



Microresistivity Log

Pioneer Energy Services

API No.

15-069-20,478-00-00

Company American Warrior, Inc.

Well Katherine No. 2-19

Field

County Gray

State

Kansas

Location 1802' FNL & 640' FWL

Sec: 19

Twp: 24S

Rge: 30W

Elevation

K.B. 2891
D.F. 2880
G.L. 2880

Other Services
CNL/CDL
DIL/BHCS

Permanent Datum Ground Level Elevation 2880
Log Measured From Kelly Bushing 11 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Date

8/12/14

Run Number

Two

Depth Driller

5150

Depth Logger

5152

Bottom Logged Interval

5151

Top Log Interval

4000

Casing Driller

8.625 @ 1702

Casing Logger

1702

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

4.700

Density / Viscosity

9.3 52

pH / Fluid Loss

11.0 9.2

Source of Sample

Flowline

Rm @ Meas. Temp

.50 @ 82

Rmf @ Meas. Temp

.38 @ 82

Rmc @ Meas. Temp

.68 @ 82

Source of Rmf / Rmc

Charts

Rm @ BHT

.32 @ 128

Operating Rig Time

5 Hours

Max Rec. Temp. F

128

Equipment Number

91

Location

Hays

Recorded By

J. Henrickson

Witnessed By

Kevin Timson

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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

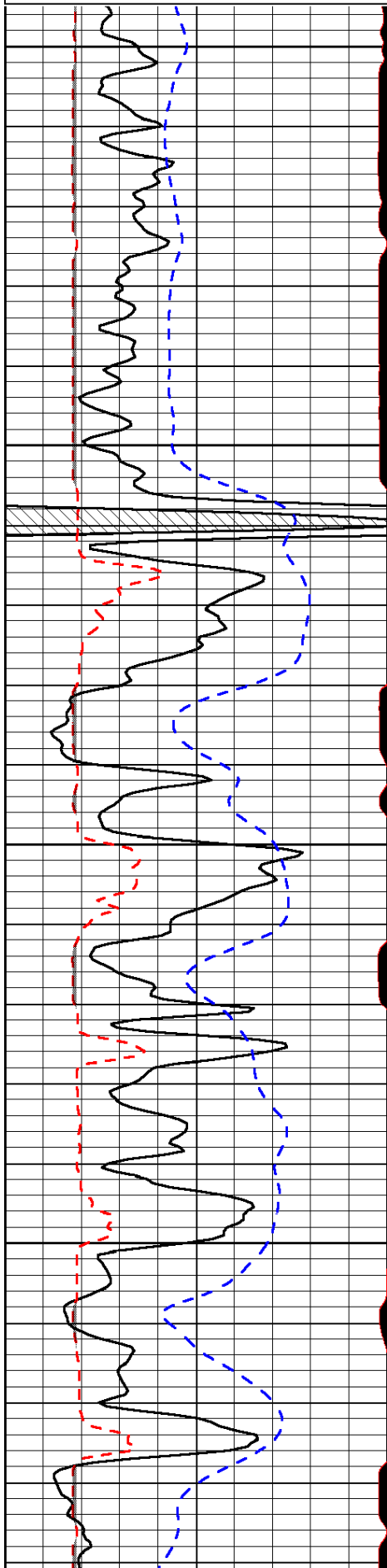
Thank you for using Log-Tech, Inc.
(785) 625-3858

Kalvesta Kansas
West to Havlitch Rd, South to D Rd, West to Mennonite Rd, 3/4 S, East Into

Database File: americanwarrior_katherine_2_19hd.db
Dataset Pathname: DIL/awstk
Presentation Format: micro
Dataset Creation: Tue Aug 12 21:33:21 2014
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
6	MCAL (GAPI)	16
2.875	Mud Cake (GAPI)	7.875
-200	SP (mV)	0

