

# LOG-TECH



## Dual Induction Log

DIGITAL LOG

(785) 625-3858

API No.

15-101-22,200-00-00

Company Larson Operating Company

Well Bryant No. 1-4

Field Wildcat

County Lane State Kansas

Location

SE SE NW SE  
1601' FSL & 1514' FEL

Sec: 4 Twp: 19 S Rge: 30 W

Permanent Datum Ground Level Elevation 2884  
Log Measured From Kelly Bushing 5 Ft. Above Perm. Datum  
Drilling Measured From Kelly Bushing

Elevation

K.B. 2889  
D.F.  
G.L. 2884

Date 11/11/2009

Run Number One

Depth Driller 4700

Depth Logger 4703

Bottom Logged Interval 4702

Top Log Interval 200

Casing Driller 8.625 @ 258

Casing Logger 256

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 2.500

Density / Viscosity 9.3 50

pH / Fluid Loss 10.5 6.8

Source of Sample Flowline

Rm @ Meas. Temp .76 @ 68

Rmf @ Meas. Temp .57 @ 68

Rmc @ Meas. Temp 1.03 @ 68

Source of Rmf / Rmc Charts

Rm @ BHT .41 @ 125

Operating Rig Time 4 Hours

Max Rec. Temp. F 125

Equipment Number 4

Location Hays

Recorded By K. Bange

Witnessed By Vern Schrag

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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

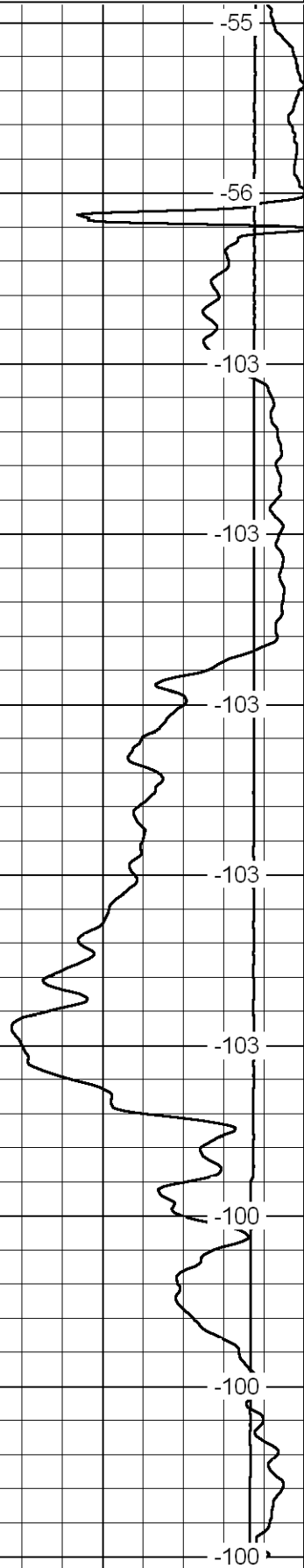
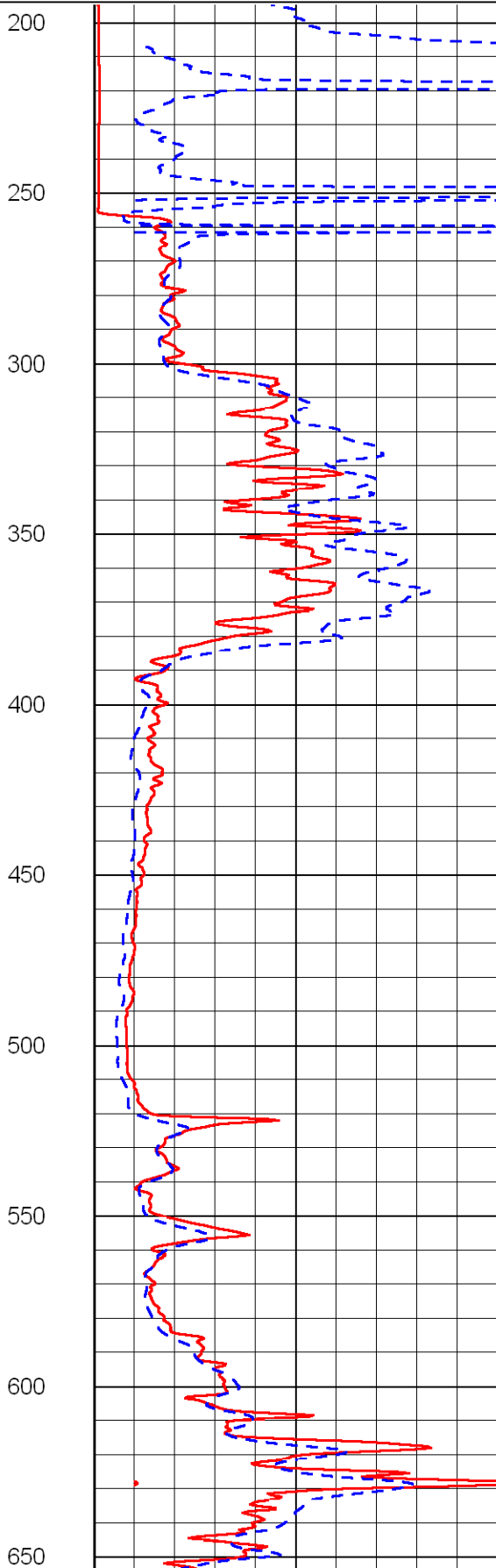
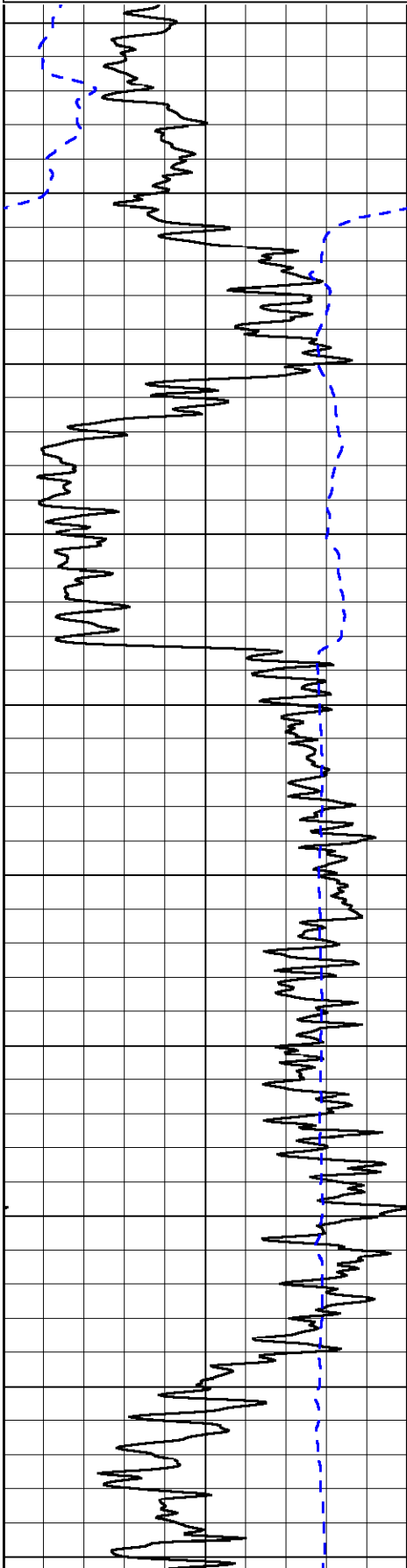
Dighton, 8 W to Dodge rd, 4 S to 110 rd, 1 1/4 W, N into

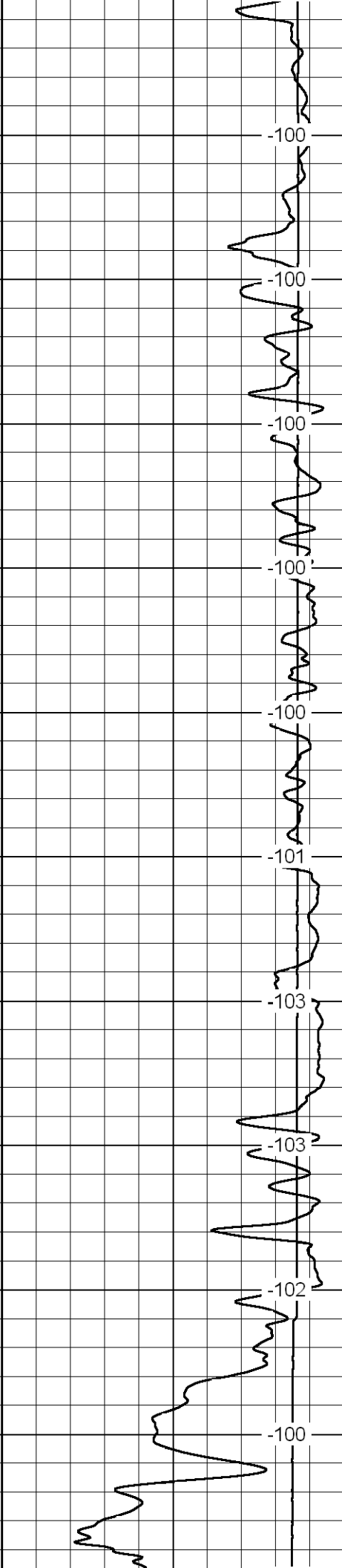
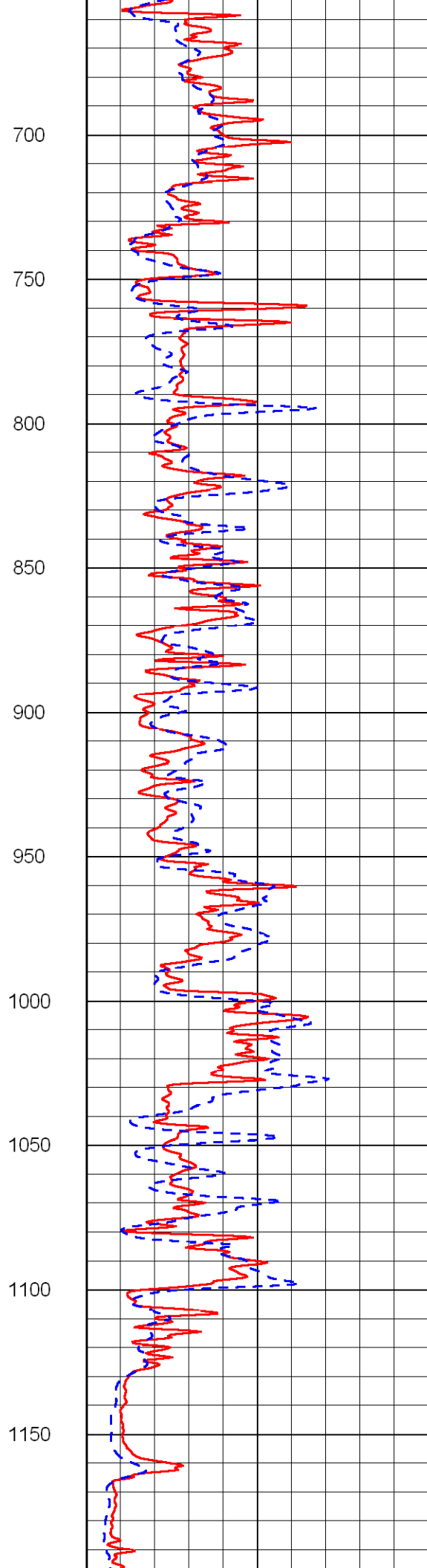
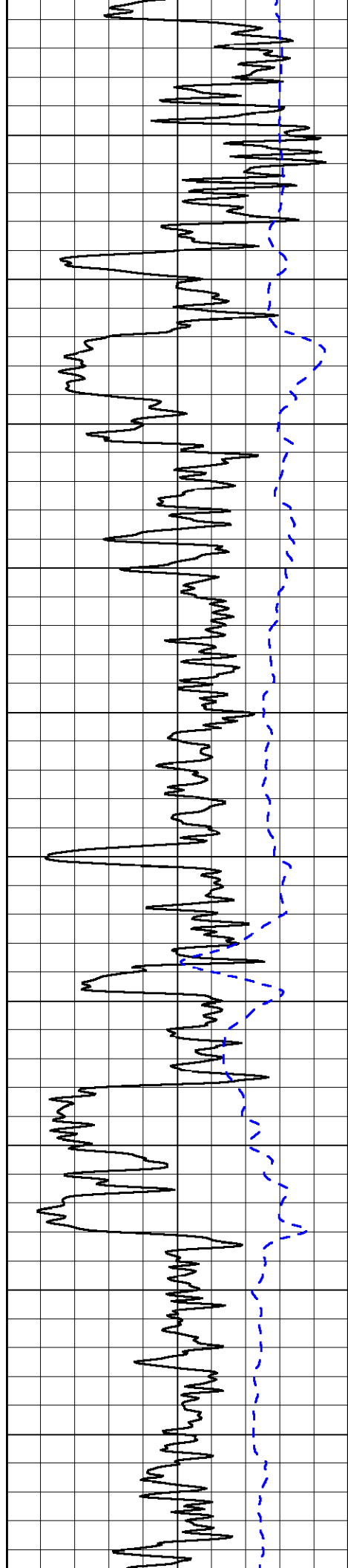
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Presentation Format: dil2in  
Dataset Creation: Wed Nov 11 12:39:40 2009  
Charted by: Depth in Feet scaled 1:600

