



Pioneer Energy Services

Microresistivity Log

API No. 15-035-24520-00-00

Company: Alton Oil, LLC
 Well: Steffen Unit #3
 Field: Posey Northeast
 County: Cowley State: Kansas

Location: N2 N2 N2 NE
 100' FNL / 1320' FEL

Other Services: CNL/CDL/DIL BHC/S/FRAC

Permanent Datum: Ground Level Elevation 1197
 Log Measured From: Kelly Bushing 8 Ft. Above Perm. Datum
 Drilling Measured From: Kelly Bushing

Sec: 16 Twp: 33S Rge: 4E

Elevation: K.B. 1205
 D.F. 1197
 G.L. 1197

Date	9/13/2013
Run Number	Two
Depth Driller	3410
Depth Logger	3410
Bottom Logged Interval	3409
Top Log Interval	2450
Casing Driller	8.625 @ 212
Casing Logger	220
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	1000
Density / Viscosity	9.1 37
pH / Fluid Loss	8.5 10.4
Source of Sample	Flowline
Rm @ Meas. Temp	1.00 @ 70
Rmf @ Meas. Temp	0.75 @ 70
Rmc @ Meas. Temp	1.35 @ 70
Source of Rmf / Rmc	Charts
Rm @ BHT	0.64 @ 110
Operating Rig Time	5 Hours
Max Rec. Temp. F	110
Equipment Number	17
Location	Hays
Recorded By	R. Barnhart
Witnessed By	Tom Blair

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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

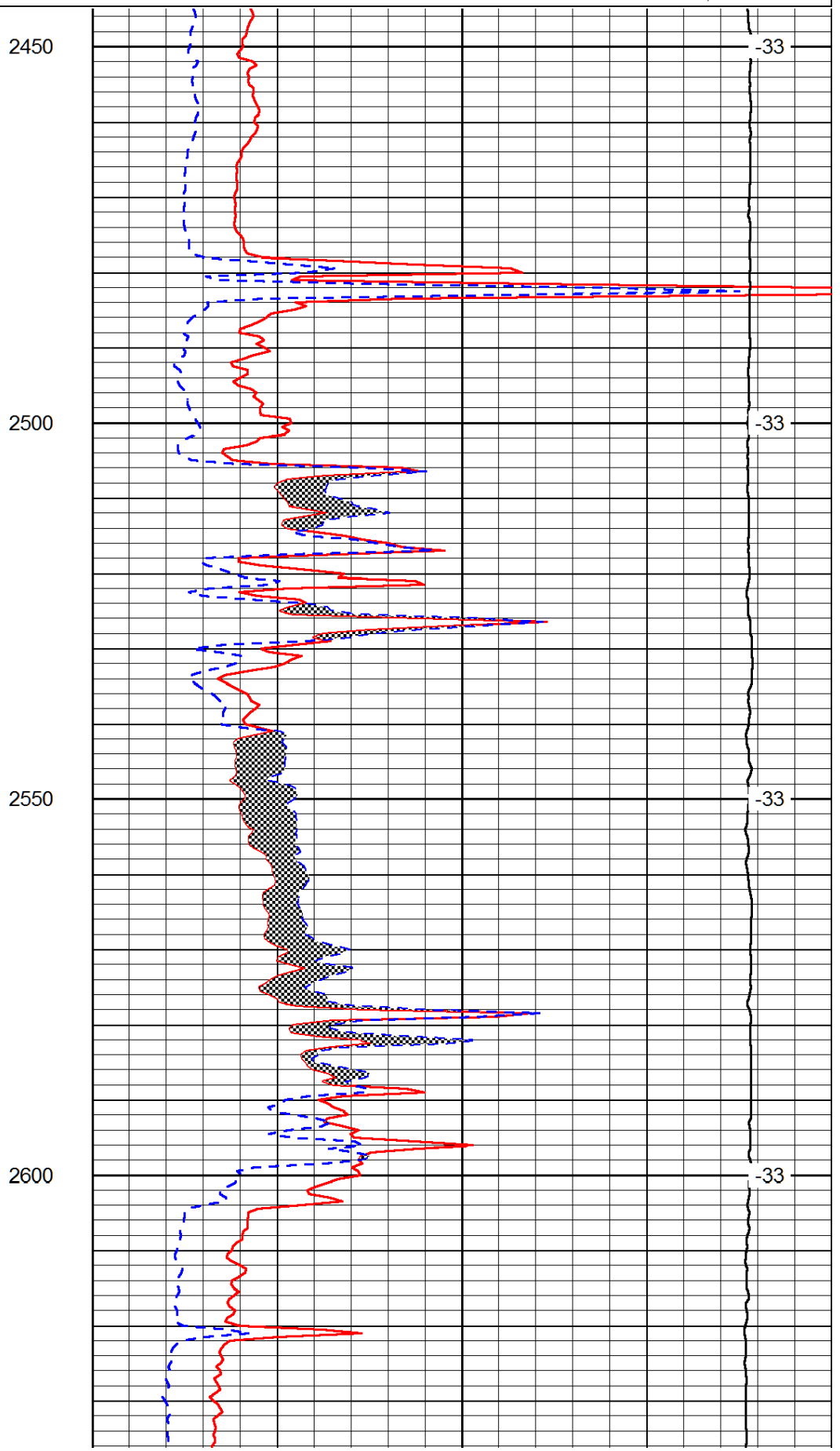
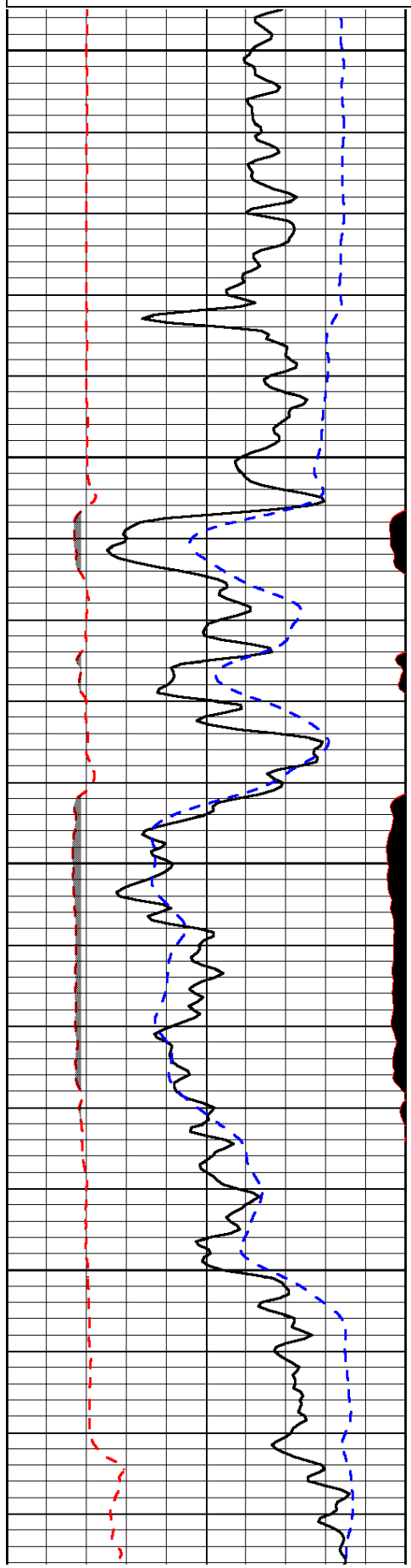
Winfield, KS:
 S of town: E at Super 8, 2S to 202 Rd., 1/4E, S into

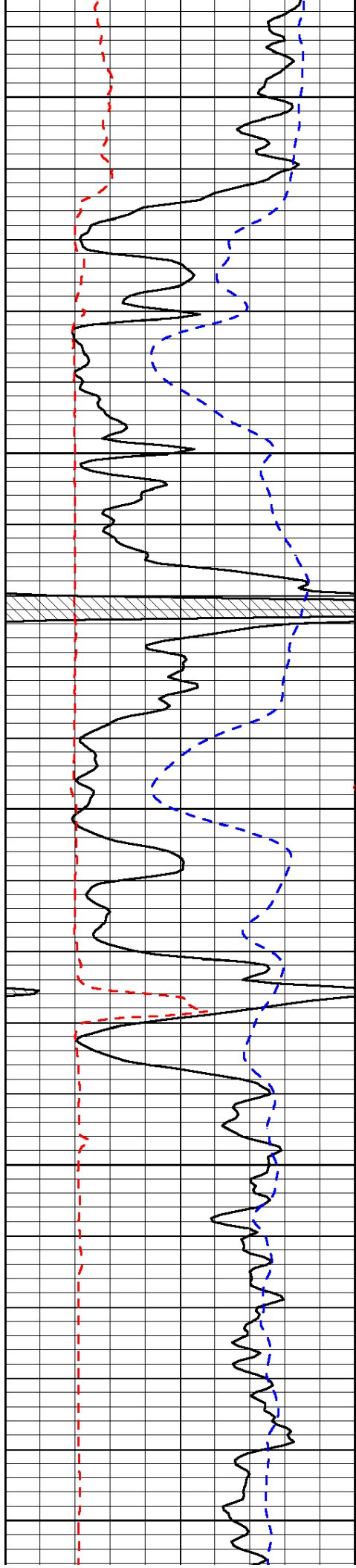
Database File: alton_hd.db
 Dataset Pathname: dil/altmain
 Presentation Format: micro
 Dataset Creation: Fri Sep 13 19:07:49 2013
 Charted by: Depth in Feet scaled 1:240

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)





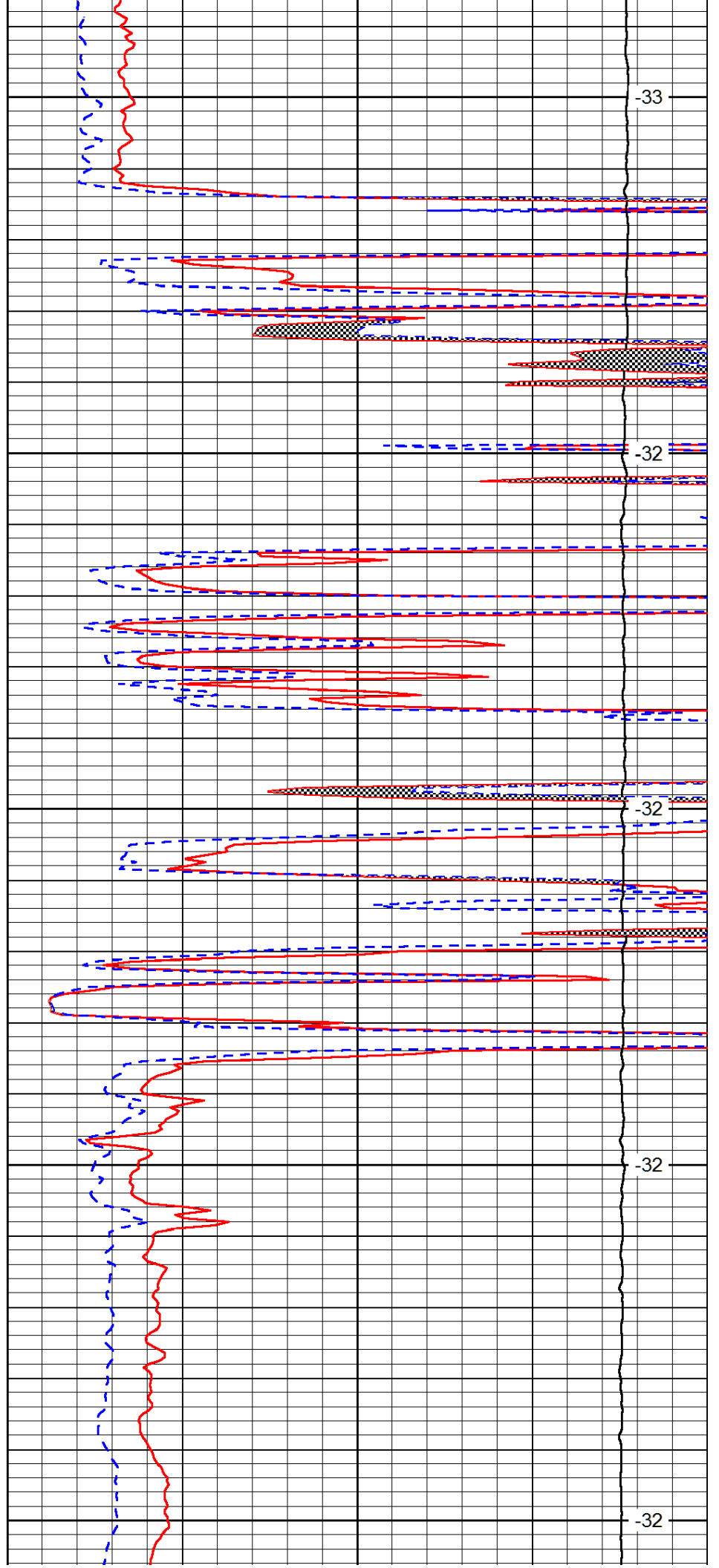
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2700

2750

2800

2850



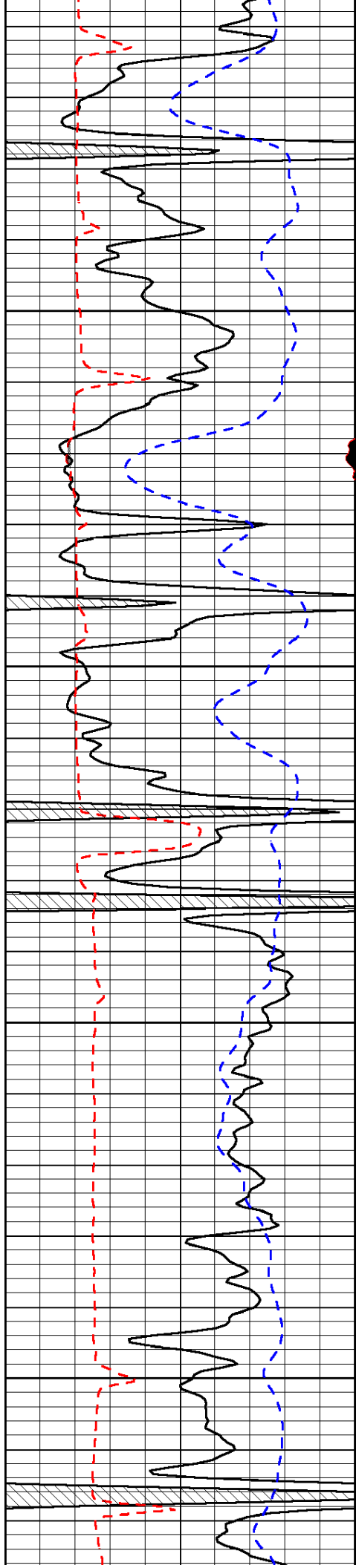
-33

-32

-32

-32

-32

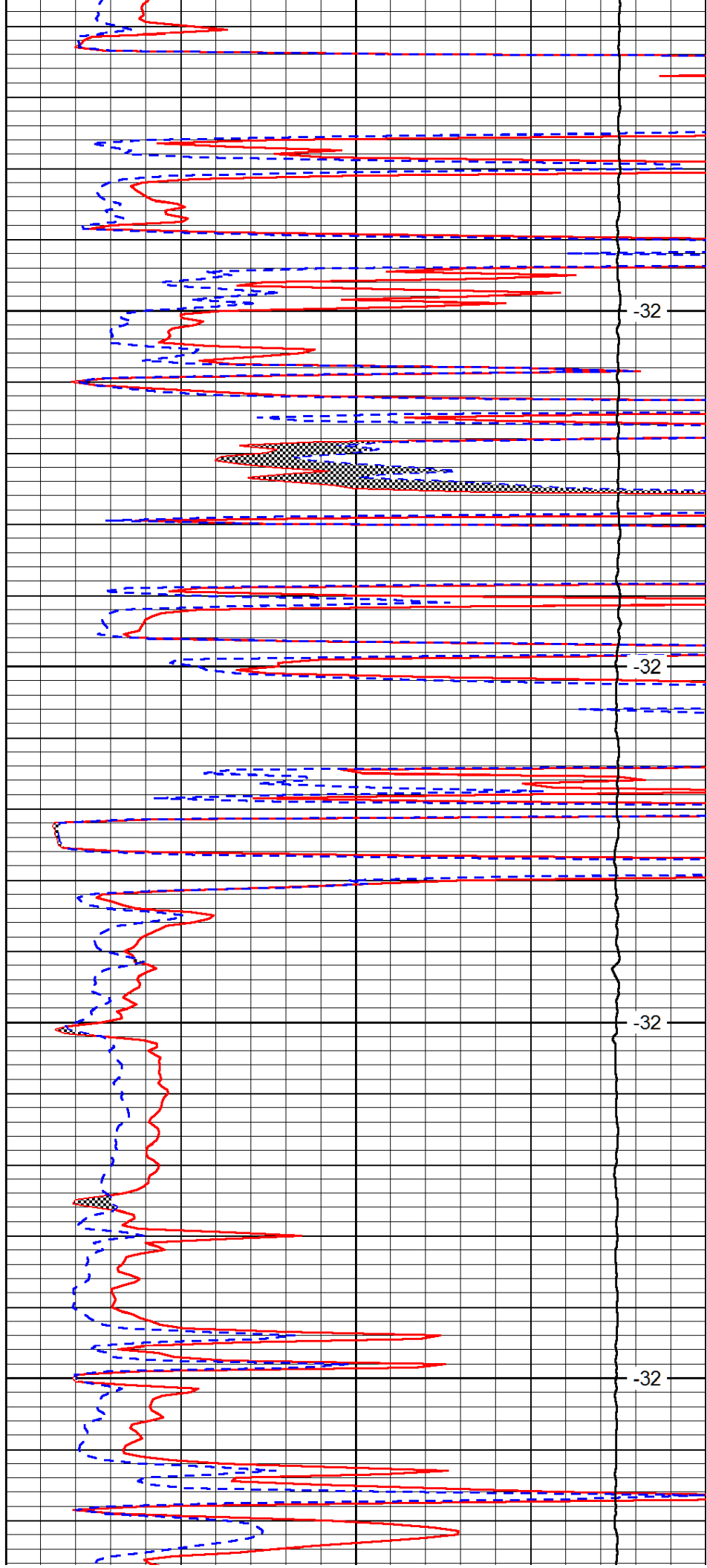


2900

2950

3000

3050

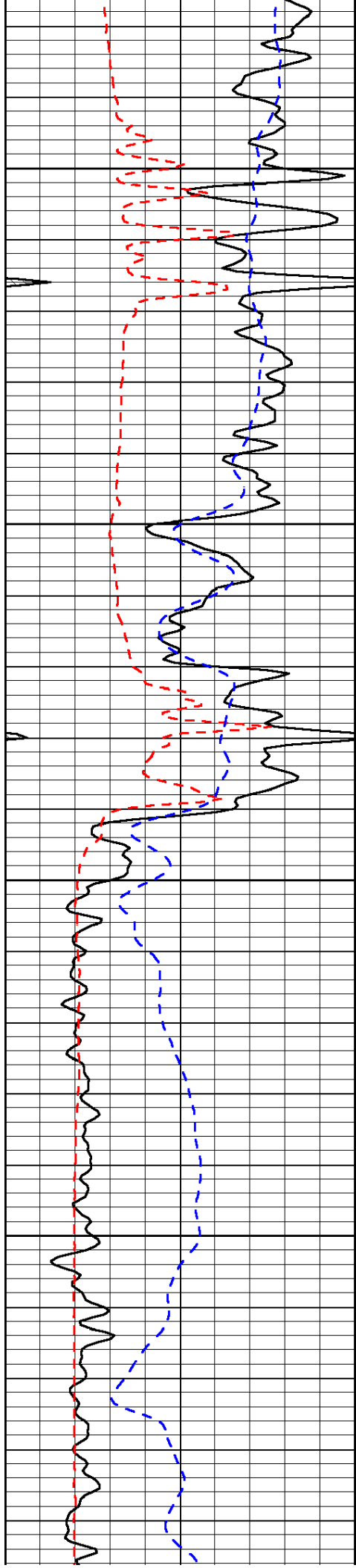


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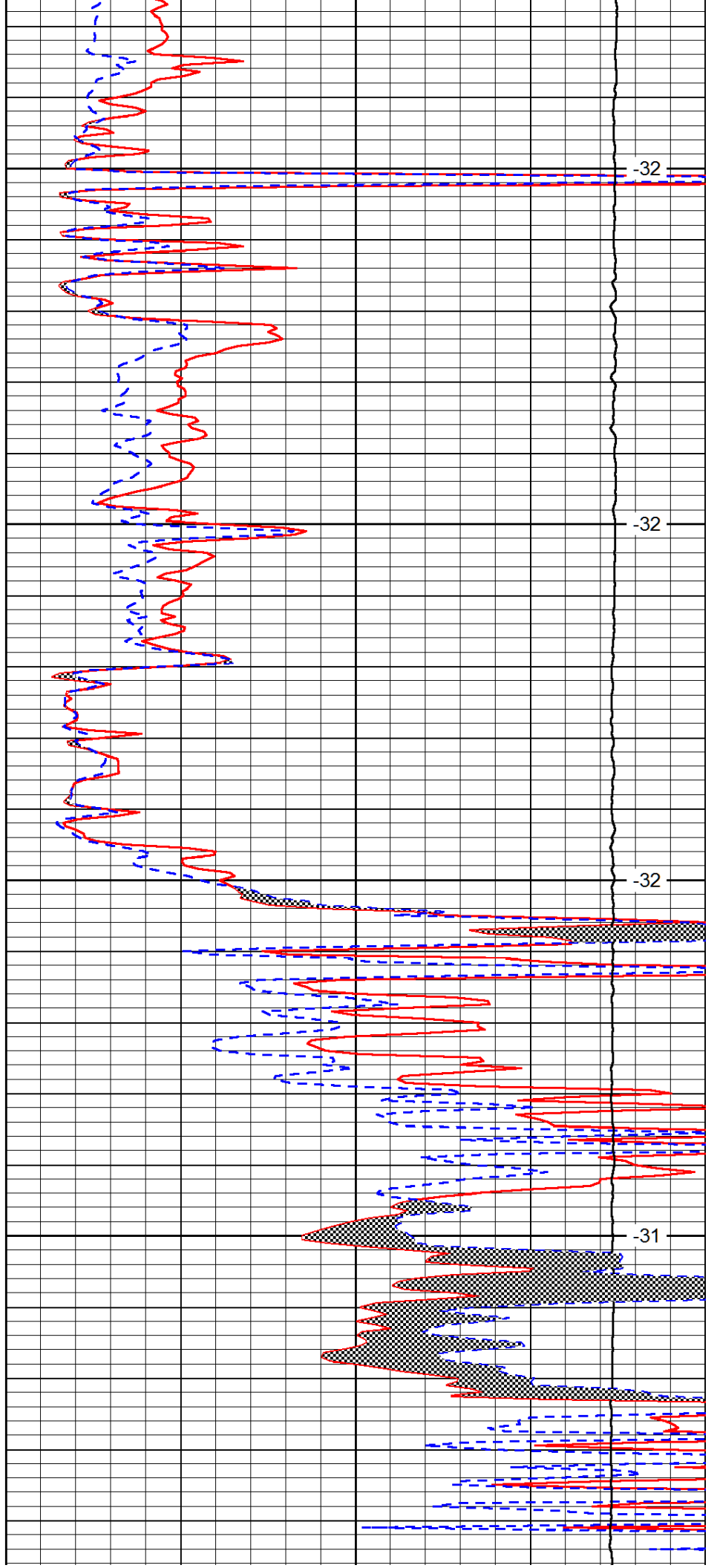


