



PIONEER

Pioneer Energy Services

Dual Induction Log

API No.

15-007-23,905-00-00

Company **Chieftain Oil Company, Inc.**

Well **Lichlyter No. 2**

Field **McGuire-Goemann South**

County **Barber** State **Kansas**

Location

**NW SW SE SE
340' FSL & 1,057' FEL**

Sec: **4**

Twp: **33S**

Rge: **10W**

Elevation

K.B. 1468
D.F. 1456
G.L. 1456

Permanent Datum **Ground Level** Elevation **1456**
Log Measured From **Kelly Bushing** 12 Ft. Above Perm. Datum
Drilling Measured From **Kelly Bushing**

Date

8/30/2012

Run Number

One

Depth Driller

5050

Depth Logger

5053

Bottom Logged Interval

5052

Top Log Interval

300

Casing Driller

8.625 @ 321

Casing Logger

325

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

7500

Density / Viscosity

9.3

65

pH / Fluid Loss

9.5

Source of Sample

Flowline

Rm @ Meas. Temp

.42 @ 87

Rmf @ Meas. Temp

.32 @ 87

Rmc @ Meas. Temp

.57 @ 87

Source of Rmf / Rmc

Charts

Rm @ BHT

.29 @ 127

Operating Rig Time

2 1/2 Hours

Max Rec. Temp. F

127

Equipment Number

108

Location

Hays

Recorded By

J. Long

Witnessed By

David Barker

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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

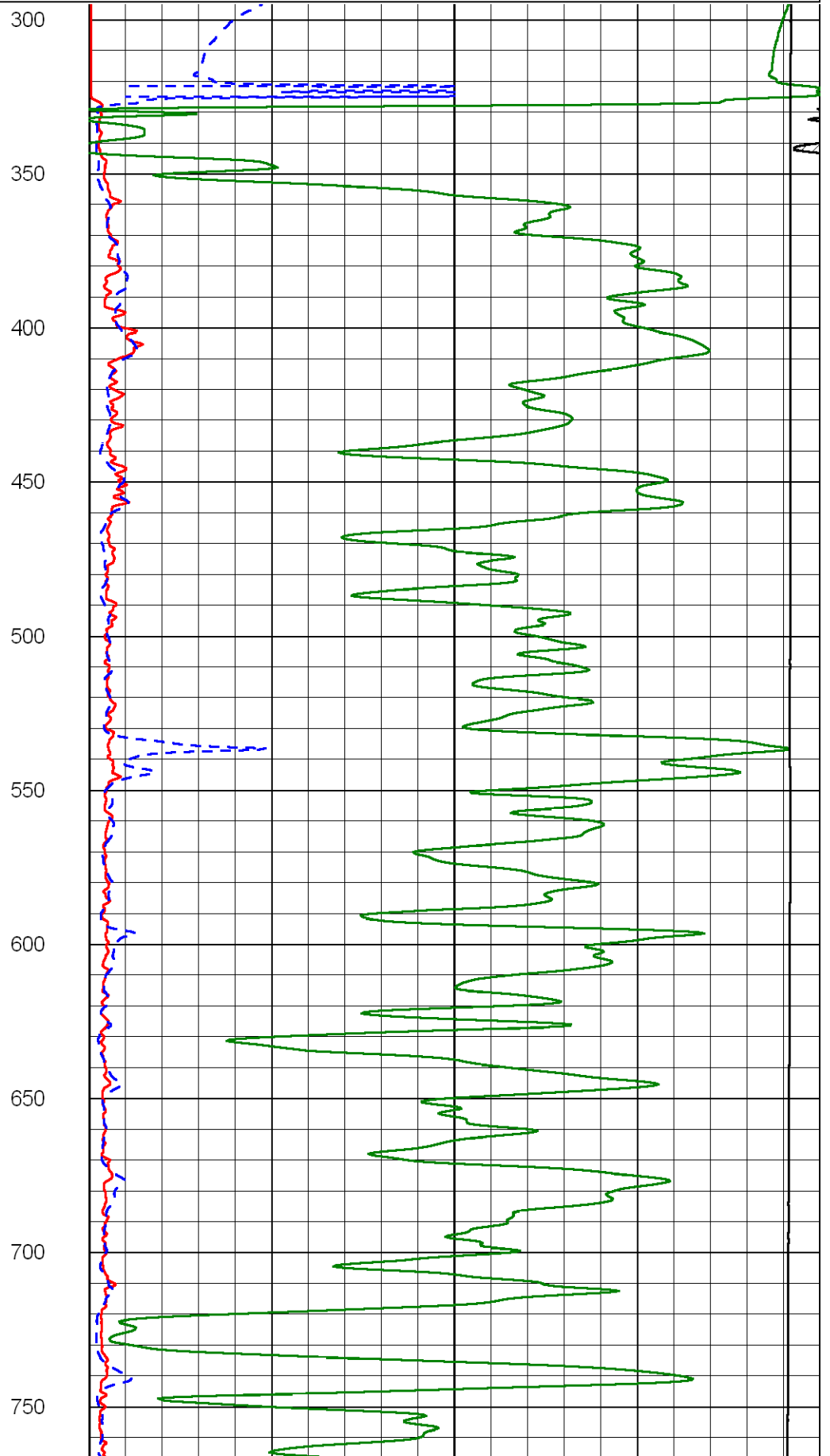
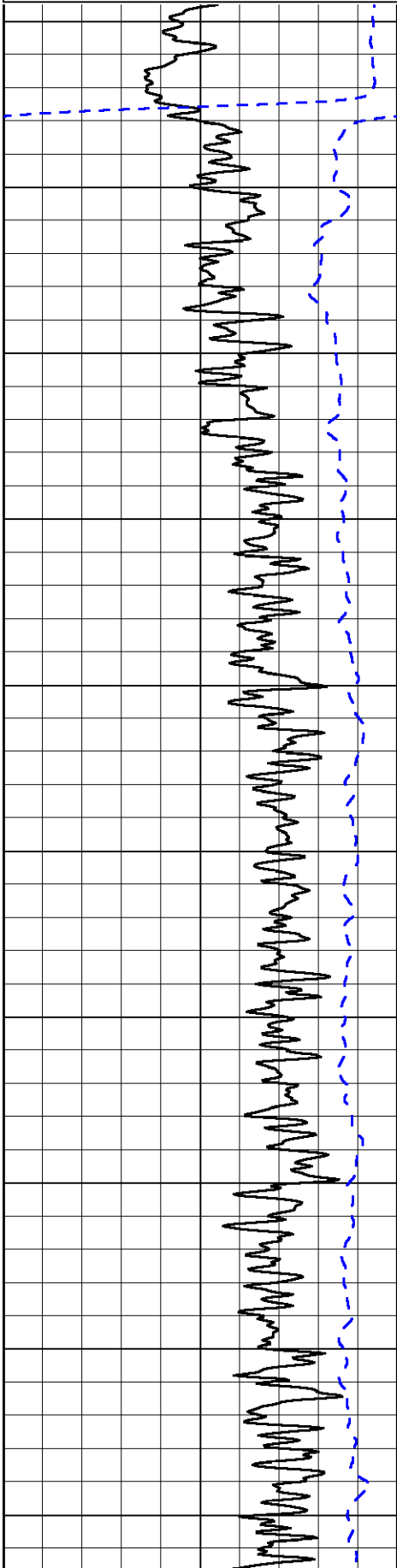
Sharon, 3 South on Tri-City Blacktop, 1/4 West, North Into

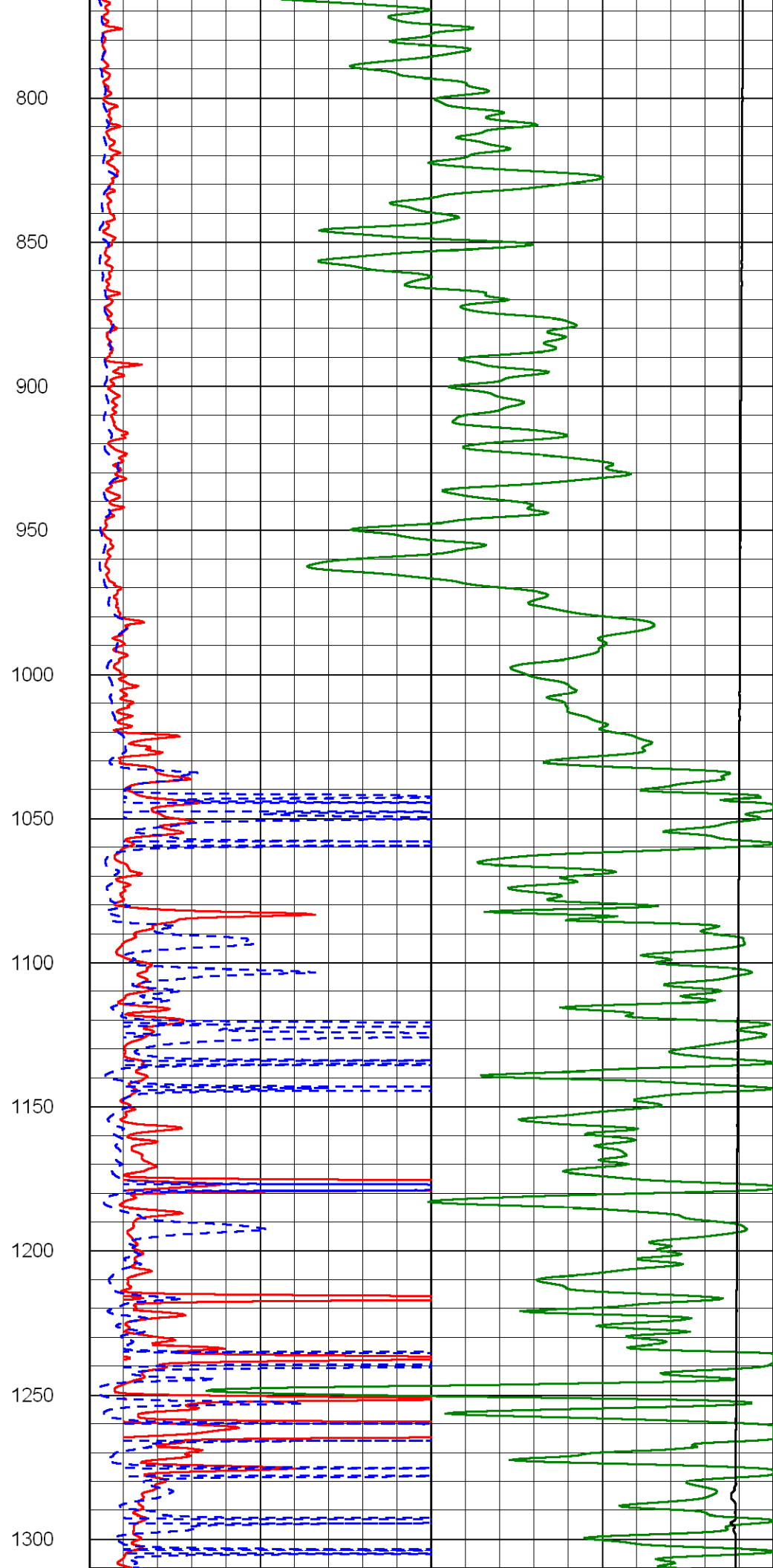
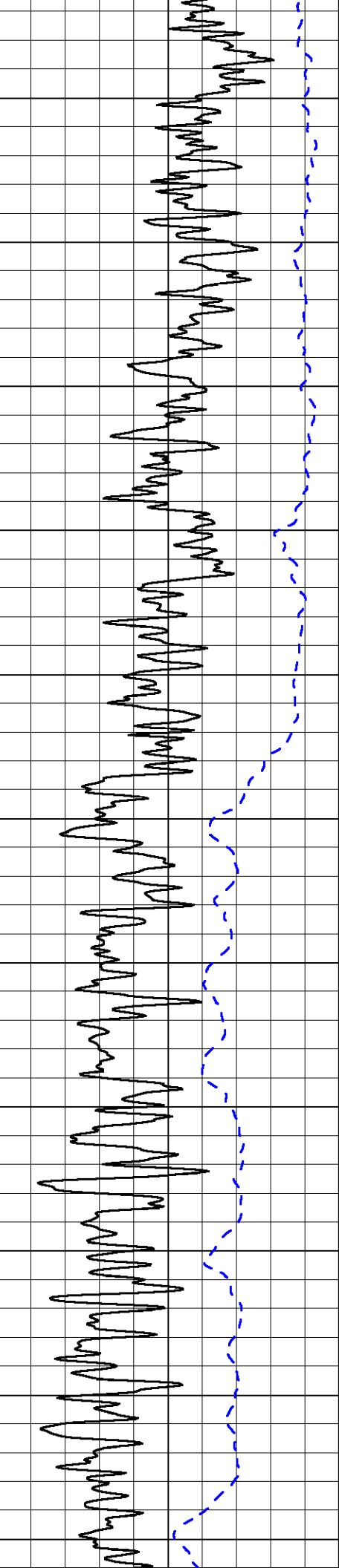
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Presentation Format: dil2in
Dataset Creation: Fri Aug 31 01:25:08 2012
Charted by: Depth in Feet scaled 1:600

