



Pioneer Energy Services

Microresistivity Log

API No. 15-063-22,169-00-00

Company **Black Tea Oil, LLC**
 Well **Krebs "Q" No. 1**
 Field
 County **Gove** State **Kansas**

Location **NW SW SE SW
 640' FSL & 1,330' FWL**

Sec: 30 Twp: 14S Rge: 31W

Other Services
 CNL/CDL
 DIL/BHCS

Permanent Datum	Ground Level	Elevation 2697	K.B. 2706 D.F. 2697 G.L. 2697
Log Measured From	Kelly Bushing	9 Ft. Above Perm. Datum	
Drilling Measured From	Kelly Bushing		
Date	2/10/2014		
Run Number	Two		
Depth Driller	4460		
Depth Logger	4446		
Bottom Logged Interval	4445		
Top Log Interval	3300		
Casing Driller	8.625 @ 260		
Casing Logger	250		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	20000		
Density / Viscosity	9.5 40		
pH / Fluid Loss	8.5 16.0		
Source of Sample	Flowline		
Rm @ Meas. Temp	.18 @ 58		
Rmf @ Meas. Temp	.14 @ 58		
Rmc @ Meas. Temp	.24 @ 58		
Source of Rmf / Rmc	Charts		
Rm @ BHT	.09 @ 121		
Operating Rig Time	4 1/2 Hours		
Max Rec. Temp. F	121		
Equipment Number	108		
Location	Hays		
Recorded By	J. Long		
Witnessed By	Big Rich	Chris Leiker	

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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

