



Pioneer Energy Services

Dual Induction Log

API No.

15-171-21,116-00-00

Company **Landmark Resources, Inc.**

Well **Rose No. 1-4**

Field **Capstone West**

County **Scott**

State

Kansas

Location **1,894' FNL & 336' FEL**

Sec: 4

Twp: 17S

Rge: 34W

Permanent Datum
Log Measured From
Drilling Measured From

Ground Level
Kelly Bushing
Kelly Bushing

Elevation 3131
10 Ft. Above Perm. Datum

Other Services
CNL/CDL
MEL

Elevation
K.B. 3141
D.F.
G.L. 3131

Date

12/18/2014

Run Number

One

Depth Driller

4905

Depth Logger

4906

Bottom Logged Interval

4905

Top Log Interval

250

Casing Driller

8.625 @ 265

Casing Logger

262

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

7500

Density / Viscosity

9.5

53

pH / Fluid Loss

9.0

9.6

Source of Sample

Flowline

Rm @ Meas. Temp

.60 @ 48

Rmf @ Meas. Temp

.45 @ 48

Rmc @ Meas. Temp

.81 @ 48

Source of Rmf / Rmc

Charts

Rm @ BHT

.23 @ 125

Operating Rig Time

4 Hours

Max Rec. Temp. F

125

Equipment Number

108

Location

Hays

Recorded By

J. Long

Witnessed By

Terry McLeod

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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

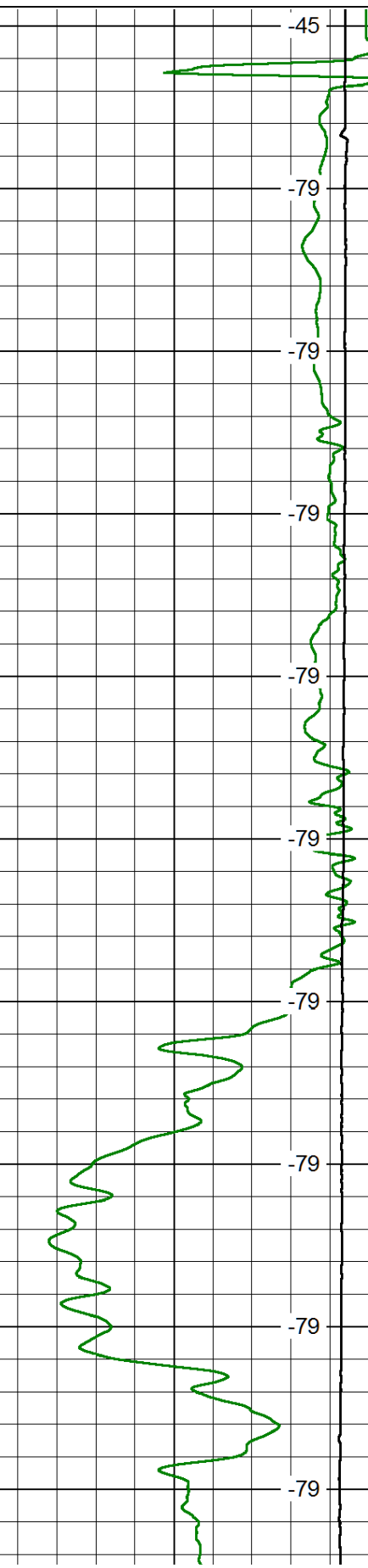
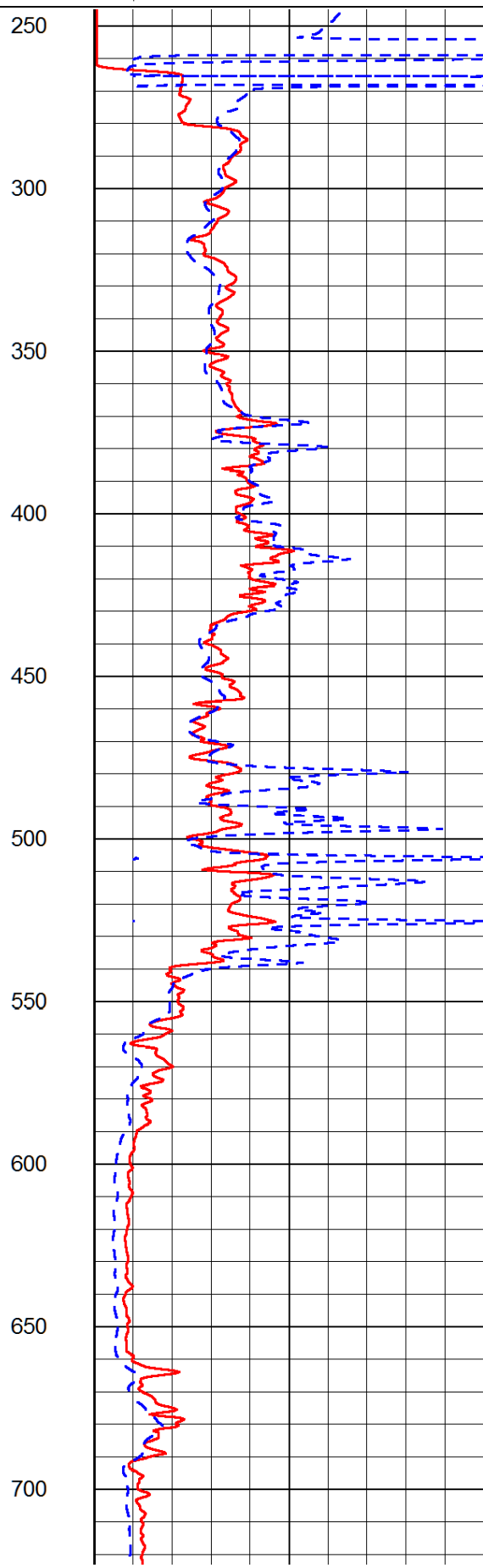
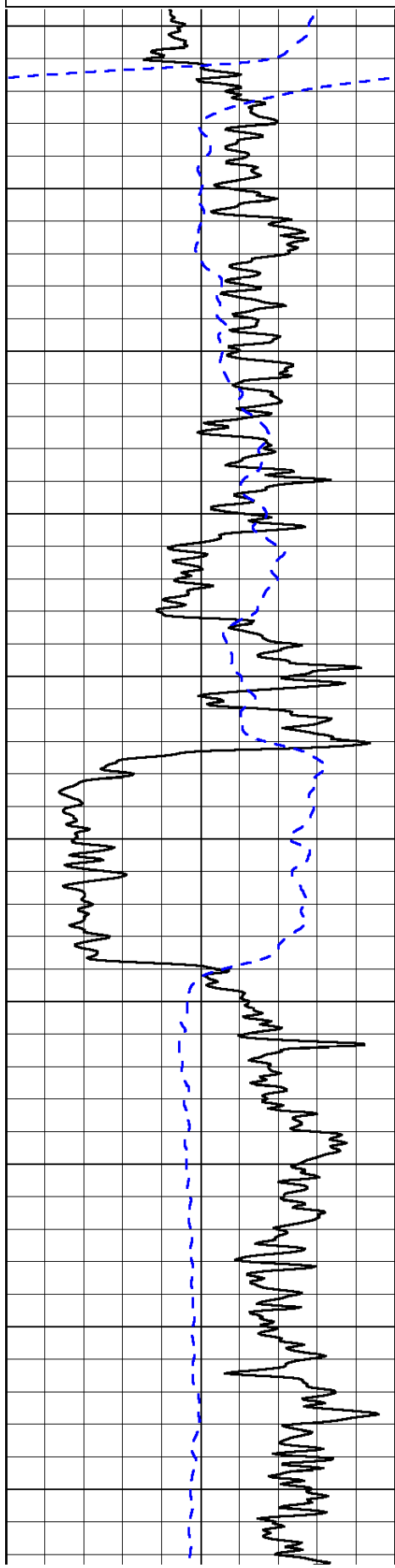
Oakley, South to Highway 4 and Highway 83 Intersection, 4 West, 1 North, 5 West,
1/4 South, West Into

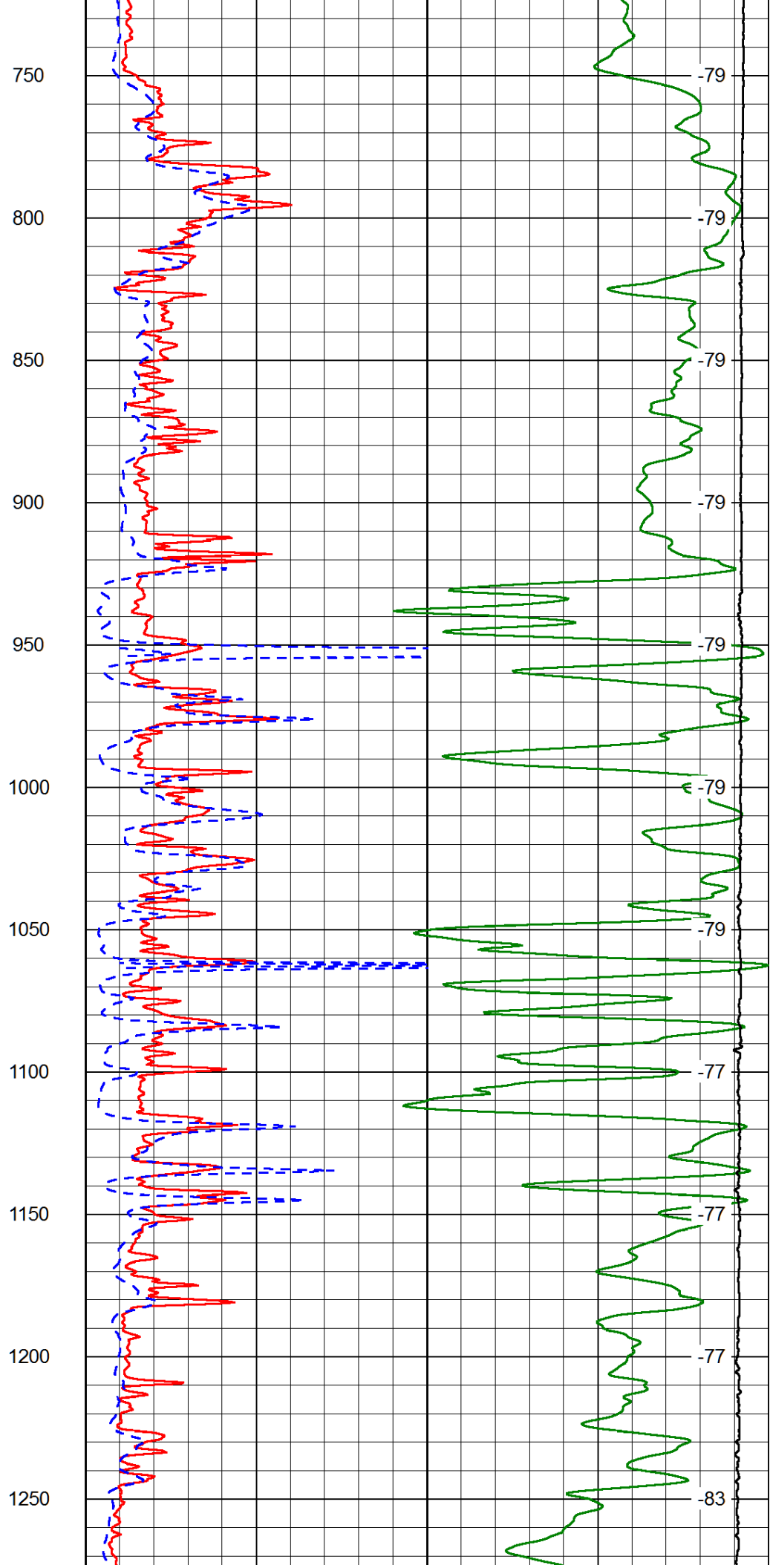
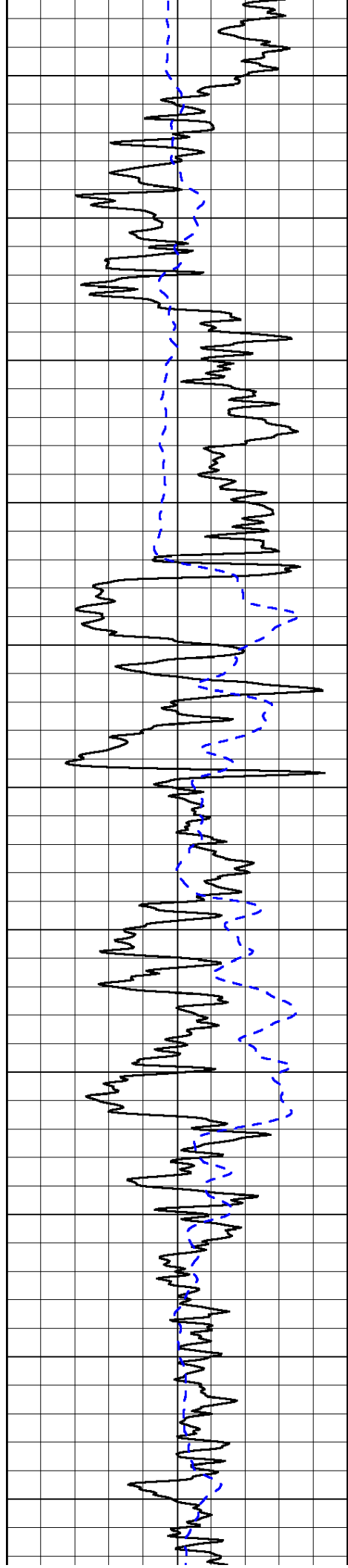
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Presentation Format: dil2in
Dataset Creation: Thu Dec 18 08:22:58 2014
Charted by: Depth in Feet scaled 1:600

