



# NABORS

**COMPLETION  
& PRODUCTION  
SERVICES CO.**

## DUAL INDUCTION LOG

|                                   |                                                                                                           |                                                                               |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Company                           | RITCHIE EXPLORATION, INC.                                                                                 |                                                                               |
| Well                              | #2 BAKER CD                                                                                               |                                                                               |
| Field                             | BEAVER CLIFF                                                                                              |                                                                               |
| County                            | WICHITA                                                                                                   | State KANSAS                                                                  |
| Location:                         | API # : 15-203-20252-0000<br>1840' FSL & 2105' FEL<br>140S & 125W OF<br>NW - SE<br>SEC 13 TWP 17S RGE 35W |                                                                               |
| Permanent Datum Log Measured From | GROUND LEVEL<br>KELLY BUSHING 5' A.G.L.                                                                   | Elevation 3144                                                                |
| Drilling Measured From            | KELLY BUSHING                                                                                             | Other Services<br>CDL/CNL<br>Elevation<br>K.B. 3149<br>D.F. 3147<br>G.L. 3144 |
| Date                              | 11/16/13                                                                                                  |                                                                               |
| Run Number                        | ONE                                                                                                       |                                                                               |
| Depth Driller                     | 5035                                                                                                      |                                                                               |
| Depth Logger                      | 5038                                                                                                      |                                                                               |
| Bottom Logged Interval            | 5036                                                                                                      |                                                                               |
| Top Log Interval                  | 0                                                                                                         |                                                                               |
| Casing Driller                    | 8 5/8" @ 222                                                                                              |                                                                               |
| Casing Logger                     |                                                                                                           |                                                                               |
| Bit Size                          | 7 7/8                                                                                                     |                                                                               |
| Type Fluid in Hole                | CHEMICAL MUD                                                                                              | CHLORIDES 3500 PPM                                                            |
| Density / Viscosity               | 9.3 / 54                                                                                                  |                                                                               |
| pH / Fluid Loss                   | 10.0 / 8.8                                                                                                |                                                                               |
| Source of Sample                  | FLOWLINE                                                                                                  |                                                                               |
| Rin @ Meas. Temp                  | 0.60 @ 74F                                                                                                |                                                                               |
| Rmf @ Meas. Temp                  | 0.45 @ 74F                                                                                                |                                                                               |
| Rmc @ Meas. Temp                  | 0.72 @ 74F                                                                                                |                                                                               |
| Source of Rmf / Rmc               | MEASURED                                                                                                  |                                                                               |
| Rin @ BHT                         | 0.34 @ 125F                                                                                               |                                                                               |
| Time Circulation Stopped          | 2 HOURS                                                                                                   |                                                                               |
| Time Logger on Bottom             |                                                                                                           |                                                                               |
| Maximum Recorded Temperature      | 125F                                                                                                      |                                                                               |
| Equipment Number                  | 680                                                                                                       |                                                                               |
| Location                          | HAYS, KS.                                                                                                 |                                                                               |
| Recorded By                       | JEFF GRONEMEG                                                                                             |                                                                               |
| Witnessed By                      | ADAM ELDANI                                                                                               |                                                                               |

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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

