



Pioneer Energy Services

# Dual Induction Log

15-063-22,170-00-00

API No.

Company **Black Tea Oil, LLC**  
 Well **Krebs Q No. 2**  
 Field **Wildcat**  
 County **Gove** State **Kansas**

Location **SW-NW-NE-SW  
2075' FSL & 1530' FWL**  
 Sec: 30 Twp: 14S Rge: 31W

Other Services  
 CNL/CDL  
 MEL/BHCS

Permanent Datum Ground Level Elevation 2720  
 Log Measured From Kelly Bushing 8 Ft. Above Perm. Datum  
 Drilling Measured From Kelly Bushing

Elevation  
 K.B. 2728  
 D.F. 2720  
 G.L. 2720

Date	1/16/14
Run Number	One
Depth Driller	4510
Depth Logger	4513
Bottom Logged Interval	4512
Top Log Interval	250
Casing Driller	8.625 @ 269
Casing Logger	256
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity,ppm CL	6,000
Density / Viscosity	8.9   47
pH / Fluid Loss	9.5   8.0
Source of Sample	Flowline
Rm @ Meas. Temp	.70 @ 45
Rmf @ Meas. Temp	.53 @ 45
Rmc @ Meas. Temp	.95 @ 45
Source of Rmf / Rmc	Charts
Rm @ BHT	.26 @ 121
Operating Rig Time	5 Hours
Max Rec. Temp. F	121
Equipment Number	15
Location	Hays
Recorded By	J. Henrickson
Witnessed By	Brian Wegley

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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

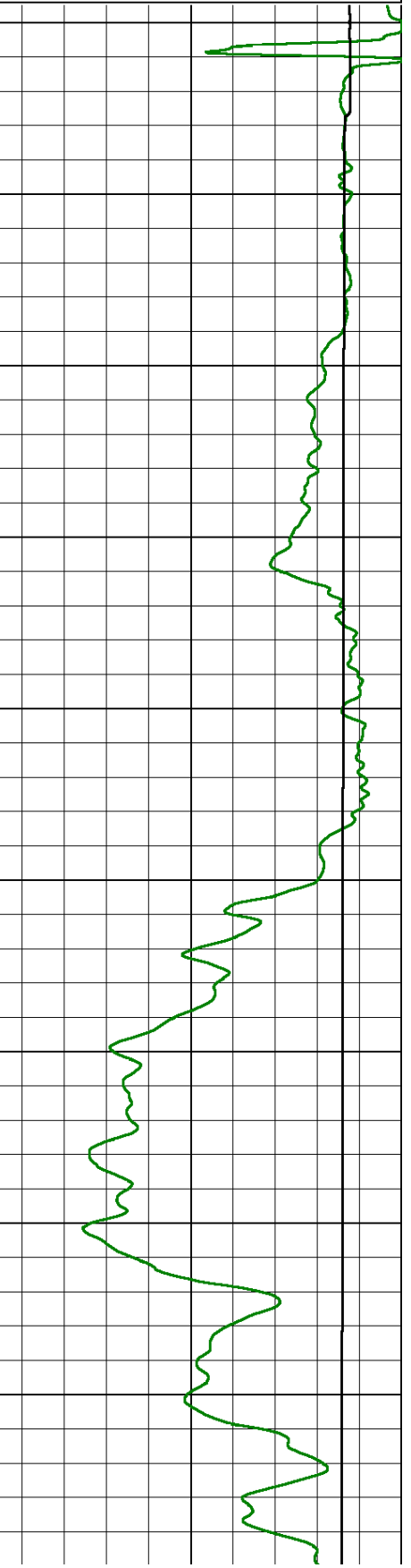
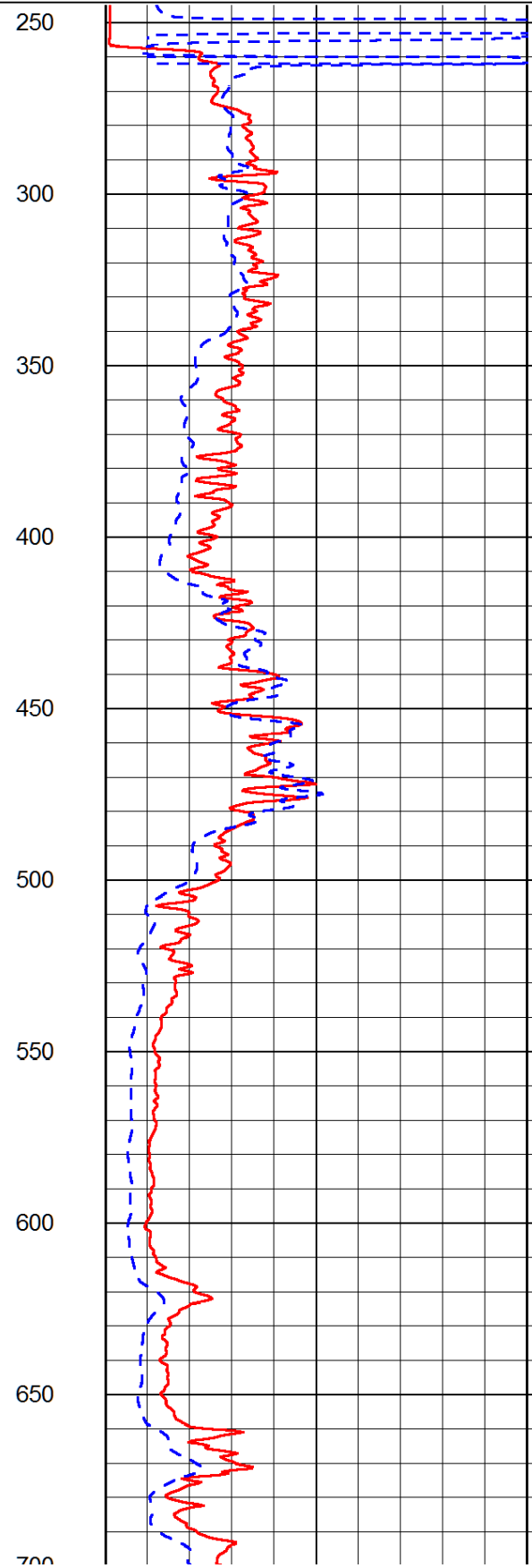
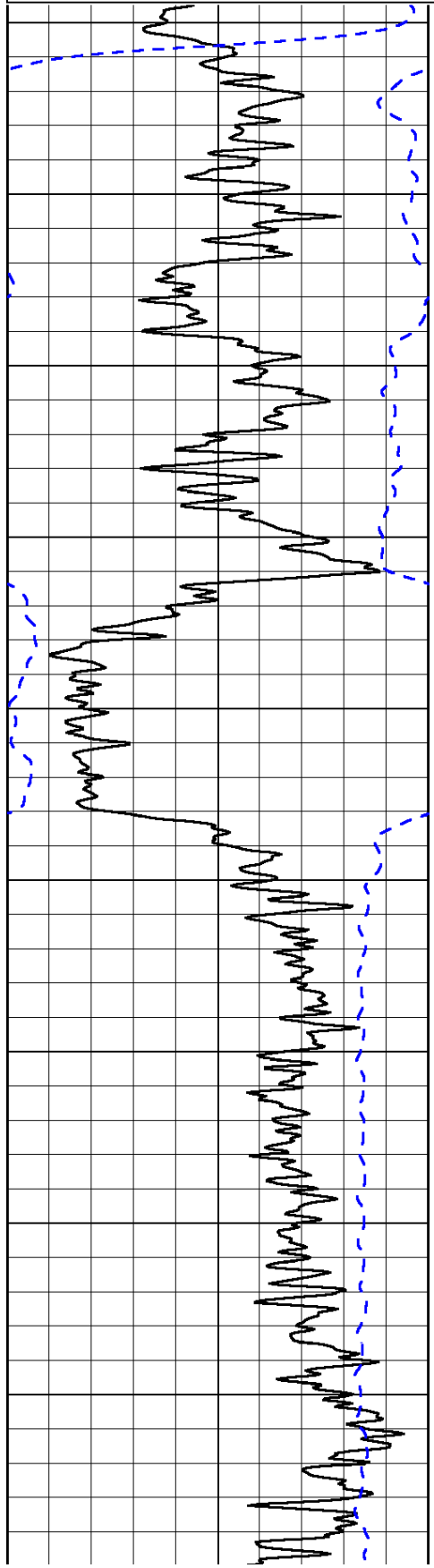
Thank you for using Log-Tech, Inc.  
 (785) 625-3858  
  
 Oakley Kansas  
 South to Indian Rd, South to just before Smokey Hill River Bridge,  
 East into at Gates, Through 2 Cattle Guards, Right at Fork

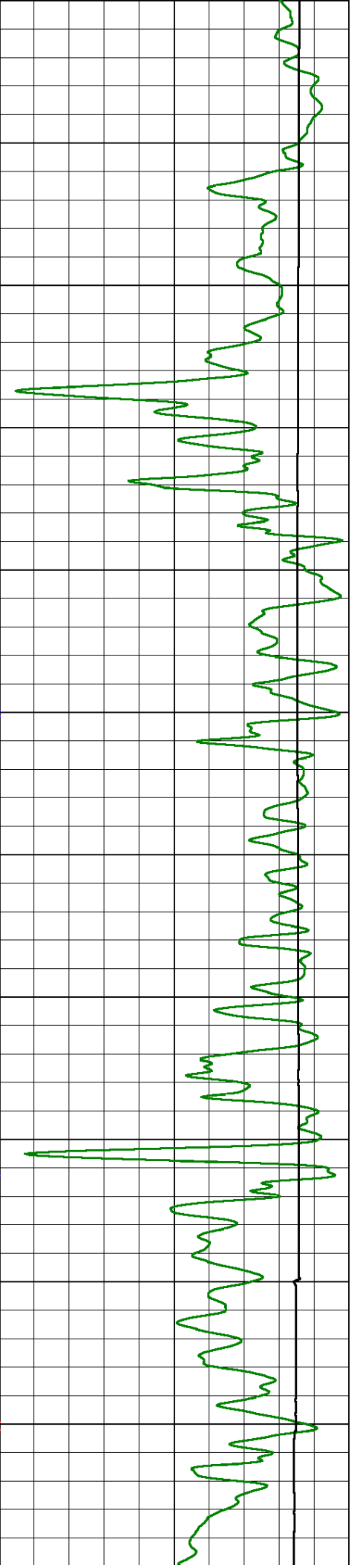
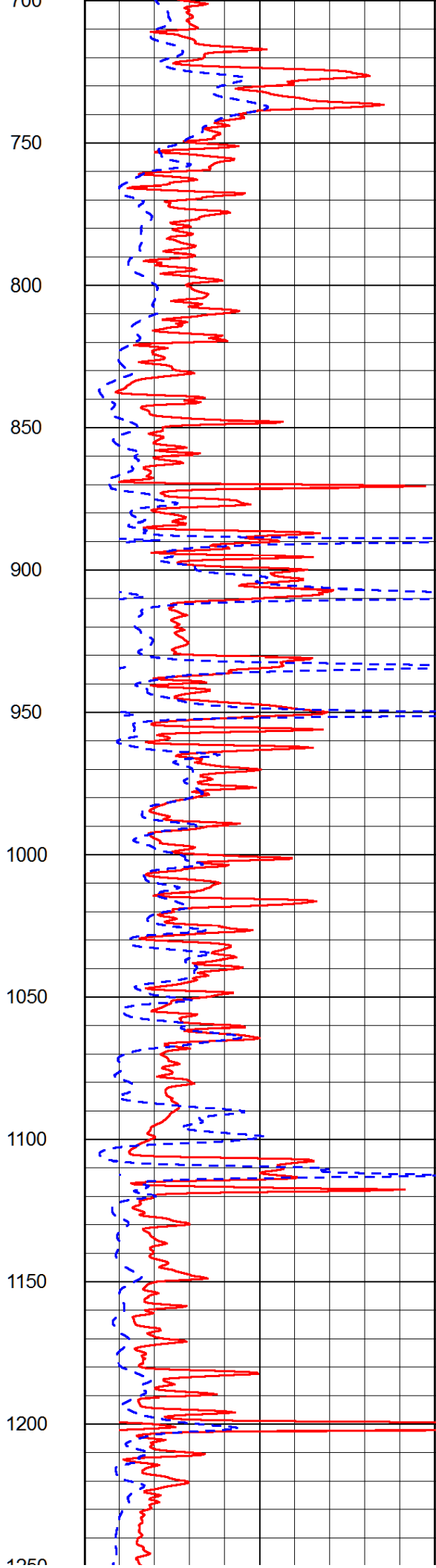
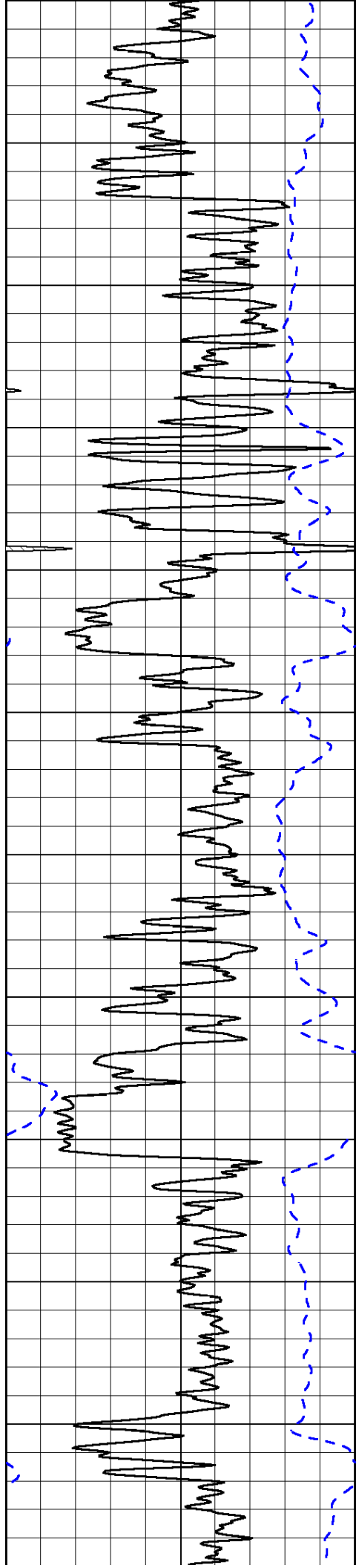
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 Presentation Format: dil2in  
 Dataset Creation: Thu Jan 16 07:12:16 2014  
 Charted by: Depth in Feet scaled 1:600

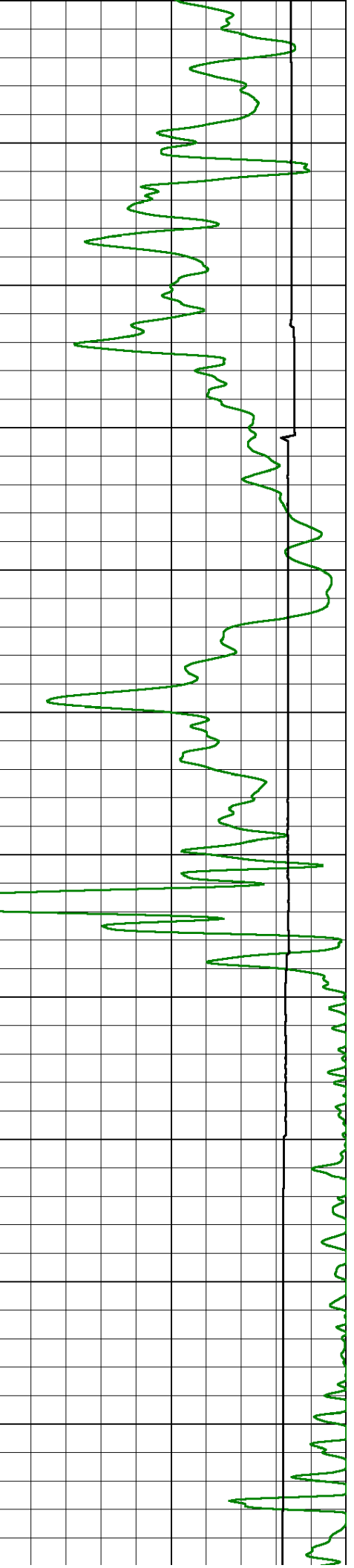
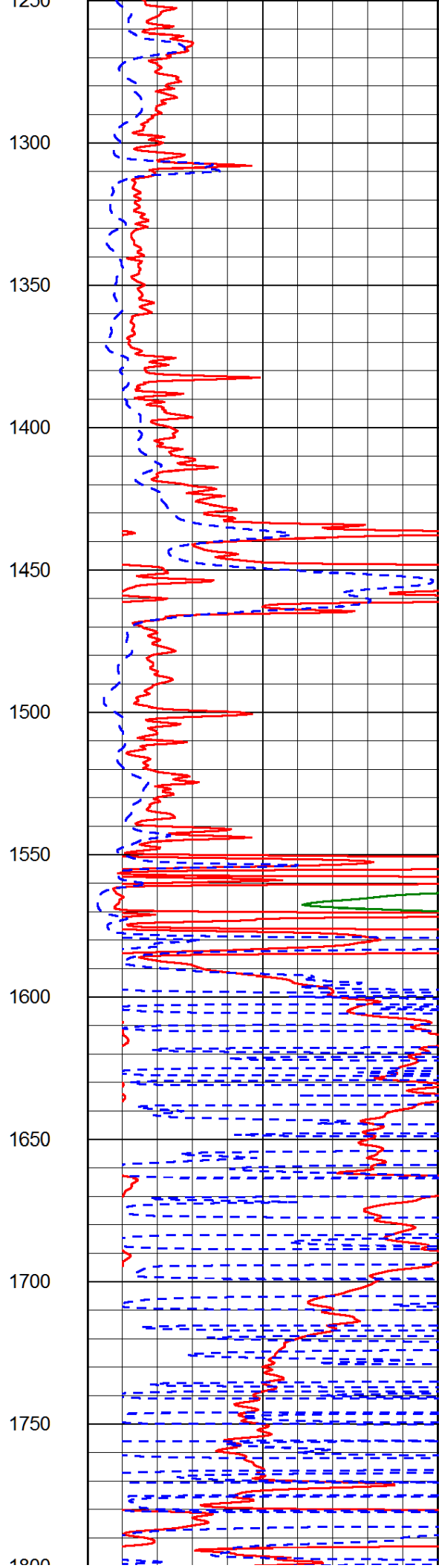
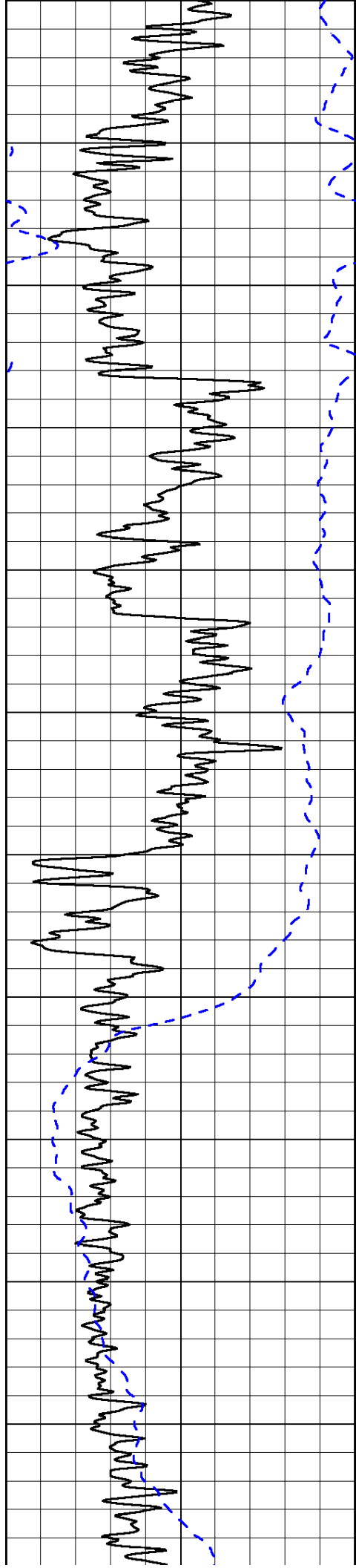
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-200	SP (mV)	0

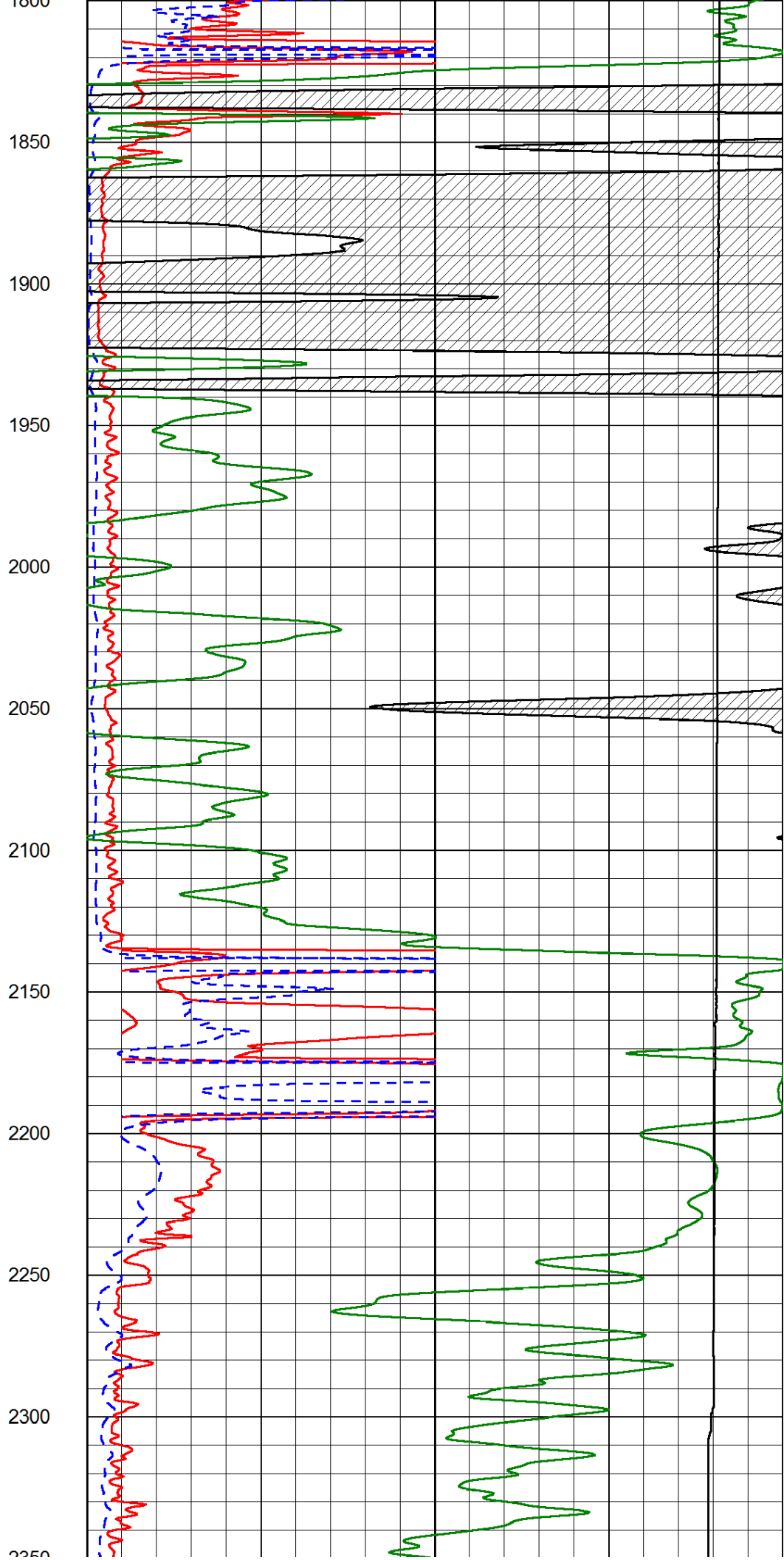
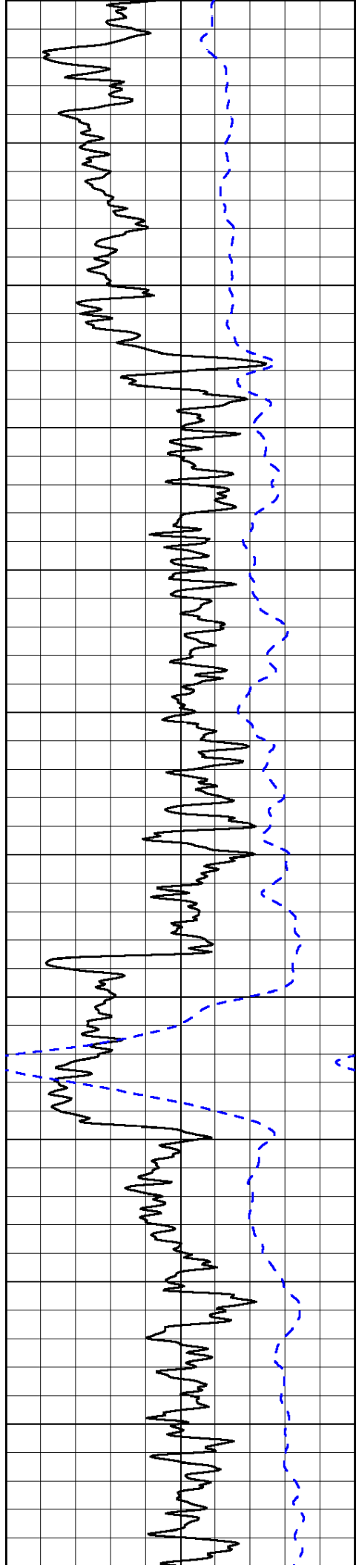
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0	Deep Resistivity (Ohm-m)	50
1000	Conductivity (Ohm-m)	0
15000	Line Tension (lb)	0

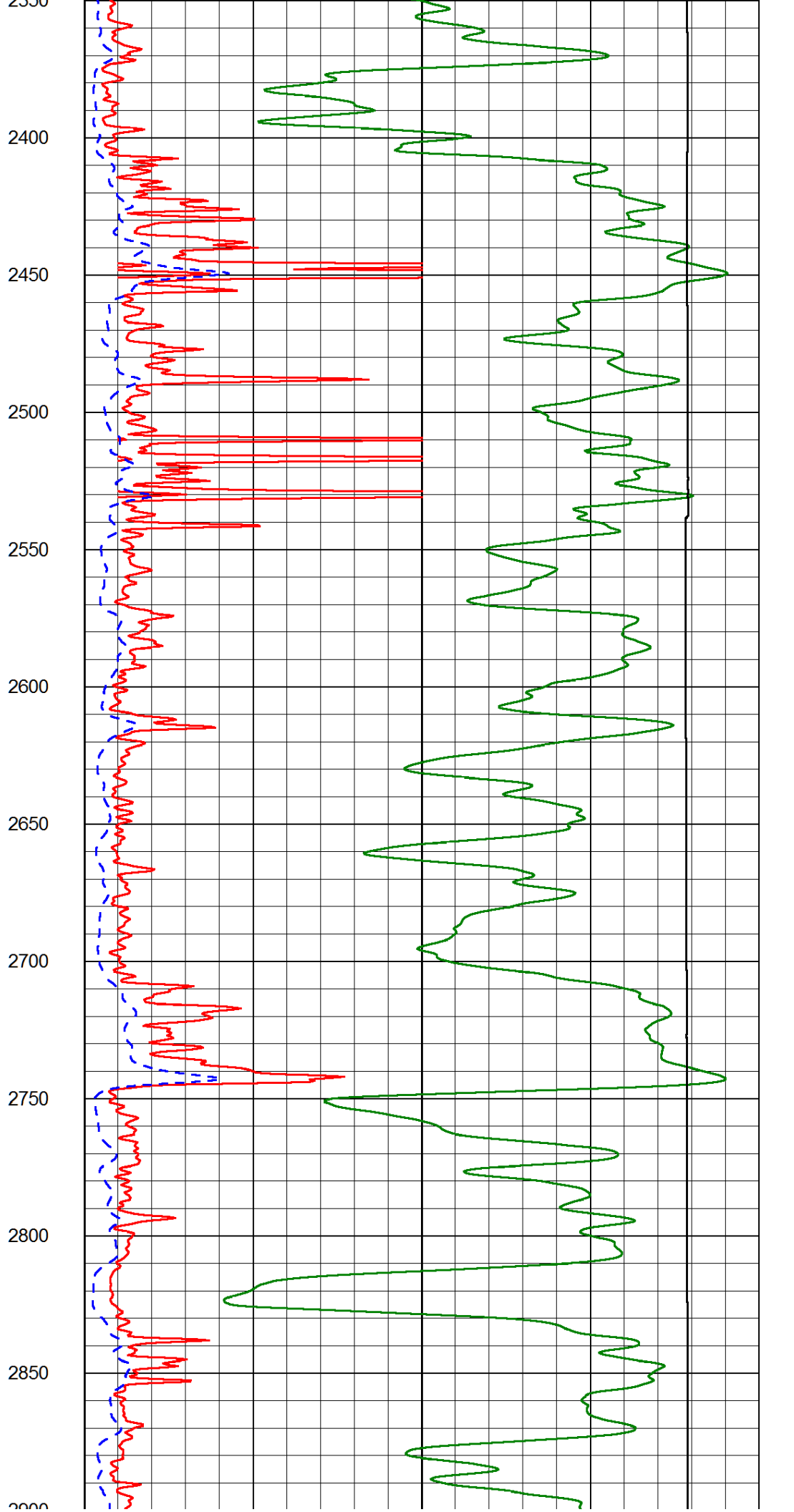
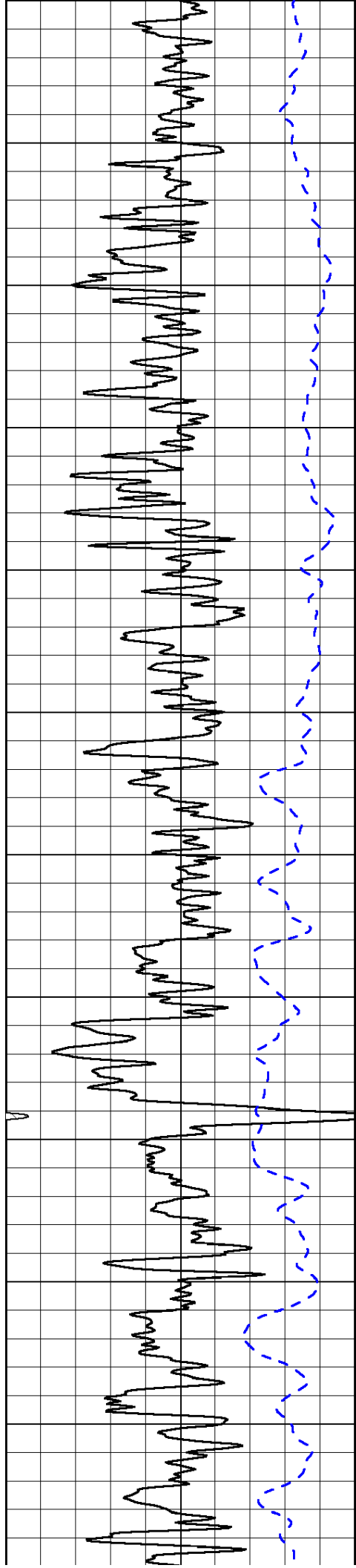
50	Shallow Resistivity (Ohm-m)	500
50	Deep Resistivity (Ohm-m)	500

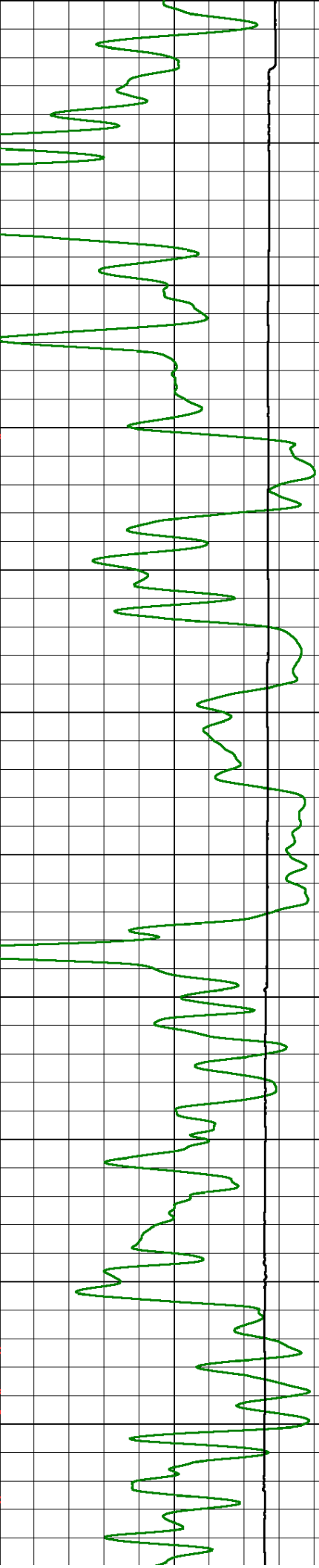
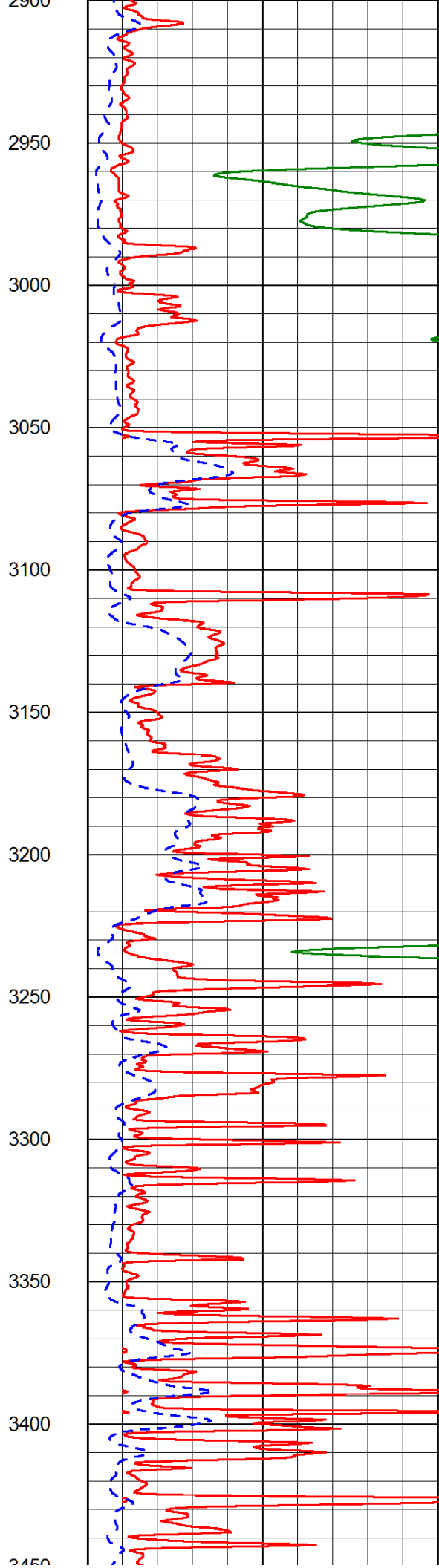
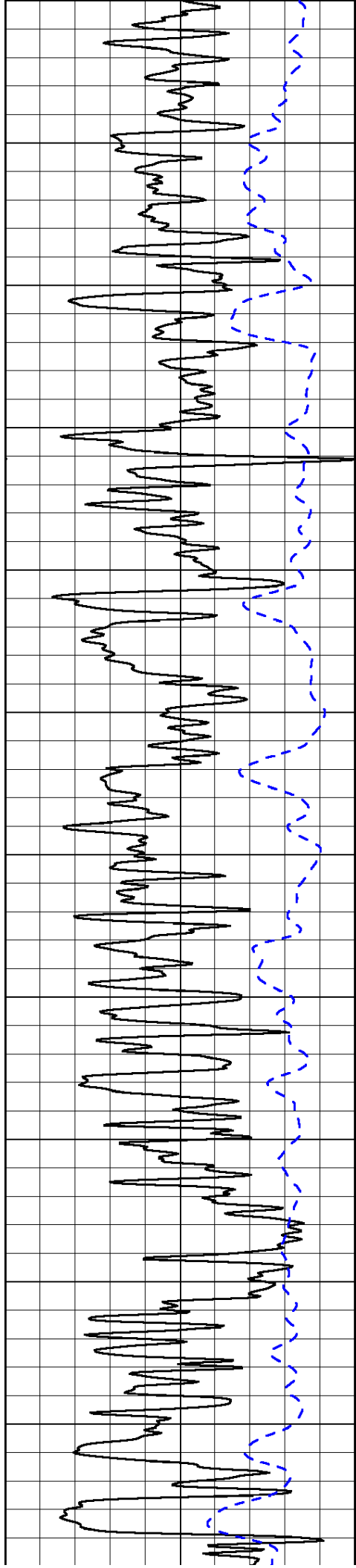


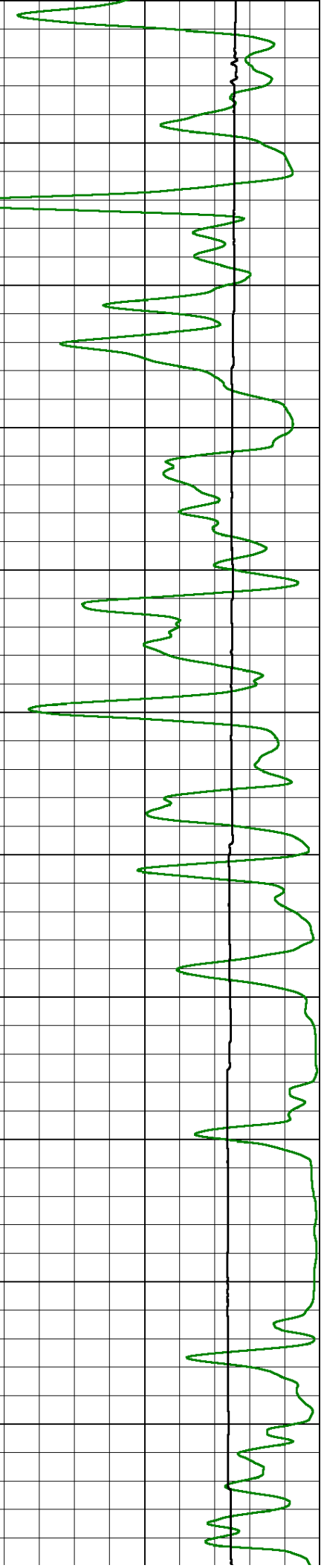
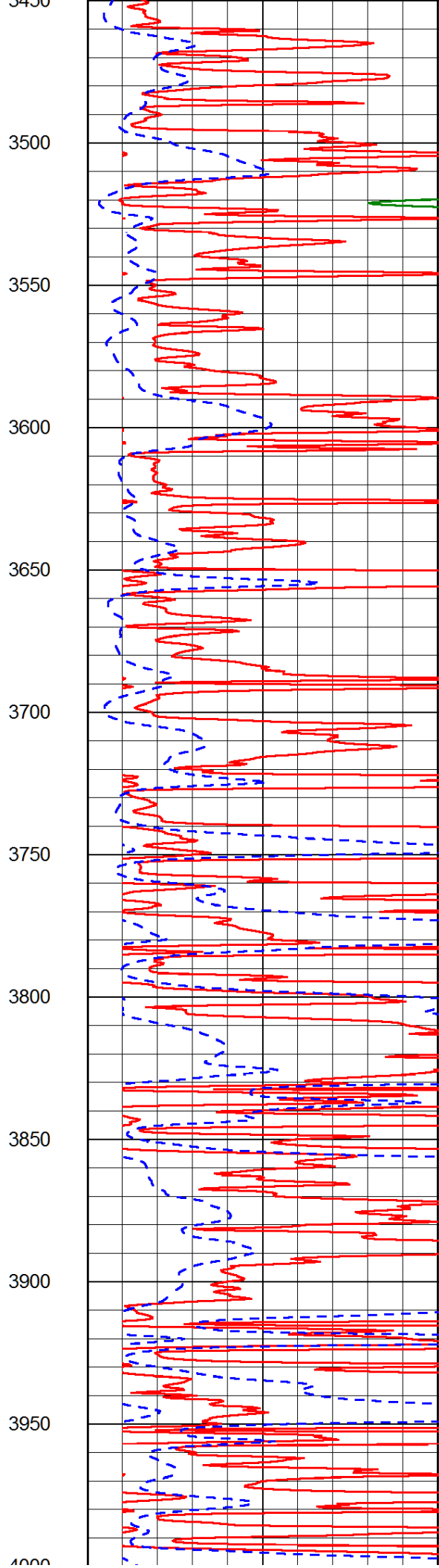
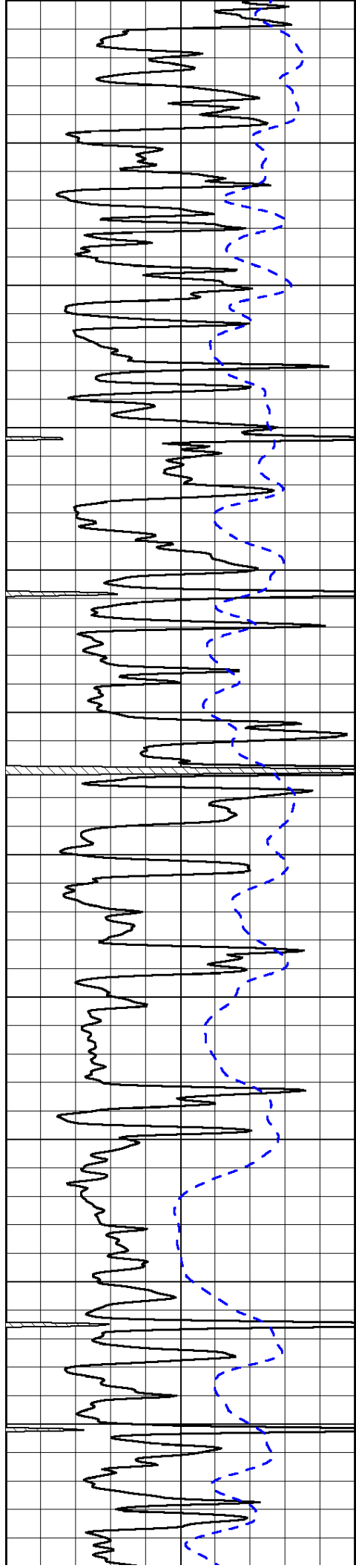




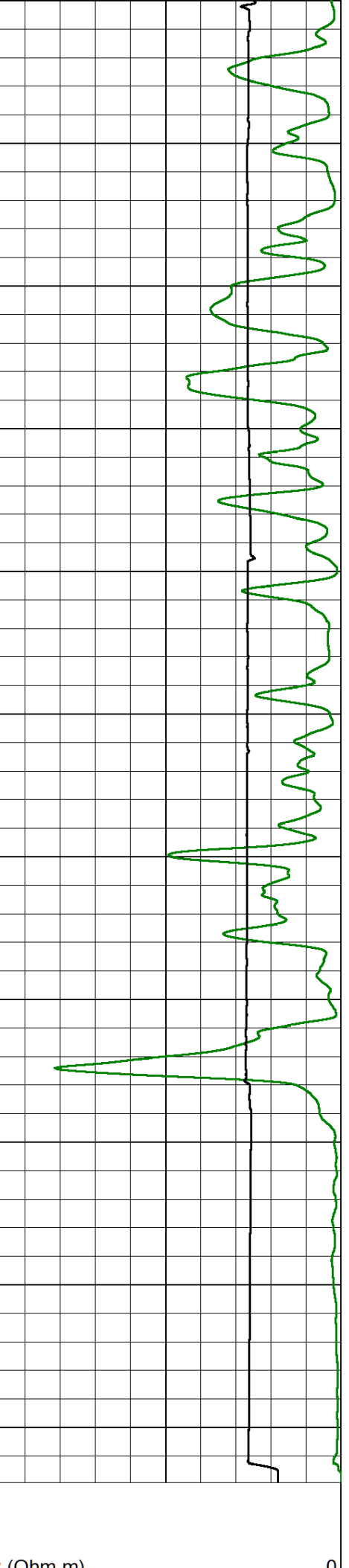
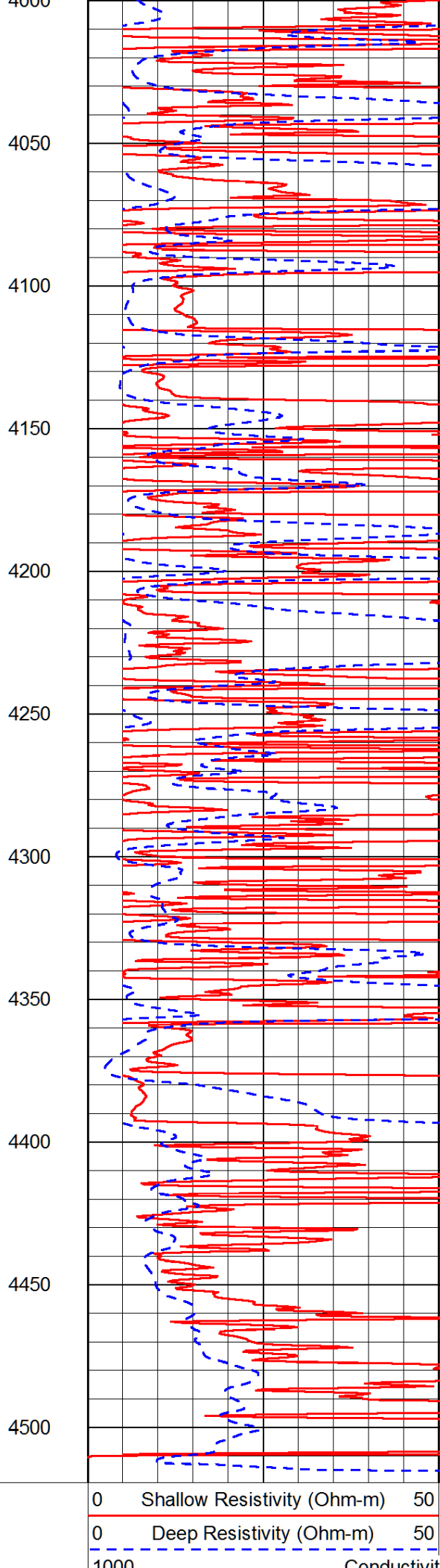
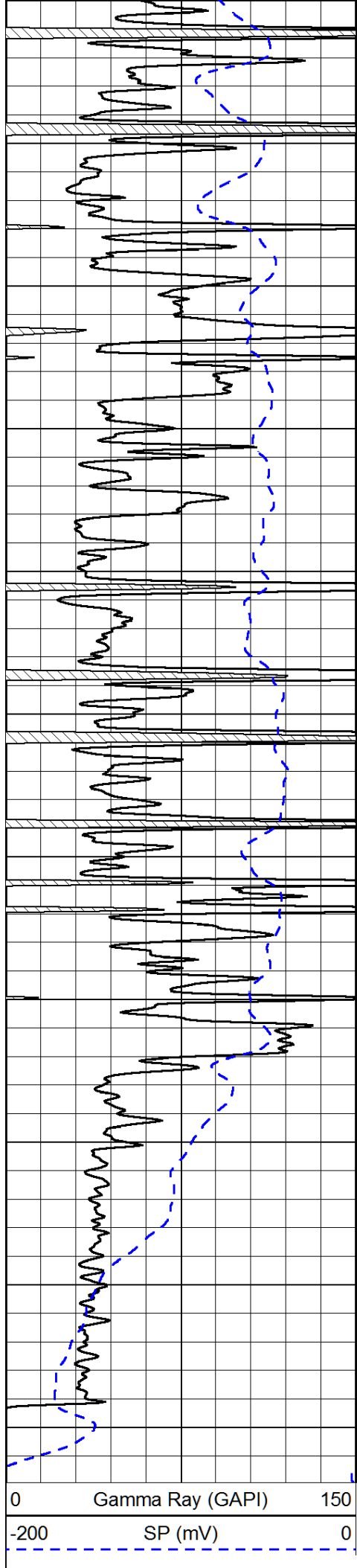








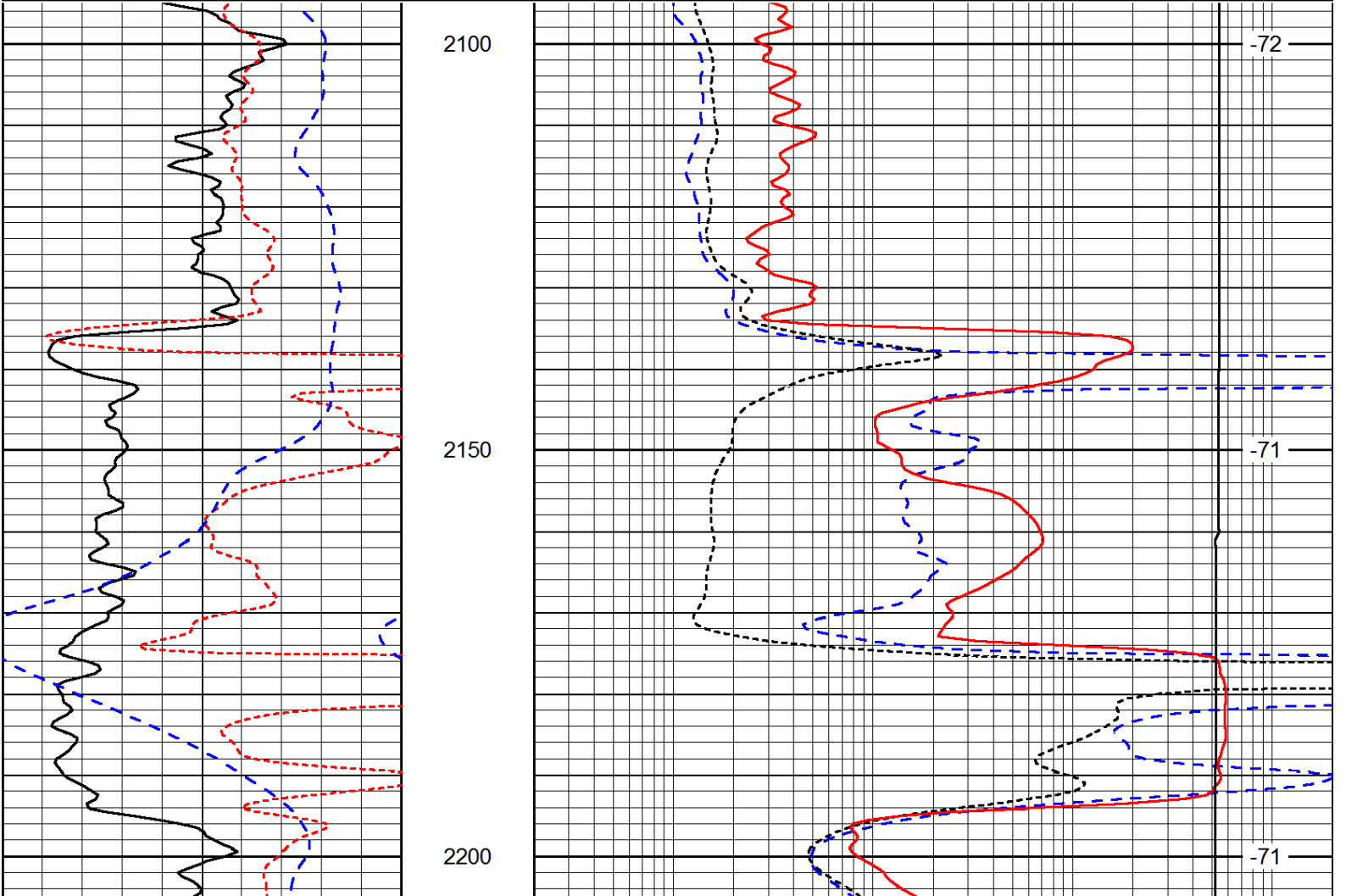




1000	Conductivity (Ohm-m)	0
15000	Line Tension (lb)	0
Shallow Resistivity		
50	(Ohm-m)	500
50	Deep Resistivity (Ohm-m)	500

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0	Gamma Ray (GAPI)	150	0.2	Deep Resistivity (Ohm-m)	2000
-160	RXO/RT	40	0.2	Medium Resistivity (Ohm-m)	2000
-200	SP (mV)	0	0.2	Shallow Resistivity (Ohm-m)	2000
			10000	Line Tension (lb)	0
					LSPD (ft/min)



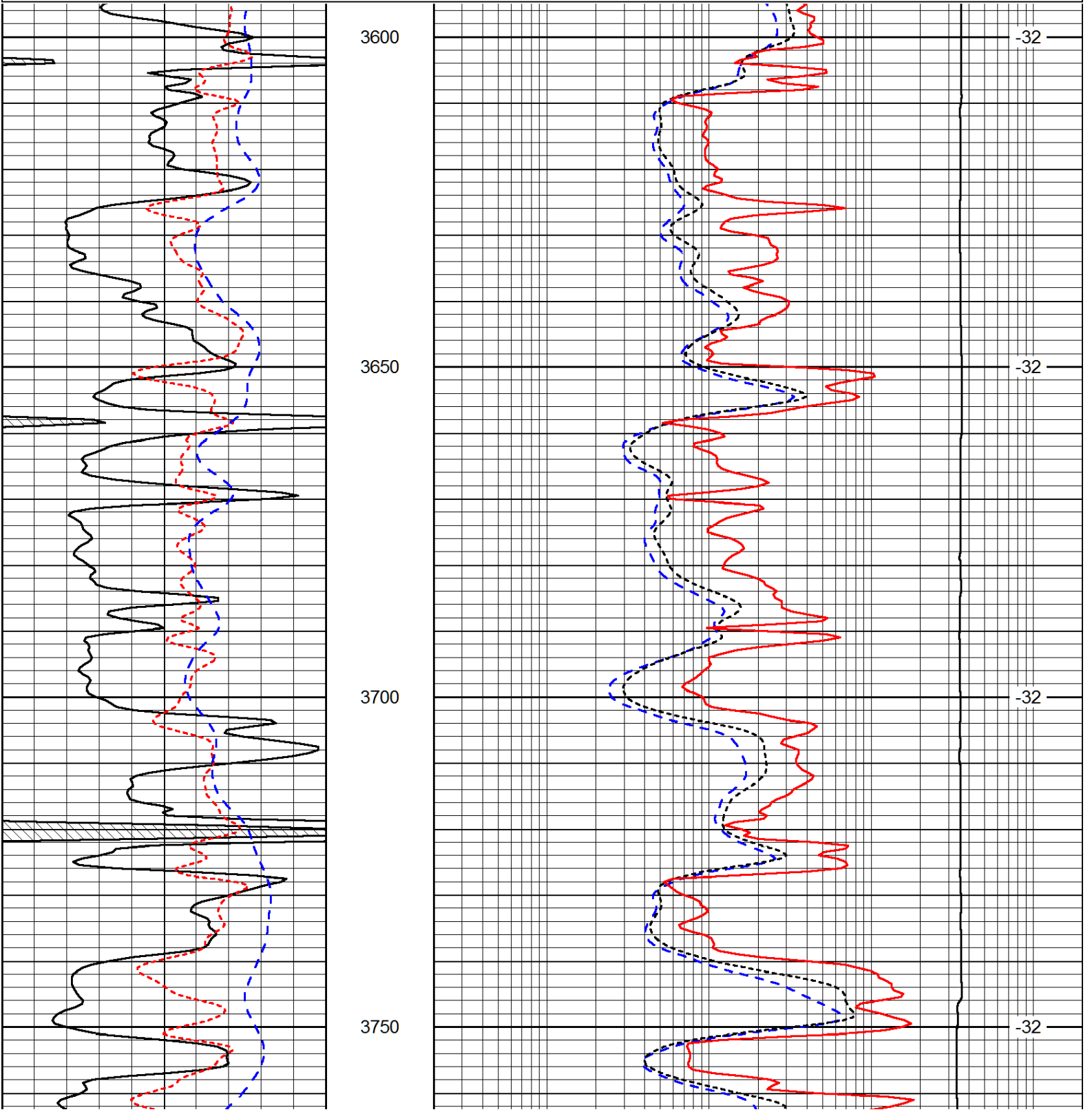
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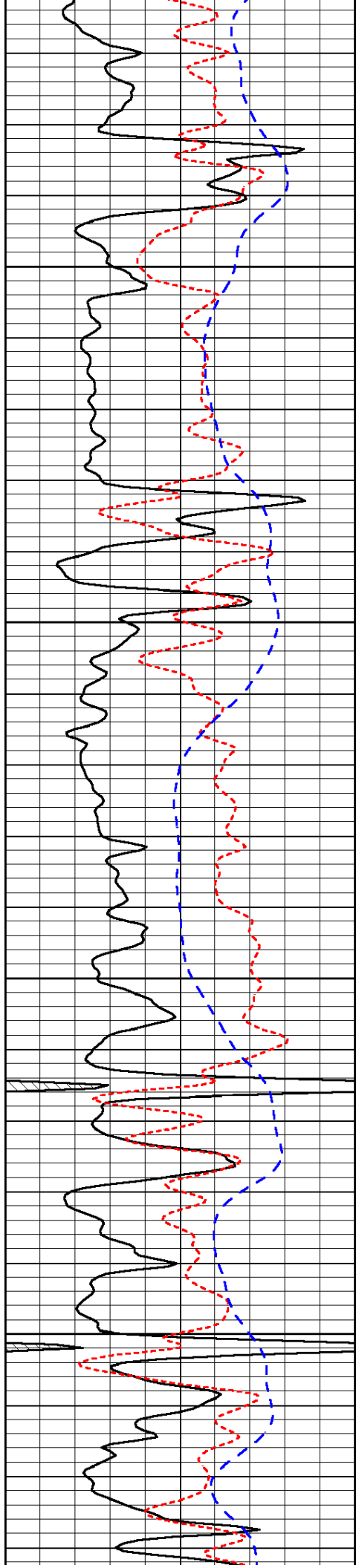
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10000	Line Tension (lb)	0

LSPD  
(ft/min)



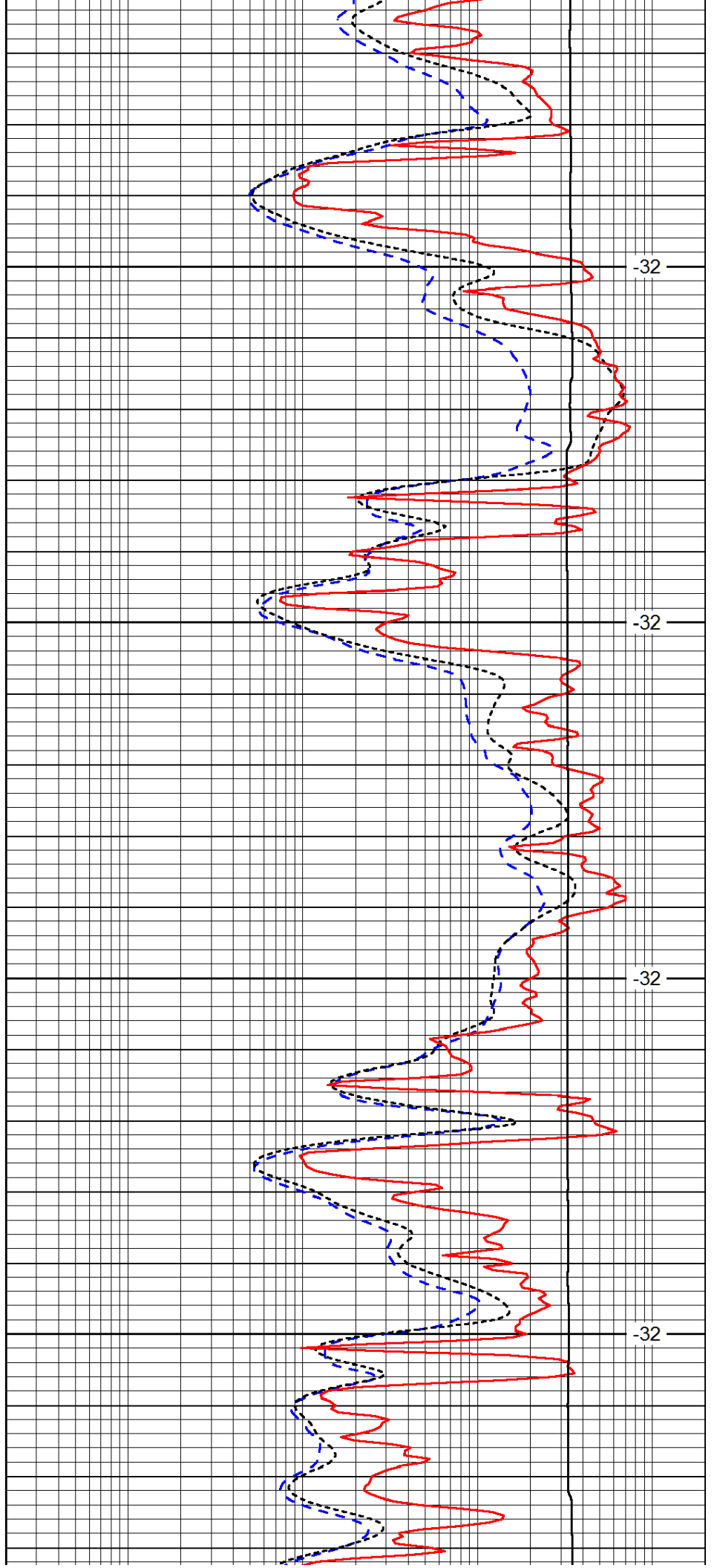


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3850

3900

3950

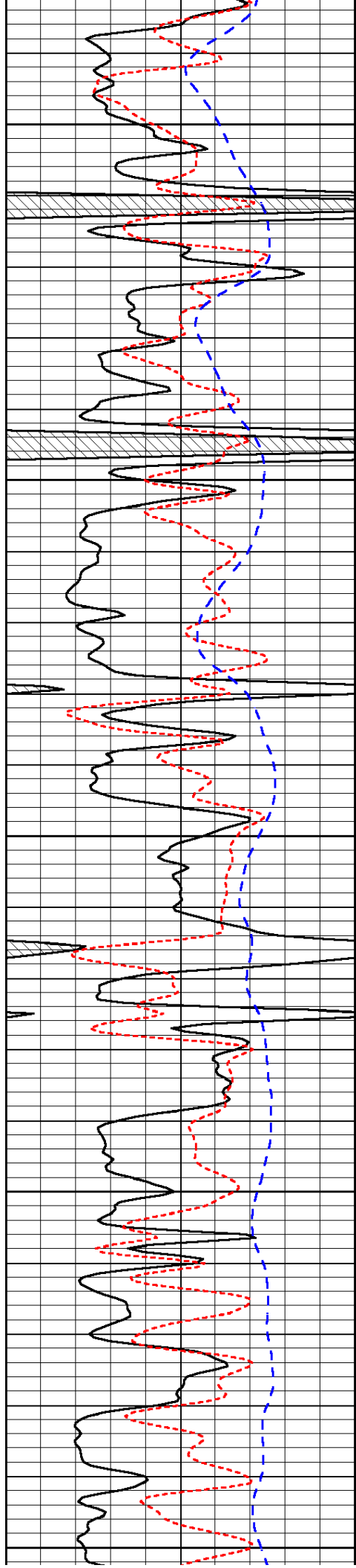


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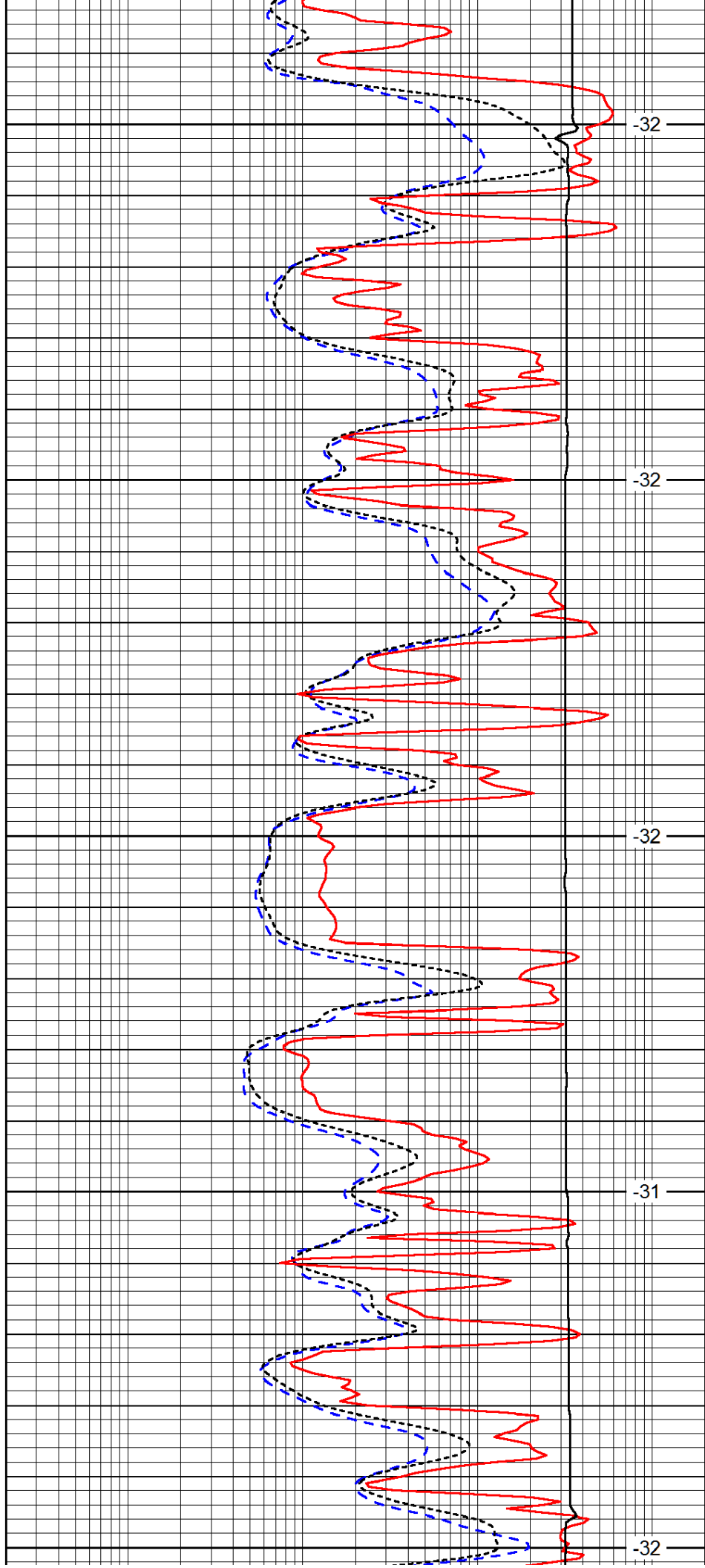
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4050

4100

4150

4200



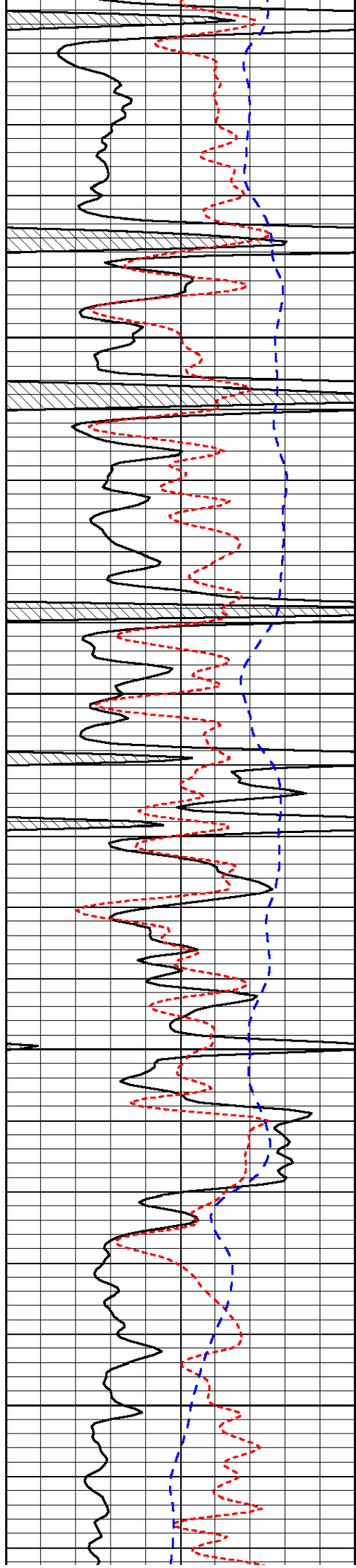
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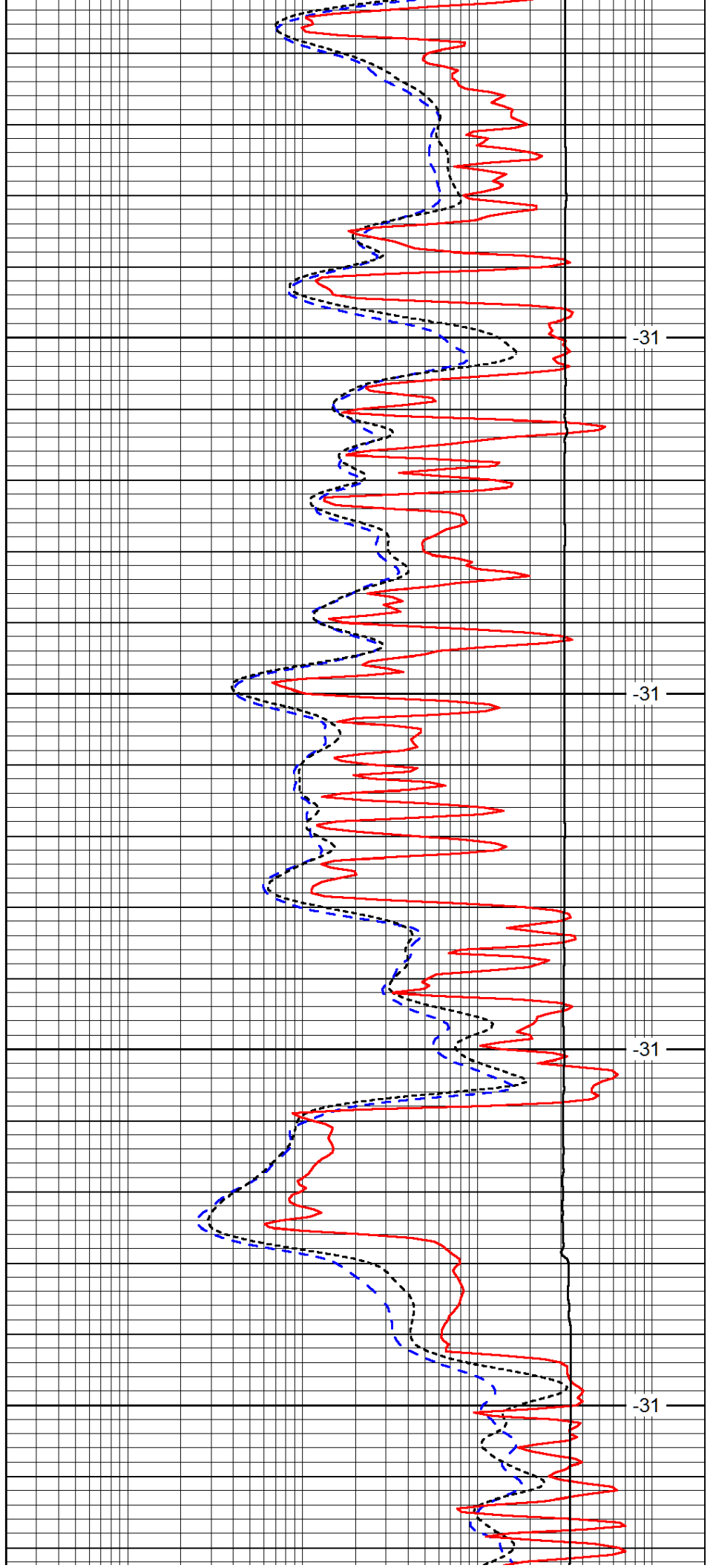


4250

4300

4350

4400

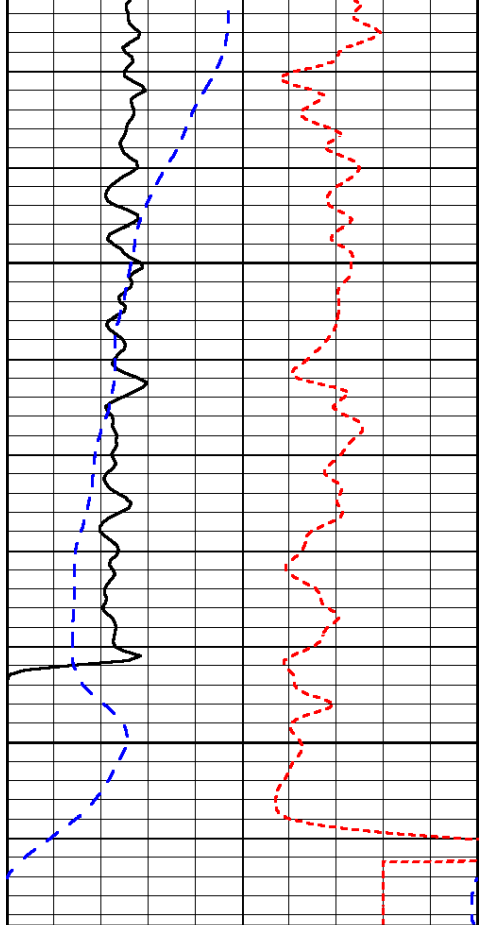


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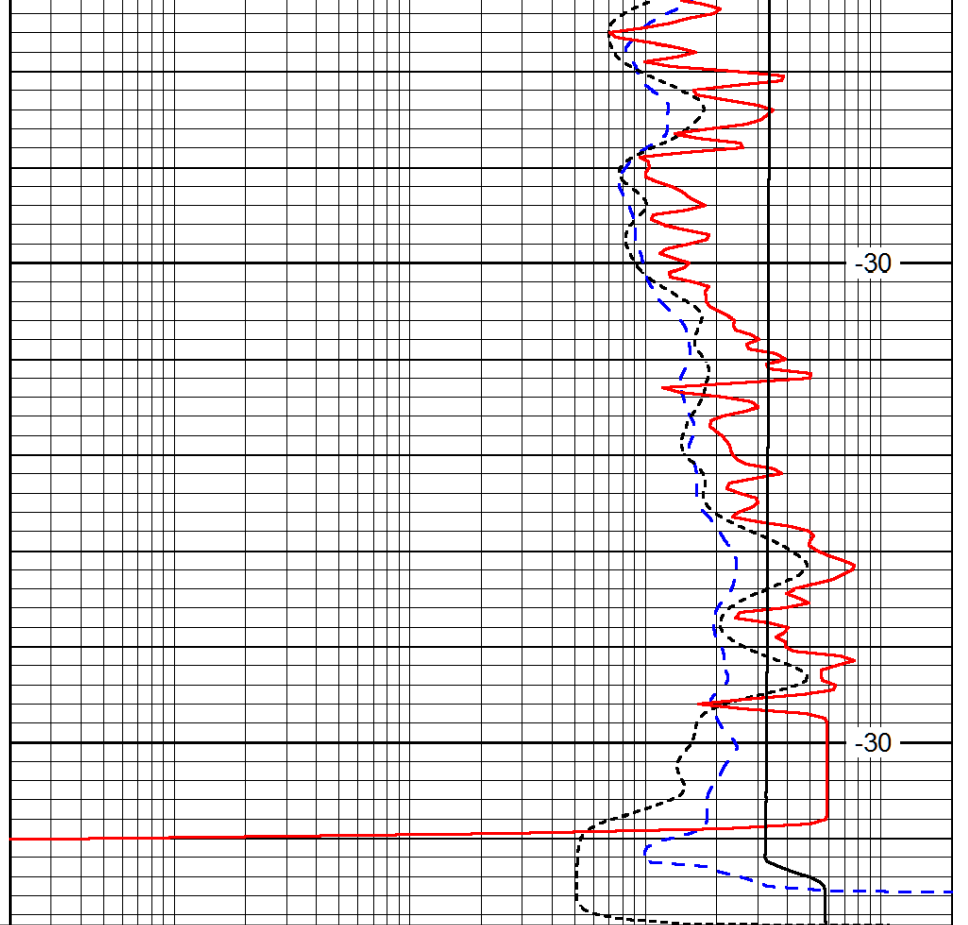
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4450

4500



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