



Dual Induction Log

Pioneer Energy Services

API No.

15-063-22245-00-00

Company Lario Oil & Gas Company

Well Knapp #10-31

Field Maurice Northeast

County Gove State Kansas

Location

1650' FNL & 4000' FEL

Sec: 31 Twp: 13S Rge: 31W

Other Services
CNL/CDL
MEL

Elevation

Permanent Datum Ground Level Elevation 2939
Log Measured From Kelly Bushing 12 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

K.B. 2951
D.F. 2939
G.L. 2939

Date 2/21/2015

Run Number One

Depth Driller 4700

Depth Logger 4698

Bottom Logged Interval 4697

Top Log Interval 250

Casing Driller 8.625 @ 295

Casing Logger 293

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 3000

Density / Viscosity 9.3 59

pH / Fluid Loss 10.0 8.8

Source of Sample Flowline

Rm @ Meas. Temp 0.70 @ 64

Rmf @ Meas. Temp 0.53 @ 64

Rmc @ Meas. Temp 0.95 @ 64

Source of Rmf / Rmc Charts

Rm @ BHT 0.36 @ 123

Operating Rig Time 3 Hours

Max Rec. Temp. F 123

Equipment Number 15

Location Hays

Recorded By D.Kerr

Witnessed By Bob Bayer

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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

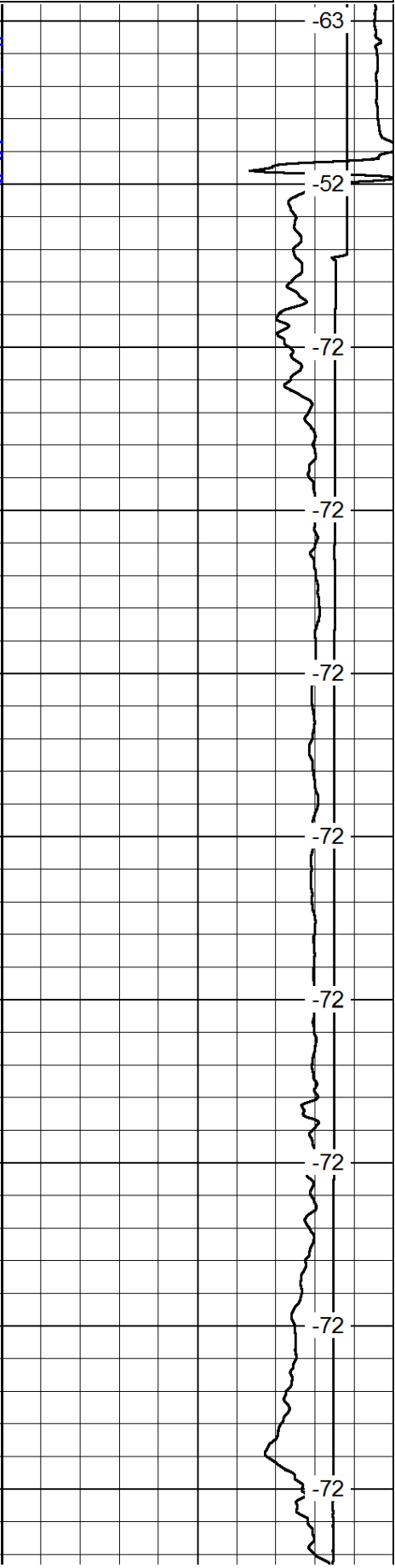
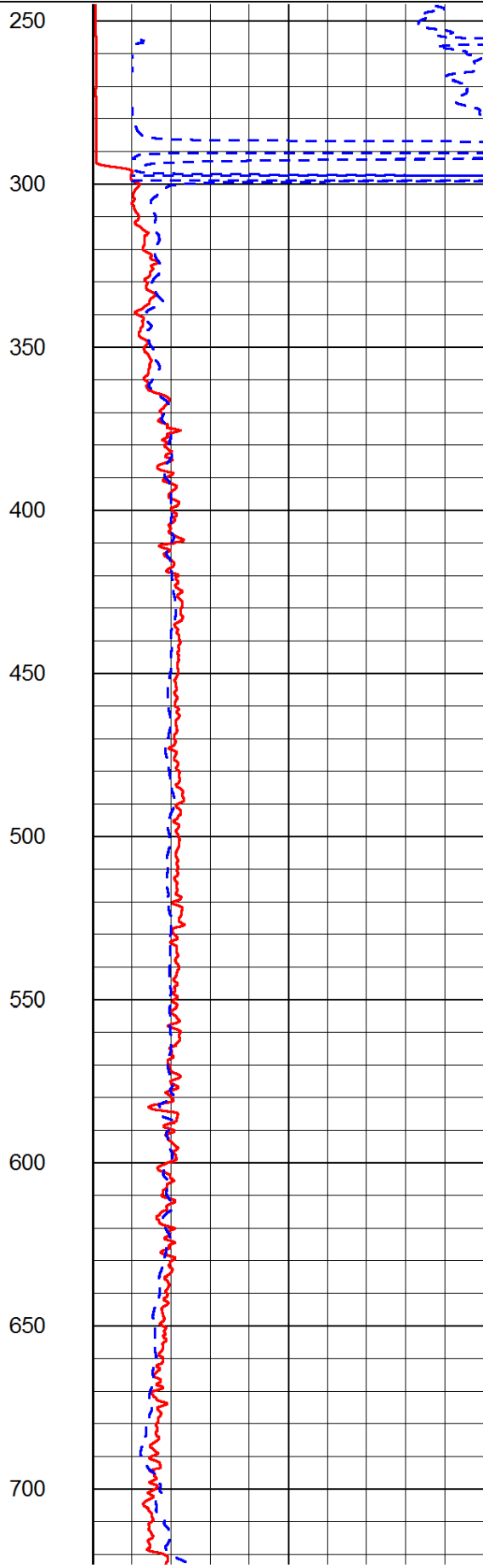
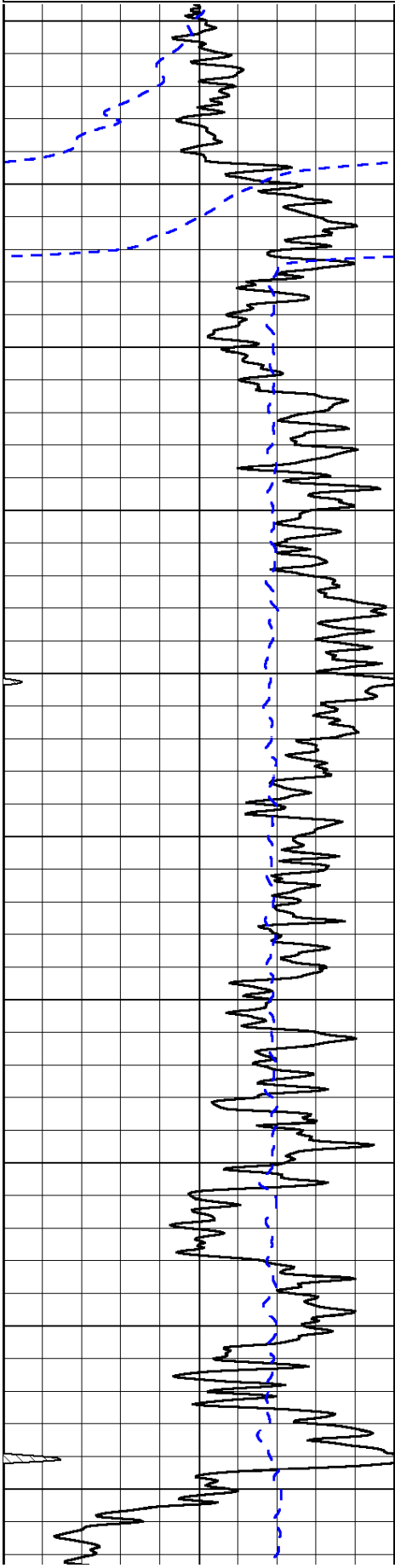
Oakley KS, 16 South to Navajo RD,
2 East, 1/8 South, East Into

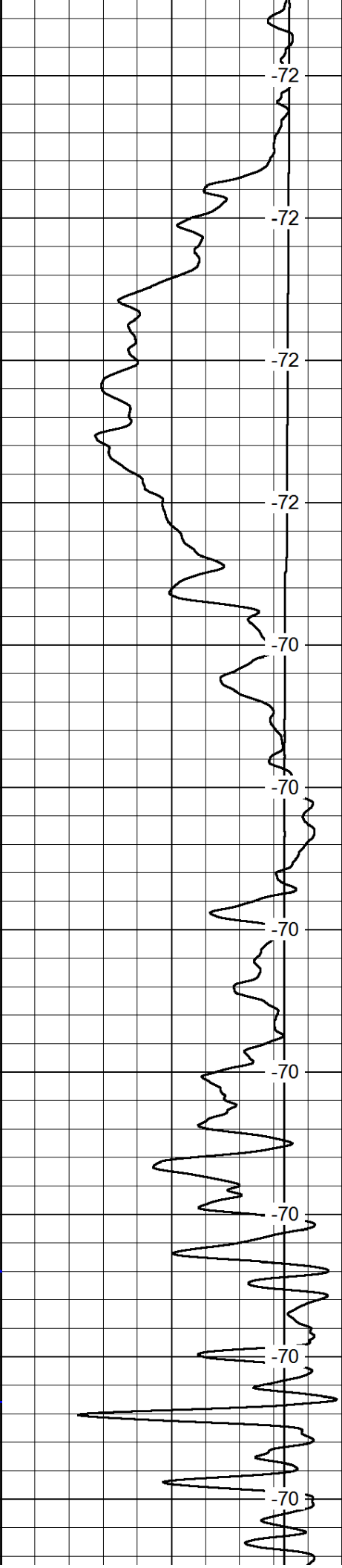
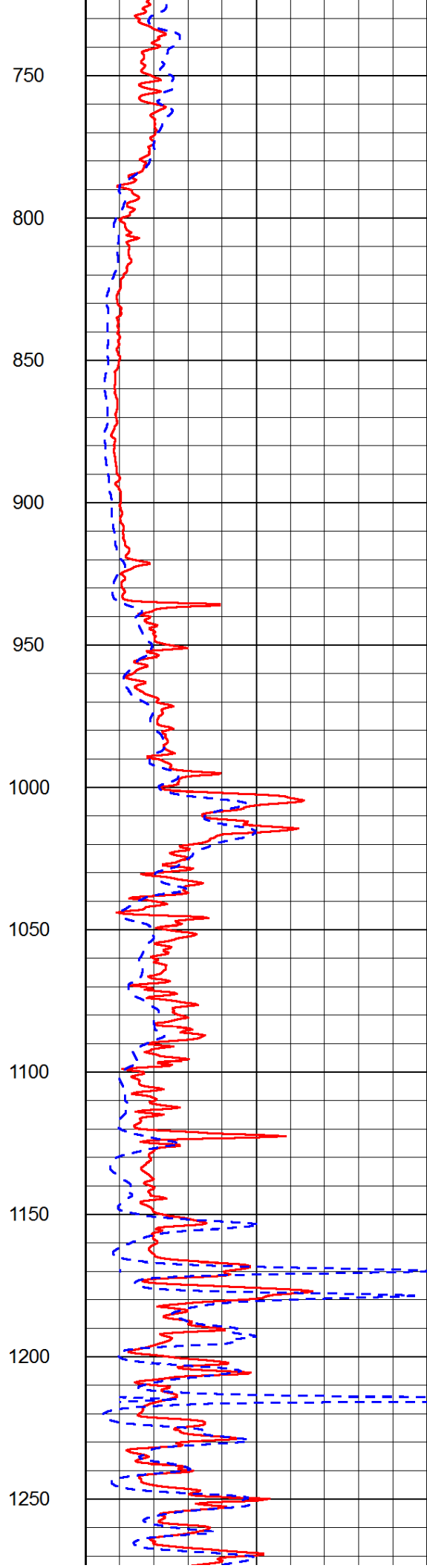
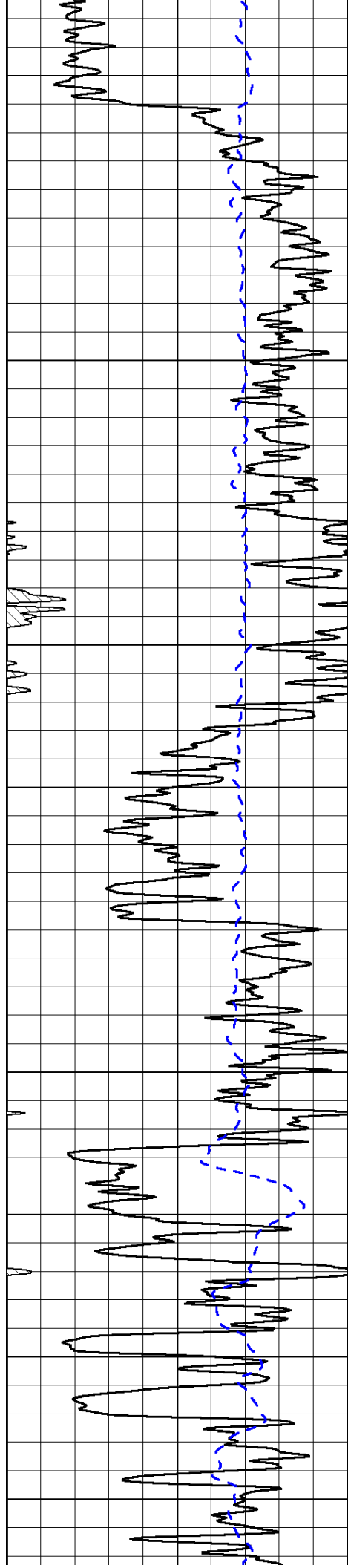
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Dataset Creation: Sat Feb 21 19:41:58 2015
Charted by: Depth in Feet scaled 1:600

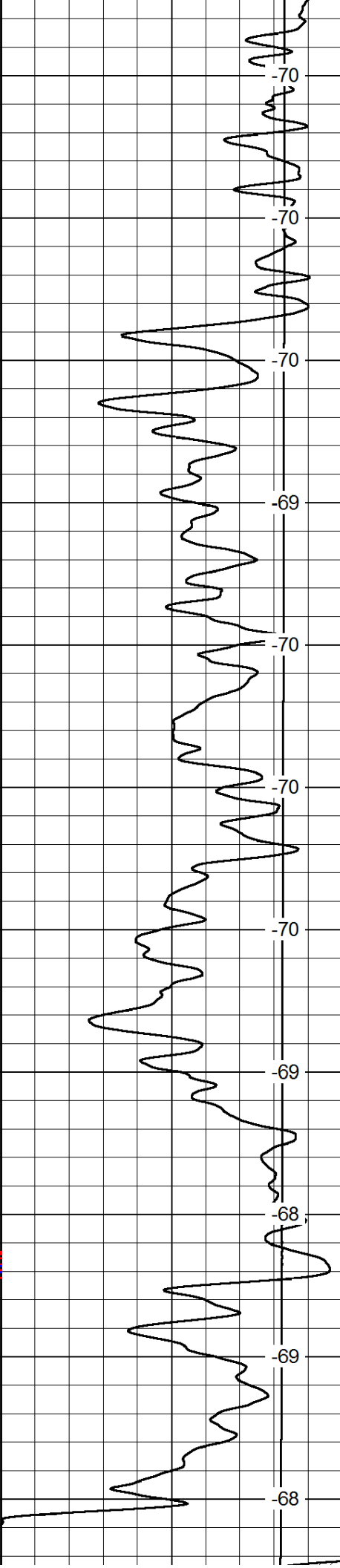
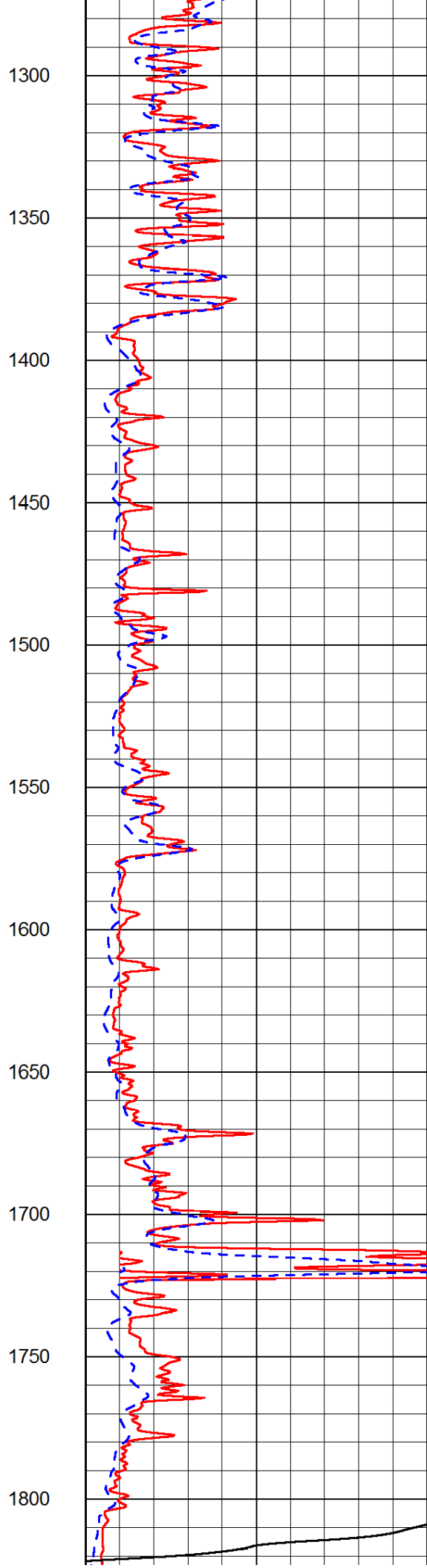
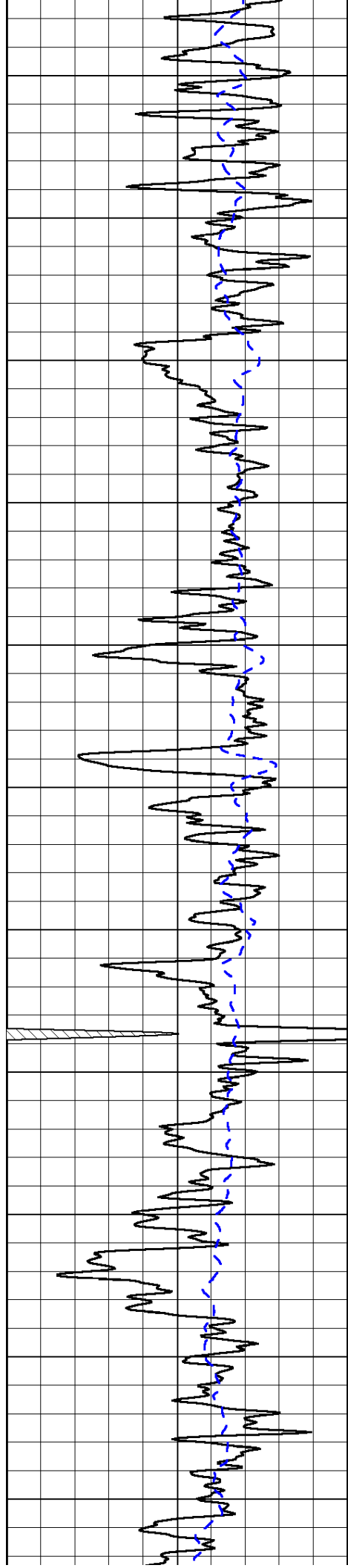
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-200	SP (mV)	0

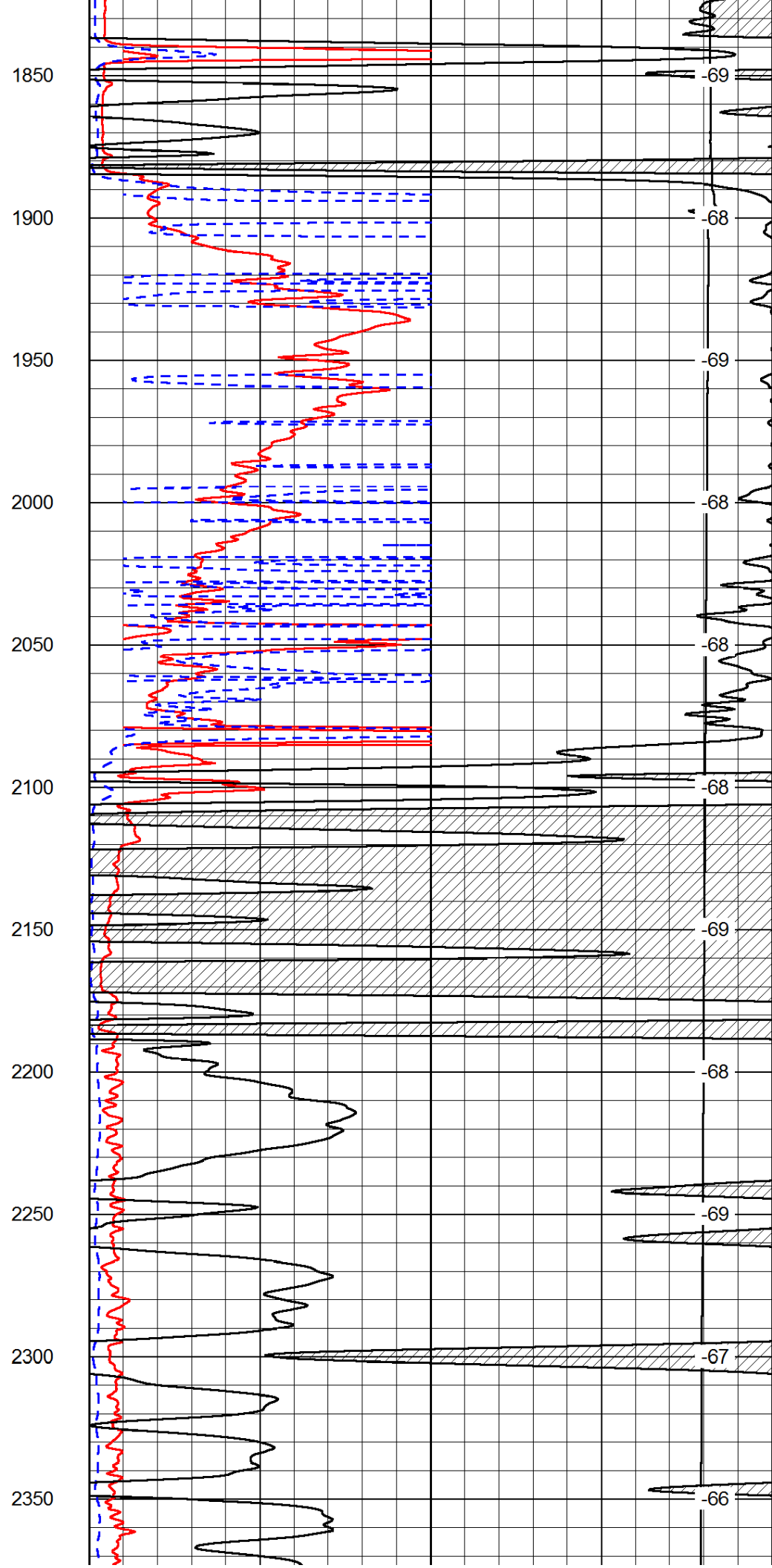
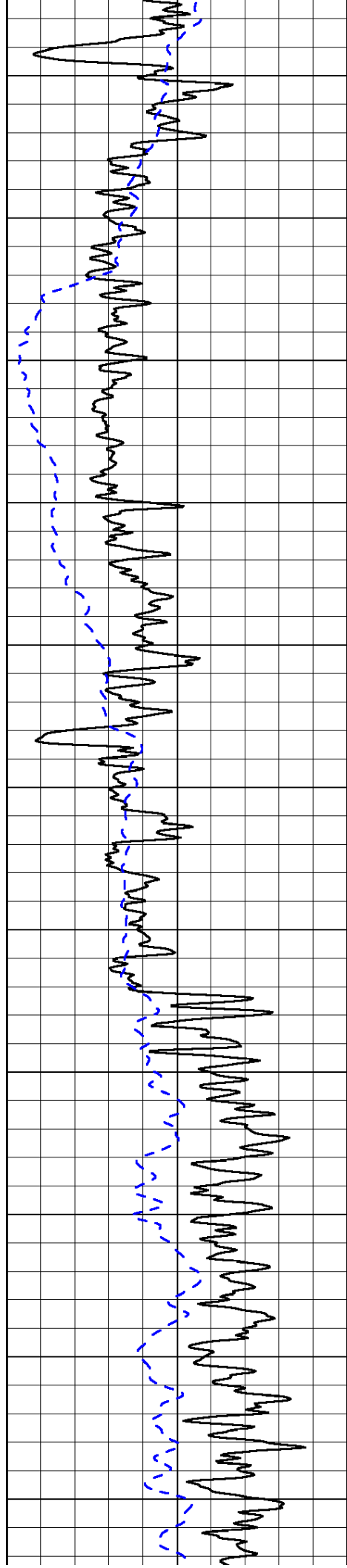
0	Shallow Resistivity	50
0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

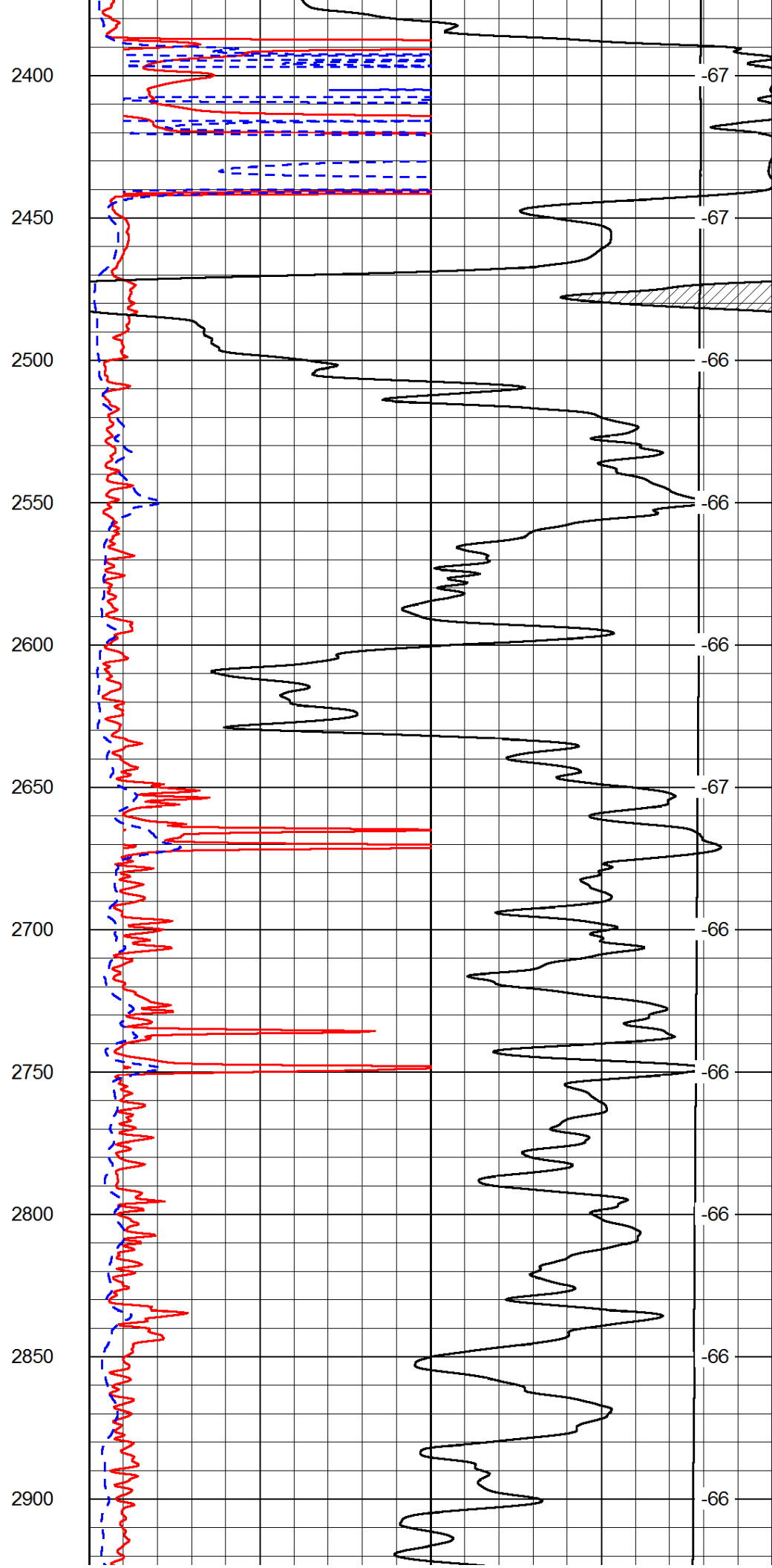
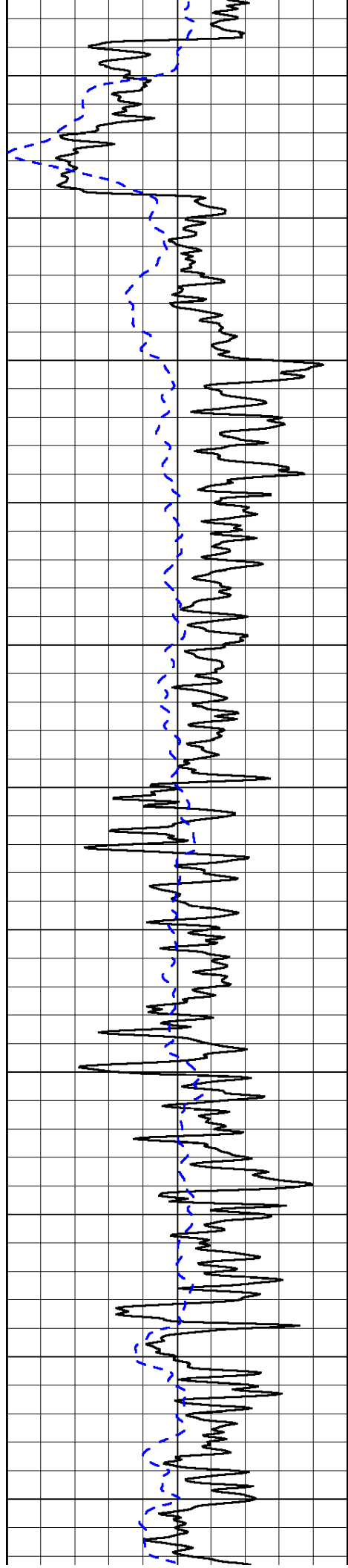
LSPD

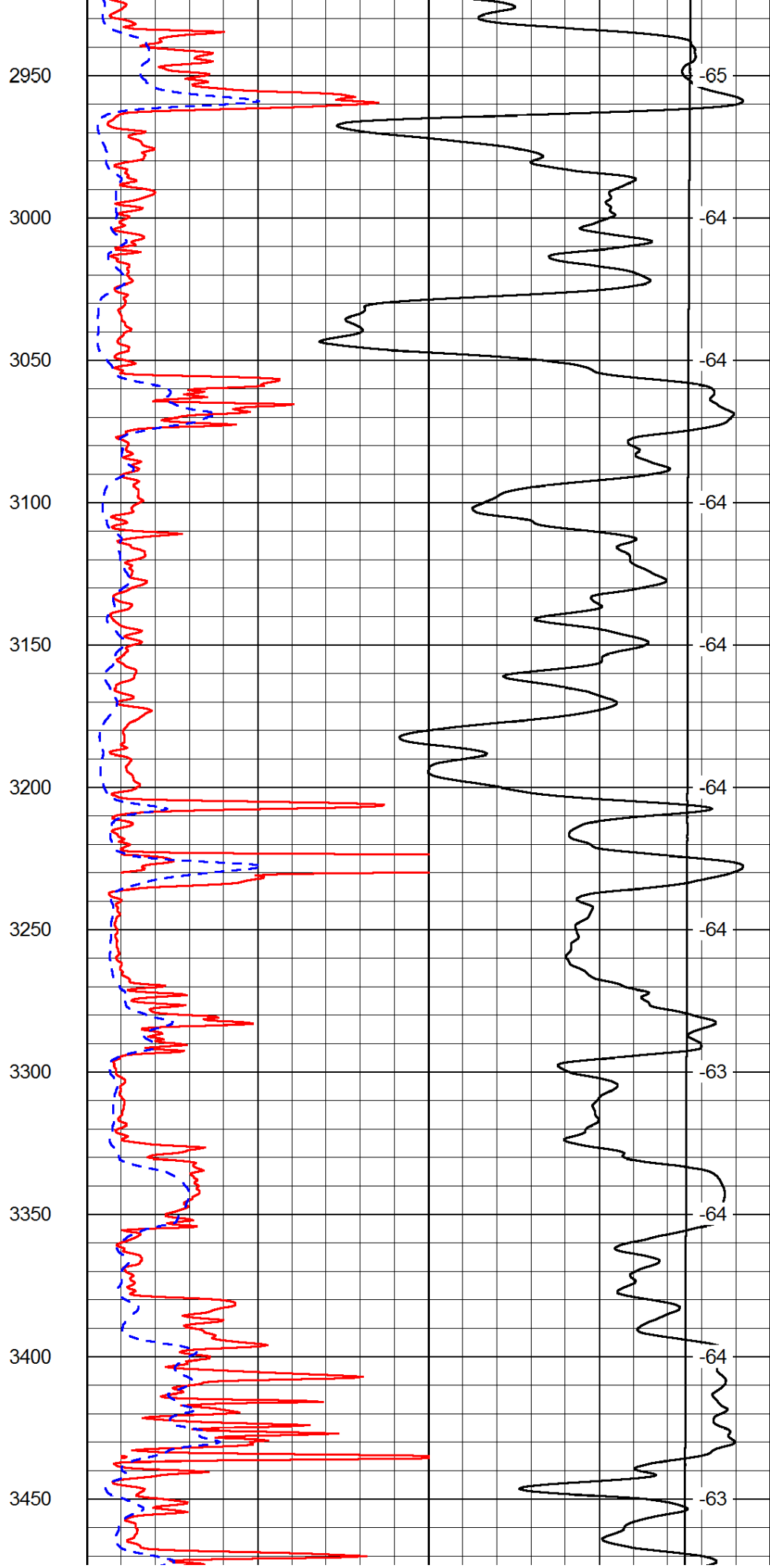
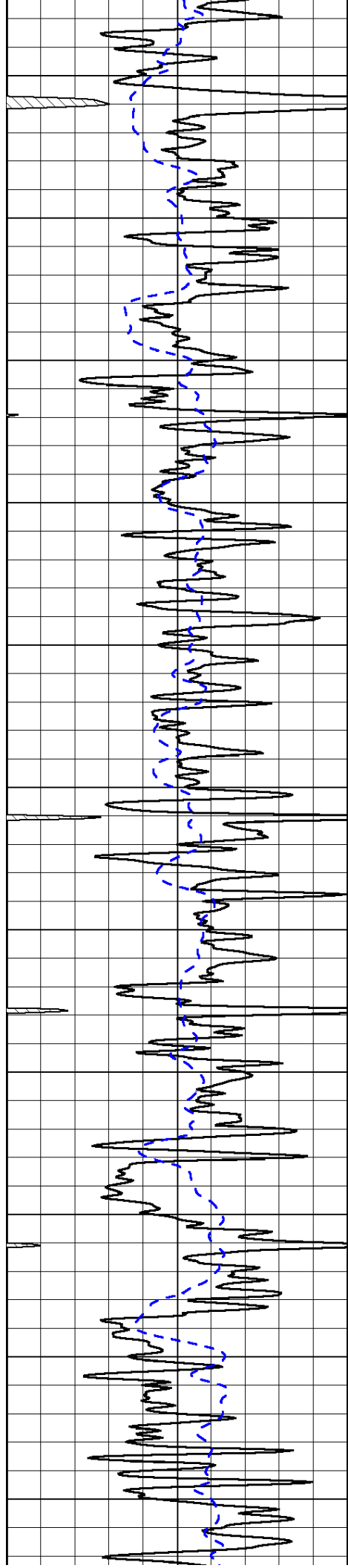


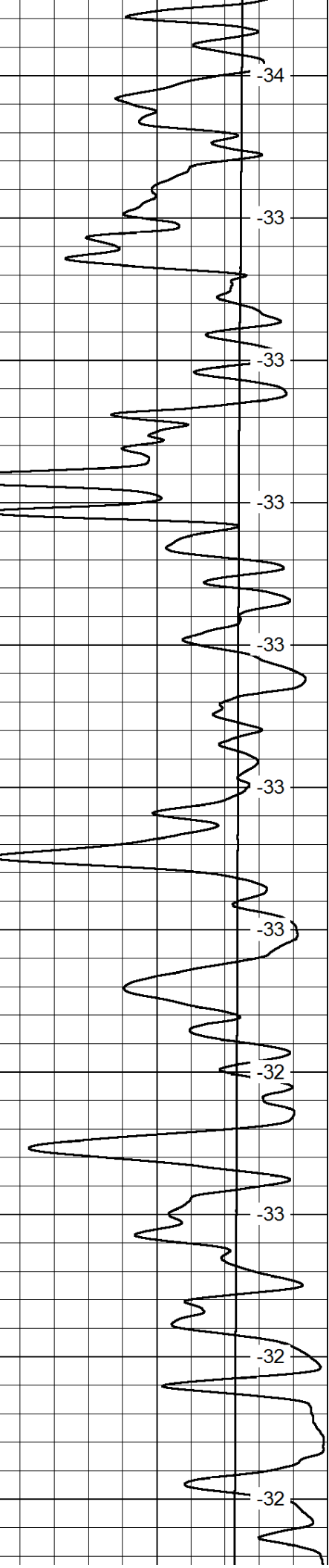
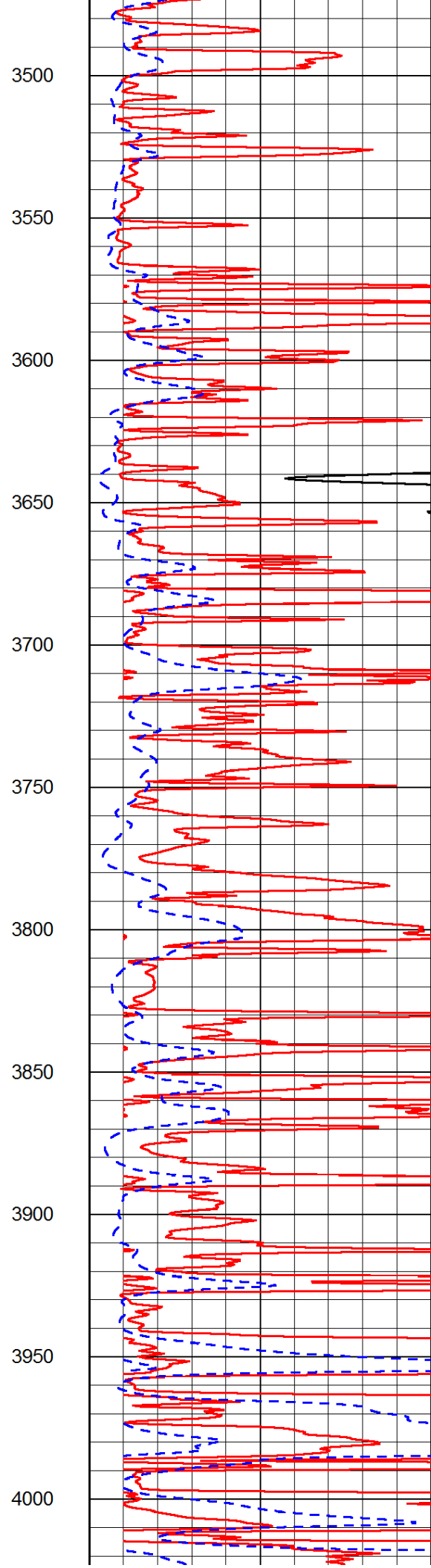
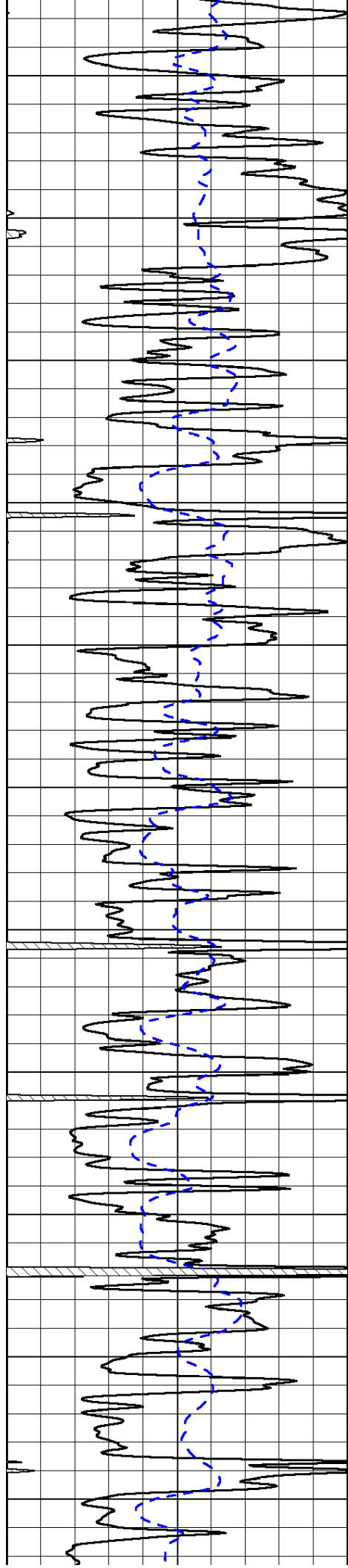


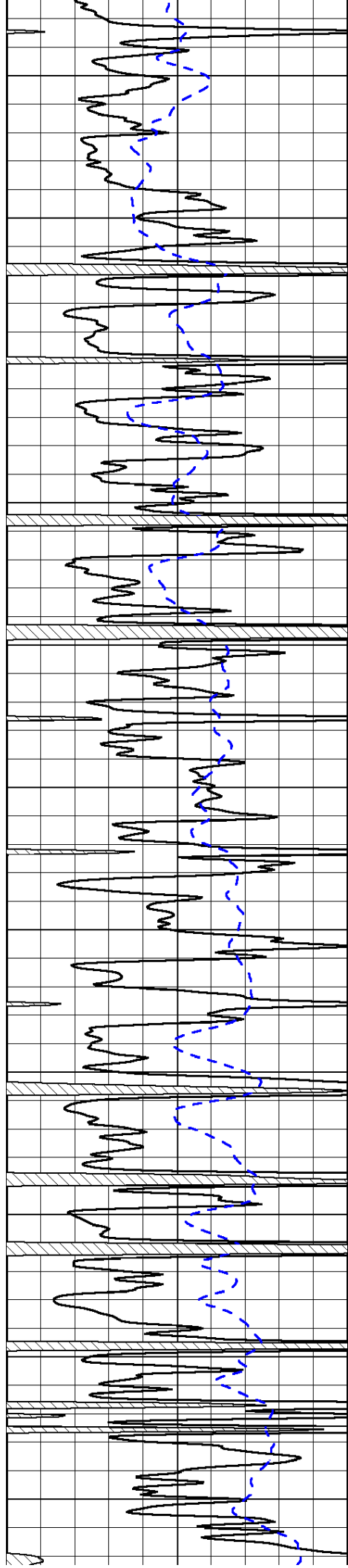












4050

4100

4150

4200

4250

4300

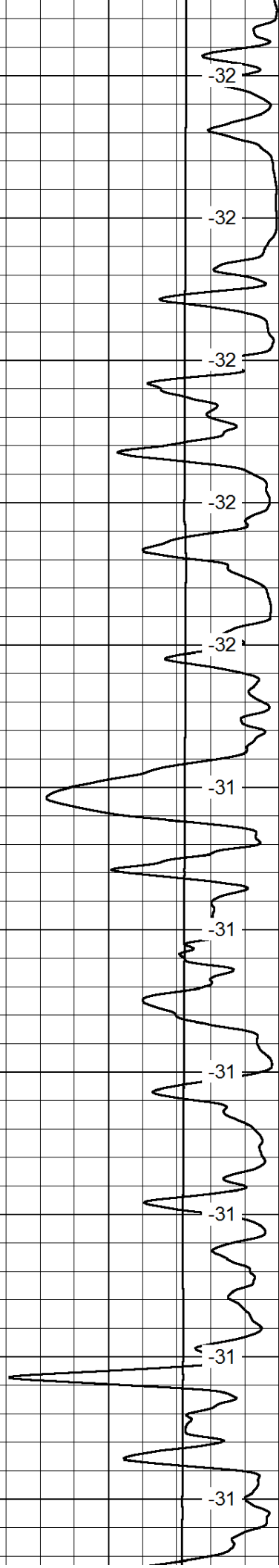
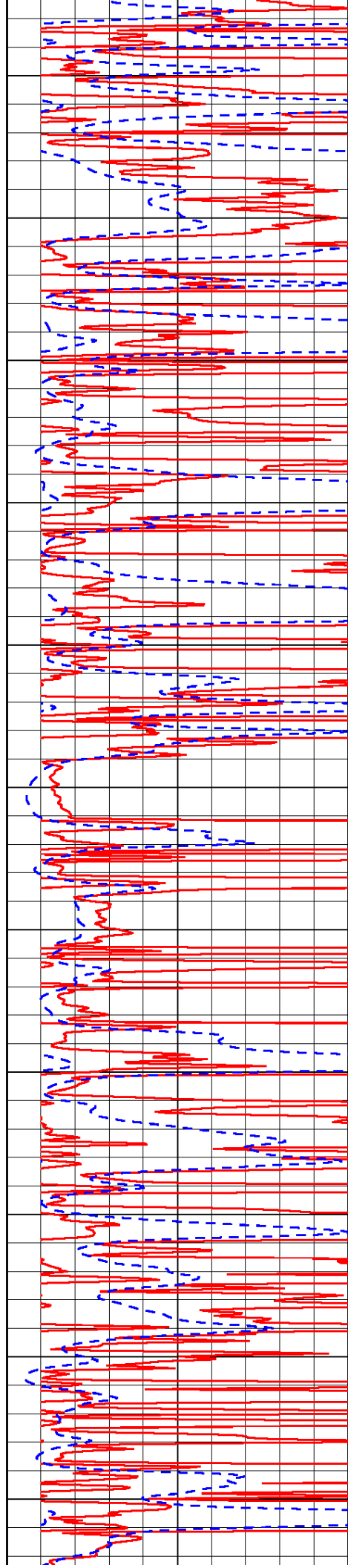
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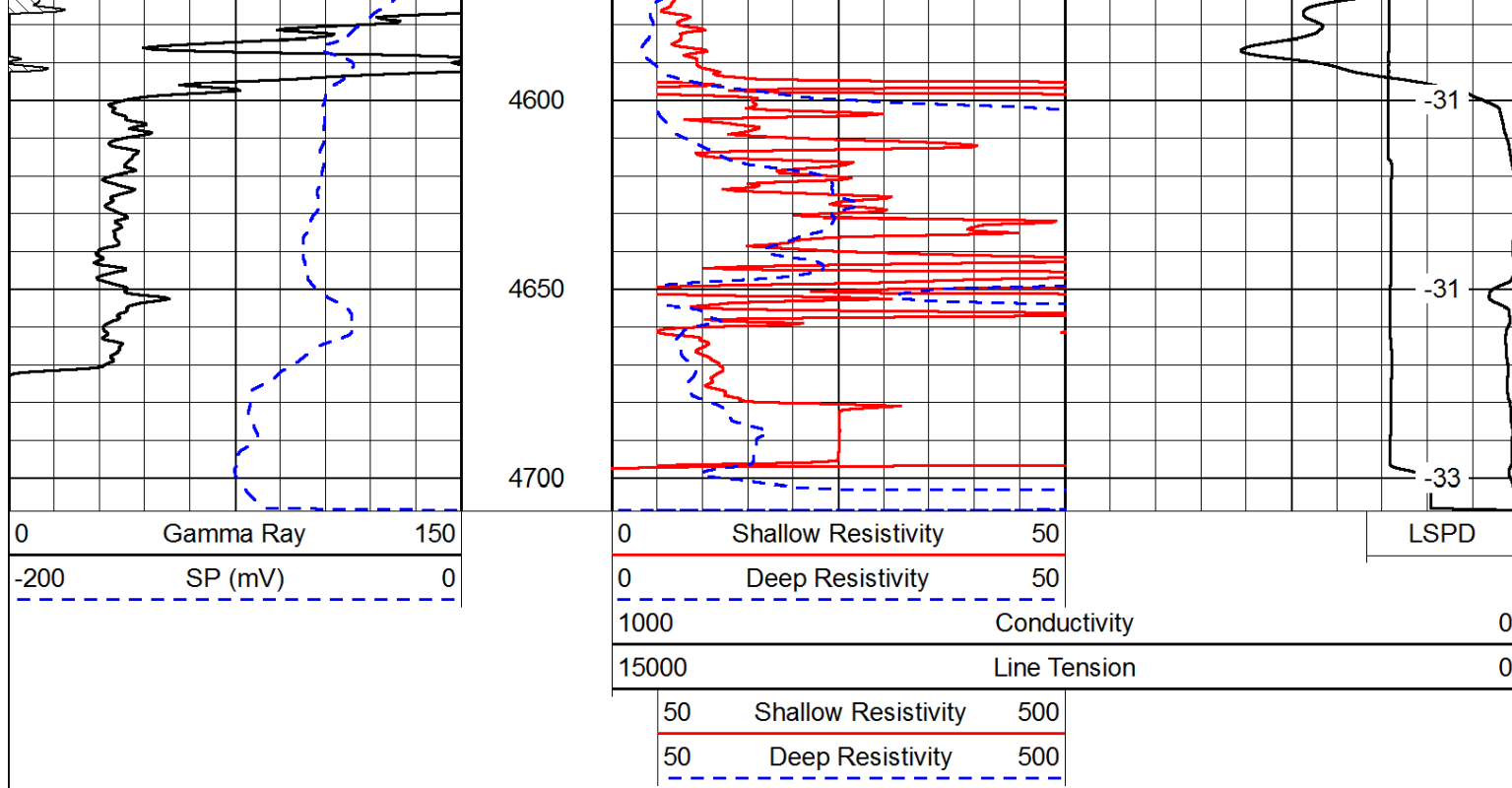
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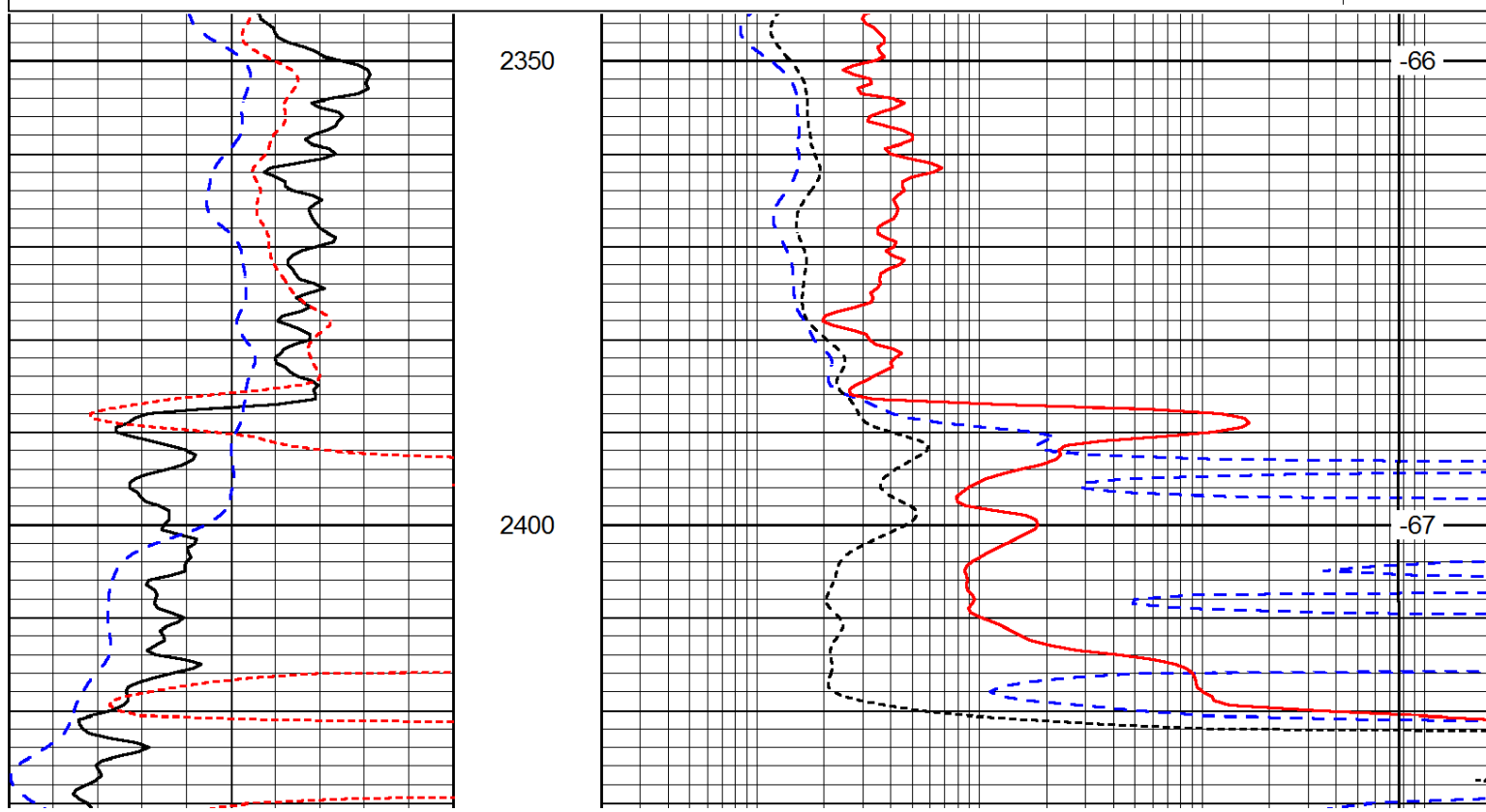
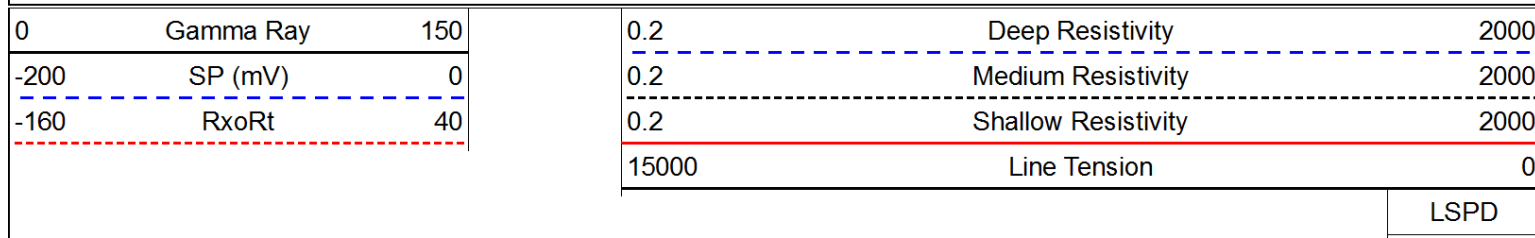
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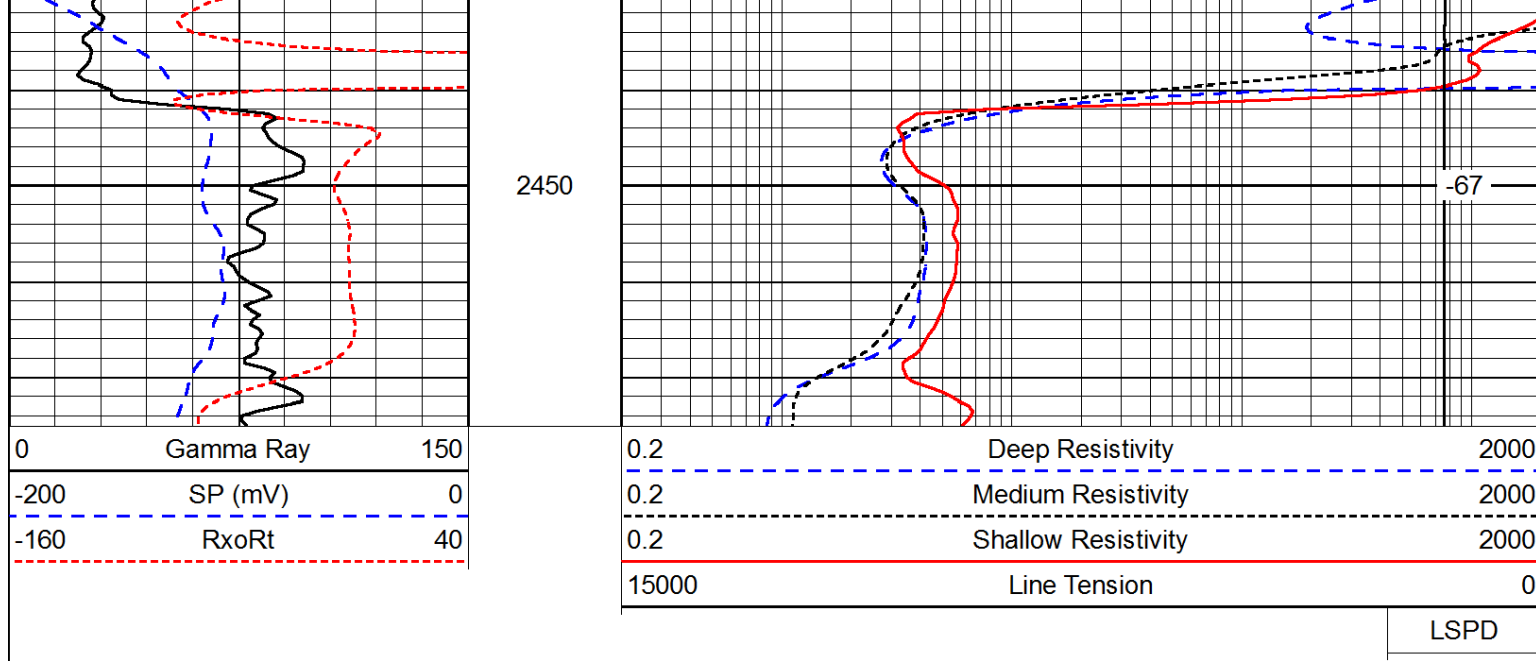
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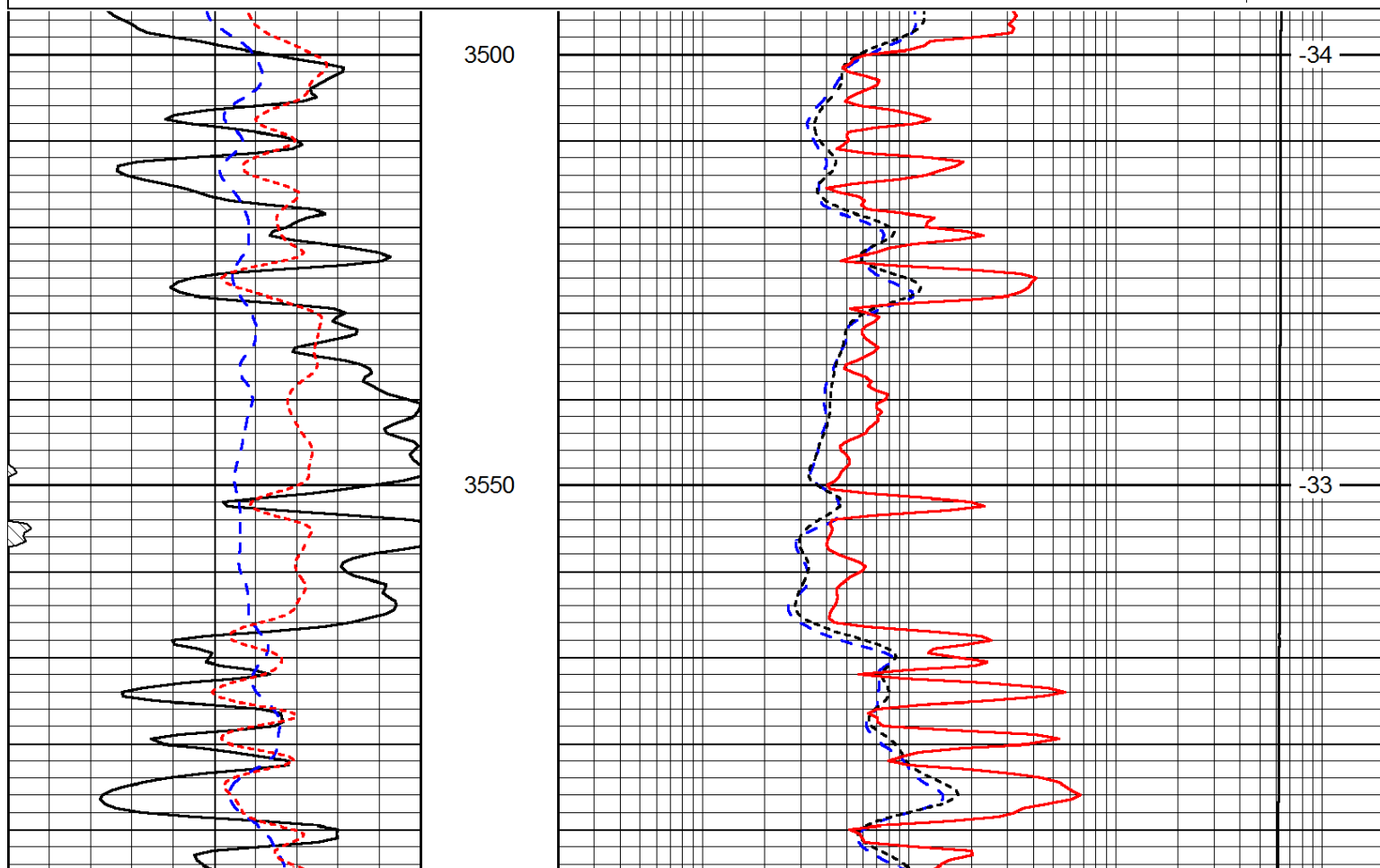
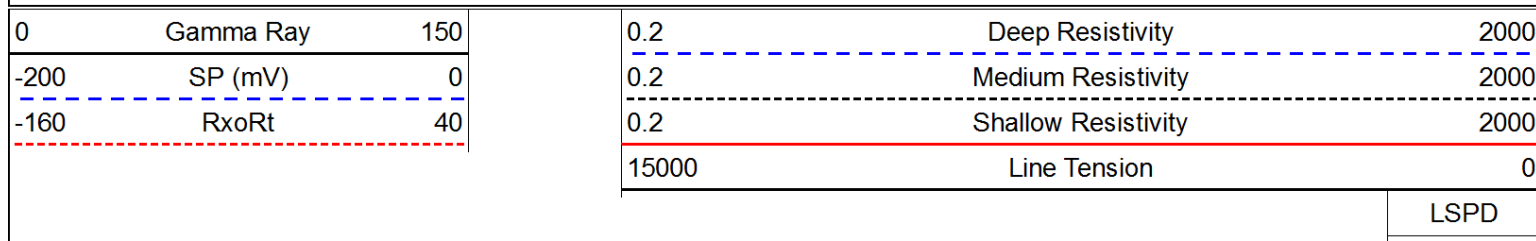


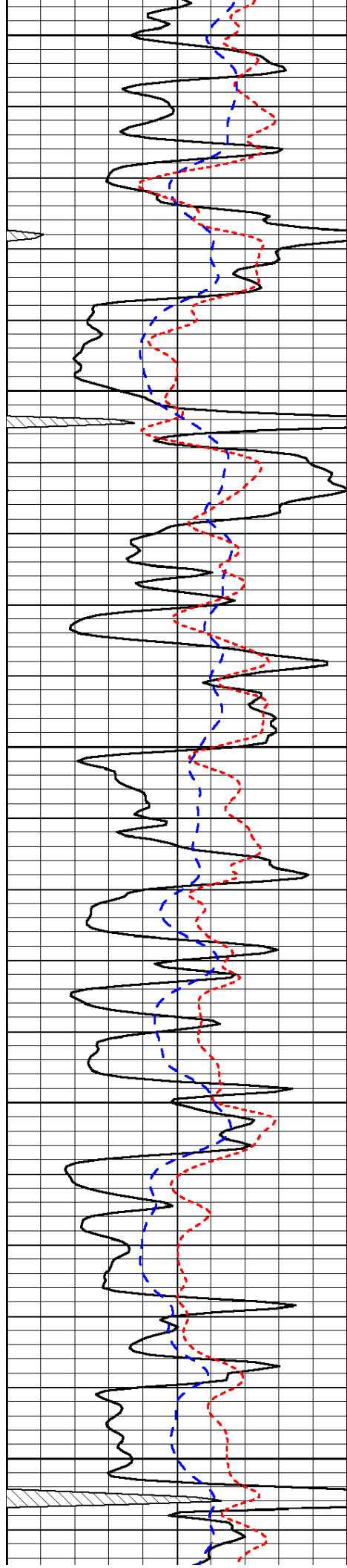
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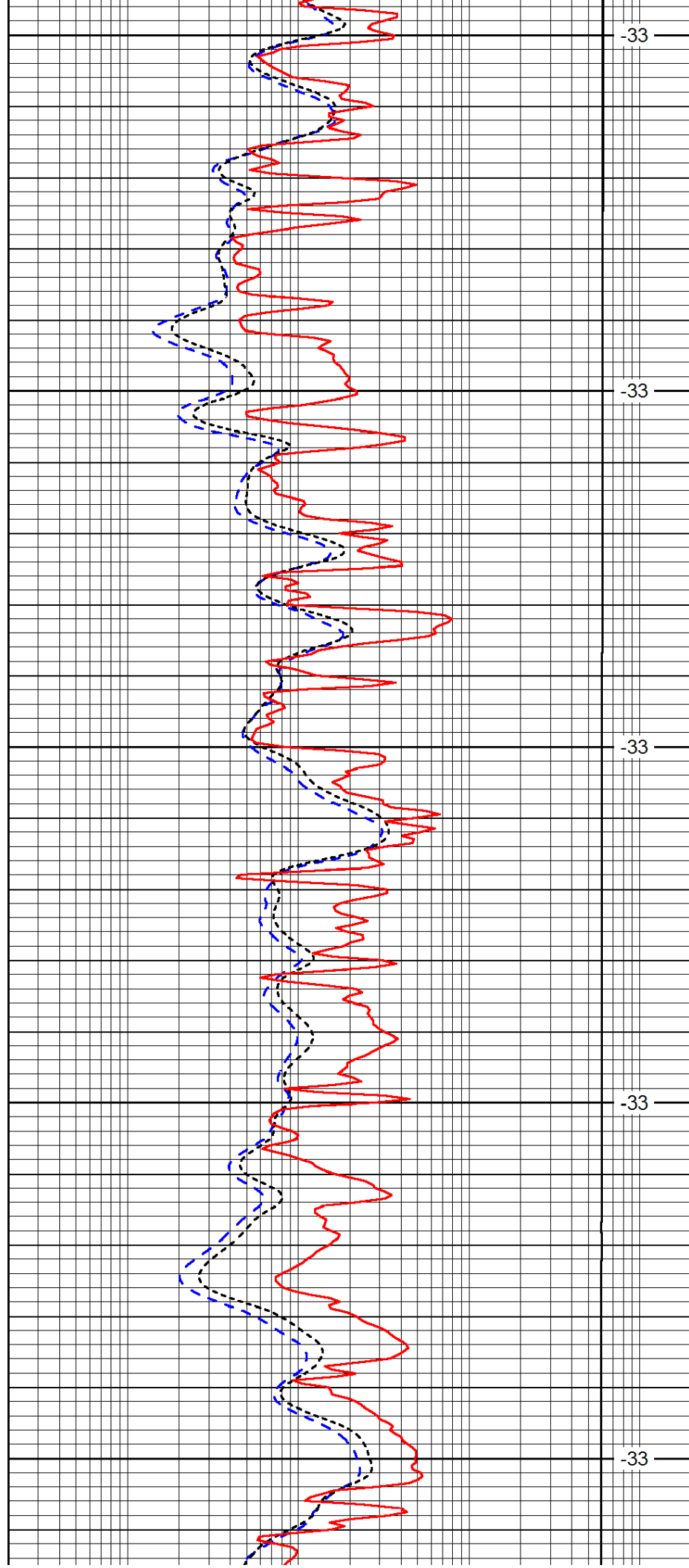
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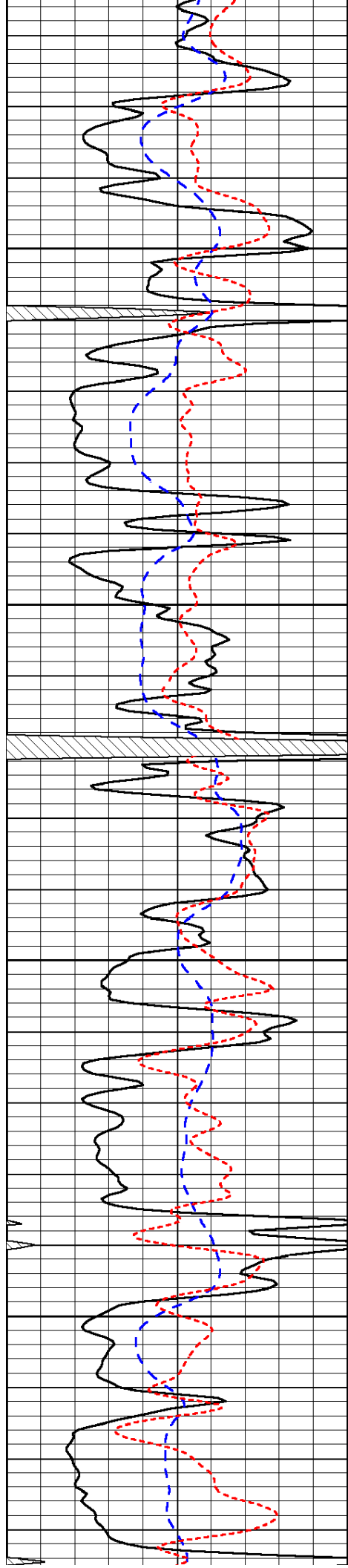
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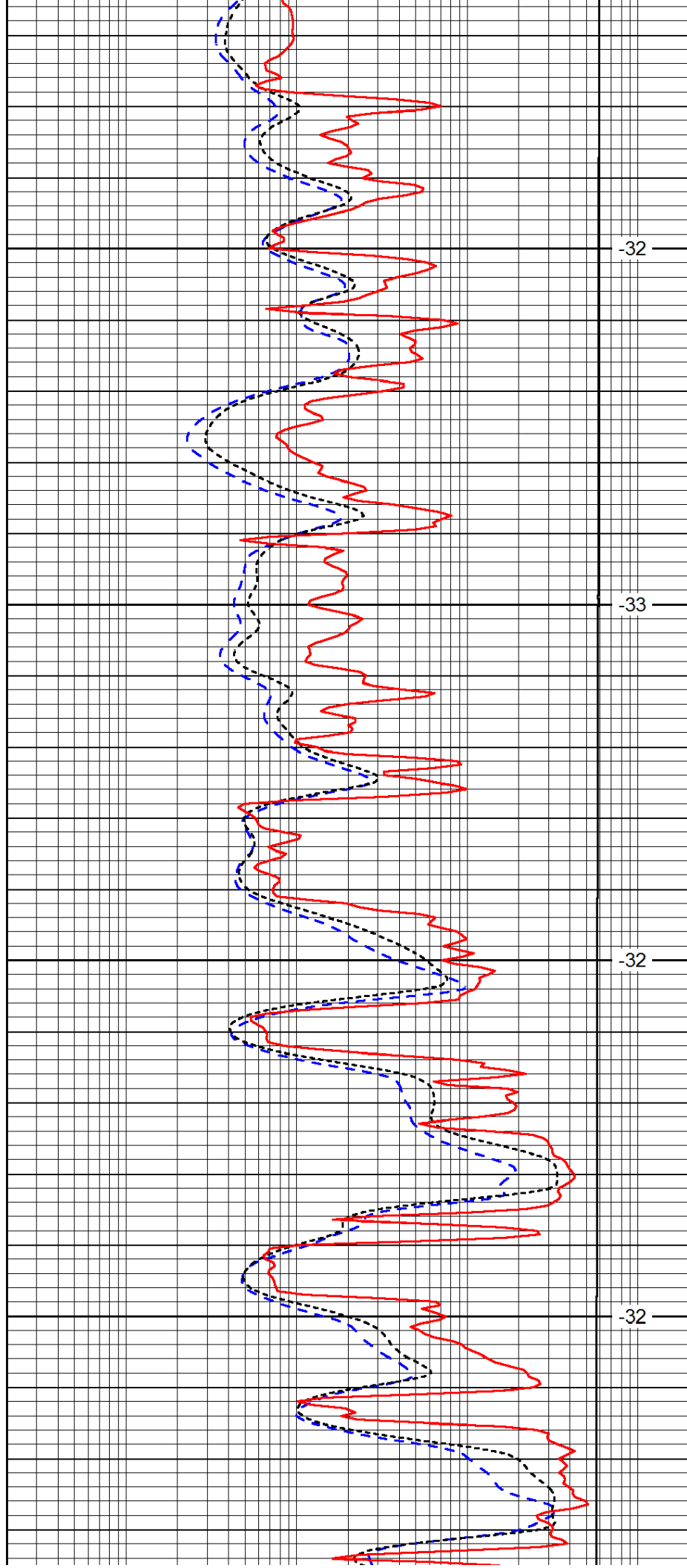


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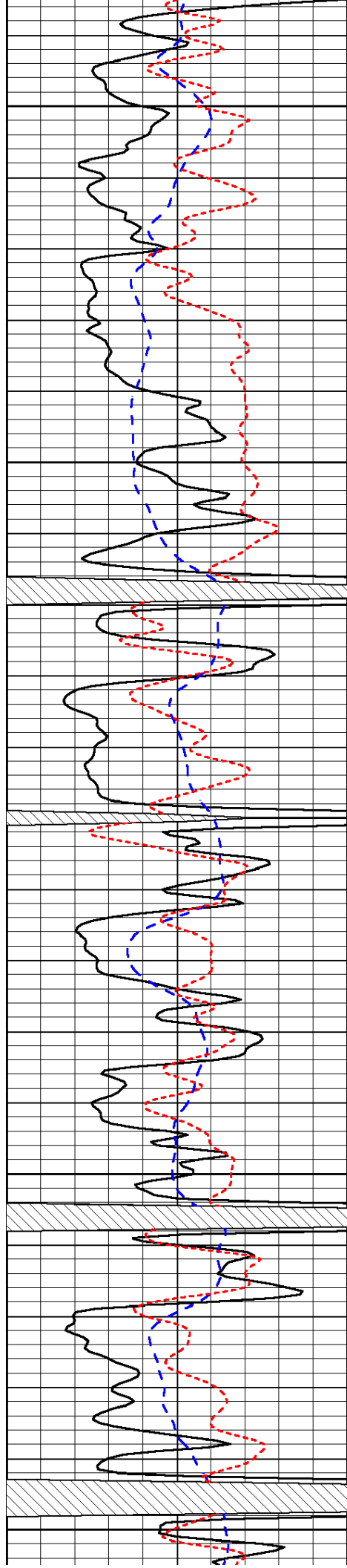


