



Microresistivity Log

Pioneer Energy Services

API No.

15-051-26528-00-00

Company TDI, Inc.

Well George #1

Field Unnamed

County Ellis State

Kansas

Location 2040' FNL & 1360' FWL

Sec: 18 Twp: 12 S Rge: 18 W

Permanent Datum Ground Level Elevation 2207

Log Measured From Kelly Bushing 10 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing

Elevation

K.B. 2217
D.F. 2207
G.L. 2207

Other Services
CNL/CDL
DIL

Date 06-20-2013

Run Number Two

Depth Driller 3900

Depth Logger 3898

Bottom Logged Interval 3897

Top Log Interval 3100

Casing Driller 8.625 @ 220

Casing Logger 222

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 2500

Density / Viscosity 9.3 55

pH / Fluid Loss 10.5 7.2

Source of Sample Flowline

Rm @ Meas. Temp 0.30 @ 80

Rmf @ Meas. Temp 0.22 @ 80

Rmc @ Meas. Temp 0.40 @ 80

Source of Rmf / Rmc Charts

Rm @ BHT 0.21 @ 117

Operating Rig Time 3 1/2 Hours

Max Rec. Temp. F 117

Equipment Number 91

Location Hays

Recorded By Y. Ruiz

Witnessed By Tom Denning

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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

