



Pioneer Energy Services

Microresistivity Log

| | | | |
|----------|-------------------------------------|----------|-----------------------|
| API No. | 15-167-23842-00-00 | | |
| Company | Bear Petroleum, LLC | | |
| Well | Krug #11 | | |
| Field | Trapp | | |
| County | Russell | State | Kansas |
| Location | S2 SE NE SE 1350' FSL / 330' FEL | | |
| Sec: 24 | Twp: 15S | Rge: 14W | Other Services RAG |

| | | | |
|------------------------|---------------|--------------------------|------|
| Permanent Datum | Ground Level | Elevation | 1882 |
| Log Measured From | Kelly Bushing | 13 Ft. Above Perm. Datum | |
| Drilling Measured From | Kelly Bushing | | |
| Date | 12/7/2012 | | |
| Run Number | Two | | |
| Depth Driller | 3367 | | |
| Depth Logger | 3365 | | |
| Bottom Logged Interval | 3364 | | |
| Top Log Interval | 2400 | | |
| Casing Driller | 8.625 @ 436 | | |
| Casing Logger | 430 | | |
| Bit Size | 7.875 | | |
| Type Fluid in Hole | Chemical | | |
| Salinity, ppm CL | 3000 | | |
| Density / Viscosity | 9.0 | 58 | |
| pH / Fluid Loss | 9.8 | 8.8 | |
| Source of Sample | Flowline | | |
| Rm @ Meas. Temp | 1.10 @ 54 | | |
| Rmf @ Meas. Temp | 0.83 @ 54 | | |
| Rmc @ Meas. Temp | 1.49 @ 54 | | |
| Source of Rmf / Rmc | Charts | | |
| Rm @ BHT | 0.54 @ 110 | | |
| Operating Rig Time | 4 Hours | | |
| Max Rec. Temp. F | 110 | | |
| Equipment Number | 15 | | |
| Location | Hays | | |
| Recorded By | R. Barnhart | | |
| Witnessed By | Keith Reavis | | |

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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

