



Dual Induction Log

DIGITAL LOG (785) 625-3858

| | | |
|------------------------|---------------------------|--|
| API No. | 15-179-21,227-00-00 | |
| Company | Murfin Drilling Co., Inc. | |
| Well | Alwhit No. 2-21 | |
| Field | Lombardy | |
| County | Sheridan | State |
| | | Kansas |
| Location | 800' FNL & 1200' FWL | |
| Sec: 21 | Twp: 9 S | Rge: 27 W |
| Permanent Datum | Ground Level | Elevation 2741 |
| Log Measured From | Kelly Bushing | 5 Ft. Above Perm. Datum |
| Drilling Measured From | Frotkelly Bushing | |
| | | Other Services CNL/CDL MEL/BHCS |
| | | Elevation K.B. 2746 D.F. 2741 G.L. 2741 |

| | |
|------------------------|-------------|
| Date | 4/22/09 |
| Run Number | One |
| Depth Driller | 4475 |
| Depth Logger | 4474 |
| Bottom Logged Interval | 4473 |
| Top Log Interval | 0 |
| Casing Driller | 8.625 @ 279 |
| Casing Logger | 279 |
| Bit Size | 7.875 |
| Type Fluid in Hole | Chemical |
| Salinity, ppm CL | 1.600 |
| Density / Viscosity | 9.1 56 |
| pH / Fluid Loss | 11.5 6.0 |
| Source of Sample | Flowline |
| Rm @ Meas. Temp | .92 @ 73 |
| Rmf @ Meas. Temp | .69 @ 73 |
| Rmc @ Meas. Temp | 1.24 @ 73 |
| Source of Rmf / Rmc | Charts |
| Rm @ BHT | .55 @ 123 |
| Operating Rig Time | 6 Hours |
| Max Rec. Temp. F | 123 |
| Equipment Number | 4 |
| Location | Havs |
| Recorded By | K. Bange |
| Witnessed By | Brad Rine |

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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

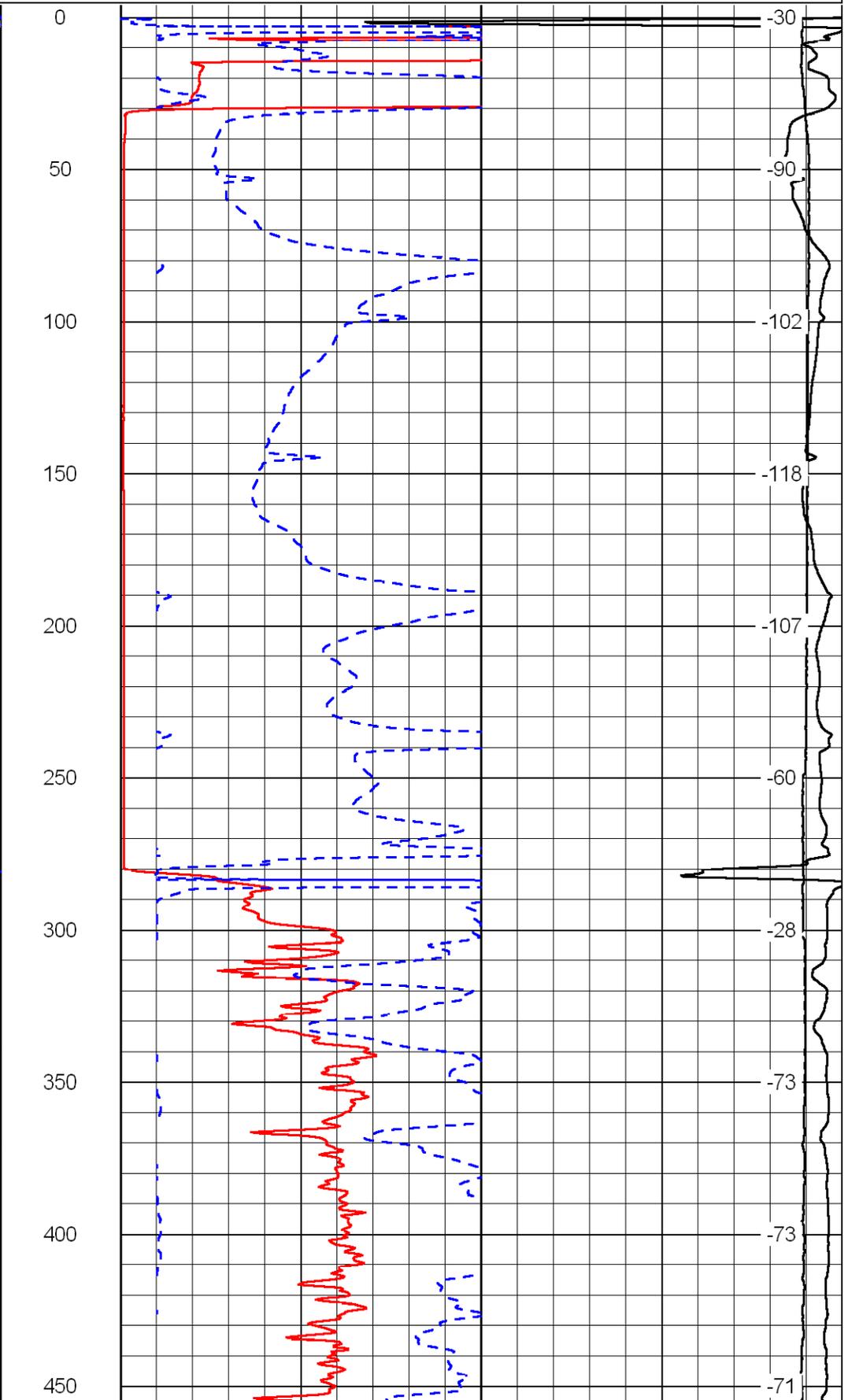
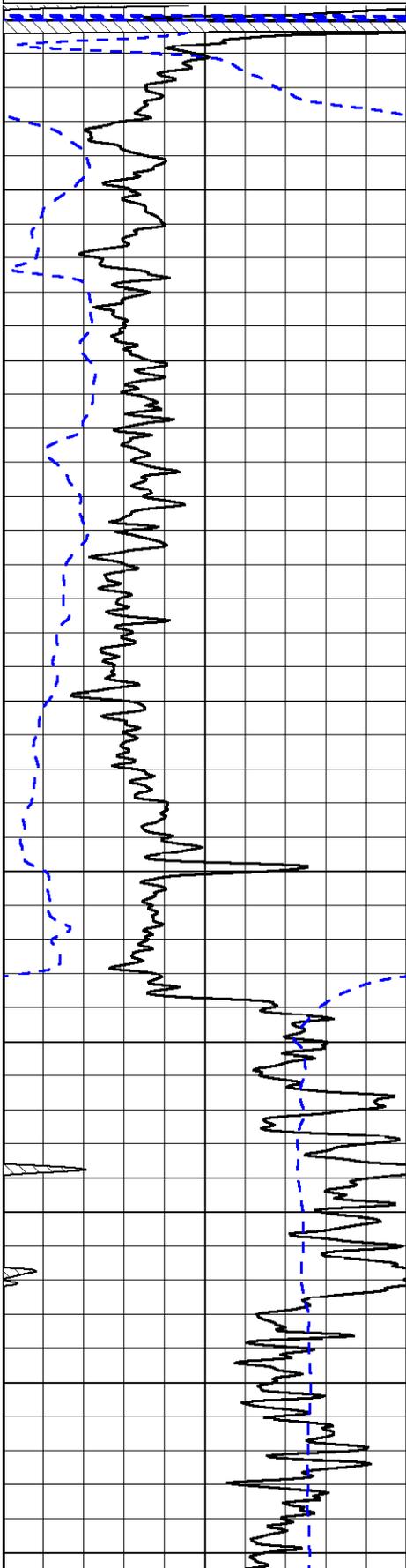
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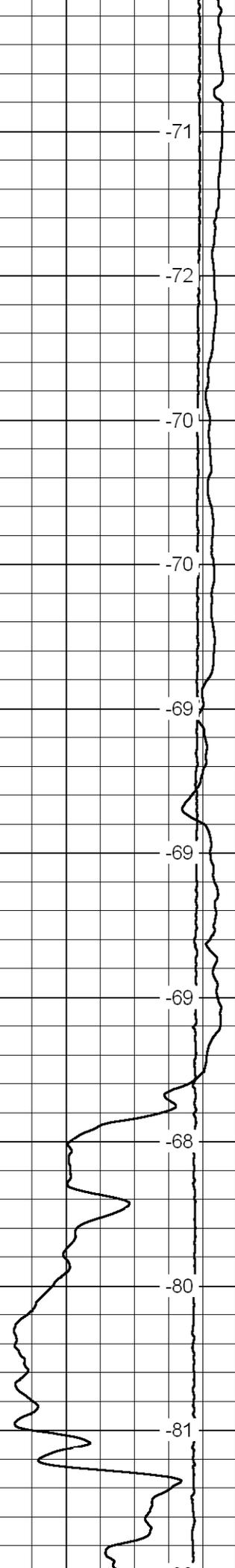
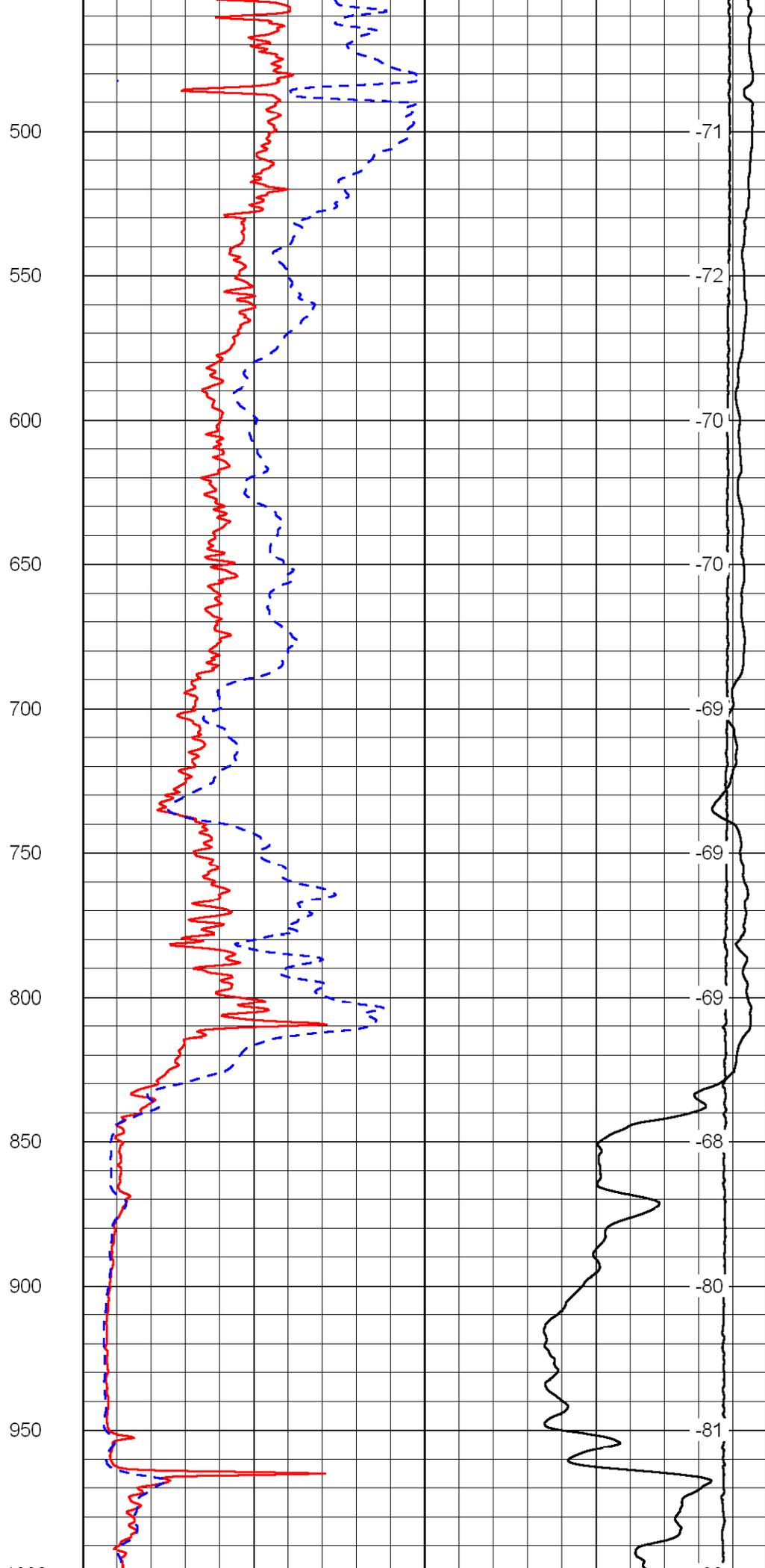
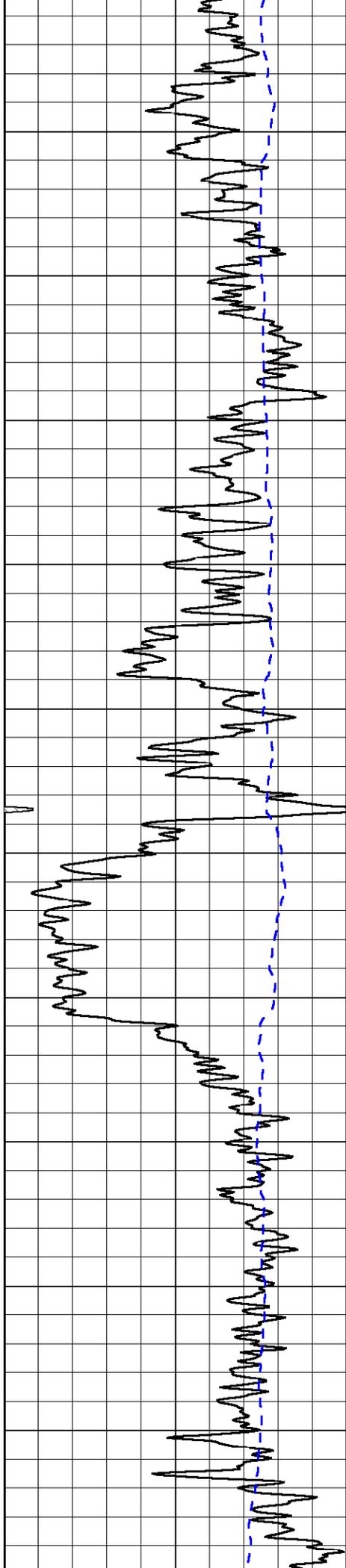
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 Charted by: Depth in Feet scaled 1:600

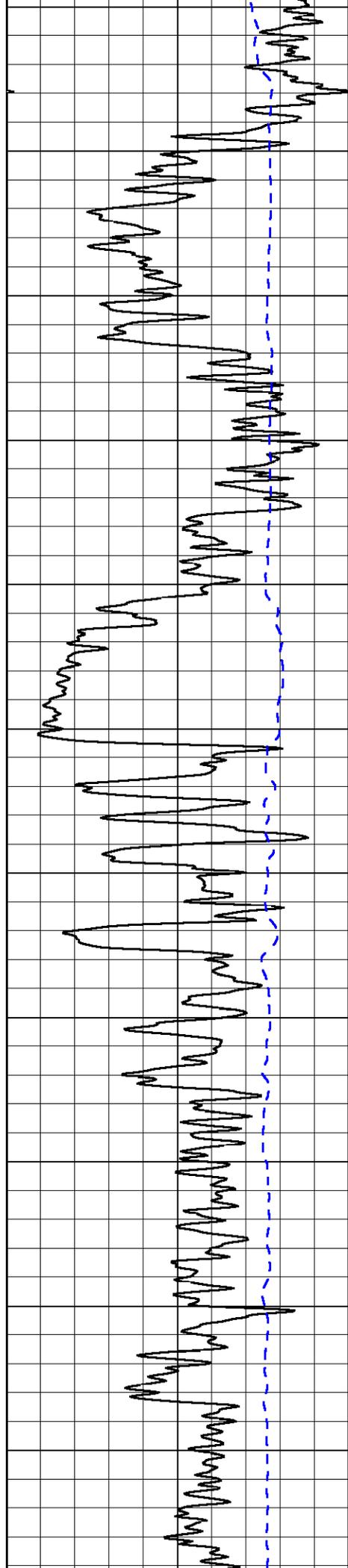
| | | |
|------|-----------|-----|
| 0 | Gamma Ray | 150 |
| -200 | SP (MV) | 0 |

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

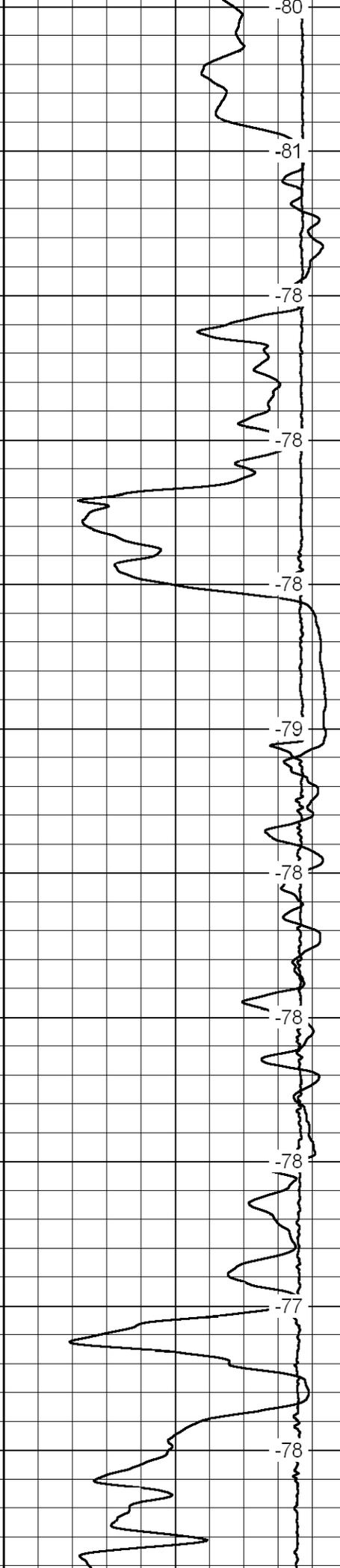
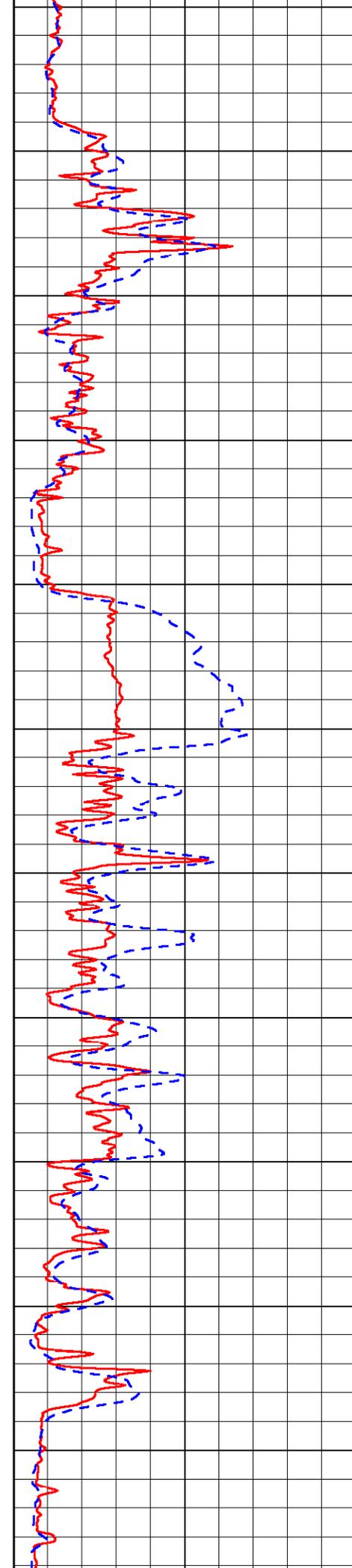
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|------|----------|---|
| LSPD | (ft/min) | 0 |
|------|----------|---|

