



Pioneer Energy Services

Microresistivity Log

15-147-20,703-00-00

API No.

Company **Bach Oil Production**
 Well **Tharman Unit No. 1**
 Field **Starvation Creek**
 County **Phillips** State **Kansas**

Location
 NE NW/ NW NE
 280' FNL & 400' FWL

Sec: **9** Twp: **2 S** Rge: **19 W**

Other Services
 CNL/CDL
 DIL

Permanent Datum Ground Level Elevation 2258
 Log Measured From Kelly Bushing 5 Ft. Above Perm. Datum
 Drilling Measured From Kelly Bushing

Elevation
 K.B. 2263
 D.F. 2258
 G.L. 2258

Date	2/26/2013
Run Number	Two
Depth Driller	3725
Depth Logger	3728
Bottom Logged Interval	3727
Top Log Interval	3100
Casing Driller	8.625 @ 248
Casing Logger	248
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	500
Density / Viscosity	9.0 50
pH / Fluid Loss	11.0 5.6
Source of Sample	Flowline
Rm @ Meas. Temp	1.20 @ 43
Rmf @ Meas. Temp	.90 @ 43
Rmc @ Meas. Temp	1.62 @ 43
Source of Rmf / Rmc	Charts
Rm @ BHT	.46 @ 113
Operating Rig Time	3 1/2 Hours
Max Rec. Temp. F	113
Equipment Number	15
Location	Hays
Recorded By	D. Martin
Witnessed By	Bob Petersen

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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

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 (785) 625-3858

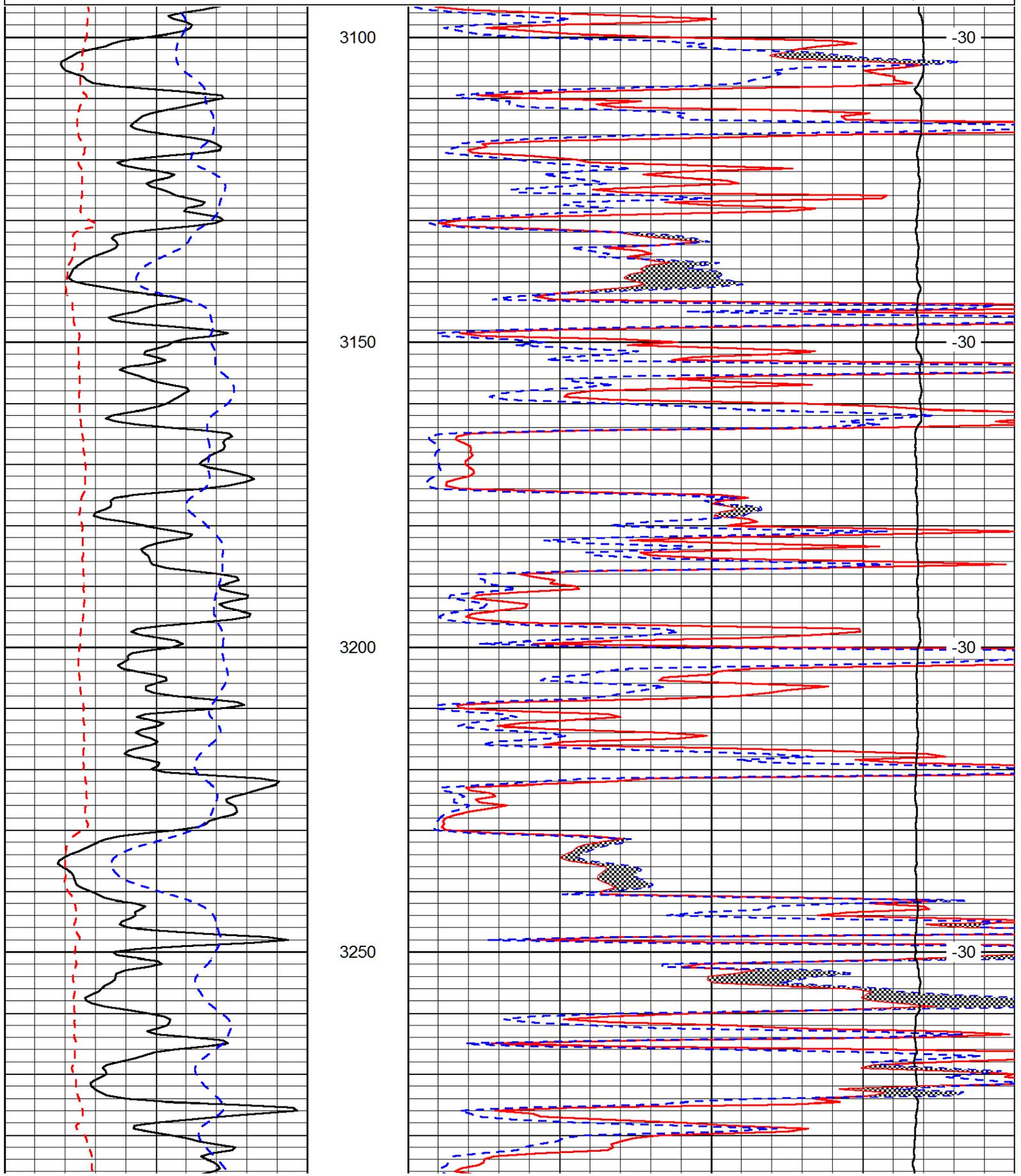
Phillipsburg, KS
 8 N to Hunter Rd., 7 W, S Into

