



PIONEER

Pioneer Energy Services

Microresistivity Log

API No.	Company H&C Oil Operating, Inc.			
15-135-25439-00-00	Well Dinges #19-1			
	Field Wildcat			
	County	Ness	State	Kansas
	Location	1550' FSL & 800' FWL		
	Sec: 19	Twp: 17S	Rge: 26W	Other Services CNL/CDL DIL/BHCS
Permanent Datum	Ground Level	Elevation 2527		Elevation
Log Measured From	Kelly Bushing	8 Ft. Above Perm. Datum		K.B. 2535
Drilling Measured From	Kelly Bushing			D.F. 2527
Date	8/5/2012			
Run Number	Two			
Depth Driller	4544			
Depth Logger	4545			
Bottom Logged Interval	4544			
Top Log Interval	3700			
Casing Driller	8.625 @ 211			
Casing Logger	209			
Bit Size	7.875			
Type Fluid in Hole	Chemical			
Salinity, ppm CL	6000			
Density / Viscosity	9.2	60		
pH / Fluid Loss	9.5	8.0		
Source of Sample	Flowline			
Rm @ Meas. Temp	0.65 @ 75			
Rmf @ Meas. Temp	0.49 @ 75			
Rmc @ Meas. Temp	0.88 @ 75			
Source of Rmf / Rmc	Charts			
Rm @ BHT	0.39 @ 123			
Operating Rig Time	5 Hours			
Max Rec. Temp. F	123			
Equipment Number	91			
Location	Hays			
Recorded By	D. Schmidt			
Witnessed By	Marc Downing			

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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

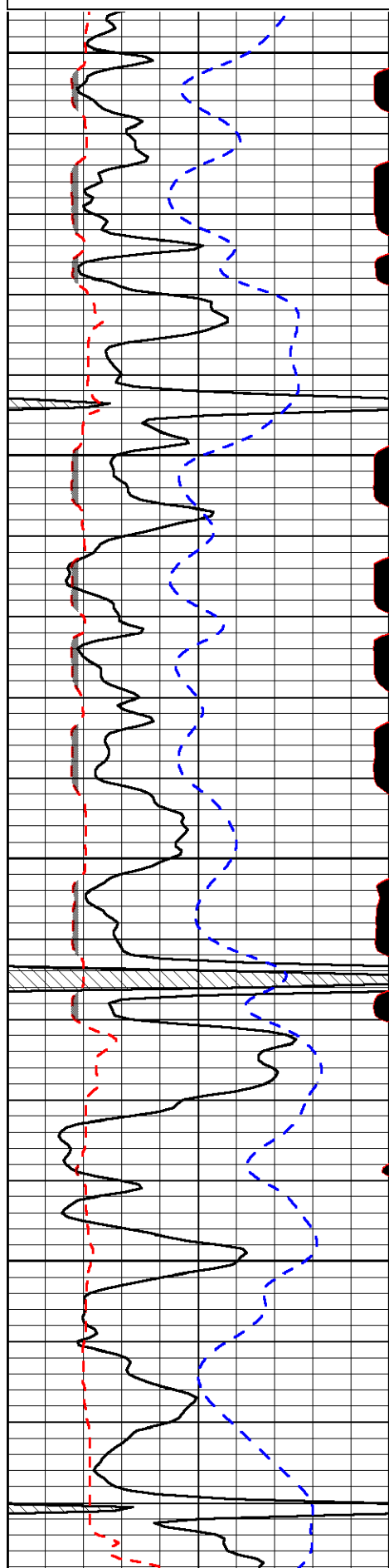
Thank you for using Log-Tech, Inc.
(785) 625-3858

Utica,
2 West to B Rd, 4 South to 220 Rd, 1 West to A Rd, 1 3/4 South,
West into thru gate about 1 mile to location

Database File: h&c_080512hd.db
Dataset Pathname: dil/hcstack
Presentation Format: micro
Dataset Creation: Sun Aug 05 06:51:58 2012
Charted by: Depth in Feet scaled 1:240