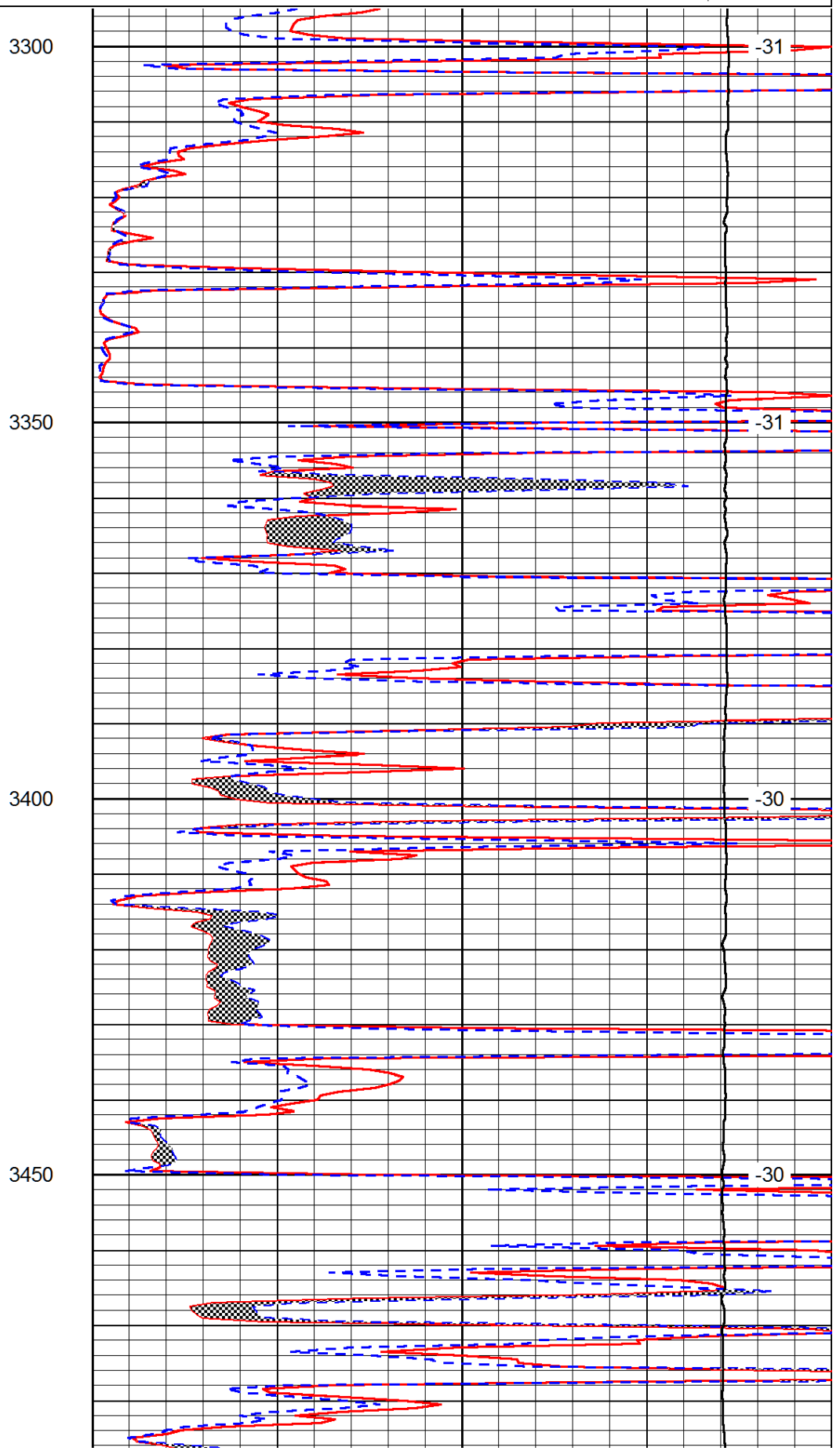
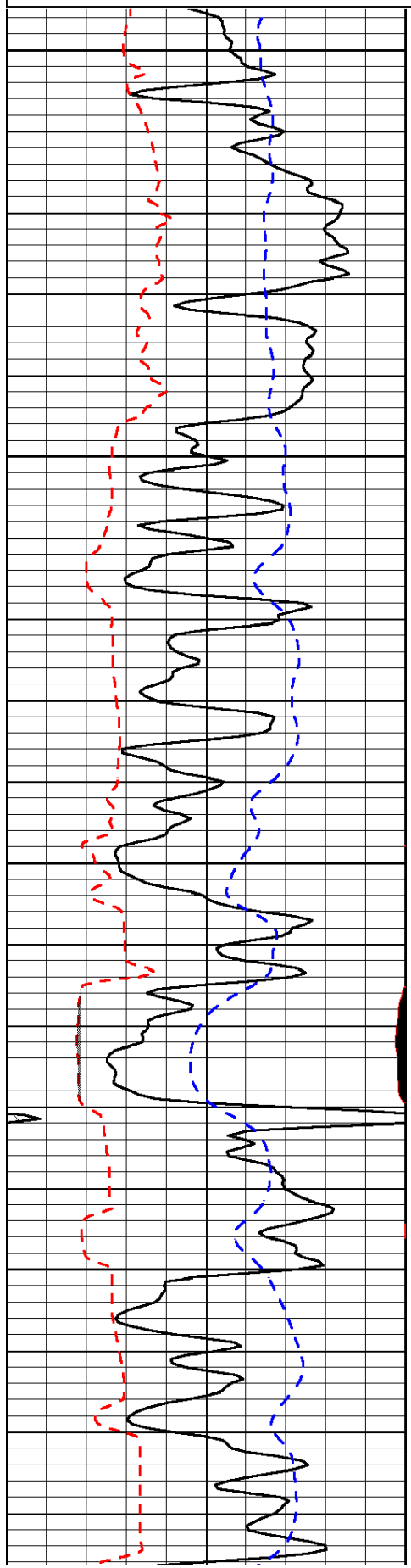
Thank you for using Log-Tech, Inc.
 (785) 625-3858

