



Pioneer Energy Services

Microresistivity Log

API No.	15-193-20889-00-00		
Company	Culbreath Oil & Gas Company, Inc.		
Well	Ostmeyer #1-20		
Field	Wildcat		
County	Thomas	State	Kansas
Location	850' FNL & 1220' FWL		
Sec: 20	Twp: 10S	Rge: 31W	
Permanent Datum	Ground Level	Elevation 2970	Other Services CNL/CDL DIL/BHCS
Log Measured From	Kelly Bushing	10 Ft. Above Perm. Datum	
Drilling Measured From	Kelly Bushing		

Date	4/14/2013
Run Number	Two
Depth Driller	4676
Depth Logger	4676
Bottom Logged Interval	4675
Top Log Interval	3600
Casing Driller	8.625 @ 310
Casing Logger	306
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	2000
Density / Viscosity	9.3 @ 60
pH / Fluid Loss	9.5 @ 7.6
Source of Sample	Flowline
Rm @ Meas. Temp	1.30 @ 60
Rmf @ Meas. Temp	0.98 @ 60
Rmc @ Meas. Temp	1.76 @ 60
Source of Rmf / Rmc	Charts
Rm @ BHT	0.63 @ 125
Operating Rig Time	5 Hours
Max Rec. Temp. F	125
Equipment Number	91
Location	Hays
Recorded By	D. Schmidt
Witnessed By	Steve Murphy

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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

