



PIONEER

Pioneer Energy Services

Microresistivity Log

API No. 15-193-20849-00-00	Company Prater Oil & Gas Operations, Inc.	
	Well Ottley #1-21	
	Field Wildcat	
	County Thomas	State Kansas
	Location SE SW SW NW 2448' FNL / 418' FWL	Other Services CNL/CDL DIL
	Sec: 21	Twp: 10S Rge: 31W
Permanent Datum Log Measured From Drilling Measured From	Ground Level Kelly Bushing Kelly Bushing	Elevation 2971 8 Ft. Above Perm. Datum K.B. 2979 D.F. G.L. 2971
Date	8/16/2012	
Run Number	Two	
Depth Driller	4665	
Depth Logger	4670	
Bottom Logged Interval	4669	
Top Log Interval	3600	
Casing Driller	8.625 @ 307	
Casing Logger	307	
Bit Size	7.875	
Type Fluid in Hole	Chemical	
Salinity, ppm CL	3000	
Density / Viscosity	9.4 48	
pH / Fluid Loss	9.5 8.0	
Source of Sample	Flowline	
Rm @ Meas. Temp	0.80 @ 80	
Rmf @ Meas. Temp	0.60 @ 80	
Rmc @ Meas. Temp	1.08 @ 80	
Source of Rmf / Rmc	Charts	
Rm @ BHT	0.52 @ 123	
Operating Rig Time	4 Hours	
Max Rec. Temp. F	123	
Equipment Number	15	
Location	Hays	
Recorded By	R. Barnhart	
Witnessed By	Scott Alberg	

<<< Fold Here >>>

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.