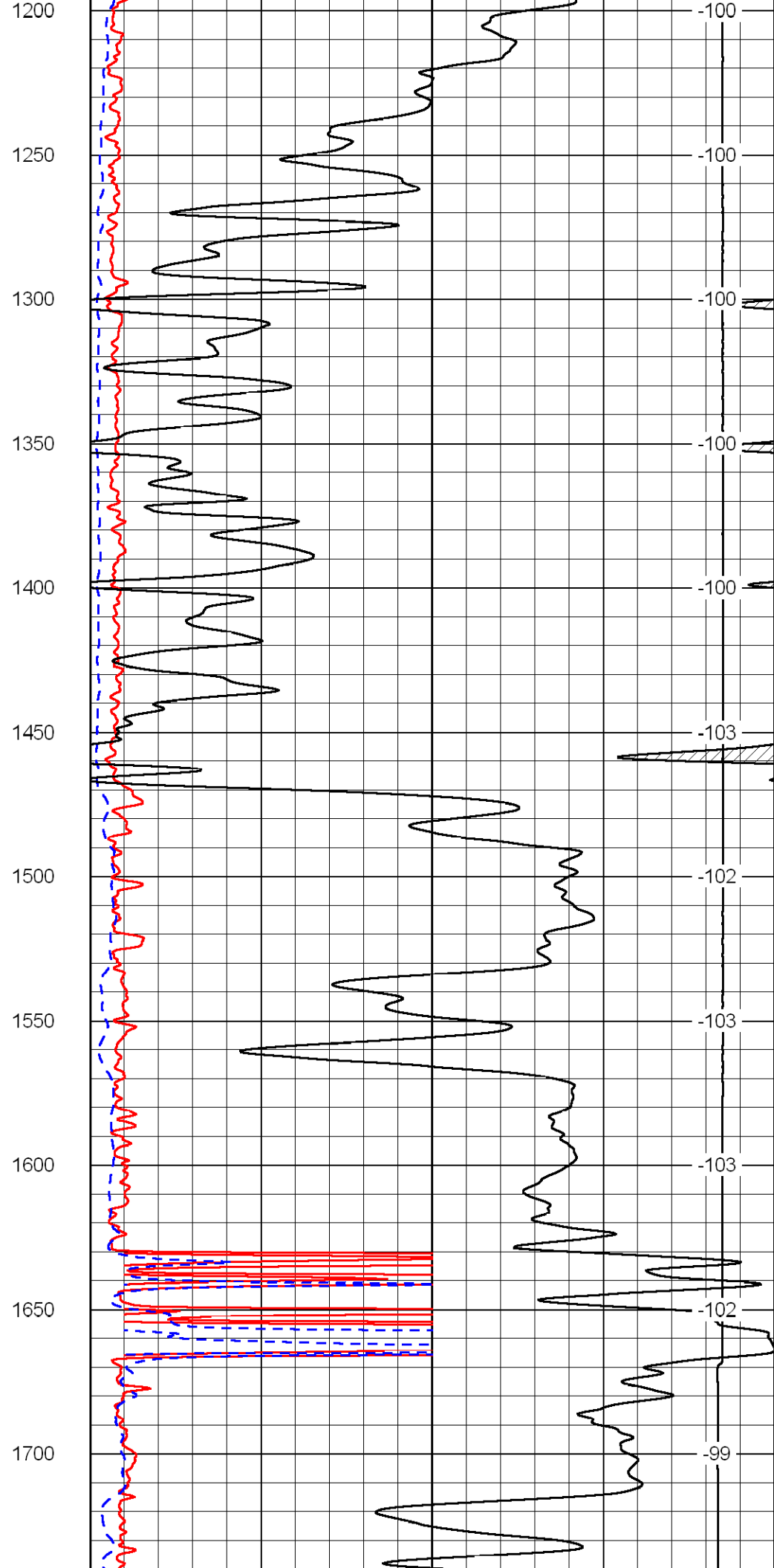
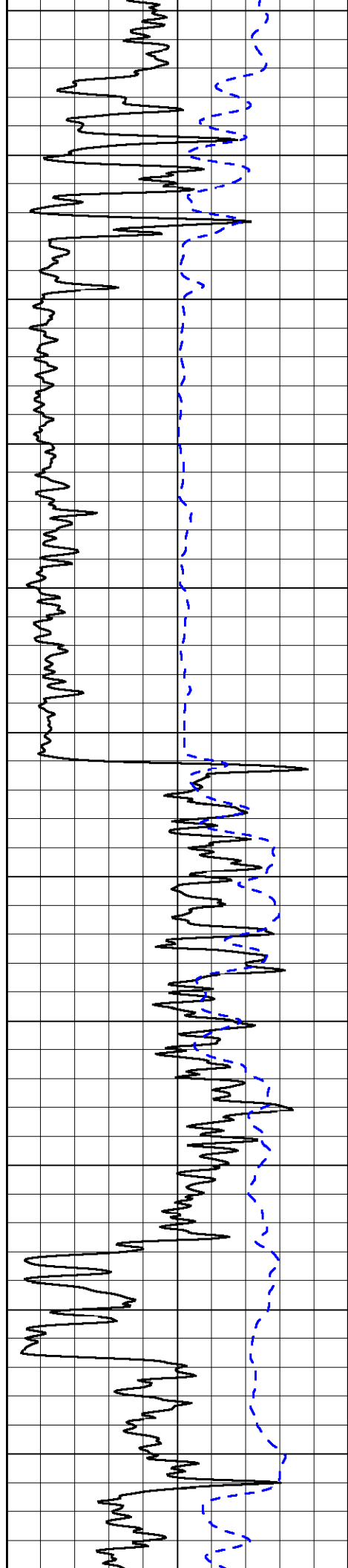
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|------|-----------|-----|
| 0    | Gamma Ray | 150 |
| -200 | SP (MV)   | 0   |

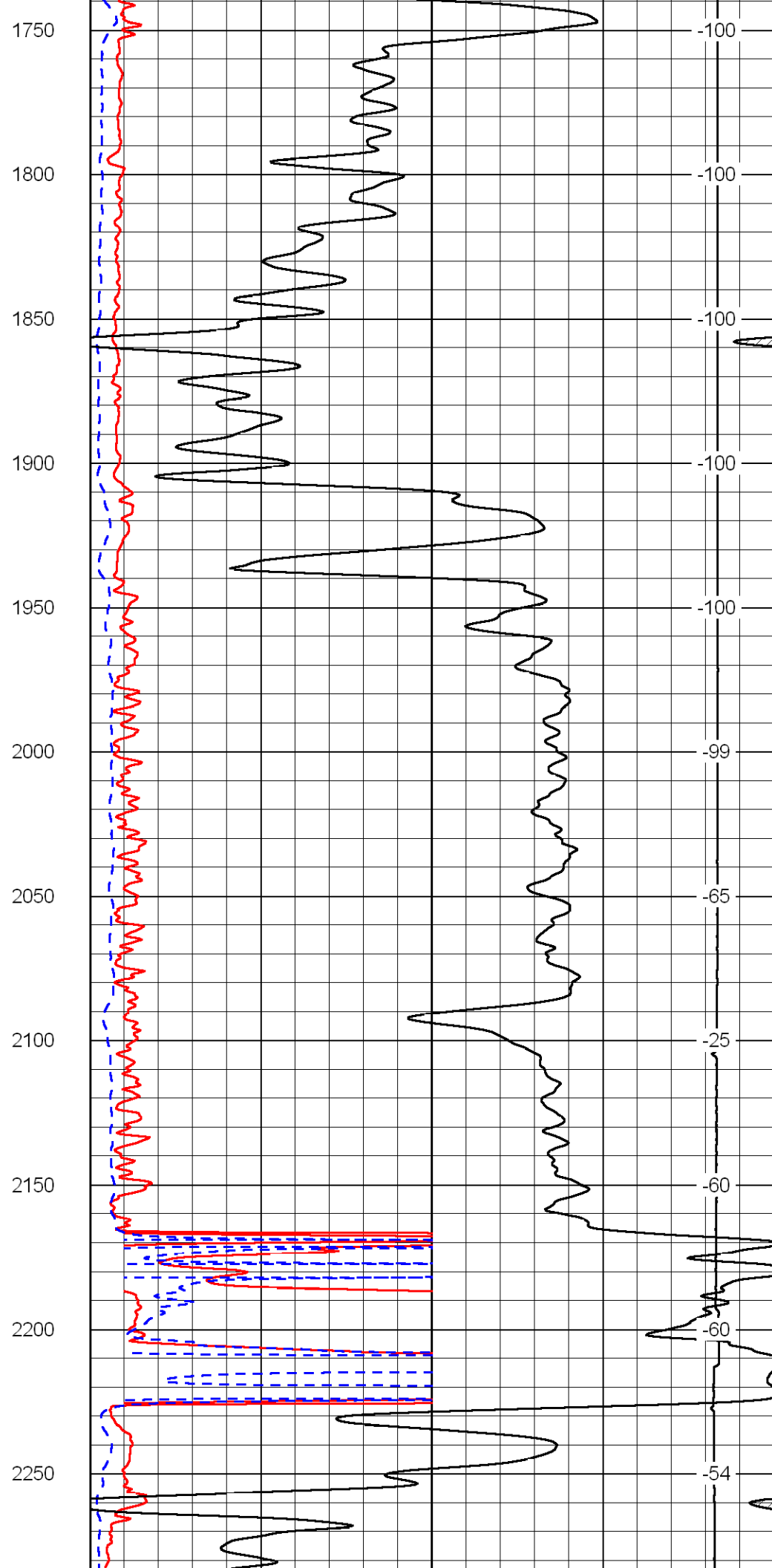
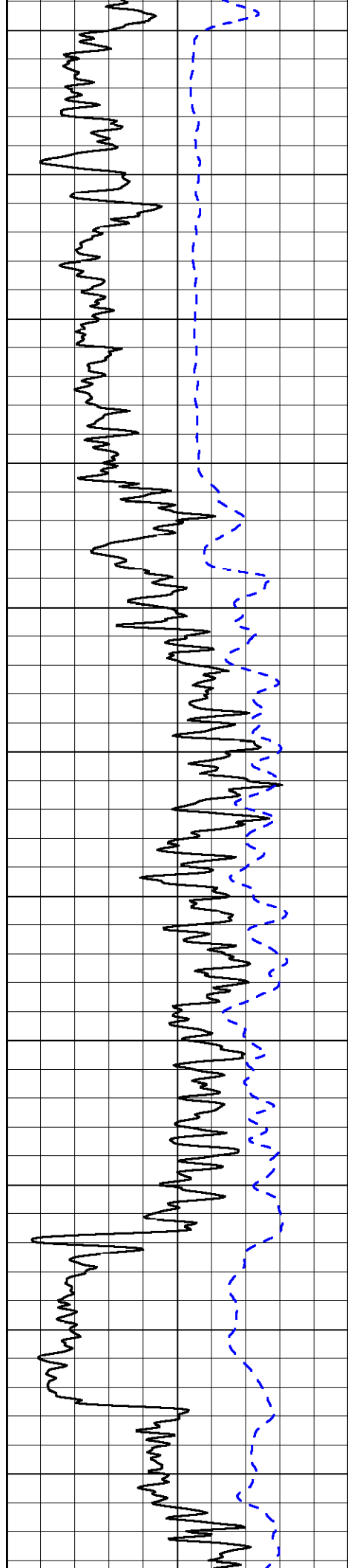
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|-------|-----------------------------|-----|
| 0     | Shallow Resistivity (Ohm-m) | 50  |
| 0     | Deep Resistivity (Ohm-m)    | 50  |
| 1000  | Conductivity (mmho/m)       | 0   |
| 15000 | Line Tension (lb)           | 0   |
| 50    | Shallow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

