



Pioneer Energy Services

Microresistivity Log

API No.

15-185-23857-00-00

Company **Rama Operating Company, Inc.**

Well **Licholat # 1-27**

Field **North Star**

County **Stafford** State **Kansas**

Location **700' FSL & 350' FEL**

Sec: **27** Twp: **24 S** Rge: **12 W**

Permanent Datum **Ground Level** Elevation **1867**
 Log Measured From **Kelly Bushing** **13** Ft. Above Perm. Datum
 Drilling Measured From **Kelly Bushing**

Other Services
 CNL/CDL
 DIL
 Elevation
 K.B. 1880
 D.F. 1867
 G.L. 1867

Date	1-31-2014
Run Number	Two
Depth Driller	4180
Depth Logger	4184
Bottom Logged Interval	4183
Top Log Interval	3200
Casing Driller	8.625 @ 354
Casing Logger	354
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	9000
Density / Viscosity	9.3 72
pH / Fluid Loss	8.0 11.2
Source of Sample	Flowline
Rm @ Meas. Temp	0.85 @ 38
Rmf @ Meas. Temp	0.63 @ 38
Rmc @ Meas. Temp	1.14 @ 38
Source of Rmf / Rmc	Charts
Rm @ BHT	0.27 @ 120
Operating Rig Time	4 Hours
Max Rec. Temp. F	120
Equipment Number	91
Location	Hays
Recorded By	Y. Ruiz
Witnessed By	Josh Austin

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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

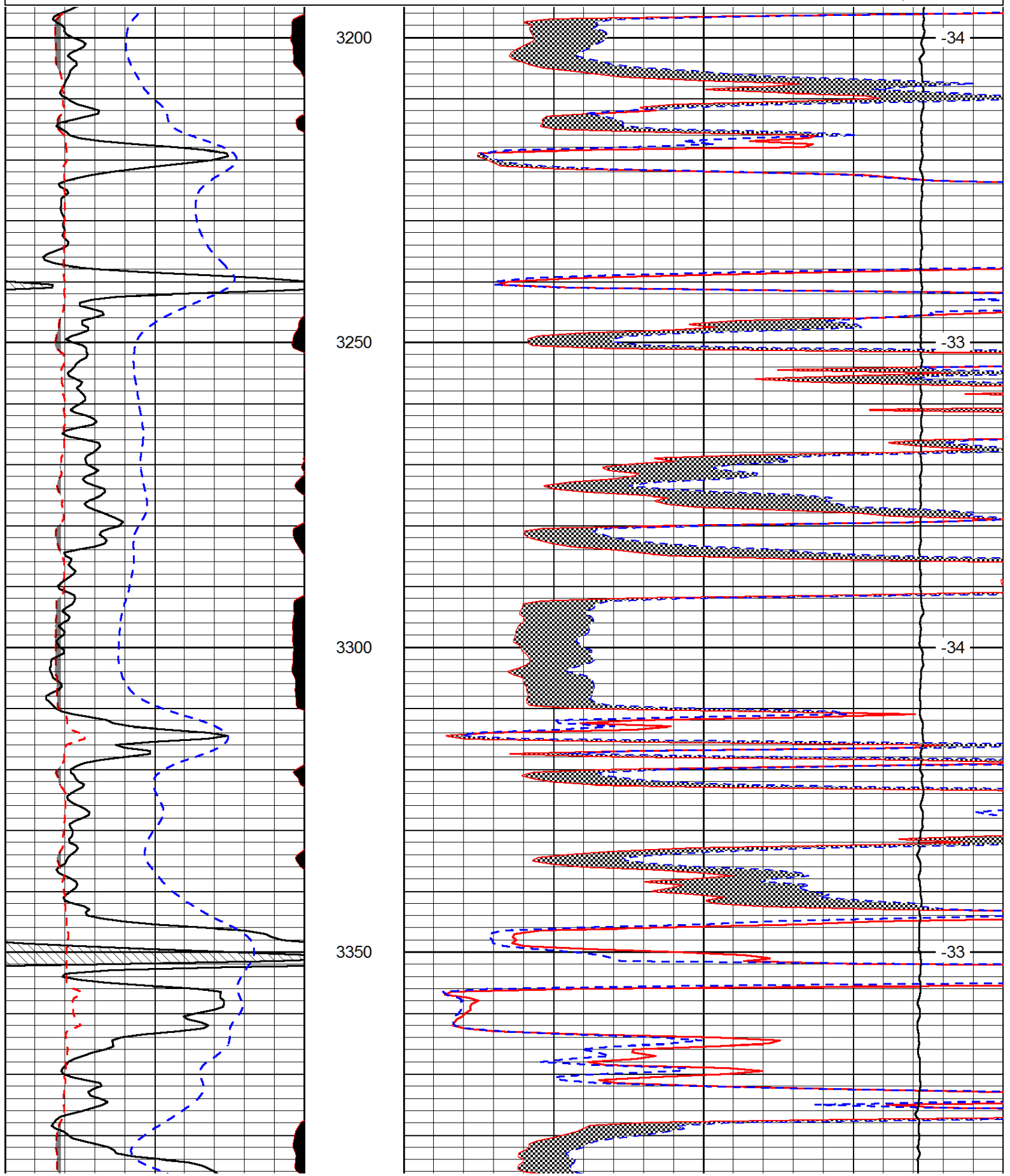
Thank you for using Log-Tech, Inc.
 (785) 625-3858
 Stafford,
 2 South, 1 West, 1/8 North,
 West into

