



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

**SONIC
LOG**

Company CHARTER ENERGY, INC.
 Well GRANT UNIT #1
 Field
 County PAWNEE
 State KANSAS

Company CHARTER ENERGY, INC.
 Well GRANT UNIT #1
 Field
 County PAWNEE State KANSAS

Location: API # : 15-145-21691-00-00
 1710' FNL & 485' FEL
 SW - NE - SE - NE
 SEC 34 TWP 20S RGE 16W

Permanent Datum GROUND LEVEL Elevation 1997
 Log Measured From KELLY BUSHING 7' A.G.L.
 Drilling Measured From KELLY BUSHING

Other Services
 CDL/CNL
 DIL/MEL
 Elevation
 K.B. 2004
 D.F. 2002
 G.L. 1997

| | |
|------------------------------|--------------|
| Date | 10/26/12 |
| Run Number | TWO |
| Depth Driller | 3841 |
| Depth Logger | 3838 |
| Bottom Logged Interval | 3824 |
| Top Log Interval | 1000 |
| Casing Driller | 8 5/8"@1010' |
| Casing Logger | 1002 |
| Bit Size | 7 7/8" |
| Type Fluid in Hole | CHEMICAL MUD |
| Density / Viscosity | 9.6/61 |
| pH / Fluid Loss | 9.0/9.2 |
| Source of Sample | FLOWLINE |
| Rm @ Meas. Temp | 0.65@70F |
| Rmf @ Meas. Temp | 0.49@70F |
| Rmc @ Meas. Temp | 0.78@70F |
| Source of Rmf / Rmc | MEASUREMENT |
| Rm @ BHT | 0.40@114F |
| Time Circulation Stopped | 2.5 HOURS |
| Time Logger on Bottom | |
| Maximum Recorded Temperature | 114F |
| Equipment Number | 4010 |
| Location | HAYS, KANSAS |
| Recorded By | IAN MABB |
| Witnessed By | JIM MUSGROVE |
| | JEFF GRONWEG |

<<< Fold Here >>>

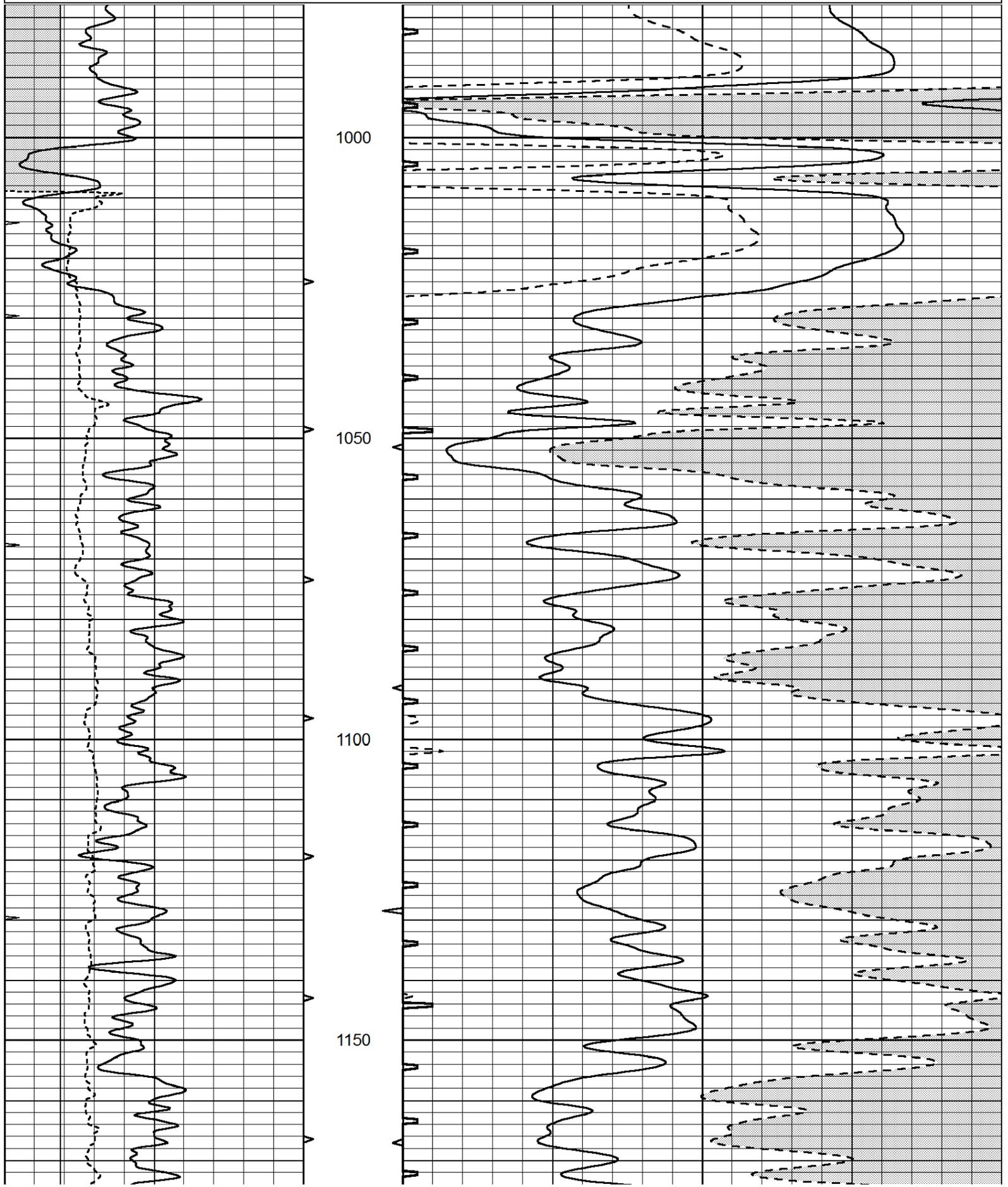
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

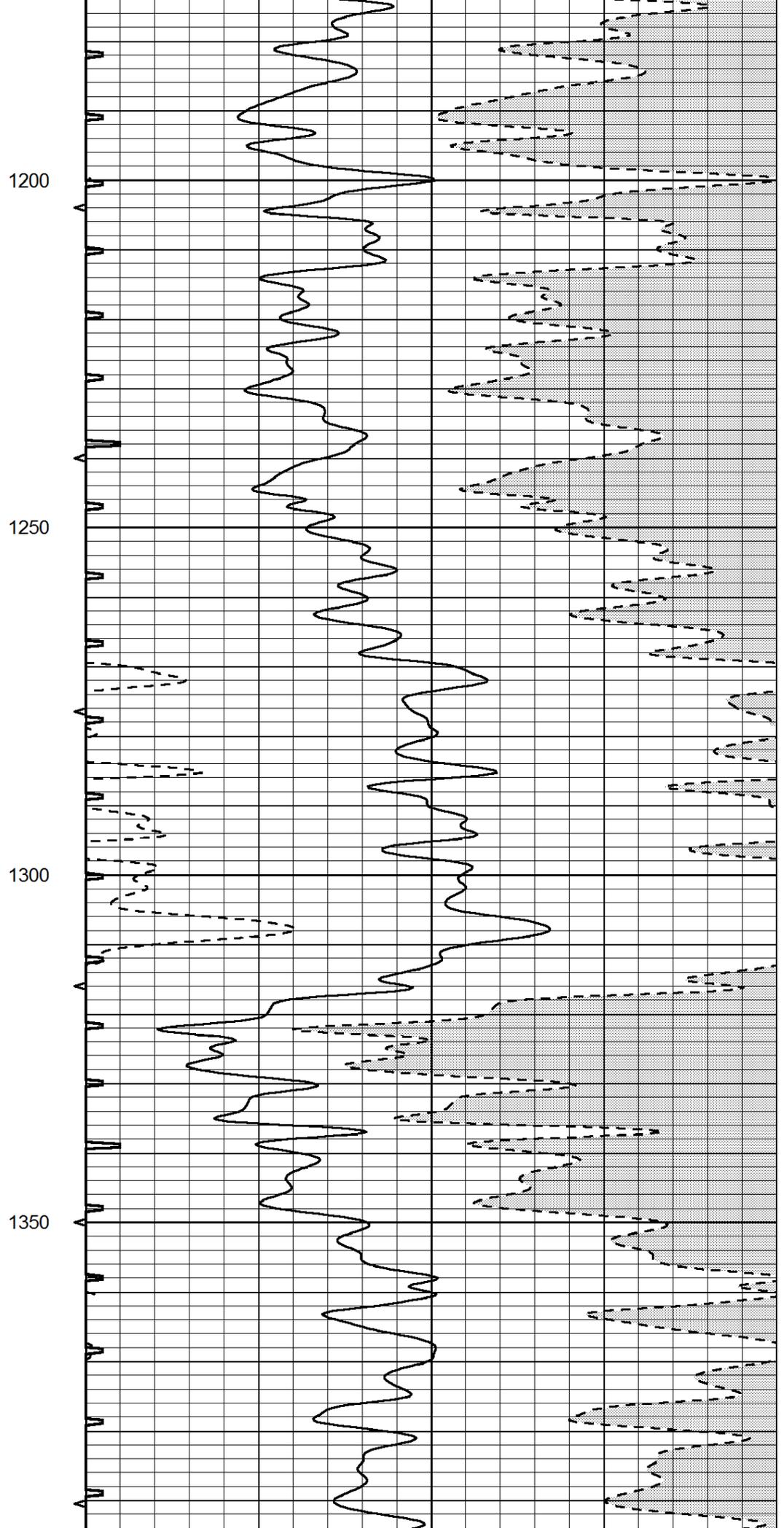
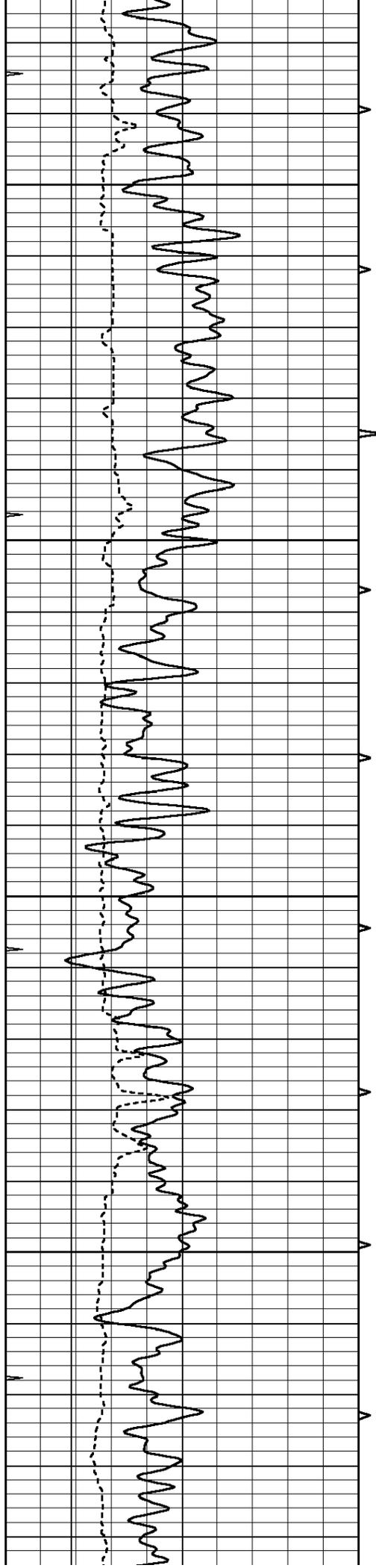
Comments

