



Microresistivity Log

Pioneer Energy Services

API No.

15-053-21,305-00-00

Company American Warrior, Inc.

Well D&S No. 1-5

Field Stollenberg

County Ellsworth State

Kansas

Location NE NW SW SW
1,100' FSL & 500' FWL

Sec: 5 Twp: 16S Rge: 10W

Permanent Datum Ground Level Elevation 1811
Log Measured From Kelly Bushing 8 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Date 2/3/2014

Run Number Two

Depth Driller 3410

Depth Logger 3412

Bottom Logged Interval 3411

Top Log Interval 2650

Casing Driller 8.625 @ 386

Casing Logger 380

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 4800

Density / Viscosity 9.4 58

pH / Fluid Loss 10.5 7.6

Source of Sample Flowline

Rm @ Meas. Temp .72 @ 52

Rmf @ Meas. Temp .54 @ 52

Rmc @ Meas. Temp .97 @ 52

Source of Rmf / Rmc Charts

Rm @ BHT .34 @ 110

Operating Rig Time 4 Hours

Max Rec. Temp. F 110

Equipment Number 108

Location Hays

Recorded By J. Long

Witnessed By Wyatt Urban

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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.

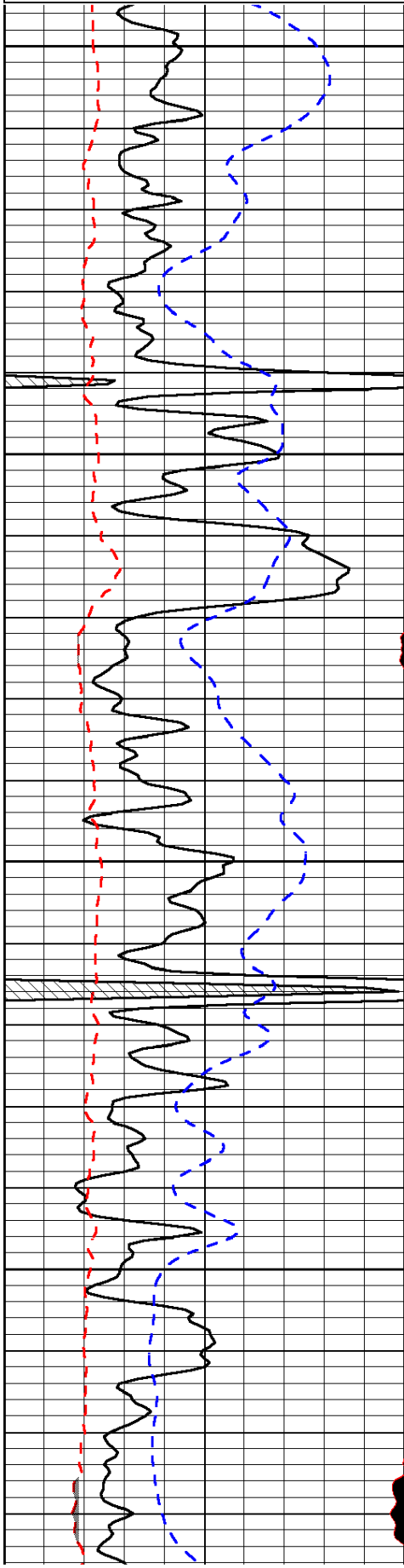
Comments

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

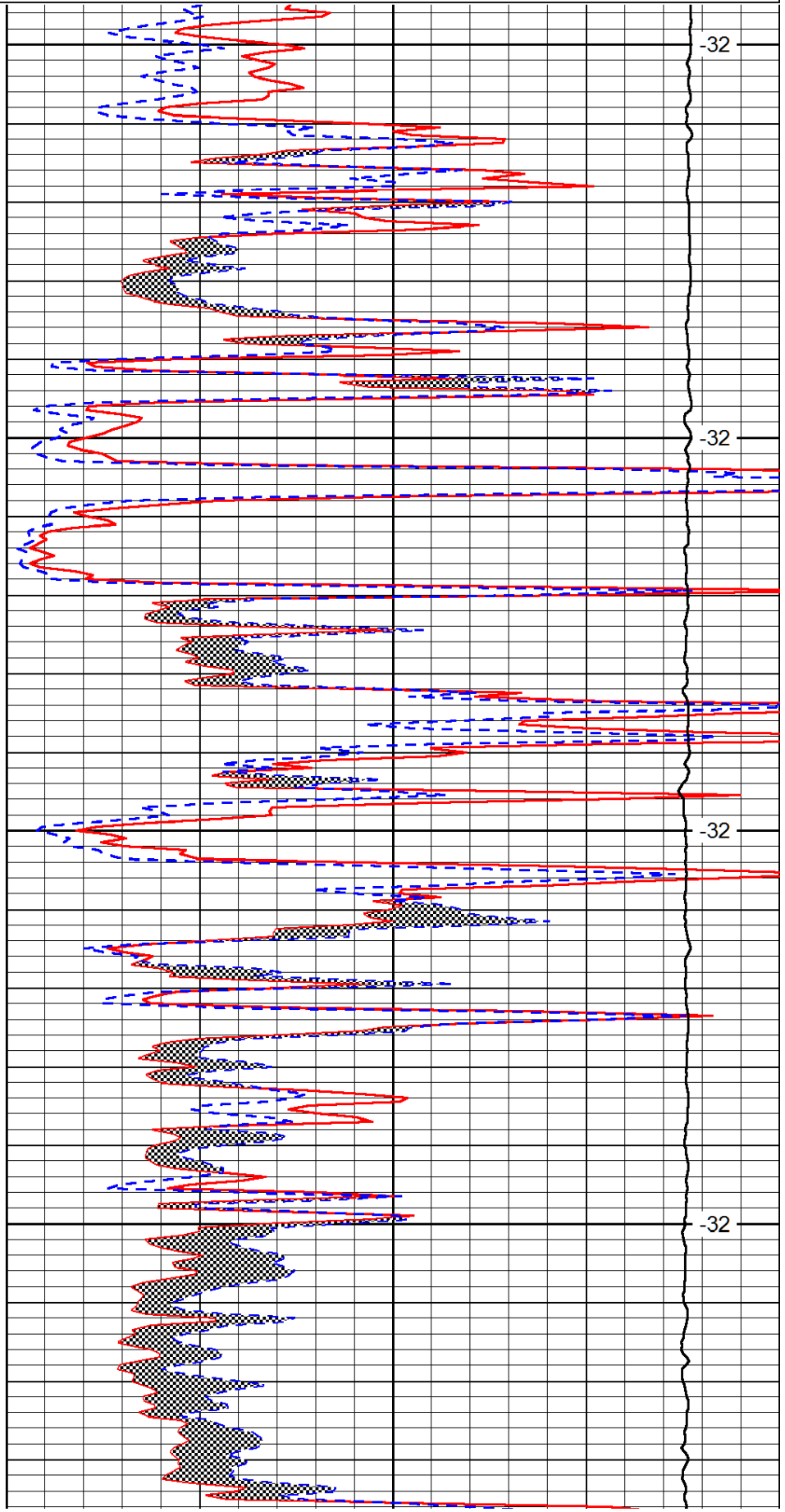
Wilson, 10 South to Avenue N (NE 220 Road), 1 East, 200 Yards North,
East Into

