



Pioneer Energy Services

# Microresistivity Log

15-153-20,912-00-00

API No.

Company **Murfin Drilling Company, Inc.**

Well **Frisbie No.1-23**

Field

County **Rawlins**

State

**Kansas**

Location

**2310' FNL & 2310' FWL**

Other Services  
CNL/CDL  
DIL/BHCS

Sec: **23**

Twp: **2S**

Rge: **36W**

Elevation

K.B. 3305  
D.F. 3295  
G.L. 3295

Permanent Datum Ground Level

10 Ft. Above Perm. Datum

Elevation 3295

Drilling Measured From Kelly Bushing

Drilling Measured From Kelly Bushing

Date **11/30/2012**

Run Number

**Two**

Depth Driller

**4990**

Depth Logger

**4986**

Bottom Logged Interval

**4985**

Top Log Interval

**3550**

Casing Driller

**8.625 @ 391**

Casing Logger

**389**

Bit Size

**7.875**

Type Fluid in Hole

**Chemical**

Salinity, ppm CL

**1,400**

Density / Viscosity

**9.3 67**

pH / Fluid Loss

**11.5 5.6**

Source of Sample

**Flowline**

Rm @ Meas. Temp

**1.55 @ 62**

Rmf @ Meas. Temp

**1.16 @ 62**

Rmc @ Meas. Temp

**2.09 @ 62**

Source of Rmf / Rmc

**Charts**

Rm @ BHT

**.76 @ 126**

Operating Rig Time

**5 Hours**

Max Rec. Temp. F

**126**

Equipment Number

**17**

Location

**Hays**

Recorded By

**C. Desaire**

Witnessed By

**Rocky Milford**

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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

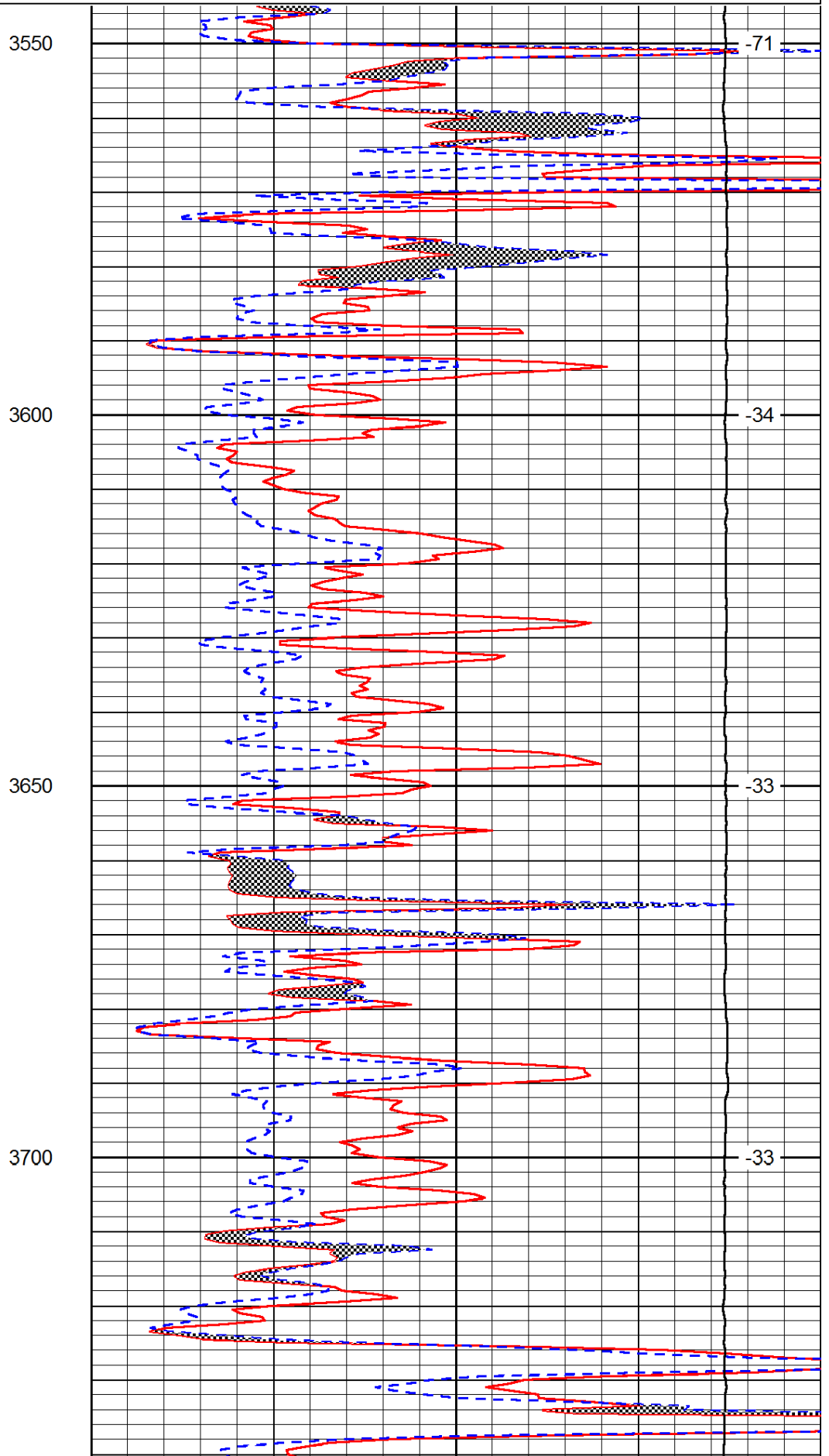
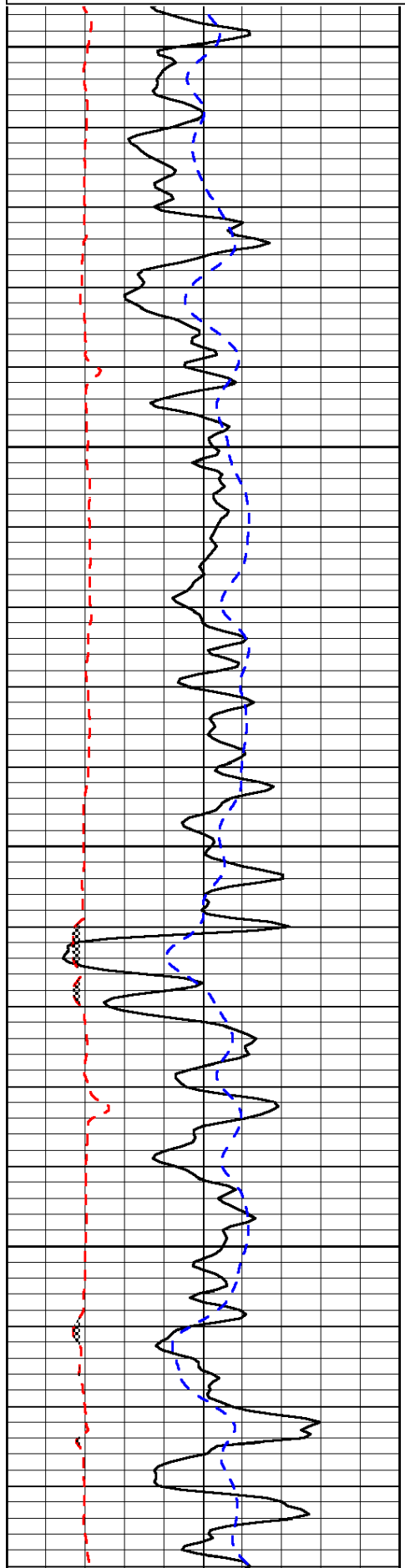
Atwood KS, 16 W to 5 Rd,  
6 N to V Rd, 1/2 E, S Into

