



Pioneer Energy Services

Dual Induction Log

15-135-25,582-00-00

API No.

Company American Warrior, Inc.

Well Dianne #2-20

Field Hinnergardt

County Ness State

Kansas

Location

2310' FNL & 1600' FEL

Other Services
CNL/CDL

Sec: 20 Twp: 19S Rge: 21W

Permanent Datum Ground Level Elevation 2276
Log Measured From Kelly Bushing 8 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Elevation

K.B. 2284

D.F. 2276

G.L. 2276

Date 5/3/2013

Run Number One

Depth Driller 4400

Depth Logger 4400

Bottom Logged Interval 4399

Top Log Interval 200

Casing Driller 8.625 @ 219

Casing Logger 219

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity,ppm CL 6.800

Density / Viscosity 9.4 52

pH / Fluid Loss 10.0 7.2

Source of Sample Flowline

Rm @ Meas. Temp .58 @ 54

Rmf @ Meas. Temp .44 @ 54

Rmc @ Meas. Temp .78 @ 54

Source of Rmf / Rmc Charts

Rm @ BHT .26 @ 120

Operating Rig Time 2 Hours

Max Rec. Temp. F 120

Equipment Number 17

Location Hays

Recorded By C. Desai

Witnessed By Jason Alm

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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 Pioneer Energy Services
www.pioneerenergy.com
785 625 3858

Alexander KS, 4 1/2 W to GG Rd, 3 S to 100 Rd,
1 W, 1 S, 1/4 W, S Into

Database File: c:\warrior\data\amwar_dianne no.2-20\awhd.db
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Dataset Creation: Fri May 03 03:17:21 2013
Charted by: Depth in Feet scaled 1:600

