



Pioneer Energy Services

Dual Induction Log

15-135-25566-00-00

API No.

Company **American Warrior, Inc.**

Well **Rothe #3-30**

Field **Unknown**

County **Ness** State **Kansas**

Location **1150' FNL & 2000' FWL**

Sec: **30** Twp: **19 S** Rge: **24 W**

Permanant Datum **Ground Level**

Log Measured From **Kelly Bushing**

Drilling Measured From **Kelly Bushing**

Elevation **2334**

11 Ft. Above Perm. Datum

Other Services
CNL/CDL
MEL

Elevation
K.B. 2345
D.F. 2334
G.L. 2334

Date **5/1/2013**

Run Number **One**

Depth Driller **4500**

Depth Logger **4501**

Bottom Logged Interval **4500**

Top Log Interval **200**

Casing Driller **8.625 @ 220**

Casing Logger **222**

Bit Size **7.875**

Type Fluid in Hole **Chemical**

Salinity,ppm CL **6300**

Density / Viscosity **9.4 51**

pH / Fluid Loss **9.0 8.4**

Source of Sample **Flowline**

Rm @ Meas. Temp **0.30 @ 60**

Rmf @ Meas. Temp **0.22 @ 60**

Rmc @ Meas. Temp **0.40 @ 60**

Source of Rmf / Rmc **Charts**

Rm @ BHT **0.15 @ 123**

Operating Rig Time **123**

Max Rec. Temp. F **4 Hours**

Equipment Number **91**

Location **Hays**

Recorded By **Y. Ruiz**

Witnessed By **Kevin Timson**

Recorded By **D. Schmidt**

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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

Thank you for using Pioneer Energy Services
www.pioneerenergy.com
 785 625 3858
 Ness City,
 7 South to 60 Rd, 7 West to L Rd,
 1 1/2 North, 1/4 East,
 North into

Database File: c:\warrior\data\amwar_rothe #3-30\american warrior_050113hd.db
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 Presentation Format: dil2in
 Dataset Creation: Wed May 01 03:48:40 2013
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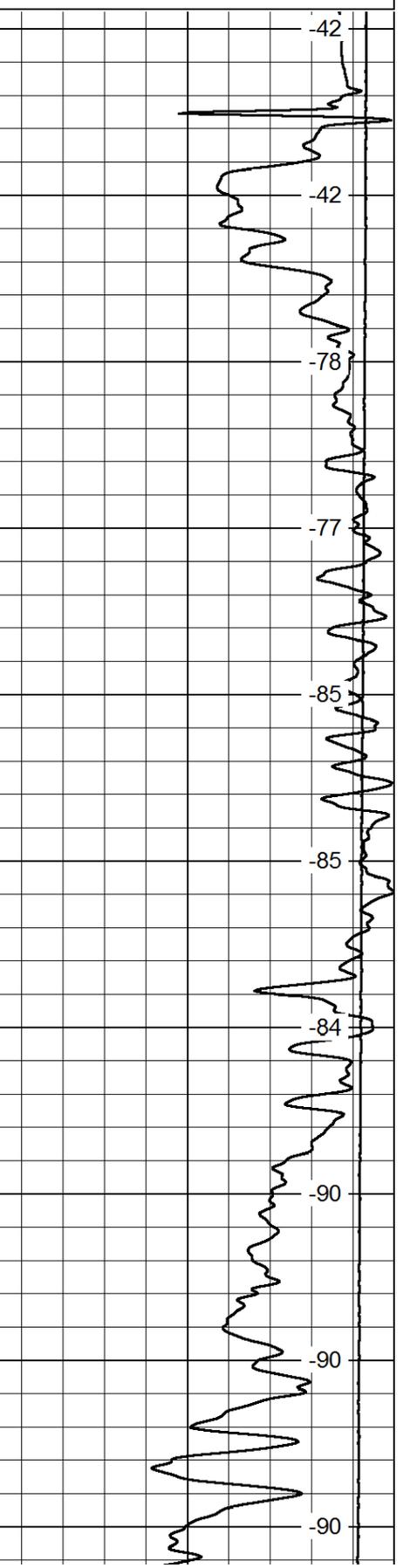
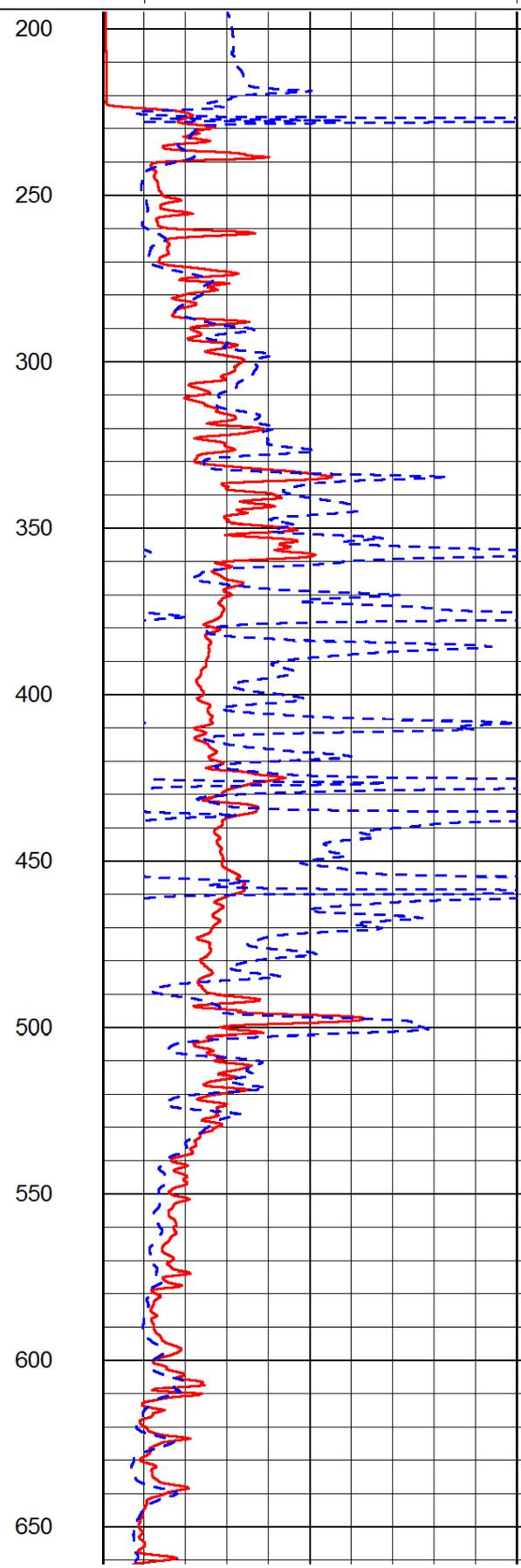
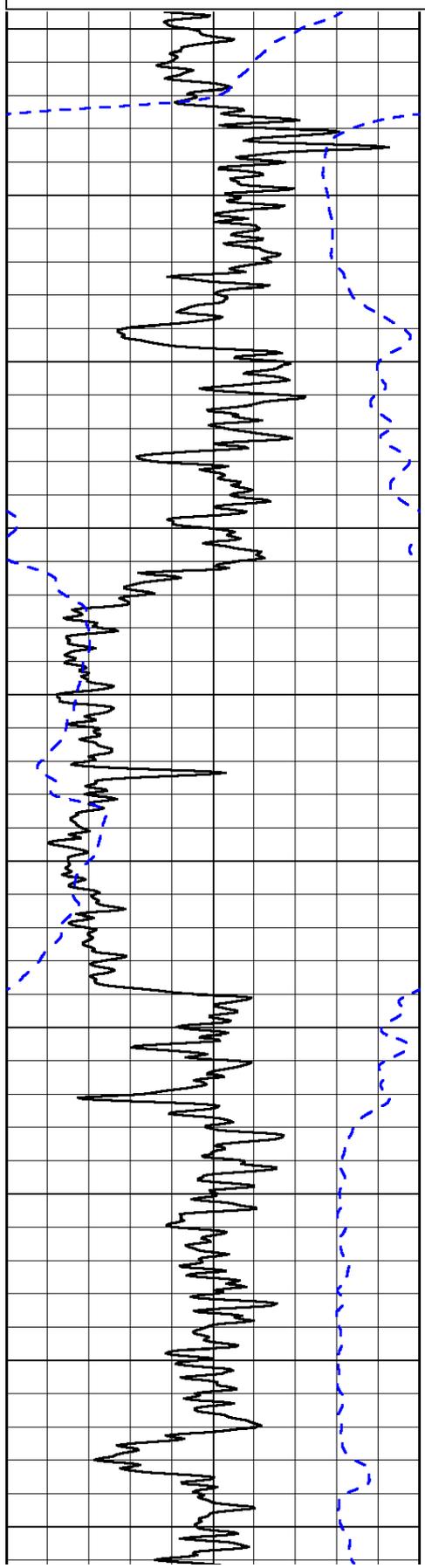
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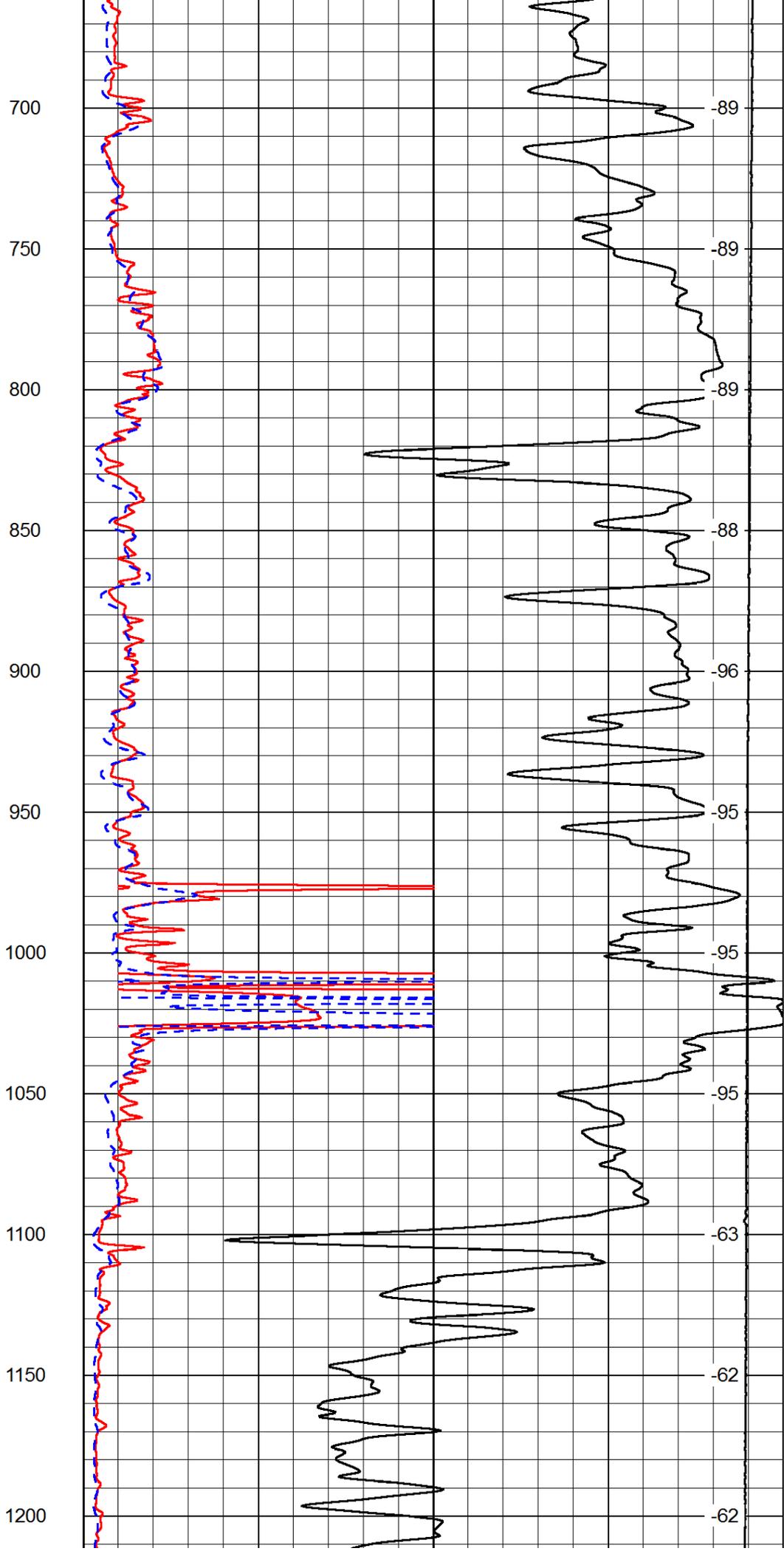
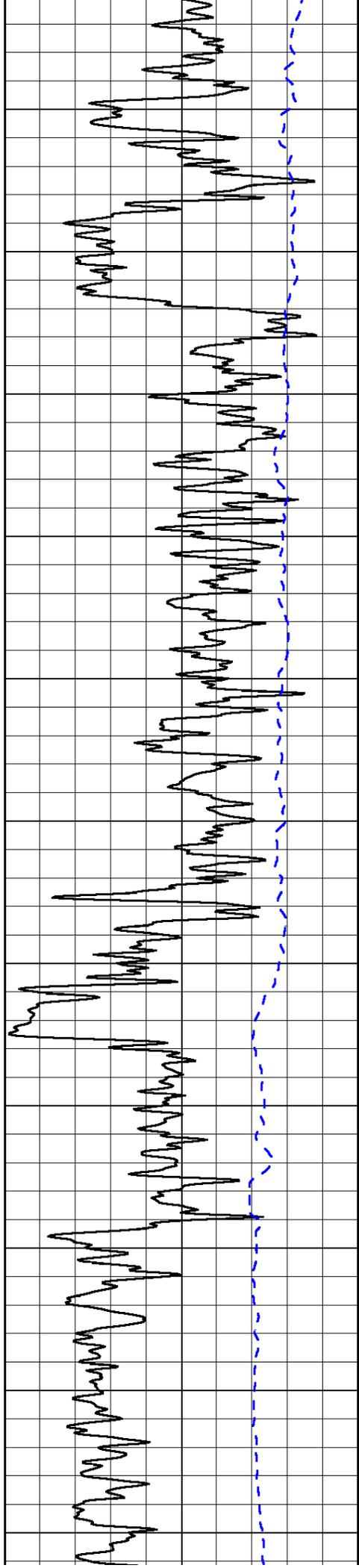
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0	Deep Resistivity	50

