



**Weatherford**

**CML WELL SHUTTLE  
COMPACT ARRAY INDUCTION  
LOG**

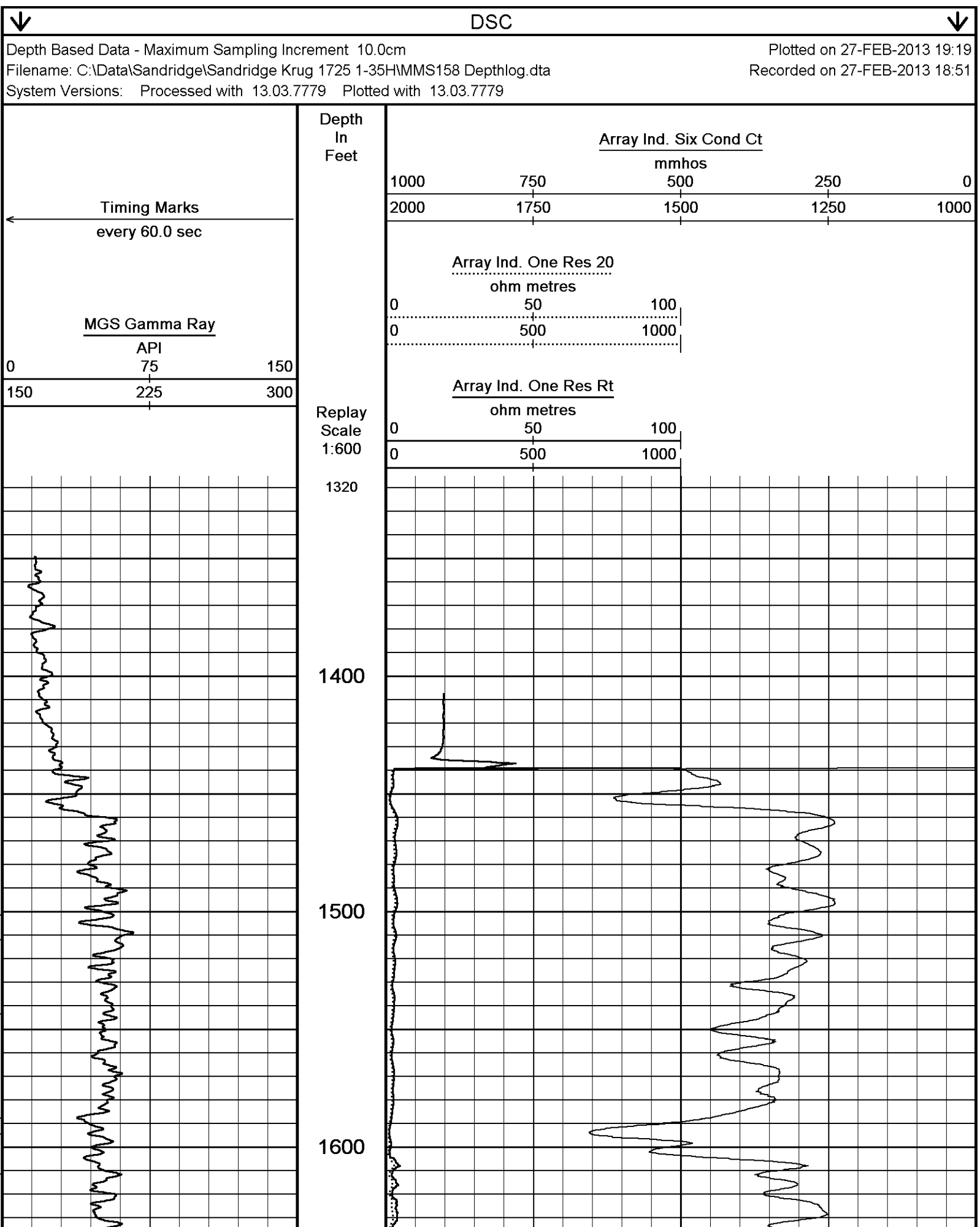
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|-------------------------------------------|------------------------------------|------|----------------|--|--|
| COMPANY                                   | SANDRIDGE EXPLORATION & PRODUCTION |      |                |  |  |
| WELL                                      | KRUG 1725 1-35H                    |      |                |  |  |
| FIELD                                     | PROSPECT NESS                      |      |                |  |  |
| PROVINCE/COUNTY                           | NESS                               |      |                |  |  |
| COUNTRY/STATE                             | USA / KANSAS                       |      |                |  |  |
| LOCATION                                  | 200' FSL & 1320' FWL               |      |                |  |  |
| SEC                                       | TWP                                | RGE  | Other Services |  |  |
| 35                                        | 17S                                | 25W  | MDN/MPD        |  |  |
| API Number                                | 15-135-25528-01                    |      |                |  |  |
| Permit Number                             |                                    |      |                |  |  |
| Permanent Datum G.L., Elevation 2392 feet |                                    |      | Elevations:    |  |  |
| Log Measured From KB                      |                                    |      | KB             |  |  |
| Drilling Measured From K.B.               |                                    |      | DF             |  |  |
|                                           |                                    |      | GL             |  |  |
| Date                                      | 26-FEB-2013                        |      |                |  |  |
| Run Number                                | ONE                                |      |                |  |  |
| Depth Driller                             | 6236.00                            |      | feet           |  |  |
| Depth Logger                              | 6216.00                            |      | feet           |  |  |
| First Reading                             | 6209.00                            |      | feet           |  |  |
| Last Reading                              | 1434.00                            |      | feet           |  |  |
| Casing Driller                            | 1434.00                            |      | feet           |  |  |
| Casing Logger                             | 1434.00                            |      | feet           |  |  |
| Bit Size                                  | 8.750                              |      | inches         |  |  |
| Hole Fluid Type                           | WATER                              |      |                |  |  |
| Density / Viscosity                       | 9.40 lb/USg                        |      | 40.00 CP       |  |  |
| PH / Fluid Loss                           | 11.20                              |      | 8.00 ml/30Min  |  |  |
| Sample Source                             | FLOWLINE                           |      |                |  |  |
| Rm @ Measured Temp                        | 0.55 @ 58.3                        |      | ohm-m          |  |  |
| Rmf @ Measured Temp                       | 0.44 @ 58.3                        |      | ohm-m          |  |  |
| Rmc @ Measured Temp                       | 0.66 @ 58.3                        |      | ohm-m          |  |  |
| Source Rmf / Rmc                          | CALC                               | CALC |                |  |  |
| Rm @ BHT                                  | 0.26 @122.0                        |      | ohm-m          |  |  |
| Time Since Circulation                    | 1 HOUR                             |      |                |  |  |
| Max Recorded Temp                         | 122.00                             |      | deg F          |  |  |
| Equipment Name                            | COMPACT                            |      |                |  |  |
| Equipment / Base                          | 18064                              |      | OKC            |  |  |
| Recorded By                               | C. GRIFFIN                         |      |                |  |  |
| Witnessed By                              | W. SCOTT                           |      |                |  |  |
| S.O.#/AFE                                 | 3539591 / DC12706                  |      |                |  |  |

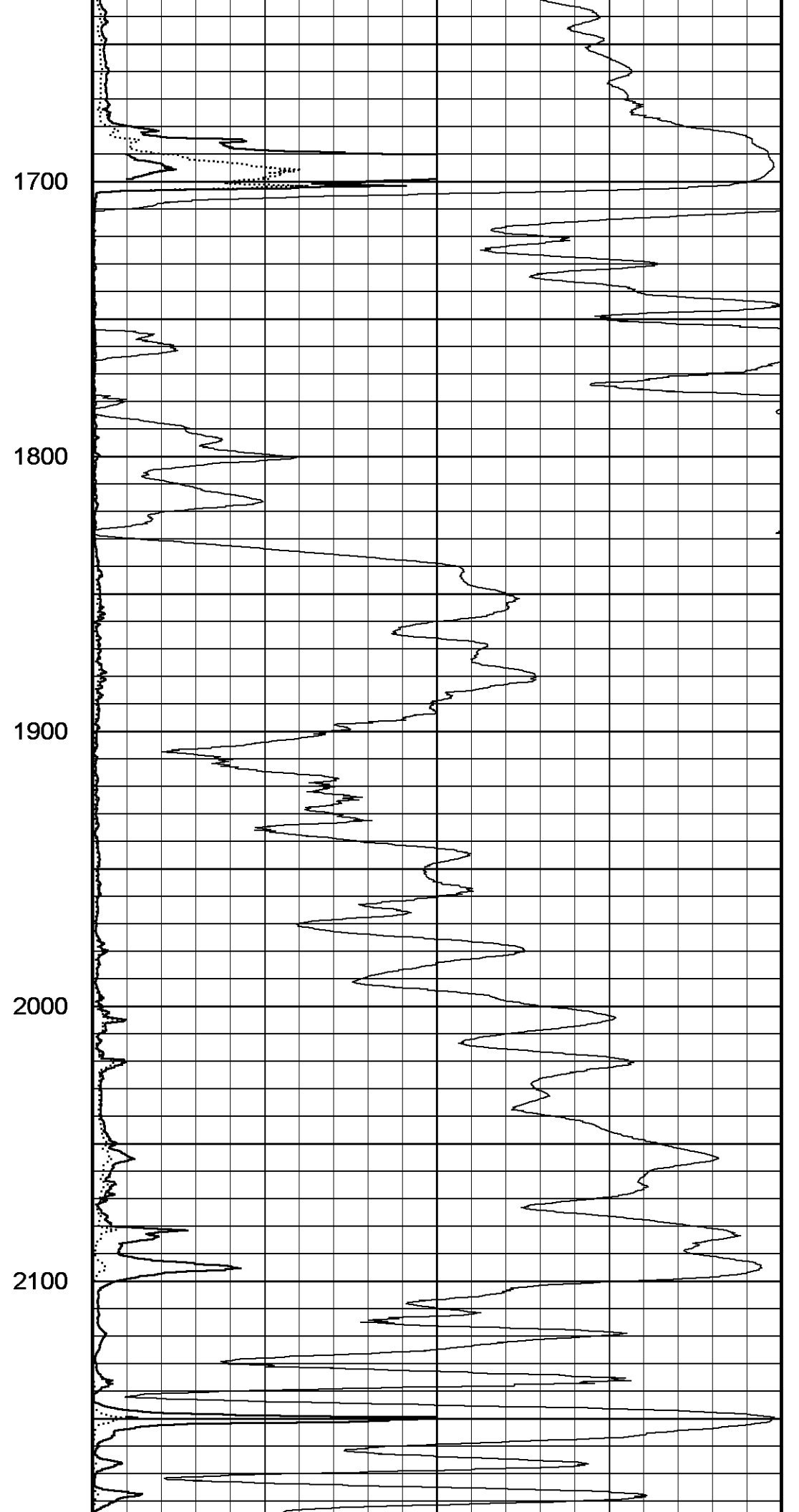
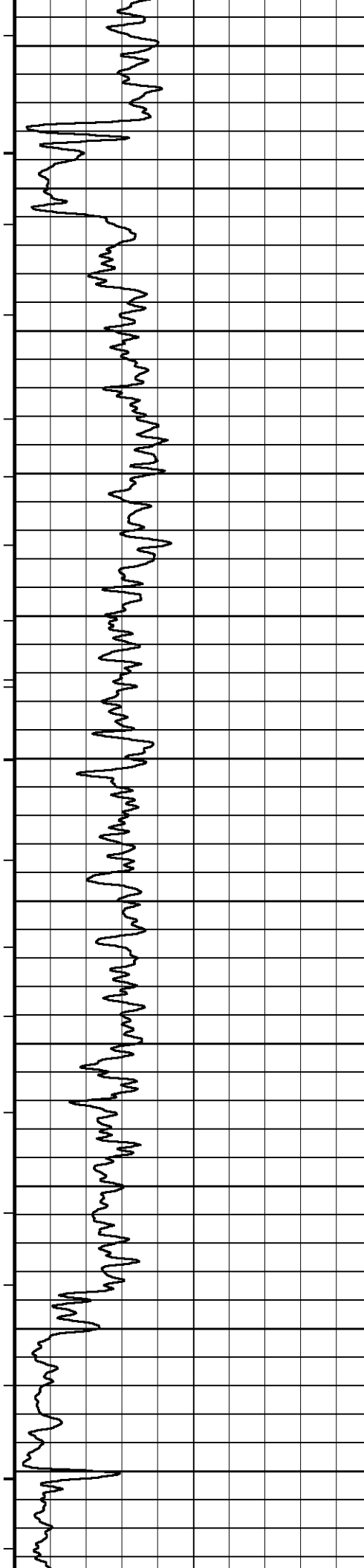
| BOREHOLE RECORD    |                |                    |                    |                     | Last Edited: 27-FEB-2013 19:08 |
|--------------------|----------------|--------------------|--------------------|---------------------|--------------------------------|
| Bit Size<br>inches |                | Depth From<br>feet |                    | Depth To<br>feet    |                                |
| 8.750              |                | 1434.00            |                    | 6236.00             |                                |
| CASING RECORD      |                |                    |                    |                     |                                |
| Type               | Size<br>inches | Depth From<br>feet | Shoe Depth<br>feet | Weight<br>pounds/ft |                                |
| INTERMED           | 12.750         | 0.00               | 1434.00            | 42.00               |                                |

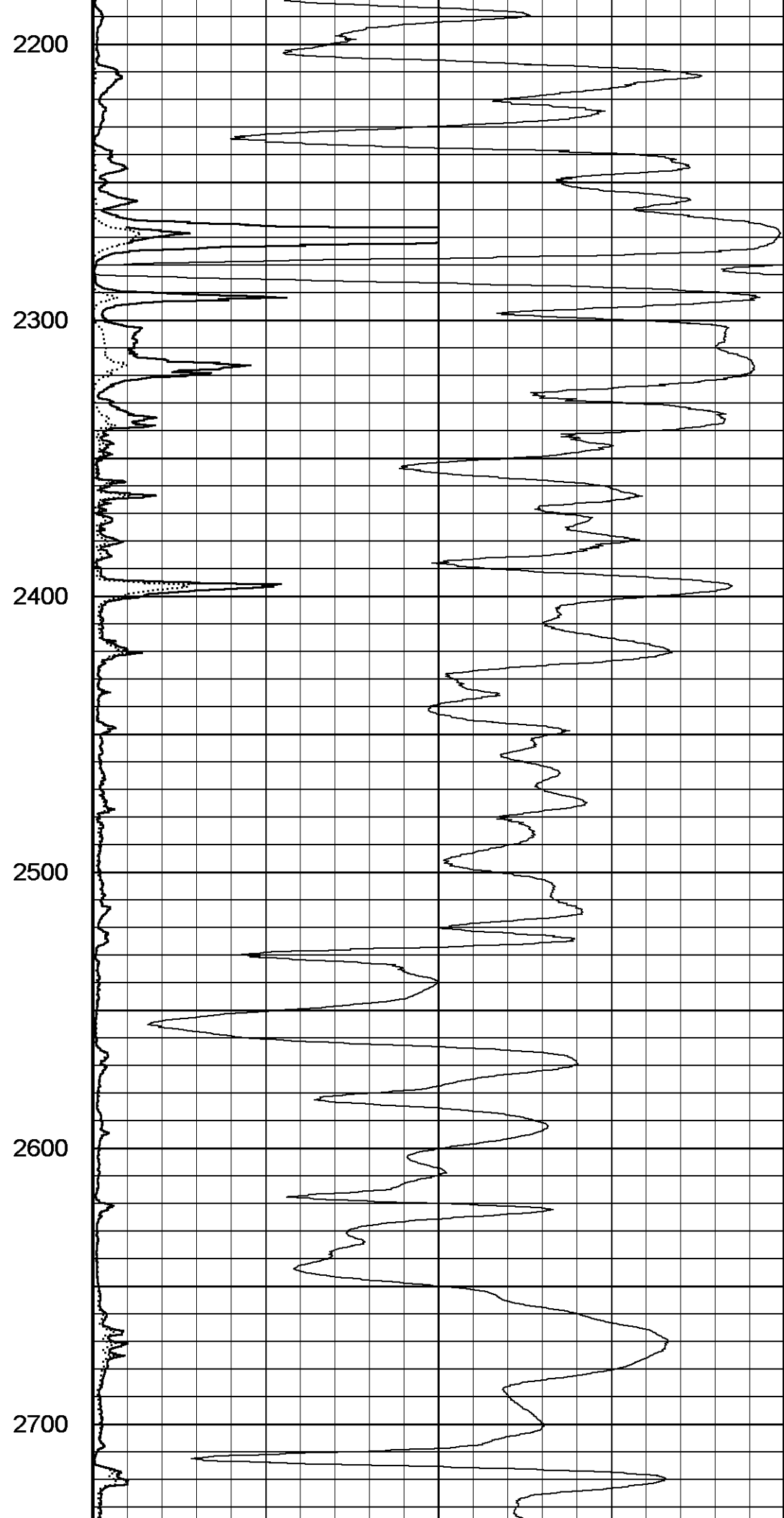
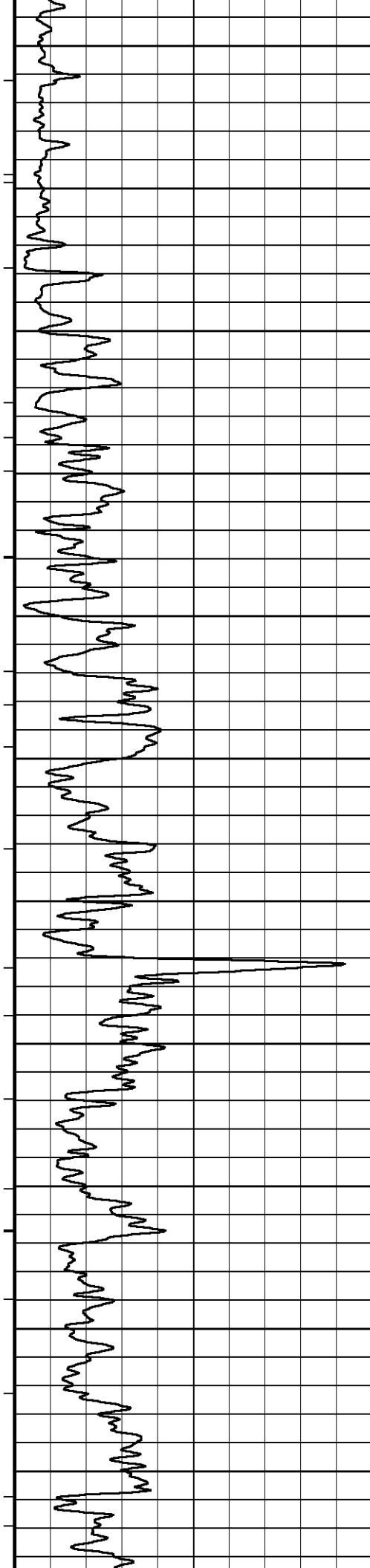
| REMARKS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WLS SOFTWARE VERSION 13.03. USED.<br>TOOLS RUN ON DRILLPIPE USING COMPACT WELL SHUTTLE DEPLOYMENT TECHNIQUE.<br><br>DEPTH MEASURED USING ADVANTAGE RIG DEPTH CORRECTED TO PIPE TALLY.<br><br>TOOLS DEPLOYED WITH MULE SHOE SITTING AT 6135 FT.<br>AFTER DEPLOYMENT LOGGING TOOL WAS AT 6216 FT.<br><br>7" PRODUCTION CASING USED TO CALCULATE ANNULAR HOLE VOLUMES.<br><br>*CALIPER BROKEN DOWNHOLE-NO CEMENT VOLUMES AVAILABLE*<br><br>OPERATORS: J. TURNER, R. ROLLANS<br>RIG: LARIAT 3 |

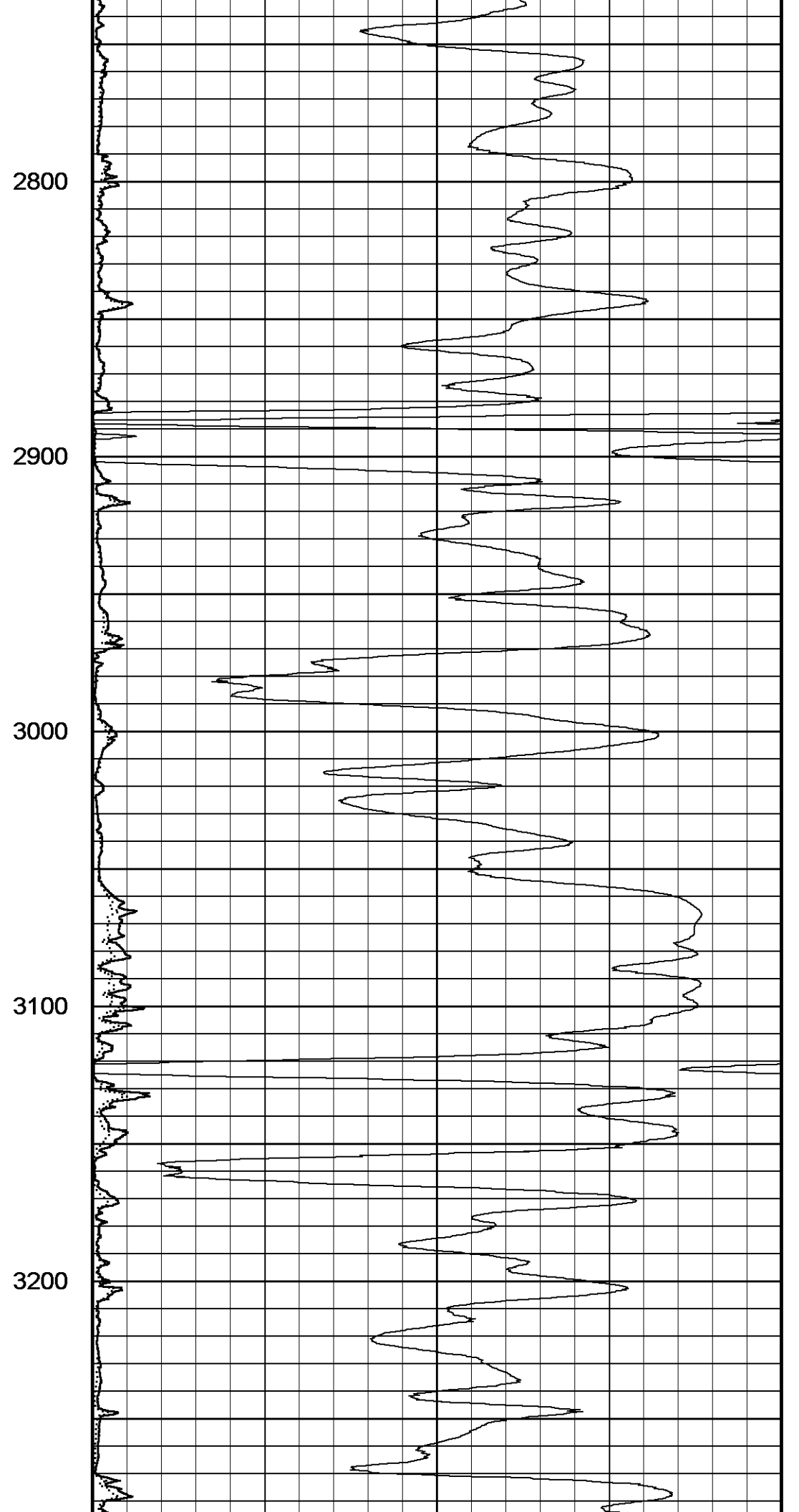
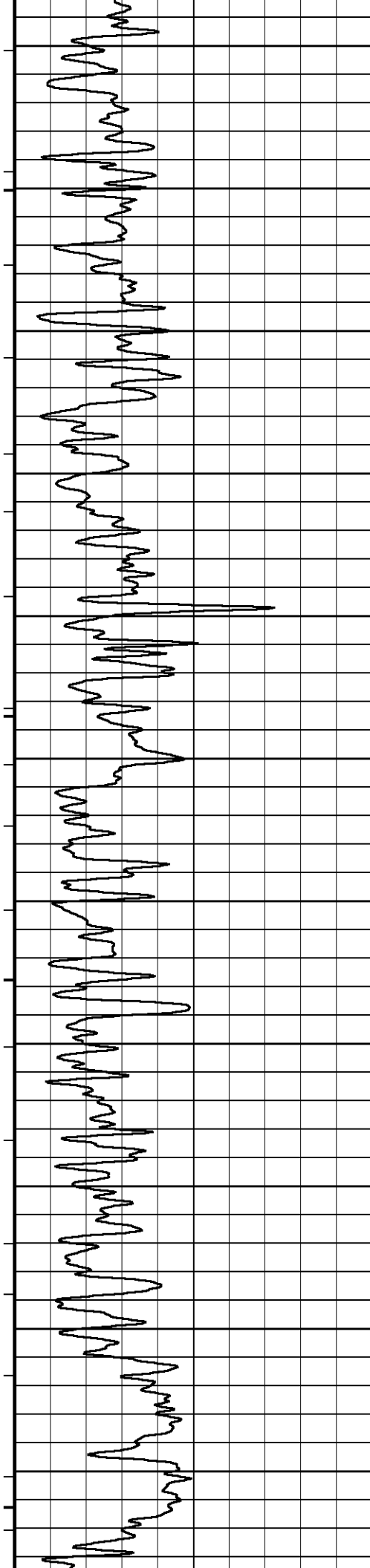
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for

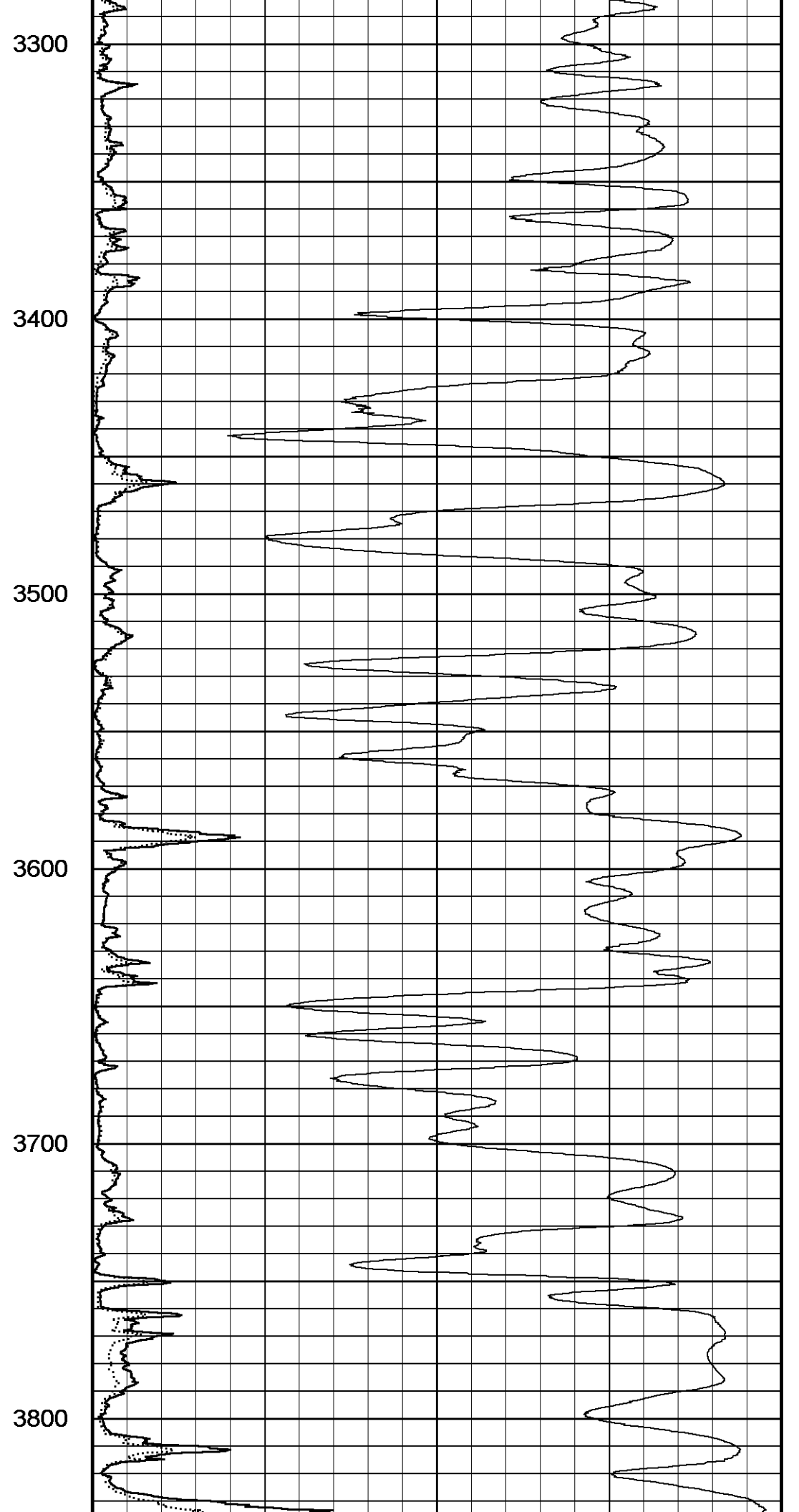
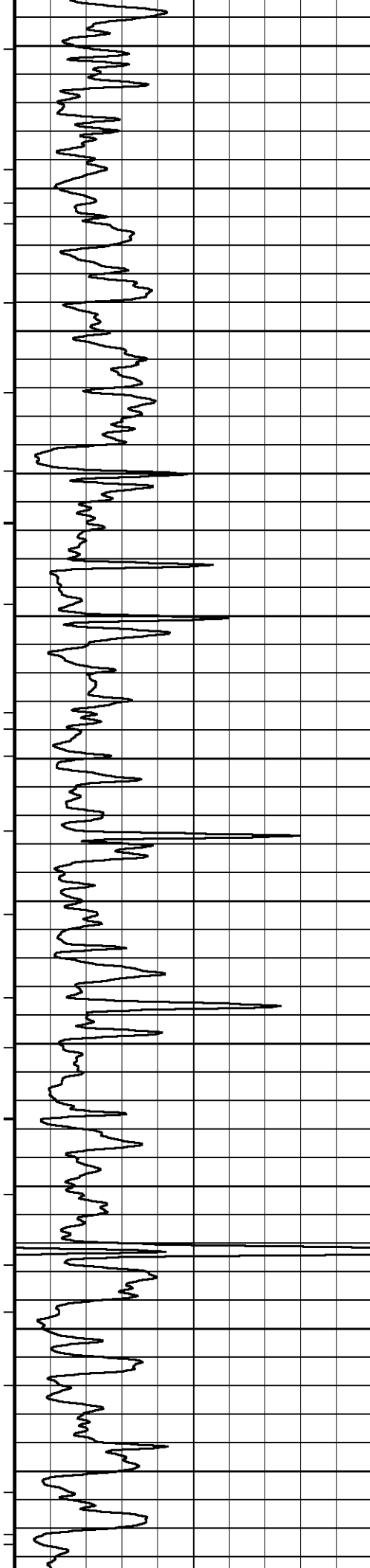
any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions in our price schedule.

