

|                              |   |                |                           |
|------------------------------|---|----------------|---------------------------|
| Company                      | Pioneer Natural Resources                       | Company        | Pioneer Natural Resources |
| Well                         | Idrahaje 12-14                                  | Well           | Idrahaje 12-14            |
| Field                        | Purgatoire River                                | Field          | Purgatoire River          |
| County                       | Las Animas                                      | County         | Las Animas                |
| State                        | Colorado  | State          | Colorado                  |
| Location:                    | API #: 05 071 09782 00<br>2198' FNL & 1109' FWL | Other Services | CDNL                      |
| SEC 14 TWP 33S RGE 66W       |   |                |                           |
| Permanent Datum              | Ground Level                                    | Elevation      | 7195'                     |
| Log Measured From            | Kelly Bushing 4' AGL                            |                |                           |
| Drilling Measured From       | Kelly Bushing                                   |                |                           |
| Date                         | 6-21-11   |                |                           |
| Run Number                   | One   |                |                           |
| Depth Driller                | 1830'   |                |                           |
| Depth Logger                 | 1826'   |                |                           |
| Bottom Logged Interval       | 1822'   |                |                           |
| Top Log Interval             | Surface Casing                                  |                |                           |
| Casing Driller               | 8 5/8" @ 424'                                   |                |                           |
| Casing Logger                | 423'  |                |                           |
| Bit Size                     | 7 7/8"  |                |                           |
| Type Fluid in Hole           | Airated 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     | 10:15 A.M.                                      |                |                           |
| Time Logger on Bottom        | 12:45 P.M.                                      |                |                           |
| Maximum Recorded Temperature | 76 DEG F  |                |                           |
| Equipment Number             | T590  |                |                           |
| Location                     | Trinidad  |                |                           |
| Recorded By                  | C. Sisneros                                     |                |                           |
| Witnessed By                 | Mr. Bill Vigil                                  |                |                           |

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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

Directions:  
Sarcillo to Primero Ranches, go thru electric gate and stay on main rd to Smith Canyon RD, go right, first right.

Database File: idrahaje.db  
Dataset Pathname: pass2.1  
Presentation Format: iel  
Dataset Creation: Tue Jun 21 16:09:31 2011 by Calc Open-Cased 110302  
Charted by: Depth in Feet scaled 1:240

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

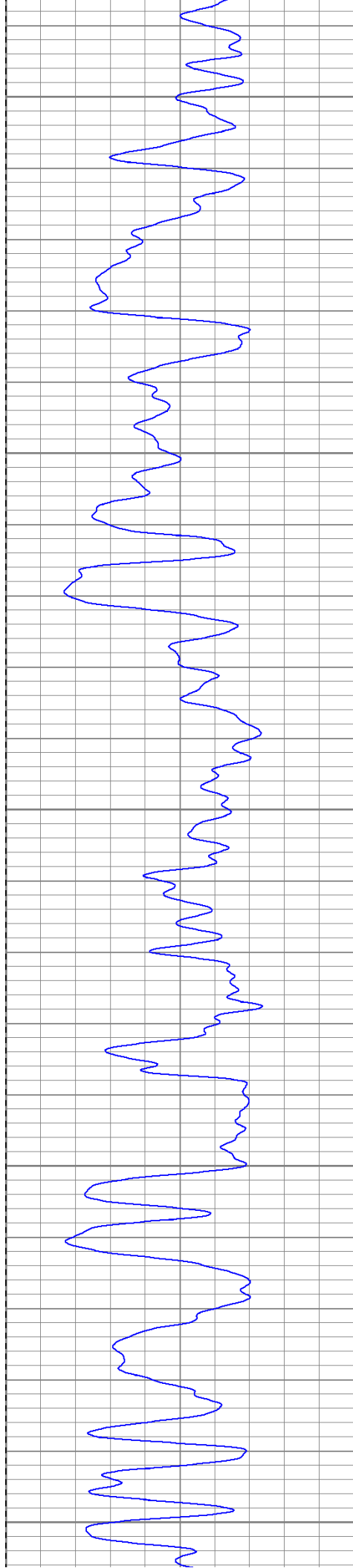
0.2 DIR (Ohm-m) 2000  
0.2 SN (Ohm-m) 2000

