



Pioneer Energy Services

## Borehole Compensated Sonic Log

|                        |                               |                                      |           |
|------------------------|-------------------------------|--------------------------------------|-----------|
| API No.                | 15-055-22,179-00-00           |                                      |           |
| Company                | Murfin Drilling Company, Inc. |                                      |           |
| Well                   | Marabelle No. 1-4             |                                      |           |
| Field                  | Wildcat                       |                                      |           |
| County                 | Finney                        | State Kansas                         |           |
| Location               | 1100' FSL & 1000' FEL         |                                      |           |
|                        | Sec: 4                        | Twp: 21 S                            | Rge: 34 W |
| Permanent Datum        | Ground Level                  | Elevation                            | 2983      |
| Log Measured From      | Kelly Bushing                 | 11 Ft. Above Perm. Datum             |           |
| Drilling Measured From | Kelly Bushing                 |                                      |           |
|                        |                               | Other Services<br>CNL/CDL<br>MEL/DIL |           |
|                        |                               | Elevation                            |           |
|                        |                               | K.B. 2994                            |           |
|                        |                               | D.F. G.L. 2983                       |           |

|                        |                |      |  |
|------------------------|----------------|------|--|
| Date                   | 9/25/2012      |      |  |
| Run Number             | Two            |      |  |
| Type Log               | BHC Sonic      |      |  |
| Depth Driller          | 4900           |      |  |
| Depth Logger           | 4902           |      |  |
| Bottom Logged Interval | 4891           |      |  |
| Top Logged Interval    | 200            |      |  |
| Type Fluid In Hole     | Chemical       |      |  |
| Salinity, PPM CL       | 5000           |      |  |
| Density                | 9.4            |      |  |
| Level                  | Full           |      |  |
| Max. Rec. Temp. F      | 125            |      |  |
| Operating Rig Time     | 5 Hours        |      |  |
| Equipment -- Location  | 15             | Hays |  |
| Recorded By            | D.Kerr         |      |  |
| Witnessed By           | Jeff Christian |      |  |

| Borehole Record |       |      |     | Casing Record |      |      |     |
|-----------------|-------|------|-----|---------------|------|------|-----|
| Run No          | Bit   | From | To  | Size          | Wgt. | From | To  |
| One             | 12.25 | 00   | 229 | 8.625         | 23#  | 00   | 229 |
| Two             | 7.875 | 229  | TD  |               |      |      |     |
|                 |       |      |     |               |      |      |     |
|                 |       |      |     |               |      |      |     |
|                 |       |      |     |               |      |      |     |
|                 |       |      |     |               |      |      |     |
|                 |       |      |     |               |      |      |     |
|                 |       |      |     |               |      |      |     |

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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

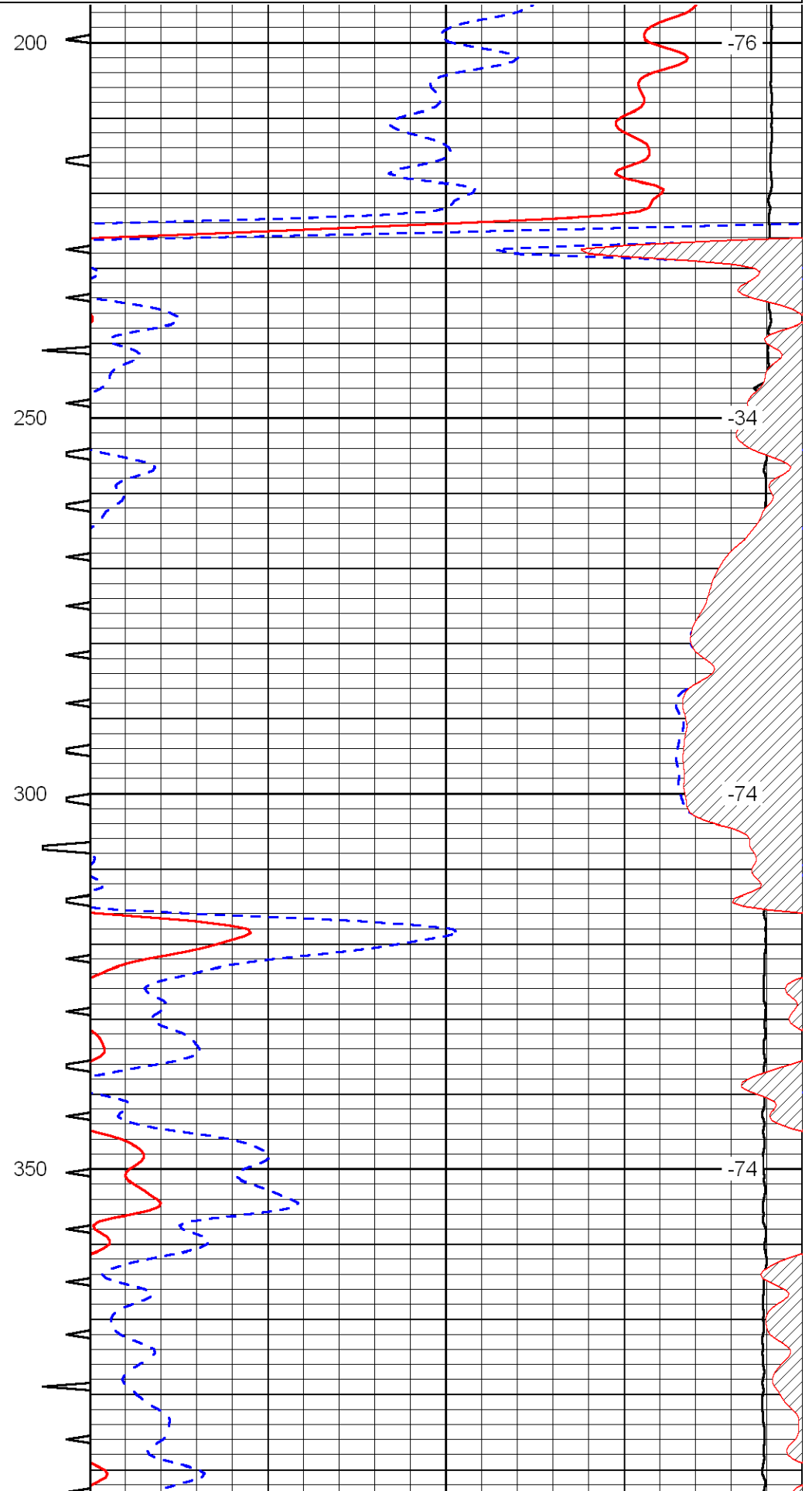
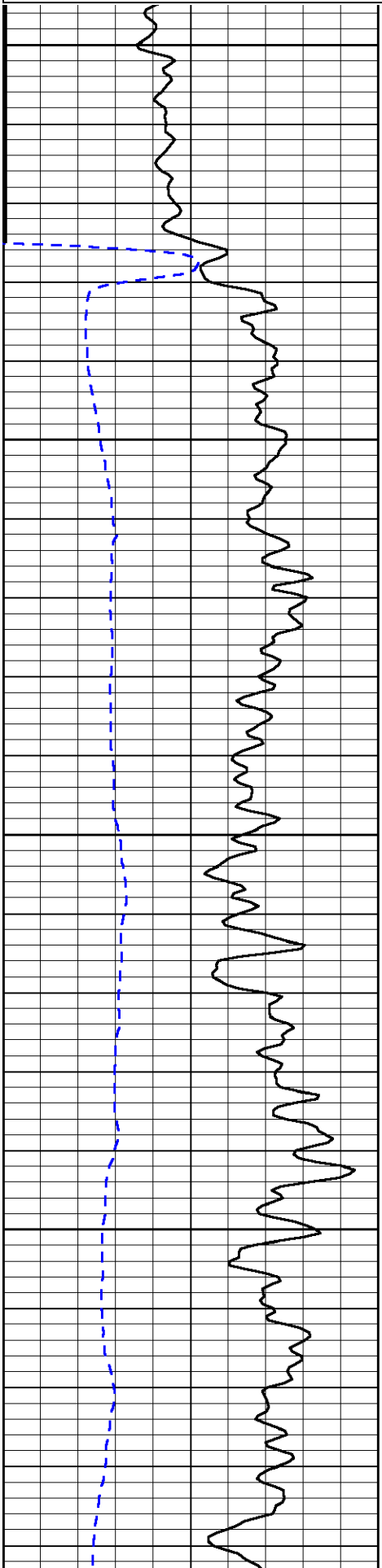
Thank you for using Log-Tech, Inc.  
(785) 625-3858

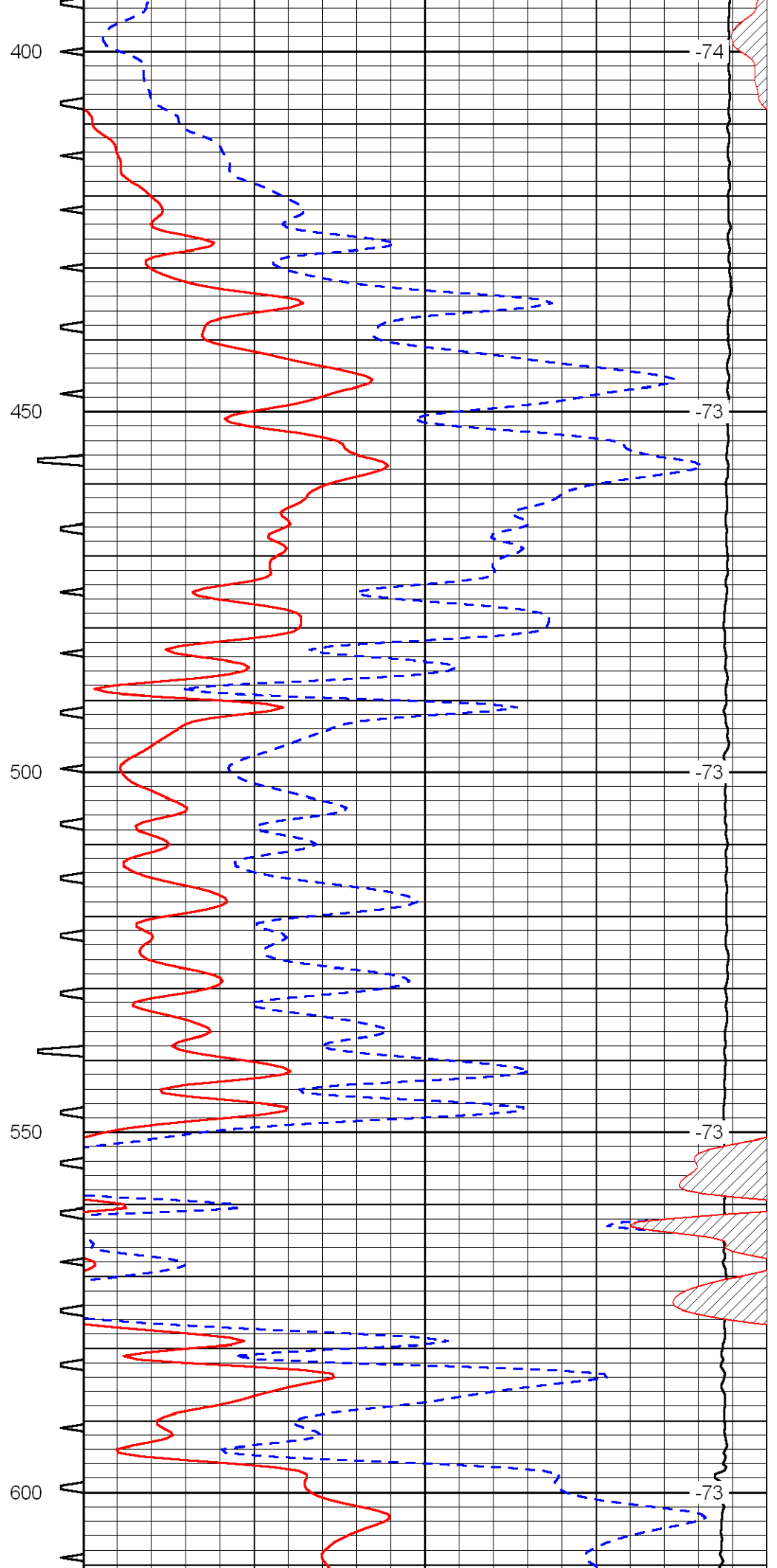
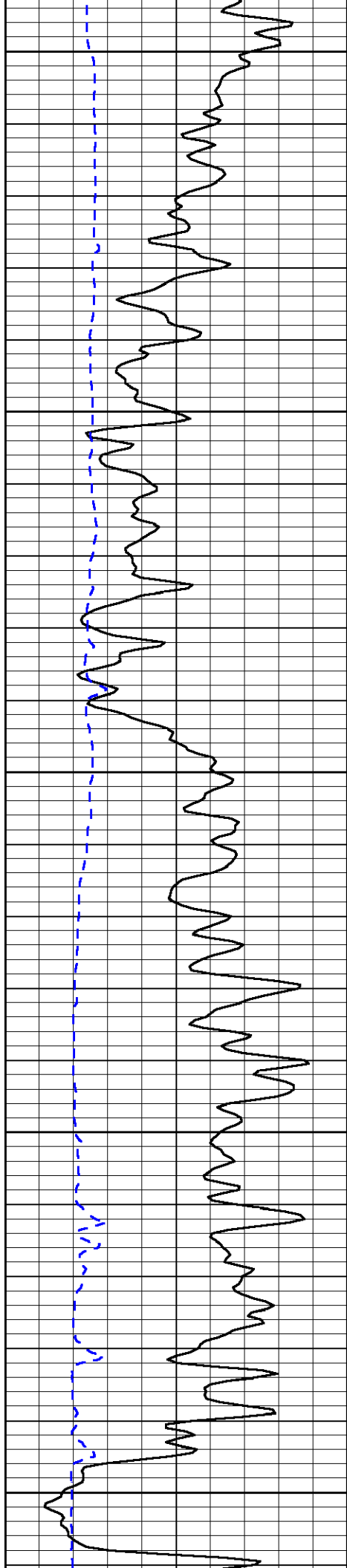
Scott City KS, South to the Finney-Scott County Line,  
8 1/2 West, 3/4 South, West Into

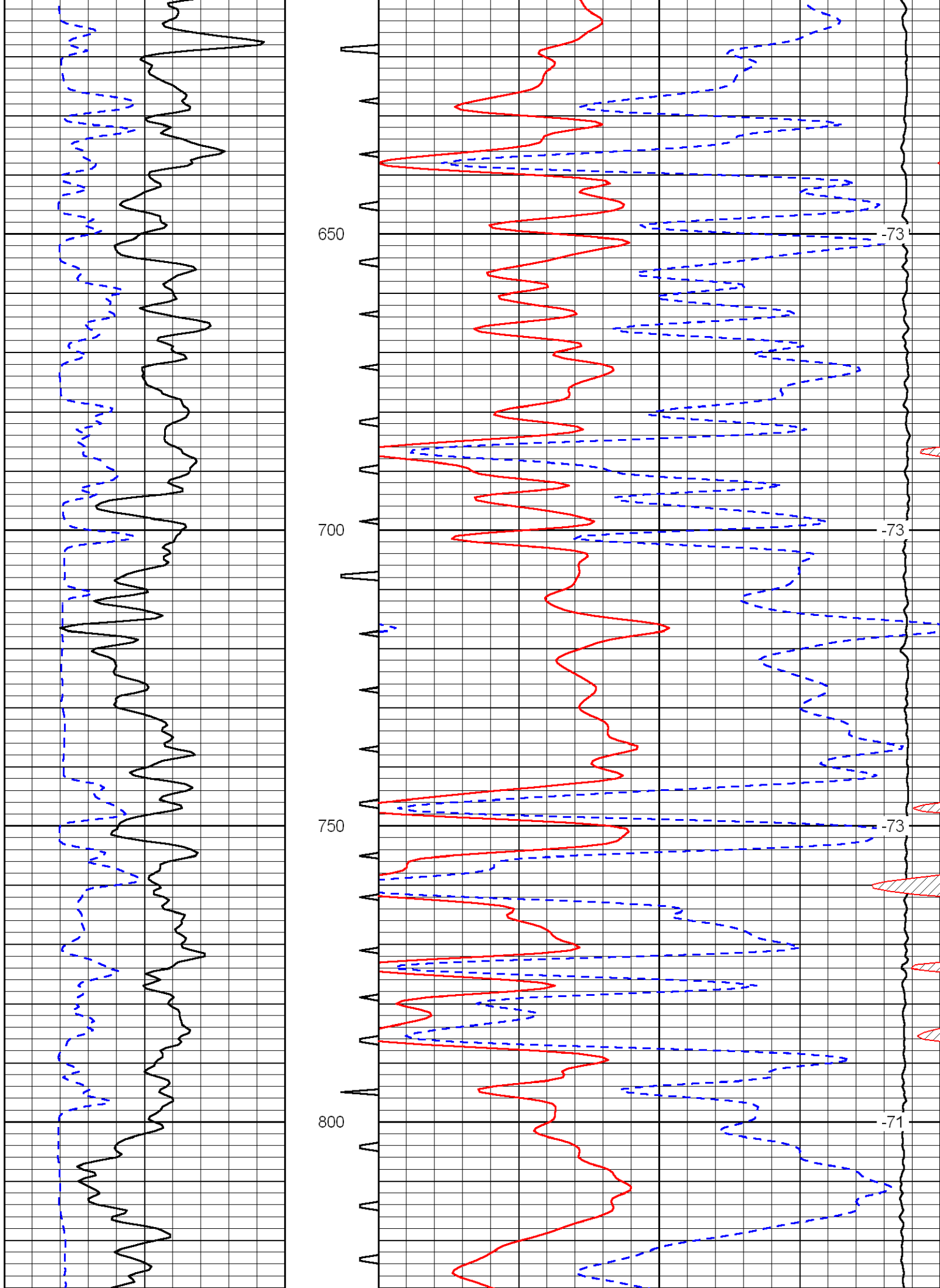
Database File: murfin\_marabelle\_1\_4hd.db  
 Dataset Pathname: DIL/murfstk  
 Presentation Format: sonic  
 Dataset Creation: Tue Sep 25 22:34:15 2012  
 Charted by: Depth in Feet scaled 1:240

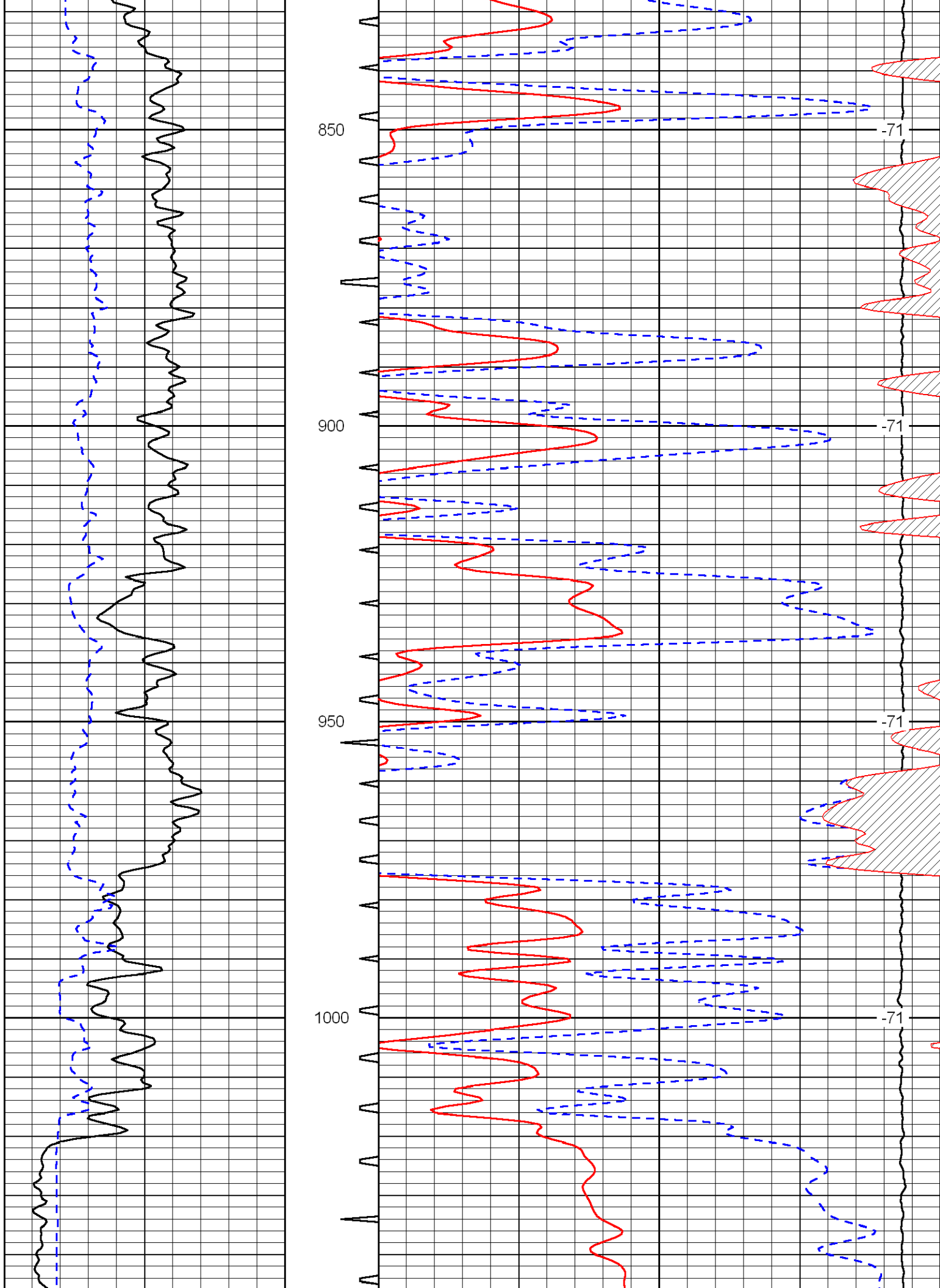
|     |             |     |           |       |                      |     |
|-----|-------------|-----|-----------|-------|----------------------|-----|
| 0   | Gamma Ray   | 150 | Sonic Int | 140   | Delta Time (usec/ft) | 40  |
| 150 | Gamma Ray   | 300 | 5         | 0     | Sonic Porosity       | -10 |
| 6   | dCAL (GAPI) | 16  |           | 15000 | LTEN (lb)            | 0   |

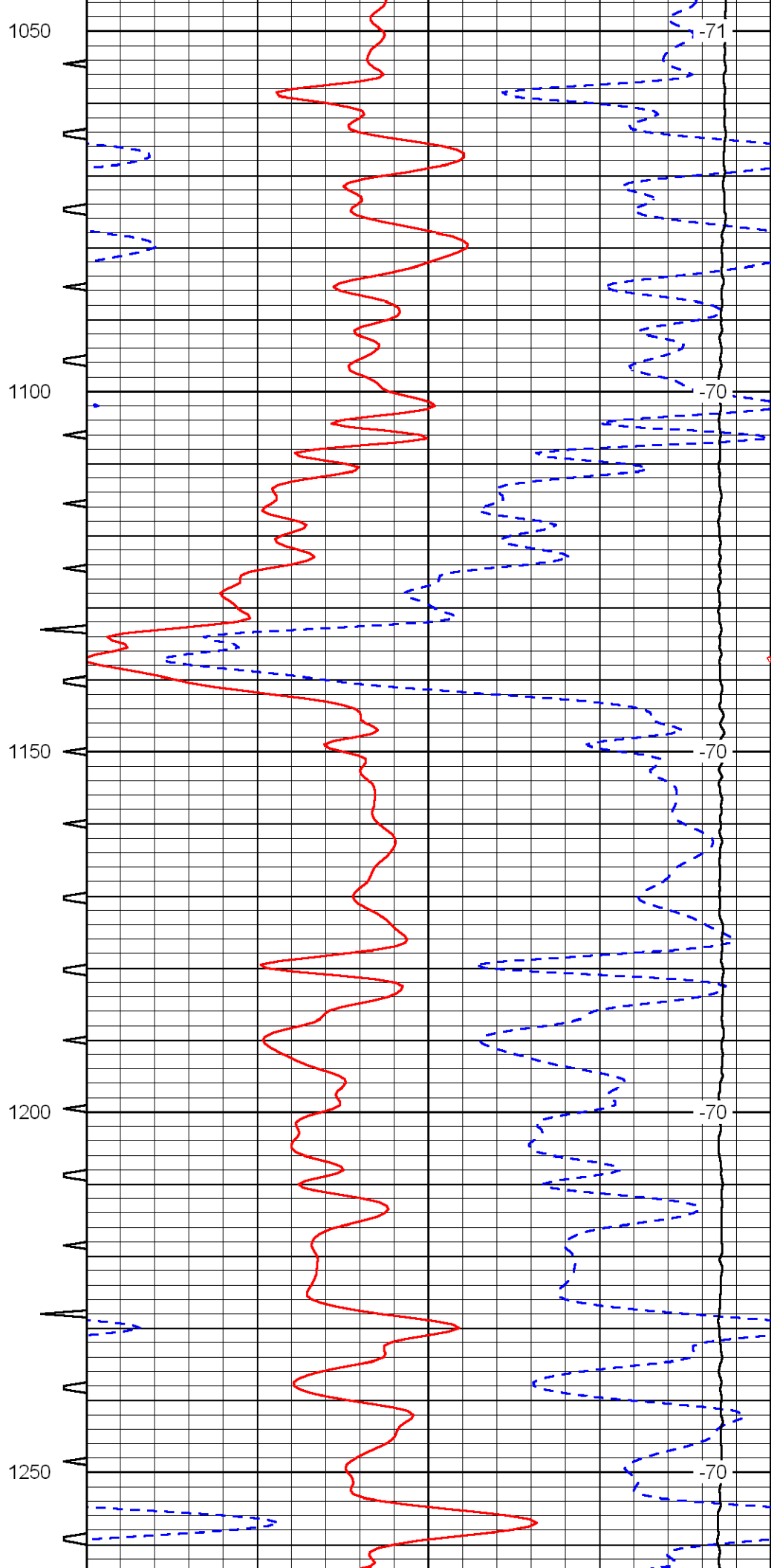
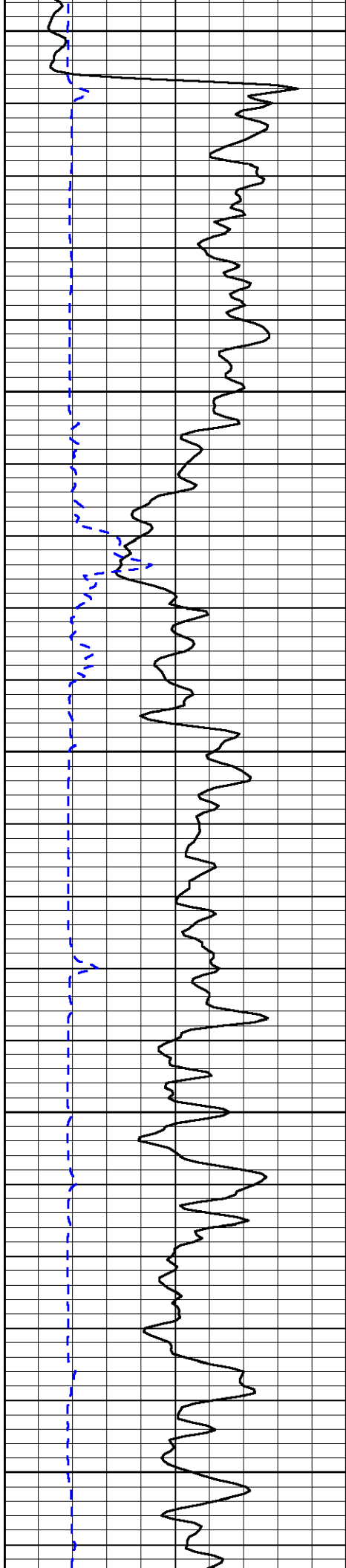
LSPD

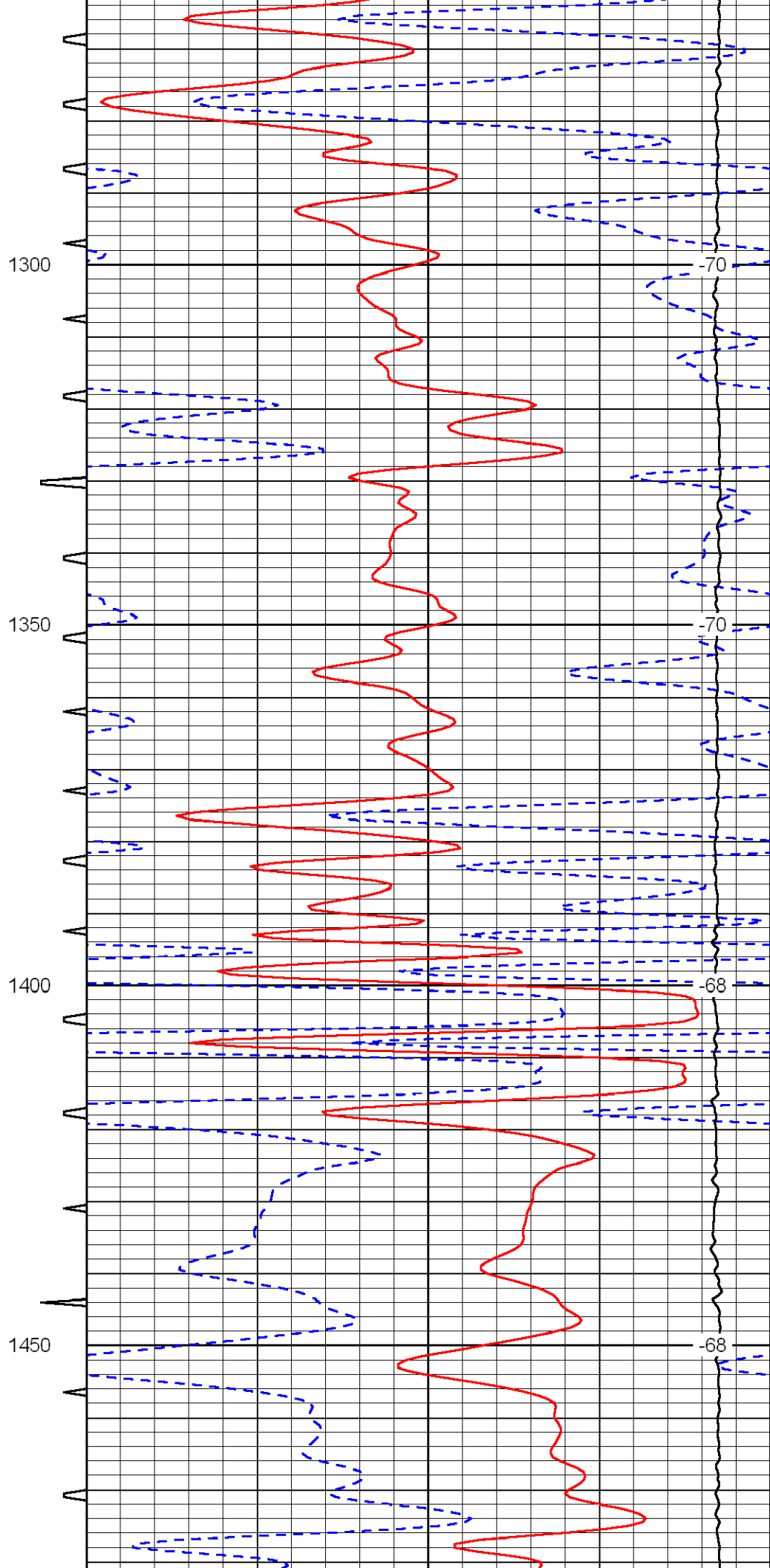
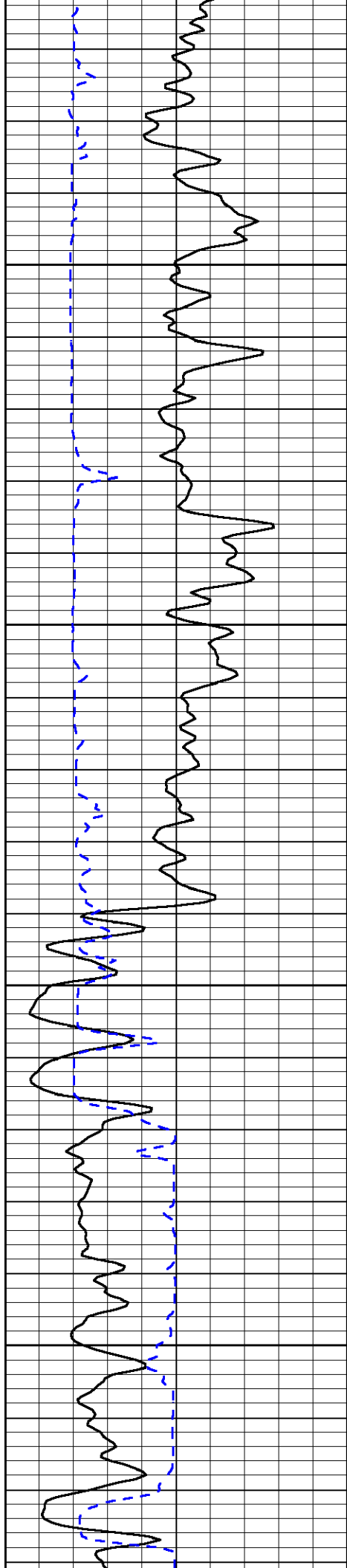


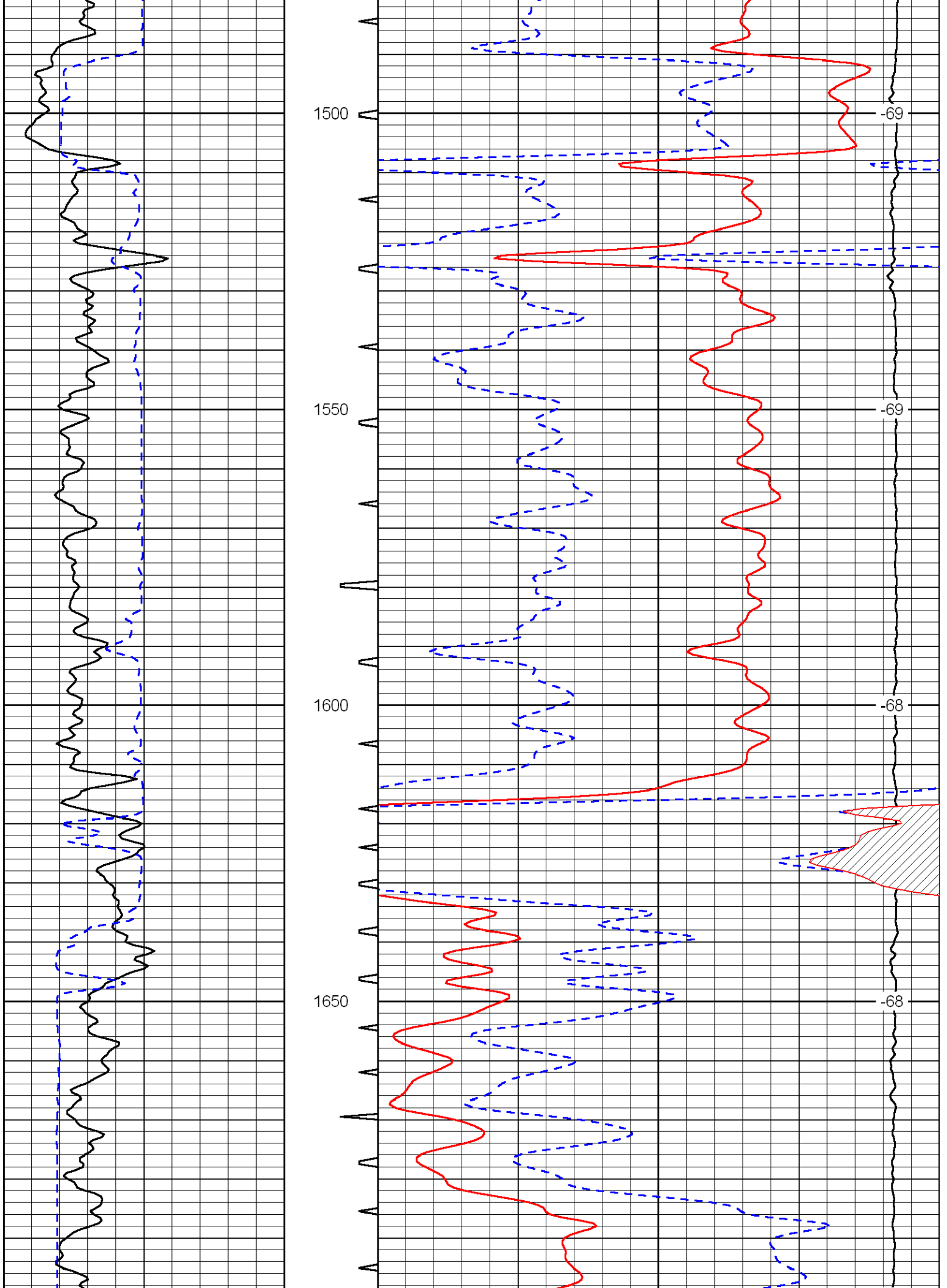




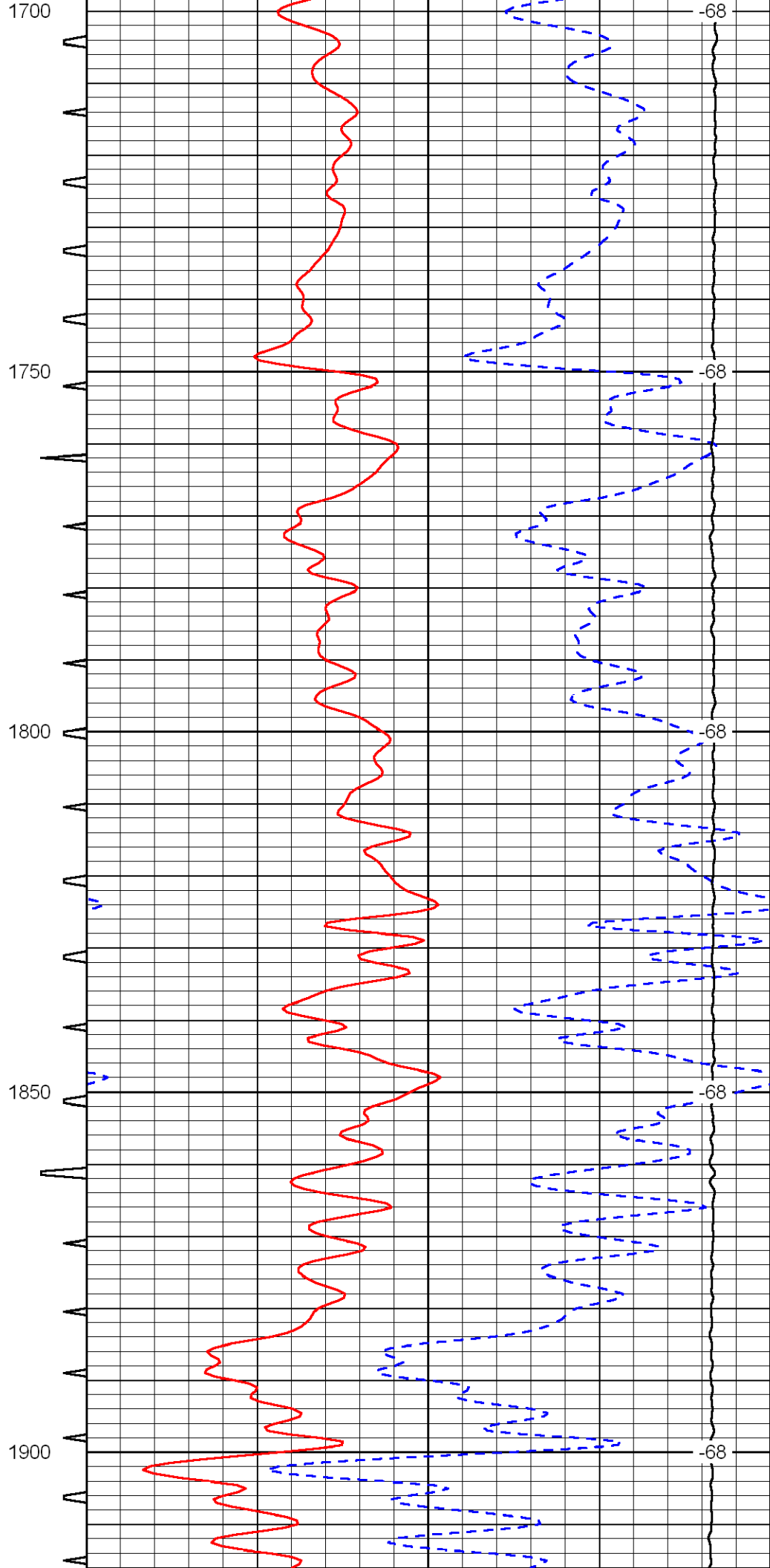
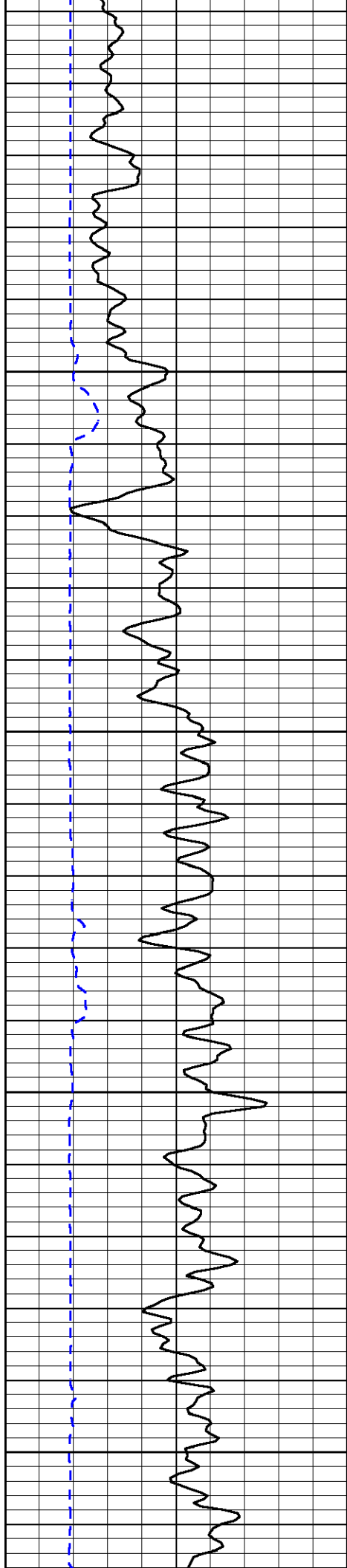


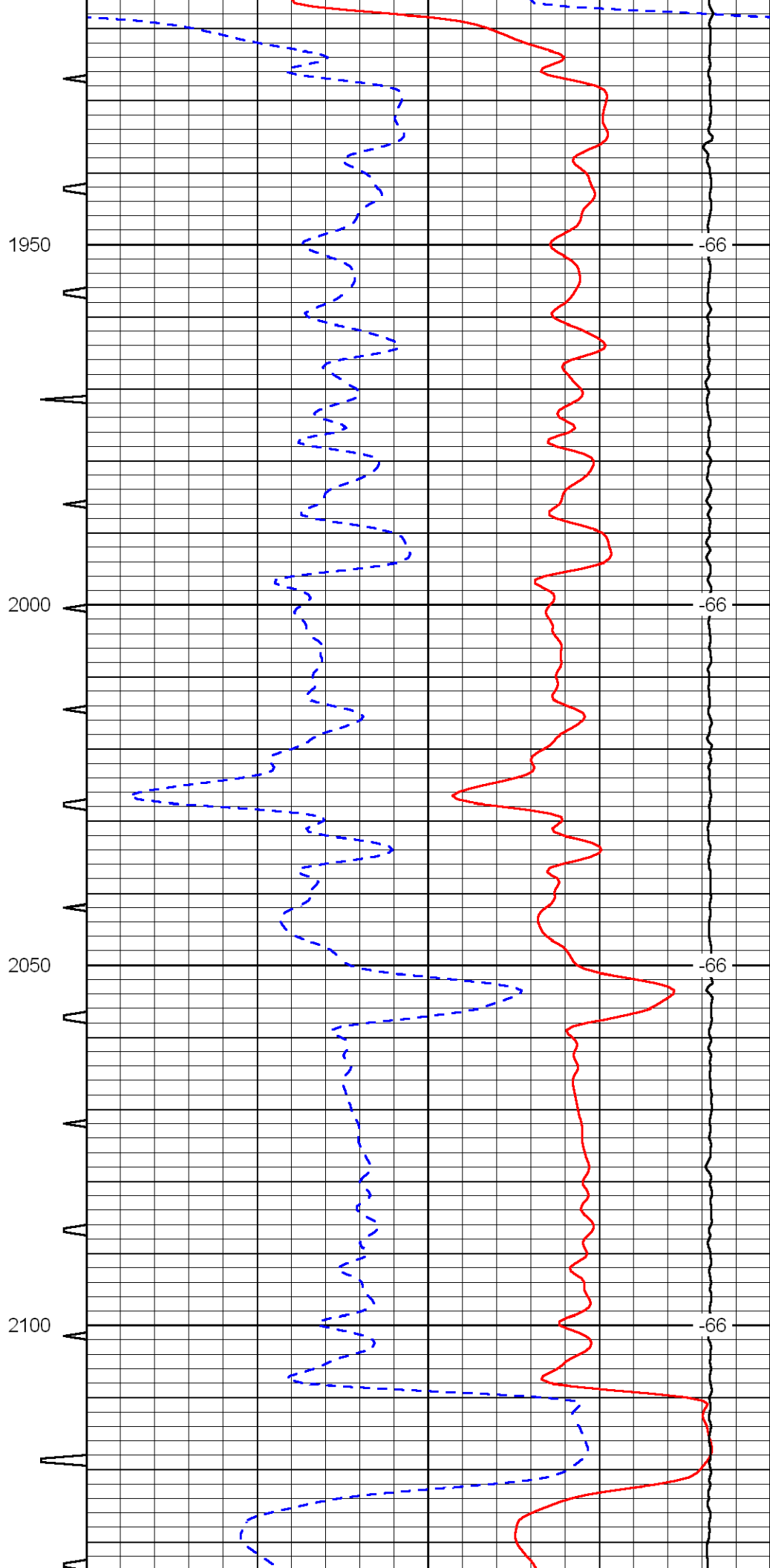
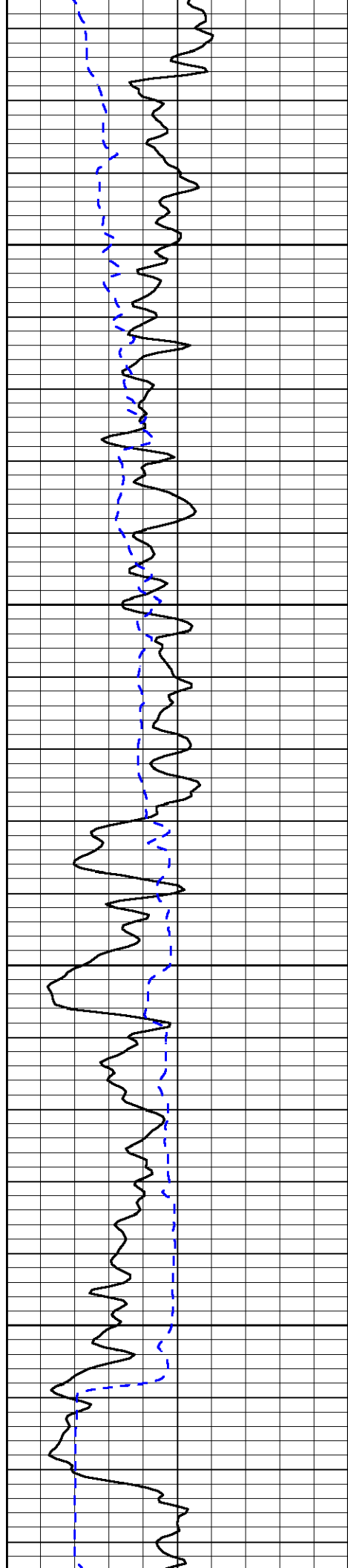


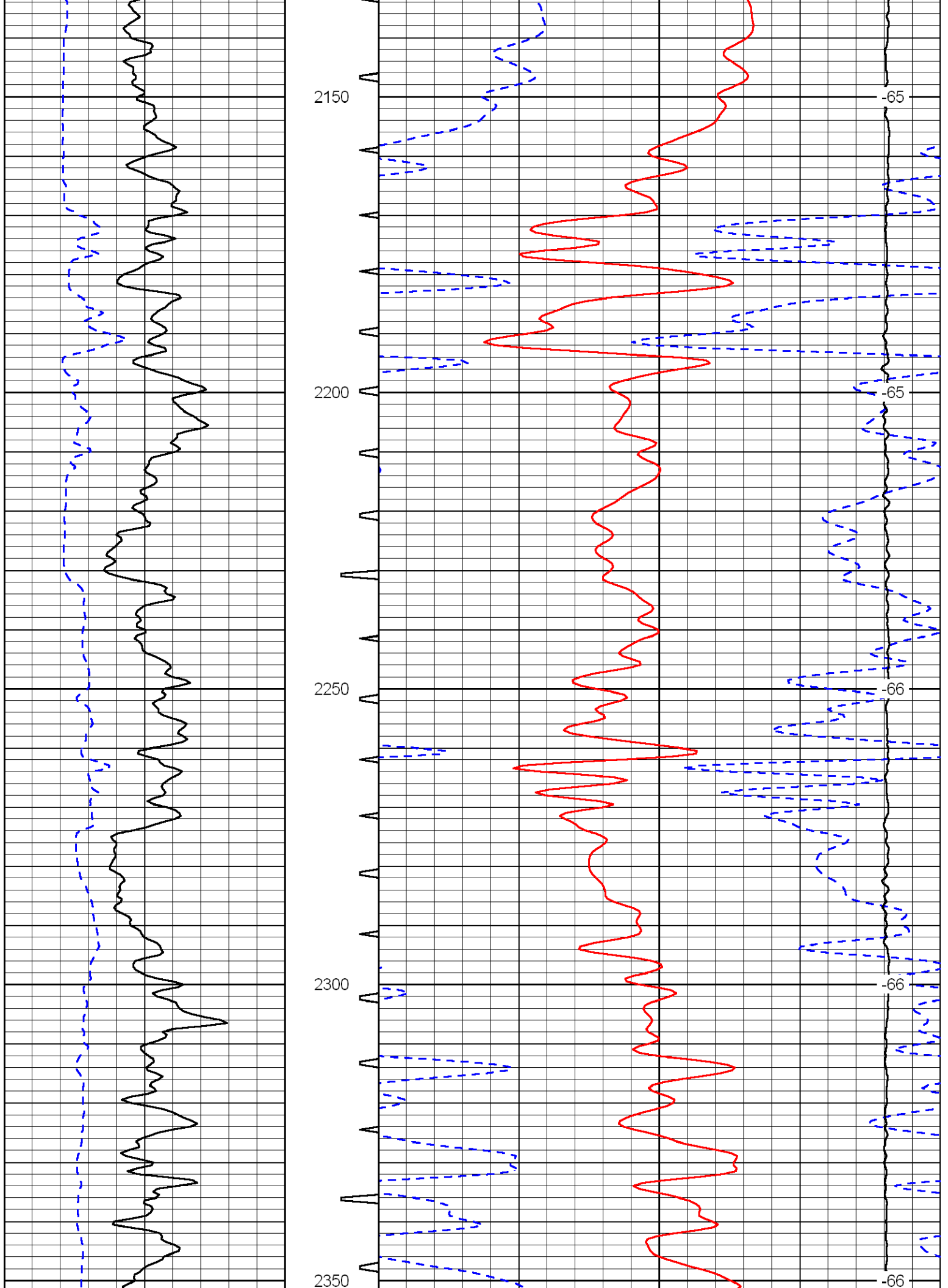


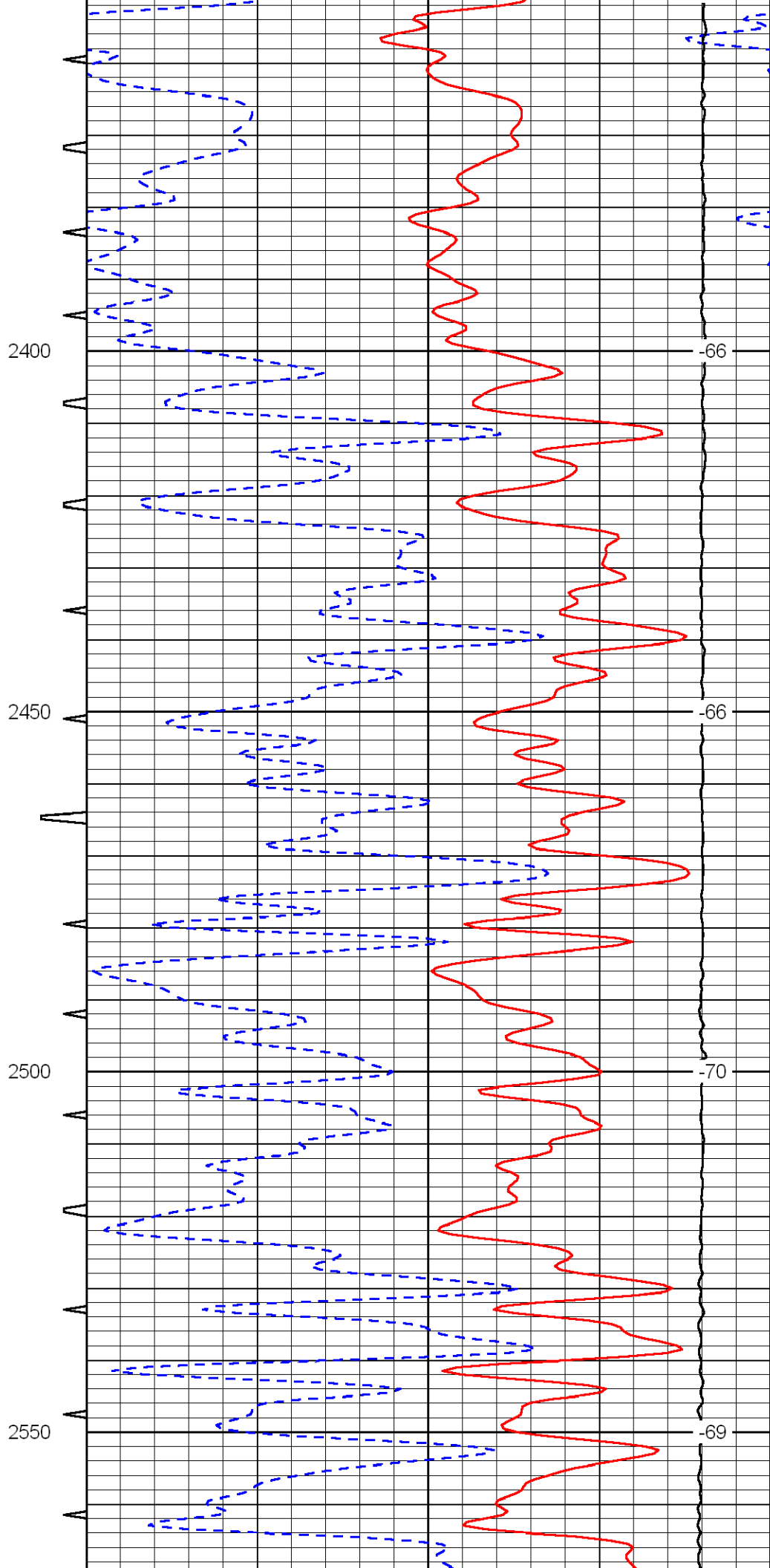
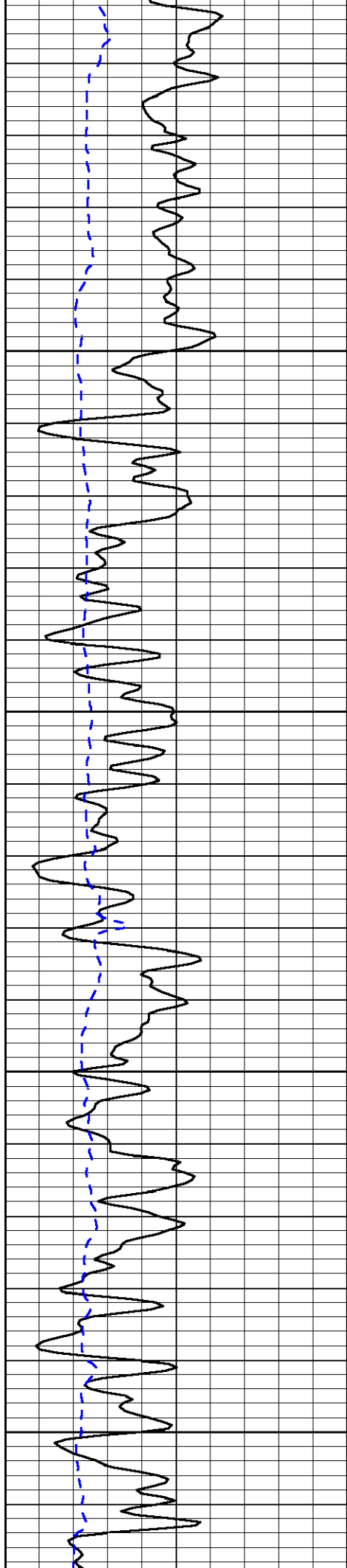


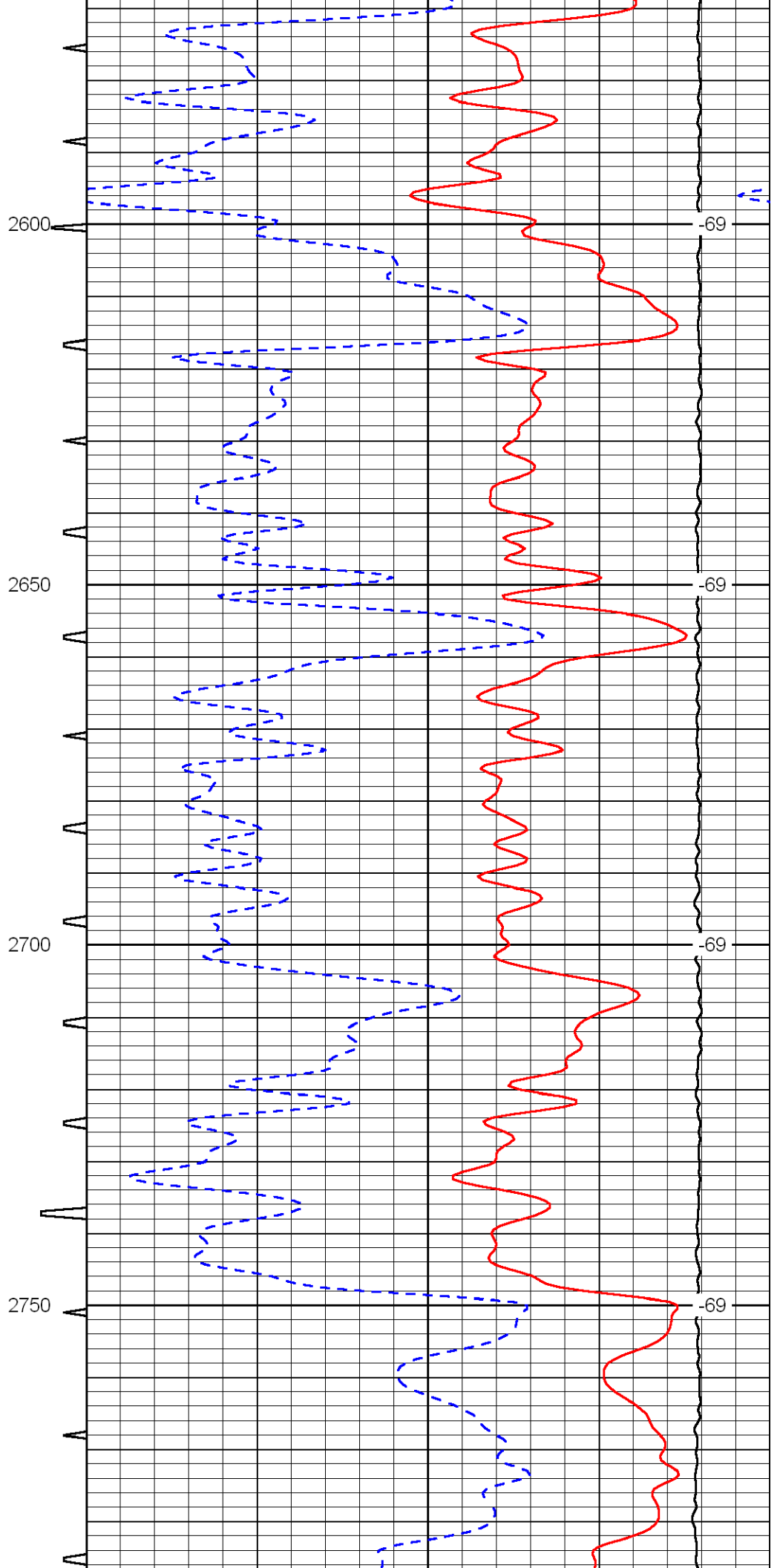
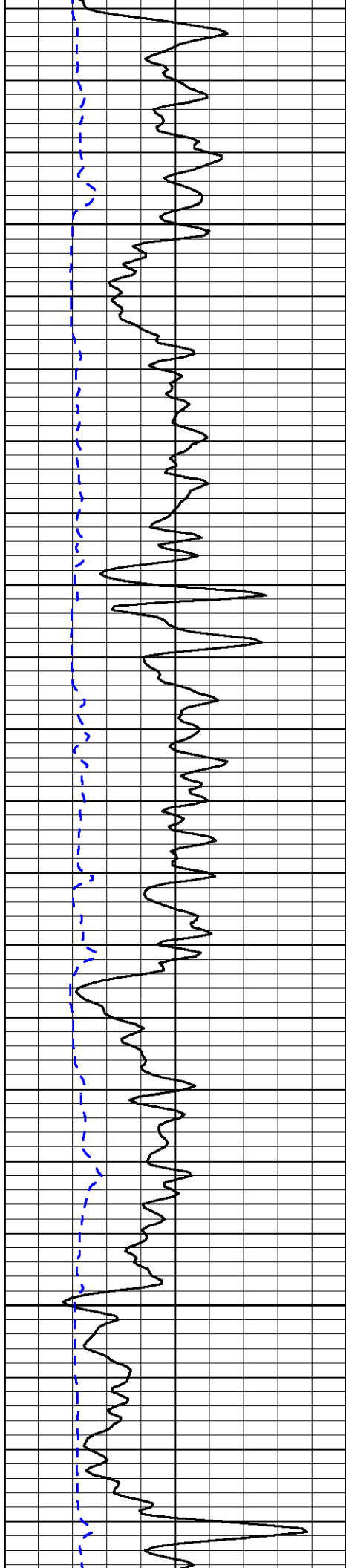


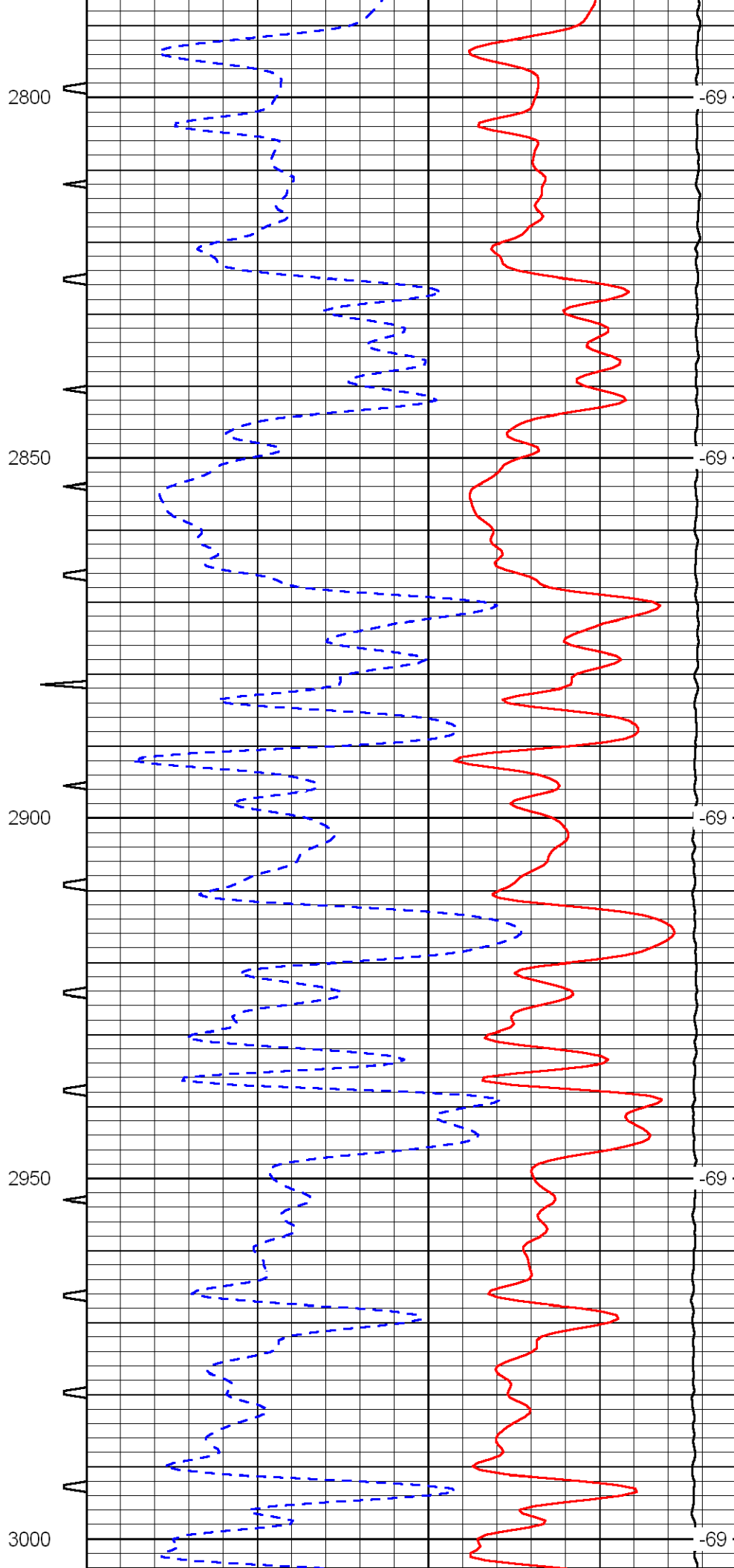
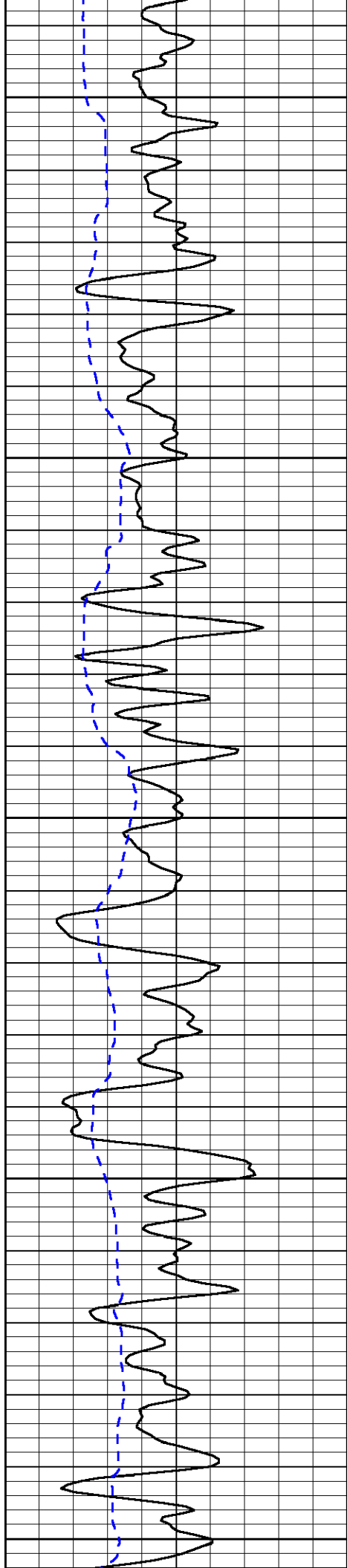


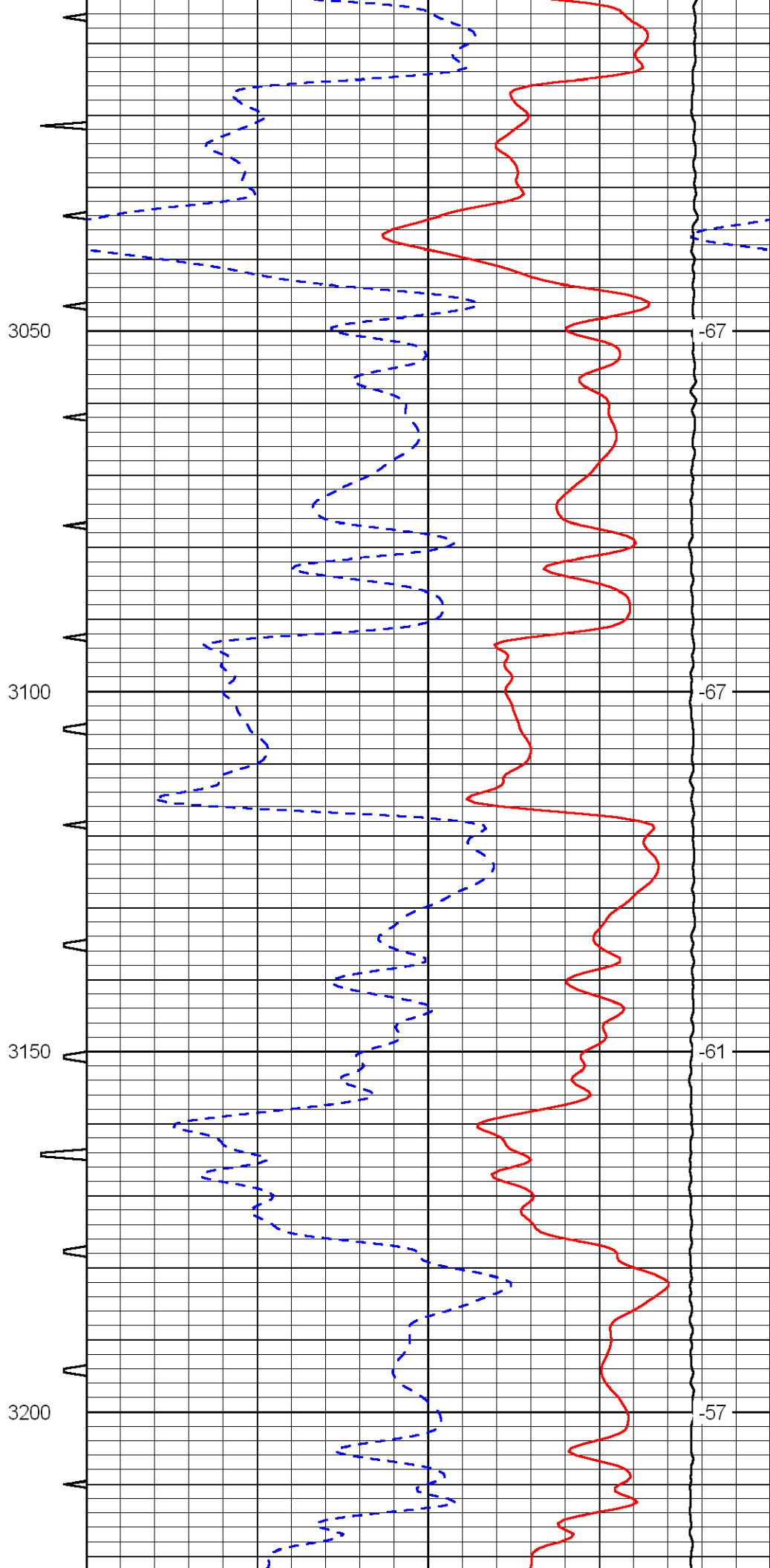
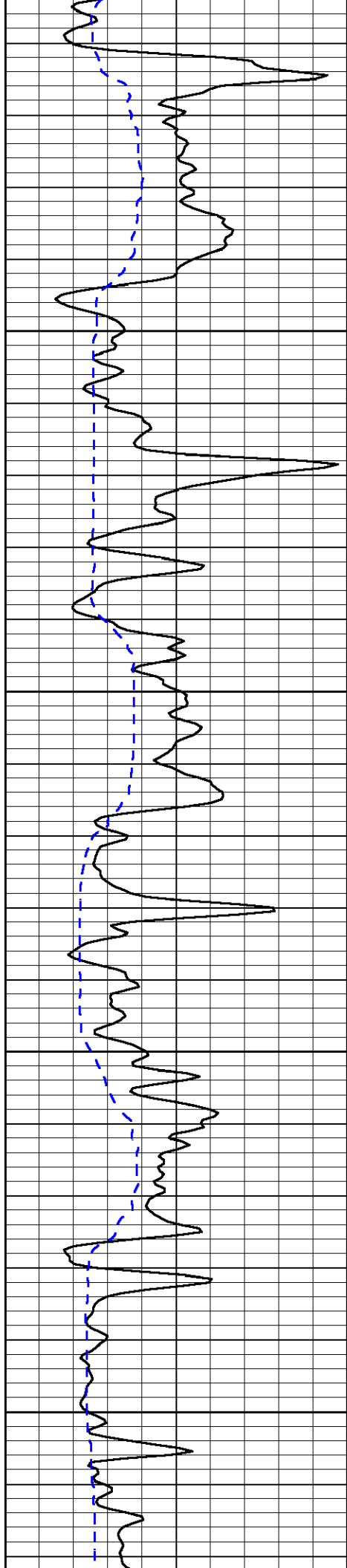


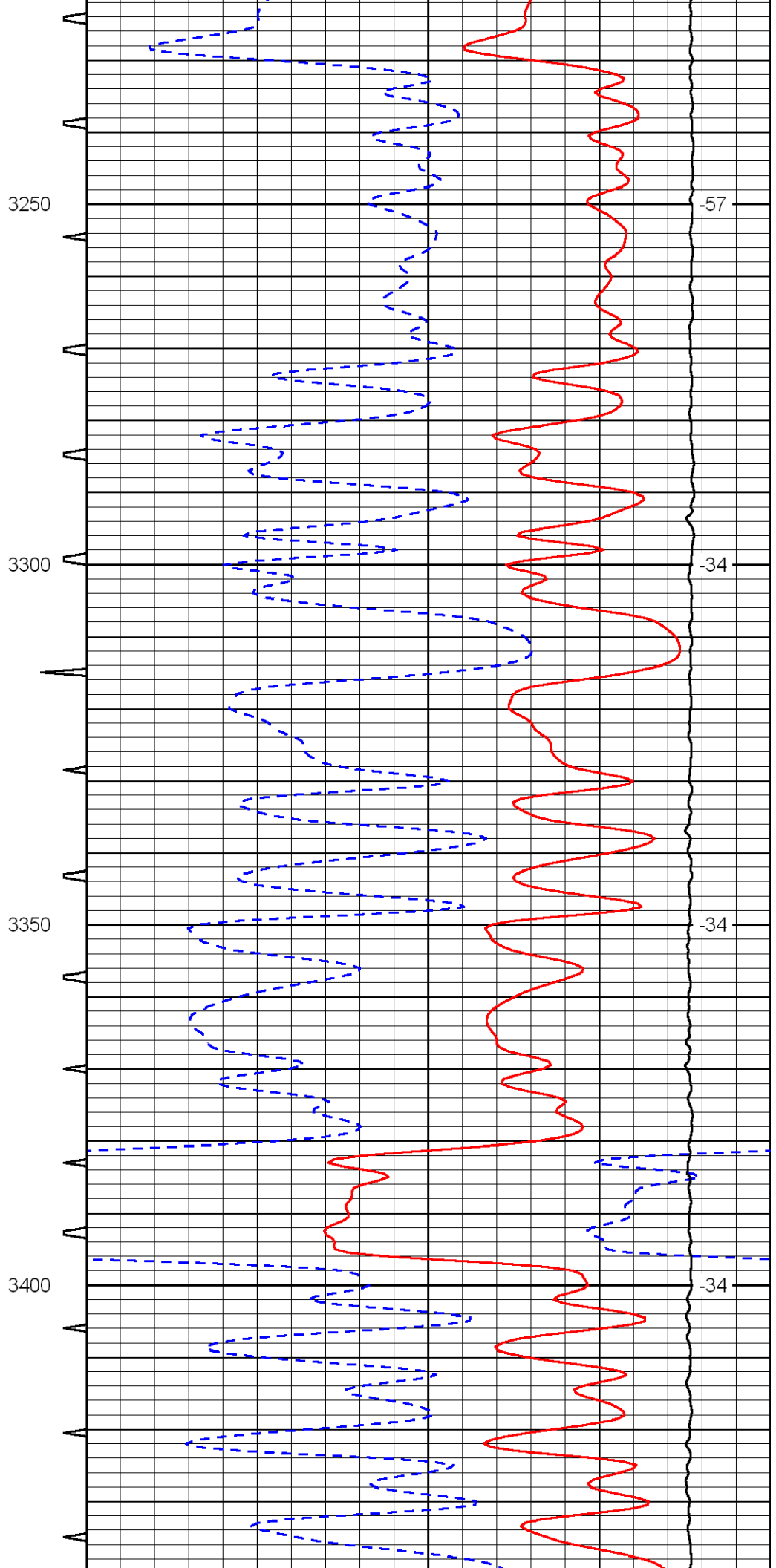
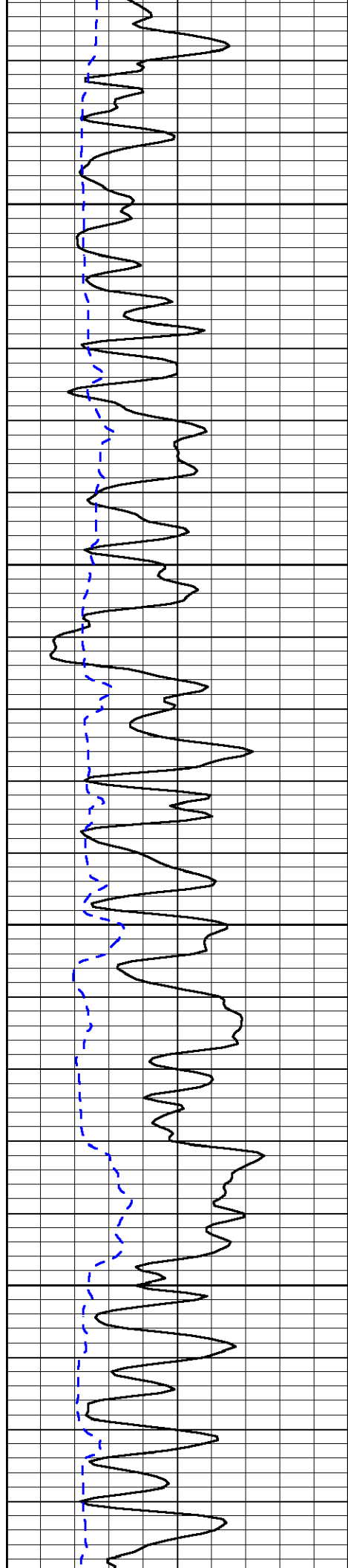




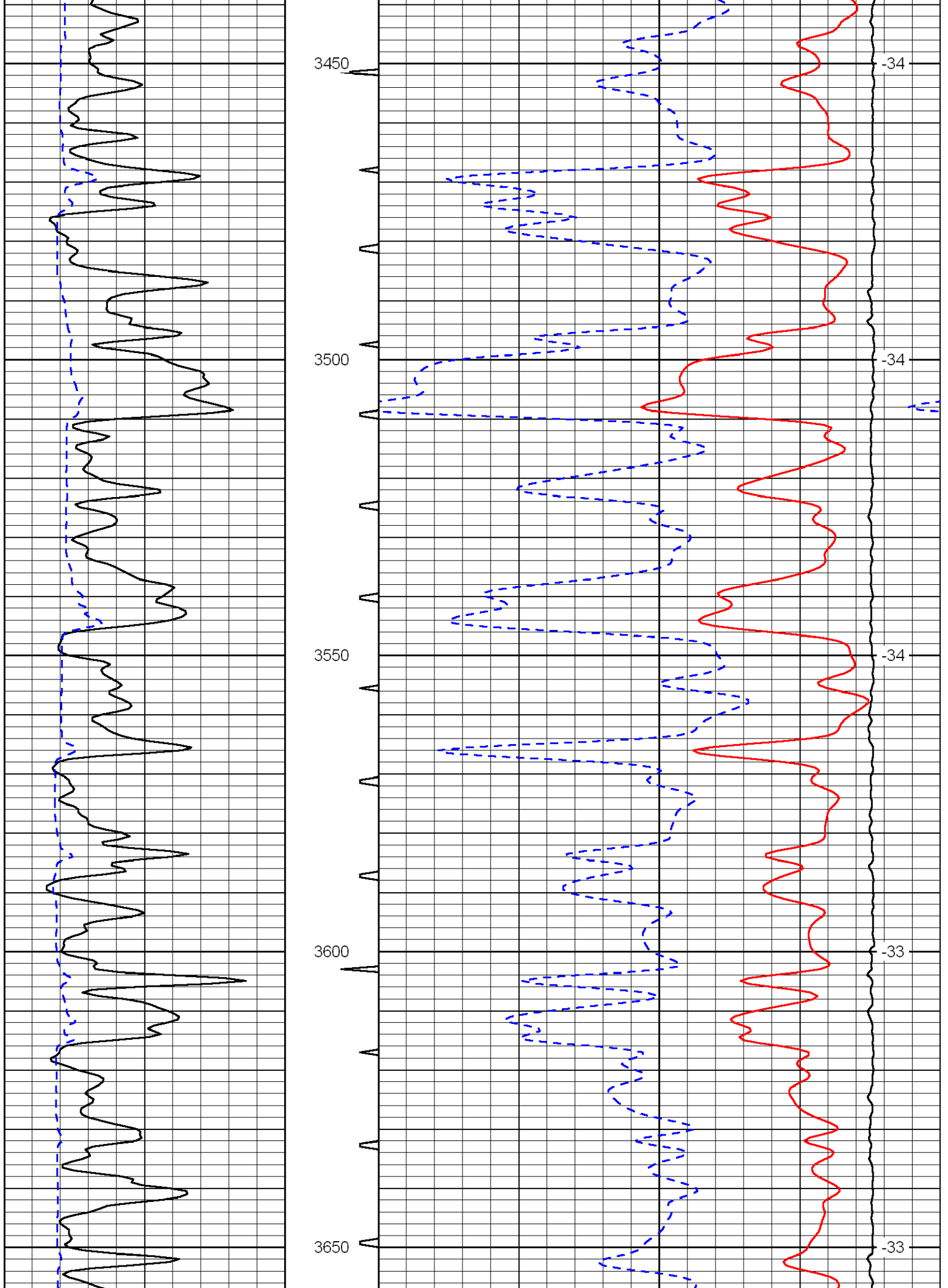


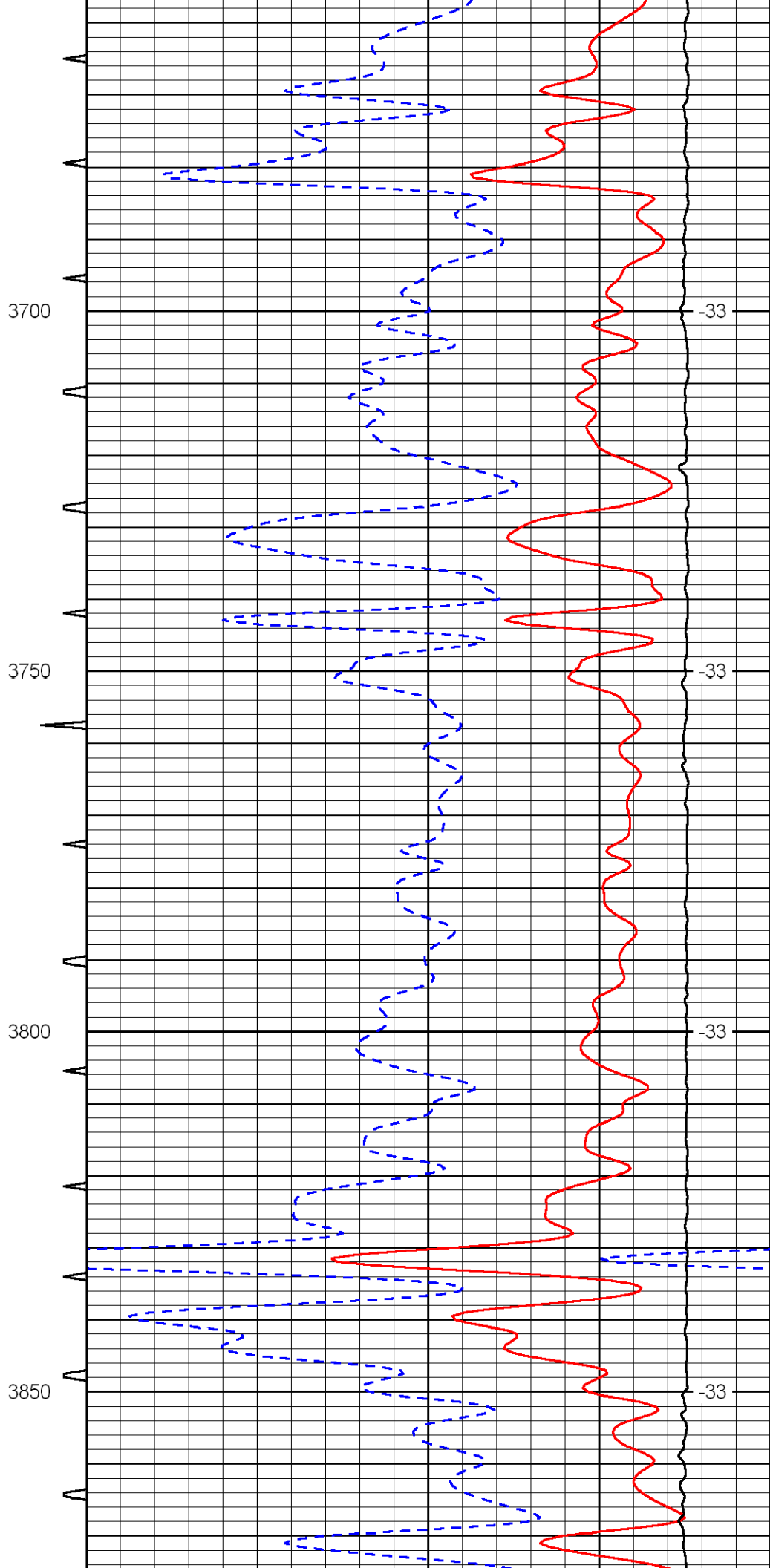
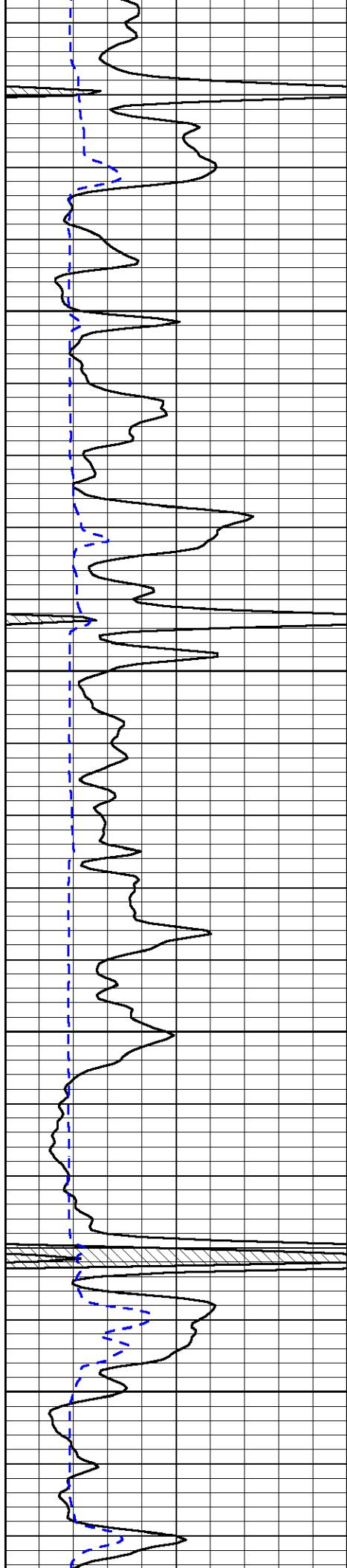












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