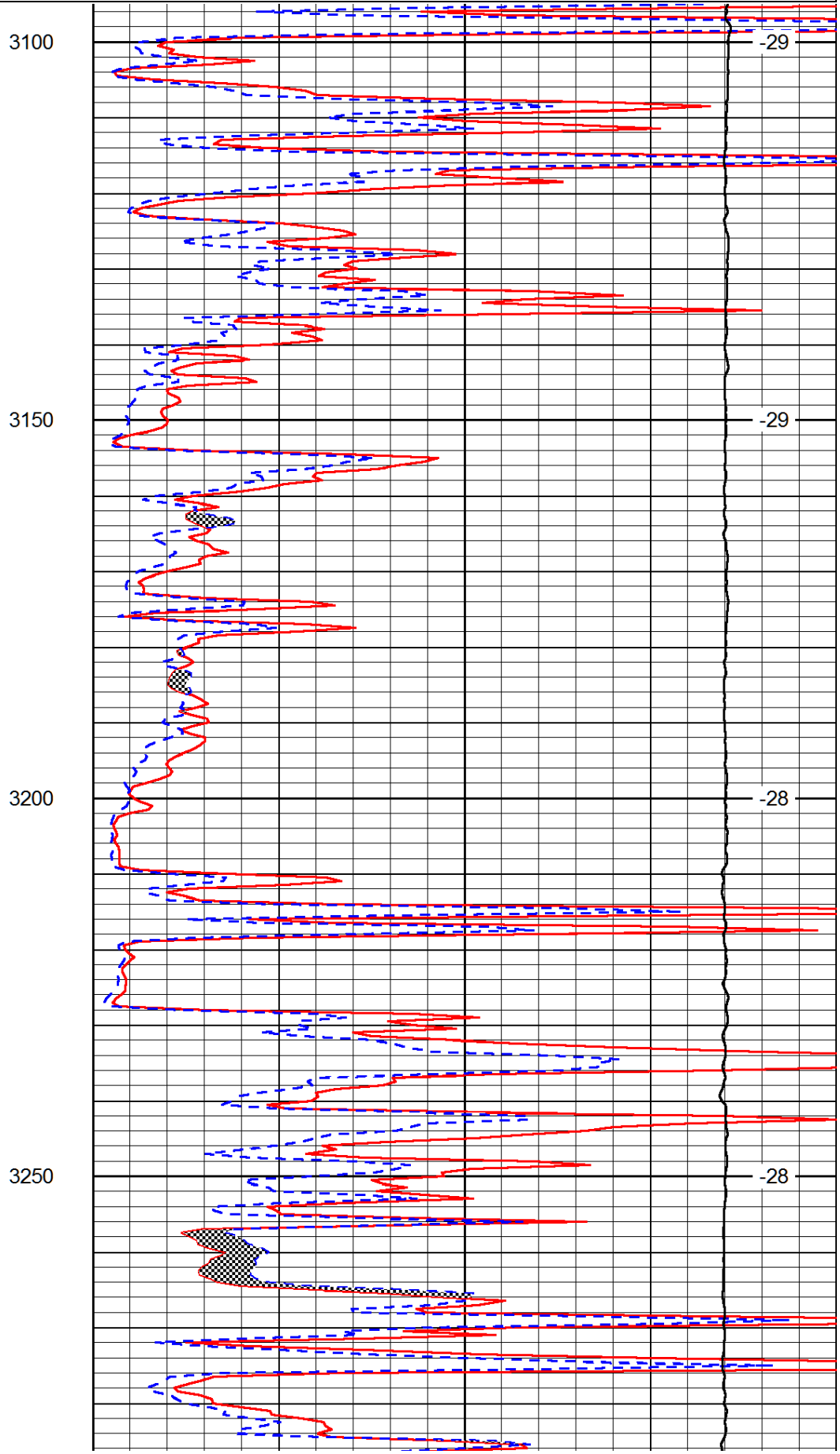
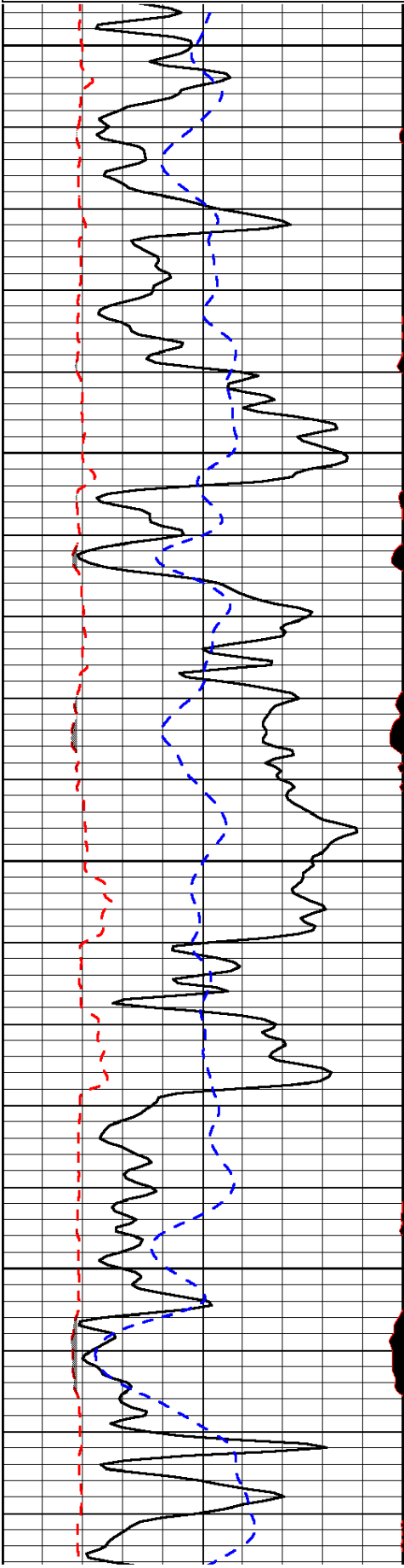
Thank you for using Log-Tech, Inc.
(785) 625-3858

