



Dual Induction Log

Pioneer Energy Services

API No.

15-101-22500-00-00

Company Larson Engineering, Inc.

Well Boomhower B # 1-16

Field Wildcat

County Lane State

Kansas

Location 2265' FSL & 342' FEL

Sec: 16 Twp: 17 S Rge: 29 W

Other Services
CNL/CDL
MEL

Permanent Datum Ground Level Elevation 2799

Log Measured From Kelly Bushing 7 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing

Elevation
K.B. 2806
D.F. 2799
G.L. 2799

Date 04-09-2014

Run Number One

Depth Driller 4640

Depth Logger 4637

Bottom Logged Interval 4636

Top Log Interval 250

Casing Driller 8.625 @ 264

Casing Logger 258

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 2000

Density / Viscosity 9.4 59

pH / Fluid Loss 9.5 7.2

Source of Sample Flowline

Rm @ Meas. Temp 0.75 @ 60

Rmf @ Meas. Temp 0.56 @ 60

Rmc @ Meas. Temp 1.01 @ 60

Source of Rmf / Rmc Charts

Rm @ BHT 0.37 @ 122

Operating Rig Time 4 Hours

Max Rec. Temp. F 122

Equipment Number 17

Location Hays

Recorded By Y. Ruiz

Witnessed By Vern Schrag

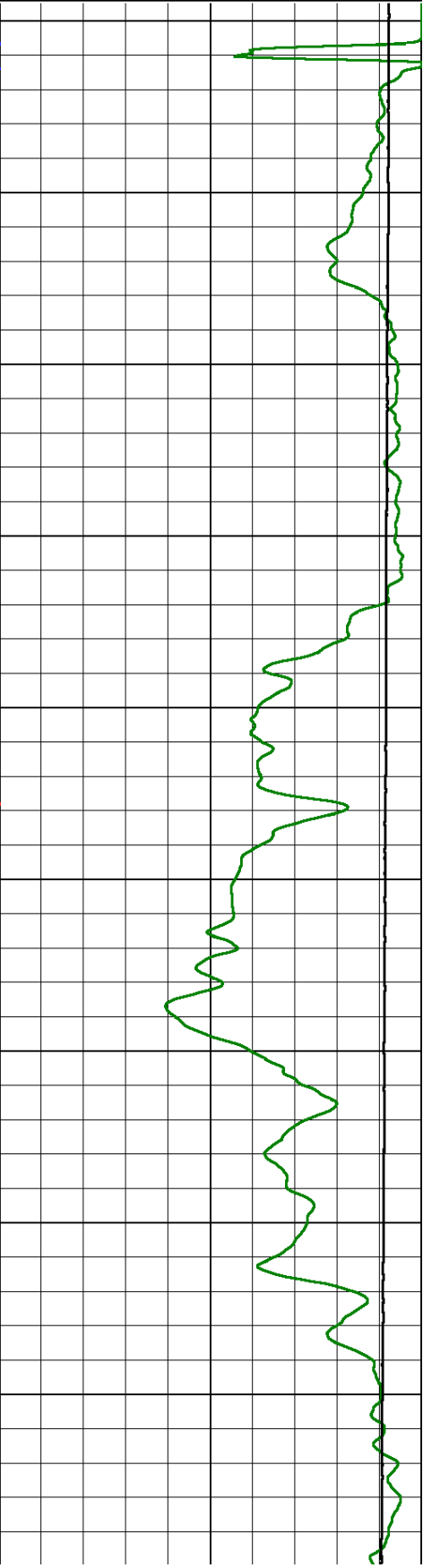
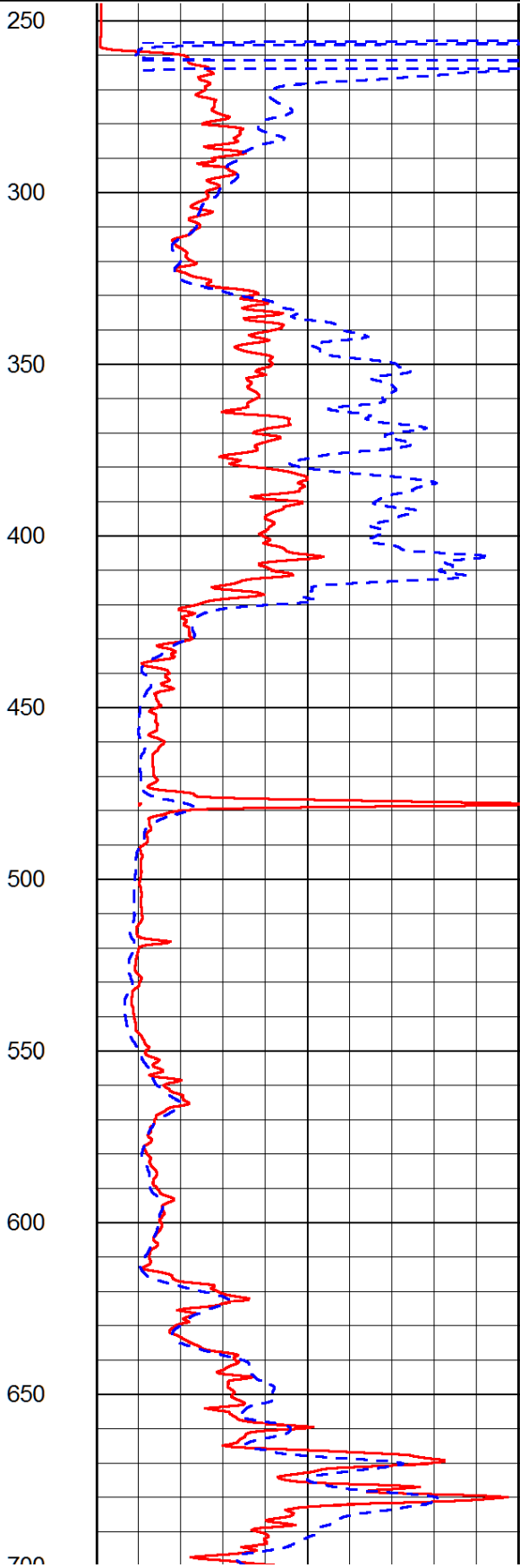
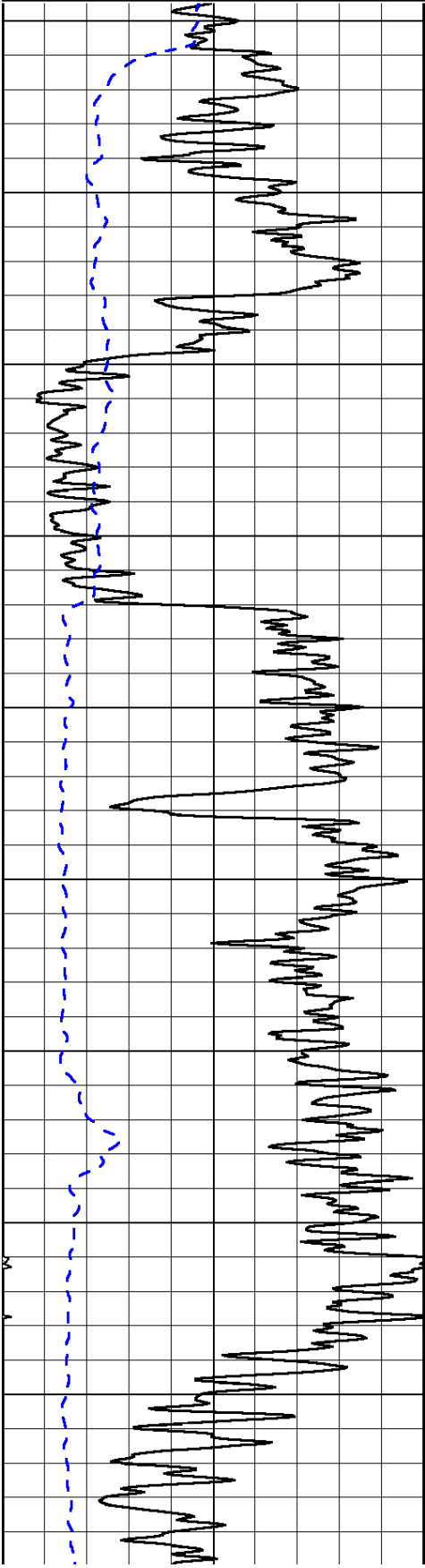
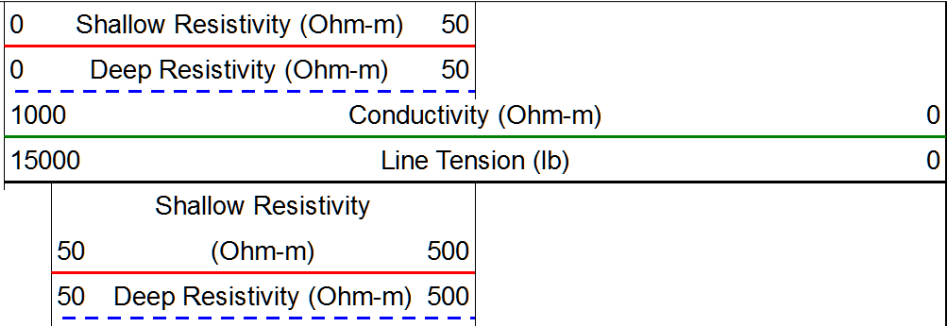
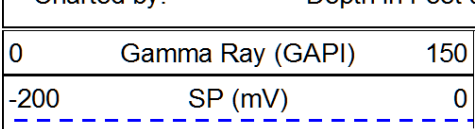
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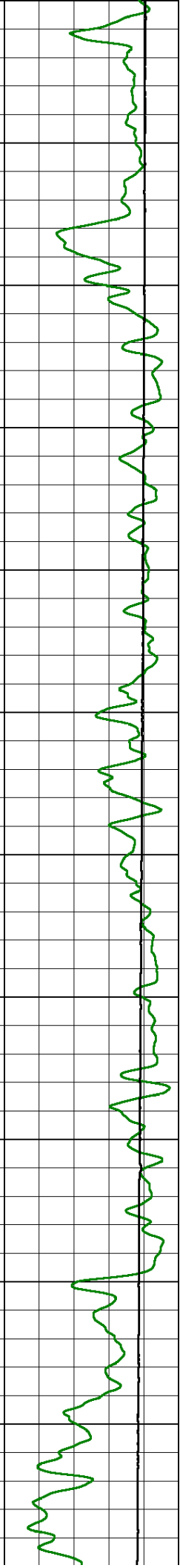
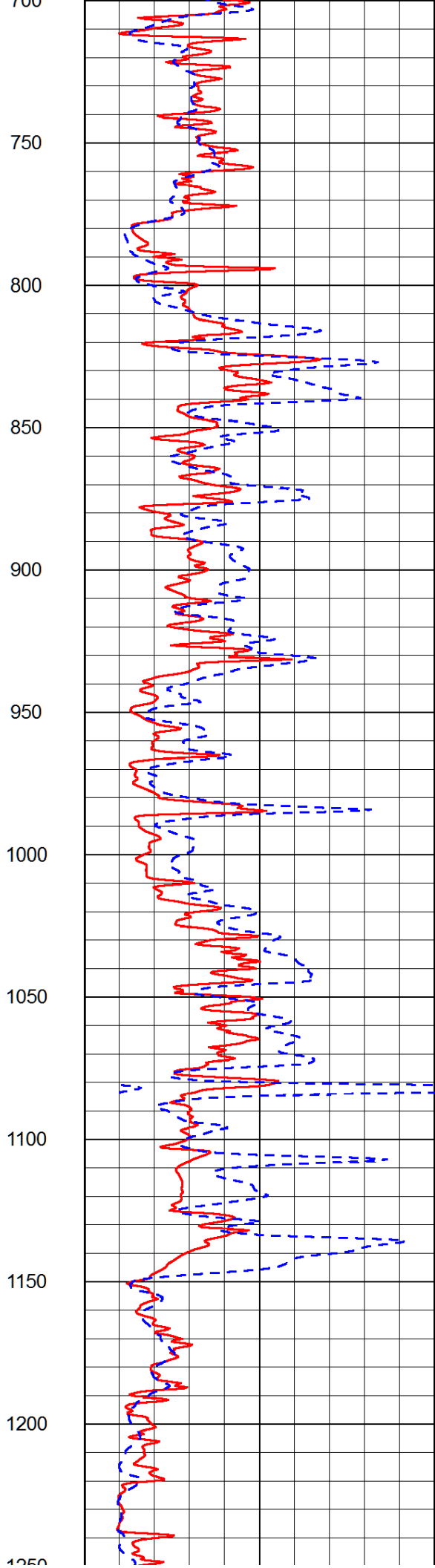
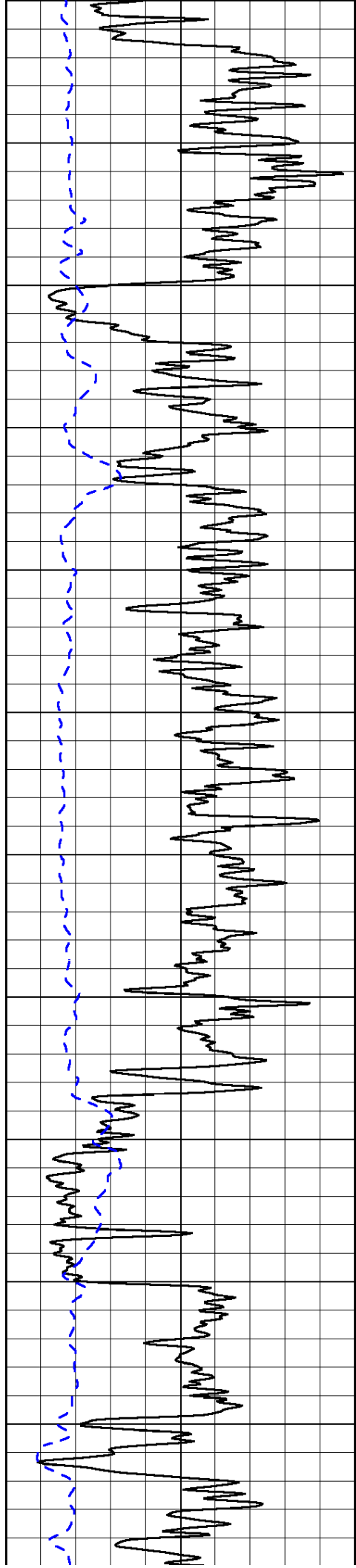
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

