



PIONEER

Pioneer Energy Services

Dual Induction Log

API No.

15-175-22221-00-00

Company **American Warrior, Inc.**

Well **Handy #10**

Field **Blue Bell**

County **Seward**

State

Kansas

Location

**NW SW SE SW
335' FSL & 1349' FWL**

Sec: **29**

Twp: **34S**

Rge: **31W**

Elevation

K.B. 2744
D.F.
G.L. 2731

Permanent Datum Ground Level Elevation 2731
Log Measured From Kelly Bushing 13 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Date **8/3/2014**

Run Number **One**

Depth Driller **6500**

Depth Logger **6500**

Bottom Logged Interval **6499**

Top Log Interval **1700**

Casing Driller **8.625 @ 1705**

Casing Logger **1699**

Bit Size **7.875**

Type Fluid in Hole **Chemical**

Salinity, ppm CL **2200**

Density / Viscosity **9.2 51**

pH / Fluid Loss **9.5 8.8**

Source of Sample **Flowline**

Rm @ Meas. Temp **1.00 @ 86**

Rmf @ Meas. Temp **0.75 @ 86**

Rmc @ Meas. Temp **1.35 @ 86**

Source of Rmf / Rmc

Charts

Rm @ BHT

Operating Rig Time

Max Rec. Temp. F

Equipment Number

Location

Recorded By

Witnessed By

<<< Fold Here >>>

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

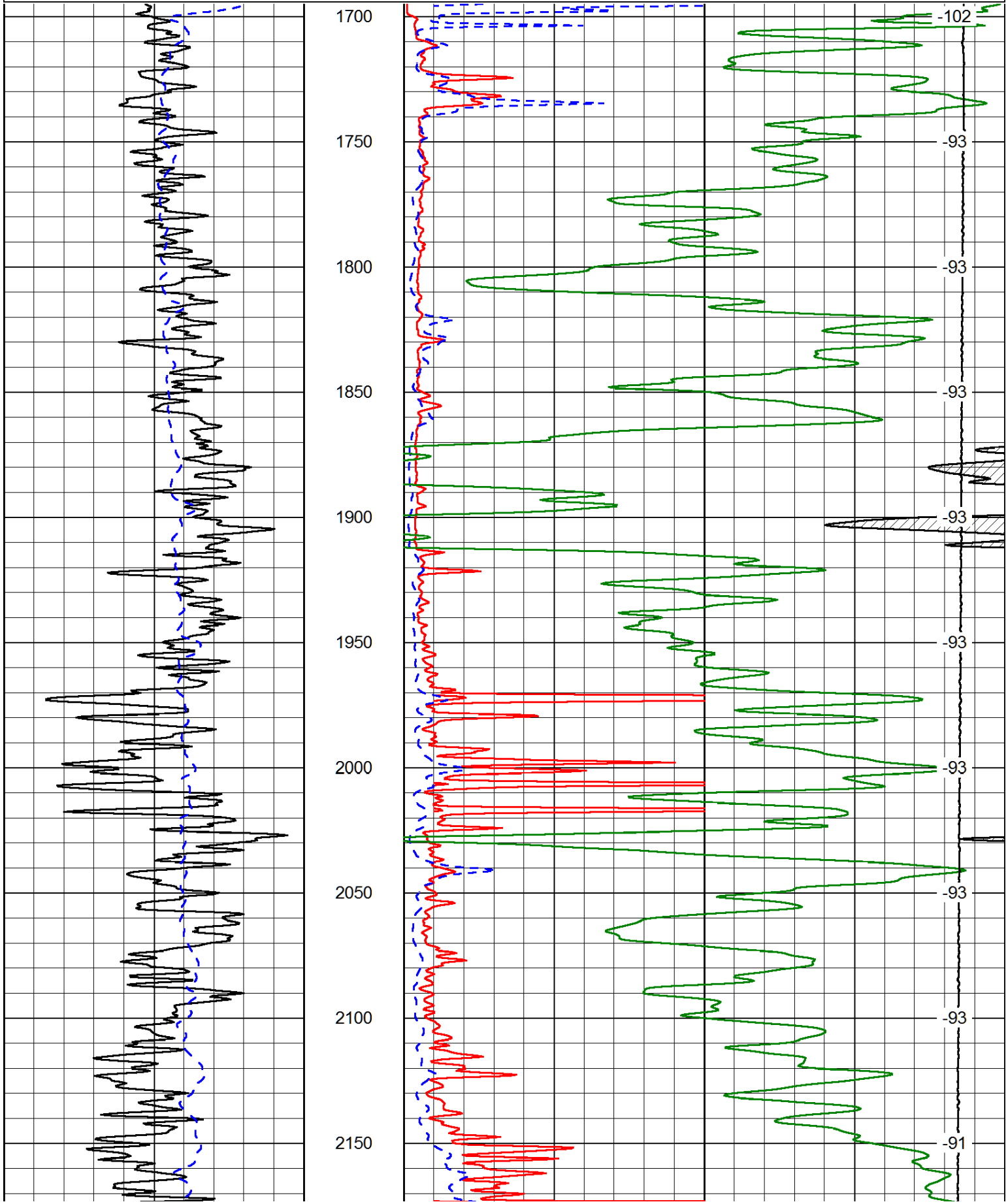
Thank you for using Log-Tech, Inc.
(785) 625-3858
Liberal,
from the 5 Points Intersection,
11 East on Blue Bell Rd to U Rd, 1 North, 1/2 West,
North into

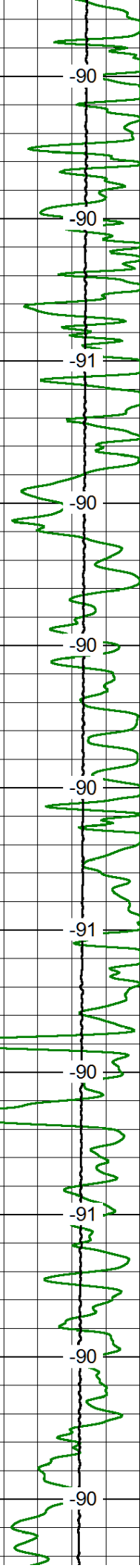
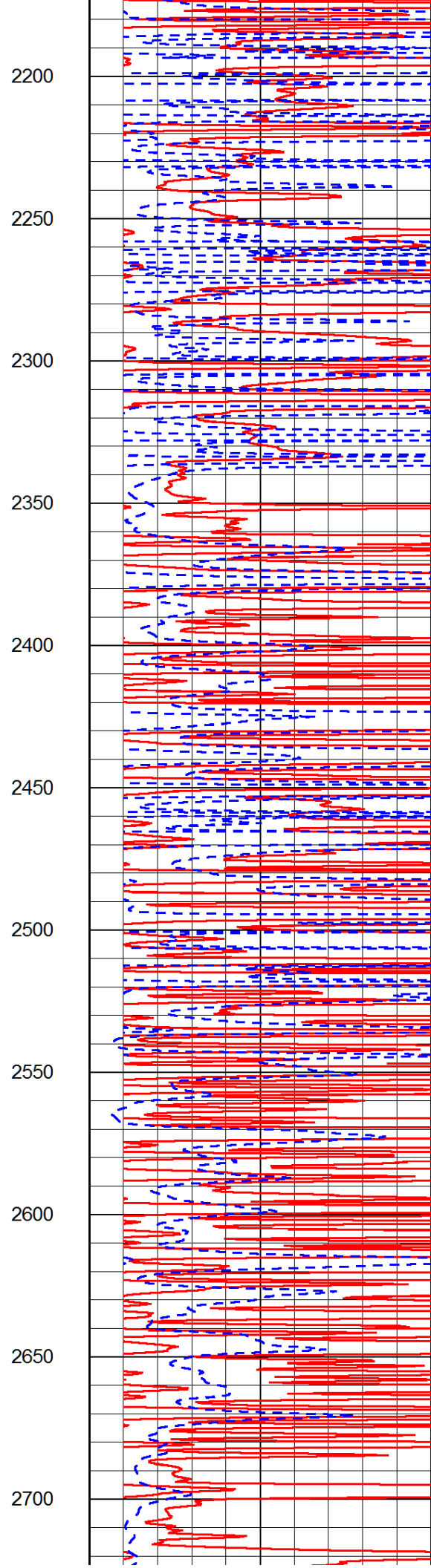
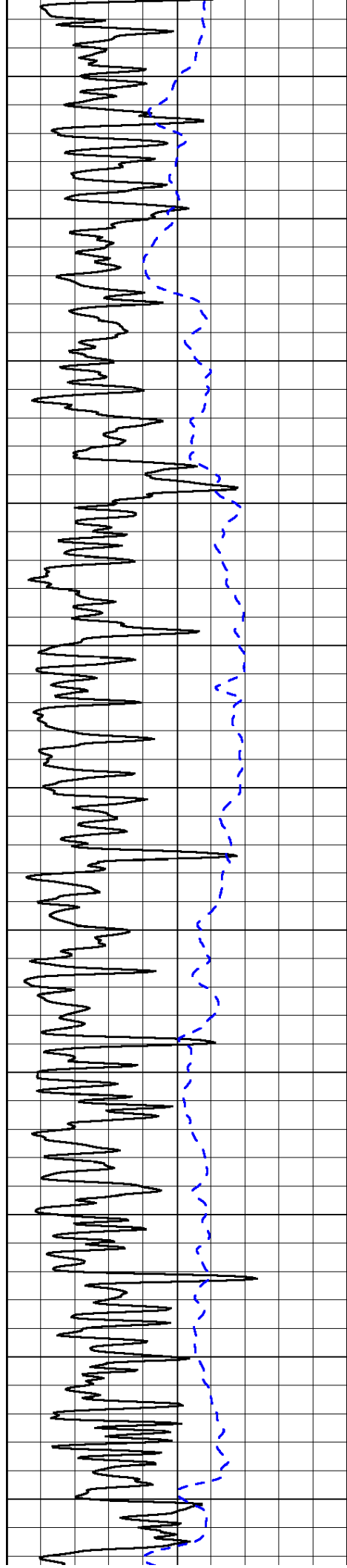
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Presentation Format: dil2in
Dataset Creation: Sun Aug 03 20:06:03 2014
Charted by: Depth in Feet scaled 1:600

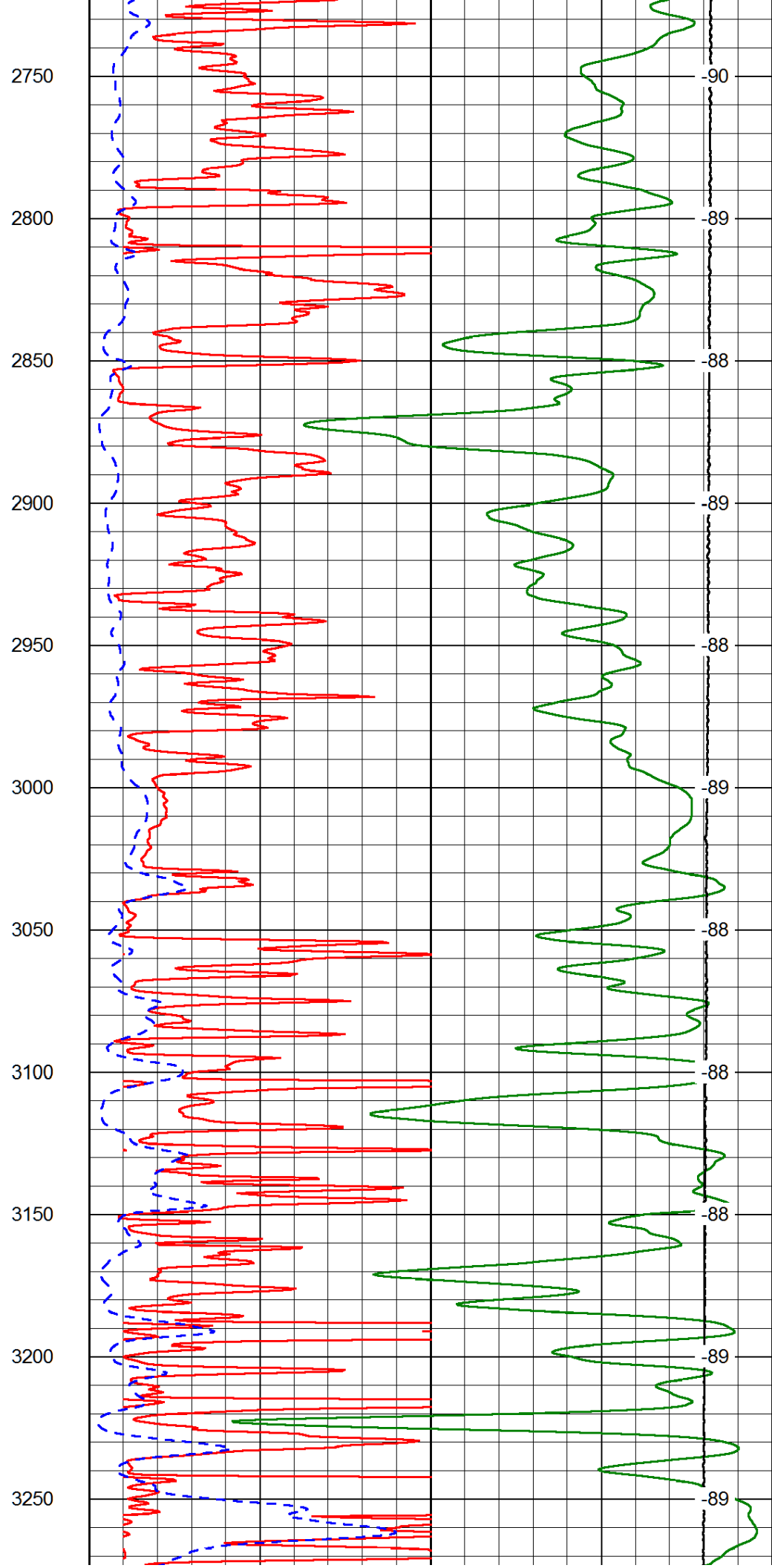
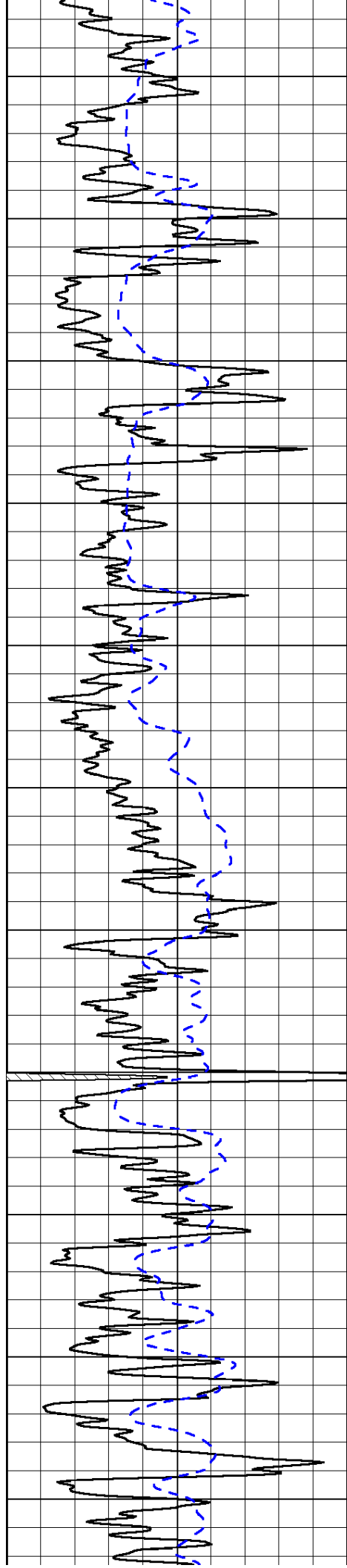
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-200	SP (mV)	0

