



# Microresistivity Log

**DIGITAL LOG** (785) 625-3858

|                                |   |  |                                       |
|--------------------------------|---|--|---------------------------------------|
| API No.<br>15-135-25,285-00-00 | Company<br><b>H&amp;B Petroleum Corporation</b> | Location<br><b>NE NW SE SW<br/>1,055' FSL &amp; 1,896' FWL</b> | Other Services<br>CNL/CDL<br>DIL/BHCS |
|                                | Well<br><b>Hagelgantz No. 34-1</b>              |  |                                       |
|                                | Field<br><b>McCormick</b>                       |  |                                       |
|                                | County<br><b>Ness</b>                           | State<br><b>Kansas</b>   |                                       |
|                                | Sec: <b>34</b>                                  | Twp: <b>17S</b>  | Rge: <b>21W</b>                       |

|   |                         |           |
|---|-------------------------|-----------|
| Permanent Datum<br>Ground Level         | Elevation 2146          | K.B. 2155 |
| Log Measured From<br>Kelly Bushing      | 9 Ft. Above Perm. Datum | D.F. 2146 |
| Drilling Measured From<br>Kelly Bushing |                         | G.L. 2146 |
| Date                                    | 8/26/2011               |           |
| Run Number                              | Two                     |           |
| Depth Driller                           | 4300                    |           |
| Depth Logger                            | 4300                    |           |
| Bottom Logged Interval                  | 4299                    |           |
| Top Log Interval                        | 3400                    |           |
| Casing Driller                          | 8.625 @ 272             |           |
| Casing Logger                           | 272                     |           |
| Bit Size                                | 7.875                   |           |
| Type Fluid in Hole                      | Chemical                |           |
| Salinity, ppm CL                        | 8800                    |           |
| Density / Viscosity                     | 9.1   50                |           |
| pH / Fluid Loss                         | 9.0   11.2              |           |
| Source of Sample                        | Flowline                |           |
| Rm @ Meas. Temp                         | .26 @ 86                |           |
| Rmf @ Meas. Temp                        | .20 @ 86                |           |
| Rmc @ Meas. Temp                        | .35 @ 86                |           |
| Source of Rmf / Rmc                     | Charts                  |           |
| Rm @ BHT                                | .19 @ 119               |           |
| Operating Rig Time                      | 4 Hours                 |           |
| Max Rec. Temp. F                        | 119                     |           |
| Equipment Number                        | 10                      |           |
| Location                                | Hays                    |           |
| Recorded By                             | J. Long                 |           |
| Witnessed By                            | Jim Musgrove            |           |

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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

