

Patterson

**COMPENSATED DENSITY
NEUTRON
LOG**

| | | | |
|------------------------------|-----------------|-------------------------|----------------|
| Company XTO Energy Inc. | | Company XTO Energy Inc. | |
| Well Golden Eagle 31-08 | | Well Golden Eagle 31-08 | |
| Field Purgatoire River | | Field Purgatoire River | |
| County Las Animas | | County Las Animas | |
| State Colorado | | State Colorado | |
| Location: | | API # : 05 071 08674 00 | Other Services |
| 1911' FNL & 1297' FEL | | | dil |
| SEC 31 TWP 33S RGE 67W | | | |
| Permanent Datum | Ground Level | Elevation | 7404' |
| Log Measured From | Ground Level | | |
| Drilling Measured From | Ground Level | | |
| Elevation | | | |
| K.B. ----- | | | |
| D.F. ----- | | | |
| G.L. 7404' | | | |
| Date | 02-24-06 | | |
| Run Number | Two | | |
| Depth Driller | 2150' | | |
| Depth Logger | 2145' | | |
| Bottom Logged Interval | 2121' | | |
| Top Log Interval | Surface Casing | | |
| Casing Driller | 8 5/8" @ 226' | | |
| Casing Logger | 226' | | |
| 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 | 9:00 p.m. | | |
| Time Logger on Bottom | 12:25 a.m. | | |
| Maximum Recorded Temperature | 122 | | |
| Equipment Number | T677 | | |
| Location | Trinidad | | |
| Recorded By | L. Smith | | |
| Witnessed By | Mr. Don Johnson | Mr. Dalton King | |

>>> Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

Compensated Density Neutron Porosity Presented On Sandstone Matrix.
ABHV Calculated For 5 1/2" Casing.
Neutron porosity invalid from 1056' to 1470' due to foam.
Second entrance to Bosque, at Y stay left to Ciruela Canyon,
go thru gate, stay on main rd to windmill, go left, first location on right.

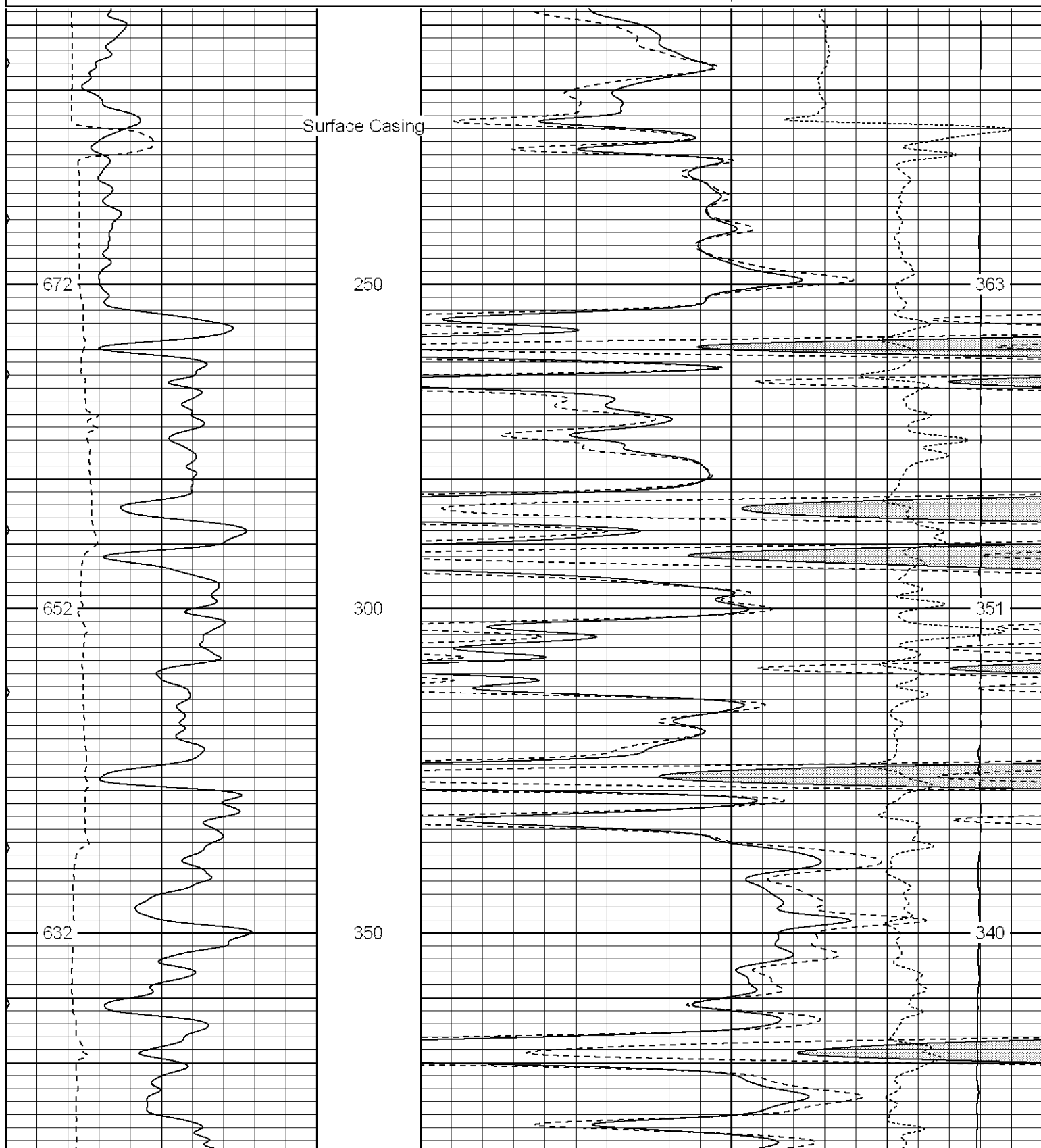
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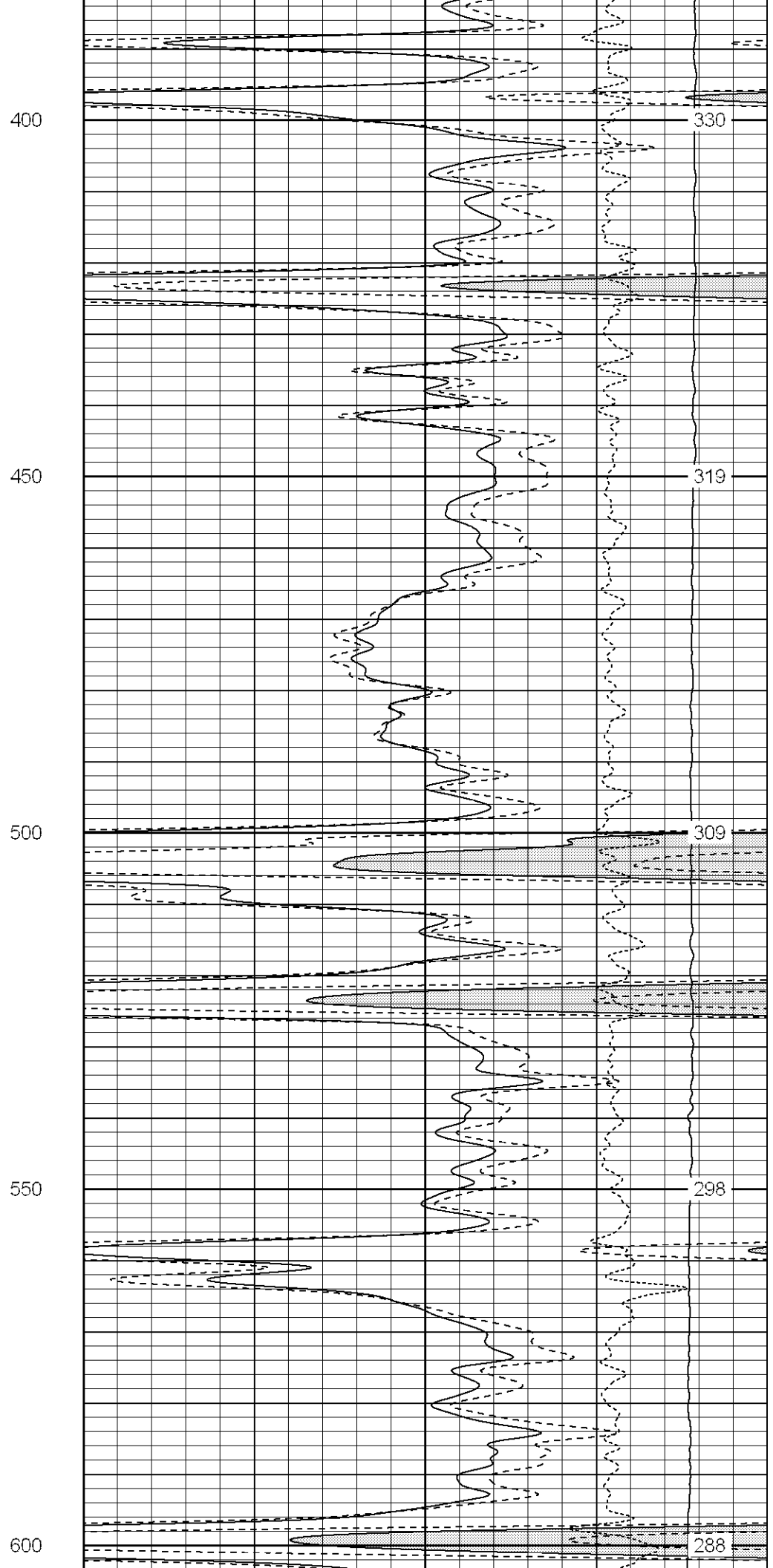
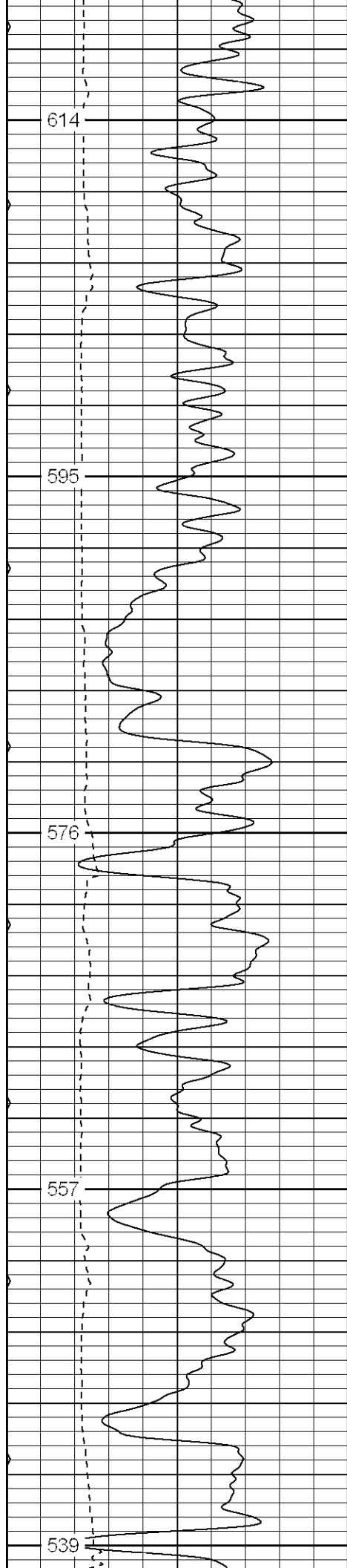
Main Pass

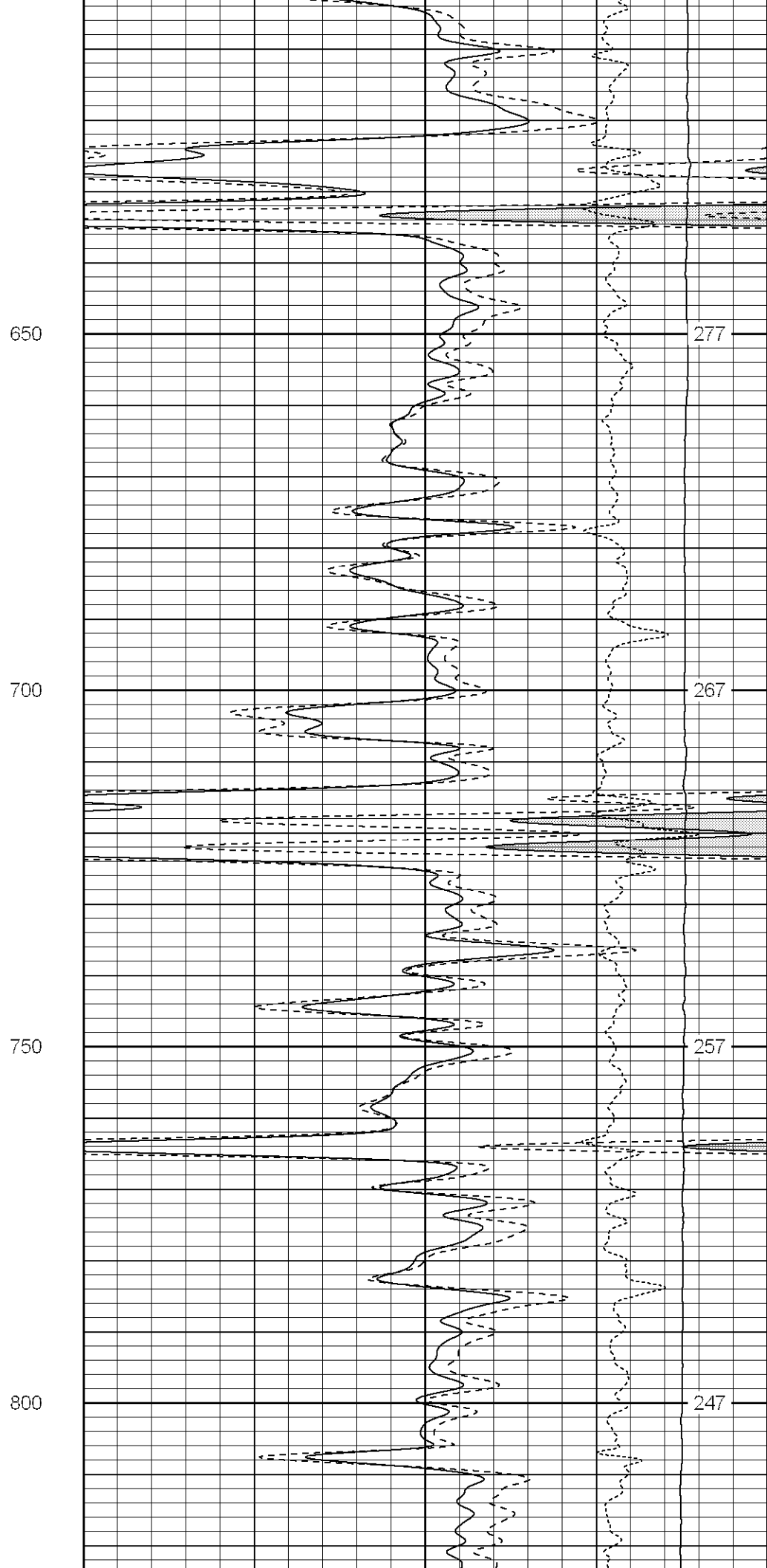
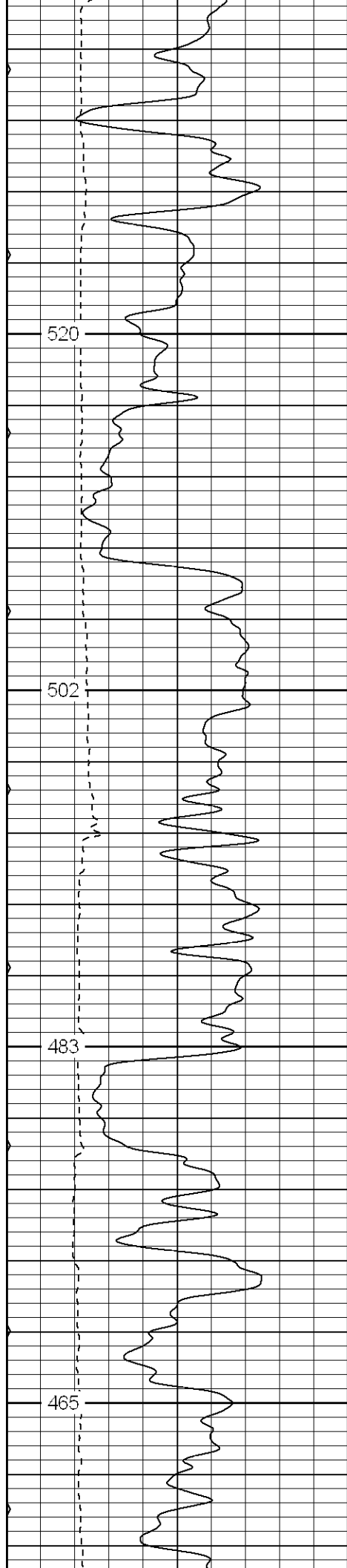
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Dataset Creation: Fri Feb 24 03:21:41 2006 by Calc Warrior 7.0 STD Ope
Charted by: Depth in Feet scaled 1:240

