



DIGITAL LOG (785) 625-3858

Dual Induction Log

API No. 15-109-20,975-00-00

Company: **Murfin Drilling Co., Inc.**
 Well: **Kuhlman 'E' No. 1-35**
 Field: **Wildcat**
 County: **Logan** State: **Kansas**

Location: **SE NW NW SW
2,280' FSL & 335' FWL**

Other Services: **CNL/CDL
MEL/BHCS**

Permanent Datum: **Ground Level** Elevation: **2972**
 Log Measured From: **Kelly Bushing** 5 Ft. Above Perm. Datum
 Drilling Measured From: **Kelly Bushing**

Sec: **35** Twp: **12 S** Rge: **32 W**

Elevation: **K.B. 2977
D.F. 2972
G.L. 2972**

| | |
|------------------------|-------------|
| Date | 1/31/2011 |
| Run Number | One |
| Depth Driller | 4650 |
| Depth Logger | 4649 |
| Bottom Logged Interval | 4648 |
| Top Log Interval | 0 |
| Casing Driller | 8.625 @ 222 |
| Casing Logger | 221 |
| Bit Size | 7.875 |
| Type Fluid in Hole | Chemical |
| Salinity, ppm CL | 1500 |
| Density / Viscosity | 9.1 48 |
| pH / Fluid Loss | 11 7.2 |
| Source of Sample | Flowline |
| Rm @ Meas. Temp | 1.35 @ 46 |
| Rmf @ Meas. Temp | 1.01 @ 46 |
| Rmc @ Meas. Temp | 1.82 @ 46 |
| Source of Rmf / Rmc | Charts |
| Rm @ BHT | .51 @ 123 |
| Operating Rig Time | 6 Hours |
| Max Rec. Temp. F | 123 |
| Equipment Number | 10 |
| Location | Hays |
| Recorded By | J Schuler |
| Witnessed By | Tom Funk |

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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

11 South of Oakley, East Into
 1/2 Mile North of Gove Road

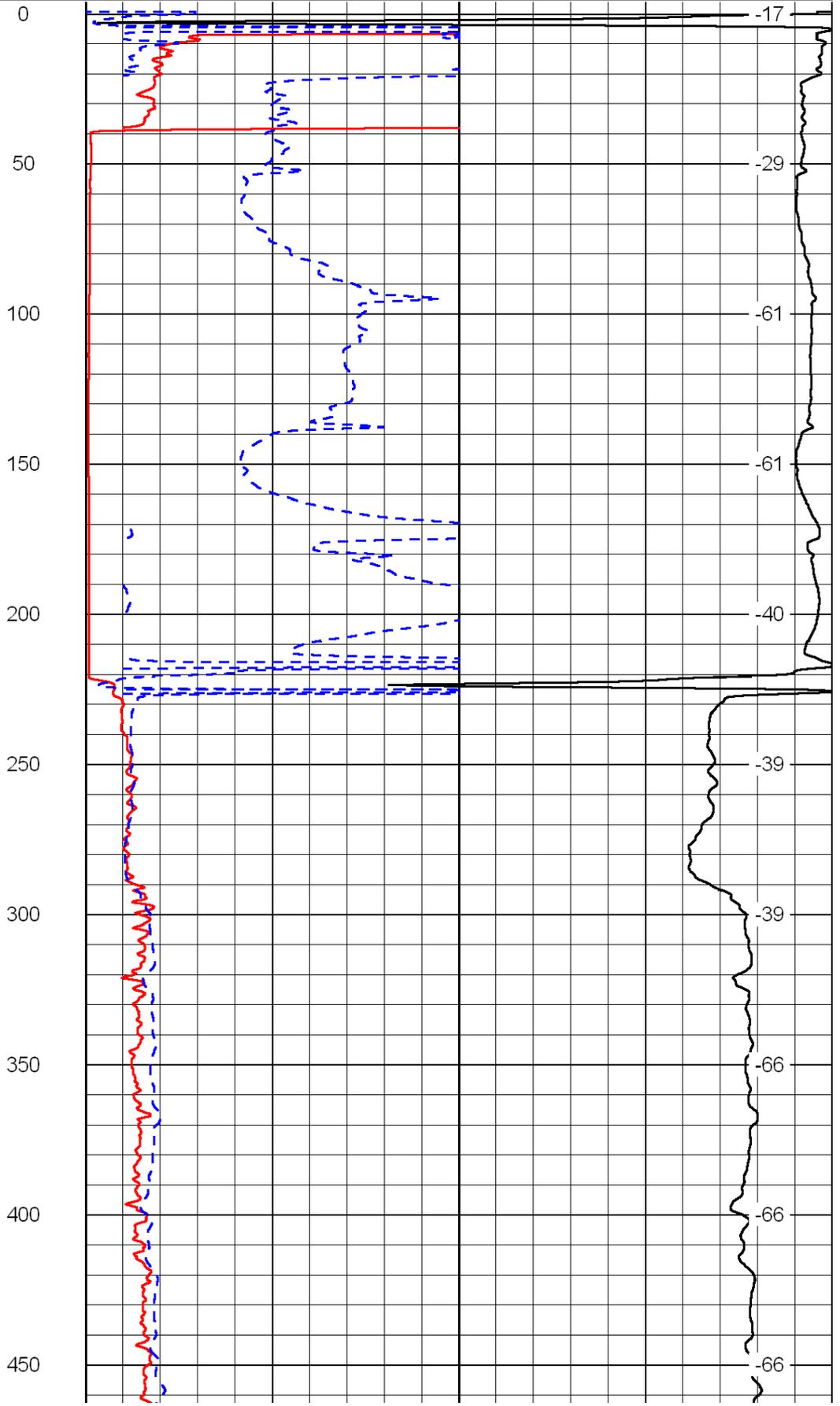
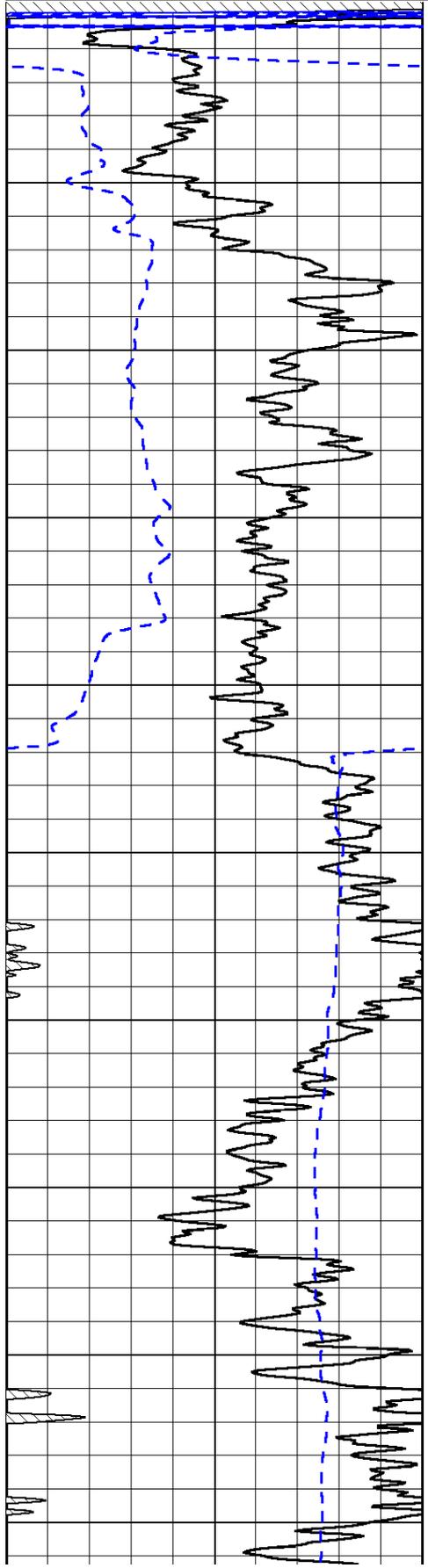
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|------|-----------|-----|
| 0 | Gamma Ray | 150 |
| -200 | SP (mV) | 0 |

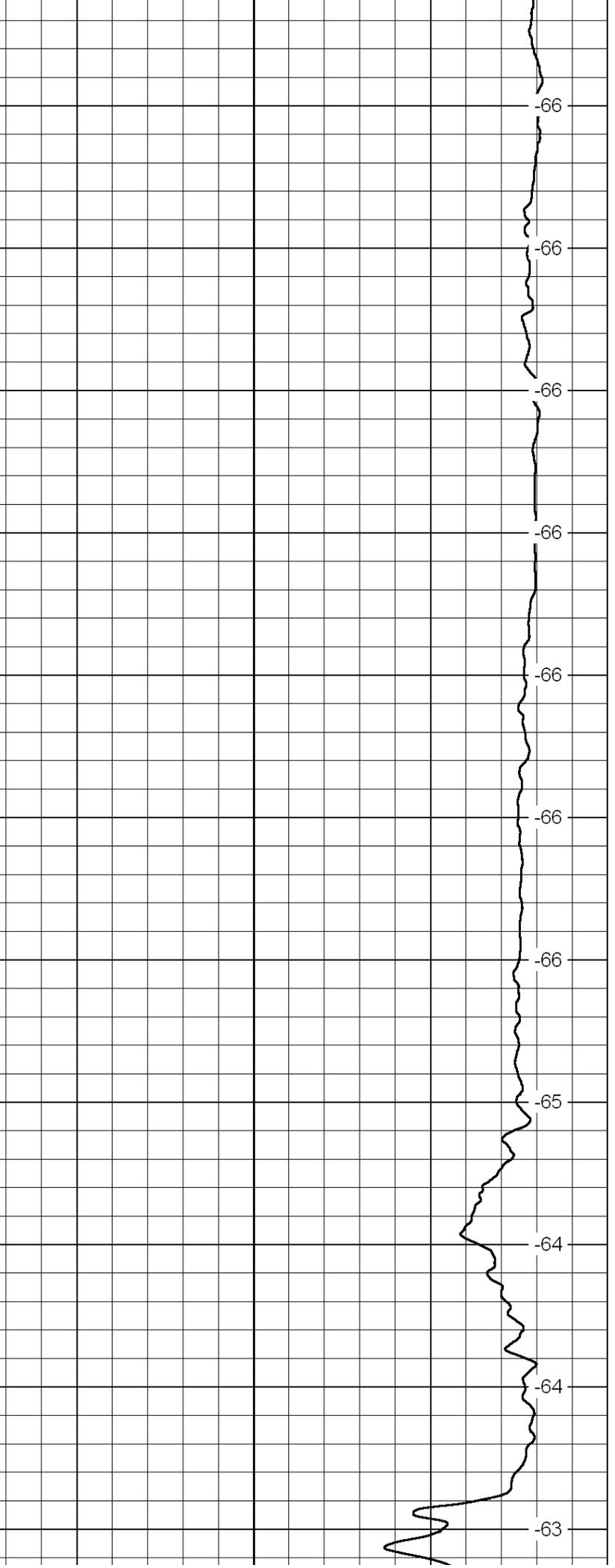
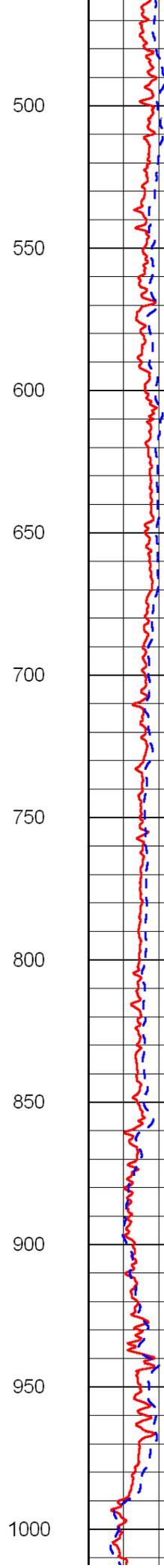
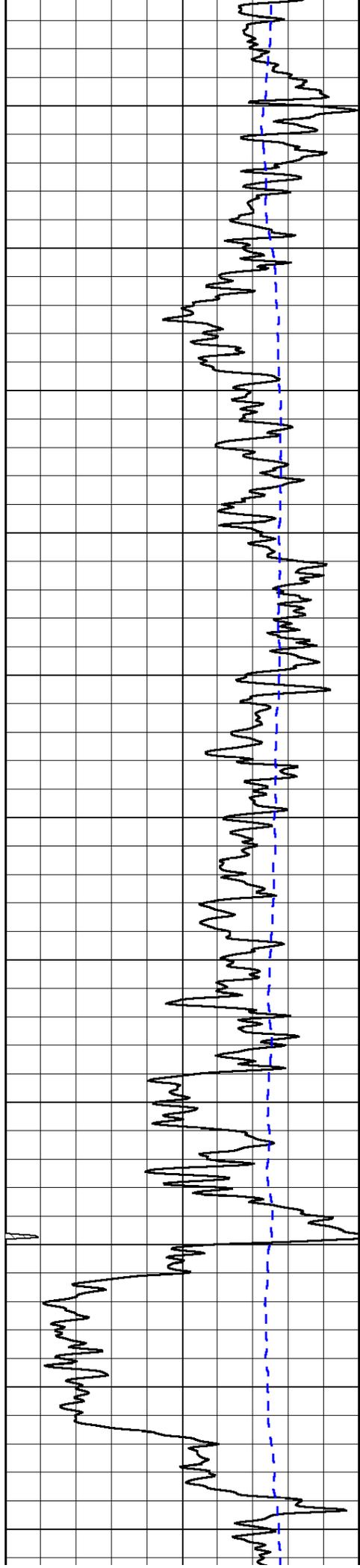
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|---|---------------------|----|
| 0 | Shallow Resistivity | 50 |
| 0 | Deep Resistivity | 50 |

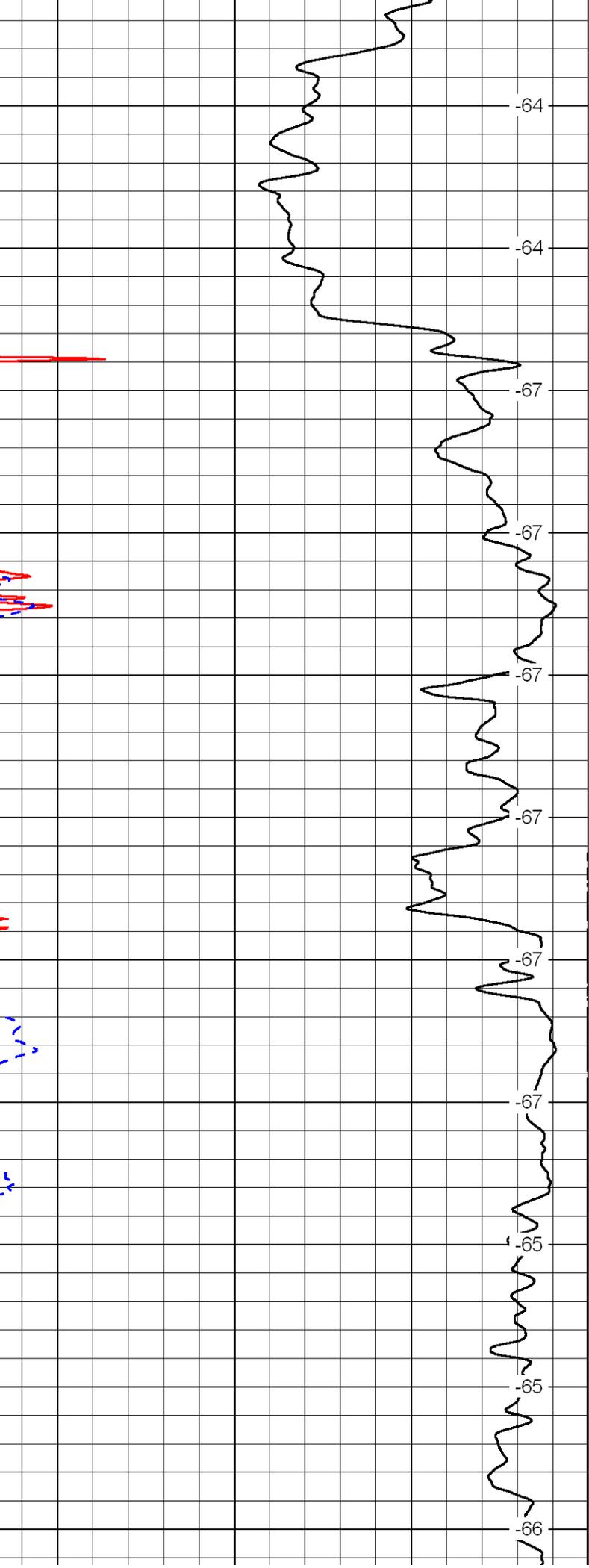
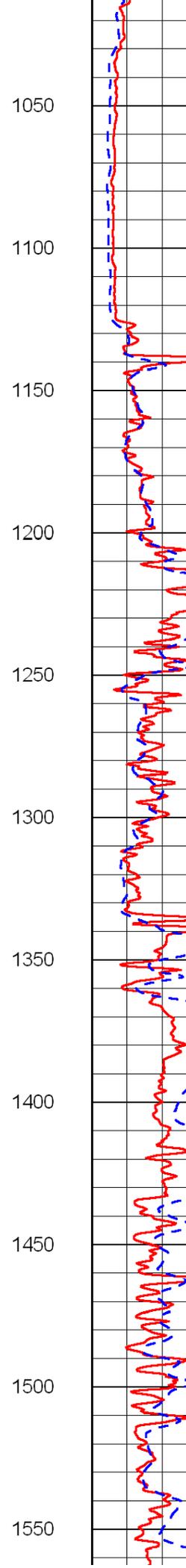
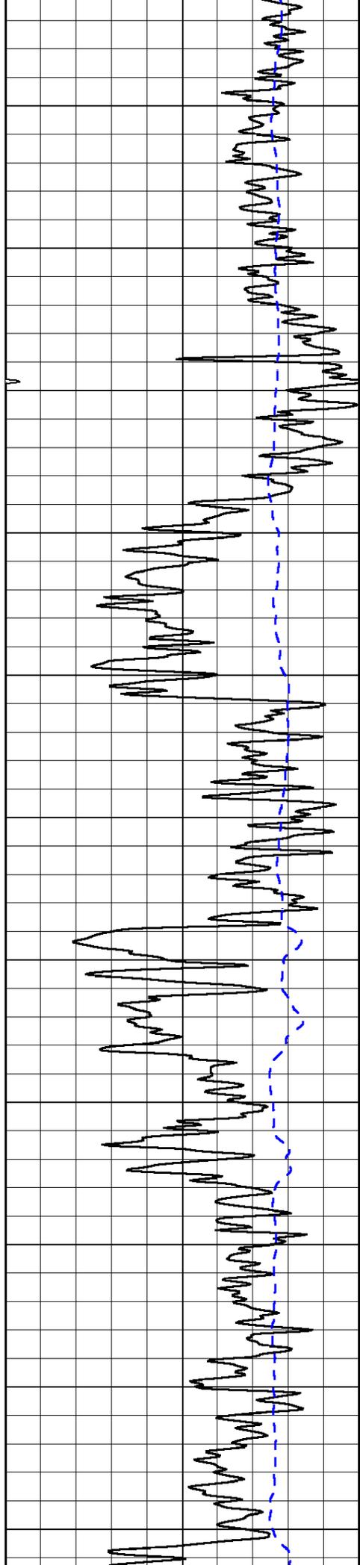
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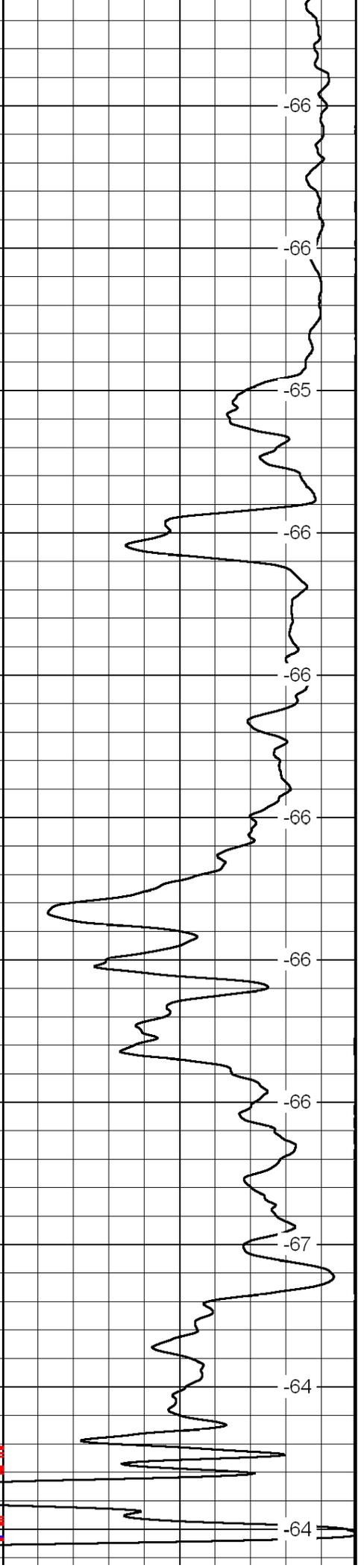
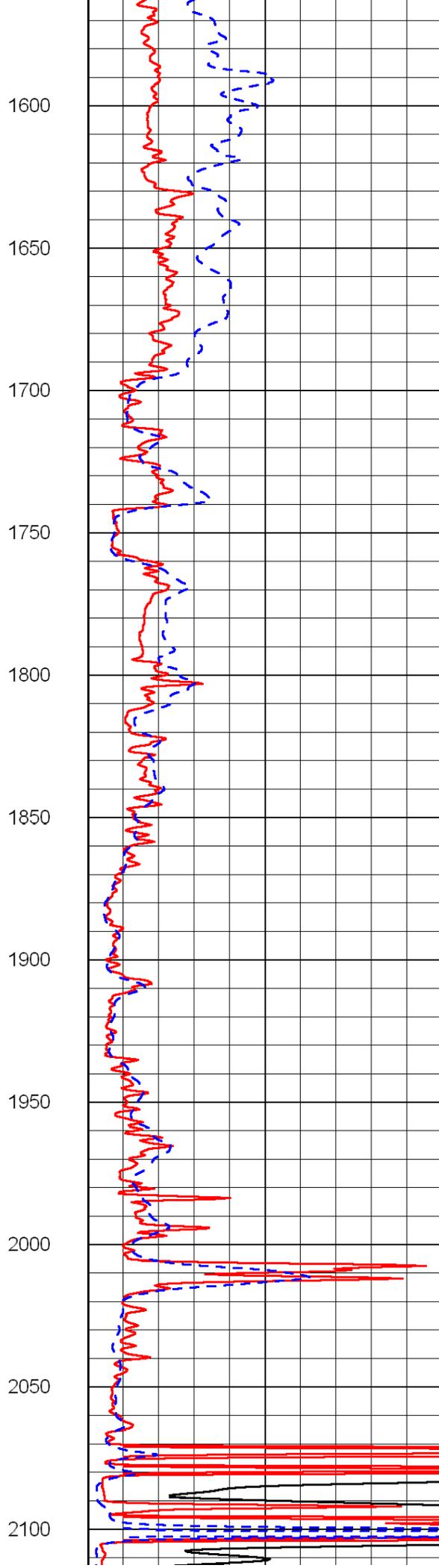
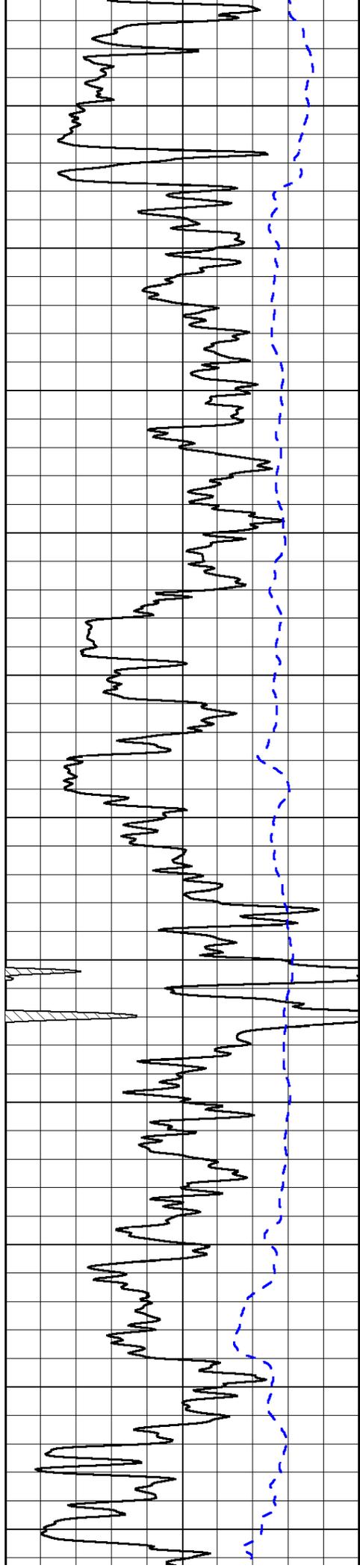
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|-------|--------------|---|
| 1000 | Conductivity | 0 |
| 15000 | Line Tension | 0 |