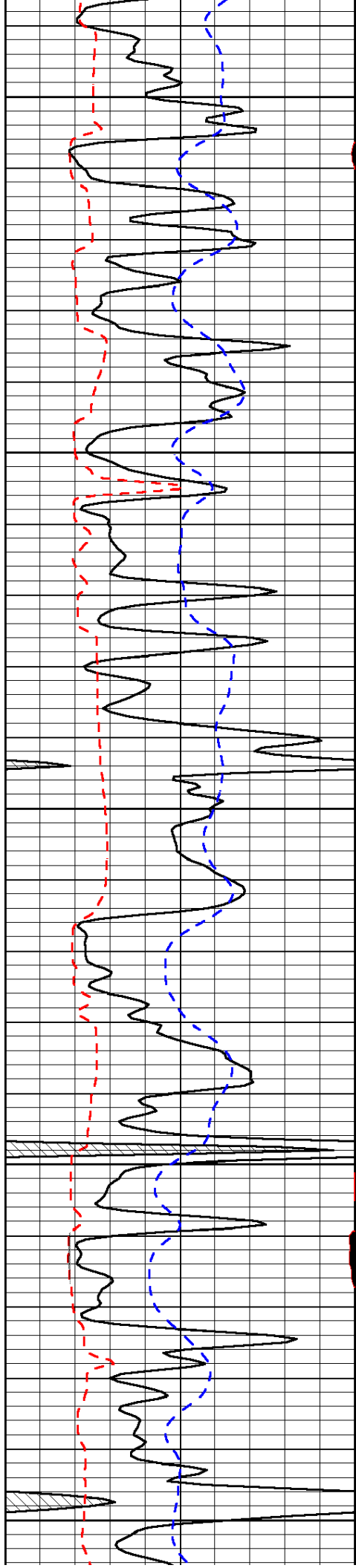
Oakley, South to Jayhawk Road, 2 South, East through double gates, 2 1/4 East through 2 cattle guards and past tank batteries, 1/3 North, East Into

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)