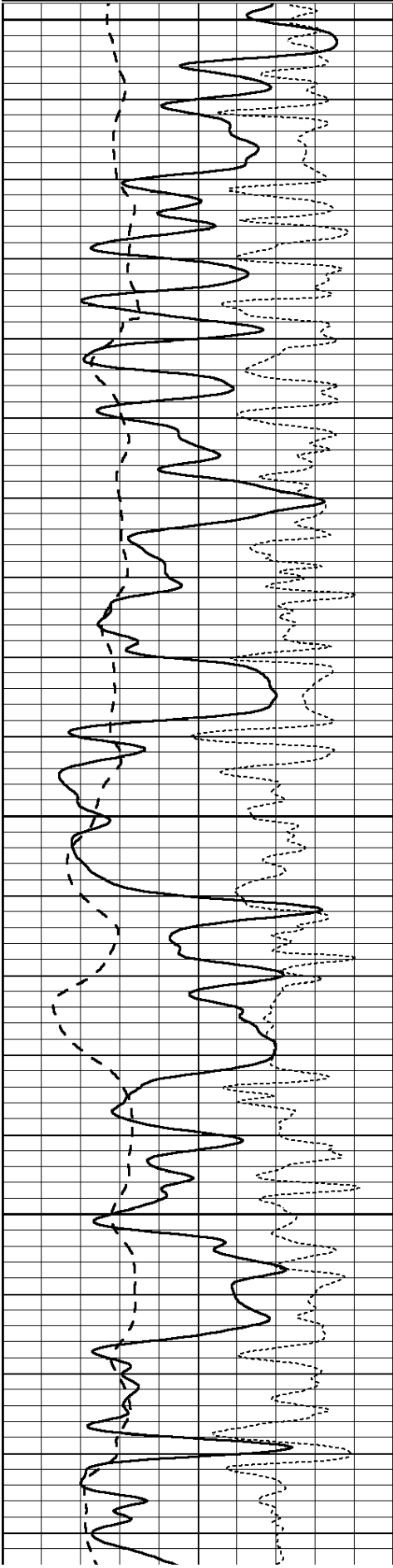
THANK YOU FOR USING NABORS COMPLETION & PRODUCTION SVCS. (785) 628-6395

### DIRECTIONS:

SCOTT CITY, KS - WEST TO SCOTTWICHITA COUNTY LINE - 5 MILES NORTH TO RD J  
1/4 MILE WEST - NORTH INTO

|      |                  |     |
|------|------------------|-----|
| 0    | GAMMA RAY (GAPI) | 150 |
| -100 | SP (mV)          | 100 |
| -250 | Rxo/Rt           | 50  |

|     |                          |      |
|-----|--------------------------|------|
| 0.2 | SHALLOW GUARD (Ohm-m)    | 2000 |
| 0.2 | MEDIUM INDUCTION (Ohm-m) | 2000 |
| 0.2 | DEEP INDUCTION (Ohm-m)   | 2000 |

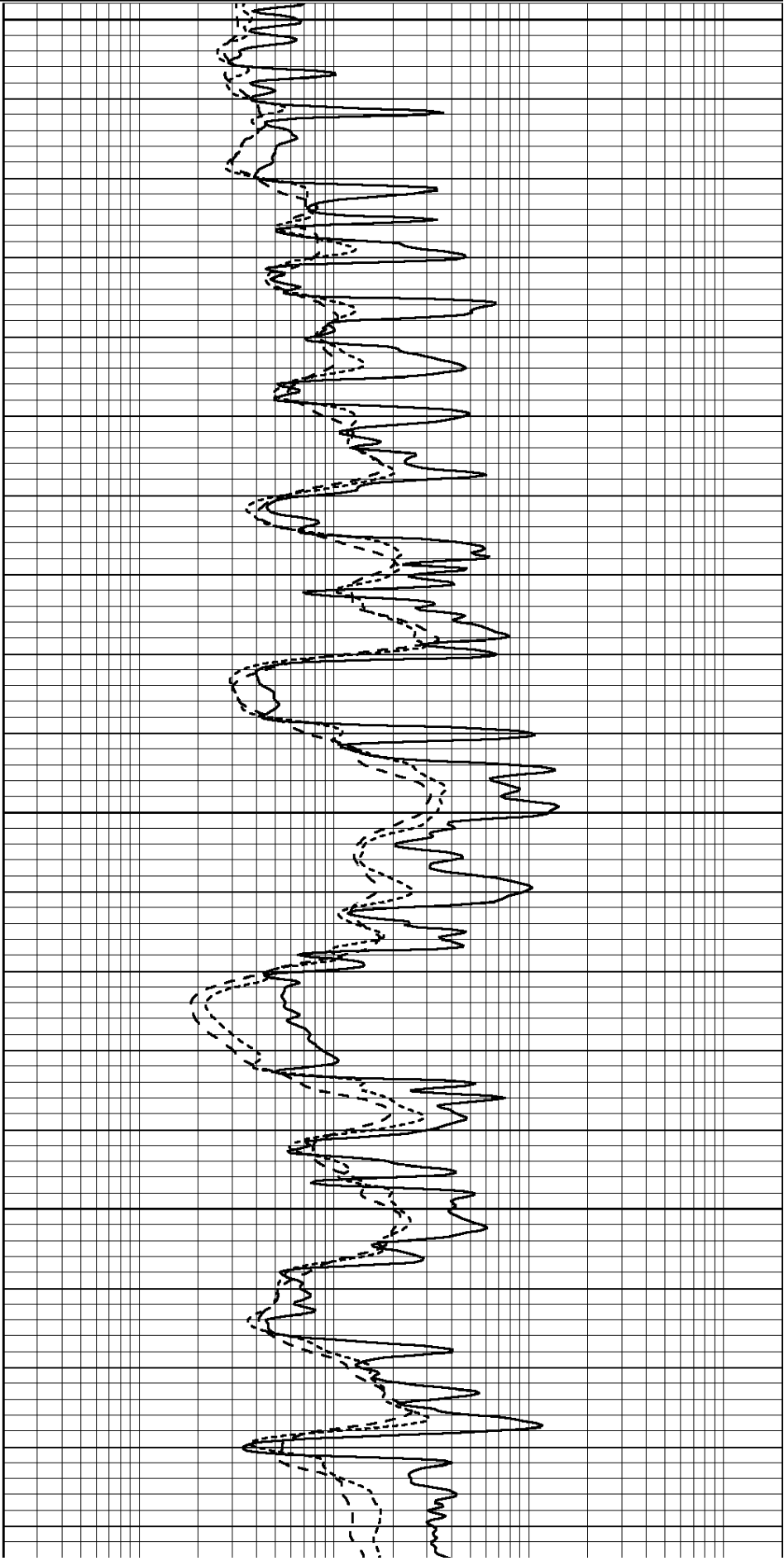


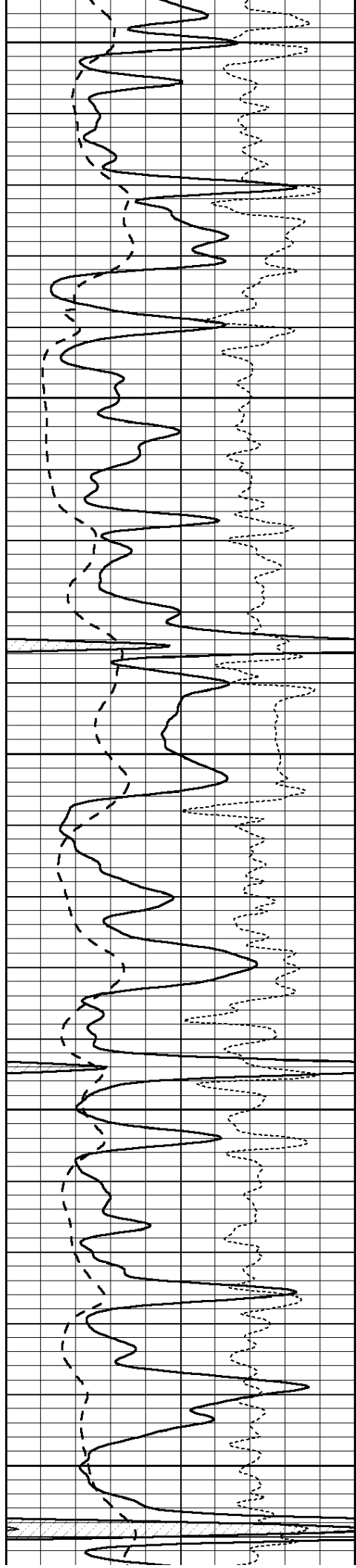
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3650

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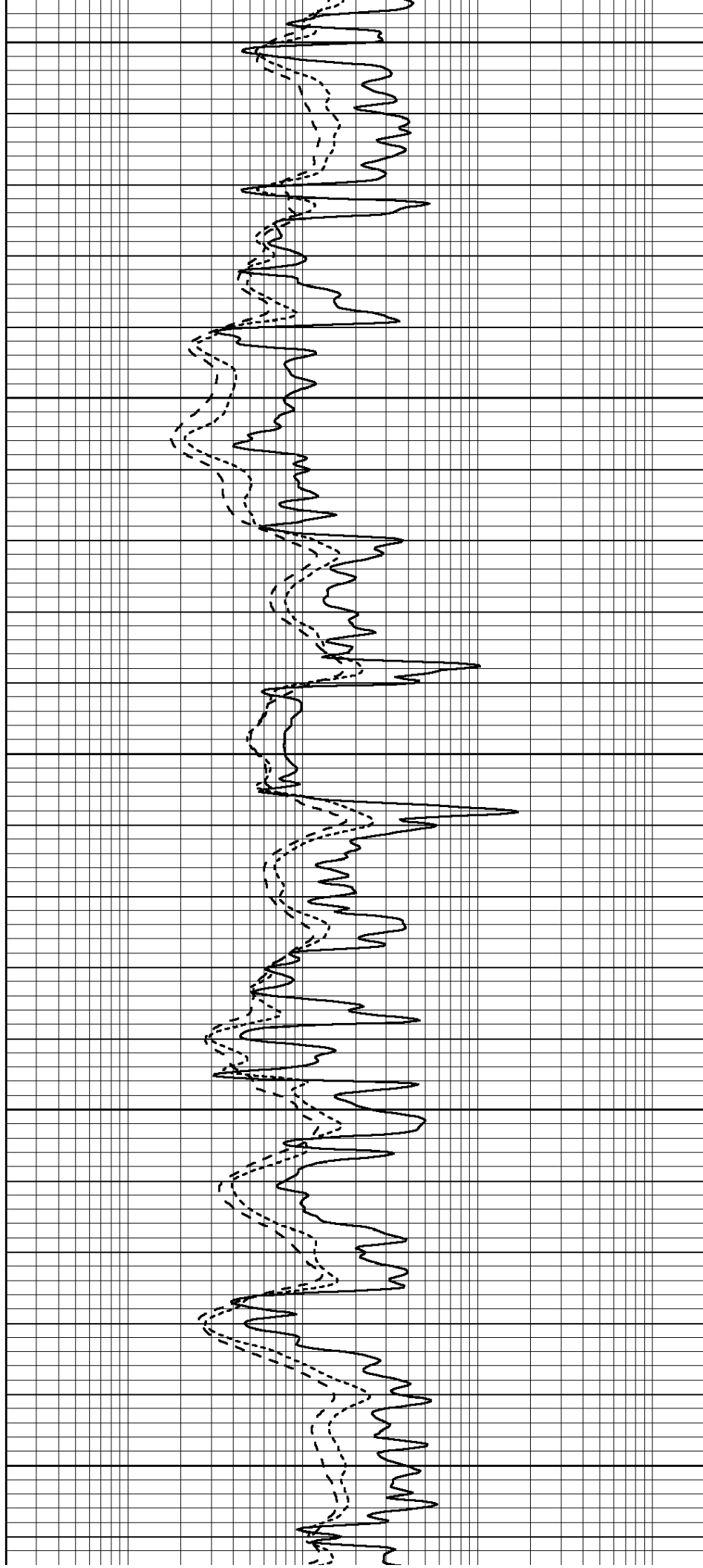
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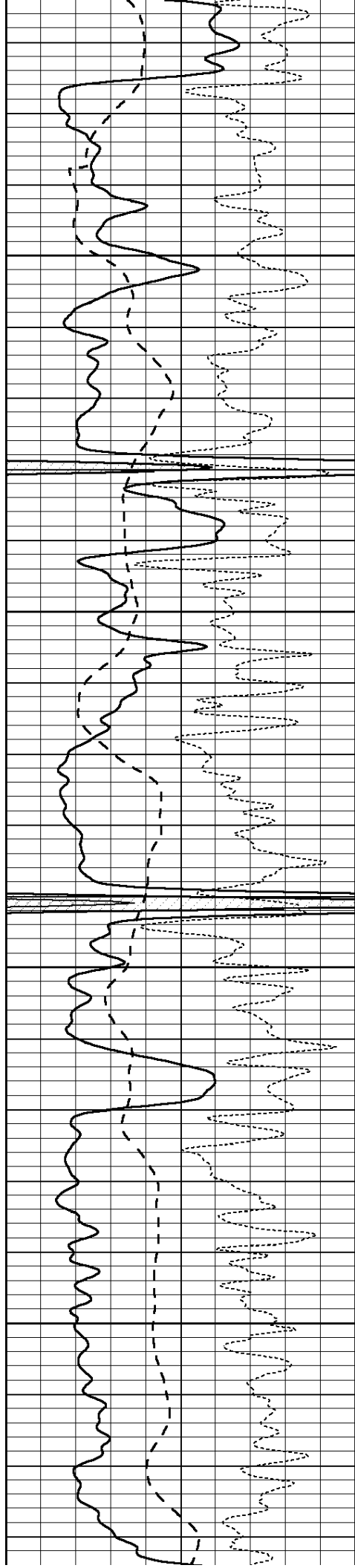
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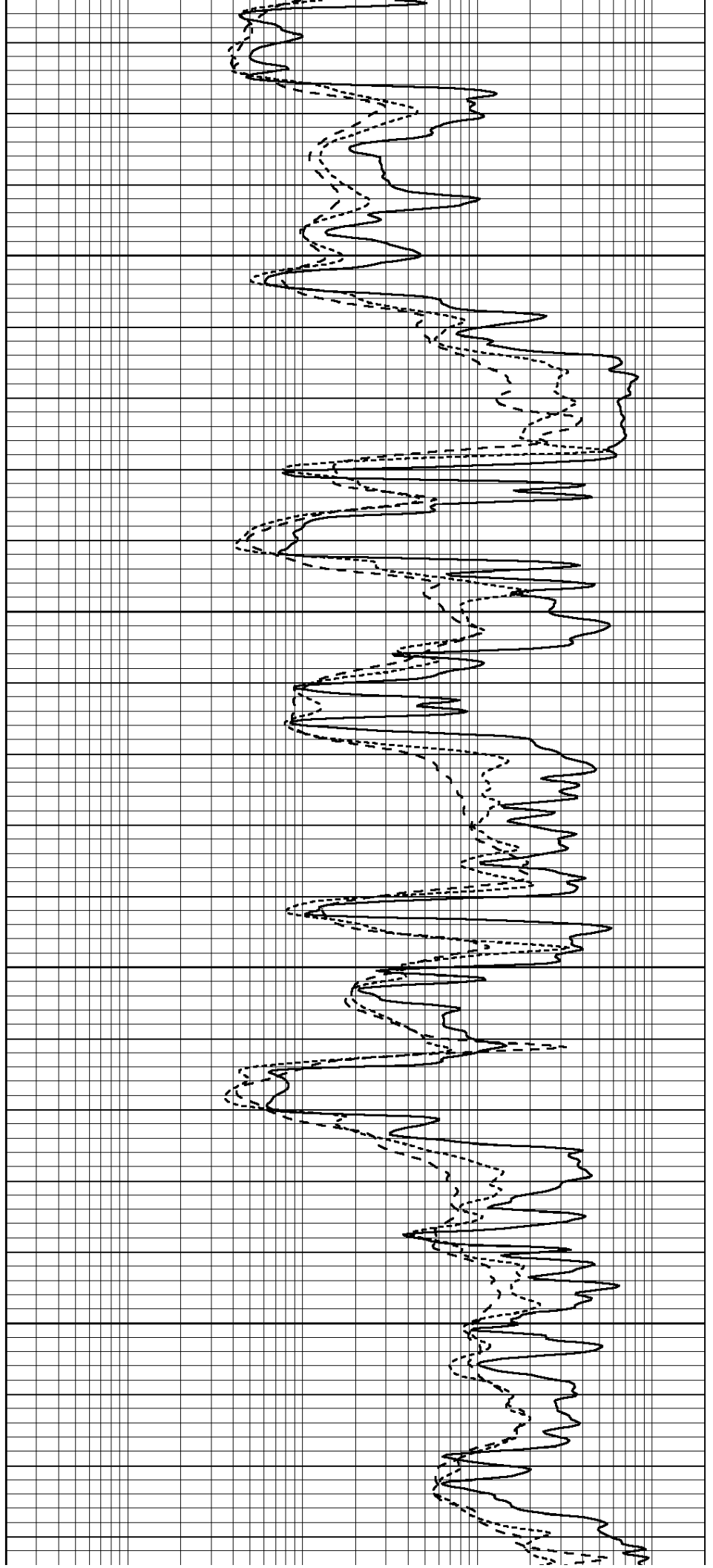


