



Pioneer Energy Services

# Microresistivity Log

API No. 15-055-22393-00-00

Company **American Warrior, Inc.**  
 Well **O'Brate-Finney #7-5**  
 Field **Seven Mile**  
 County **Finney** State **Kansas**

Location **952' FSL & 744' FWL**

Sec: **5** Twp: **23S** Rge: **32W**

Permanent Datum **Ground Level** Elevation **2853**  
 Log Measured From **Kelly Bushing** 11 Ft. Above Perm. Datum  
 Drilling Measured From **Kelly Bushing**

Date **3/12/2015**

Run Number **Two**

Depth Driller **4900**

Depth Logger **4898**

Bottom Logged Interval **4897**

Top Log Interval **3750**

Casing Driller **8.625 @ 1766**

Casing Logger **1770**

Bit Size **7.875**

Type Fluid in Hole **Chemical**

Salinity, ppm CL **2600**

Density / Viscosity **9.4 47**

pH / Fluid Loss **9.5 7.2**

Source of Sample **Flowline**

Rm @ Meas. Temp **1.02 @ 60**

Rmf @ Meas. Temp **0.77 @ 60**

Rmc @ Meas. Temp **1.38 @ 60**

Source of Rmf / Rmc **Charts**

Rm @ BHT **0.49 @ 125**

Operating Rig Time **4 1/2 Hours**

Max Rec. Temp. F **125**

Equipment Number	15
Location	Hays
Recorded By	D.Kerr
Witnessed By	Kevin Timson

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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

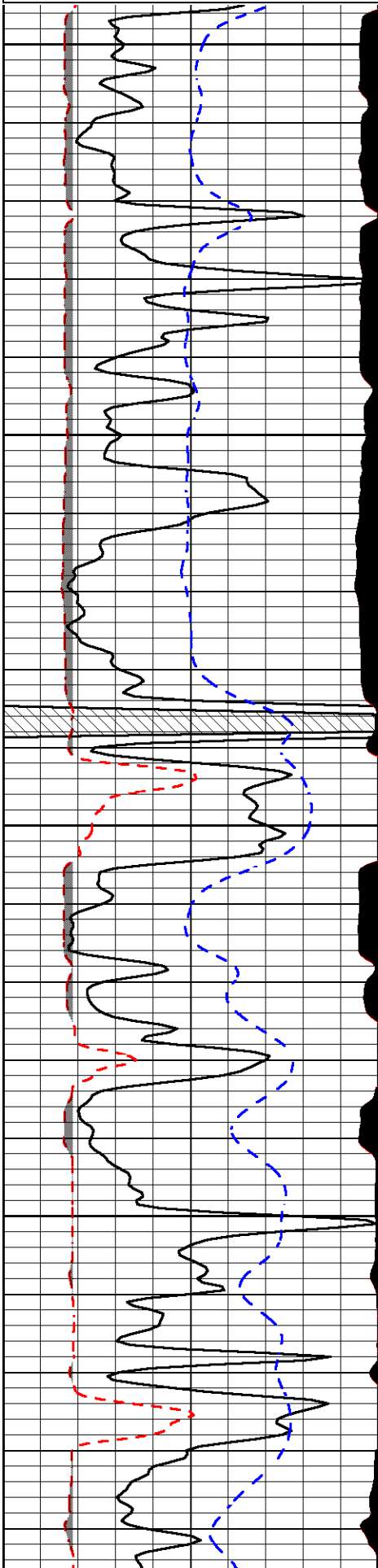
Thank you for using Pioneer Energy Services  
 785.625.3858

Garden City KS, 5 North to Six Mile RD,  
 1 East, 1/2 North, East and North Into