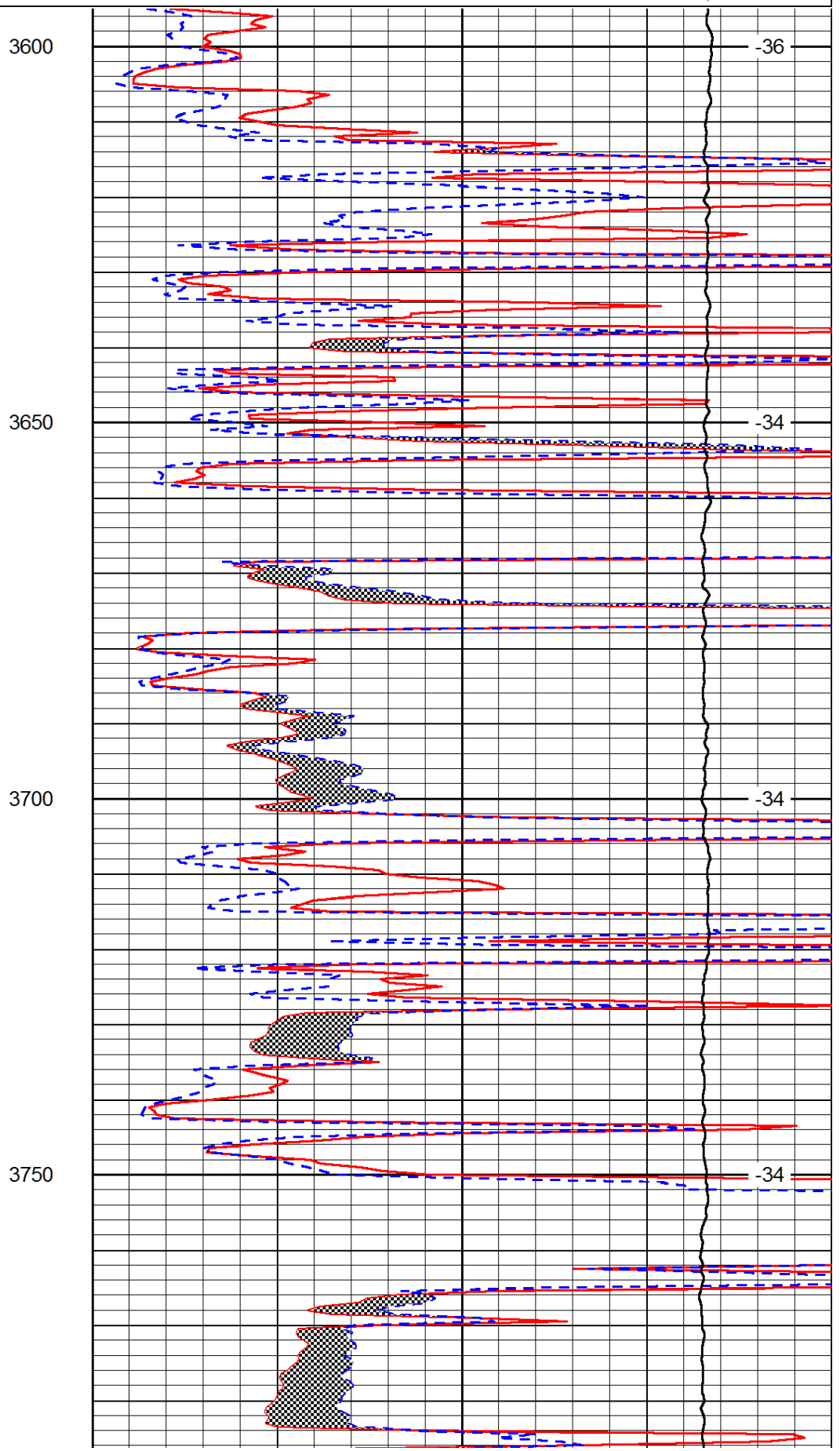
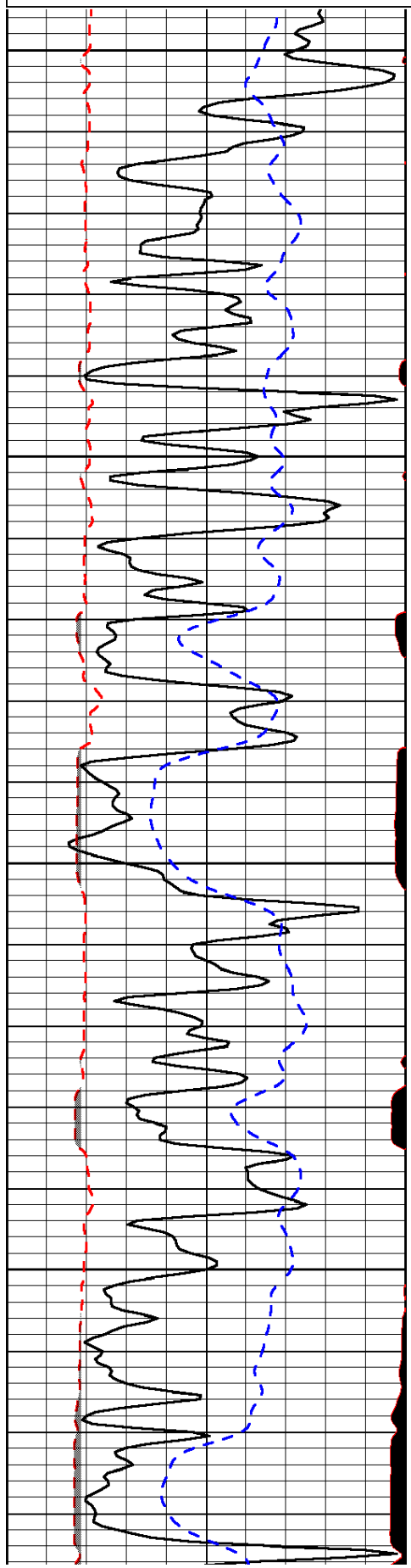
Thank you for using Log-Tech, Inc.
 (785) 625-3858
 Oakley (Mittens),
 1 1/2 West on Old Hwy 40 to 450 Rd, 1 North to the T,
 1 East to 460 Rd, 2 1/2 North,
 East & North into