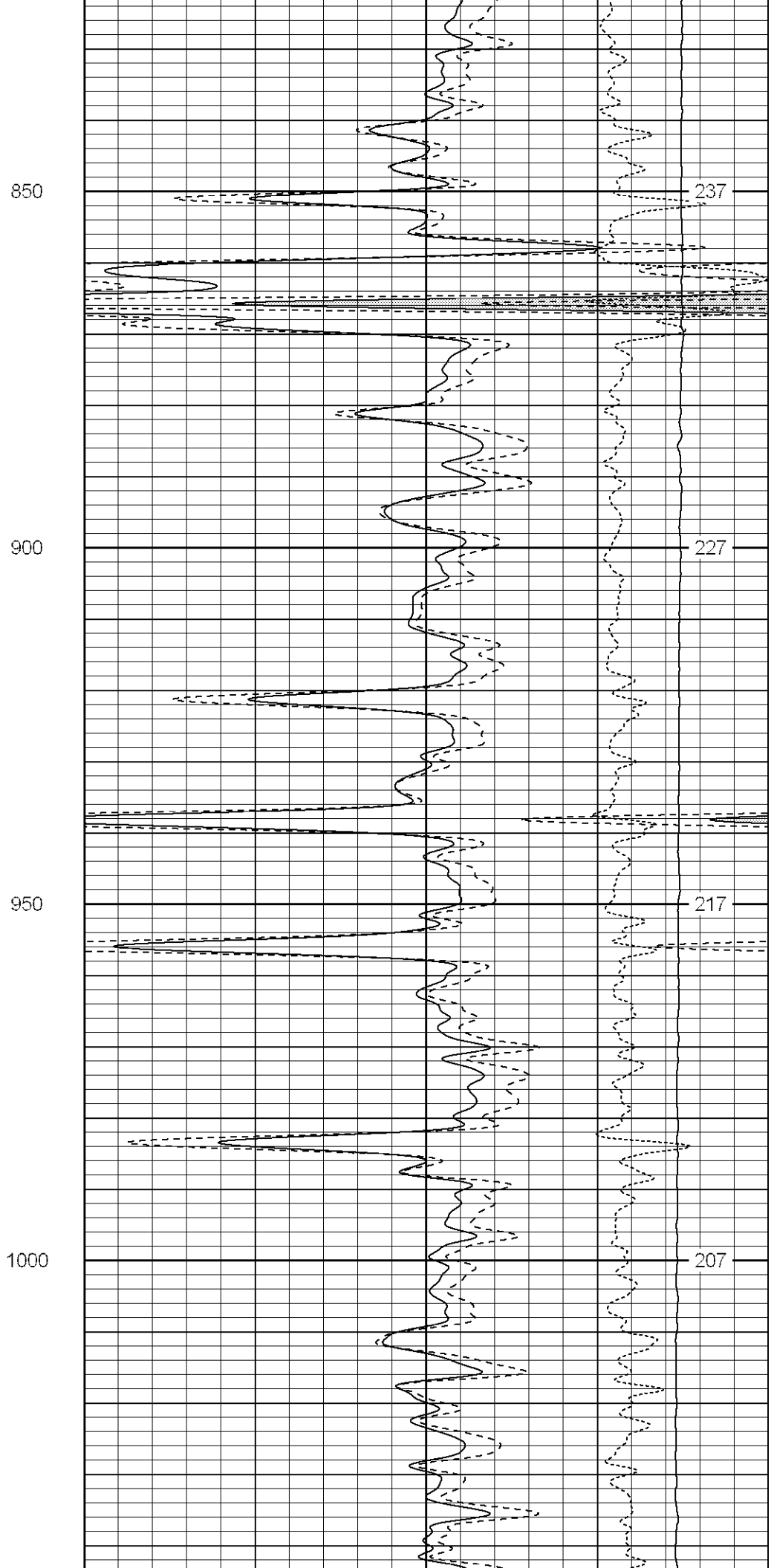
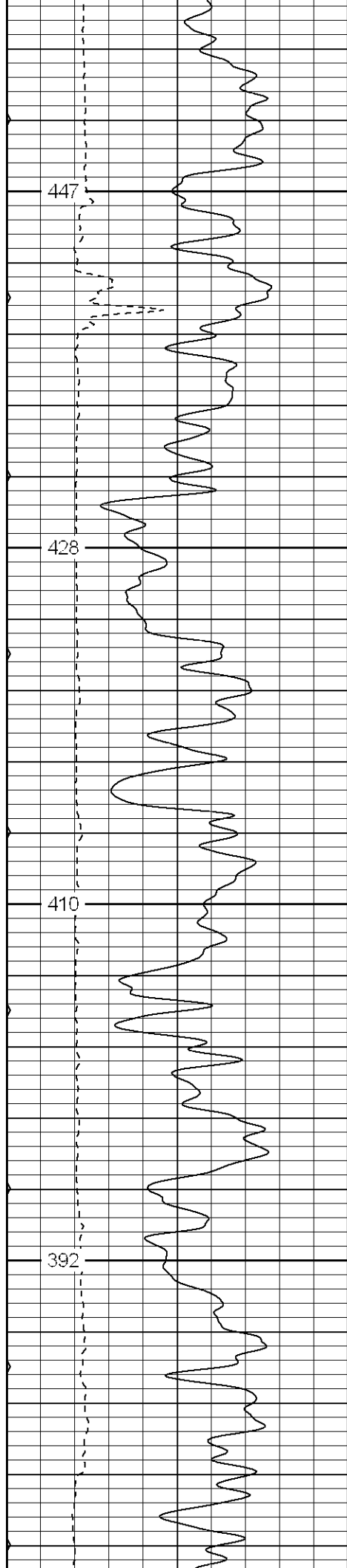
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| 6 | DCAL (in) | 16 |
| 0 | MINMK | 80 |

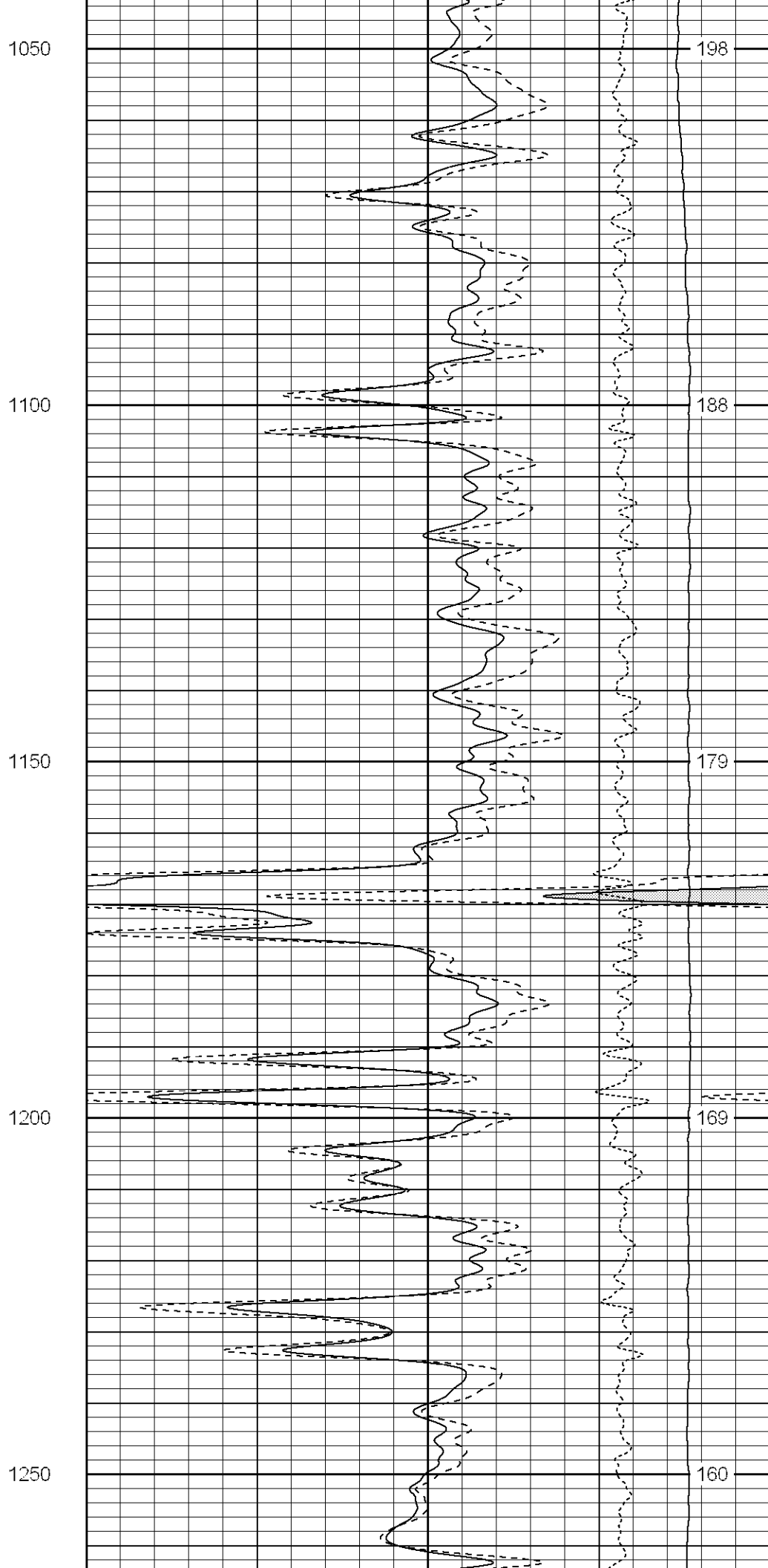
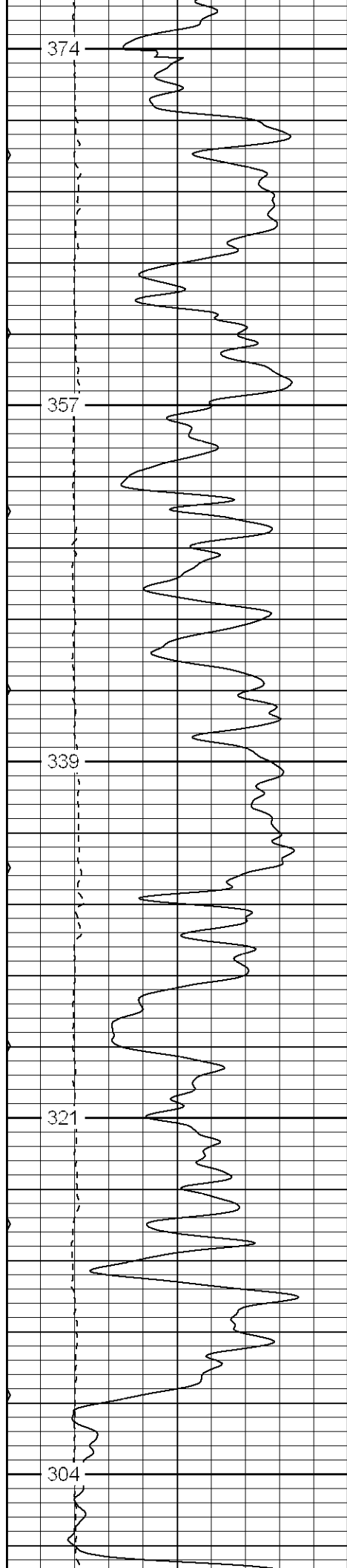
| | | |
|------|-------------|-----|
| 2 | RHOB (g/cc) | 3 |
| 1 | RHOB (g/cc) | 2 |
| 30 | DPOR (pu) | -10 |
| -0.5 | RHOC (g/cc) | 0.5 |
| 4000 | LTEN (lb) | 0 |