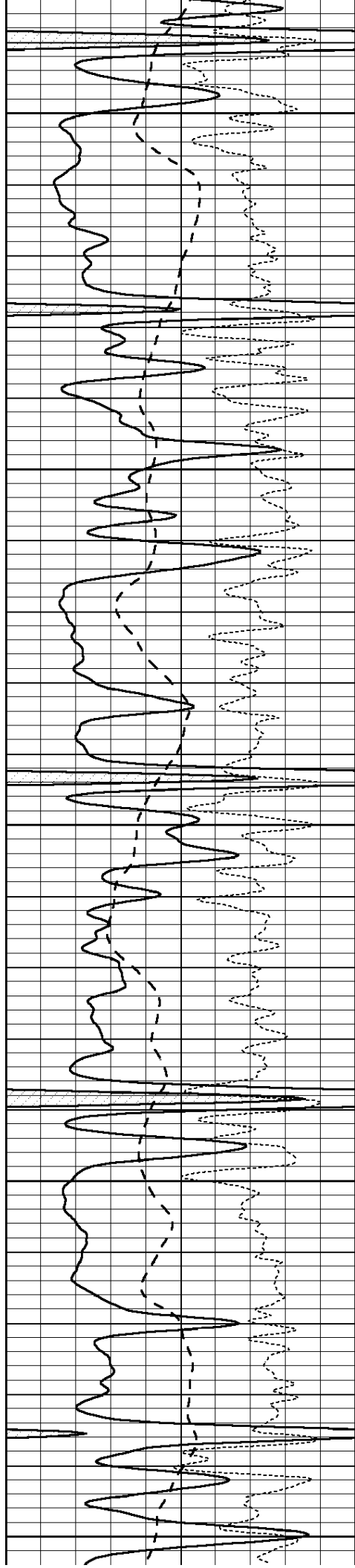
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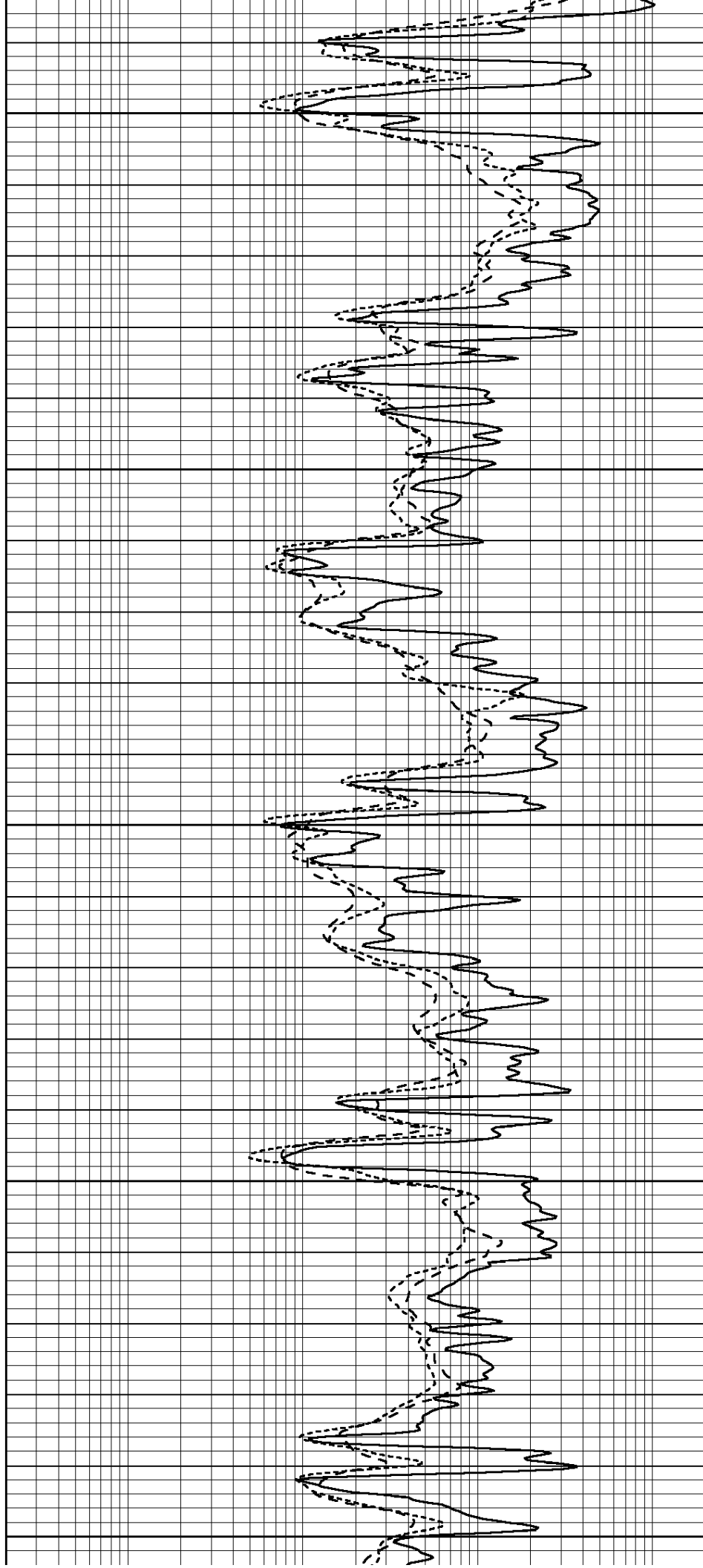
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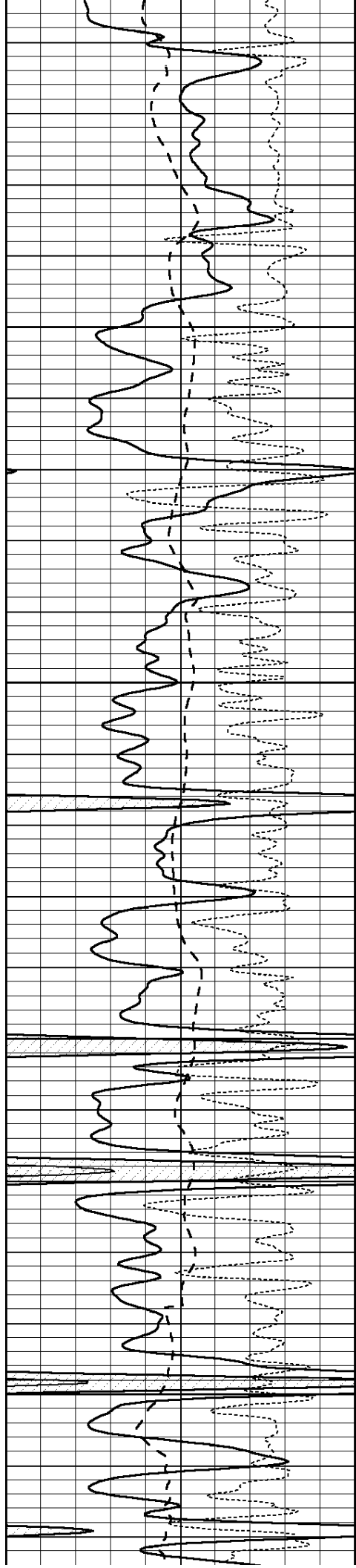
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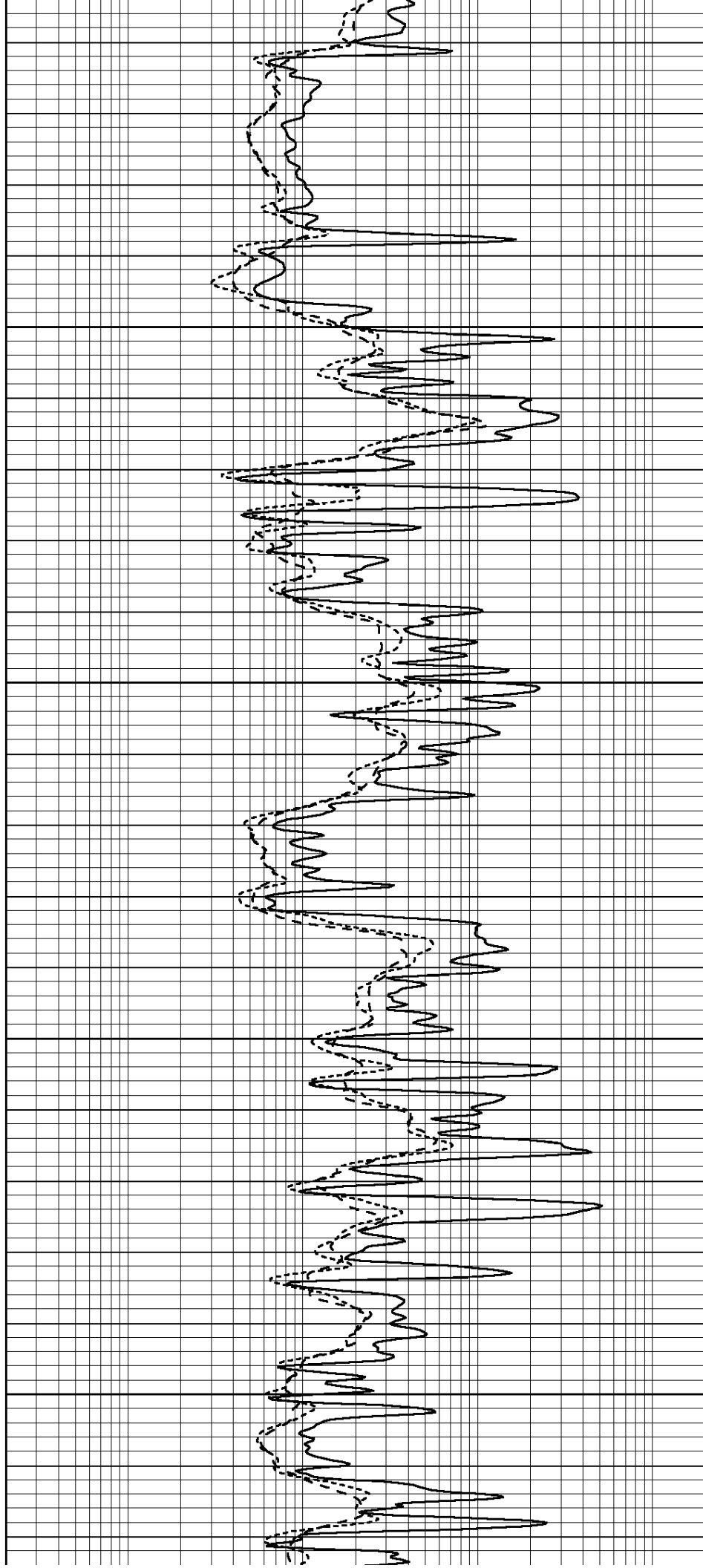


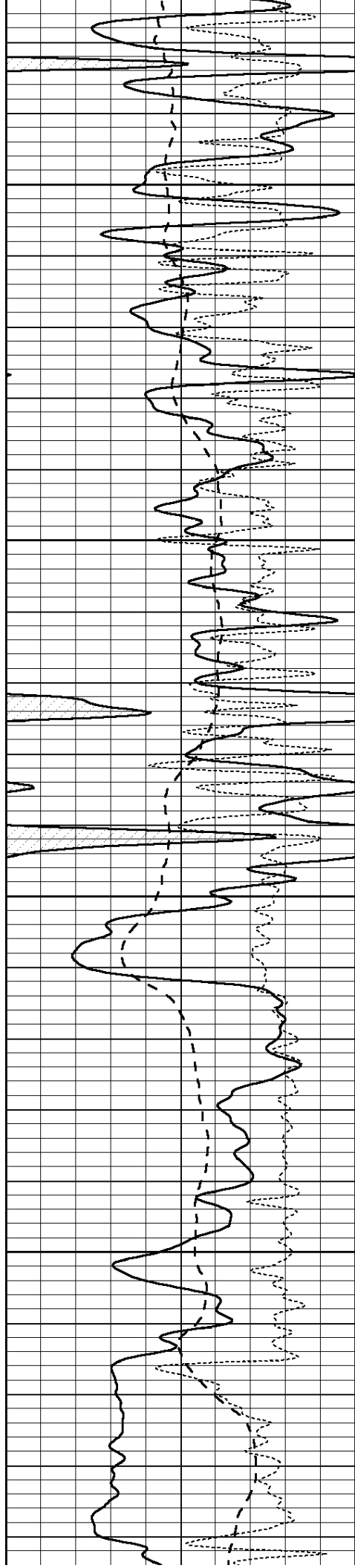
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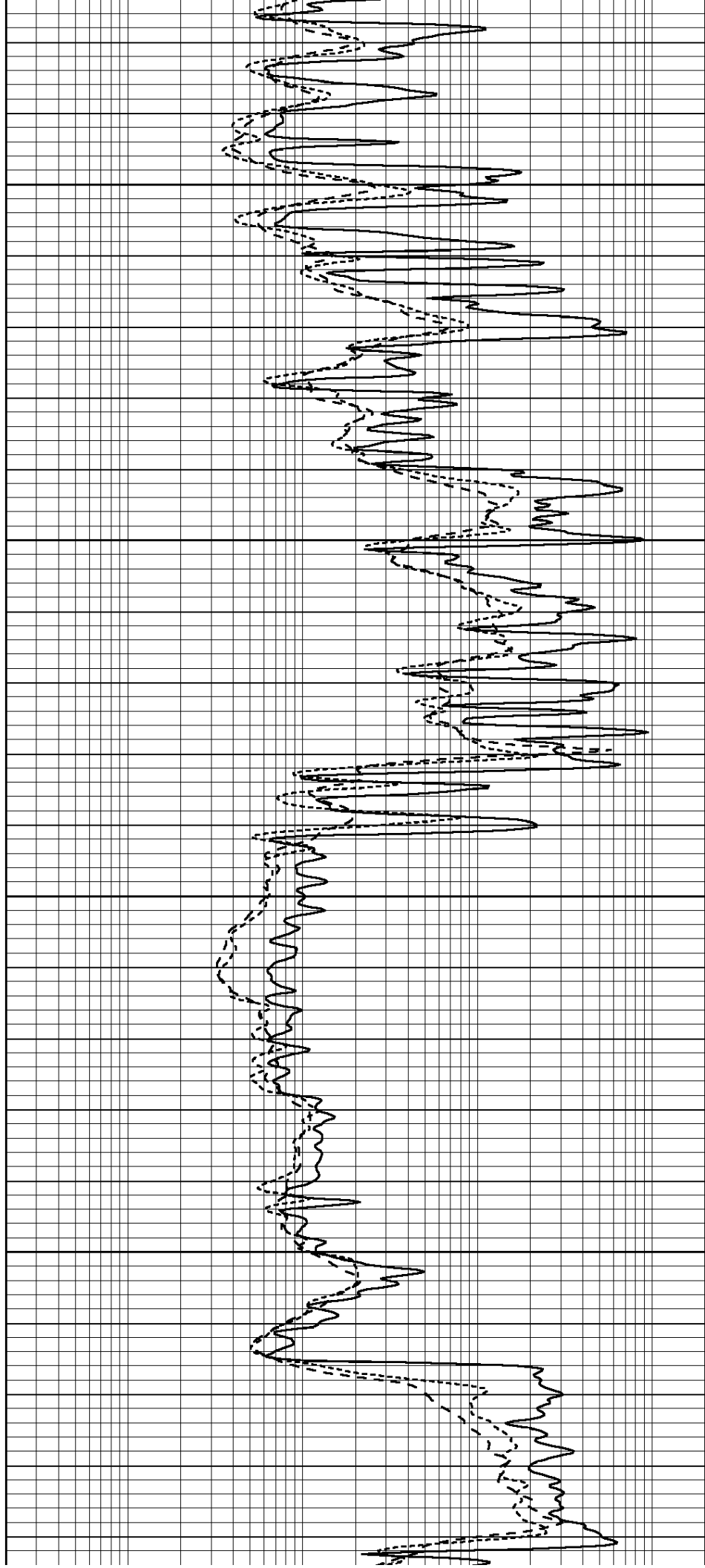


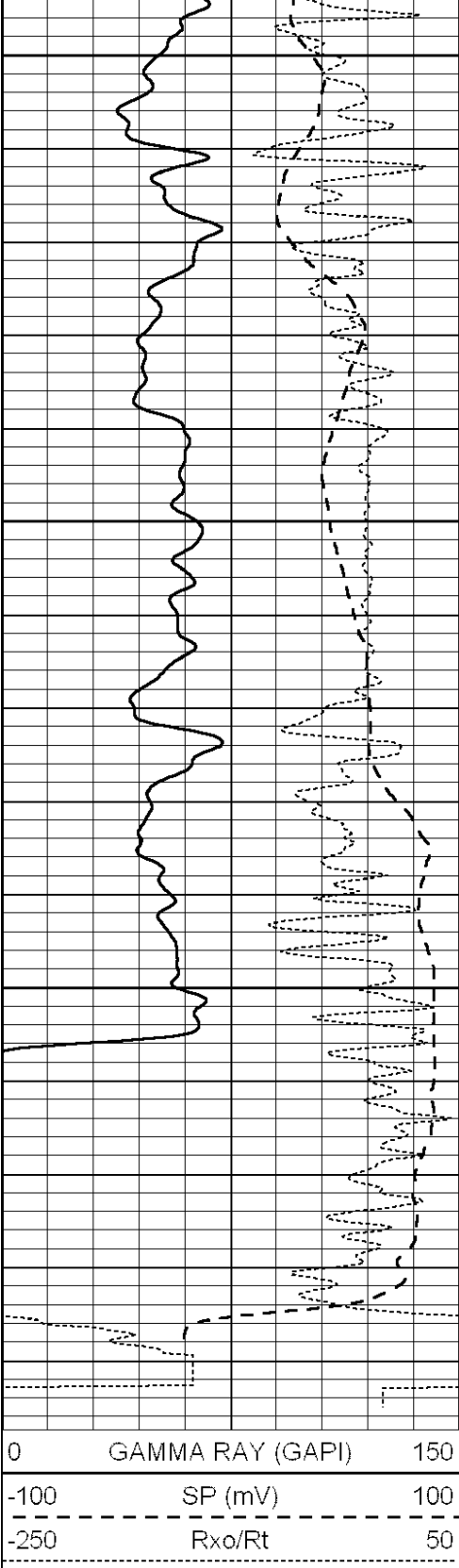
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