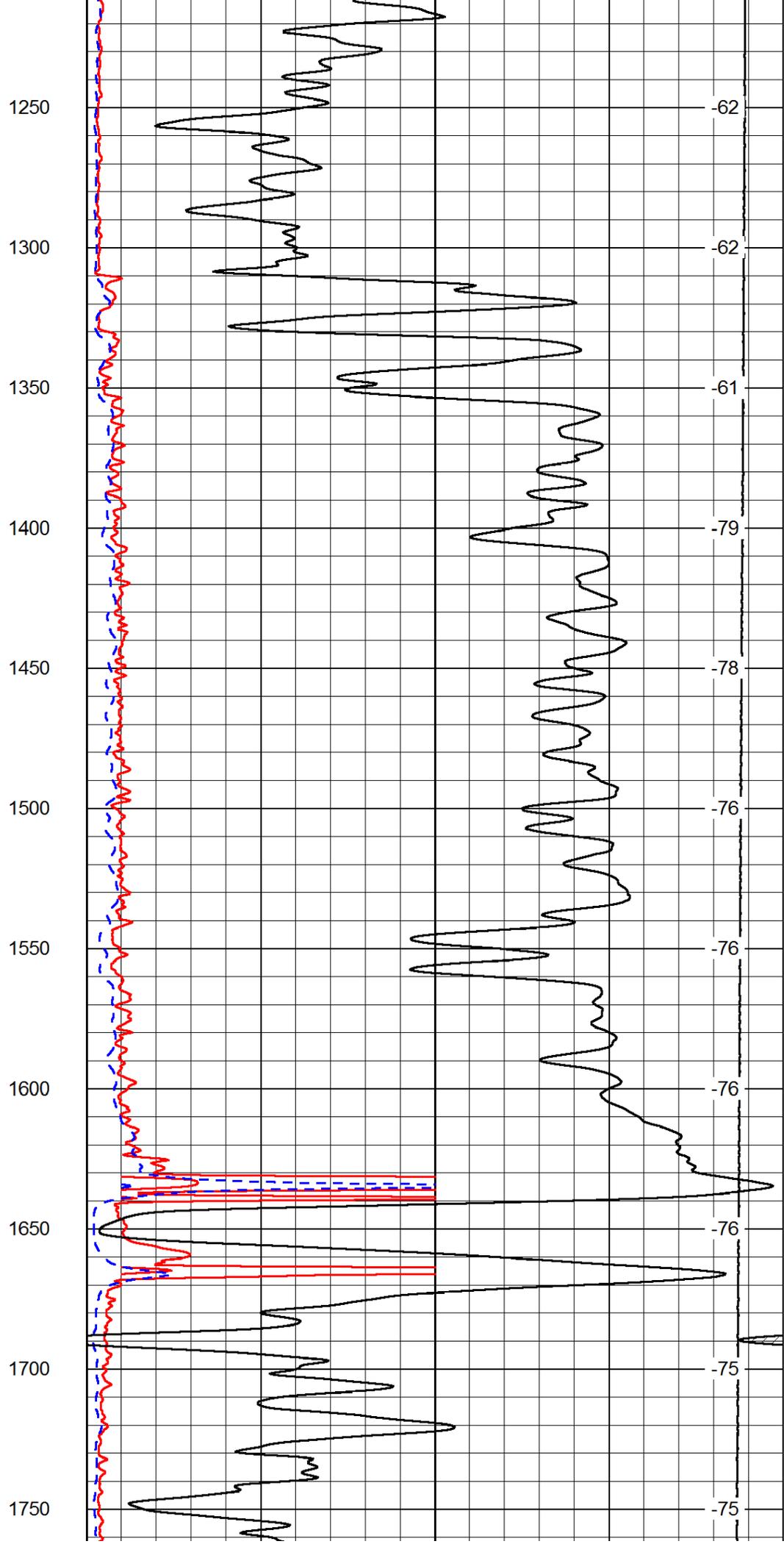
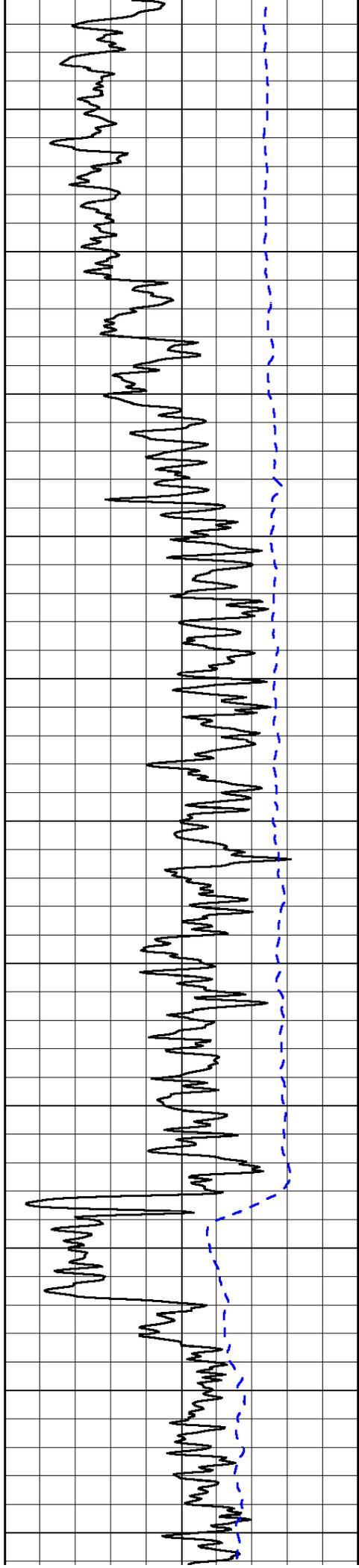
LSPD