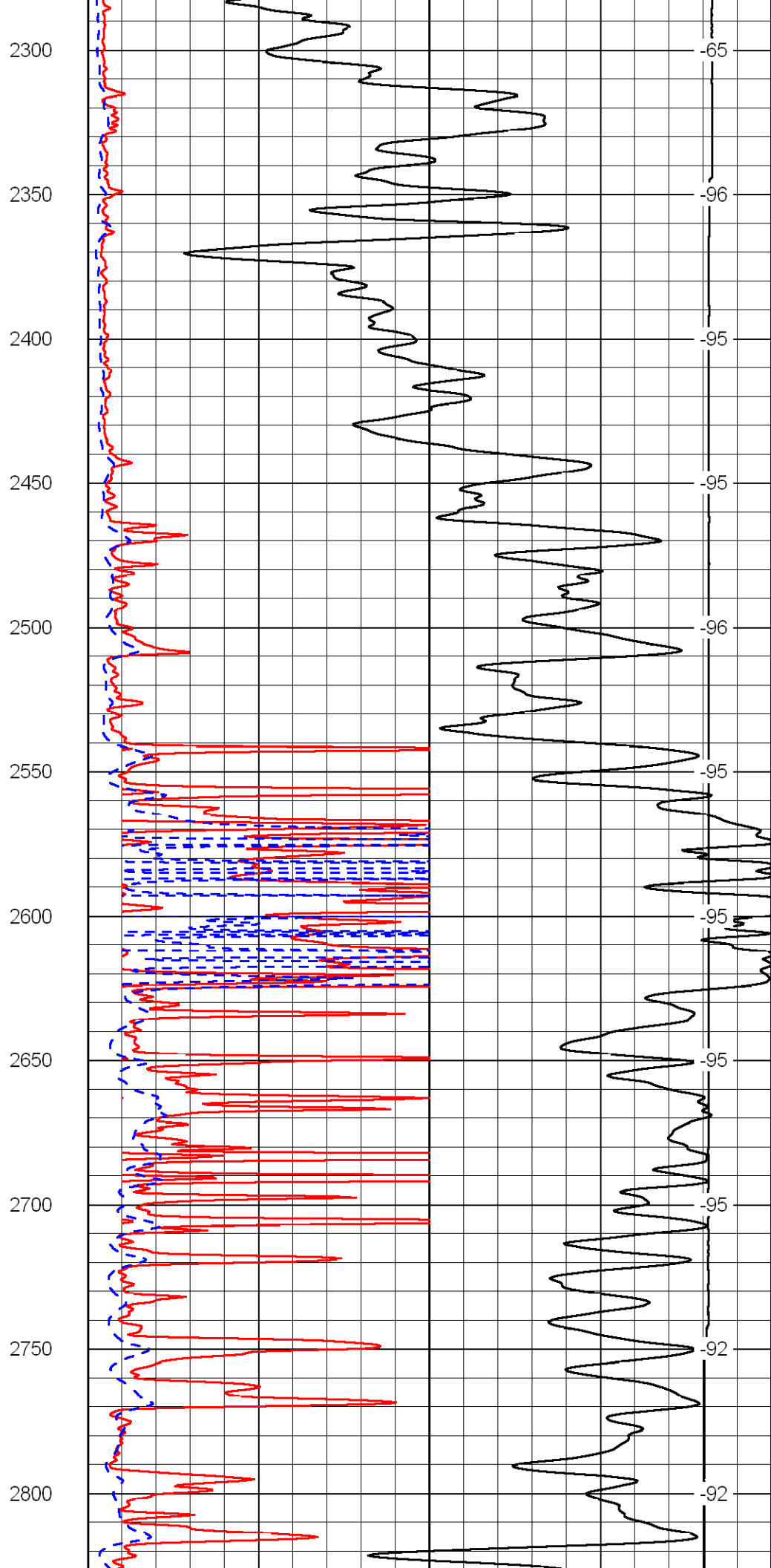
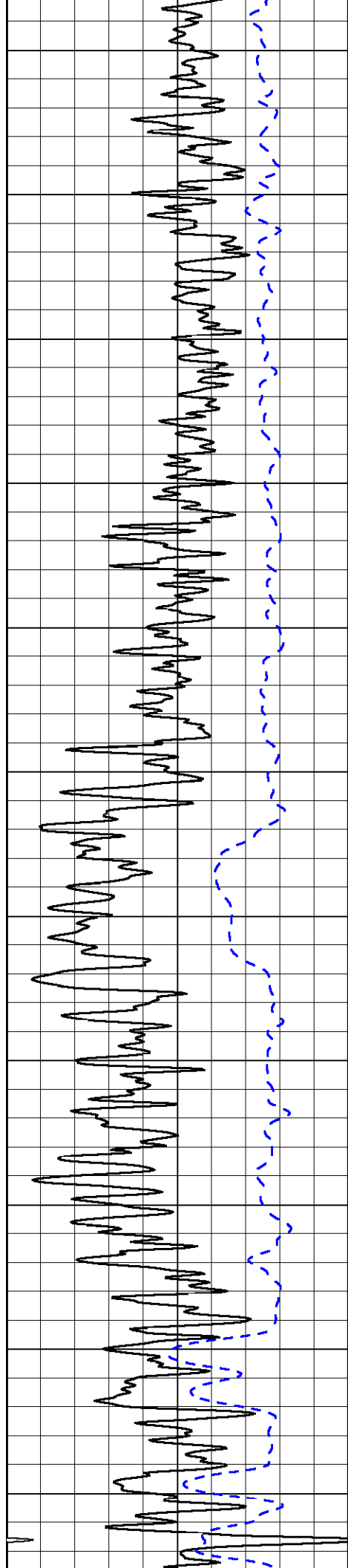
|          |
|----------|
| LSPD     |
| (ft/min) |