0	Micro Inverse 1 X 1	40
0	Micro Normal 2"	40
10000	Line Weight	0
		LSPD

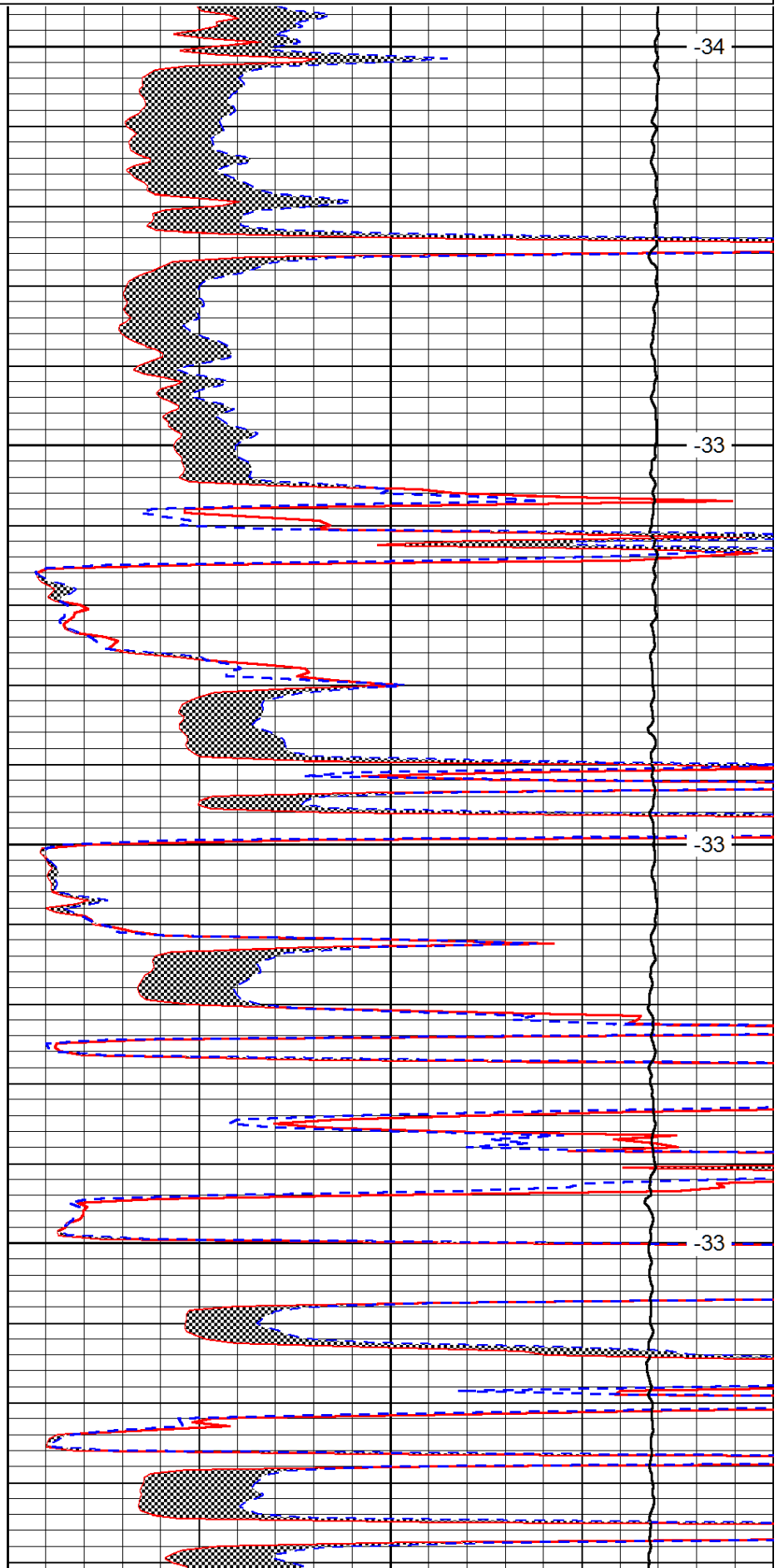


4000

