

**Patterson**

**SINGLE  
INDUCTION  
LOG**

|                                   |                             |                                   |                  |
|-----------------------------------|-----------------------------|-----------------------------------|------------------|
| Company Pioneer Natural Resources |                             | Company Pioneer Natural Resources |                  |
| Well                              | Zen 42-14 Tr                | Well                              | Zen 42-14 Tr     |
| Field                             | Purgatoire River            | Field                             | Purgatoire River |
| County                            | Las Animas                  | County                            | Las Animas       |
| State                             | Colorado                    | State                             | Colorado         |
| Location: API # : 05 071 08605 00 |                             | Other Services<br>cdl<br>neutron  |                  |
| SEC 14 TWP 32S RGE 68W            |                             | Elevation                         |                  |
| Permanent Datum                   | Ground Level                | Elevation                         | 8368'            |
| Log Measured From                 | Kelly Bushing 4' Above G.L. | K.B. 8372'                        |                  |
| Drilling Measured From            | Kelly Bushing               | D.F. -----                        |                  |
|                                   |                             | G.L. 8368'                        |                  |
| Date                              | 11-09-05                    |                                   |                  |
| Run Number                        | One                         |                                   |                  |
| Depth Driller                     | 2395'                       |                                   |                  |
| Depth Logger                      | 2395'                       |                                   |                  |
| Bottom Logged Interval            | 2393'                       |                                   |                  |
| Top Log Interval                  | Surface                     |                                   |                  |
| Casing Driller                    | 8 5/8" @ 757'               |                                   |                  |
| Casing Logger                     | 757'                        |                                   |                  |
| Bit Size                          | 7 7/8"                      |                                   |                  |
| Type Fluid in Hole                | Water                       |                                   |                  |
| Density / Viscosity               | ///                         |                                   |                  |
| pH / Fluid Loss                   | ///                         |                                   |                  |
| Source of Sample                  | ///                         |                                   |                  |
| Rm @ Meas. Temp                   | ///                         |                                   |                  |
| Rmf @ Meas. Temp                  | ///                         |                                   |                  |
| Rmc @ Meas. Temp                  | ///                         |                                   |                  |
| Source of Rmf / Rmc               | ///                         |                                   |                  |
| Rm @ BHT                          | ///                         |                                   |                  |
| Time Circulation Stopped          | 4:30 a.m.                   |                                   |                  |
| Time Logger on Bottom             | 6:30 a.m.                   |                                   |                  |
| Maximum Recorded Temperature      | 96                          |                                   |                  |
| Equipment Number                  | T677                        |                                   |                  |
| Location                          | Trinidad                    |                                   |                  |
| Recorded By                       | L. Smith                    |                                   |                  |
| Witnessed By                      | Mr. Neal Hawthorne          | Mr. Paul Dein                     |                  |

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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

Up Wet Canyon turn left @ Hicks School,  
go thru crossroads and take next left.

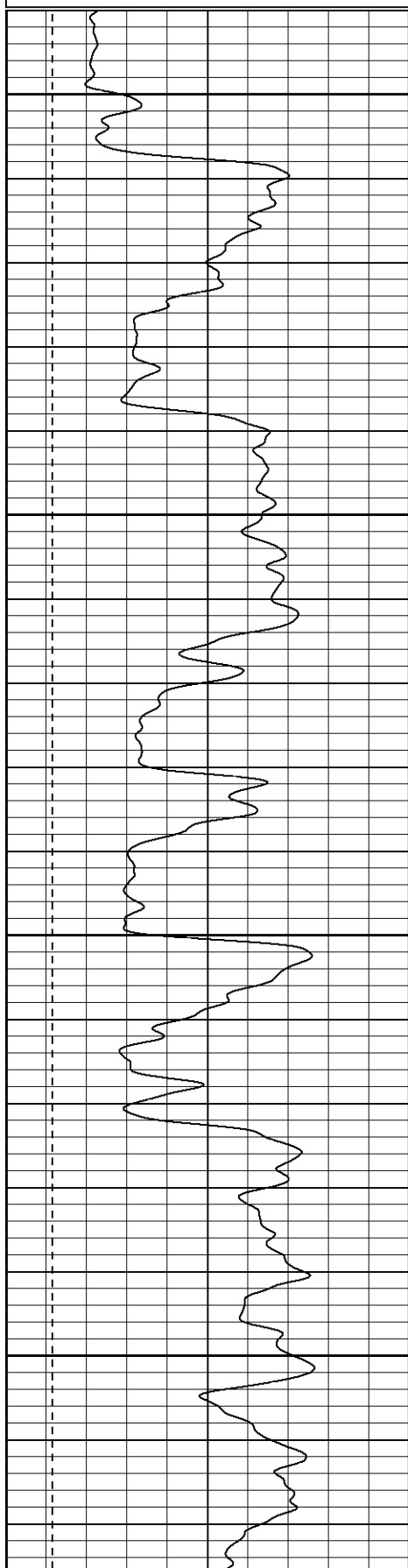
**Patterson**

**Main Pass**

Database File: zentr.db  
Dataset Pathname: pass2.1  
Presentation Format: iel  
Dataset Creation: Wed Nov 09 08:09:05 2005 by Calc Warrior 7.0 STD Ope  
Charted by: Depth in Feet scaled 1:240

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

|     |             |      |
|-----|-------------|------|
| 0.2 | DIR (Ohm-m) | 2000 |
| 0.2 | SN (Ohm-m)  | 2000 |

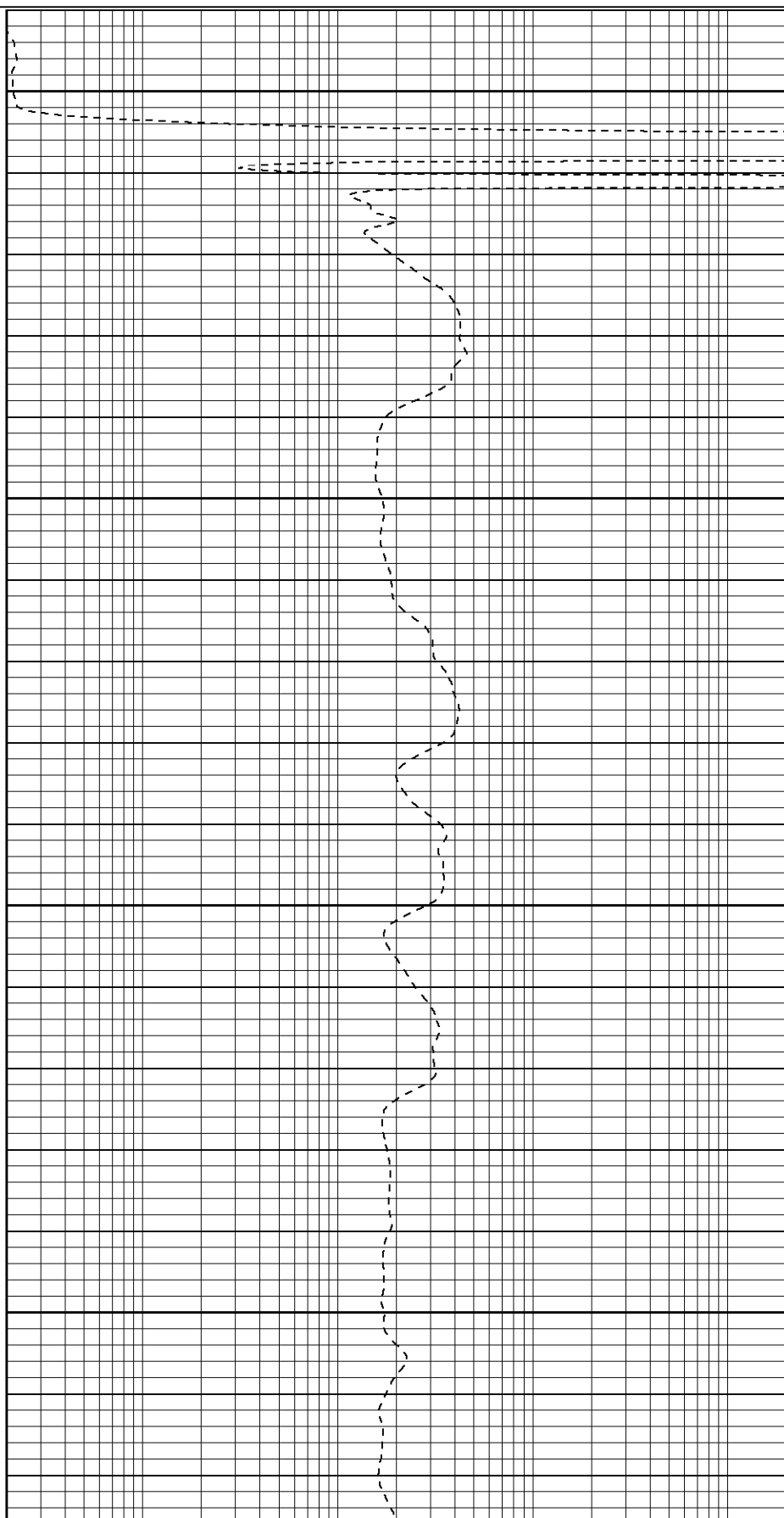


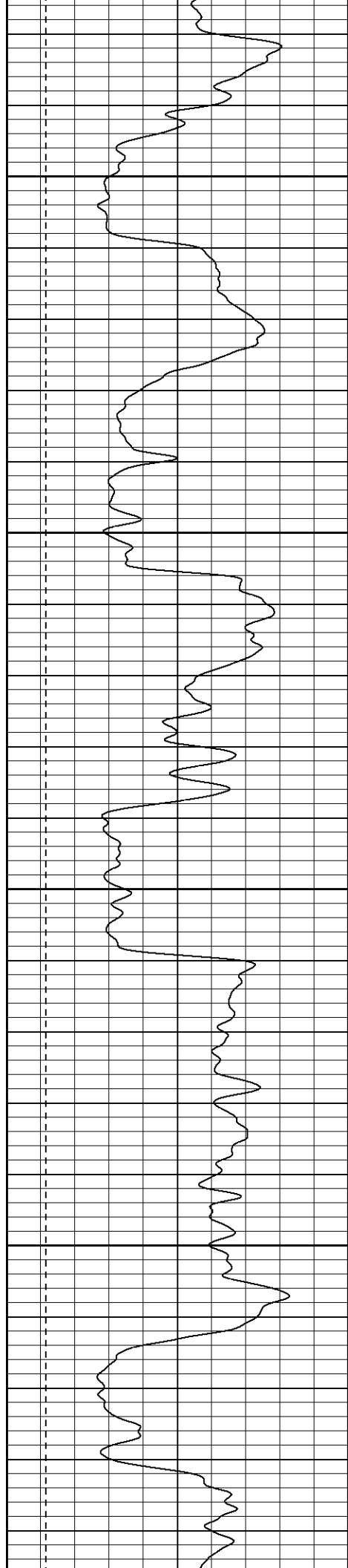
750

800

850

900



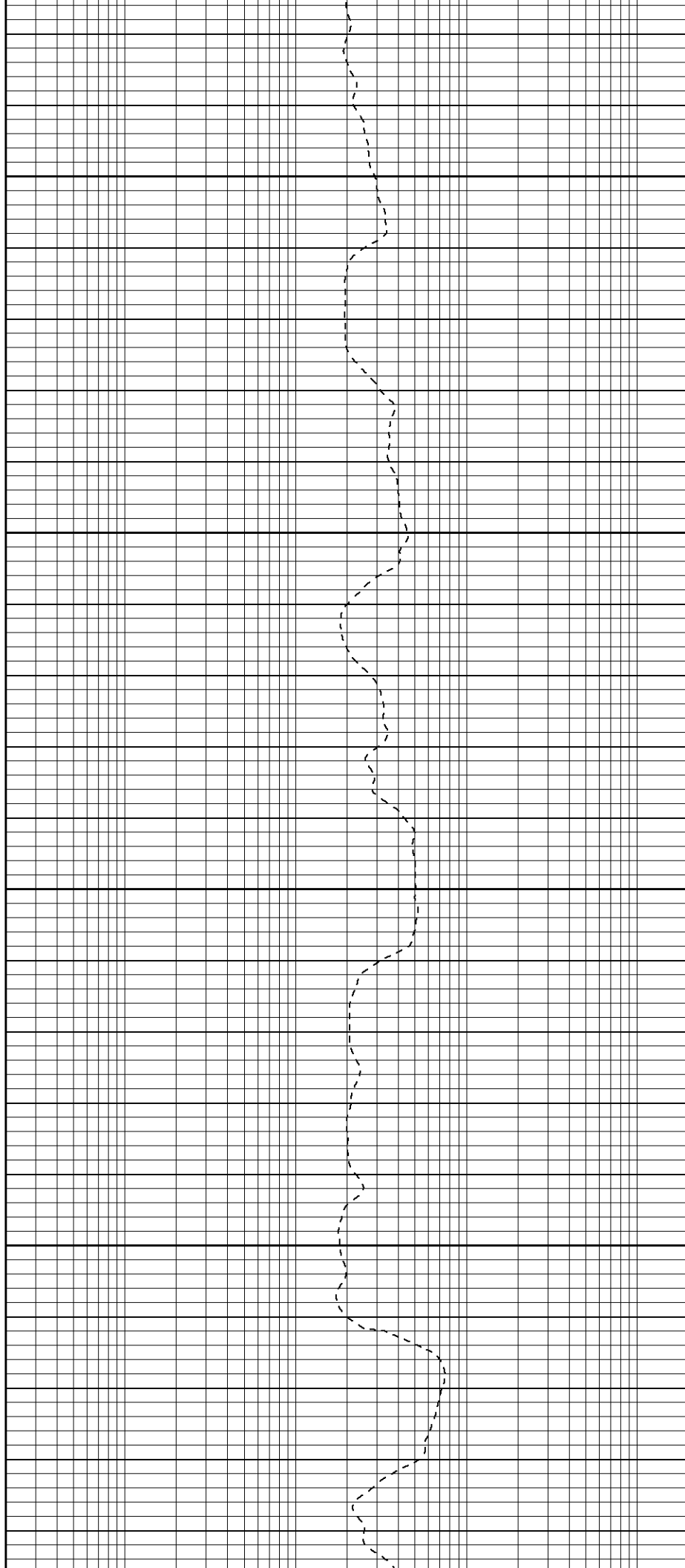


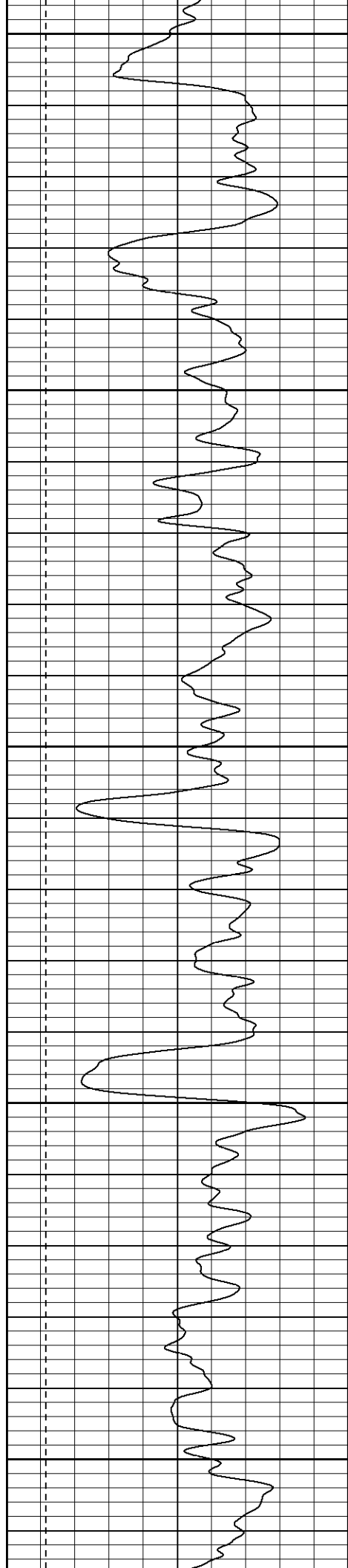
950

1000

1050

1100





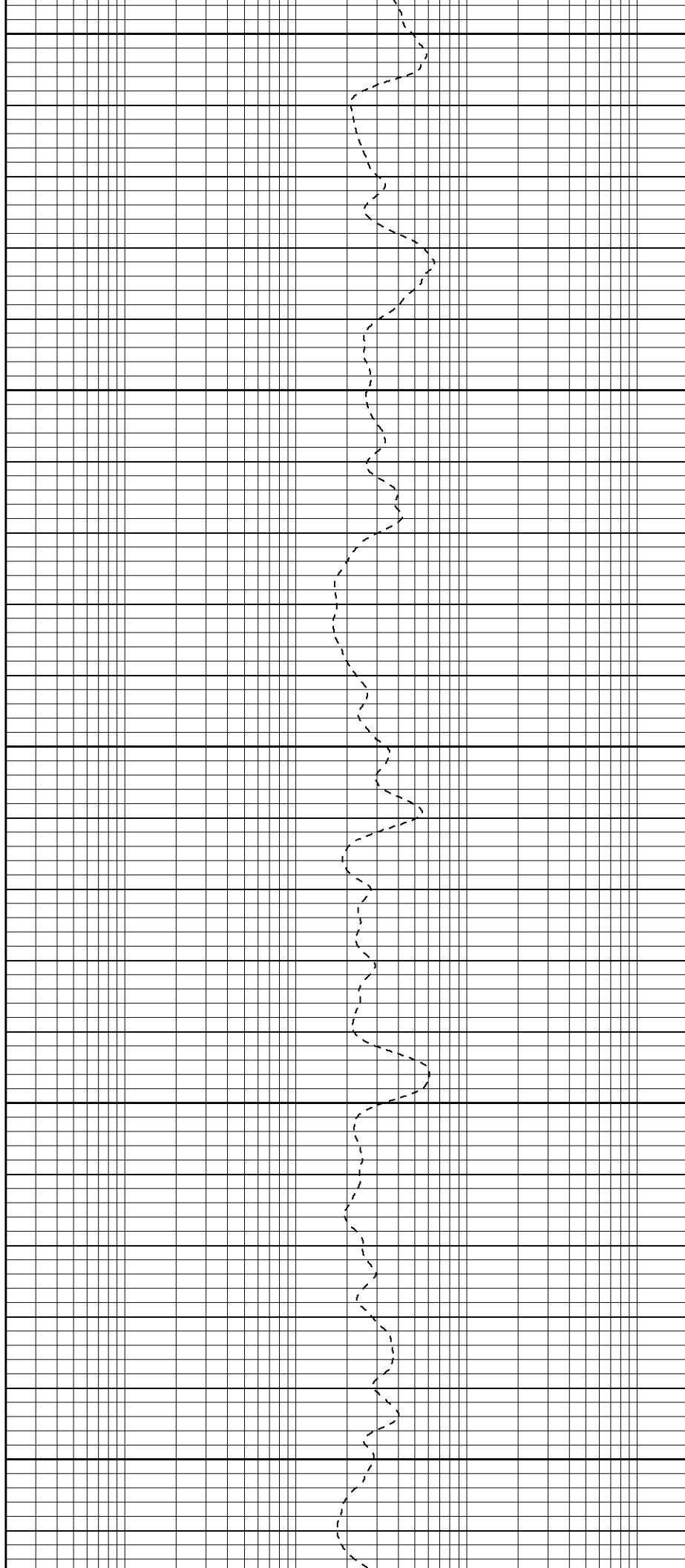
1150

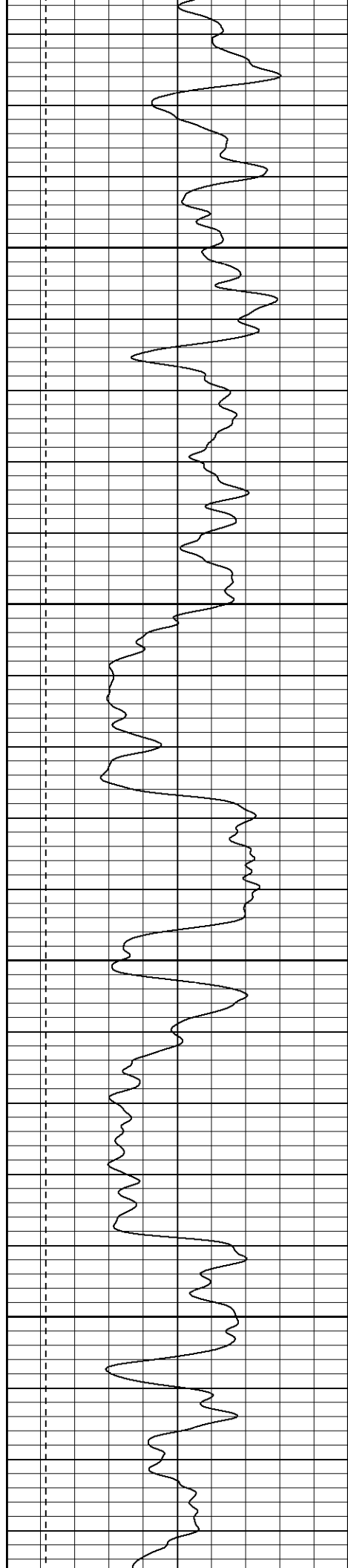
1200

1250

1300

1350



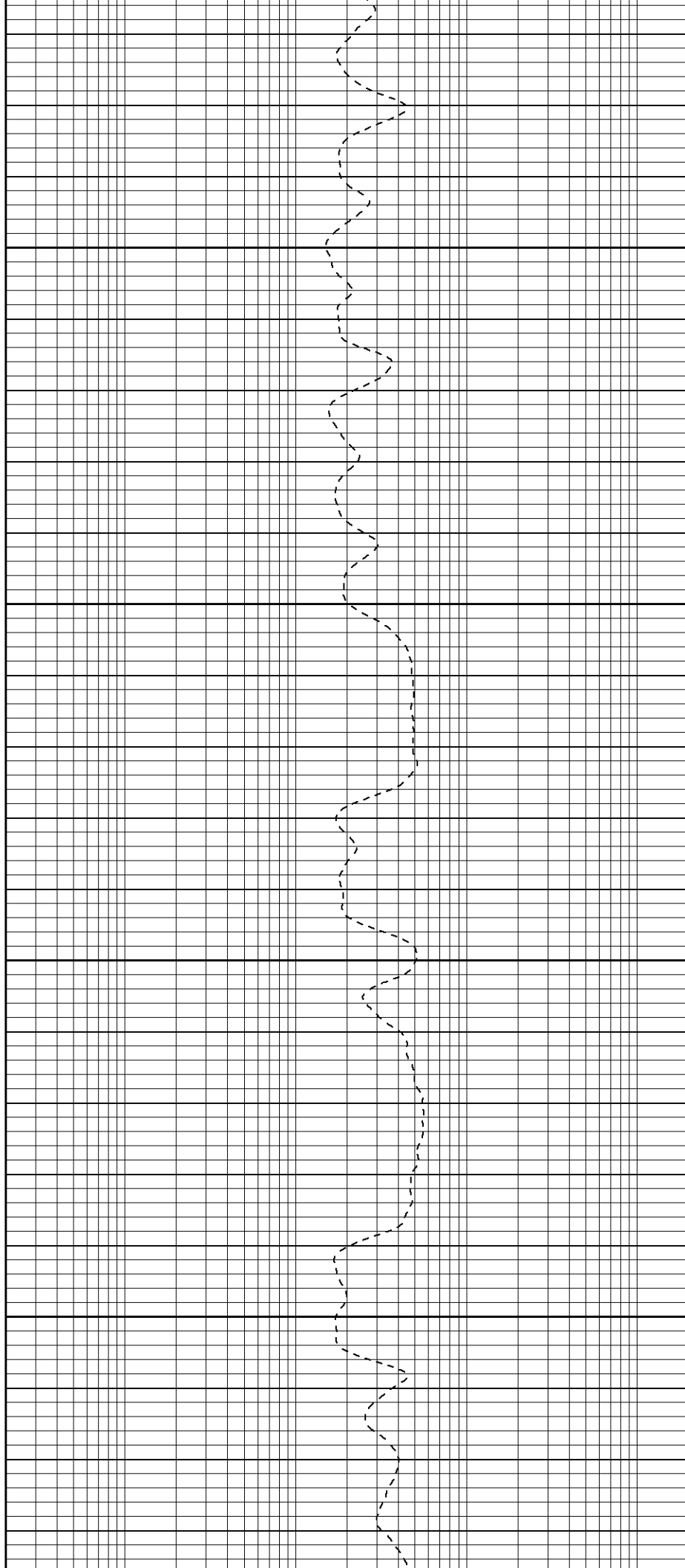


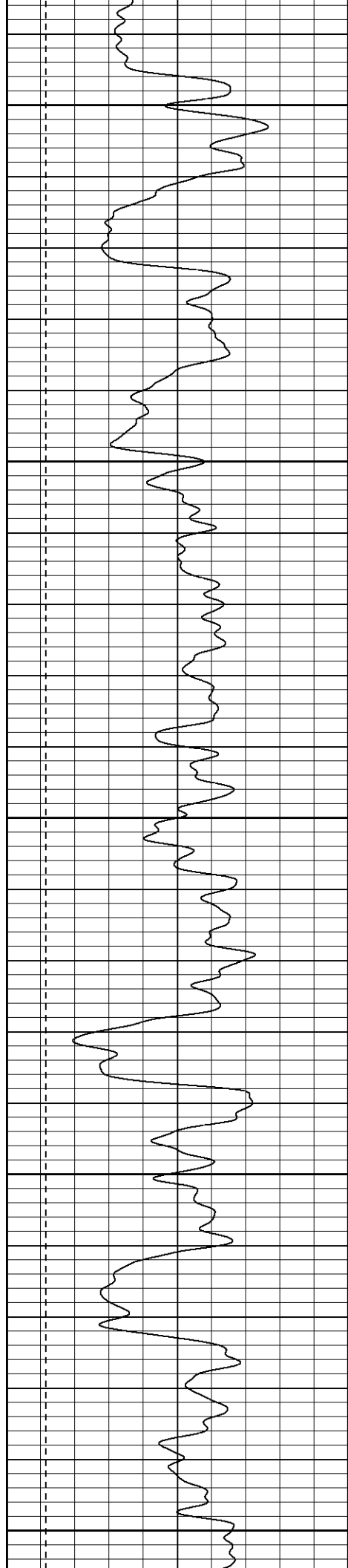
1400

1450

1500

1550





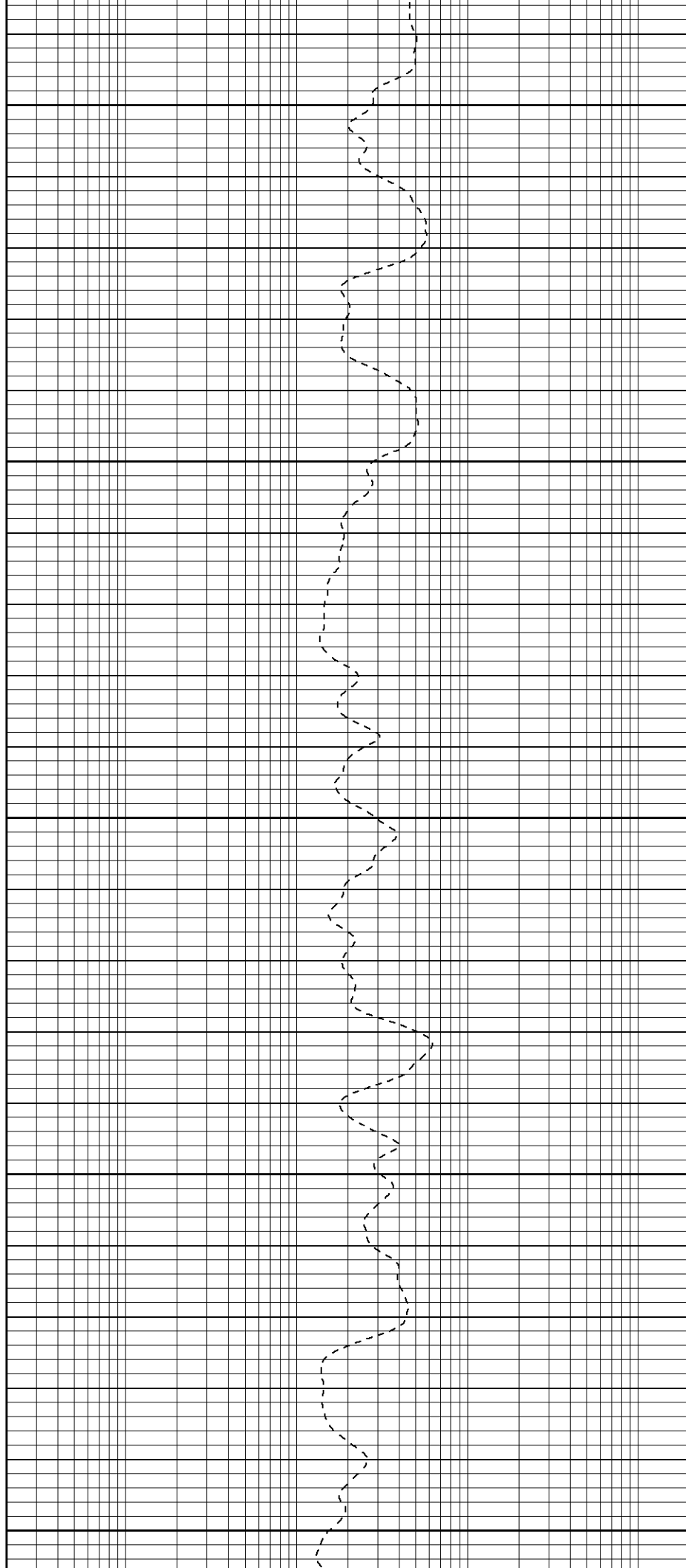
1600

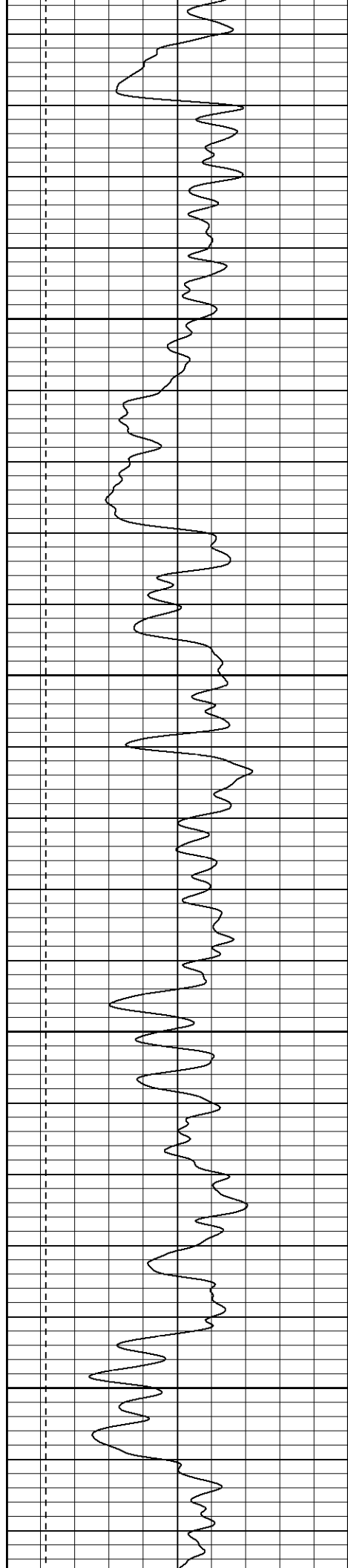
1650

1700

1750

1800



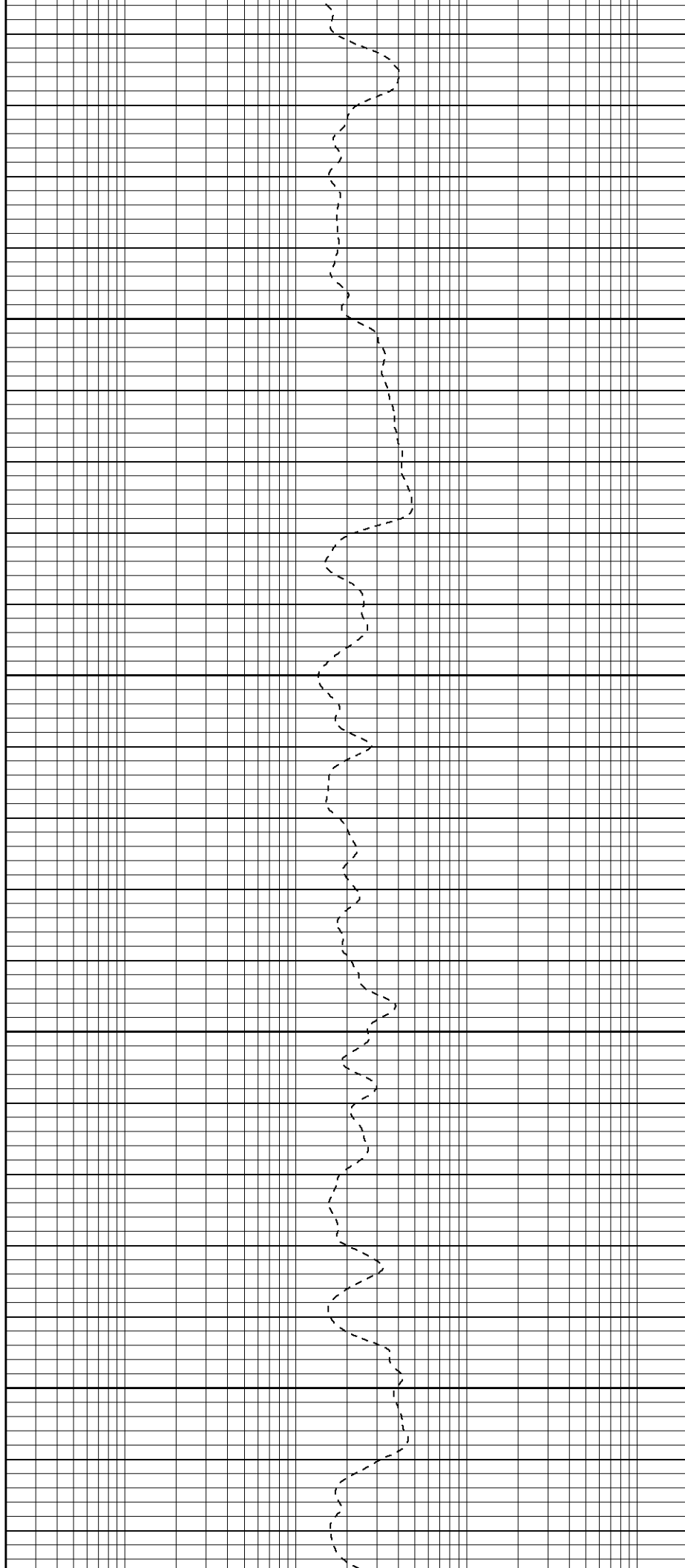


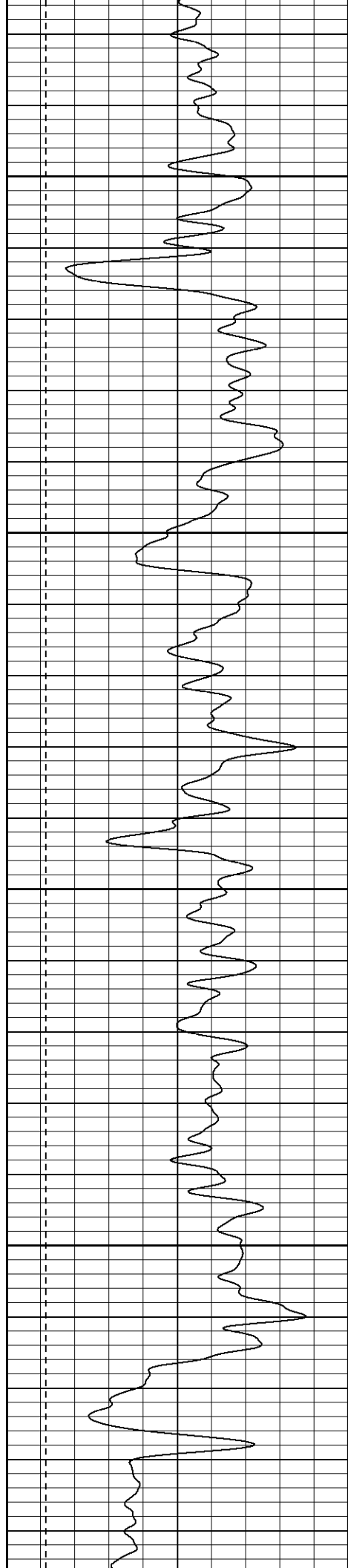
1850

1900

1950

2000