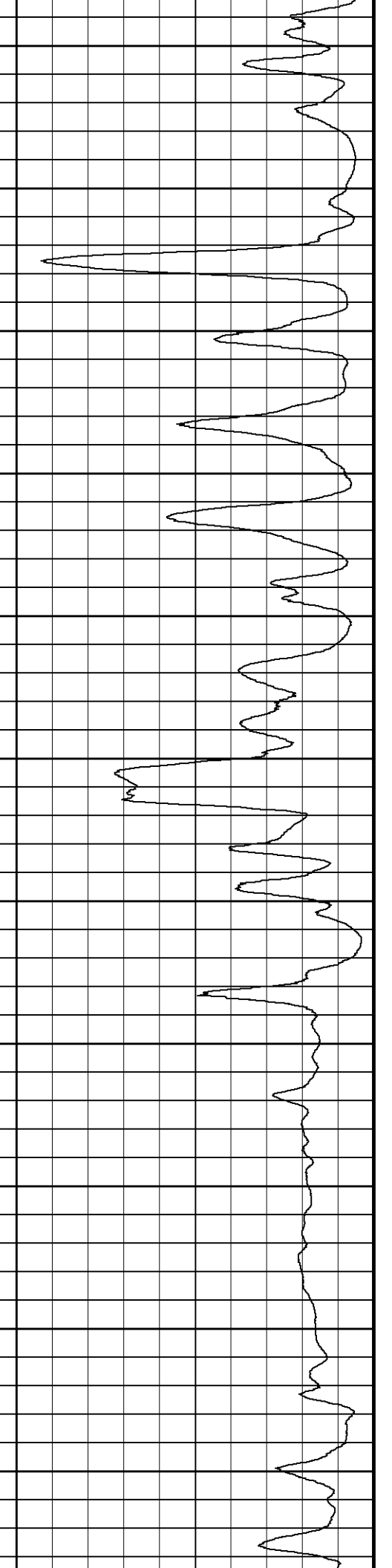
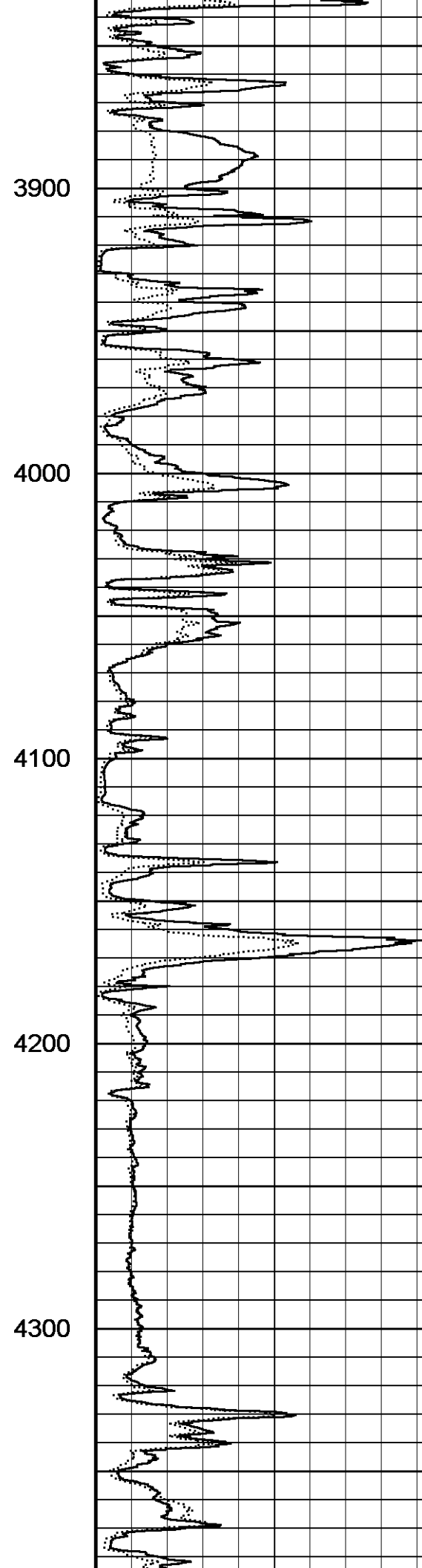
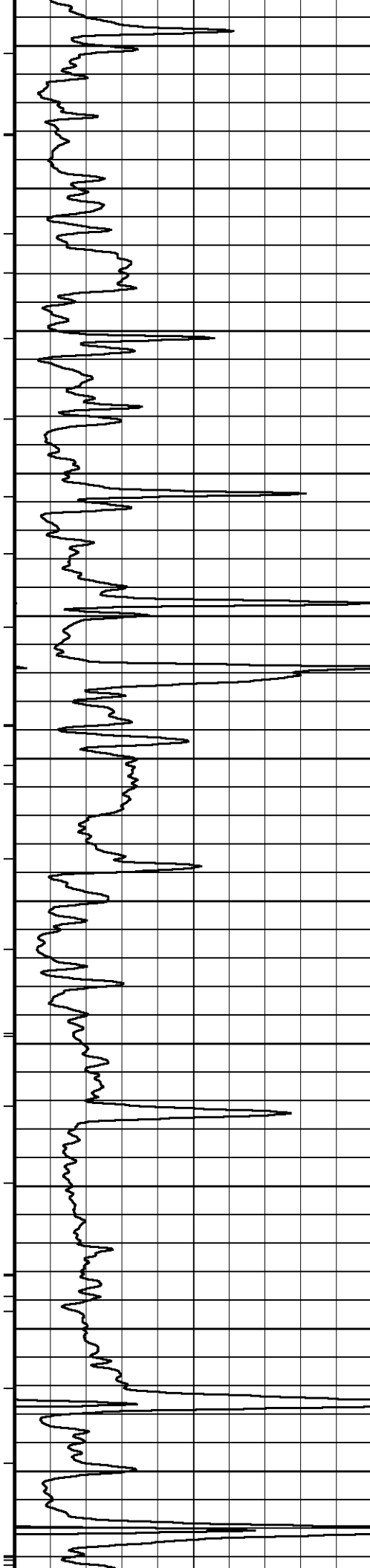


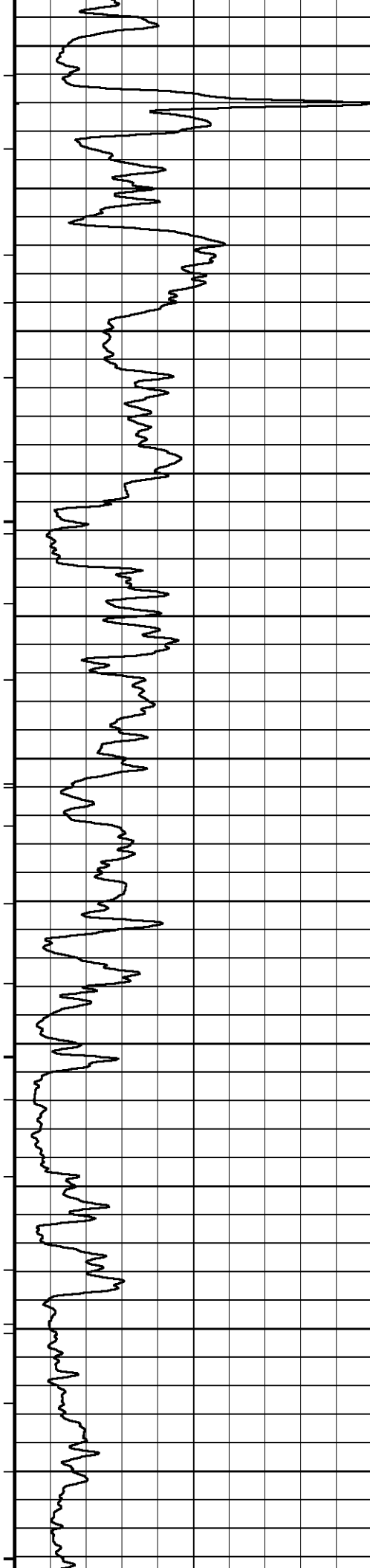












4400

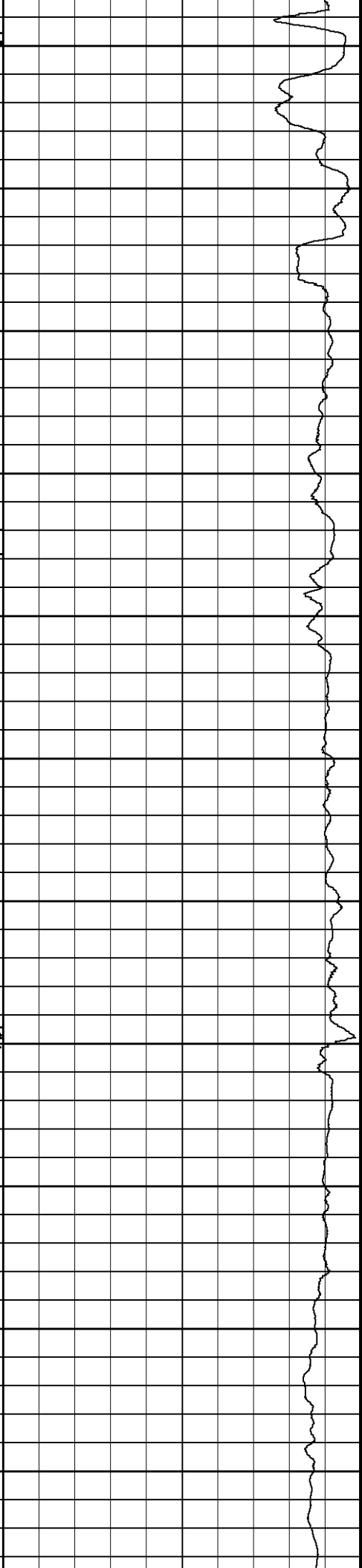
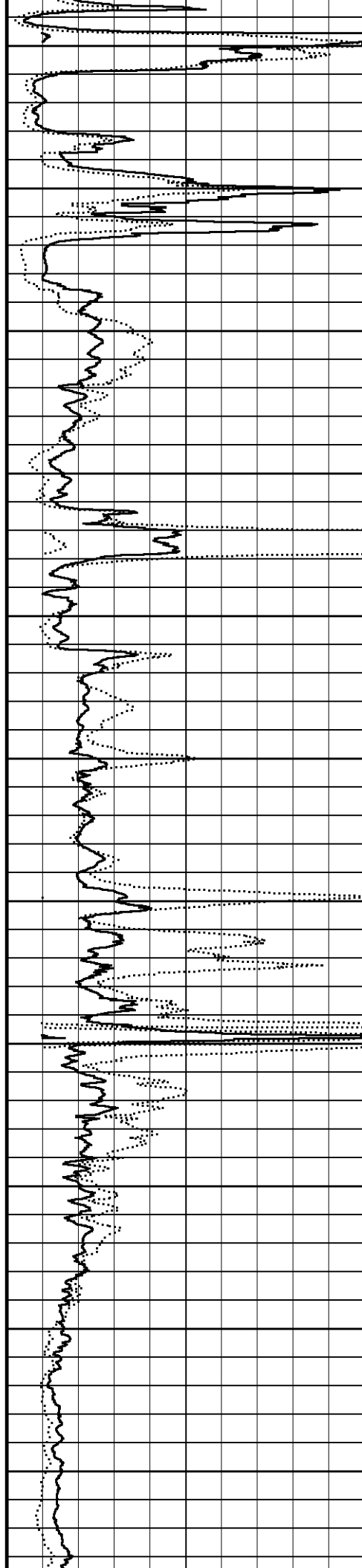
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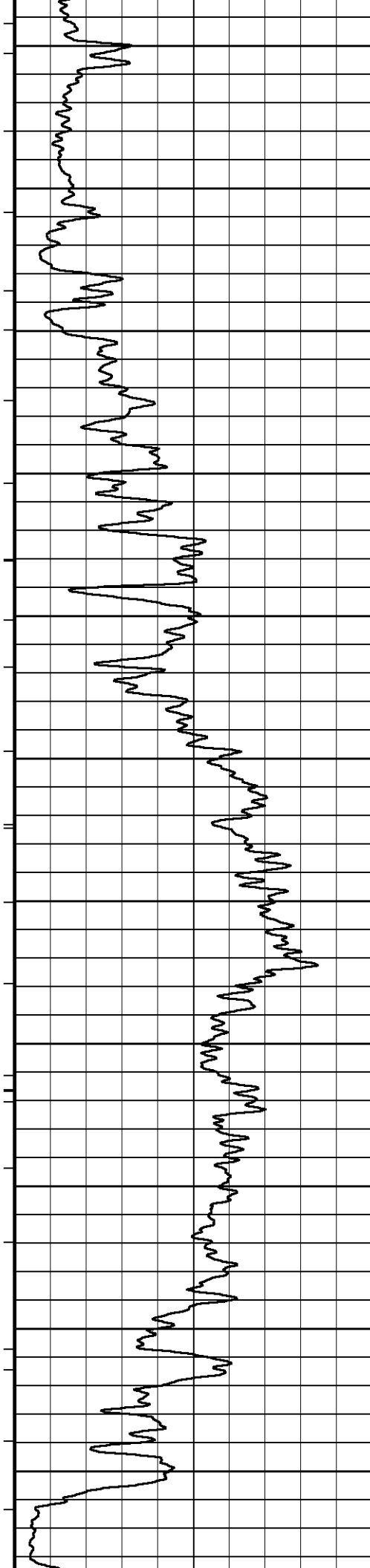
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4800