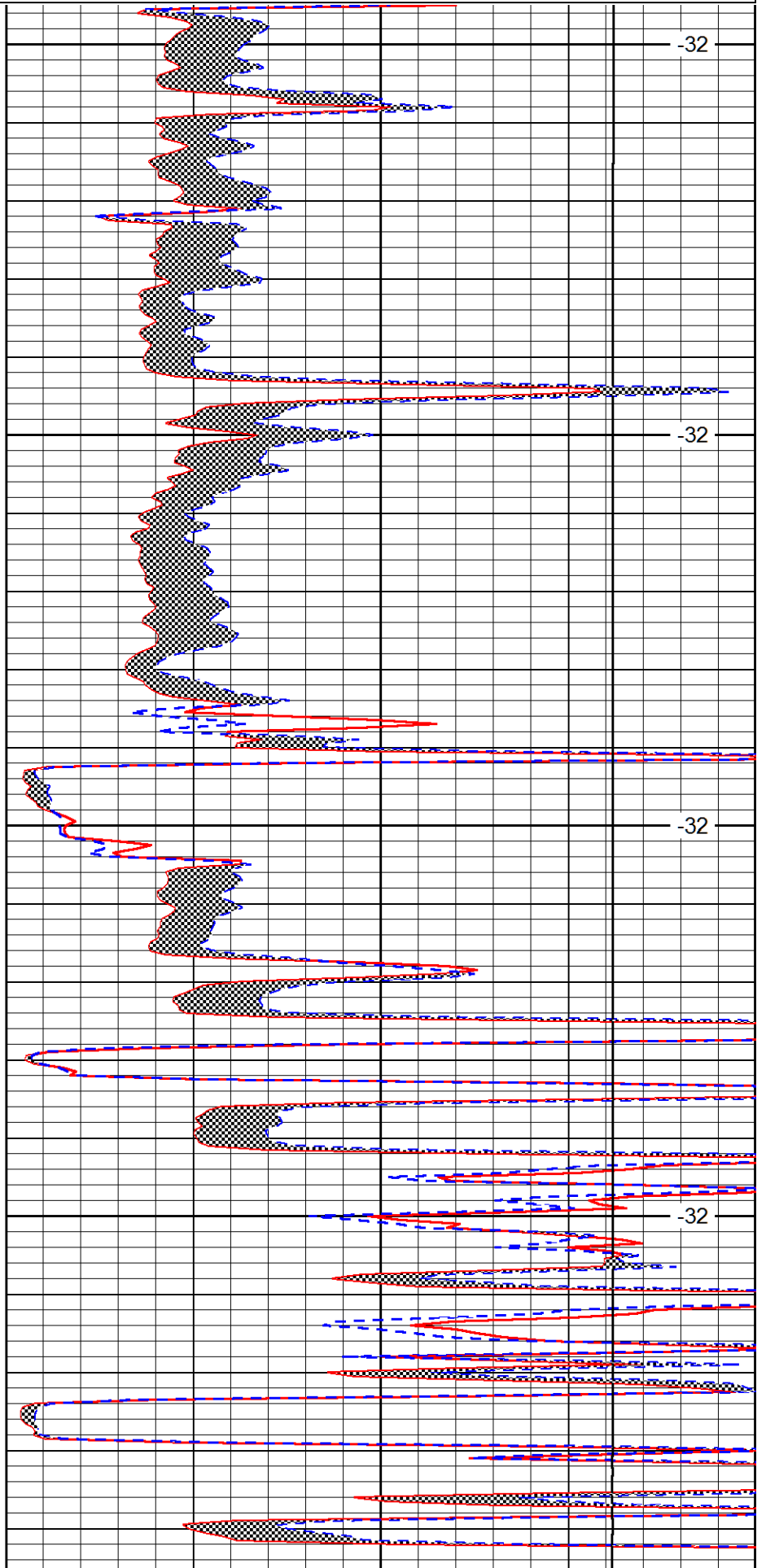
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 Dataset Pathname DIL/aw  
 Presentation Format micro  
 Dataset Creation Thu Mar 12 04:00:59 2015  
 Charted by Depth in Feet scaled 1:240