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

0	Micro Inverse 1 X 1	40
0	Micro Normal 2"	40
10000	Line Weight	0
		LSPD

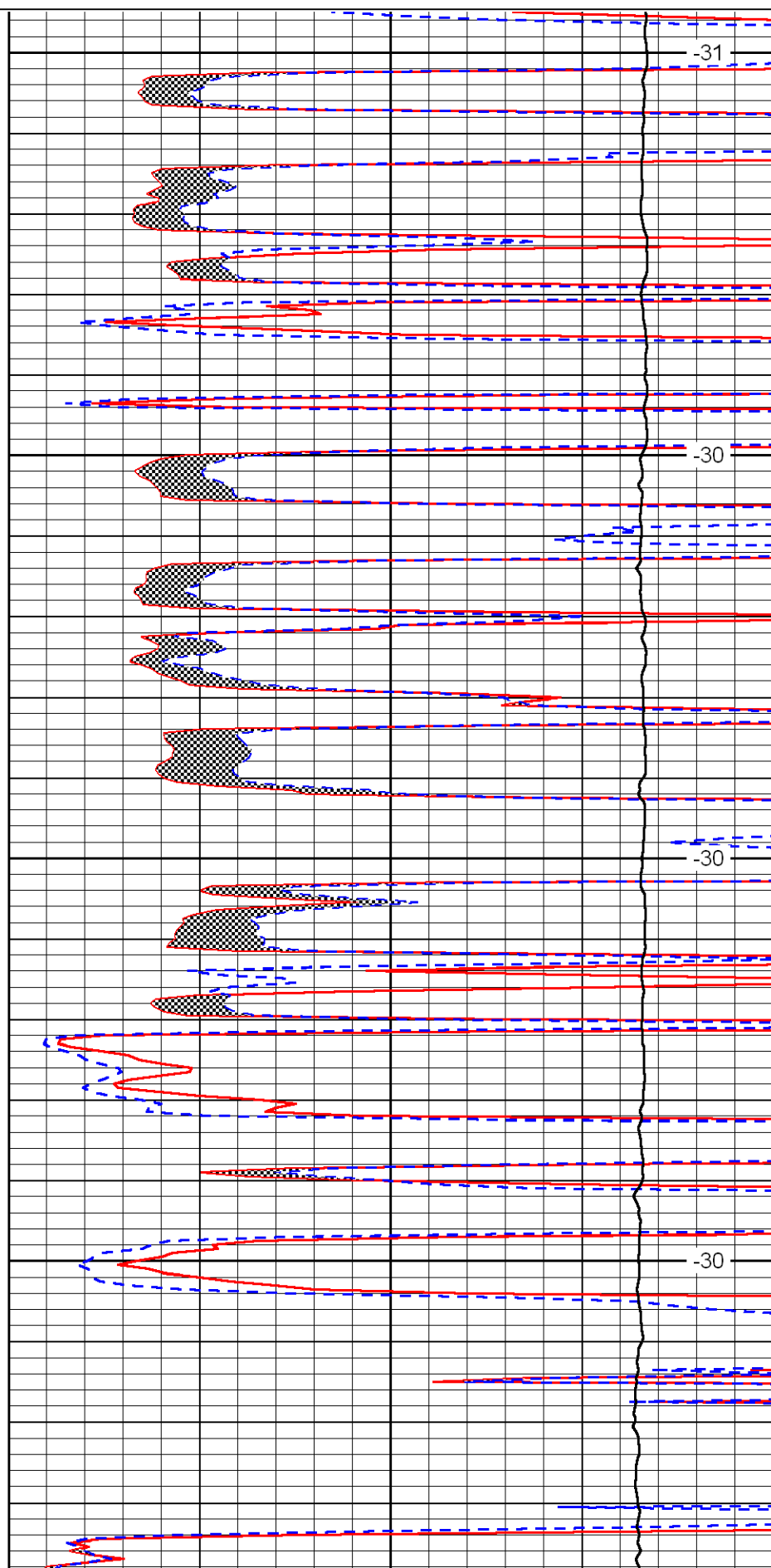


3700

3750

3800

3850

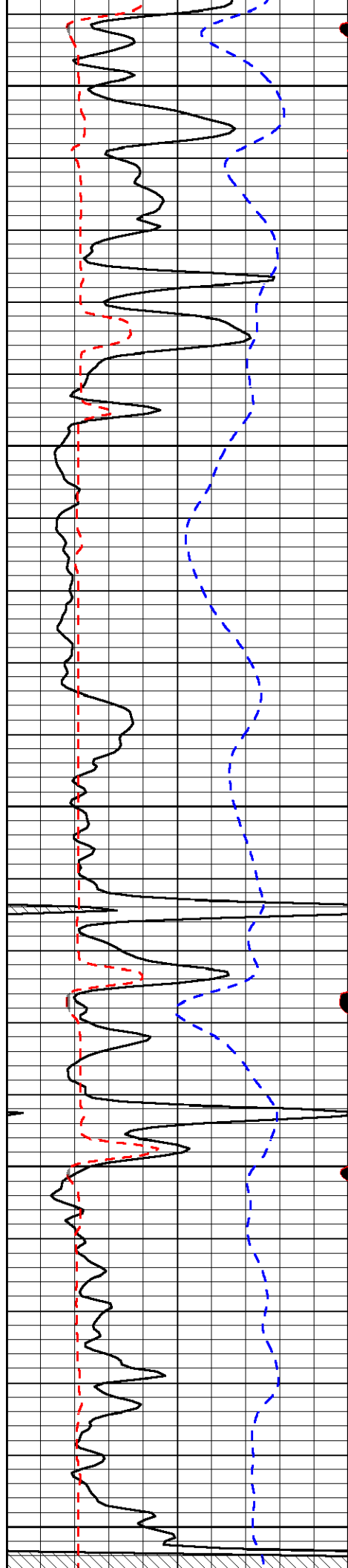


-31

-30

-30

-30



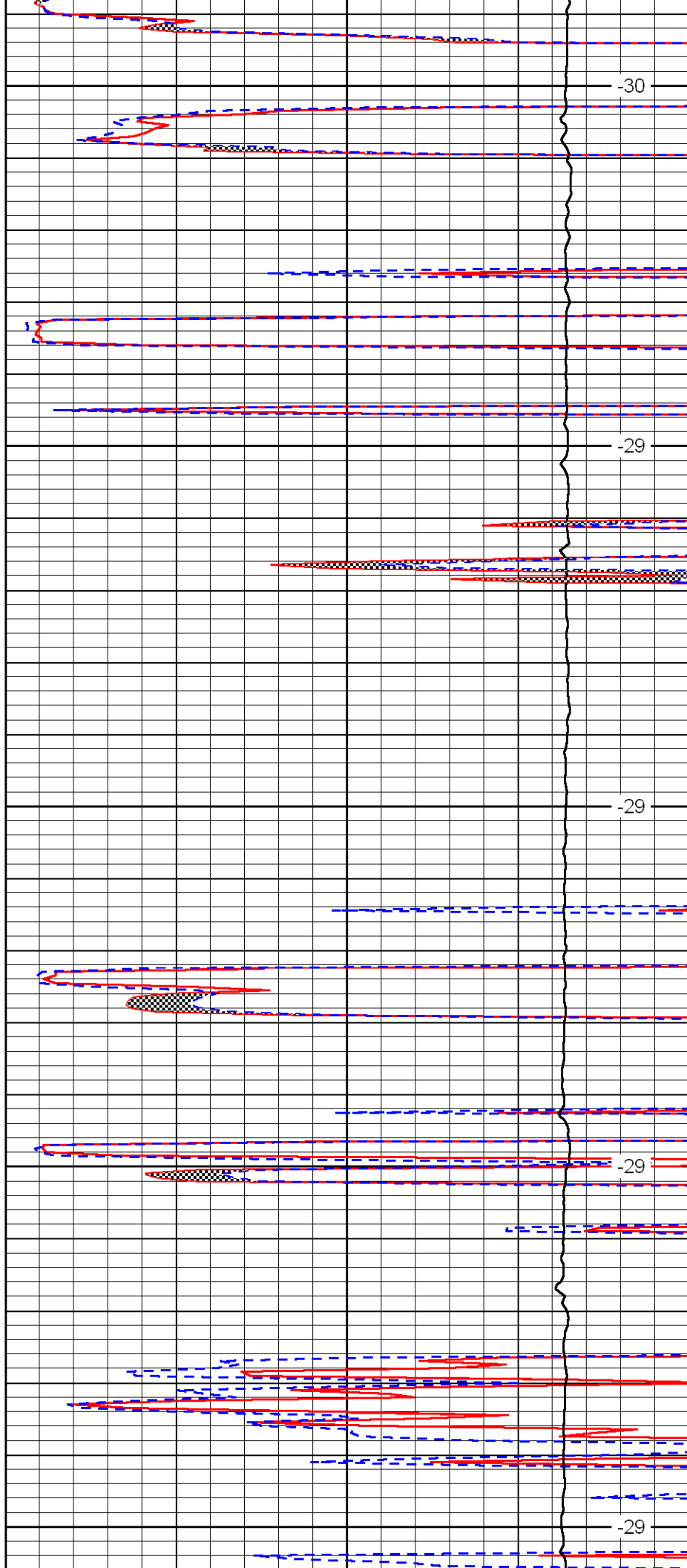
