PIONEER

Pioneer Energy Services

# Borehole Compensated Sonic Log

API No. 15-007-24,029-00-00

Company Toto Energy, LLC

Well Packard #24-1

Field Nurse

County Barber State Kansas

Location 1536' FNL & 625' FWL

Sec: 24 Twp: 31S Rge: 13W

Permanent Datum Ground Level Elevation 1625

Log Measured From Kelly Bushing 11 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing

Other Services
CNL/CDL
MEL/DIL

Elevation
K.B. 1636
D.F.
G.L. 1625

| | |
|---|---|
| Date | 6/26/2013 |
| Run Number | Two |
| Type Log | BHC Sonic |
| Depth Driller | 4750 |
| Depth Logger | 4753 |
| Bottom Logged Interval | 4742 |
| Top Logged Interval | 400 |
| Type Fluid In Hole | Chemical |
| Salinity, PPM CL | 7,000 |
| Density | 9.2 |
| Level | Full |
| Max. Rec. Temp. F | 124 |
| Operating Rig Time | 5 Hours |
| Equipment -- Location | 17 Hays |
| Recorded By | C. Desaire |
| Witnessed By | Terry Madden |

Borehole Record

| Run No. | Bit | From | To |
|---|---|---|---|
| 1 | 12.25 | 00 | 442 |
| 2 | 7.875 | 442 | 4750 |

Casing Record

| Size | Wgt. | From | To |
|---|---|---|---|
| 8.625 | 24# | 00 | 442 |

Sean Deenihan

<<< Fold Here >>>

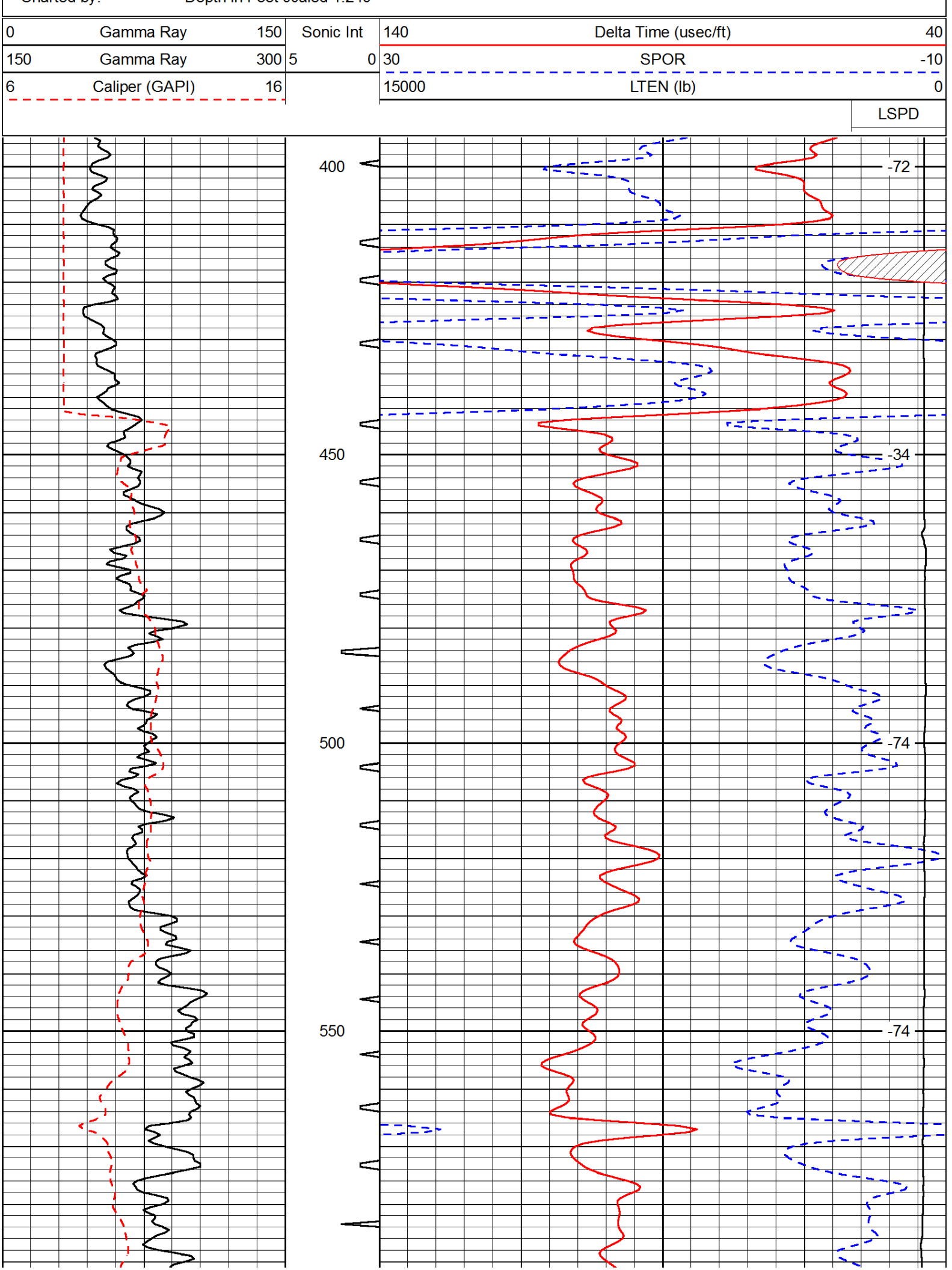
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

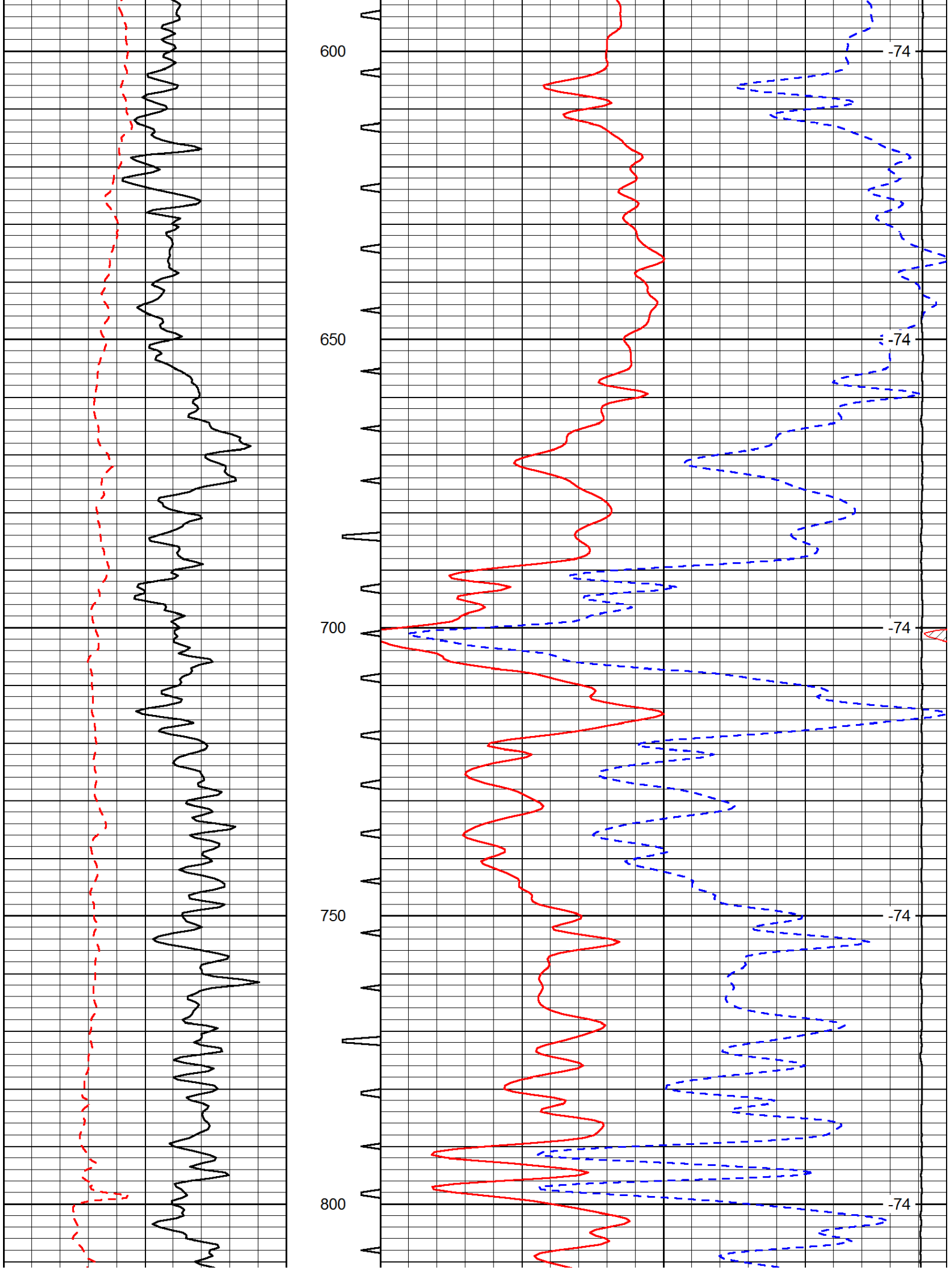
Thank you for using Pioneer Energy Services
www.pioneeres.com
785 625 3858

Medicine Lodge KS, 7 1/2 W on River Rd, N Into

| | |
|---|---|
| Database File: | c:\warrior\data\toto energy_packard #24-1\totohd.db |
| Dataset Pathname: | dil/totostk |
| Presentation Format: | sonic |
| Dataset Creation: | Wed Jun 26 09:56:40 2013 |
| Charted by: | Depth in Feet scaled 1:240 |



0 Gamma Ray 150
150 Gamma Ray 300
6 Caliper (GAPI) 16
Sonic Int
5 0
140 Delta Time (usec/ft) 40
30 SPOR -10
15000 LTEN (lb) 0
LSPD
400
450
500
550
-72
-34
-74
-74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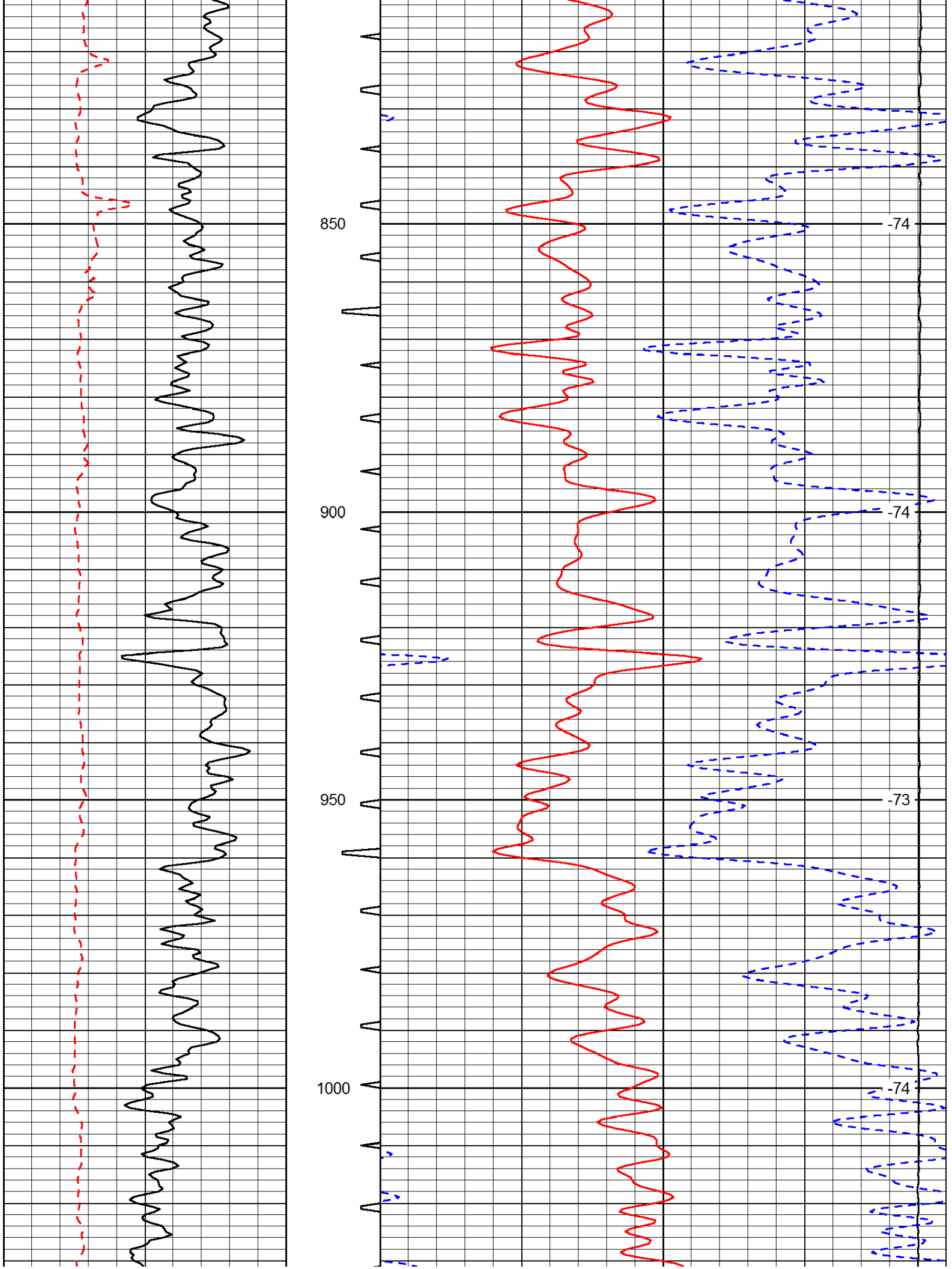
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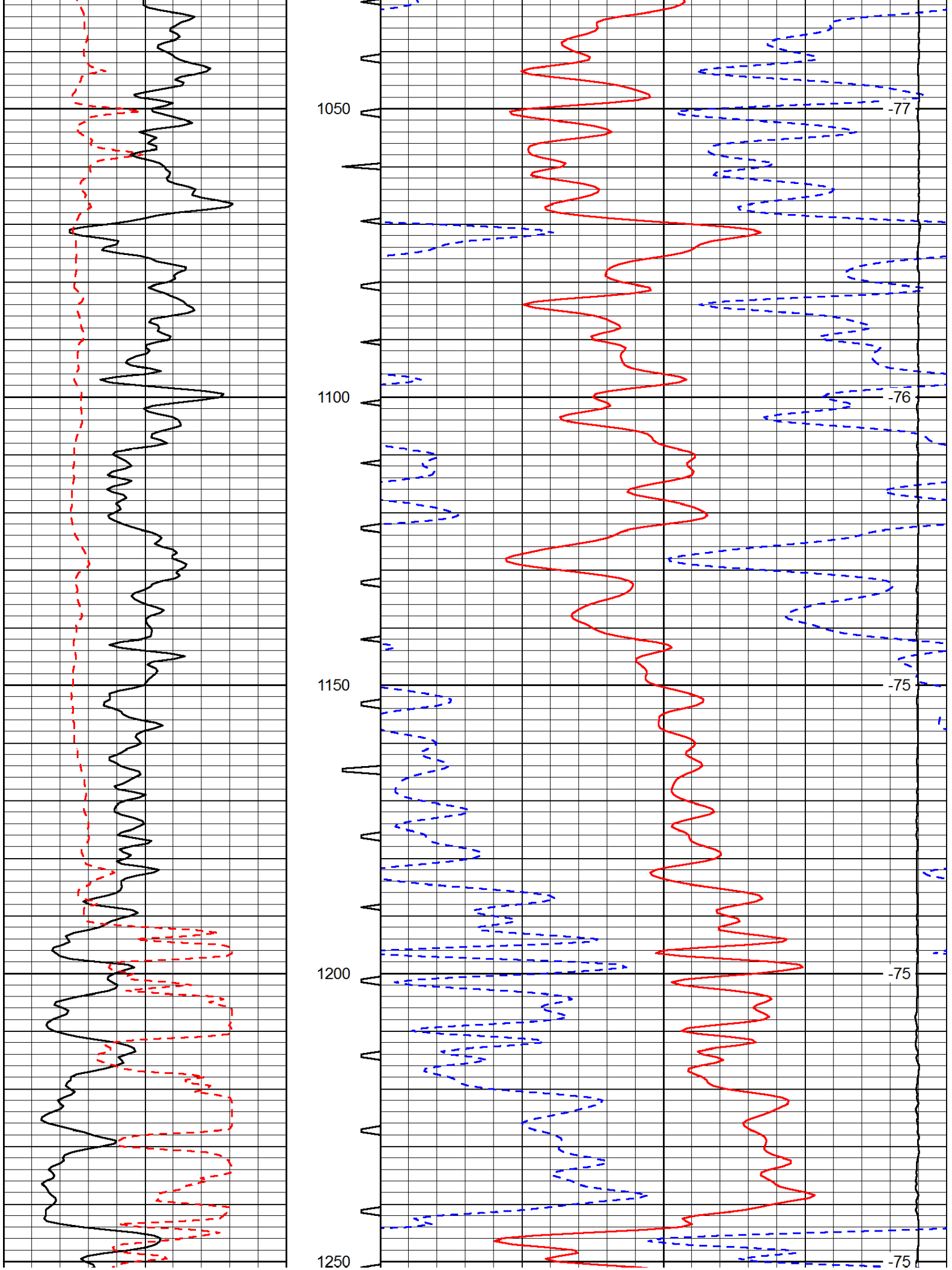
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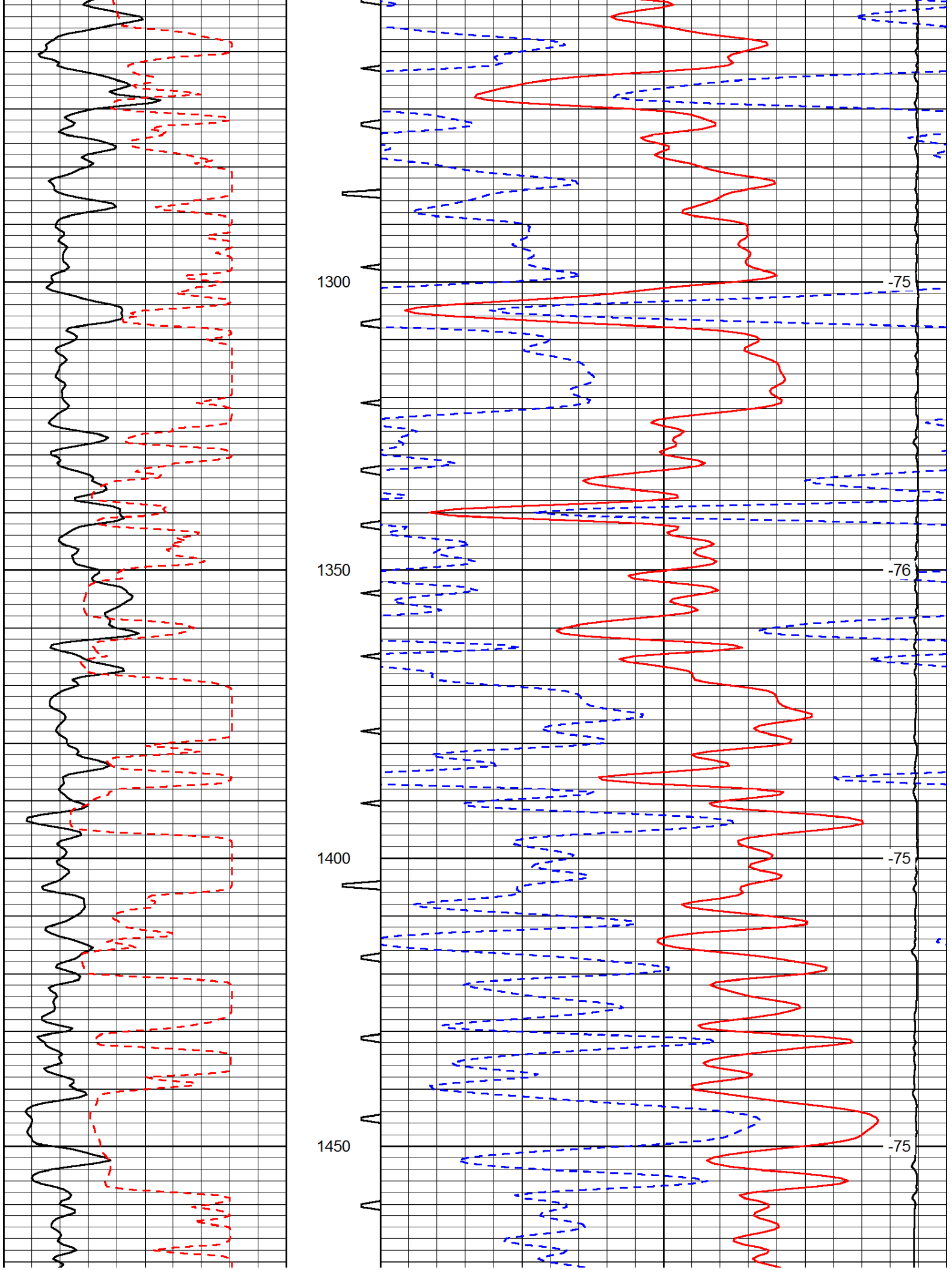
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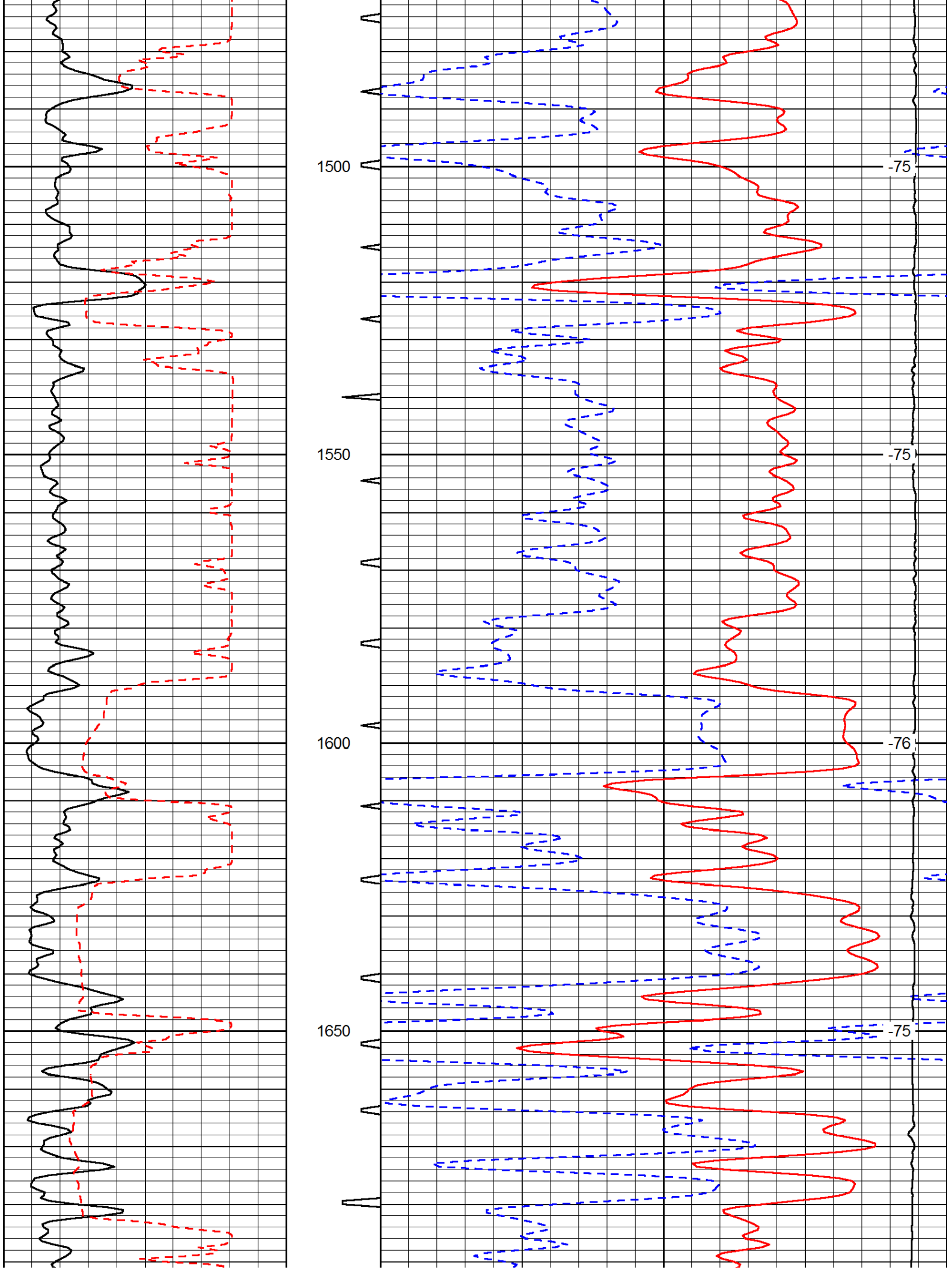
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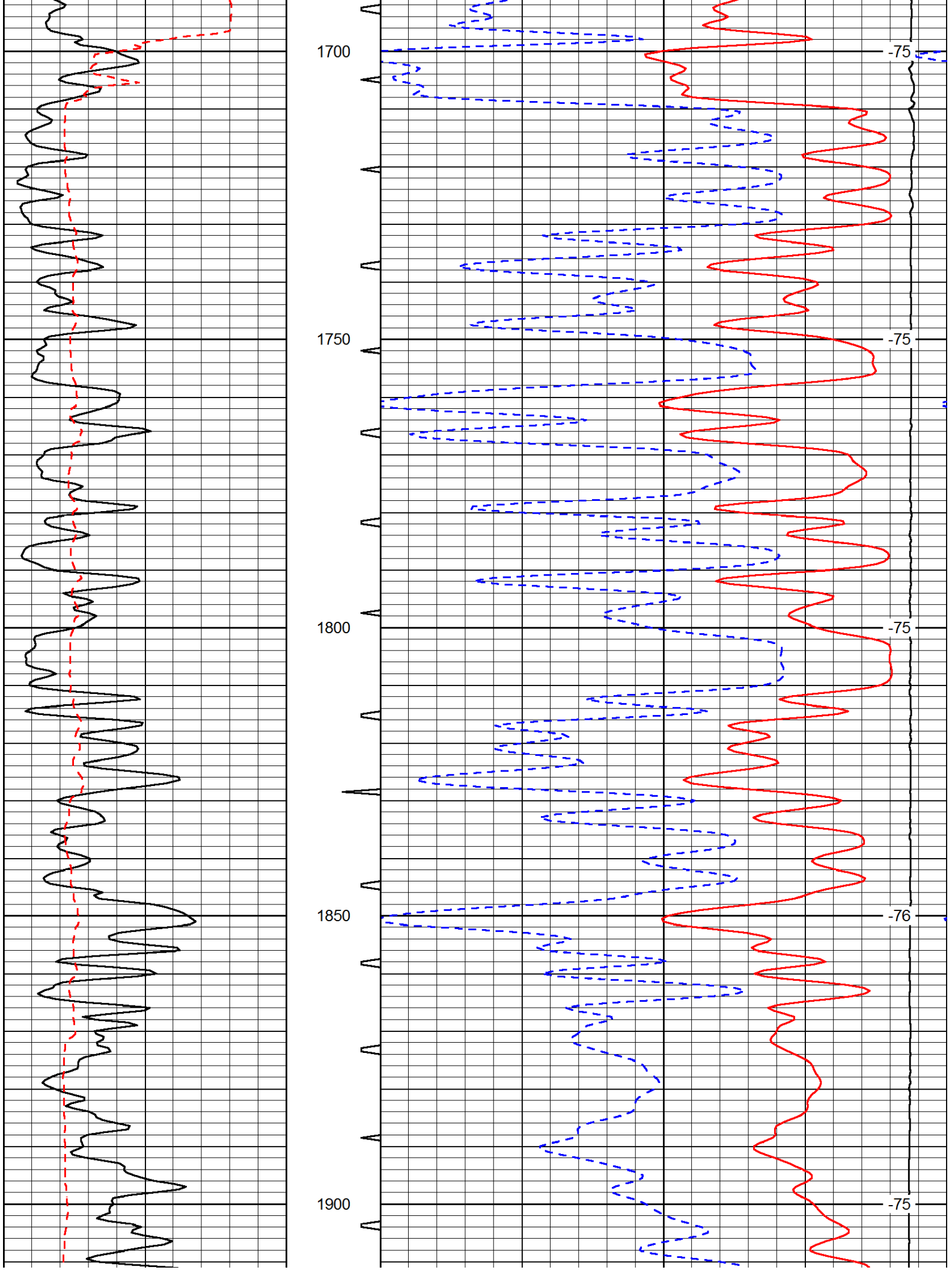
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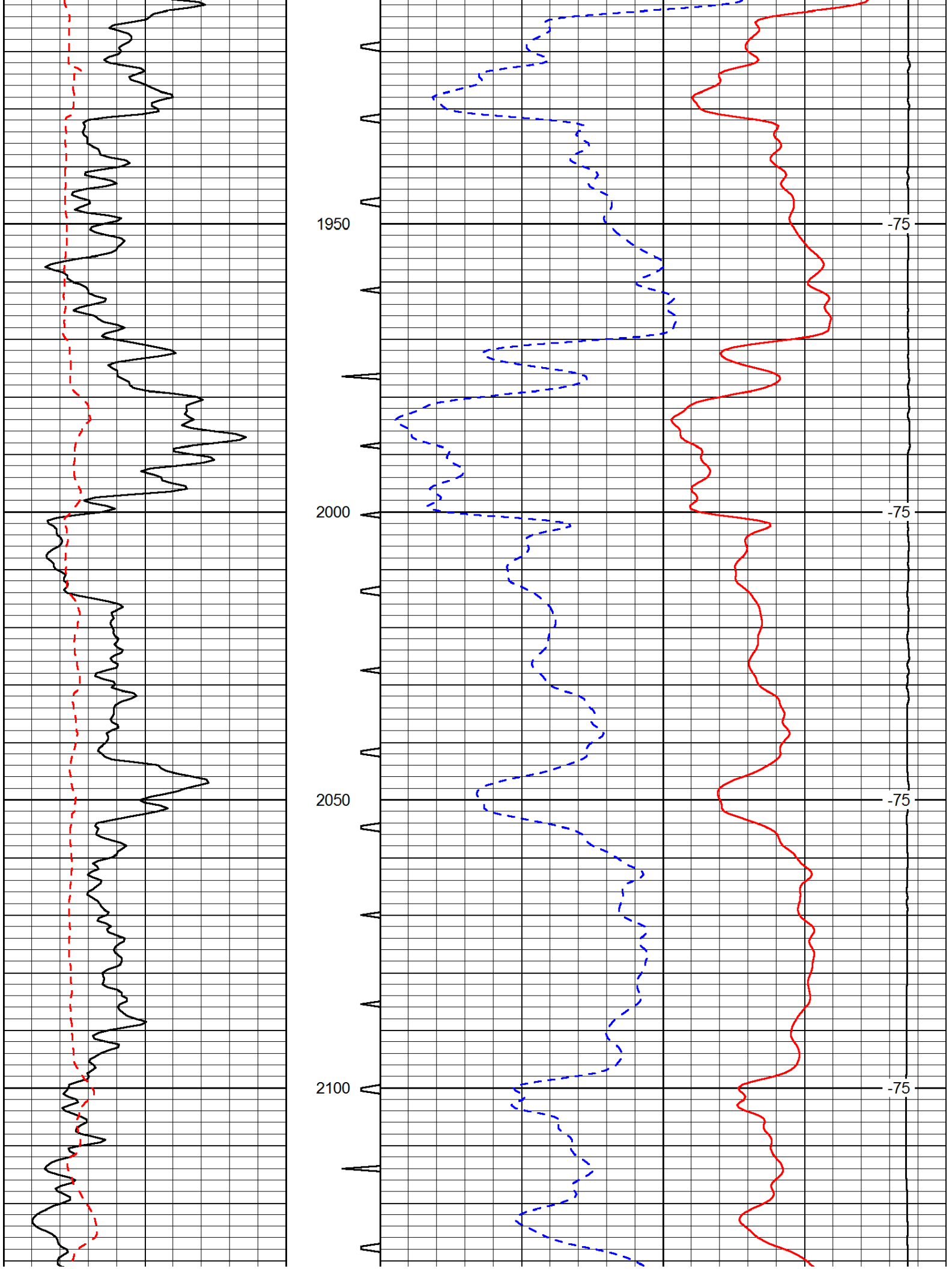
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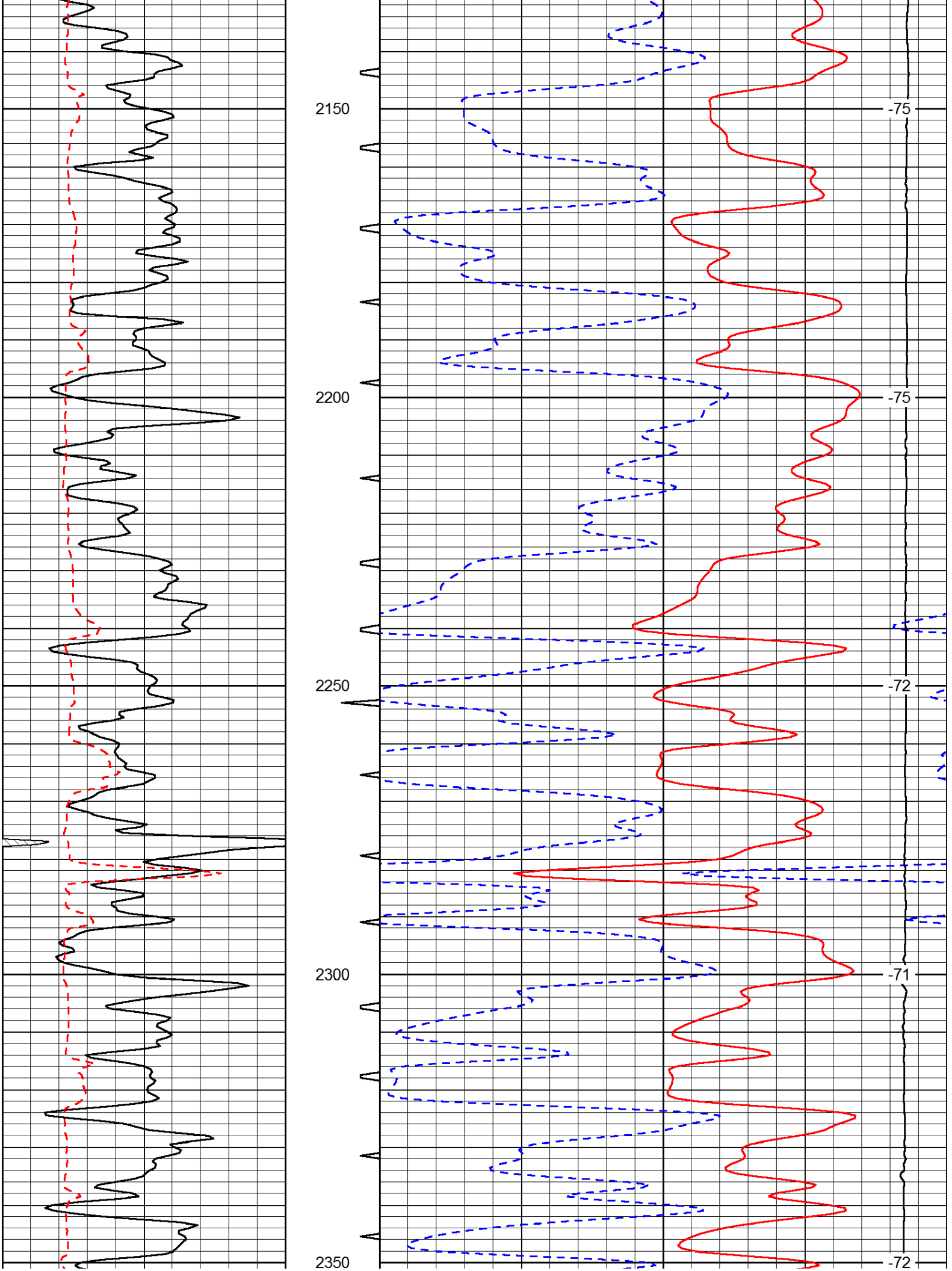
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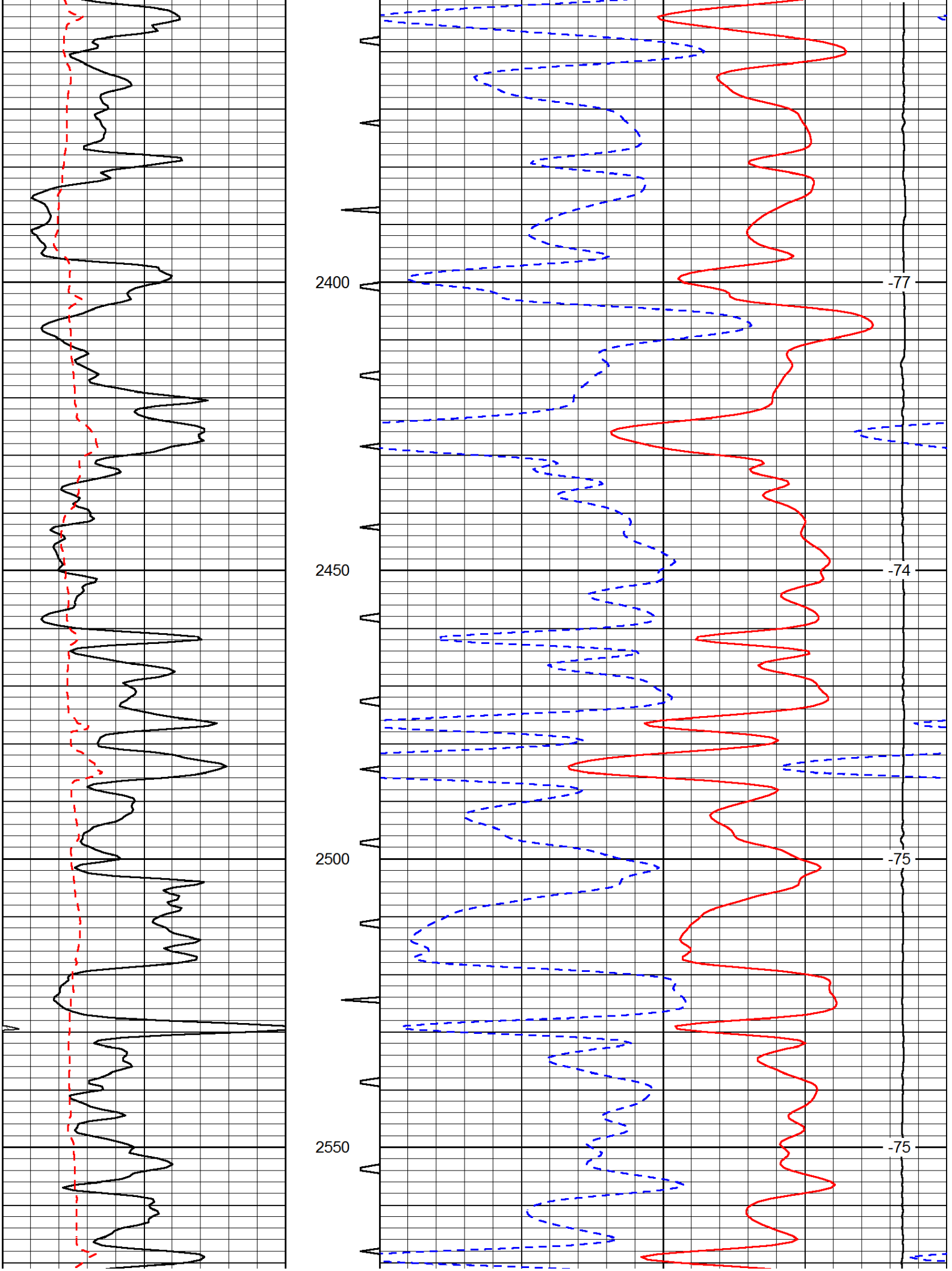
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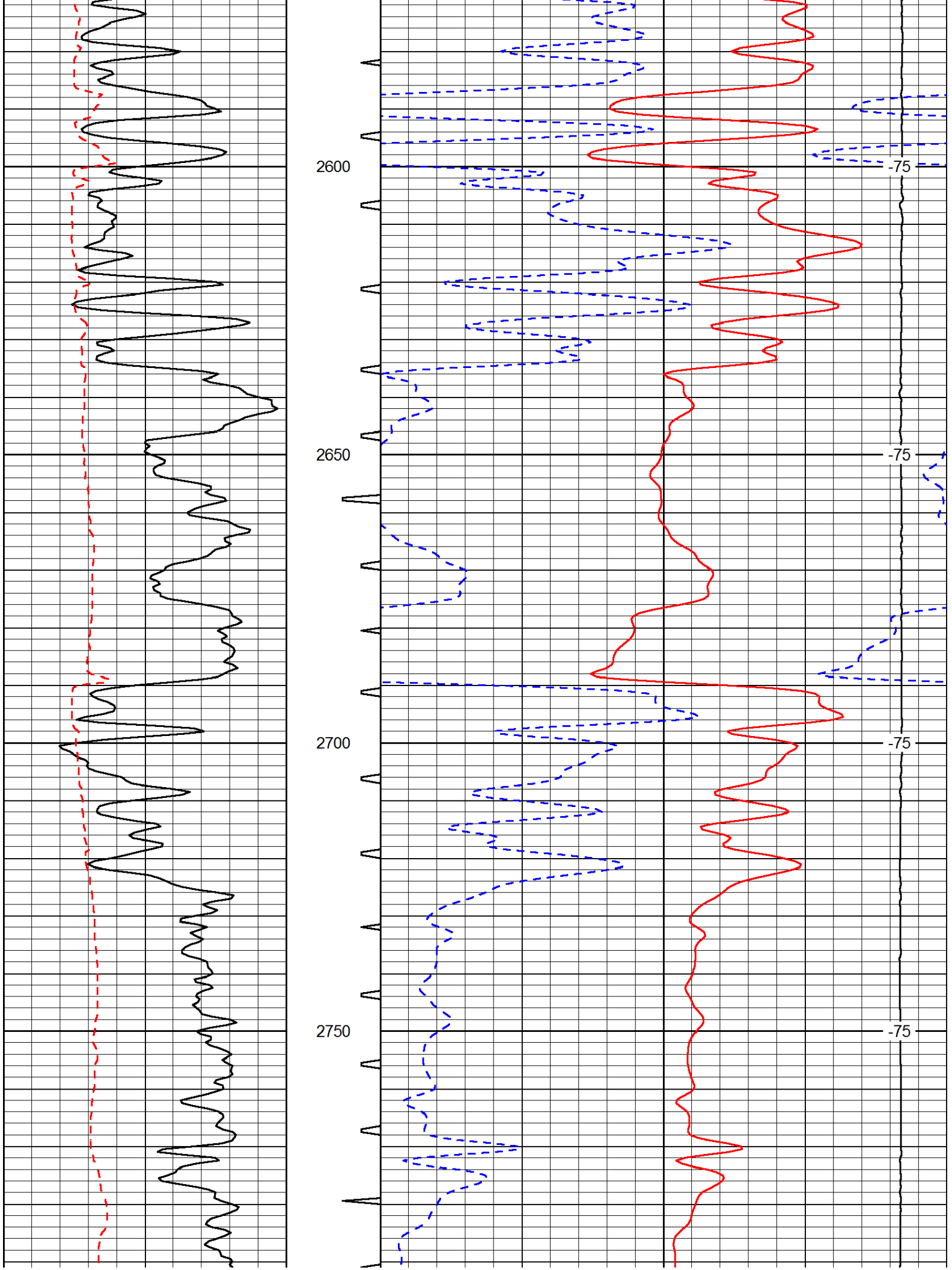
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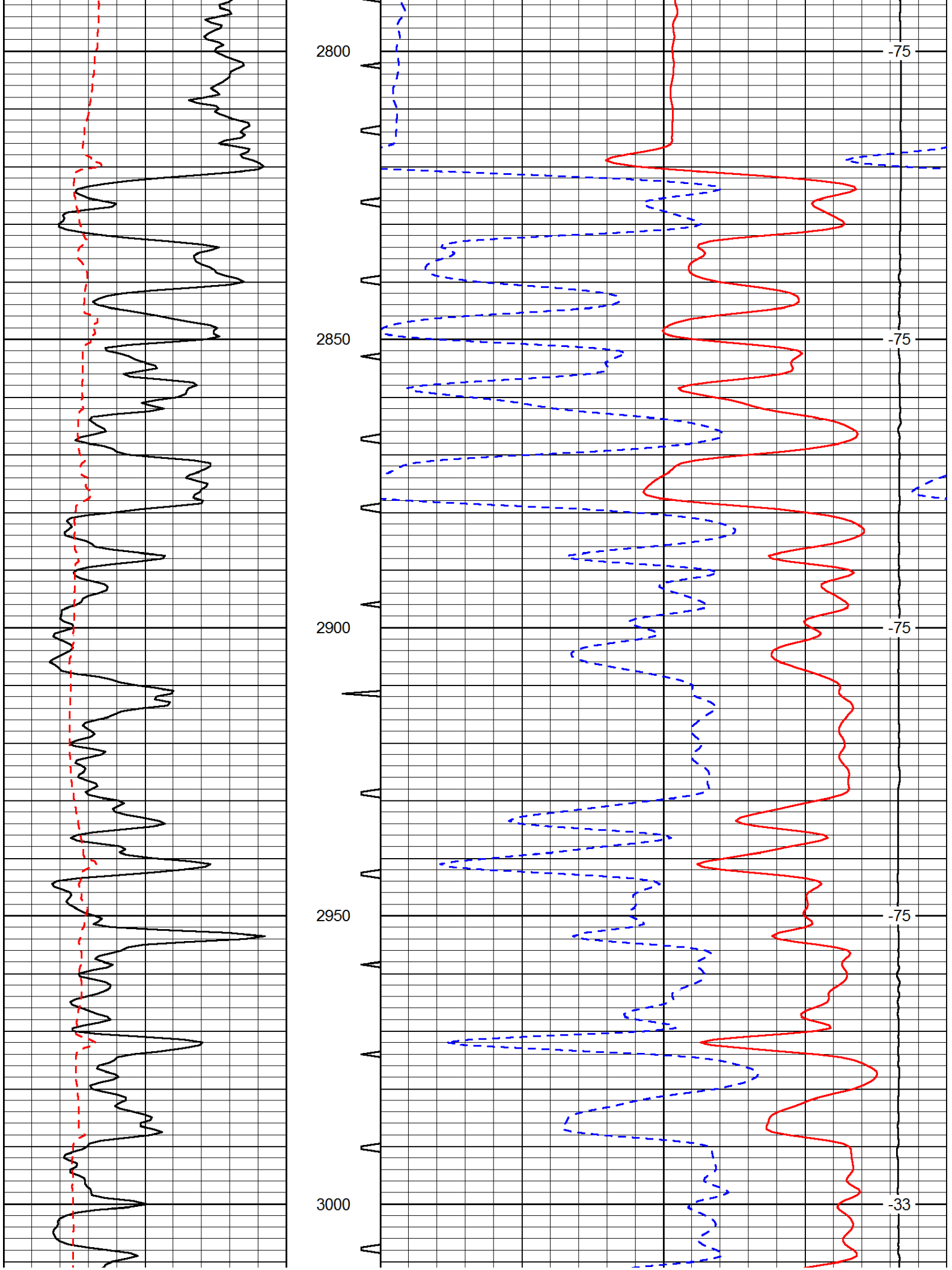
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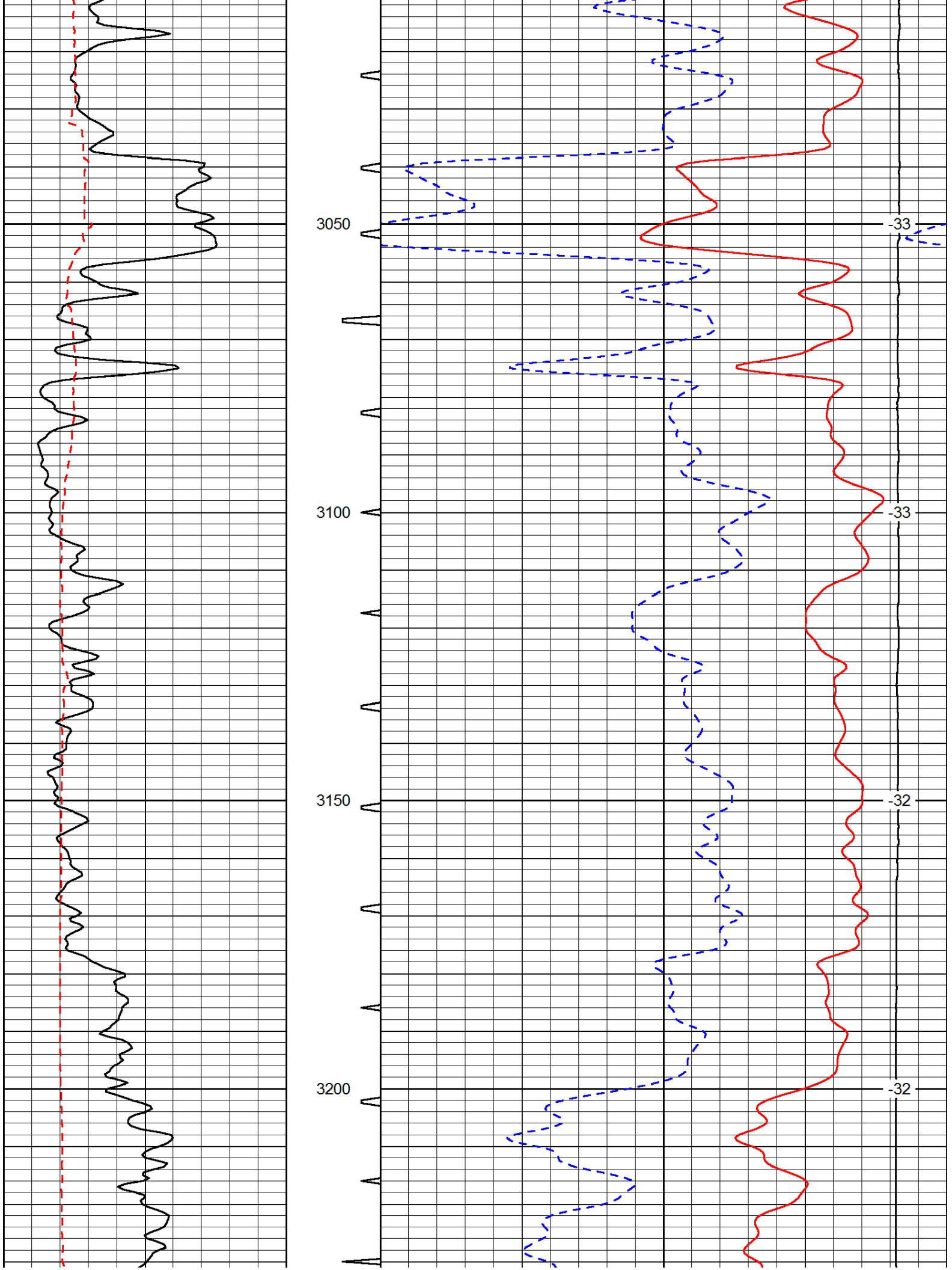
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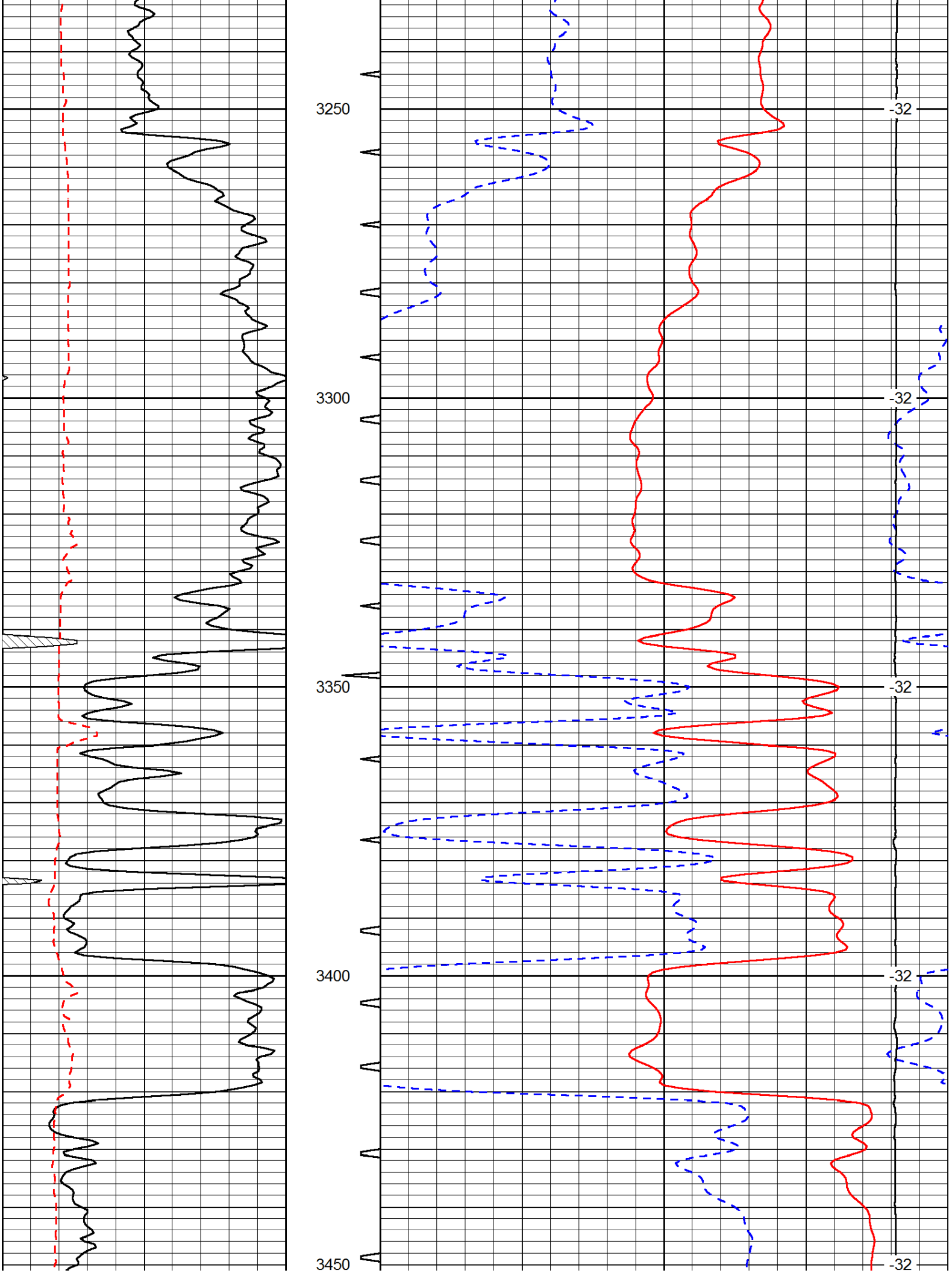
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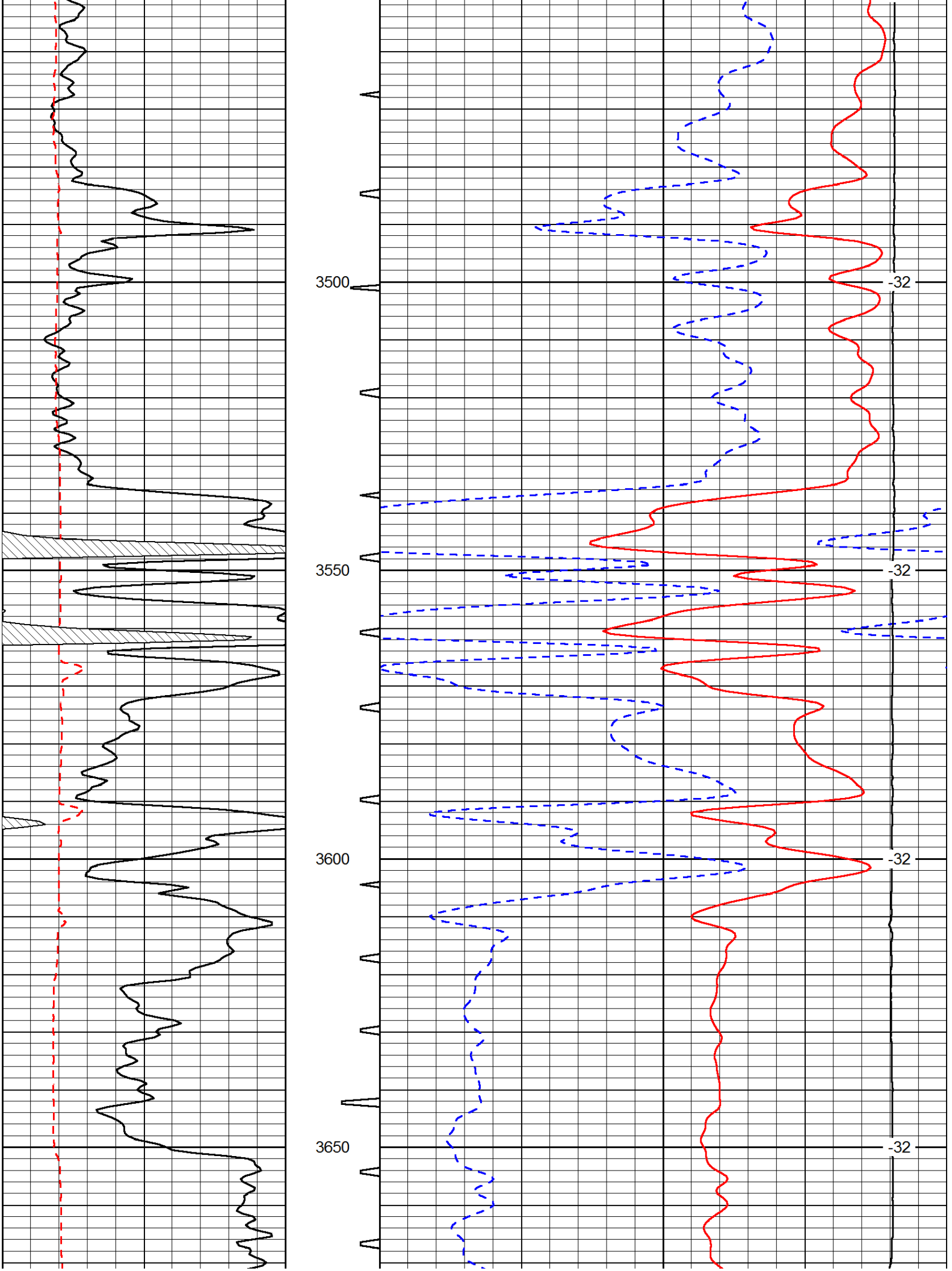
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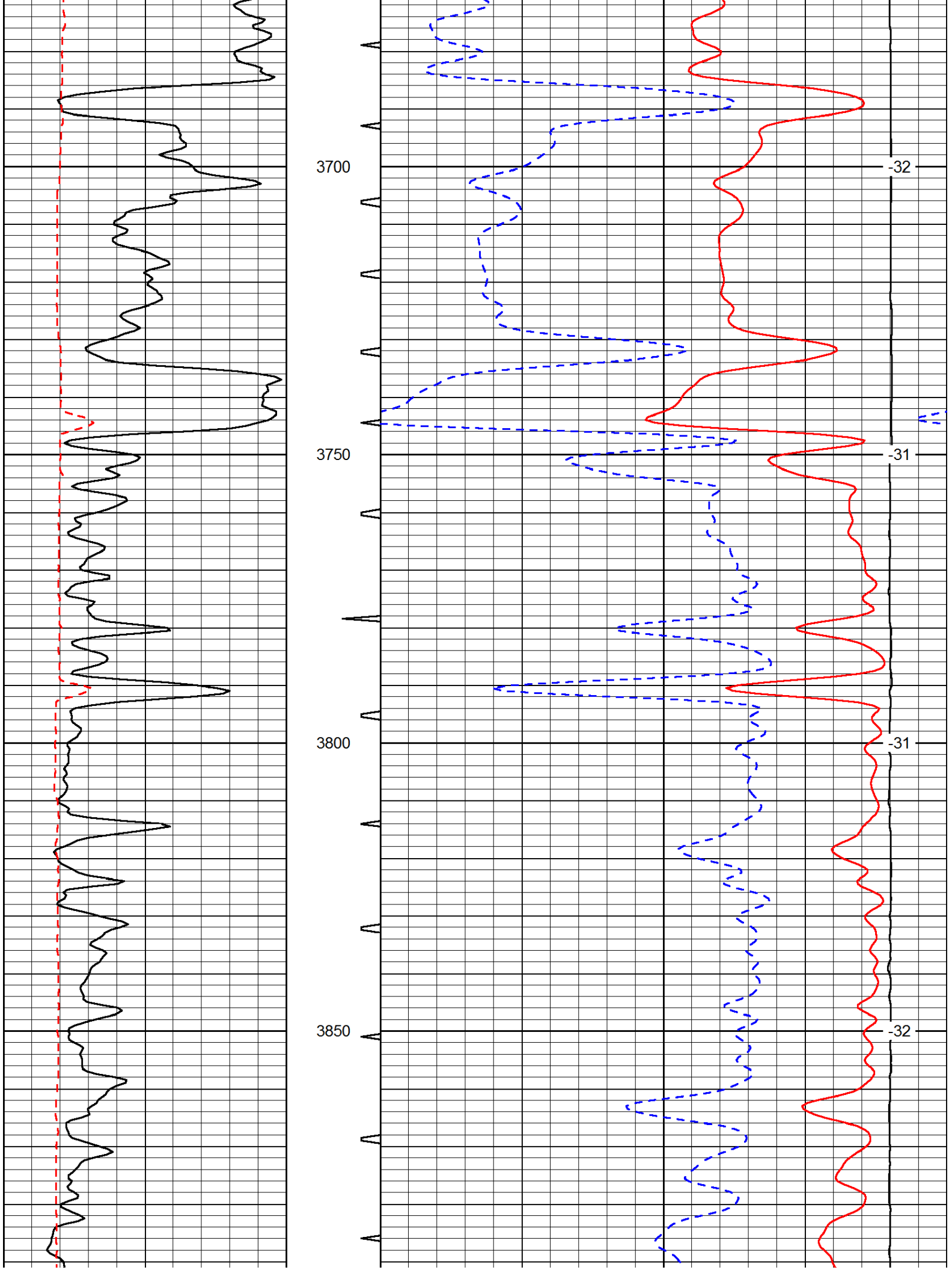
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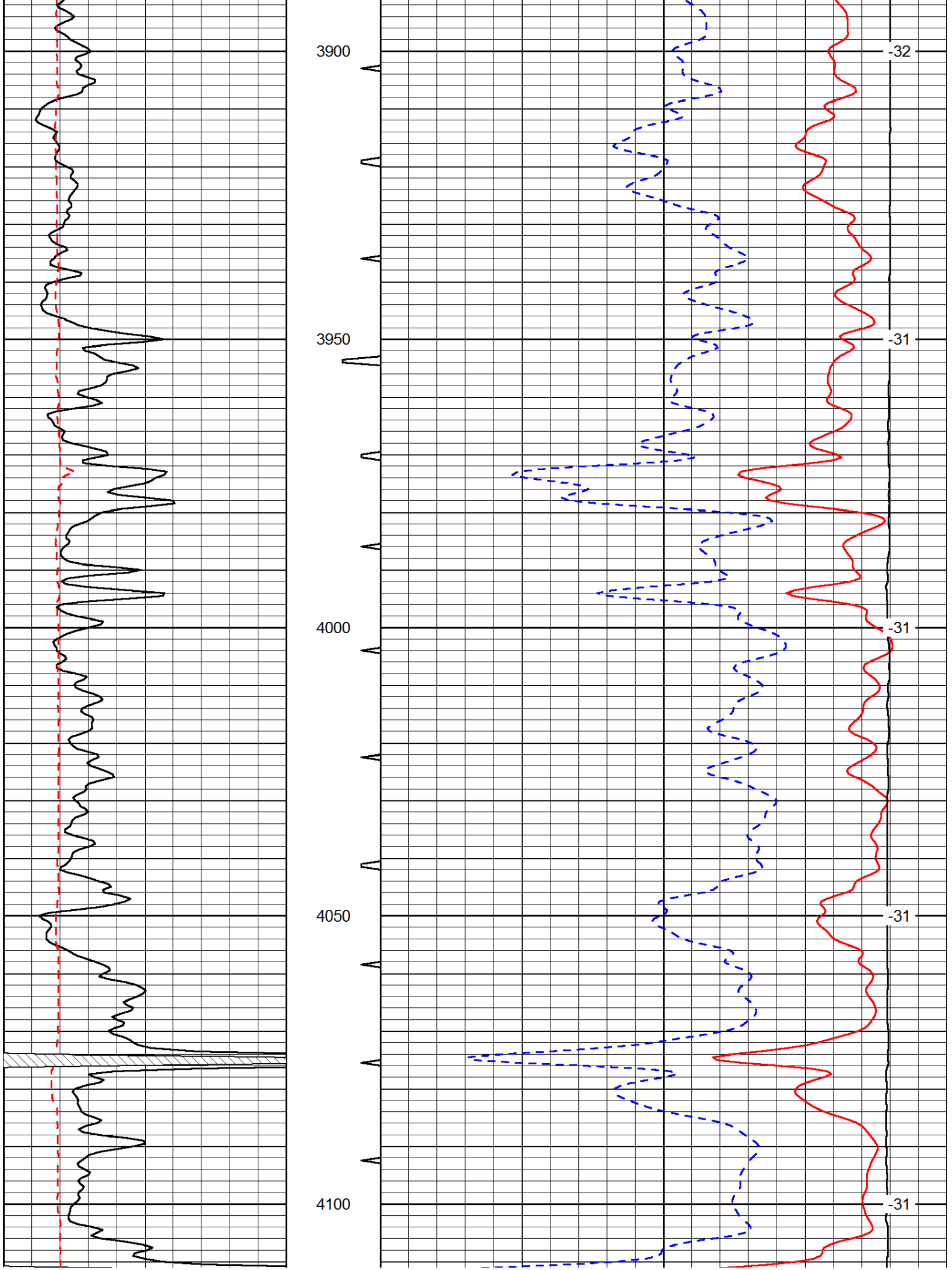
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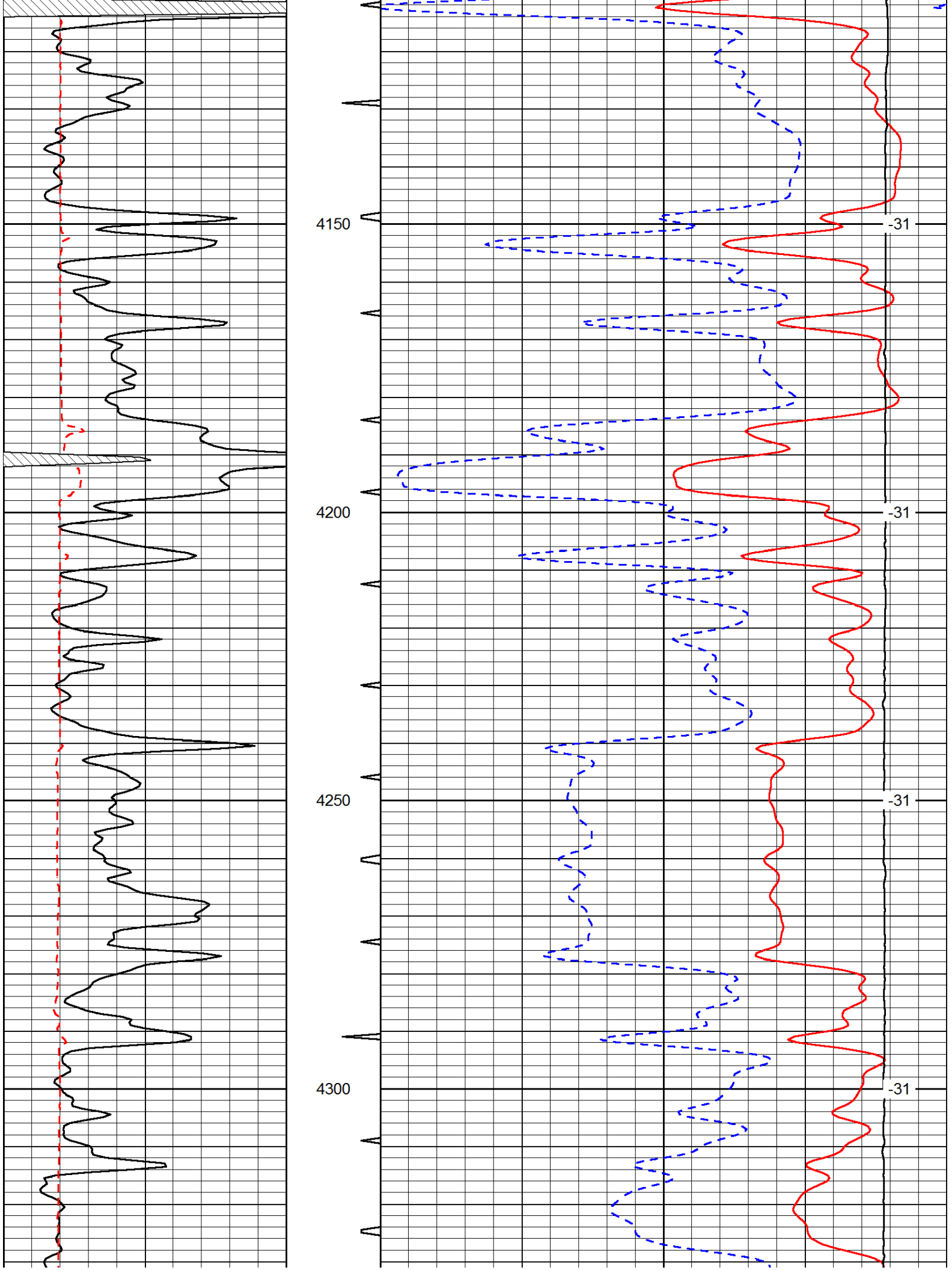
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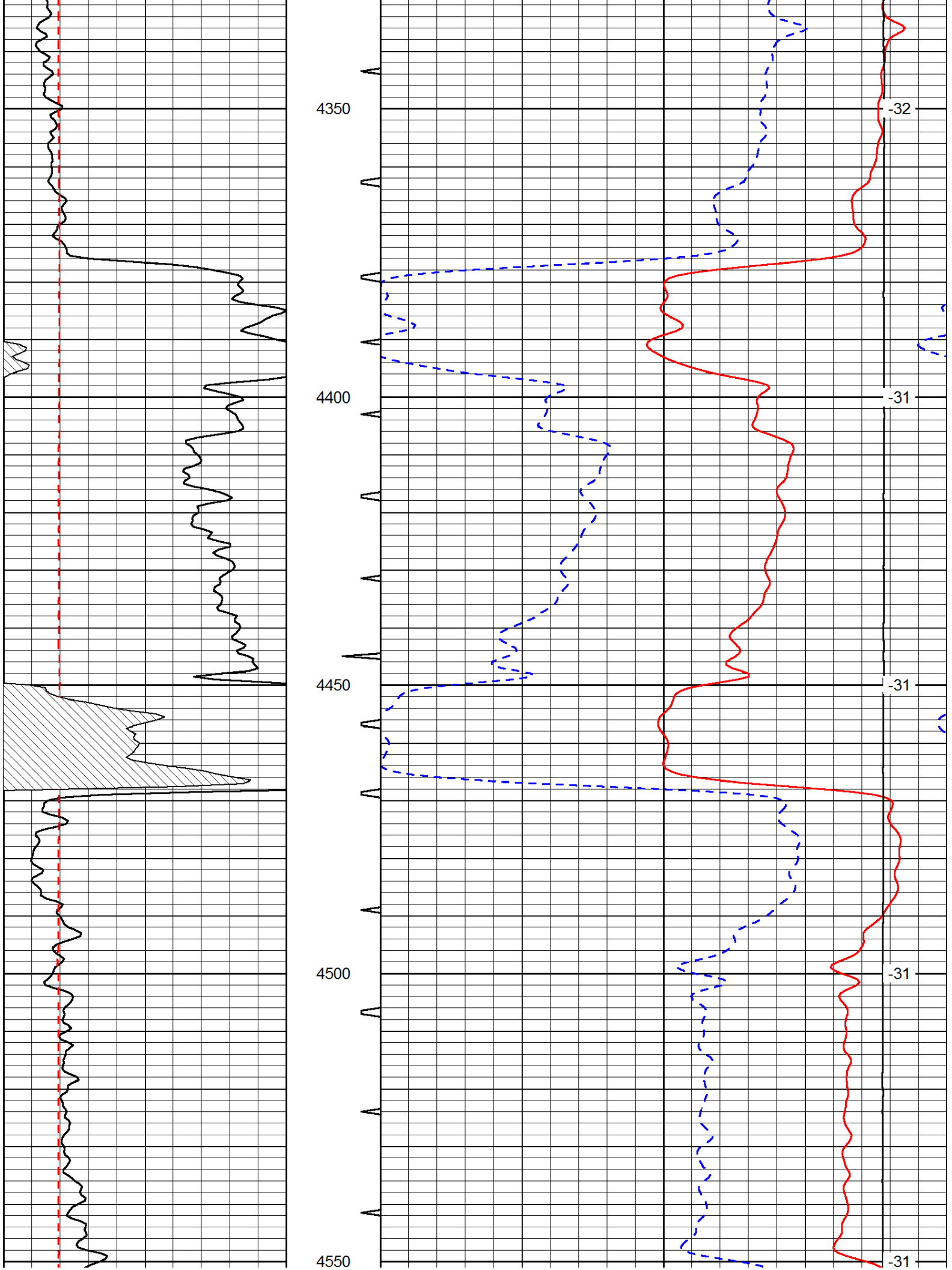
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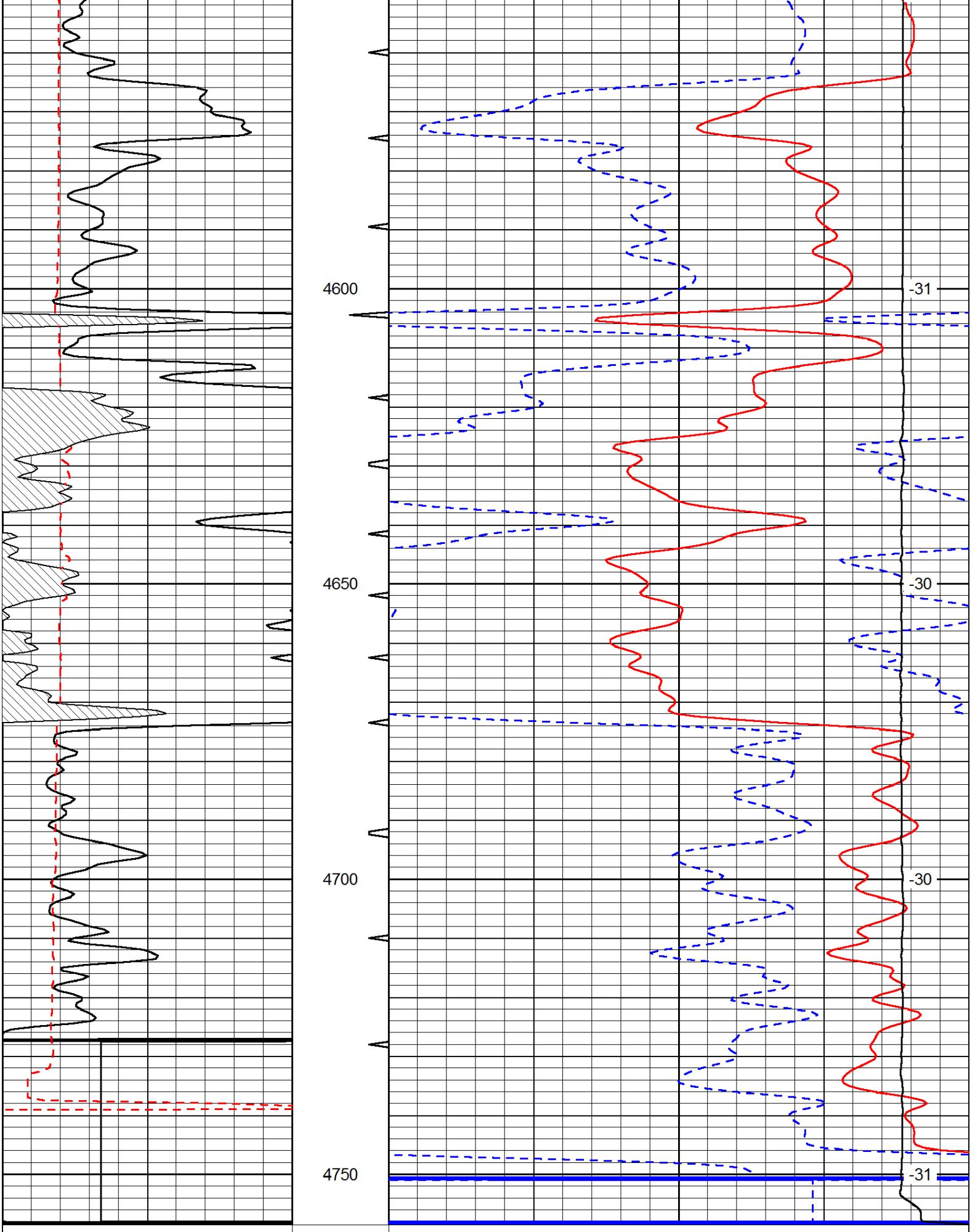


| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0 | Gamma Ray | 150 | Sonic Int | 140 | Delta Time (usec/ft) | 40 |
| 150 | Gamma Ray | 300 | 5 0 | 30 | SPOR | -10 |
| 6 | Caliper (GAPI) | 16 | | 15000 | LTEN (lb) | 0 |

LSPD