4900







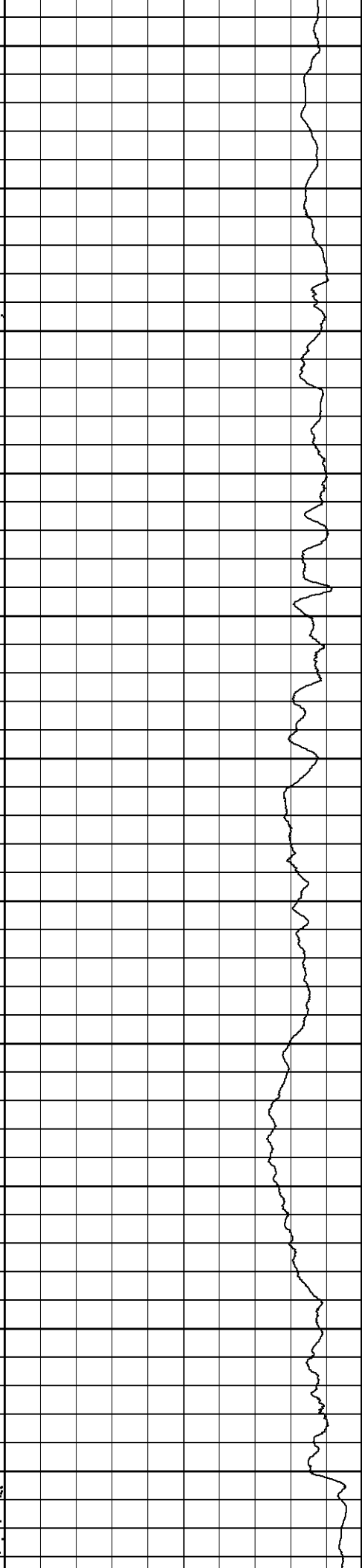
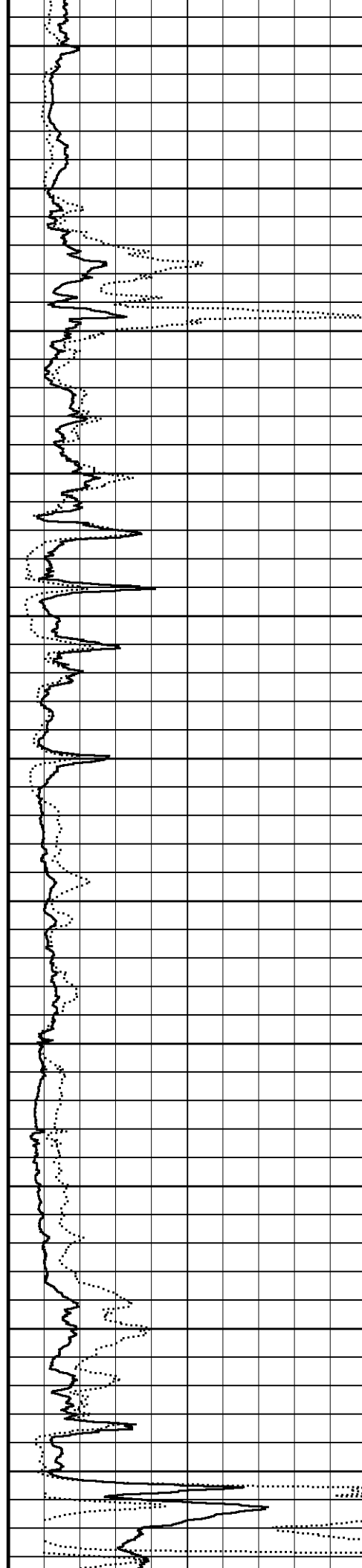
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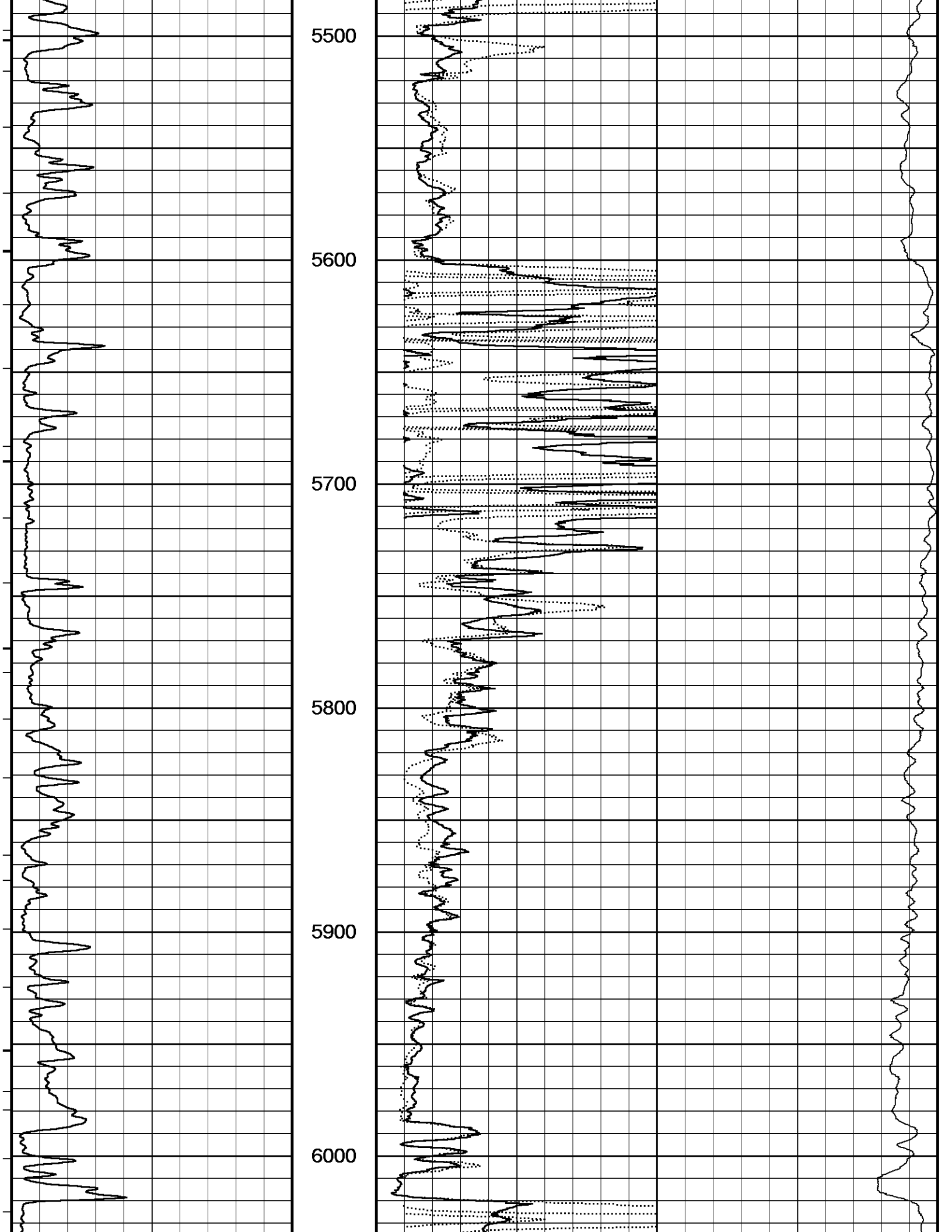
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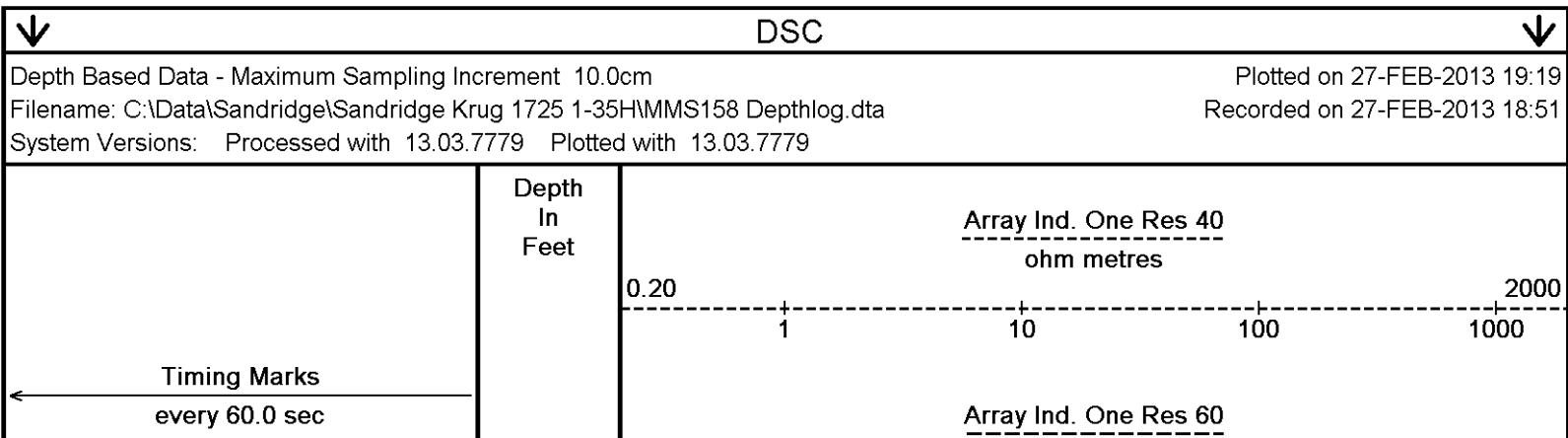
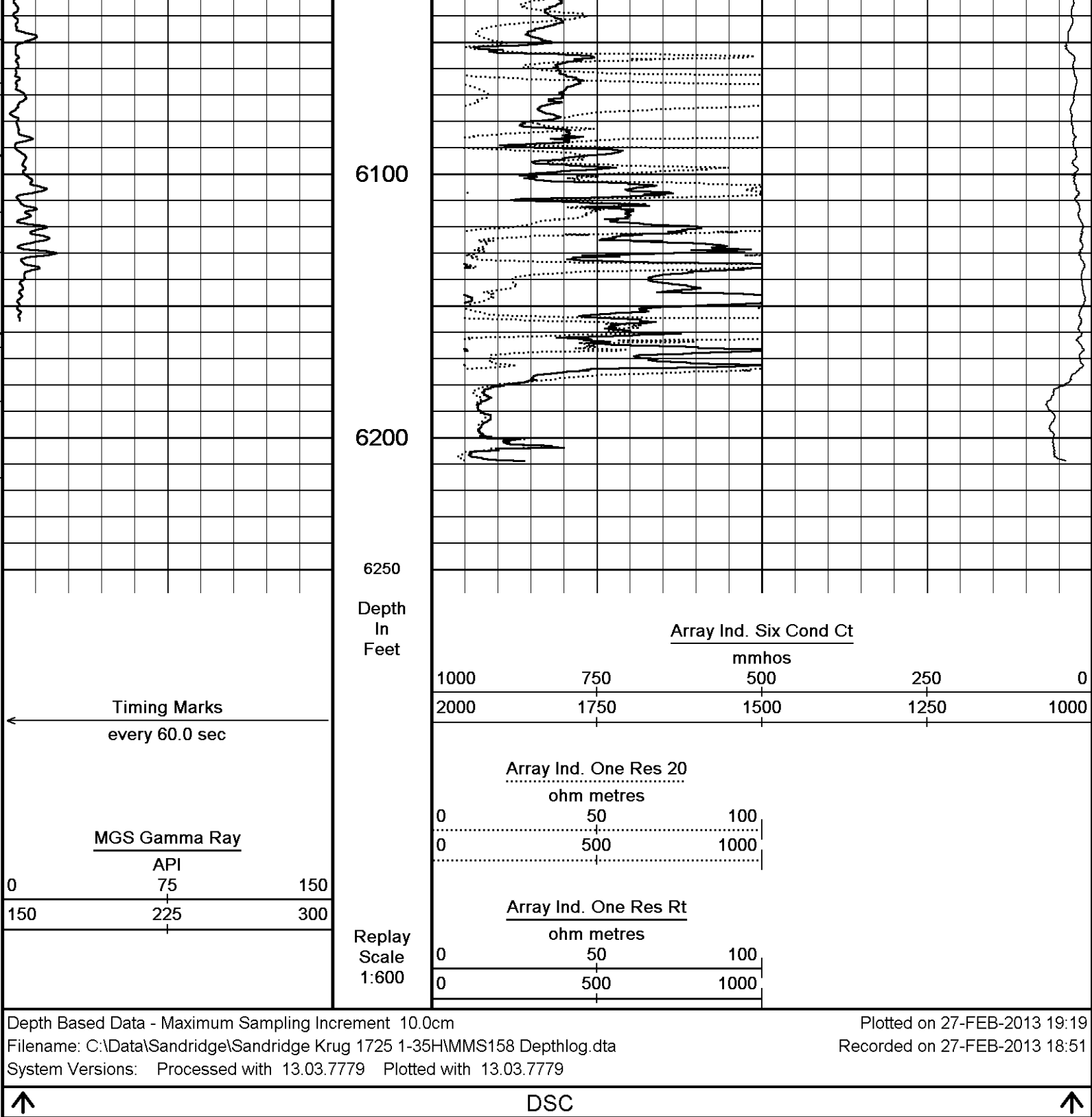
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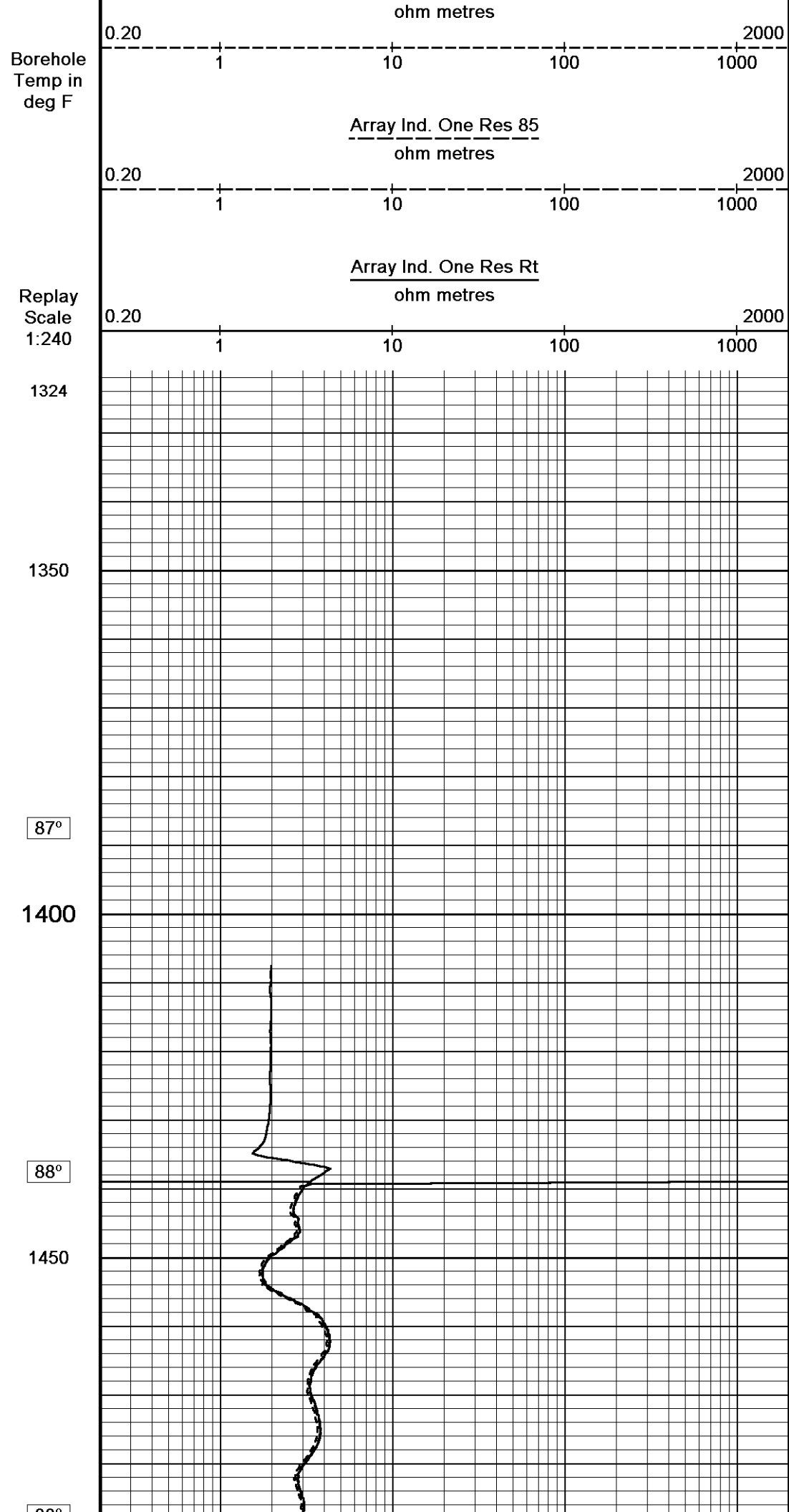
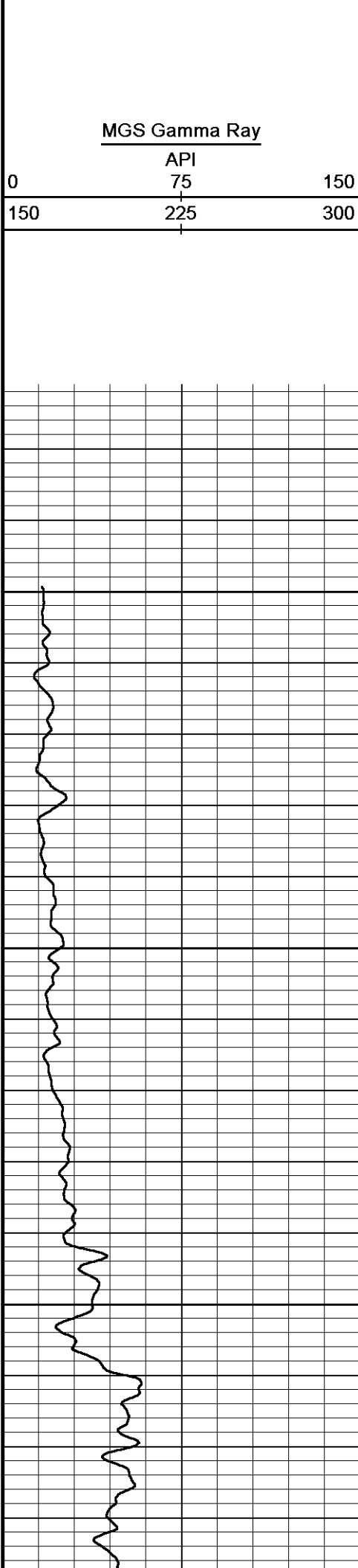
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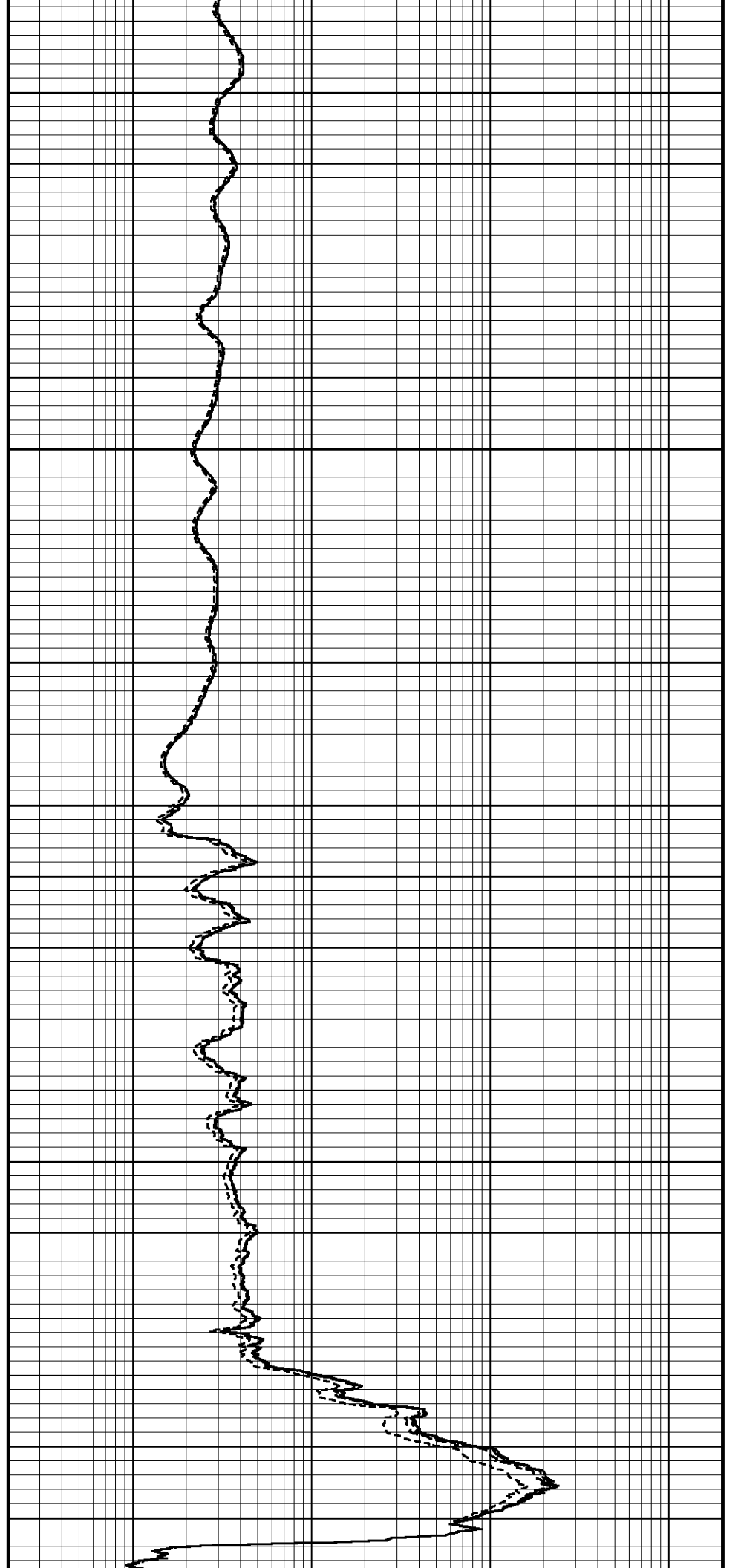
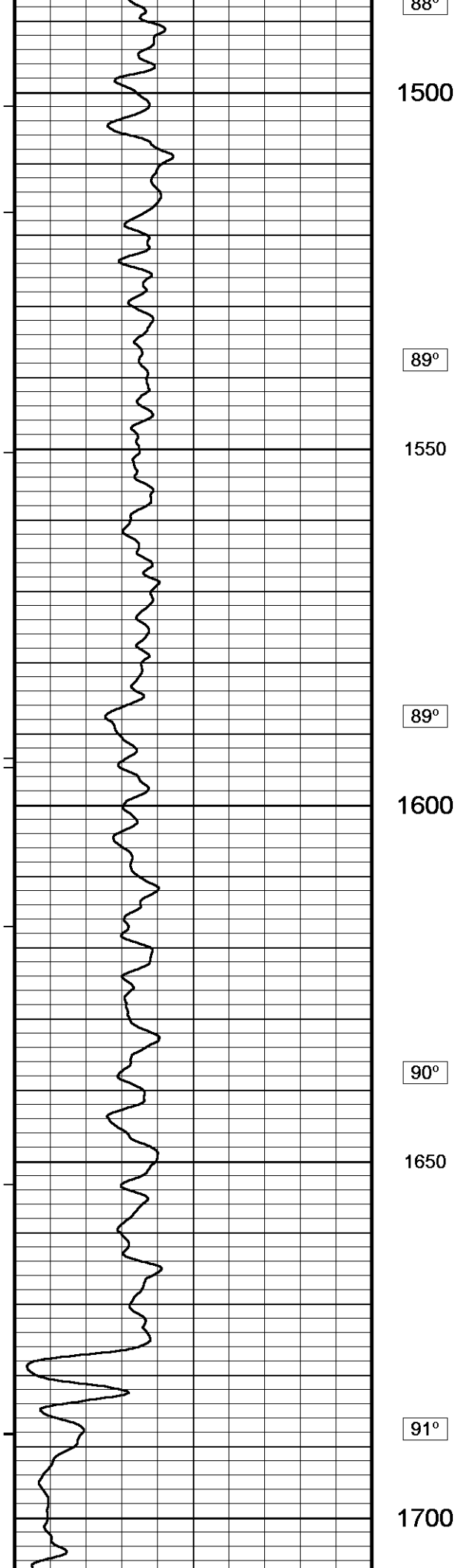
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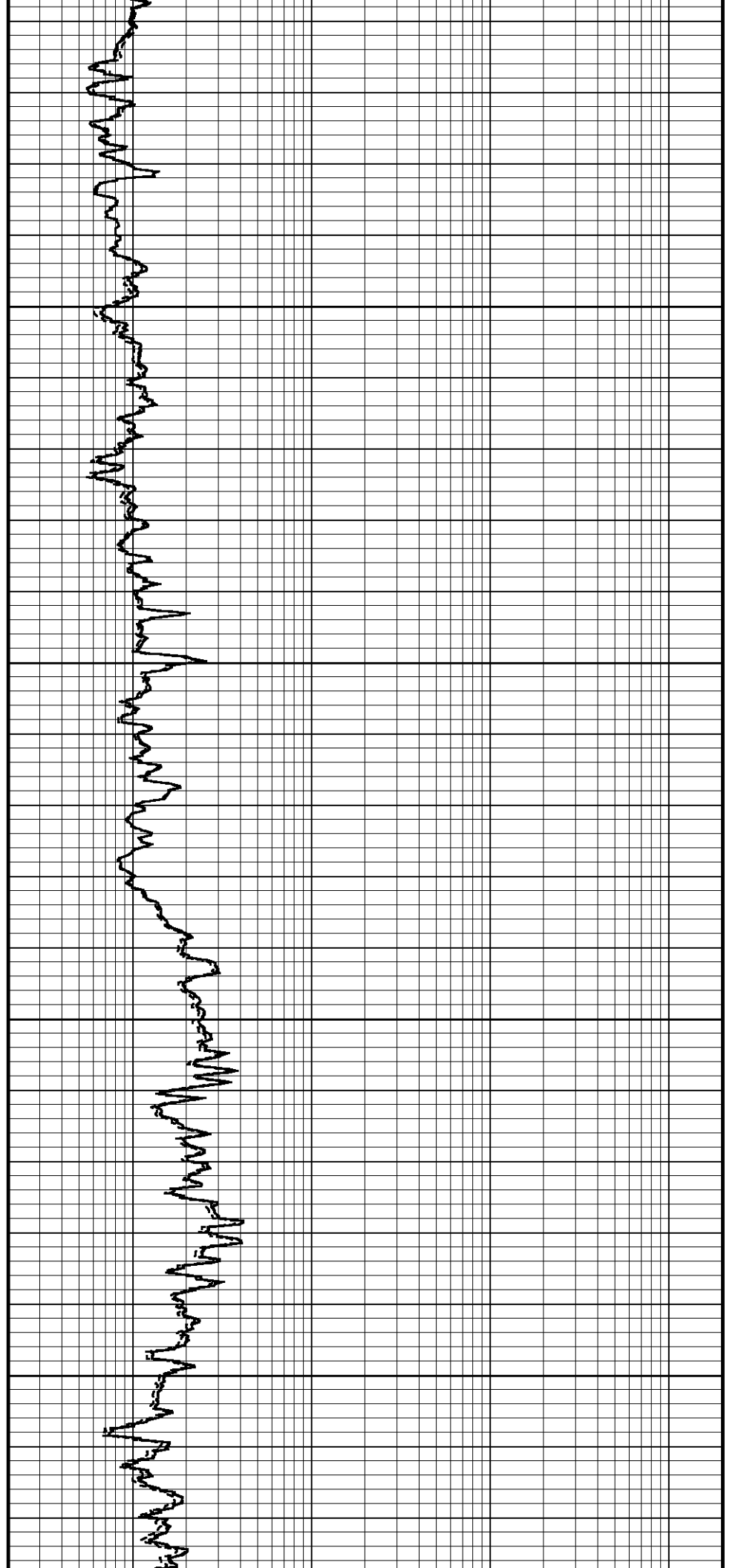
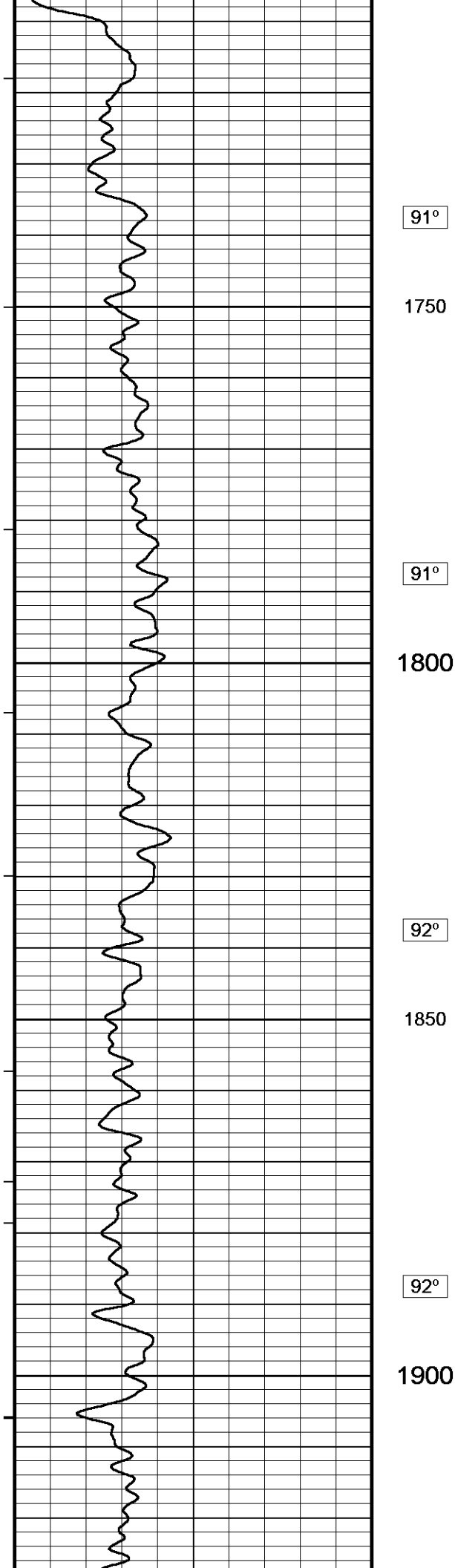


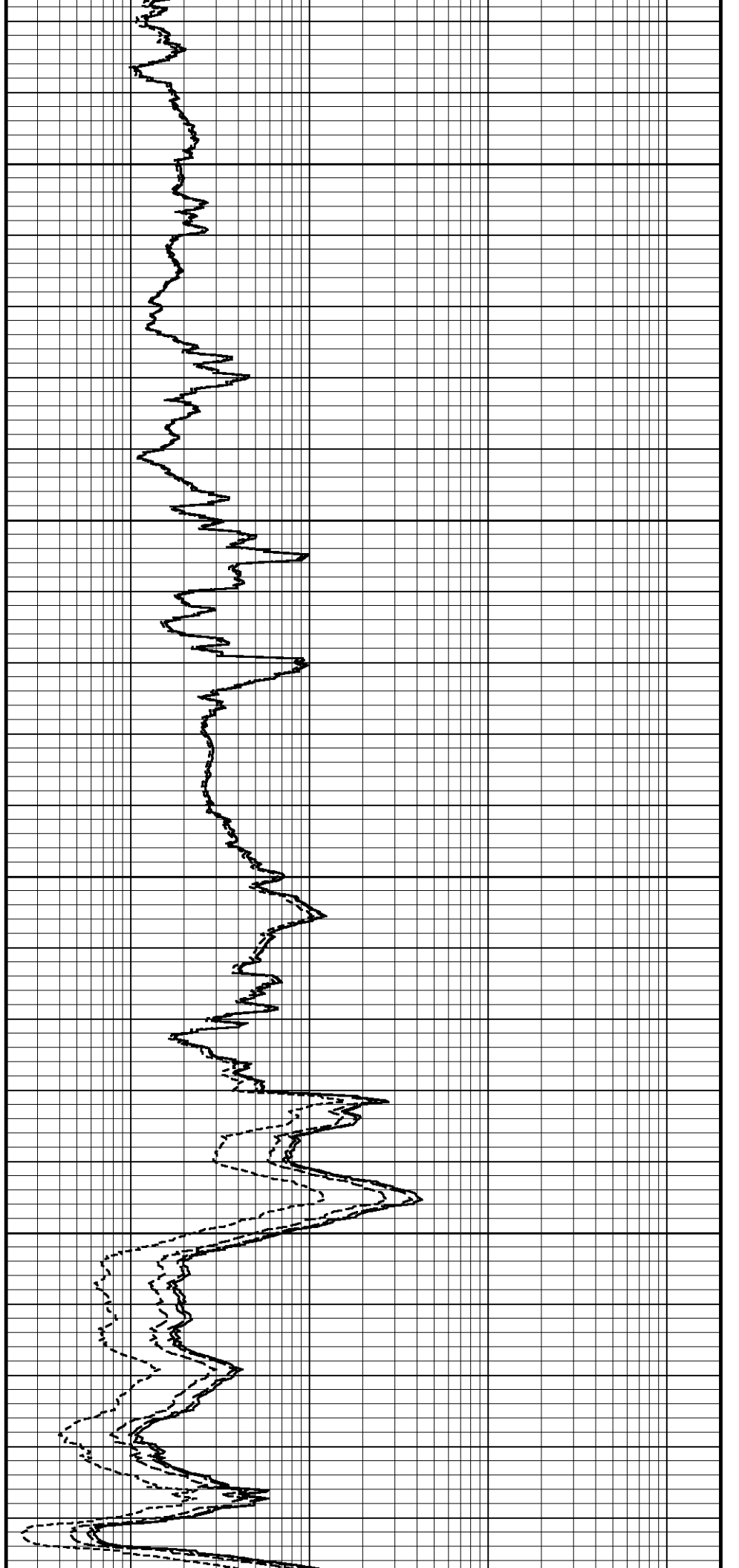
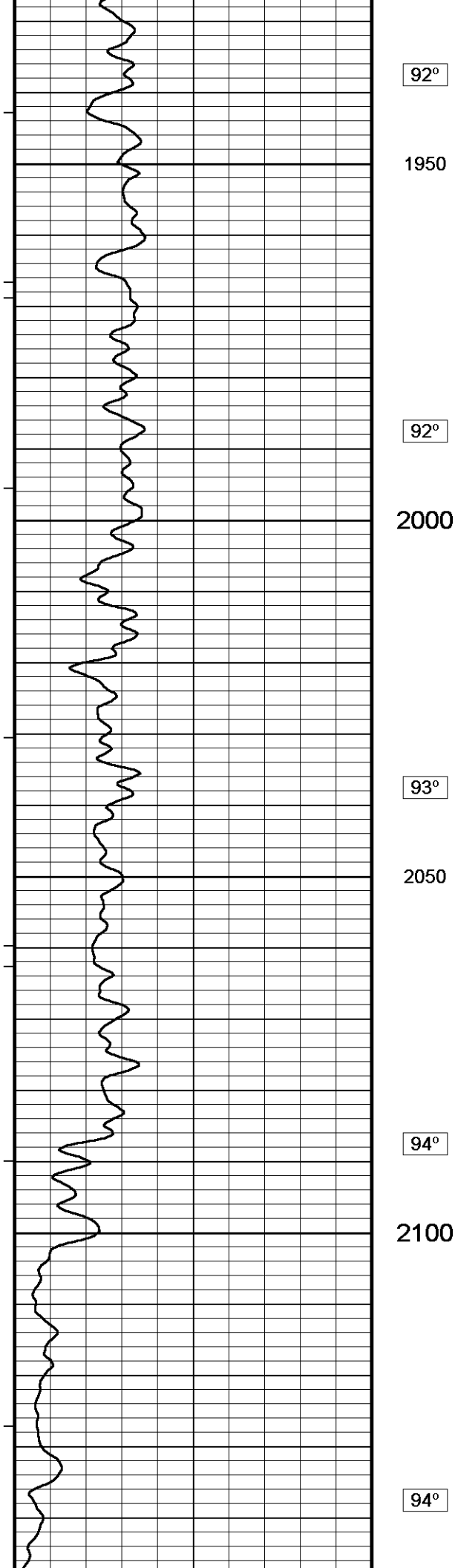