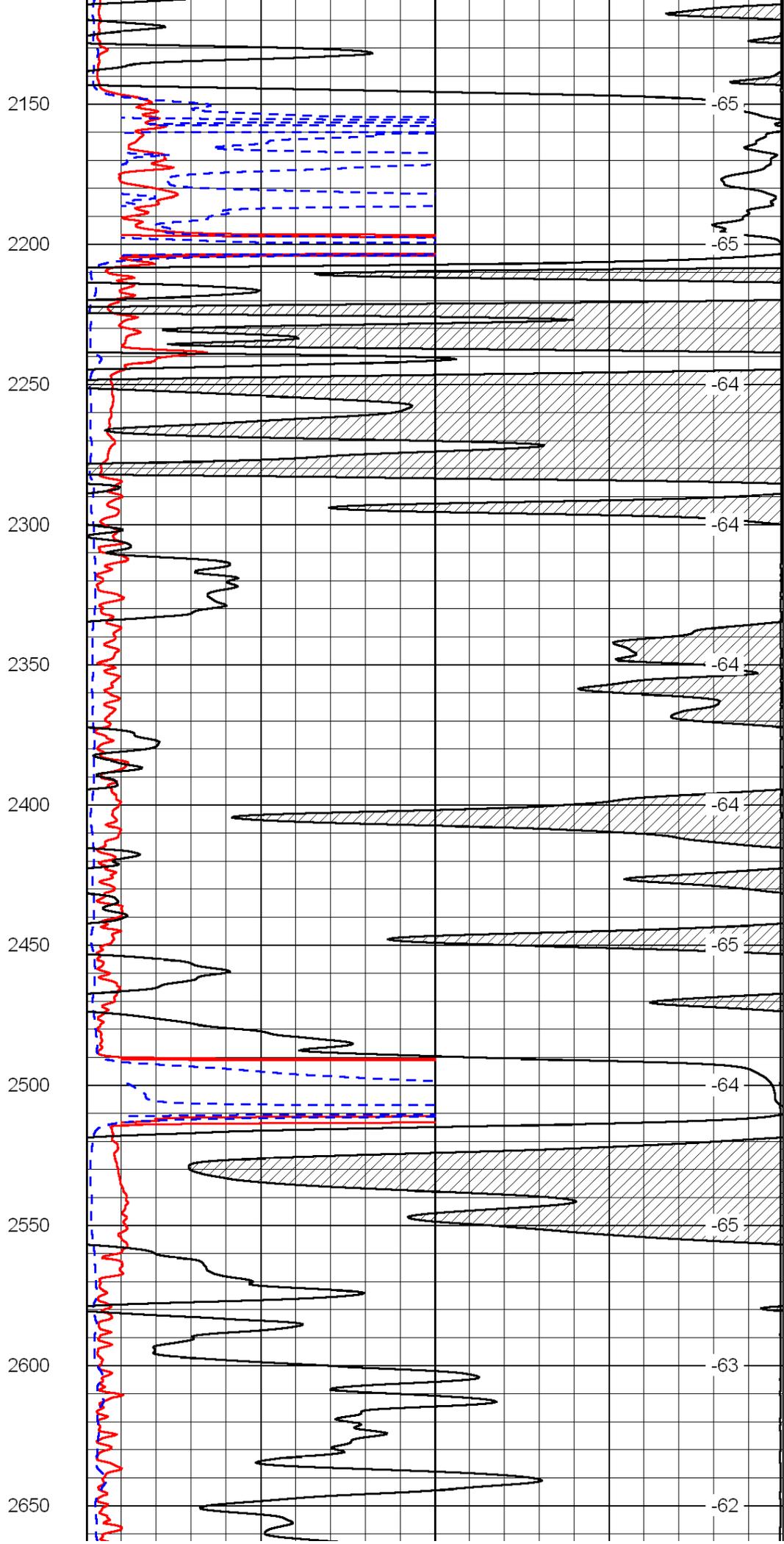
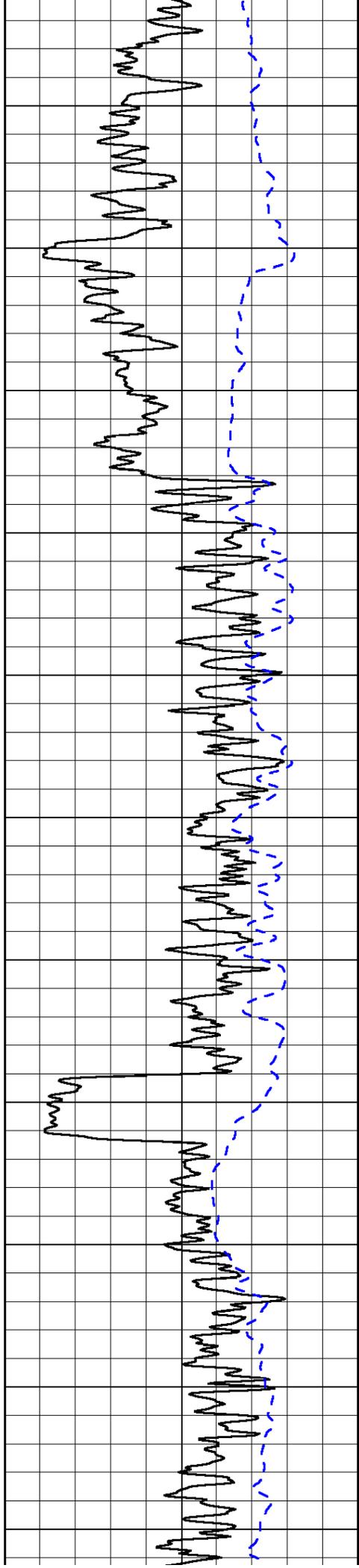
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| 50 | Shallow Resistivity | 500 |
| 50 | Deep Resistivity | 500 |

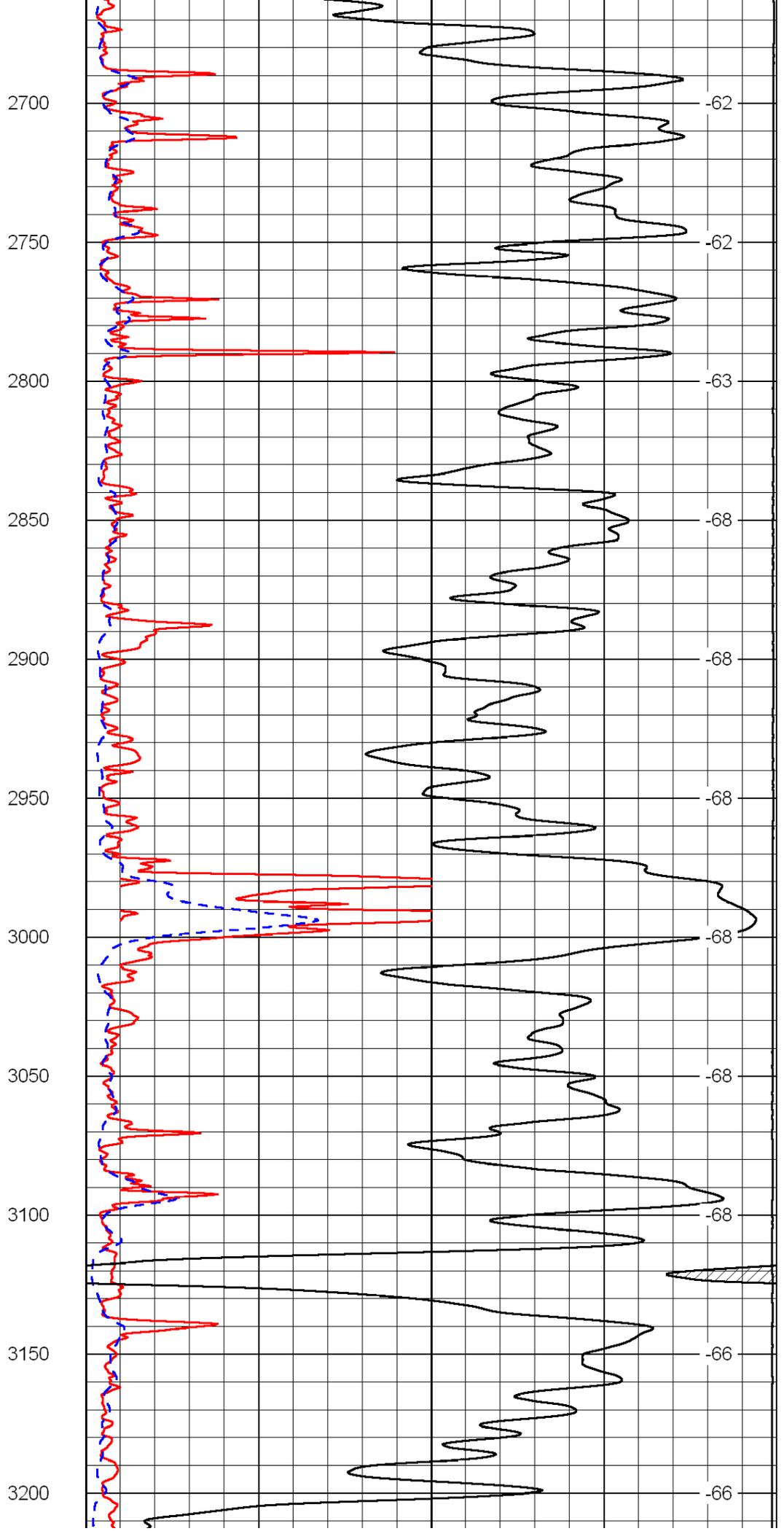
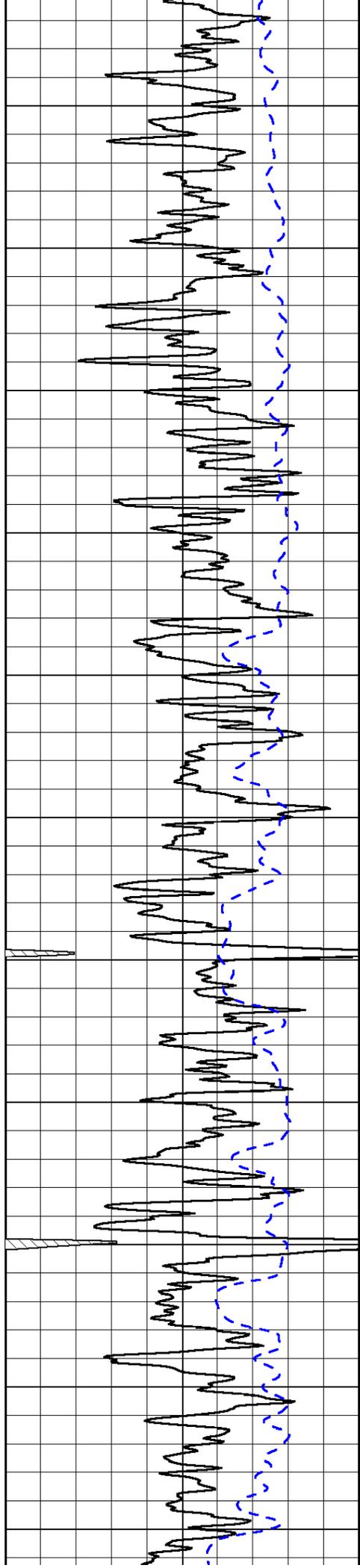


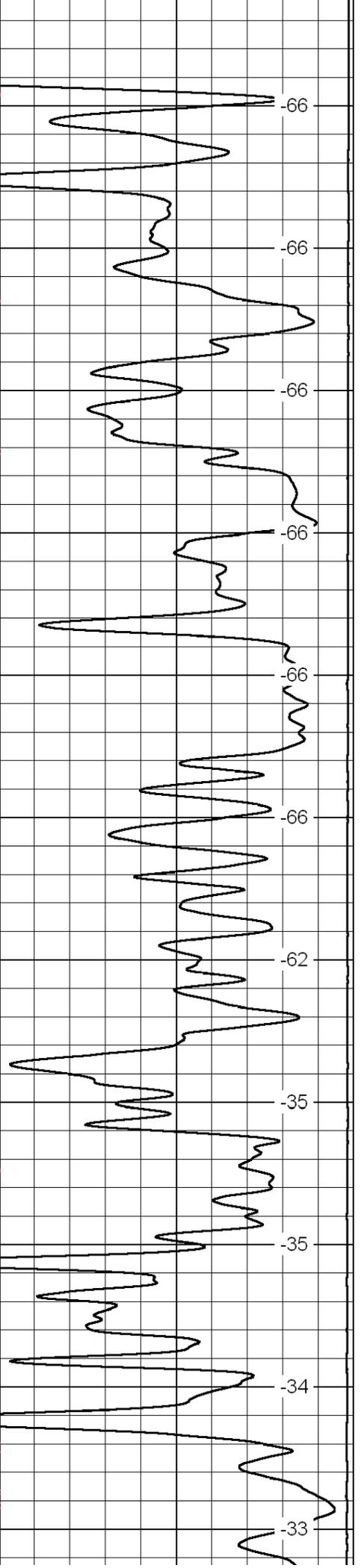
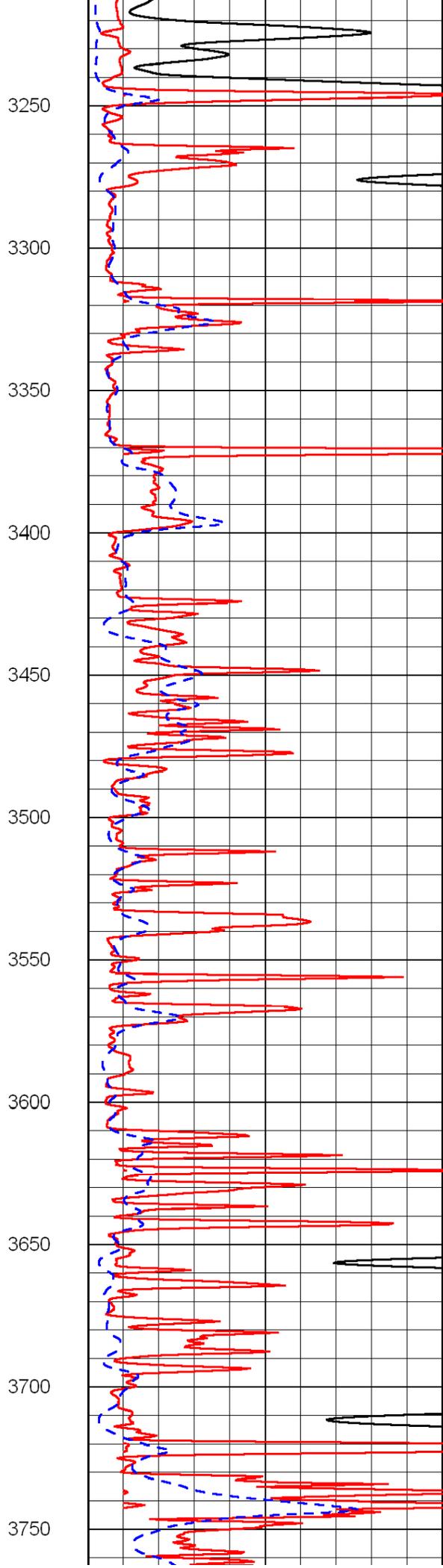
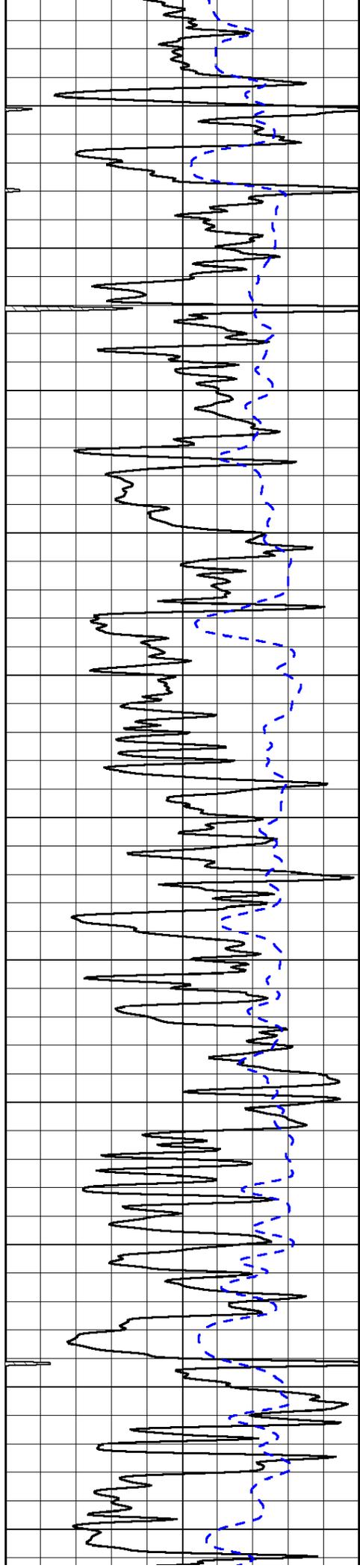