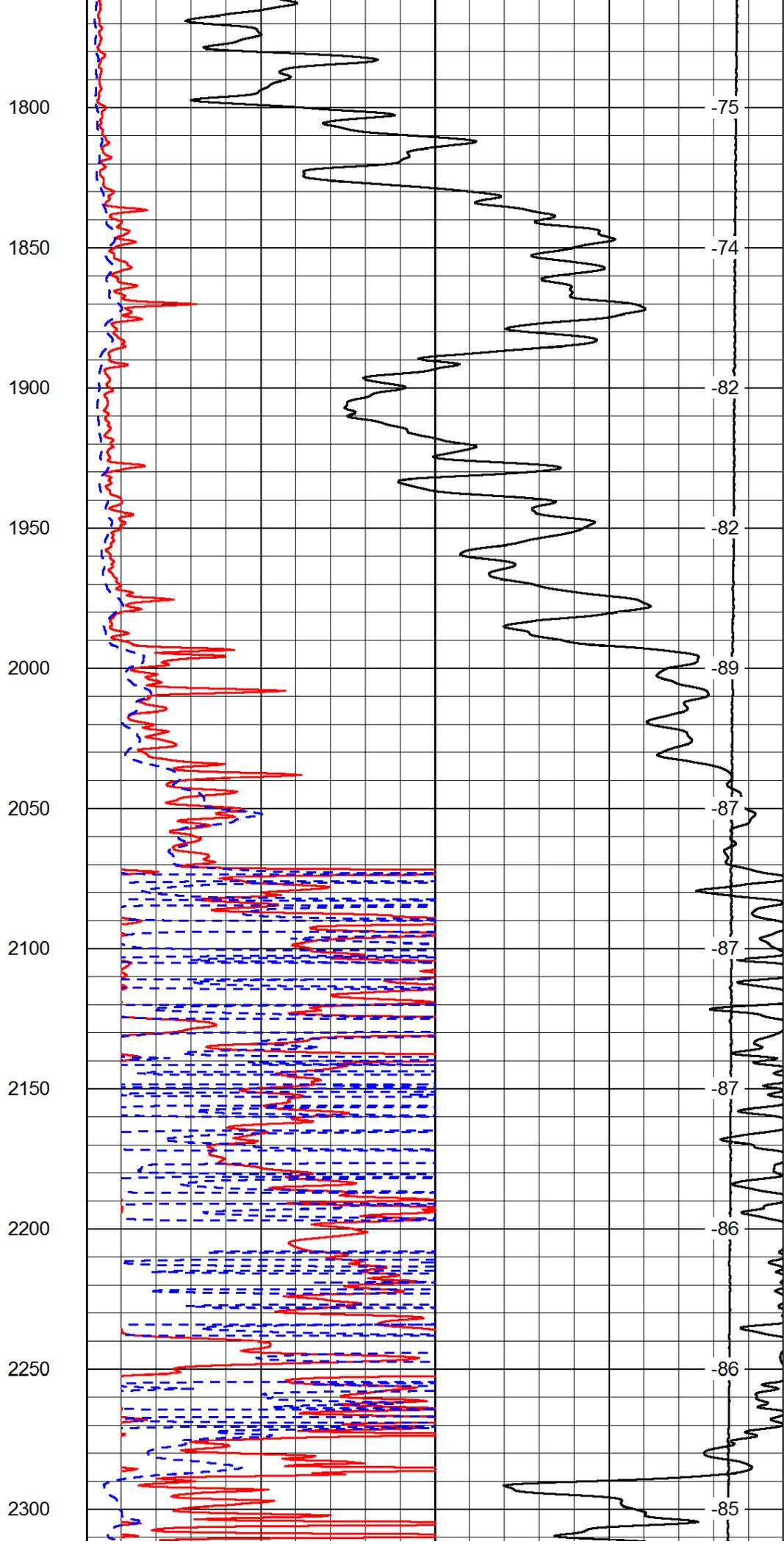
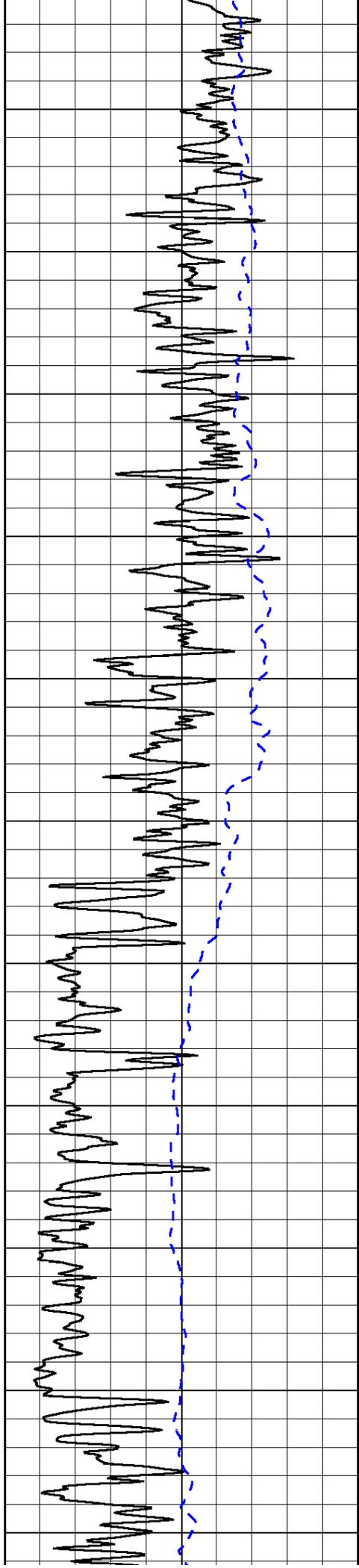
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15000	Line Tension	0