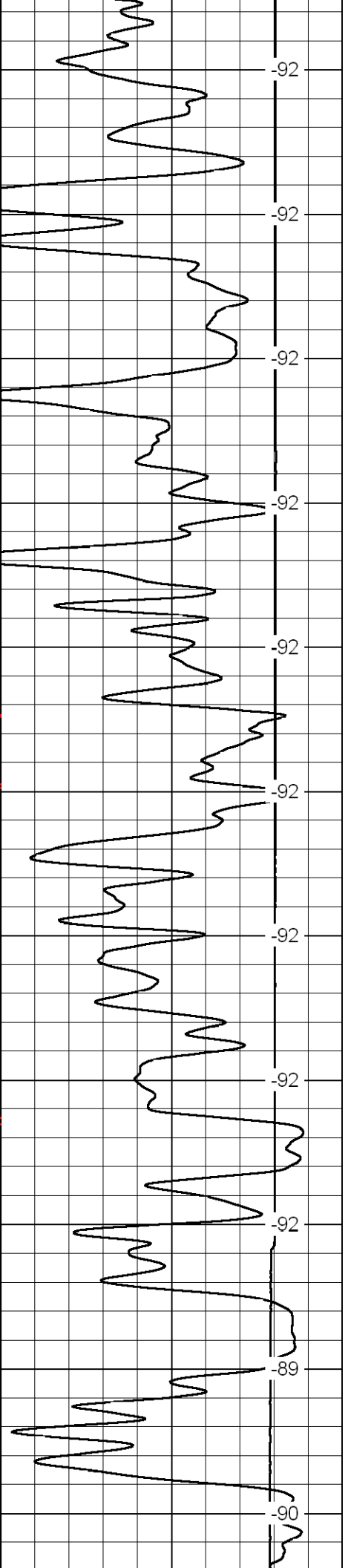
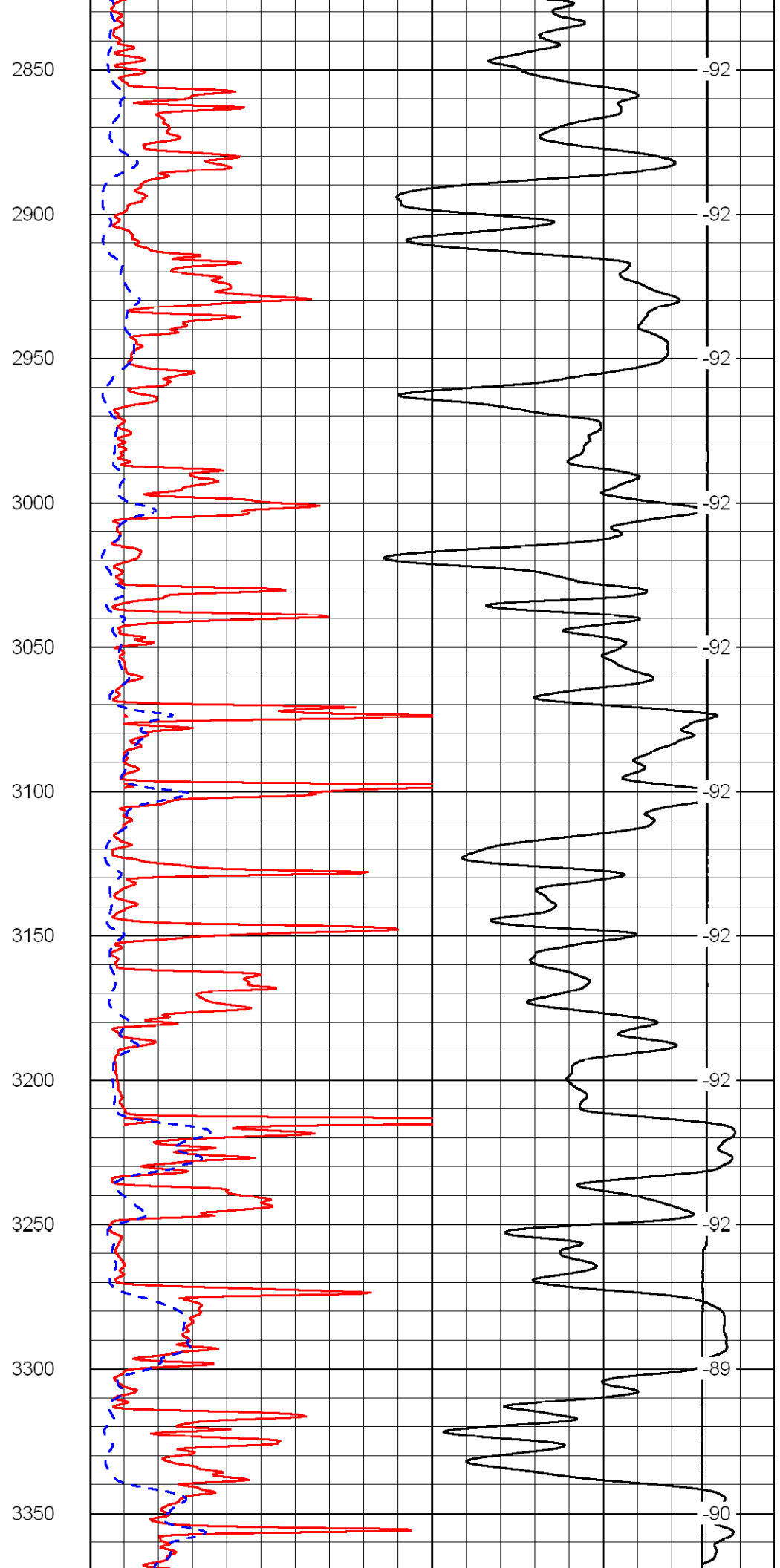
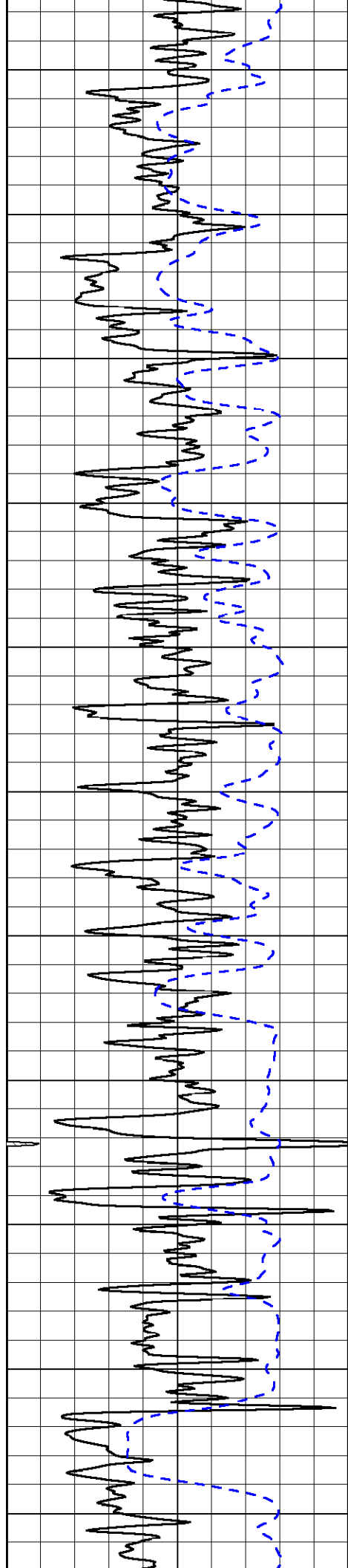


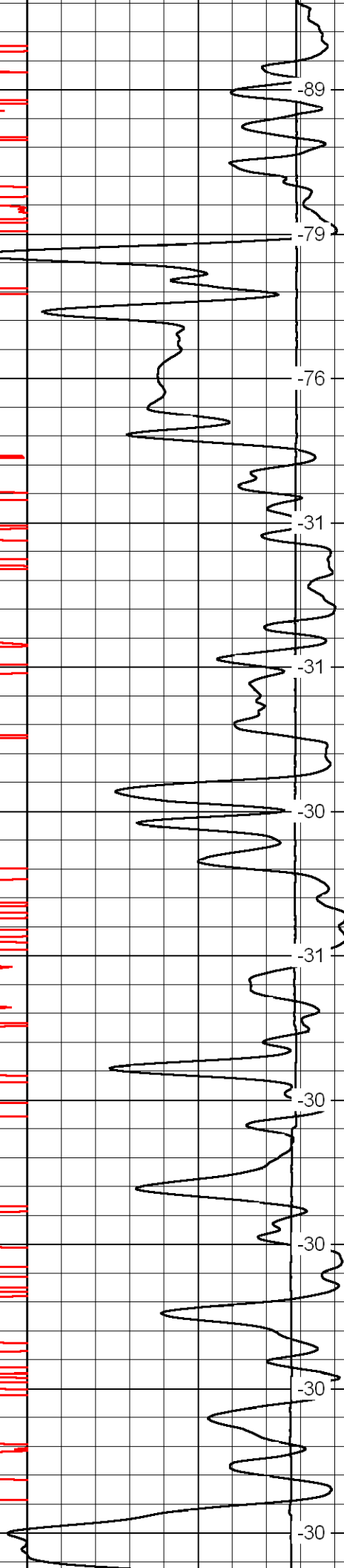
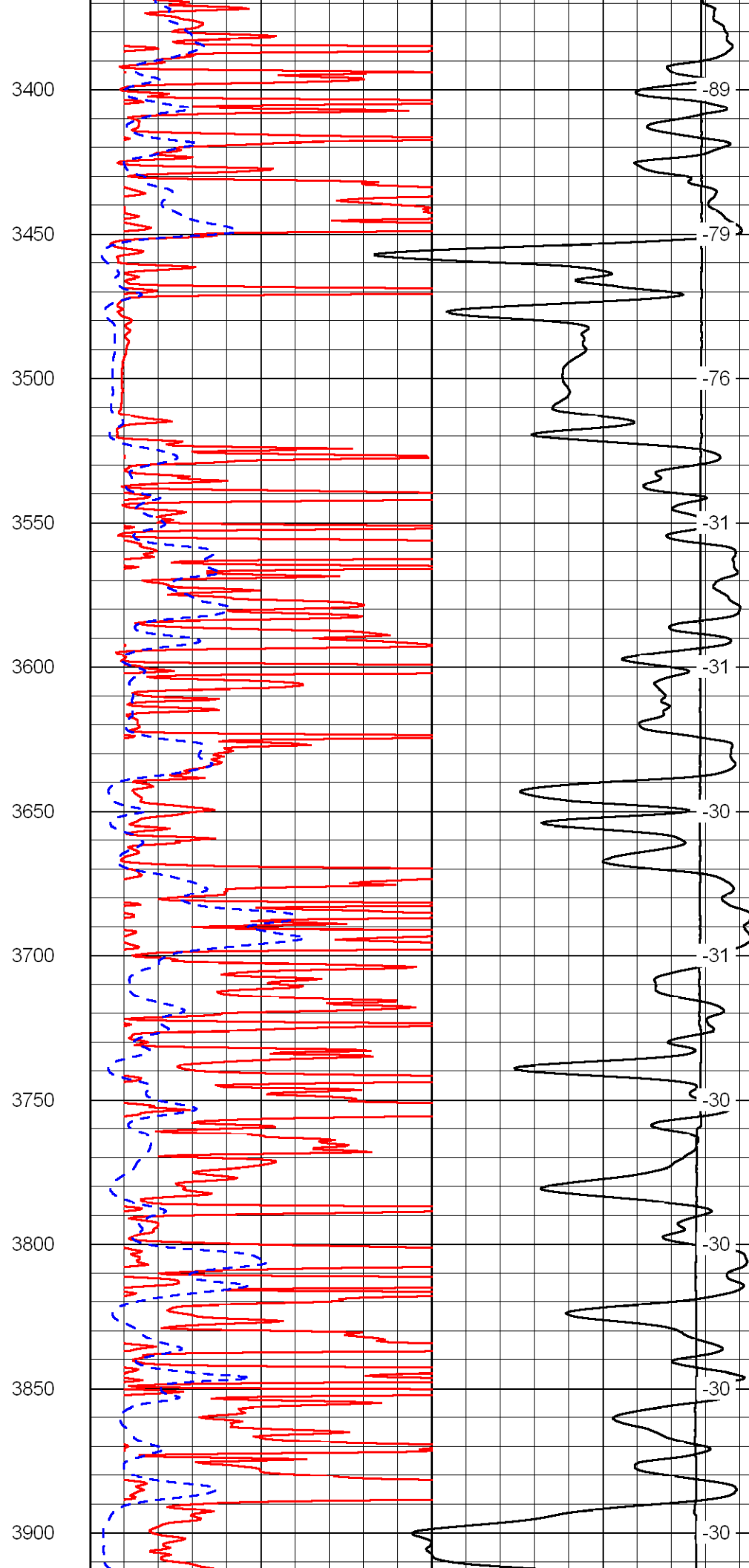
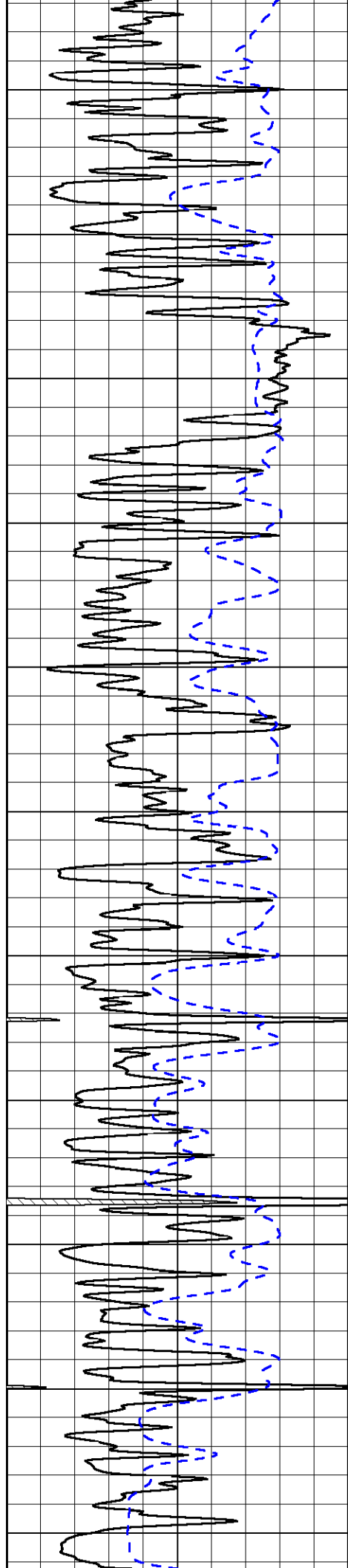


