



## DUAL INDUCTION LOG

|                              |                         |                            |                            |
|------------------------------|-------------------------|----------------------------|----------------------------|
| Company Palomino Petroleum   |                         | Company Palomino Petroleum |                            |
| Well J & B Wilkinson #1      | Well J & B Wilkinson #1 |                            |                            |
| Field Wildcat                | Field Wildcat           |                            |                            |
| County Scott                 | County Scott            |                            |                            |
| State Kansas                 | State Kansas            |                            |                            |
| Location:                    |                         | API #: 15 171 21166        | Other Services<br>LD<br>ML |
| SEC 21 TWP 17S RGE 34W       |                         | Elevation                  |                            |
| Permanent Datum              | Ground Level            | Elevation                  | 3061'                      |
| Log Measured From            | KB 5' AGL               | K.B. 3066'                 |                            |
| Drilling Measured From       | KB                      | D.F. 3065'                 |                            |
| Date 3-14-16                 |                         | G.L. 3061'                 |                            |
| Run Number                   | One                     |                            |                            |
| Depth Driller                | 4900'                   |                            |                            |
| Depth Logger                 | 4900'                   |                            |                            |
| Bottom Logged Interval       | 4838'                   |                            |                            |
| Top Log Interval             | 330'                    |                            |                            |
| Casing Driller               | 345'                    |                            |                            |
| Casing Logger                | 345'                    |                            |                            |
| Bit Size                     | 7 7/8"                  |                            |                            |
| Type Fluid in Hole           | Chemical                |                            |                            |
| Density / Viscosity          | 9.4/55                  |                            |                            |
| pH / Fluid Loss              | 10.5/8.8                |                            |                            |
| Source of Sample             | Pit                     |                            |                            |
| Rm @ Meas. Temp              | 1.9@65degf              |                            |                            |
| Rmf @ Meas. Temp             | 1.52@62degf             |                            |                            |
| Rmc @ Meas. Temp             | 2.43@62degf             |                            |                            |
| Source of Rmf / Rmc          | Calculated              |                            |                            |
| Rm @ BHT                     | .92@128degf             |                            |                            |
| Time Circulation Stopped     | 10:00 a.m.              |                            |                            |
| Time Logger on Bottom        | 12:00 p.m.              |                            |                            |
| Maximum Recorded Temperature | 128degf                 |                            |                            |
| Equipment Number             | T127                    |                            |                            |
| Location                     | Hays, KS                |                            |                            |
| Recorded By                  | L. Smith                |                            |                            |
| Witnessed By                 | Mr. Ryan Seib           |                            |                            |

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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

West of Scott City To Dakota rd., 1 N,1W,5.5 N, W into



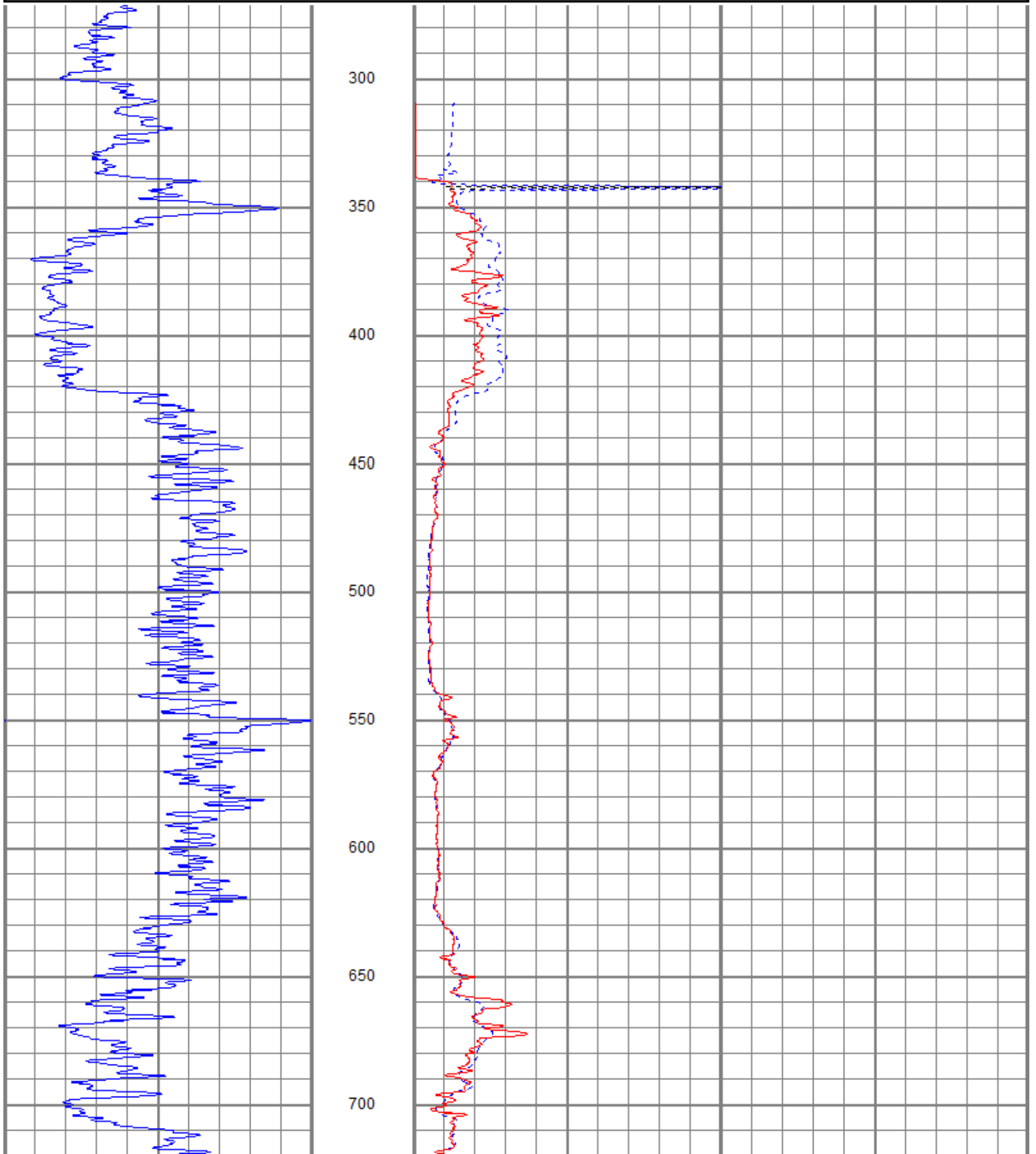
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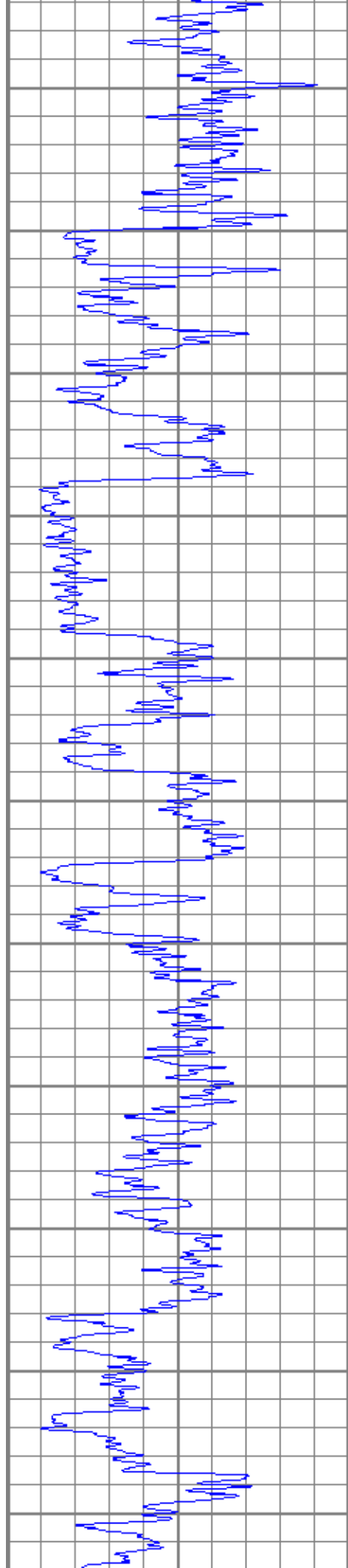
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Dataset Pathname pass2.1  
Presentation Format kdi11inn  
Dataset Creation Mon Mar 14 15:42:43 2016  
Charted by Depth in Feet scaled 1:600

