



Pioneer Energy Services

# Dual Induction Log

15-055-22,360-00-00

API No.

Company **American Warrior, Inc.**

Well **O'Brate-Finney #1-5**

Field **Unknown**

County **Finney** State **Kansas**

Location **742' FSL & 2310' FWL**

Sec: **5** Twp: **23S** Rge: **32W**

Permanent Datum **Ground Level** Elevation **2849**

Log Measured From **Kelly Bushing** 11 Ft. Above Perm. Datum

Drilling Measured From **Kelly Bushing** K.B. 2860  
D.F. 2849  
G.L. 2849

Date **12/8/2014**

Run Number **One**

Depth Driller **5000**

Depth Logger **4999**

Bottom Logged Interval **4998**

Top Log Interval **1700**

Casing Driller **8.625 @ 1725**

Casing Logger **1723**

Bit Size **7.875**

Type Fluid in Hole **Chemical**

Salinity, ppm CL **2400**

Density / Viscosity **9.5 48**

pH / Fluid Loss **9.5 9.6**

Source of Sample **Flowline**

Rm @ Meas. Temp **0.55 @ 68**

Rmf @ Meas. Temp **0.41 @ 68**

Rmc @ Meas. Temp **0.74 @ 68**

Source of Rmf / Rmc **Charts**

Rm @ BHT **0.30 @ 126**

Operating Rig Time **5 1/2 Hours**

Max Rec. Temp. F **126**

Equipment Number **15**

Location **Hays**

Recorded By **D.Kerr**

Witnessed By **Kevin Timson**

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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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 785 625 3858

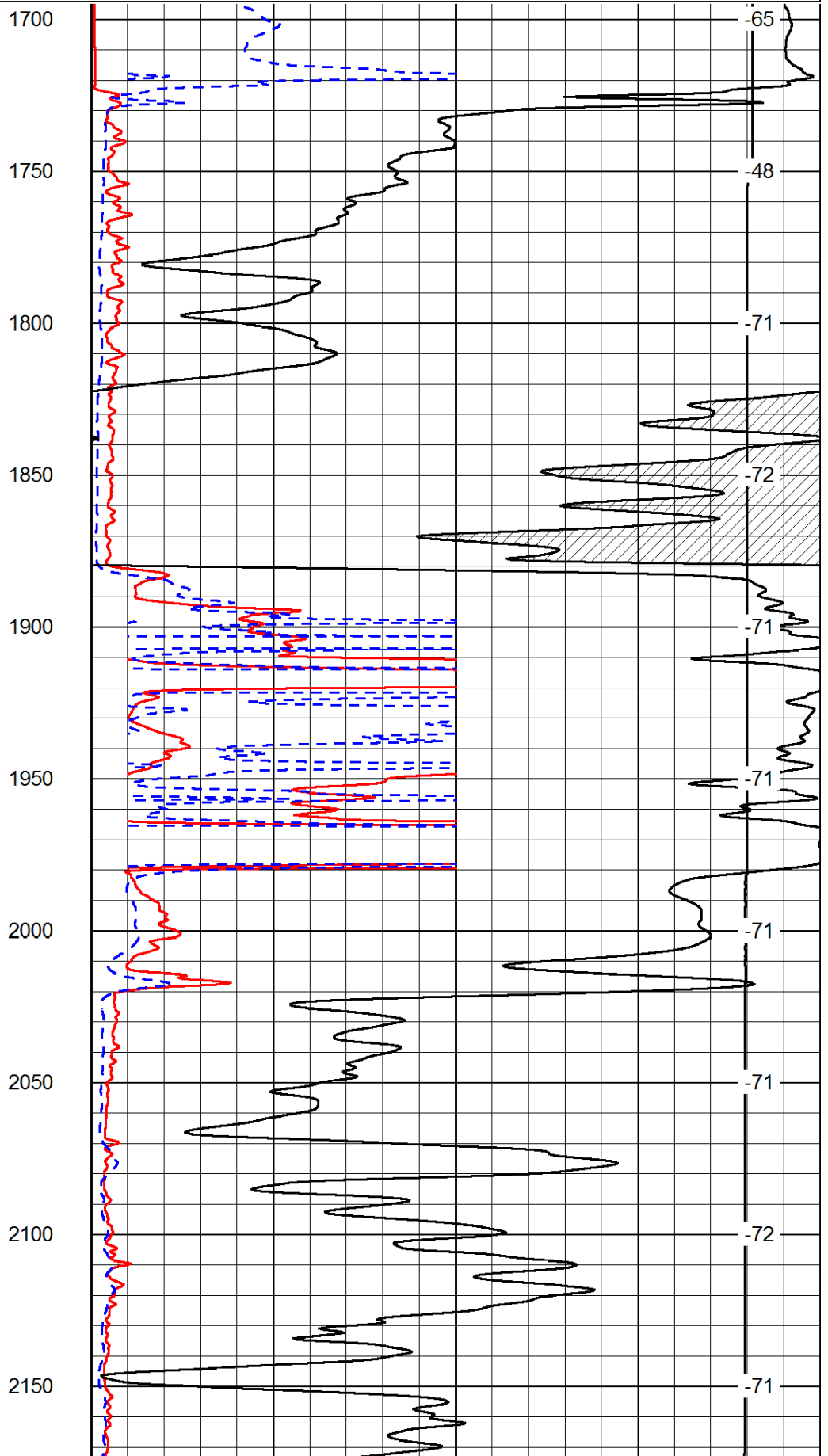
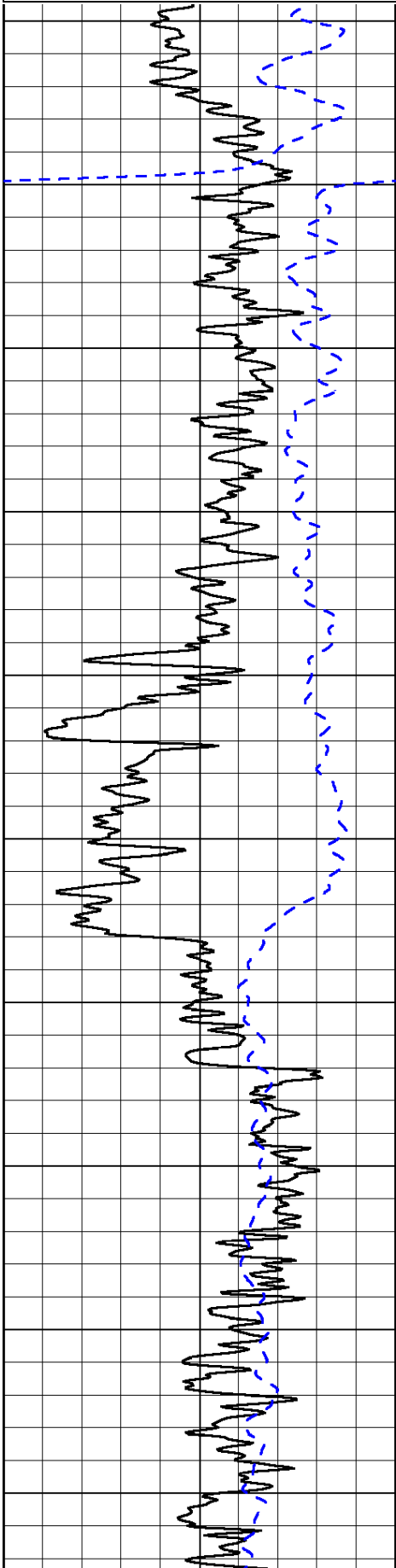
Garden City KS, 5 North to Six Mile RD,  
 1 East, 3/4 North, East Into

