



Pioneer Energy Services

# Dual Induction Log

API No.	15-047-21641-00-00	
Company	Toto Energy, LLC	
Well	Acoustic Guitar #16-1	
Field	Wil	
County	Edwards	State
		Kansas
Location	W2 W2 E2 SE 1320' FSL / 1100' FEL	
Sec: 16	Twp: 25S	Rge: 16W
Permanent Datum	Ground Level	Elevation 2072
Log Measured From	Kelly Bushing	10 Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing	
		Other Services CNL / CDL MEL
		Elevation K.B. 2082 D.F. G.L. 2072

Date	10/24/2014
Run Number	One
Depth Driller	4820
Depth Logger	4818
Bottom Logged Interval	4817
Top Log Interval	350
Casing Driller	8.625 @ 359
Casing Logger	354
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	6700
Density / Viscosity	9.1   48
pH / Fluid Loss	7.5   11.2
Source of Sample	Flowline
Rm @ Meas. Temp	0.48 @ 60
Rmf @ Meas. Temp	0.36 @ 60
Rmc @ Meas. Temp	0.65 @ 60
Source of Rmf / Rmc	Charts
Rm @ BHT	0.23 @ 124
Operating Rig Time	4 Hours
Max Rec. Temp. F	124
Equipment Number	10
Location	Hays
Recorded By	R. Barnhart
Witnessed By	Sonia McDanel

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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

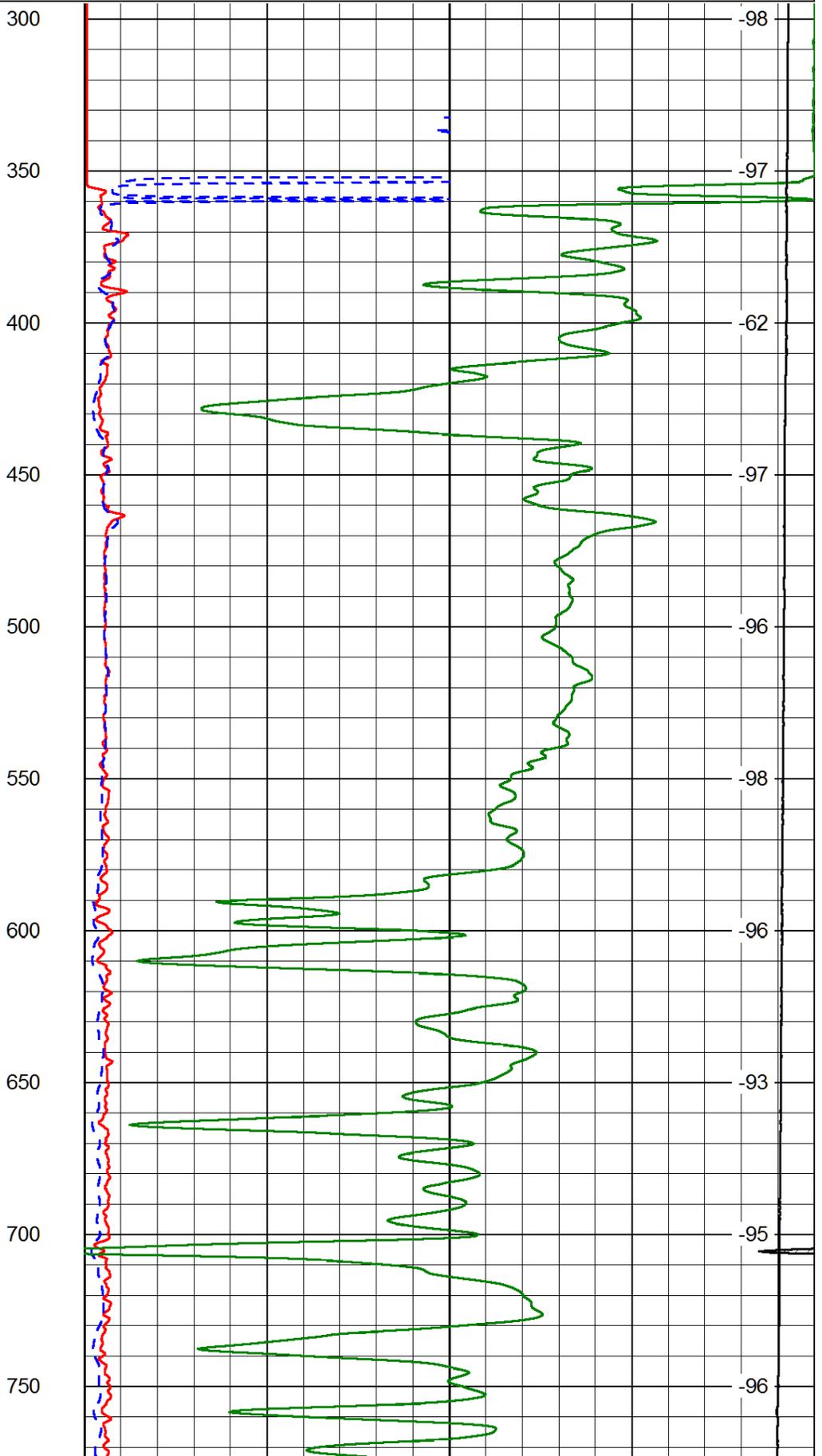
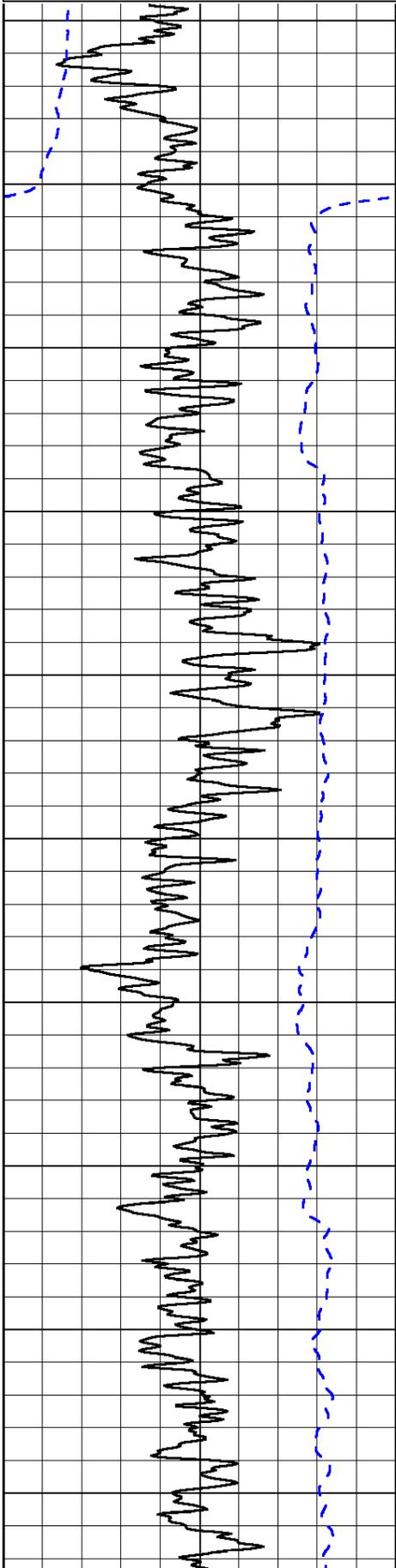
Thank you for using Log-Tech, Inc.  
 (785) 625-3858  
 Belpre, KS:  
 5S, 1E, N into