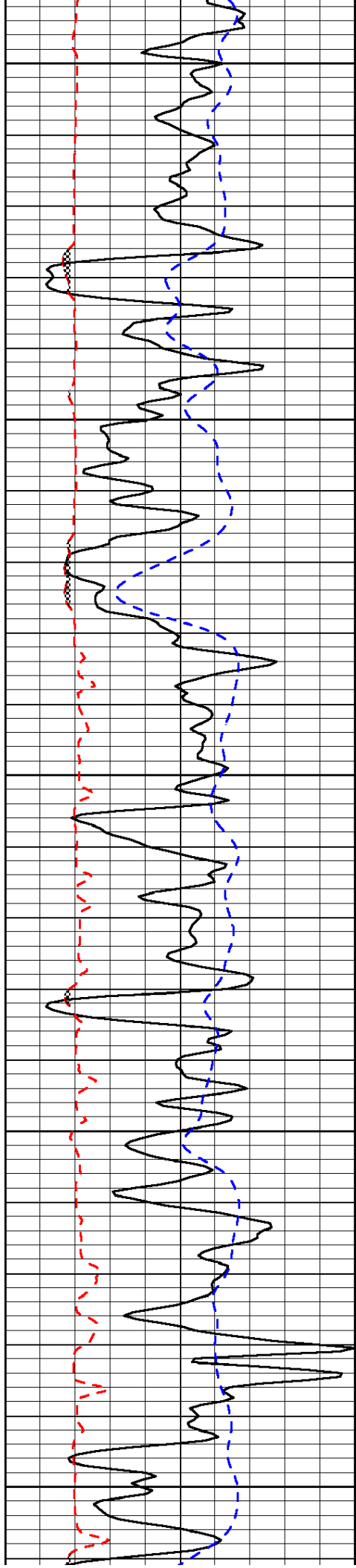
Database File: c:\warrior\data\murfin\_frisbie #1-23\murfhd.db  
Dataset Pathname: dil/murfstk  
Presentation Format: micro  
Dataset Creation: Fri Nov 30 17:56:53 2012  
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
6	Micro Log Caliper (GAPI)	16
-200	SP (mV)	0