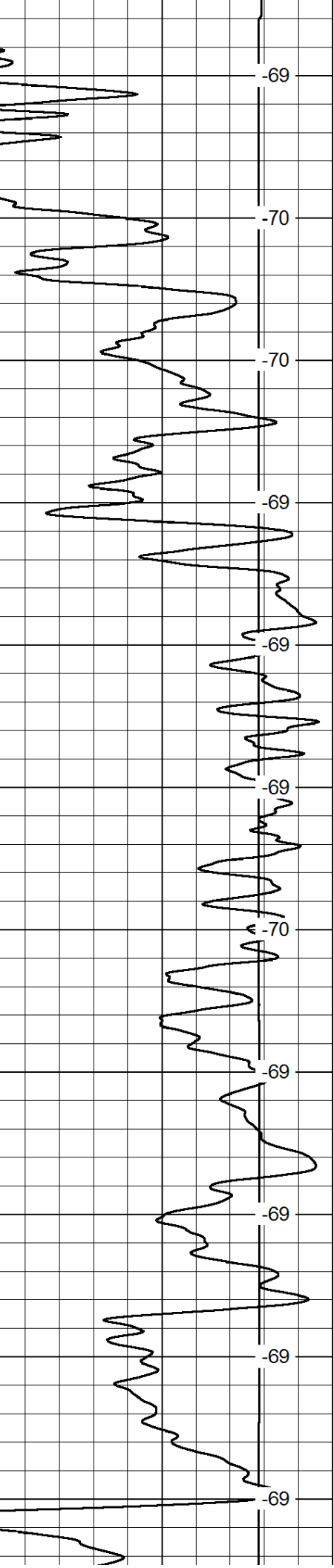
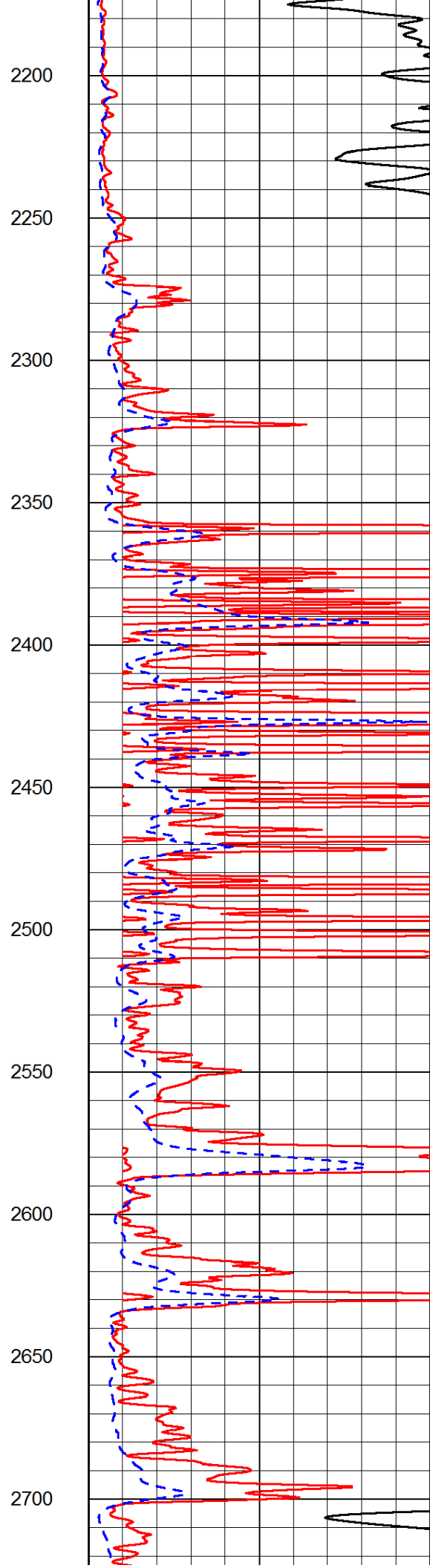
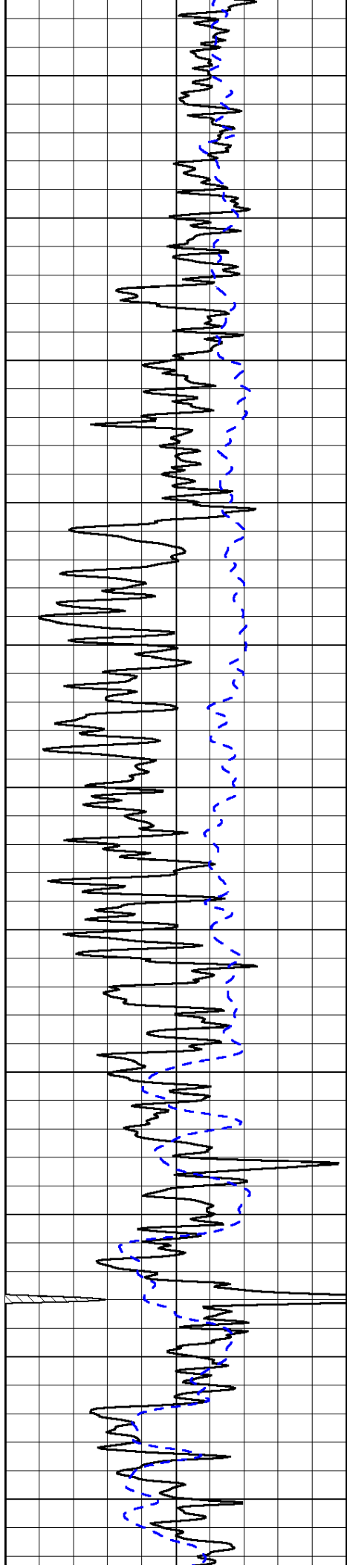
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 Dataset Creation: Mon Dec 08 20:13:15 2014  
 Charted by: Depth in Feet scaled 1:600

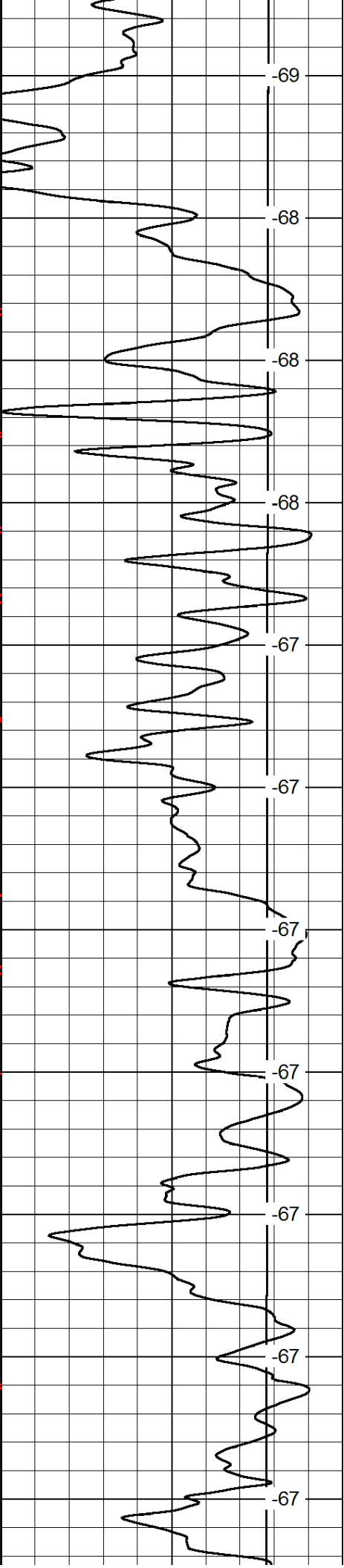
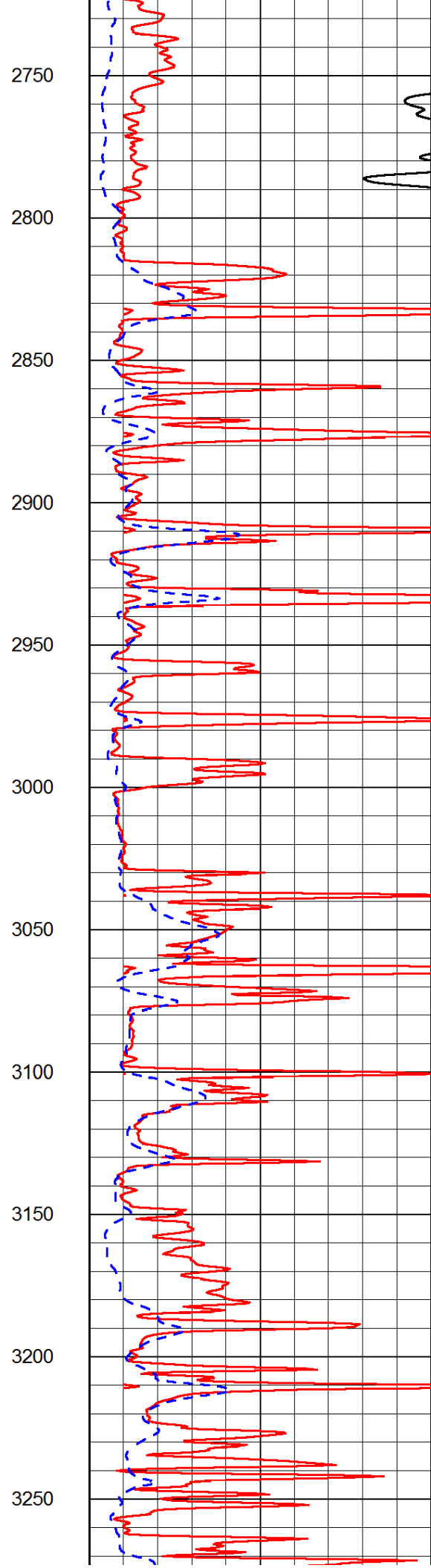
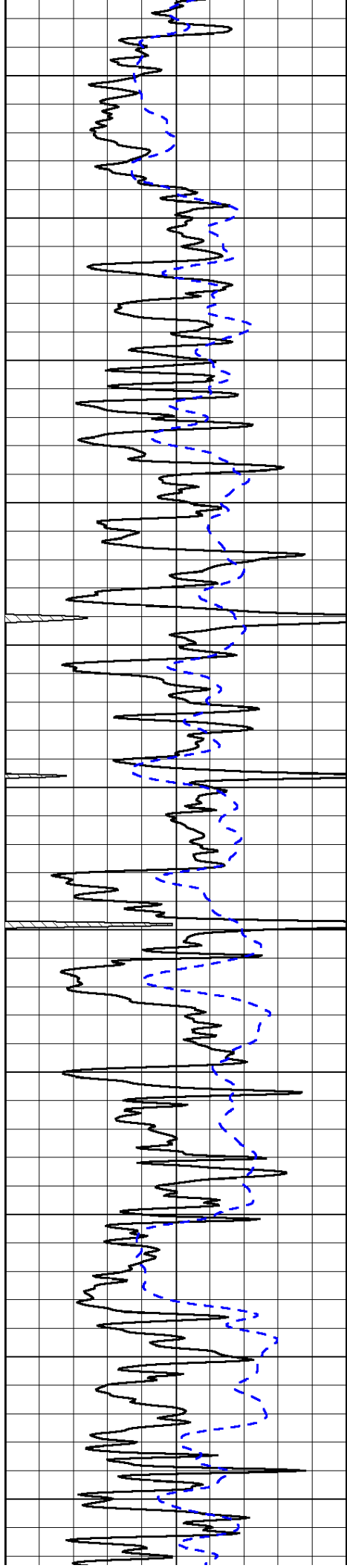
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-200	SP (mV)	0