0 GR (GAPI) 150

1000 CILD (mmho/m) 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 |





750

800

850

900

950

1000

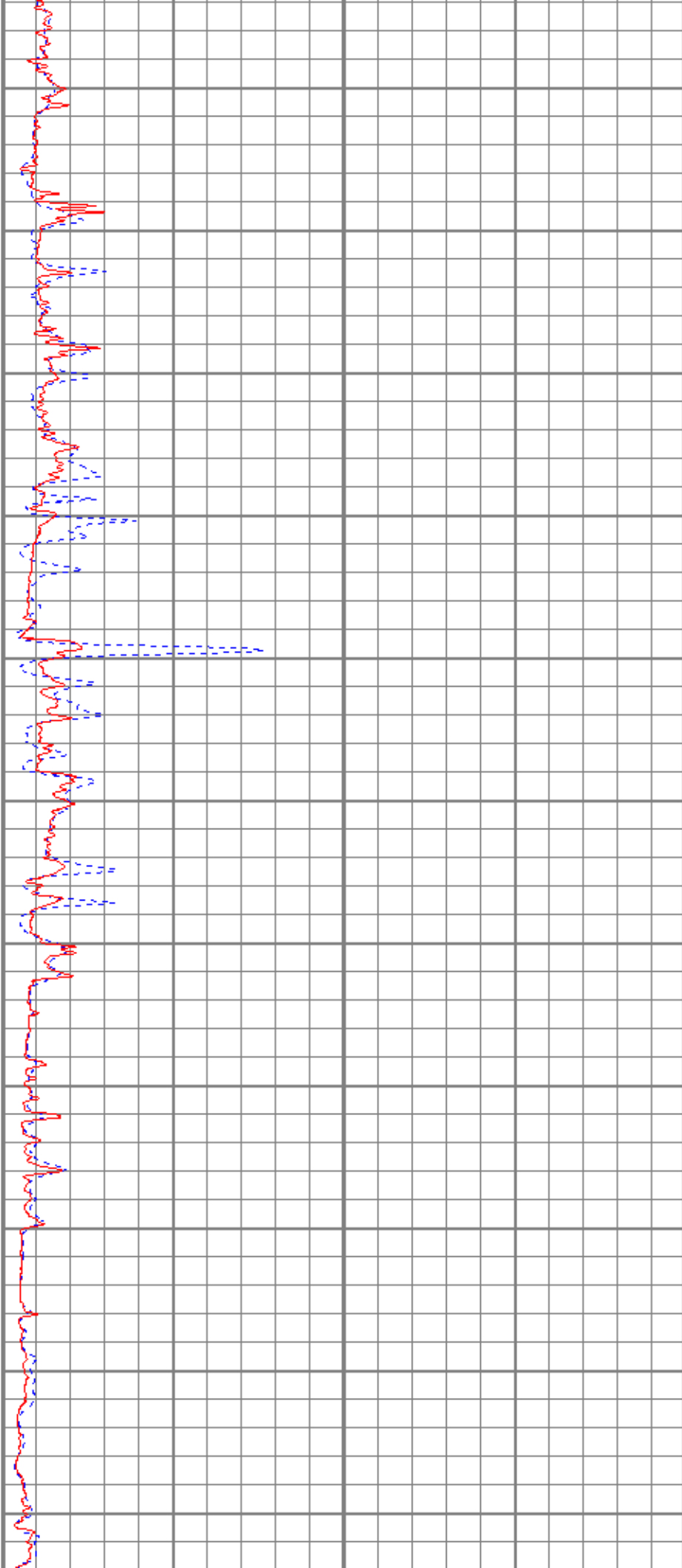
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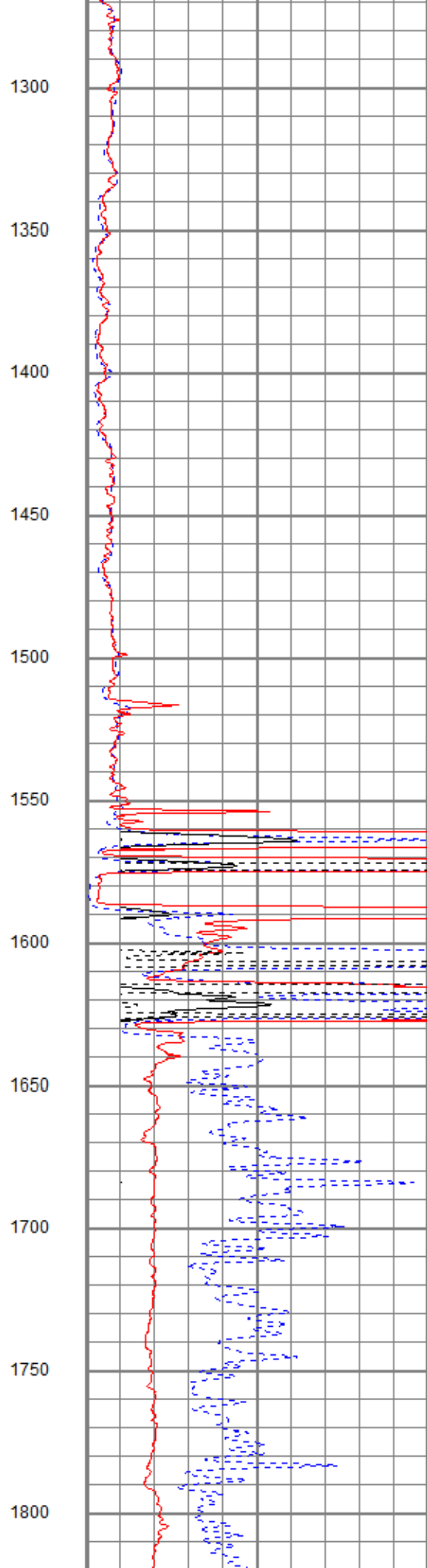
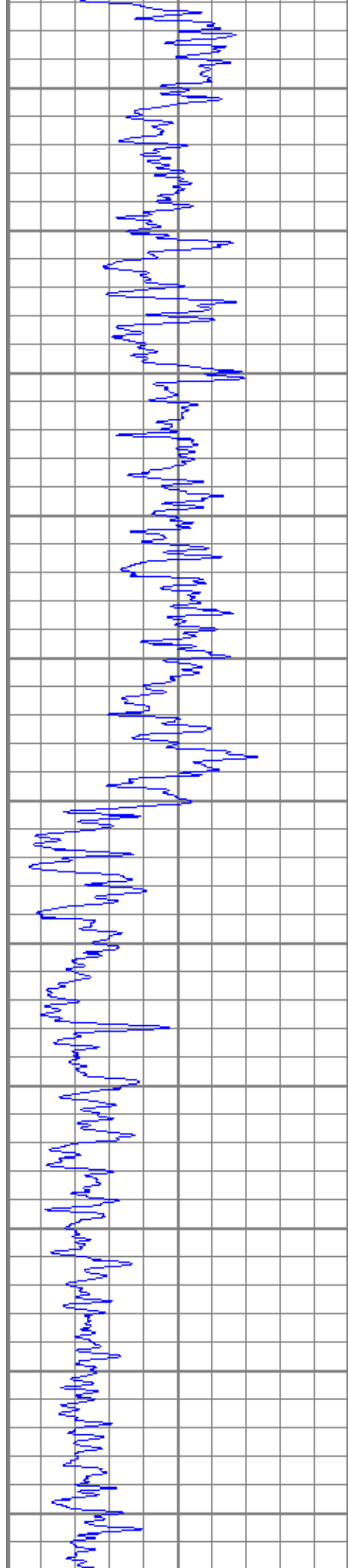
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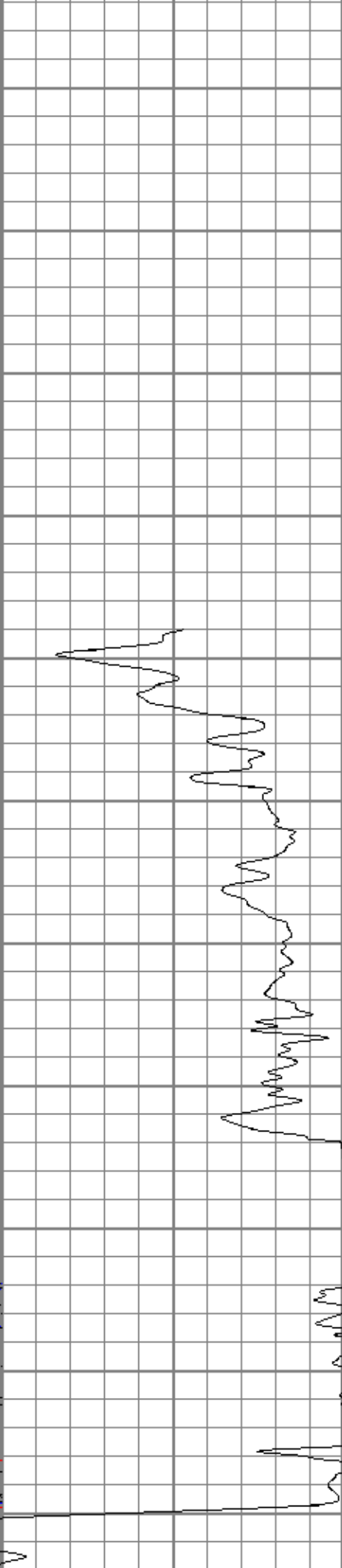
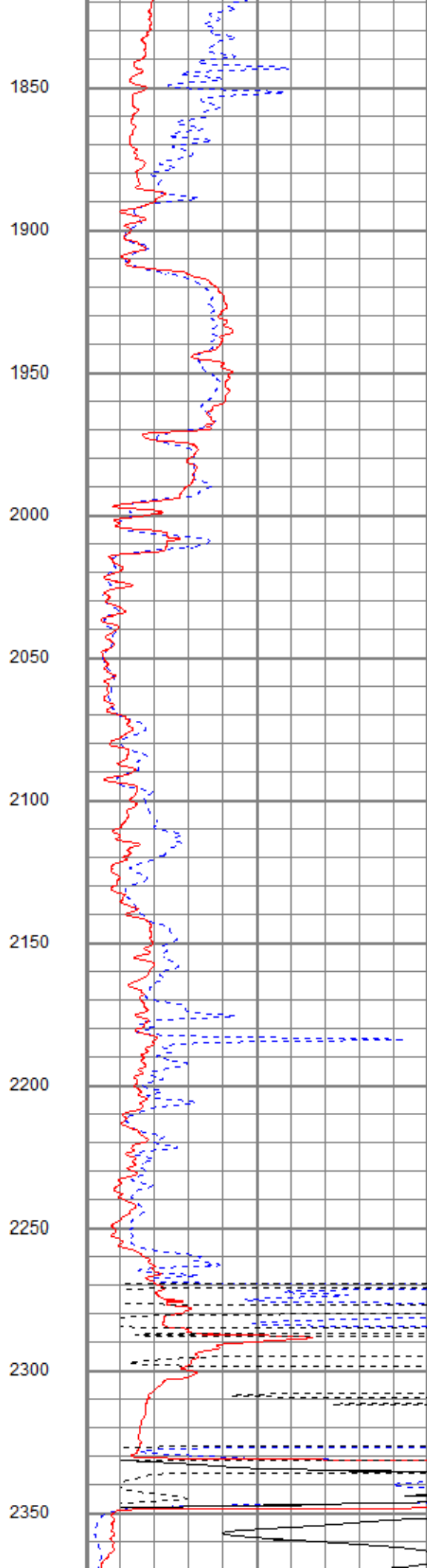
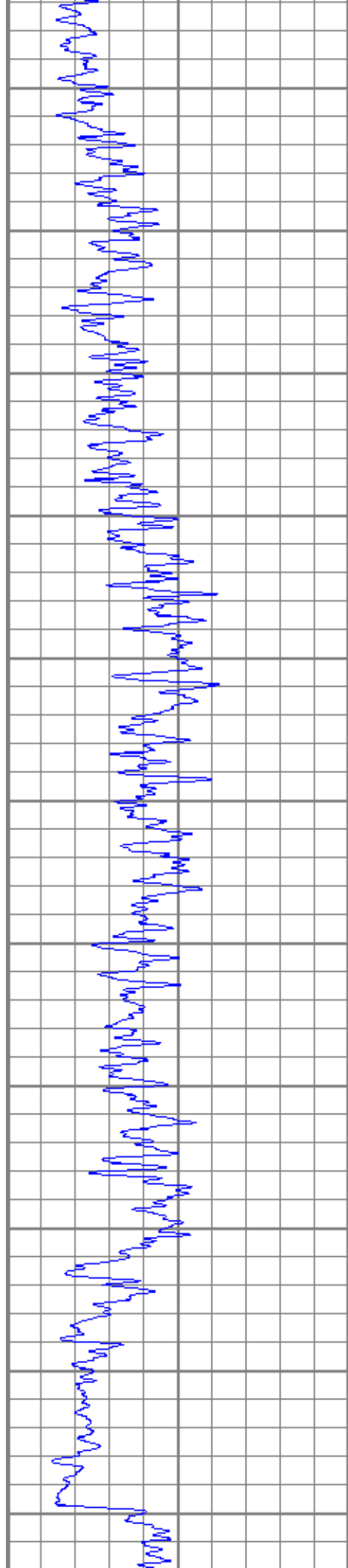
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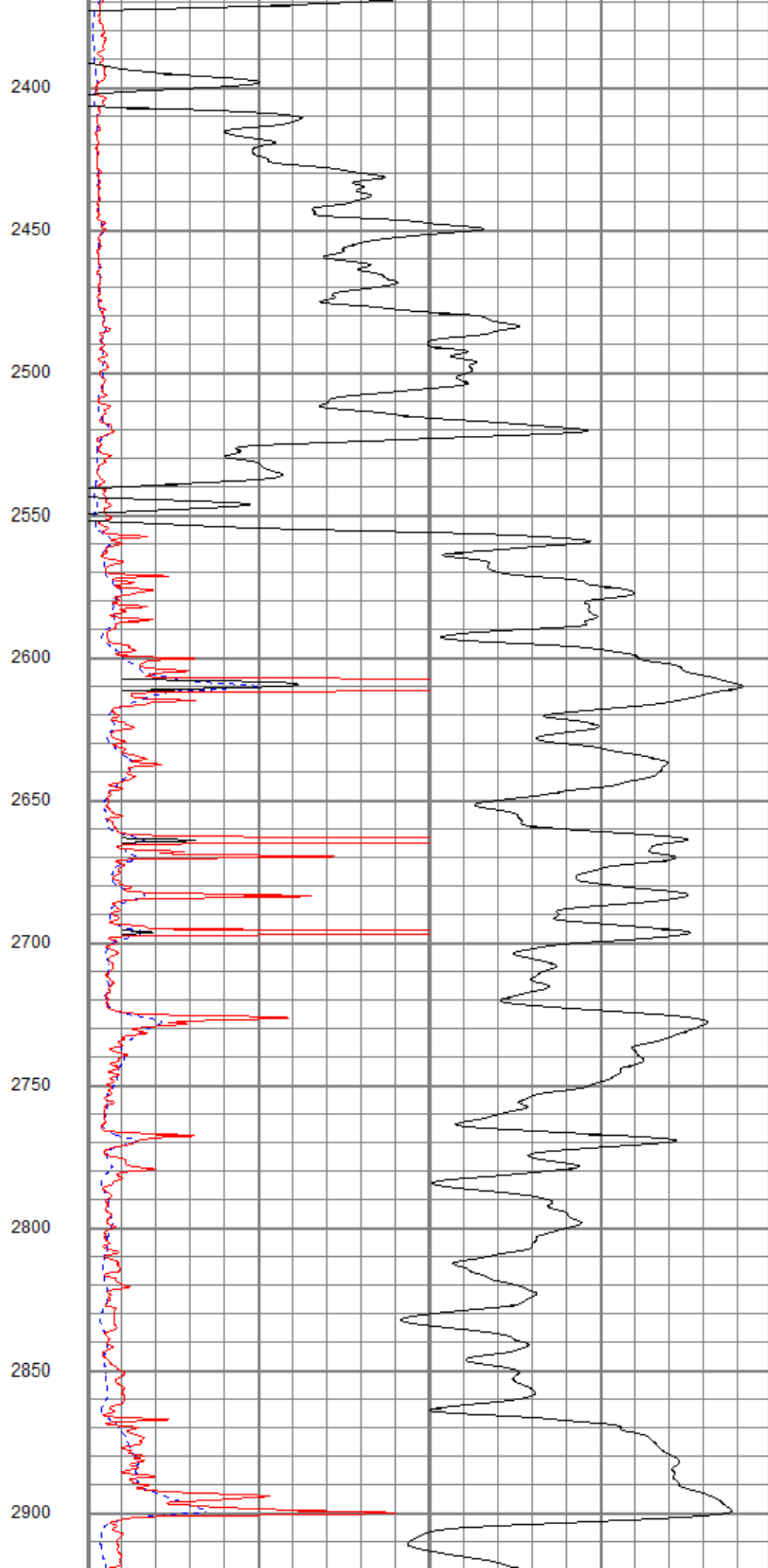
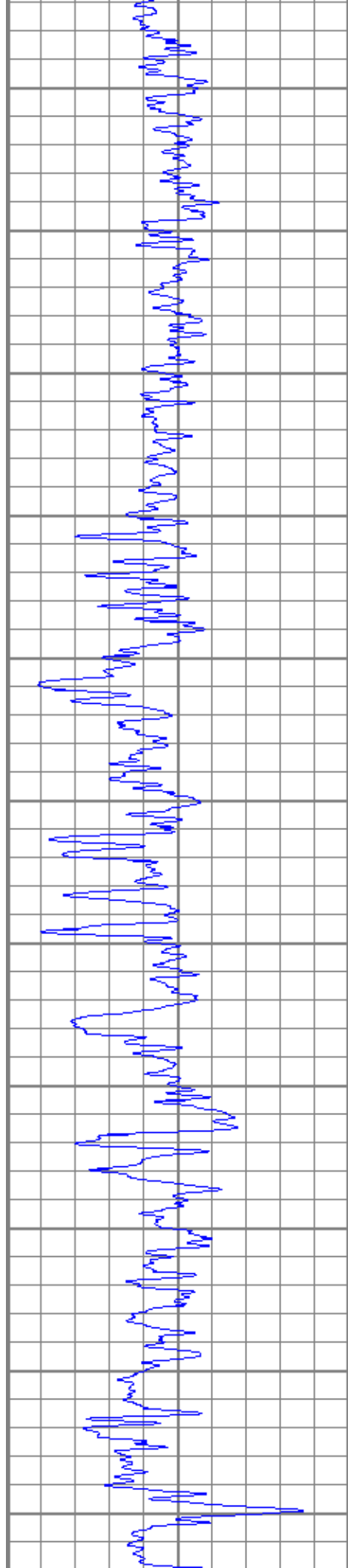
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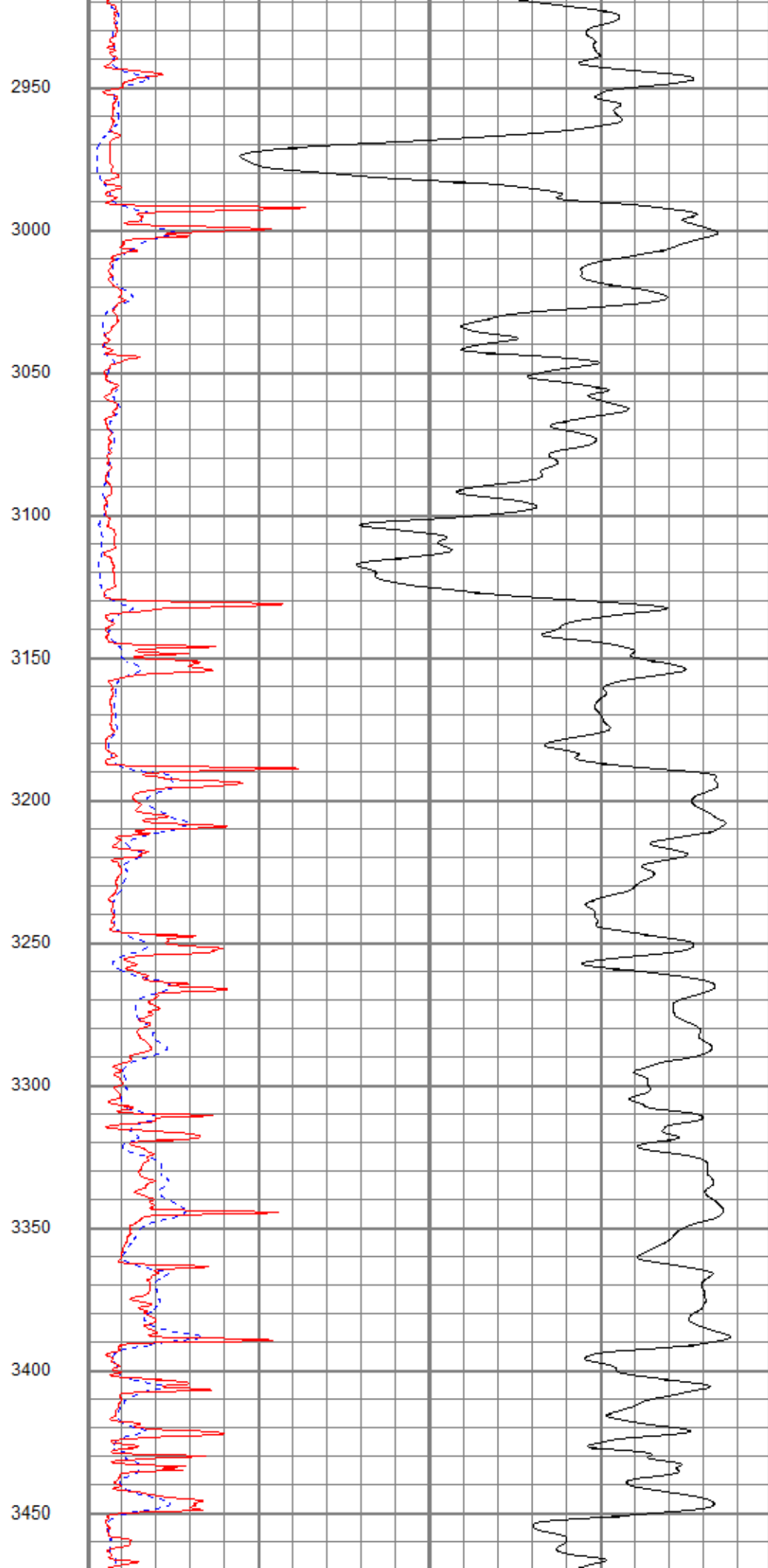
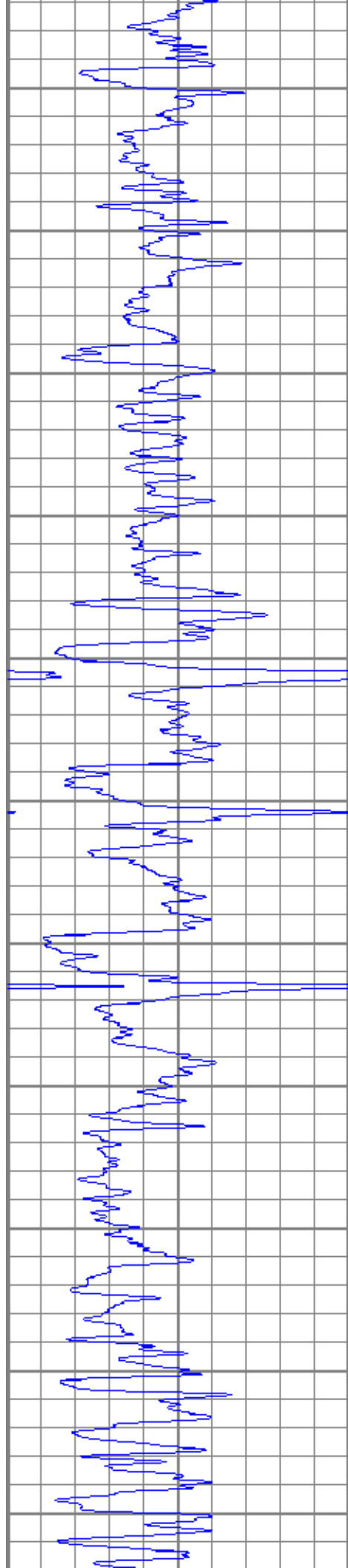
1250