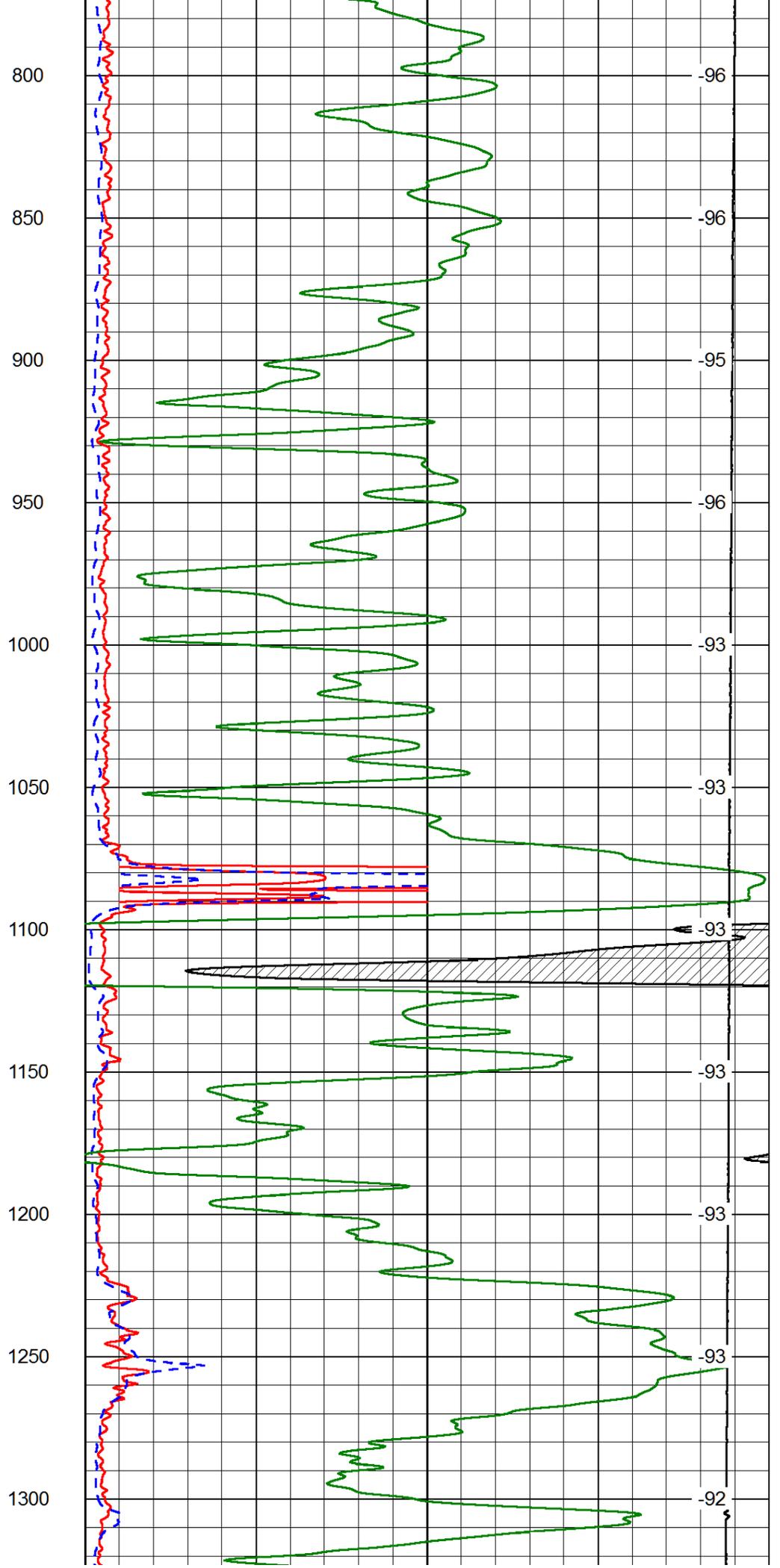
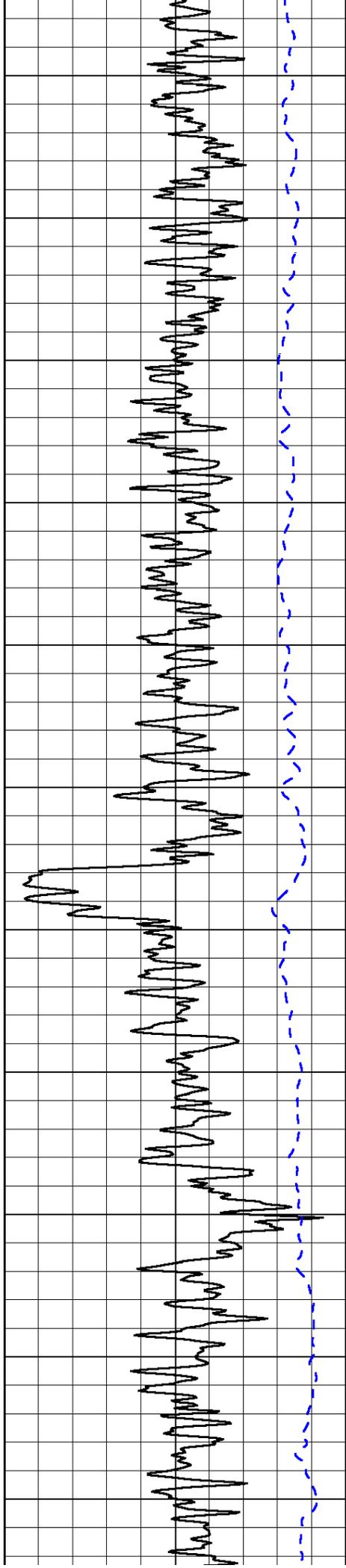
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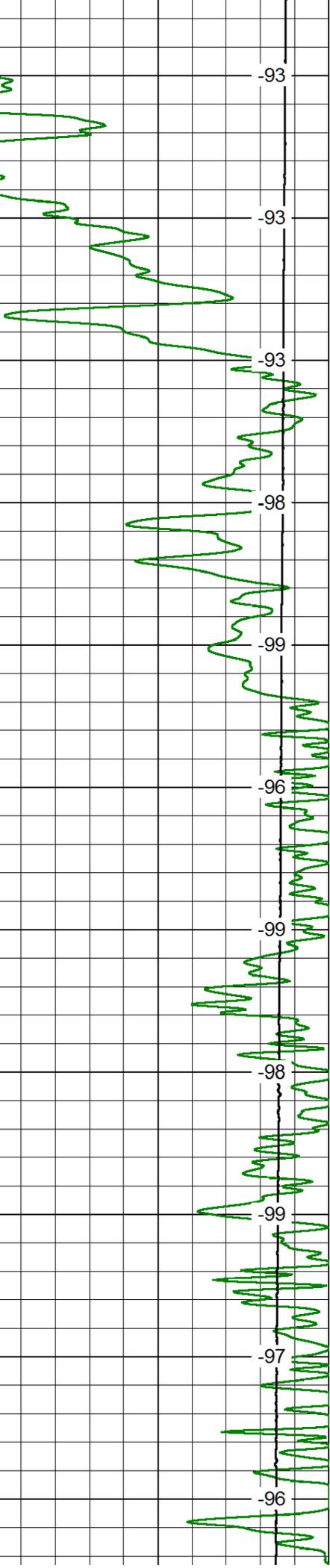
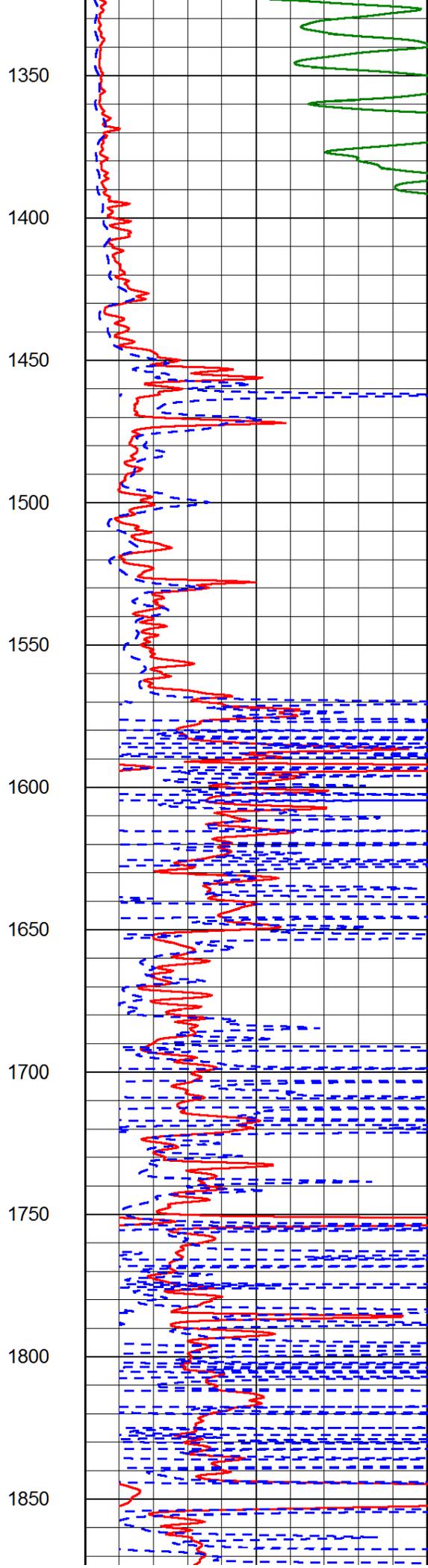
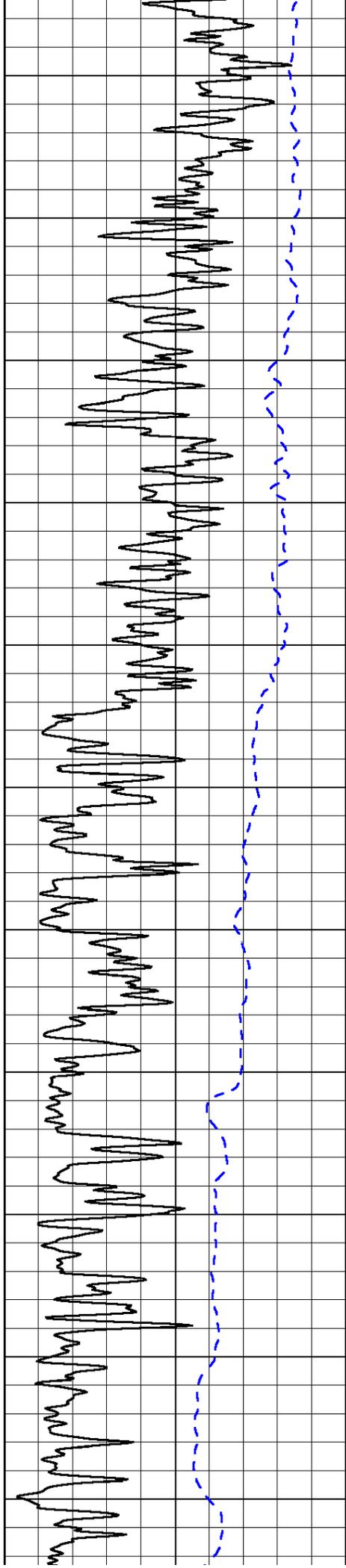
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-200	SP (mV)	0

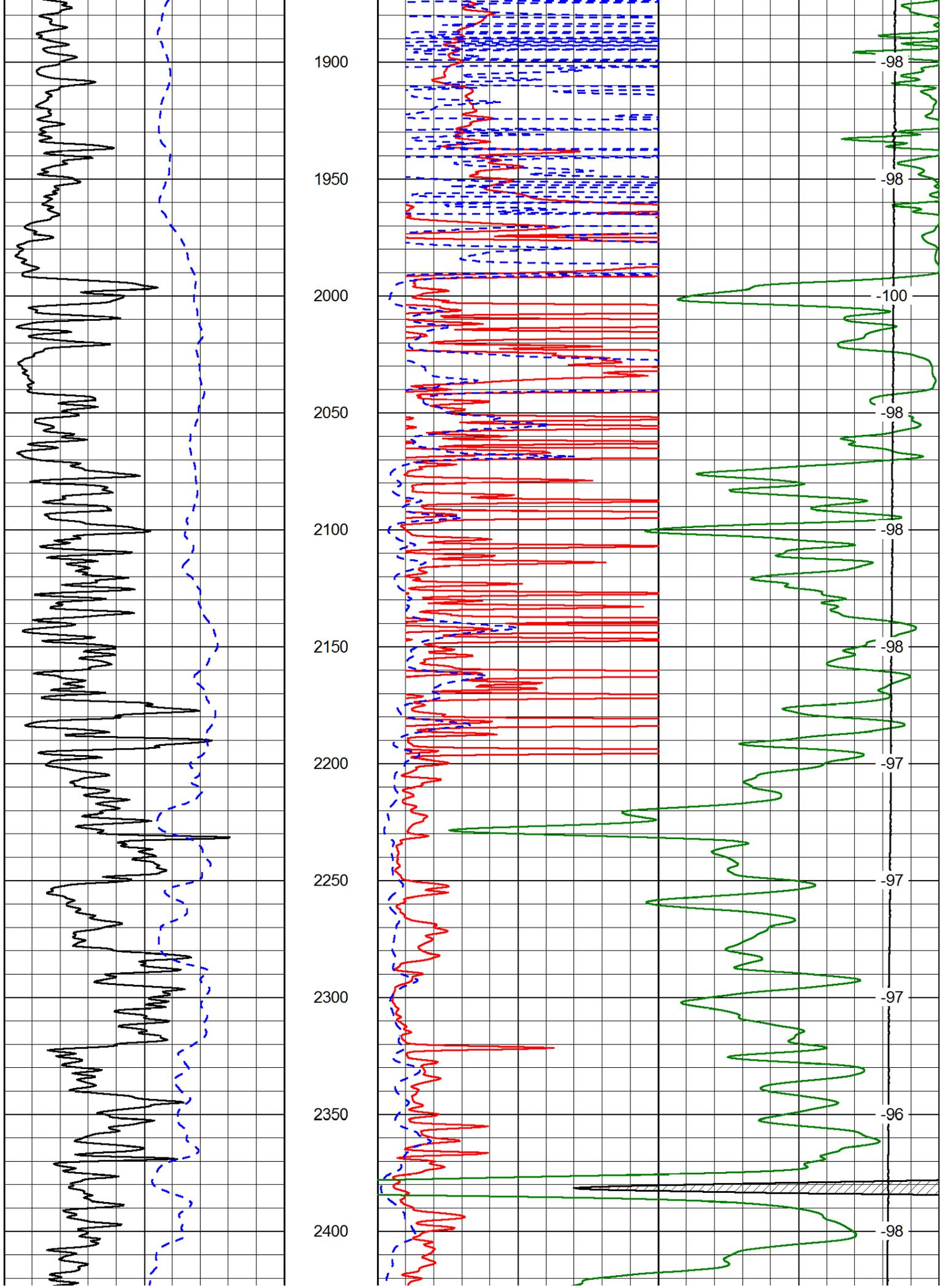
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15000	Line Tension	0
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50	Deep Resistivity	500