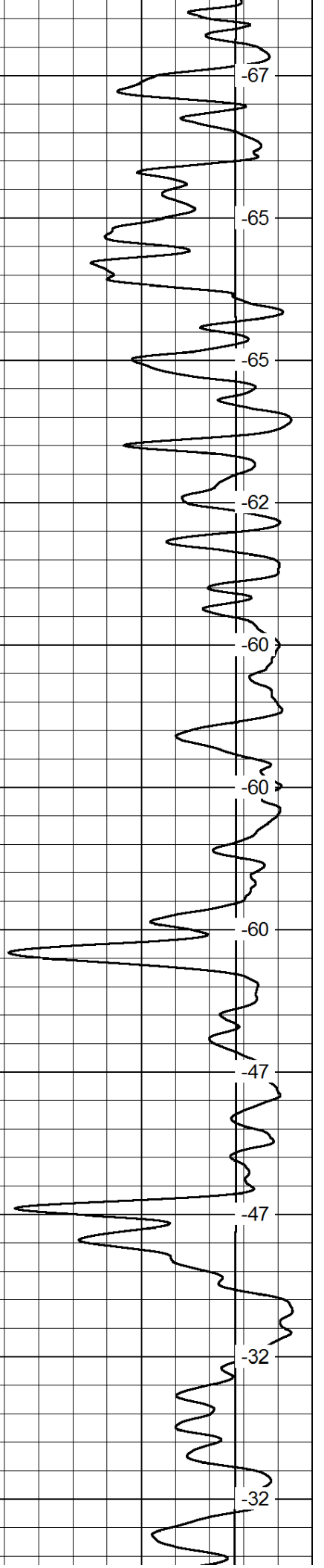
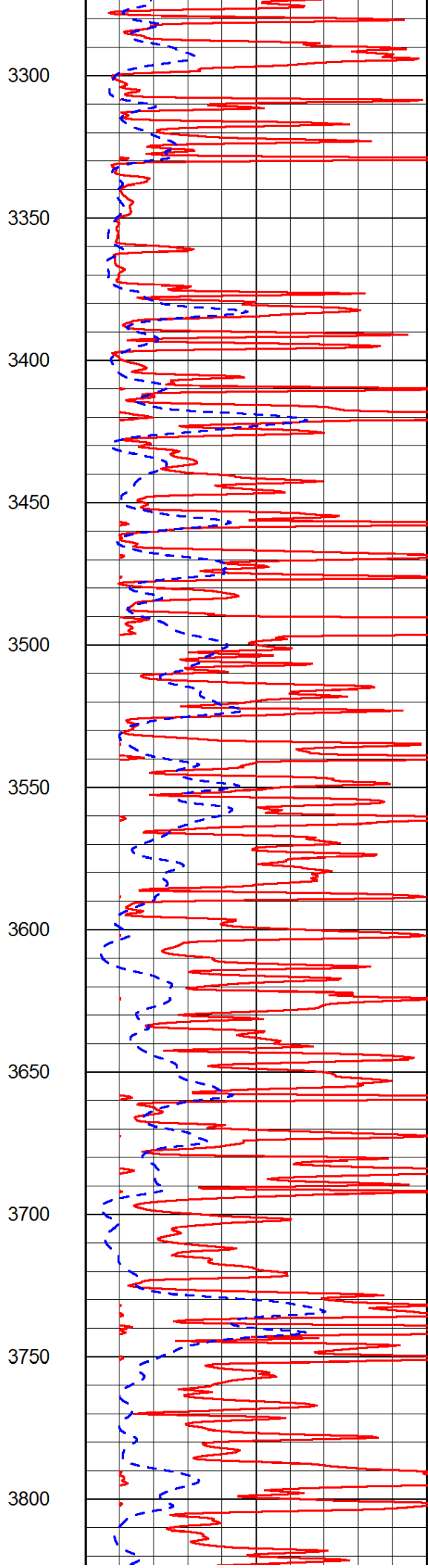
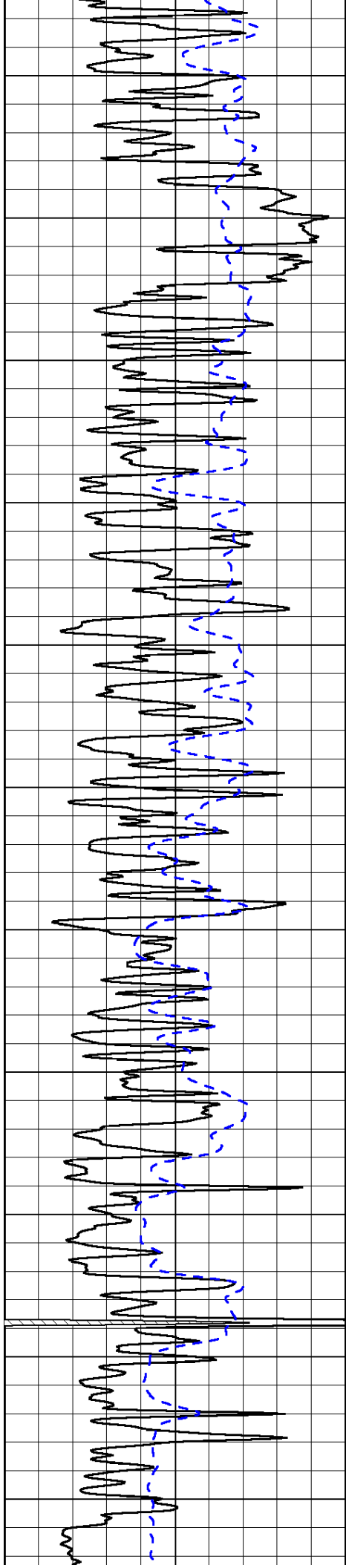
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0	Deep Resistivity	50
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15000	Line Tension	0
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50	Deep Resistivity	500

