



Dual Induction Log

Pioneer Energy Services

API No.	Company Chieftain Oil Company, Inc.		
	Well Lorraine "A" No.1		
	Field Rhodes		
	County Barber	State	Kansas
15-007-23,864-00-00	Location	SE NW SE SW 710' FSL & 1,828' FWL	
	Sec: 22	Twp: 33S	Rge: 11W
	Permanent Datum	Ground Level	Elevation 1442
	Log Measured From	Kelly Bushing	13 Ft. Above Perm. Datum
	Drilling Measured From	Kelly Bushing	K.B. 1455 D.F. 1442 G.L. 1442
Date		11/20/2012	
Run Number		One	
Depth Driller		5080	
Depth Logger		5080	
Bottom Logged Interval		5079	
Top Log Interval		300	
Casing Driller		8.625 @ 310	
Casing Logger		309	
Bit Size		7.875	
Type Fluid in Hole		Chemical	
Salinity, ppm CL		6500	
Density / Viscosity		9.2 60	
pH / Fluid Loss		10.0 7.3	
Source of Sample		Flowline	
Rm @ Meas. Temp		.50 @ 72	
Rmf @ Meas. Temp		.38 @ 72	
Rmc @ Meas. Temp		.68 @ 72	
Source of Rmf / Rmc		Charts	
Rm @ BHT		.28 @ 127	
Operating Rig Time		5 Hours	
Max Rec. Temp. F		127	
Equipment Number		108	
Location		Hays	
Recorded By		J. Long	
Witnessed By		David A. Barker	

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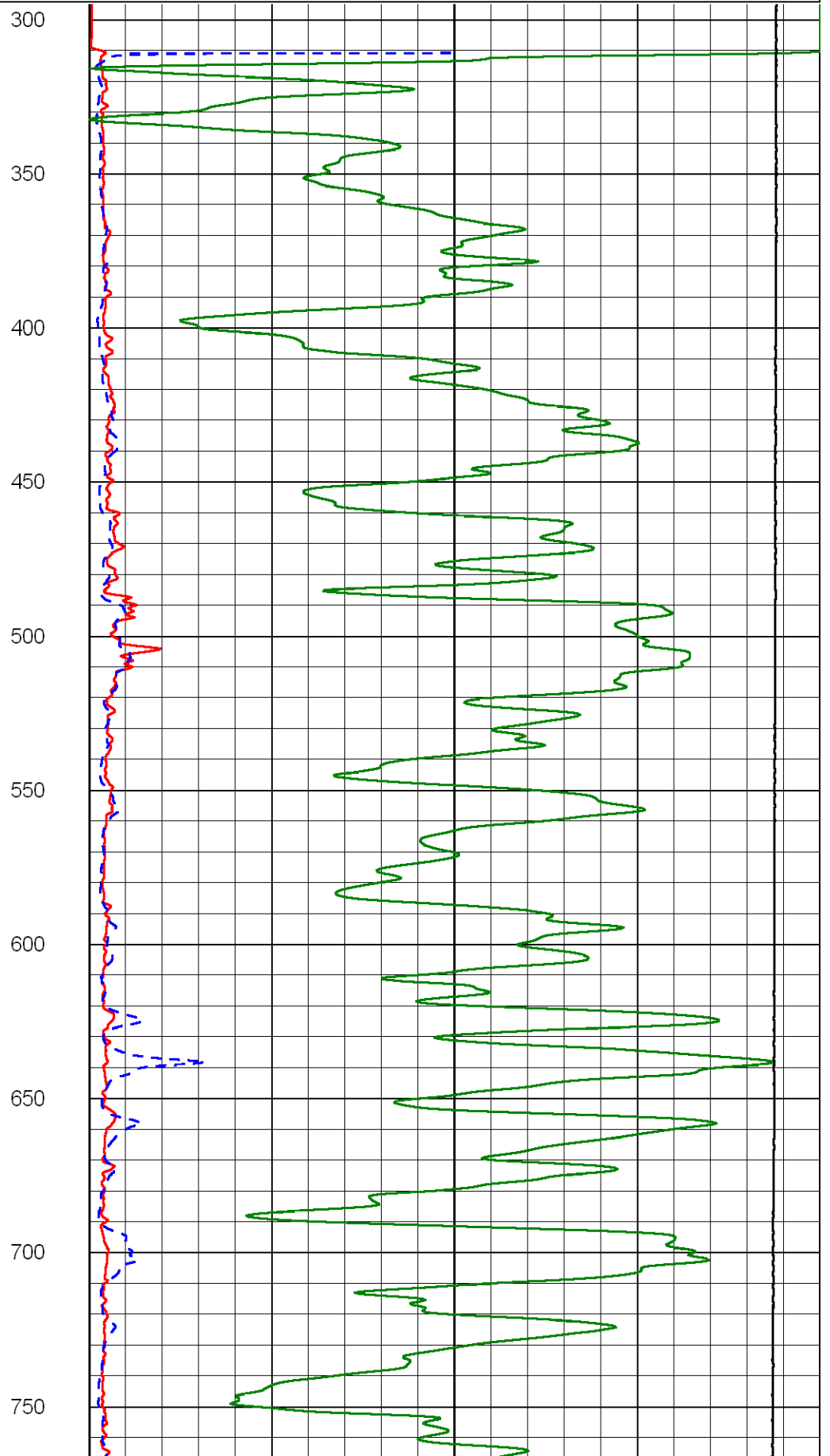
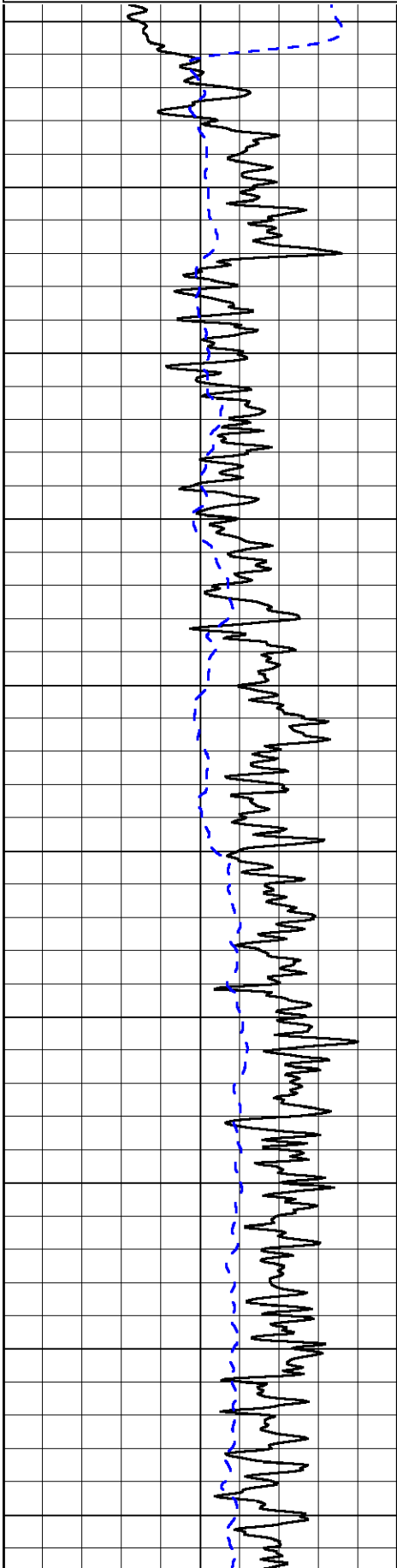
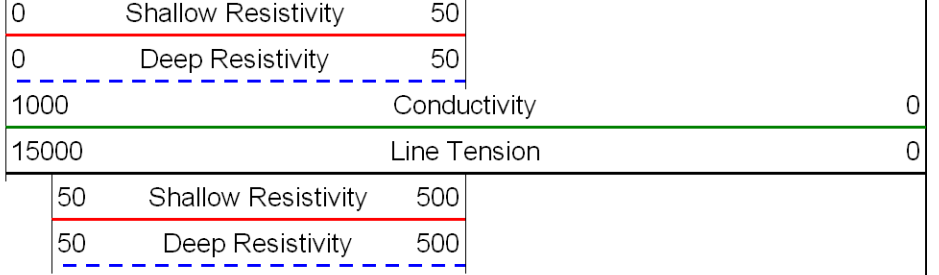
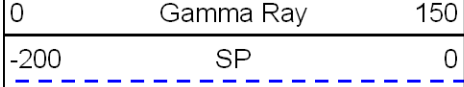
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