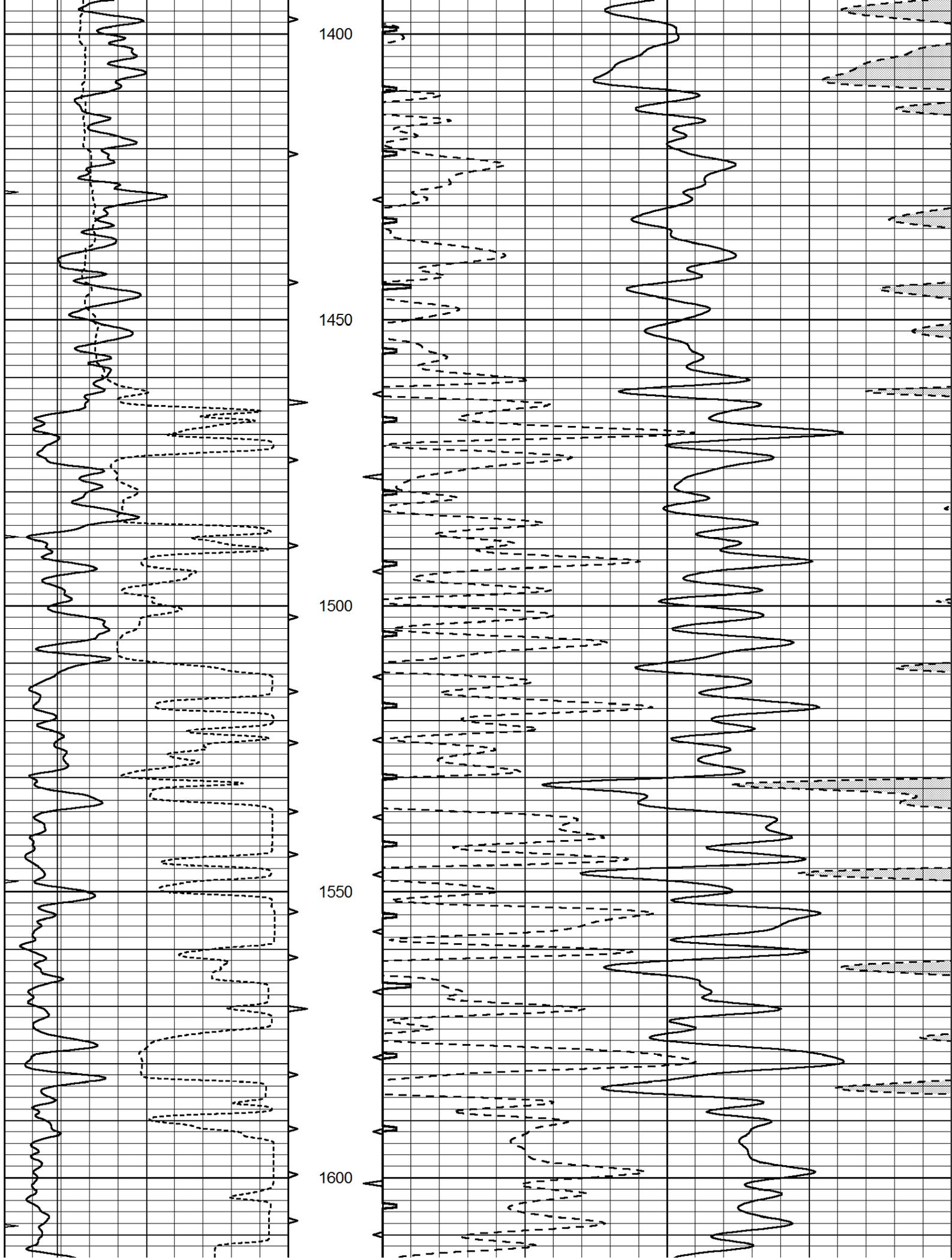
THANK YOU FOR USING SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395
 DIRECTIONS
 PAWNEE ROCK, KS. W ON SW 70 4 MILES, N 1 MILE, W 1 MILE , SOUTH INTO

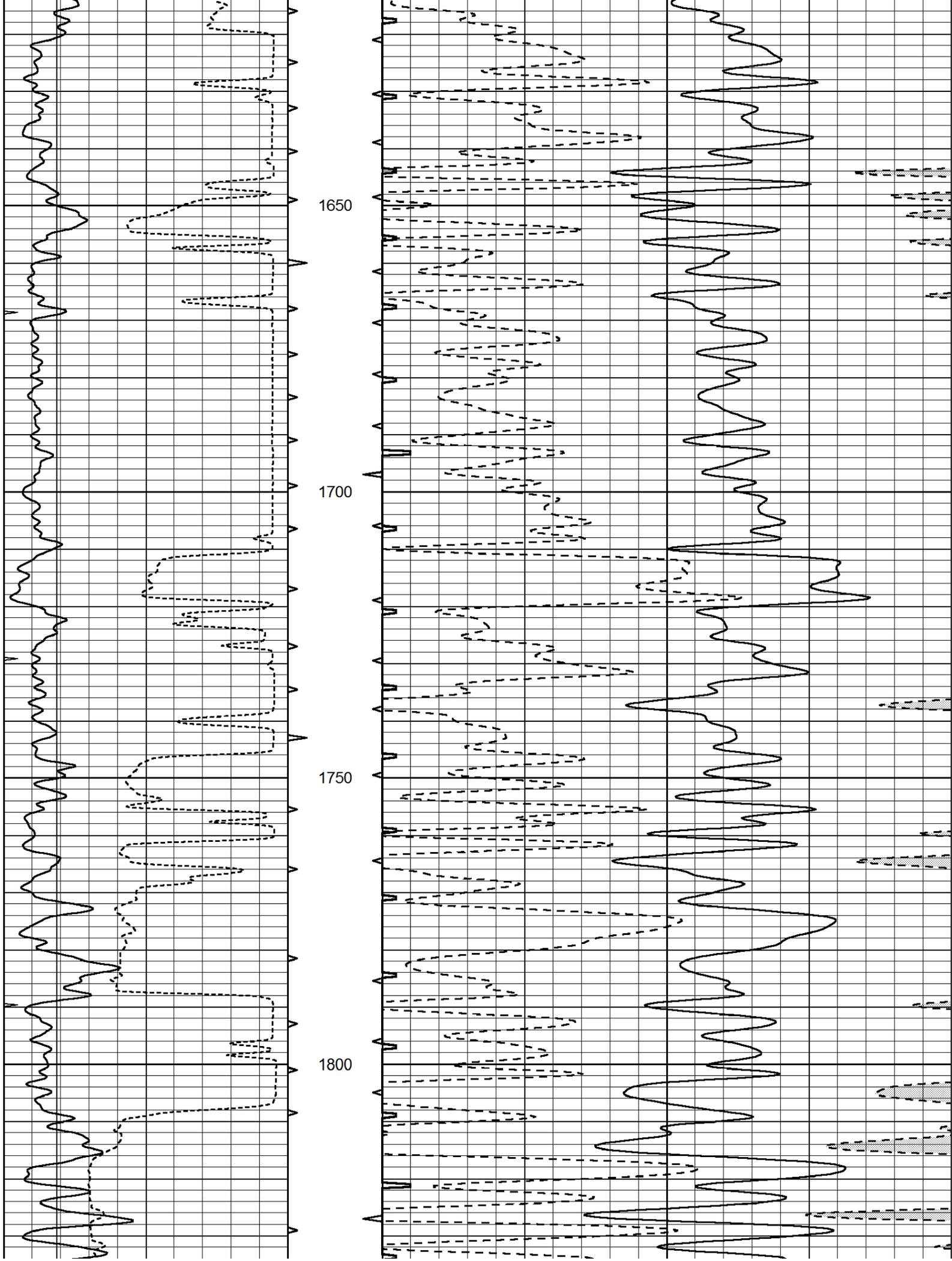
Database File: 9700ddn.db
 Dataset Pathname: pass6.2
 Presentation Format: slt
 Dataset Creation: Fri Oct 26 05:16:10 2012 by Calc Open-Cased 110302
 Charted by: Depth in Feet scaled 1:240