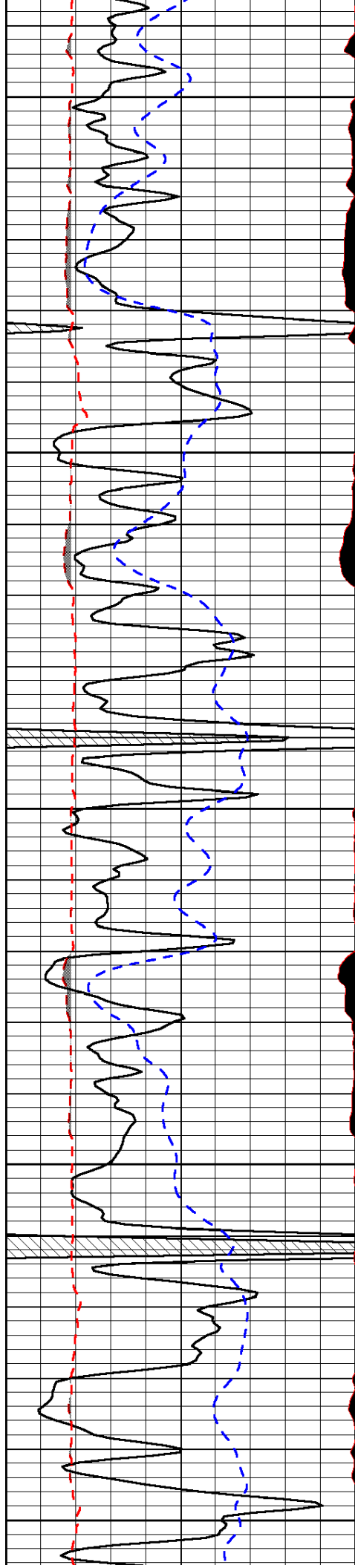
Hays,
Hwy 183 North to Buckeye Rd, 2 West, 1/2 North,
West into

Database File: tdi_062013hd.db
Dataset Pathname: dil/tdistk
Presentation Format: micro
Dataset Creation: Thu Jun 20 19:28:26 2013
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)





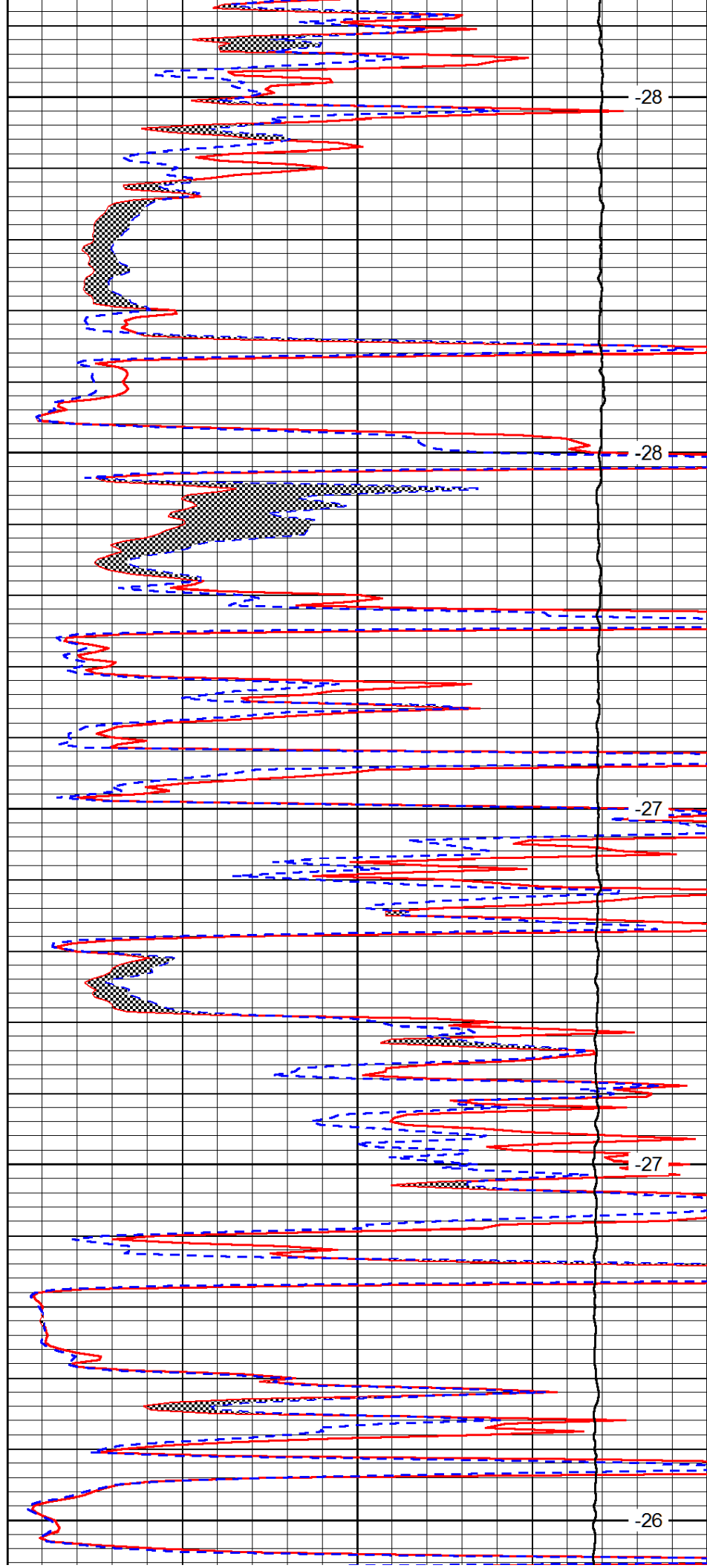
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3350