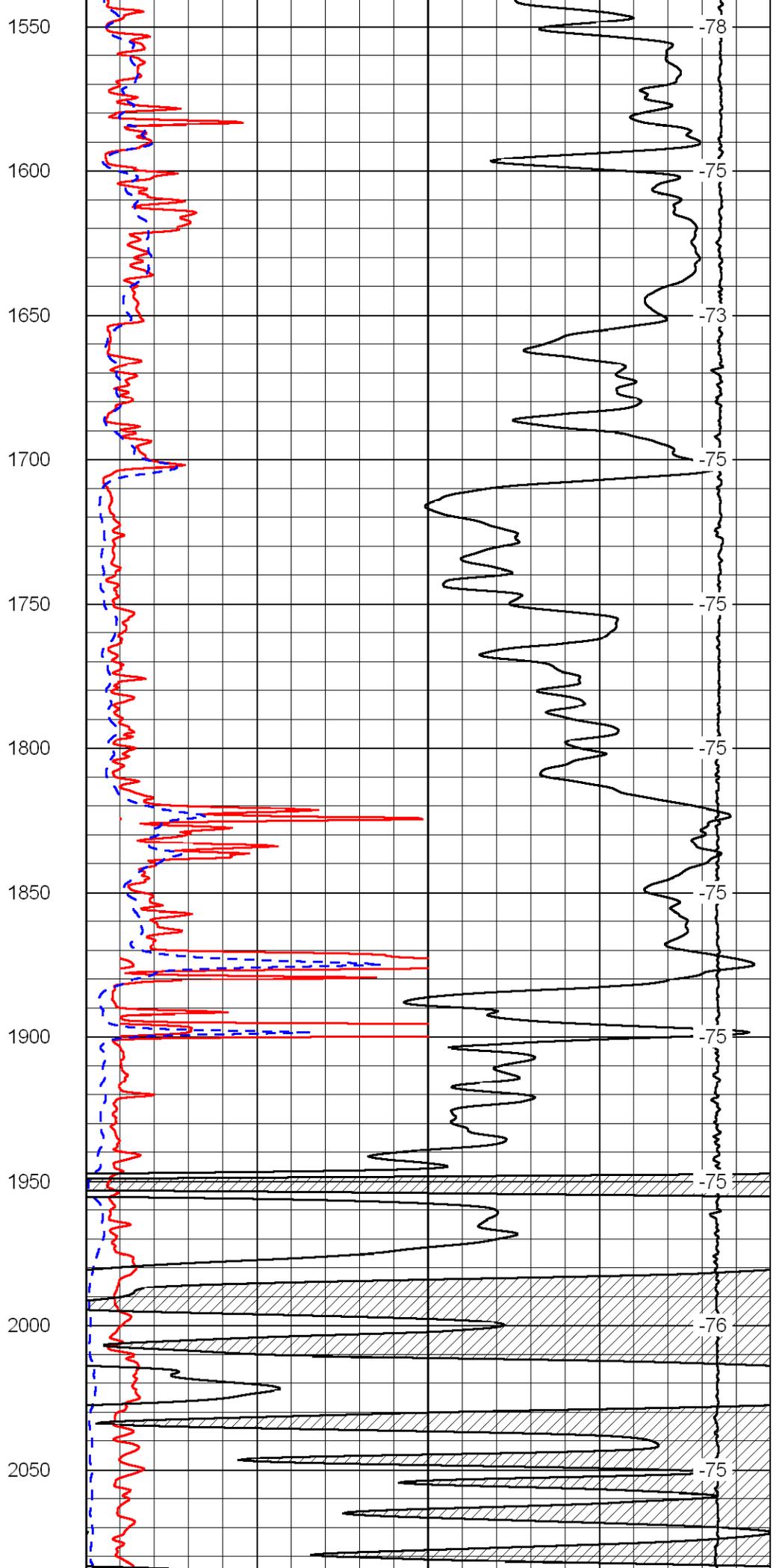
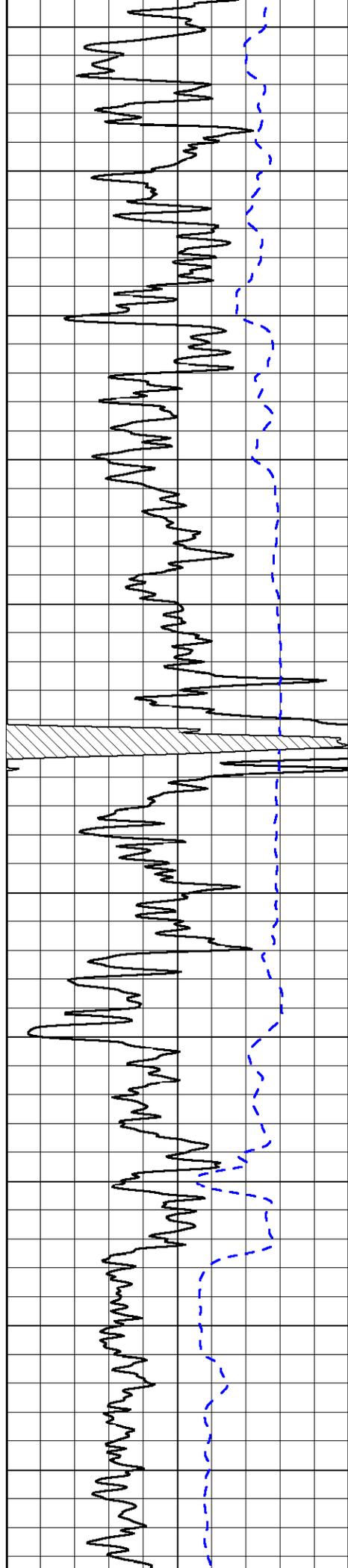


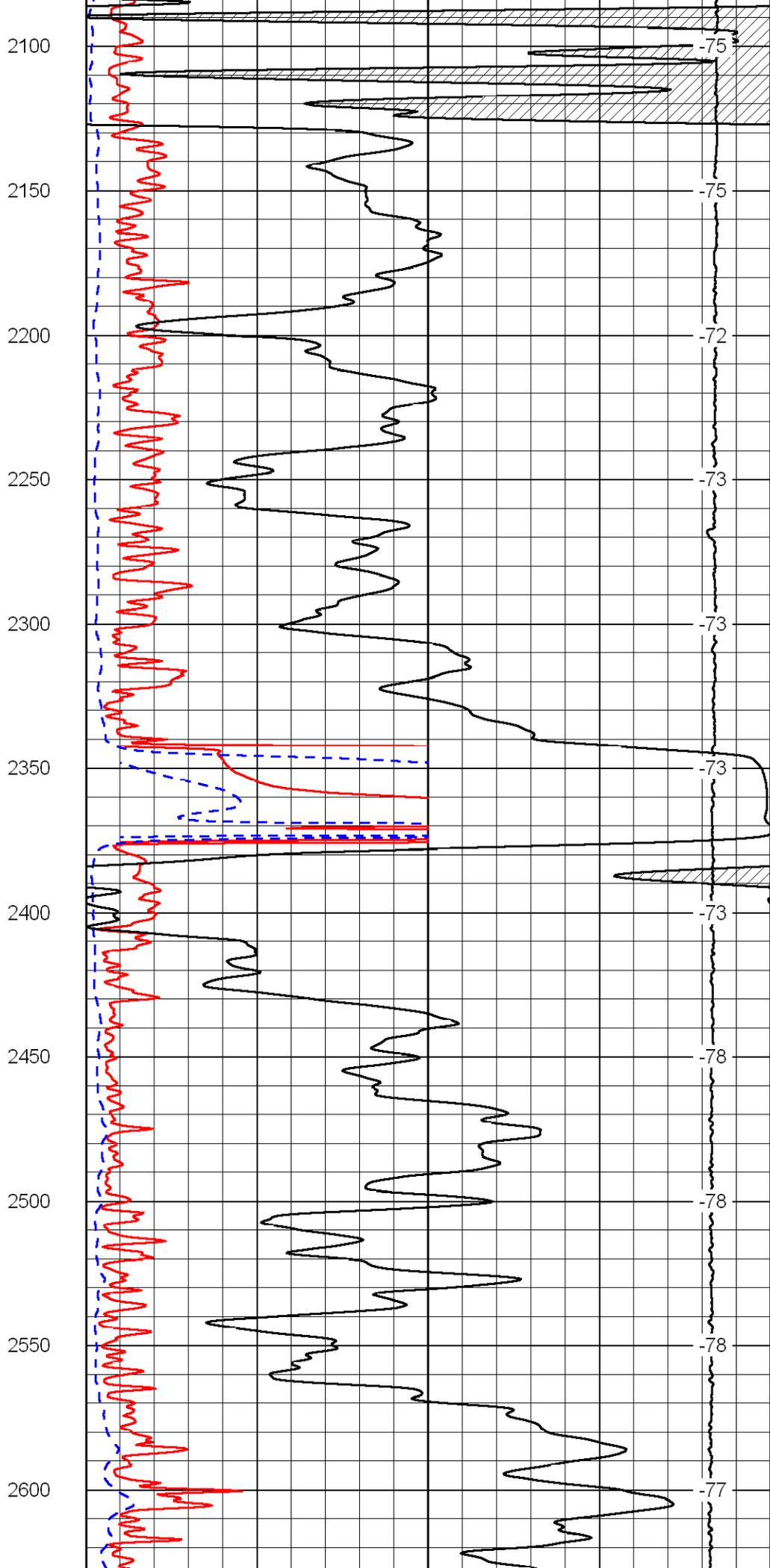
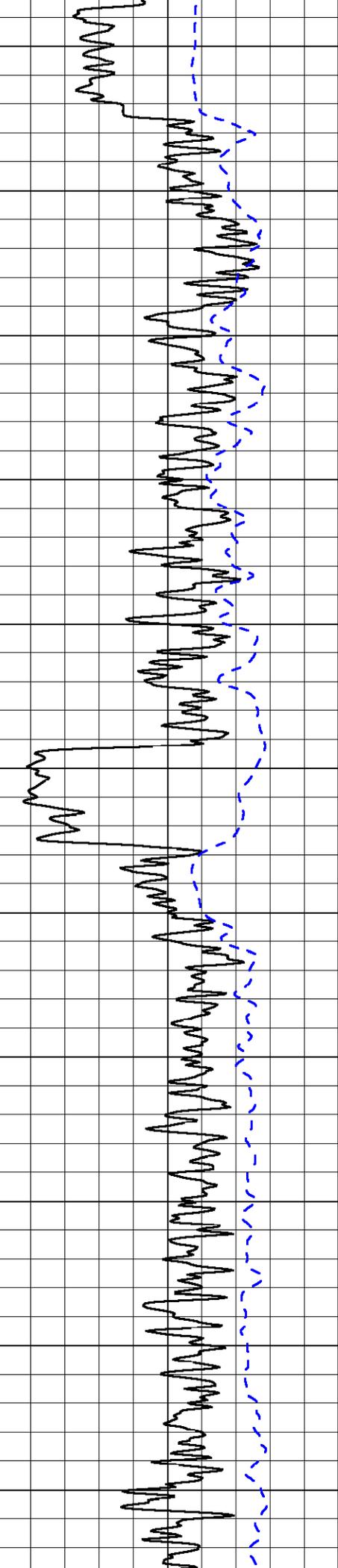


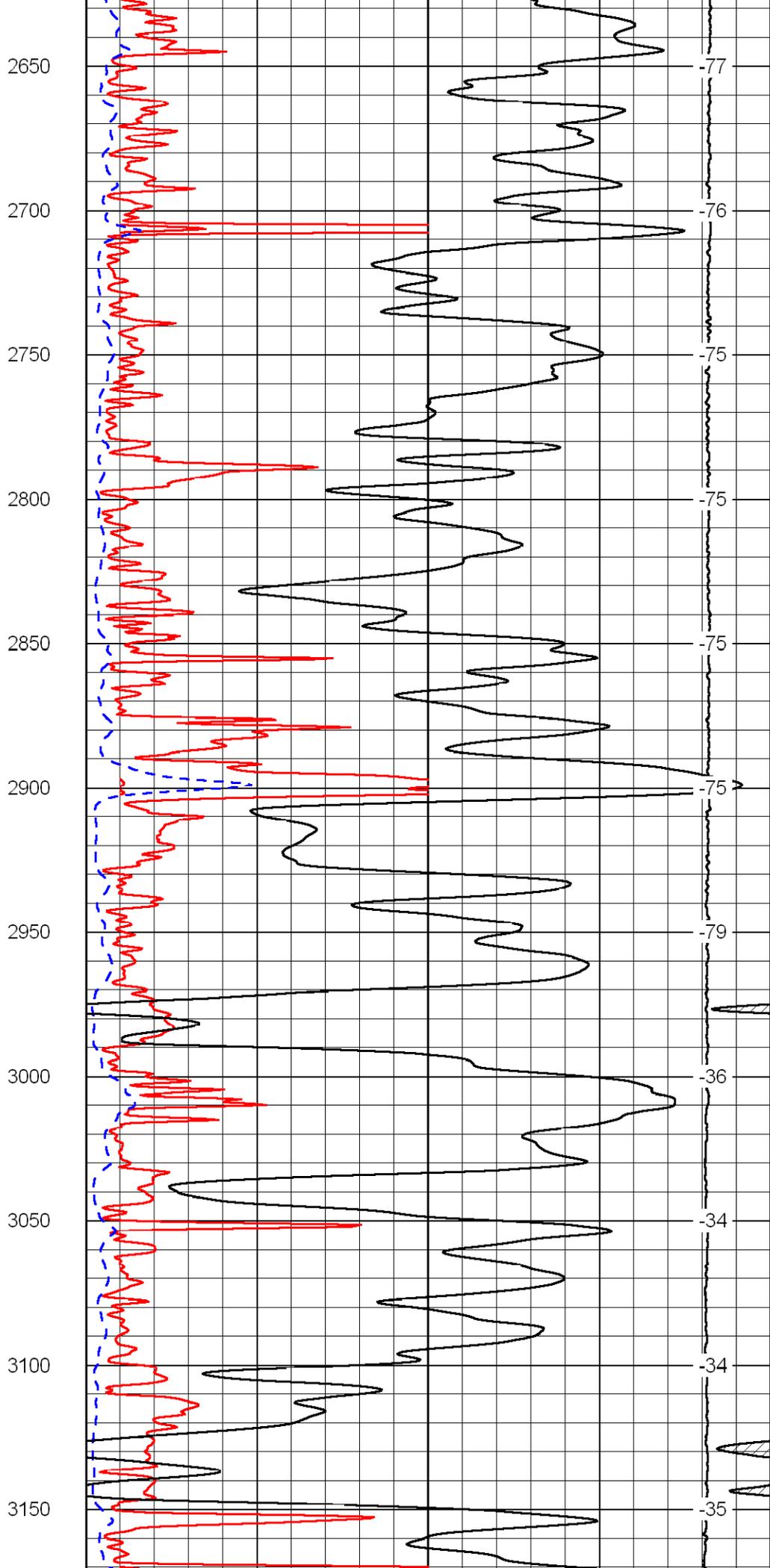
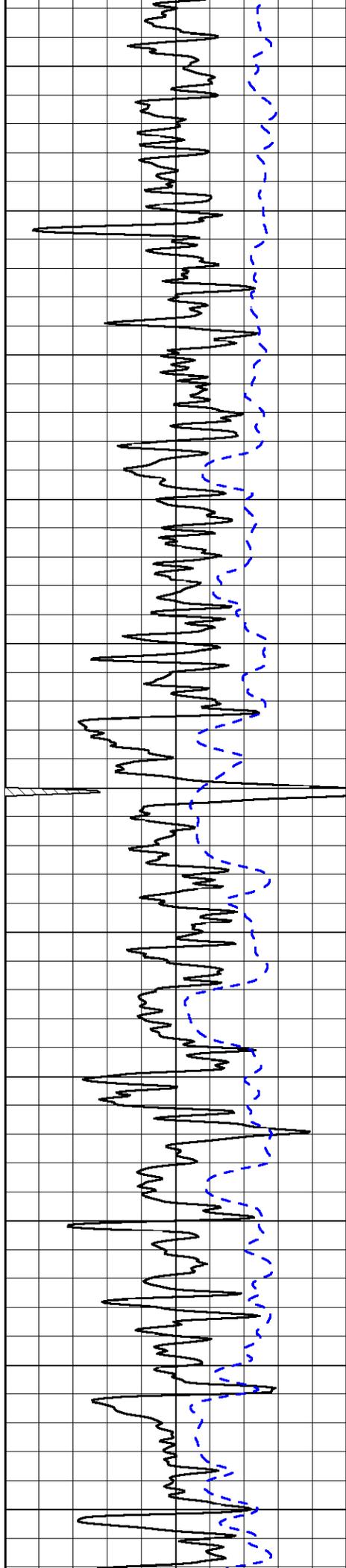


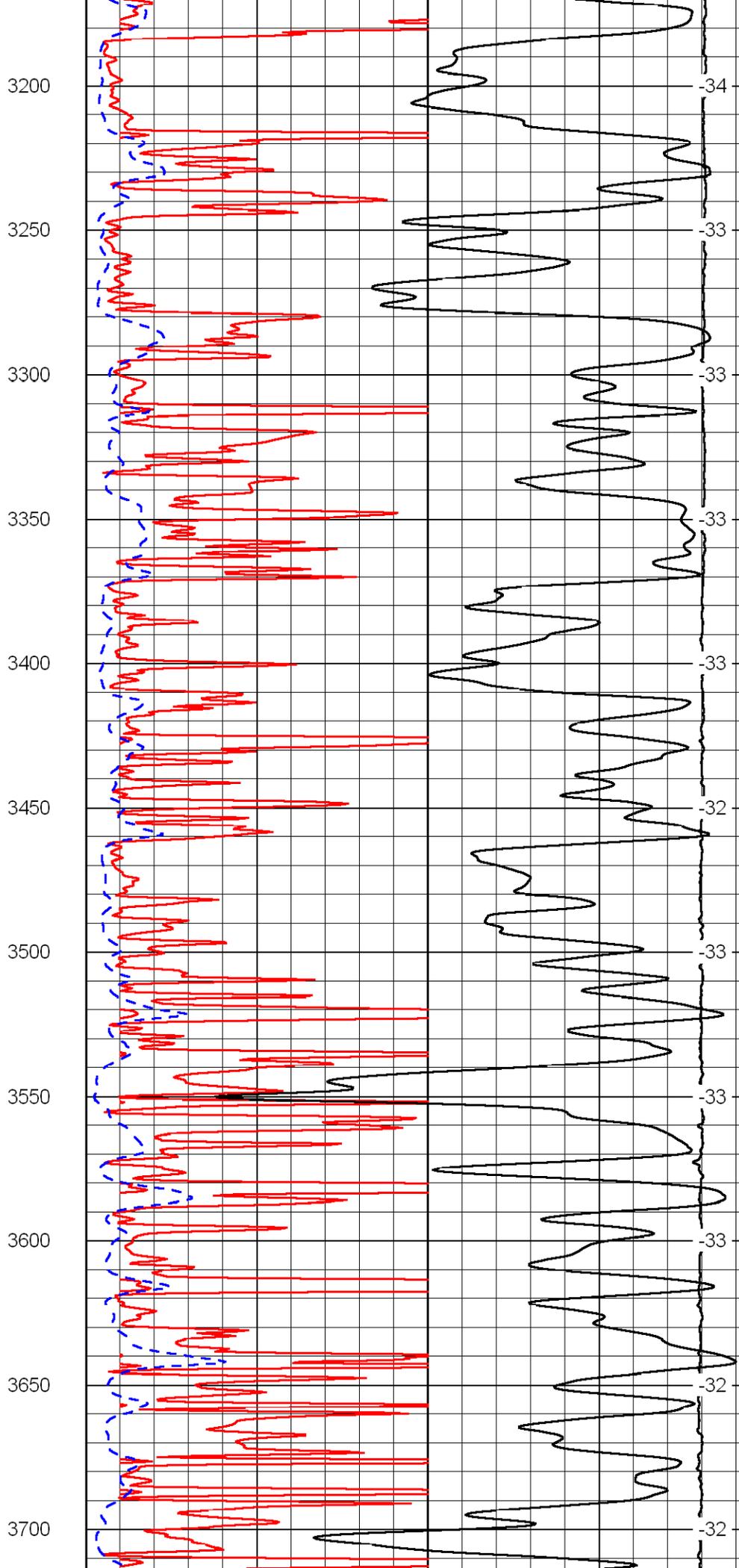
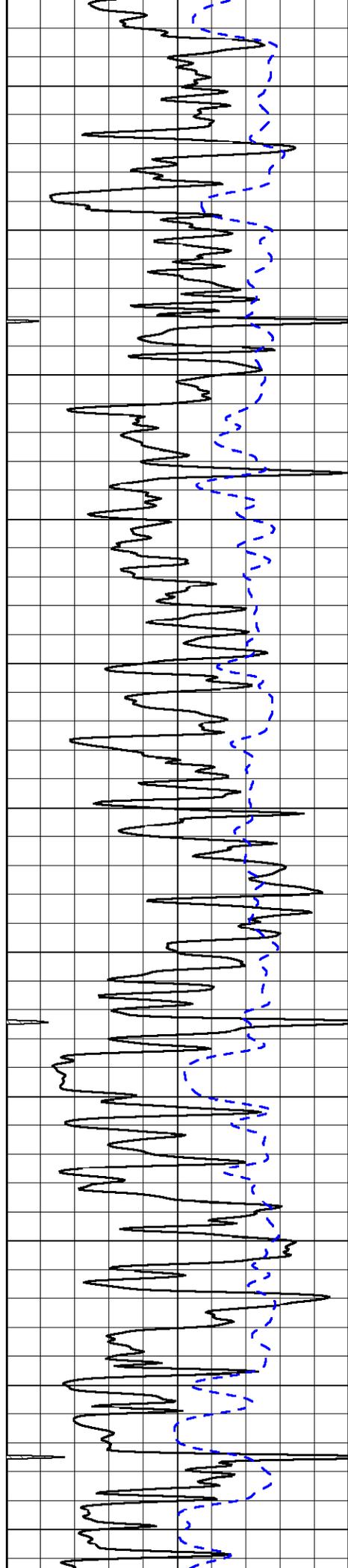
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1500