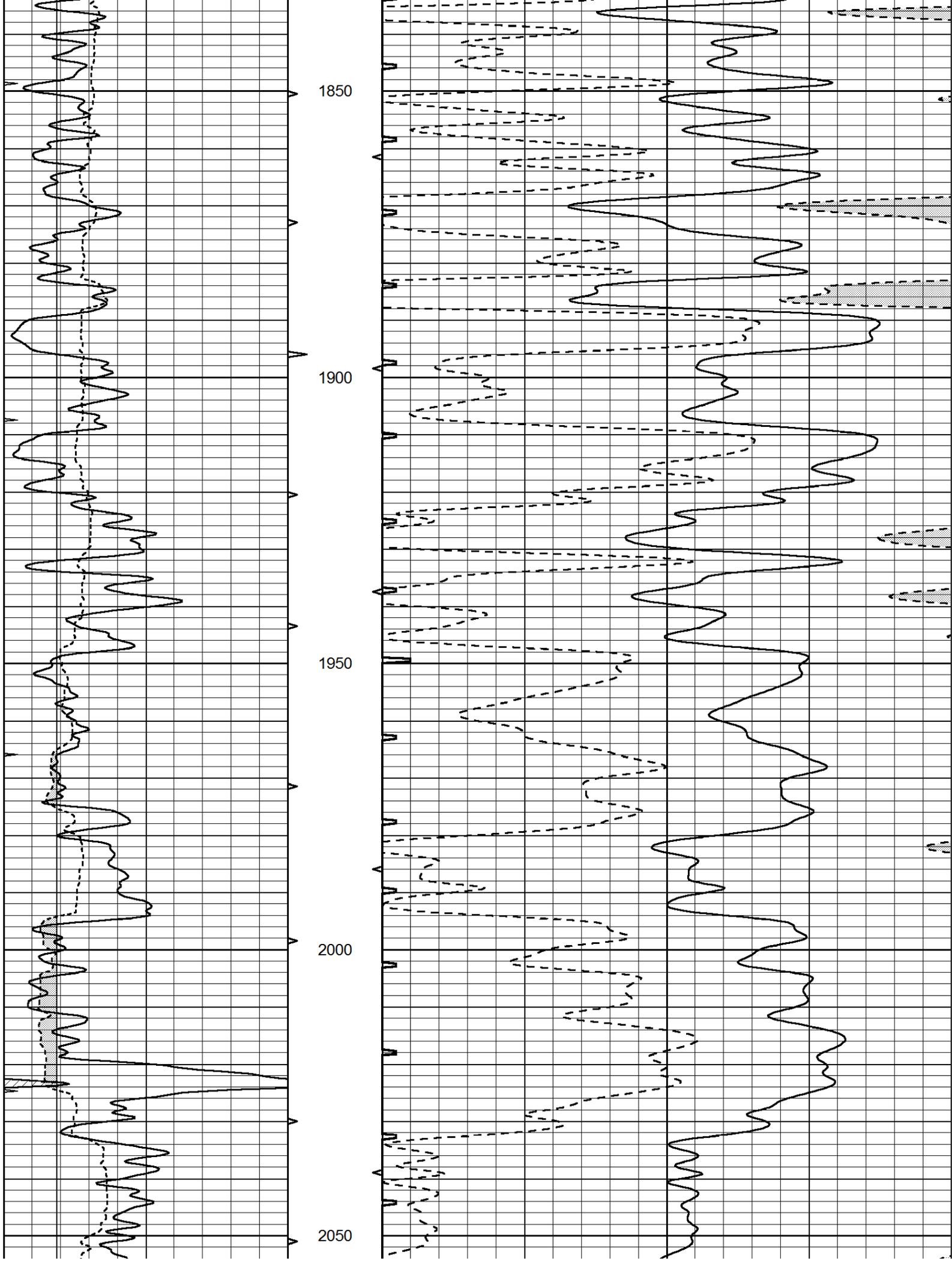
| | | | | | | |
|---|------------------|-----|------------|-----|----------------------|-----|
| 0 | GAMMA RAY (GAPI) | 150 | ABHV | 140 | DELTA TIME (usec/ft) | 40 |
| 6 | CALIPER (in) | 16 | 10 (ft3) 0 | 30 | SONIC POROSITY (pu) | -10 |
| 0 | MINMK | 20 | TBHV | 0 | ITT (msec) | 20 |
| | | | 0 (ft3)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

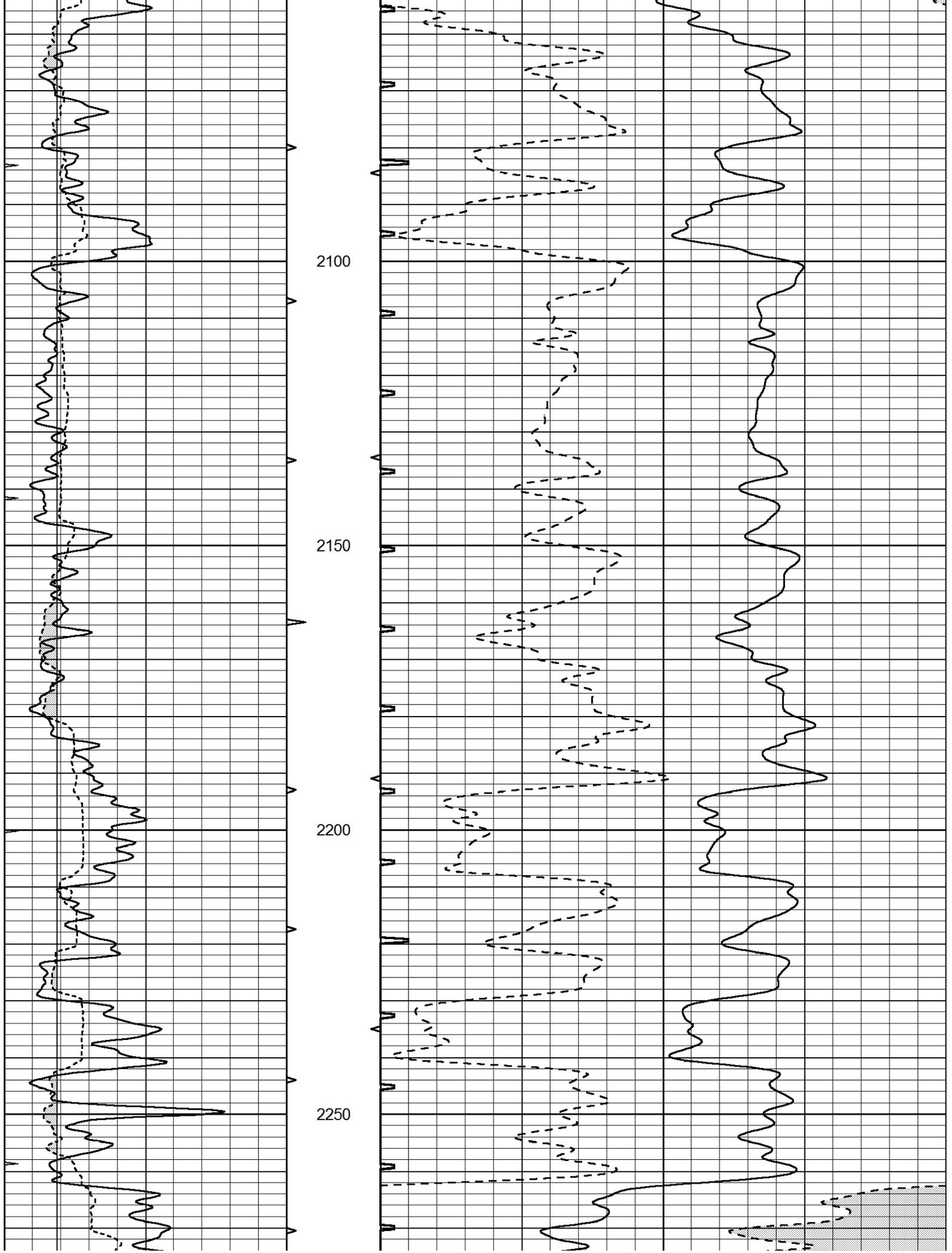


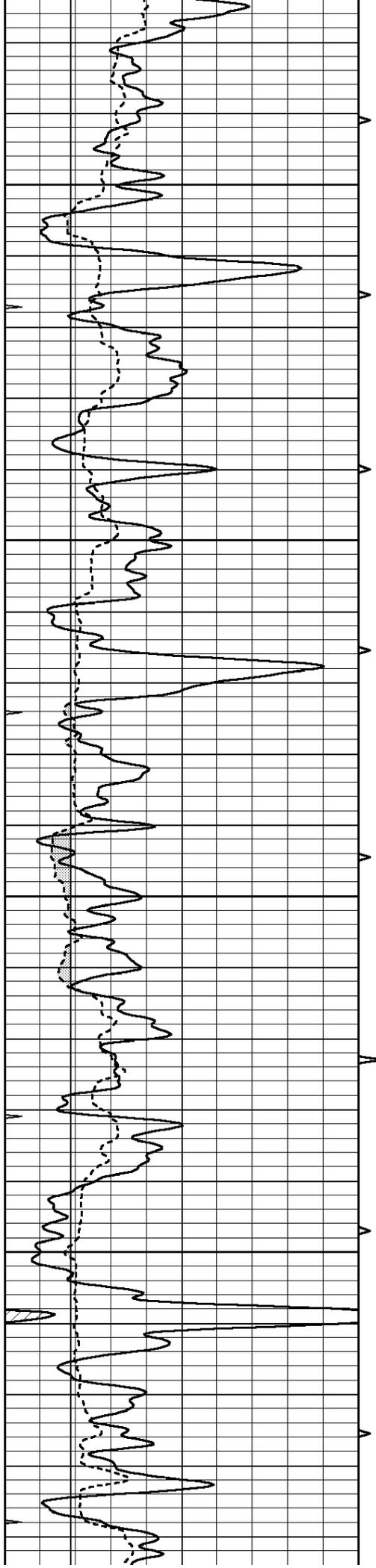










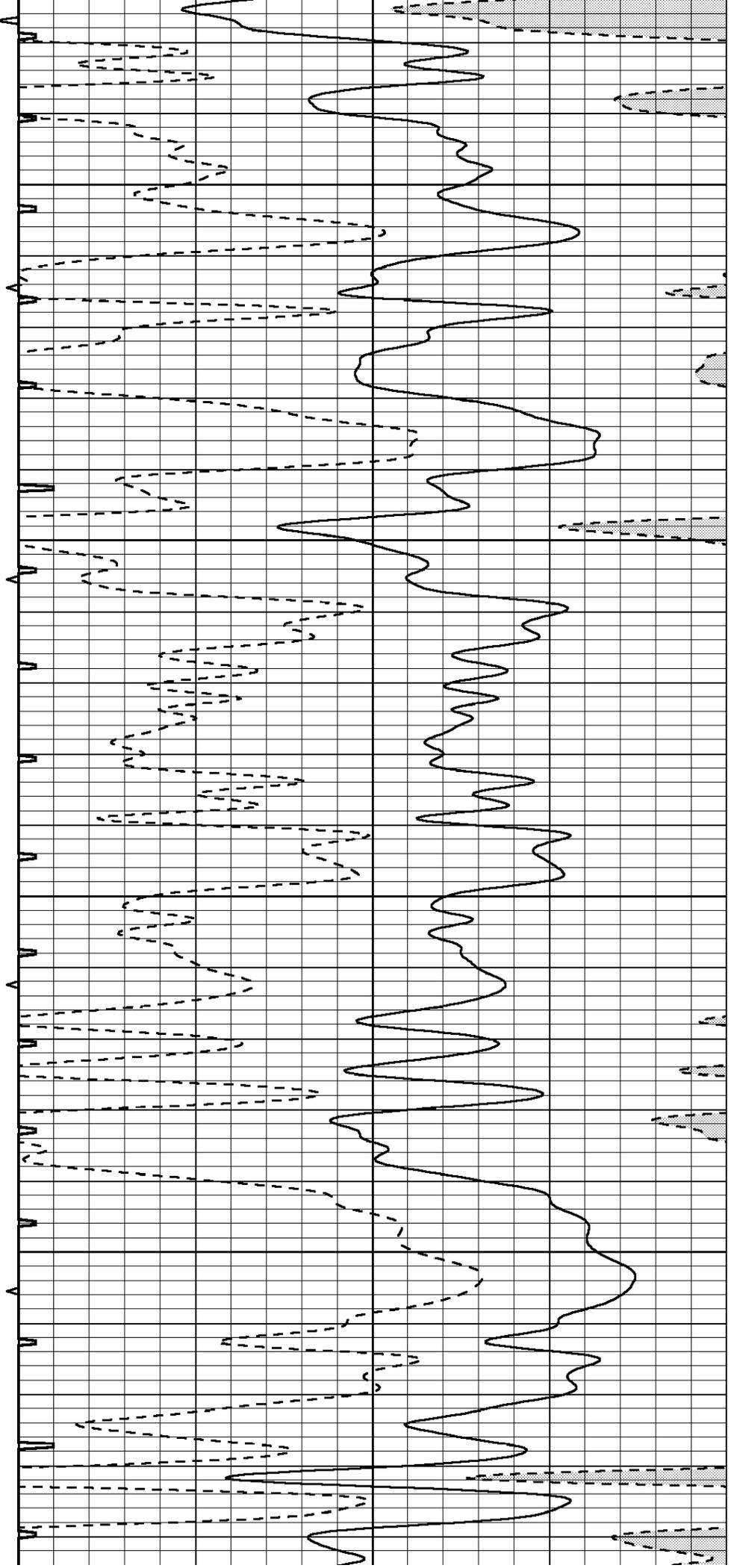


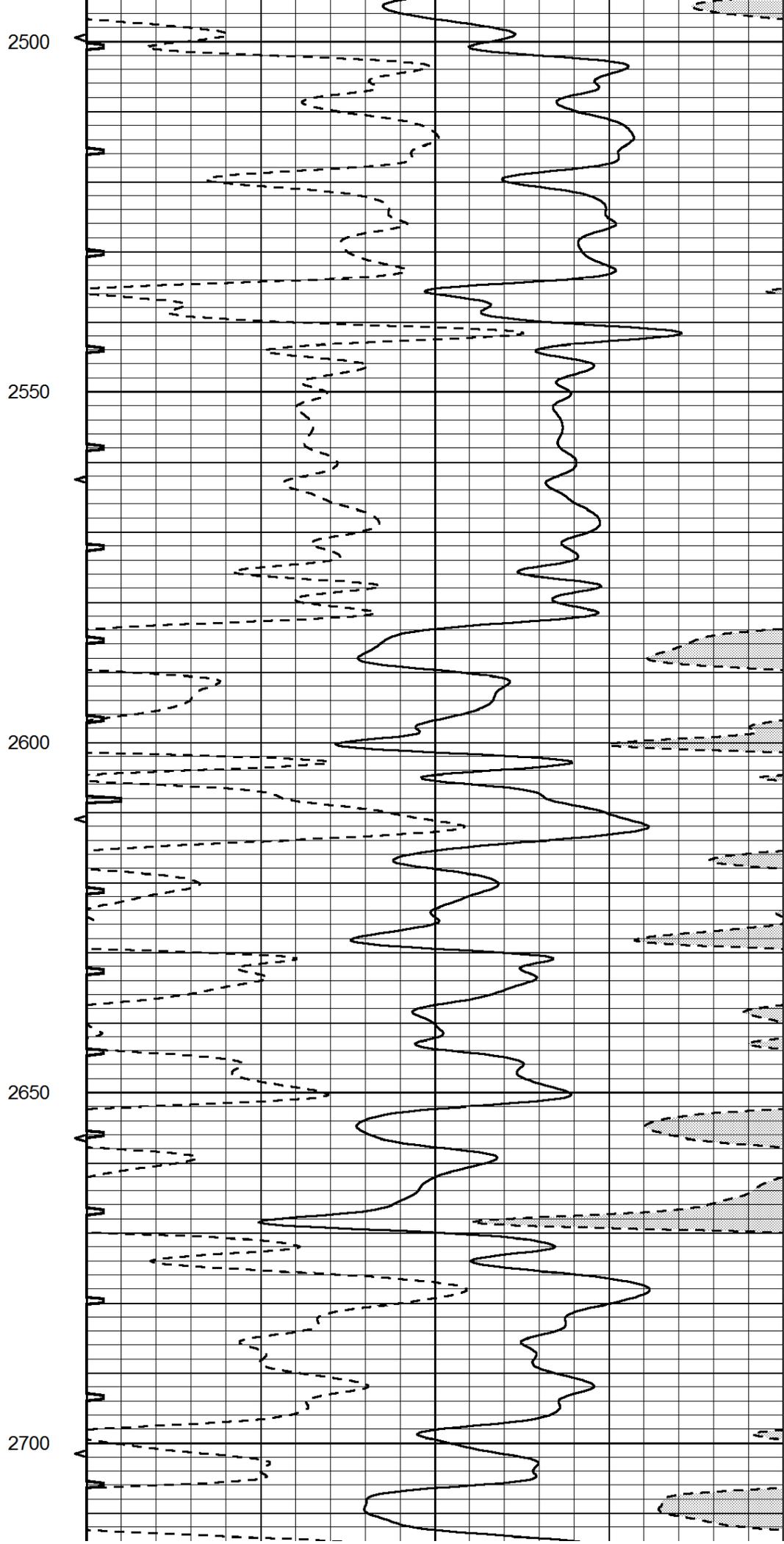
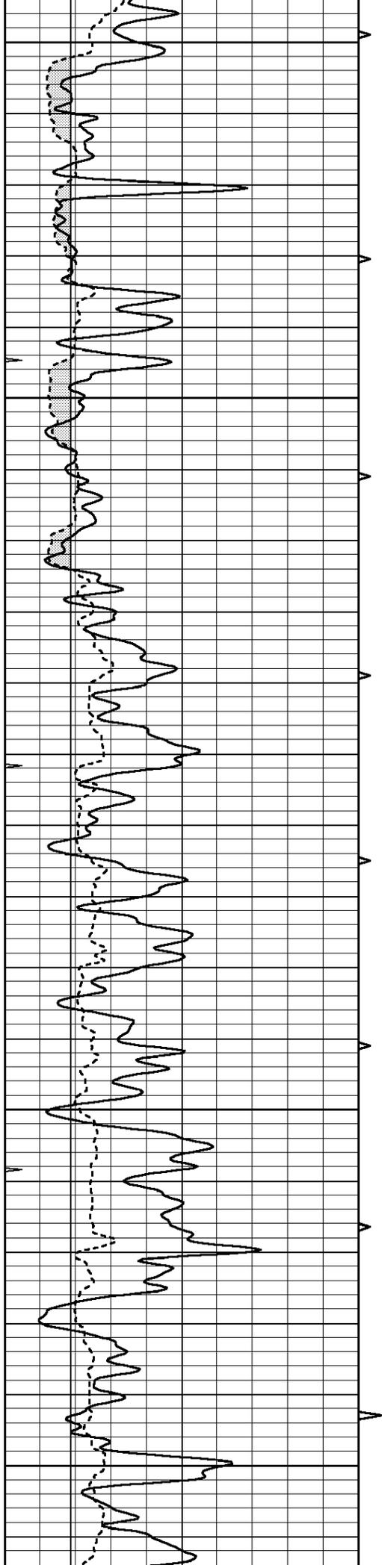
2300

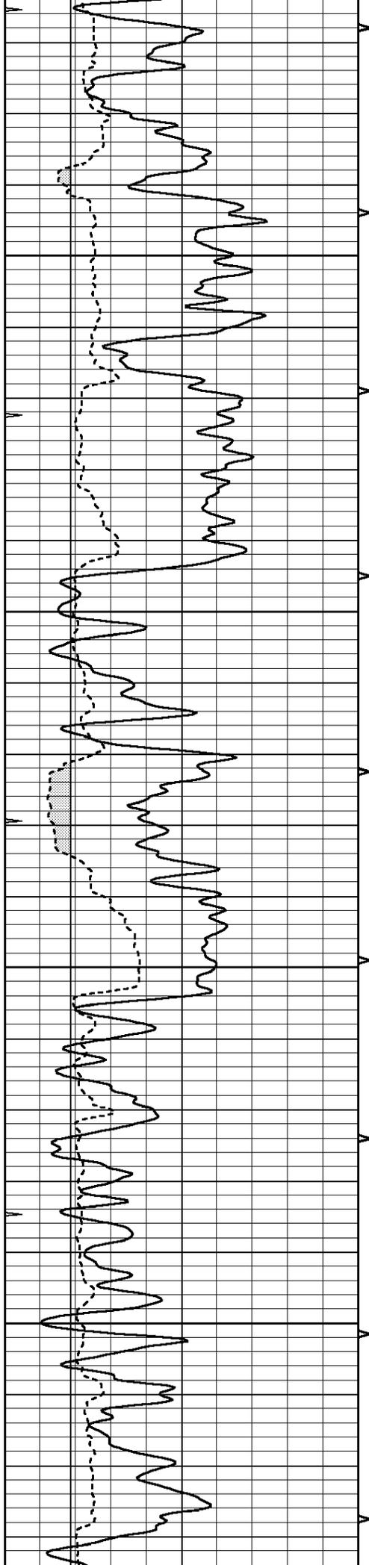
2350

2400

2450





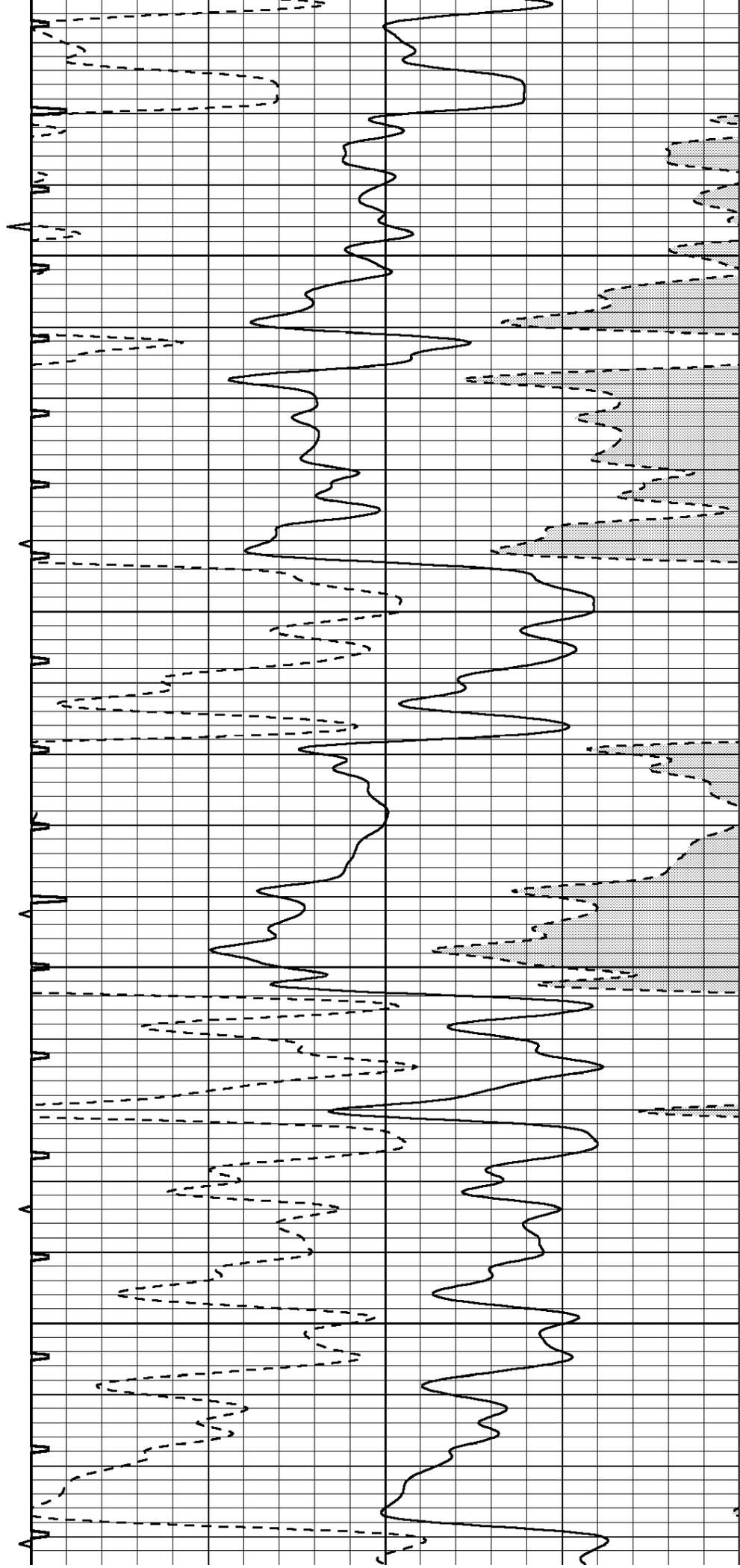


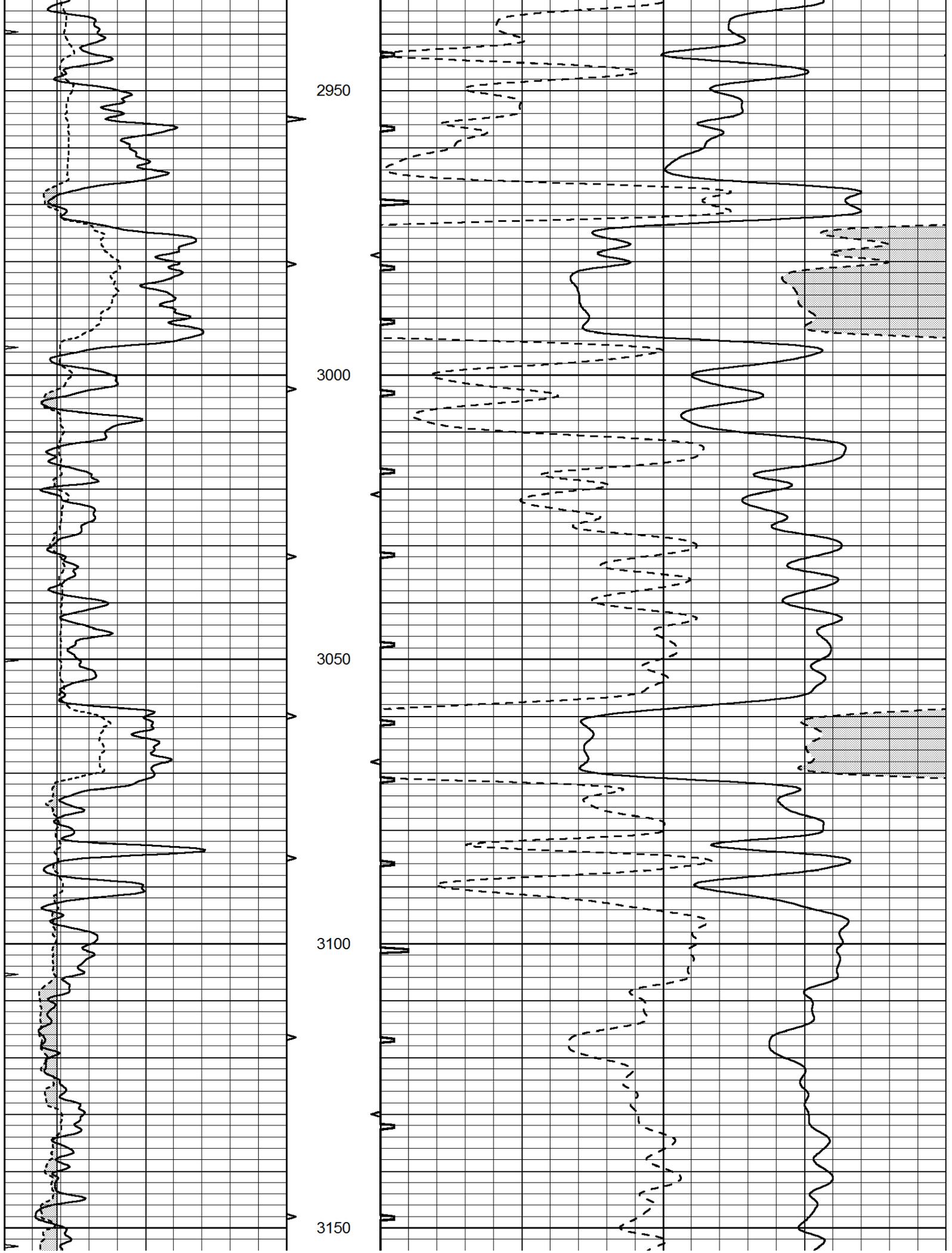
2750

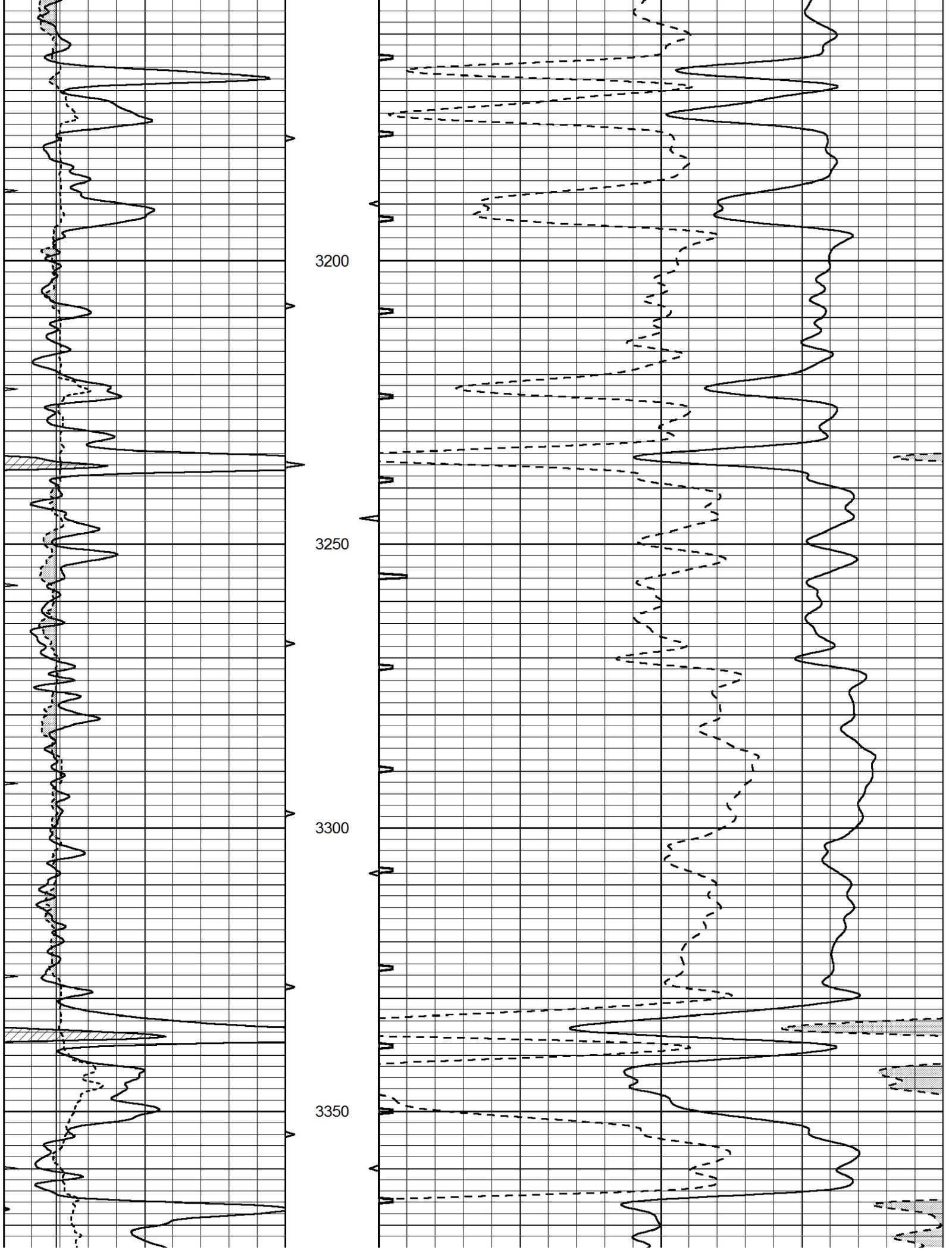
2800

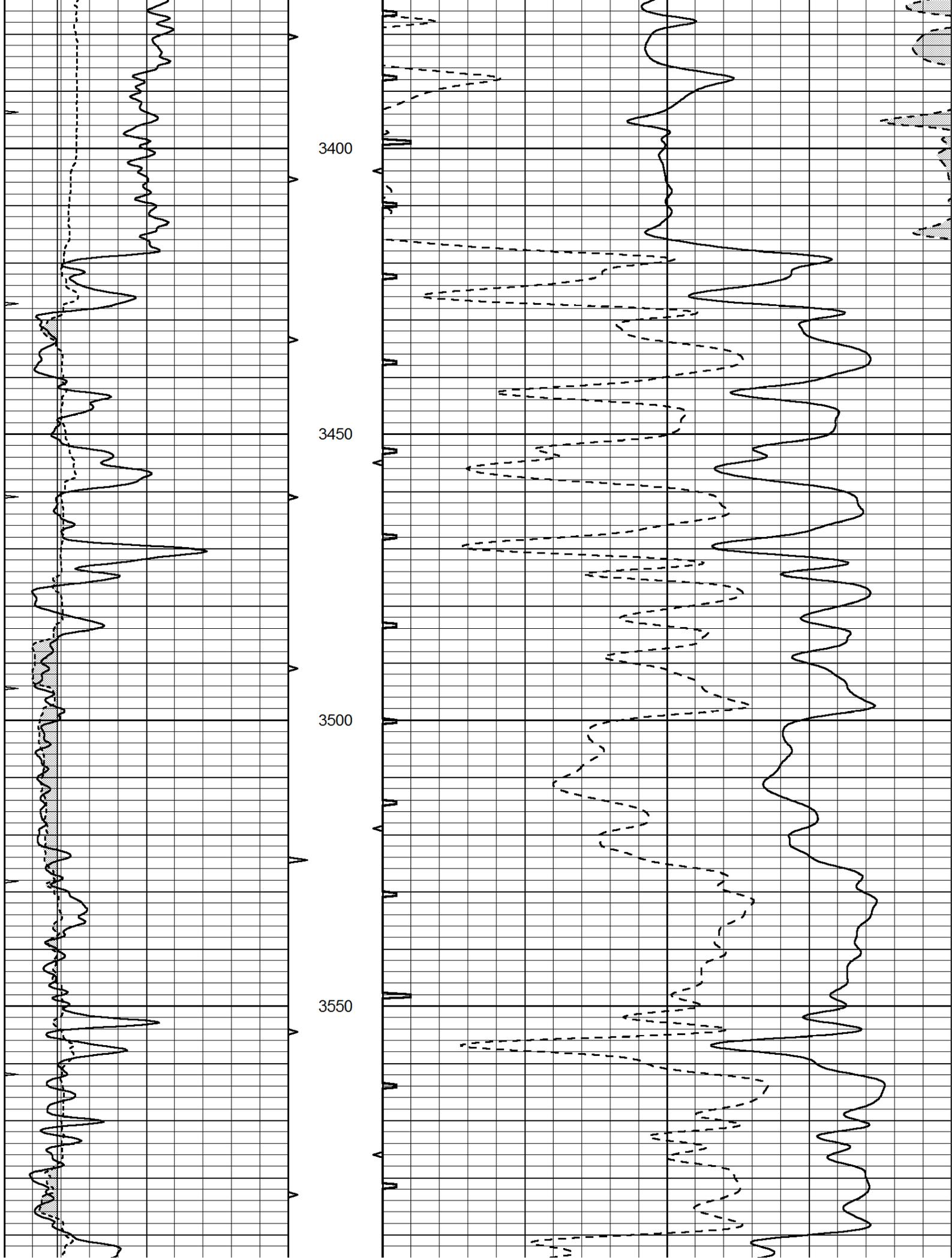
2850

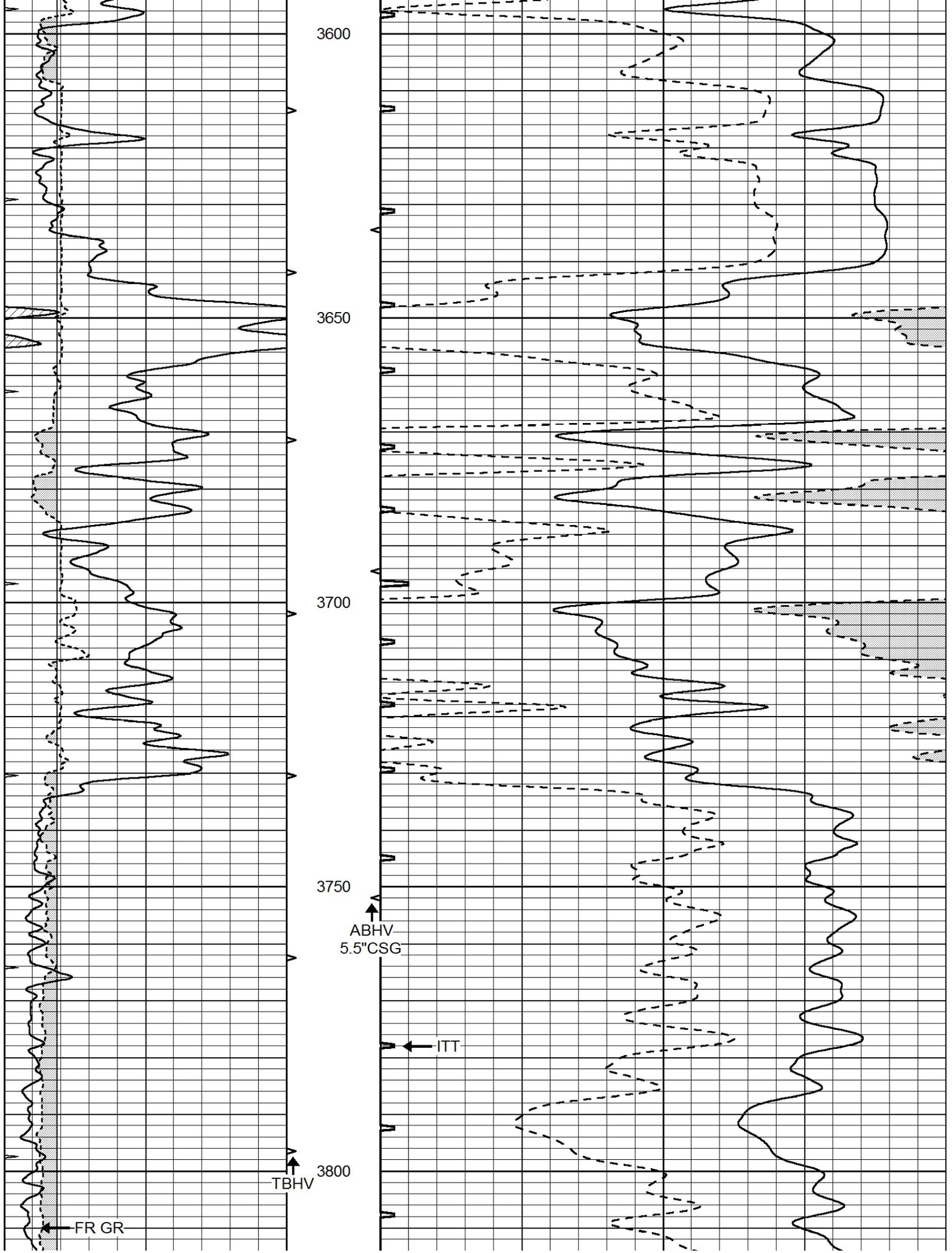
2900

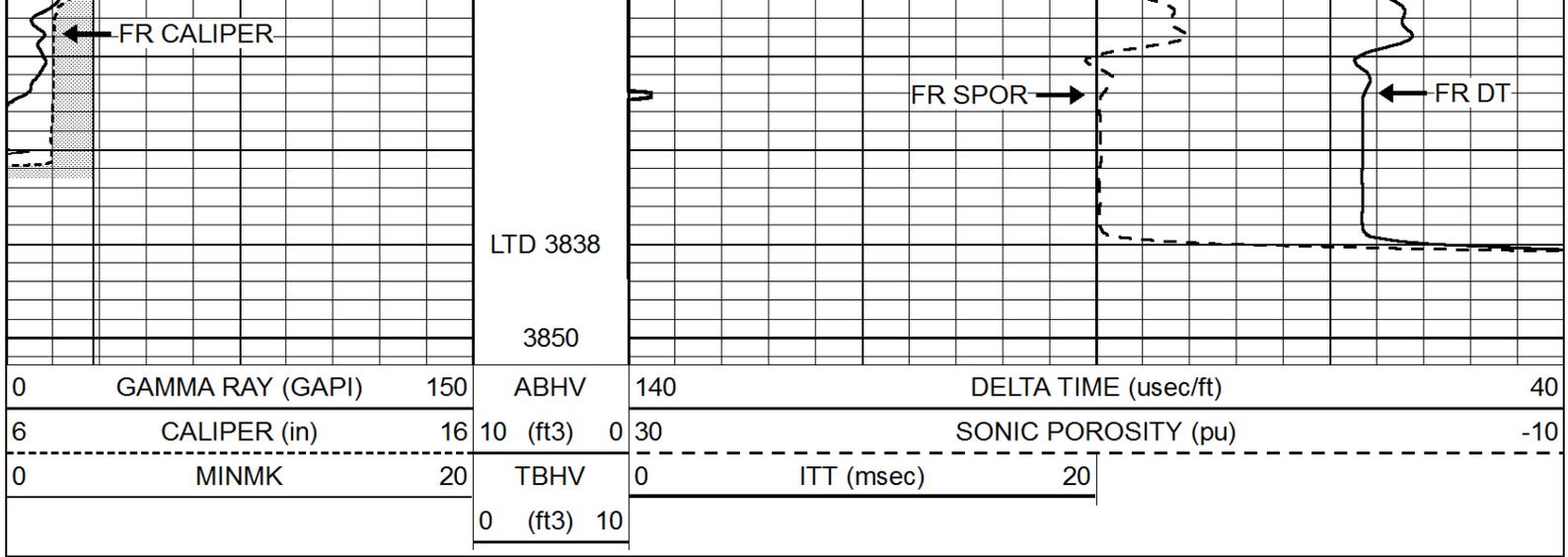






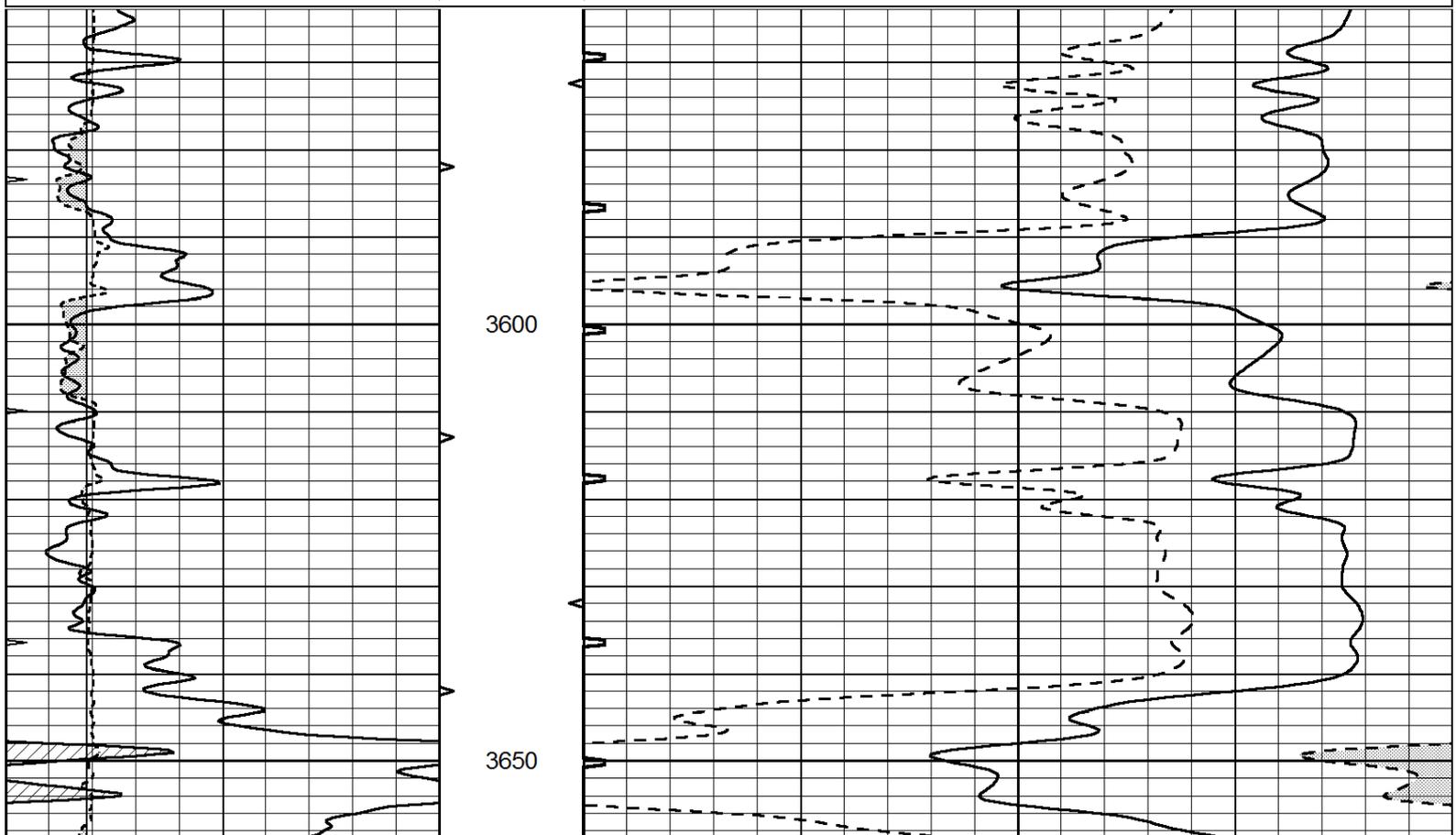
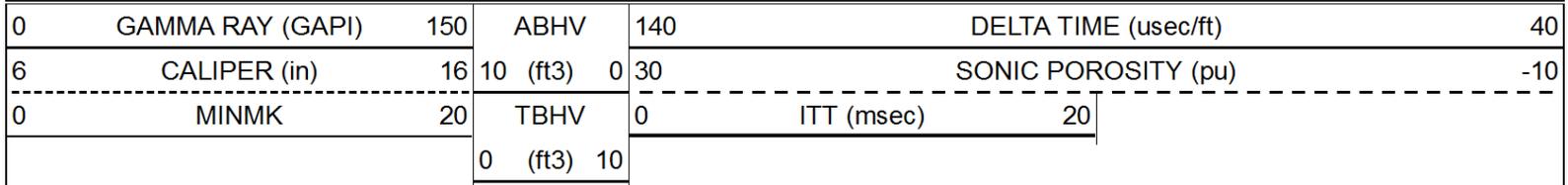


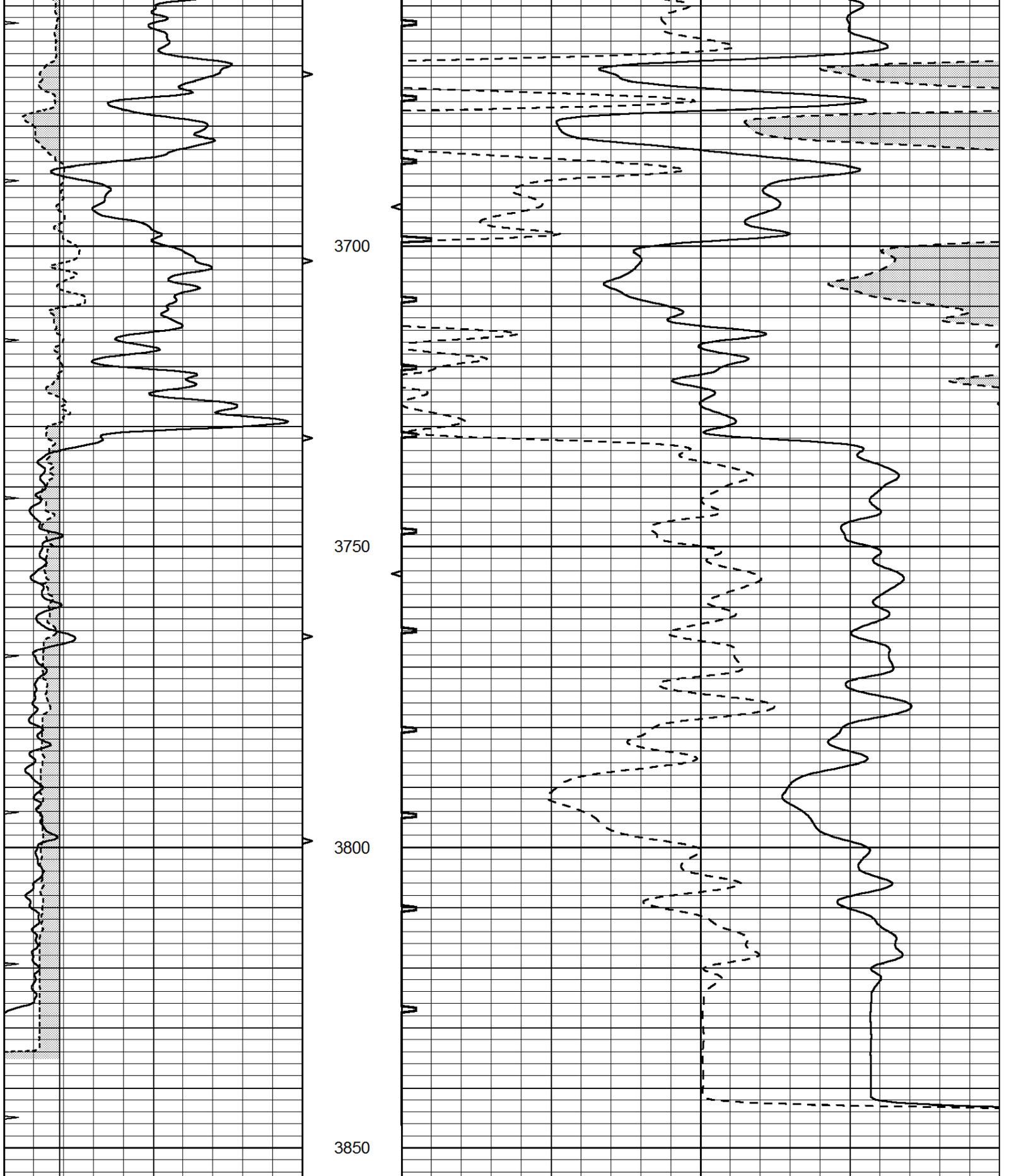




REPEAT SECTION

Database File: 9700ddn.db
 Dataset Pathname: pass5.1
 Presentation Format: slt
 Dataset Creation: Fri Oct 26 04:11:19 2012 by Calc Open-Cased 110302
 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 | | | |