



Pioneer Energy Services

Dual Induction Log

API No.

15-047-21639-00-00

Company Toto Energy, LLC

Well Edward Land Investment #30-1

Field McCarty

County Edwards State Kansas

Location

S2 SW SE
330' FSL / 1980' FEL

Sec: 30 Twp: 25S Rge: 17W

Permanent Datum Ground Level Elevation 2146
Log Measured From Kelly Bushing 10 Ft. Above Perm. Datum
Drilling Measured From Kelly BushingOther Services
CNL / CDL
MEL
Elevation
K.B. 2156
D.F.
G.L. 2146

Date 10/10/2014

Run Number One

Depth Driller 4954

Depth Logger 4956

Bottom Logged Interval 4955

Top Log Interval 350

Casing Driller 8.625 @ 357

Casing Logger 356

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 6300

Density / Viscosity 9.5 49

pH / Fluid Loss 10.5 11.2

Source of Sample Flowline

Rm @ Meas. Temp 0.70 @ 68

Rmf @ Meas. Temp 0.53 @ 68

Rmc @ Meas. Temp 0.95 @ 68

Source of Rmf / Rmc Charts

Rm @ BHT 0.38 @ 126

Operating Rig Time 4 Hours

Max Rec. Temp. F 126

Equipment Number 15

Location Hays

Recorded By R. Barnhart

Witnessed By Sonia McDanel

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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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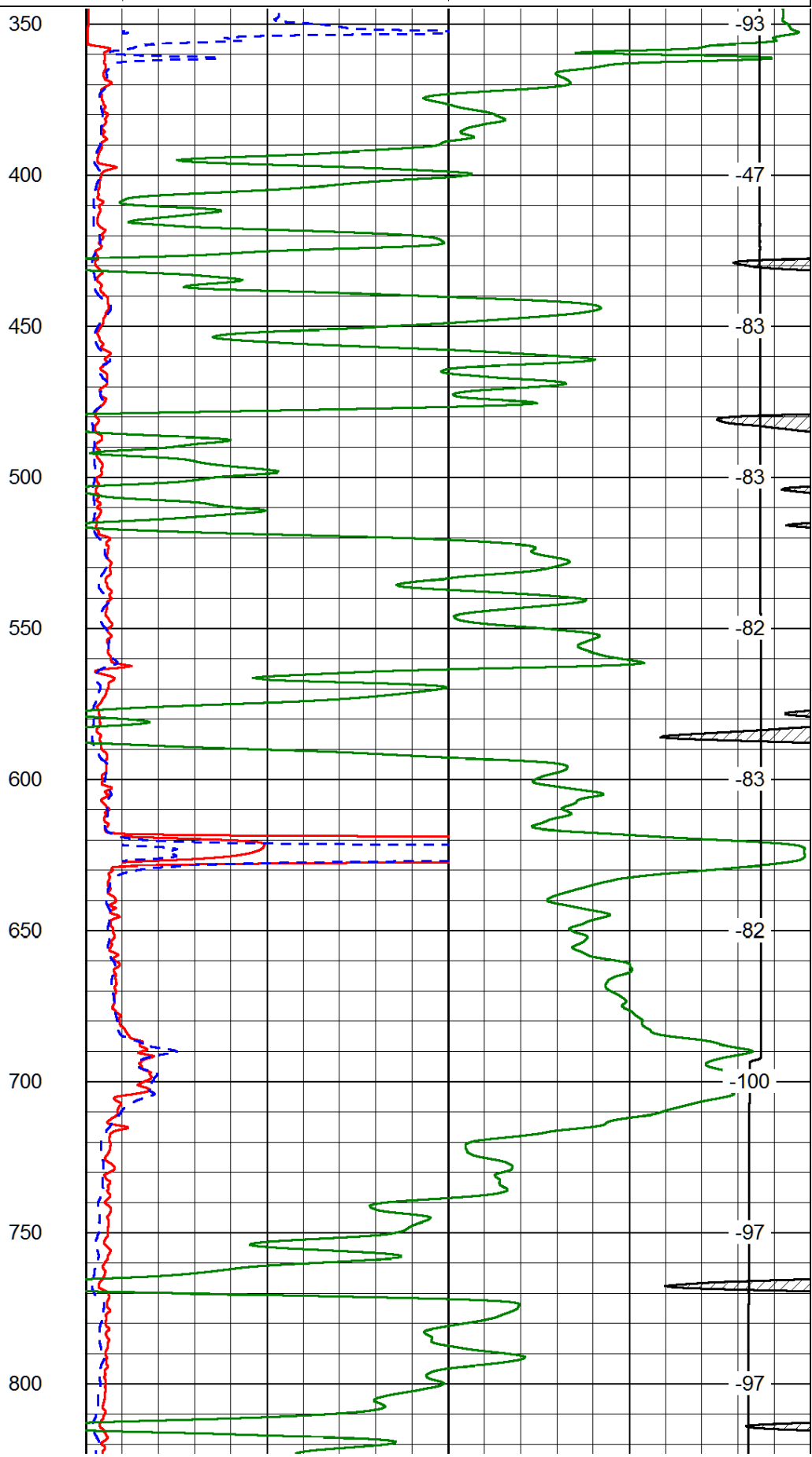
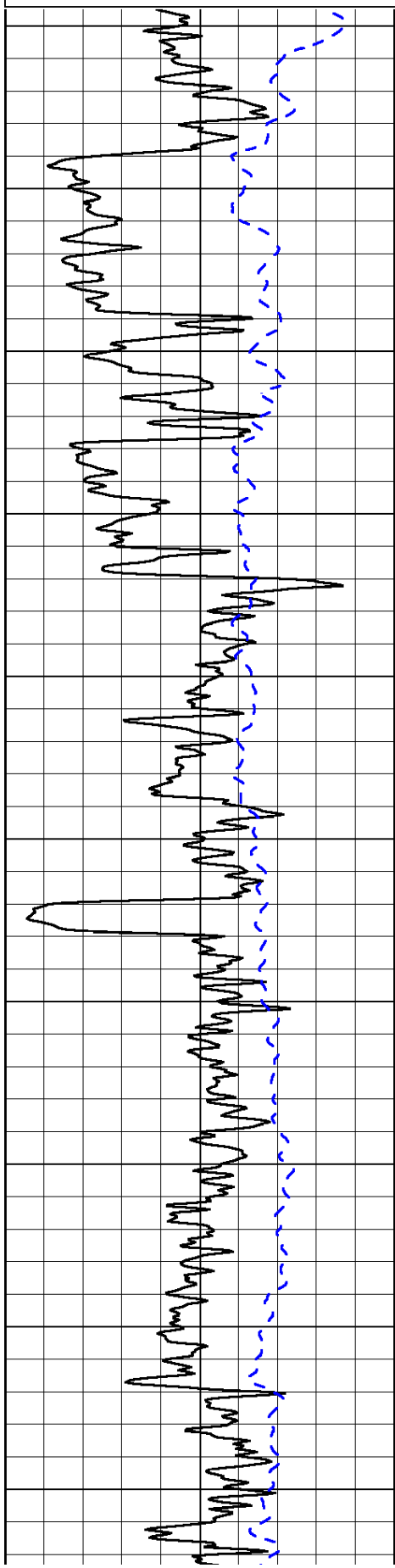
Lewis, KS:
6S on Blktop to R Rd., 1 1/2E, N into

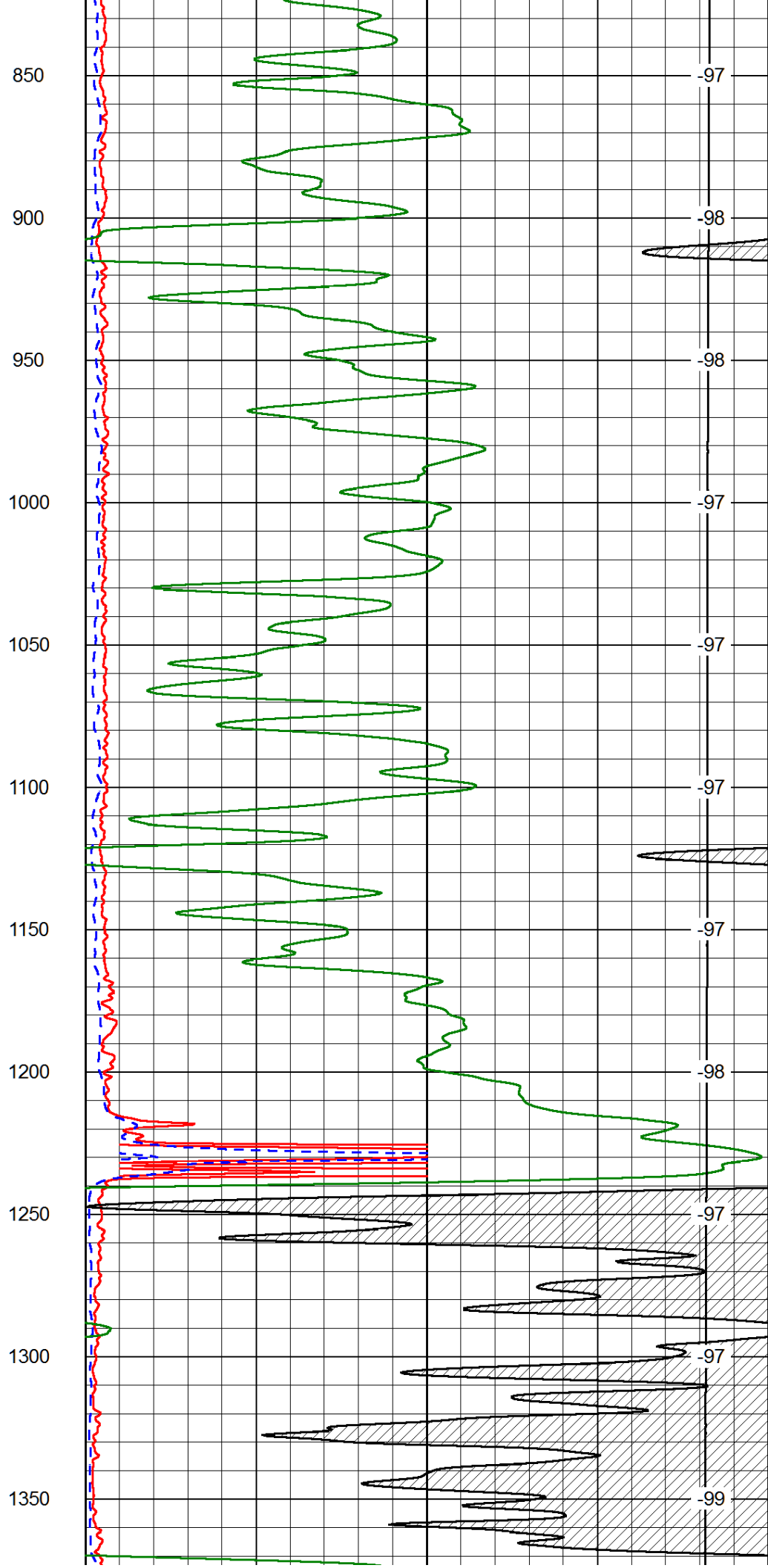
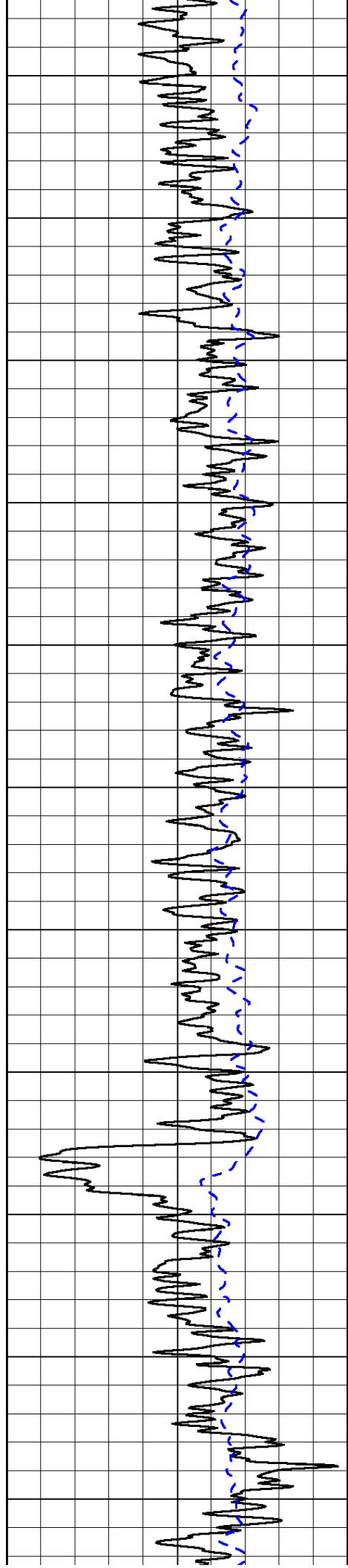
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Dataset Creation: Fri Oct 10 04:16:31 2014
Charted by: Depth in Feet scaled 1:600