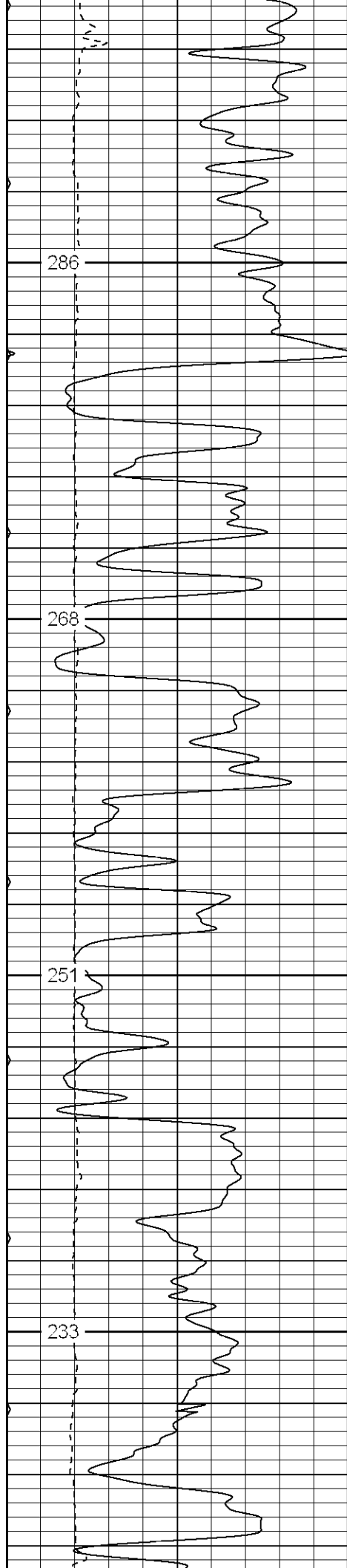










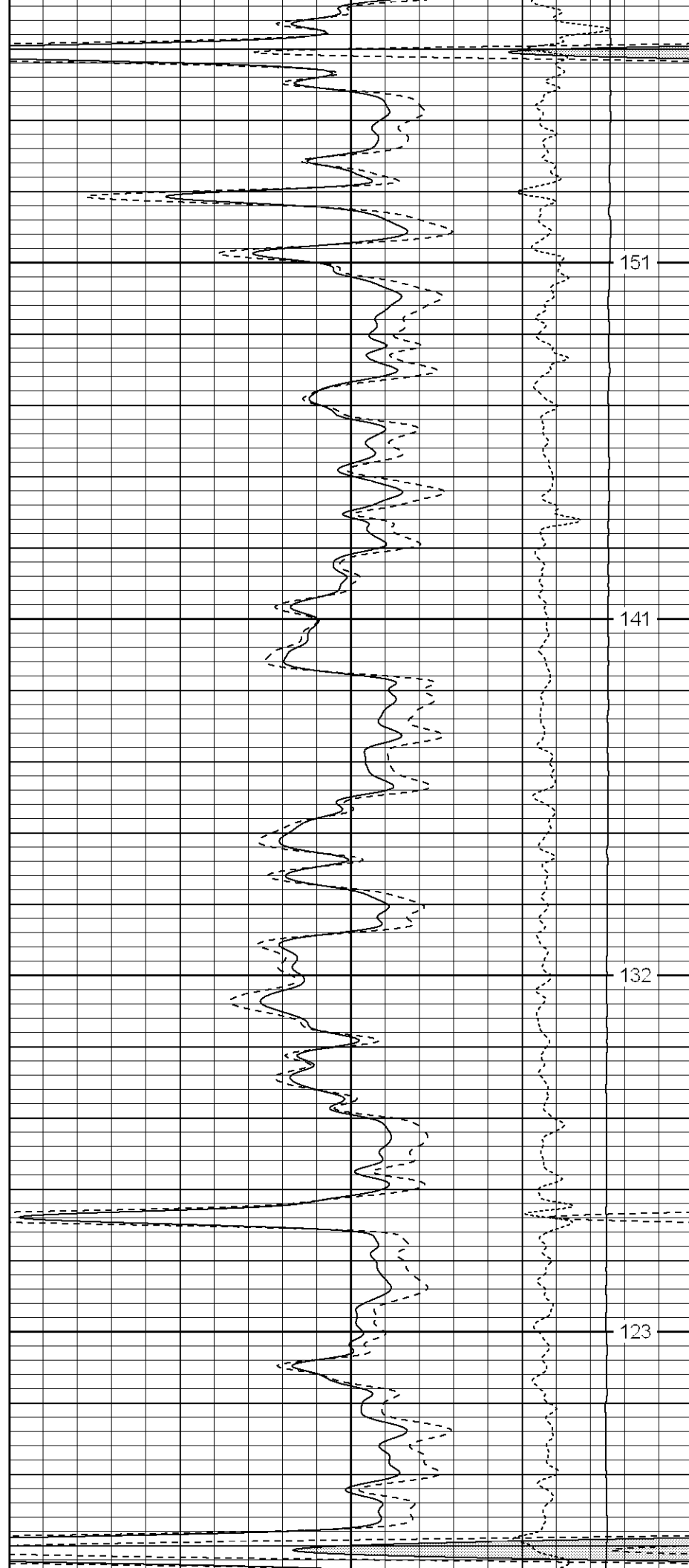


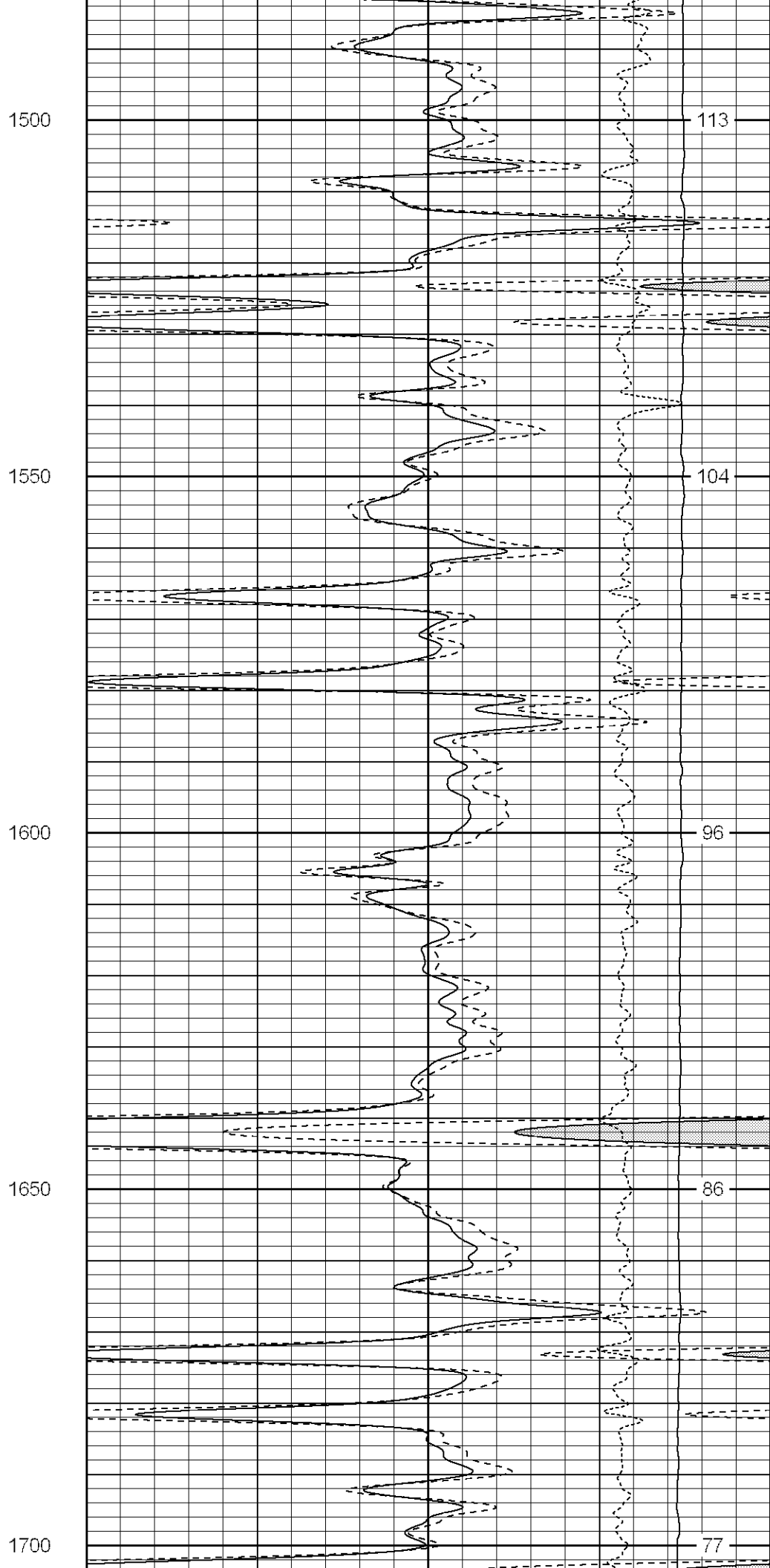
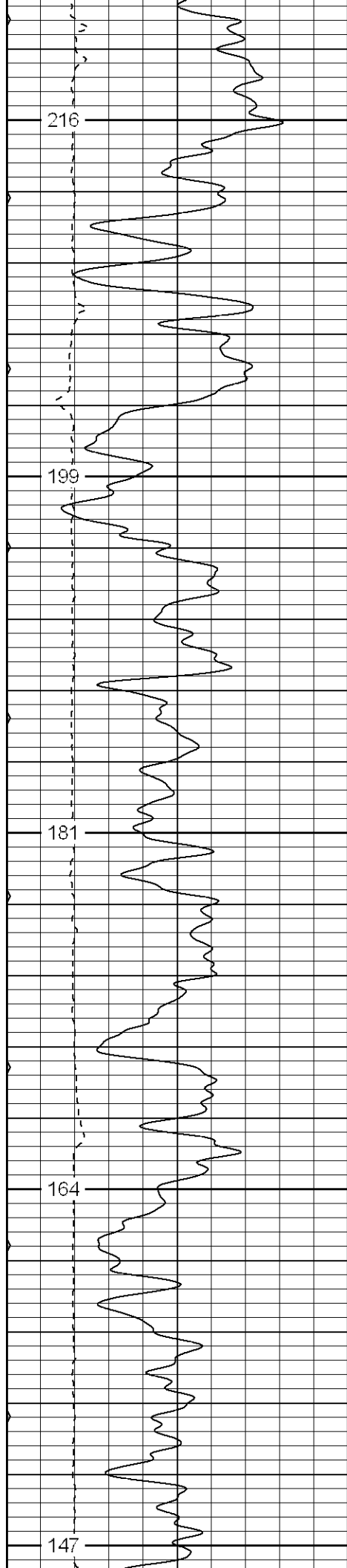
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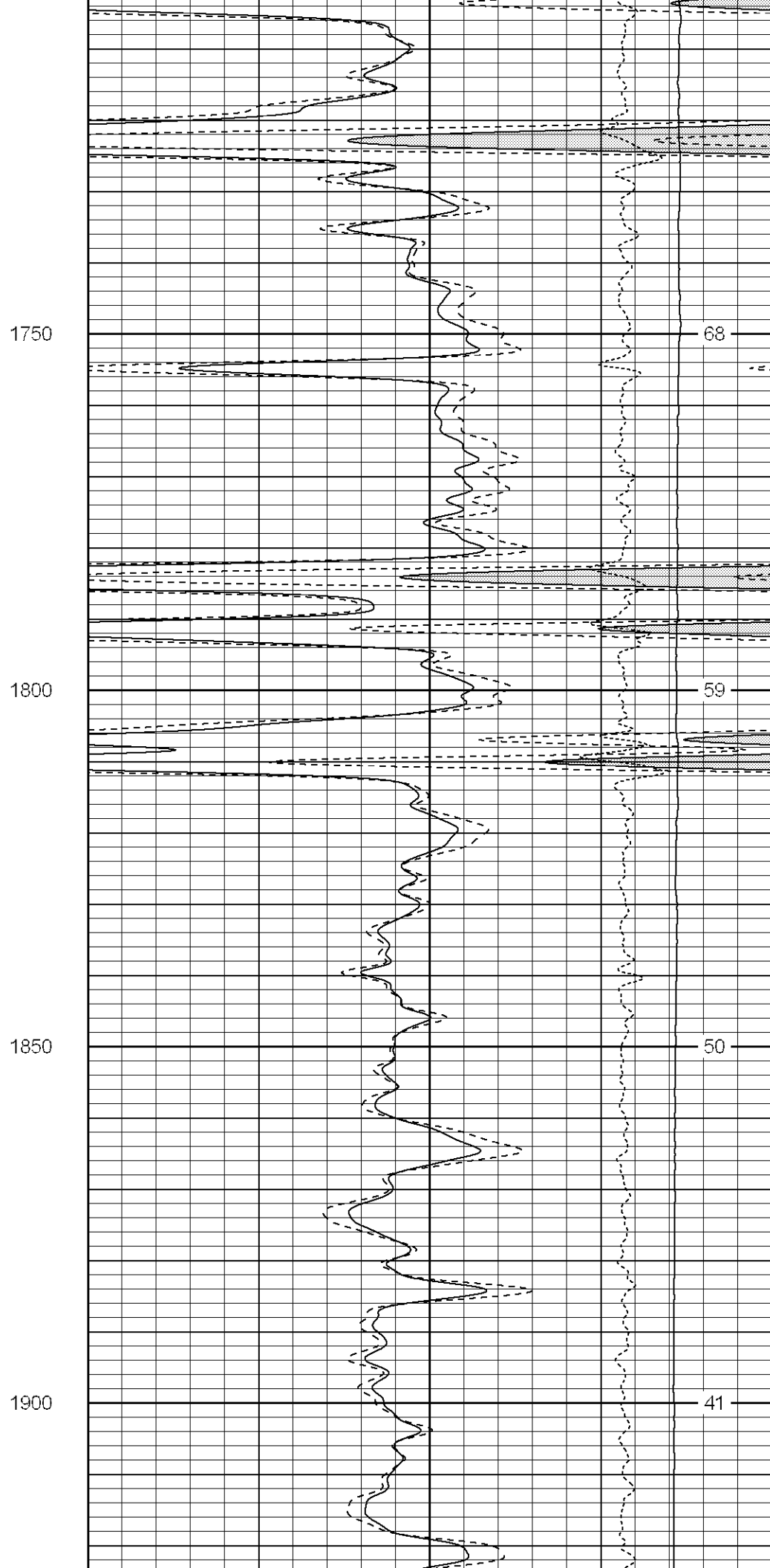
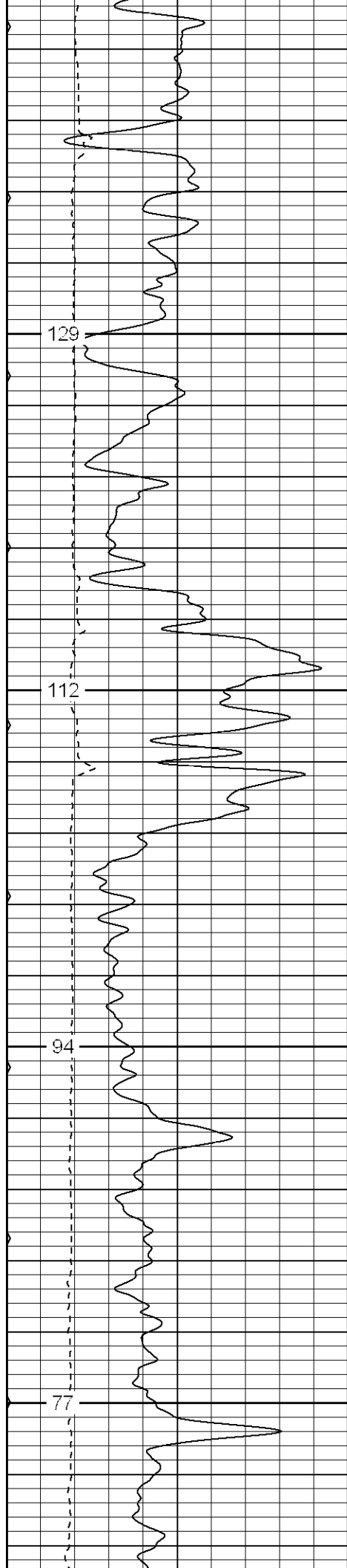
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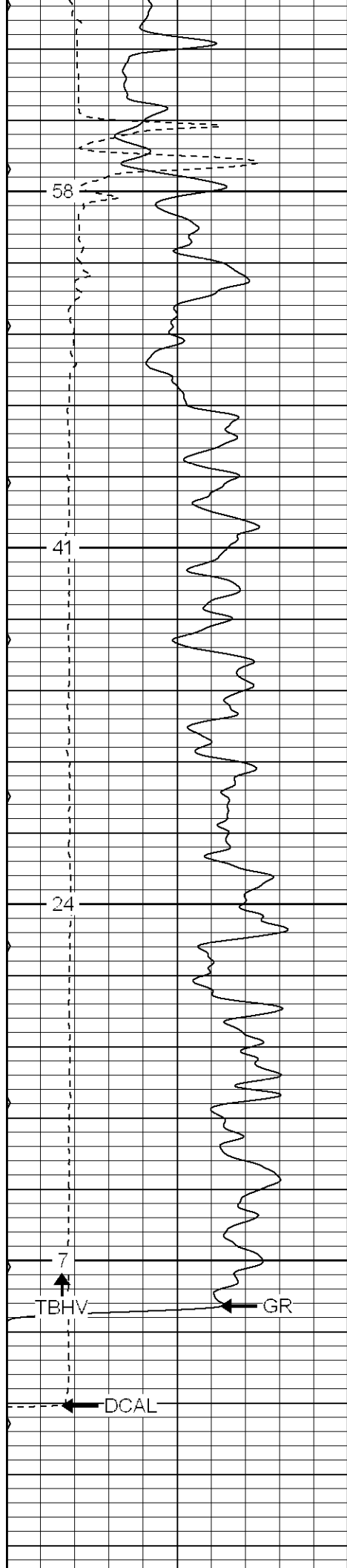
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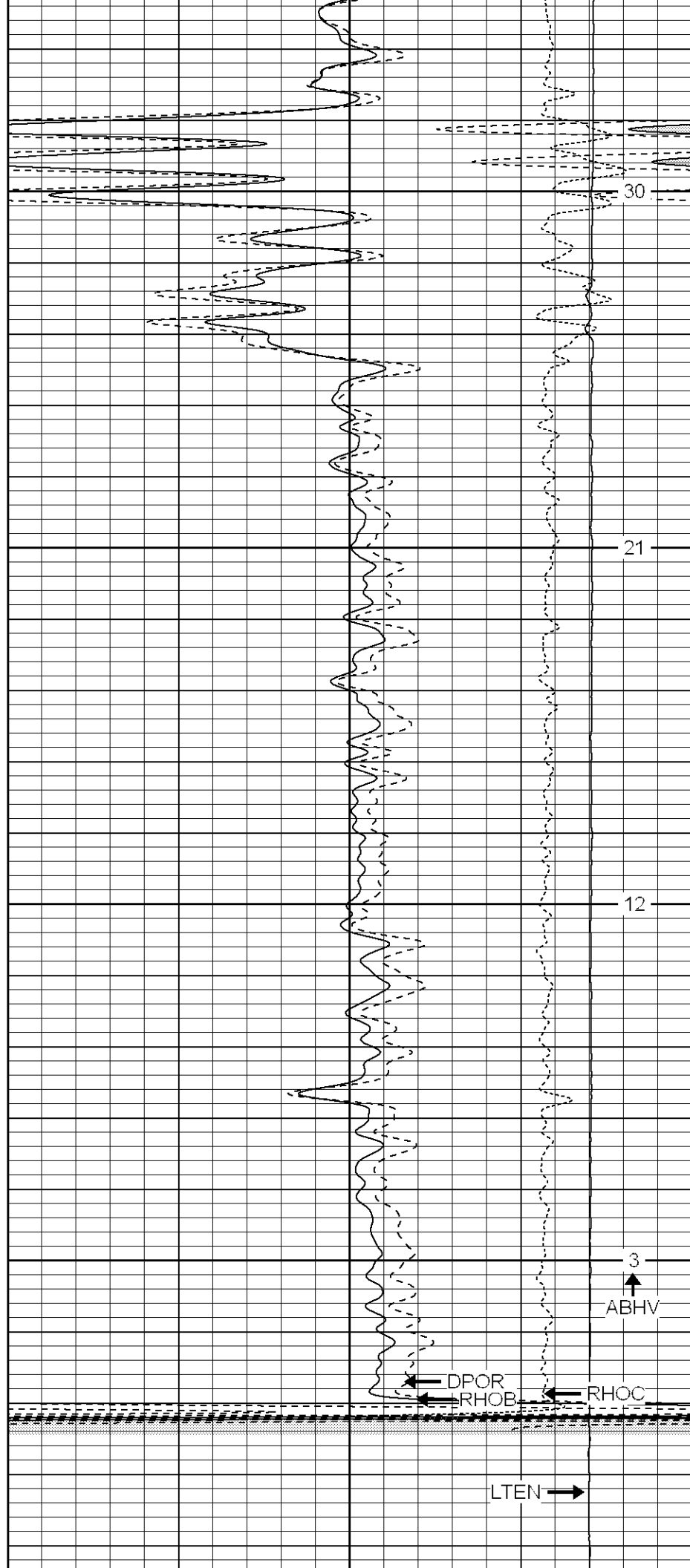