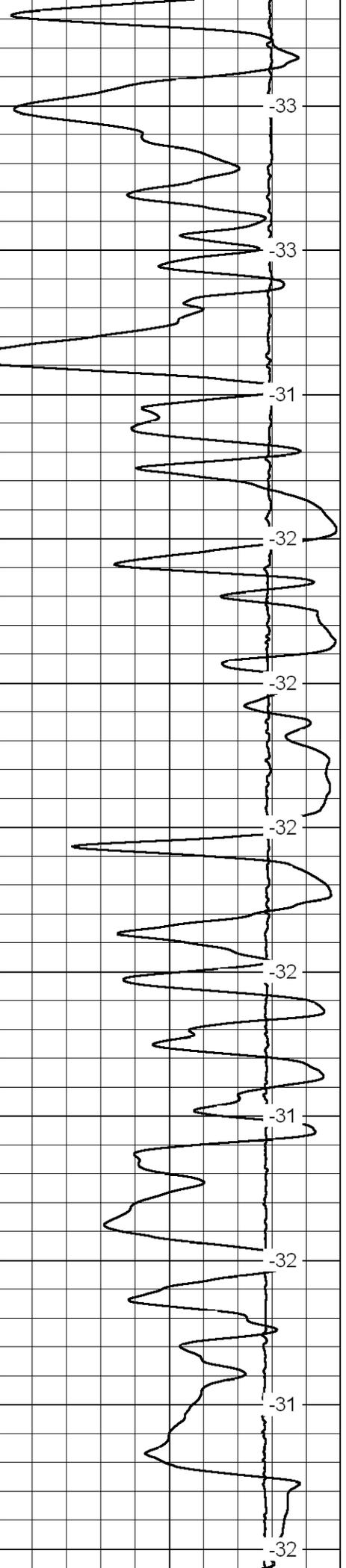
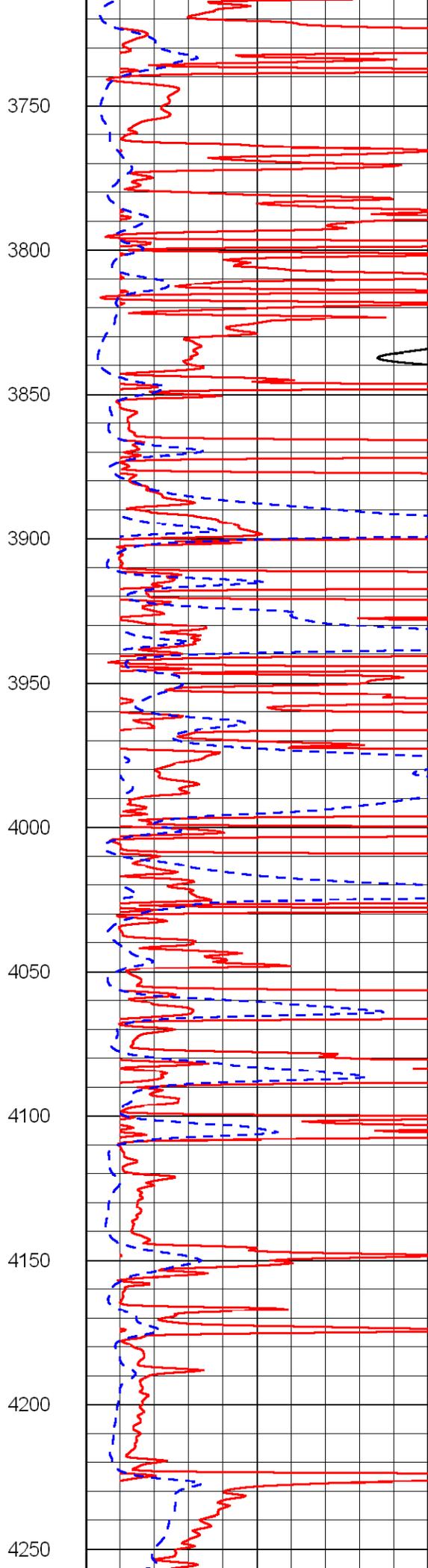
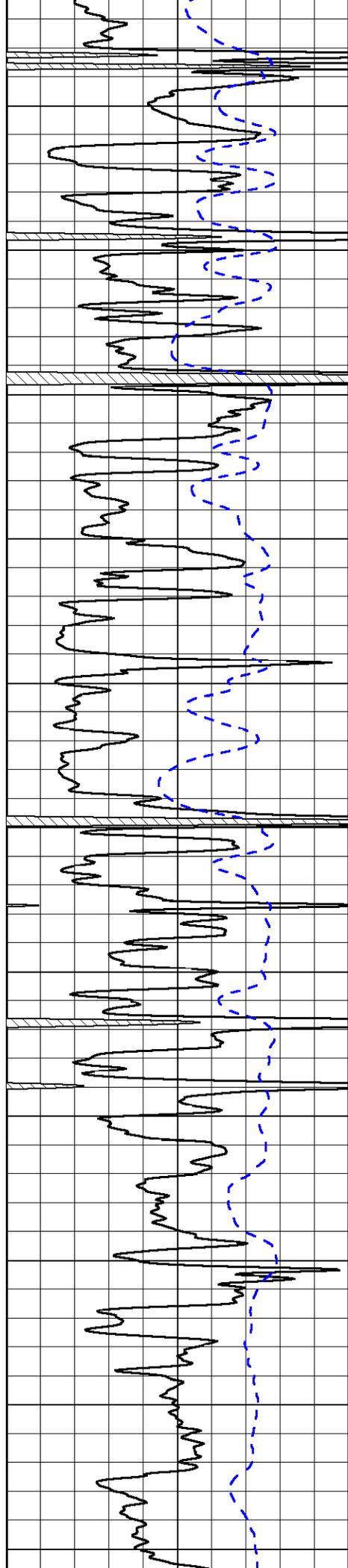


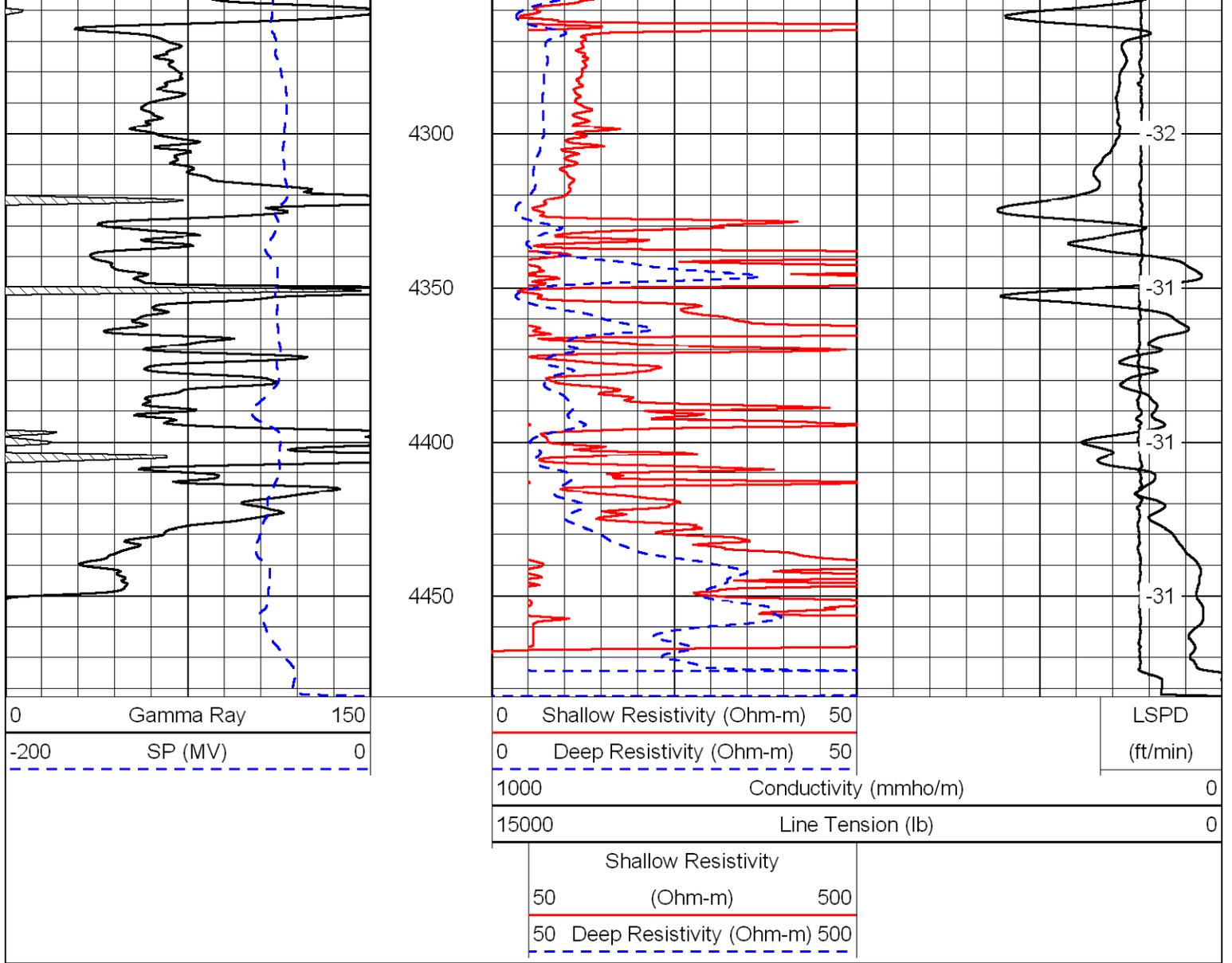




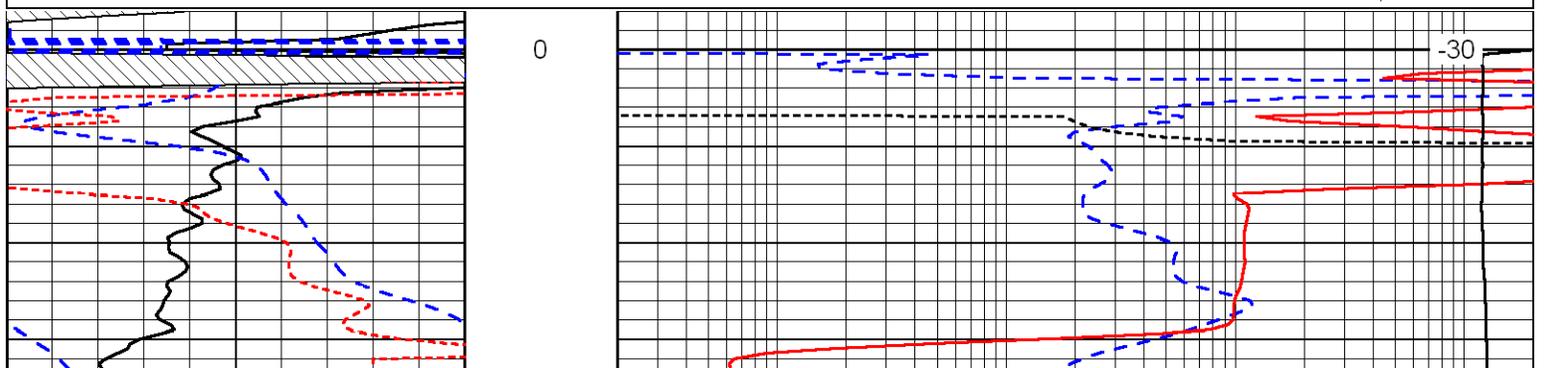
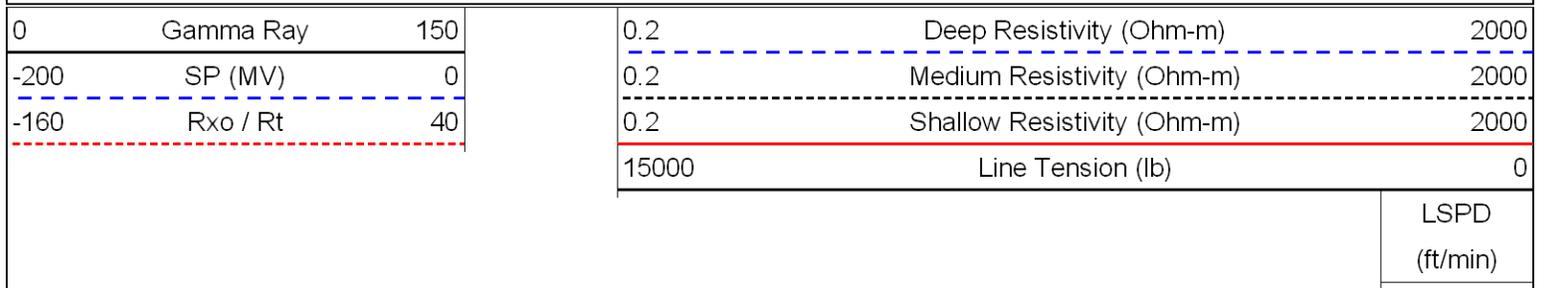


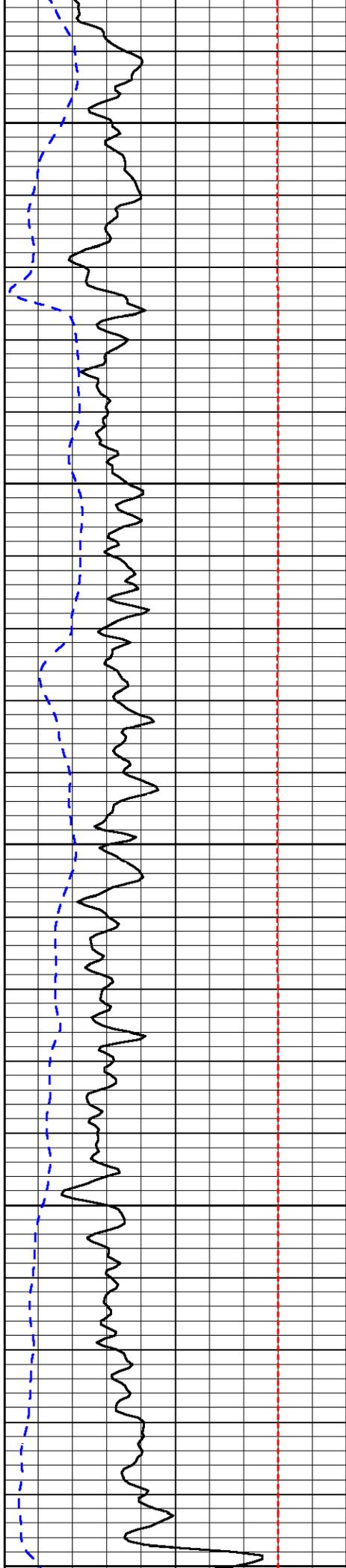






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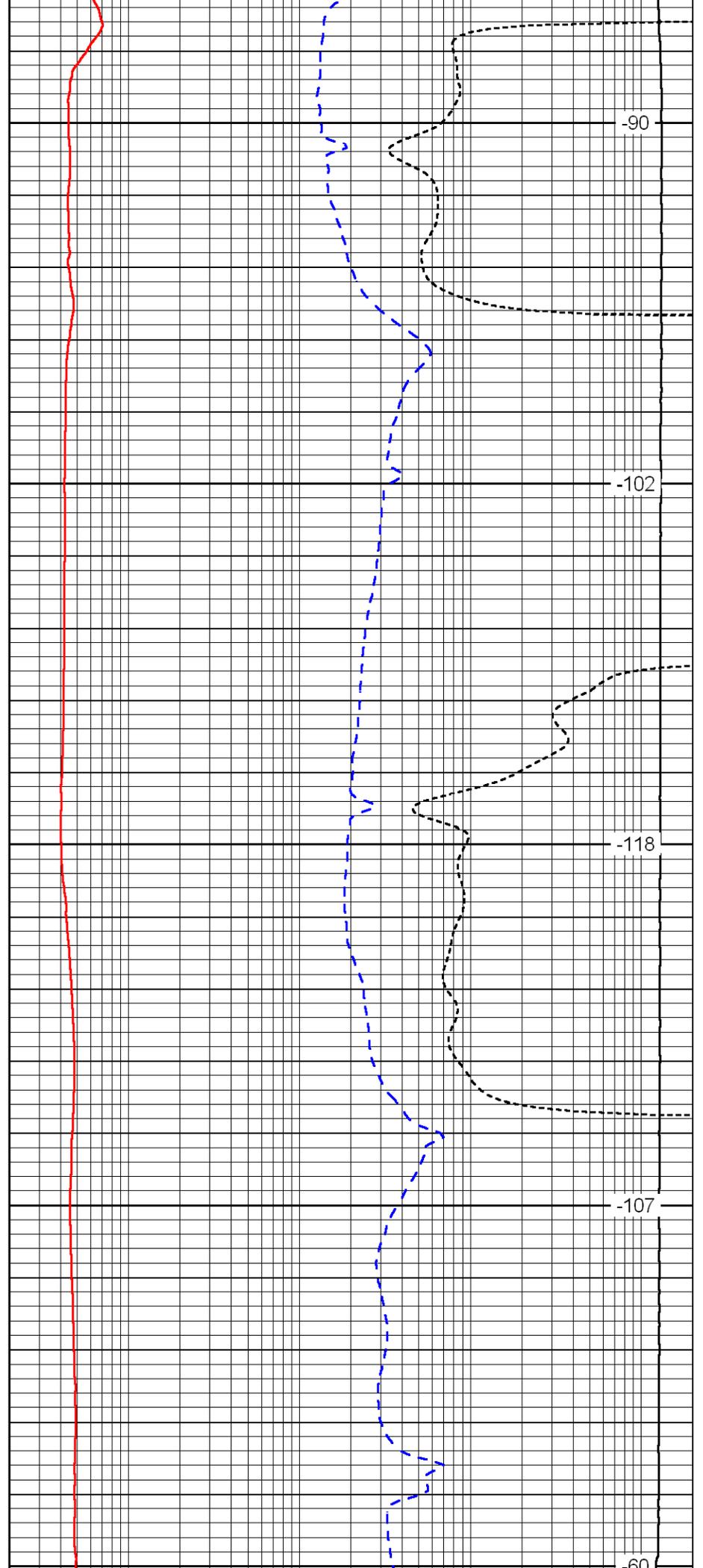
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100