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

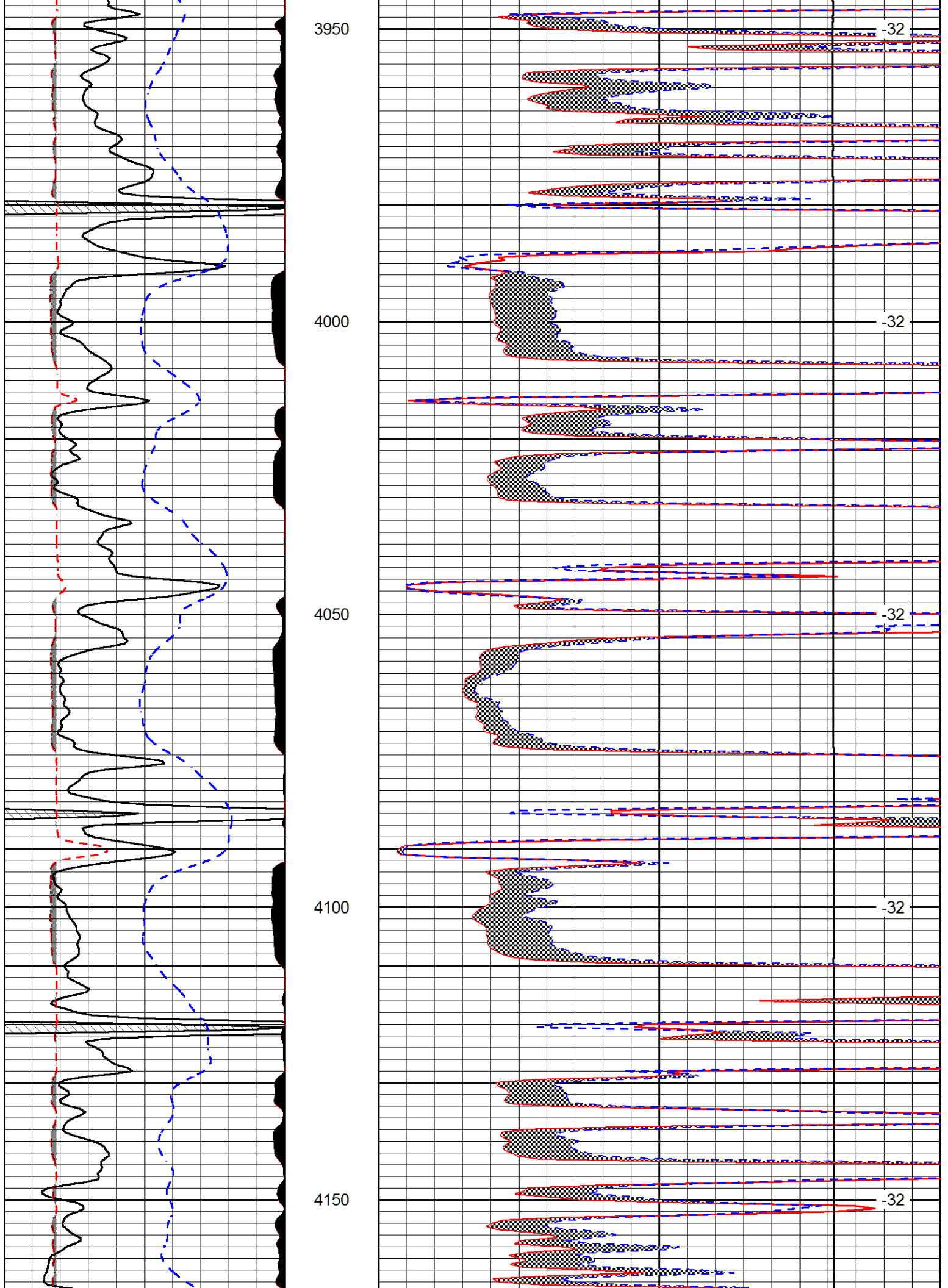
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0	Micro Normal 2"	40
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	LSPD	