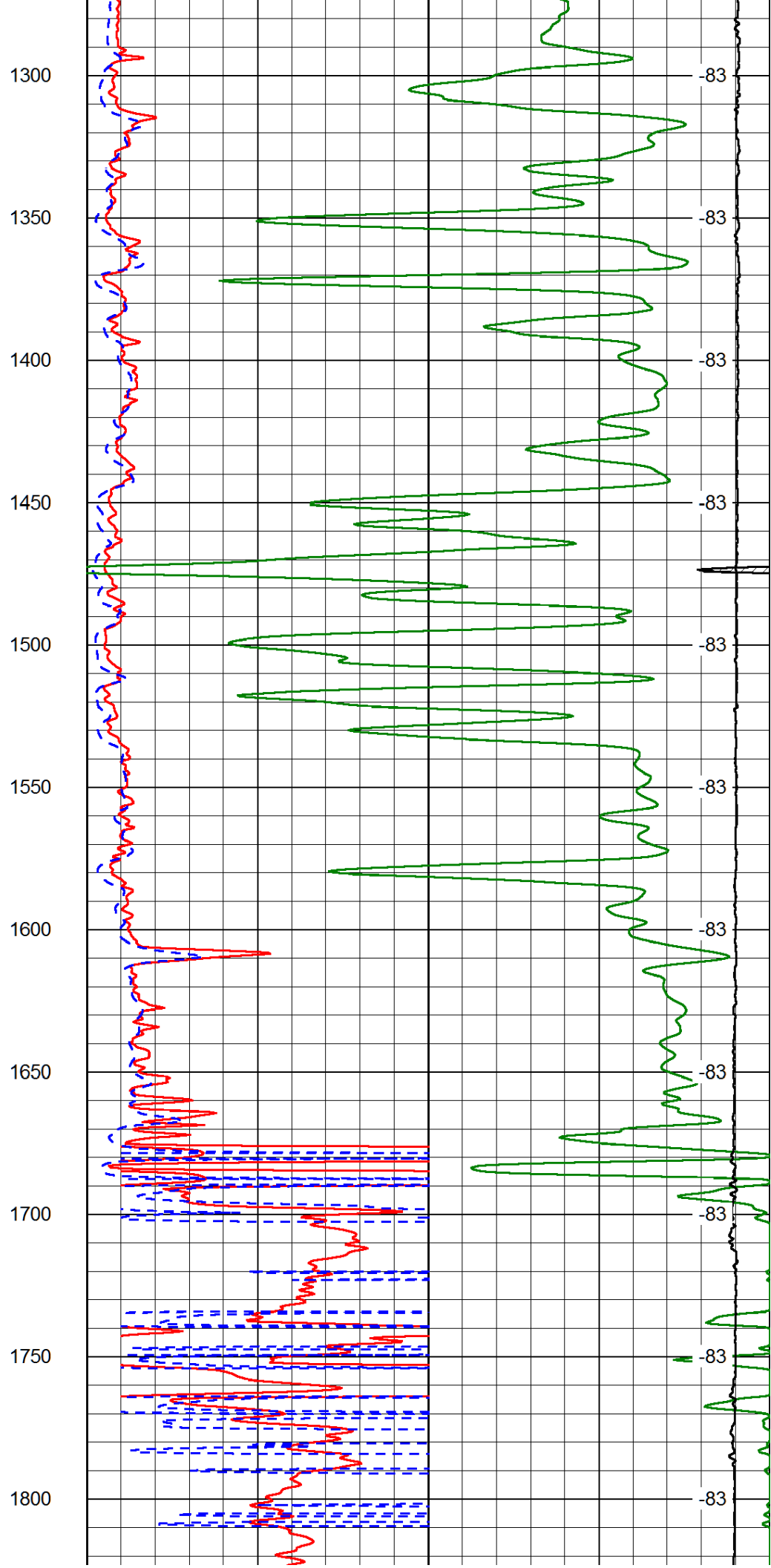
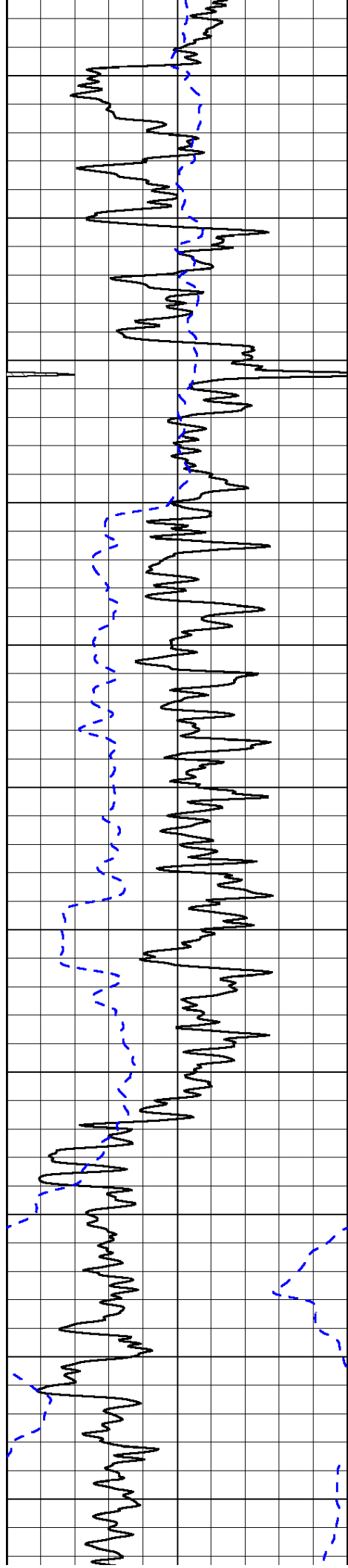
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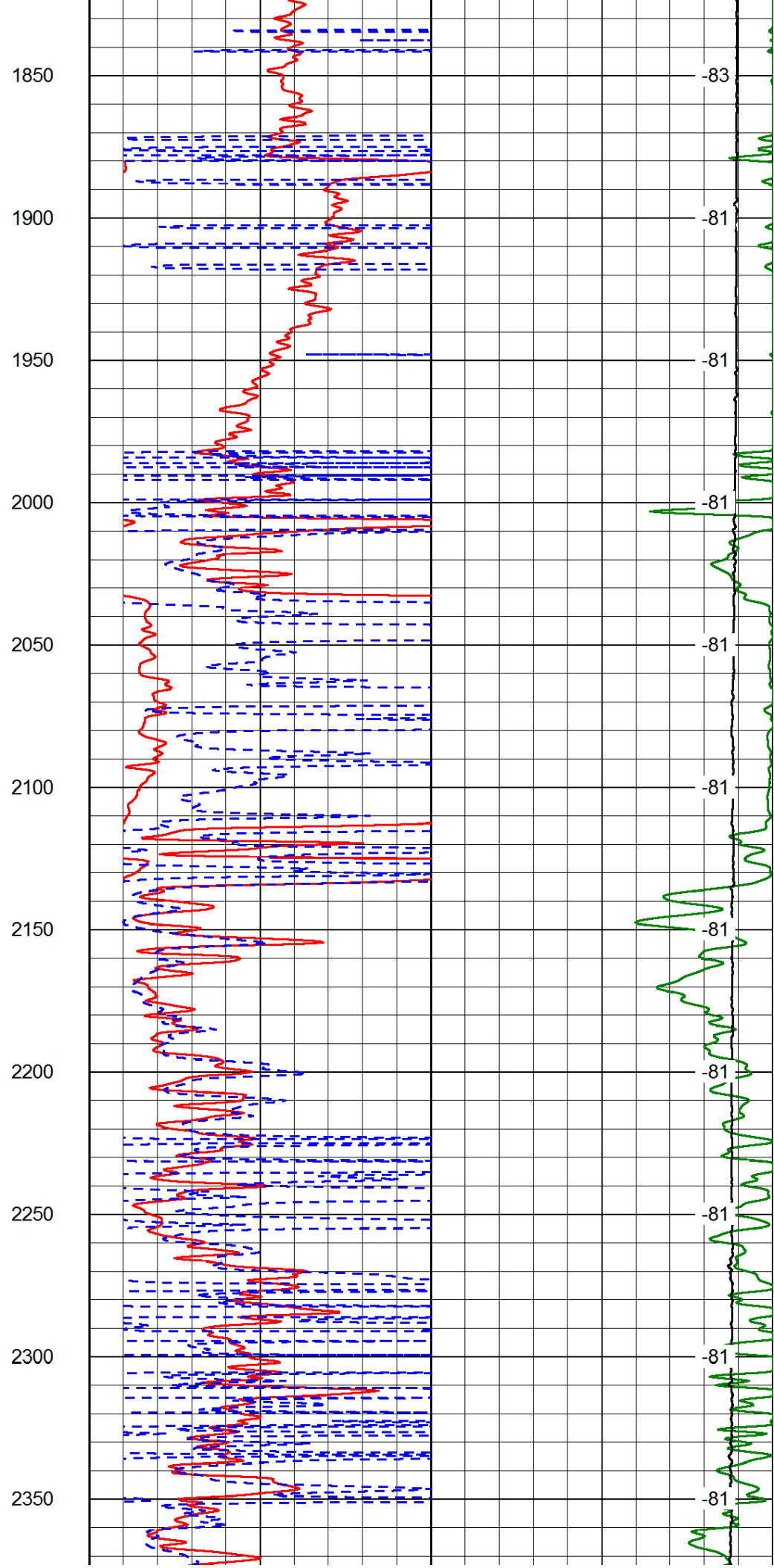
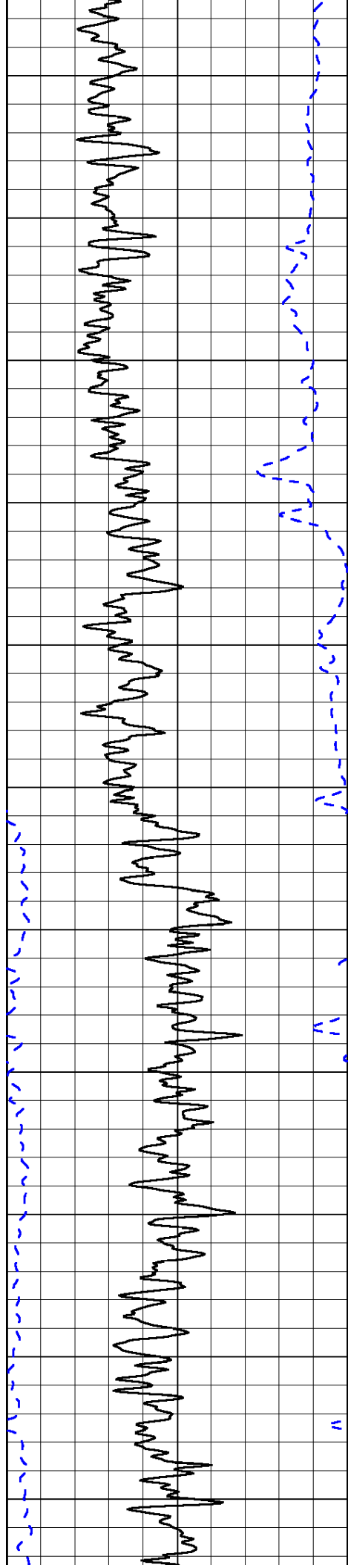
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0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

