



**SUPERIOR**  
**Hays,**  
**Kansas**

## MICRO LOG

|                              |                   |                             |  |
|------------------------------|-------------------|-----------------------------|--|
| Company                      |                   | MULL DRILLING COMPANY, INC. |  |
| Well                         |                   | APC-TALLMAN #2-3            |  |
| Field                        |                   |                             |  |
| County                       |                   | KIOWA                       |  |
| State                        |                   | COLORADO                    |  |
| Location:                    |                   | API # : 05-061-06356-00     |  |
| Permanent Datum              |                   | GROUND LEVEL                |  |
| Log Measured From            |                   | KELLY BUSHING 11' A.G.L.    |  |
| Drilling Measured From       |                   | KELLY BUSHING               |  |
| SEC 3                        |                   | TWP 18S                     |  |
|                              |                   | RGE 45W                     |  |
| Other Services               |                   | CDL/CNL/PE                  |  |
|                              |                   | DIL/SON                     |  |
| Elevation                    |                   | K.B. 4002                   |  |
|                              |                   | D.F. 4000                   |  |
|                              |                   | G.L. 3991                   |  |
| Date                         | 3/18/11           |                             |  |
| Run Number                   | TWO               |                             |  |
| Depth Driller                | 5057              |                             |  |
| Depth Logger                 | 5057              |                             |  |
| Bottom Logged Interval       | 5034              |                             |  |
| Top Log Interval             | 3500              |                             |  |
| Casing Driller               | 8 5/8" @ 326      |                             |  |
| Casing Logger                | 322               |                             |  |
| Bit Size                     | 7 7/8"            |                             |  |
| Type Fluid in Hole           | CHEMICAL MUD      | CHLORIDES 3200 PPM          |  |
| Density / Viscosity          | 9.2/56            |                             |  |
| pH / Fluid Loss              | 10.5/8.0          |                             |  |
| Source of Sample             | FLOWLINE          |                             |  |
| Rim @ Meas. Temp             | .95 @ 78F         |                             |  |
| Rmf @ Meas. Temp             | .71 @ 78F         |                             |  |
| Rmc @ Meas. Temp             | 1.13 @ 78F        |                             |  |
| Source of Rmf / Rmc          | MEASUREMENT       |                             |  |
| Rim @ BHT                    | .59 @ 125F        |                             |  |
| Time Circulation Stopped     | 2 HOURS           |                             |  |
| Time Logger on Bottom        |                   |                             |  |
| Maximum Recorded Temperature | 125F              |                             |  |
| Equipment Number             | 0836              |                             |  |
| Location                     | HAYS, KANSAS      |                             |  |
| Recorded By                  | JASON CAPPELLUCCI |                             |  |
| Witnessed By                 | PHIL ASKEY        |                             |  |

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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 SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395  
DIRECTIONS  
BRANDON CO. - EAST EDGE (MM 186) 5 N. - W. INTO