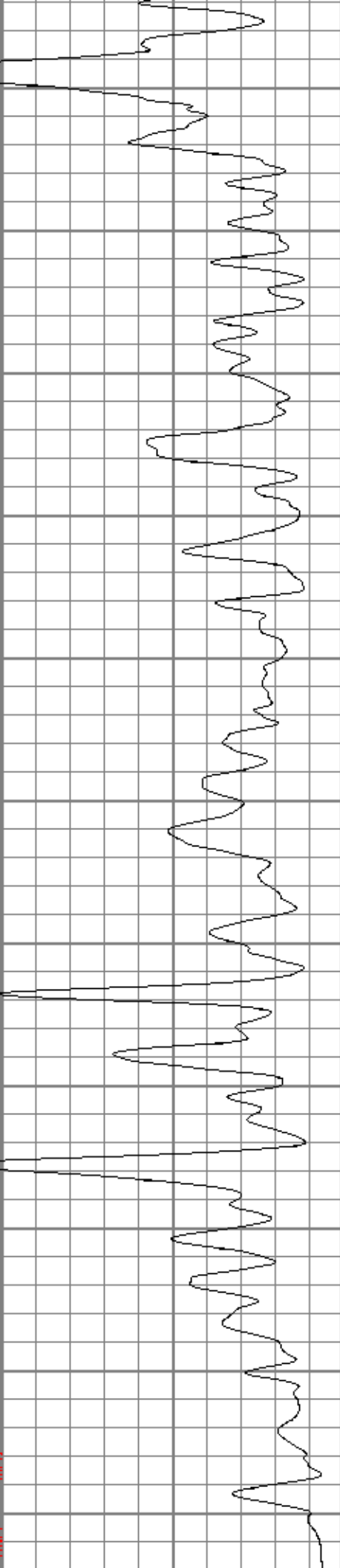
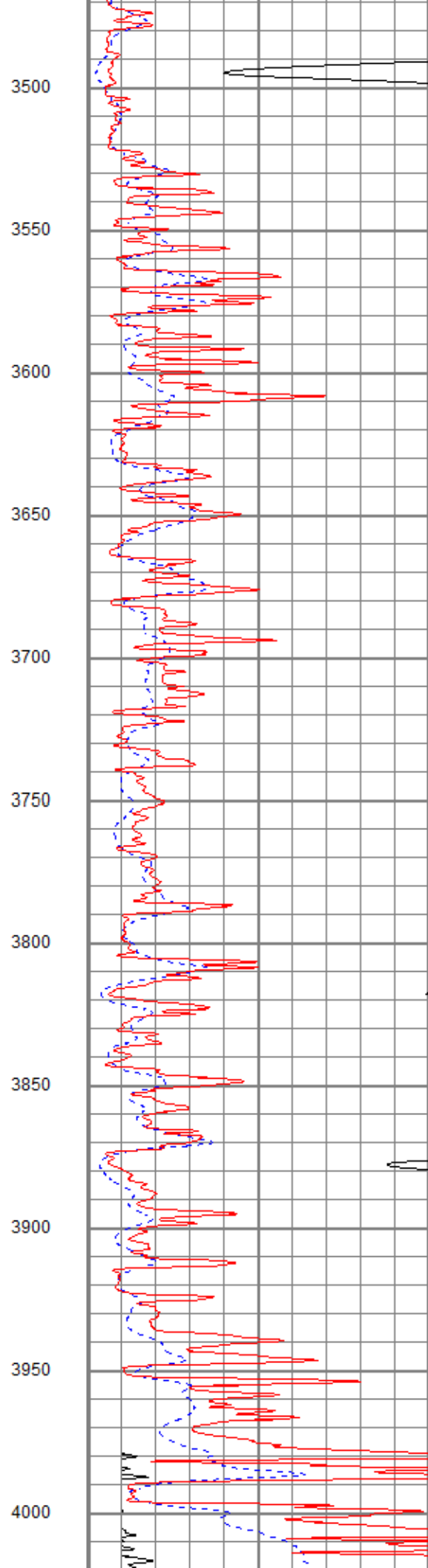
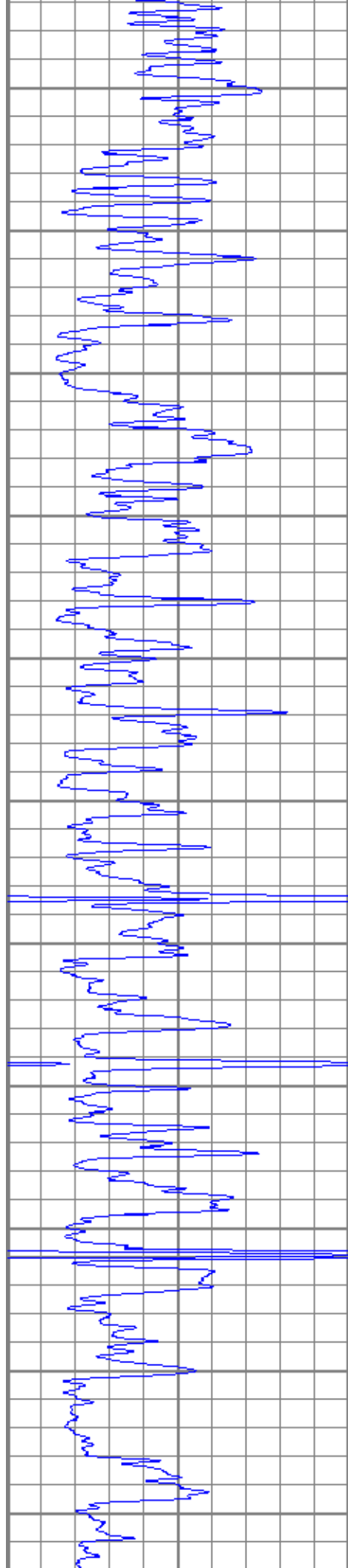


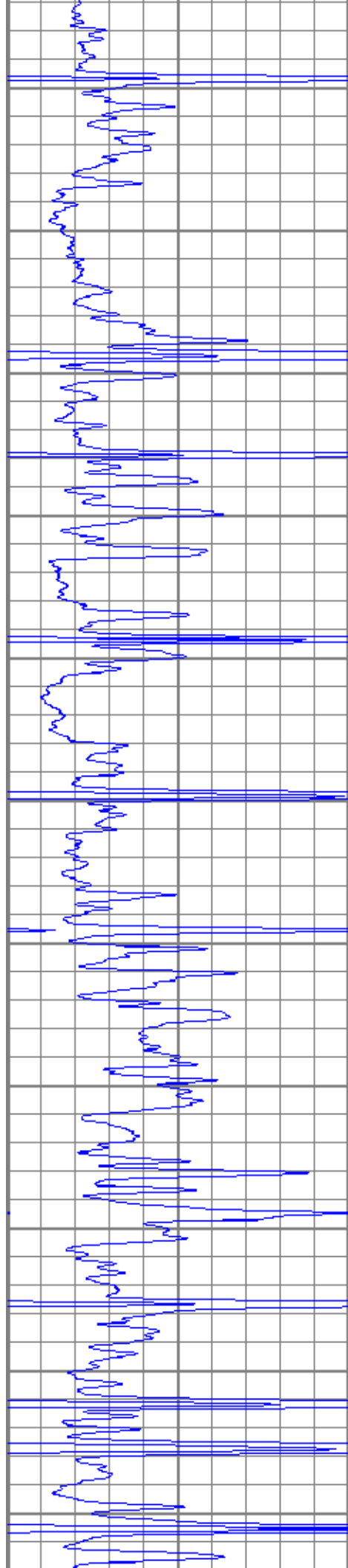












4050

4100

4150

4200

4250

4300

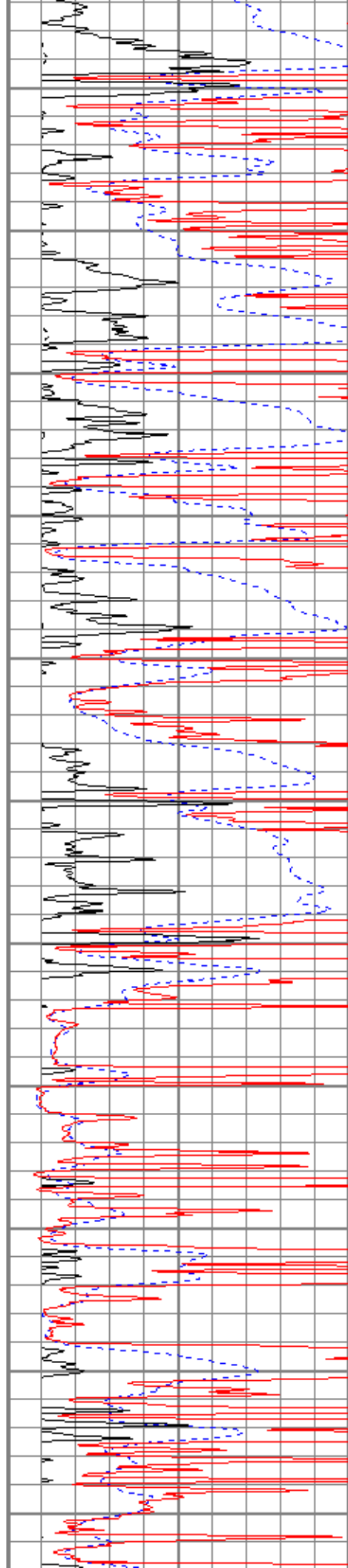
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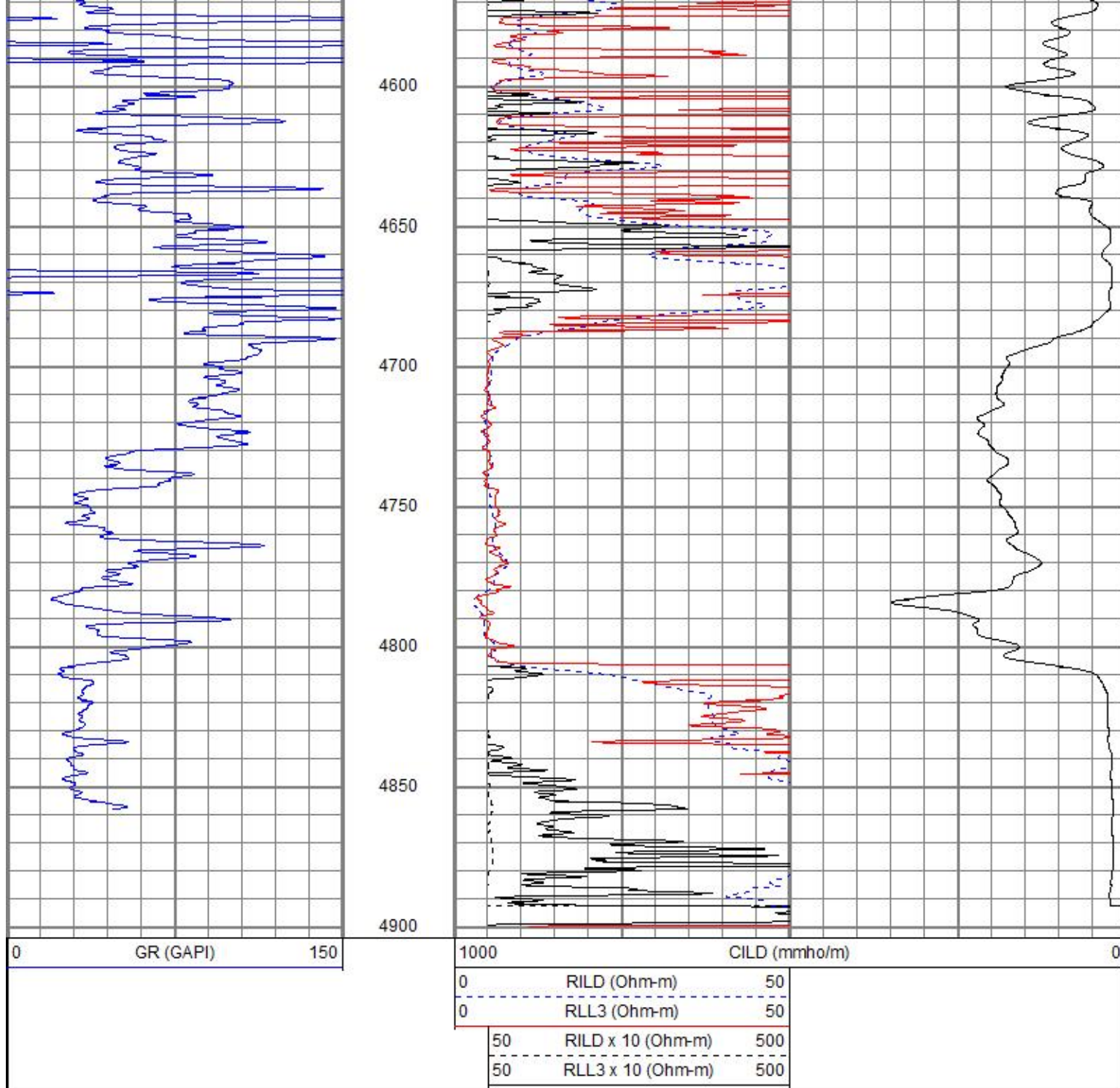
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4450

4500

4550



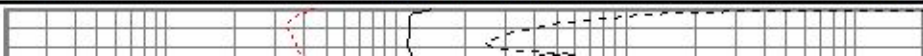
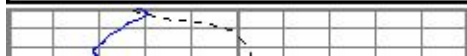


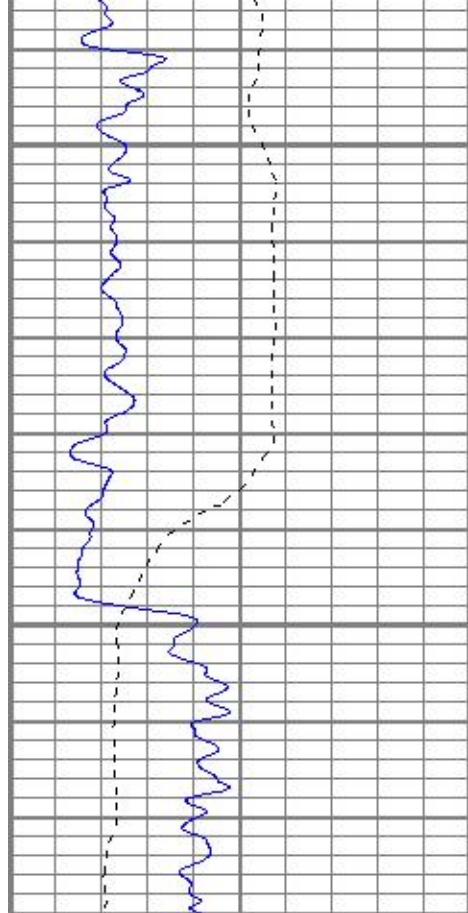
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Database File j&bwilkinson#1oh.db  
 Dataset Pathname pass2.1  
 Presentation Format kdil  
 Dataset Creation Mon Mar 14 15:42:43 2016  
 Charted by Depth in Feet scaled 1:240

|      |           |     |
|------|-----------|-----|
| 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 |

