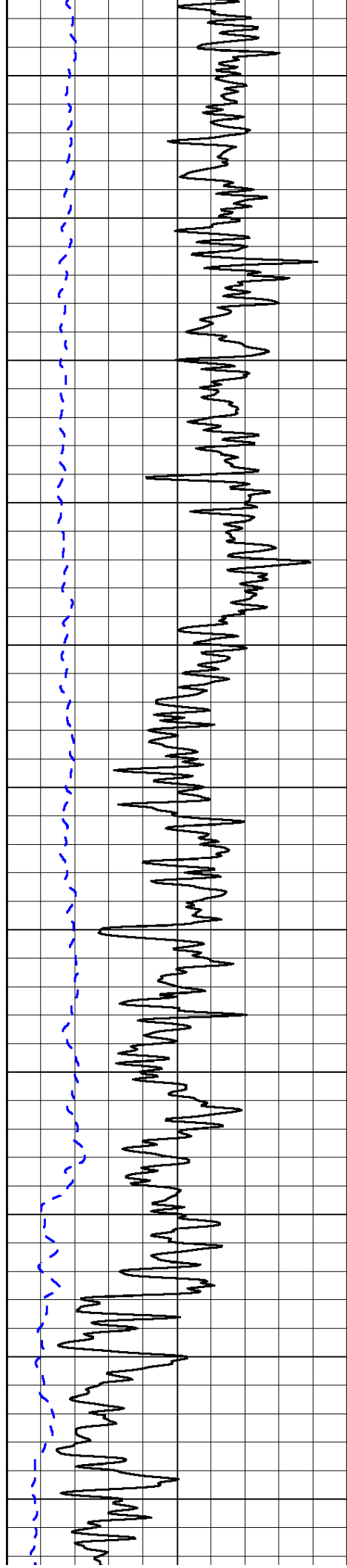
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Presentation Format: dil2in
Dataset Creation: Tue Nov 18 08:19:10 2014
Charted by: Depth in Feet scaled 1:600