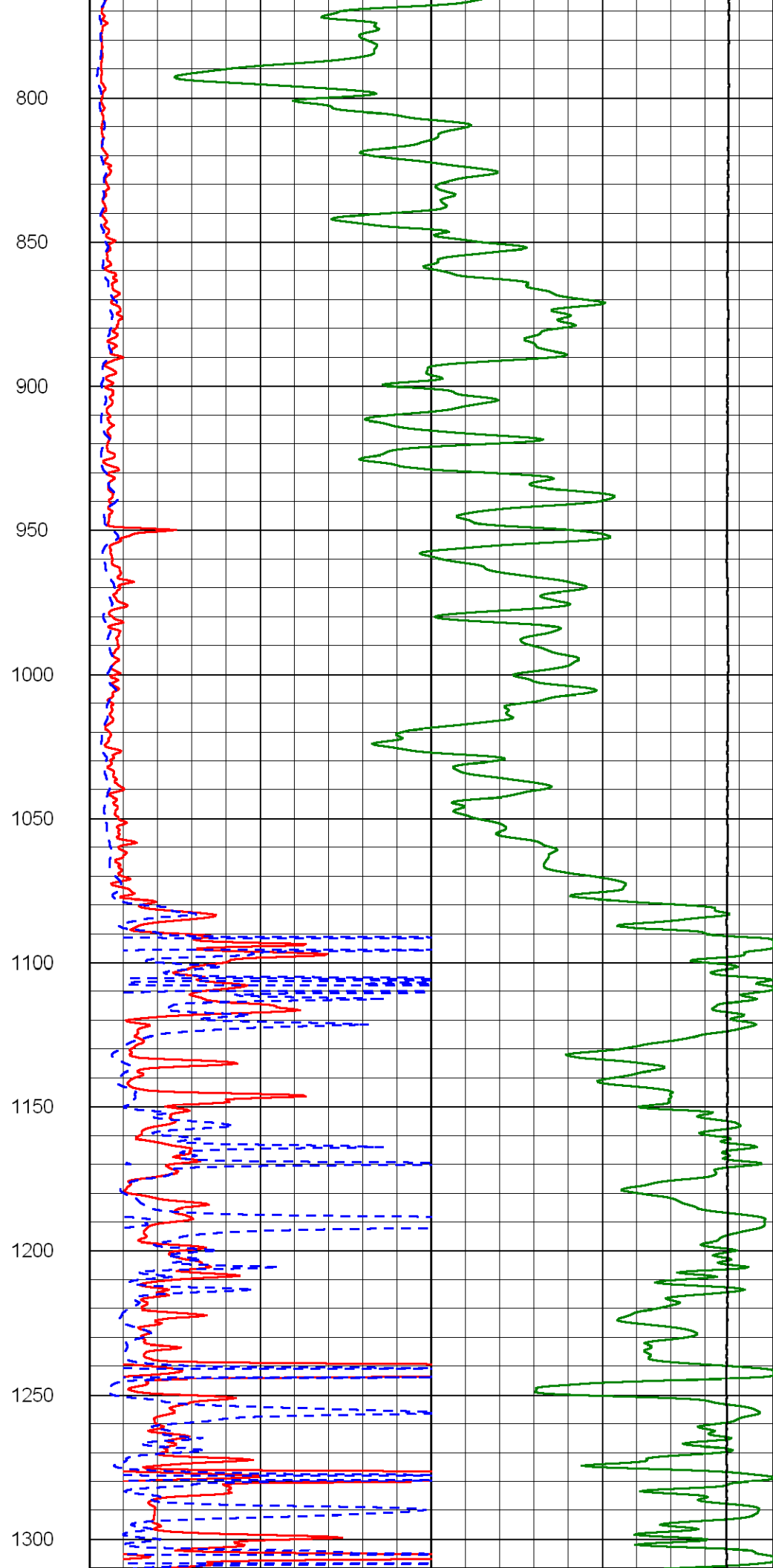
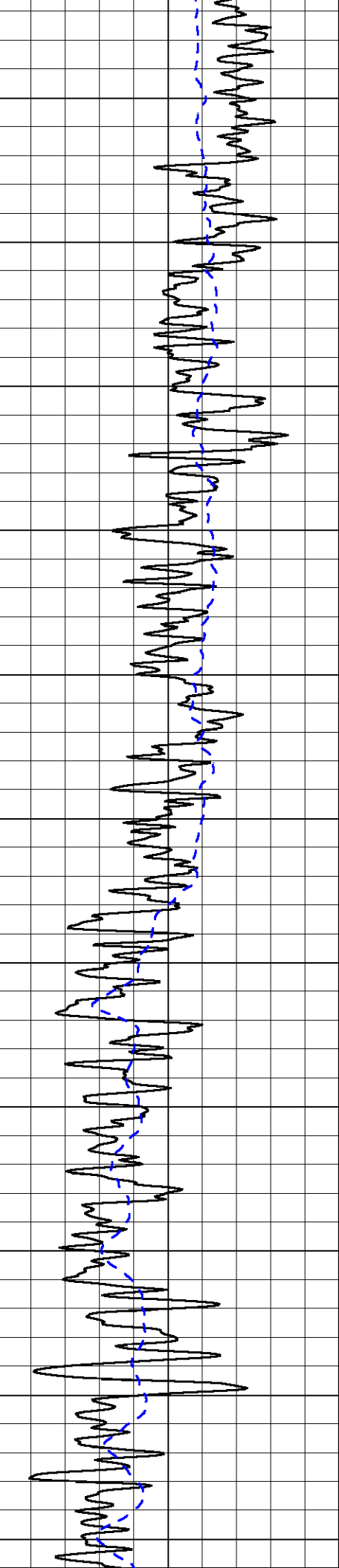
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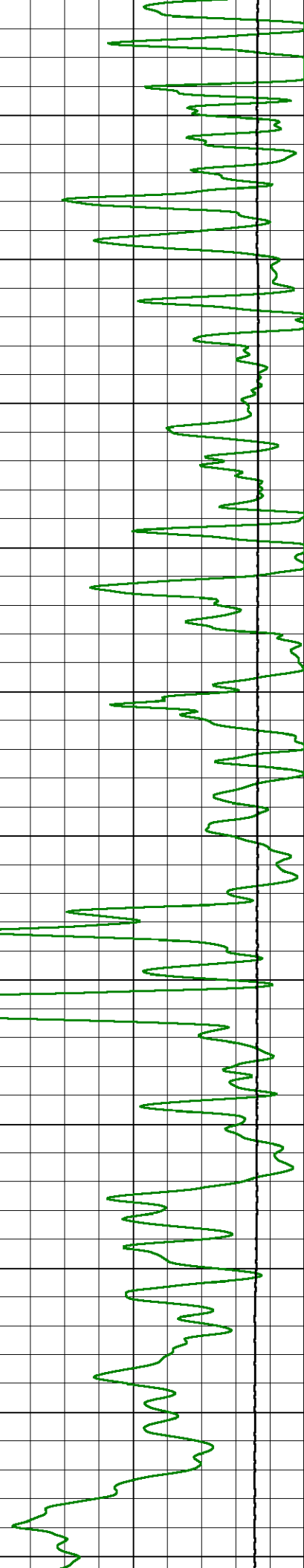
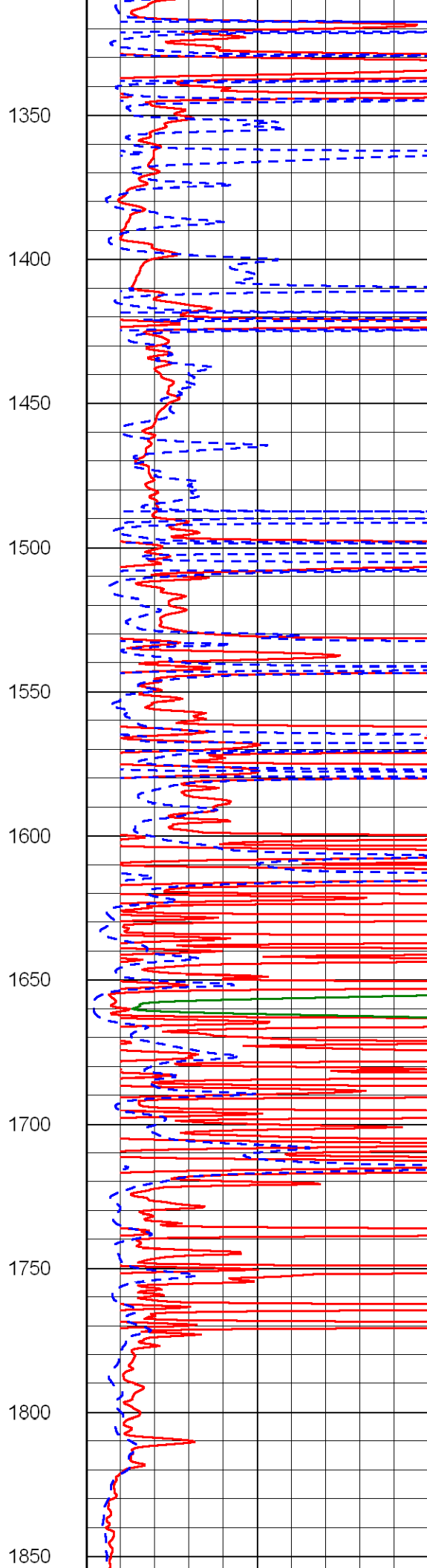
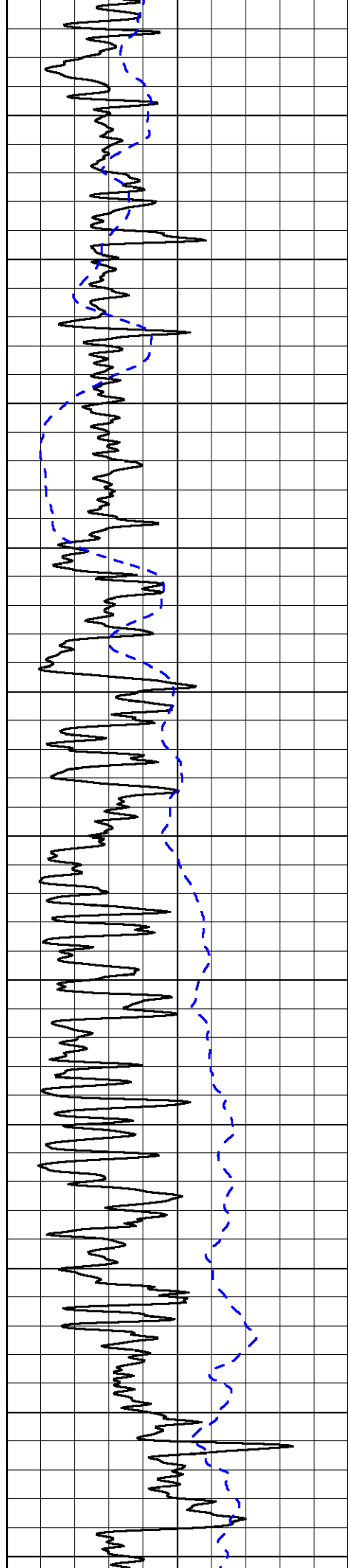
Thank you for using Log-Tech, Inc.
(785) 625-3858

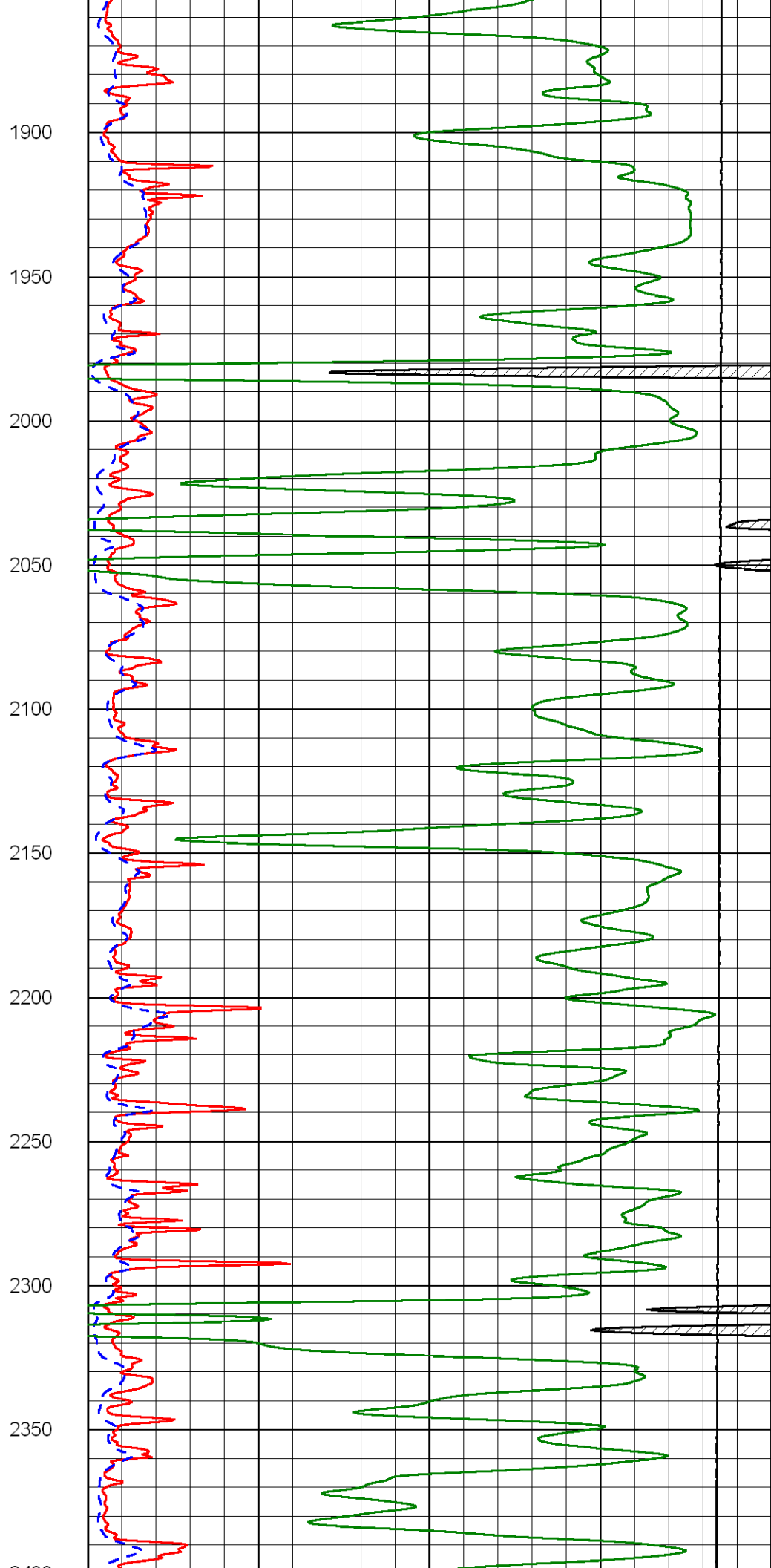
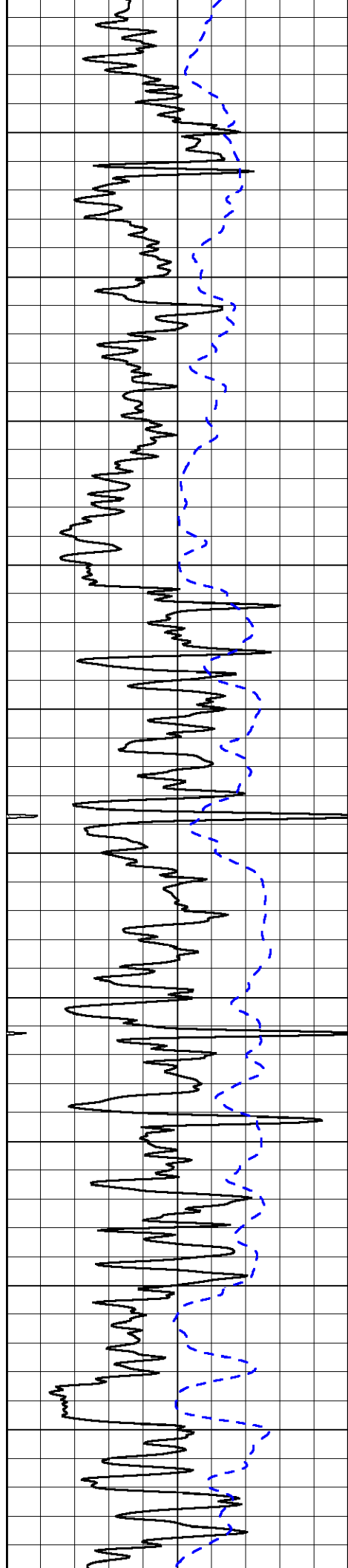
Medicine Lodge, South to Gerlane Blacktop, 4 East, North Into