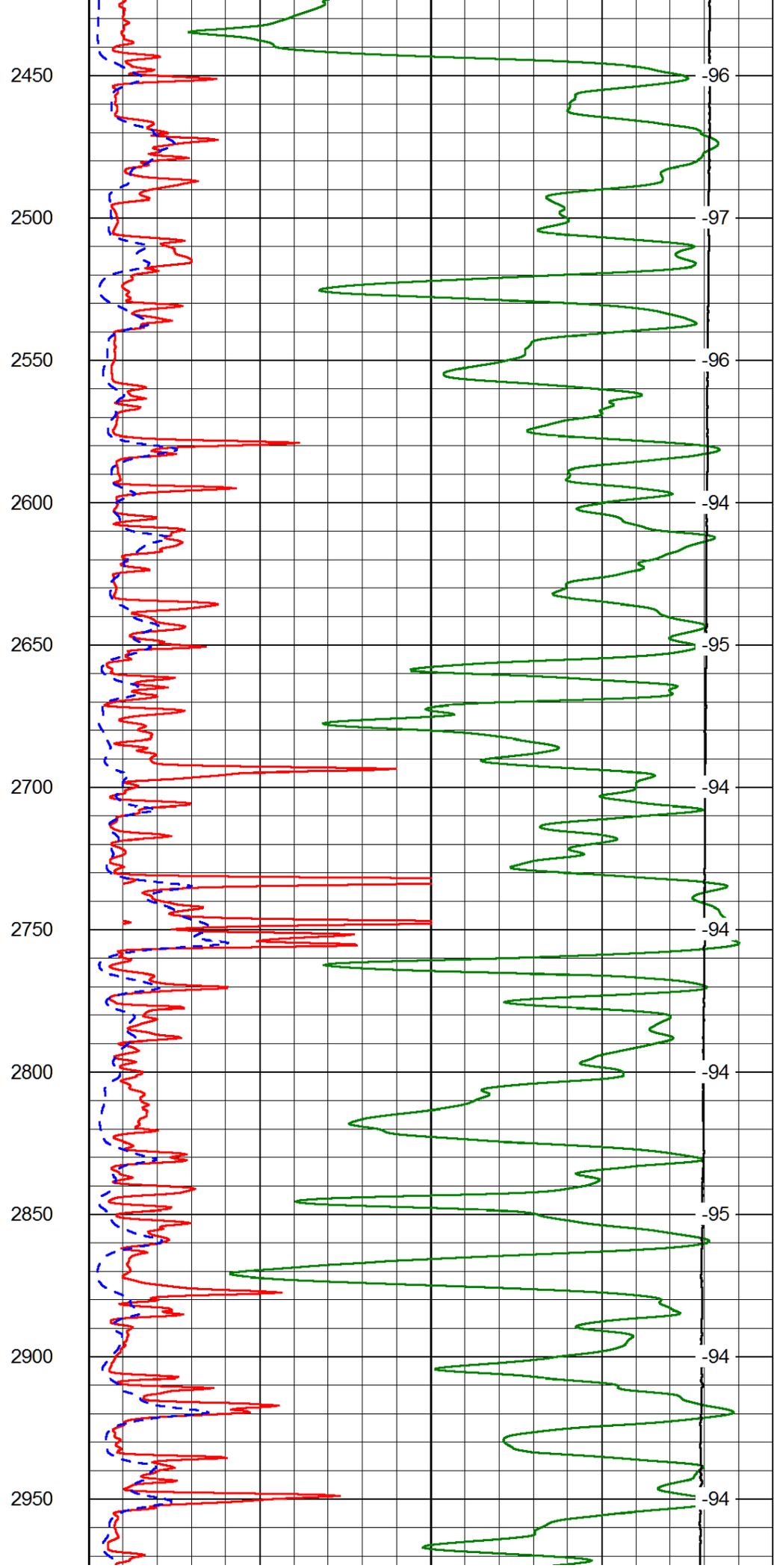
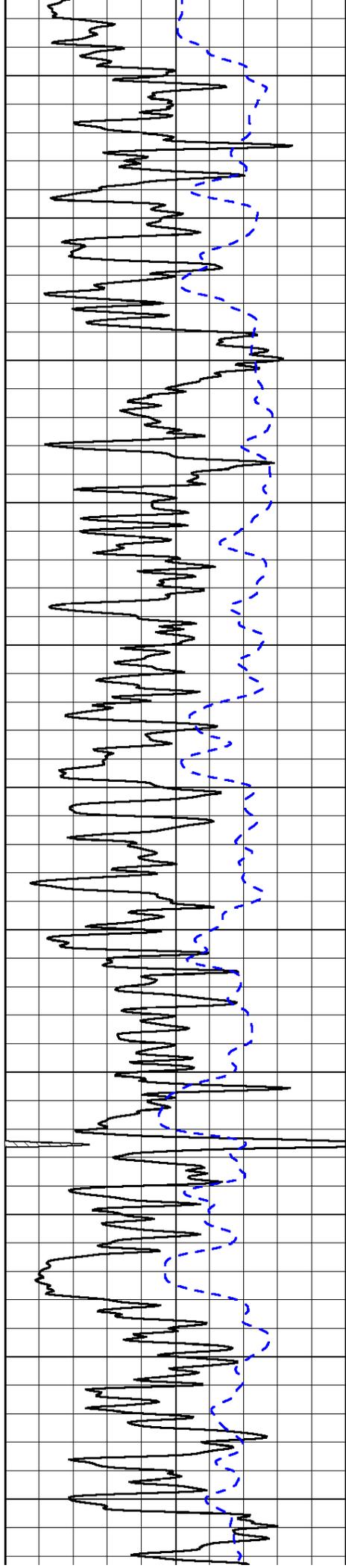
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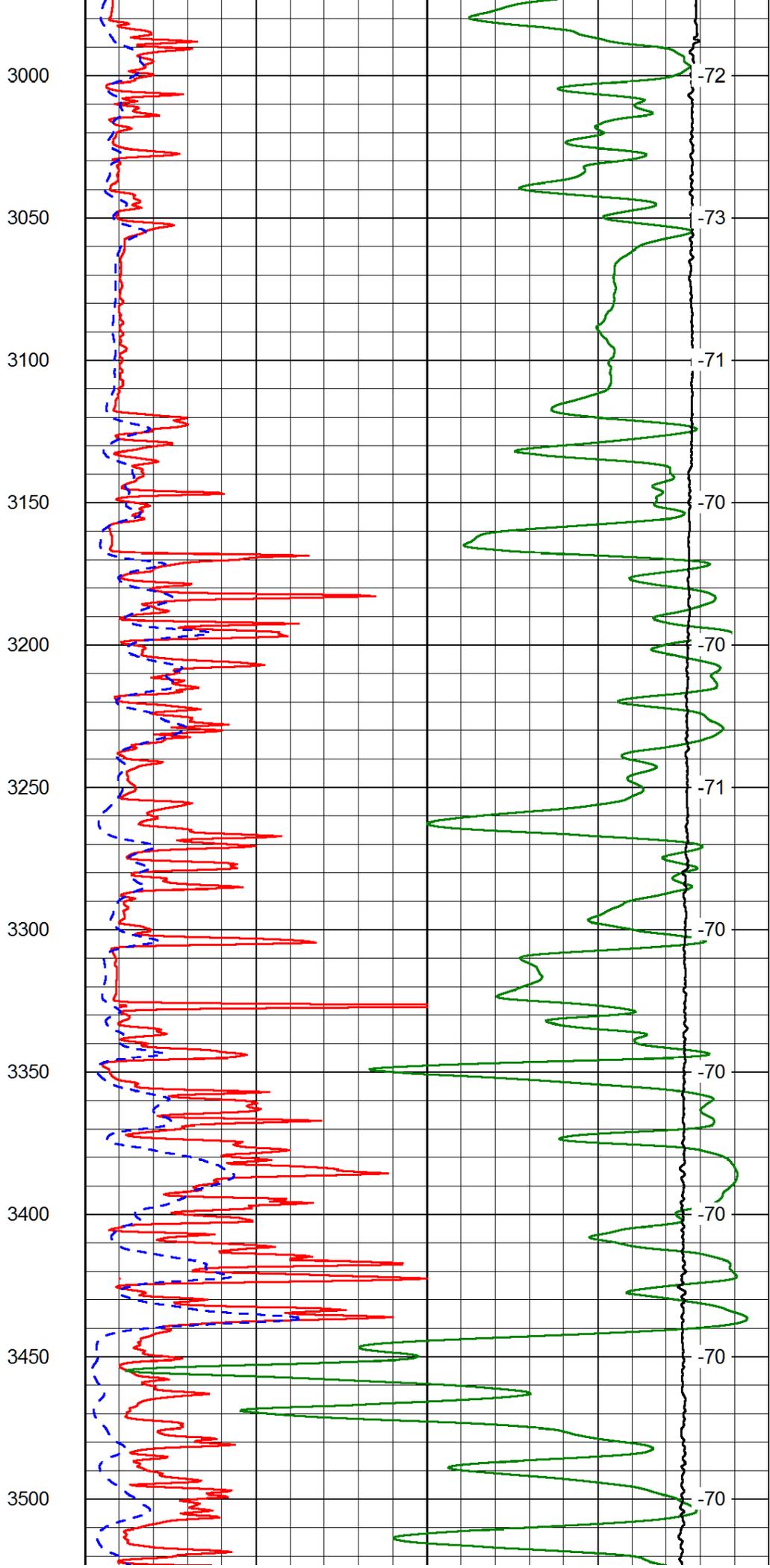
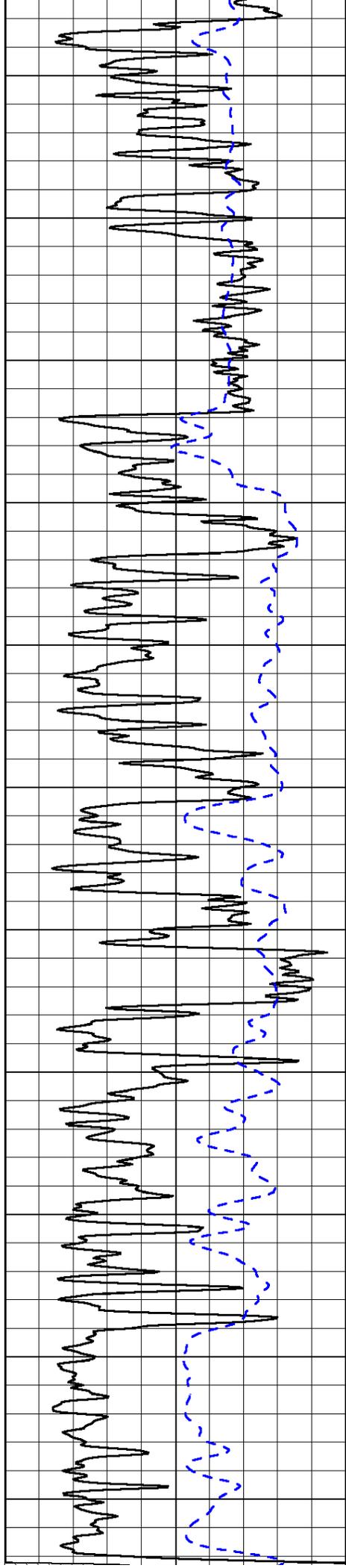


