



Pioneer Energy Services

Microresistivity Log

API No. 15-185-23834-00-00

Company: H & D Exploration, LLC
 Well: Nichols "A" #1
 Field: Wildcat
 County: Stafford State: Kansas

Location: W2 NE NW NE
 330' FNL / 1903' FEL

Sec: 22 Twp: 25S Rge: 12W

Other Services: CNL/CDL DIL/BHCS

Permanent Datum	Ground Level	Elevation 1861	K.B. 1869 D.F. 1861 G.L. 1861
Log Measured From	Kelly Bushing	8 Ft. Above Perm. Datum	
Drilling Measured From	Kelly Bushing		
Date	10/12/2013		
Run Number	Two		
Depth Driller	4275		
Depth Logger	4274		
Bottom Logged Interval	4273		
Top Log Interval	3200		
Casing Driller	8.625 @ 662		
Casing Logger	660		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	6500		
Density / Viscosity	9.4 52		
pH / Fluid Loss	9.5 10.0		
Source of Sample	Flowline		
Rm @ Meas. Temp	0.42 @ 65		
Rmf @ Meas. Temp	0.32 @ 65		
Rmc @ Meas. Temp	0.57 @ 65		
Source of Rmf / Rmc	Charts		
Rm @ BHT	0.23 @ 119		
Operating Rig Time	5 Hours		
Max Rec. Temp. F	119		
Equipment Number	17		
Location	Hays		
Recorded By	R. Barnhart		
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

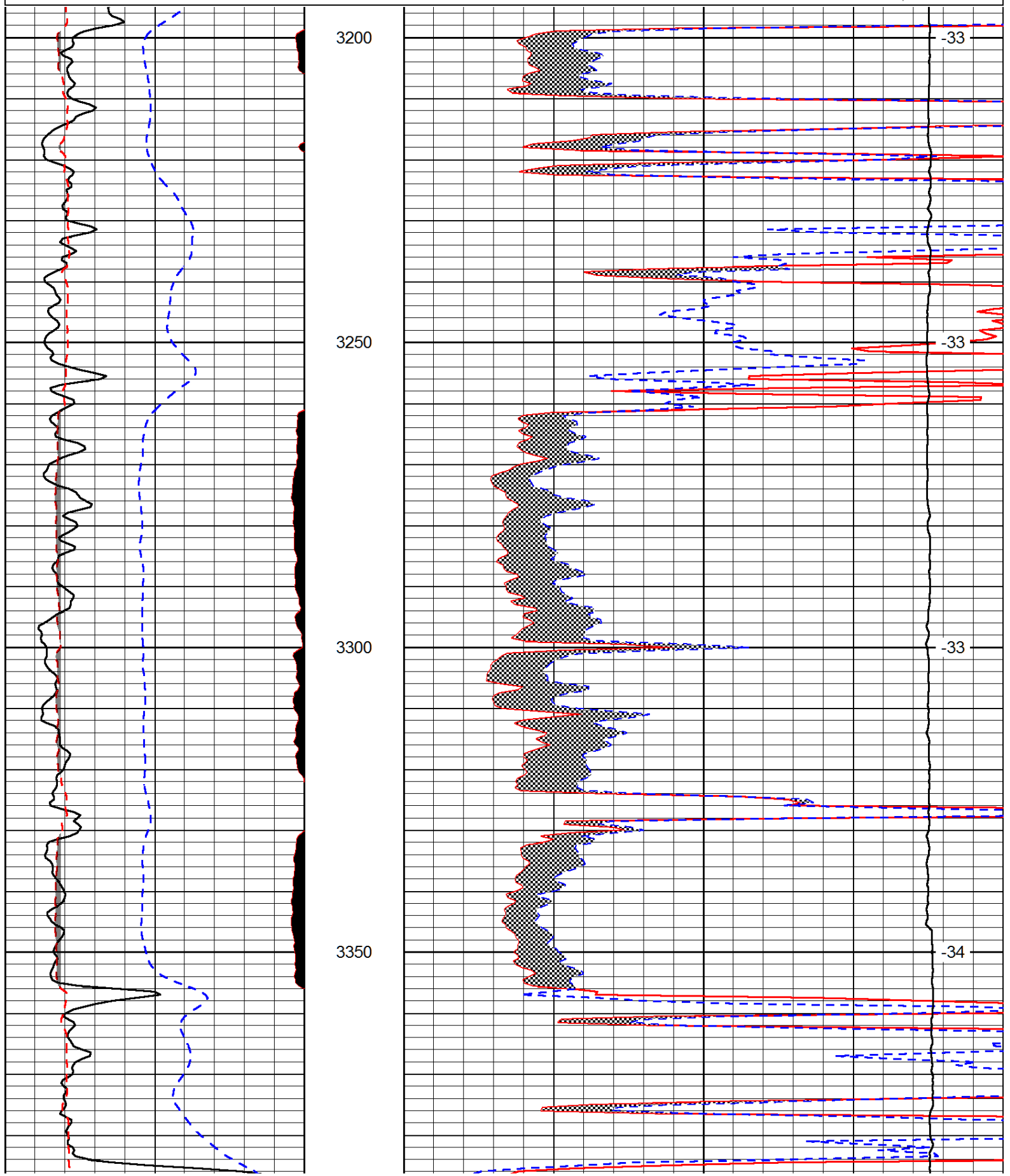
Stafford, KS:
 6S to Rd. 60, 1 1/2W, S into