3100

3150

3200

3250

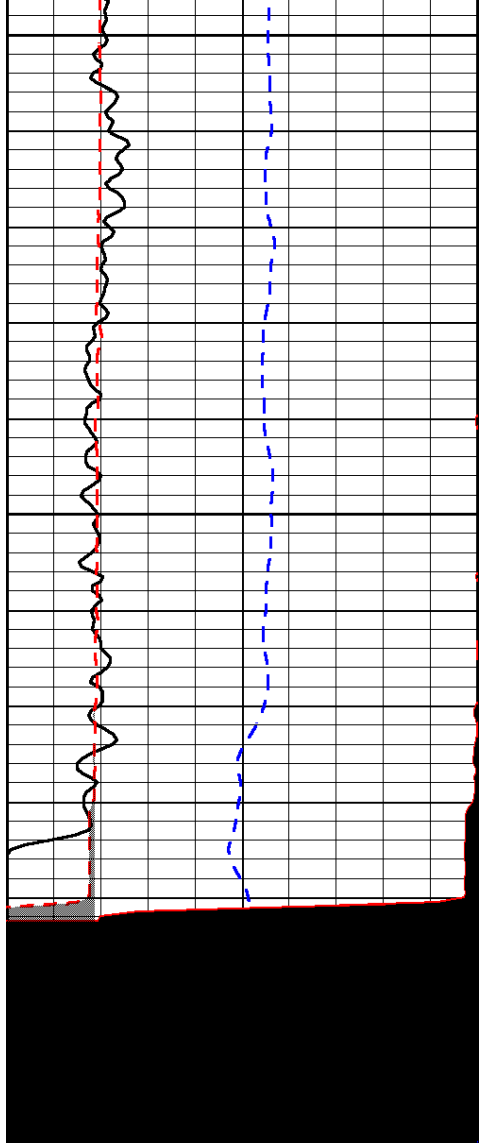


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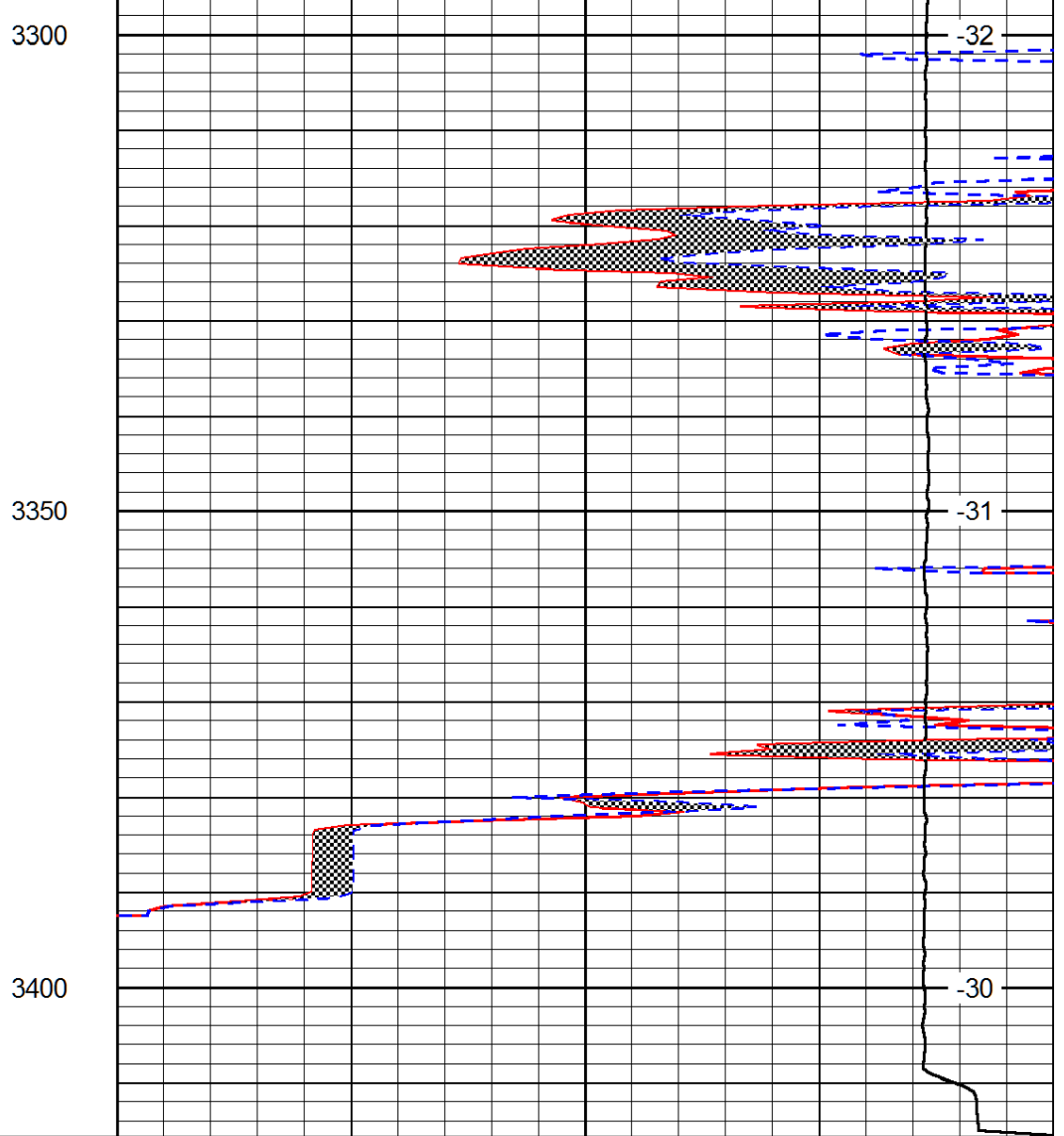
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-31



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