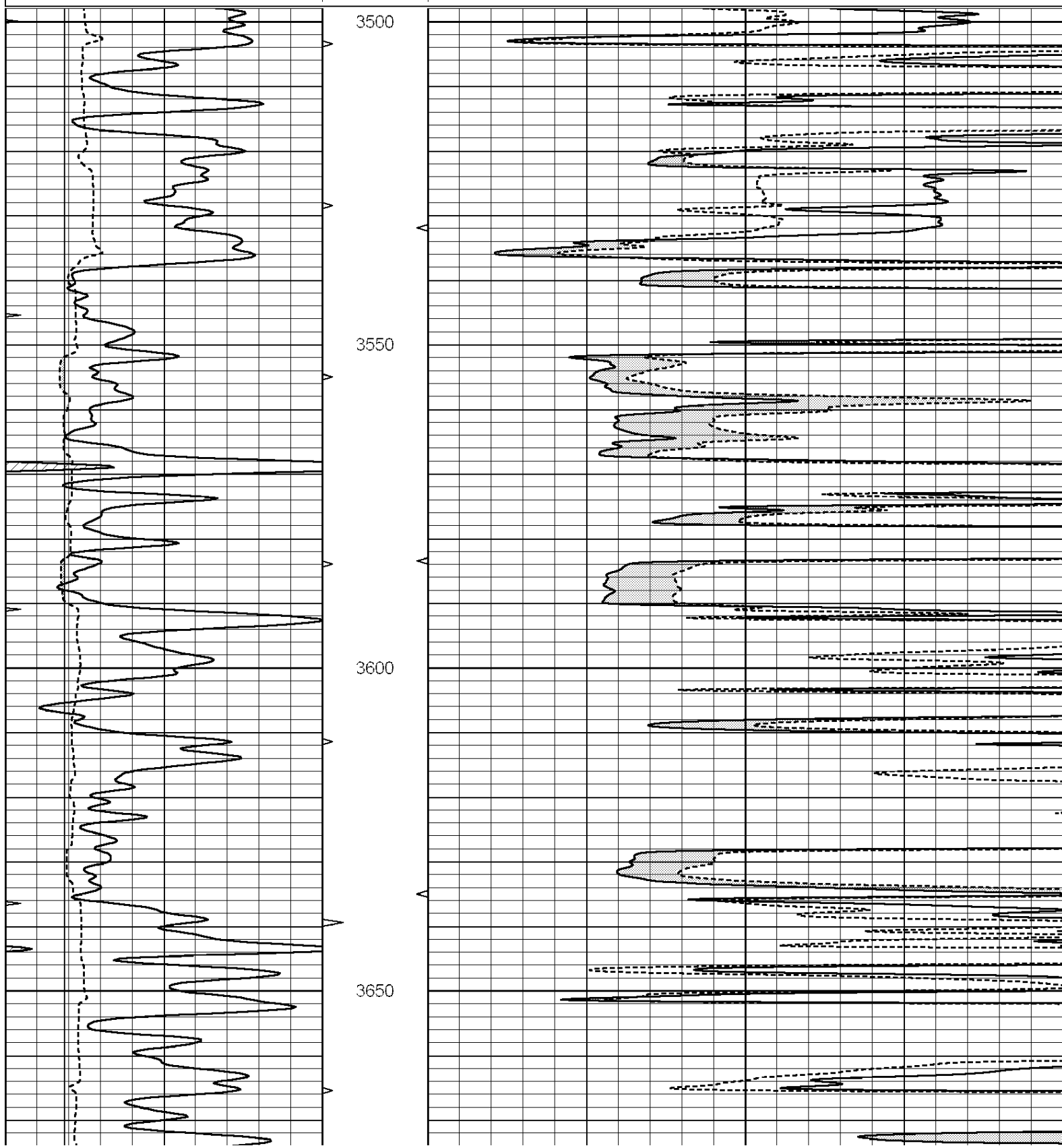


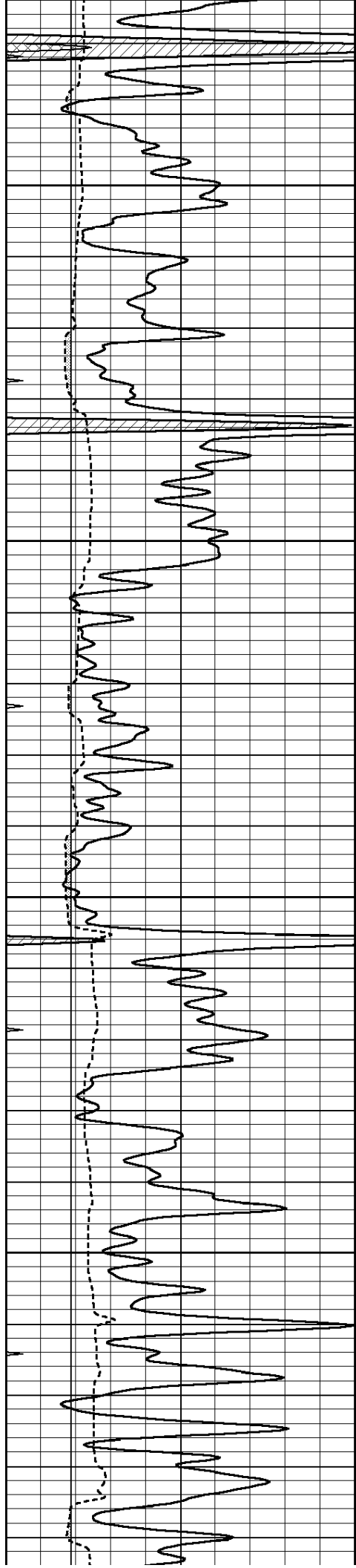
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# MAIN SECTION

Database File: 006616ddn.db  
 Dataset Pathname: pass6.1  
 Presentation Format: micro  
 Dataset Creation: Fri Mar 18 20:46:48 2011 by Calc Open-Cased 090629  
 Charted by: Depth in Feet scaled 1:240

|   |                  |     |          |     |                |    |
|---|------------------|-----|----------|-----|----------------|----|
| 0 | GAMMA RAY (GAPI) | 150 | ABHV     | 0   | MEL1.5 (Ohm-m) | 40 |
| 6 | CALIPER (in)     | 16  | 10 (ft3) | 0 0 | MEL2.0 (Ohm-m) | 40 |
| 0 | MINMK            | 20  | TBHV     |     |                |    |
|   |                  |     | 0 (ft3)  | 10  |                |    |



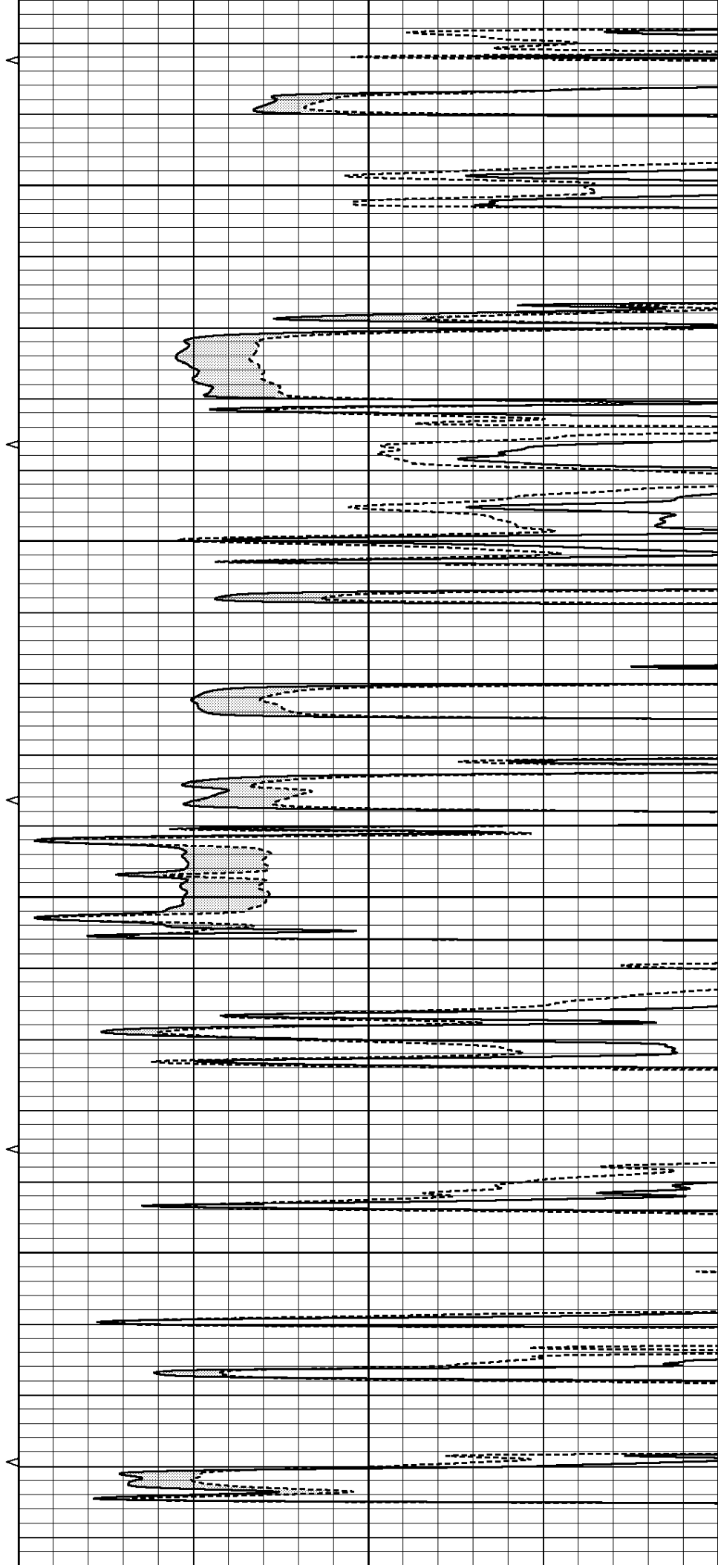


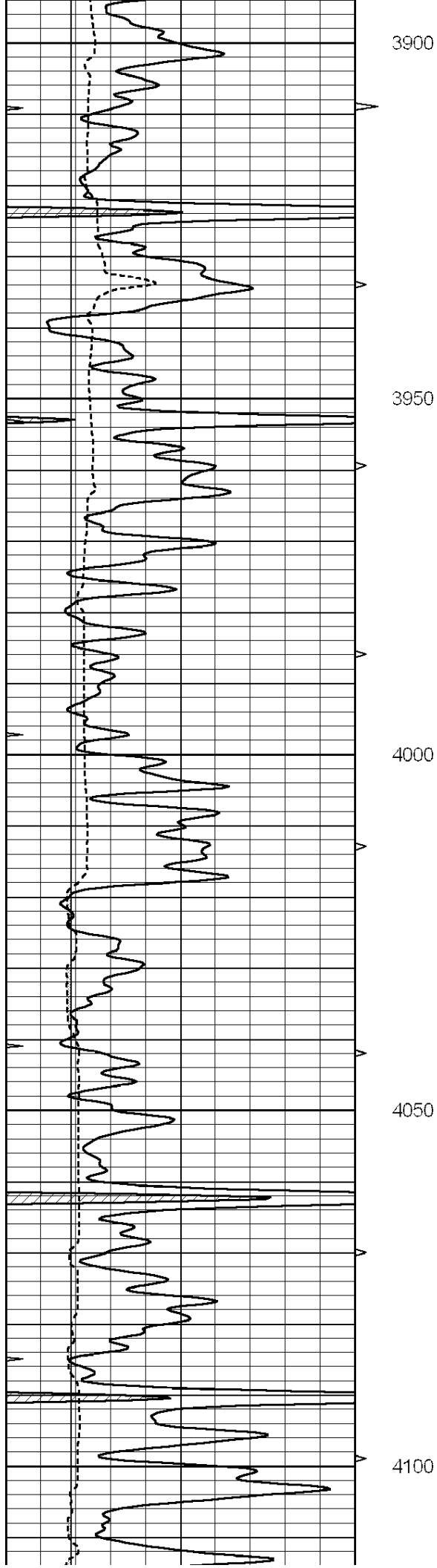
3700

3750

3800

3850





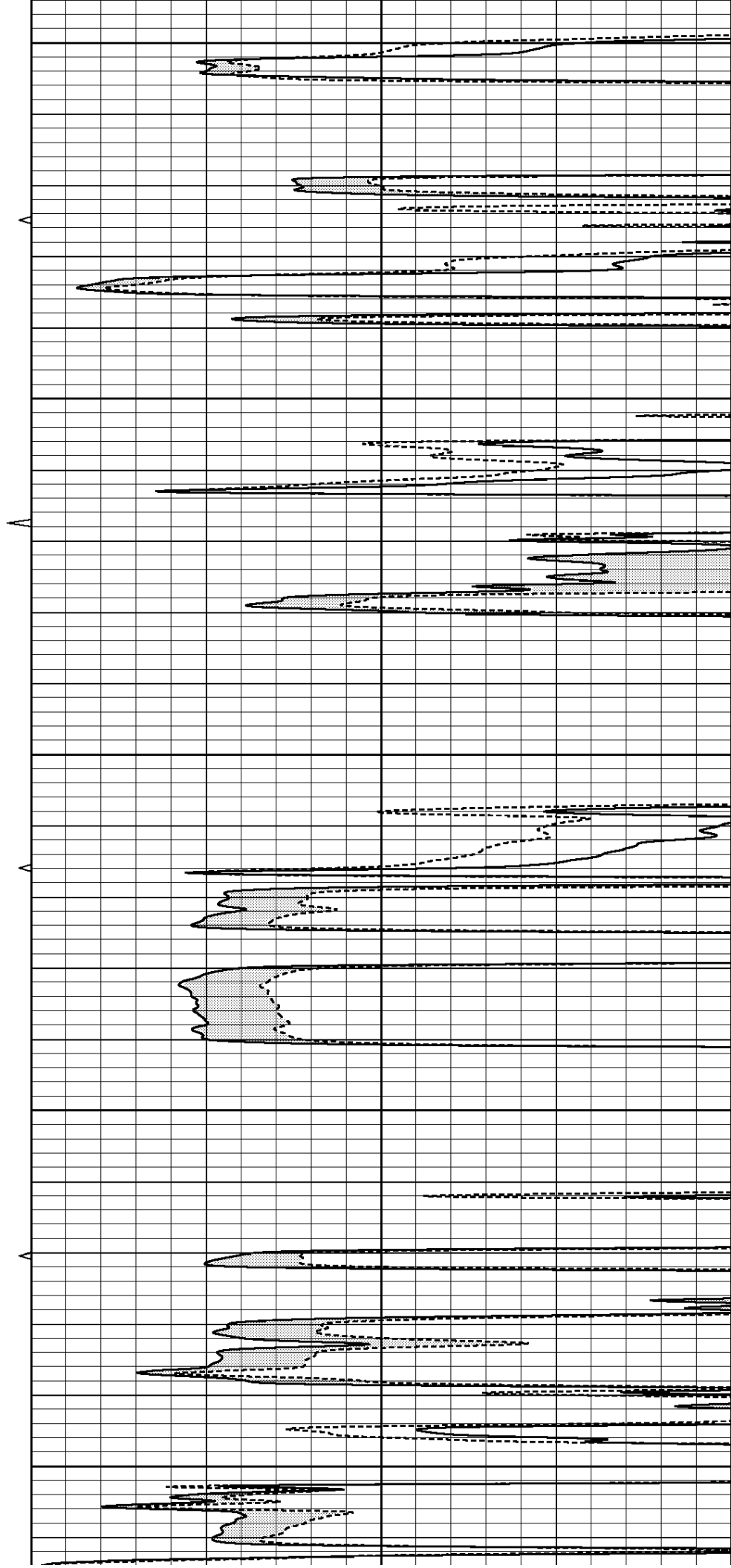
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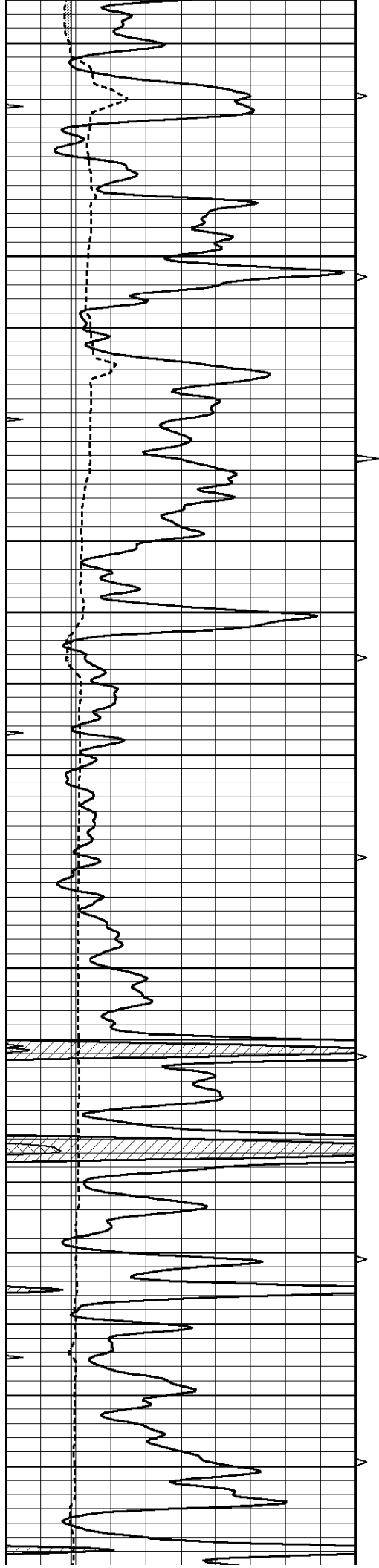
3950

4000

4050

4100



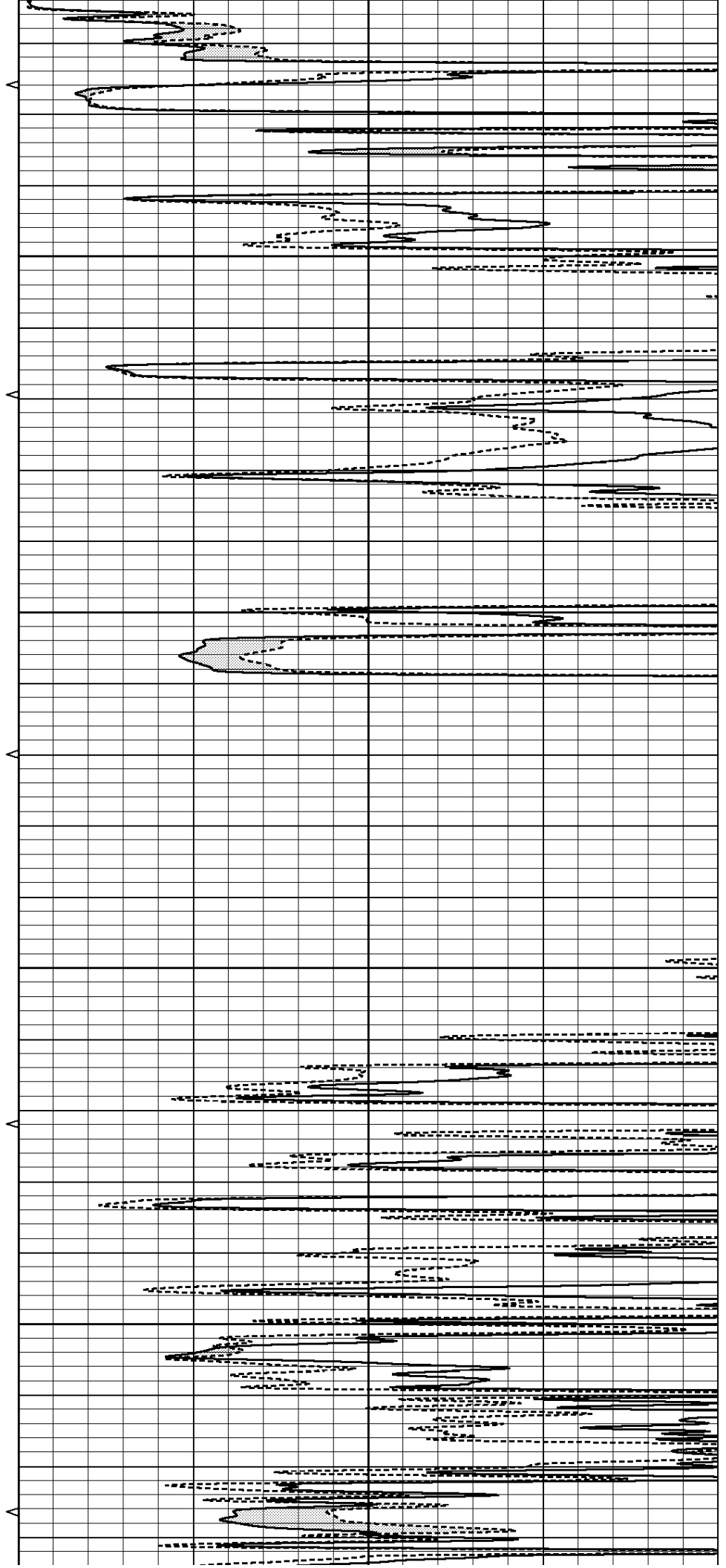


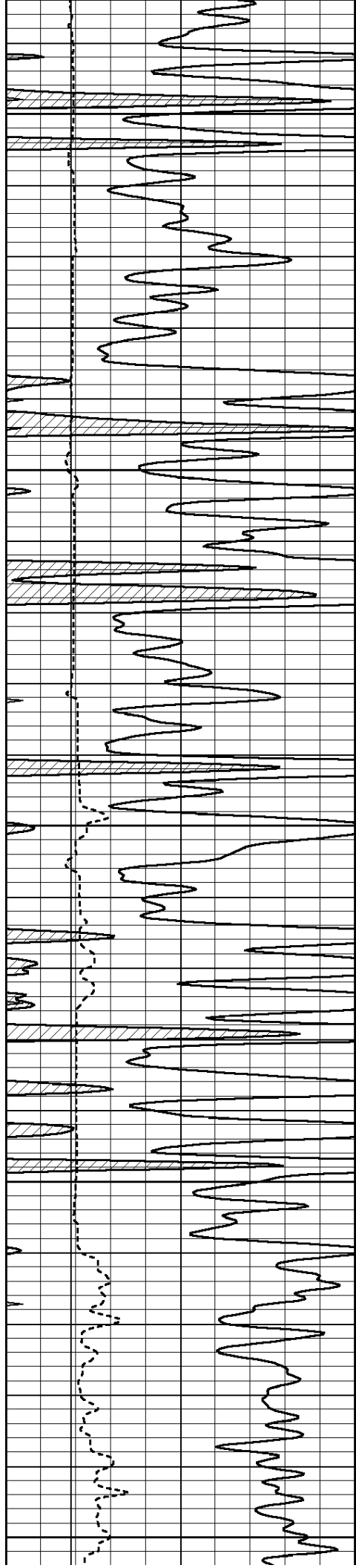
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4200

4250

4300





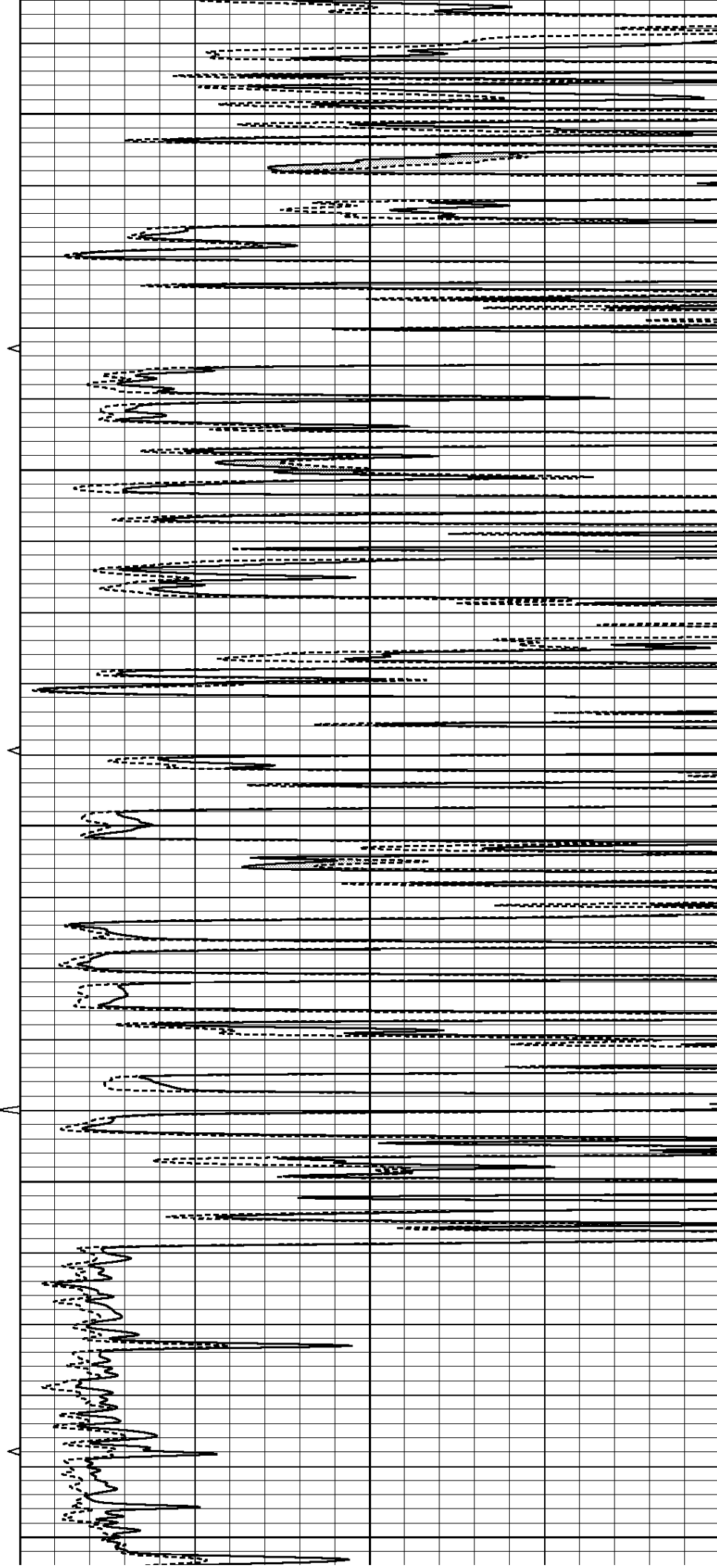
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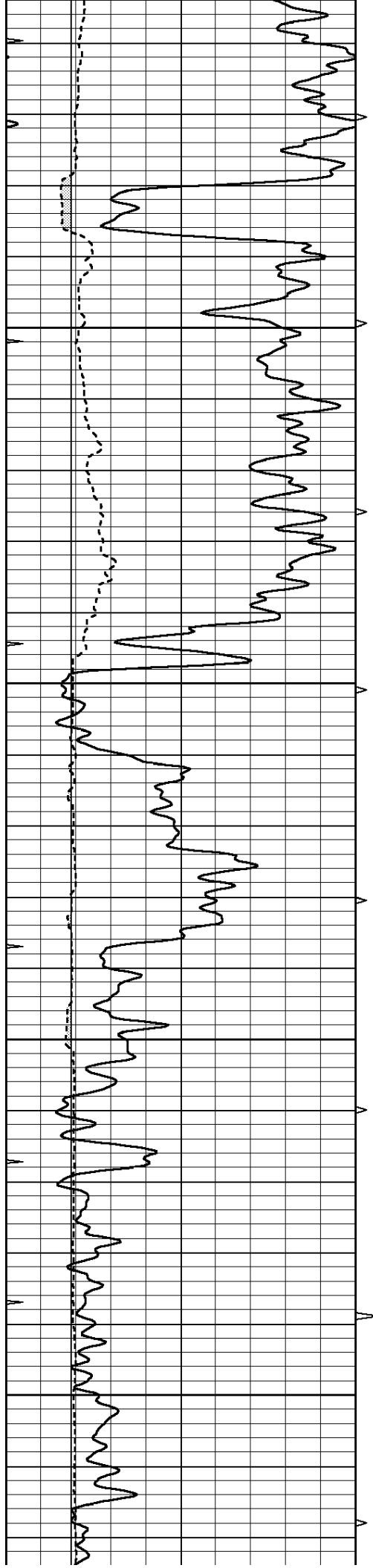
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4450

4500

4550



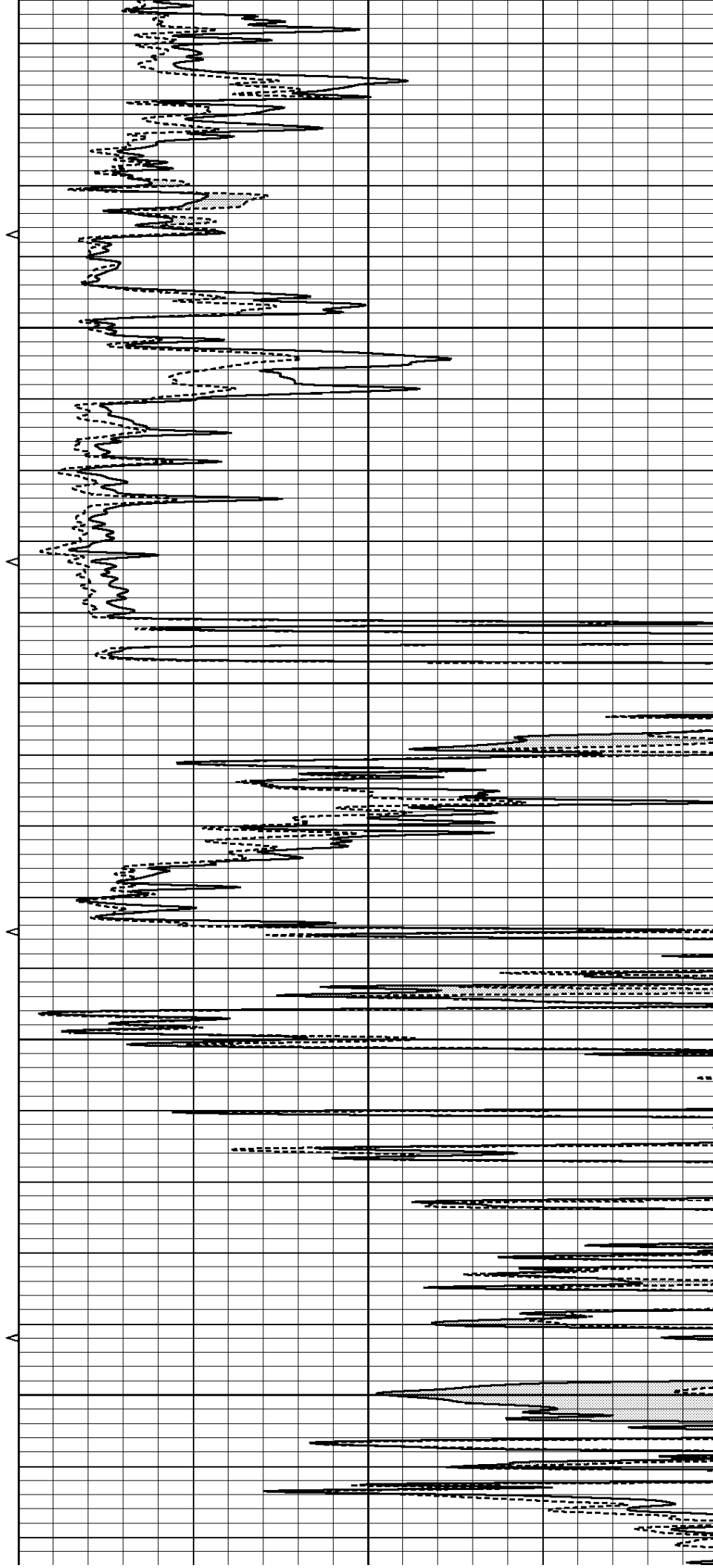


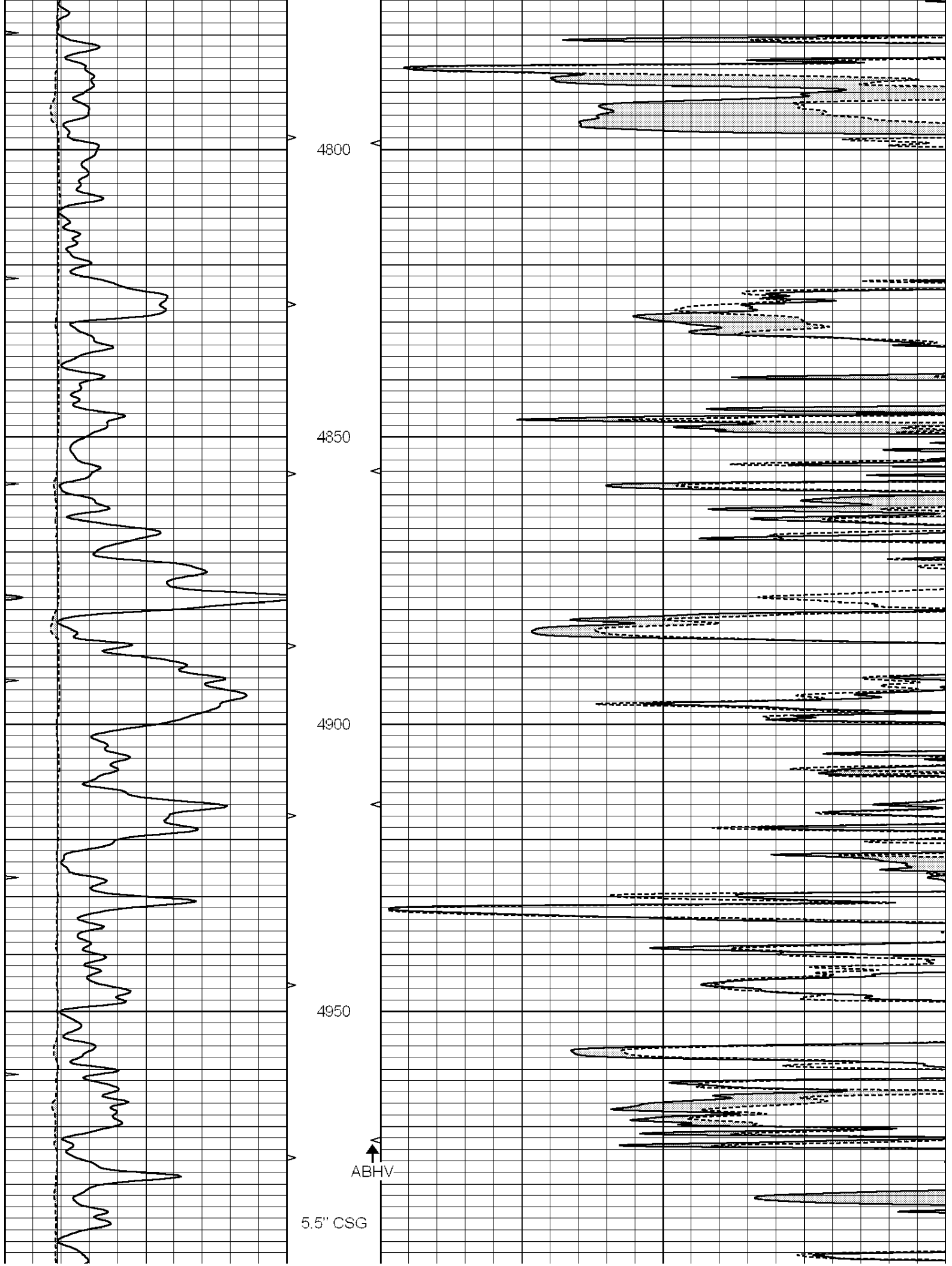
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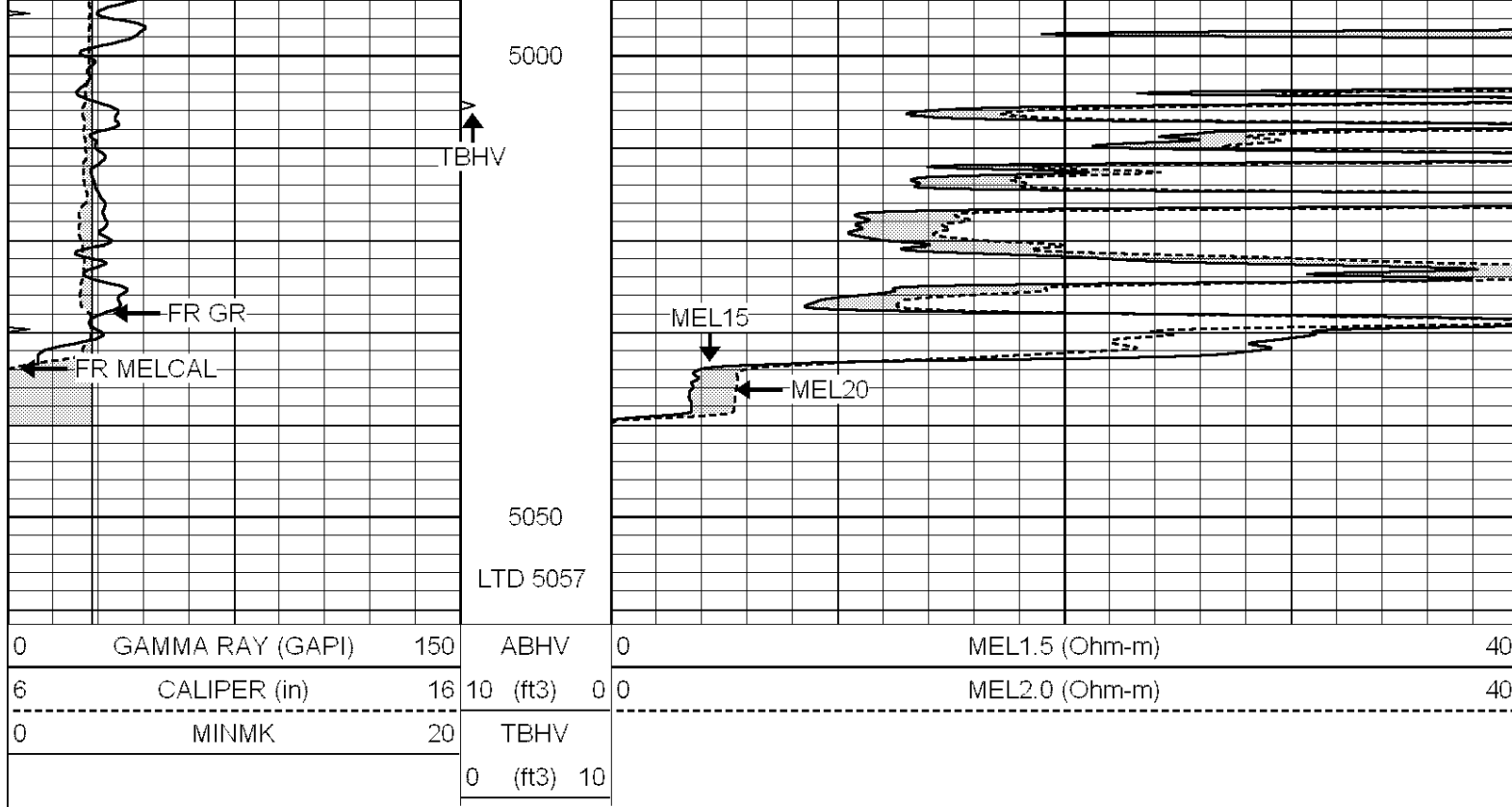
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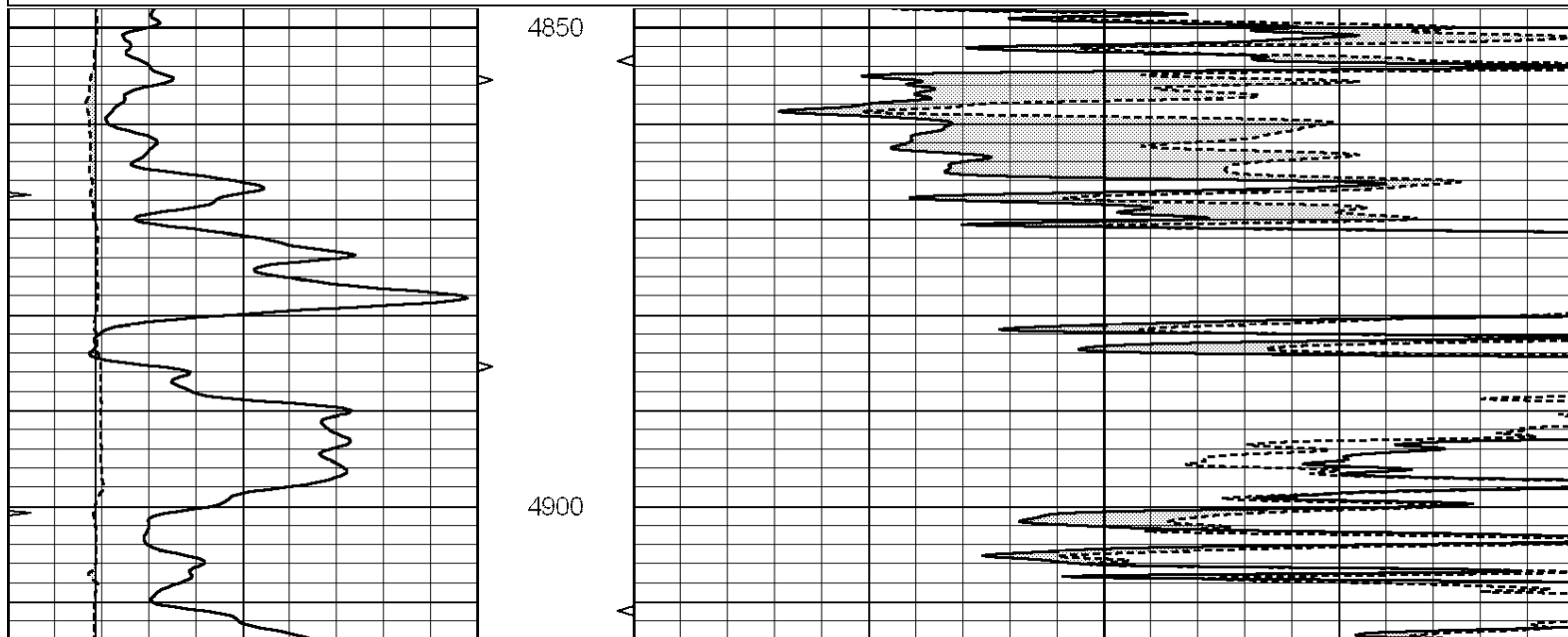


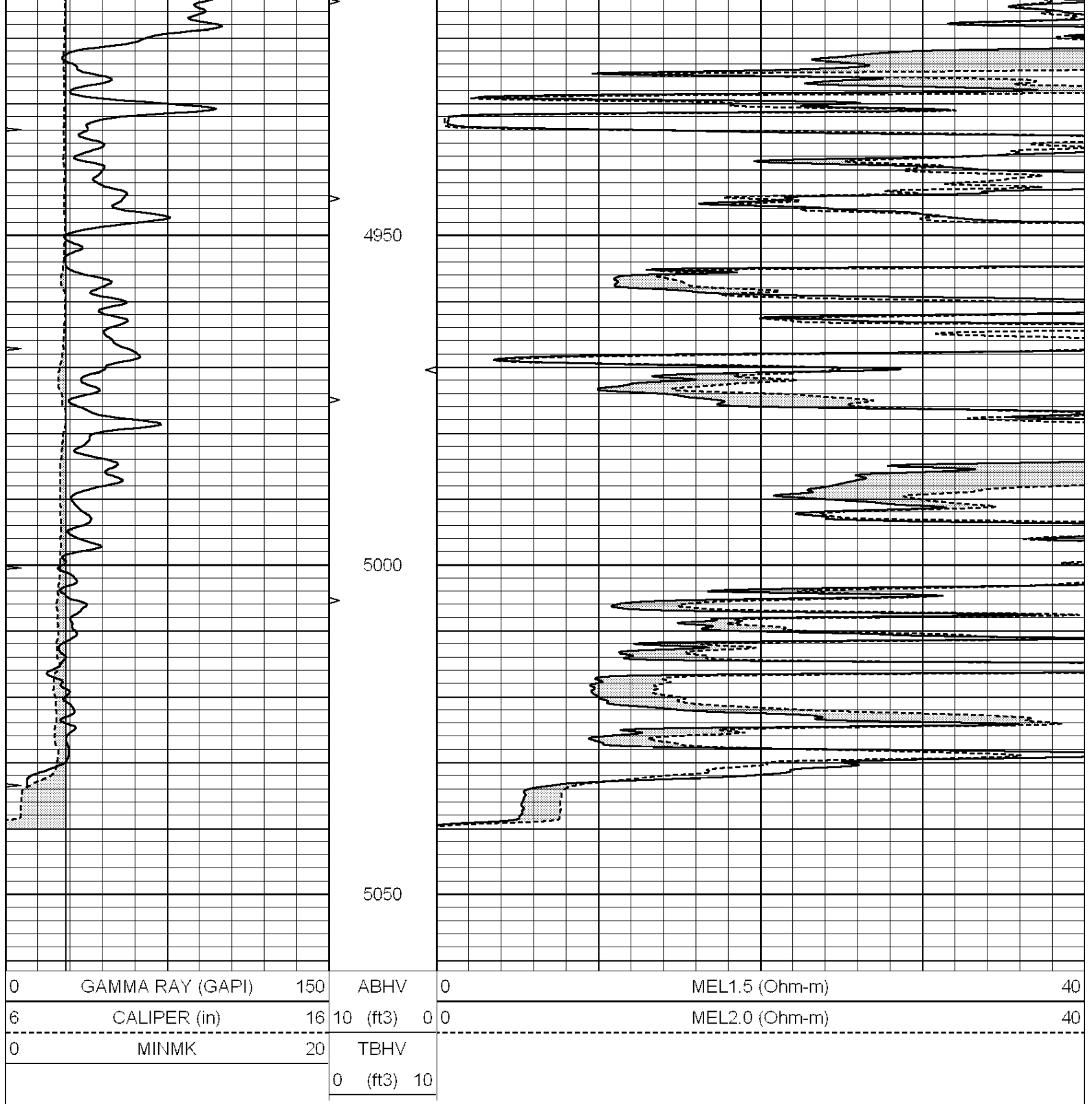
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# REPEAT SECTION

Database File: 006616ddn.db  
 Dataset Pathname: pass5.2  
 Presentation Format: micro  
 Dataset Creation: Fri Mar 18 20:38:39 2011 by Calc Open-Cased 090629  
 Charted by: Depth in Feet scaled 1:240

|   |                  |     |          |    |                |    |
|---|------------------|-----|----------|----|----------------|----|
| 0 | GAMMA RAY (GAPI) | 150 | ABHV     | 0  | MEL1.5 (Ohm-m) | 40 |
| 6 | CALIPER (in)     | 16  | 10 (ft3) | 0  | MEL2.0 (Ohm-m) | 40 |
| 0 | MINMK            | 20  | TBHV     |    |                |    |
|   |                  |     | 0 (ft3)  | 10 |                |    |





|                          |  |              |
|--------------------------|--|--------------|
| Calibration Report       |  |              |
| Database File:           | 006616ddn.db                                       |              |
| Dataset Pathname:        | pass5.2  |              |
| Dataset Creation:        | Fri Mar 18 20:38:39 2011 by Calc Open-Cased 090629 |              |
| MICRO Calibration Report |  |              |
| Serial Number:           | 2  |              |
| Tool Model:              | PROBE  |              |
| Performed:               | Mon Mar 14 15:36:10 2011                           |              |
| Caliper Calibration:     | Gain=4.809   | Offset=2.459 |
|                          | Low Cal  | High Cal     |
|                          | 0.000  | 1.000        |

|                              |                          |               |
|------------------------------|--------------------------|---------------|
| References                   | 6.300                    | 14.000        |
| Readings                     | 0.757                    | 2.358         |
| 1.5" Calibration:            | Gain=43.000              | Offset=-0.200 |
| References                   | Low Cal                  | High Cal      |
| Readings                     | 0.000                    | 20.000        |
|                              | 0.065                    | 1.210         |
| 2" Calibration:              | Gain=50.000              | Offset=0.000  |
| References                   | Low Cal                  | High Cal      |
| Readings                     | 0.000                    | 20.000        |
|                              | 0.012                    | 1.043         |
| Gamma Ray Calibration Report |                          |               |
| Serial Number:               | GR4                      |               |
| Tool Model:                  | OPEN                     |               |
| Performed:                   | Wed Mar 16 12:55:45 2011 |               |
| Calibrator Value:            | 200.0                    | GAPI          |
| Background Reading:          | 0.0                      | cps           |
| Calibrator Reading:          | 189.0                    | cps           |
| Sensitivity:                 | 1.3000                   | GAPI/cps      |