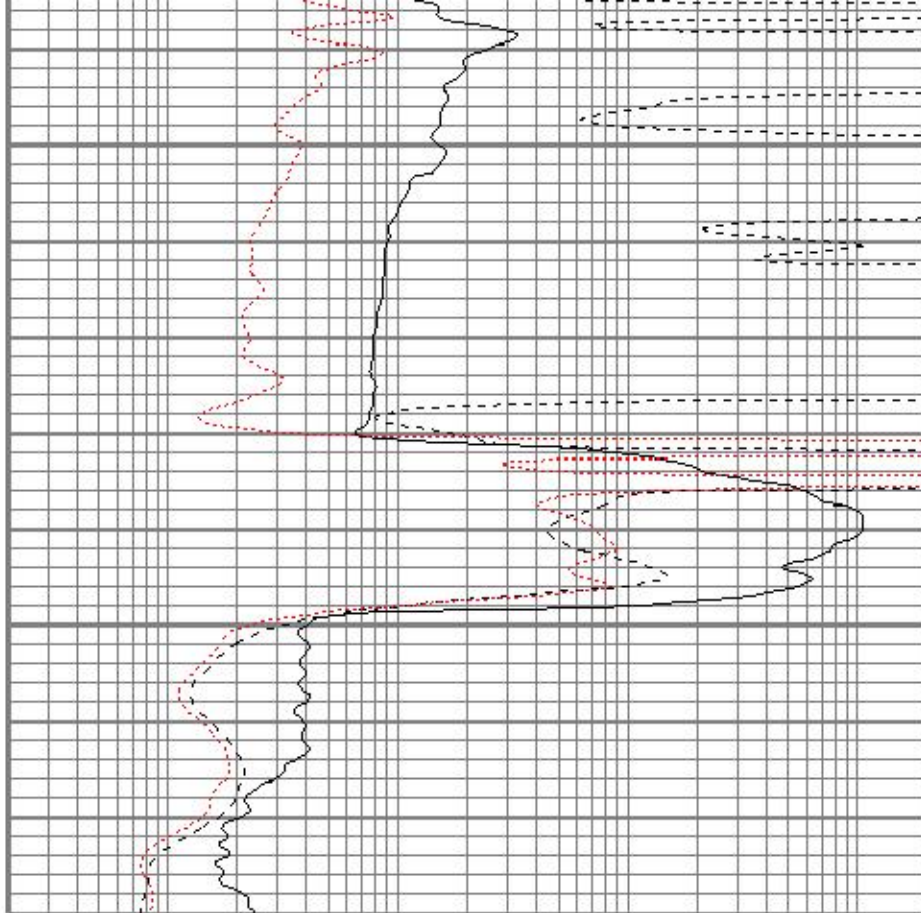




2300

2350

|      |           |     |
|------|-----------|-----|
| 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 |

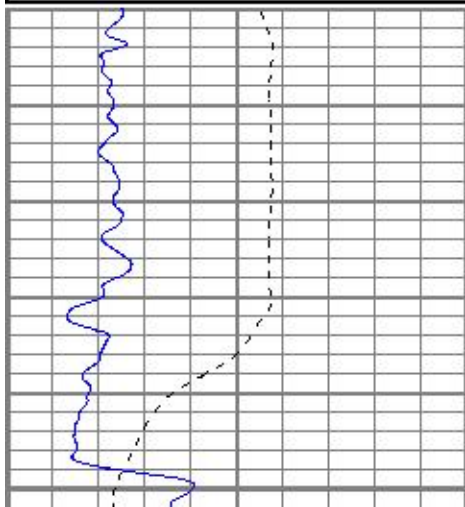


# Main Pass

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 Dataset Pathname pass2.1  
 Presentation Format kdil  
 Dataset Creation Mon Mar 14 15:42:43 2016  
 Charted by Depth in Feet scaled 1:240

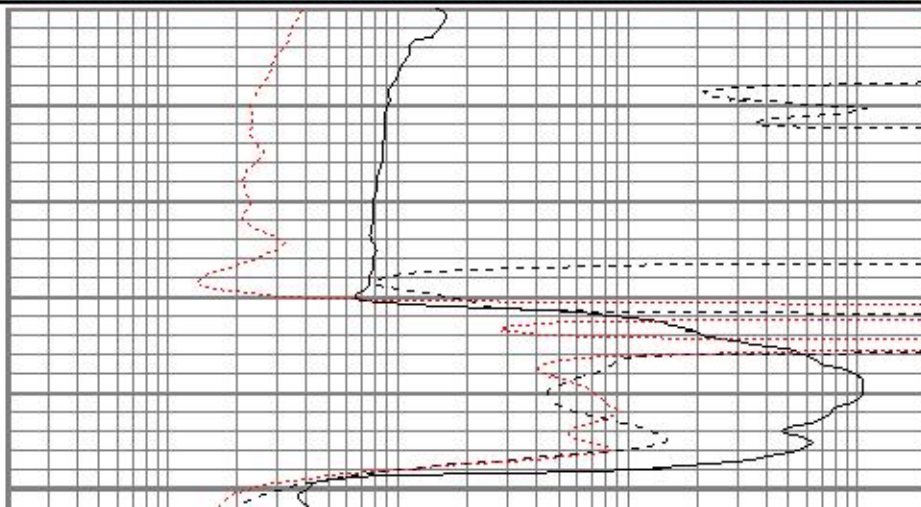
|      |           |     |
|------|-----------|-----|
| 0    | GR (GAPI) | 150 |
| -100 | SP (mV)   | 100 |

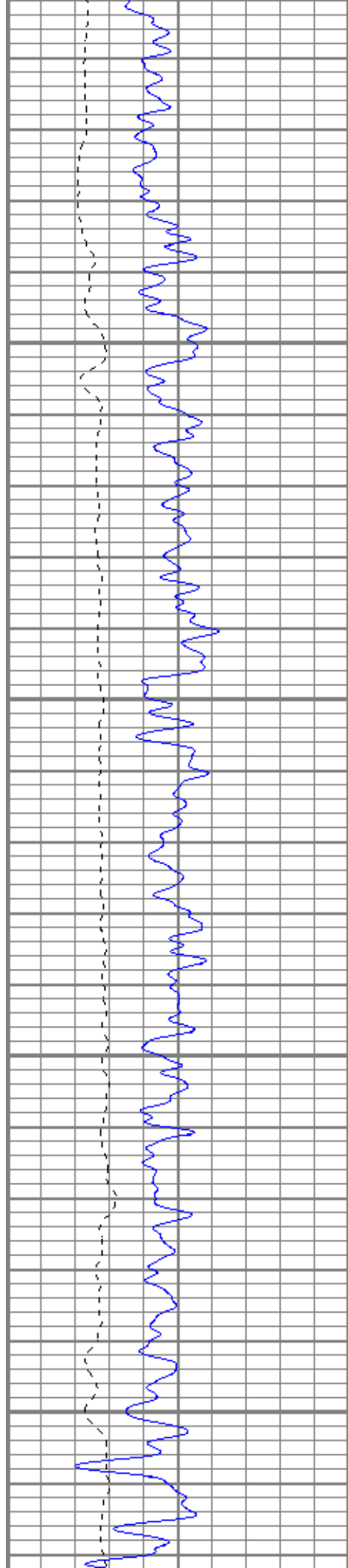
|     |              |      |
|-----|--------------|------|
| 0.2 | RILD (Ohm-m) | 2000 |
| 0.2 | RLL3 (Ohm-m) | 2000 |
| 0.2 | RILM (Ohm-m) | 2000 |



2300

2350



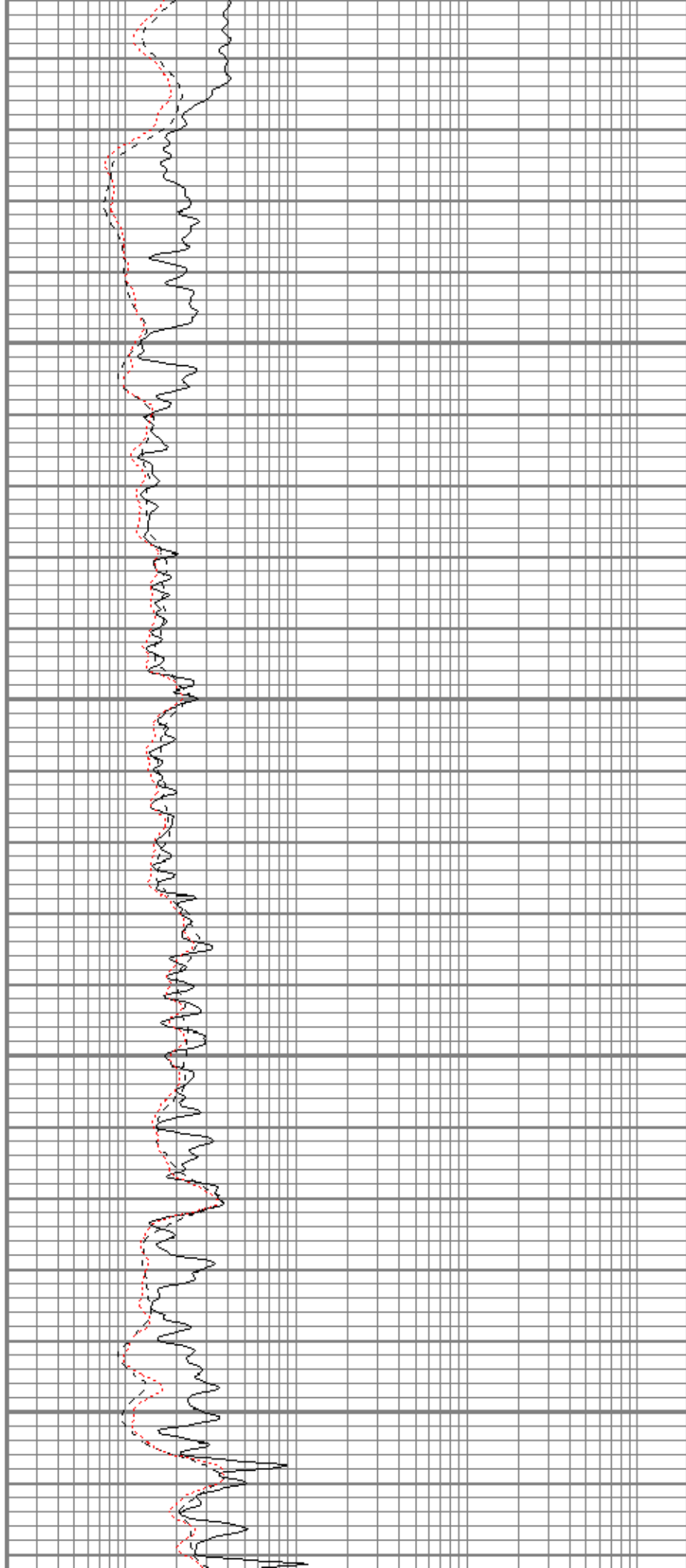


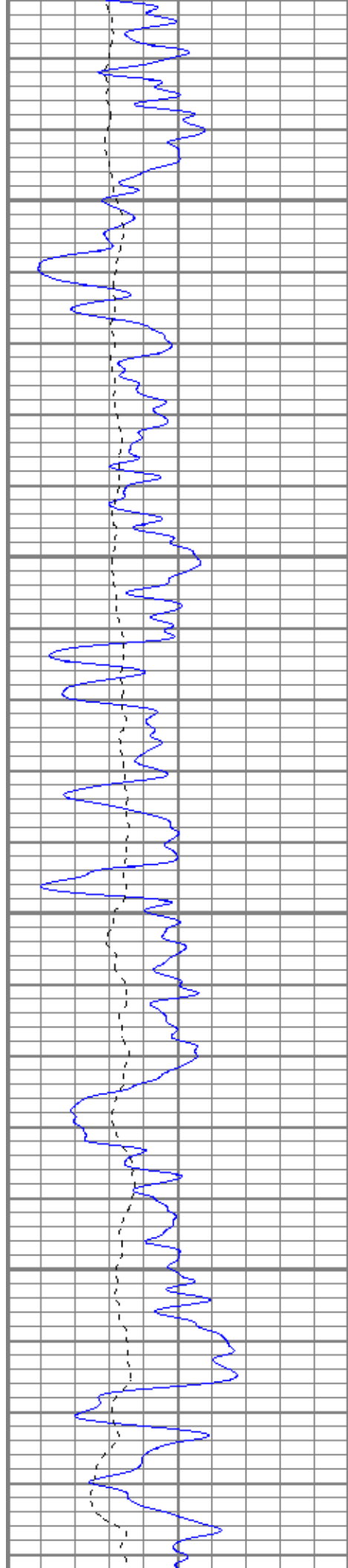
2400

2450

2500

2550



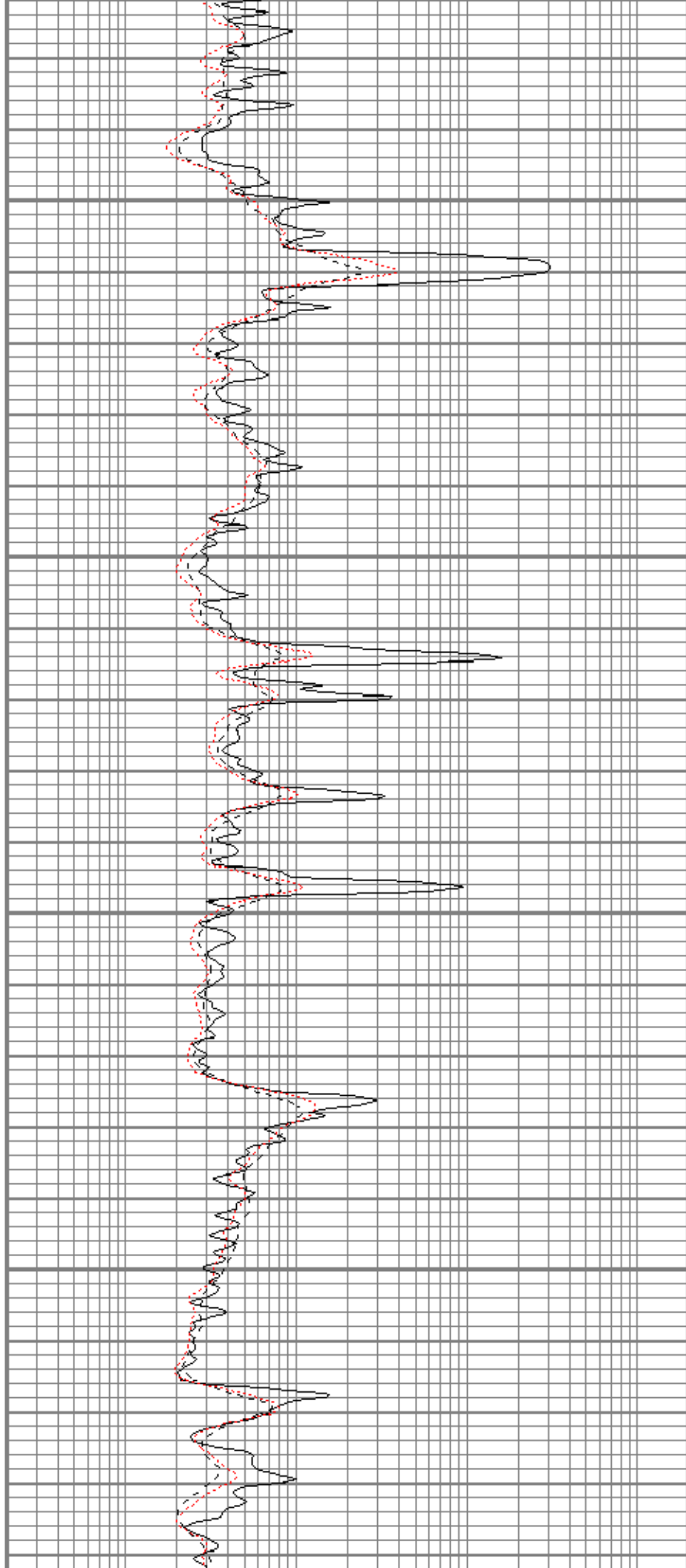


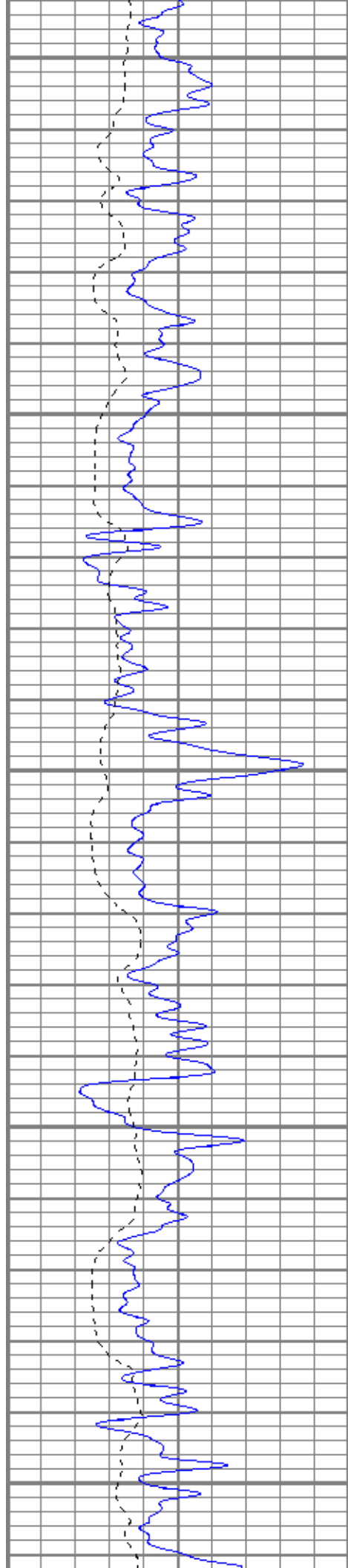
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2650