150

200

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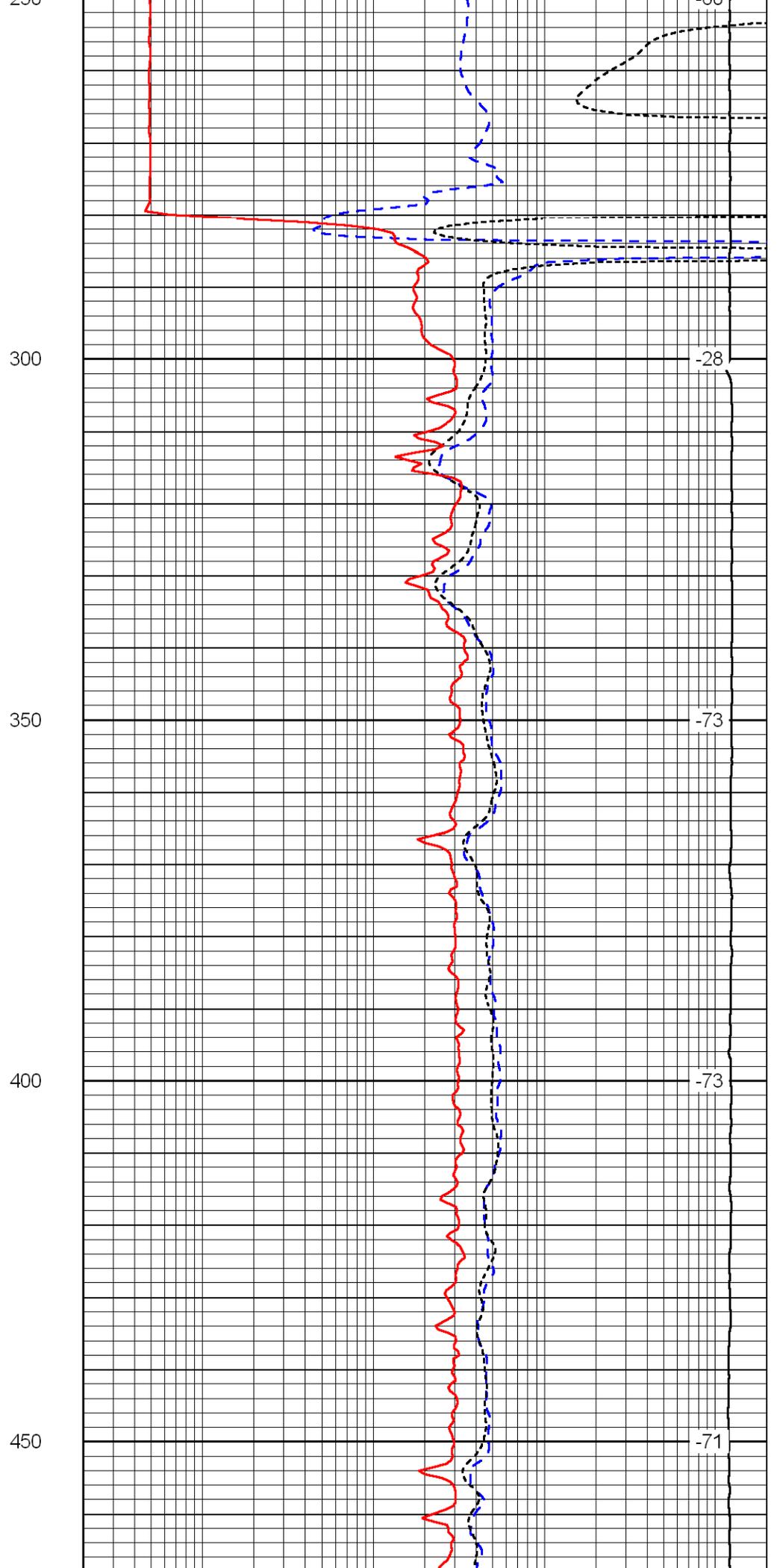
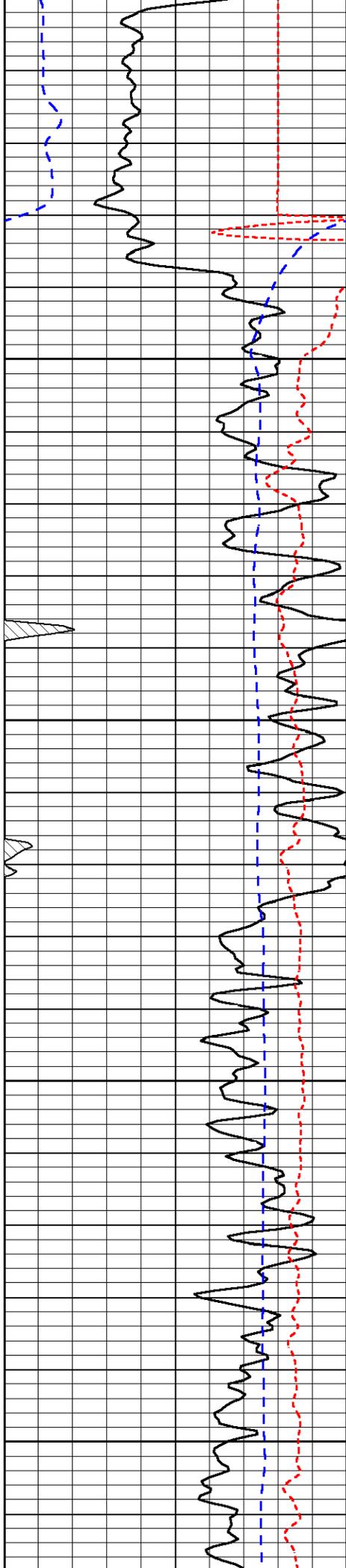
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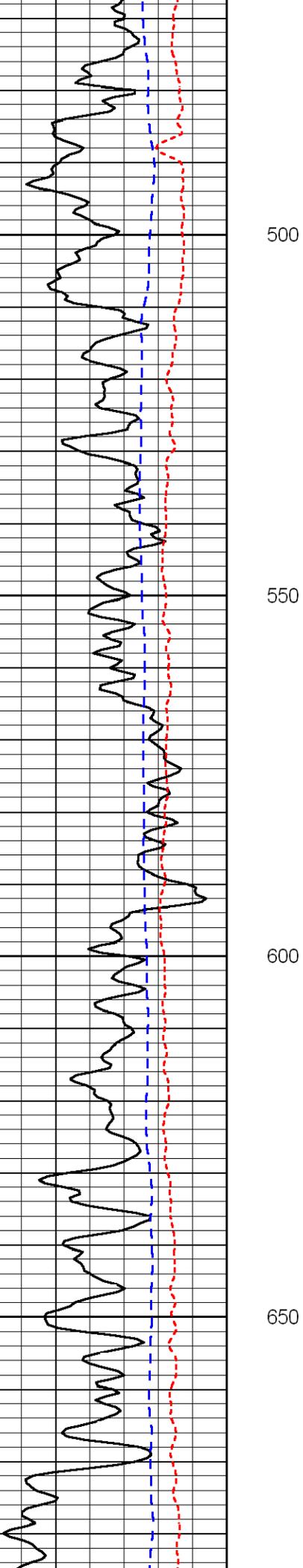
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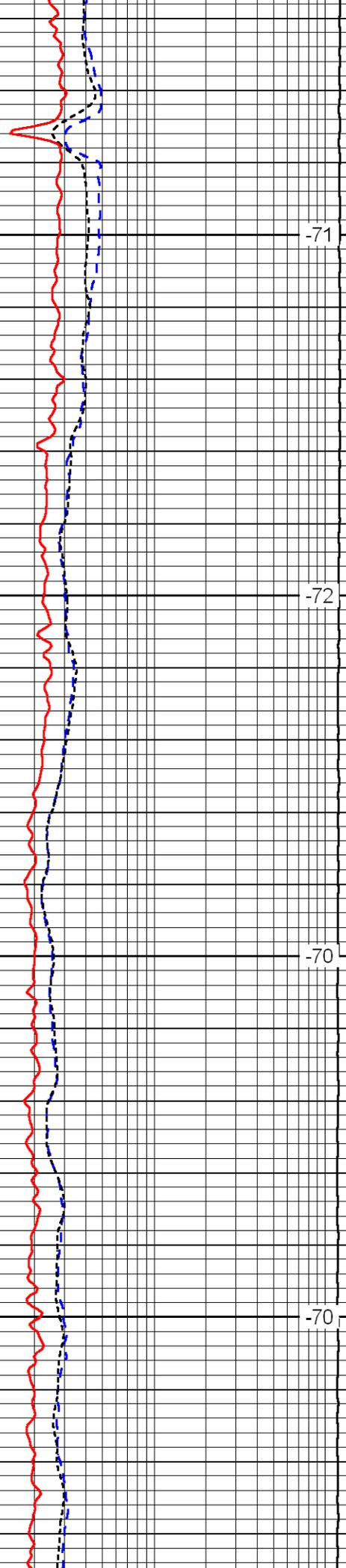


500

550

600

650

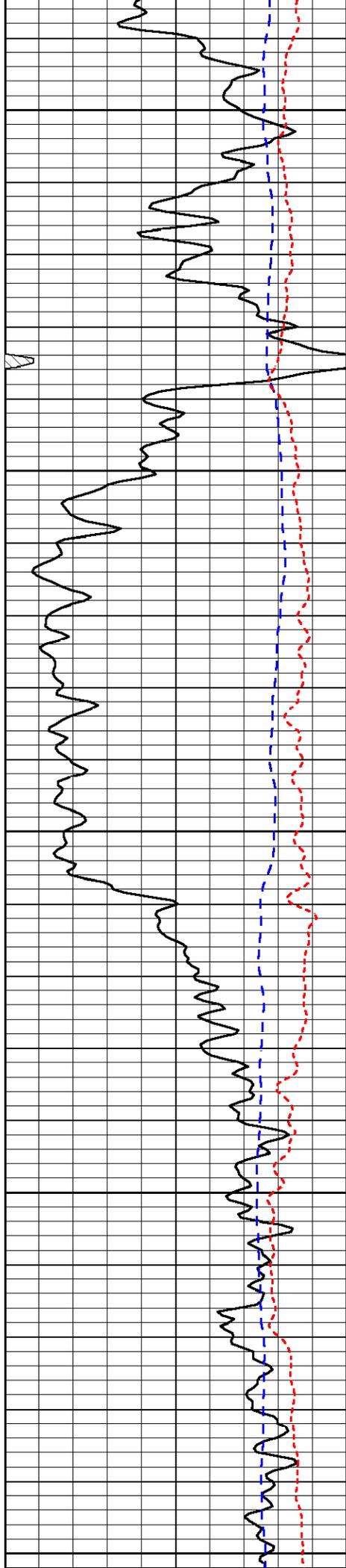


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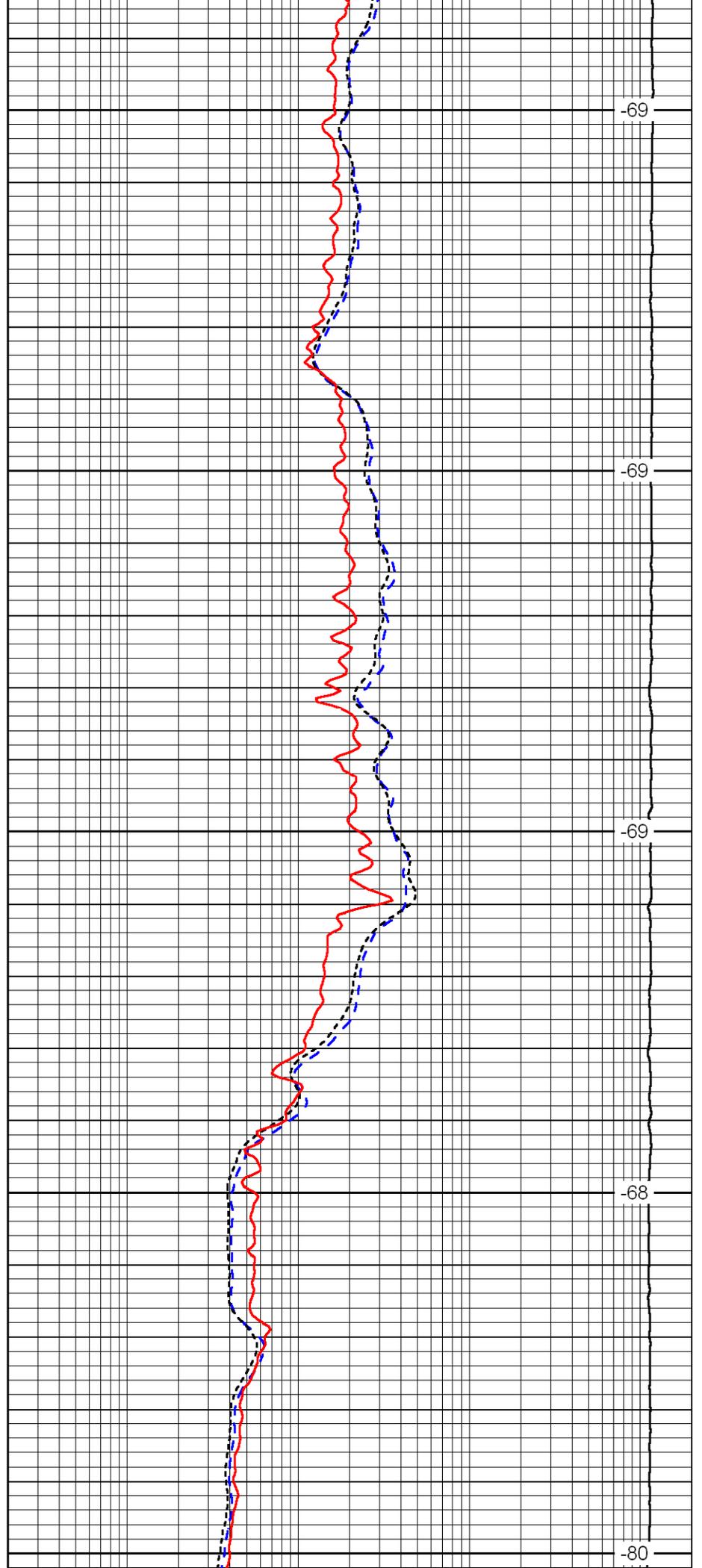
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750

800

850

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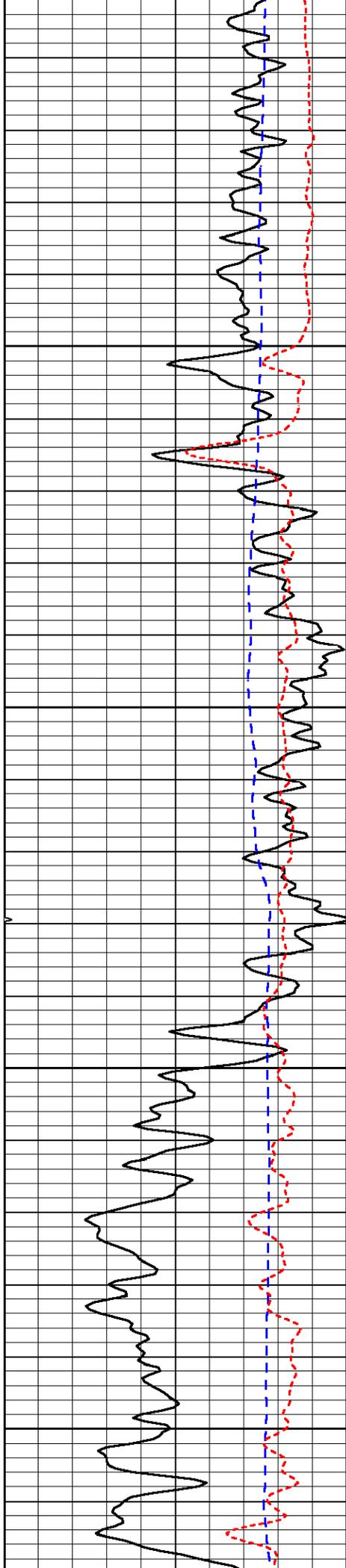
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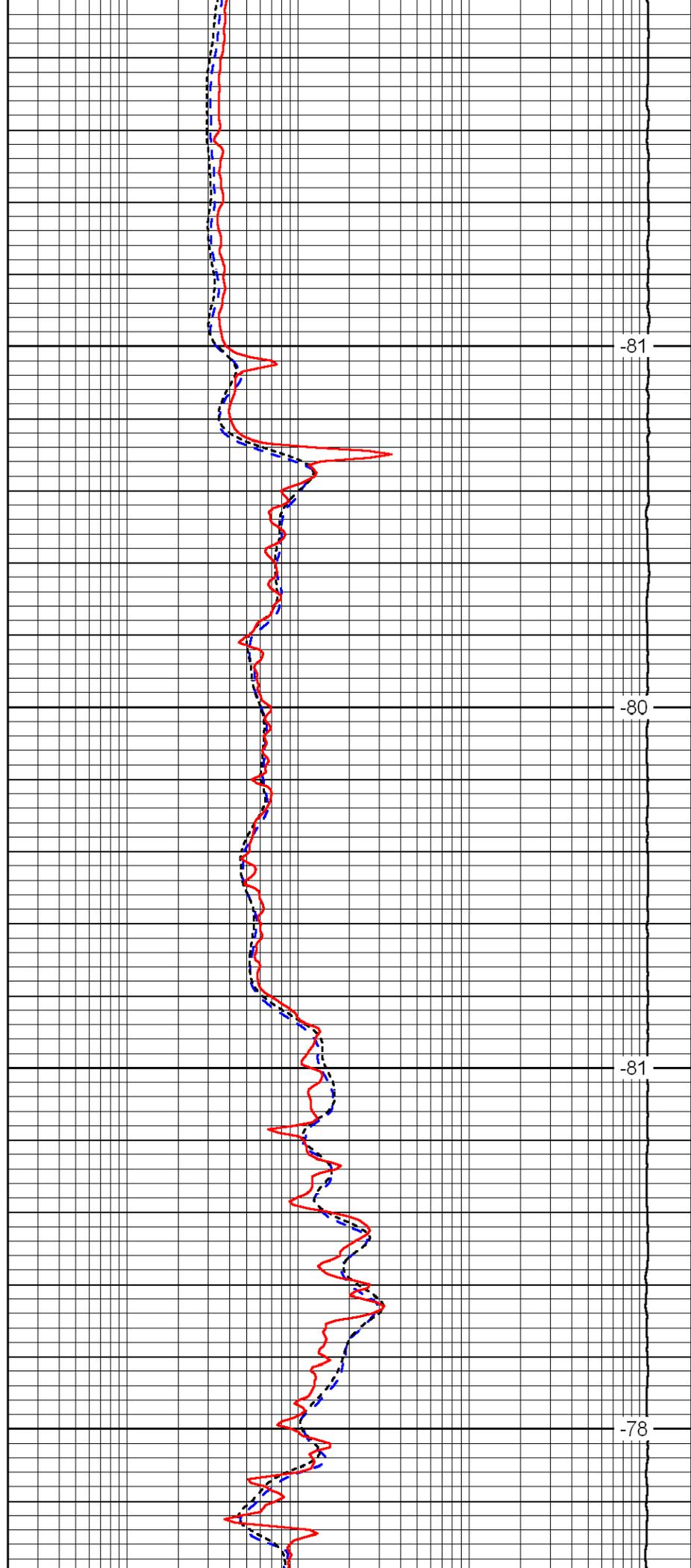