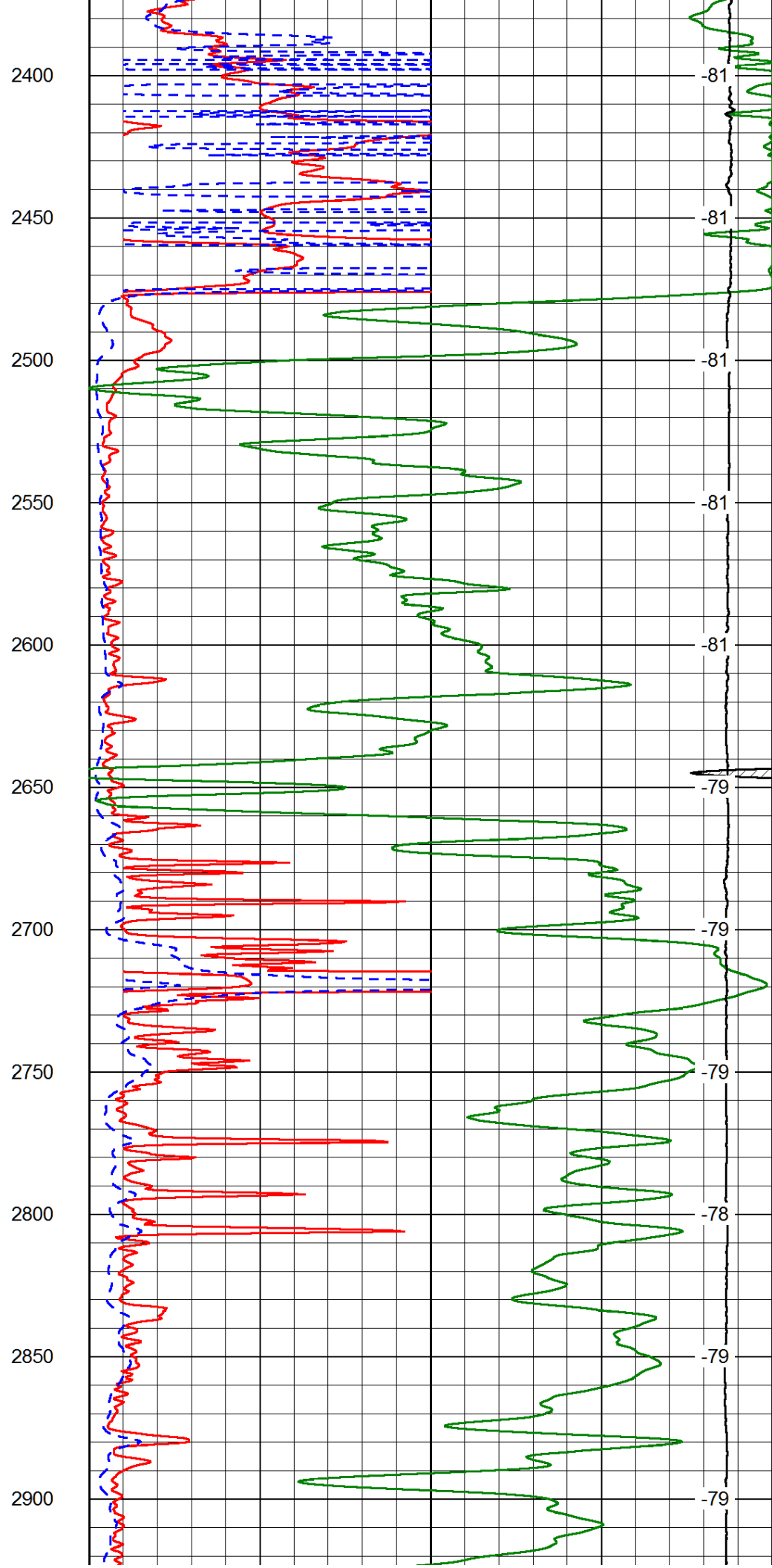
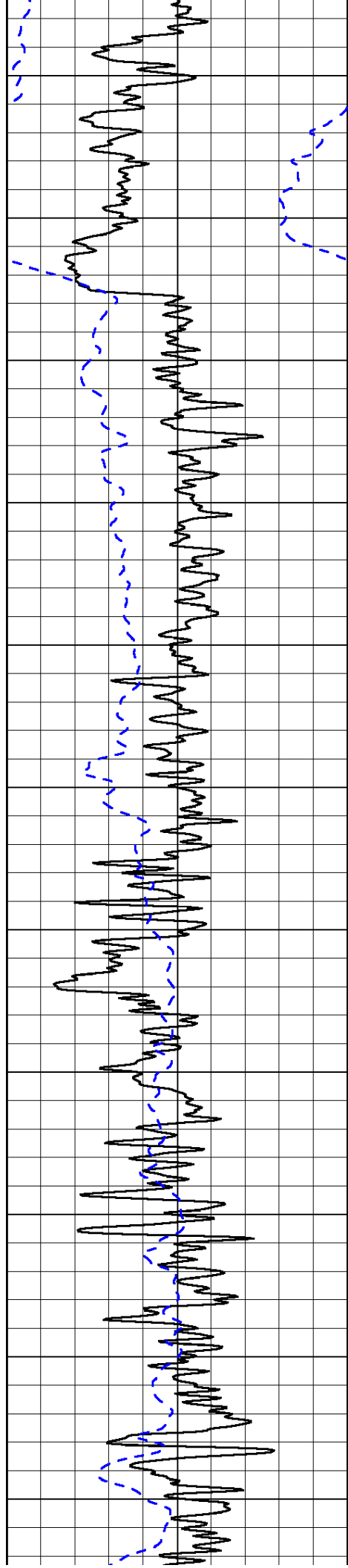
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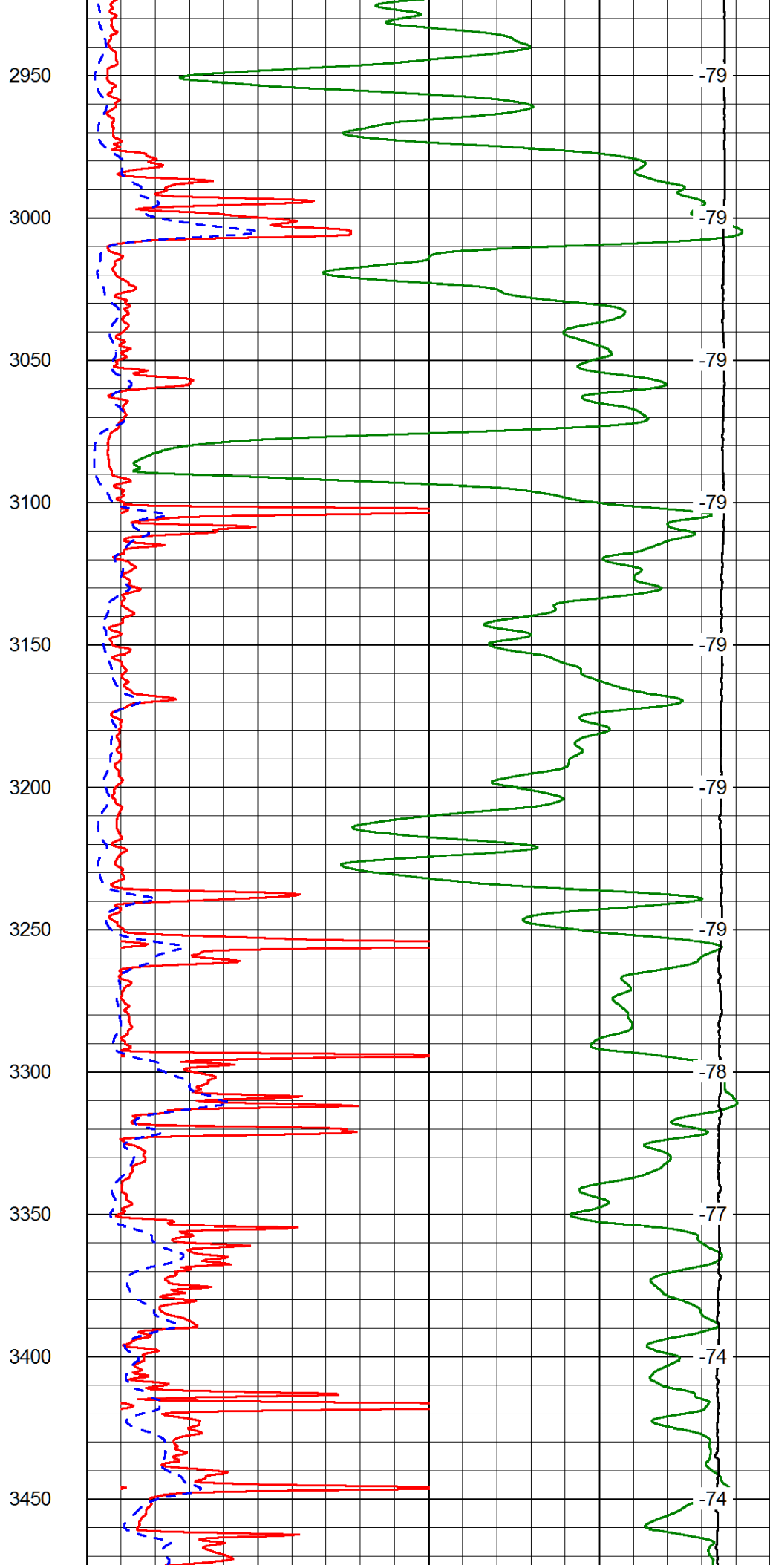
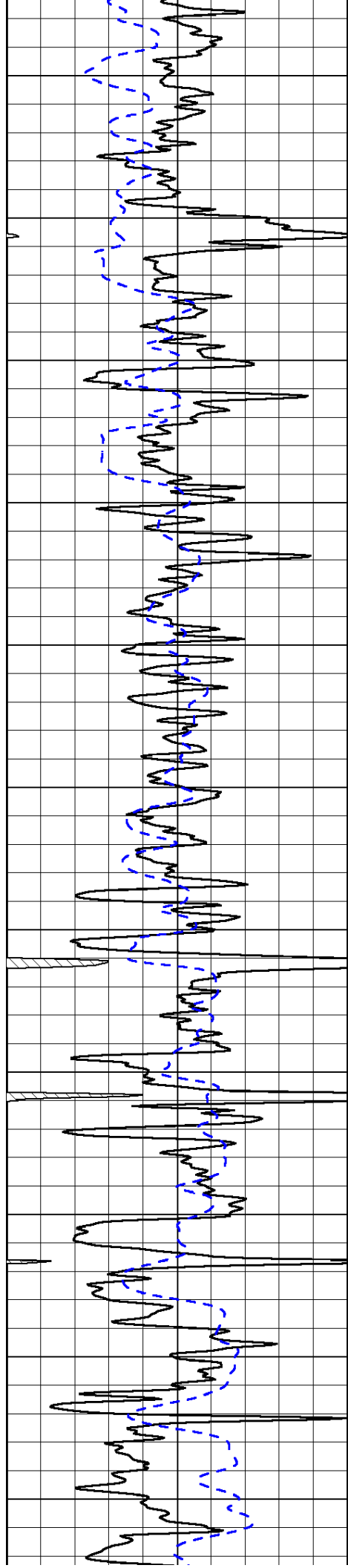


