



Microresistivity Log

Pioneer Energy Services

API No.

15-109-21,192-00-00

Company Lario Oil & Gas Company

Well Nuss No. 2-24

Field Unknown

County Logan State Kansas

Location 2310' FNL & 660' FEL

Sec: 24 Twp: 14S Rge: 32W

Other Services
CNL/CDL
DIL

Permanent Datum Ground Level Elevation 2749

Log Measured From Kelly Bushing 11 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing Elevation
K.B. 2760
D.F. 2749
G.L. 2749

Date 7/31/2013

Run Number Two

Depth Driller 4550

Depth Logger 4549

Bottom Logged Interval 4548

Top Log Interval 3300

Casing Driller 8.625 @ 223

Casing Logger 223

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity,ppm CL 4,400

Density / Viscosity 9.3 55

pH / Fluid Loss 10.5 8.8

Source of Sample Flowline

Rm @ Meas. Temp .30 @ 78

Rmf @ Meas. Temp .23 @ 78

Rmc @ Meas. Temp .41 @ 78

Source of Rmf / Rmc Charts

Rm @ BHT .19 @ 122

Operating Rig Time 4 Hours

Max Rec. Temp. F 122

Equipment Number 91

Location Hays

Recorded By J. Henrickson

Witnessed By Steve Davis

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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.

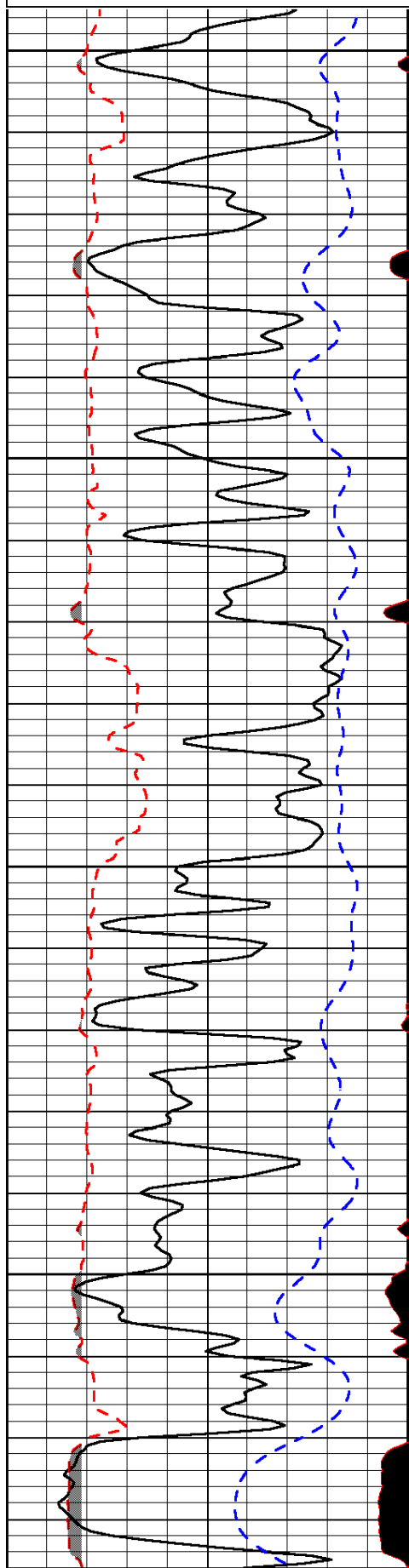
Comments

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

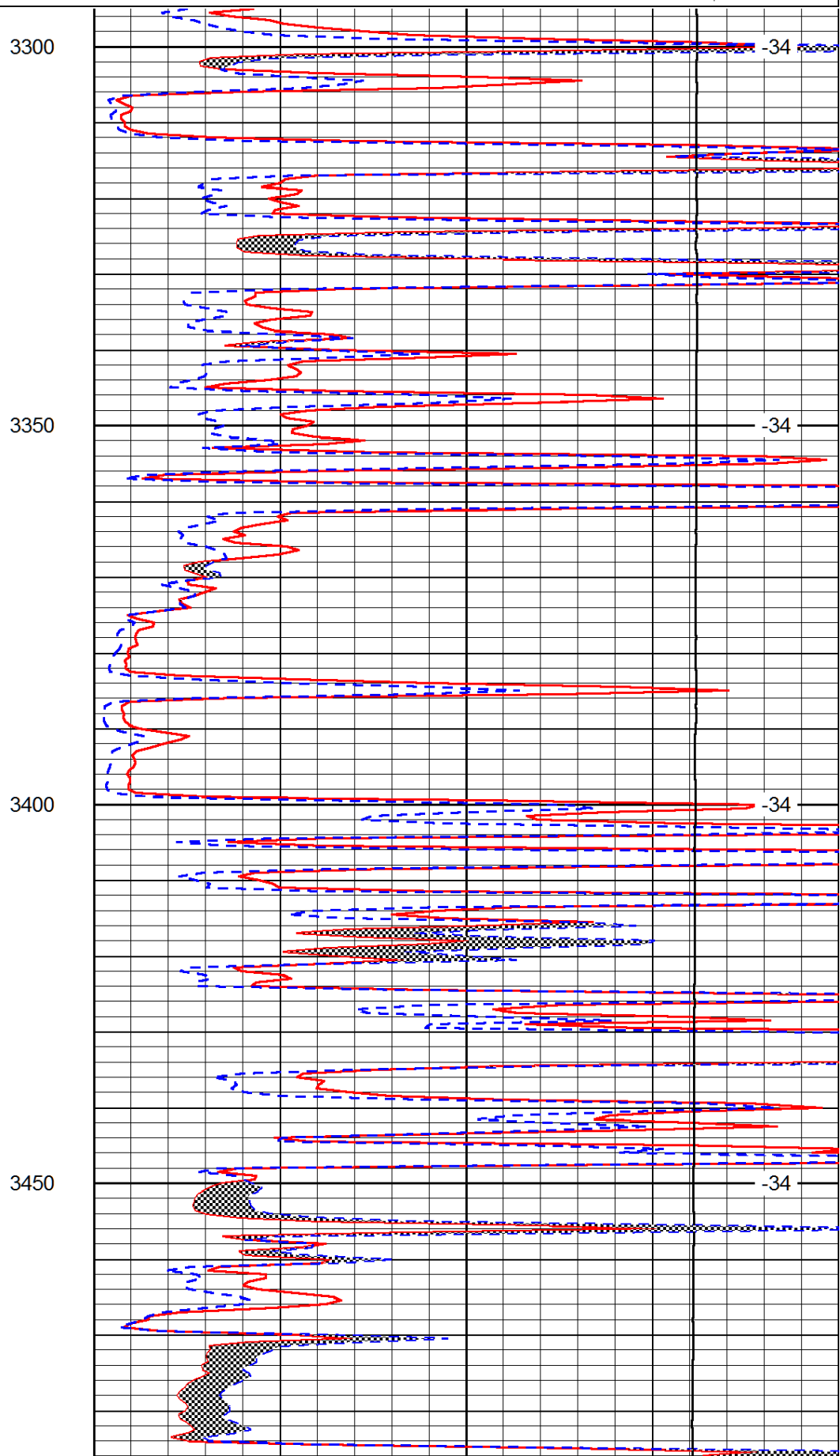
Oakley Kansas
South to Jayhawk Rd, East to 460 Rd, South Into

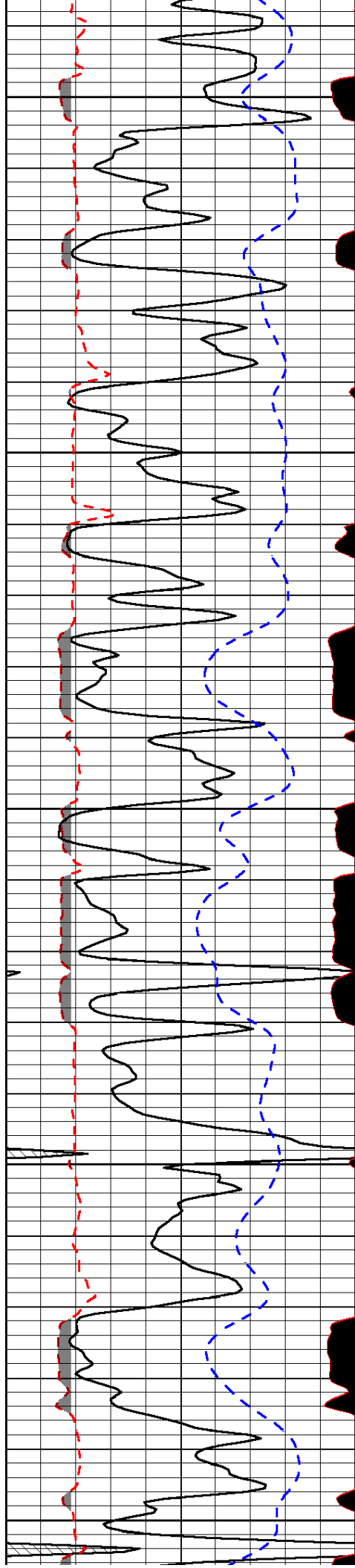
Database File: lario_nuss_2_24hd1.db
Dataset Pathname: DIL/larstk2
Presentation Format: micro
Dataset Creation: Thu Aug 01 00:28:08 2013
Charted by: Depth in Feet scaled 1:240

Charted by: Depth (m) Set scaled 1.210		
0	Gamma Ray (GAPI)	150
6	MCAL (in)	16
2.875	Mud Cake (in)	7.875
-200	SP (mV)	0



0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0
		LSPD (ft/min)





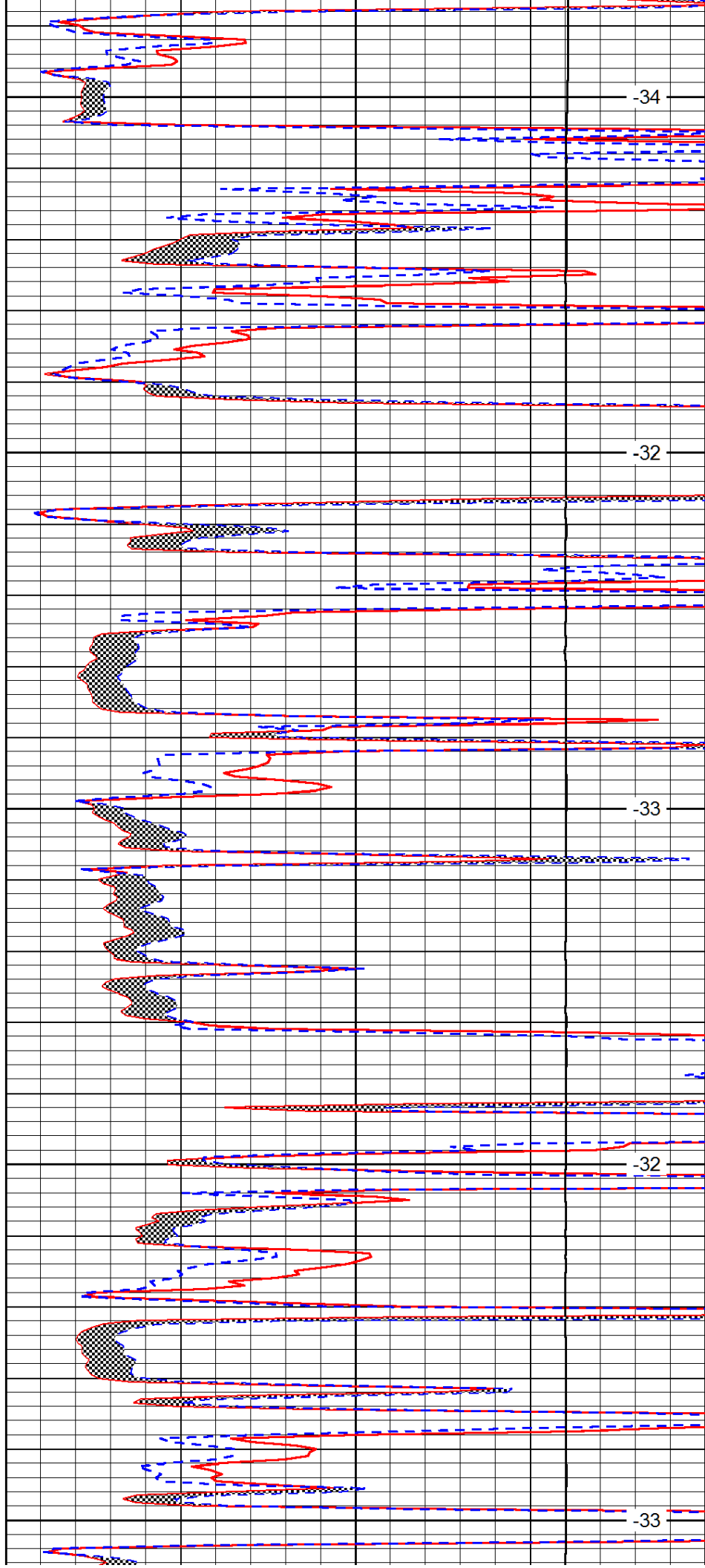
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3550

3600

3650

3700



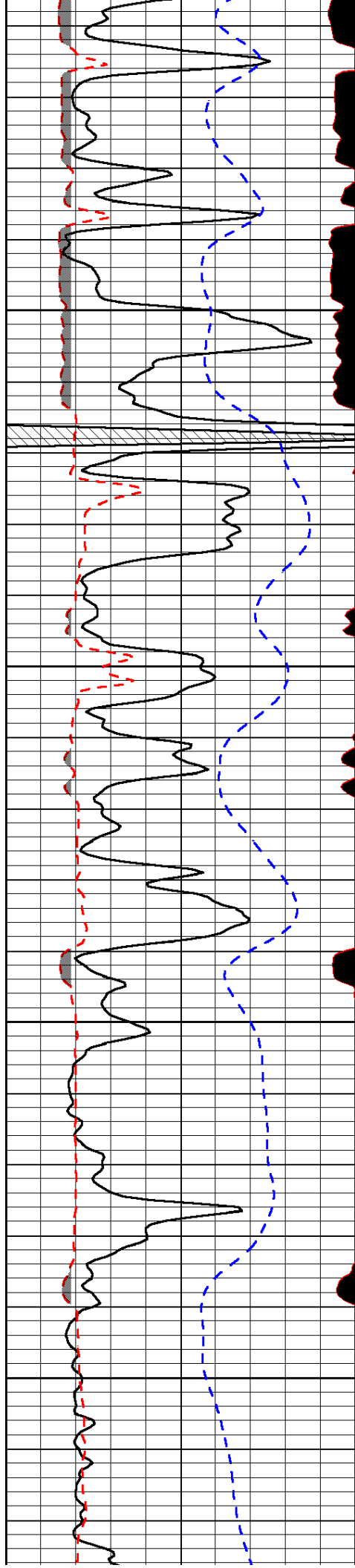
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-32

-33

-32

-33

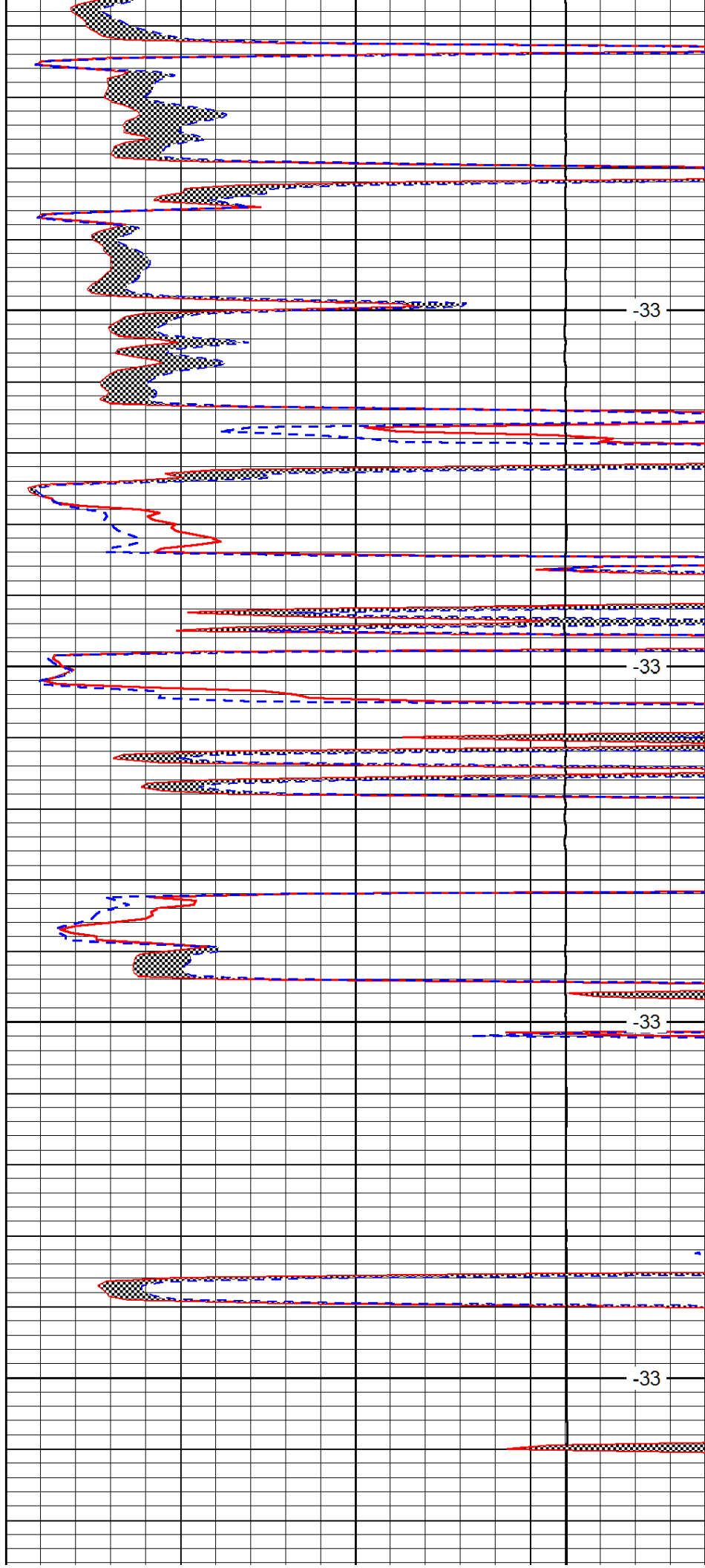


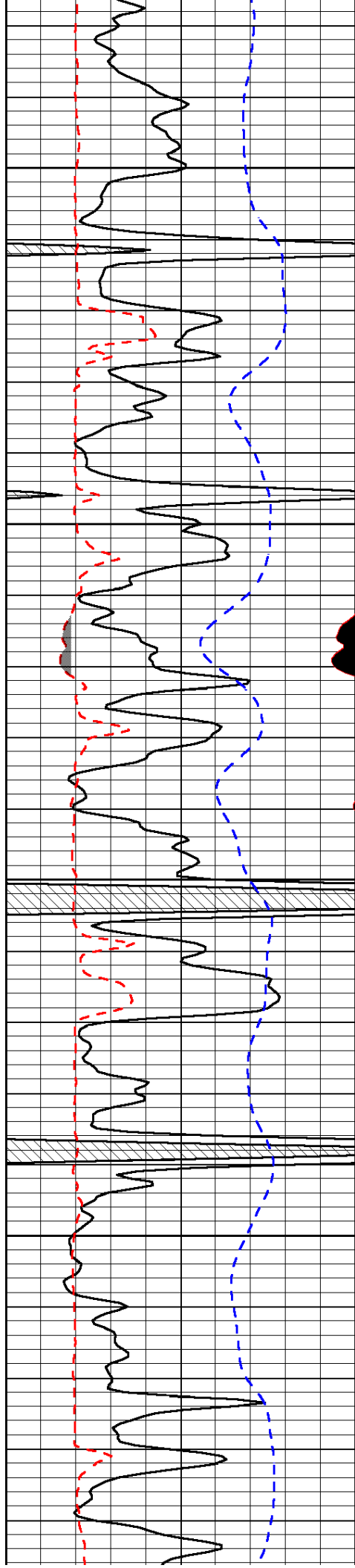
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3800

3850

3900



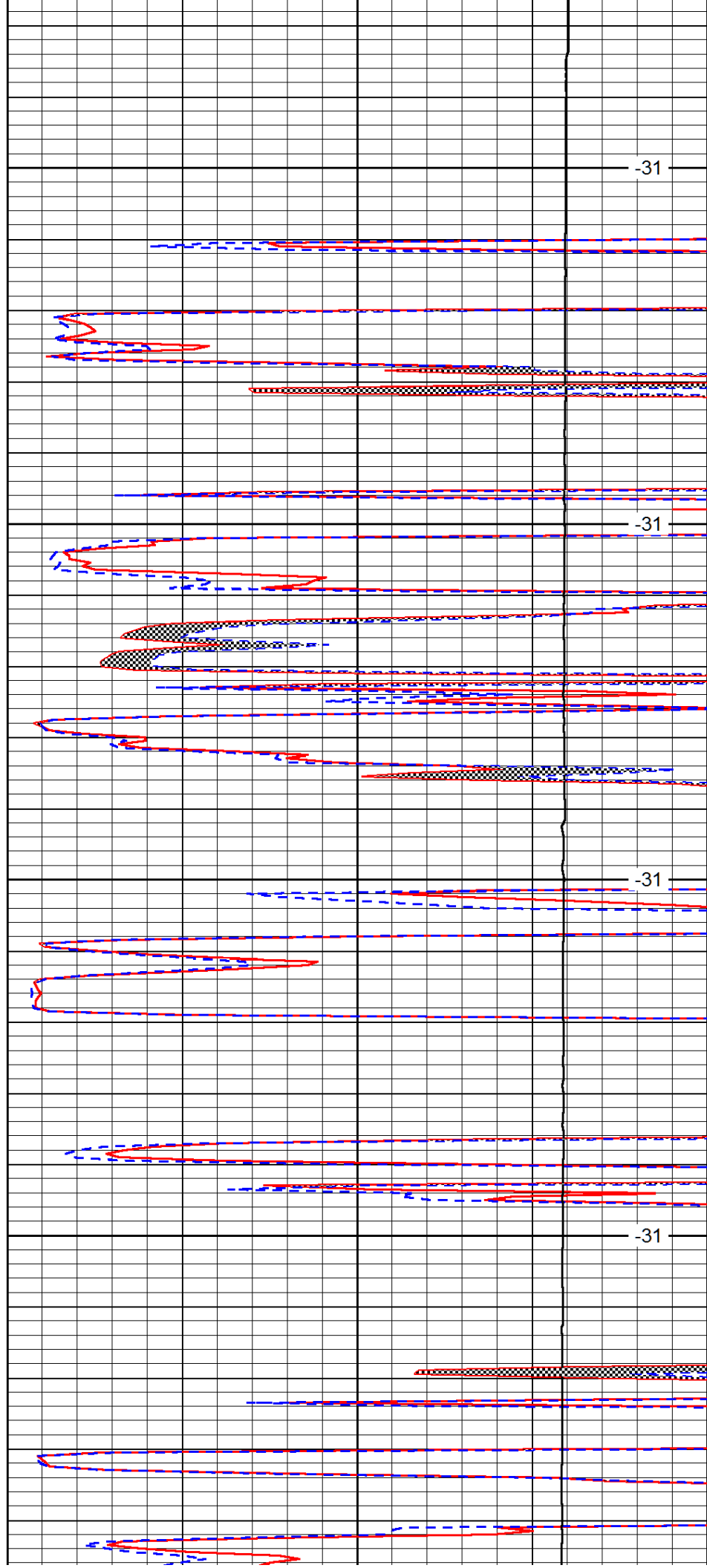


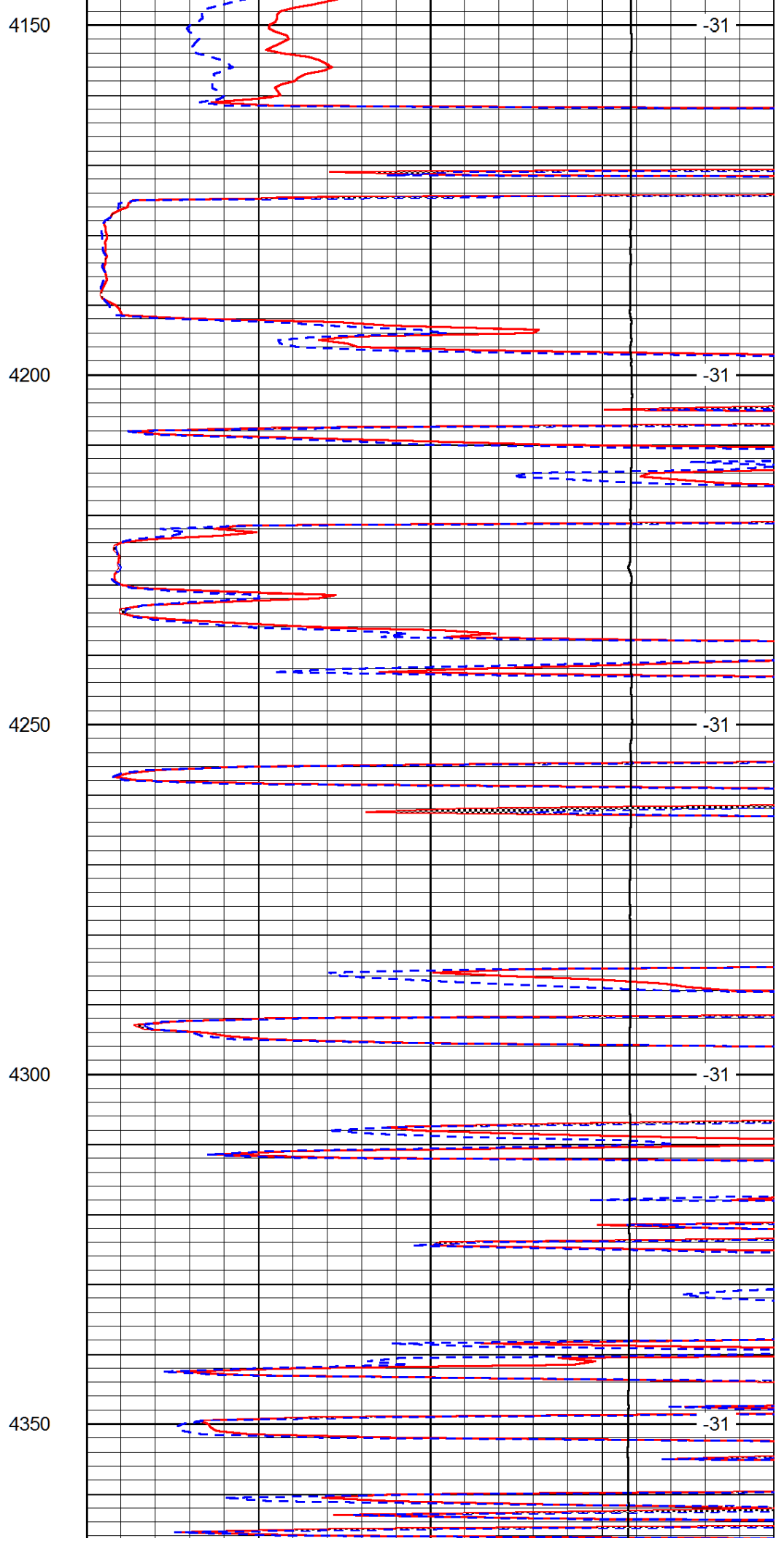
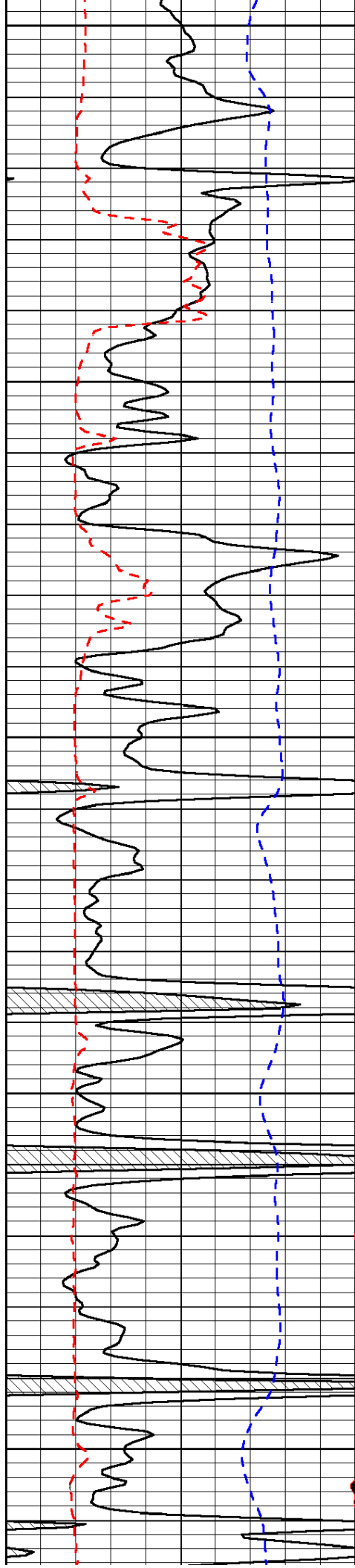
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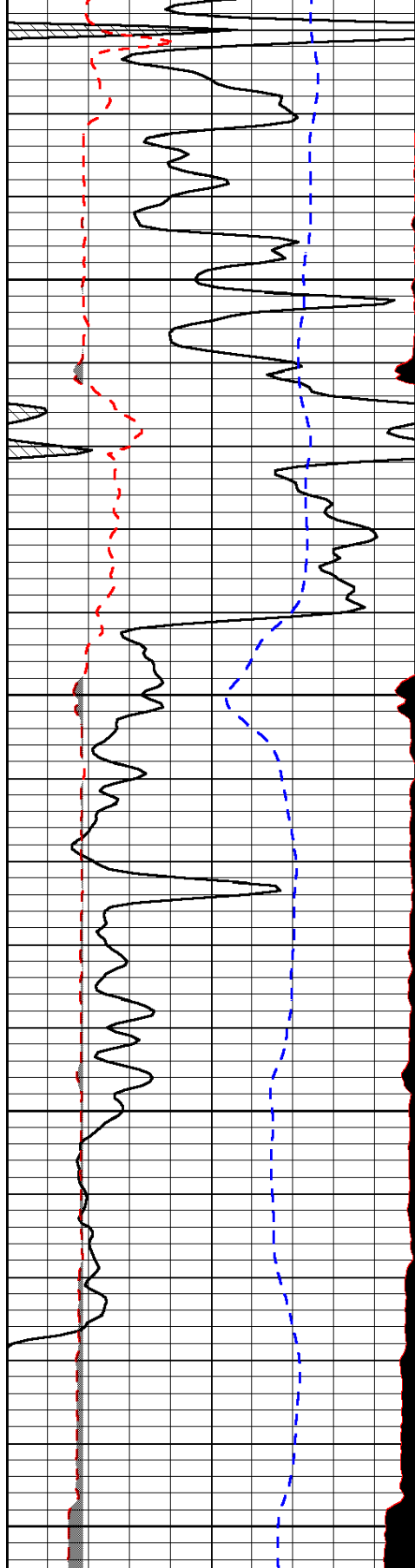
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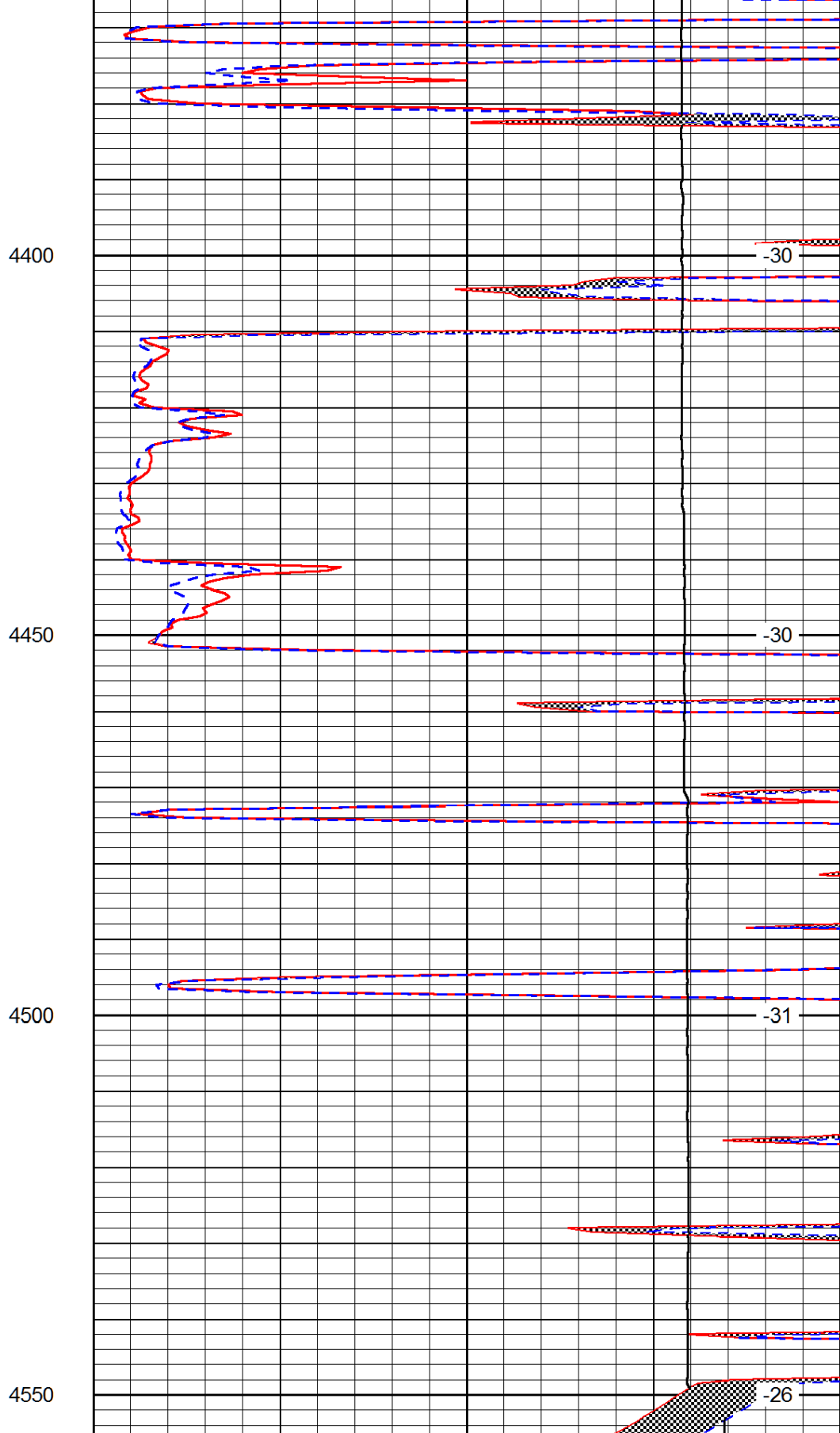
4100







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