



Pioneer Energy Services

Dual Induction Log

API No.	15-101-22414-00-00		
Company	Flatirons Resources, LLC		
Well	Munsell #11-23		
Field	Demand Northwest		
County	Lane	State	Kansas
Location	330' FNL & 1295' FWL		
Sec: 23	Twp: 16S	Rge: 28W	Other Services CNL/CDL MEL
Permanent Datum	Ground Level	Elevation 2645	Elevation
Log Measured From	Kelly Bushing	10 Ft. Above Perm. Datum	K.B. 2655
Drilling Measured From	Kelly Bushing		D.F. 2645
			G.L. 2645

Date	12/22/2012
Run Number	One
Depth Driller	4560
Depth Logger	4560
Bottom Logged Interval	4559
Top Log Interval	200
Casing Driller	8.625 @ 223
Casing Logger	222
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	2000
Density / Viscosity	9.2 46
pH / Fluid Loss	10.0 6.8
Source of Sample	Flowline
Rm @ Meas. Temp	1.35 @ 42
Rmf @ Meas. Temp	1.01 @ 42
Rmc @ Meas. Temp	1.82 @ 42
Source of Rmf / Rmc	Charts
Rm @ BHT	0.46 @ 124
Operating Rig Time	4 Hours
Max Rec. Temp. F	124
Equipment Number	91
Location	Hays
Recorded By	D. Schmidt
Witnessed By	Ken Wallace

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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

Pendennis,
2 1/2 West to Pawnee Rd, 1 1/8 North,
West into

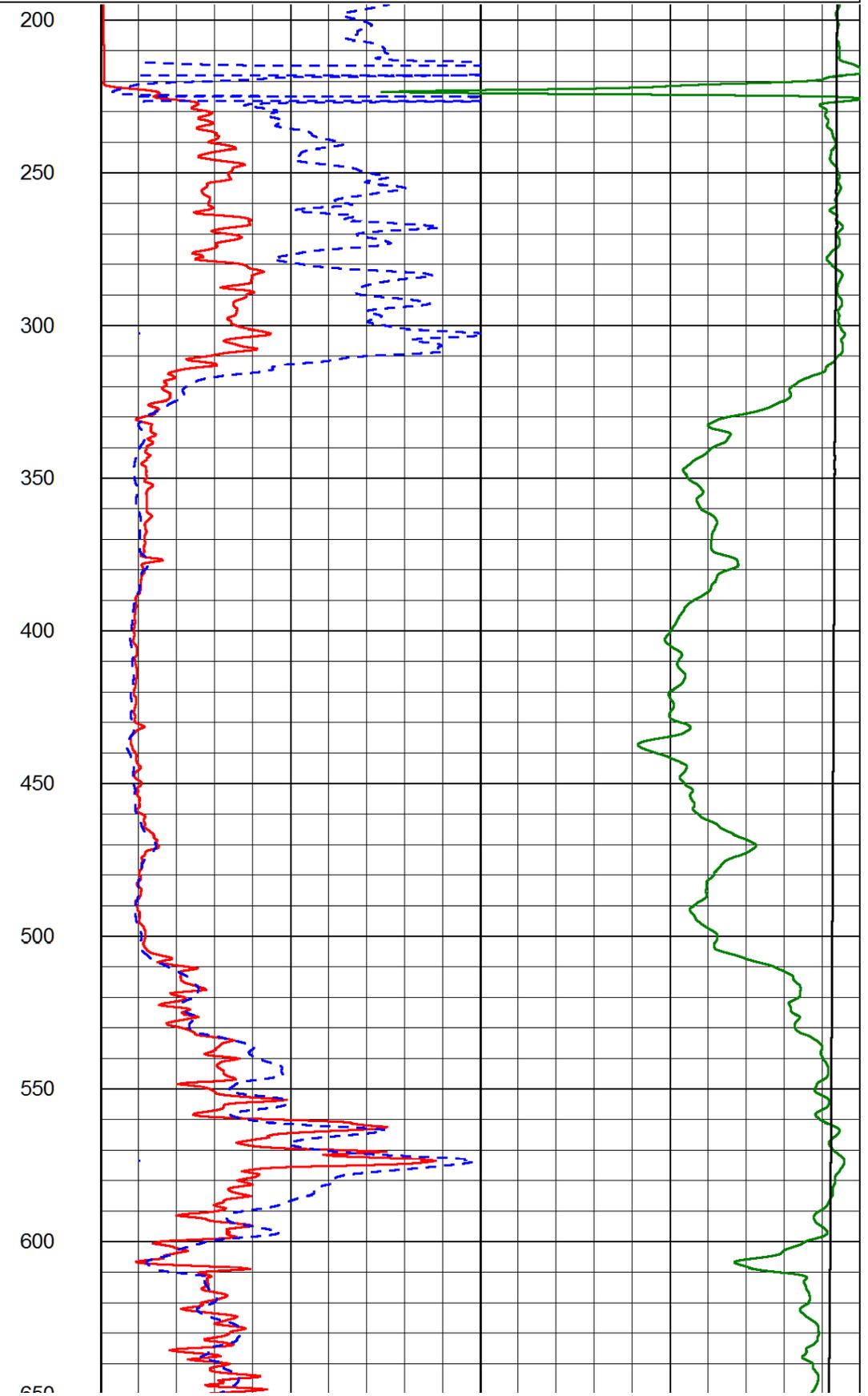
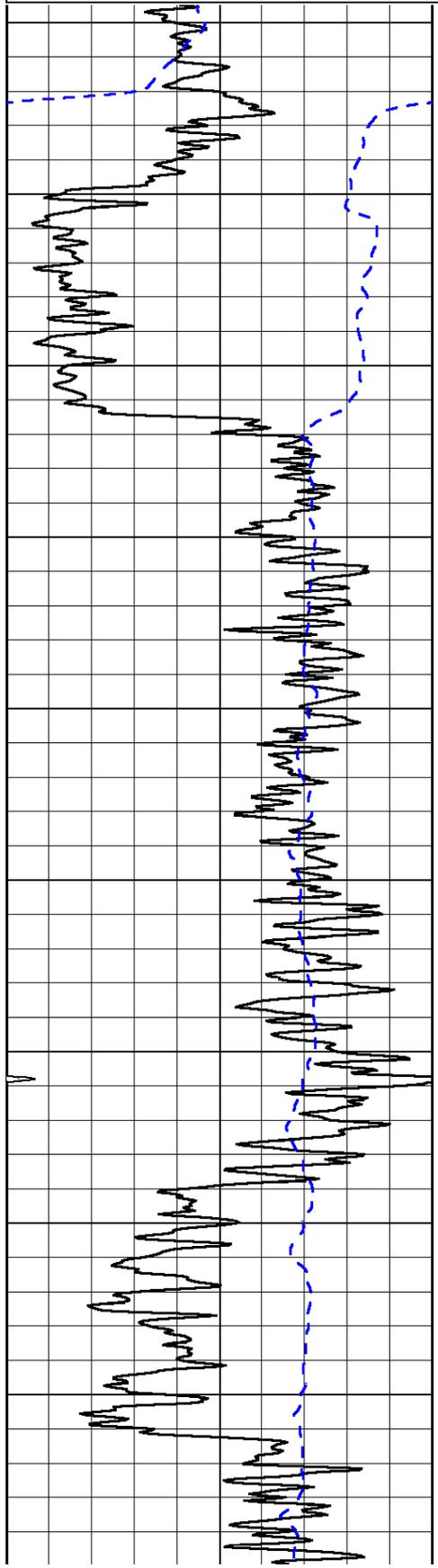
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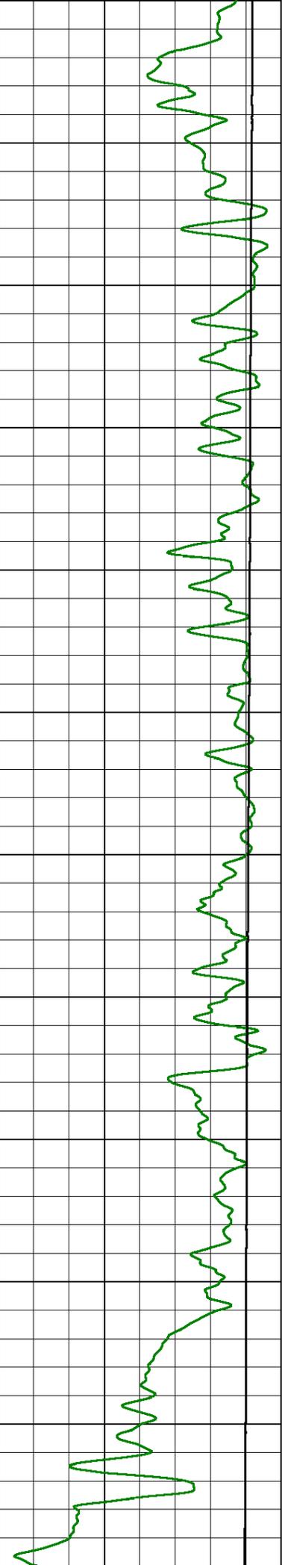
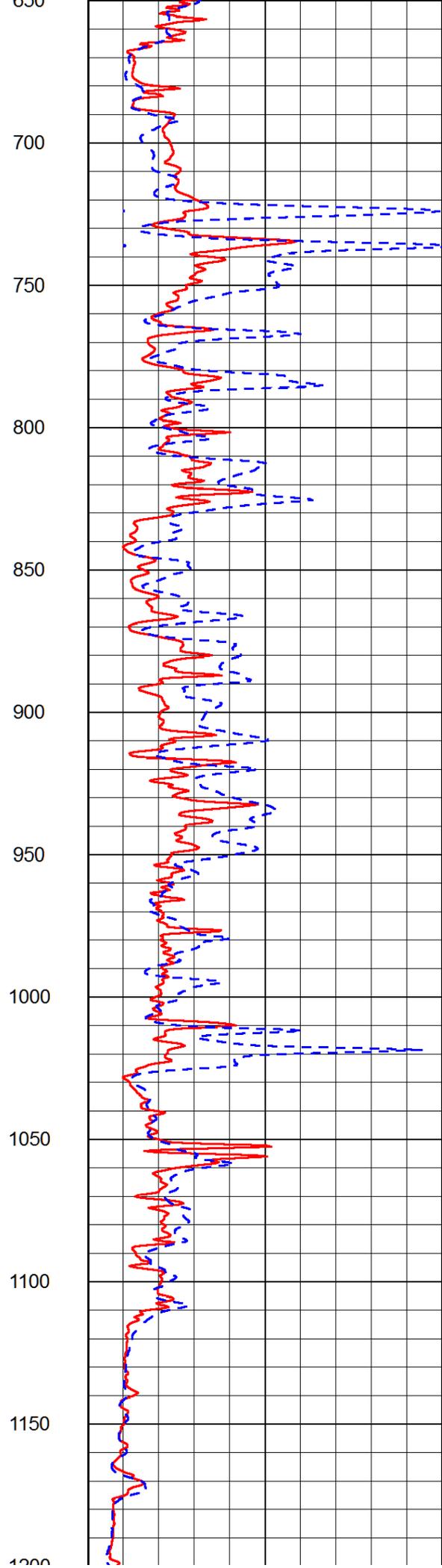
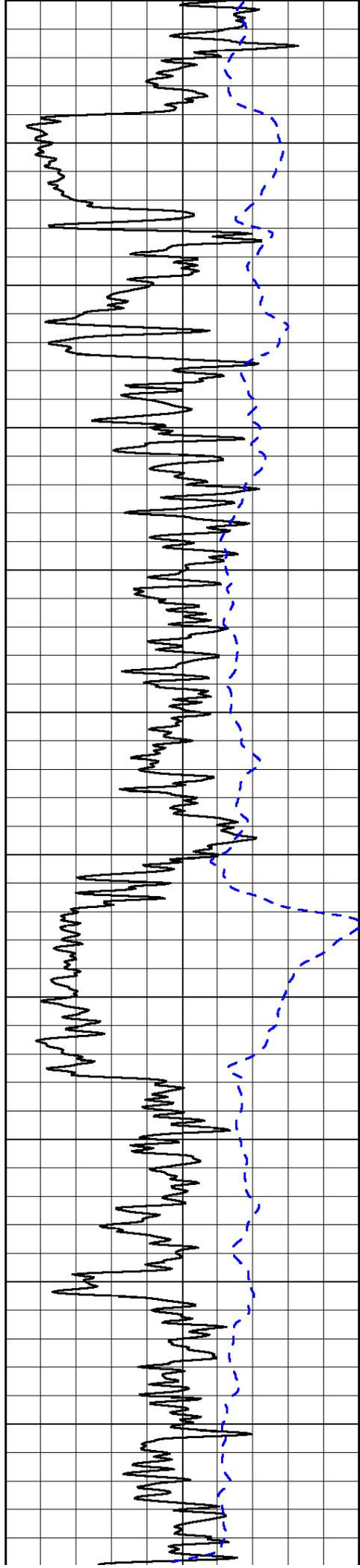
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-200	SP (mV)	0