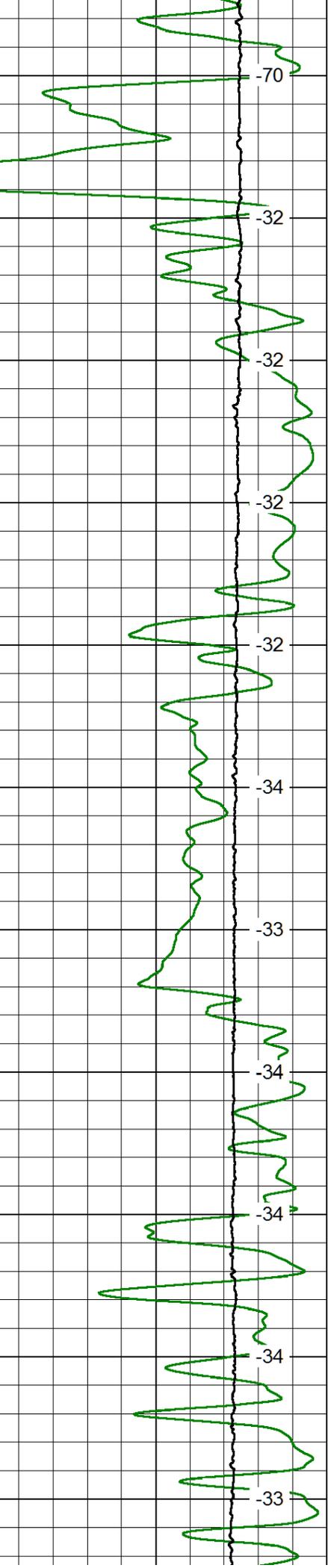
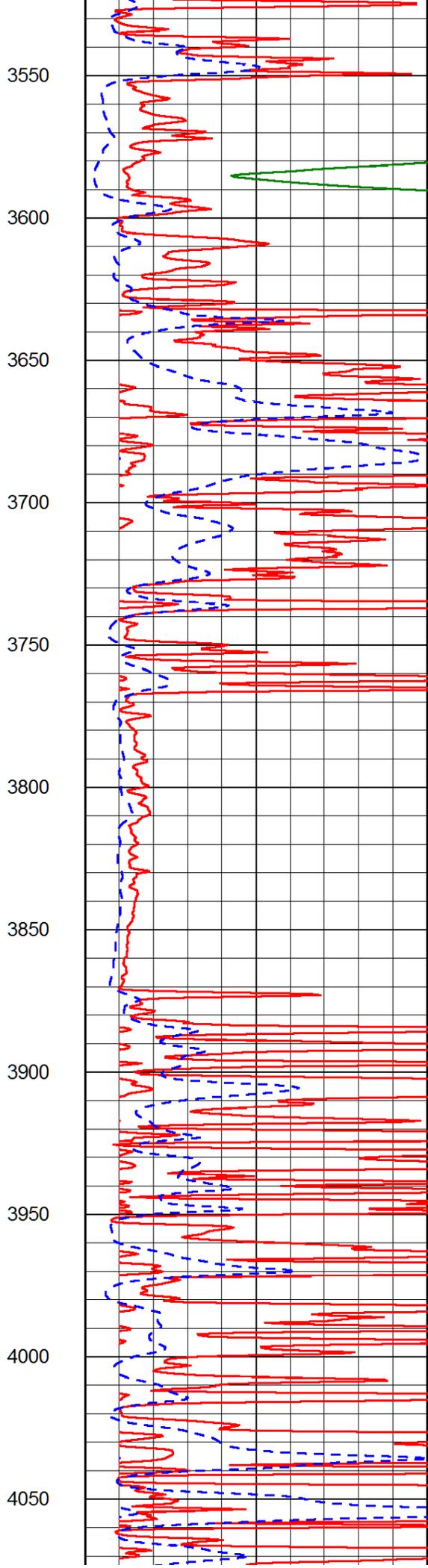
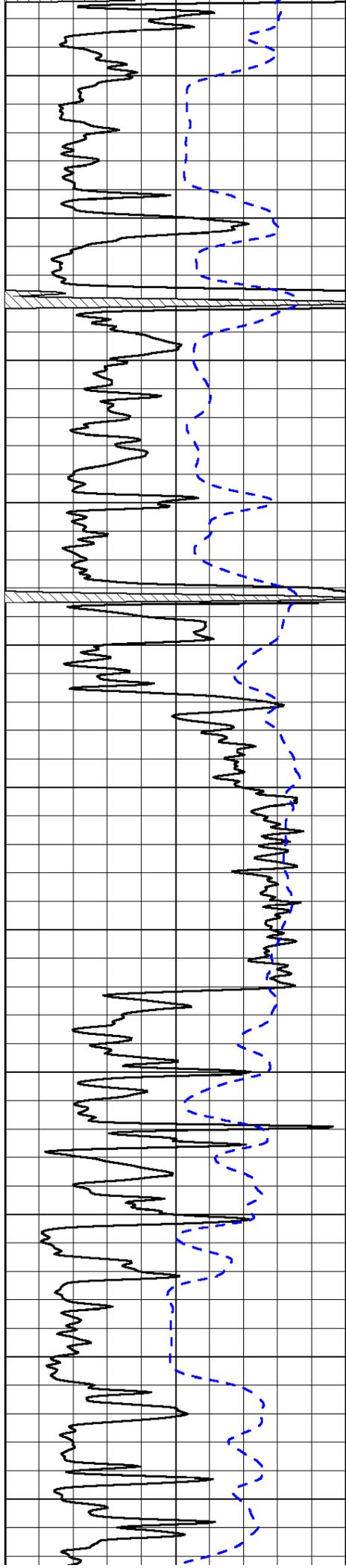


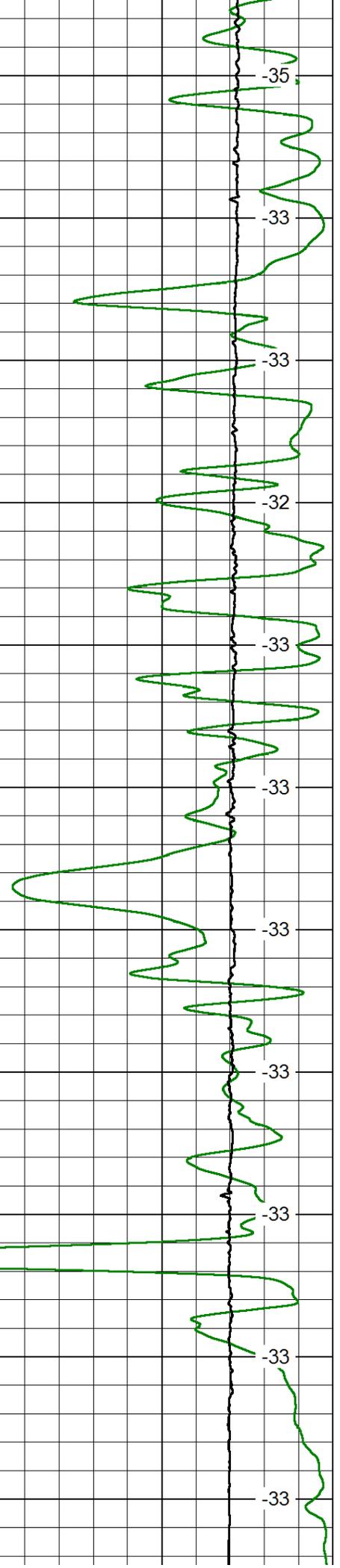
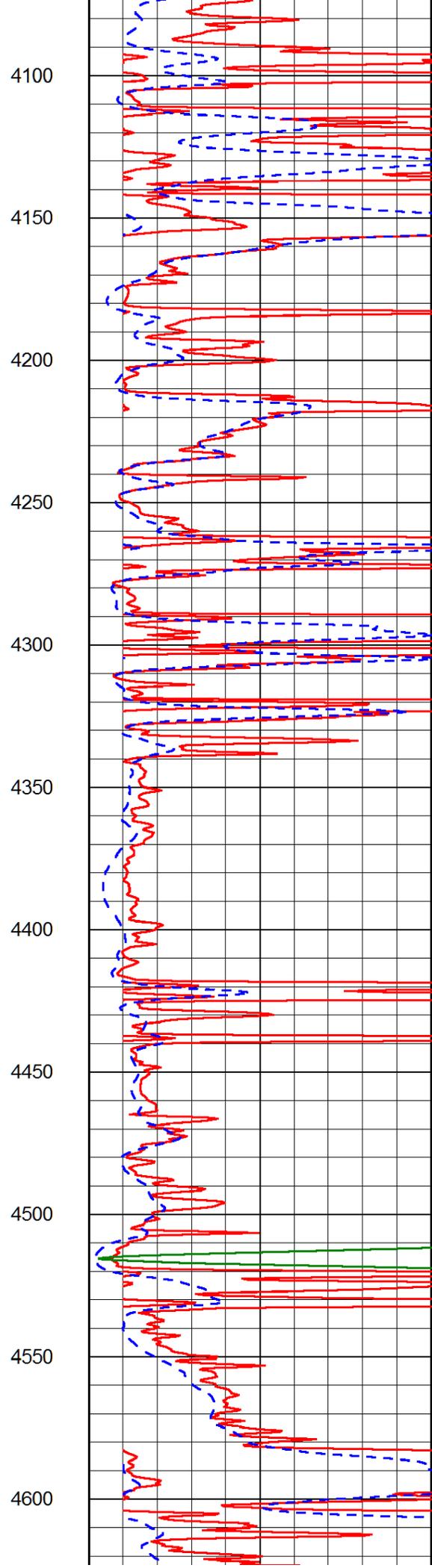
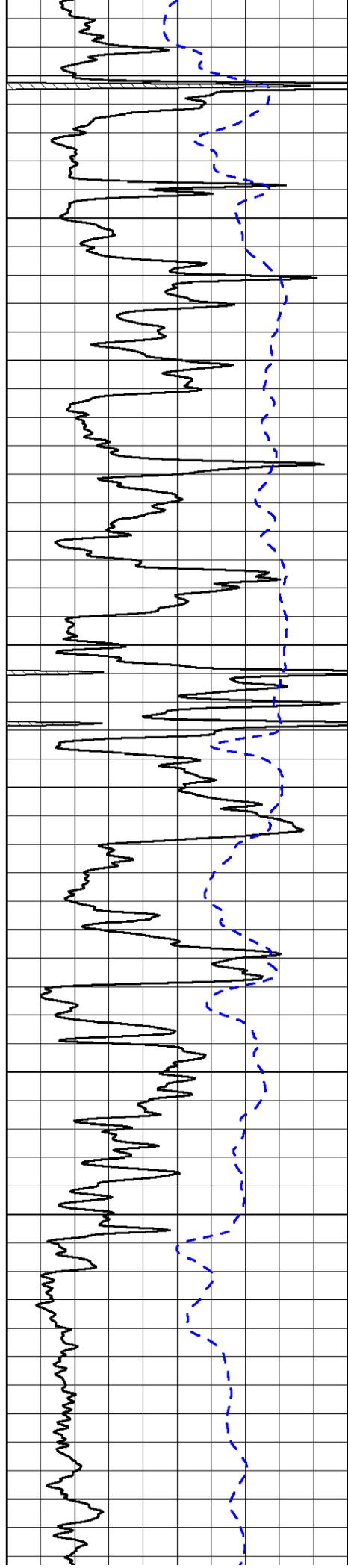