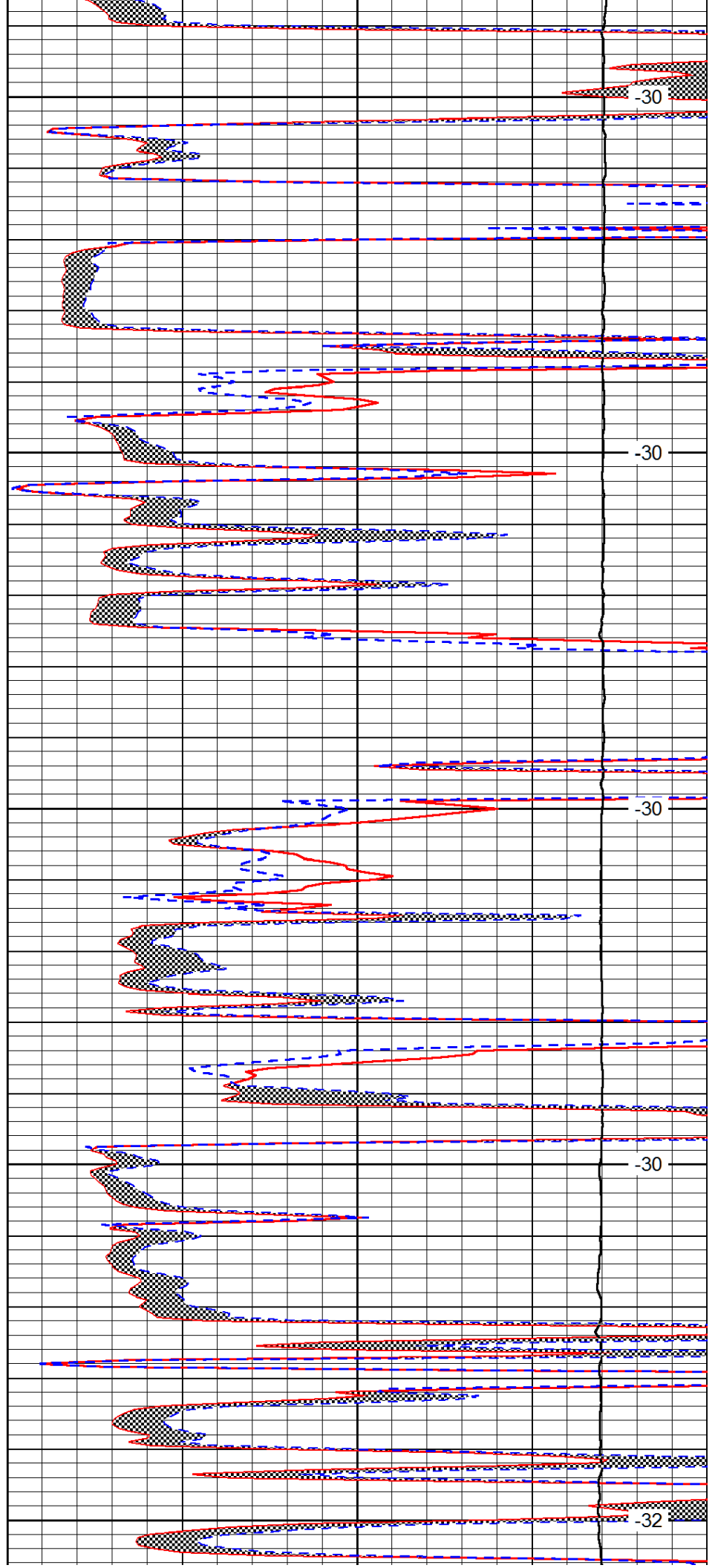
3500

3550

3600

3650

3700



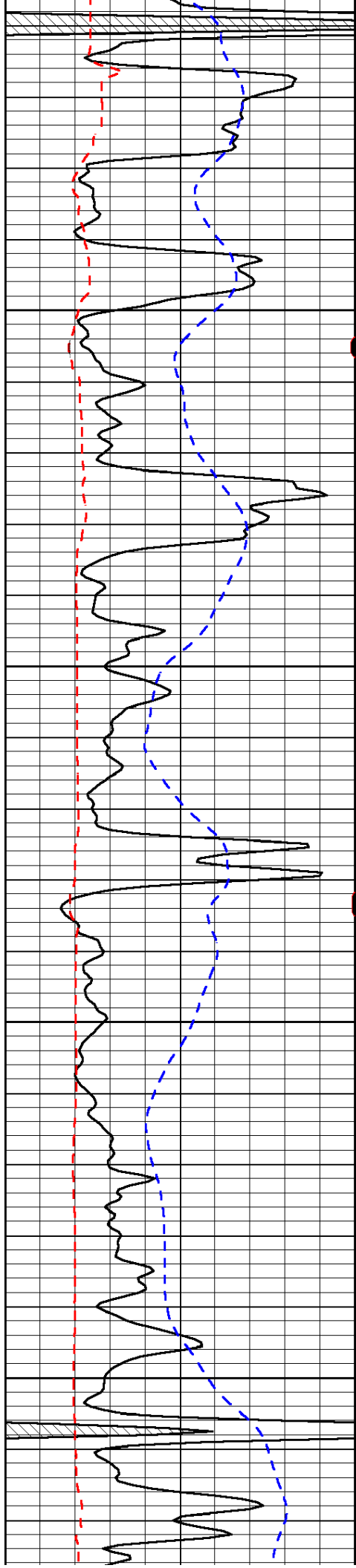
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-30