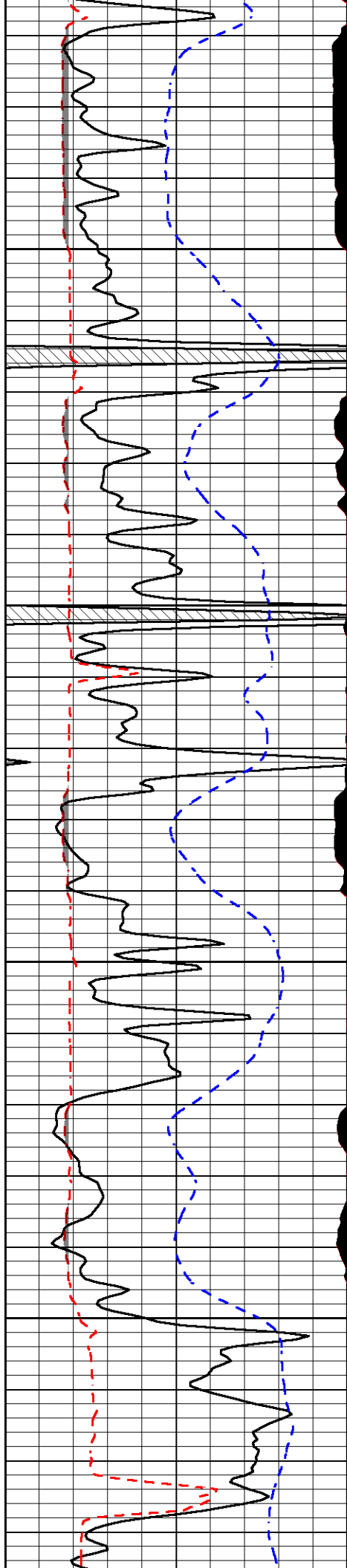


3750  
3800  
3850  
3900



-32  
-32  
-32  
-32