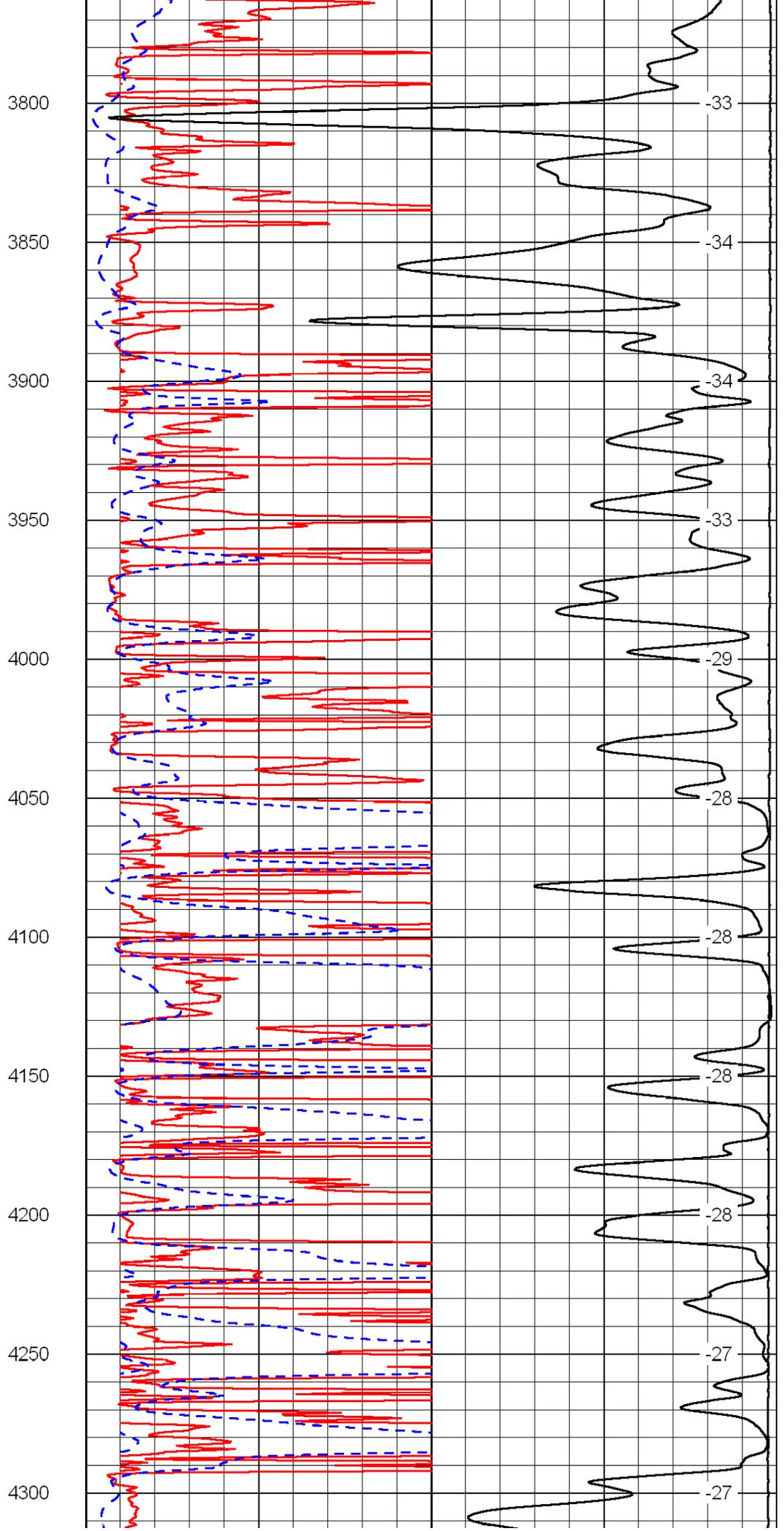
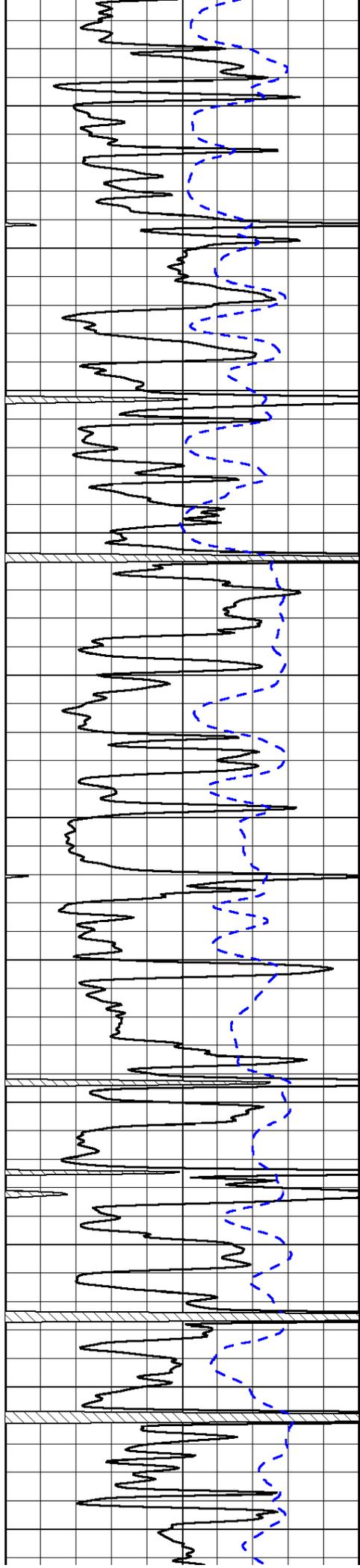


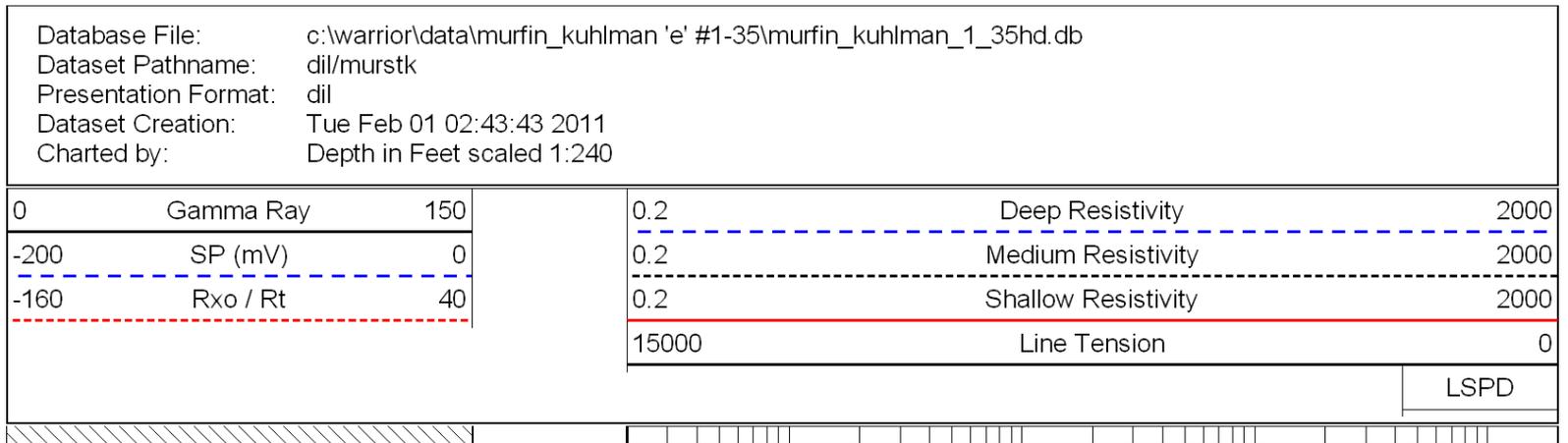
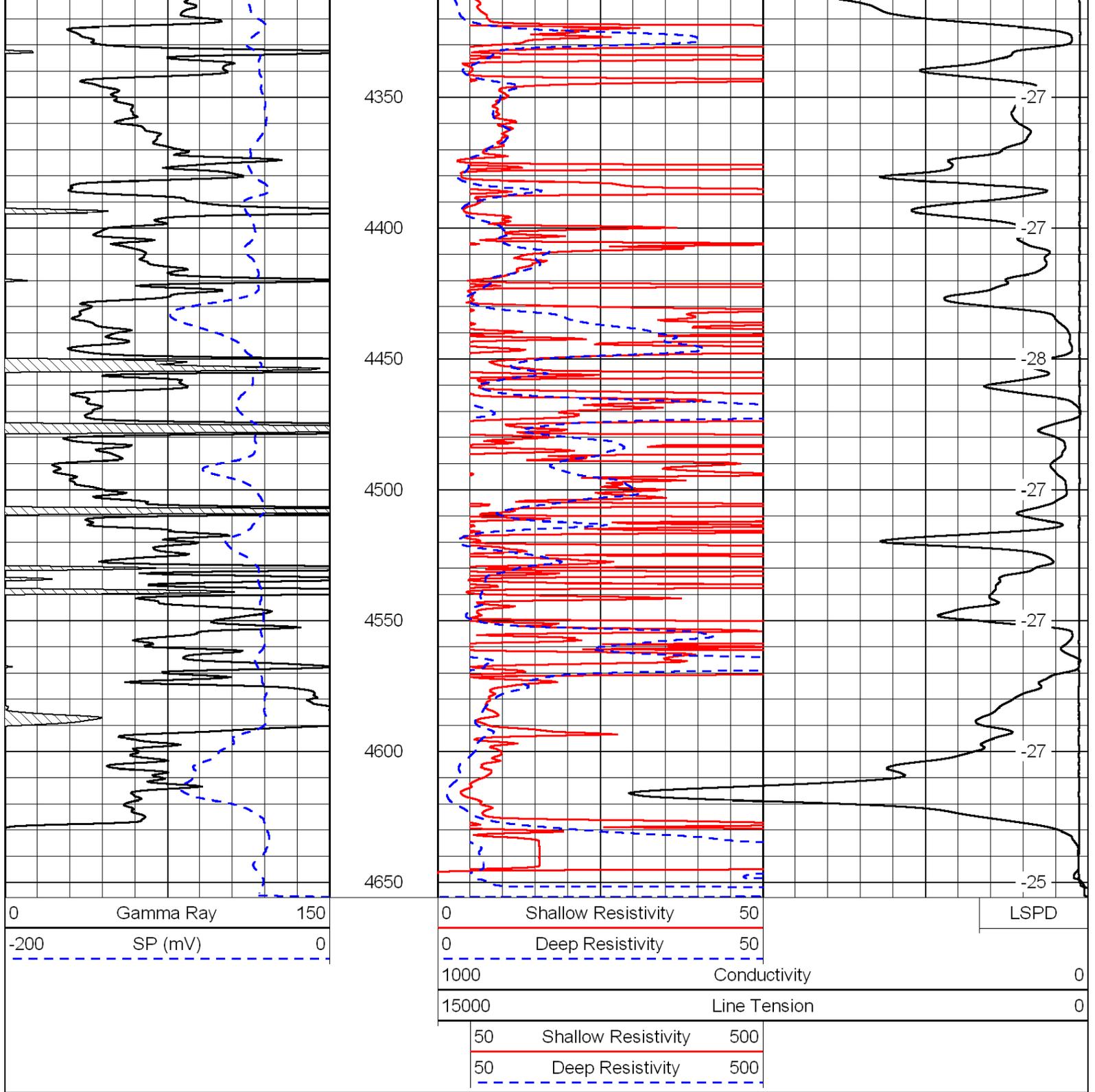


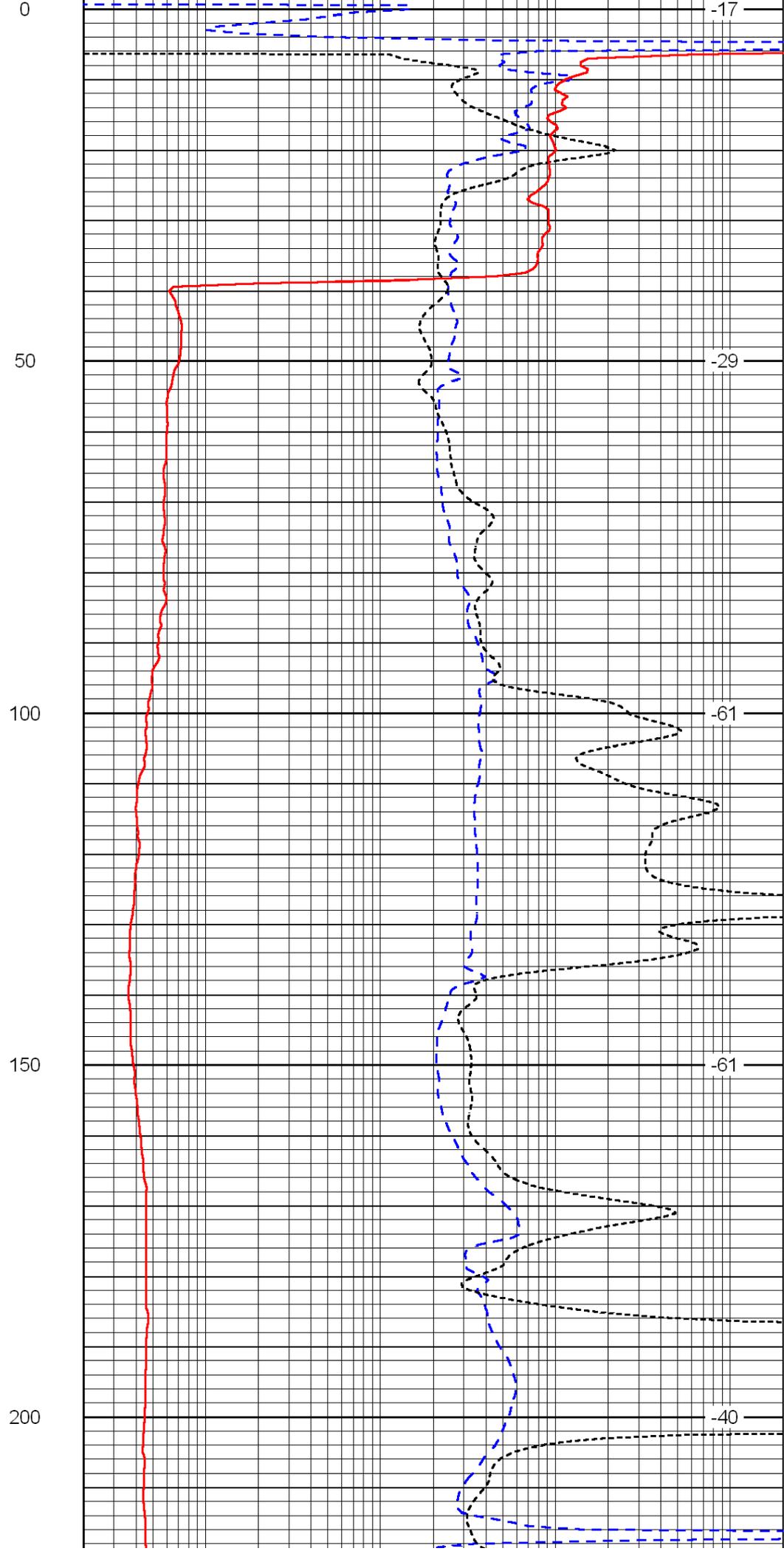
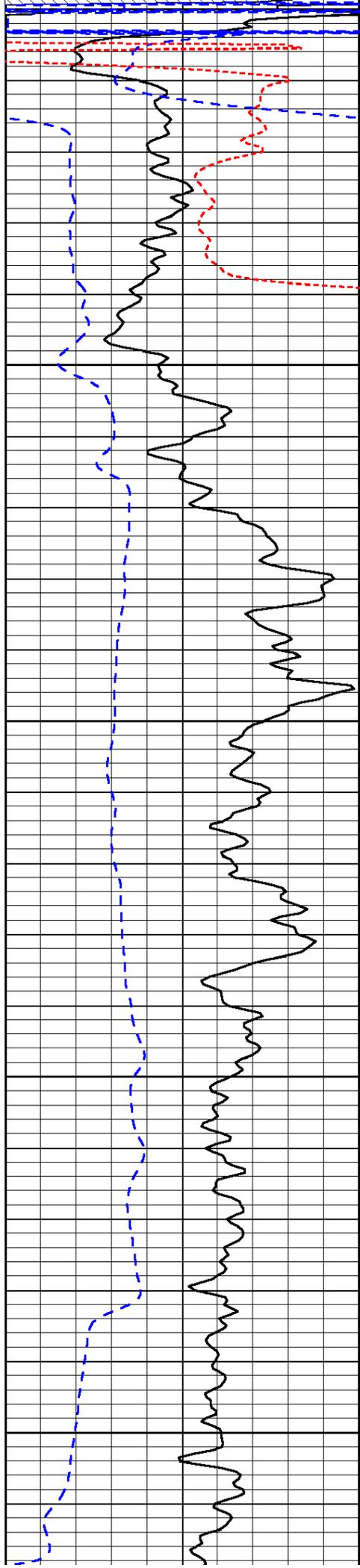