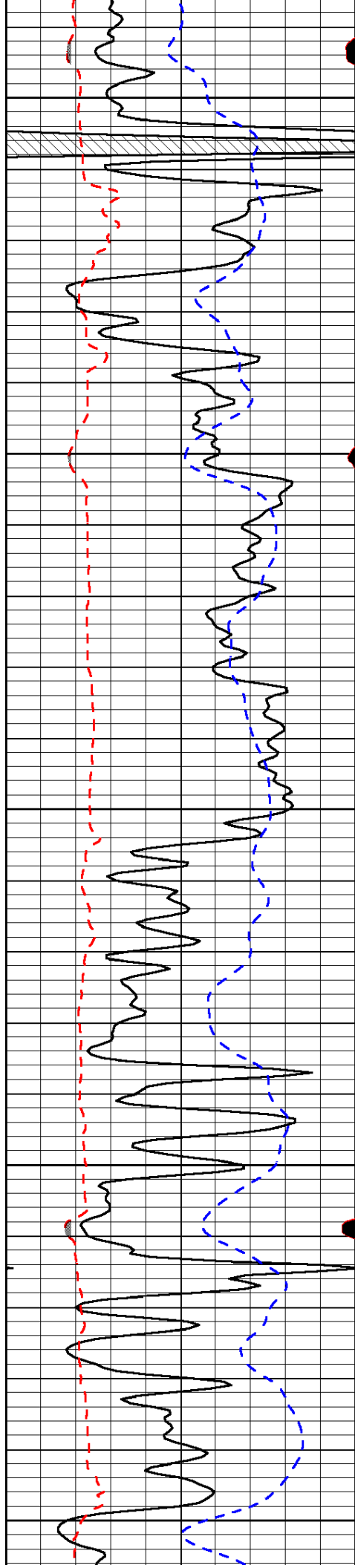
Database File: amwarrior_d&s_1-5hd.db
Dataset Pathname: dil/awstck
Presentation Format: micro
Dataset Creation: Mon Feb 03 06:59:52 2014
Charted by: Depth in Feet scaled 1:240

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)