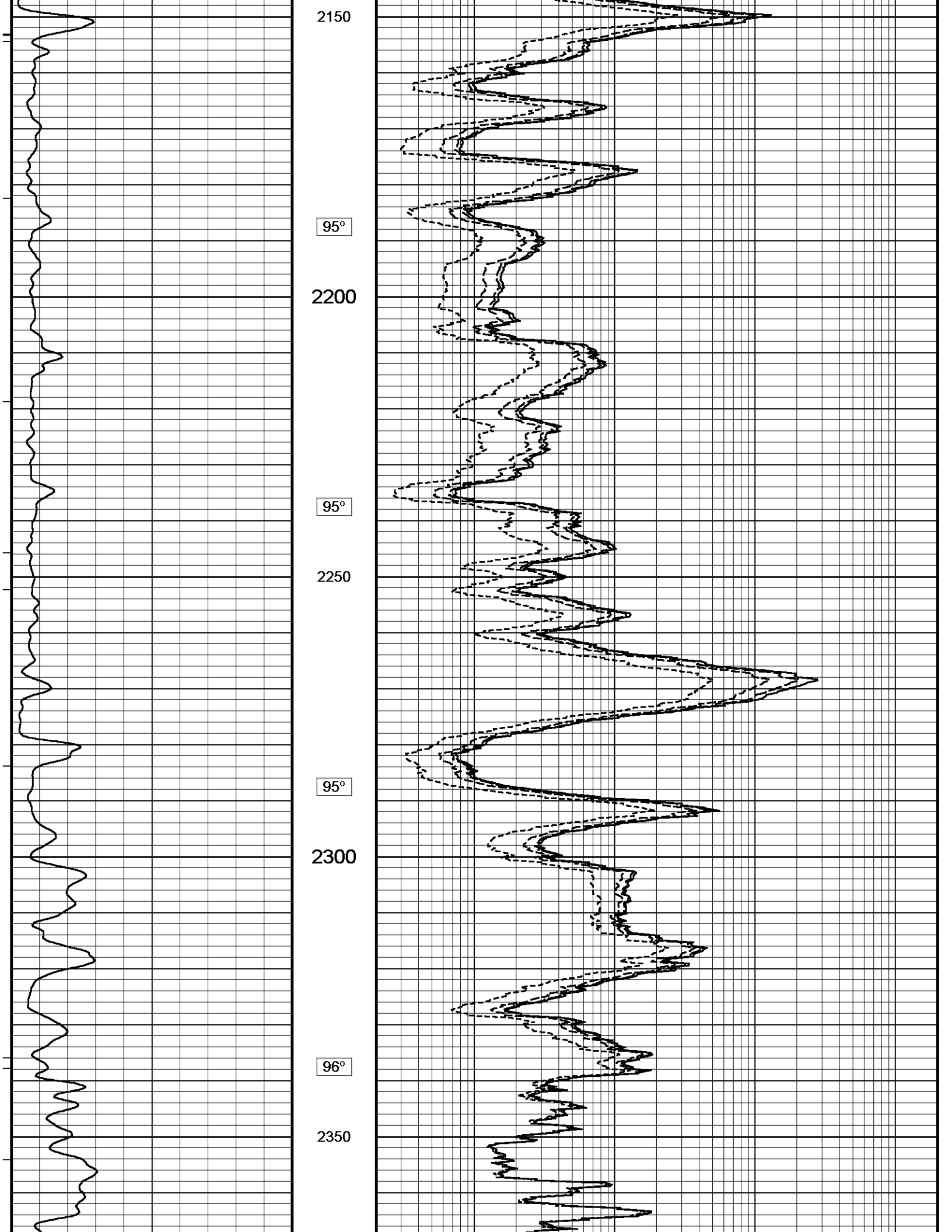






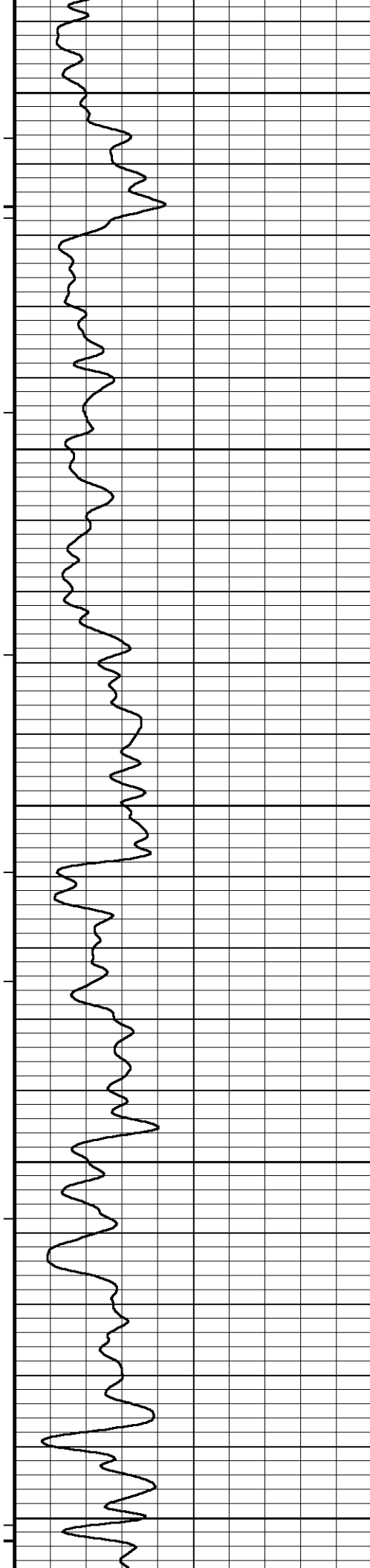












98°

2600

98°

2650

99°

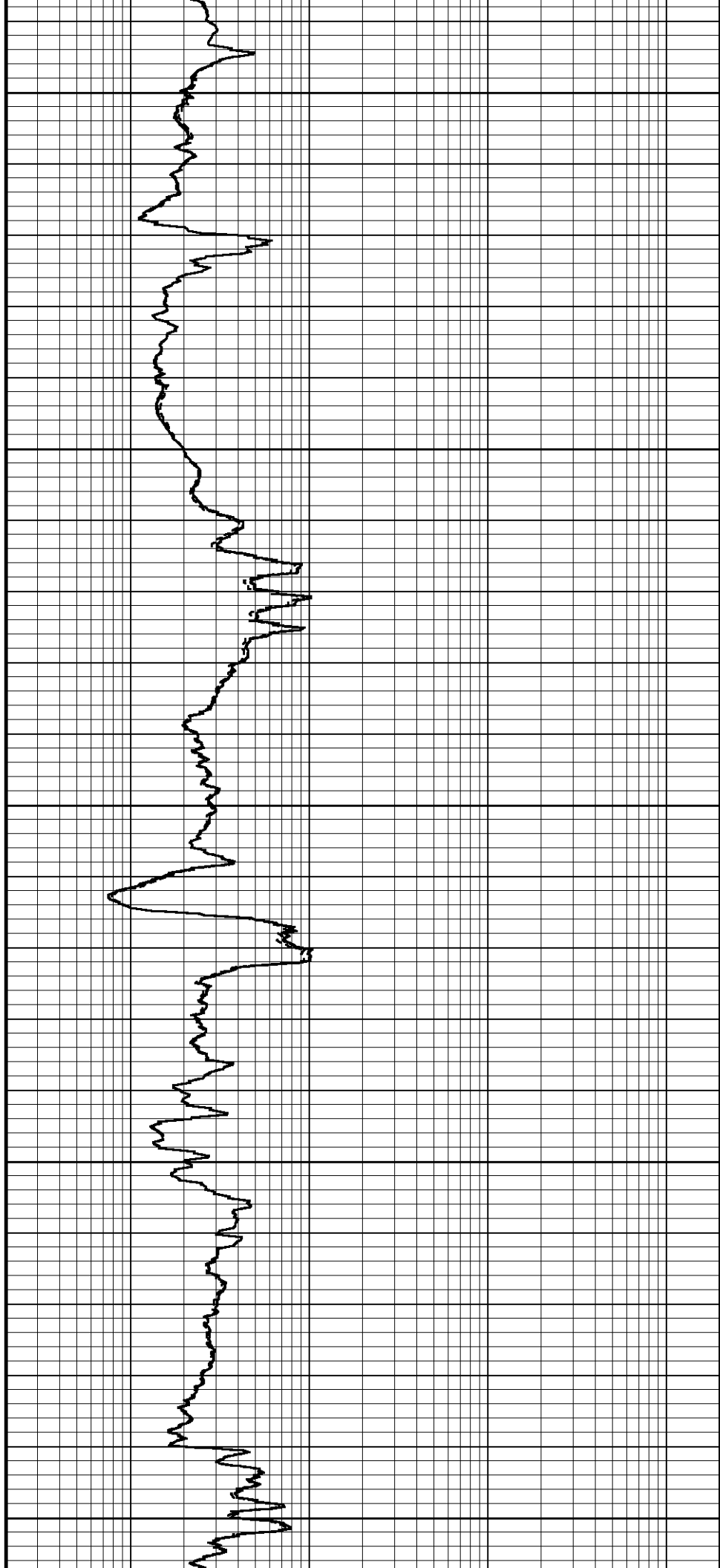
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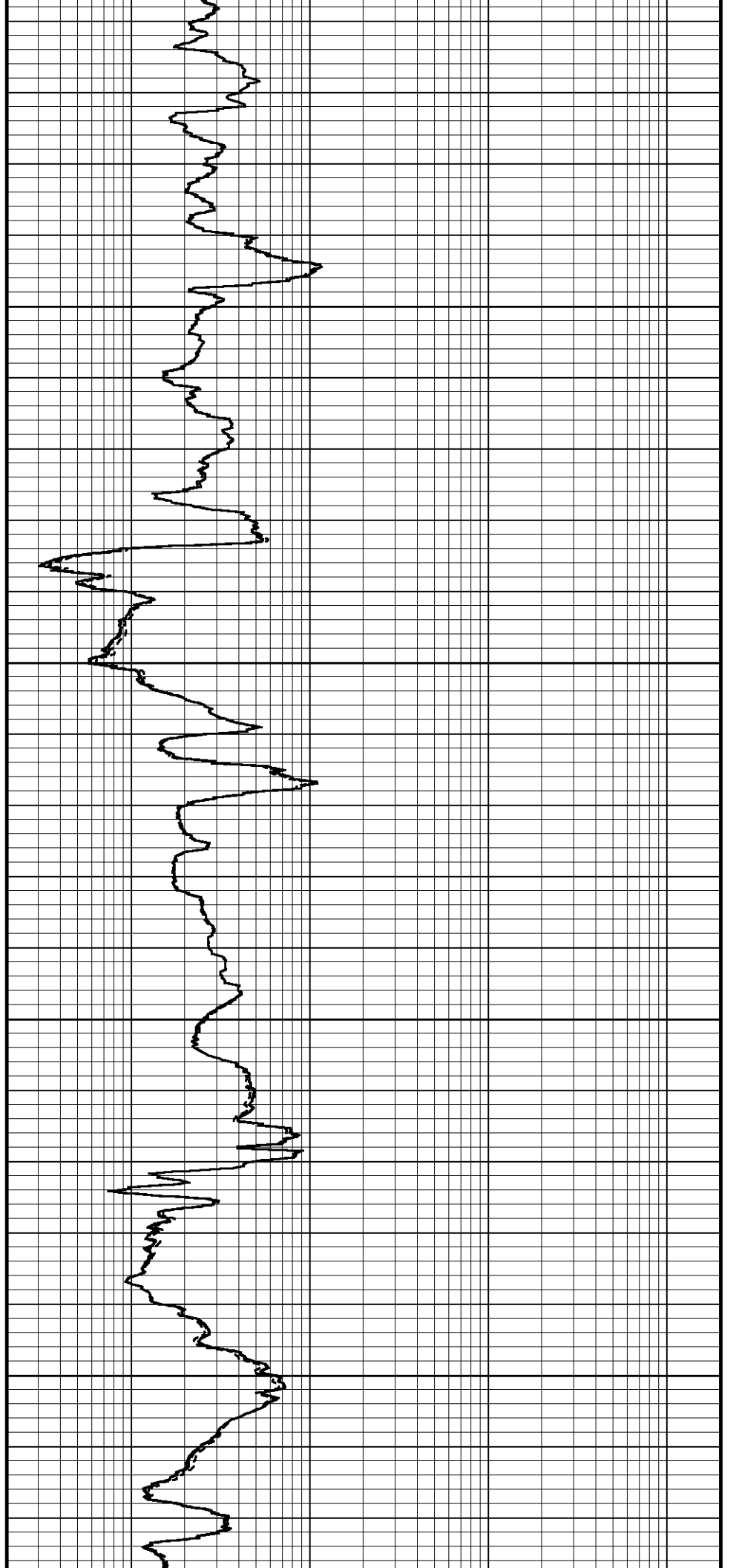
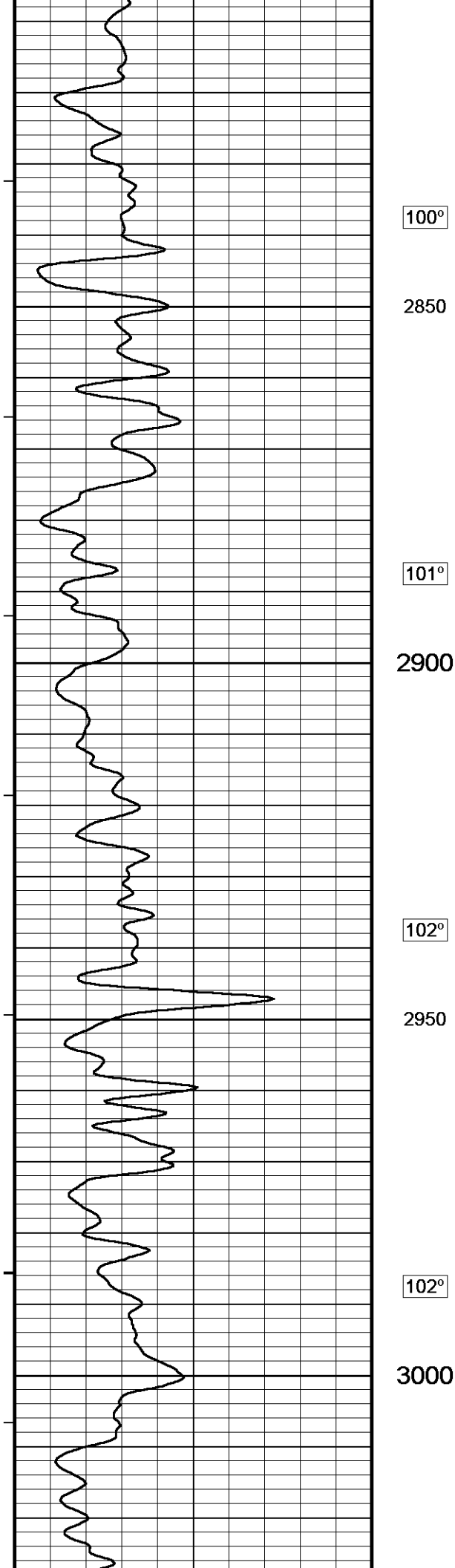
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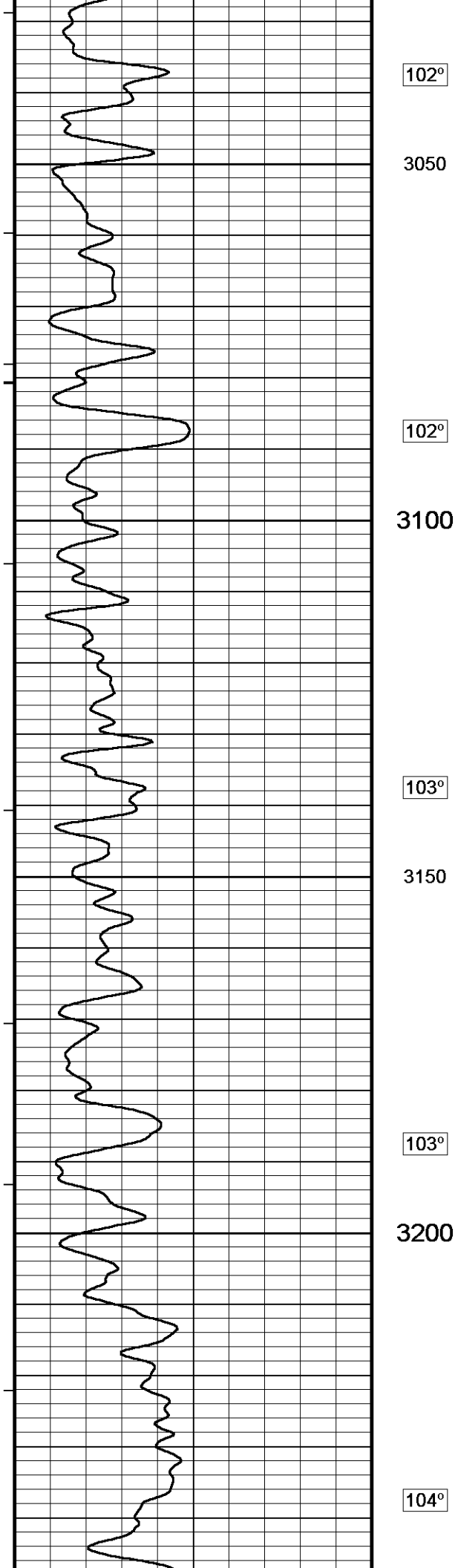
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100°

2800







102°

3050

102°

3100

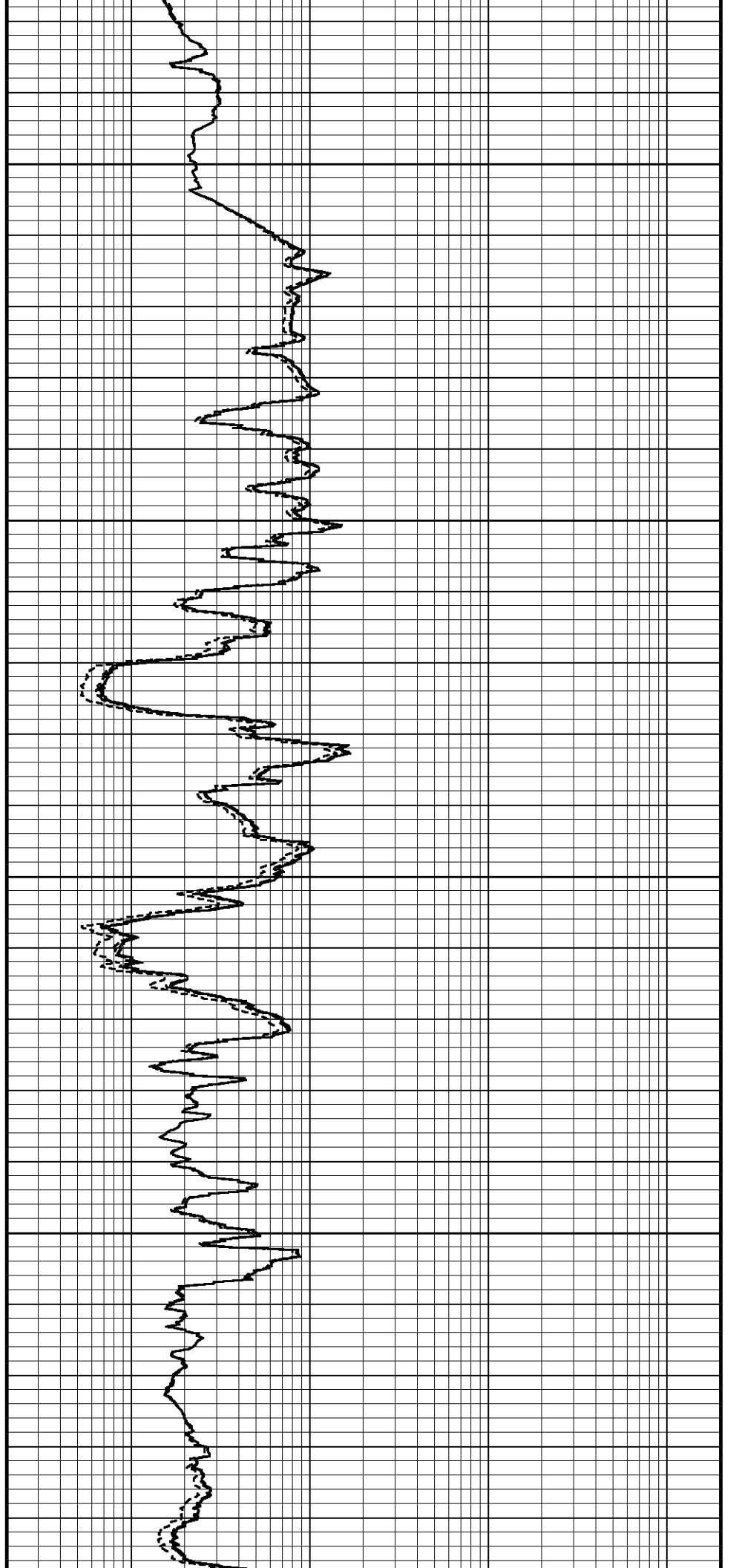
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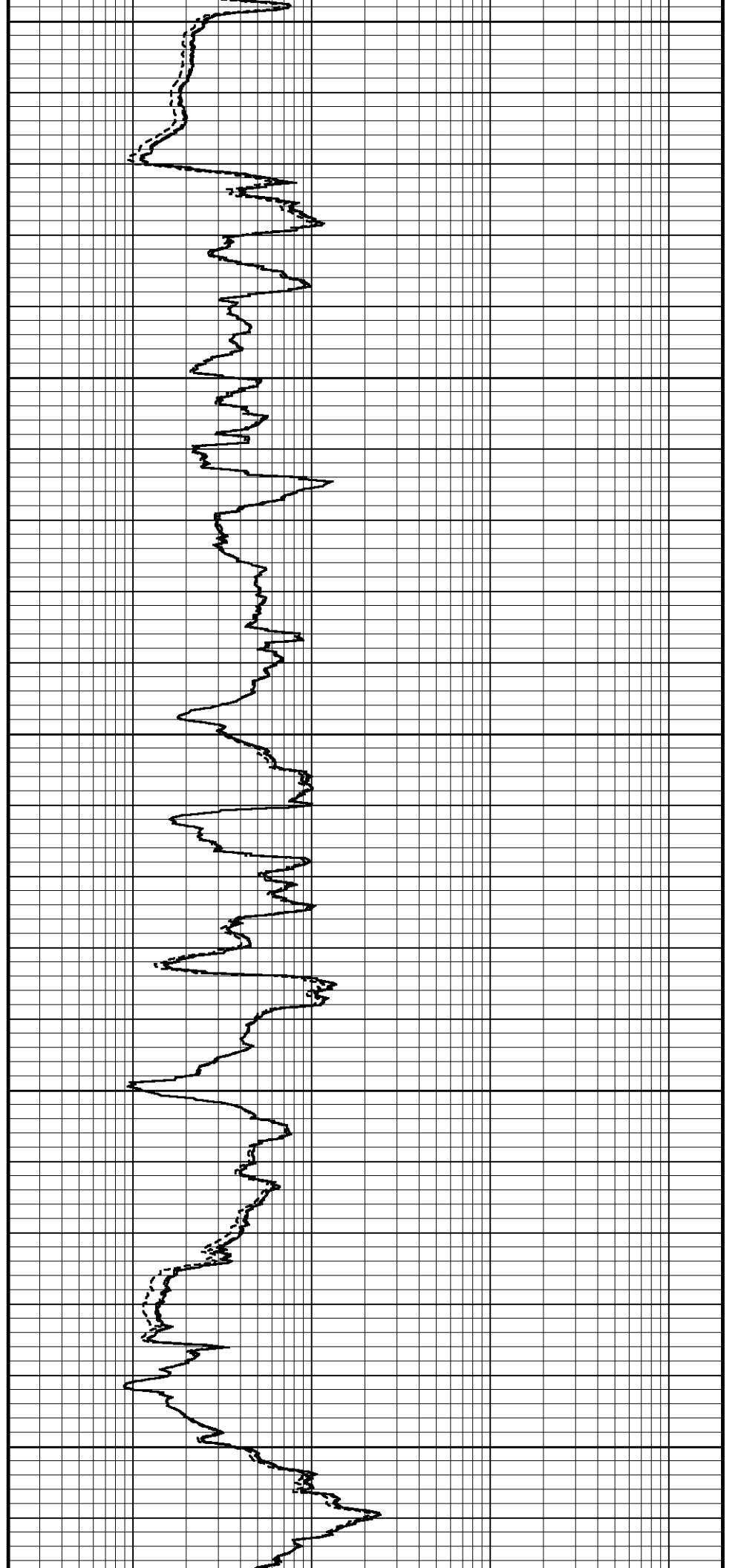
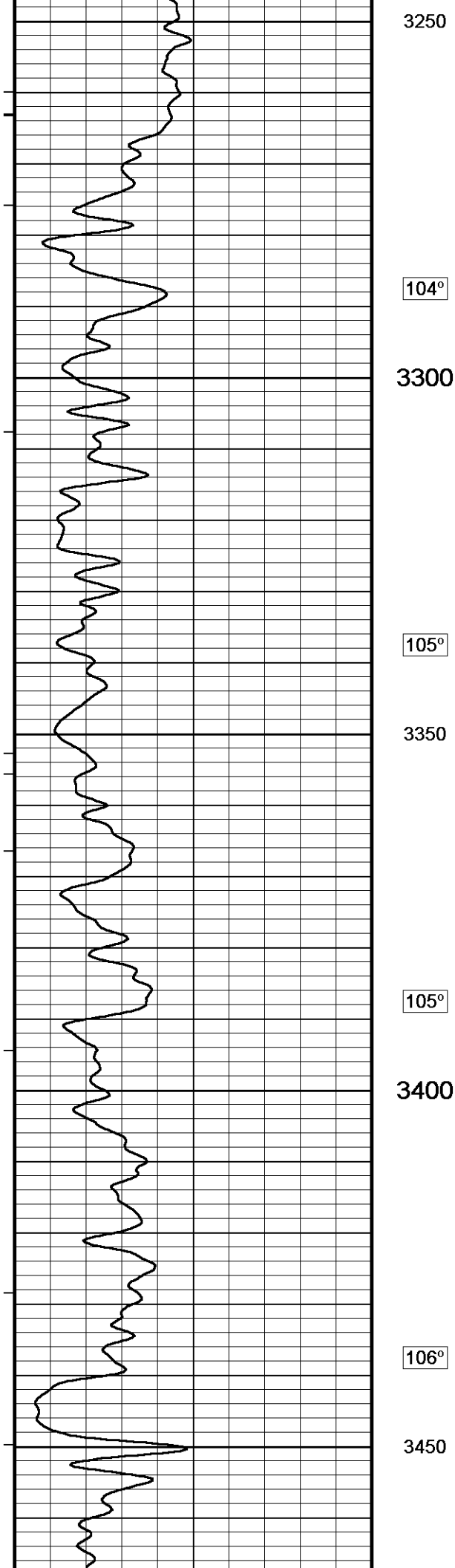
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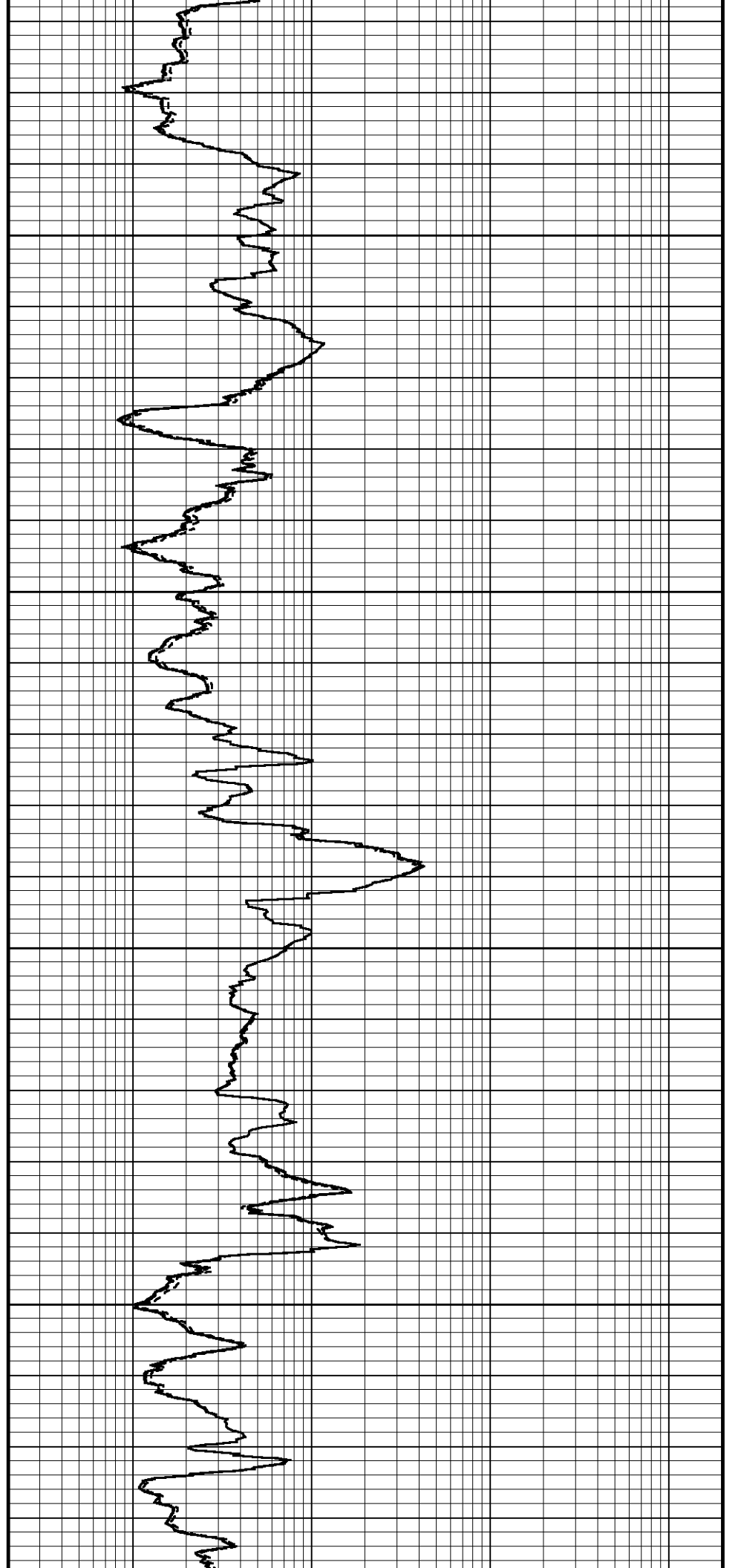
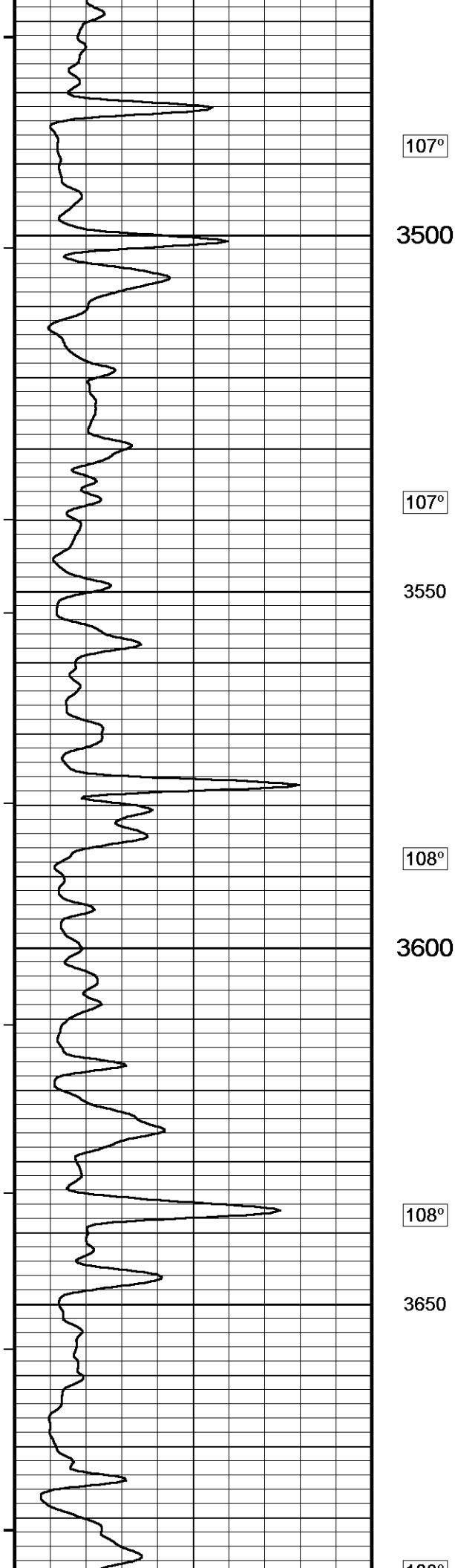
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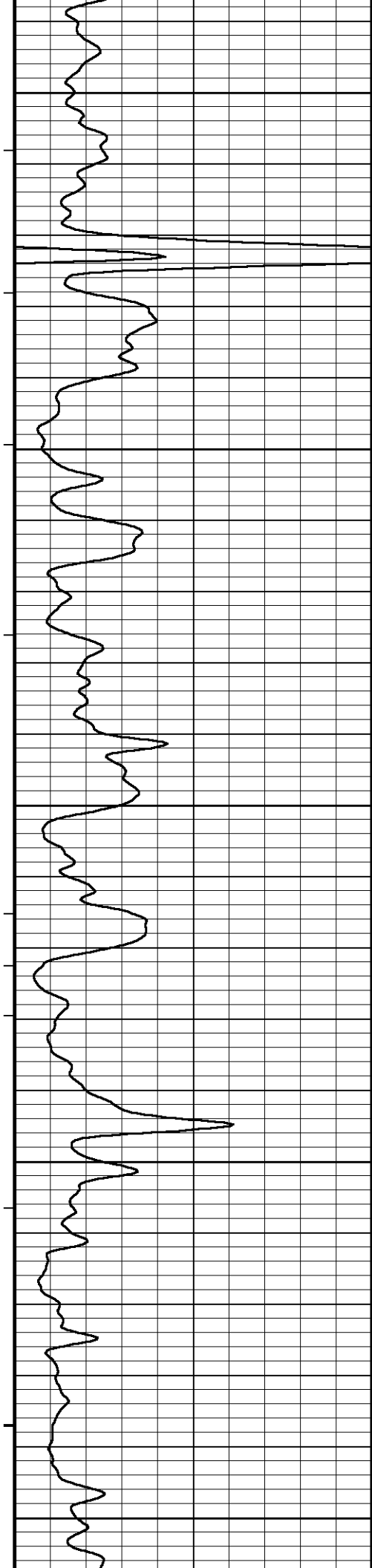
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104°