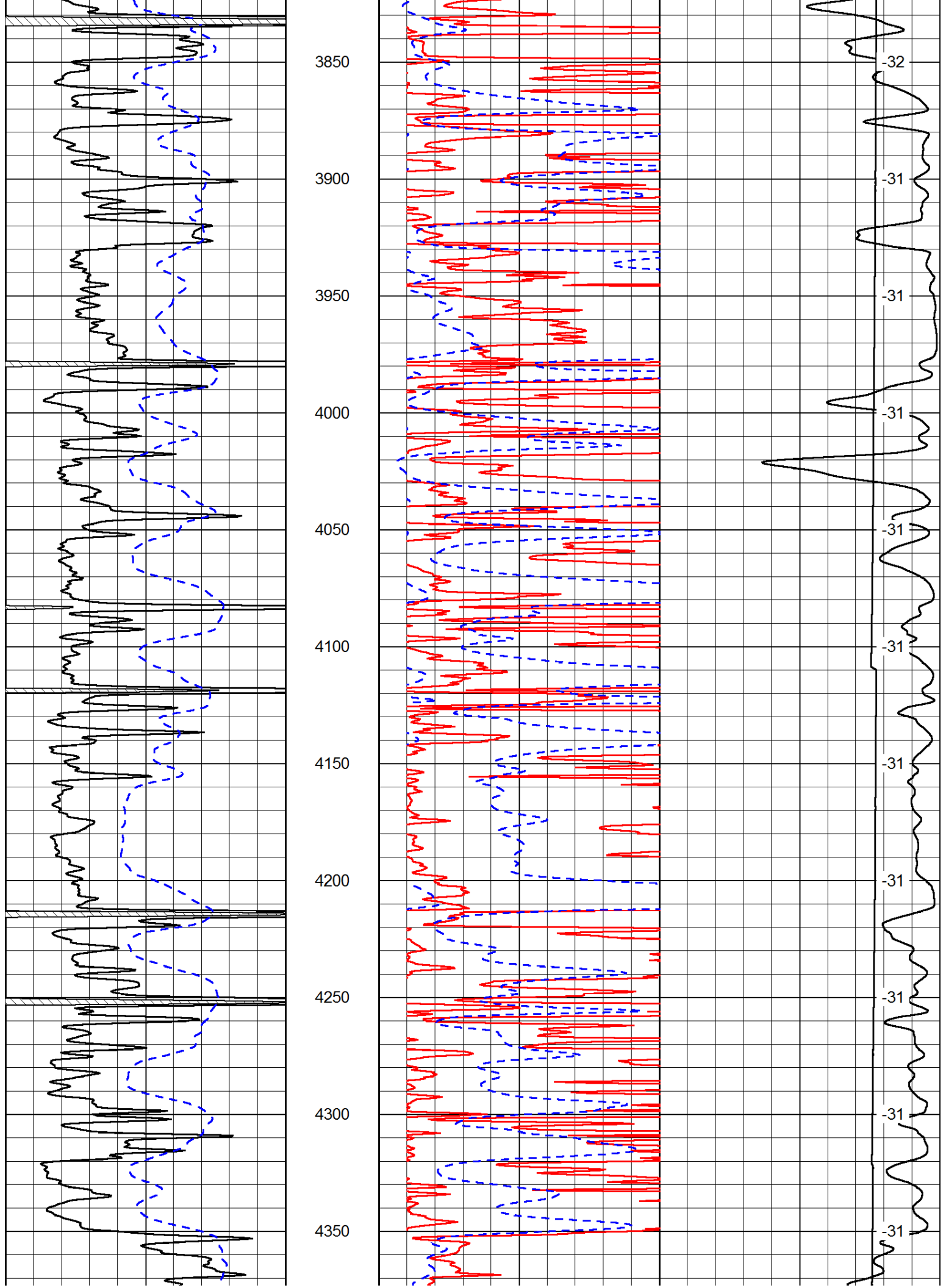
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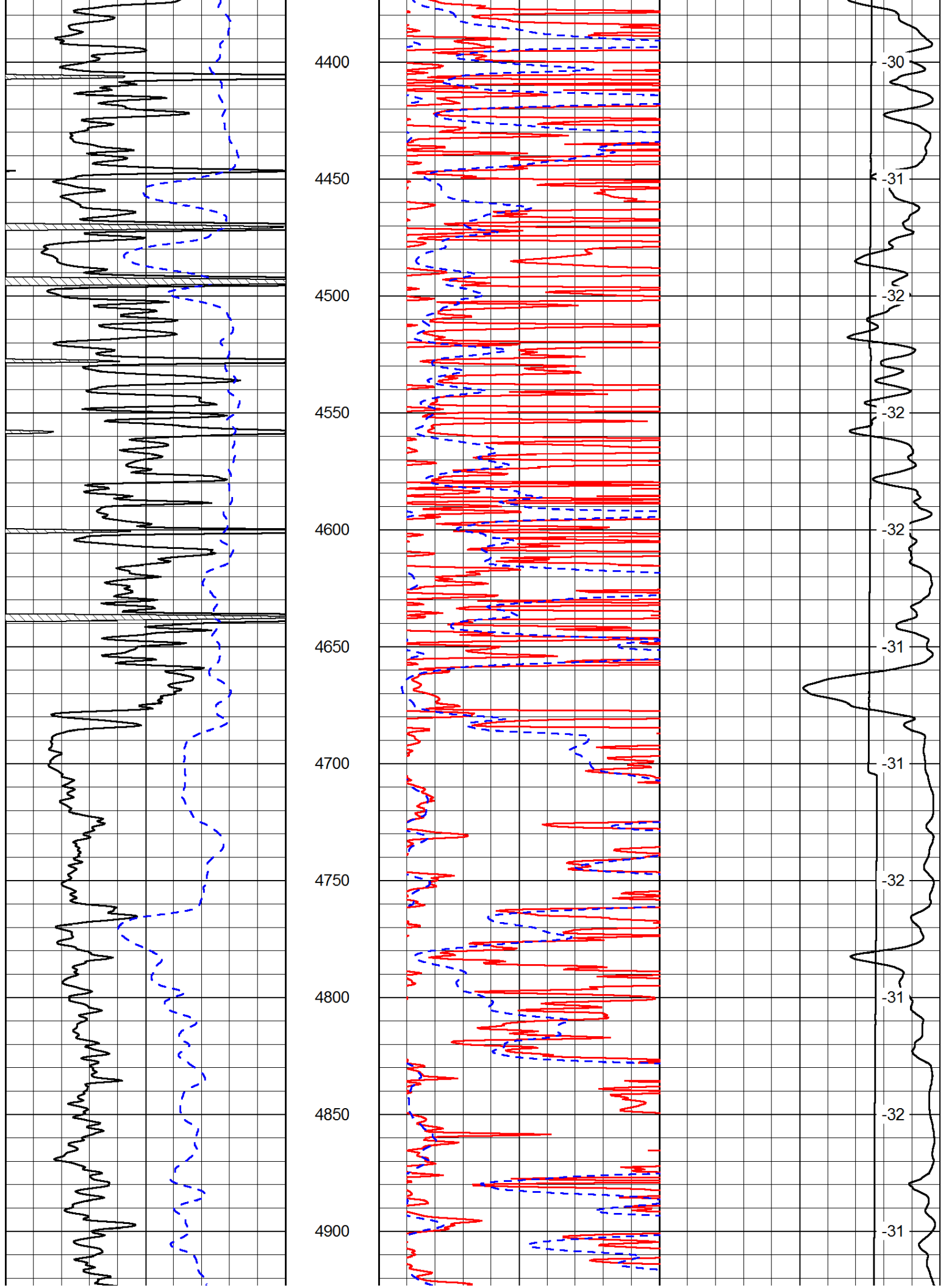