0	Micro Inverse 1 X 1	40
0	Micro Normal 2"	40
15000	Line Weight	0

LSPD





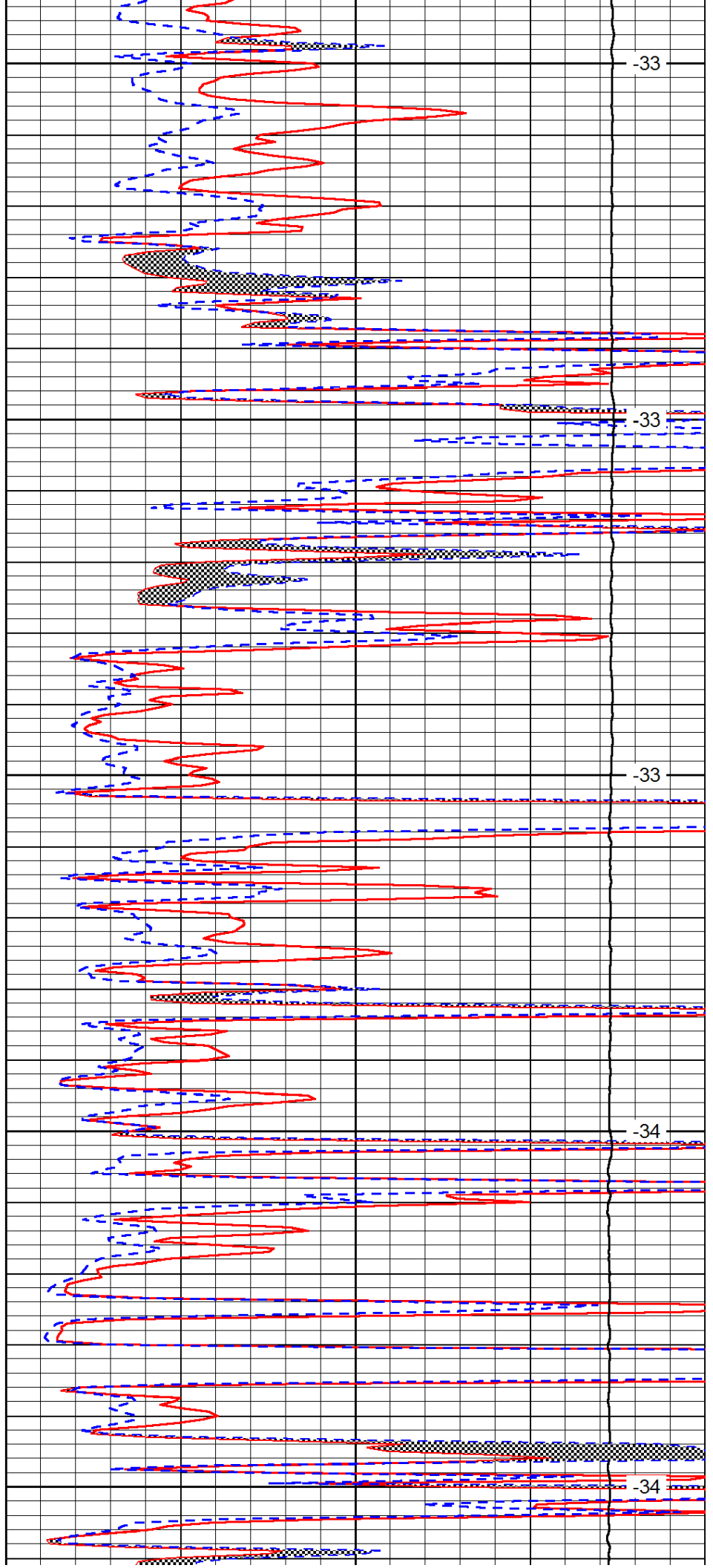
3750

3800

3850

3900

3950