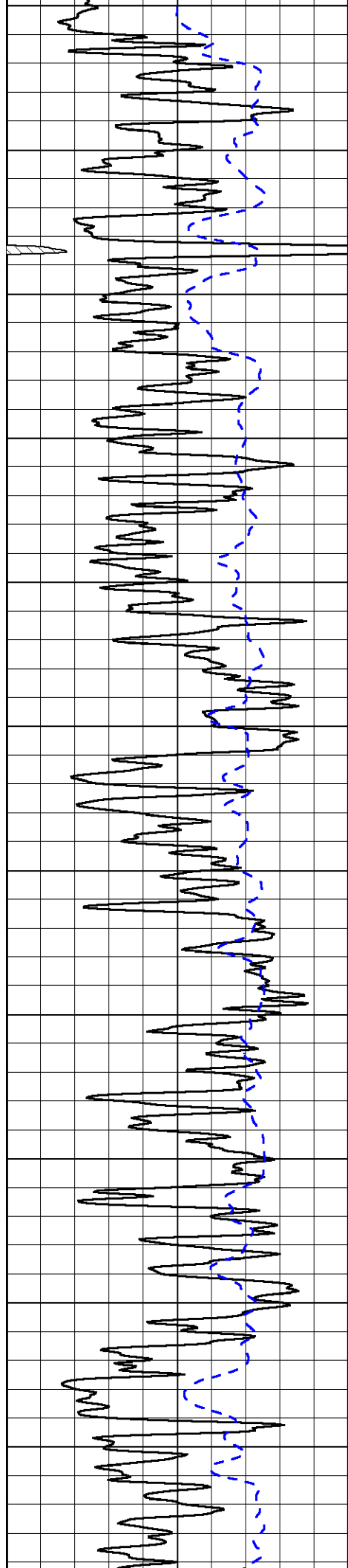
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Presentation Format: dil2in
Dataset Creation: Tue Nov 20 16:53:53 2012
Charted by: Depth in Feet scaled 1:600



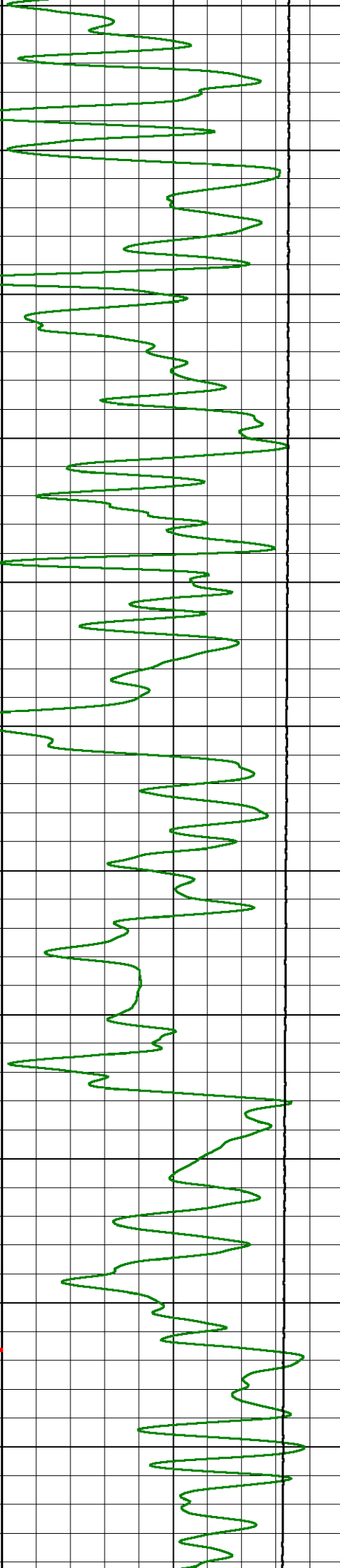
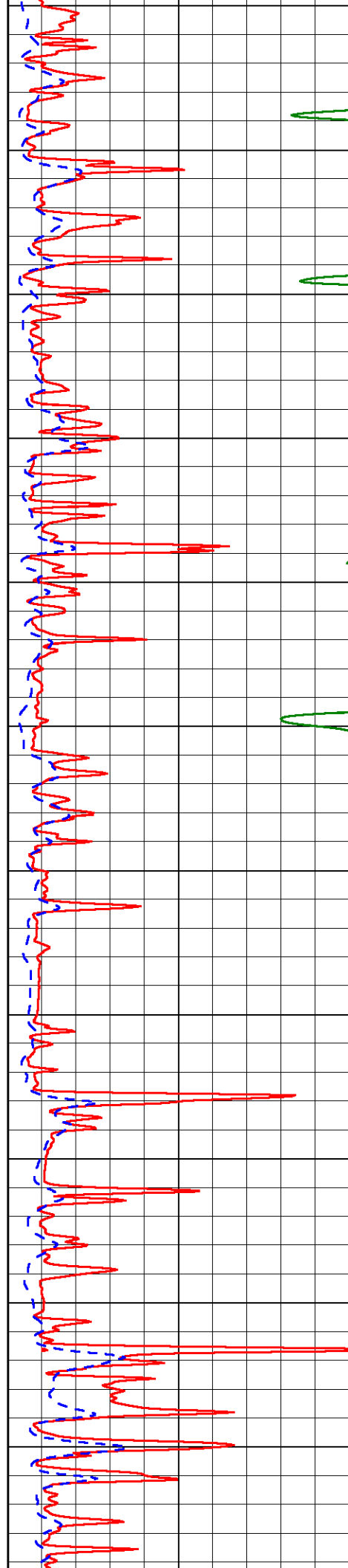


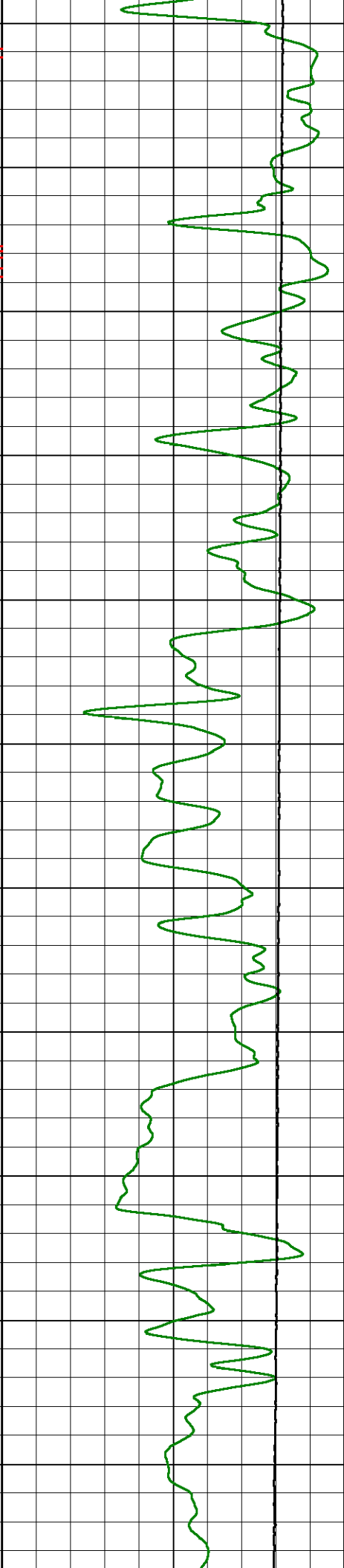
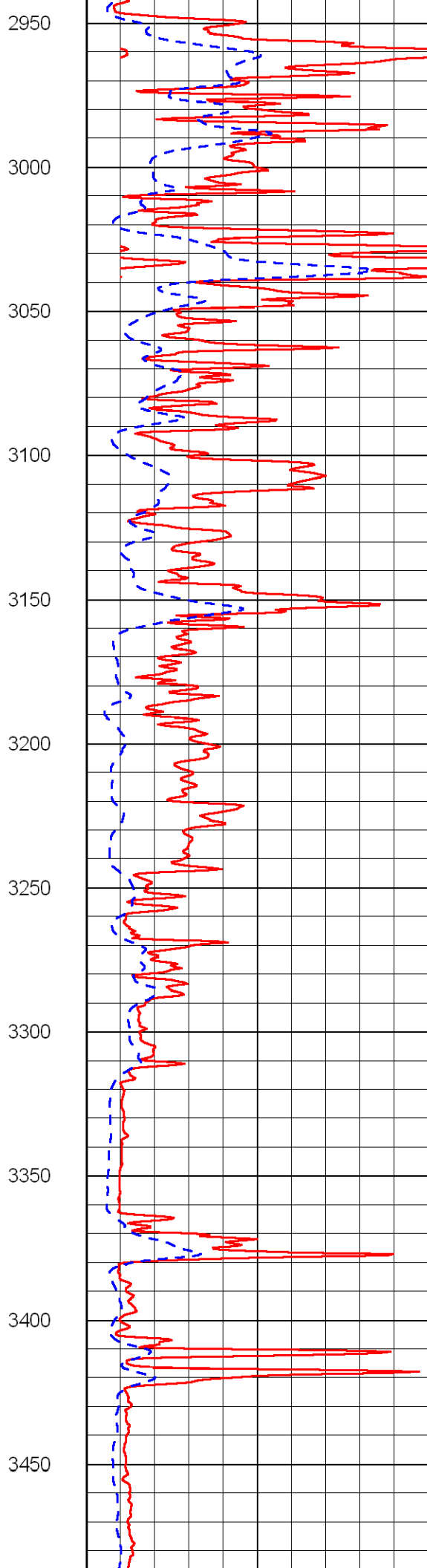
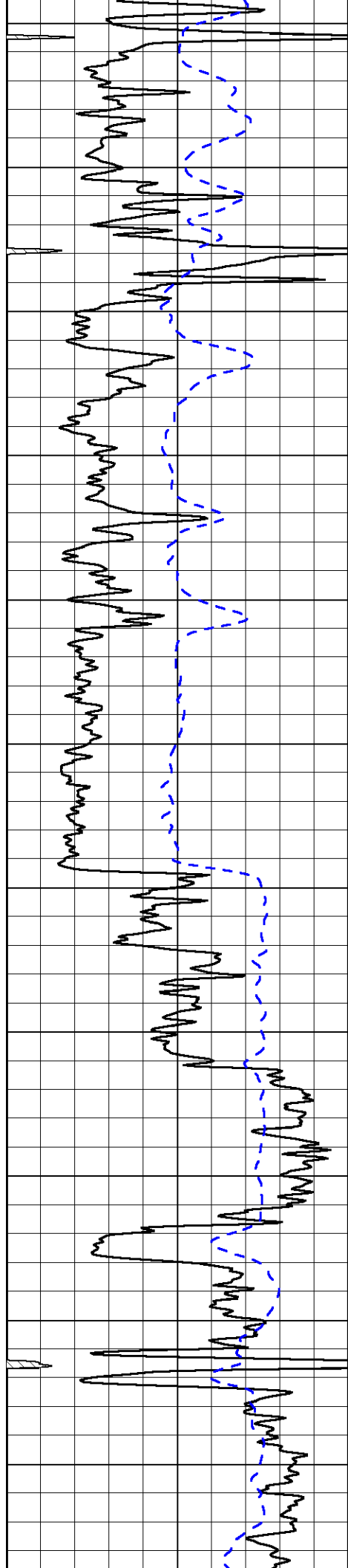