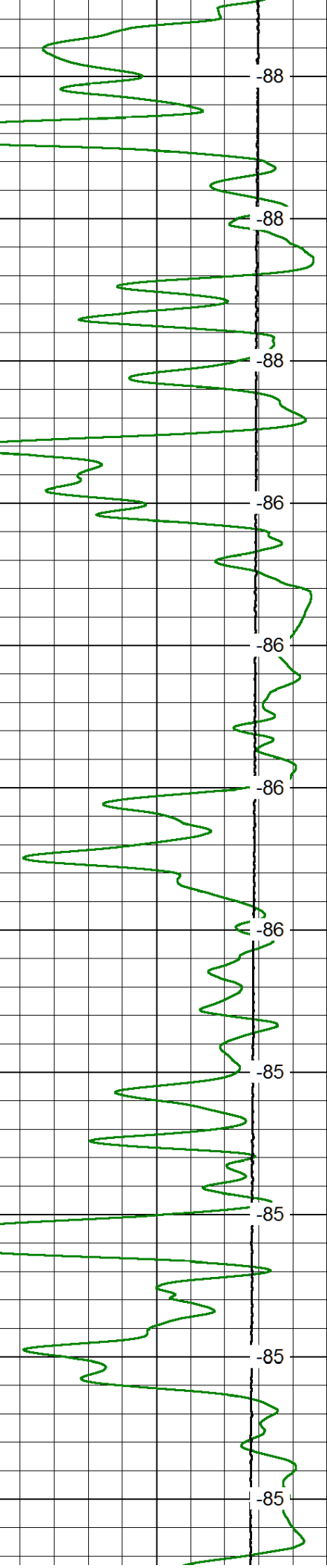
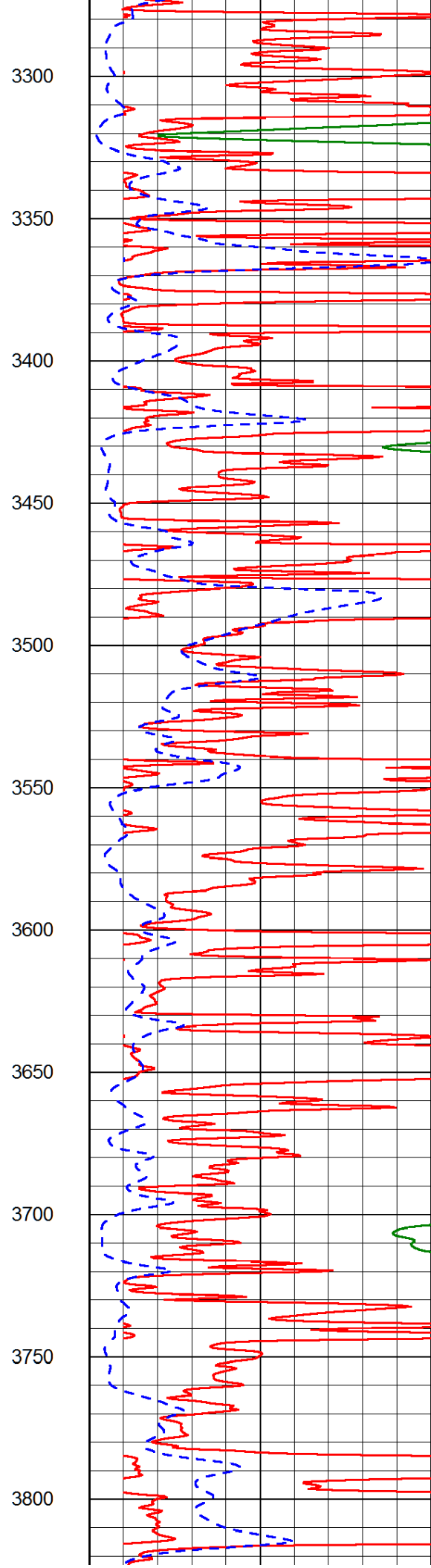
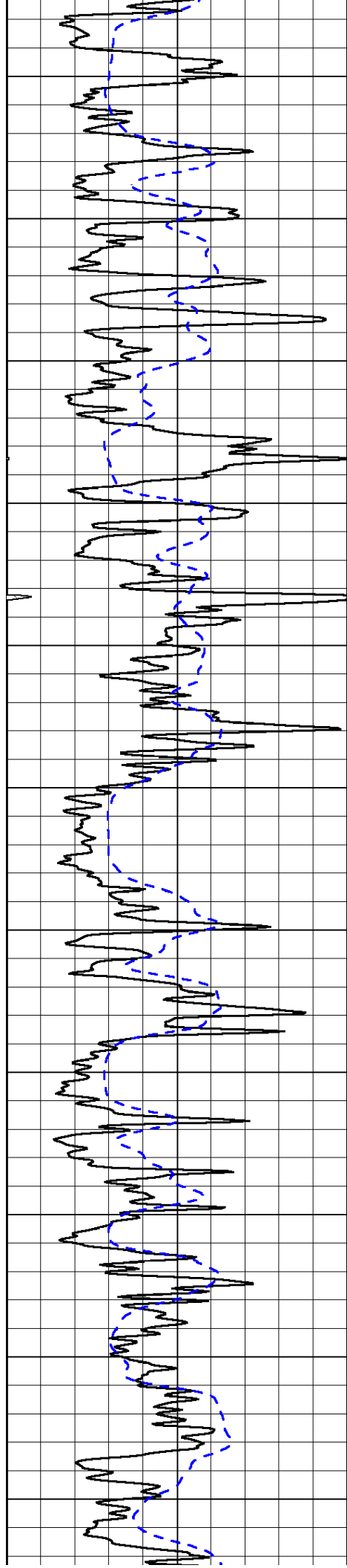
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0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0