Surface Casing

450

500

550



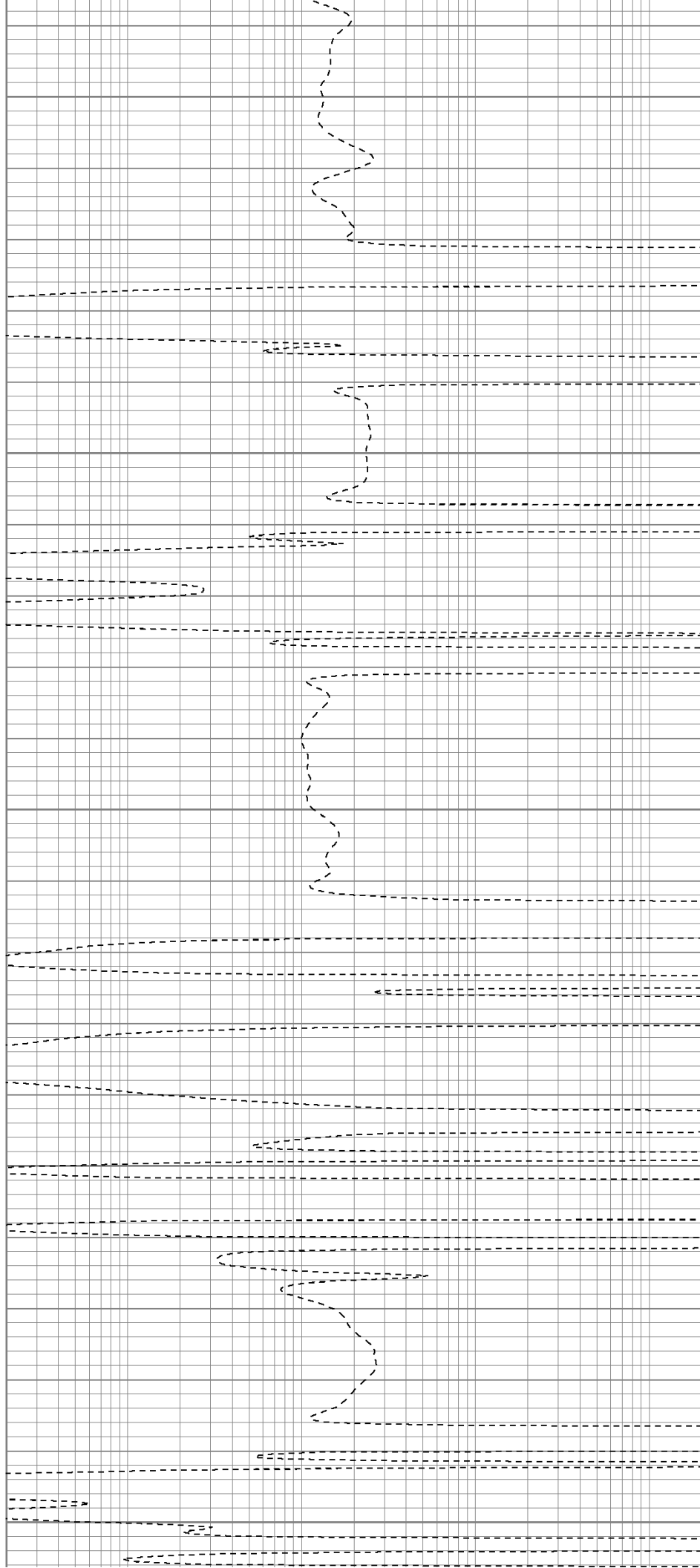
600

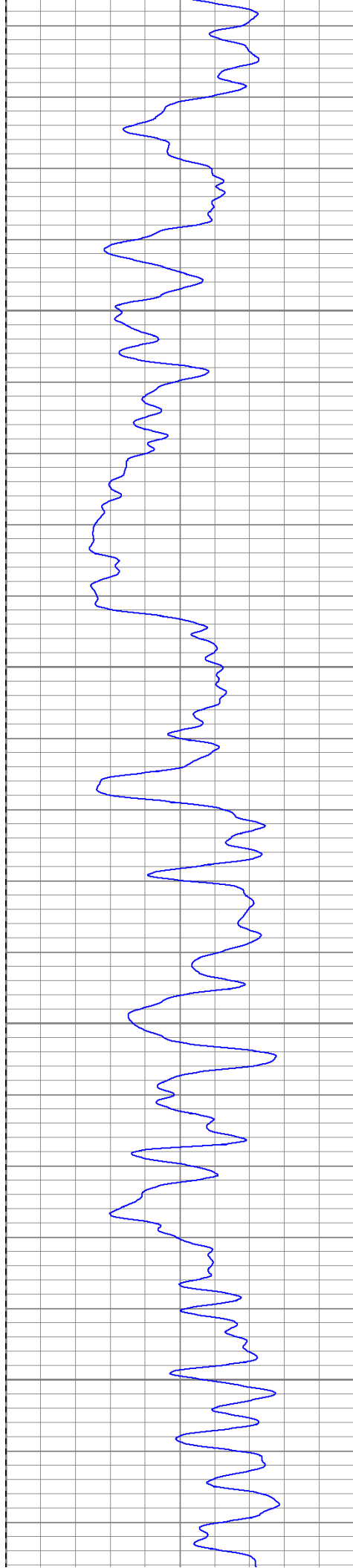
650

700

750

800



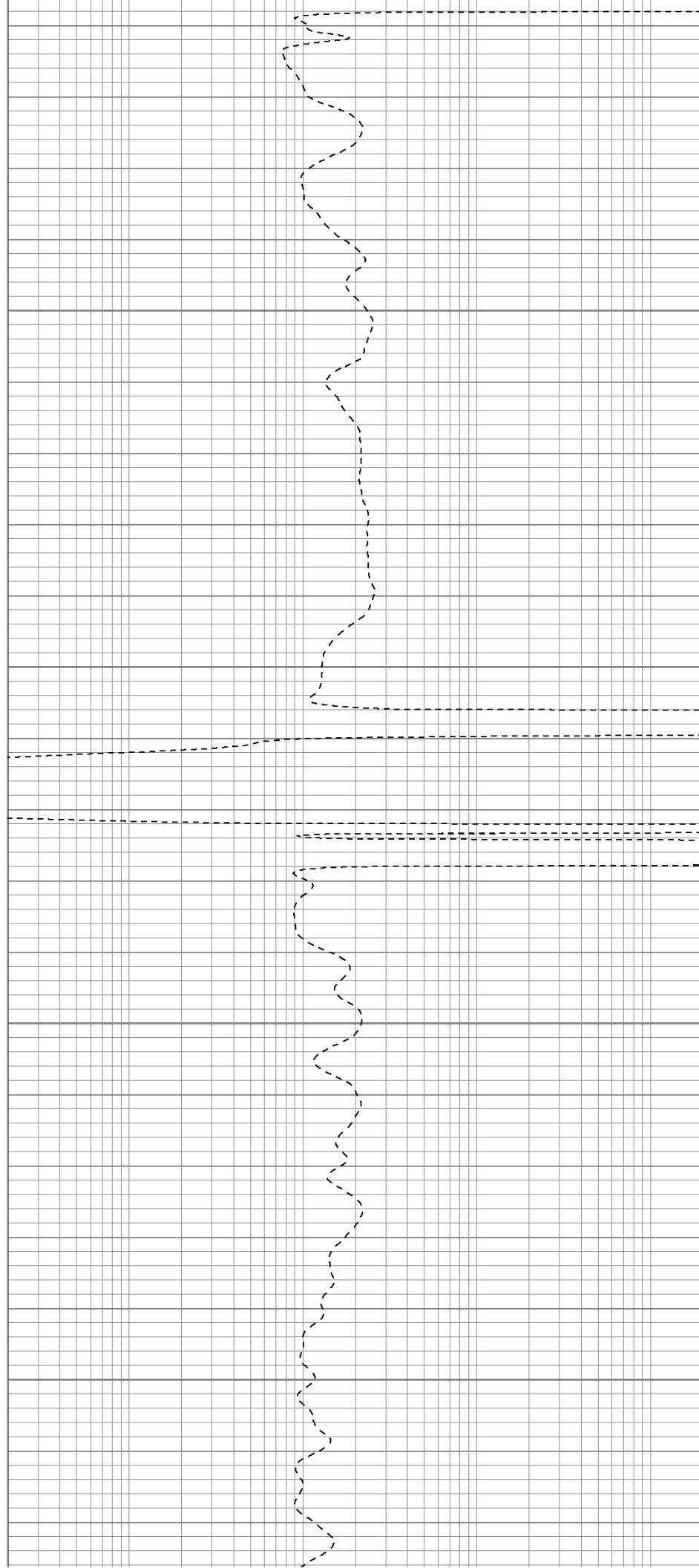