108°

3700

109°

3750

109°

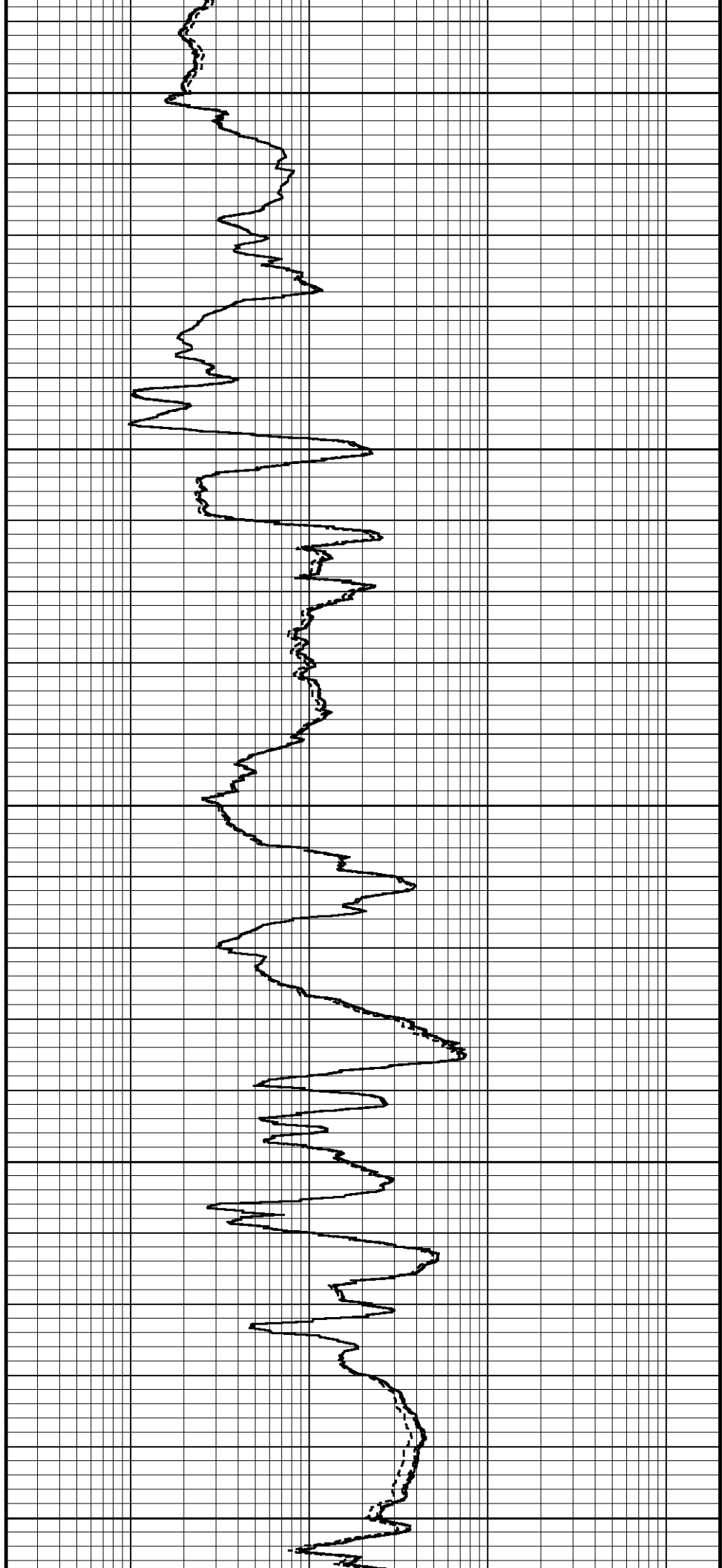
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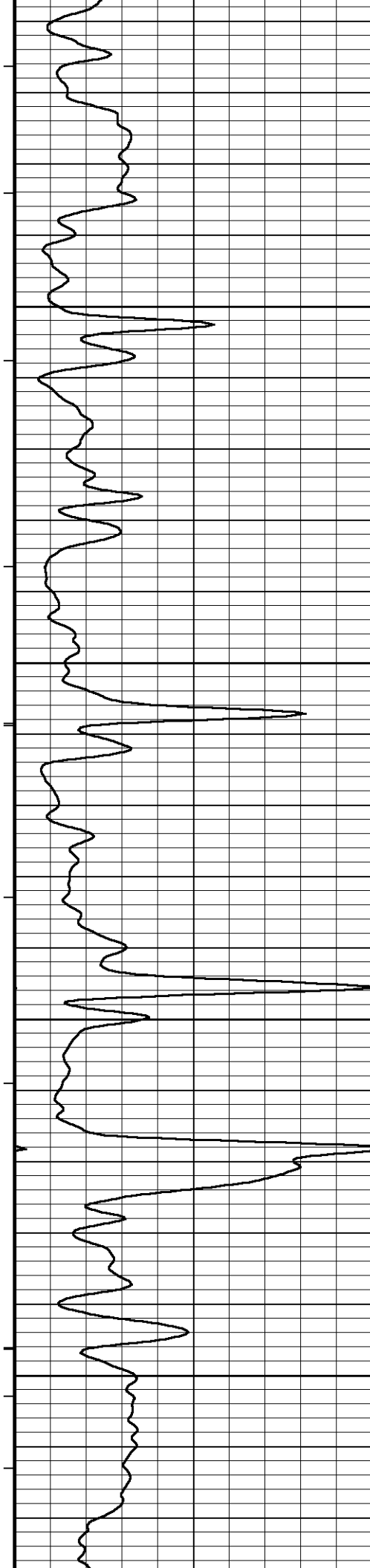
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3850

110°

3900





111°

3950

111°

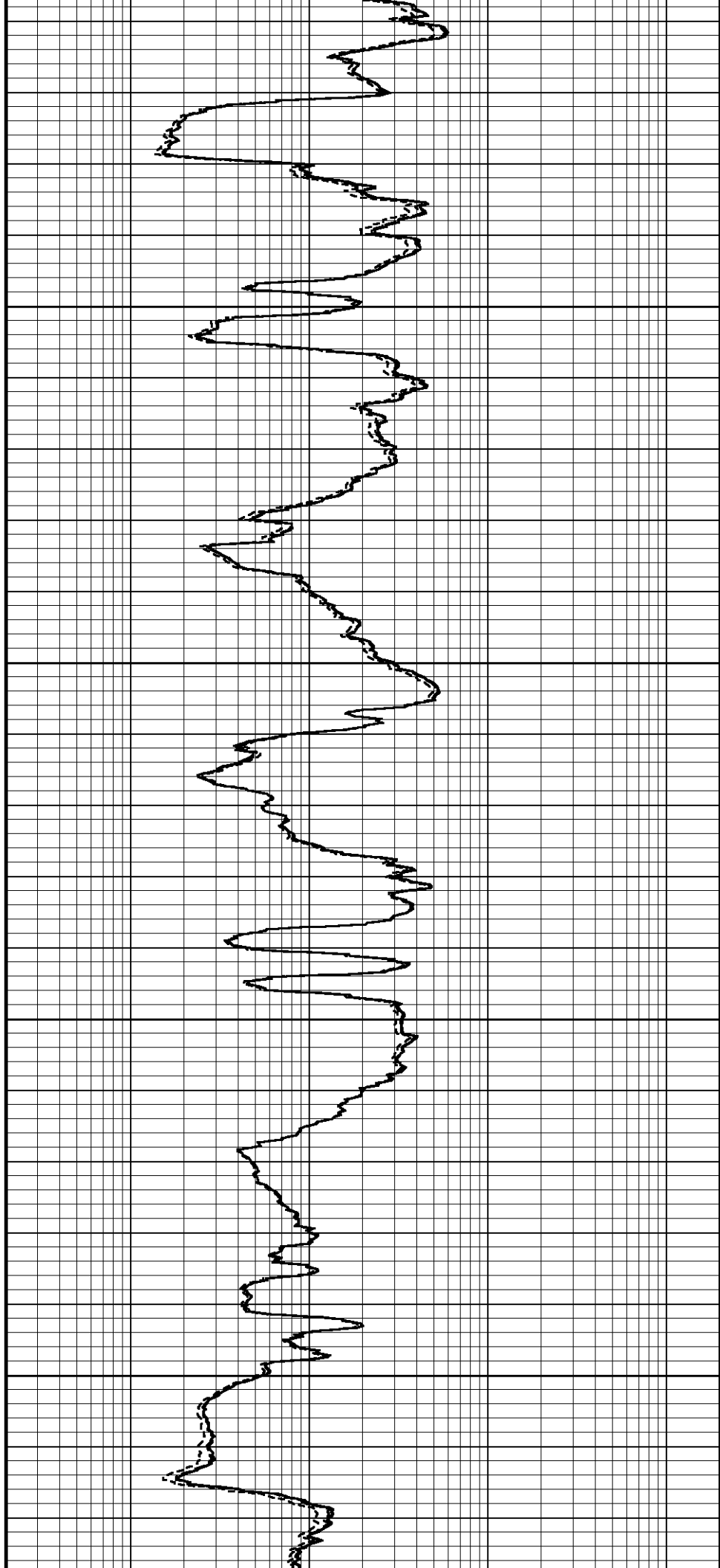
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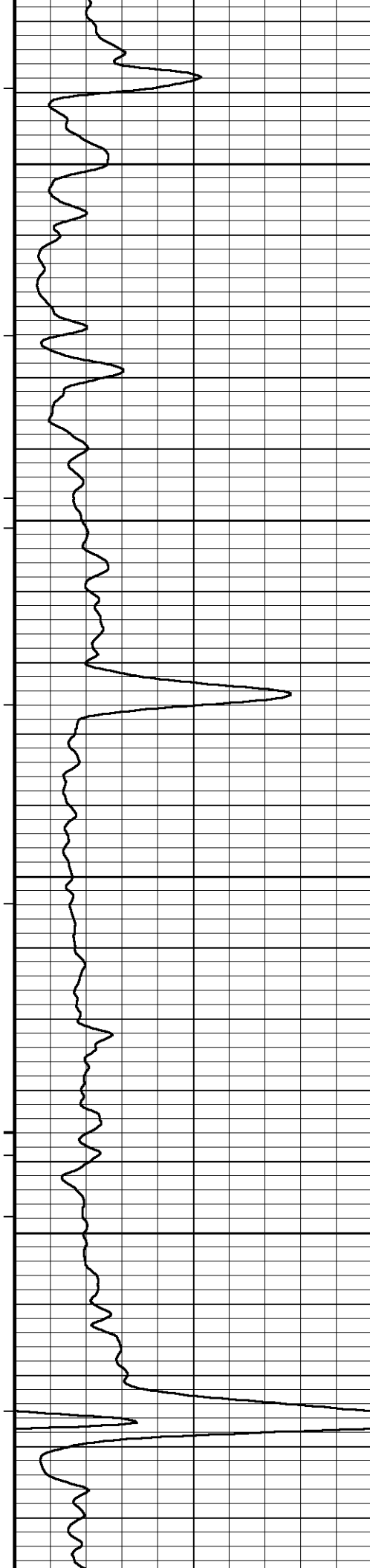
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112°

4100







112°

4150

113°

4200

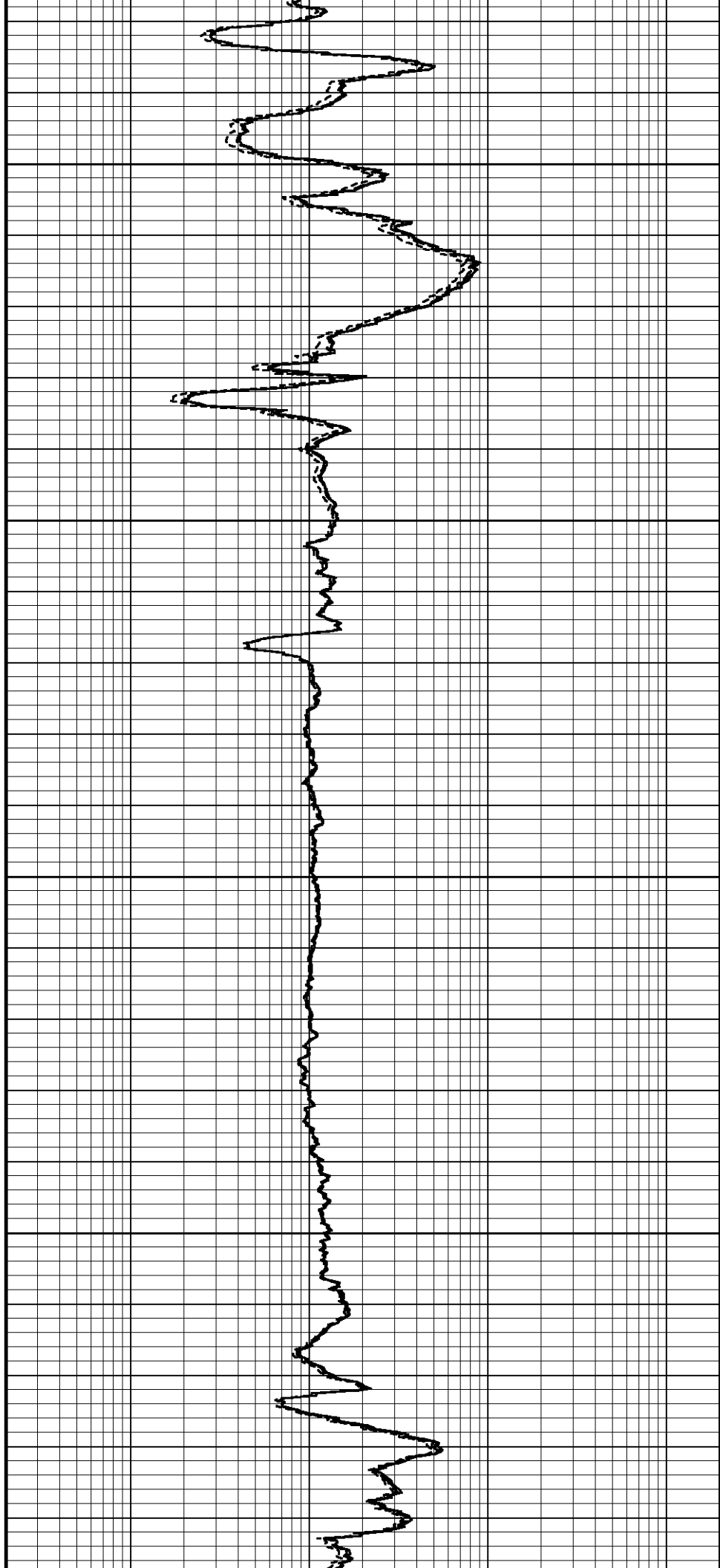
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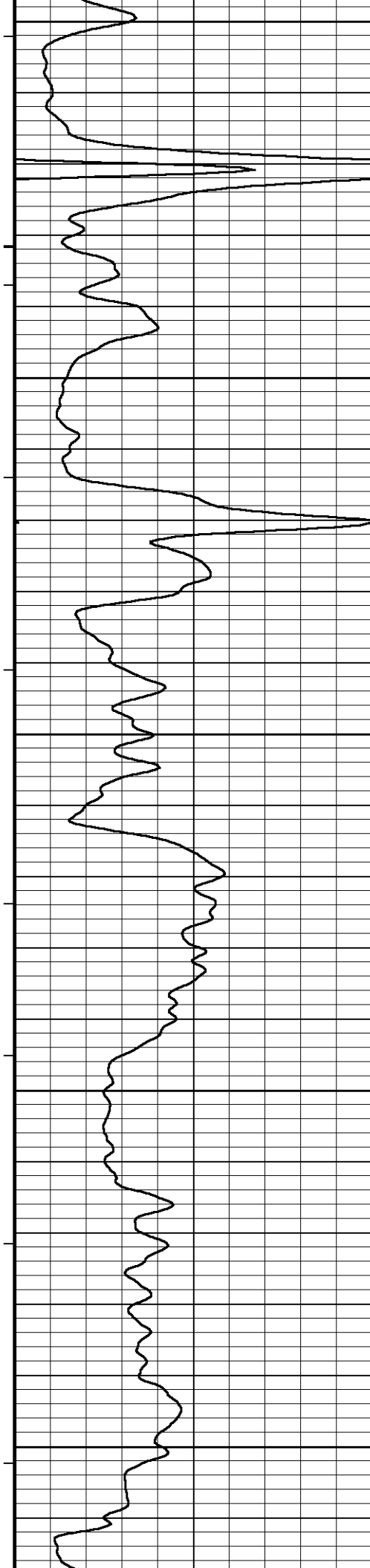
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113°

4300

114°





4350

114°

4400

115°

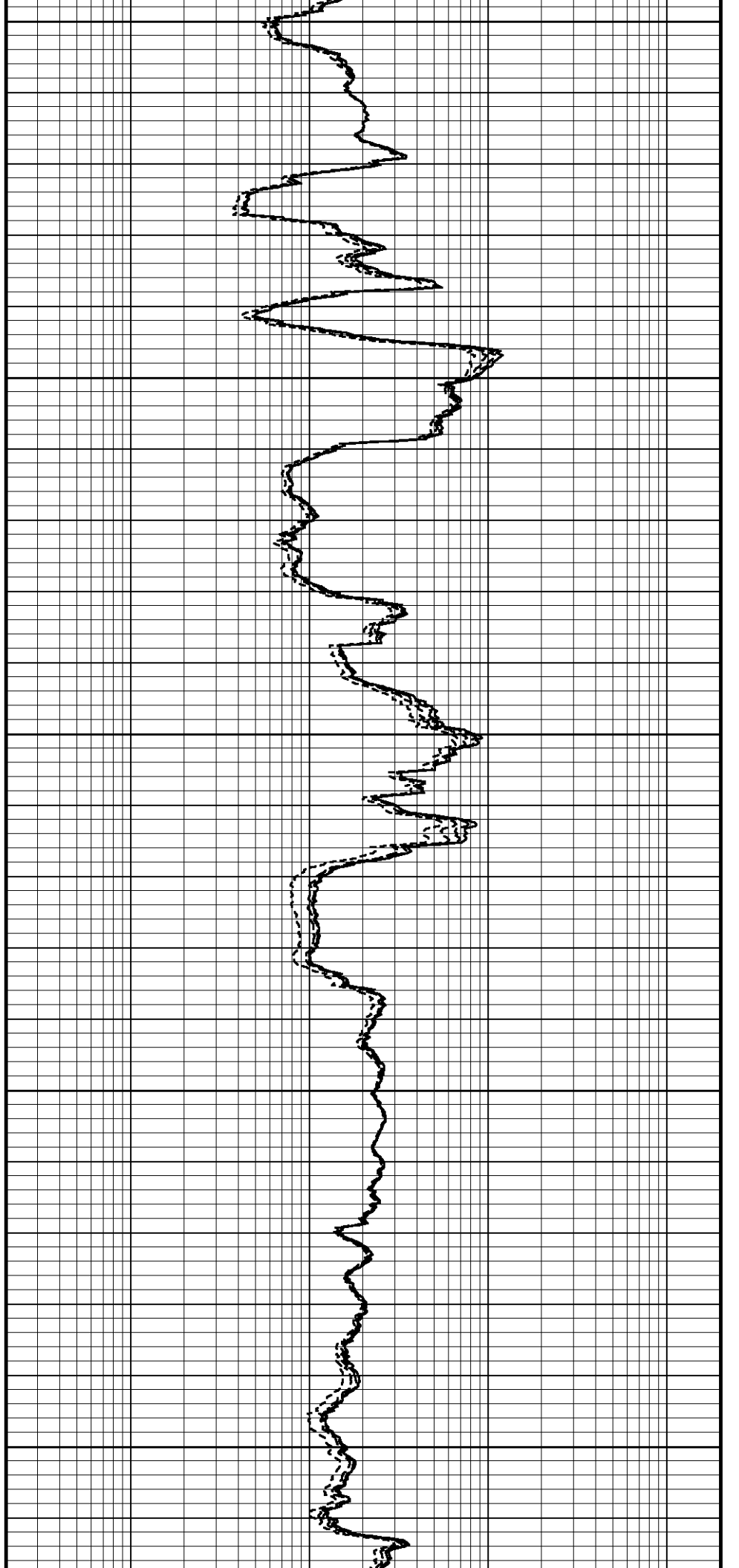
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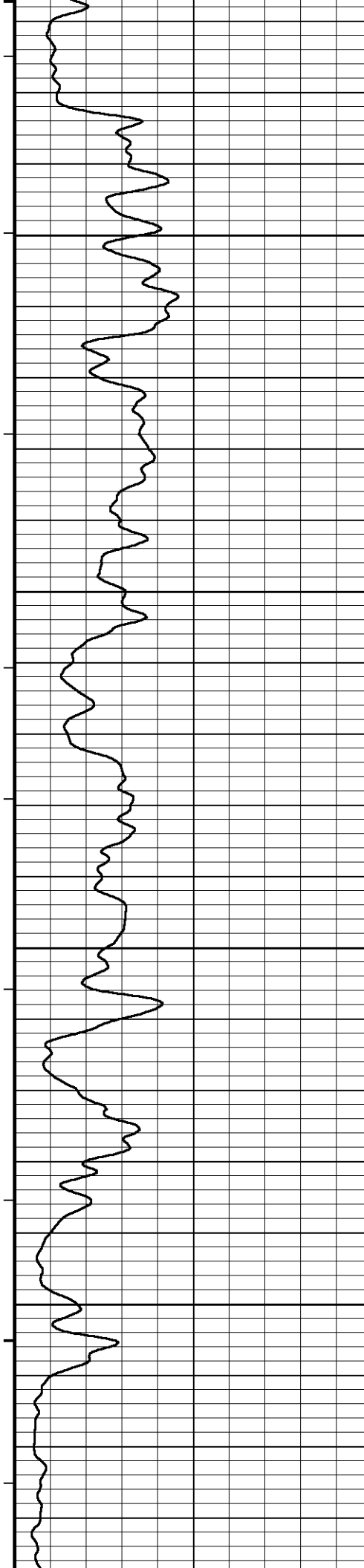
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4500