3900

3950

4000

4050

4100



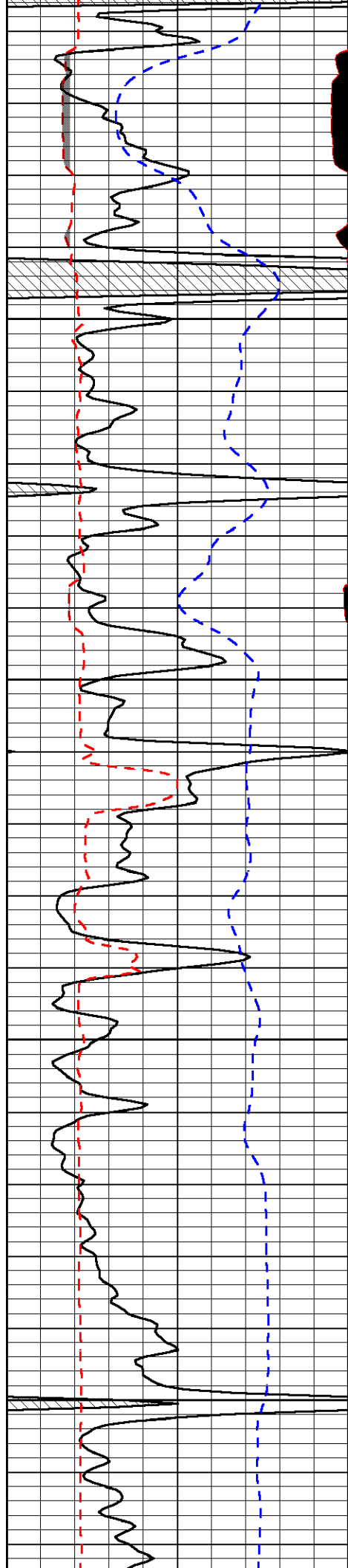
-30

-29

-29

-29

-29

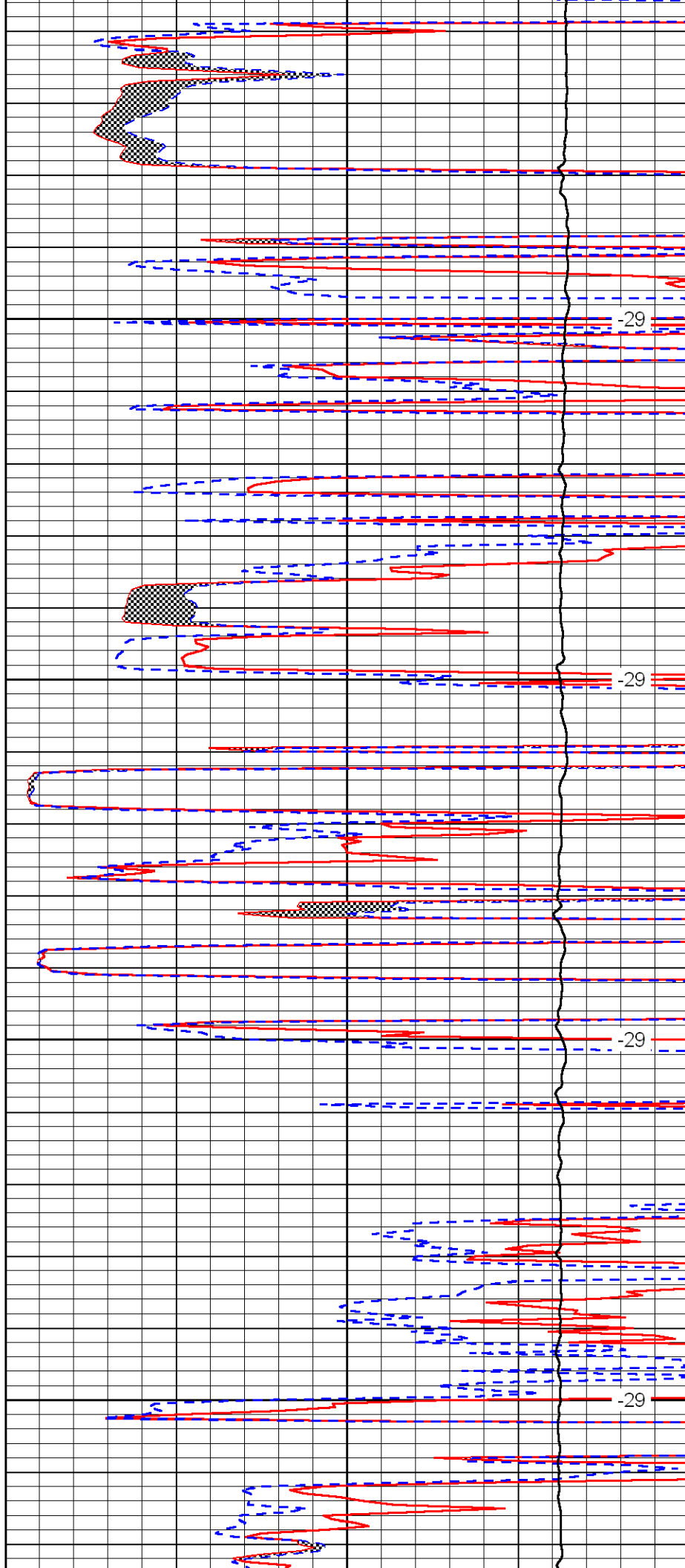