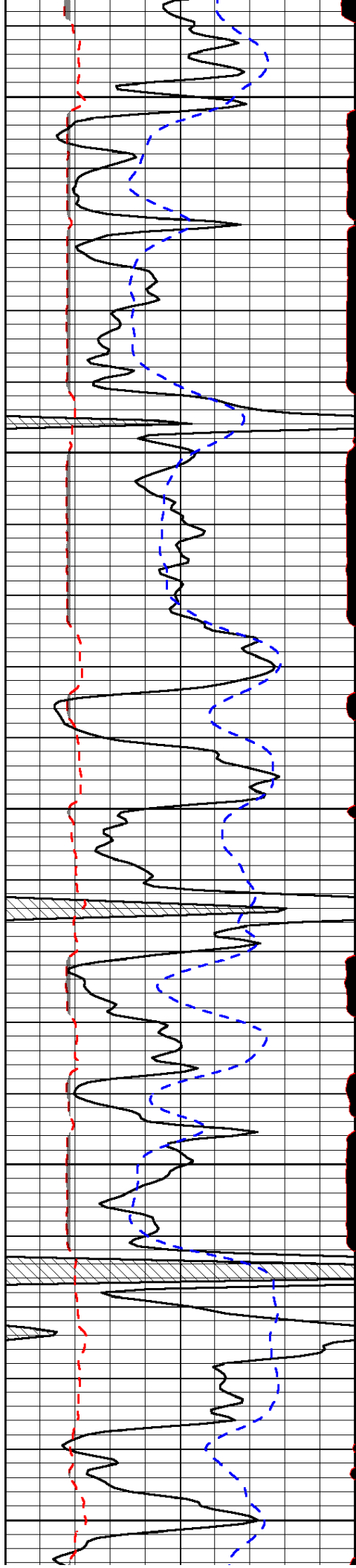
Database File: culbreath_041413hd.db
 Dataset Pathname: dil/culstk
 Presentation Format: micro
 Dataset Creation: Sun Apr 14 21:23:00 2013
 Charted by: Depth in Feet scaled 1:240

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)