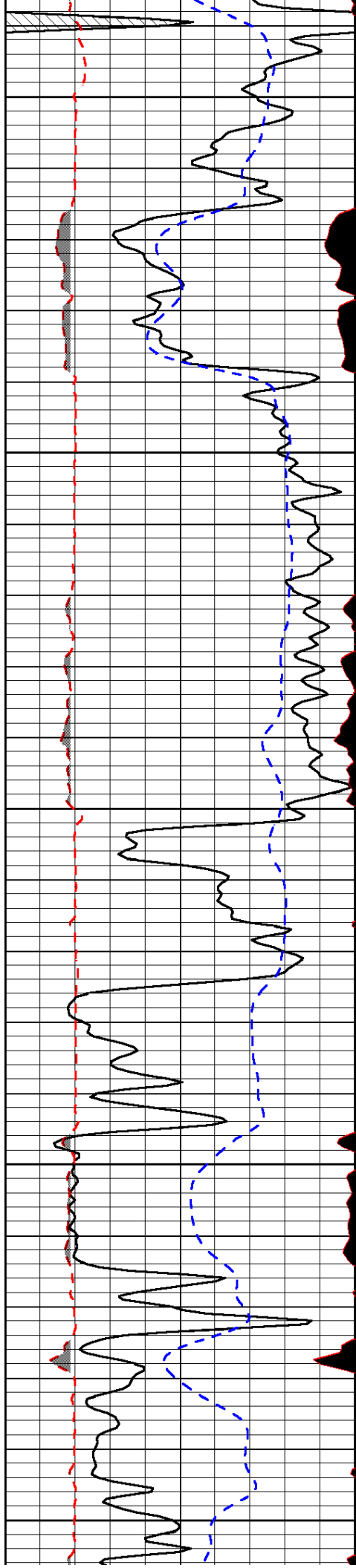
Database File: rama_013114hd3.db
 Dataset Pathname: DIL/ramstk
 Presentation Format: micro
 Dataset Creation: Fri Jan 31 04:01:50 2014
 Charted by: Depth in Feet scaled 1:240

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)