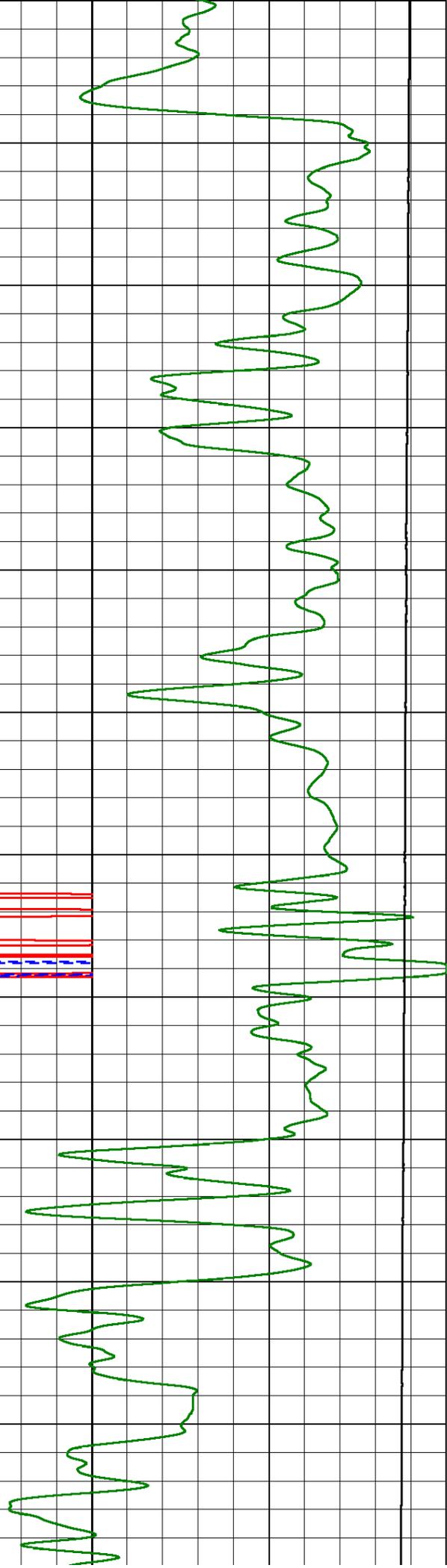
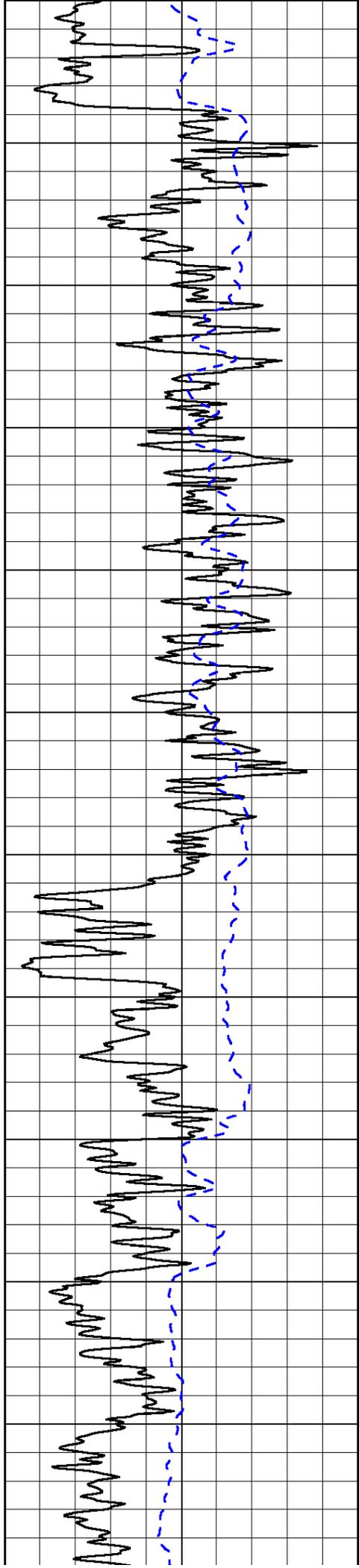
0	Shallow Resistivity (Ohm-m)	50
0	Deep Resistivity (Ohm-m)	50

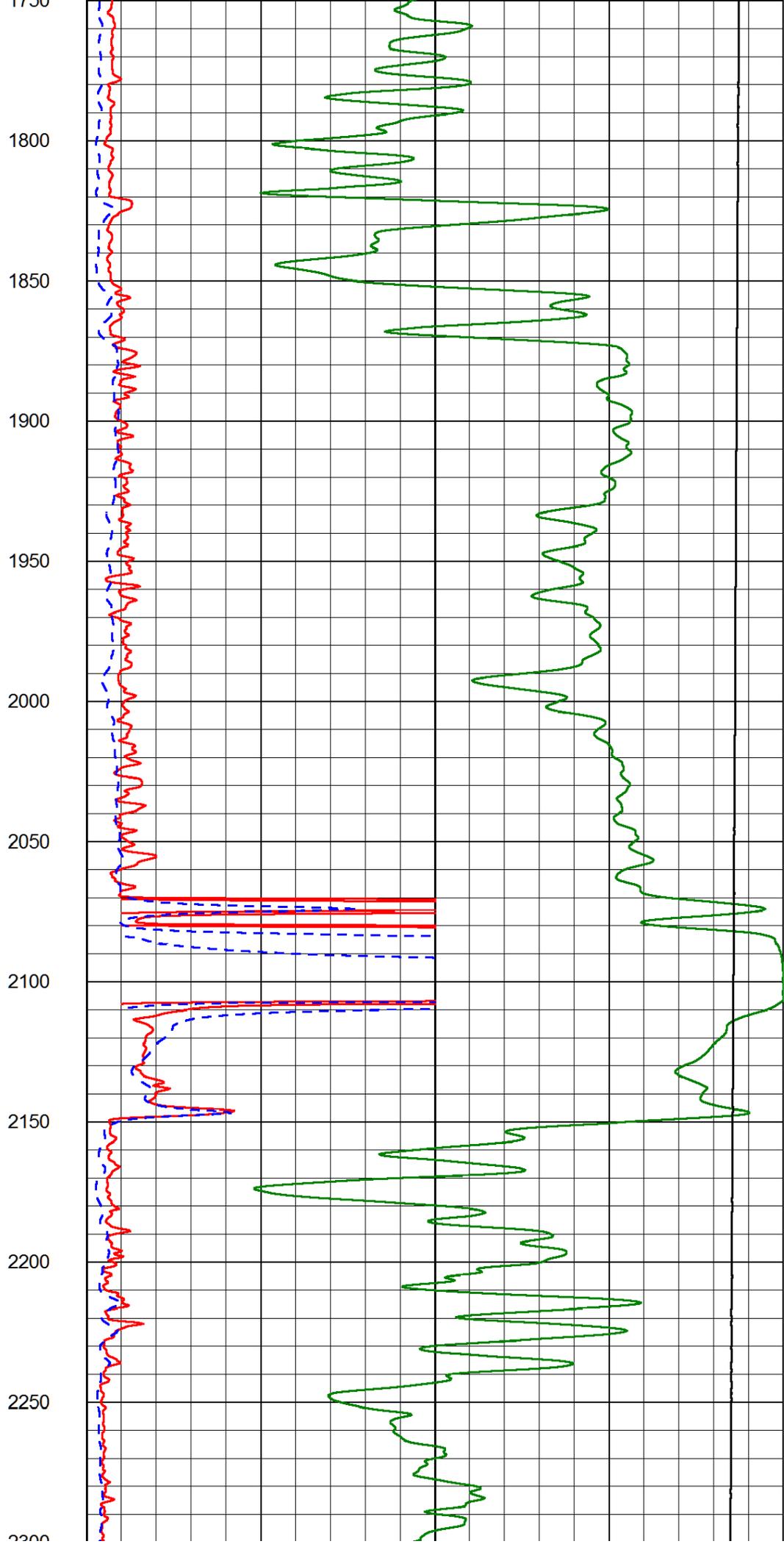
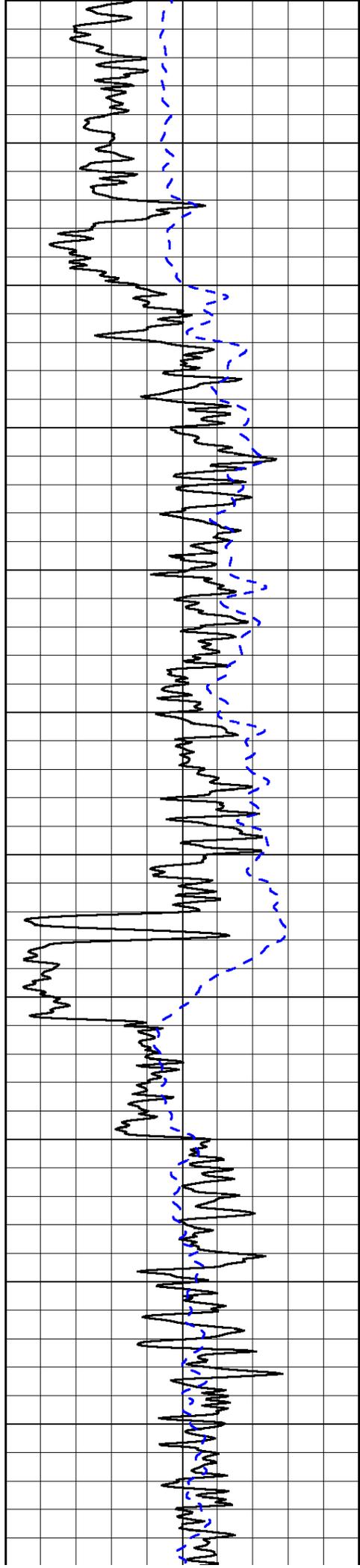
1000	Conductivity (Ohm-m)	0
15000	Line Tension (lb)	0