1950

2000

2050

2100



| | | |
|---|-----------|-----|
| 0 | GR (GAPI) | 200 |
| 6 | DCAL (in) | 16 |
| 0 | MINMK | 80 |

| | | |
|------|-------------|-----|
| 2 | RHOB (g/cc) | 3 |
| 1 | RHOB (g/cc) | 2 |
| 30 | DPOR (pu) | -10 |
| -0.5 | RHOC (g/cc) | 0.5 |
| 4000 | LTEN (lb) | 0 |

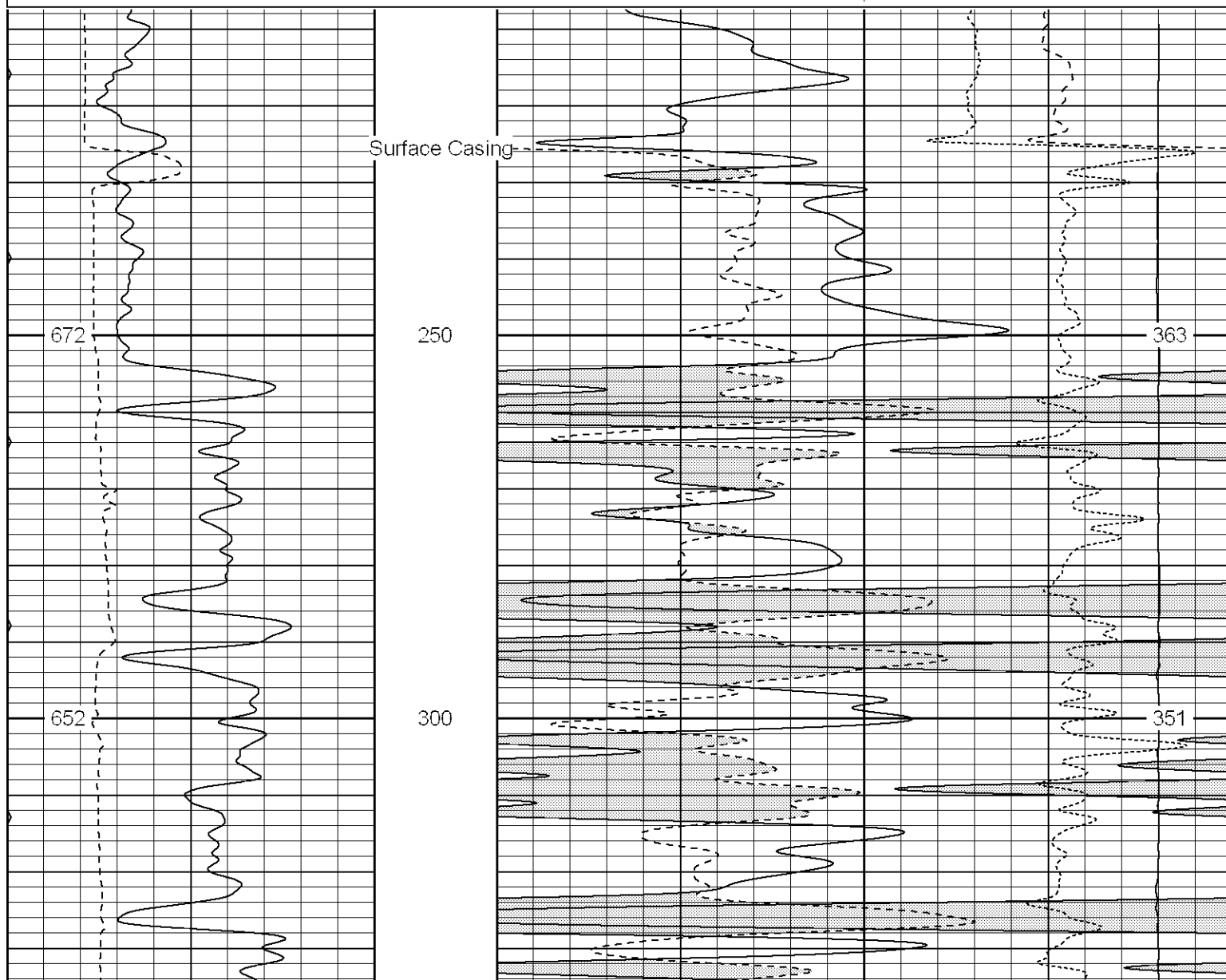
Patterson

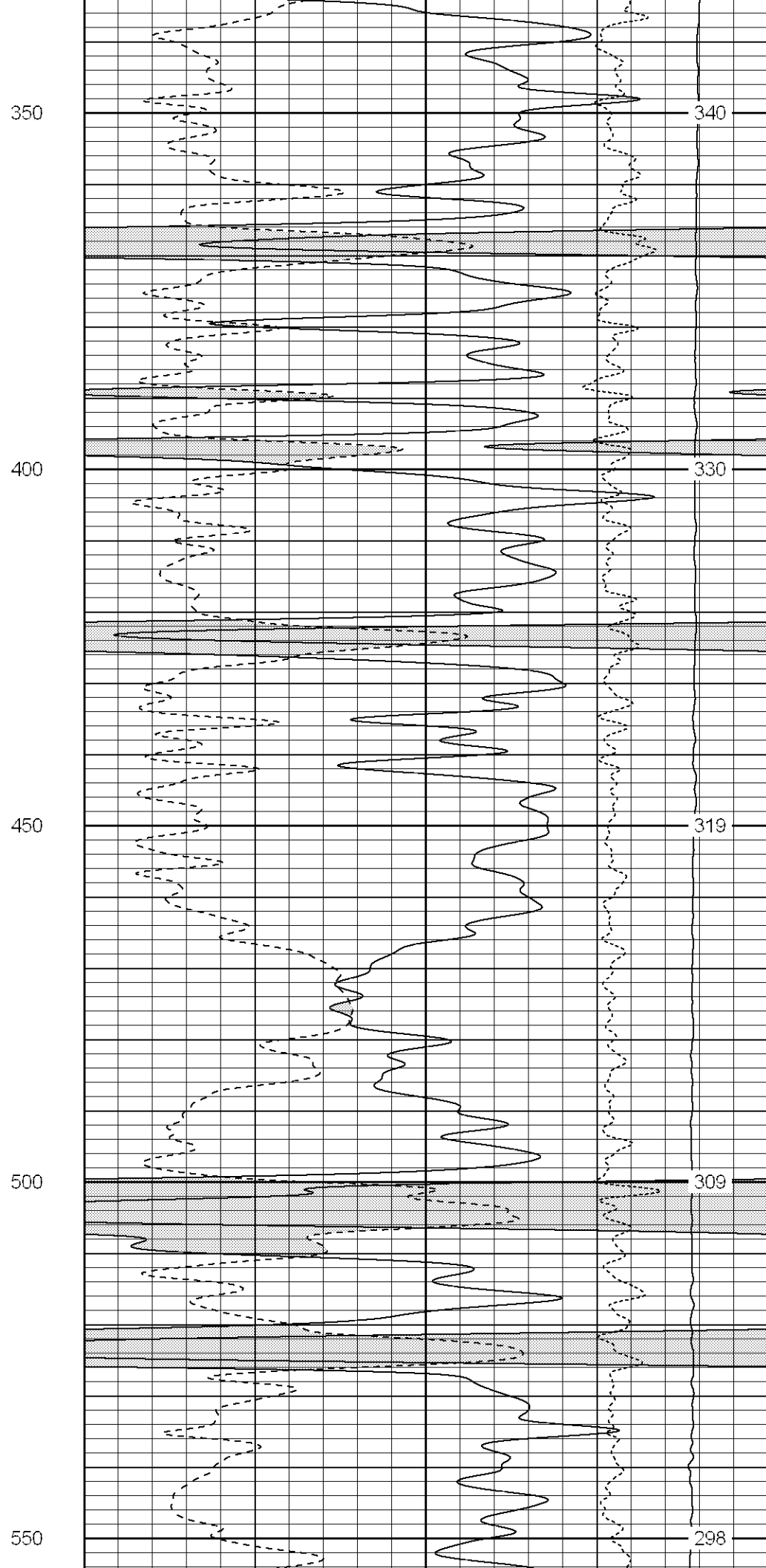
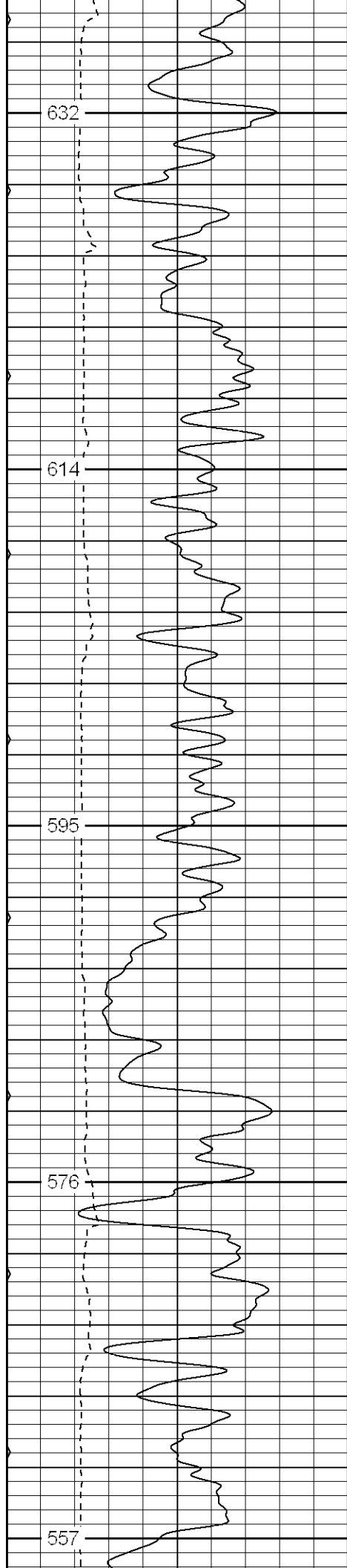
Main Pass

