



Dual Induction Log

Pioneer Energy Services

API No.

15-007-22,122-00-00

Company R&B Oil & Gas, Inc.

Well Culver 'A' #3

Field Spivey-Grabs

County Harper

State

Kansas

Location

2170' FNL & 660' FWL

Sec: 4

Twp: 31S

Rge: 8W

Other Services
CNL/CDL

Permanent Datum Ground Level Elevation 1663
Log Measured From Kelly Bushing 10 Ft. Above Perm. Datum
Drilling Measured Front Kelly Bushing

K.B. 1673
D.F. 1663
G.L. 1663

Date 12/10/2014

Run Number One

Depth Driller 4648

Depth Logger 4646

Bottom Logged Interval 4645

Top Log Interval 200

Casing Driller 8.625 @ 249

Casing Logger 246

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 3000

Density / Viscosity 9.2 65

pH / Fluid Loss 10.5 8.8

Source of Sample Flowline

Rm @ Meas. Temp .9 @ 55

Rmf @ Meas. Temp .68 @ 55

Rmc @ Meas. Temp 1.22 @ 55

Source of Rmf / Rmc Charts

Rm @ BHT .4 @ 122

Operating Rig Time 3 Hours

Max Rec. Temp. F 122

Equipment Number 15

Location Hays

Recorded By C. Desaire

Witnessed By Tim Pierce

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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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www.pioneerres.com
785 625 3858

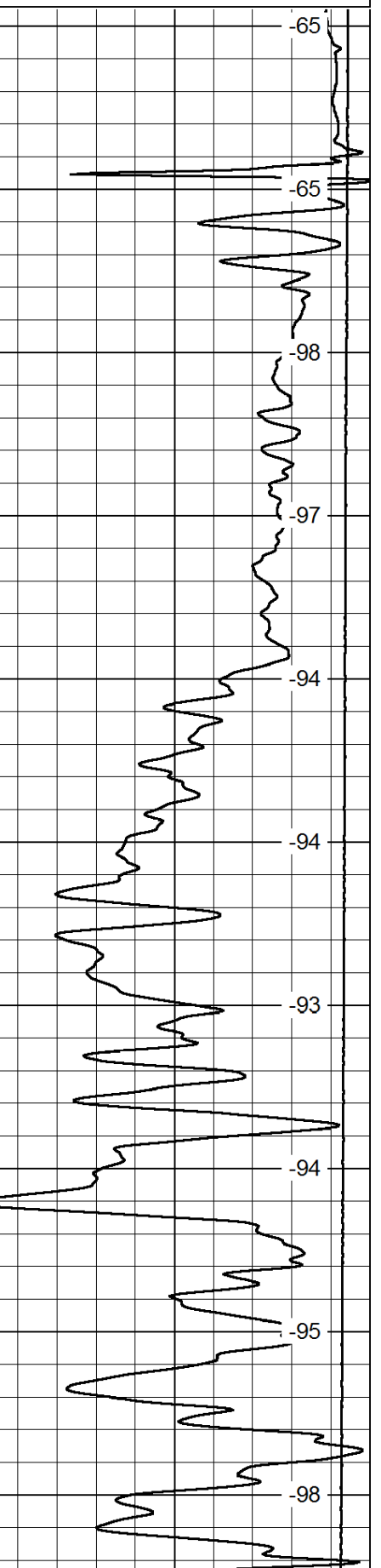
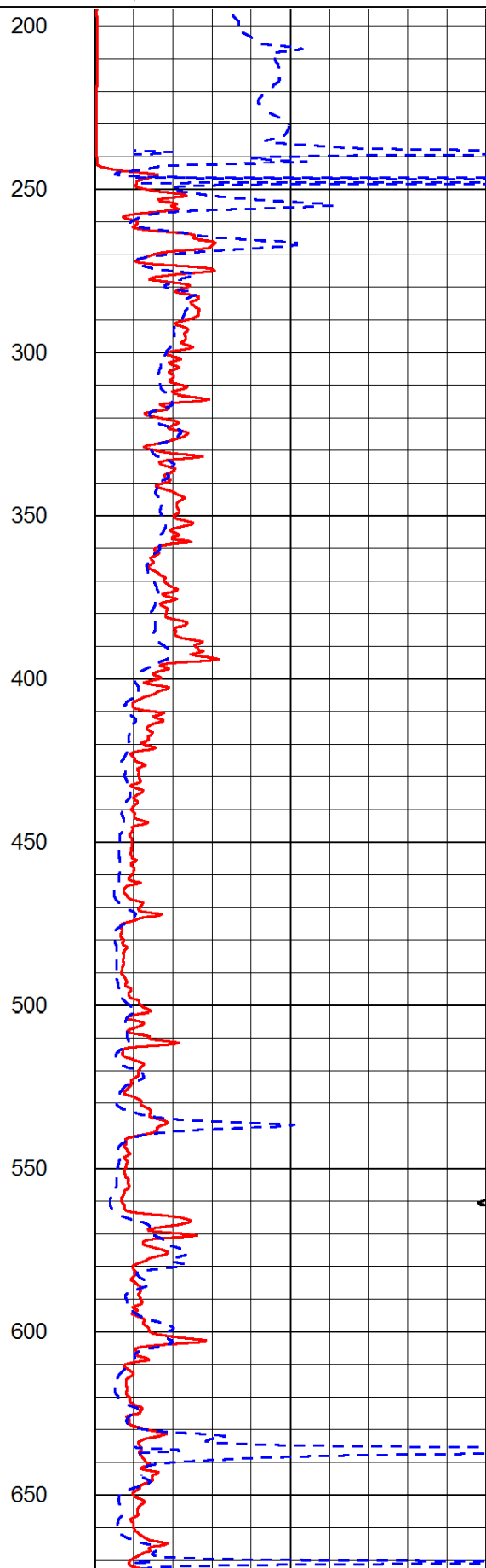
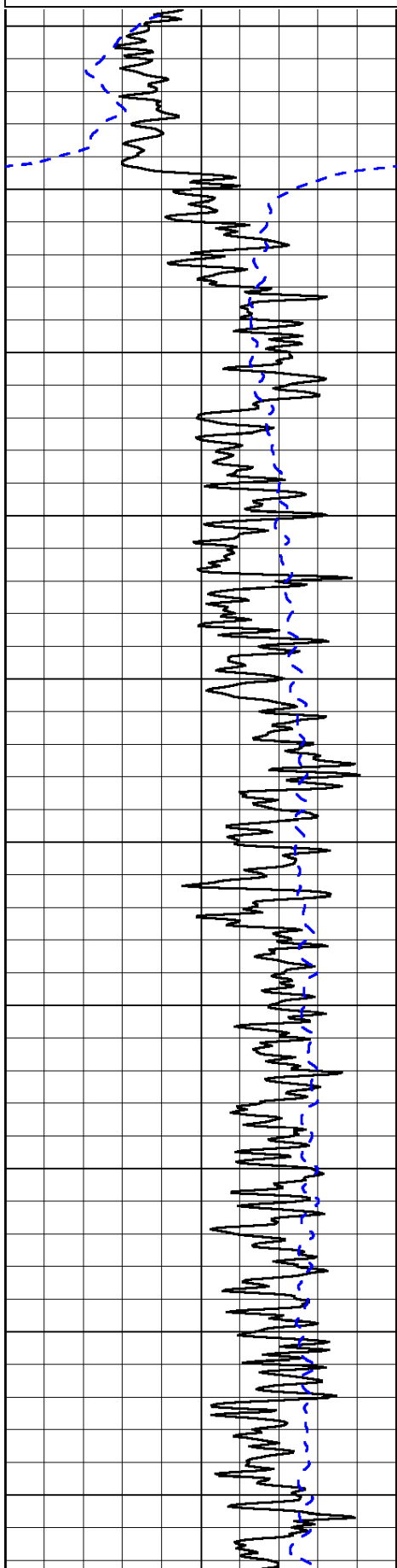
Zenda KS, 5 S to NW 150th, 4 E,
5/8 N, E Into

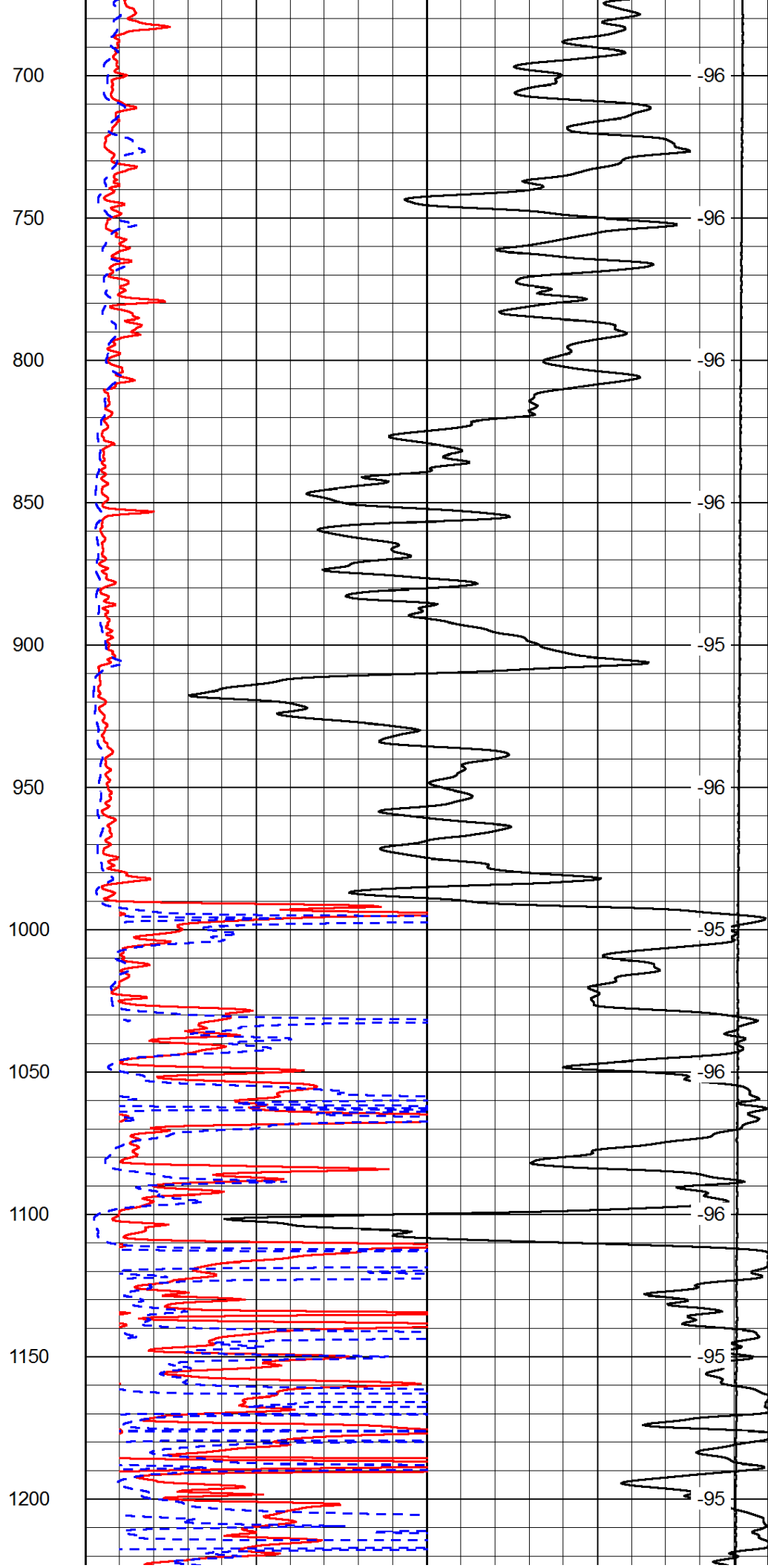
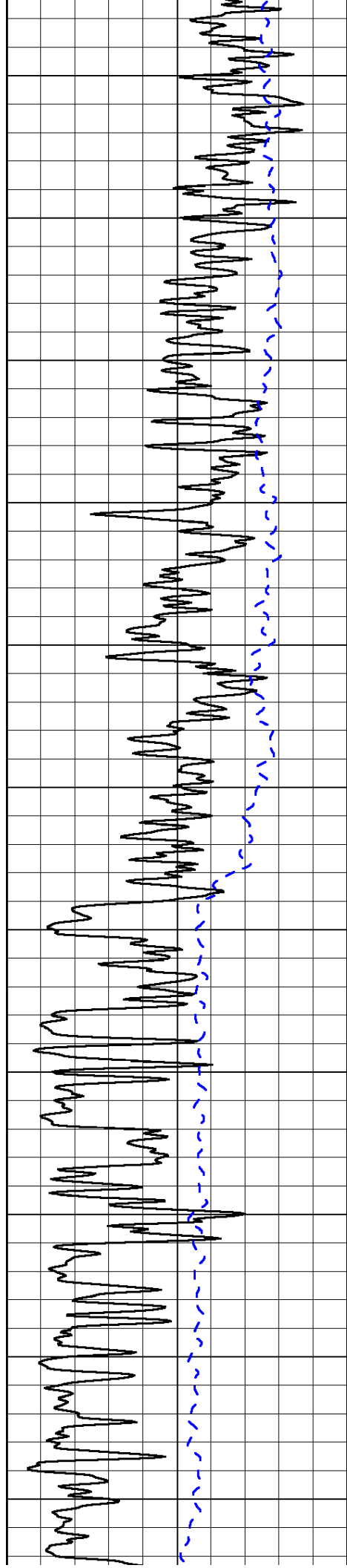
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Dataset Creation: Wed Dec 10 11:45:47 2014
Charted by: Depth in Feet scaled 1:600