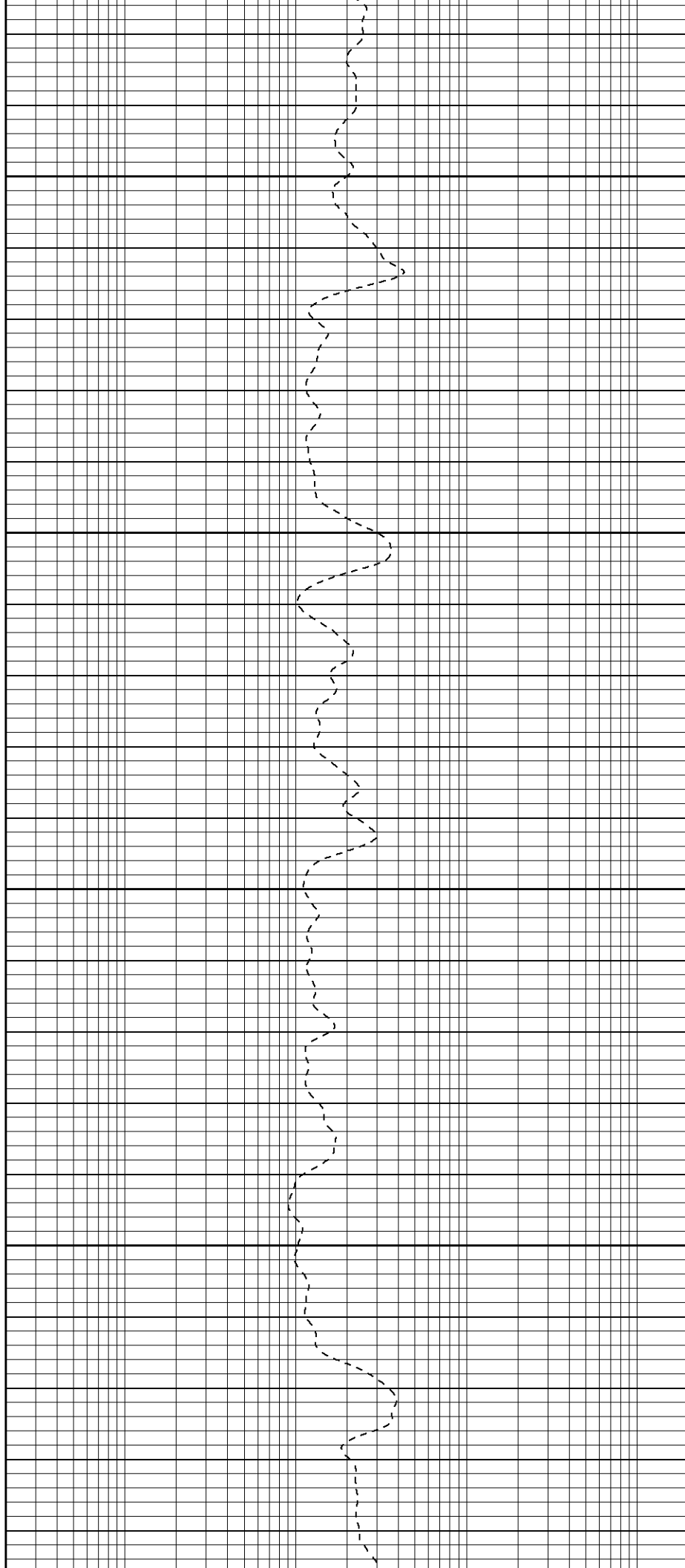


2050

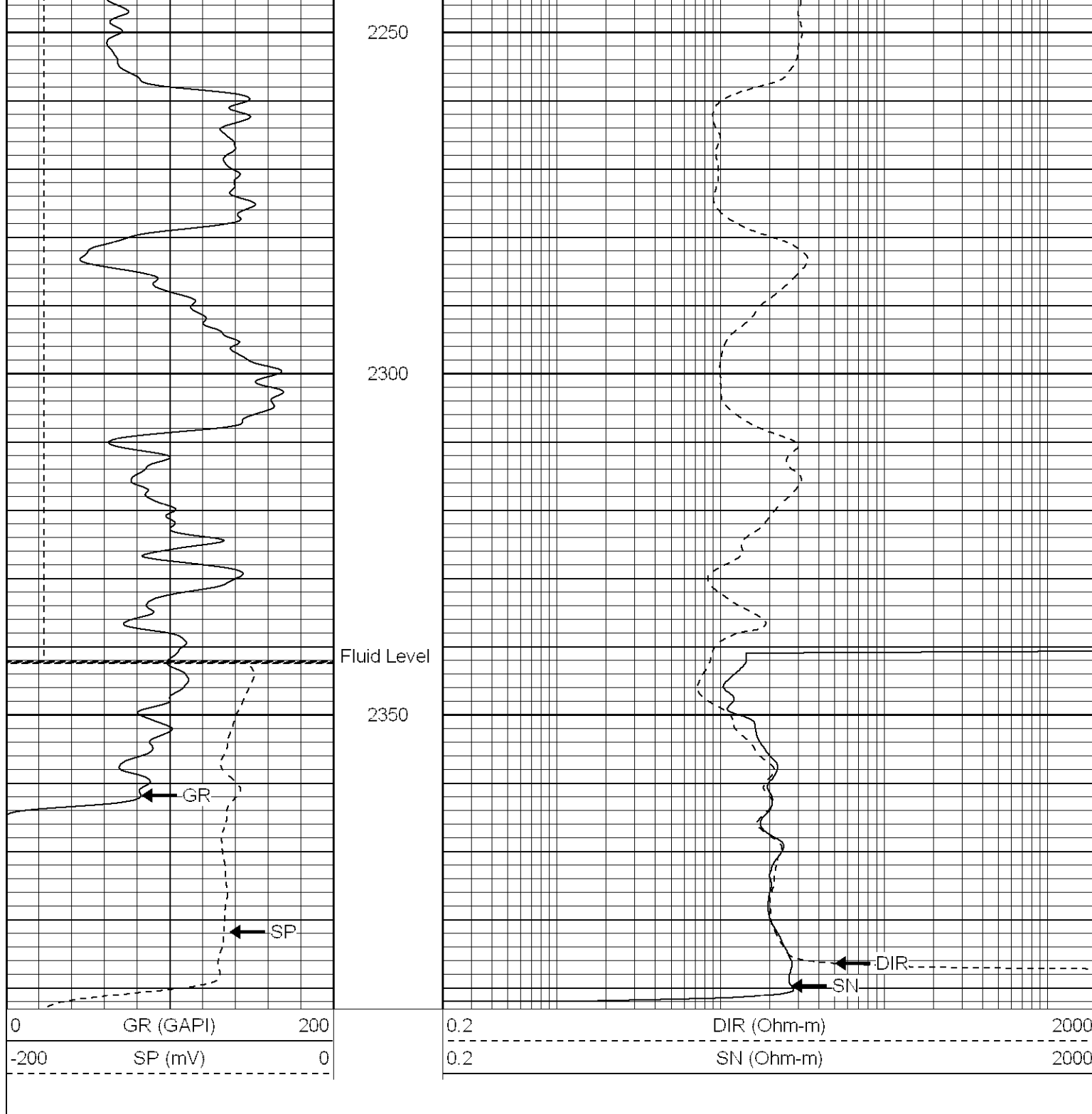
2100

2150

2200







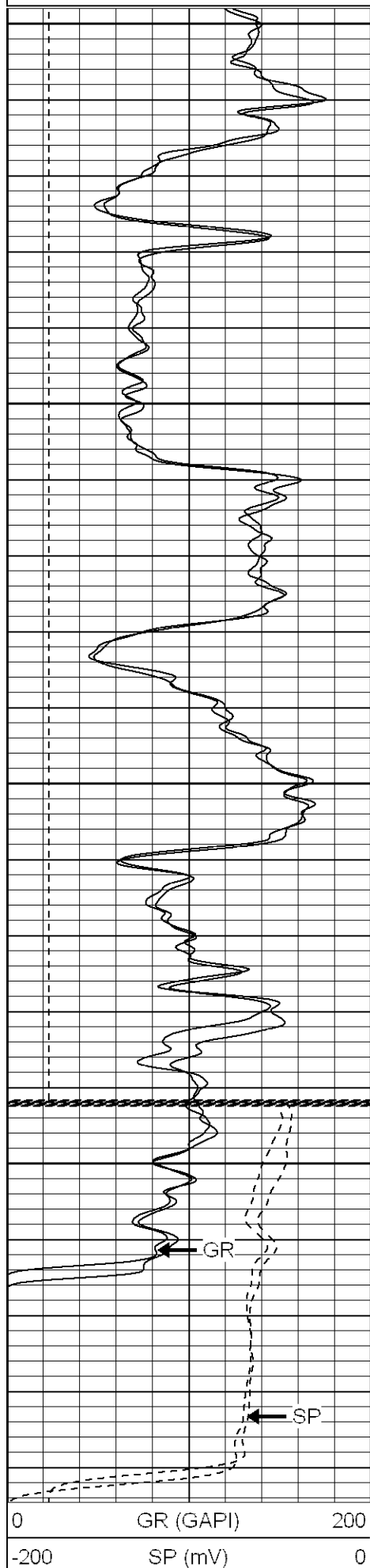
**Patterson**

## Repeat Pass

Database File: zentr.db  
Dataset Pathname: pass1.2  
Presentation Format: iel  
Dataset Creation: Wed Nov 09 07:14:42 2005 by Calc Warrior 7.0 STD Ope  
Charted by: Depth in Feet scaled 1:240

|      |           |     |     |             |      |
|------|-----------|-----|-----|-------------|------|
| 0    | GR (GAPI) | 200 | 0.2 | DIR (Ohm-m) | 2000 |
| -200 | SP (mV)   | 0   | 0.2 | SN (Ohm-m)  | 2000 |
| 0    | GR (GAPI) | 200 | 0.2 | DIR (Ohm-m) | 2000 |
| -200 | SP (mV)   | 0   | 0.2 | SN (Ohm-m)  | 2000 |