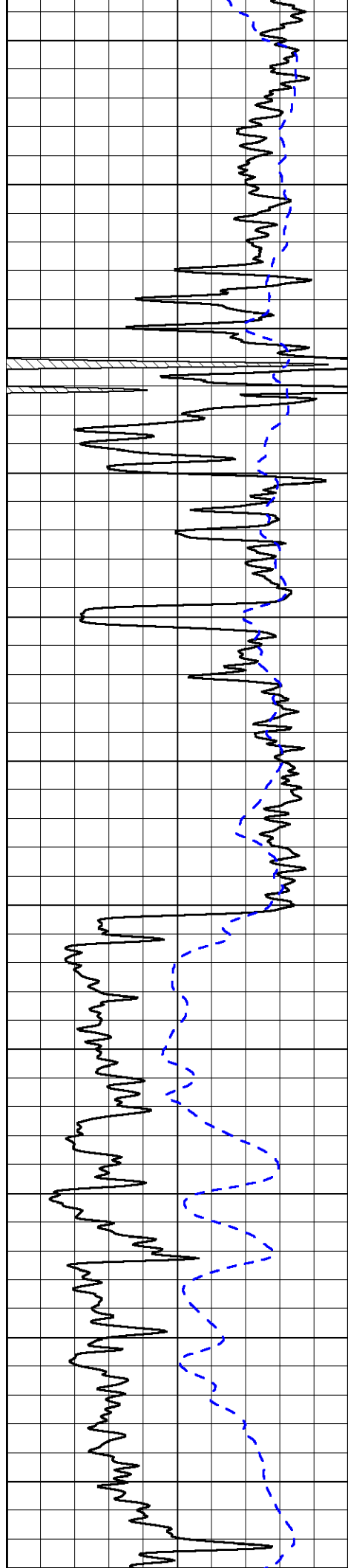




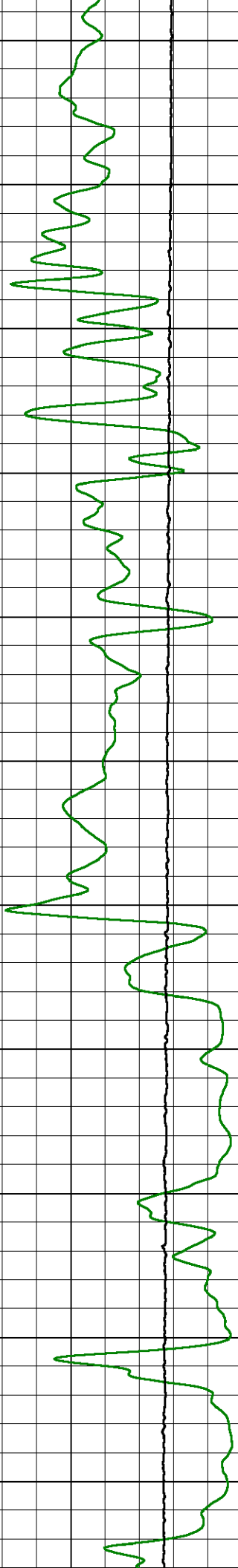
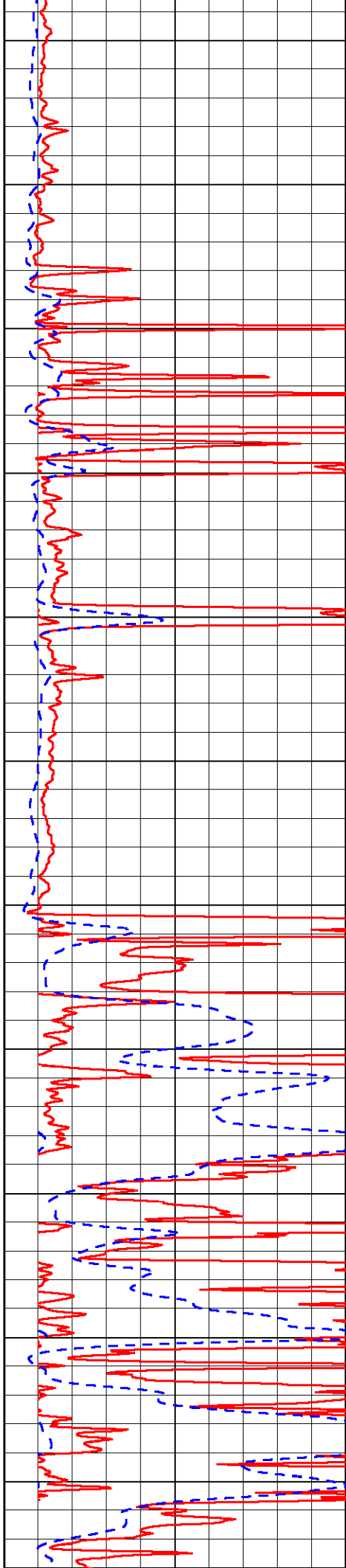
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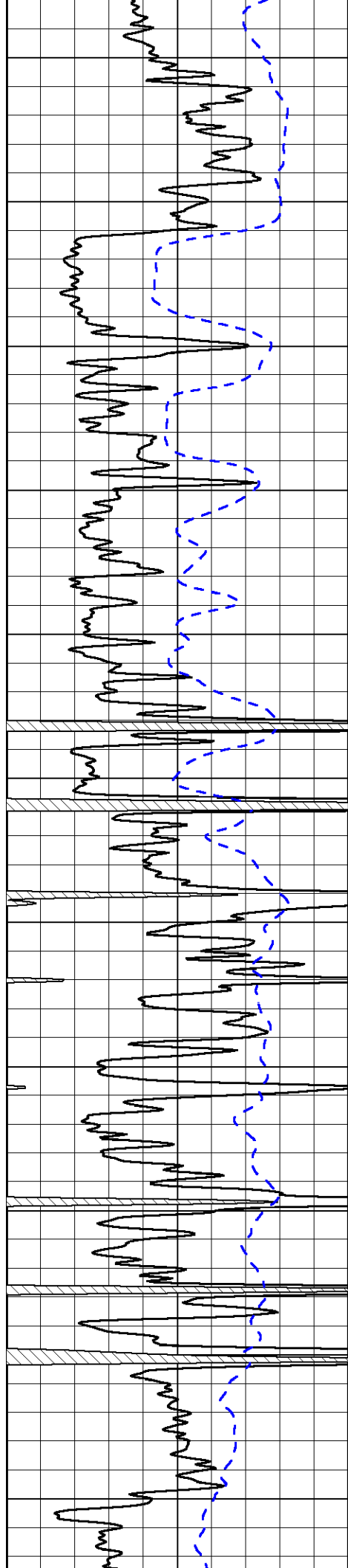