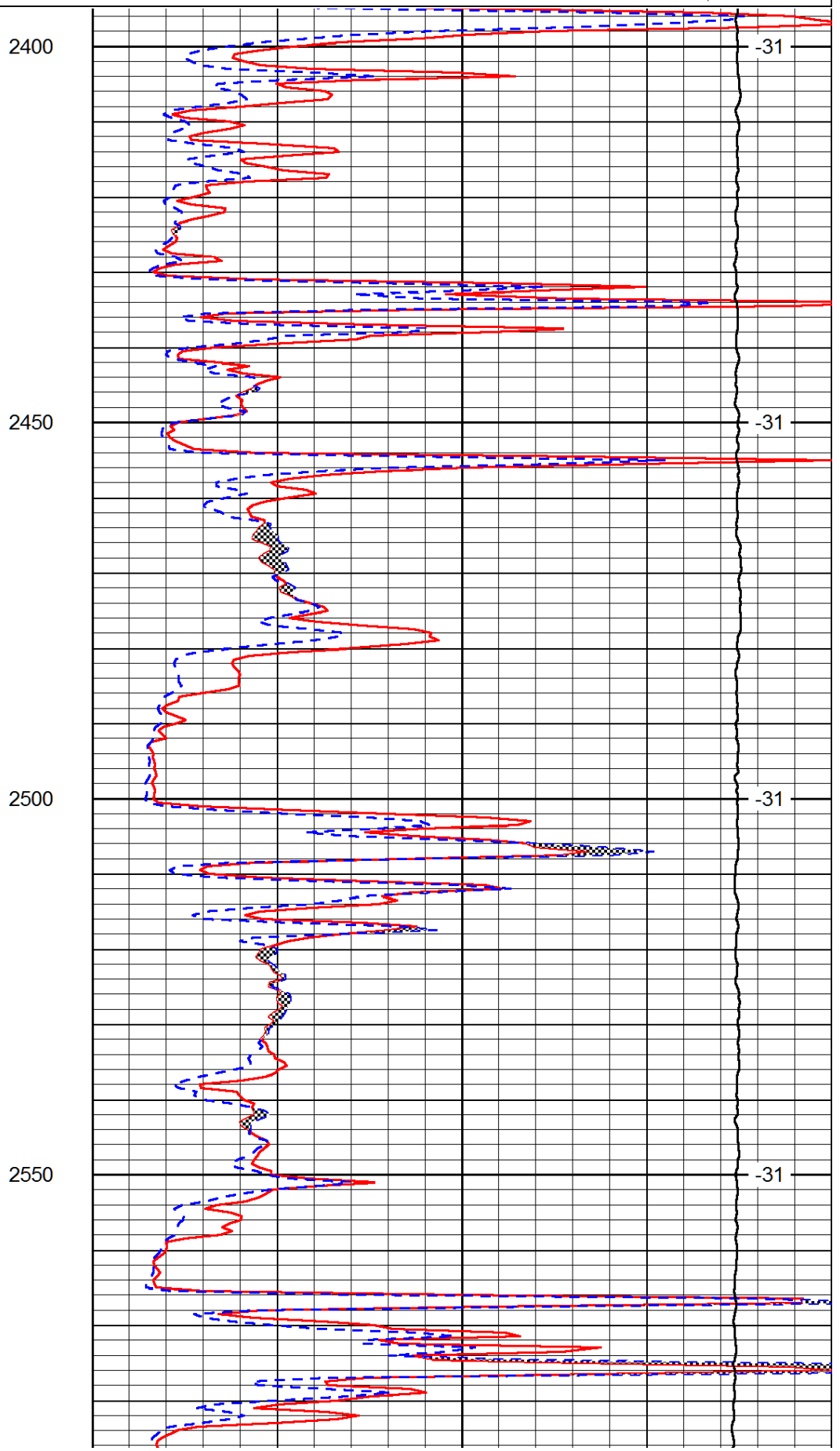
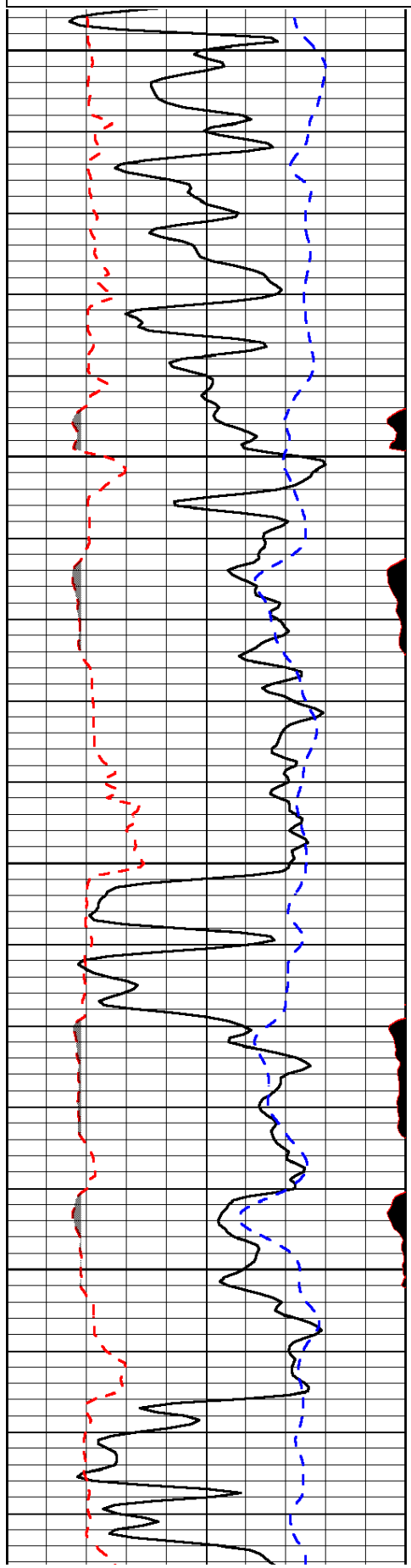
Russell, KS:
S to Stickney Rd., 2E, 1/4N, W into