3400

3450

3500



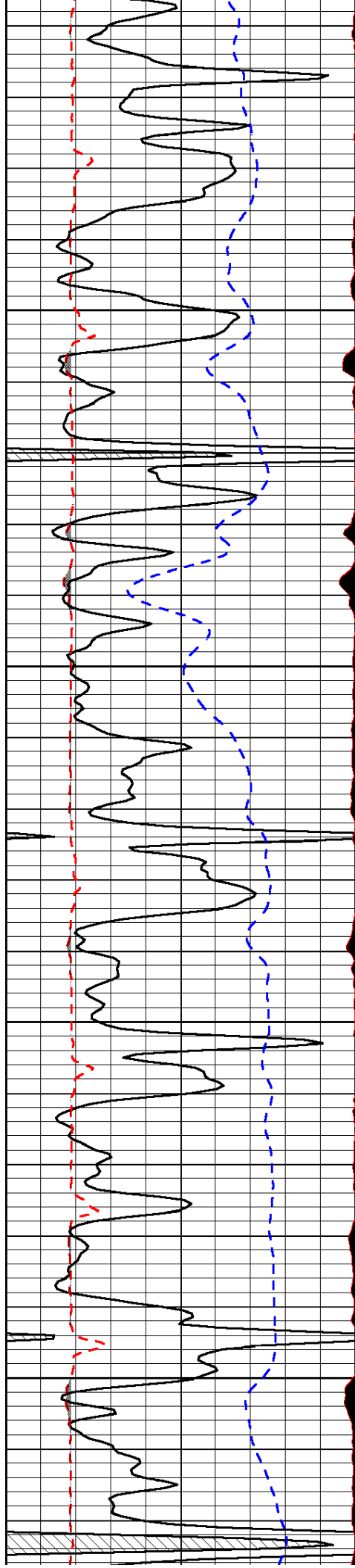
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-28