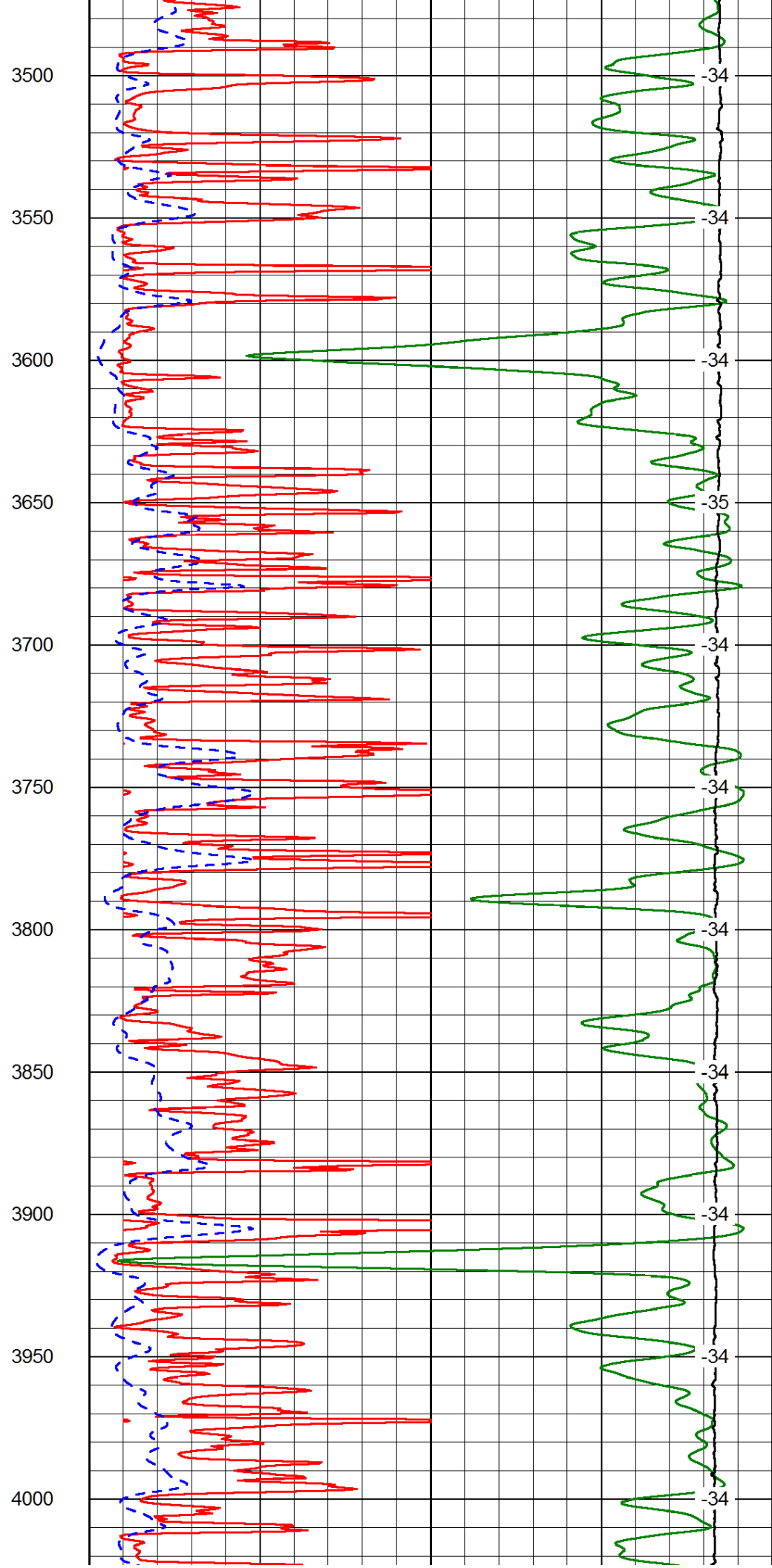
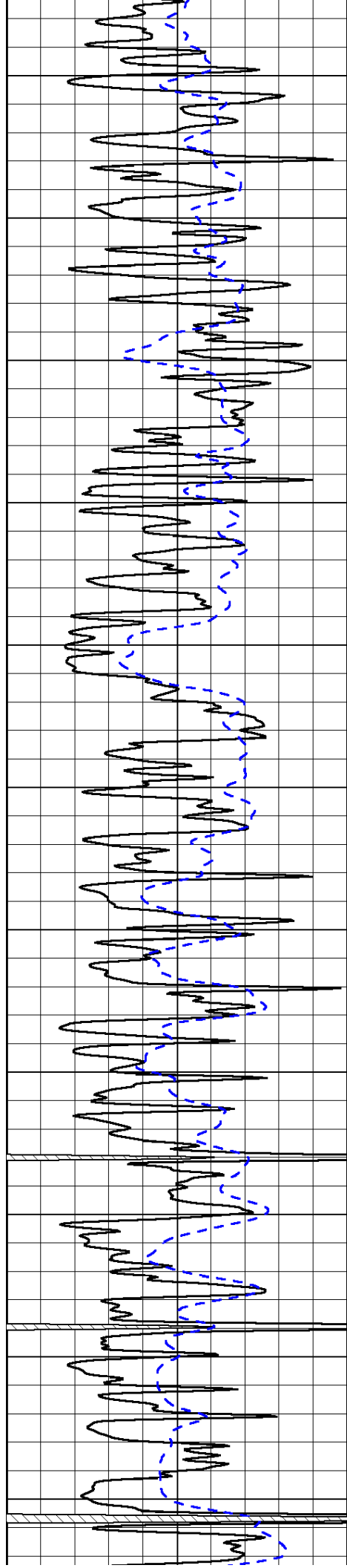