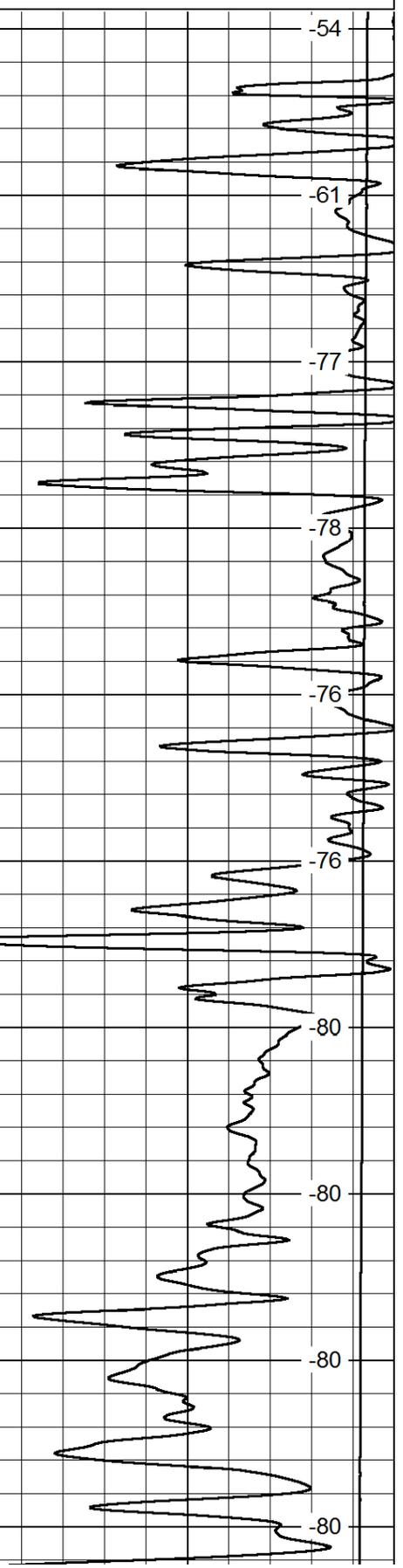
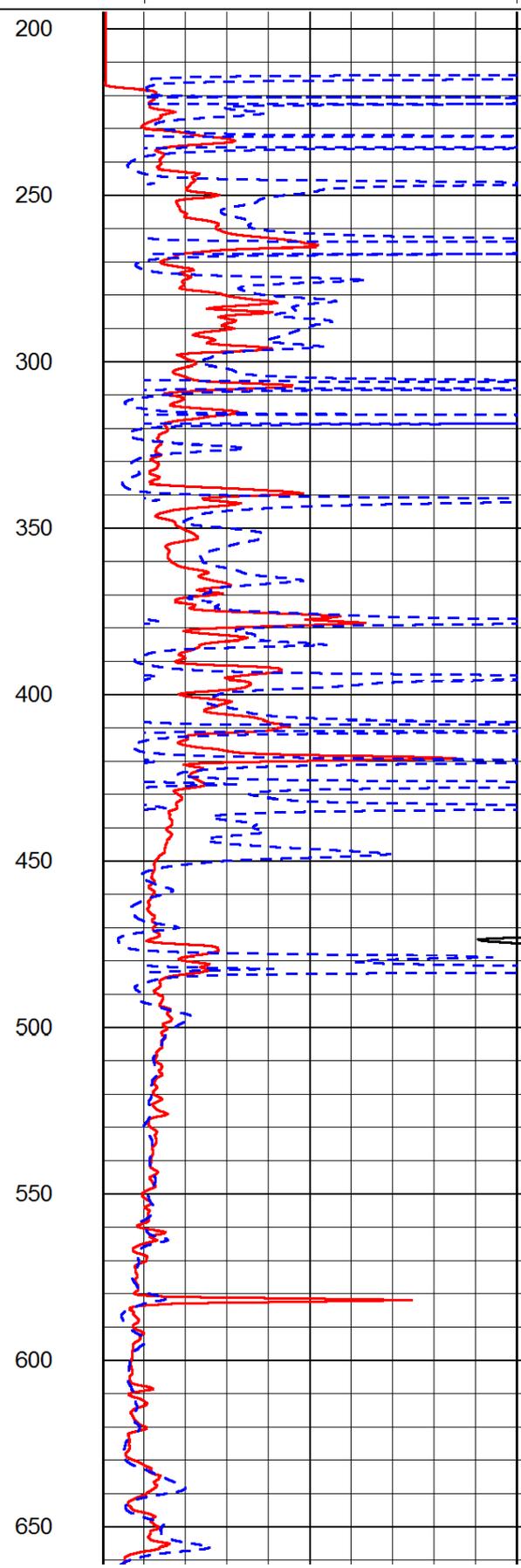
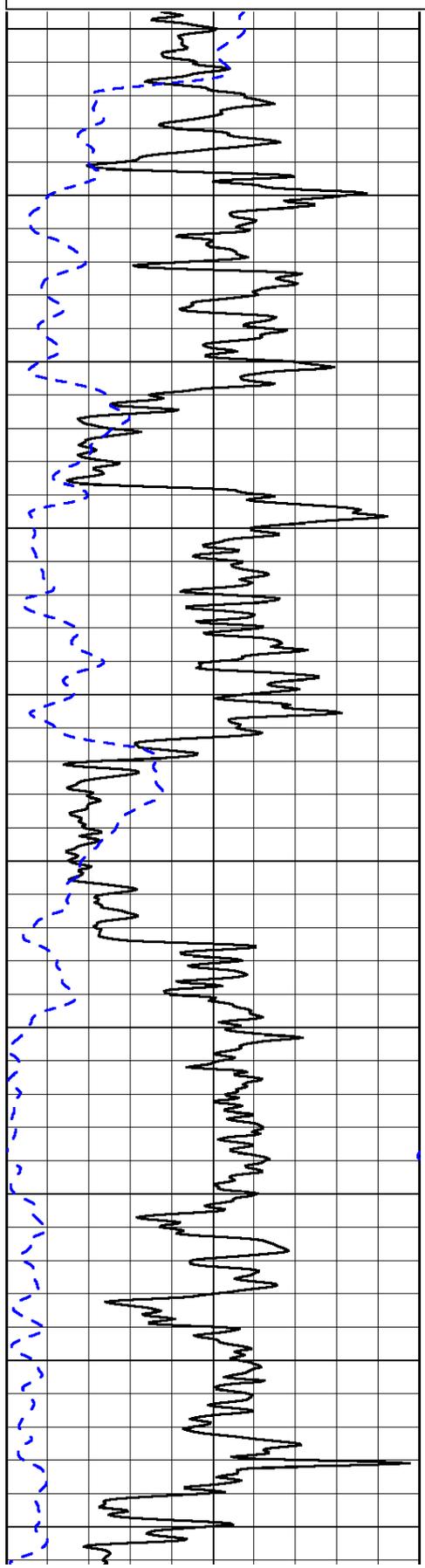
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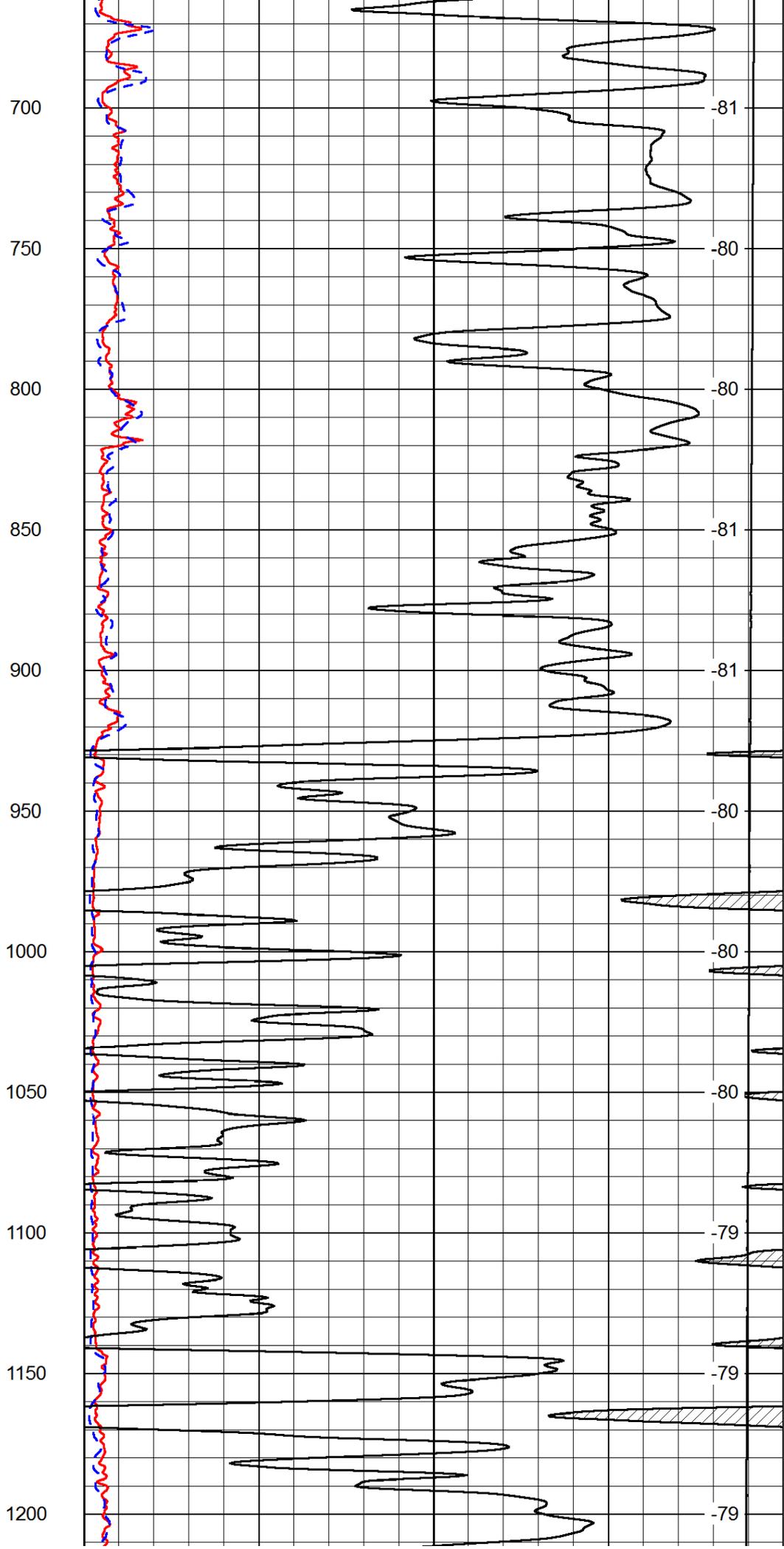
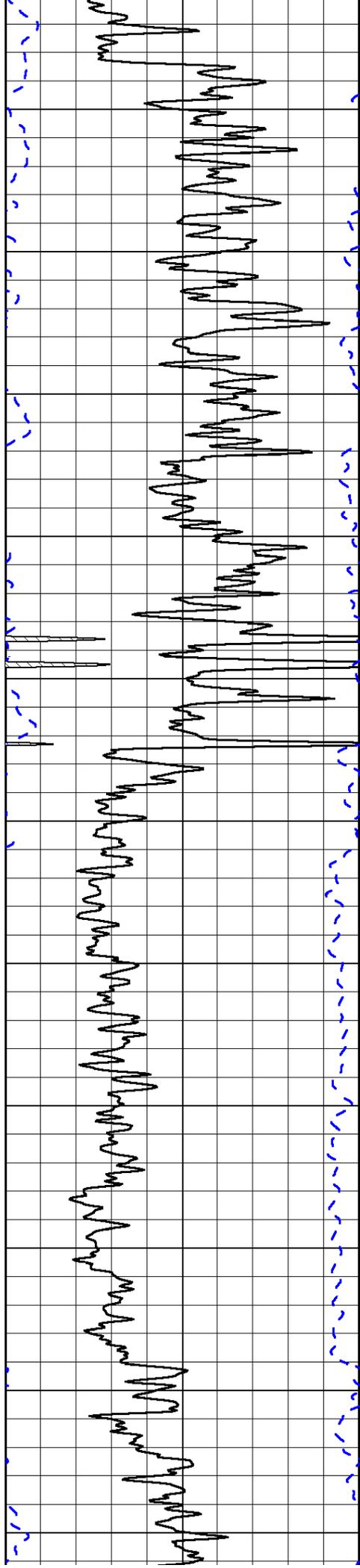
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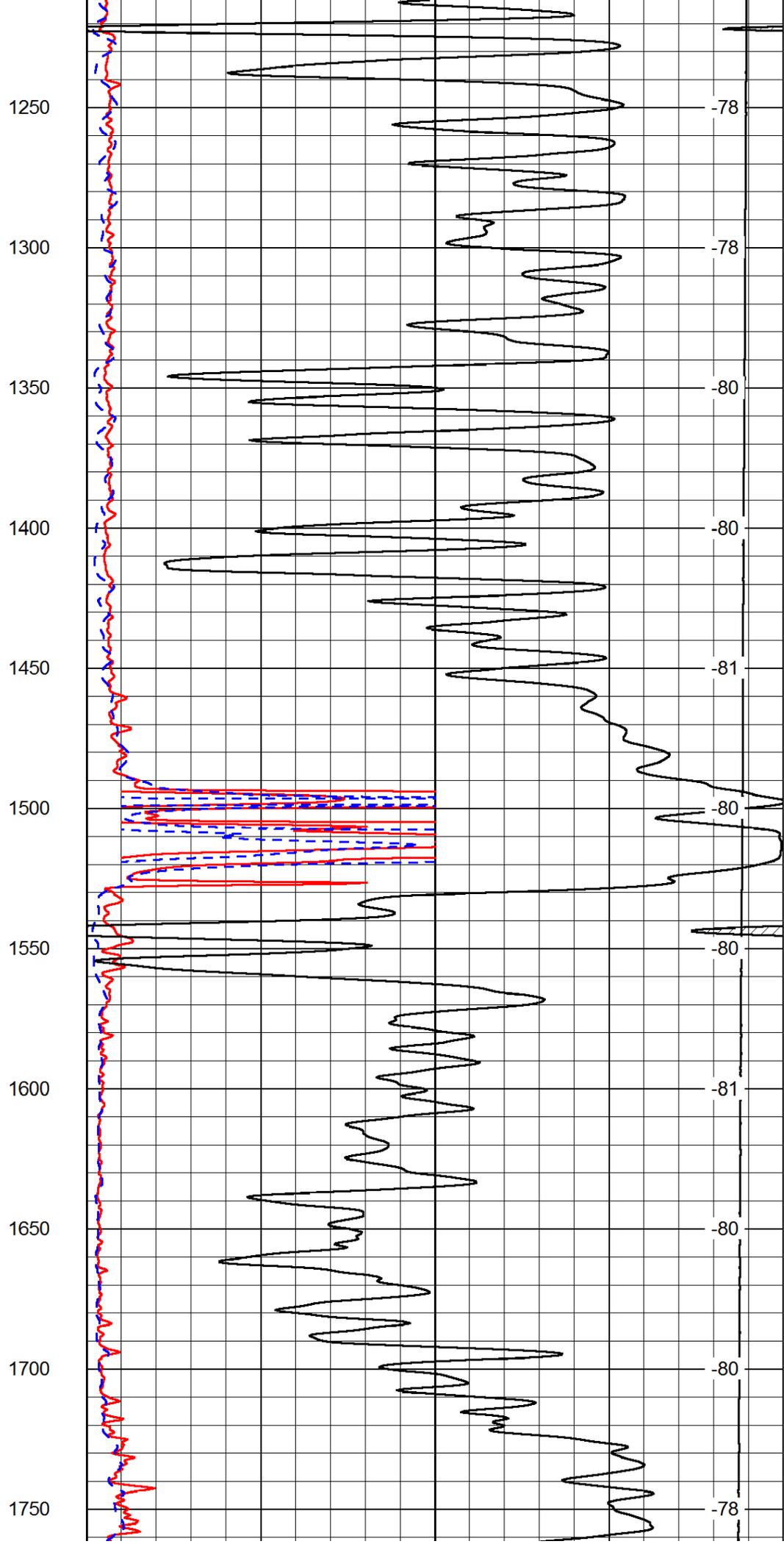
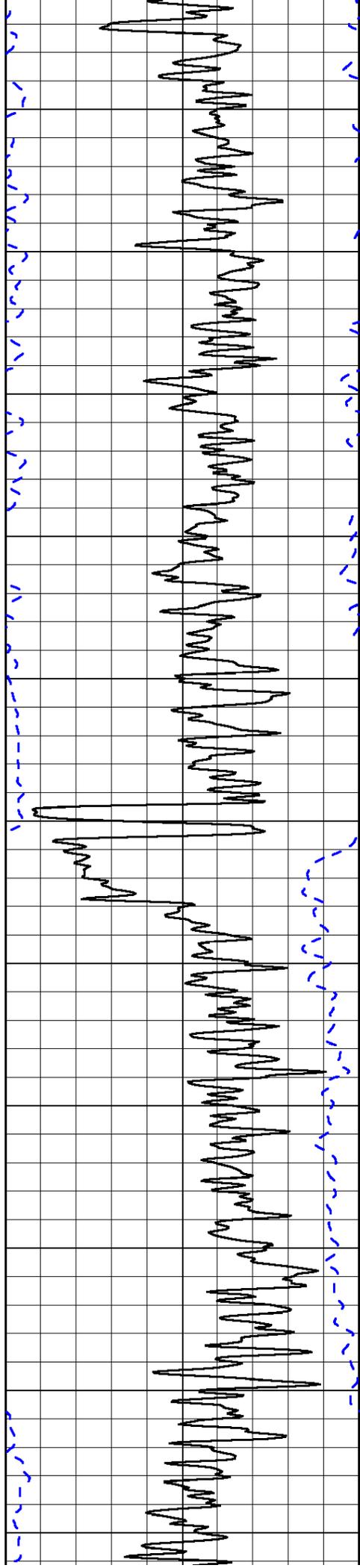
LSPD