-30

-30

-32

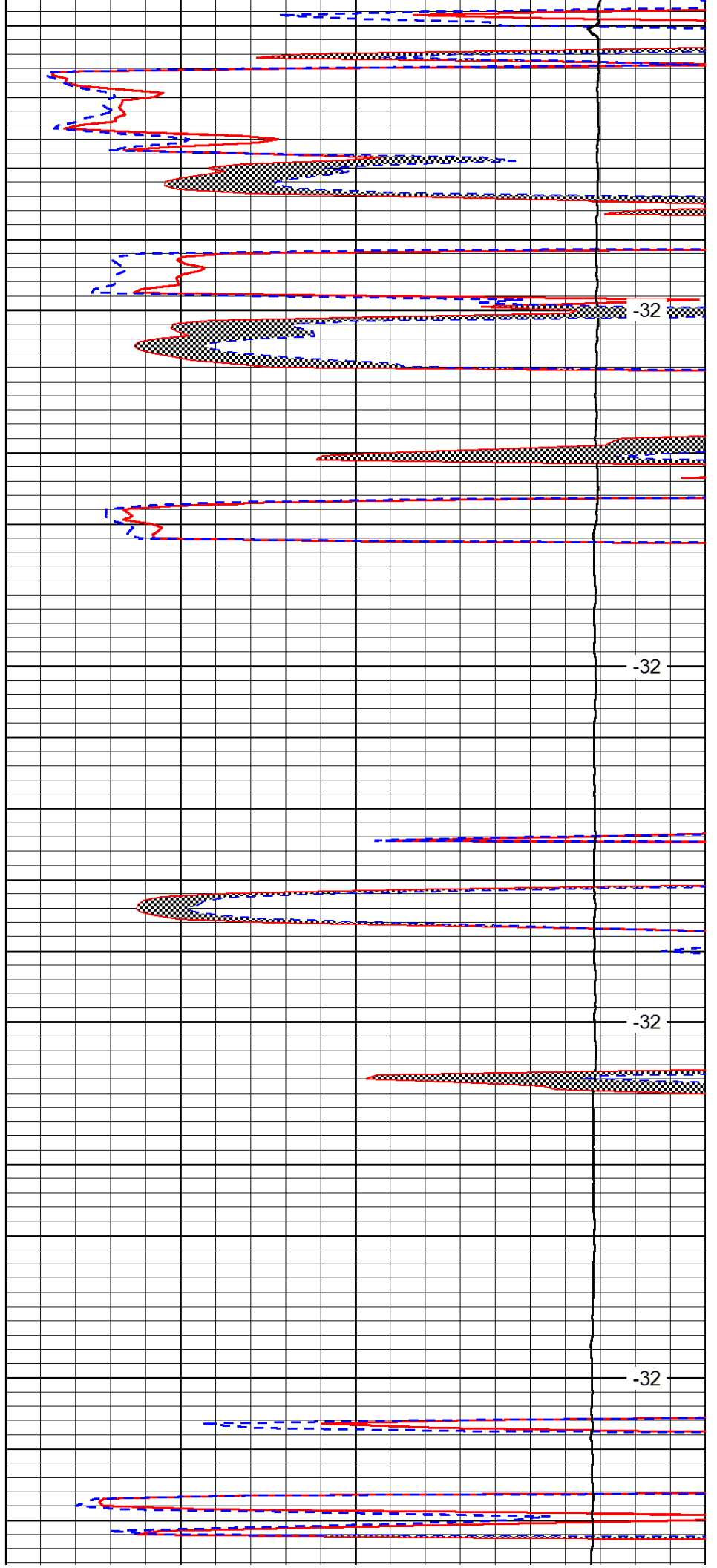


3750

3800

3850

3900

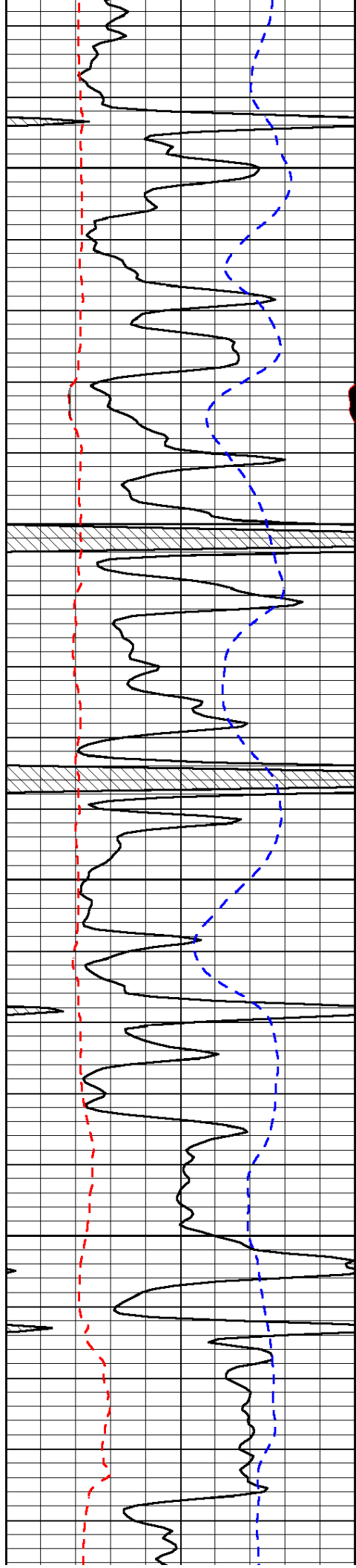


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