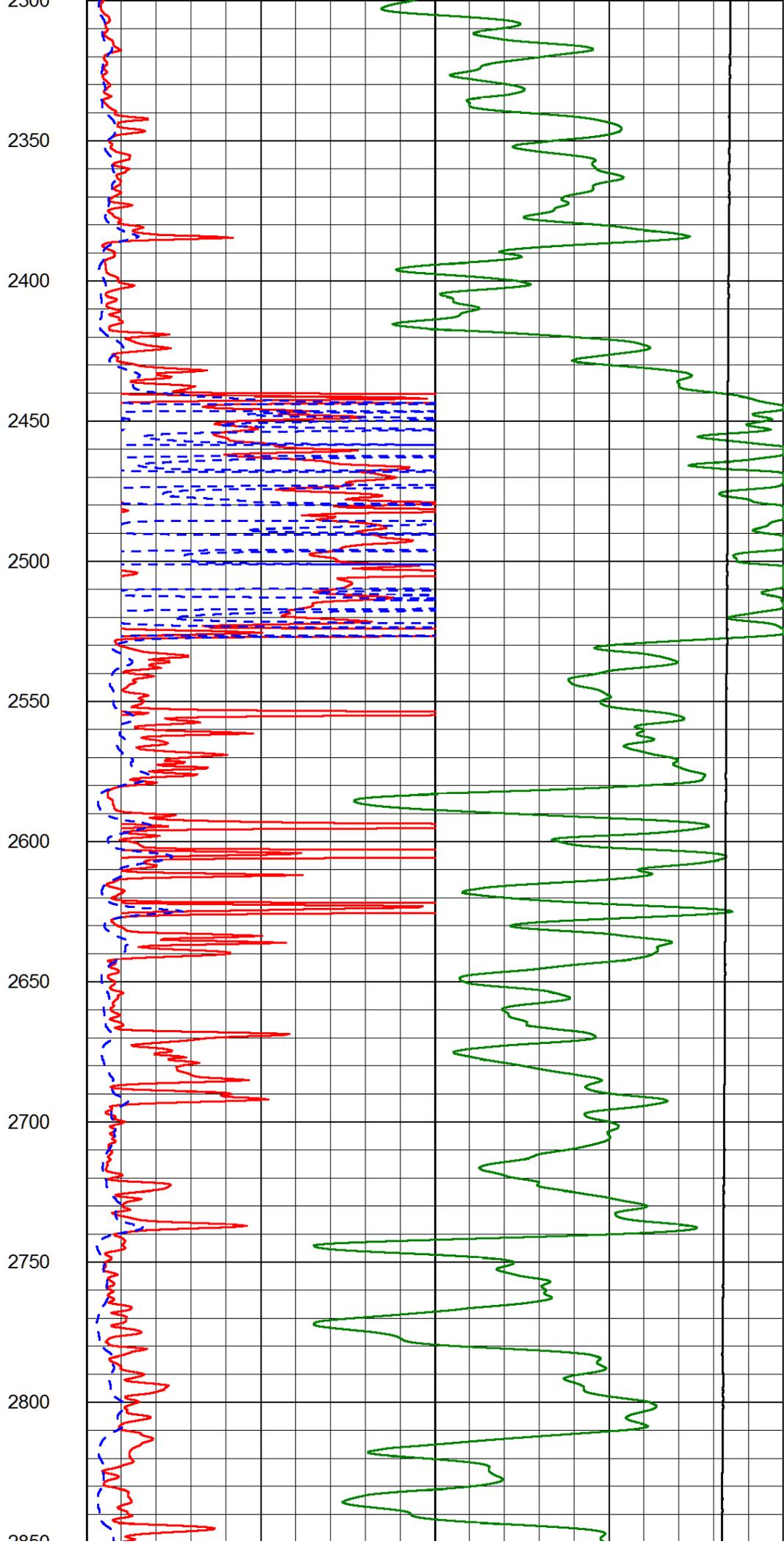
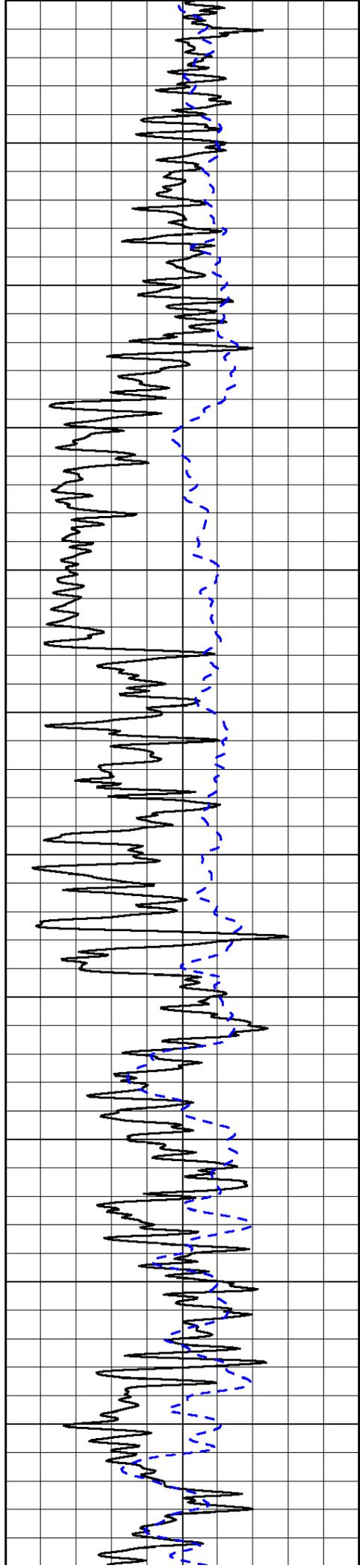
Shallow Resistivity		
50	(Ohm-m)	500
50	Deep Resistivity (Ohm-m)	500

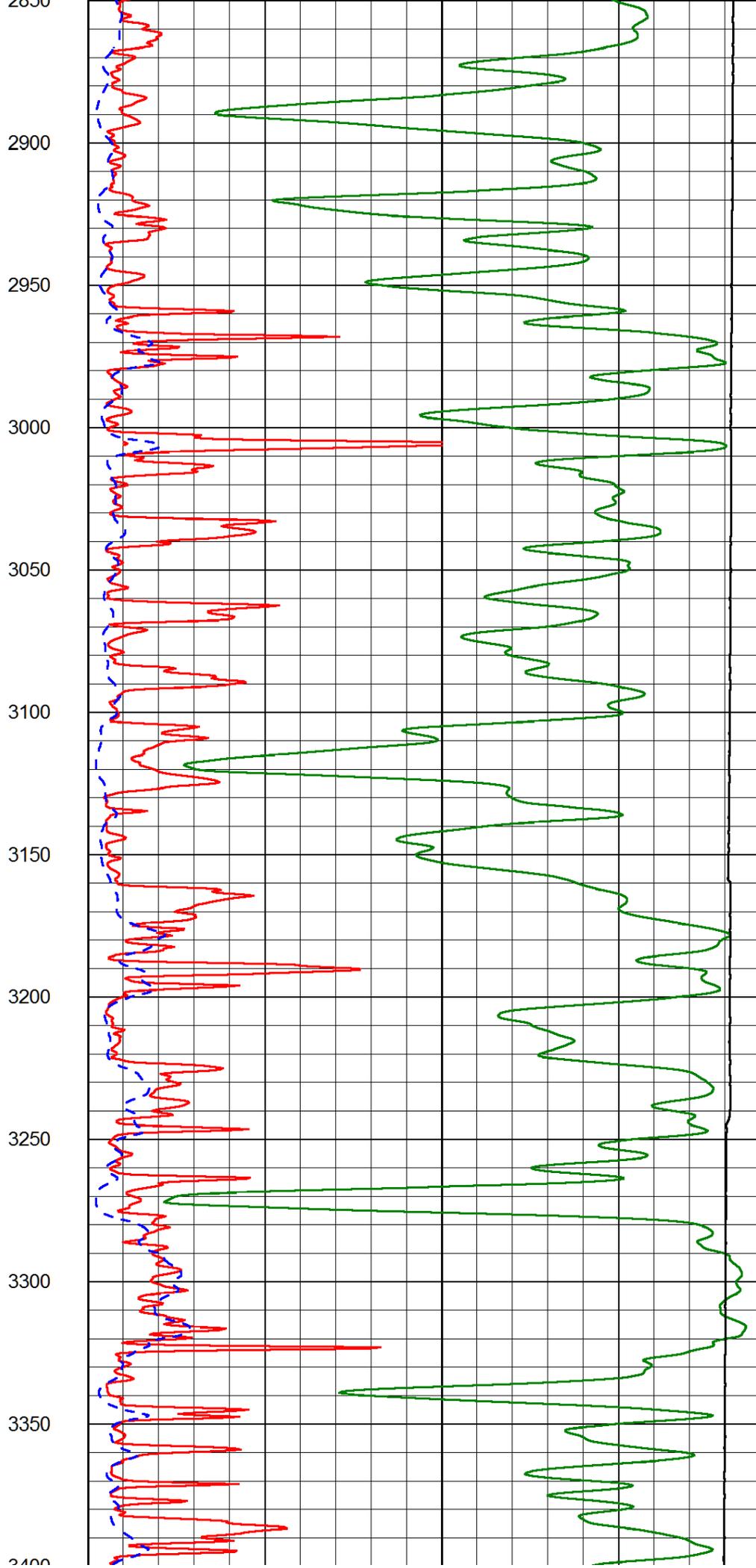
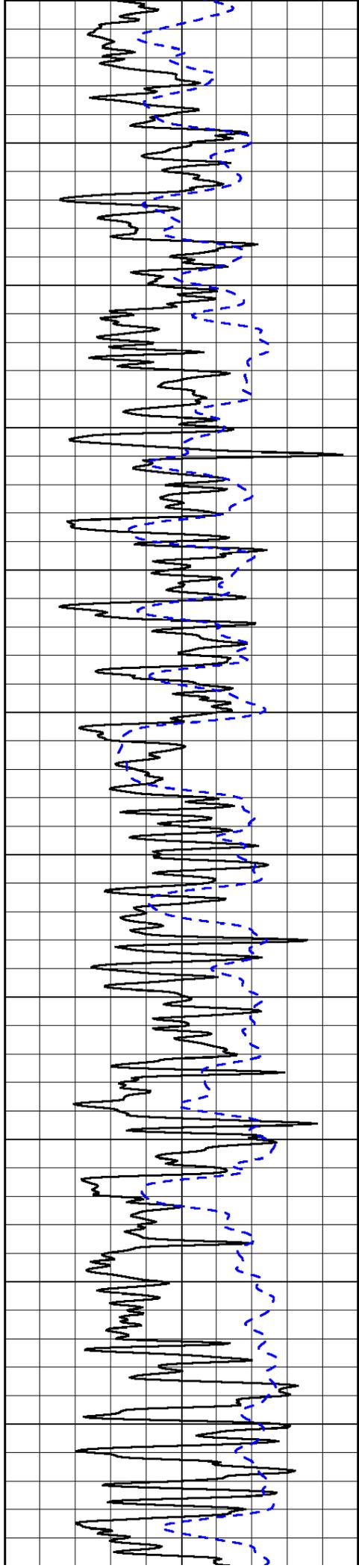