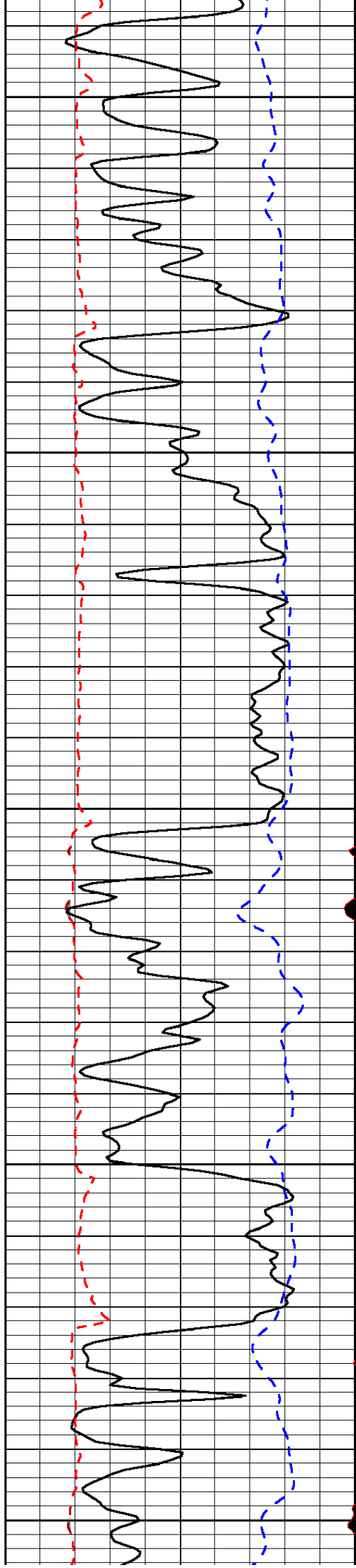
Database File: bear_hd.db
 Dataset Pathname: rag/brmain
 Presentation Format: micro
 Dataset Creation: Fri Dec 07 22:52:13 2012
 Charted by: Depth in Feet scaled 1:240

| | | |
|-------|------------------|-------|
| 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)