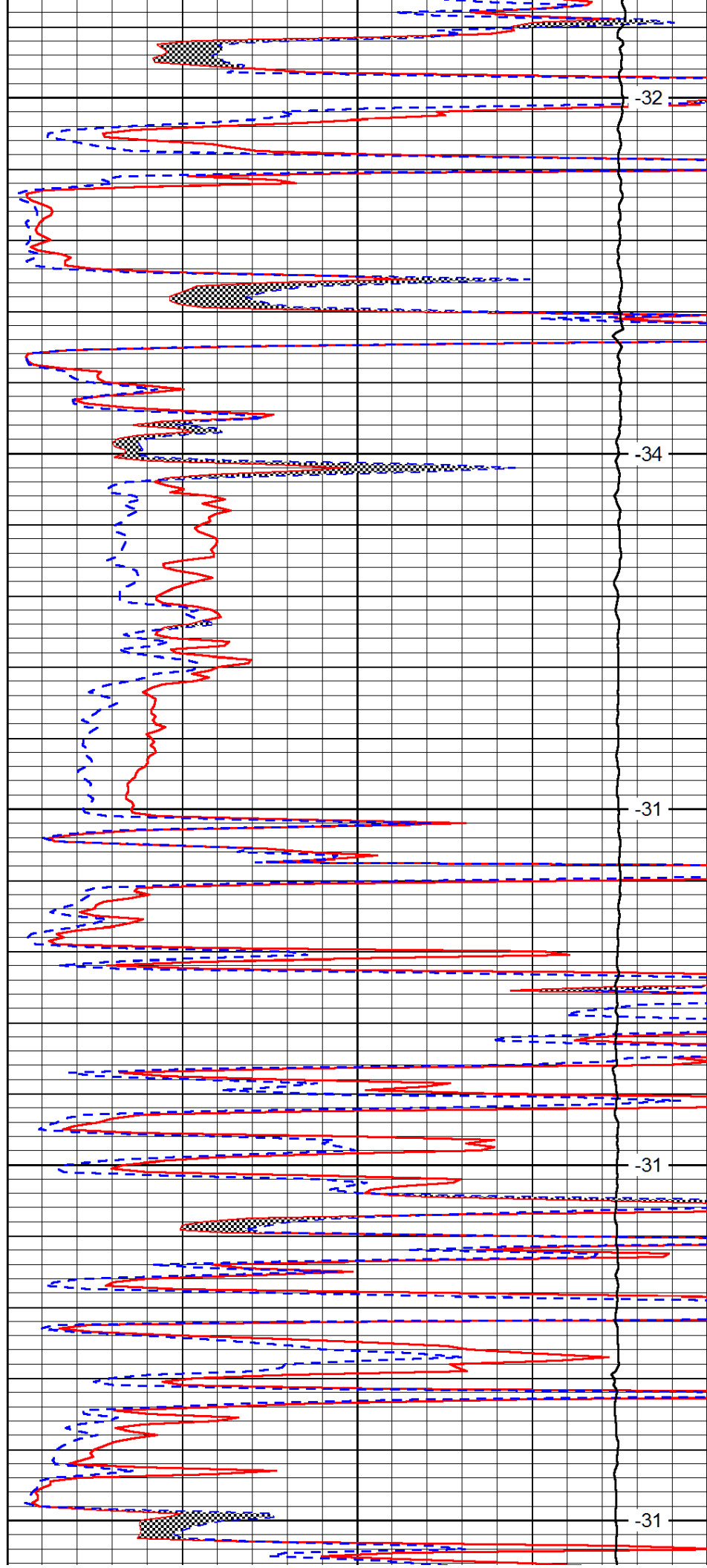
2850

2900

2950

3000

3050



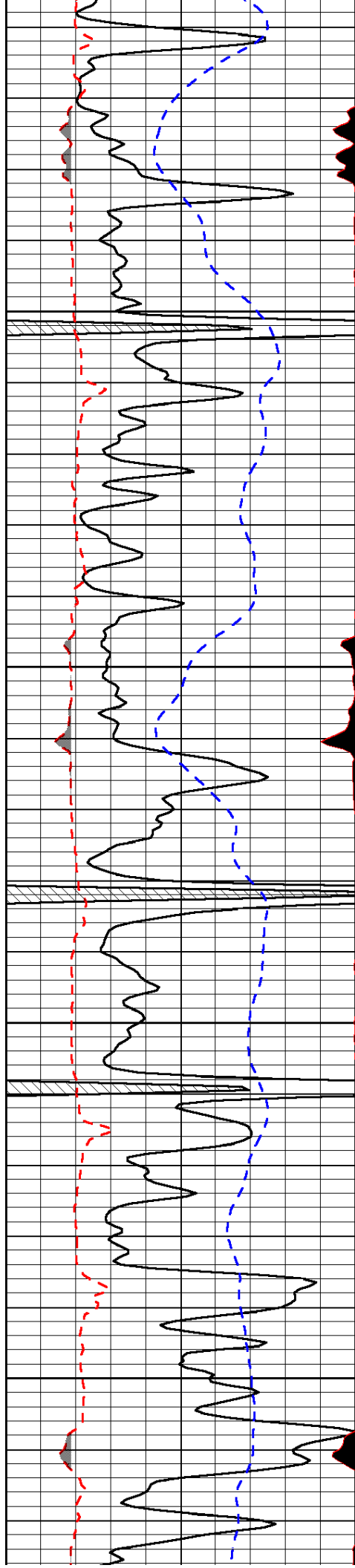
-32

-34

-31

-31