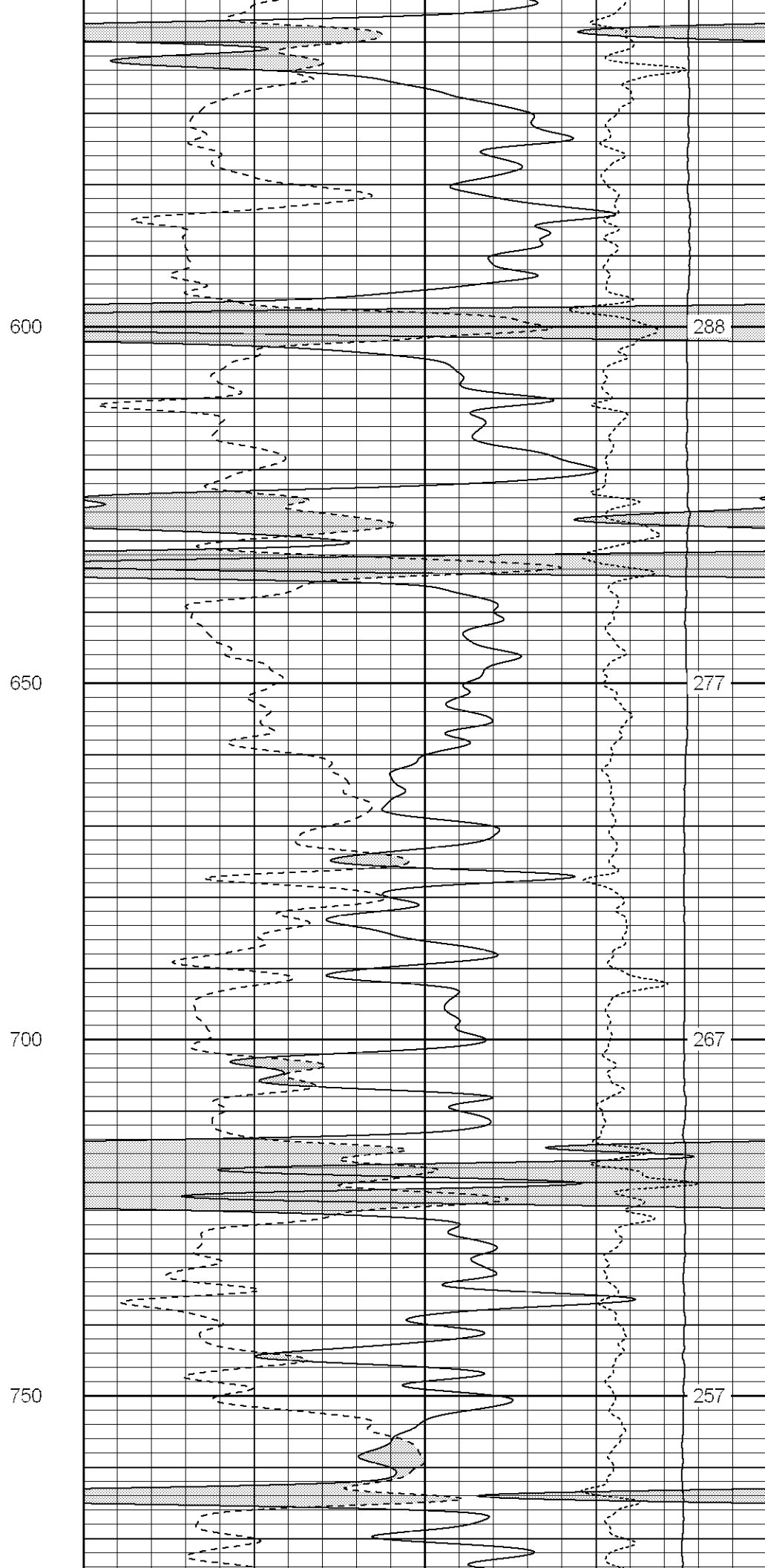
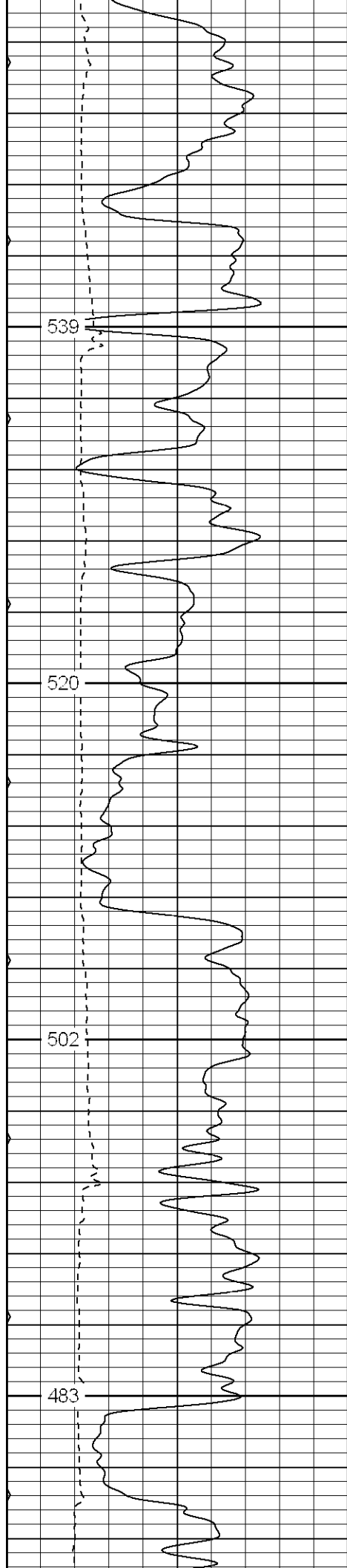
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 Dataset Pathname: pass3.1
 Presentation Format: cdnl
 Dataset Creation: Fri Feb 24 03:21:41 2006 by Calc Warrior 7.0 STD Ope
 Charted by: Depth in Feet scaled 1:240

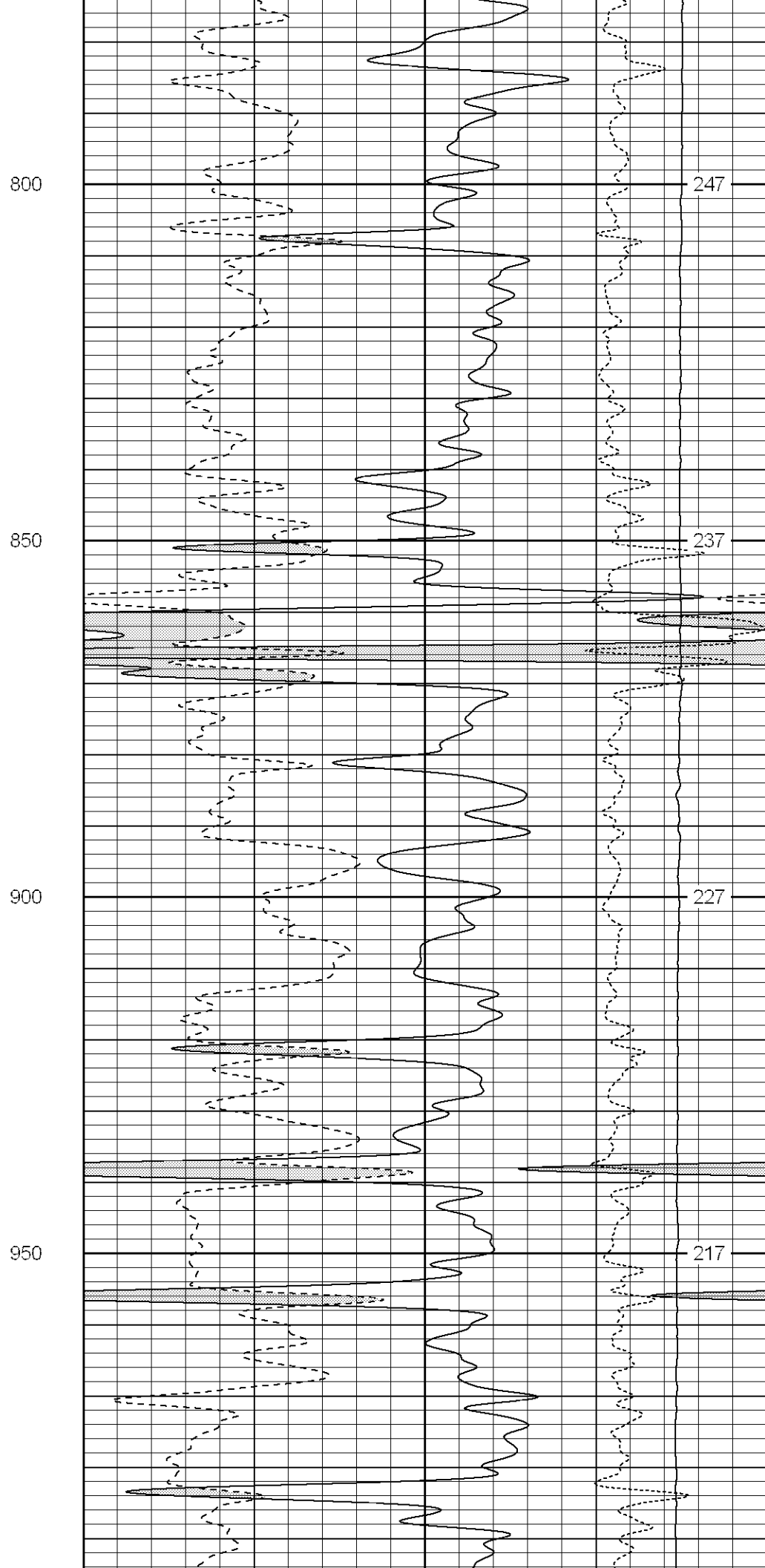
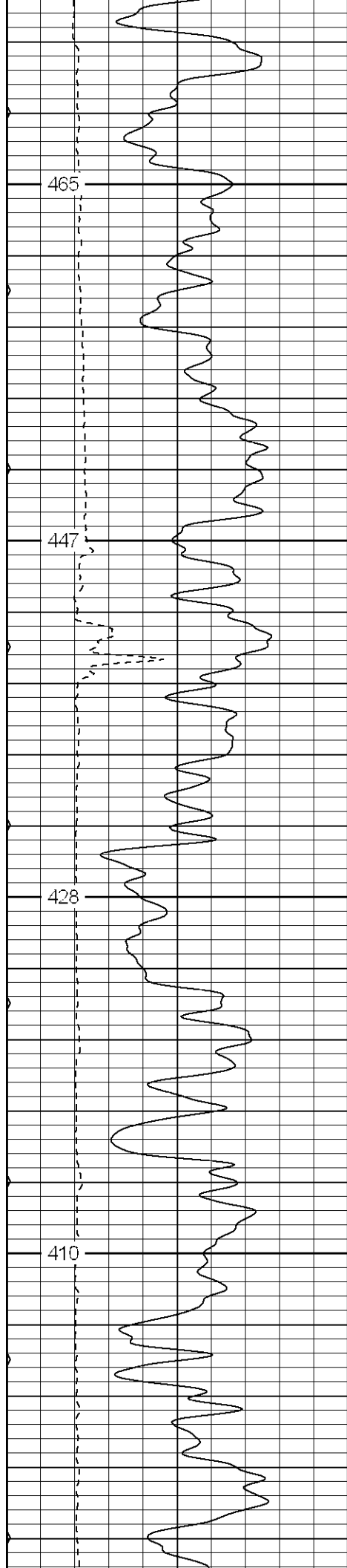
| | | |
|---|-----------|-----|
| 0 | GR (GAPI) | 200 |
| 6 | DCAL (in) | 16 |
| 0 | MINMK | 80 |

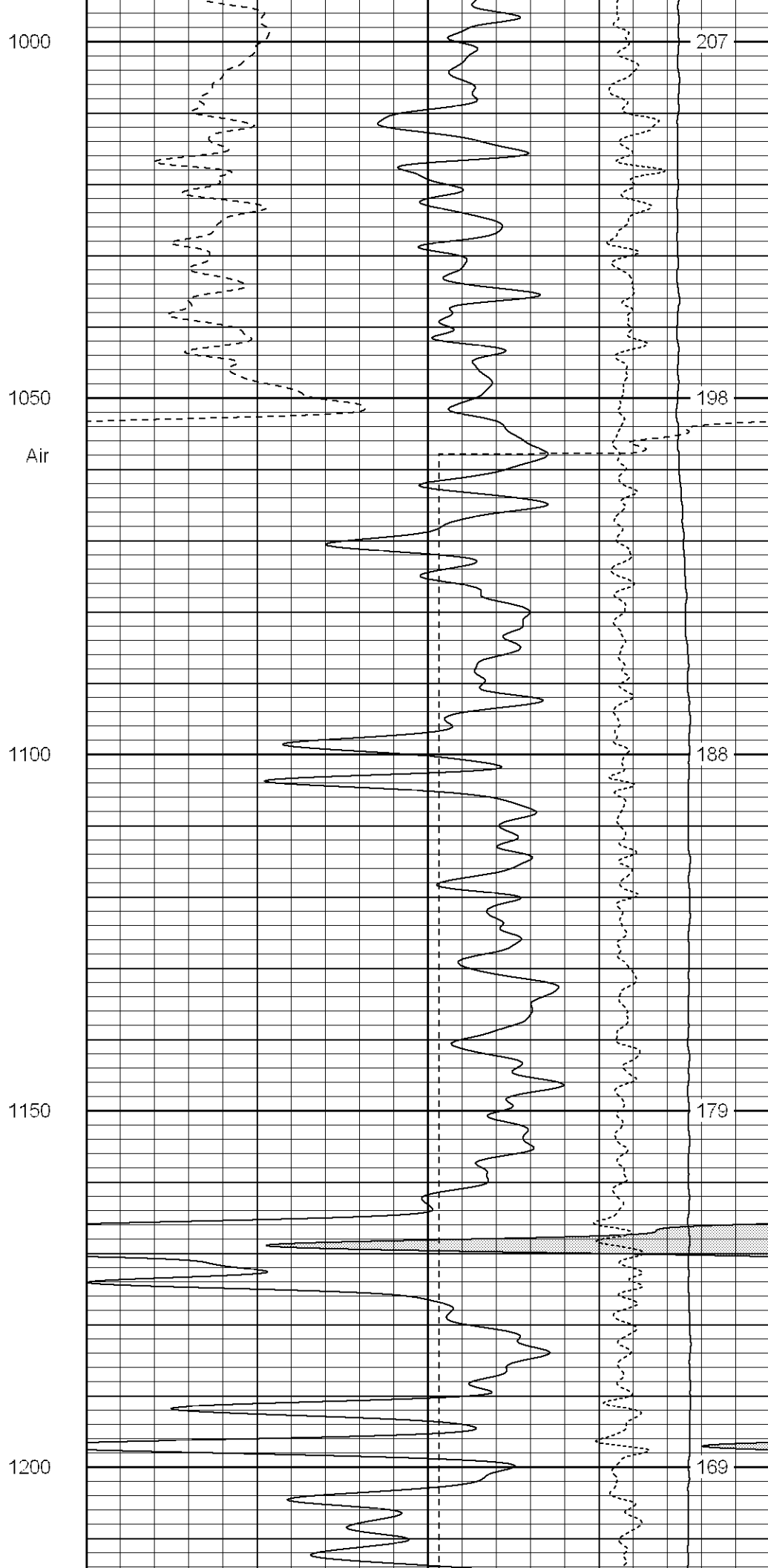
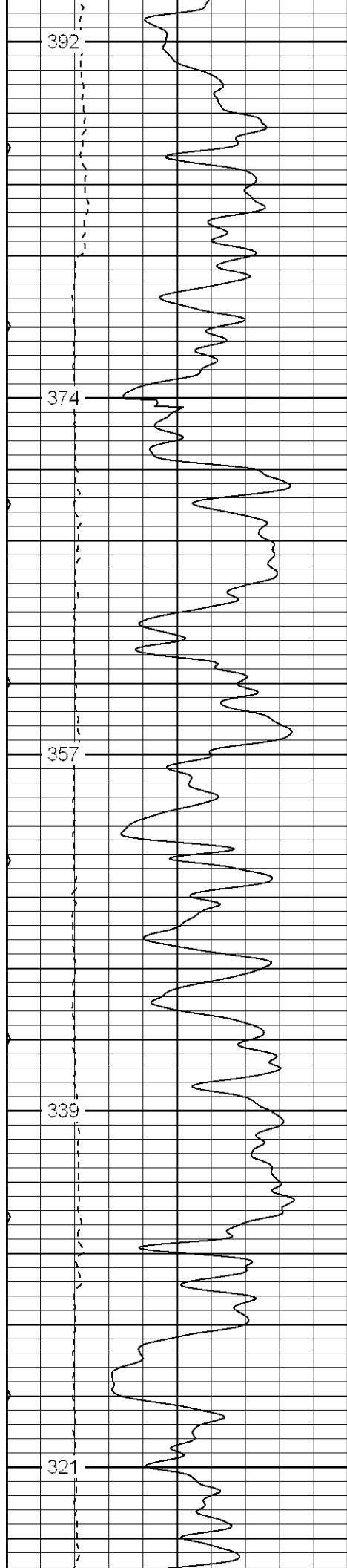
| | | |
|------|-------------|-----|
| 30 | NPOR (pu) | -10 |
| 30 | DPOR (pu) | -10 |
| -0.5 | RHOC (g/cc) | 0.5 |
| 4000 | LTEN (lb) | 0 |

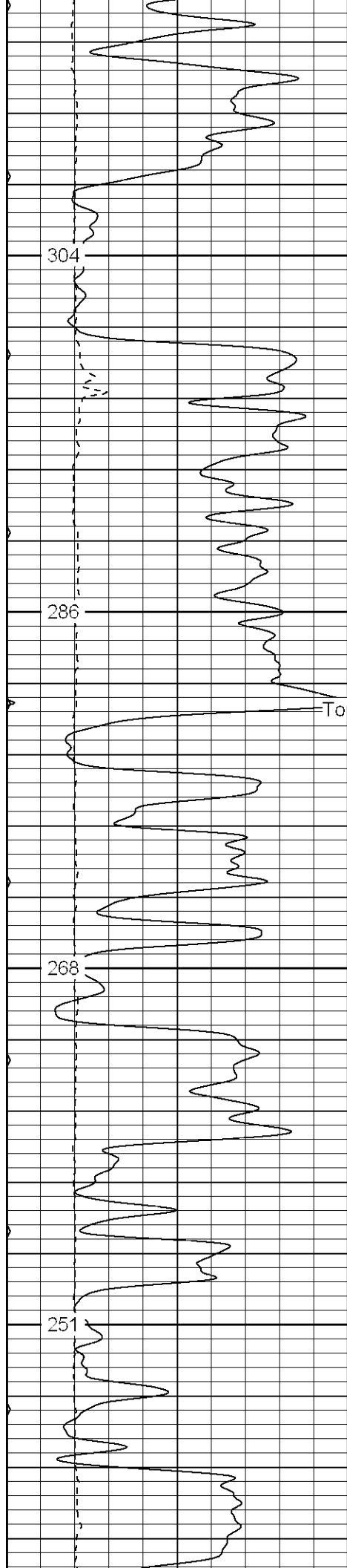












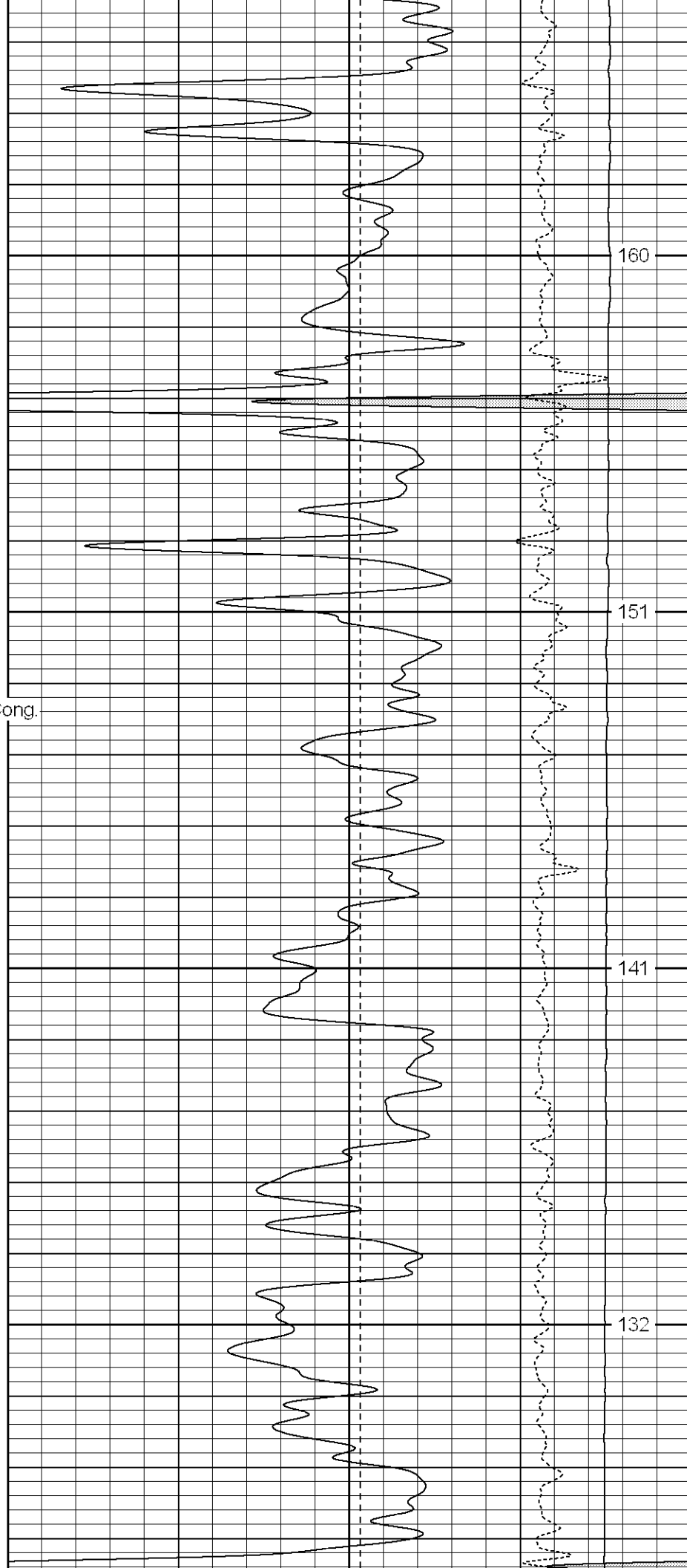
1250

1300

1350

1400

Top of Raton Cong.

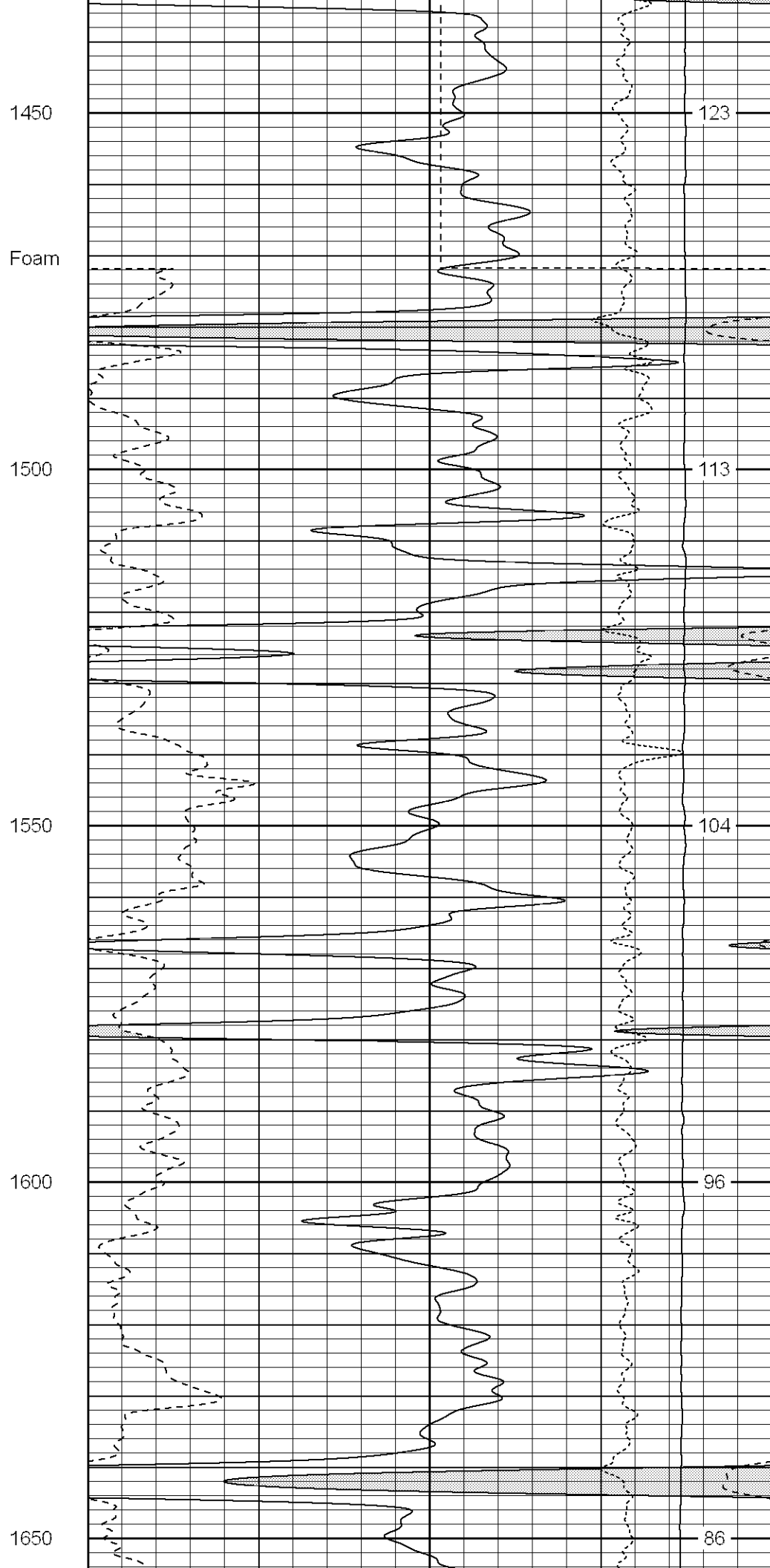
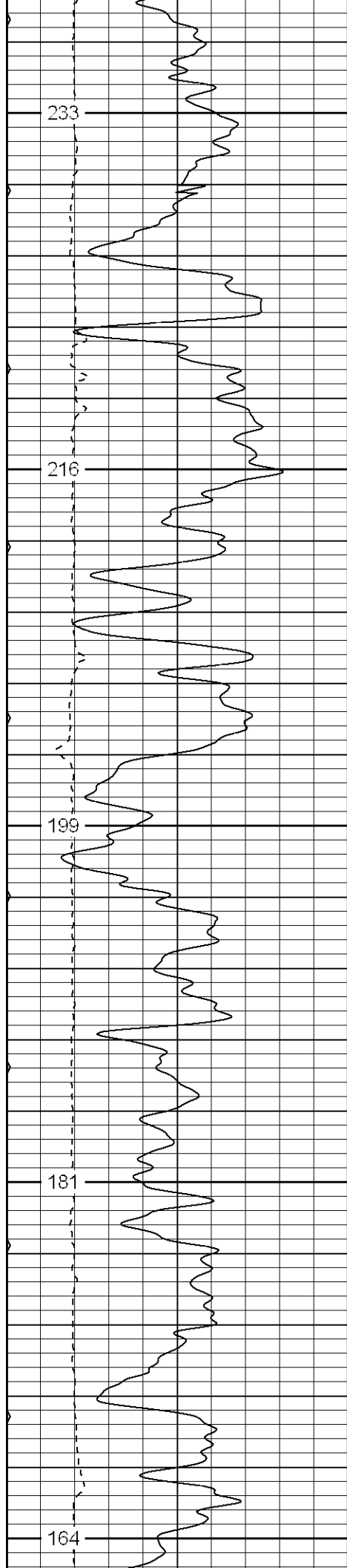


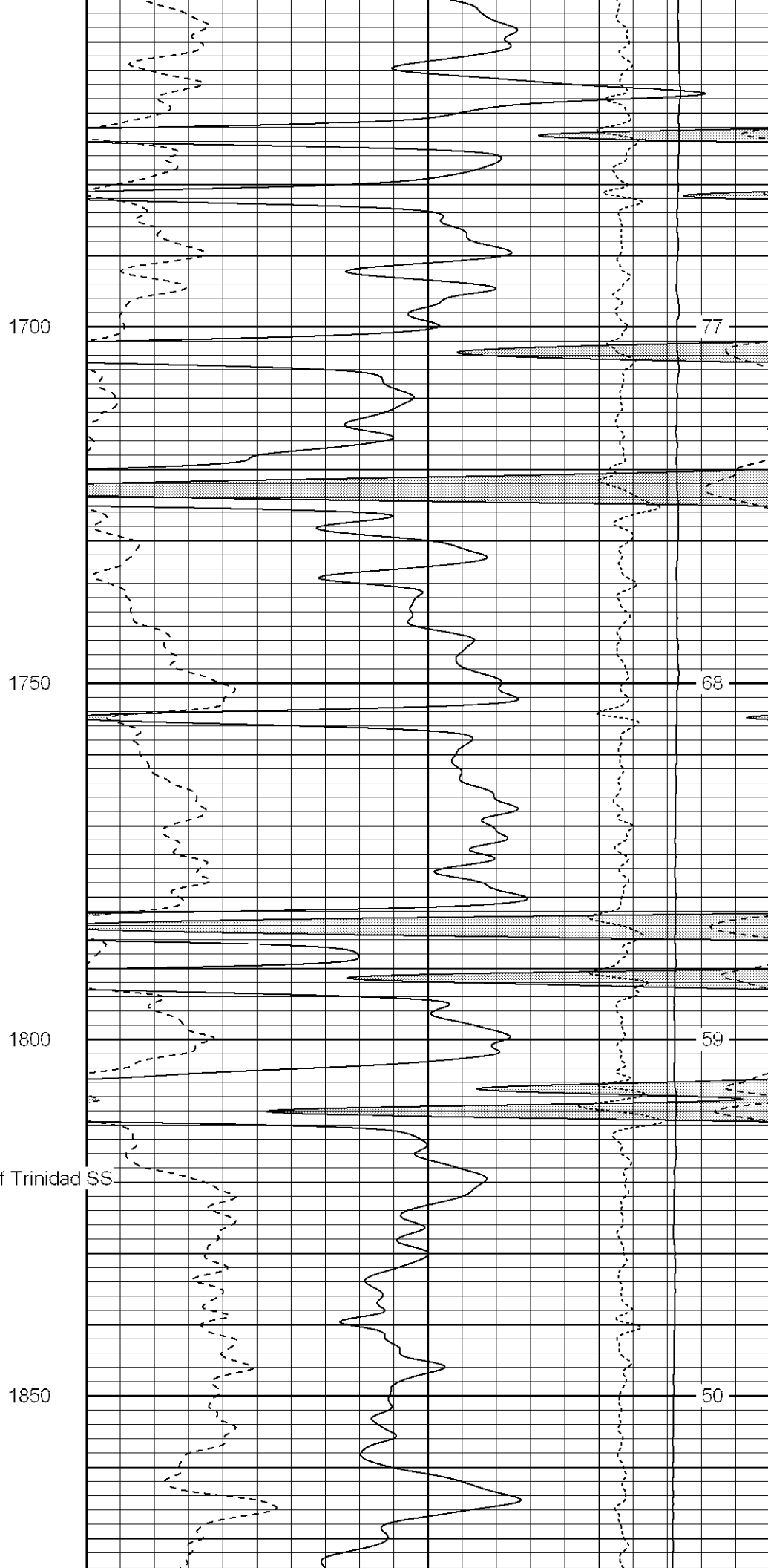
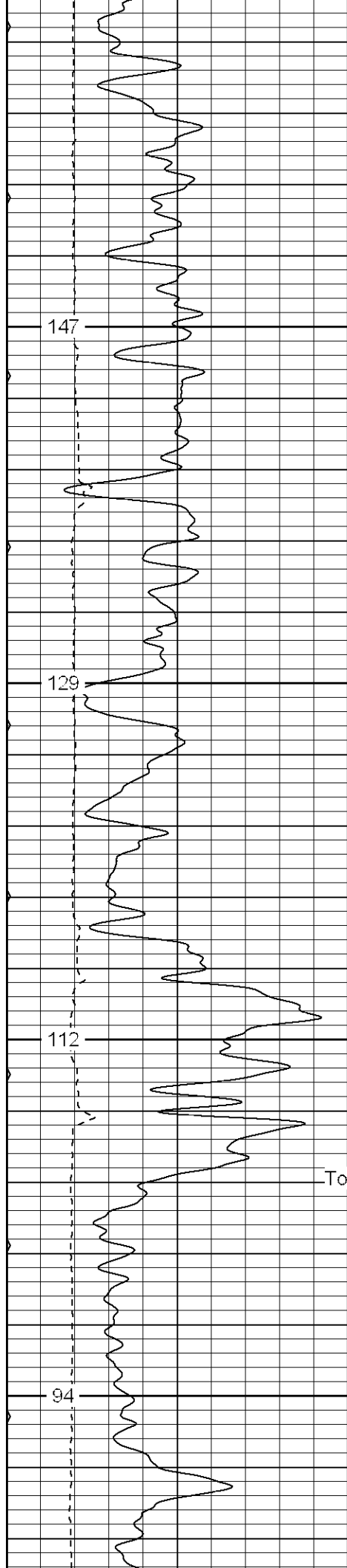
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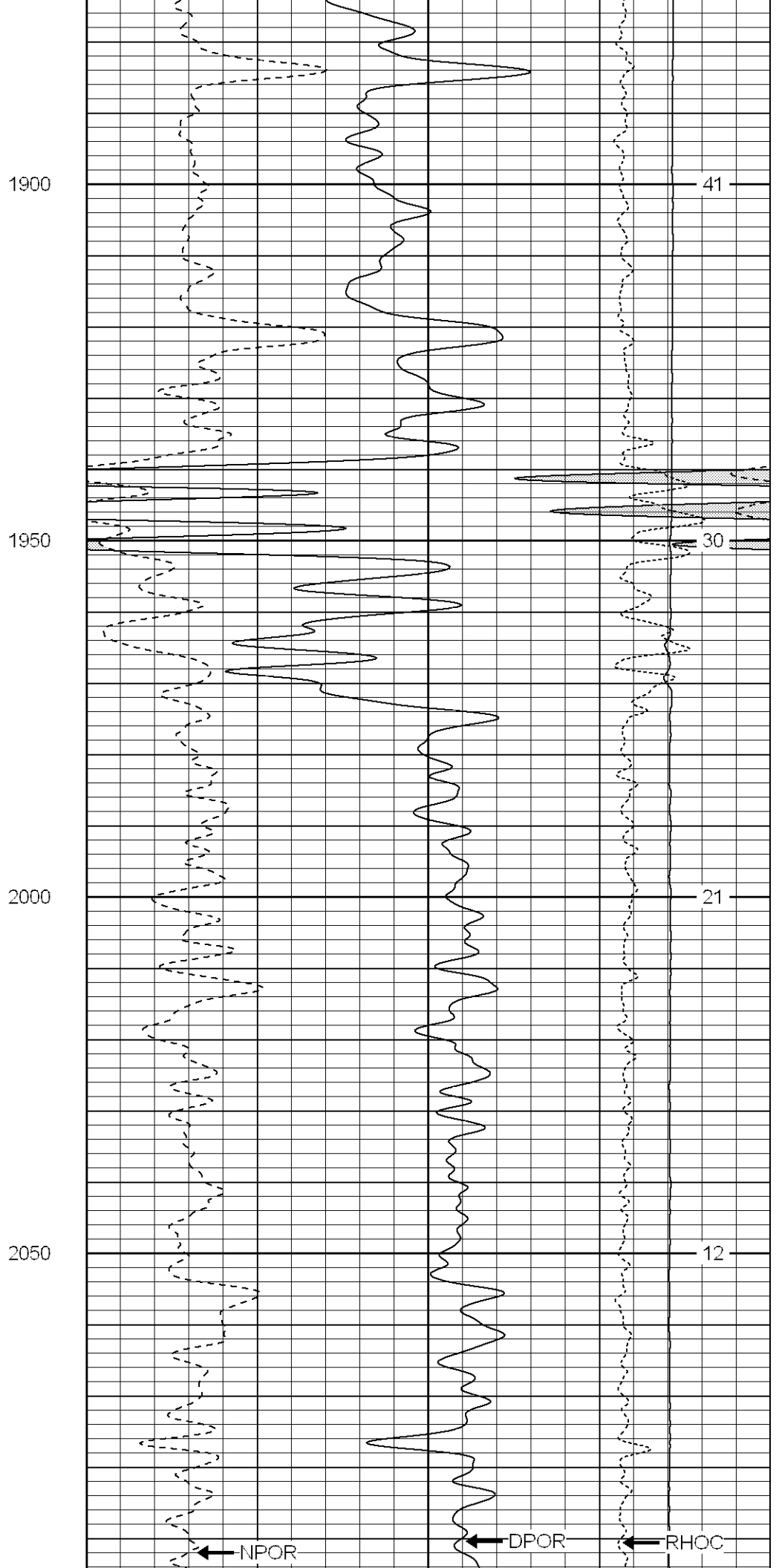
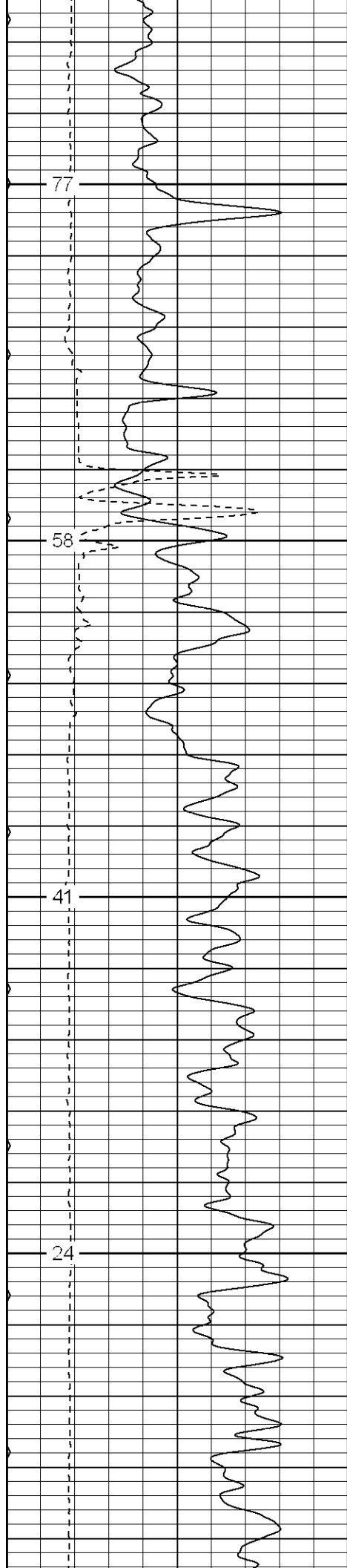
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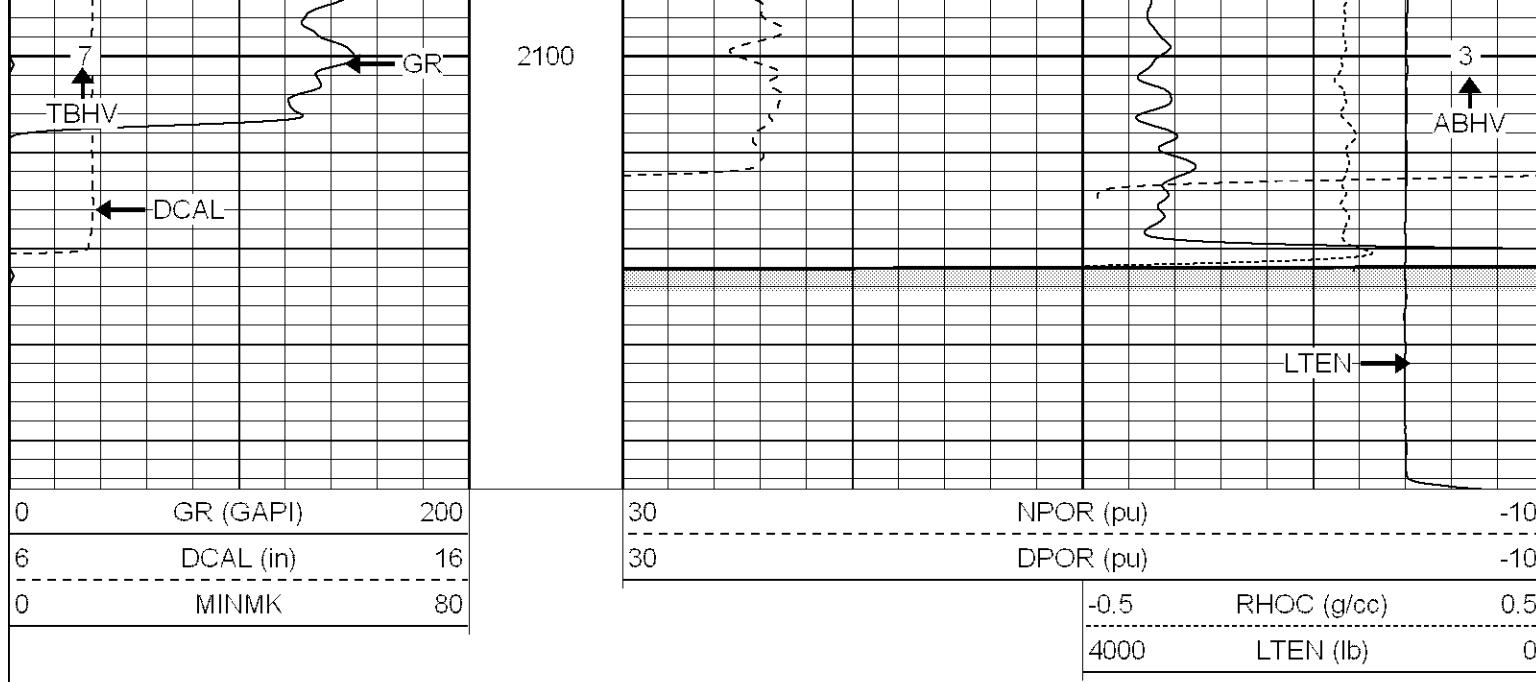
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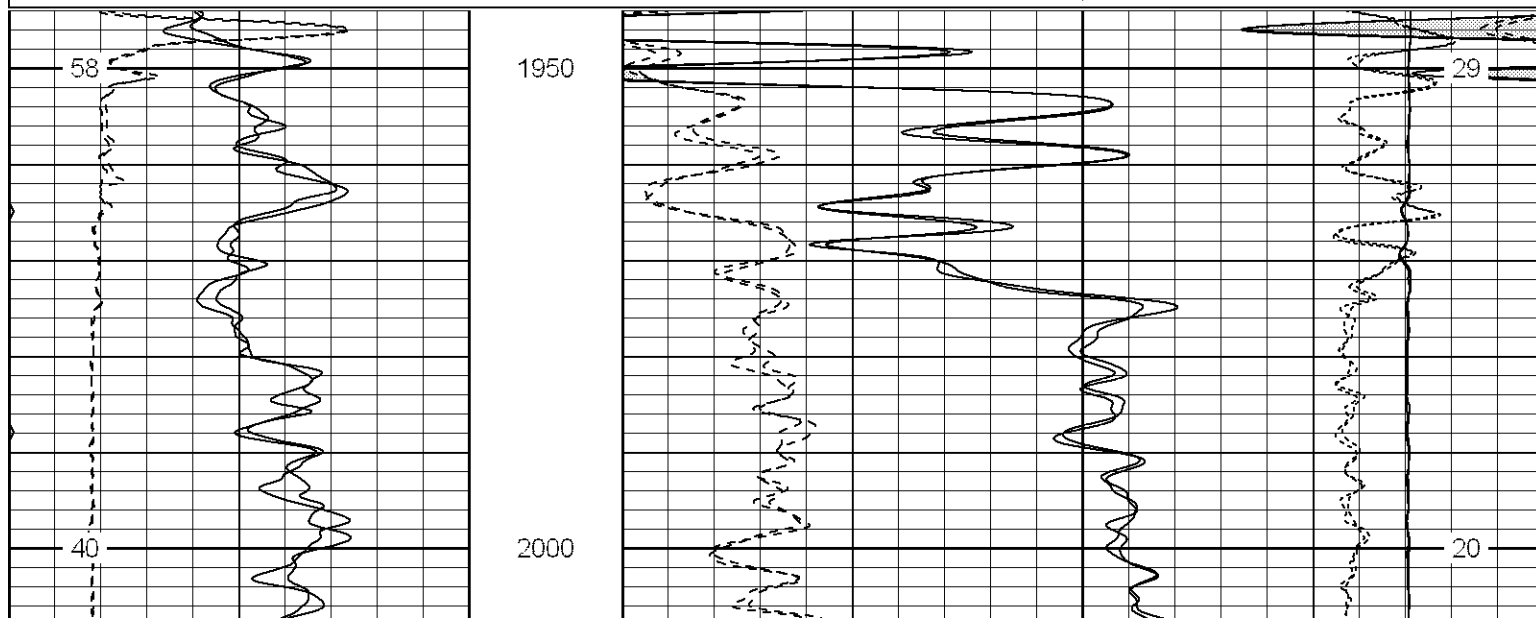