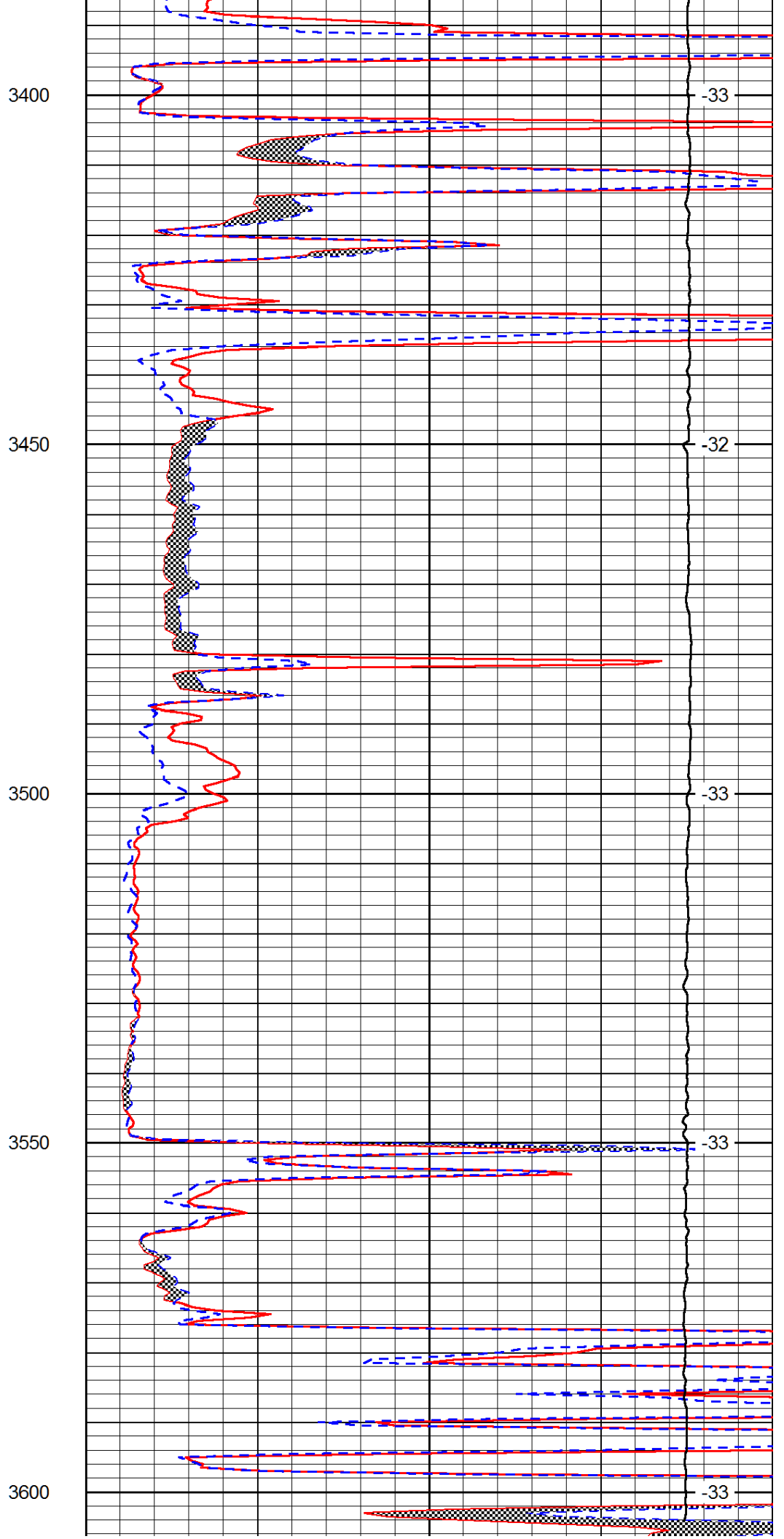
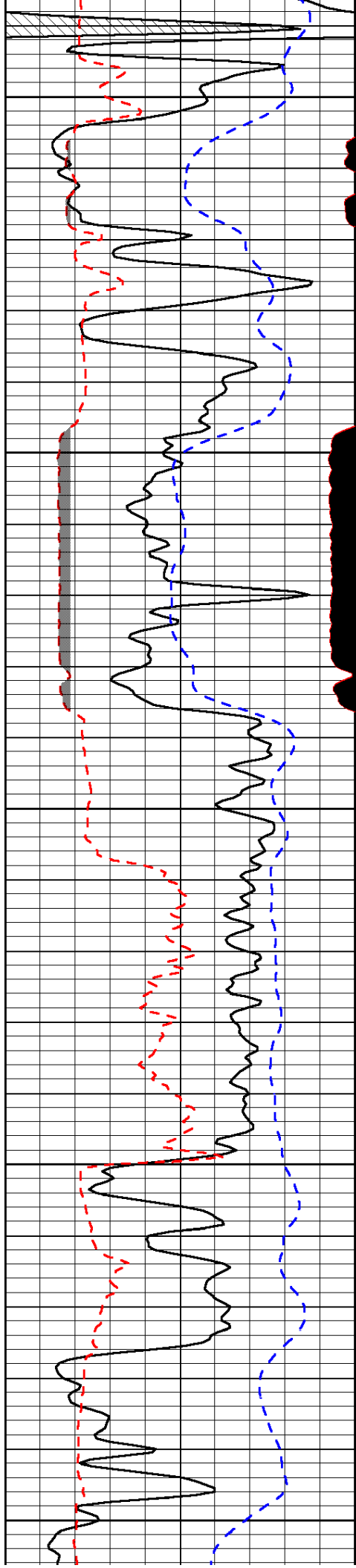
Database File: h&d_hd.db
 Dataset Pathname: DIL/hdmain
 Presentation Format: micro
 Dataset Creation: Sat Oct 12 15:49:27 2013
 Charted by: Depth in Feet scaled 1:240