4050

4100

4150

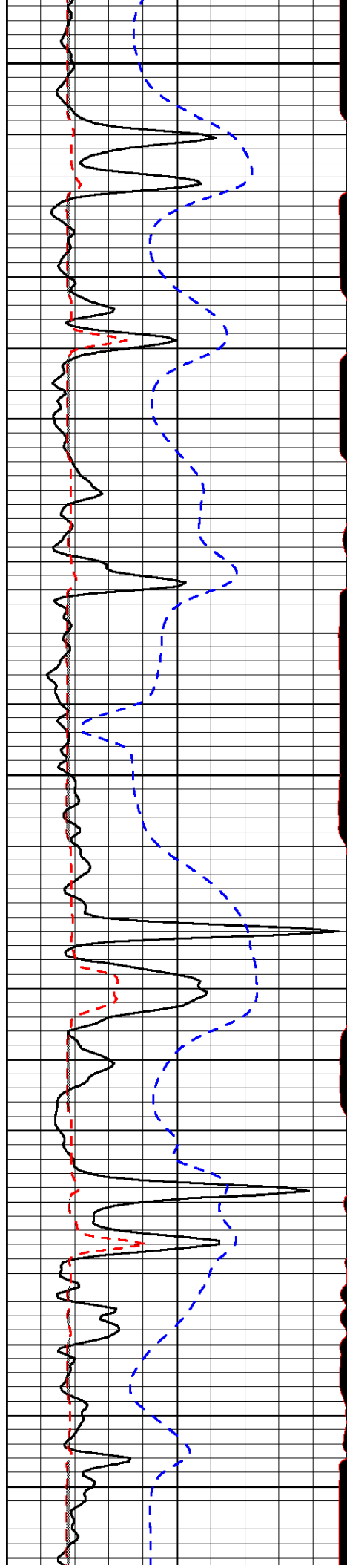


-34

-33

-33

-33



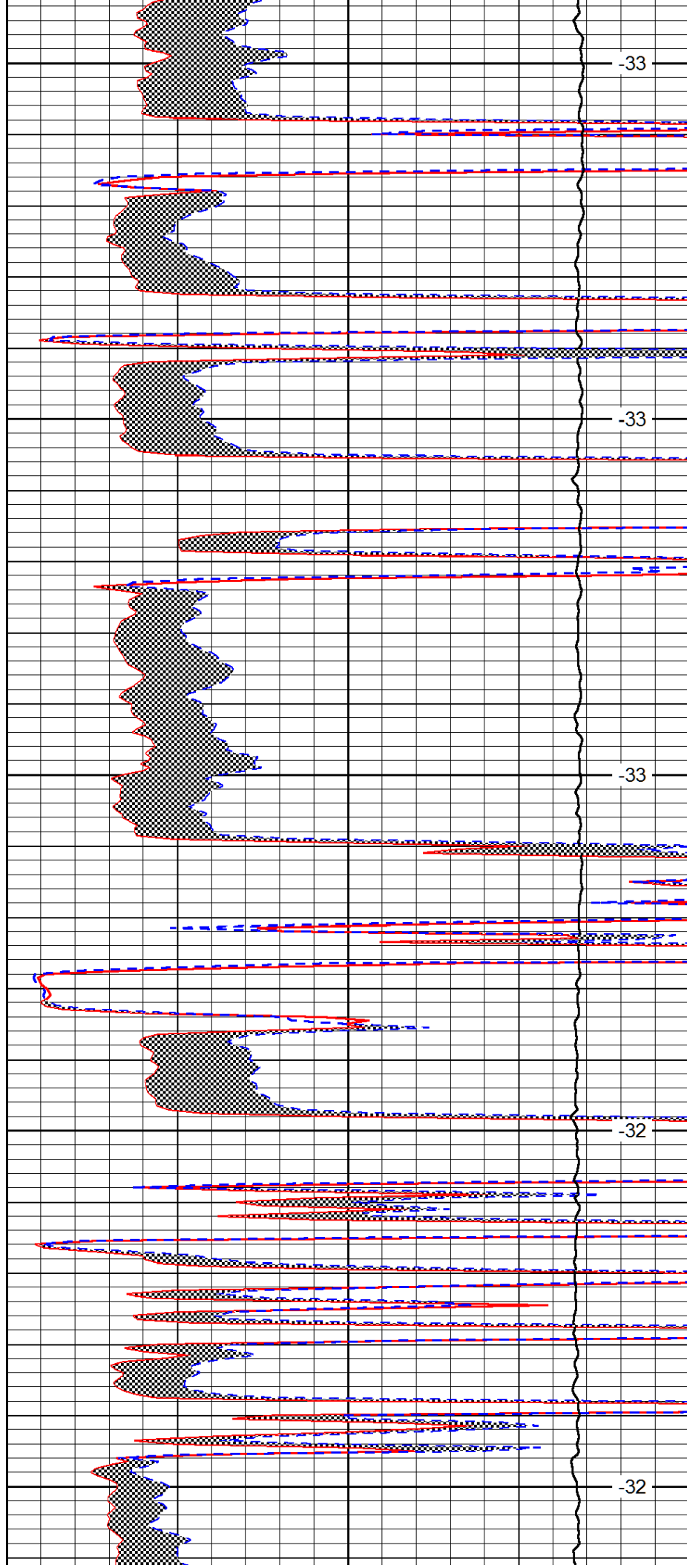
4200