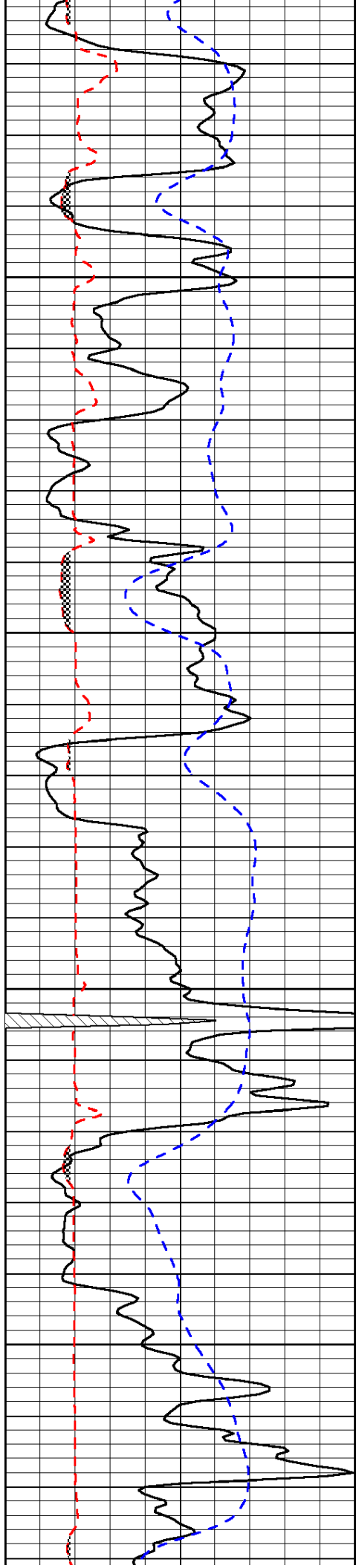
-33

-33

-33

-34

-34

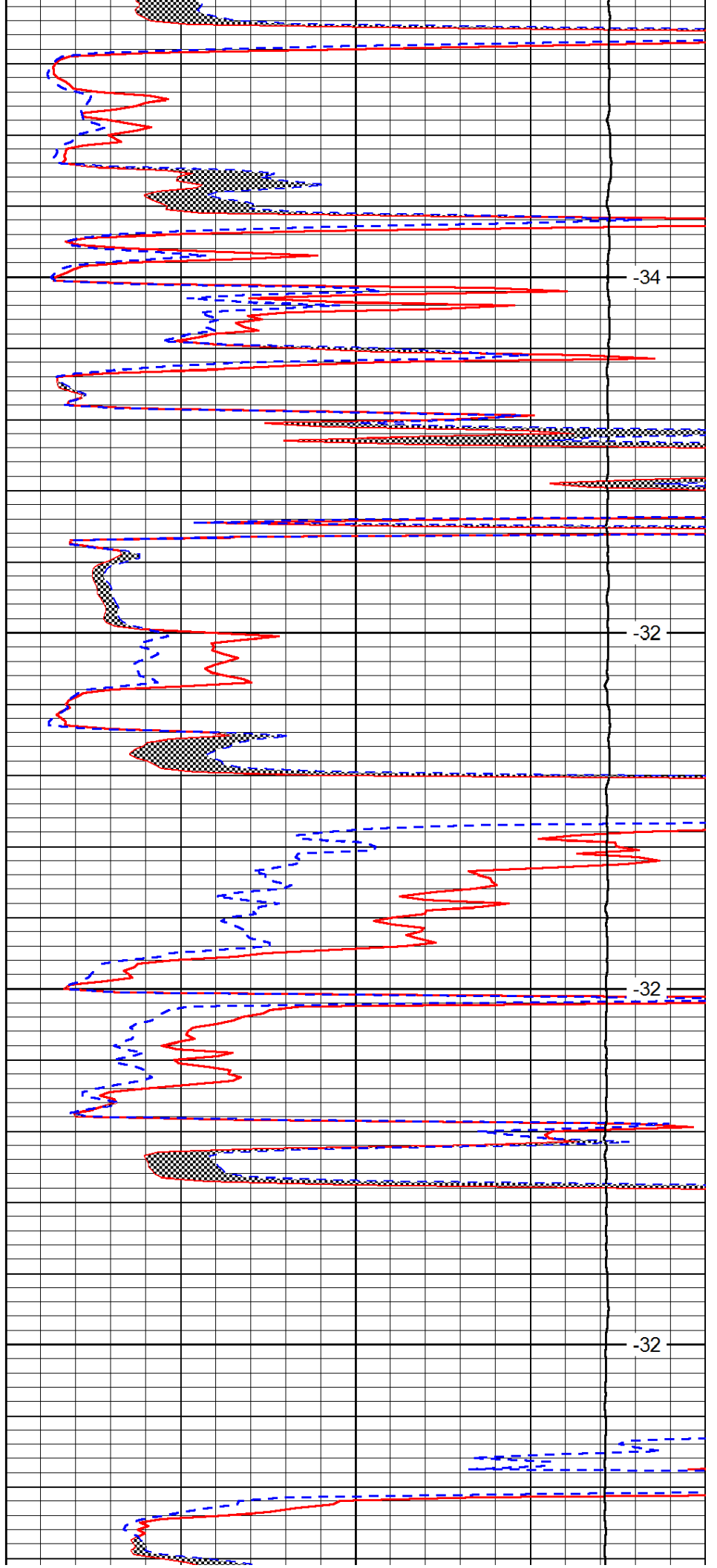


4000

4050

4100

4150

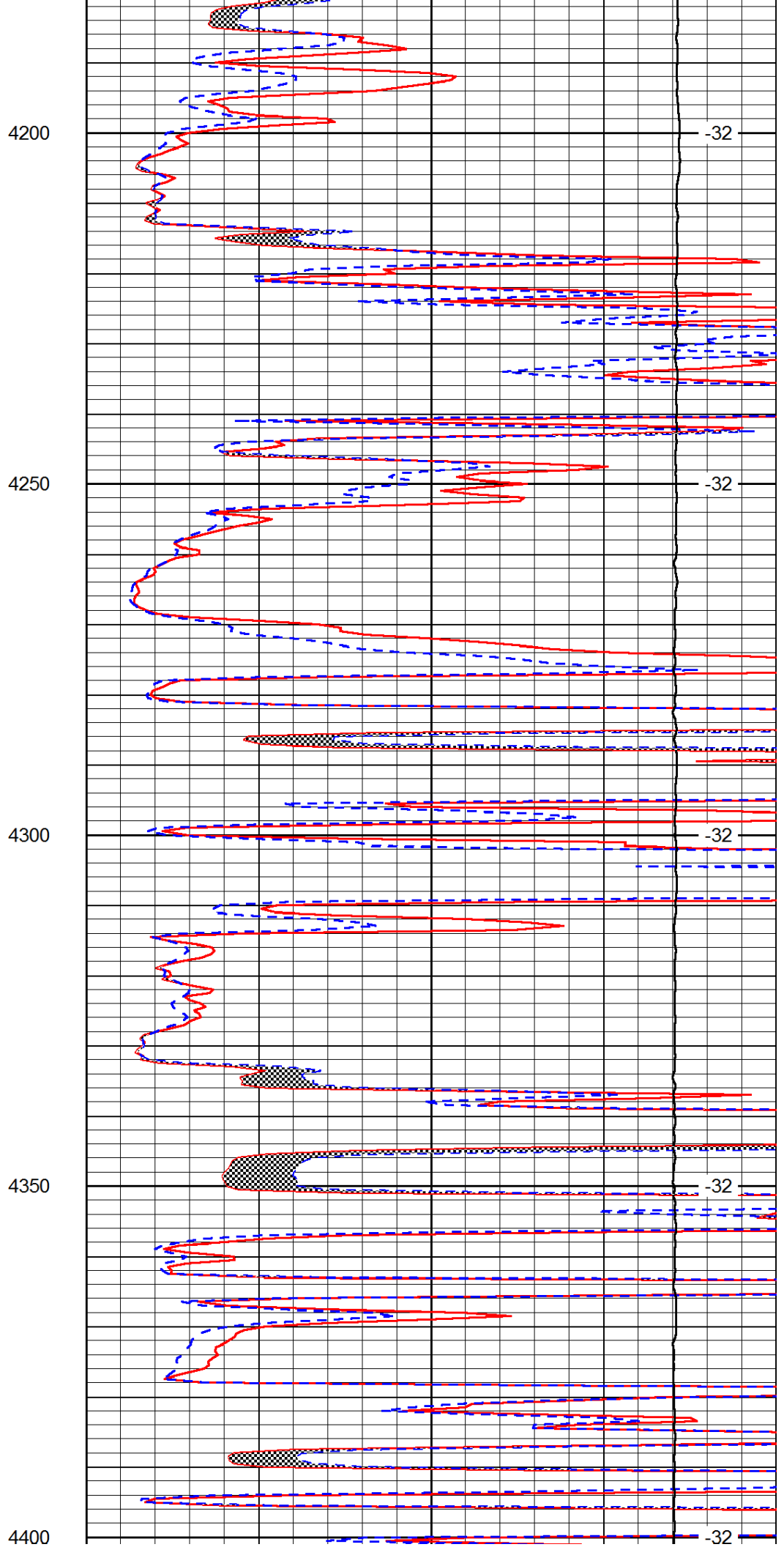
