



# Microresistivity Log

**DIGITAL LOG** (785) 625-3858

|                        |                                      |                         |                             |
|------------------------|--------------------------------------|-------------------------|-----------------------------|
| API No.                | API 15-101-22, 155-00-00             |                         |                             |
| Company                | Larson Engineering, Inc.             |                         |                             |
| Well                   | McLeish No. 1-24                     |                         |                             |
| Field                  | Wildcat                              |                         |                             |
| County                 | Lane                                 | State                   | Kansas                      |
| Location               | E2 W2 E2 NE<br>1,320' FNL & 820' FEL |                         |                             |
| Sec: 24                | Twp: 18S                             | Rge: 27W                | Elevation<br>CNL/CDL<br>DIL |
| Permanent Datum        | Ground Level                         | Elevation 2658          | K.B. 2663                   |
| Log Measured From      | Kelly Bushing                        | 5 Ft. Above Perm. Datum | D.F. 2658                   |
| Drilling Measured From | Froth Kelly Bushing                  |                         |                             |

|                        |              |     |  |
|------------------------|--------------|-----|--|
| Date                   | 3/5/09       |     |  |
| Run Number             | Two          |     |  |
| Depth Driller          | 4710         |     |  |
| Depth Logger           | 4706         |     |  |
| Bottom Logged Interval | 4705         |     |  |
| Top Log Interval       | 3600         |     |  |
| Casing Driller         | 8.625 @ 242  |     |  |
| Casing Logger          | 246          |     |  |
| Bit Size               | 7.875        |     |  |
| Type Fluid in Hole     | Chemical     |     |  |
| Salinity, ppm CL       | 4200         |     |  |
| Density / Viscosity    | 9.3          | 50  |  |
| pH / Fluid Loss        | 10.5         | 7.2 |  |
| Source of Sample       | Flowline     |     |  |
| Rm @ Meas. Temp        | 1.4 @ 76     |     |  |
| Rmf @ Meas. Temp       | 1.05 @ 76    |     |  |
| Rmc @ Meas. Temp       | 1.89 @ 76    |     |  |
| Source of Rmf / Rmc    | Charts       |     |  |
| Rm @ BHT               | .85 @ 125    |     |  |
| Operating Rig Time     | 4 Hours      |     |  |
| Max Rec. Temp. F       | 125          |     |  |
| Equipment Number       | 17           |     |  |
| Location               | Hays         |     |  |
| Recorded By            | J. Long      |     |  |
| Witnessed By           | Bob Lewellvn |     |  |
| M. Garrison            |              |     |  |

<<< 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 Log-Tech, Inc.  
(785) 625-3858

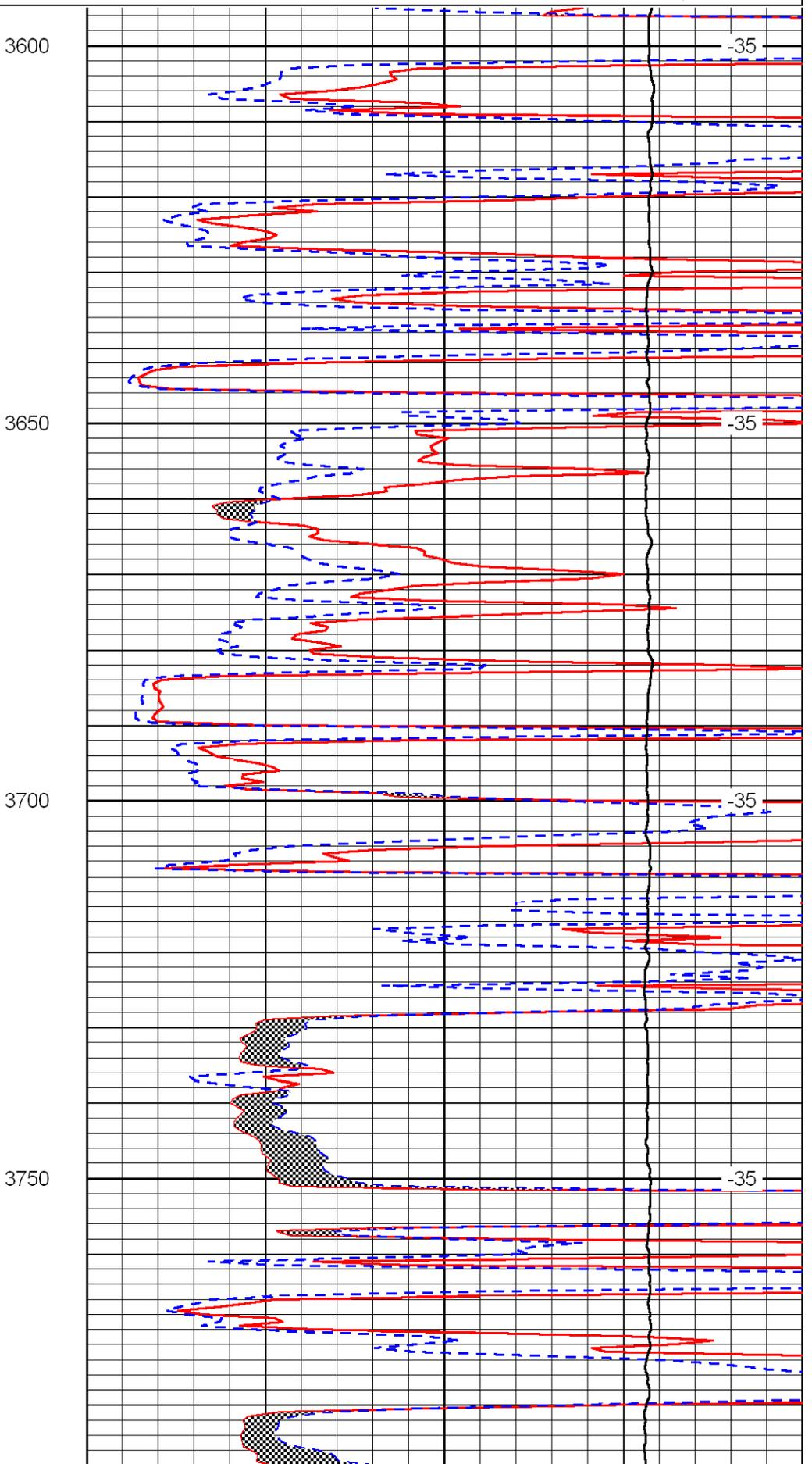
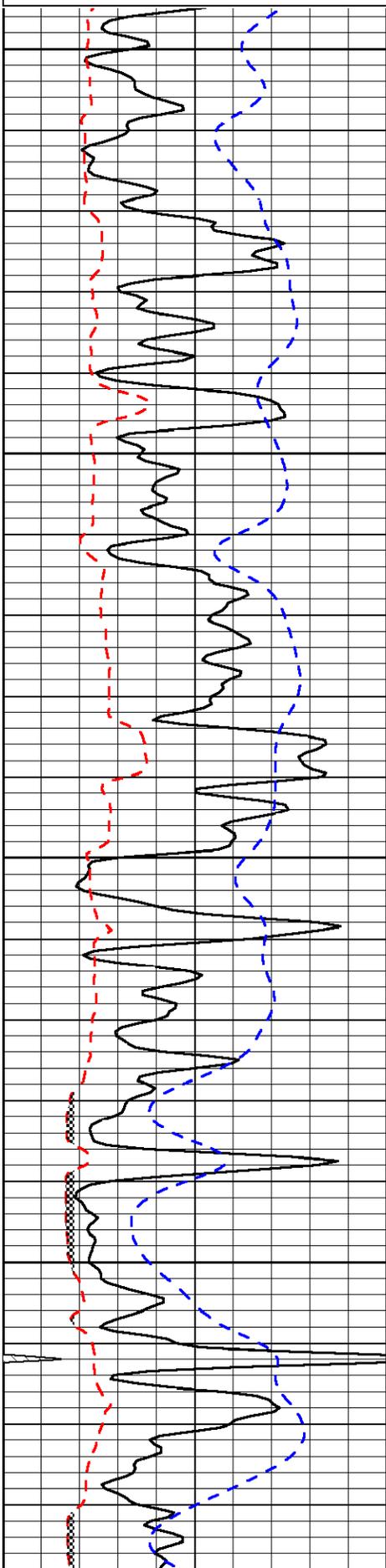
Ness City, W to County Line, 1 N, W Into

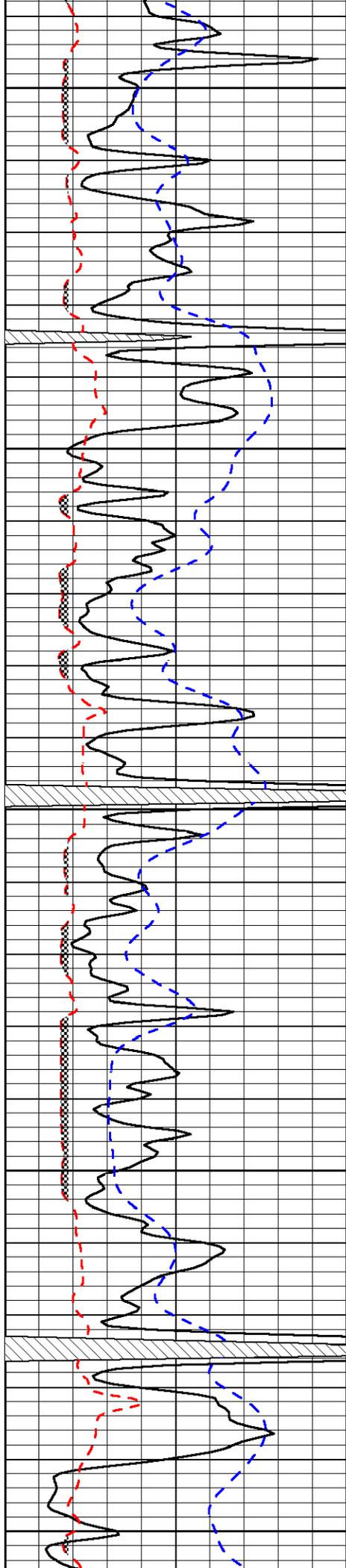
|                      |   |
|----------------------|---|
| Database File:       | c:\warrior\data\larson_mcleish no. 1-24\larsonhd.db |
| Dataset Pathname:    | dil\larstack  |
| Presentation Format: | micro   |
| Dataset Creation:    | Thu Mar 05 22:48:40 2009                            |
| Charted by:          | Depth in Feet scaled 1:240                          |

|      |                        |     |
|------|------------------------|-----|
| 0    | Gamma Ray              | 150 |
| 6    | Micro Log Caliper (in) | 16  |
| -200 | SP (MV)                | 0   |

|       |                             |    |
|-------|-----------------------------|----|
| 0     | Micro Inverse 1 X 1 (Ohm-m) | 40 |
| 0     | Micro Normal 2" (Ohm-m)     | 40 |
| 10000 | Line Weight (lb)            | 0  |

LSPD  
(ft/min)





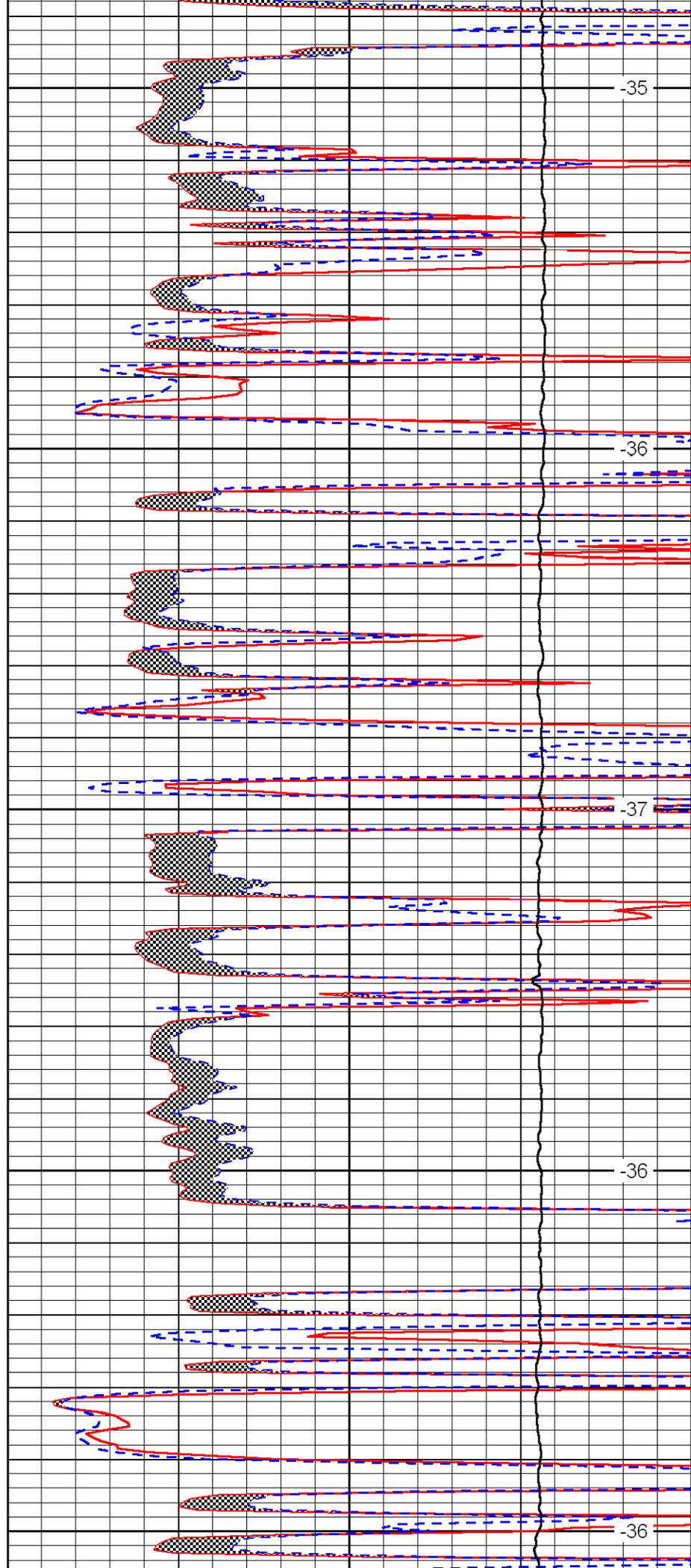
3800

3850

3900

3950

4000



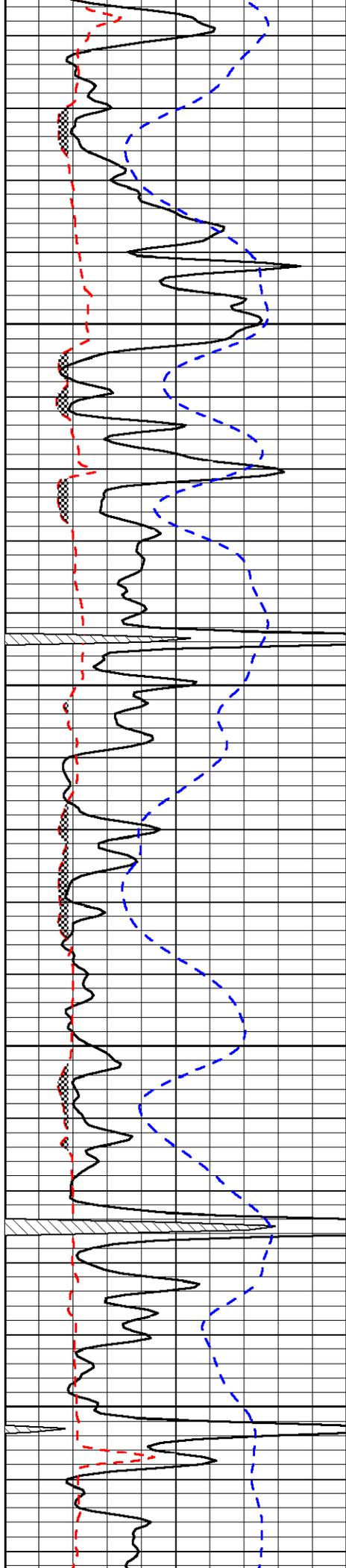
-35

-36

-37

-36

-36

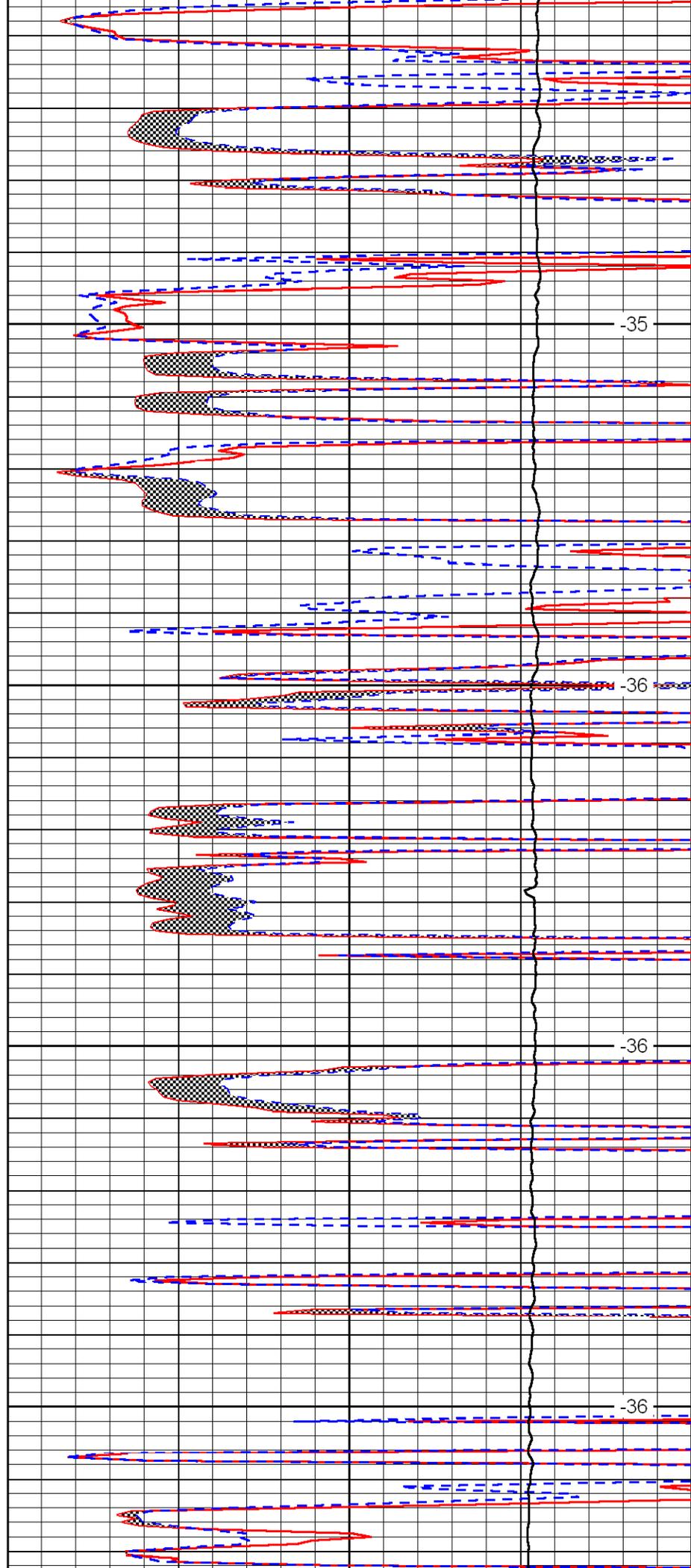


4050

4100

4150

4200

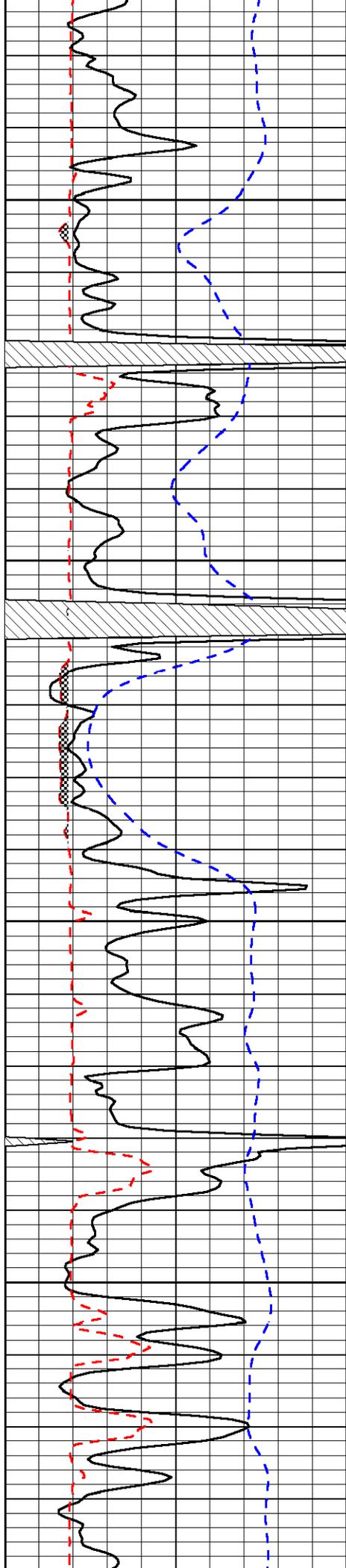


-35

-36

-36

-36

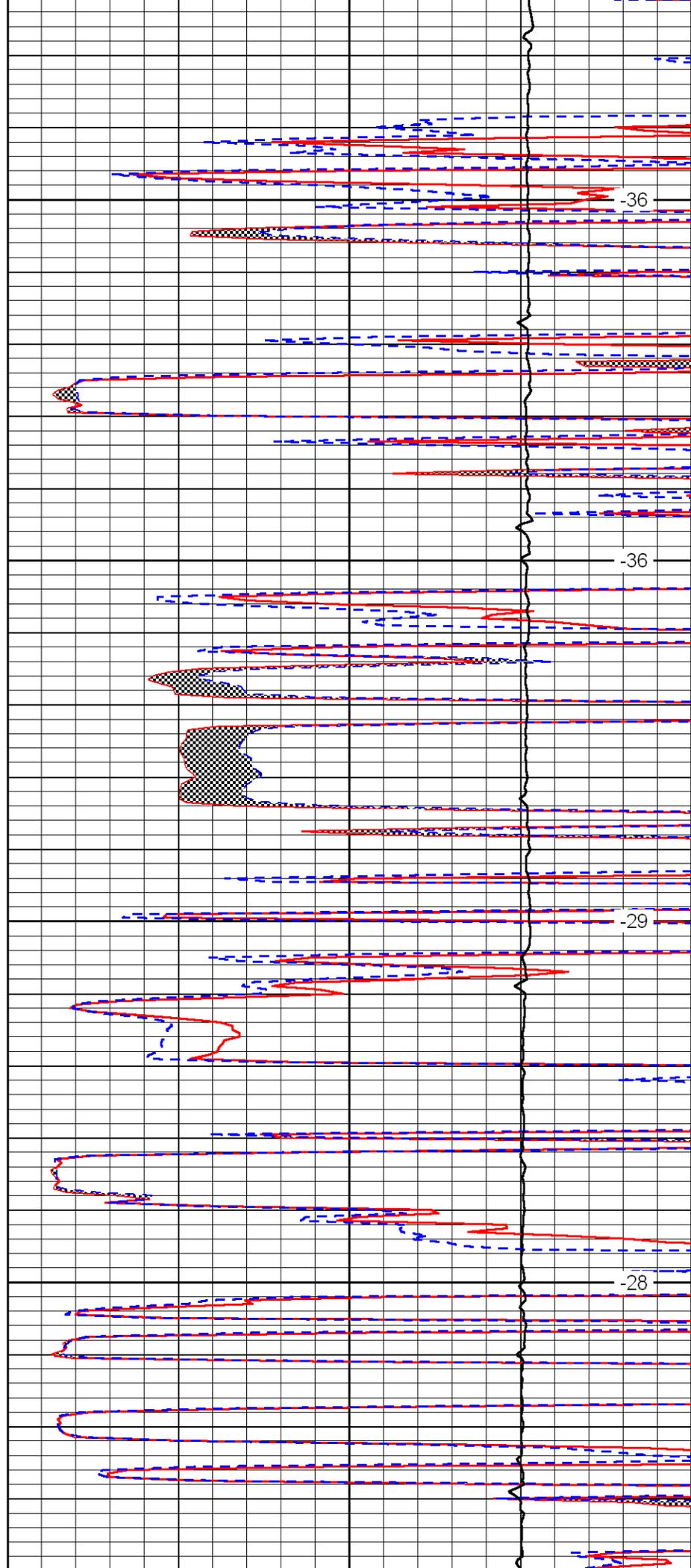


4250

4300

4350

4400

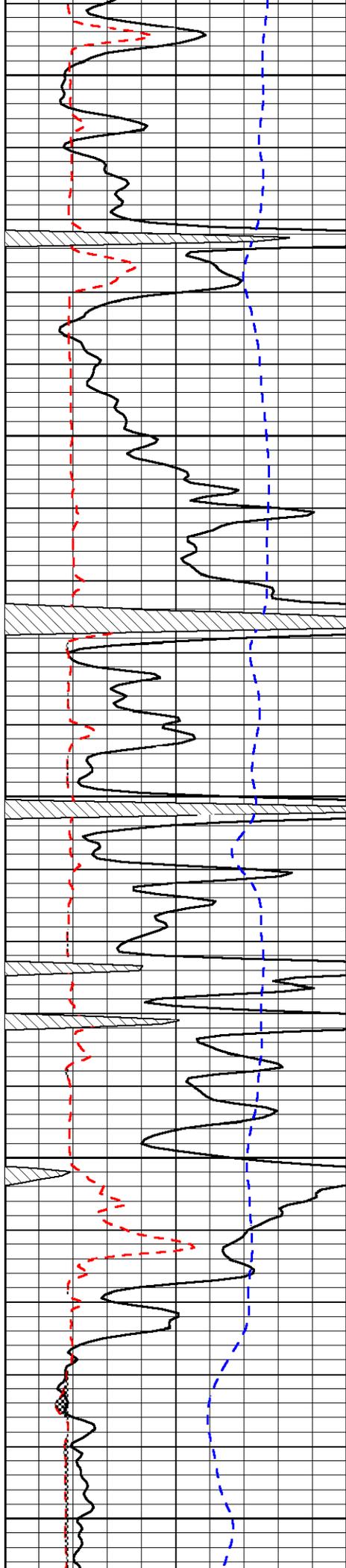


-36

-36

-29

-28



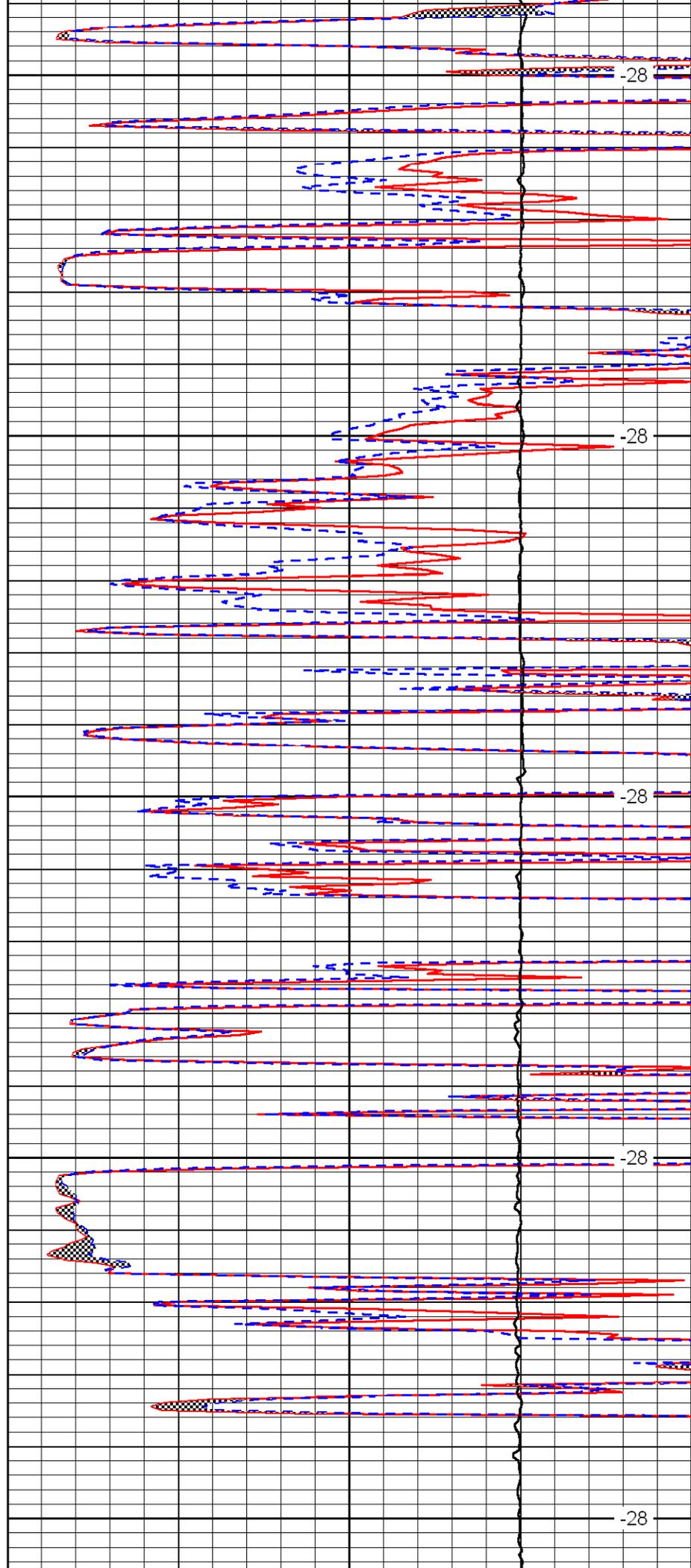
4450

4500

4550

4600

4650



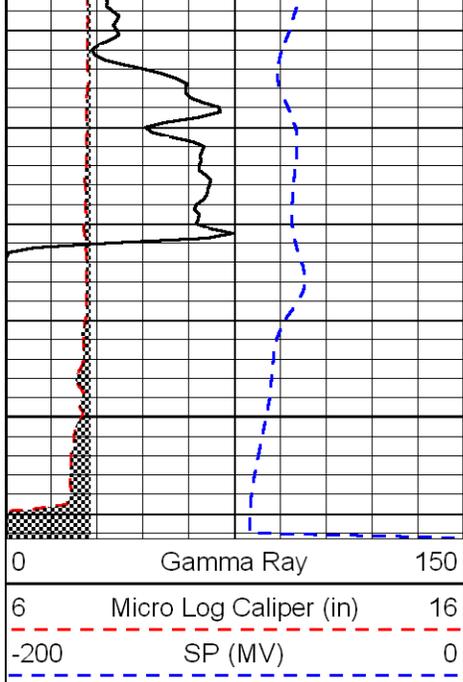
-28

-28

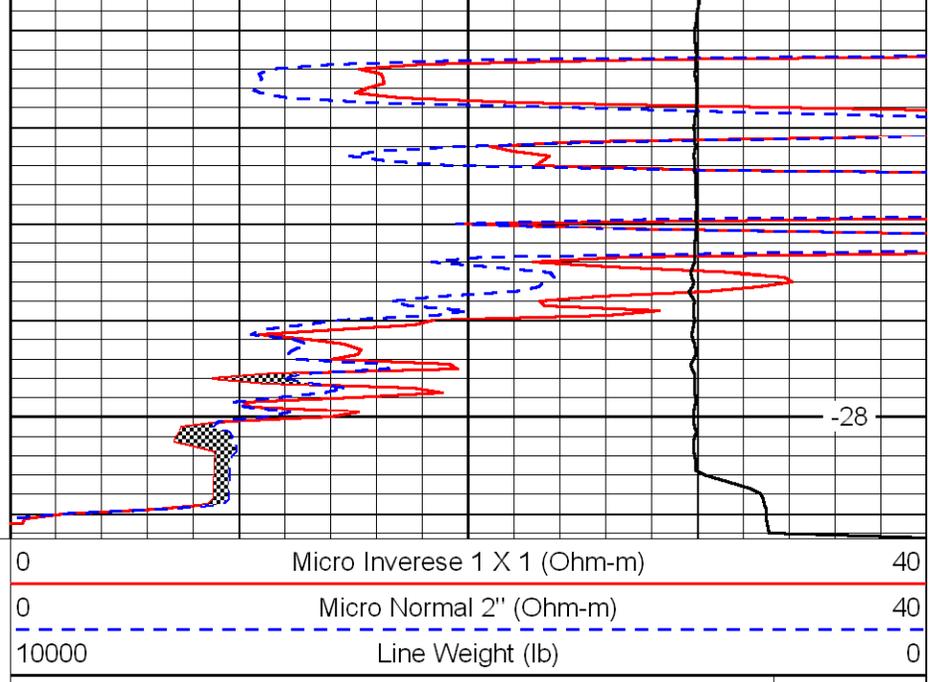
-28

-28

-28



4700



-28

LSPD  
(ft/min)