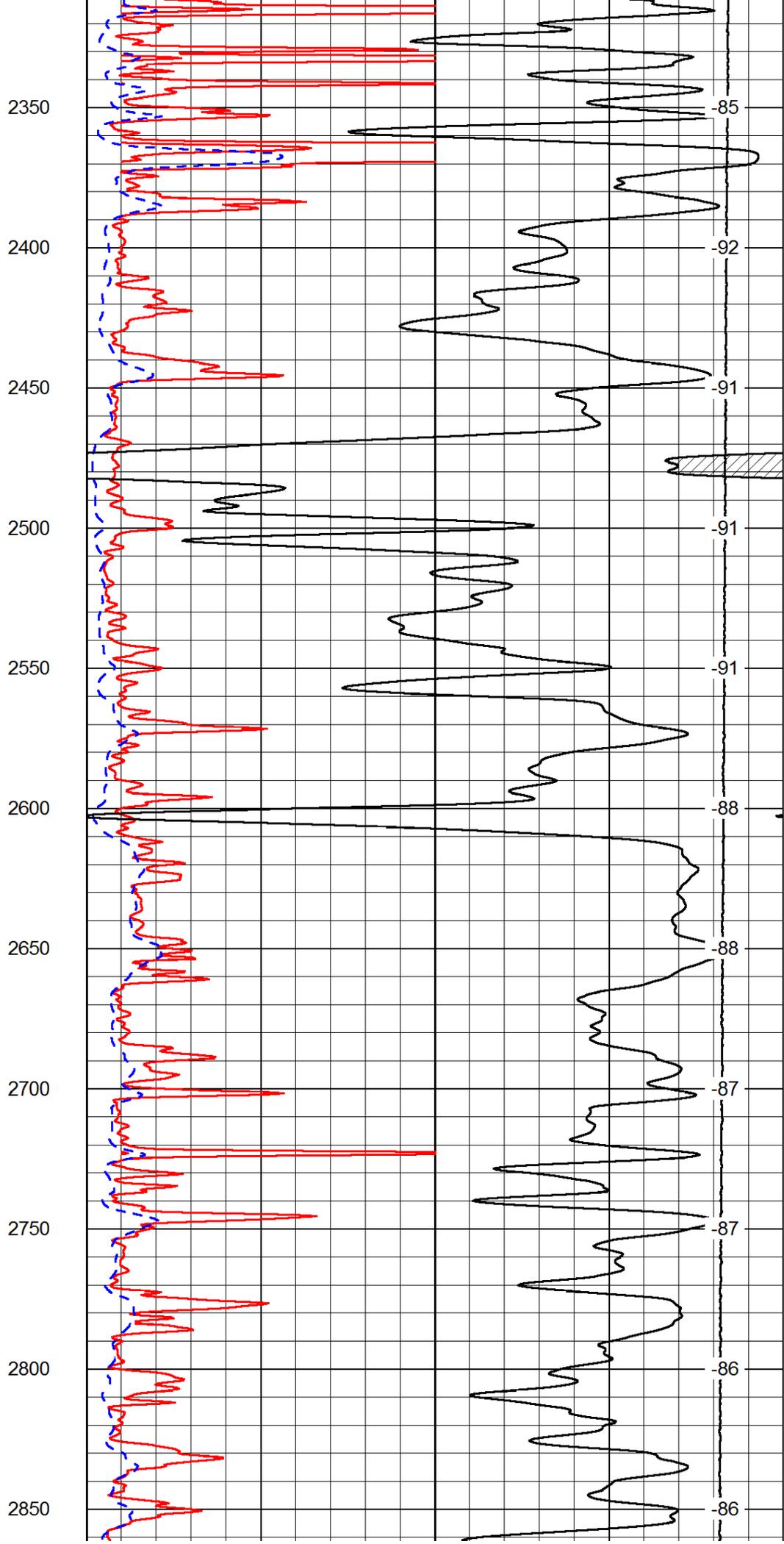
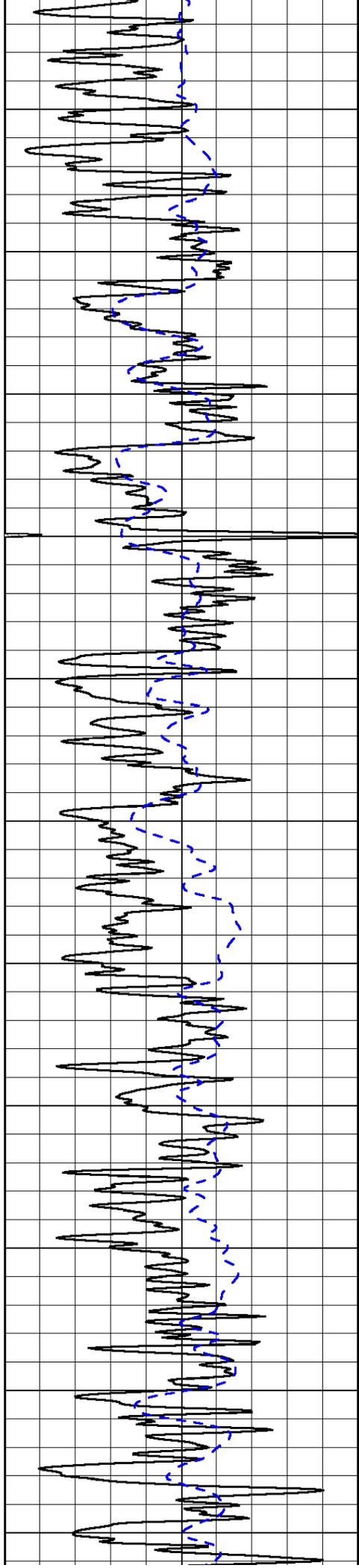
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50	Deep Resistivity	500

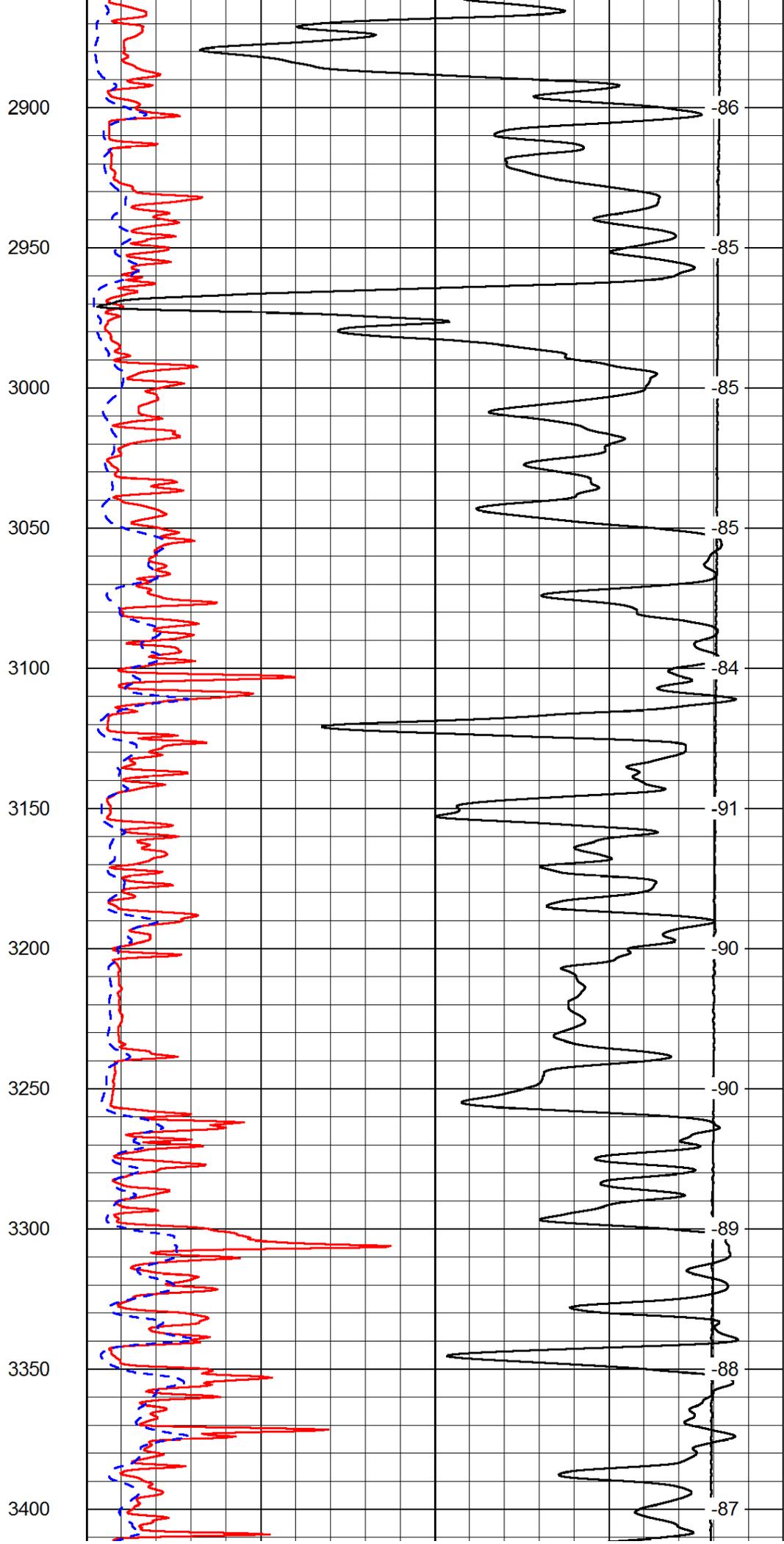
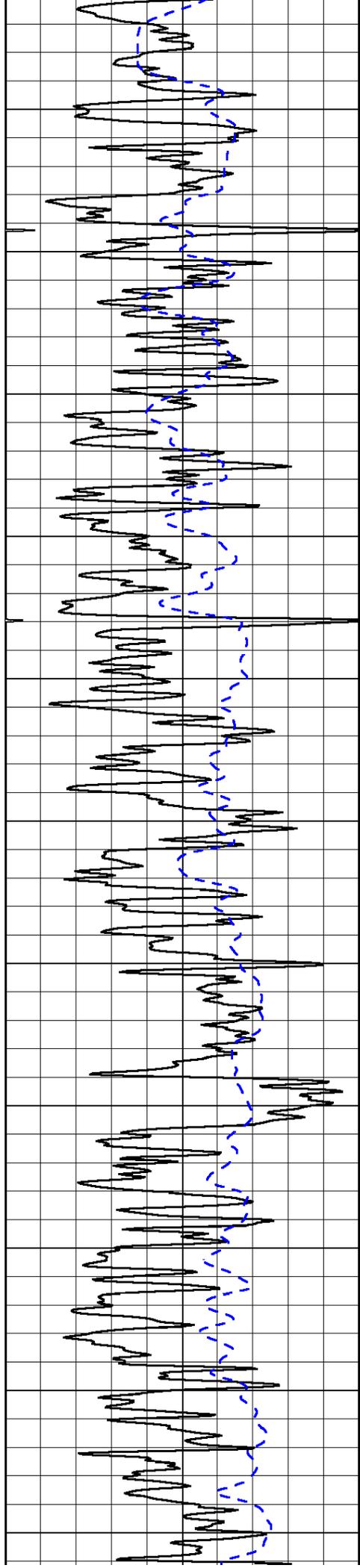