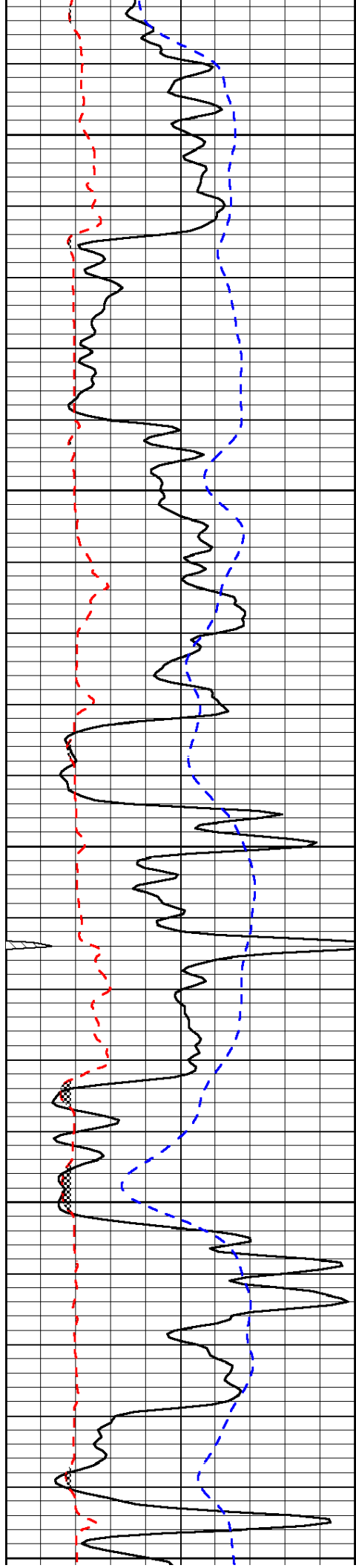


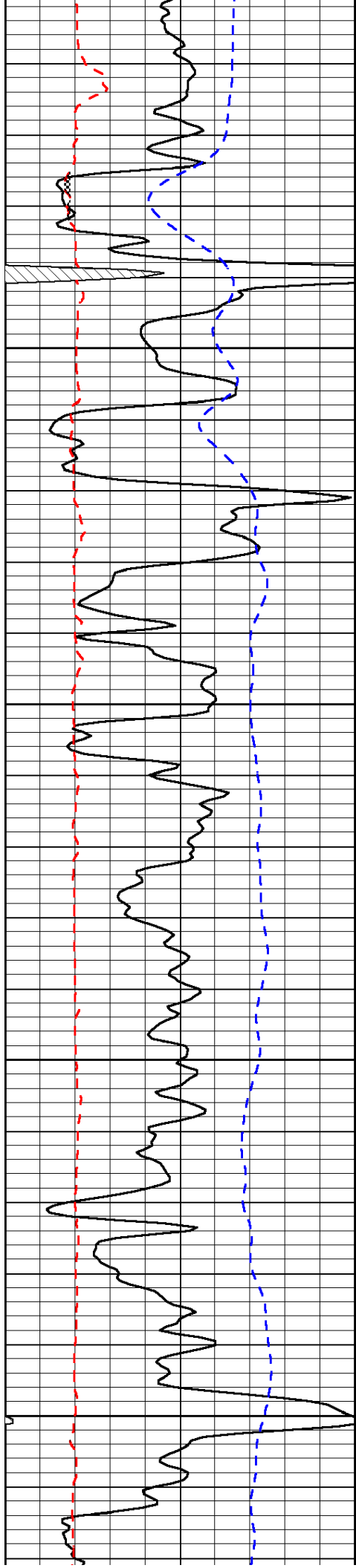
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-32

-32



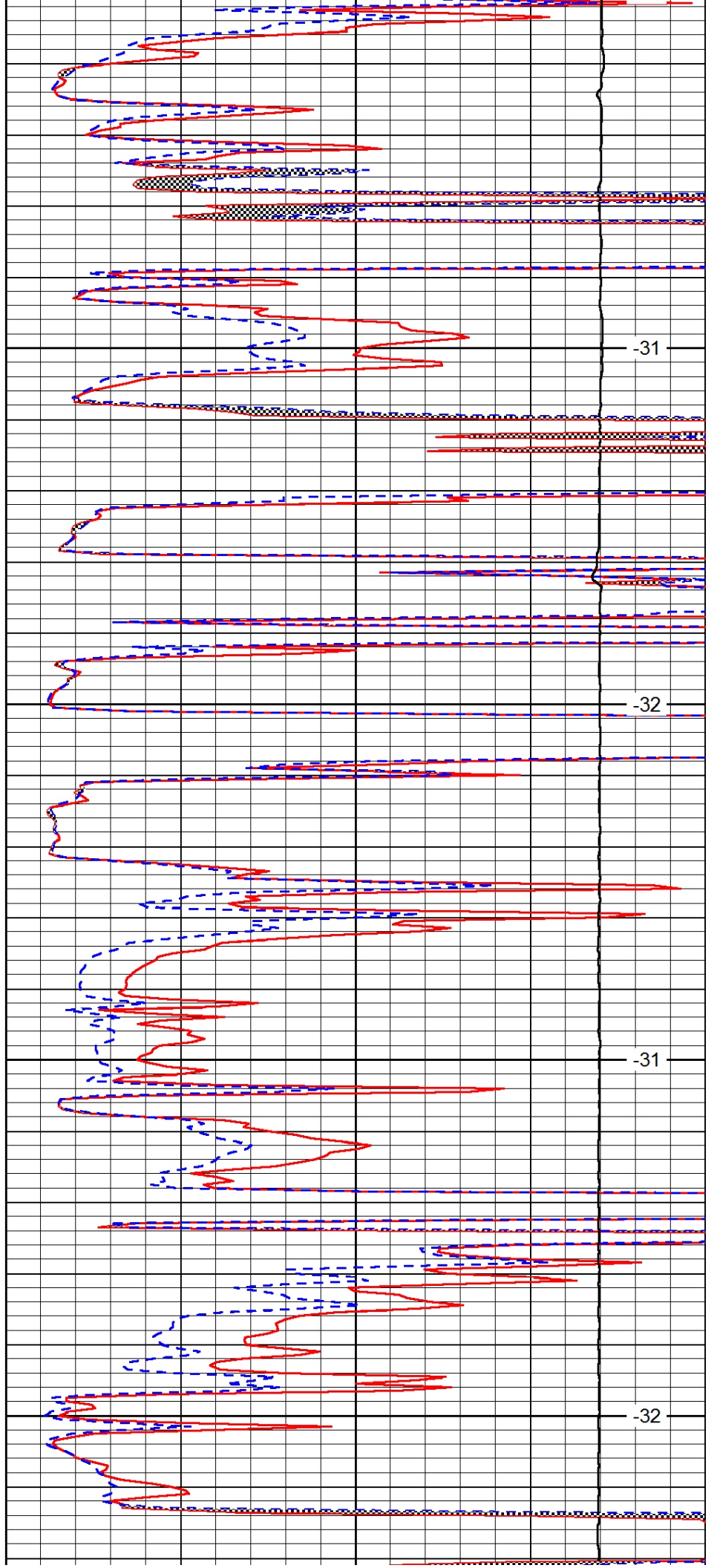


4450

4500

4550

4600

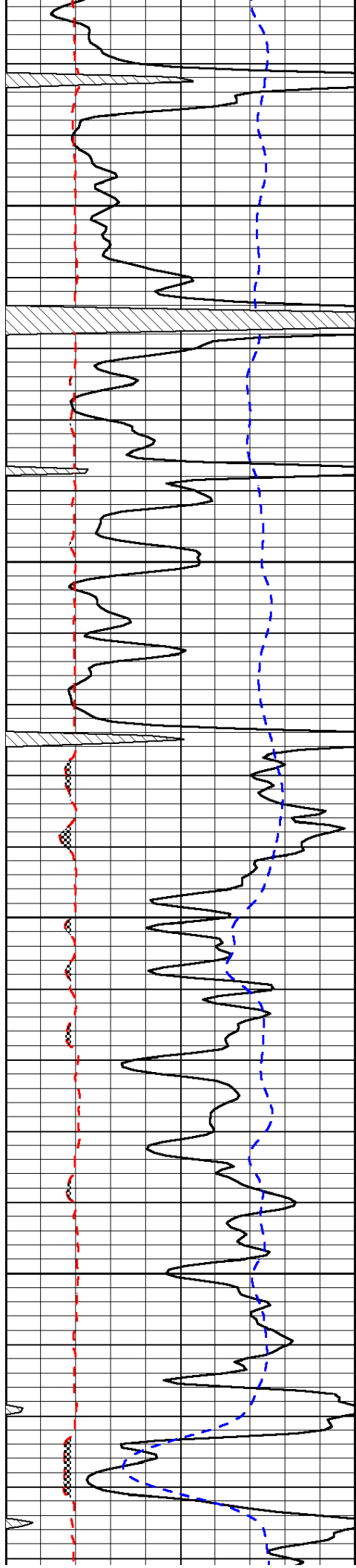