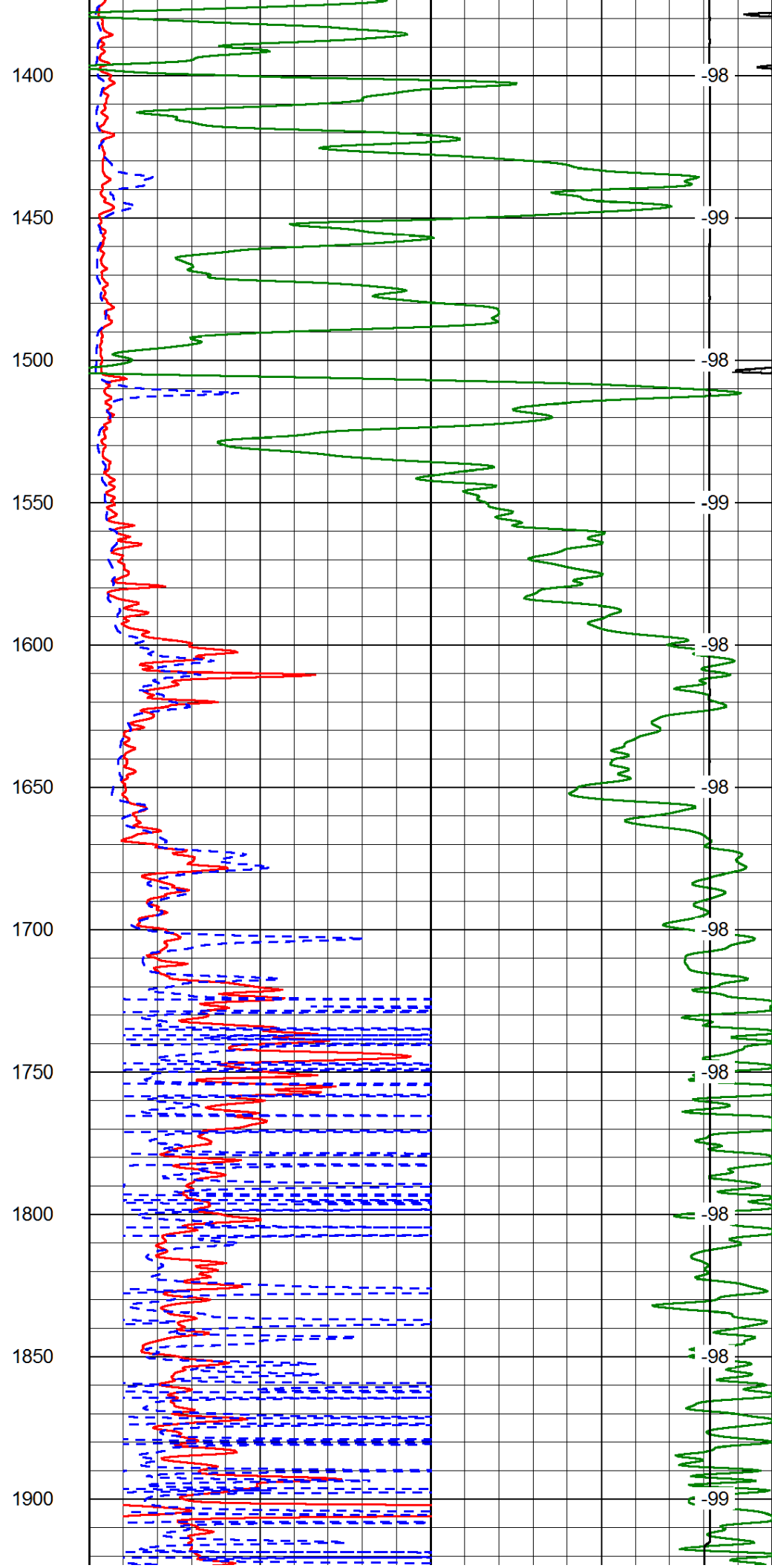
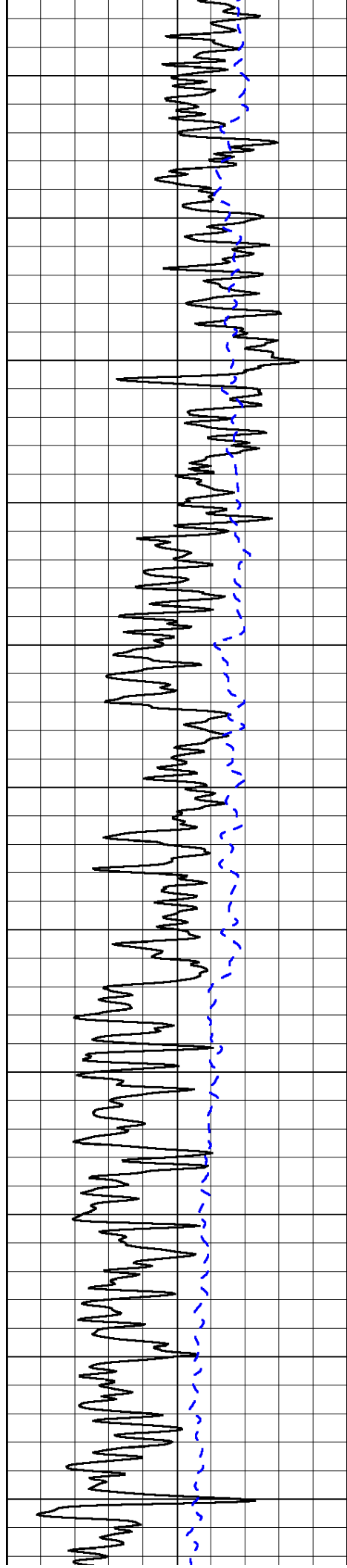
0	Gamma Ray	150
-200	SP (mV)	0

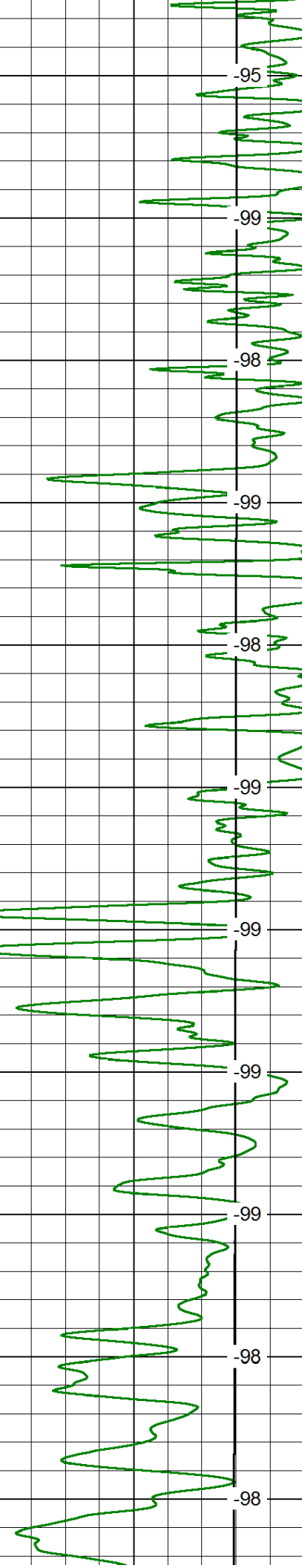
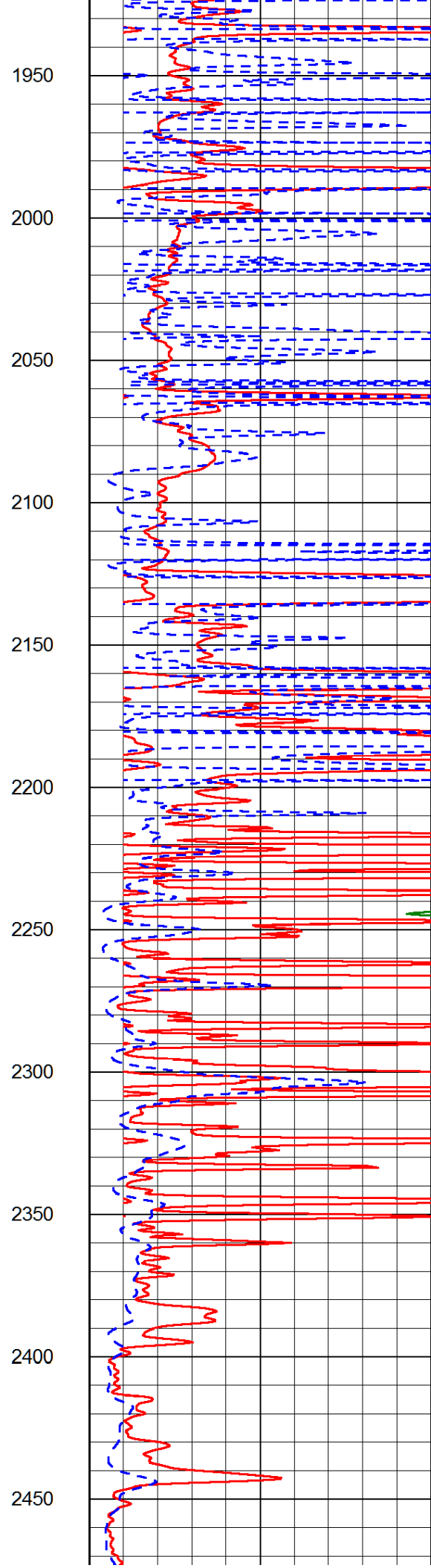
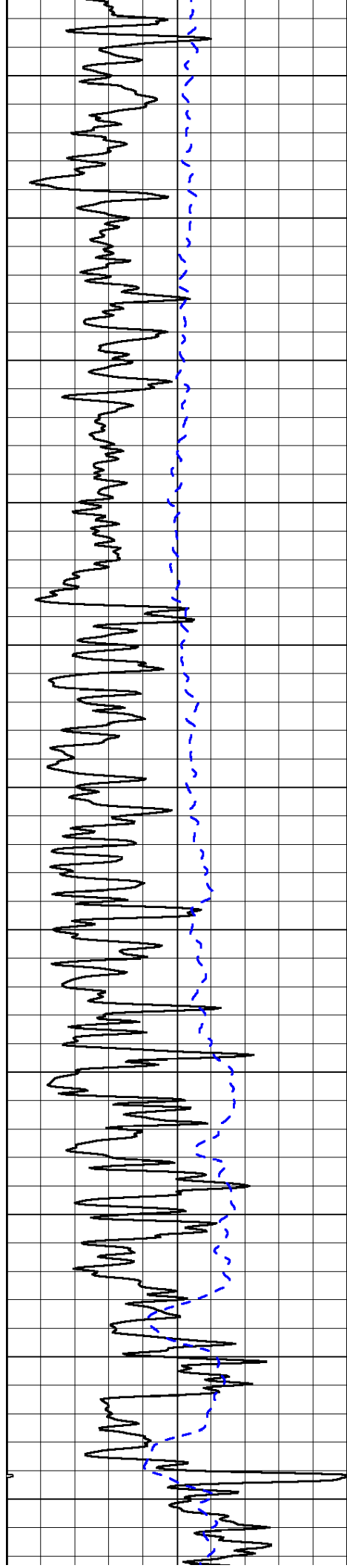
0	Shallow Resistivity	50
0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