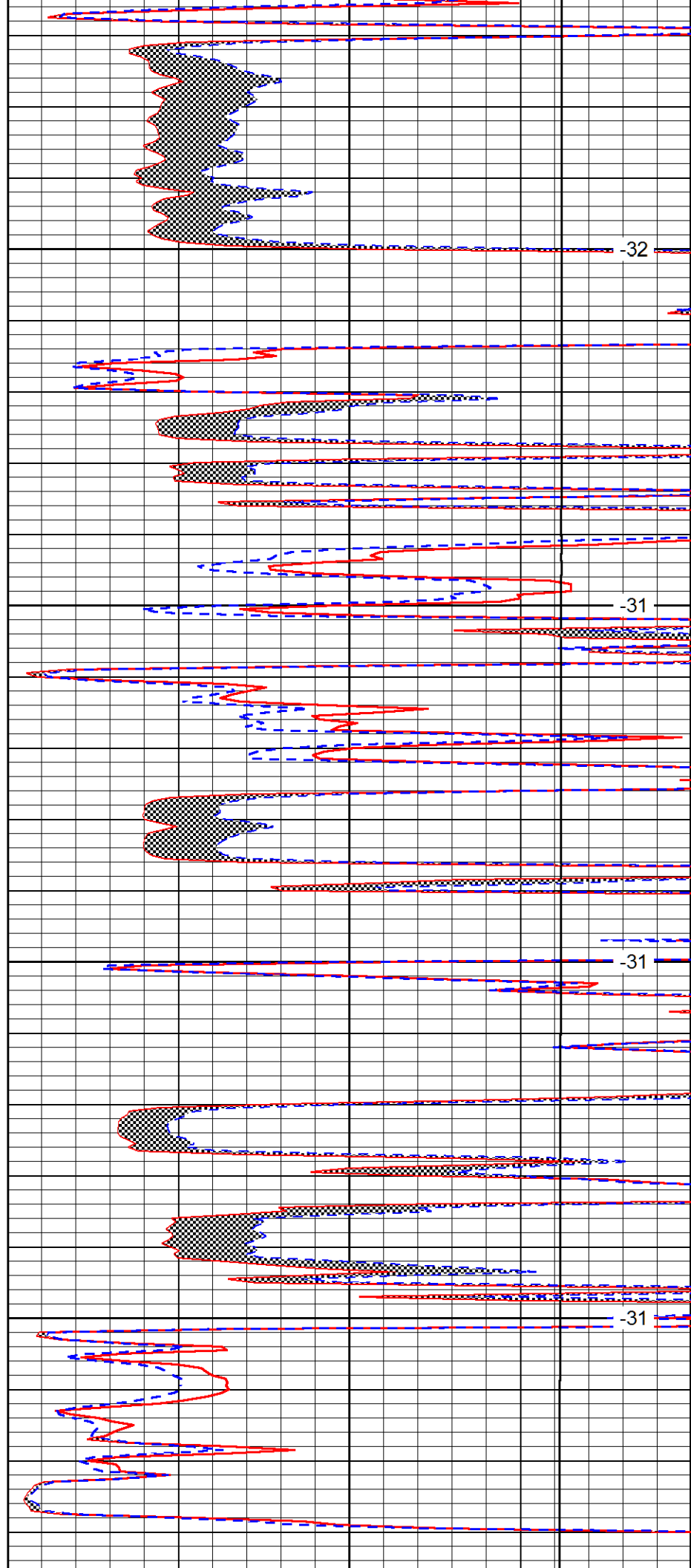


4200

4250

4300

4350

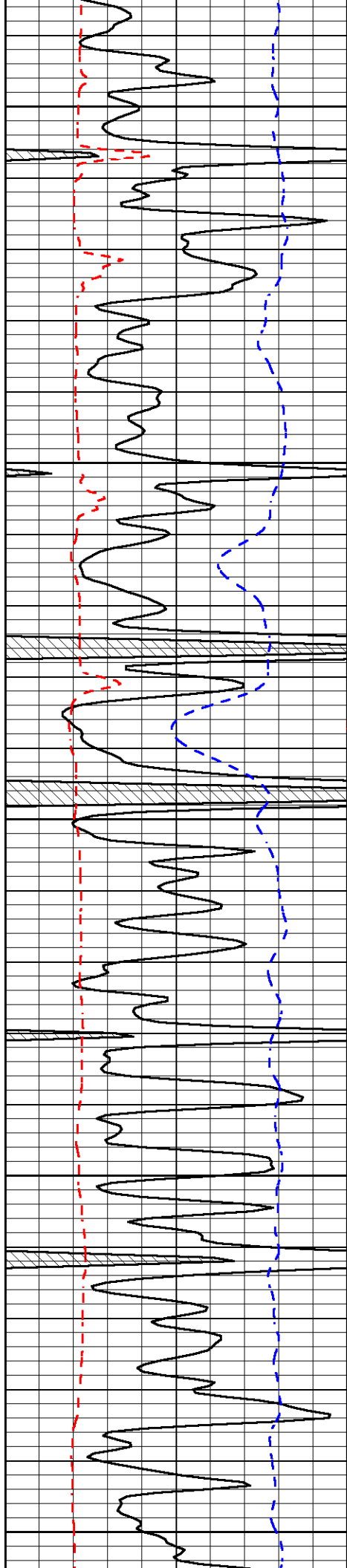


-32

-31

