



# MICRORESISTIVITY LOG

Company AMERICAN WARRIOR, INC.  
 Well NAIRN NO. 1-26  
 Field WILDCAT  
 County STANTON  
 State KANSAS

Company AMERICAN WARRIOR, INC.  
 Well NAIRN NO. 1-26  
 Field WILDCAT  
 County STANTON  
 State KANSAS

Location: API #: 15-187-21328-00-00  
 1,859' FSL & 1,942' FWL  
 SEC 26 TWP 28S RGE 41W  
 Permanent Datum GROUND LEVEL Elevation 3354'  
 Log Measured From KELLY BUSHING  
 Drilling Measured From KELLY BUSHING  
 Other Services  
 CNL/CDL  
 DIL  
 Elevation  
 K.B. 3366'  
 D.F. N/A  
 G.L. 3354'

|                        |                |
|------------------------|----------------|
| Date                   | 5/31/2016      |
| Run Number             | ONE            |
| Depth Driller          | 5650'          |
| Depth Logger           | 5654'          |
| Bottom Logged Interval | 5653'          |
| Top Log Interval       | 3600'          |
| Casing Driller         | 8.625" @ 1745' |
| Casing Logger          | 1744'          |
| Bit Size               | 7.875"         |
| Type Fluid in Hole     | CHEMICAL       |
| Salinity, ppm CL       | 900            |
| Density / Viscosity    | 9.3 59         |
| pH / Fluid Loss        | 10.0 8.8       |
| Source of Sample       | FLOWLINE       |
| Rm @ Meas. Temp        | 1.02 @ 68      |
| Rmt @ Meas. Temp       | .77 @ 68       |
| Rmc @ Meas. Temp       | 1.38 @ 68      |
| Source of Rmf / Rmc    | CHARTS         |
| Rm @ BHT               | .52 @ 133      |
| Operating Rig Time     | 3 HOURS        |
| Max Rec. Temp. F       | 133 DEG F.     |
| Equipment Number       | 108            |
| Location               | COLBY          |
| Recorded By            | J. LONG        |
| Witnessed By           | KEVIN TIMSON   |

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.

### Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

JOHNSON CITY, HIGHWAY 27 AND ROAD 12 INTERSECTION, 1 WEST, 1/2 NORTH, EAST INTO

Log Measured From: KELLY BUSHING 12 Ft. Above Permanent Datum

THANK YOU FOR USING PIONEER ENERGY SERVICES  
[www.pioneerenergy.com](http://www.pioneerenergy.com) 785-625-3858

### Your Pioneer Energy Services Crew

Engineer: J. LONG  
 Operator:  
 Operator:  
 Operator: J. HENRICKSON

### This Log Record Was Witnessed By

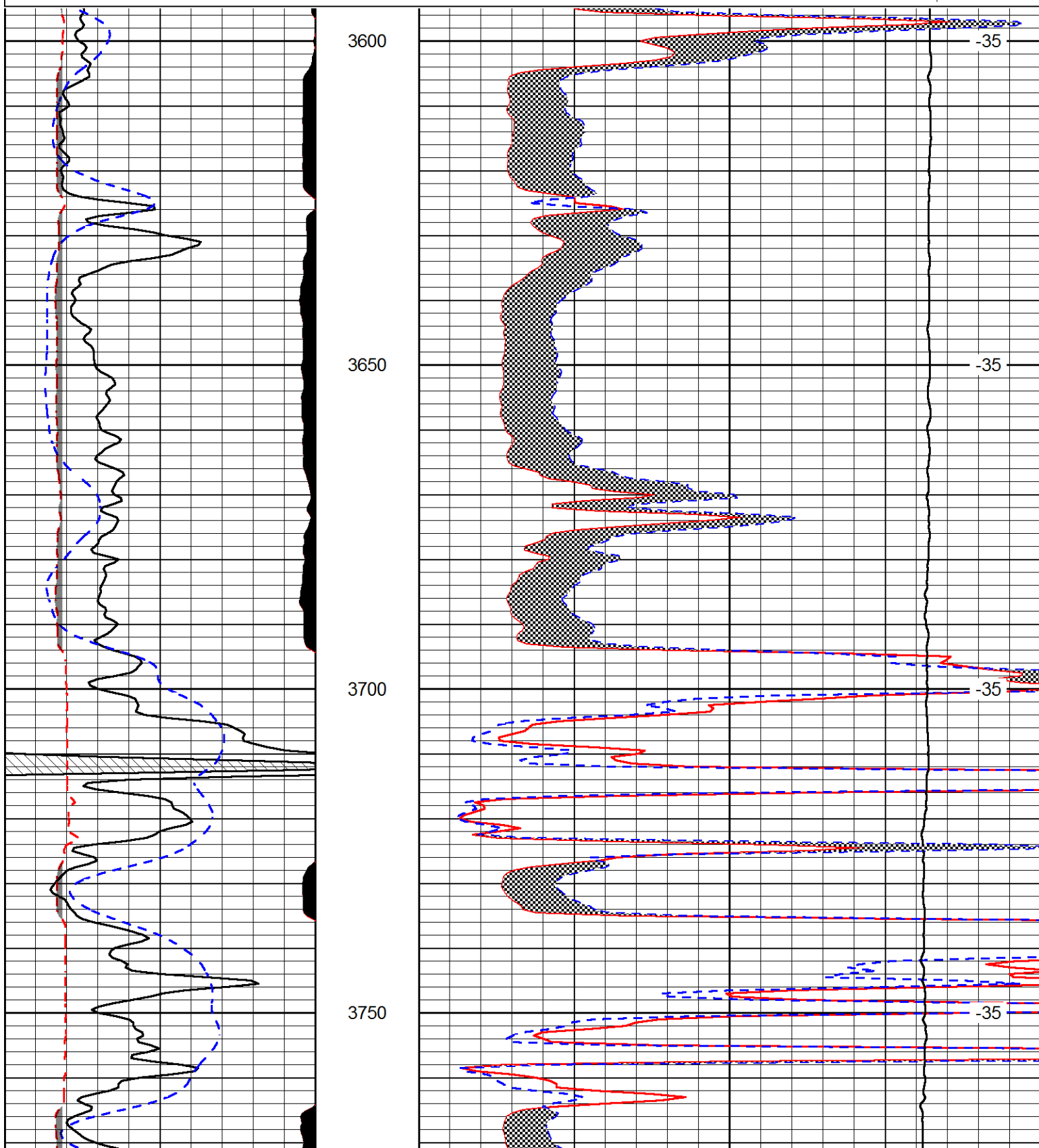
Primary Witness: KEVIN TIMSON  
 Secondary Witness:  
 Secondary Witness:  
 Secondary Witness:

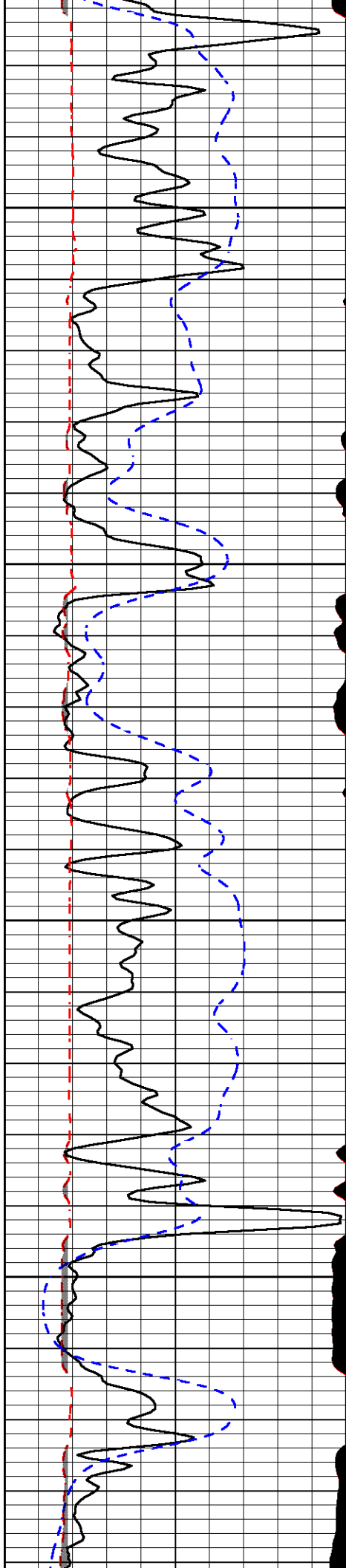
Database File amwar\_nairn\_#1-26\americanwarrior\_nairn\_1-26hd.db  
 Dataset Pathname DIL/awstck  
 Presentation Format micro  
 Dataset Creation Wed Jun 01 09:53:58 2016  
 Charted by Depth in Feet scaled 1:240

|       |                  |       |
|-------|------------------|-------|
| 0     | Gamma Ray (GAPI) | 150   |
| 6     | MCAL (in)        | 16    |
| 2.875 | Mud Cake (in)    | 7.875 |
| -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)