-32

-32

-32

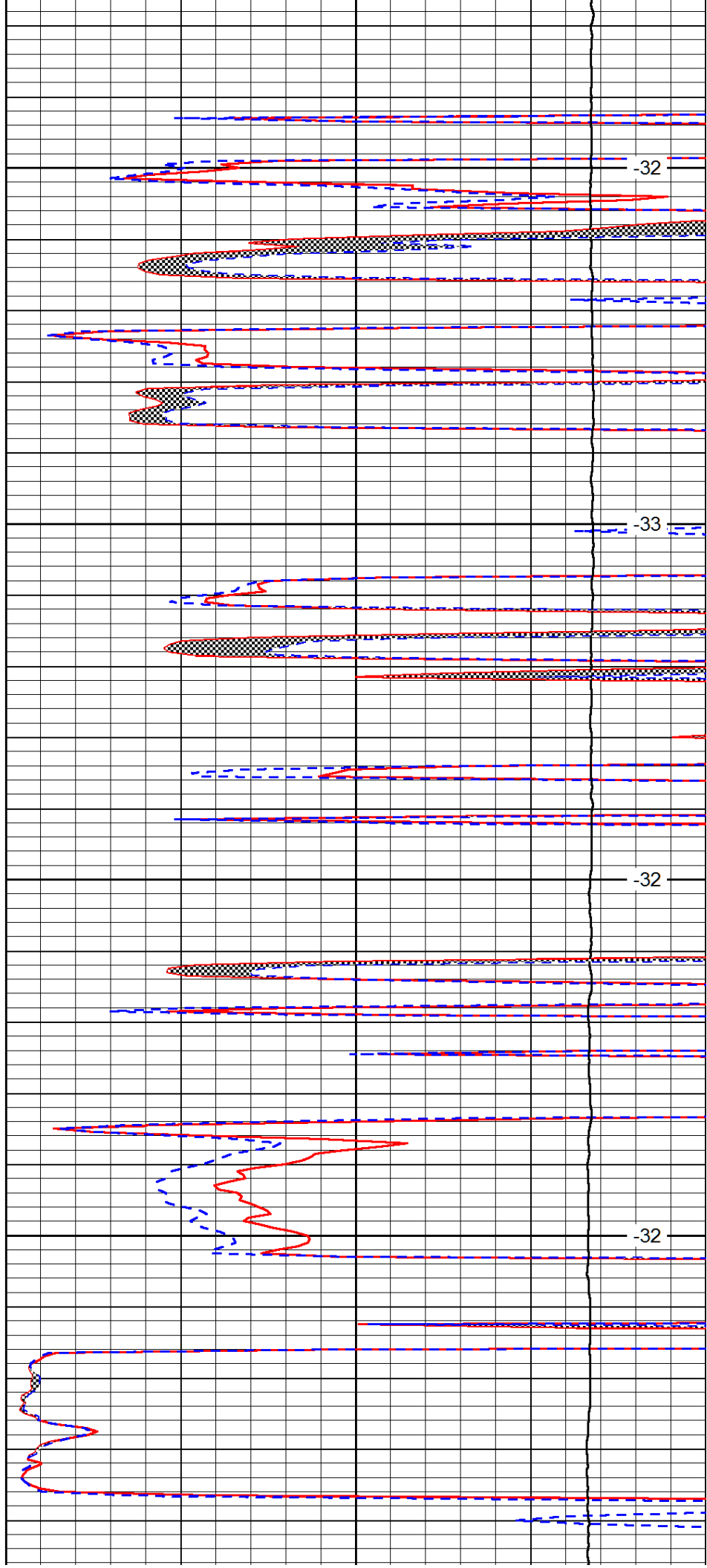


3950

4000

4050

4100

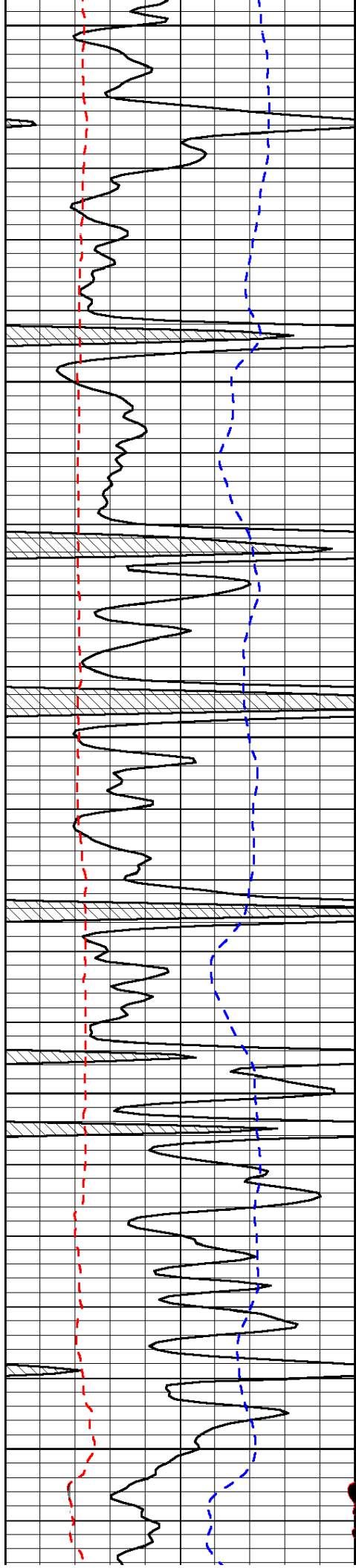