-31

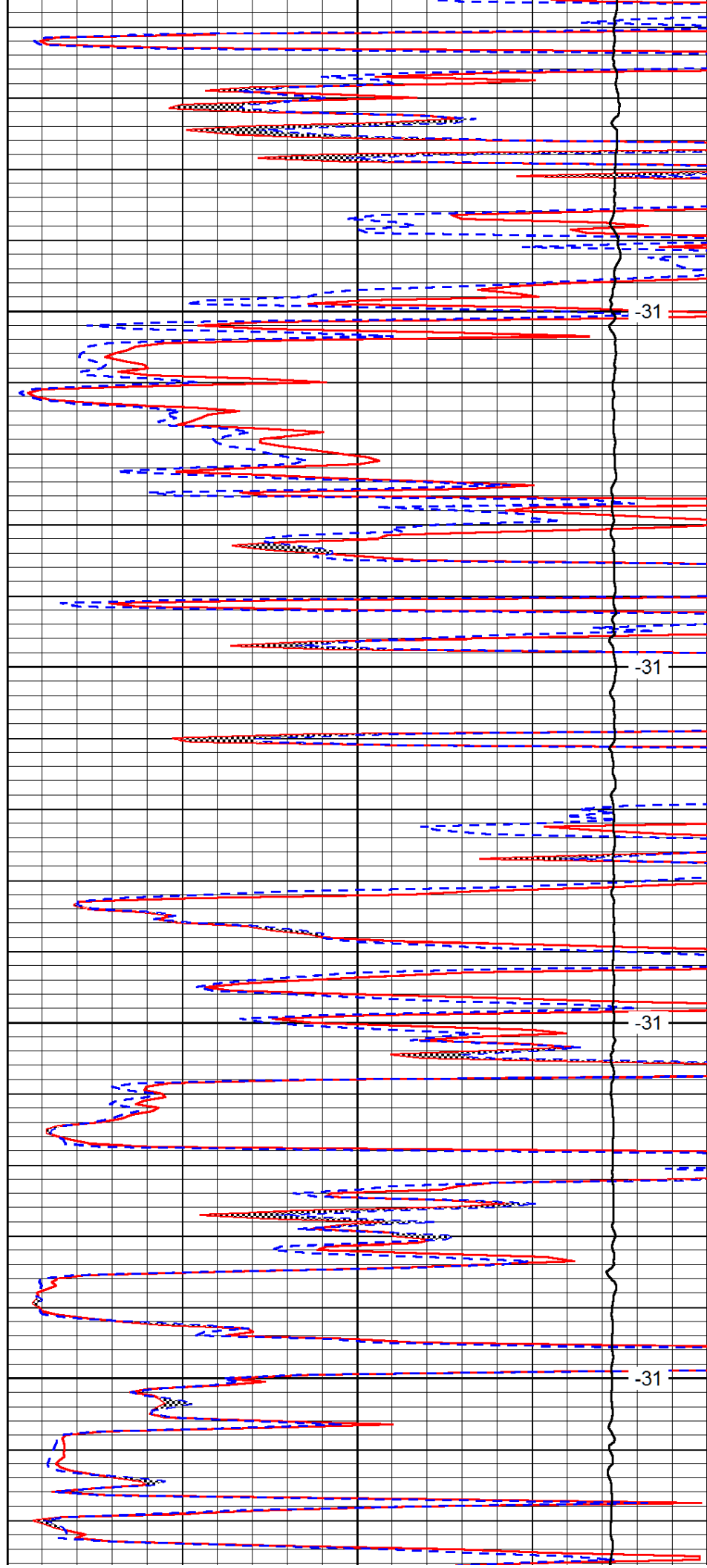


3100

3150

3200

3250

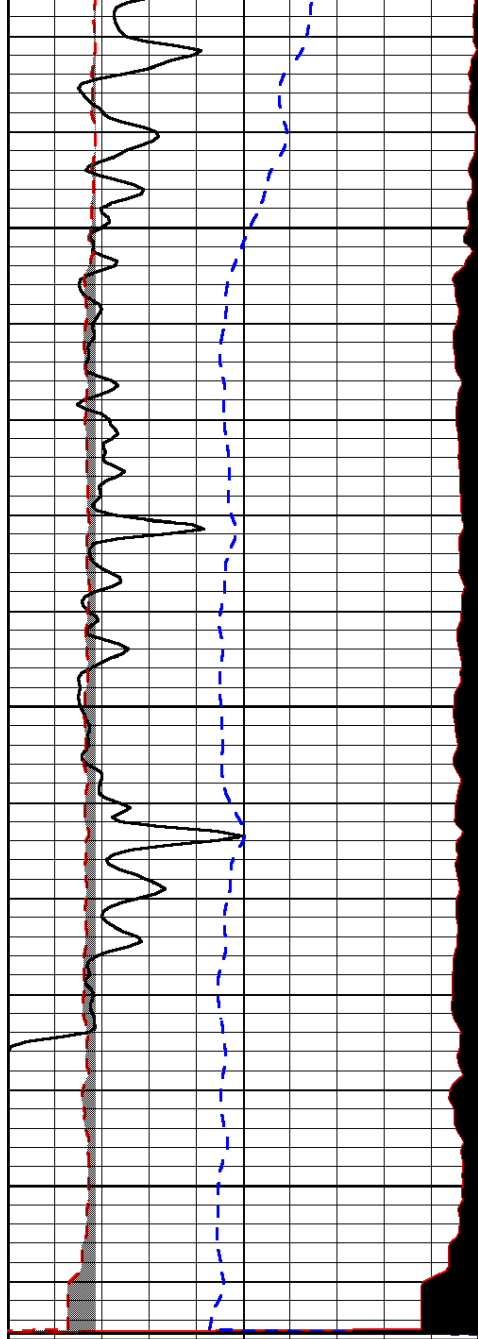


-31