116°

4550





117°

4600

117°

4650

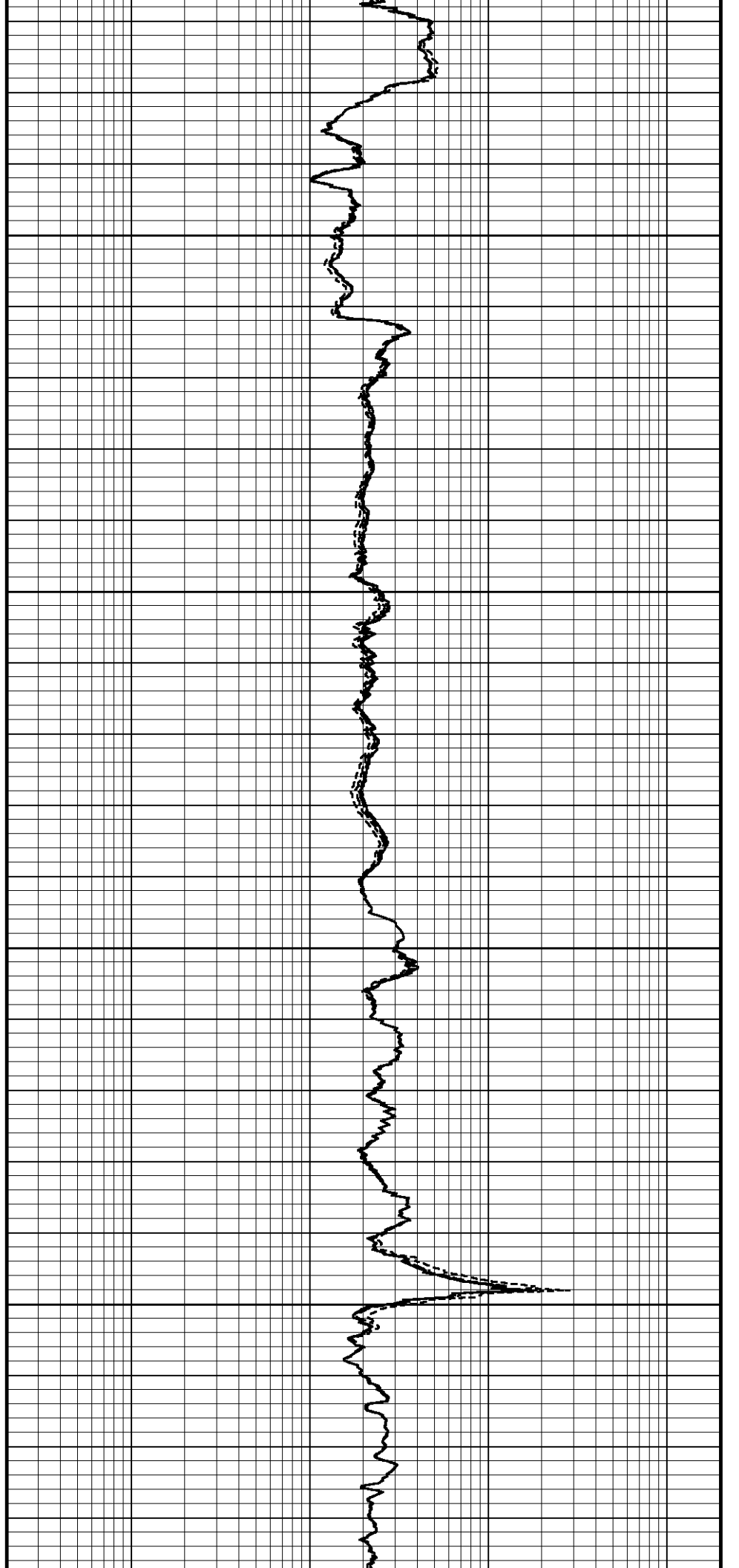
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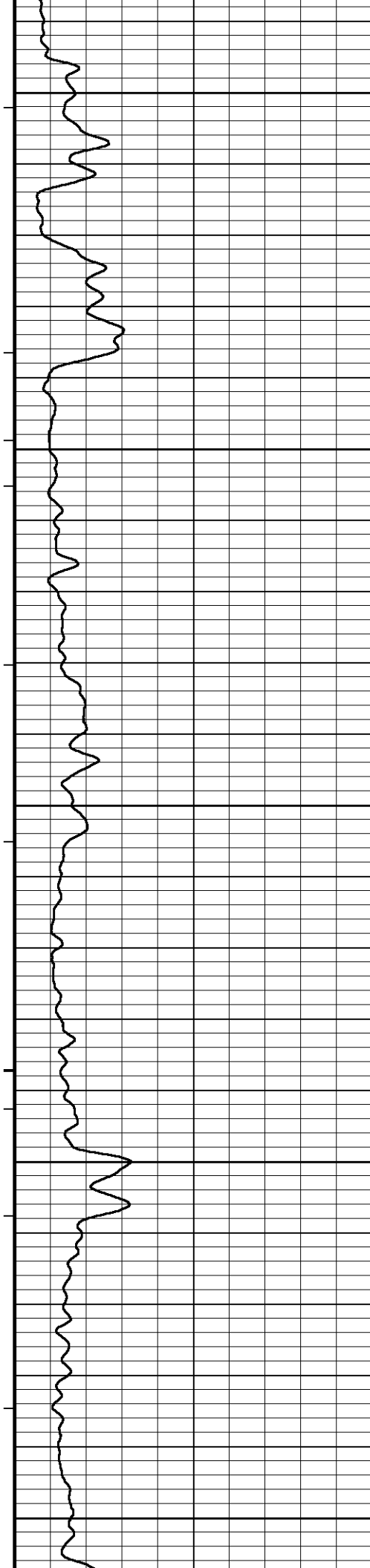
4700

117°

4750

117°





117°

4800

118°

4850

118°

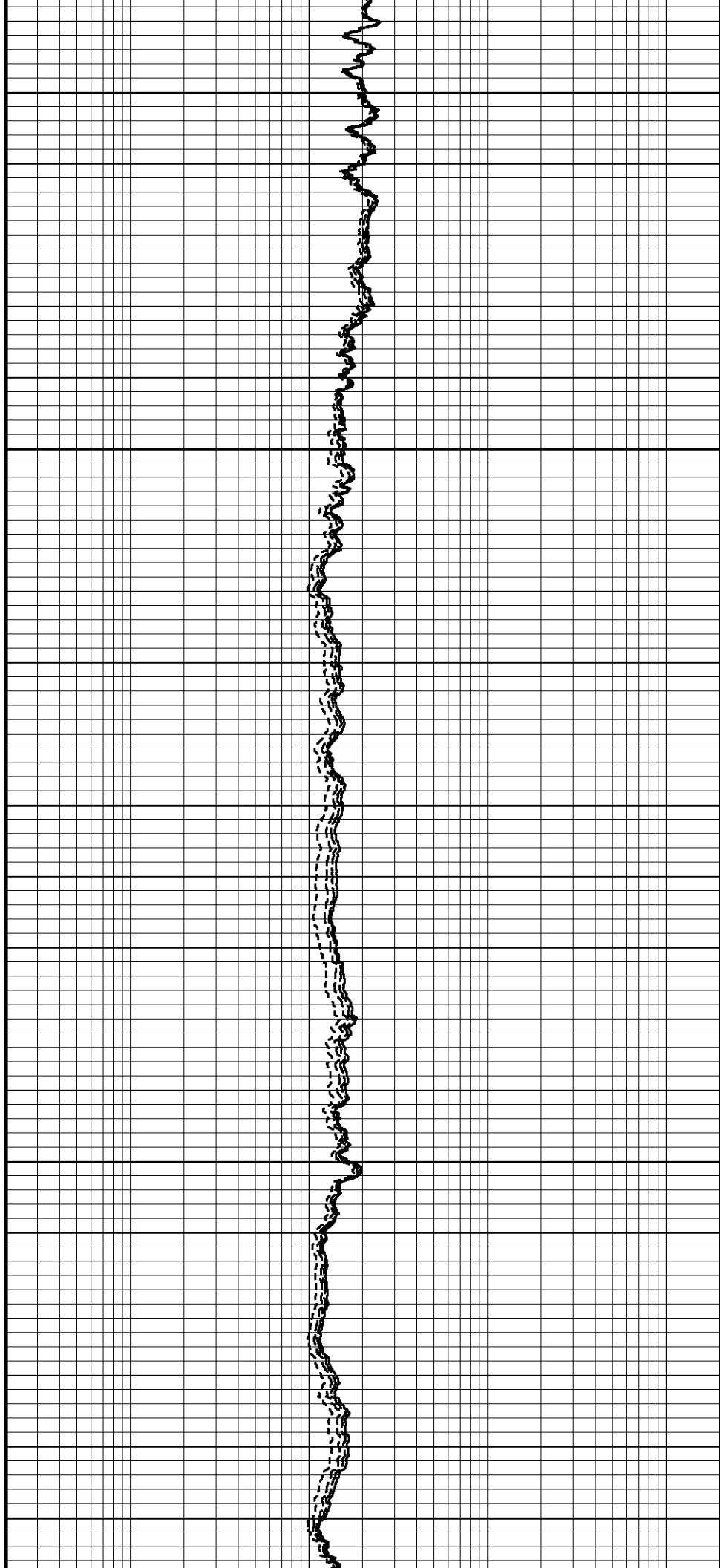
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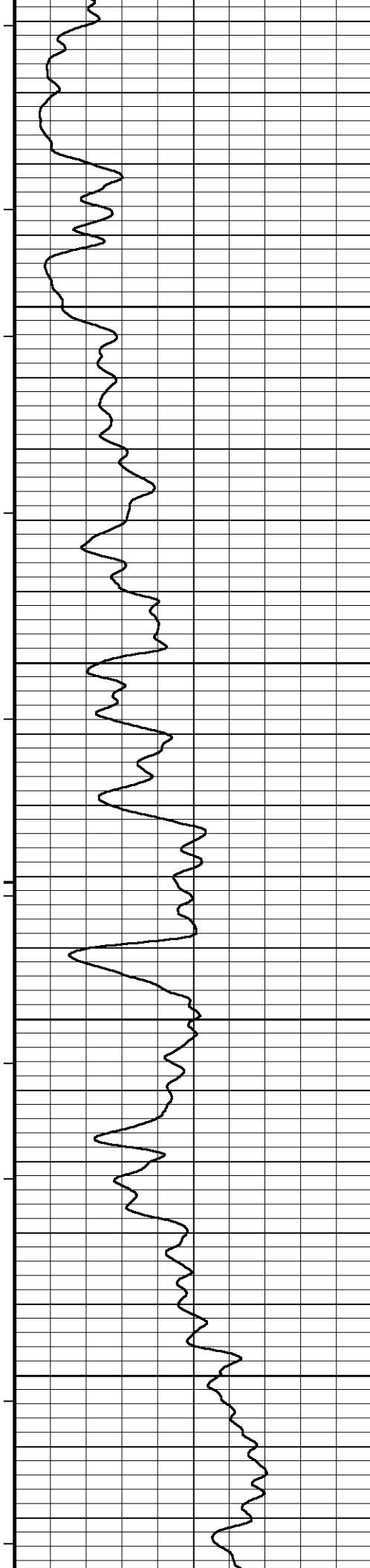
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4950

118°

5000





118°

5050

118°

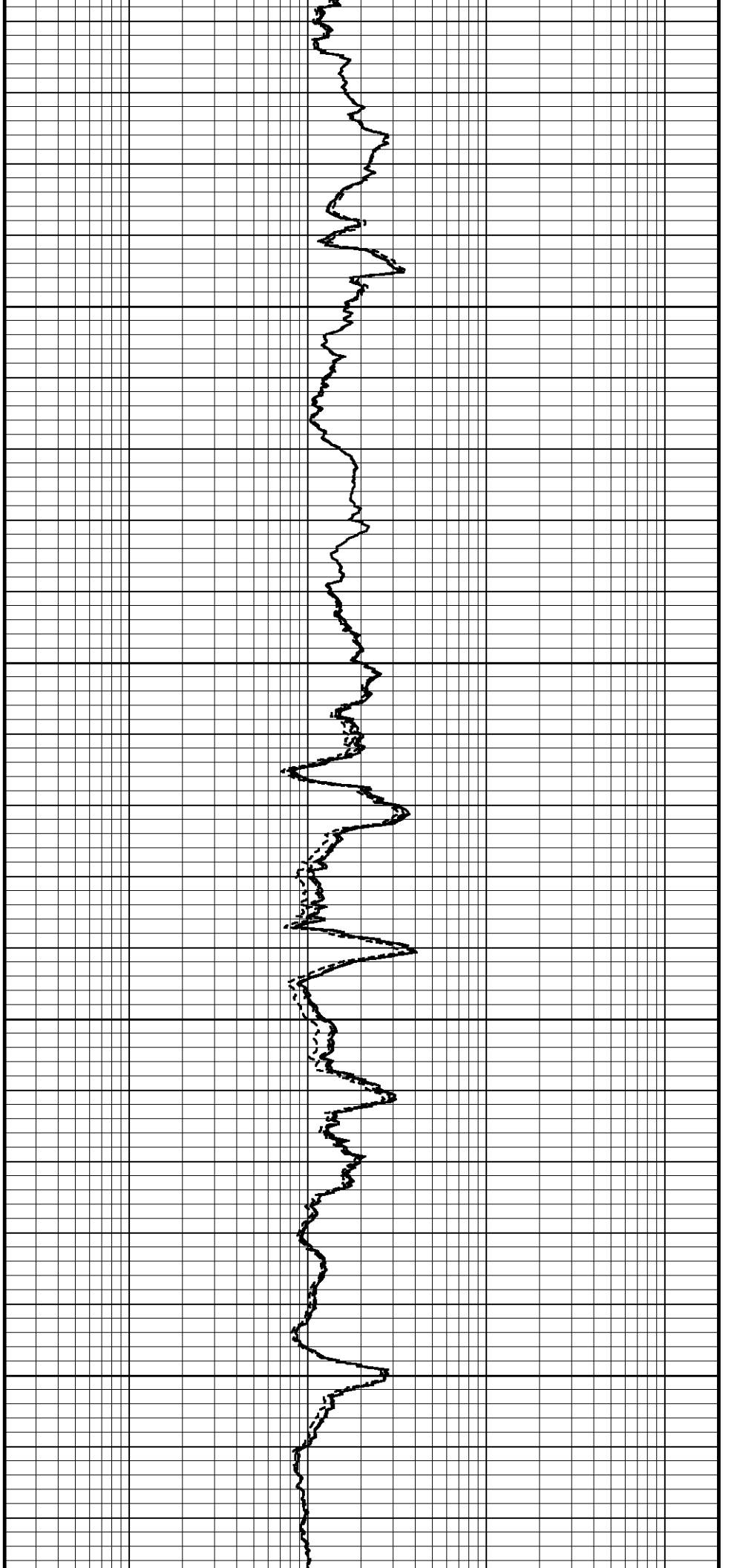
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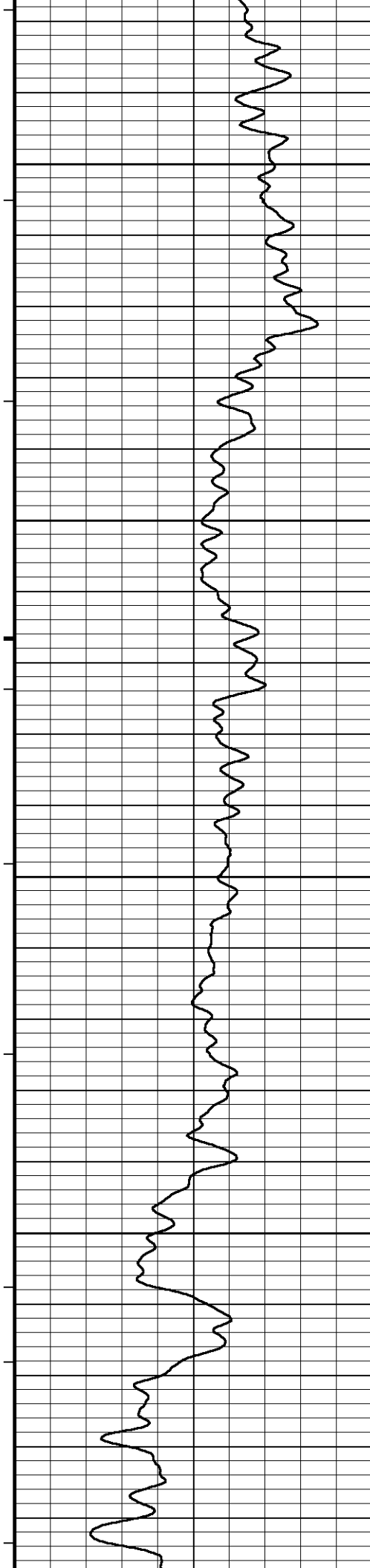
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5150

118°

5200





118°

5250

118°

5300

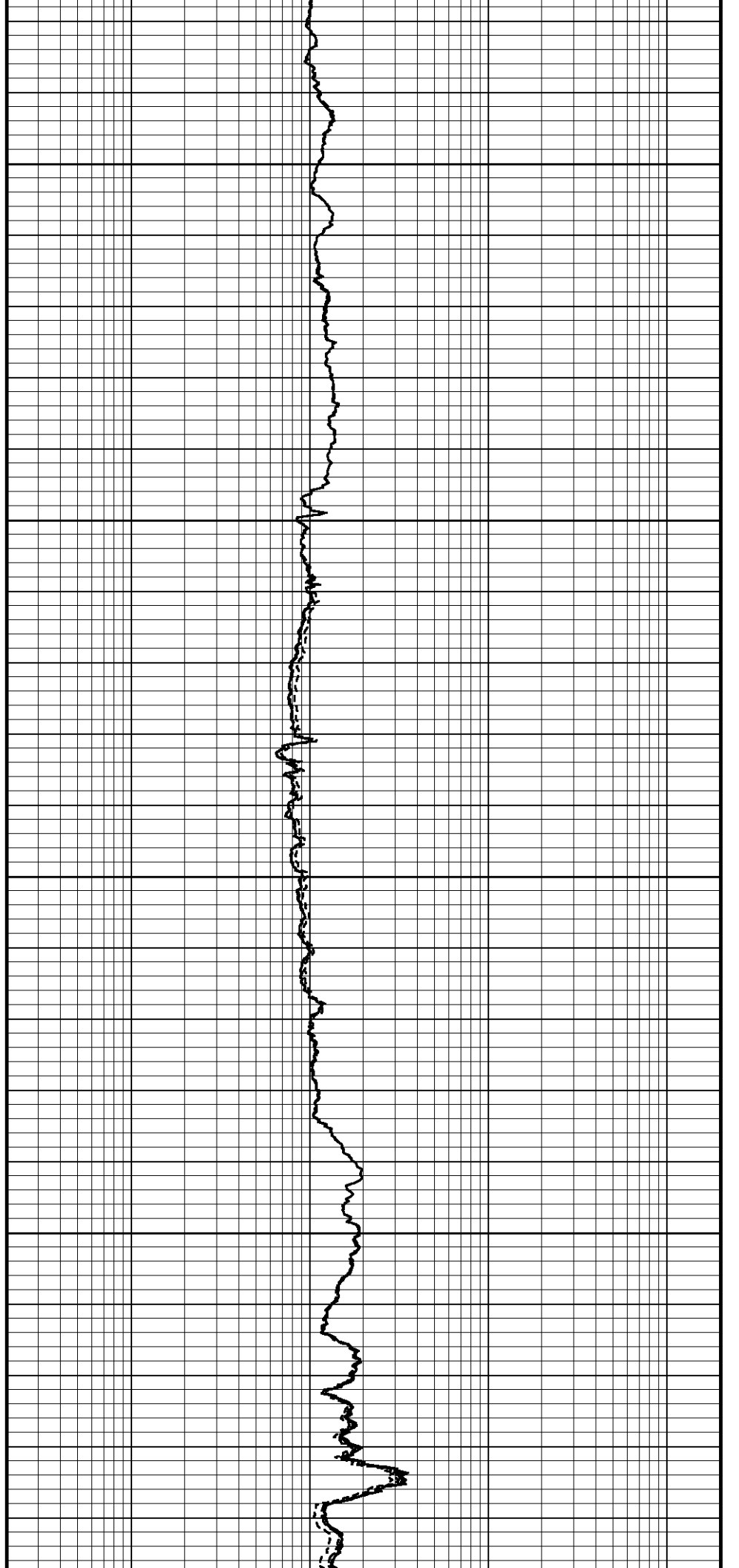
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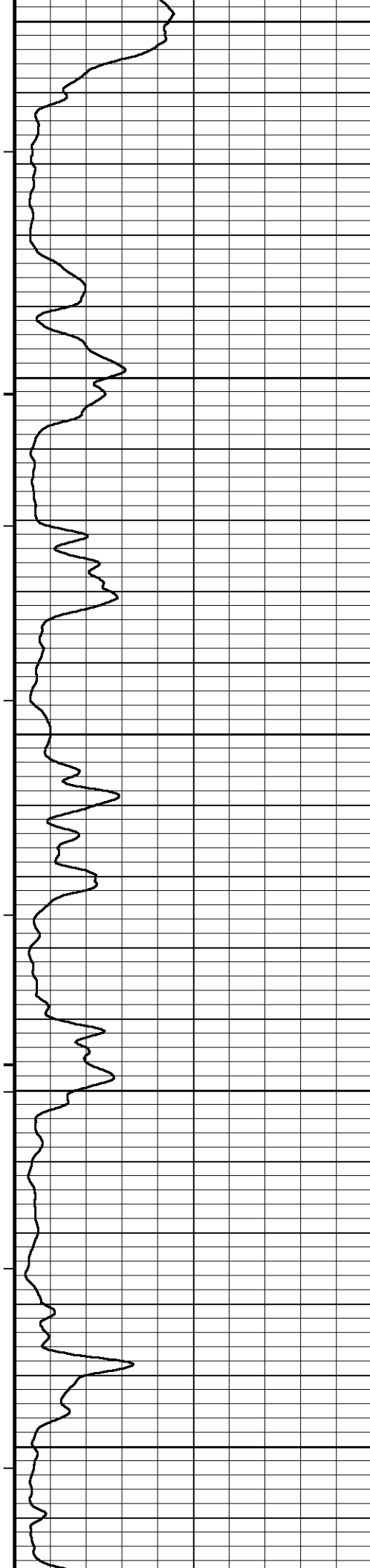
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119°

5400

119°





5450

119°

5500

118°

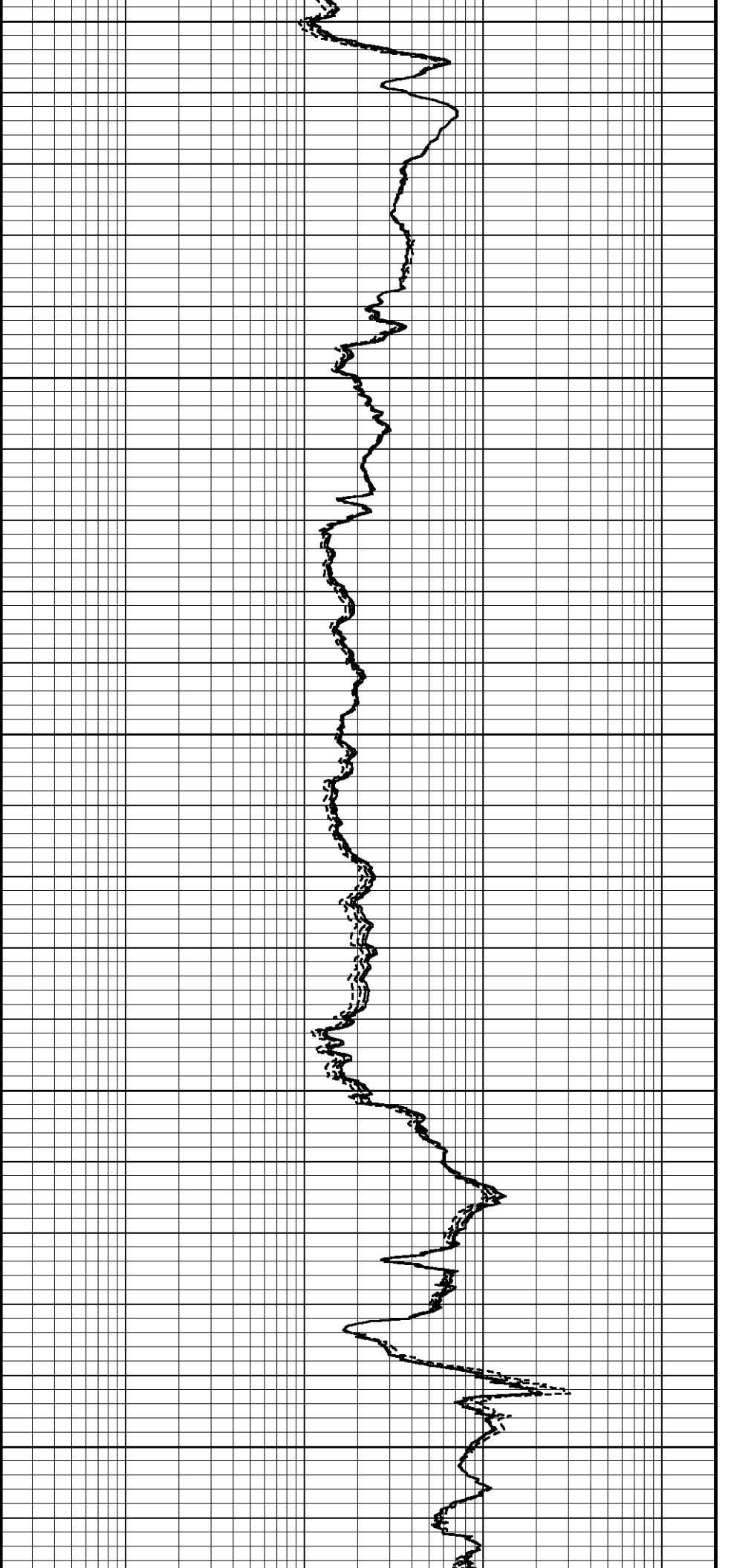
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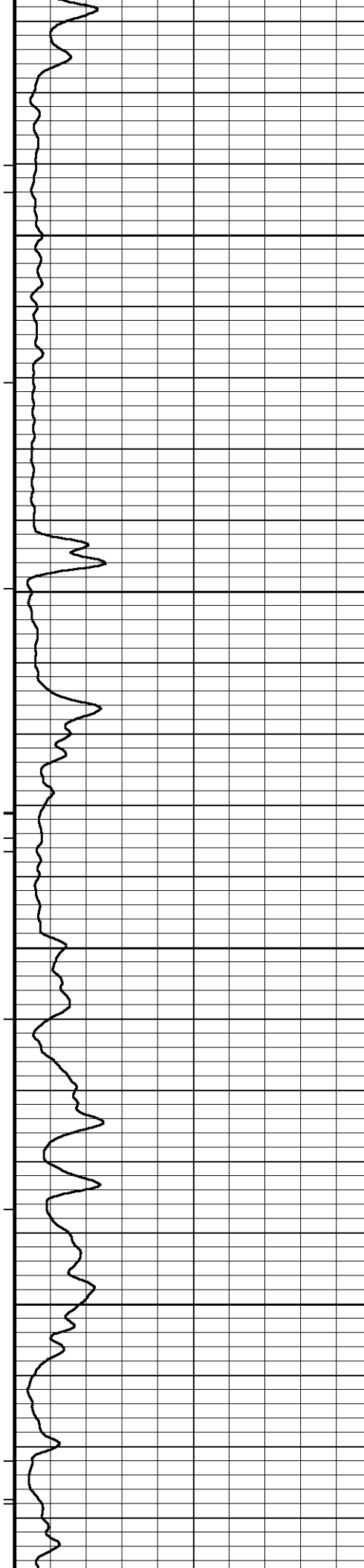
119°