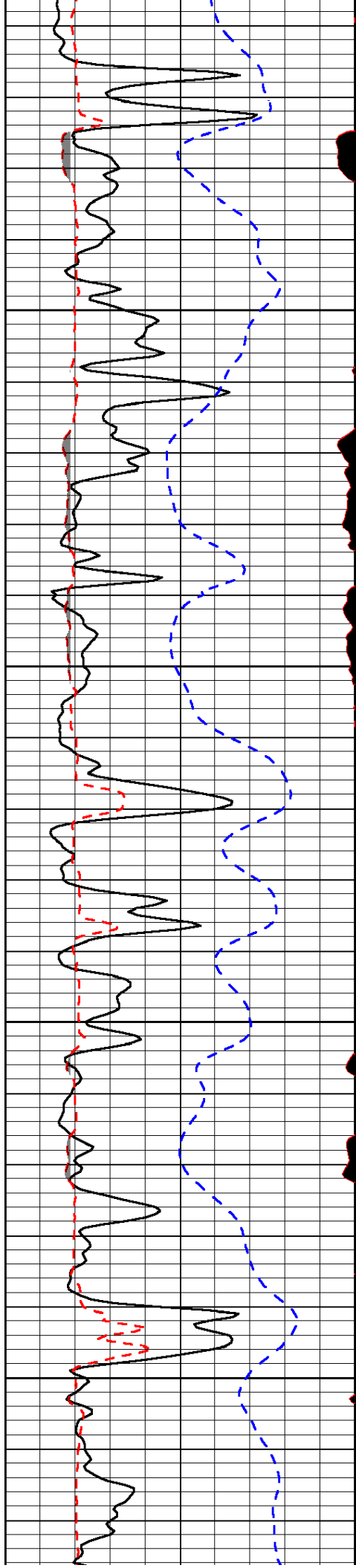
0	Gamma Ray (GAPI)	150
6	MCAL (in)	16
2.875	Mud Cake (in)	7.875
-200	SP (mV)	0