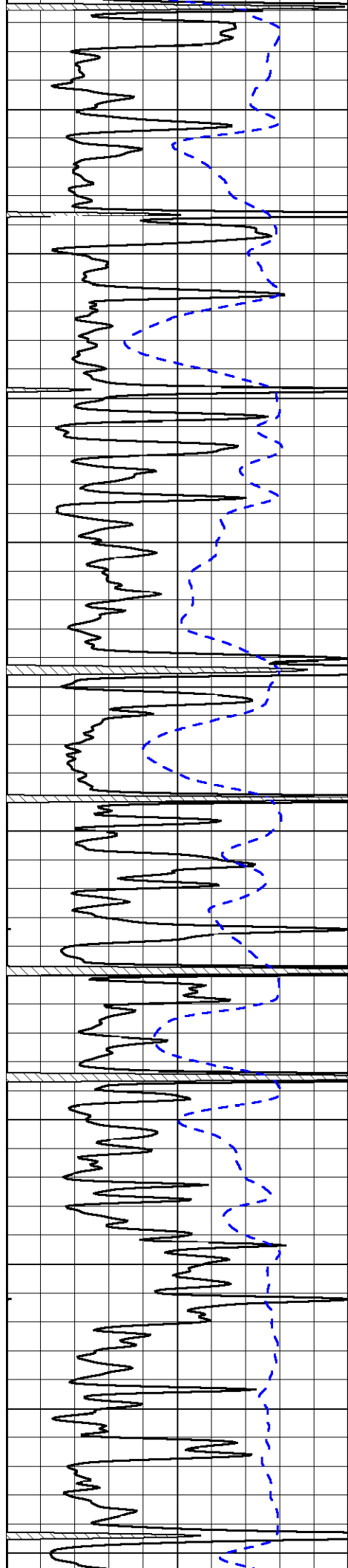












3950

4000

4050

4100

4150

4200

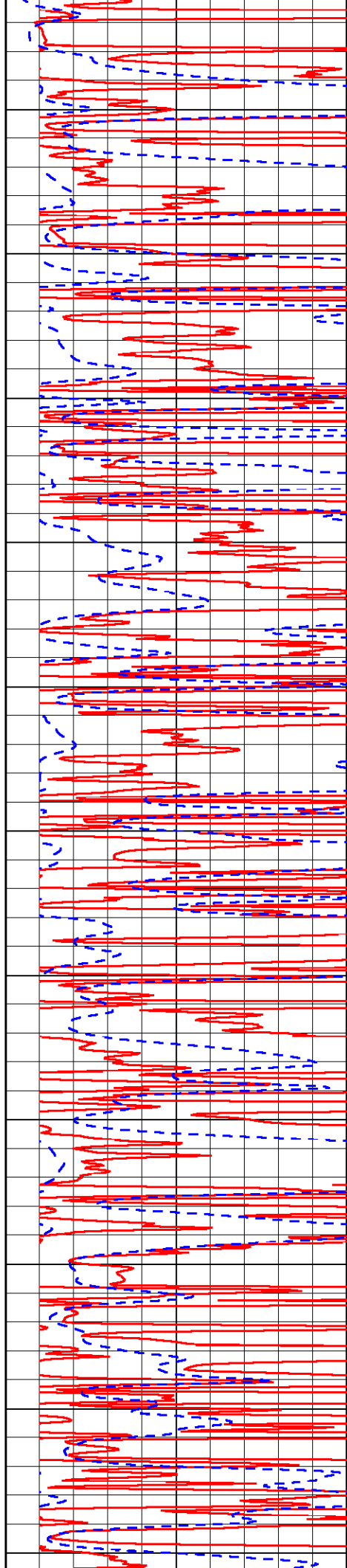
4250

4300

4350

4400

4450



-29

-30

-29

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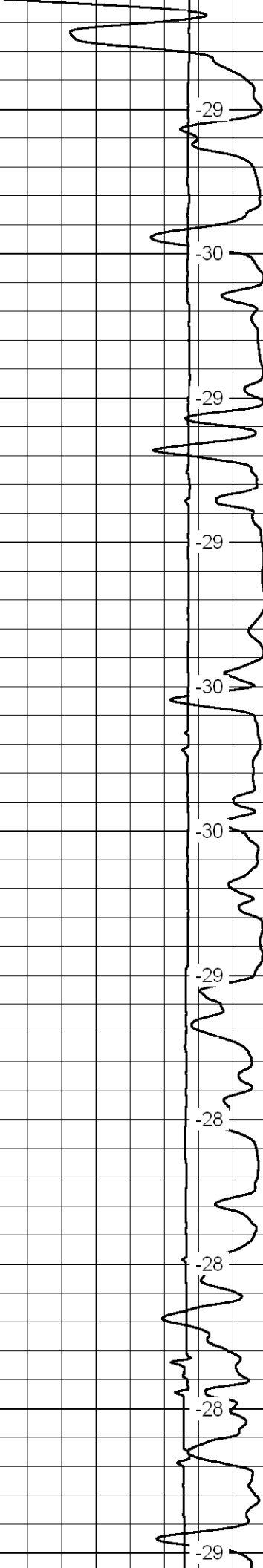
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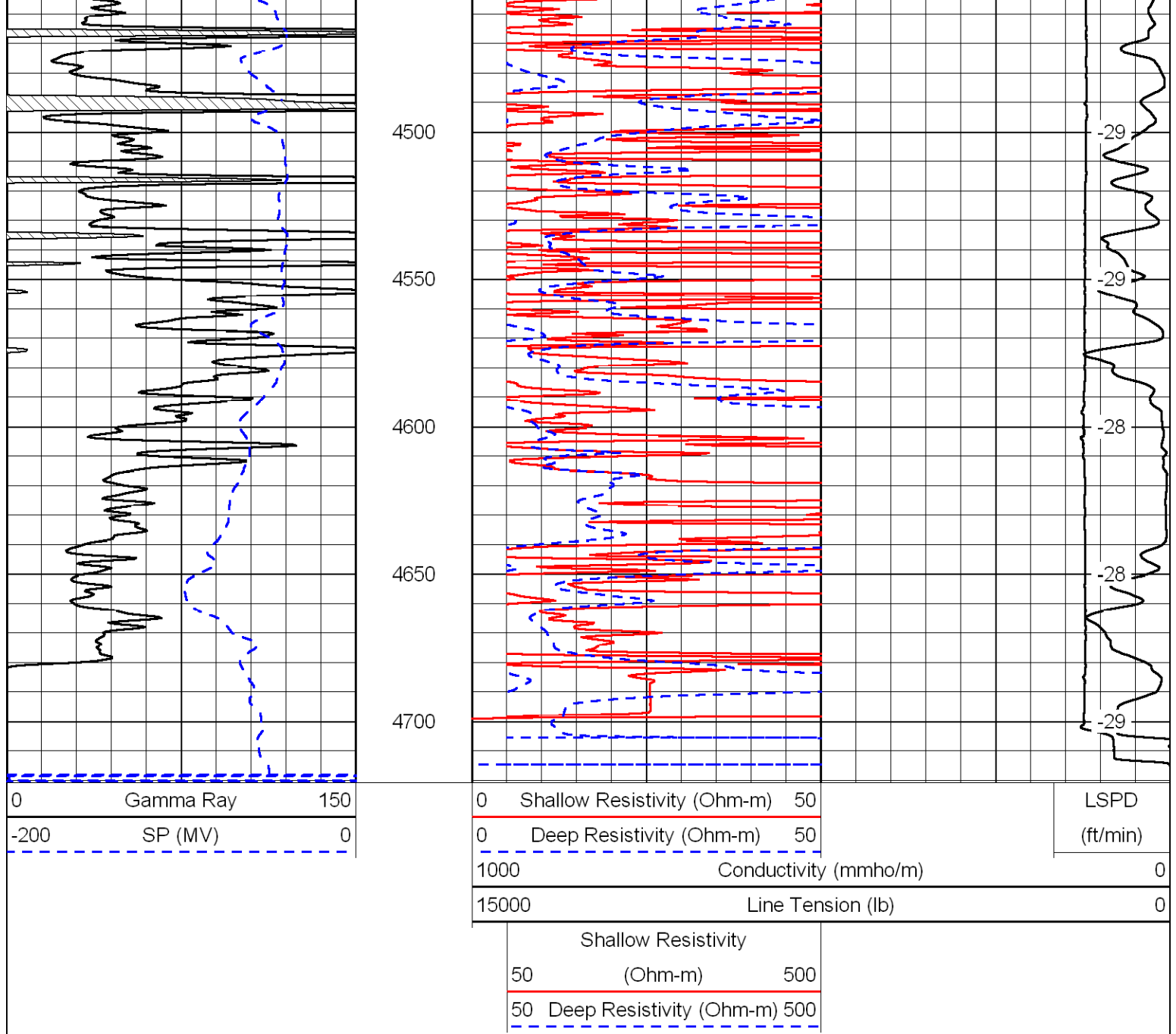
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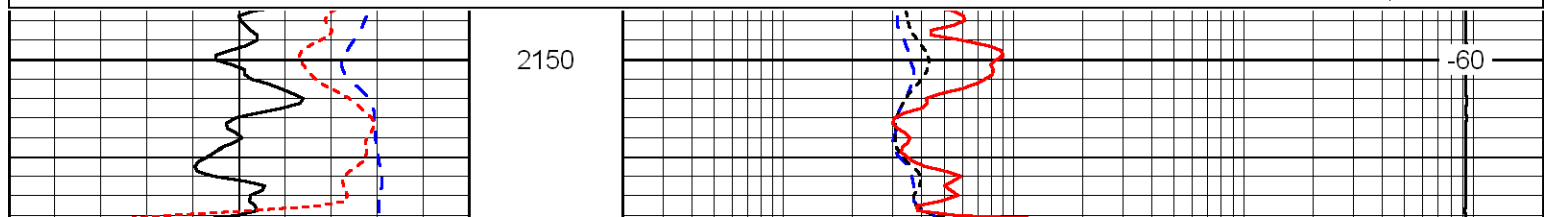
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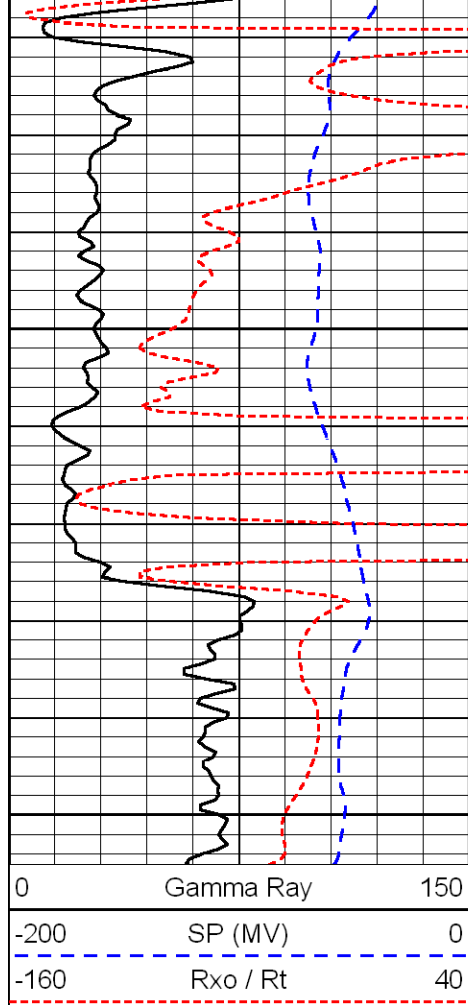