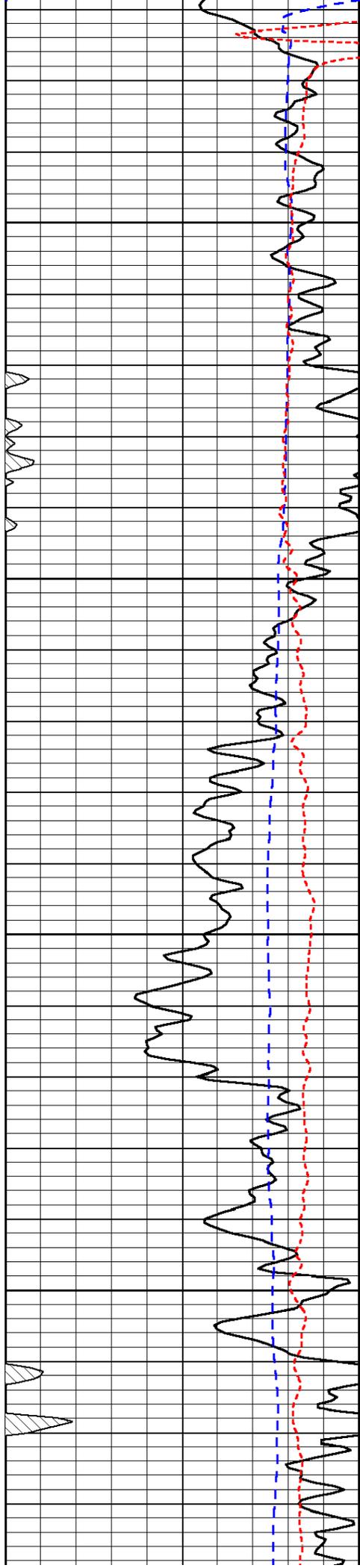










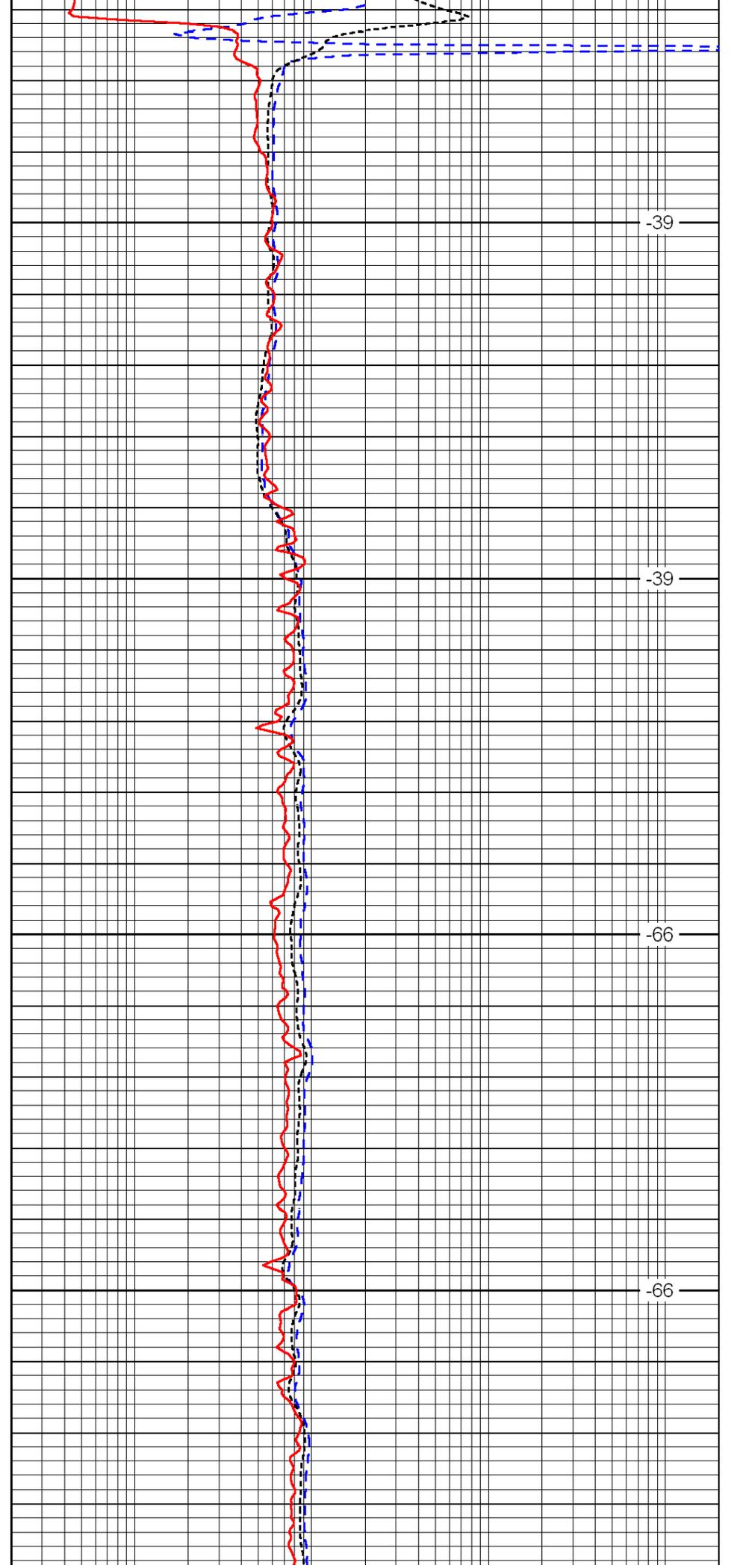


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300

350

400

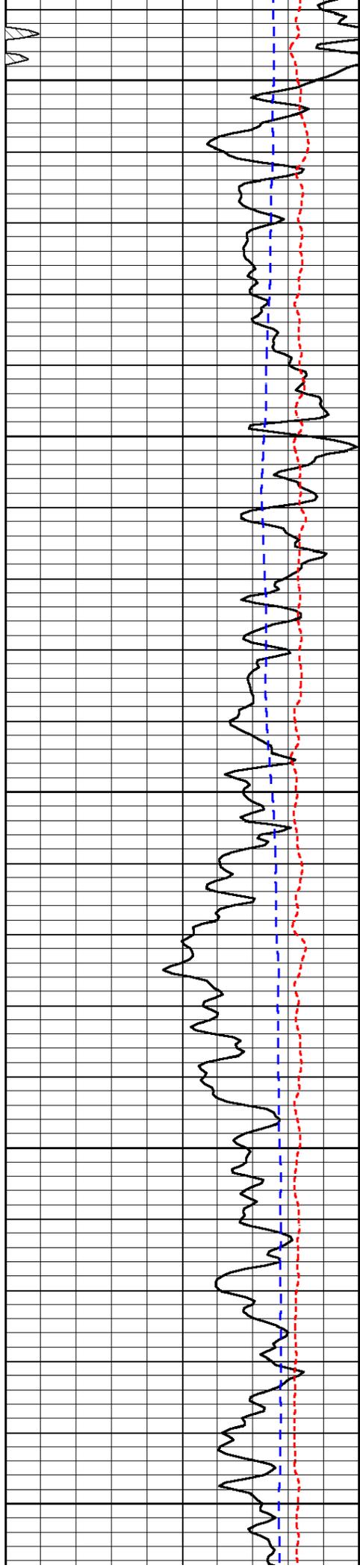


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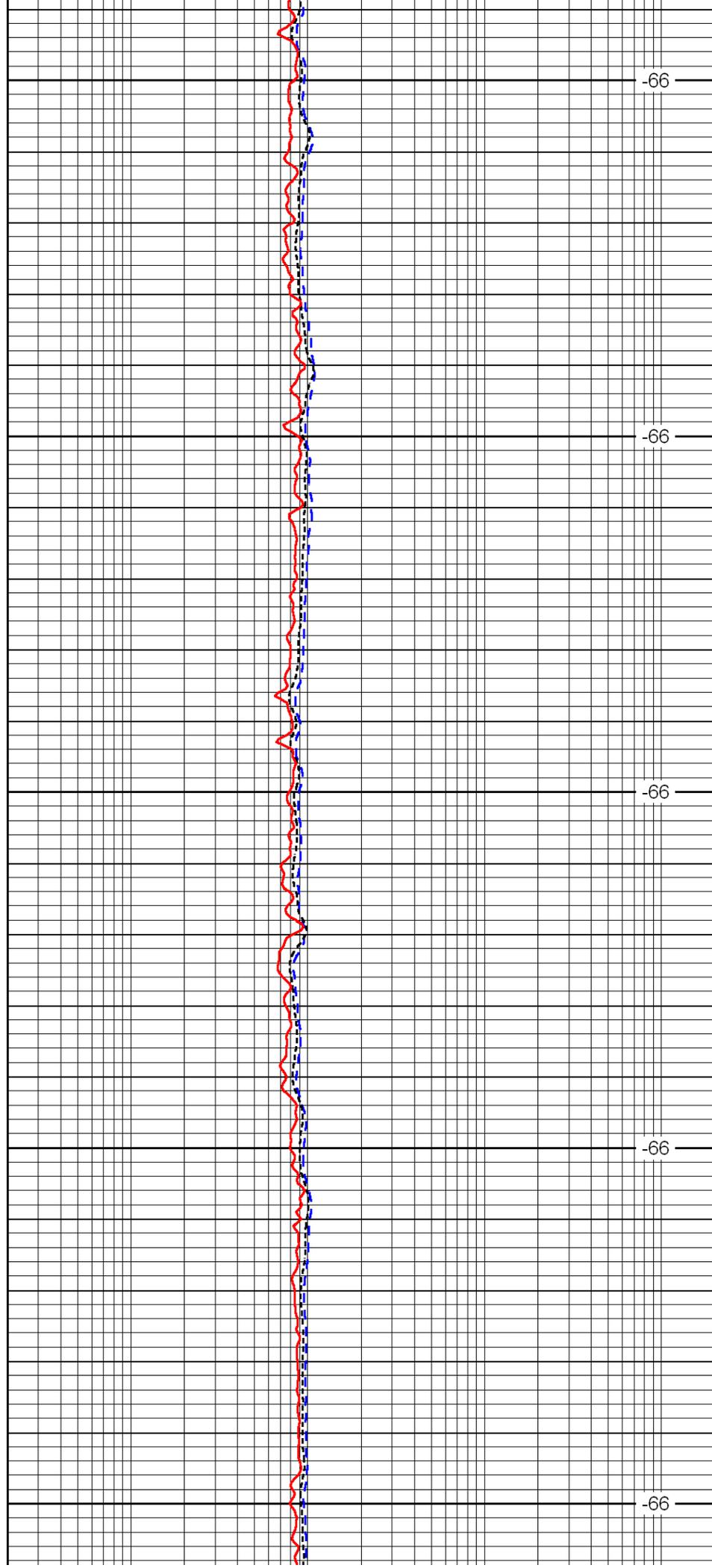
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600

650



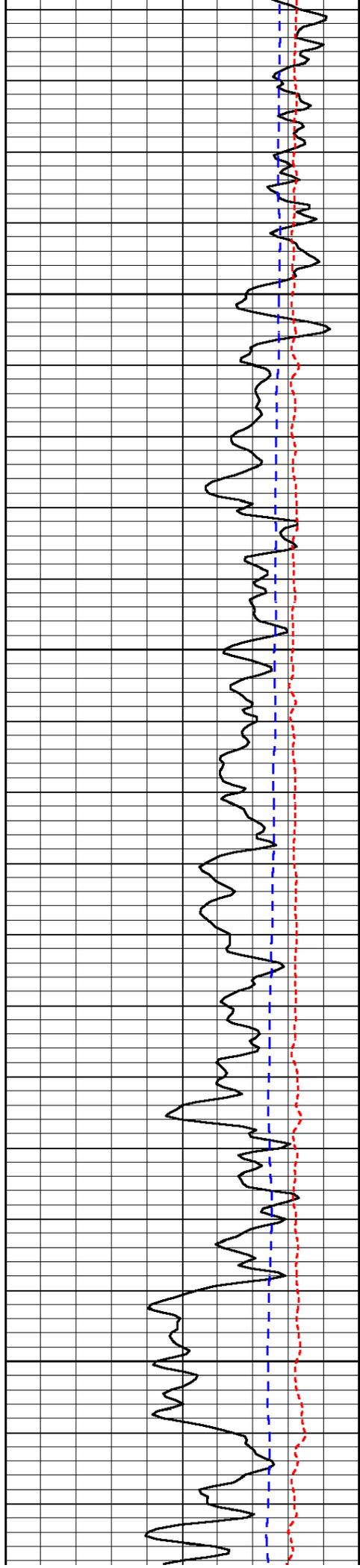
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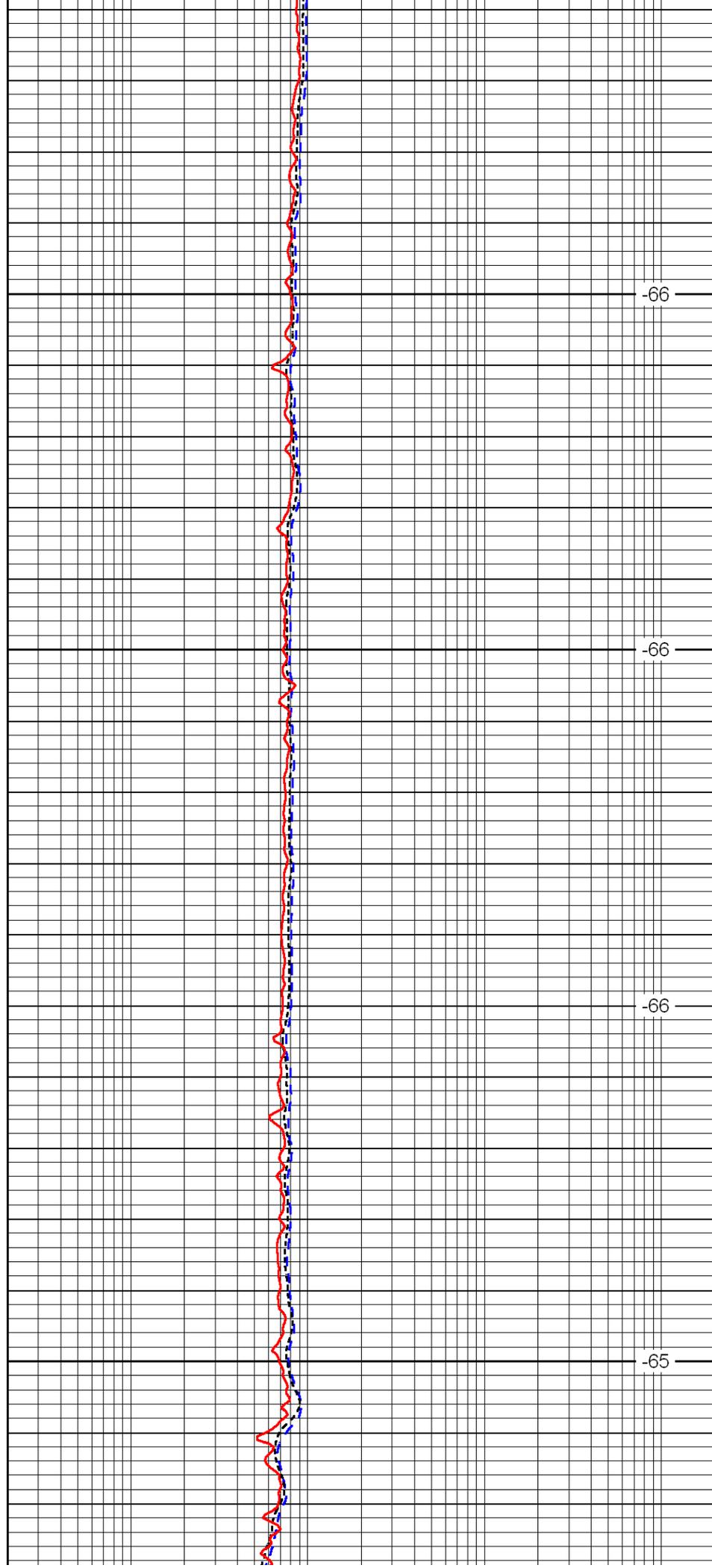


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750

800

850

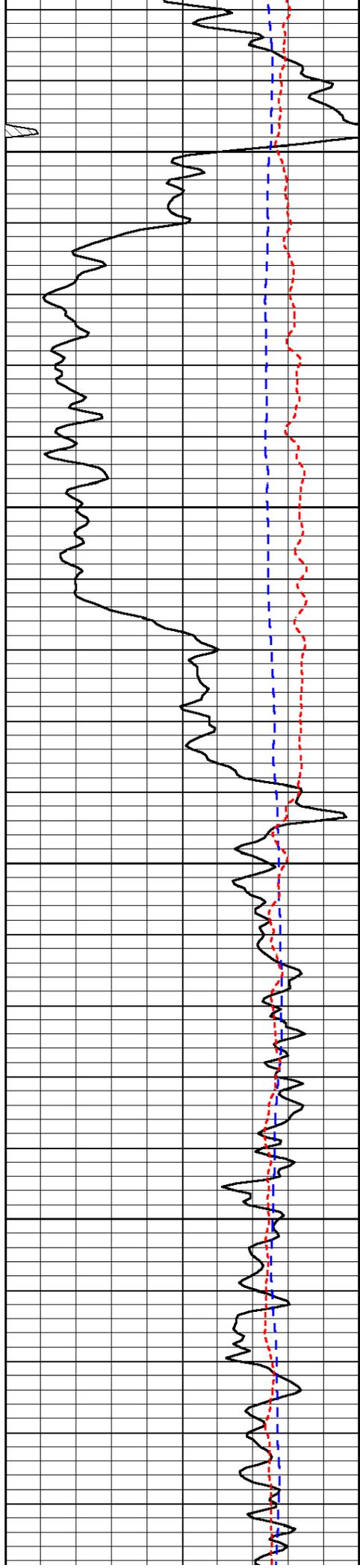


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900

950

1000

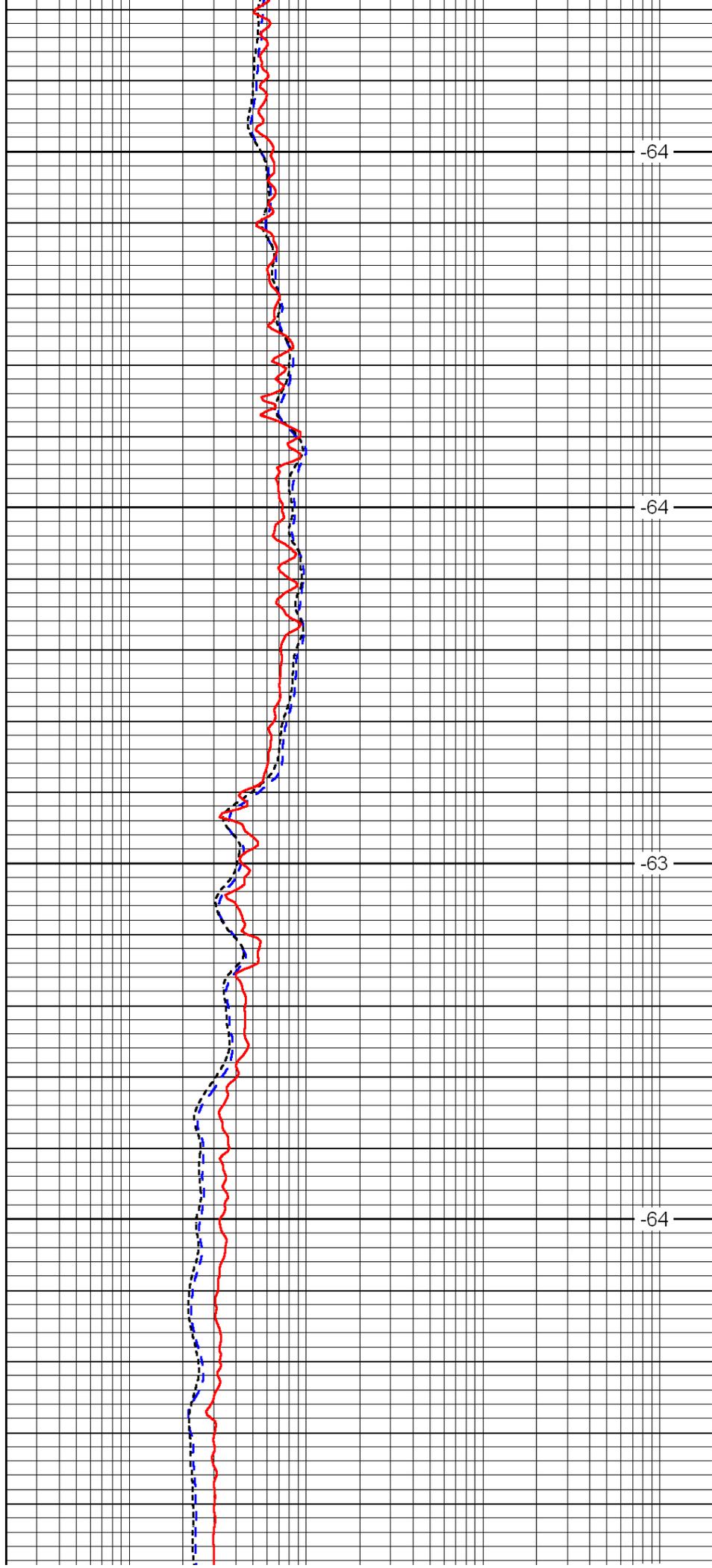
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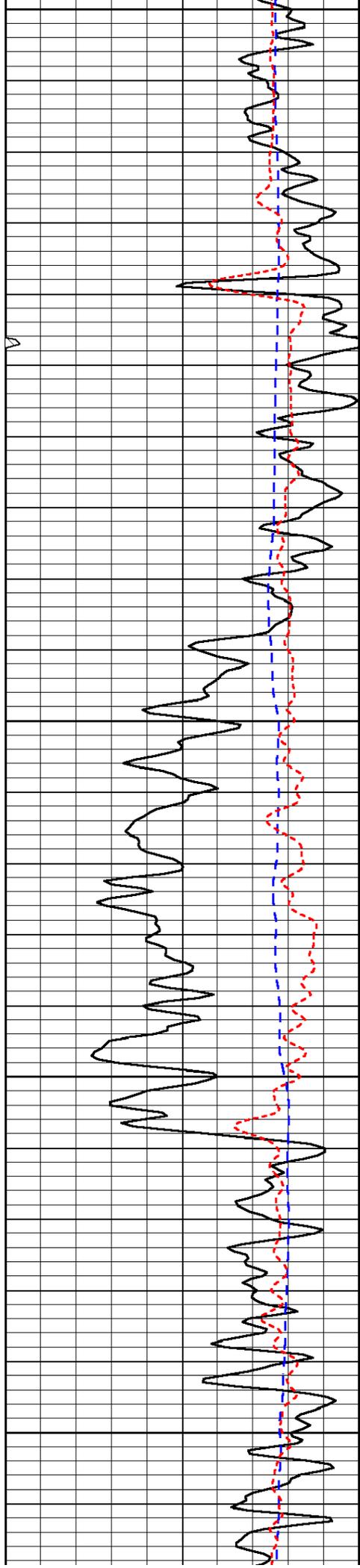
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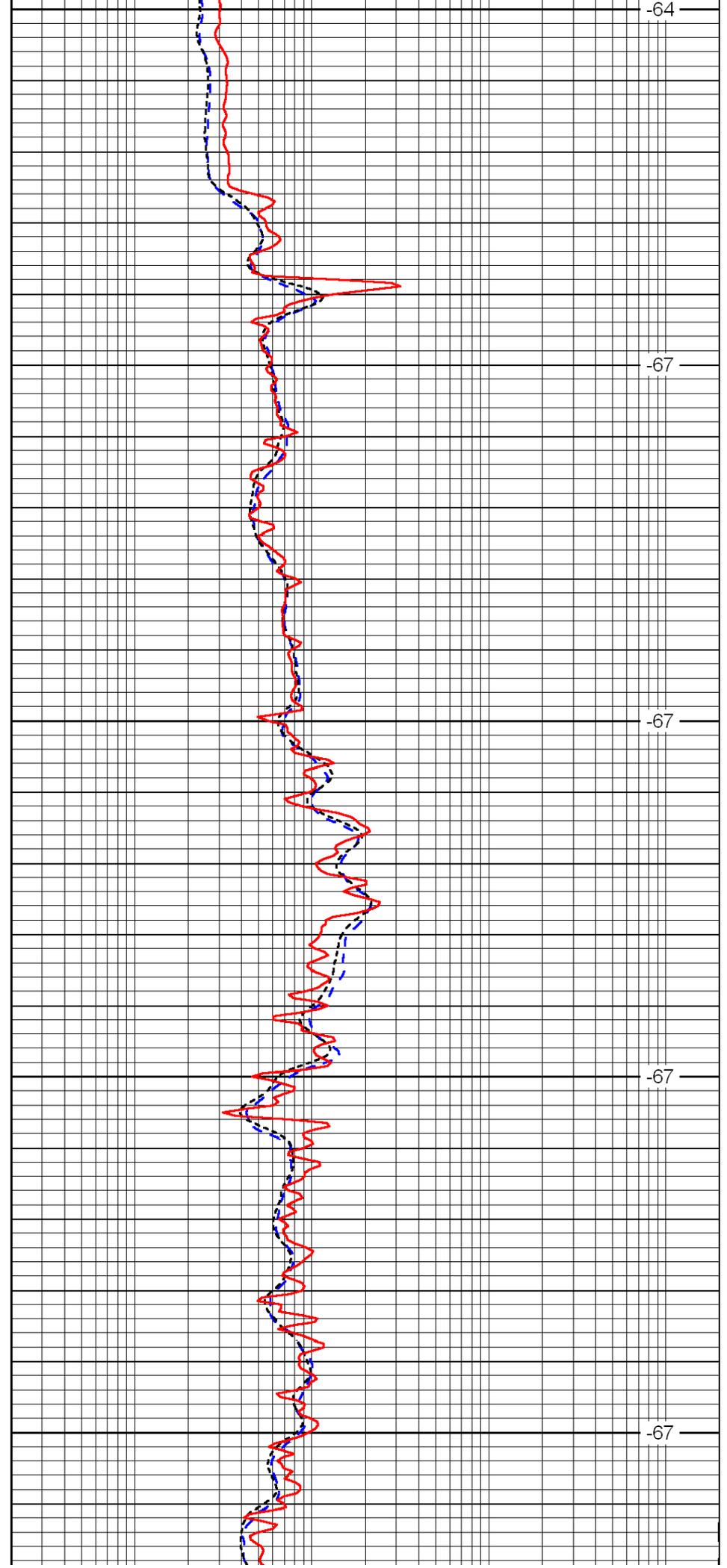
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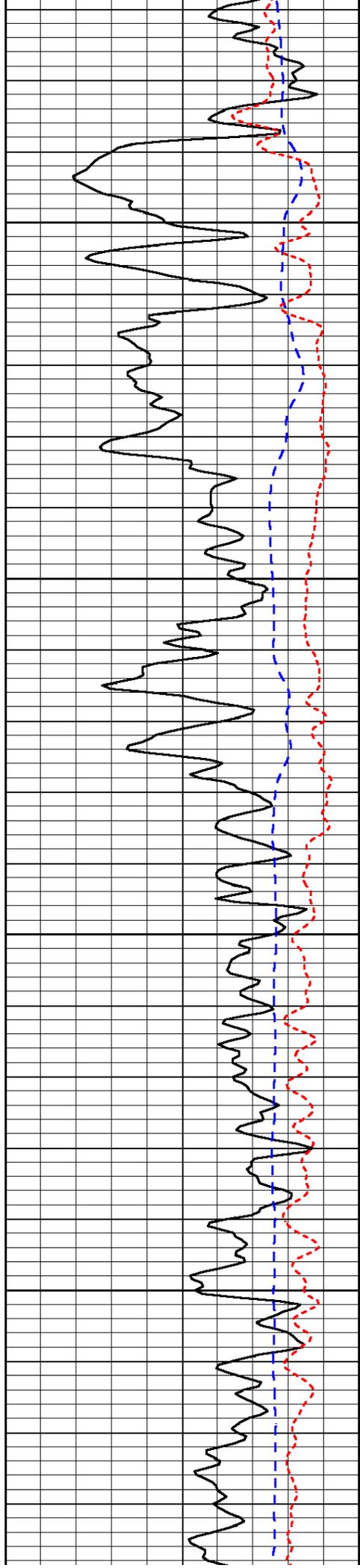