-31

-31



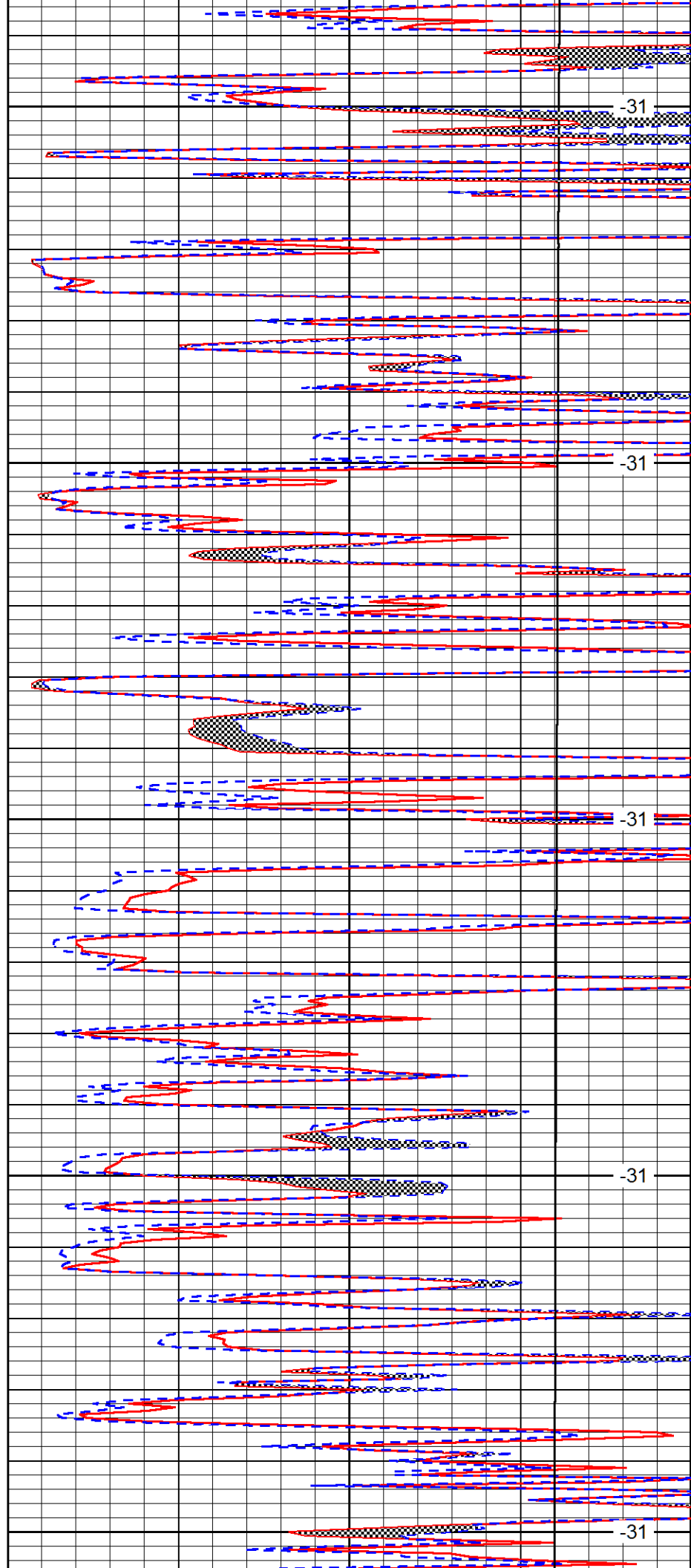
4400

4450

4500

4550

4600



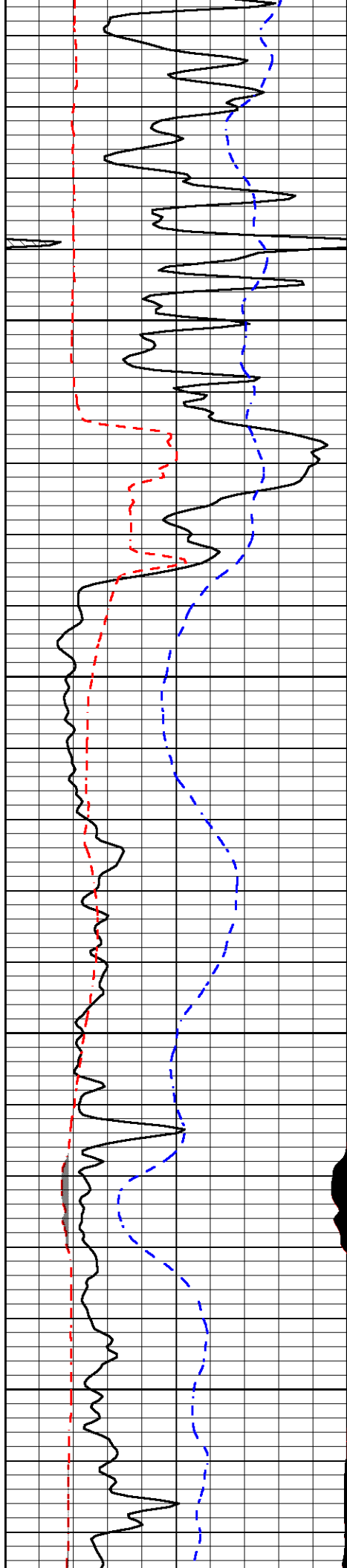