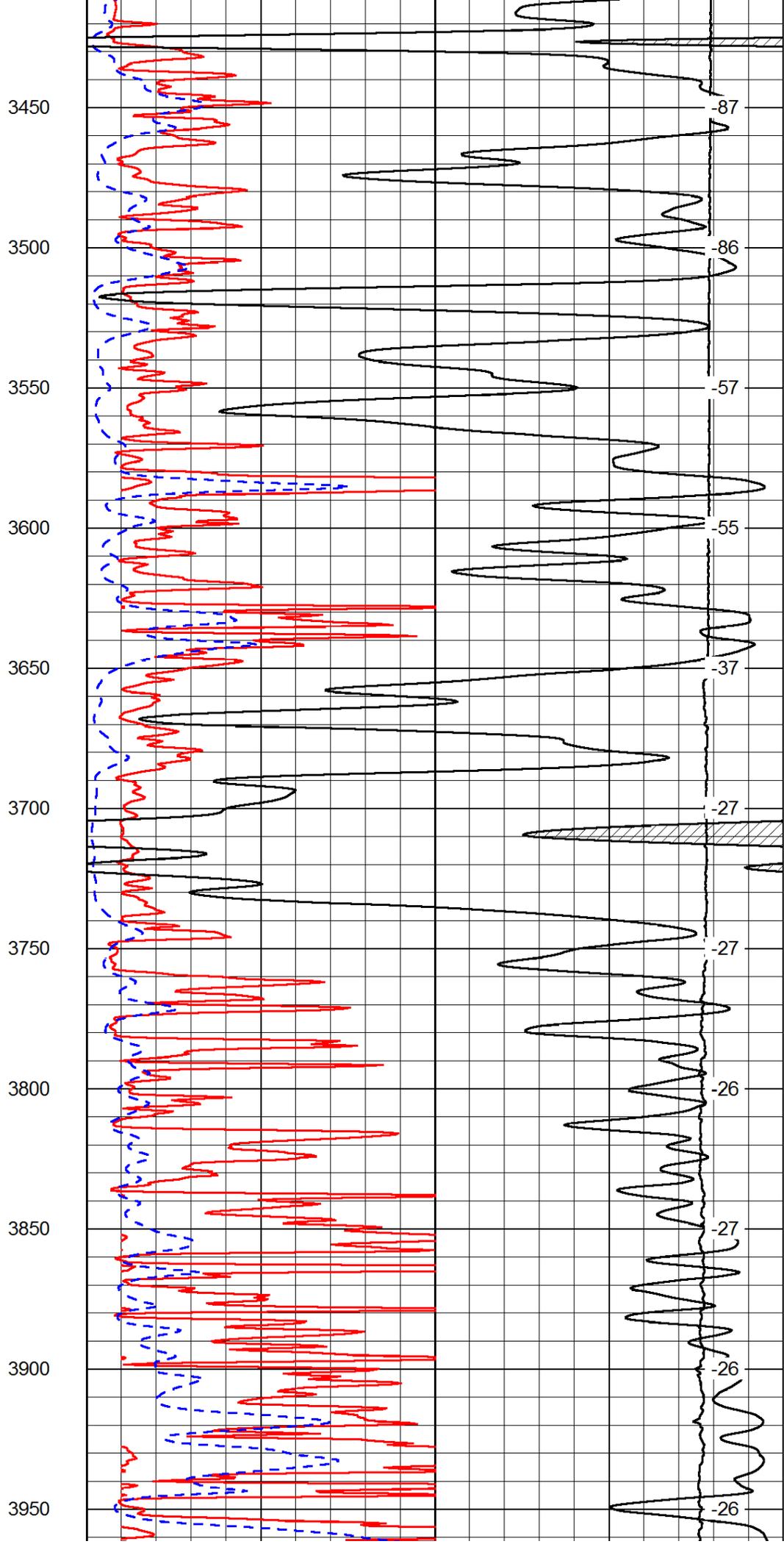
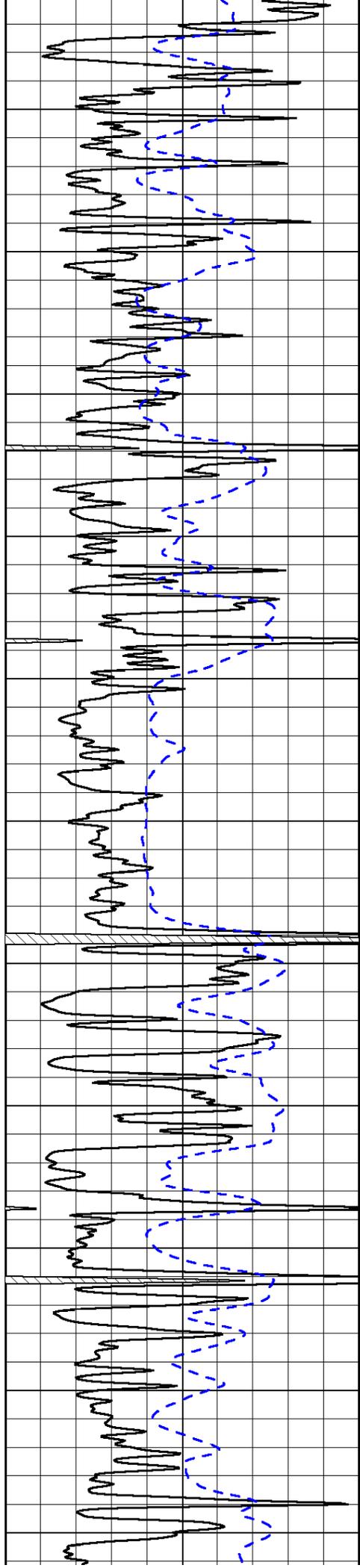


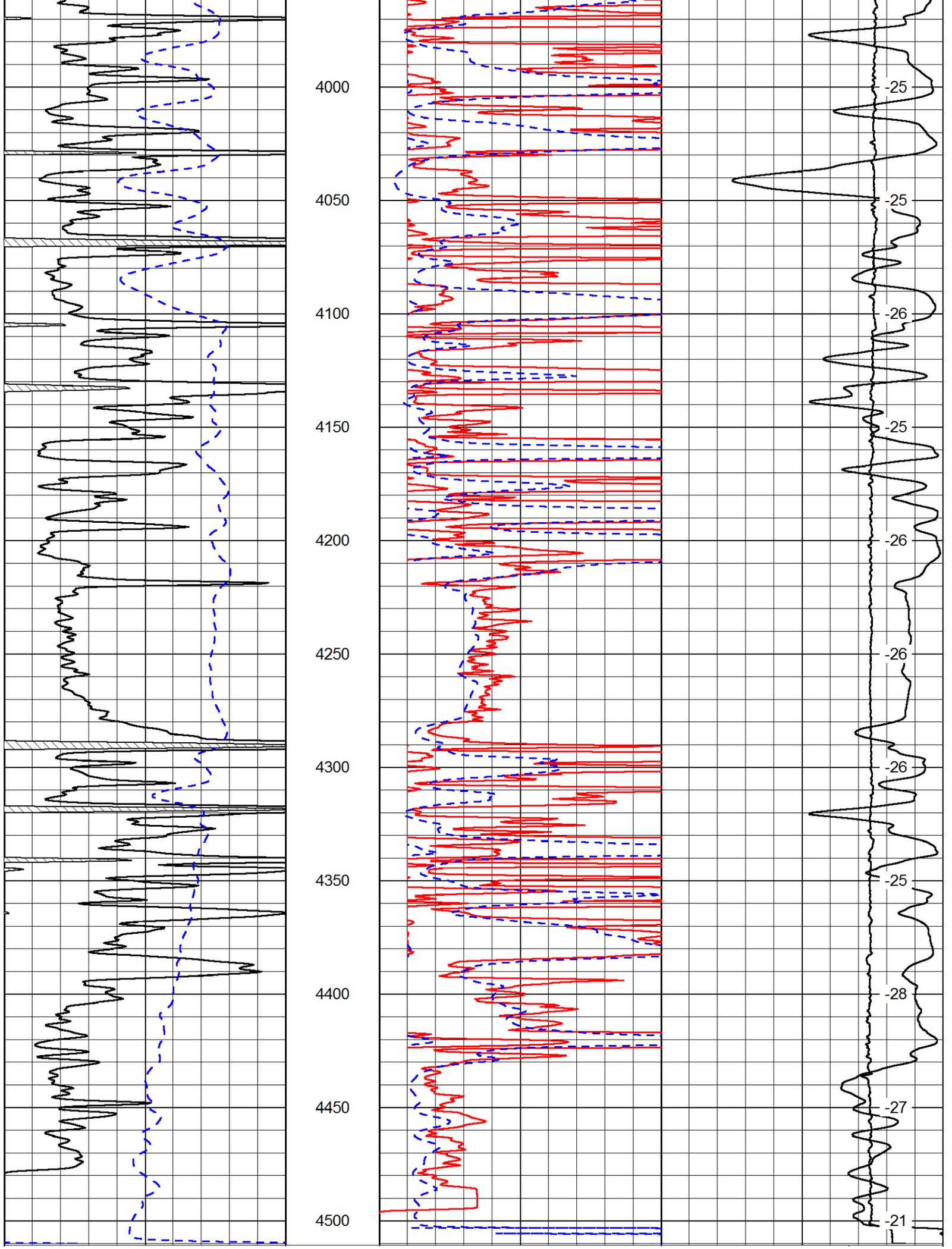












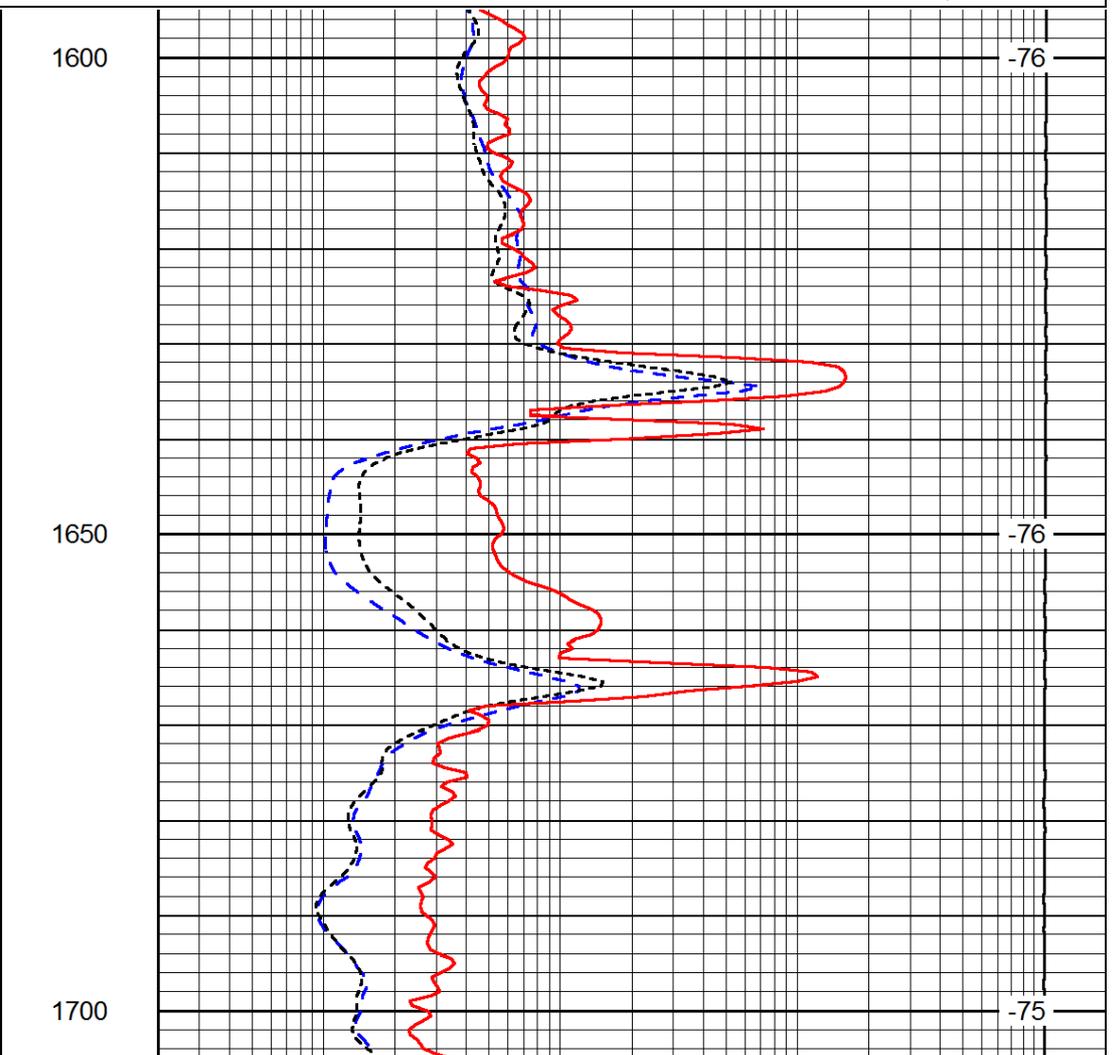
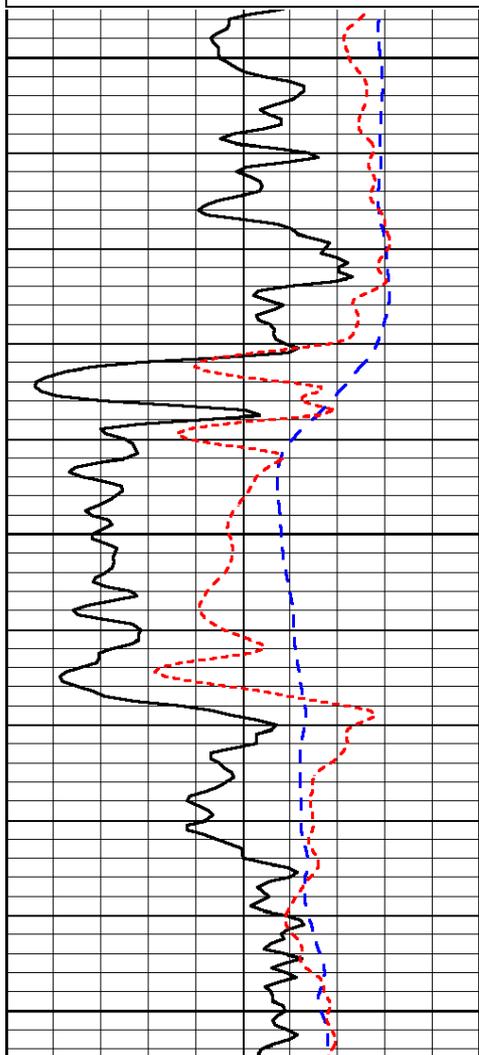
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-200	SP (mV)	0

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

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 Presentation Format: dil
 Dataset Creation: Wed May 01 03:48:40 2013
 Charted by: Depth in Feet scaled 1:240

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



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

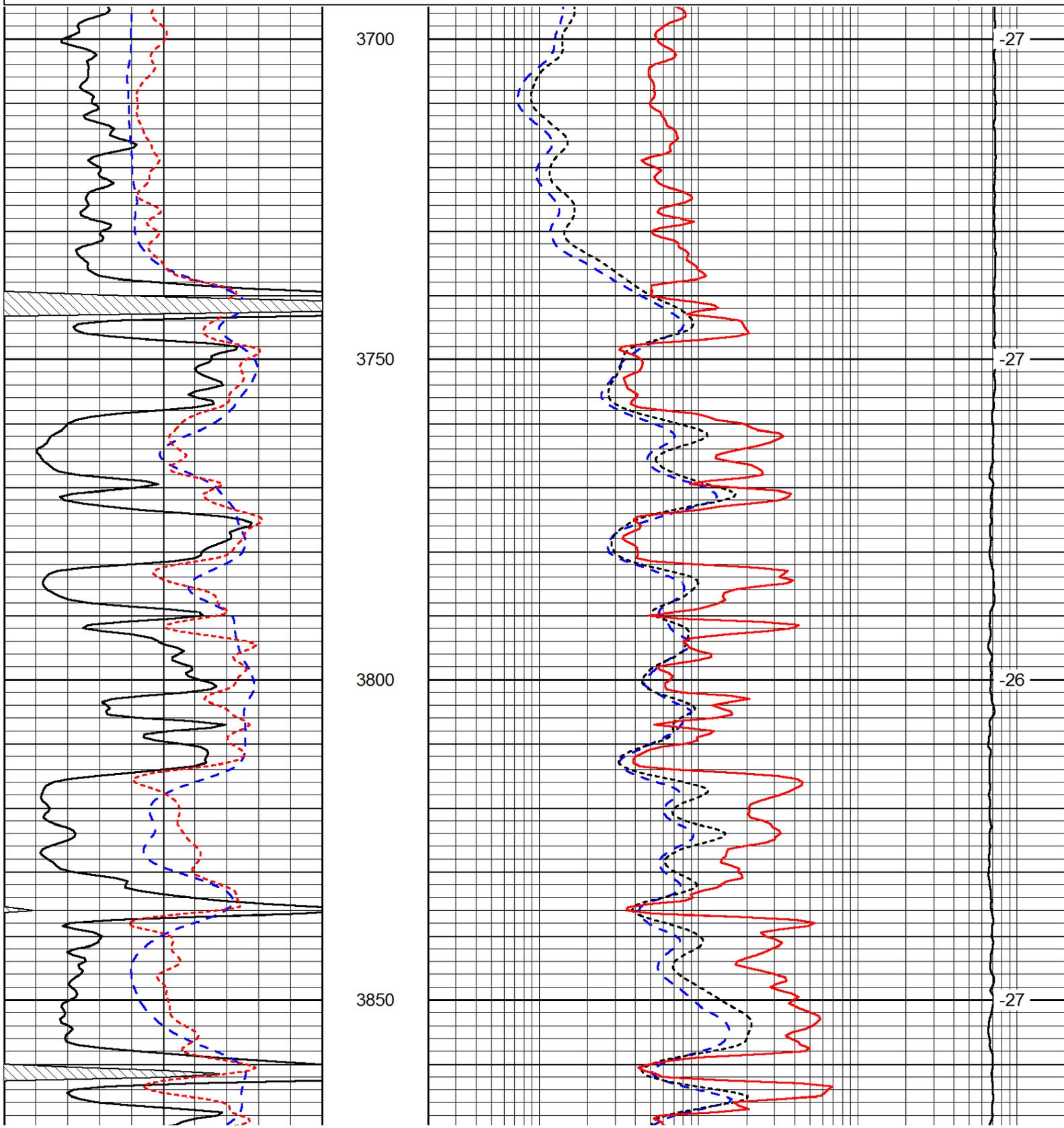
0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