-27

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-26

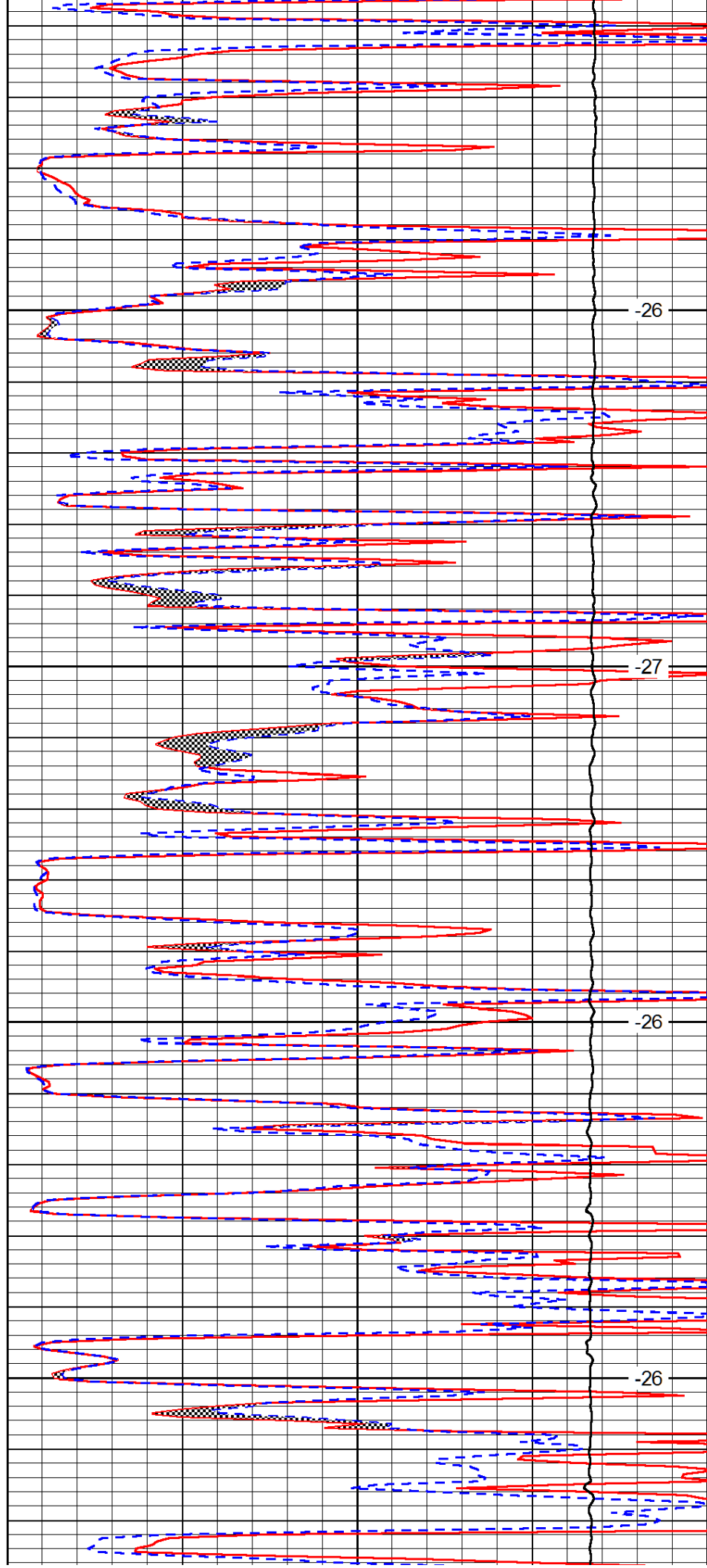


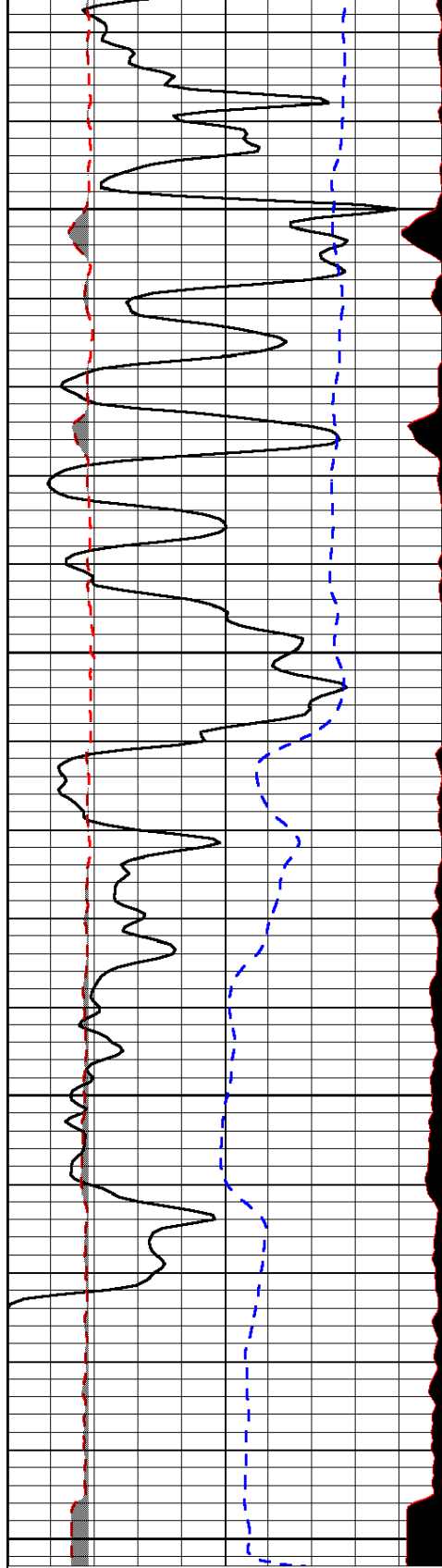