Database File: c:\warrior\data\larson\_bryant no. 1-4\larson111109hd.db  
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Presentation Format: dil  
Dataset Creation: Wed Nov 11 12:39:40 2009  
Charted by: Depth in Feet scaled 1:240

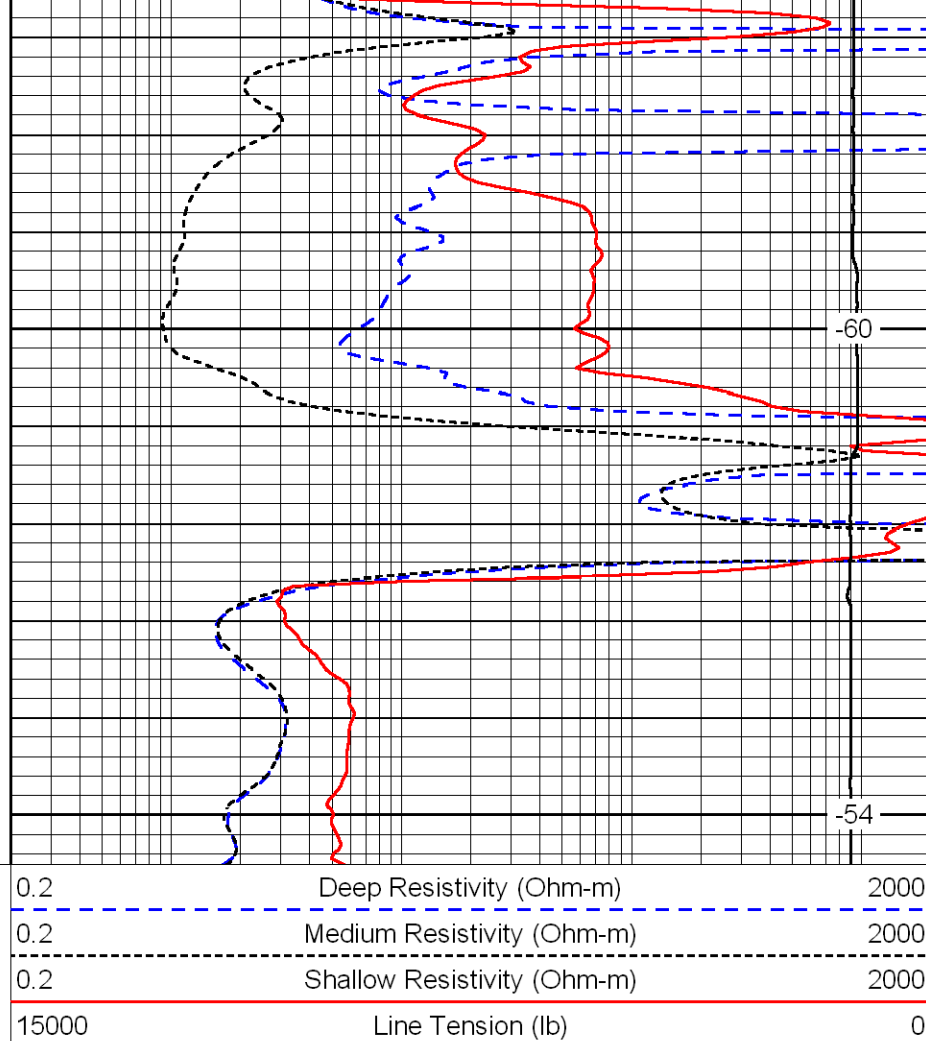
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|------|-----------|-----|-----|-----------------------------|-------------------|---|
| 0    | Gamma Ray | 150 | 0.2 | Deep Resistivity (Ohm-m)    | 2000              |   |
| -200 | SP (MV)   | 0   | 0.2 | Medium Resistivity (Ohm-m)  | 2000              |   |
| -160 | Rxo / Rt  | 40  | 0.2 | Shallow Resistivity (Ohm-m) | 2000              |   |
|      |           |     |     | 15000                       | Line Tension (lb) | 0 |
|      |           |     |     |                             | LSPD              |   |
|      |           |     |     |                             | (ft/min)          |   |





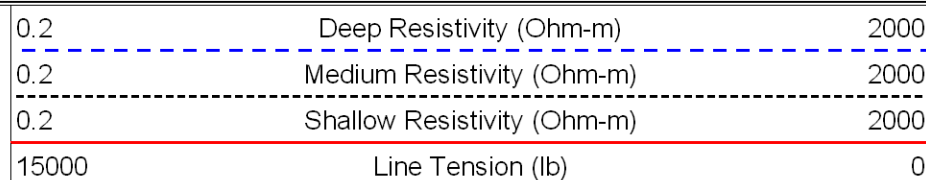
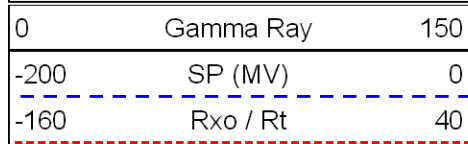
2200

2250

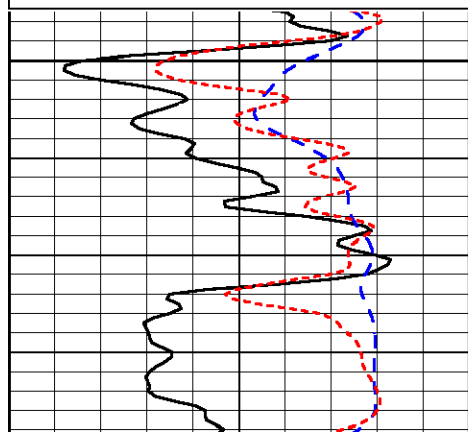


LSPD  
(ft/min)

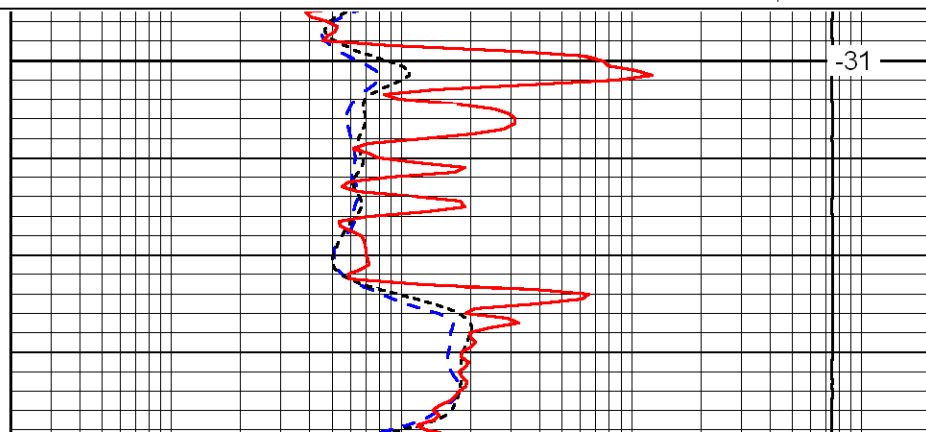
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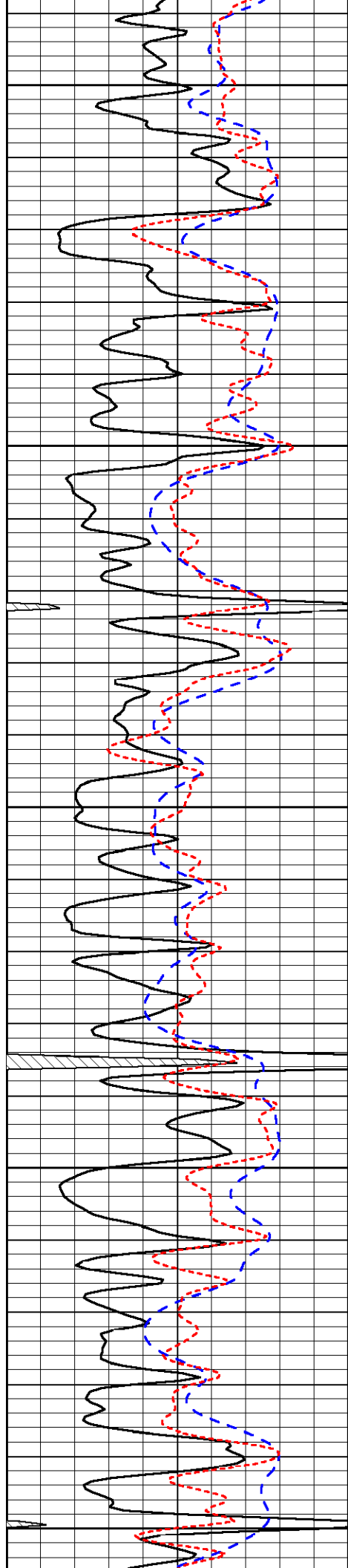
LSPD  
(ft/min)



3600



-31



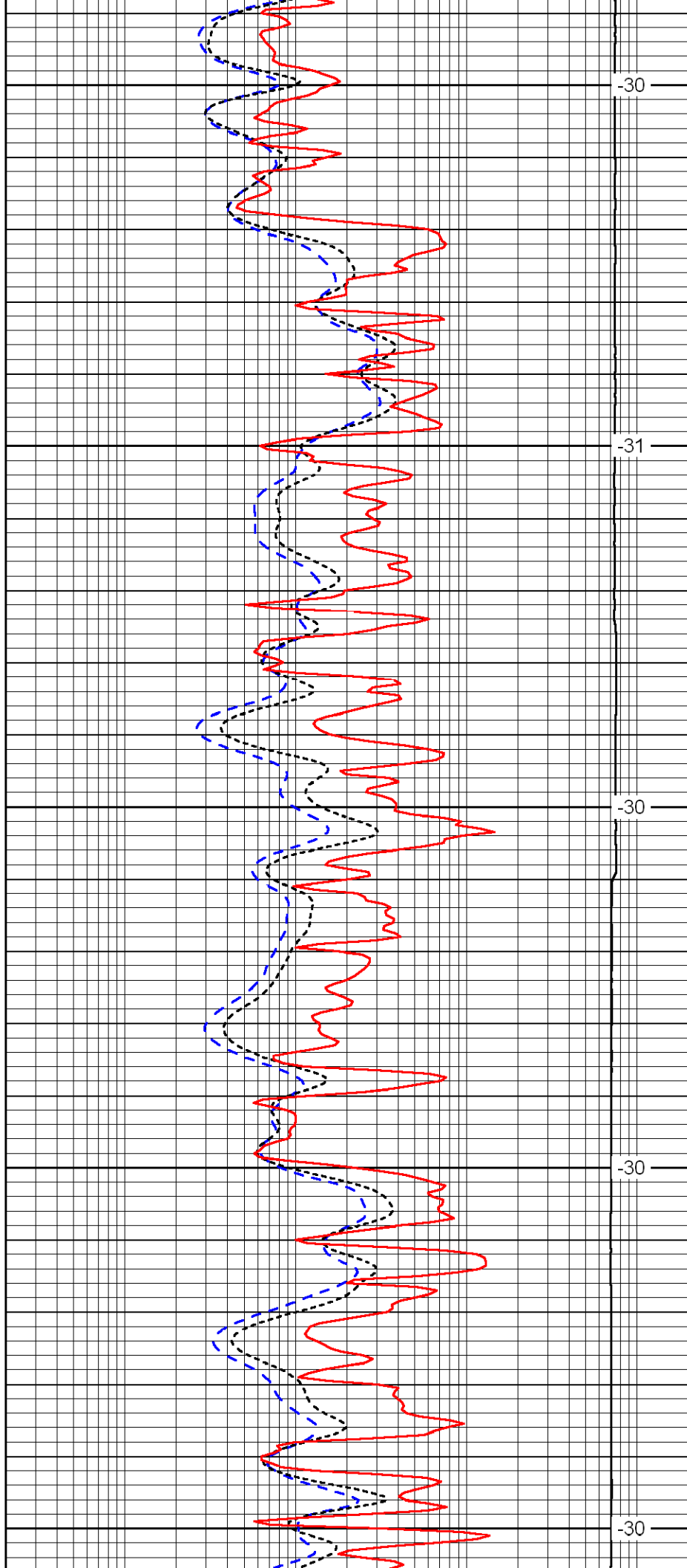
3650

3700

3750

3800

3850



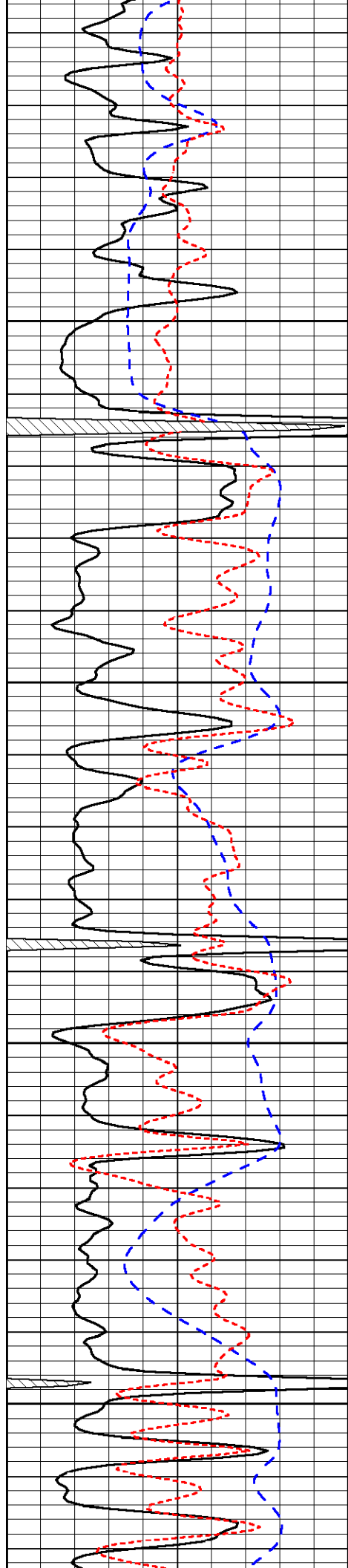
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-31

-30

-30

-30

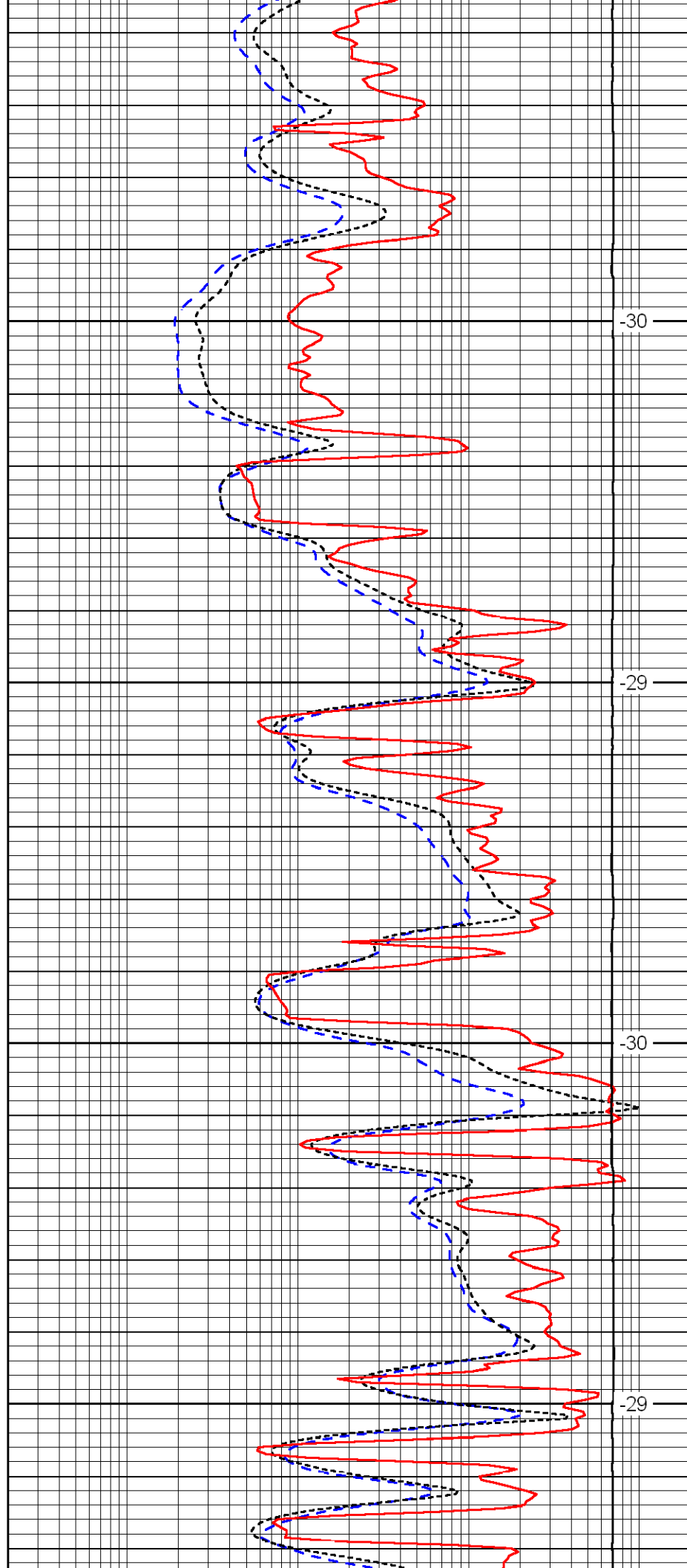


3900

3950

4000

4050

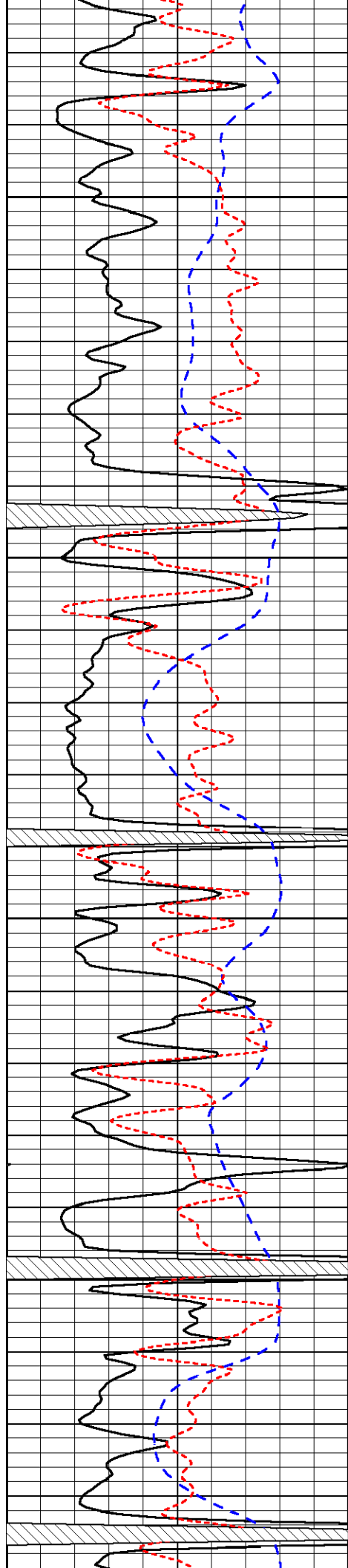


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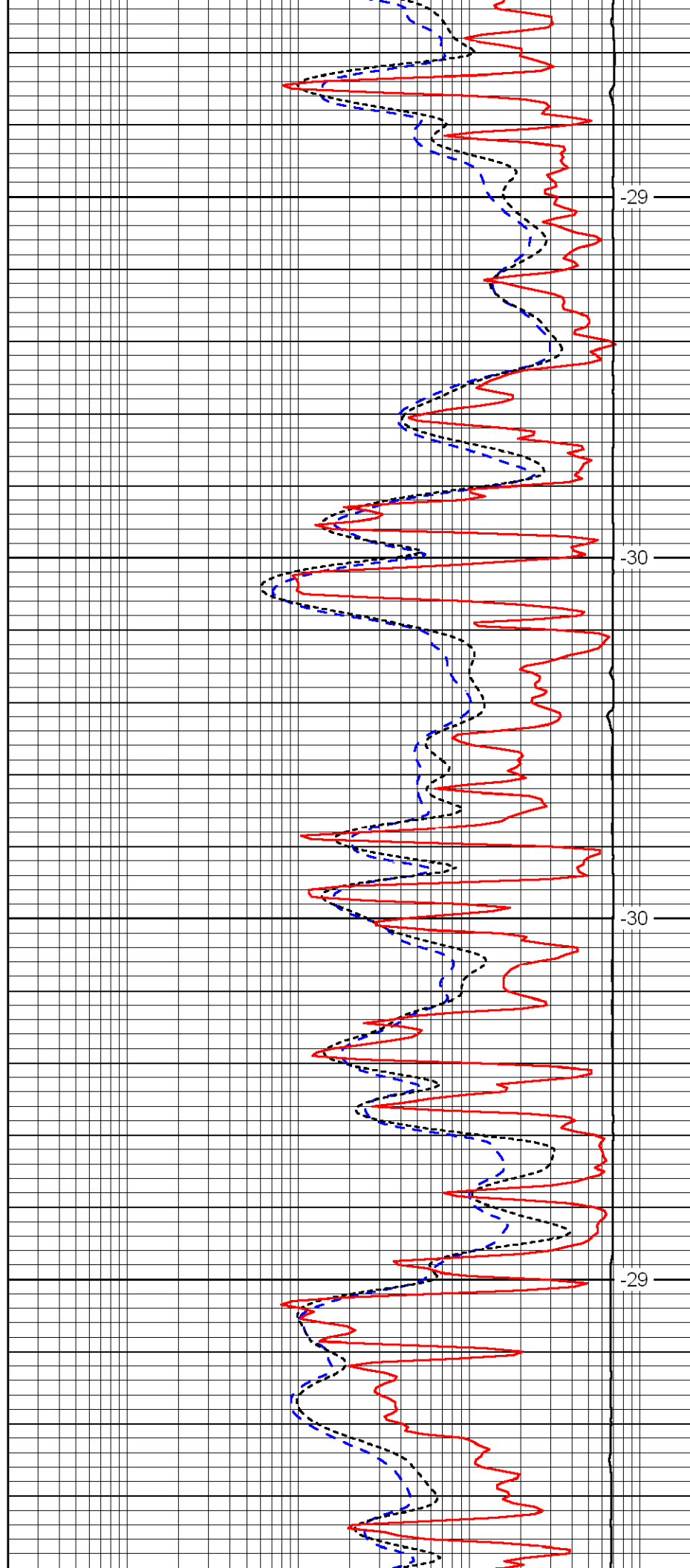