2700

2750





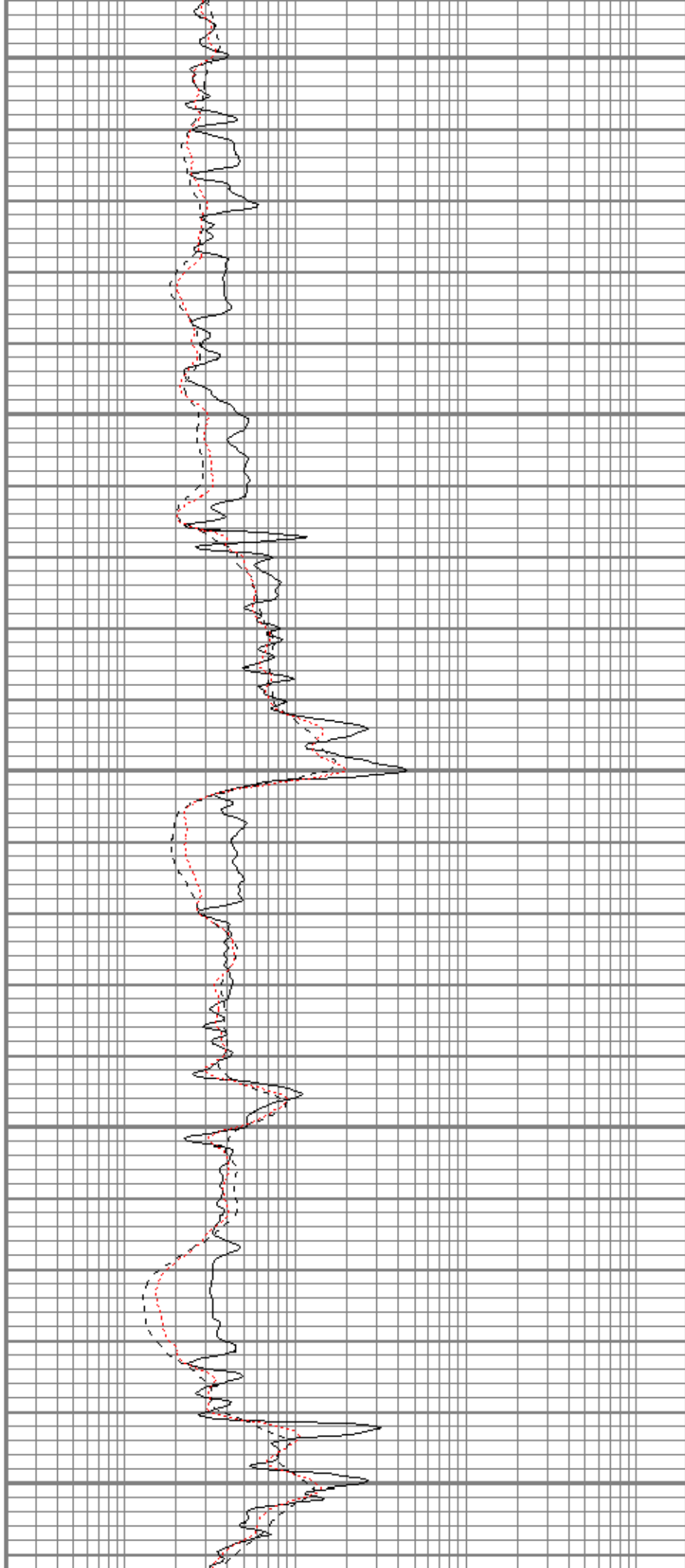
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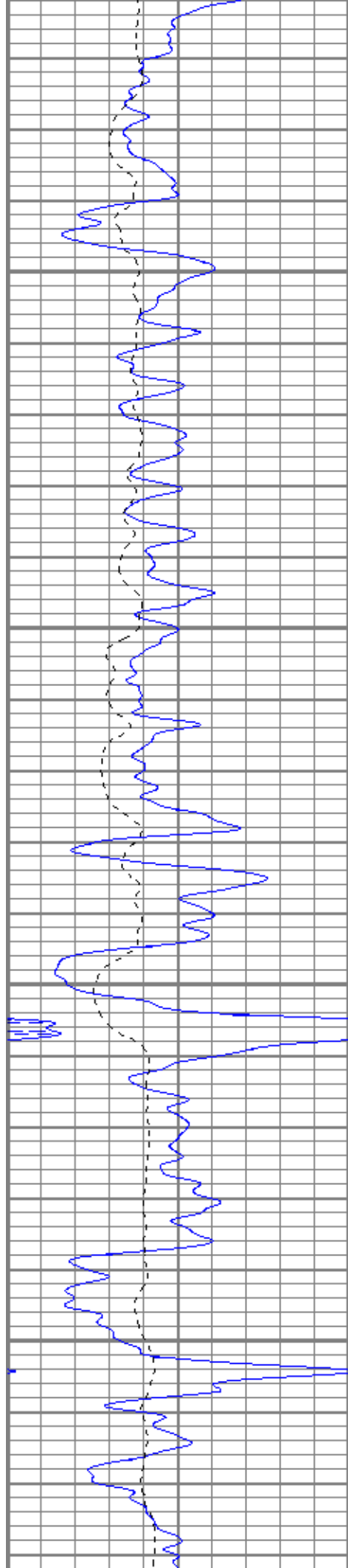
2850

2900

2950

3000



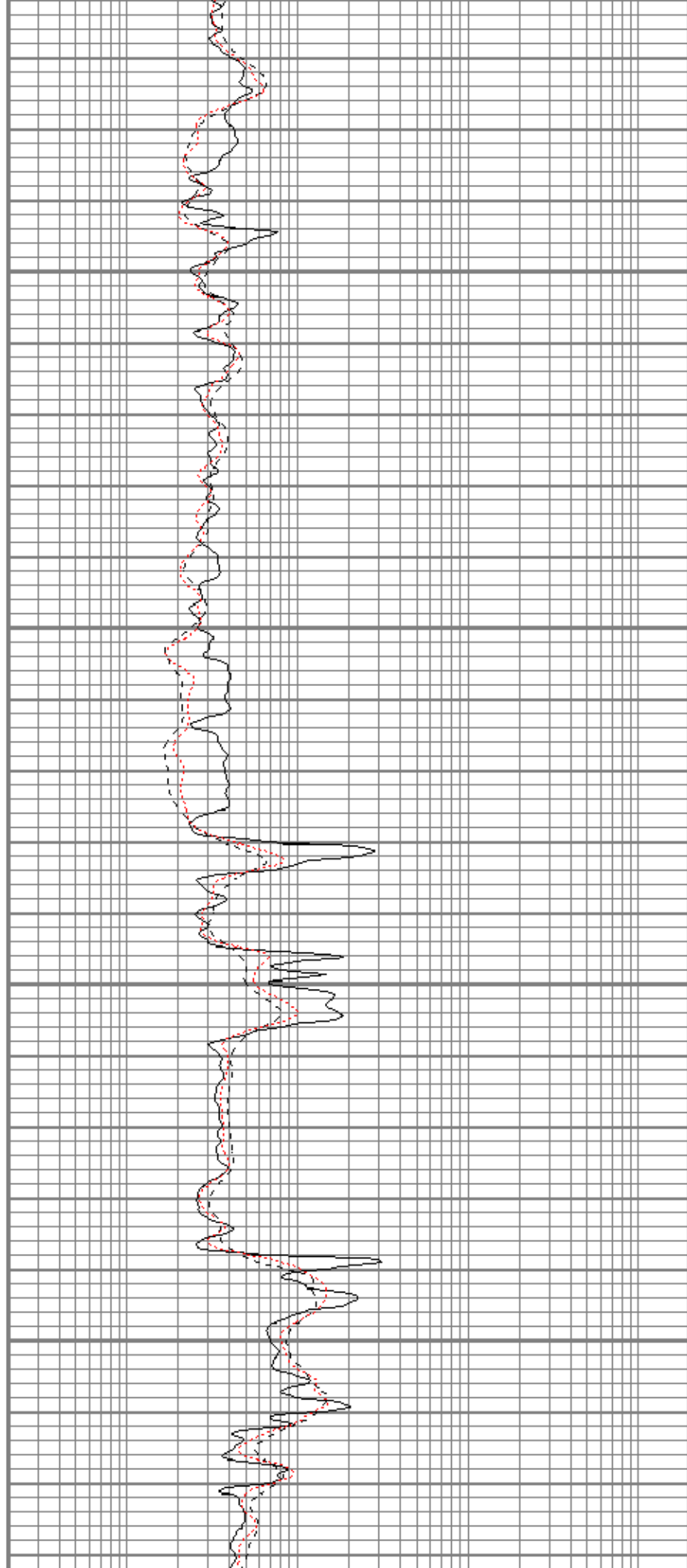


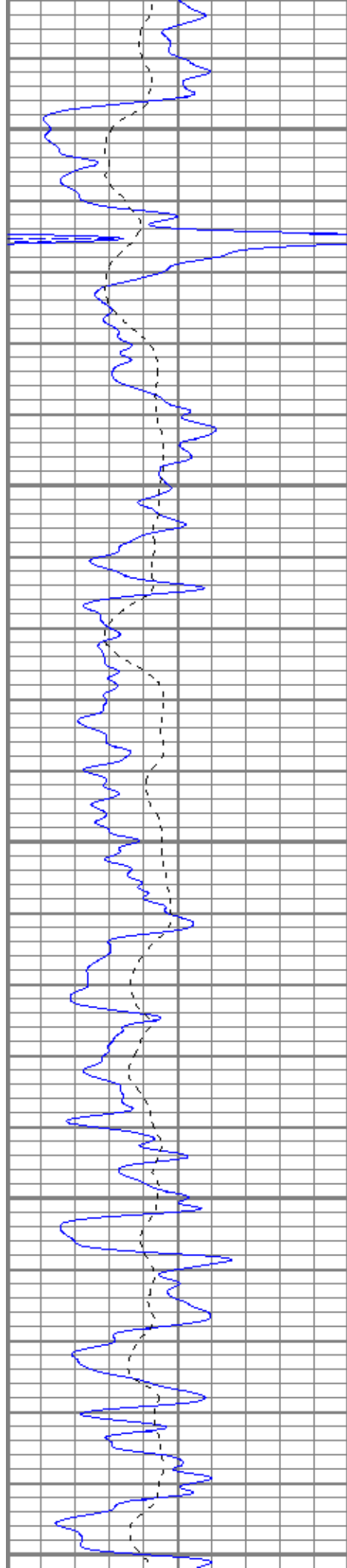
3050

3100

3150

3200





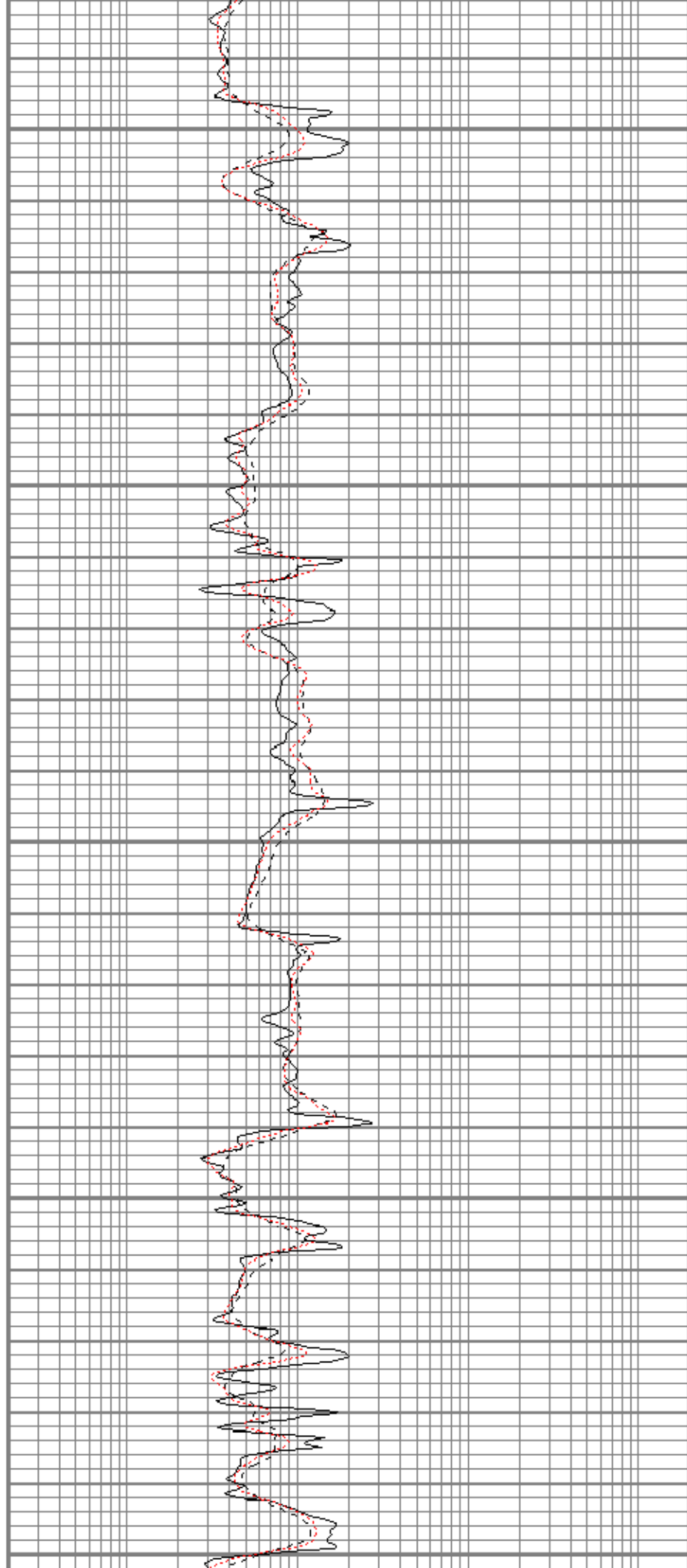
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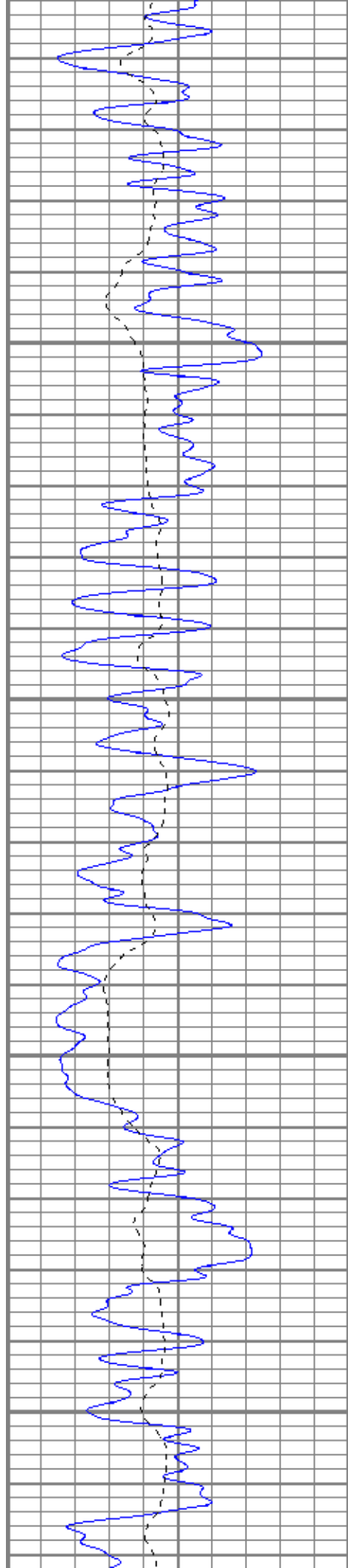
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3350