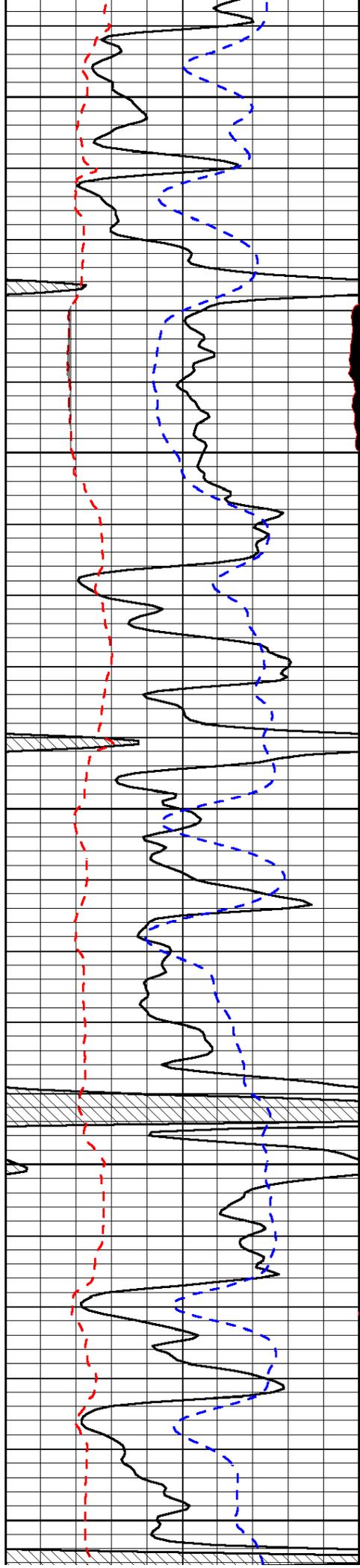
Database File: bachd.db
 Dataset Pathname: DIL/bachstk2
 Presentation Format: micro
 Dataset Creation: Tue Feb 26 09:09:22 2013
 Charted by: Depth in Feet scaled 1:240

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)