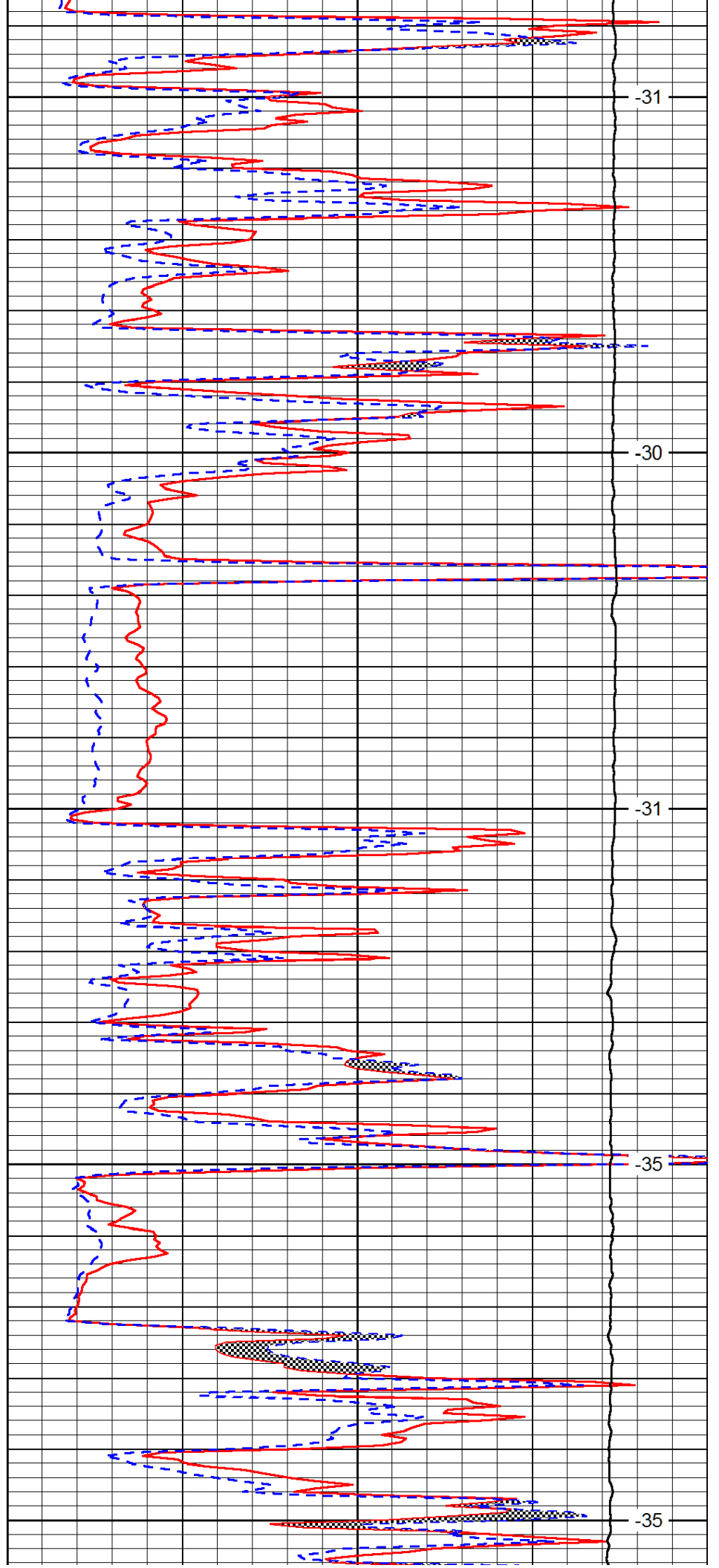
2600

2650

2700

2750

2800



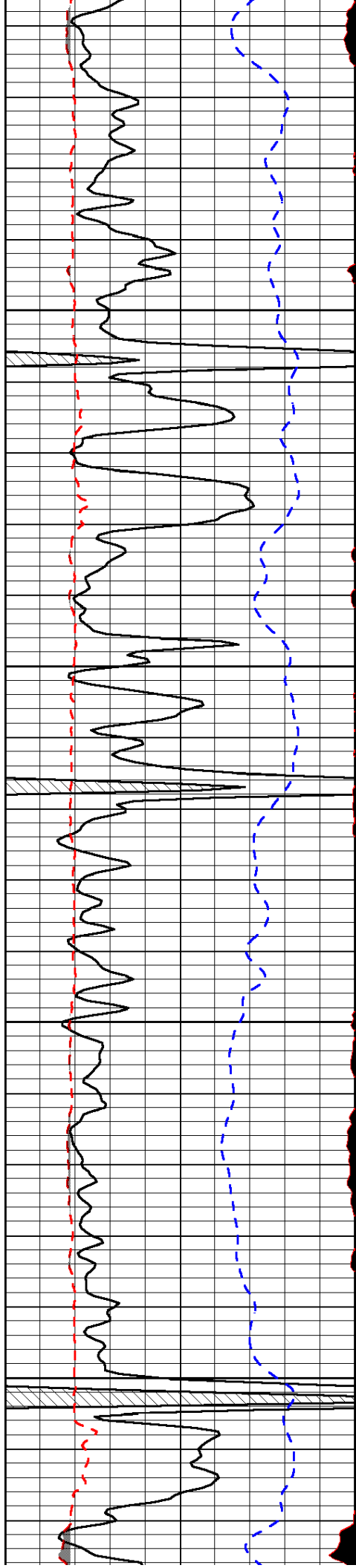