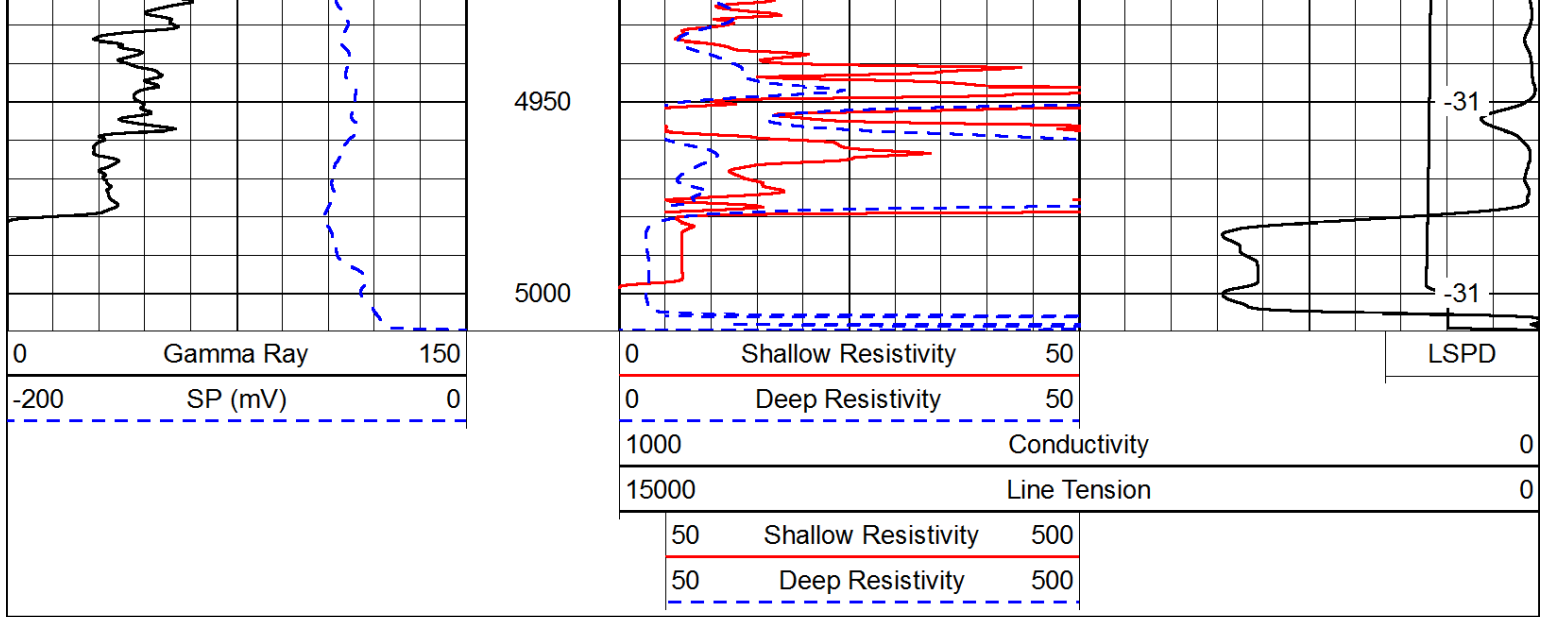




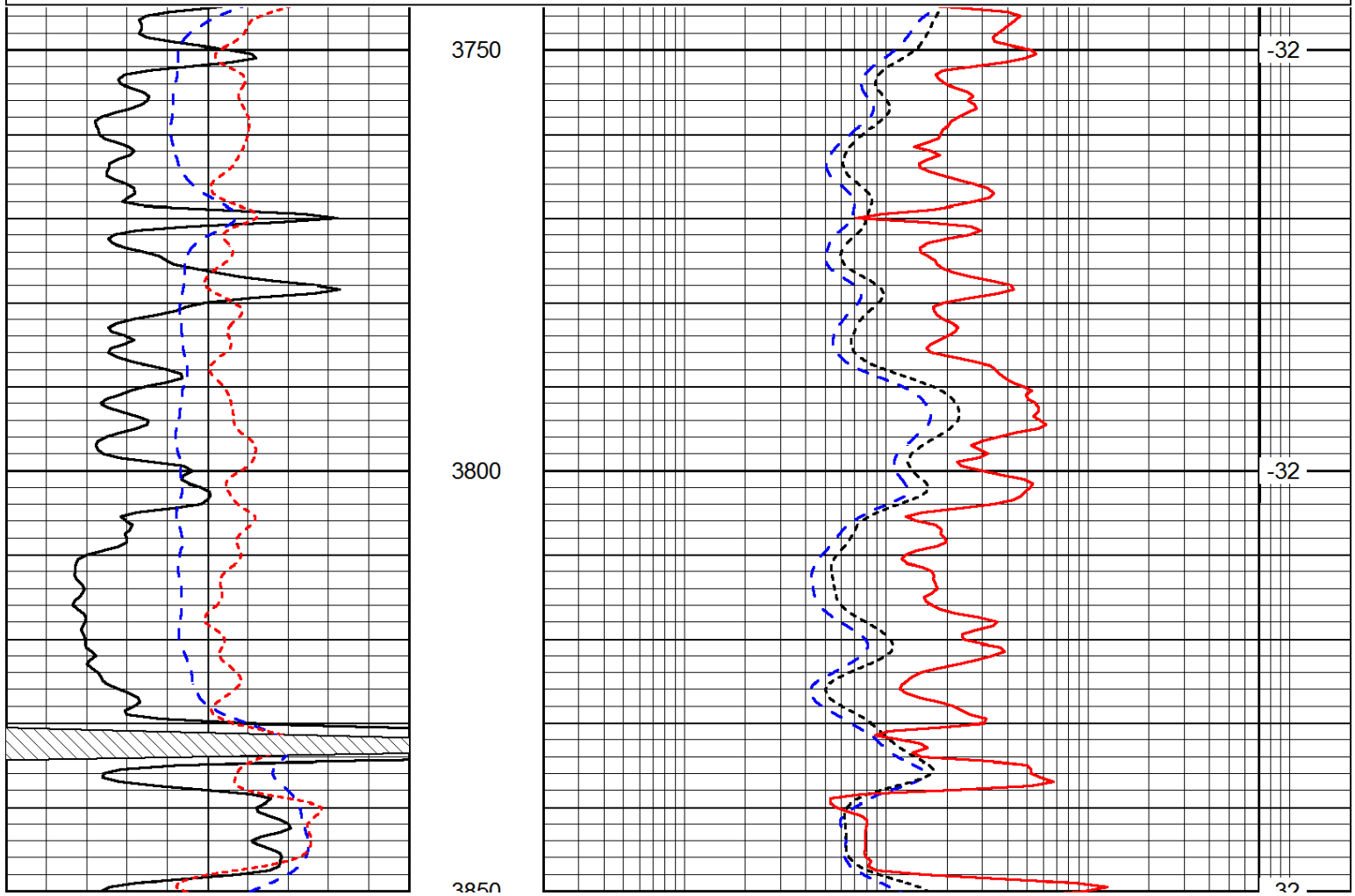
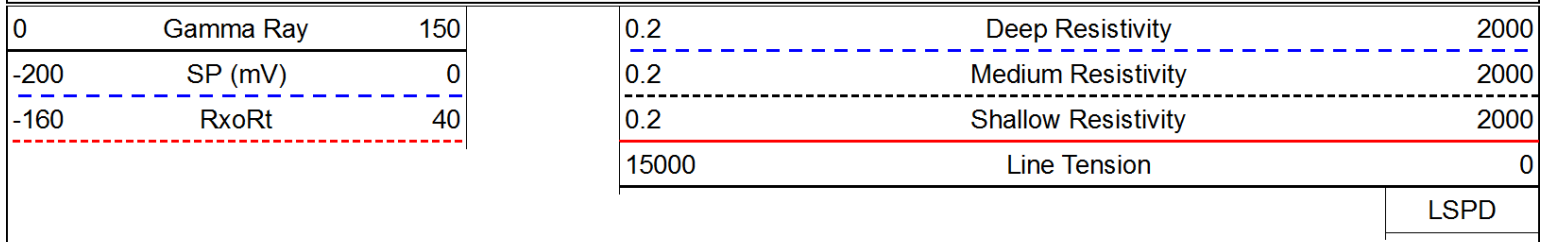