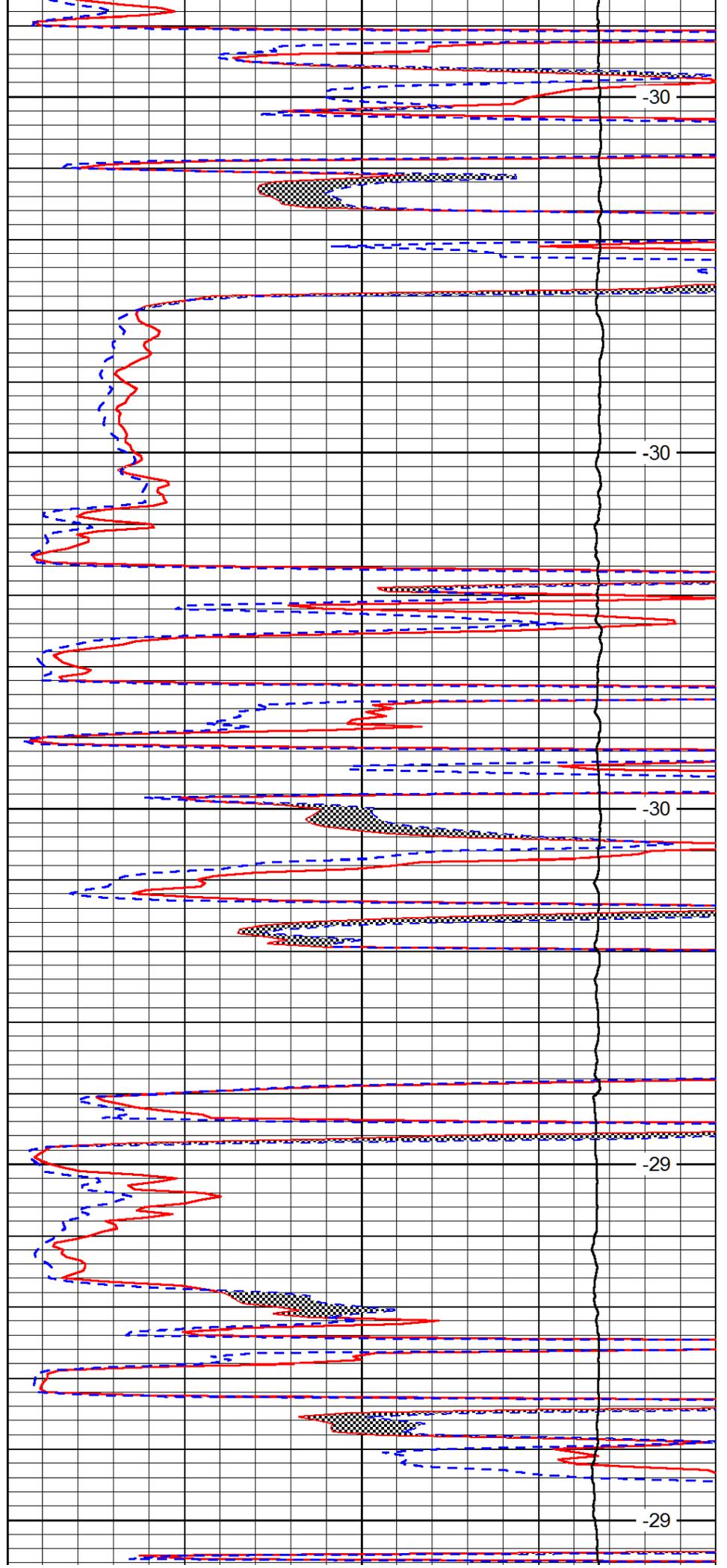
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3350