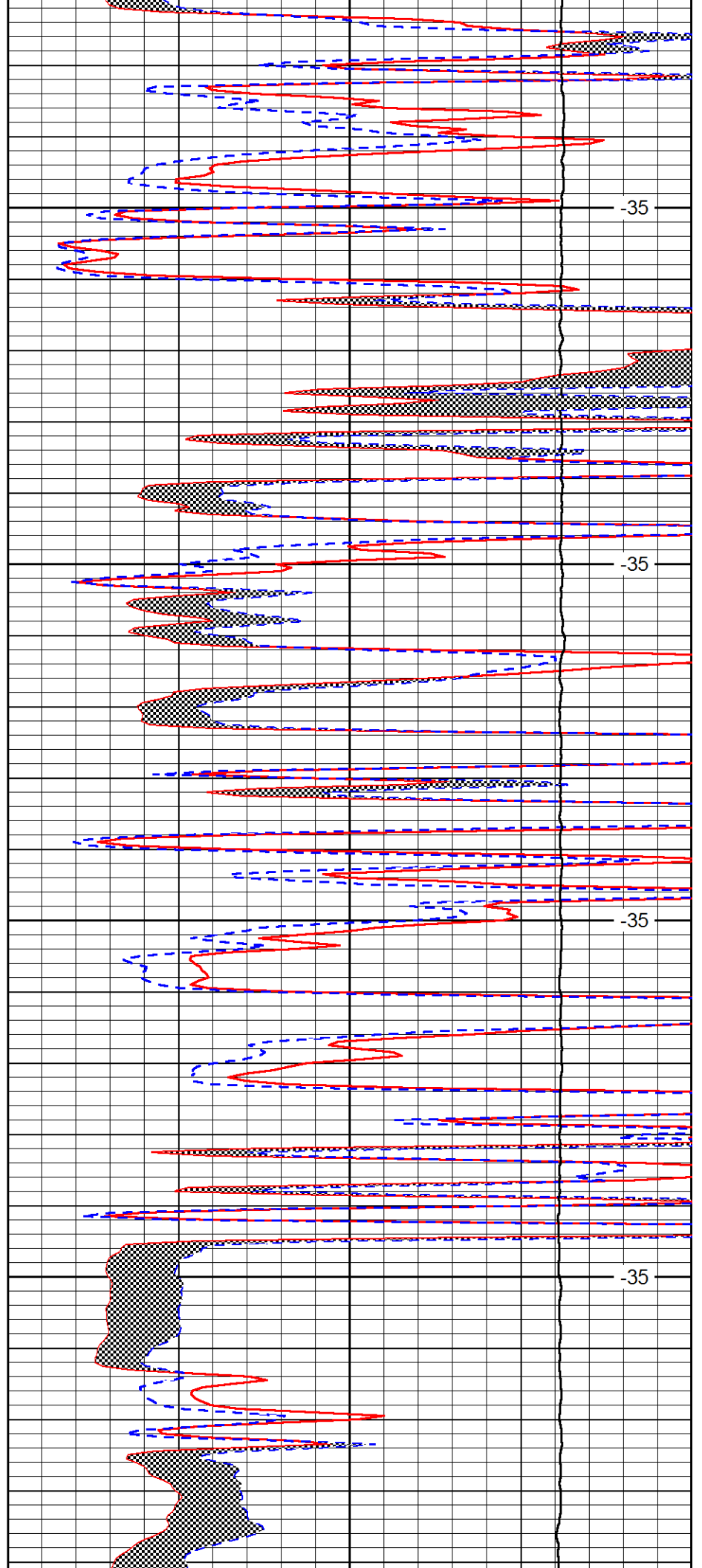


3800

3850

3900

3950

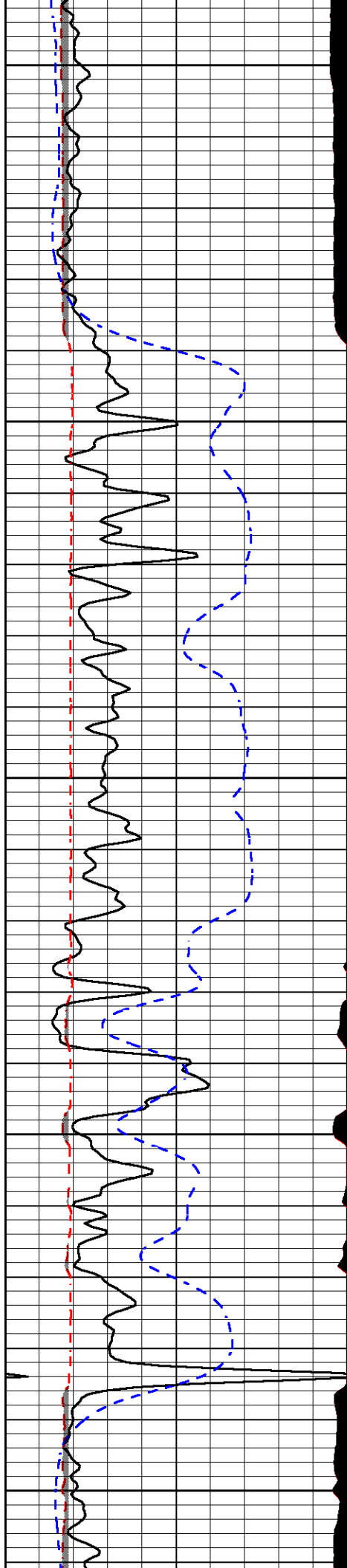


-35

-35

-35

-35



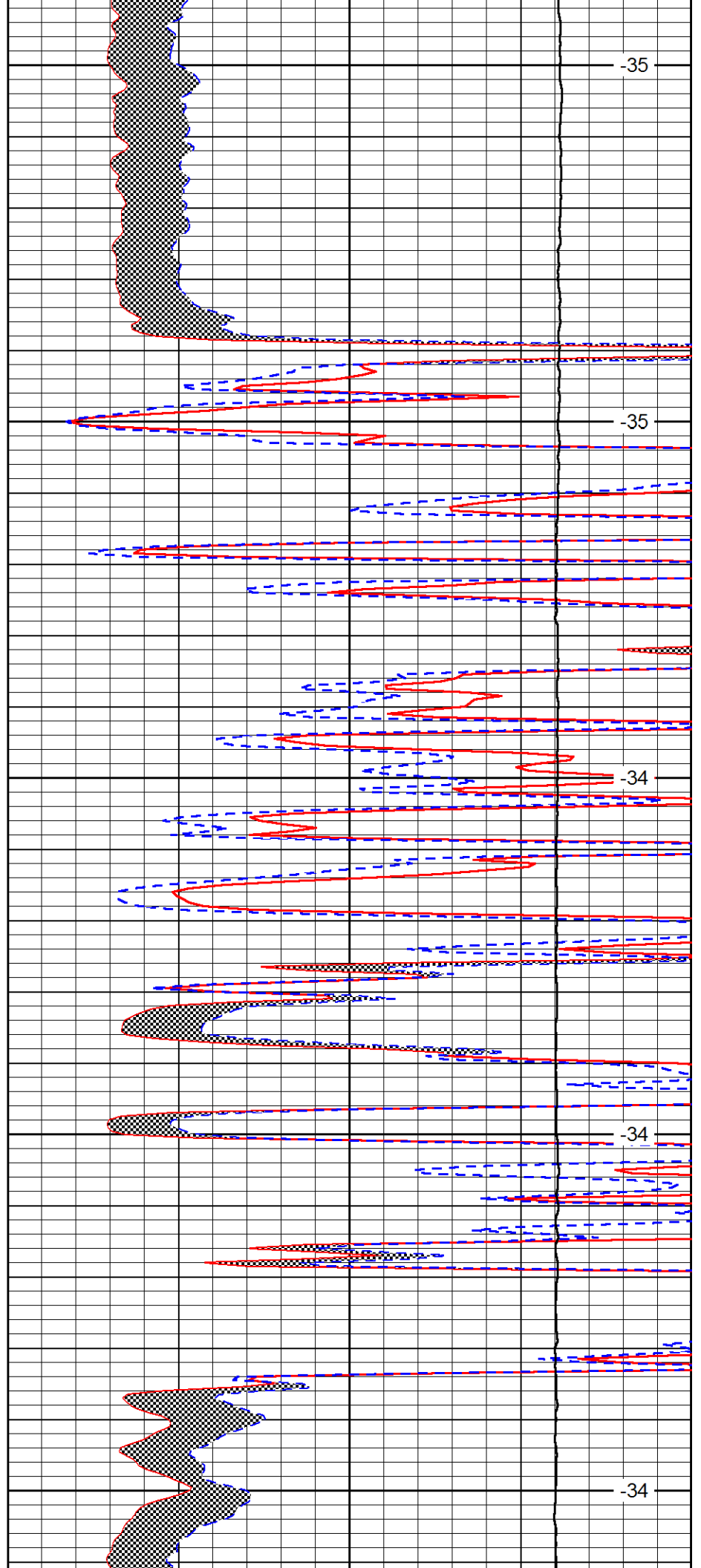
4000

4050

4100

4150

4200



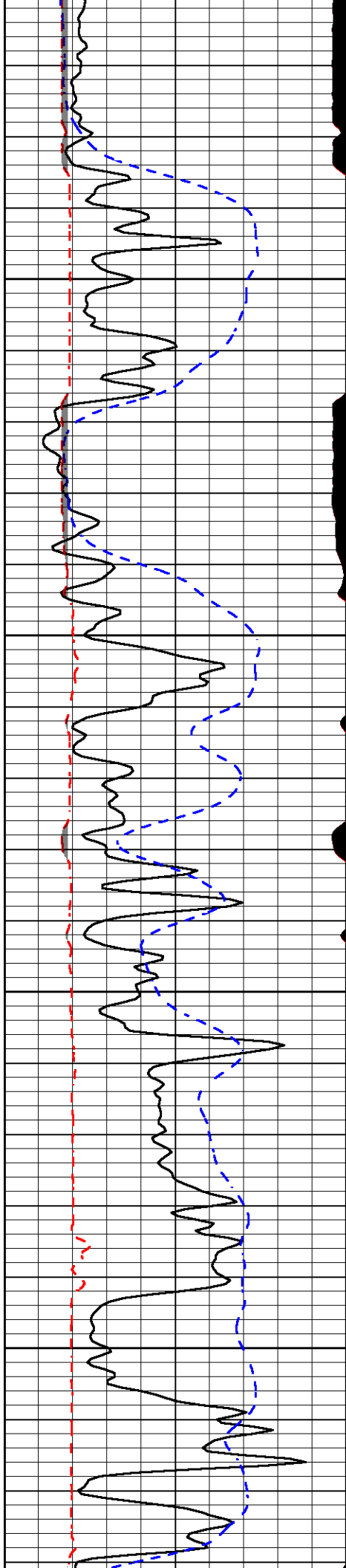
-35

-35

-34

-34

-34

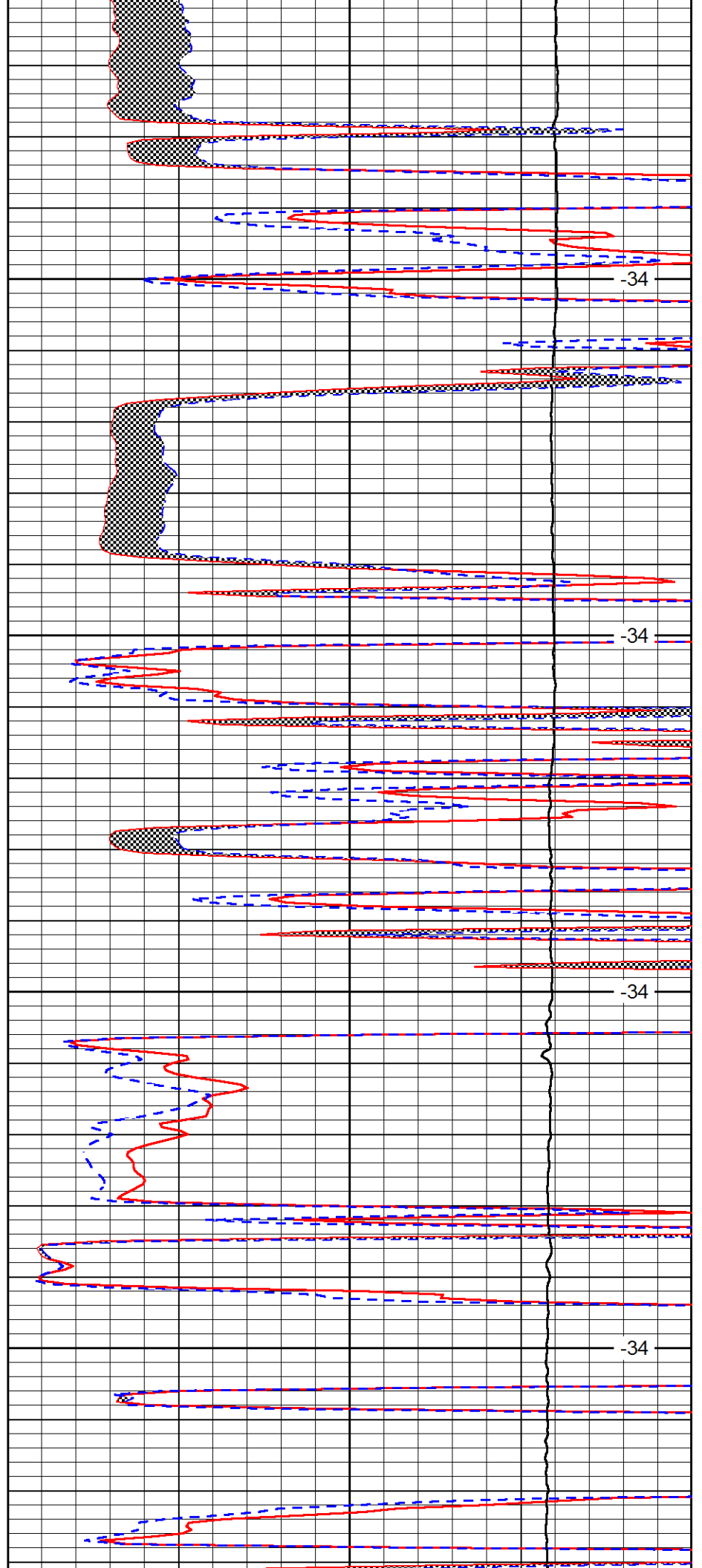


4250

4300

4350

4400

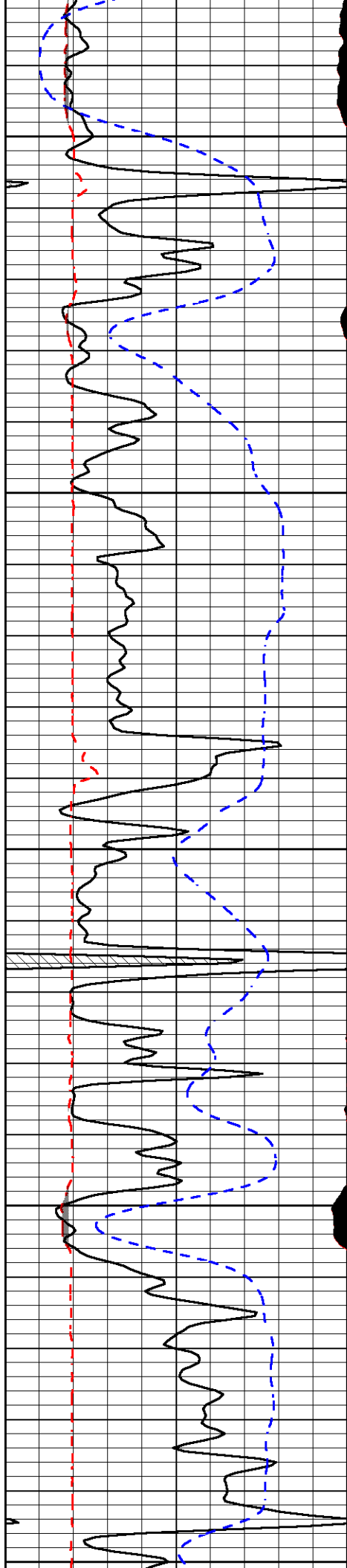


-34

-34

-34

-34



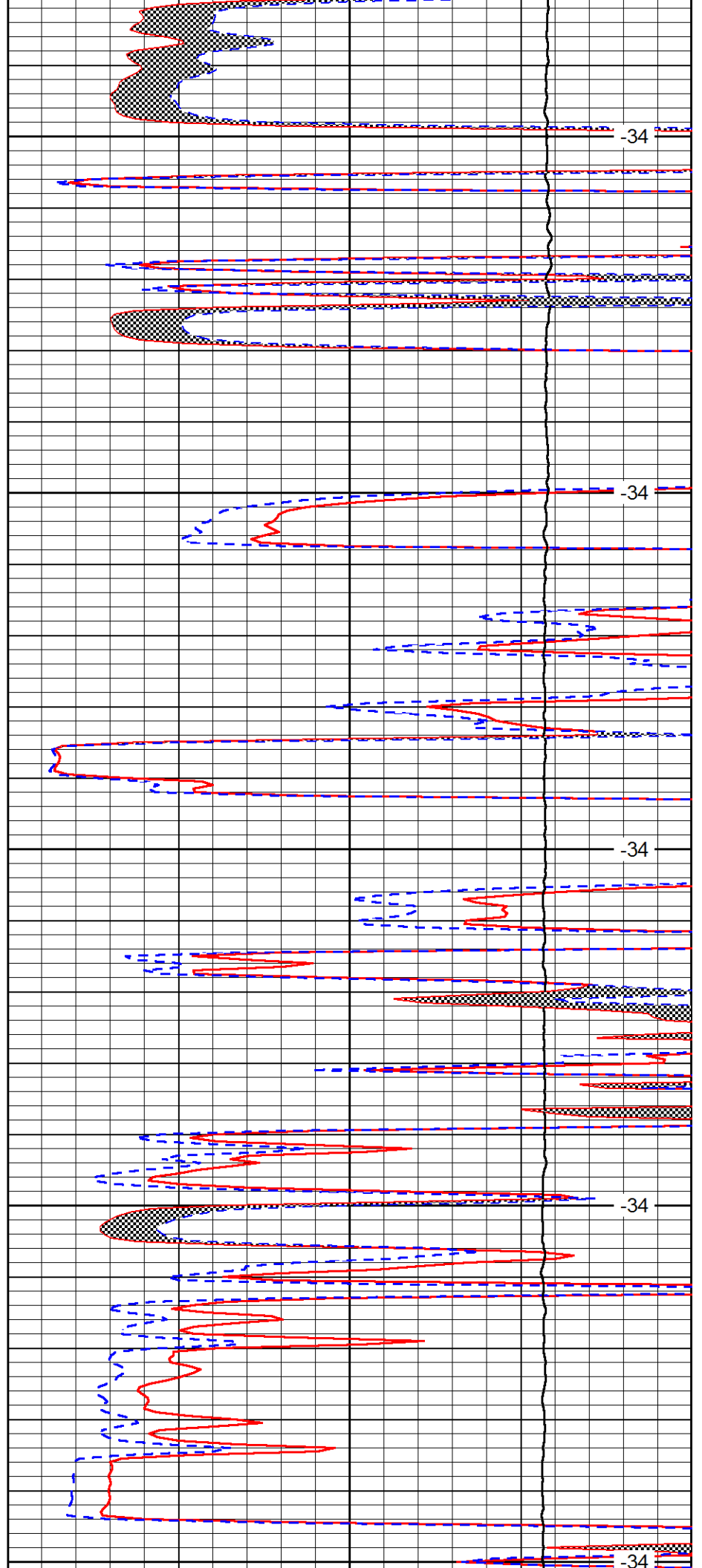
4450

4500

4550

4600

4650



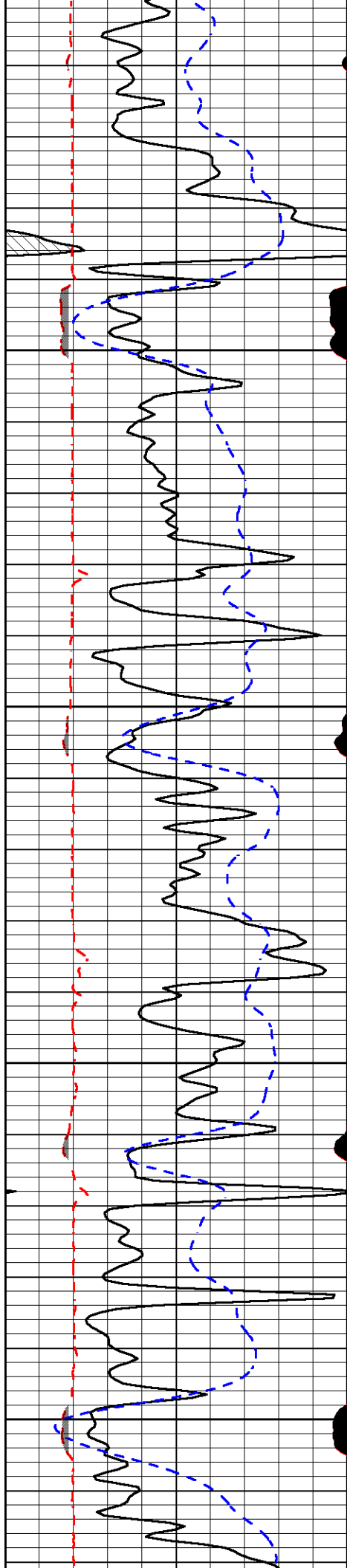
-34

-34

-34

-34

-34

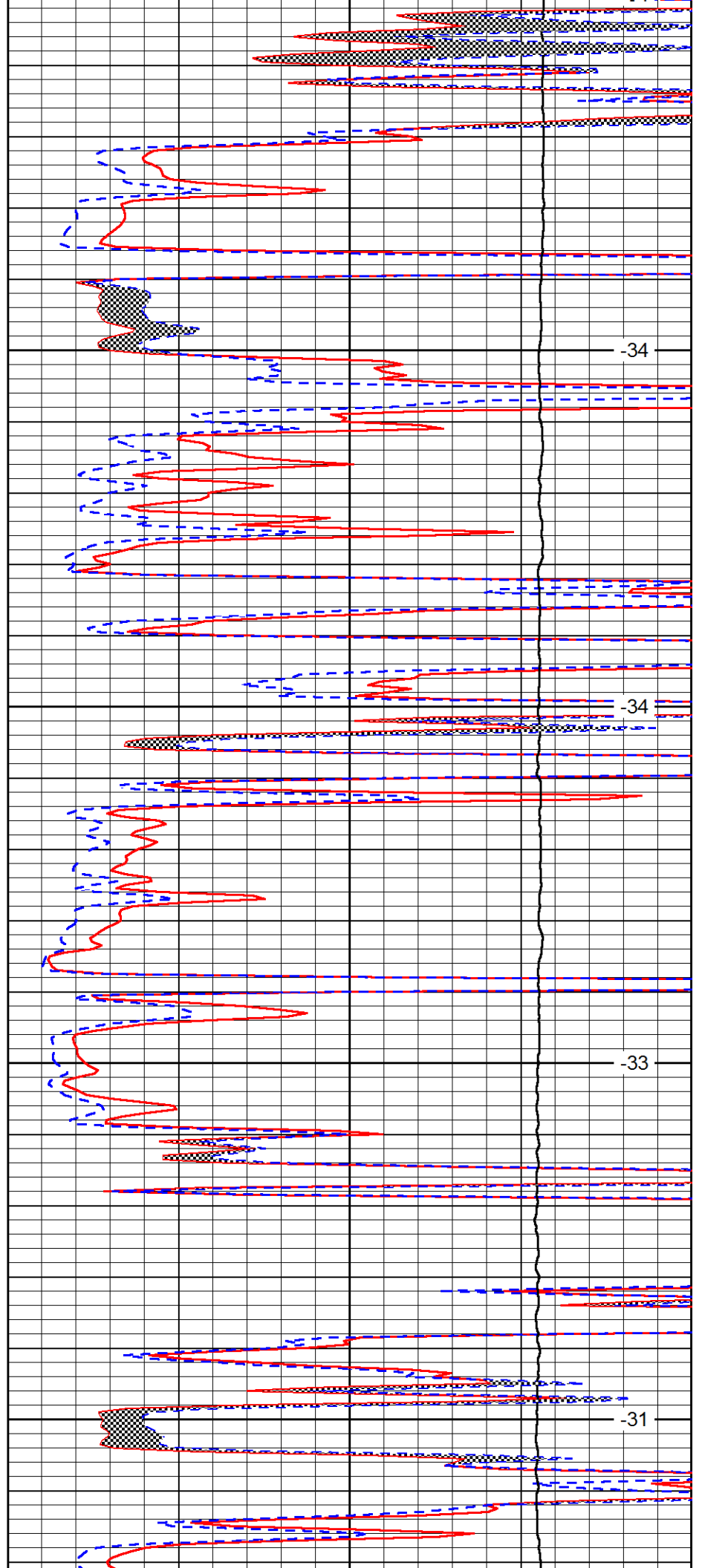


4700

4750

4800

4850

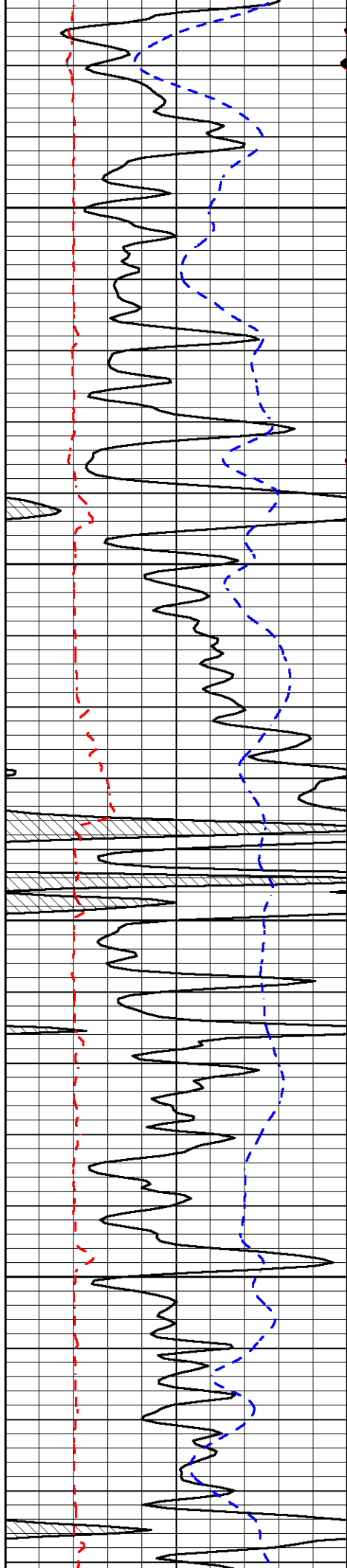


-34

-34

-33

-31

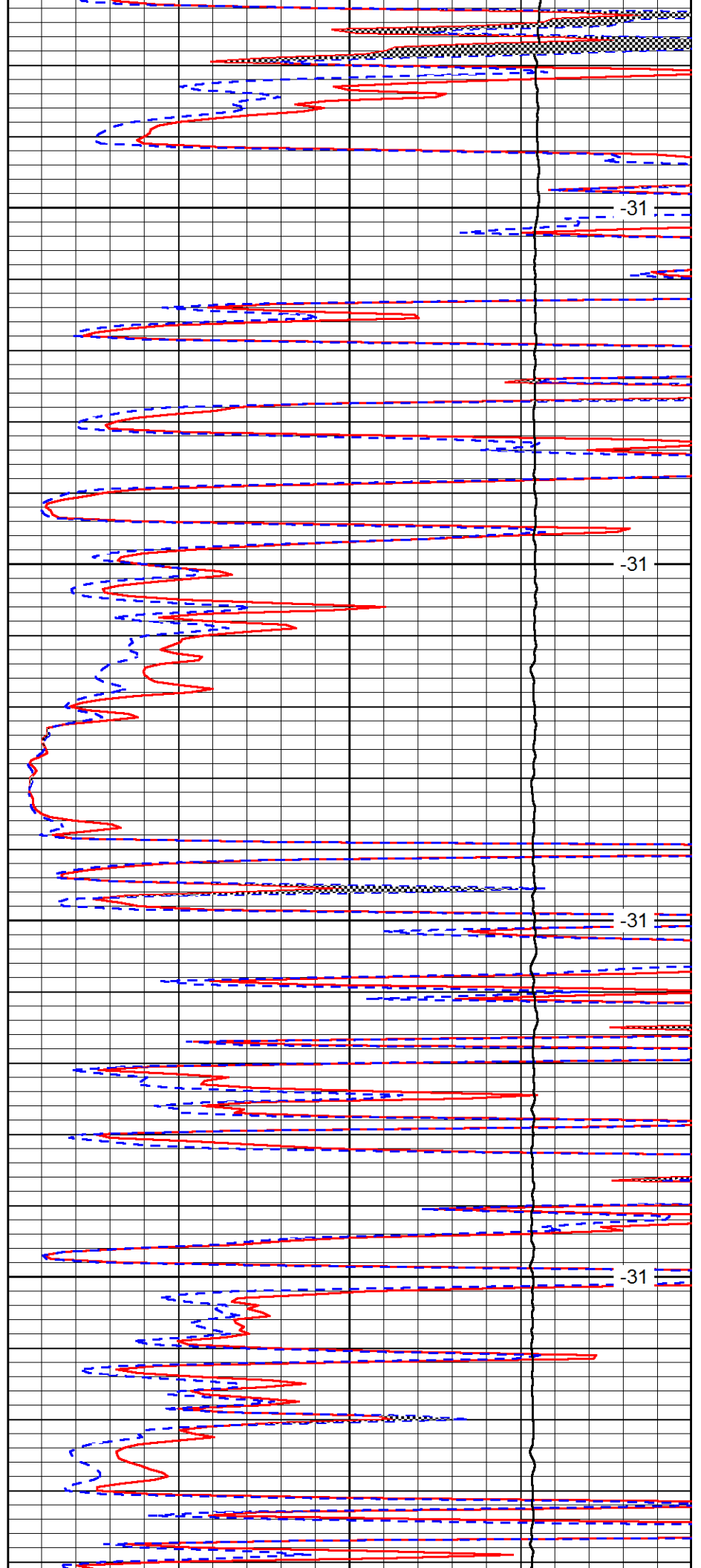


4900

4950

5000

5050

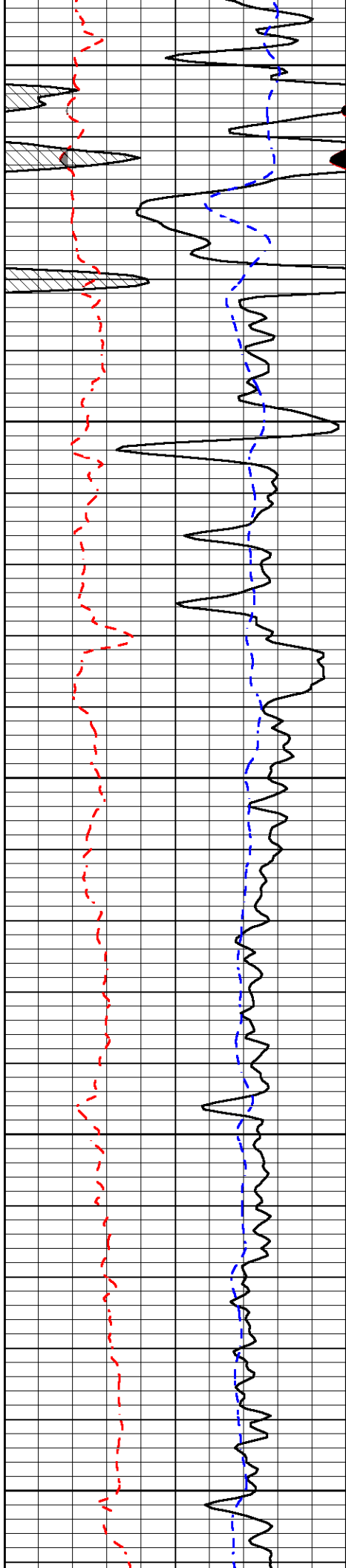


-31

-31

-31

-31



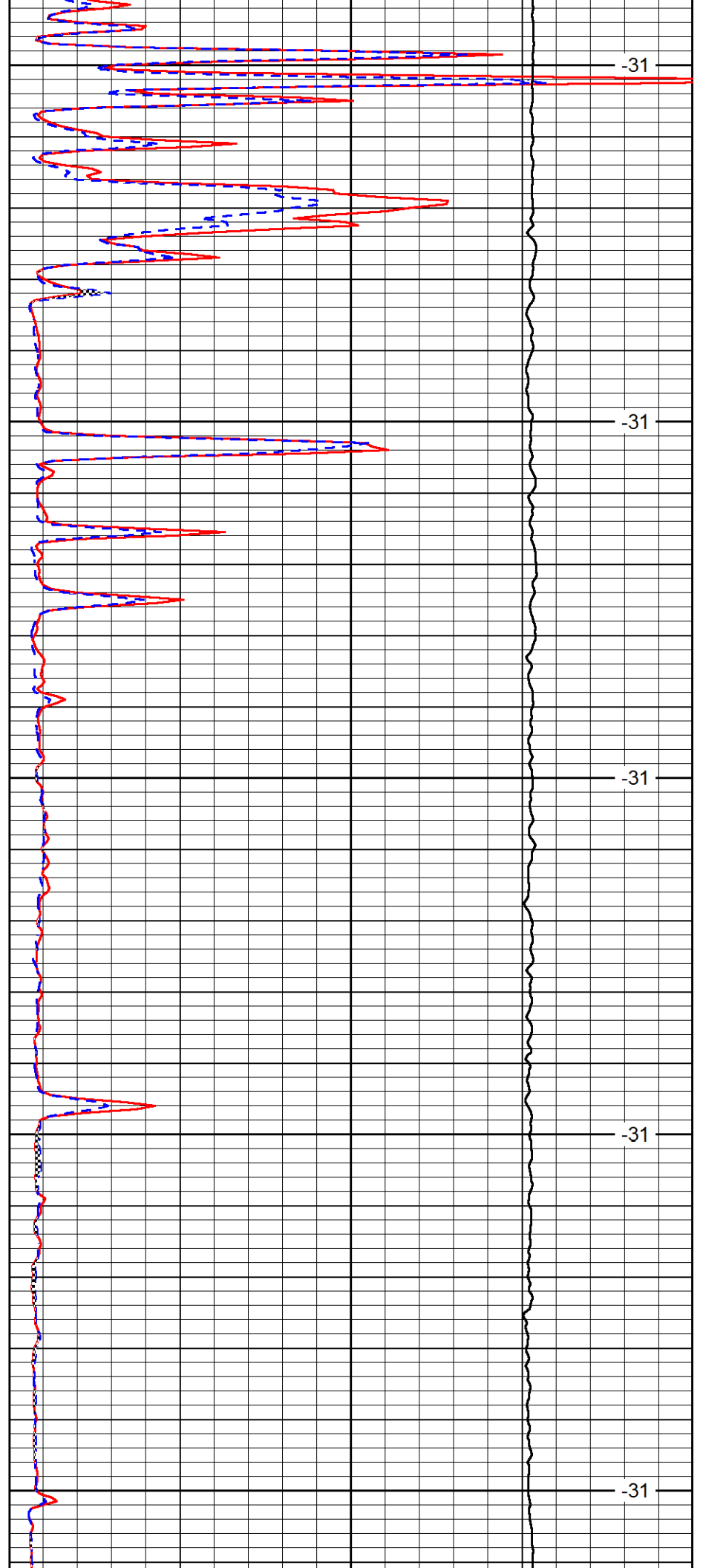
5100

5150

5200

5250

5300



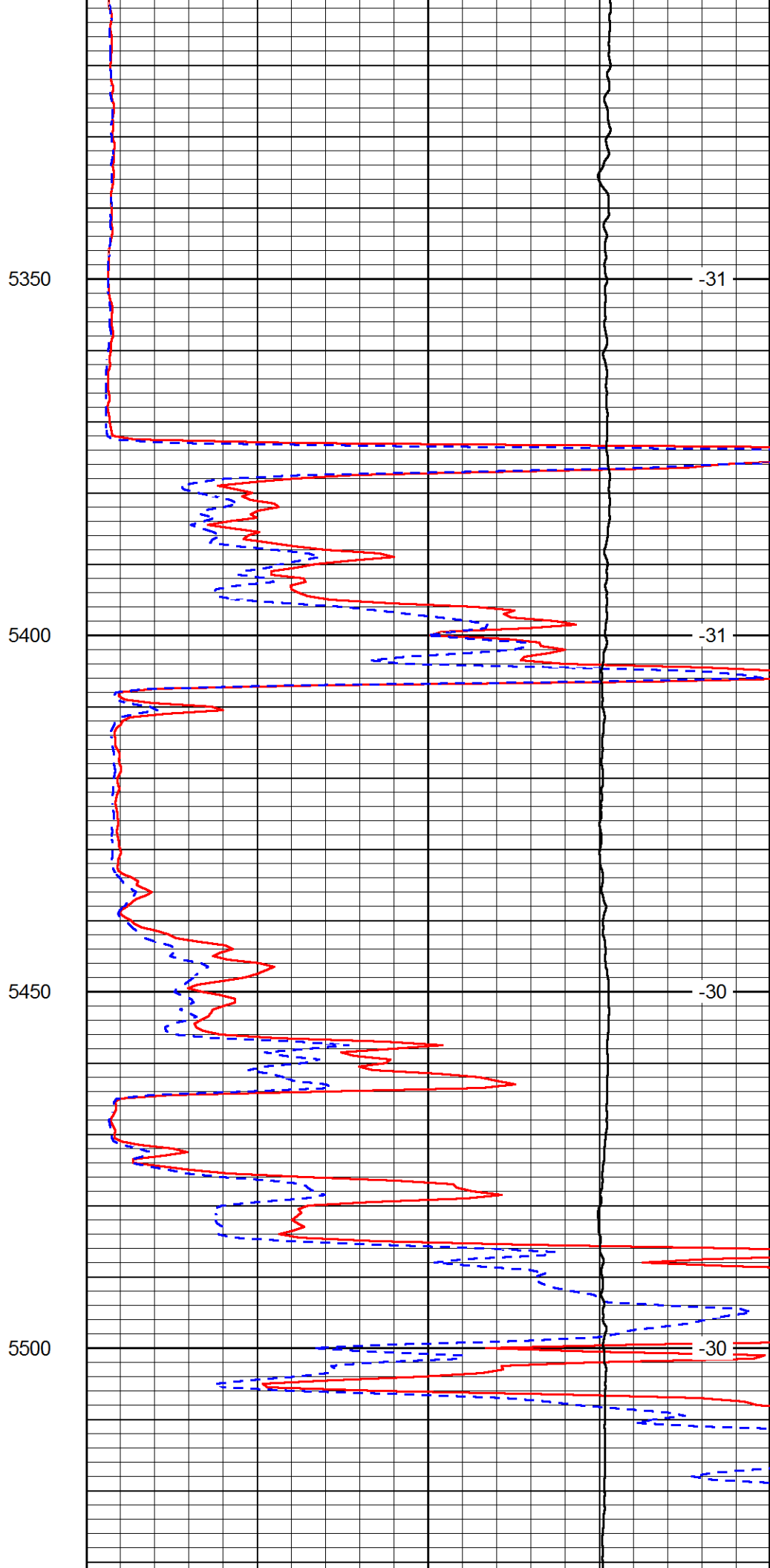
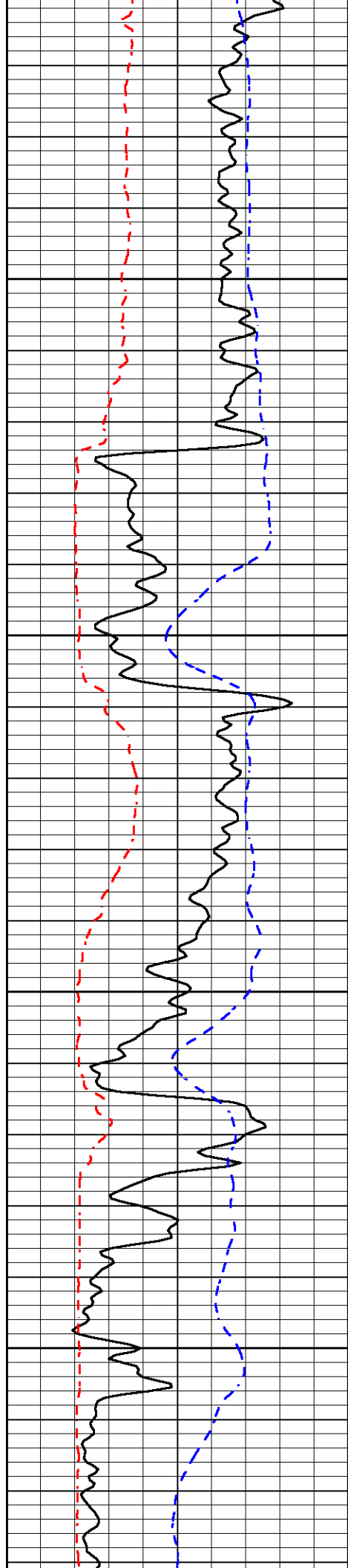
-31

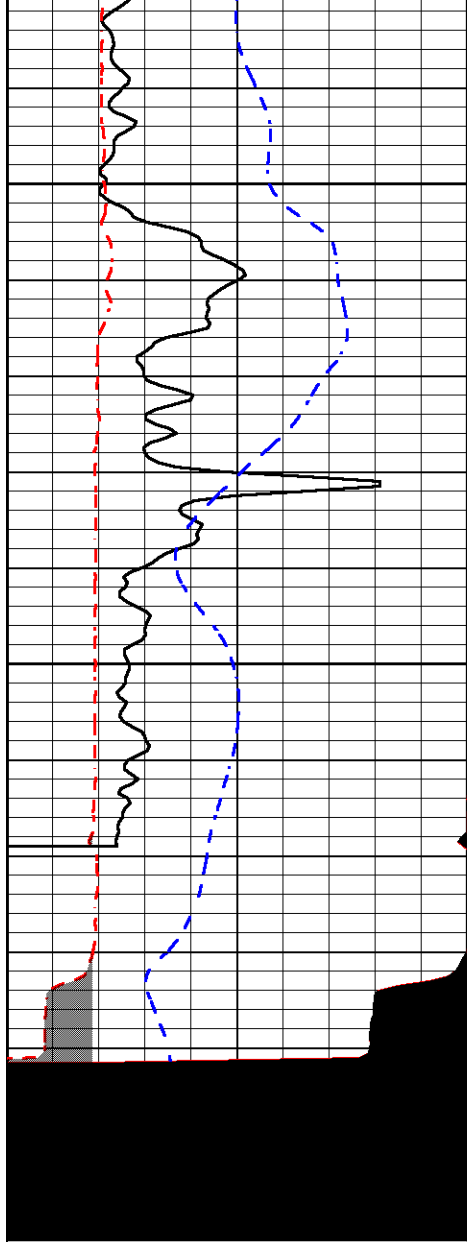
-31

-31

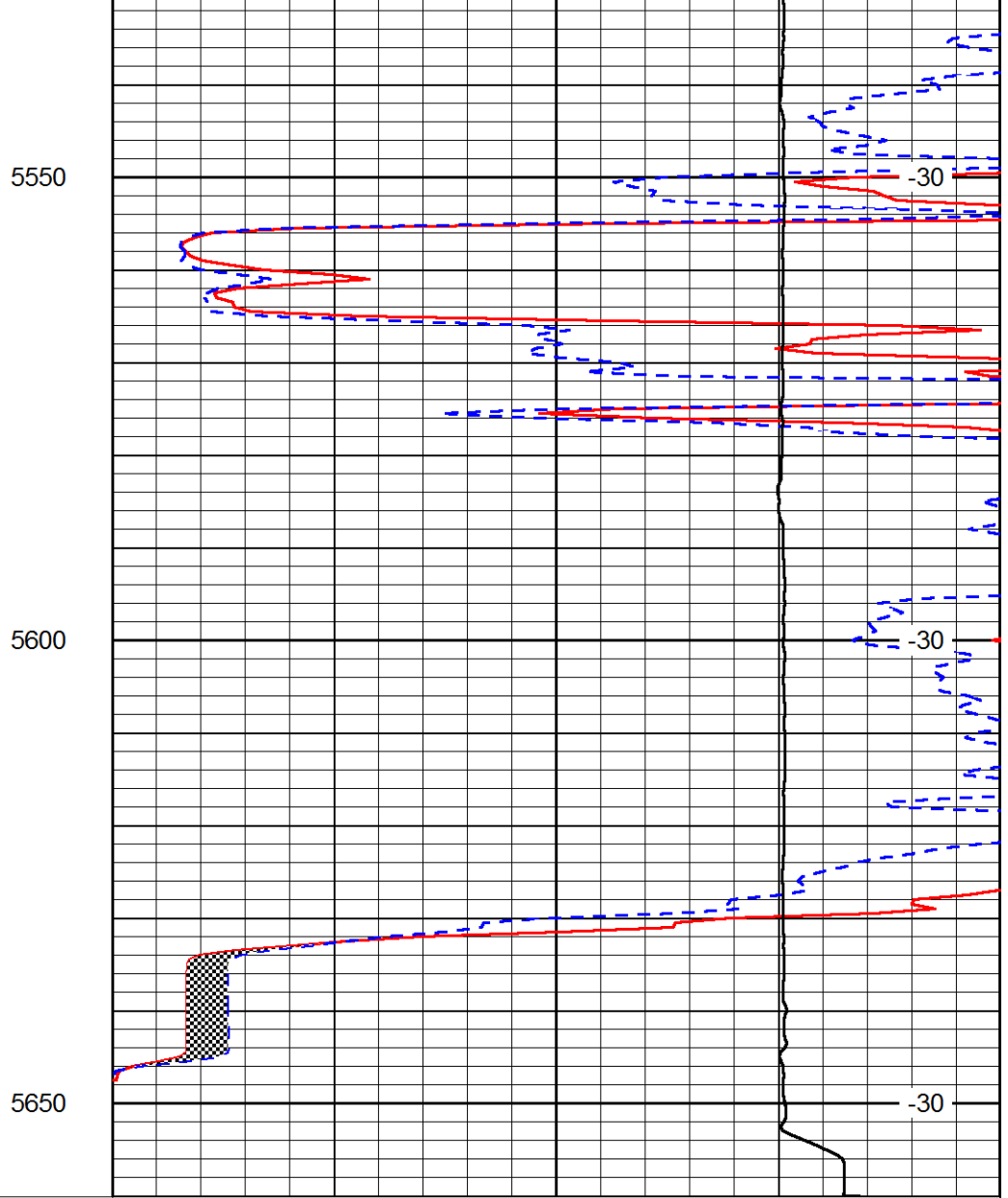
-31

-31





|       |                  |       |
|-------|------------------|-------|
| 0     | Gamma Ray (GAPI) | 150   |
| 6     | MCAL (in)        | 16    |
| 2.875 | Mud Cake (in)    | 7.875 |
| -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)