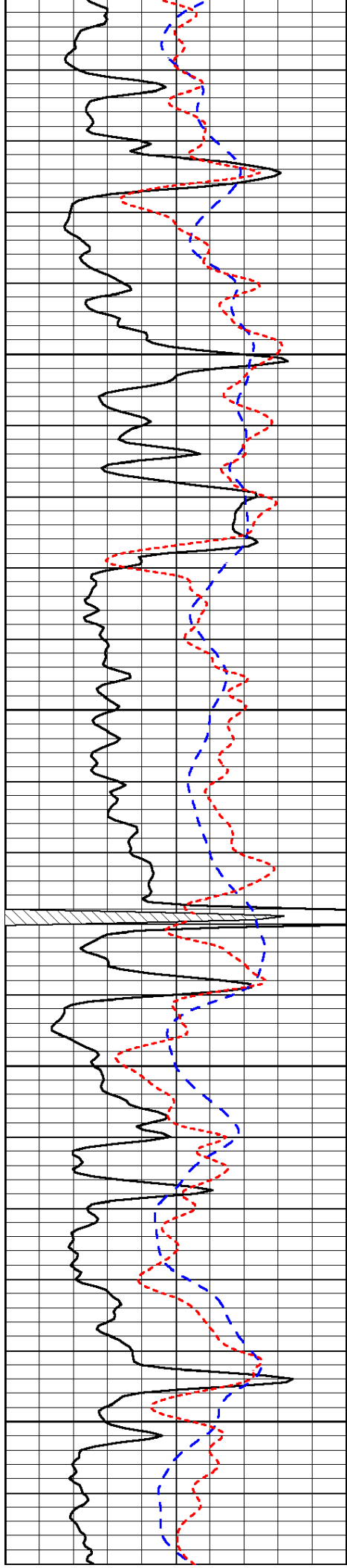






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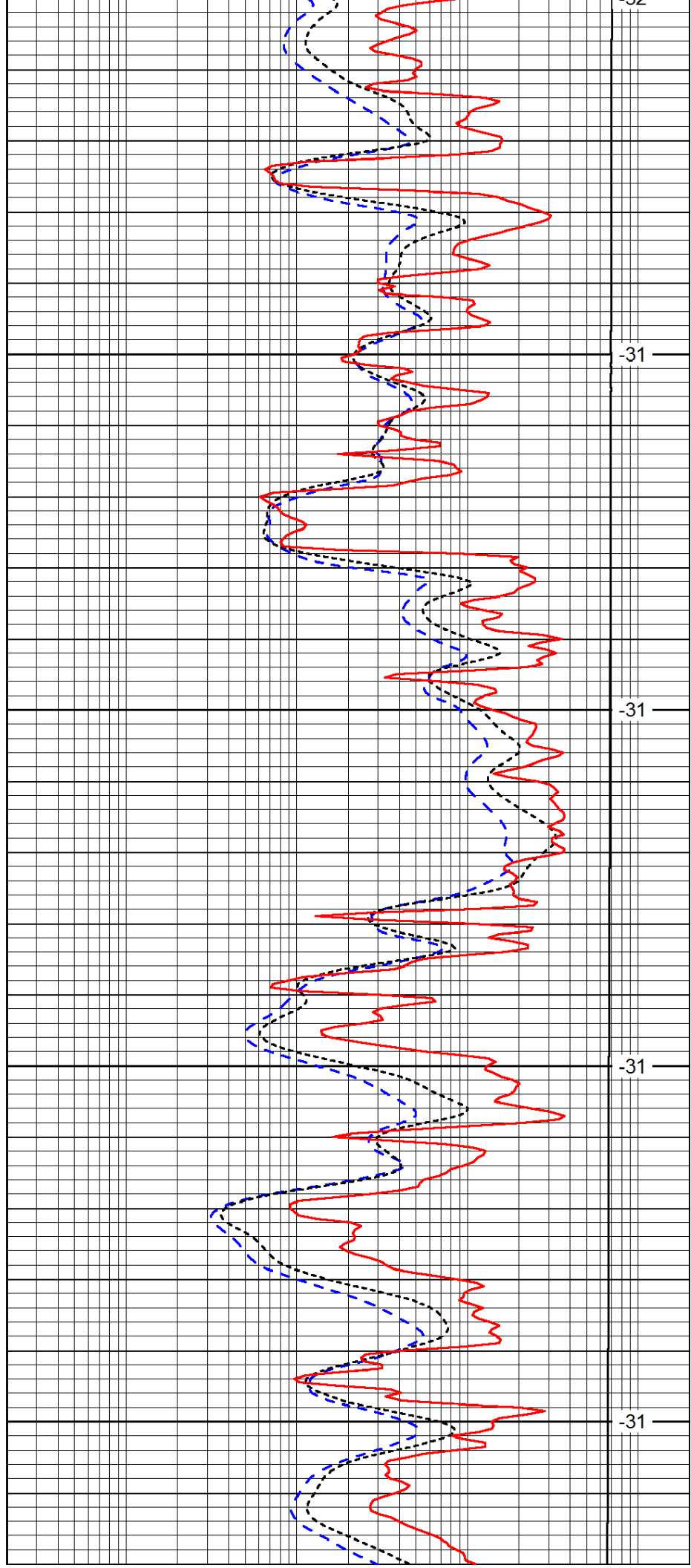
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3900

3950

4000

4050



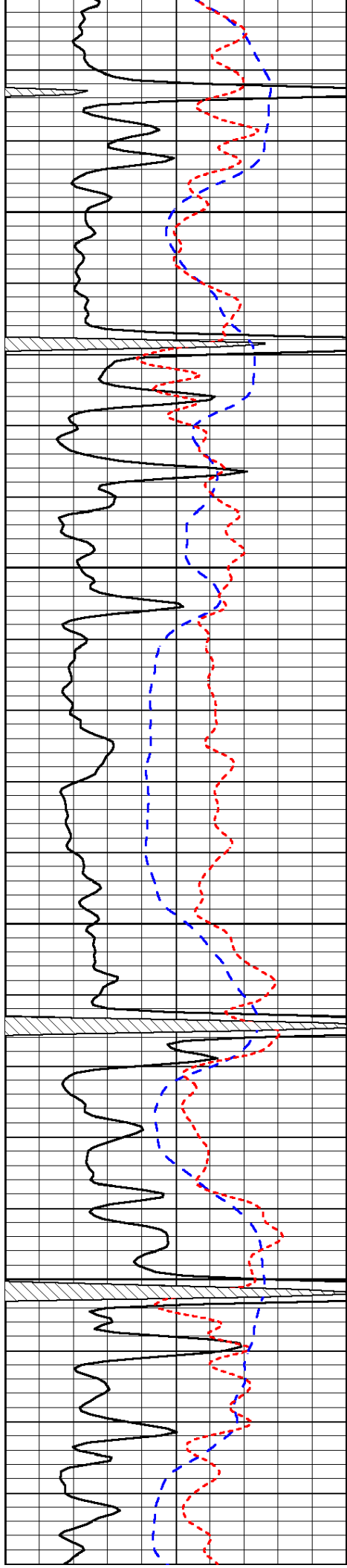
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-31