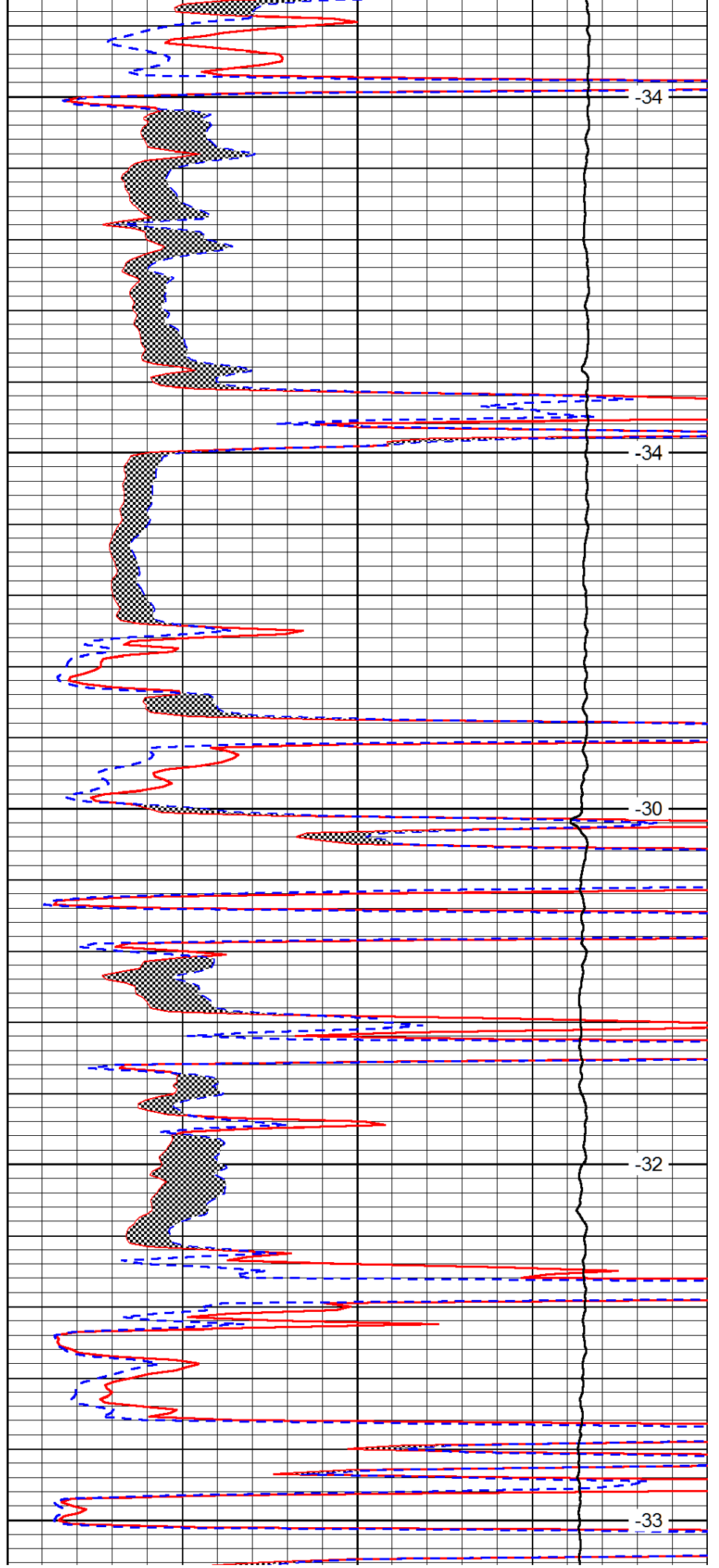
3800

3850

3900

3950

4000