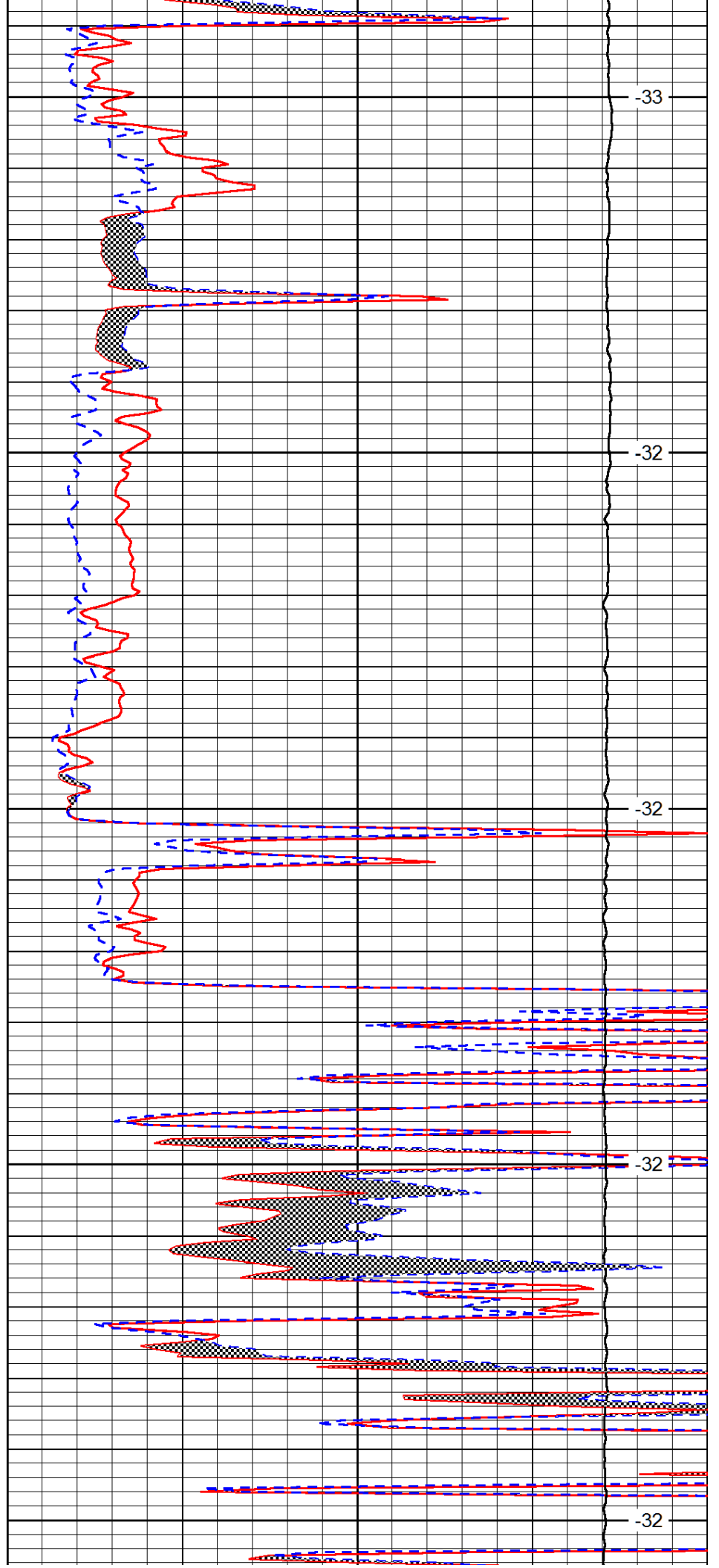
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3450

3500

3550

3600



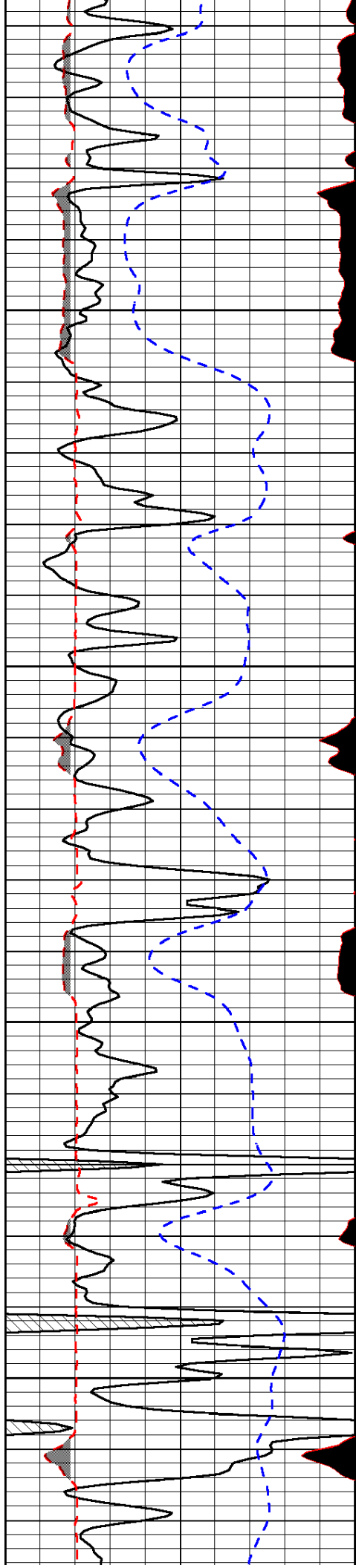
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-32

-32

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-32

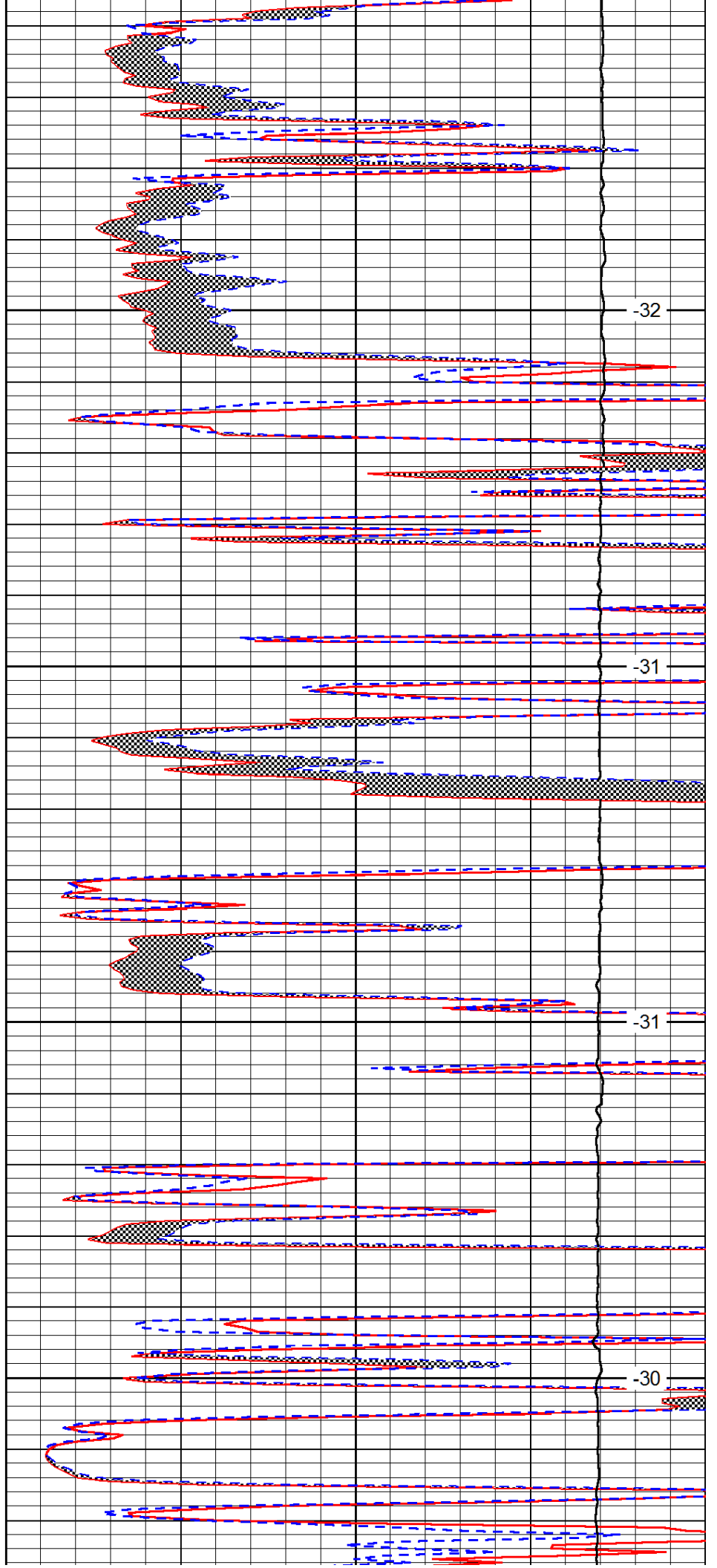


3650

3700

3750

3800

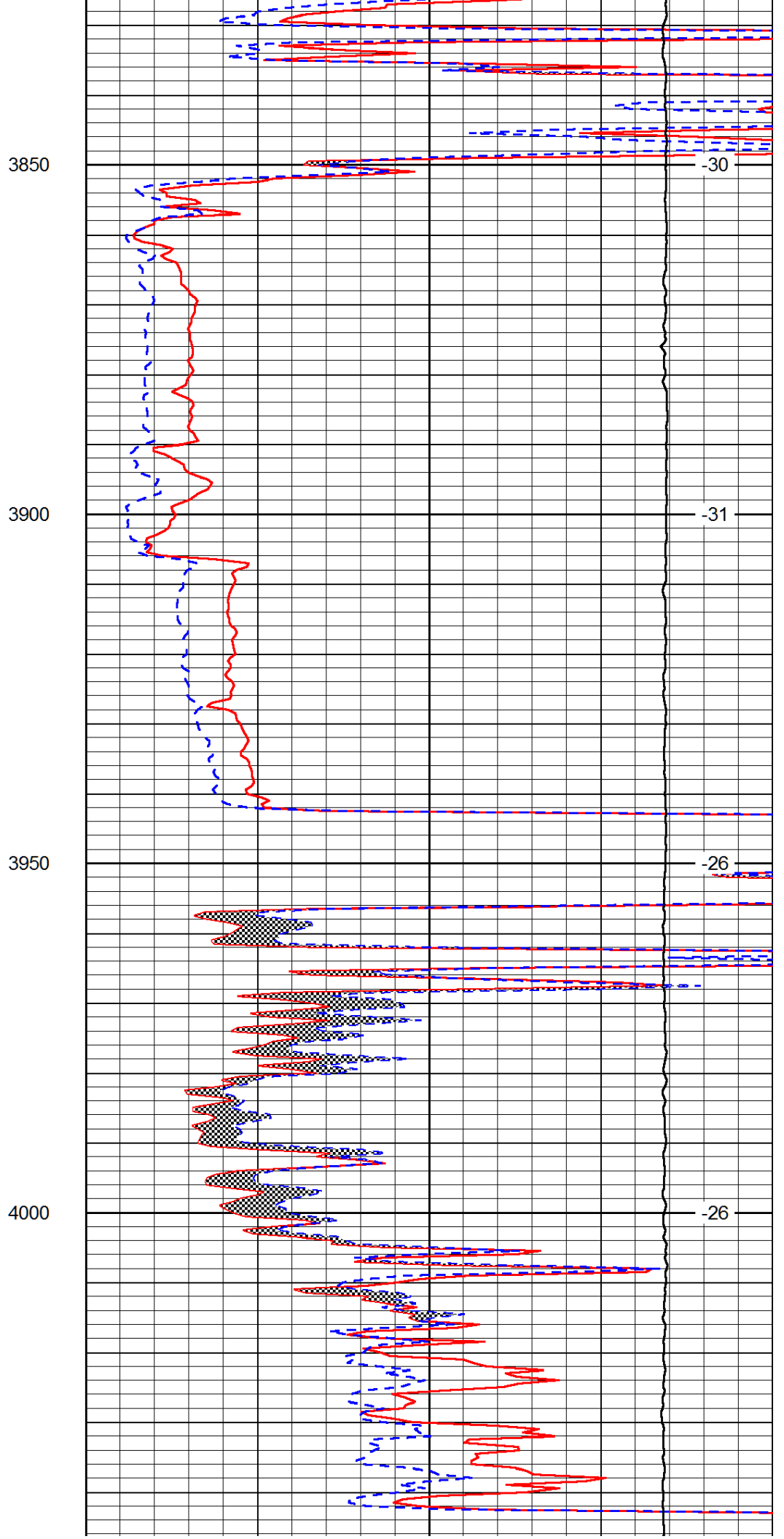
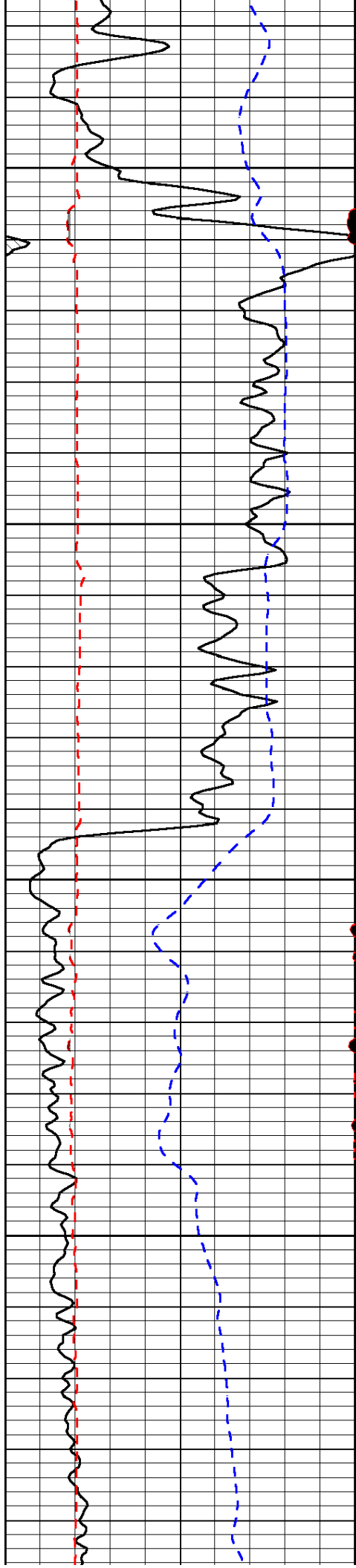


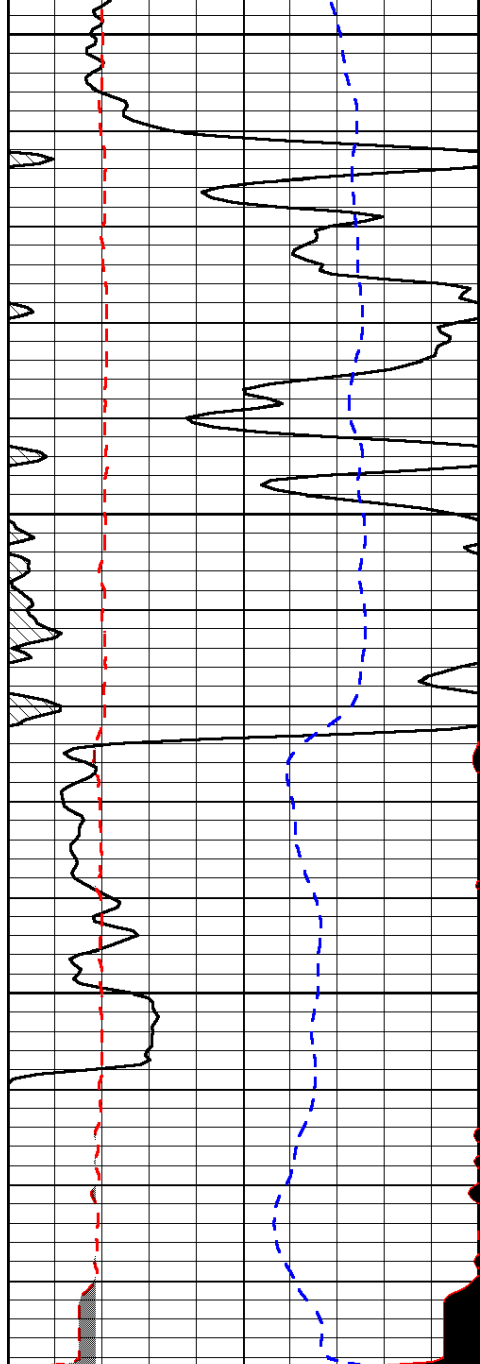
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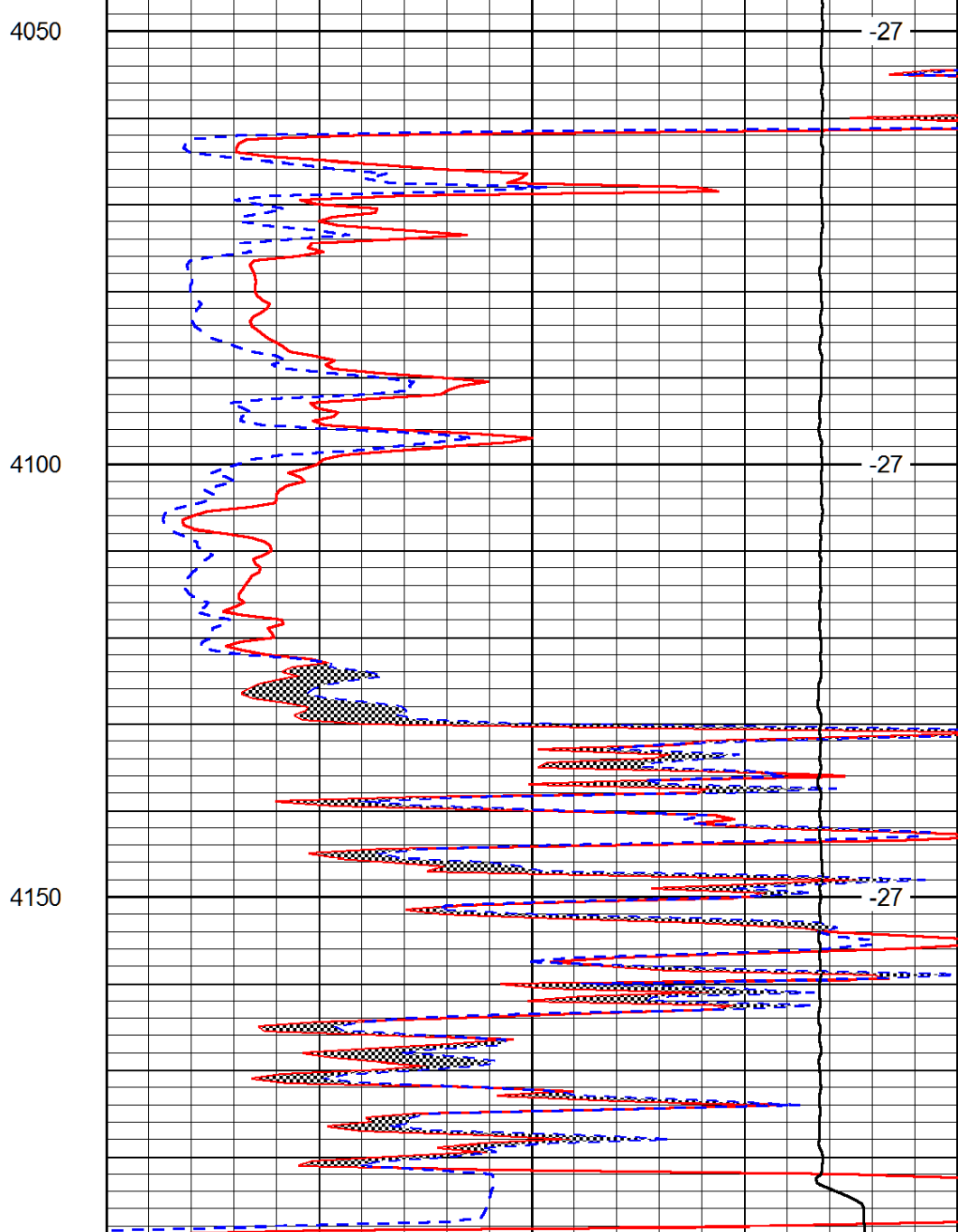
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