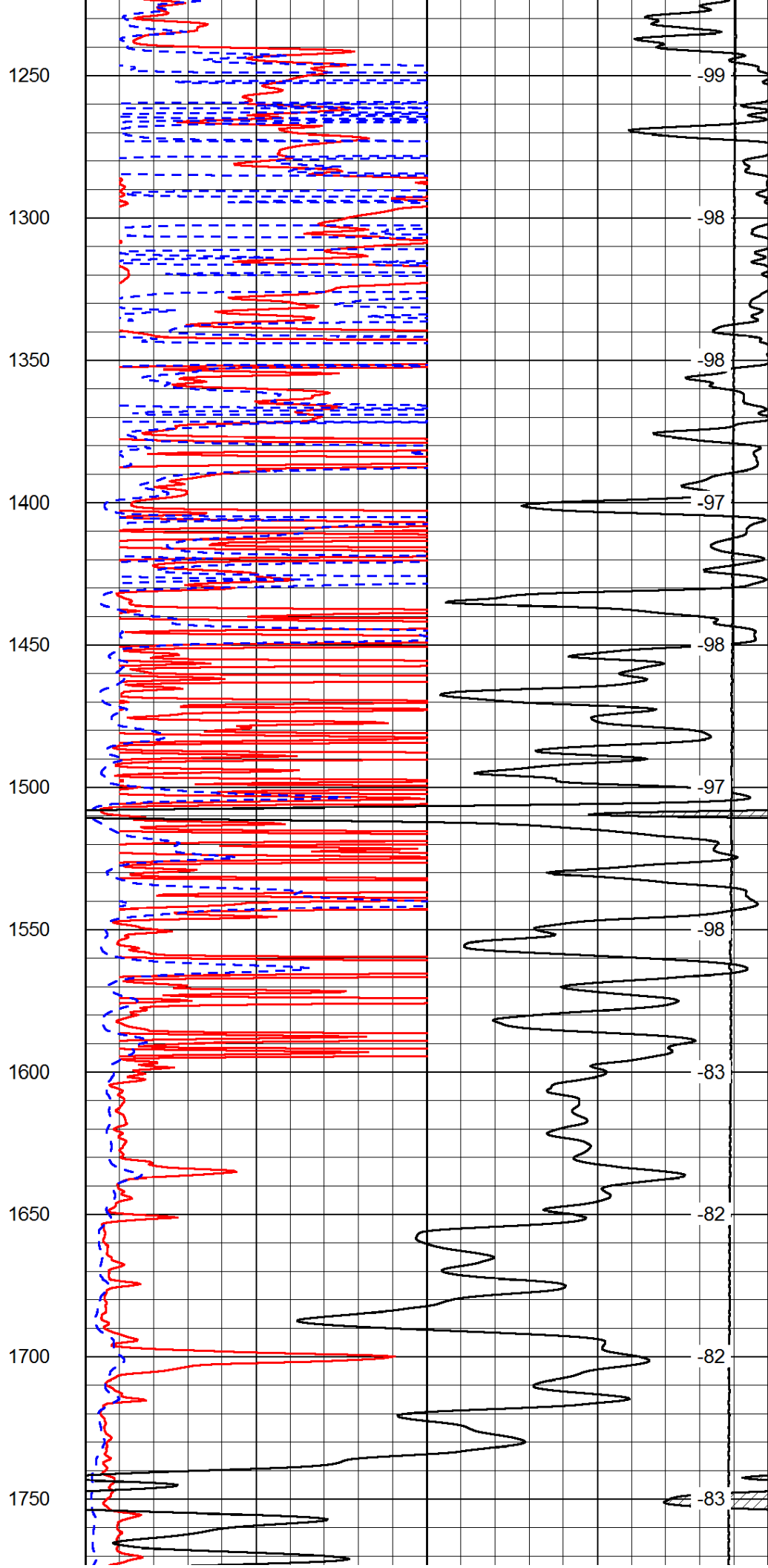
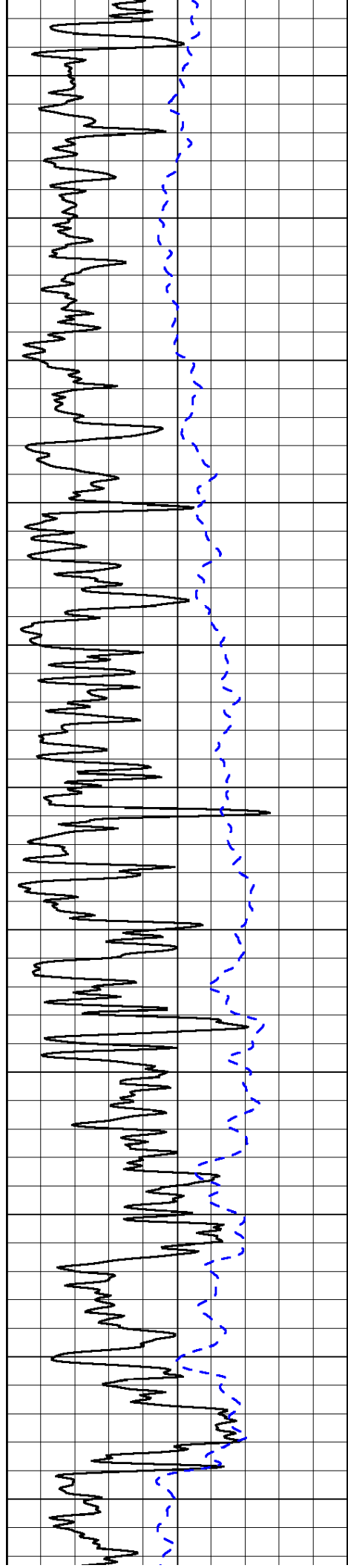
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-200	SP (mV)	0

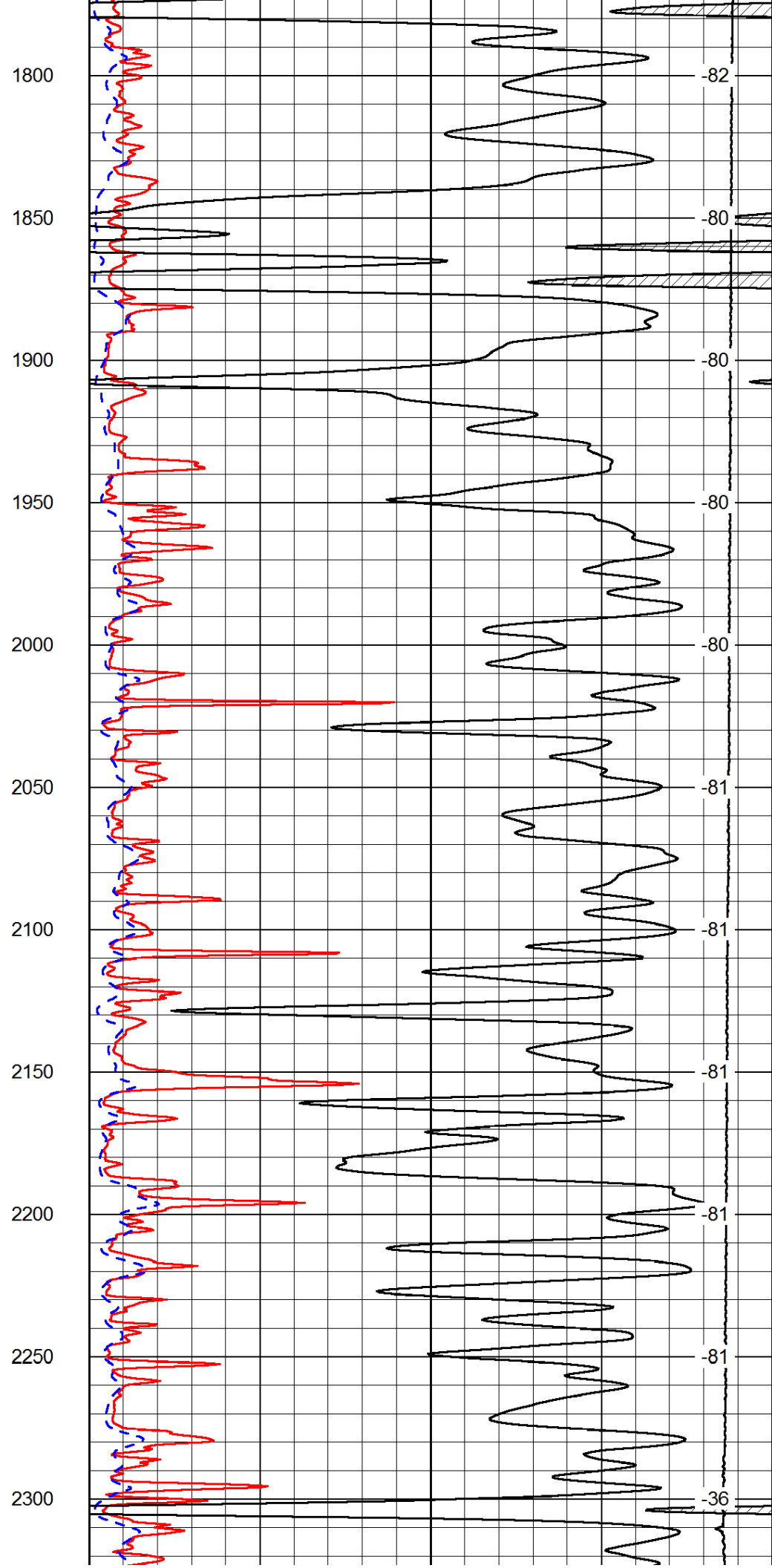
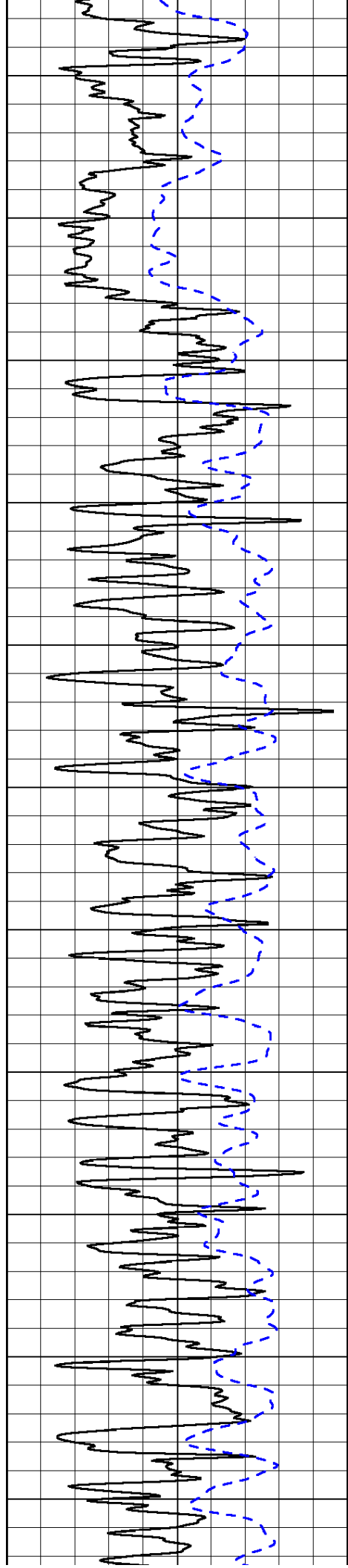
0	Shallow Resistivity	50
0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