-31

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-31

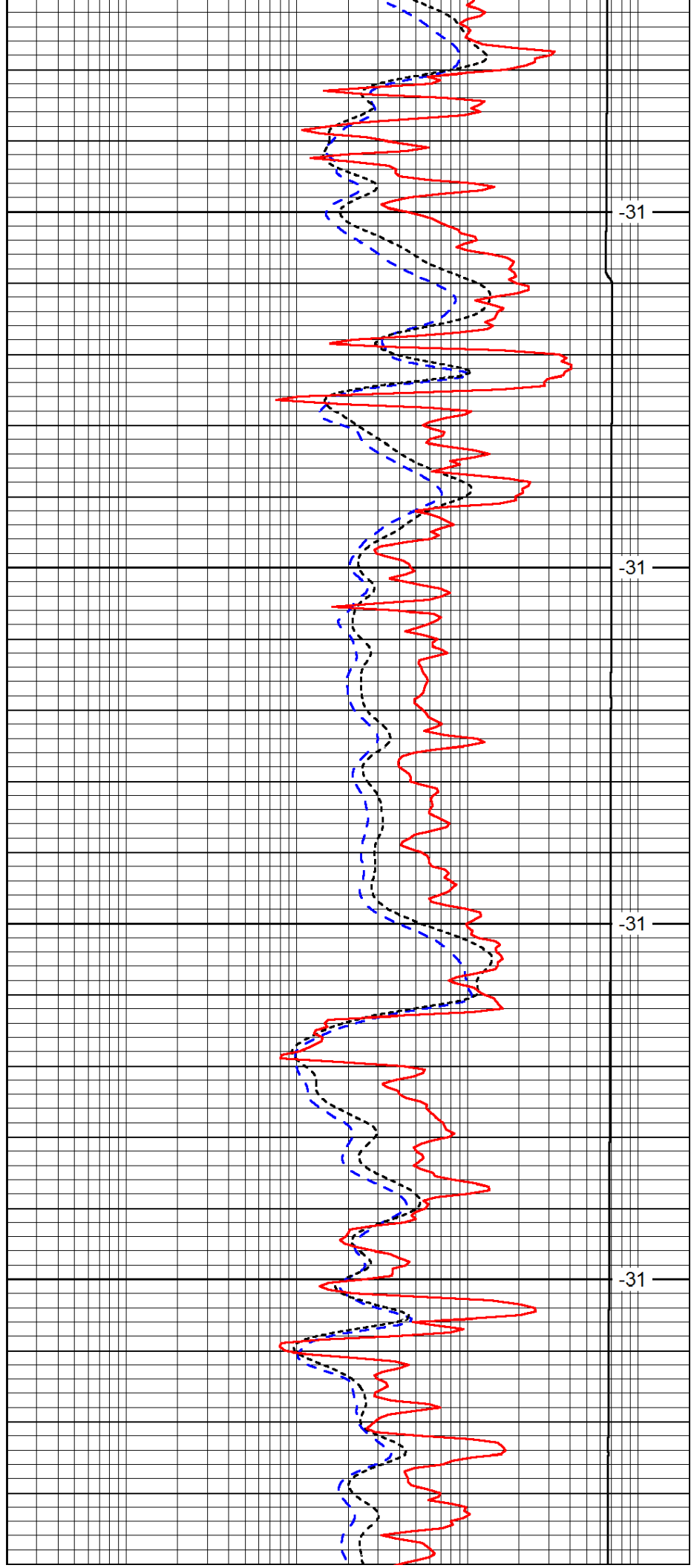


4100

4150

4200

4250

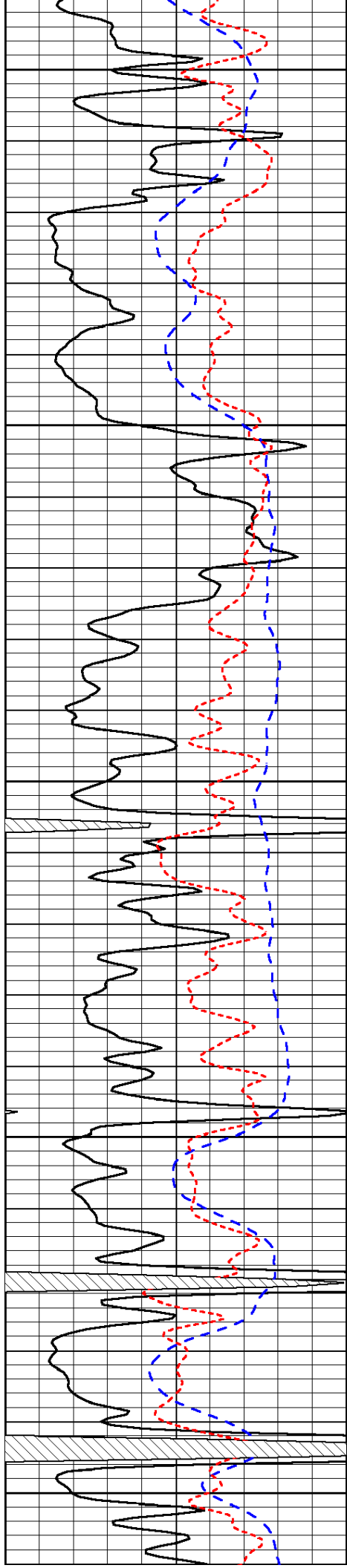


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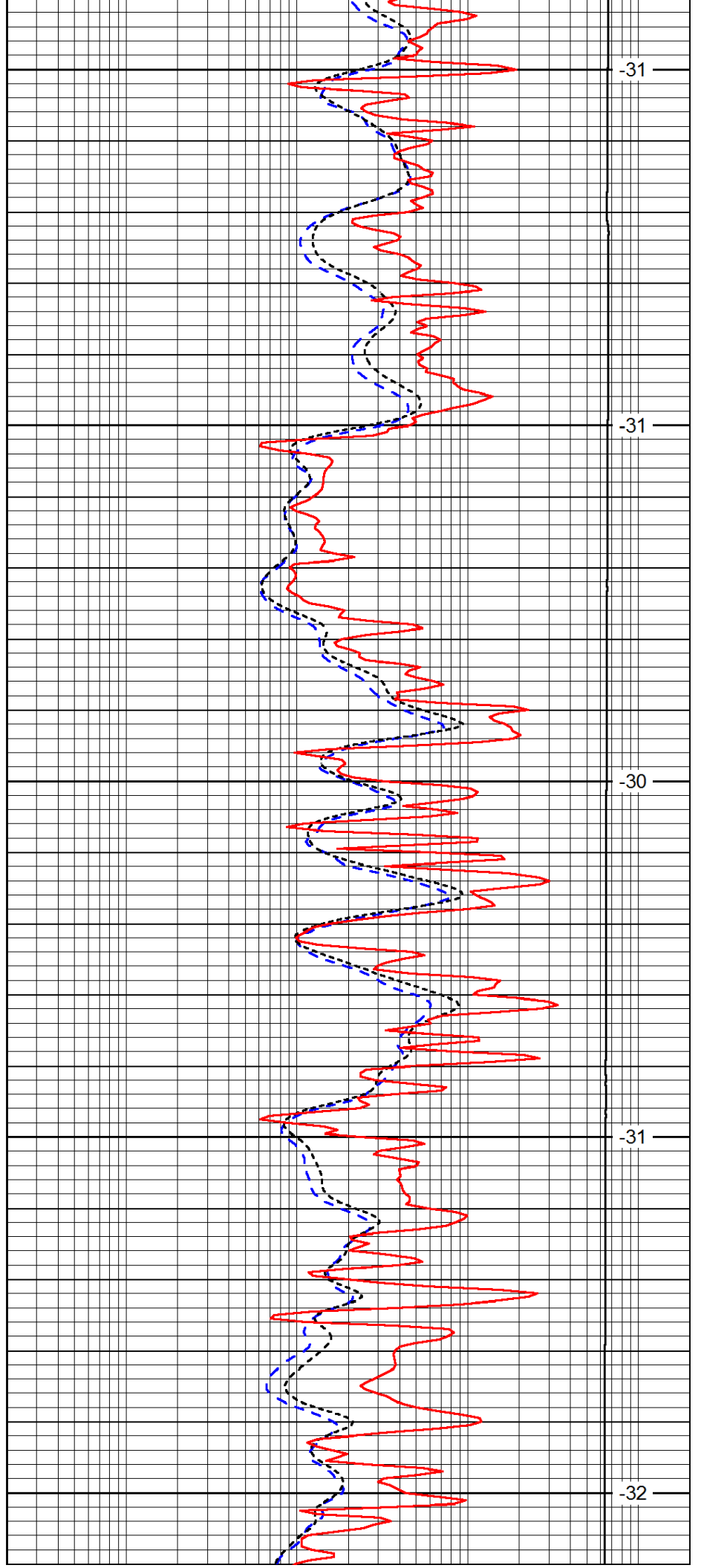
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4500



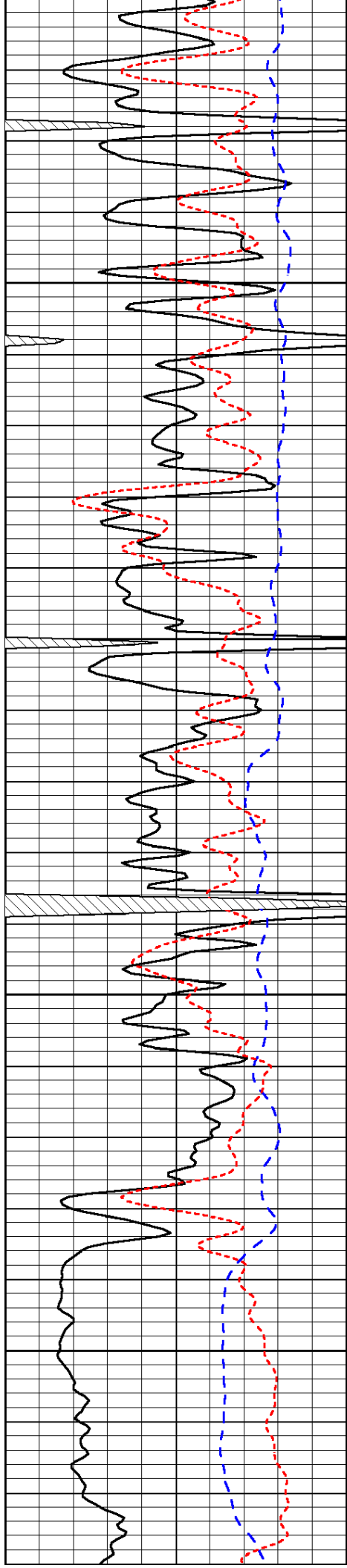
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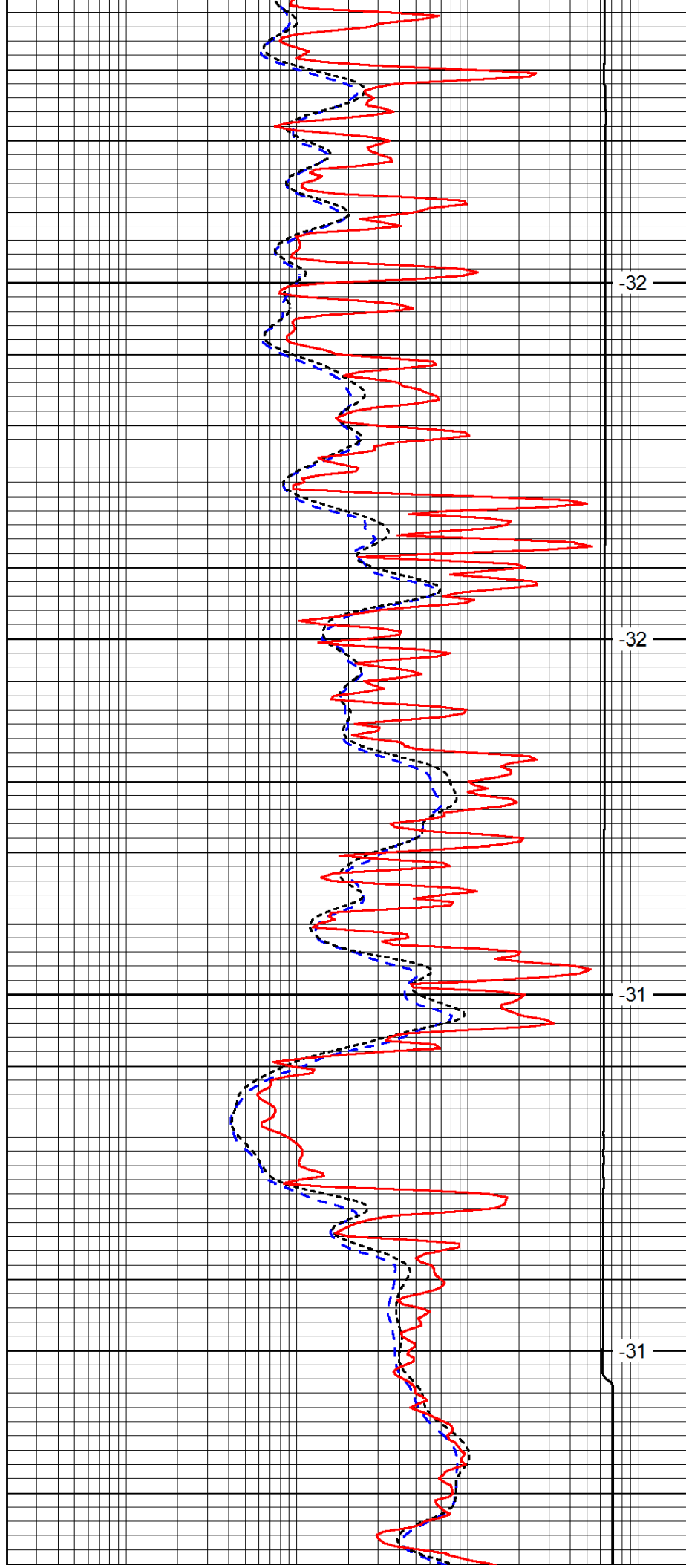