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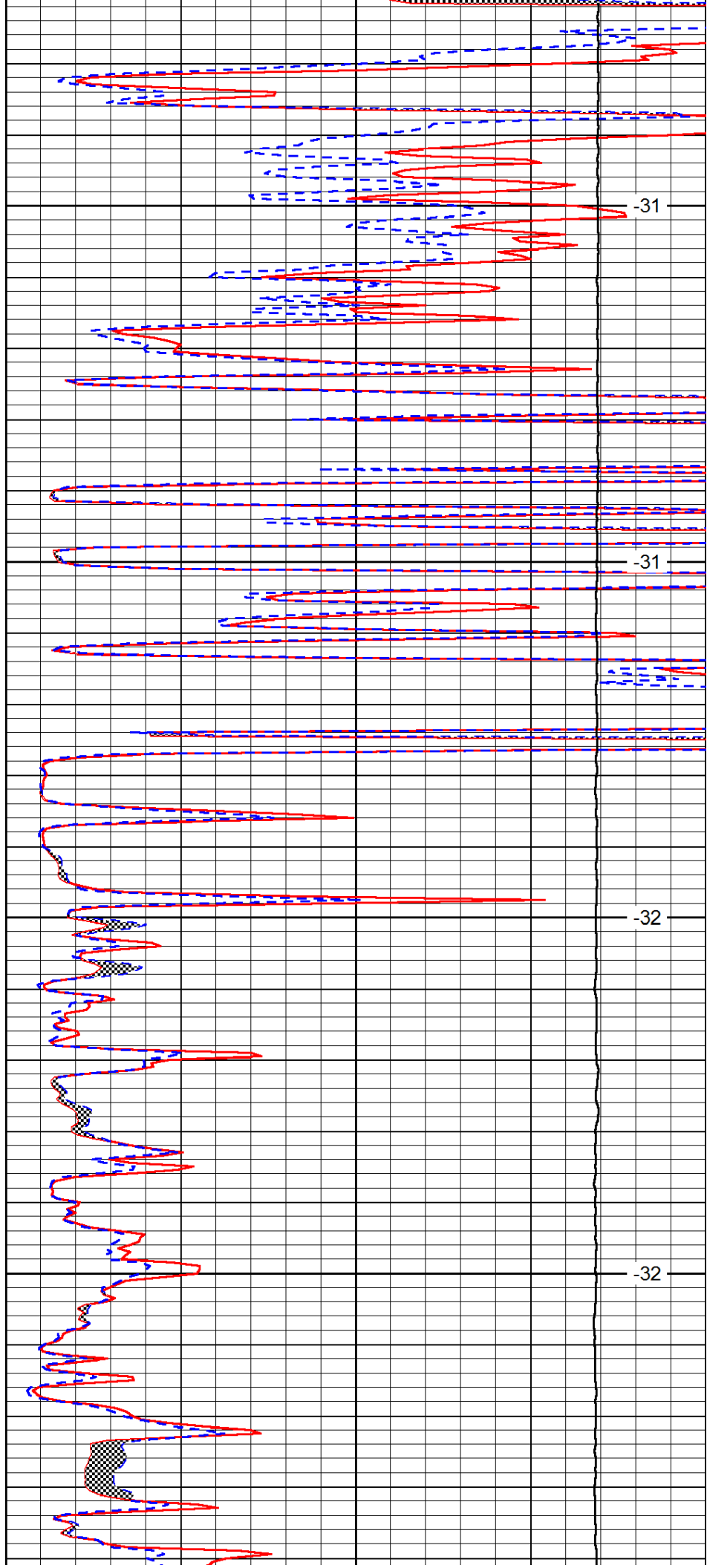