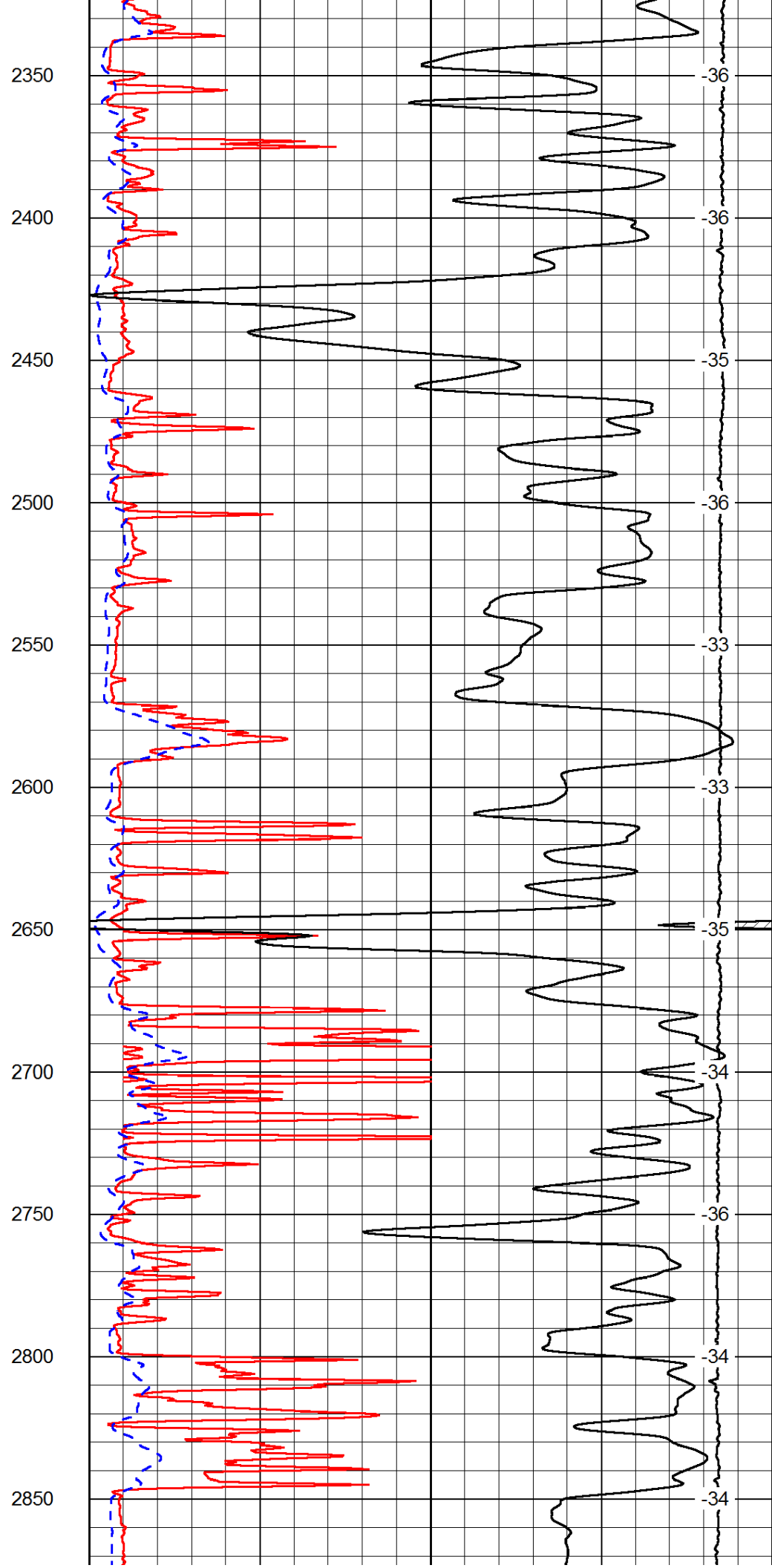
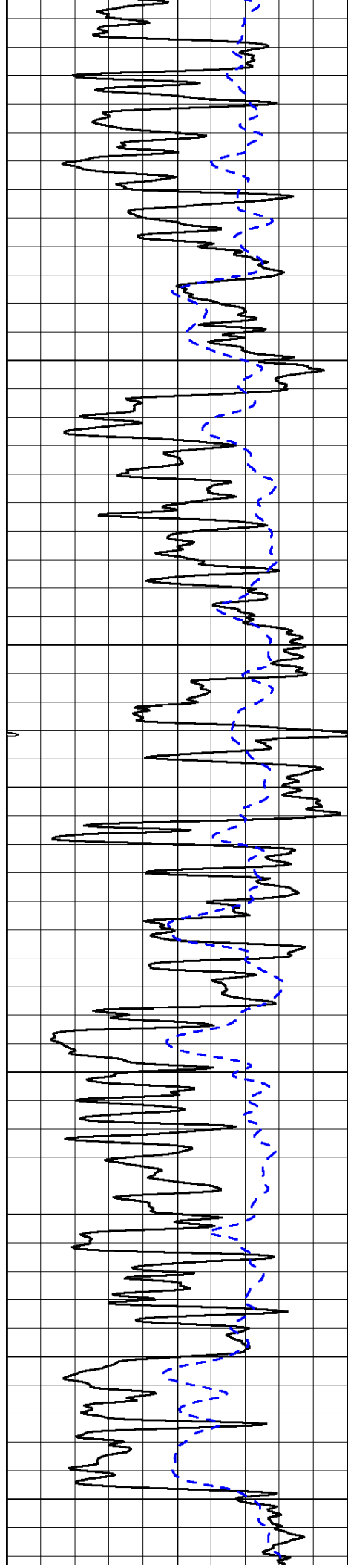
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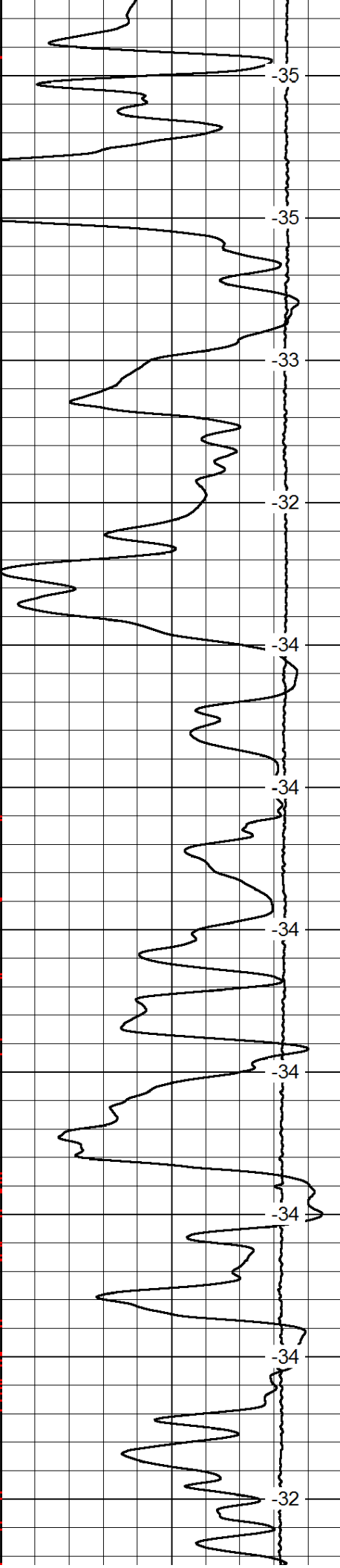
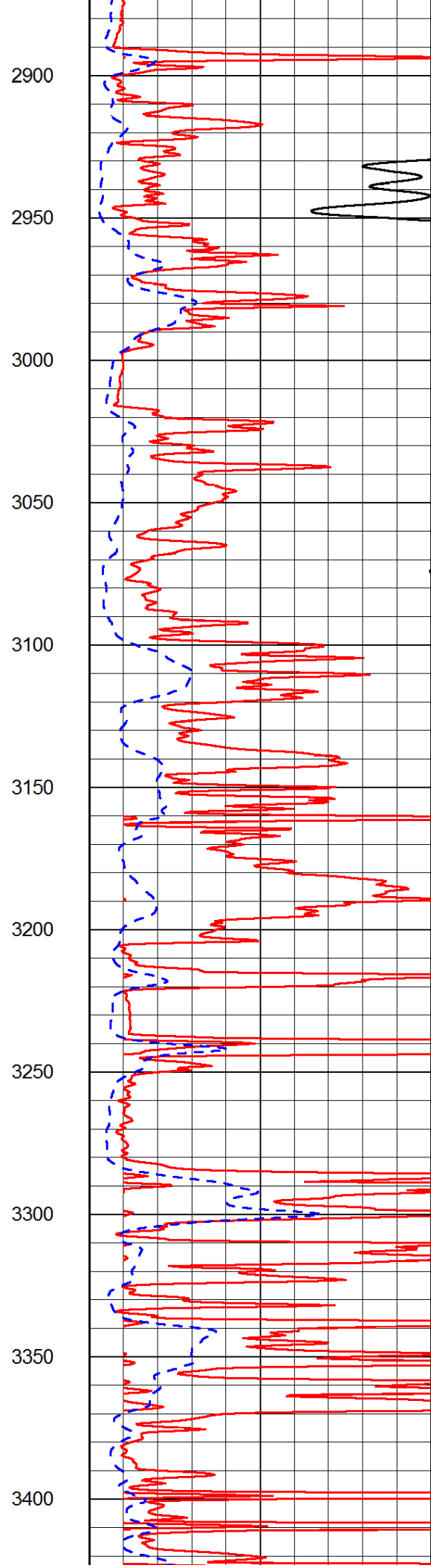
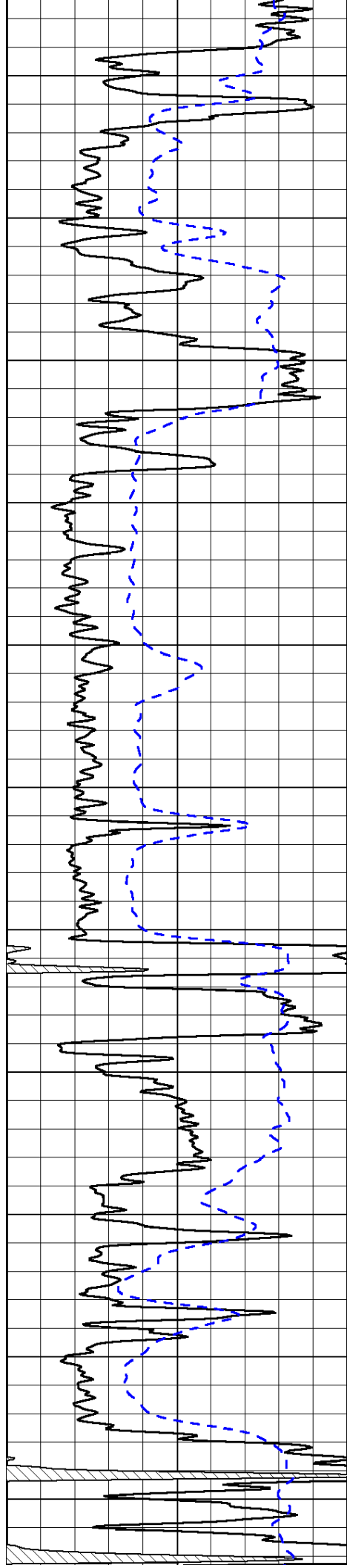


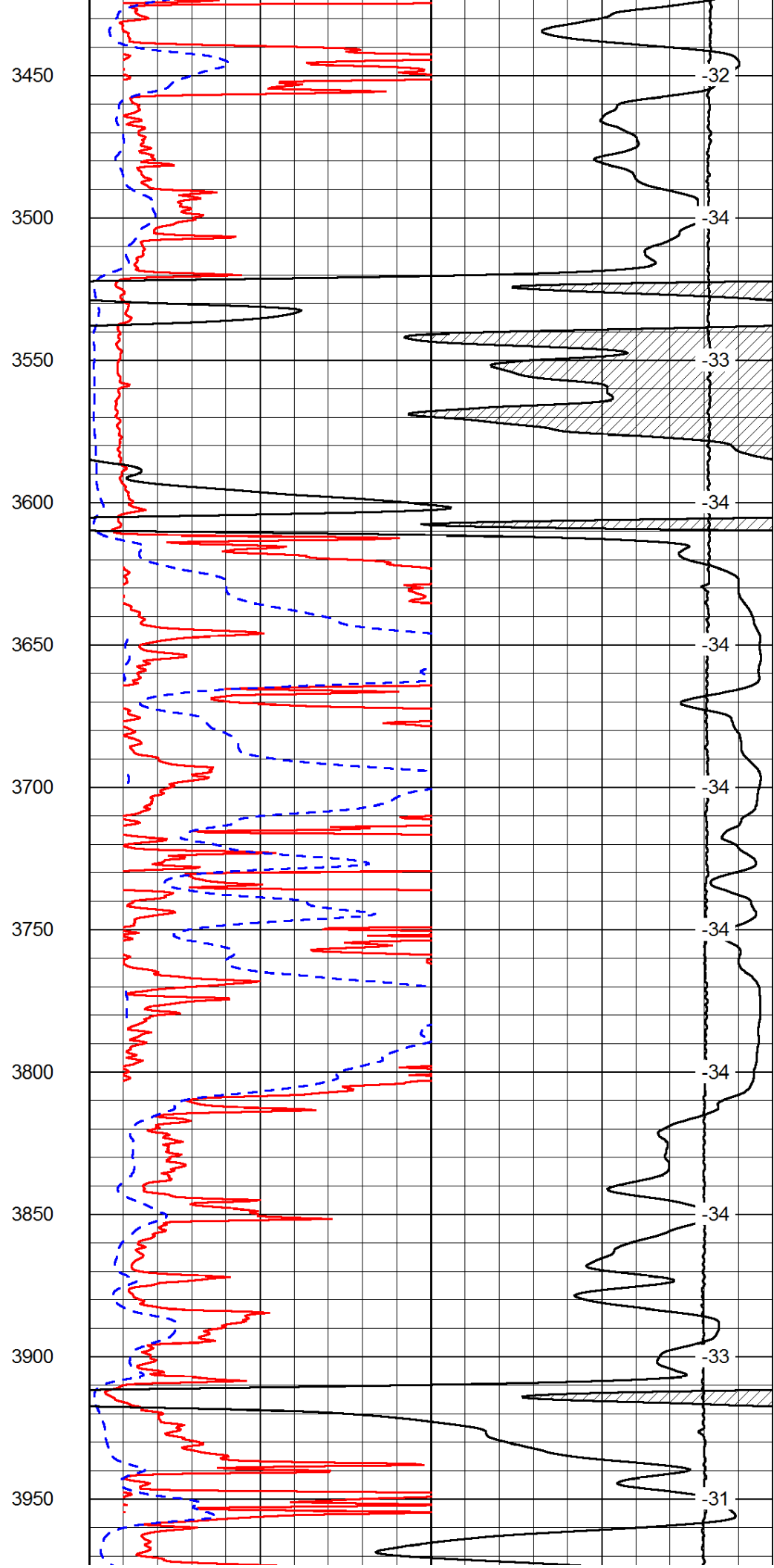
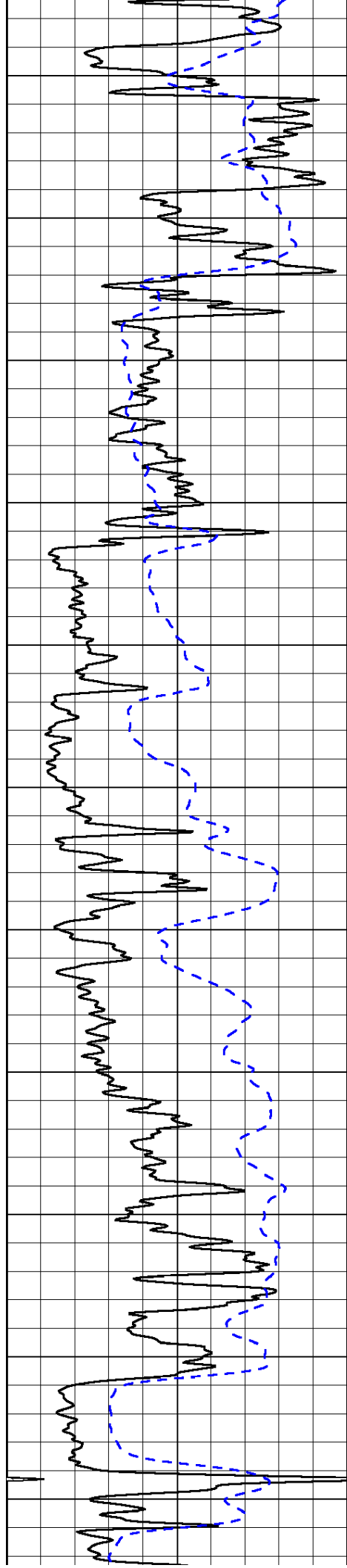