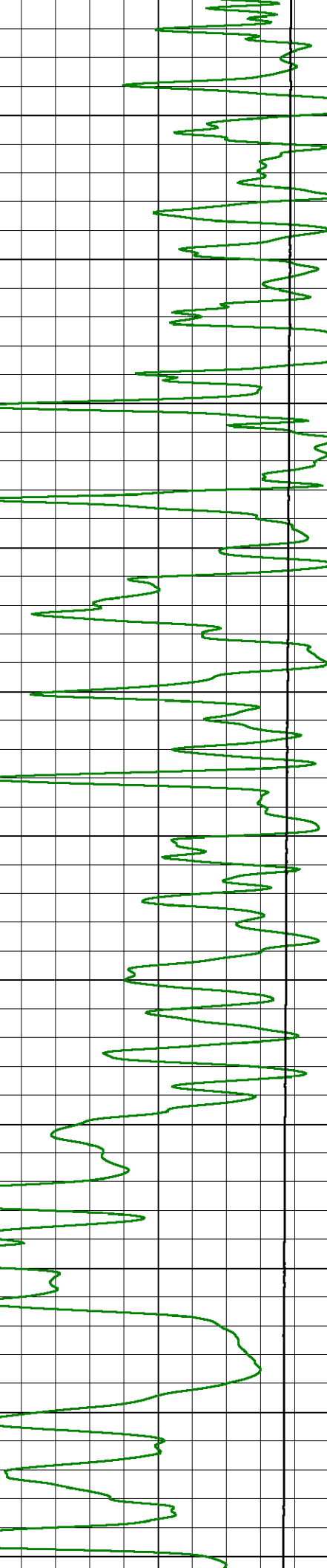
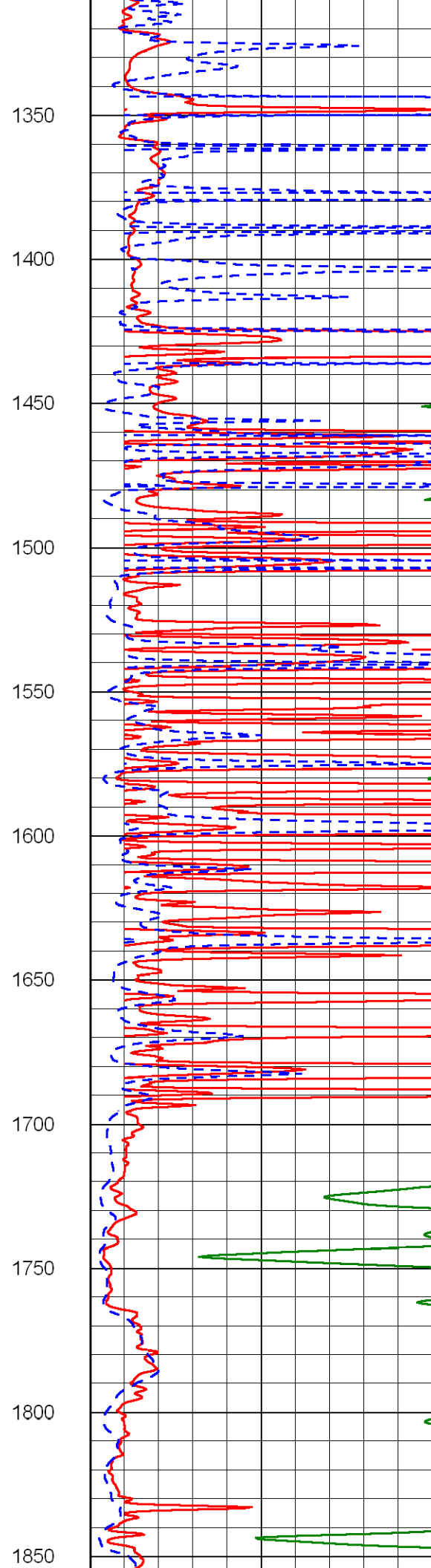
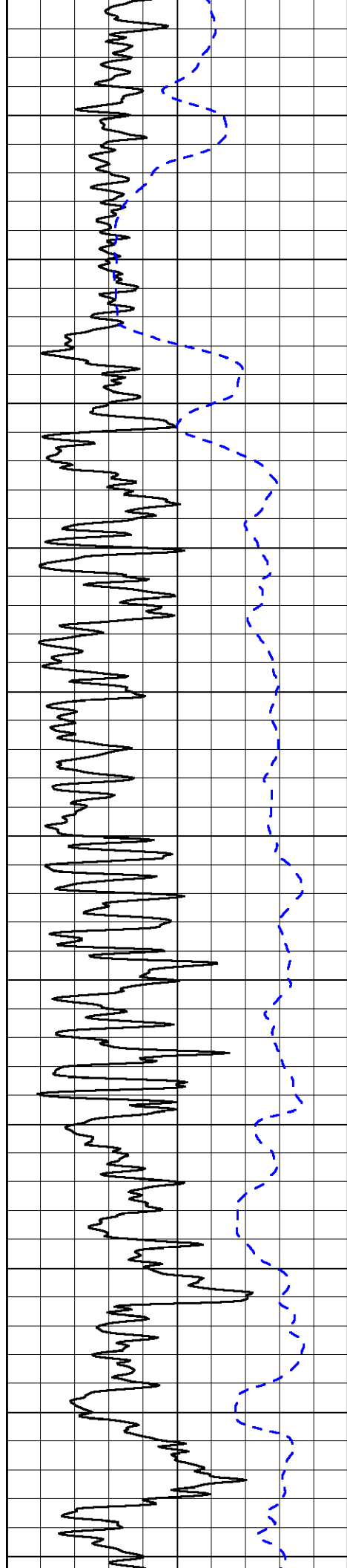
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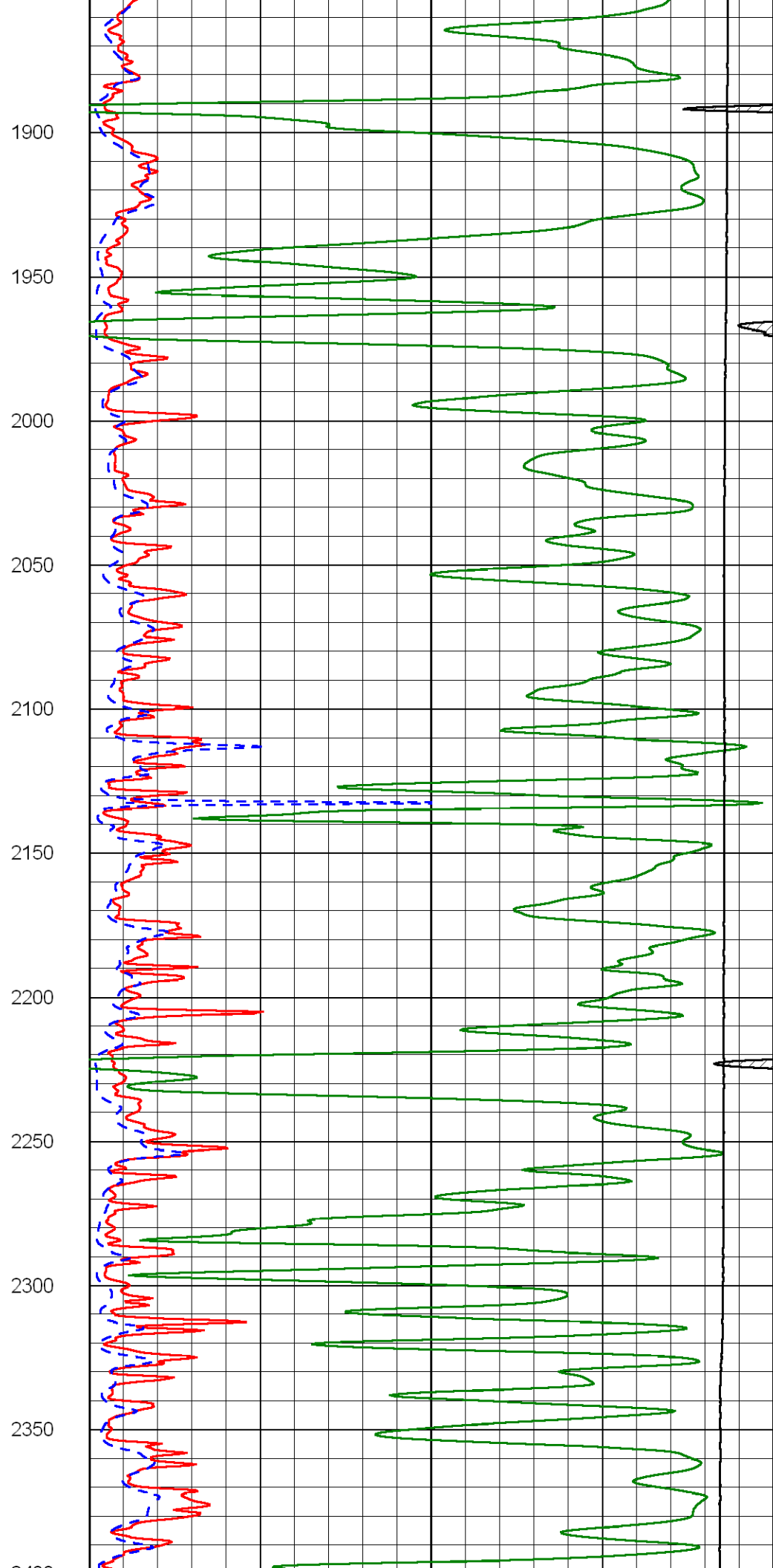
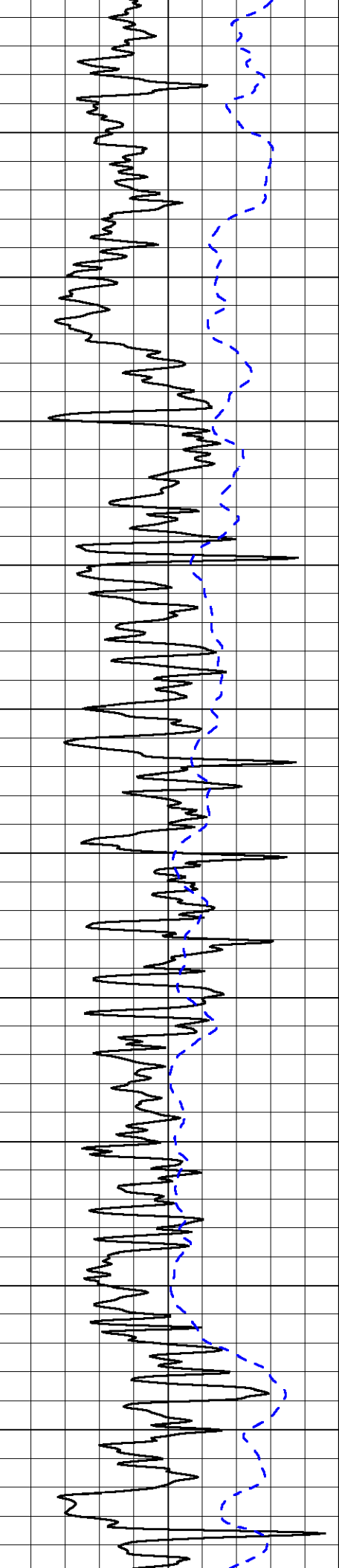
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0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0