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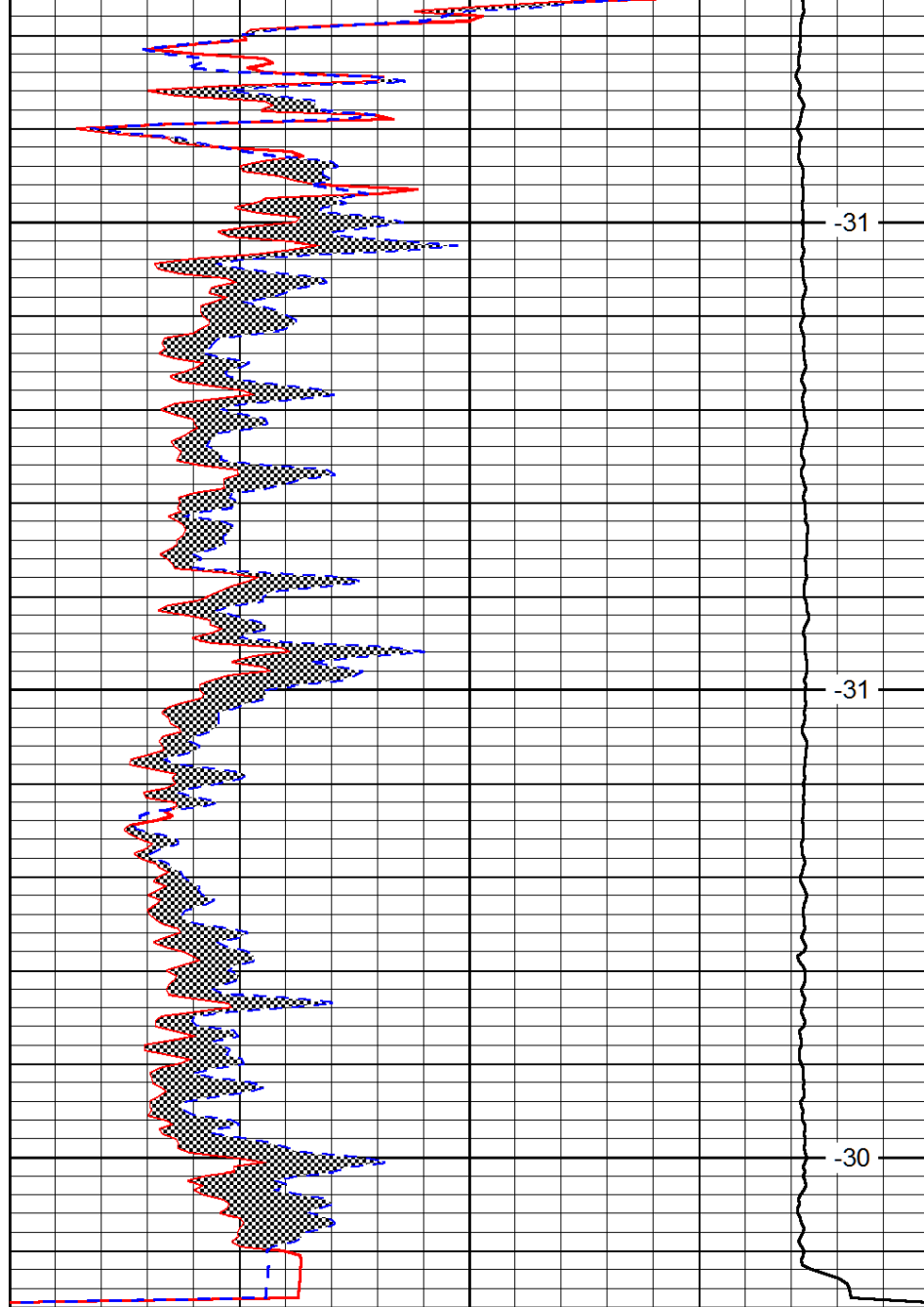


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