4650

4700

4750

4800

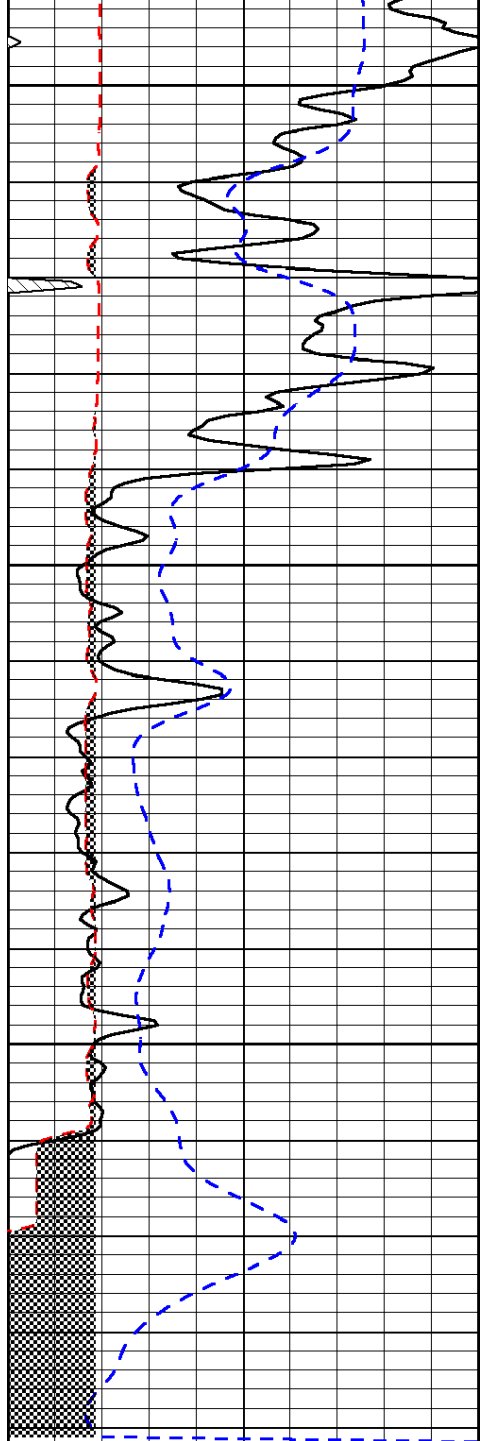


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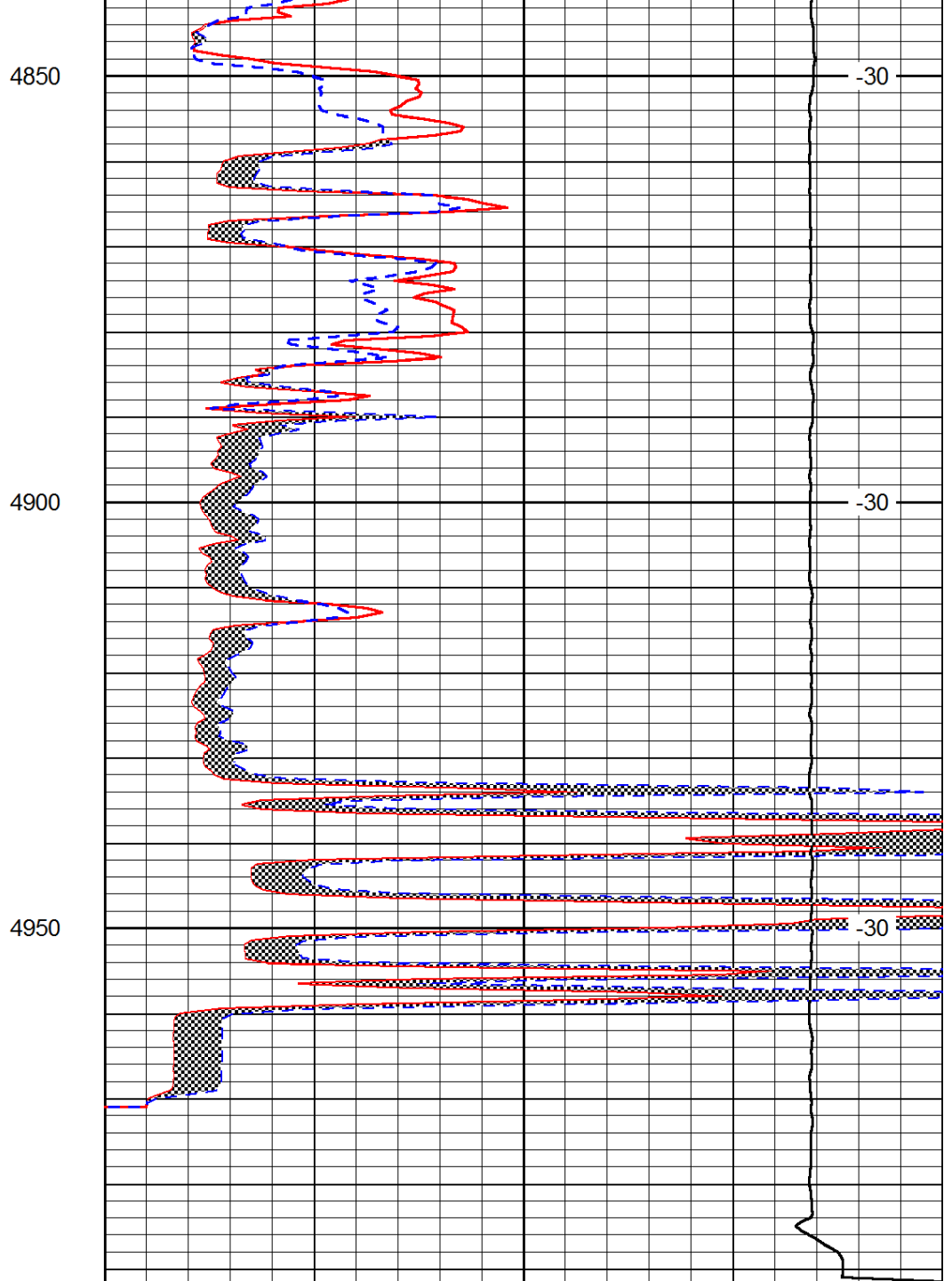
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-32

-32



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