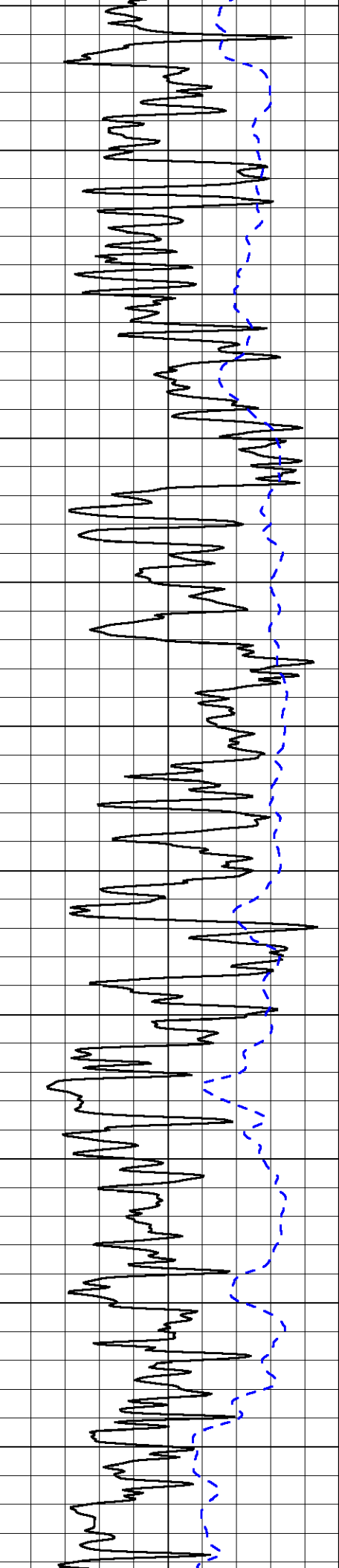
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50	Deep Resistivity	500



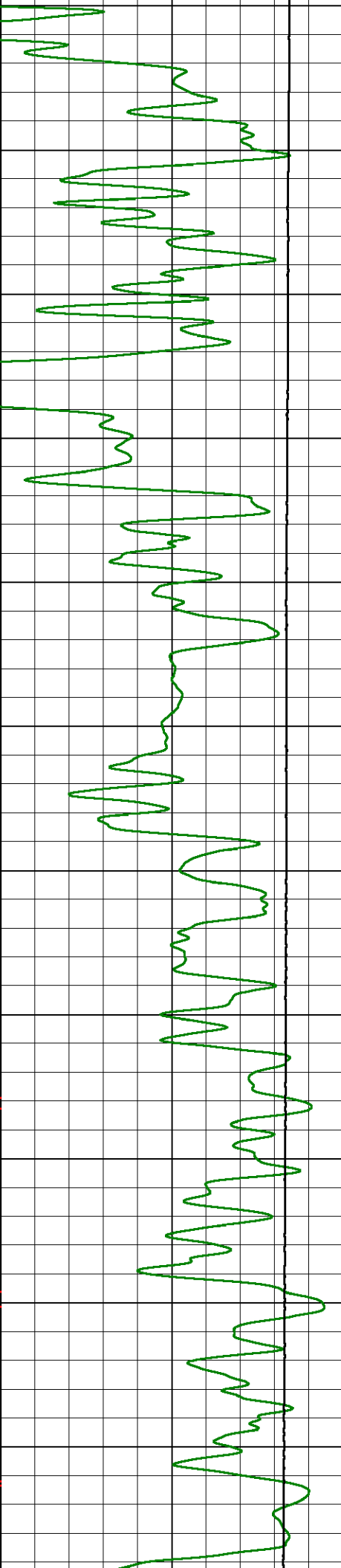
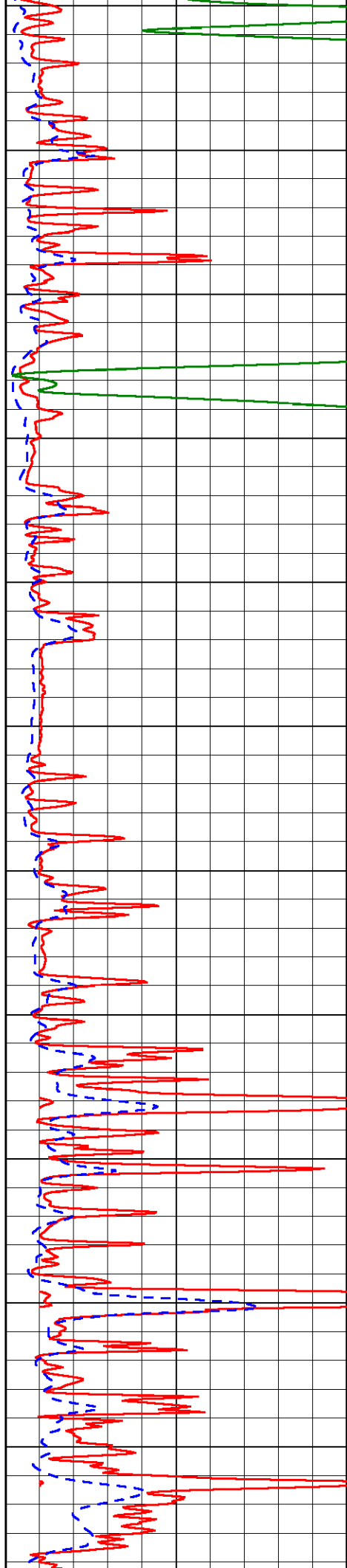


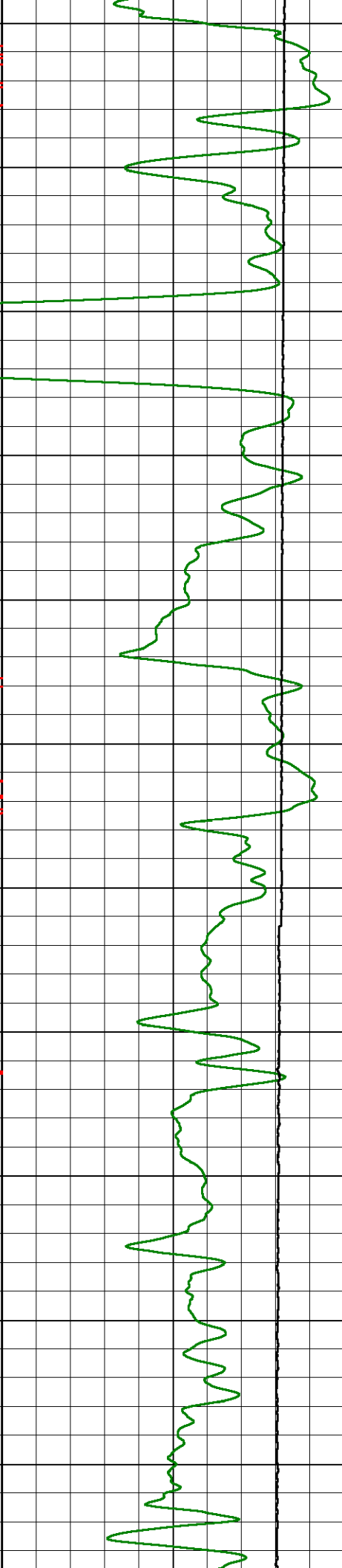
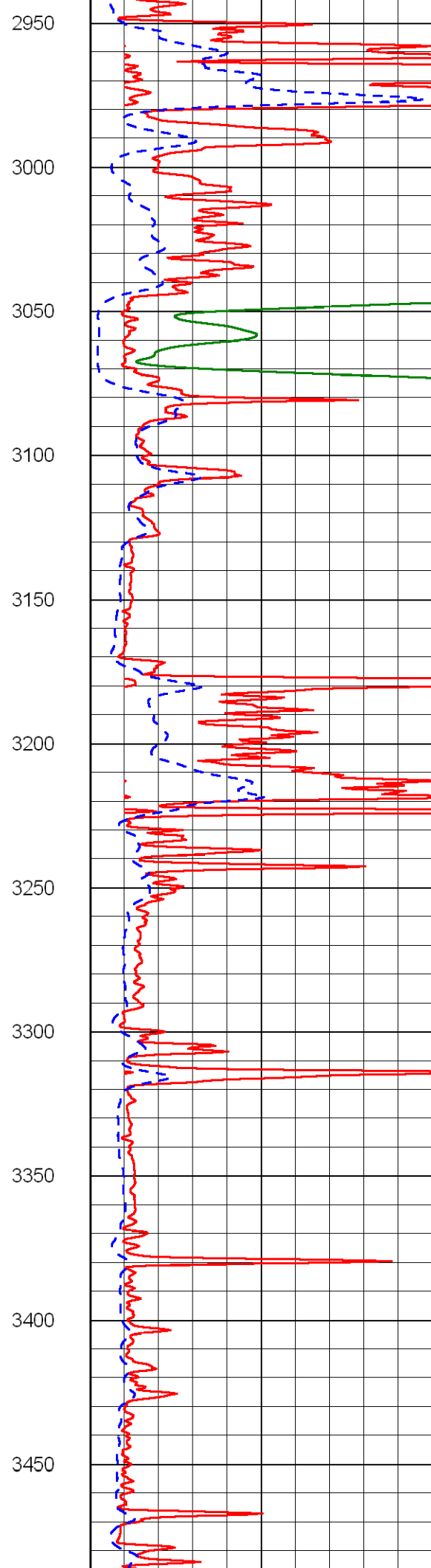
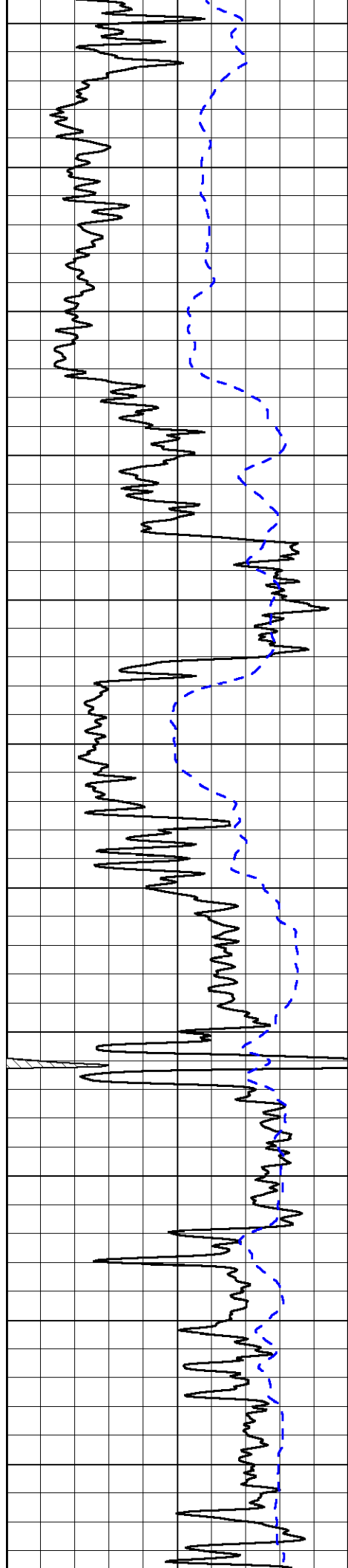


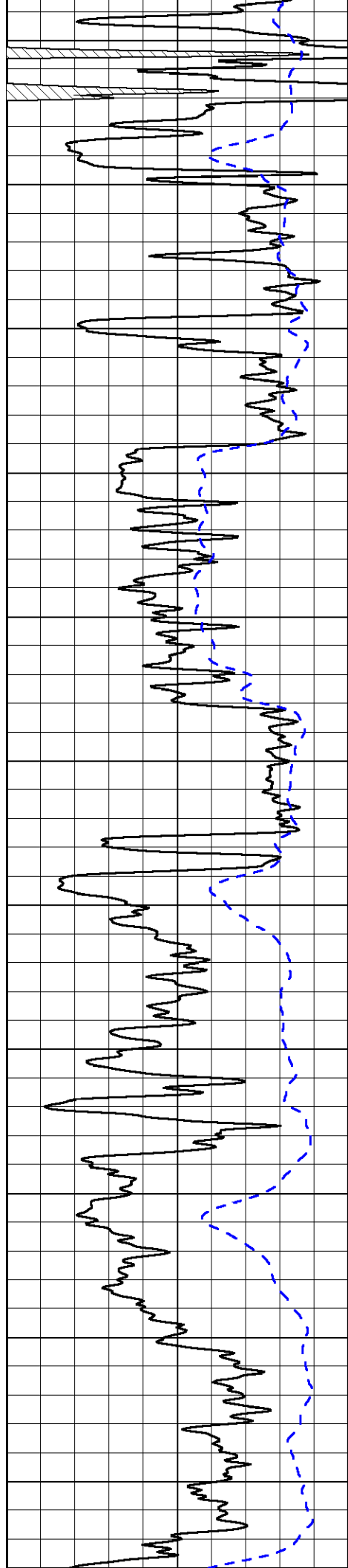




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2500
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2800
2850
2900