950

1000

1050

1100

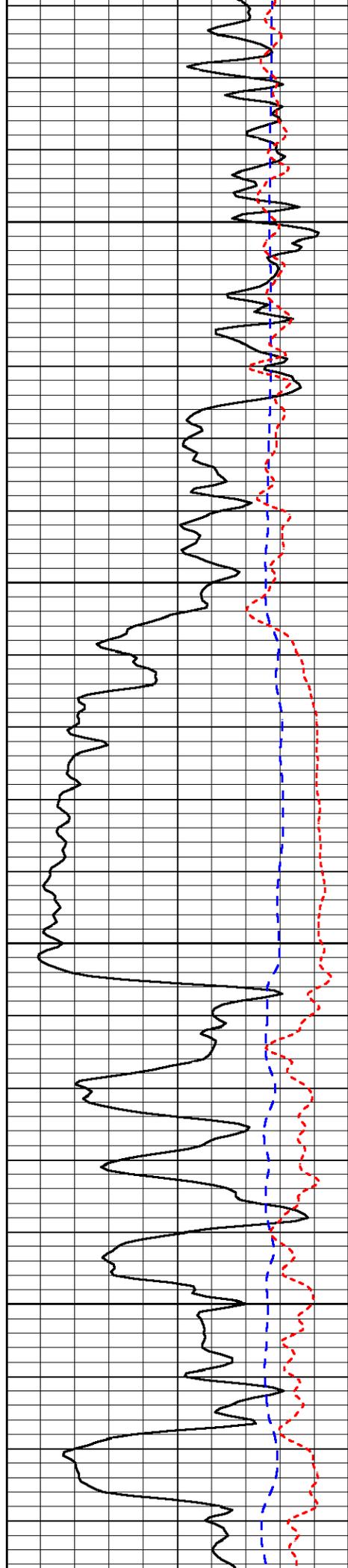


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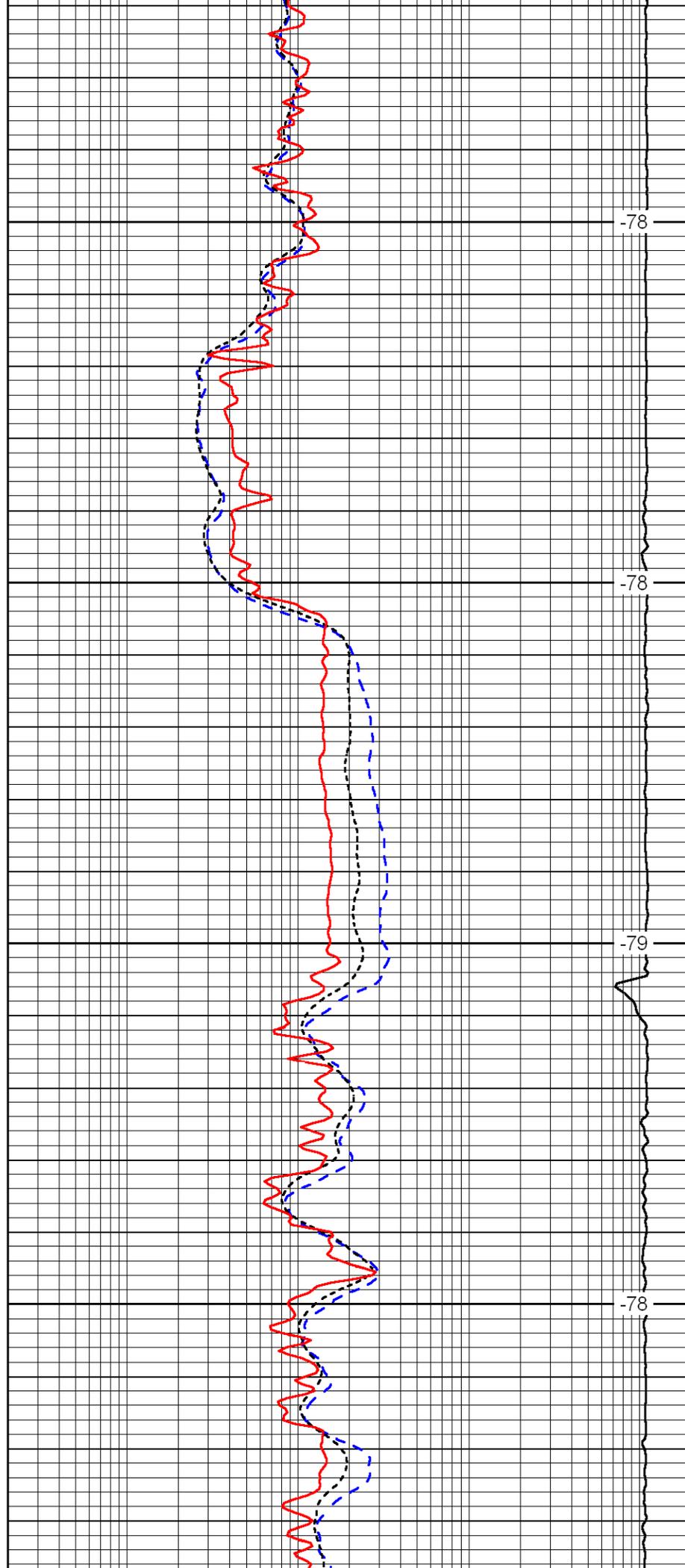


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1200

1250

1300

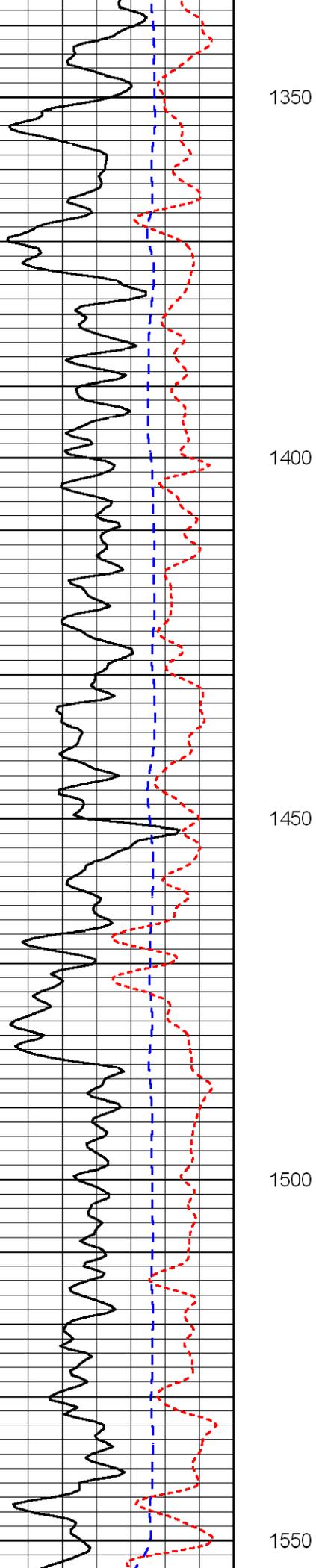


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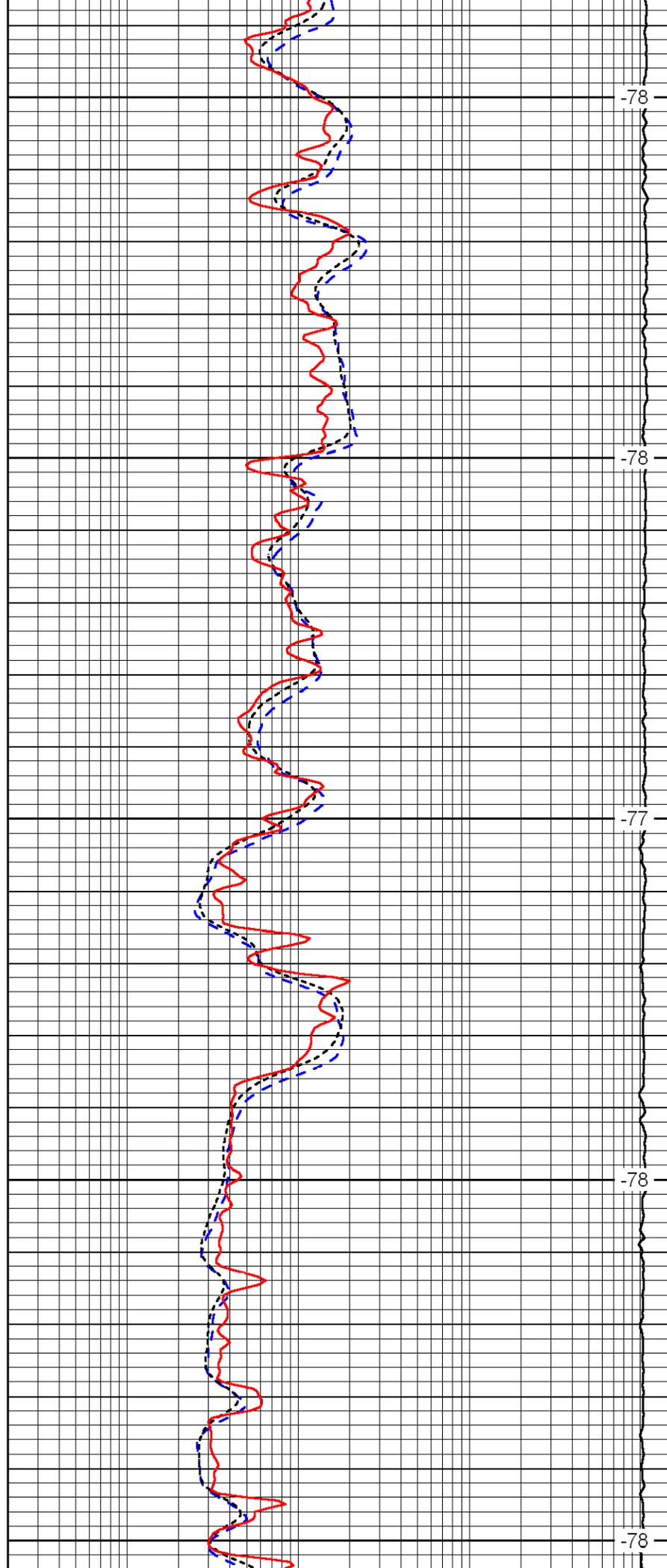
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1400

1450

1500

1550



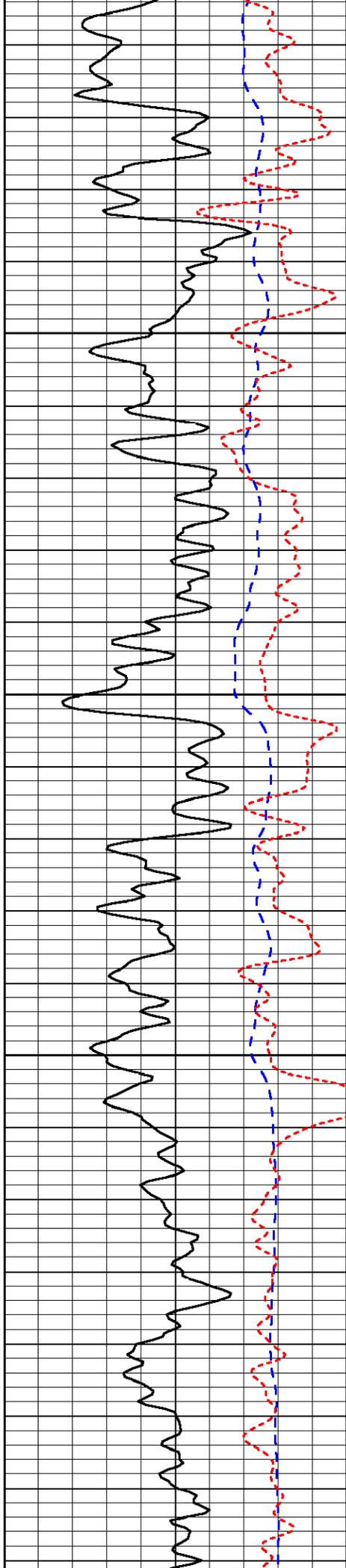
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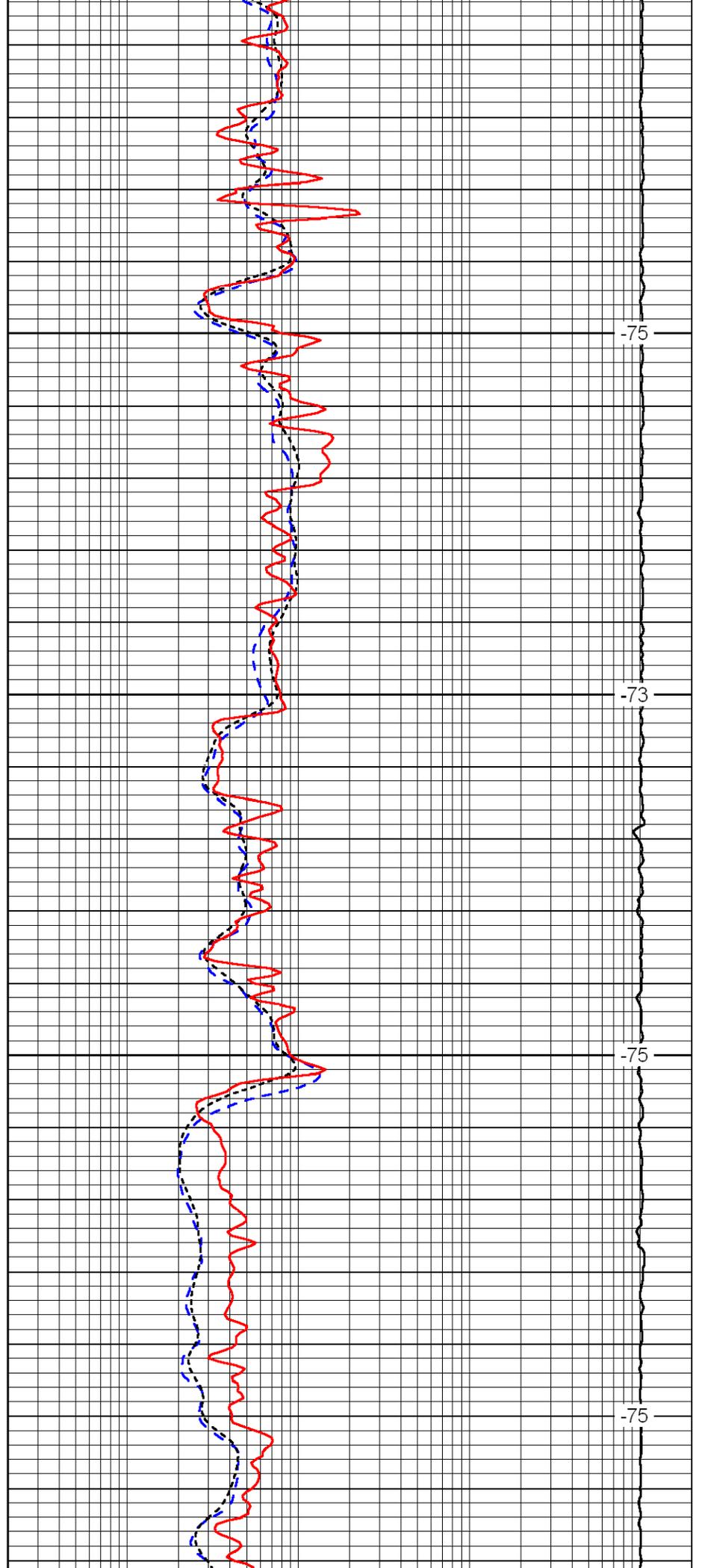


1600

1650

1700

1750

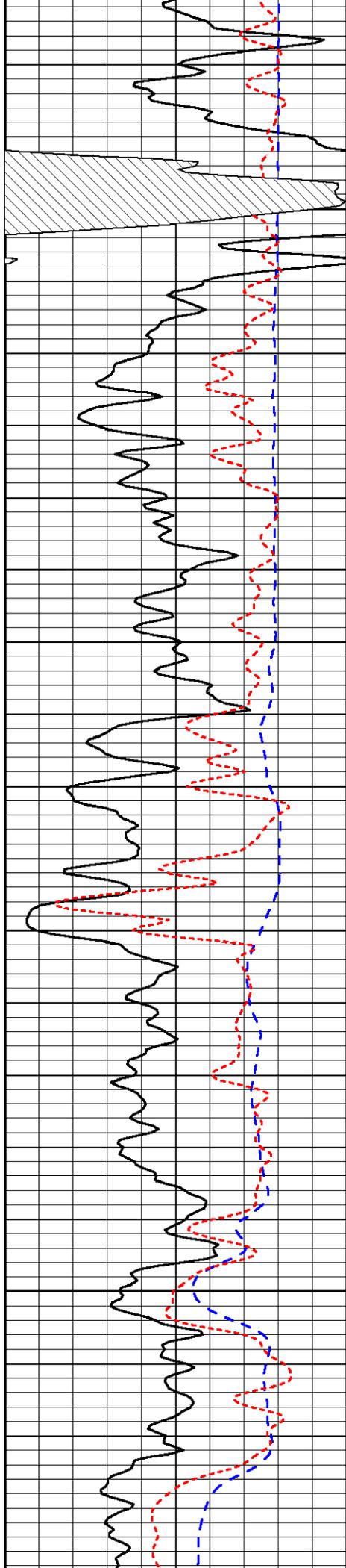


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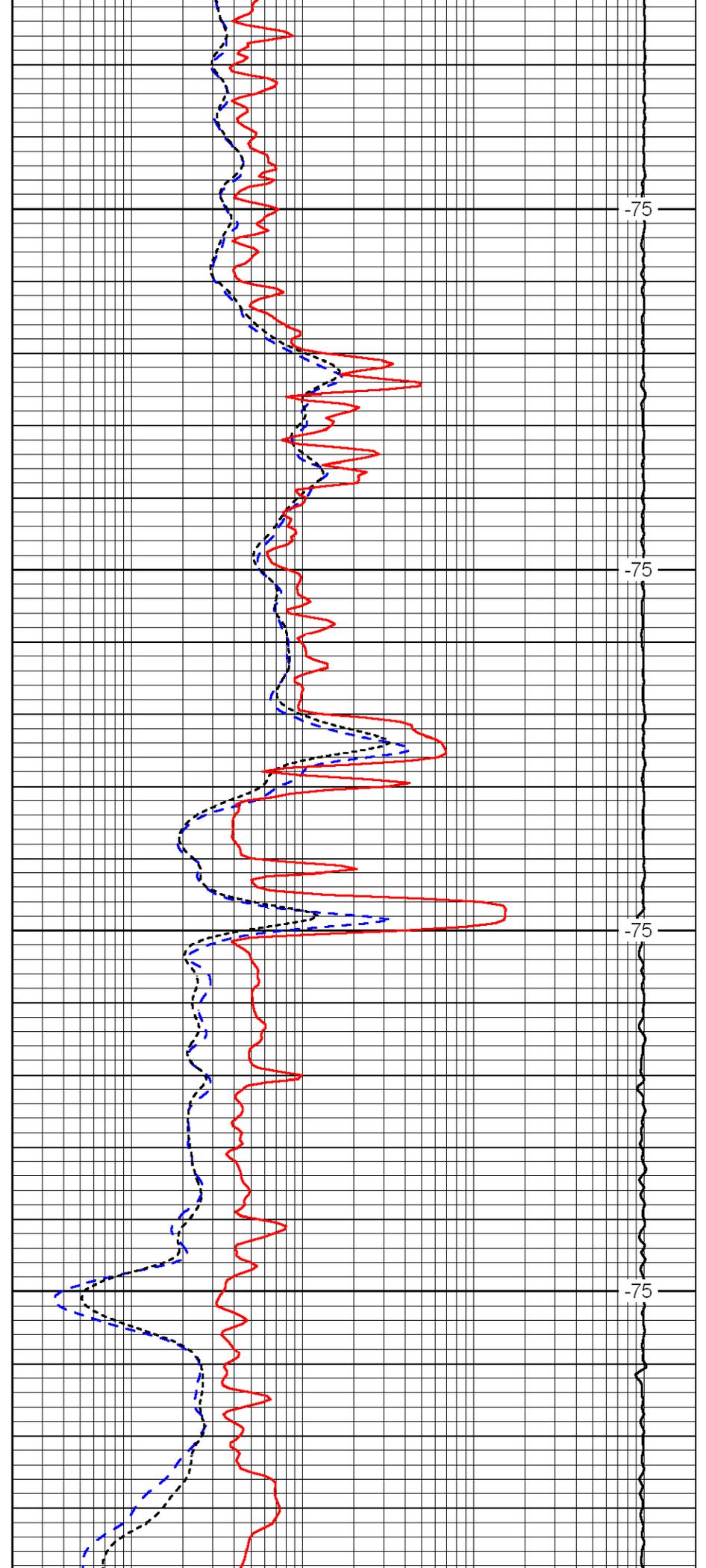