1100
1150
1200
1250
1300



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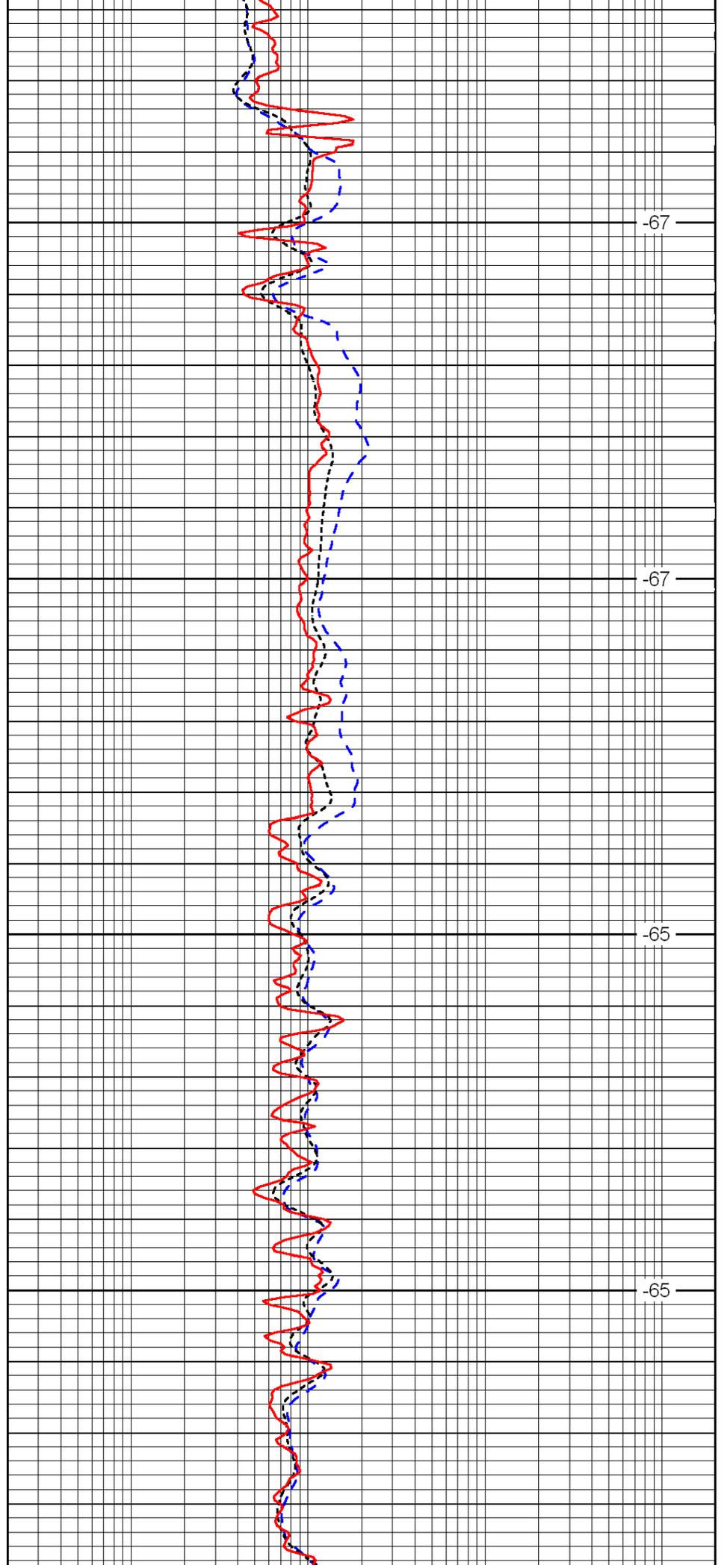


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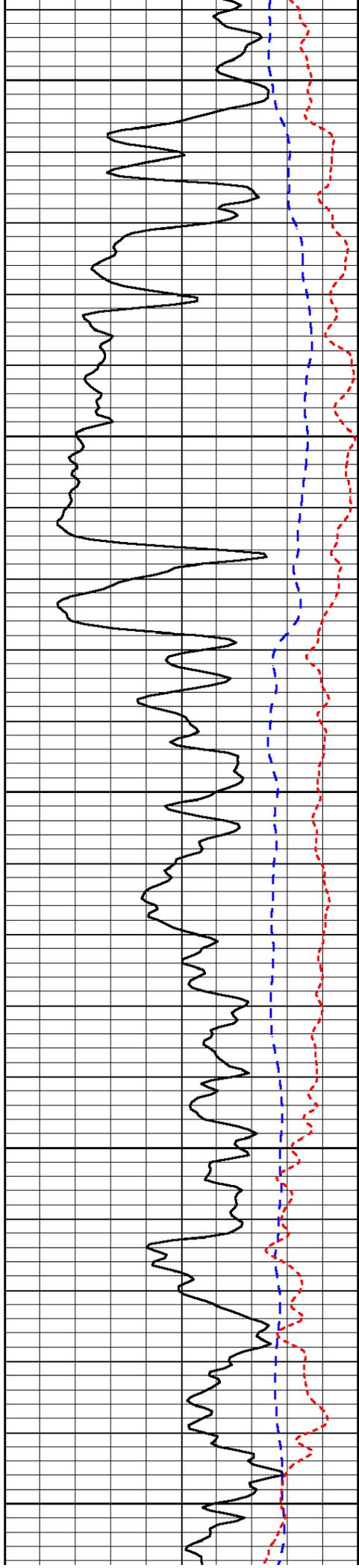


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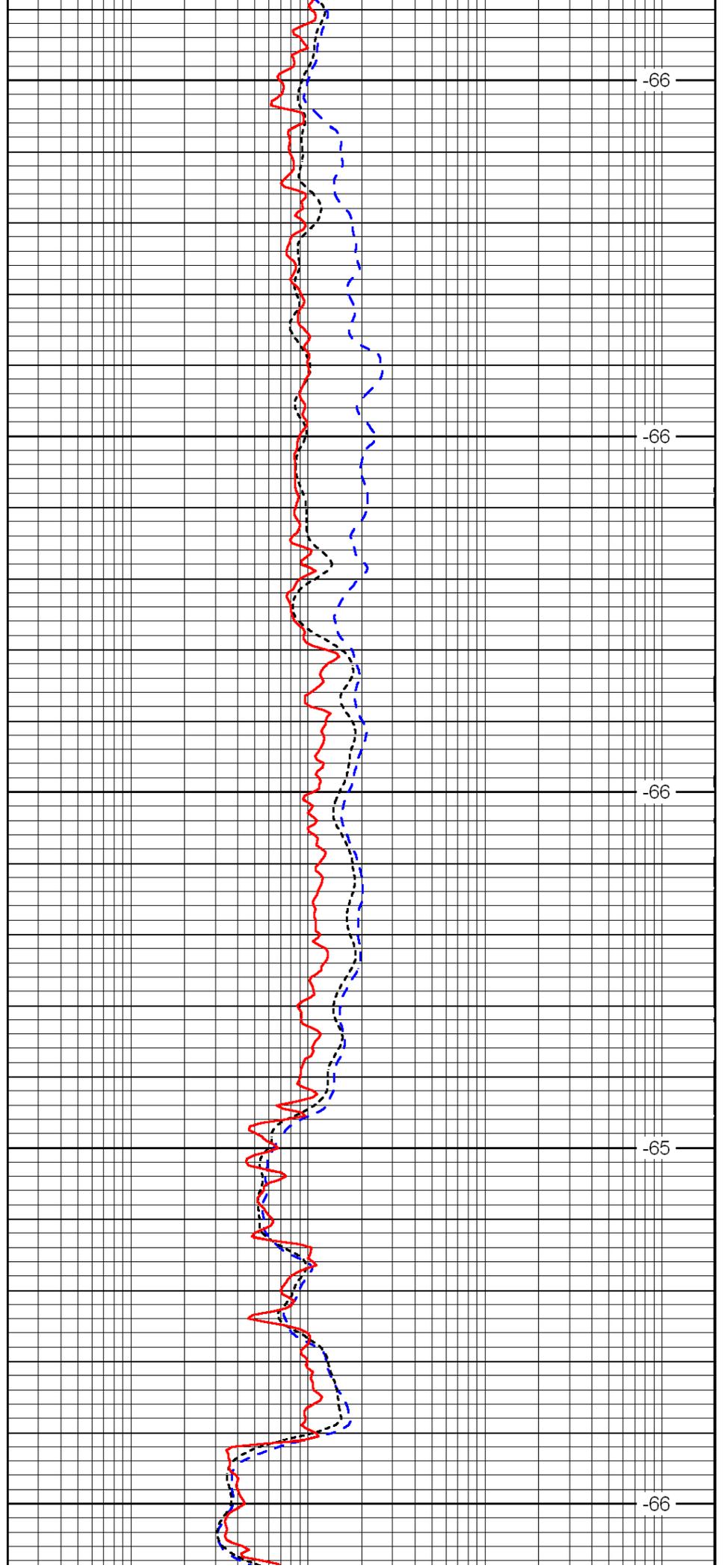
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1650

1700

1750



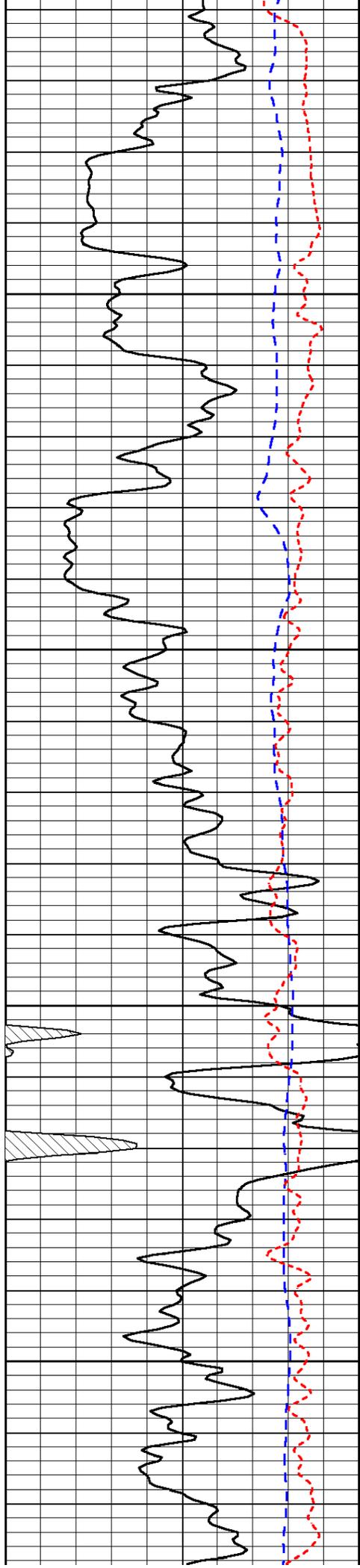
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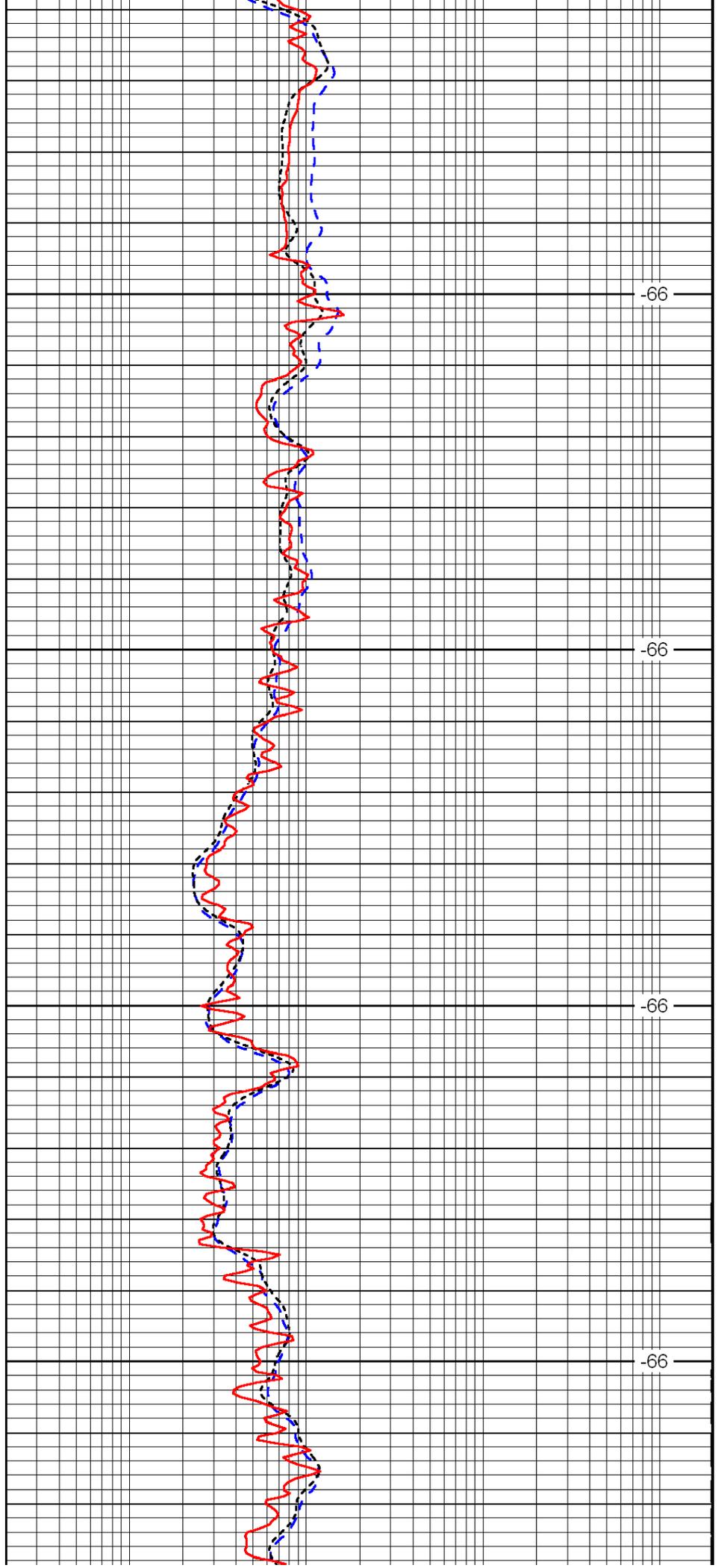