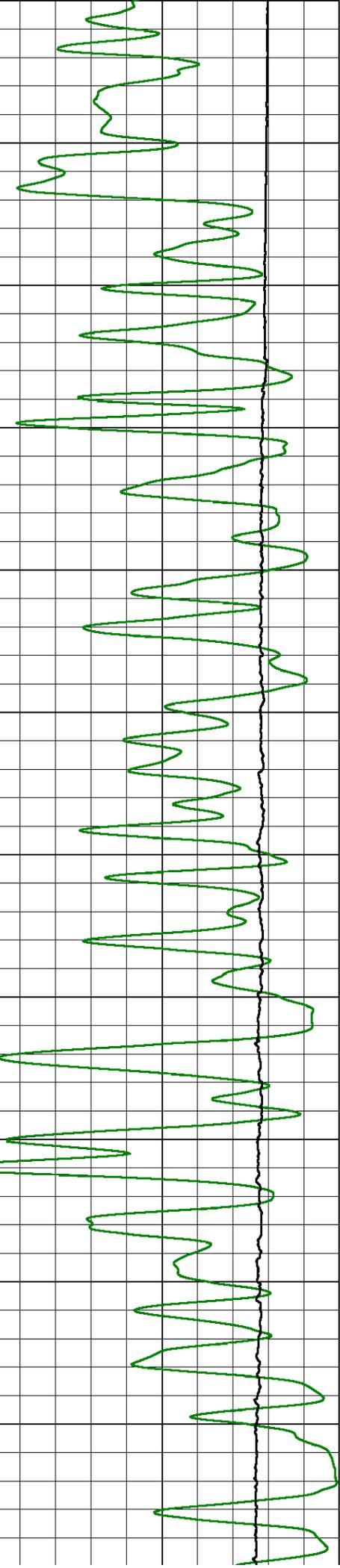
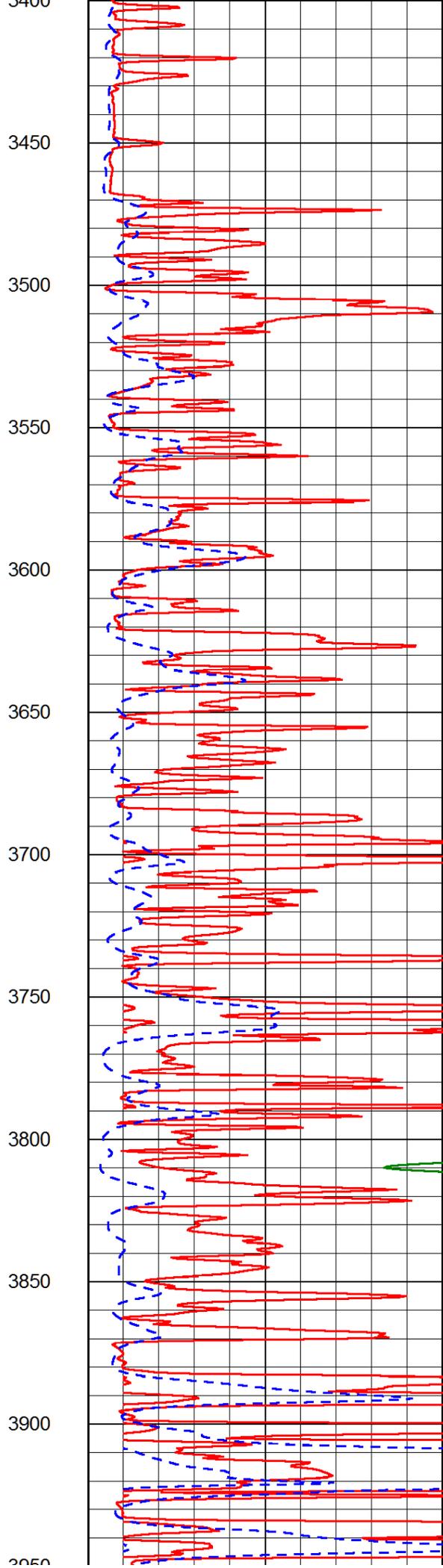
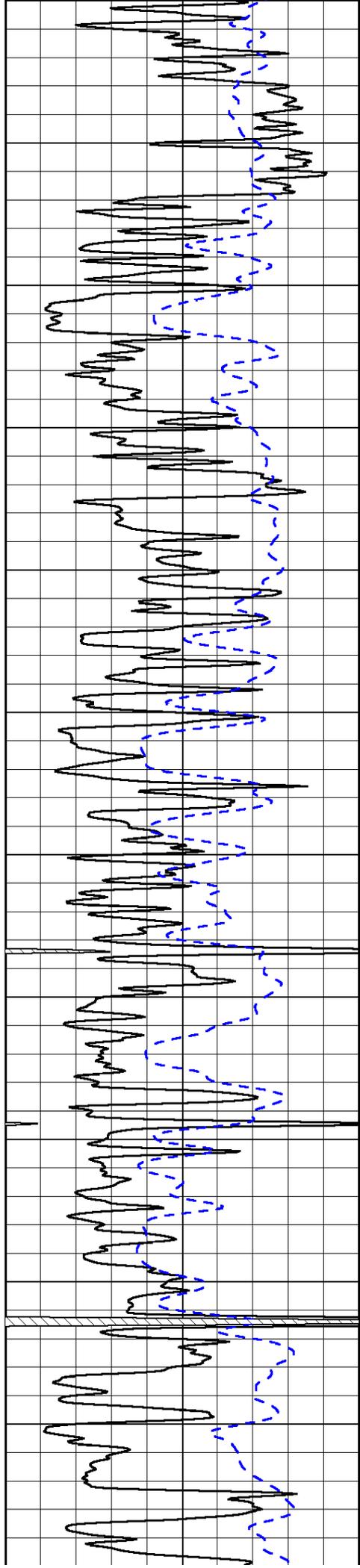


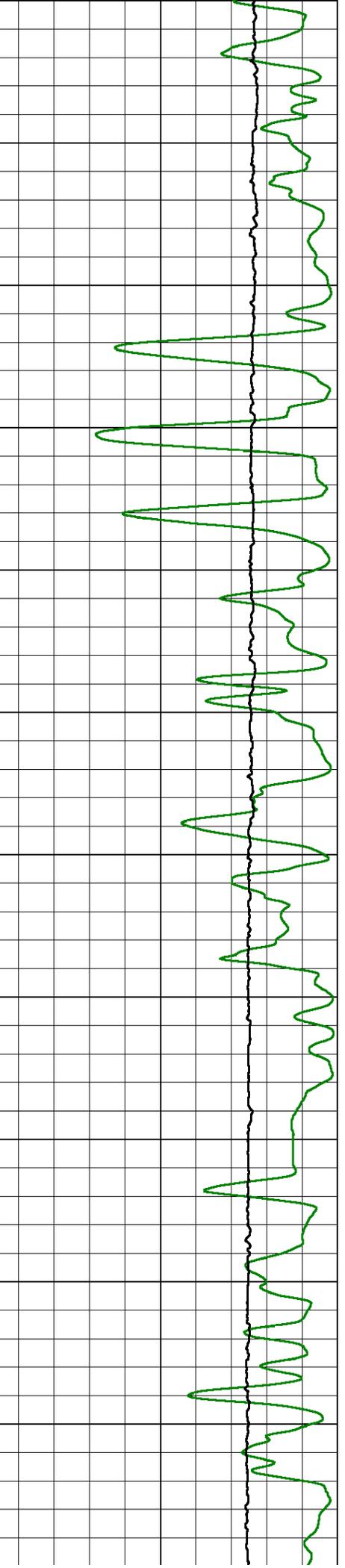
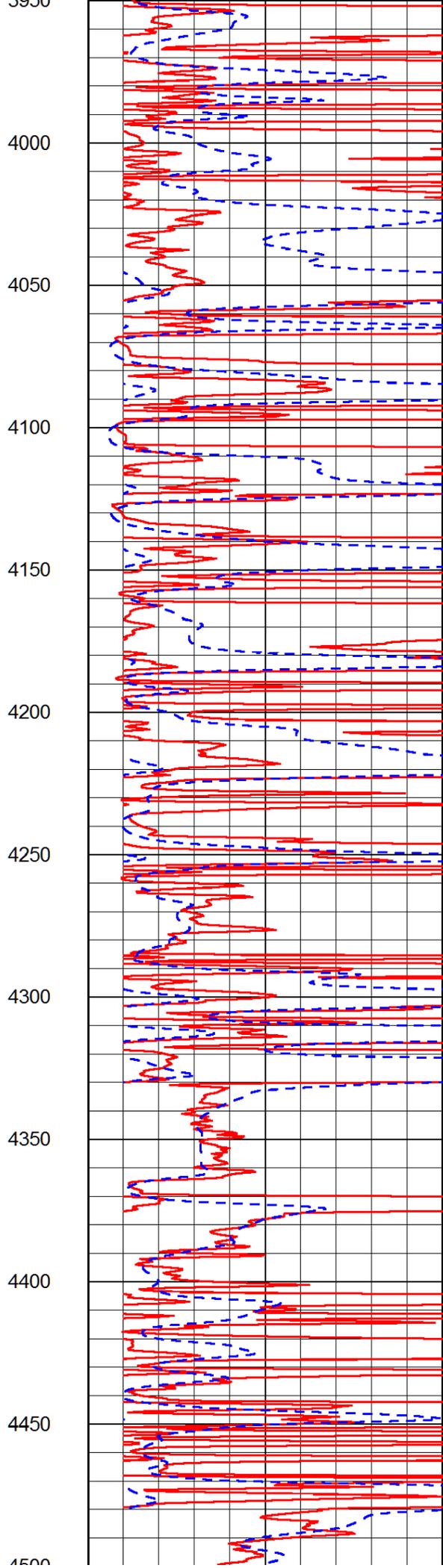
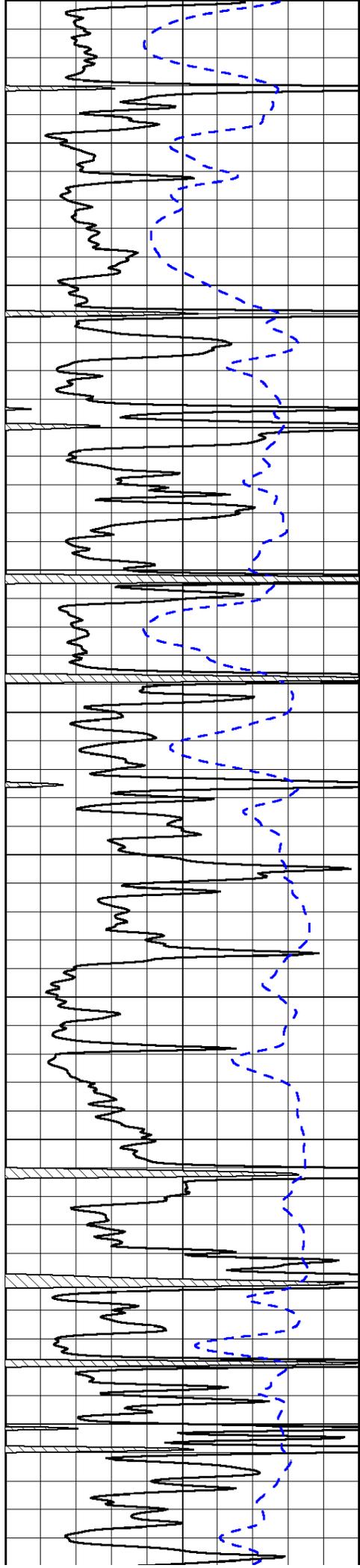


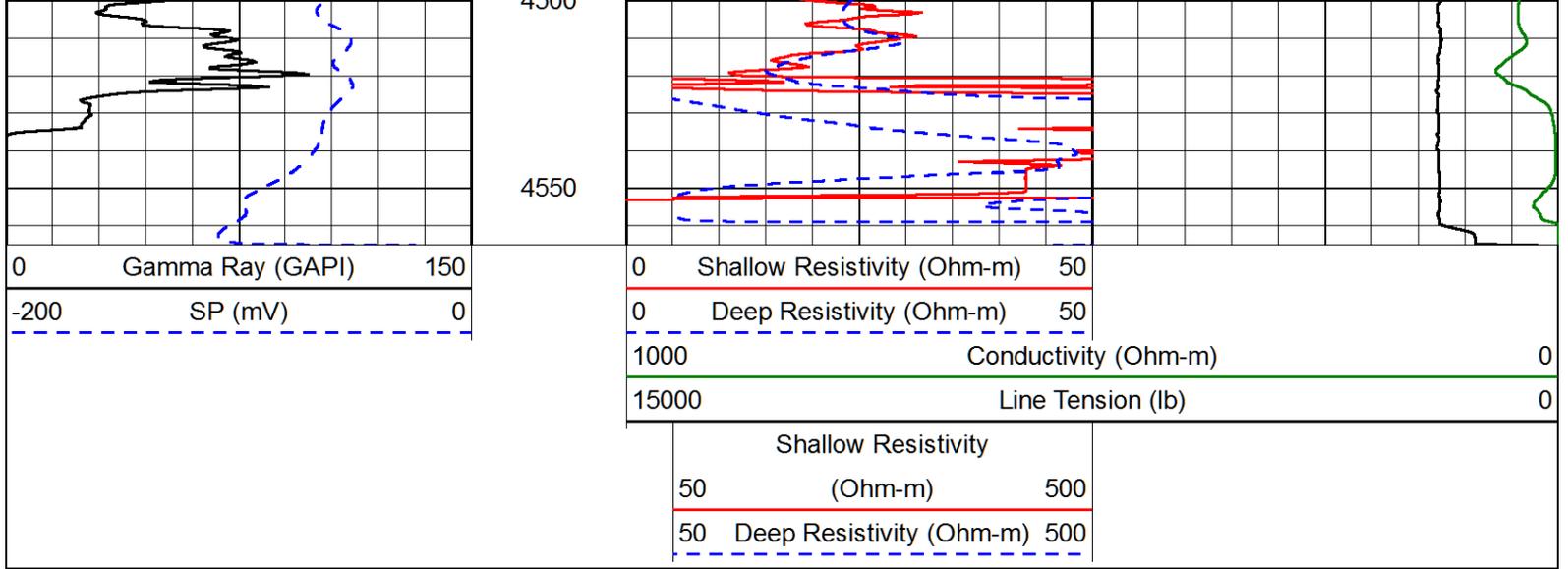




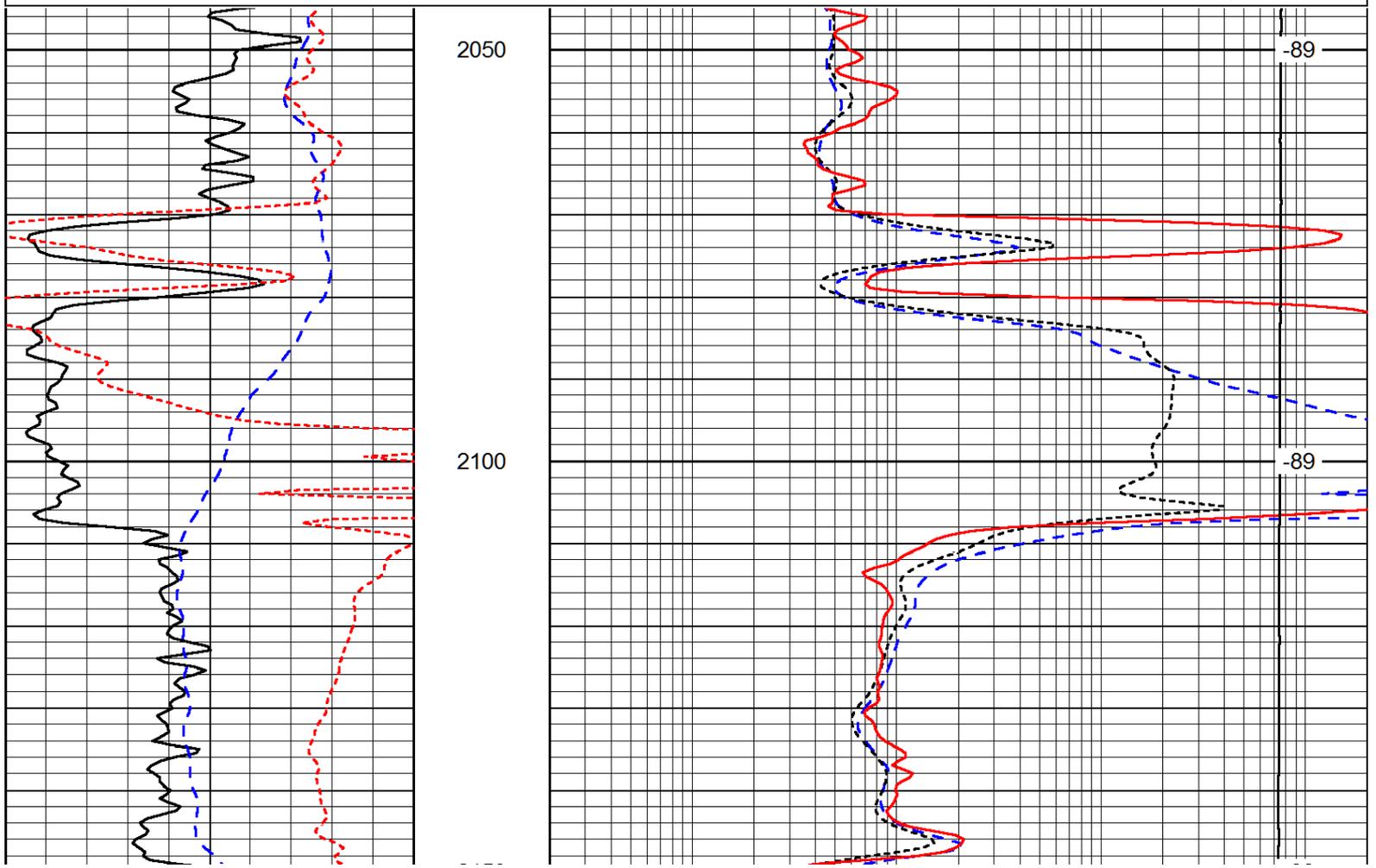
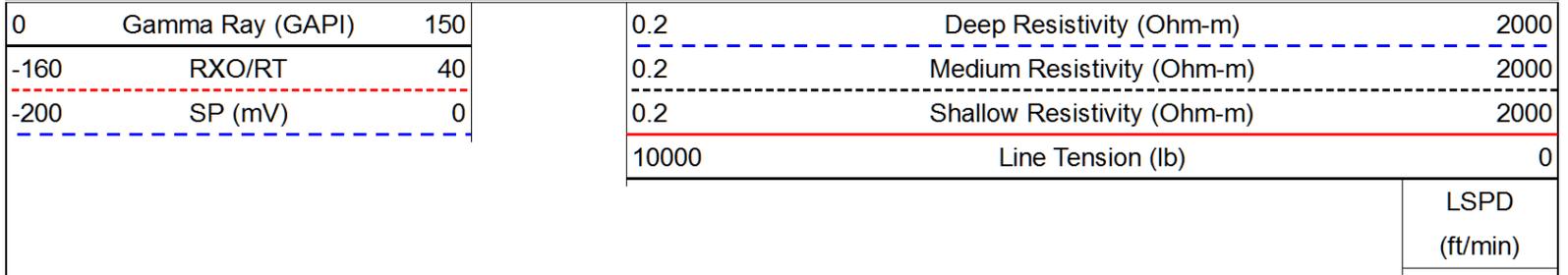


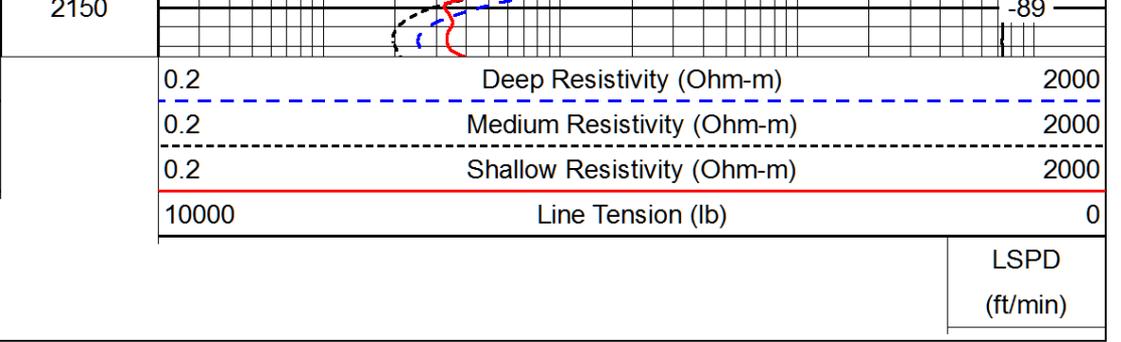
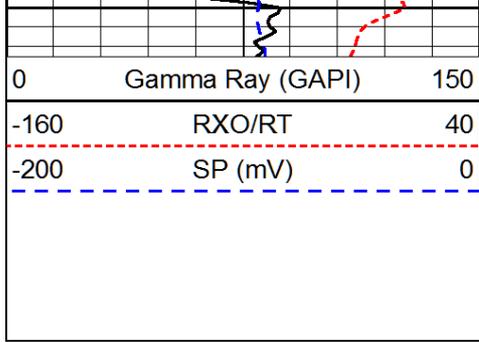




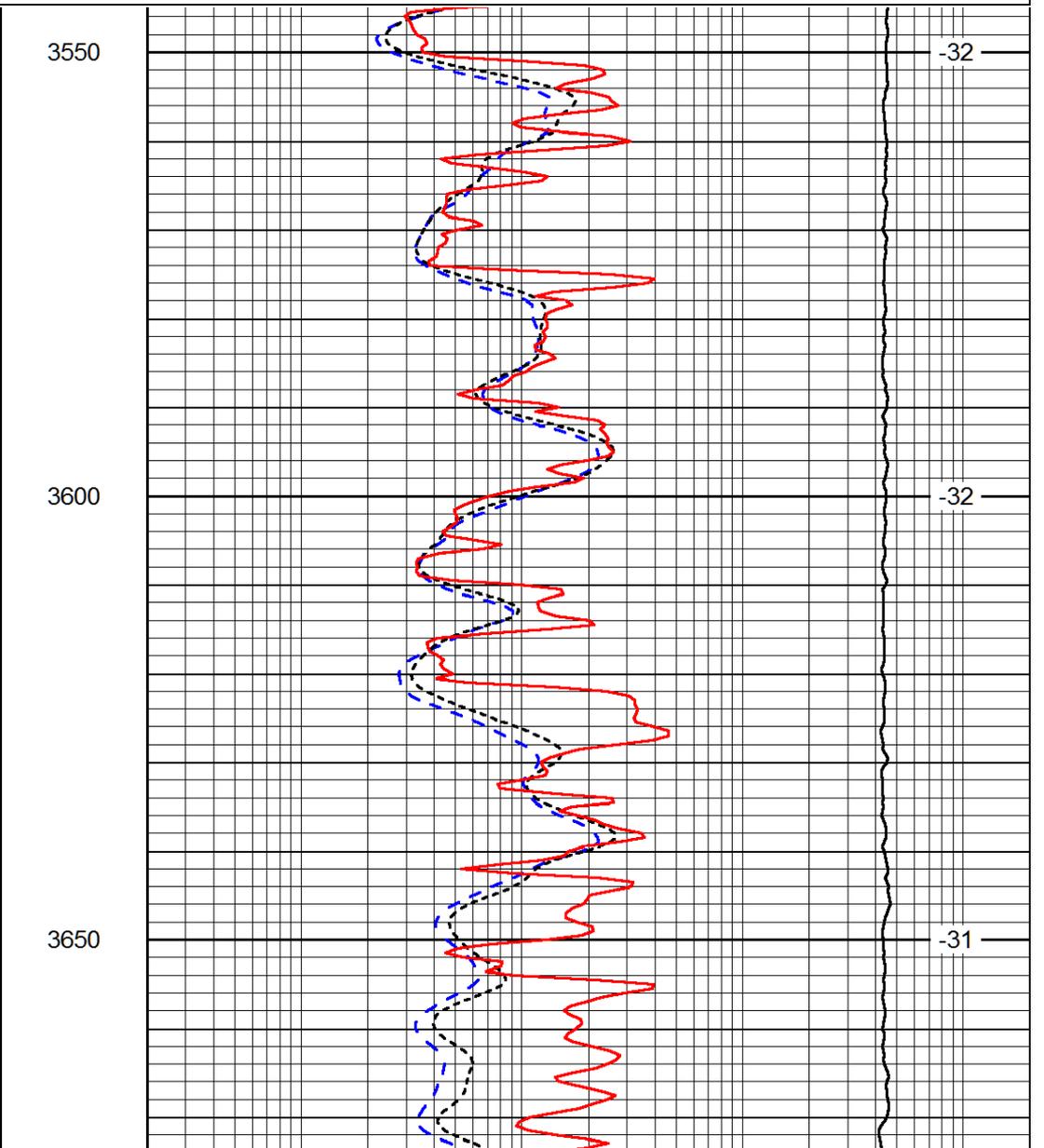
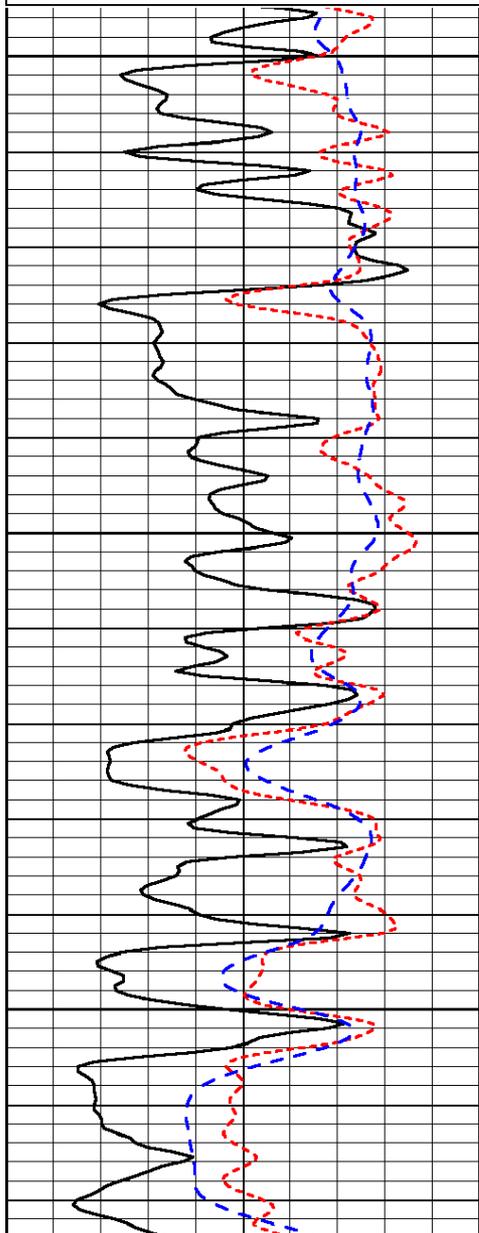
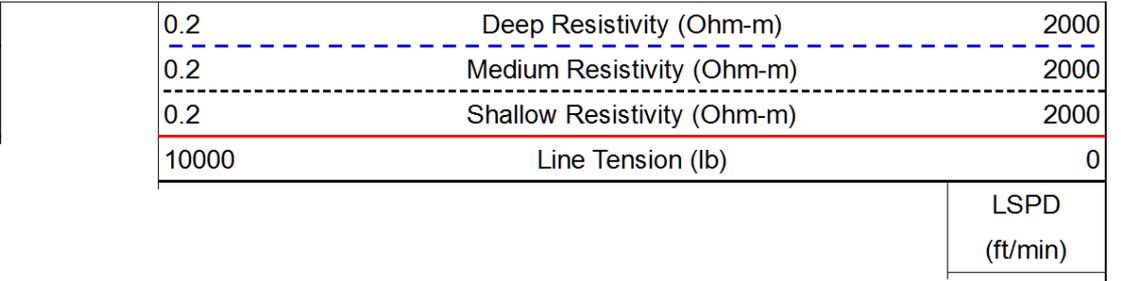
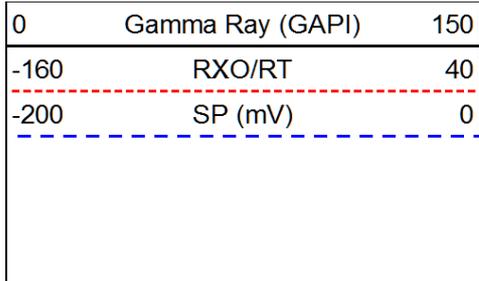


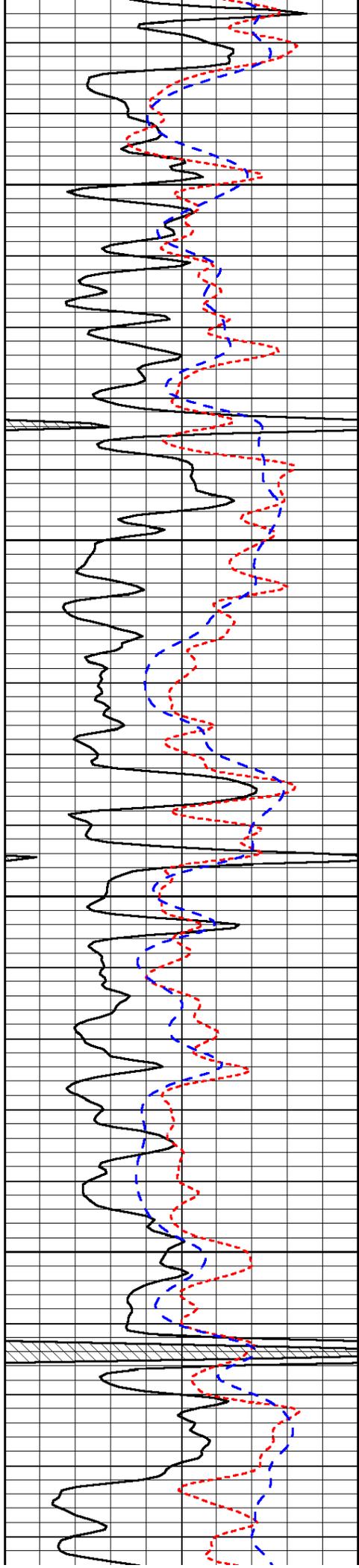
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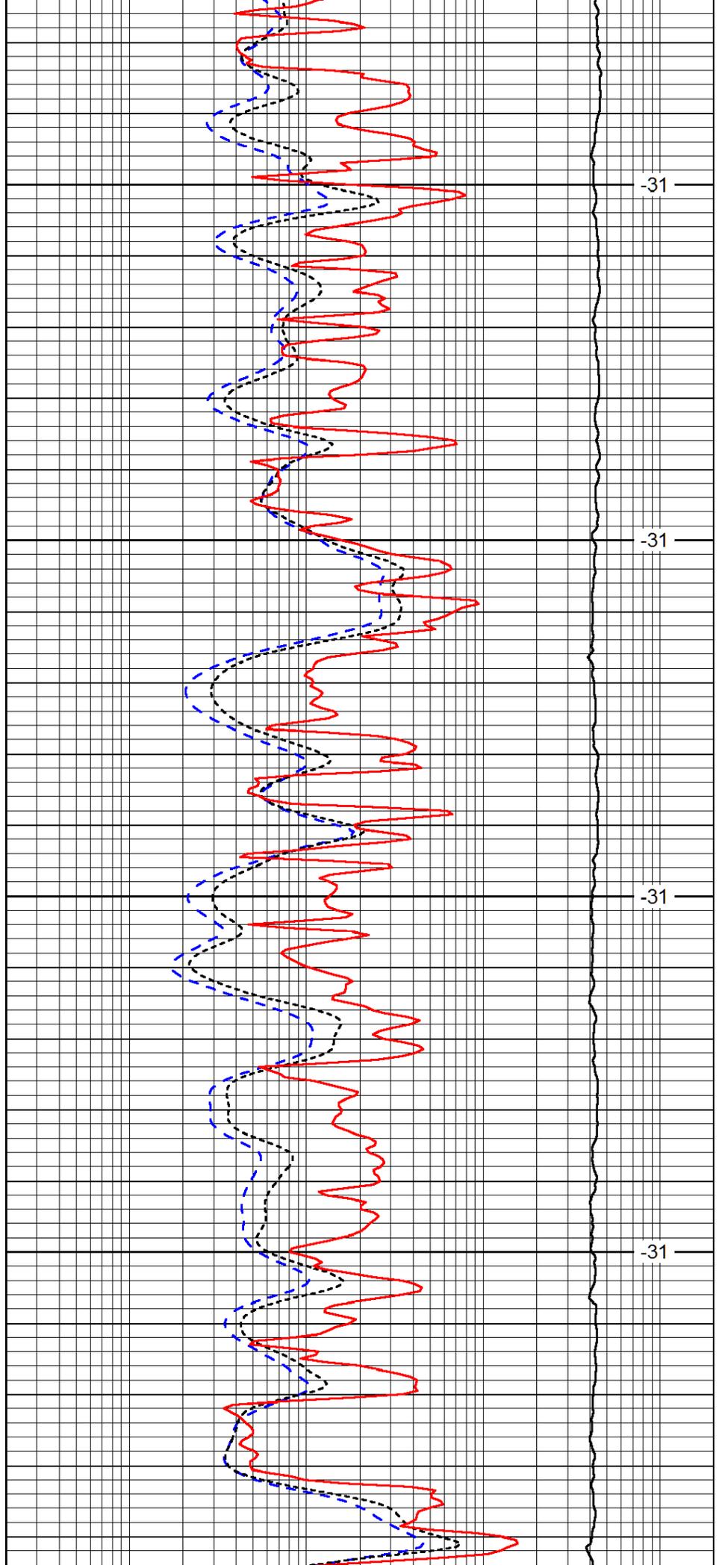


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3750

3800

3850

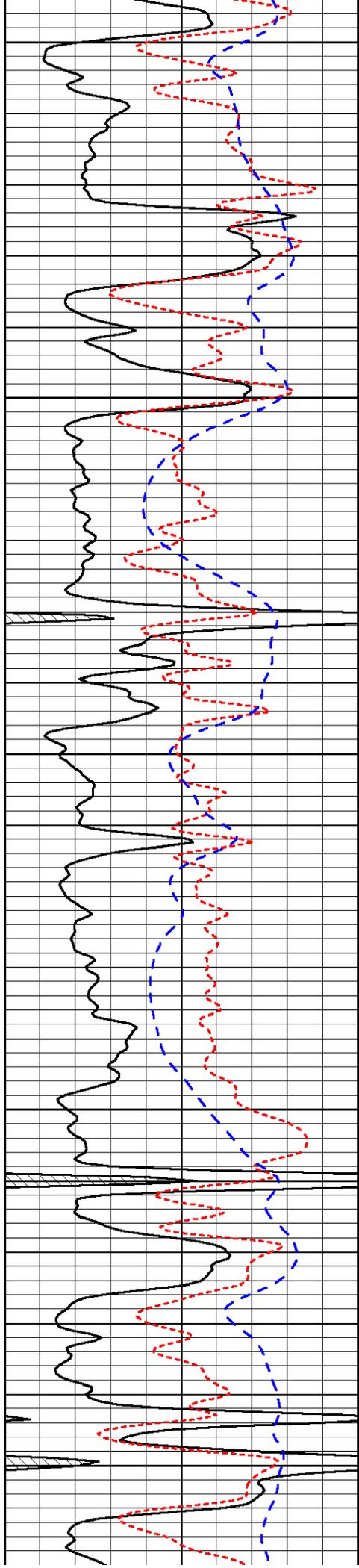


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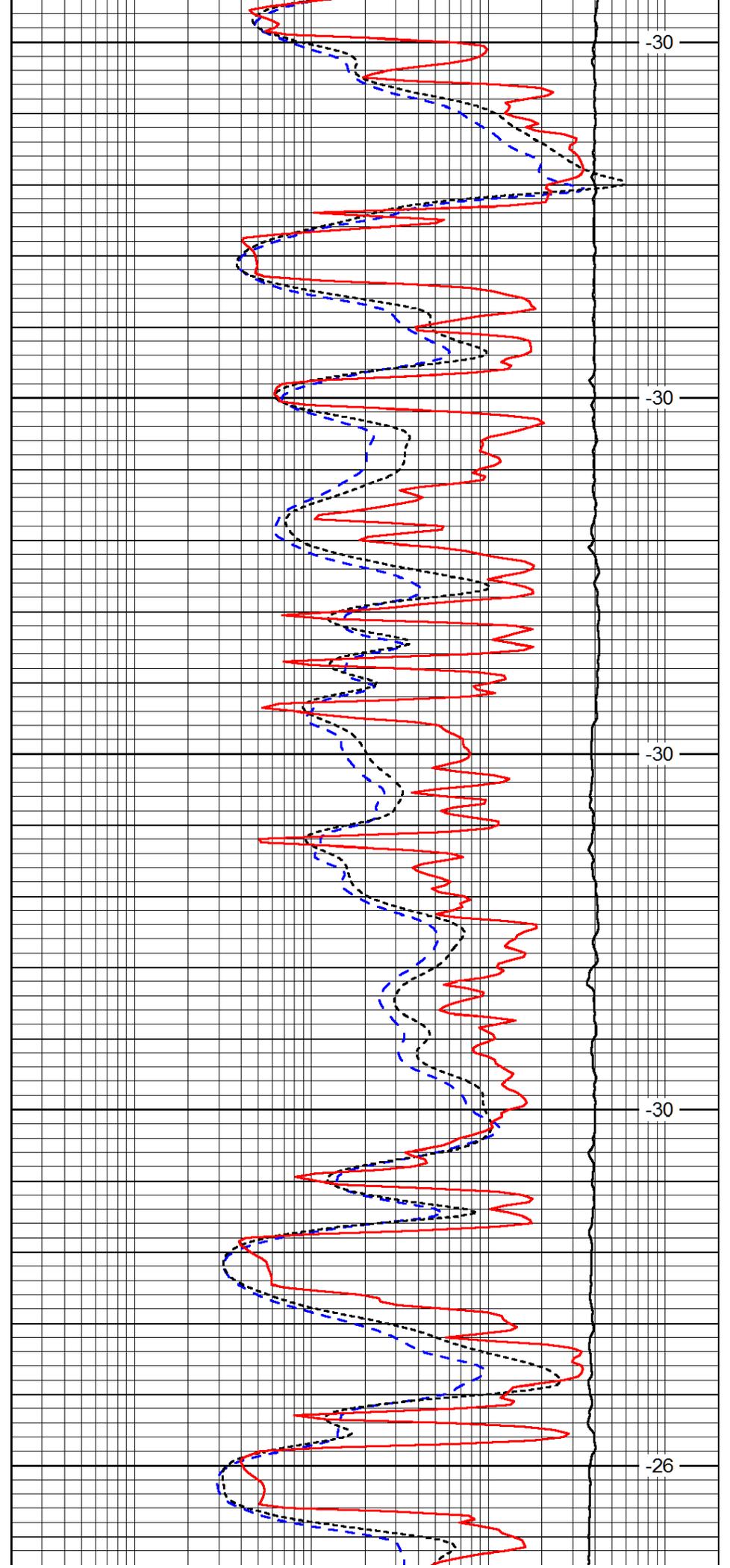
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3950

4000

4050

4100



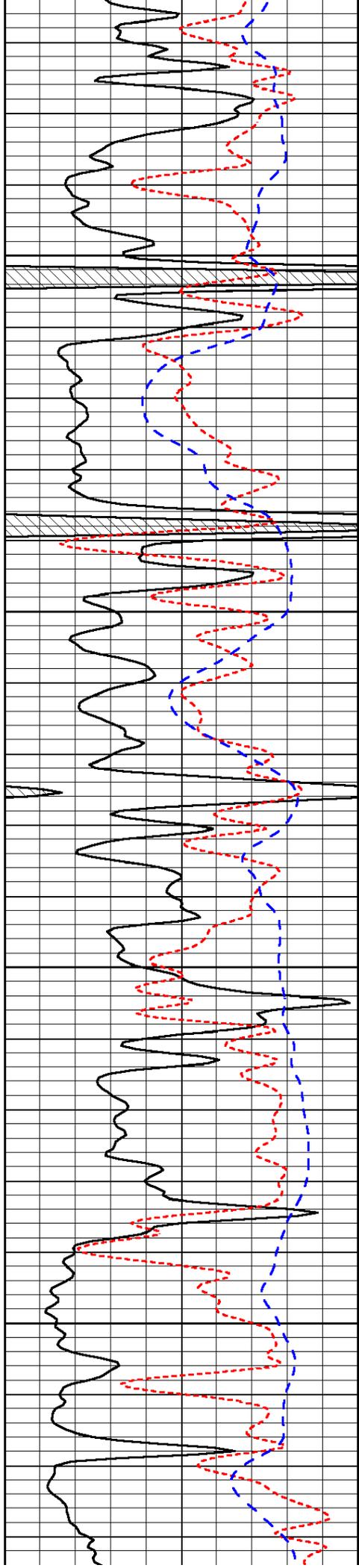
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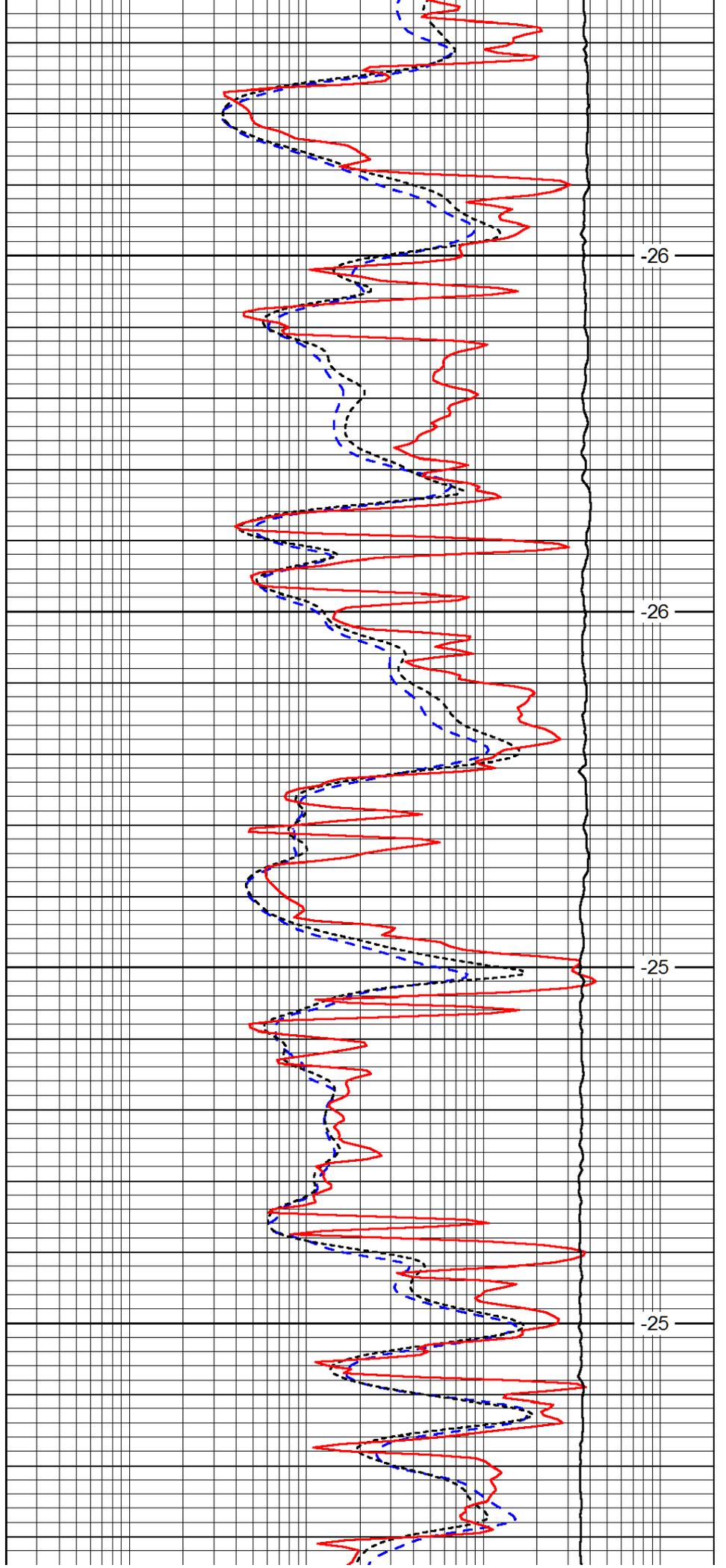


4150

4200

4250

4300

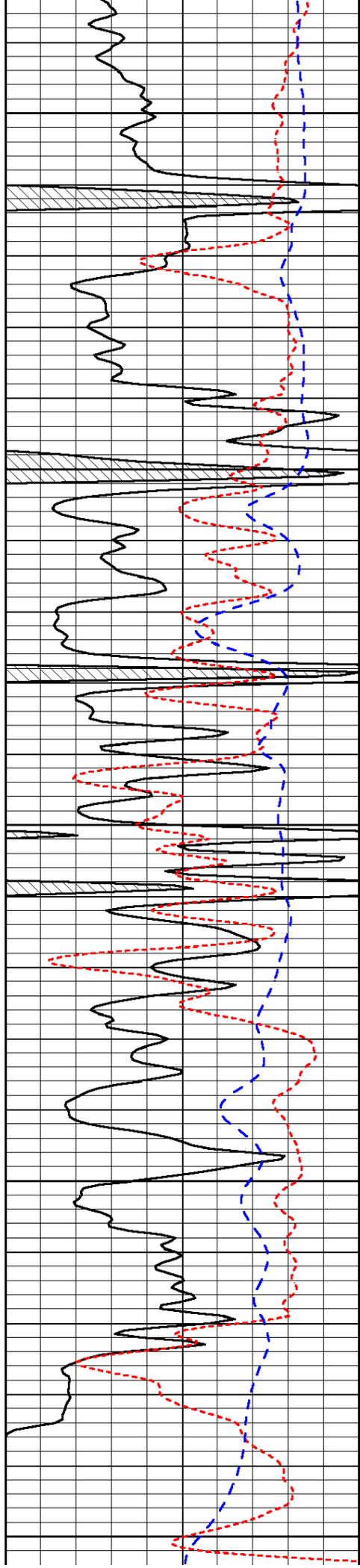


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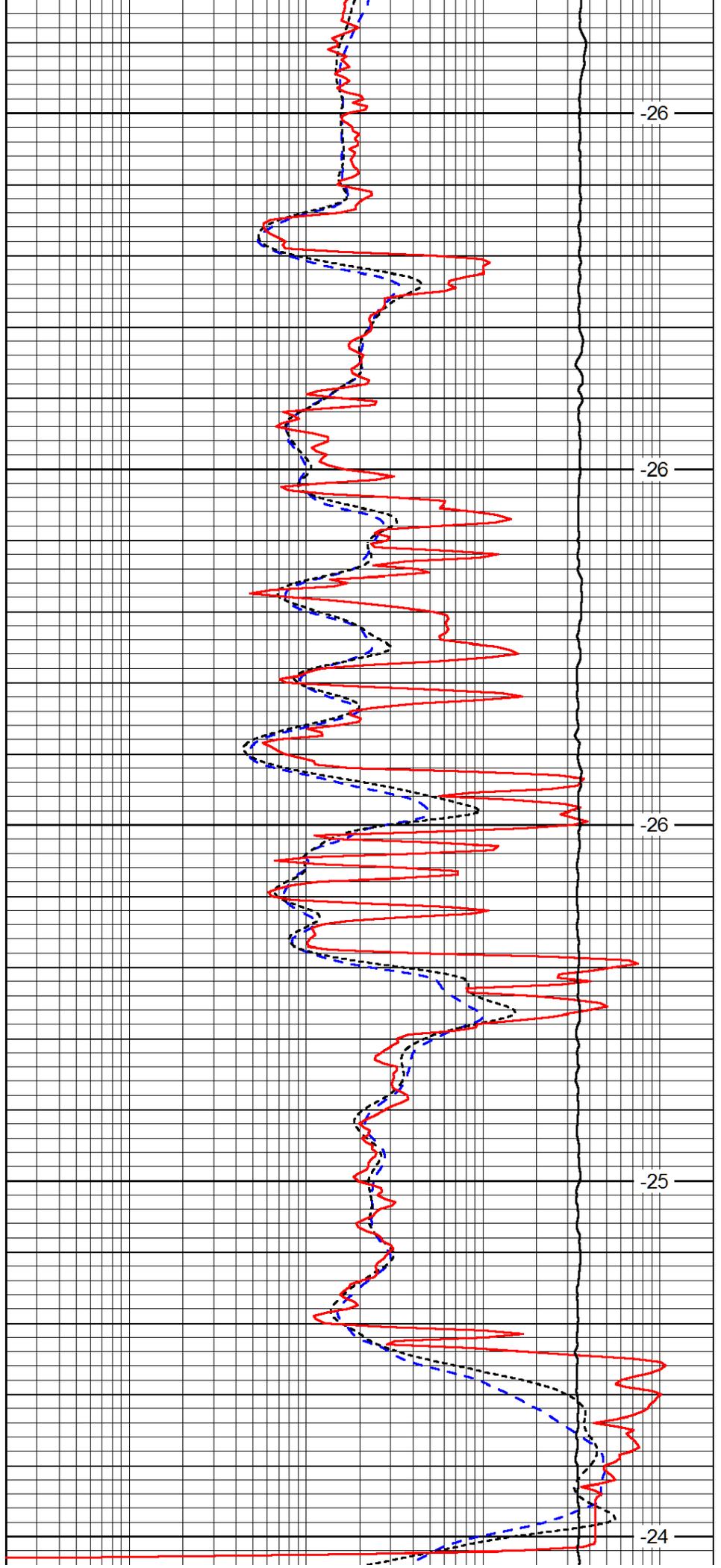
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4500

4550



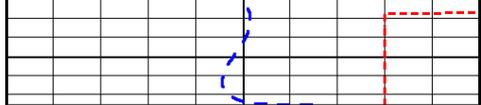
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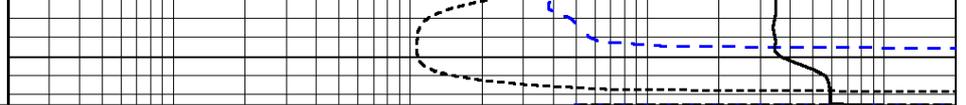
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0	Gamma Ray (GAPI)	150
-160	RXO/RT	40
-200	SP (mV)	0



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)