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1850

1900

1950

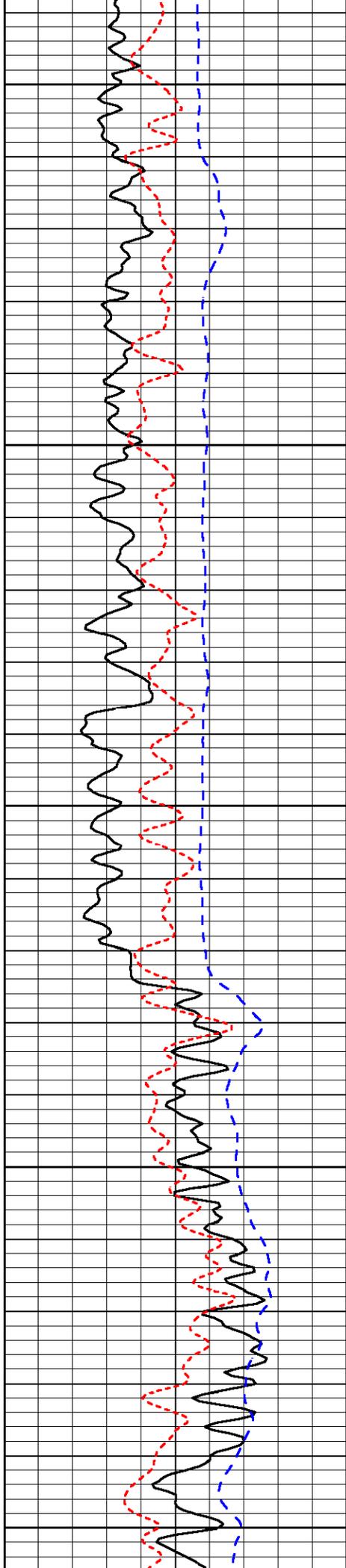


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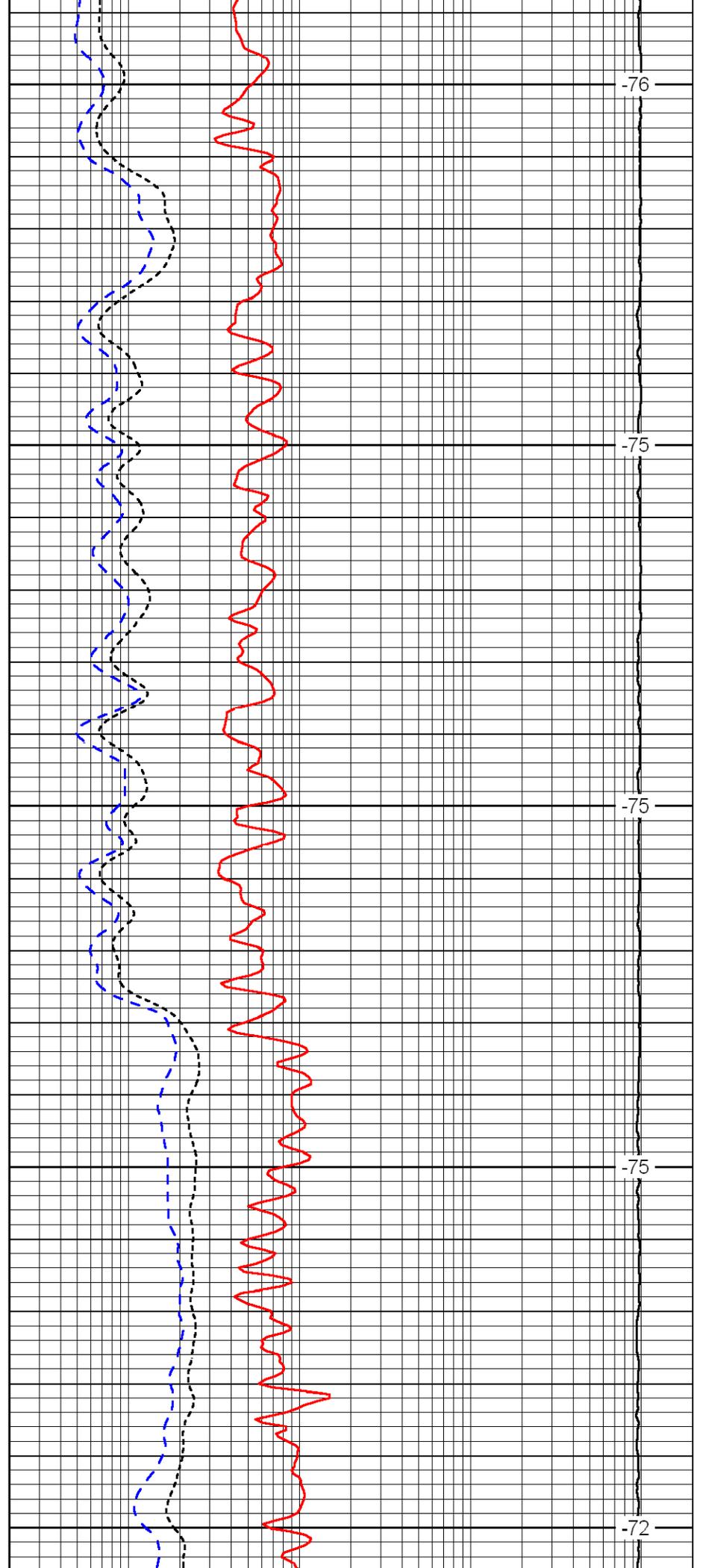
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2050

2100

2150

2200



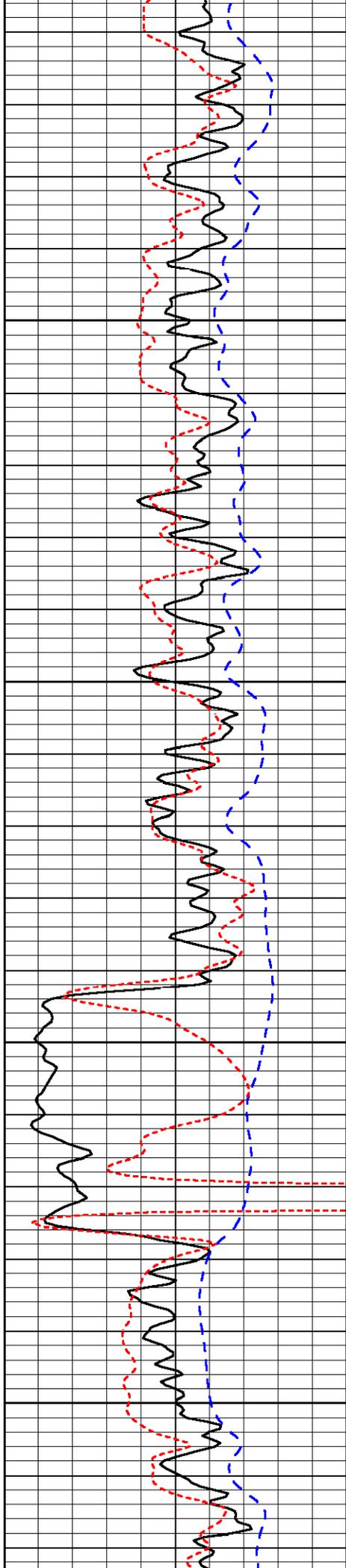
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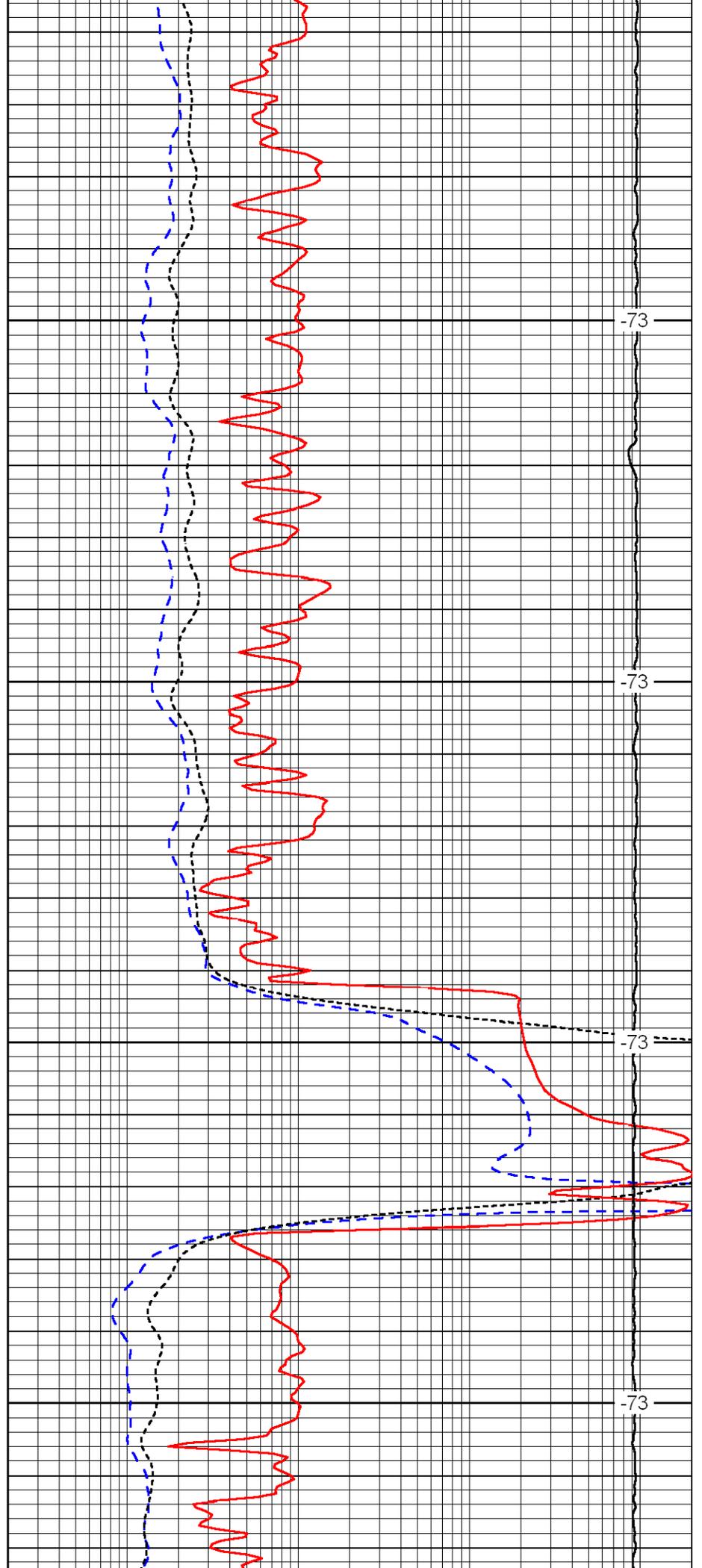


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2300

2350

2400

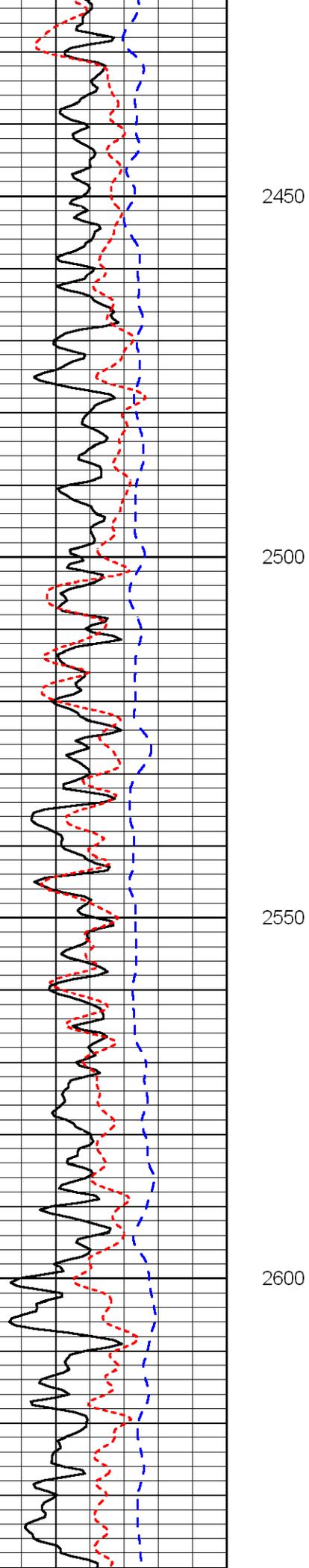


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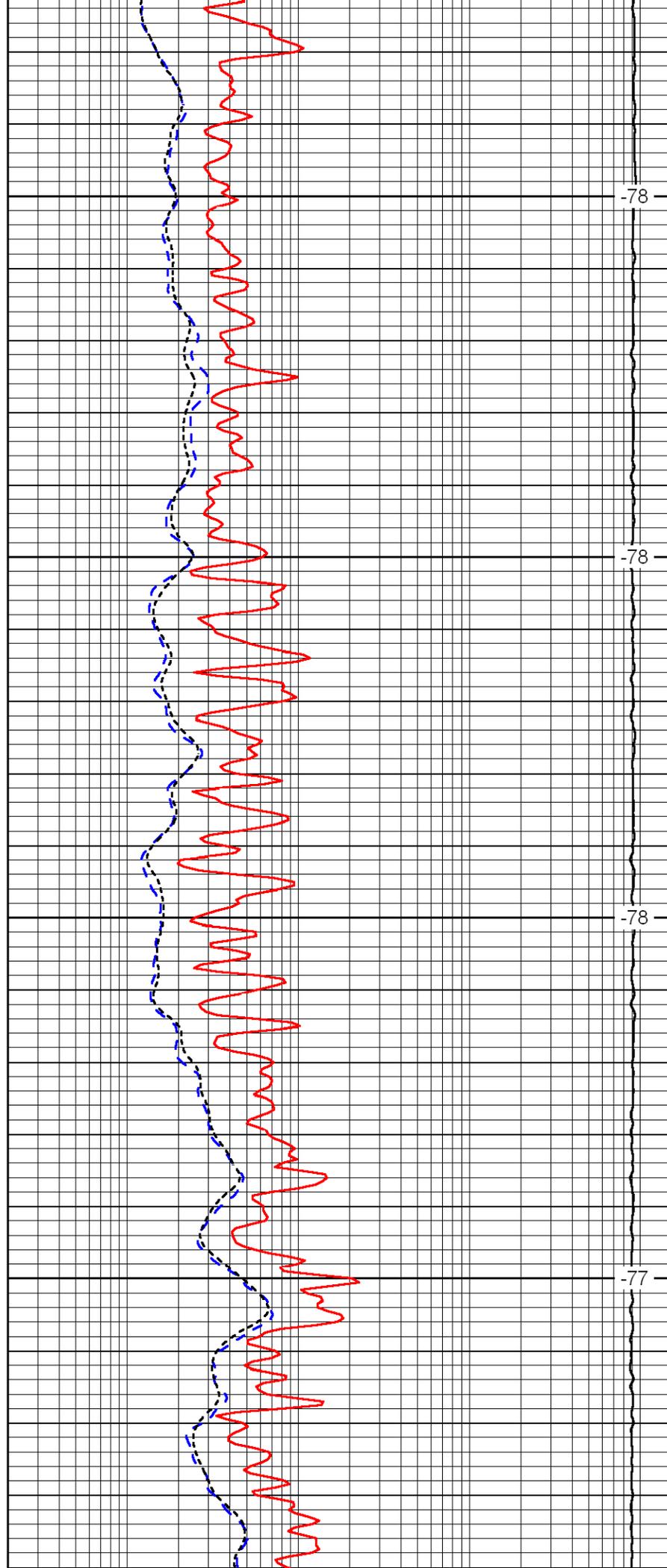


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2500

2550

2600

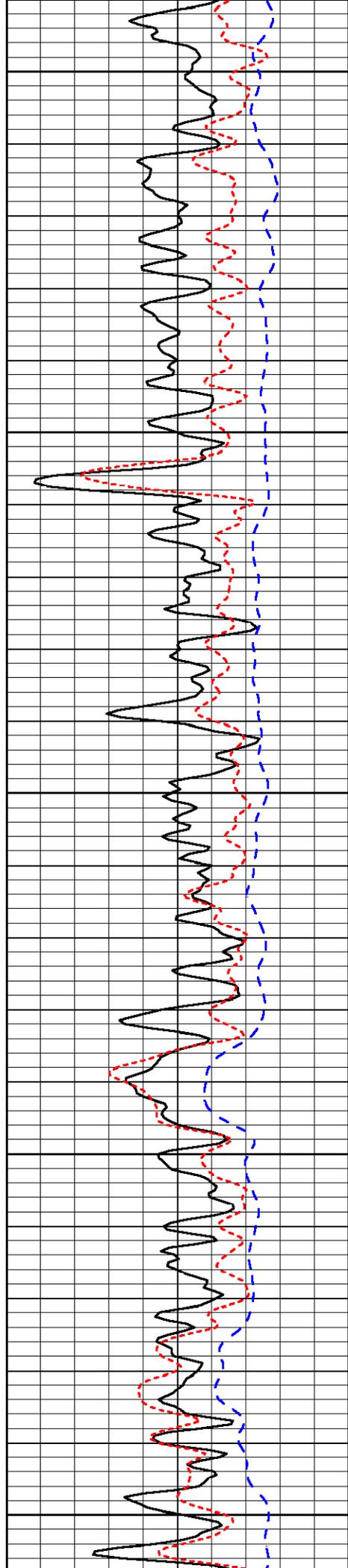


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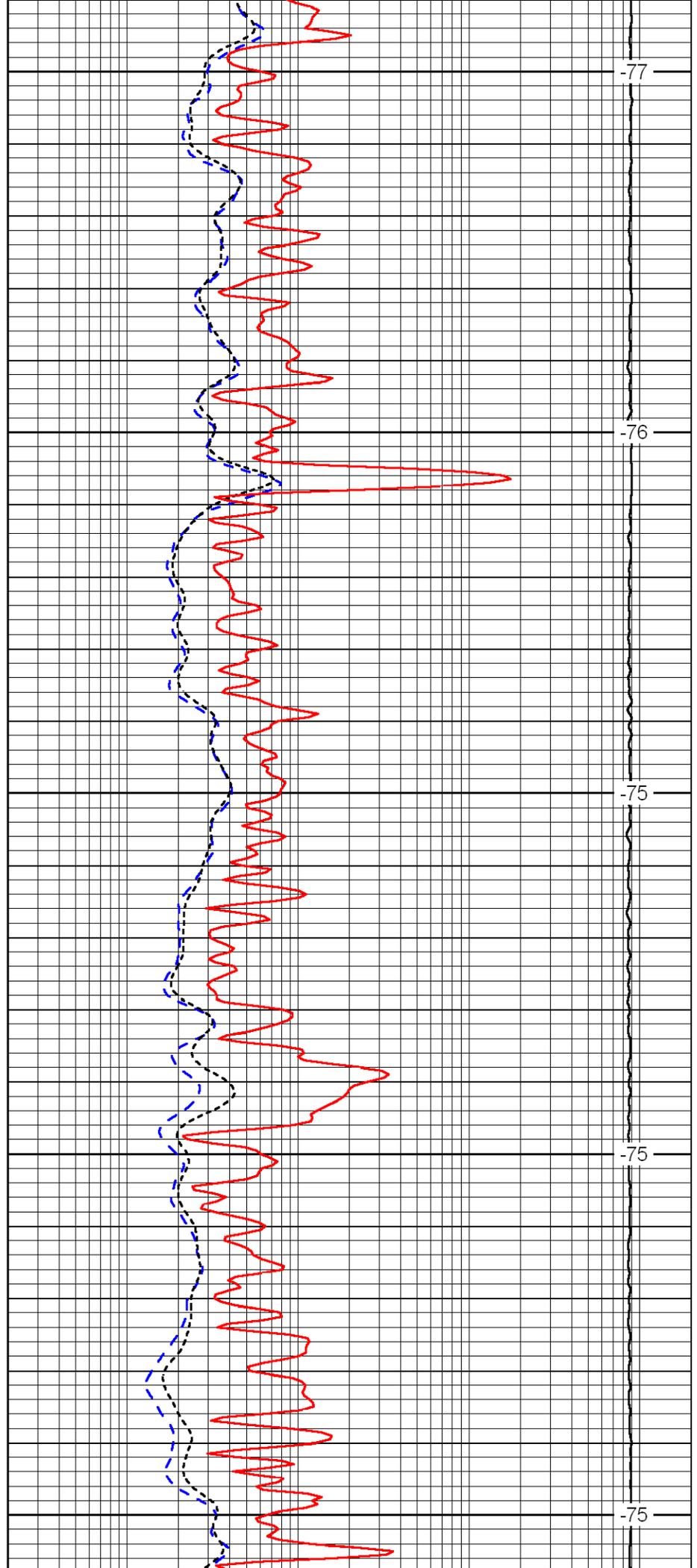
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2700

2750

2800

2850



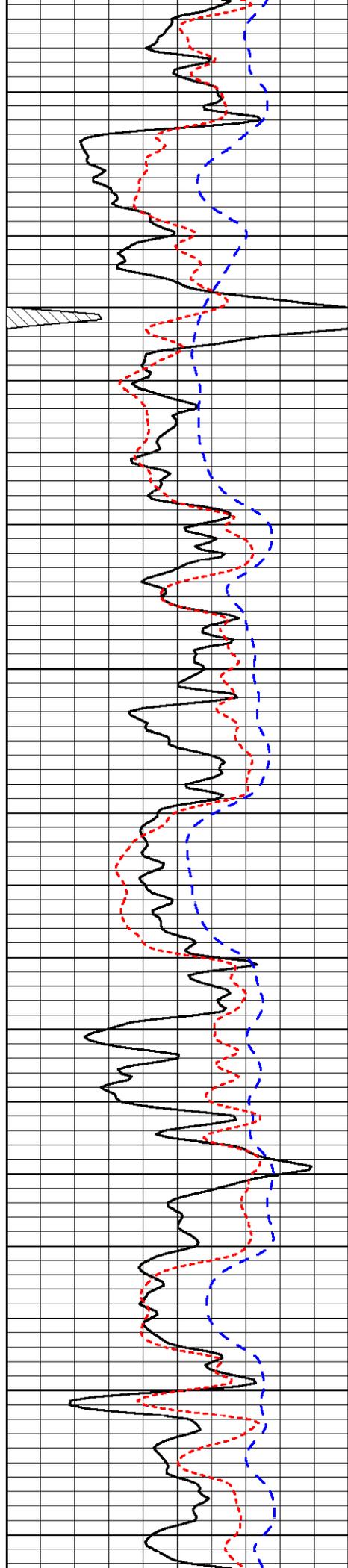
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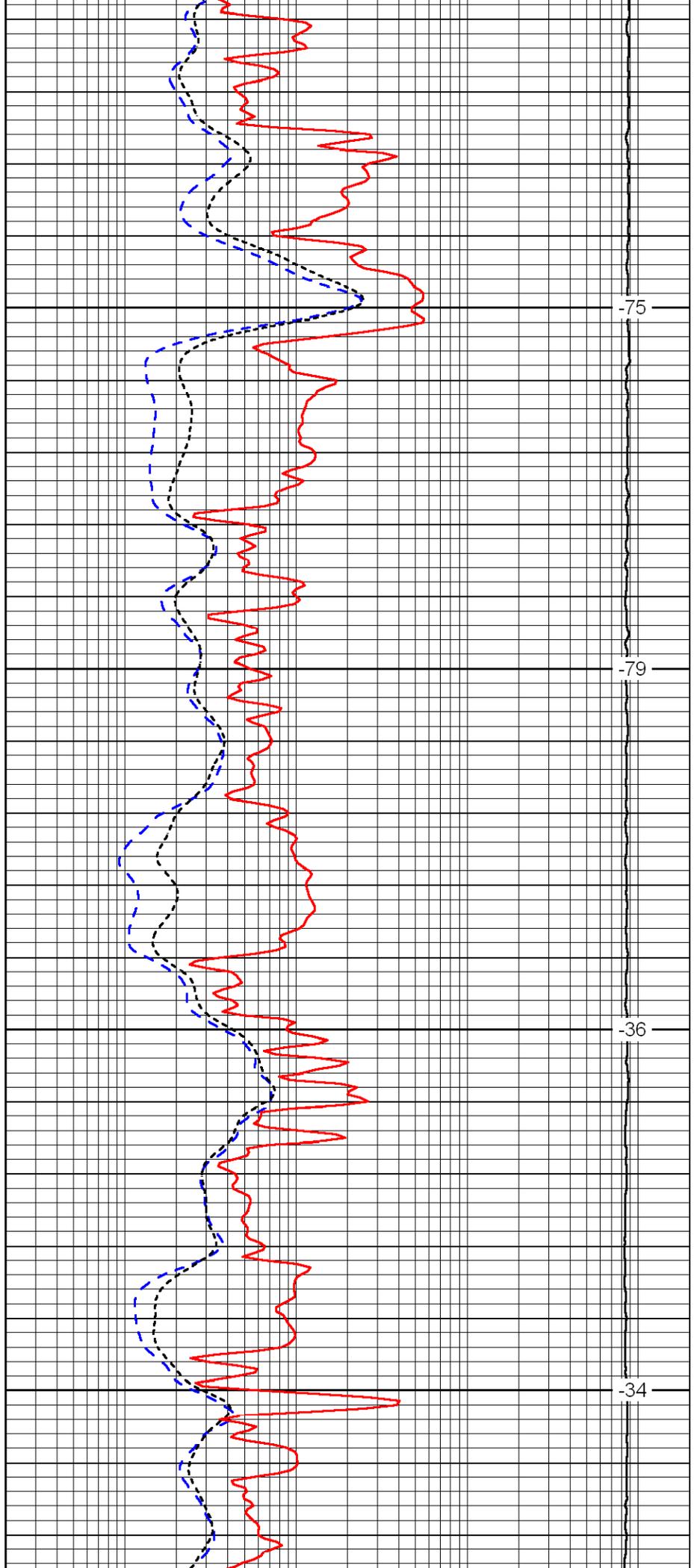


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2950

3000

3050

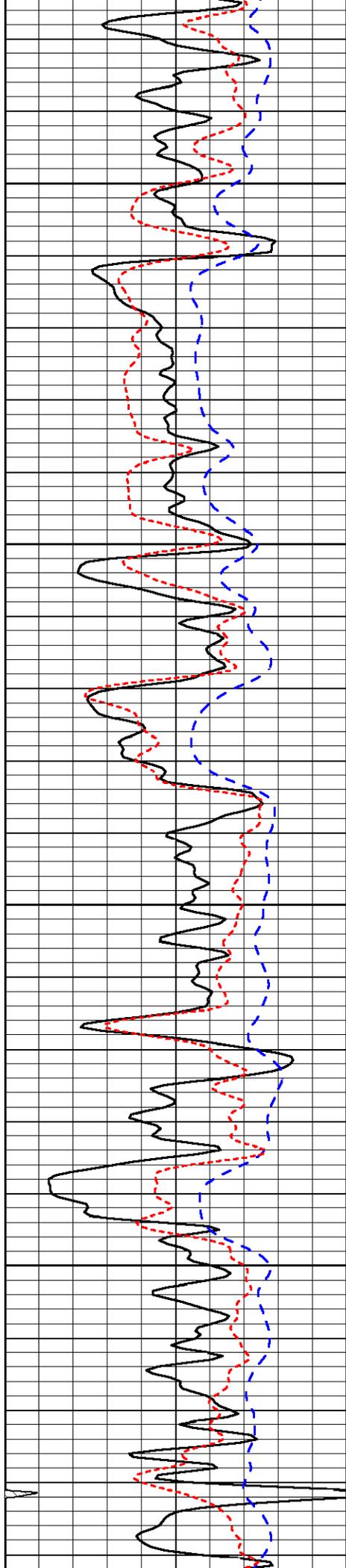


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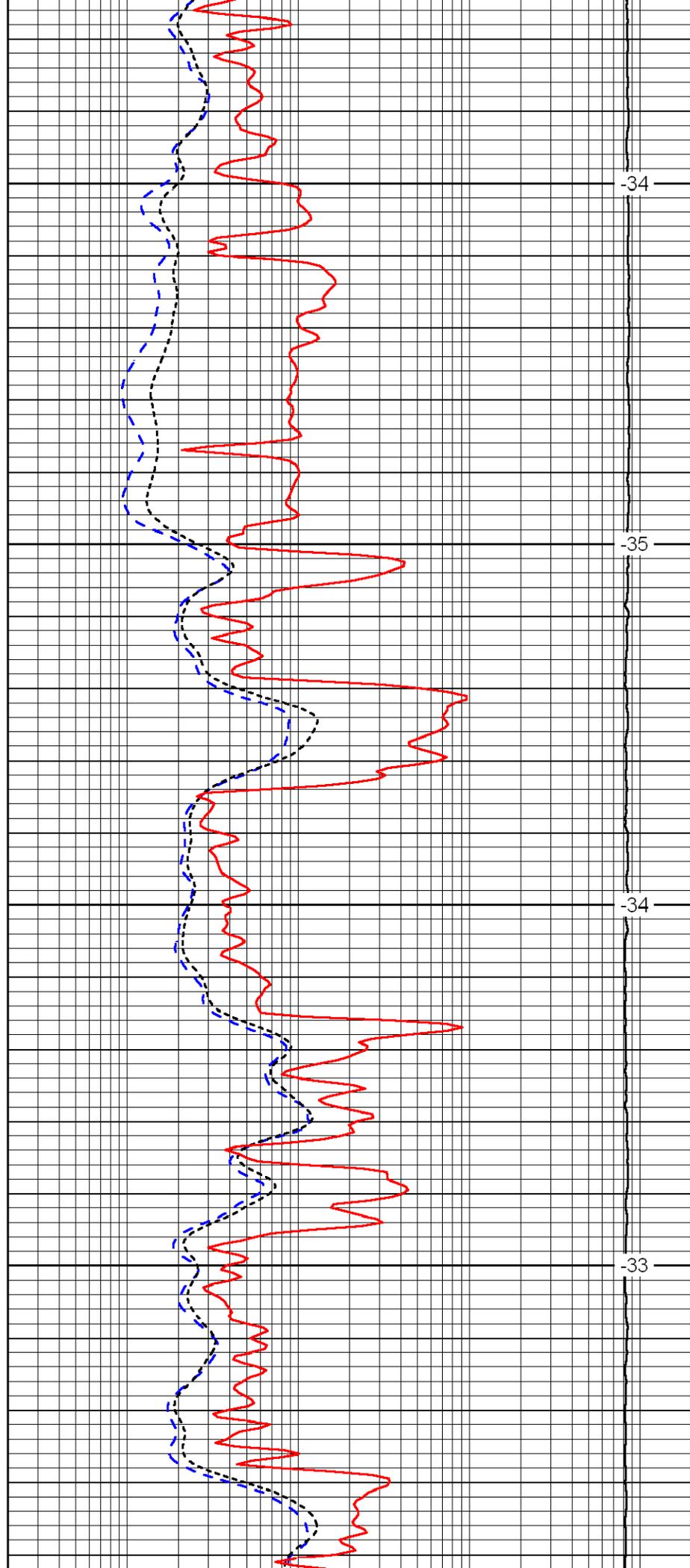


3100

3150

3200

3250

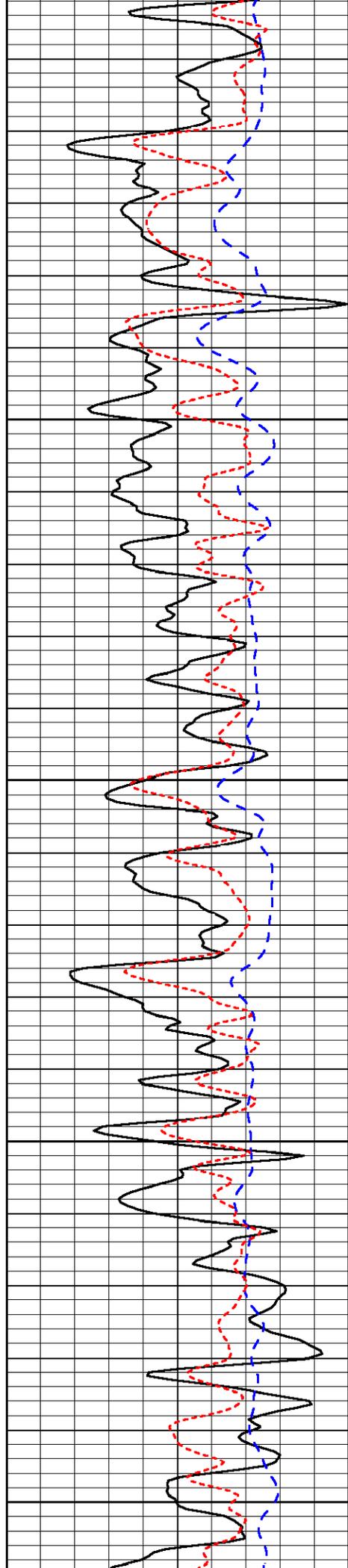


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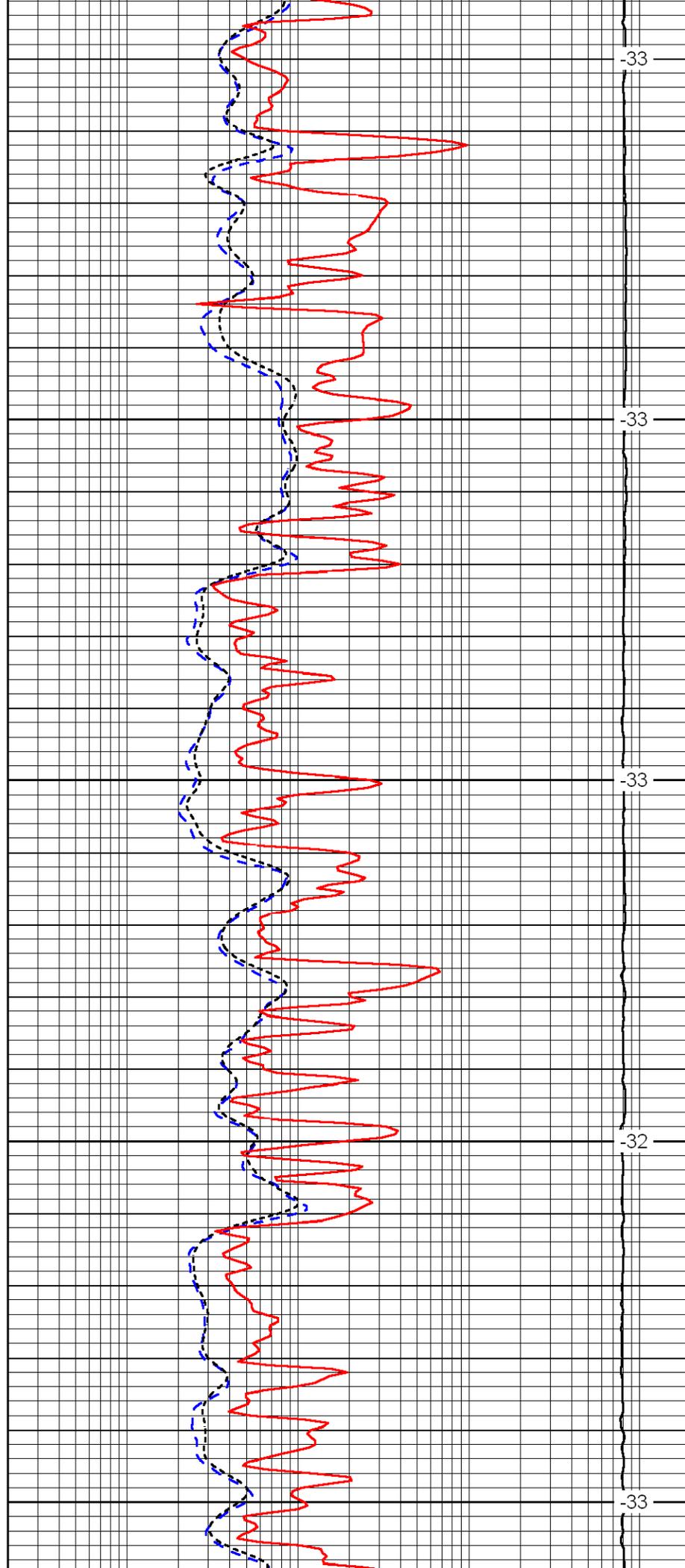
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3400

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3500



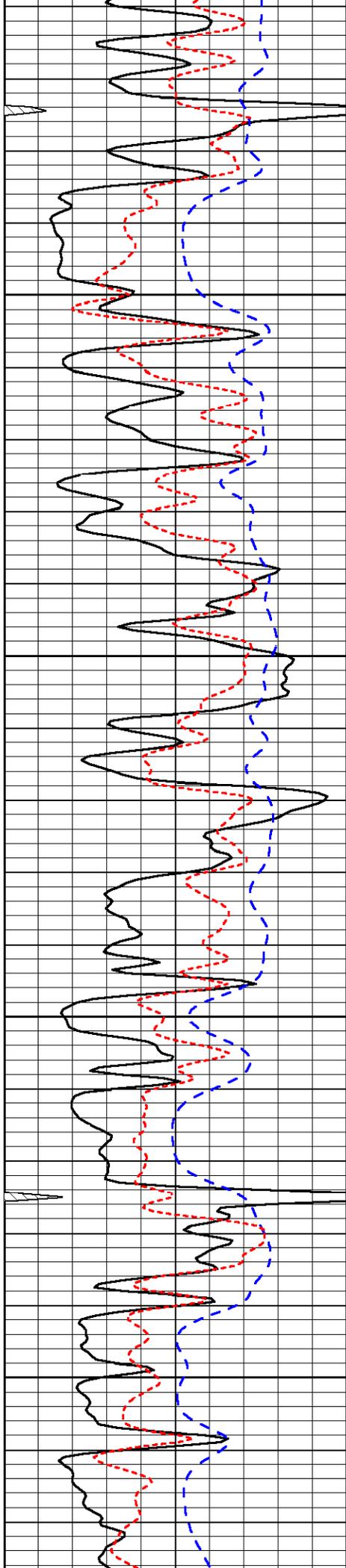
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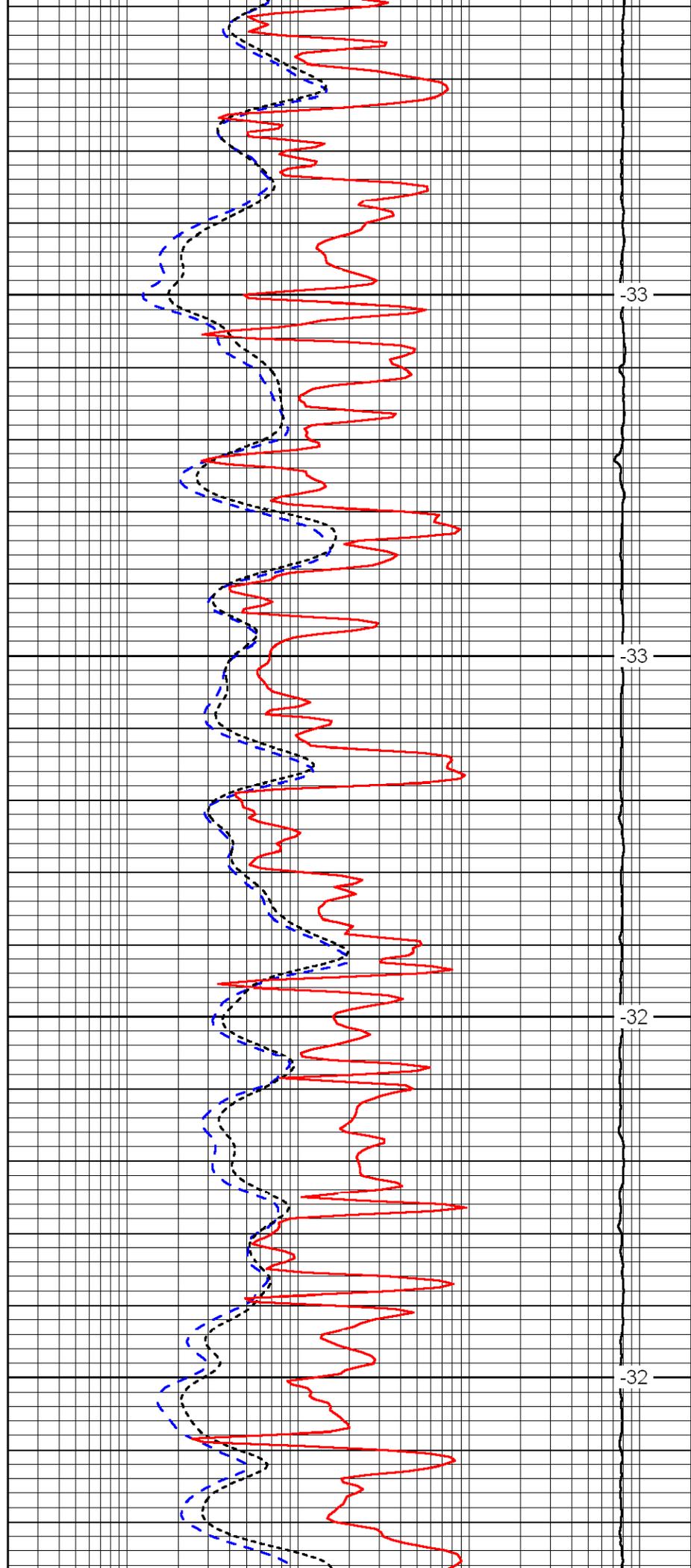


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3650

3700

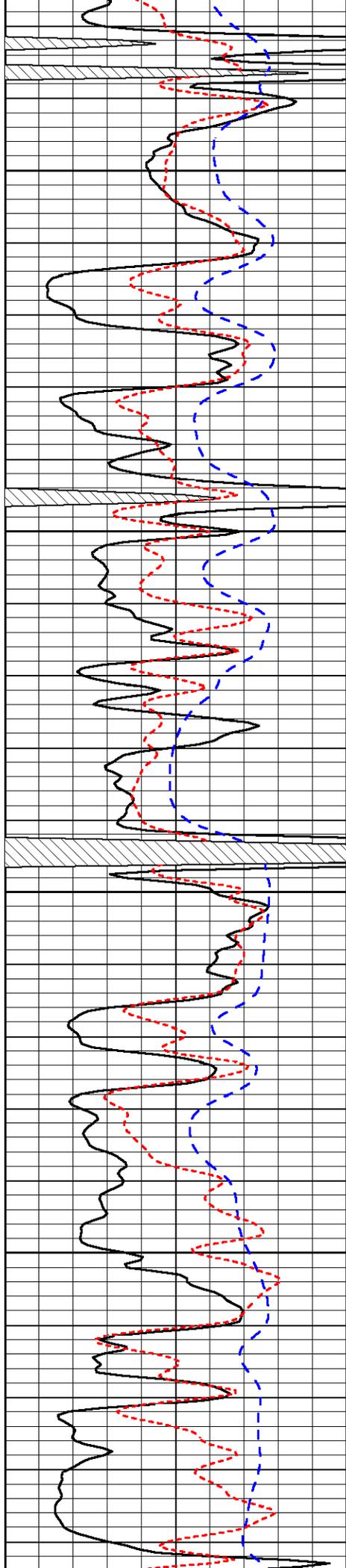


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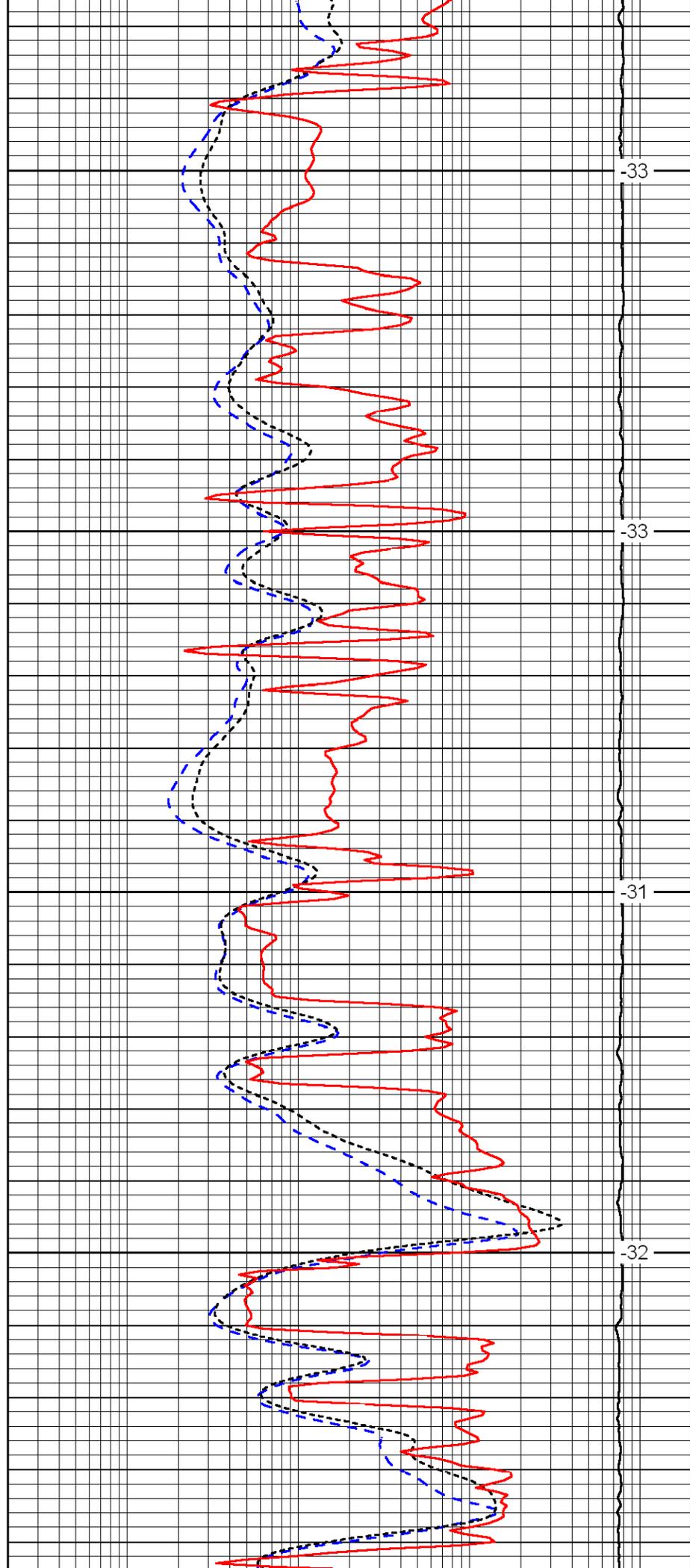


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3800

3850

3900

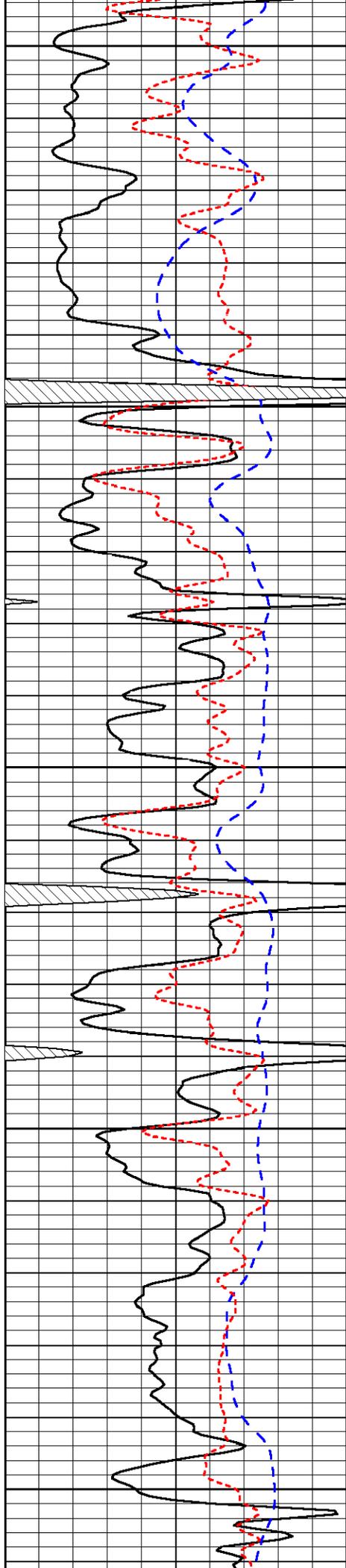


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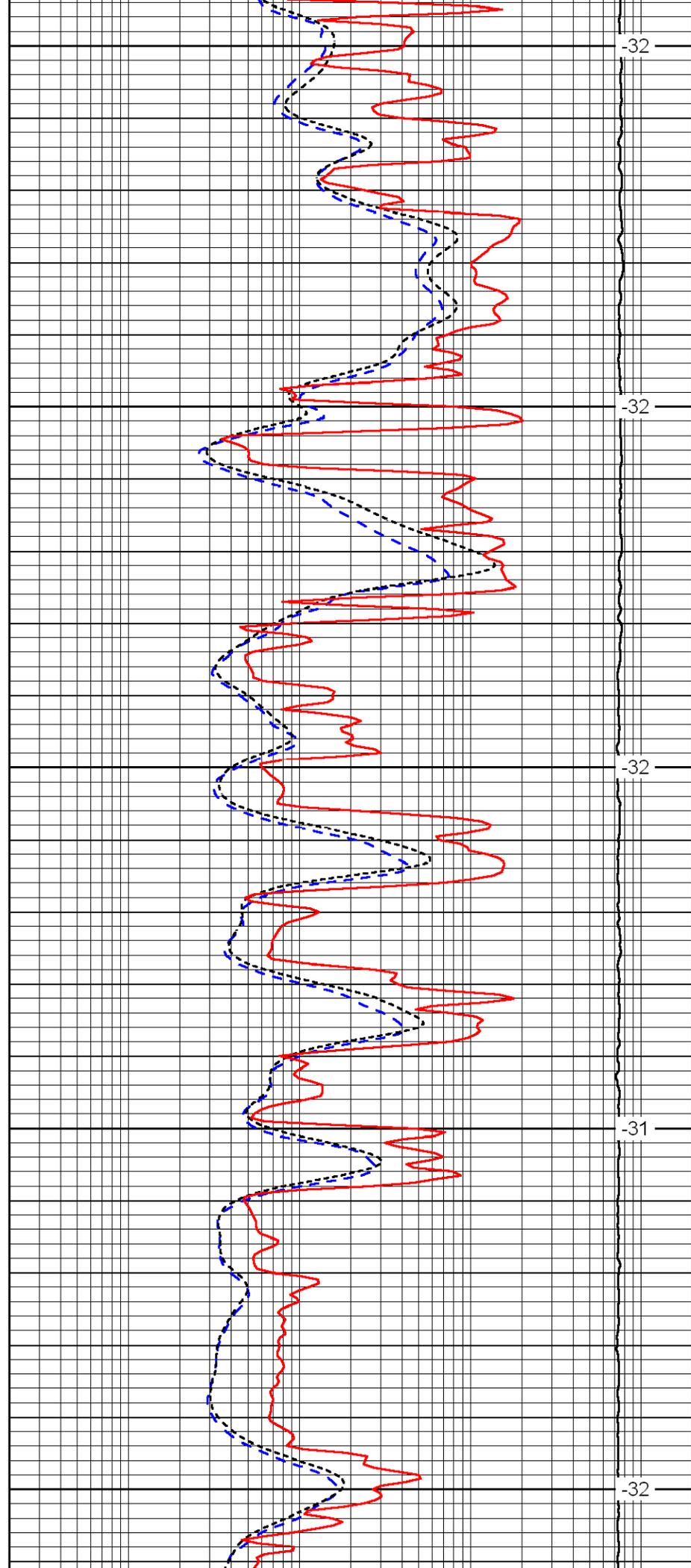
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4100

4150



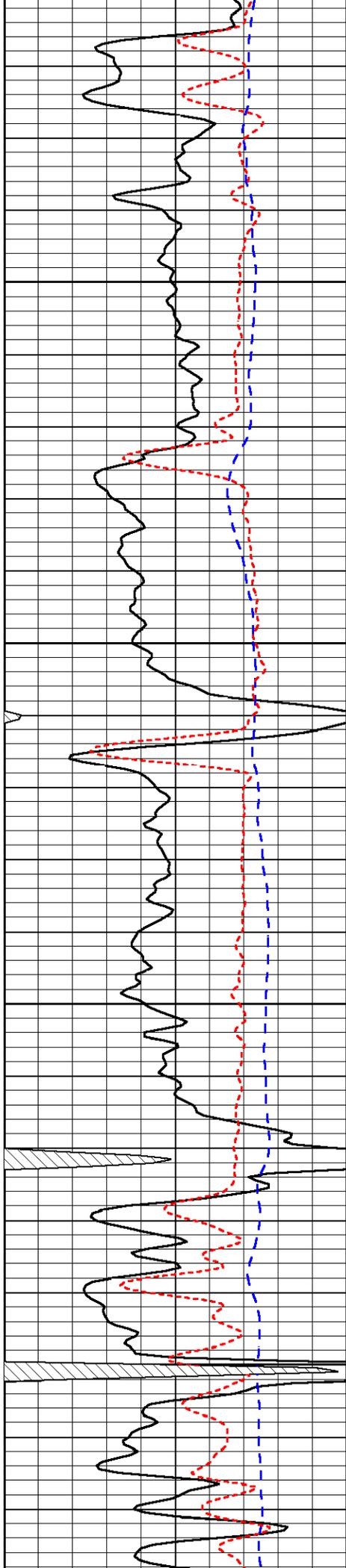
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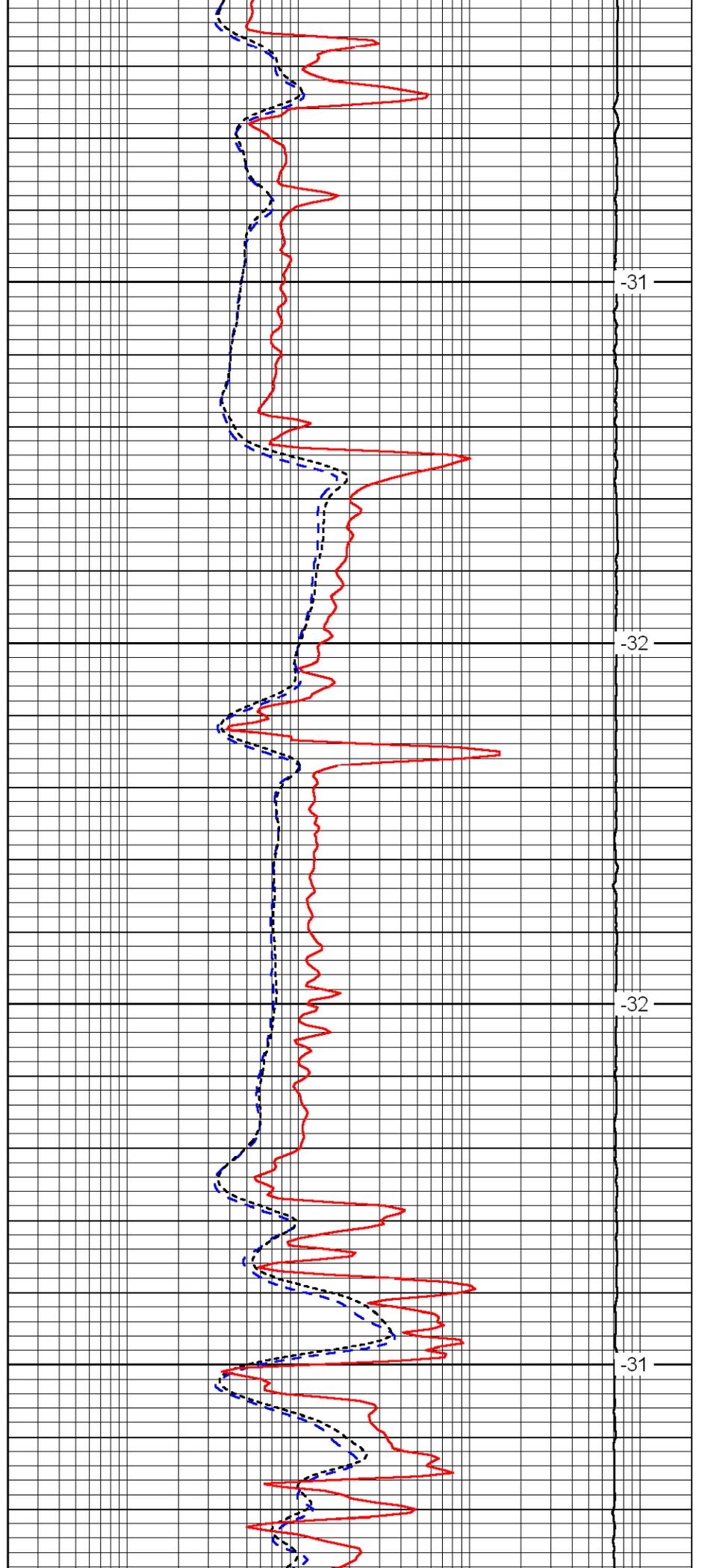


4200

4250

4300

4350

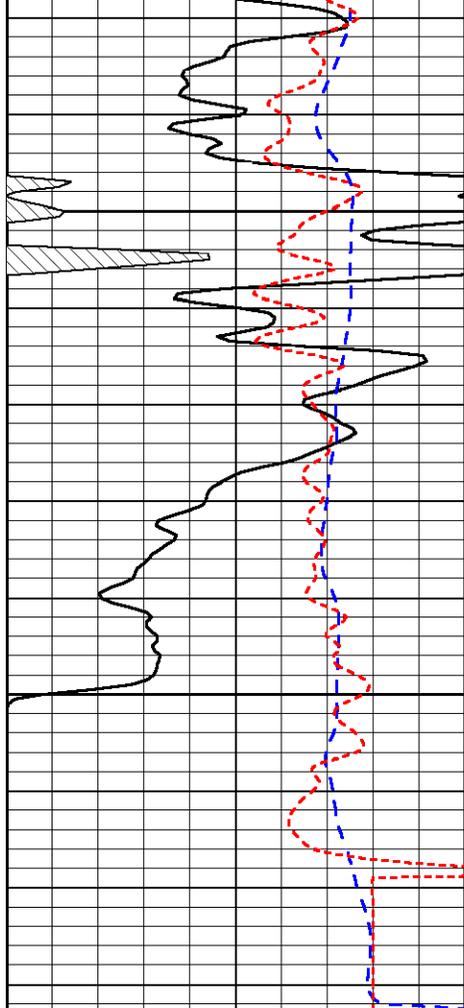


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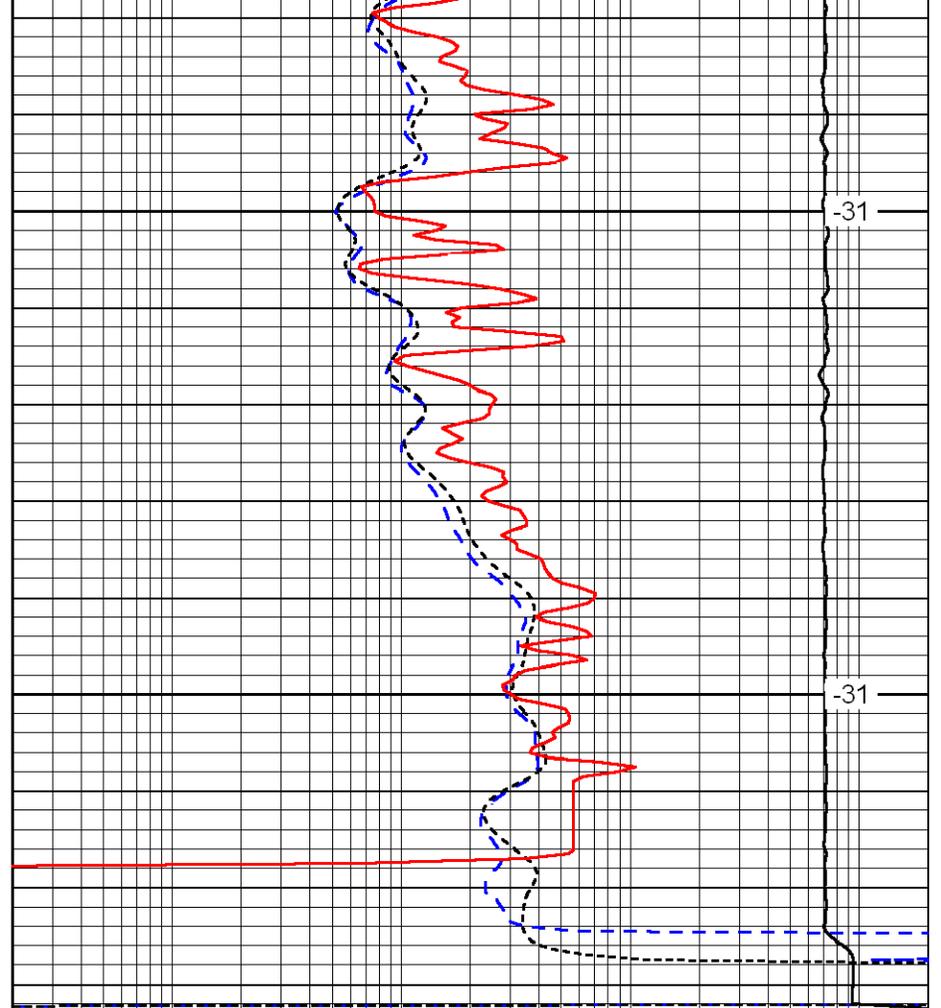
-31



4400

4450

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



-31

-31

| | | |
|-------|-----------------------------|------|
| 0.2 | Deep Resistivity (Ohm-m) | 2000 |
| 0.2 | Medium Resistivity (Ohm-m) | 2000 |
| 0.2 | Shallow Resistivity (Ohm-m) | 2000 |
| 15000 | Line Tension (lb) | 0 |

LSPD
(ft/min)