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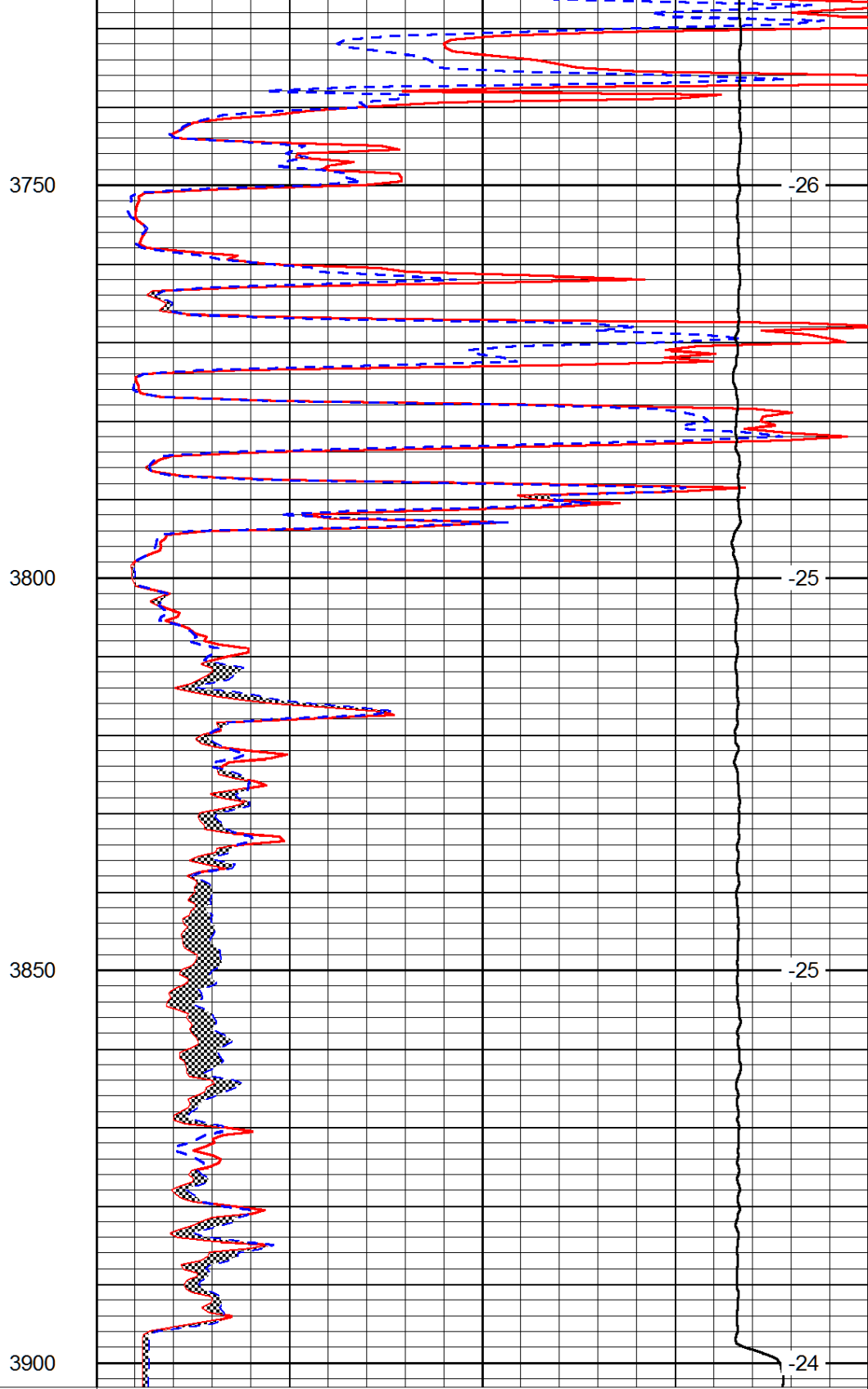
3650

3700





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