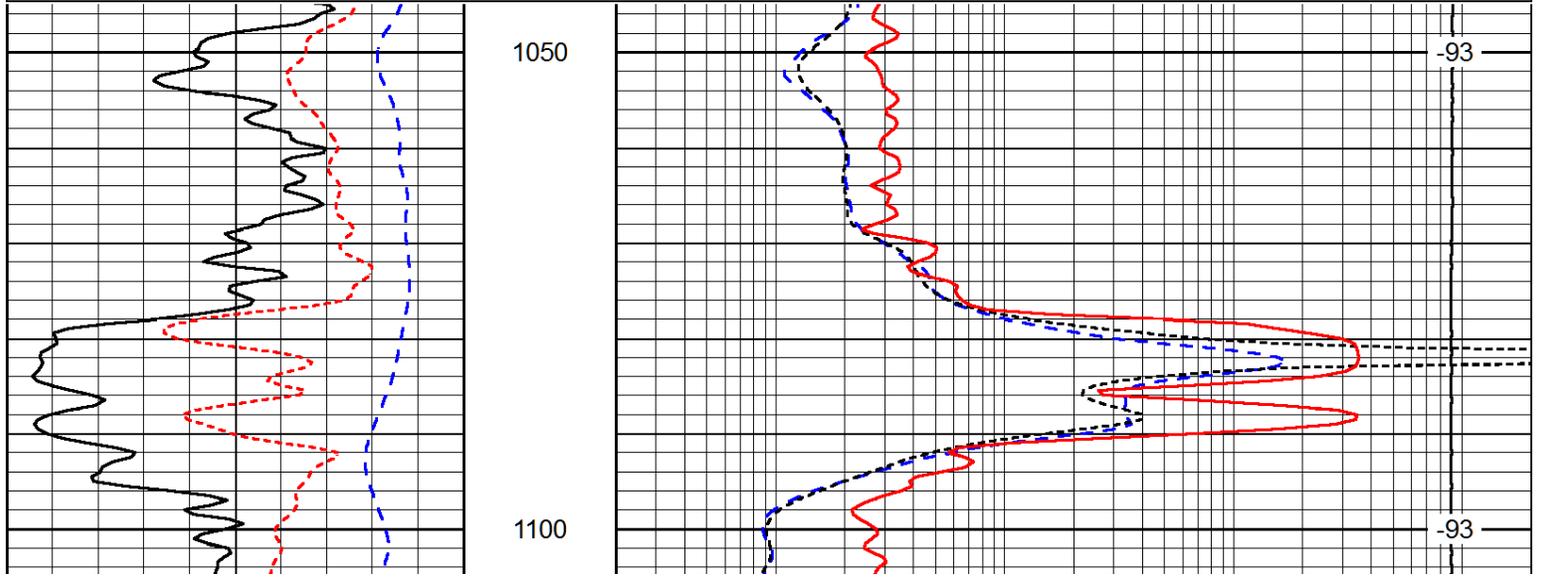
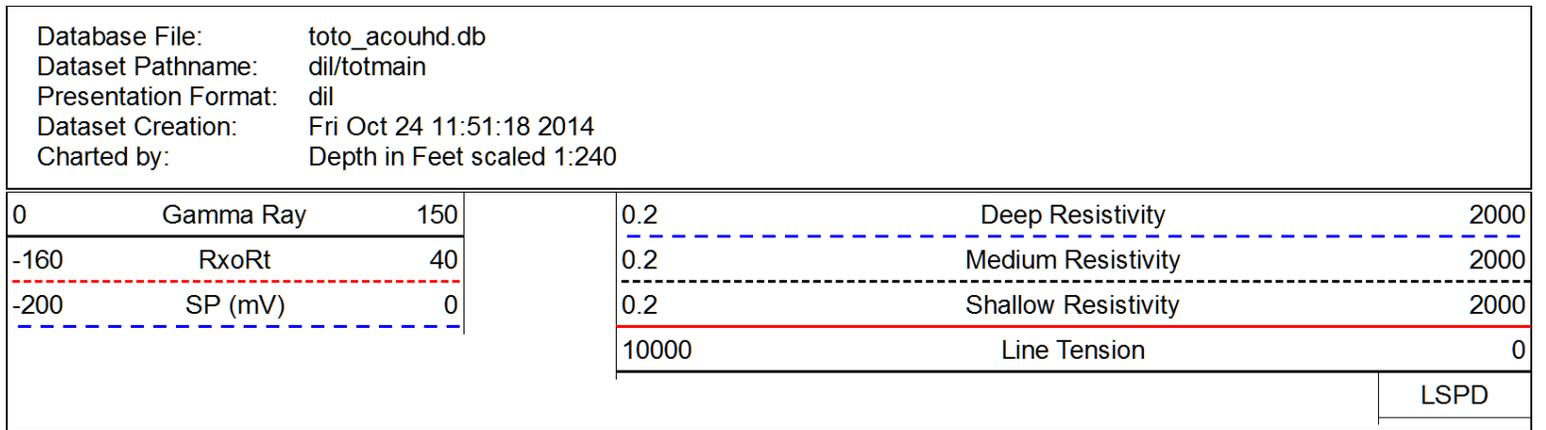
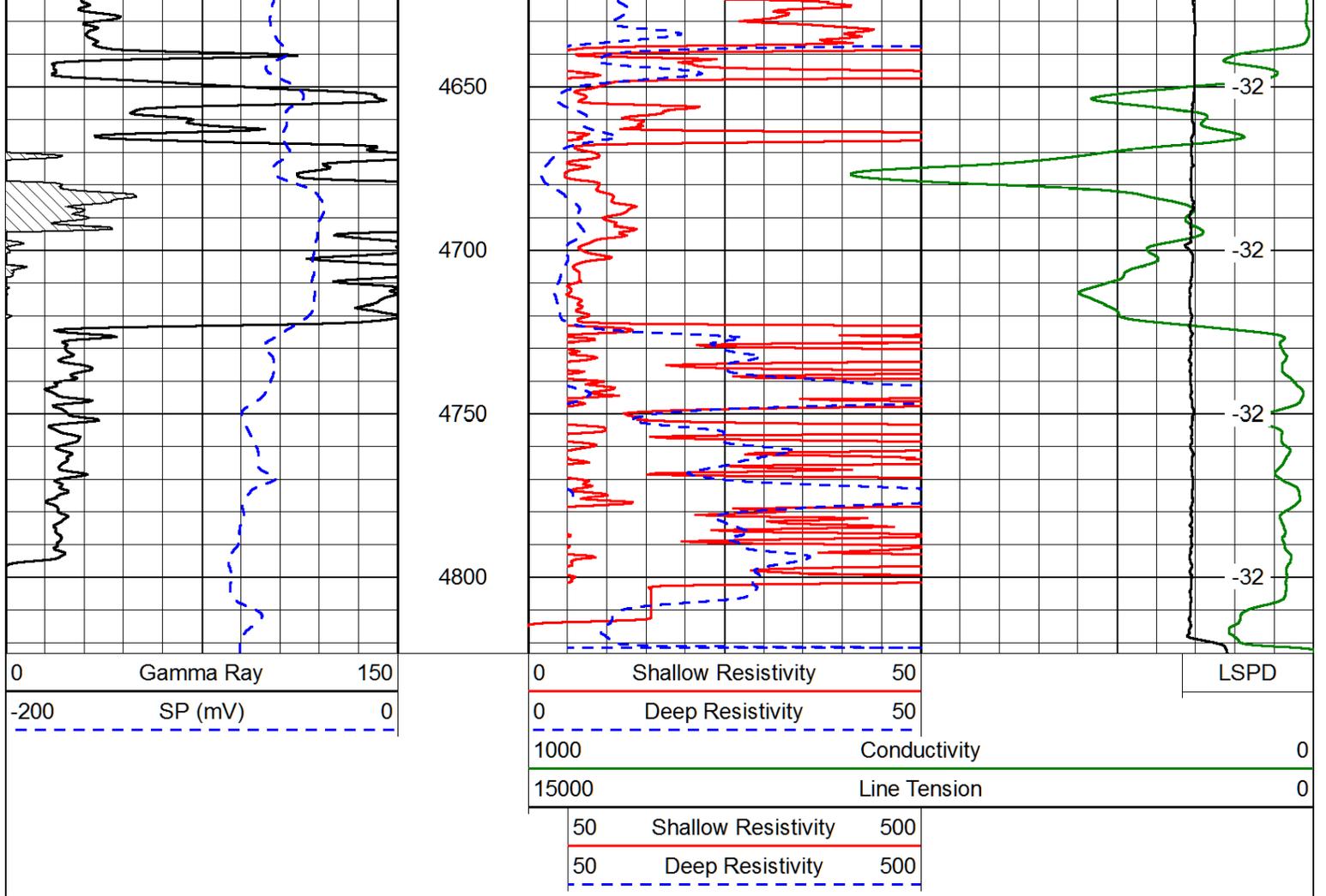