3400

3450



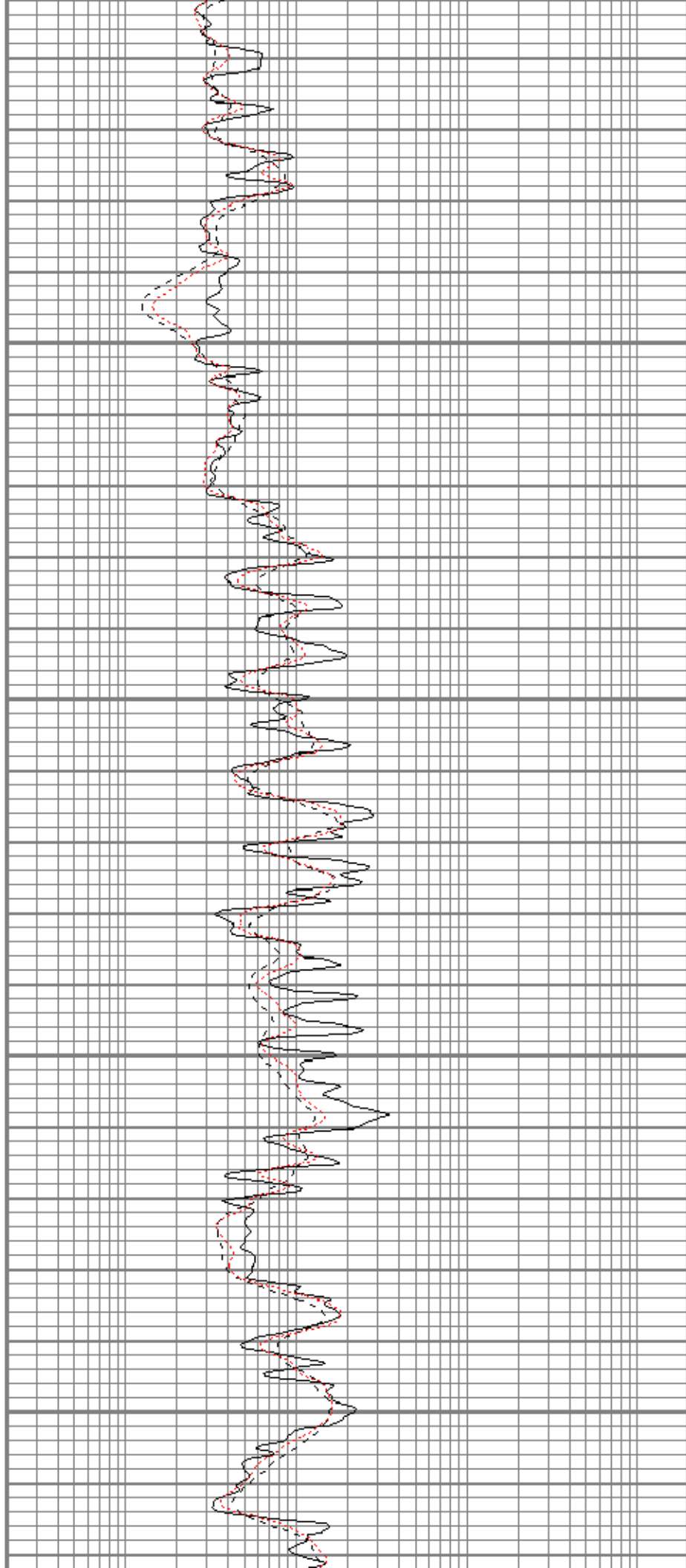


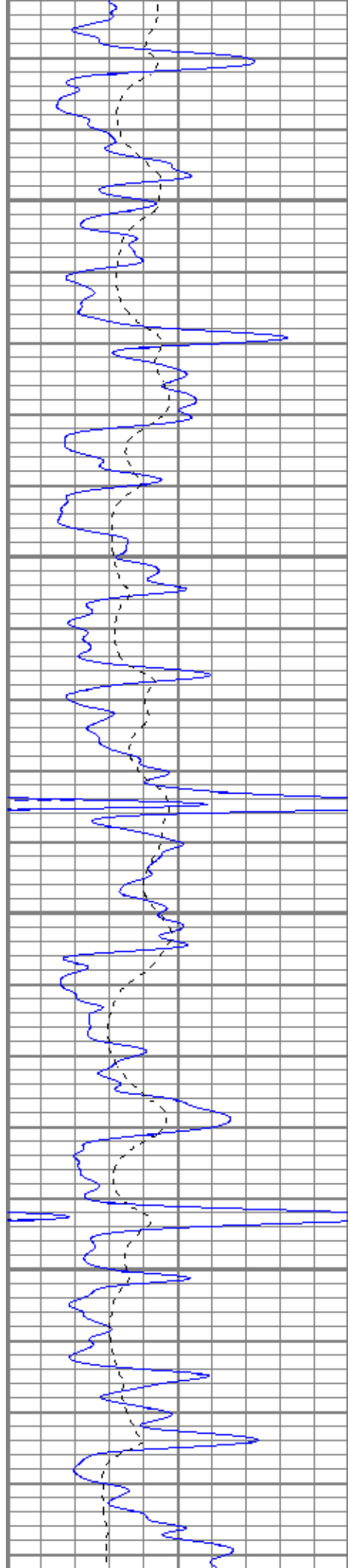
3500

3550

3600

3650



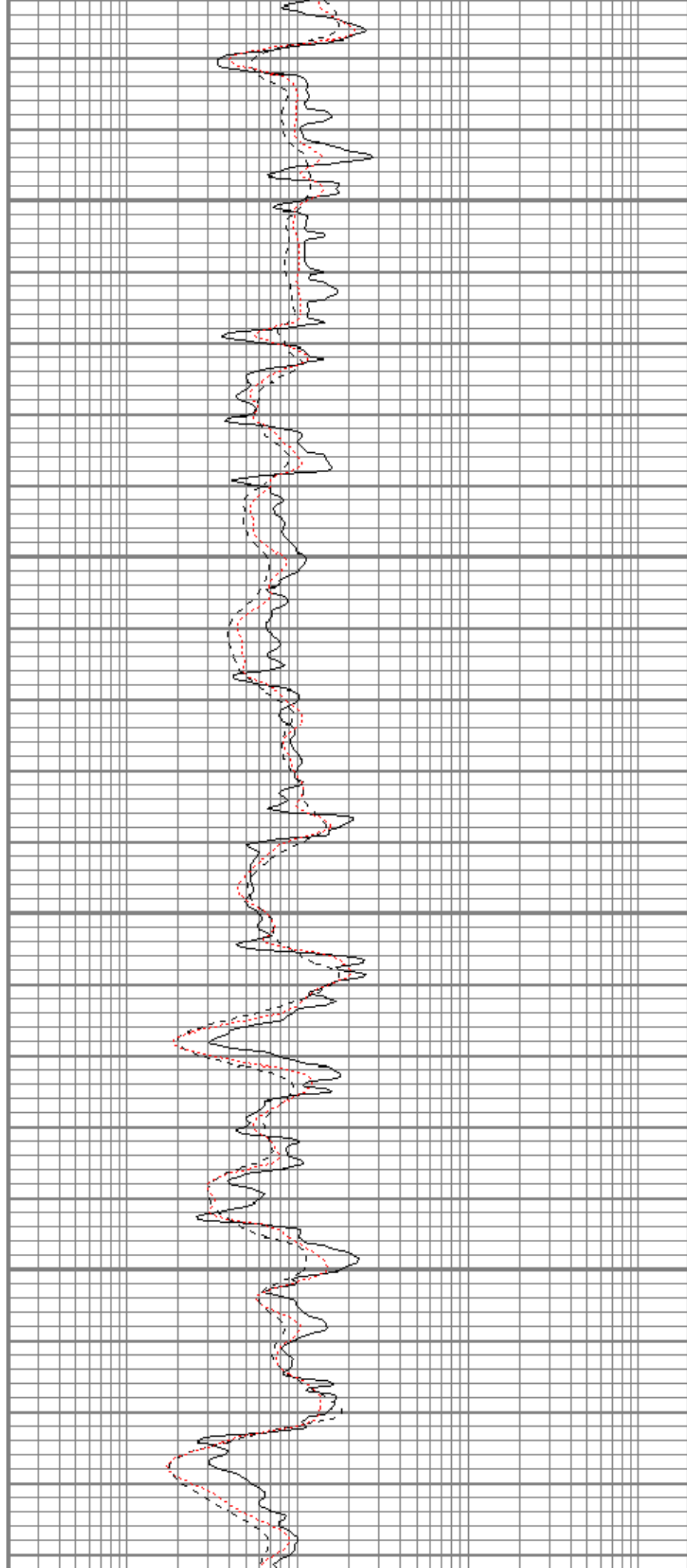


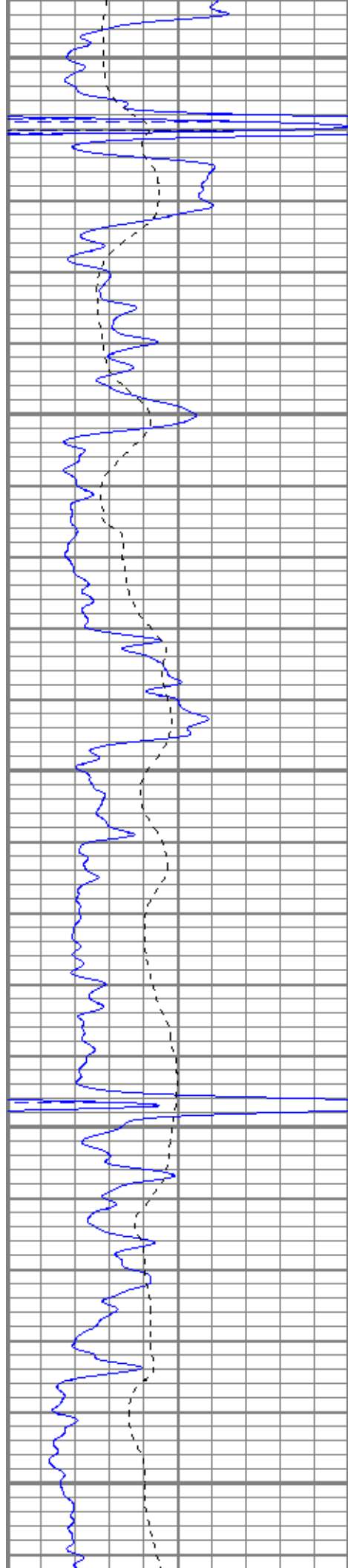
3700

3750

3800

3850





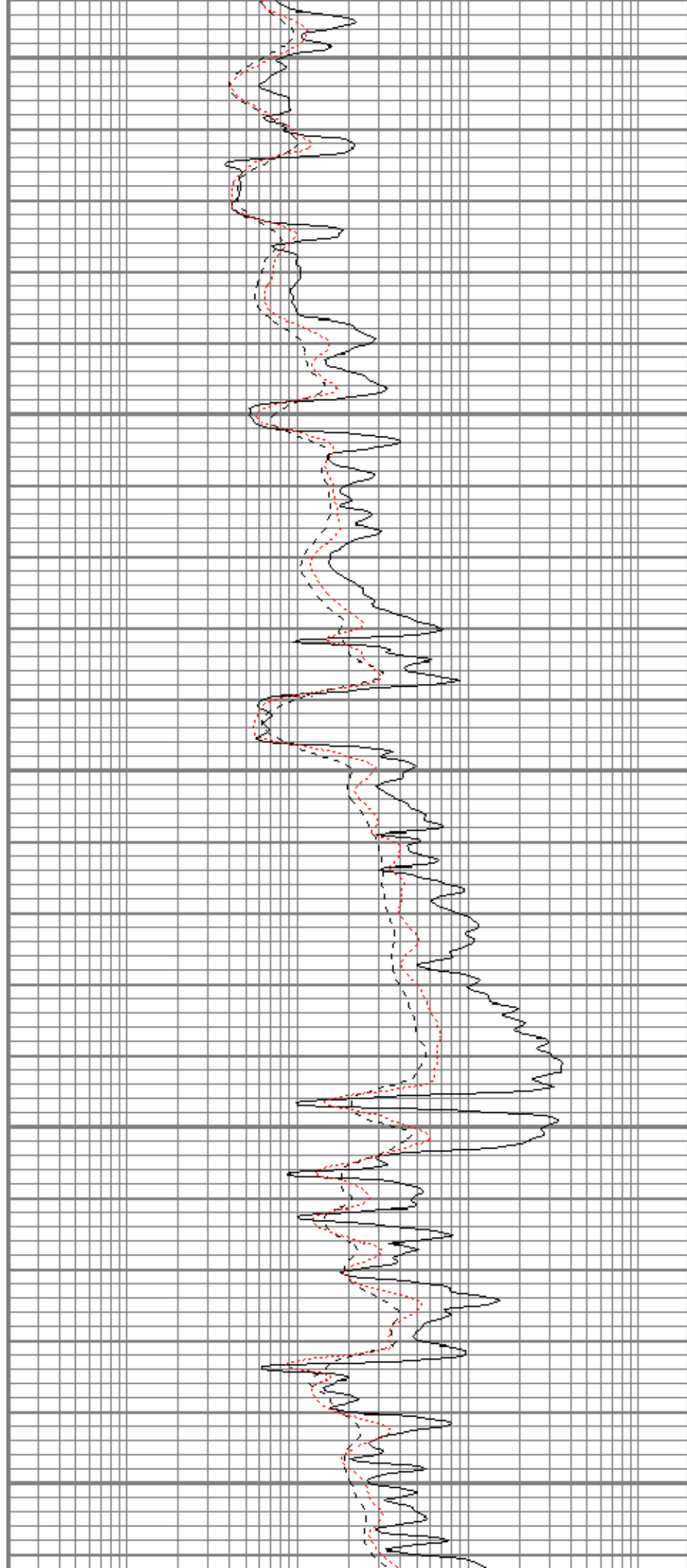
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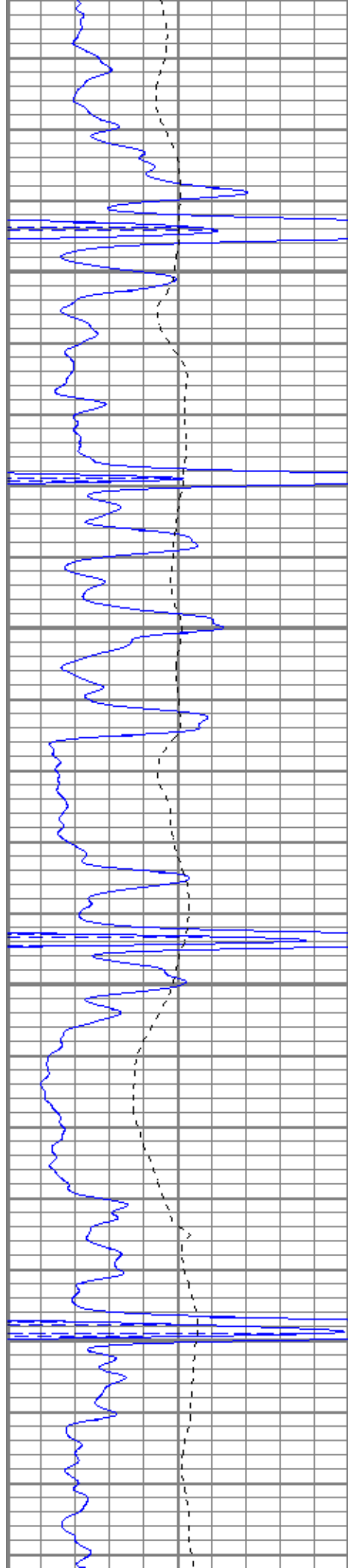
3950

4000

4050

4100



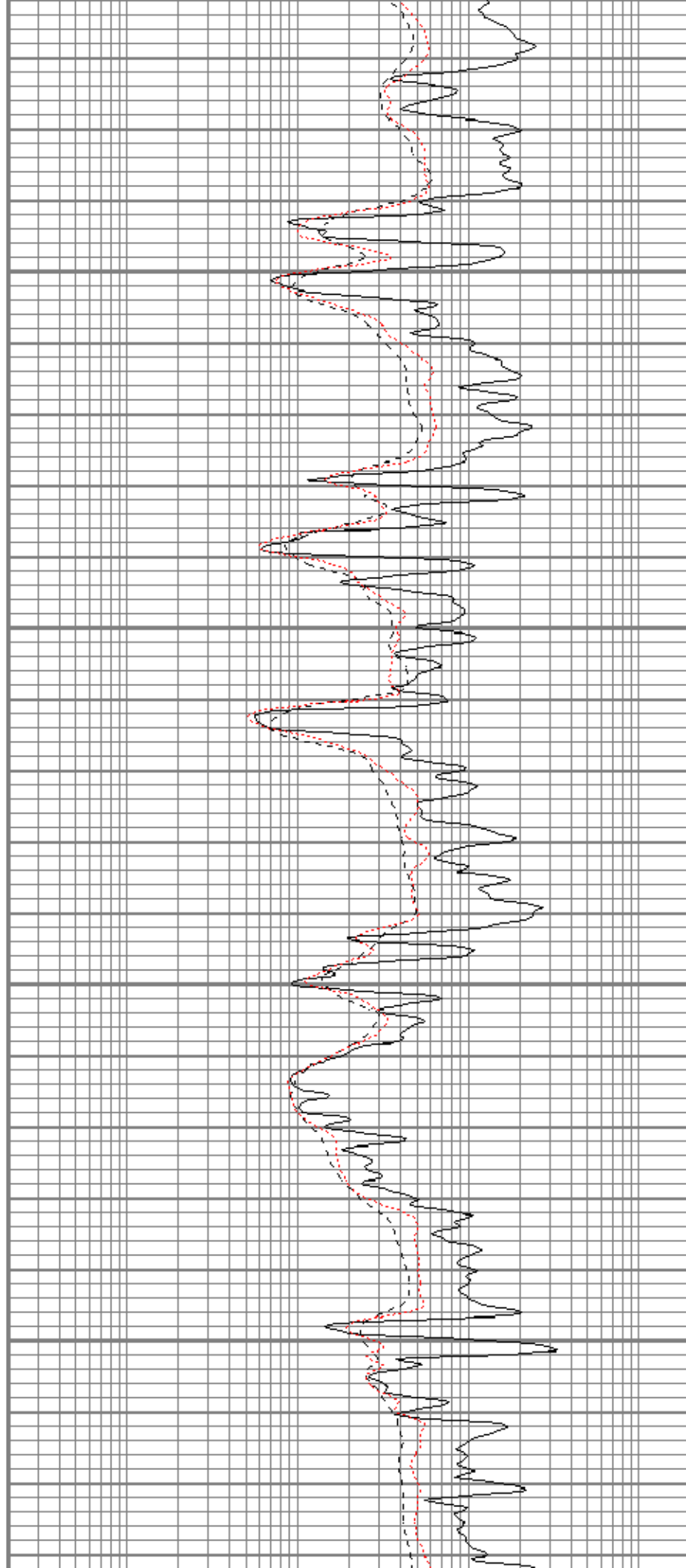


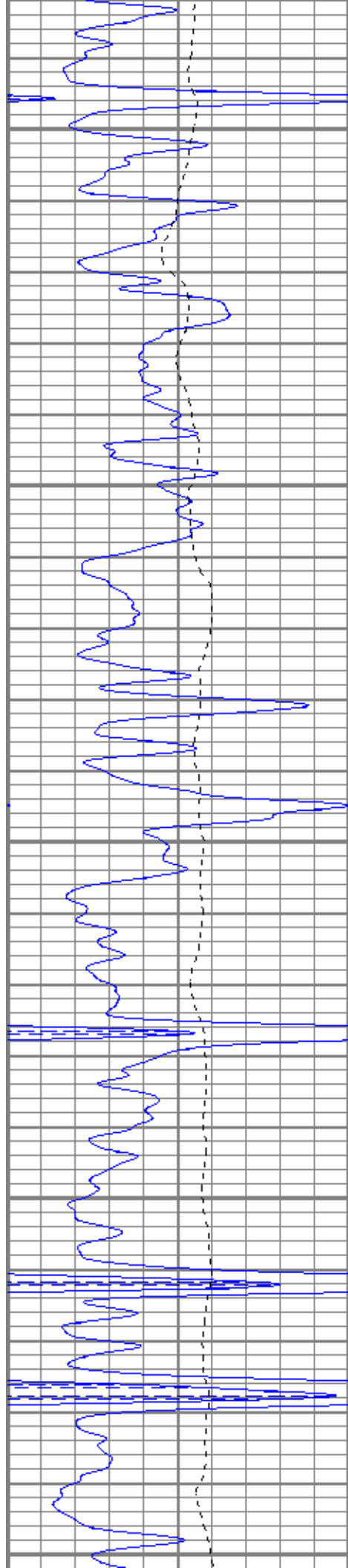
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4200

4250

4300





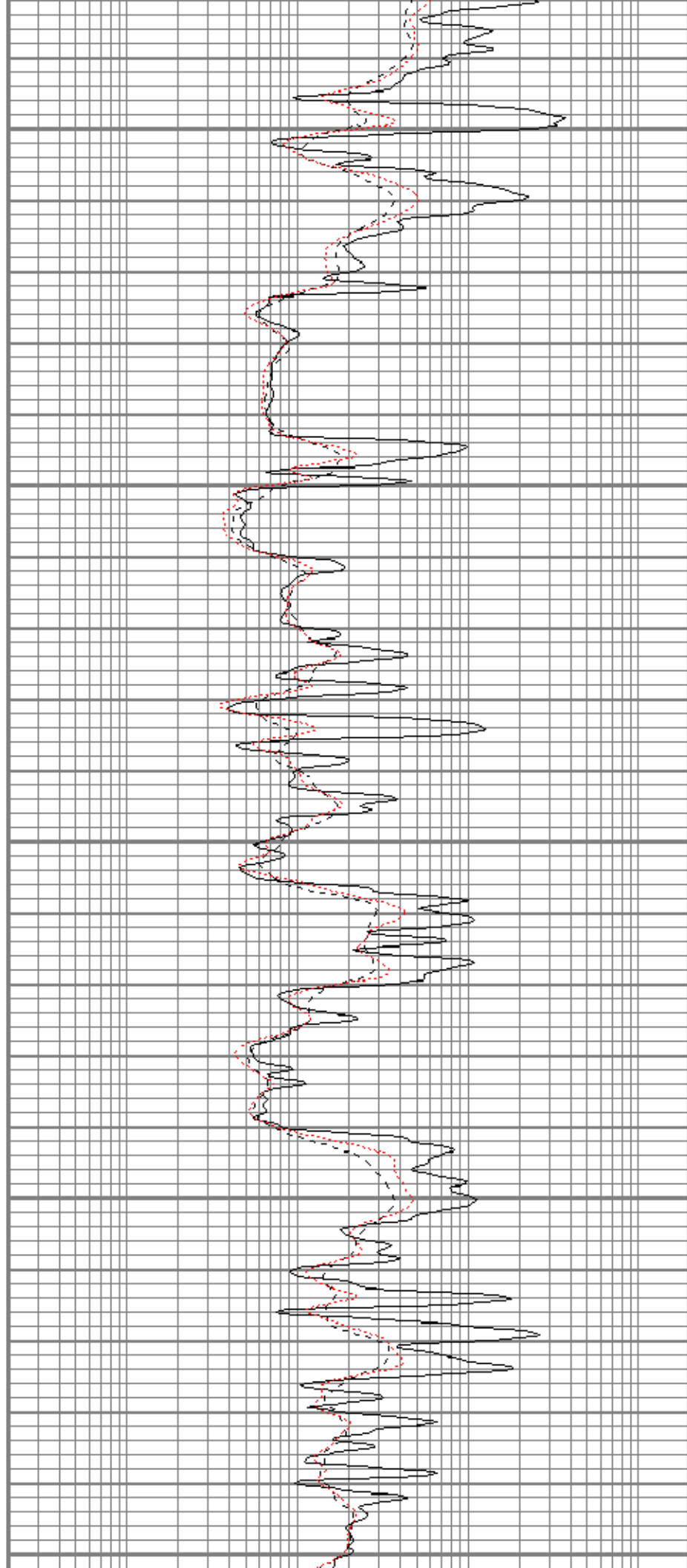
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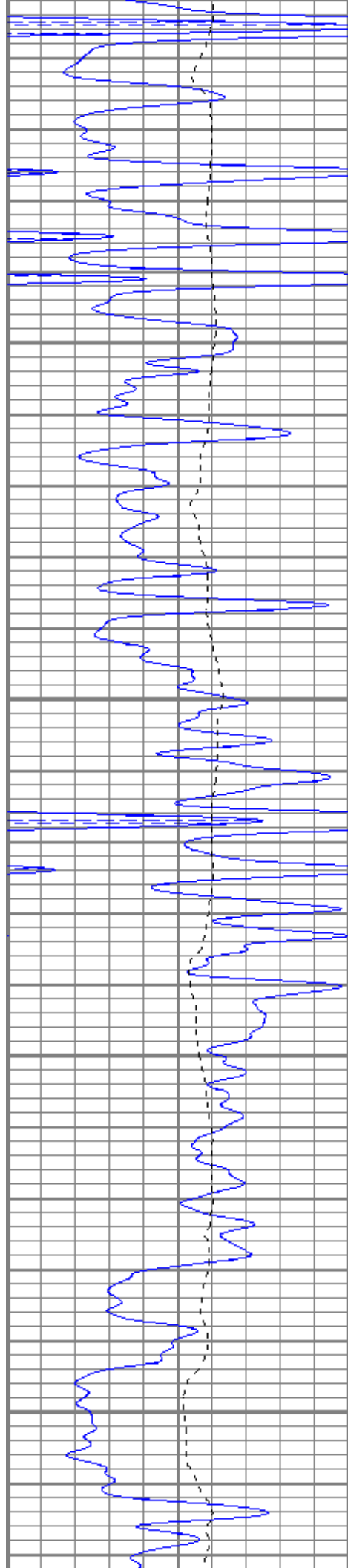
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4450

4500

4550



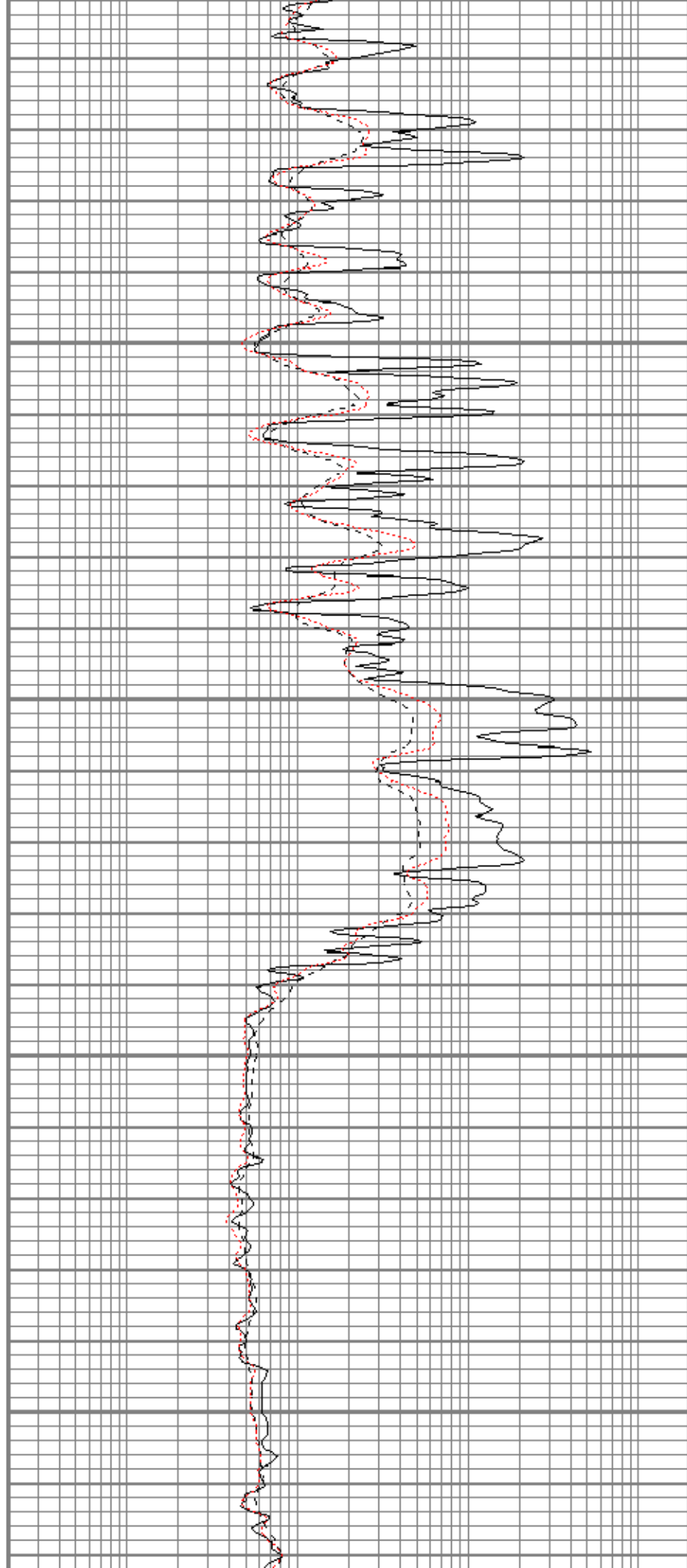


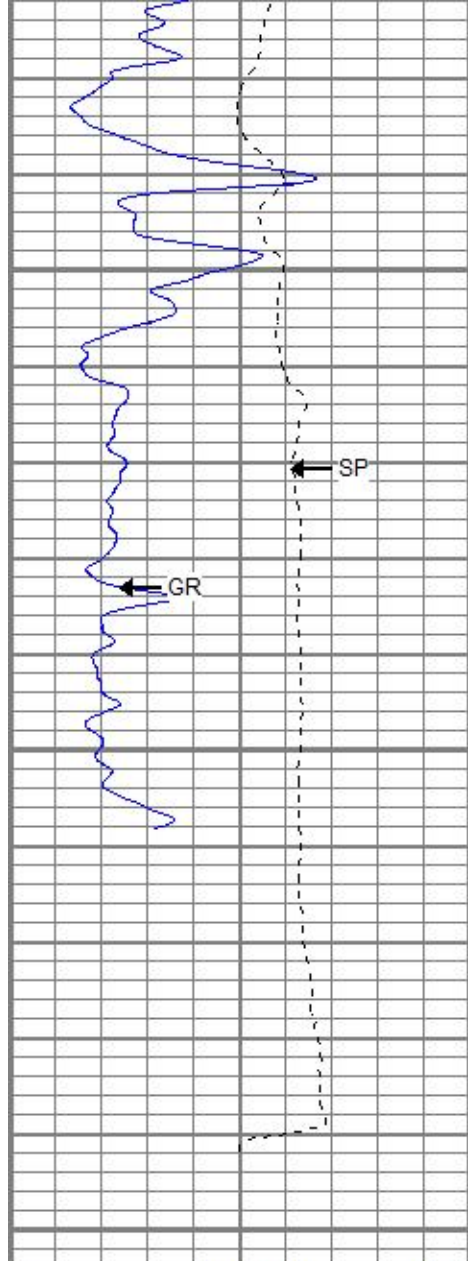
4600

4650

4700

4750



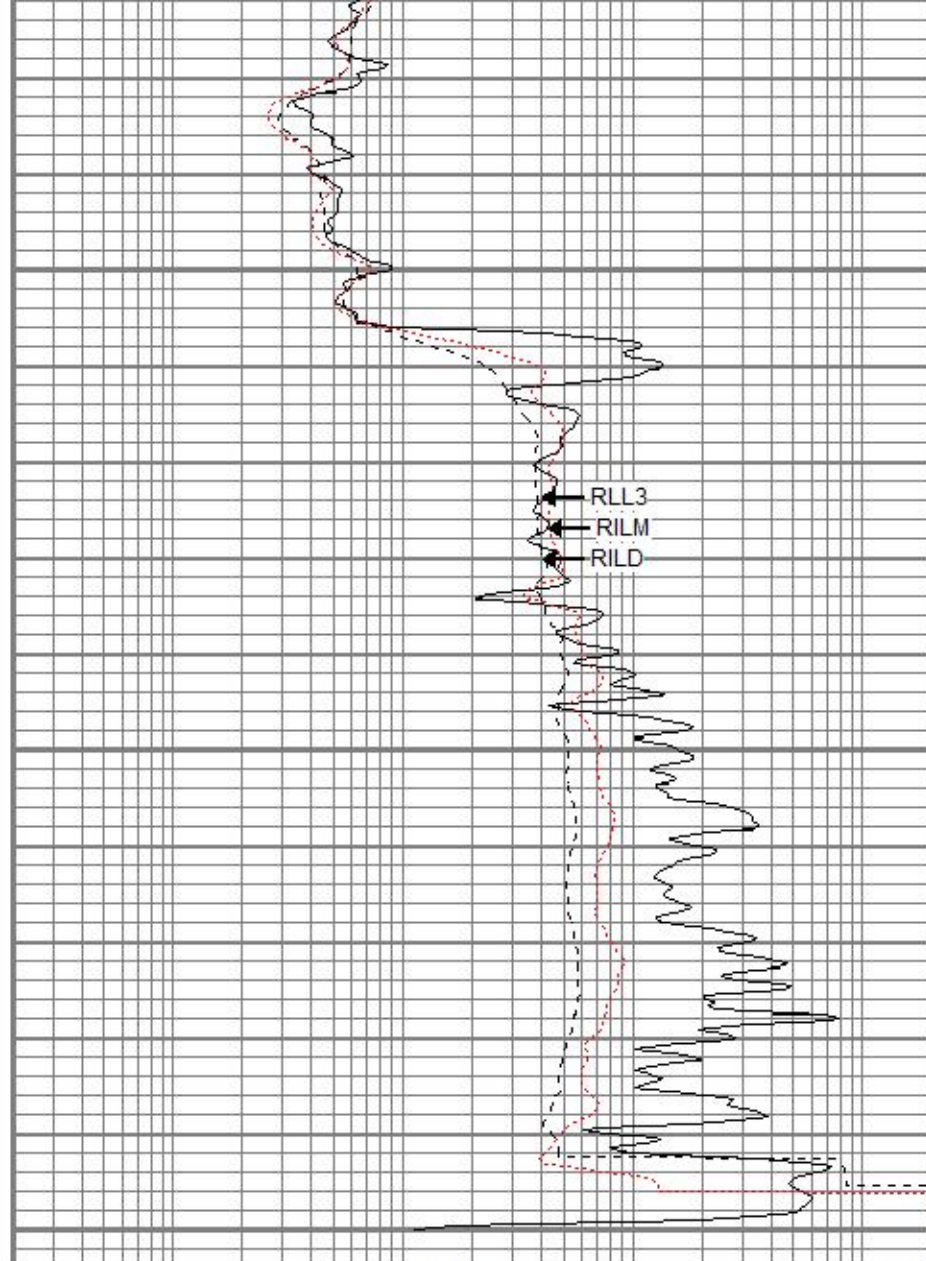


4800

4850

4900

|      |           |     |
|------|-----------|-----|
| 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 |

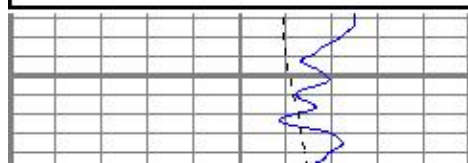


## Repeat Pass

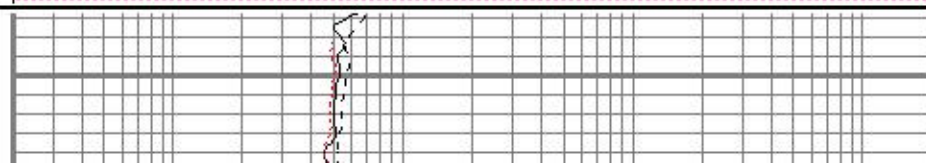
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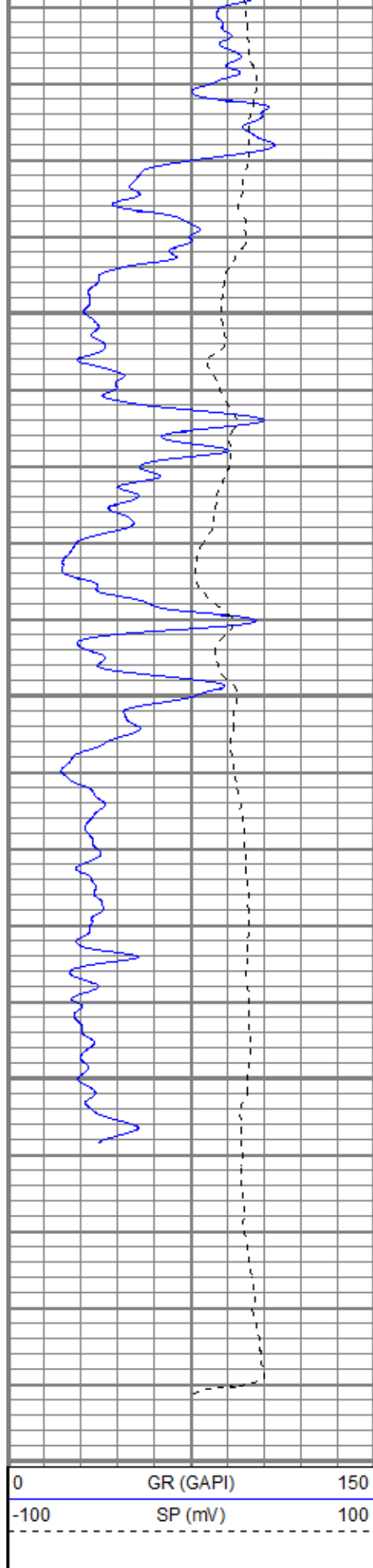
|      |           |     |
|------|-----------|-----|
| 0    | GR (GAPI) | 150 |
| -100 | SP (mV)   | 100 |

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



4700



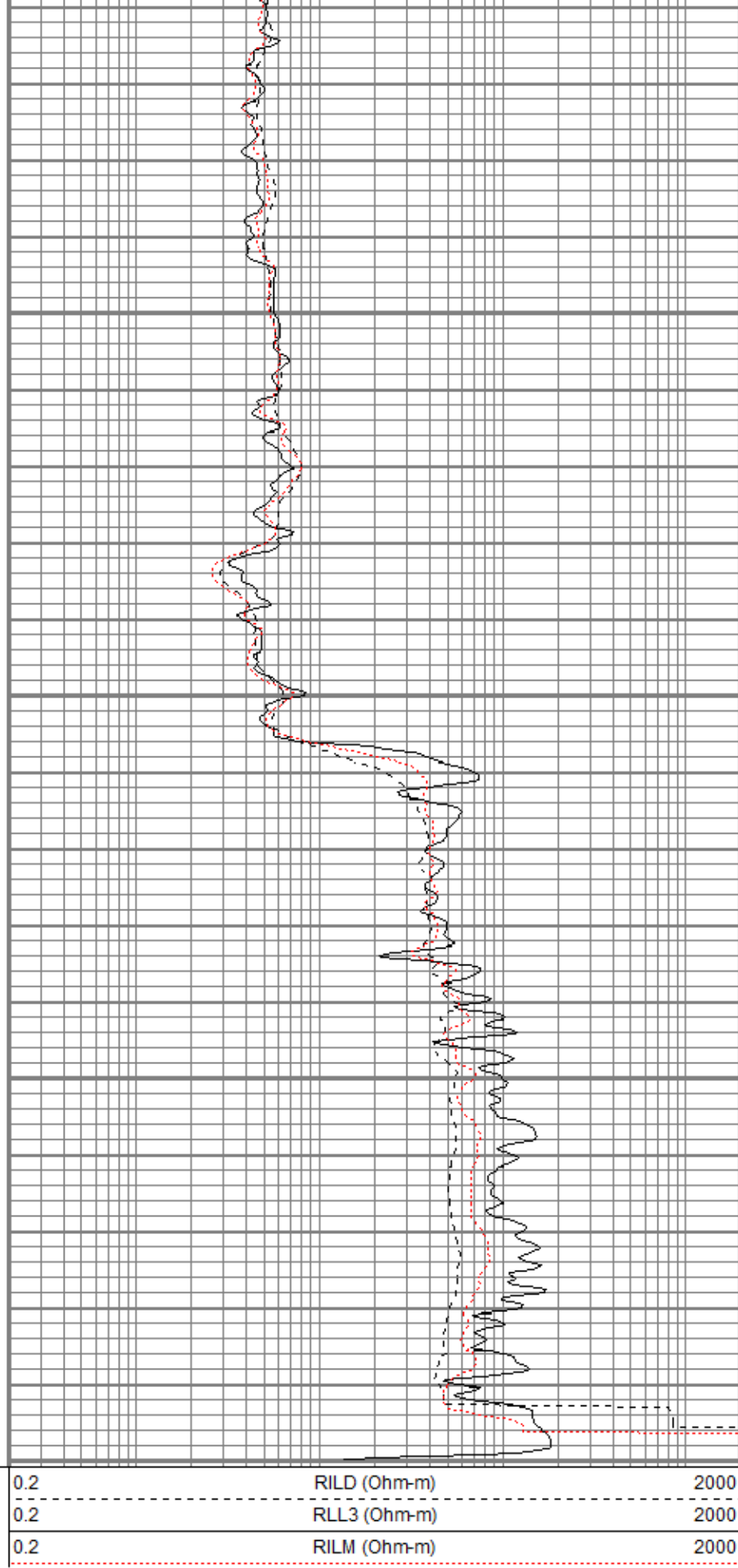


4750

4800

4850

4900



# Calibration Report

### Dual Induction Calibration Report

Serial-Model: 080522-Probe  
Surface Cal Performed: Mon Mar 14 11:26:37 2016  
Downhole Cal Performed: Mon Mar 14 11:26:40 2016  
After Survey Verification Performed: Mon Mar 14 11:26:42 2016

#### Surface Calibration

| Readings  |        |       |   | References |         |        | Results |        |
|-----------|--------|-------|---|------------|---------|--------|---------|--------|
| Loop:     | Air    | Loop  |   | Air        | Loop    |        | m       | b      |
| Deep      | -0.040 | 0.651 | V | 0.000      | 400.000 | mmho/m | 578.981 | 22.871 |
| Medium    | -0.028 | 0.742 | V | 0.000      | 464.000 | mmho/m | 602.582 | 16.690 |
| Internal: | Zero   | Cal   |   | Zero       | Cal     |        | m       | b      |
| Deep      | -0.016 | 0.653 | V | 0.000      | 400.000 | mmho/m | 598.311 | 9.396  |
| Medium    | -0.025 | 0.747 | V | 0.000      | 464.000 | mmho/m | 601.262 | 14.808 |

#### Downhole Calibration

| Readings |        |         |        | References |          |        | Results |       |
|----------|--------|---------|--------|------------|----------|--------|---------|-------|
|          | Zero   | Cal     |        | Zero       | Cal      |        | m'      | b'    |
| Deep     | 6.834  | 401.088 | mmho/m | 13.778     | 400.855  | mmho/m | 0.982   | 7.068 |
| Medium   | -2.964 | 468.230 | mmho/m | 1.850      | 466.869  | mmho/m | 0.987   | 4.775 |
| LL3      |        | 7.145   | V      |            | 750.000  | Ohm-m  |         |       |
|          |        | 0.016   | V      |            | 12.000   | Ohm-m  |         |       |
|          |        | -7.248  | V      |            | 3745.000 | mmho-m |         |       |

#### After Survey Verification

| Readings |       |       |        | Targets |          |        | Results |       |
|----------|-------|-------|--------|---------|----------|--------|---------|-------|
|          | Zero  | Cal   |        | Zero    | Cal      |        | m'      | b'    |
| Deep     | 0.000 | 0.000 | mmho/m | 6.834   | 401.088  | mmho/m | 1.000   | 0.000 |
| Medium   | 0.000 | 0.000 | mmho/m | -2.964  | 468.230  | mmho/m | 1.000   | 0.000 |
| LL3      |       | 0.000 | Ohm-m  |         | 750.000  | Ohm-m  |         |       |
|          |       | 0.000 | Ohm-m  |         | 12.000   | Ohm-m  |         |       |
|          |       | 0.000 | mmho-m |         | 3745.000 | mmho-m |         |       |

### Neutron Calibration Report

Serial Number: Admyr  
Tool Model: G  
Performed: Mon Mar 14 10:45:21 2016

Calibrator Value: 1 NAPI

Calibrator Reading: 1 cps

Sensitivity: 1 NAPI/cps

### Gamma Ray Calibration Report

Serial Number: 1  
Tool Model: A  
Performed: Mon Mar 14 10:45:15 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: Mon Feb 10 14:27:19 2014

|                 |            |            |
|-----------------|------------|------------|
|                 | 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 Nov 13 12:11:33 2015

|                 | 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) |
|--------|-------------|-----------|--------------------------|-------------|-----------|-------------|
| GR     | 40.08       |           | CHD-STD                  | 0.50        | 1.69      | 1.00        |
|        |             |           | ADT1SENSORS-A (1)        | 4.54        | 3.50      | 10.00       |
|        |             |           | ADT1PULSE-A (1)          | 0.83        | 3.50      | 10.00       |
|        |             |           | Pulsed Interface Tool #1 |             |           |             |
|        |             |           | ADT1ADC-A (1)            | 0.83        | 3.50      | 10.00       |
|        |             |           | Analog Interface #1      |             |           |             |
|        |             |           | NEU-G (Admyr)            | 5.65        | 3.50      | 85.00       |
|        |             |           | Gearhart Epithermal      |             |           |             |
|        |             |           |                          |             |           |             |
|        |             |           |                          |             |           |             |
|        |             |           |                          |             |           |             |
|        |             |           |                          |             |           |             |
|        |             |           |                          |             |           |             |
|        |             |           |                          |             |           |             |
|        |             |           |                          |             |           |             |
| LStat  | 24.30       |           | ADT1LITH-A (1)           | 9.29        | 3.50      | 240.00      |
| LS8    | 23.64       |           | Admyr Litho Density Tool |             |           |             |
| LS7    | 23.64       |           |                          |             |           |             |
| LS6    | 23.64       |           |                          |             |           |             |
| LS5    | 23.64       |           |                          |             |           |             |
| LS4    | 23.64       |           |                          |             |           |             |
| LS3    | 23.64       |           |                          |             |           |             |
| LS2    | 23.64       |           |                          |             |           |             |
| LS1    | 23.64       |           |                          |             |           |             |
| LSV    | 23.64       |           |                          |             |           |             |
| LSD    | 23.62       |           |                          |             |           |             |
| SSV    | 23.43       |           |                          |             |           |             |
| SS8    | 23.43       |           |                          |             |           |             |
| SS7    | 23.43       |           |                          |             |           |             |
| SS6    | 23.43       |           |                          |             |           |             |
| SS5    | 23.43       |           |                          |             |           |             |
| SS4    | 23.43       |           | DIL-Probe (080522)       | 21.47       | 4.00      | 345.00      |

|     |       |                                                                                 |                                                                                 |                                                                                 |                                                                                 |                                                                                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                       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| SS4 | 23.43 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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