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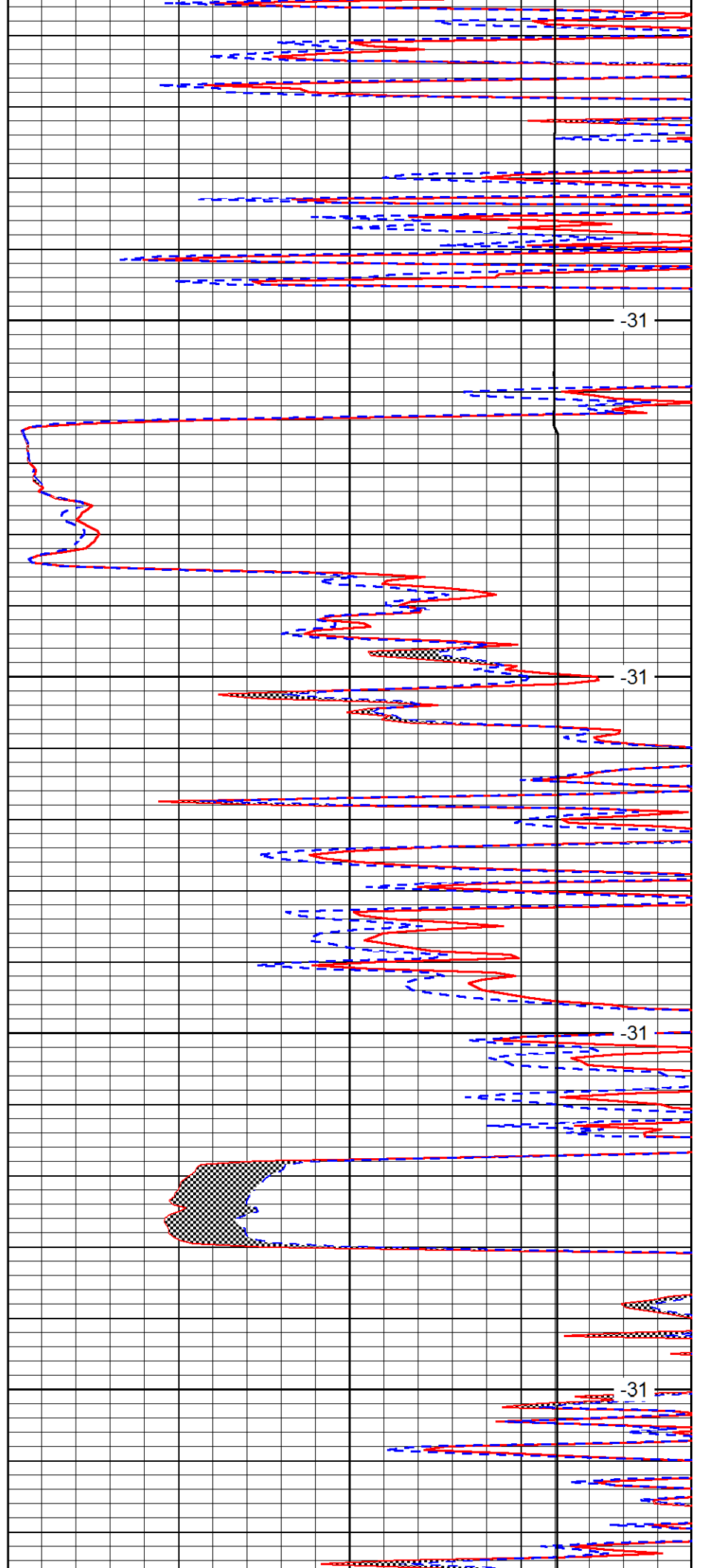


4650

4700

4750

4800

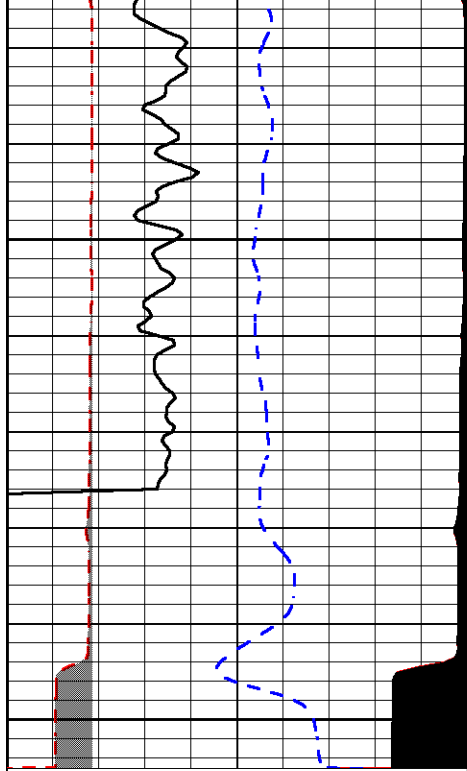


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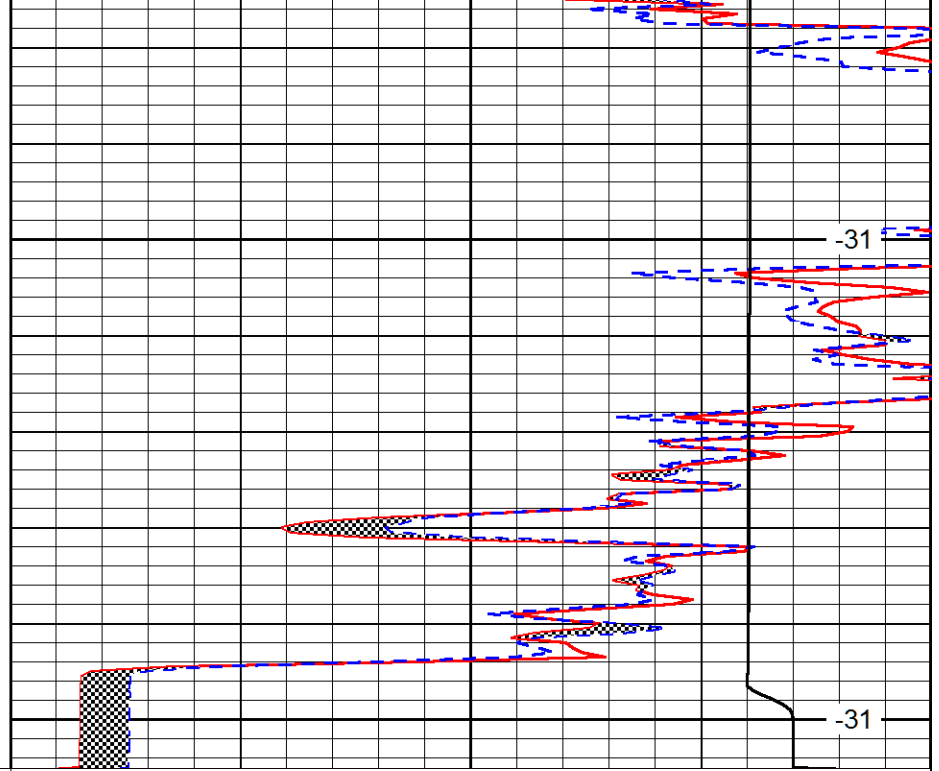
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