5600

119°

5650





119°

5700

119°

5750

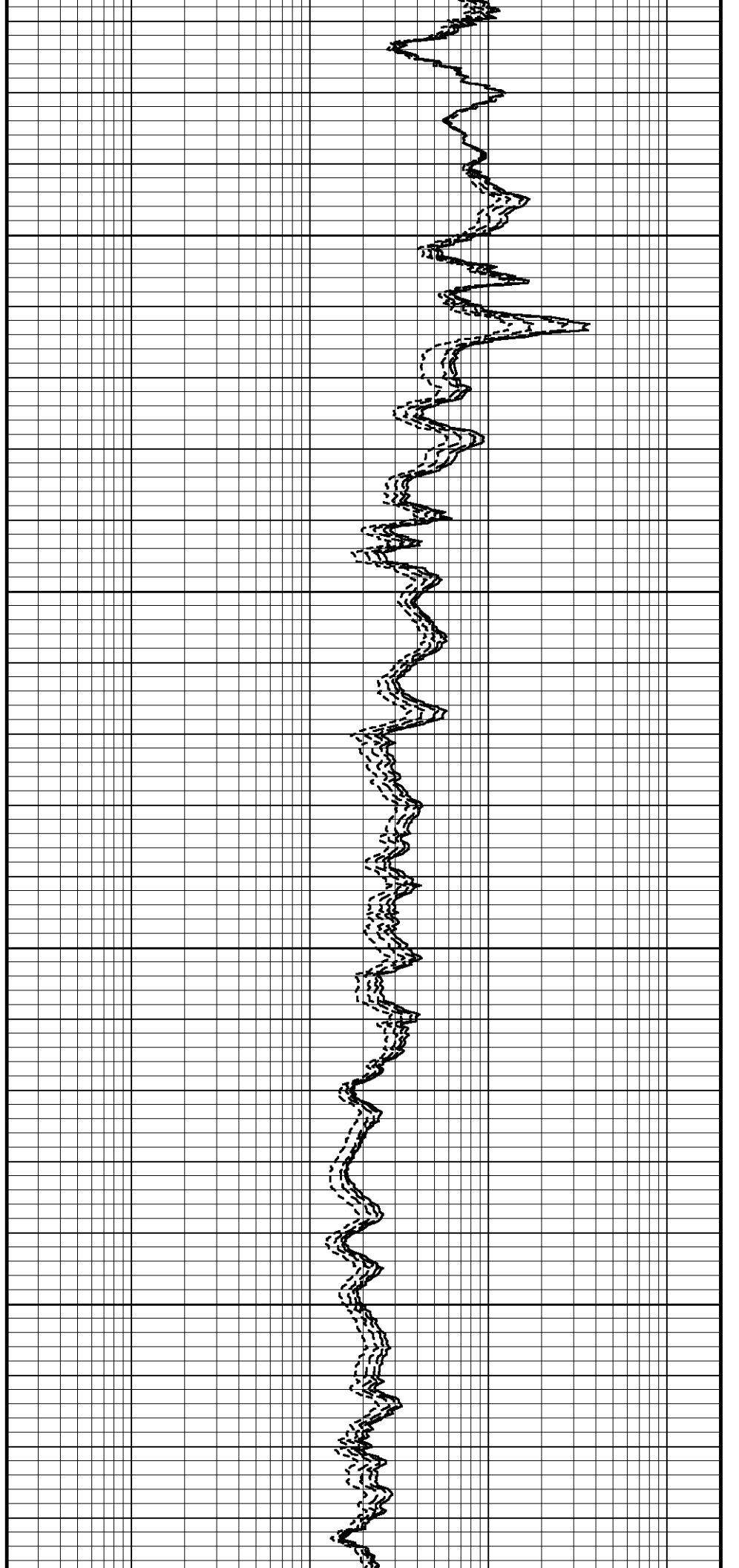
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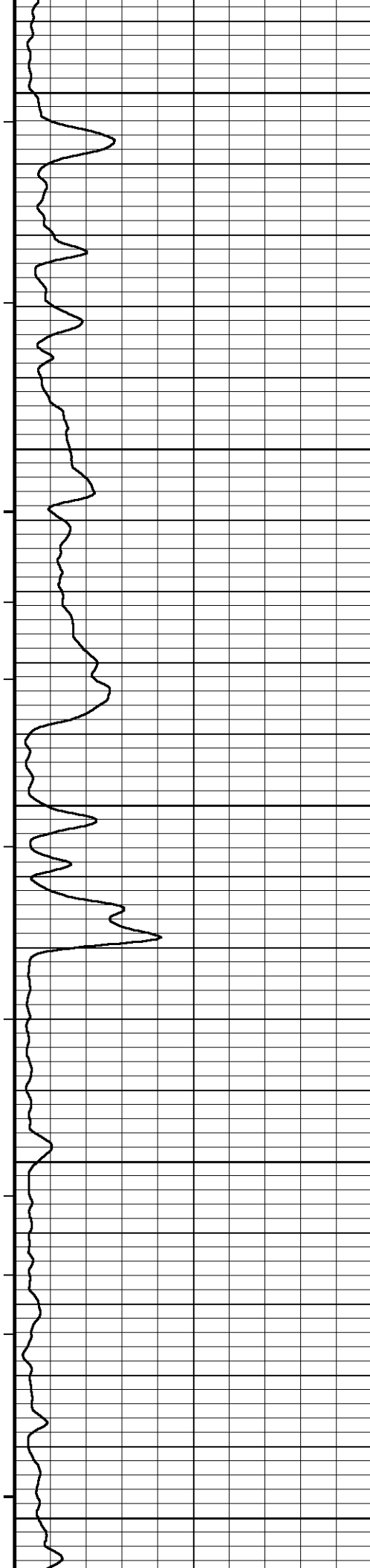
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5850

119°







119°

5900

119°

5950

119°

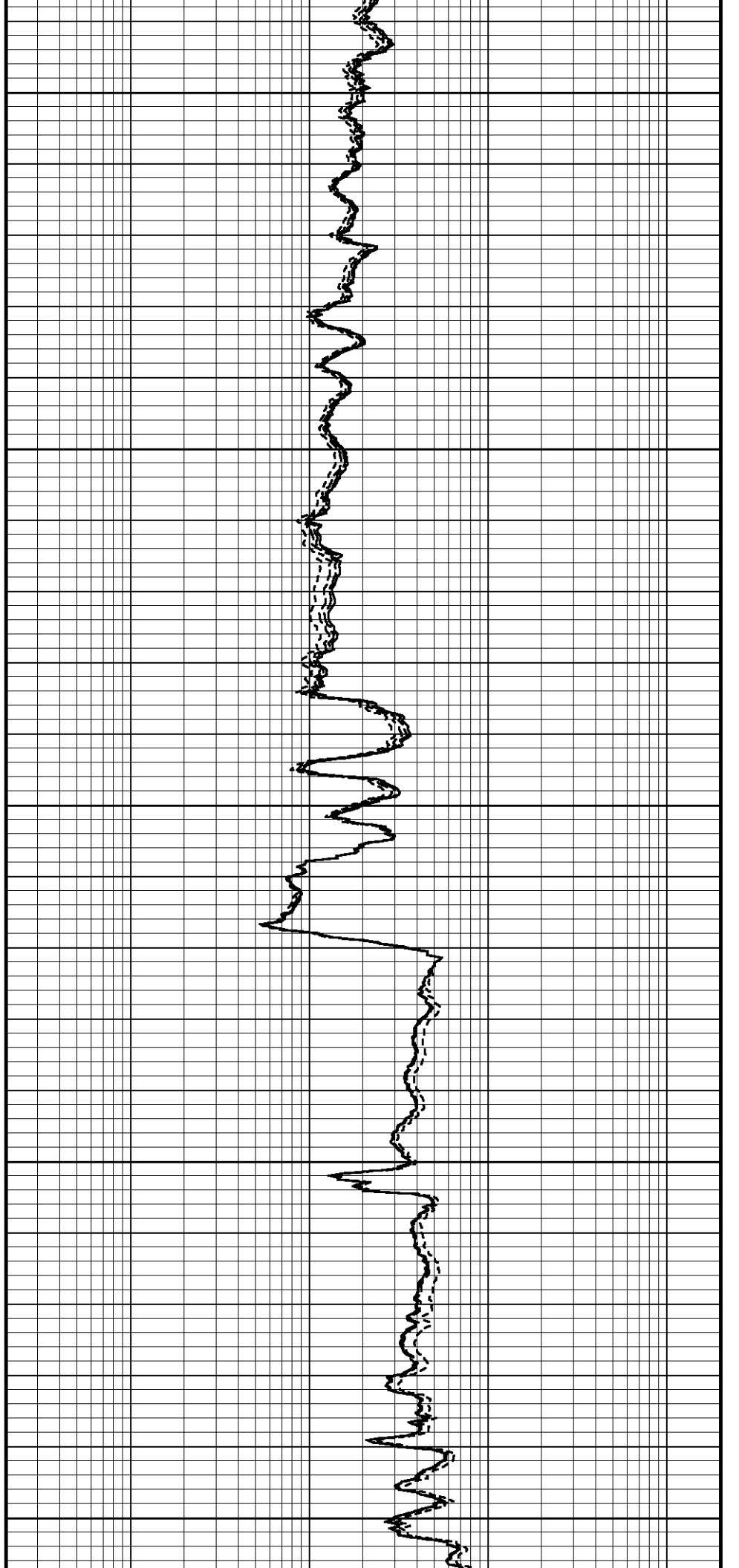
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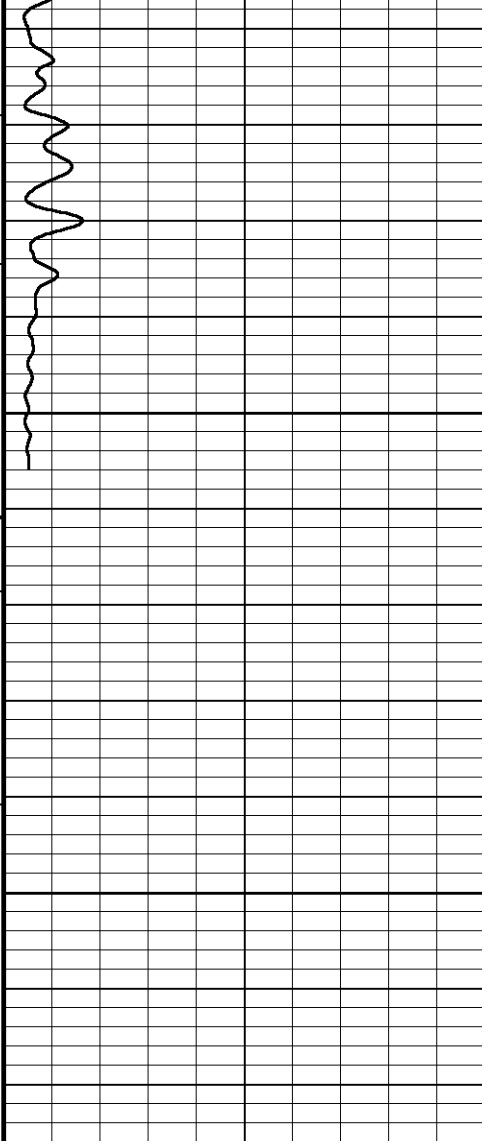
119°

6050

119°

6100





122°

6150

6200

6224

Depth  
In  
Feet

Timing Marks  
every 60.0 sec

MGs Gamma Ray

API

75

225

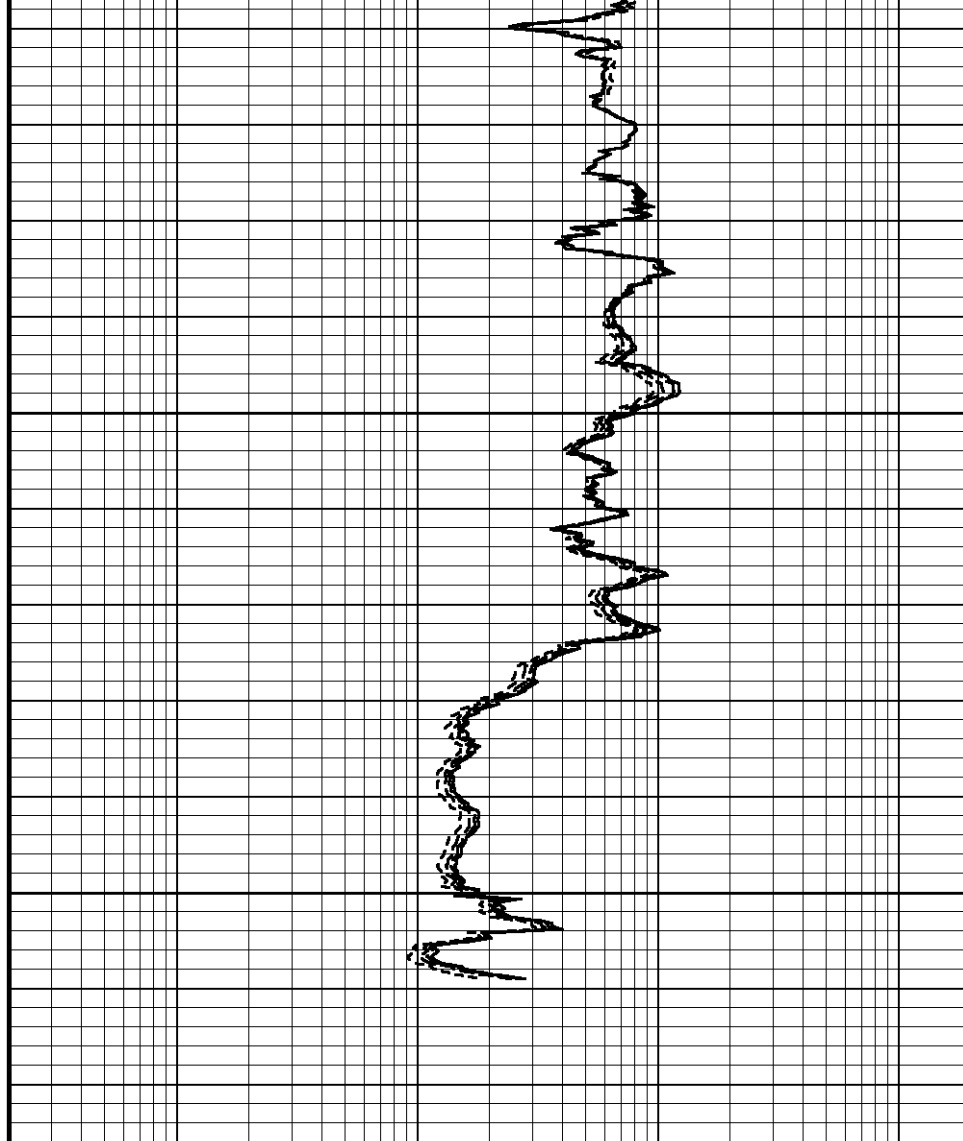
300

0 150

150 300

Borehole  
Temp in  
deg F

Replay  
Scale  
1:240



Array Ind. One Res 40  
ohm metres

0.20

1

10

100

1000

2000

Array Ind. One Res 60  
ohm metres

0.20

1

10

100

1000

2000

Array Ind. One Res 85  
ohm metres

0.20

1

10

100

1000

2000

Array Ind. One Res Rt  
ohm metres

0.20

1

10

100

1000

2000

# BEFORE SURVEY CALIBRATION

C:\Data\Sandridge\Sandridge Krug 1725 1-35H\MMS158 Depthlog.dta

## General Constants All 000

Last Edited on 27-FEB-2013,15:32

### General Parameters

|                             |          |            |
|-----------------------------|----------|------------|
| Mud Resistivity             | 0.550    | ohm-metres |
| Mud Resistivity Temperature | 58.300   | degrees F  |
| Water Level                 | 0.000    | feet       |
| Density/Neutron Processing  | Wet Hole |            |

### Hole/Annular Volume and Differential Caliper Parameters

|                                  |                 |        |
|----------------------------------|-----------------|--------|
| HVOL Method                      | Single Caliper  |        |
| HVOL Caliper 1                   | Density Caliper |        |
| HVOL Caliper 2                   | N/A             |        |
| Annular Volume Diameter          | 7.000           | inches |
| Caliper for Differential Caliper | Density Caliper |        |

### Rwa Parameters

|                  |                       |
|------------------|-----------------------|
| Porosity used    | Base Density Porosity |
| Resistivity used | Deep Induction        |
| RWA Constant A   | 0.610                 |
| RWA Constant M   | 2.150                 |

## Down-hole Tension Calibration SMS 0

Field Calibration on 05-SEP-2012,13:01

| Reading No | Measured | Calibrated (lbs) |
|------------|----------|------------------|
| 1          | 15152.07 | 0.00             |
| 2          | 18386.74 | 2000.00          |

## Strain Gauge Constants MMS-E.B 158

Last Edited on

|                                      |              |     |
|--------------------------------------|--------------|-----|
| Atmospheric Pressure                 | 14.70        | psi |
| Serial Number                        | 0            |     |
| Calibration Date                     | 000000000000 |     |
| Base Check Date                      |              |     |
| Dead Weight Serial Number            | 0            |     |
| Dead Weight Gravitational Correction | 1.0          |     |

| Temperature   | 75.0  | 150.0 | 250.0 | 350.0 | degrees F |
|---------------|-------|-------|-------|-------|-----------|
| Pressure psia | Inc.  | Dec.  | Inc.  | Dec.  | Inc.      |
| 0.0           | 0.000 | 0.000 | 0.000 | 0.000 | 0.000     |
| 2000.0        | 0.000 | 0.000 | 0.000 | 0.000 | 0.000     |
| 4000.0        | 0.000 | 0.000 | 0.000 | 0.000 | 0.000     |
| 6000.0        | 0.000 | 0.000 | 0.000 | 0.000 | 0.000     |
| 8000.0        | 0.000 | 0.000 | 0.000 | 0.000 | 0.000     |
| 10000.0       | 0.000 | 0.000 | 0.000 | 0.000 | 0.000     |

## Gamma Calibration MGS-C.J 133

Field Calibration on 22-FEB-2013 09:59

|                    | Measured | Calibrated (API) |
|--------------------|----------|------------------|
| Background         | 42       | 16               |
| Calibrator (Gross) | 1839     | 712              |
| Calibrator (Net)   | 1797     | 696              |

## Gamma Constants MGS-C.J 133

Last Edited on 24-FEB-2013,08:17

|                               |                 |       |
|-------------------------------|-----------------|-------|
| Gamma Calibrator Number       | 036             |       |
| Mud Density                   | 1.01            | gm/cc |
| Caliper Source for Processing | Density Caliper |       |
| Tool Position                 | Eccentred       |       |
| Concentration of KCl          | 0.00            | kppm  |

## SP Calibration MGS-C.J 133

Field Calibration on 07-FEB-2013,10:52

|             | Measured | Calibrated (mV) |
|-------------|----------|-----------------|
| Reference 1 | -100.0   | -100.0          |
| Reference 2 | 100.0    | 100.0           |

## High Resolution Temperature Calibration MGS-C.J 133

Field Calibration on 09-FEB-2013,12:46

| Measured | Calibrated (Deg F) |
|----------|--------------------|
|----------|--------------------|

|                                                     |                          |                  |                    |                                                                           |
|-----------------------------------------------------|--------------------------|------------------|--------------------|---------------------------------------------------------------------------|
| Lower                                               | Measured                 | 0.00             | Calibrated(Deg F)  | 0.00                                                                      |
| Upper                                               |                          | 0.00             |                    | 0.00                                                                      |
| High Resolution Temperature Constants MGS-C.J 133   |                          |                  |                    | Last Edited on 09-FEB-2013,12:46                                          |
| Pre-filter Length                                   |                          | 11               |                    |                                                                           |
| Neutron Calibration MDN-B.J 423                     |                          |                  |                    | Base Calibration on 20-FEB-2013 09:27<br>Field Check on 22-FEB-2013 10:05 |
| Base Calibration                                    |                          |                  |                    |                                                                           |
|                                                     | Measured                 |                  | Calibrated (cps)   |                                                                           |
|                                                     | Near                     | Far              | Near               | Far                                                                       |
|                                                     | 2823                     | 86               | 3714               | 110                                                                       |
| Ratio                                               |                          | 32.681           |                    | 33.764                                                                    |
| Field Calibrator at Base                            |                          |                  | Calibrated (cps)   |                                                                           |
|                                                     |                          |                  | 2197               | 3245                                                                      |
| Ratio                                               |                          |                  |                    | 0.677                                                                     |
| Field Check                                         |                          |                  | Calibrated (cps)   |                                                                           |
|                                                     |                          |                  | 1336               | 1952                                                                      |
| Ratio                                               |                          |                  |                    | 0.685                                                                     |
| Neutron Constants MDN-B.J 423                       |                          |                  |                    | Last Edited on 26-FEB-2013,09:13                                          |
| Neutron Source Id                                   |                          | 000              |                    |                                                                           |
| Neutron Jig Number                                  |                          | 000              |                    |                                                                           |
| Epithermal Neutron                                  |                          | No               |                    |                                                                           |
| Caliper Source for Processing                       |                          | Bit Size         |                    |                                                                           |
| Stand-off                                           |                          | 0.00             | inches             |                                                                           |
| Mud Density                                         |                          | 0.99             | gm/cc              |                                                                           |
| Limestone Sigma                                     |                          | 7.10             | cu                 |                                                                           |
| Sandstone Sigma                                     |                          | 4.26             | cu                 |                                                                           |
| Dolomite Sigma                                      |                          | 4.70             | cu                 |                                                                           |
| Formation Pressure Source                           |                          | None             |                    |                                                                           |
| Formation Pressure                                  |                          | N/A              | kpsi               |                                                                           |
| Temperature Source                                  |                          | None             |                    |                                                                           |
| Temperature                                         |                          | N/A              | degrees F          |                                                                           |
| Mud Salinity                                        |                          | 0.00             | kppm               |                                                                           |
| Salinity Correction                                 |                          | Not Applied      |                    |                                                                           |
| Formation Fluid Salinity Source                     |                          | None             |                    |                                                                           |
| Formation Fluid Salinity                            |                          | N/A              | kppm               |                                                                           |
| Barite Mud Correction                               |                          | Not Applied      |                    |                                                                           |
| FE Calibration MFE-B.A 247                          |                          |                  |                    | Base Calibration on 20-FEB-2013 09:00<br>Field Check on 22-FEB-2013 09:46 |
| Base Calibration                                    |                          |                  |                    |                                                                           |
|                                                     | Measured                 |                  | Calibrated (ohm-m) |                                                                           |
| Reference 1                                         |                          | 0.0              |                    | 0.0                                                                       |
| Reference 2                                         |                          | 972.5            |                    | 126.8                                                                     |
| Base Check                                          |                          |                  |                    | 279.3                                                                     |
| Field Check                                         |                          |                  |                    | 307.1                                                                     |
| FE Constants MFE-B.A 247                            |                          |                  |                    | Last Edited on 22-FEB-2013,09:43                                          |
| Running Mode                                        |                          | No Sleeve        |                    |                                                                           |
| MFE K Factor                                        |                          | 0.1268           |                    |                                                                           |
| Caliper Source for FE correction                    |                          | Bit Size         |                    |                                                                           |
| Caliper Value for FE correction                     |                          | N/A              | inches             |                                                                           |
| Rm Source for FE correction                         |                          | Temperature Corr |                    |                                                                           |
| Temp. for Rm Corr.                                  | MGS External Temperature |                  |                    |                                                                           |
| Stand-off                                           |                          | 0.5              | inches             |                                                                           |
| High Resolution Temperature Calibration MAI-C.A 427 |                          |                  |                    | Field Calibration on 22-FEB-2013,09:43                                    |
|                                                     | Measured                 |                  | Calibrated(Deg F)  |                                                                           |
| Lower                                               |                          | 10.00            |                    | 10.00                                                                     |
| Upper                                               |                          | 100.00           |                    | 100.00                                                                    |
| High Resolution Temperature Constants MAI-C.A 427   |                          |                  |                    | Last Edited on 22-FEB-2013,09:43                                          |

## Induction Calibration MAI-C.A 427

Base Calibration on 27-JAN-2013,14:35

Field Check on 26-FEB-2013 09:06

## Base Calibration

## Test Loop Calibration

| Channel | Measured |       | Calibrated (mmho/m) |       |
|---------|----------|-------|---------------------|-------|
|         | Low      | High  | Low                 | High  |
| 1       | 14.4     | 434.9 | 9.3                 | 966.2 |
| 2       | 5.8      | 355.4 | 7.6                 | 821.4 |
| 3       | 2.7      | 244.4 | 5.2                 | 566.0 |
| 4       | 1.8      | 129.3 | 2.6                 | 279.2 |

Array Temperature 22.9 Deg F

| Channel | Base Check (mmho/m) |      | Field Check (mmho/m) |        |
|---------|---------------------|------|----------------------|--------|
|         | Low                 | High | Low                  | High   |
| 1       |                     |      | 16.7                 | 4139.1 |
| 2       |                     |      | 31.8                 | 3771.3 |
| 3       |                     |      | 31.3                 | 3211.2 |
| 4       |                     |      | 20.1                 | 2125.2 |
| Deep    |                     |      | 19.5                 | 2021.0 |
| Medium  |                     |      | 45.9                 | 4291.0 |
| Shallow |                     |      | 46.9                 | 5679.8 |

Array Temperature 31.1 Deg F

## Induction Constants MAI-C.A 427

Last Edited on 27-FEB-2013,18:54

## Induction Model

## RtAP-WBM

Caliper for Borehole Corr.

Density Caliper

Hole Size for Borehole Correction

N/A

inches

Tool Centred

No

Stand-off Type

Fins

Stand-off

0.50

inches

Number of Fins on Stand-off

6.0000

Stand-off Fin Angle

60.00

degrees

Stand-off Fin Width

0.5000

inches

Borehole Corr. Rm Source

Temperature Corr

Temp. for Rm Corr.