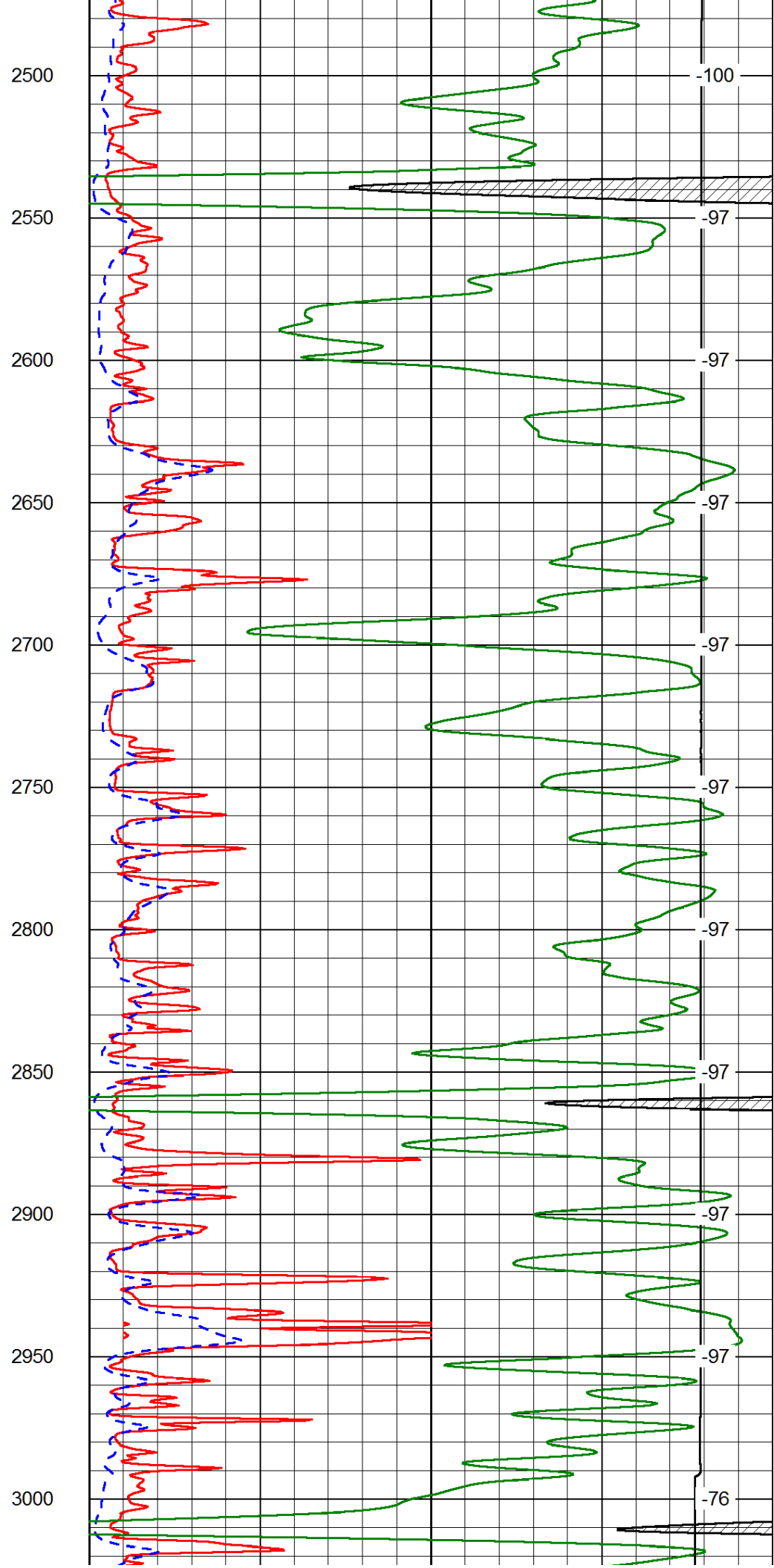
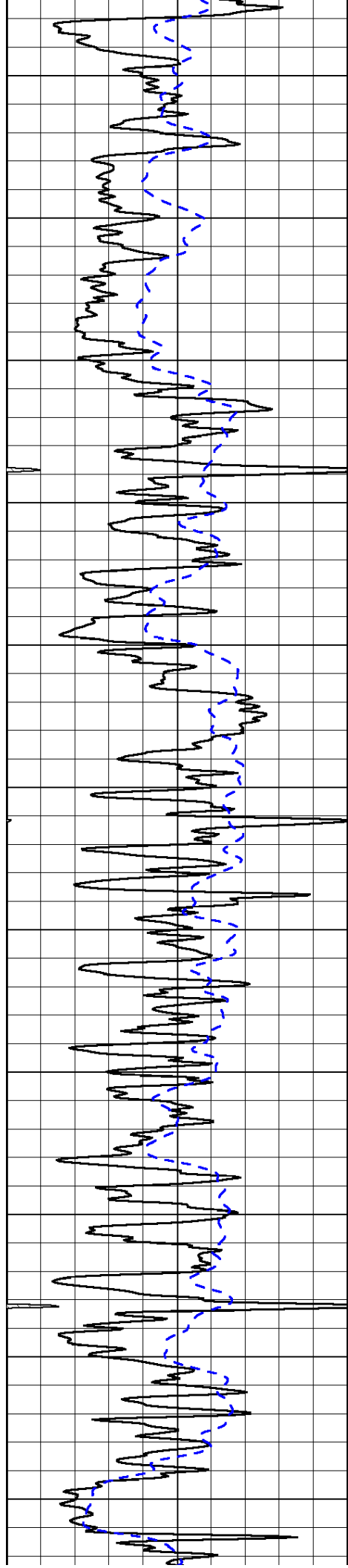
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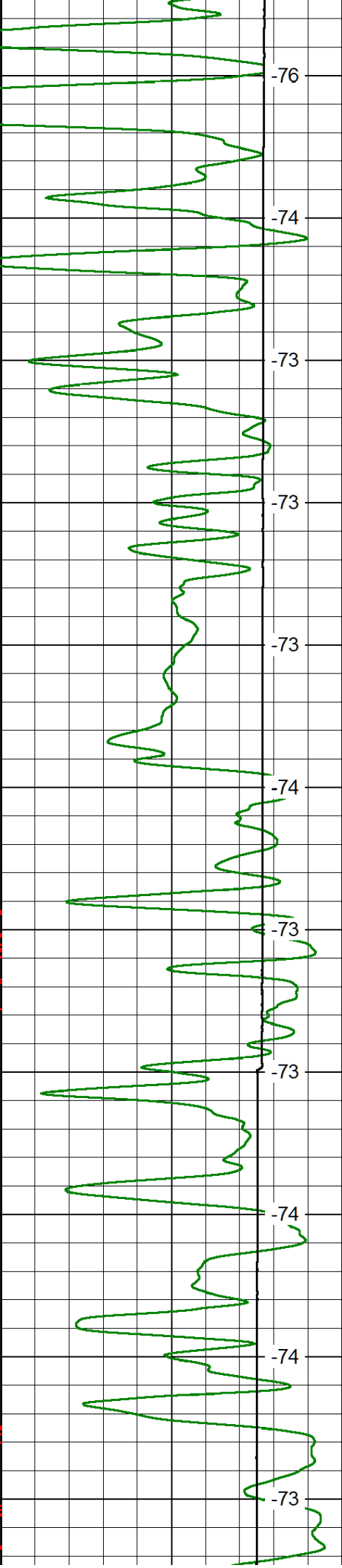
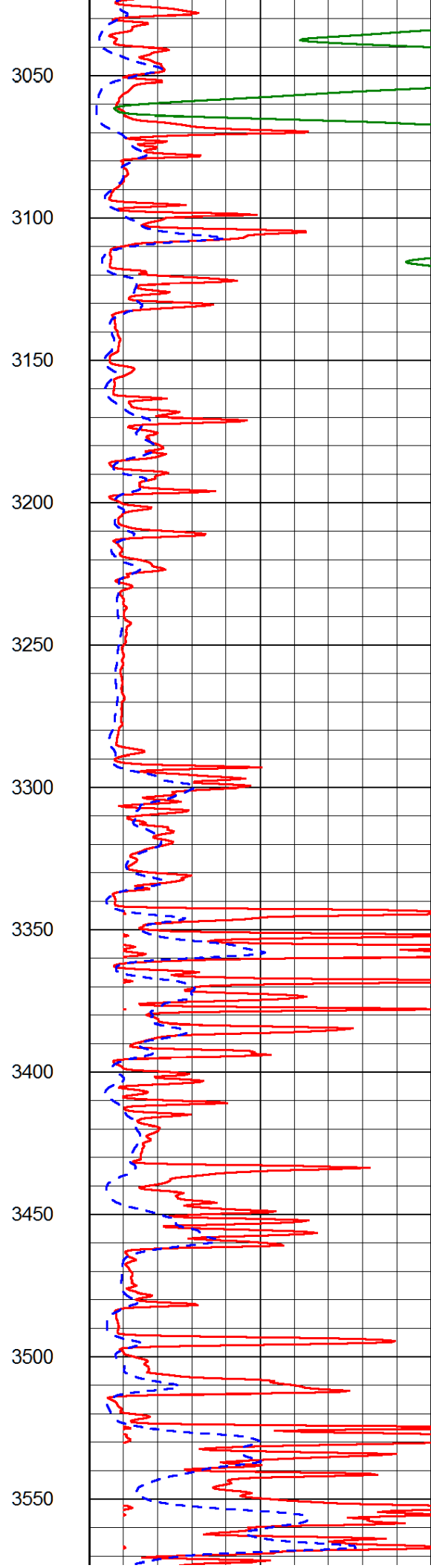
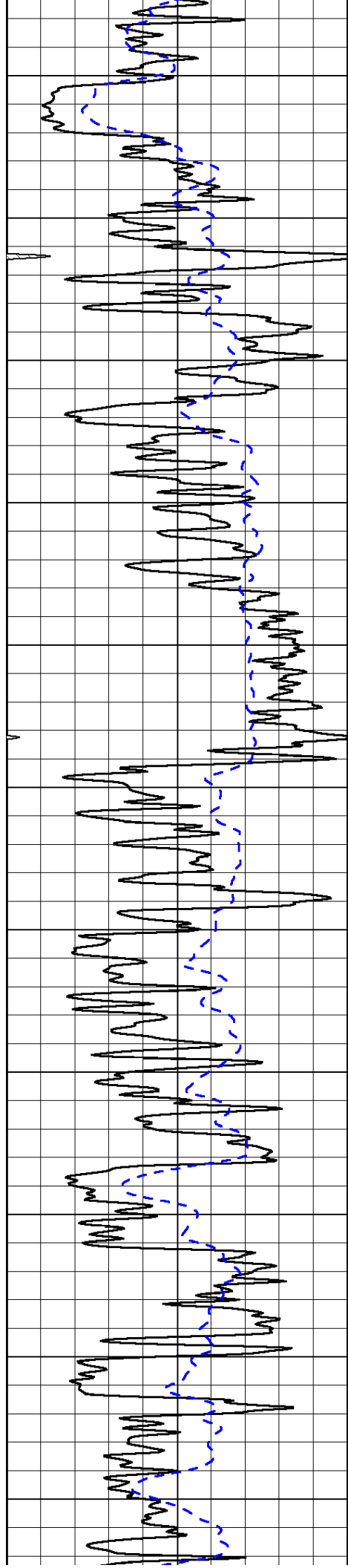