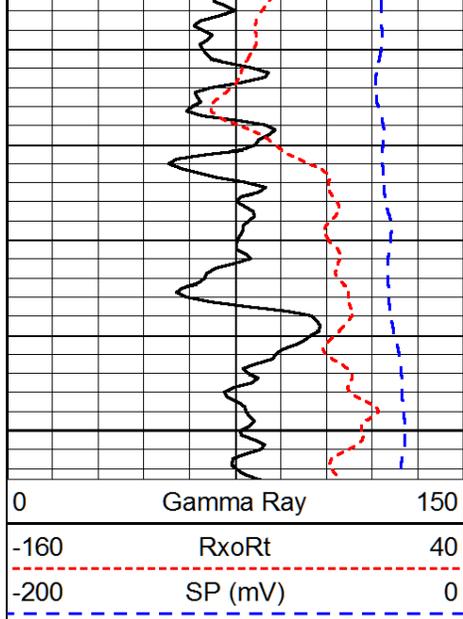




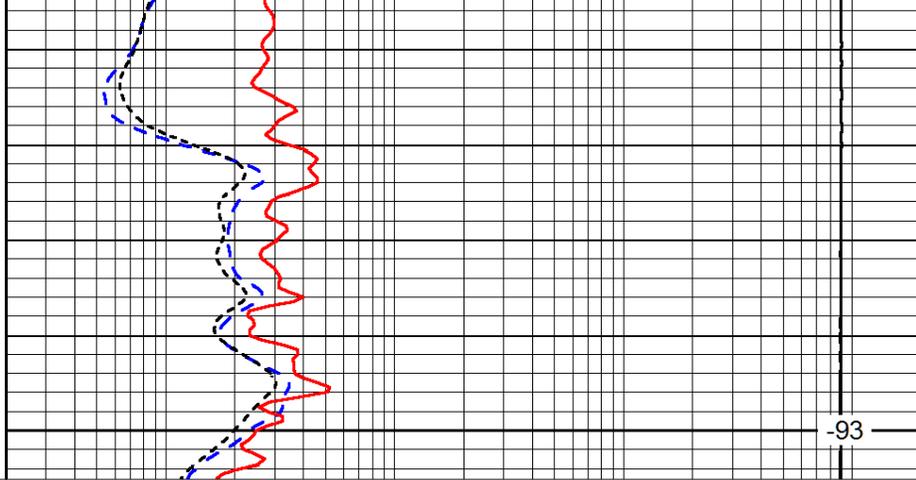








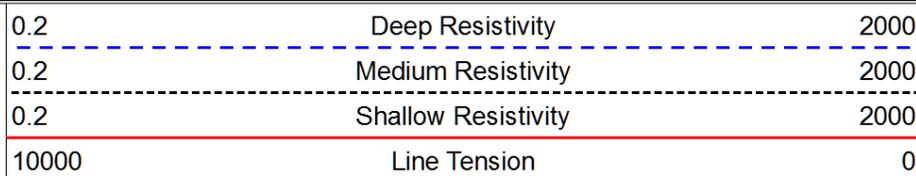
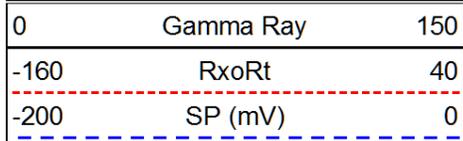
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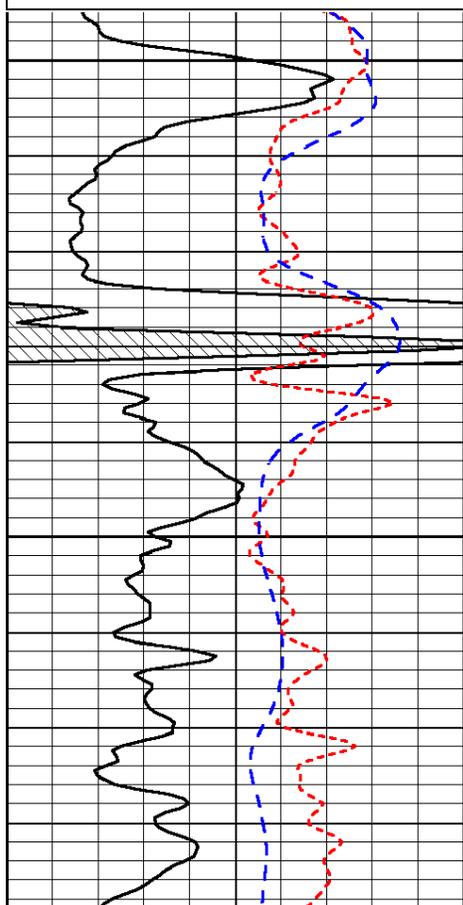
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LSPD

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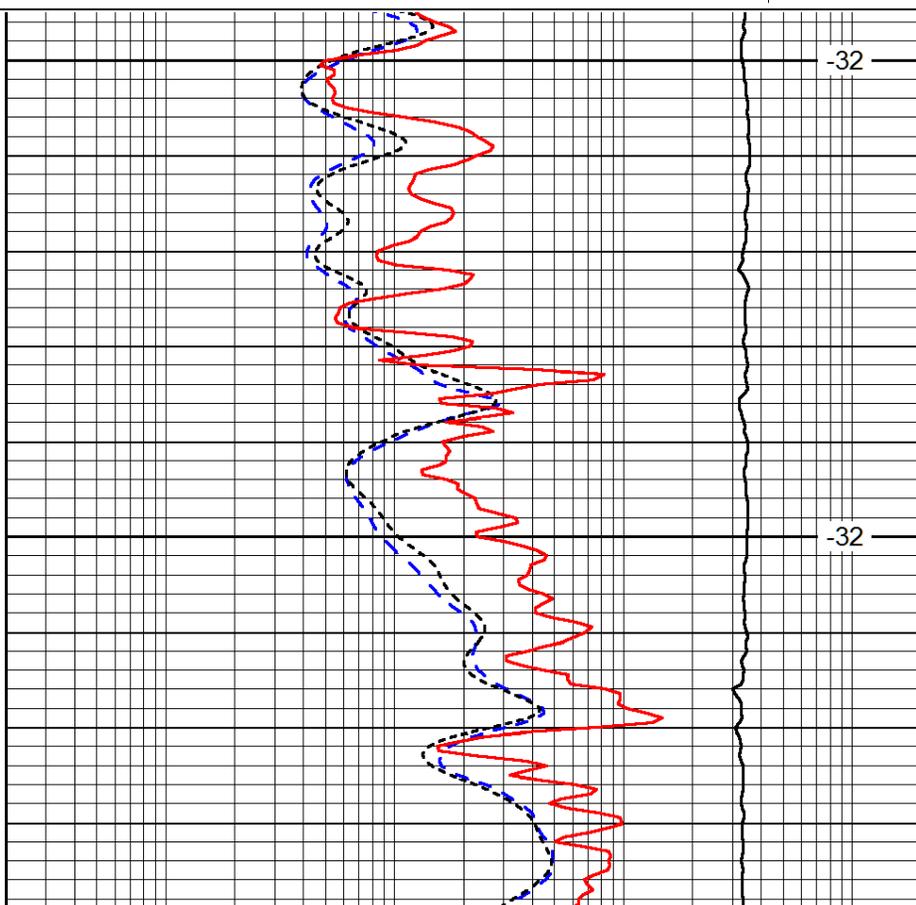


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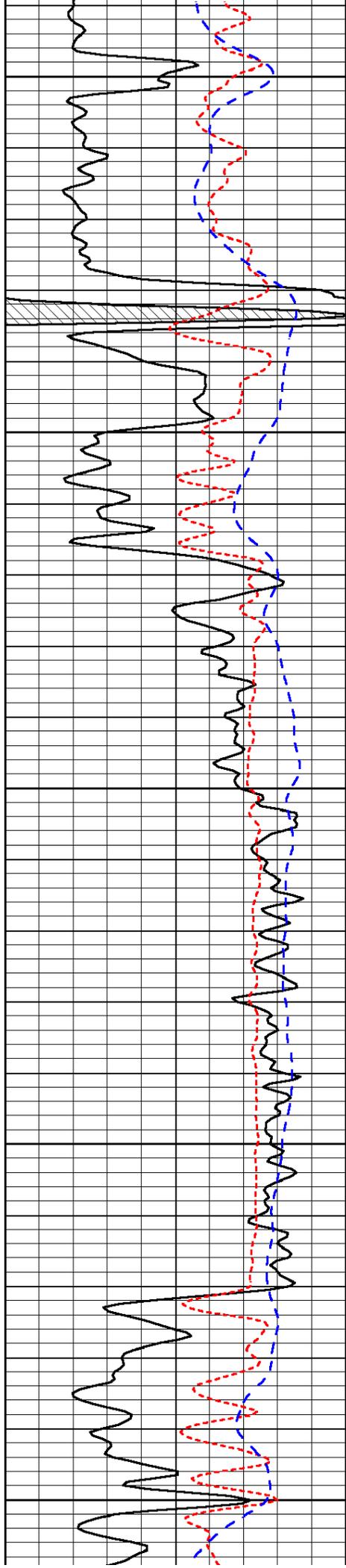
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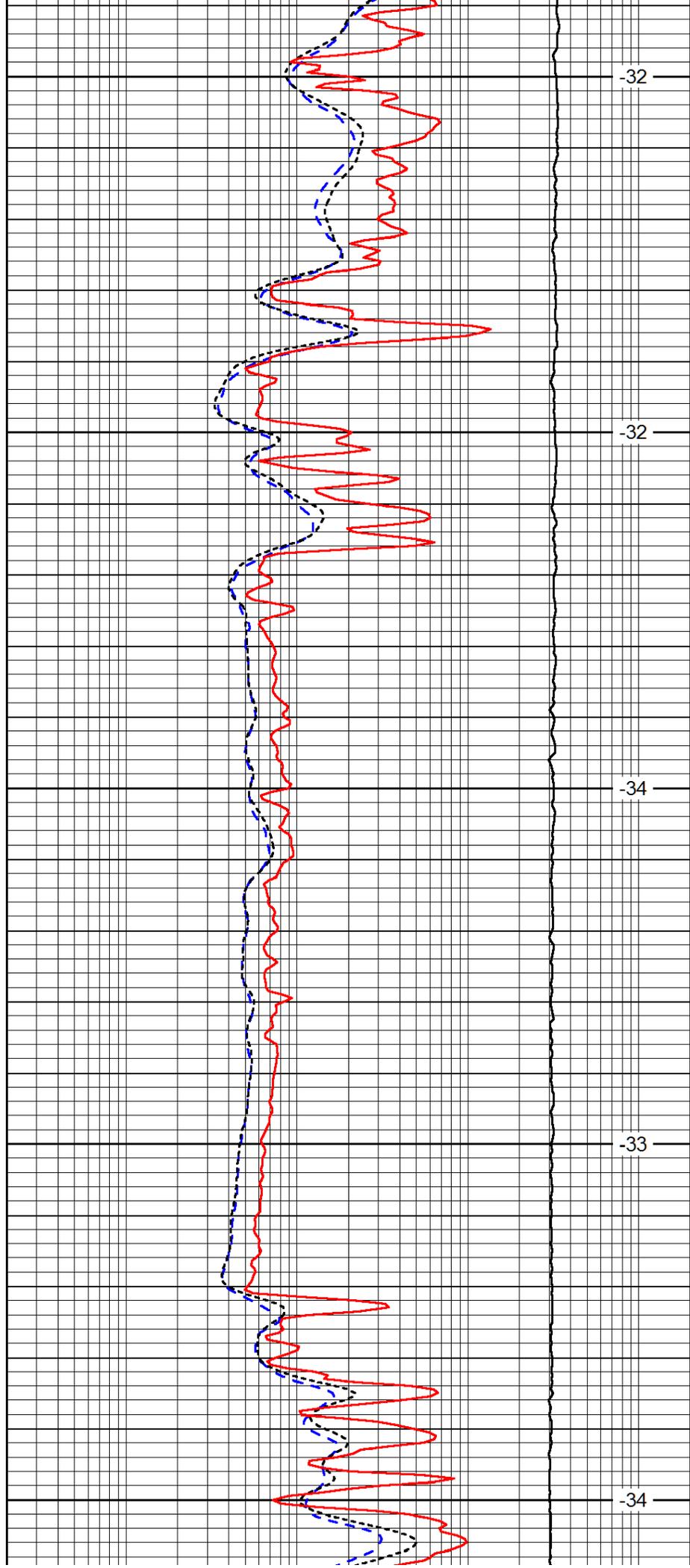
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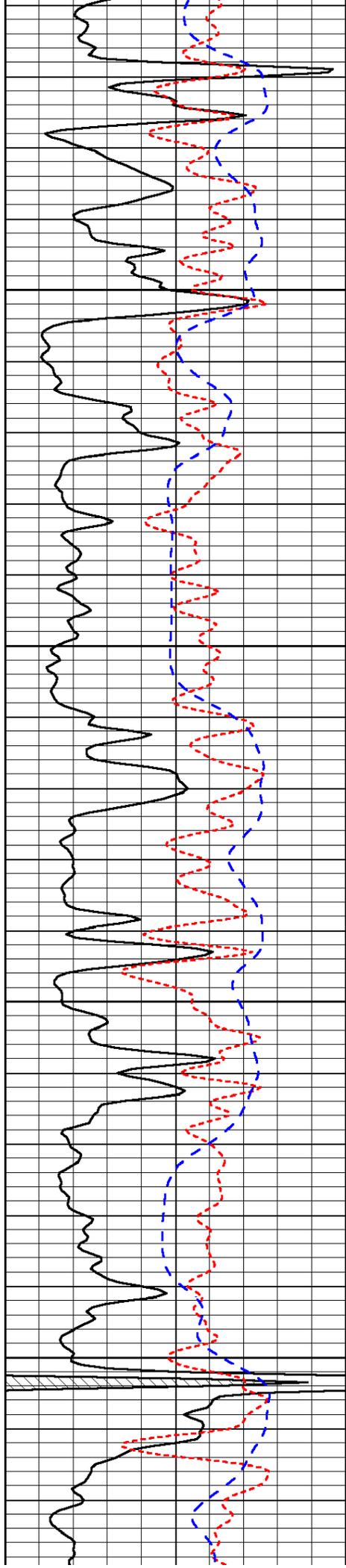
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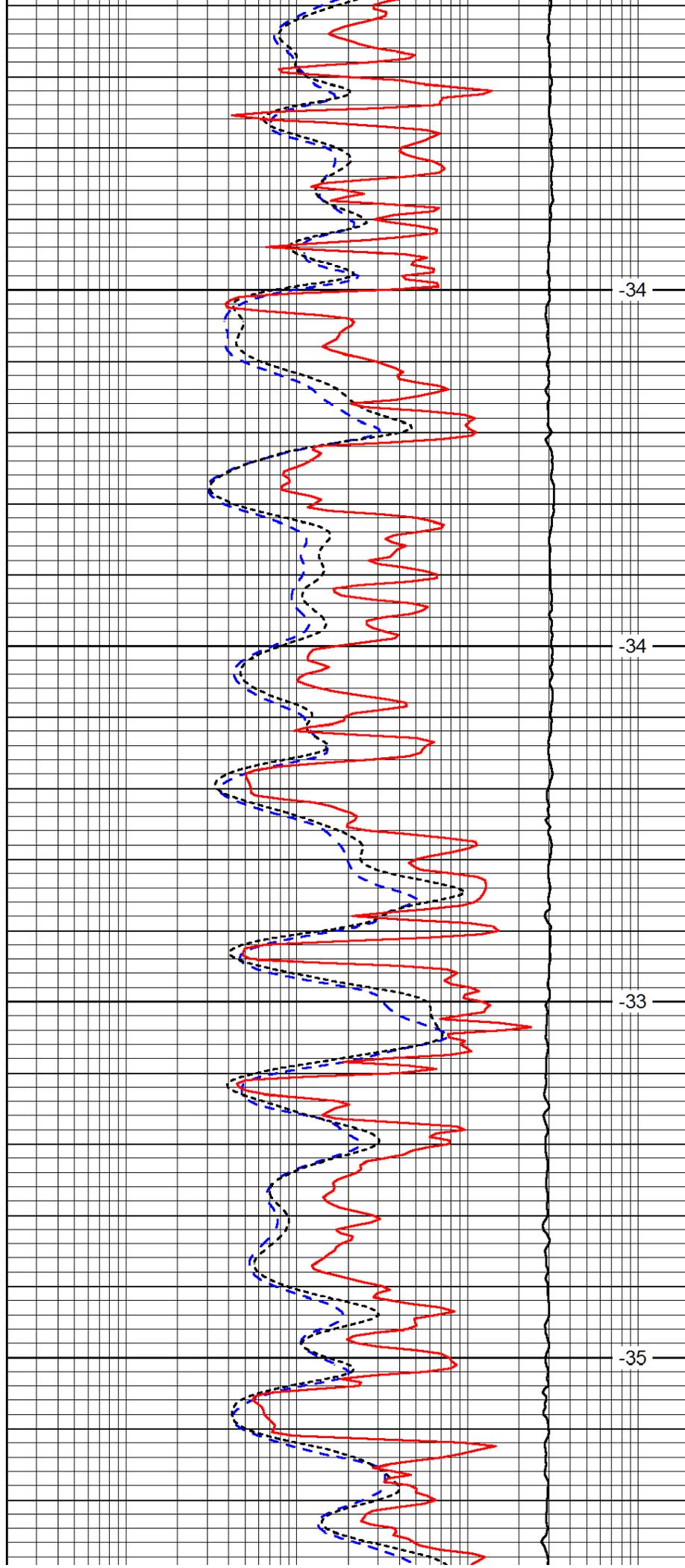