MGS External Temperature

Squasher Start

0.0020

mhos/metre

Squasher Offset

N/A

mhos/metre

## Borehole Normalisation

|      |        |      |        |
|------|--------|------|--------|
| DRM1 | 0.0000 | DRC1 | 0.0000 |
| DRM2 | 0.0000 | DRC2 | 0.0000 |
| MRM1 | 0.0000 | MRC1 | 0.0000 |
| MRM2 | 0.0000 | MRC2 | 0.0000 |
| SRM1 | 0.0000 | SRC1 | 0.0000 |
| SRM2 | 0.0000 | SRC2 | 0.0000 |

## Calibration Site Corrections

|           |      |             |
|-----------|------|-------------|
| Channel 1 | 0.00 | mmhos/metre |
| Channel 2 | 0.00 | mmhos/metre |
| Channel 3 | 0.00 | mmhos/metre |
| Channel 4 | 0.00 | mmhos/metre |

## Apparent Porosity and Water Saturation Constants

|                                      |        |         |
|--------------------------------------|--------|---------|
| Archie Constant (A)                  | 1.00   |         |
| Cementation Exponent (M)             | 2.00   |         |
| Saturation Exponent (N)              | 2.00   |         |
| Saturation of Water for Apor         | 100.00 | percent |
| Resistivity of Water for Apor and Sw | 0.05   | ohm-m   |
| Resistivity of Mud Filtrate for Sw   | 0.00   | ohm-m   |
| Source for Rt                        | 0.00   |         |
| Source for Rxo                       | 0.00   |         |

## Photo Density Calibration MPD-D.A 471

Base Calibration on 04-FEB-2013 13:31

Field Check on 26-FEB-2013 09:13

## Density Calibration

## Base Calibration

## Measured

## Calibrated (sdu)

| Reference 1 | Near Far |       | Near Far |       |
|-------------|----------|-------|----------|-------|
|             |          |       |          |       |
|             | 54416    | 27473 | 59869    | 31110 |

|             |       |       |       |       |
|-------------|-------|-------|-------|-------|
| Reference 1 | 24410 | 27470 | 33600 | 31110 |
| Reference 2 | 22802 | 2732  | 24557 | 2522  |

Field Check at Base

|        |        |
|--------|--------|
| 1278.8 | 1479.3 |
|--------|--------|

Field Check

|        |        |
|--------|--------|
| 1278.3 | 1468.6 |
|--------|--------|

PE Calibration

Base Calibration

Measured

Calibrated

WS

WH

Ratio

Ratio

Background

247

1133

Reference 1

24125

54197

0.450

0.369

Reference 2

7025

22646

0.315

0.271

Field Check at Base

247.3

1133.4

Field Check

244.4

1133.0

Density Constants MPD-D.A 471

Last Edited on 24-FEB-2013,08:18

Density Source Id

243

Nylon Calibrator Number

633

Aluminium Calibrator Number

633

Density Shoe Profile

4 inch

Caliper Source for Processing

Density Caliper

PE Correction to Density

Not Applied

Mud Density

1.01

gm/cc

Mud Density Z/A Multiplier

1.11

Mud Filtrate Density

1.00

gm/cc

Dry Hole Mud Filtrate Density

1.00

gm/cc

DNCT

0.00

gm/cc

CRCT

0.00

gm/cc

Density Z/A Correction

Hybrid

Matrix Density (gm/cc)

Depth (ft)

2.71

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

Caliper Calibration MPD-D.A 471

Base Calibration on 04-FEB-2013 23:20

Field Calibration on 22-FEB-2013 09:54

Base Calibration

Reading No

Measured

Calibrator Size (in)

1

19168

3.99

2

28887

5.97

3

38925

7.99

4

48364

9.86

5

59511

11.93

6

N/A

N/A

Field Calibration

Measured Caliper (in)

Actual Caliper (in)

6.02

5.96

## DOWNHOLE EQUIPMENT

C:\Data\Sandridge\Sandridge Krug 1725 1-35HMMS158 Depthlog.dta

Shuttle Running Tool 3.5" )

SRT-A.A 40 LG: 6.62 ft WT: 37.5 lb OD: 2.52 in



MBS-F.A 200v Compact Battery Sub  
MBS-F.A 114 LG: 10.61 ft WT: 70.5 lb OD: 2.24 in

Compact Memory Sub E.B  
MMS-E.B 158 LG: 5.20 ft WT: 37.5 lb OD: 2.24 in

Compact Tool Isolator sub.  
MTI-B.A 63 LG: 1.54 ft WT: 13.2 lb OD: 2.24 in

Compact Short Gamma  
MGS-C.J 133 LG: 3.41 ft WT: 24.3 lb OD: 2.24 in

Compact Collar Locator  
MCL-B.J 72 LG: 3.17 ft WT: 26.5 lb OD: 2.24 in

SKJ-E.B Compact Knuckle Joint  
SKJ-E.B 458 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

SHA-J.A Compact Swivel Head Adaptor  
SHA-J.A 432 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in

MIS-A.A Compact Inline Bowspring sub  
MIS-A.A 247 LG: 5.70 ft WT: 33.1 lb OD: 2.24 in

Compact Neutron  
MDN-B.J 423 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

Compact Density/Caliper  
MPD-D.A 471 LG: 9.59 ft WT: 90.4 lb OD: 2.24 in

MIS-D.A Compact Inline Bowspring sub  
MIS-D.A 315 LG: 5.70 ft WT: 33.1 lb OD: 2.24 in

SHA-J.B Compact Swivel Head Adaptor  
SHA-J.B 595 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in

SKJ-E.B Compact Knuckle Joint  
SKJ-E.B 477 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

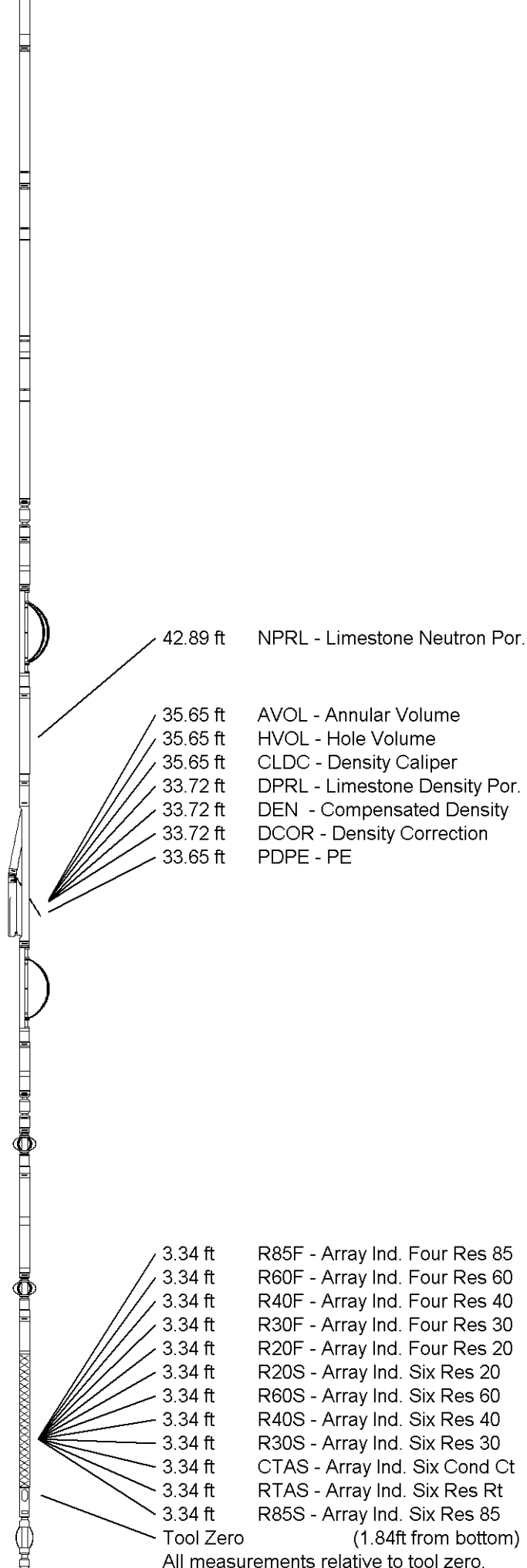
MIS-B Compact Inline Standoff sub  
MIS-B 102 LG: 2.14 ft WT: 15.4 lb OD: 2.24 in

Compact Focussed Electric  
MFE-B.A 247 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

MIS-B Compact Inline Standoff sub  
MIS-B 107 LG: 2.14 ft WT: 15.4 lb OD: 2.24 in

Compact Induction  
MAI-C.A 427 LG: 12.52 ft WT: 48.5 lb OD: 2.24 in

Total Length: 88.36 ft Weight: 637.1 lb



|                 |                                    |  |  |
|-----------------|------------------------------------|--|--|
| COMPANY         | SANDRIDGE EXPLORATION & PRODUCTION |  |  |
| WELL            | KRUG 1725 1-35H                    |  |  |
| FIELD           | PROSPECT NESS                      |  |  |
| PROVINCE/COUNTY | NESS                               |  |  |
| COUNTRY/STATE   | USA / KANSAS                       |  |  |

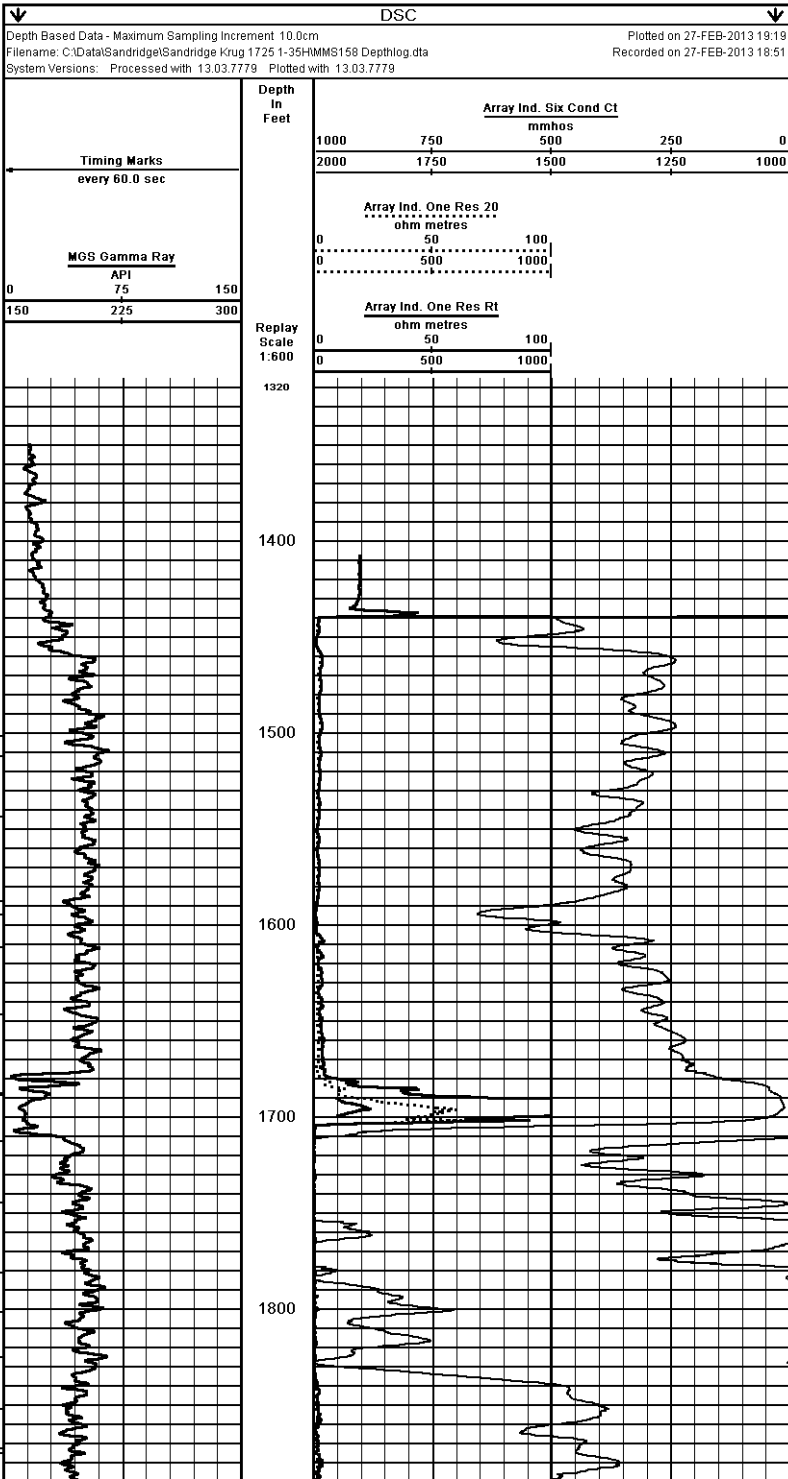
|                         |         |      |               |         |      |
|-------------------------|---------|------|---------------|---------|------|
| Elevation Kelly Bushing | 2412.00 | feet | First Reading | 6209.00 | feet |
| Elevation Drill Floor   | 2412.00 | feet | Depth Driller | 6236.00 | feet |
| Elevation Ground Level  | 2392.00 | feet | Depth Logger  | 6216.00 | feet |



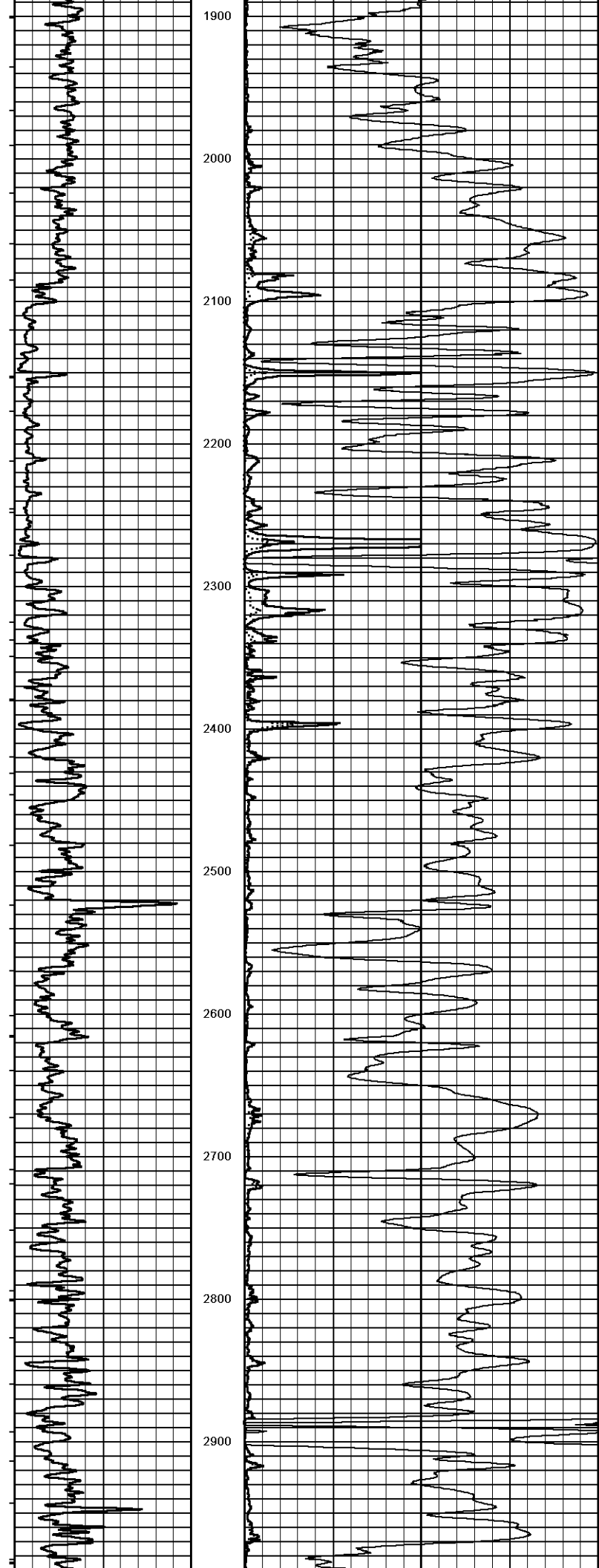
CML WELL SHUTTLE

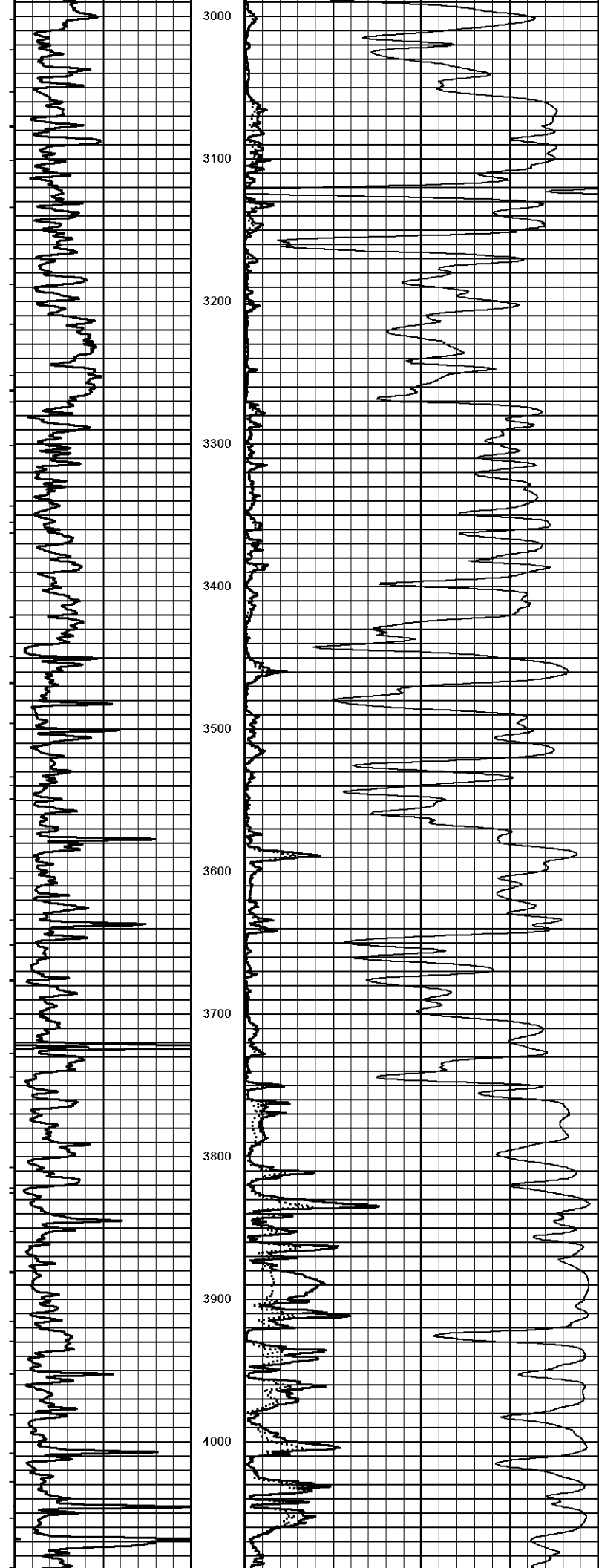
COMPACT ARRAY INDUCTION

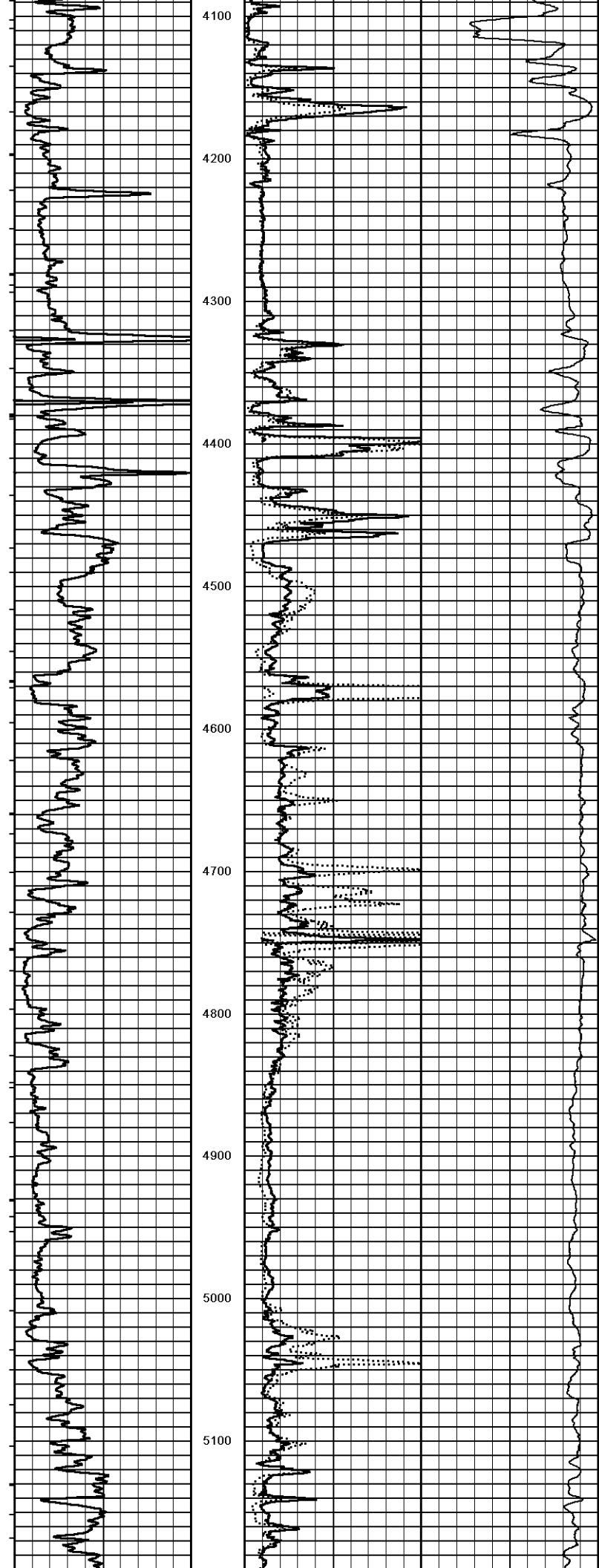
LOG

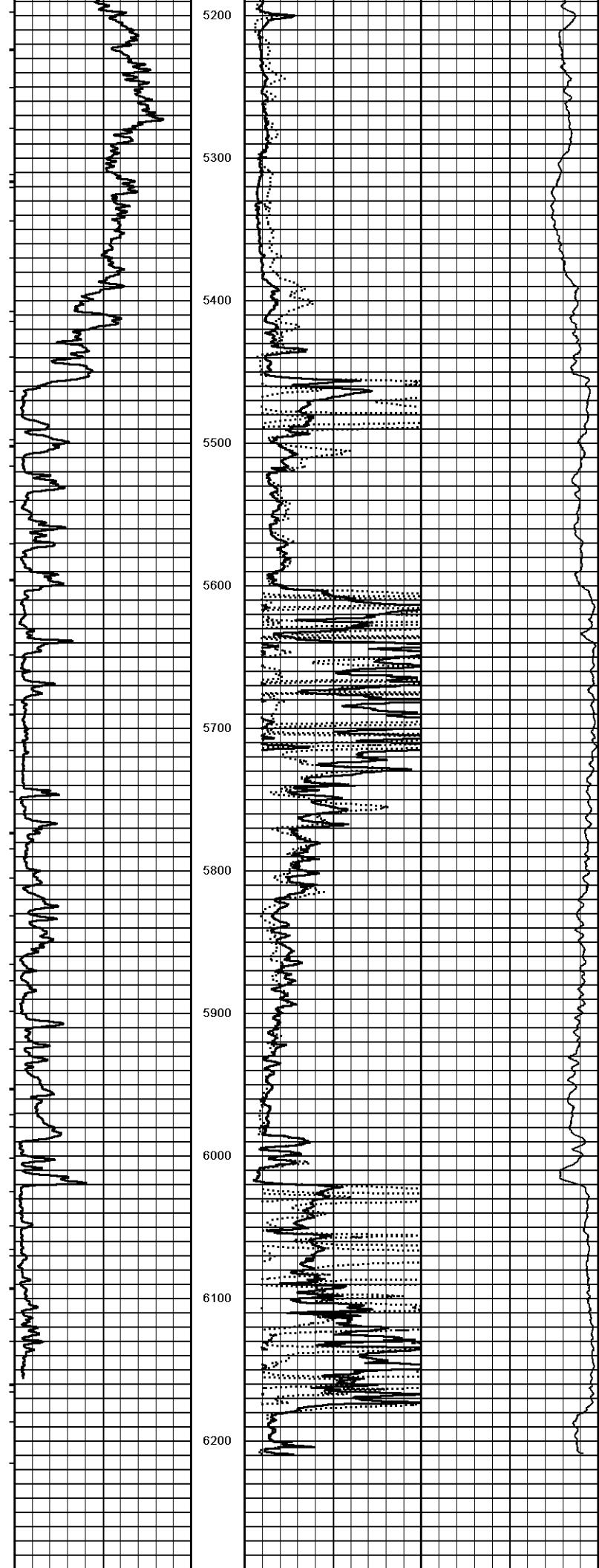


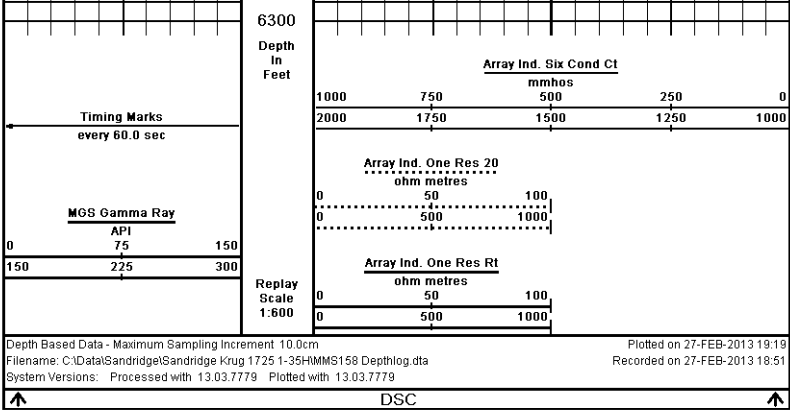












|                                                                                                       |         |                                    |                                                    |         |      |
|-------------------------------------------------------------------------------------------------------|---------|------------------------------------|----------------------------------------------------|---------|------|
| COMPANY                                                                                               |         | SANDRIDGE EXPLORATION & PRODUCTION |                                                    |         |      |
| WELL                                                                                                  |         | KRUG 1725 1-35H                    |                                                    |         |      |
| FIELD                                                                                                 |         | PROSPECT NESS                      |                                                    |         |      |
| PROVINCE/COUNTY                                                                                       |         | NESS                               |                                                    |         |      |
| COUNTRY/STATE                                                                                         |         | USA / KANSAS                       |                                                    |         |      |
| Elevation Kelly Bushing                                                                               | 2412.00 | feet                               | First Reading                                      | 6209.00 | feet |
| Elevation Drill Floor                                                                                 | 2412.00 | feet                               | Depth Driller                                      | 6236.00 | feet |
| Elevation Ground Level                                                                                | 2392.00 | feet                               | Depth Logger                                       | 6216.00 | feet |
| <br><b>Weatherford</b> |         |                                    | CML WELL SHUTTLE<br>COMPACT ARRAY INDUCTION<br>LOG |         |      |