1800

1850

1900

1950

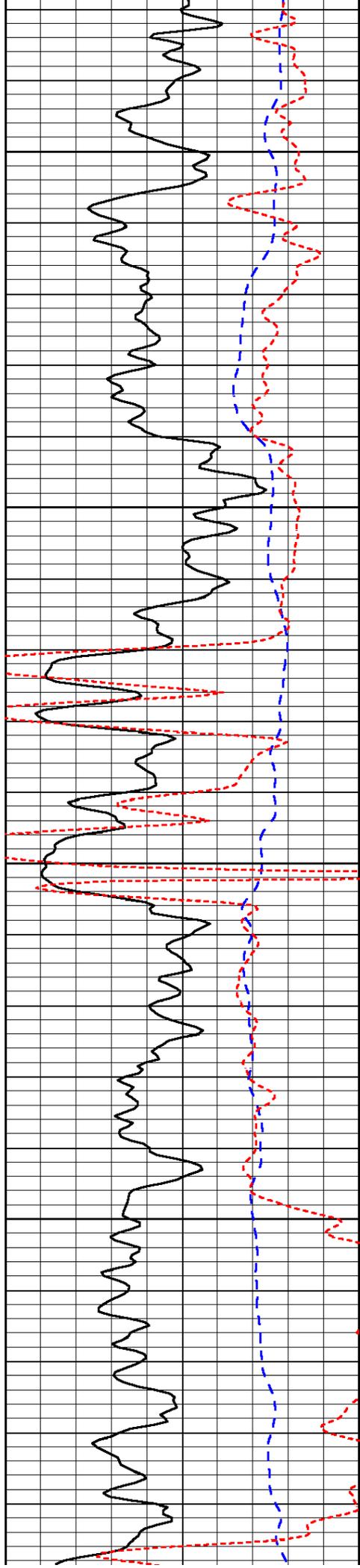


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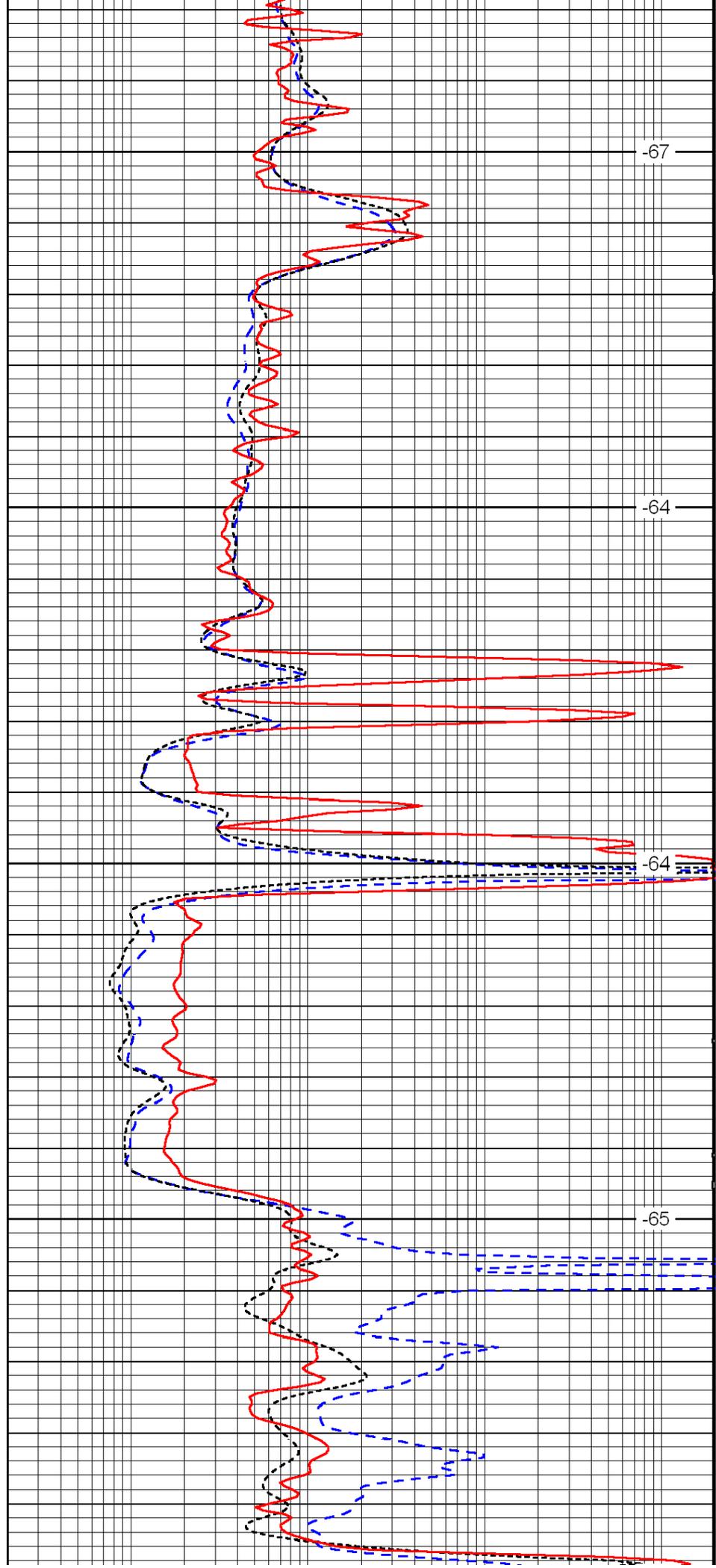


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2050

2100

2150

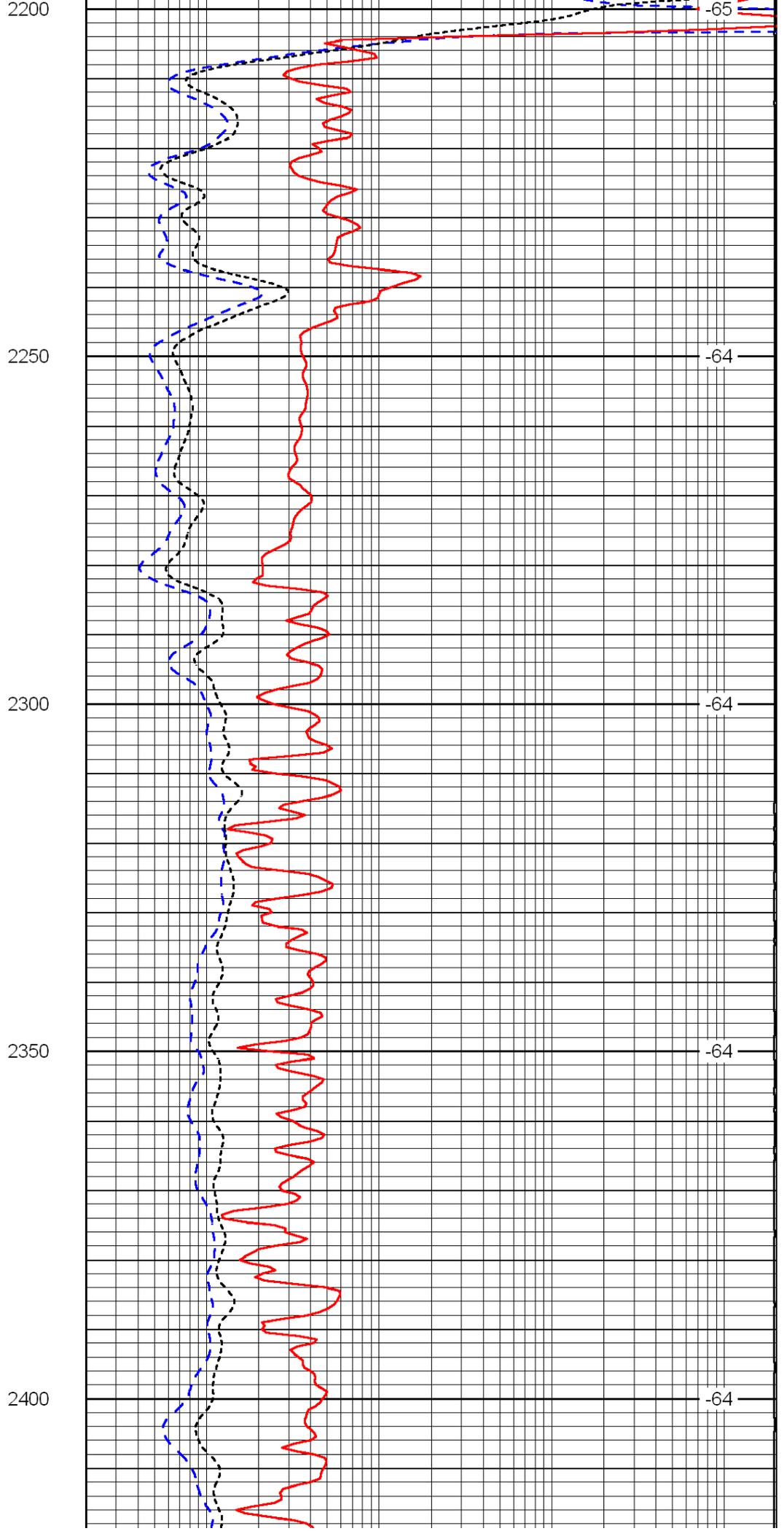
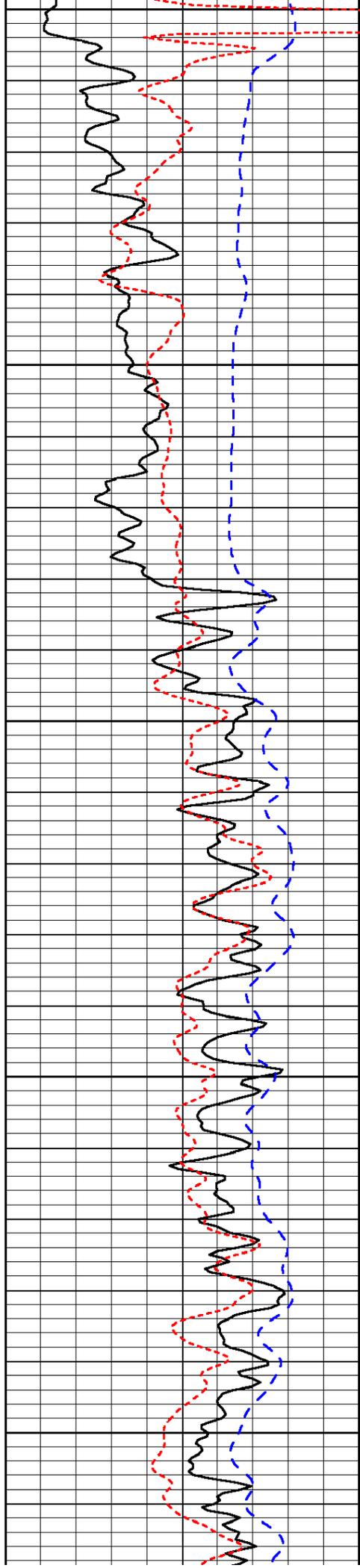


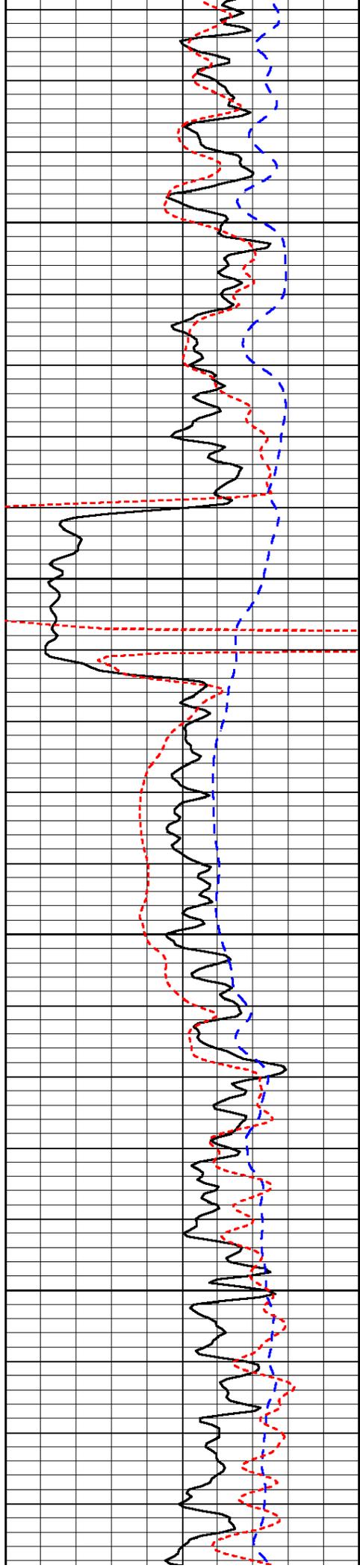
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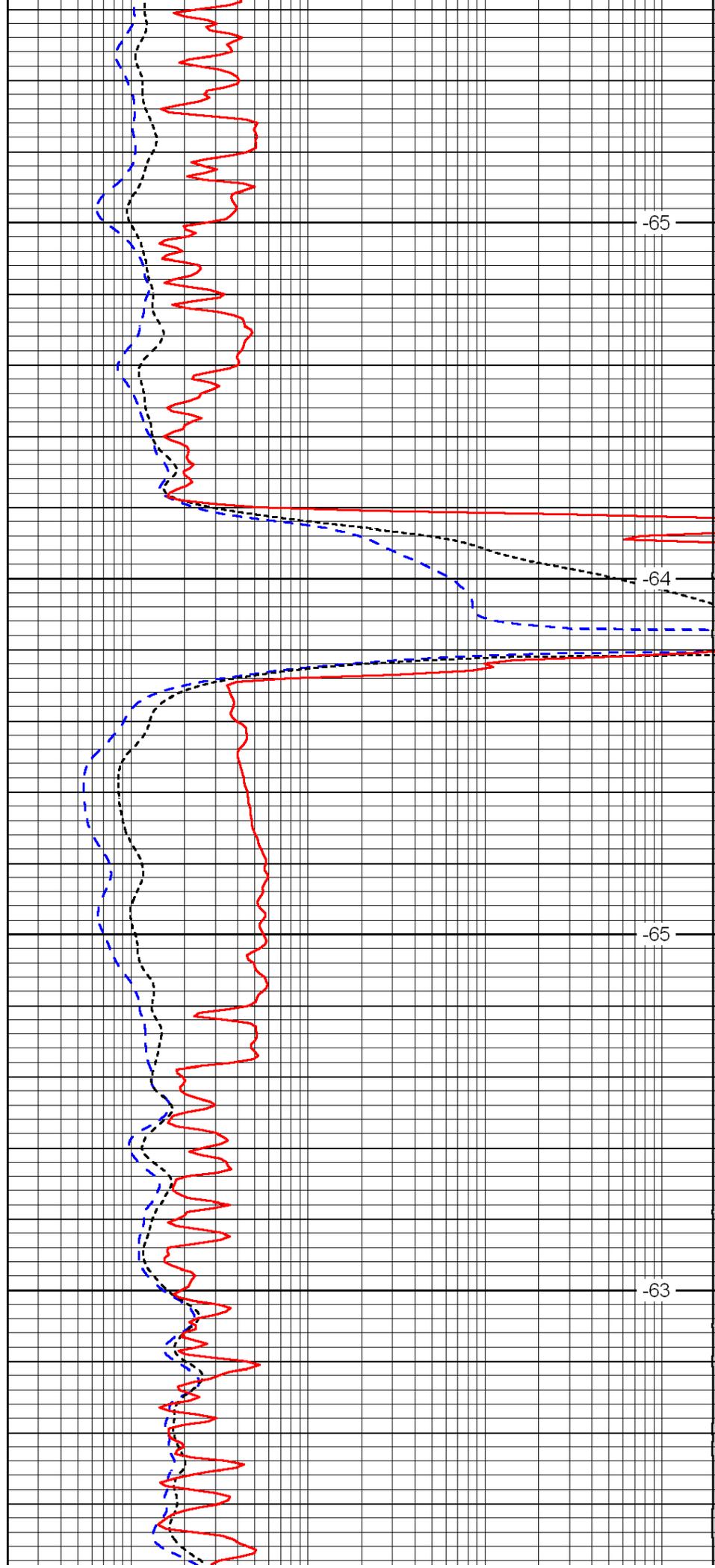


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2600

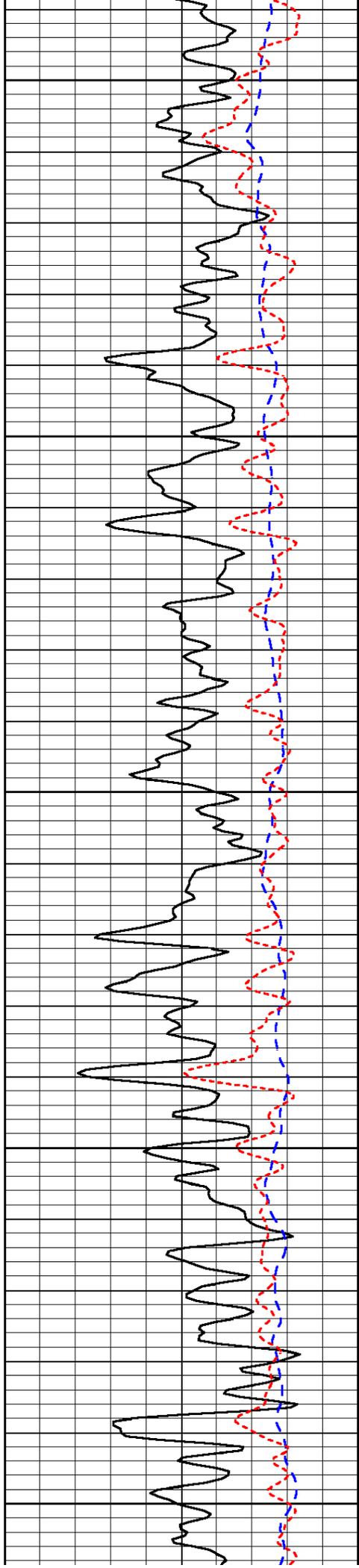


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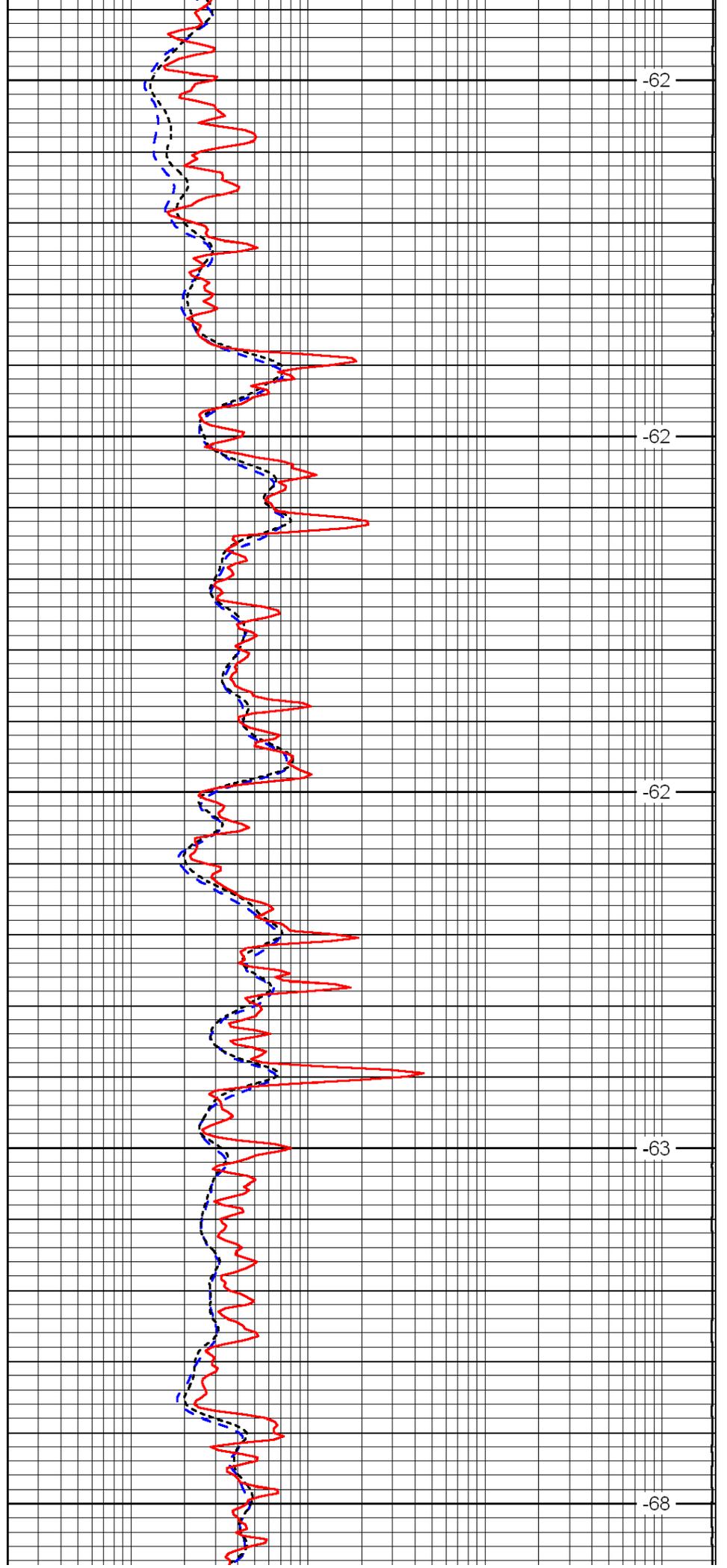
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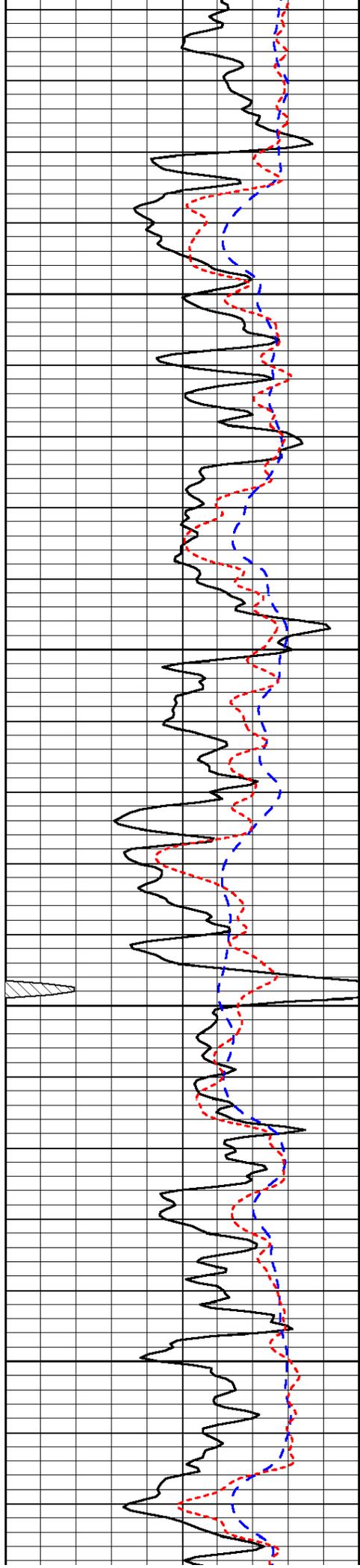
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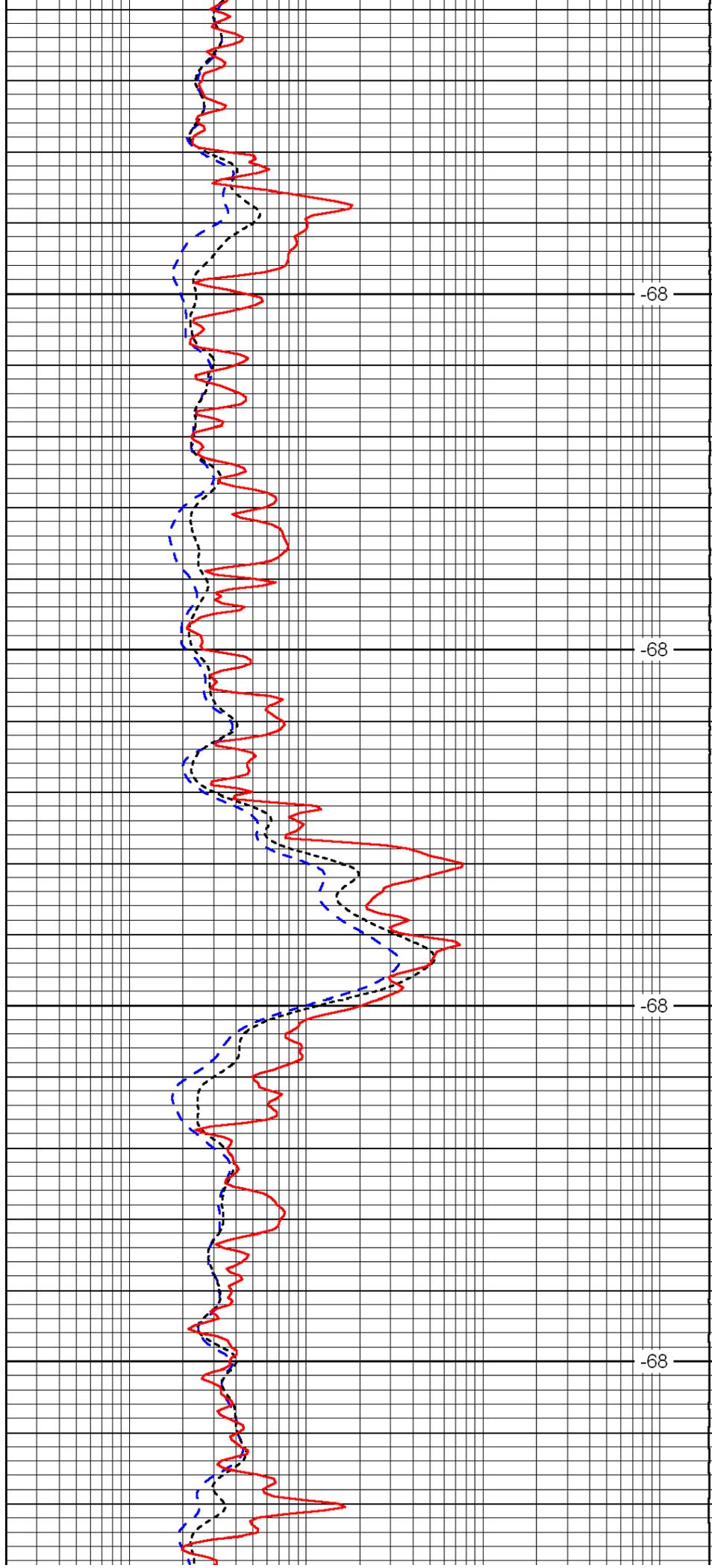


