

**COMPLETION  
& PRODUCTION  
SERVICES CO.**

**SONIC  
LOG**

Company BLACK DIAMOND OIL, INC.  
Well GLENNEMEIER #1  
Field  
County NORTON  
State KANSAS

Company BLACK DIAMOND OIL, INC.  
Well GLENNEMEIER #1  
Field  
County NORTON State KANSAS

Location: API # : 15-137-20697-0000  
1630' FNL & 530' FWL  
SEC 4 TWP 5S RGE 21W  
Permanent Datum GROUND LEVEL Elevation 2017  
Log Measured From KELLY BUSHING 5' A.G.L.  
Drilling Measured From KELLY BUSHING  
Elevation  
CDL/CNL  
DIL/MEL  
K.B. 2022  
D.F. 2020  
G.L. 2017

|                              |                   |                    |  |
|------------------------------|-------------------|--------------------|--|
| Date                         | 4/18/14           |                    |  |
| Run Number                   | TWO               |                    |  |
| Depth Driller                | 3530              |                    |  |
| Depth Logger                 | 3532              |                    |  |
| Bottom Logged Interval       | 3522              |                    |  |
| Top Log Interval             | 200               |                    |  |
| Casing Driller               | 8 5/8" @ 216      |                    |  |
| Casing Logger                | 216               |                    |  |
| Bit Size                     | 7 7/8"            |                    |  |
| Type Fluid in Hole           | CHEMICAL MUD      | CHLORIDES 2000 PPM |  |
| Density / Viscosity          | 9.2/57            |                    |  |
| pH / Fluid Loss              | 10.0/7.6          |                    |  |
| Source of Sample             | FLOWLINE          |                    |  |
| Rm @ Meas. Temp              | 1.0 @ 80F         |                    |  |
| Rmt @ Meas. Temp             | .75 @ 80F         |                    |  |
| Rmc @ Meas. Temp             | 1.2 @ 80F         |                    |  |
| Source of Rmf / Rmc          | MEASUREMENT       |                    |  |
| Rm @ BHT                     | .71 @ 112F        |                    |  |
| Time Circulation Stopped     | 2 HOURS           |                    |  |
| Time Logger on Bottom        | 3:15 P.M.         |                    |  |
| Maximum Recorded Temperature | 112F              |                    |  |
| Equipment Number             | 4010              |                    |  |
| Location                     | HAYS, KANSAS      |                    |  |
| Recorded By                  | JASON CAPPELLUCCI |                    |  |
| Witnessed By                 | JEFF LAWLER       |                    |  |

<<< Fold Here >>>

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**

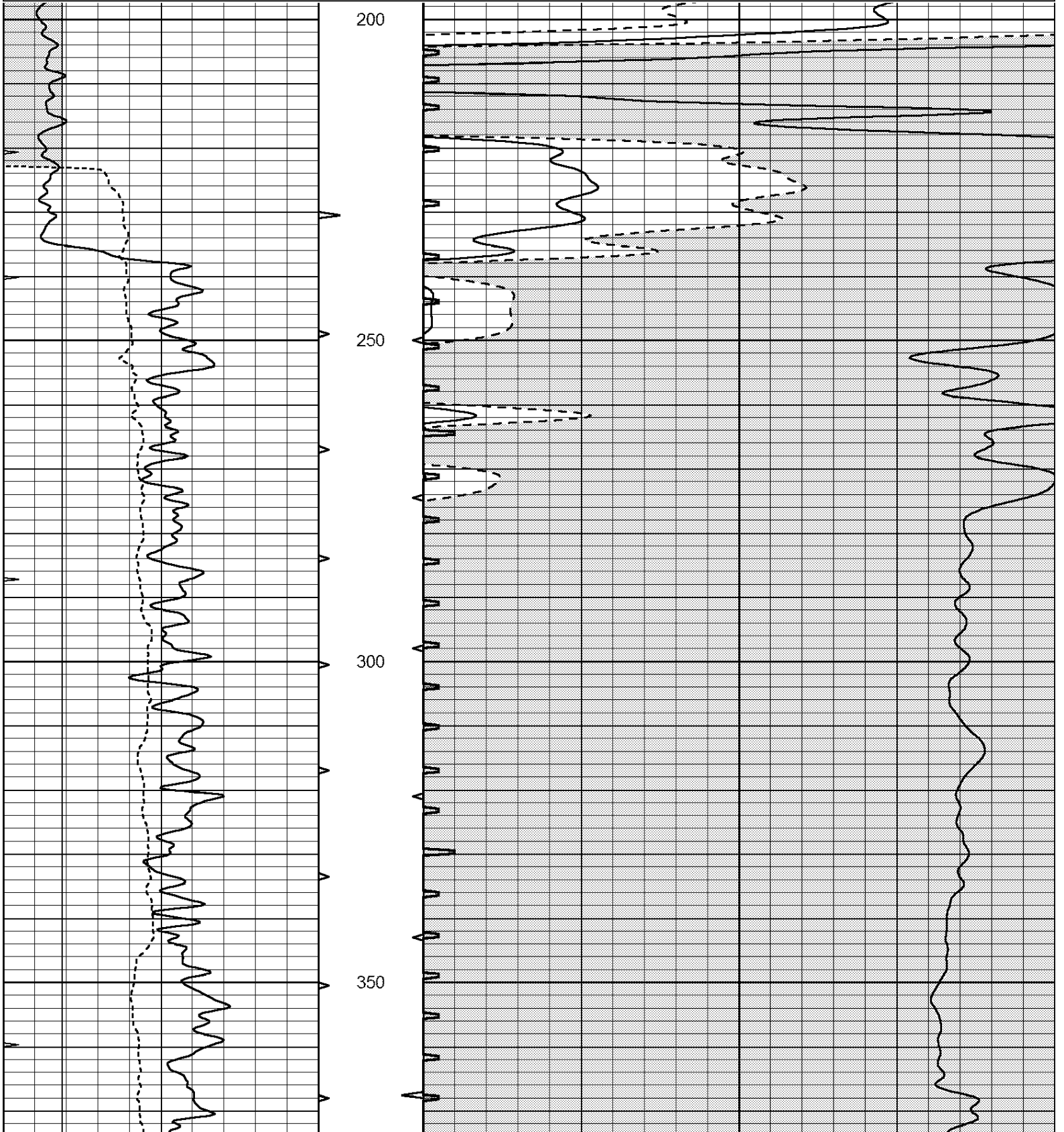
THANK YOU FOR USING NABORS, HAYS, KS. (785) 628-6395  
DIRECTIONS:  
LOGAN, KS. - WEST TO RD. W10 - 1/2 SOUTH - EAST INTO

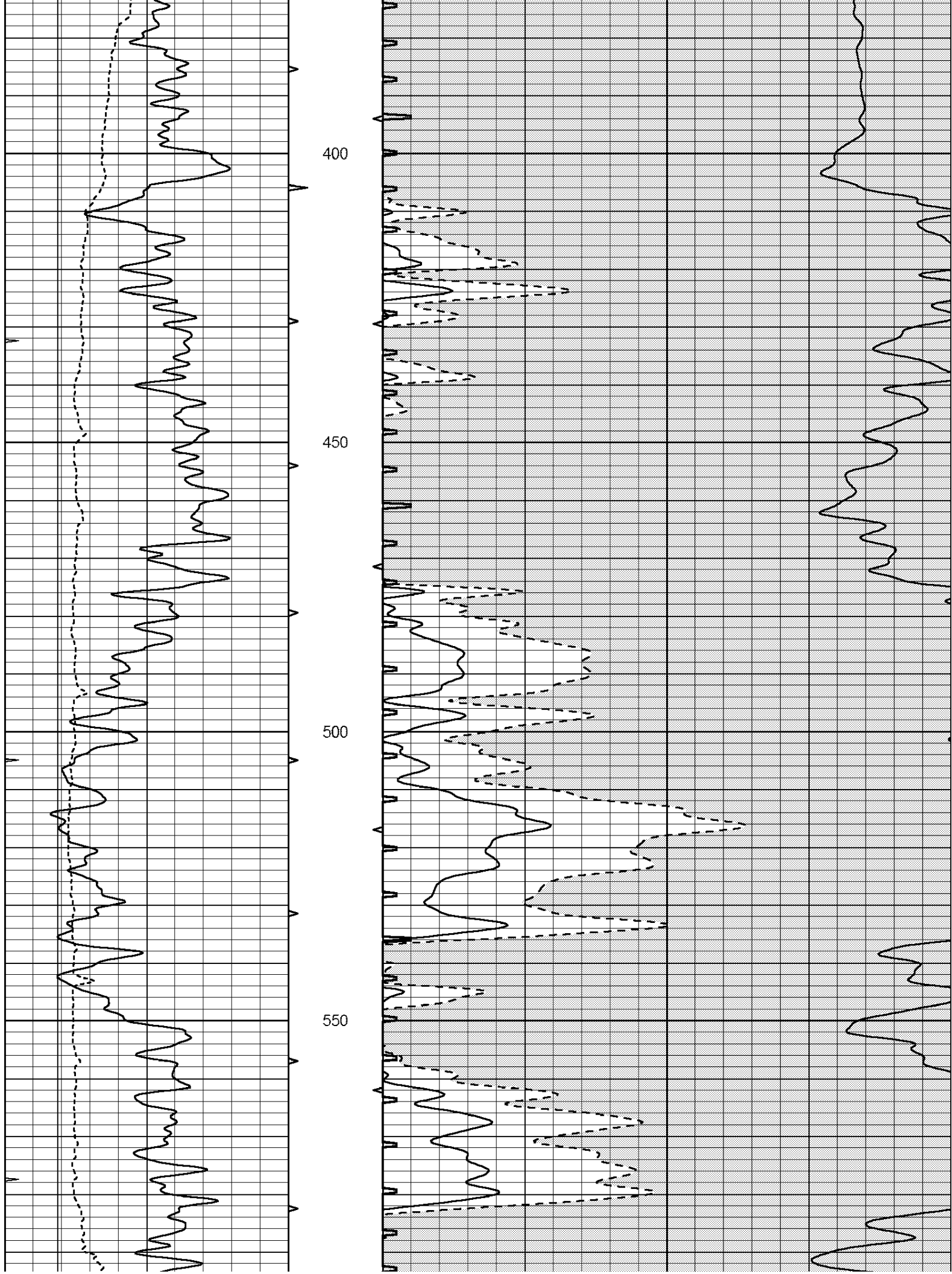


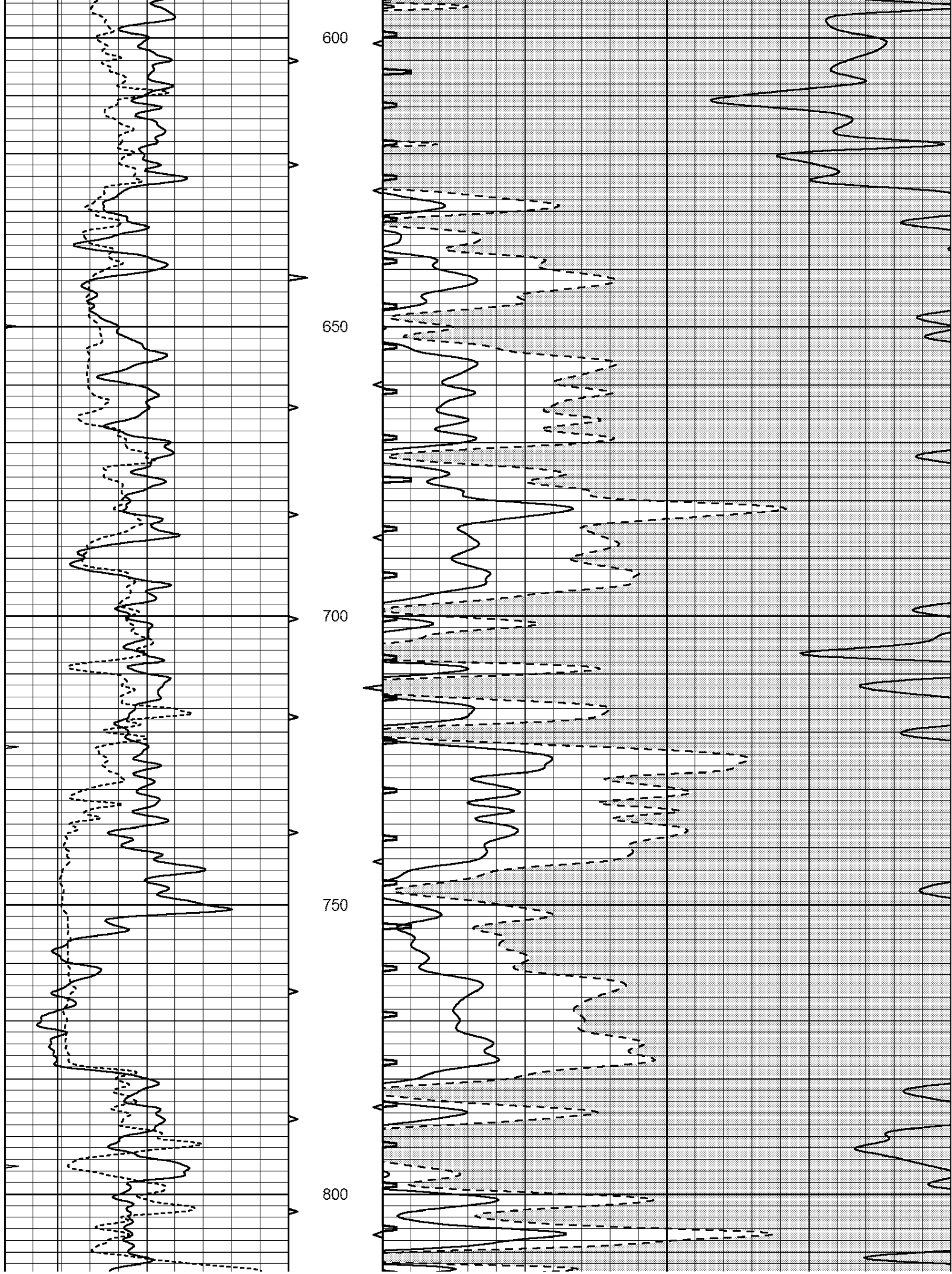
**MAIN SECTION**

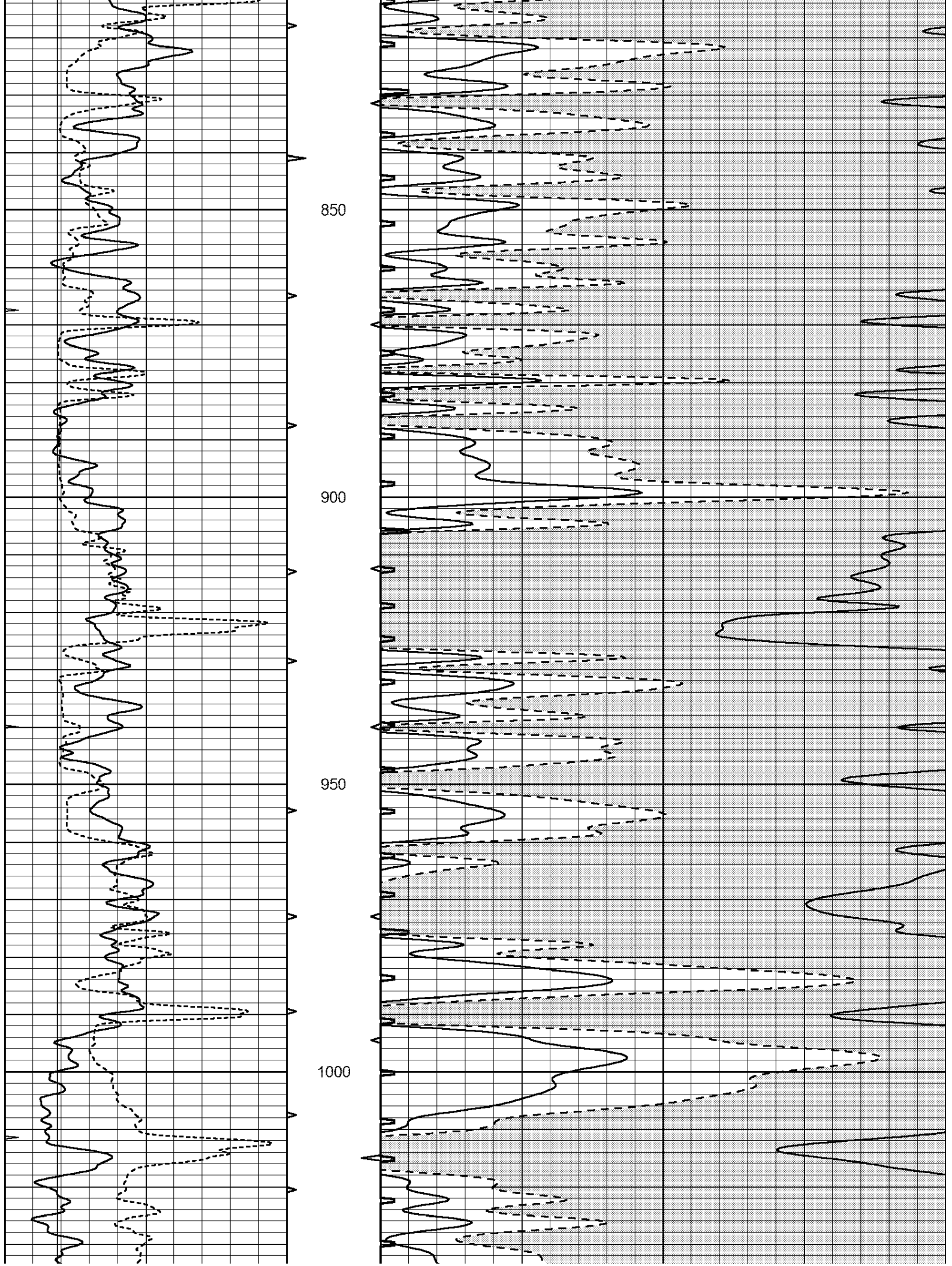
Database File: 24228ddn.db  
 Dataset Pathname: pass7.2  
 Presentation Format: \_slt  
 Dataset Creation: Fri Apr 18 19:03:39 2014 by Calc Open-Cased 090629  
 Charted by: Depth in Feet scaled 1:240

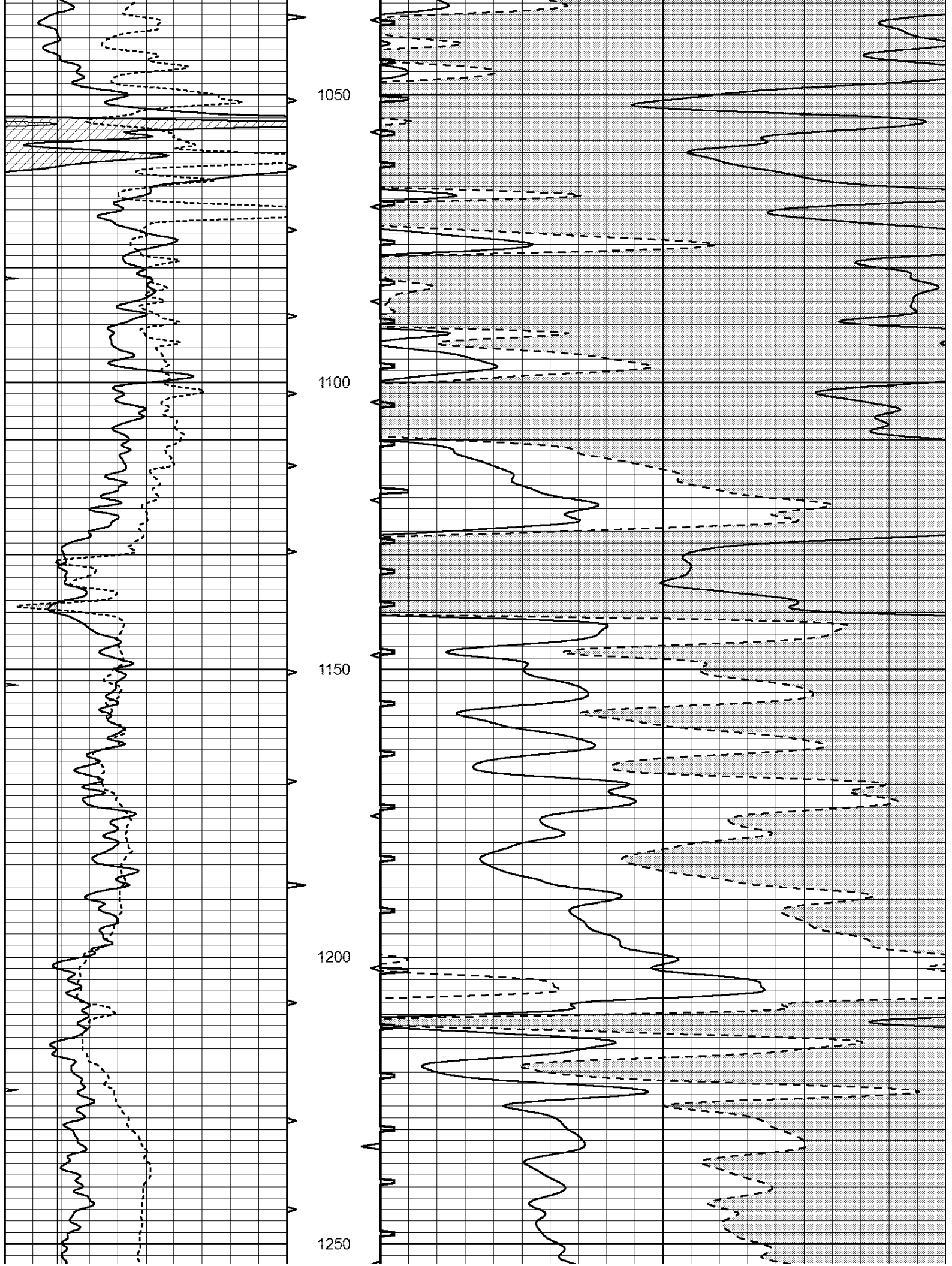
|   |                  |     |            |     |                      |     |
|---|------------------|-----|------------|-----|----------------------|-----|
| 0 | GAMMA RAY (GAPI) | 150 | ABHV       | 140 | DELTA TIME (usec/ft) | 40  |
| 6 | CALIPER (in)     | 16  | 10 (ft3) 0 | 30  | SONIC POROSITY (pu)  | -10 |
| 0 | MINMK            | 20  | TBHV       | 0   | ITT (msec)           | 20  |
|   |                  |     | 0 (ft3) 10 |     |                      |     |

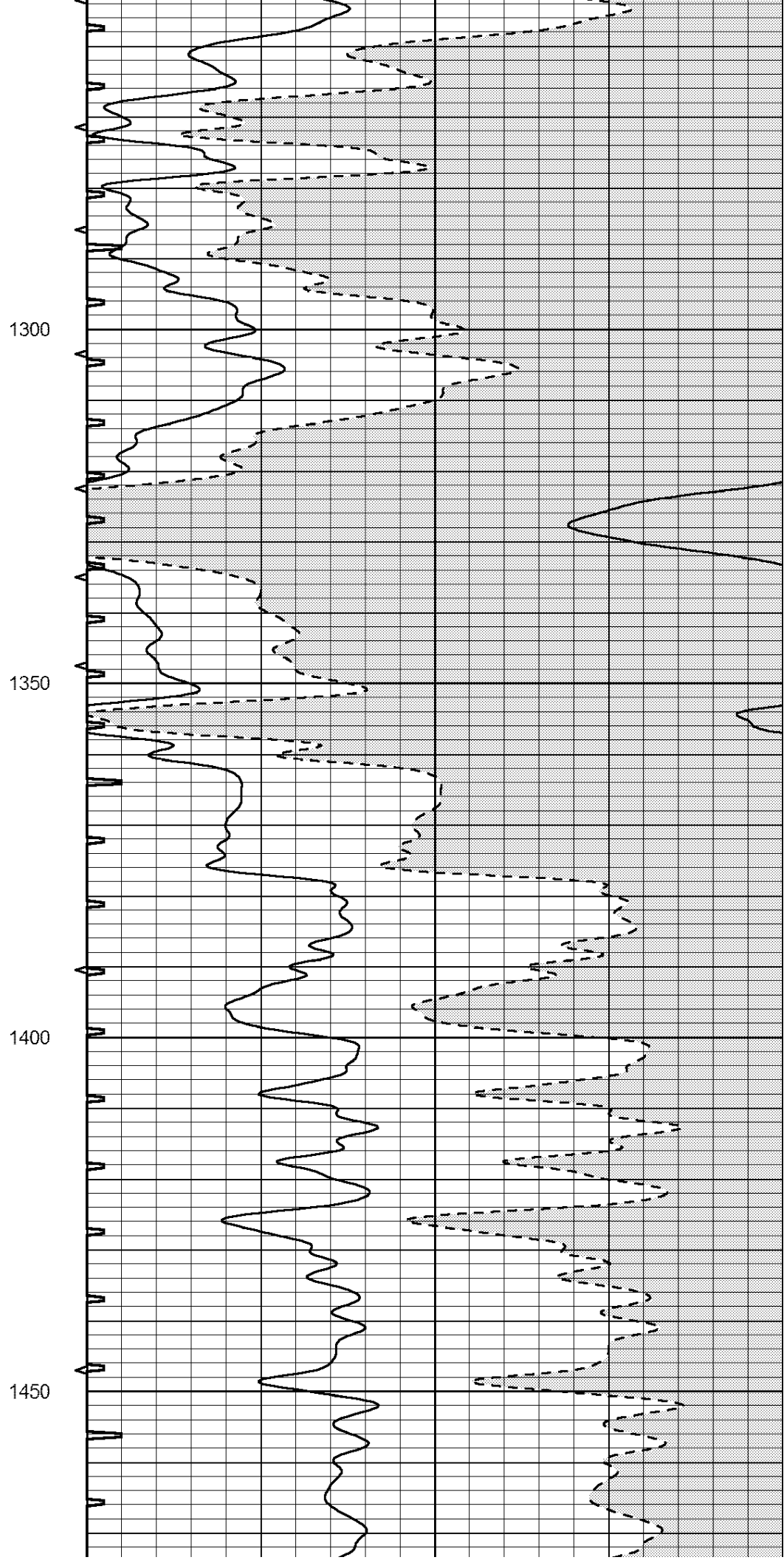
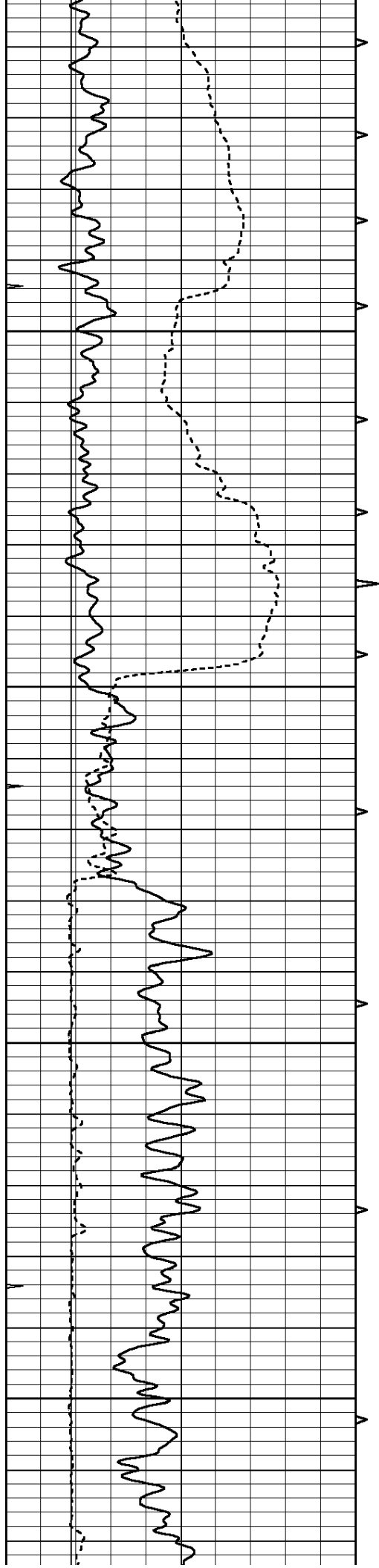


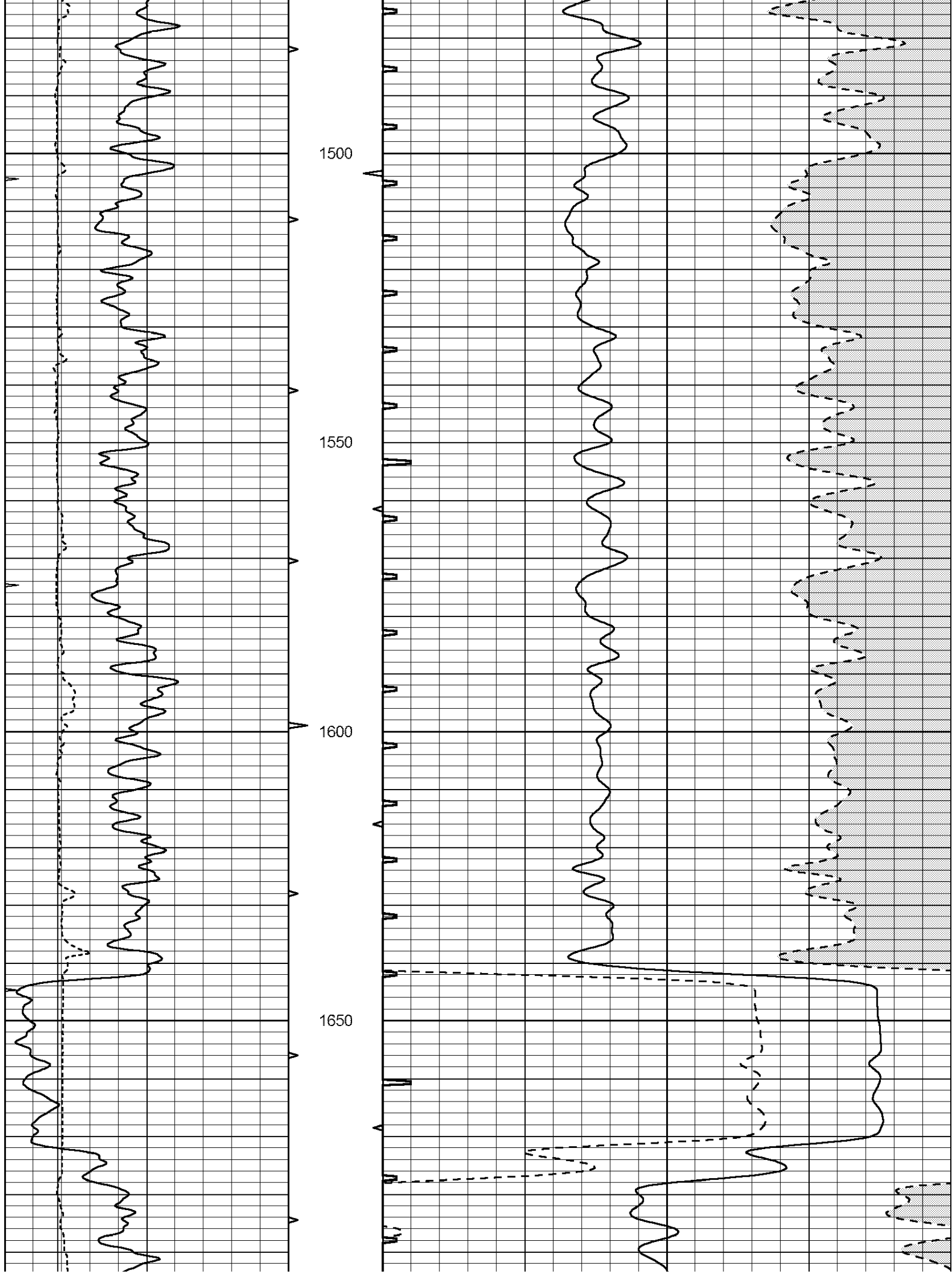


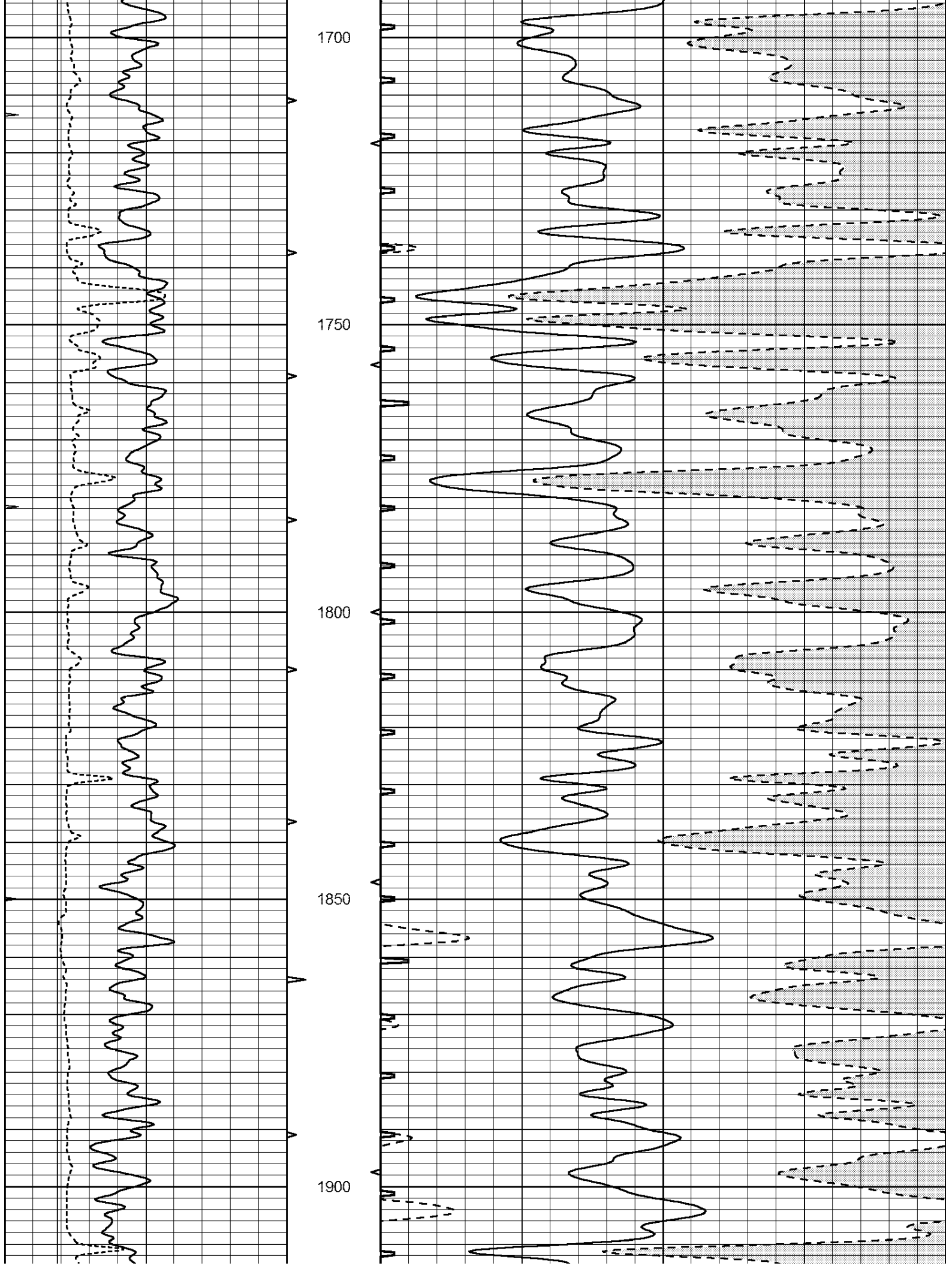


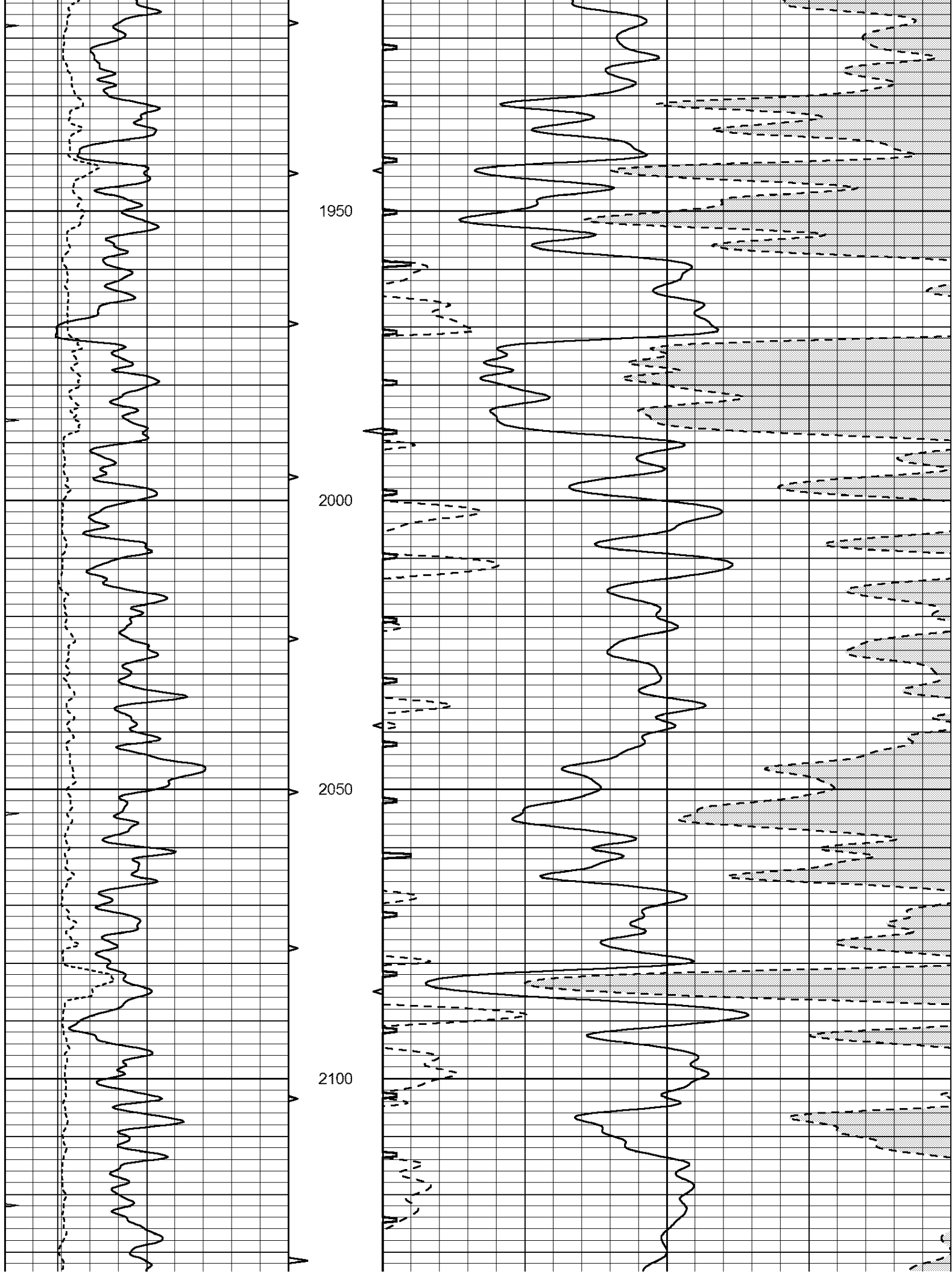


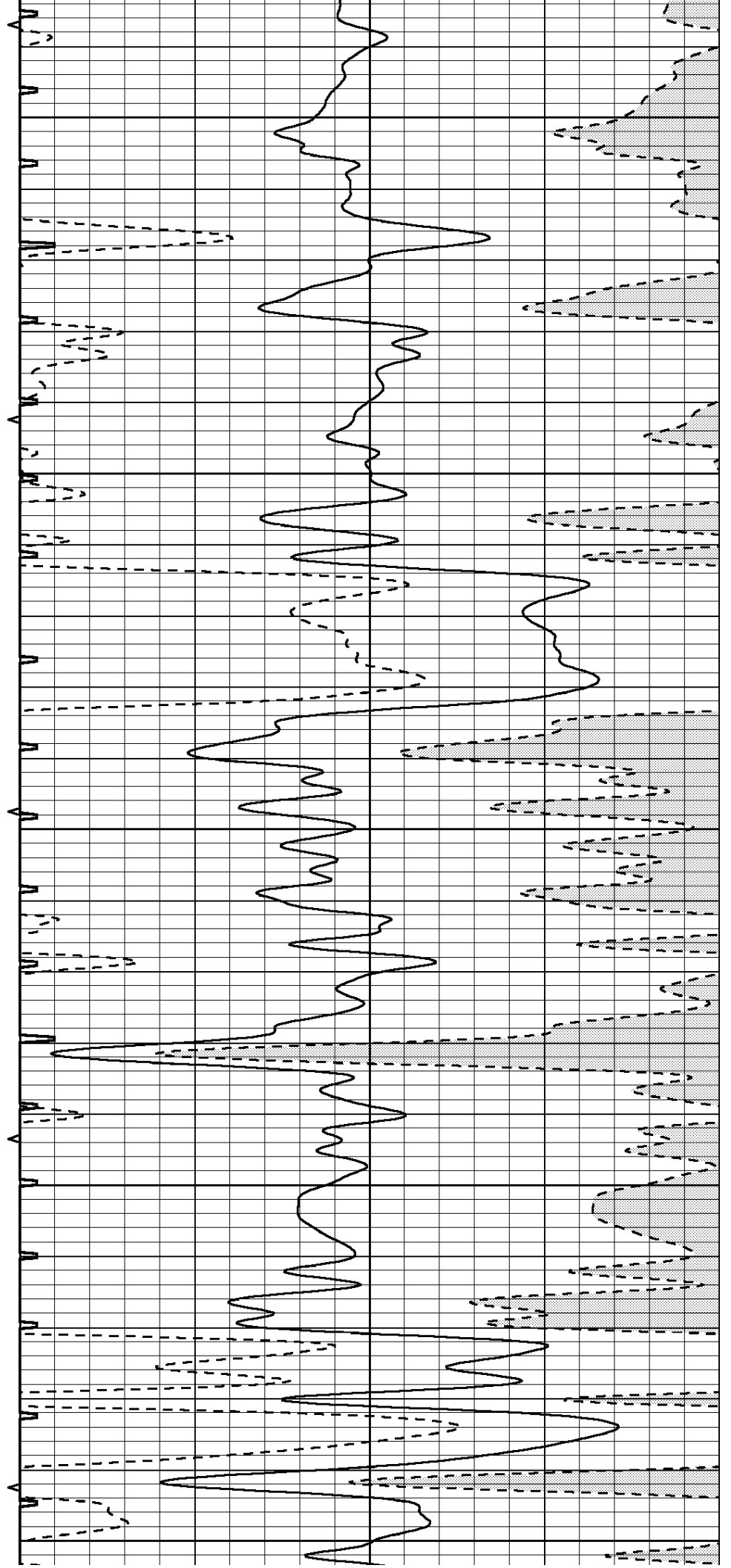
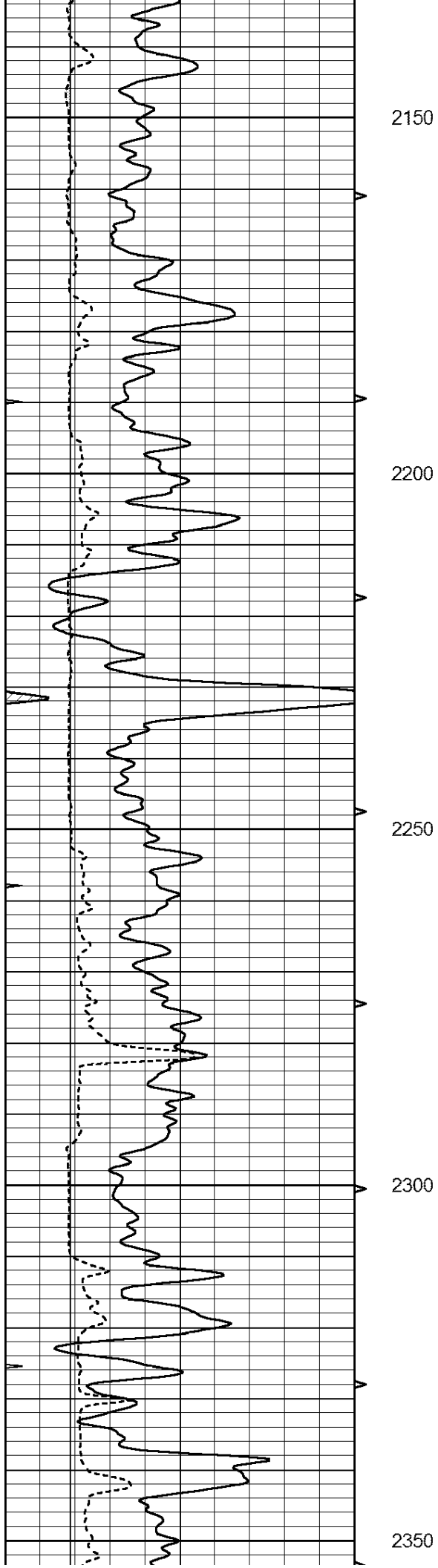


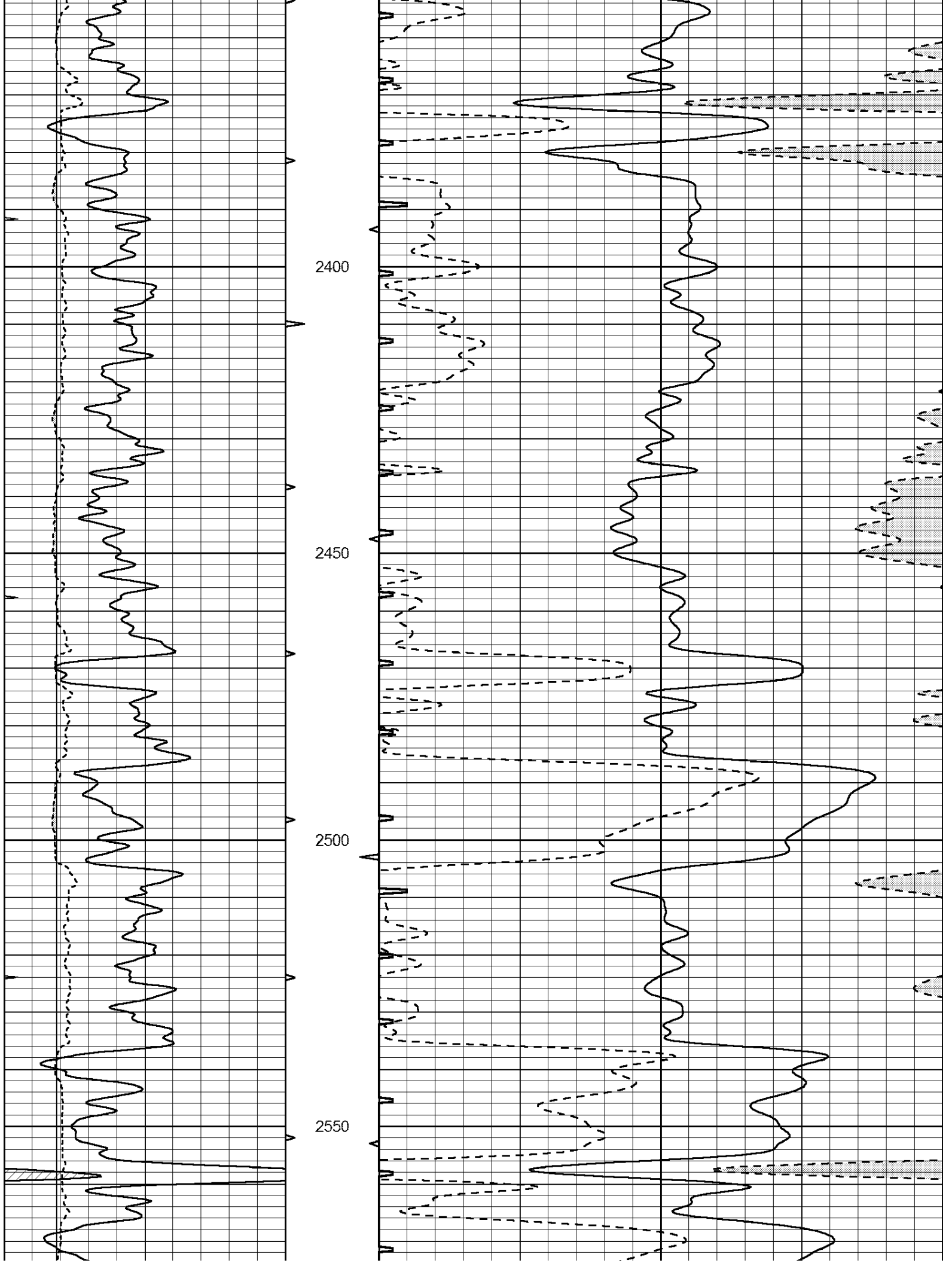


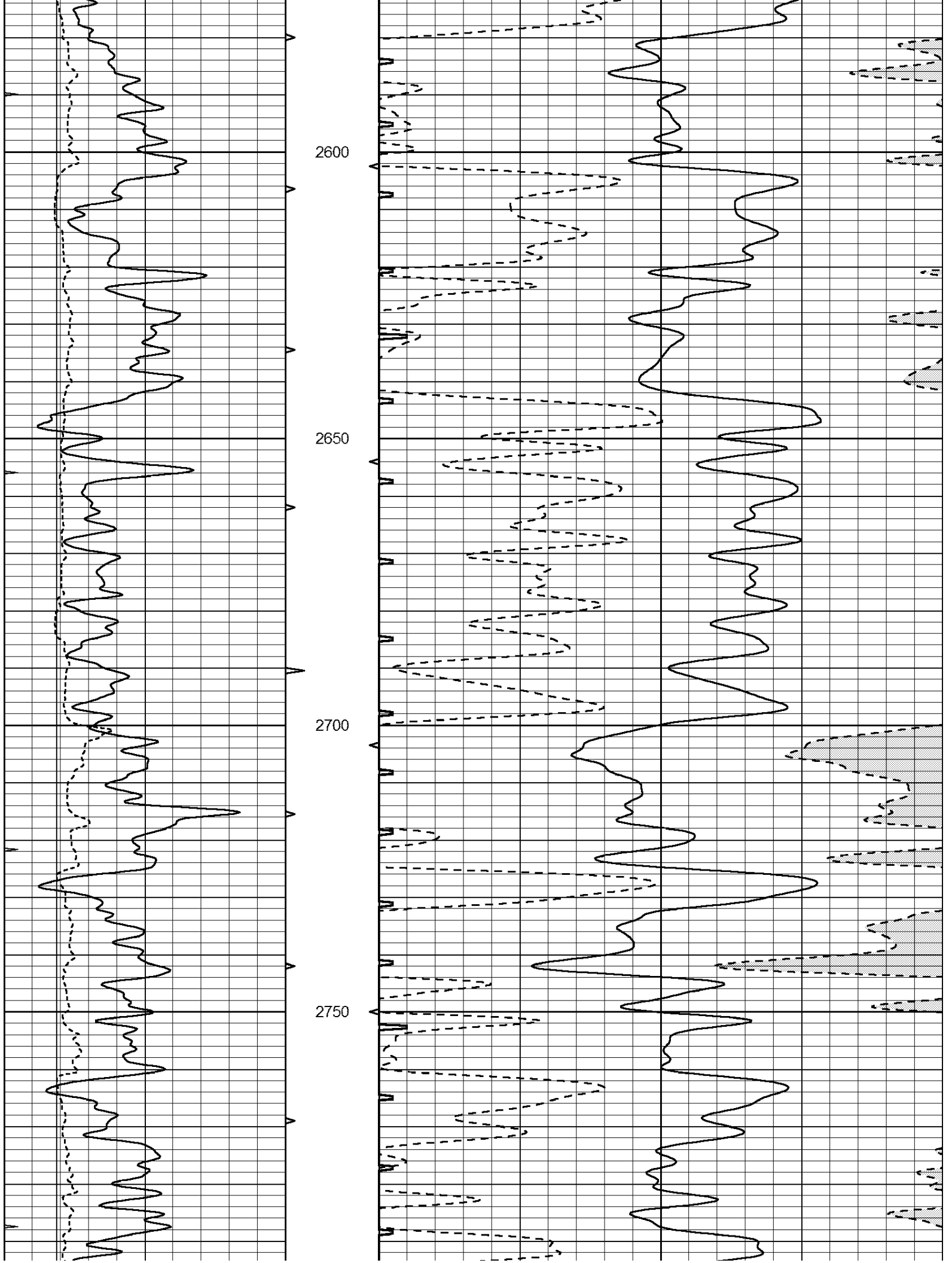


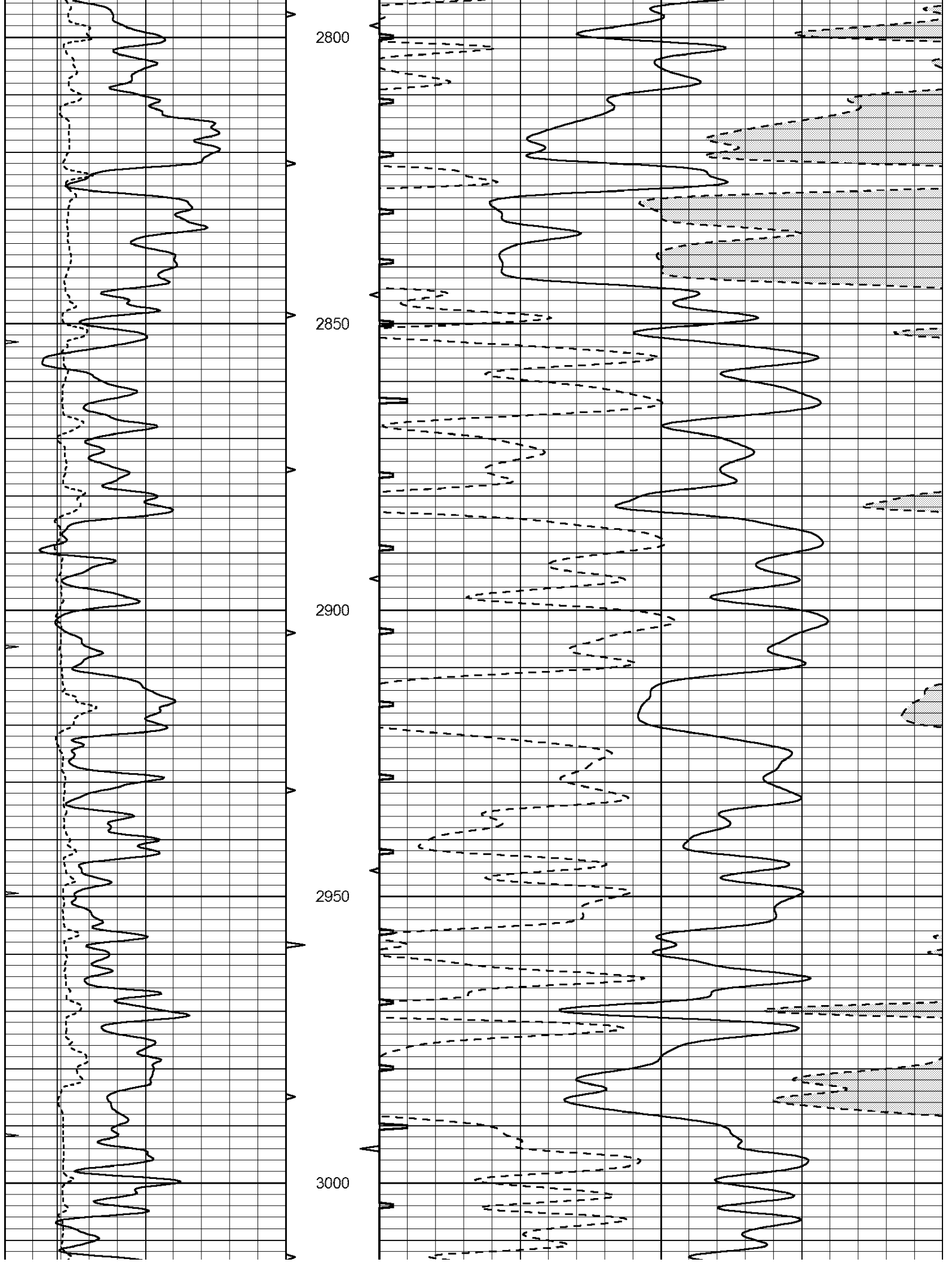


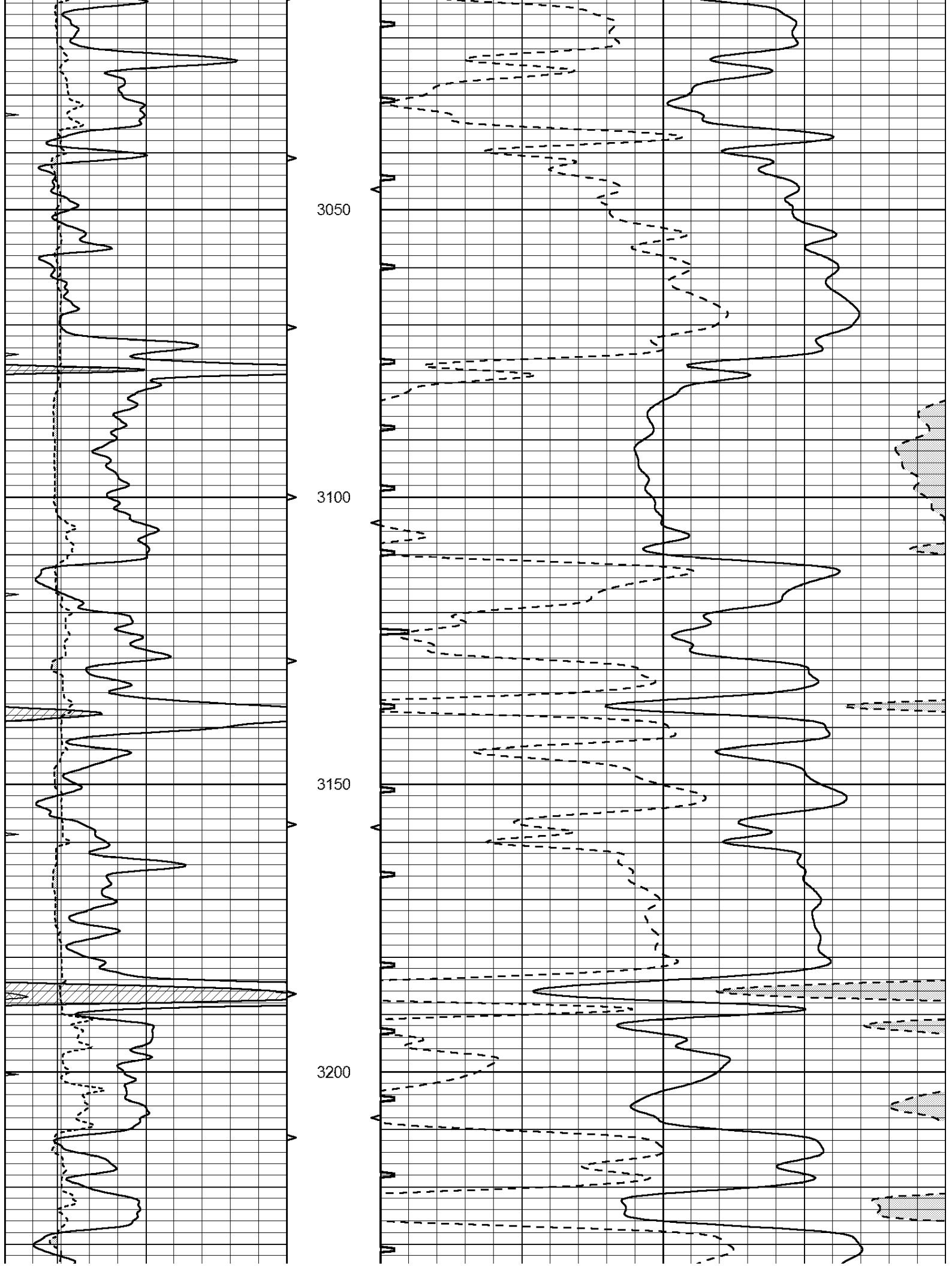


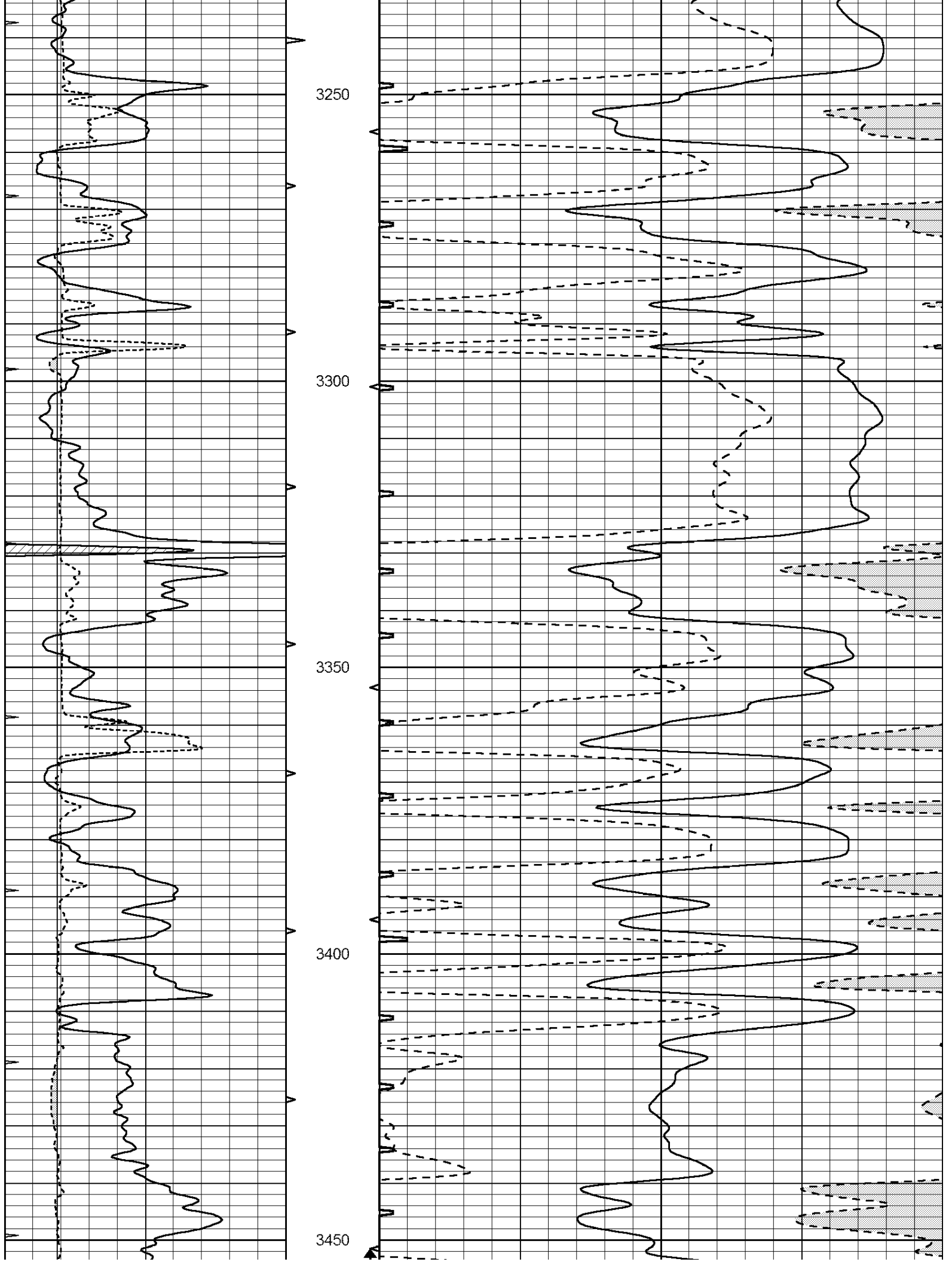


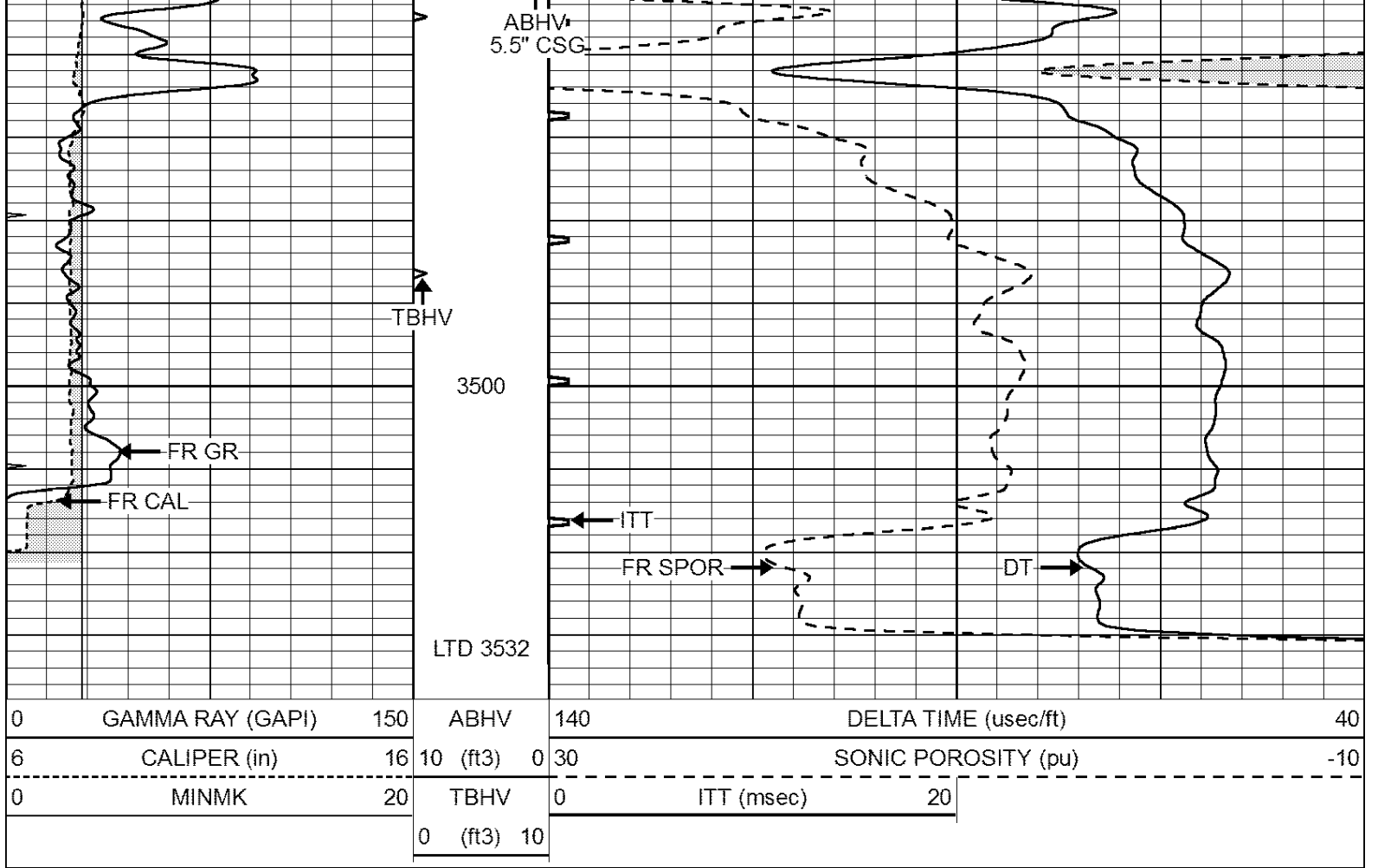






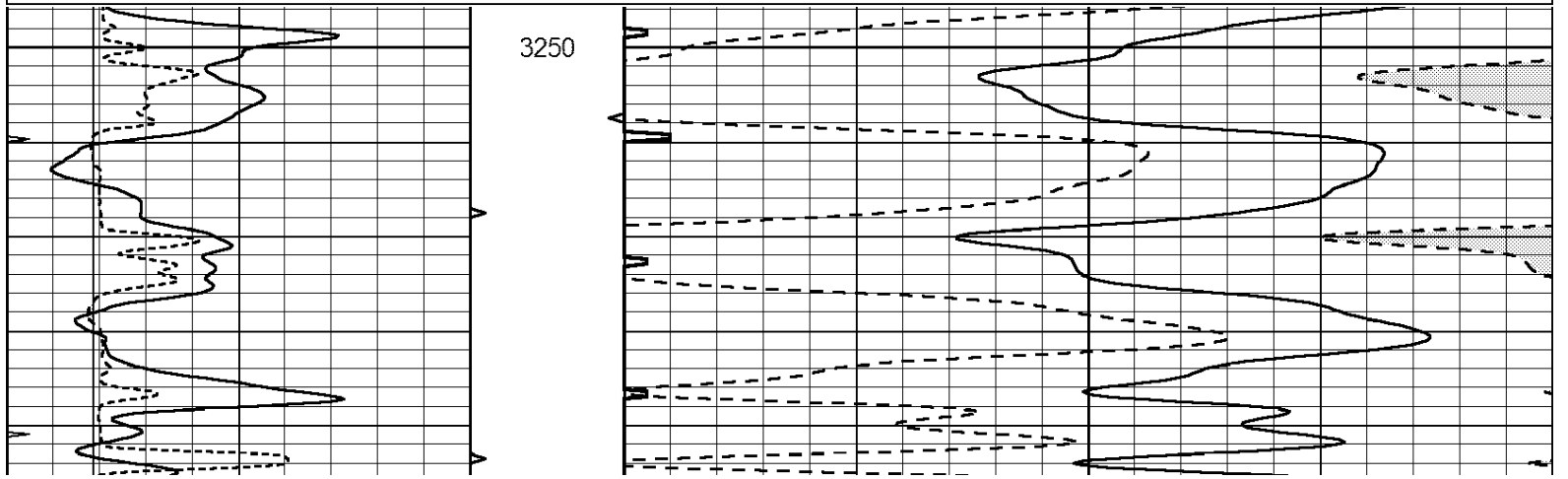
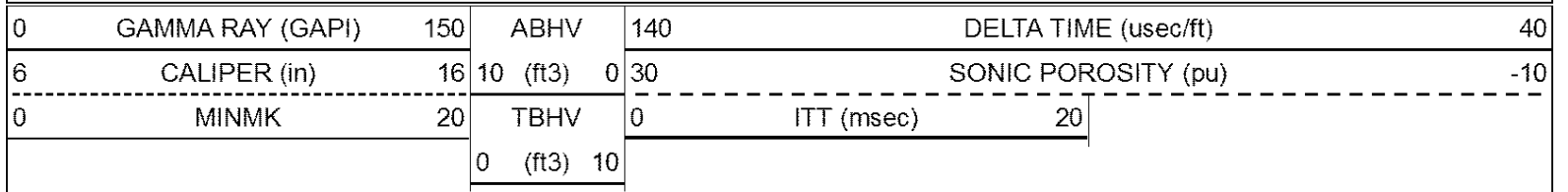


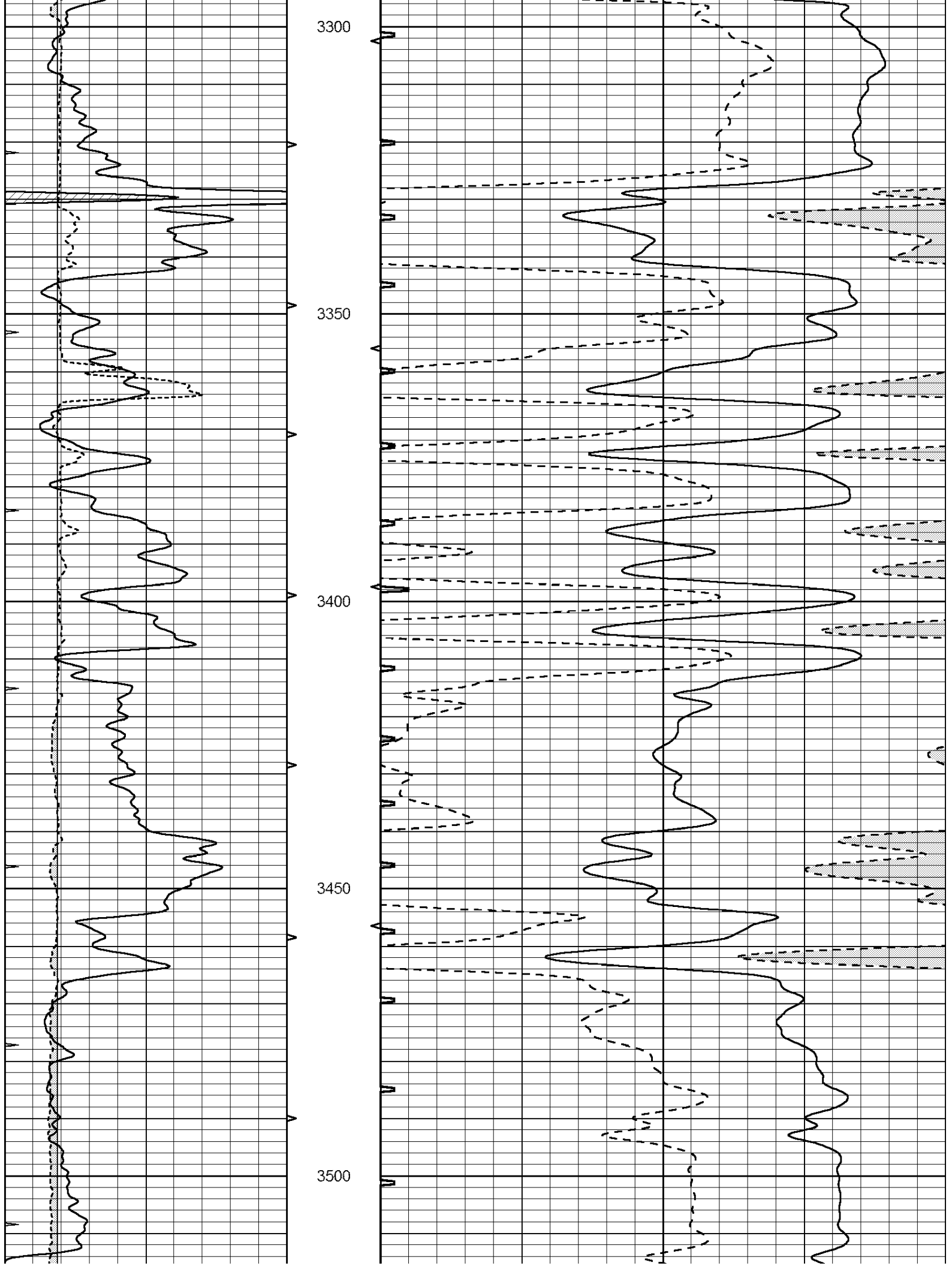


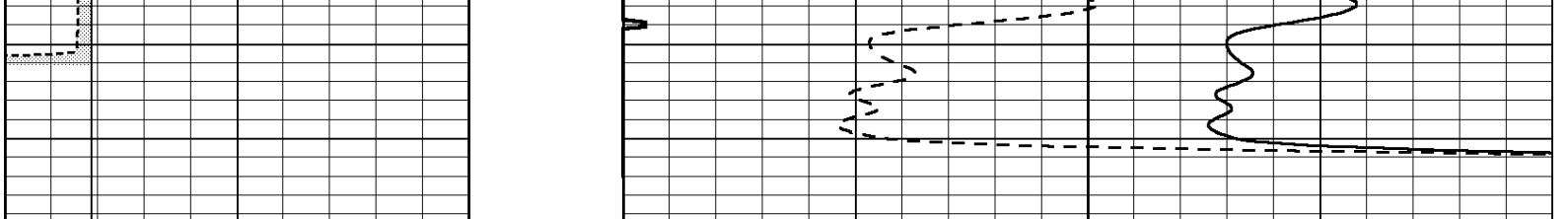


# REPEAT SECTION

Database File: 24228ddn.db  
 Dataset Pathname: pass6.1  
 Presentation Format: \_slt  
 Dataset Creation: Fri Apr 18 18:18:29 2014 by Calc Open-Cased 090629  
 Charted by: Depth in Feet scaled 1:240







|   |                  |     |            |     |                      |     |
|---|------------------|-----|------------|-----|----------------------|-----|
| 0 | GAMMA RAY (GAPI) | 150 | ABHV       | 140 | DELTA TIME (usec/ft) | 40  |
| 6 | CALIPER (in)     | 16  | 10 (ft3) 0 | 30  | SONIC POROSITY (pu)  | -10 |
| 0 | MINMK            | 20  | TBHV       | 0   | ITT (msec)           | 20  |
|   |                  |     | 0 (ft3) 10 |     |                      |     |