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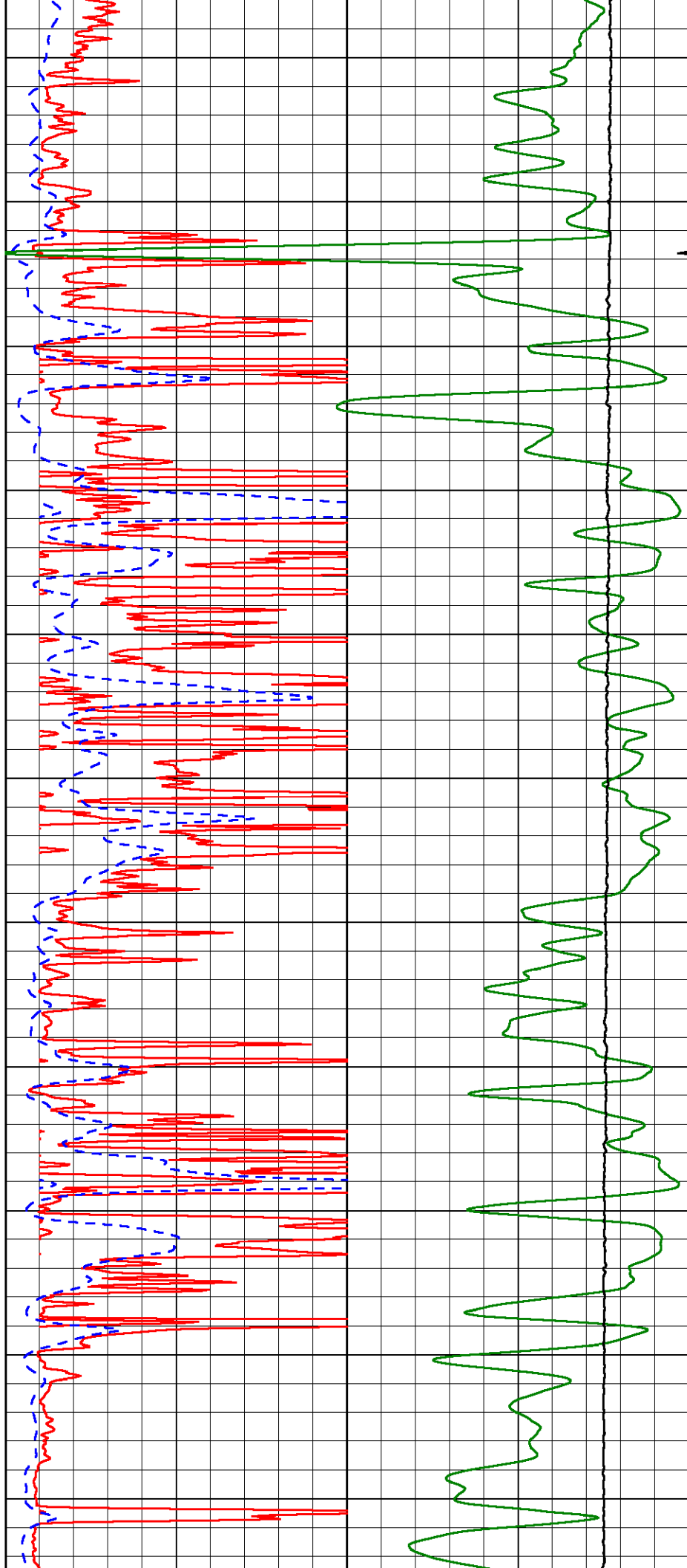
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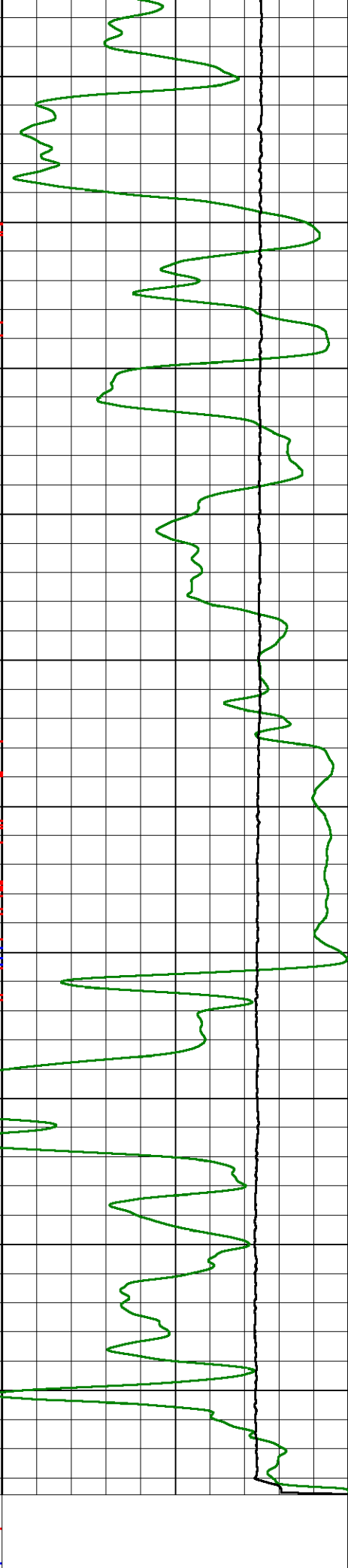
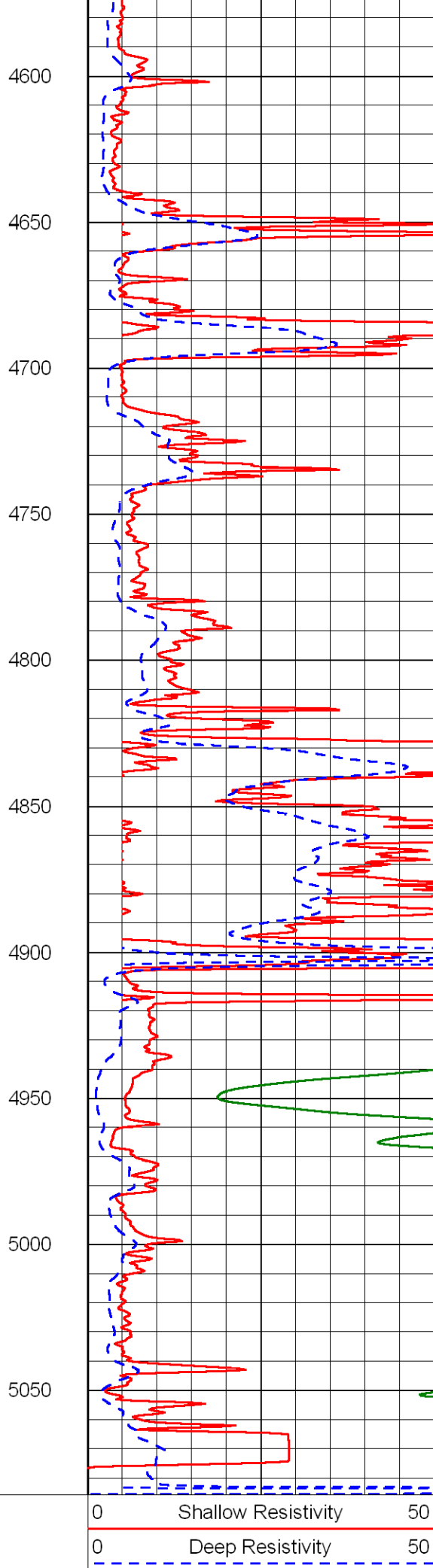
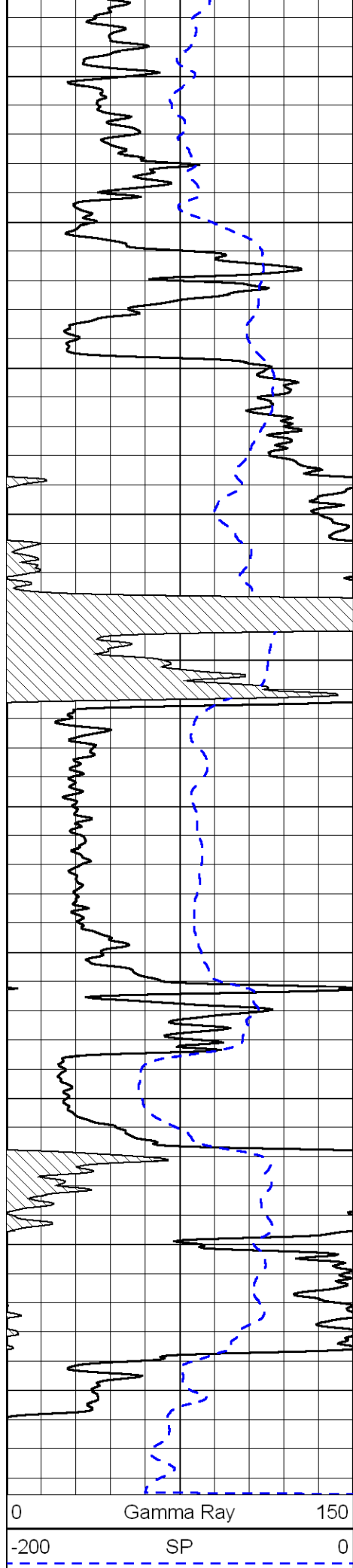
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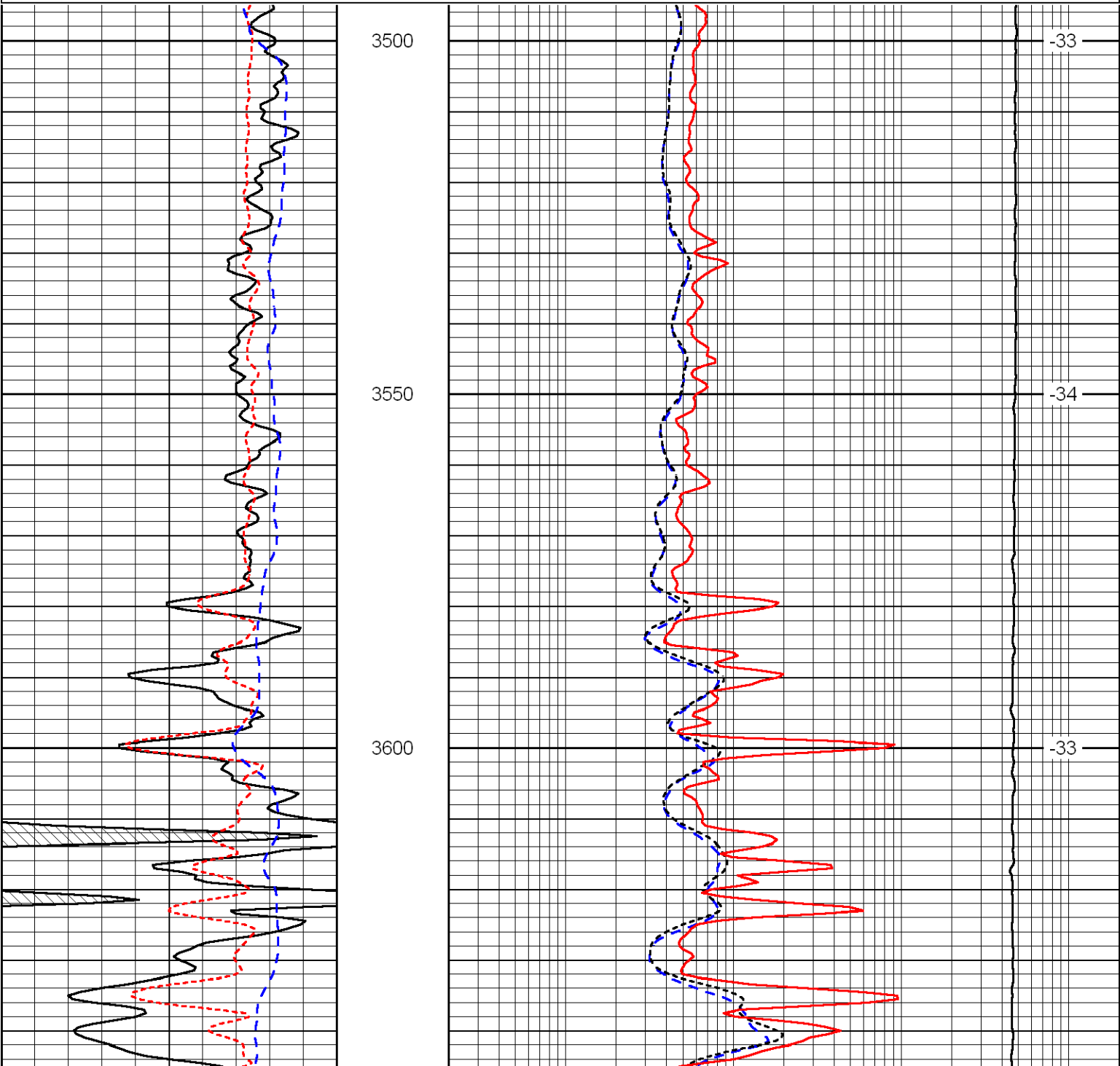


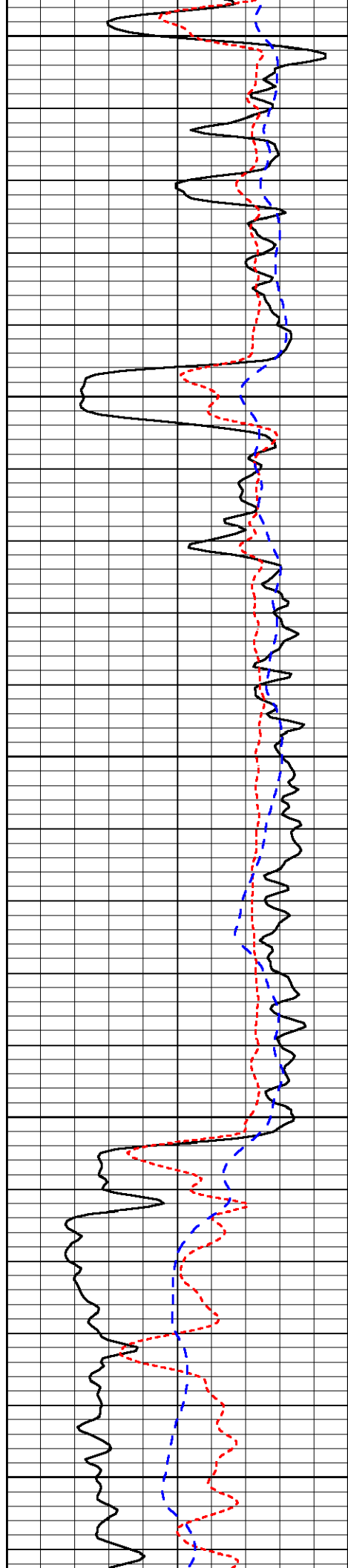


15000	Line Tension		0
50	Shallow Resistivity	500	
50	Deep Resistivity	500	

Database File:	chieftain_lorraine_a_1hd.db
Dataset Pathname:	dil/chiefstck
Presentation Format:	dil
Dataset Creation:	Tue Nov 20 16:53:53 2012
Charted by:	Depth in Feet scaled 1:240

0	Gamma Ray	150	0.2	Deep Resistivity	2000
-160	RXO/RT	40	0.2	Medium Resistivity	2000
-200	SP	0	0.2	Shallow Resistivity	2000
			10000	Line Tension	0
					LSPD