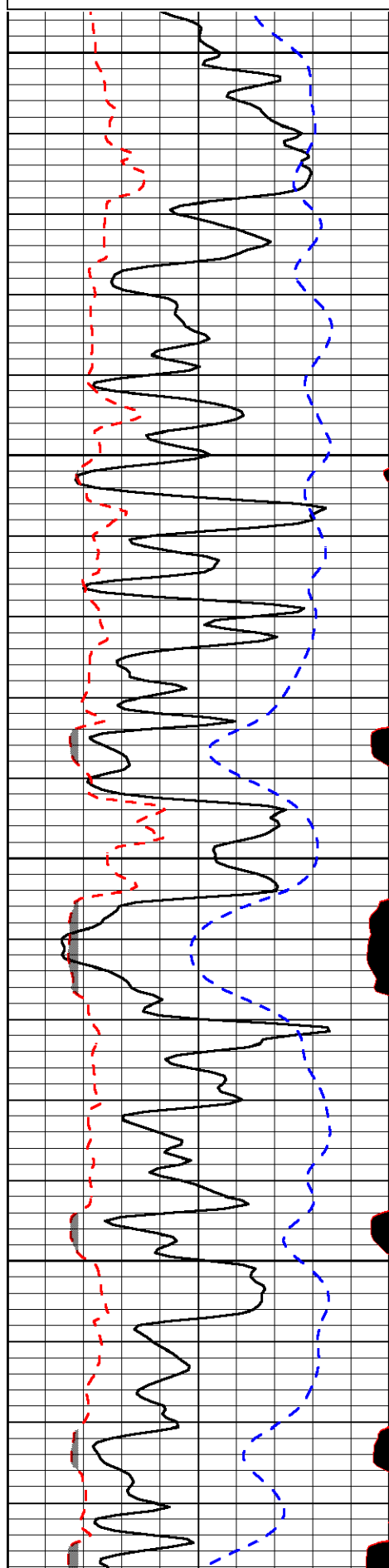
Comments

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

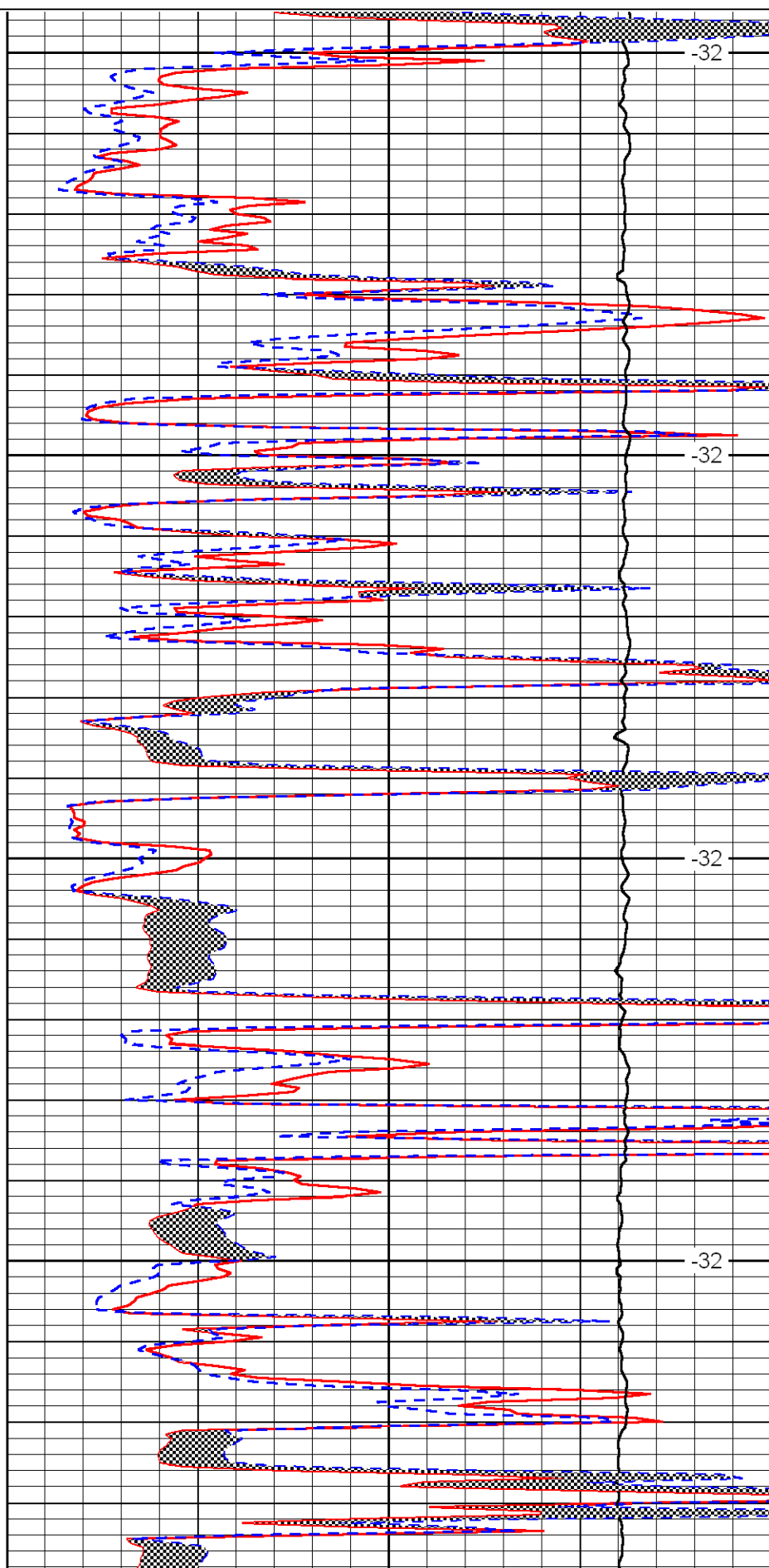
Oakley, KS:
I-70W to 2nd Exit: 100 yardsN, 4E, 1 1/2S, E into