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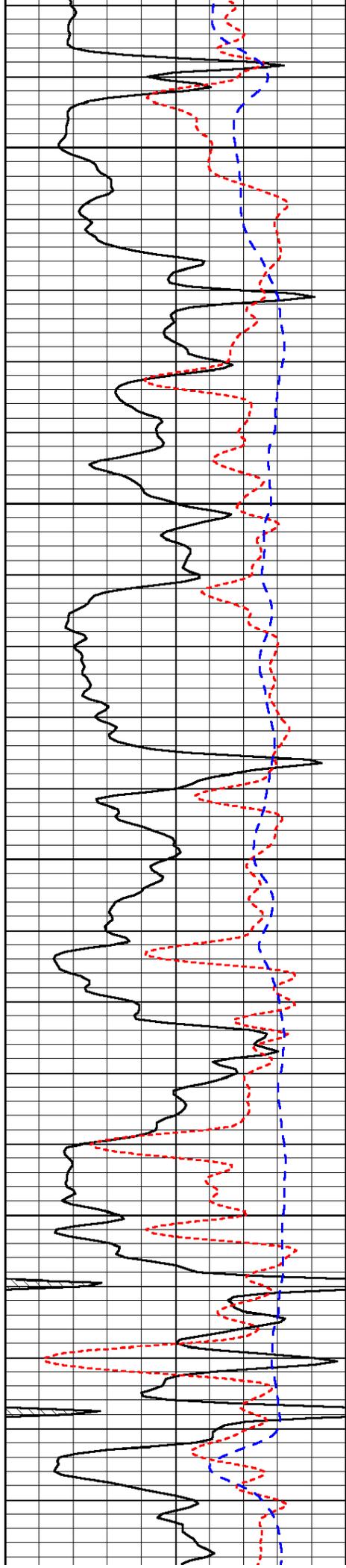


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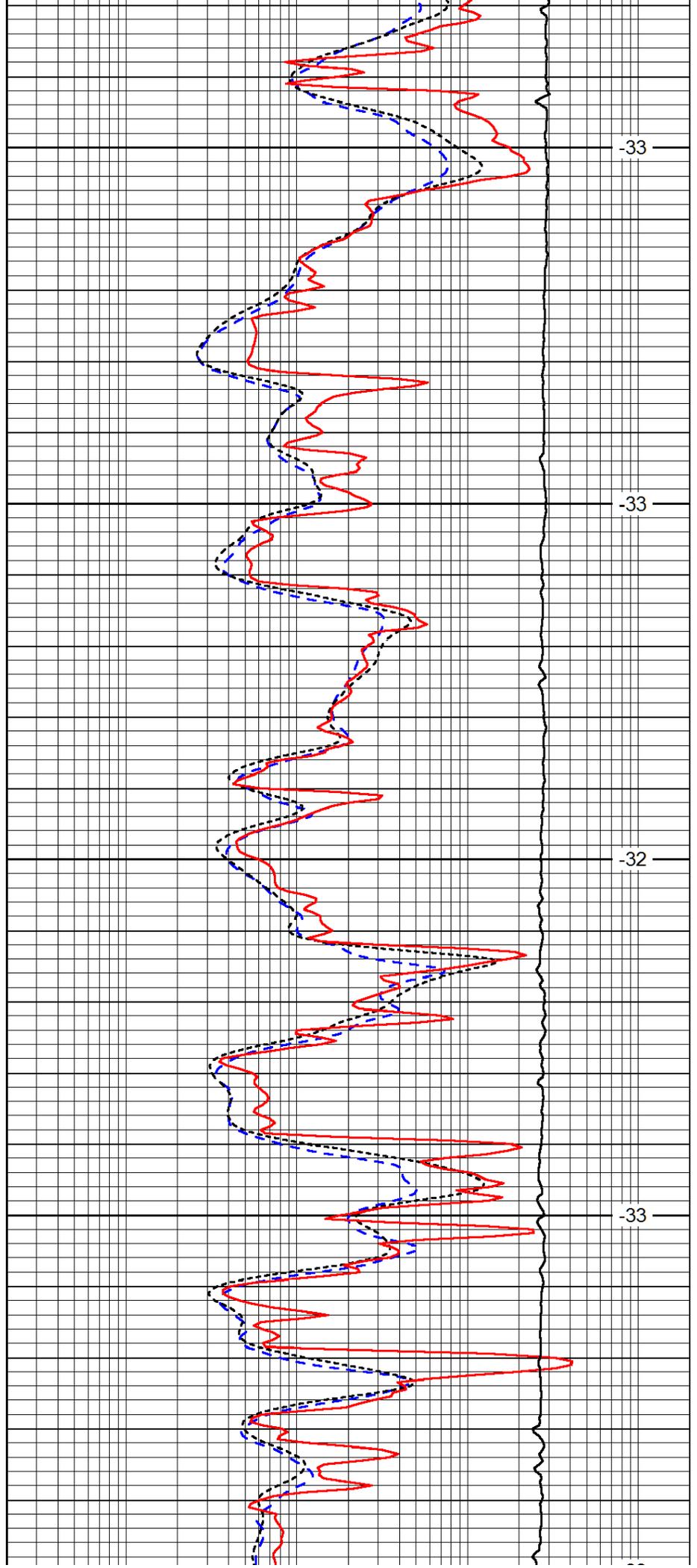


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4200

4250

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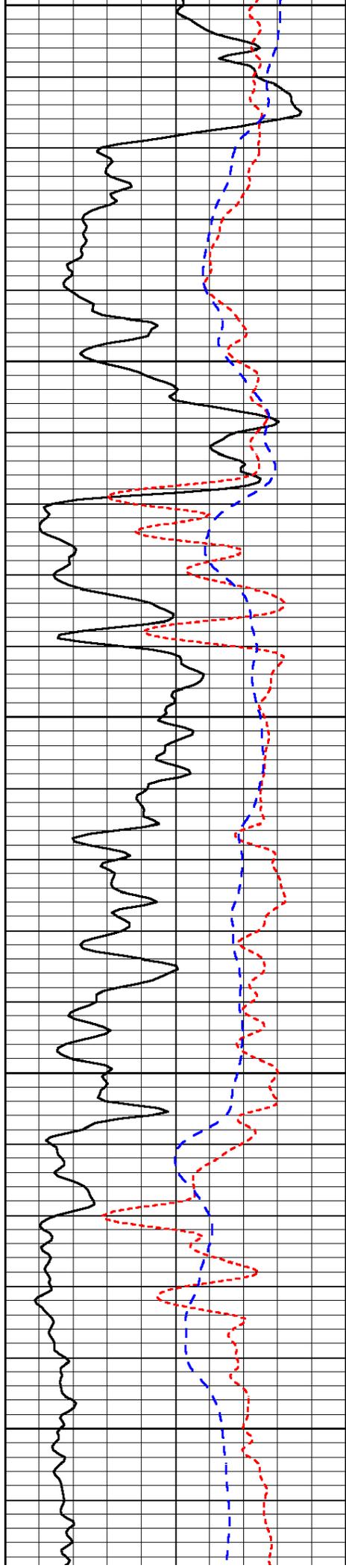