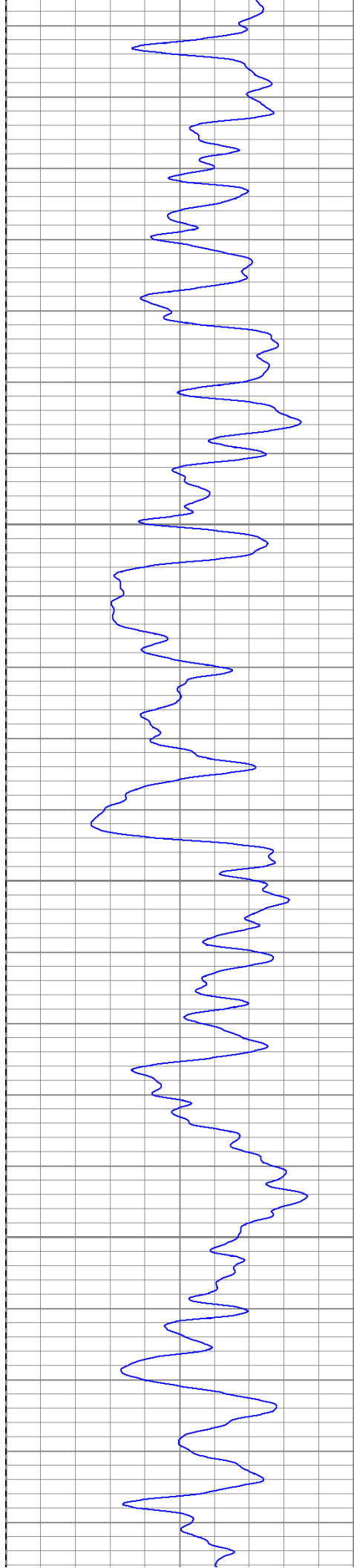
850

900

950

1000



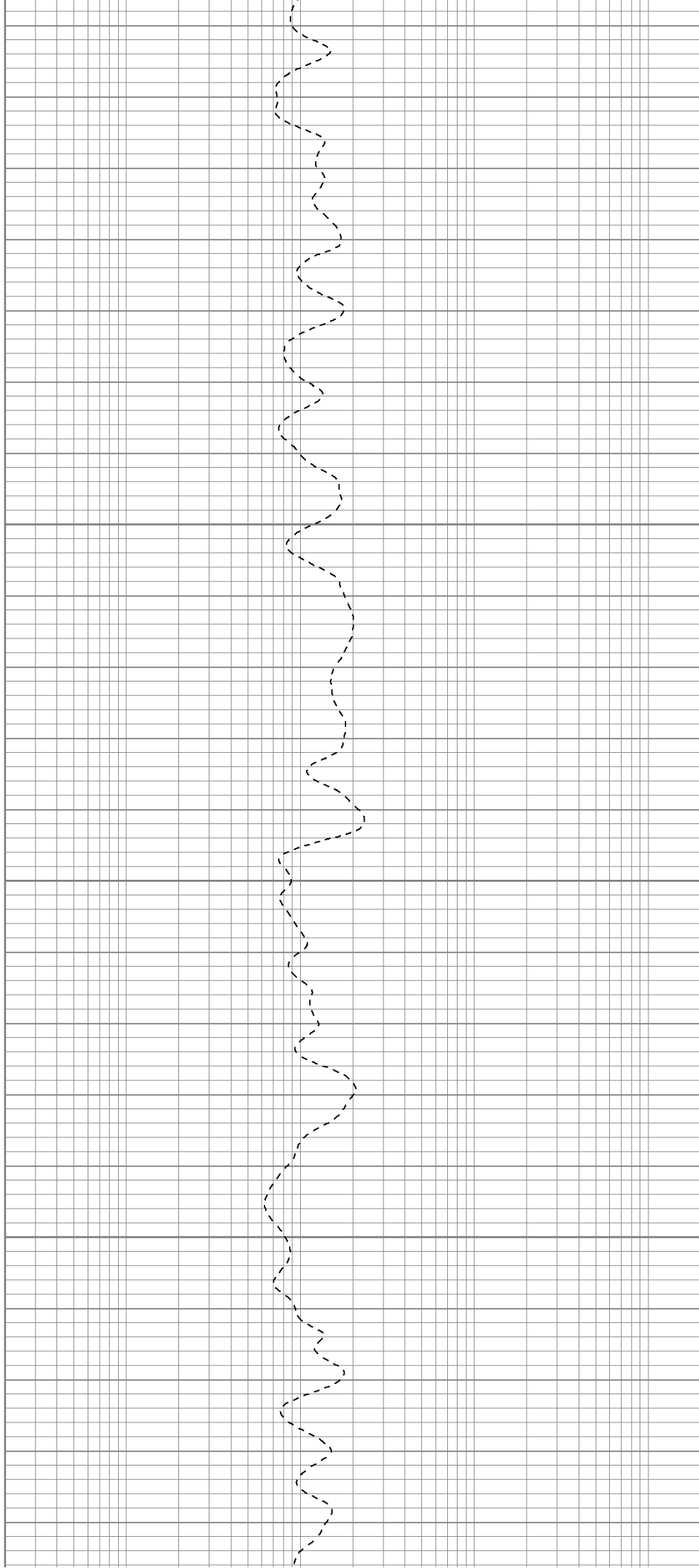


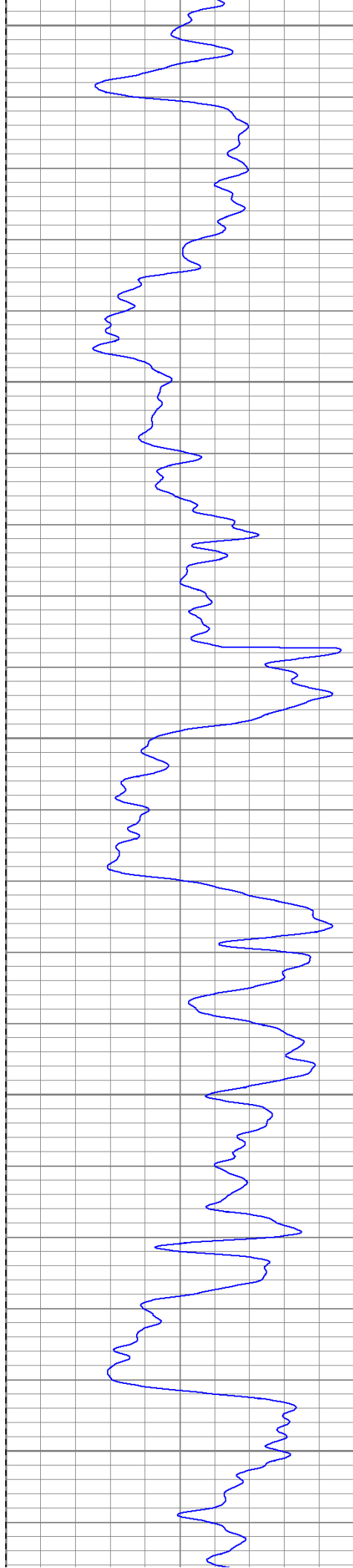
1050

1100

1150

1200





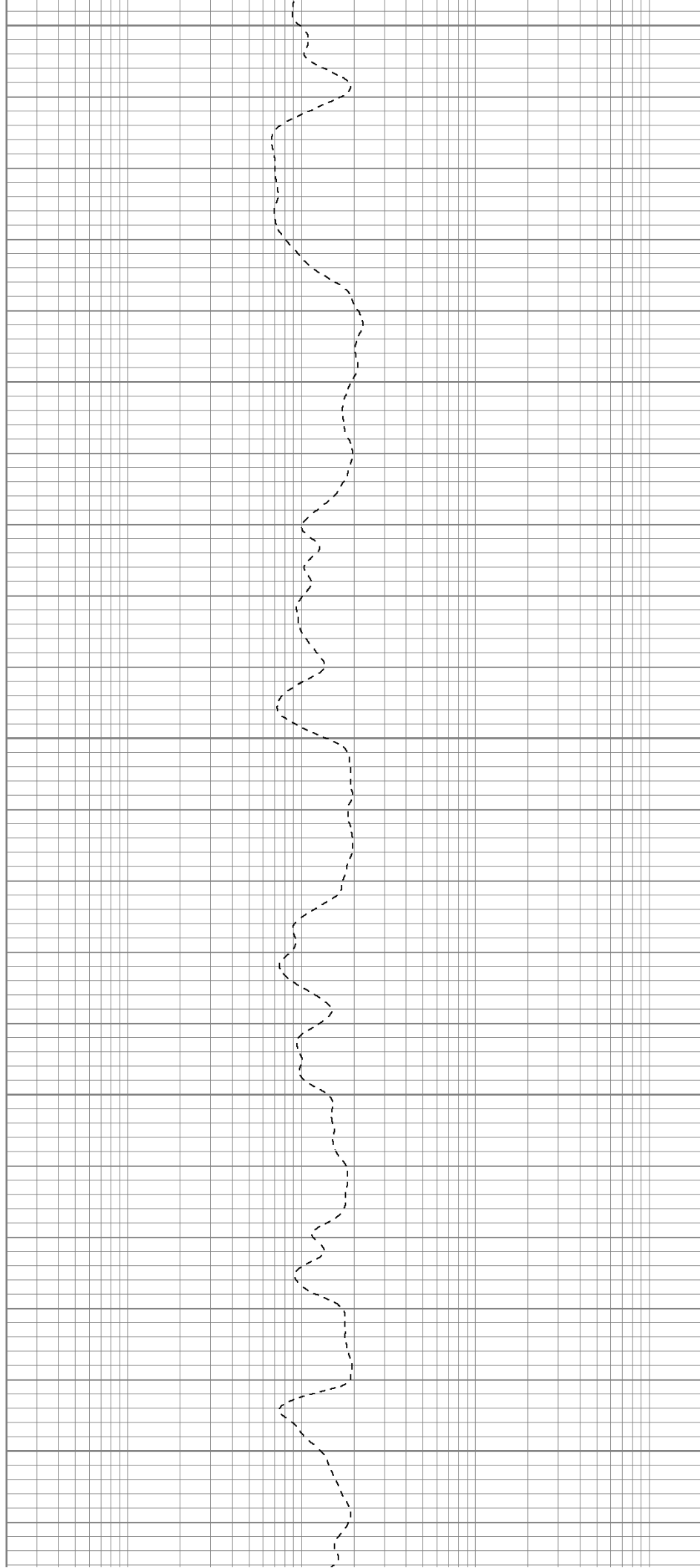
1250

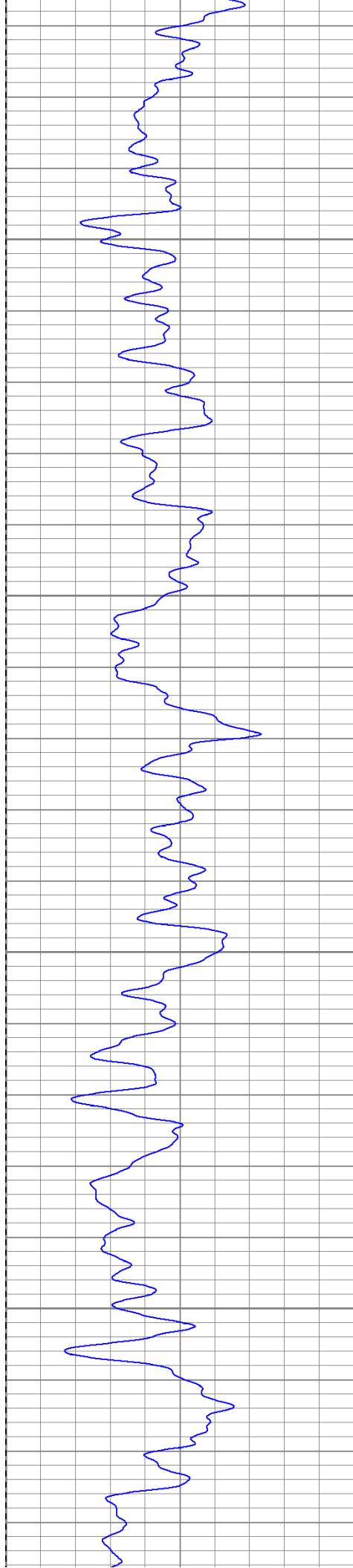
1300

1350

1400

1450



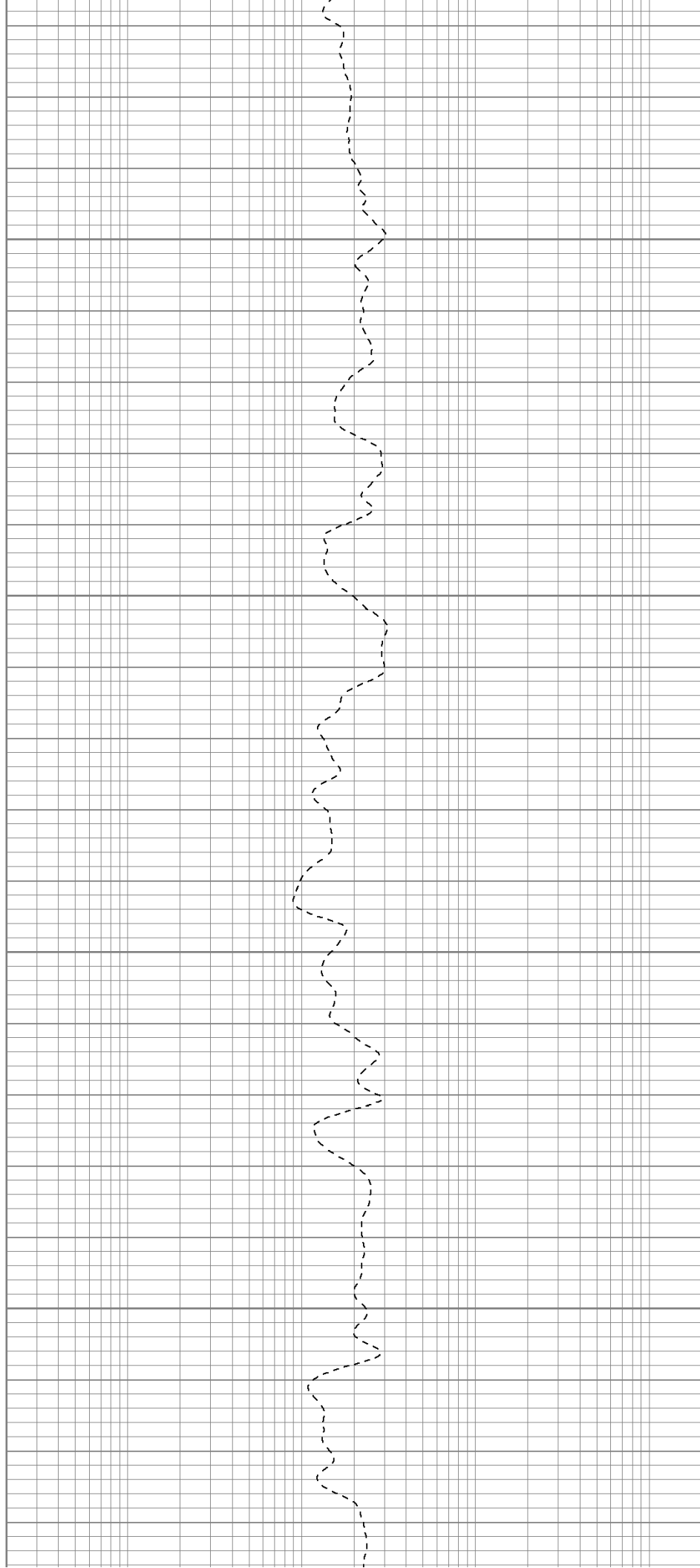


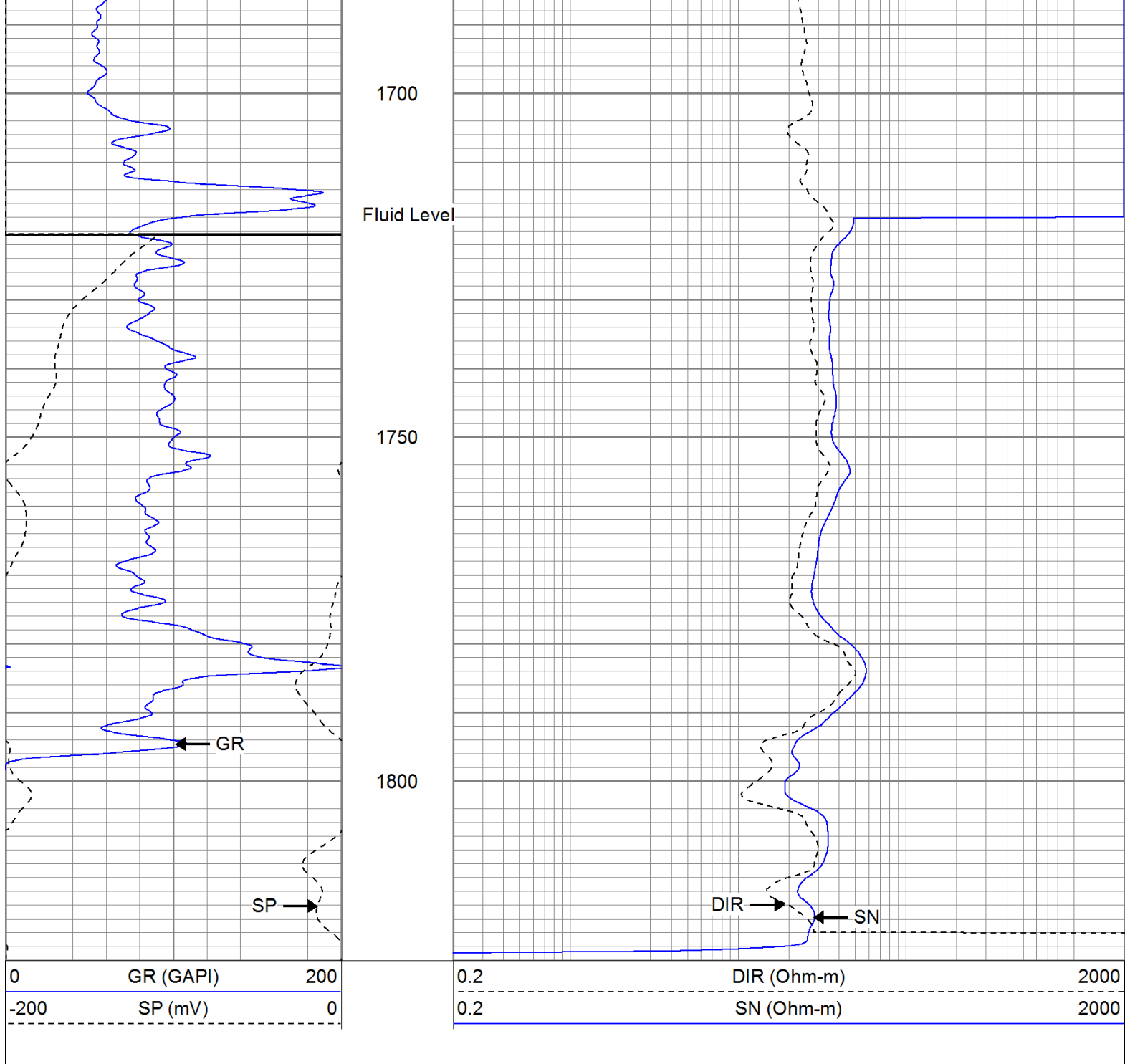
1500

1550

1600

1650





# Repeat Pass

Database File: idrahaje.db  
 Dataset Pathname: pass1.1  
 Presentation Format: iel  
 Dataset Creation: Tue Jun 21 16:23:06 2011 by Calc Open-Cased 110302  
 Charted by: Depth in Feet scaled 1:240

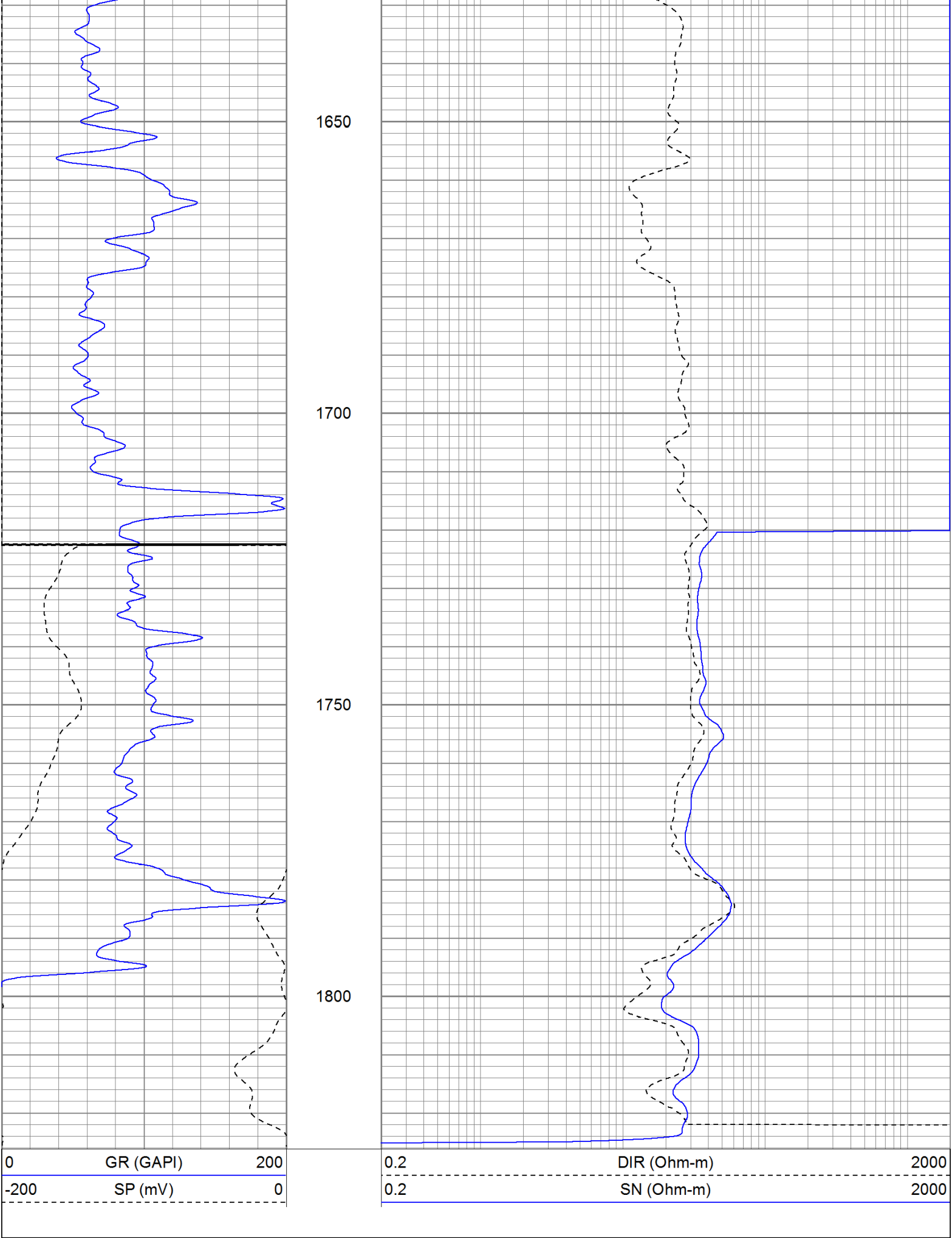
0 GR (GAPI) 200

-200 SP (mV) 0

0.2 DIR (Ohm-m) 2000

0.2 SN (Ohm-m) 2000





# Calibration Report

Database File: idrahaje.db  
 Dataset Pathname: pass1  
 Dataset Creation: Tue Jun 21 13:00:08 2011 by Log Open-Cased 110302

## Induction Tool Calibration Report

Serial Number: 903  
 Tool Model: Probe  
 Downhole Cal Performed: Sat Jun 18 15:02:12 2011  
 Surface Cal Performed: Sat Jun 18 17:40:00 2011  
 After Survey Verification Performed:

|                         |        |         |      |
|-------------------------|--------|---------|------|
| Surface Calibration:    | Air    | Loop    |      |
| Conductivity Reference: | 0.000  | 500.000 | mmho |
| Conductivity Reading:   | -0.045 | 0.642   | V    |
| Internal Reference:     | Zero   | Cal     |      |
| Conductivity Reference: | 0.000  | 500.000 | mmho |
| Conductivity Reading:   | 0.006  | 0.641   | V    |

|                         |               |              |       |
|-------------------------|---------------|--------------|-------|
| Downhole Calibration:   | Internal Zero | Internal Cal |       |
| Conductivity Reference: | -0.702        | 499.904      | mmho  |
| Conductivity Reading:   | -0.082        | 503.319      | V     |
| Short Normal Reference: | 0.000         | 20.000       | Ohm-m |
| Short Normal Reading:   | 0.006         | 0.233        | V     |

|                           |         |        |
|---------------------------|---------|--------|
| Results:                  | Gain    | Offset |
| Loop Conductivity:        | 728.211 | 32.770 |
| Downhole Correction:      | 0.994   | -0.621 |
| Short Normal Resistivity: | 88.245  | -3.000 |

|                           |               |              |       |
|---------------------------|---------------|--------------|-------|
| After Survey Verification | Internal Zero | Internal Cal |       |
| Conductivity Reading:     | 0.000         | 0.000        | V     |
| Conductivity Result:      | 0.000         | 0.000        | mmho  |
| Short Normal Reading:     | 0.000         | 0.000        | V     |
| Short Normal Result:      | 0.000         | 0.000        | Ohm-m |

## Compensated Density Calibration Report

Serial-Model: 901-2.75POH  
 Source / Verifier: /  
 Master Calibration Performed: Wed Jun 08 09:11:26 2011  
 Before Survey Verification Performed:  
 After Survey Verification Performed:

### Master Calibration

|                     | Density |      | Far Detector                | Near Detector |     |
|---------------------|---------|------|-----------------------------|---------------|-----|
| Magnesium           | 1.710   | g/cc | 1001.79                     | 578.48        | cps |
| Aluminum            | 2.590   | g/cc | 180.36                      | 300.39        | cps |
| Spine Angle = 69.08 |         |      | Density/Spine Ratio = 0.479 |               |     |
|                     | Size    |      | Reading                     |               |     |
| Small Ring          | 8.00    | in   | 2.50                        | V             |     |
| Large Ring          | 16.00   | in   | 4.57                        | V             |     |

### Before Survey Verification

| Target | Measured |
|--------|----------|
| g/cc   | g/cc     |
| g/cc   | g/cc     |
| g/cc   | g/cc     |

### After Survey Verification




|  |        |  |          |
|--|--------|--|----------|
|  | Target |  | Measured |
|  | g/cc   |  | g/cc     |
|  | g/cc   |  | g/cc     |
|  | g/cc   |  | g/cc     |

Neutron Calibration Report

|                     |                          |          |
|---------------------|--------------------------|----------|
| Serial Number:      | 803                      |          |
| Tool Model:         | 2.75POH                  |          |
| Performed:          | Wed Jun 08 13:12:55 2011 |          |
| Calibrator Value:   | 1                        | NAPI     |
| Calibrator Reading: | 1                        | cps      |
| Sensitivity:        | 1                        | NAPI/cps |

Gamma Ray Calibration Report

|                     |                          |          |
|---------------------|--------------------------|----------|
| Serial Number:      | 804                      |          |
| Tool Model:         | 2.75POH                  |          |
| Performed:          | Tue Jun 14 18:09:29 2011 |          |
| Calibrator Value:   | 1.0                      | GAPI     |
| Background Reading: | 0.0                      | cps      |
| Calibrator Reading: | 1.0                      | cps      |
| Sensitivity:        | 0.6000                   | GAPI/cps |

| Sensor | Offset (ft) | Schematic   | Description   | Len (ft) | OD (in) | Wt (lb) |
|--------|-------------|---|---|----------|---------|---------|
| GR     | 29.58       |  | None  | 0.75     | 1.50    | 5.00    |
|        |             |   | GR-2.75POH (804)<br>Probe 2.75" Probe Open Hole Gamma Ray | 3.73     | 2.75    | 43.00   |
| NEU    | 24.04       |  | NEU-2.75POH (803)<br>Probe Epithermal                     | 4.75     | 2.75    | 58.00   |
|        |             |   | CDL-2.75POH (901)<br>Probe                                | 8.43     | 2.75    | 106.00  |
| LSD    | 16.21       |  |   |          |         |         |
| DCAL   | 15.94       |   |   |          |         |         |
| SSD    | 15.69       |   |   |          |         |         |

|     |      |  |       |      |       |
|-----|------|--|-------|------|-------|
| DIC | 6.24 |  | 13.46 | 2.75 | 93.00 |
| SP  | 2.25 |  |       |      |       |
| SN  | 1.71 |  |       |      |       |

Dataset: idrahaje.db: field/well/run1/pass1

Total Length: 31.11 ft

Total Weight: 305.00 lb

O.D. 2.75 in