0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0

LSPD
(ft/min)





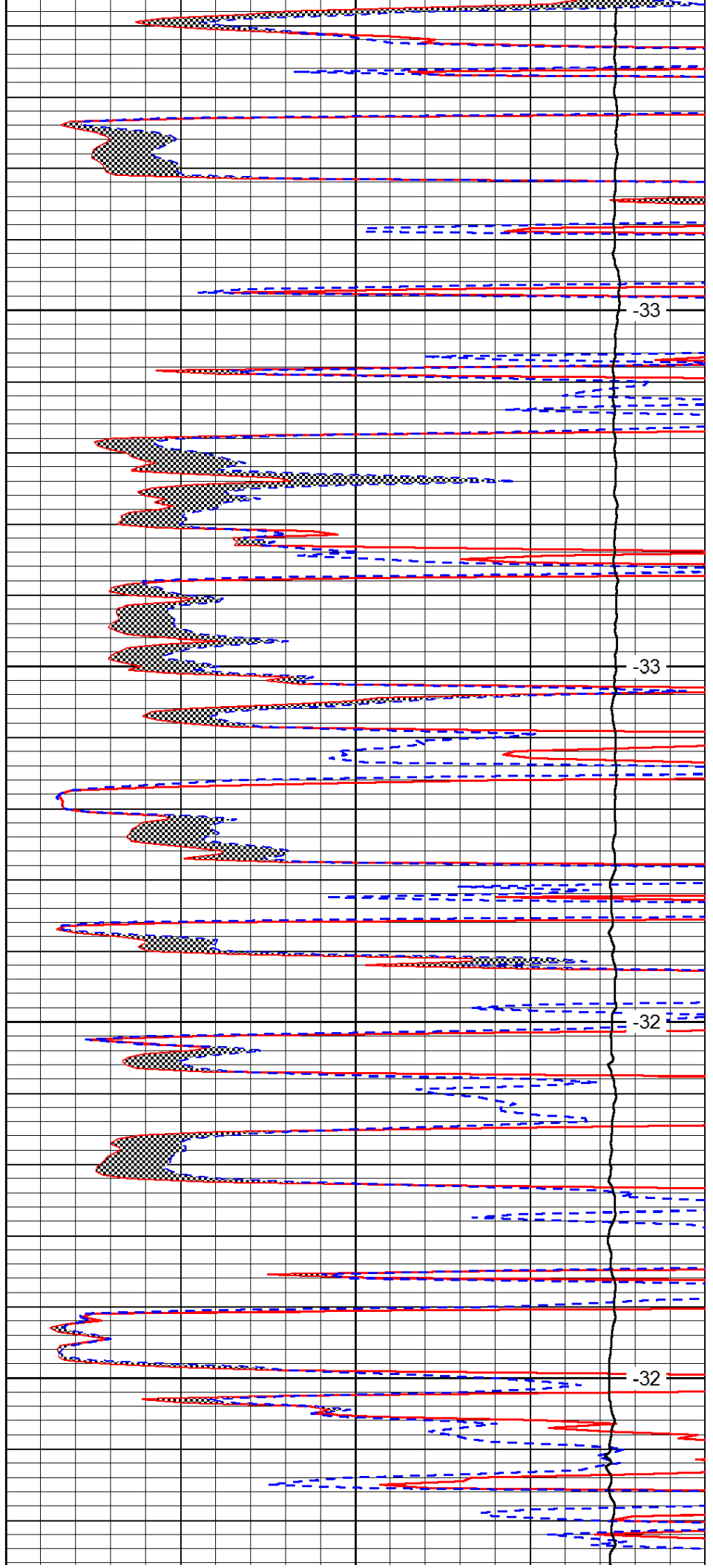


3650

3700

3750

3800

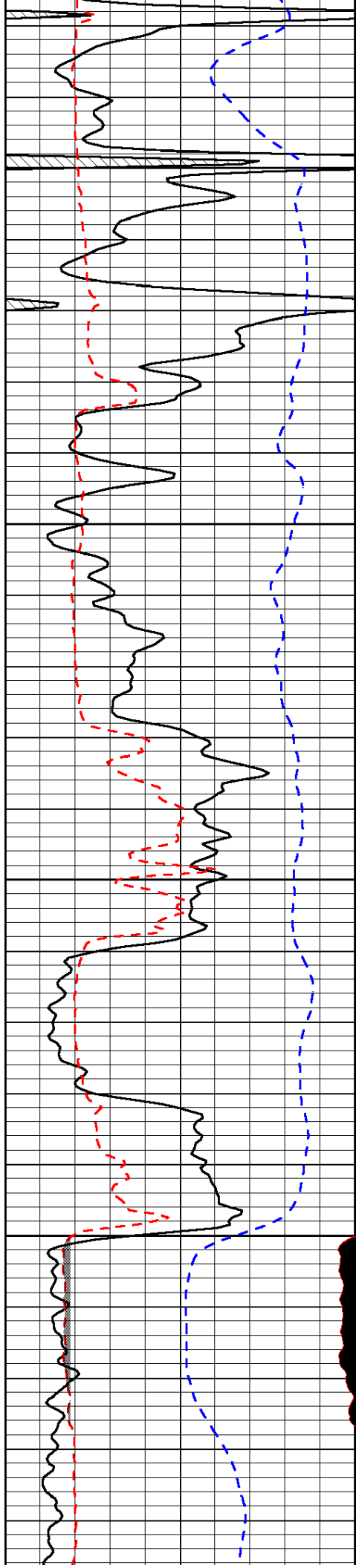


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-32

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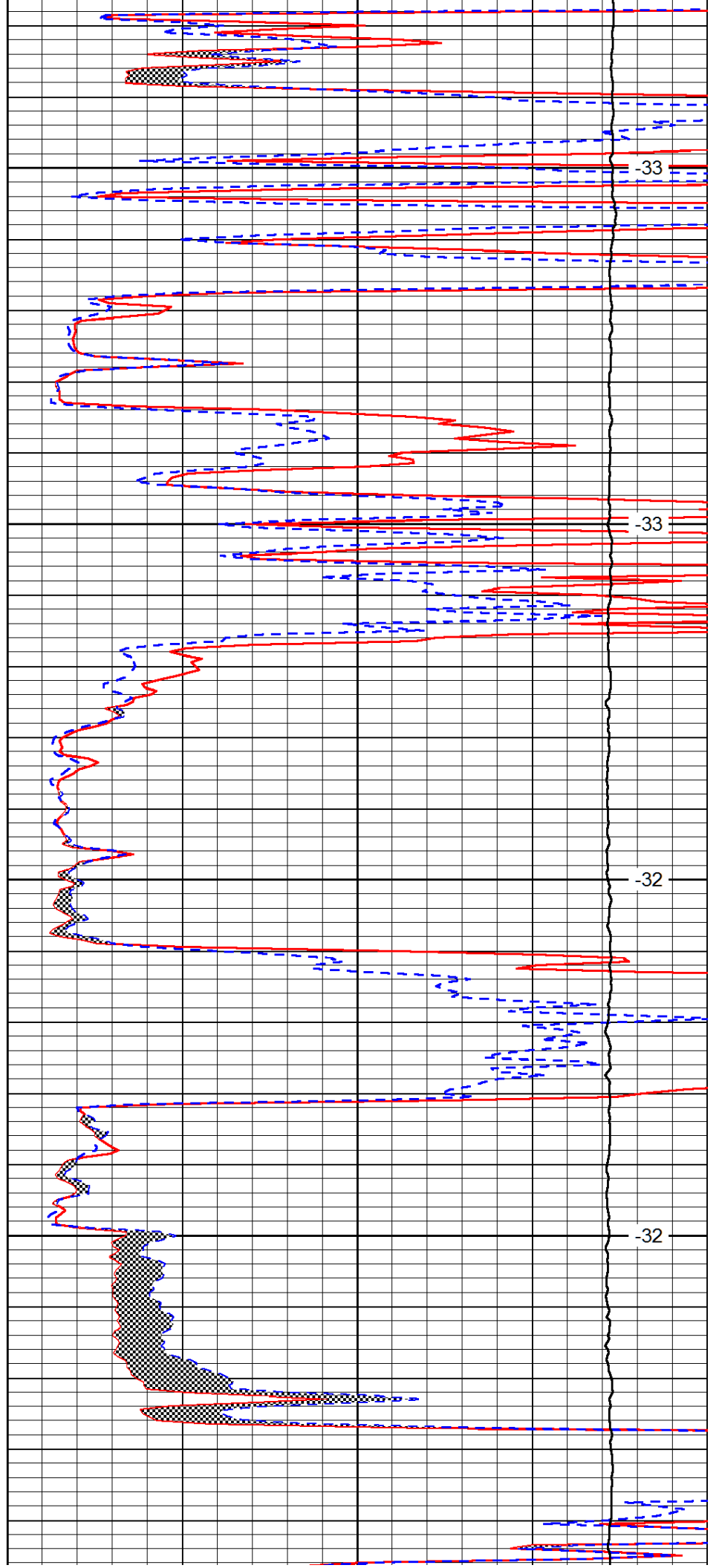