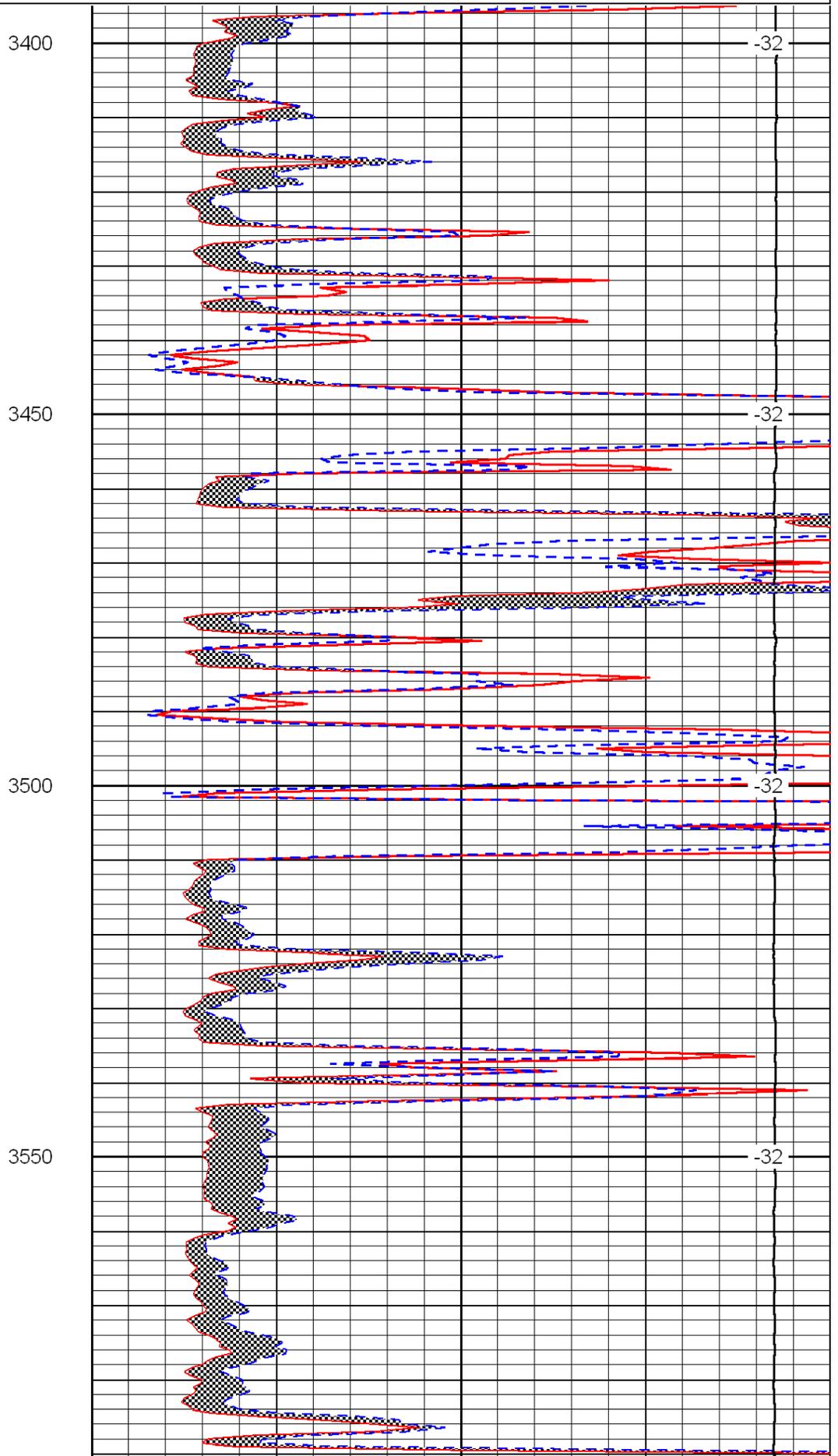
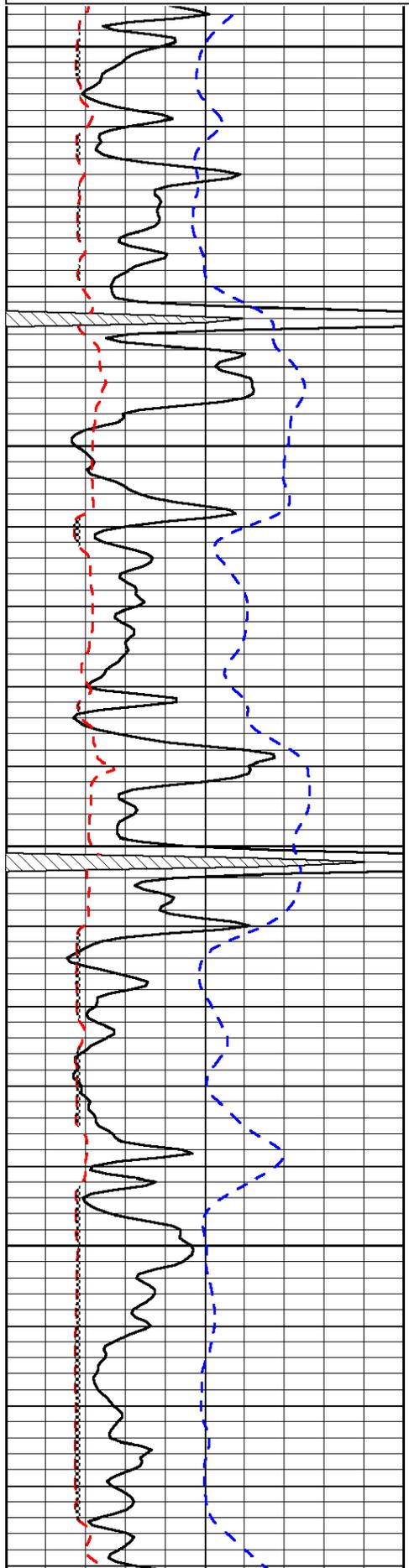
Thank you for using Log-Tech, Inc.  
(785) 625-3858