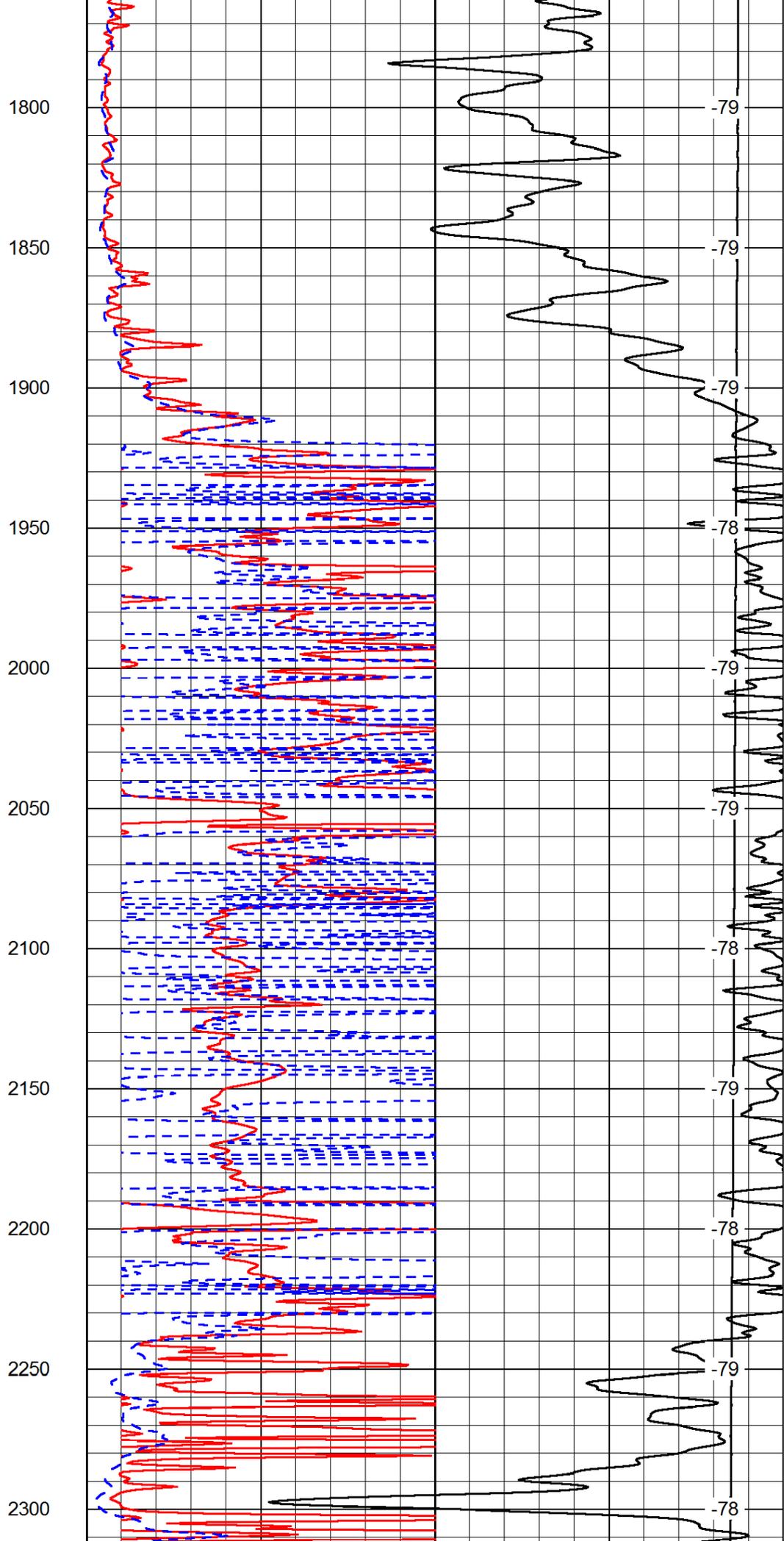
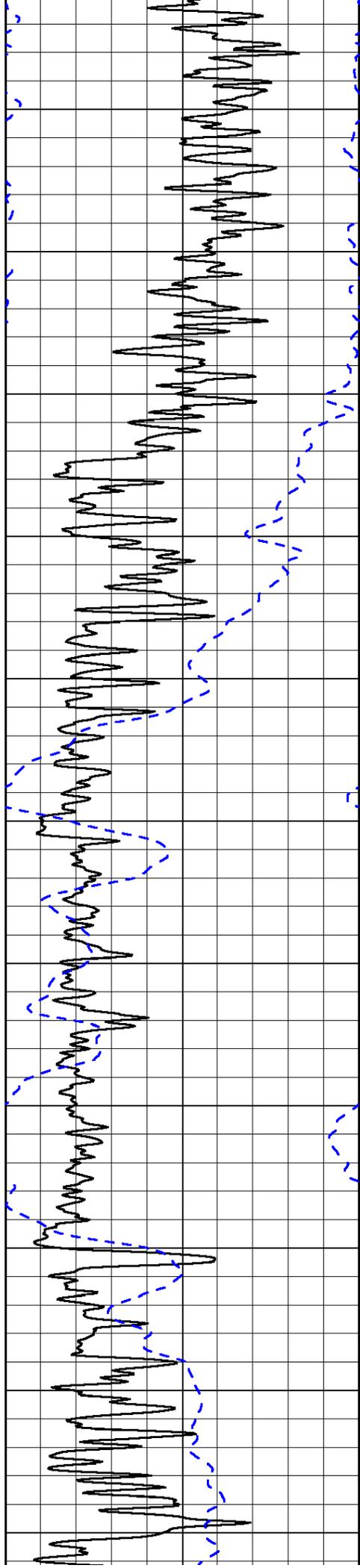
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15000	Line Tension	0

