



Pioneer Energy Services

Microresistivity Log

15-109-21,354-00-00

API No.

Company **Black Tea Oil, LLC**
 Well **Pahls 'E' #2**
 Field **N/A**
 County **Logan** State **Kansas**

Location **1500' FSL & 770' FWL**

Other Services
 CNL/CDL
 DIL/BHCS

Permanent Datum **Ground Level** Elevation **2944**
 Log Measured From **Kelly Bushing** 12 Ft. Above Perm. Datum
 Drilling Measured From **Kelly Bushing**

Elevation
 K.B. 2956
 D.F. G.I.L. 2944

Date	10/19/2014
Run Number	One
Depth Driller	4745
Depth Logger	4748
Bottom Logged Interval	4747
Top Log Interval	3000
Casing Driller	8.625 @ 266
Casing Logger	263
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	8000
Density / Viscosity	9.2 43
pH / Fluid Loss	9.0 9.6
Source of Sample	Flowline
Rm @ Meas. Temp	0.60 @ 62
Rmf @ Meas. Temp	0.45 @ 62
Rmc @ Meas. Temp	0.81 @ 62
Source of Rmf / Rmc	Charts
Rm @ BHT	0.30 @ 123
Operating Rig Time	5 Hours
Max Rec. Temp. F	123
Equipment Number	15
Location	Hays
Recorded By	D.Kerr
Witnessed By	Richard Thomasson

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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
 www.pioneeres.com
 785 625 3858

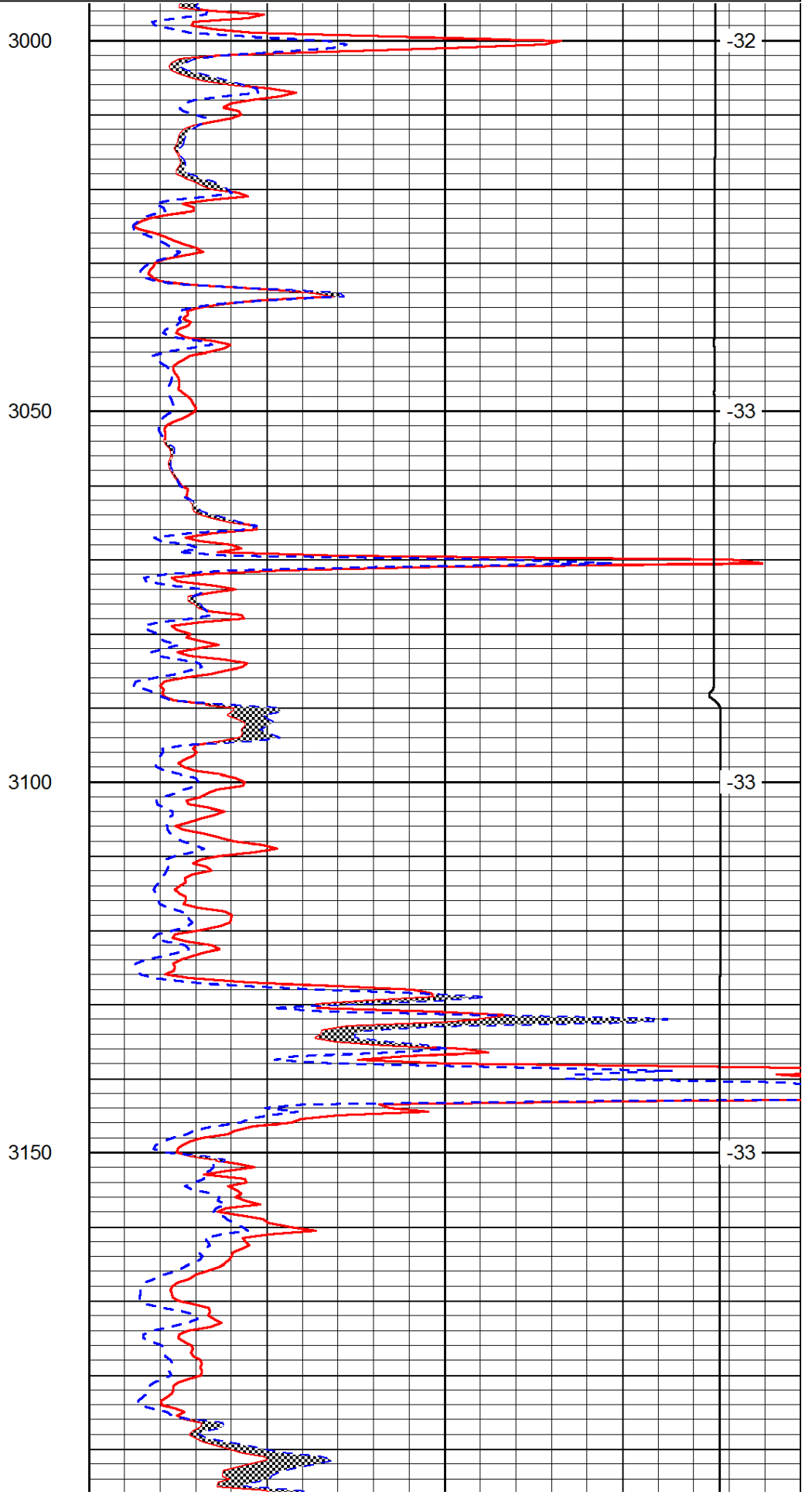
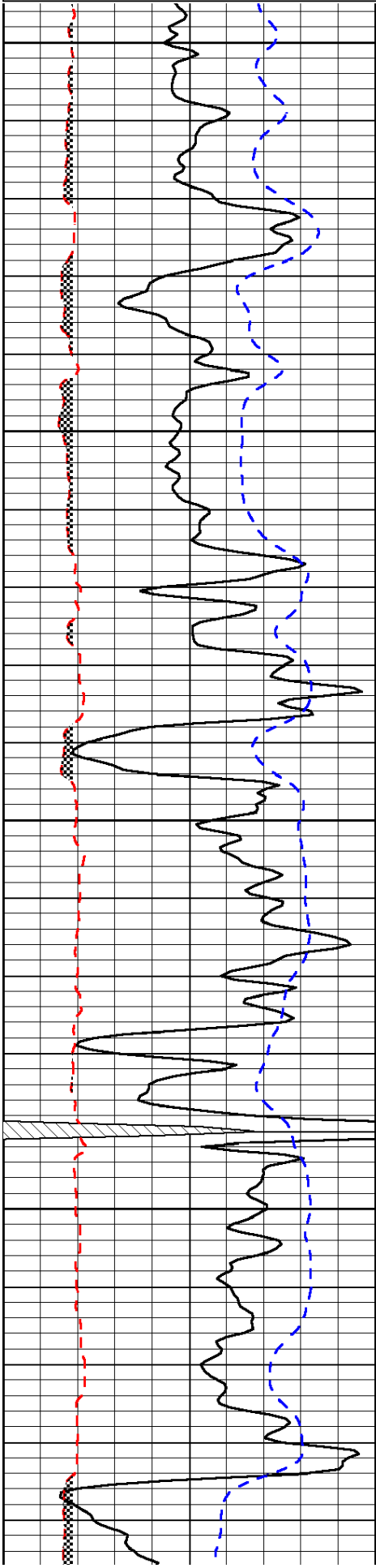
Russell Springs KS, East to 310 RD,
 1/2 South to Tanks, 3/4 West/ 1/4 South, West and North Into

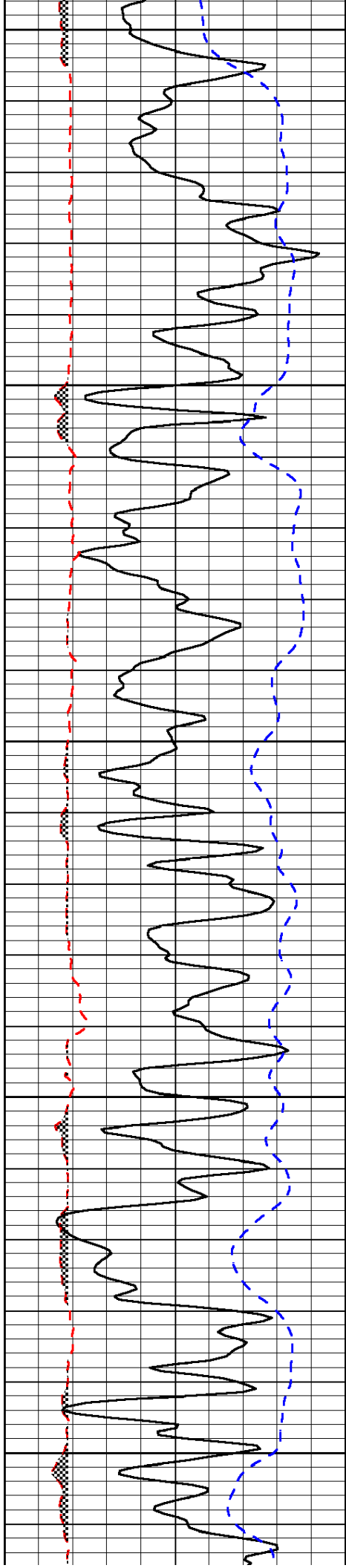
Database File: c:\warrior\data\black tea_pahls 'e' #2\blacktea_pahls_e_2hd.db
 Dataset Pathname: DIL/btstk
 Presentation Format: micro
 Dataset Creation: Sun Oct 19 13:00:40 2014
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
6	MCAL (GAPI)	16
-200	SP (mV)	0

0	Micro Inverse 1 X 1	40
0	Micro Normal 2"	40
15000	Line Weight	0

LSPD





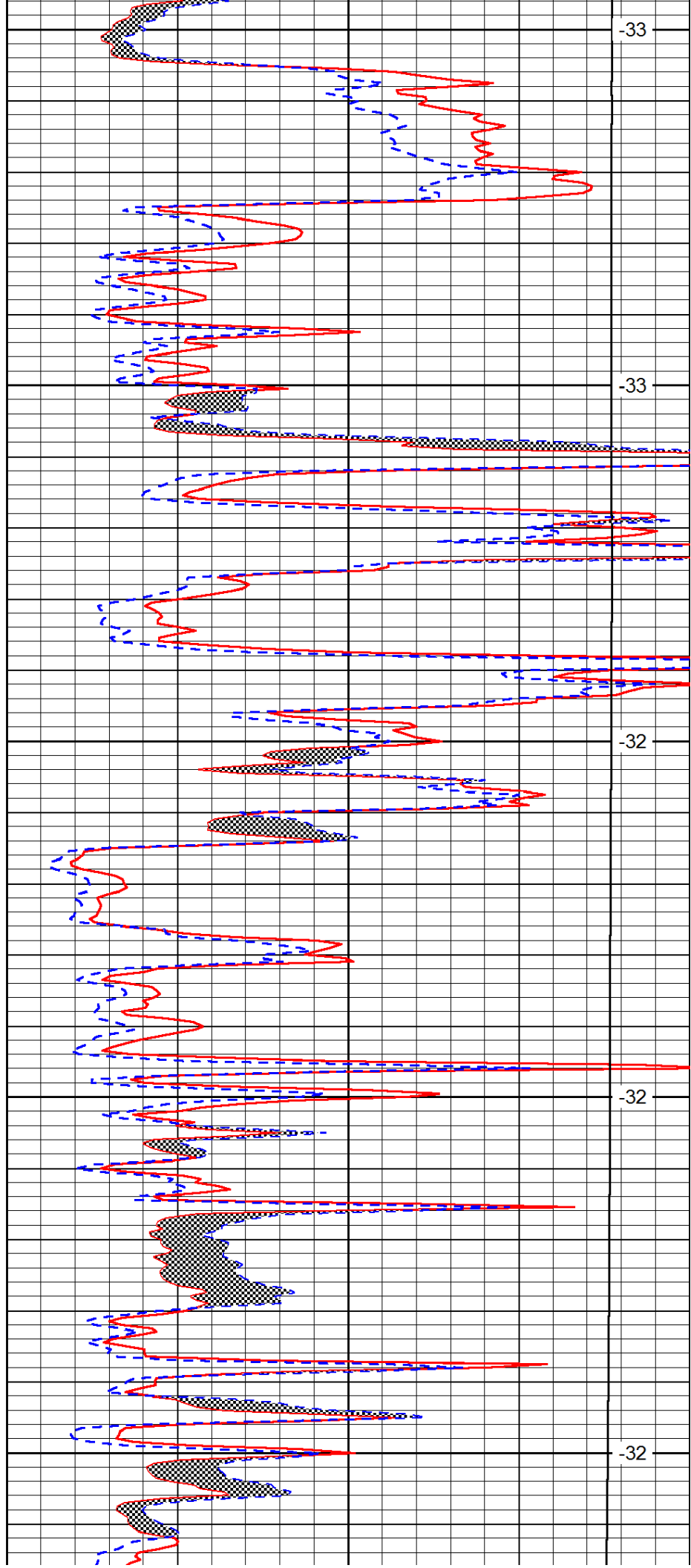
3200

3250

3300

3350

3400



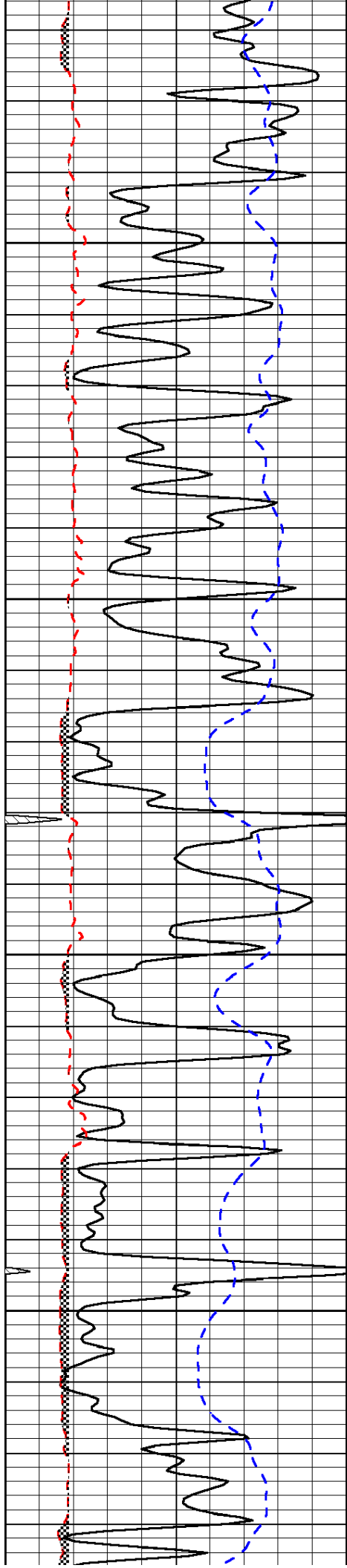
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-33

-32

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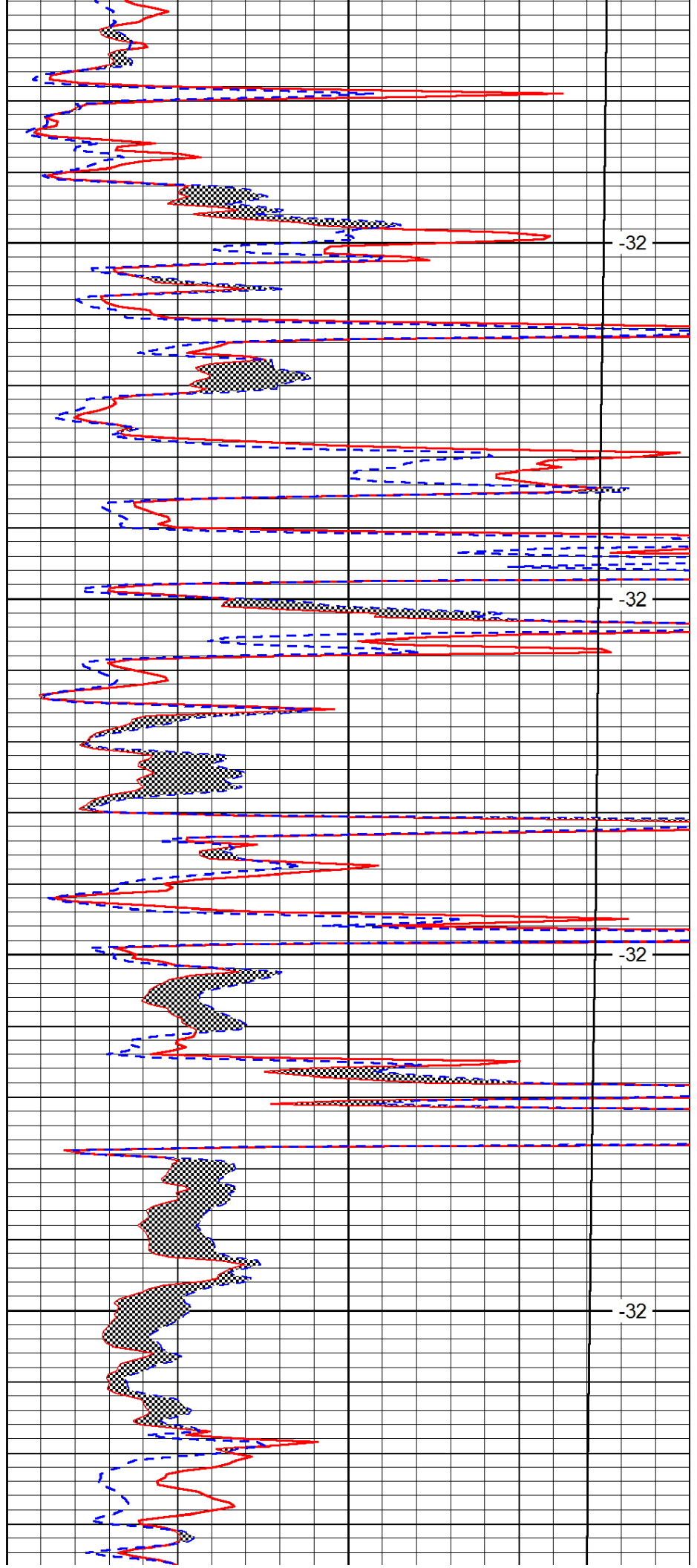


3450

3500

3550

3600

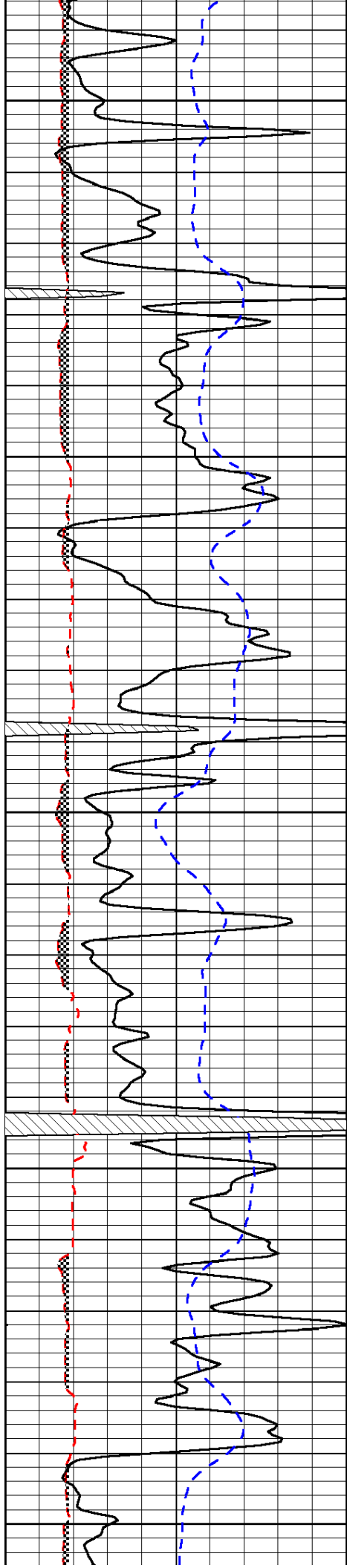


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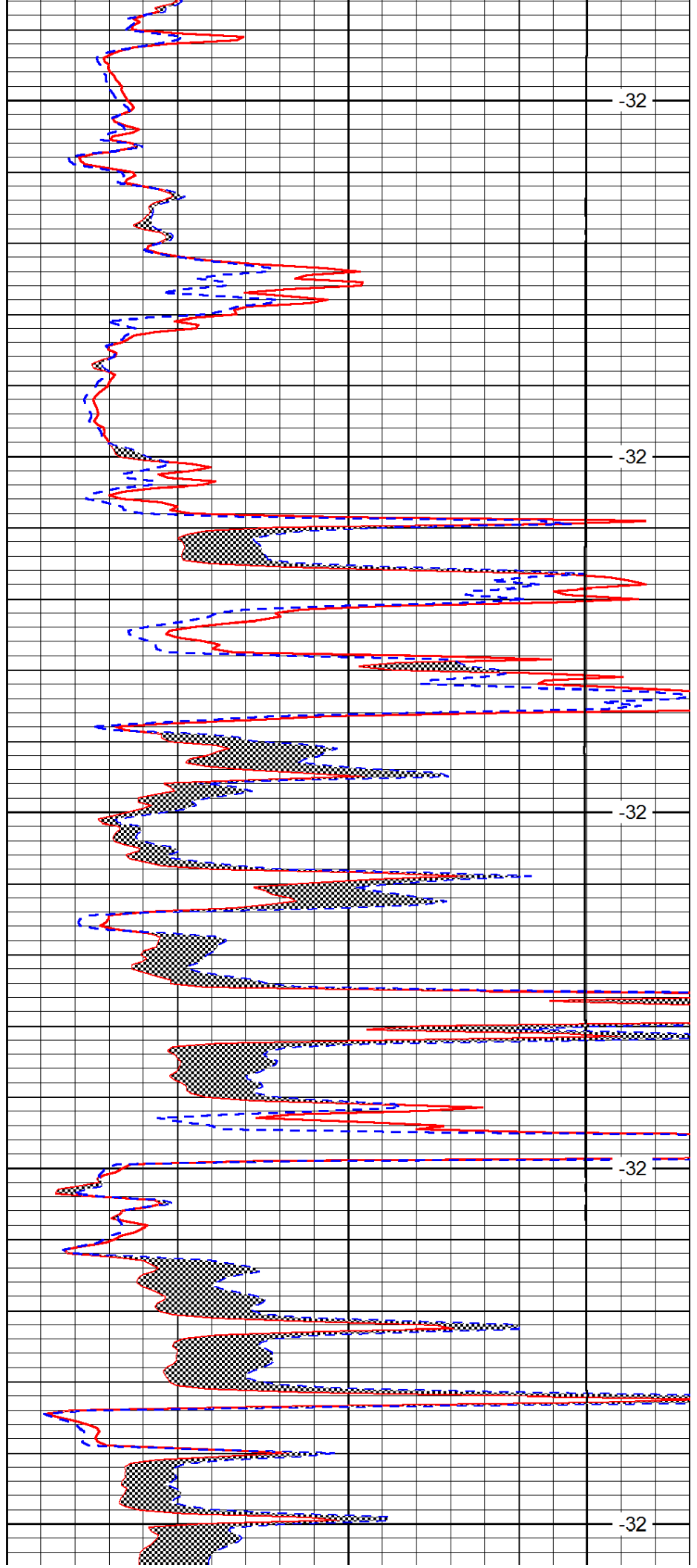
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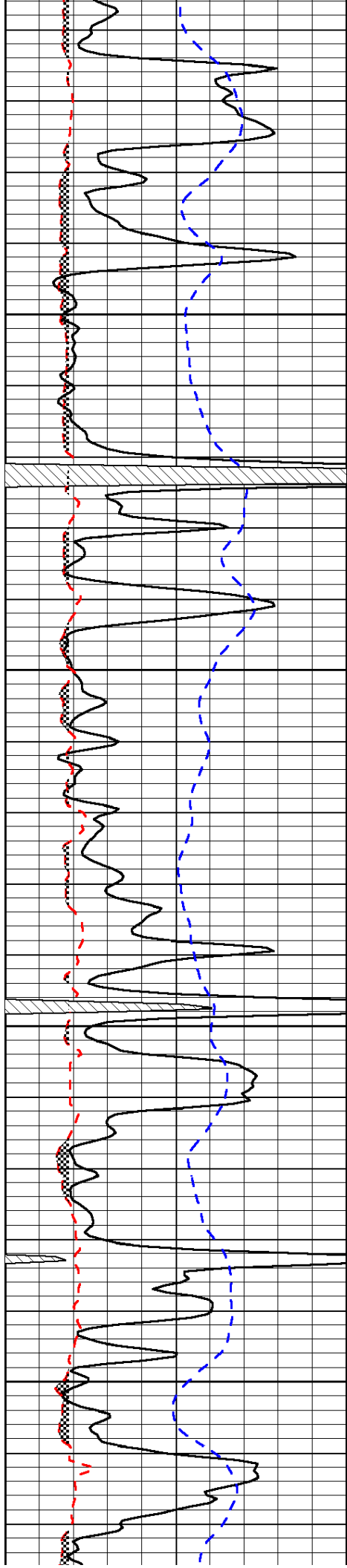
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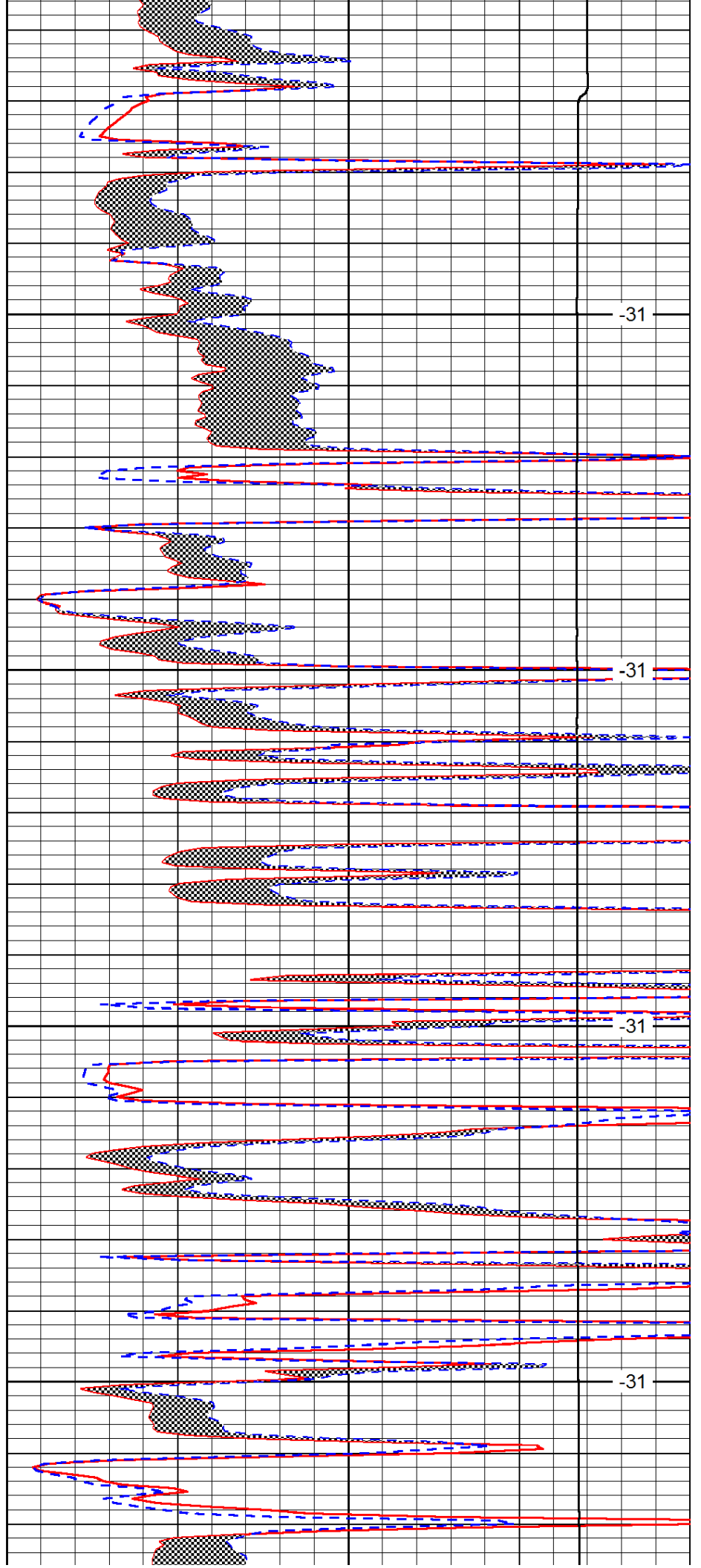


3900

3950

4000

4050

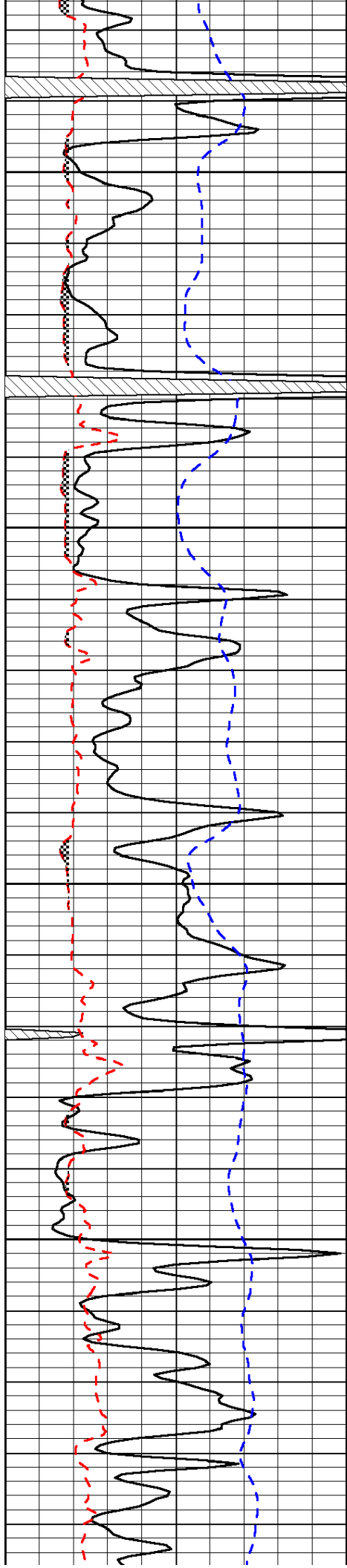


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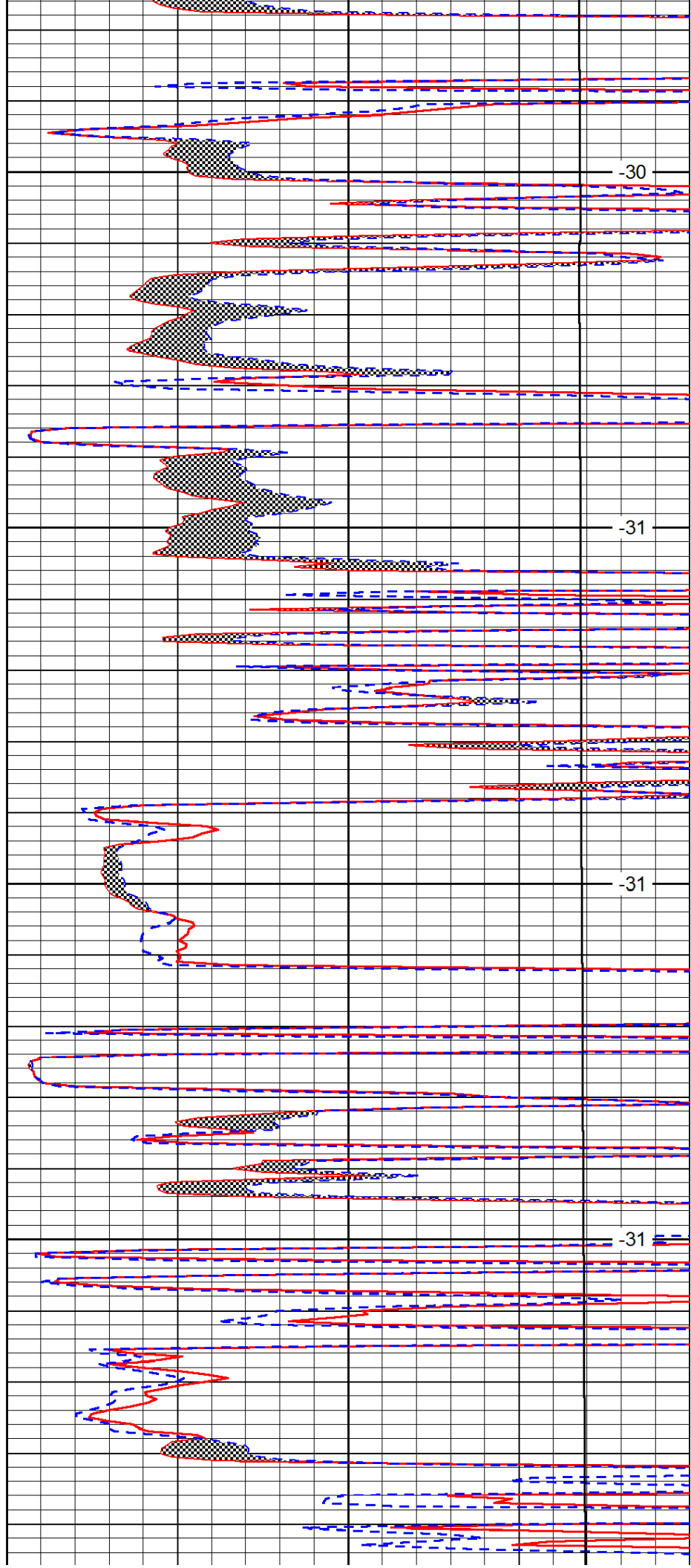


4100

4150

4200

4250

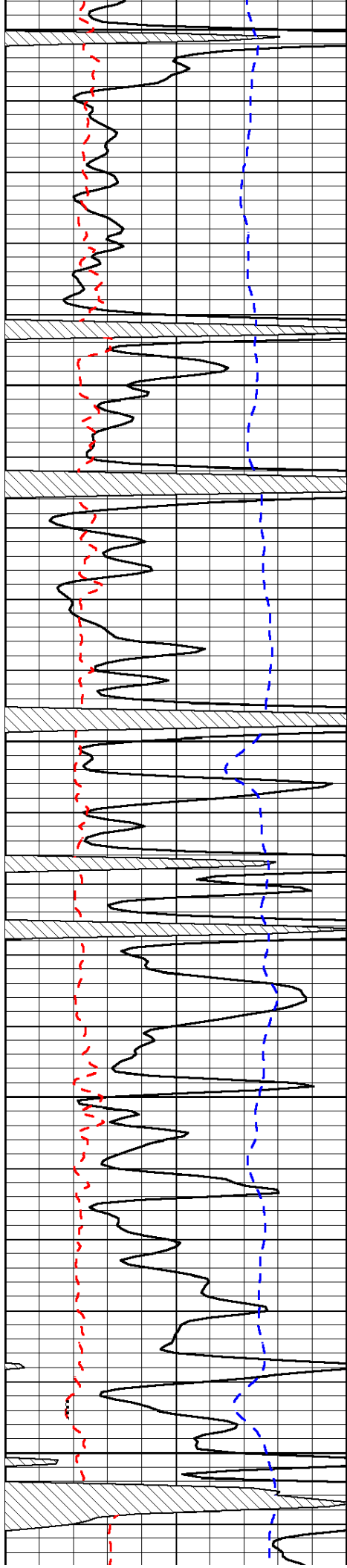


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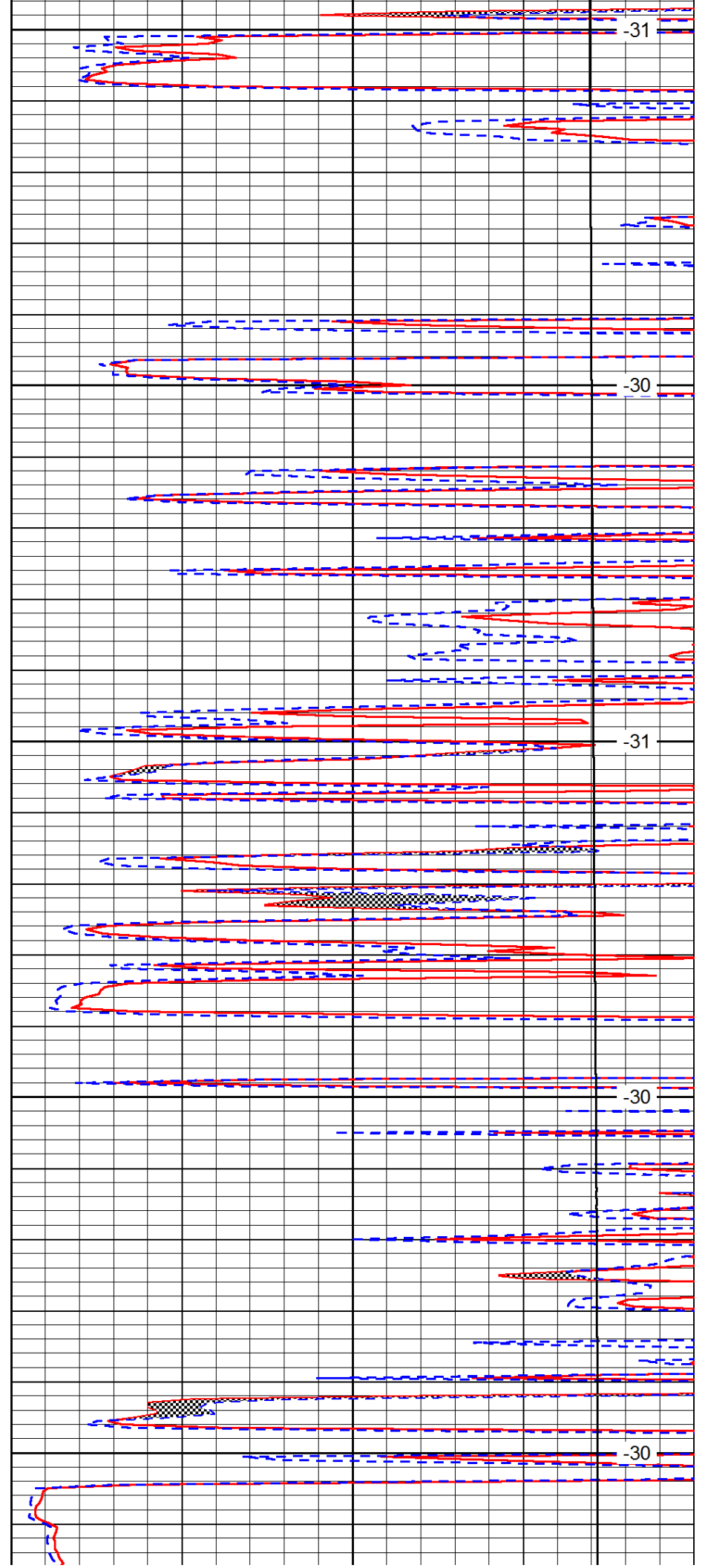
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4400

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4500



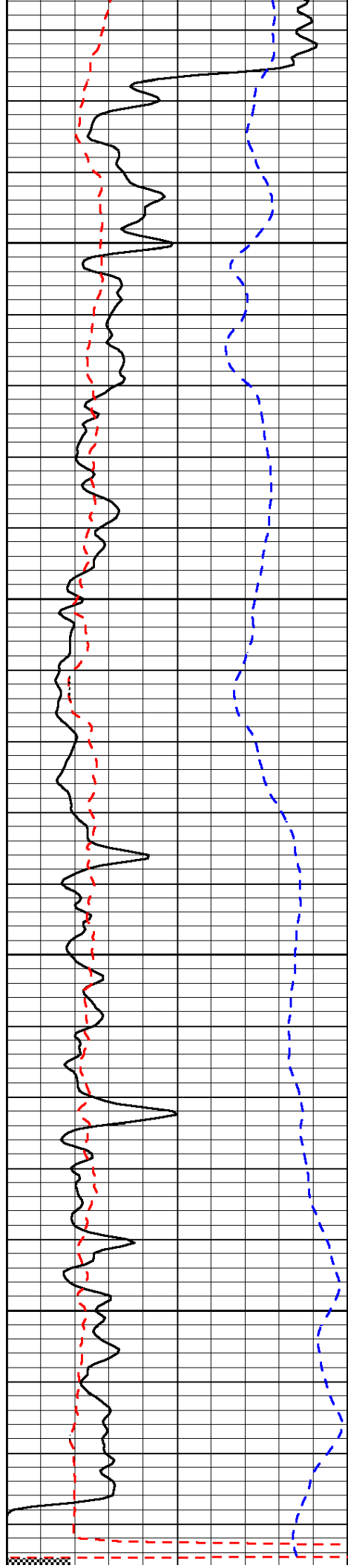
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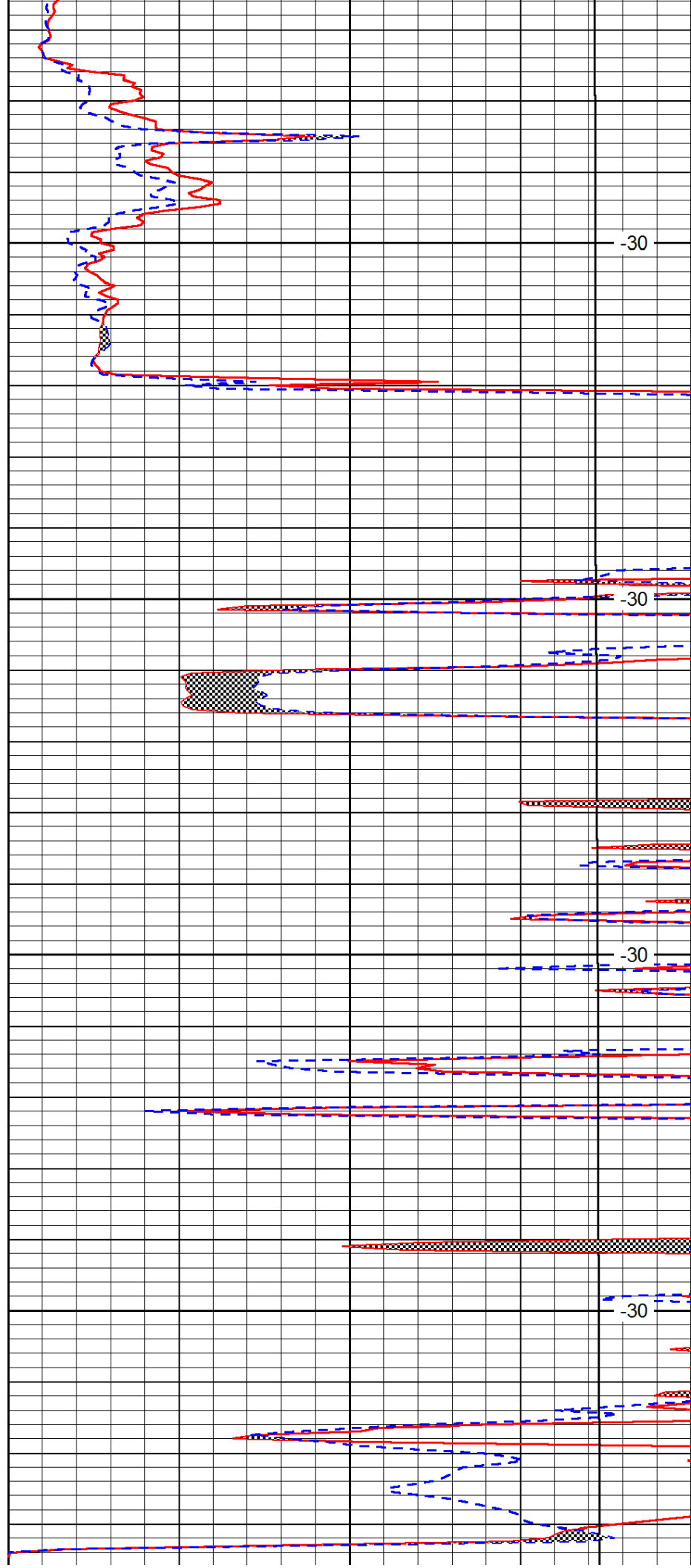


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4600

4650

4700

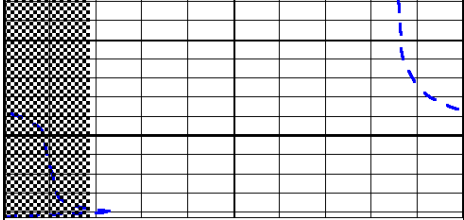


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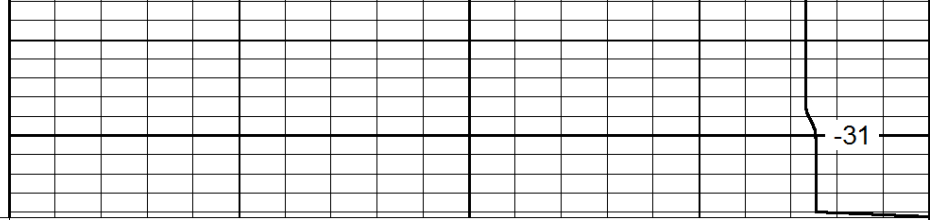
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-30

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4750



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