Alexander, 2 West to HH Road, 5 1/2 North, 2 West, 1 South, 1 1/2 East, North Into

|      |                          |     |
|------|--------------------------|-----|
| 0    | Gamma Ray                | 150 |
| 6    | Micro Log Caliper (GAPI) | 16  |
| -200 | SP (mV)                  | 0   |

|       |                     |    |
|-------|---------------------|----|
| 0     | Micro Inverse 1 X 1 | 40 |
| 0     | Micro Normal 2"     | 40 |
| 15000 | Line Weight         | 0  |

LSPD



3400

-32

3450

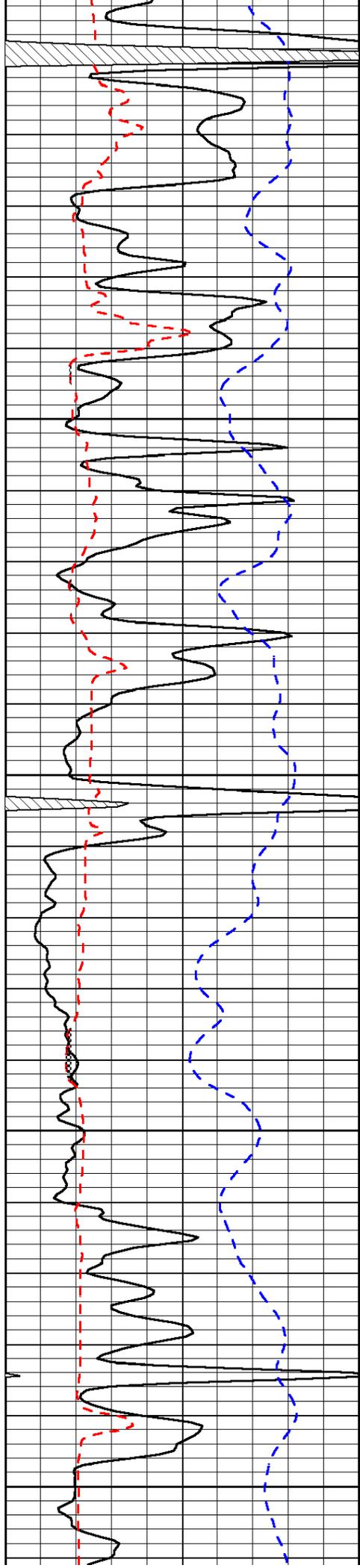
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3500

-32

3550

-32



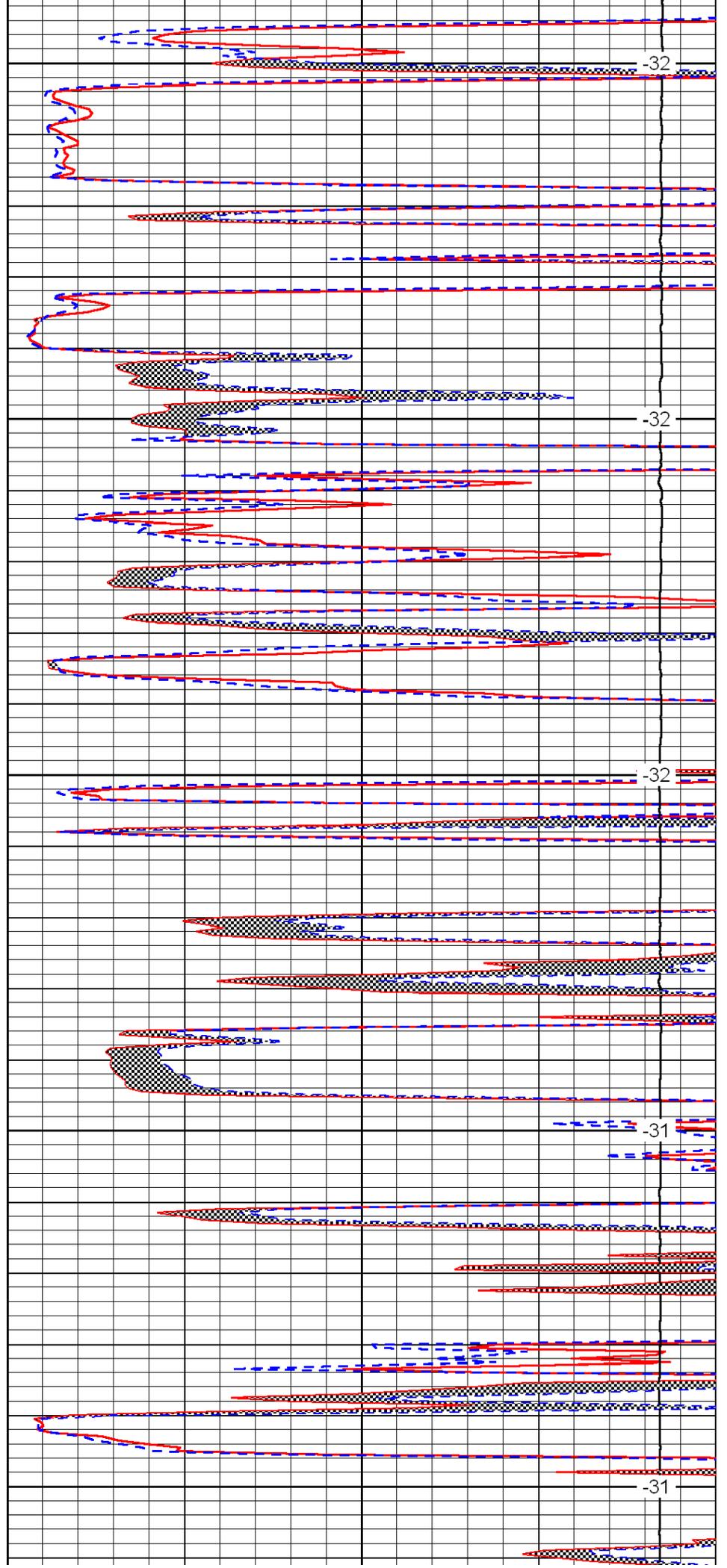
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3650

3700

3750

3800



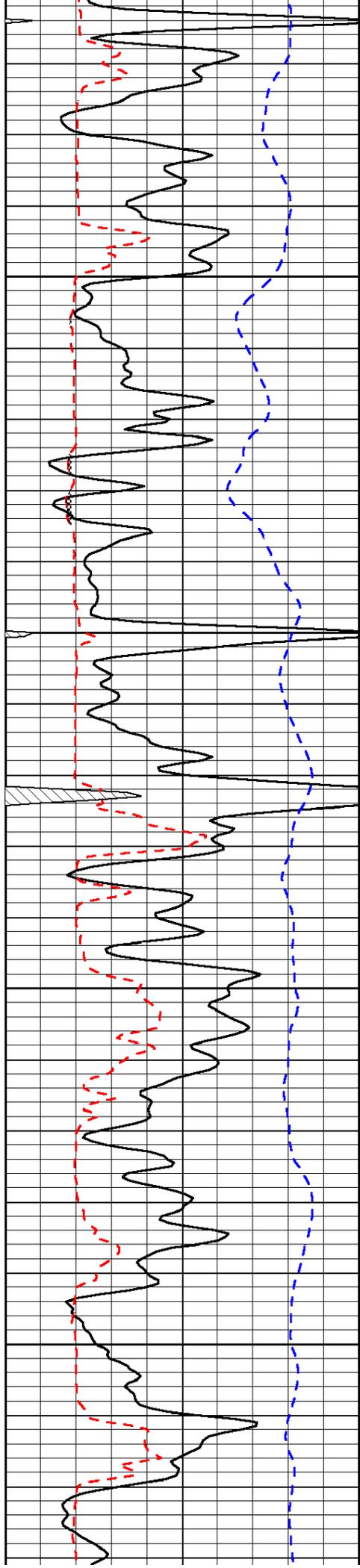
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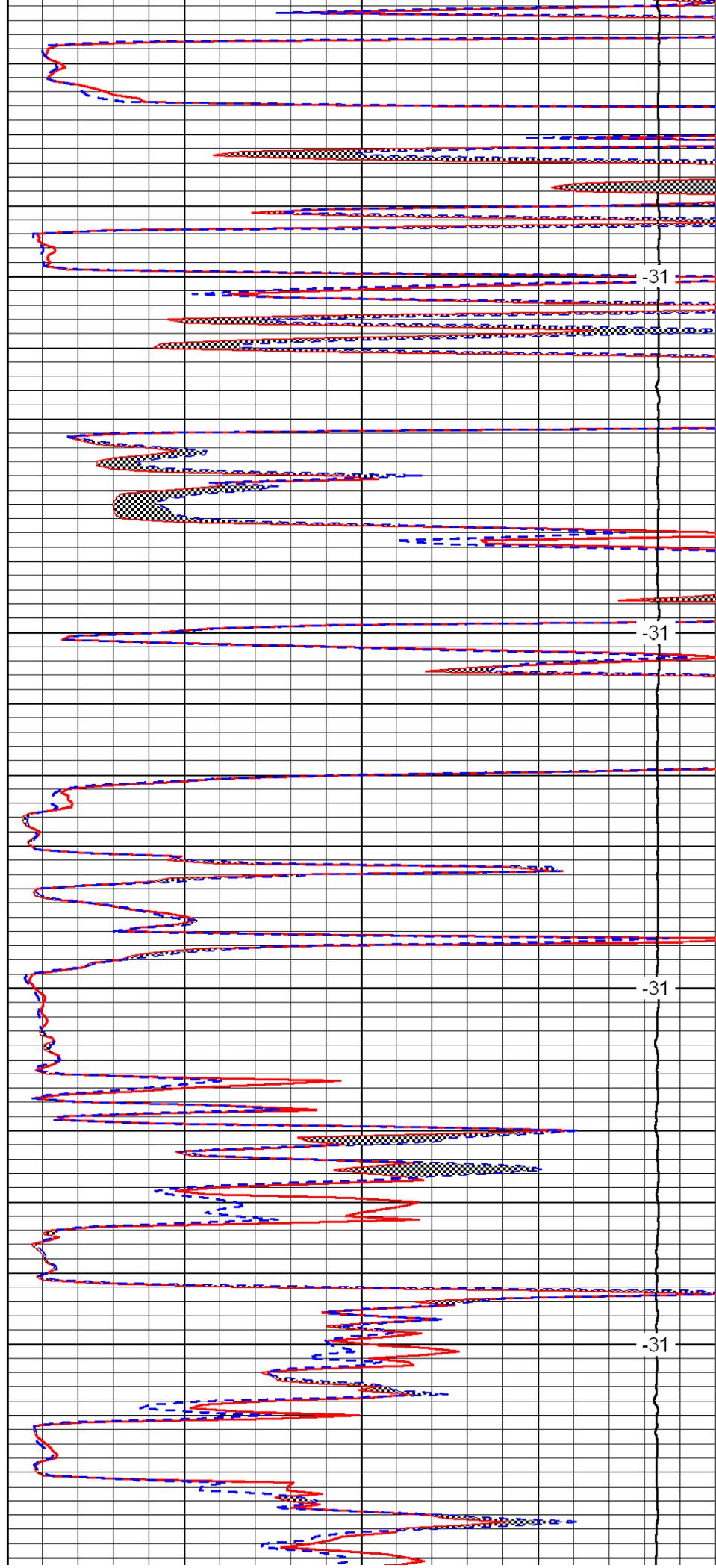


3850

3900

3950

4000

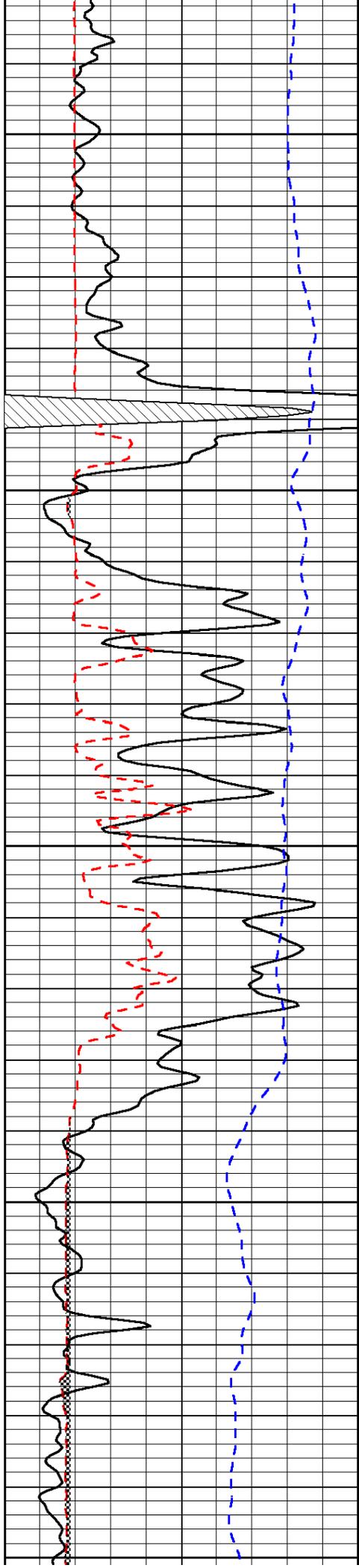


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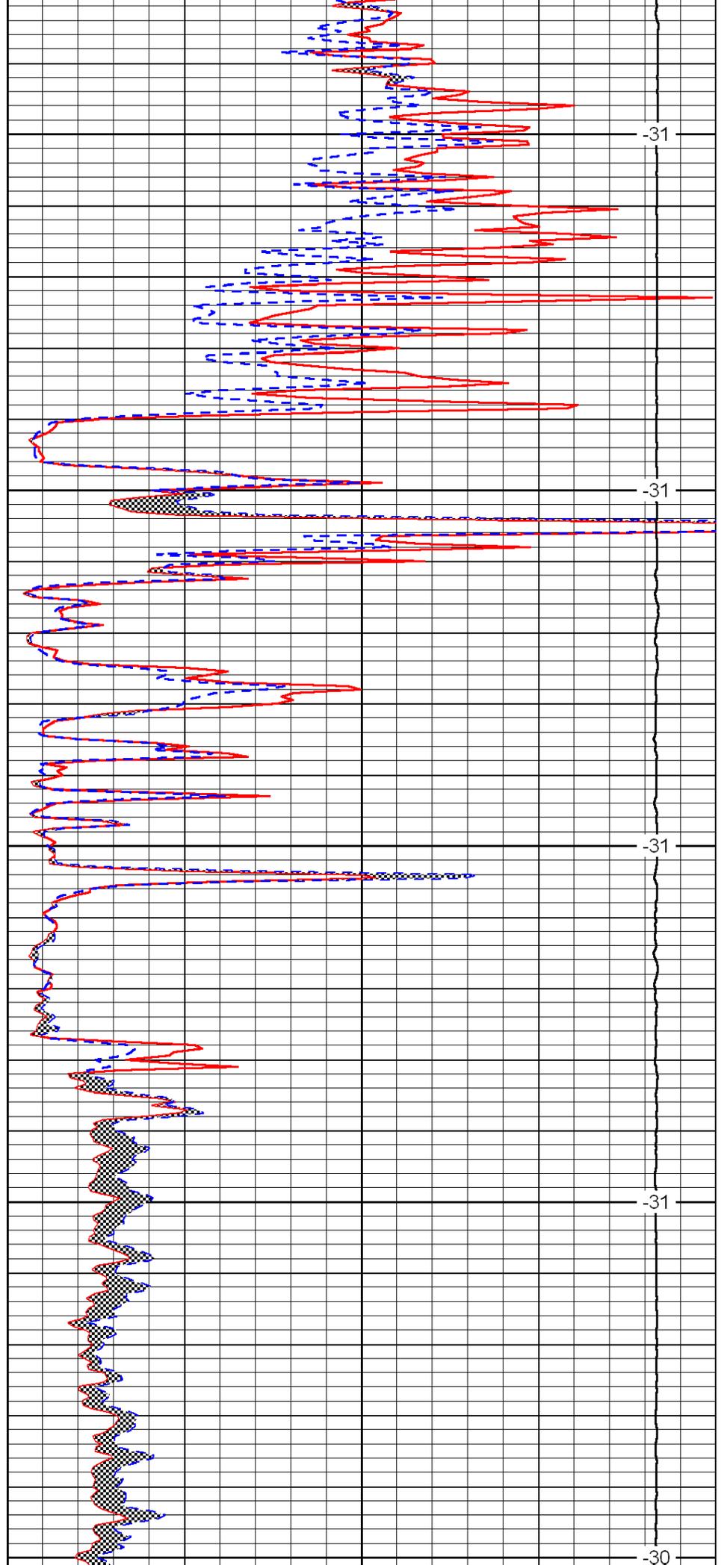
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4100

4150

4200

4250



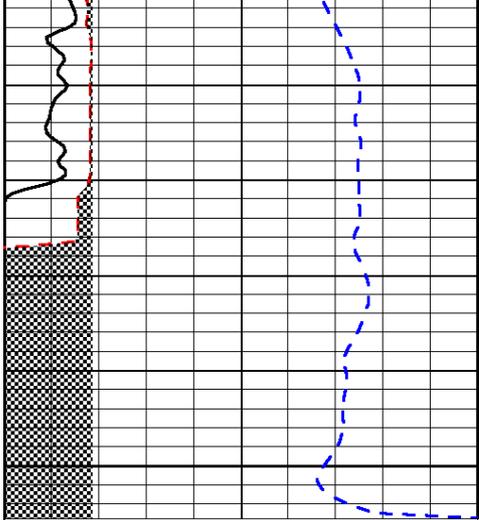
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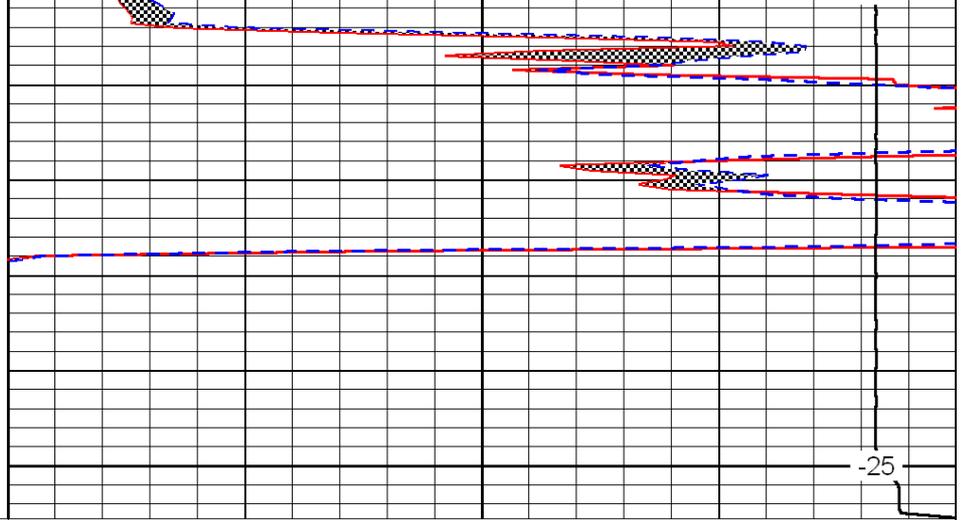
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-30



|      |                          |     |
|------|--------------------------|-----|
| 0    | Gamma Ray                | 150 |
| 6    | Micro Log Caliper (GAPI) | 16  |
| -200 | SP (mV)                  | 0   |

4300



|       |                     |    |
|-------|---------------------|----|
| 0     | Micro Inverse 1 X 1 | 40 |
| 0     | Micro Normal 2''    | 40 |
| 15000 | Line Weight         | 0  |

-25

LSPD