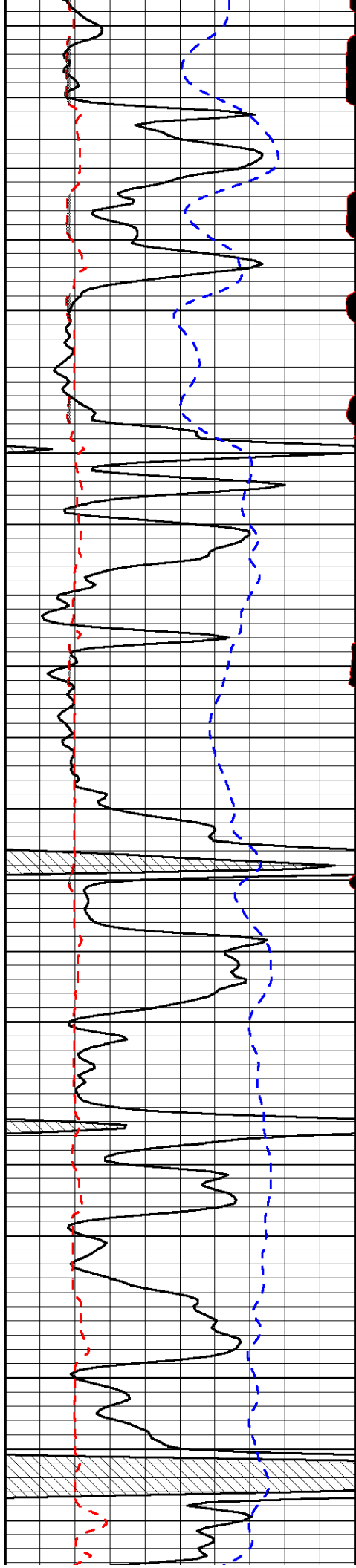
-34

-34

-30

-32

-33

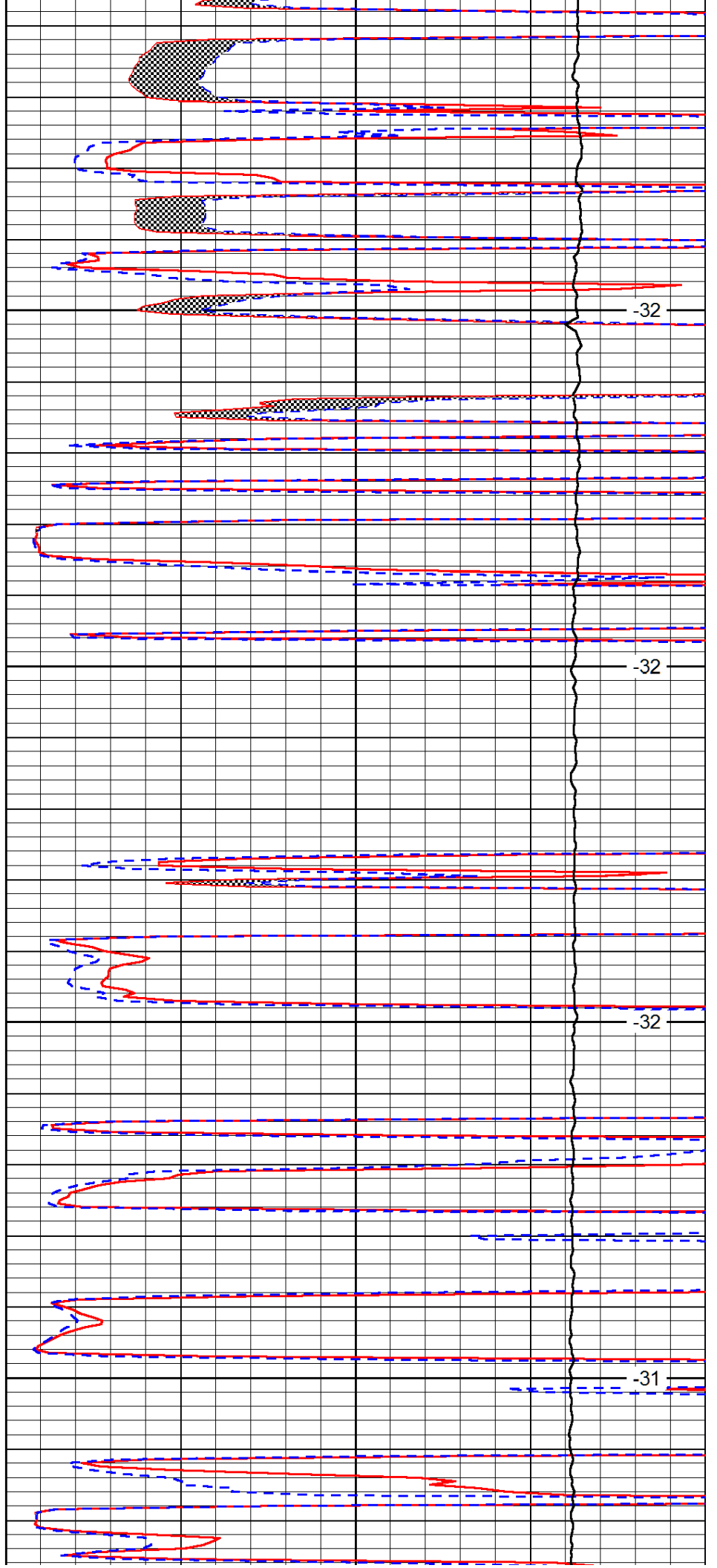