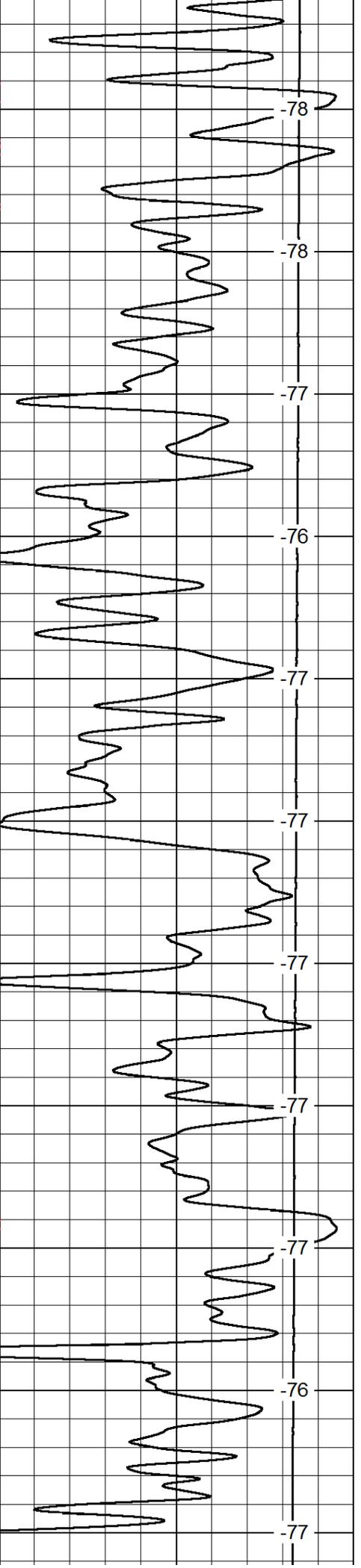
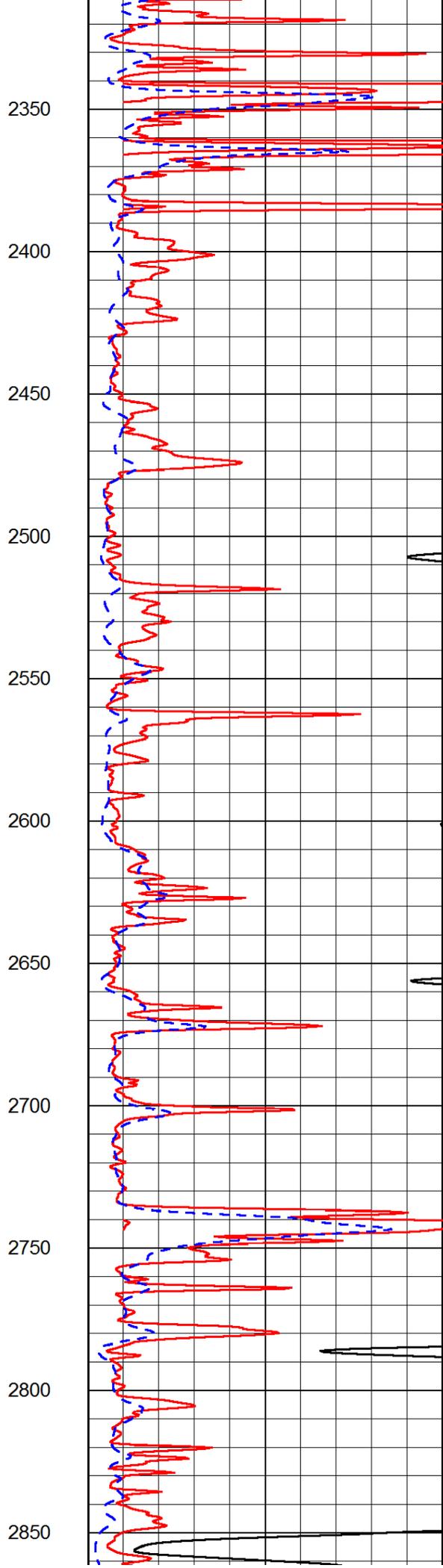
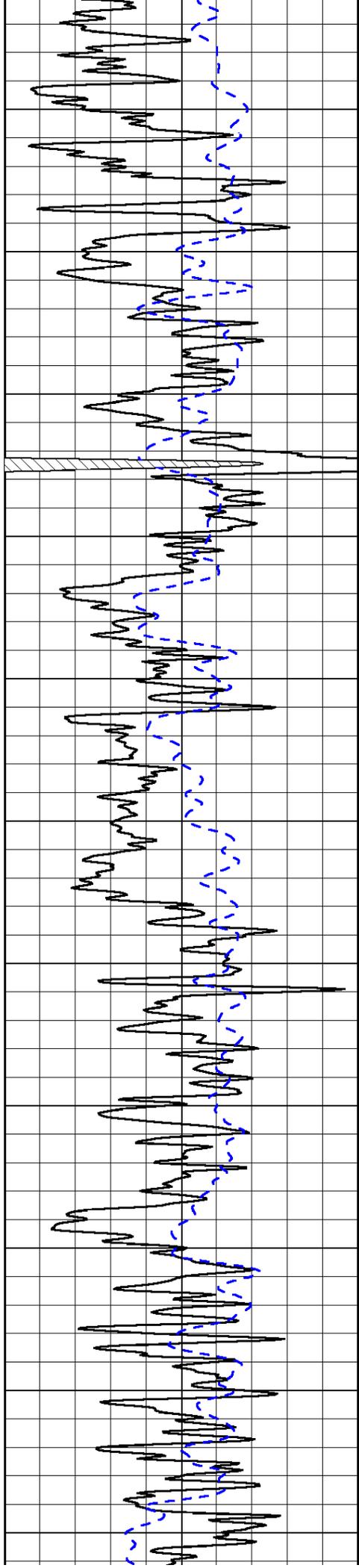
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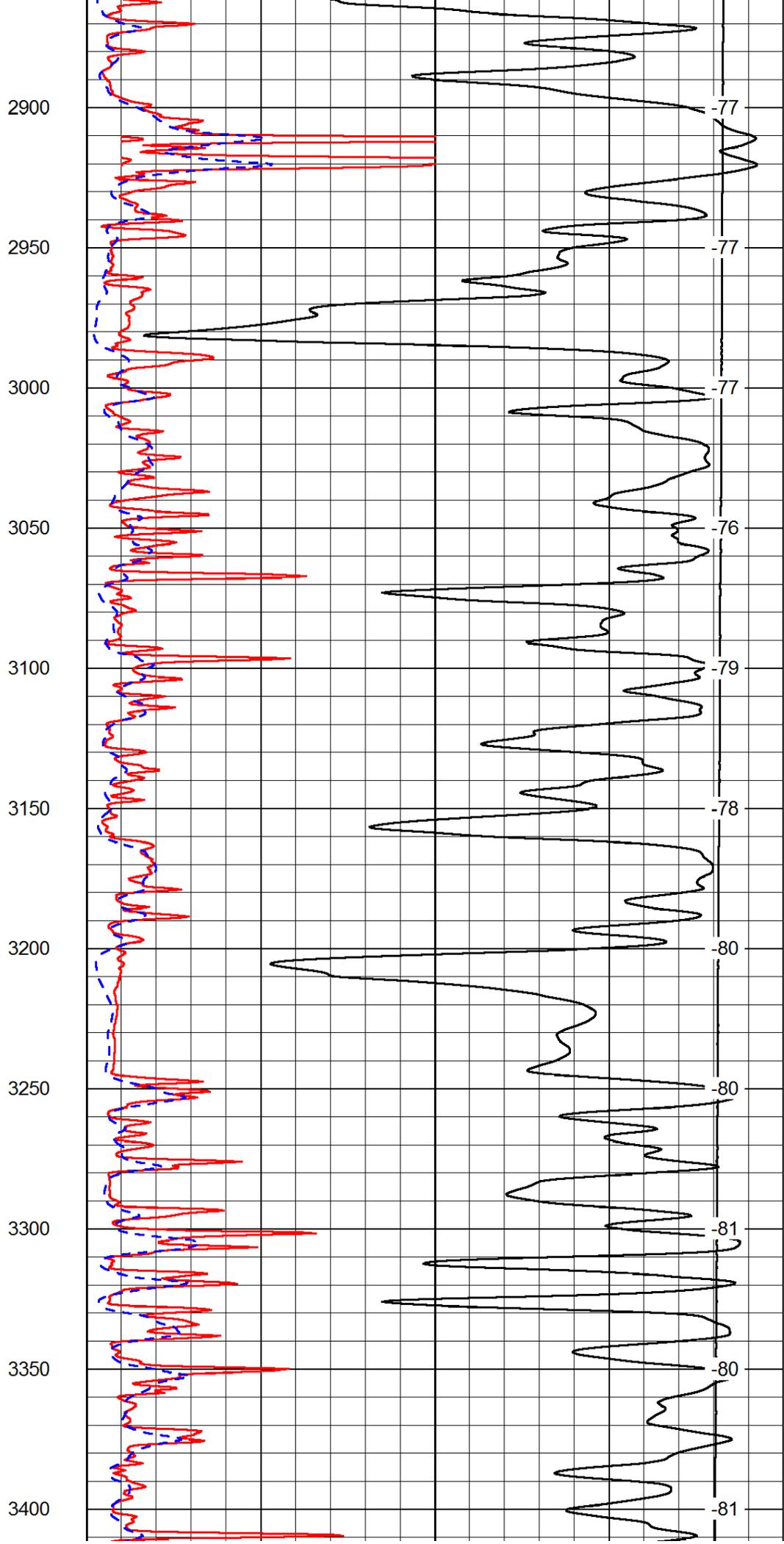
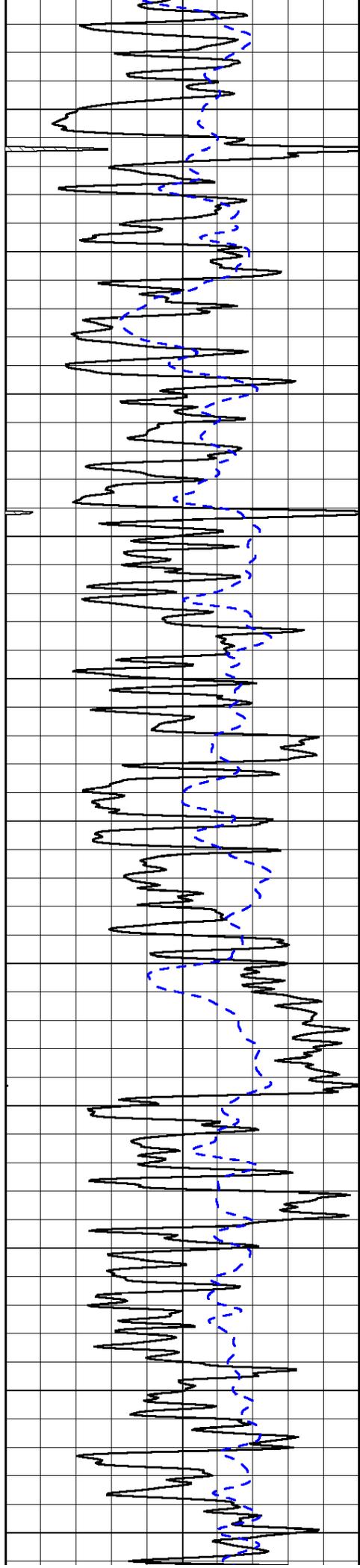


