



# MICRORESISTIVITY LOG

Company **CARMEN SCHMITT, INC.**  
 Well **LAWRENCE #1-14**  
 Field **DEMAND NORTHWEST**  
 County **LANE**  
 State **KANSAS**

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Location: **API # : 15-101-22567-00-00**  
**1617' FSL & 680' FEL**  
**SEC 14 TWP 16S RGE 28W**

Other Services  
**CNL/CDL DIL**

|                        |             |
|------------------------|-------------|
| Date                   | 8/8/2015    |
| Run Number             | ONE         |
| Depth Driller          | 4640        |
| Depth Logger           | 4639        |
| Bottom Logged Interval | 4638        |
| Top Log Interval       | 3500        |
| Casing Driller         | 8:625 @ 221 |
| Casing Logger          | 221         |
| Bit Size               | 7.875       |
| Type Fluid in Hole     | CHEMICAL    |
| Salinity, ppm CL       | 3700        |
| Density / Viscosity    | 9.2 51      |
| pH / Fluid Loss        | 8.0 10.0    |
| Source of Sample       | Flowline    |
| Rm @ Meas. Temp        | 0.80 @ 94   |
| Rmt @ Meas. Temp       | 0.60 @ 94   |
| Rmc @ Meas. Temp       | 1.08 @ 94   |
| Source of Rmf / Rmc    | Charts      |
| Rm @ BHT               | 0.61 @ 122  |
| Operating Rig Time     | 3 1/2 HOURS |
| Max Rec. Temp. F       | 122         |
| Equipment Number       | 91          |
| Location               | Hays        |
| Recorded By            | D. SCHMIDT  |
| Witnessed By           | BRAD RINE   |

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.

Comments

**N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.**

**PENDENNIS,  
 2 WEST TO PAWNEE RD, 1 1/2 NORTH,  
 WEST AND NORTH INTO**

Log Measured From: **KELLY BUSHING**      8 Ft. Above Permanent Datum

**THANK YOU FOR USING PIONEER ENERGY SERVICES**  
[www.pioneerenergy.com](http://www.pioneerenergy.com)      785-625-3858

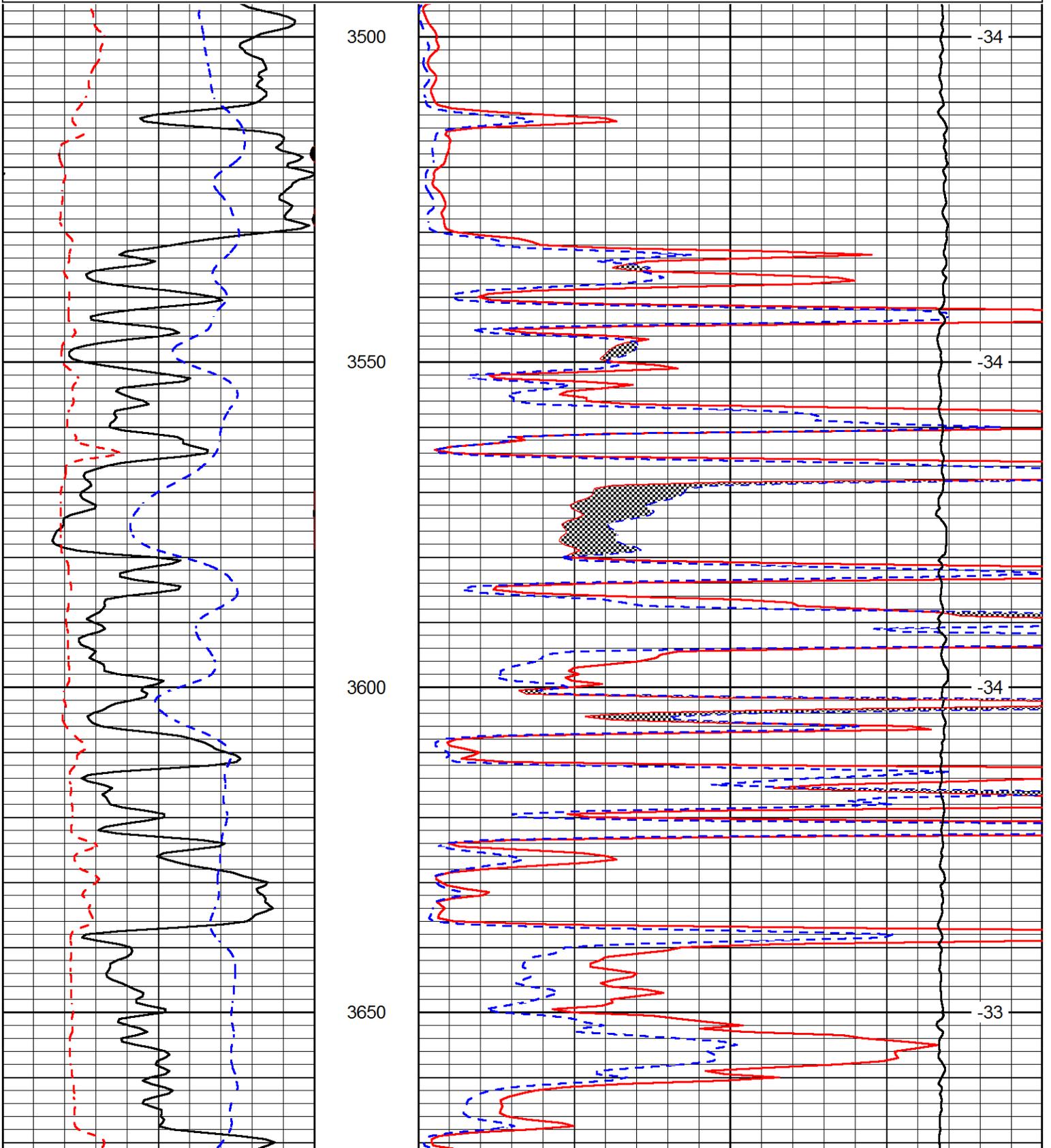
|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Your Pioneer Energy Services Crew | This Log Record Was Witnessed By  |
| Engineer: <b>D. SCHMIDT</b>       | Primary Witness: <b>BRAD RINE</b> |
| Operator:                         | Secondary Witness:                |
| Operator:                         | Secondary Witness:                |
| Operator:                         | Secondary Witness:                |

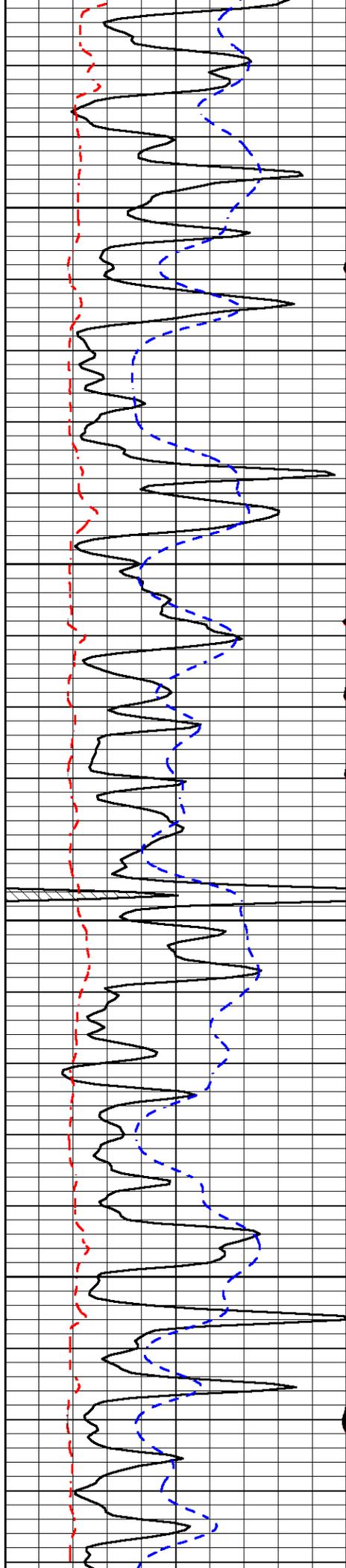
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 Dataset Pathname DIL/csstkml  
 Presentation Format micro  
 Dataset Creation Sat Aug 08 17:34:43 2015  
 Charted by Depth in Feet scaled 1:240

|       |                  |       |
|-------|------------------|-------|
| 0     | Gamma Ray (GAPI) | 150   |
| 6     | MCAL (in)        | 16    |
| 2.875 | Mud Cake (in)    | 7.875 |
| -200  | SP (mV)          | 0     |

|       |                             |    |
|-------|-----------------------------|----|
| 0     | Micro Inverse 1 X 1 (Ohm-m) | 40 |
| 0     | Micro Normal 2" (Ohm-m)     | 40 |
| 10000 | Line Weight (lb)            | 0  |

LSPD  
(ft/min)



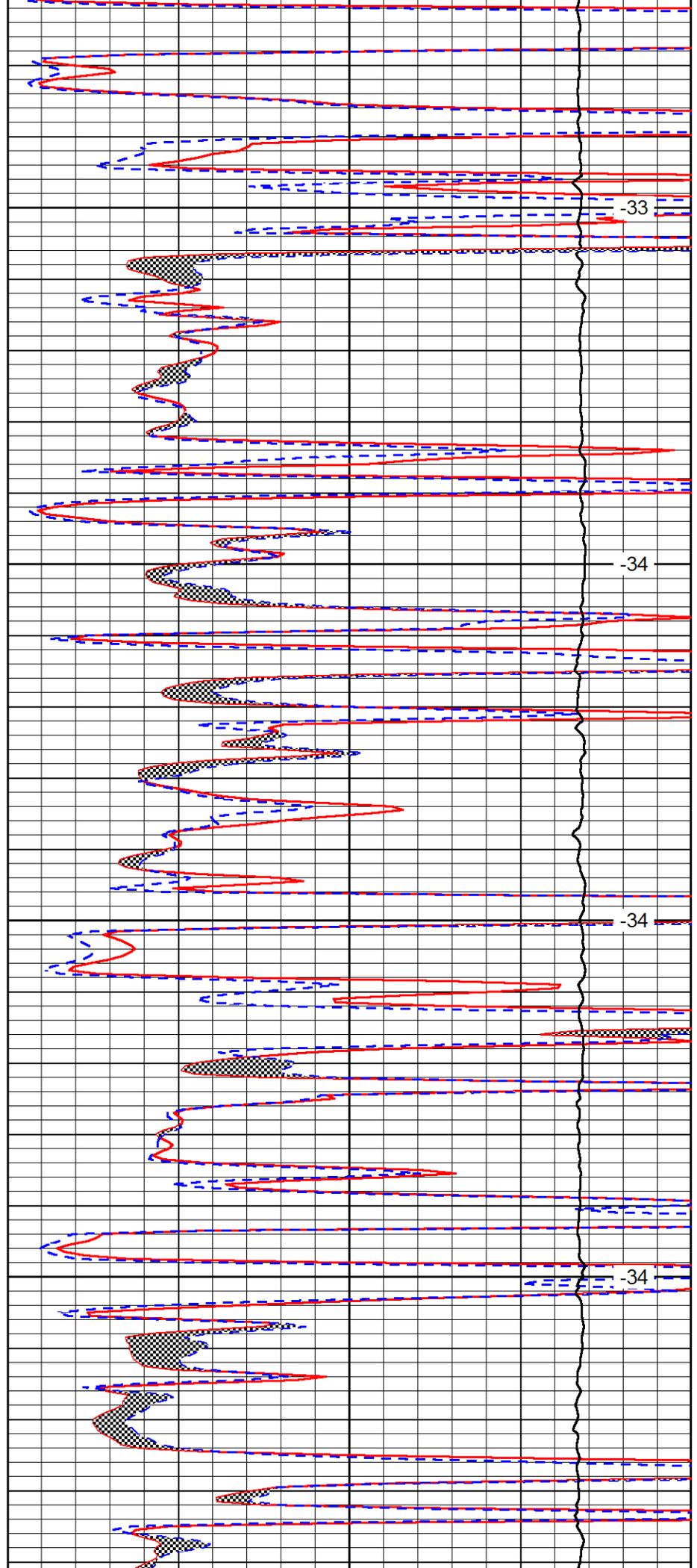


3700

3750

3800

3850

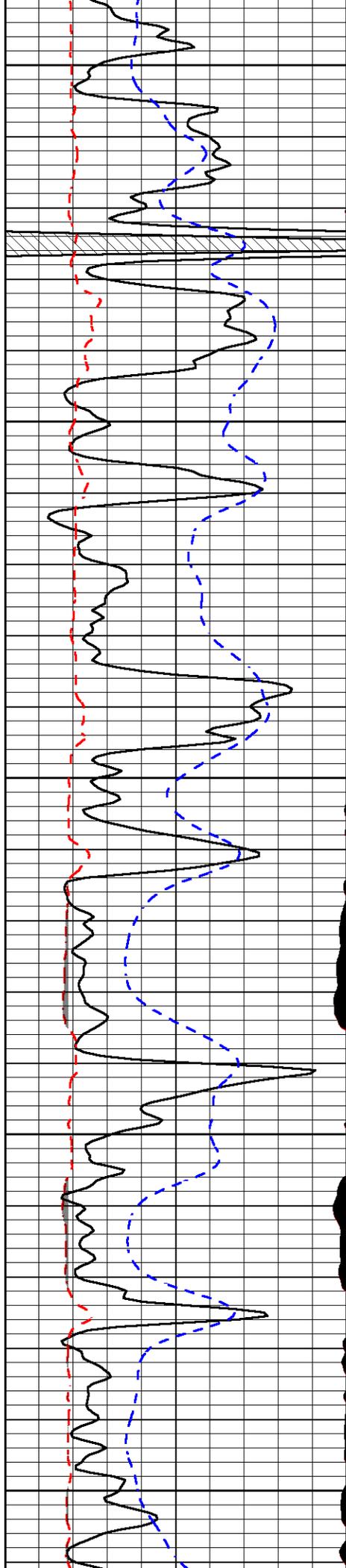


33

34

34

34



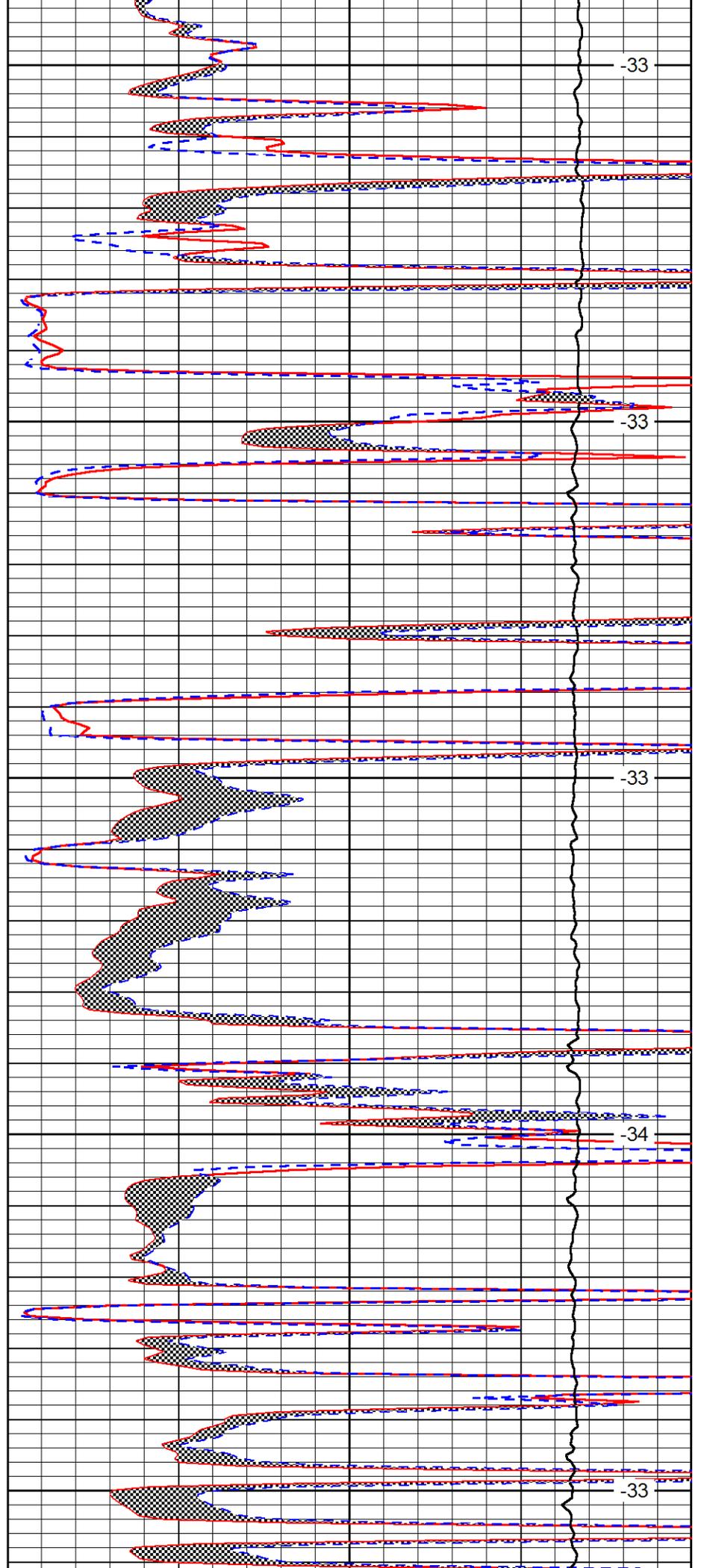
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3950

4000

4050

4100



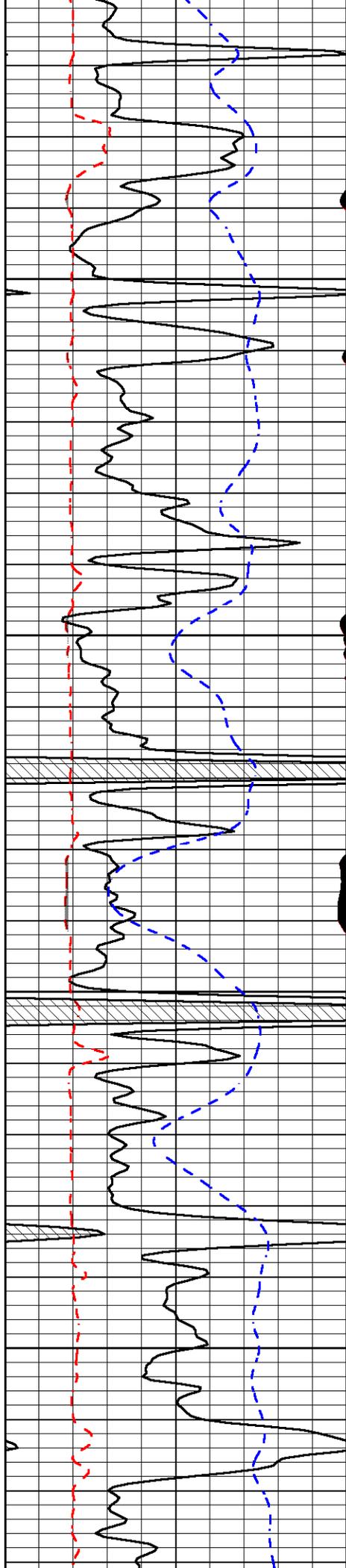
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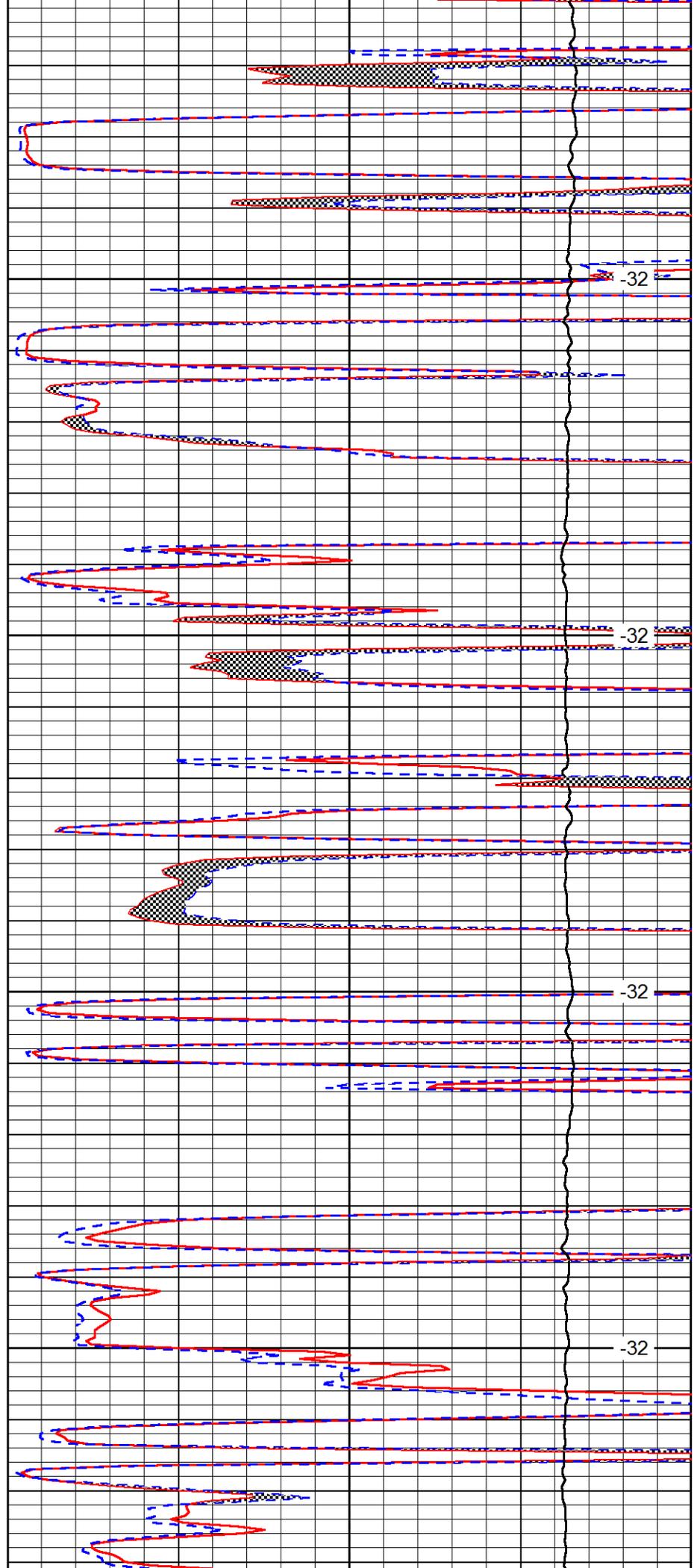


4150

4200

4250

4300

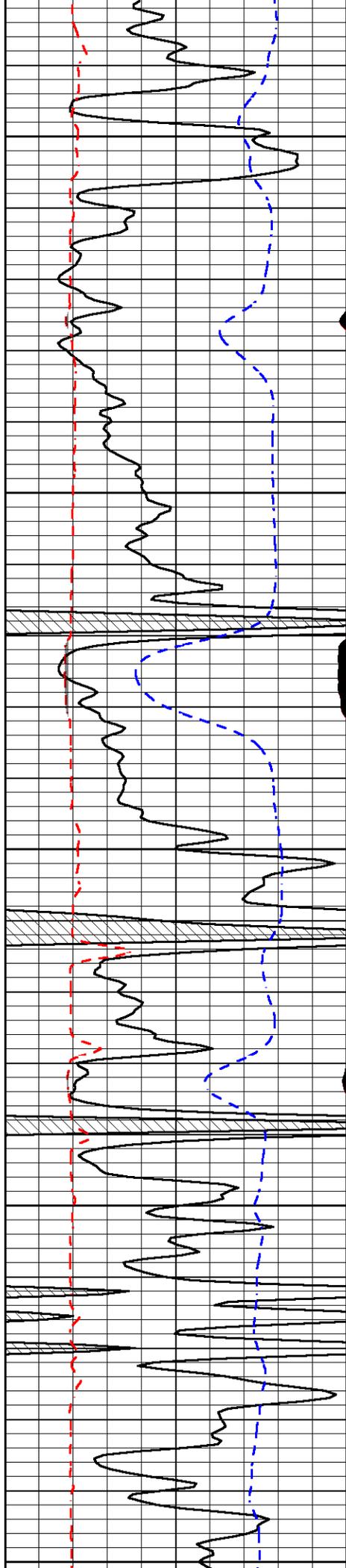


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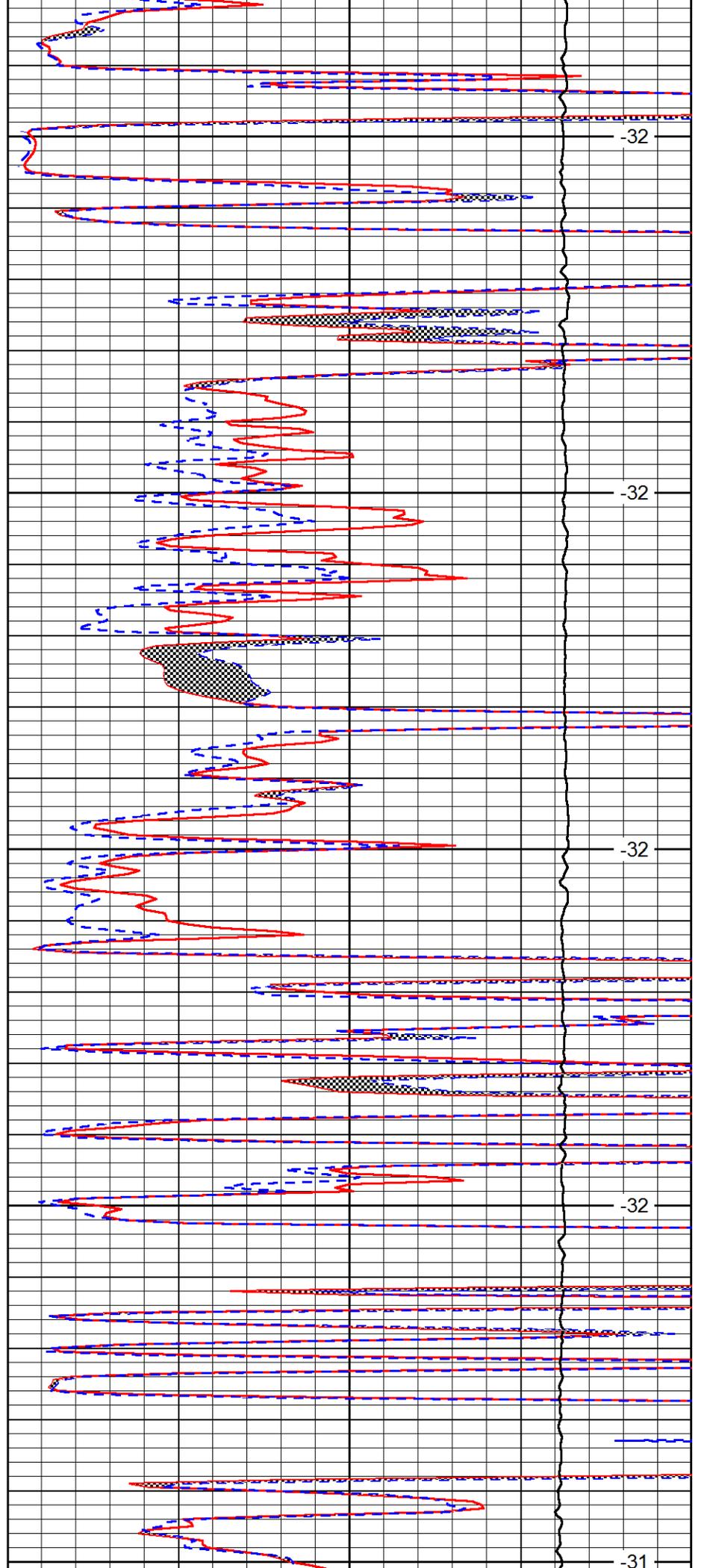
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4400

4450

4500

4550



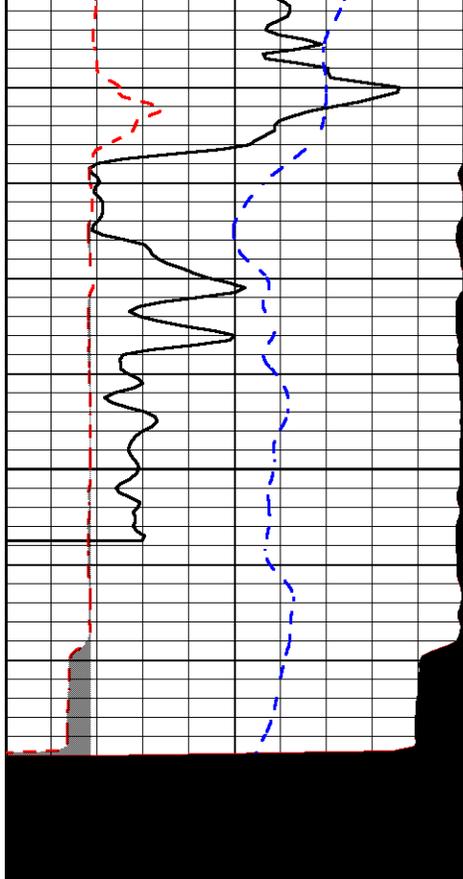
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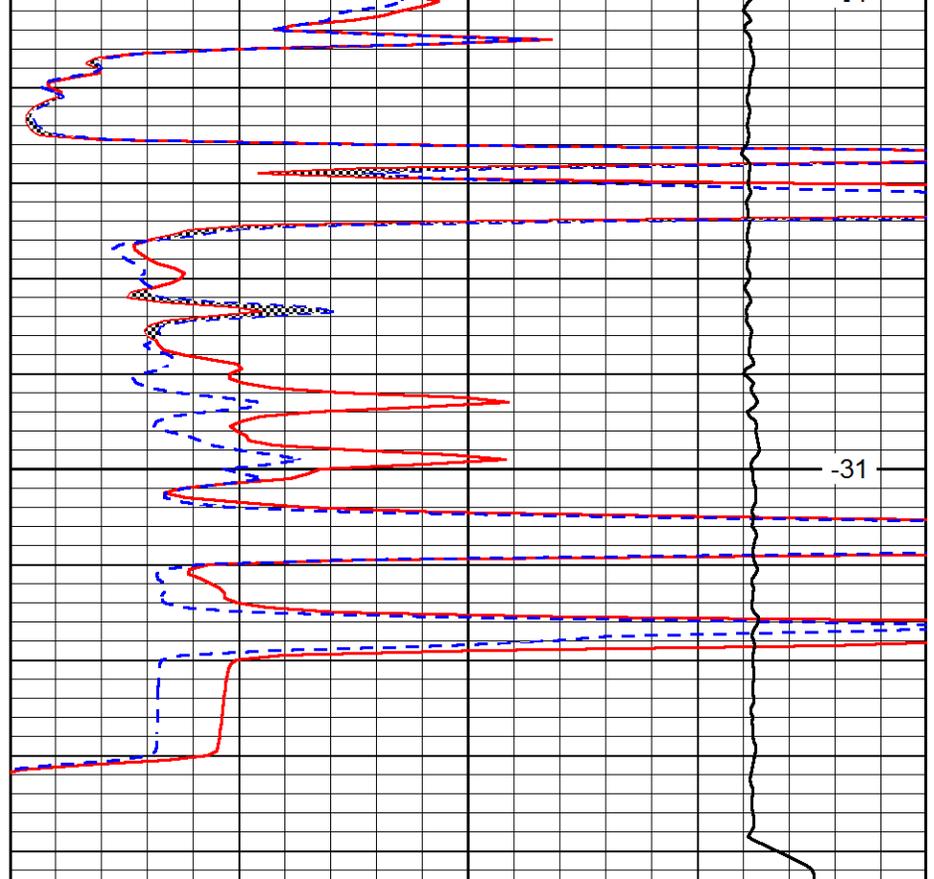
-32

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-31



4600



-31

|       |                  |       |
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