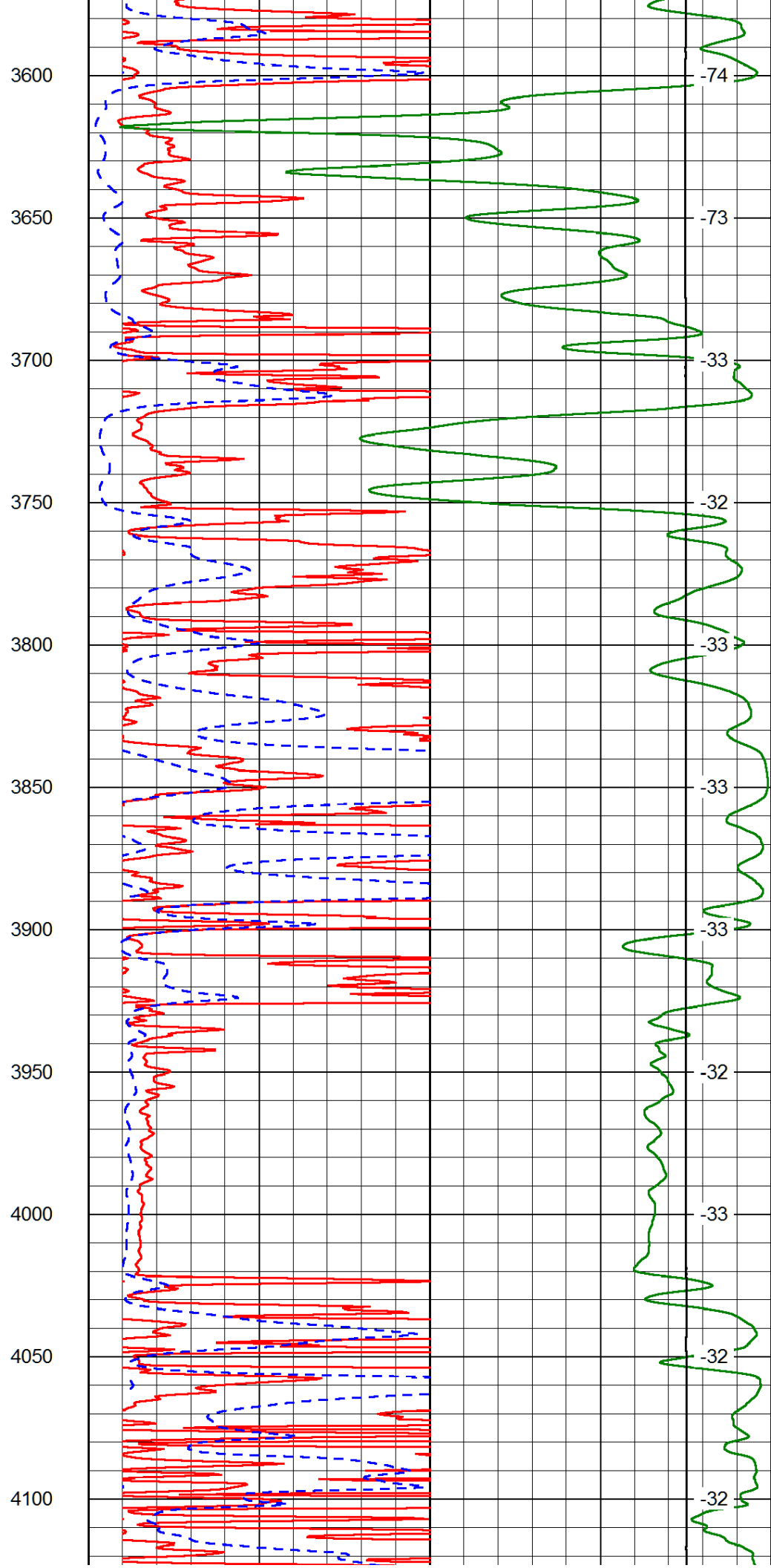
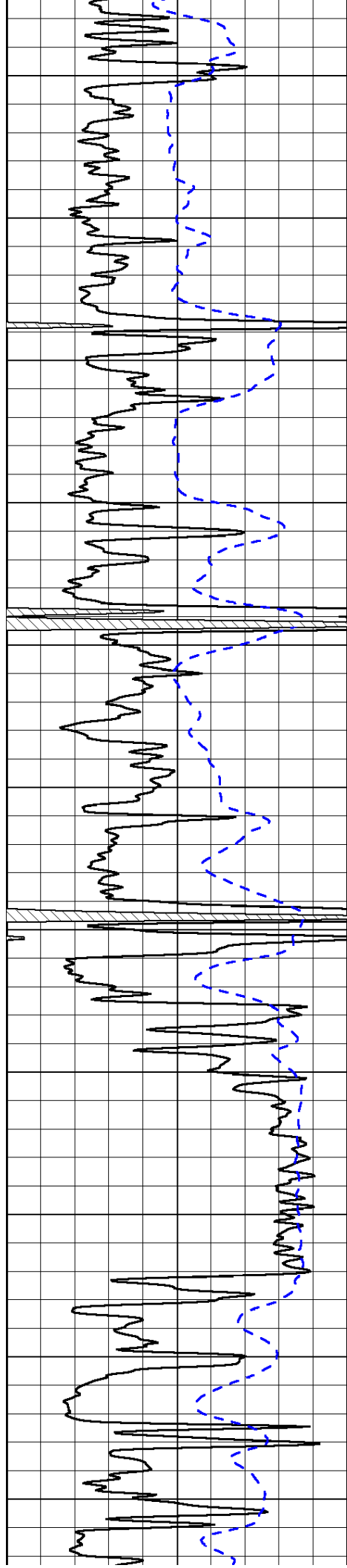


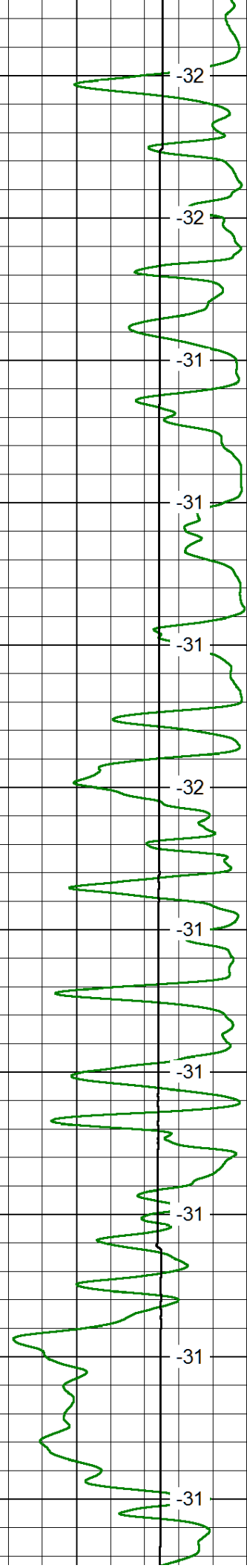
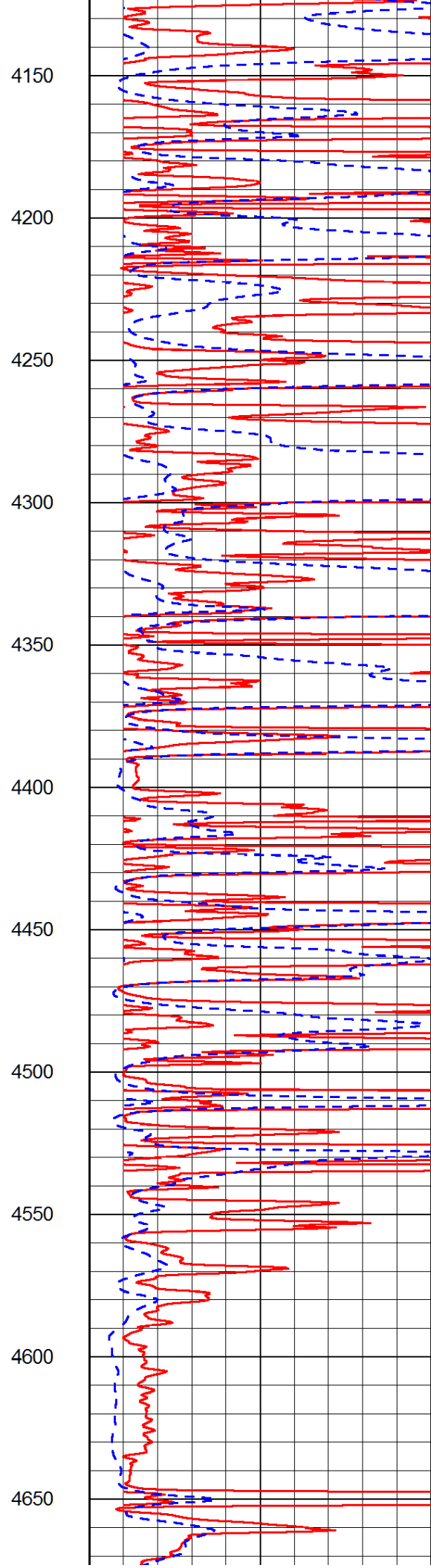
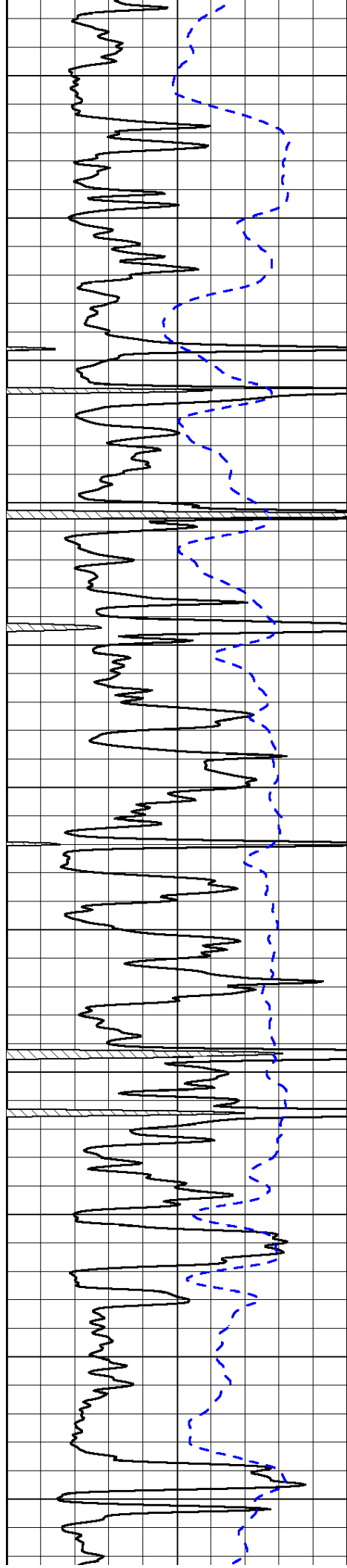


