



## DUAL INDUCTION LOG

Company Taos Resources Operating Company LLC

Well Webber # 34-2

Field Maddix North

County Cowley

State Kansas

Location:

API #: 15 035 24662

361' FNL & 1692' FWL

SEC 34 TWP 32S RGE 5E

Permanent Datum Ground Level Elevation 1290'  
Log Measured From KB 5' AGL  
Drilling Measured From KB

Other Services  
CDNL  
BHC  
ML

Elevation

K.B. 1295'  
D.F. 1294'  
G.L. 1290'

Date 12-11-16

Run Number One

Depth Driller 3552'

Depth Logger 3547'

Bottom Logged Interval 3545'

Top Log Interval 300'

Casing Driller 8 5/8" @ 259'

Casing Logger 259'

Bit Size 7 7/8"

Type Fluid in Hole Chemical

Density / Viscosity 9.4/45

pH / Fluid Loss 9.5/8.8

Source of Sample Pit

Rm @ Meas. Temp 1.95@85degf

Rmf @ Meas. Temp 1.56@85degf

Rmc @ Meas. Temp 2.5@85degf

Source of Rmf / Rmc Calculated

Rm @ BHT 1.49@111degf

Time Circulation Stopped 6:30 p.m.

Time Logger on Bottom 8:30 p.m.

Maximum Recorded Temperature 106degf

Equipment Number T127

Location Hays, KS

Recorded By L. Smith

Witnessed By Mr. Mike Pressnall

Mr. Keith Fite

Mr. Ray Dorothy

>>> 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

East of Winfield to 151st rd., 1 south, 1/2 east, south into

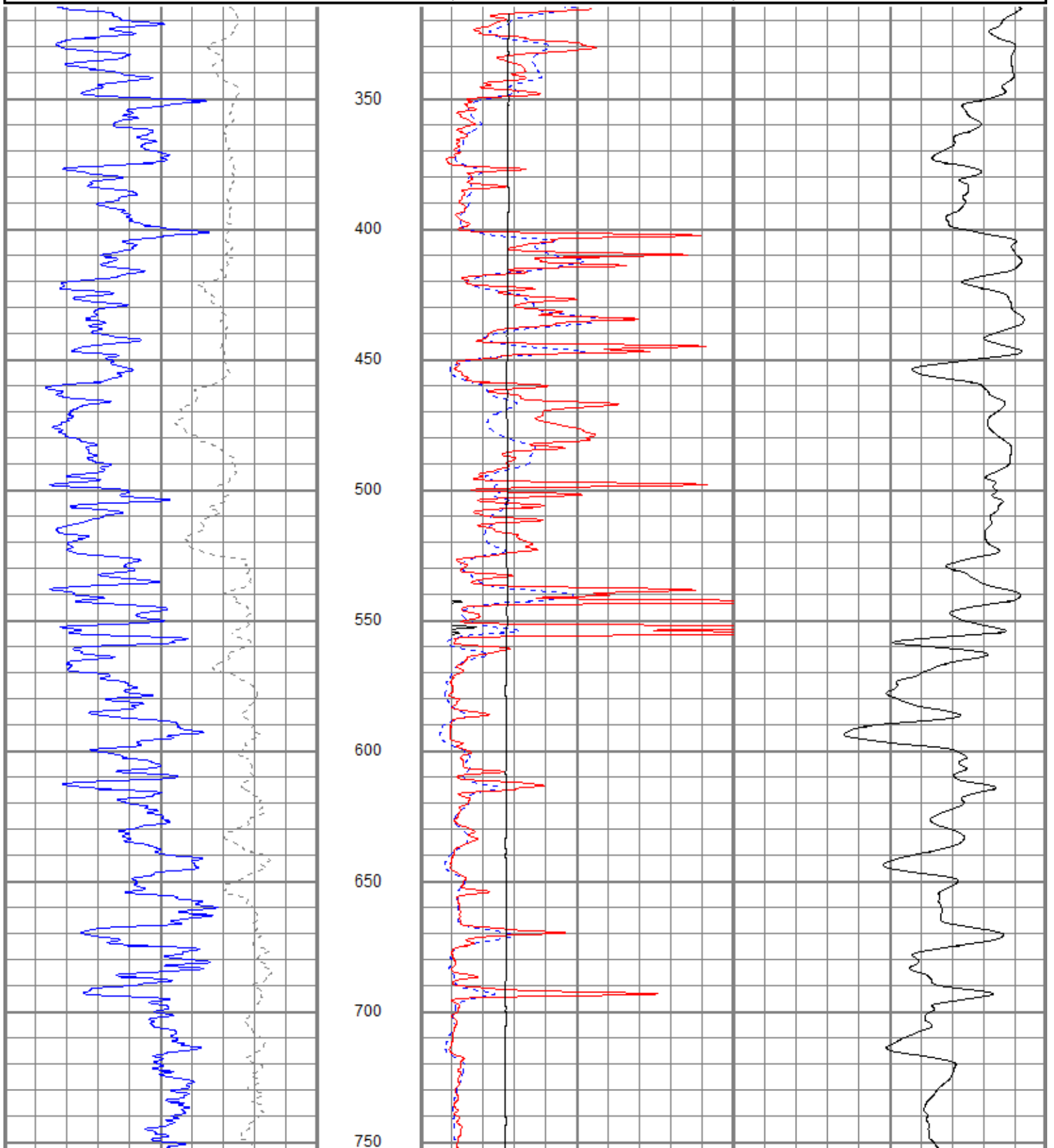


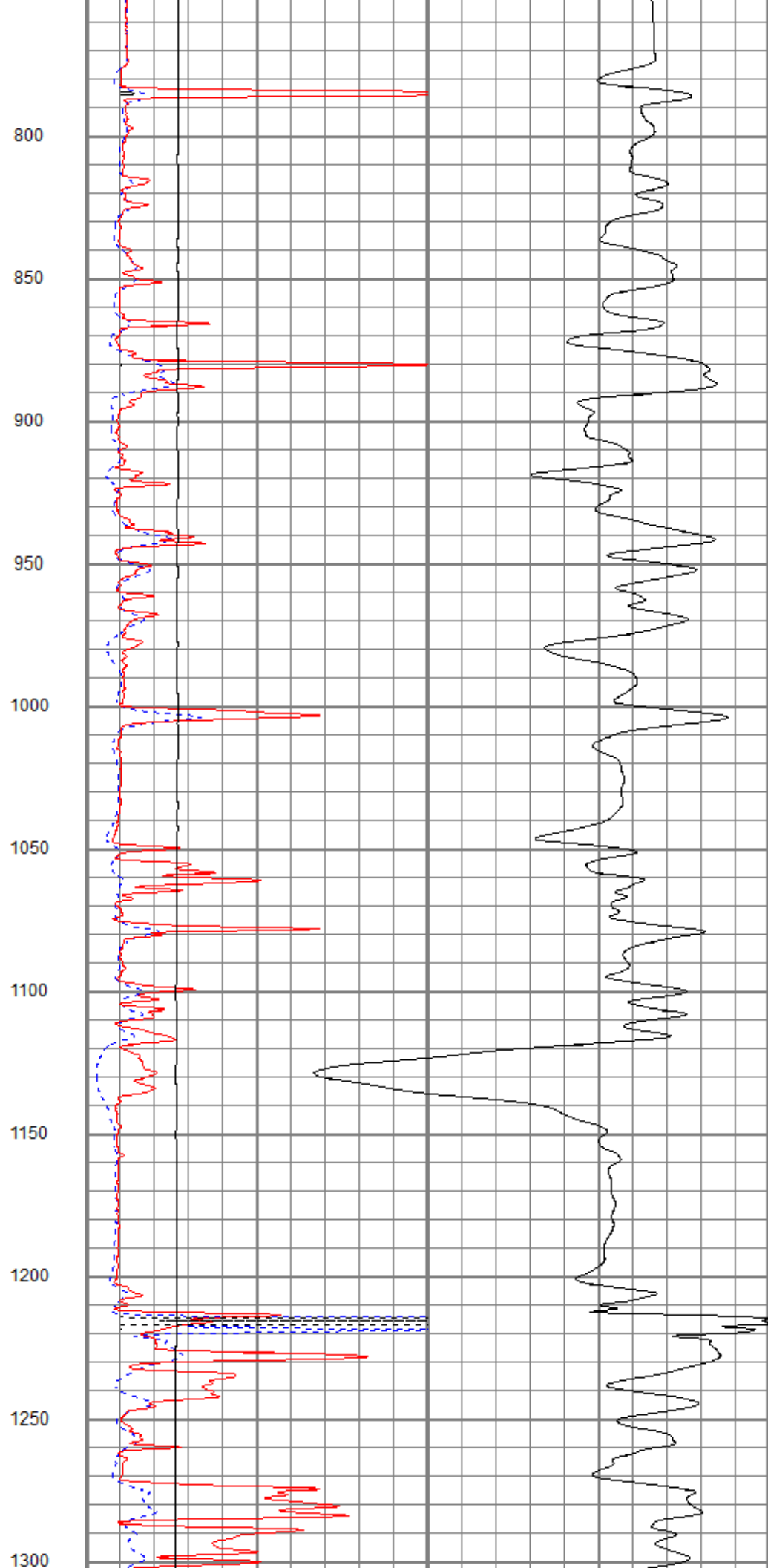
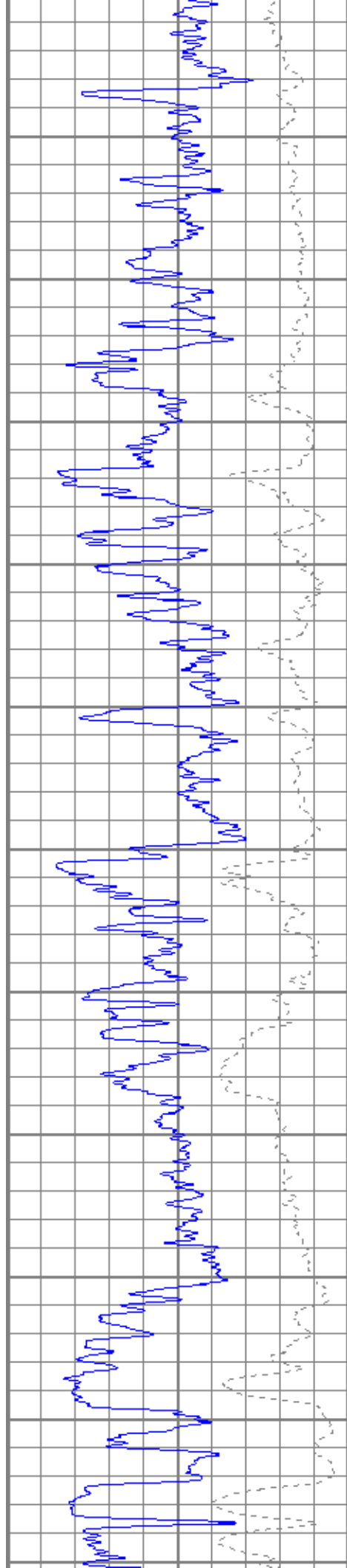
# Main Pass

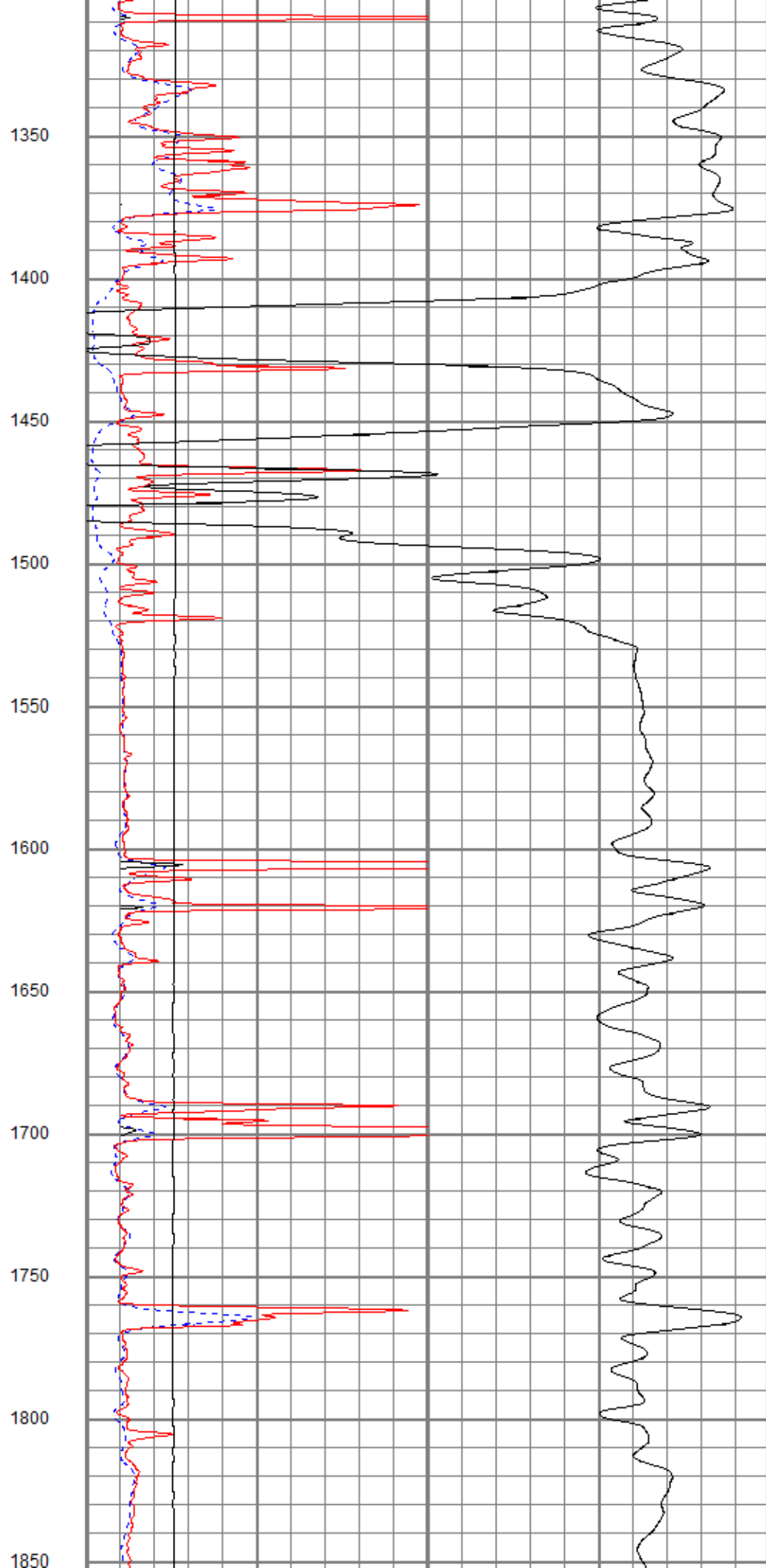
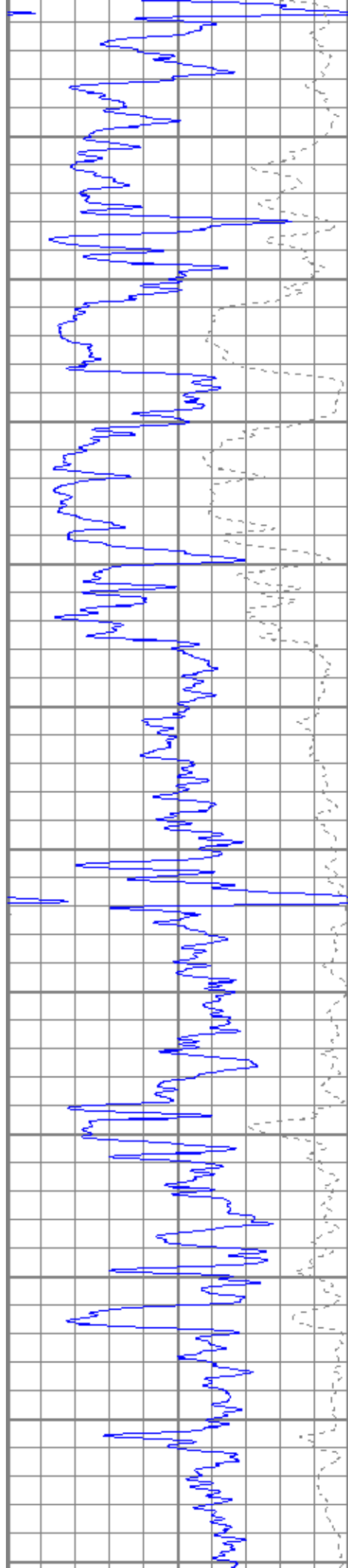
Database File taoswebber34-2oh.db  
Dataset Pathname pass2.1  
Presentation Format kdillin2  
Dataset Creation Sun Dec 11 22:36:56 2016  
Charted by Depth in Feet scaled 1:600

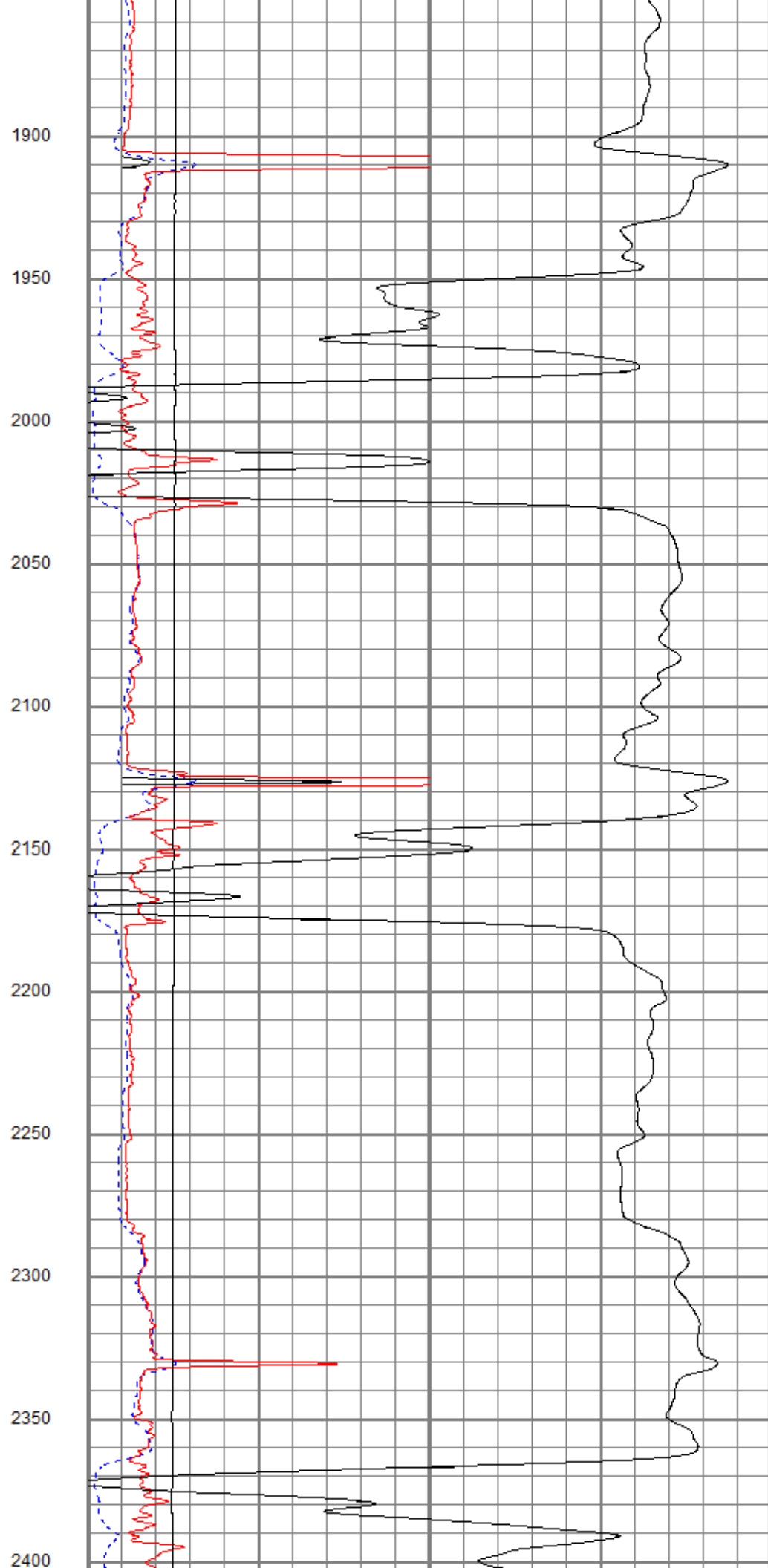
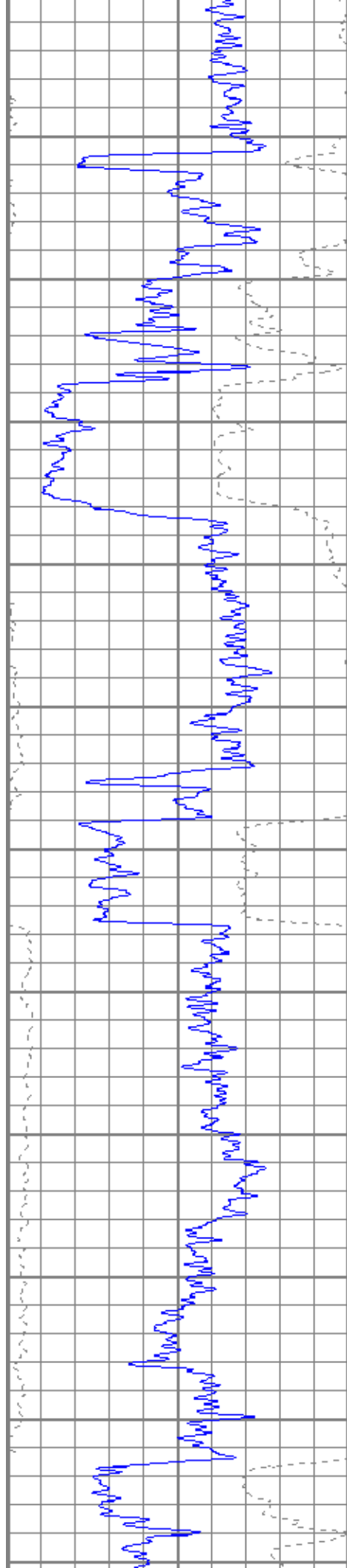
|      |           |     |
|------|-----------|-----|
| 0    | GR (GAPI) | 150 |
| -200 | SP (mV)   | 0   |

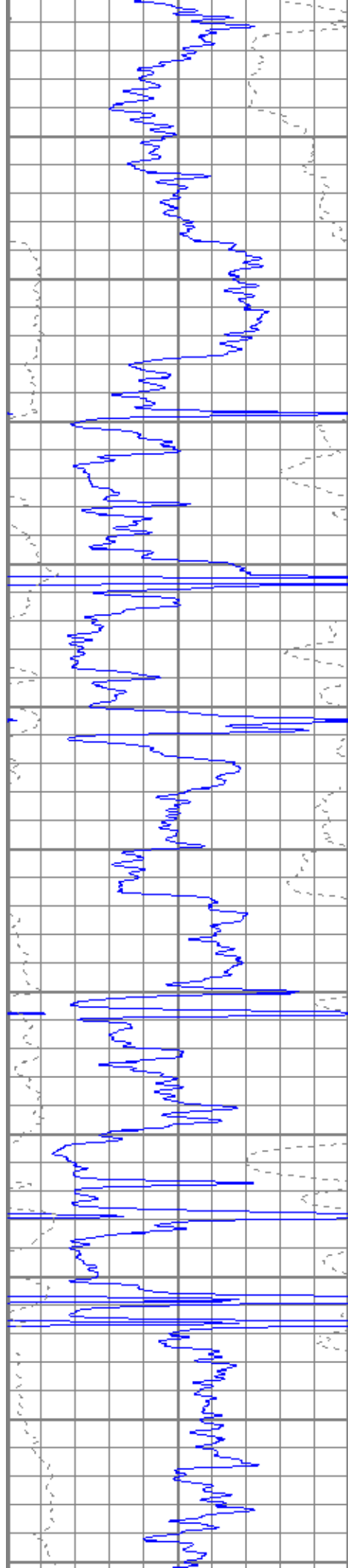
|       |                   |     |
|-------|-------------------|-----|
| 1000  | CILD (mmho/m)     | 0   |
| 10000 | LTEN (lb)         | 0   |
| 0     | RILD (Ohm-m)      | 50  |
| 0     | RLL3 (Ohm-m)      | 50  |
| 50    | RILD x 10 (Ohm-m) | 500 |
| 50    | RLL3 x 10 (Ohm-m) | 500 |











2450

2500

2550

2600

2650

2700

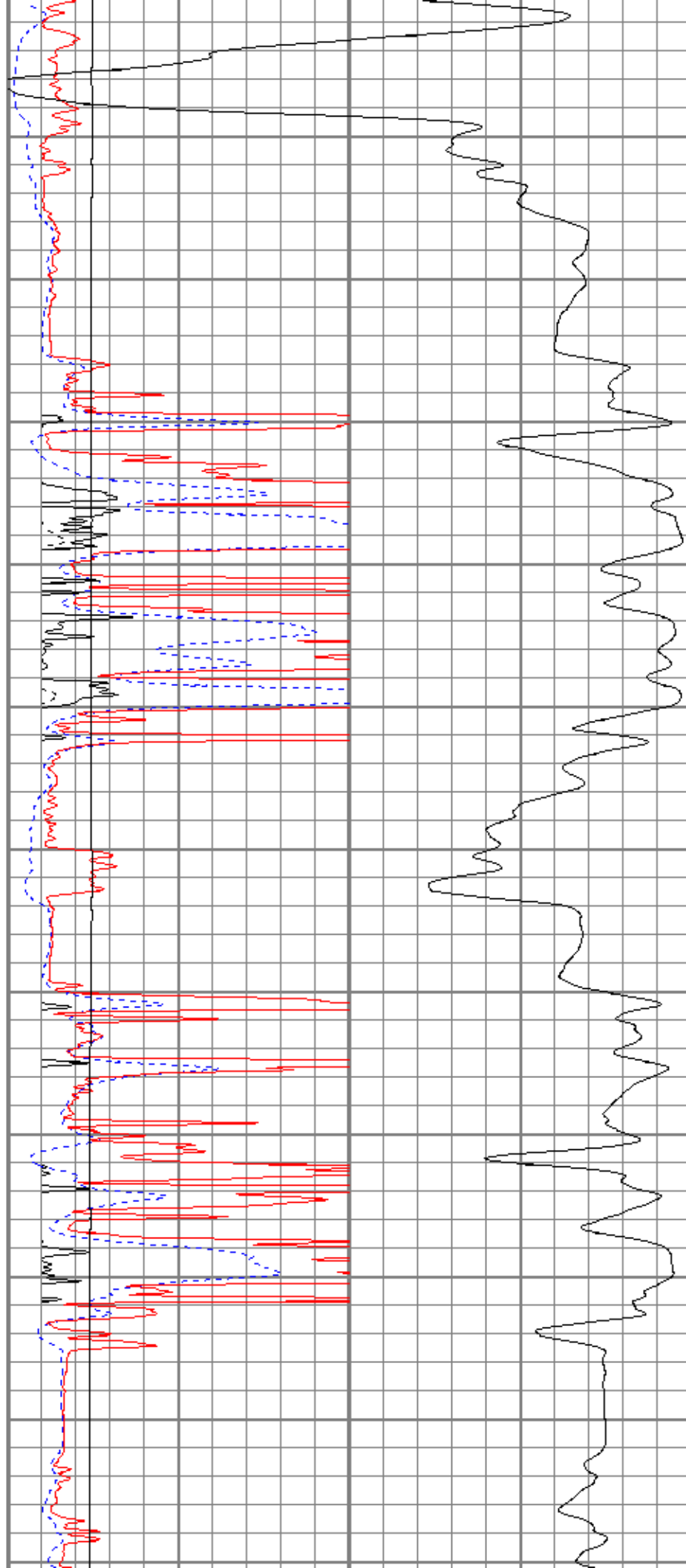
2750

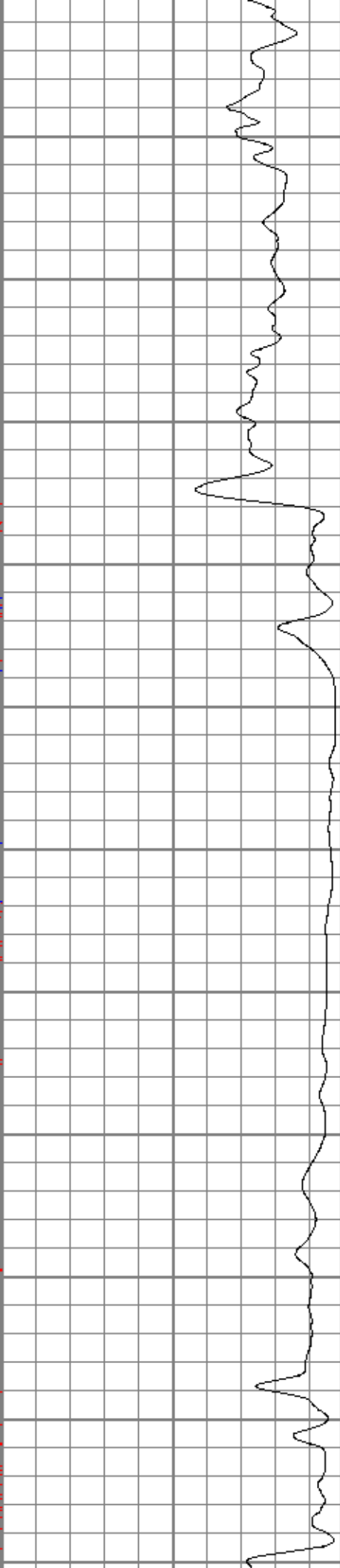
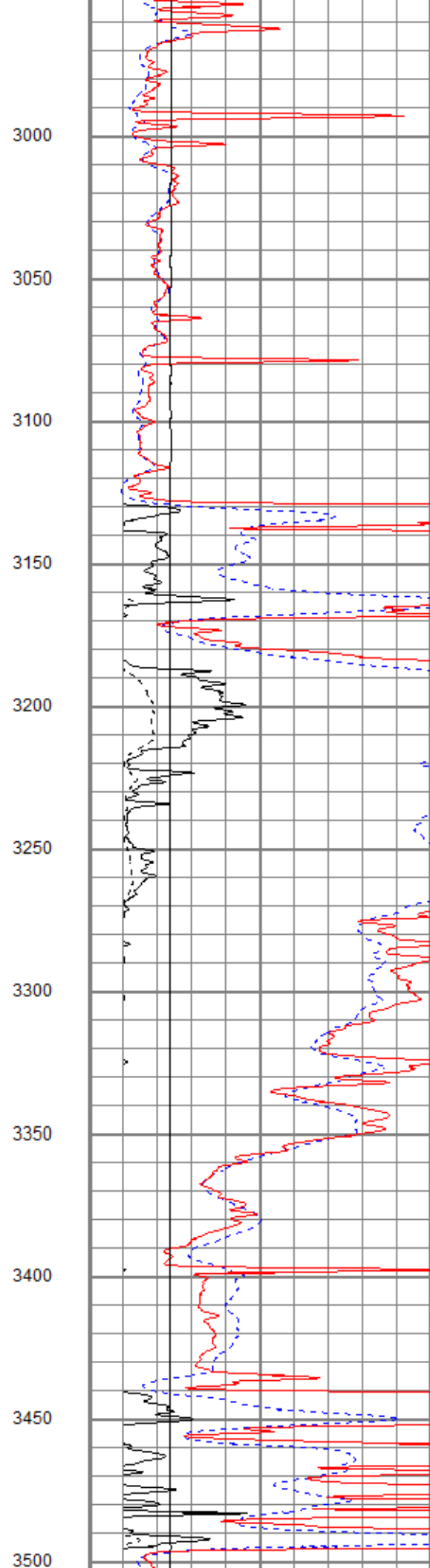
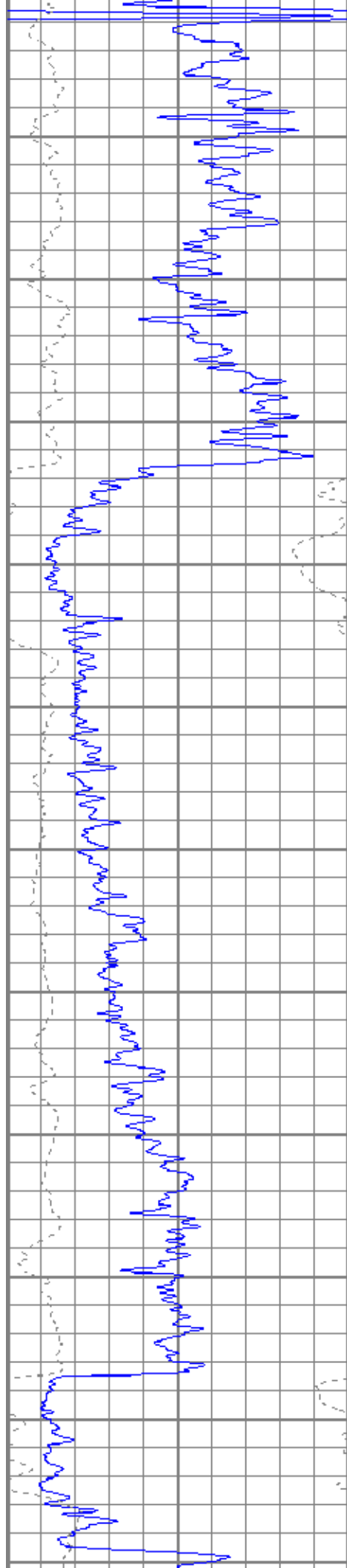
2800

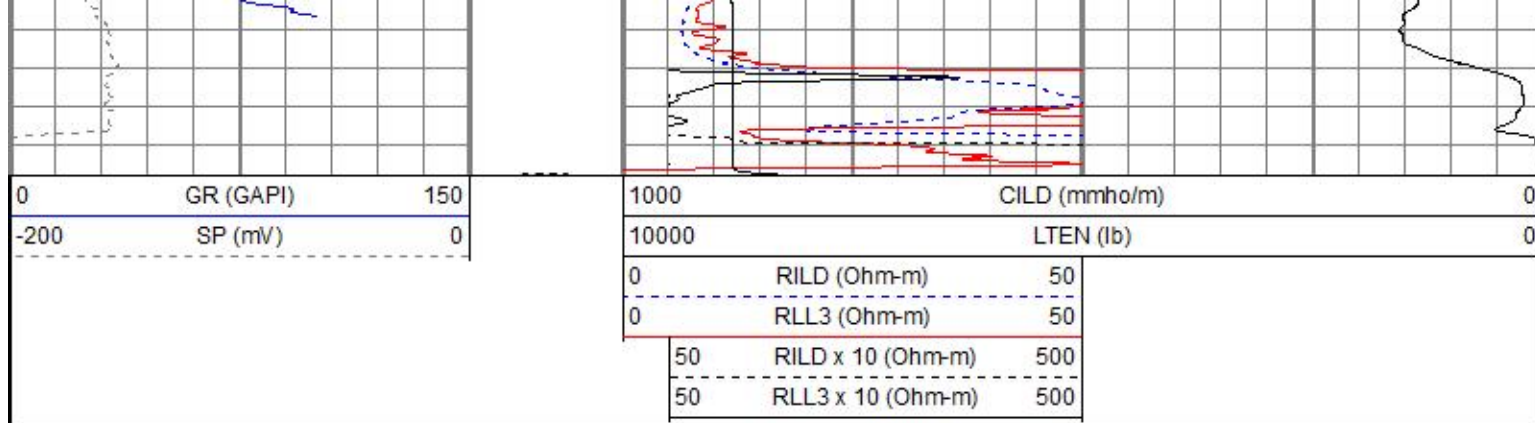
2850

2900

2950





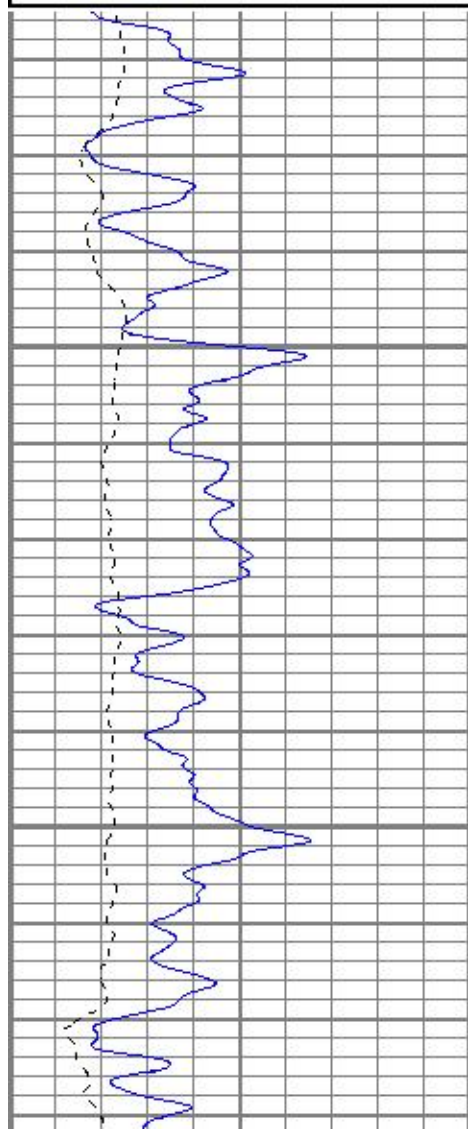


# Main Pass

Database File taoswebber34-2oh.db  
Dataset Pathname pass2.1  
Presentation Format kdil  
Dataset Creation Sun Dec 11 22:36:56 2016  
Charted by Depth in Feet scaled 1:240

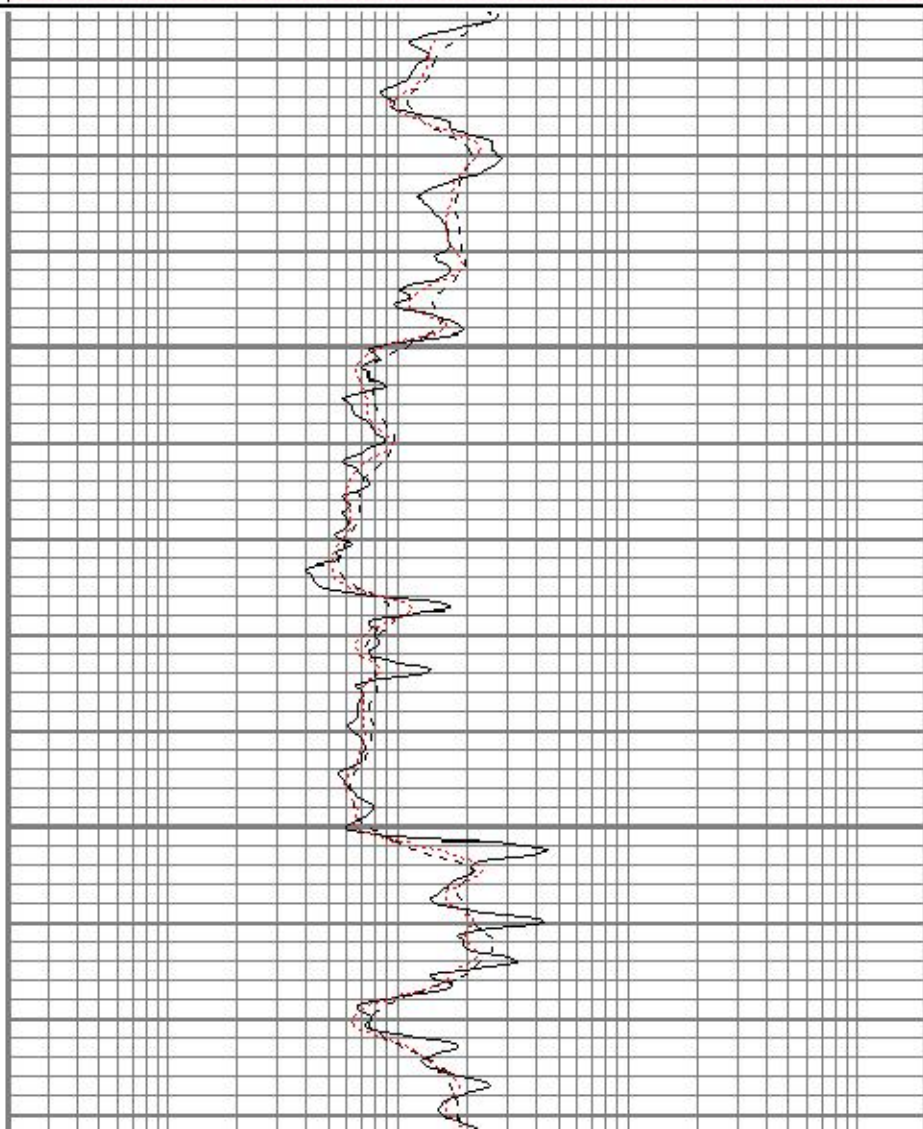
|      |           |     |
|------|-----------|-----|
| 0    | GR (GAPI) | 150 |
| -100 | SP (mV)   | 100 |

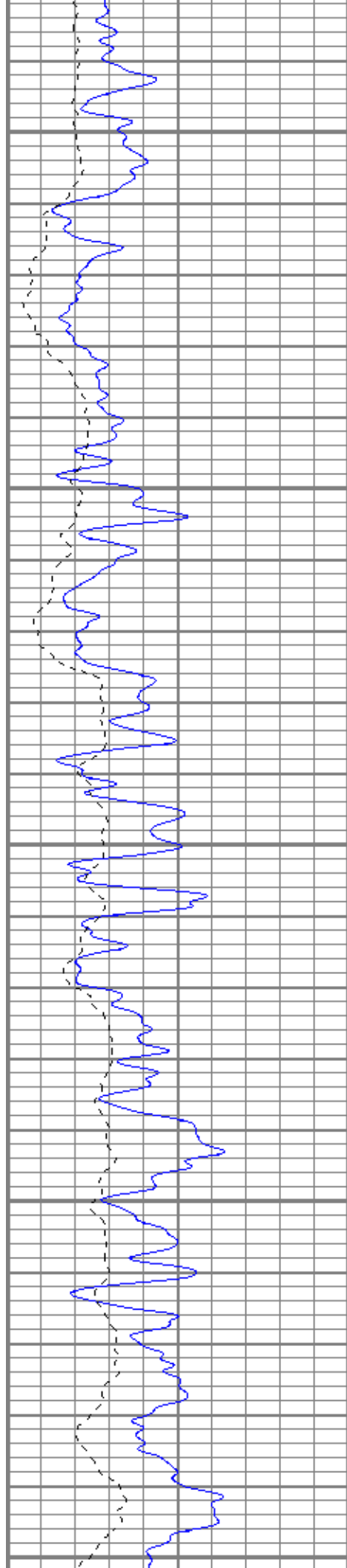
|     |              |      |
|-----|--------------|------|
| 0.2 | RILD (Ohm-m) | 2000 |
| 0.2 | RLL3 (Ohm-m) | 2000 |
| 0.2 | RILM (Ohm-m) | 2000 |



350

400





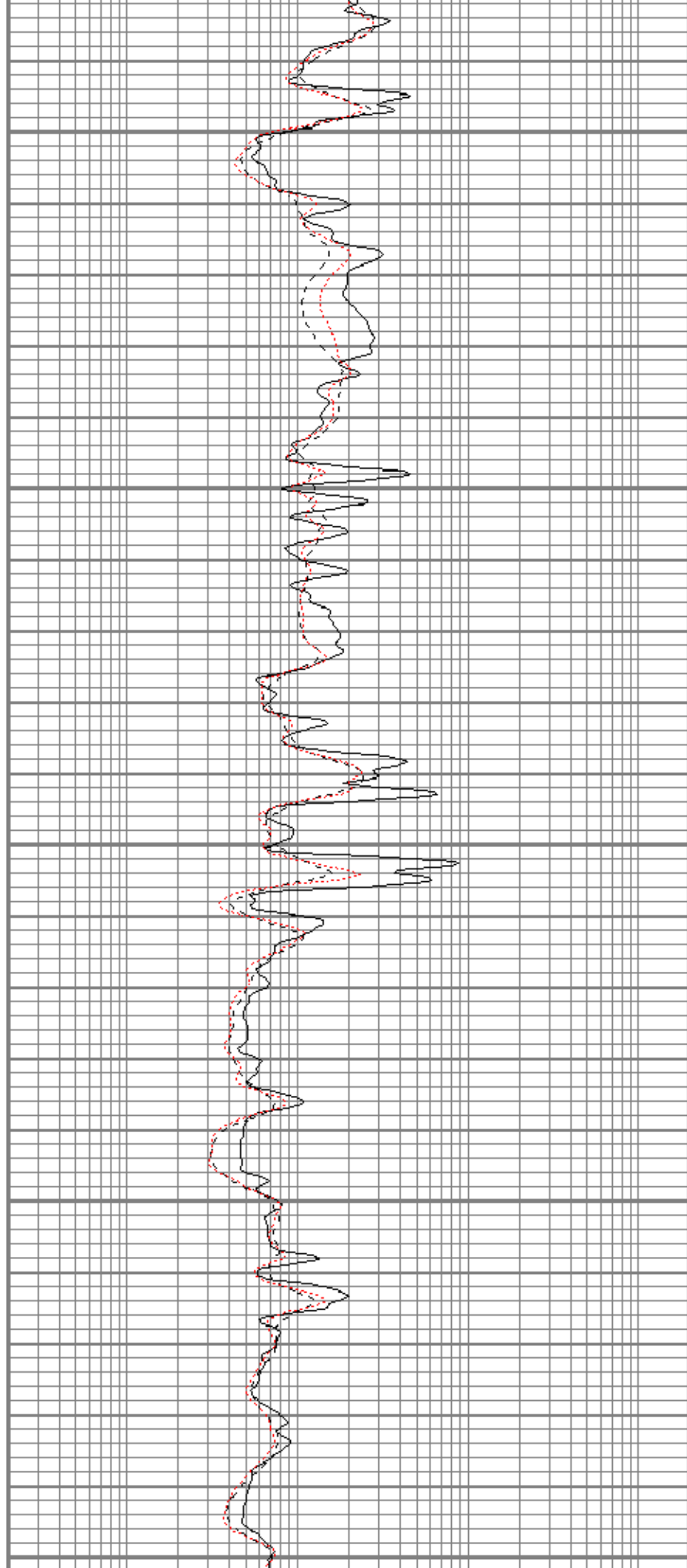
450

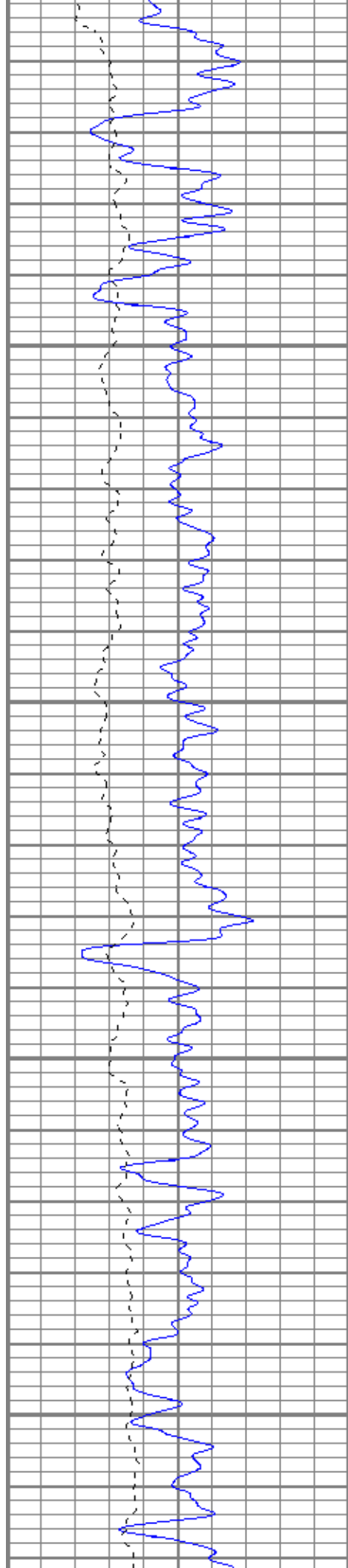
500

550

600

650



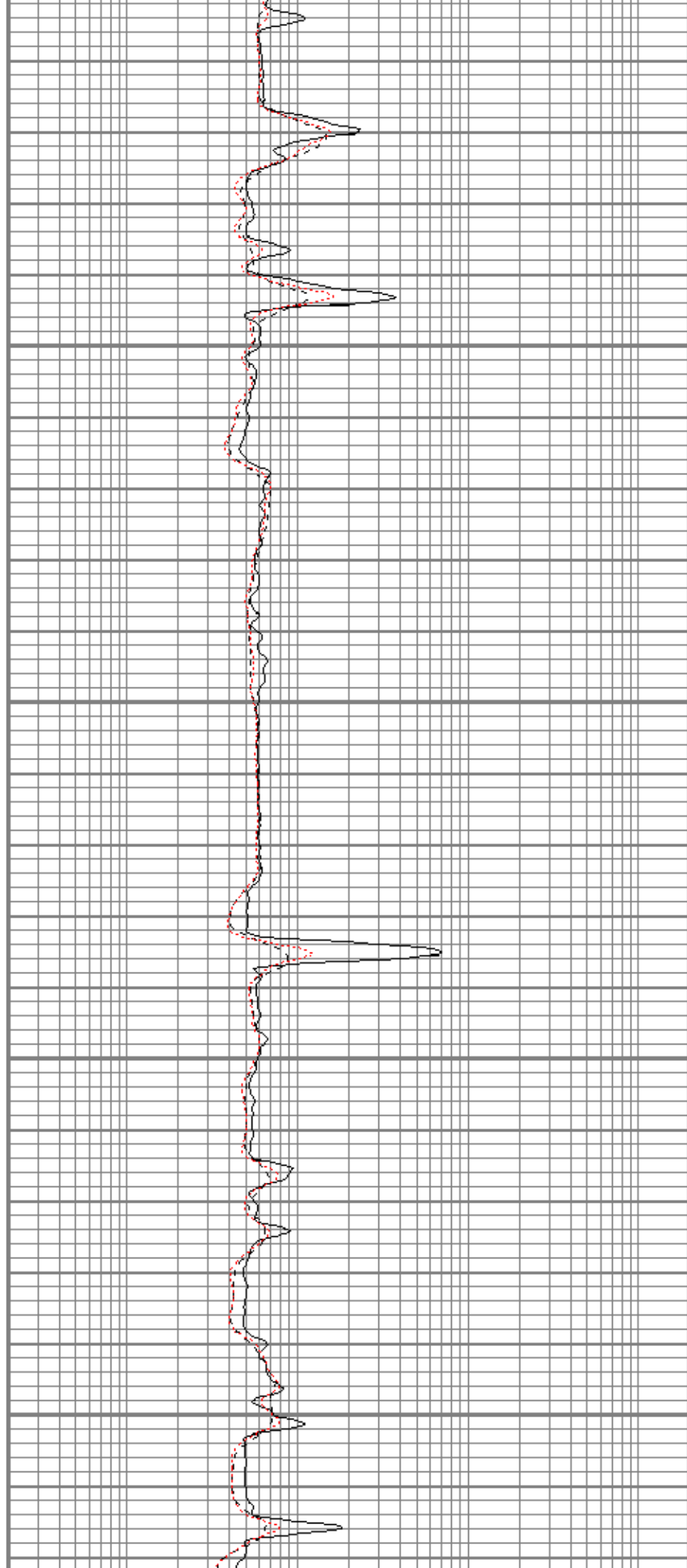


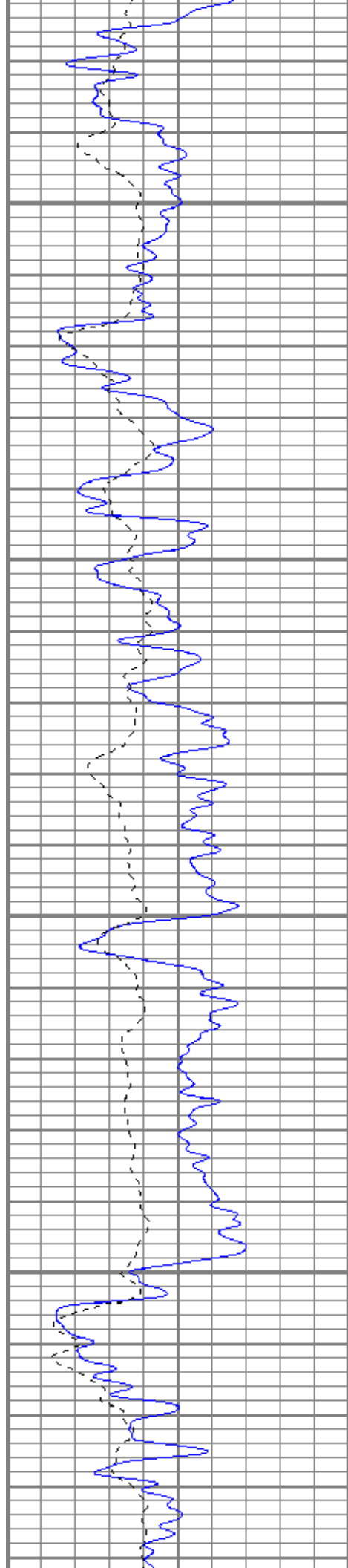
700

750

800

850



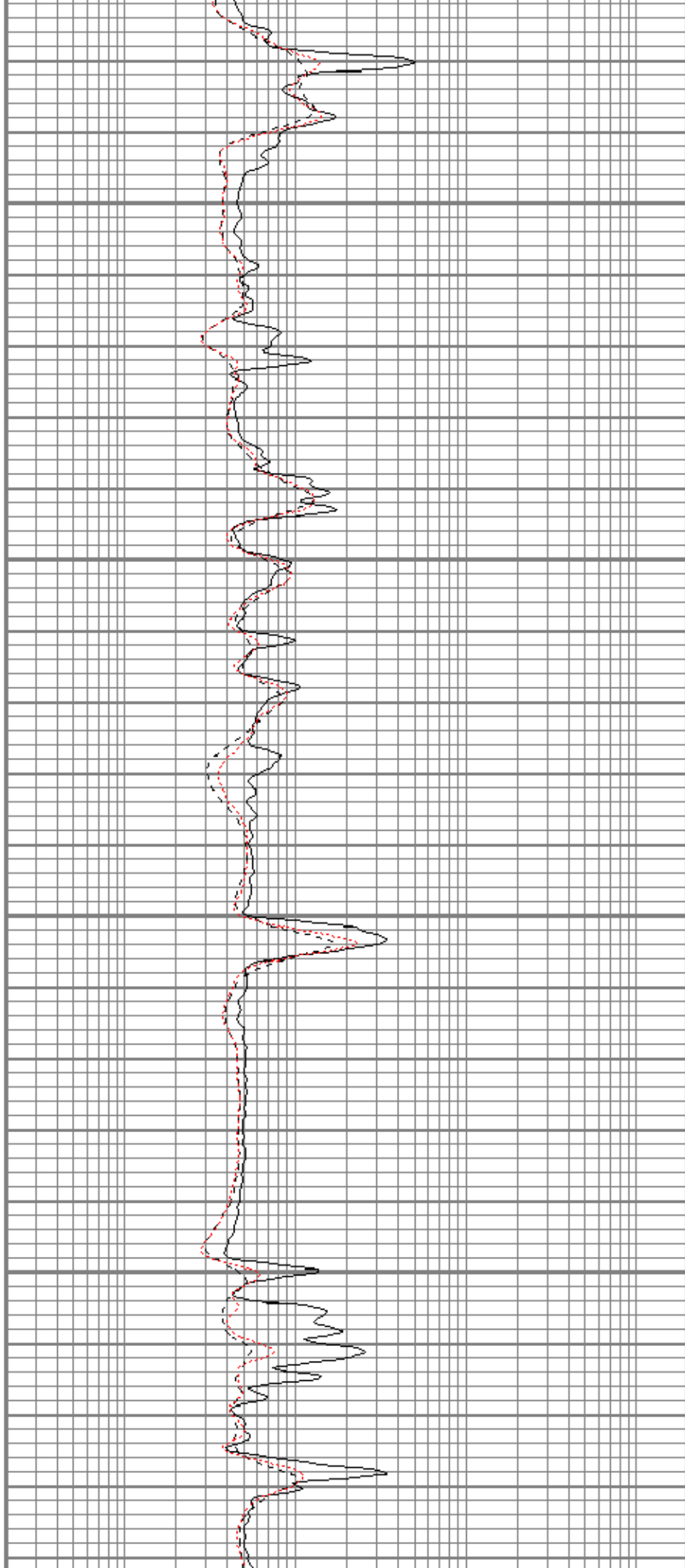


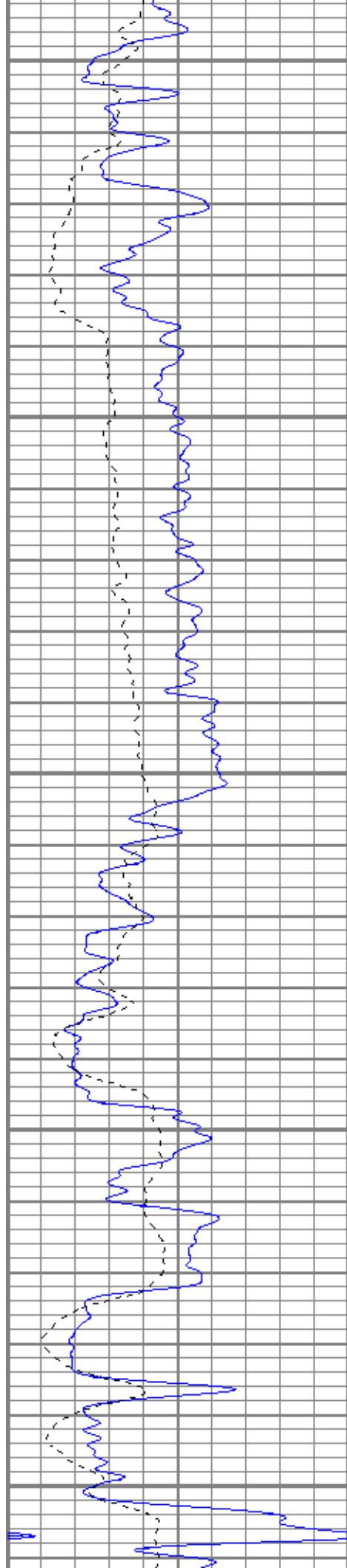
900

950

1000

1050





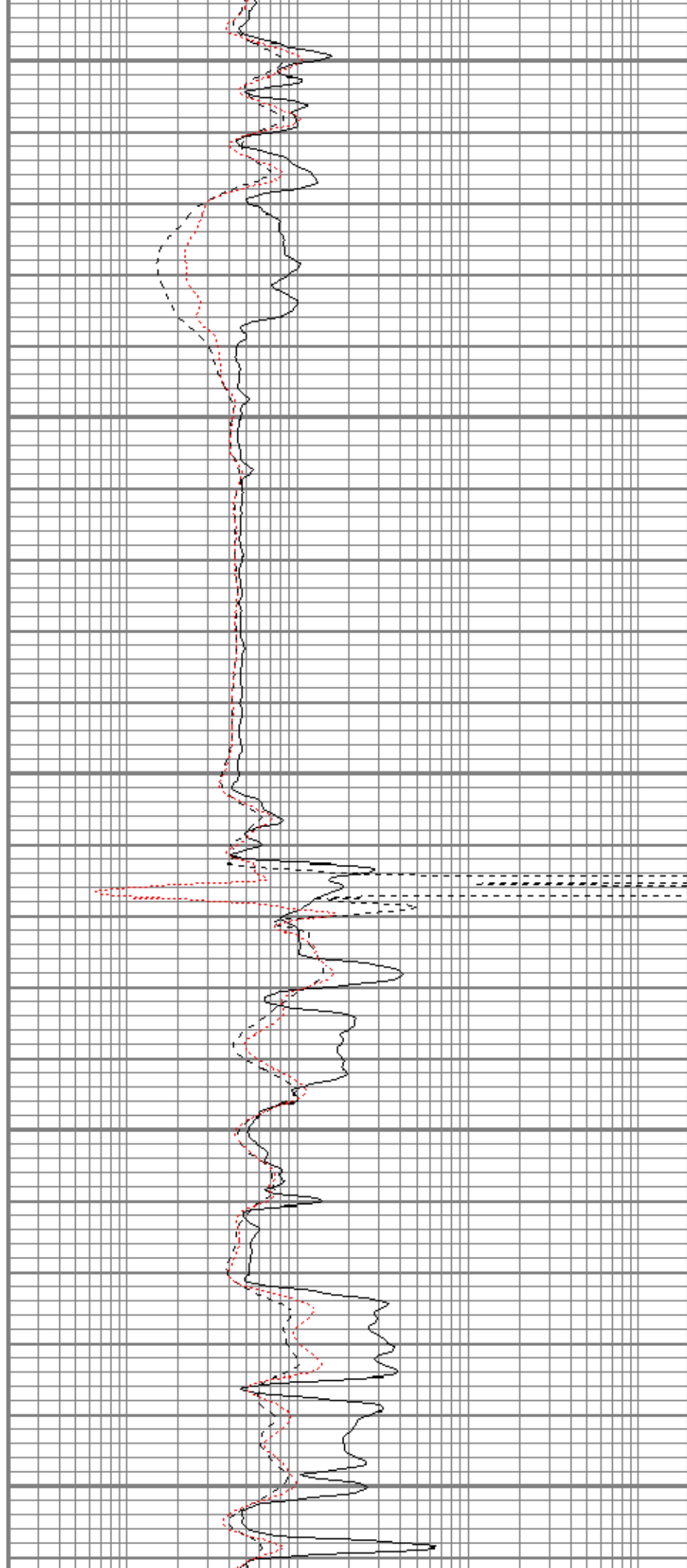
1100

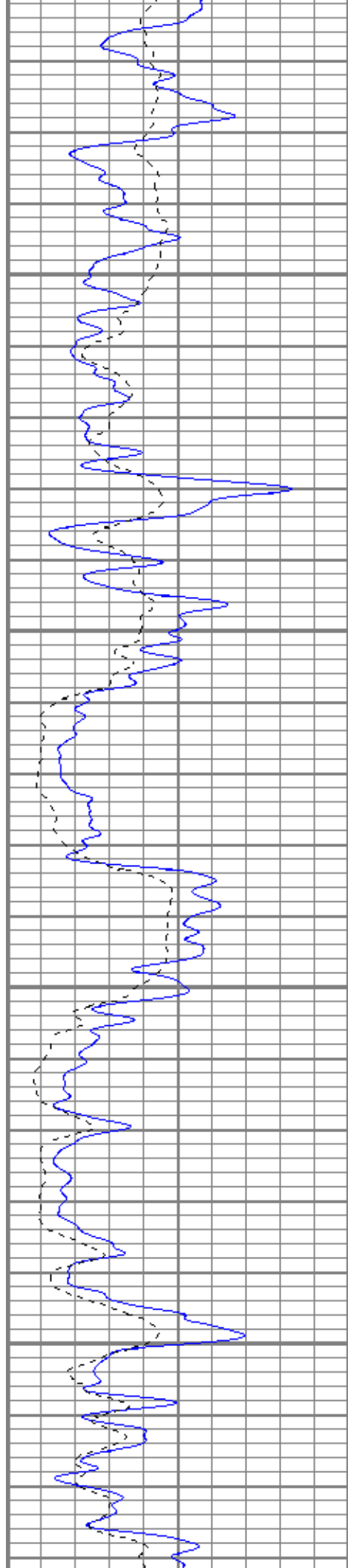
1150

1200

1250

1300



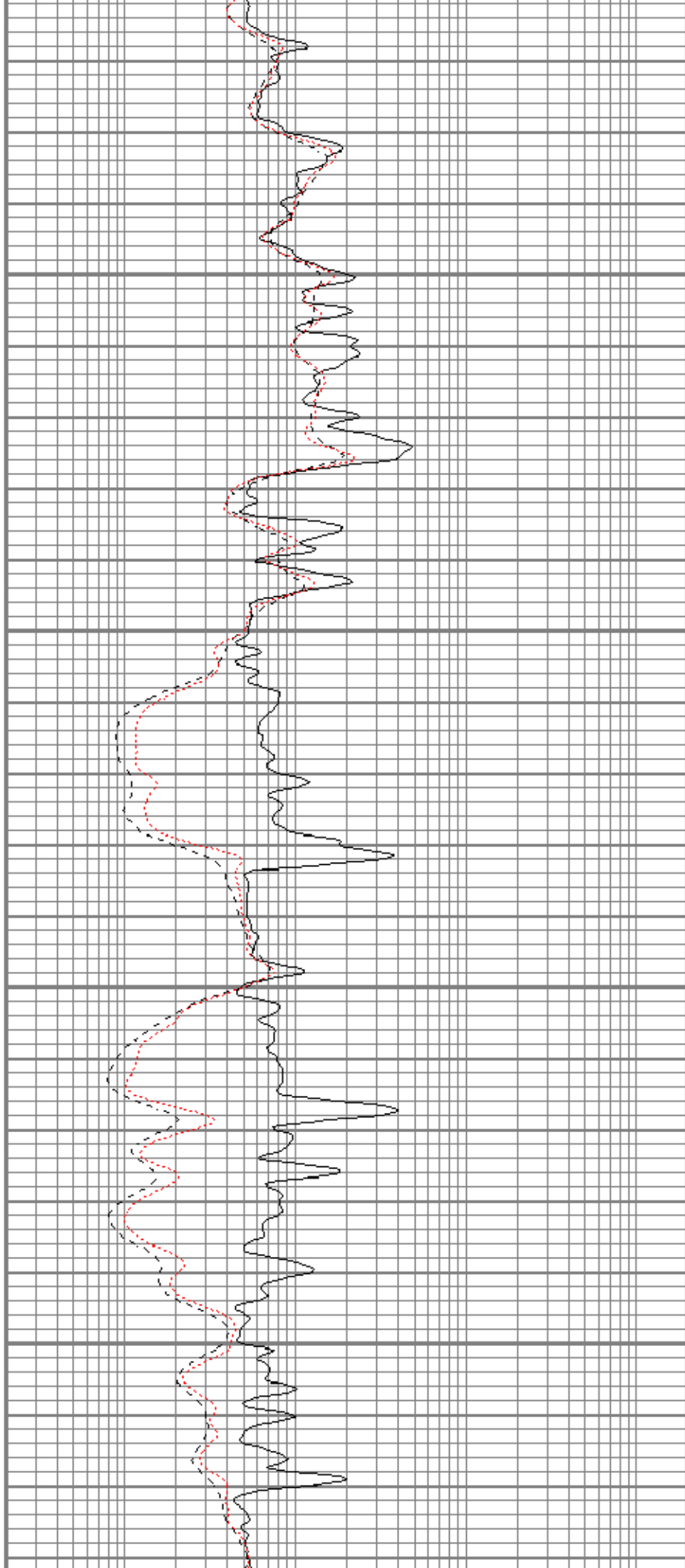


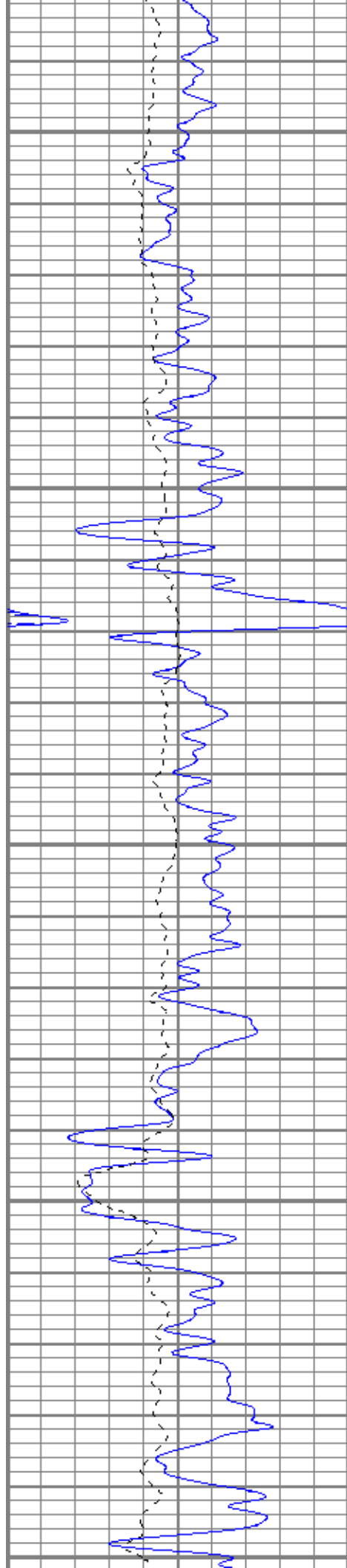
1350

1400

1450

1500





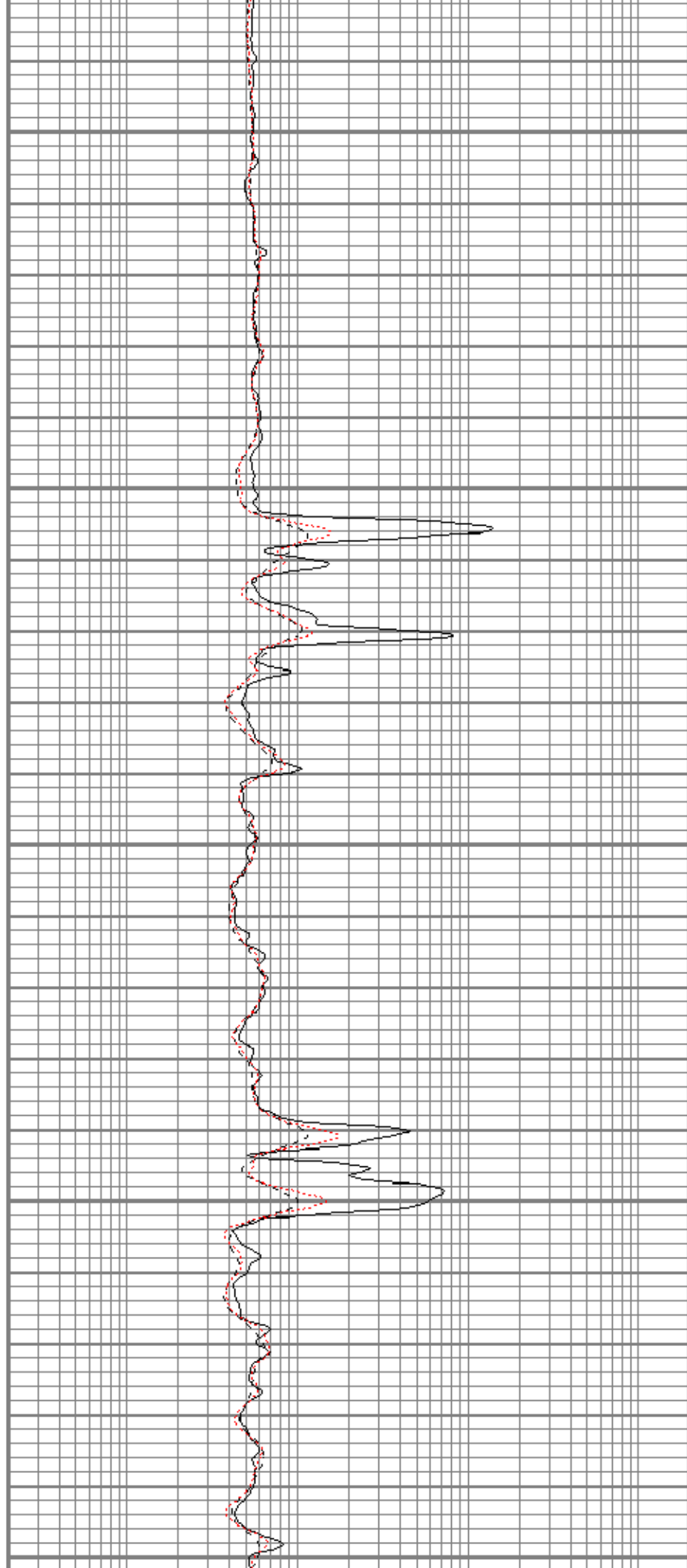
1550

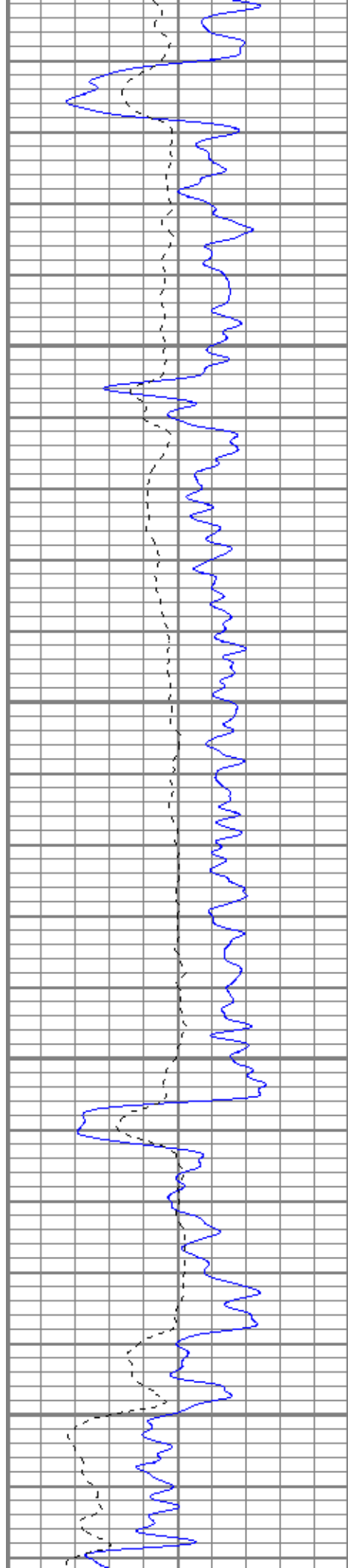
1600

1650

1700

1750





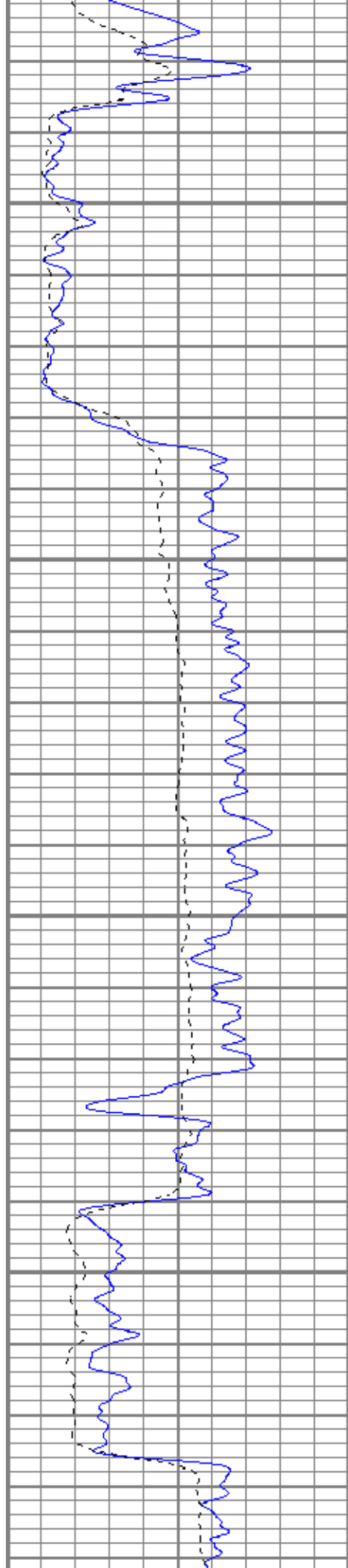
1800

1850

1900

1950



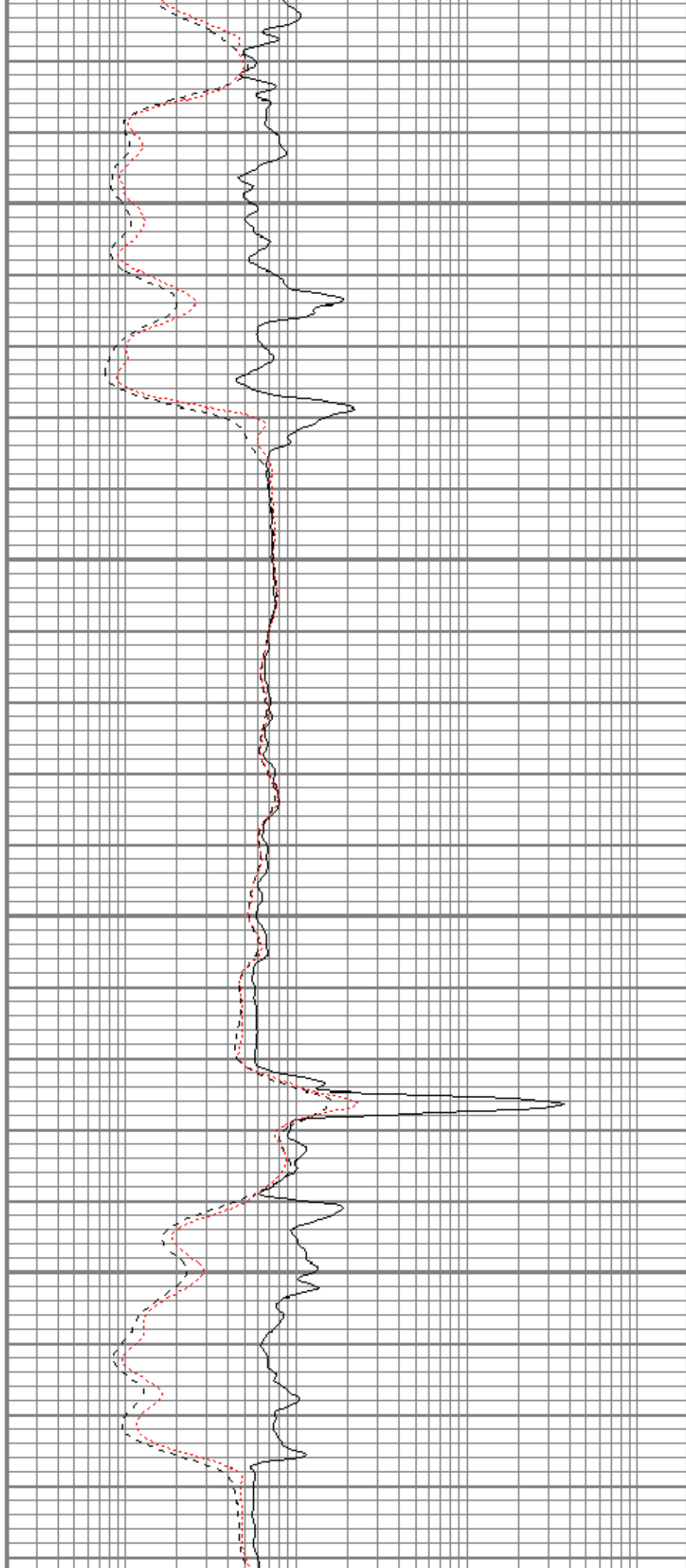


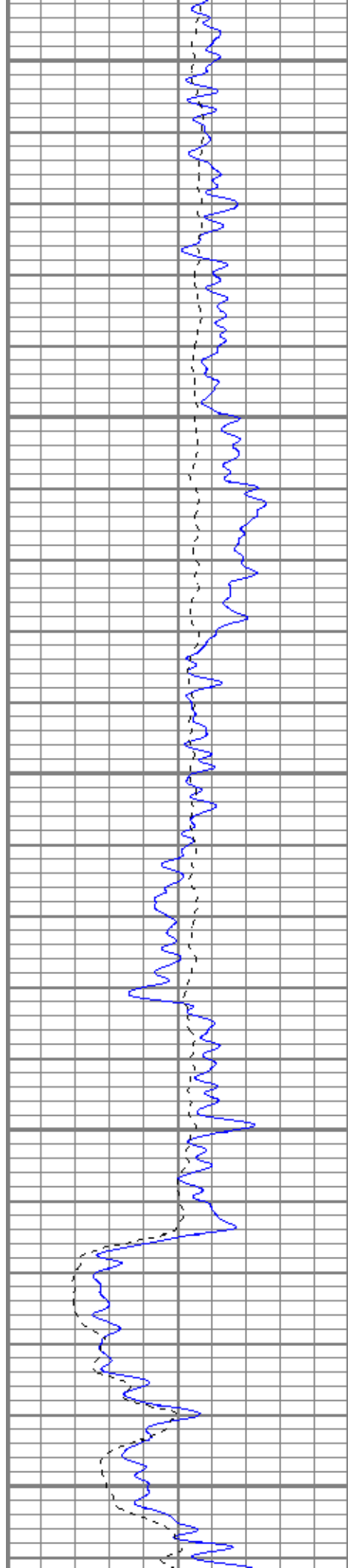
2000

2050

2100

2150





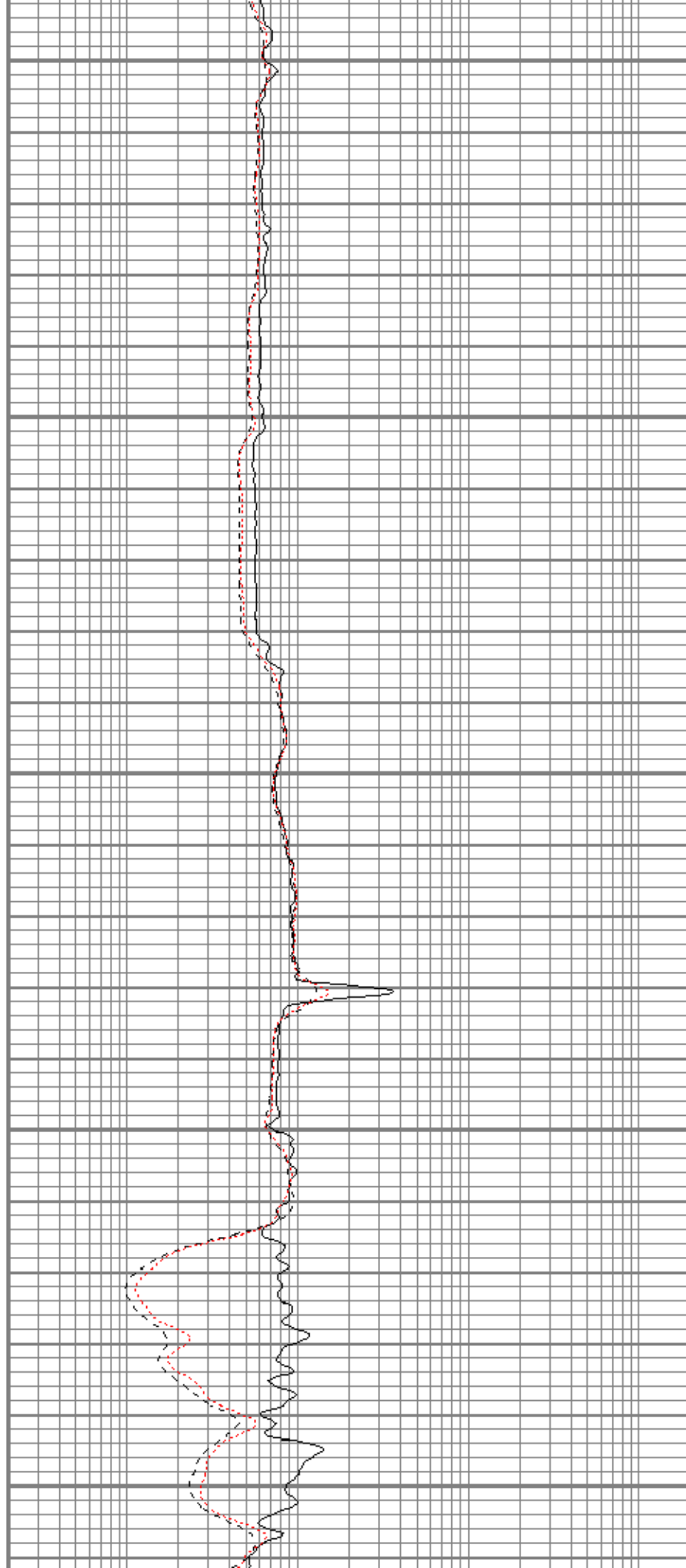
2200

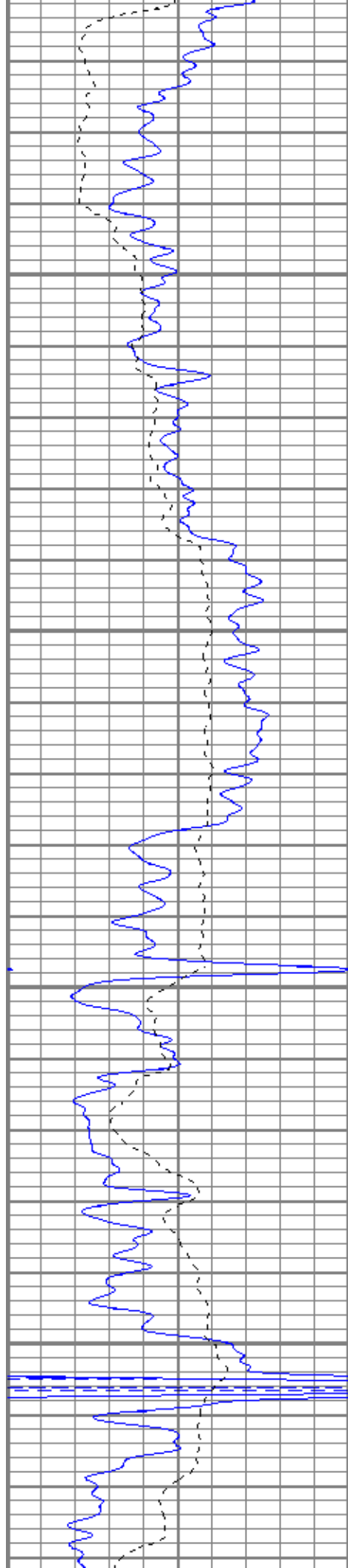
2250

2300

2350

2400



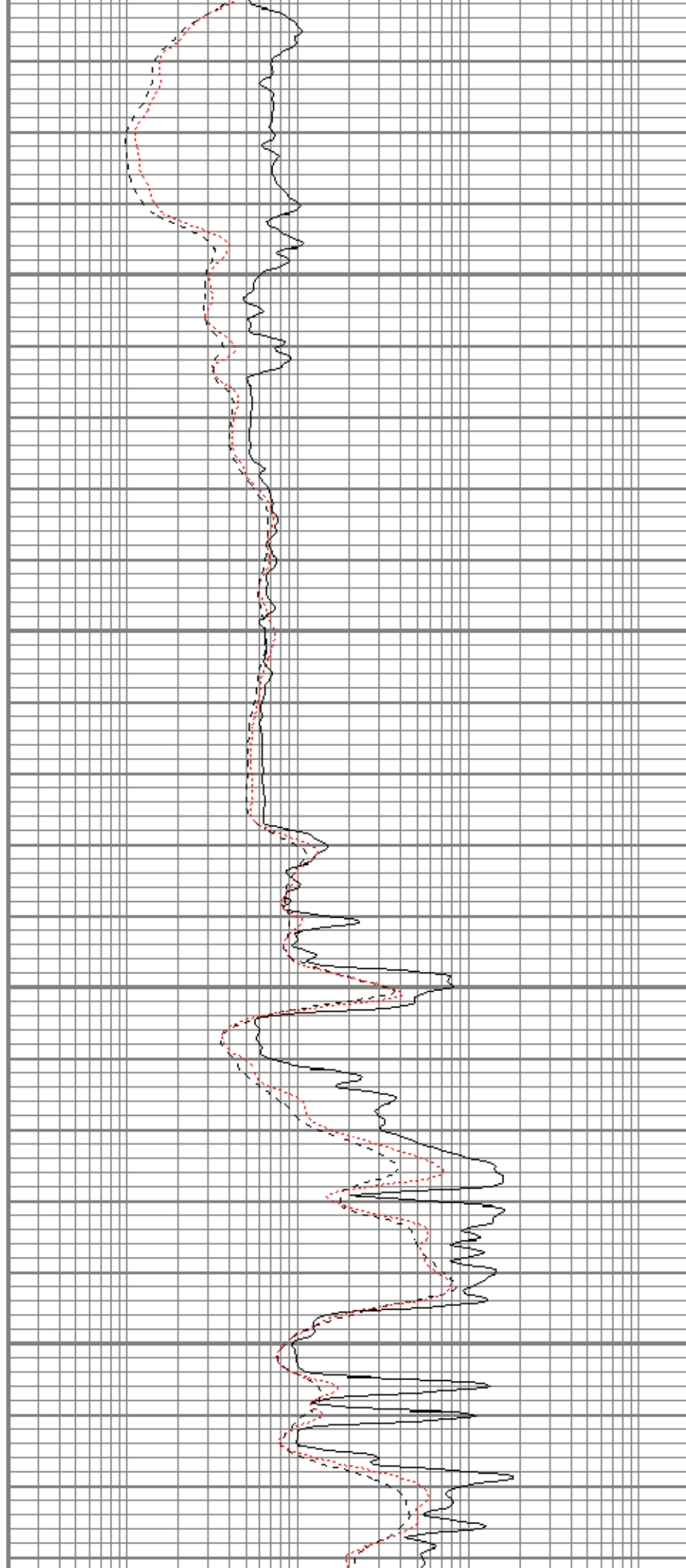


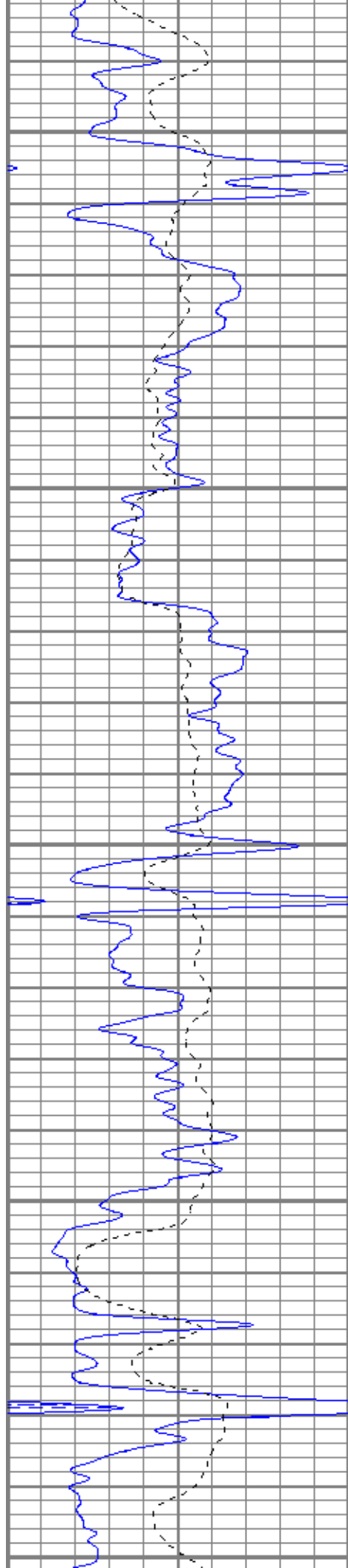
2450

2500

2550

2600





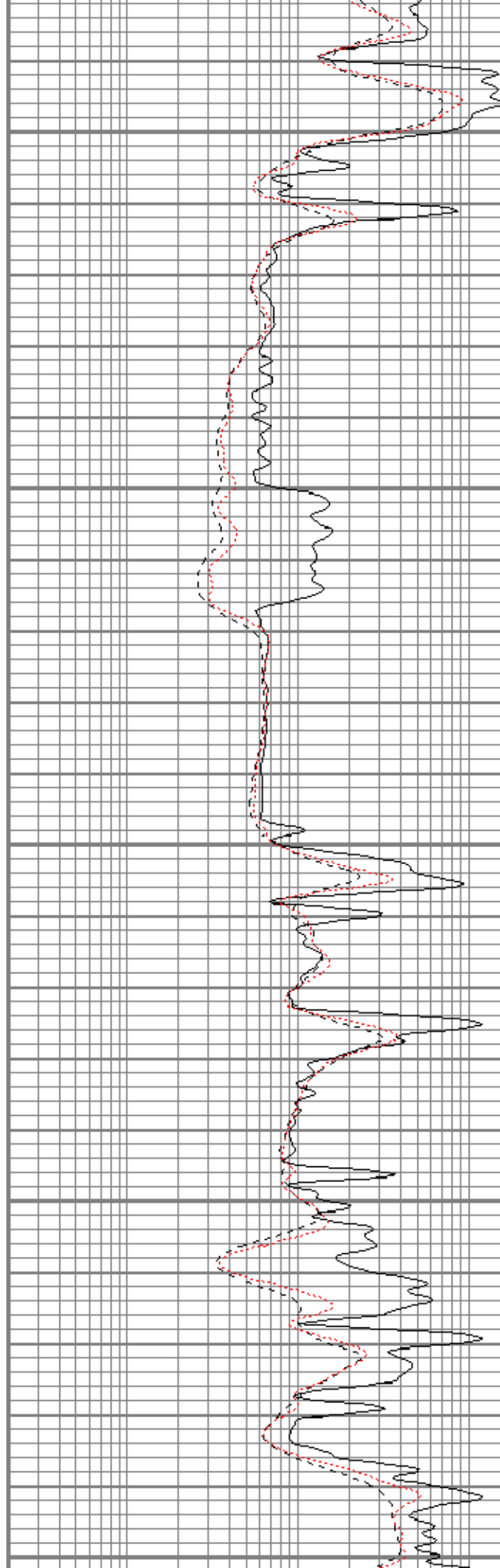
2650

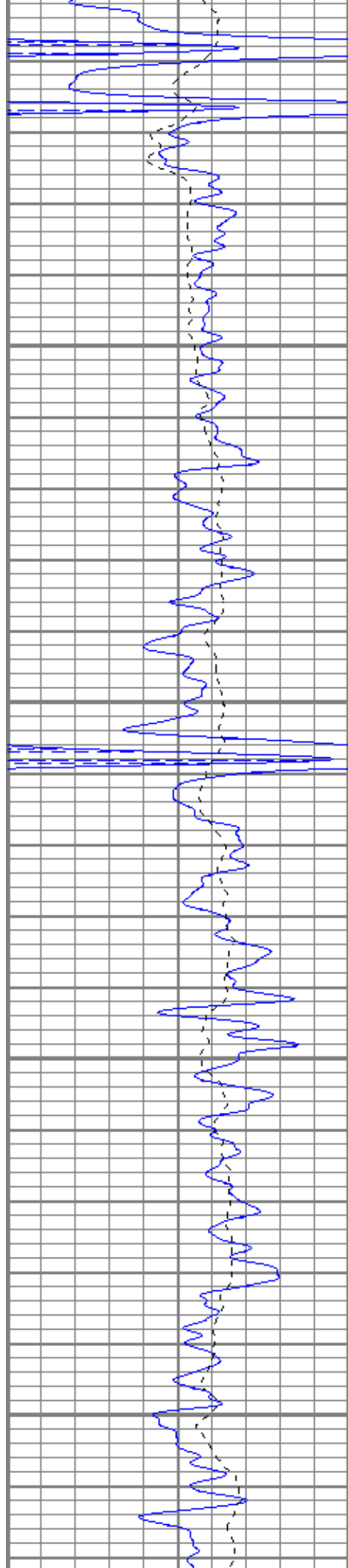
2700

2750

2800

2850



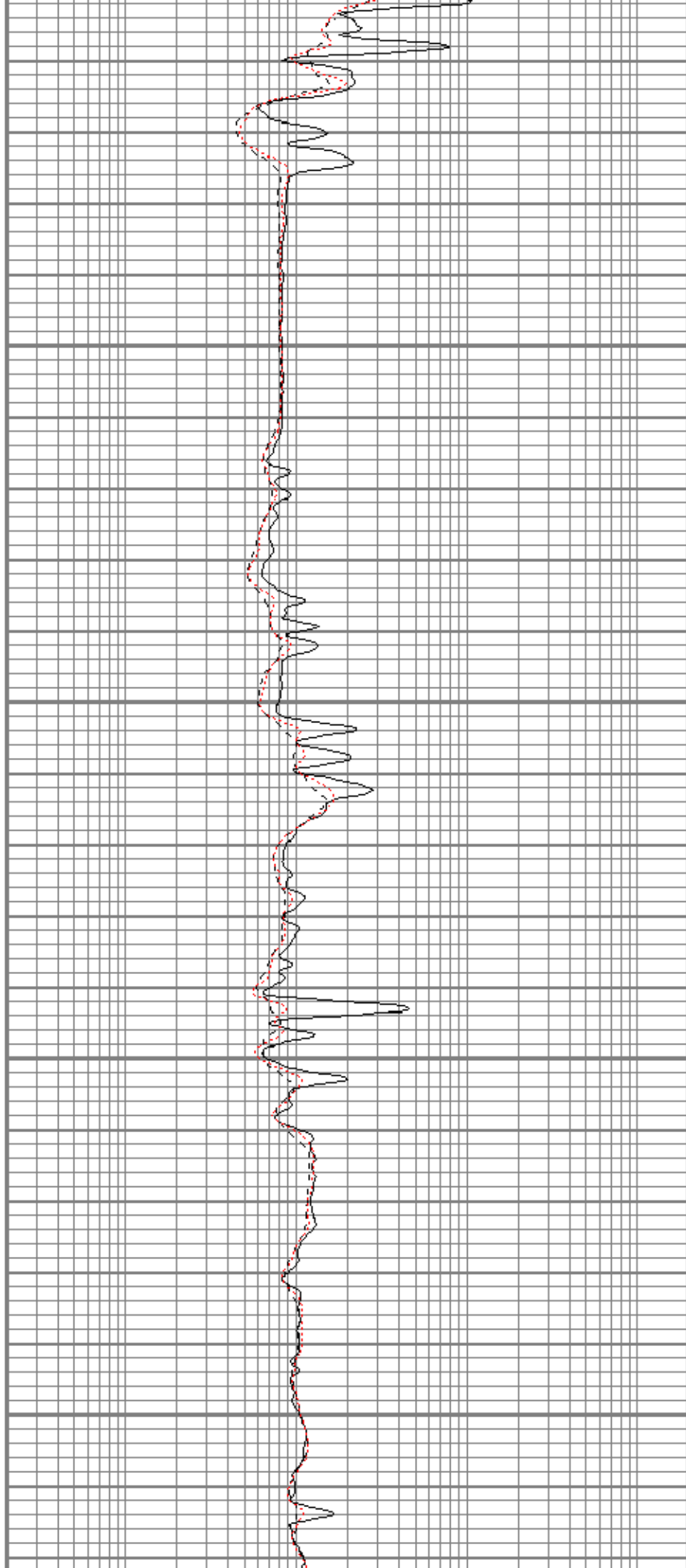


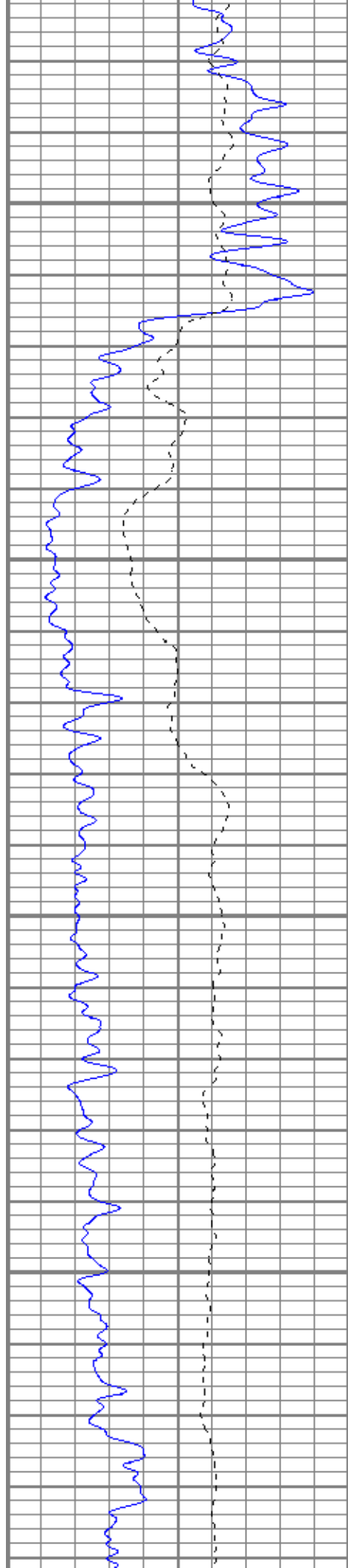
2900

2950

3000

3050



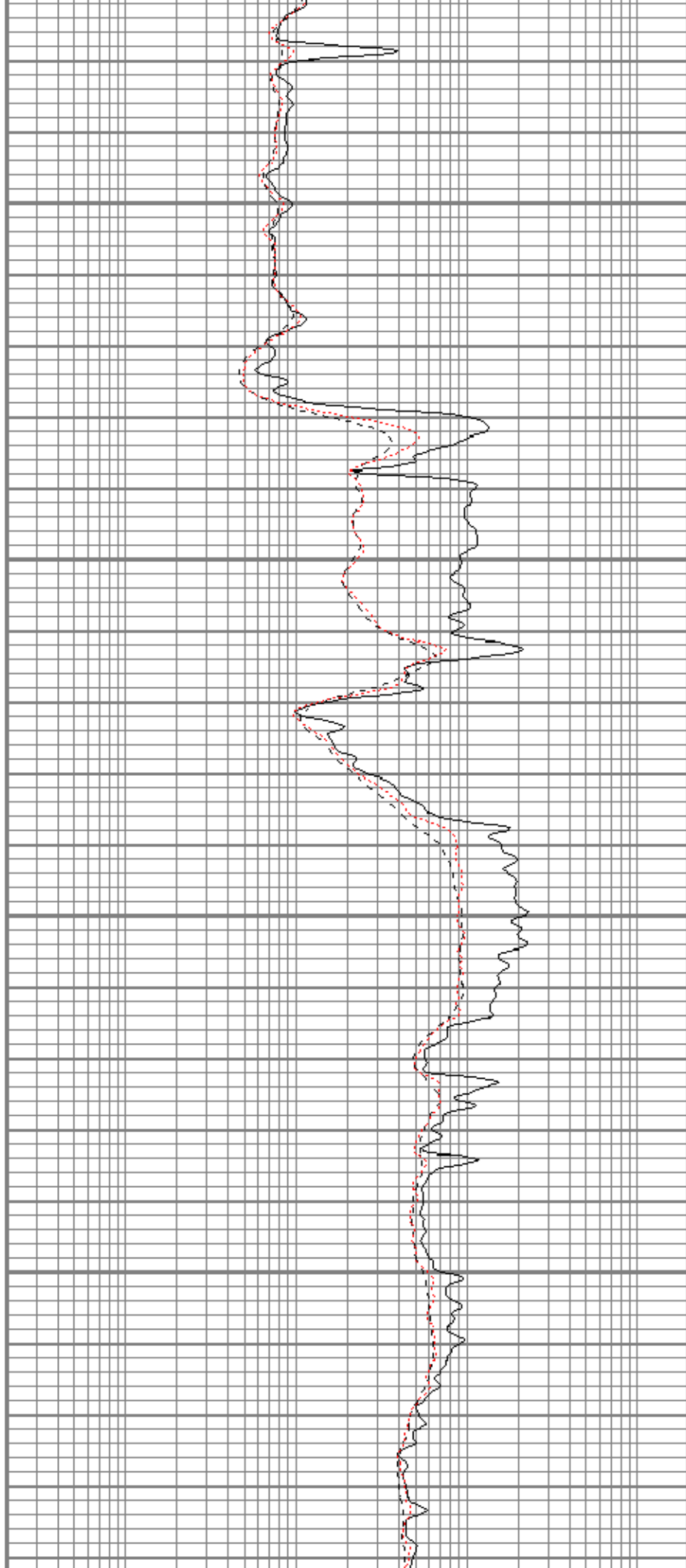


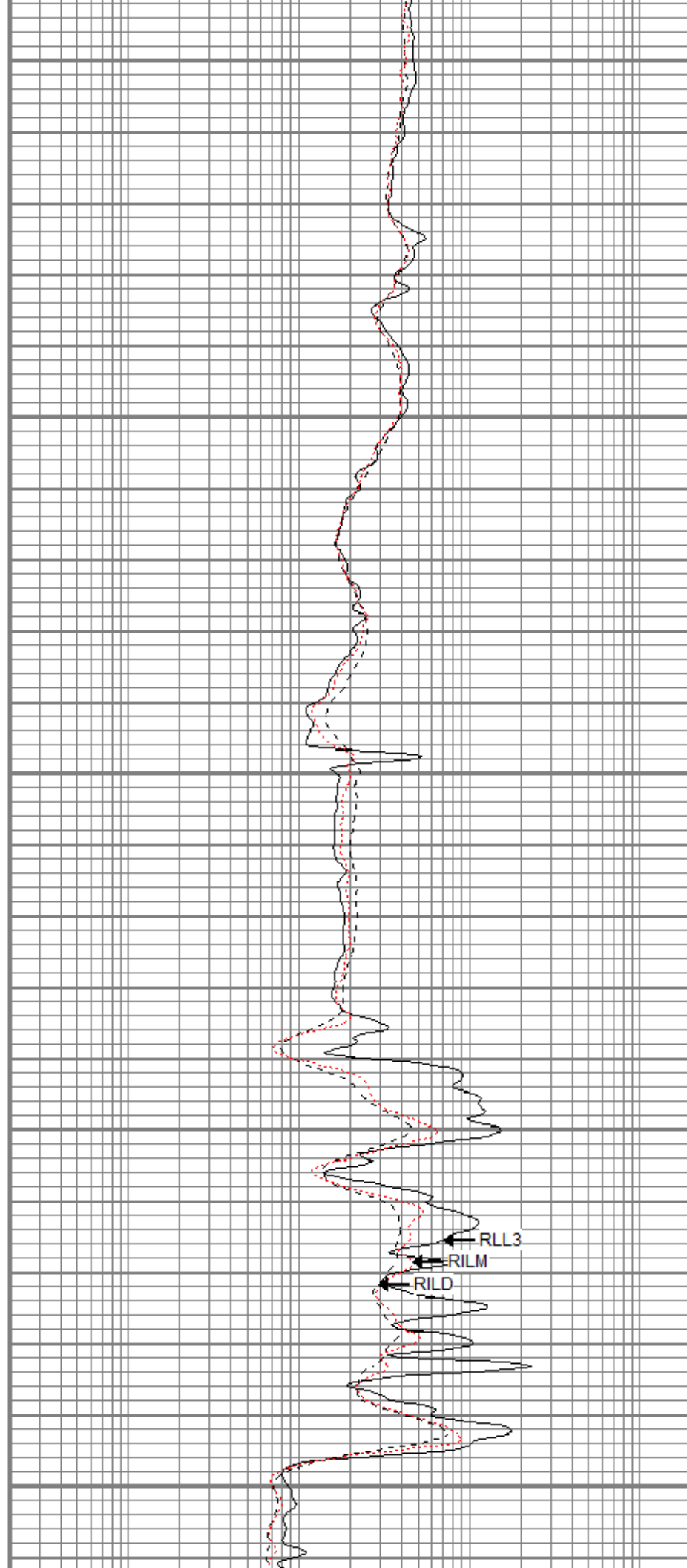
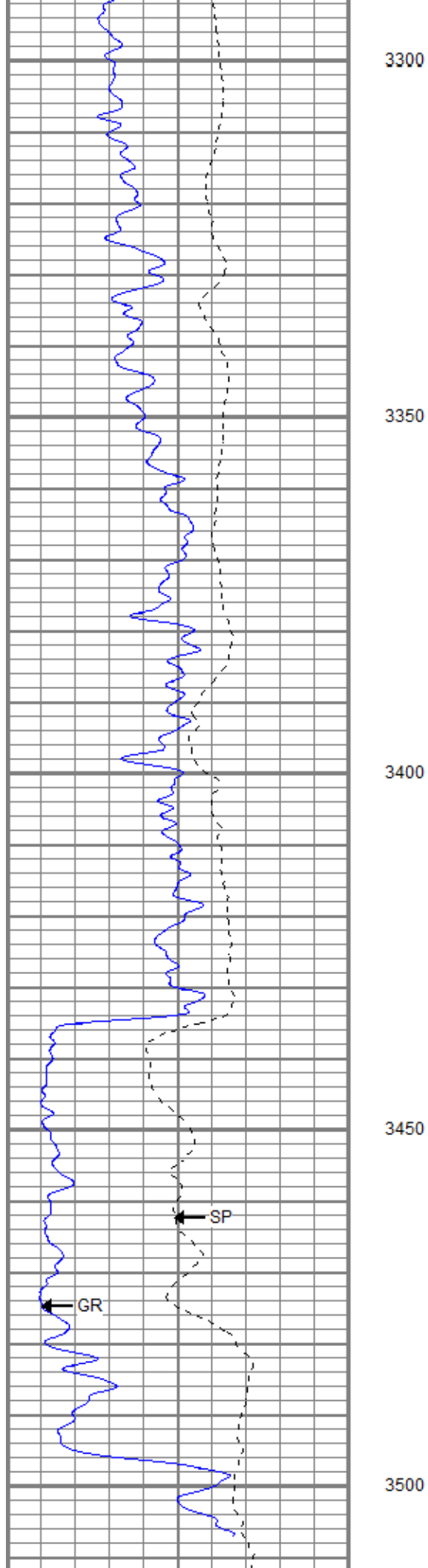
3100

3150

3200

3250

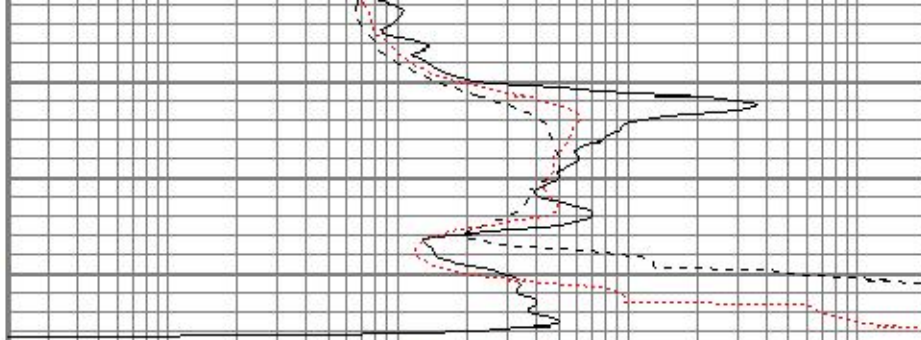






LTD 3547'

|      |           |     |
|------|-----------|-----|
| 0    | GR (GAPI) | 150 |
| -100 | SP (mV)   | 100 |



|     |              |      |
|-----|--------------|------|
| 0.2 | RILD (Ohm-m) | 2000 |
| 0.2 | RLL3 (Ohm-m) | 2000 |
| 0.2 | RILM (Ohm-m) | 2000 |

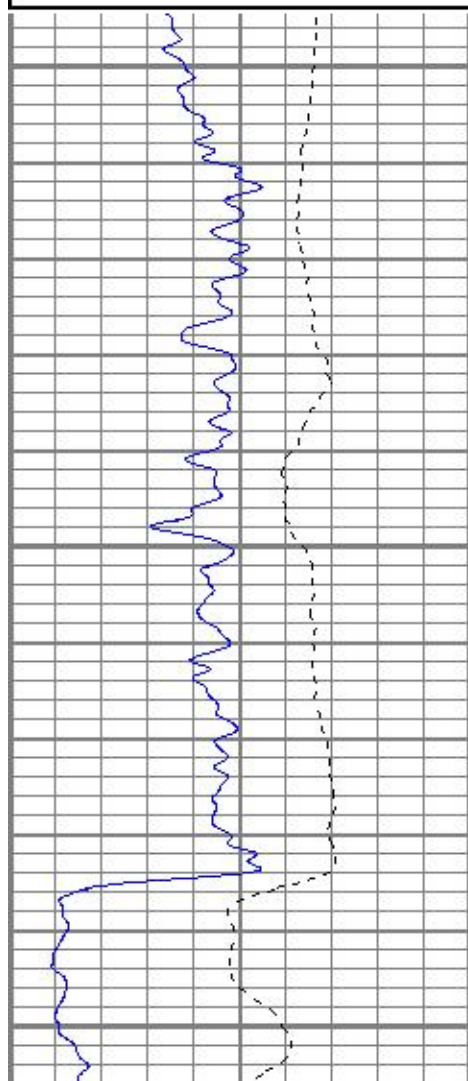


# Repeat Pass

Database File taoswebber34-2oh.db  
 Dataset Pathname pass1.1  
 Presentation Format kdil  
 Dataset Creation Sun Dec 11 21:28:18 2016  
 Charted by Depth in Feet scaled 1:240

|      |           |     |
|------|-----------|-----|
| 0    | GR (GAPI) | 150 |
| -100 | SP (mV)   | 100 |

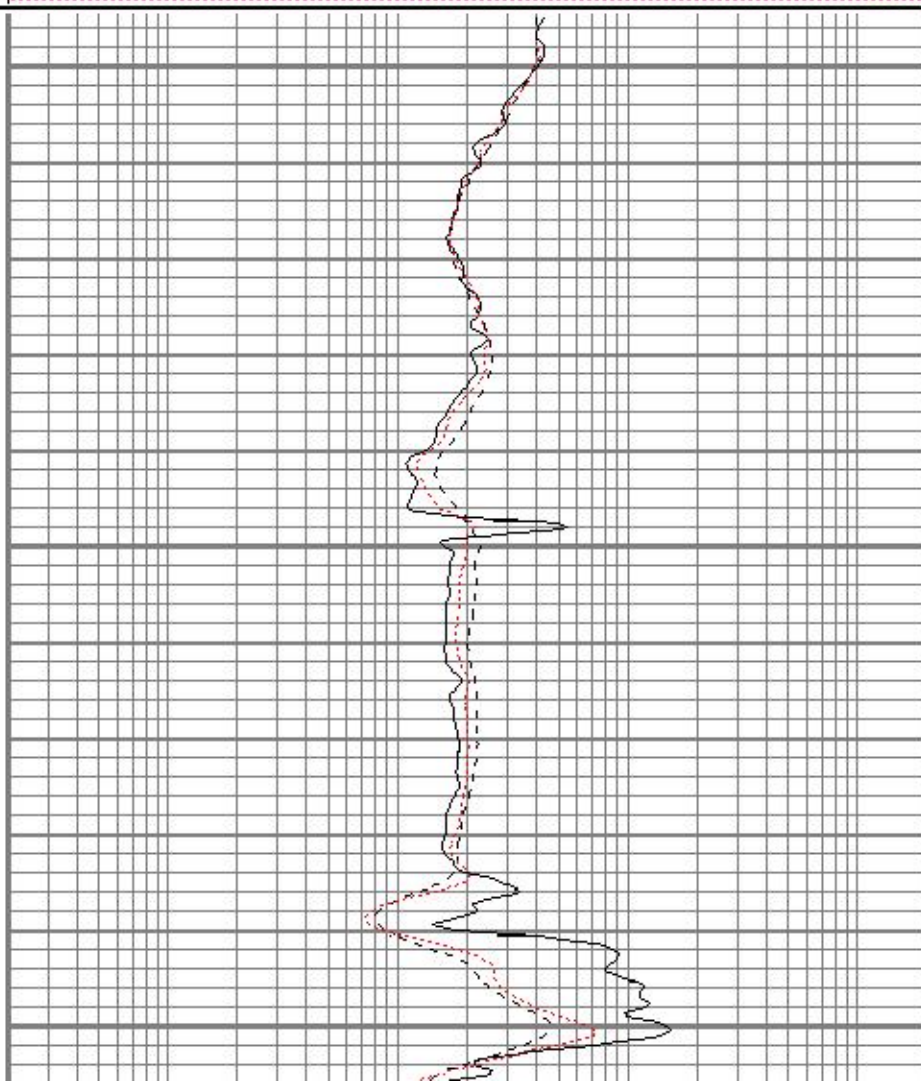
|     |              |      |
|-----|--------------|------|
| 0.2 | RILD (Ohm-m) | 2000 |
| 0.2 | RLL3 (Ohm-m) | 2000 |
| 0.2 | RILM (Ohm-m) | 2000 |

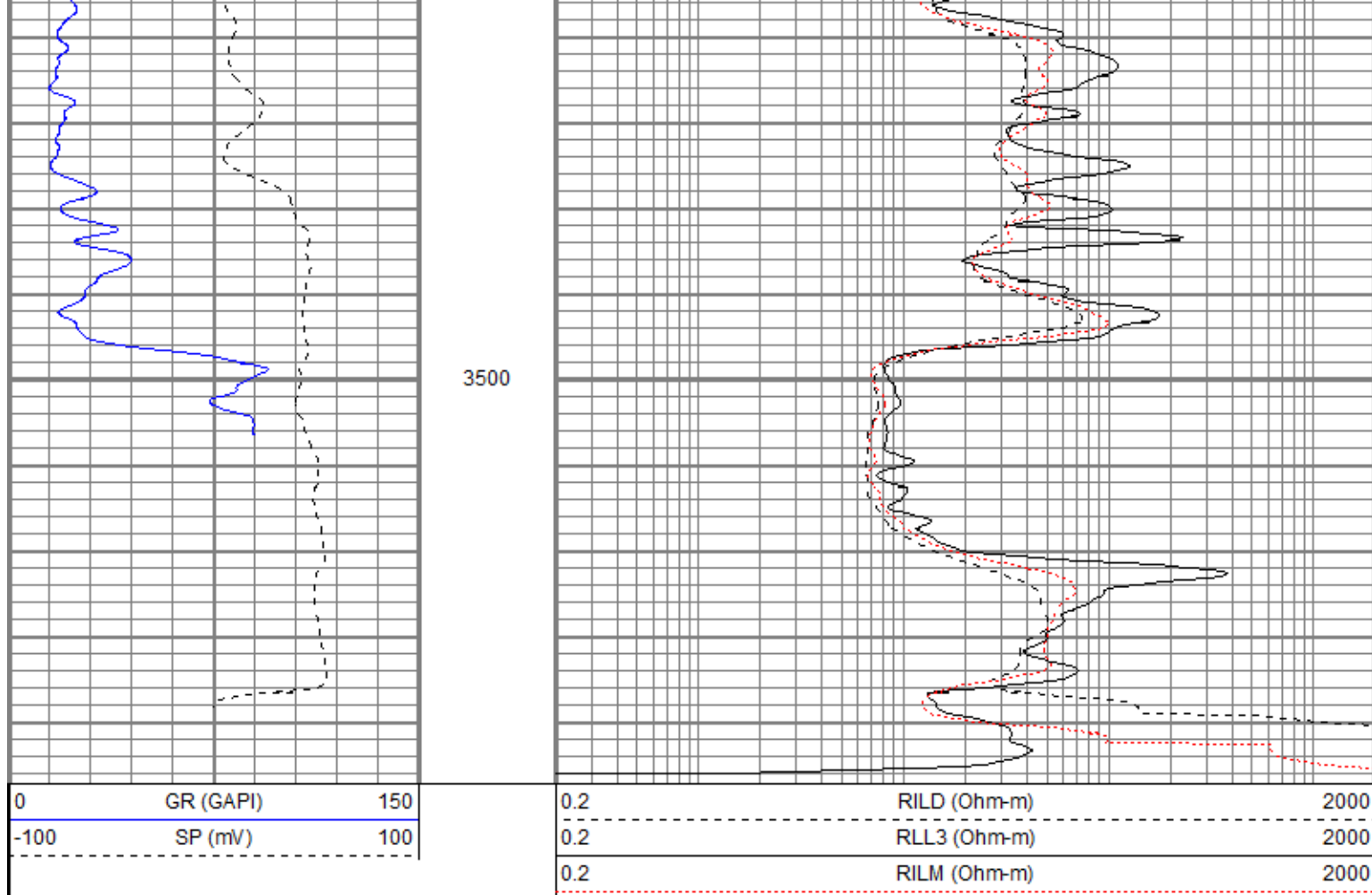


3350

3400

3450





| Calibration Report                   |                          |          |                          |         |         |        |            |        |         |  |
|--------------------------------------|--------------------------|----------|--------------------------|---------|---------|--------|------------|--------|---------|--|
| Database File                        | taoswebber34-2oh.db      |          |                          |         |         |        |            |        |         |  |
| Dataset Pathname                     | pass1.1                  |          |                          |         |         |        |            |        |         |  |
| Dataset Creation                     | Sun Dec 11 21:28:18 2016 |          |                          |         |         |        |            |        |         |  |
| Dual Induction Calibration Report    |                          |          |                          |         |         |        |            |        |         |  |
| Serial-Model:                        |                          |          | 1989-ADM                 |         |         |        |            |        |         |  |
| Surface Cal Performed:               |                          |          | Fri Dec 09 04:19:59 2016 |         |         |        |            |        |         |  |
| Downhole Cal Performed:              |                          |          | Fri Dec 09 04:20:05 2016 |         |         |        |            |        |         |  |
| After Survey Verification Performed: |                          |          | Fri Dec 09 04:20:08 2016 |         |         |        |            |        |         |  |
| Surface Calibration                  |                          |          |                          |         |         |        |            |        |         |  |
|                                      |                          | Readings |                          |         |         |        | References |        | Results |  |
| Loop:                                | Air                      | Loop     |                          | Air     | Loop    |        | m          | b      |         |  |
| Deep                                 | 0.002                    | 0.656    | V                        | 0.000   | 350.000 | mmho/m | 535.560    | -1.118 |         |  |
| Medium                               | 0.003                    | 0.745    | V                        | 0.000   | 400.000 | mmho/m | 538.828    | -1.427 |         |  |
| Internal:                            | Zero                     | Cal      |                          | Zero    | Cal     |        | m          | b      |         |  |
| Deep                                 | 0.002                    | 0.656    | V                        | 0.000   | 350.000 | mmho/m | 535.220    | -1.003 |         |  |
| Medium                               | 0.003                    | 0.745    | V                        | 0.000   | 550.000 | mmho/m | 741.357    | -2.036 |         |  |
| Downhole Calibration                 |                          |          |                          |         |         |        |            |        |         |  |
|                                      |                          | Readings |                          |         |         |        | References |        | Results |  |
| Internal:                            | Zero                     | Cal      |                          | Zero    | Cal     |        | m          | b      |         |  |
| Deep                                 | -0.036                   | 349.993  | mmho/m                   | -0.114  | 350.108 | mmho/m | 1.001      | -0.078 |         |  |
| Medium                               | 0.039                    | 400.181  | mmho/m                   | 0.053   | 399.799 | mmho/m | 0.999      | 0.013  |         |  |
| Shallow                              | 2.503                    | 0.015    | V                        | 500.000 | 2.000   | Ohm-m  | 180.177    | -2.046 |         |  |

## After Survey Verification

| Internal: | Readings |       |        | Targets |         |        | Results |        |
|-----------|----------|-------|--------|---------|---------|--------|---------|--------|
|           | Zero     | Cal   |        | Zero    | Cal     |        | m'      | b'     |
| Deep      | 0.000    | 0.000 | mmho/m | -0.036  | 349.993 | mmho/m | 1.001   | -0.078 |
| Medium    | 0.000    | 0.000 | mmho/m | 0.039   | 400.181 | mmho/m | 0.999   | 0.013  |
| Shallow   | 0.000    | 0.000 | Ohm-m  | 500.000 | 2.000   | Ohm-m  | 1.000   | 0.000  |

## Neutron Calibration Report

Serial Number: Admyr  
 Tool Model: G  
 Performed: Fri Dec 09 04:18:49 2016  
  
 Calibrator Value: 1 NAPI  
 Calibrator Reading: 1 cps  
 Sensitivity: 1 NAPI/cps

## Gamma Ray Calibration Report

Serial Number: 1  
 Tool Model: A  
 Performed: Sun Dec 11 17:01:48 2016  
  
 Calibrator Value: 1.0 GAPI  
 Background Reading: 0.0 cps  
 Calibrator Reading: 1.0 cps  
 Sensitivity: 0.7000 GAPI/cps

## Temperature Calibration Report

Serial Number: 1  
 Tool Model: A  
 Performed: Sat Apr 09 21:14:20 2016  
  

|                 | Reference  | Reading    |
|-----------------|------------|------------|
| Low Reference:  | 0.00 degF  | 0.00 degF  |
| High Reference: | 32.00 degF | 32.00 degF |
| Gain:           | 1.00       |            |
| Offset:         | 0.00       |            |
| Delta Spacing   | 1          |            |

## Inclinometer Calibration Report

Performed: Fri Dec 09 04:18:36 2016  
  

|                 | Low Read. | High Read. | Low Ref. | High Ref. |     |
|-----------------|-----------|------------|----------|-----------|-----|
| X Accelerometer | 205.00    | 1843.00    | -1.00    | 1.00      | gee |
| Y Accelerometer | 205.00    | 1843.00    | -1.00    | 1.00      | gee |
| Z Accelerometer |           |            |          |           | gee |

| Sensor | Offset (ft) | Schematic                                                                           | Description     | Length (ft) | O.D. (in) | Weight (lb) |
|--------|-------------|-------------------------------------------------------------------------------------|-----------------|-------------|-----------|-------------|
| PSTAT  | 39.60       |  | CHD-STD         | 0.50        | 1.69      | 1.00        |
| GR     | 38.32       |  | ADT1PULSE-A (1) | 0.83        | 3.50      | 10.00       |

|        |       |                                                                                                                             |                                            |       |      |        |
|--------|-------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-------|------|--------|
| TEMP   | 35.35 |                                                                                                                             | Pulsed Interface Tool #1                   |       |      |        |
| ASTAT  | 35.06 |                                                                                                                             | ADT1ADC-A (1)<br>Analog Interface #1       | 0.83  | 3.50 | 10.00  |
| GRD    | 34.81 |                                                                                                                             | ADT1SENSORS-A (1)                          | 4.54  | 3.50 | 10.00  |
| ACCY   | 34.65 |                                                                                                                             | NEU-G (Admyr)<br>Gearhart Epithermal       | 5.65  | 3.50 | 85.00  |
| ACCX   | 34.65 |                                                                                                                             |                                            |       |      |        |
| SSTAT  | 34.65 |                                                                                                                             |                                            |       |      |        |
| NEU    | 33.46 |                                                                                                                             |                                            |       |      |        |
| LStat  | 22.54 |                                                                                                                             |                                            |       |      |        |
| LS8    | 21.88 |                                                                                                                             |                                            |       |      |        |
| LS7    | 21.88 |                                                                                                                             |                                            |       |      |        |
| LS6    | 21.88 |                                                                                                                             | ADT1LITH-A (1)<br>Admyr Litho Density Tool | 9.29  | 3.50 | 240.00 |
| LS5    | 21.88 |                                                                                                                             |                                            |       |      |        |
| LS4    | 21.88 |                                                                                                                             |                                            |       |      |        |
| LS3    | 21.88 |                                                                                                                             |                                            |       |      |        |
| LS2    | 21.88 |                                                                                                                             |                                            |       |      |        |
| LS1    | 21.88 |                                                                                                                             |                                            |       |      |        |
| LSV    | 21.88 |                                                                                                                             |                                            |       |      |        |
| LSD    | 21.86 |                                                                                                                             |                                            |       |      |        |
| SSV    | 21.67 |                                                                                                                             |                                            |       |      |        |
| SS8    | 21.67 |                                                                                                                             |                                            |       |      |        |
| SS7    | 21.67 |                                                                                                                             |                                            |       |      |        |
| SS6    | 21.67 |                                                                                                                             | DIL-ADM (1989)<br>Dual Induction           | 19.71 | 4.00 | 300.00 |
| SS5    | 21.67 |                                                                                                                             |                                            |       |      |        |
| SS4    | 21.67 |                                                                                                                             |                                            |       |      |        |
| SS3    | 21.67 |                                                                                                                             |                                            |       |      |        |
| SS2    | 21.67 |                                                                                                                             |                                            |       |      |        |
| SS1    | 21.67 |                                                                                                                             |                                            |       |      |        |
| DCAL   | 21.61 |                                                                                                                             |                                            |       |      |        |
| SSD    | 21.27 |                                                                                                                             |                                            |       |      |        |
| SP     | 10.60 |                                                                                                                             |                                            |       |      |        |
| CILD   | 10.60 |                                                                                                                             |                                            |       |      |        |
| CILM   | 6.89  | Dataset: taoswebber34-2oh.db: field/well/run1/pass1.1<br>Total length: 39.69 ft<br>Total weight: 656.00 lb<br>O.D.: 4.00 in |                                            |       |      |        |
| RLL3   | 1.70  |                                                                                                                             |                                            |       |      |        |
| TR_Mon | 0.00  |                                                                                                                             |                                            |       |      |        |