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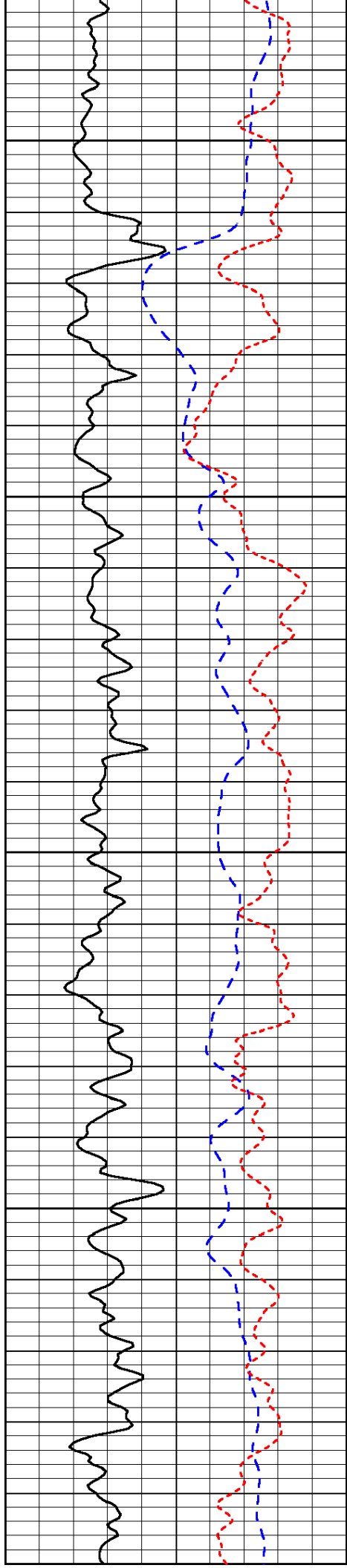


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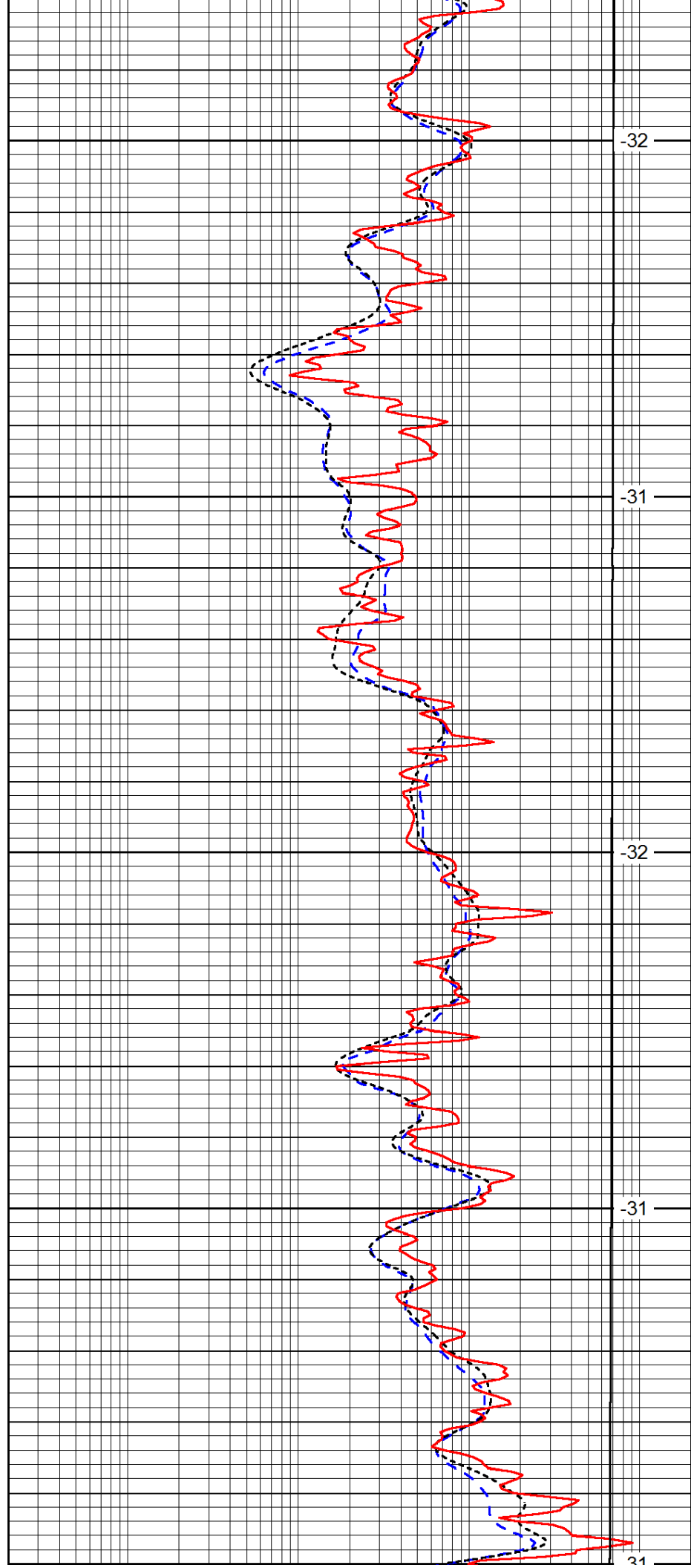
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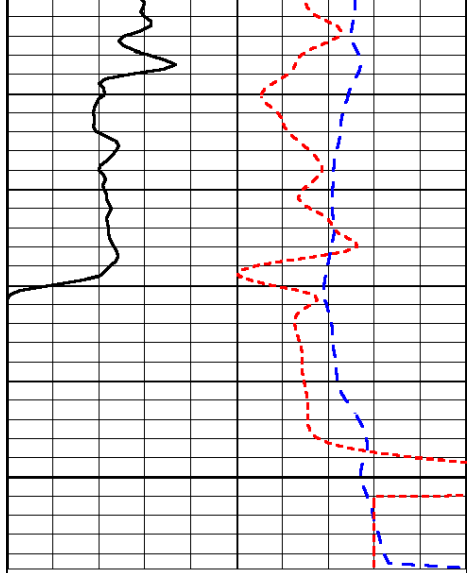
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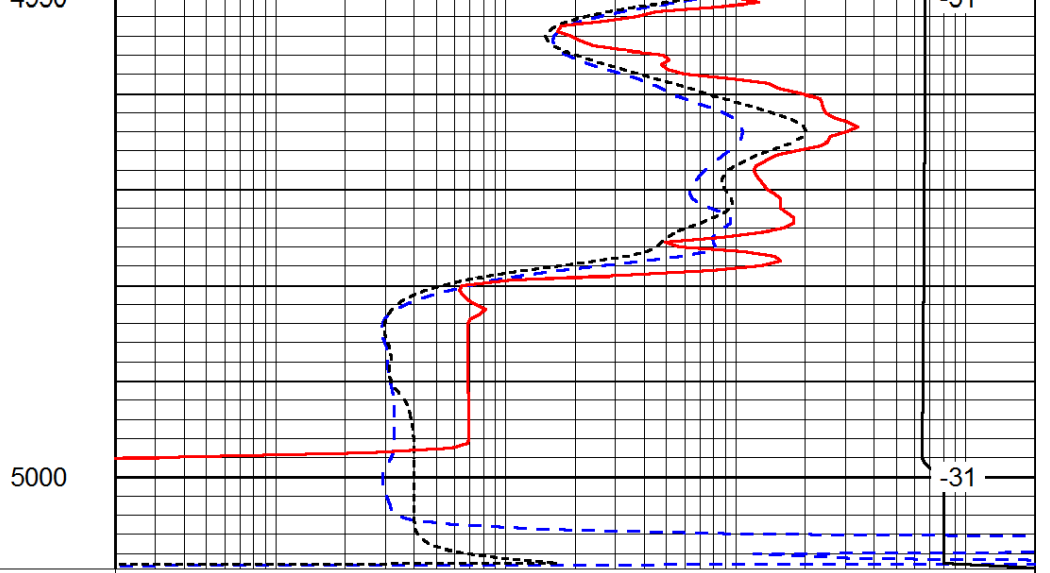
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-31



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



0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD