



**COMPLETION  
& PRODUCTION  
SERVICES CO.**

**MICRO  
LOG**

Company MULL DRILLING CO. INC.  
Well JOY #1-1  
Field WILDCAT  
County WICHITA  
State KANSAS

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Well JOY #1-1  
Field WILDCAT  
County WICHITA  
State KANSAS

Location: API # : 15-203-20255-0000  
396' FSL 1852' FEL  
SW/4 - SE/4  
SEC 1 TWP 16S RGE 38W  
Permanent Datum GROUND LEVEL Elevation 3419  
Log Measured From KELLY BUSHING 9' A.G.L.  
Drilling Measured From KELLY BUSHING  
Other Services  
CDL/CNL/PE  
DIL/SON  
Elevation  
K.B. 3428  
D.F. 3426  
G.L. 3419

|                              |               |
|------------------------------|---------------|
| Date                         | 5/16/14       |
| Run Number                   | TWO           |
| Depth Driller                | 5395          |
| Depth Logger                 | 5397          |
| Bottom Logged Interval       | 5379          |
| Top Log Interval             | 3600          |
| Casing Driller               | 8 5/8"@219'   |
| Casing Logger                | 219'          |
| Bit Size                     | 7 7/8"        |
| Type Fluid in Hole           | CHEMICAL MUD  |
| Density / Viscosity          | 9.1/52        |
| pH / Fluid Loss              | 9.0/10.0      |
| Source of Sample             | FLOWLINE      |
| Rim @ Meas. Temp             | .50@82F       |
| Rmf @ Meas. Temp             | .38@82F       |
| Rmc @ Meas. Temp             | .60@82F       |
| Source of Rmf / Rmc          | MEASUREMENT   |
| Rim @ BHT                    | .32@129F      |
| Time Circulation Stopped     | 2 HOURS       |
| Time Logger on Bottom        |               |
| Maximum Recorded Temperature | 129F          |
| Equipment Number             | 4854          |
| Location                     | HAYS, KANSAS  |
| Recorded By                  | JEFF GRONEMEG |
| Witnessed By                 | STEVE REED    |

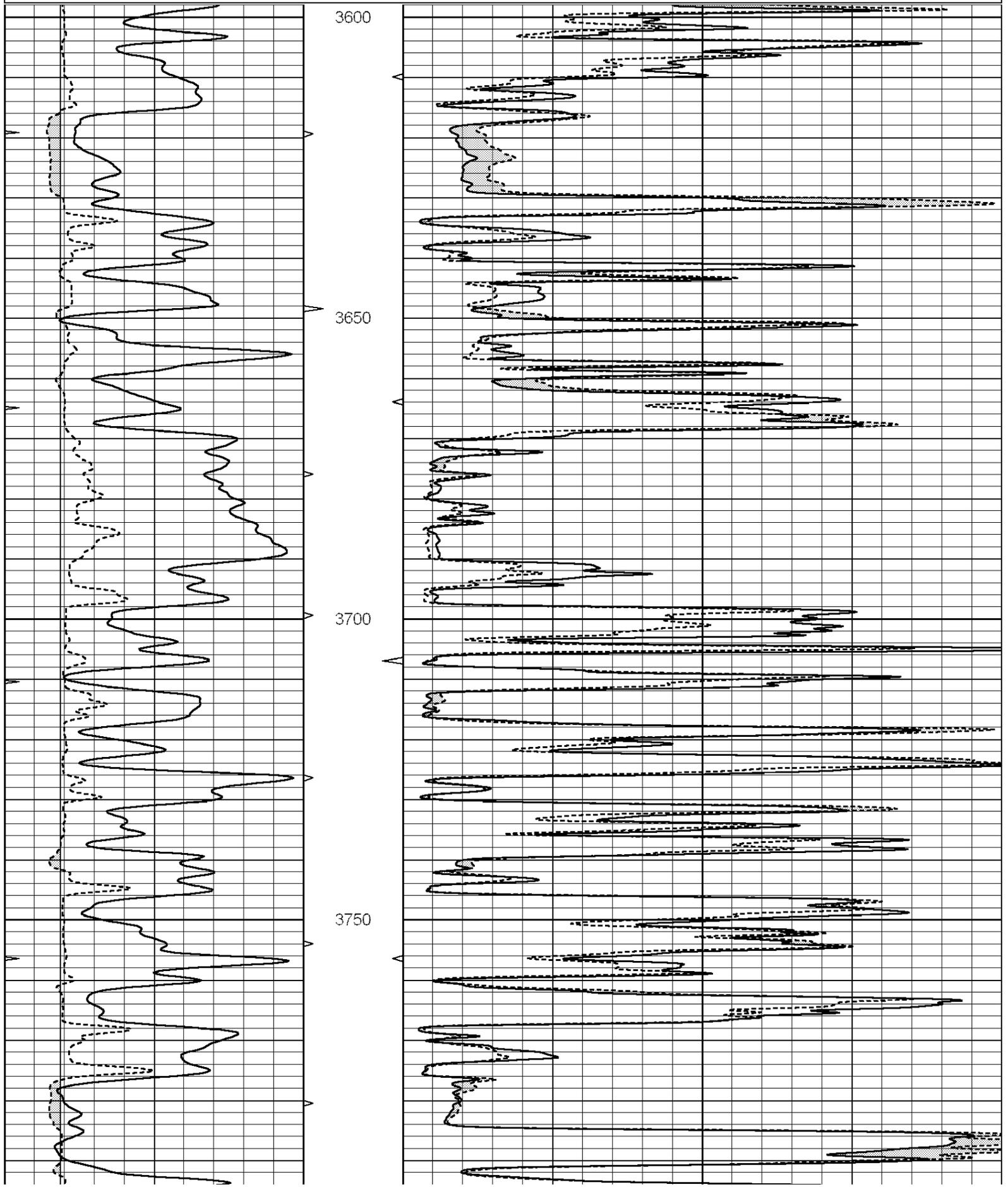
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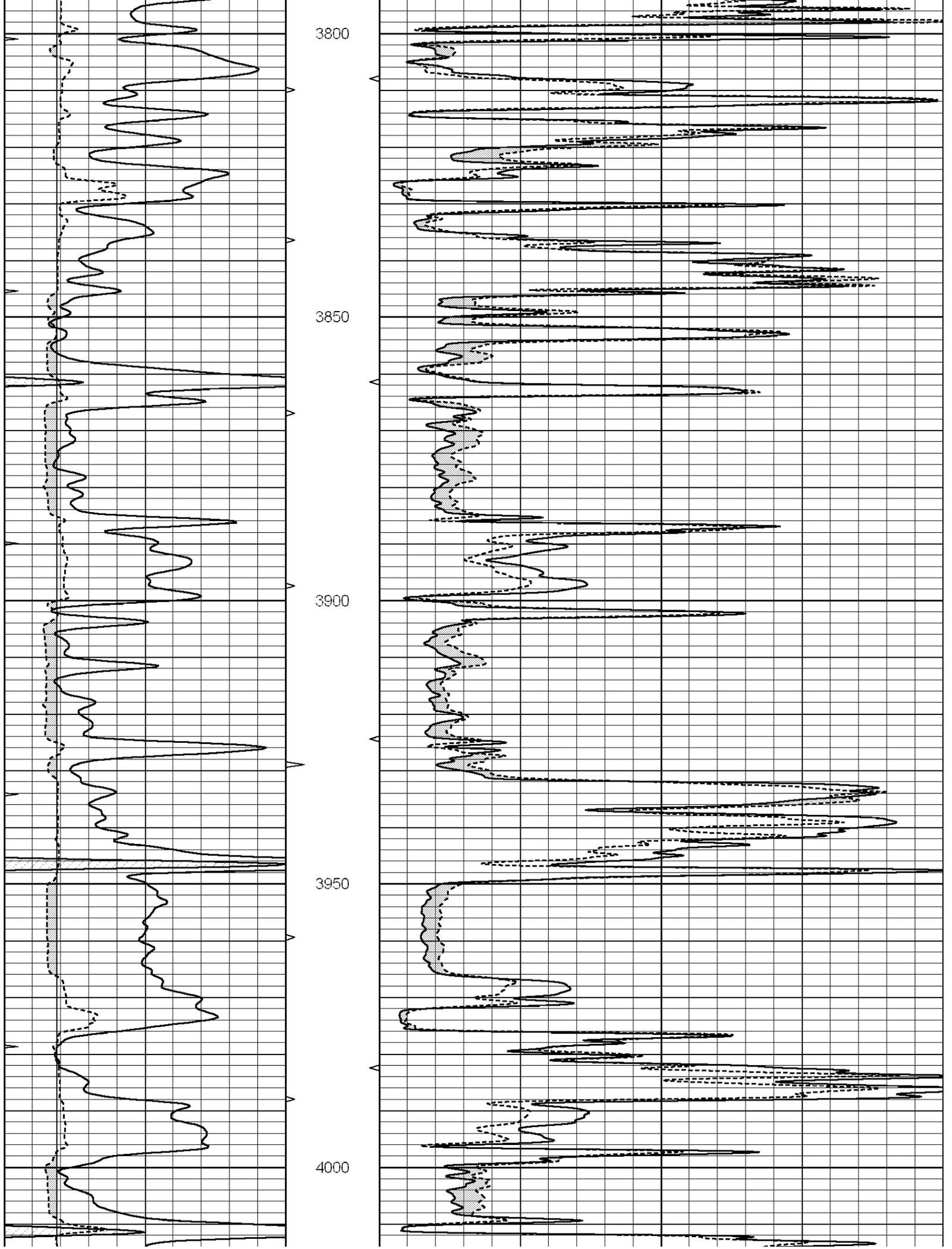
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

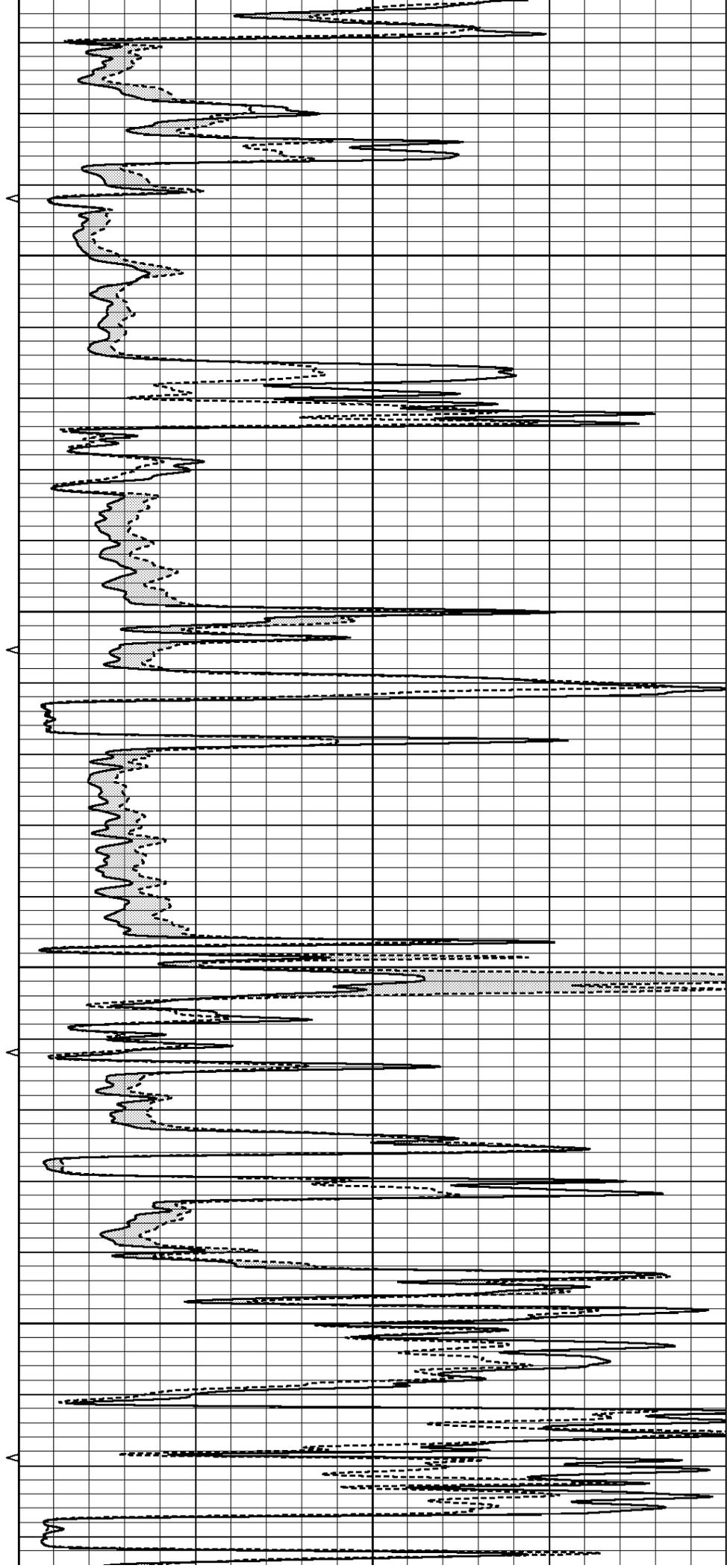
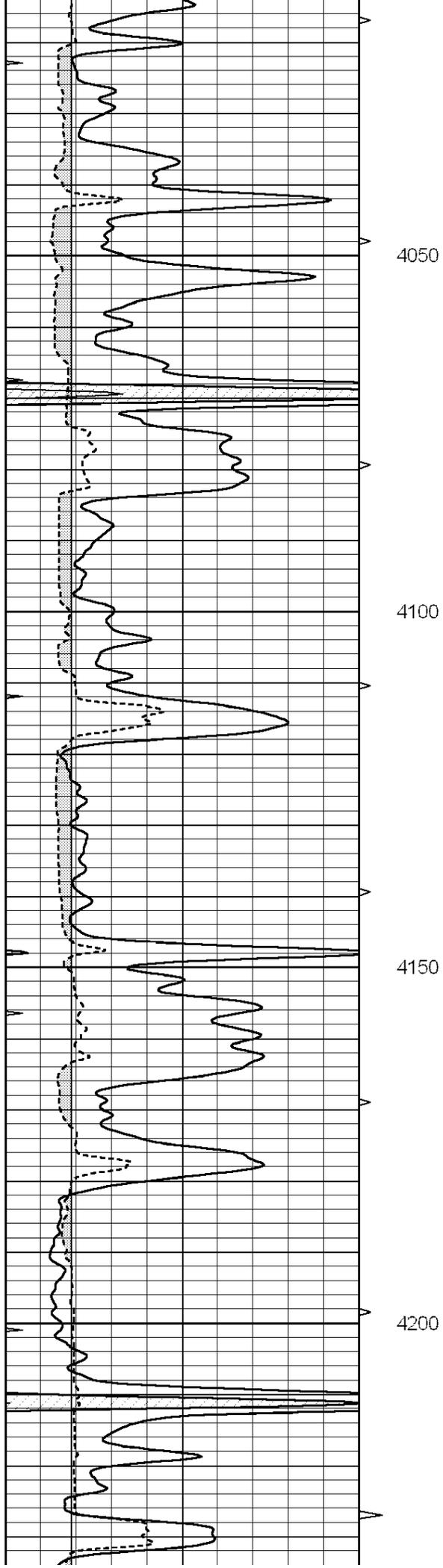
**Comments**

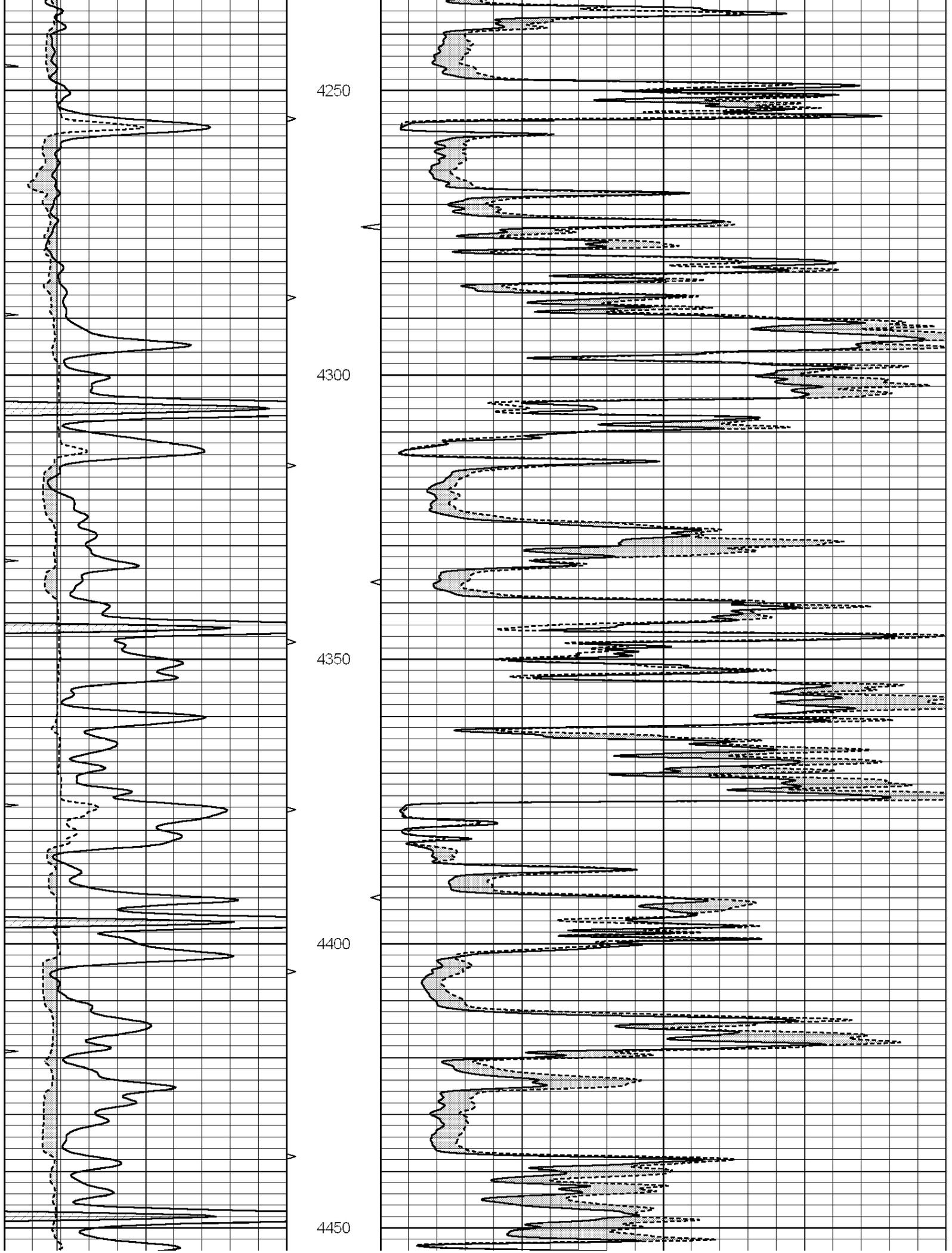
THANK YOU FOR USING "NABORS" HAYS, KANSAS (785) 628-6395  
DIRECTIONS  
RUSSELL SPRINGS, KS - SOUTH TO LOGAN/WICHITA COUNTY LINE  
1 MILE SOUTH TO RD B  
5 MILES WEST - NORTH INTO

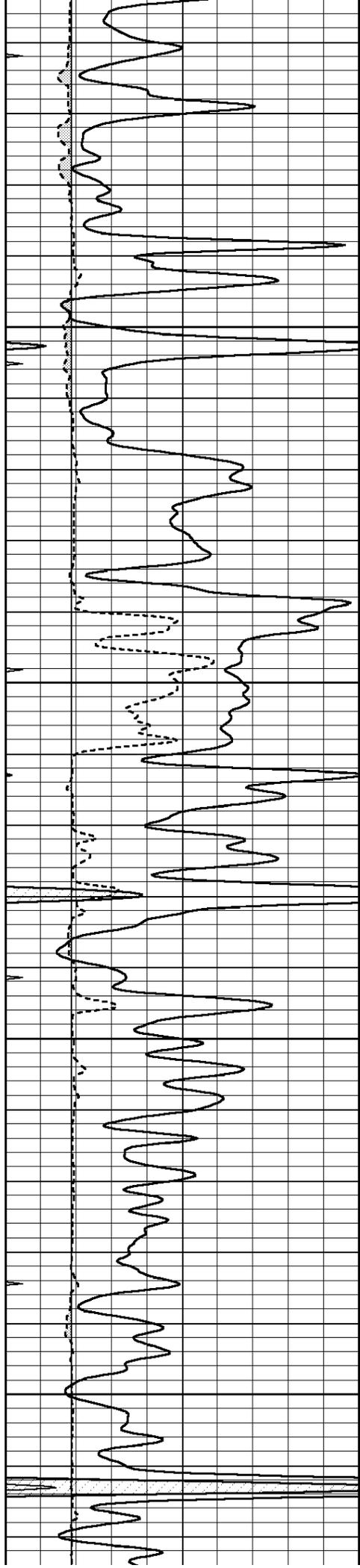
|   |                  |     |          |     |                |    |
|---|------------------|-----|----------|-----|----------------|----|
| 0 | GAMMA RAY (GAPI) | 150 | ABHV     | 0   | MEL1.5 (Ohm-m) | 40 |
| 6 | CALIPER (in)     | 16  | 10 (ft3) | 0 0 | MEL2.0 (Ohm-m) | 40 |
| 0 | MINMK         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









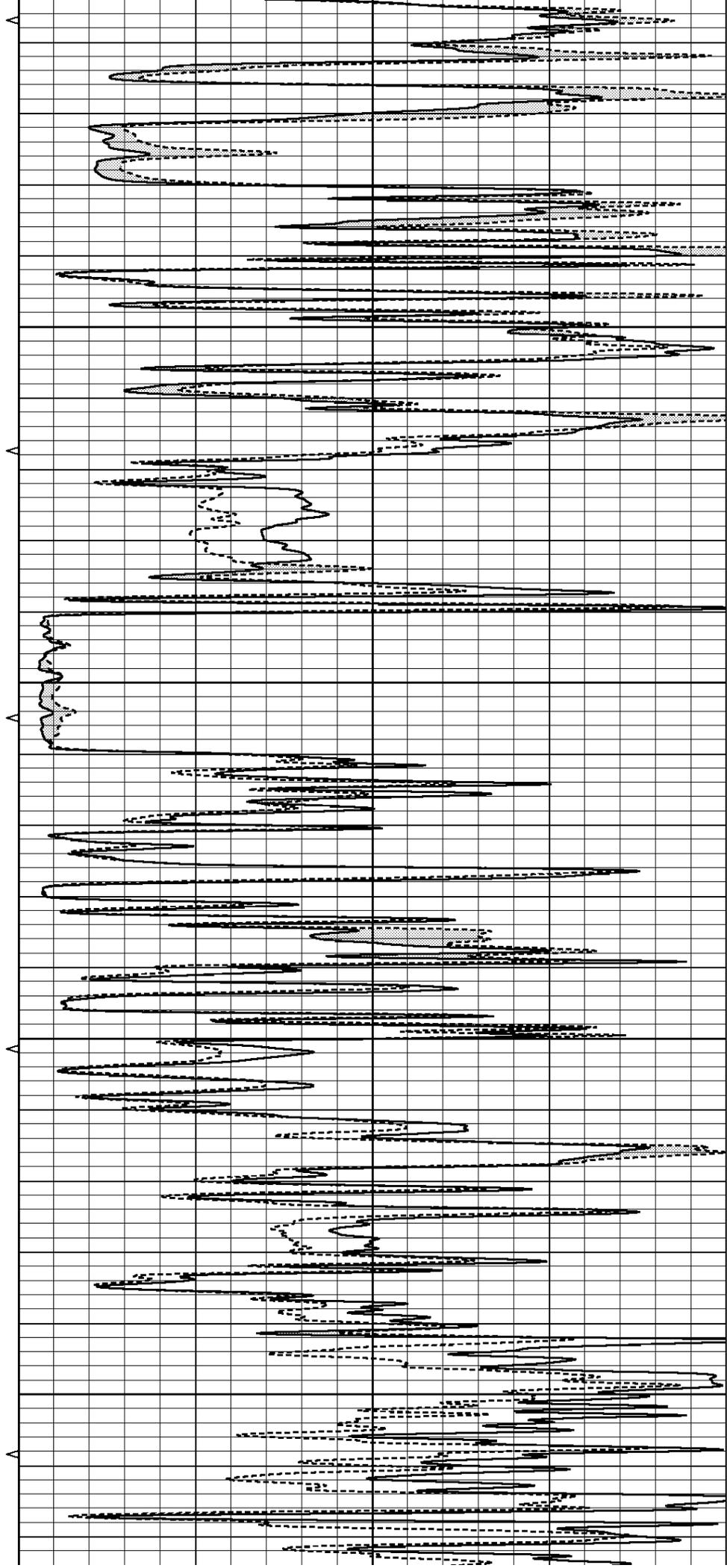


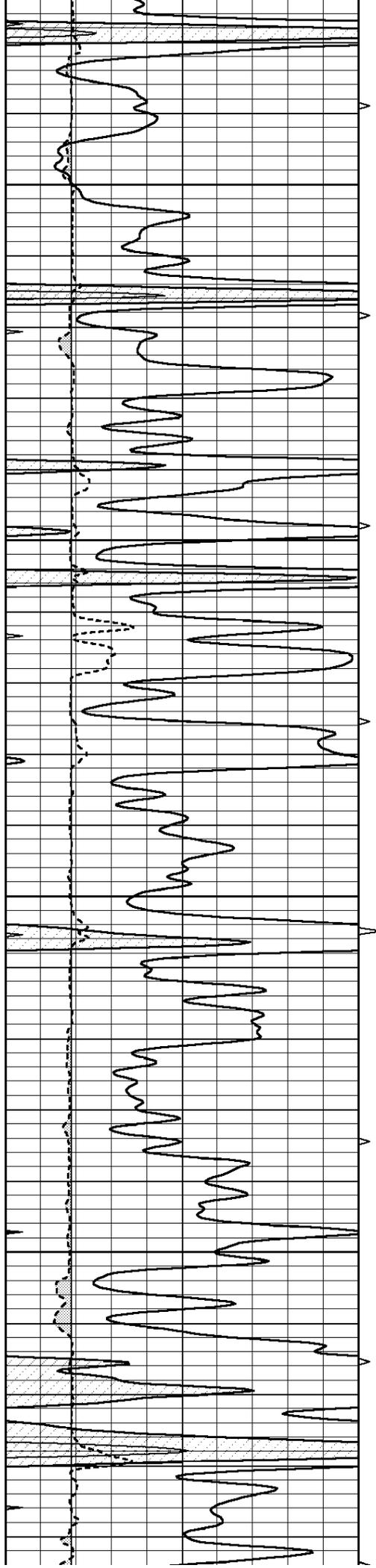
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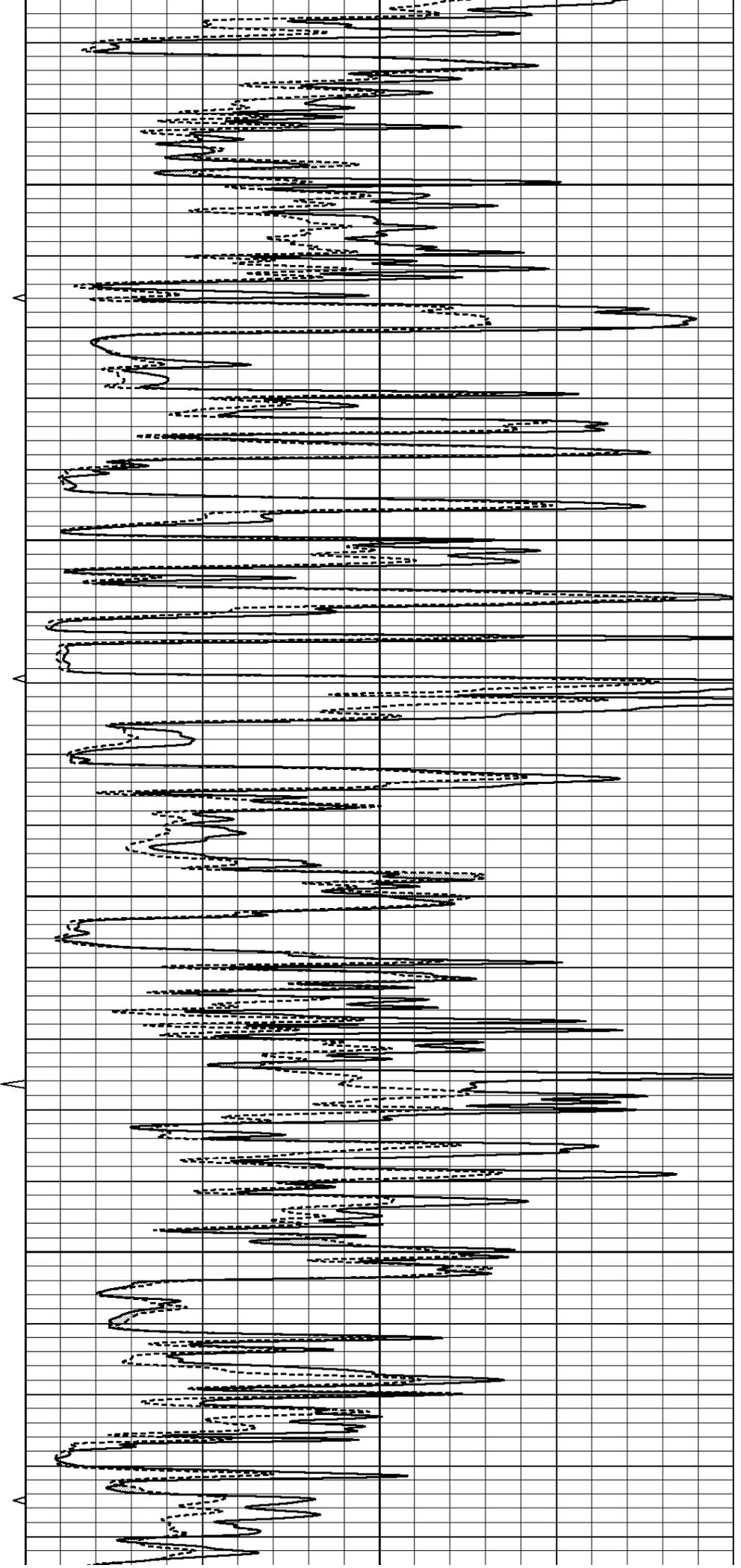


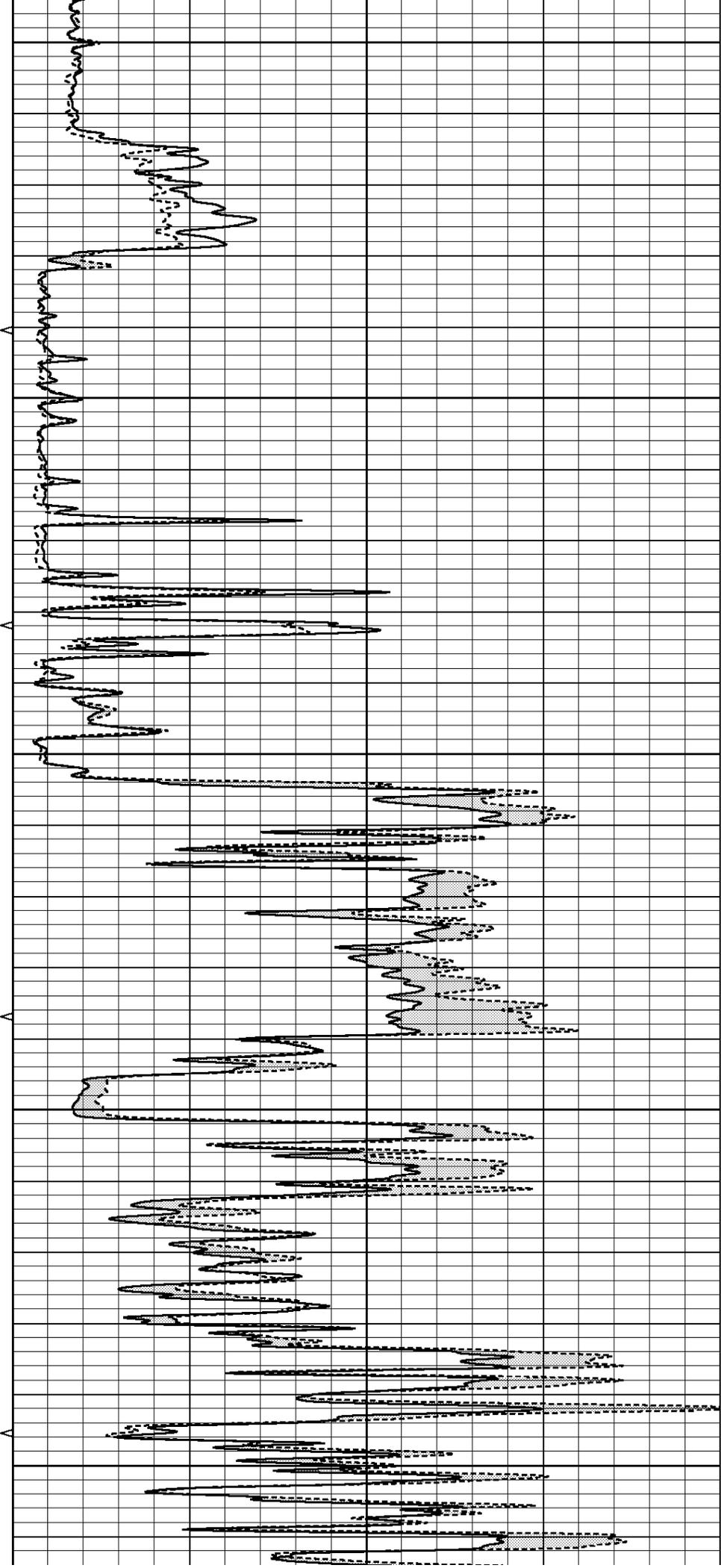
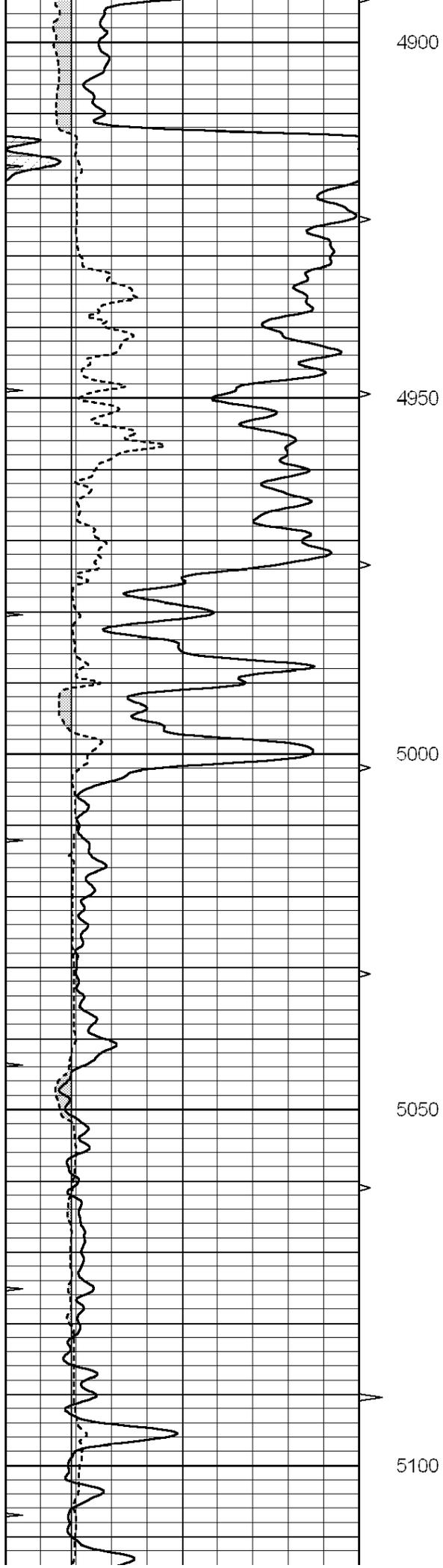
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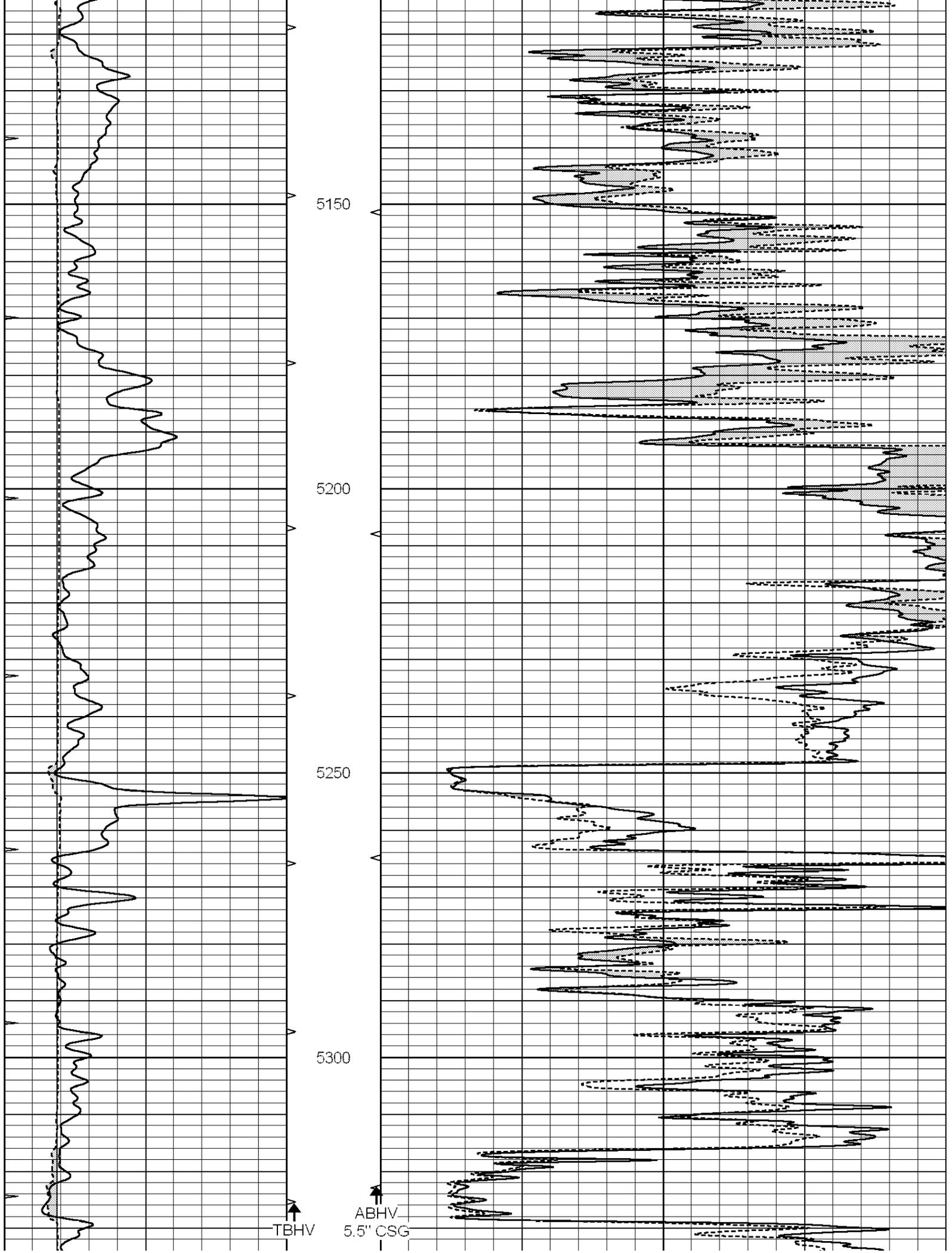
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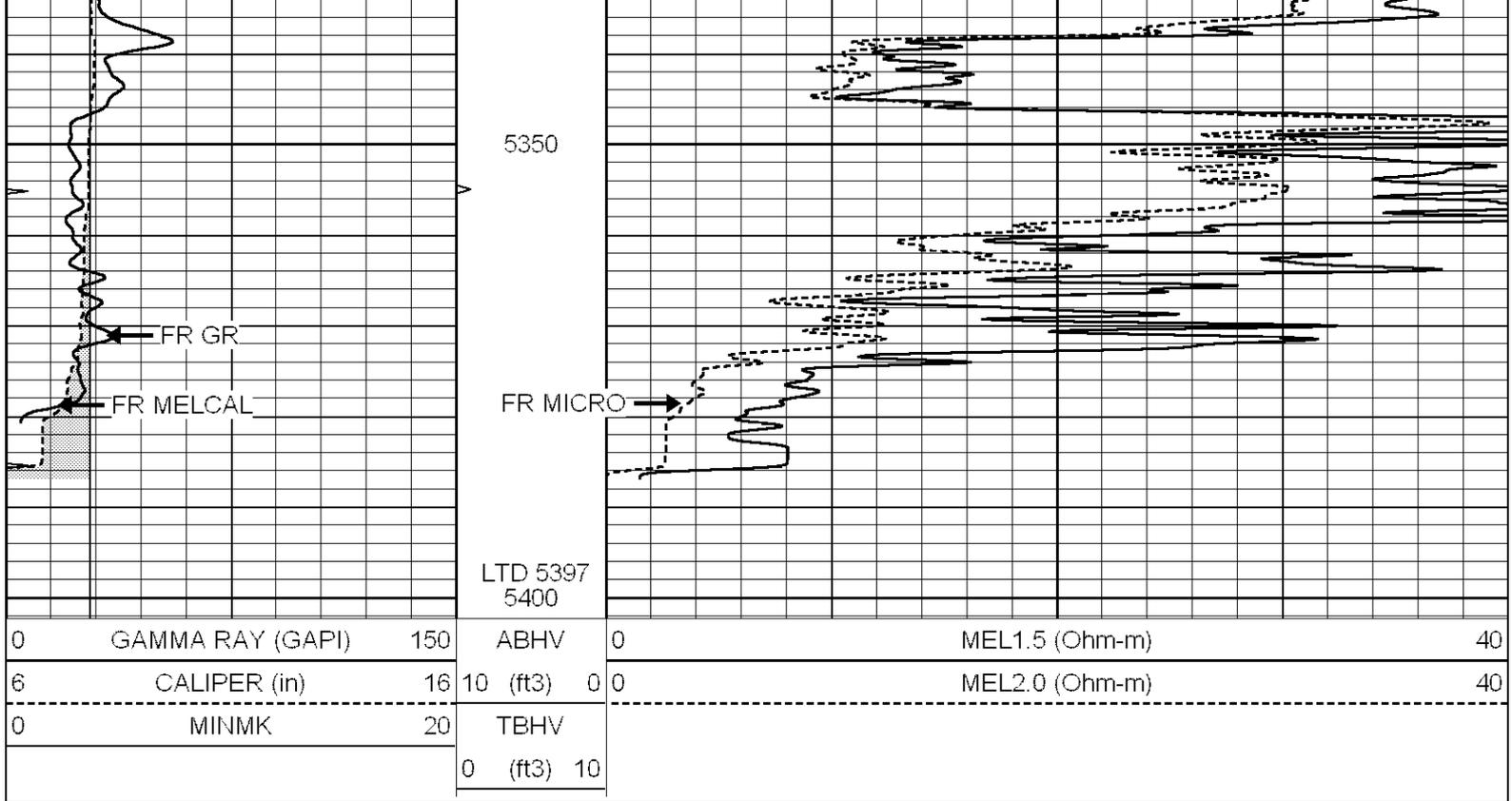
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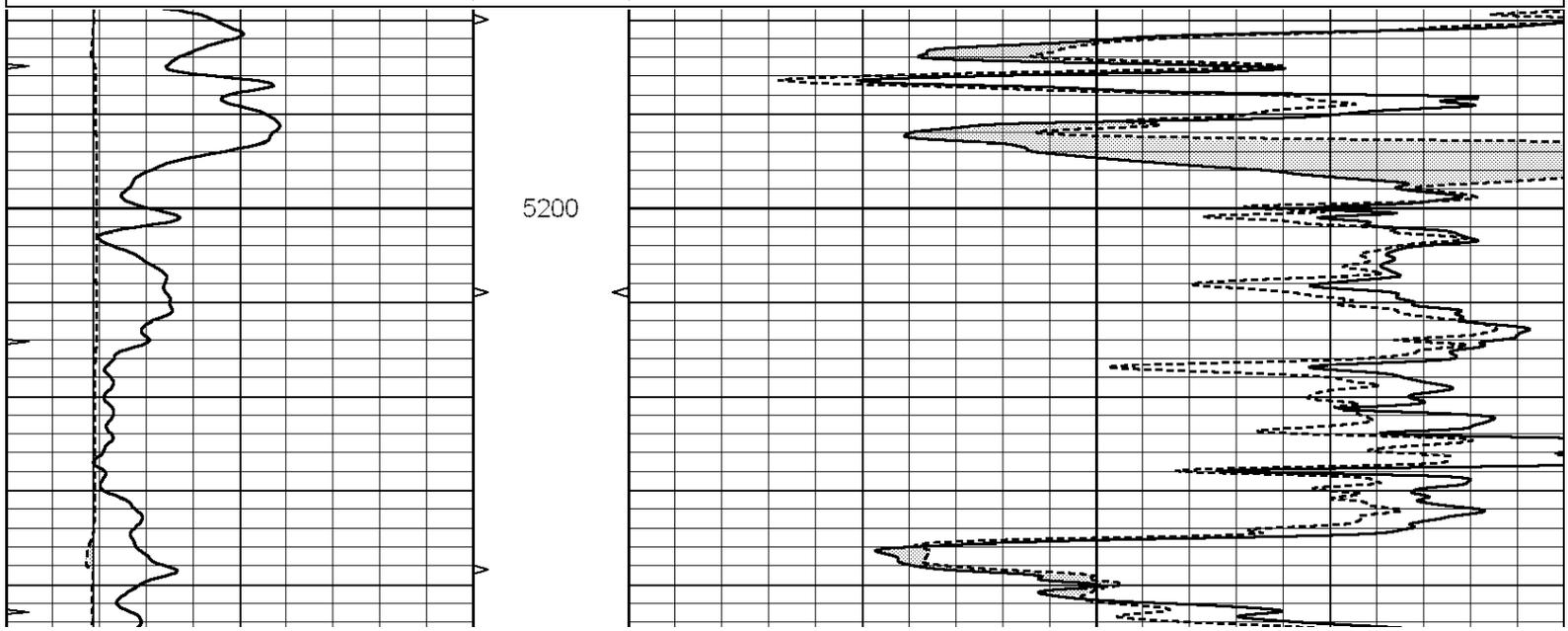


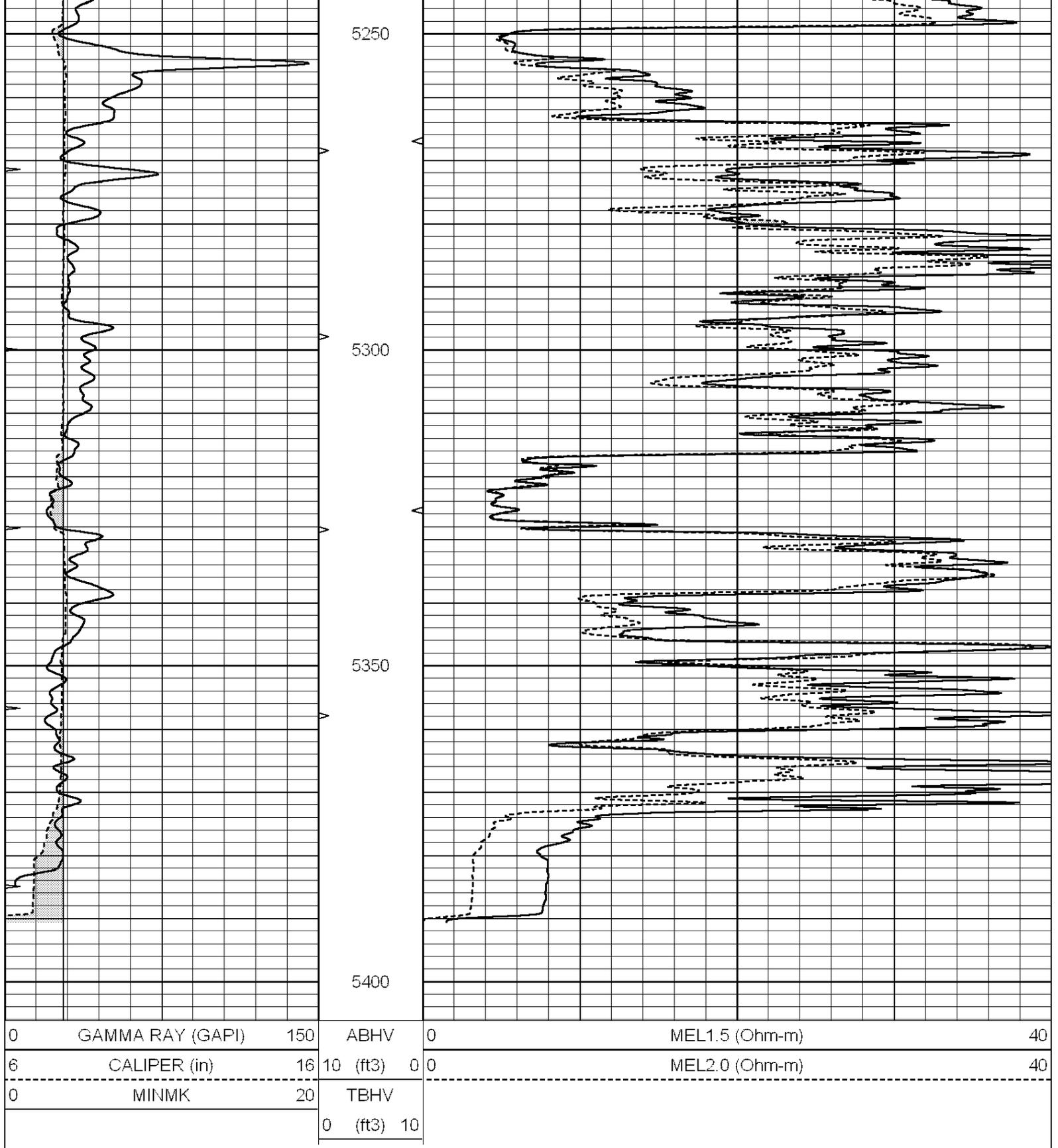


# REPEAT SECTION

Database File: 24155pe.db  
 Dataset Pathname: pass5.1  
 Presentation Format: \_micro  
 Dataset Creation: Fri May 16 17:21:47 2014 by Calc SOC 120430  
 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  |                |    |





Calibration Report

Database File: 24155pe.db  
 Dataset Pathname: pass6.1.2  
 Dataset Creation: Fri May 16 17:17:04 2014 by Calc SOC 120430

MICRO Calibration Report

Serial Number: 070911  
 Tool Model: ProbeN  
 Performed: Wed May 14 01:34:49 2014

|                              |                          |                    |
|------------------------------|--------------------------|--------------------|
| Caliper Calibration:         | Gain=3.867               | Offset=2.545       |
| References                   | Low Cal<br>7.500         | High Cal<br>15.000 |
| Readings                     | 1.281                    | 3.221              |
| 1.5" Calibration:            | Gain=80.000              | Offset=1.500       |
| References                   | Low Cal<br>0.000         | High Cal<br>20.000 |
| Readings                     | 0.001                    | 1.274              |
| 2" Calibration:              | Gain=35.000              | Offset=0.000       |
| References                   | Low Cal<br>0.000         | High Cal<br>20.000 |
| Readings                     | 0.003                    | 1.107              |
| Gamma Ray Calibration Report |                          |                    |
| Serial Number:               | 070559                   |                    |
| Tool Model:                  | OPEN_GR                  |                    |
| Performed:                   | Thu May 15 09:17:20 2014 |                    |
| Calibrator Value:            | 1.0                      | GAPI               |
| Background Reading:          | 0.0                      | cps                |
| Calibrator Reading:          | 1.0                      | cps                |
| Sensitivity:                 | 0.2200                   | GAPI/cps           |