4150

4200

4250

4300

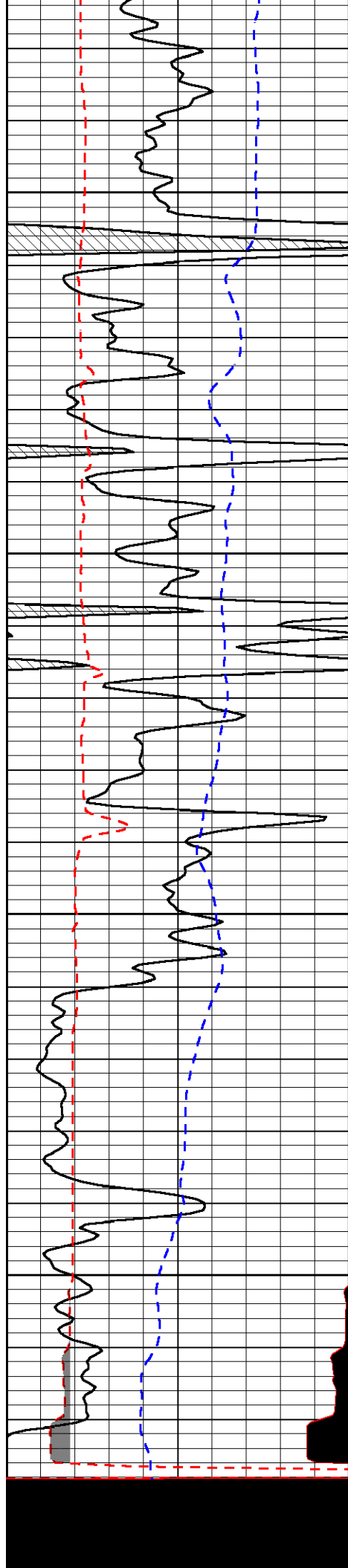


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