4250

4300

4350

4400



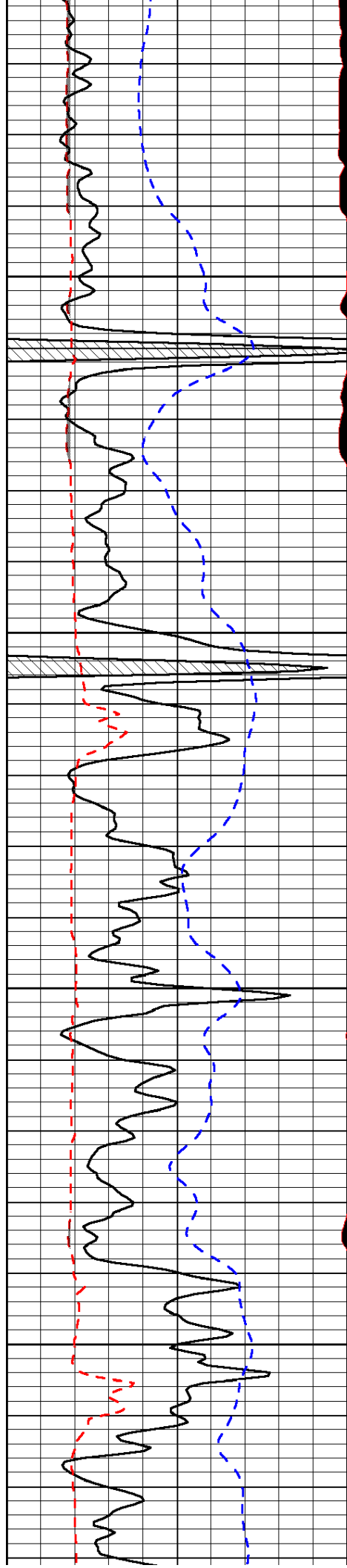
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-33