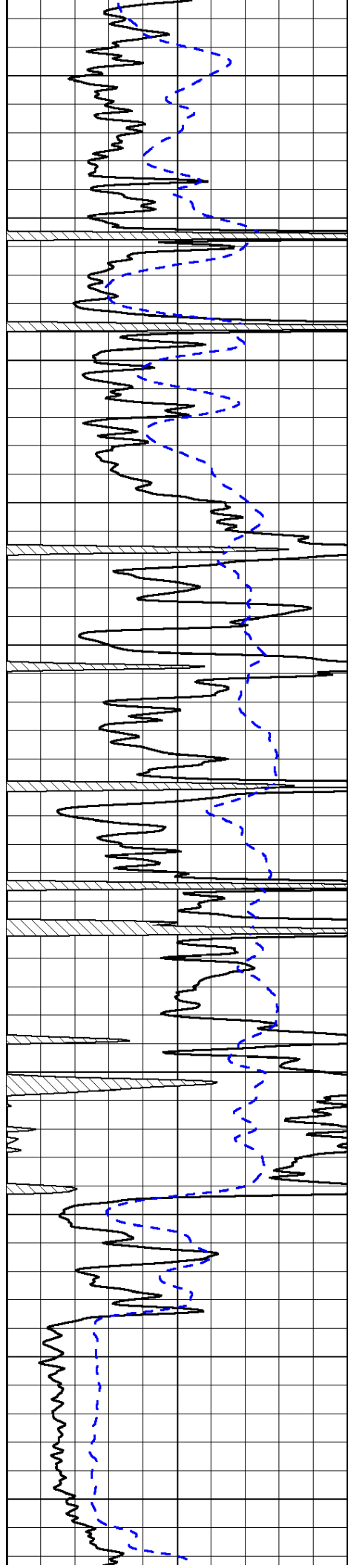












4000

4050

4100

4150

4200

4250

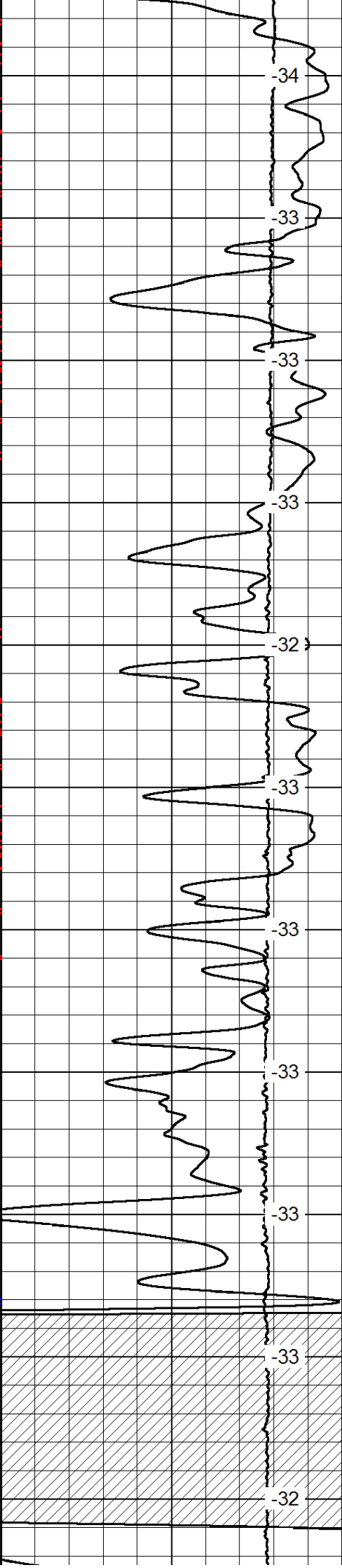
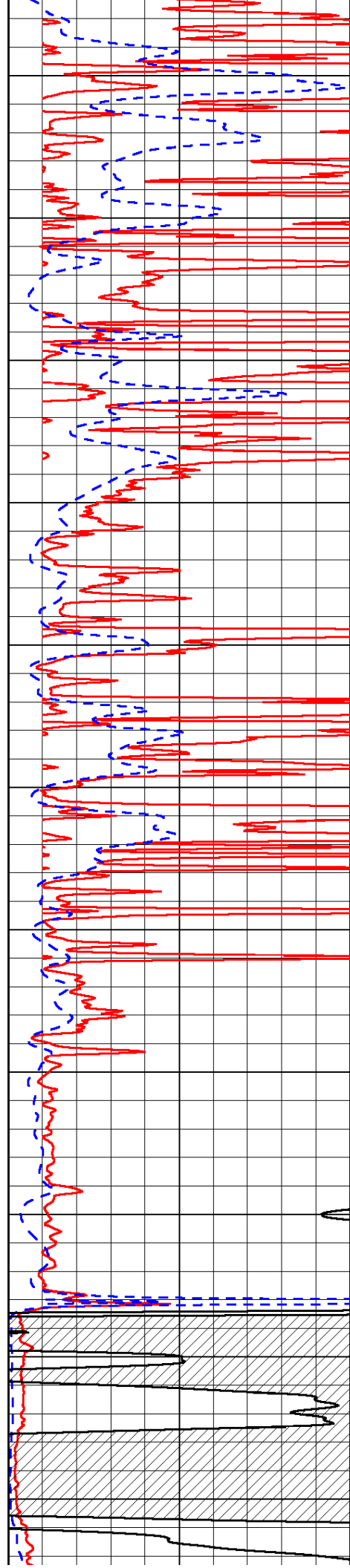
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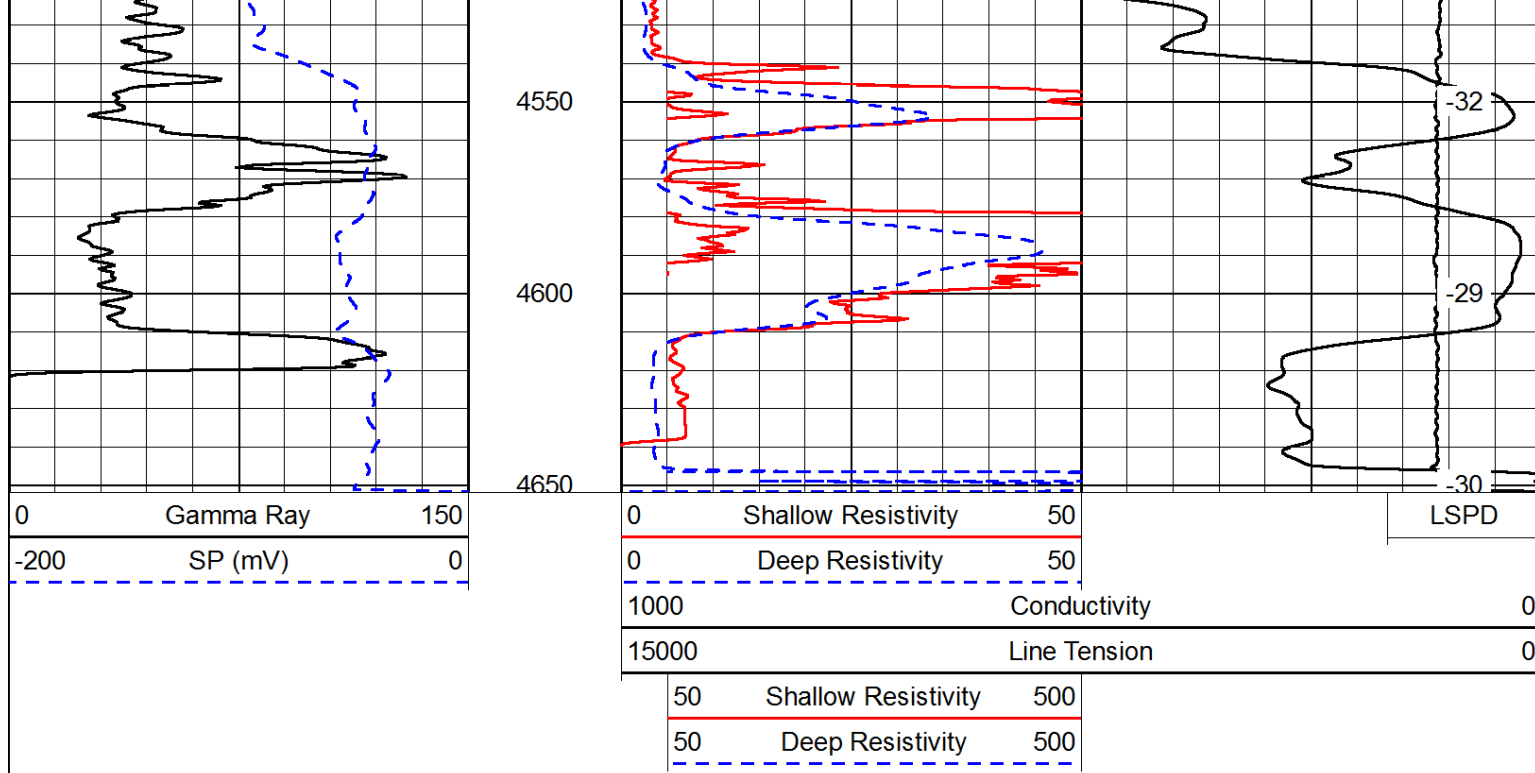
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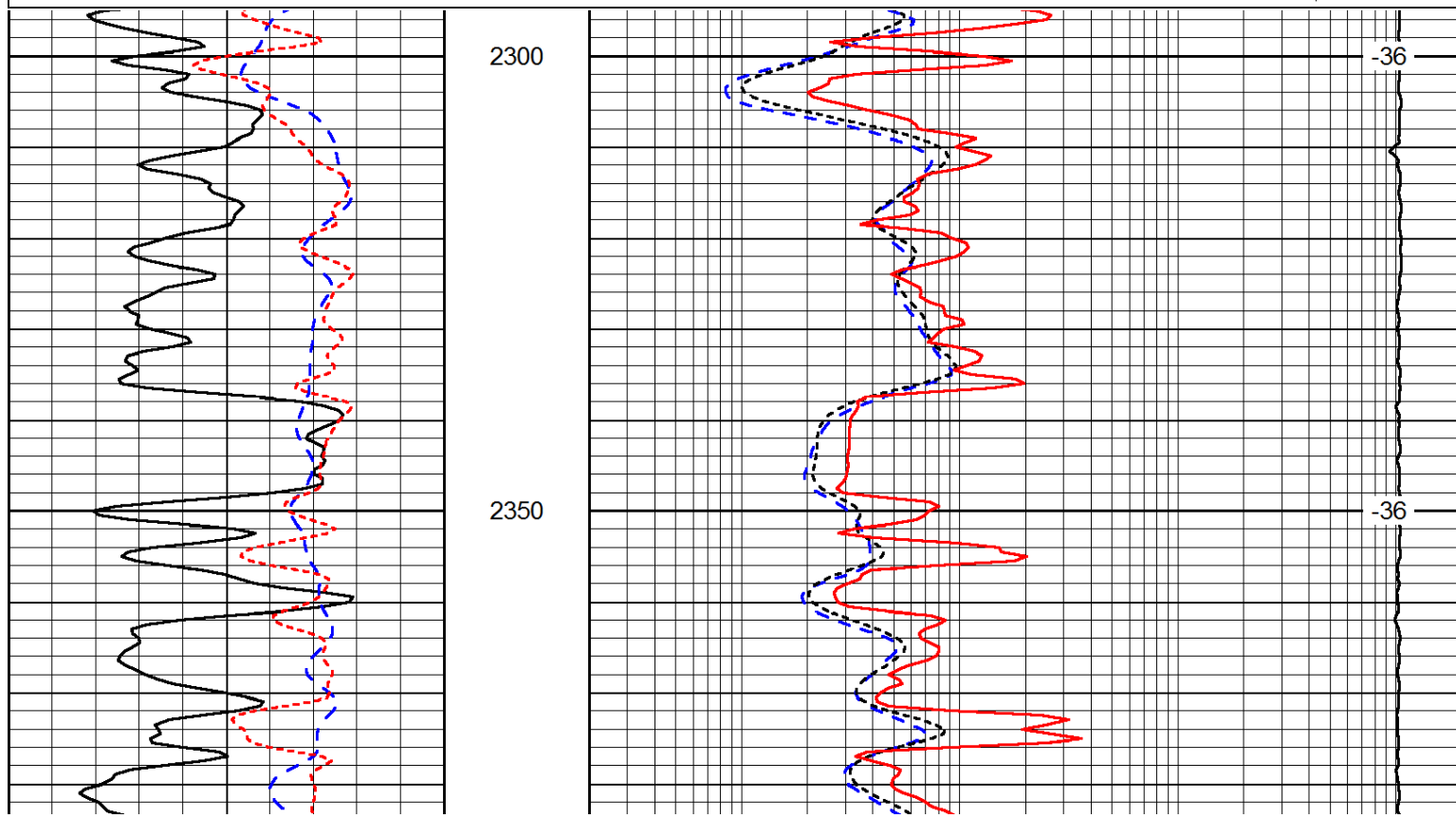
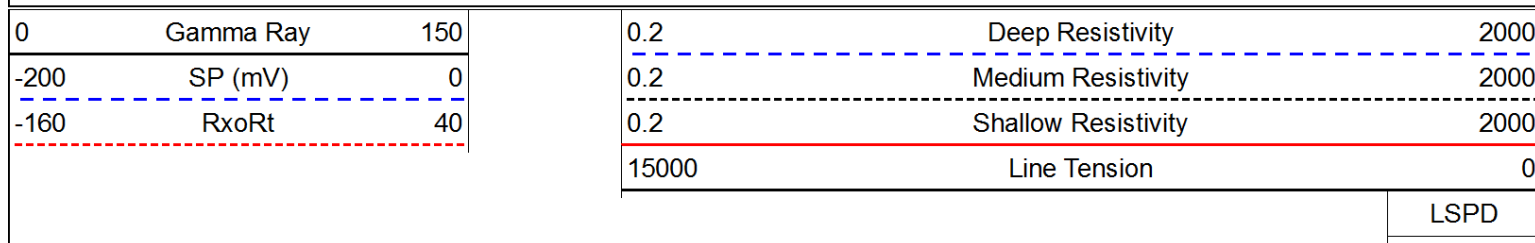
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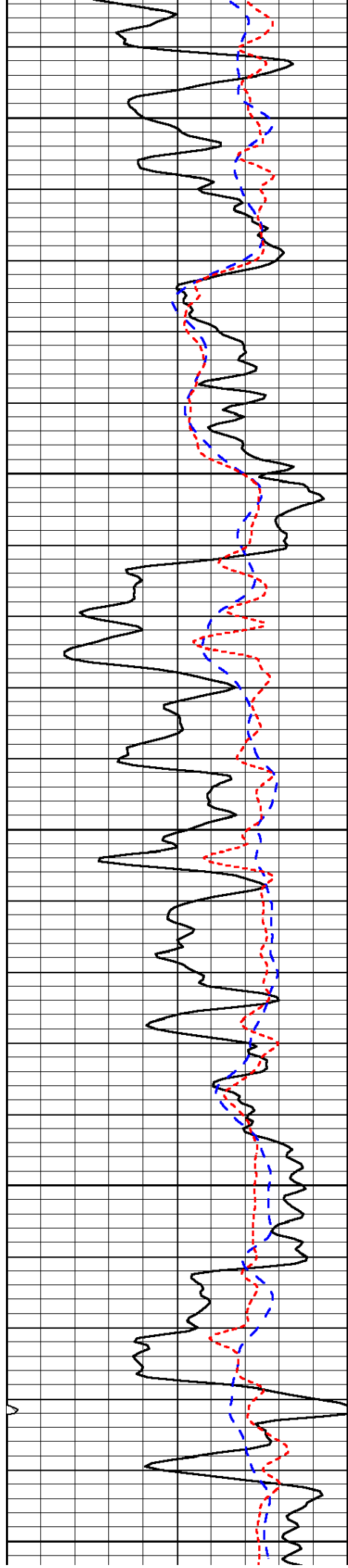
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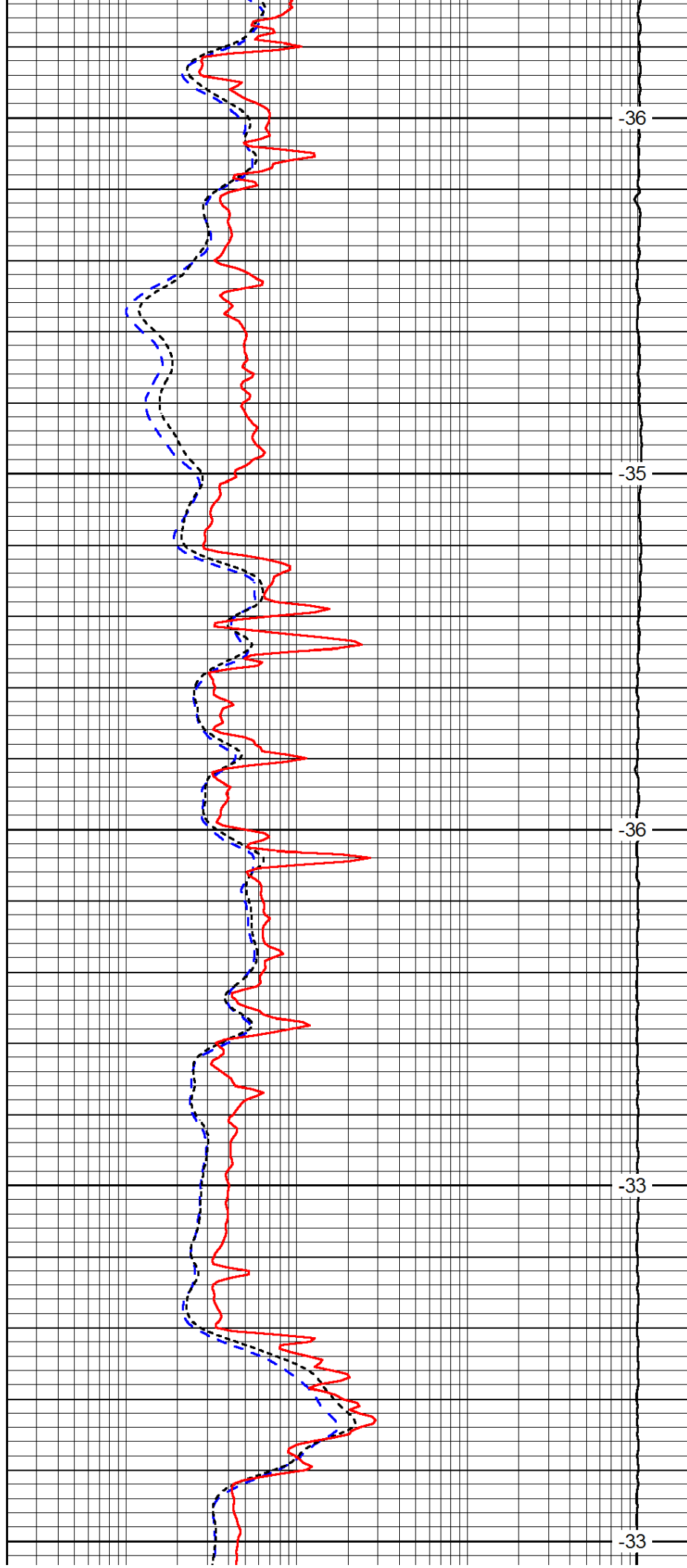
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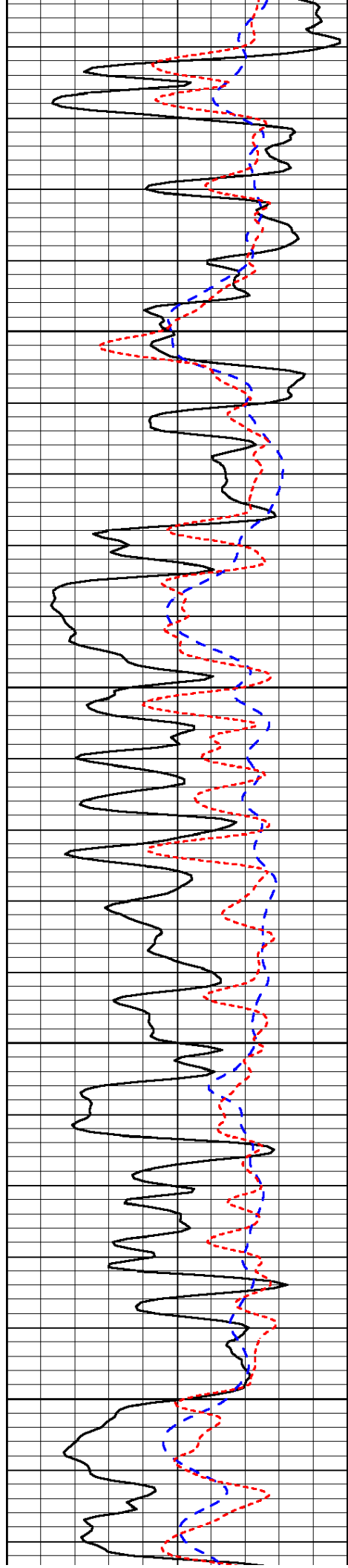
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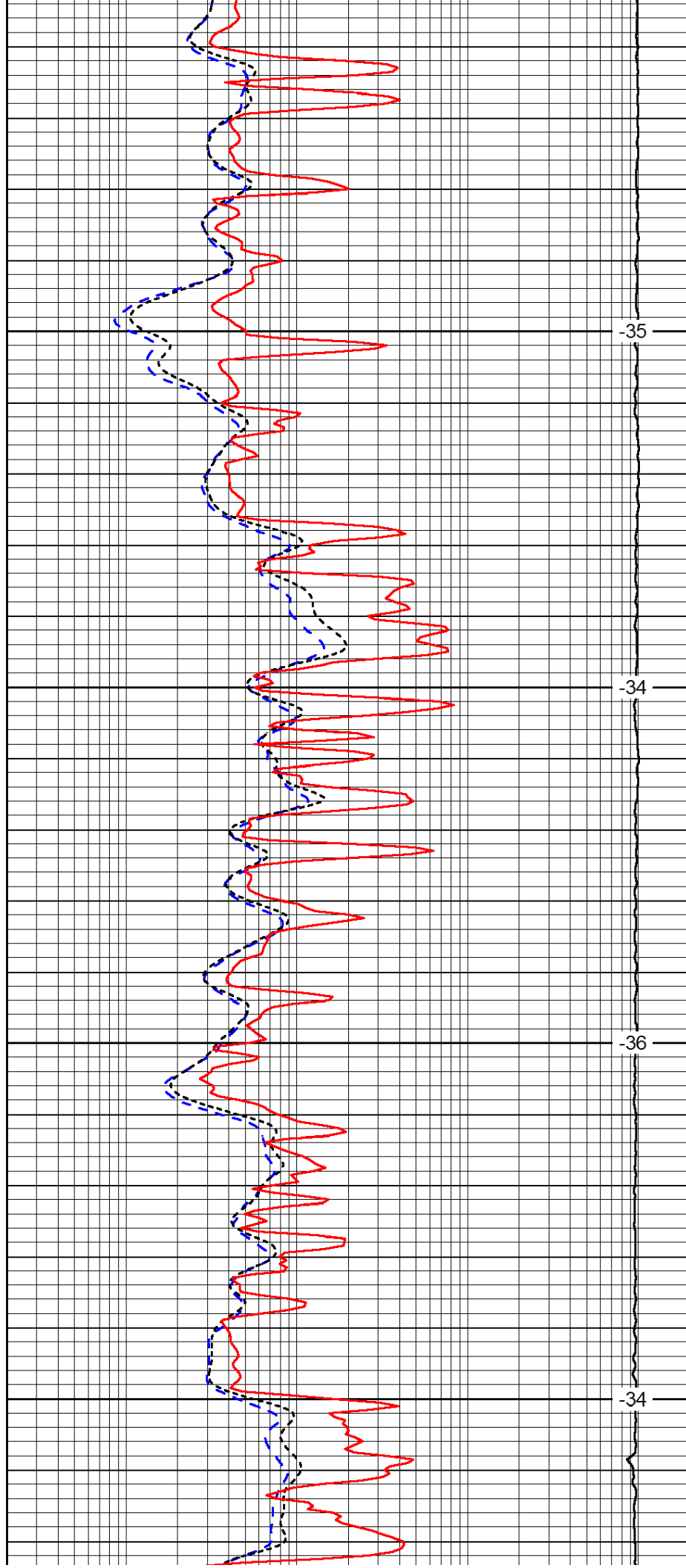