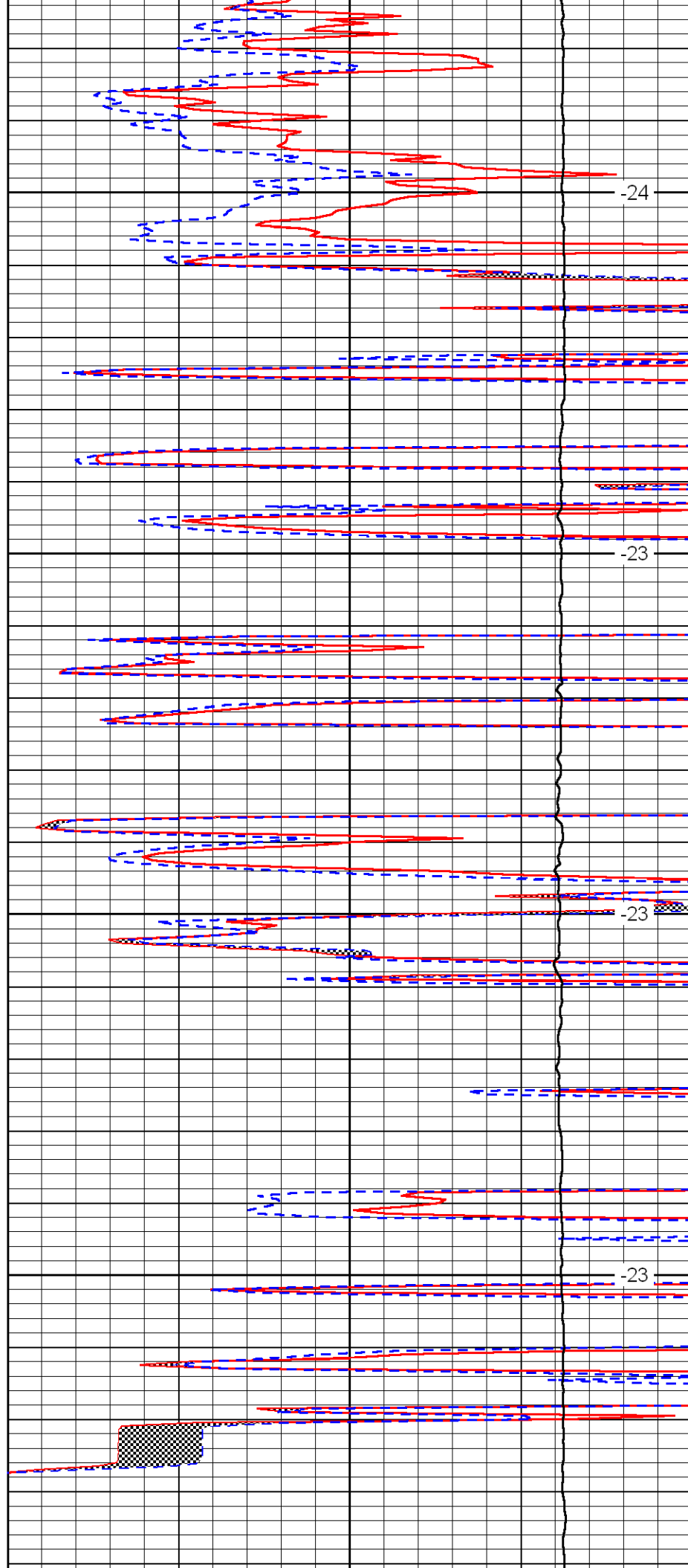


4350

4400

4450

4500



-24

-23

-23

-23

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