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2950

3000

3050

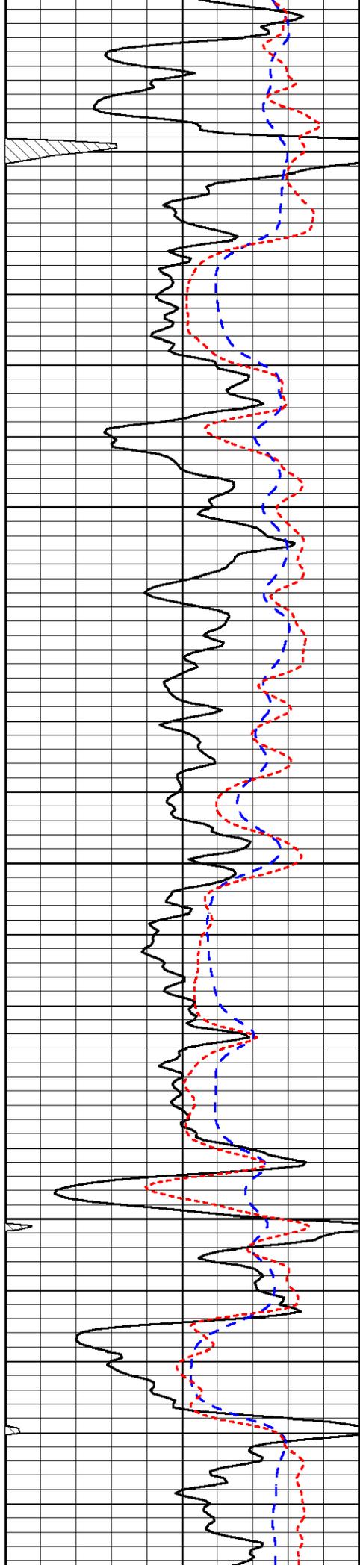


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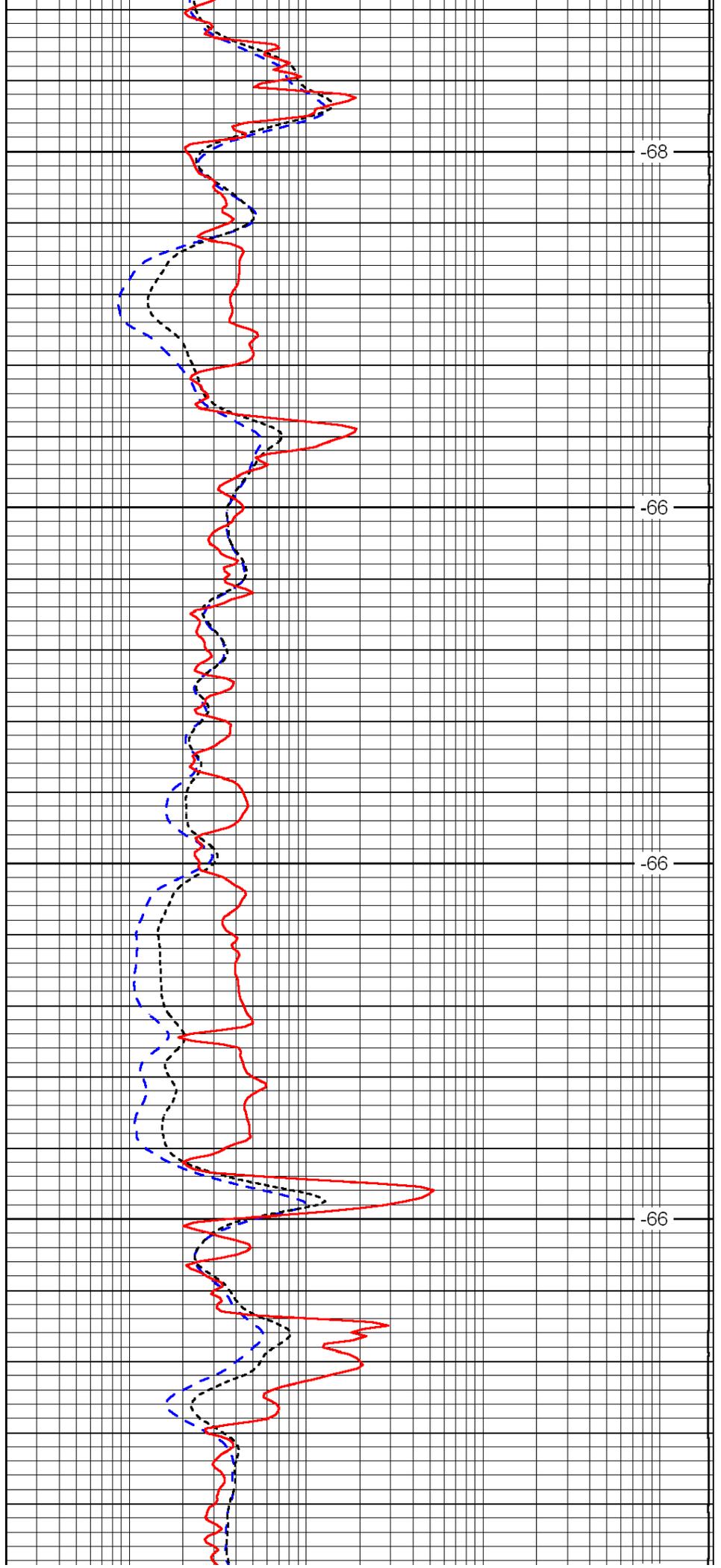


3100

3150

3200

3250

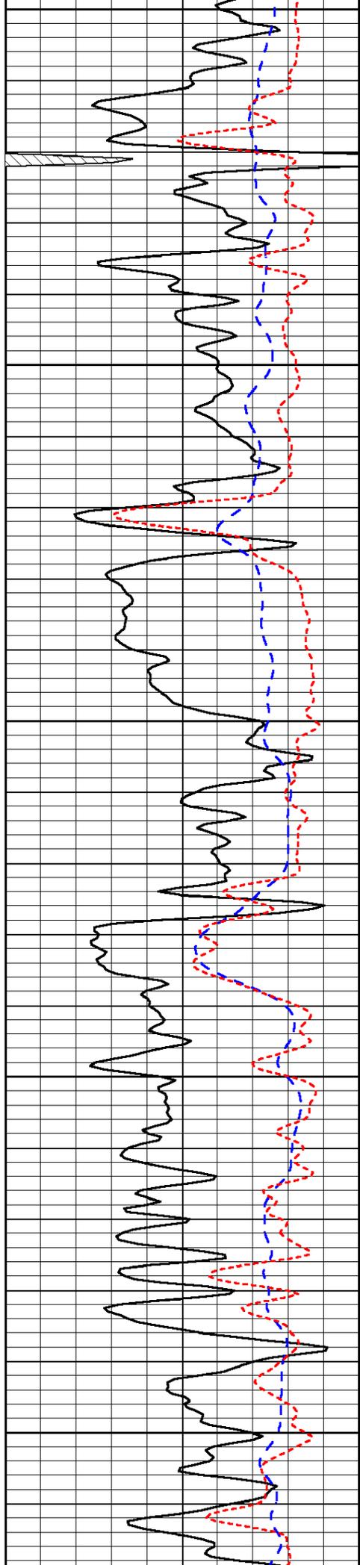


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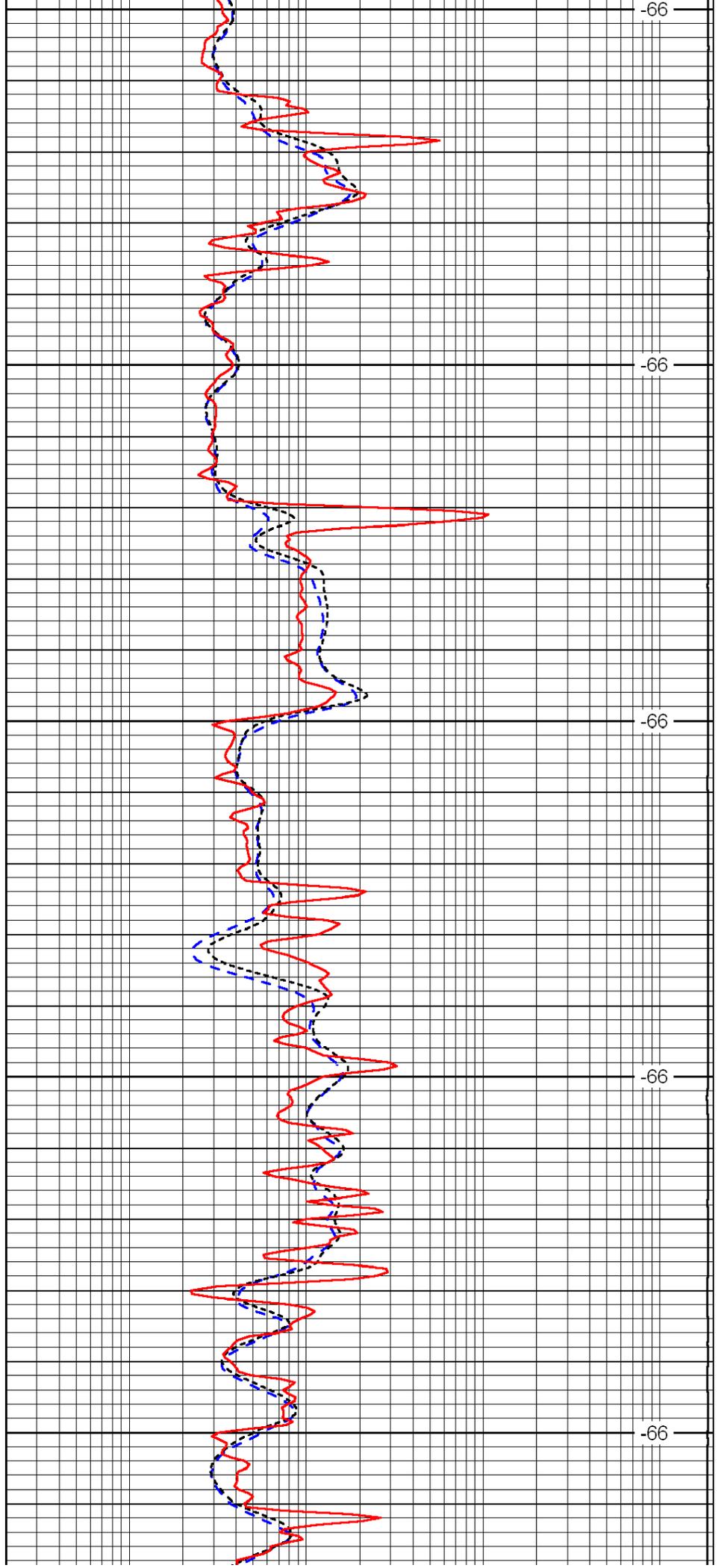
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3400

3450

3500



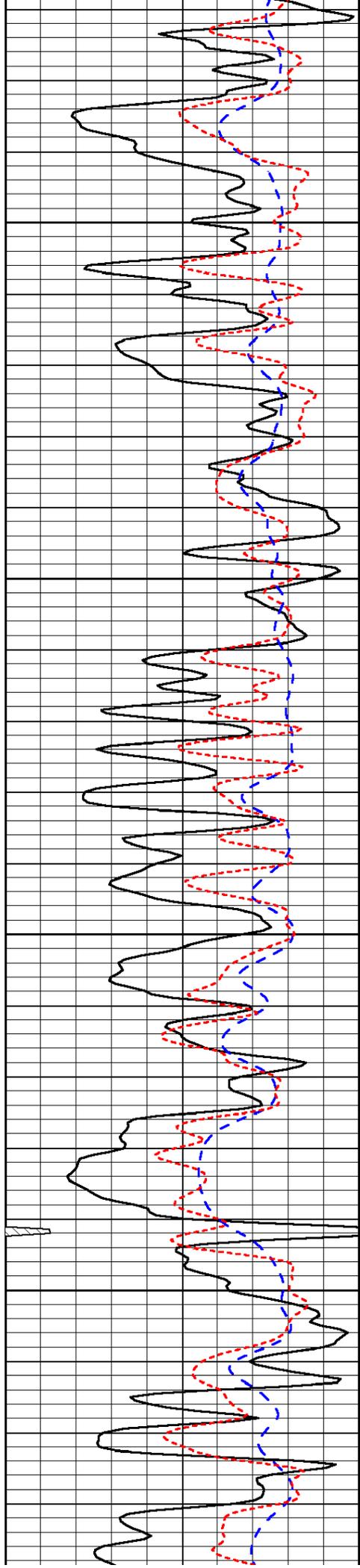
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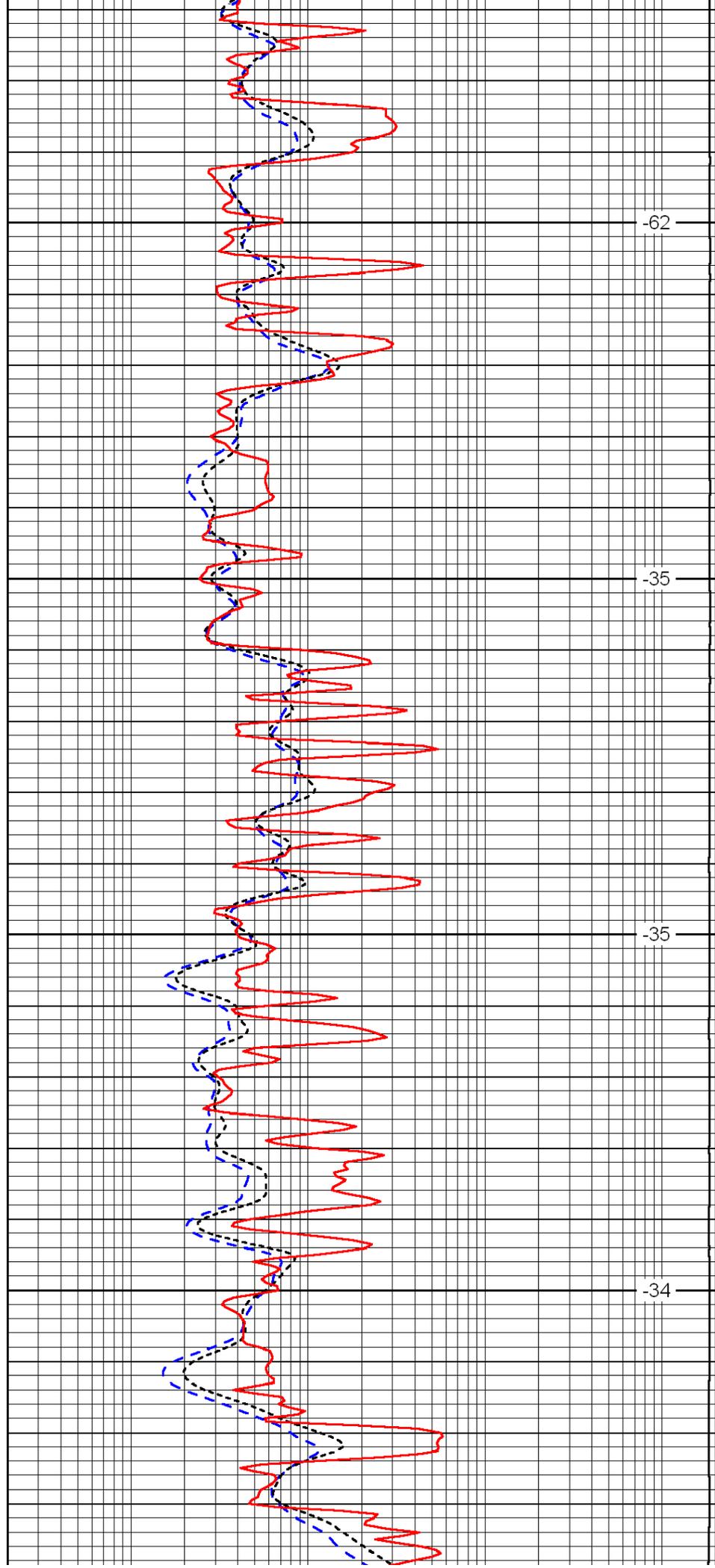