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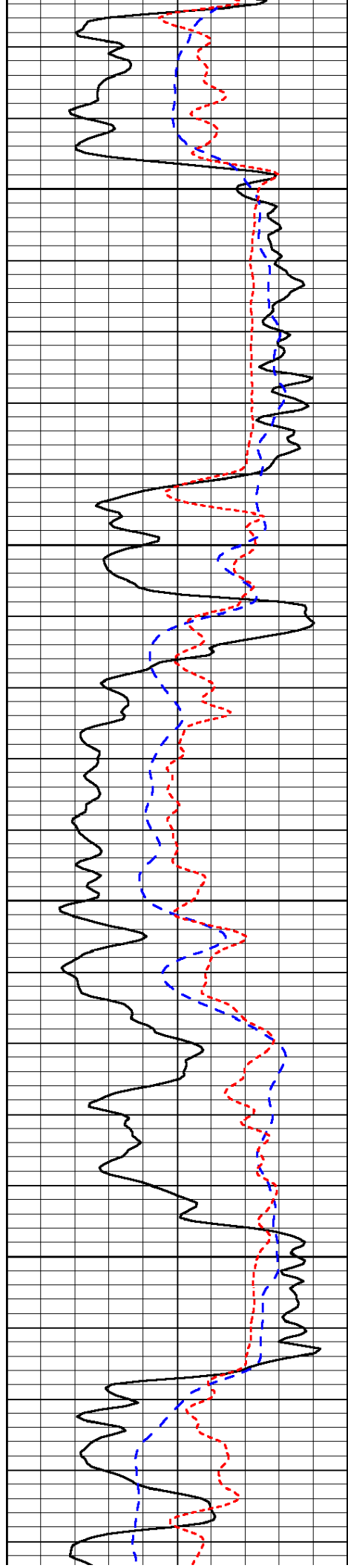