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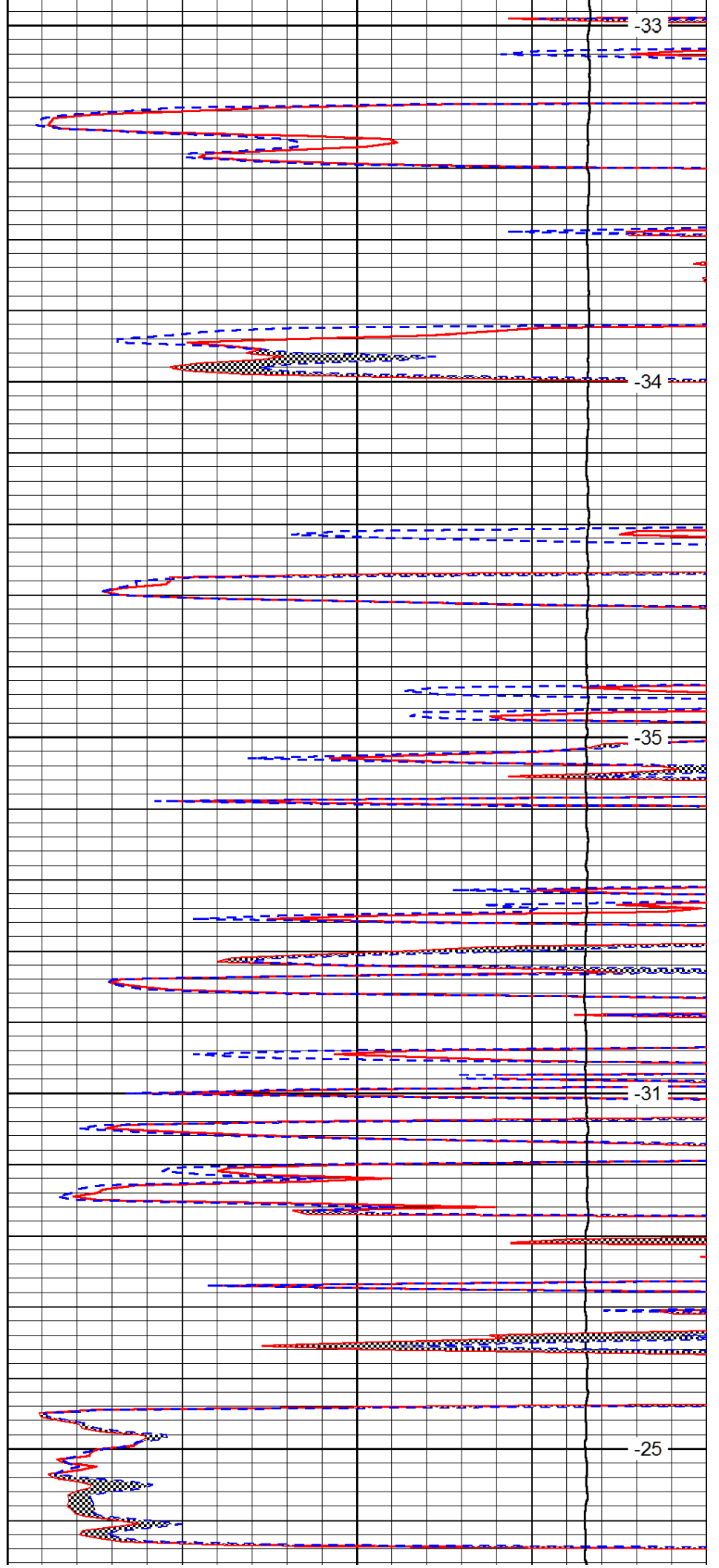
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4200