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



2200

2250

2300

Fluid Level

2350

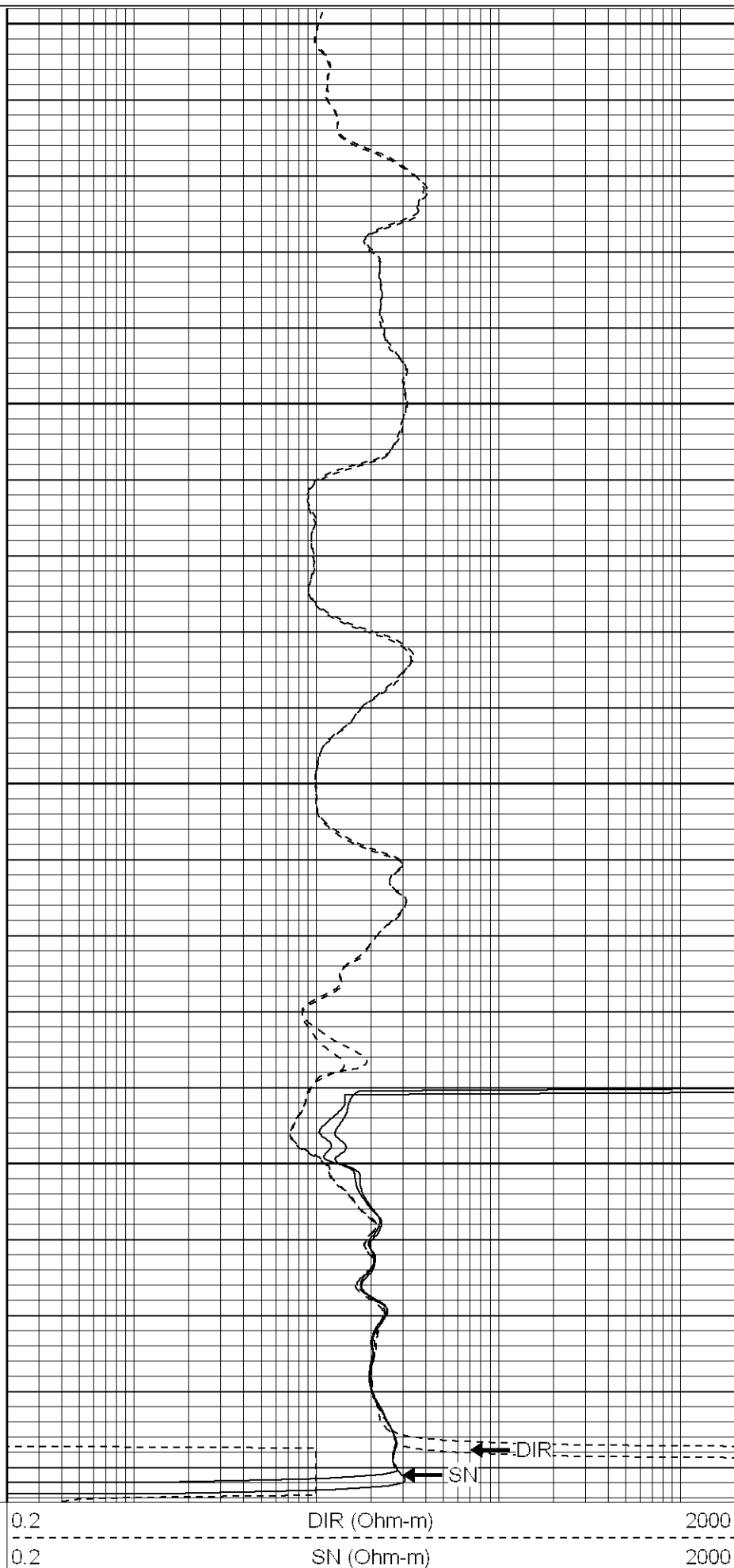
GR

SP

0 GR (GAPI) 200

-200 SP (mV) 0

|     |                    |      |
|-----|--------------------|------|
| 0.2 | DIR-repeat (Ohm-m) | 2000 |
| 0.2 | SN-repeat (Ohm-m)  | 2000 |



0.2 DIR (Ohm-m) 2000

0.2 SN (Ohm-m) 2000

DIR

SN

|      |                  |     |     |                    |      |
|------|------------------|-----|-----|--------------------|------|
| 0    | GR-repeat (GAPI) | 200 | 0.2 | DIR-repeat (Ohm-m) | 2000 |
| -200 | SP-repeat (mV)   | 0   | 0.2 | SN-repeat (Ohm-m)  | 2000 |
|      |                  |     |     |                    |      |

| Induction Tool Calibration Report |  |                          |              |       |  |
|-----------------------------------|--|--------------------------|--------------|-------|--|
| Serial Number:                    |  | 040903                   |              |       |  |
| Tool Model:                       |  | Probe                    |              |       |  |
| Downhole Cal Performed:           |  | Thu Nov 03 05:30:40 2005 |              |       |  |
| Surface Cal Performed:            |  | Thu Nov 03 05:00:06 2005 |              |       |  |
| Surface Calibration:              |  | Air                      | Loop         |       |  |
| Conductivity Reference:           |  | 0.000                    | 500.000      | mmho  |  |
| Conductivity Reading:             |  | 0.013                    | 0.648        | V     |  |
| Internal Reference:               |  | Zero                     | Cal          |       |  |
| Conductivity Reference:           |  | 0.000                    | 500.000      | mmho  |  |
| Conductivity Reading:             |  | 0.013                    | 0.648        | V     |  |
| Downhole Calibration:             |  | Internal Zero            | Internal Cal |       |  |
| Conductivity Reference:           |  | 0.101                    | 499.962      | mmho  |  |
| Conductivity Reading:             |  | -0.029                   | 500.197      | V     |  |
| Short Normal Reference:           |  | 0.000                    | 20.000       | Ohm-m |  |
| Short Normal Reading:             |  | 0.008                    | 0.236        | V     |  |
| Results:                          |  | Gain                     | Offset       |       |  |
| Loop Conductivity:                |  | 788.246                  | -10.522      |       |  |
| Downhole Correction:              |  | 0.999                    | 0.130        |       |  |
| Short Normal Resistivity:         |  | 57.503                   | -2.000       |       |  |

| Compensated Density Calibration Report |         |                          |                             |               |     |
|--|---------|--------------------------|-----------------------------|---------------|-----|
| Serial-Model:                          |         | 901-2.75POH              |                             |               |     |
| Source / Verifier:                     |         | /                        |                             |               |     |
| Master Calibration Performed:          |         | Fri Oct 28 10:55:46 2005 |                             |               |     |
| Master Calibration                     |         |                          |                             |               |     |
|  | Density |                          | Far Detector                | Near Detector |     |
| Magnesium                              | 1.710   | g/cc                     | 1053.25                     | 537.38        | cps |
| Aluminum                               | 2.570   | g/cc                     | 186.28                      | 258.25        | cps |
| Spine Angle = 67.07                    |         |                          | Density/Spine Ratio = 0.457 |               |     |
|  | Size    |                          | Reading                     |               |     |
| Small Ring                             | 8.10    | in                       | 1.92                        | V             |     |
| Large Ring                             | 17.00   | in                       | 4.15                        | V             |     |

| Neutron Calibration Report |   |                          |  |
|----------------------------|---|--------------------------|--|
| Serial Number:             |   | 803                      |  |
| Tool Model:                |   | 2.75POH                  |  |
| Performed:                 |   | Fri Oct 28 09:26:12 2005 |  |
| Calibrator Value:          | 1 | NAPI                     |  |
| Calibrator Reading:        | 1 | cps                      |  |
| Sensitivity:               | 1 | NAPI/cps                 |  |

| Gamma Ray Calibration Report |  |  |  |
|------------------------------|--|--|--|
|------------------------------|--|--|--|

|                     |        |          |
|---------------------|--------|----------|
| Calibrator Value:   | 1.0    | GAPI     |
| Background Reading: | 0.0    | cps      |
| Calibrator Reading: | 1.0    | cps      |
| Sensitivity:        | 0.4000 | GAPI/cps |

| Sensor | Offset (ft) | Schematic | Description                           | Len (ft) | OD (in) | Wt (lb) |
|--------|-------------|-----------|---------------------------------------|----------|---------|---------|
| CHD    | 31.11       |           | None                                  | 0.75     | 1.50    | 5.00    |
| GR     | 29.38       |           | GR-2.75POH (801)<br>Probe             | 3.73     | 2.75    | 43.00   |
| NEU    | 23.84       |           | NEU-2.75POH (803)<br>Probe Epithelial | 4.75     | 2.75    | 58.00   |
| LSD    | 16.21       |           | CDL-2.75POH (901)<br>Probe            | 8.43     | 2.75    | 106.00  |
| DCAL   | 15.94       |           |                                       |          |         |         |
| SSD    | 15.69       |           |                                       |          |         |         |
| DIC    | 6.24        |           | IEL-Probe (040903)                    | 13.46    | 2.75    | 93.00   |
| SP     | 2.25        |           |                                       |          |         |         |
| SN     | 1.71        |           |                                       |          |         |         |

Dataset: /field/well/run1/\_plots/\_jobs/i  
Total Length: 31.11 ft  
Total Weight: 305.00 lb  
O.D. 2.75 in