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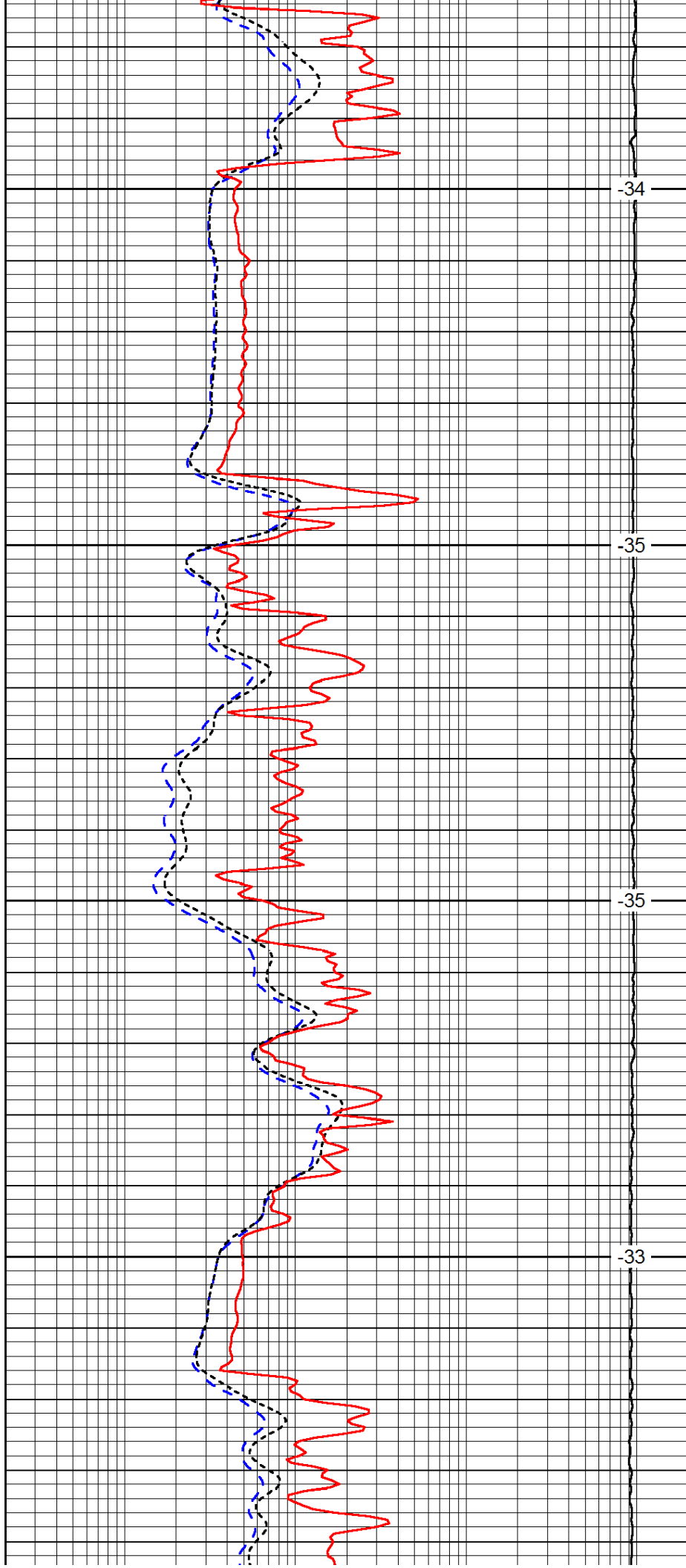


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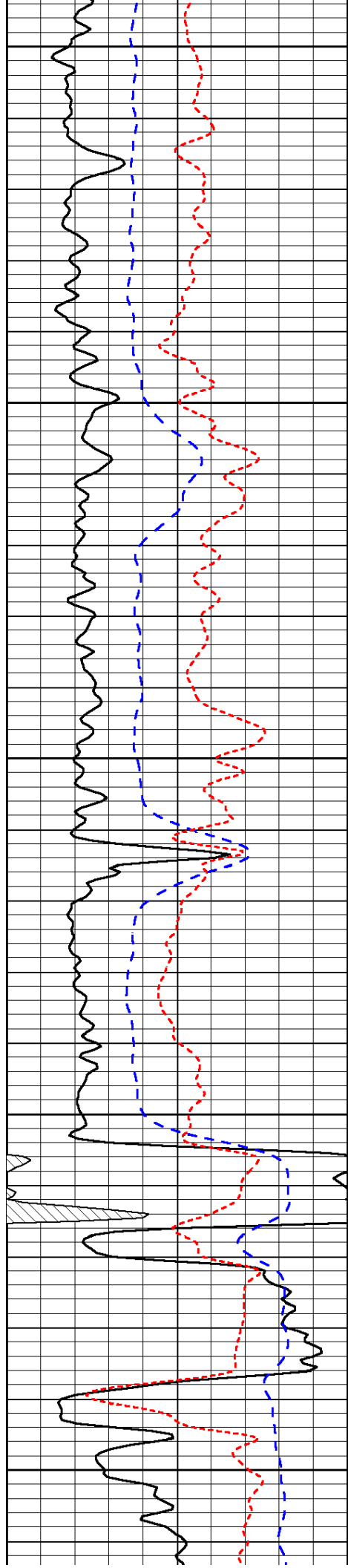


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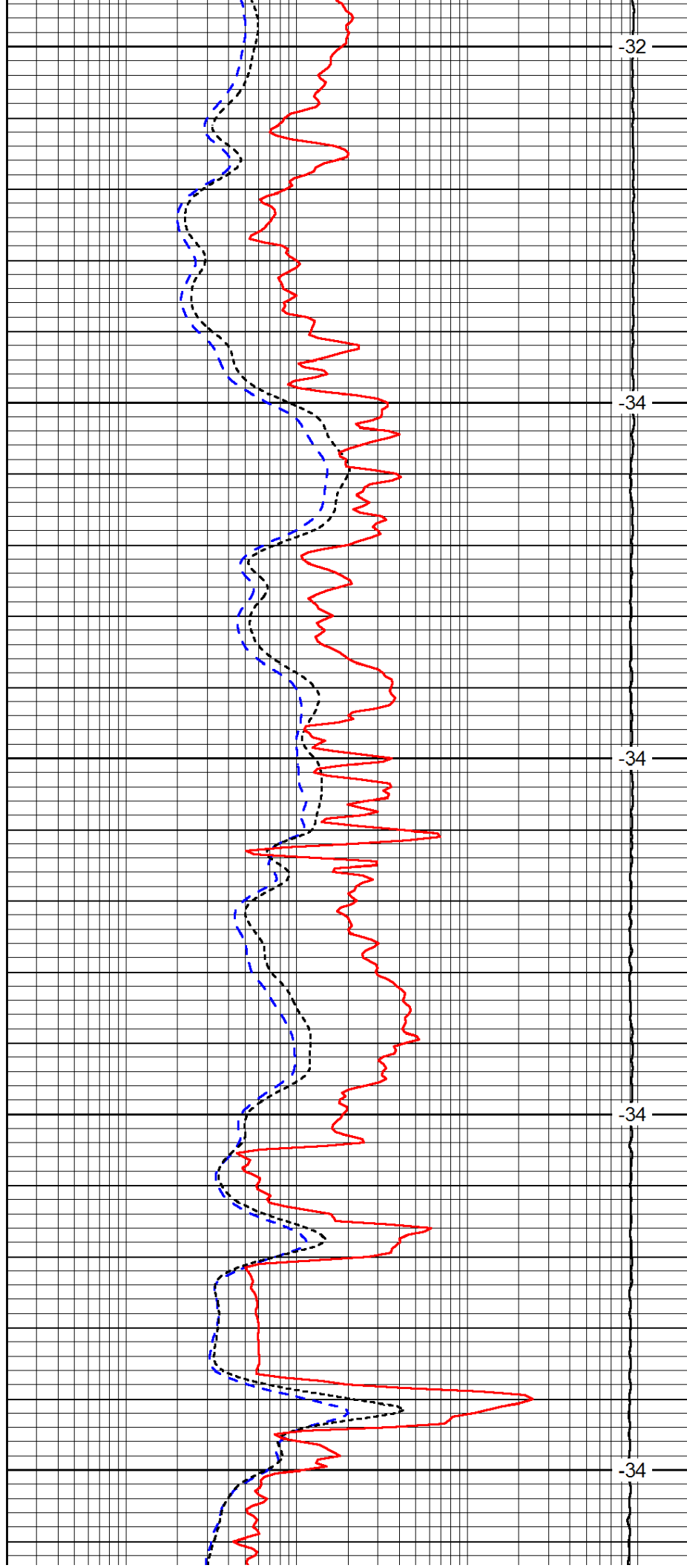
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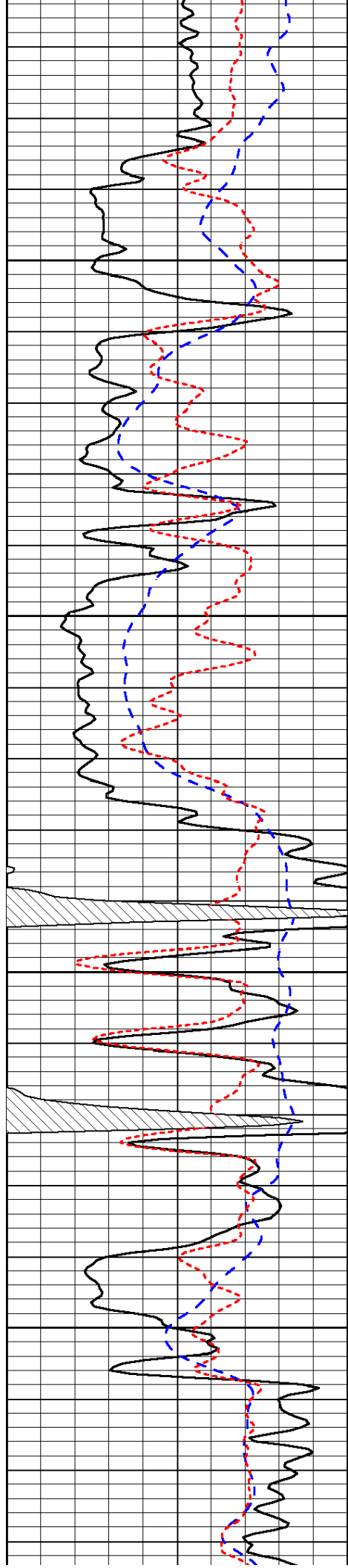
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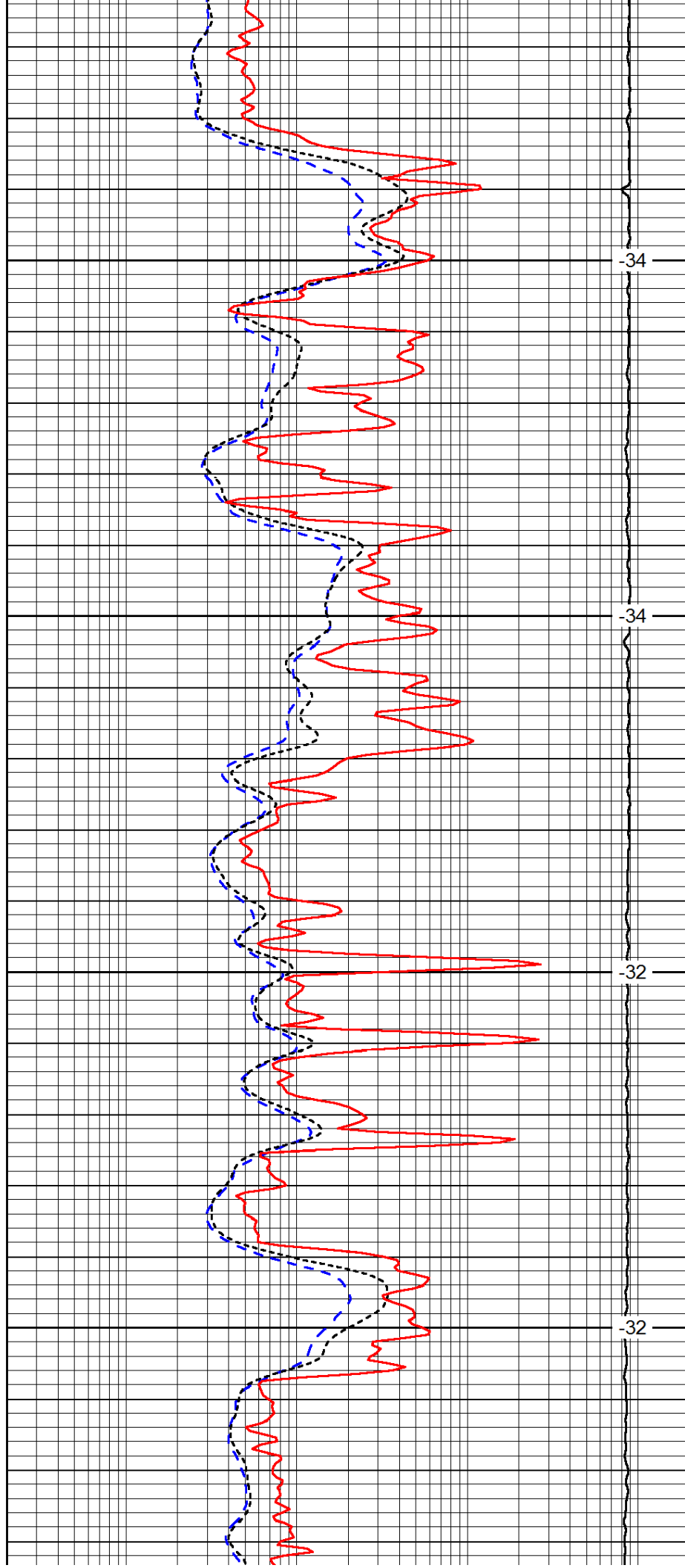


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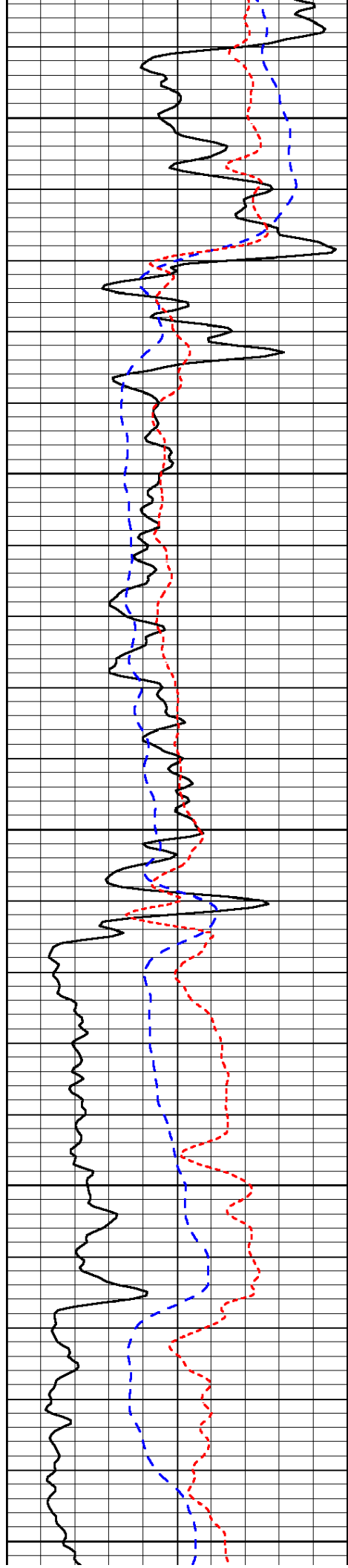


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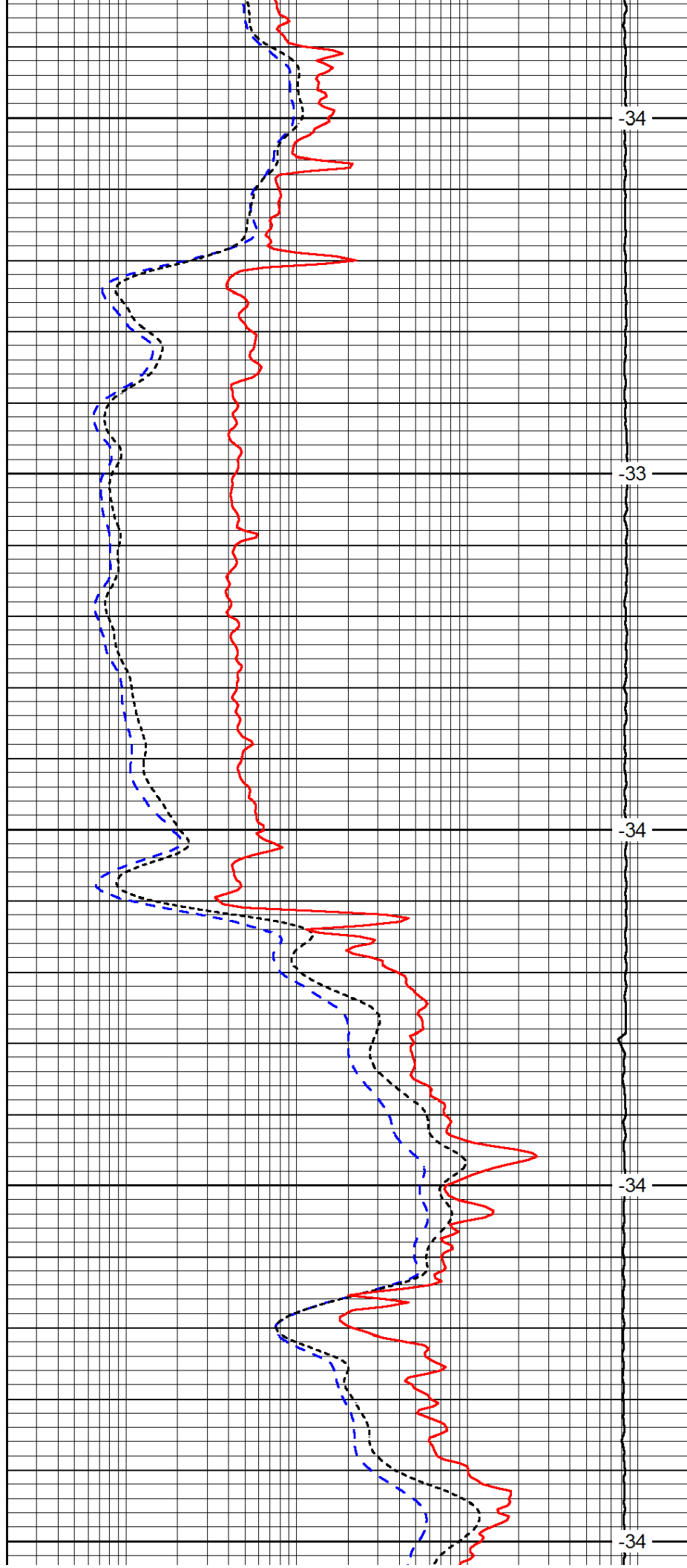
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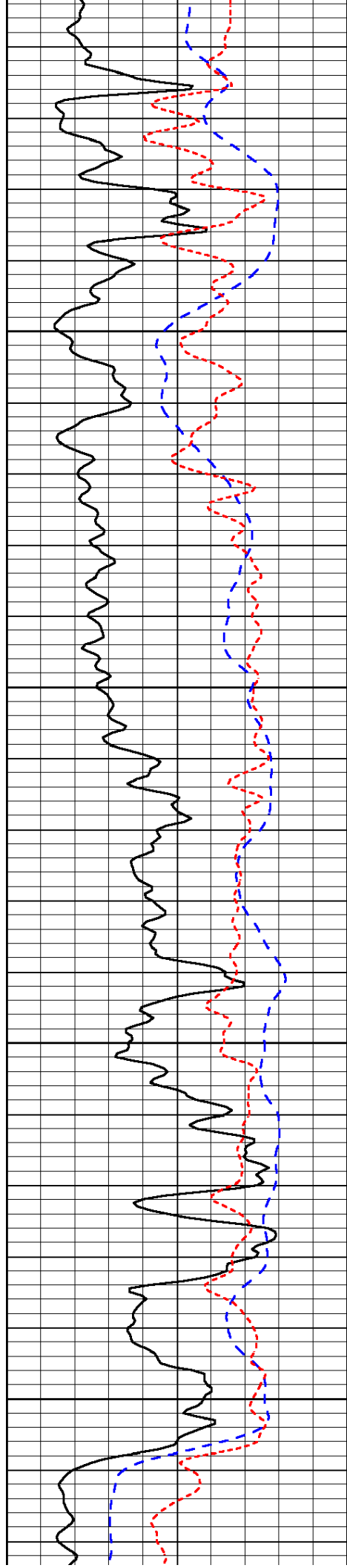
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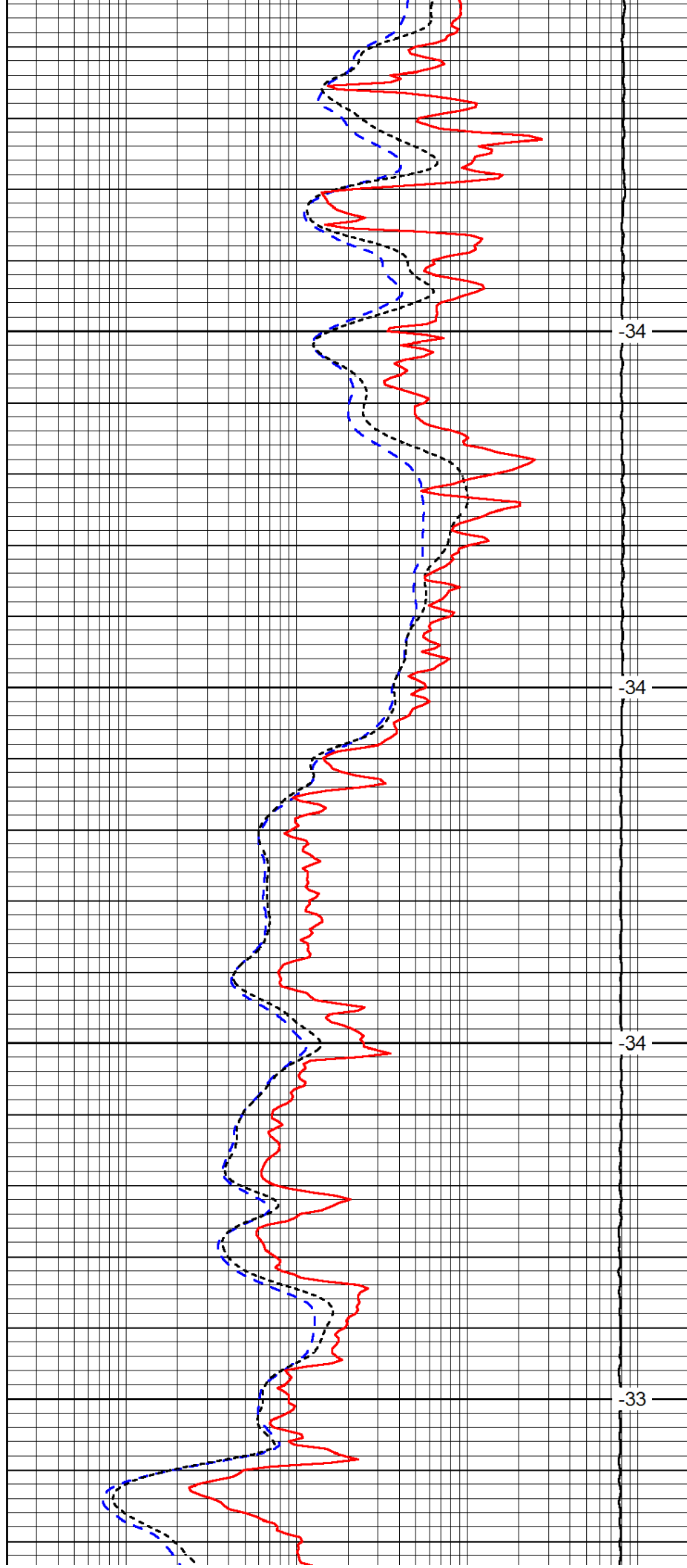


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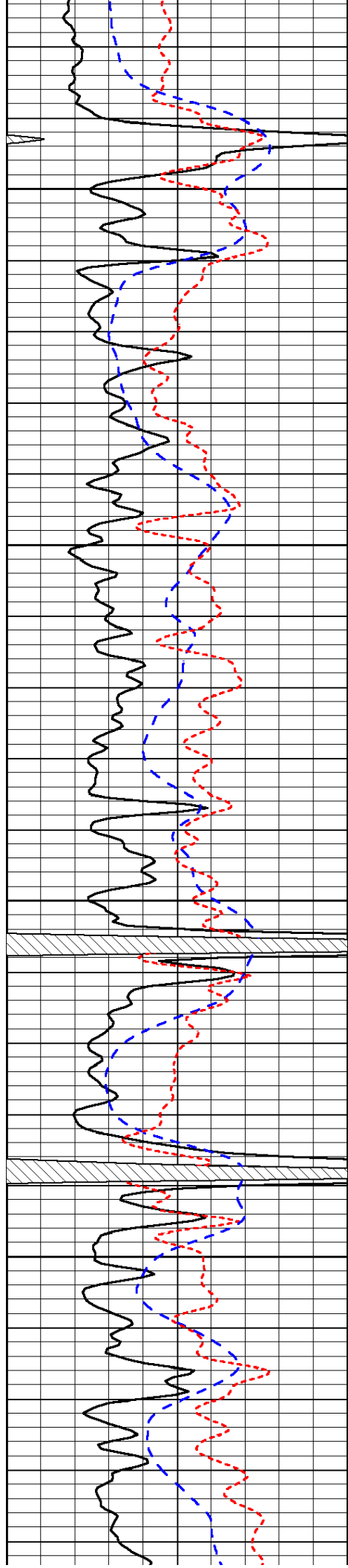


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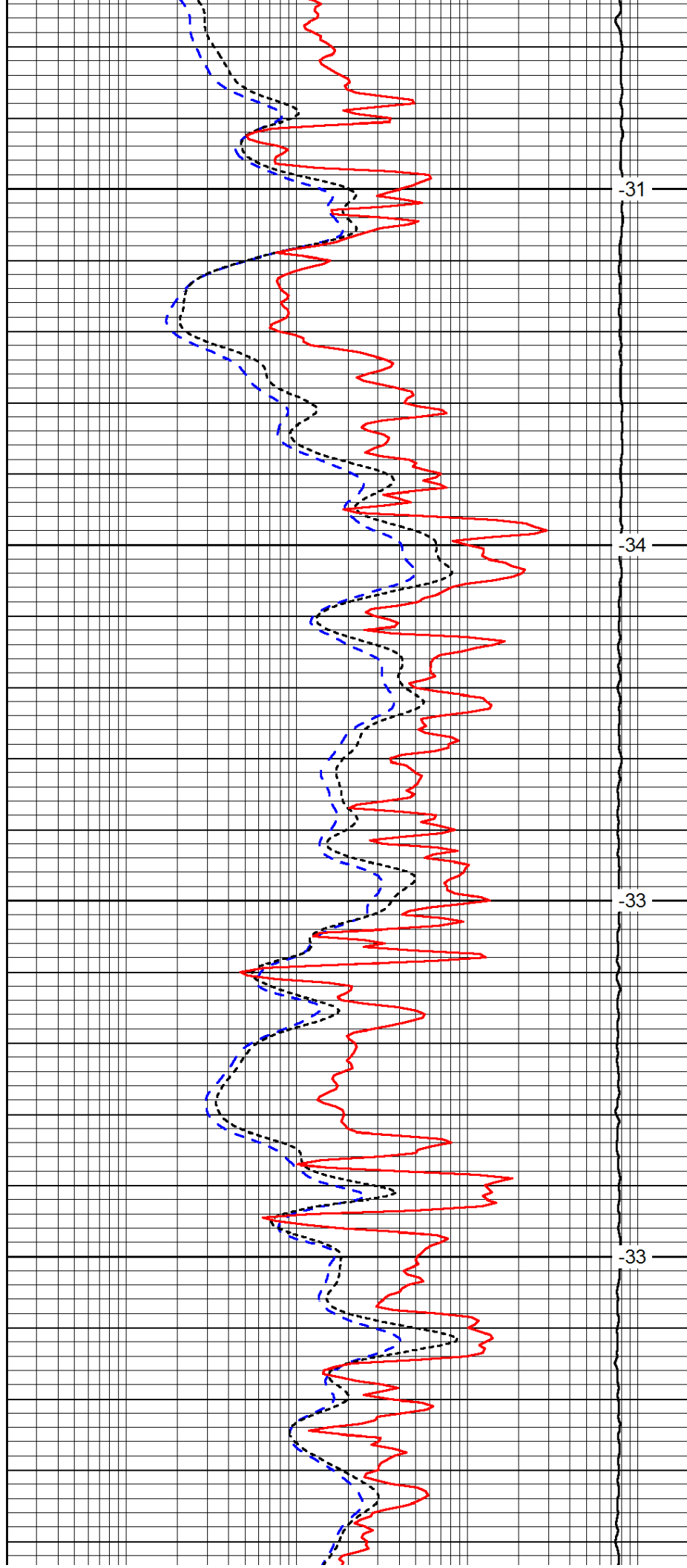