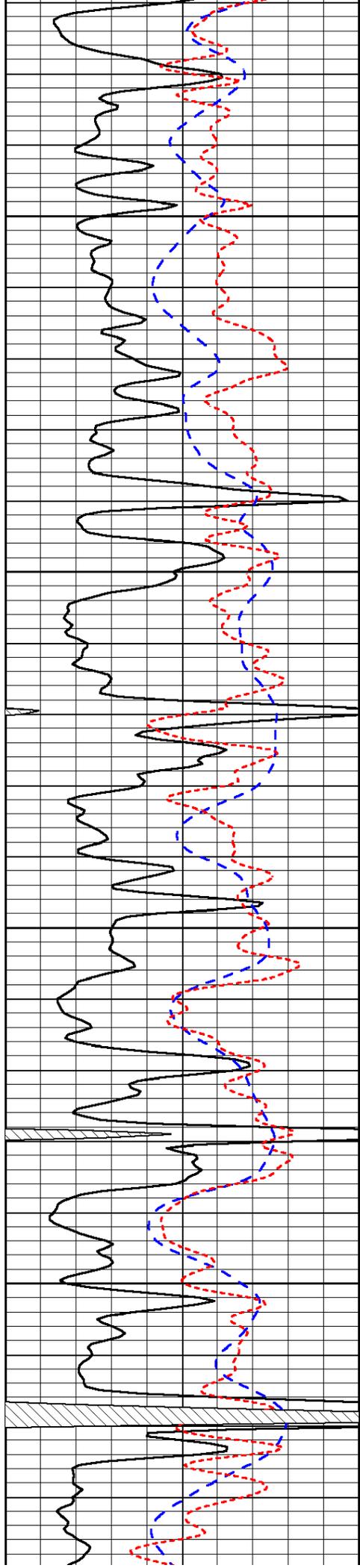
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15000	Line Tension	0