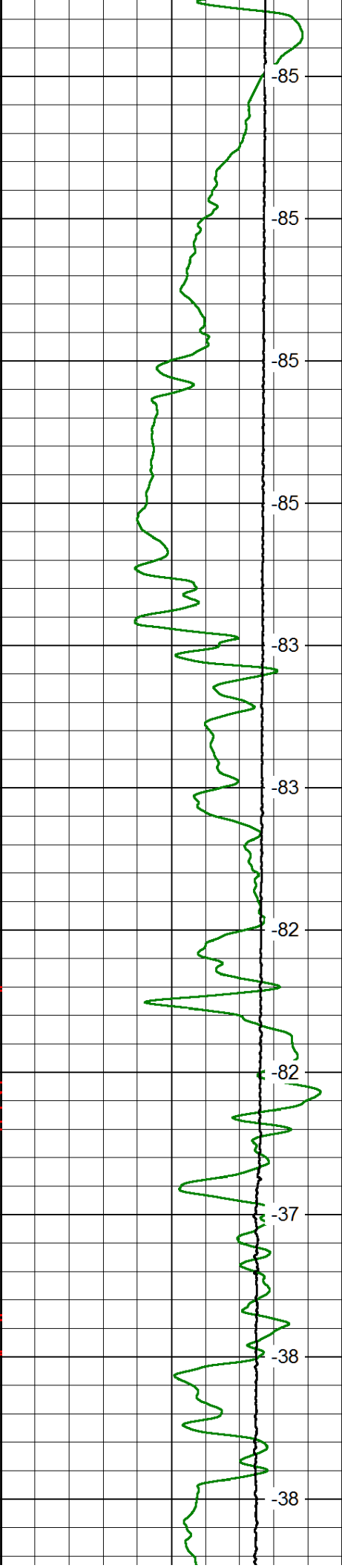
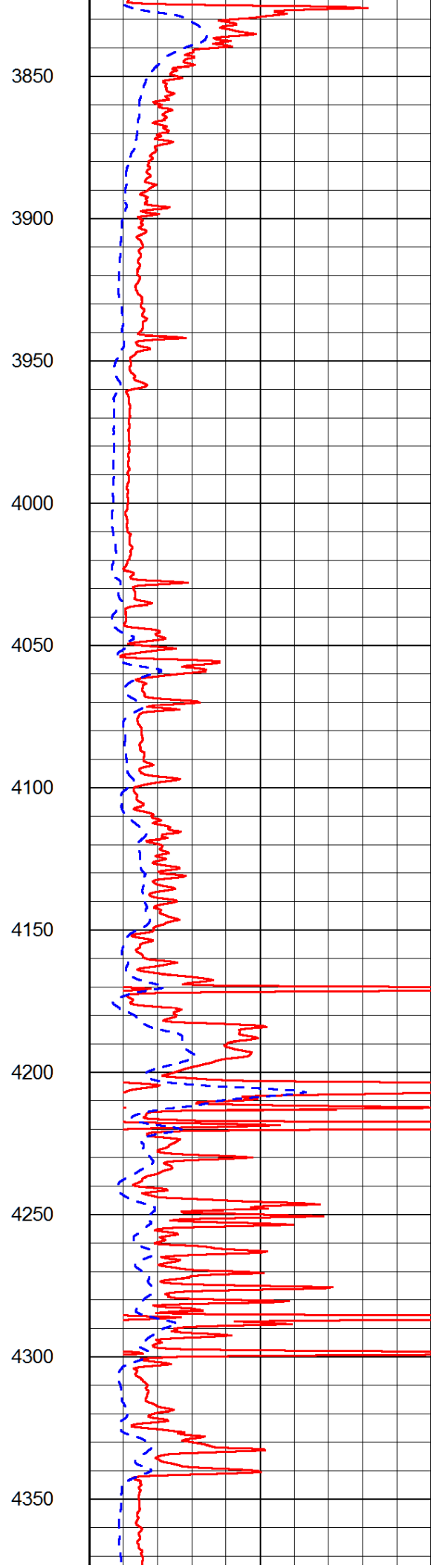
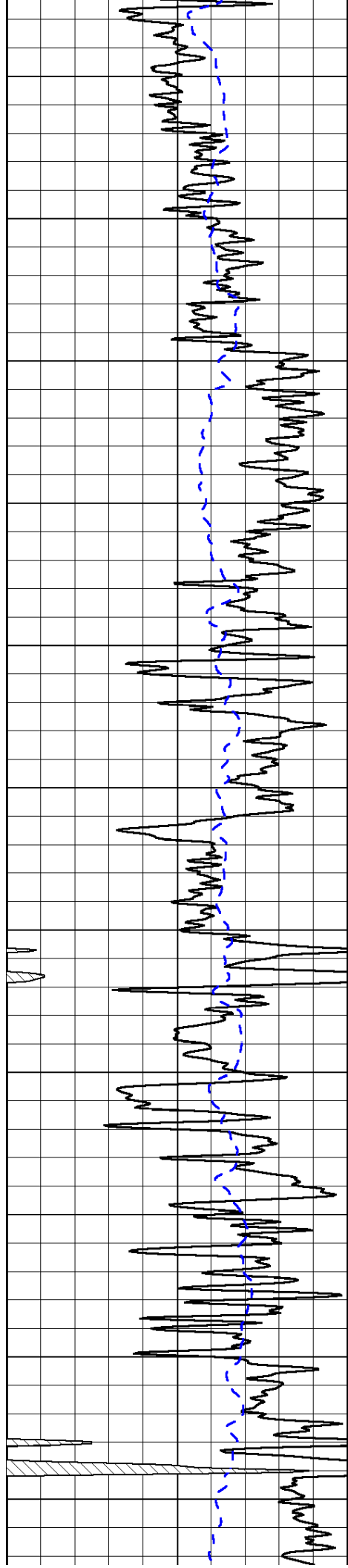
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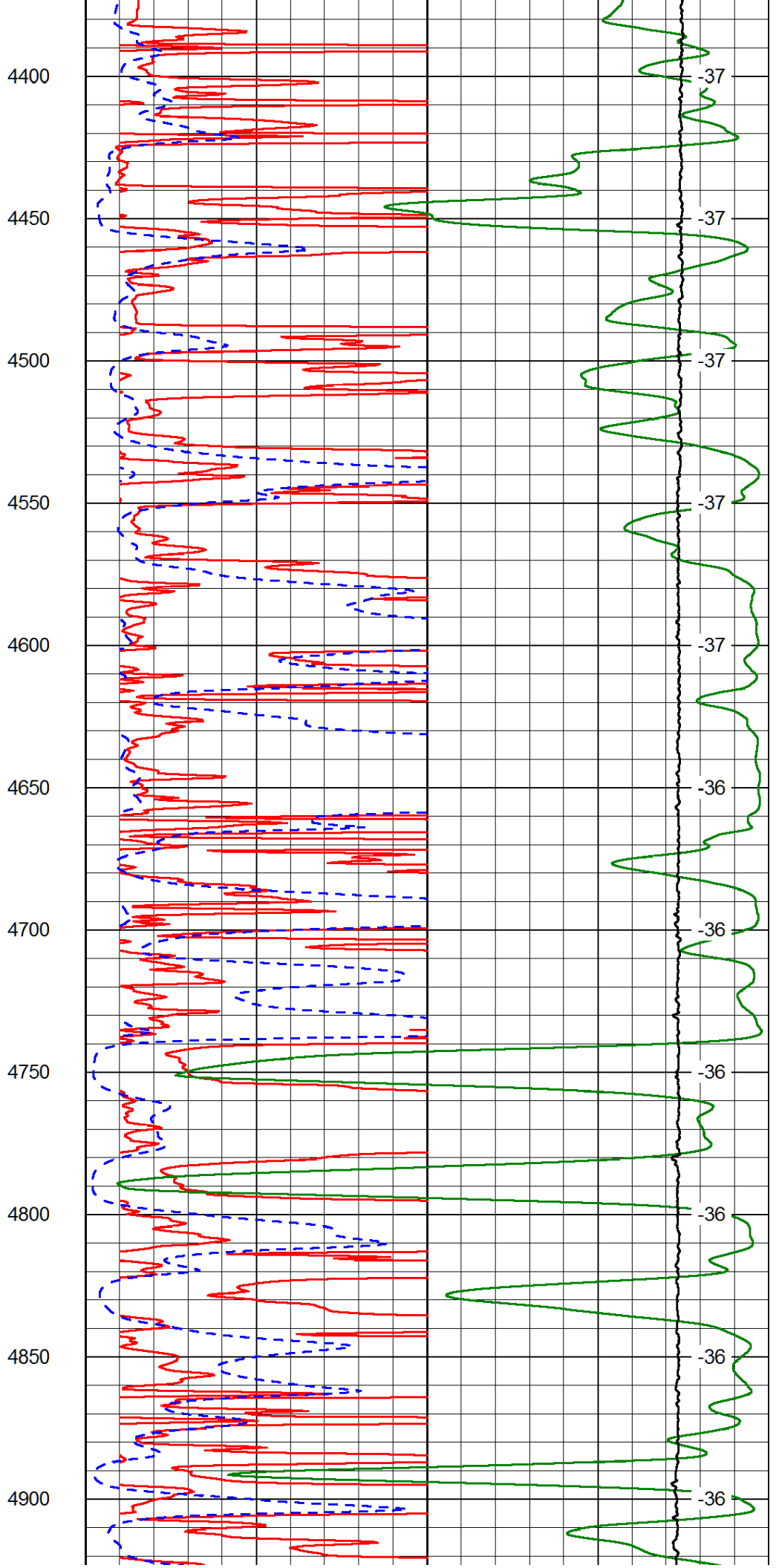
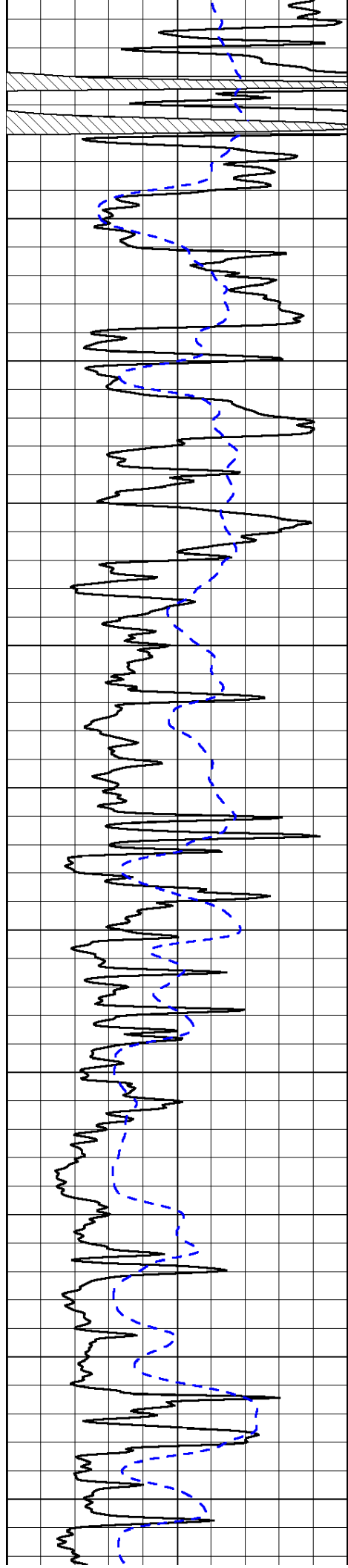


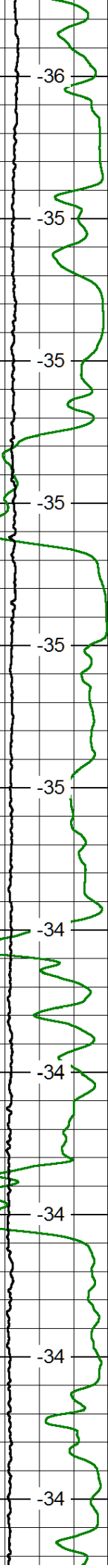
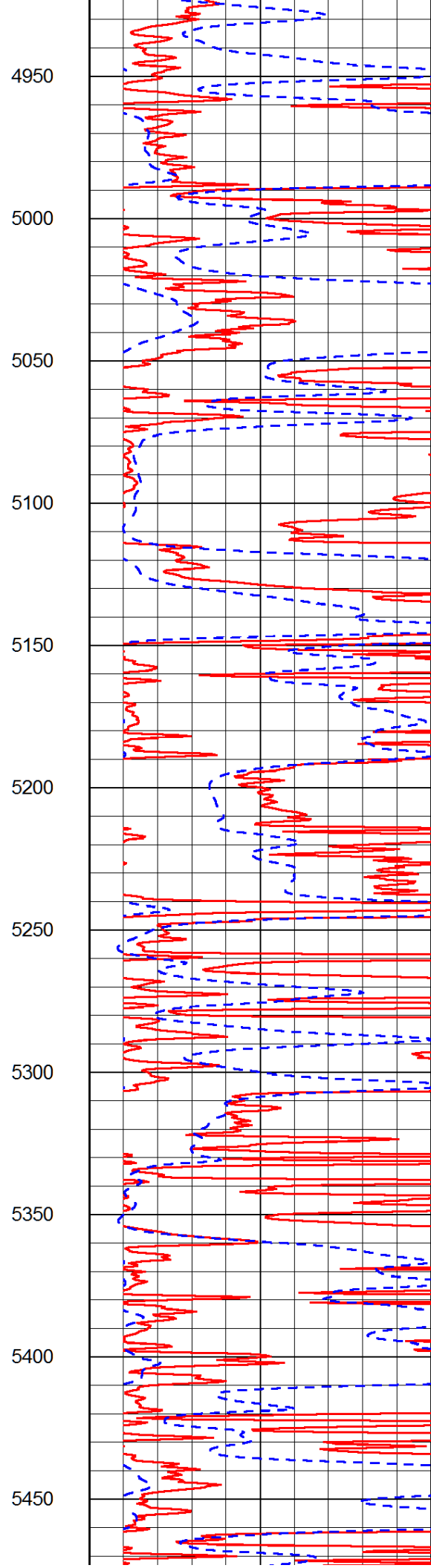
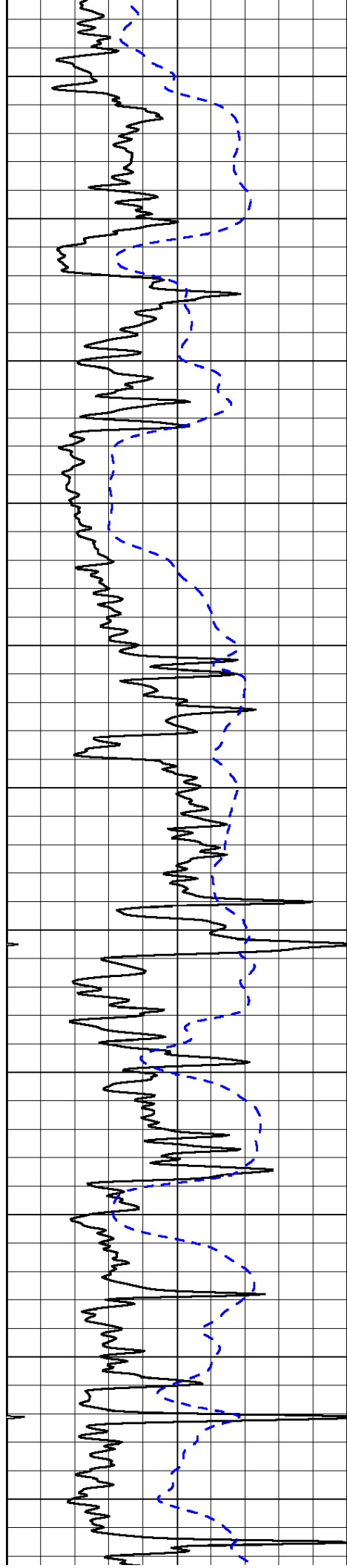