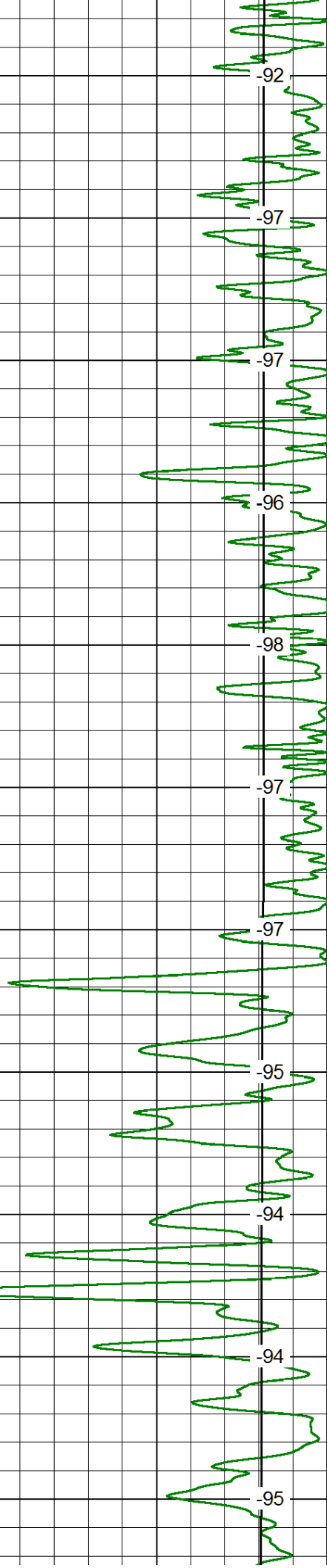
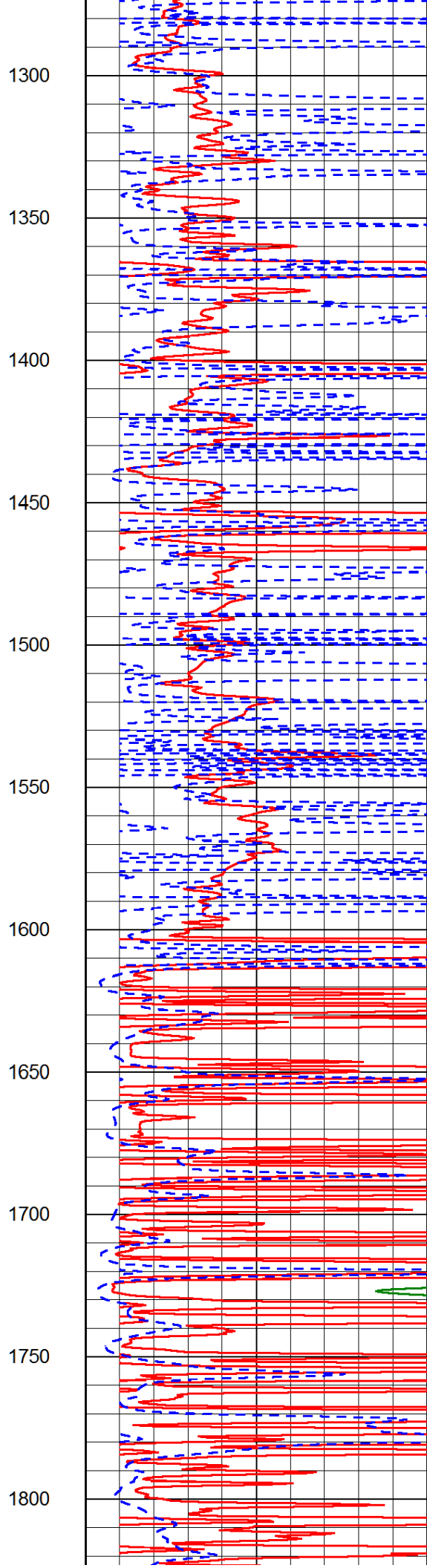
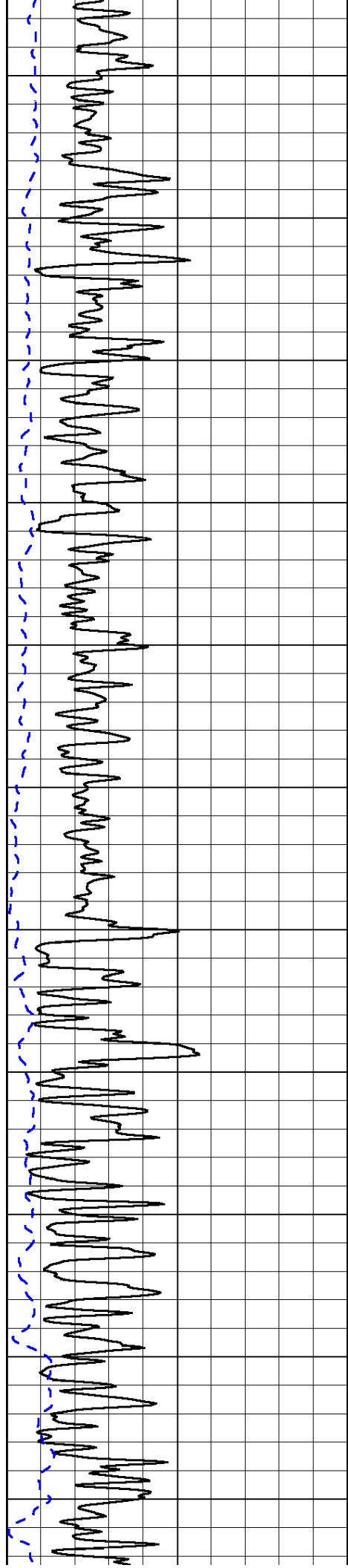
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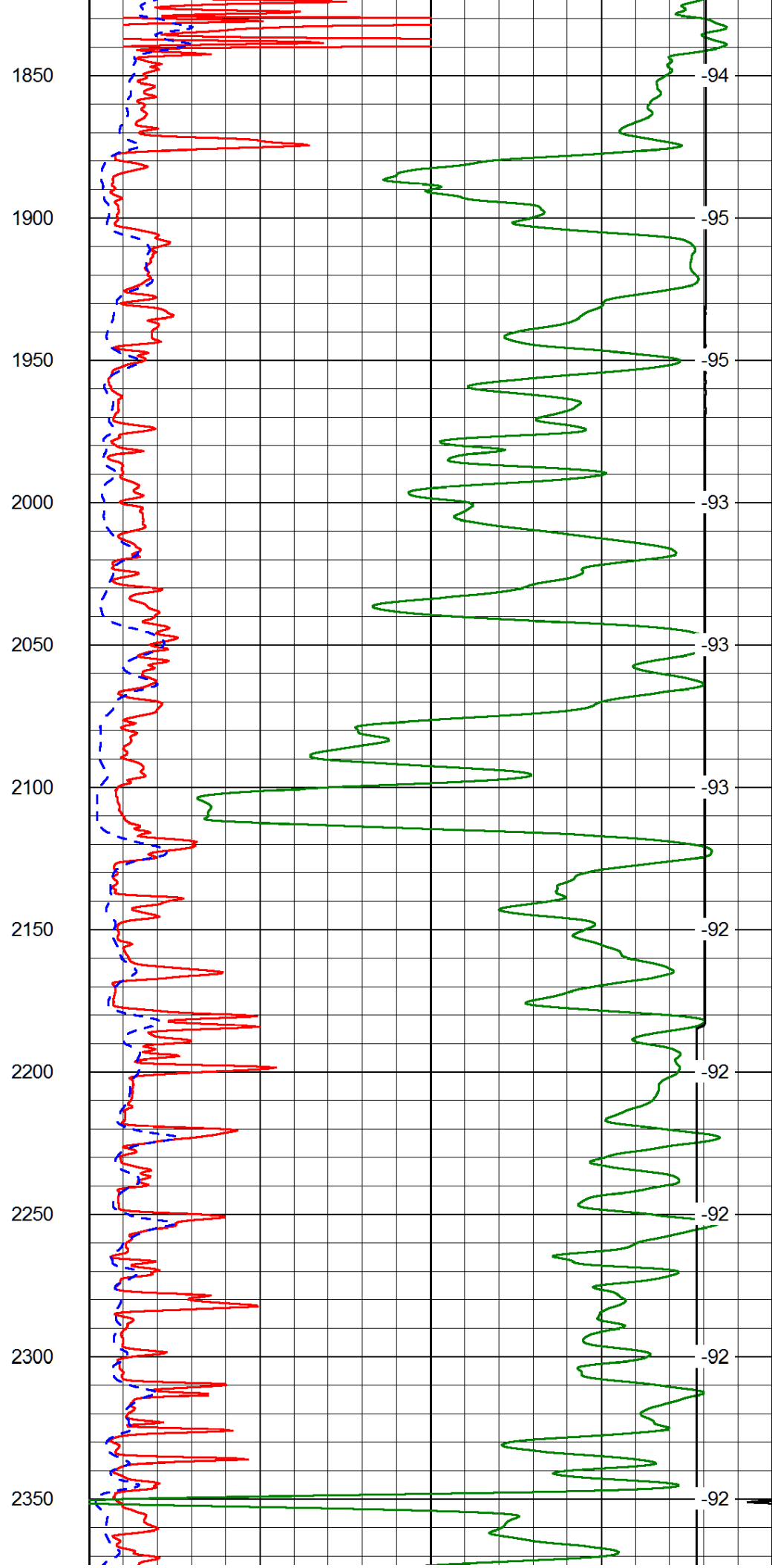
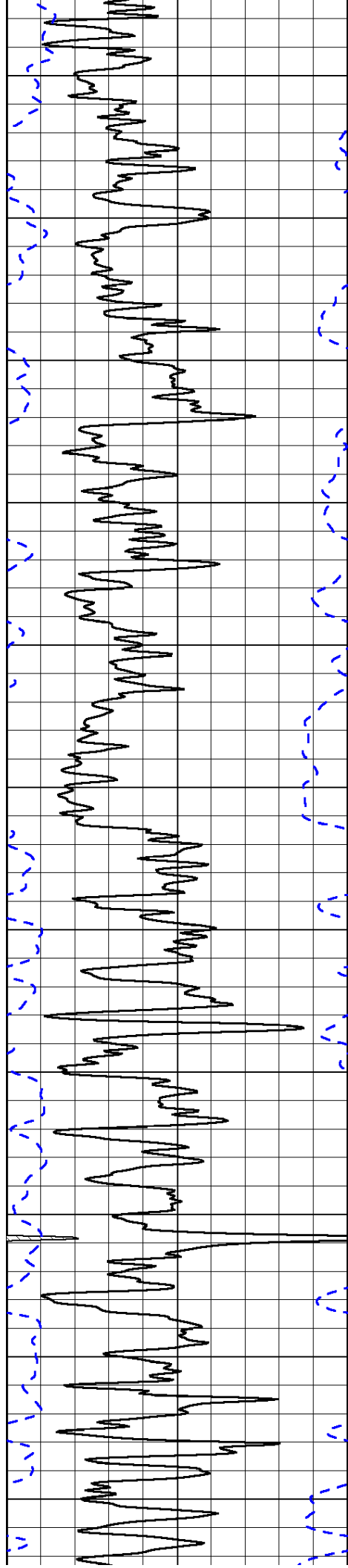
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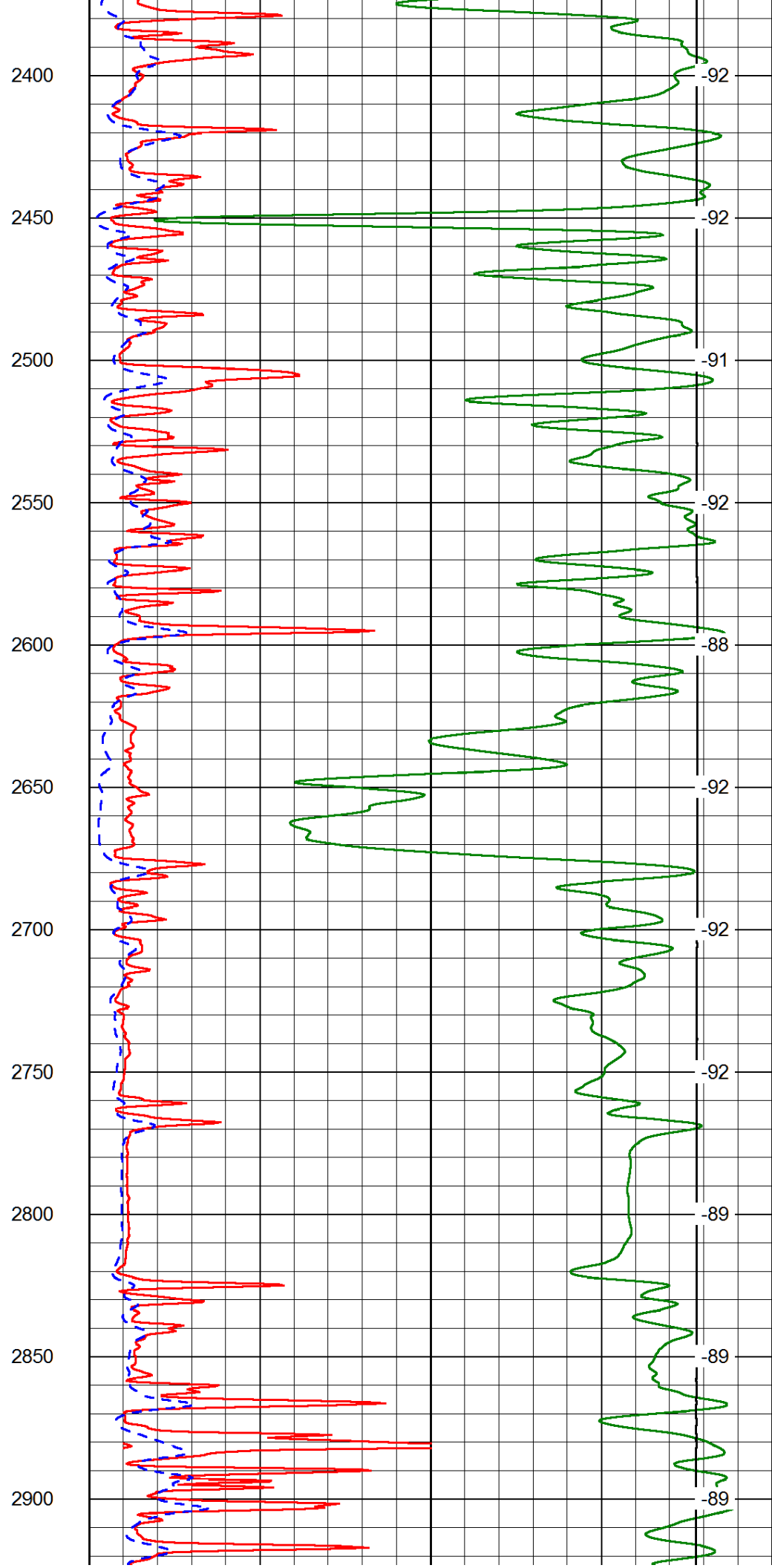
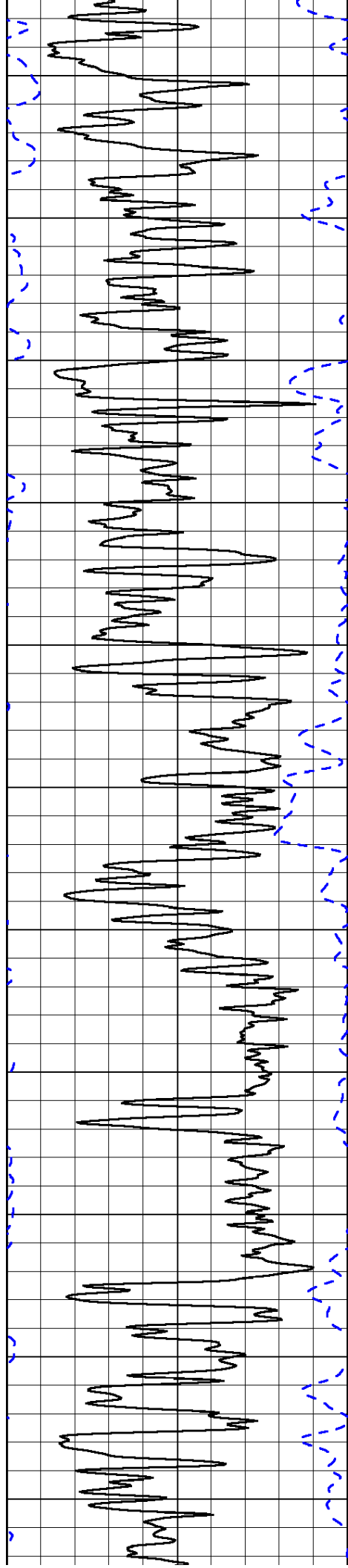
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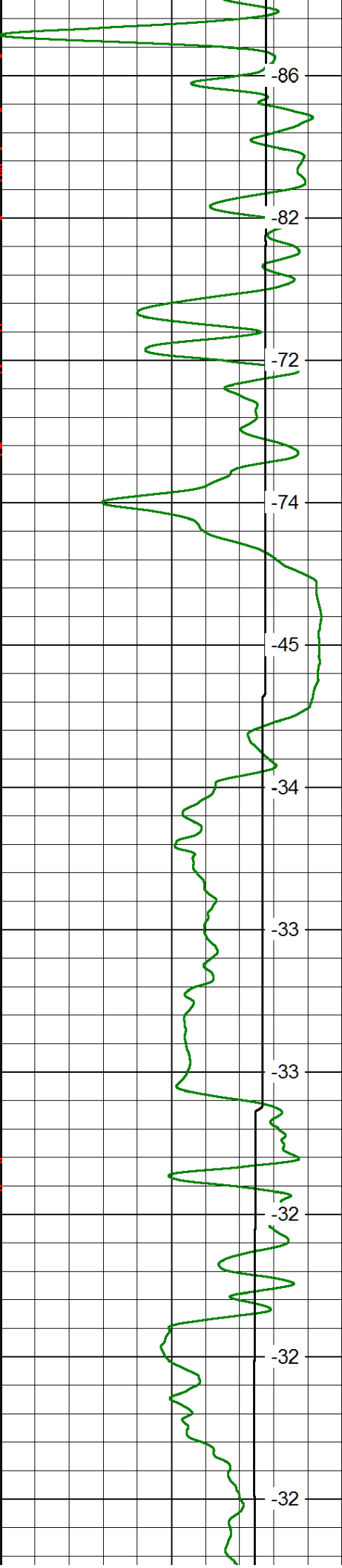
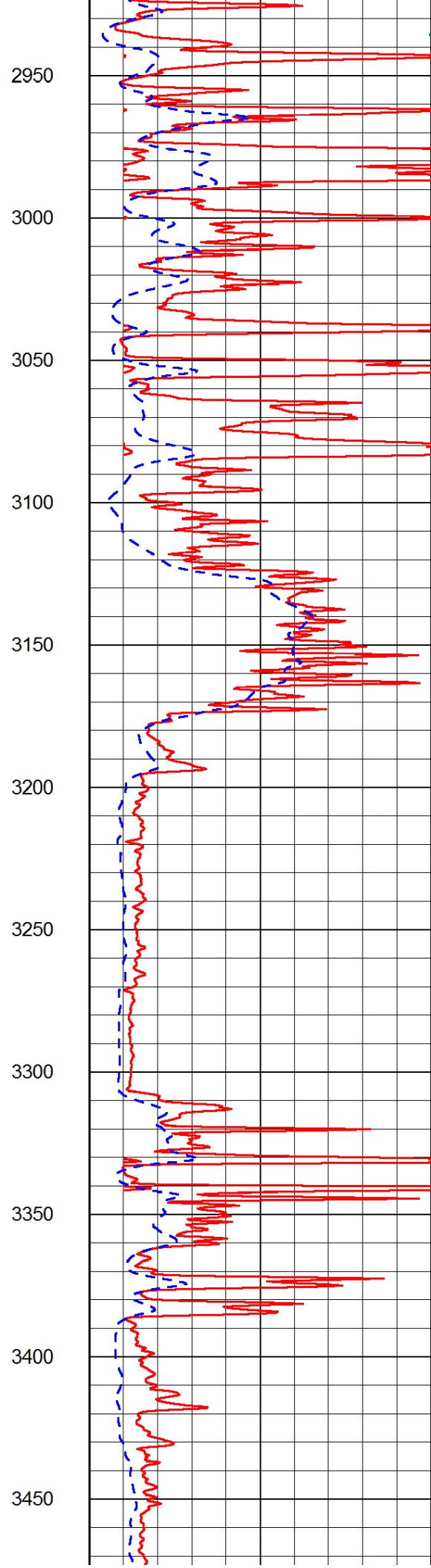
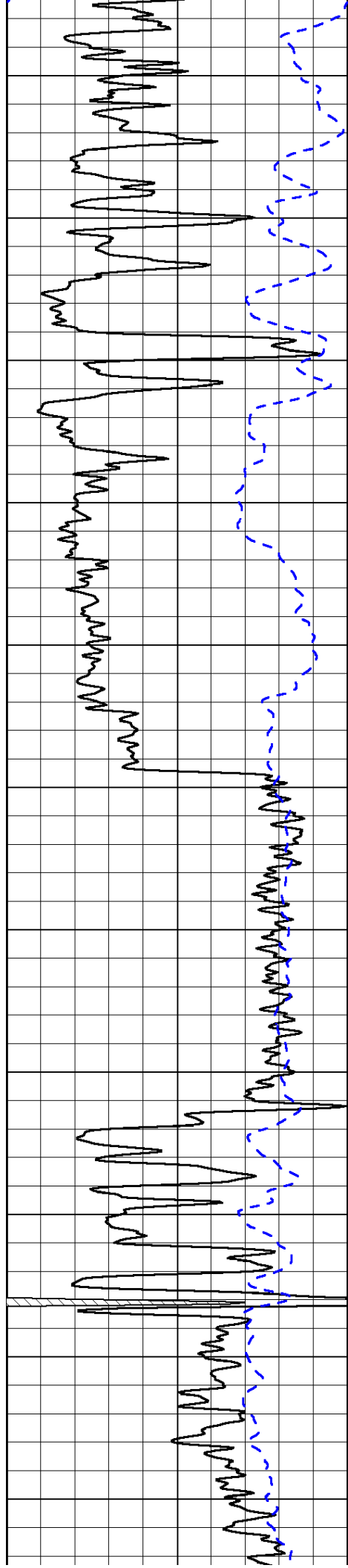