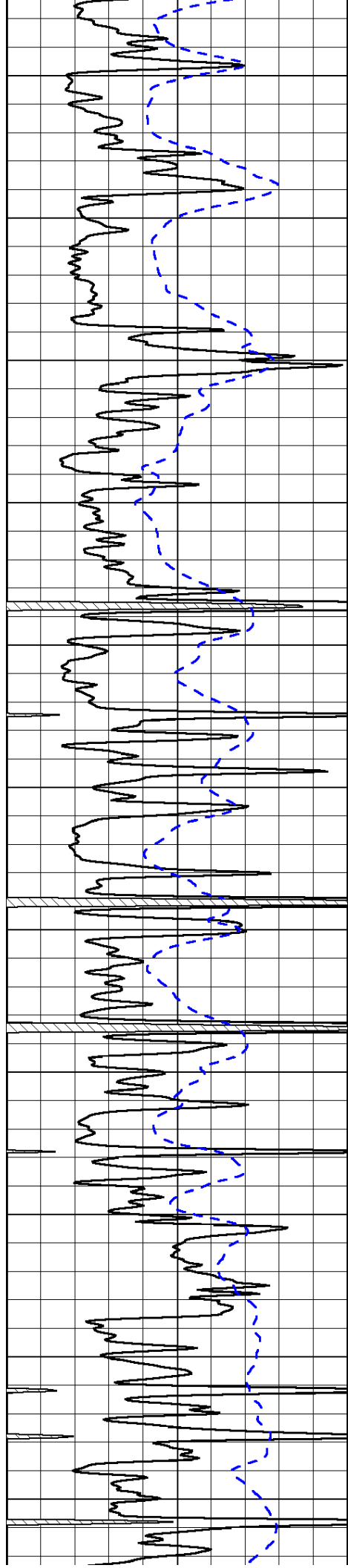












4050

4100

4150

4200

4250

4300

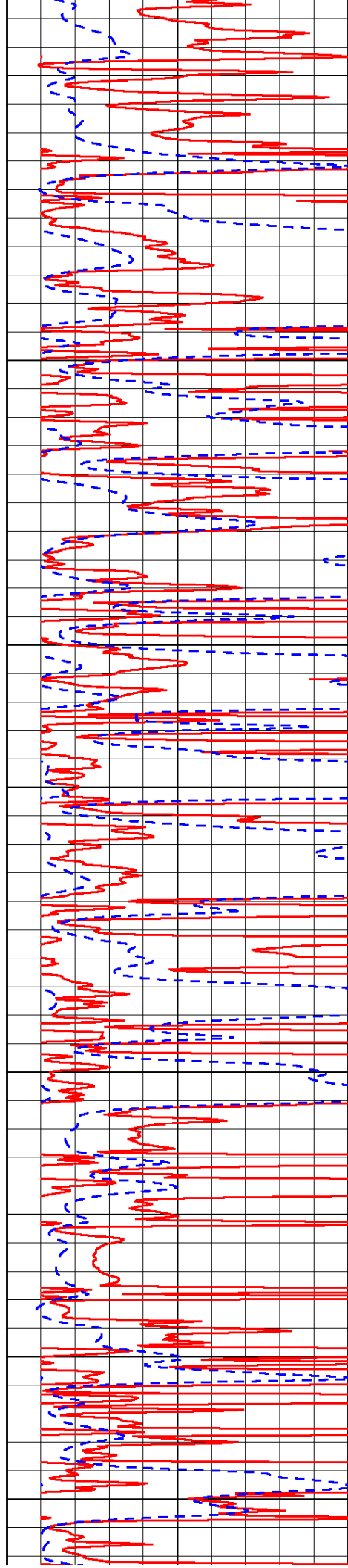
4350

4400

4450

4500

4550



-34

-34

-33

-33

-33

-32

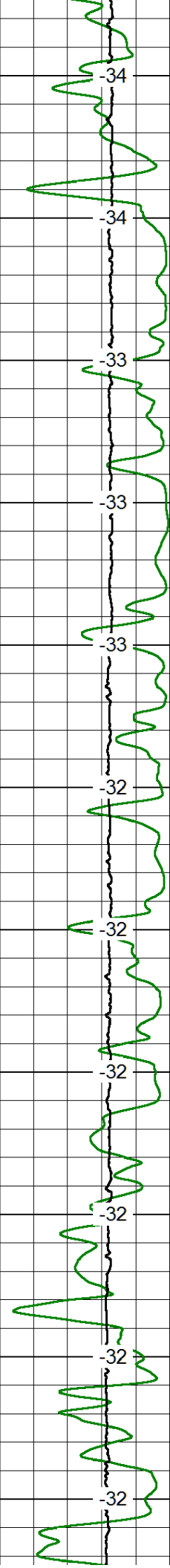
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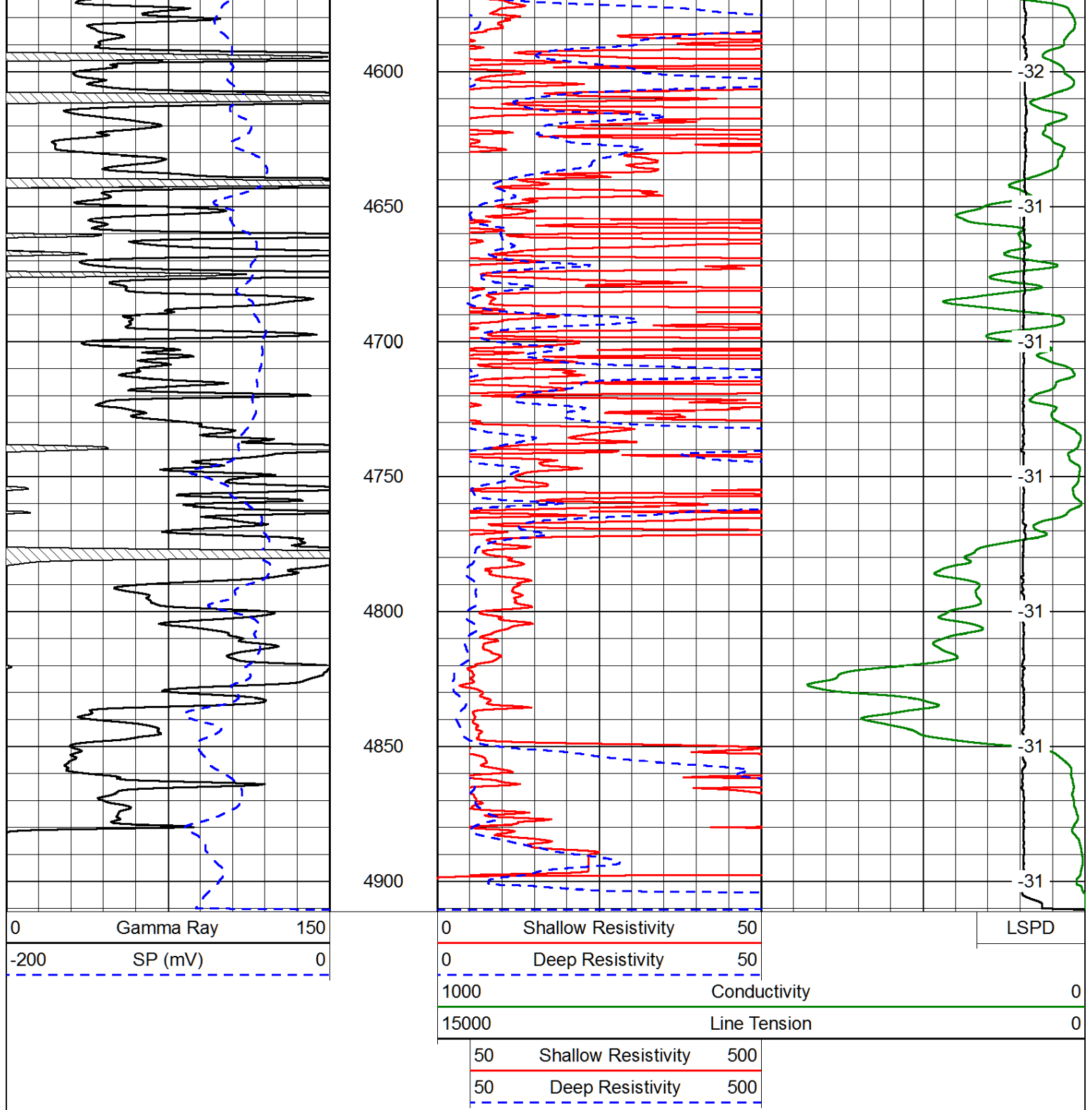
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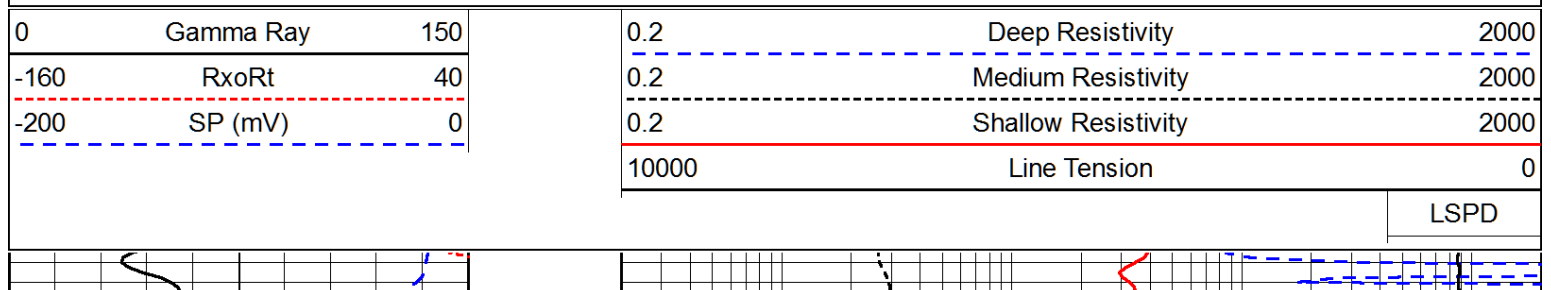
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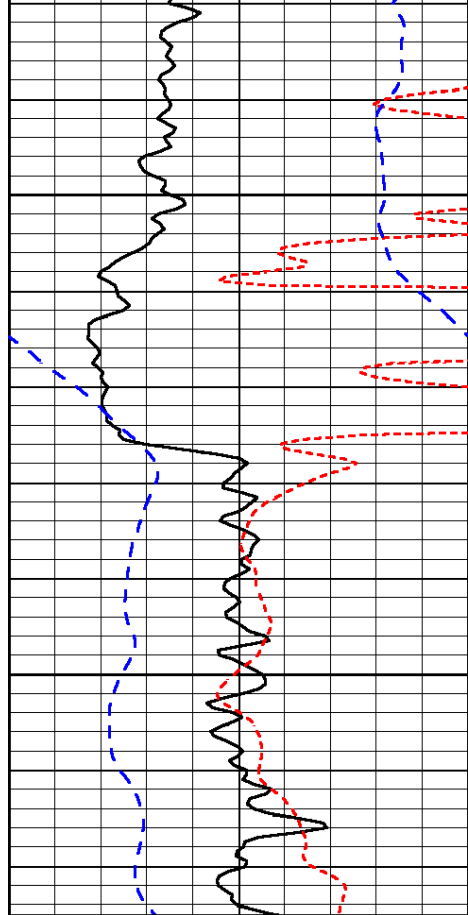
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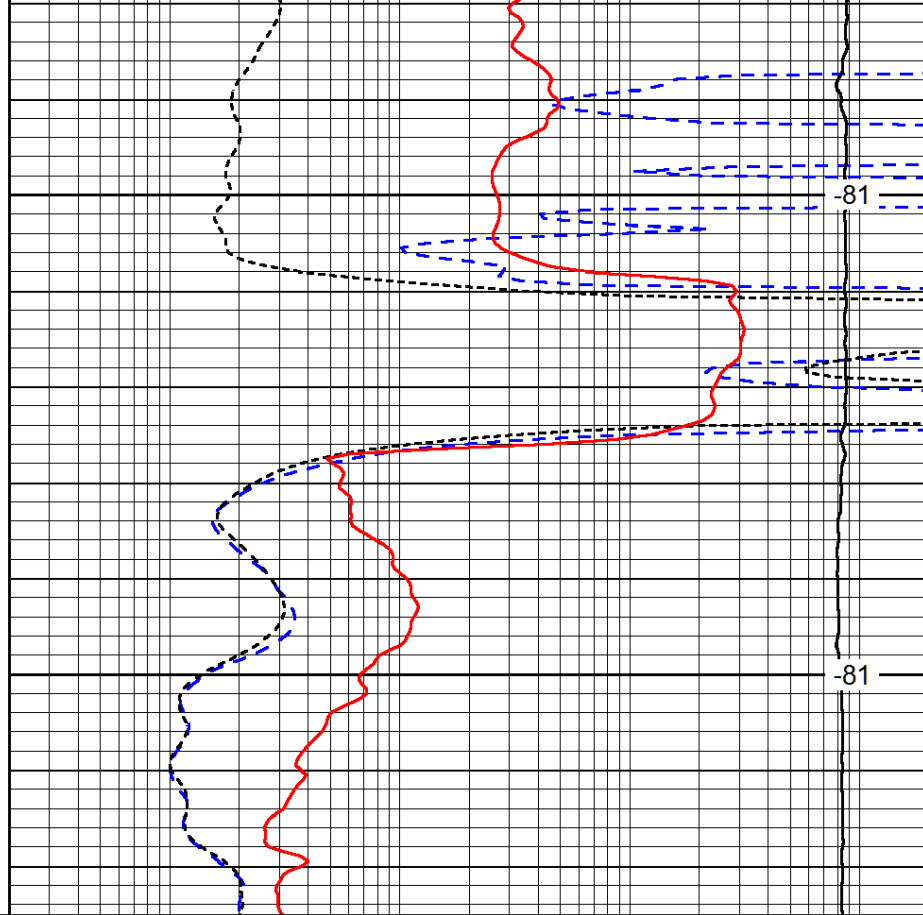




2450

2500

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



-81

-81

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

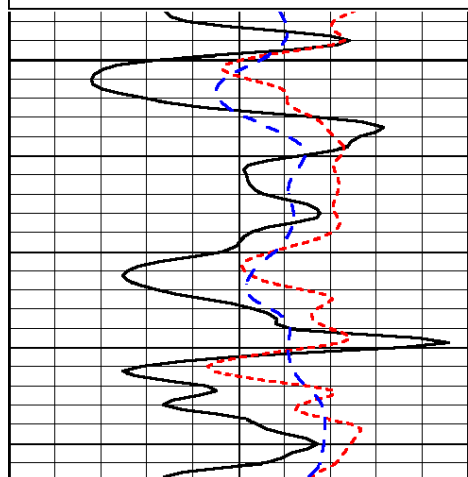
LSPD

Database File: landmark_rose_1-4hd.db
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 Charted by: Depth in Feet scaled 1:240