3400

3450

3500



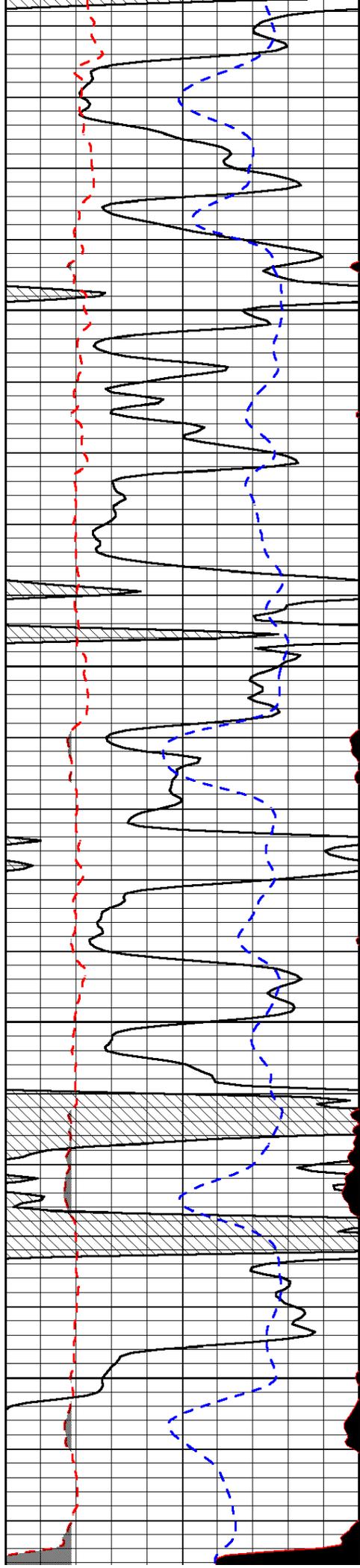
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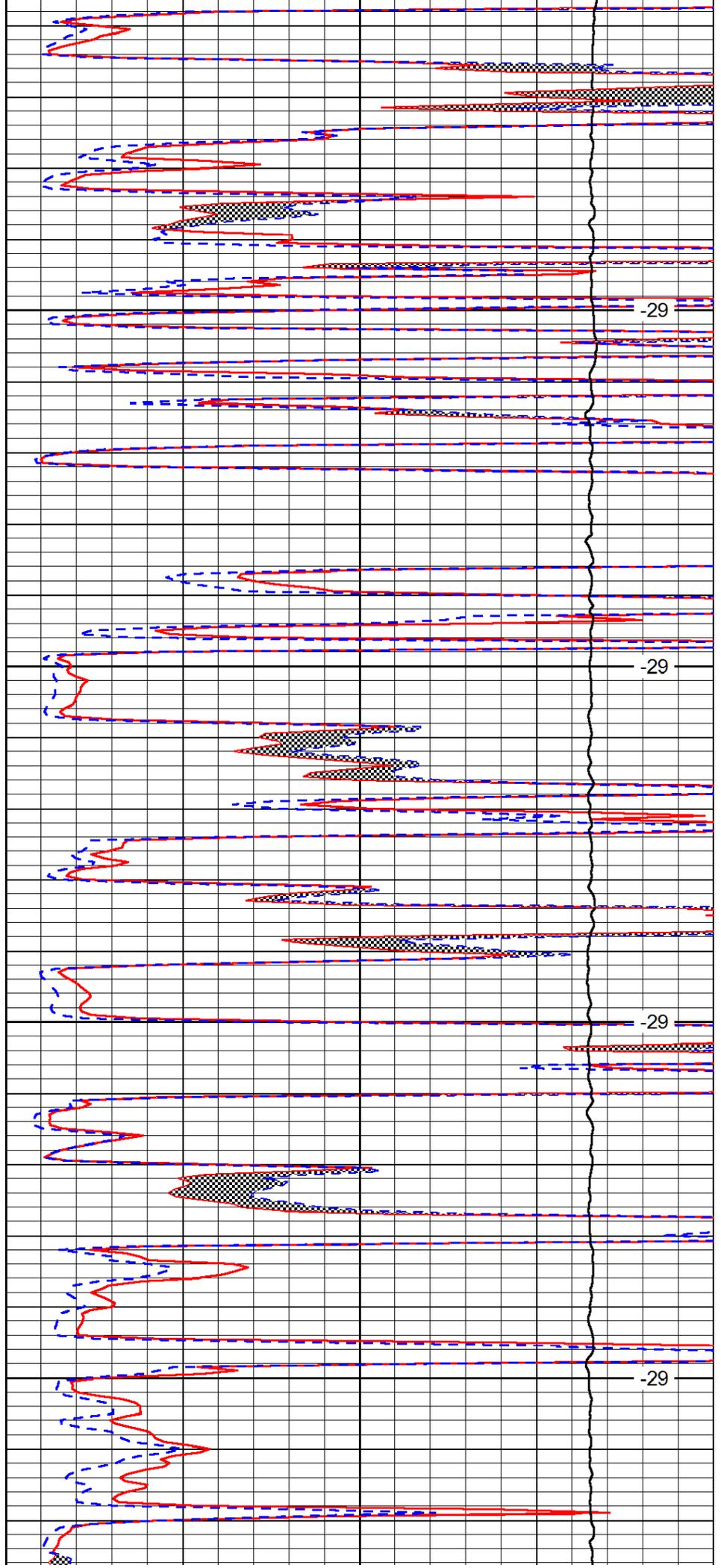


3550

3600

3650

3700



-29

-29

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