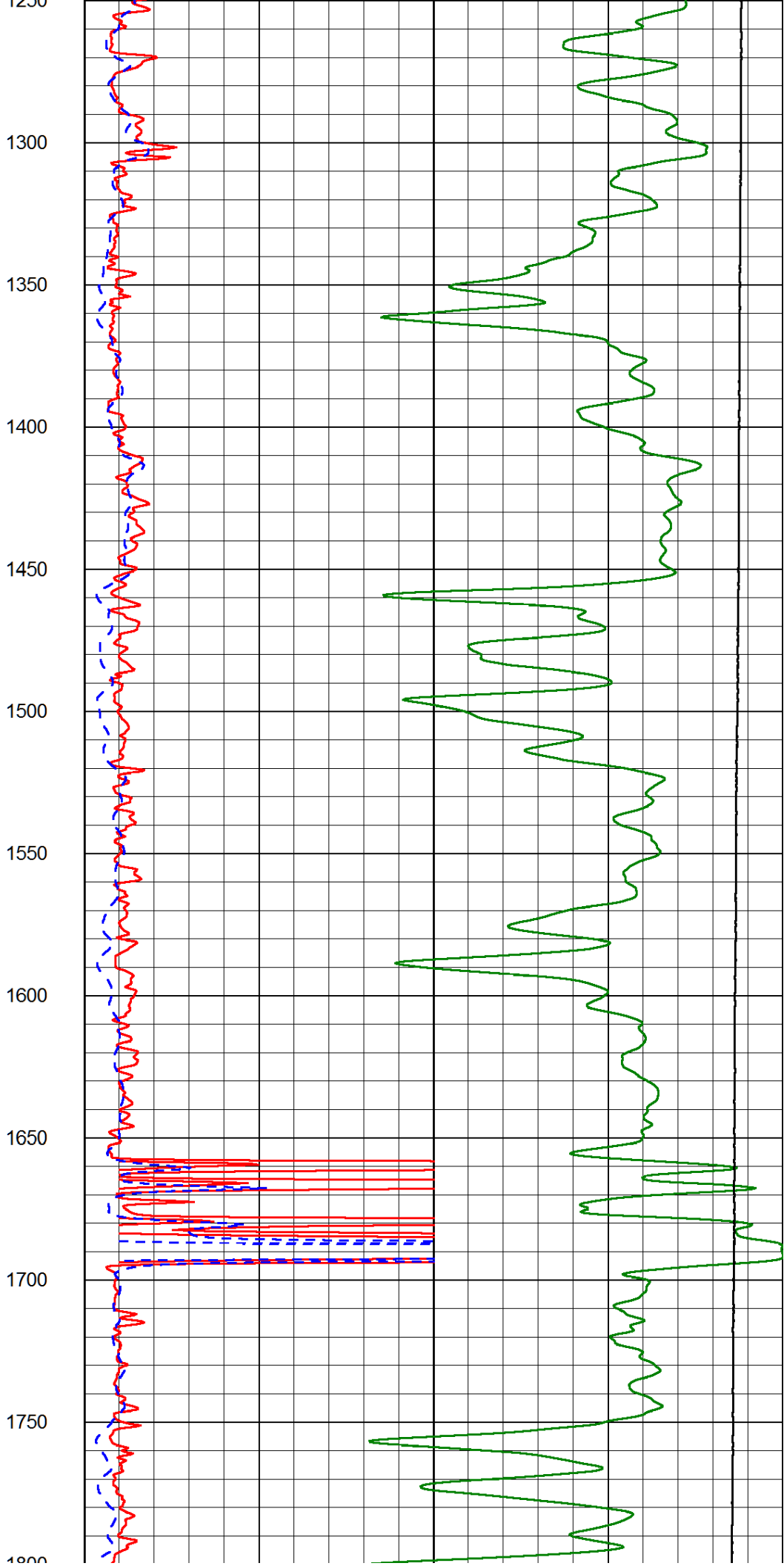
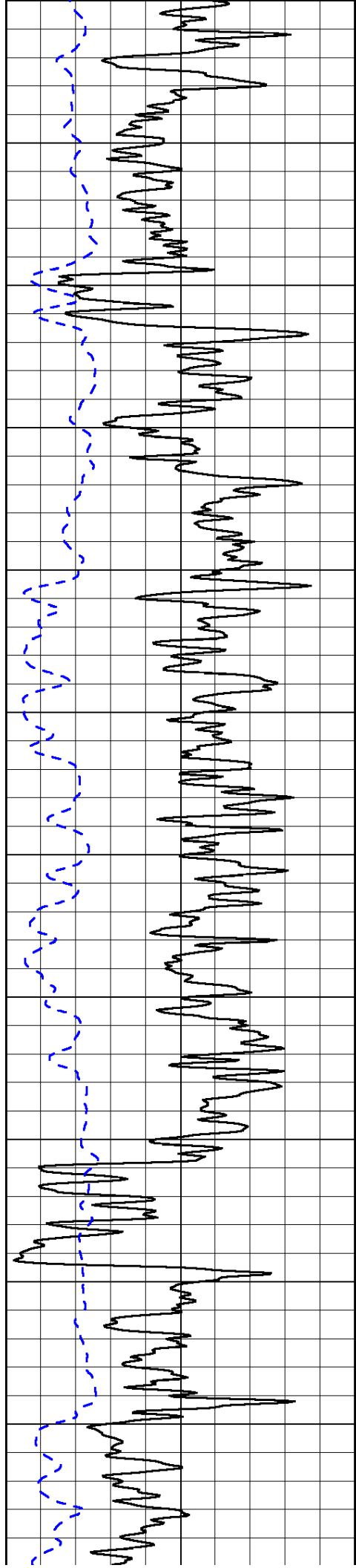
Comments

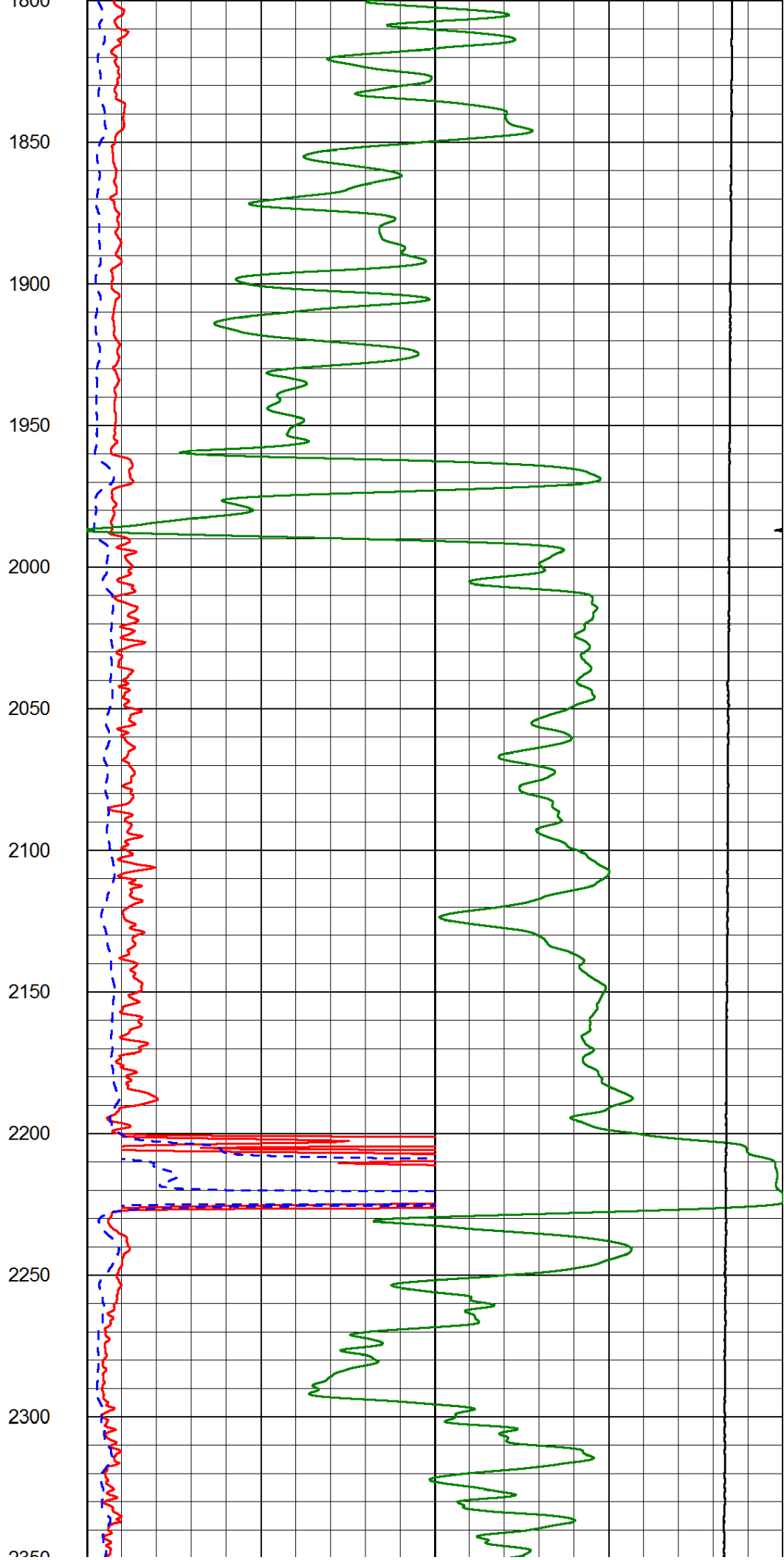
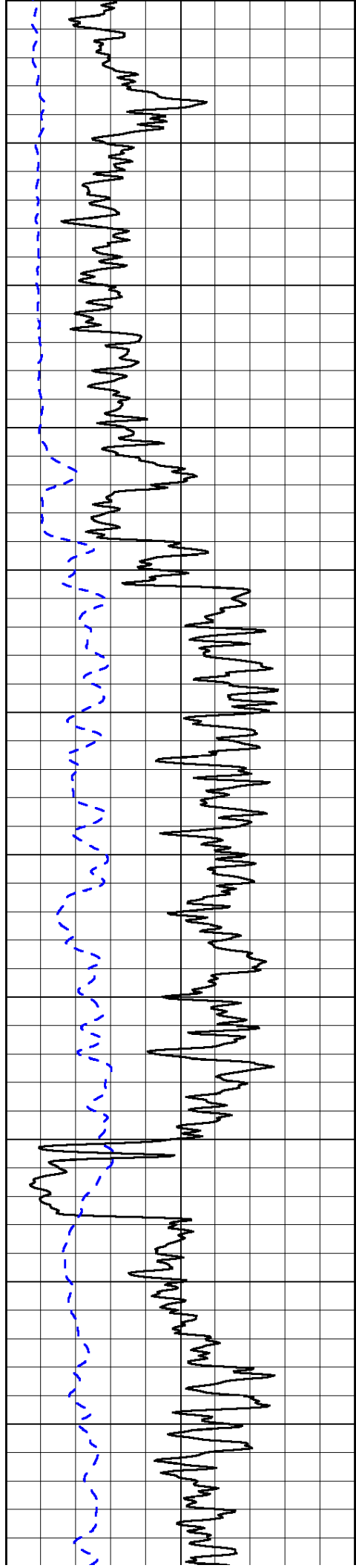
Thank you for using Log-Tech, Inc.
(785) 625-3858

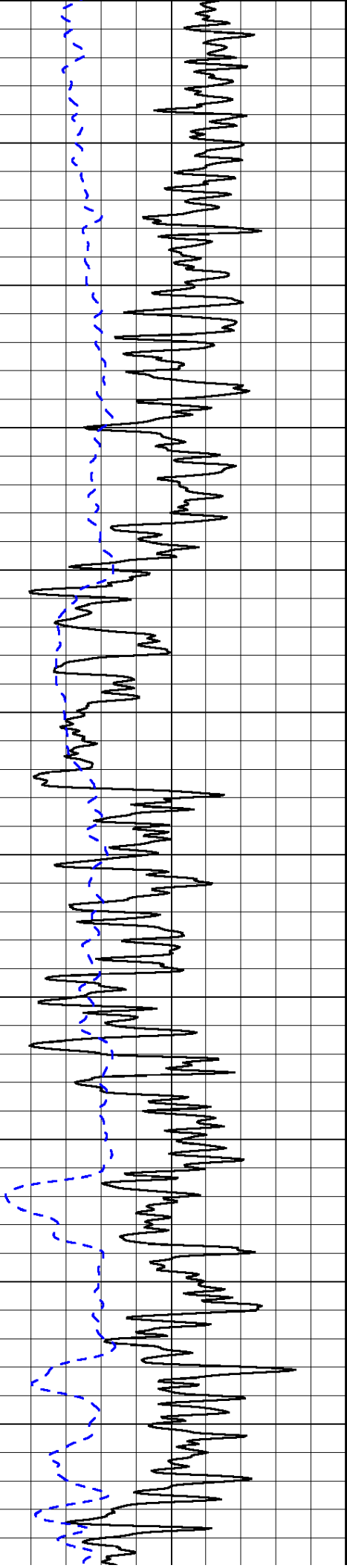
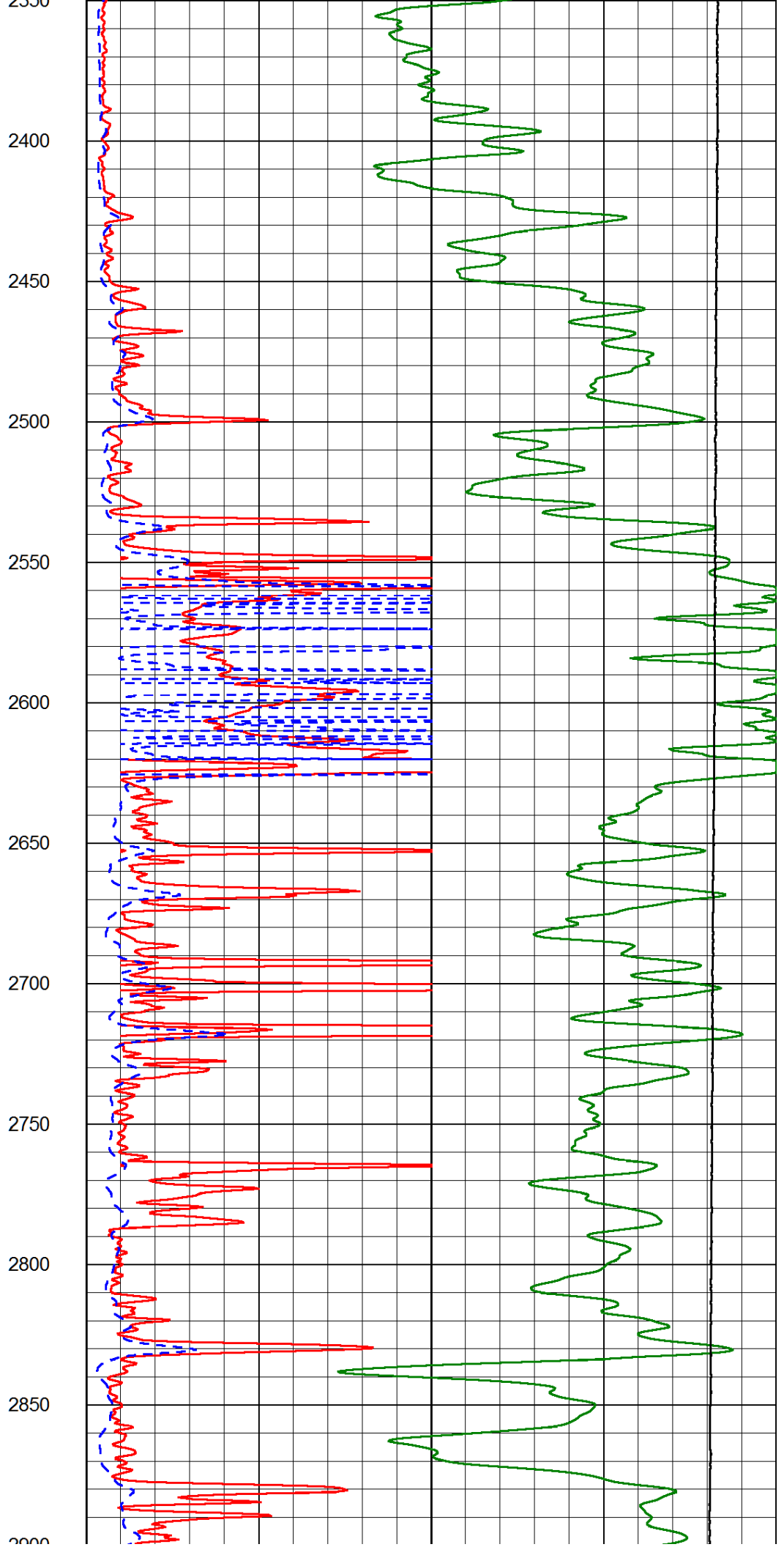
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Healy, 5 M E on Hwy 4 to Ike Rd, 2 1/4 S, W into

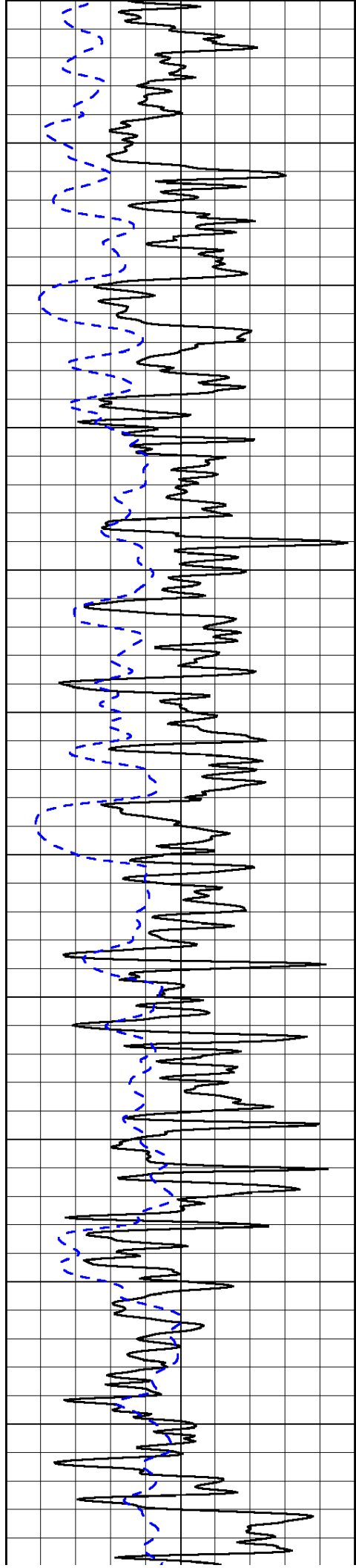




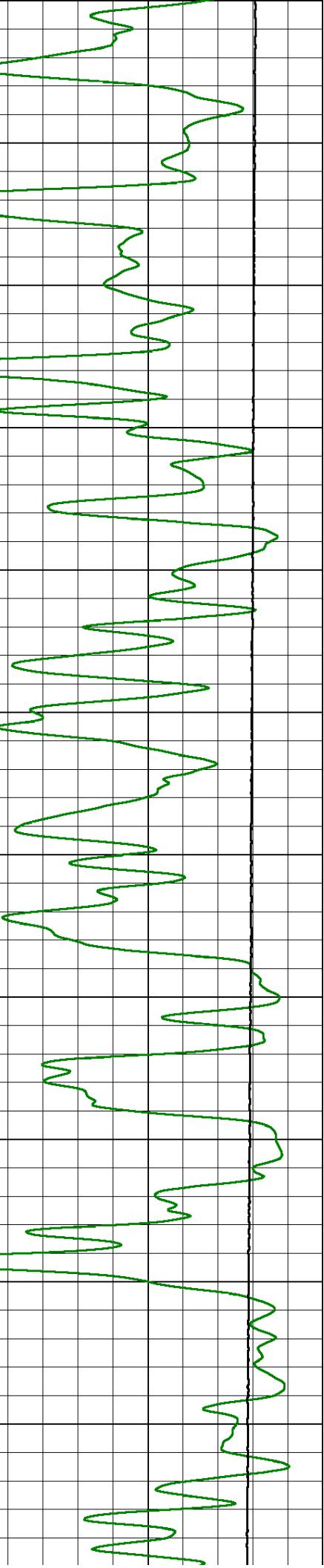
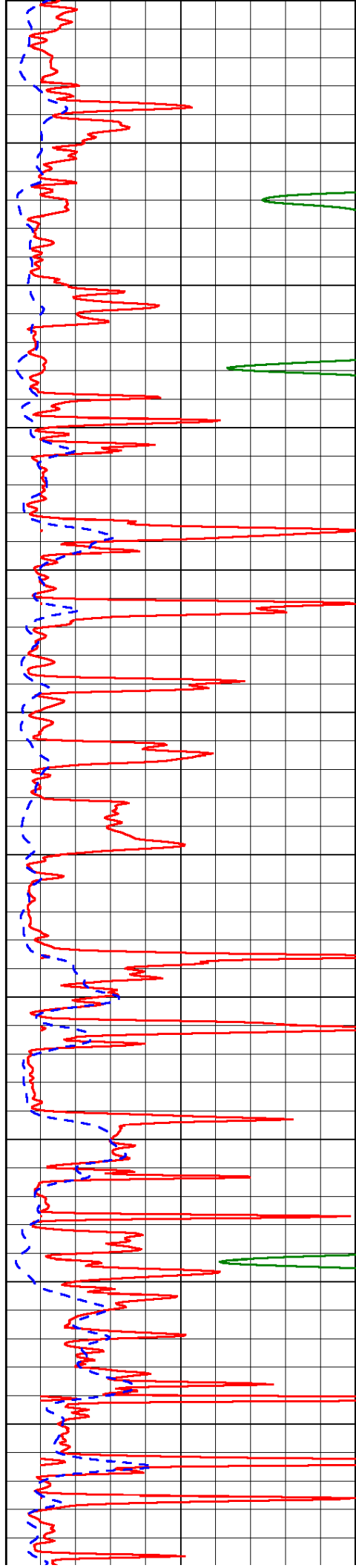


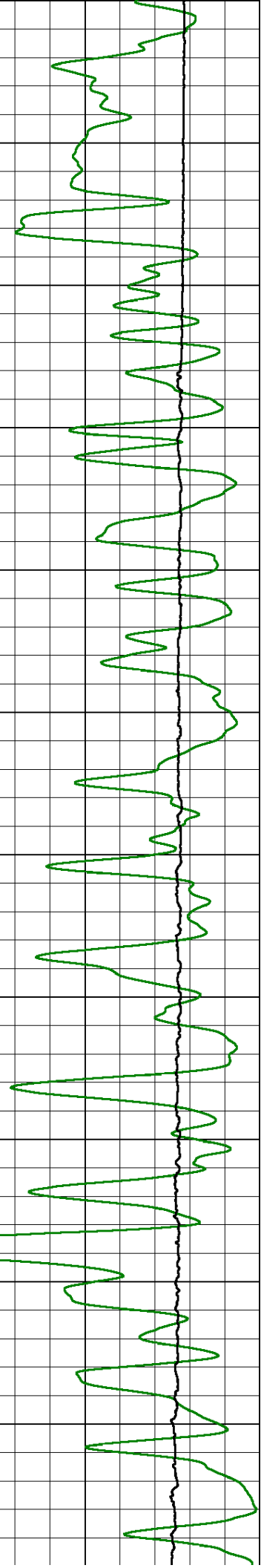
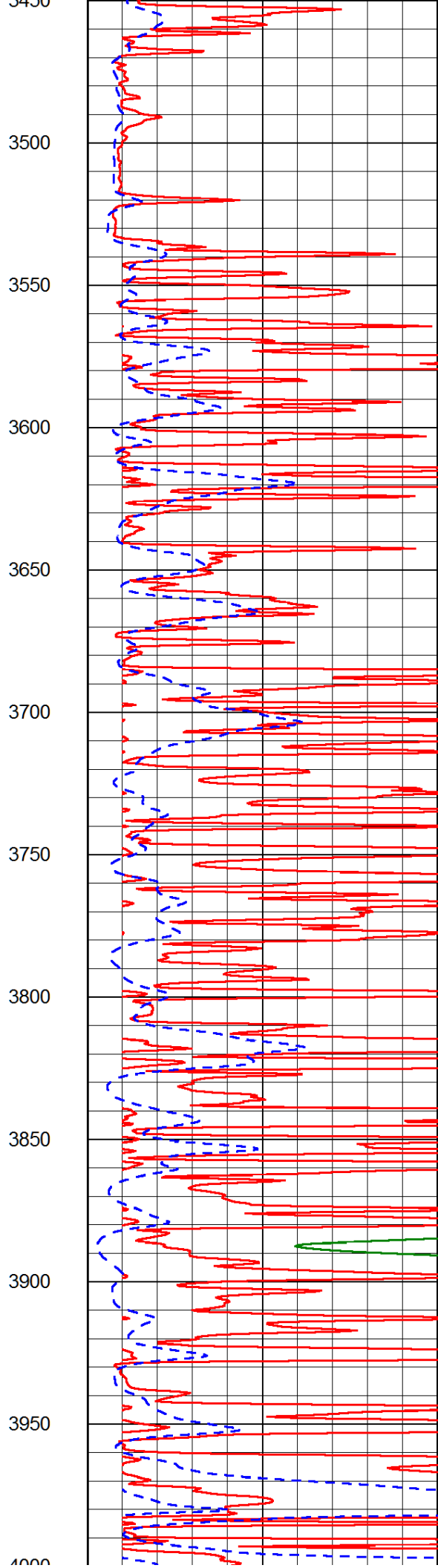
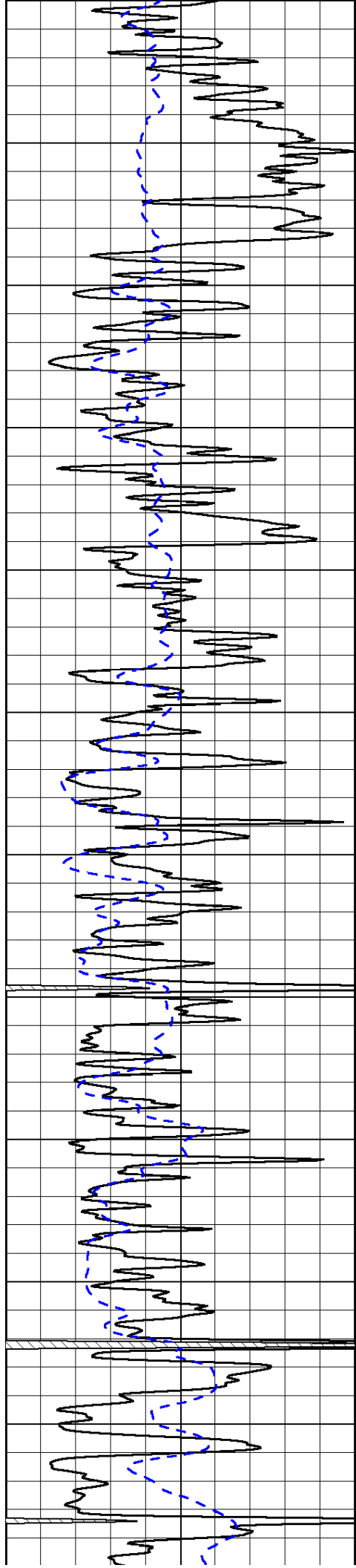


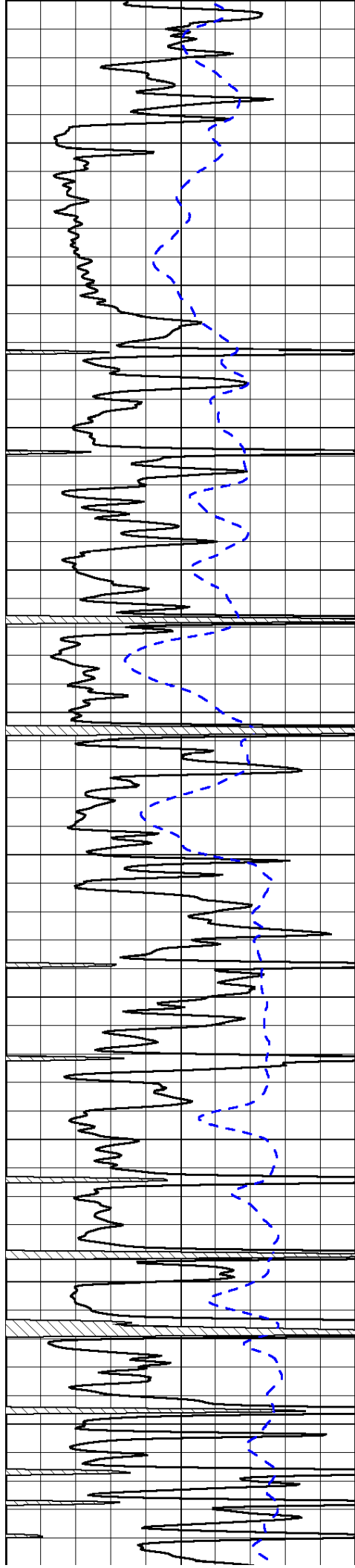




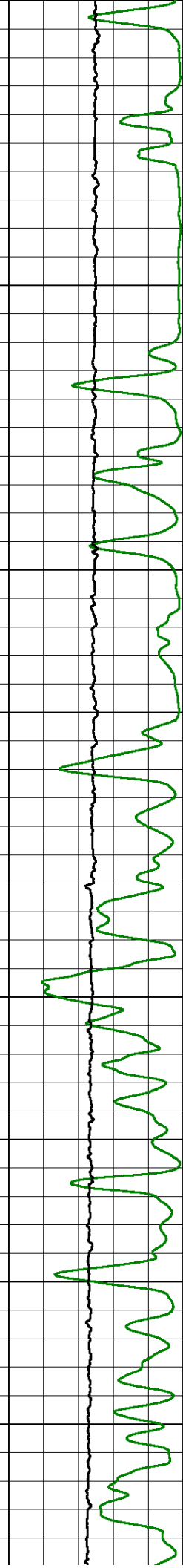
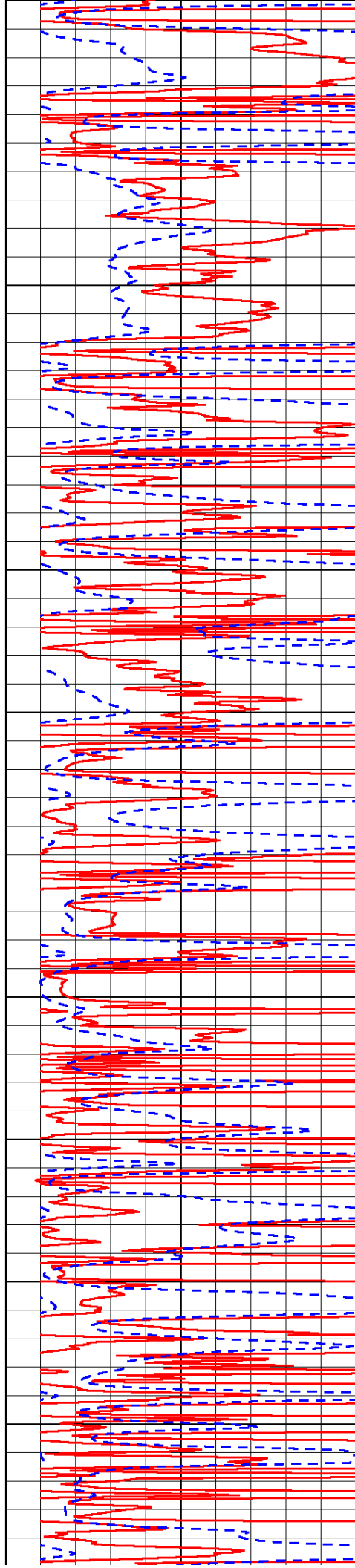
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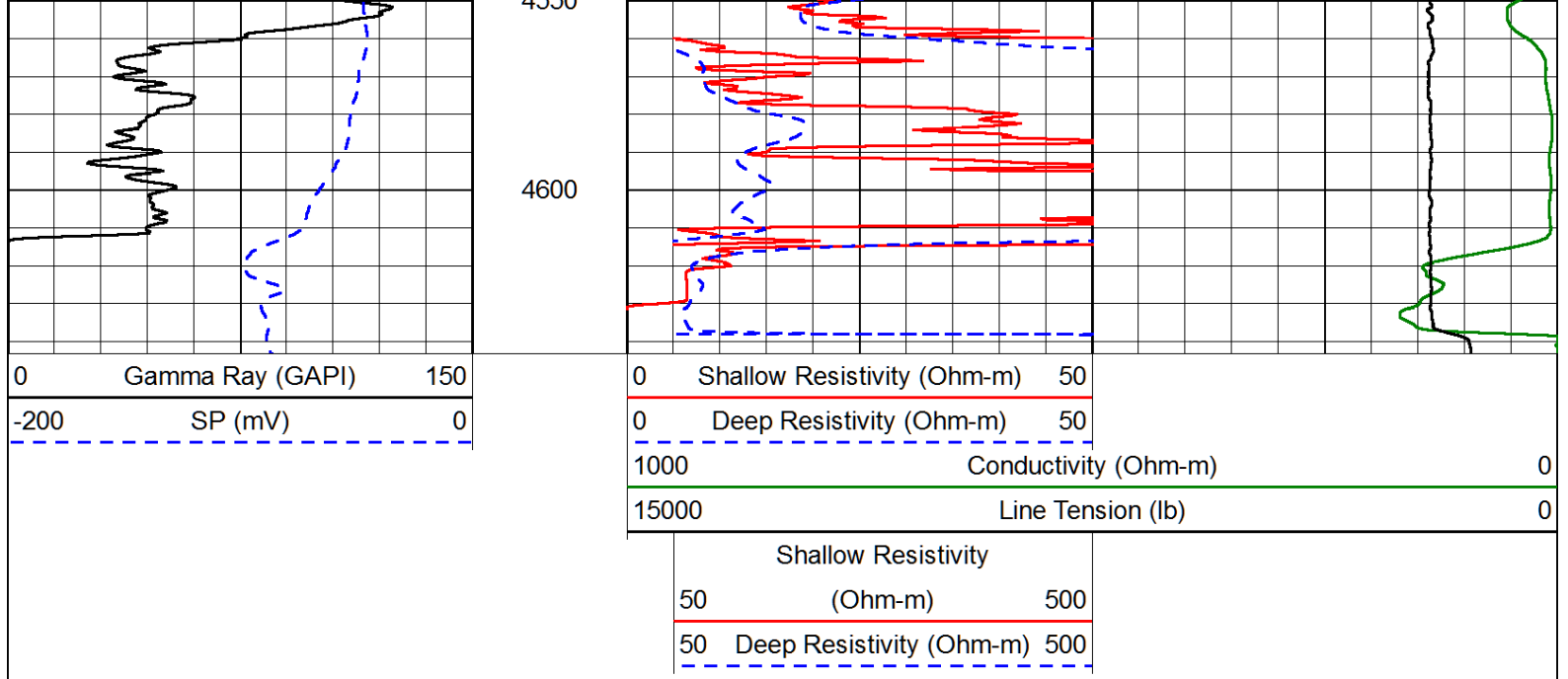




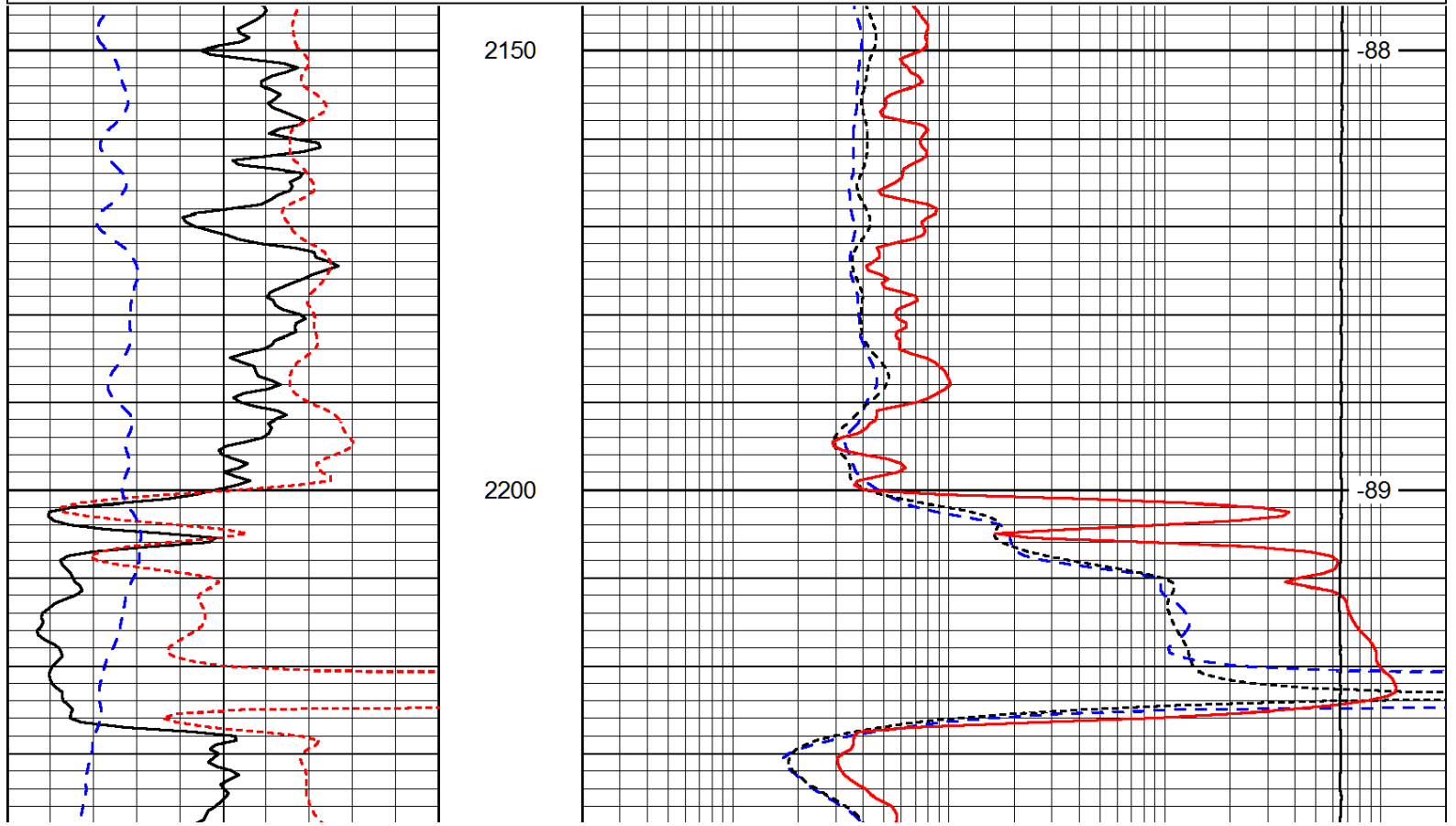
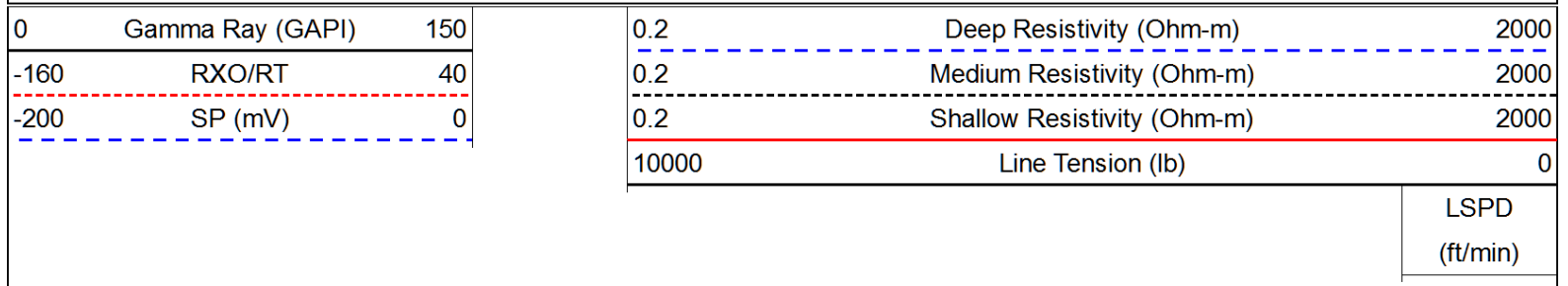


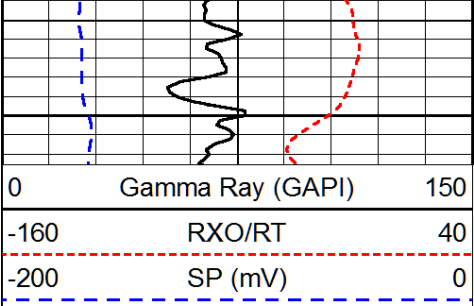
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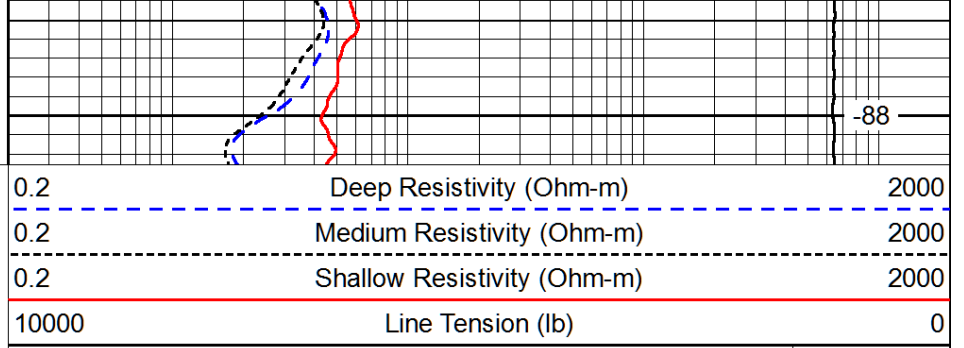


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 Presentation Format: dil
 Dataset Creation: Wed Apr 09 03:21:29 2014
 Charted by: Depth in Feet scaled 1:240



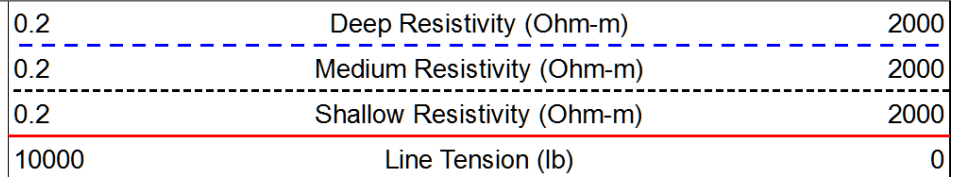
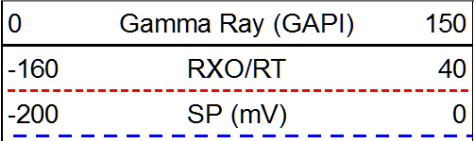


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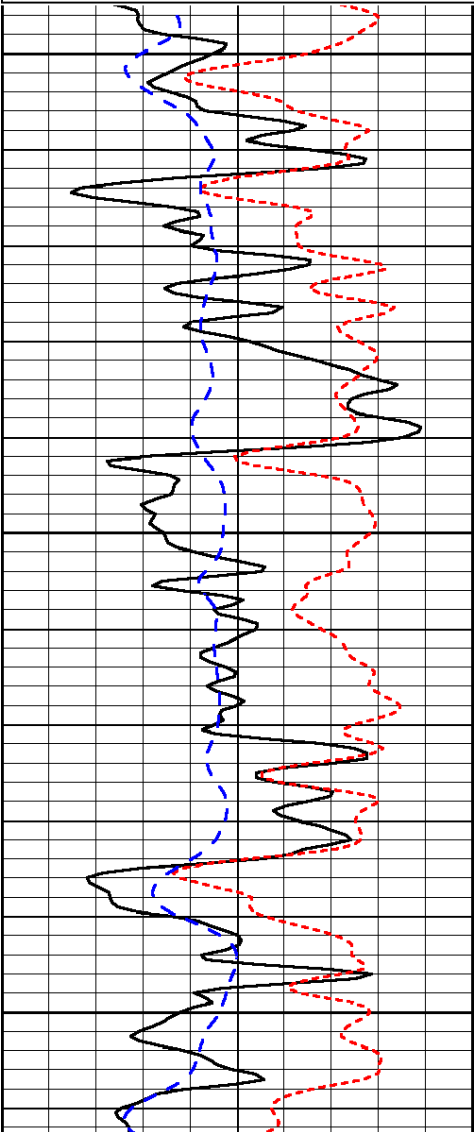


LSPD
(ft/min)

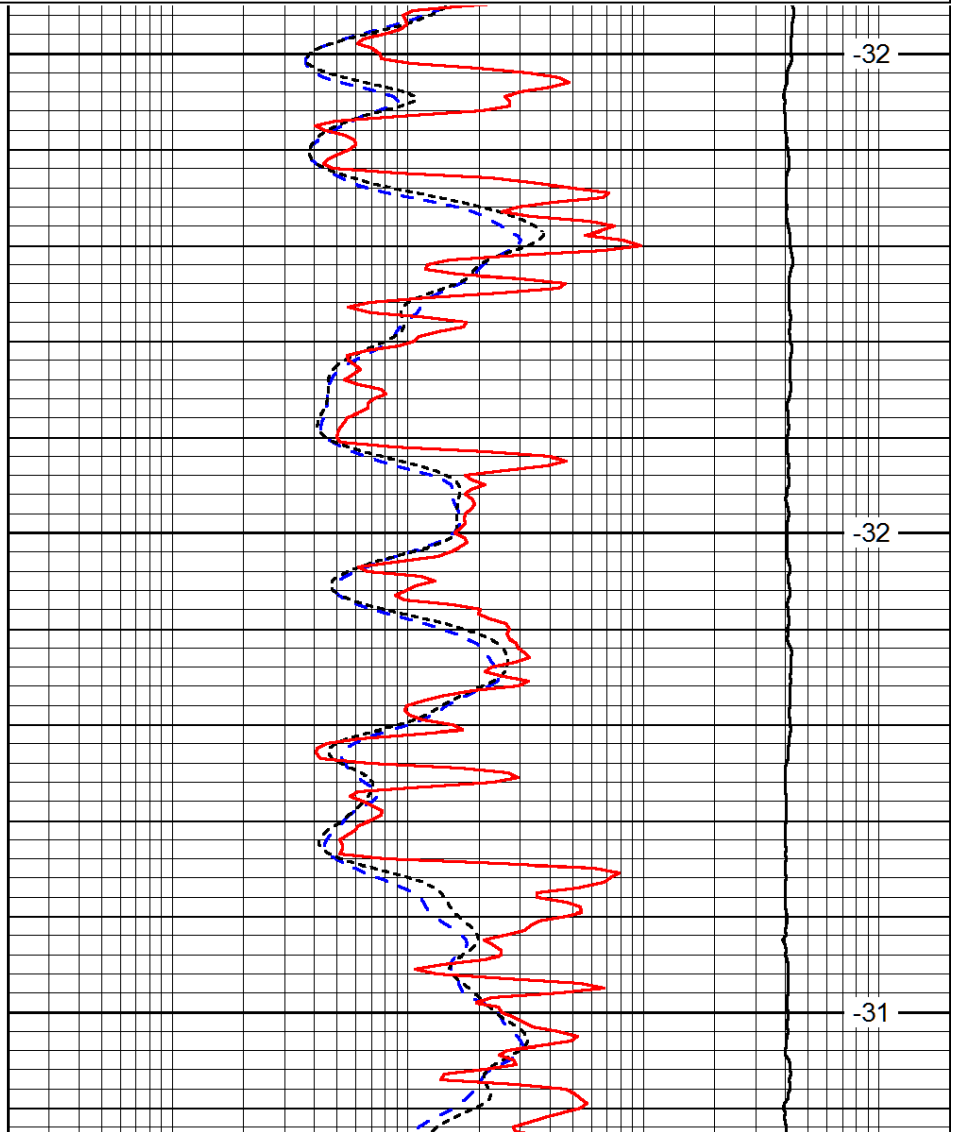
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Charted by: Depth in Feet scaled 1:240



LSPD
(ft/min)



3600



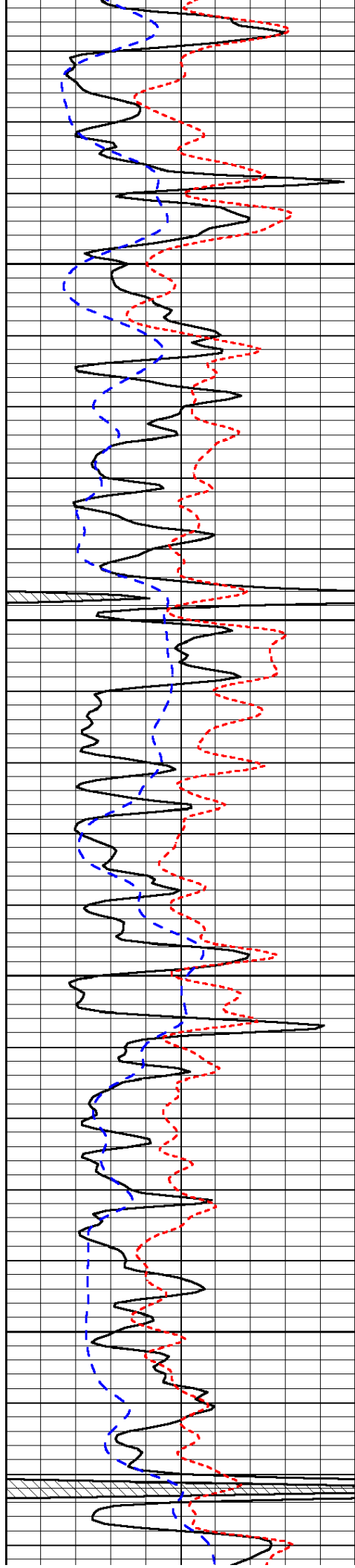
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3700

-32

-32

-31

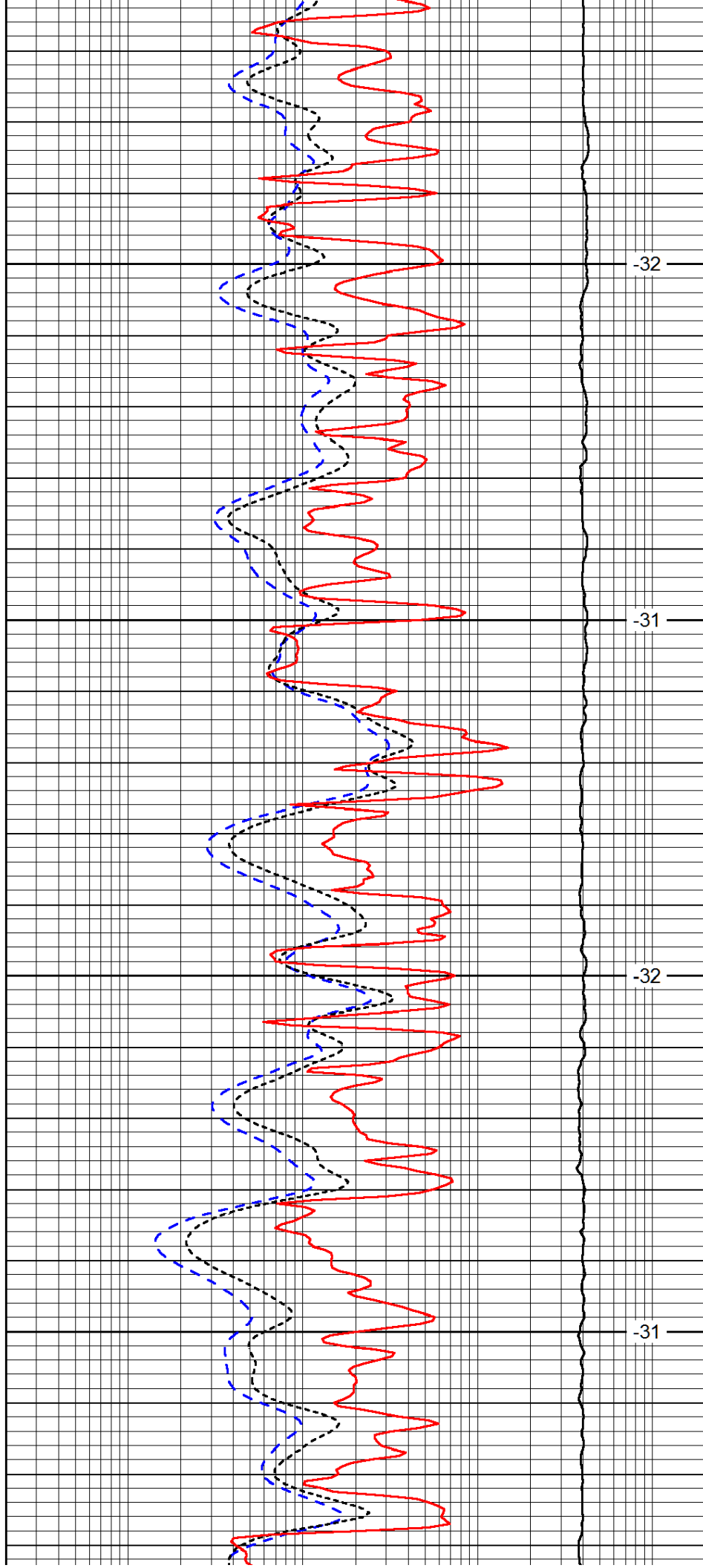


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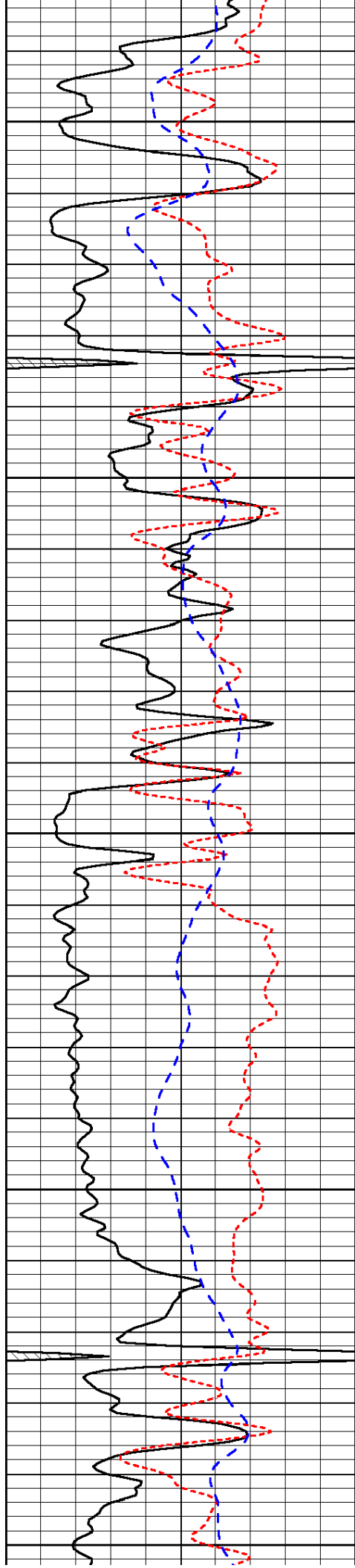


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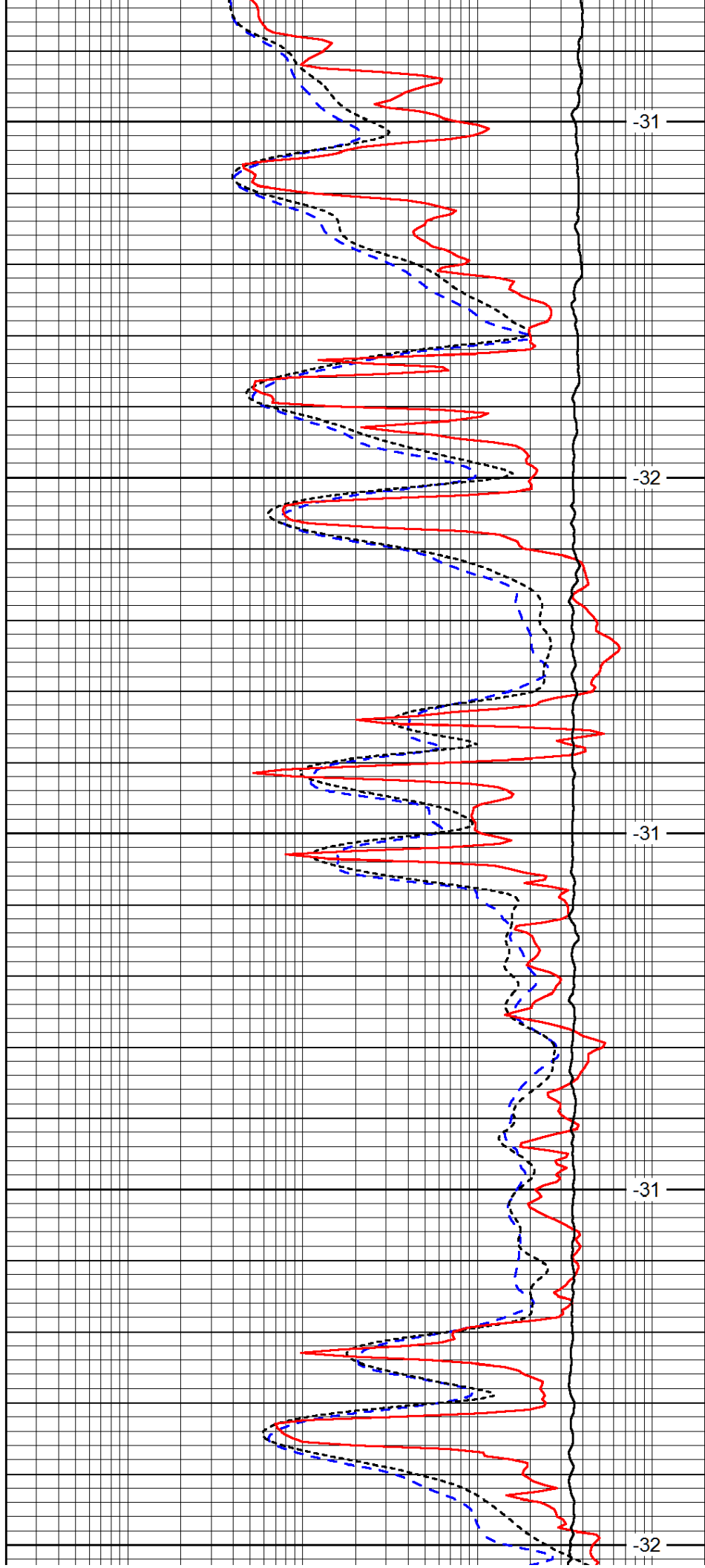
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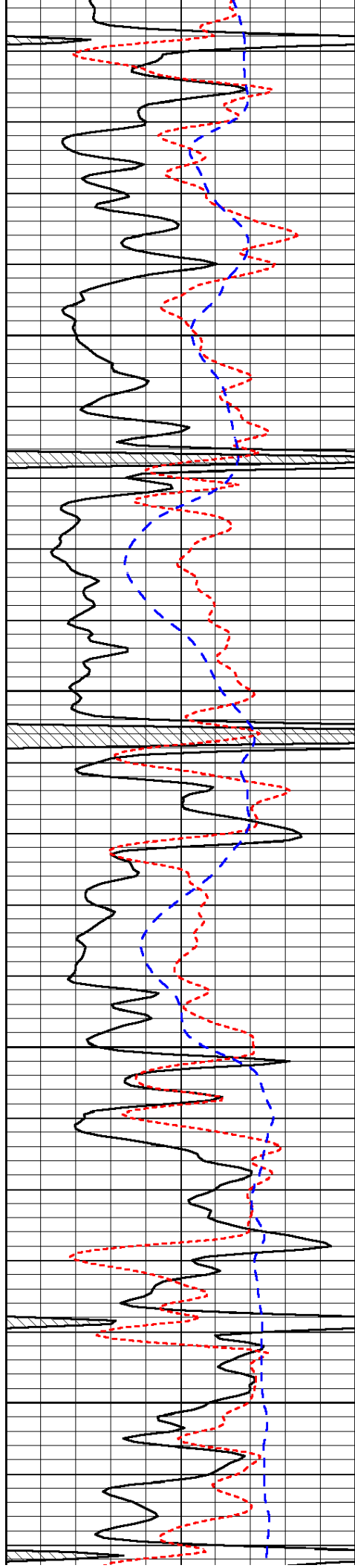
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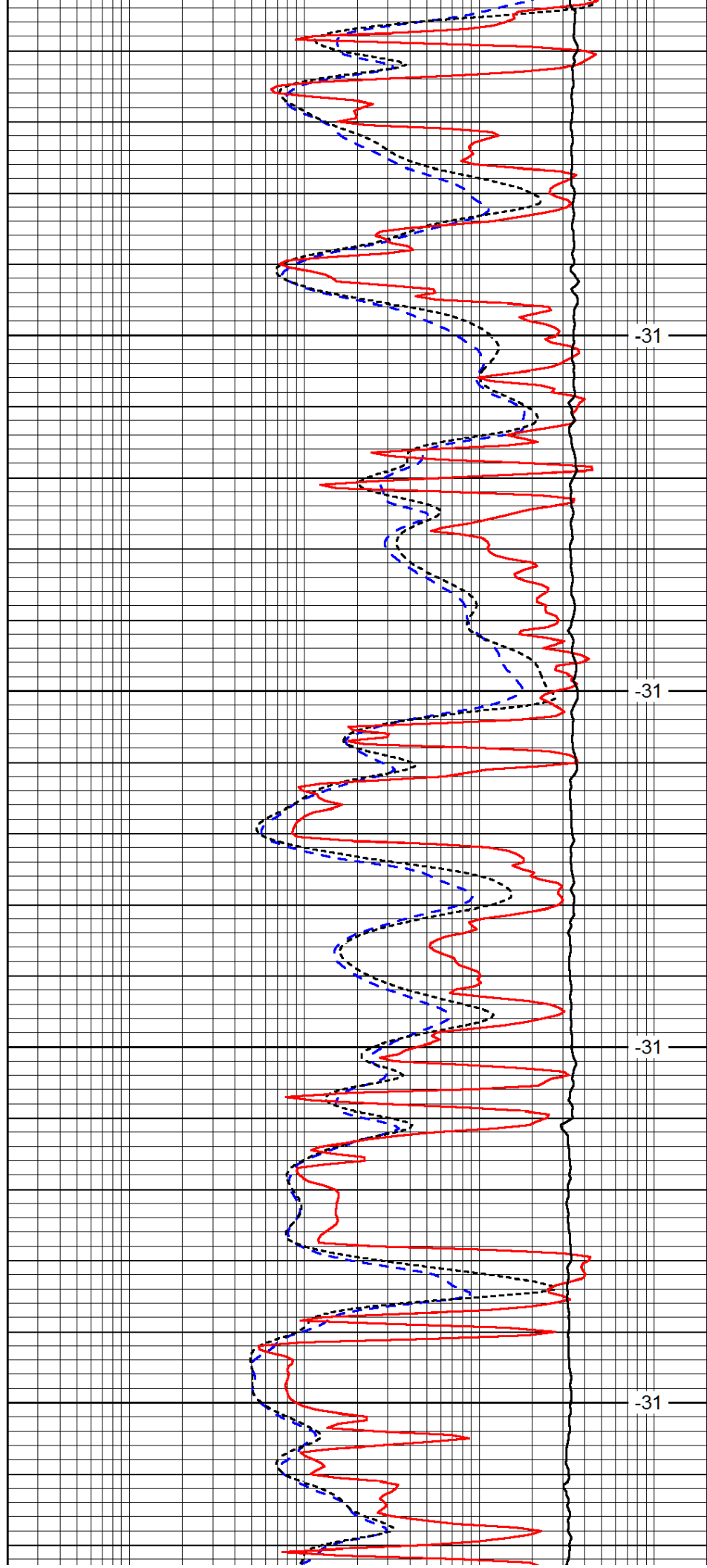


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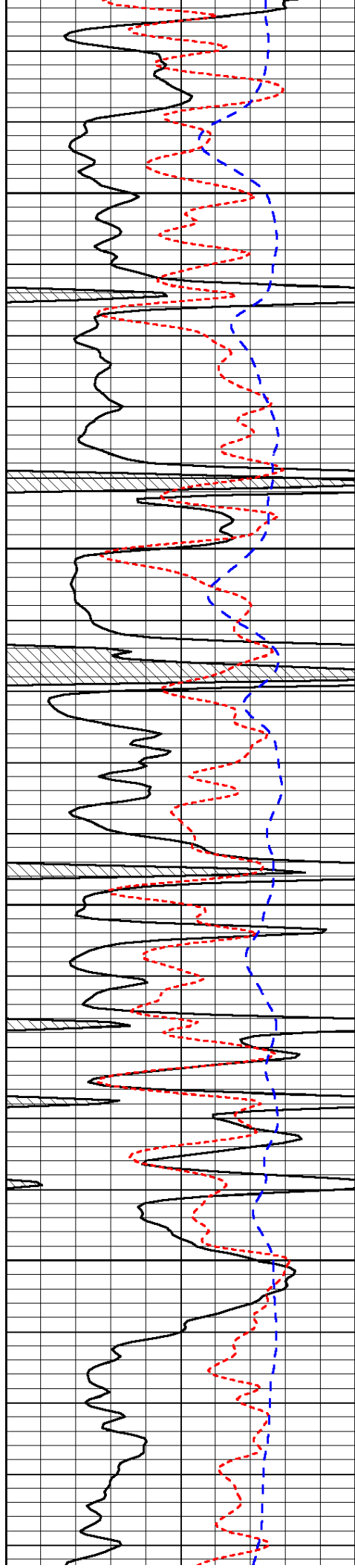


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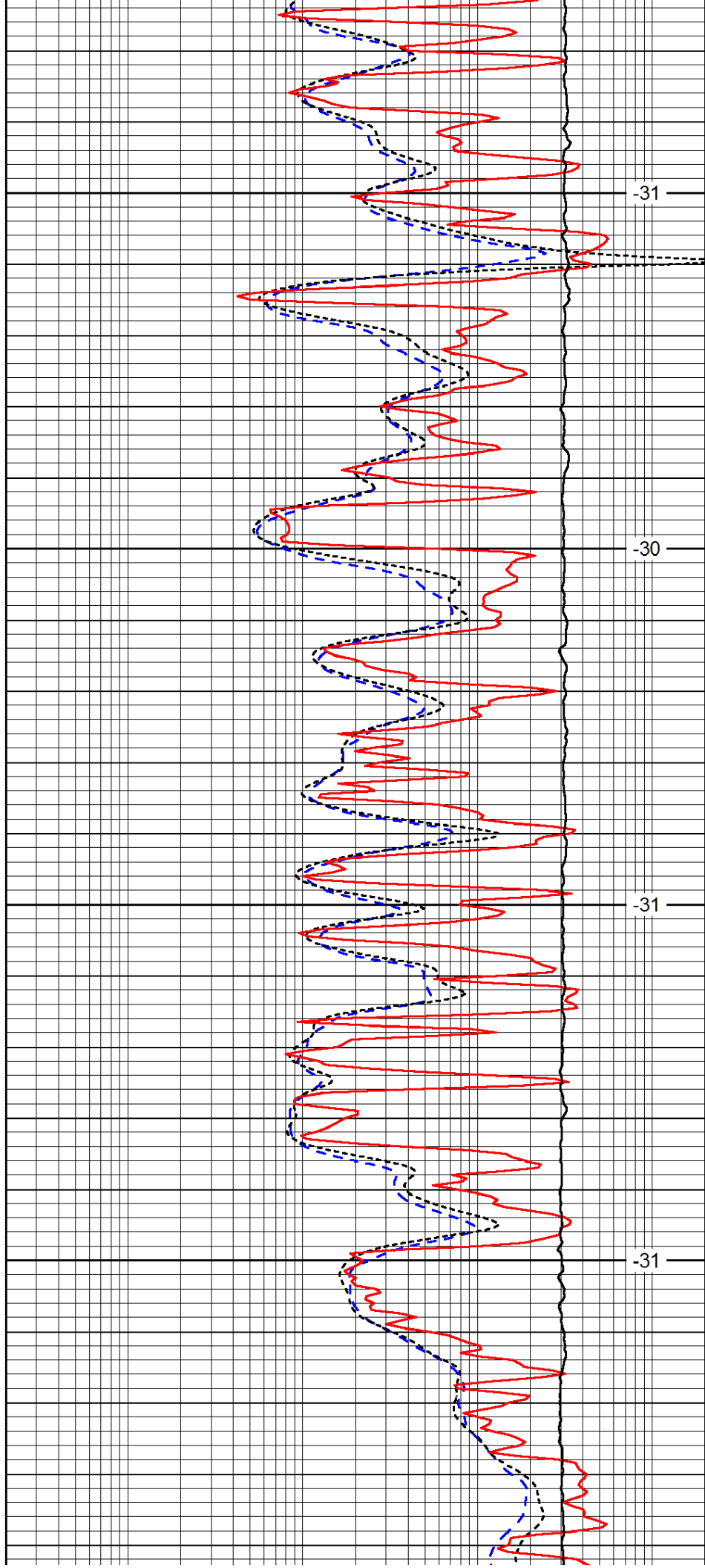


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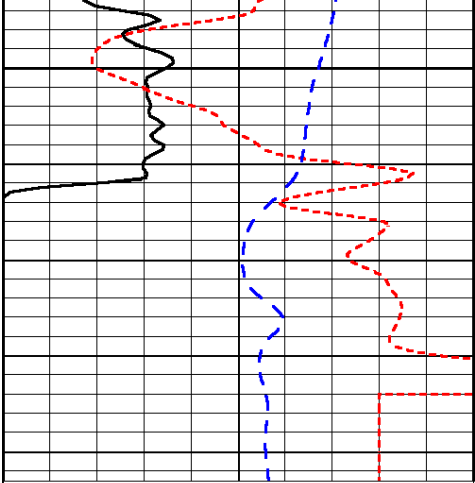


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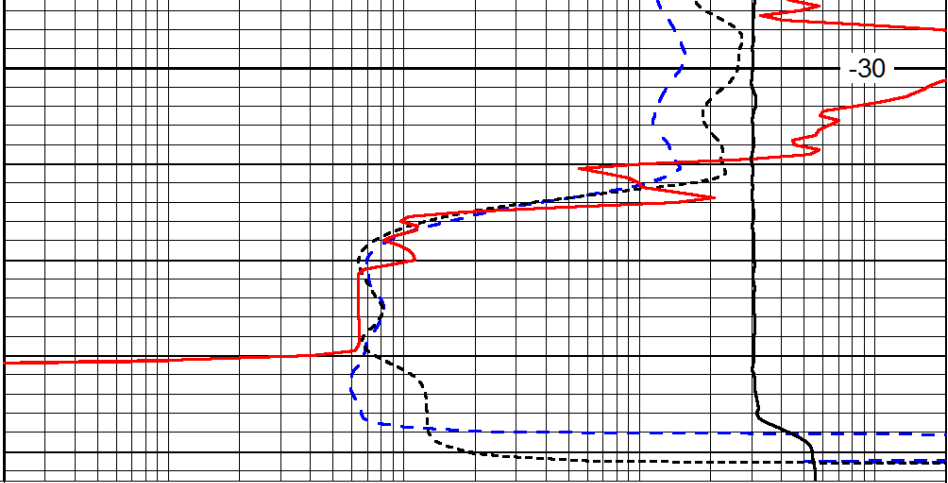
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-31



4600

0	Gamma Ray (GAPI)	150
-160	RXO/RT	40
-200	SP (mV)	0



-30

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

LSPD
(ft/min)