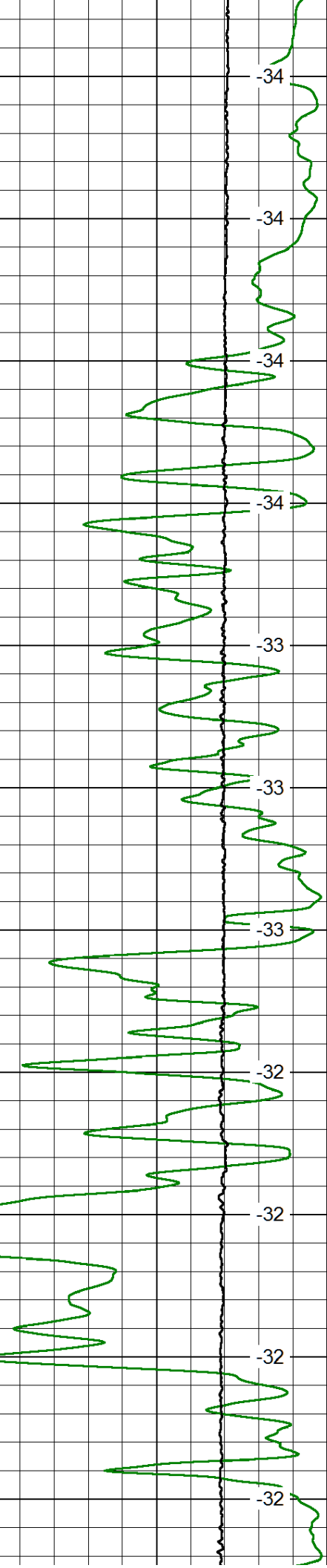
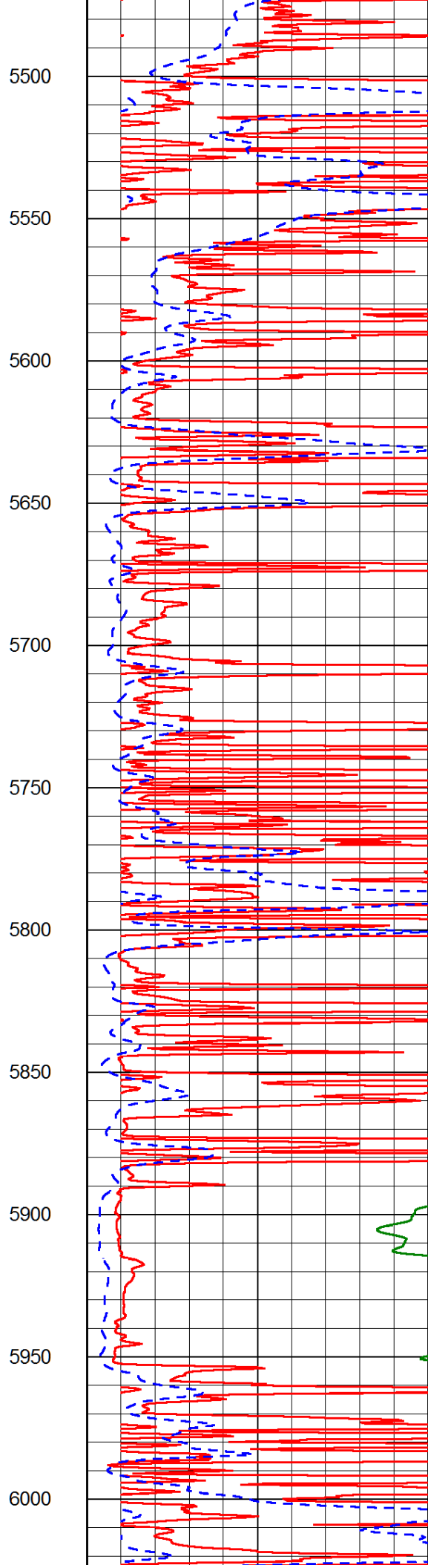
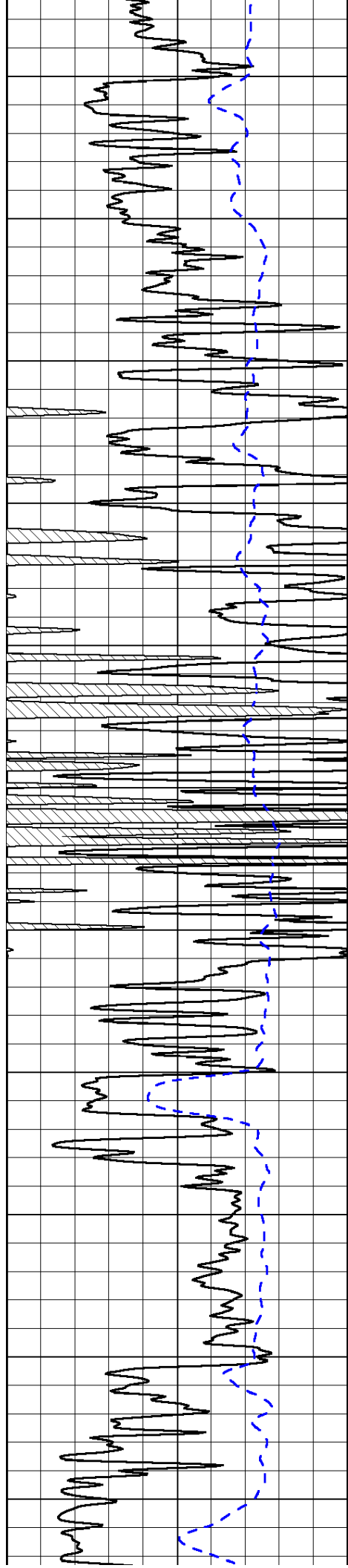


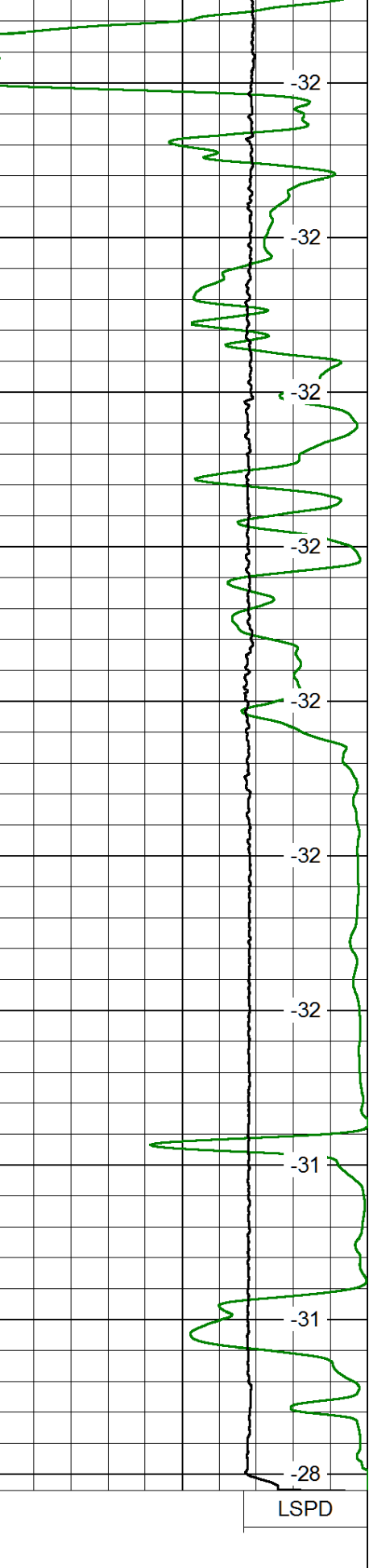
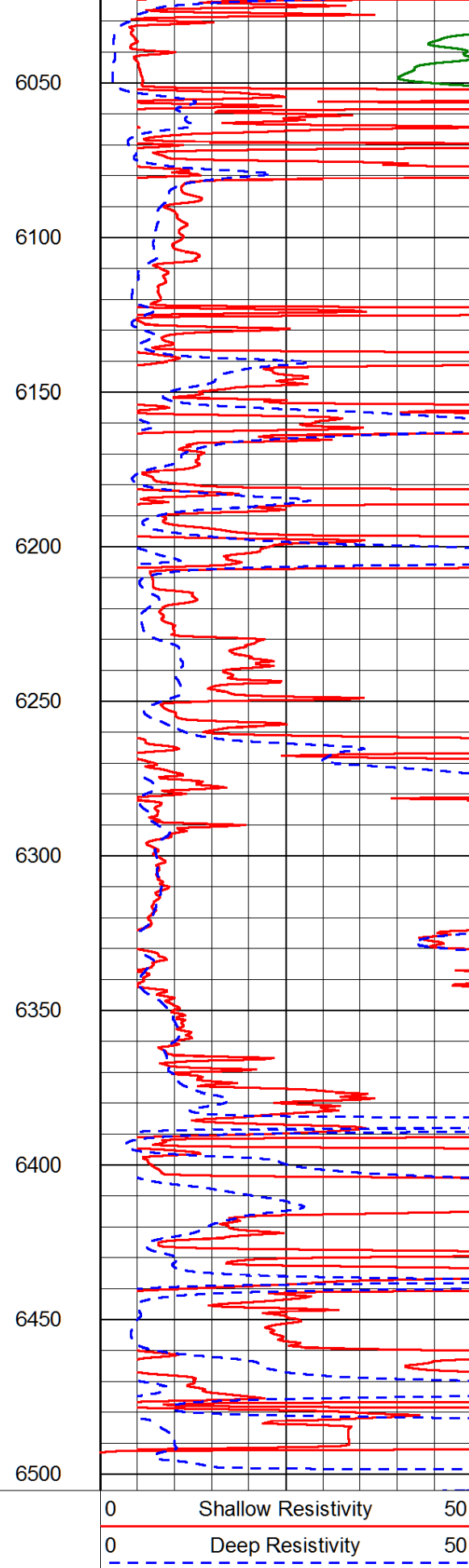
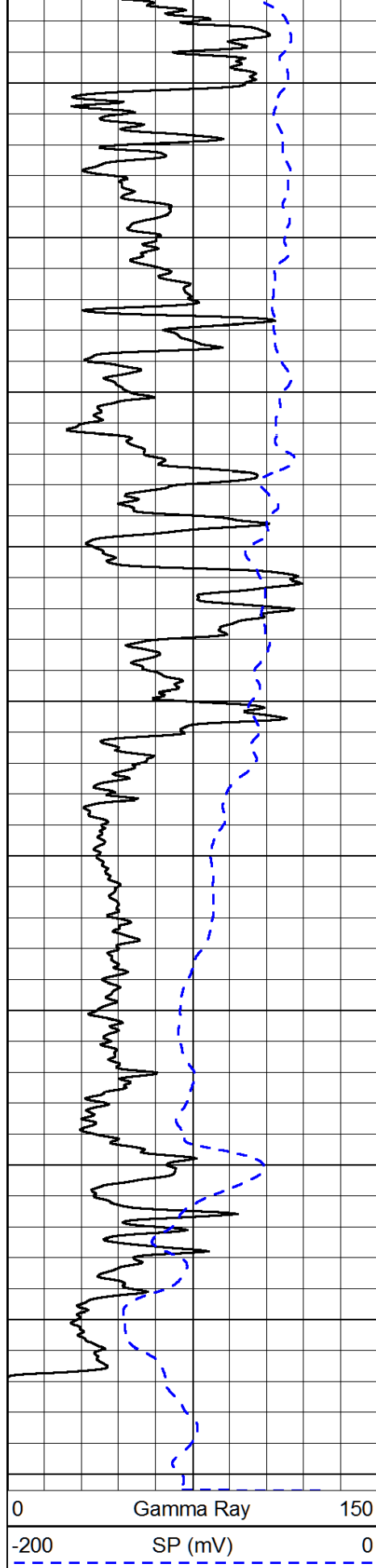












0 Gamma Ray 150
-200 SP (mV) 0

0 Shallow Resistivity 50
0 Deep Resistivity 50

1000 Conductivity 0
15000 Line Tension 0

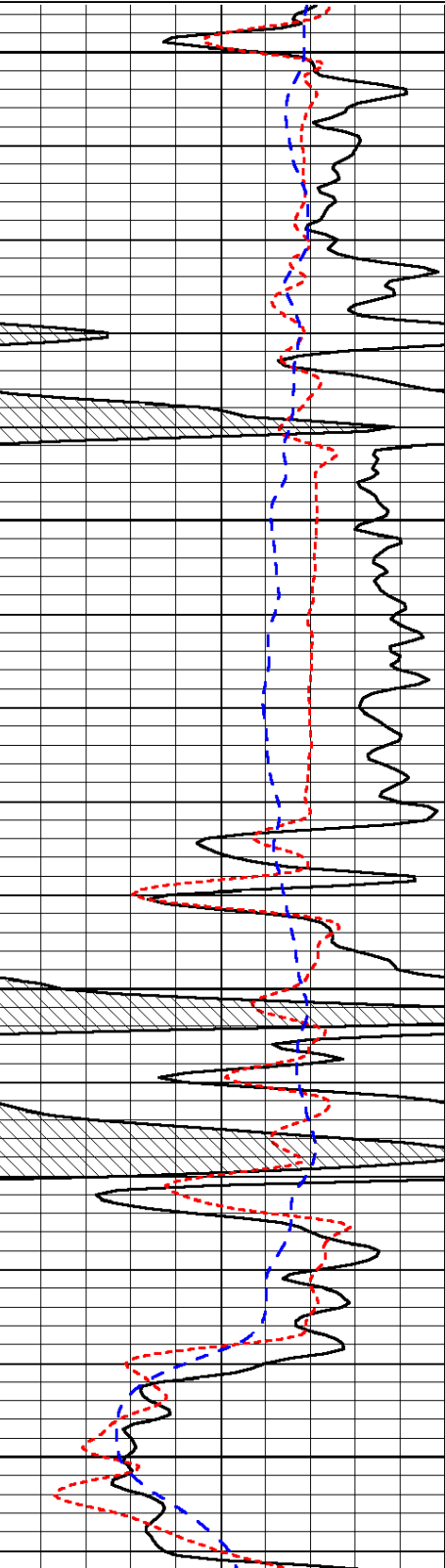
50 Shallow Resistivity 500
50 Deep Resistivity 500

Database File: american warrior_handy_10hd.db
Dataset Pathname: dil/awstkml
Presentation Format: dil
Dataset Creation: Sun Aug 03 20:06:03 2014
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
-160	RXO/RT	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

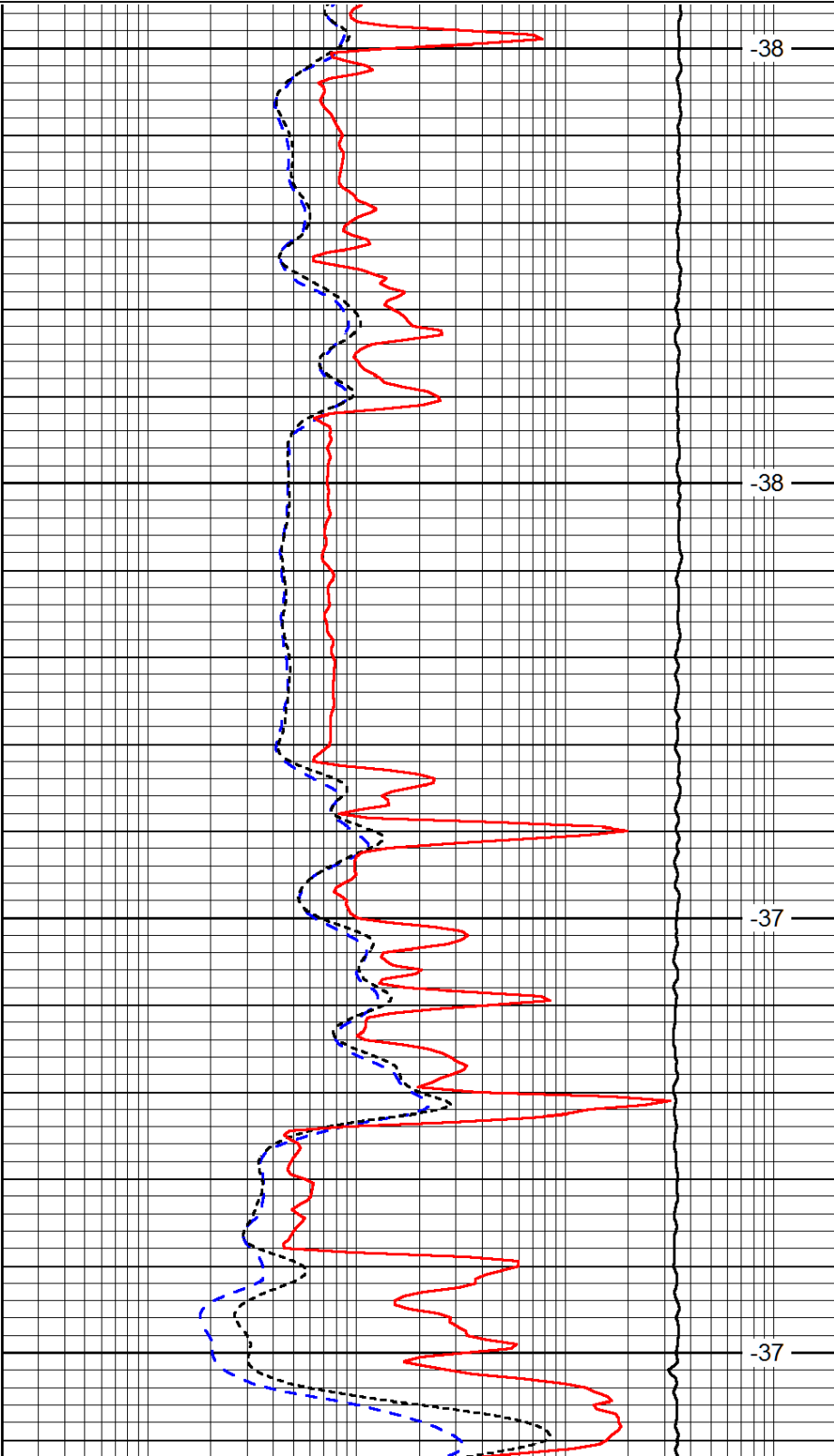


4300

4350

4400

4450

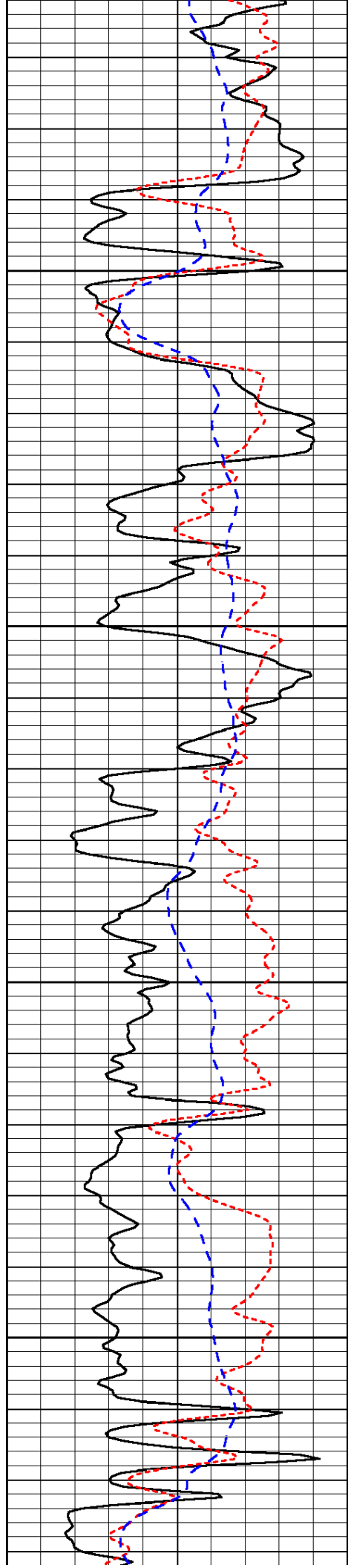


-38

-38

-37

-37

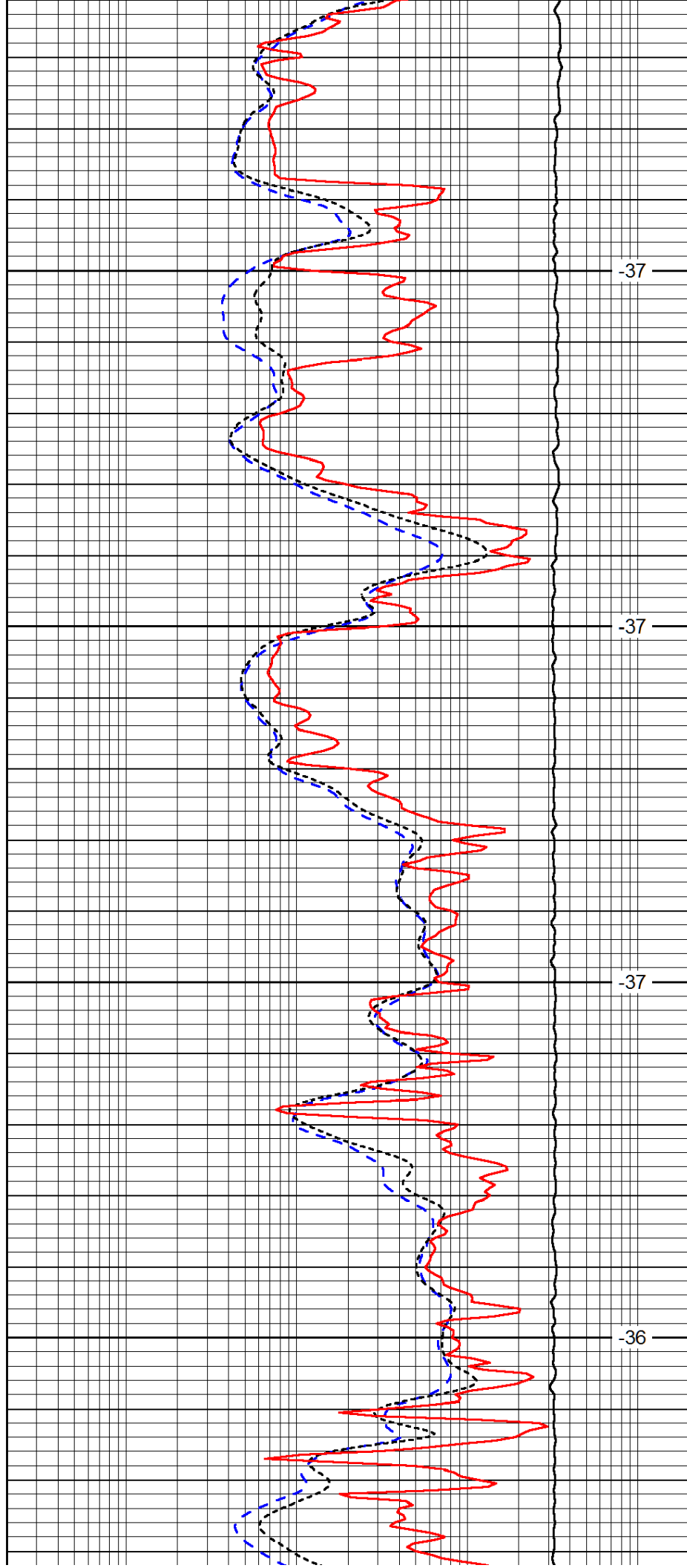


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4550

4600

4650

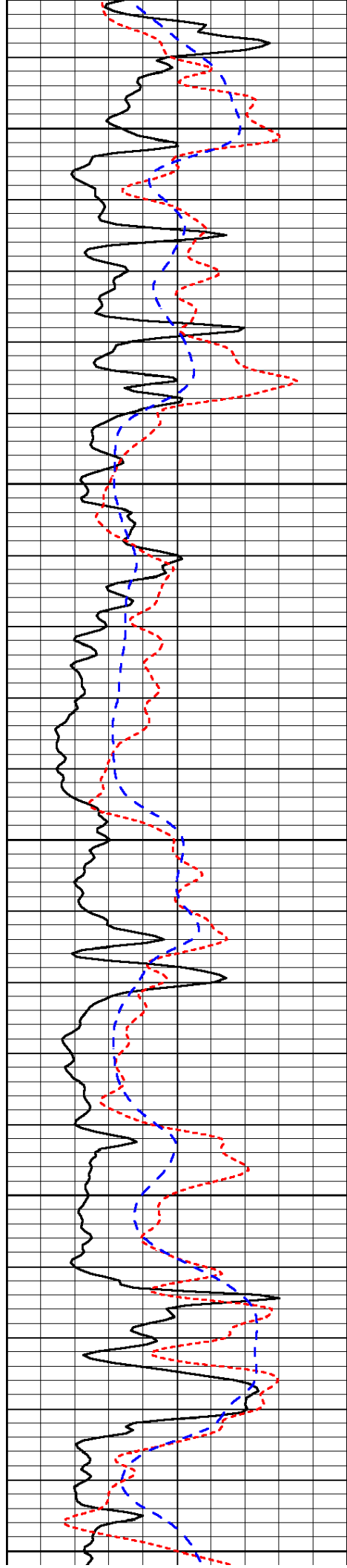


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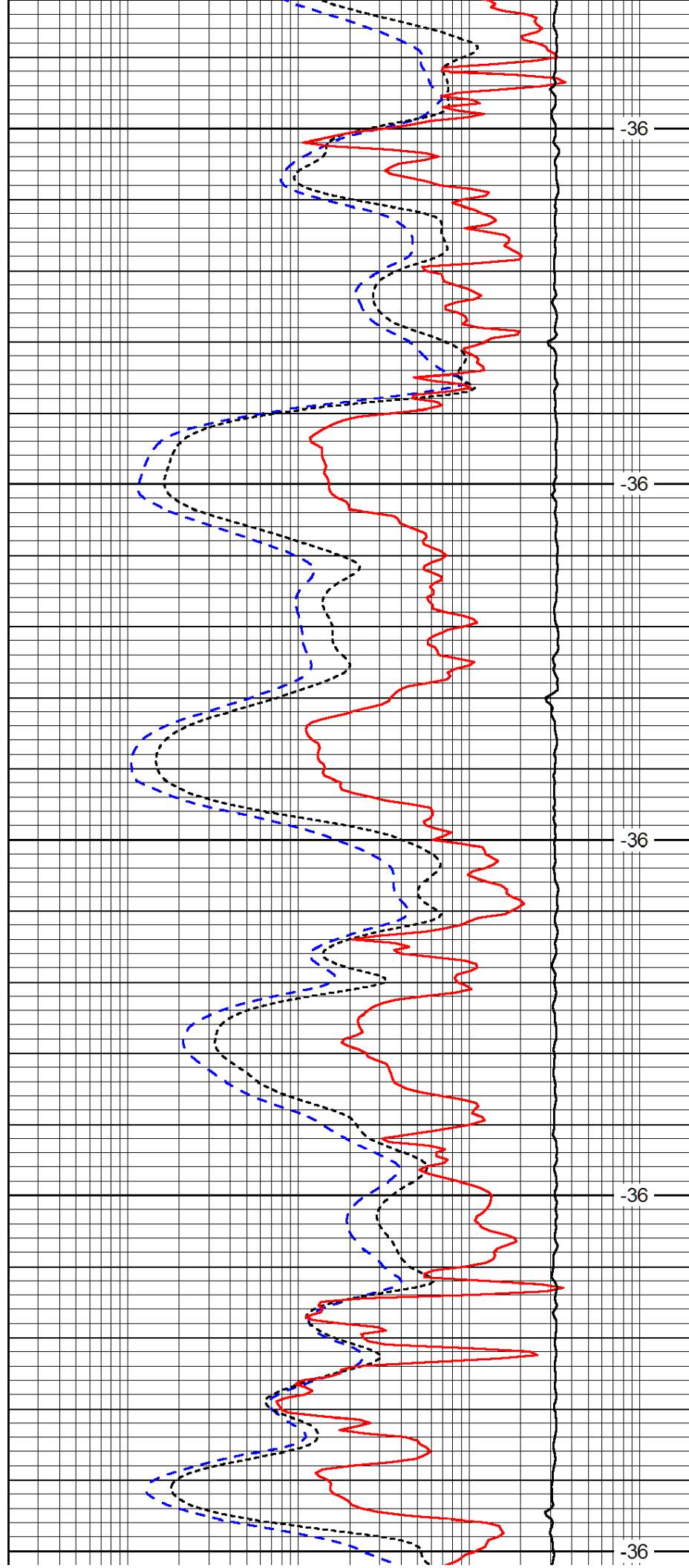
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4800

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4900



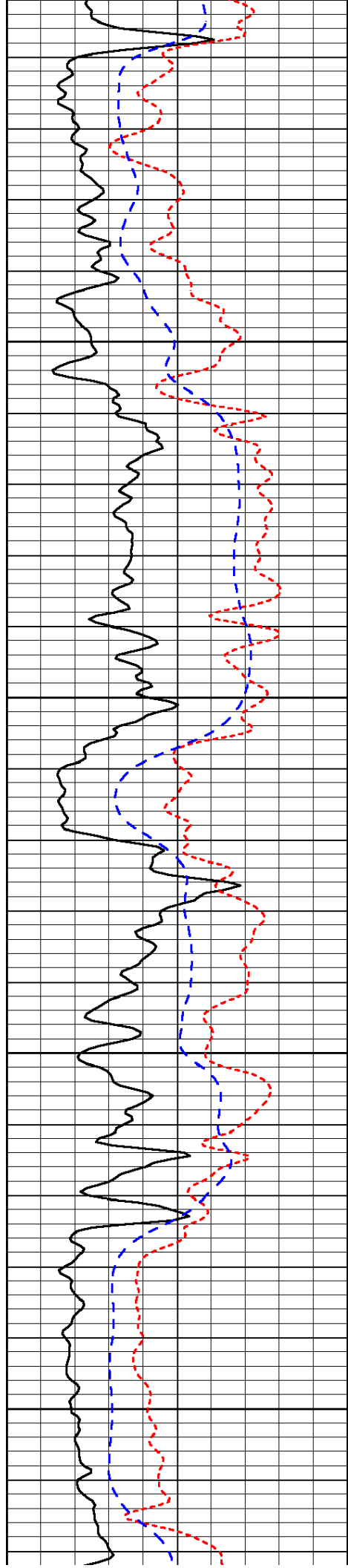
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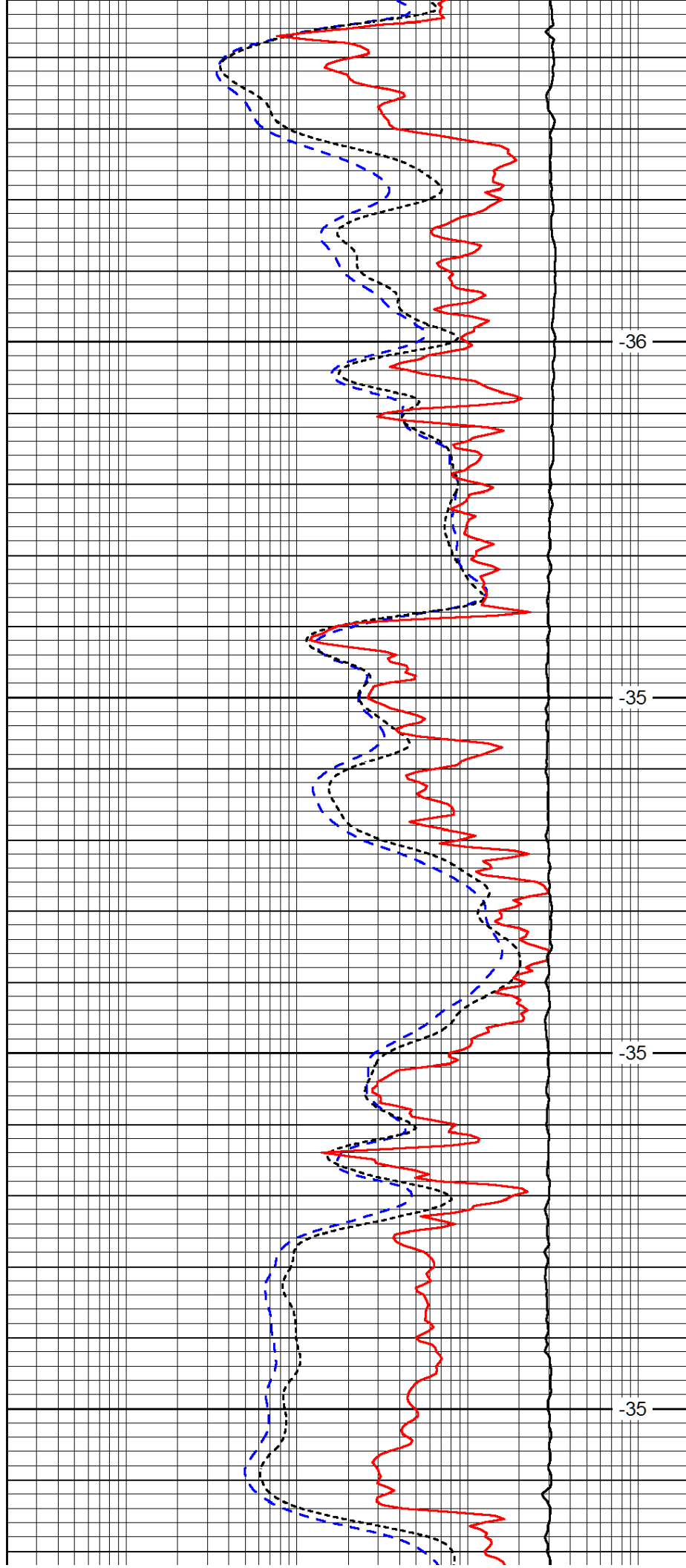


4950

5000

5050

5100

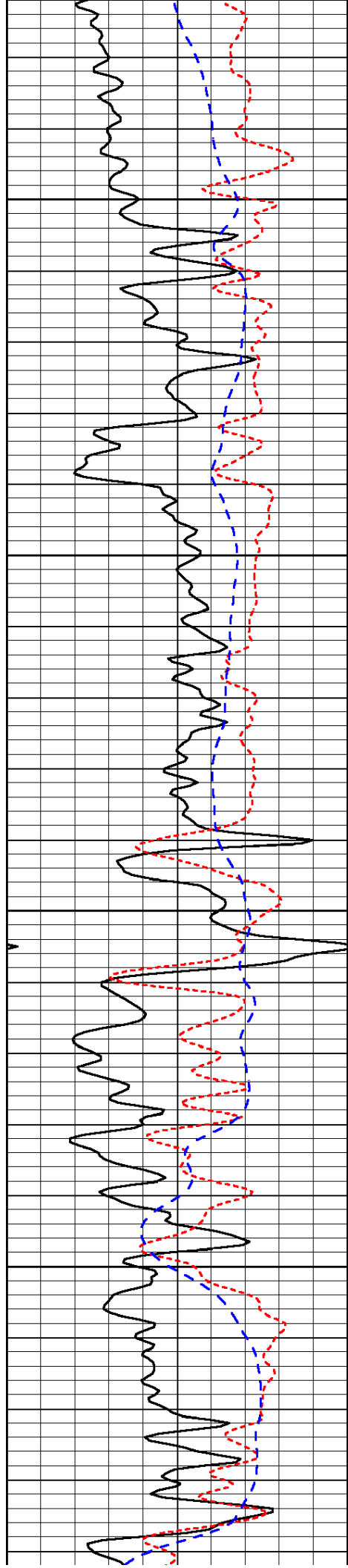


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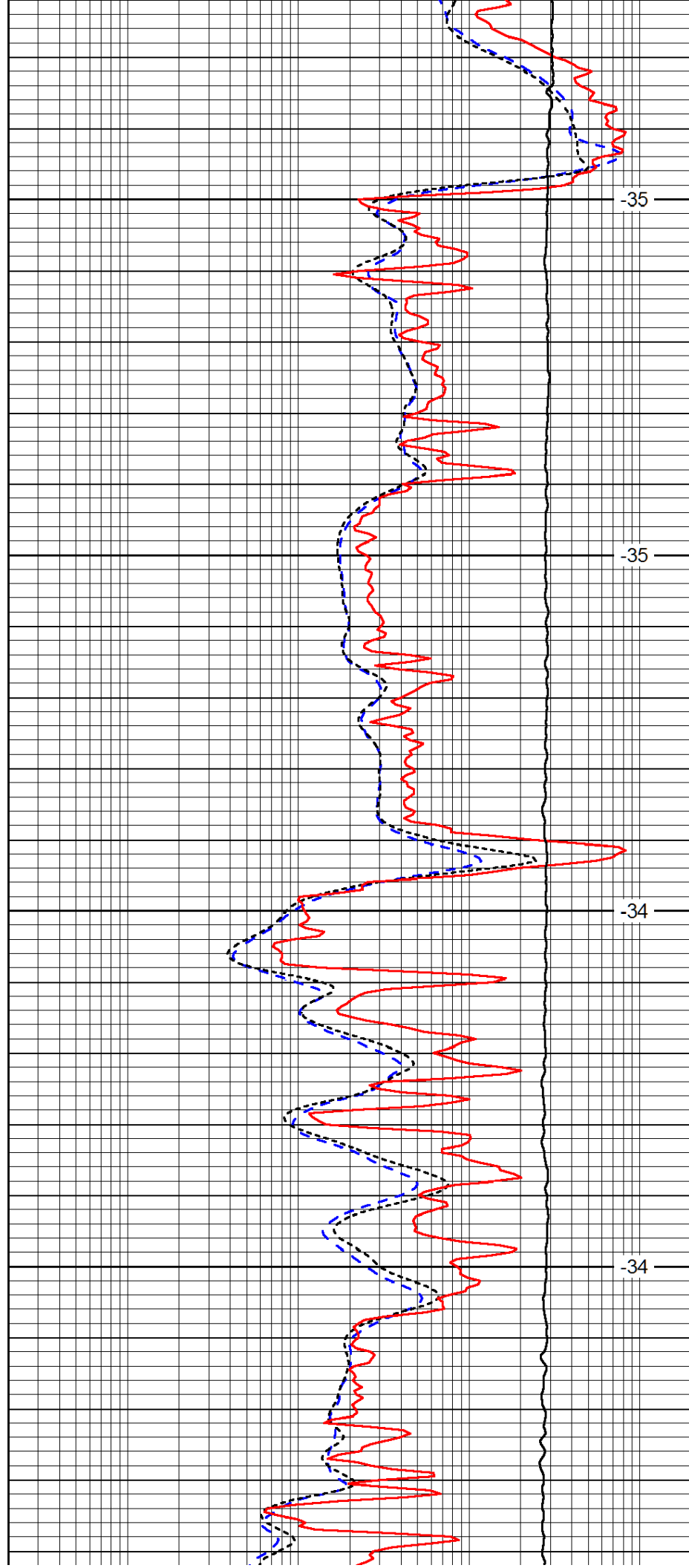


5150

5200

5250

5300

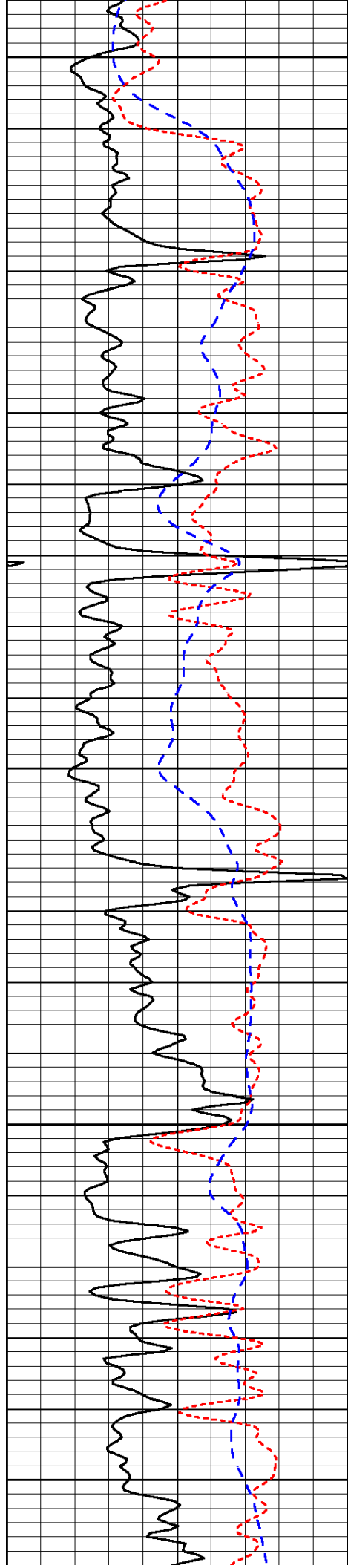


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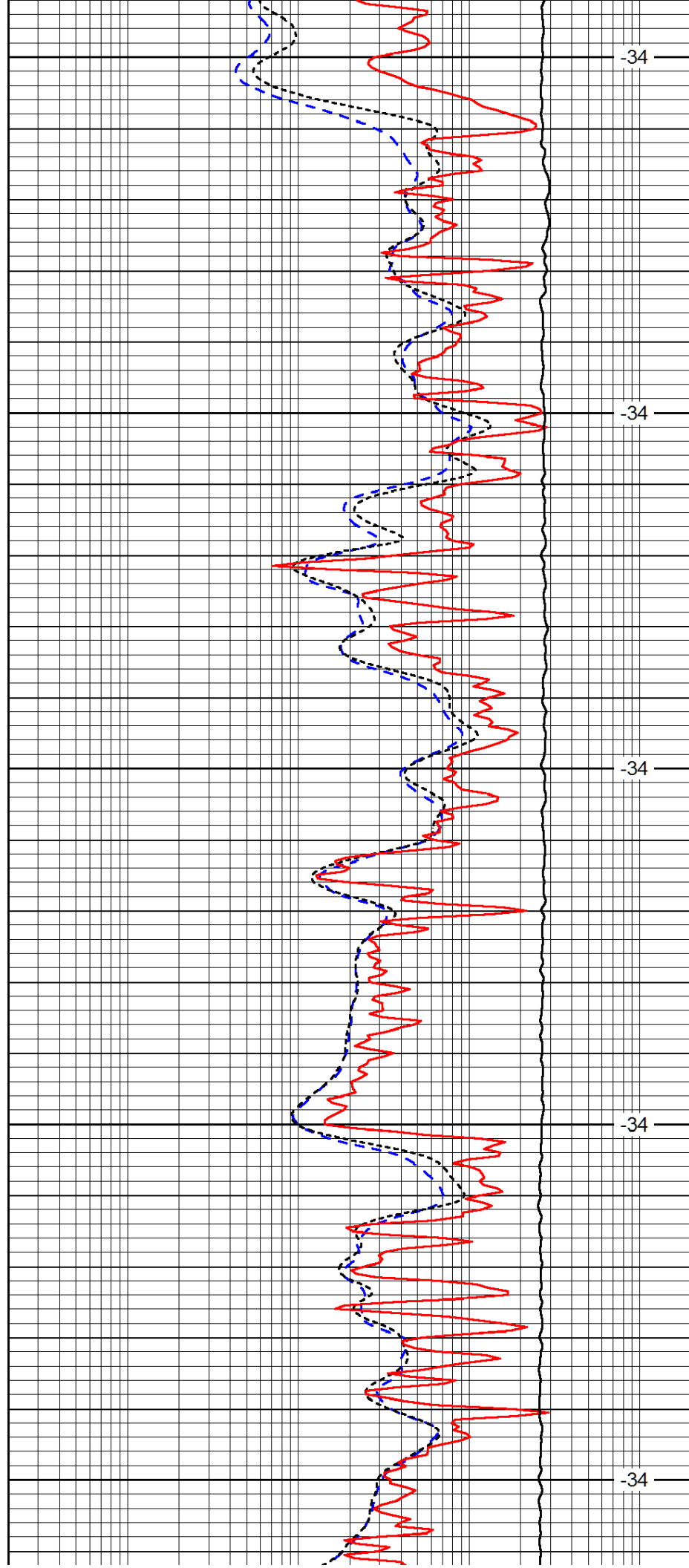
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5550



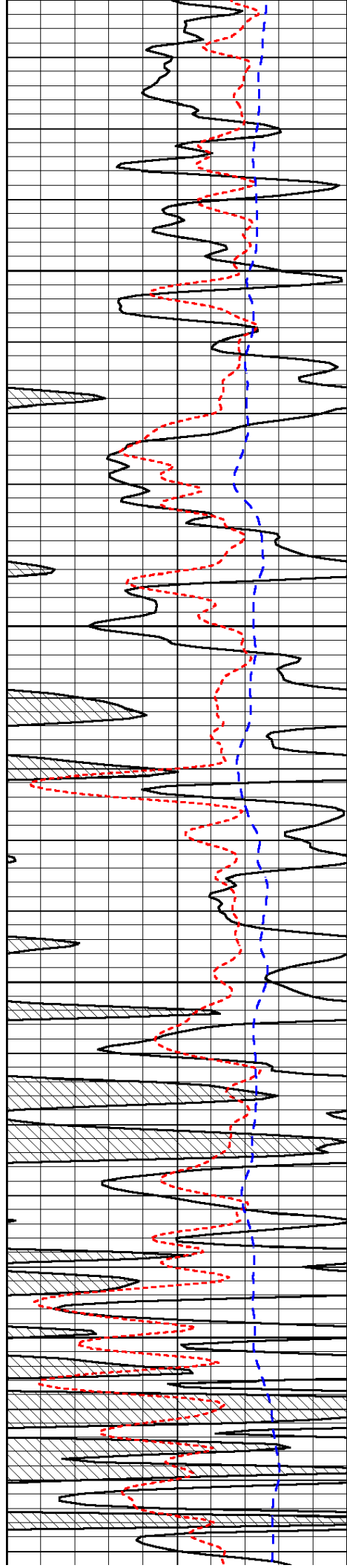
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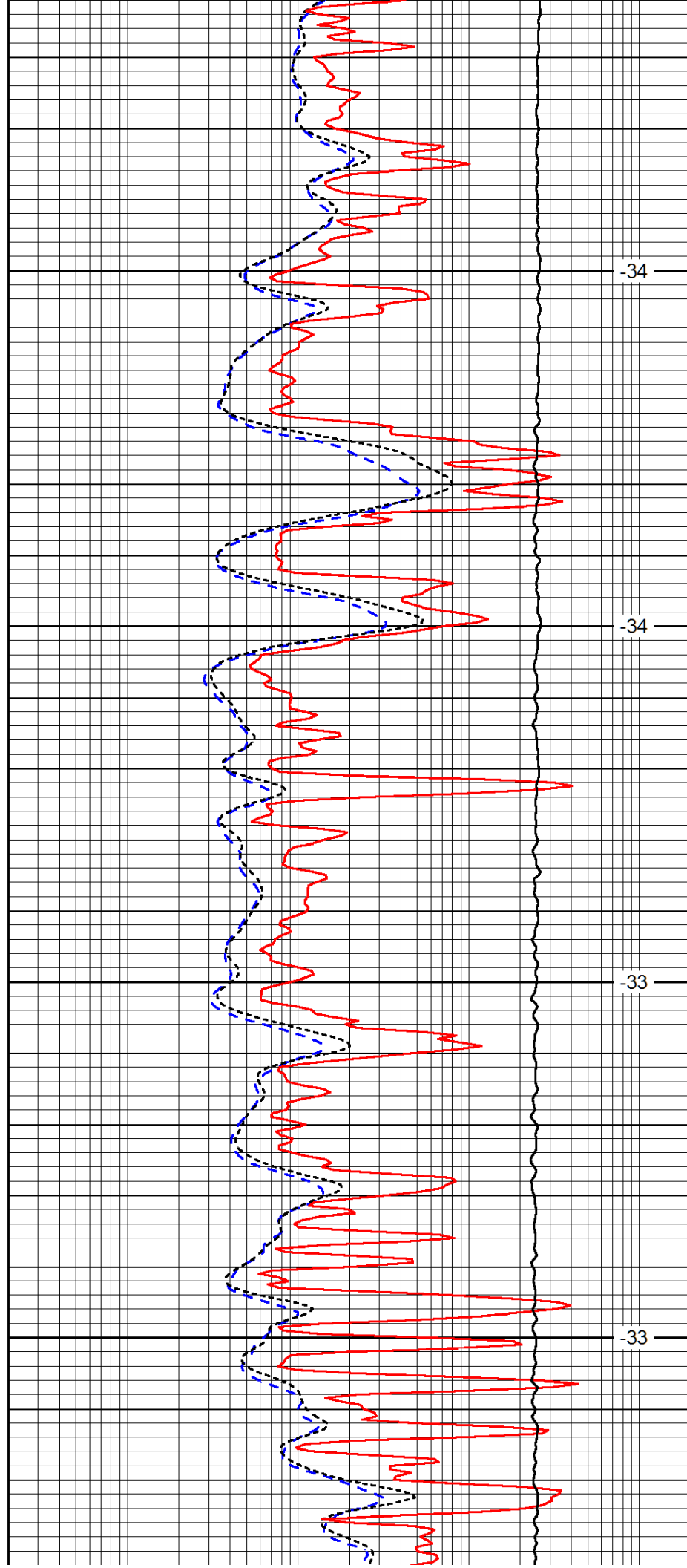


5600

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5700

5750

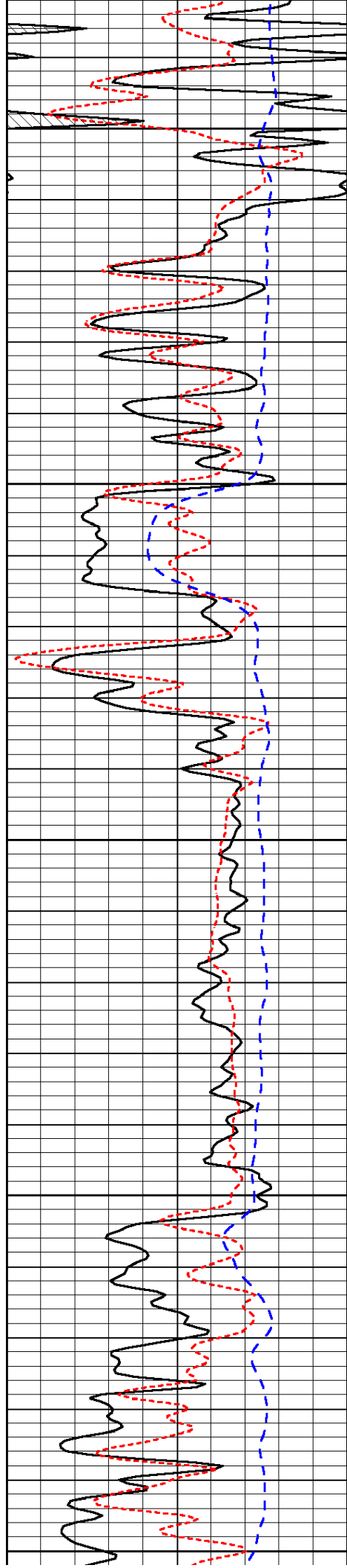


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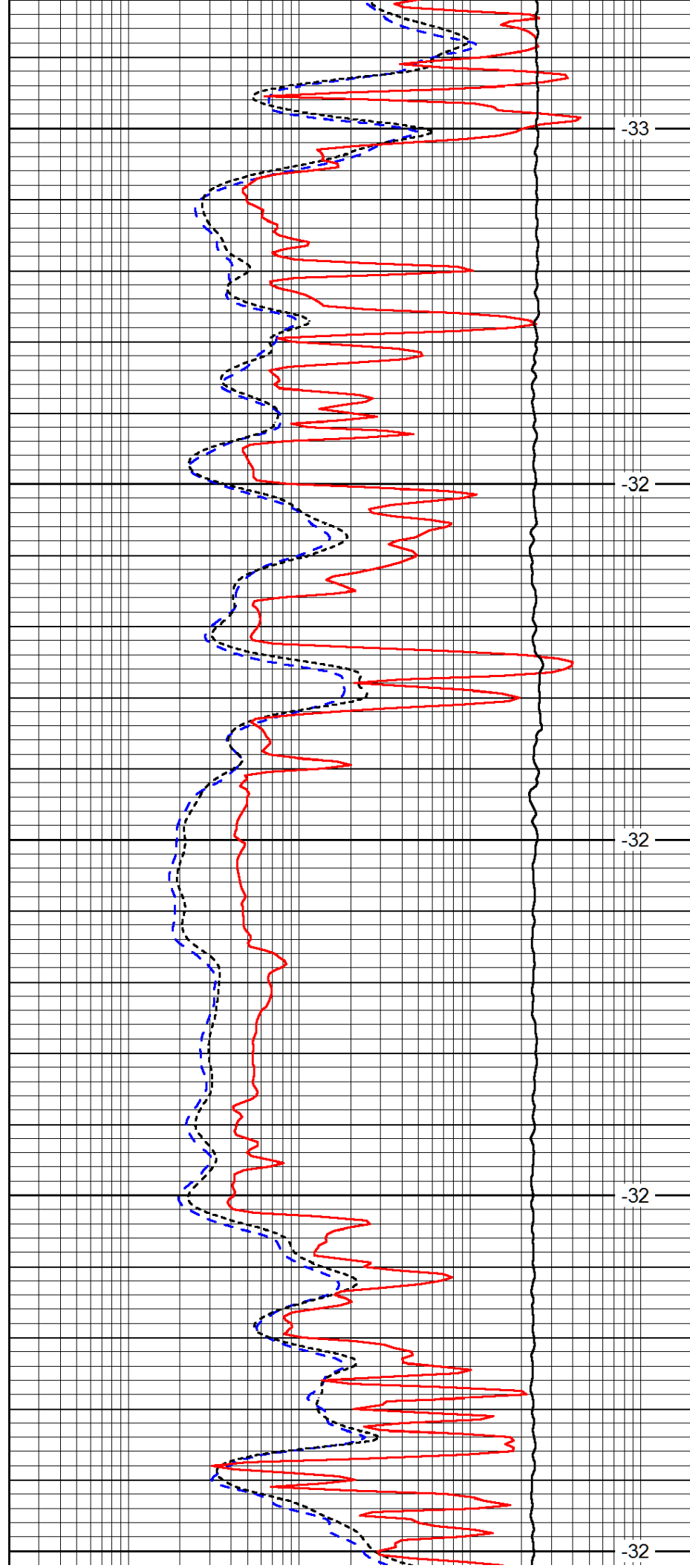
5800

5850

5900

5950

6000



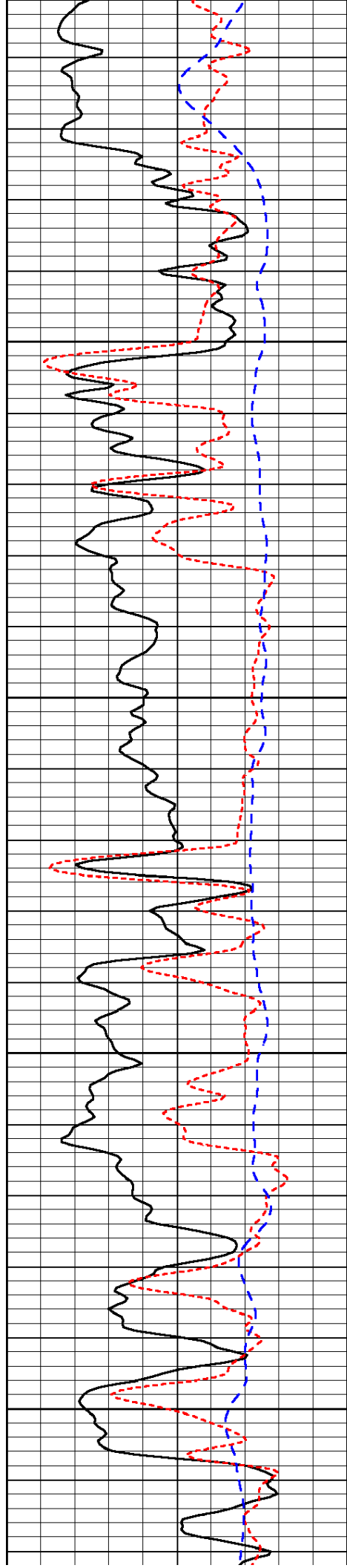
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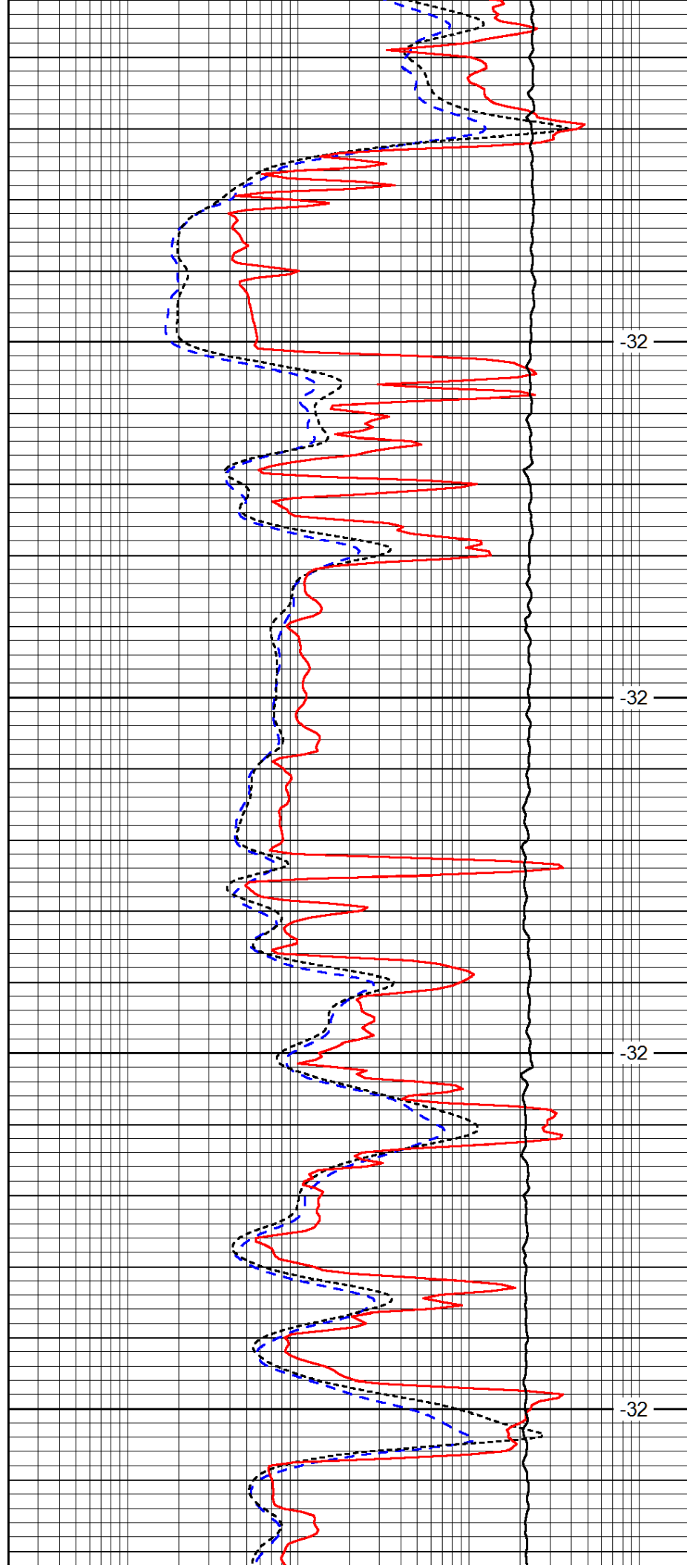


6050

6100

6150

6200

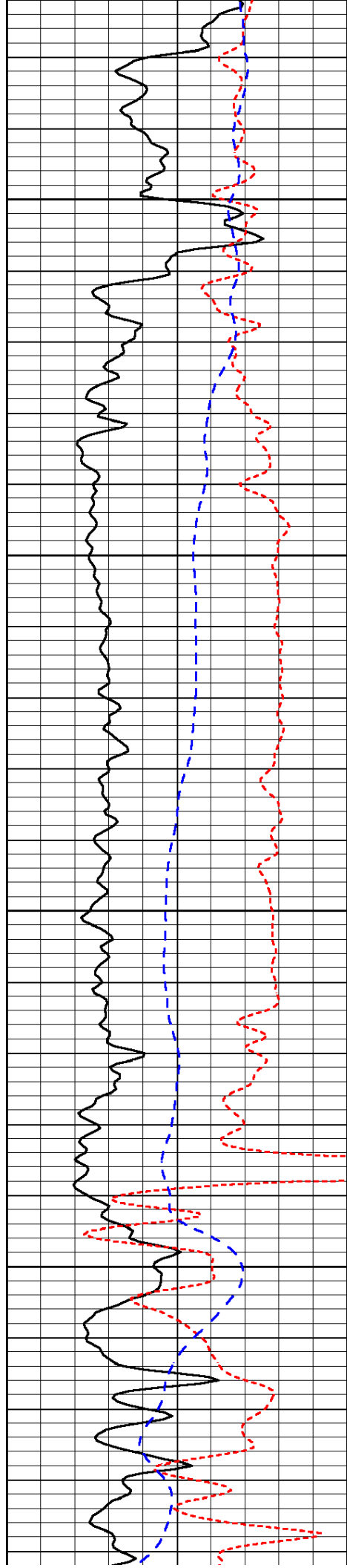


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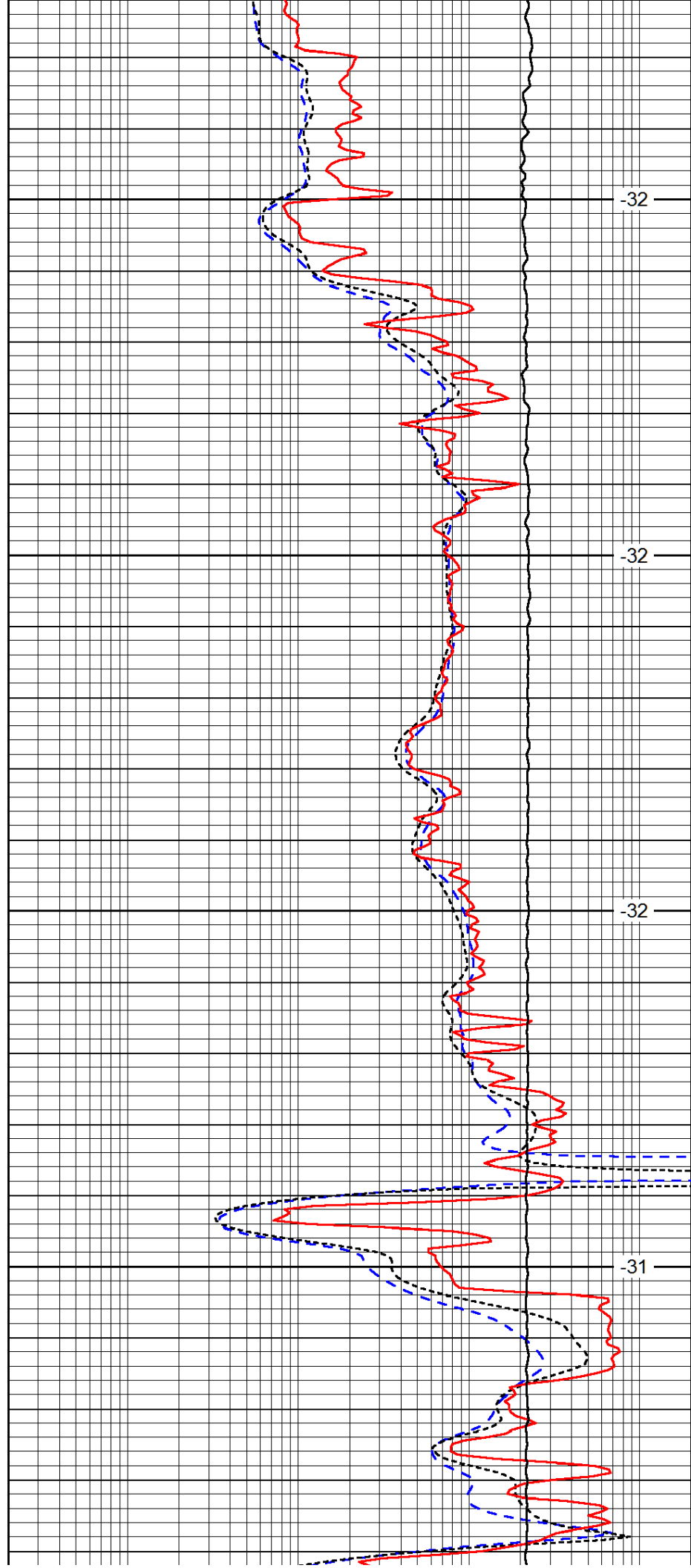


6250

6300

6350

6400

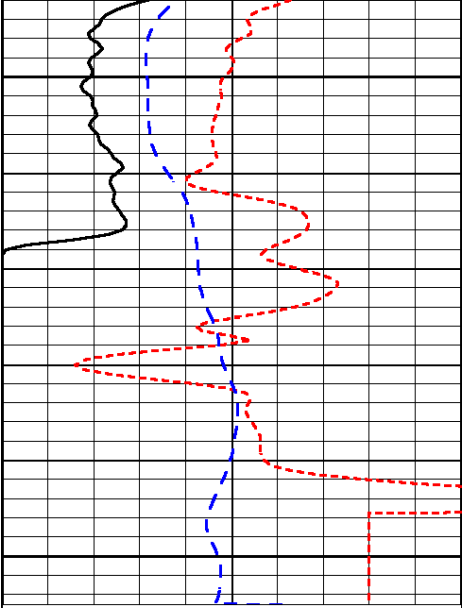


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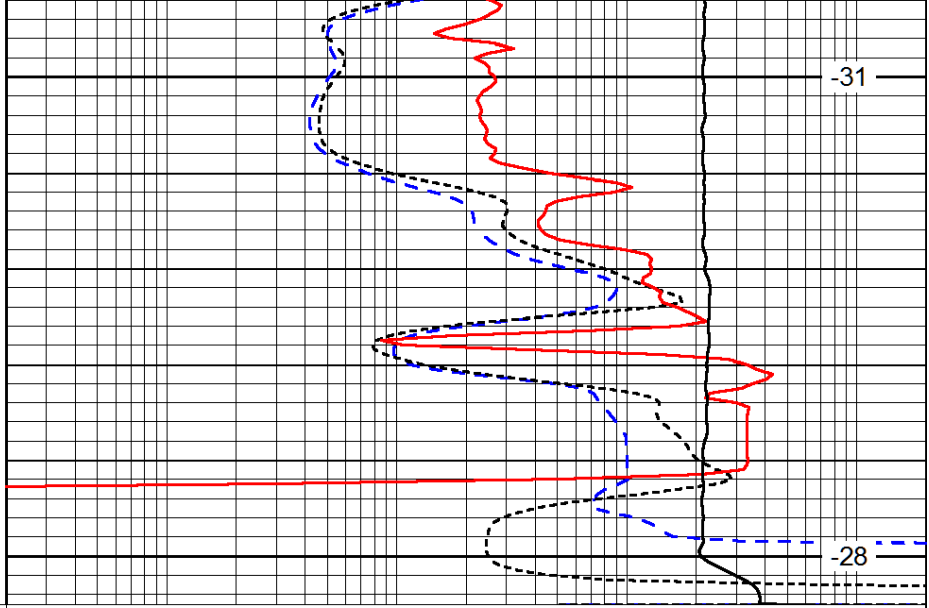
-31



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

6450

6500



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

LSPD