4250

4300

4350



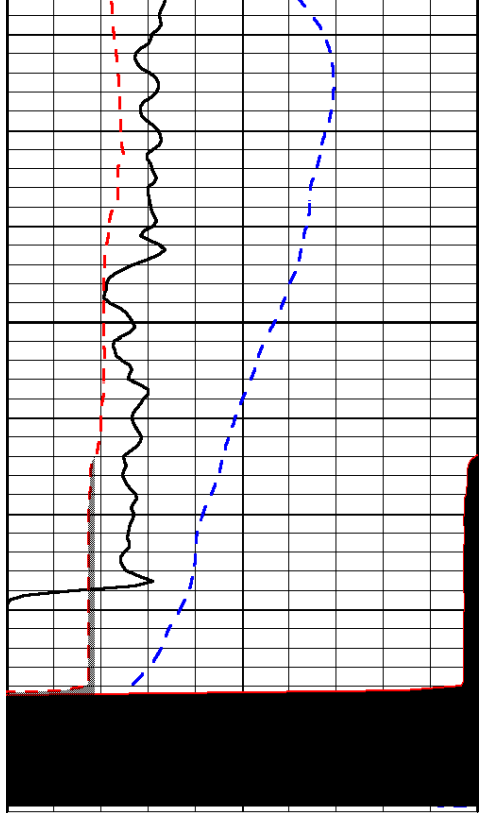
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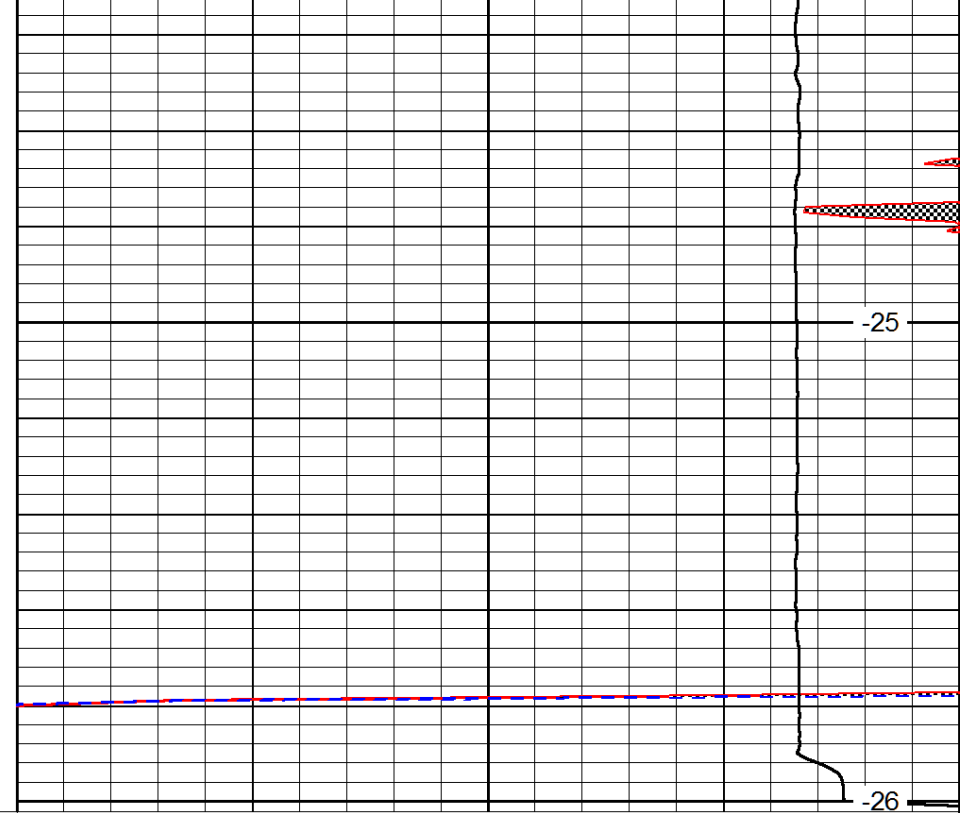
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-26

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