3500

3550

3600

3650

3700

3750

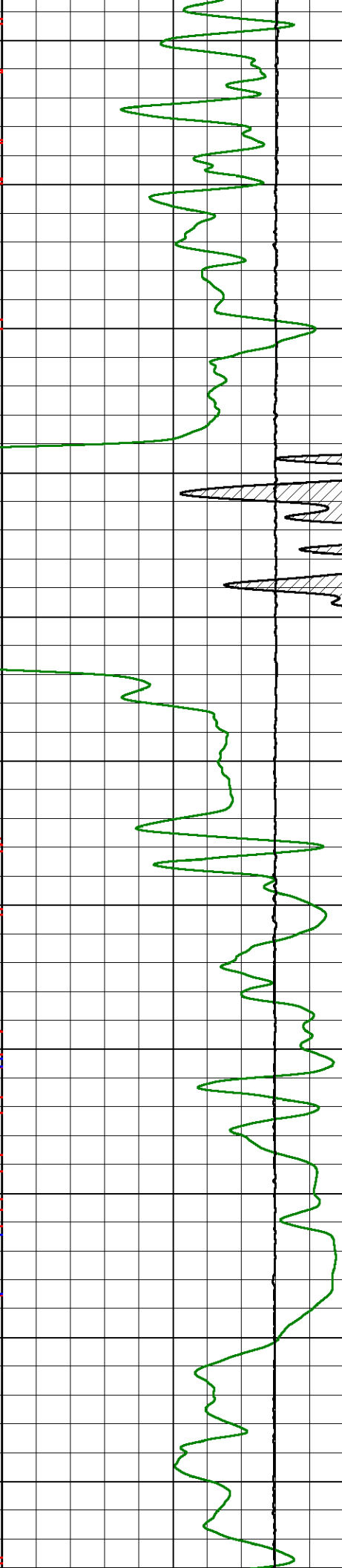
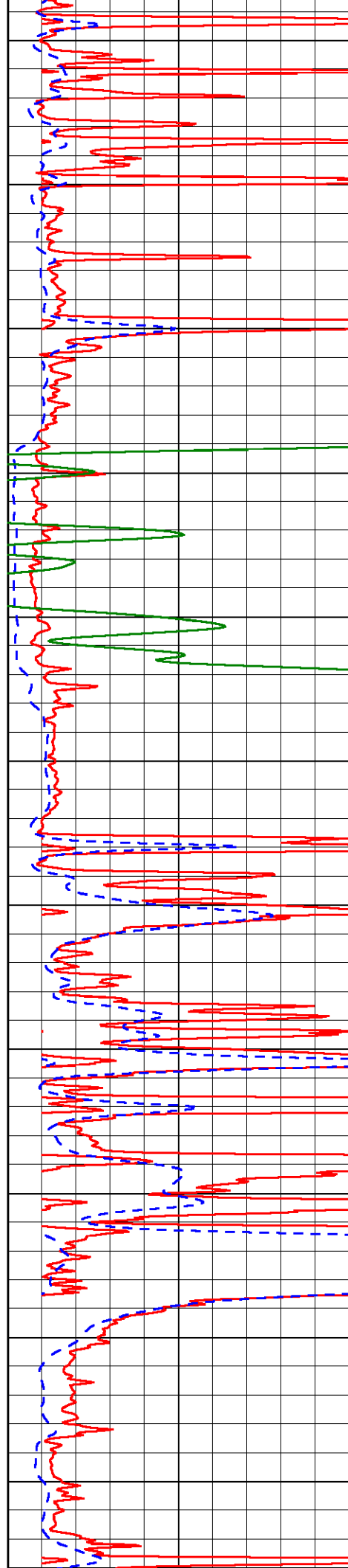
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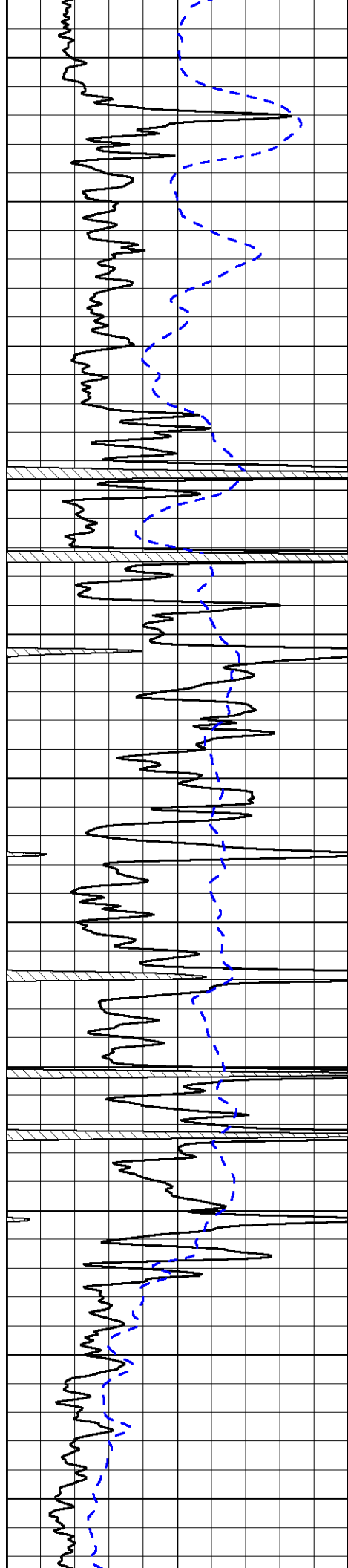
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3900

3950

4000





4050

4100

4150

4200

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4300

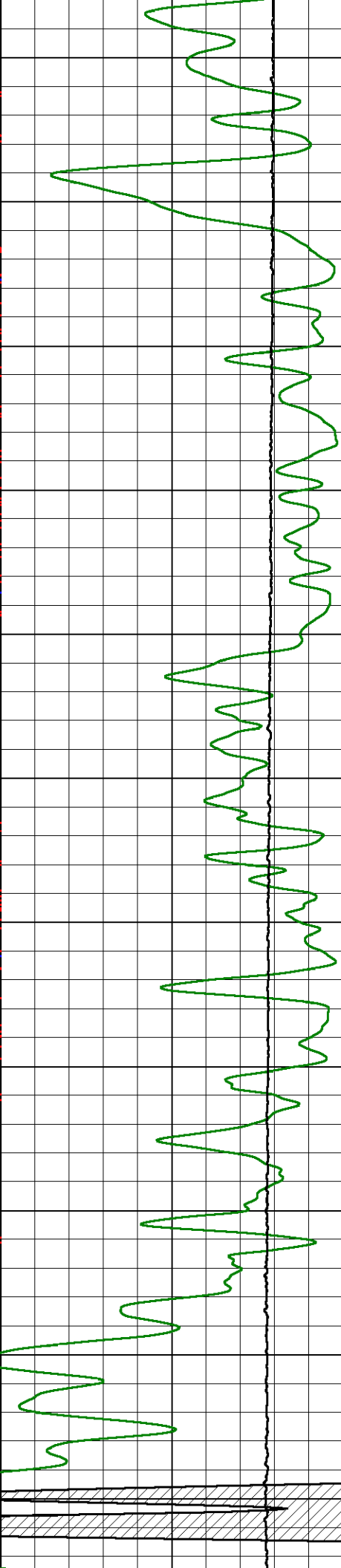
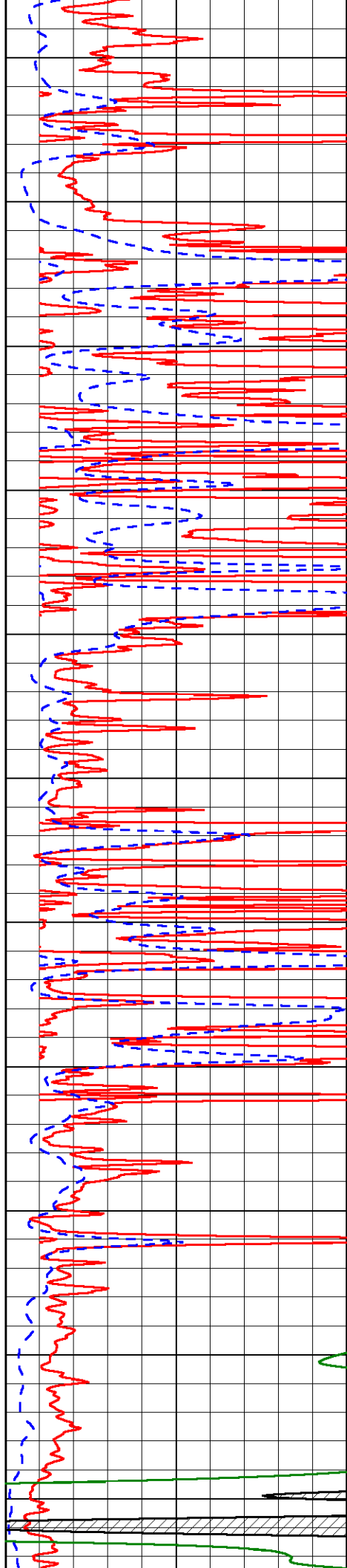
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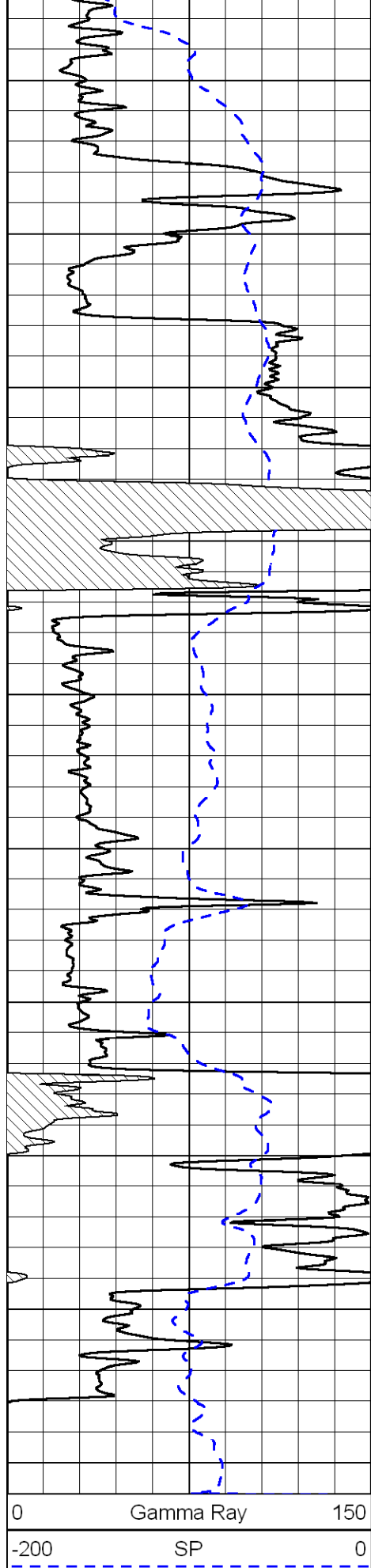
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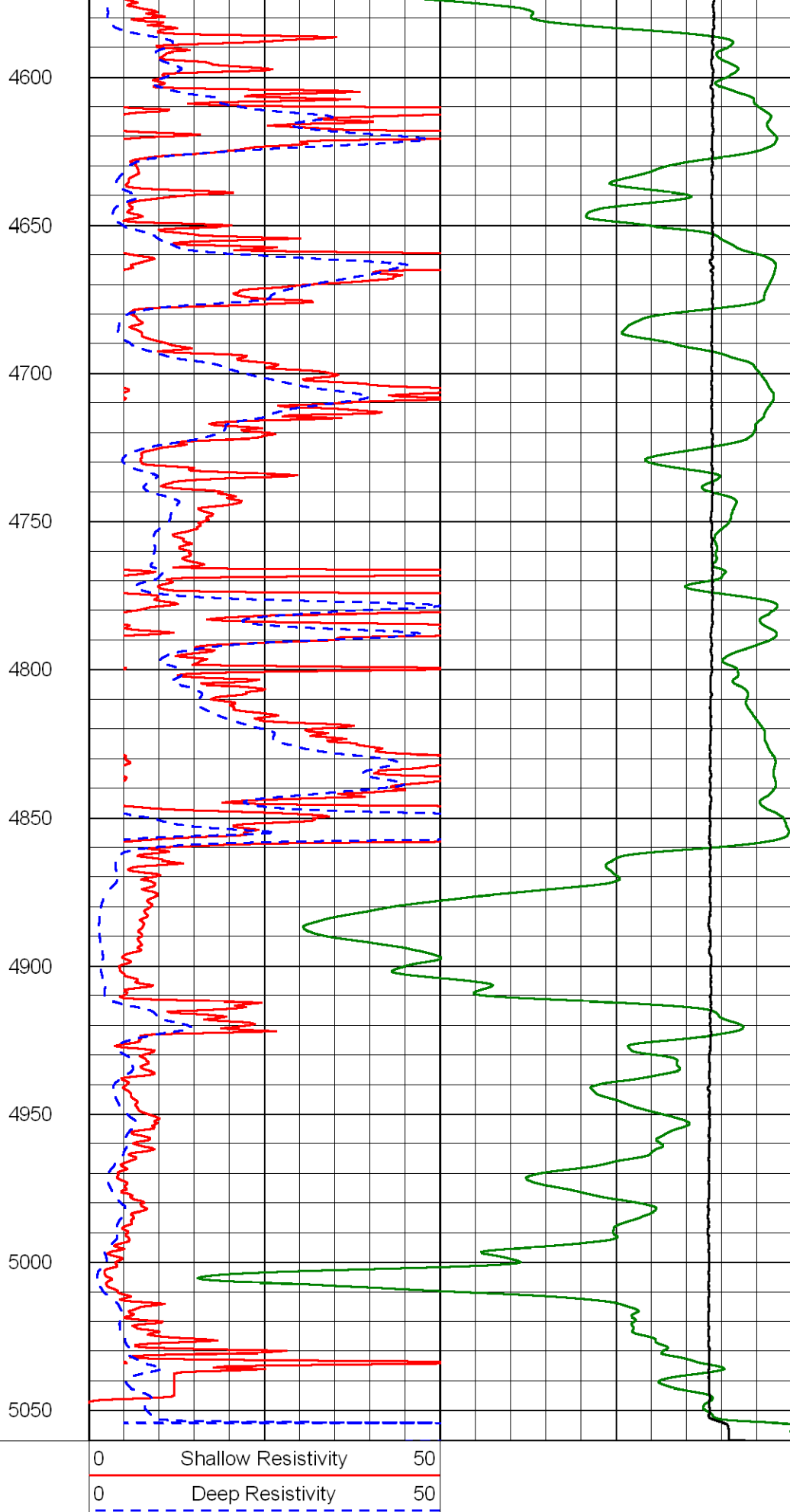
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4550





0 Gamma Ray 150
-200 SP 0



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

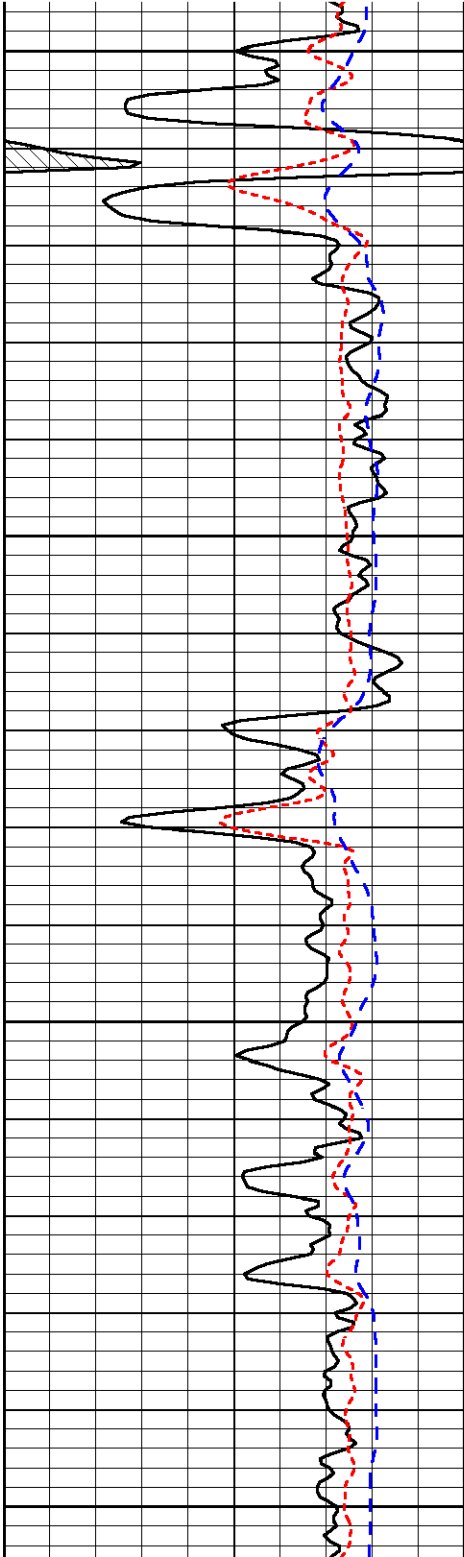
50 Shallow Resistivity 500

Database File: chieftain_lichlyter_2hd.db
Dataset Pathname: dil/chiefstck
Presentation Format: dil
Dataset Creation: Fri Aug 31 01:25:08 2012
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
-160	RXO/RT	40
-200	SP	0

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

LSPD

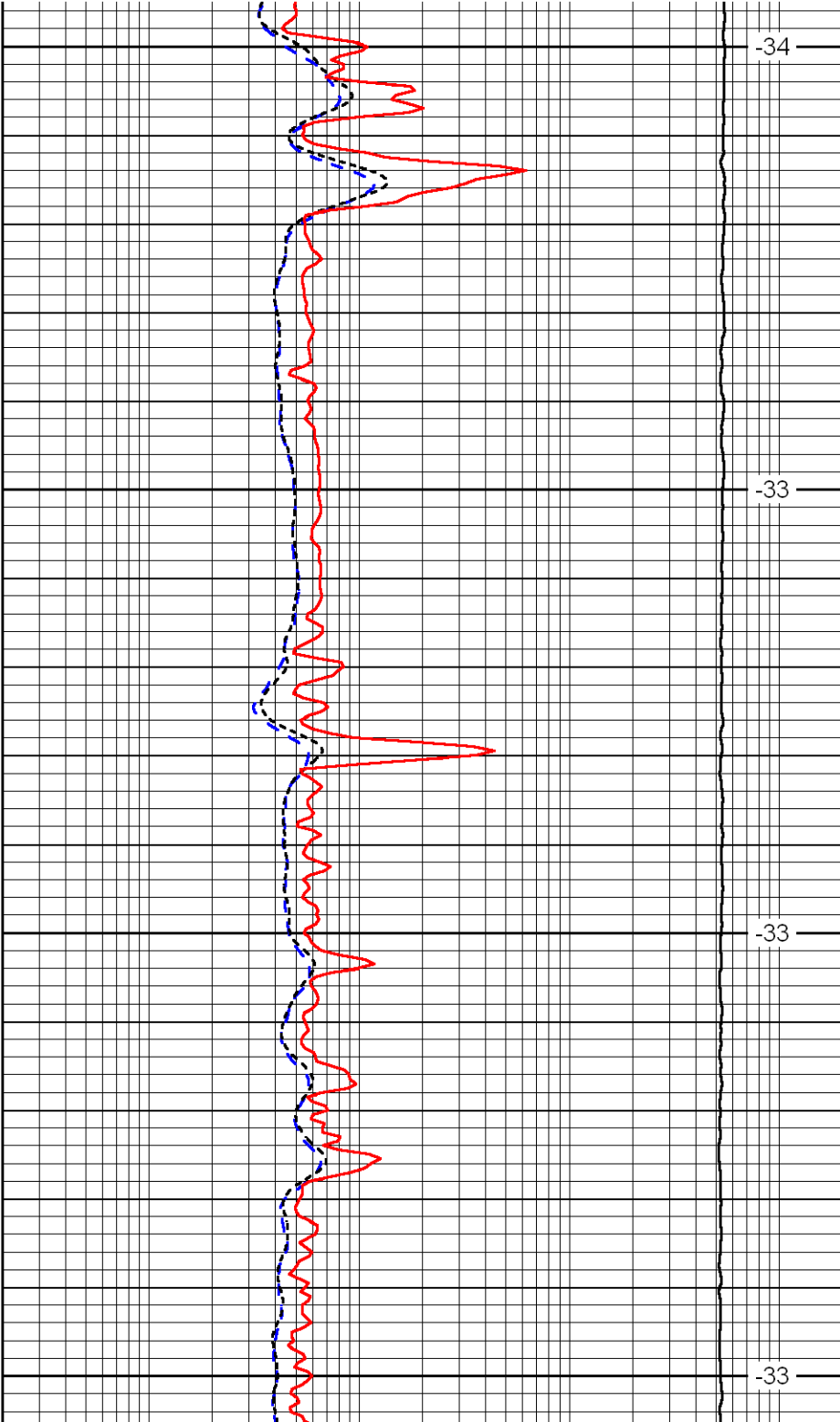


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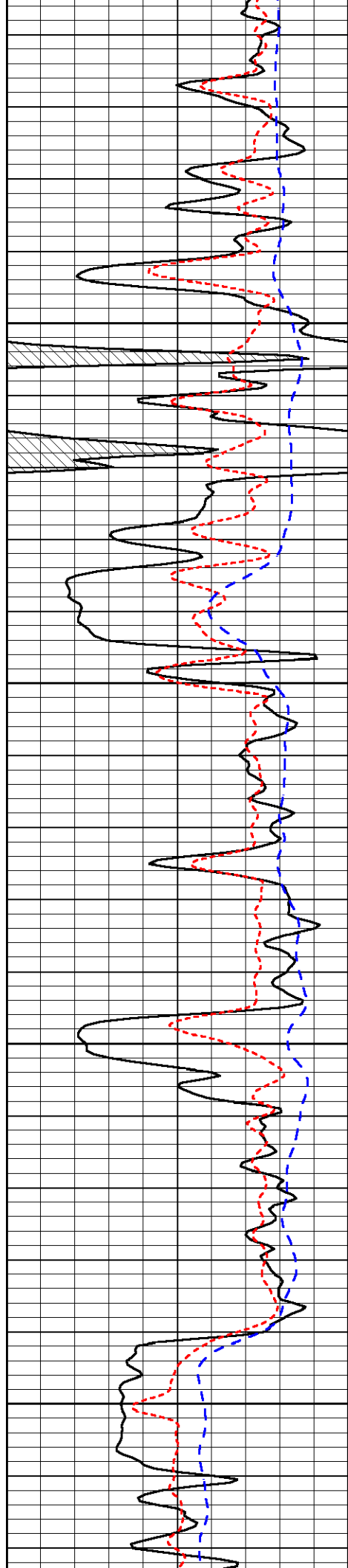


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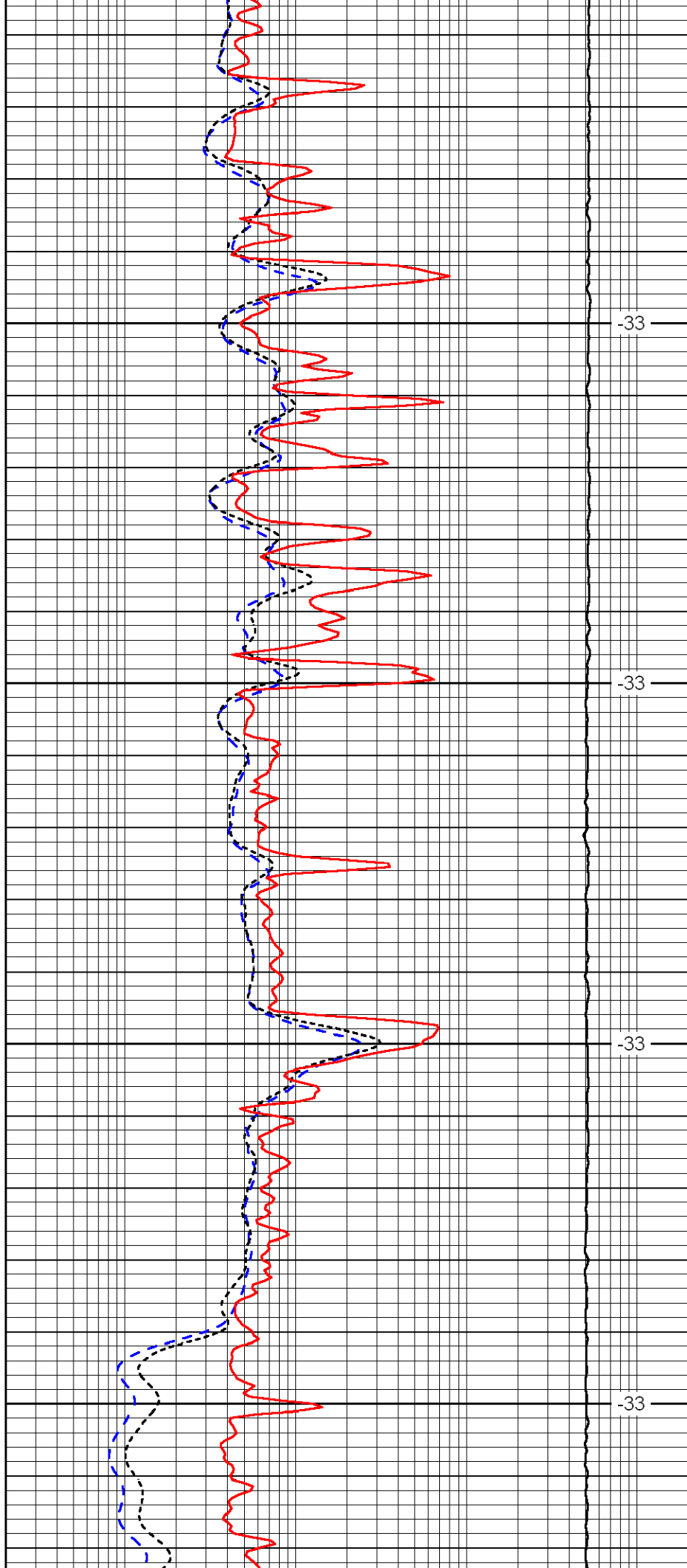


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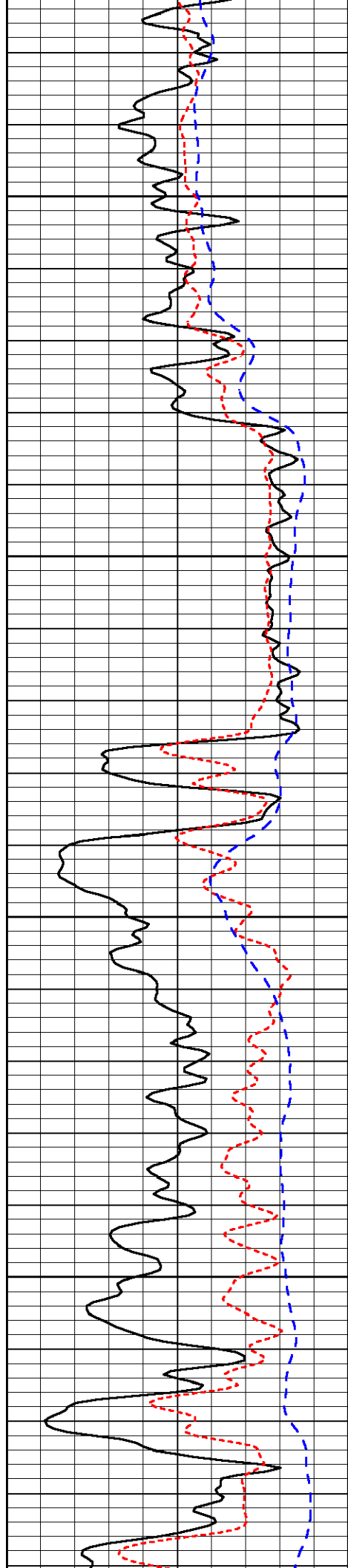


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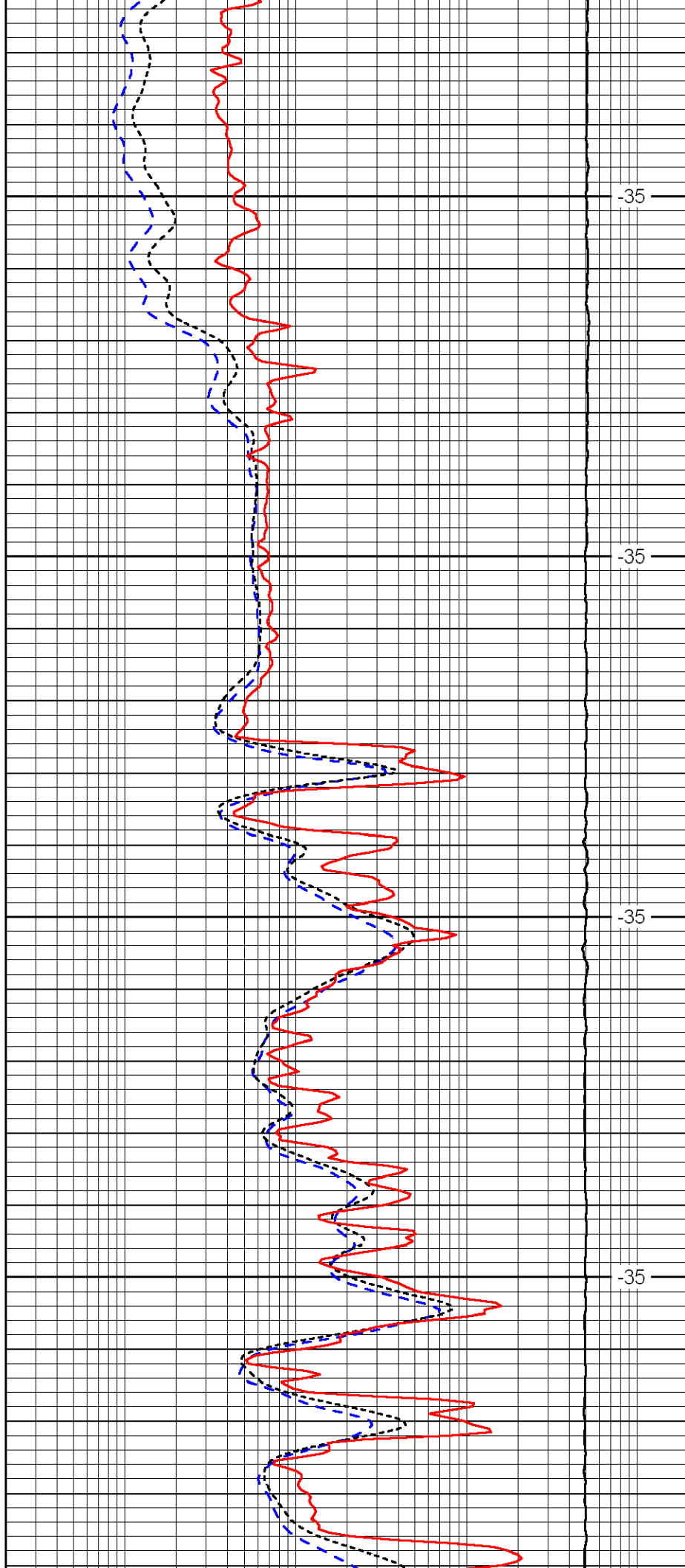


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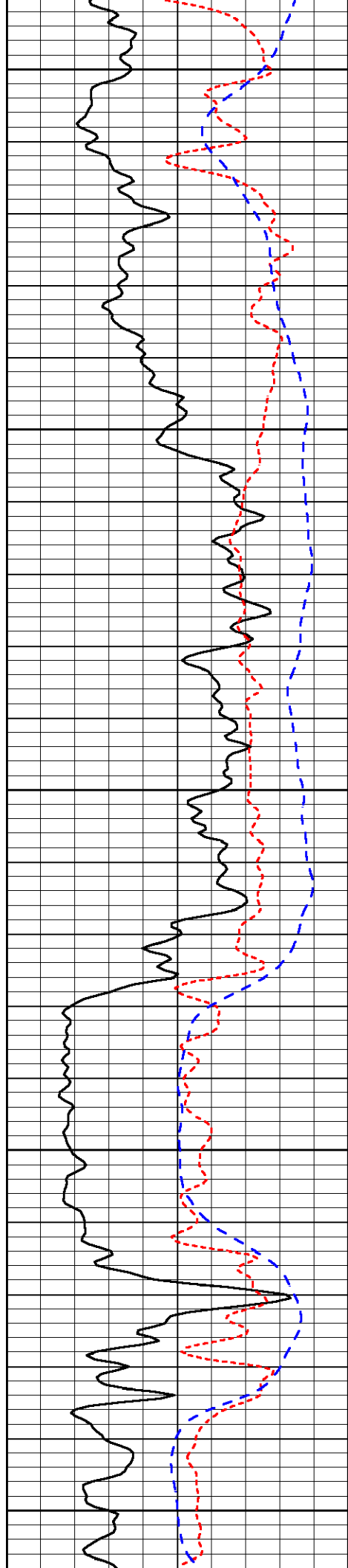


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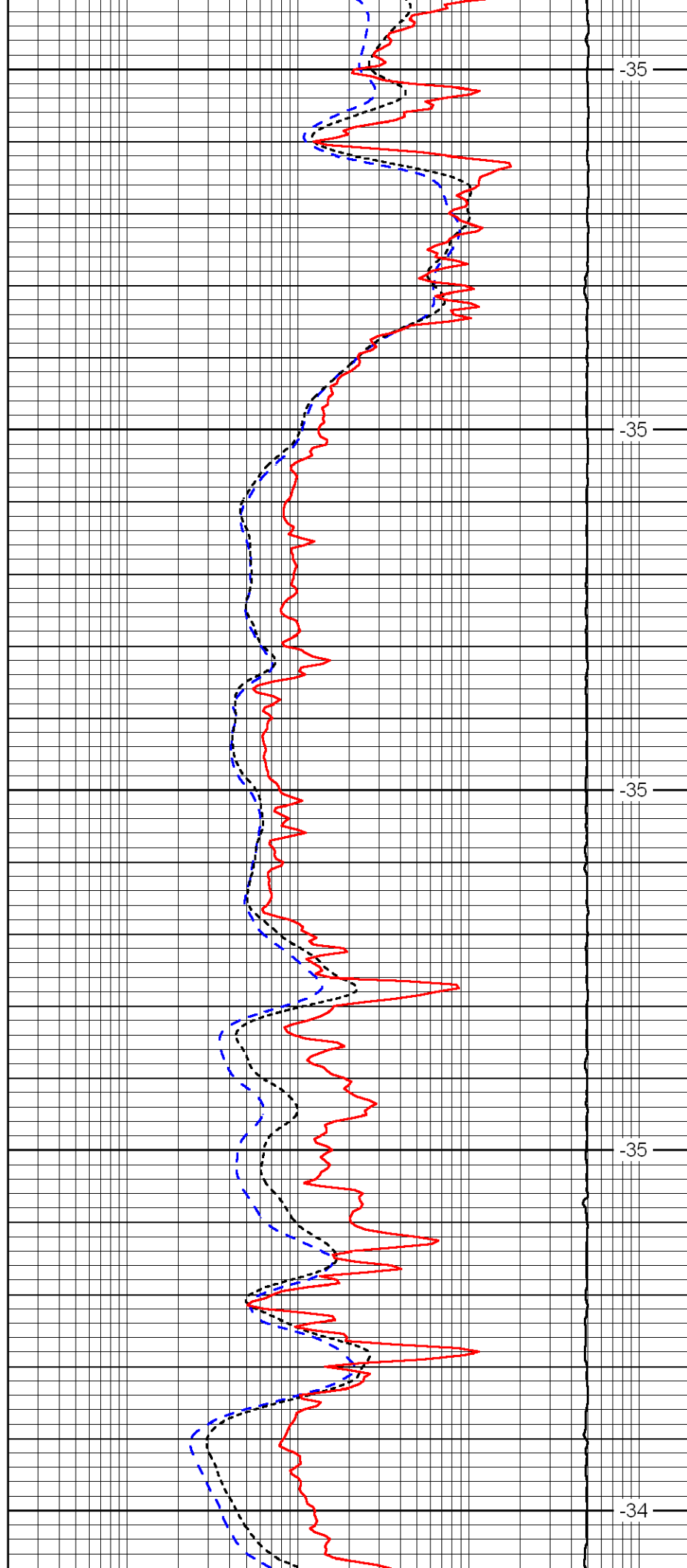
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4000

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4100



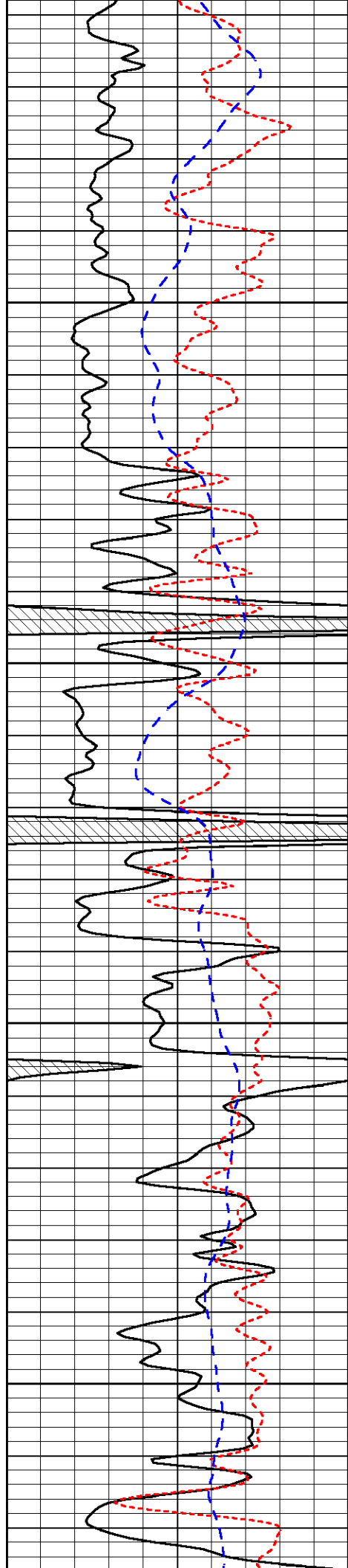
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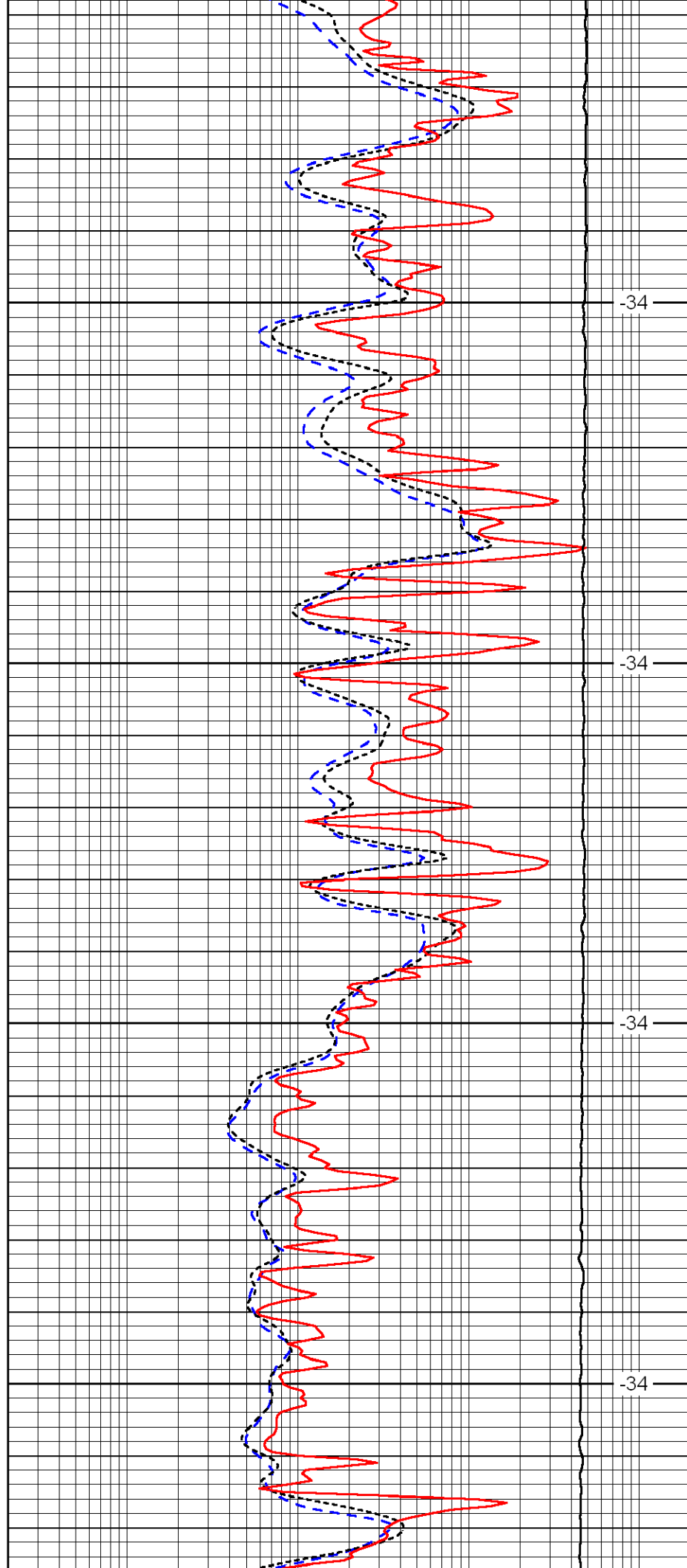


4150

4200

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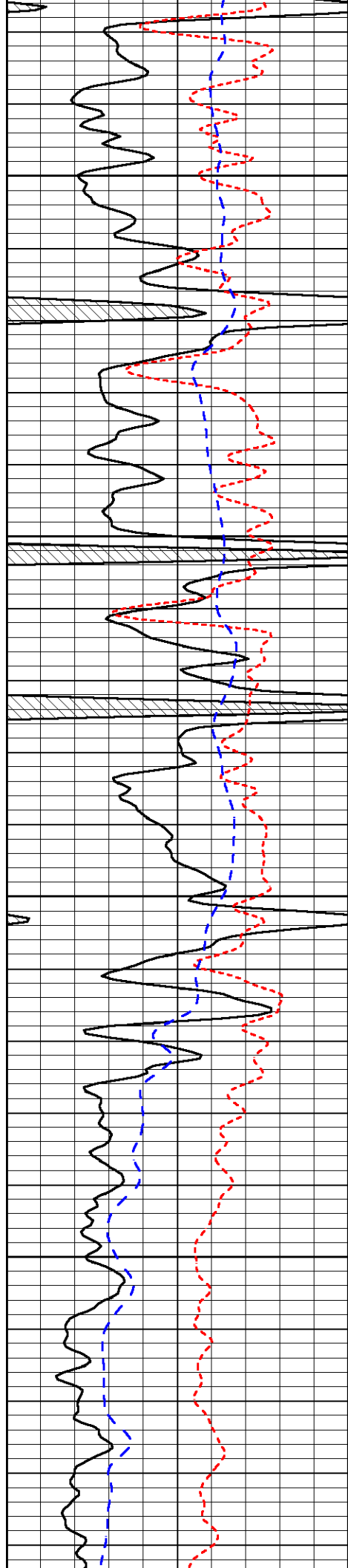


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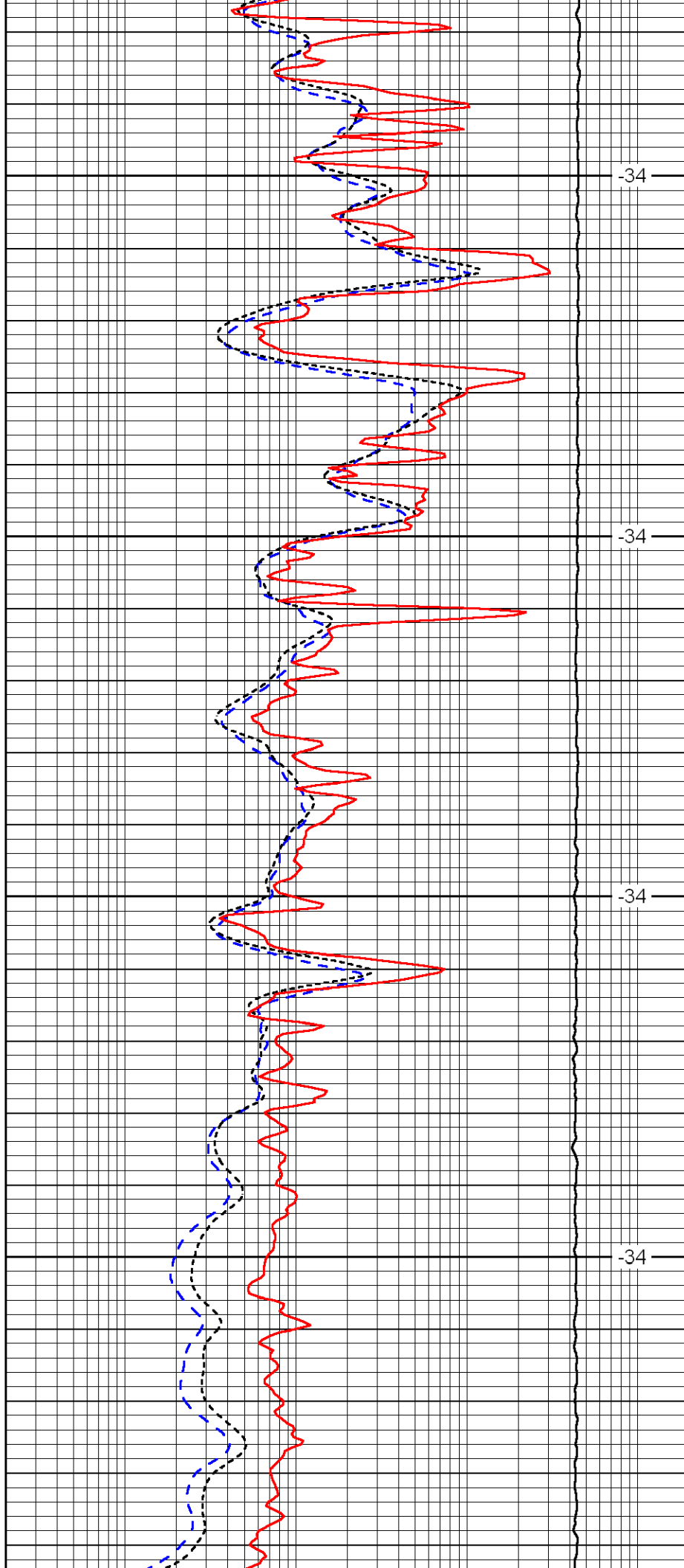


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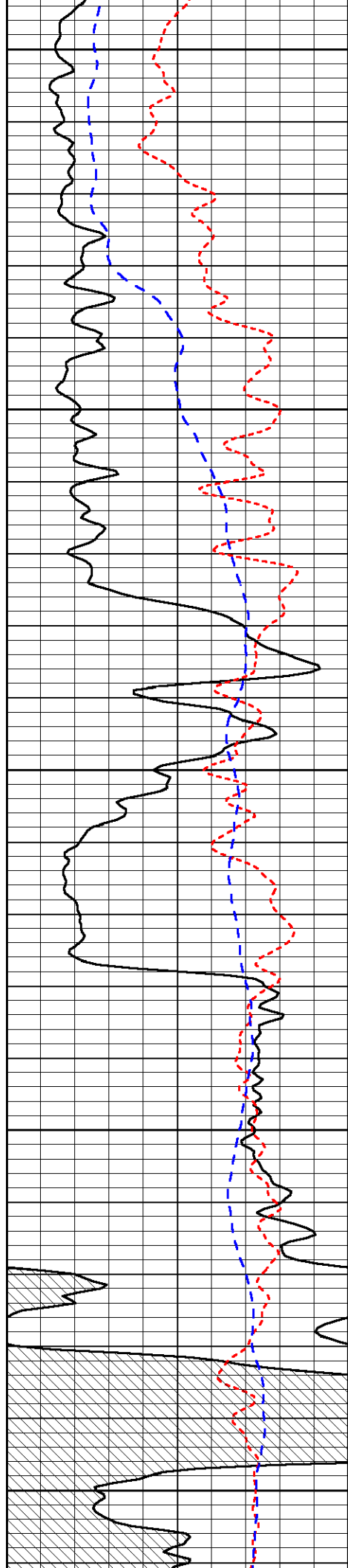


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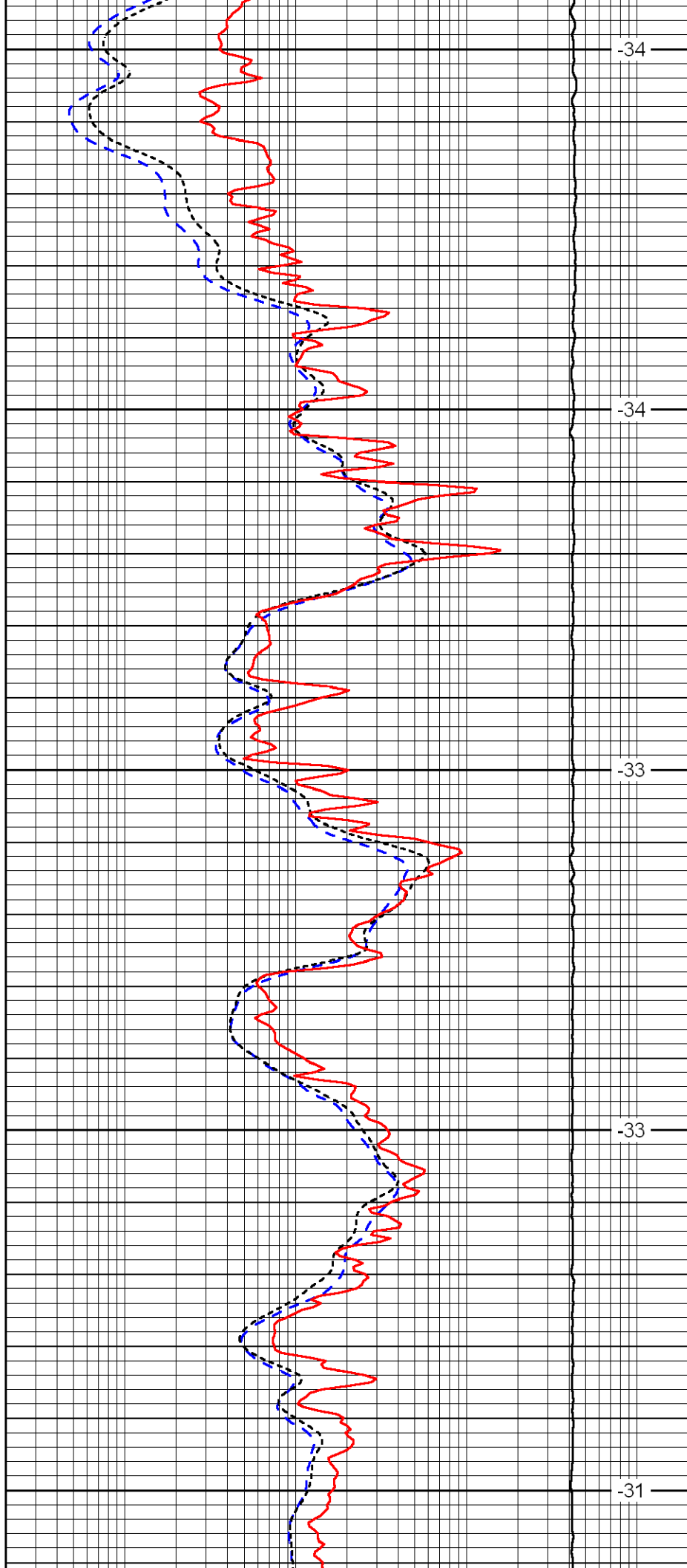
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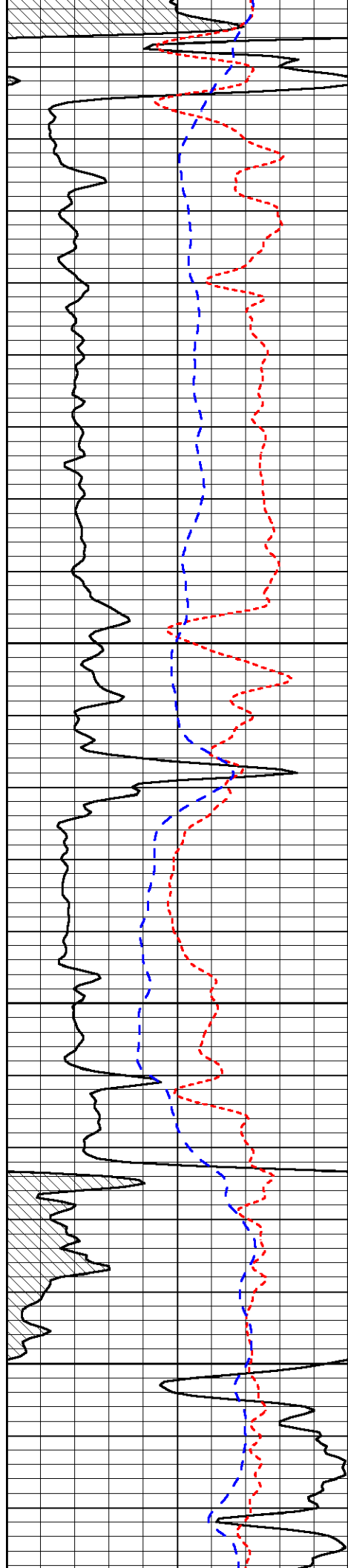
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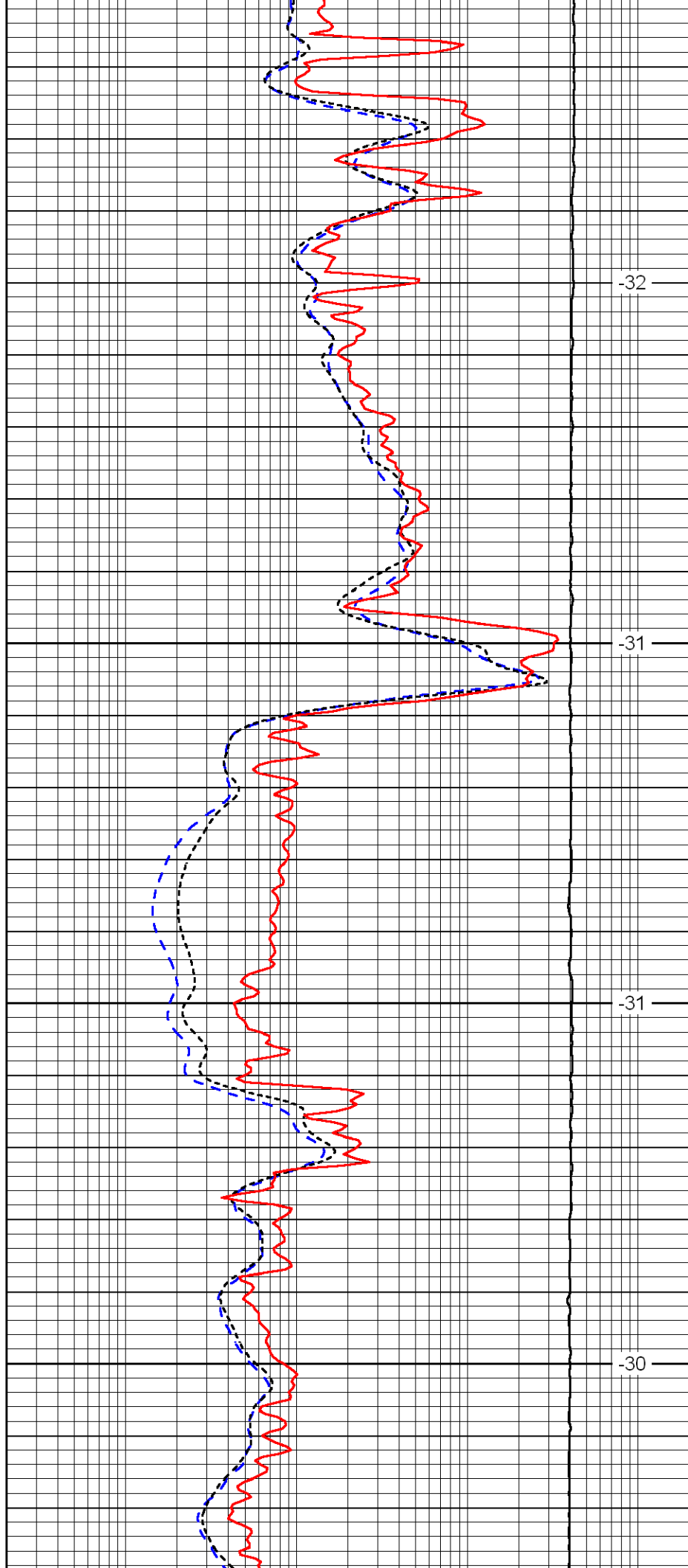


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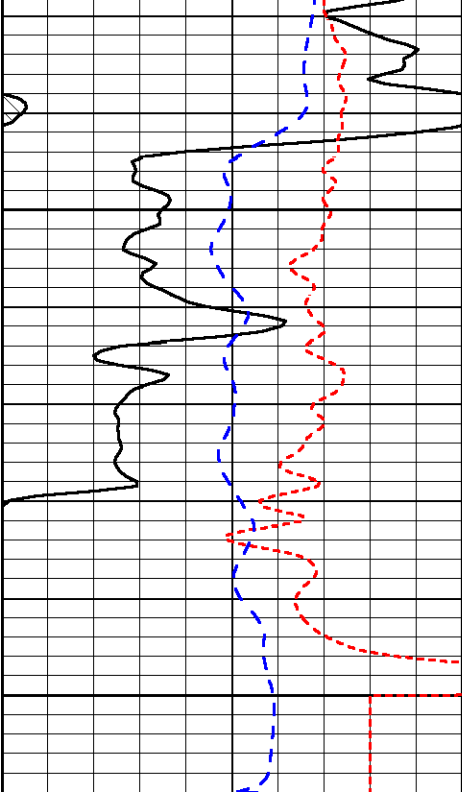


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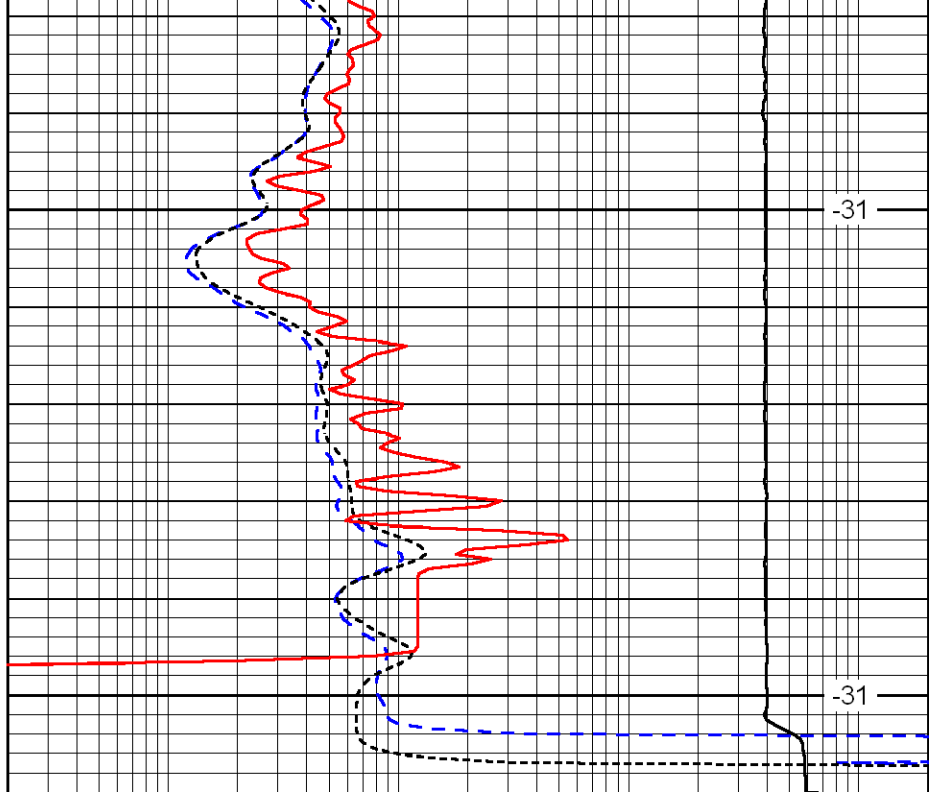
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-31

-30



0	Gamma Ray	150
-160	RXO/RT	40
-200	SP	0



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

LSPD