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3600

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3700

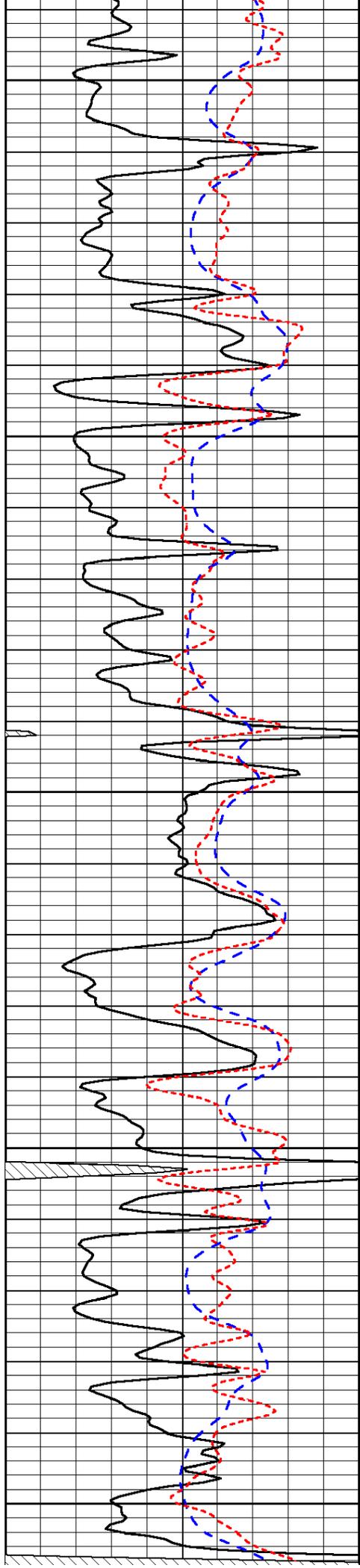


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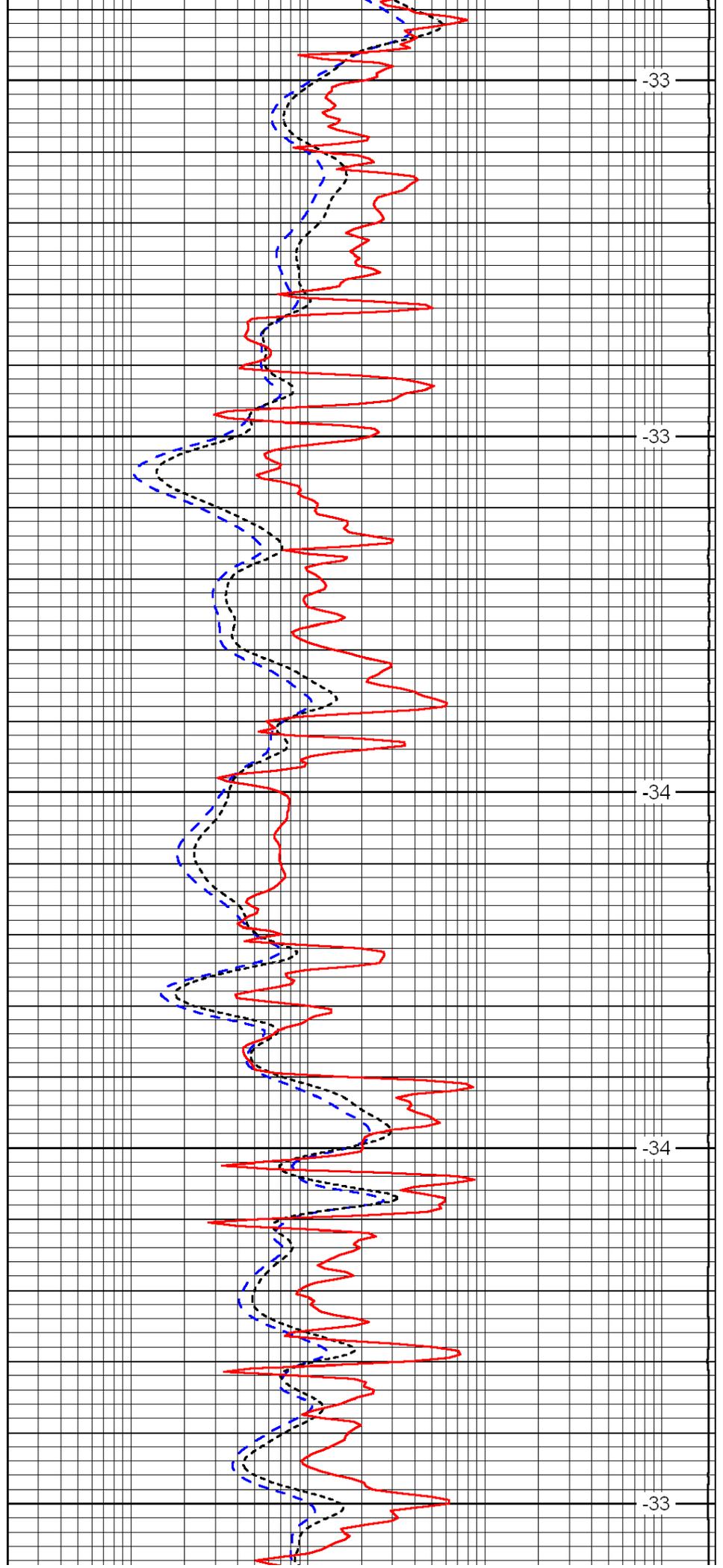
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3800

3850

3900

3950



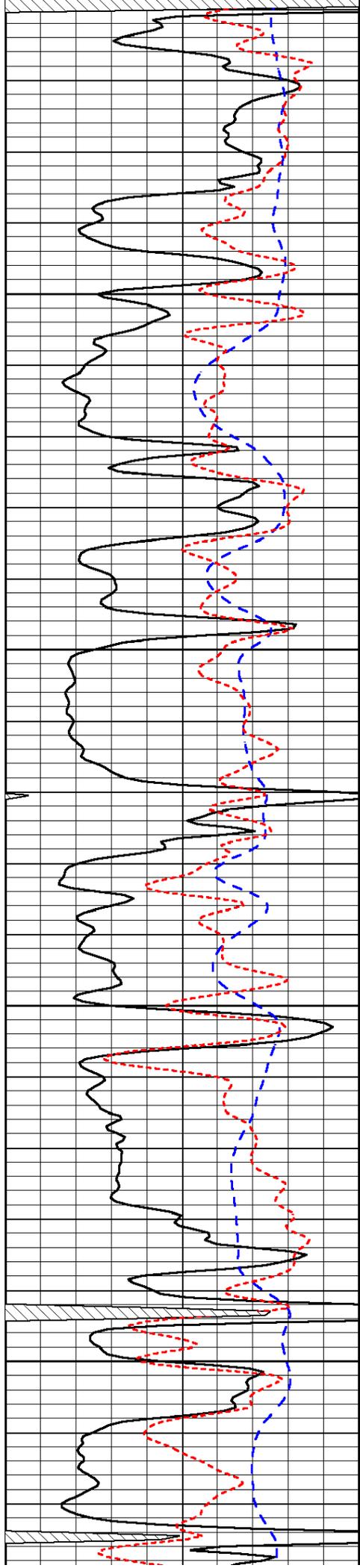
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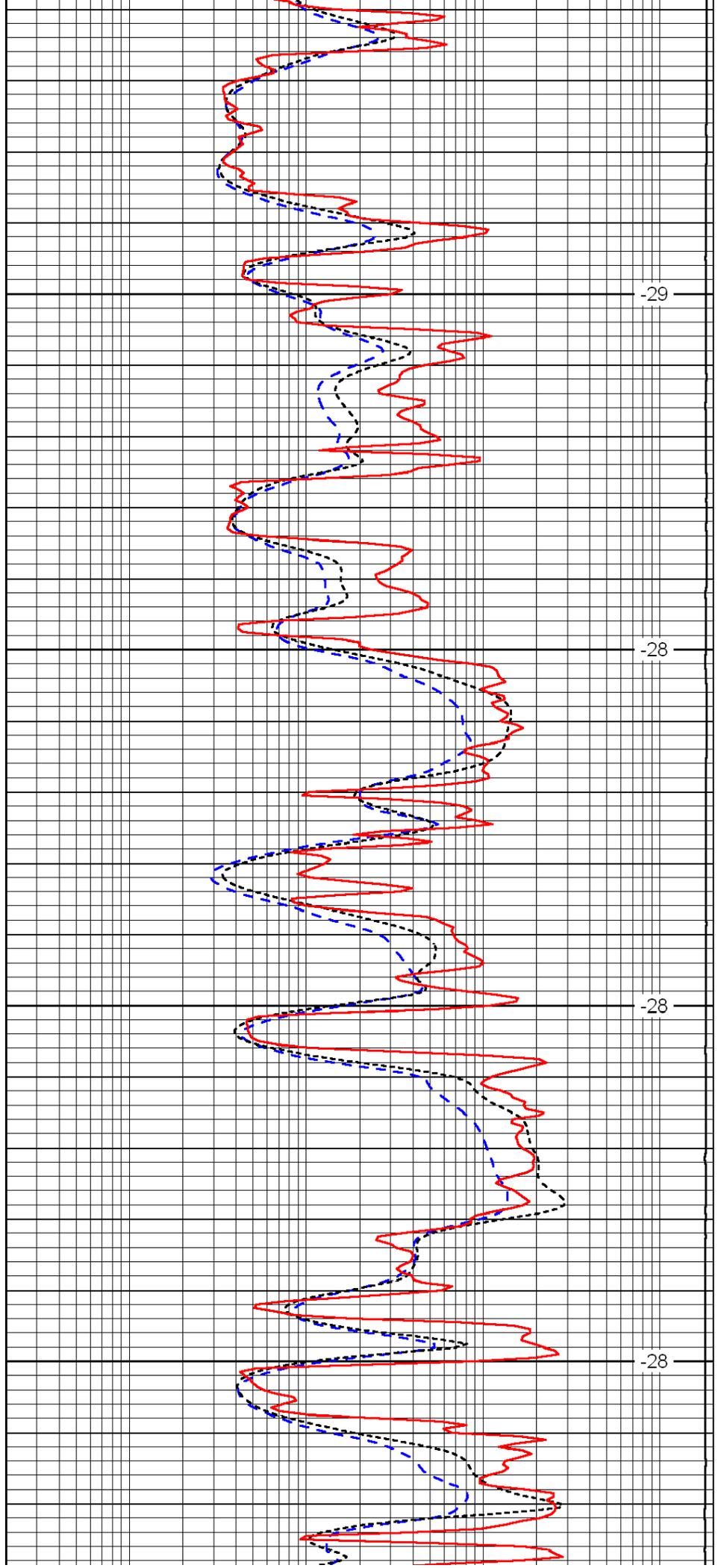


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4050

4100

4150

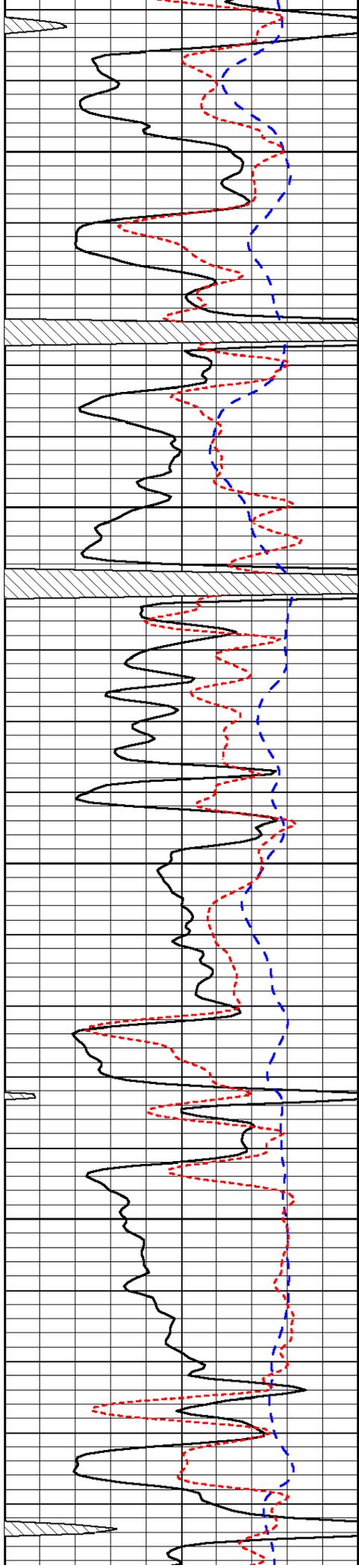


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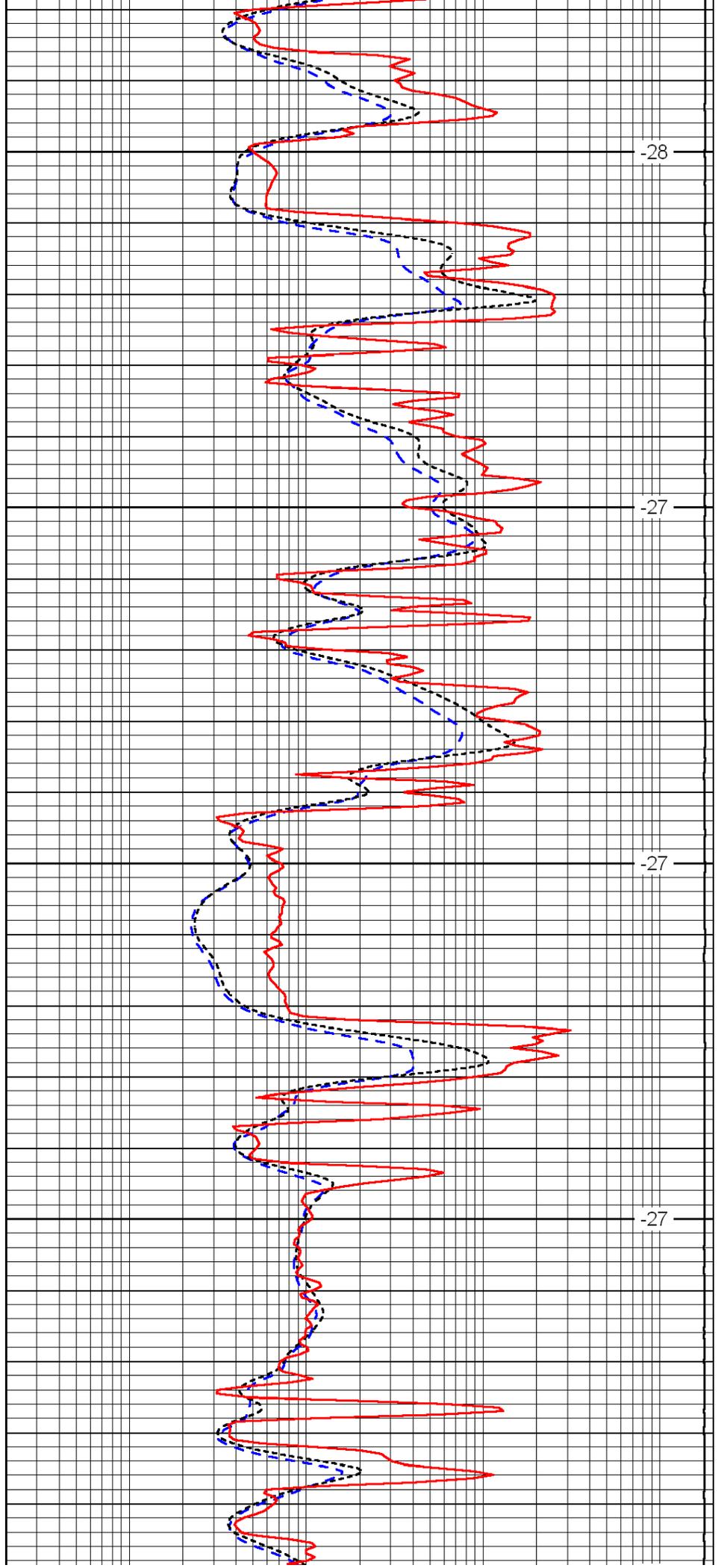


4200

4250

4300

4350

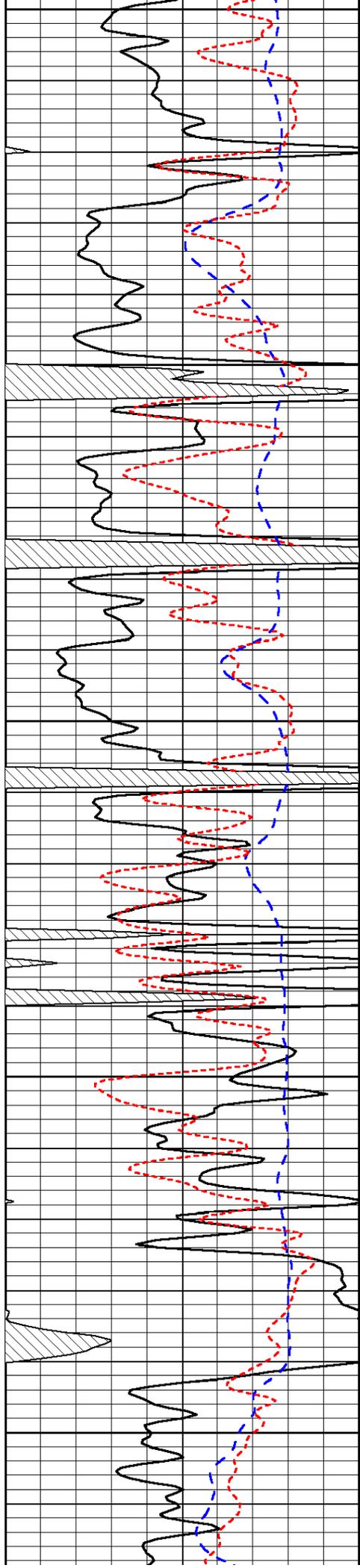


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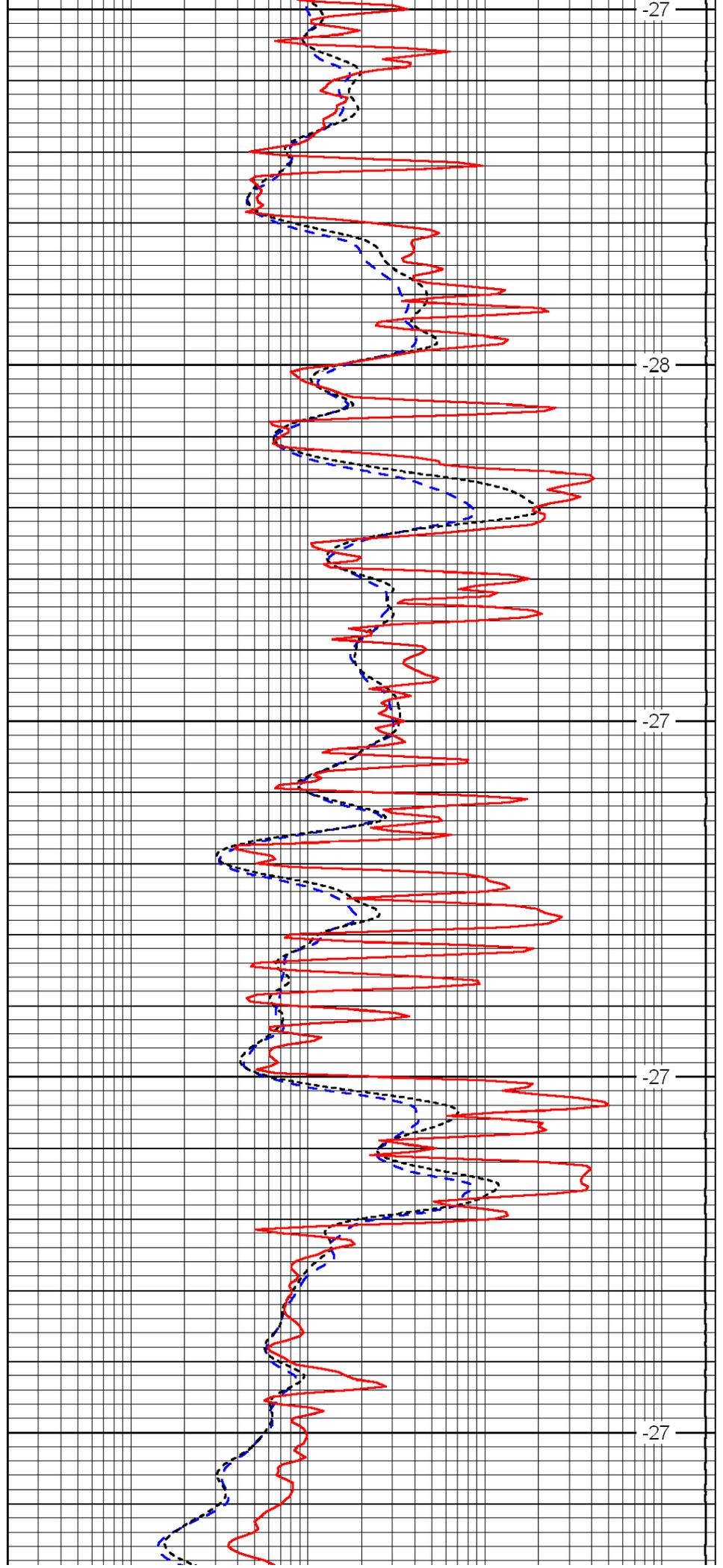
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4450

4500

4550

4600



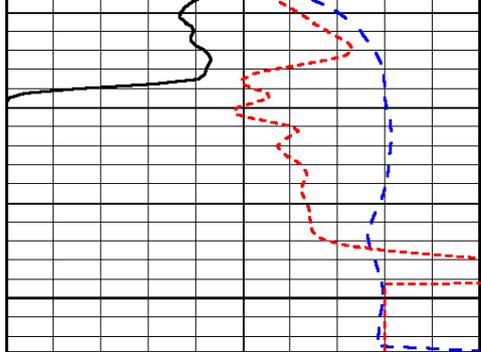
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-27

-27



| | | |
|------|-----------|-----|
| 0 | Gamma Ray | 150 |
| -200 | SP (mV) | 0 |
| -160 | Rxo / Rt | 40 |

4650



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

LSPD