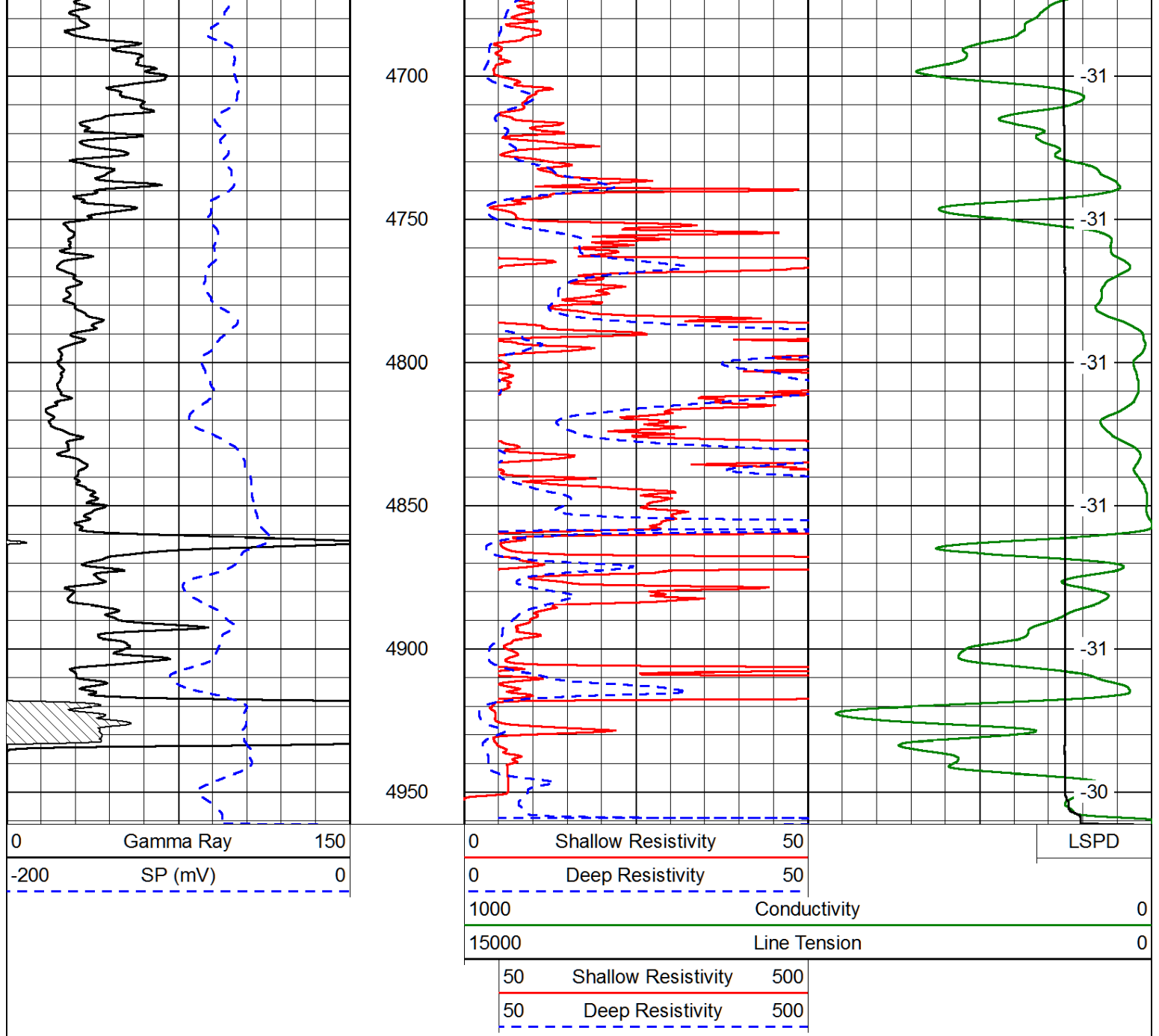




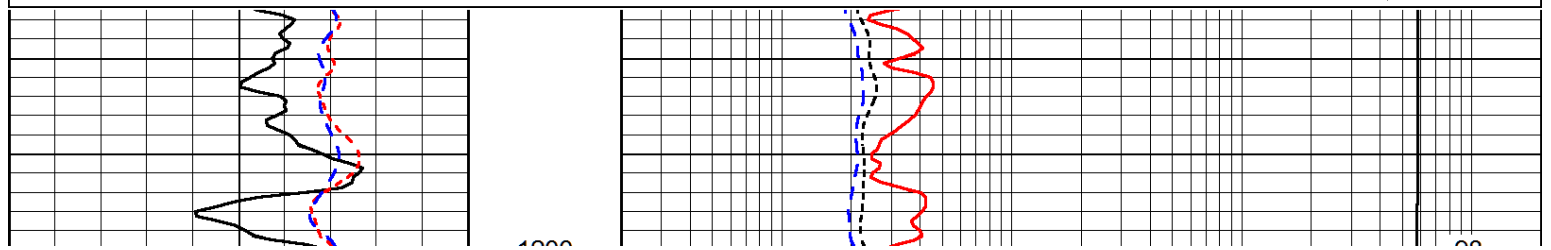
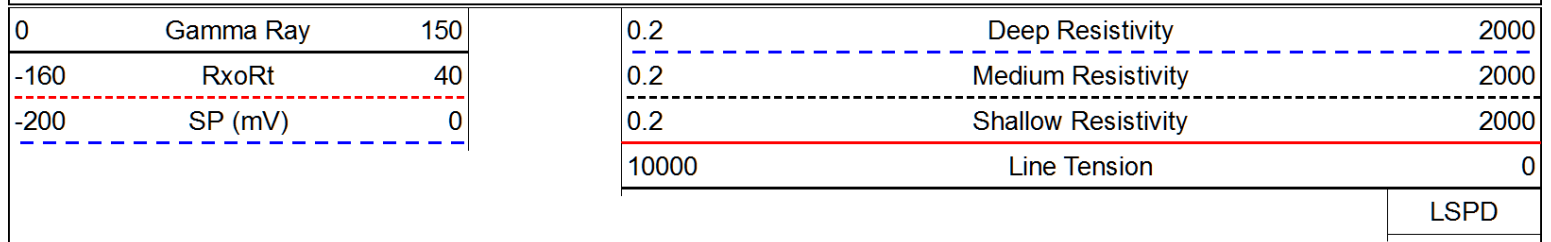


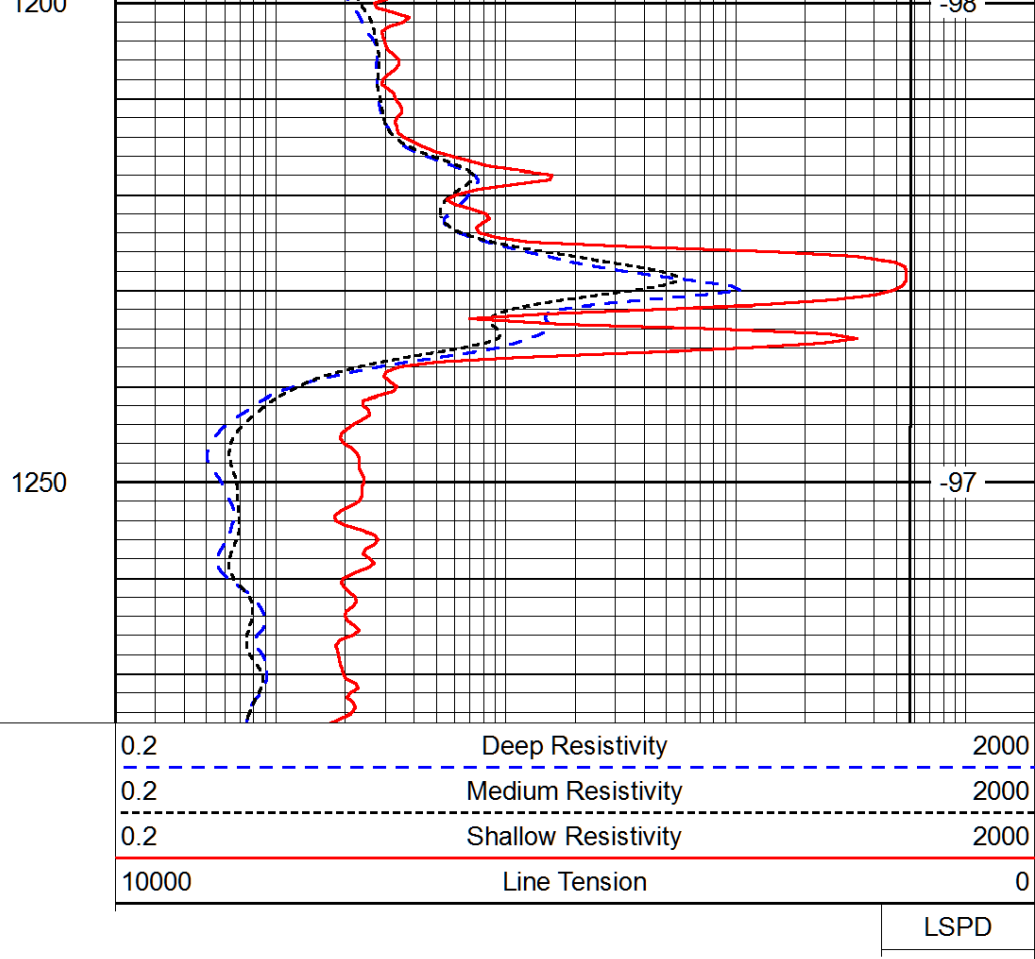
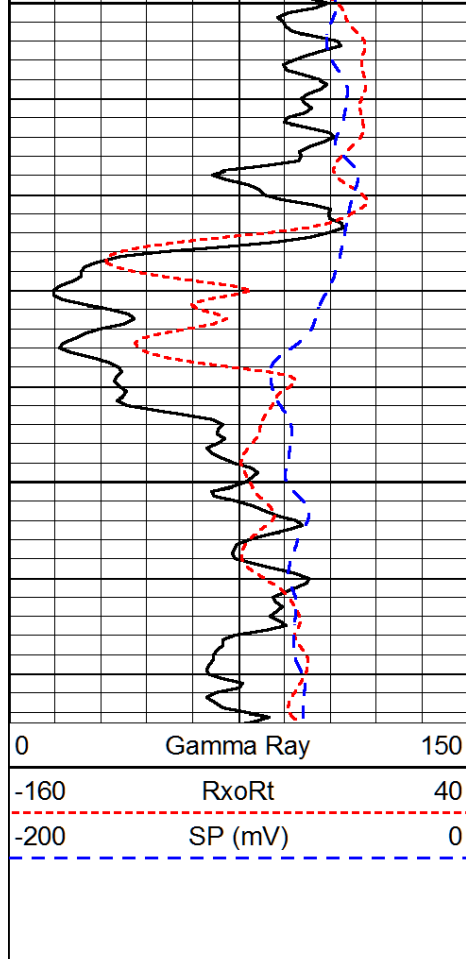




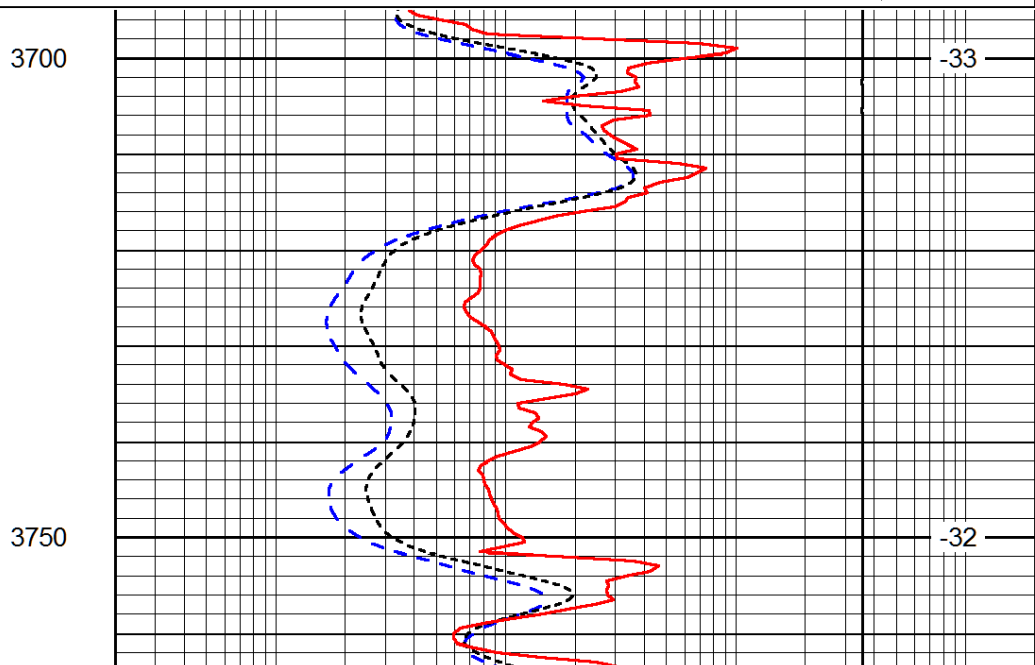
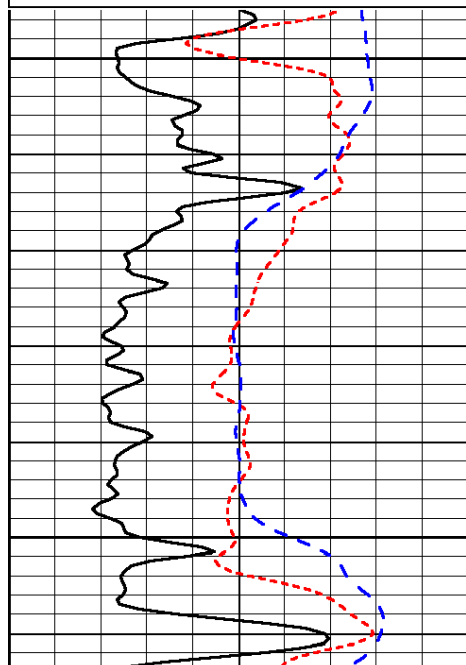
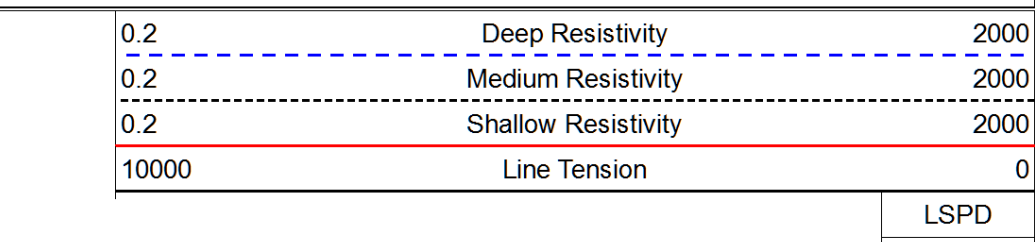
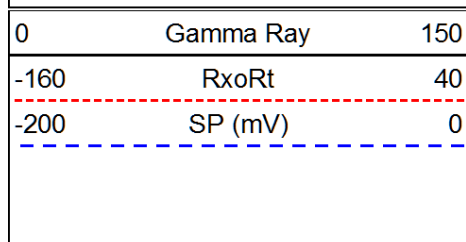


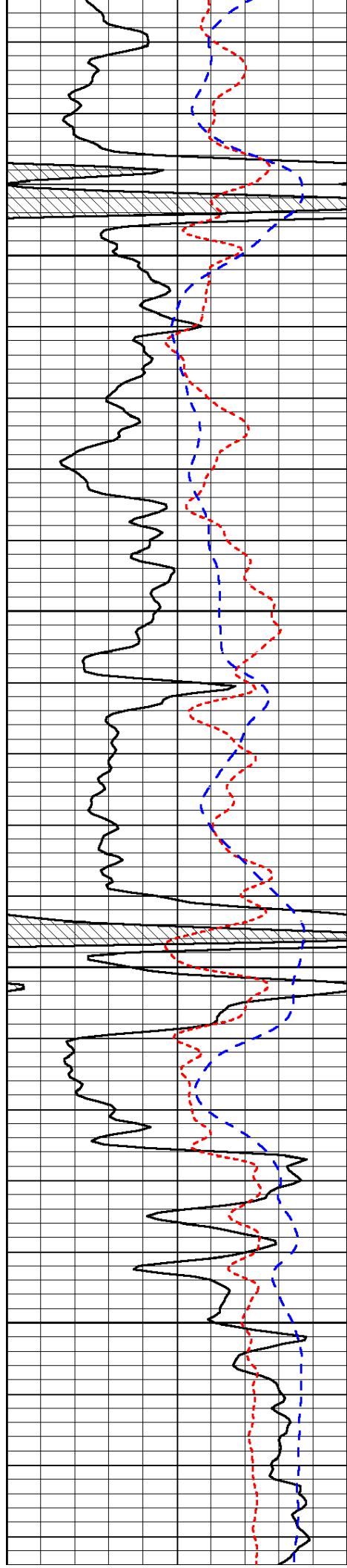
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 Charted by: Depth in Feet scaled 1:240





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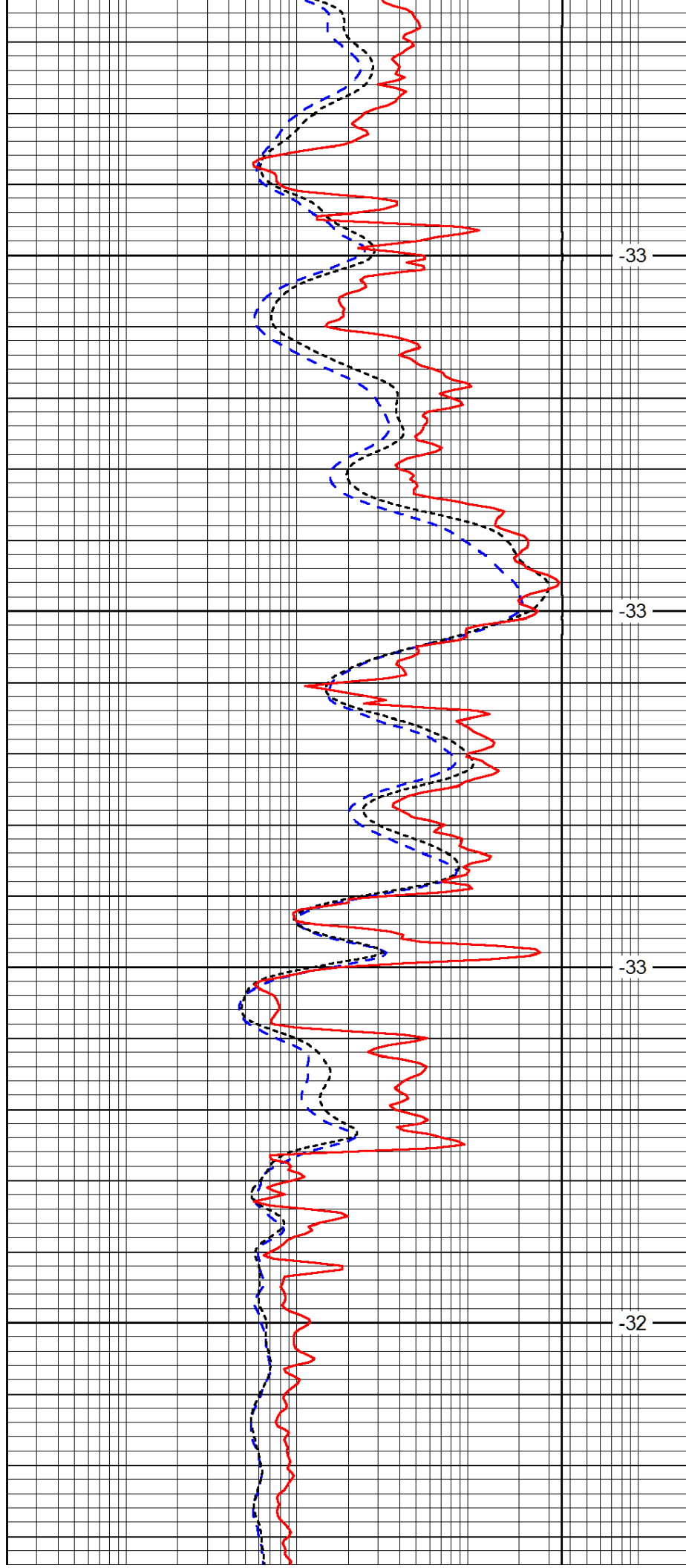


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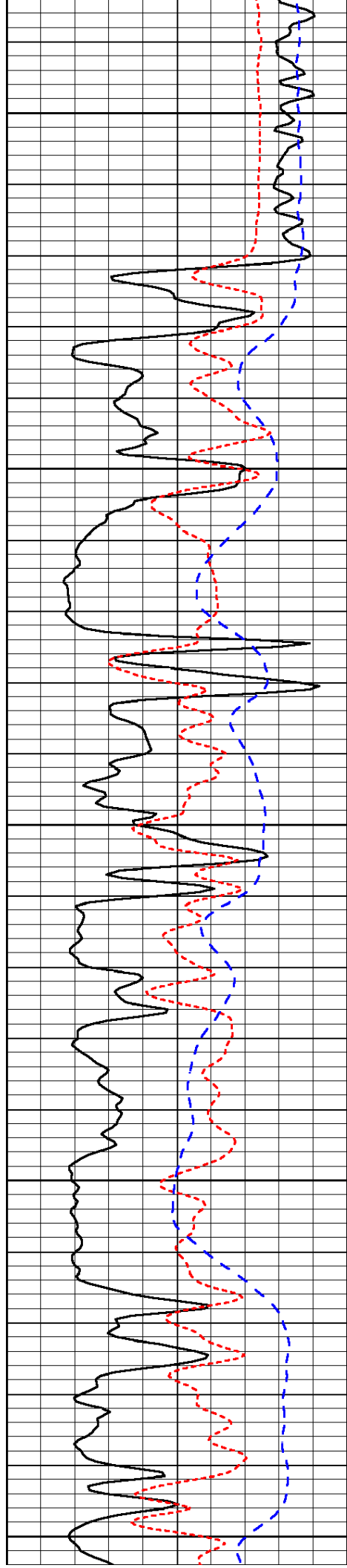