3850

3900

3950

4000

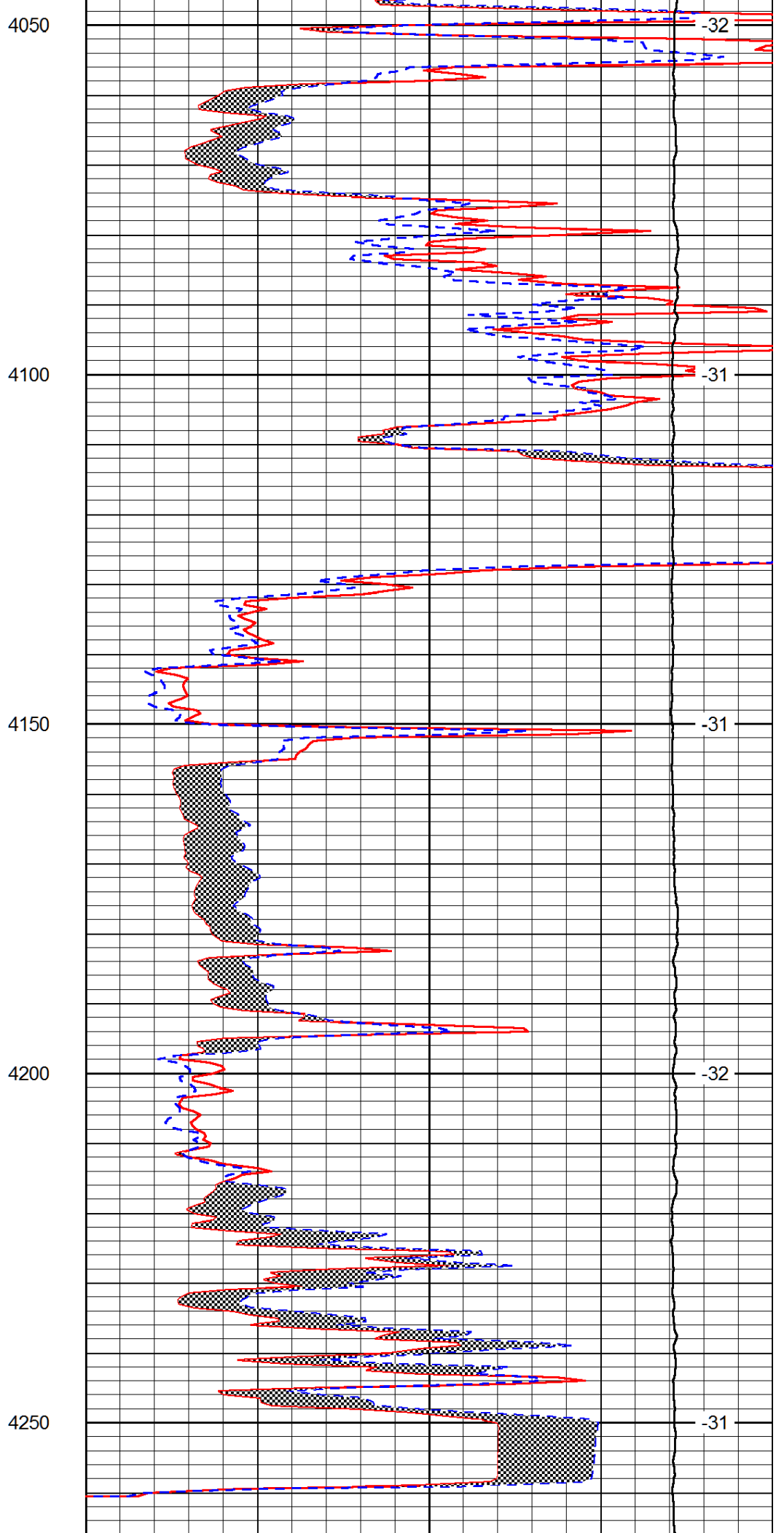
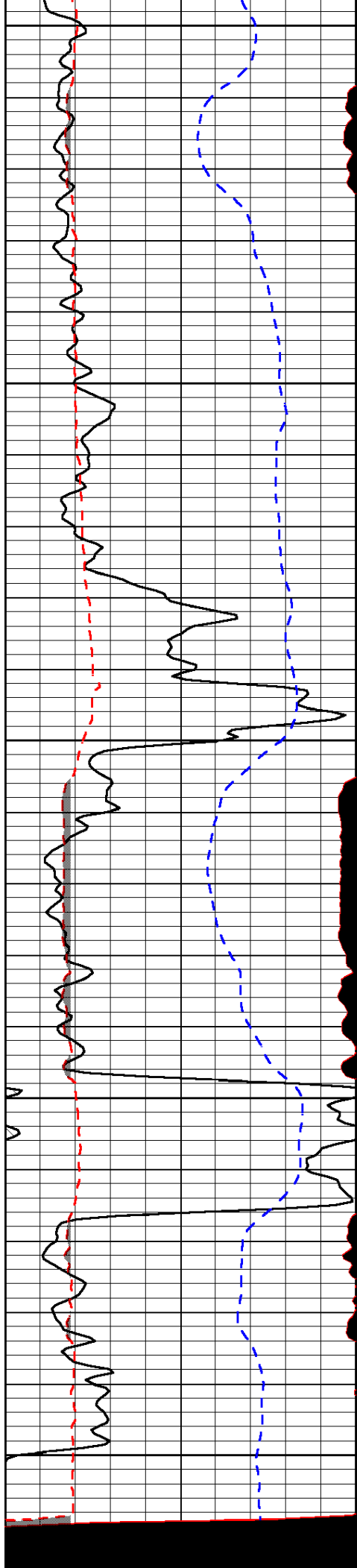


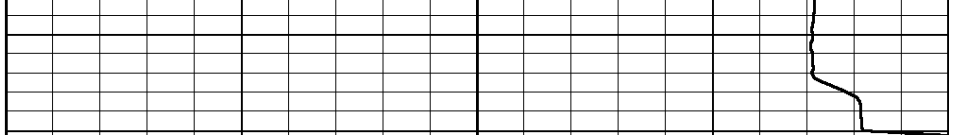
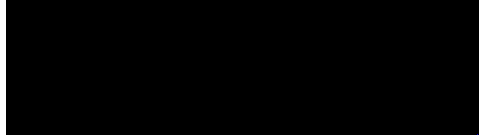
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