LSPD



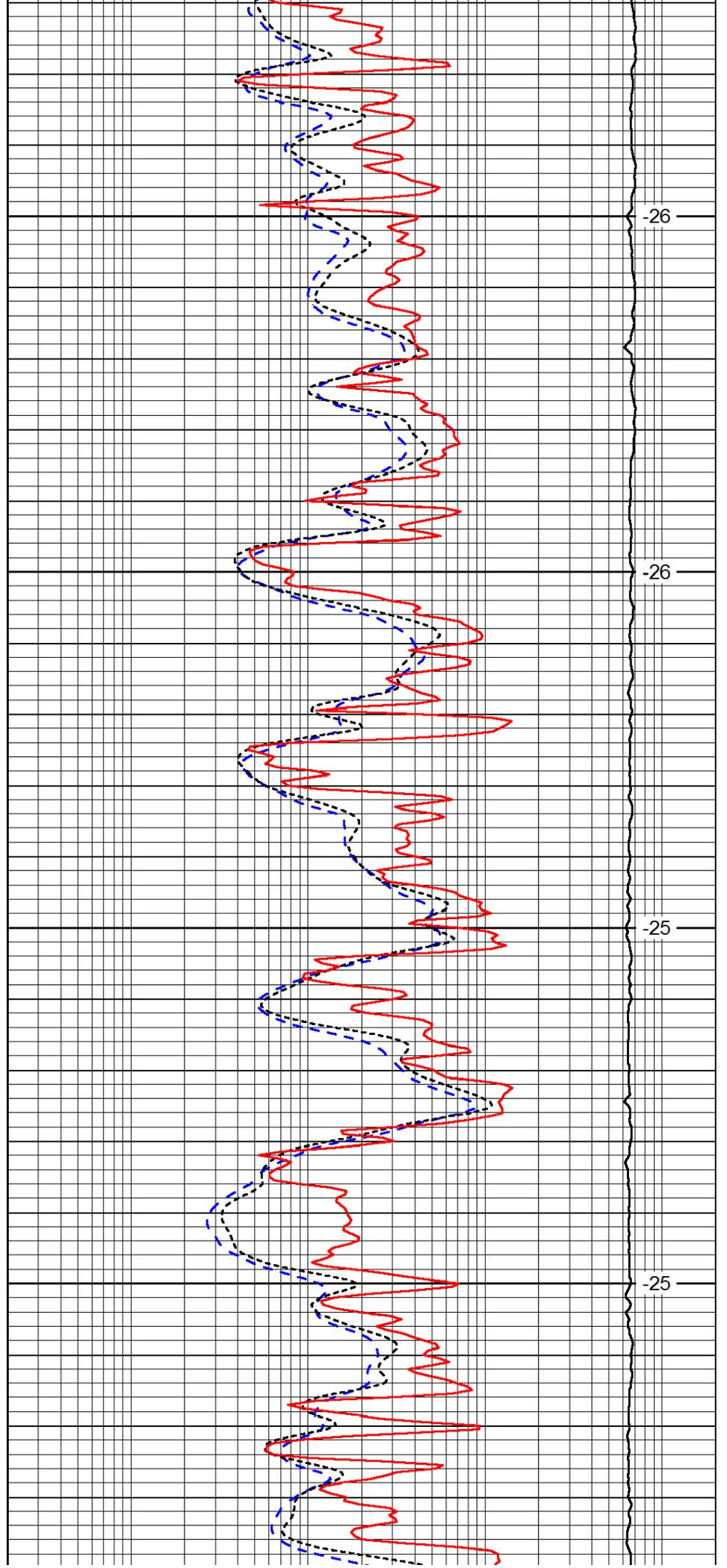


3900

3950

4000

4050

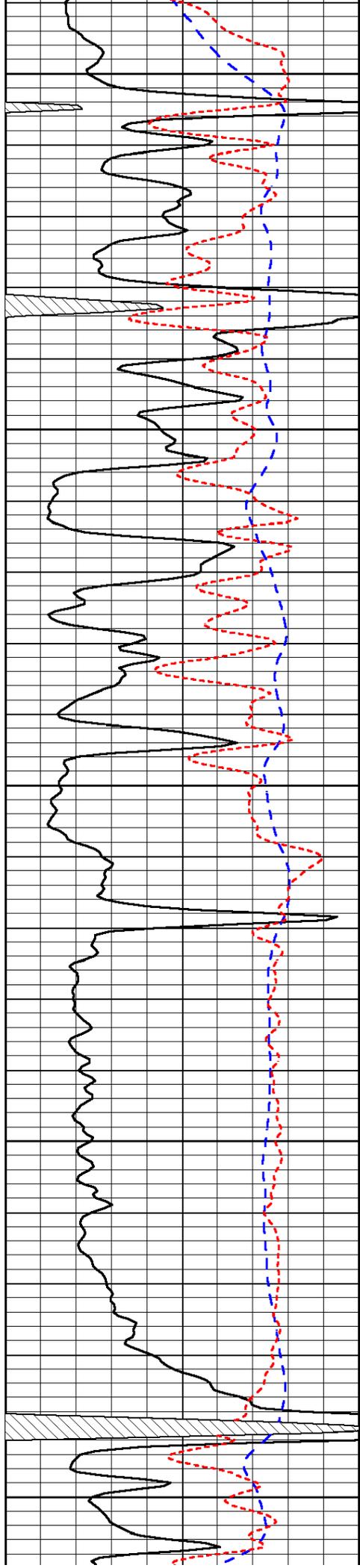


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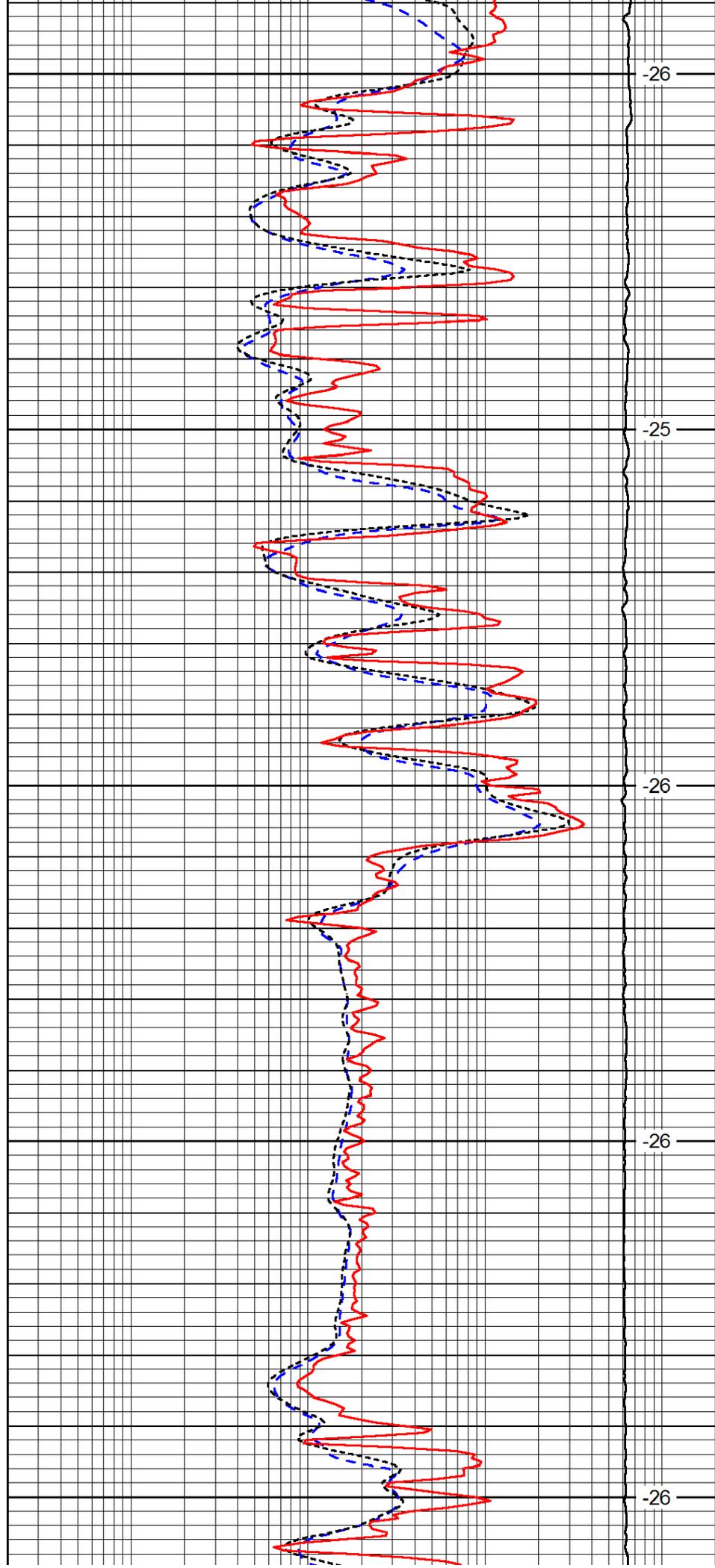
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4150

4200

4250

4300



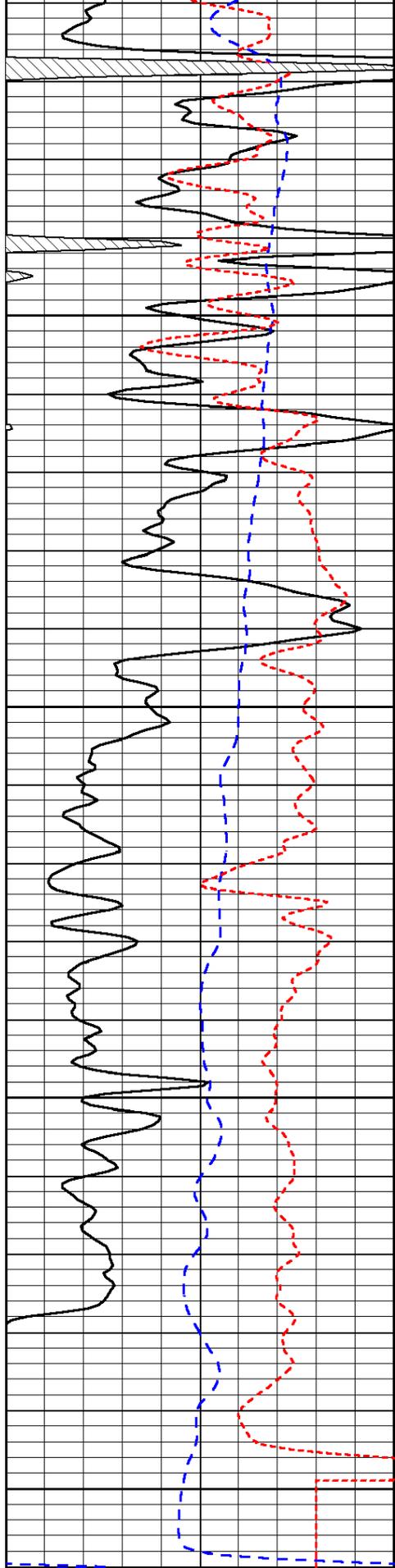
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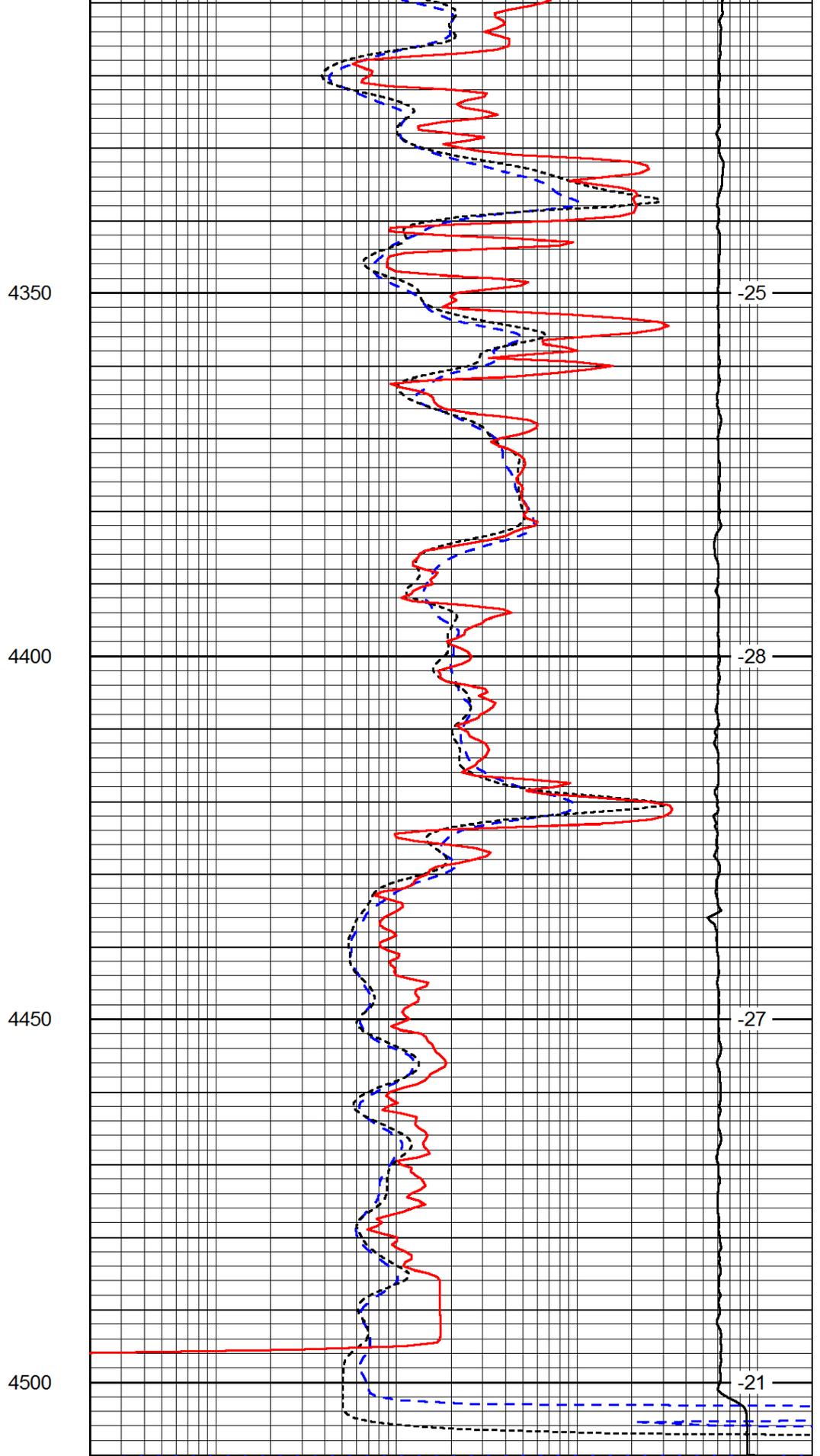
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15000	Line Tension	0