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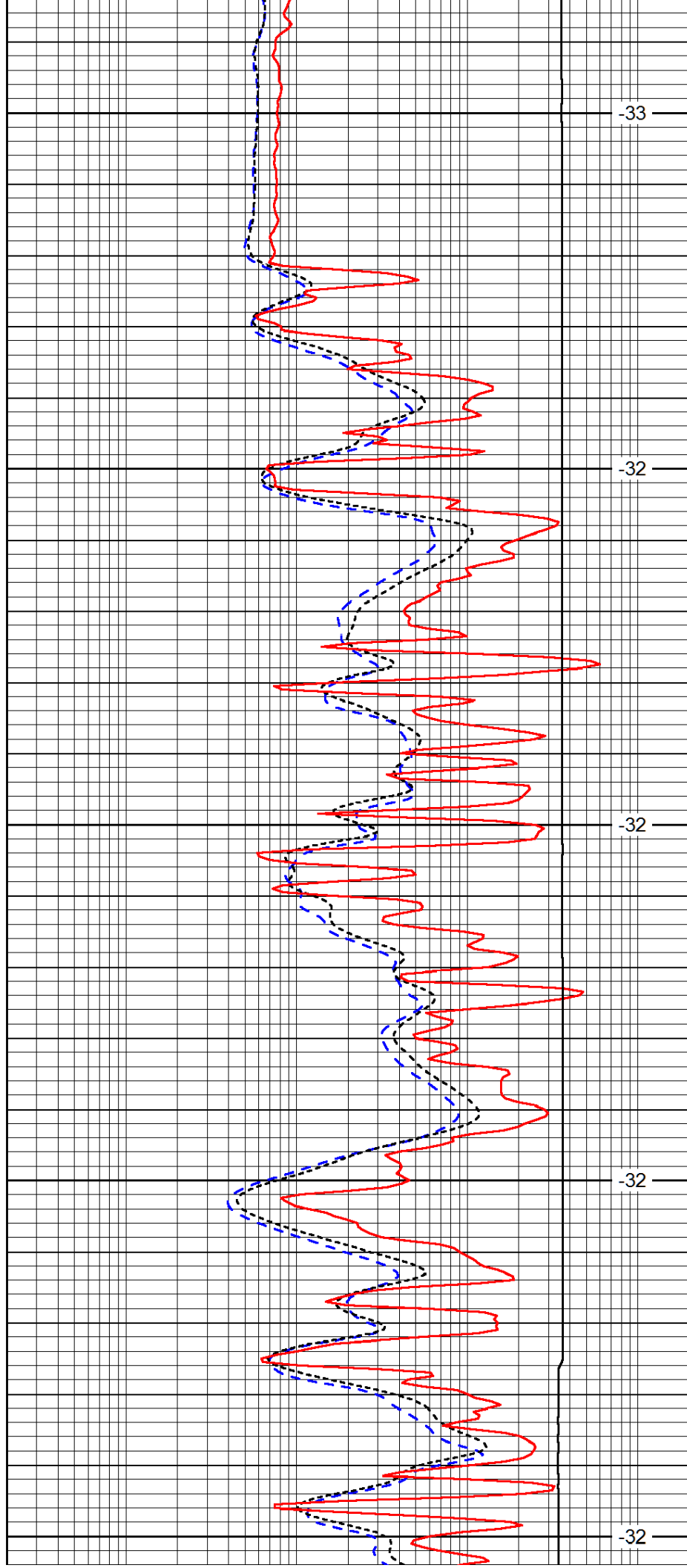
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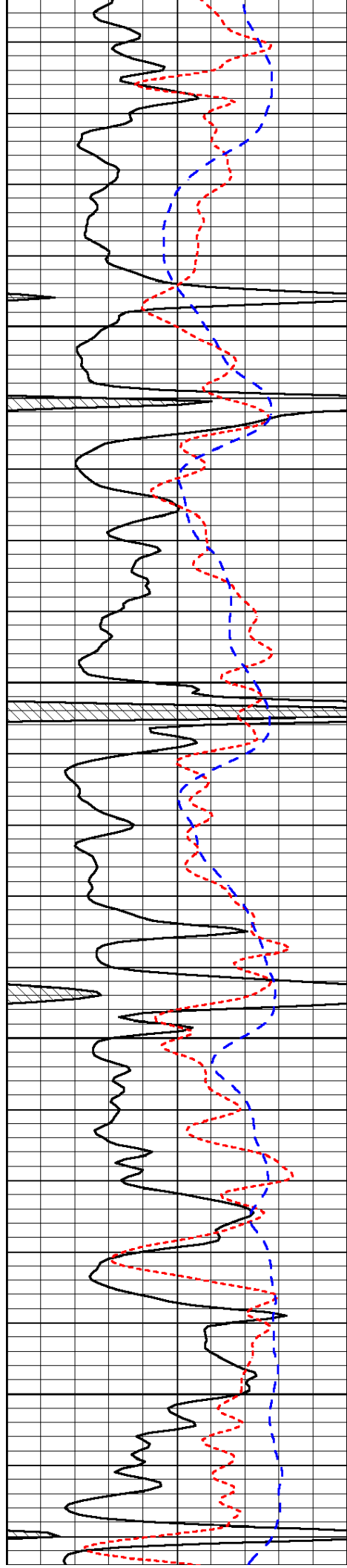
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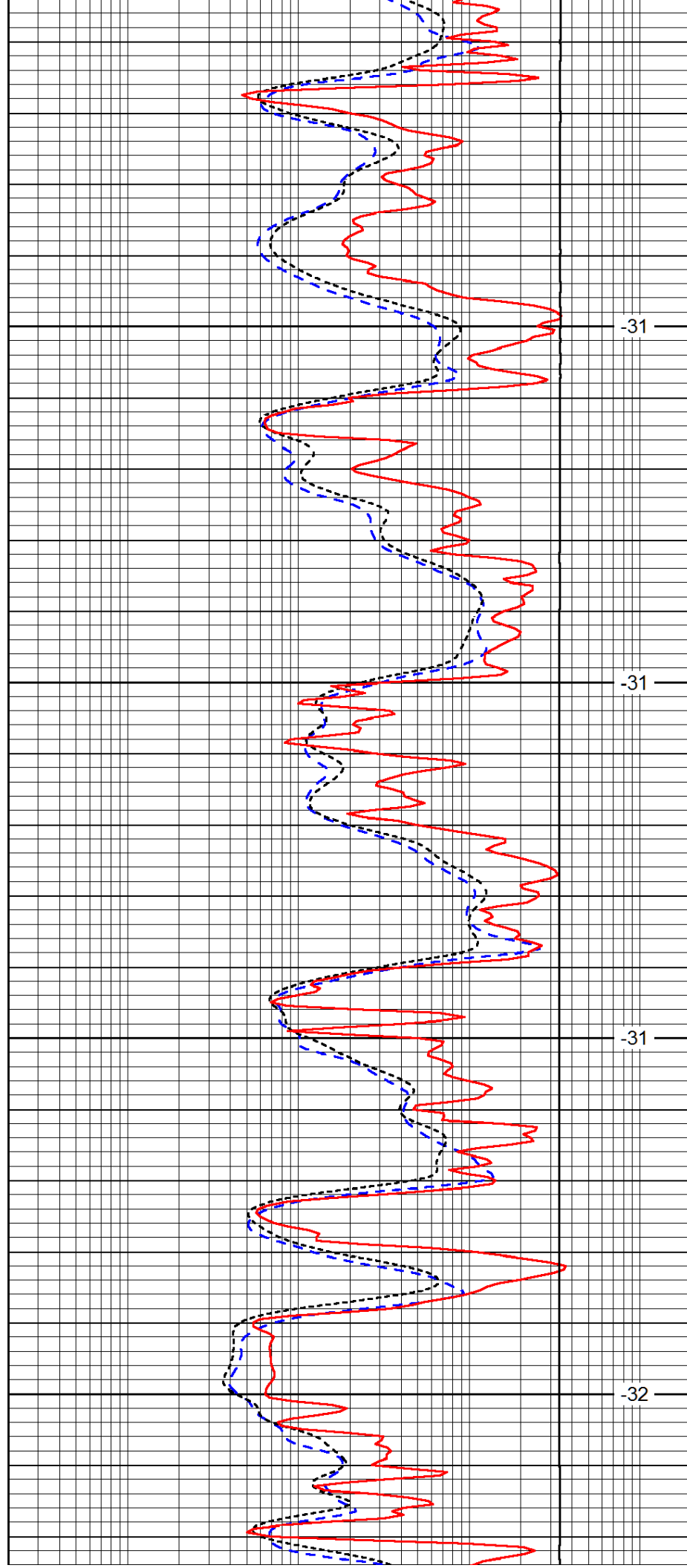


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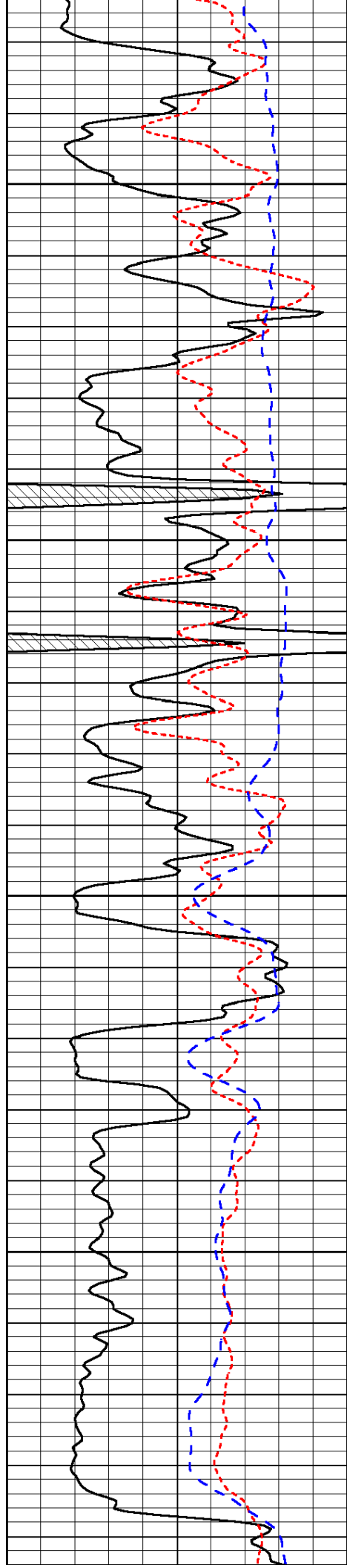


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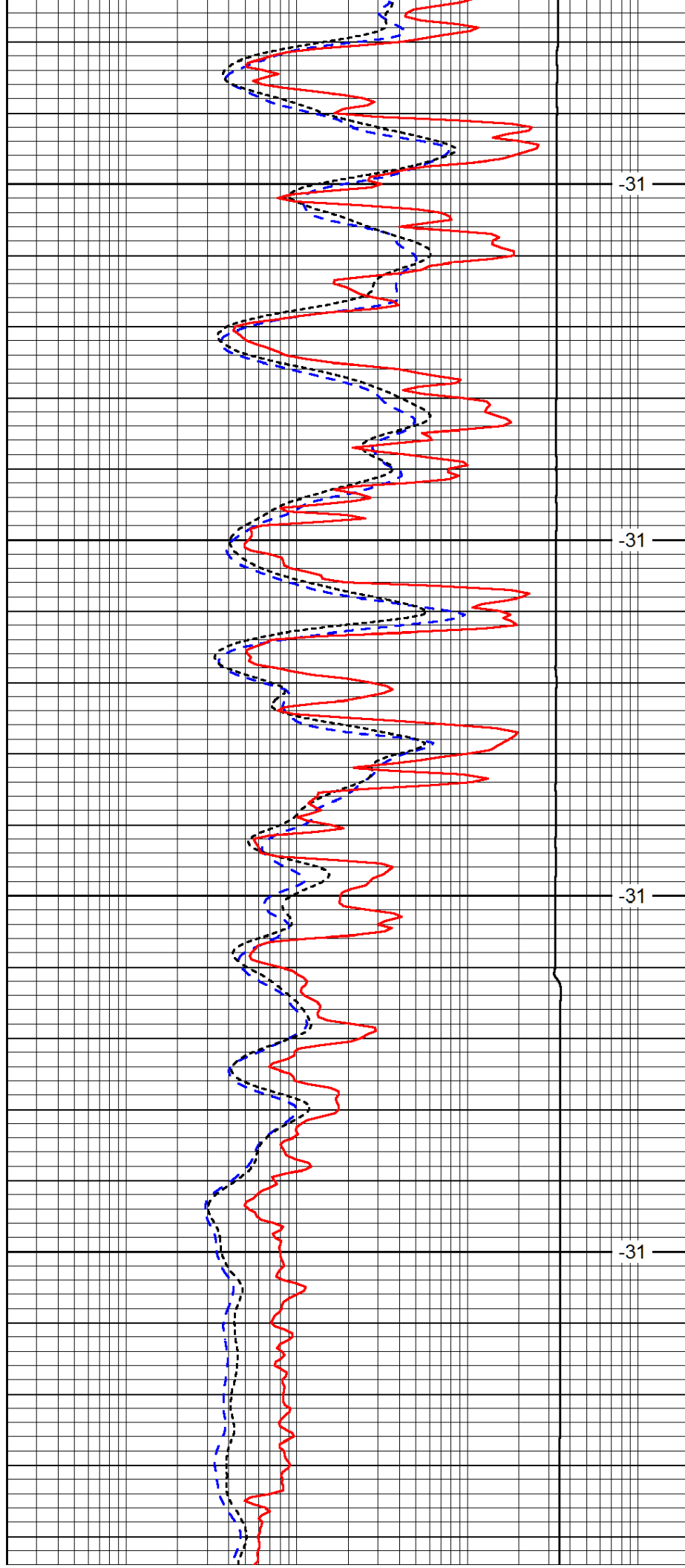


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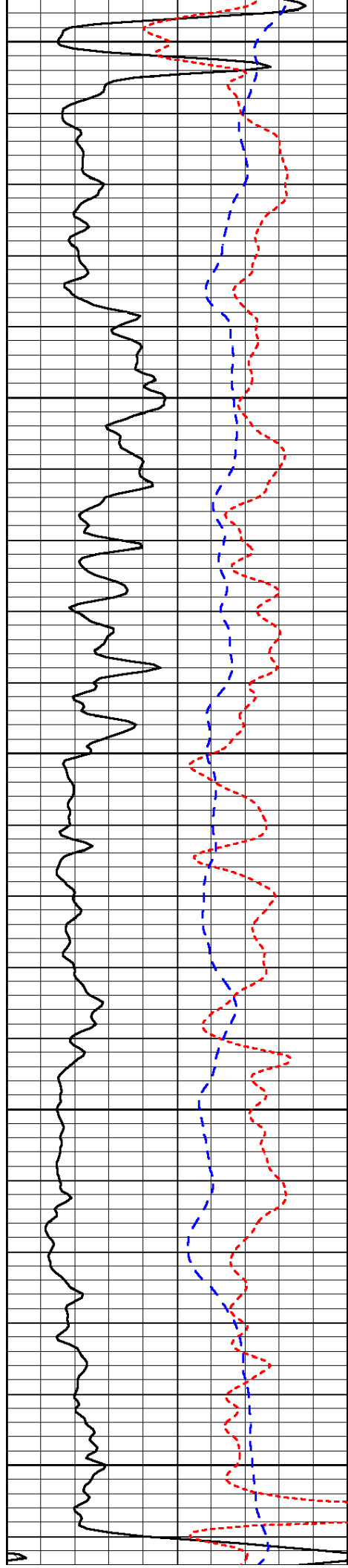


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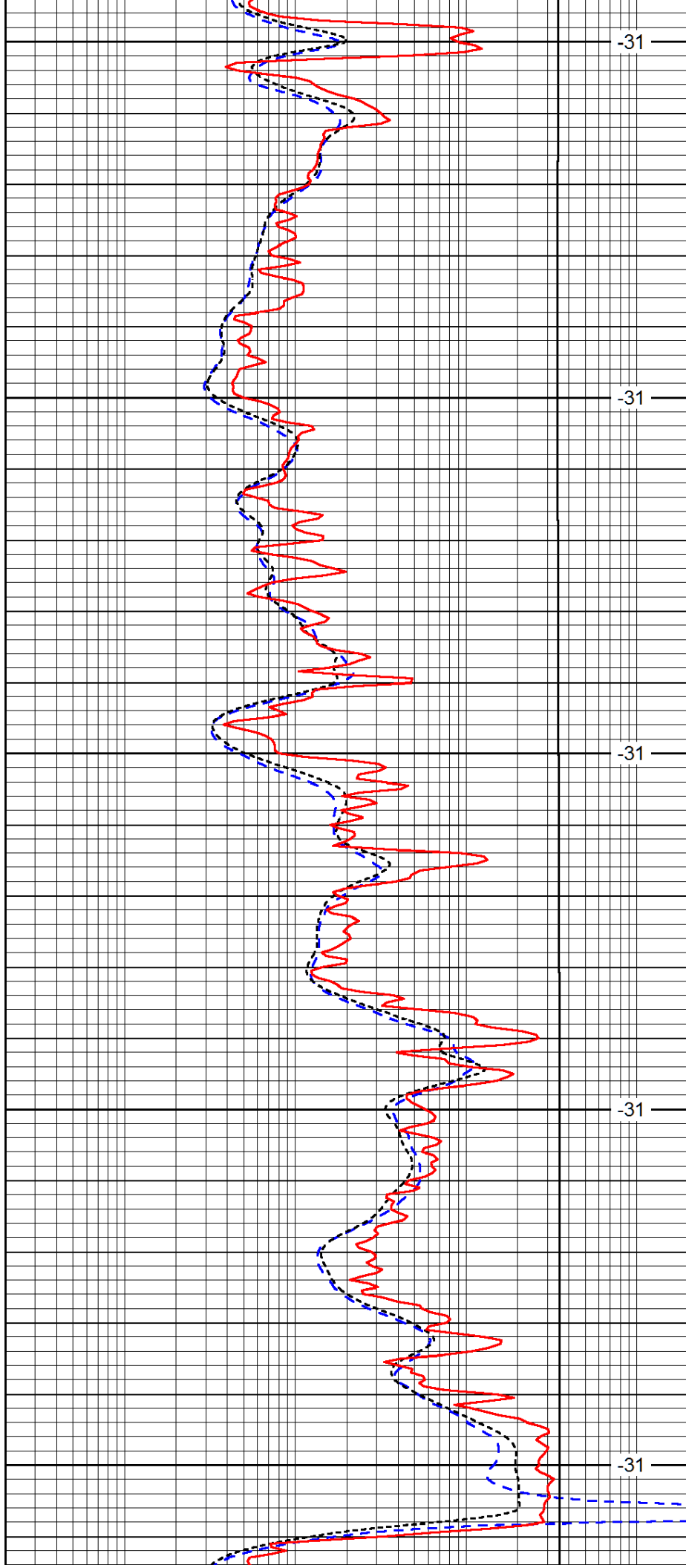
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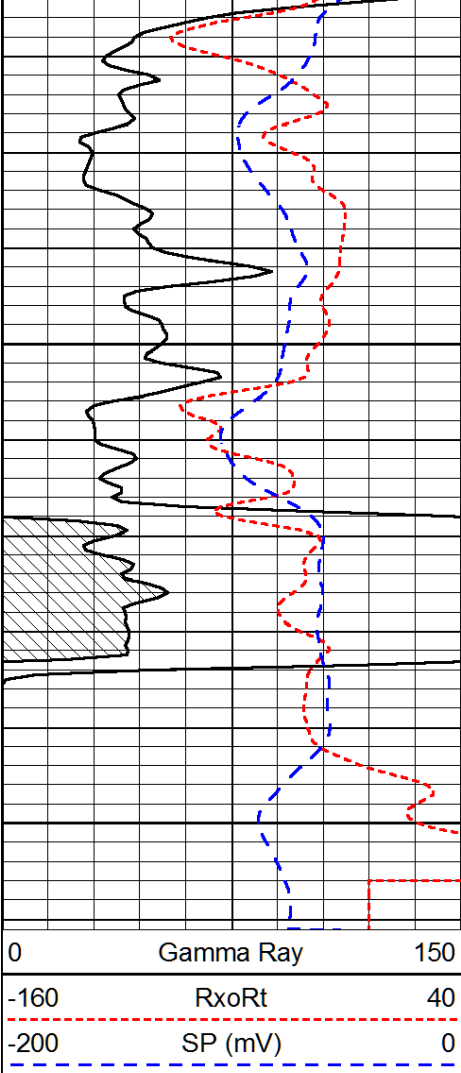
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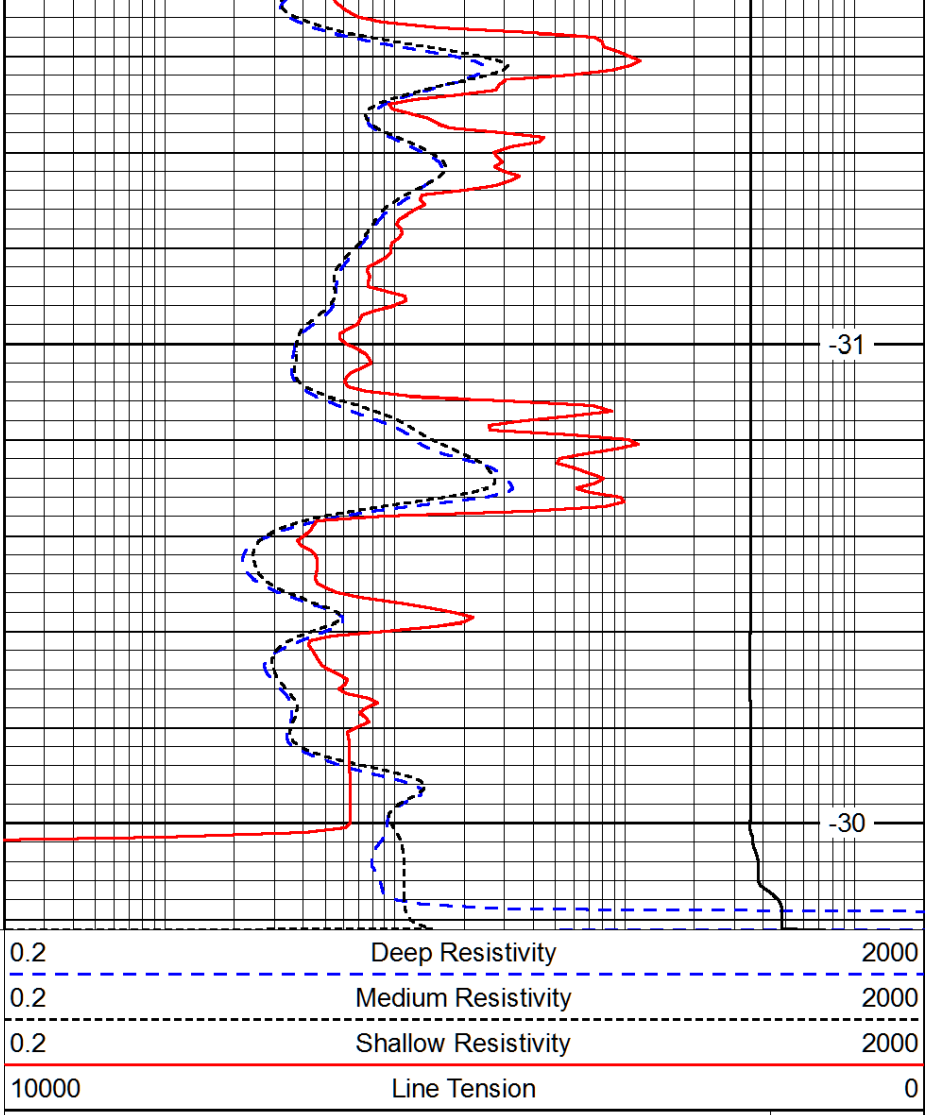
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