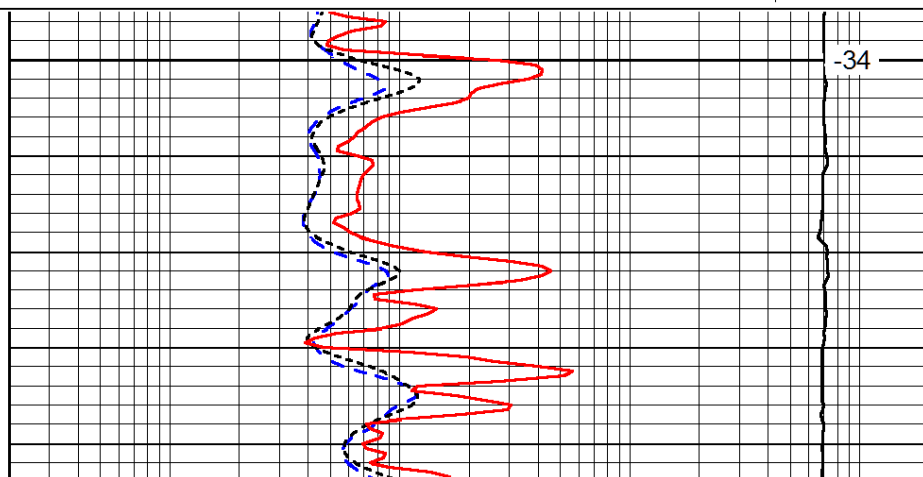
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-160	RxoRt	40
-200	SP (mV)	0

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

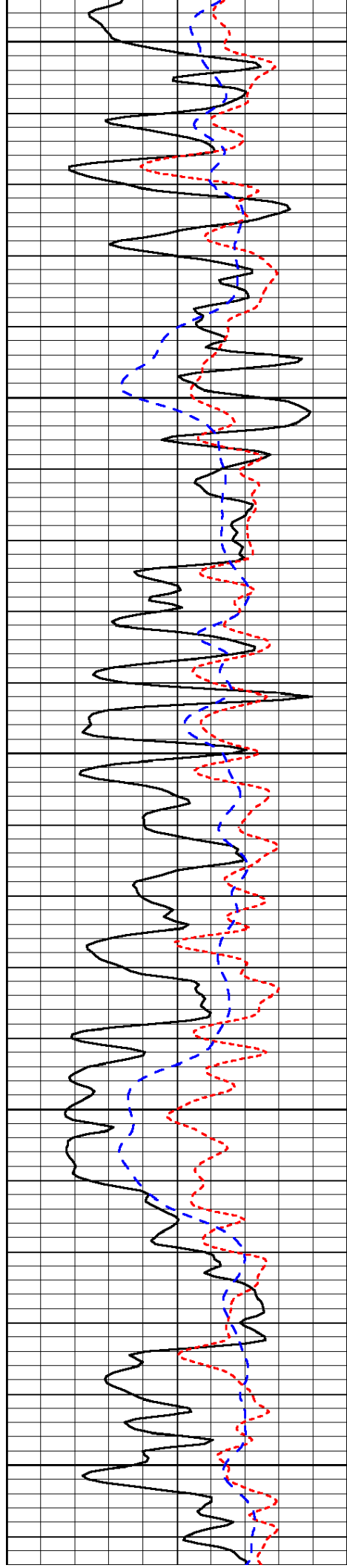
LSPD



3500



-34



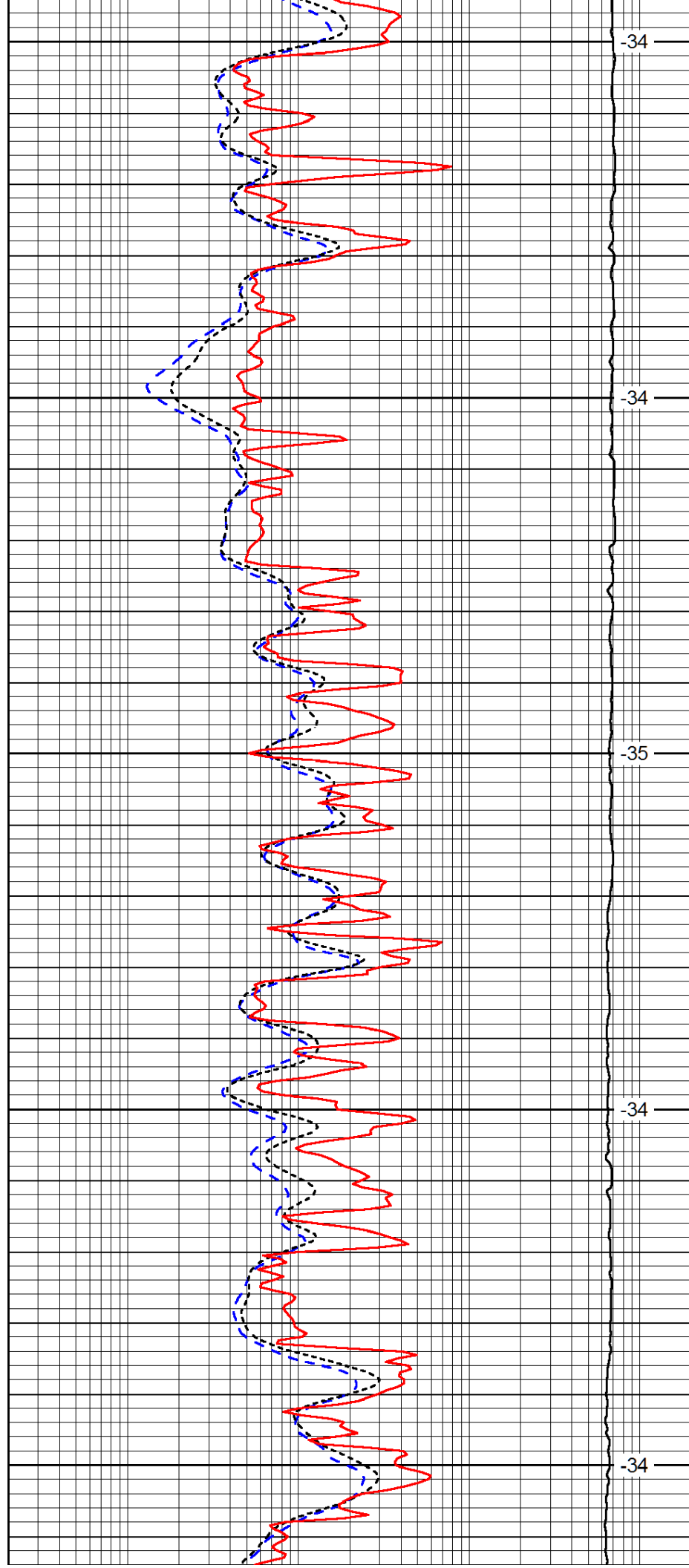
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3600

3650

3700

3750



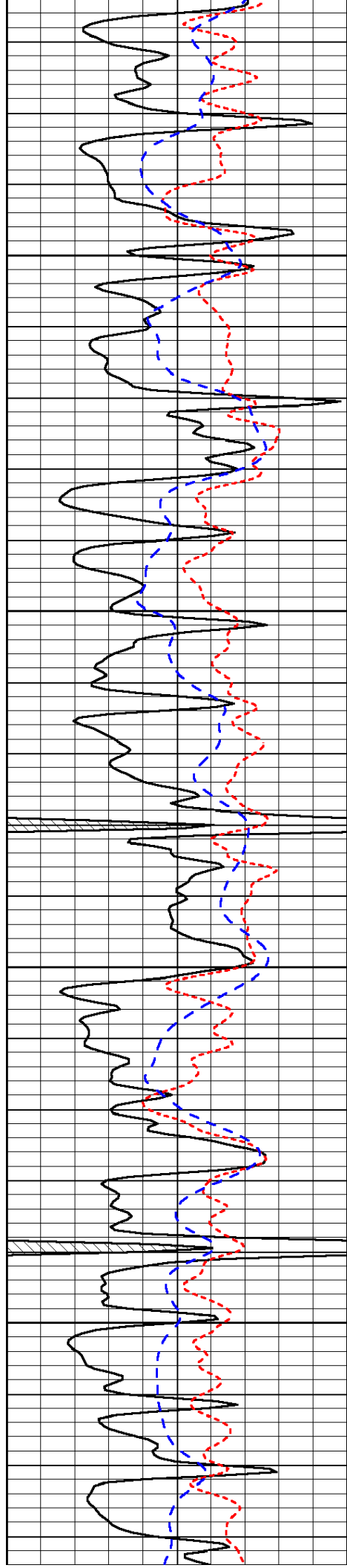
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-34