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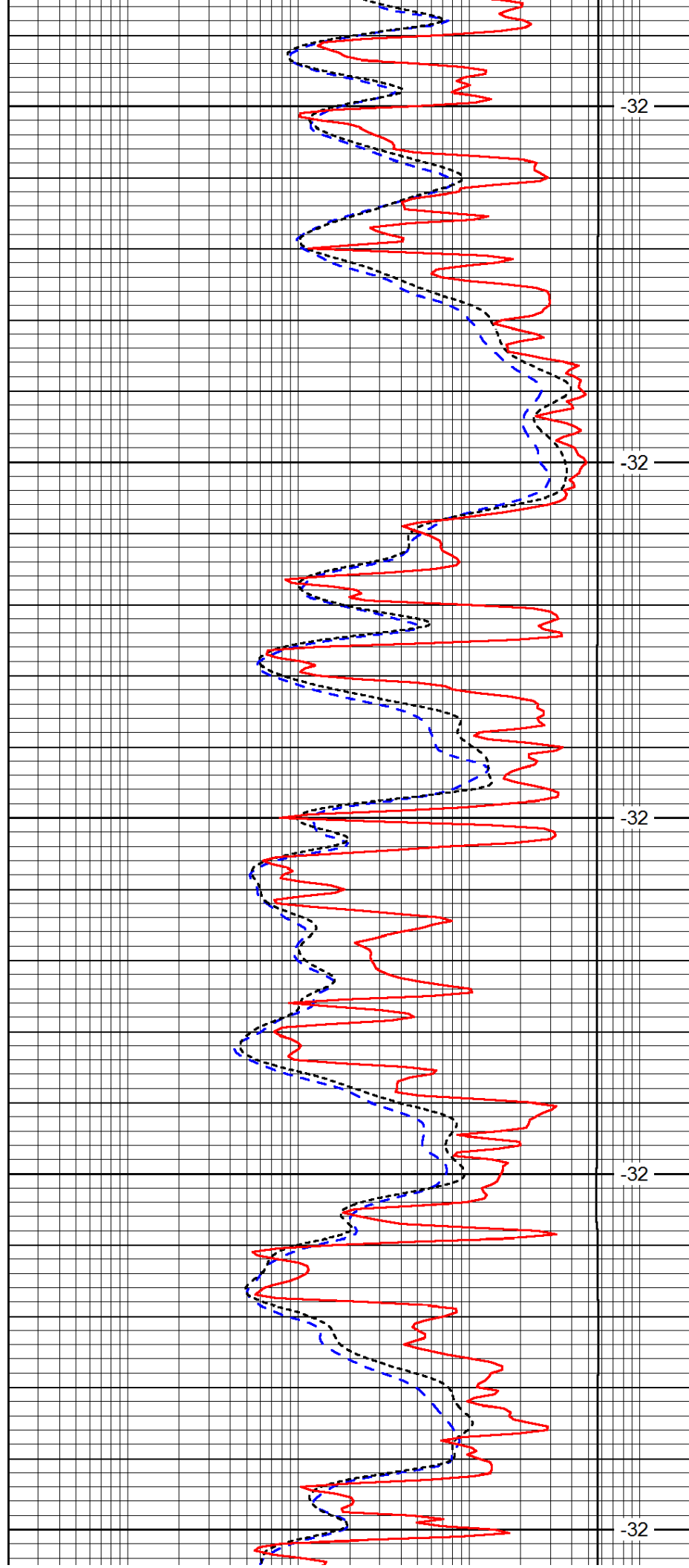
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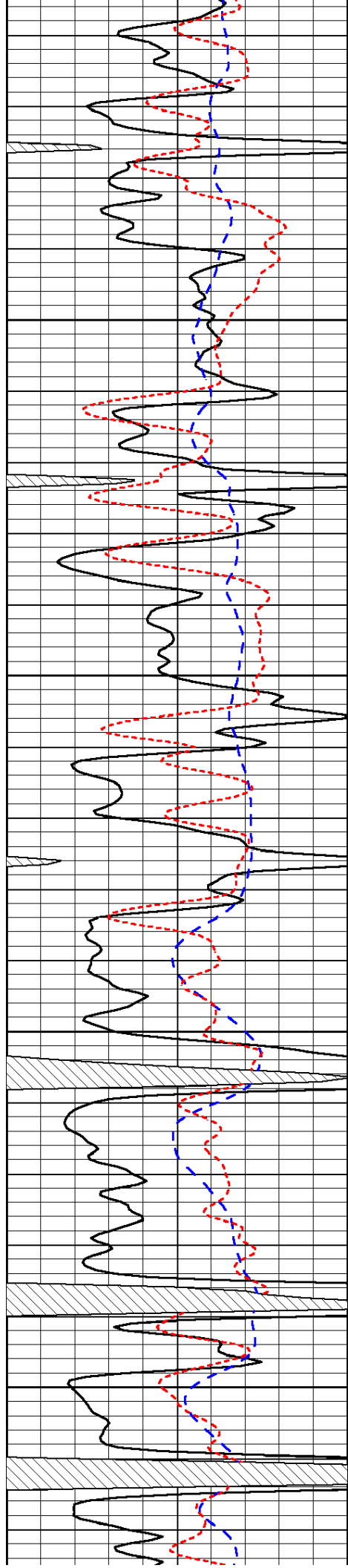
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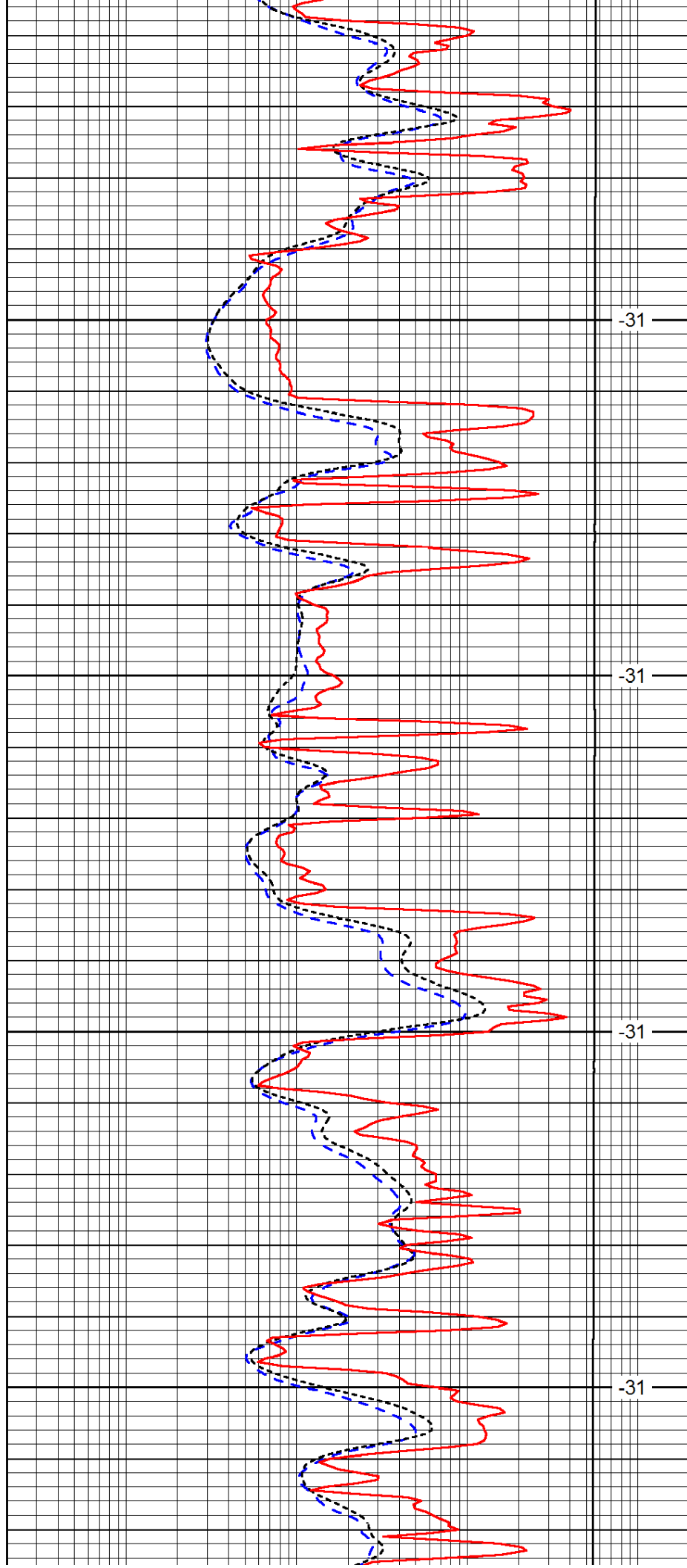


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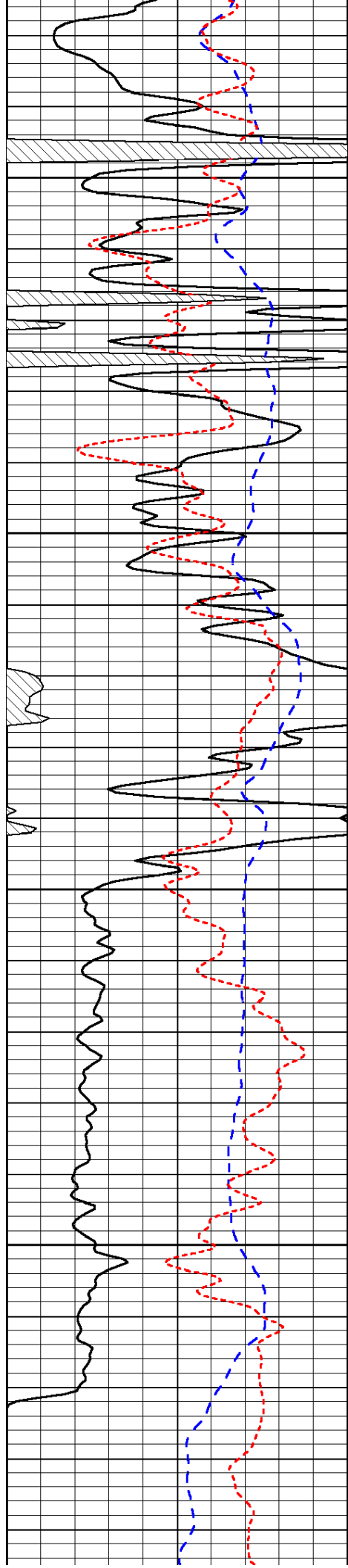


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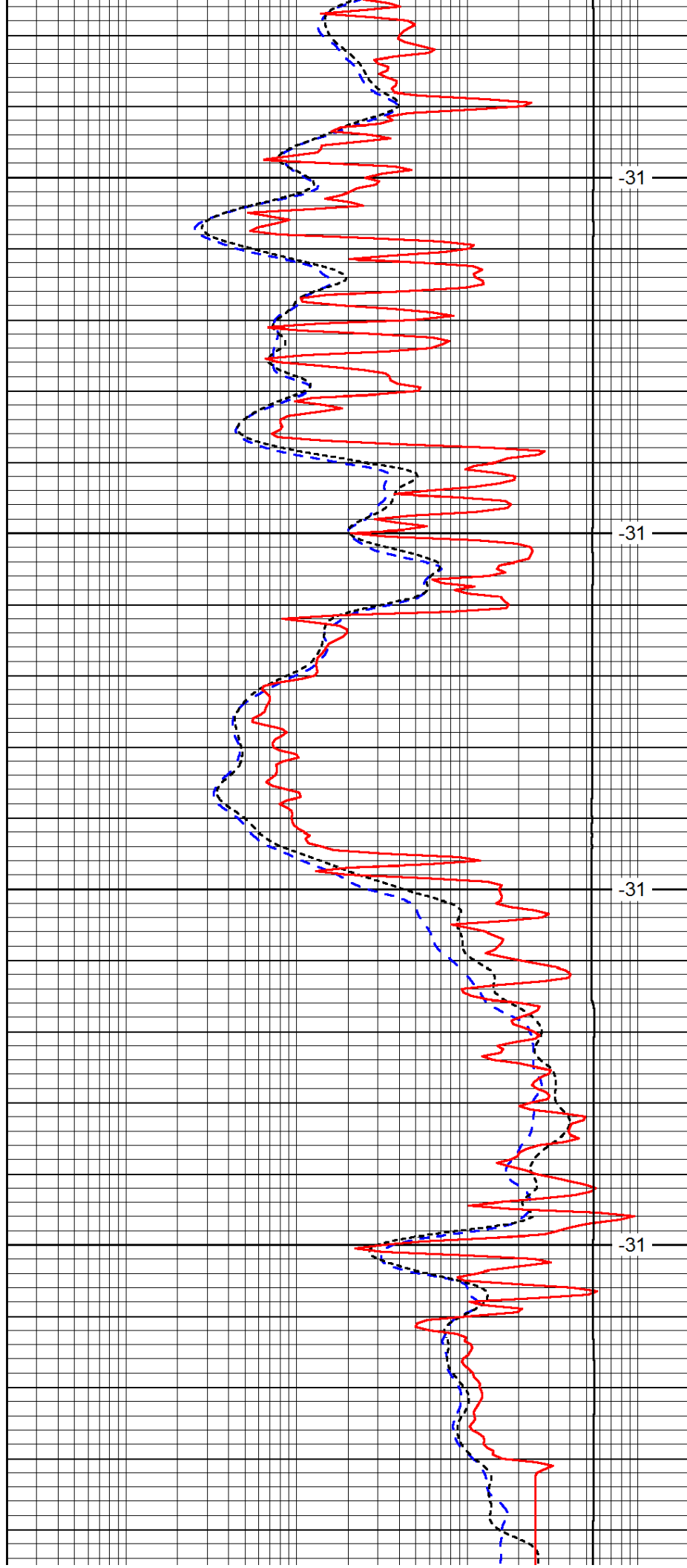


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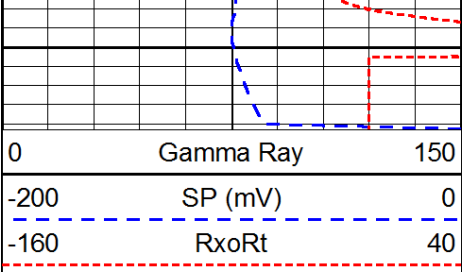


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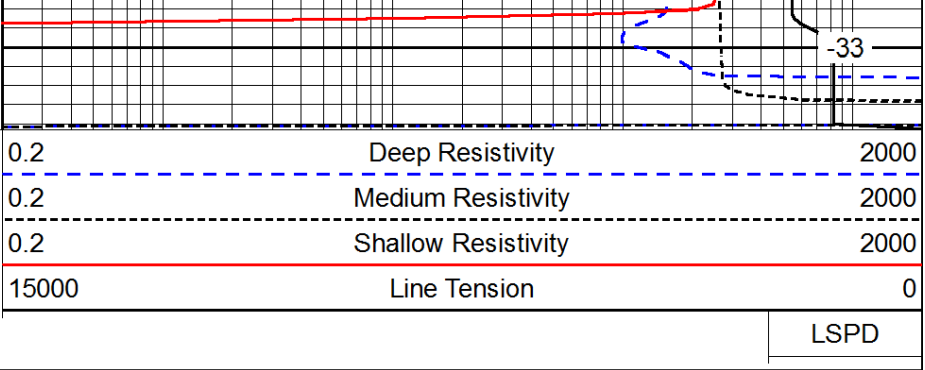
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4700



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LSPD