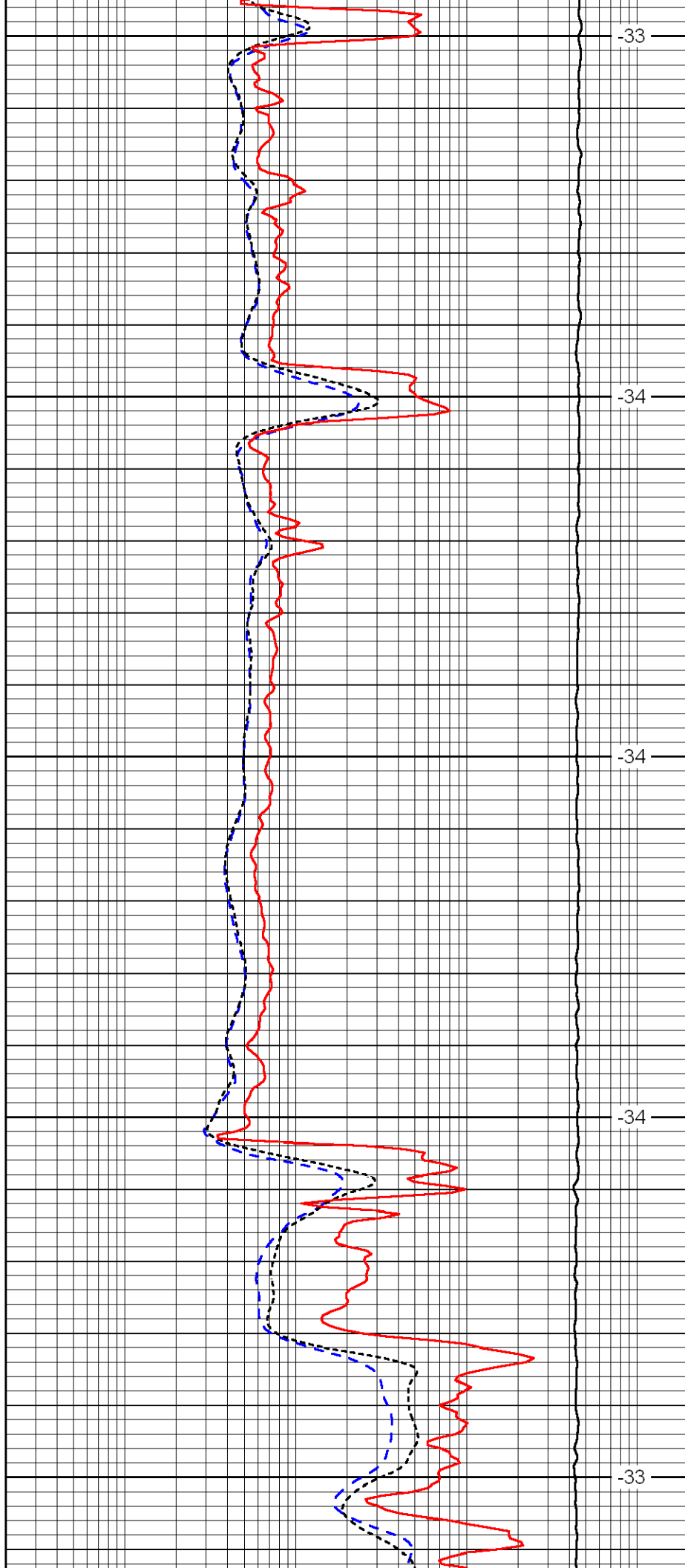
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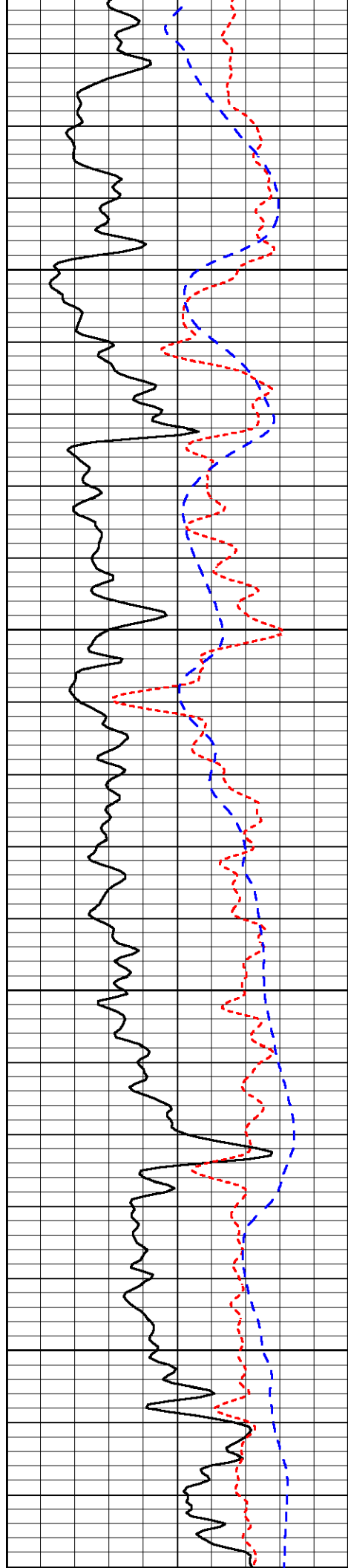
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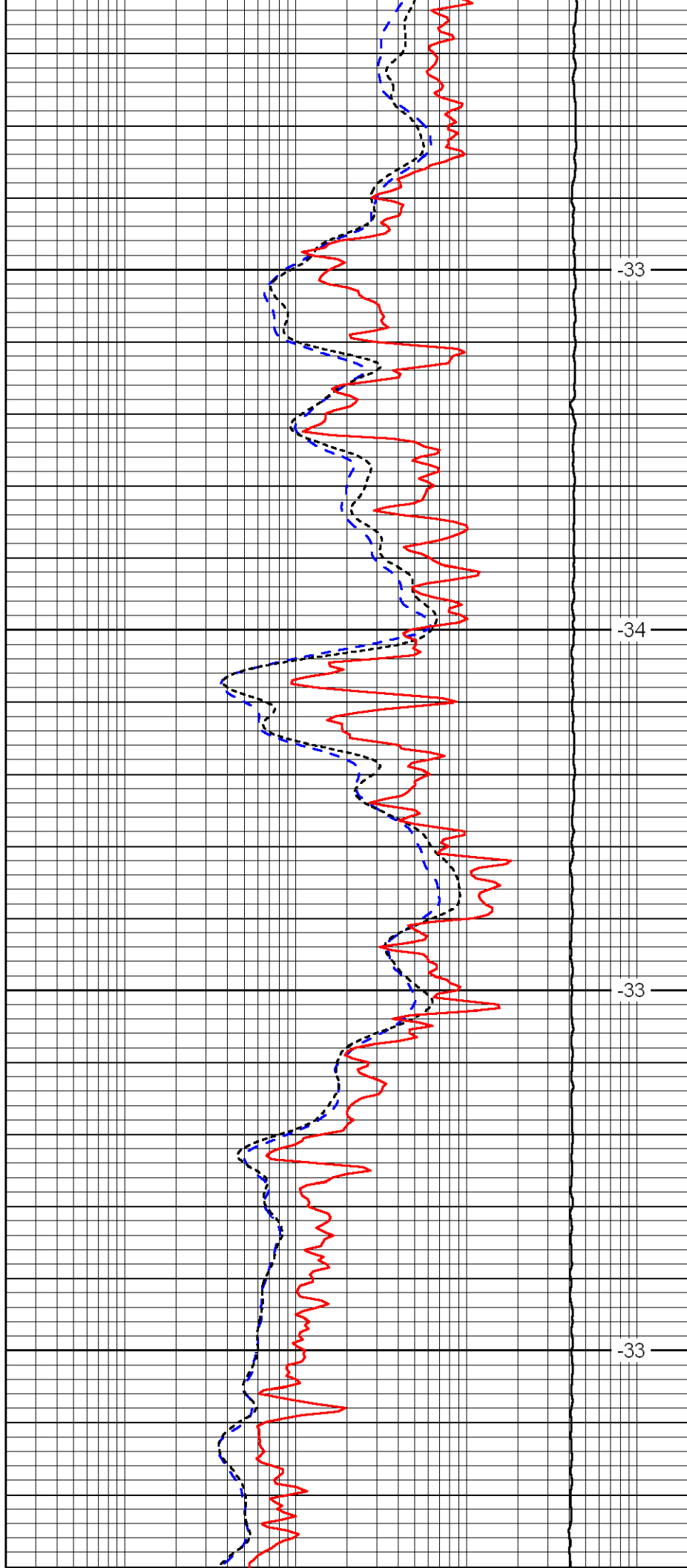


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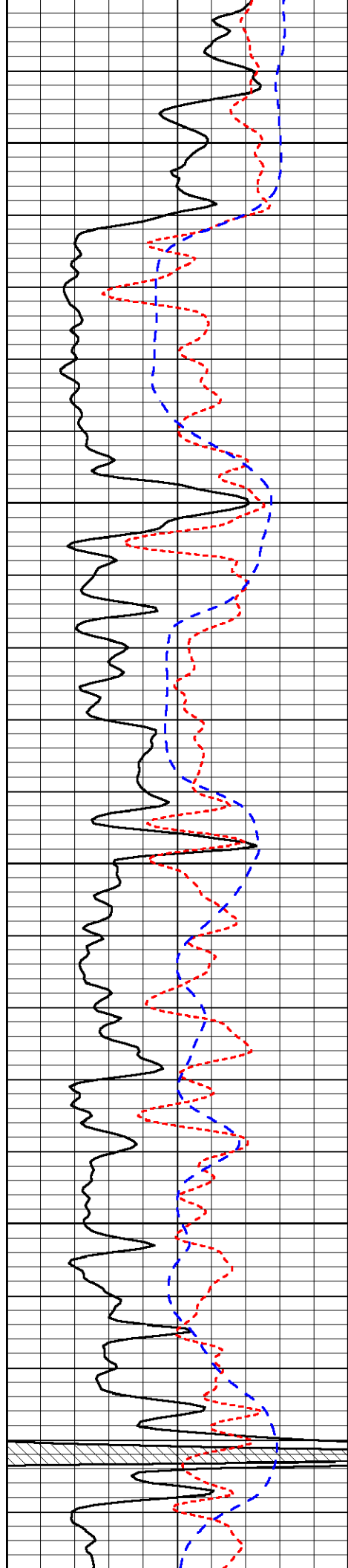


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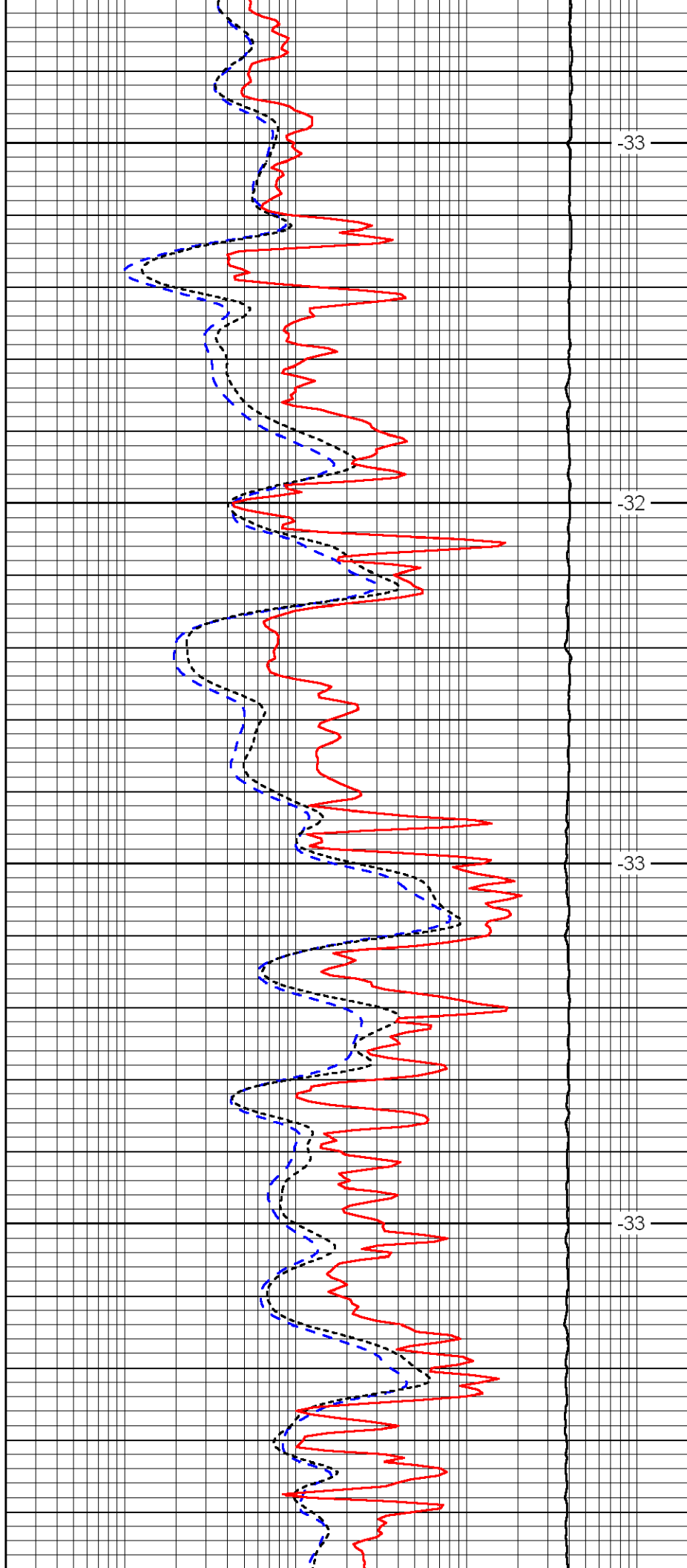


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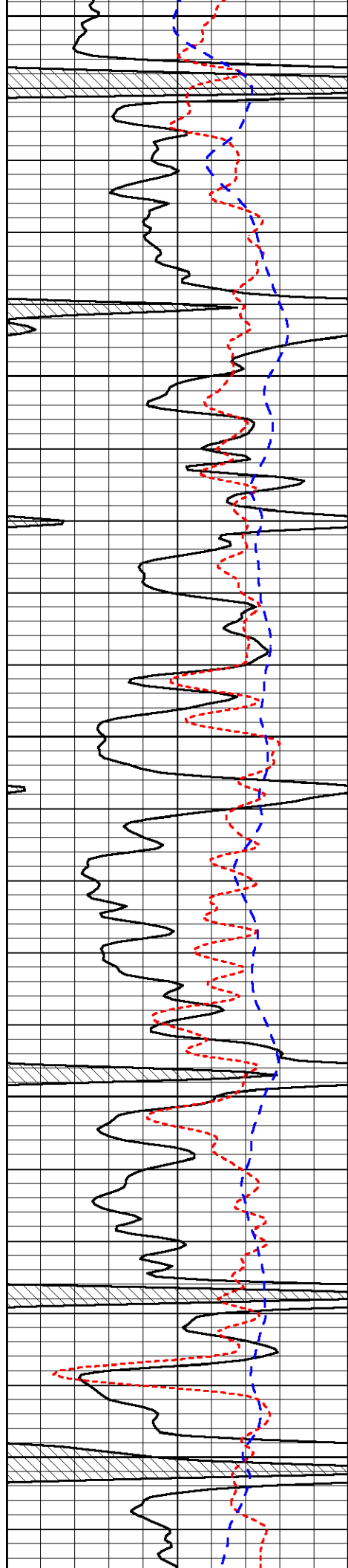


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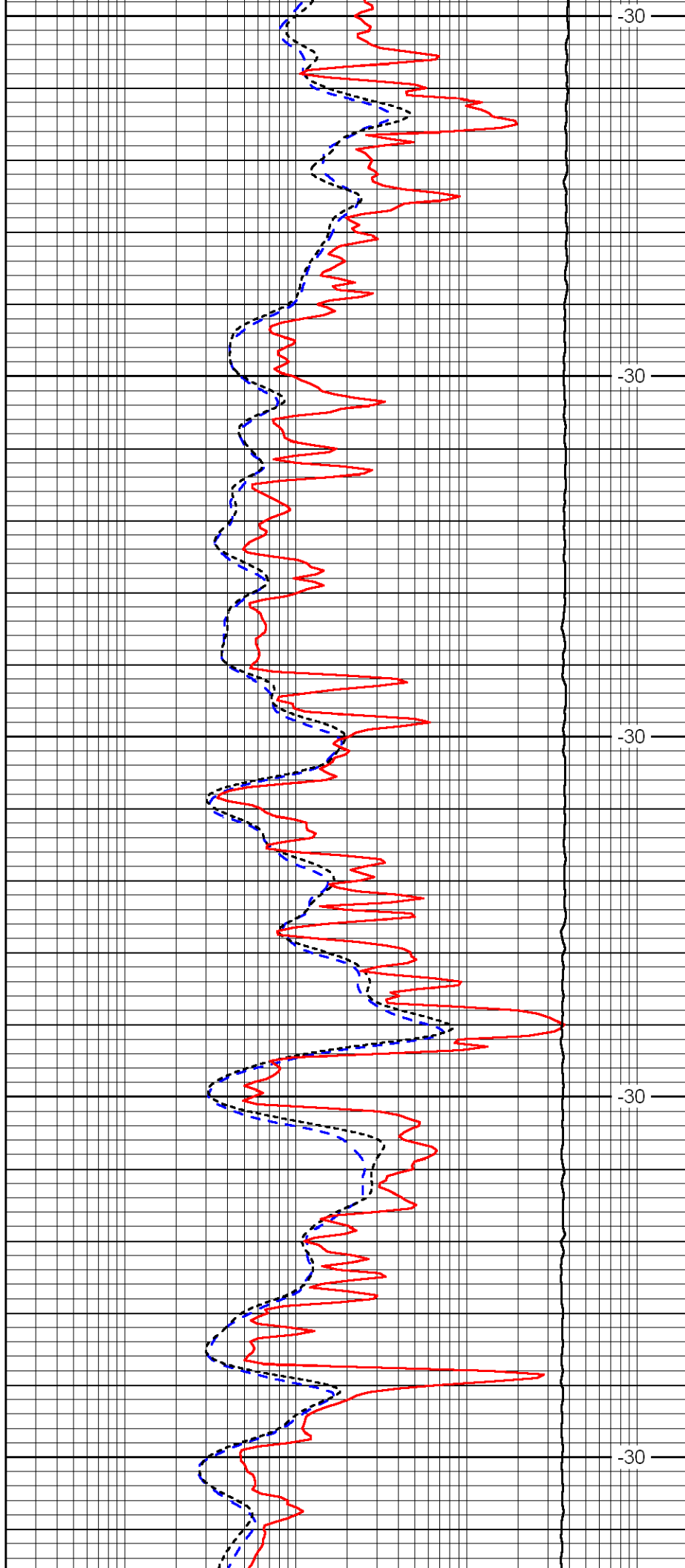
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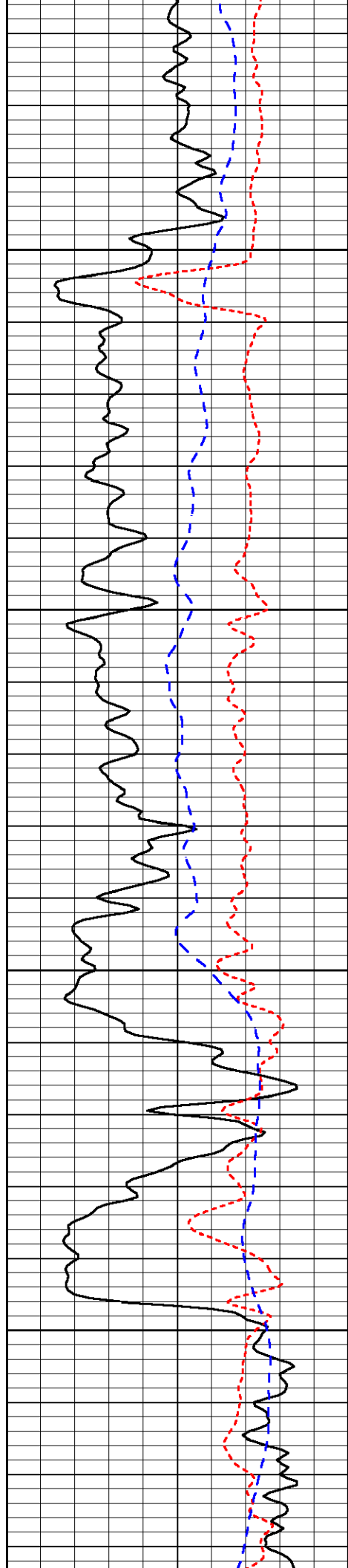
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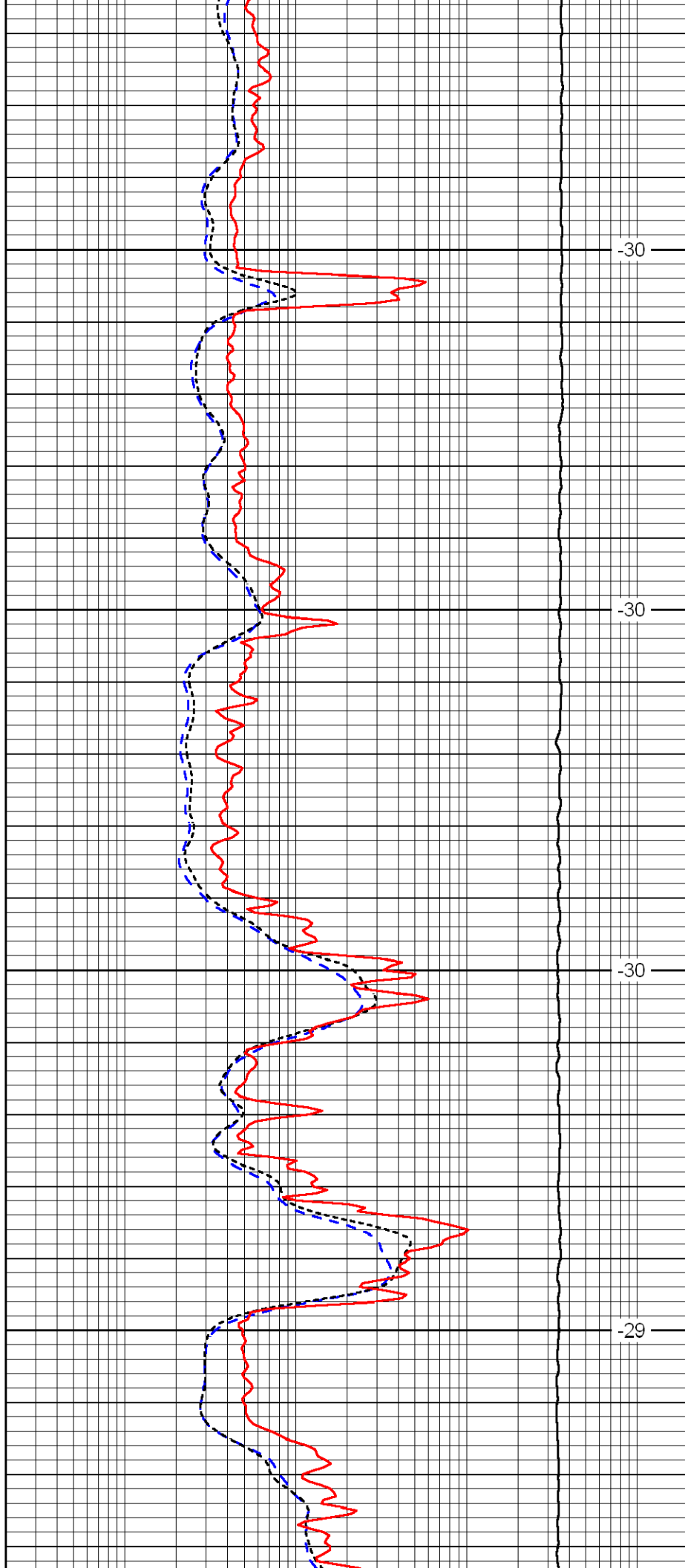


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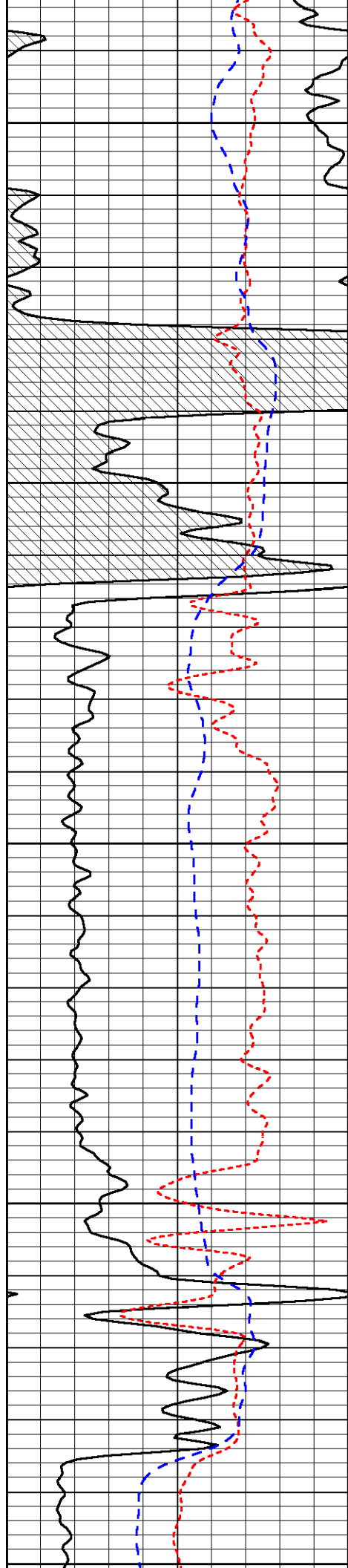


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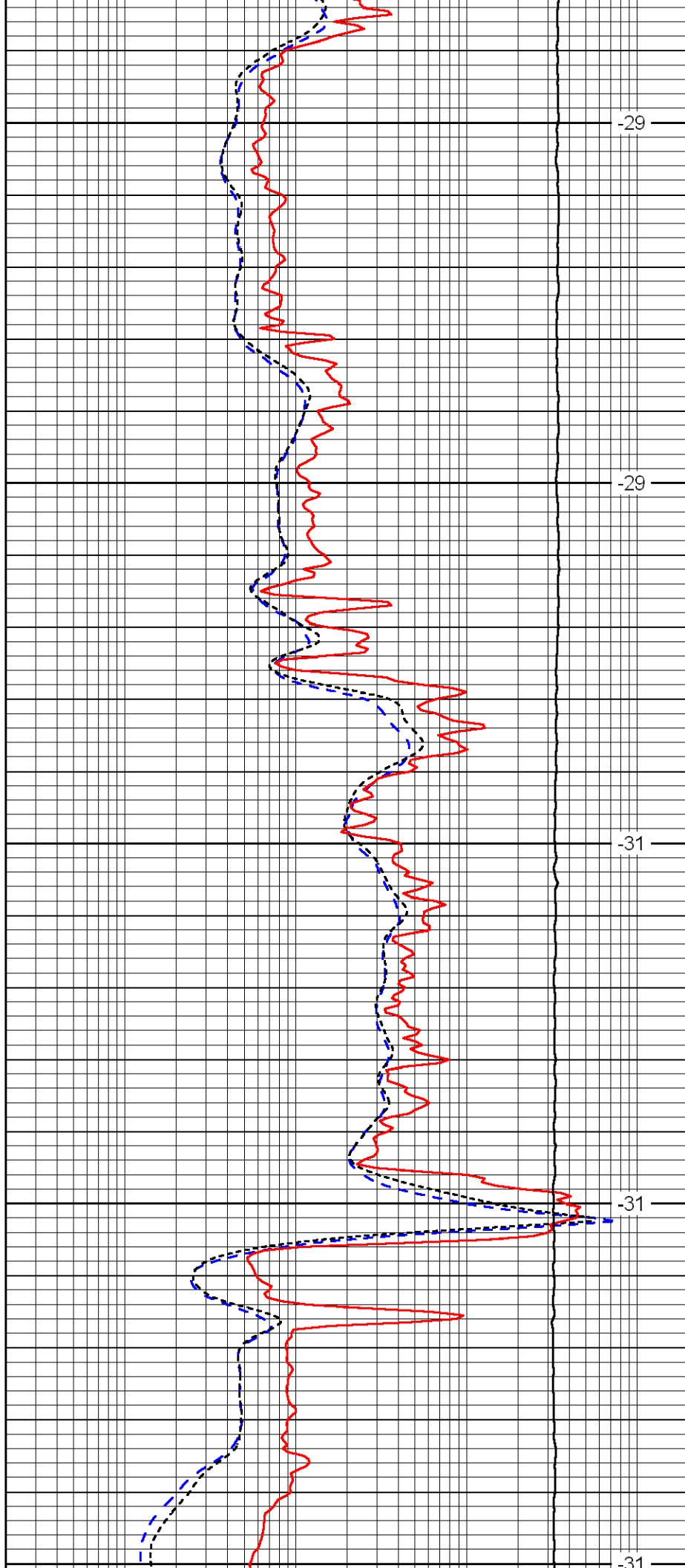
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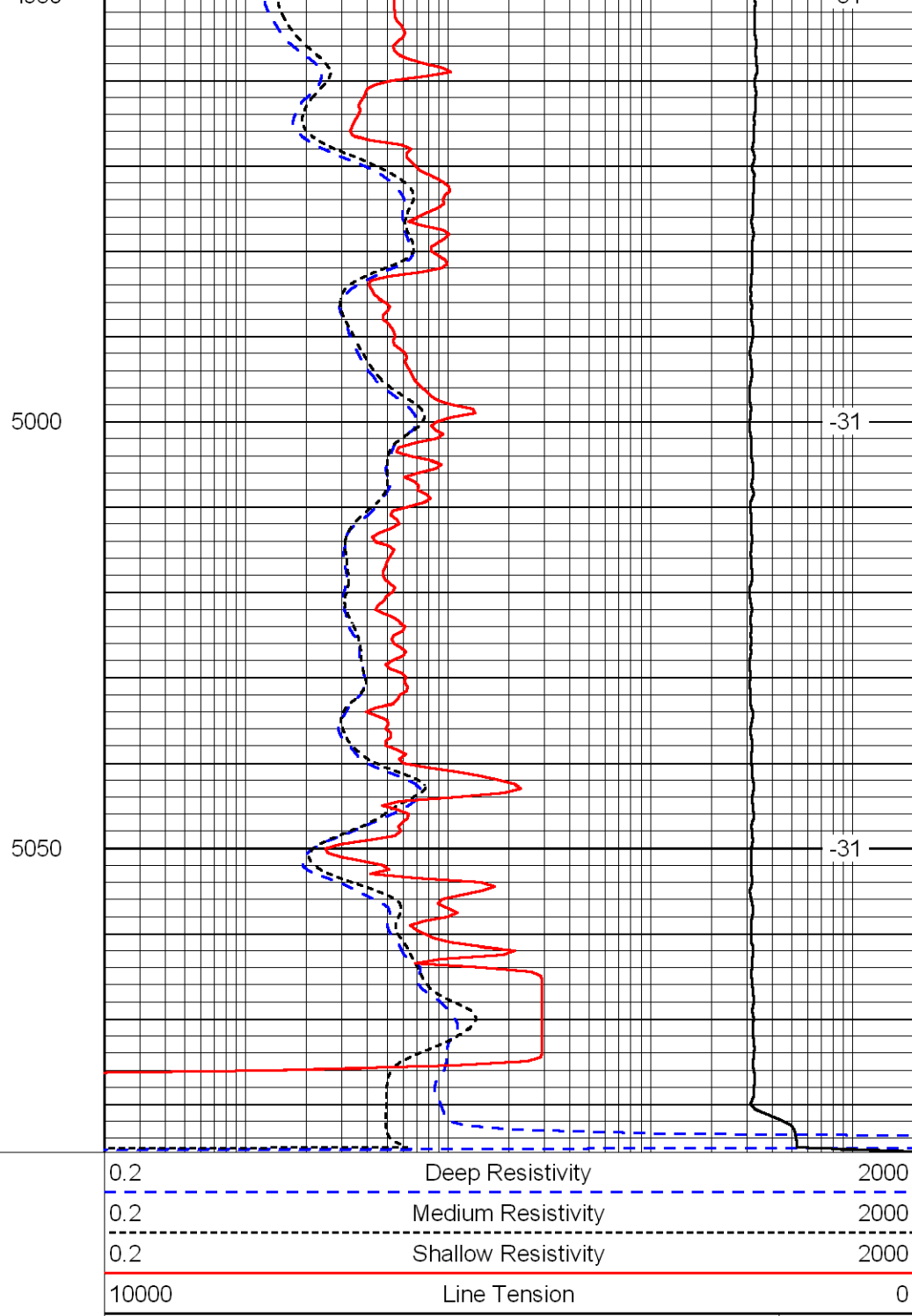
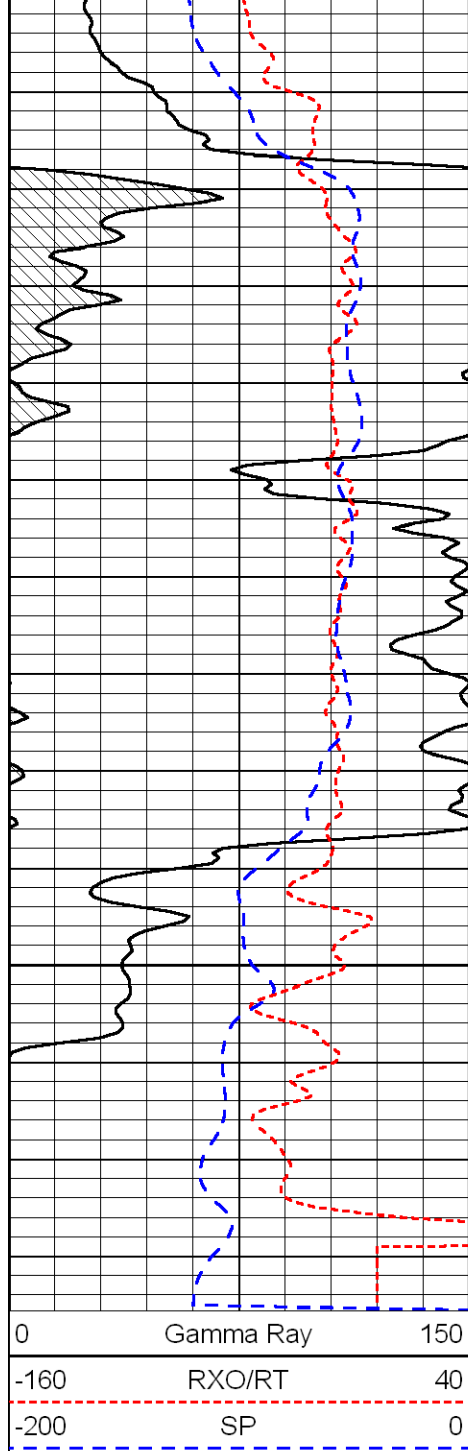
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