-35

-34

-34

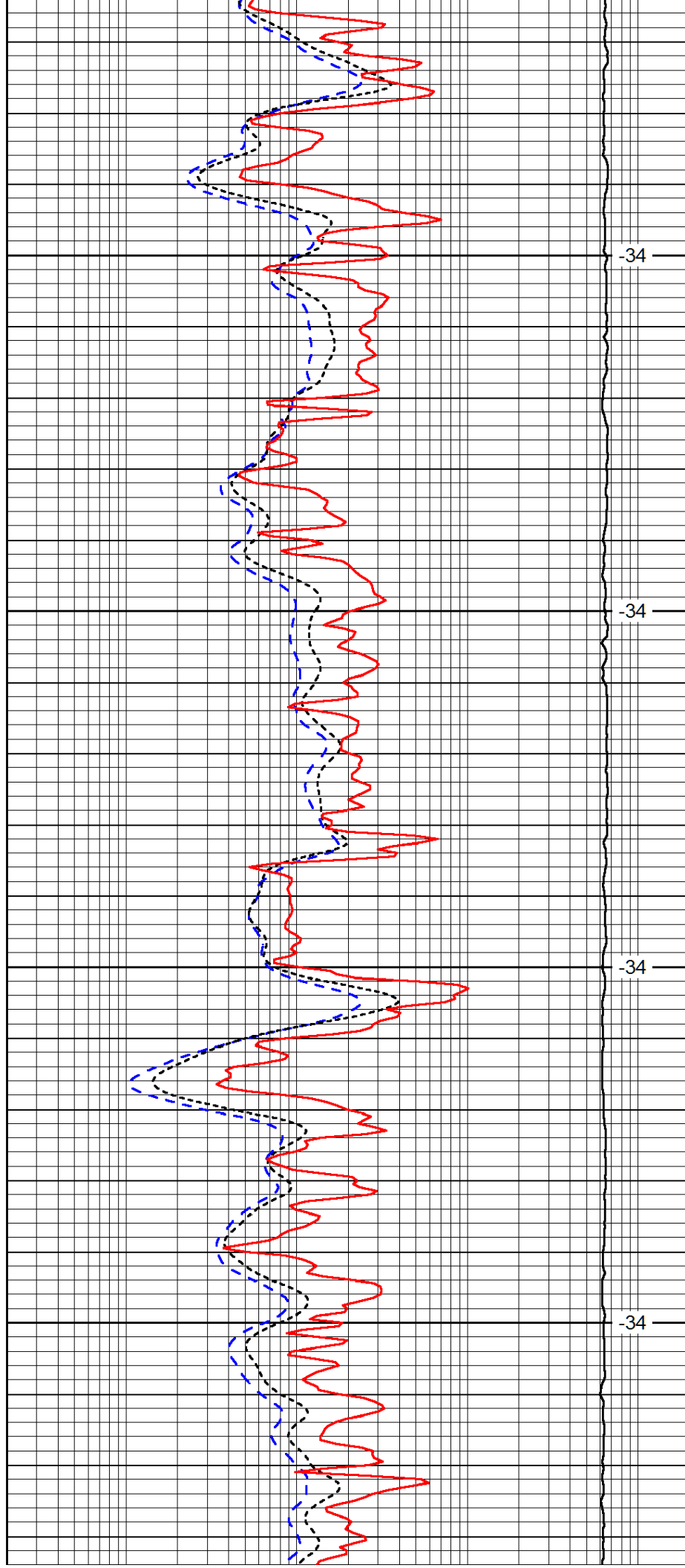


3800

3850

3900

3950

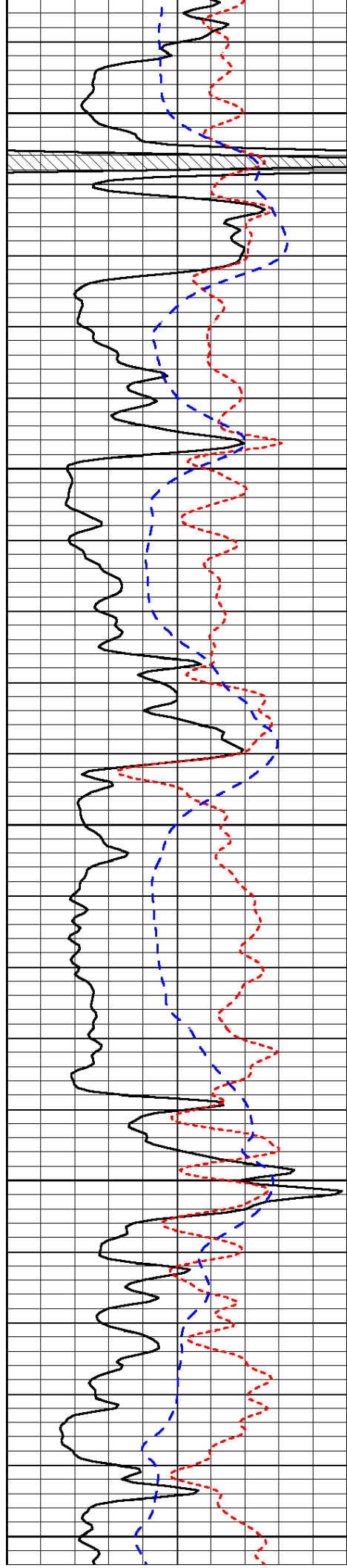


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-34

-34



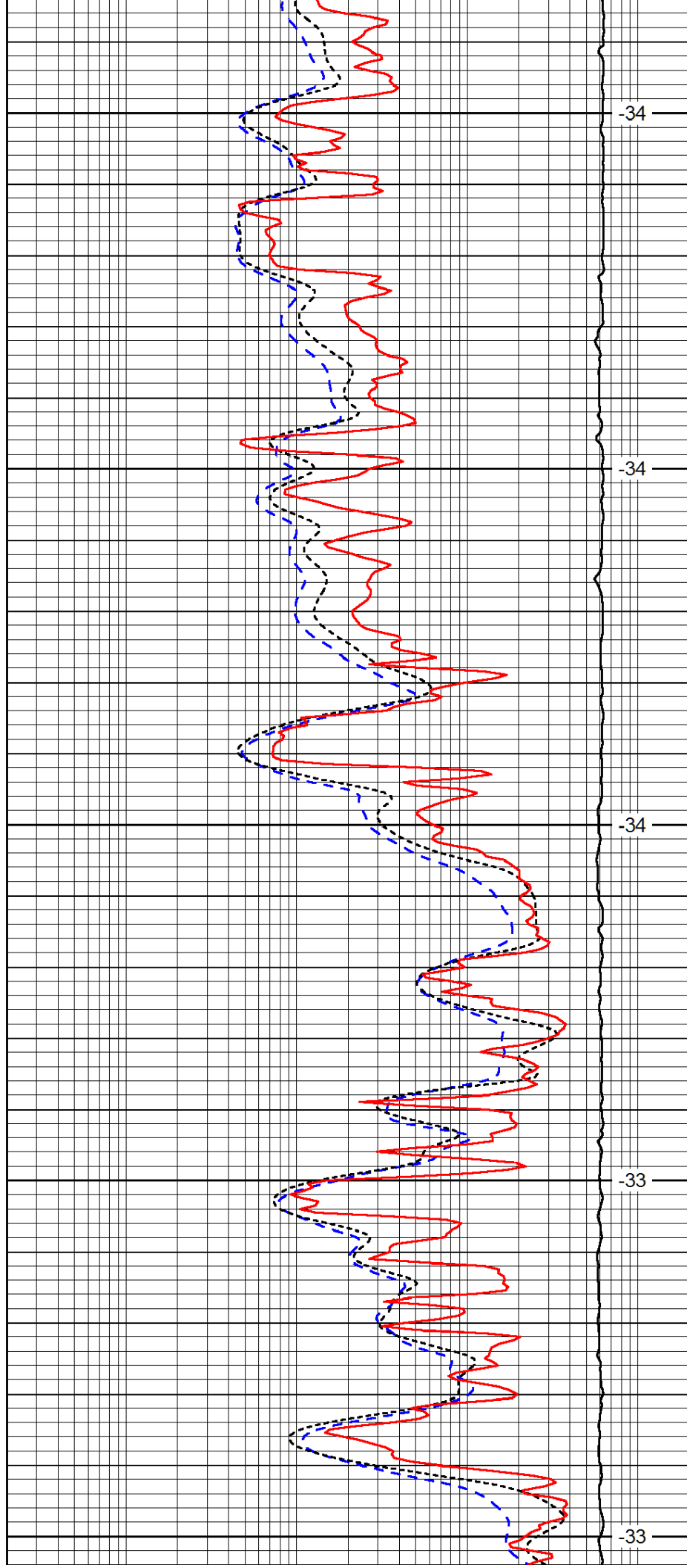
4000

4050

4100

4150

4200



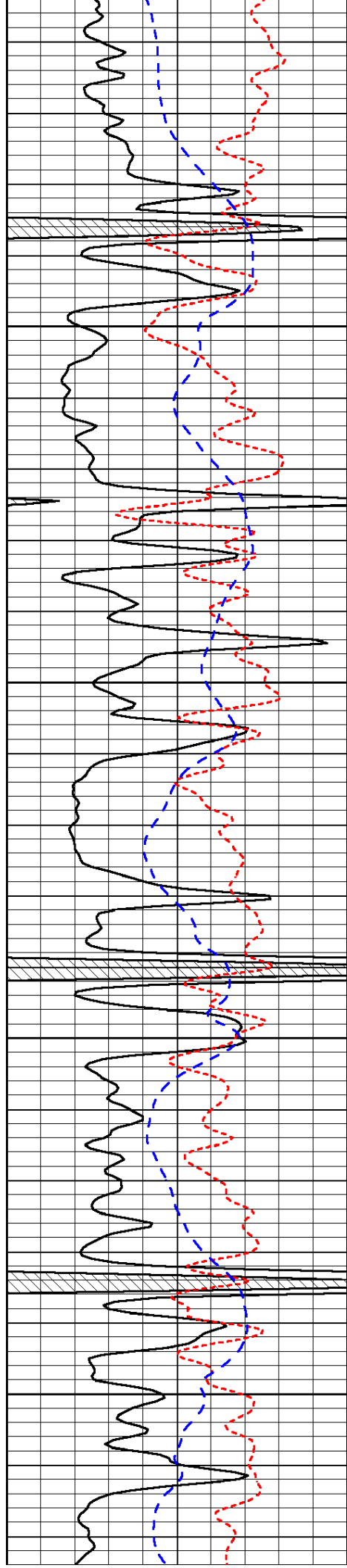
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-33

-33

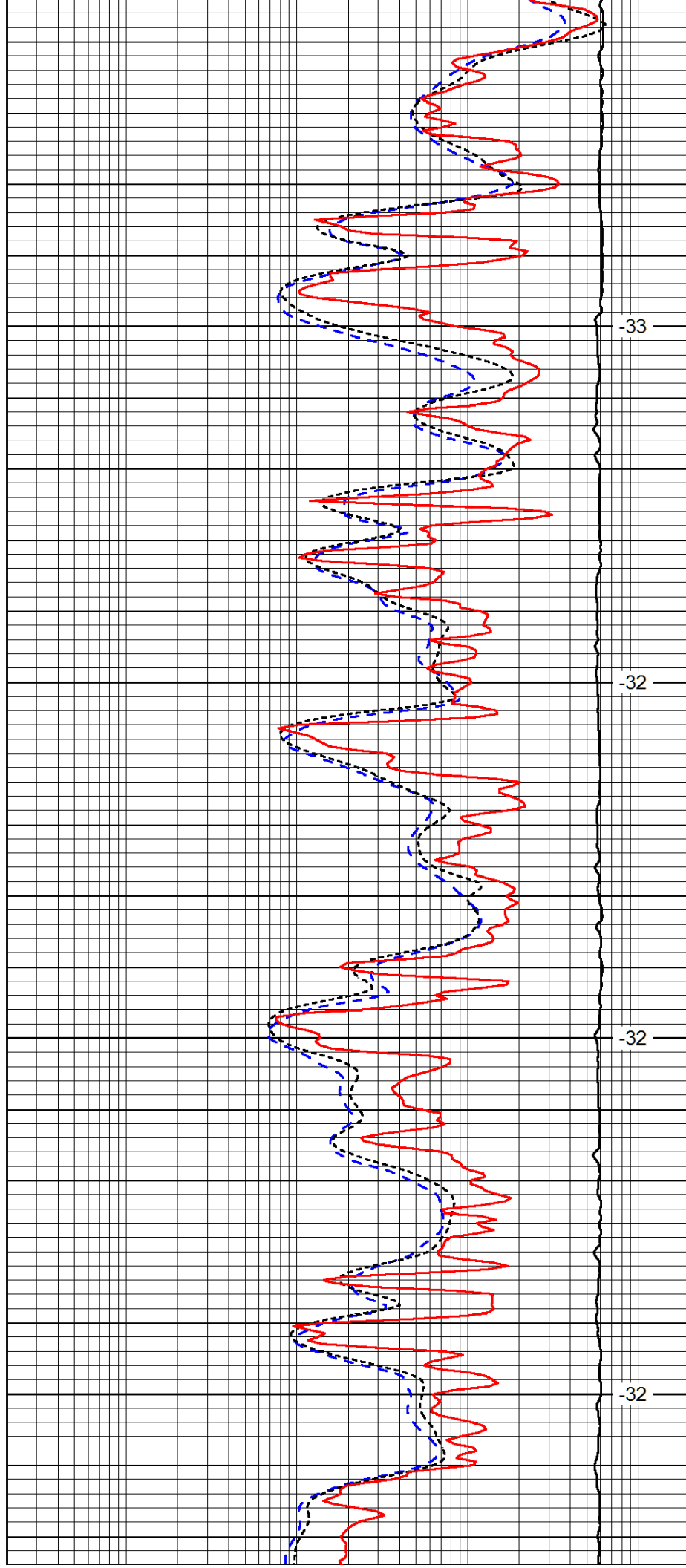


4250

4300

4350

4400

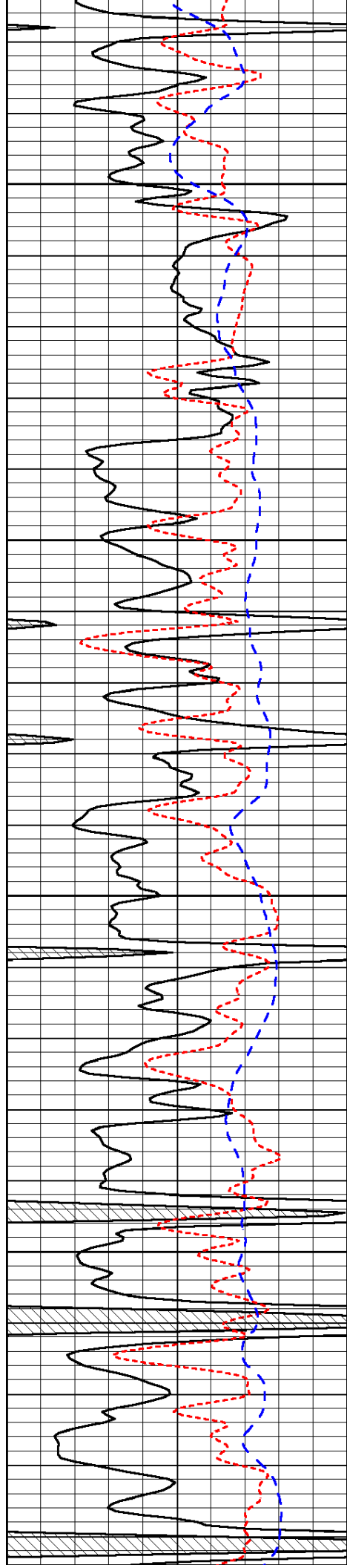


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-32

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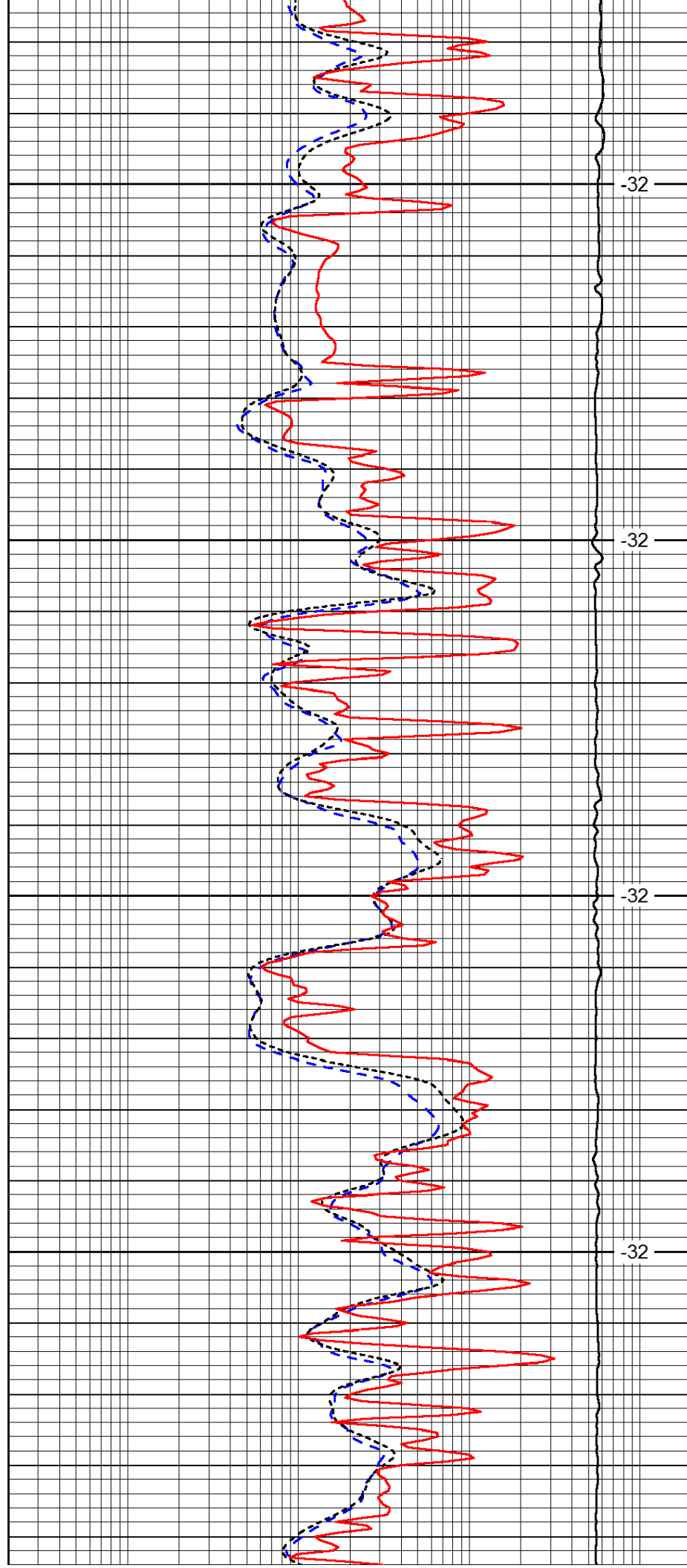


4450

4500

4550

4600

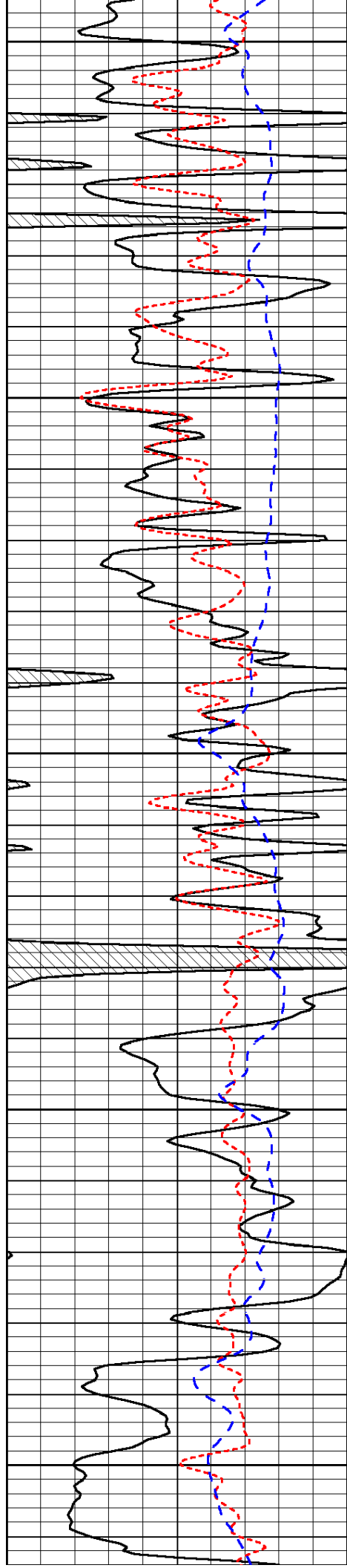


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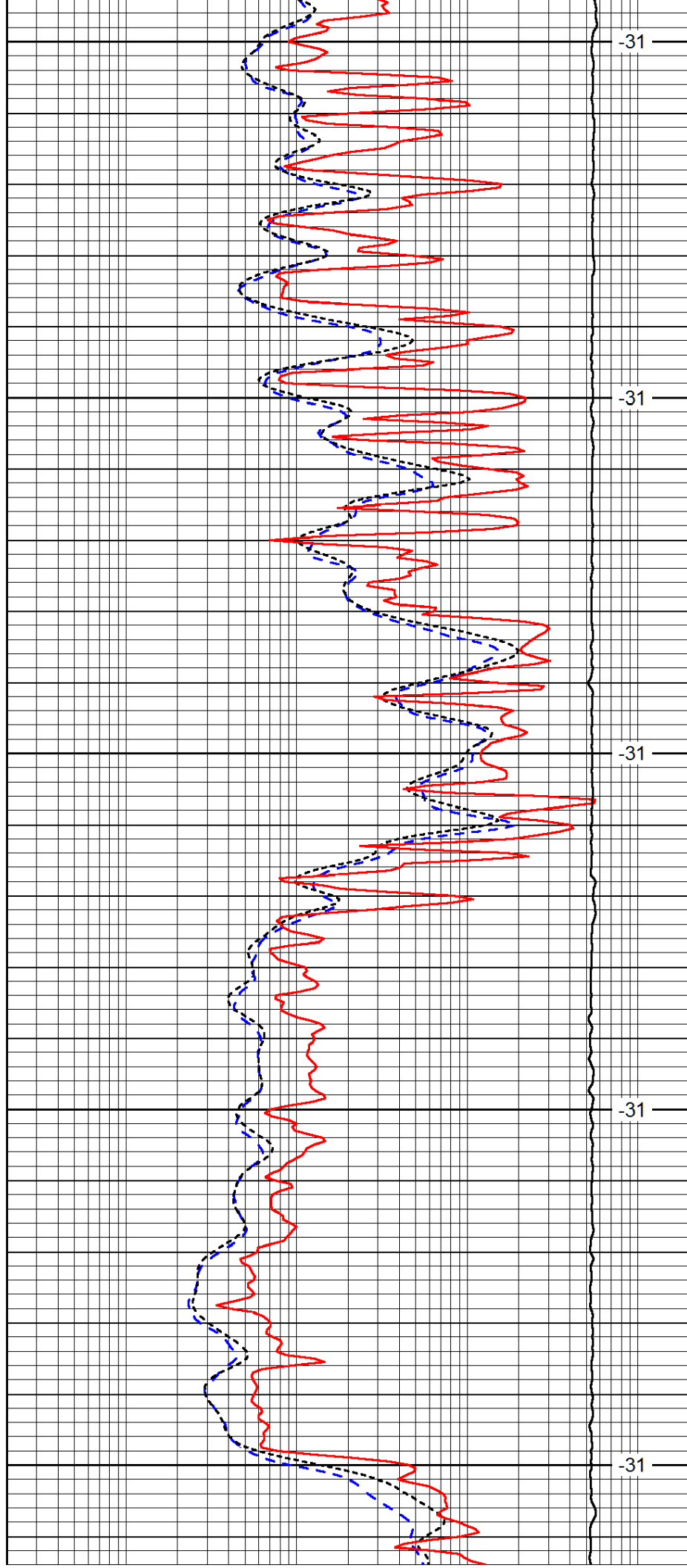
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4700

4750

4800

4850



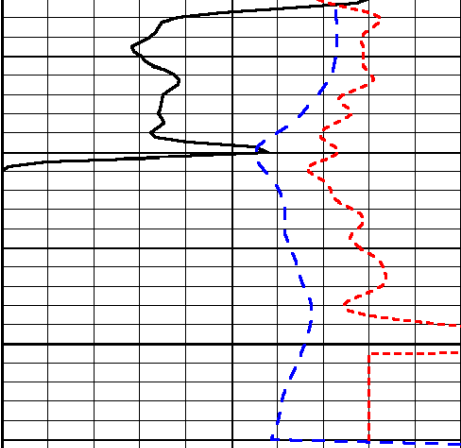
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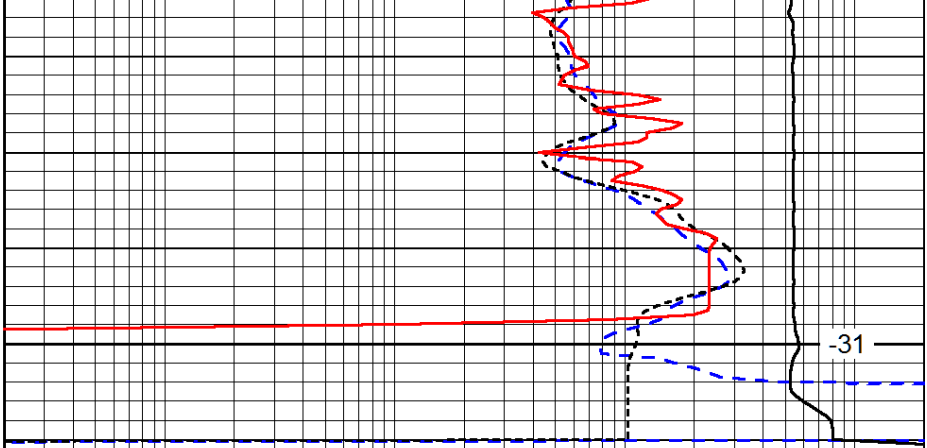
-31

-31



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

4900



0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD

-31