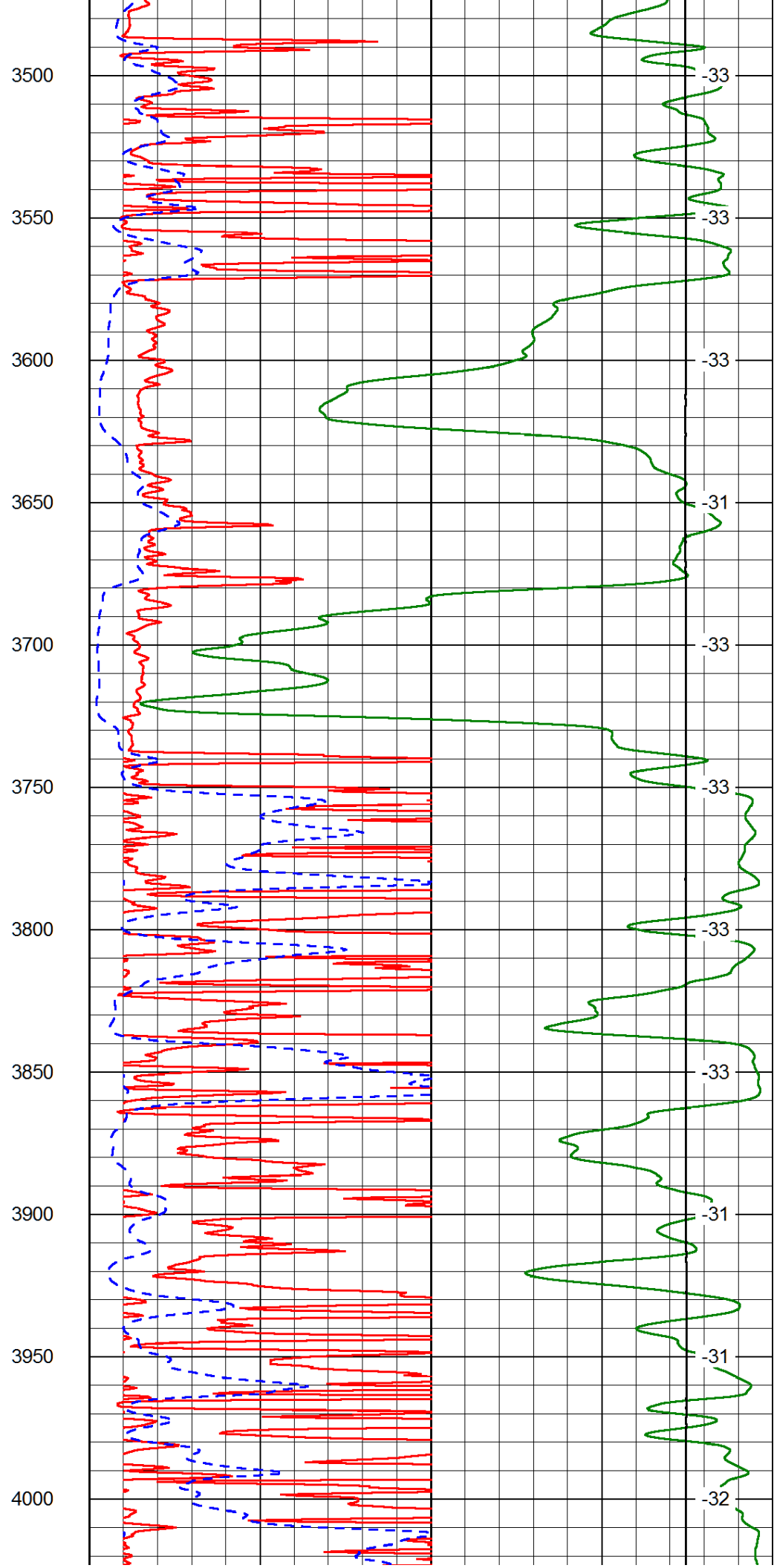
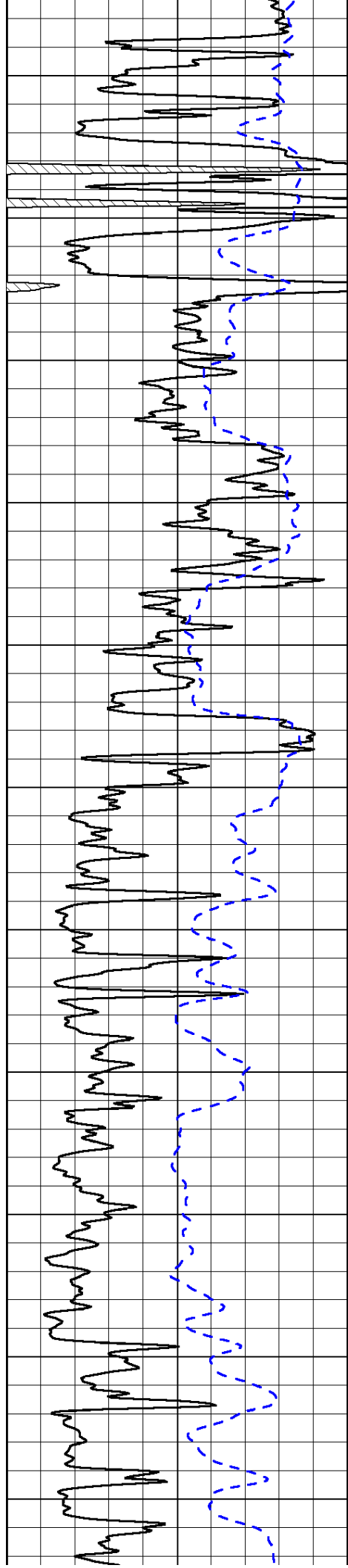


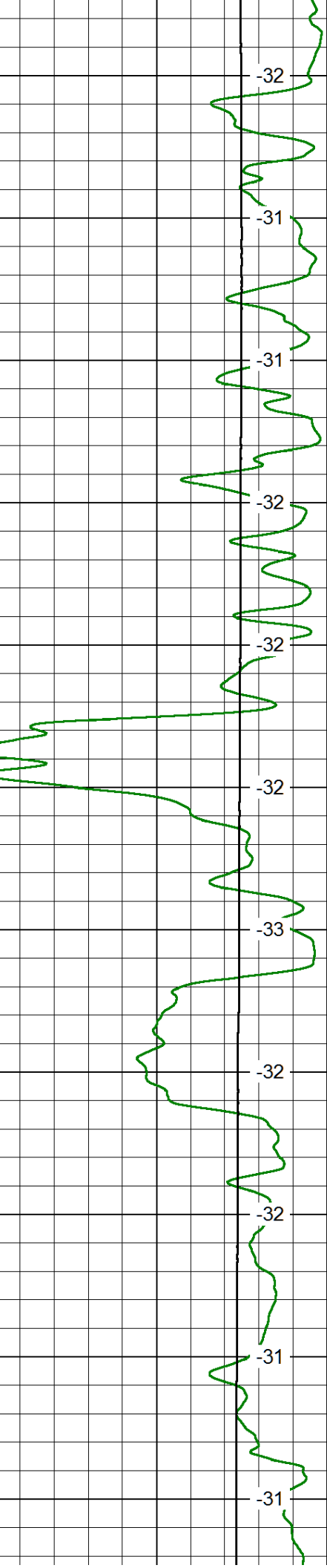
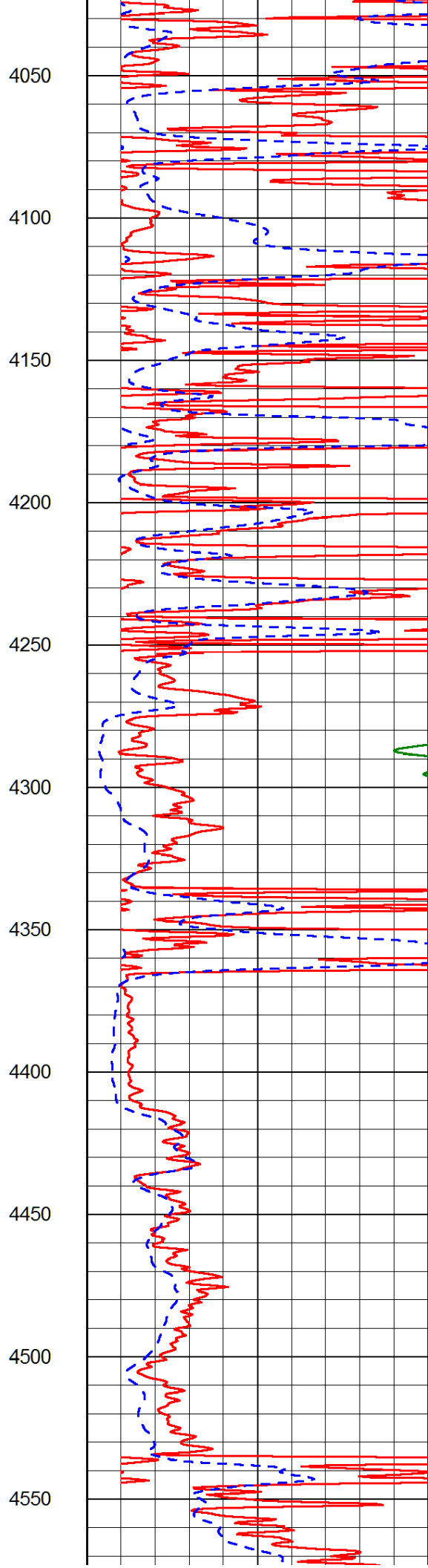
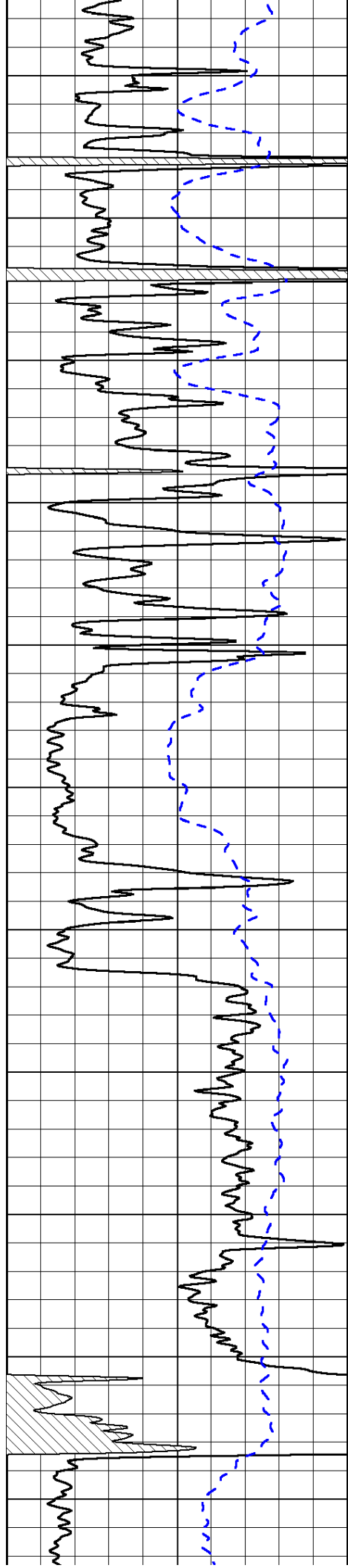