-31

-30

-31

-35

-35

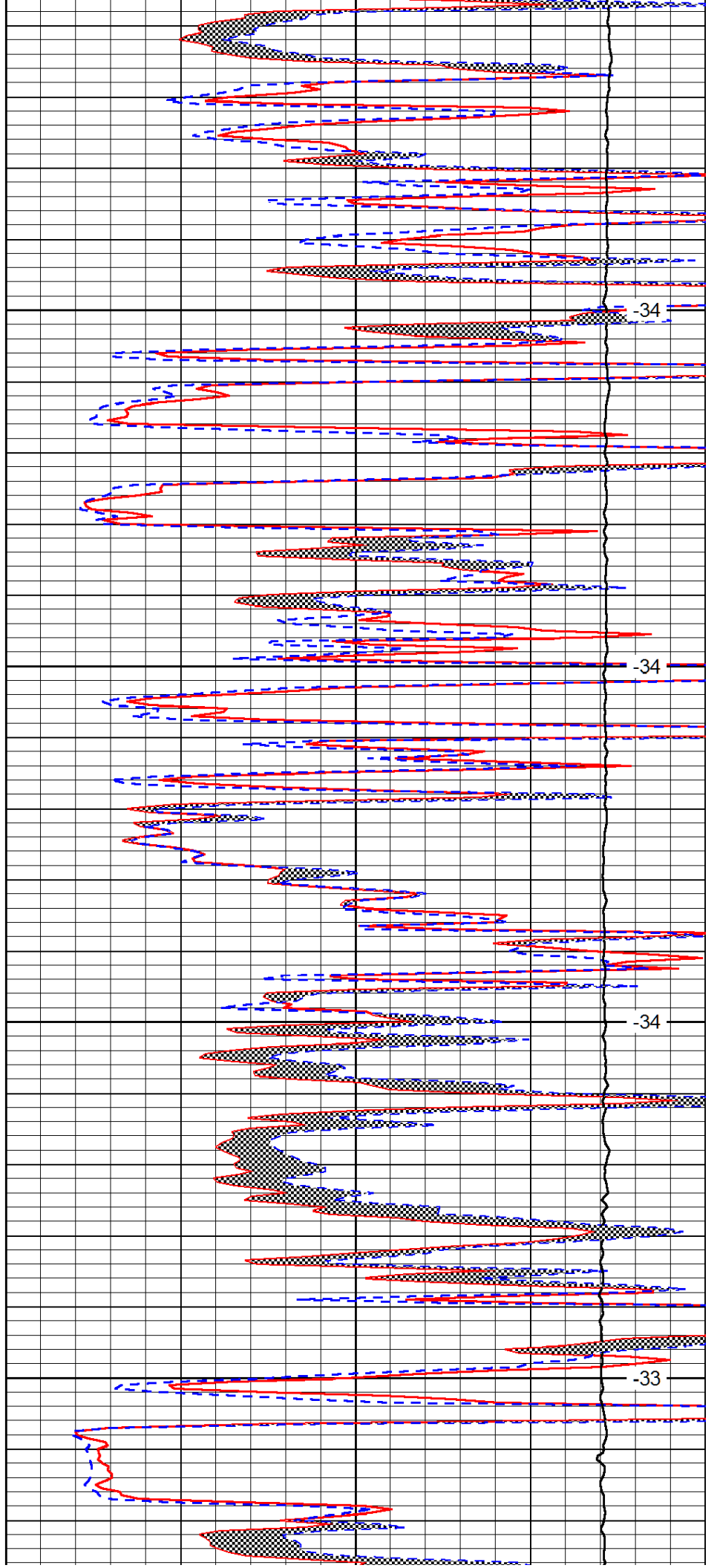


2850

2900

2950

3000

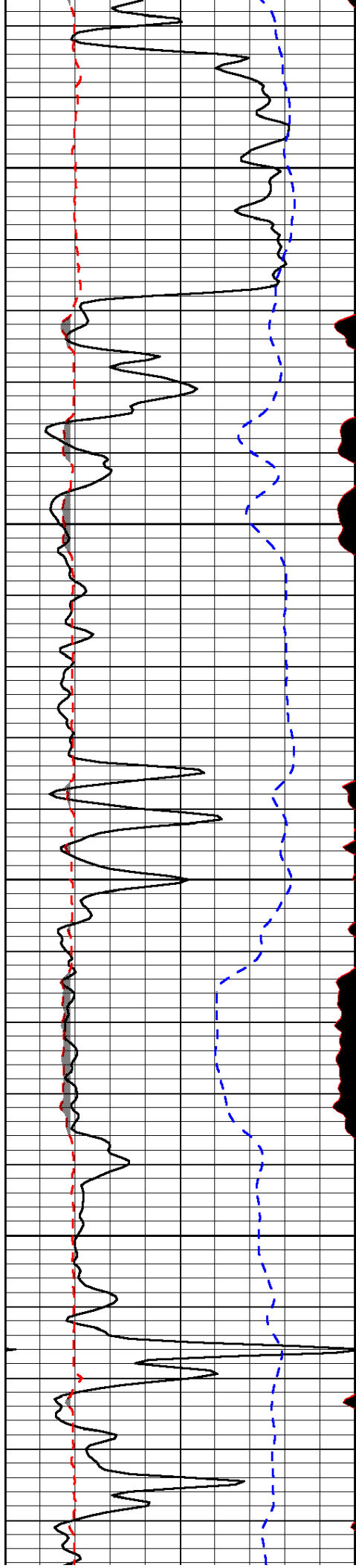


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-34

-34

-33

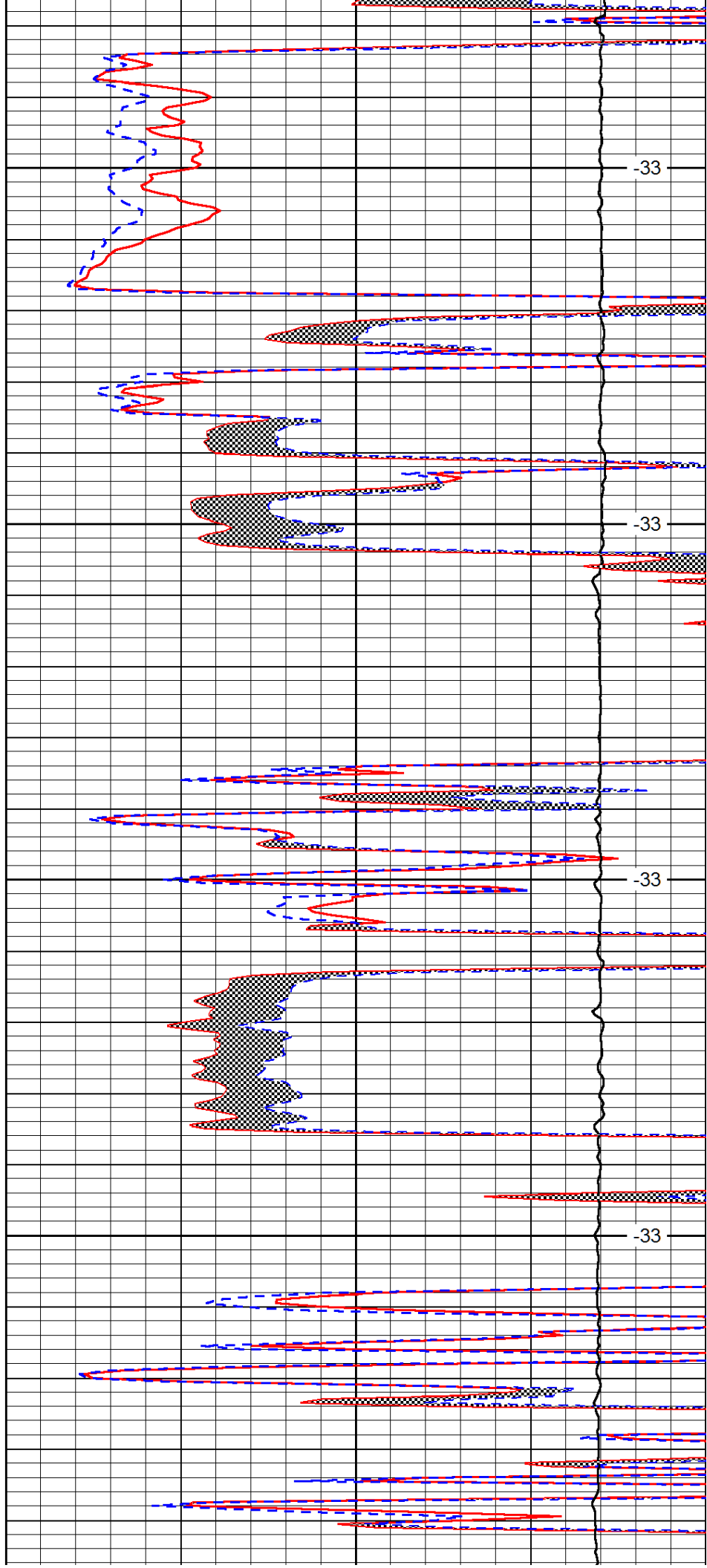


3050

3100

3150

3200

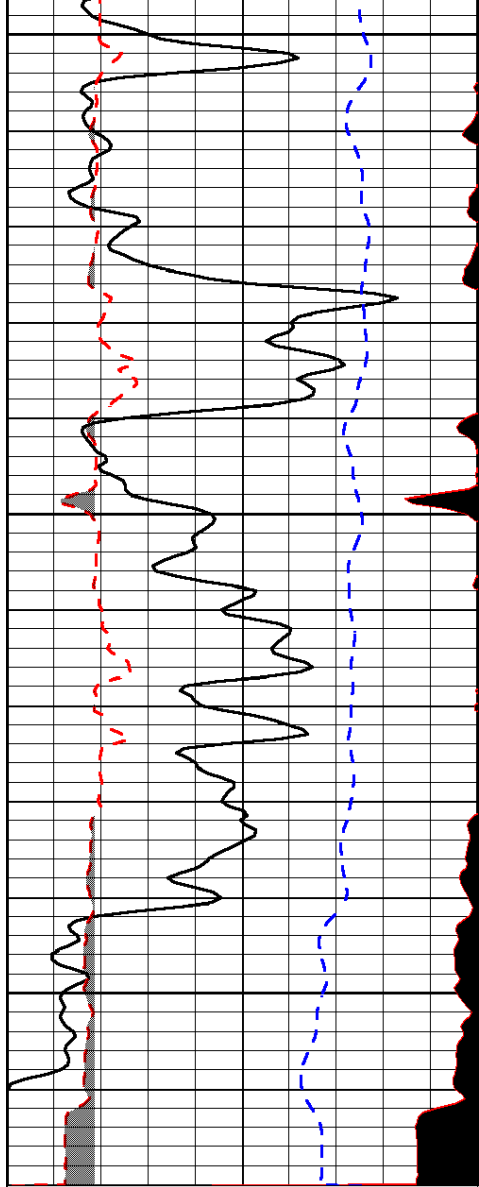


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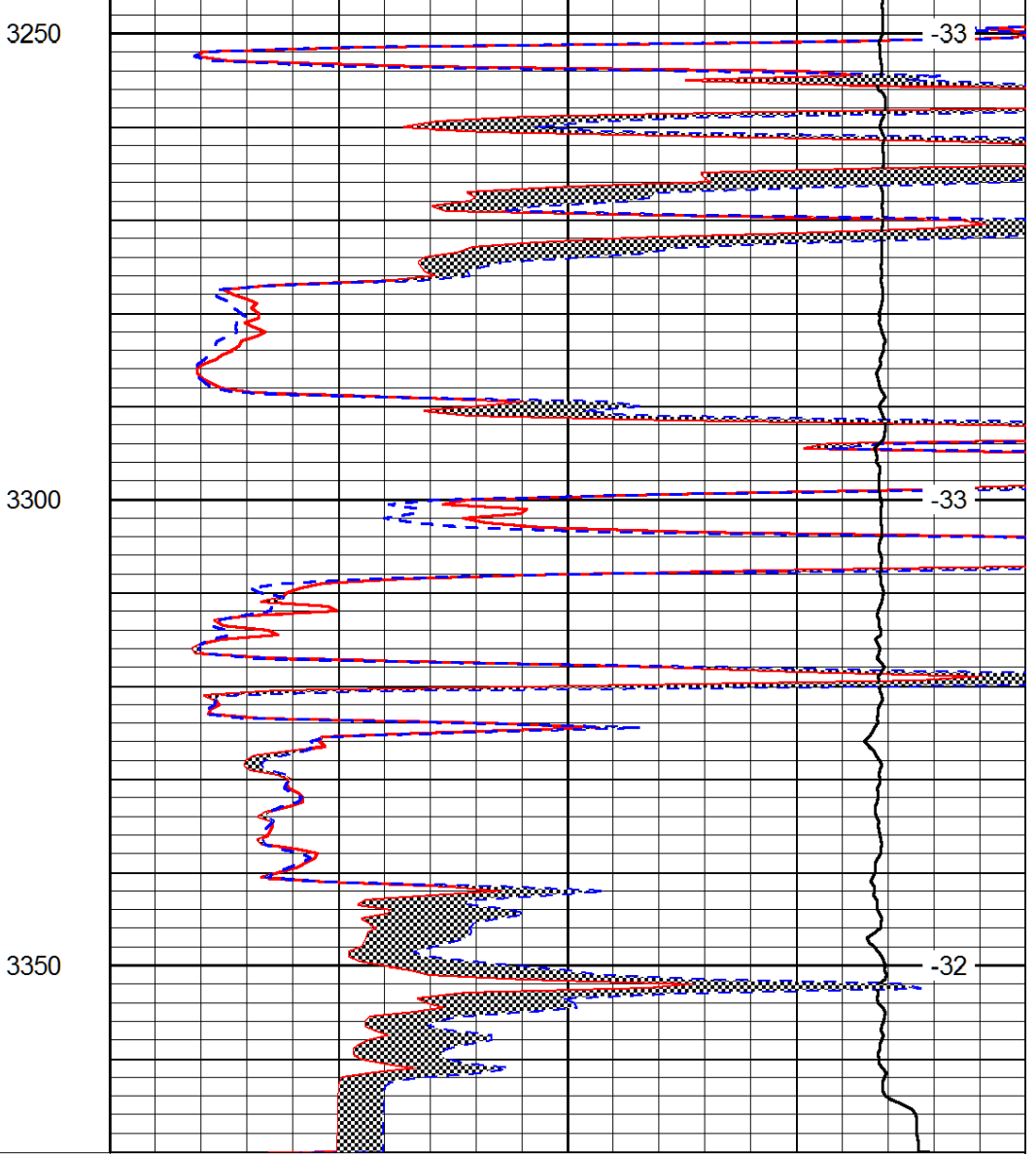
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