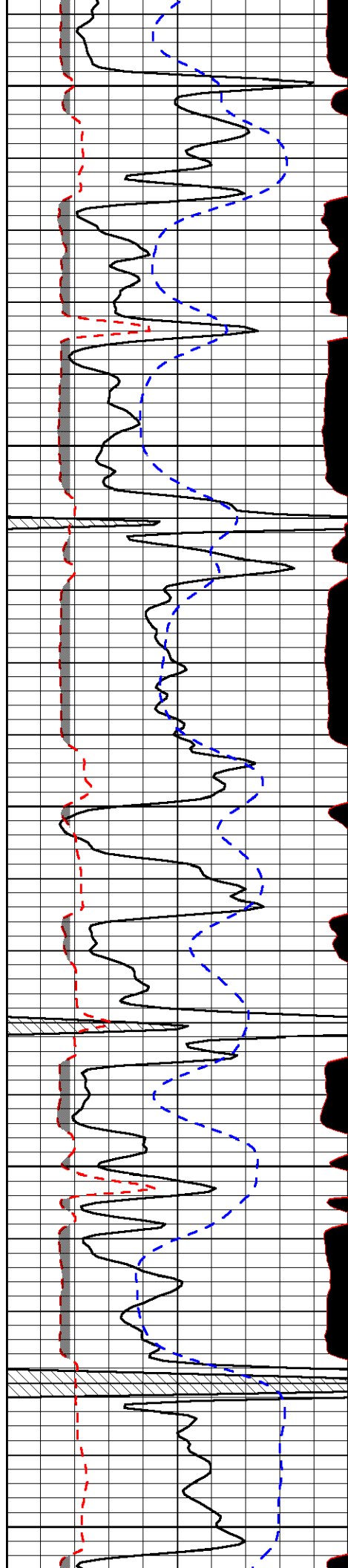
Database File: prater_hd.db
Dataset Pathname: dil/prmain
Presentation Format: micro
Dataset Creation: Thu Aug 16 00:33:23 2012
Charted by: Depth in Feet scaled 1:240

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





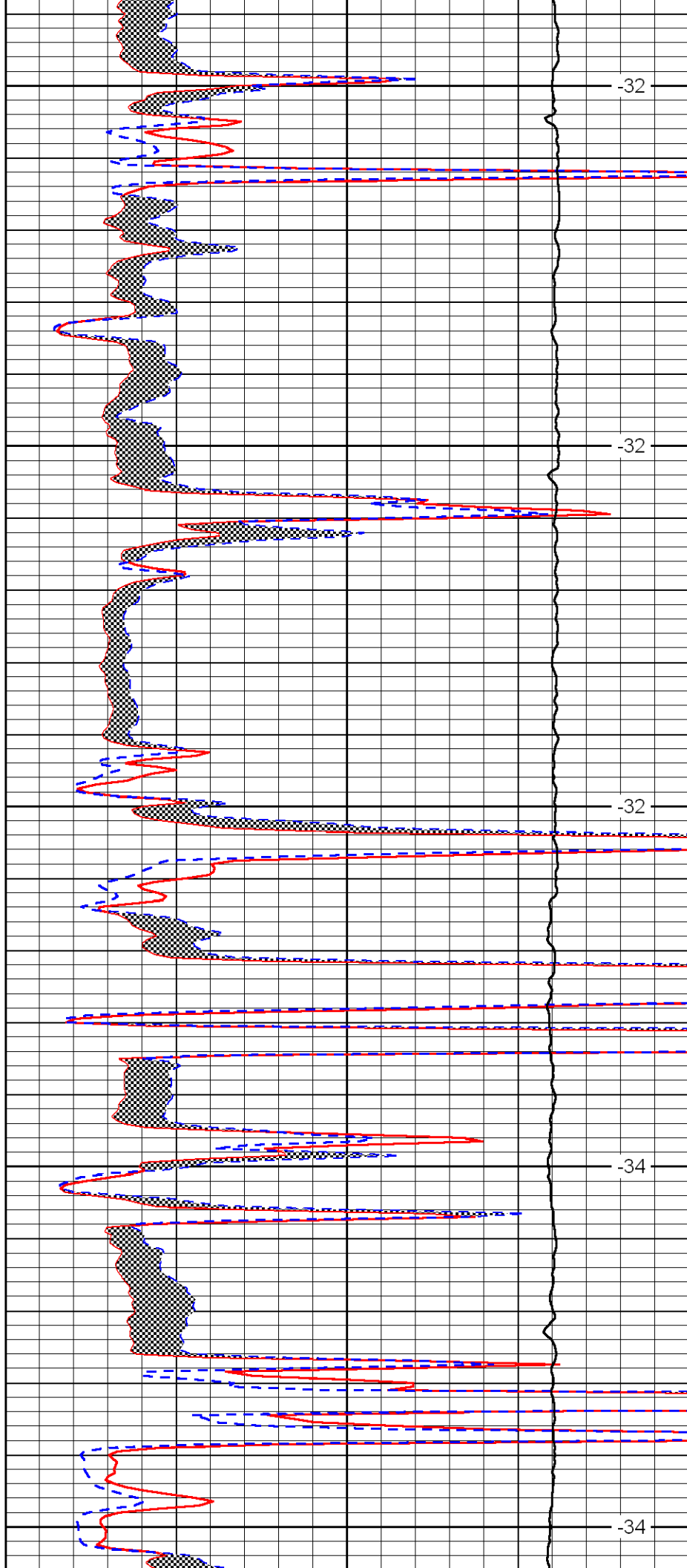
3800

3850

3900

3950

4000



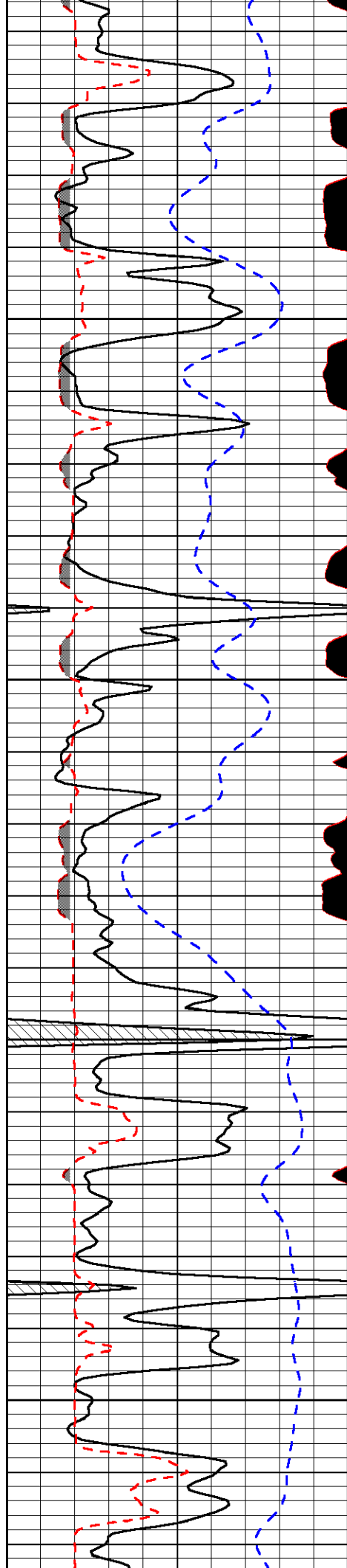
-32

-32

-32

-34

-34

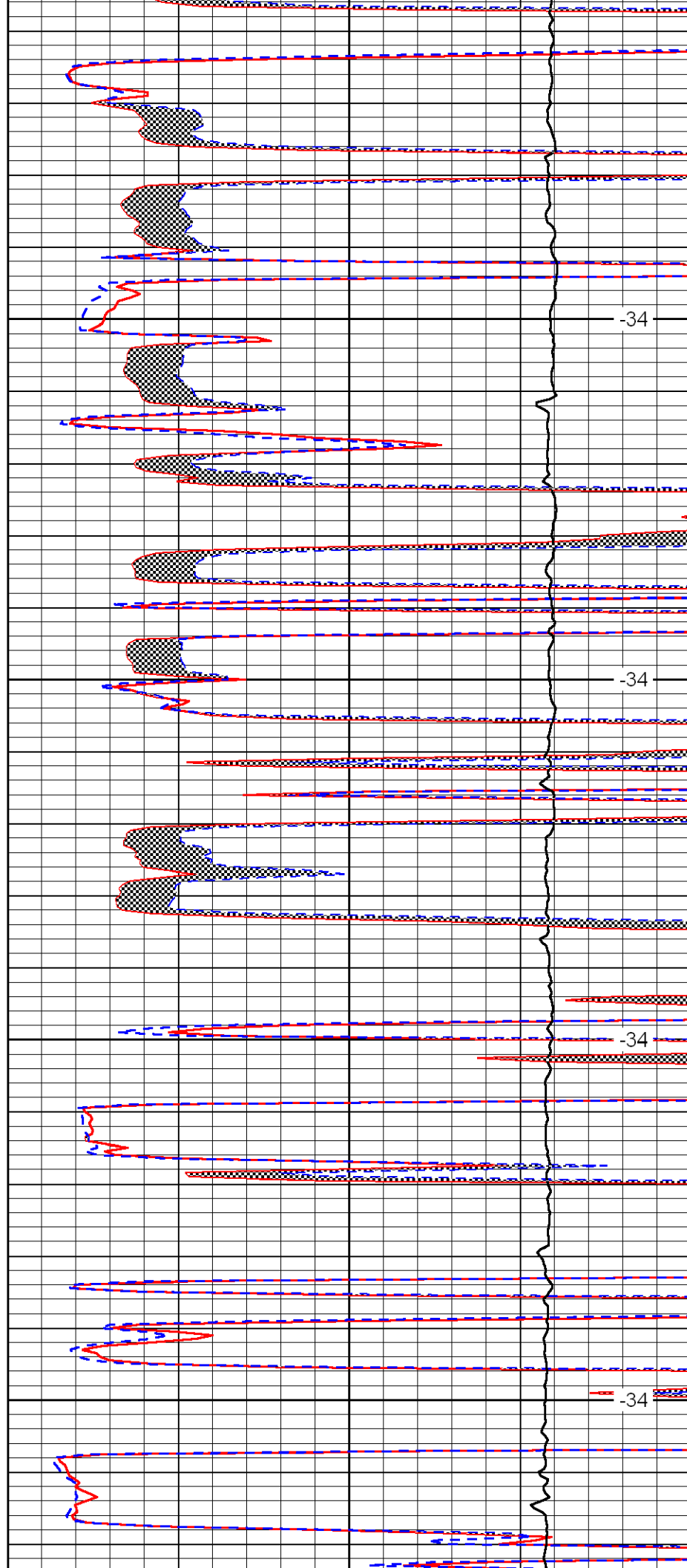


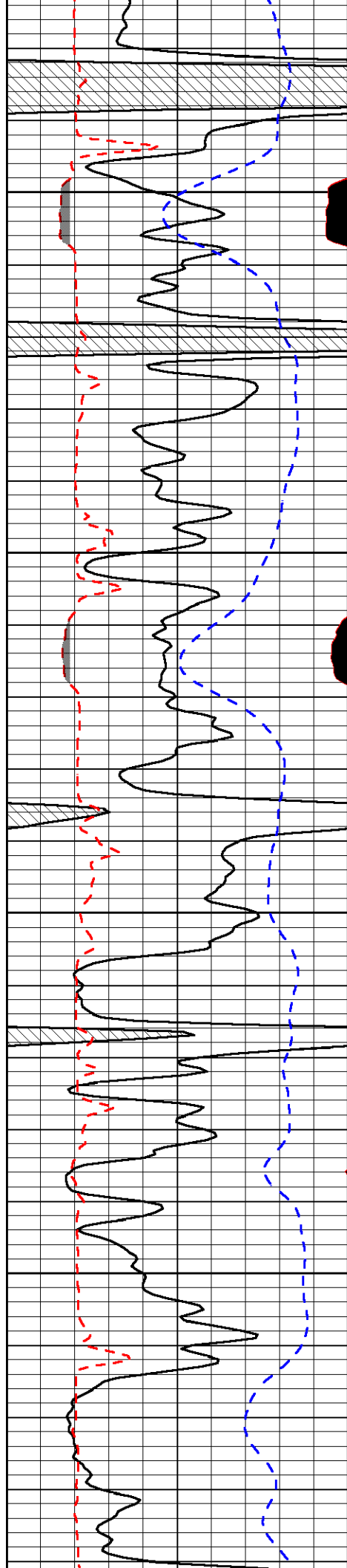
4050

4100

4150

4200



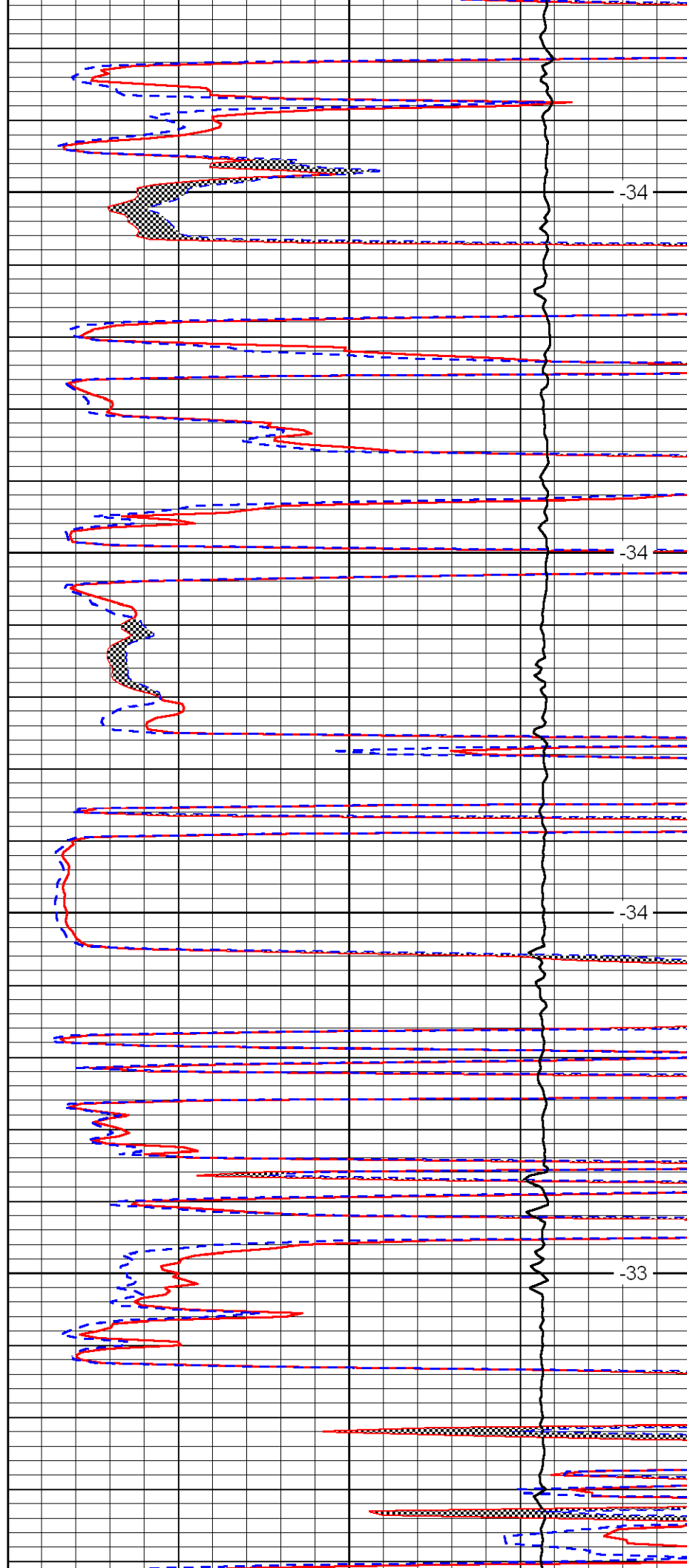


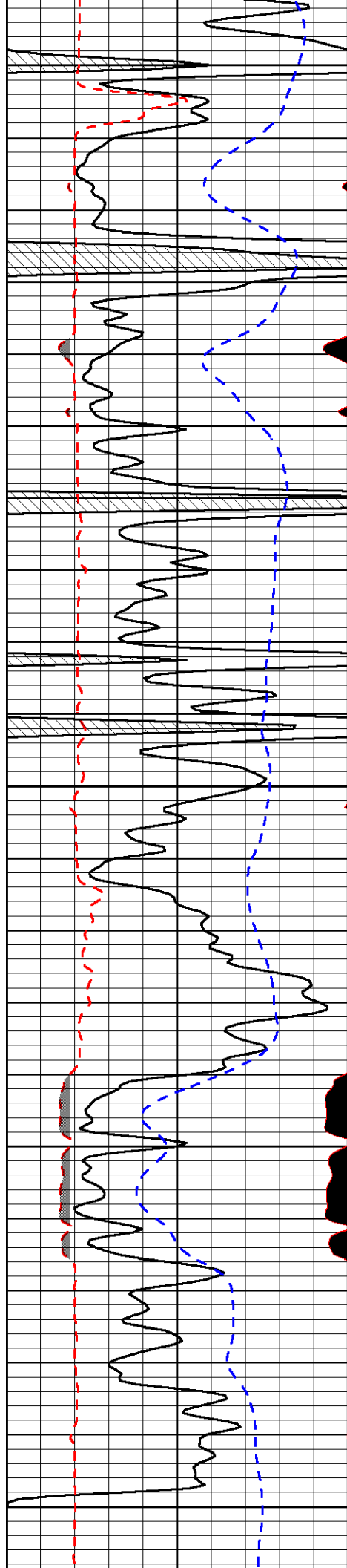
4250

4300

4350

4400





4450

4500

4550

4600

4650