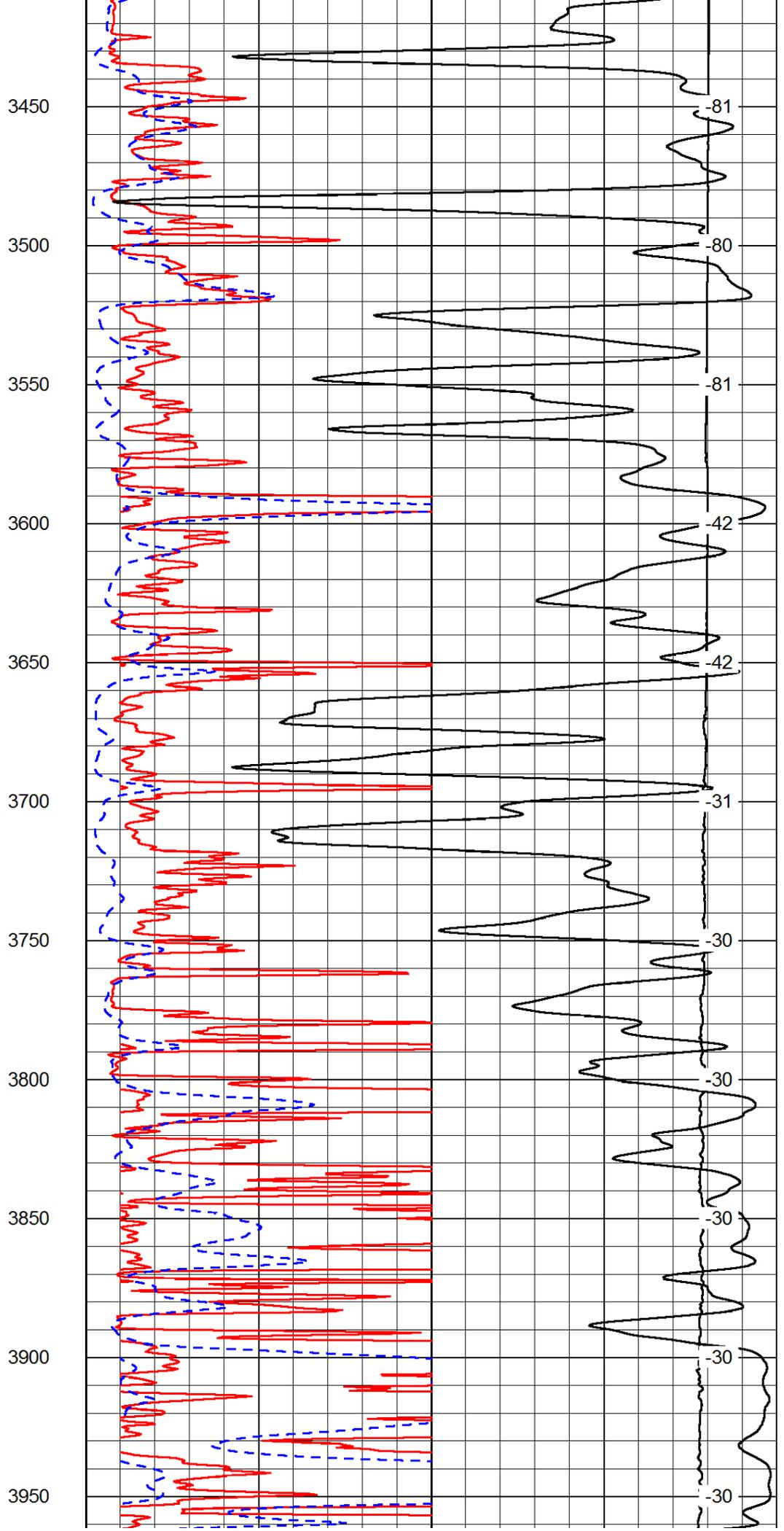
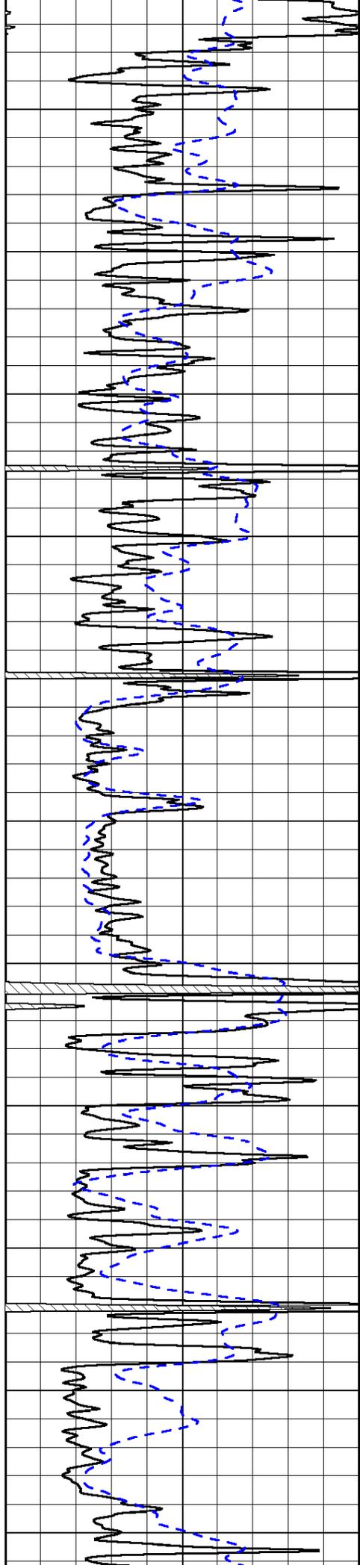


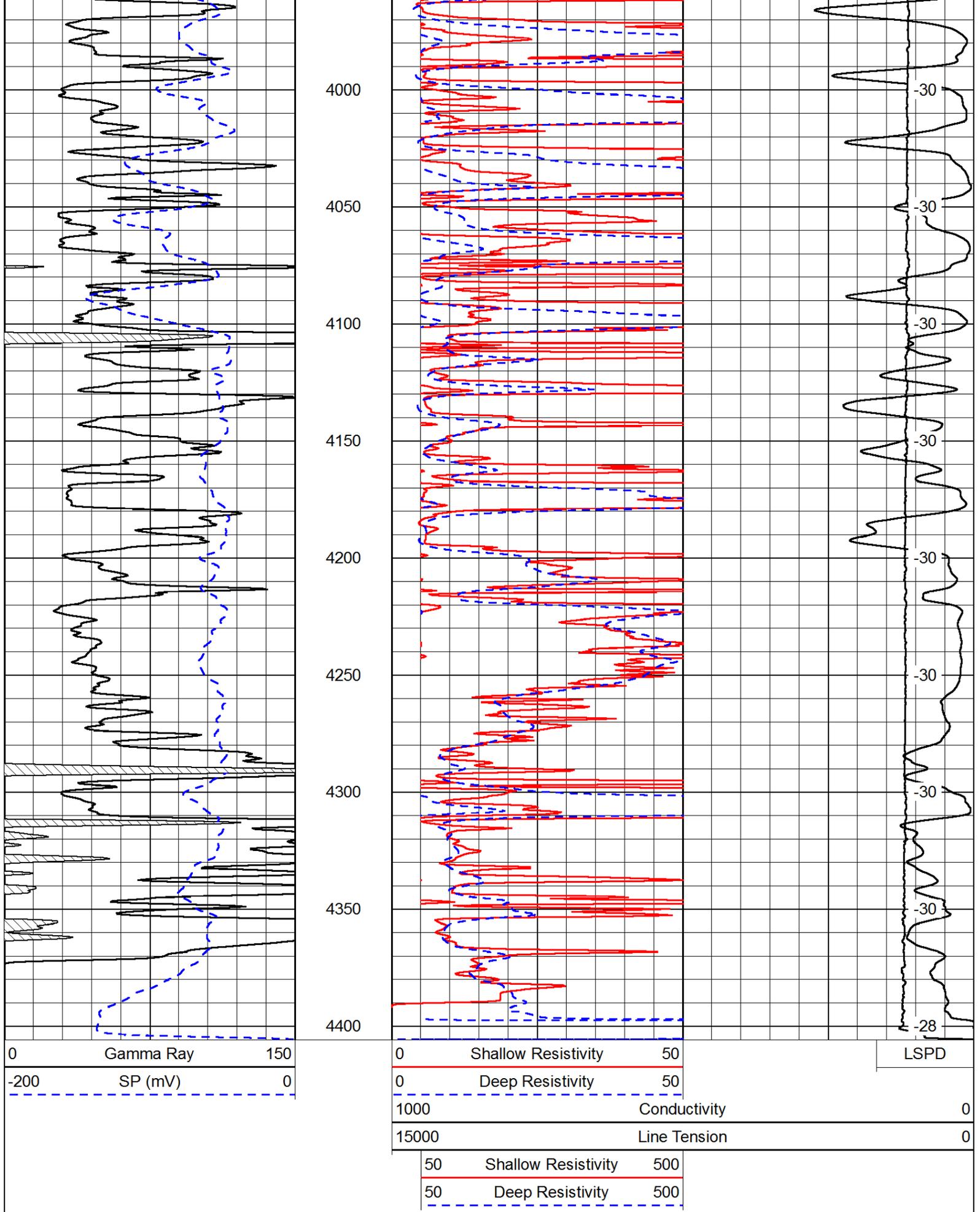










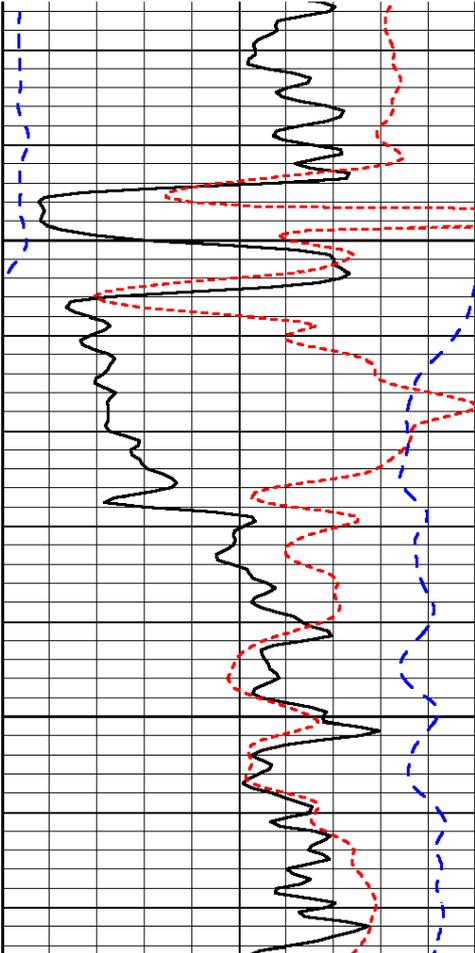


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-160	RxoRt	40

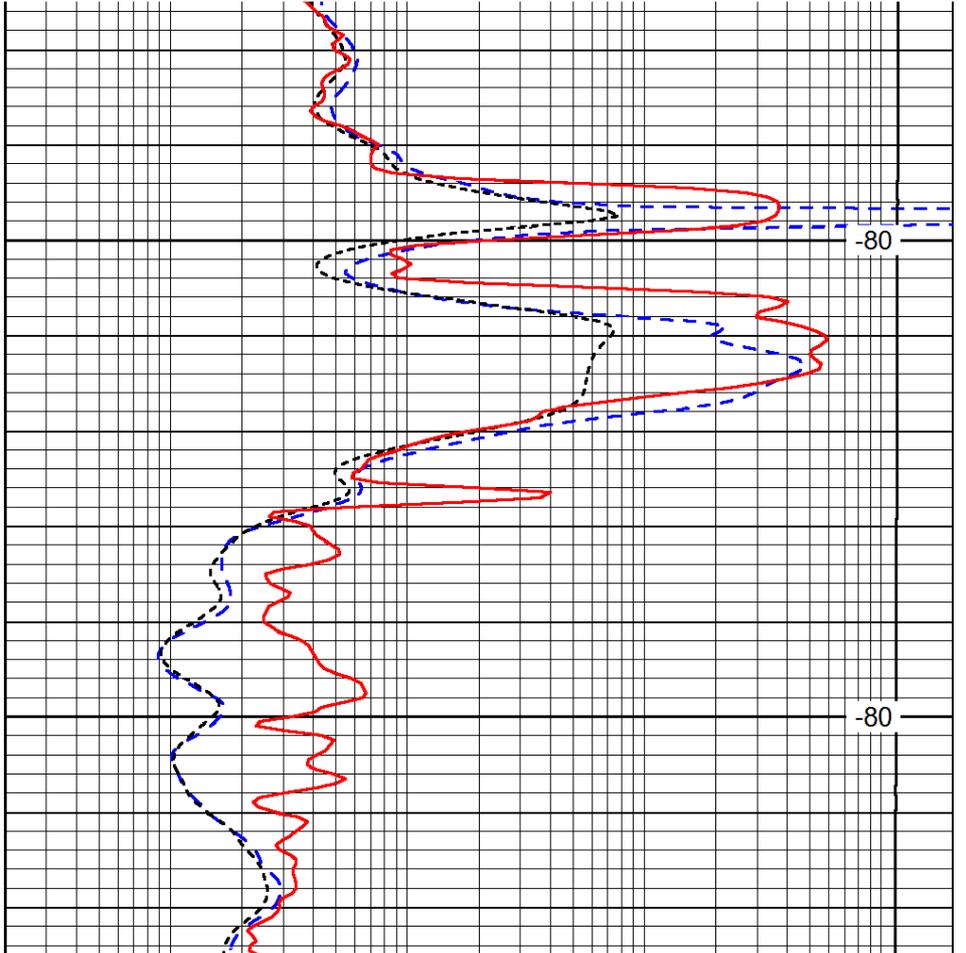
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0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD



1500

1550



-80

-80

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

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

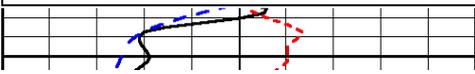
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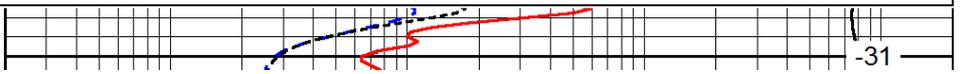
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-200	SP (mV)	0
-160	RxoRt	40

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

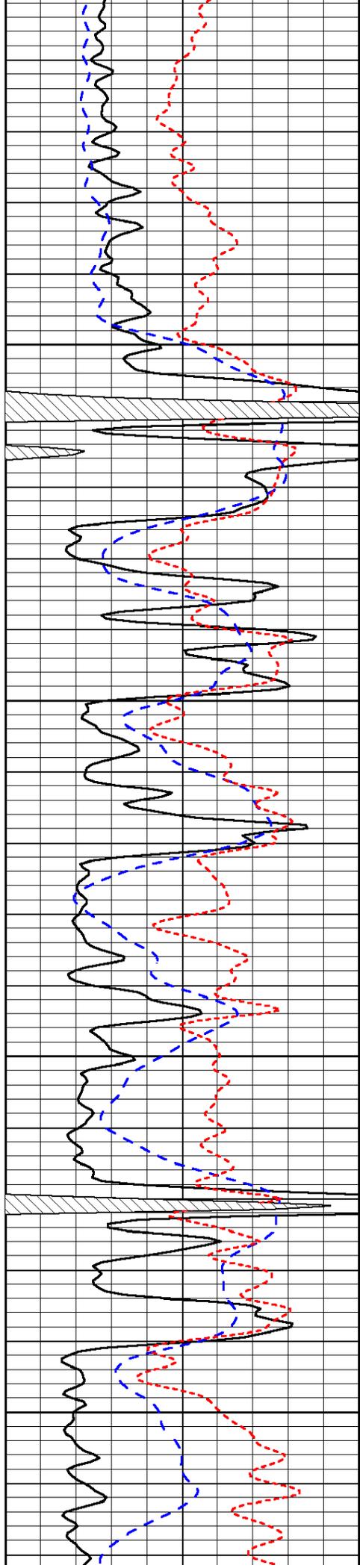
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3700



-31

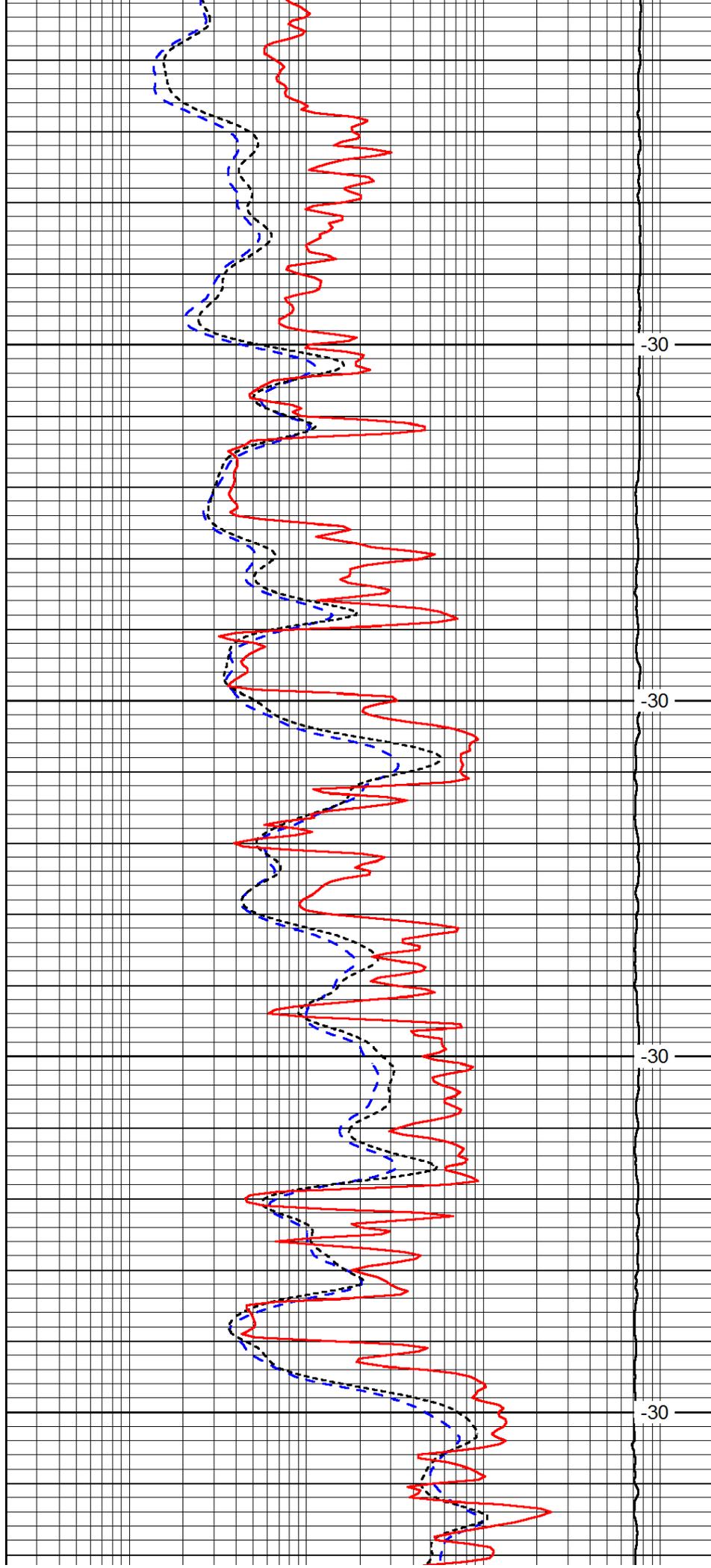


3750

3800

3850

3900

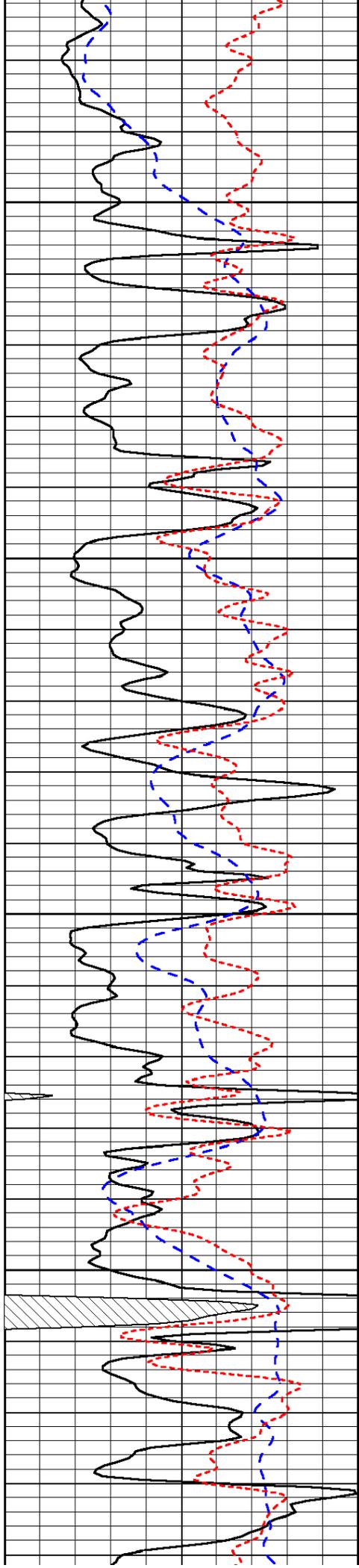


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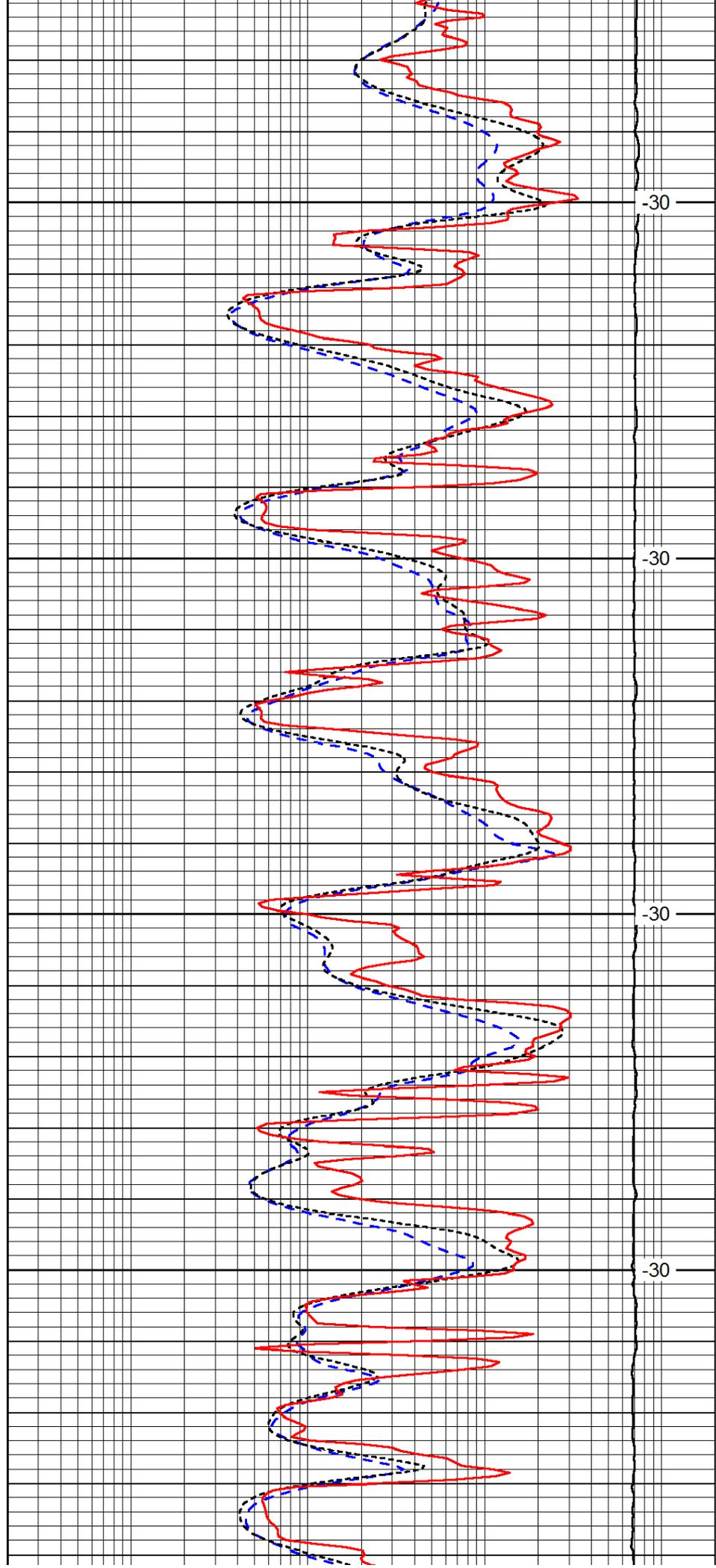


3950

4000

4050

4100

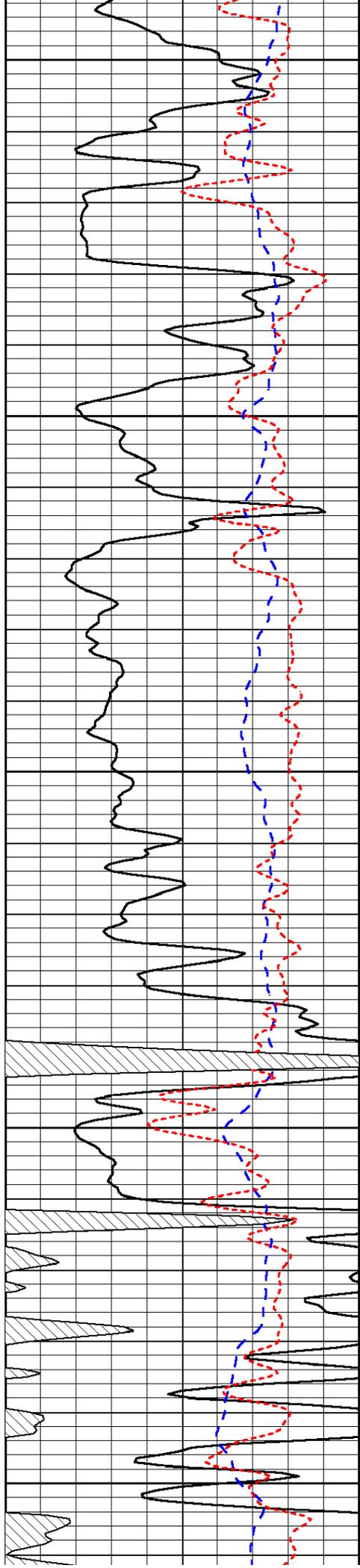


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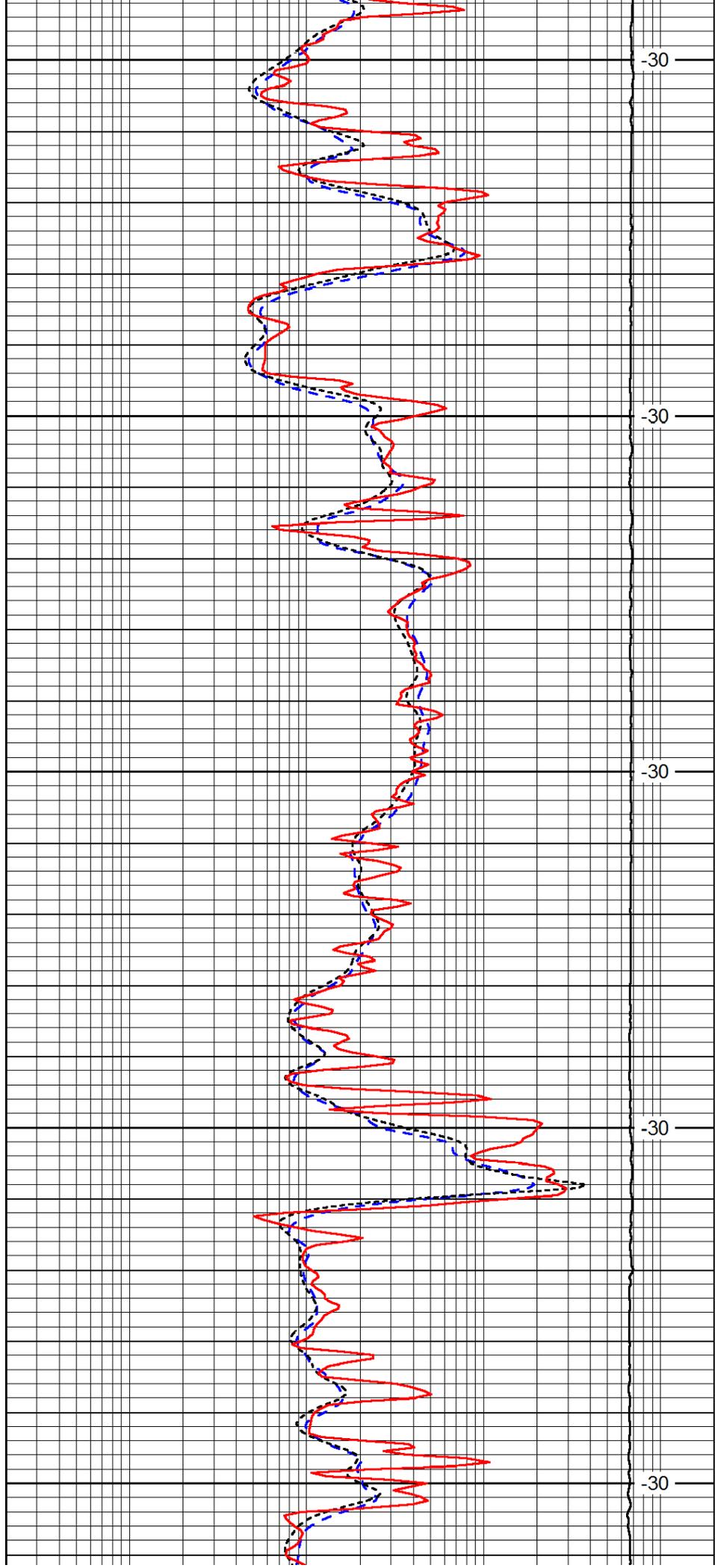
4150

4200

4250

4300

4350



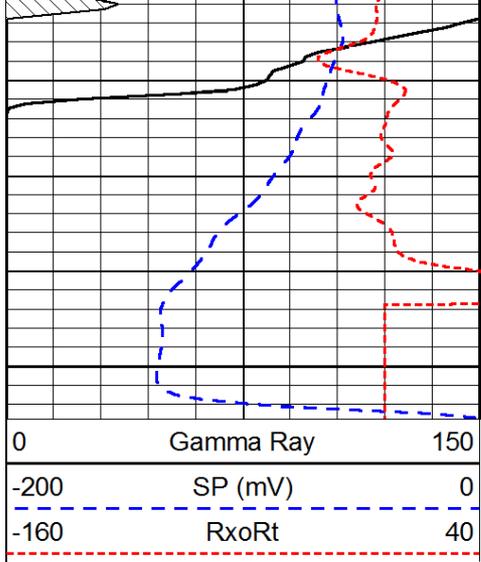
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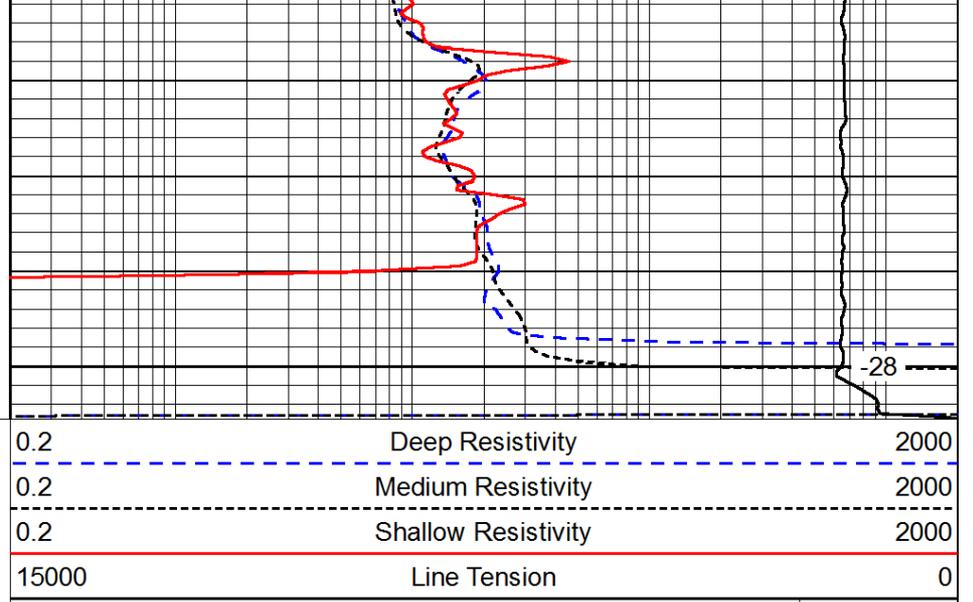
-30

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-30



4400



-28

LSPD