-33

-32

-32

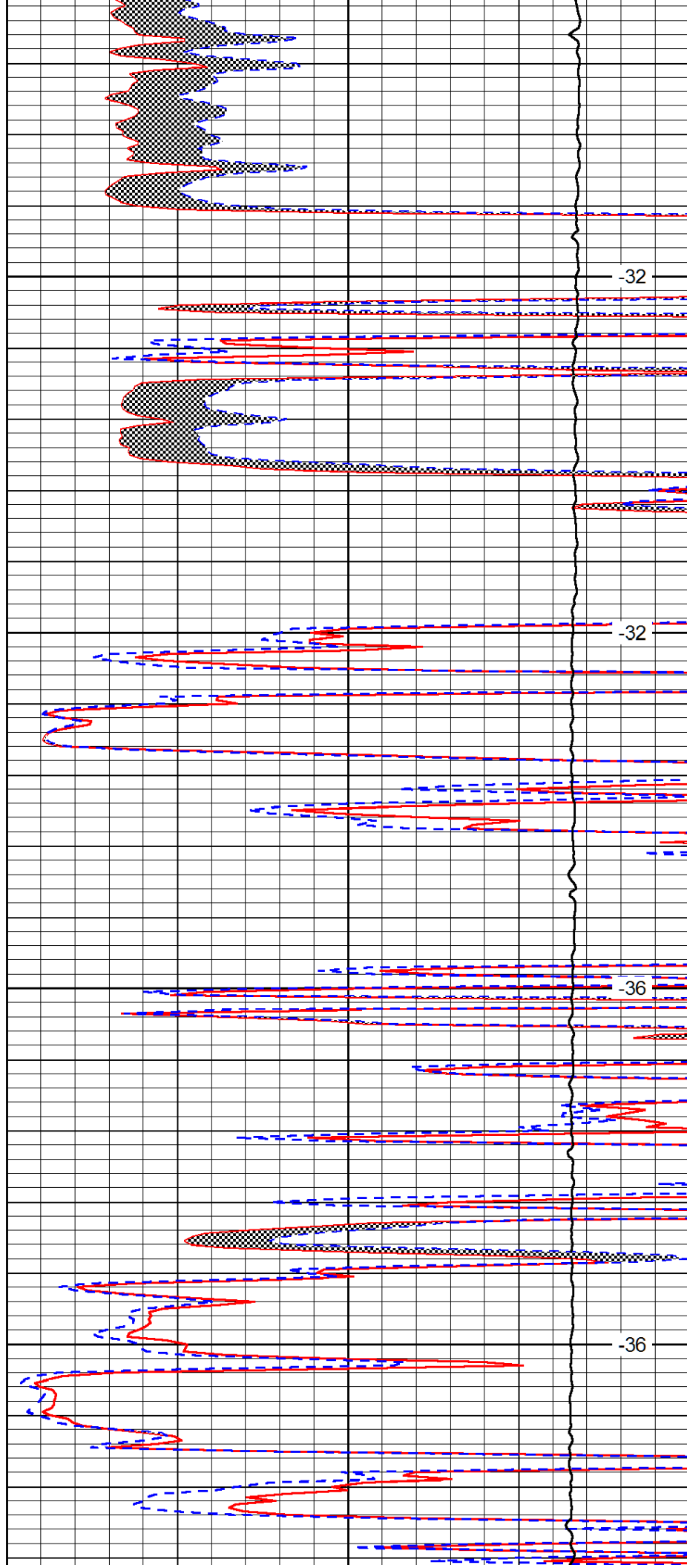


4450

4500

4550

4600

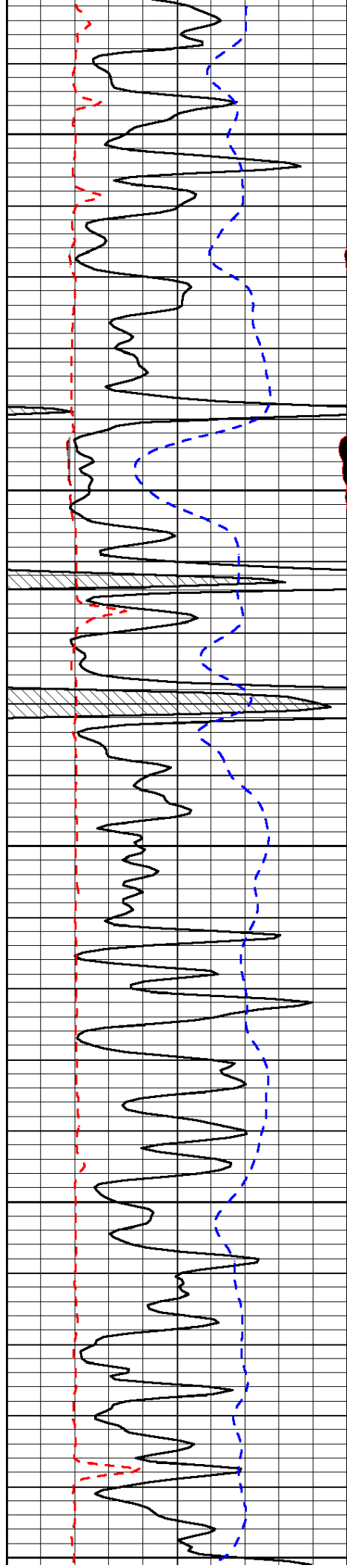


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-32

-36

-36



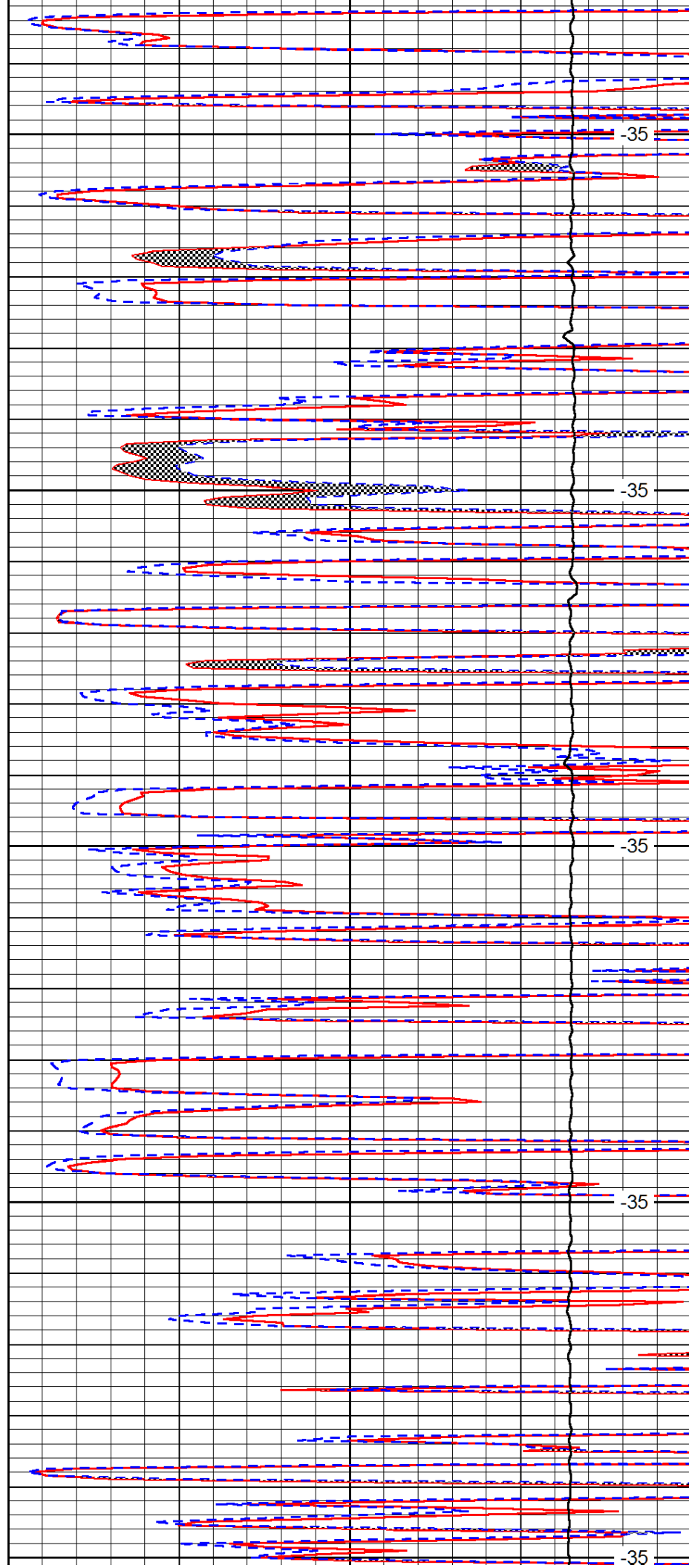
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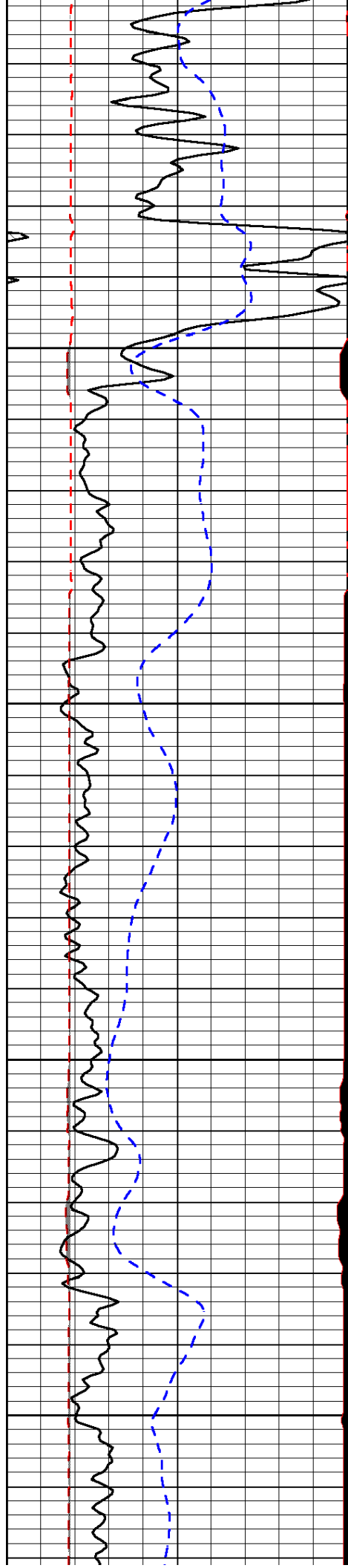
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4750

4800

4850



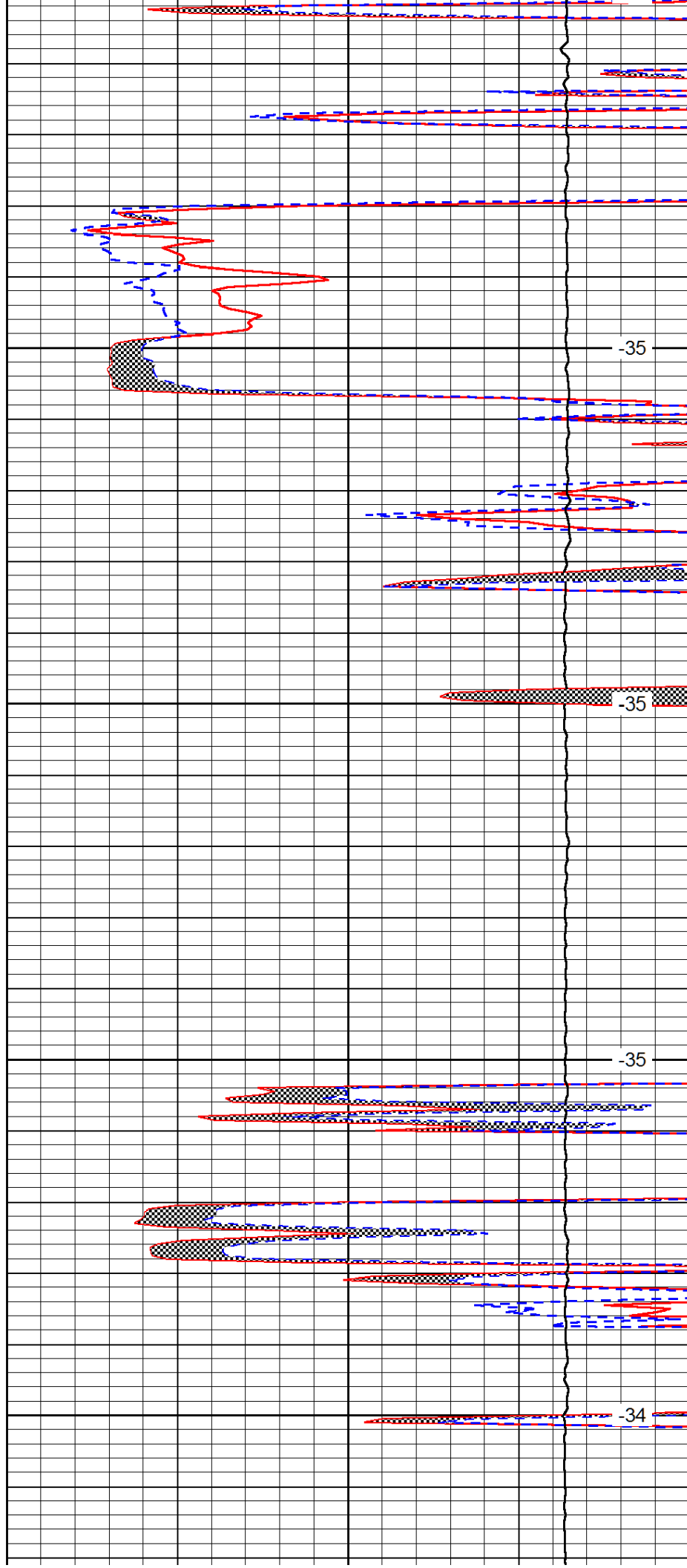


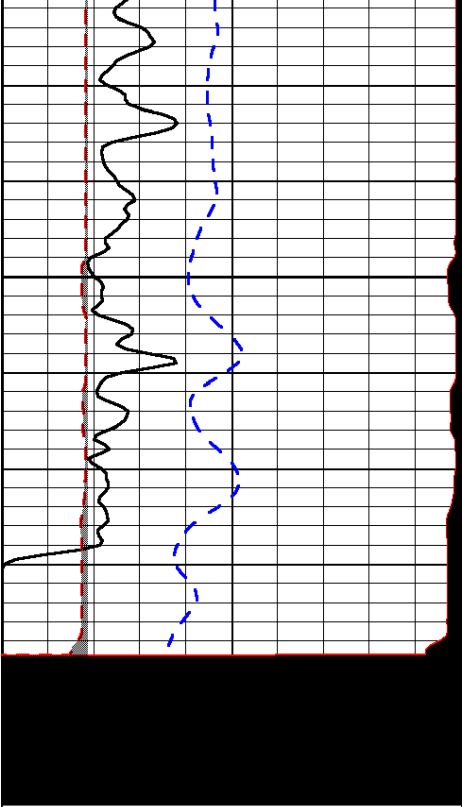
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4950

5000

5050

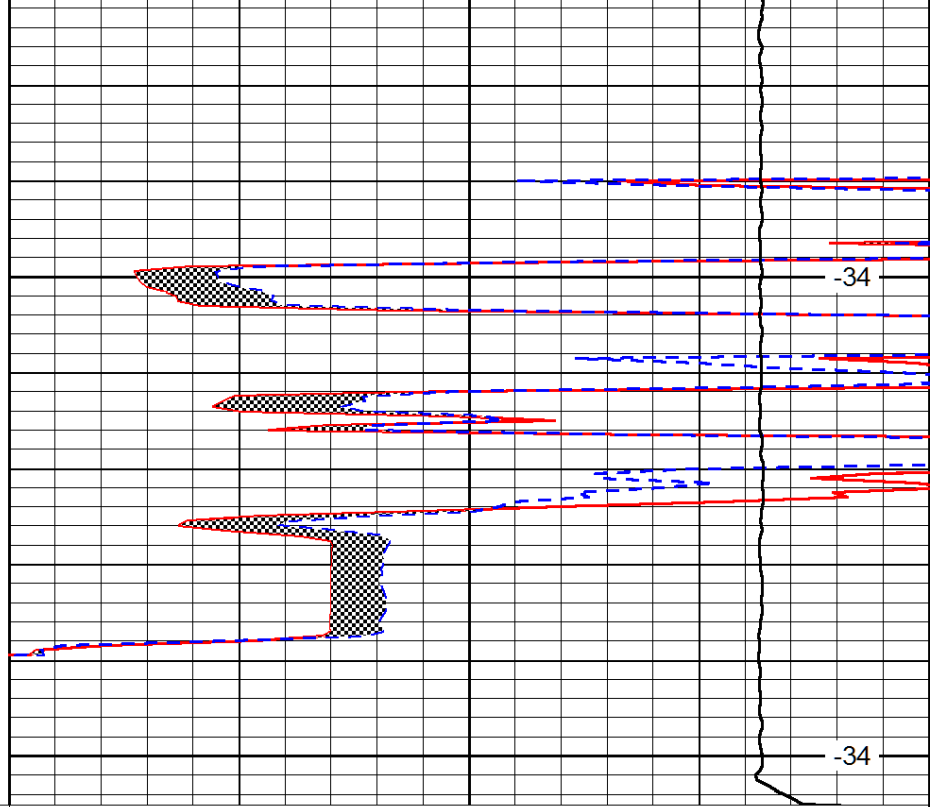




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