4100

4150

4200

4250

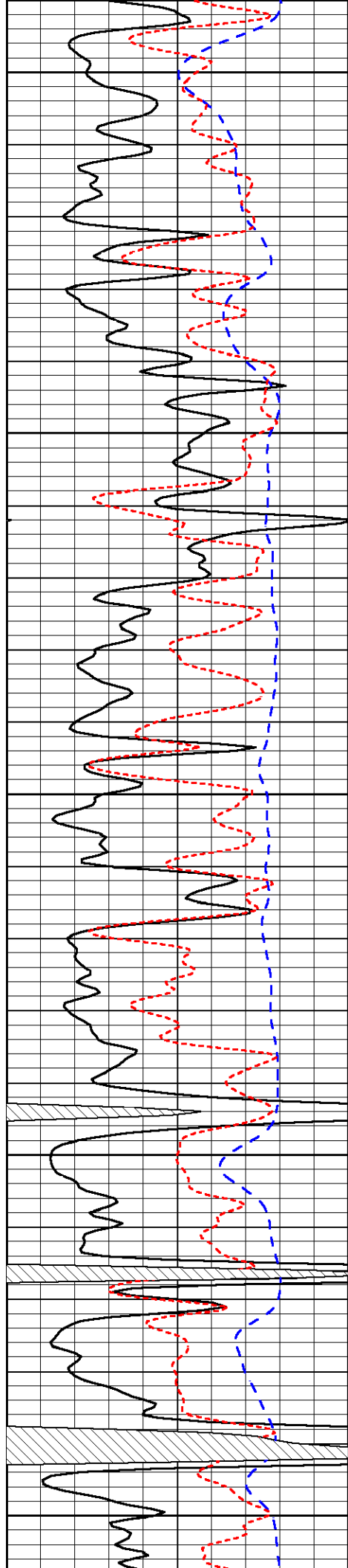


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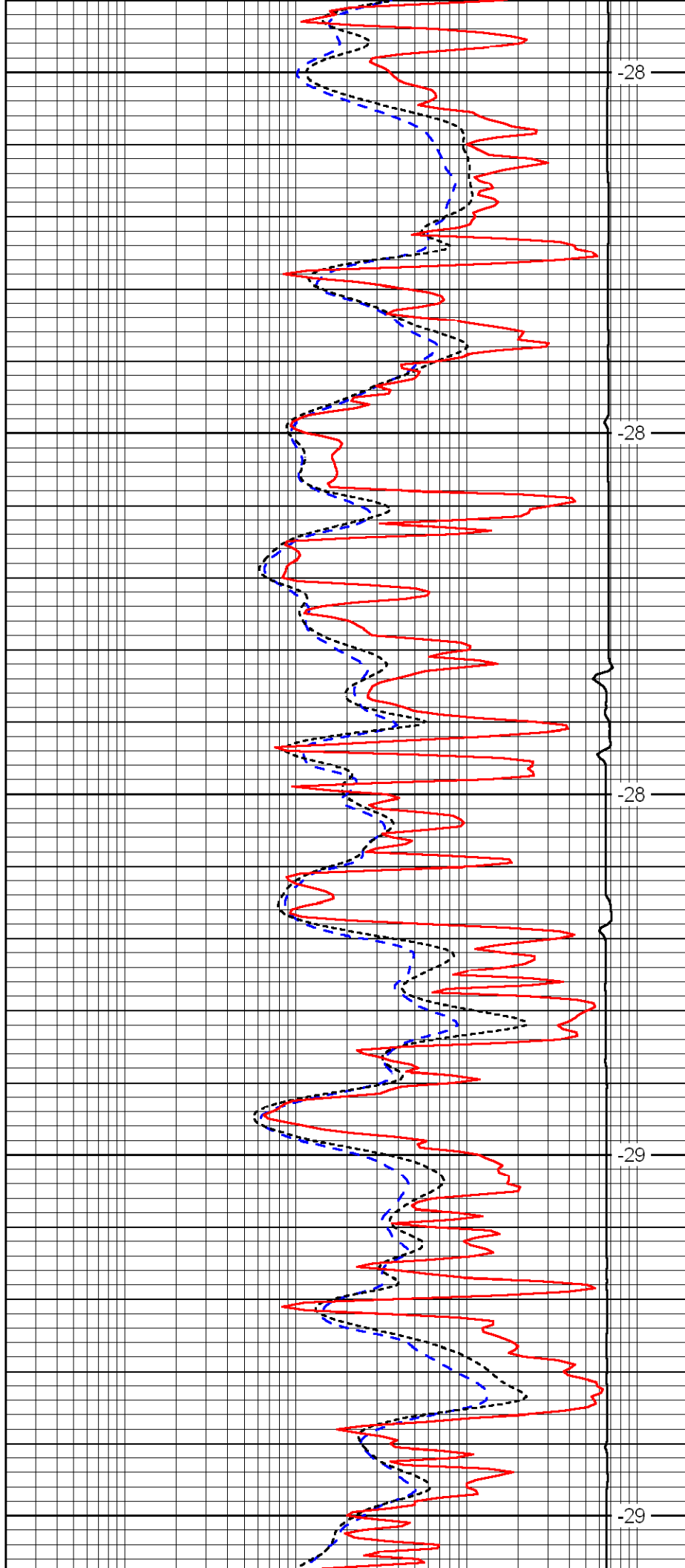
4300

4350

4400

4450

4500



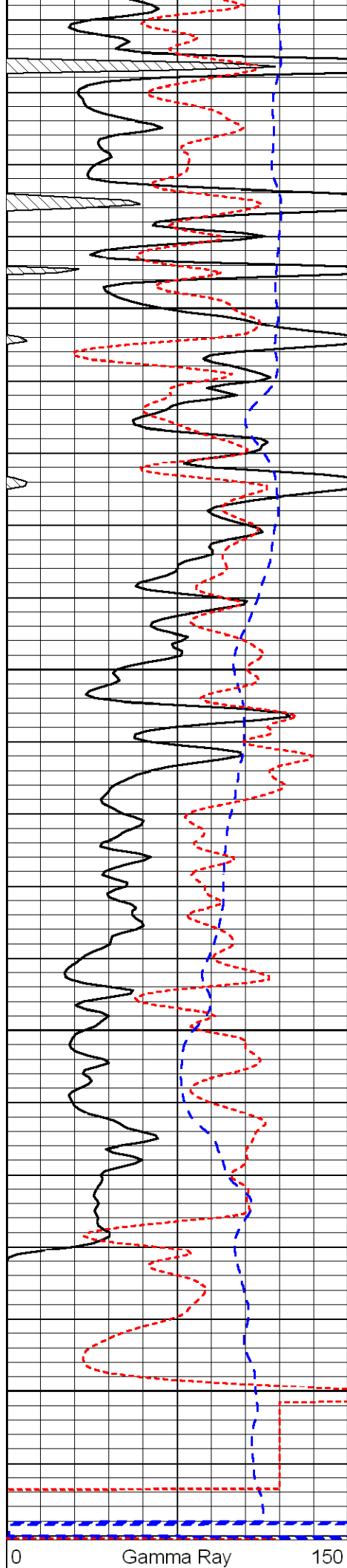
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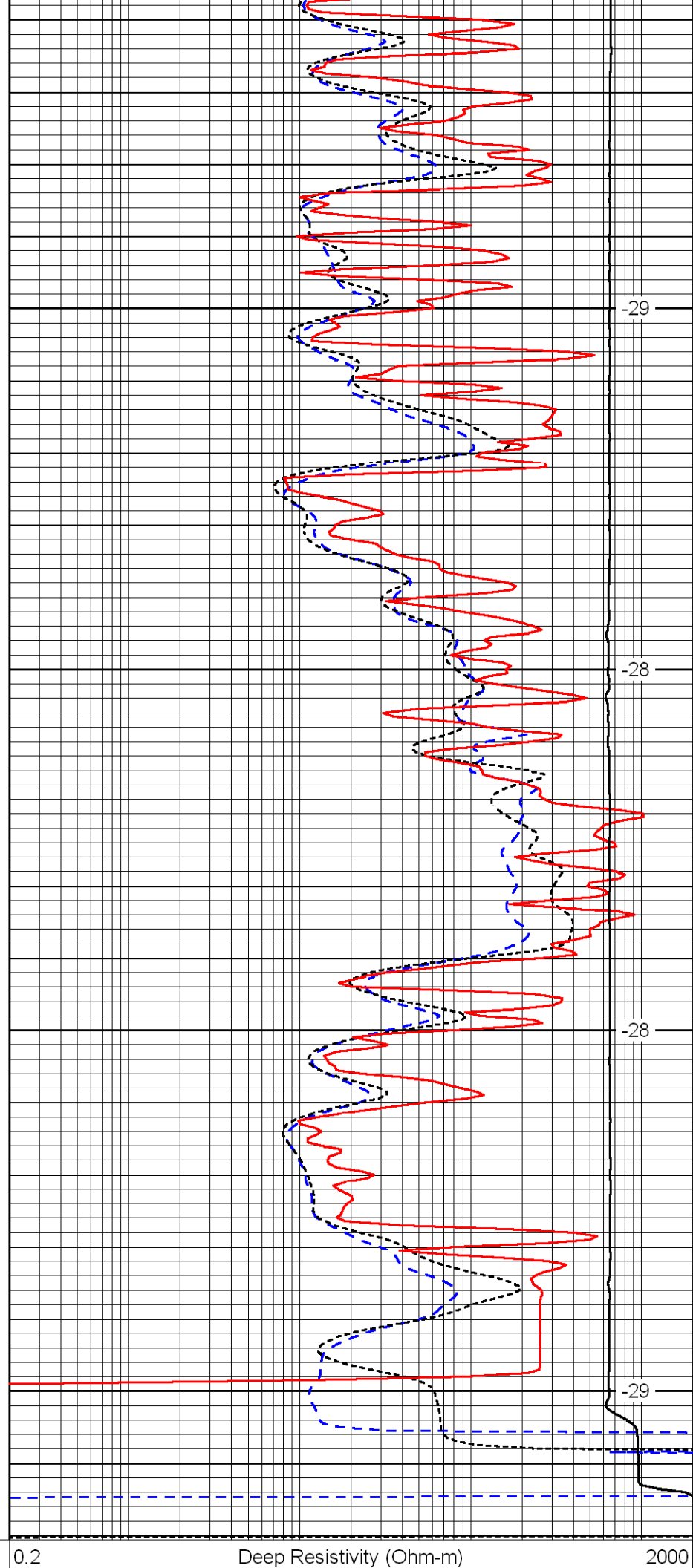


4550

4600

4650

4700



-29

-28

-28

-29

|      |          |    |
|------|----------|----|
| -200 | SP (MV)  | 0  |
| -160 | Rxo / Rt | 40 |

|       |                             |                  |
|-------|-----------------------------|------------------|
| 0.2   | Medium Resistivity (Ohm-m)  | 2000             |
| 0.2   | Shallow Resistivity (Ohm-m) | 2000             |
| 15000 | Line Tension (lb)           | 0                |
|       |                             | LSPD<br>(ft/min) |