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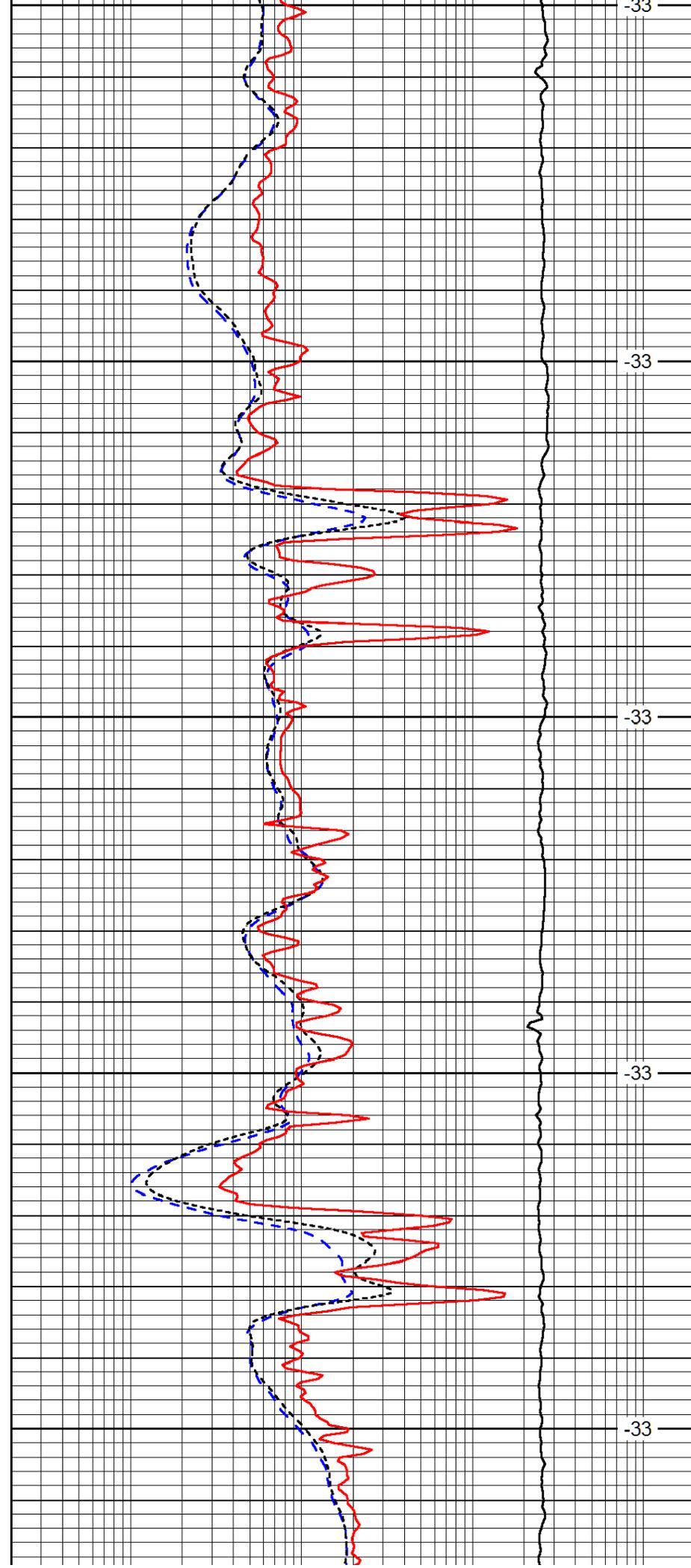
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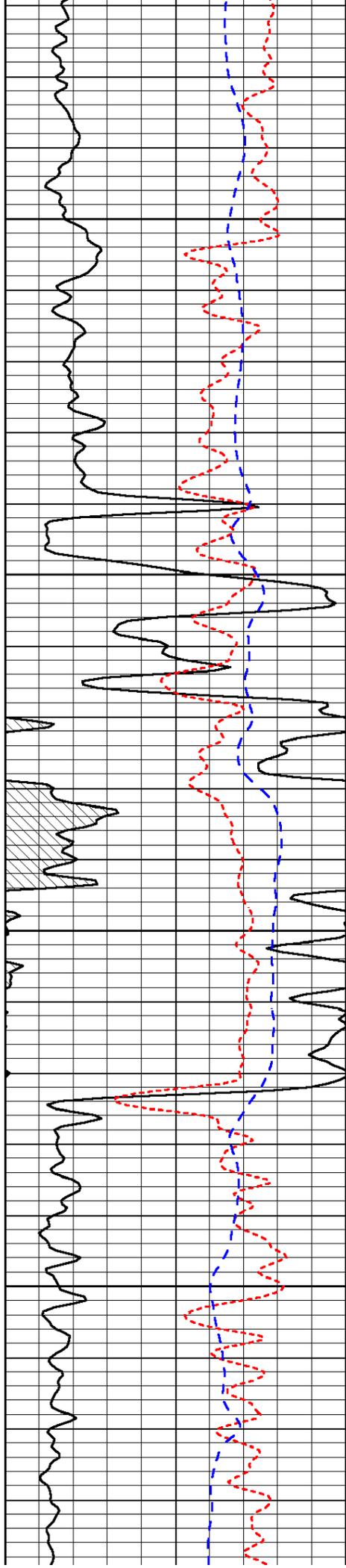
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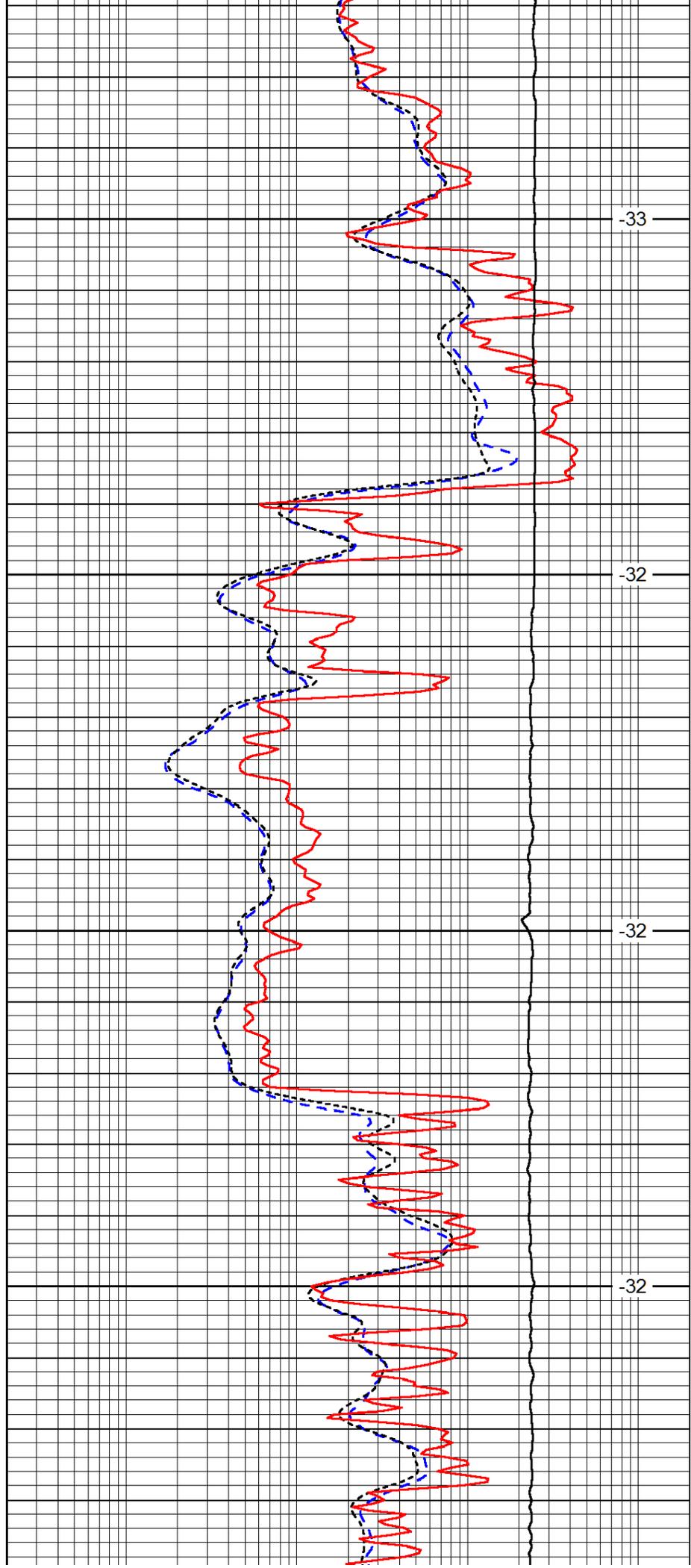


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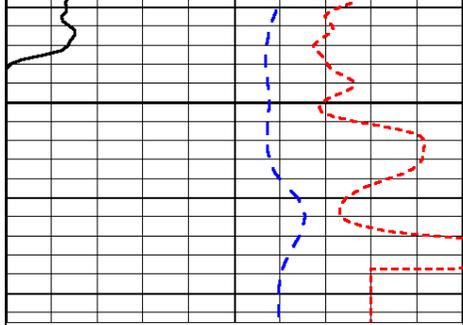


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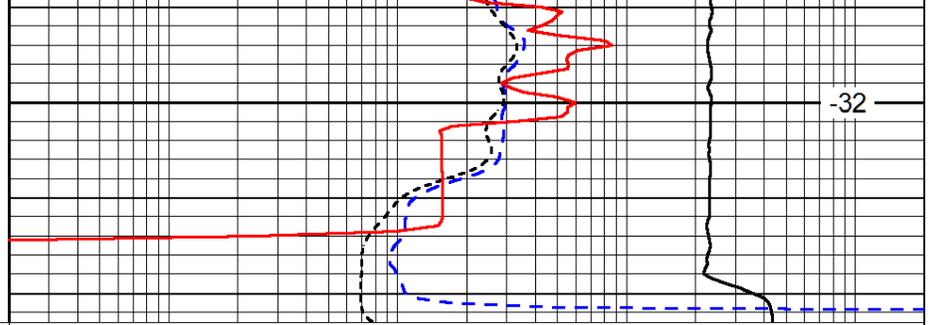
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4800

0	Gamma Ray	150
-160	RxoRt	40
-200	SP (mV)	0



-32

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD