



Pioneer Energy Services

Microresistivity Log

API No. 15-189-22,827-00-00

Company **Palmer Oil, Inc.**
 Well **Laura #21-4**
 Field **Gentzler North**
 County **Stevens** State **Kansas**

Location **SW SE NE SE
 1600' FSL & 500' FEL**

Other Services
 CNL/CDL
 DIL

Sec: 21 Twp: 32S Rge: 37W

Elevation
 K.B. 3154
 D.F. 3141
 G.L. 3141

Permanent Datum	Ground Level	Elevation 3141
Log Measured From	Kelly Bushing	13 Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing	
Date	12/31/2013	
Run Number	Two	
Depth Driller	6500	
Depth Logger	6486	
Bottom Logged Interval	6485	
Top Log Interval	4700	
Casing Driller	8.625 @ 1755	
Casing Logger	1748	
Bit Size	7.875	
Type Fluid in Hole	Chemical	
Salinity, ppm CL	2400	
Density / Viscosity	9.35 55	
pH / Fluid Loss	9.0 8.0	
Source of Sample	Flowline	
Rm @ Meas. Temp	0.60 @ 68	
Rmf @ Meas. Temp	0.45 @ 68	
Rmc @ Meas. Temp	0.81 @ 68	
Source of Rmf / Rmc	Charts	
Rm @ BHT	0.29 @ 141	
Operating Rig Time	5 1/2 Hours	
Max Rec. Temp. F	141	
Equipment Number	15	
Location	Hays	
Recorded By	D. Kerr	
Witnessed By	Wyatt Urban	

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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

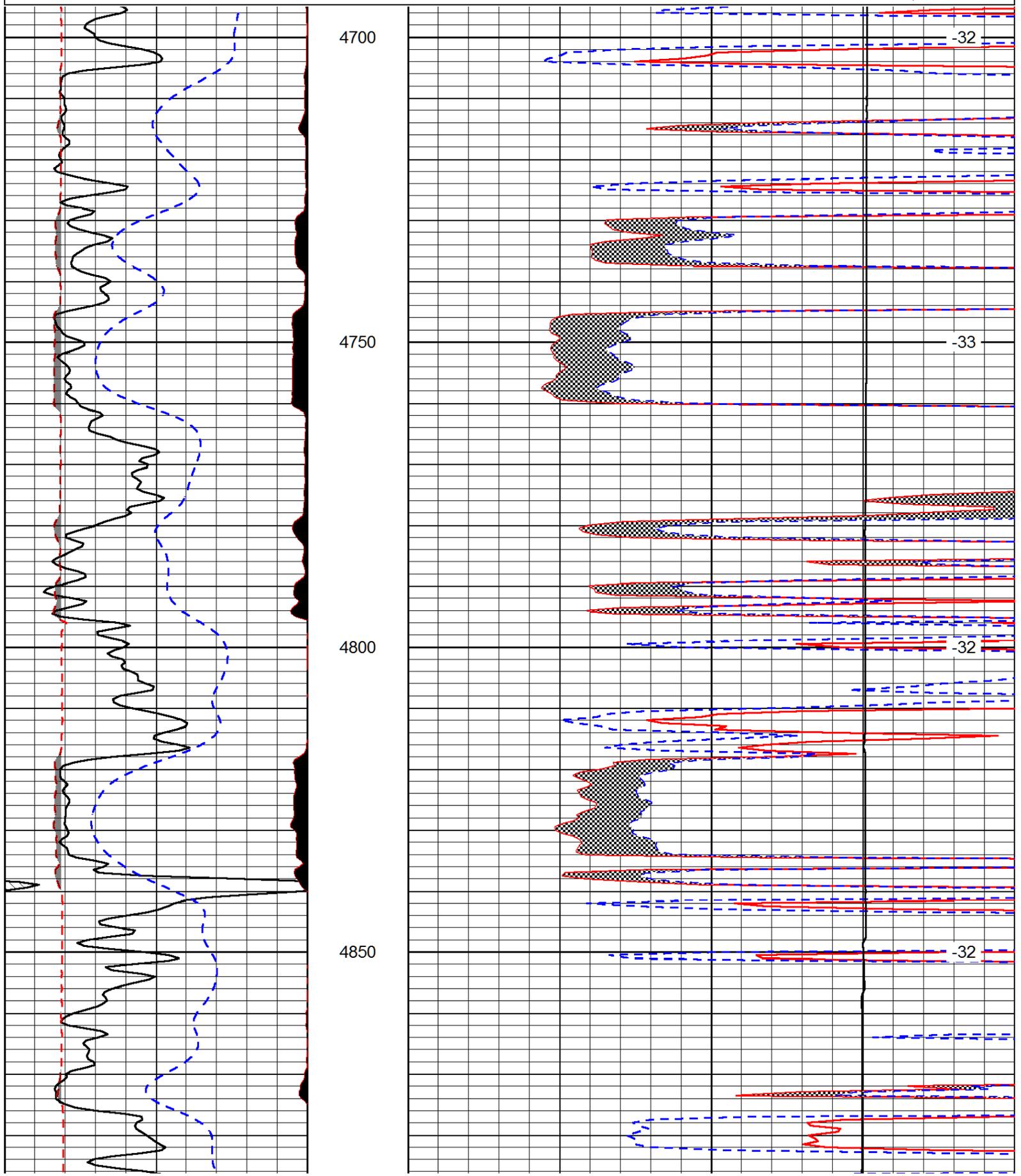
Hugoton KS, 3 North,
 1/2 West, North/East Into

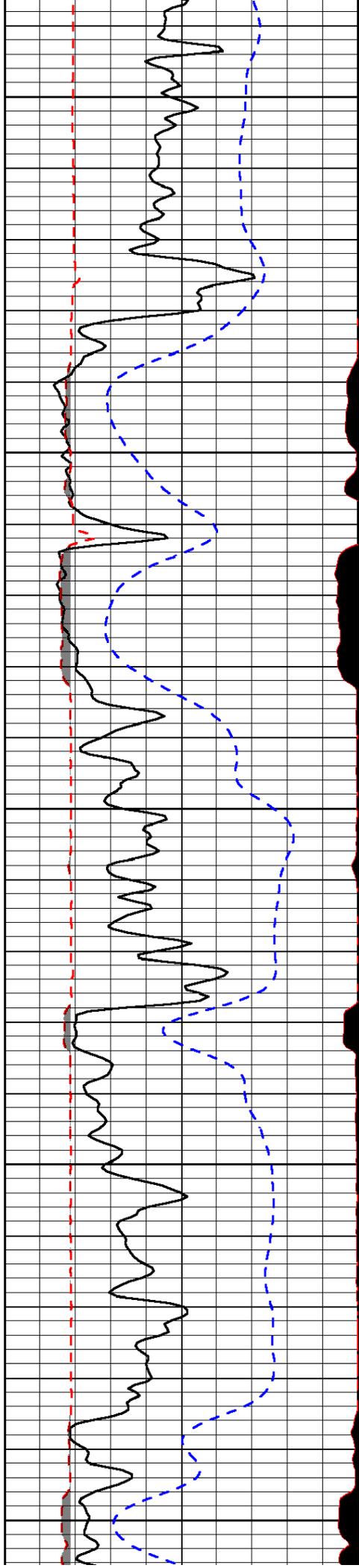
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 Dataset Pathname: DIL/palmstk
 Presentation Format: micro
 Dataset Creation: Tue Dec 31 17:51:47 2013
 Charted by: Depth in Feet scaled 1:240

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)





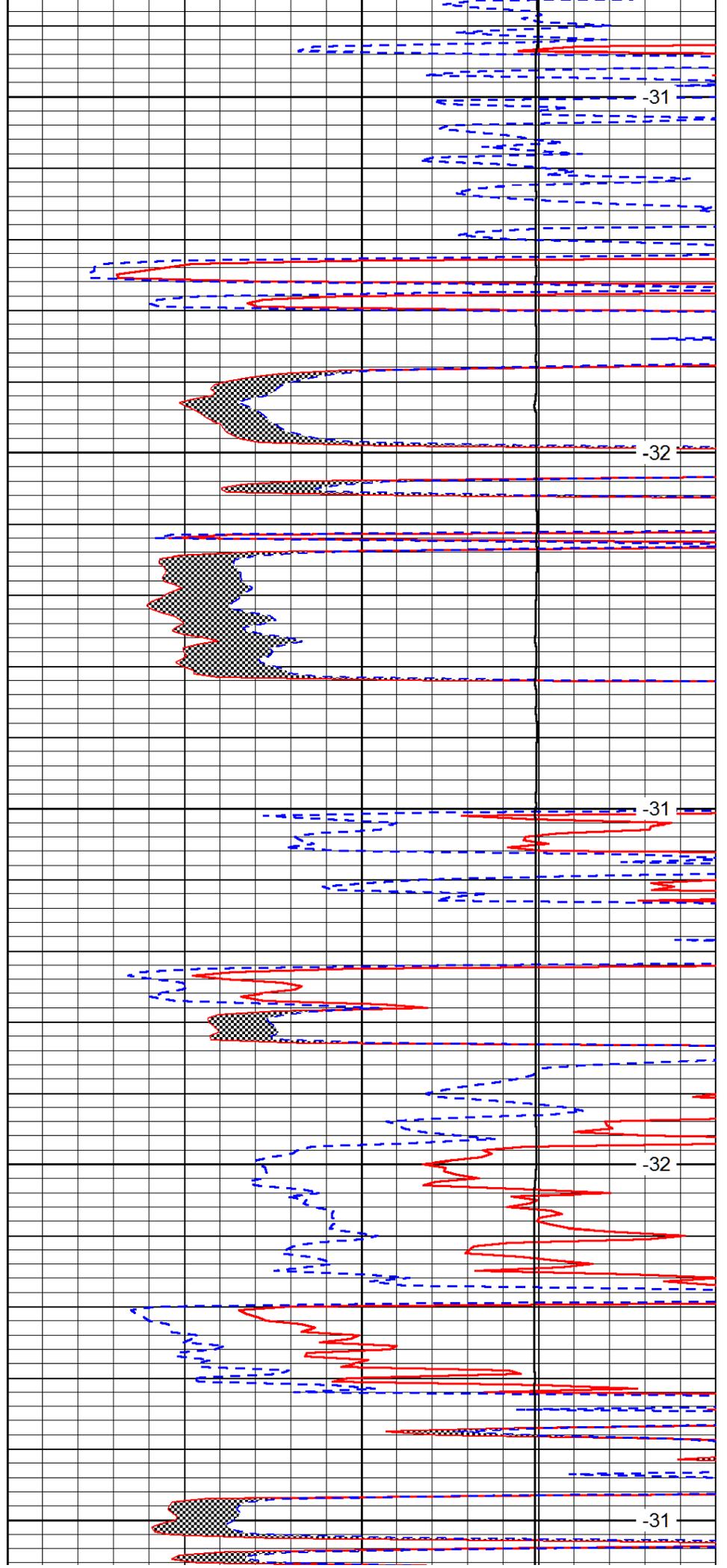
4900

4950

5000

5050

5100



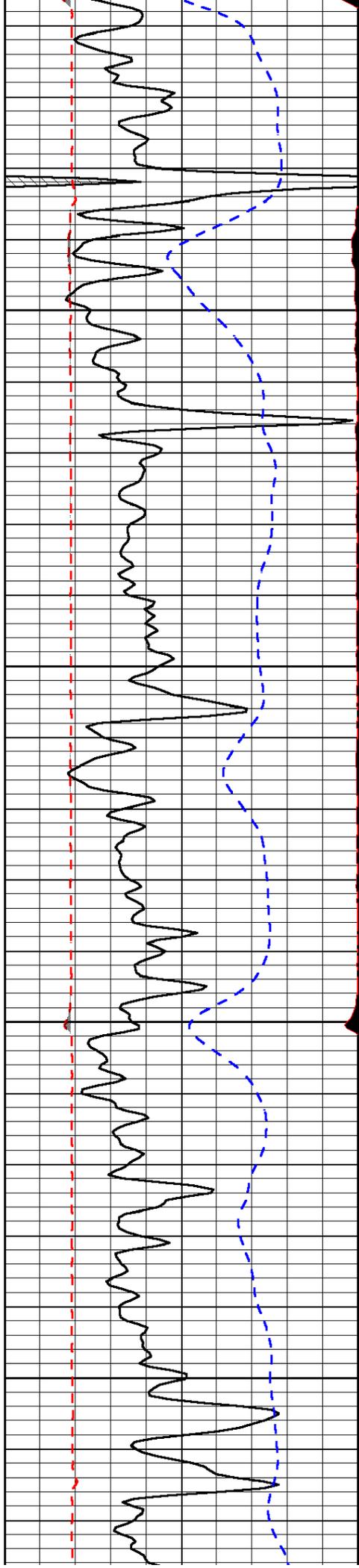
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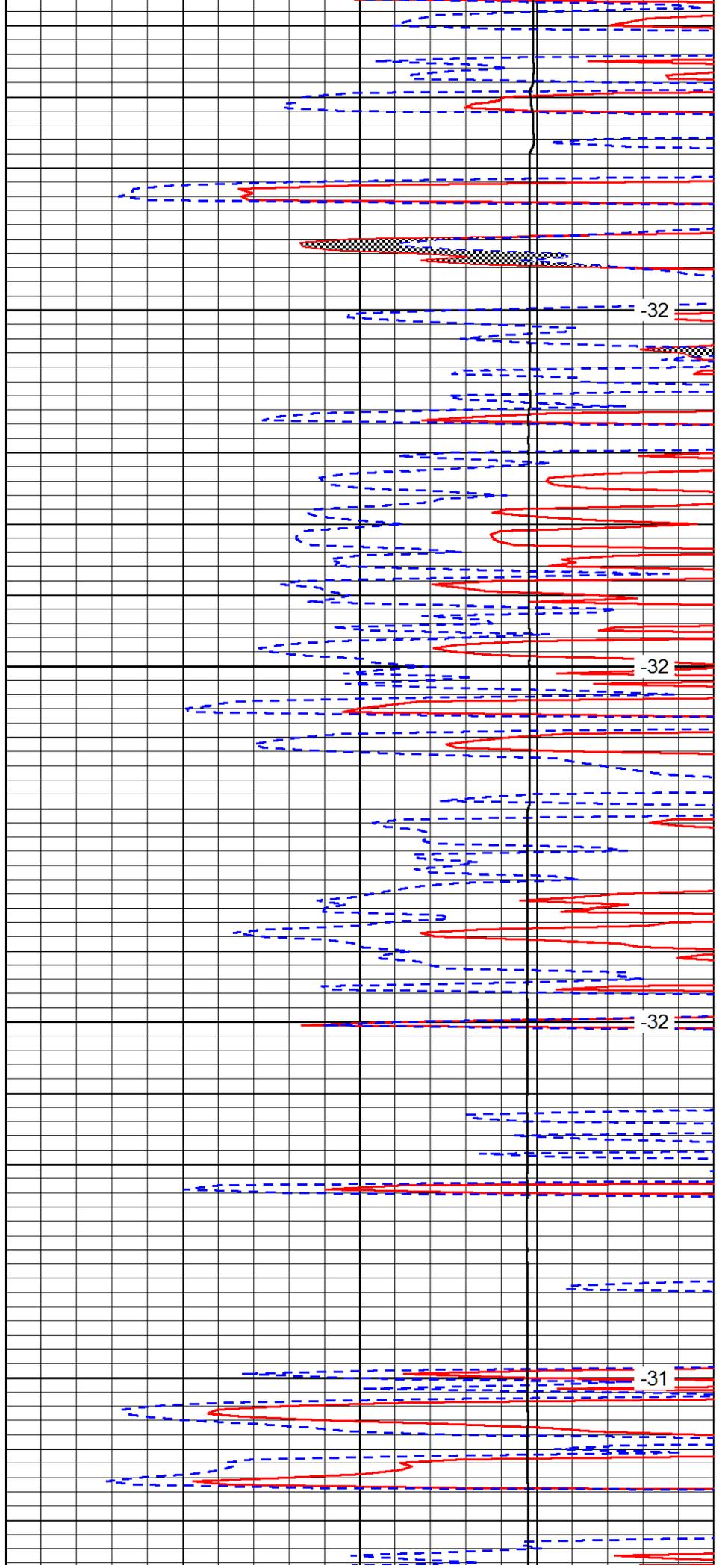


5150

5200

5250

5300

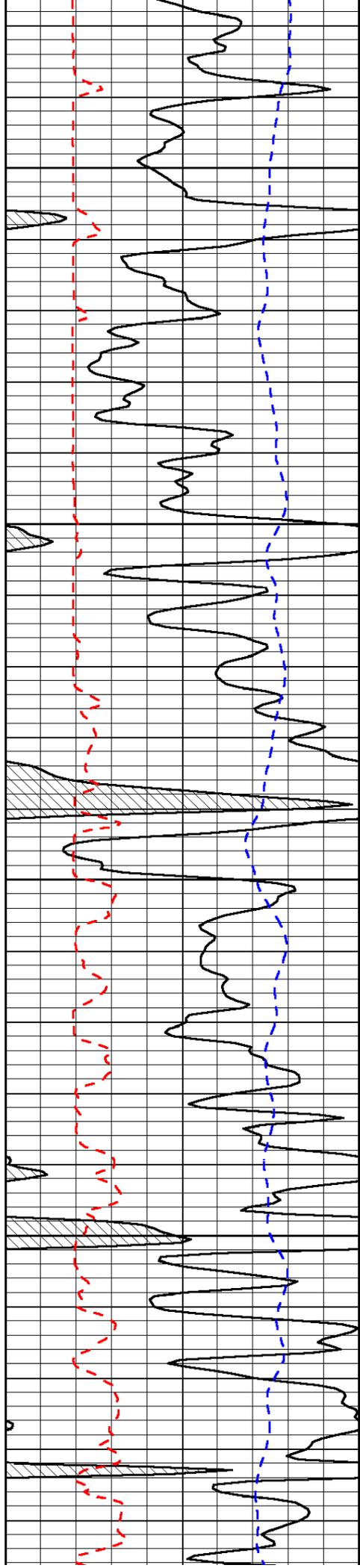


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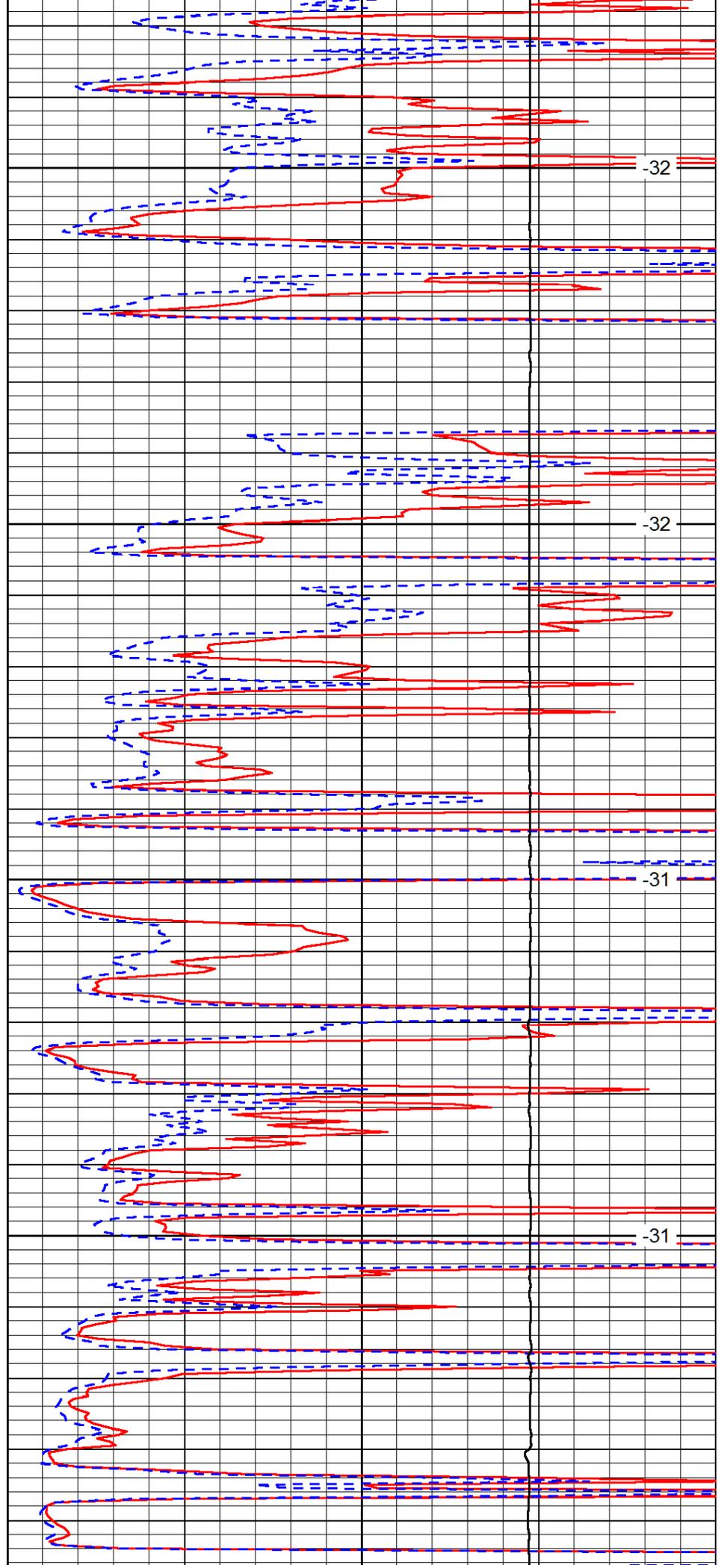


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5400

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5500

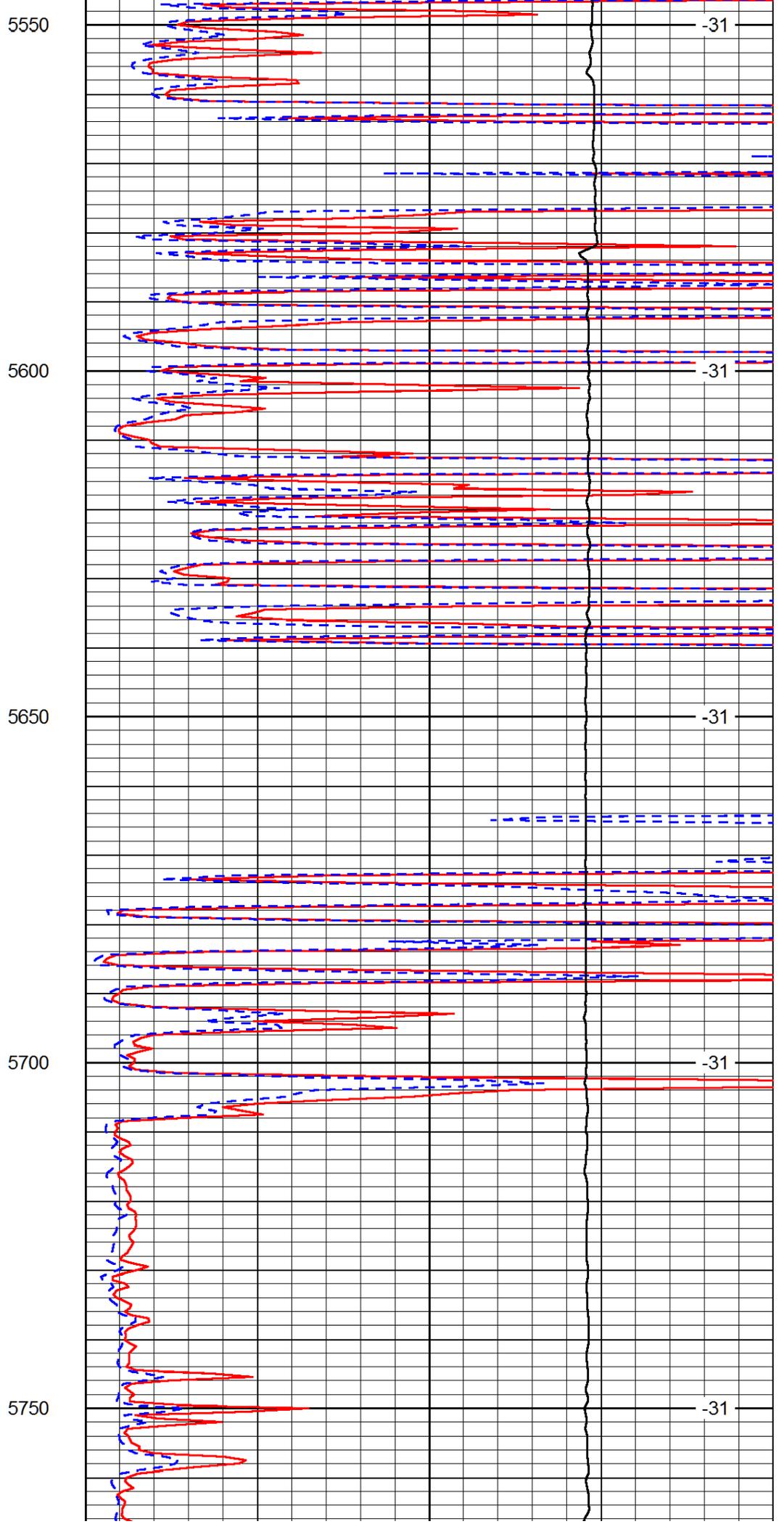
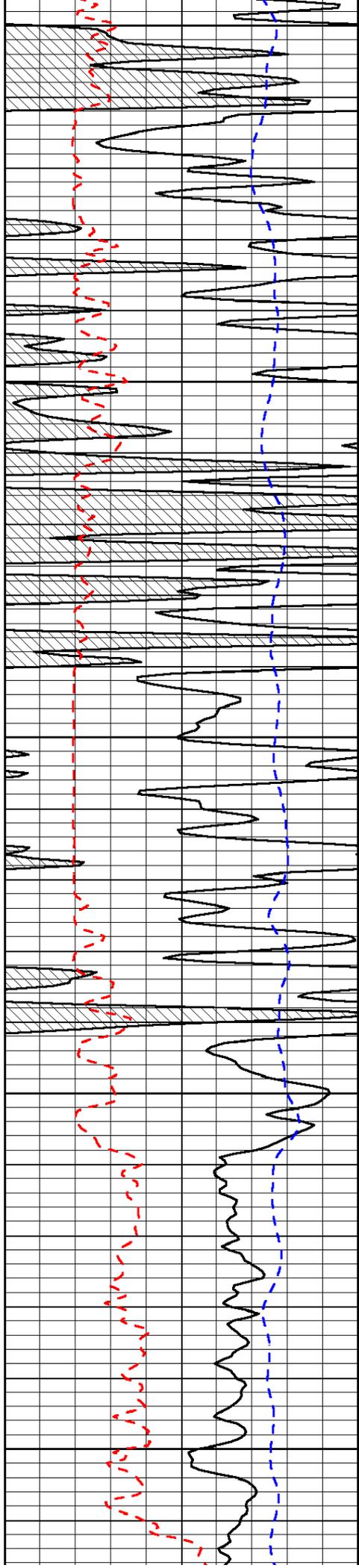


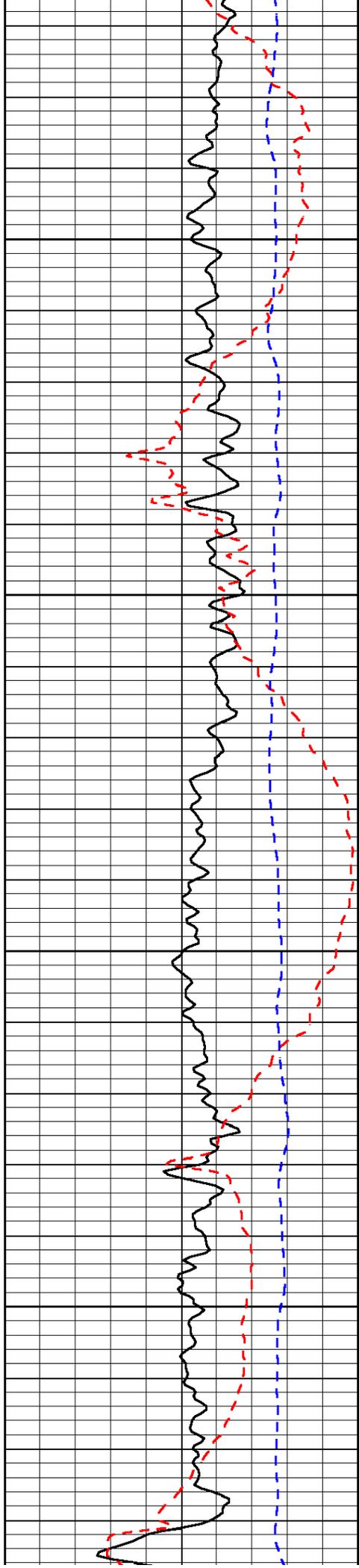
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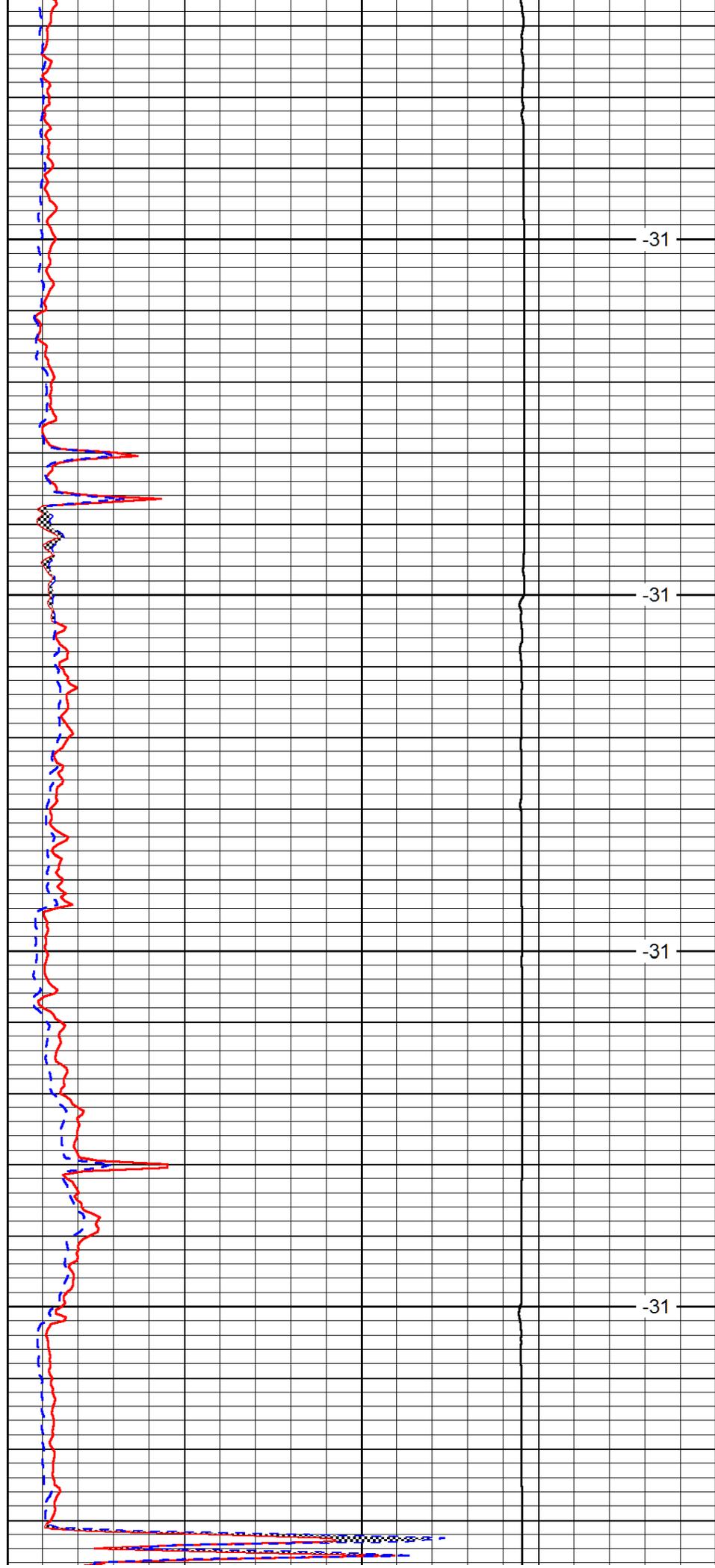


5800

5850

5900

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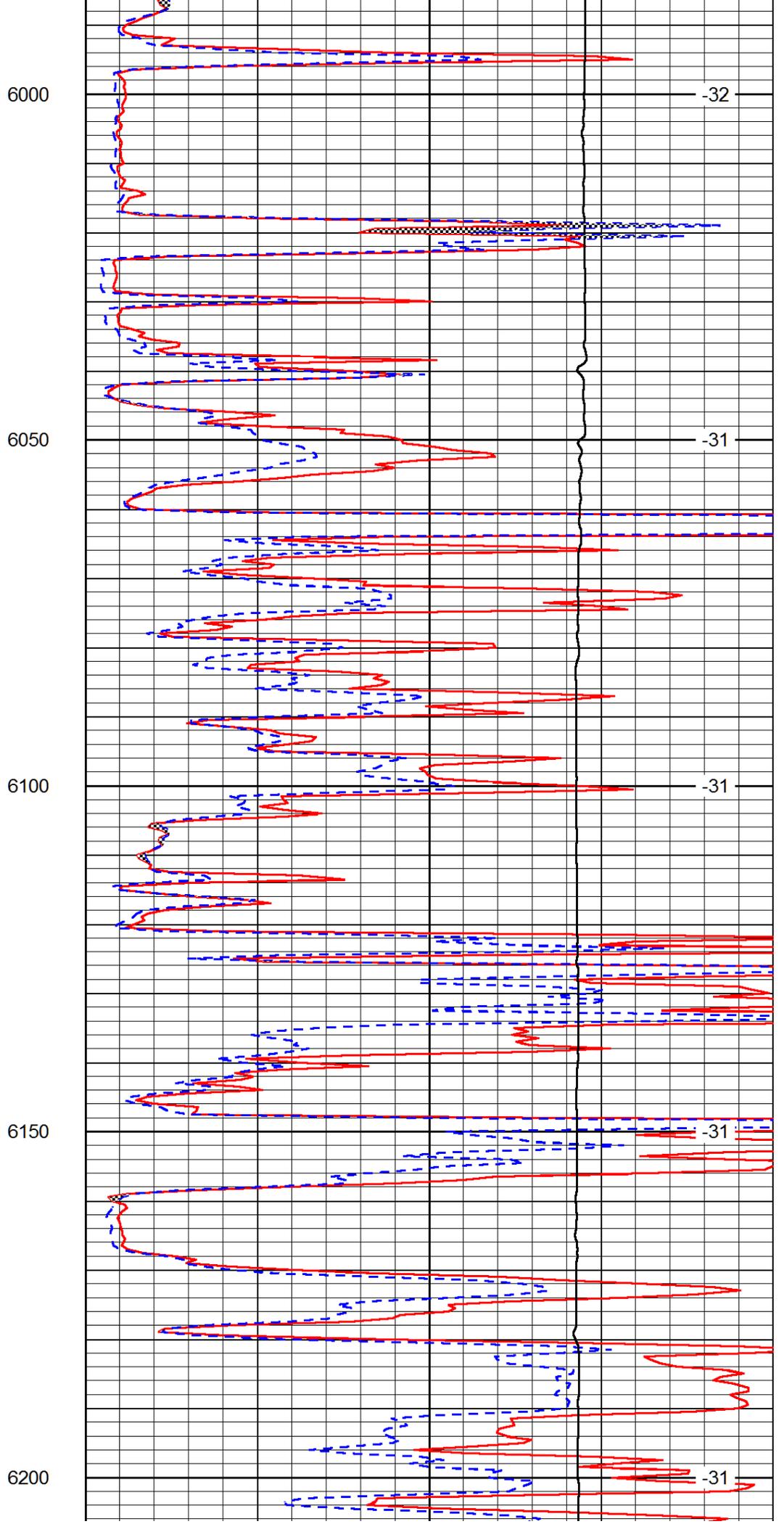
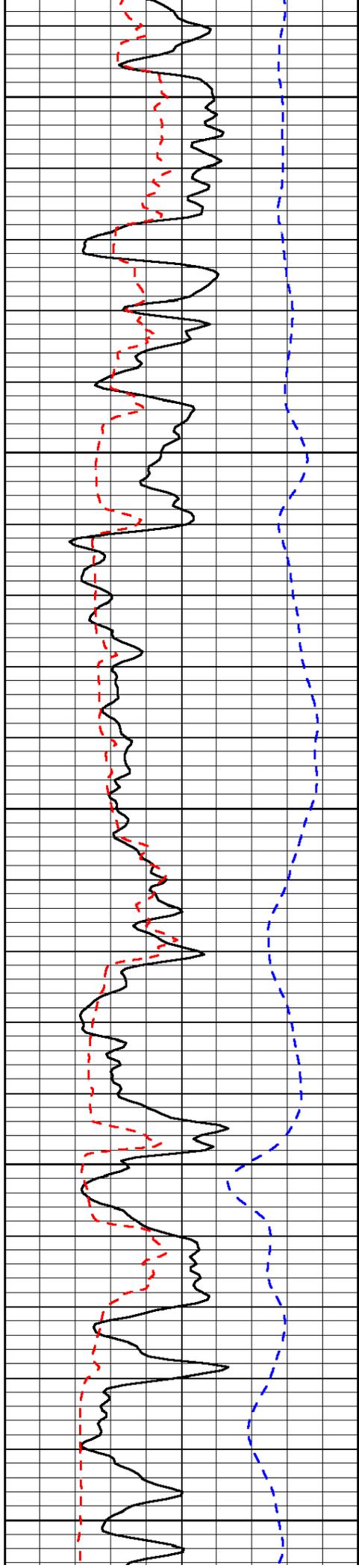


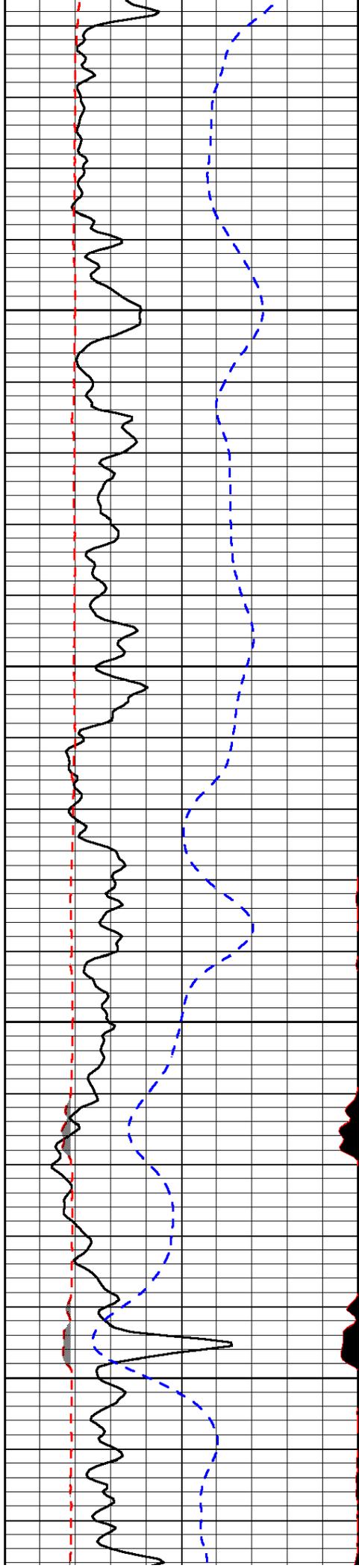
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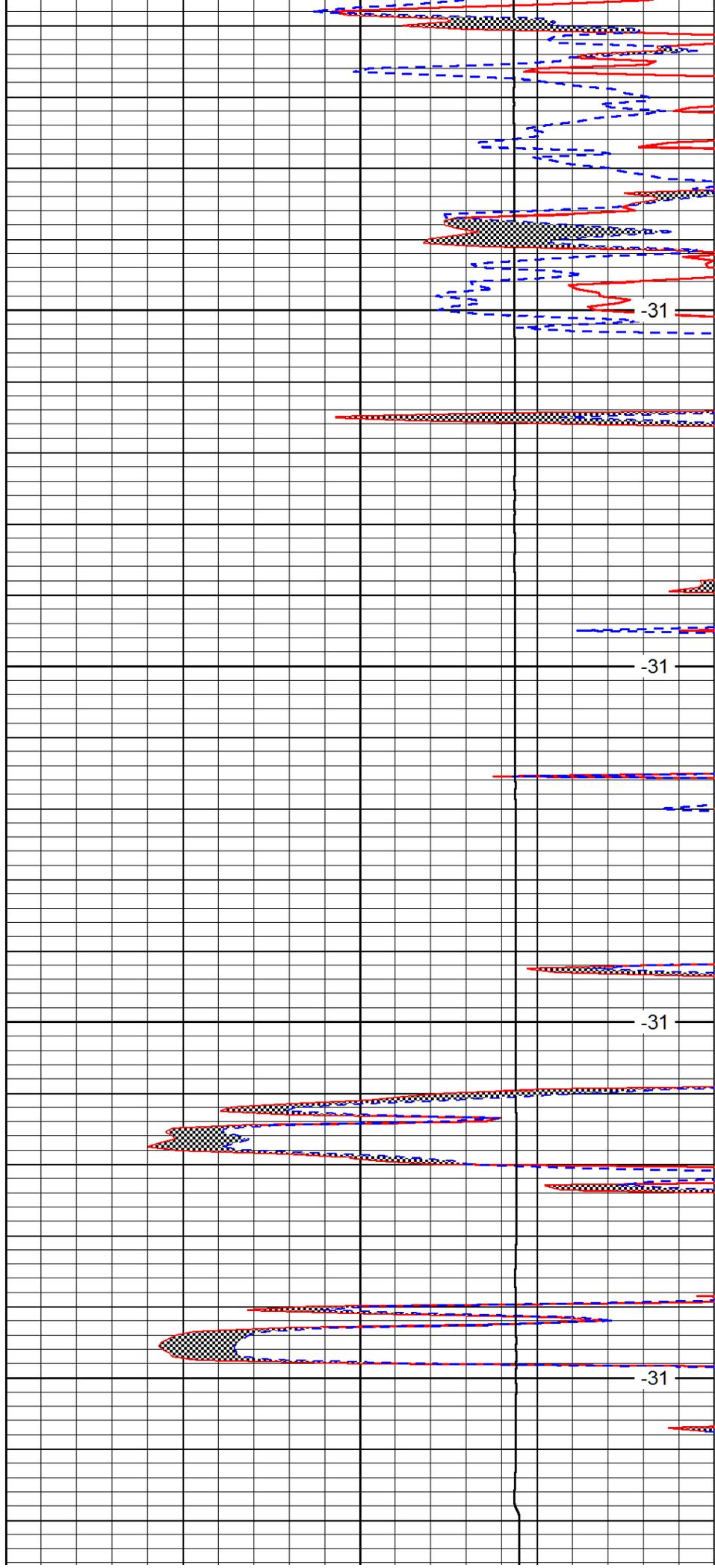


6250

6300

6350

6400

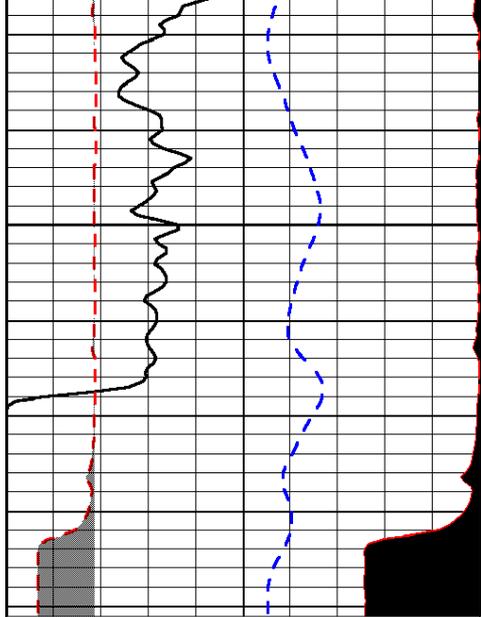


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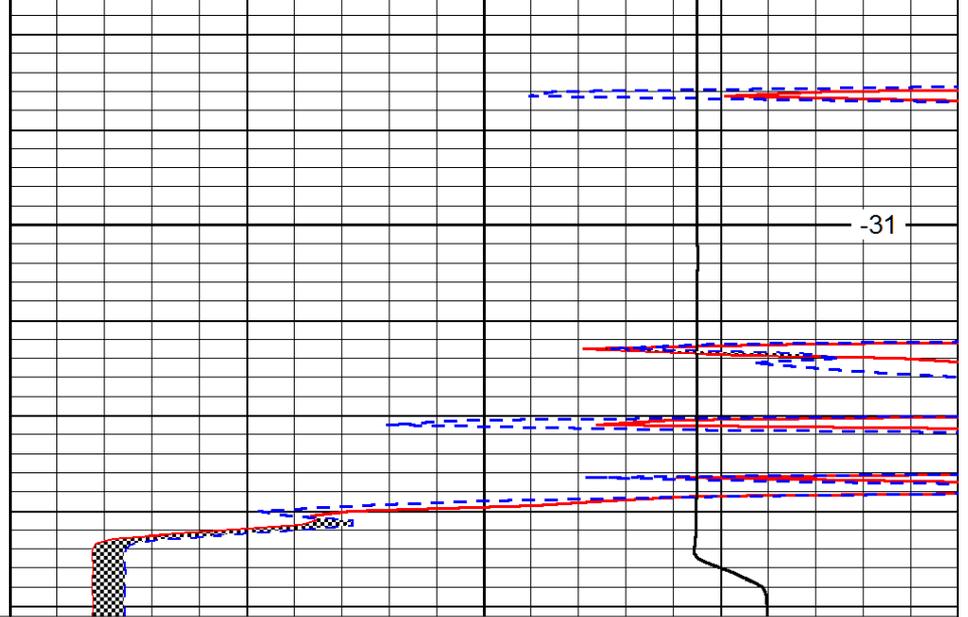
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