



**SUPERIOR**  
Black Lick, Pa.  
Mercer, Pa.  
Wooster, Oh.  
Cleveland, Ok.  
Trinidad, Co.

## DUAL INDUCTION LOG

Company XTO Energy Inc.  
Well New Elk 24-15  
Field Purgatoire River  
County Las Animas State Colorado

Location: API # : 05 071 09472 00

666' FSL & 2354' FEL

SEC 24 TWP 33S RGE 68W

Other Services  
CDL  
NEUTRON

Elevation

Permanent Datum Ground Level Elevation 7955'  
Log Measured From Ground Level  
Drilling Measured From Ground Level

K.B. -----  
D.F. -----  
G.L. 7955'

Date 3-21-08

Run Number One

Depth Driller 2480'

Depth Logger 2474'

Bottom Logged Interval 2472'

Top Log Interval Surface Casing

Casing Driller 8 5/8" @ 764'

Casing Logger 764'

Bit Size 7 7/8"

Type Fluid in Hole Water

Density / Viscosity ///

pH / Fluid Loss ///

Source of Sample ///

Rm @ Meas. Temp ///

Rmf @ Meas. Temp ///

Rmc @ Meas. Temp ///

Source of Rmf / Rmc ///

Rm @ BHT ///

Time Circulation Stopped 1:30 P.M.

Time Logger on Bottom 4:15 P.M.

Maximum Recorded Temperature 108 DEG F

Equipment Number T697

Location Trinidad

Recorded By J. Cappellucci

Witnessed By Mr. Don Johnson

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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

#### Well Directions:

Second Bosque Entrance, straight across railroad tracks, at Y stay left to Apache canyon, take first right past windmill, follow up the hill, through one location, at fork stay left, take first hard right up hill, first drive through location on top of hill.

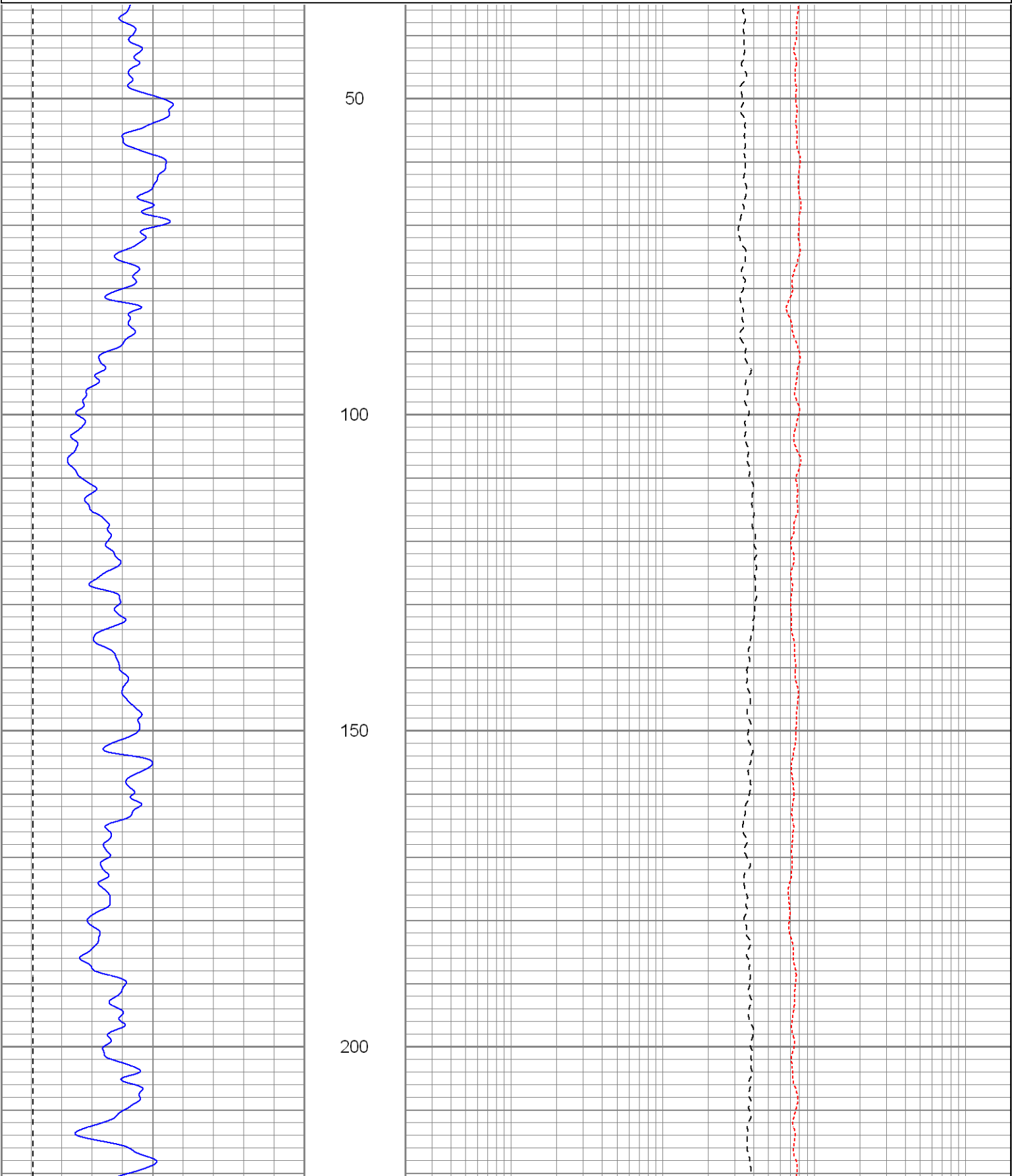


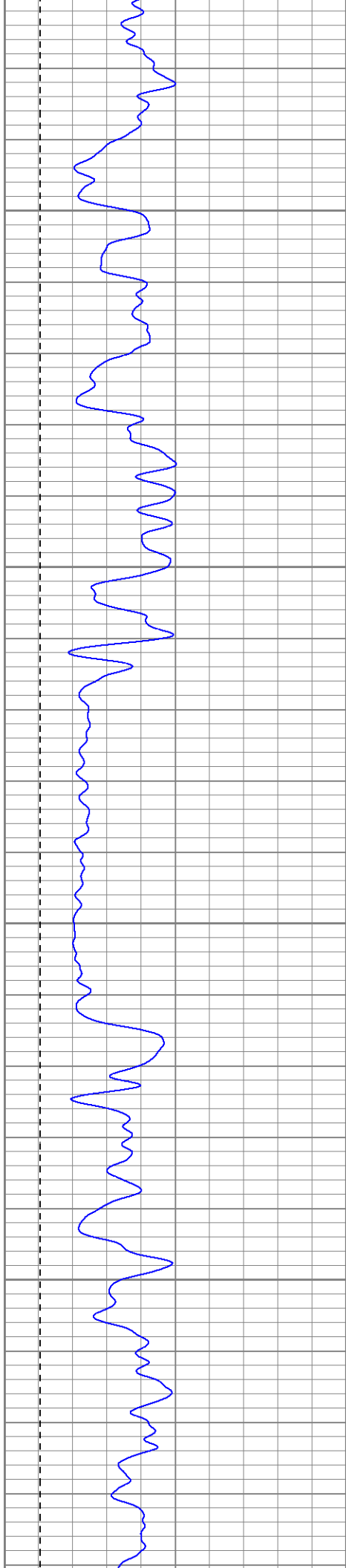
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# Main Pass

|      |           |     |     |              |      |
|------|-----------|-----|-----|--------------|------|
| 0    | GR (GAPI) | 200 | 0.2 | RILM (Ohm-m) | 2000 |
| -200 | SP (mV)   | 0   | 0.2 | RILD (Ohm-m) | 2000 |
|      |           |     | 0.2 | RLL3 (Ohm-m) | 2000 |



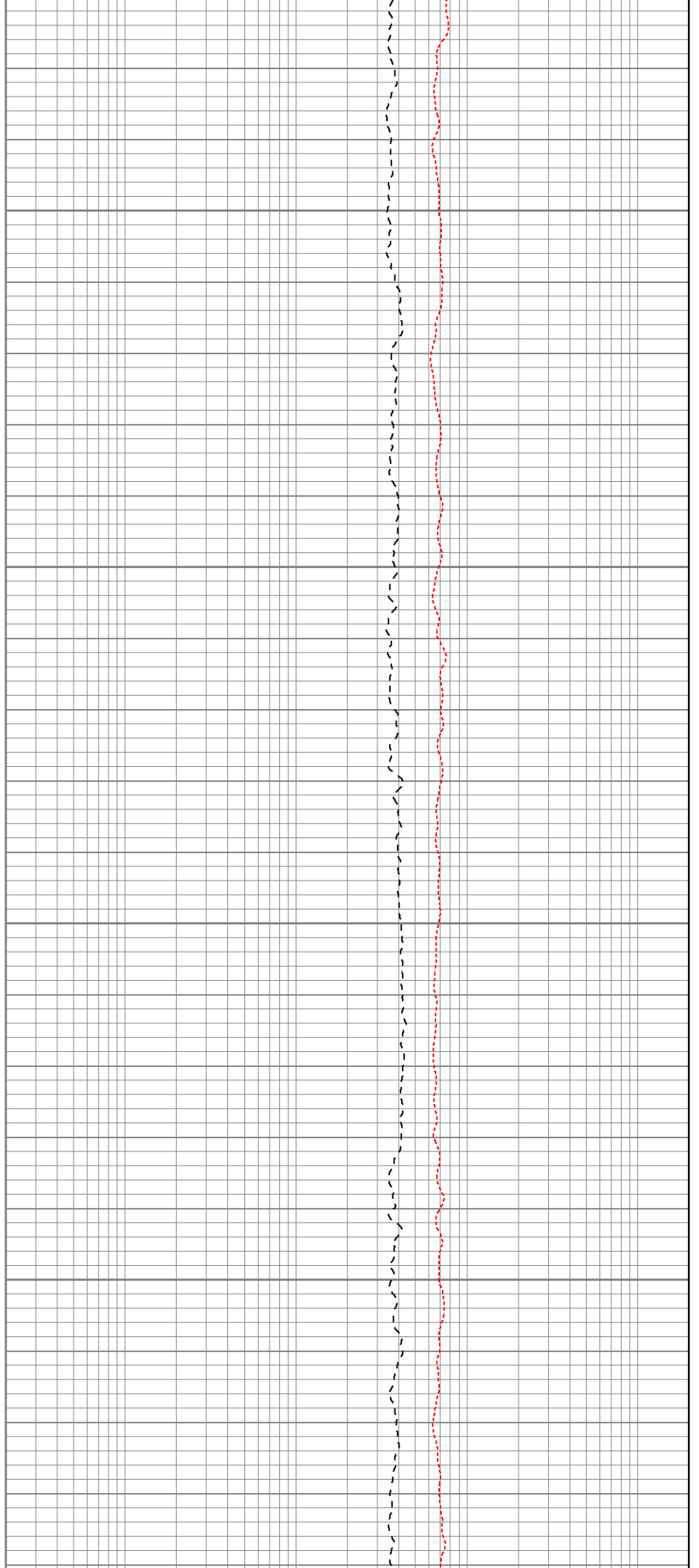


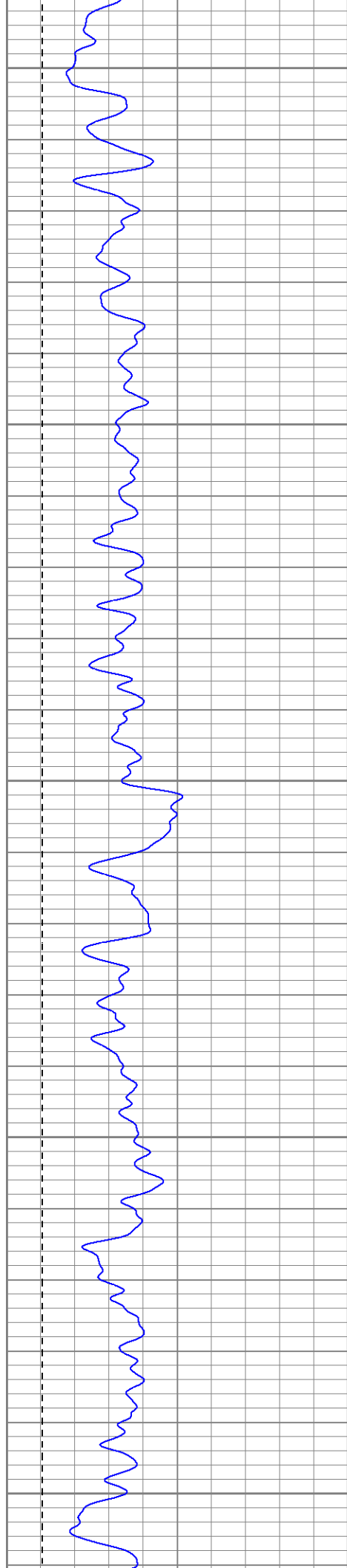
250

300

350

400





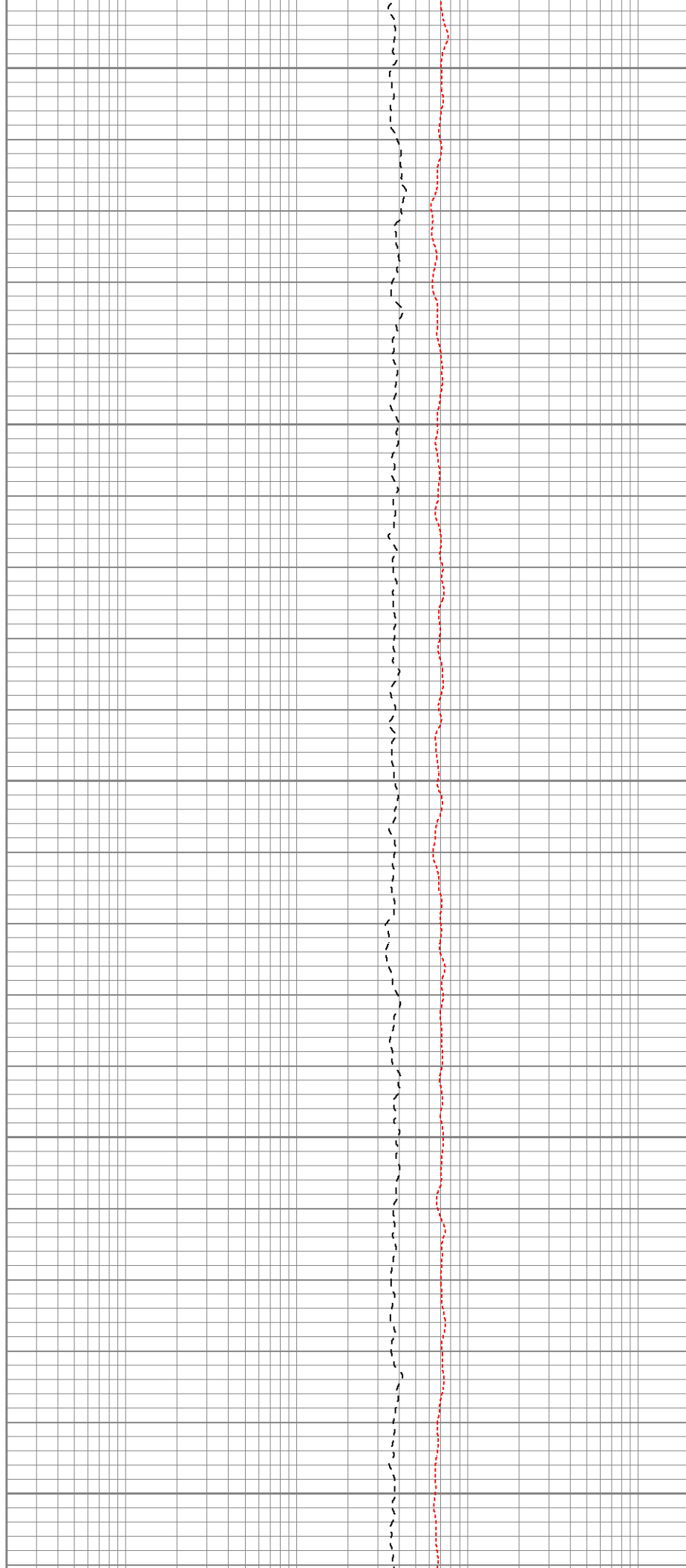
450

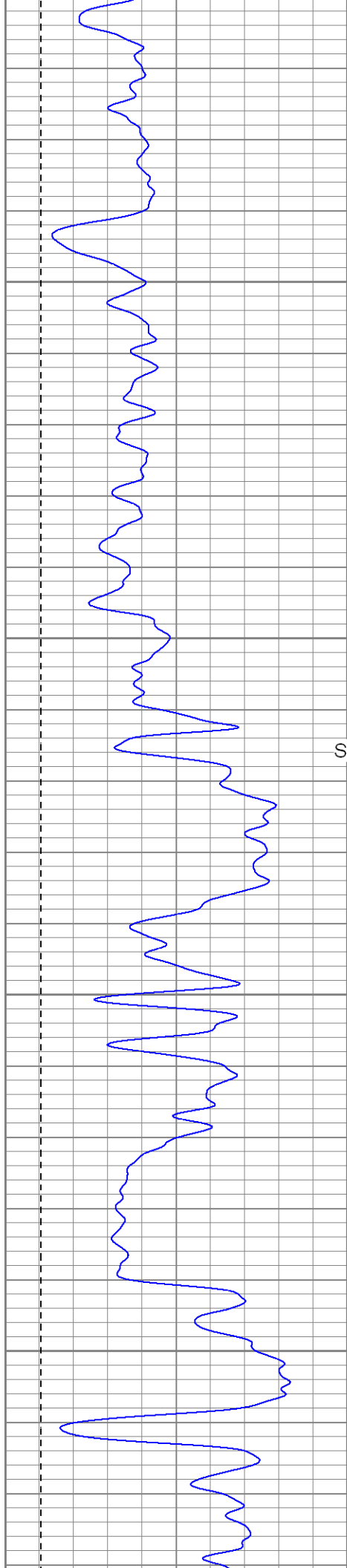
500

550

600

650





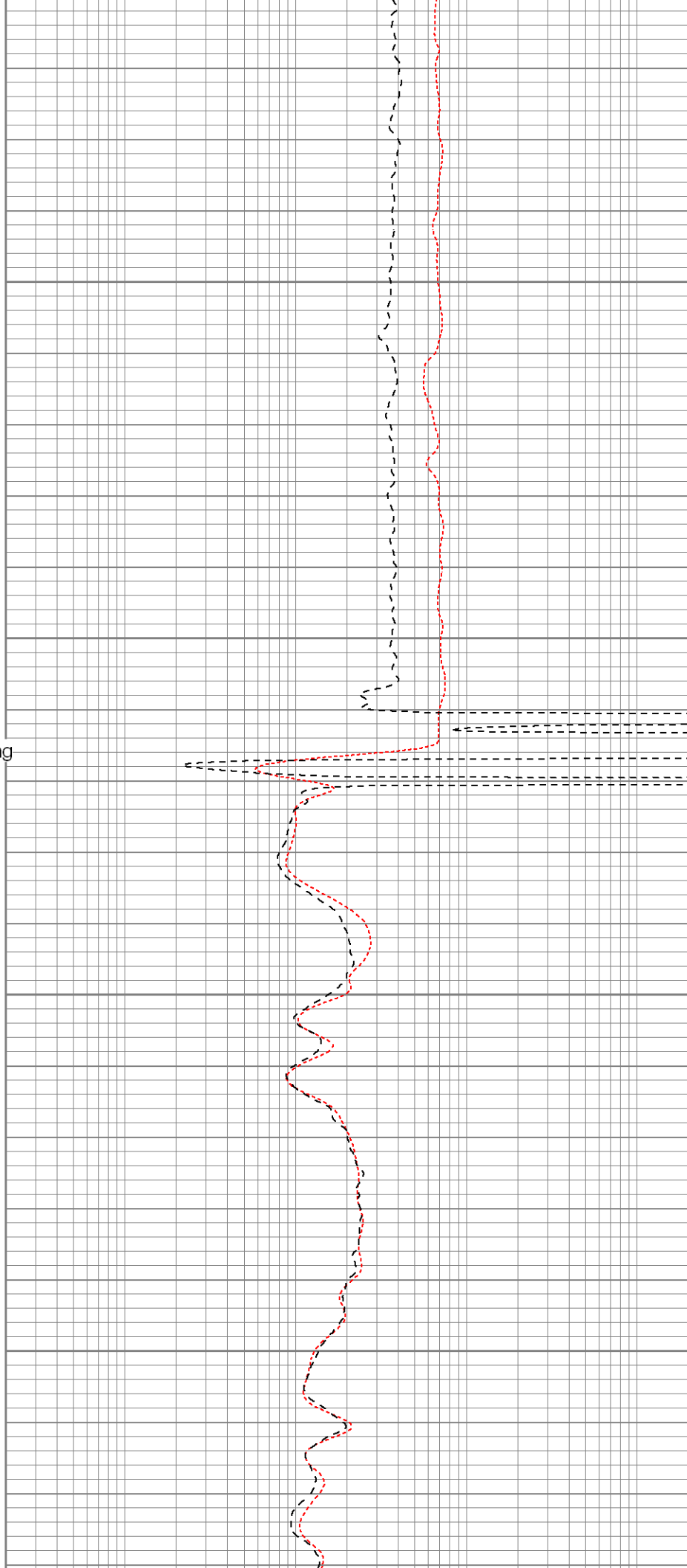
700

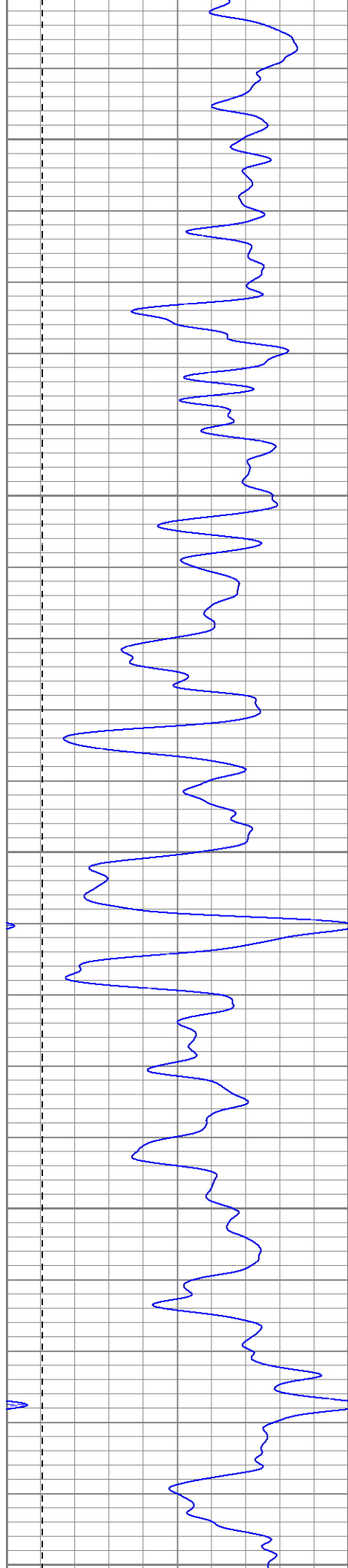
750

Surface Casing

800

850





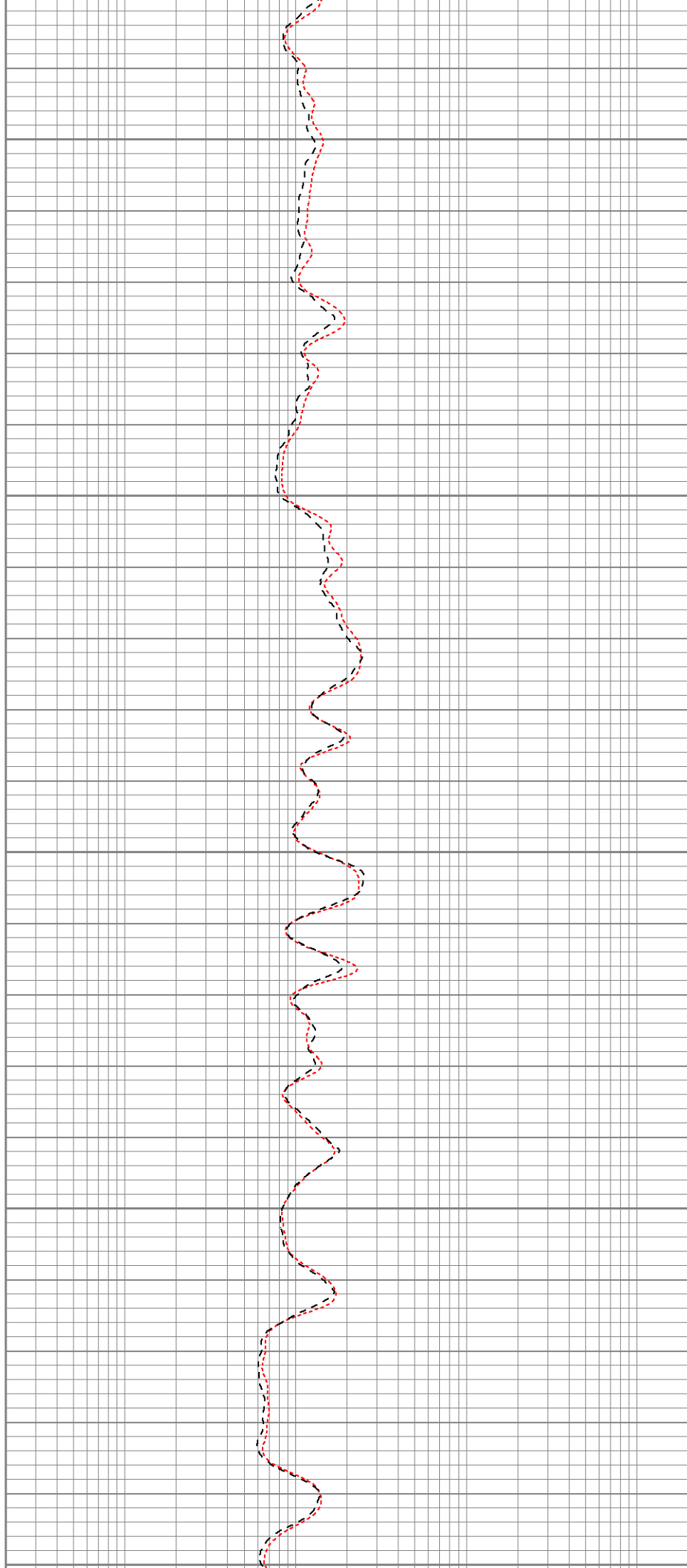
900

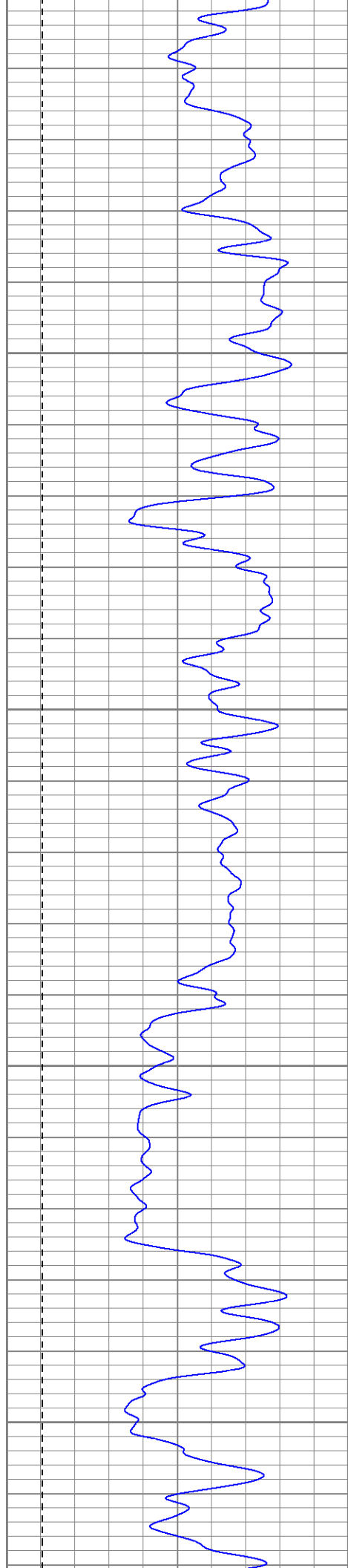
950

1000

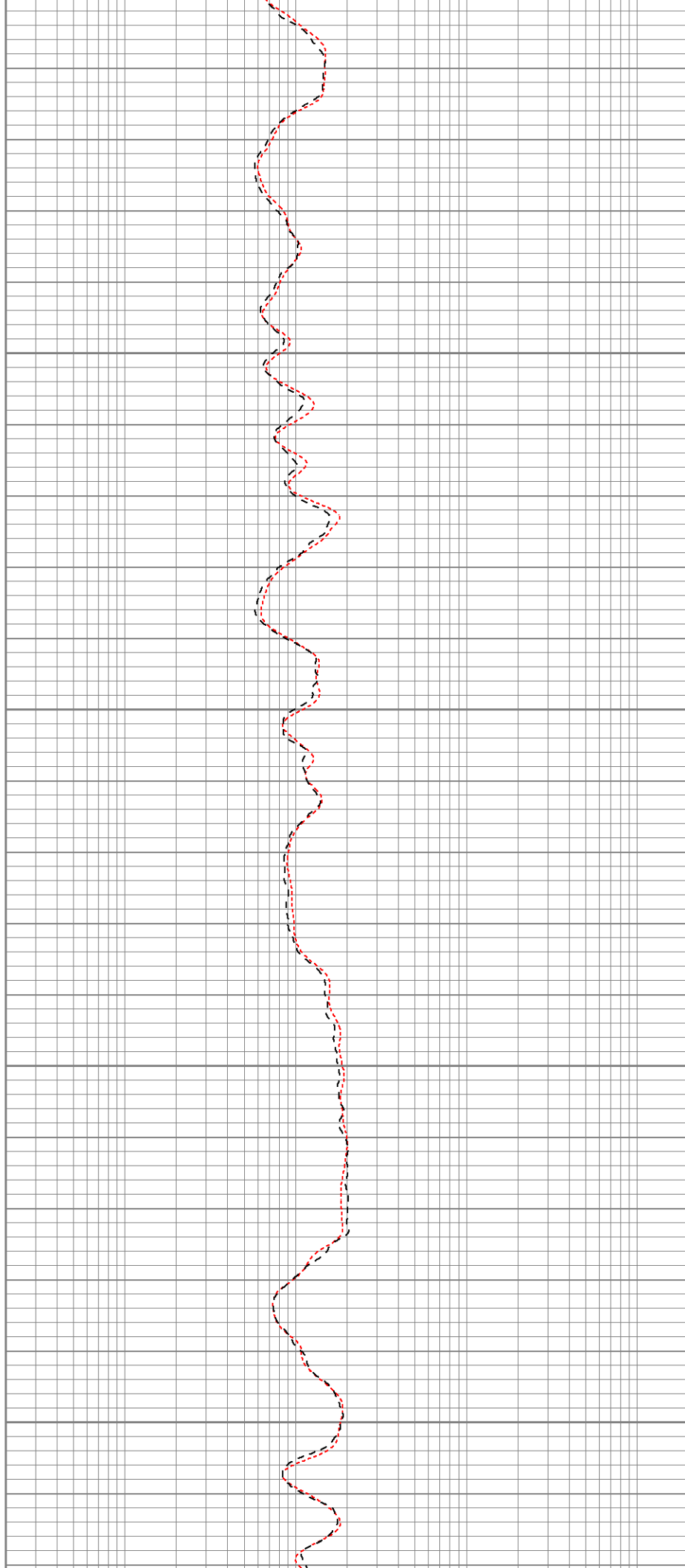
1050

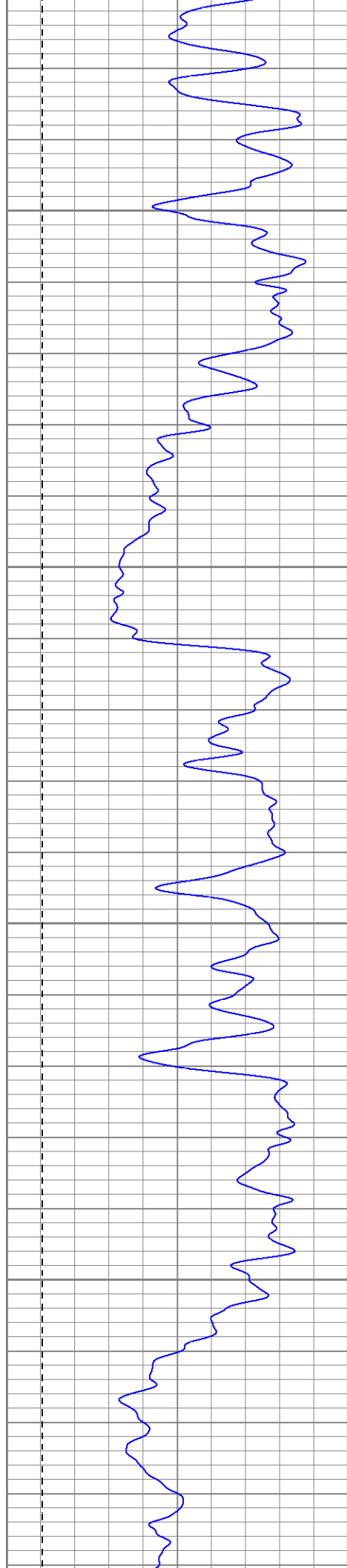
1100





1100  
1150  
1200  
1250  
1300



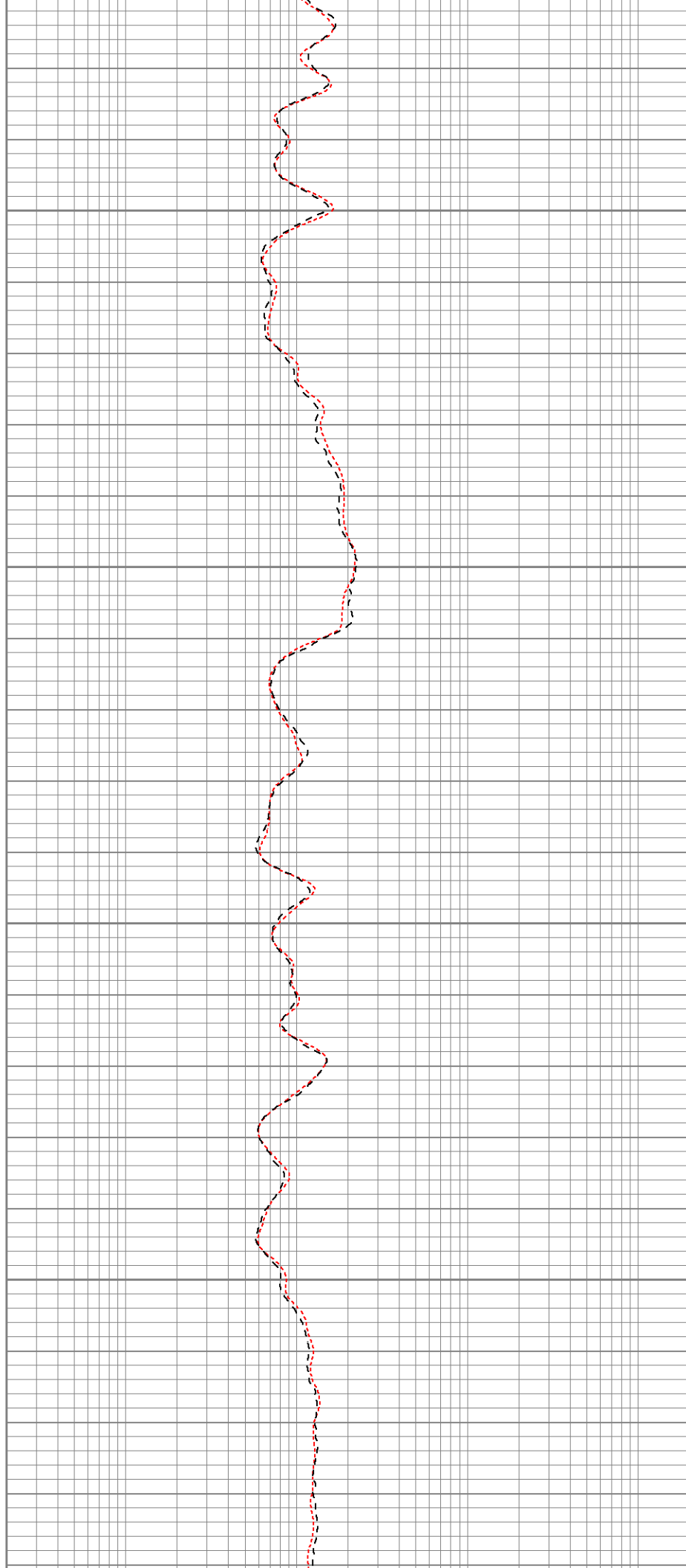


1350

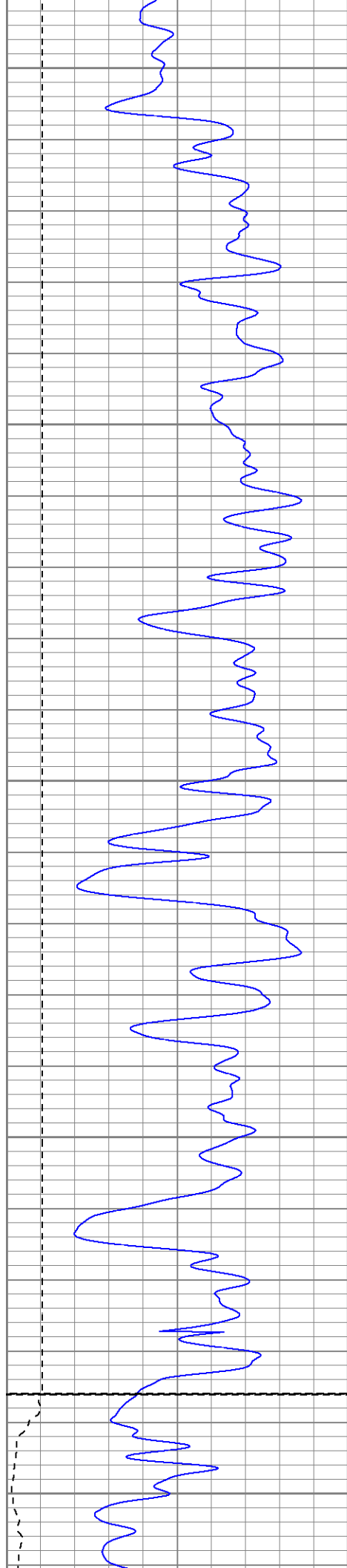
1400

1450

1500







1550

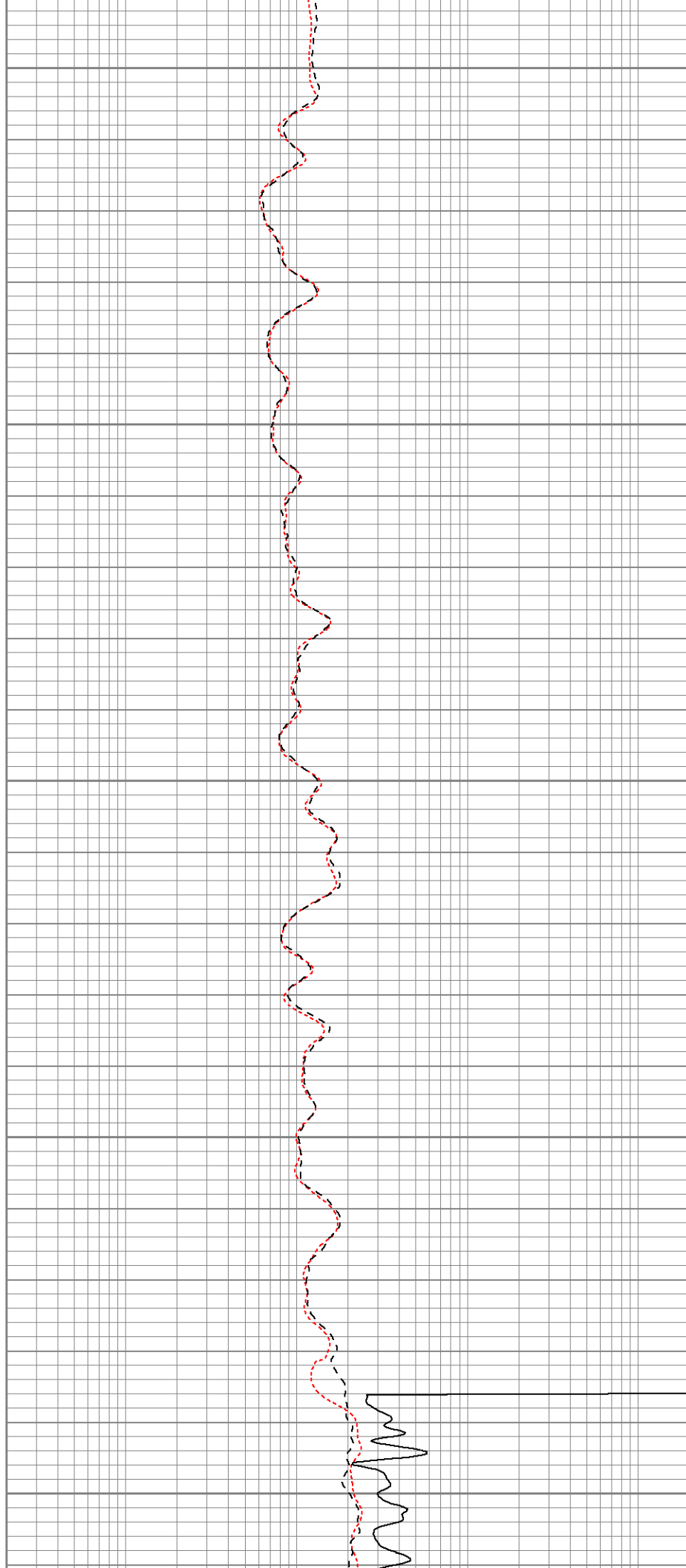
1600

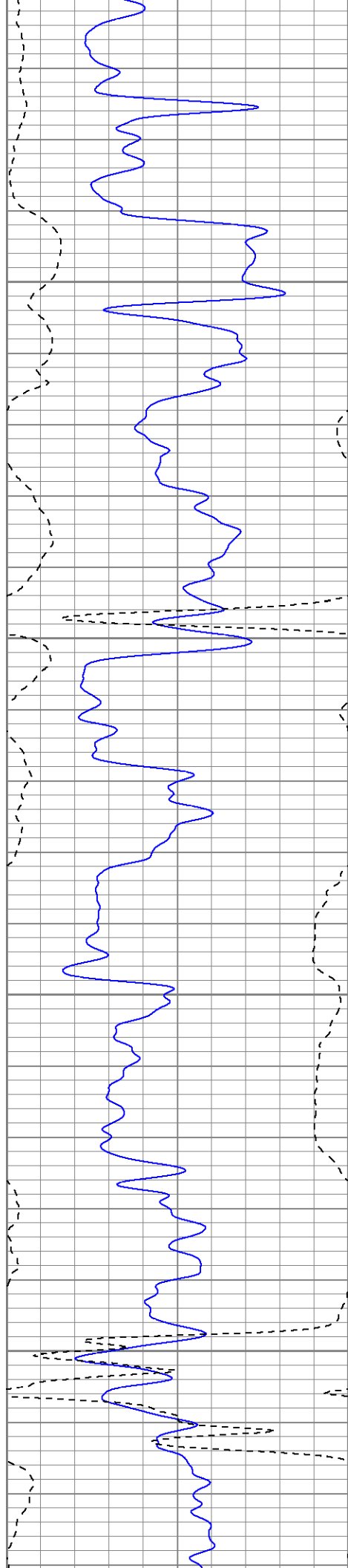
1650

1700

Fluid Level

1750



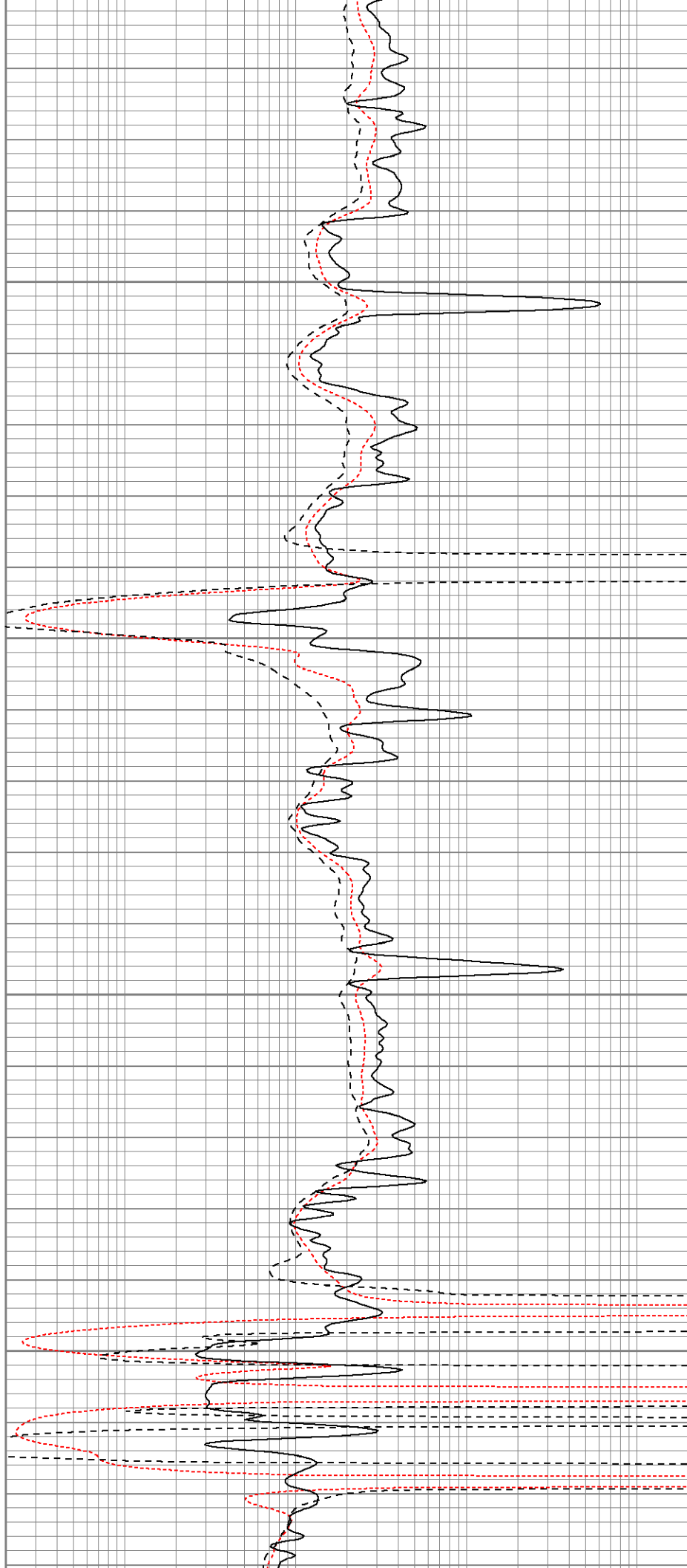


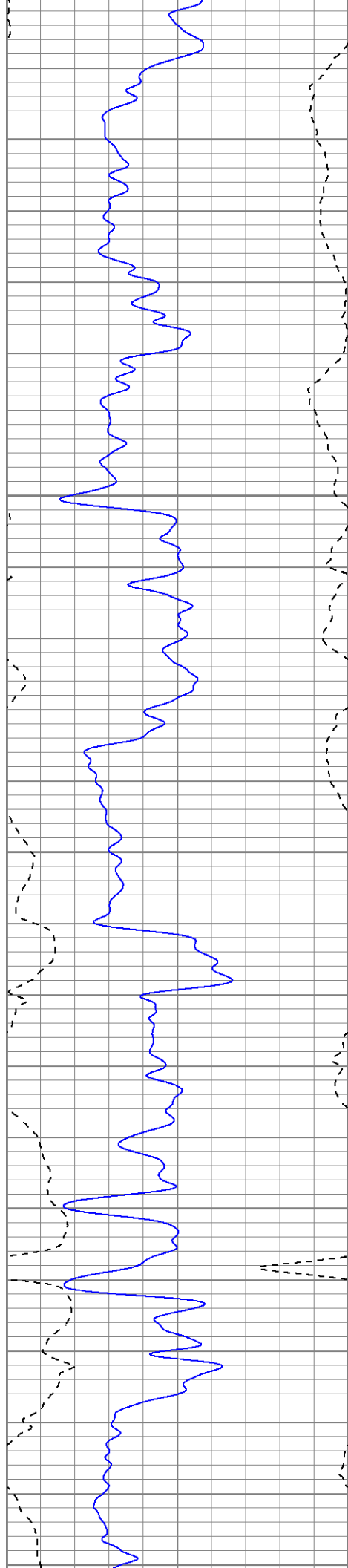
1800

1850

1900

1950





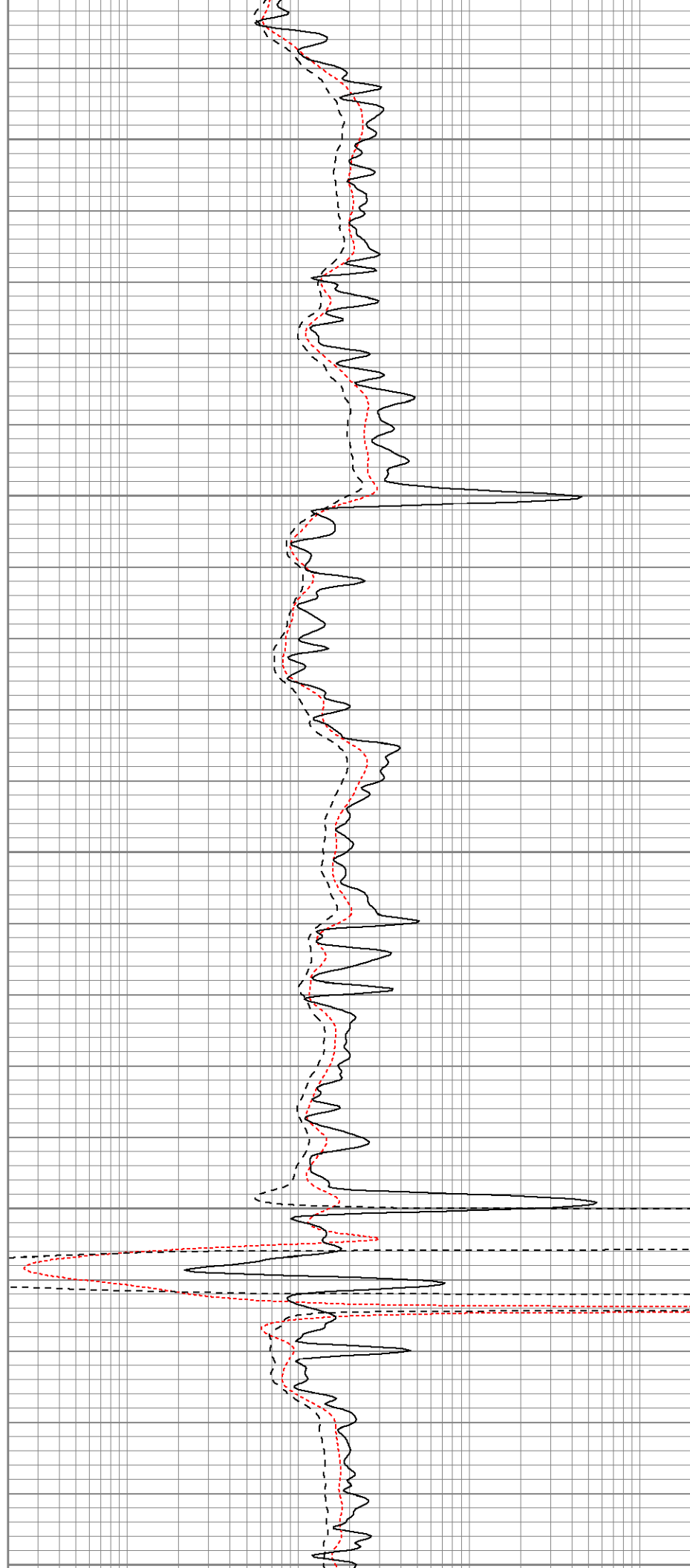
2000

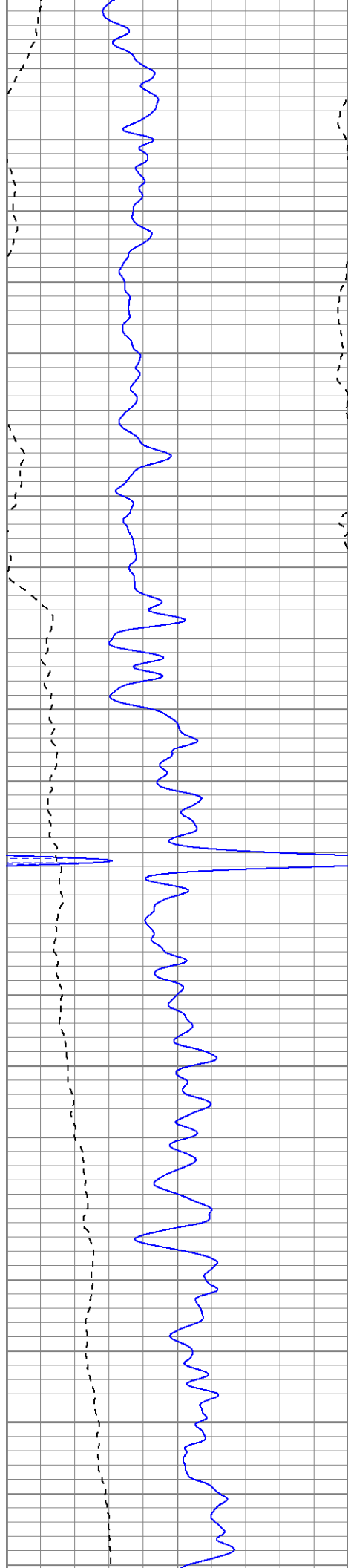
2050

2100

2150

2200





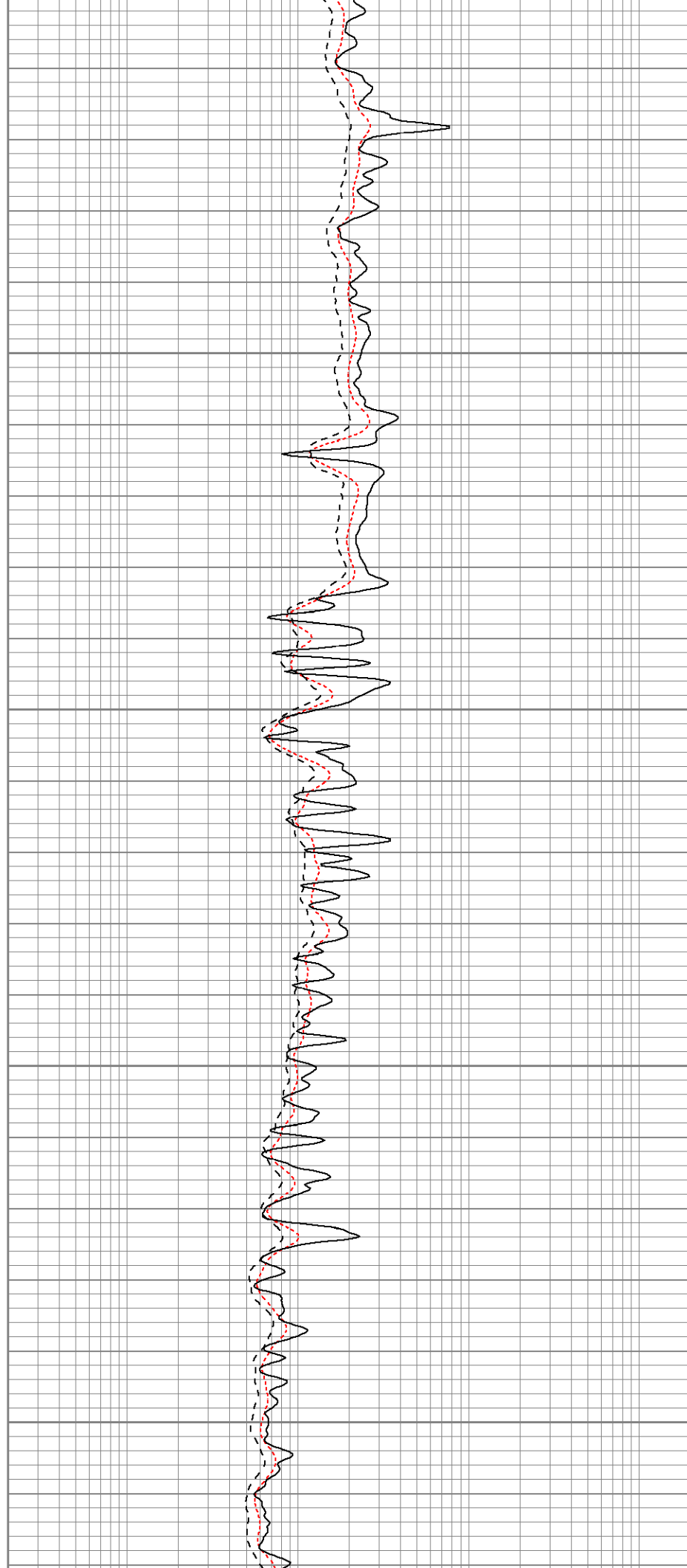
2200

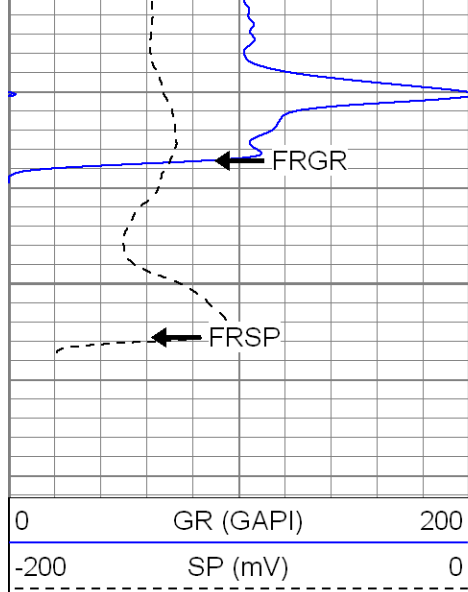
2250

2300

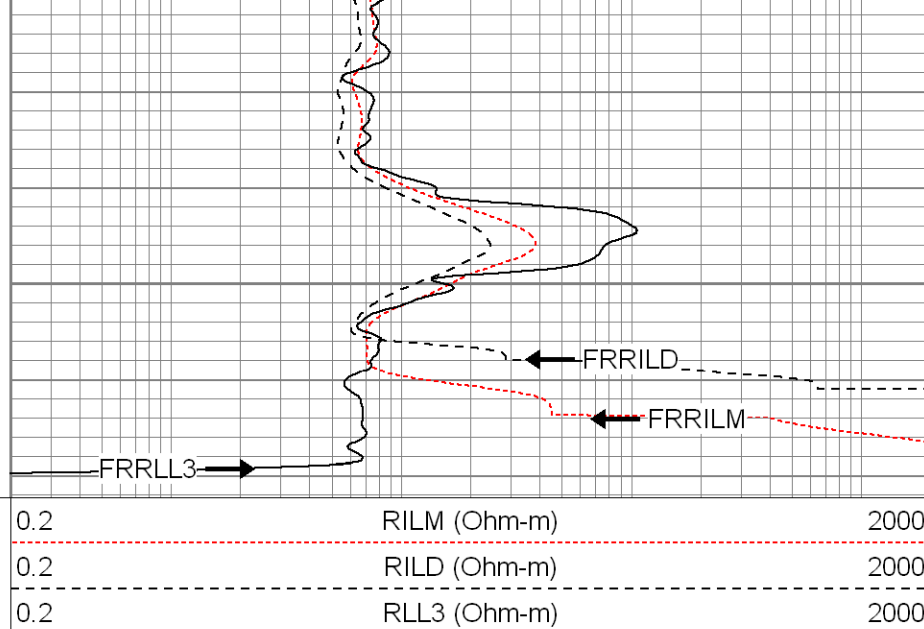
2350

2400





2450

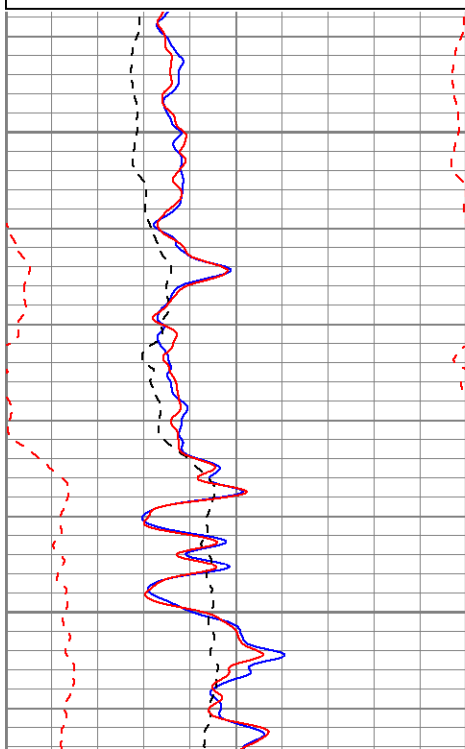
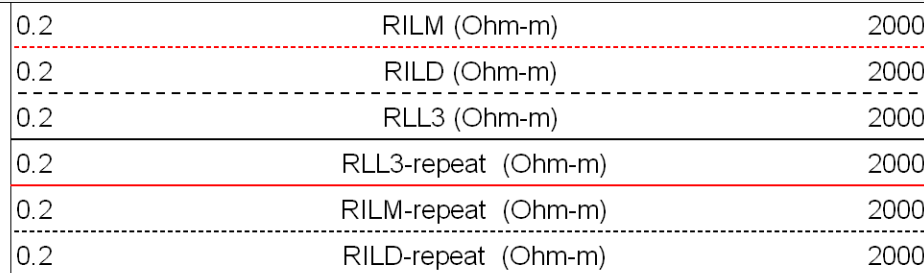
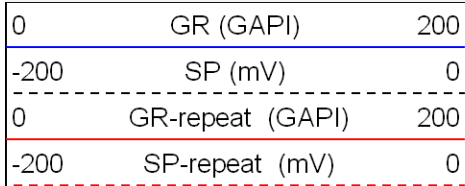


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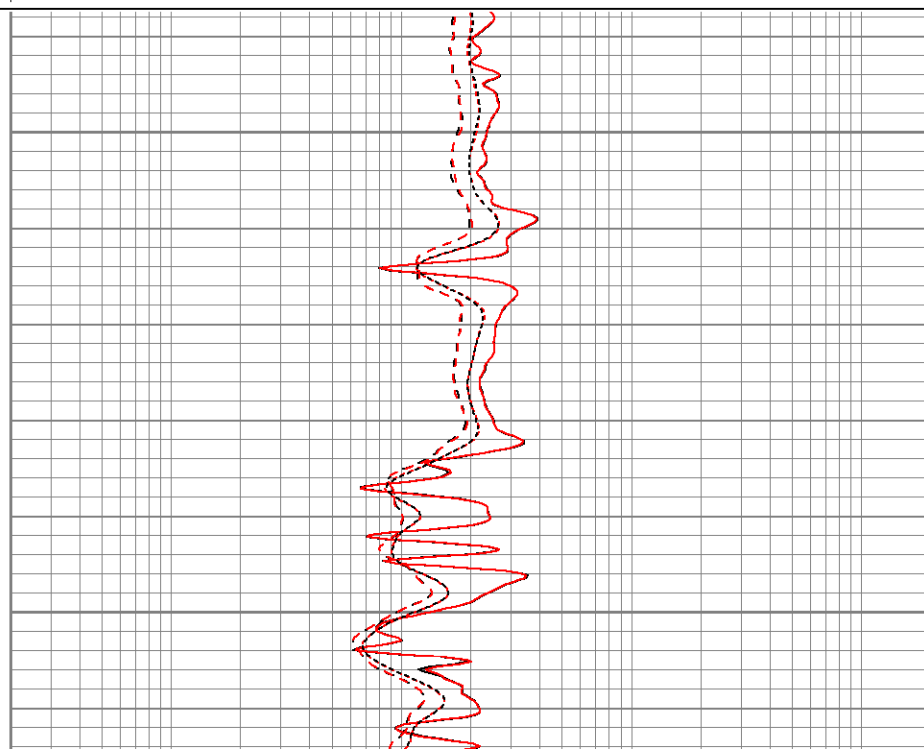
# Repeat Pass

Database File: xtone2415.db  
Dataset Pathname: pass3.2  
Presentation Format: dil  
Dataset Creation: Fri Mar 21 18:03:43 2008 by Calc Open-Cased 070814  
Charted by: Depth in Feet scaled 1:240



2250

2300

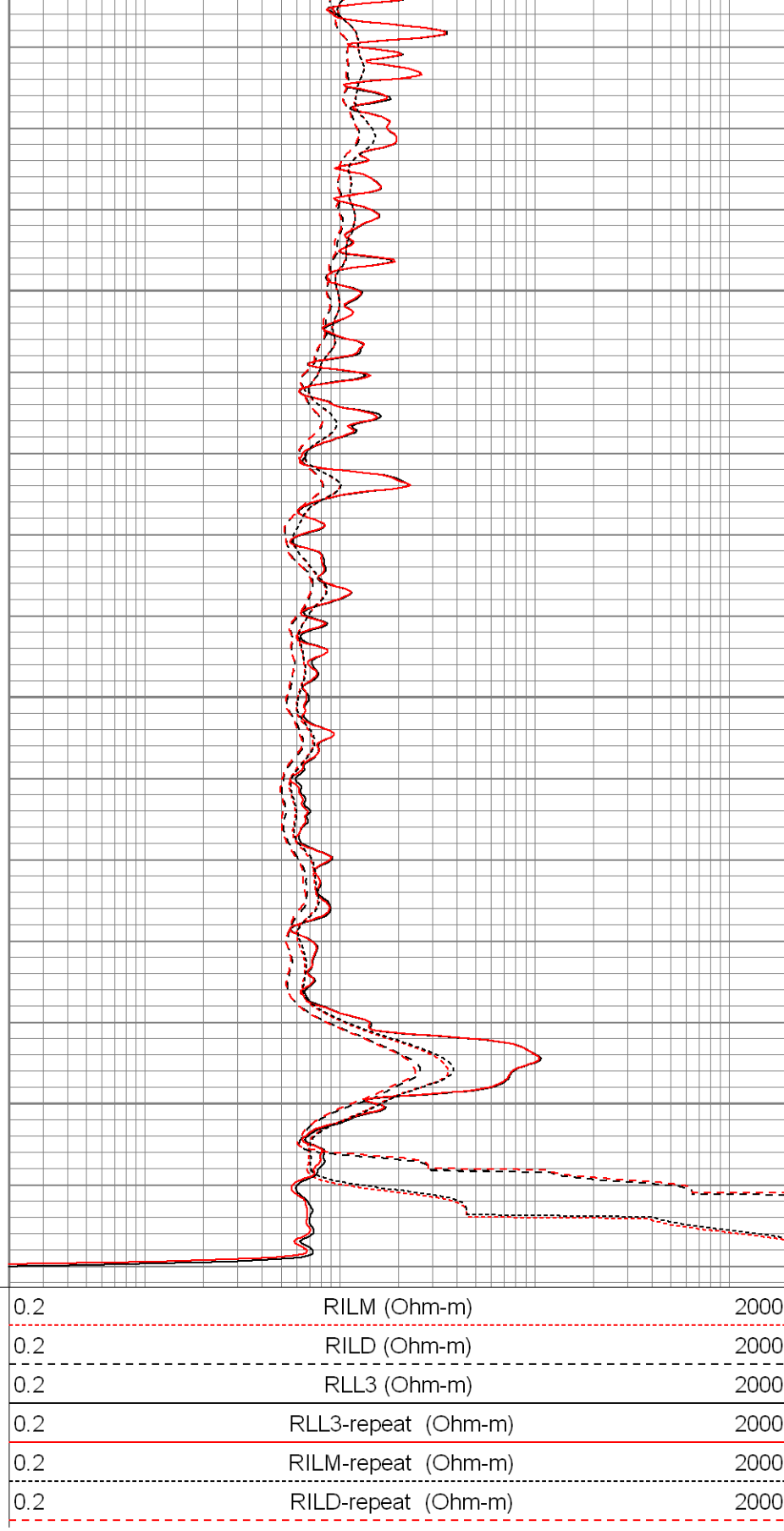




2350

2400

2450



### Calibration Report

Database File: xtone2415.db  
 Dataset Pathname: pass1  
 Dataset Creation: Fri Mar 21 16:15:29 2008 by Log Open-Cased 070814

### Dual Induction Calibration Report

Serial Model:

5375 G

Serial-Model:  
Surface Cal Performed:  
Downhole Cal Performed:









5375-G  
Wed Mar 05 01:17:28 2008  
Wed Mar 05 01:18:19 2008

### Surface Calibration

| Readings  |       |       |   | References |         |        | Results |        |
|-----------|-------|-------|---|------------|---------|--------|---------|--------|
| Loop:     | Air   | Loop  |   | Air        | Loop    |        | m       | b      |
| Deep      | 0.000 | 0.619 | V | 0.000      | 500.000 | mmho-m | 808.416 | -0.143 |
| Medium    | 0.003 | 0.740 | V | 0.000      | 550.000 | mmho-m | 746.121 | -2.291 |
| Internal: | Zero  | Cal   |   | Zero       | Cal     |        | m       | b      |
| Deep      | 0.000 | 0.618 | V | 0.000      | 500.000 | mmho-m | 809.686 | -0.193 |
| Medium    | 0.003 | 0.740 | V | 0.000      | 550.000 | mmho-m | 746.925 | -2.612 |

### Downhole Calibration

| Readings  |       |         |        | References |         |        | Results |        |
|-----------|-------|---------|--------|------------|---------|--------|---------|--------|
| Internal: | Zero  | Cal     |        | Zero       | Cal     |        | m       | b      |
| Deep      | 0.133 | 499.798 | mmho-m | 0.049      | 499.265 | mmho-m | 0.999   | -0.084 |
| Medium    | 0.460 | 549.973 | mmho-m | 0.319      | 549.727 | mmho-m | 1.000   | -0.141 |
| Shallow   | 2.510 | 0.008   | V      | 500.000    | 2.000   | Ohm-m  | 189.000 | -2.700 |

| Sensor     | Offset (ft)    | Schematic   |   | Description                         | Len (ft) | OD (in) | Wt (lb) |
|------------|----------------|---|---|-------------------------------------|----------|---------|---------|
| NEU        | 40.47          |   |    | None                                | 0.75     | 1.50    | 5.00    |
|            |                |   |   | NEU-G (5145)<br>Gearhart Epithermal | 5.65     | 3.50    | 85.00   |
| GR         | 34.63          |  |  | GR-OH (2001)<br>2001                | 3.56     | 3.25    | 40.00   |
|            |                |   |   | CDL-poilex (2118)                   | 8.83     | 4.00    | 275.00  |
| LSD        | 26.46          |  |  |                                     |          |         |         |
| DCAL       | 26.05          |   |   |                                     |          |         |         |
| SSD        | 25.88          |   |   |                                     |          |         |         |
| CILD<br>SP | 16.29<br>16.29 |  |  |                                     |          |         |         |
| CILM       | 12.54          |   |   | DIL-P (20017)<br>Pengo              | 24.63    | 4.00    | 300.00  |