4050

4100

4150

4200

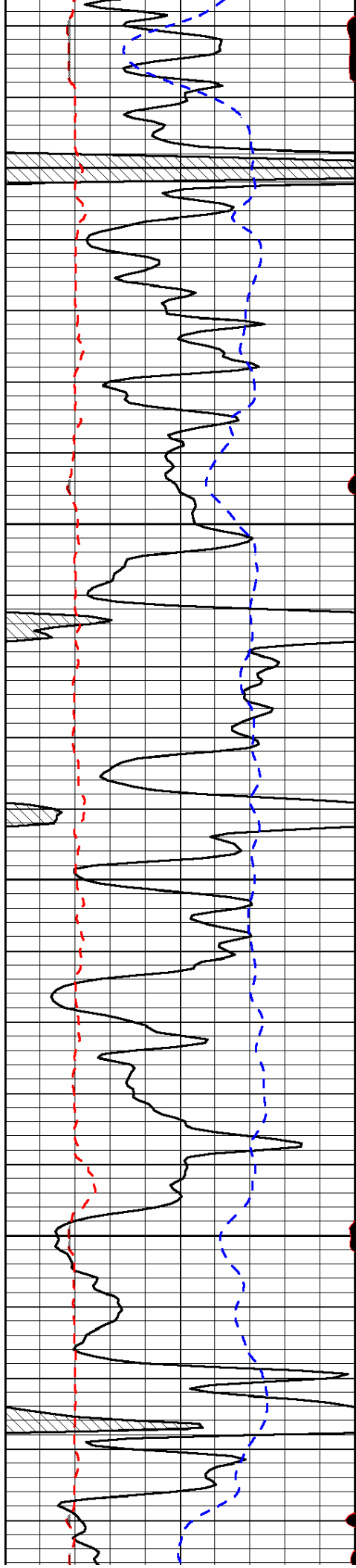


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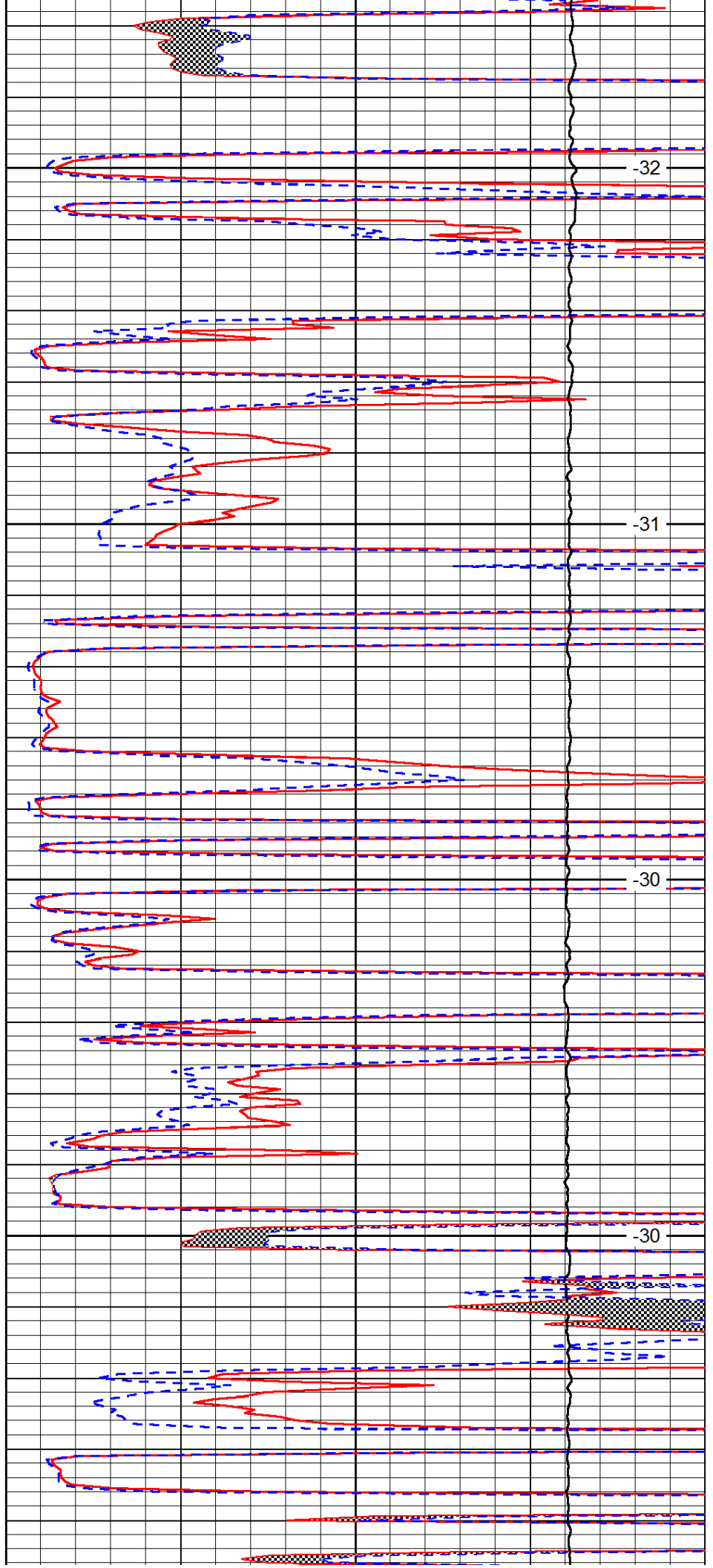


4250

4300

4350

4400

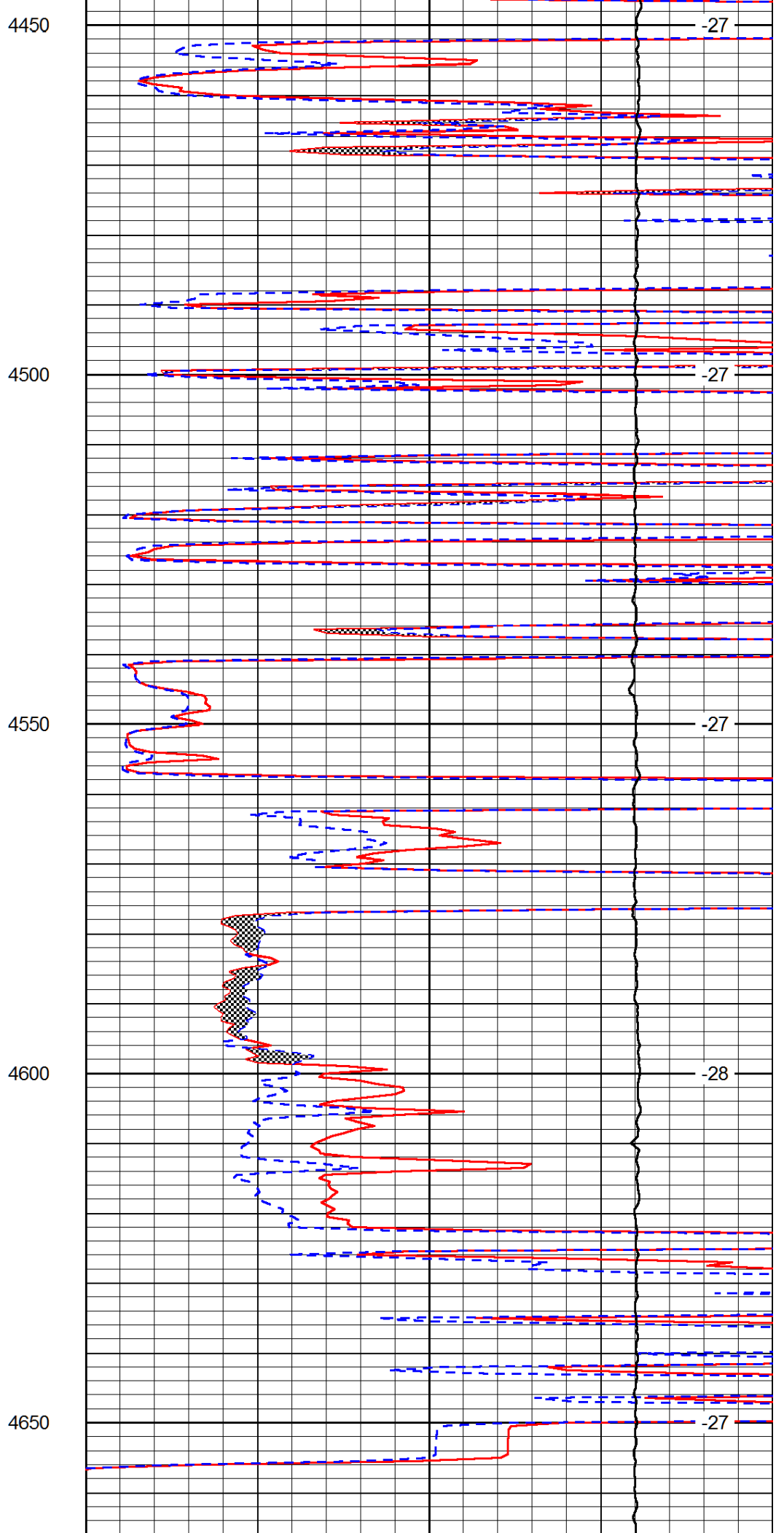
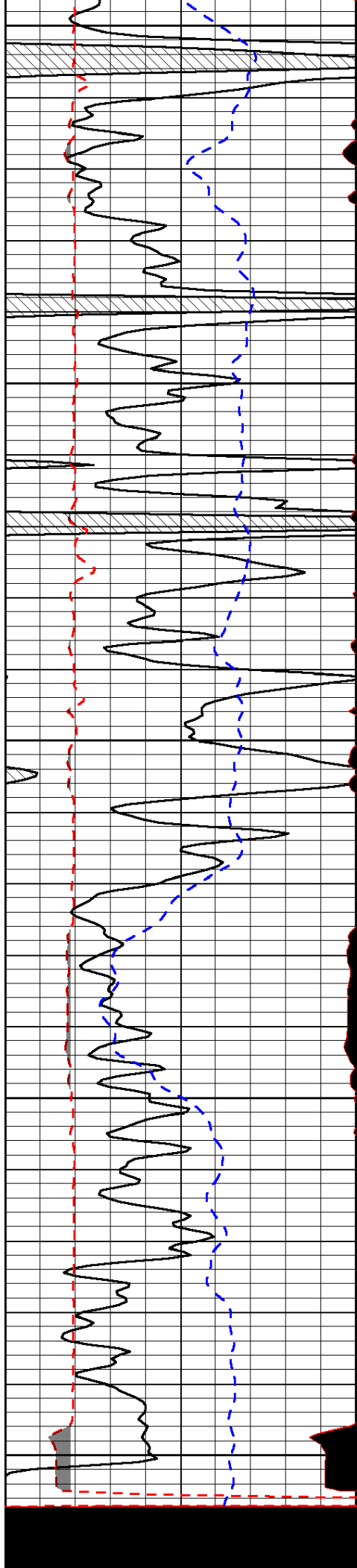


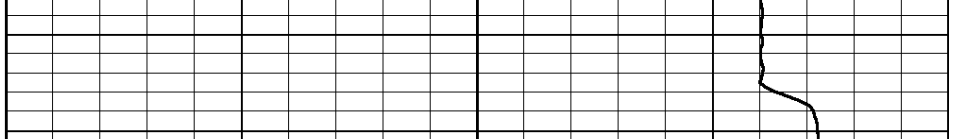
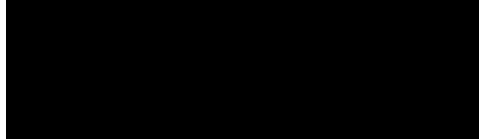
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-31

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