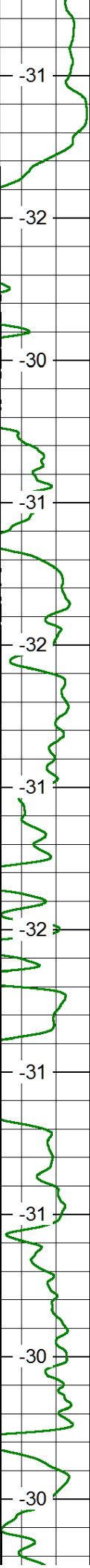
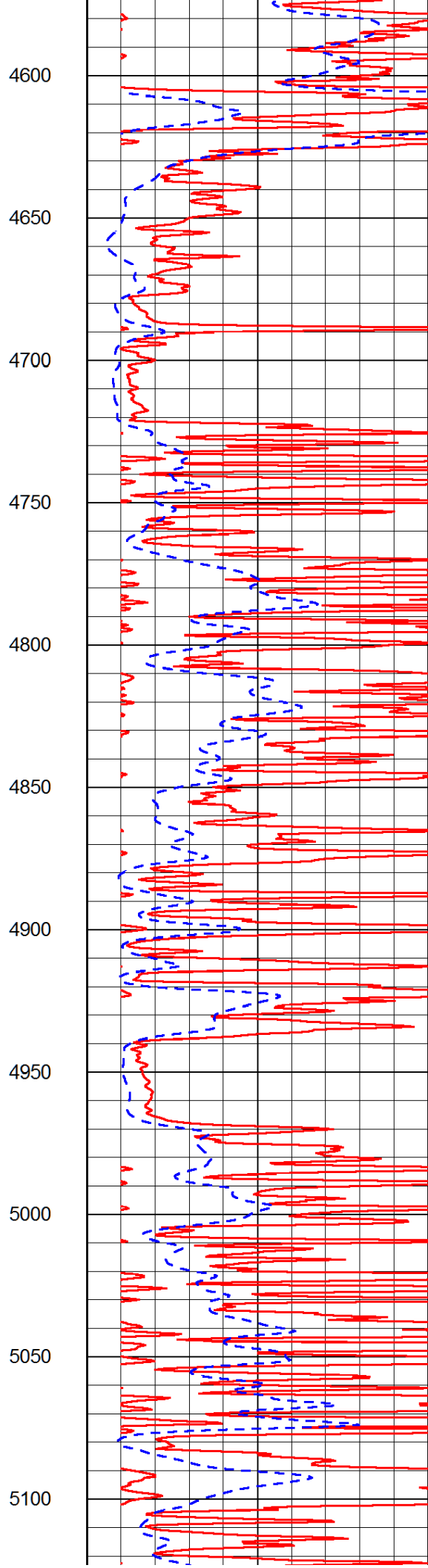
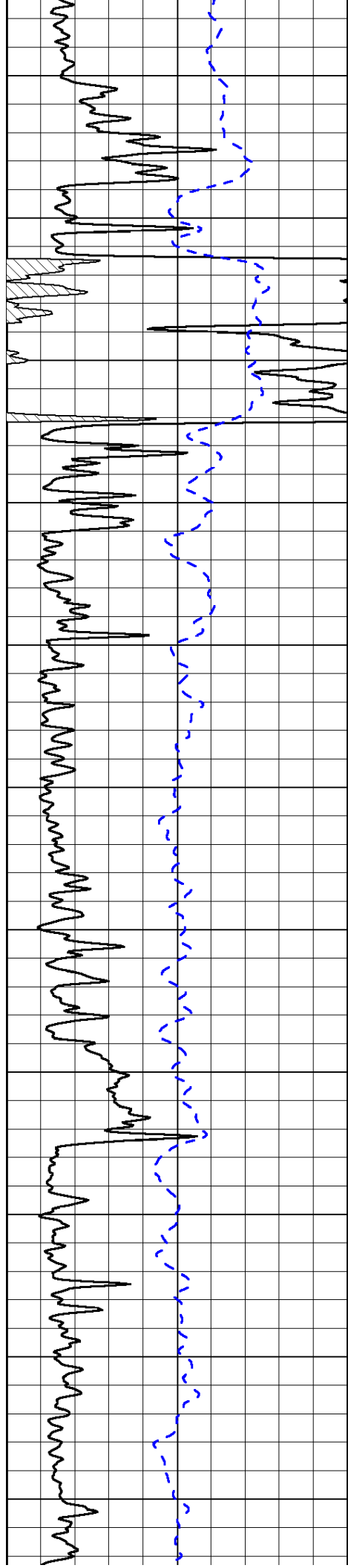


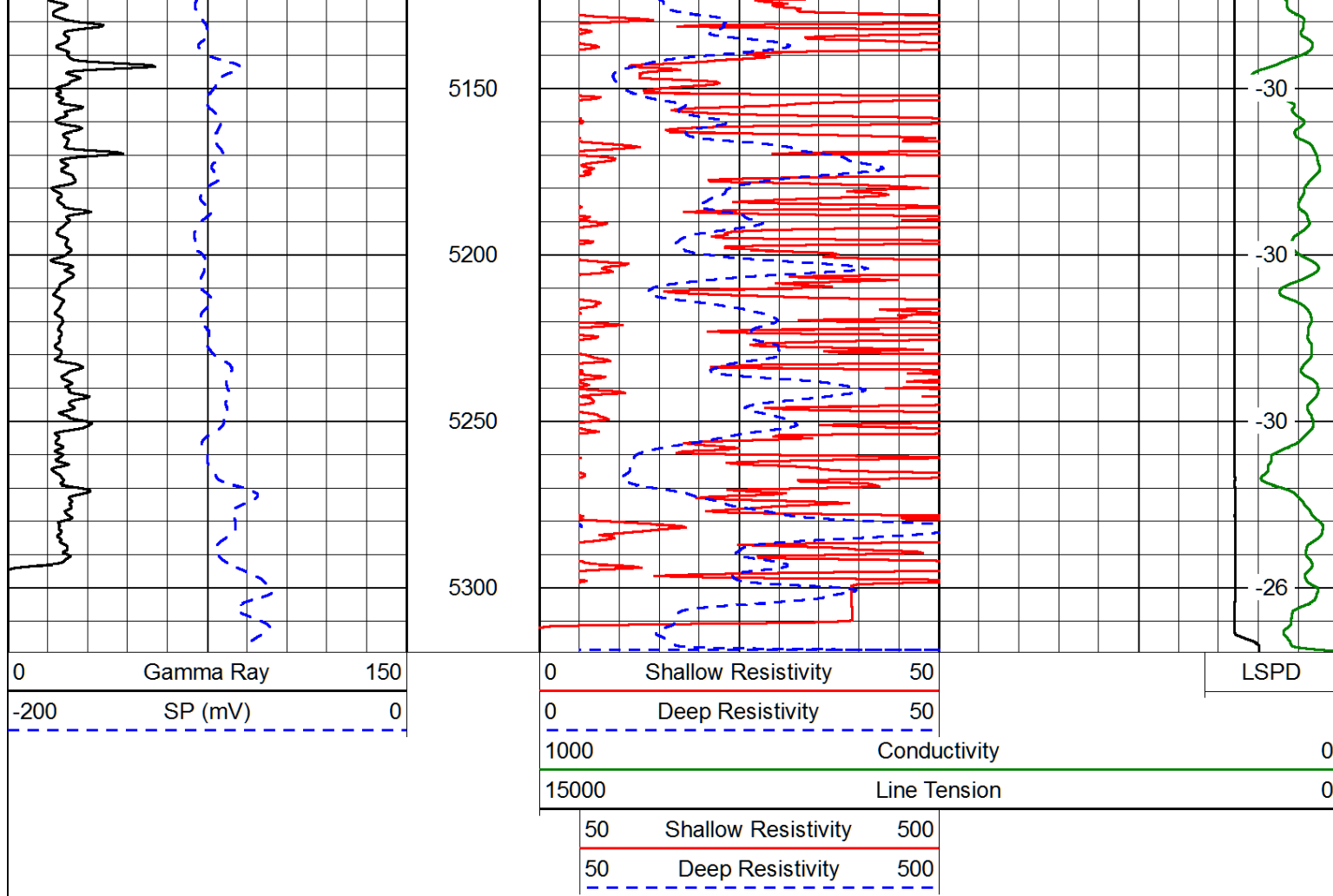




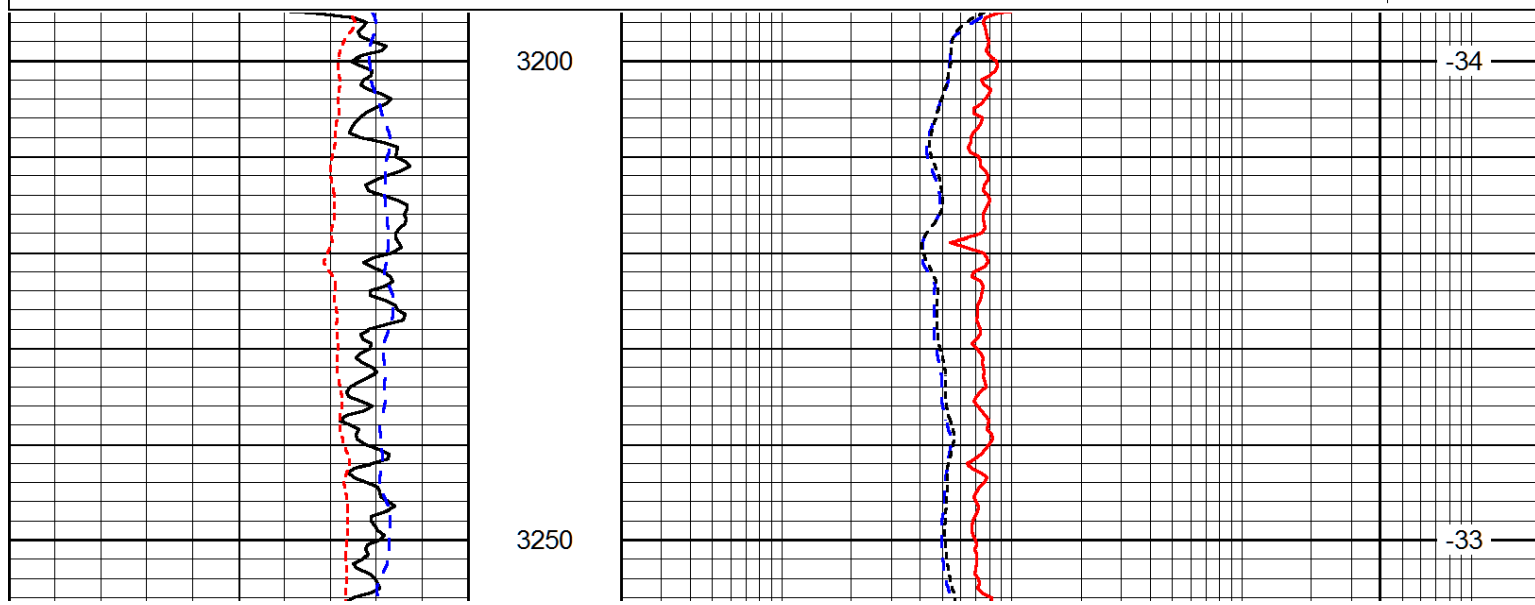
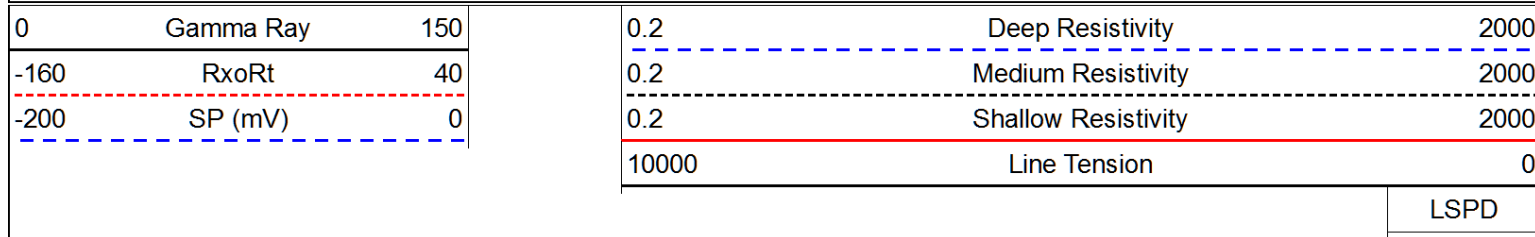


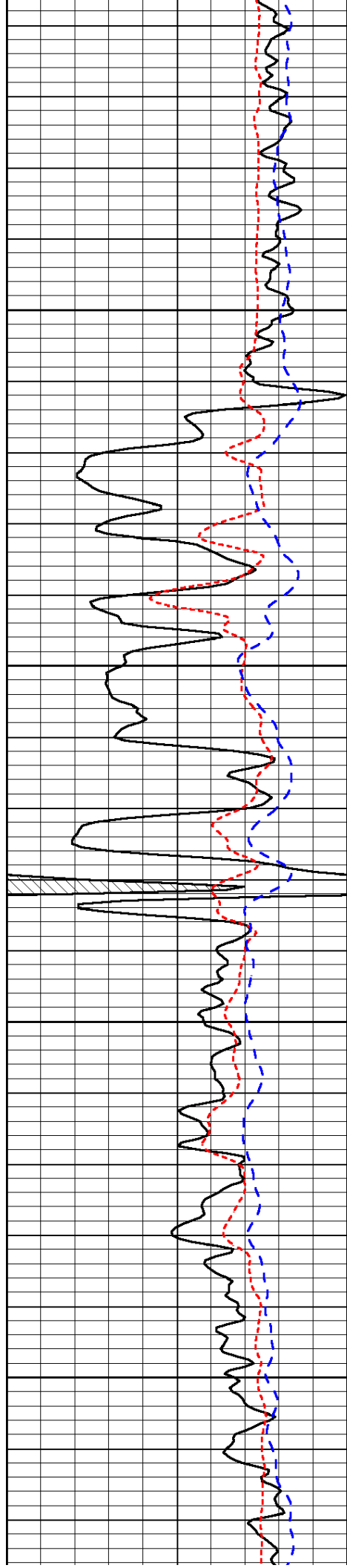






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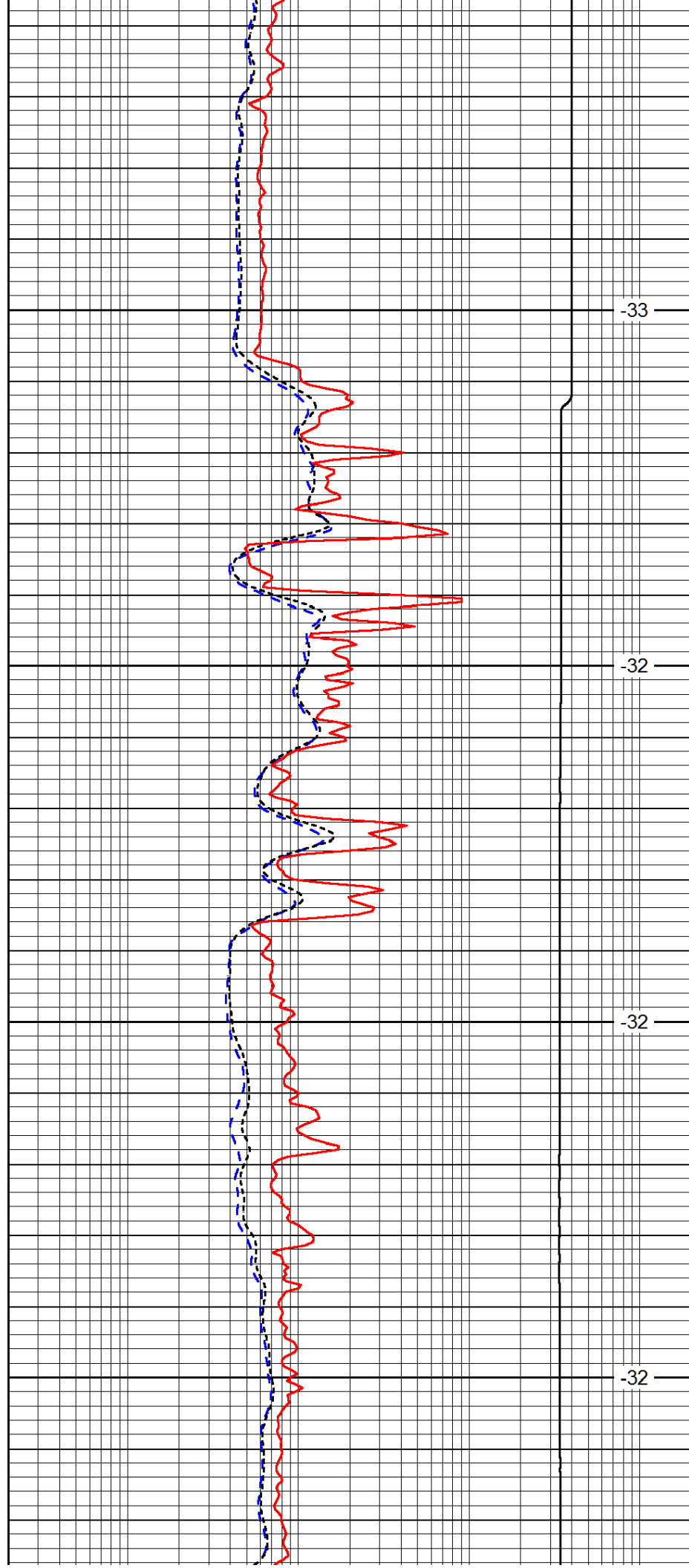


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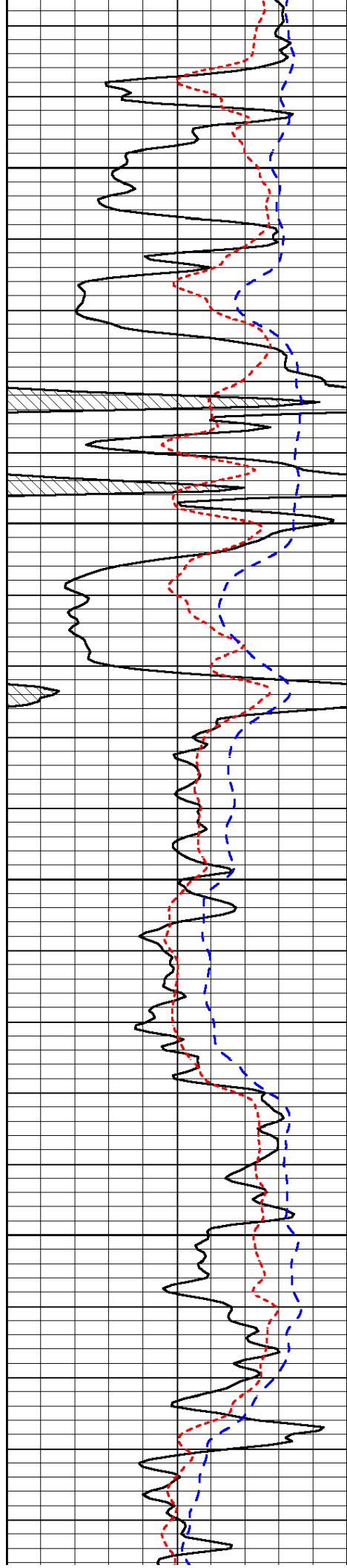


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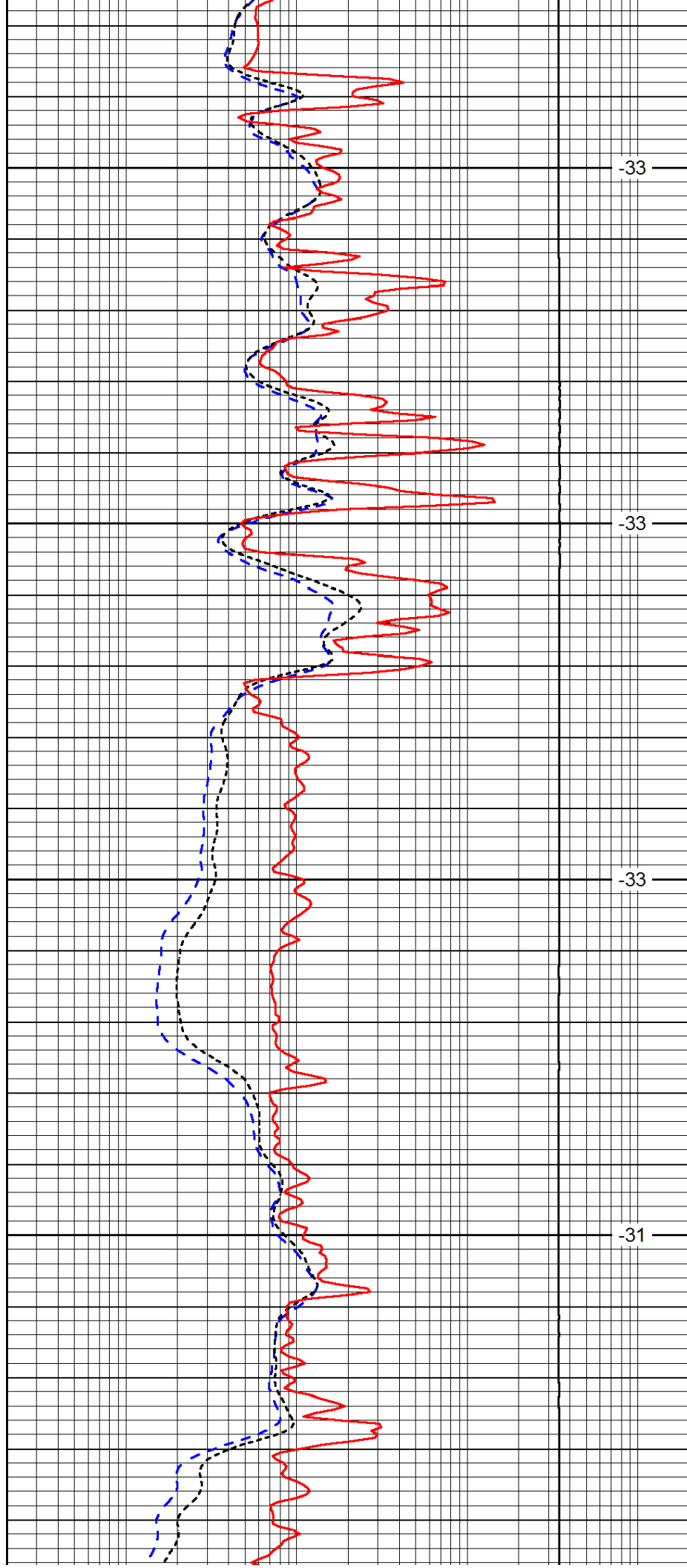


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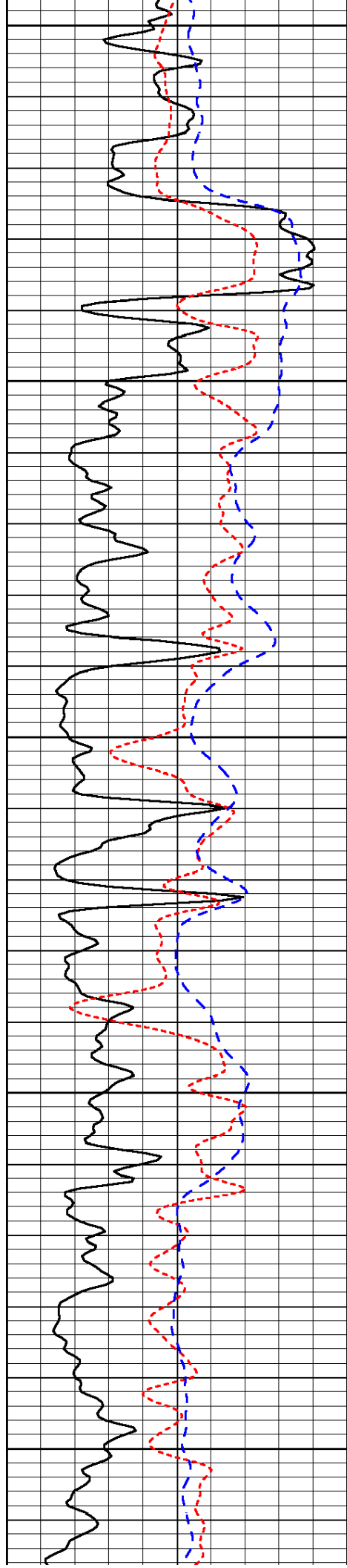


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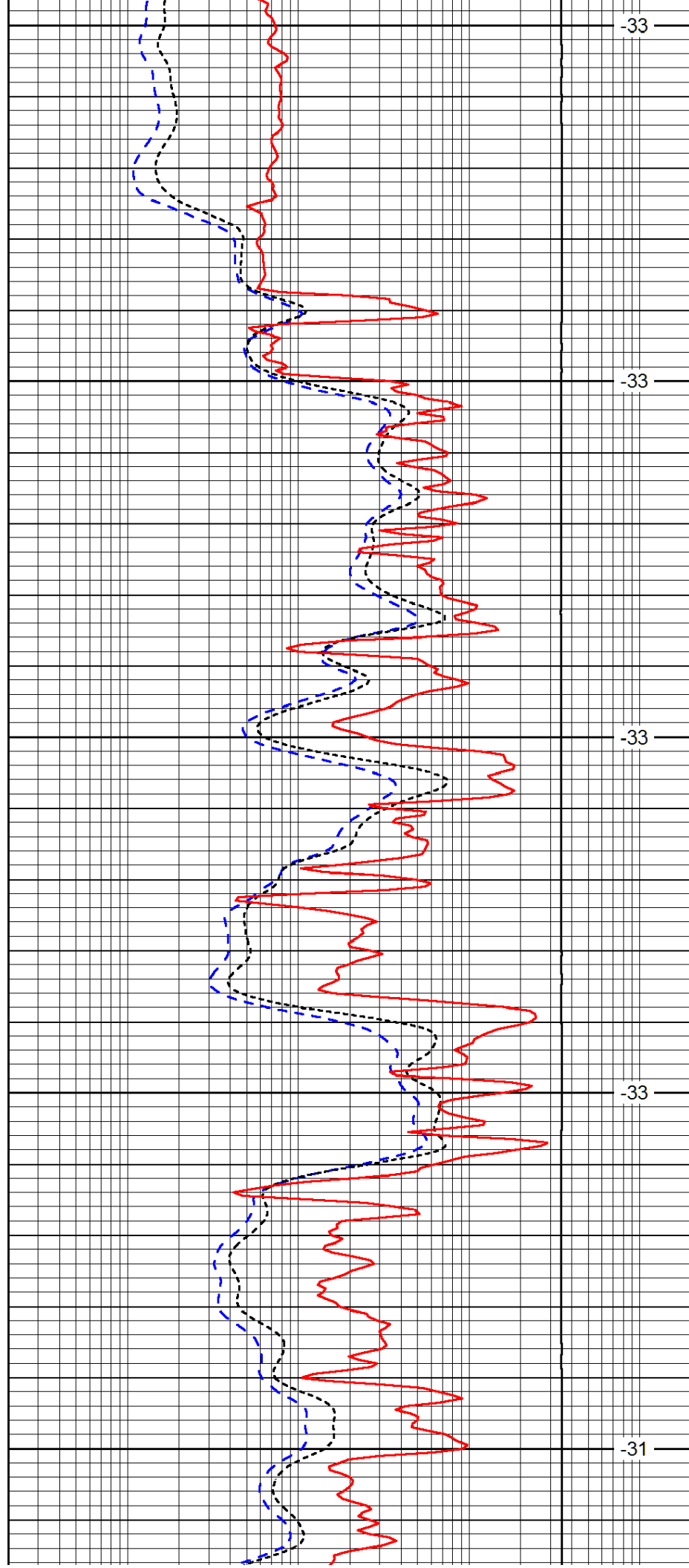
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3900



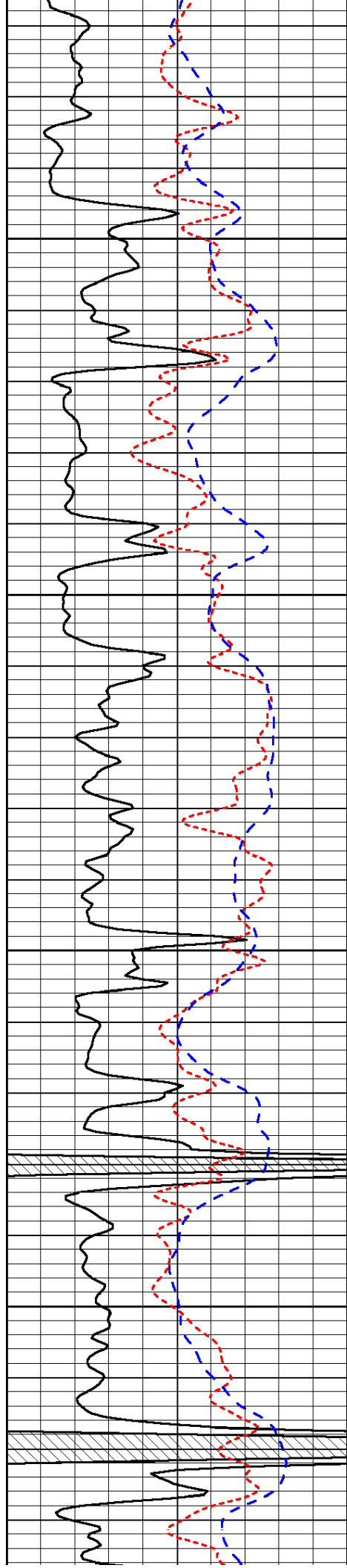
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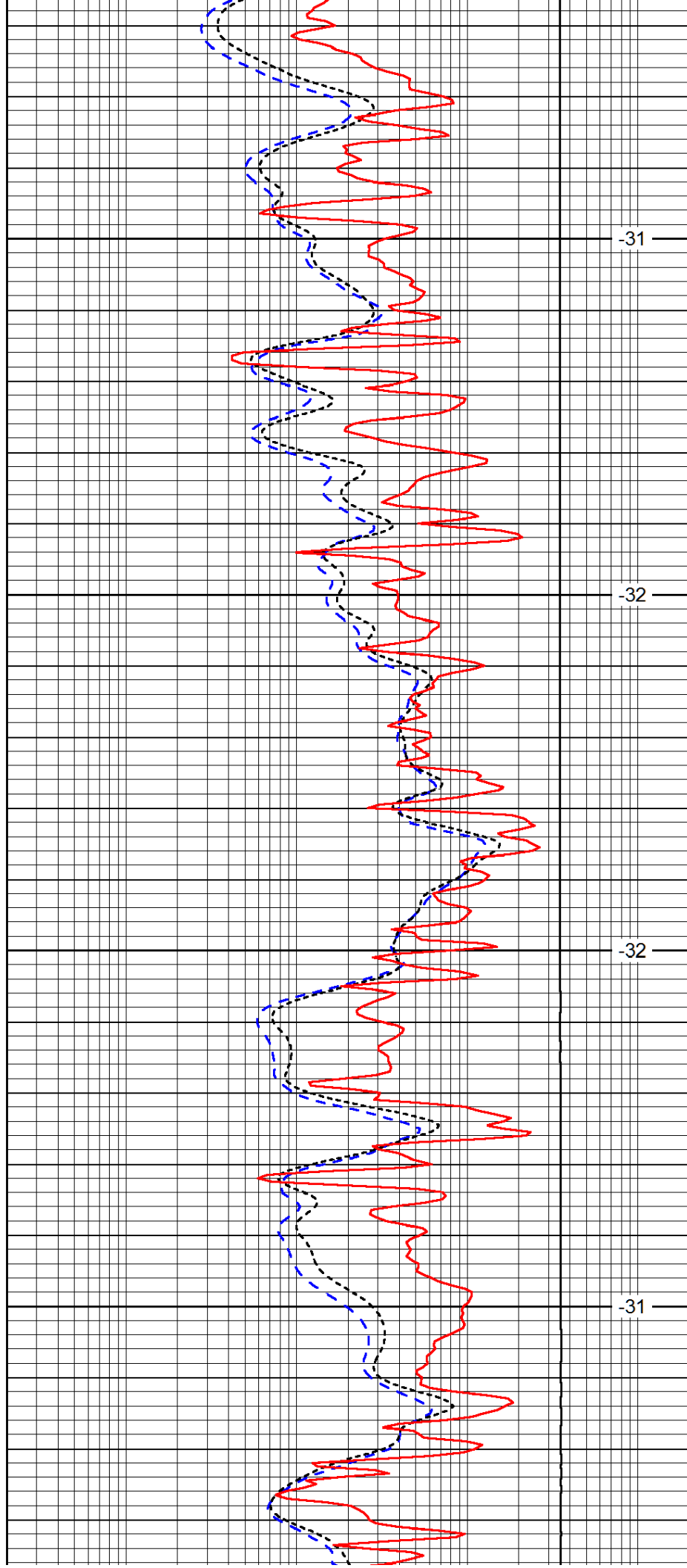


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4050

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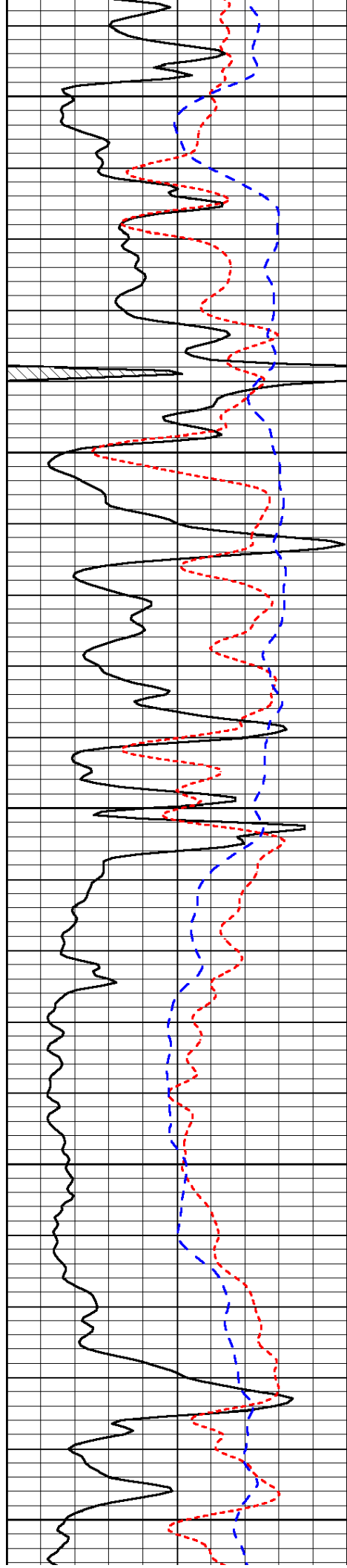


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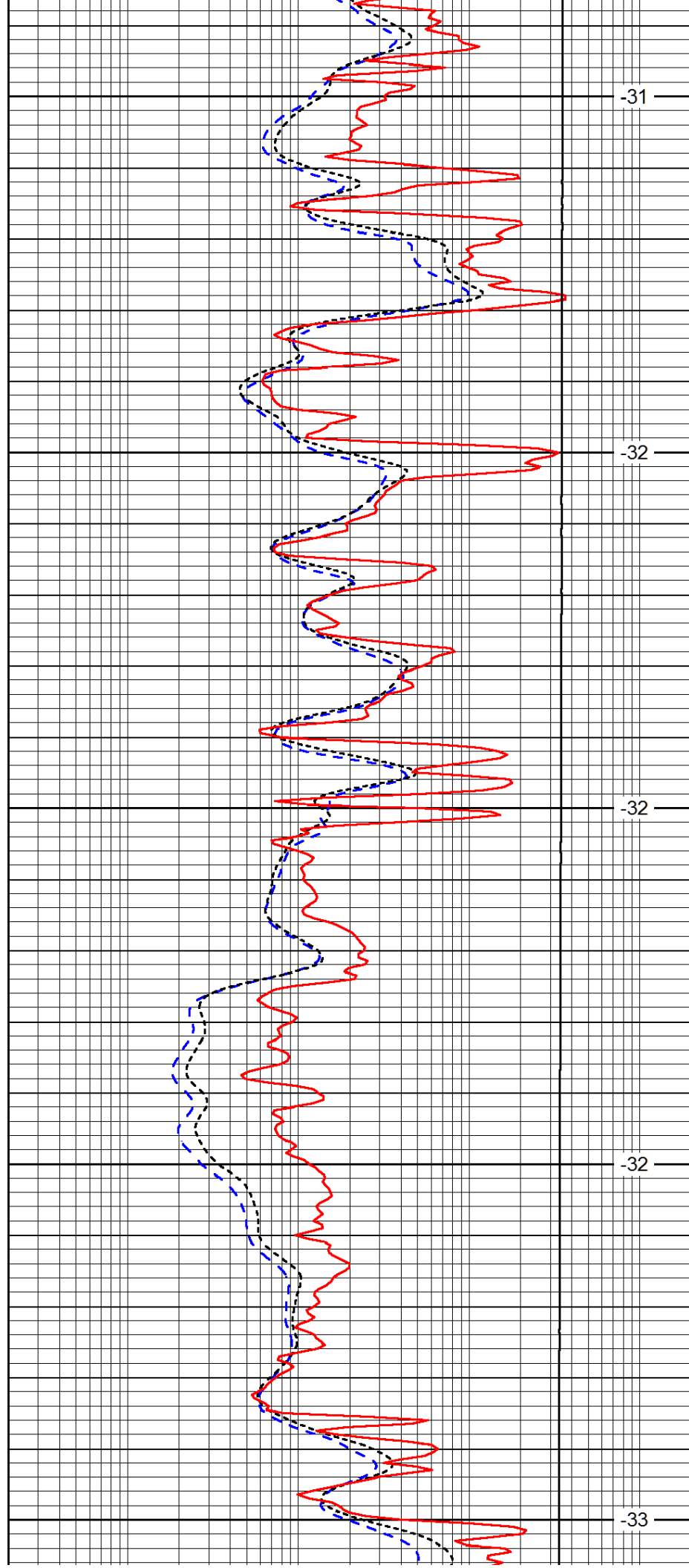
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4300

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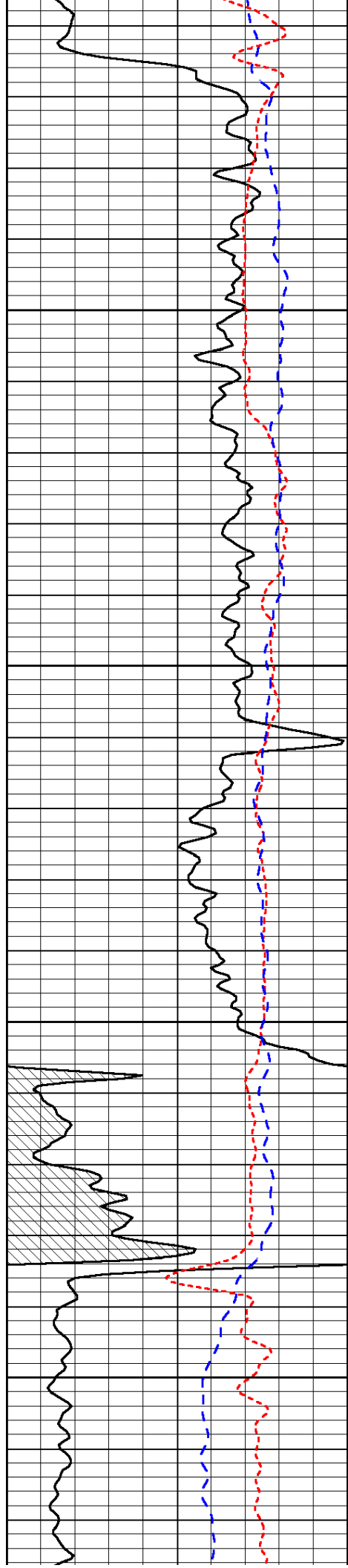
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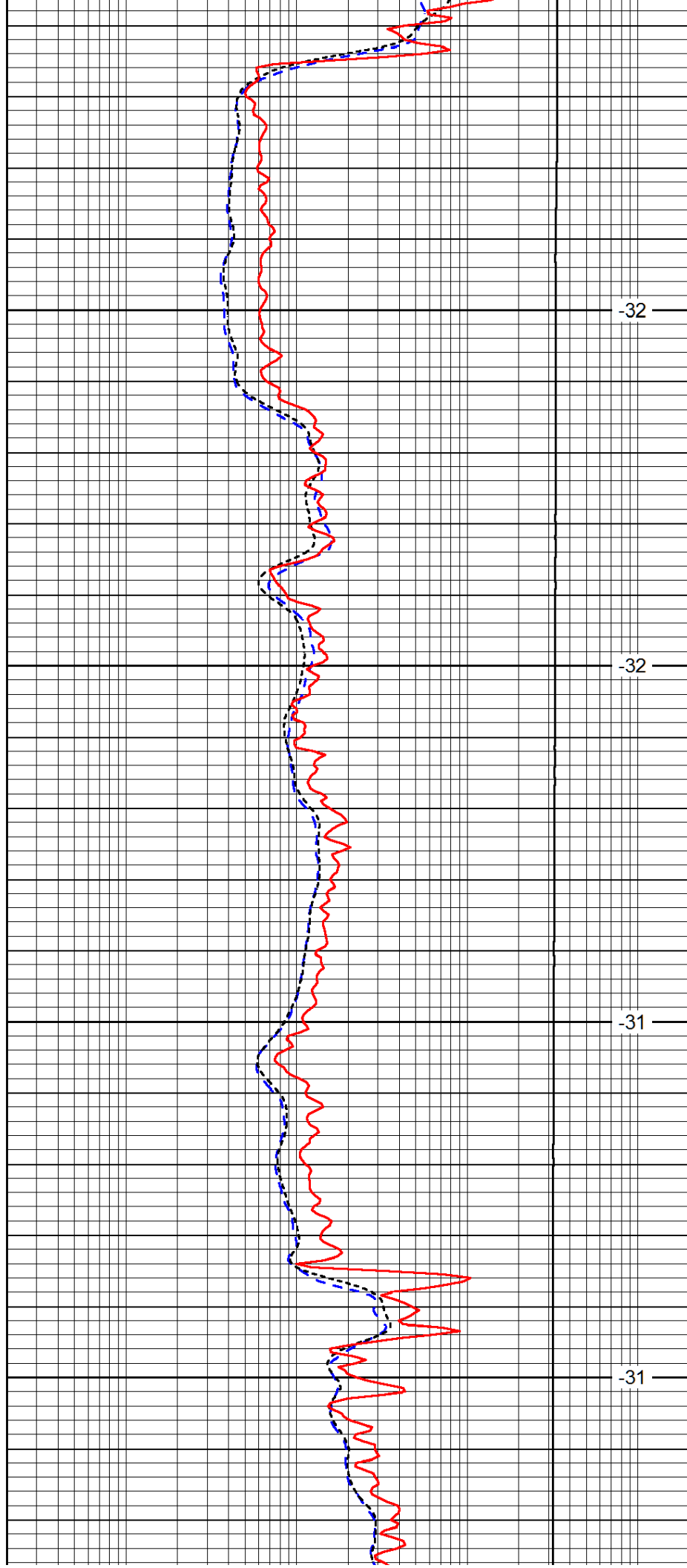


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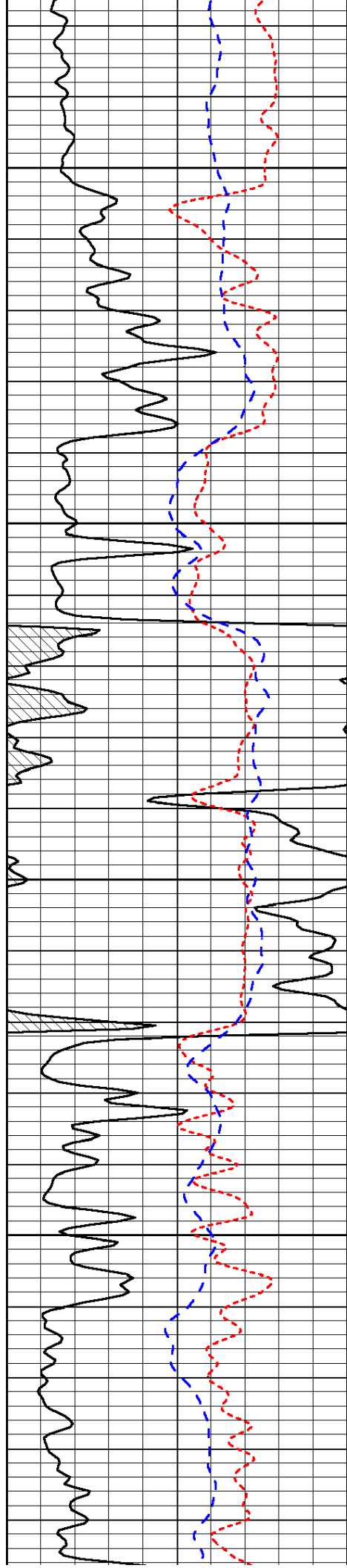


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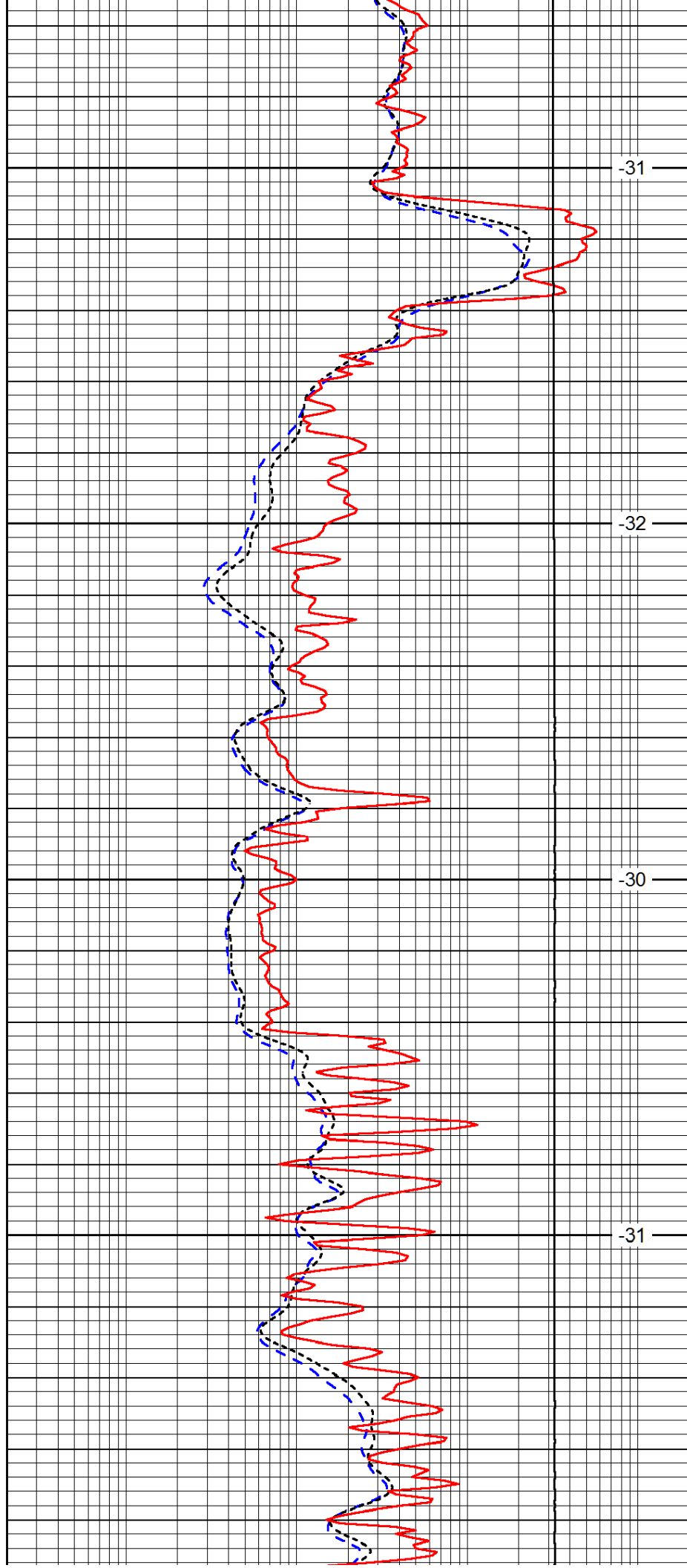


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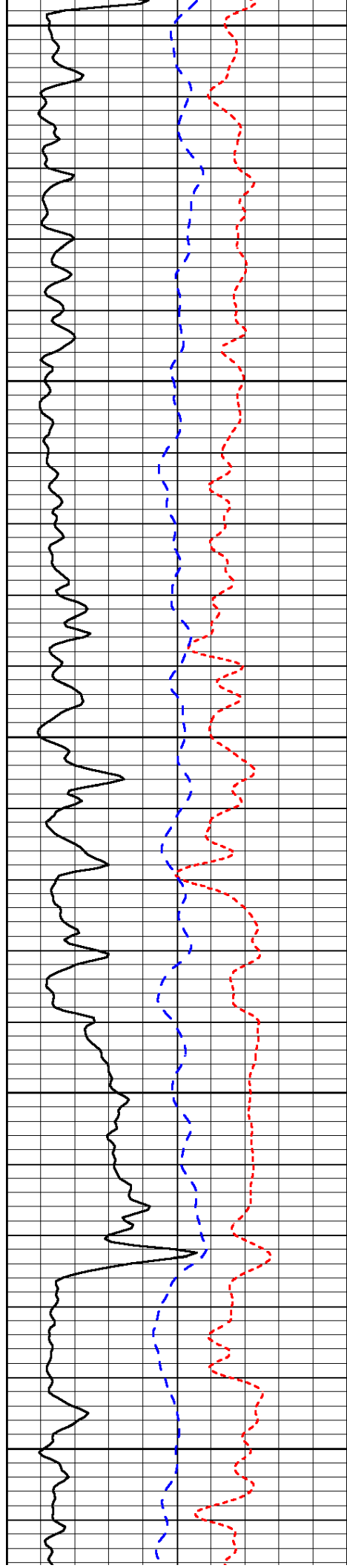


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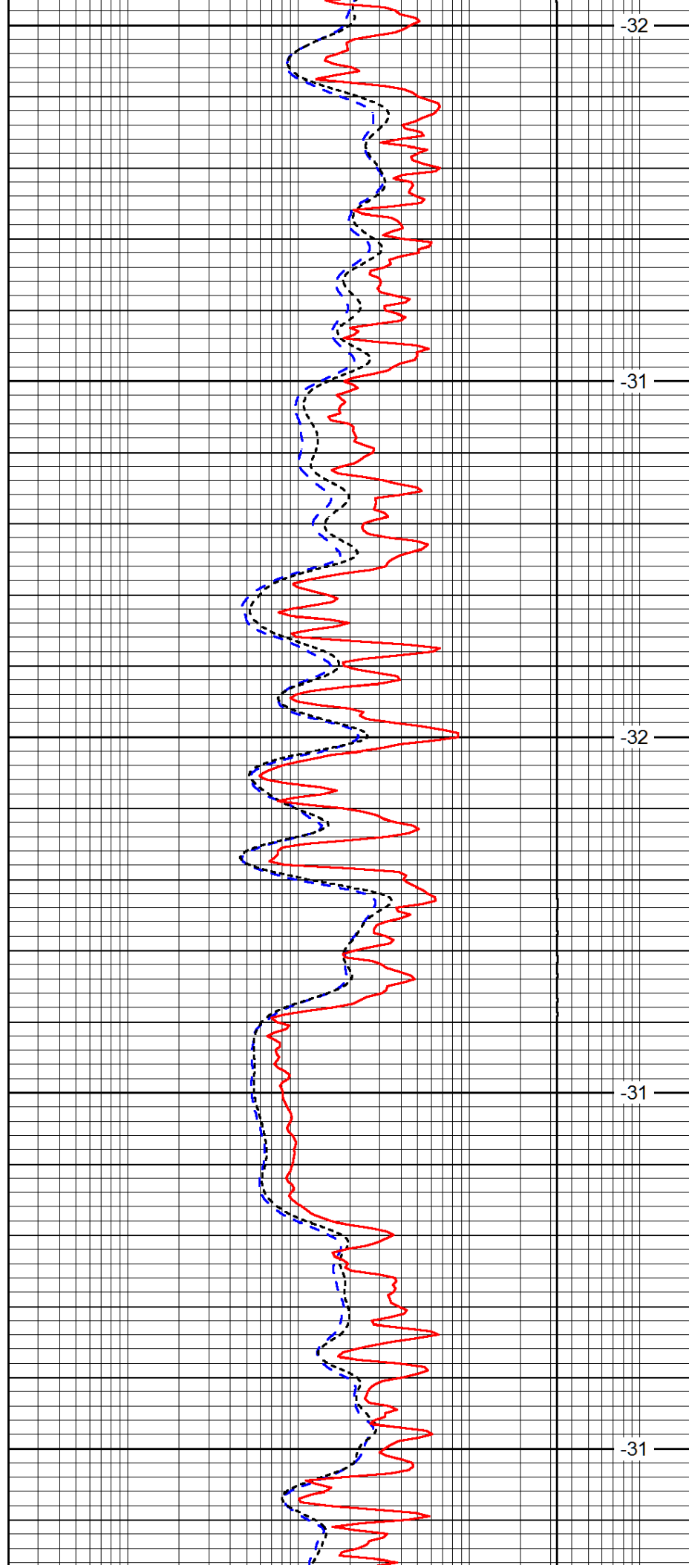
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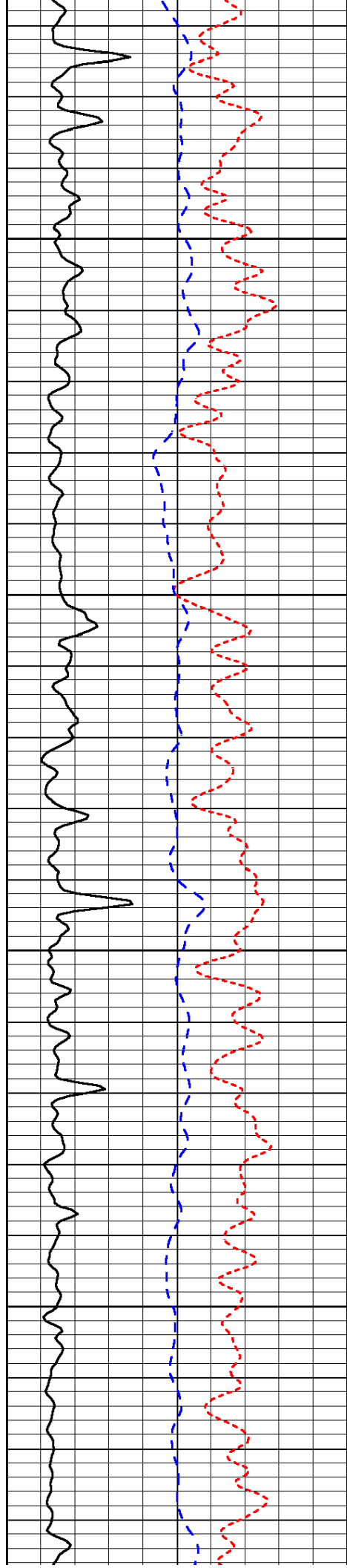
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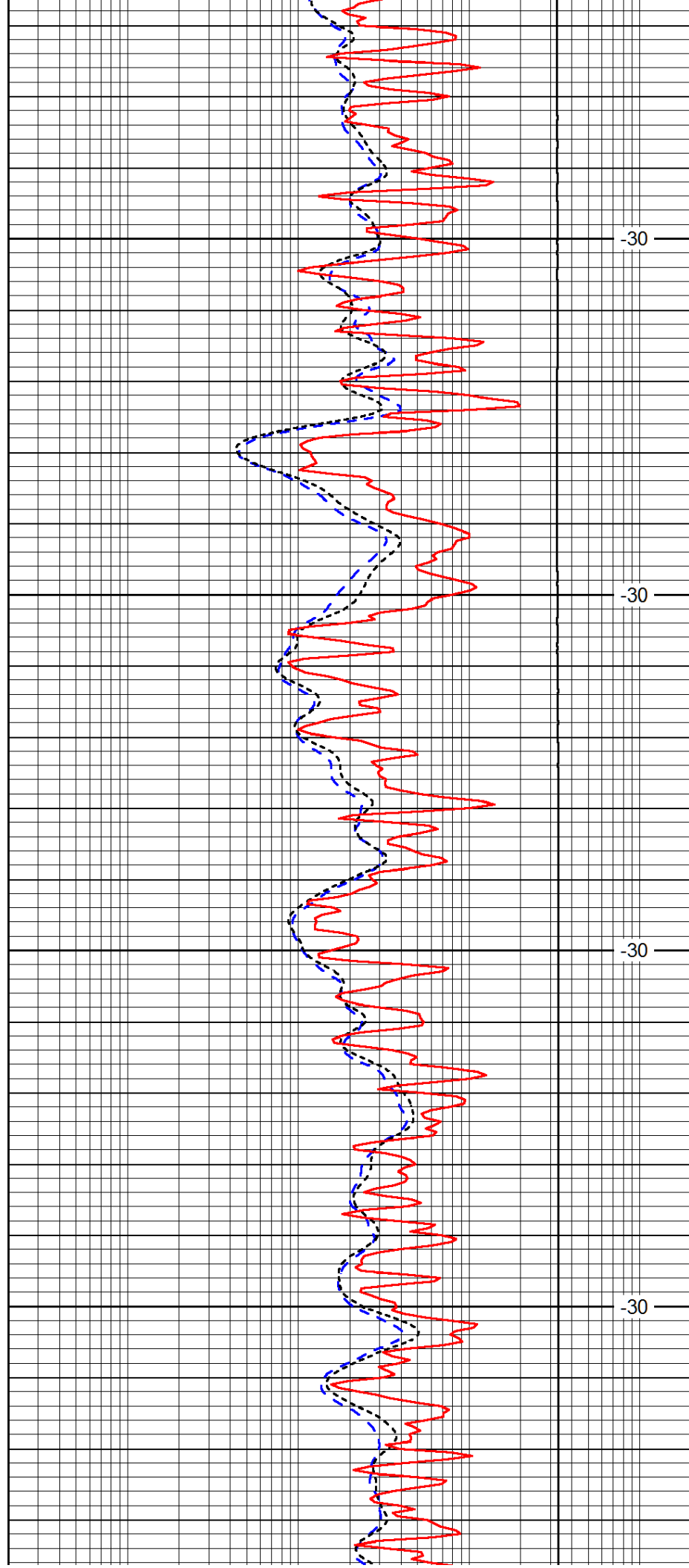


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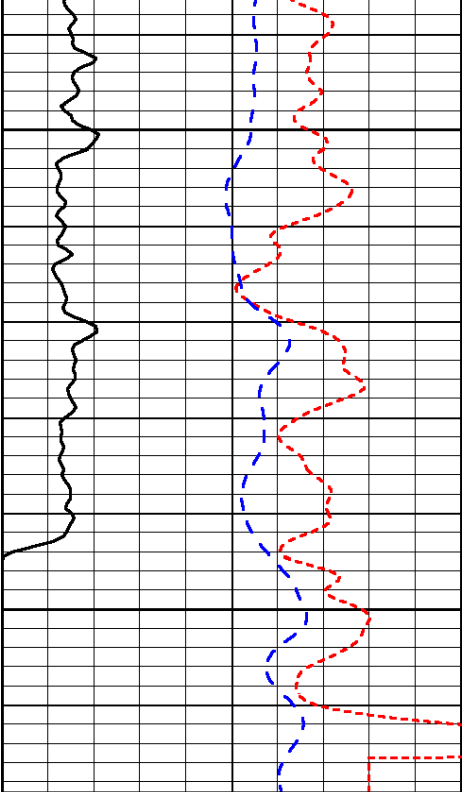


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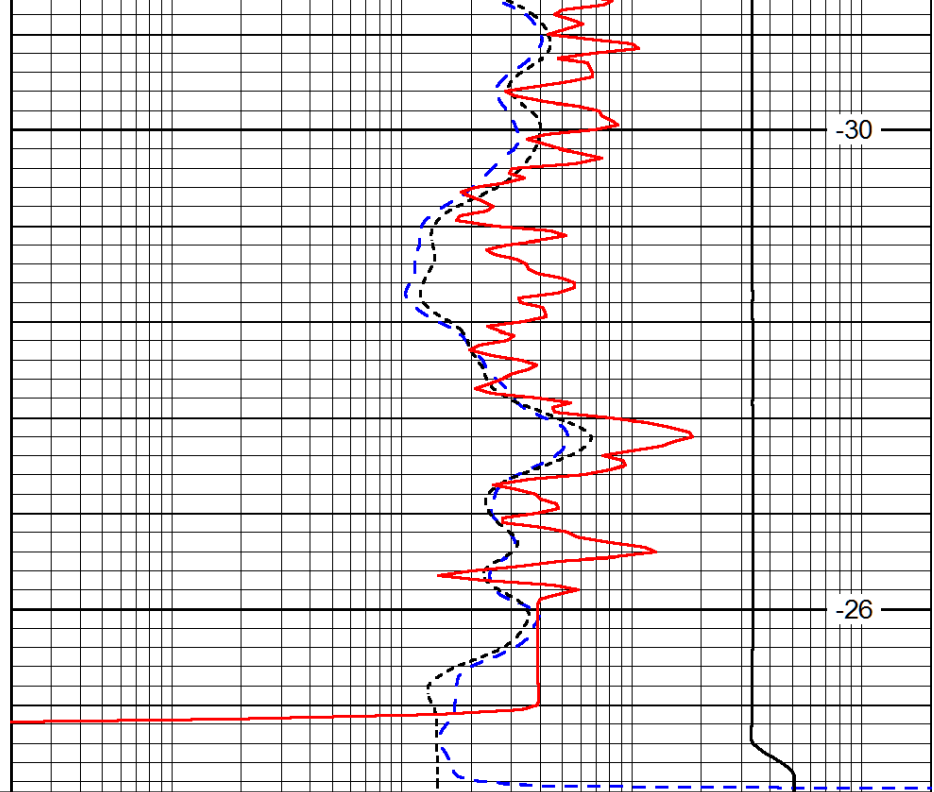
-30



0	Gamma Ray	150
-160	RxoRt	40
-200	SP (mV)	0

5250

5300



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

-30

-26

LSPD