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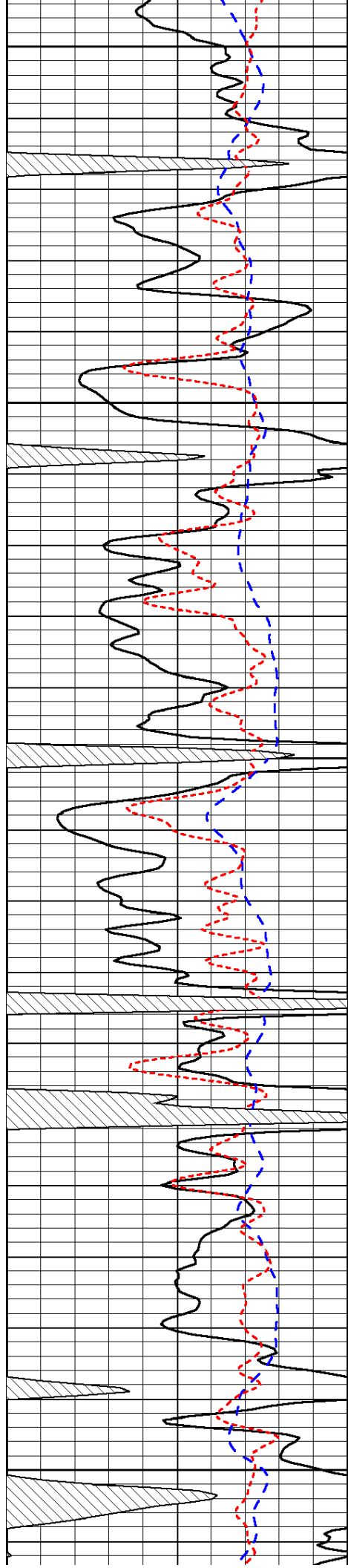


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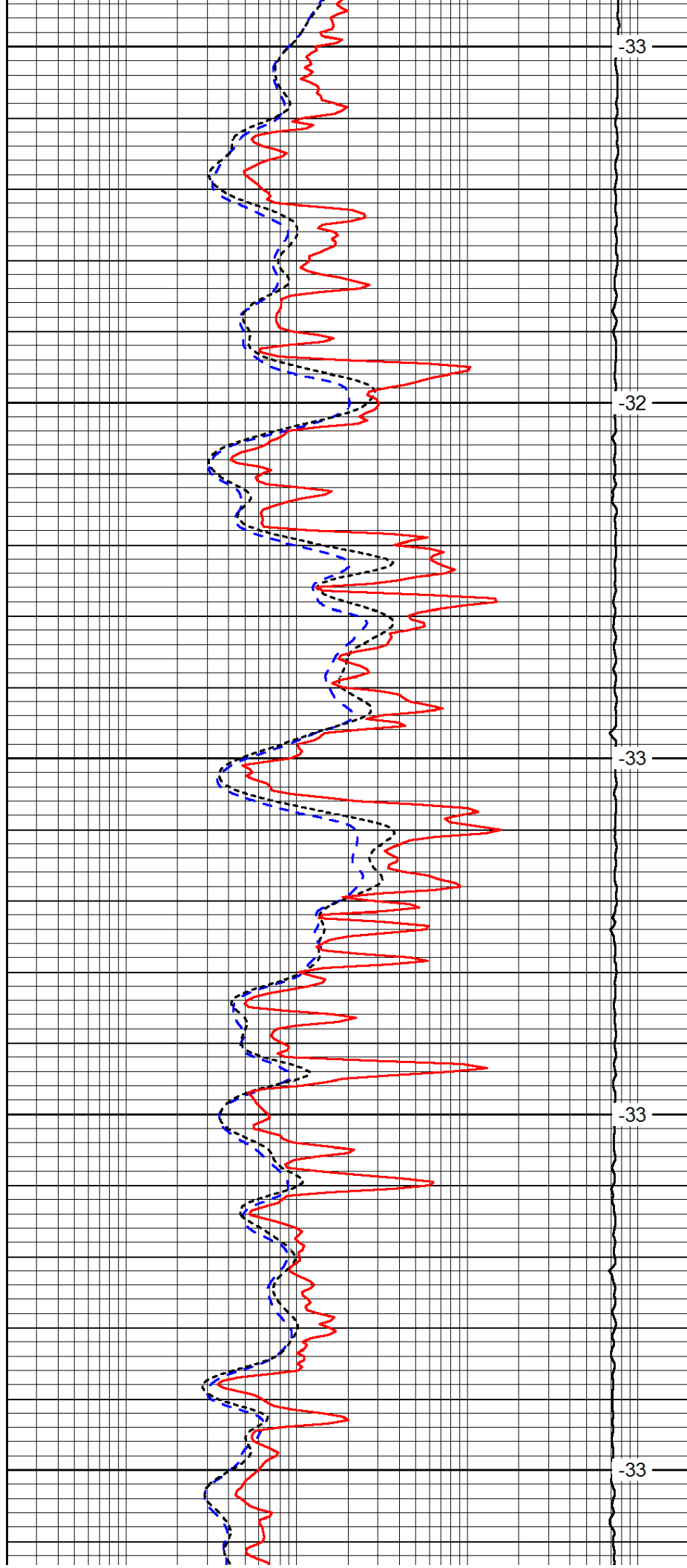
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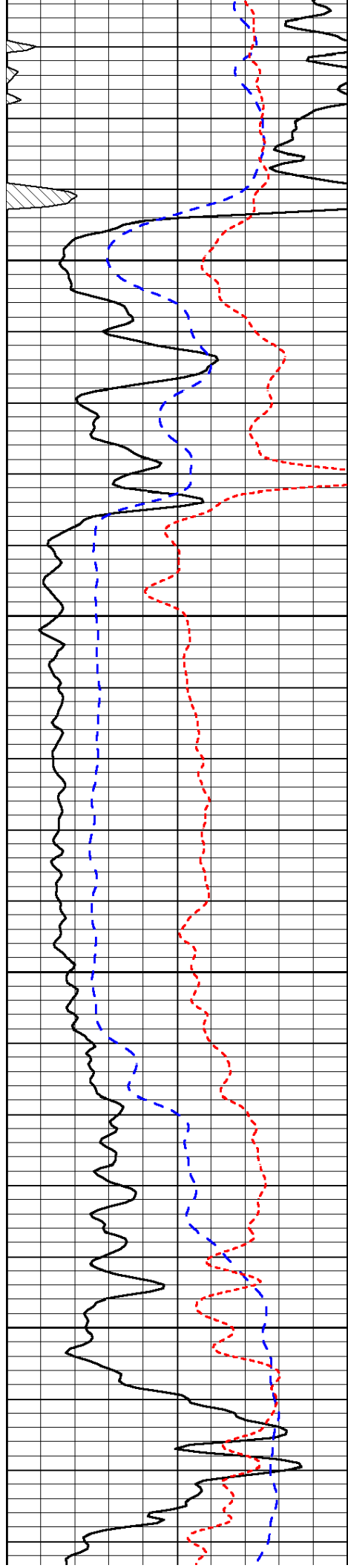
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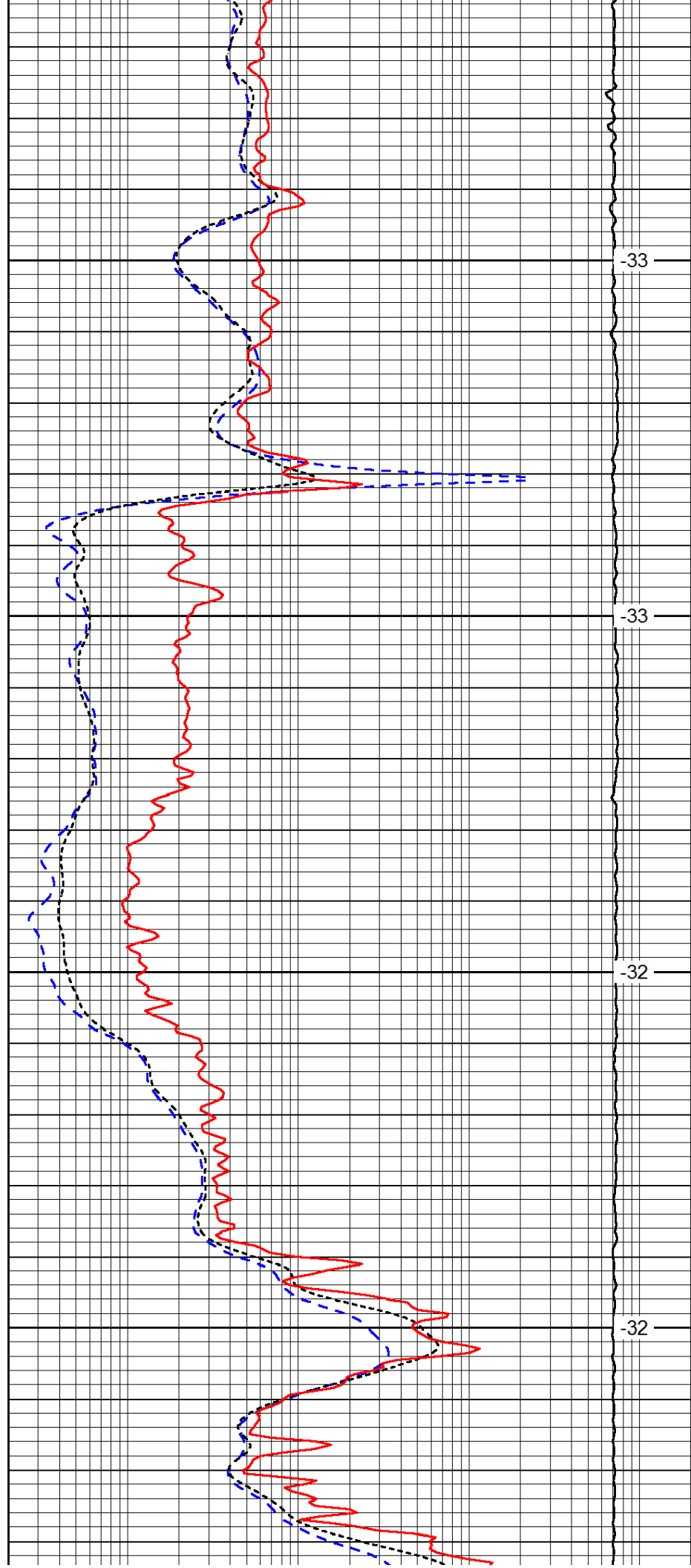


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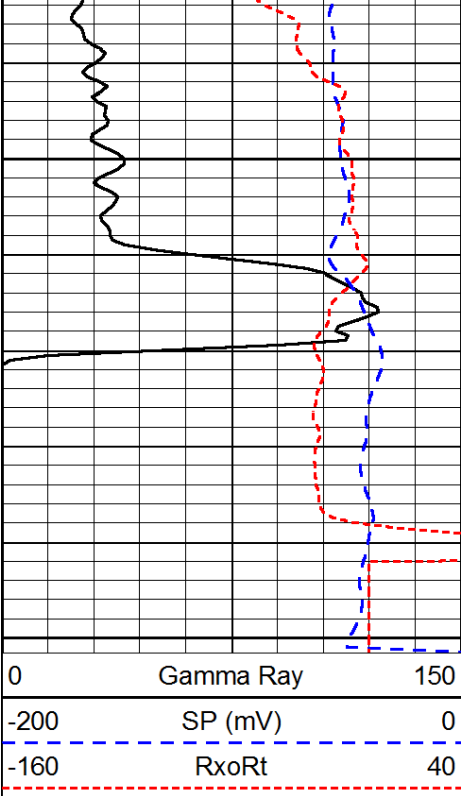


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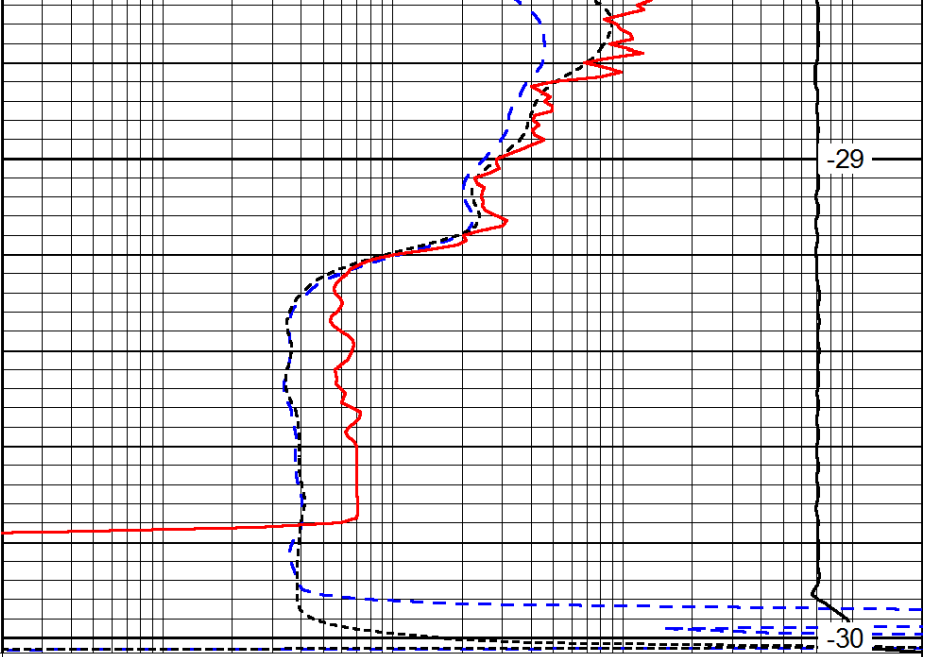
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LSPD