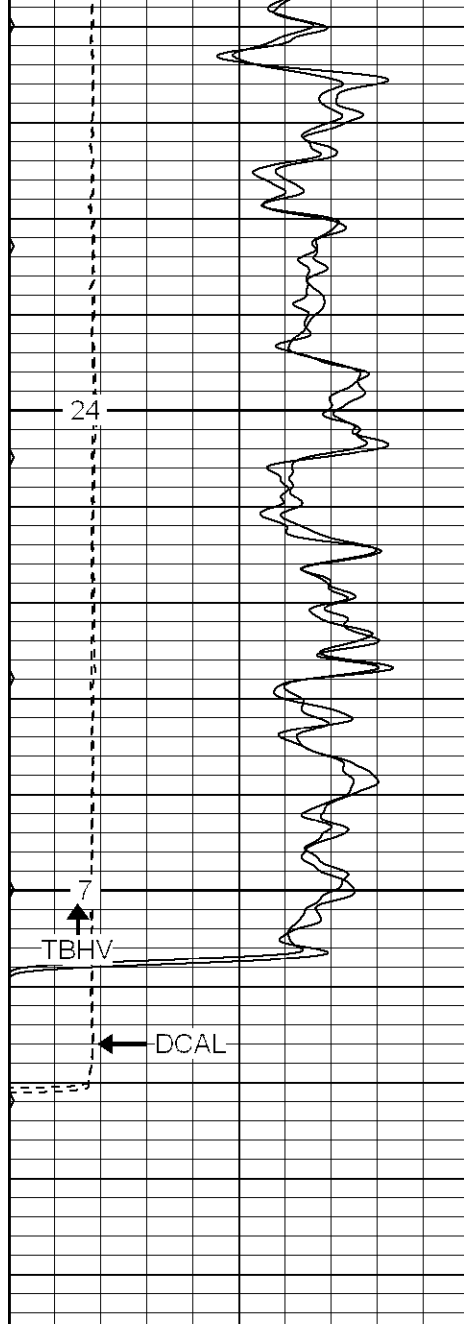
Patterson

Repeat Pass

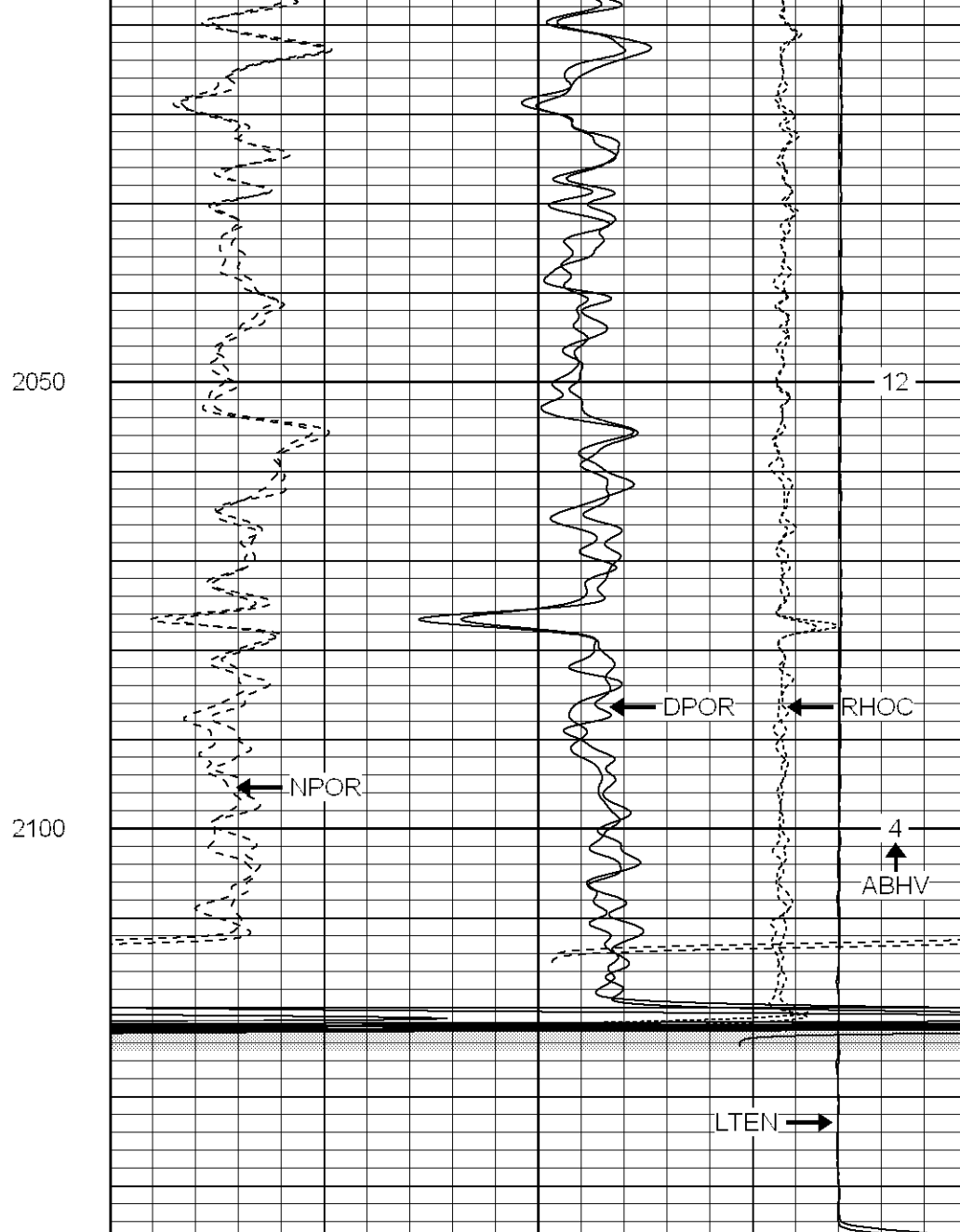
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 Charted by: Depth in Feet scaled 1:240

| | | | | | | | |
|---|------------------|-----|--|----|------------------|--------------------|-----|
| 0 | GR (GAPI) | 200 | | 30 | NPOR (pu) | -10 | |
| 6 | DCAL (in) | 16 | | 30 | DPOR (pu) | -10 | |
| 0 | MINMK | 80 | | 30 | NPOR-repeat (pu) | -10 | |
| 0 | GR-repeat (GAPI) | 200 | | 30 | DPOR-repeat (pu) | -10 | |
| 6 | DCAL-repeat (in) | 16 | | | -0.5 | RHOC (g/cc) | 0.5 |
| | | | | | 4000 | LTEN (lb) | 0 |
| | | | | | -0.5 | RHOC-repeat (g/cc) | 0.5 |
| | | | | | 4000 | LTEN-repeat (lb) | 0 |
| | | | | | | | |
| | | | | | | | |





| | | |
|---|------------------|-----|
| 0 | GR (GAPI) | 200 |
| 6 | DCAL (in) | 16 |
| 0 | MINMK | 80 |
| 0 | GR-repeat (GAPI) | 200 |
| 6 | DCAL-repeat (in) | 16 |



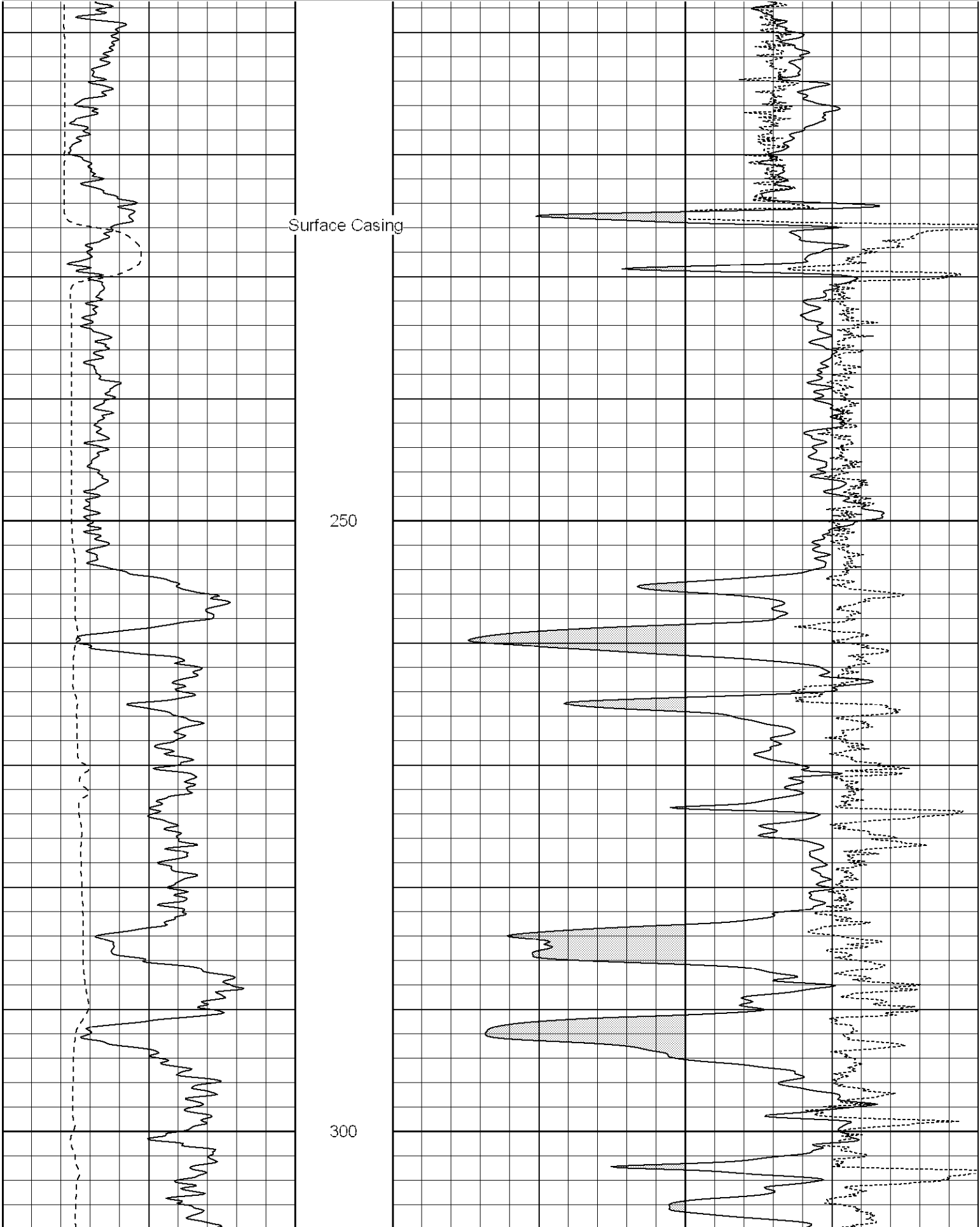
| | | |
|------|--------------------|-----|
| 30 | NPOR (pu) | -10 |
| 30 | DPOR (pu) | -10 |
| 30 | NPOR-repeat (pu) | -10 |
| 30 | DPOR-repeat (pu) | -10 |
| -0.5 | RHOC (g/cc) | 0.5 |
| 4000 | LTEN (lb) | 0 |
| -0.5 | RHOC-repeat (g/cc) | 0.5 |
| 4000 | LTEN-repeat (lb) | 0 |

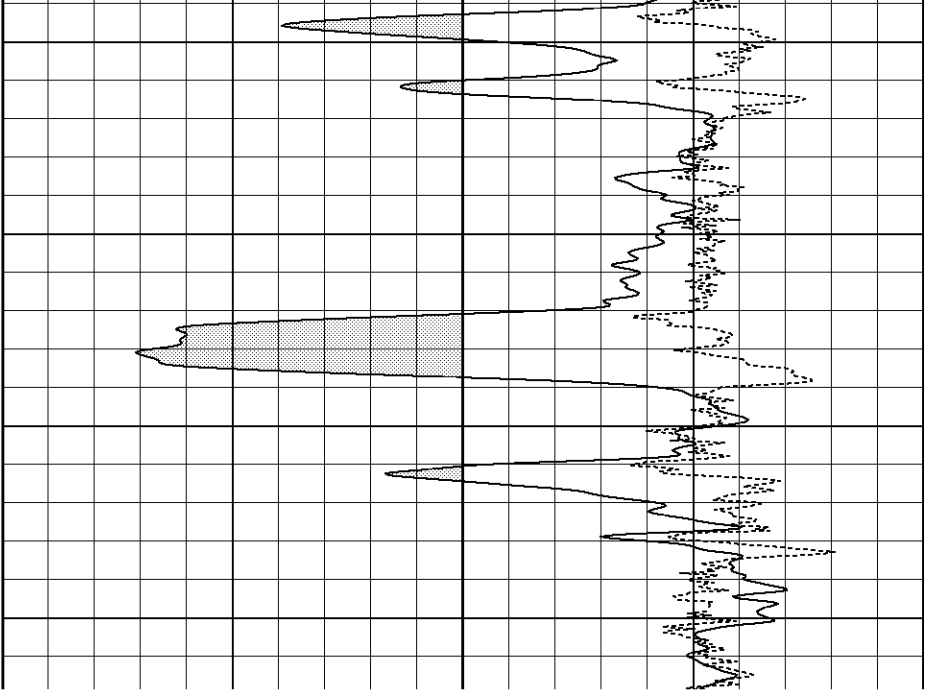
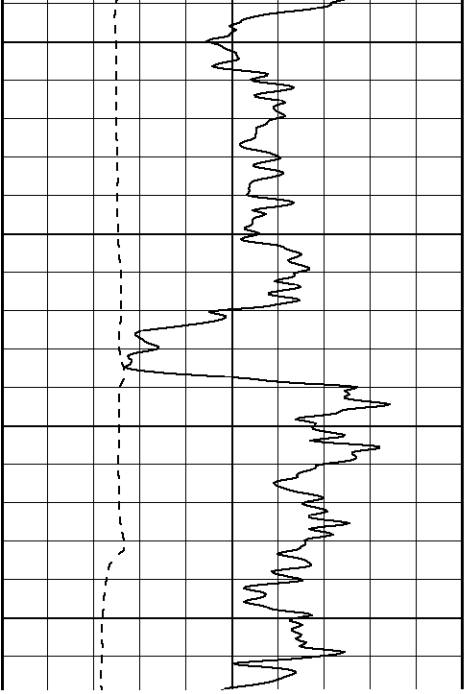
Patterson

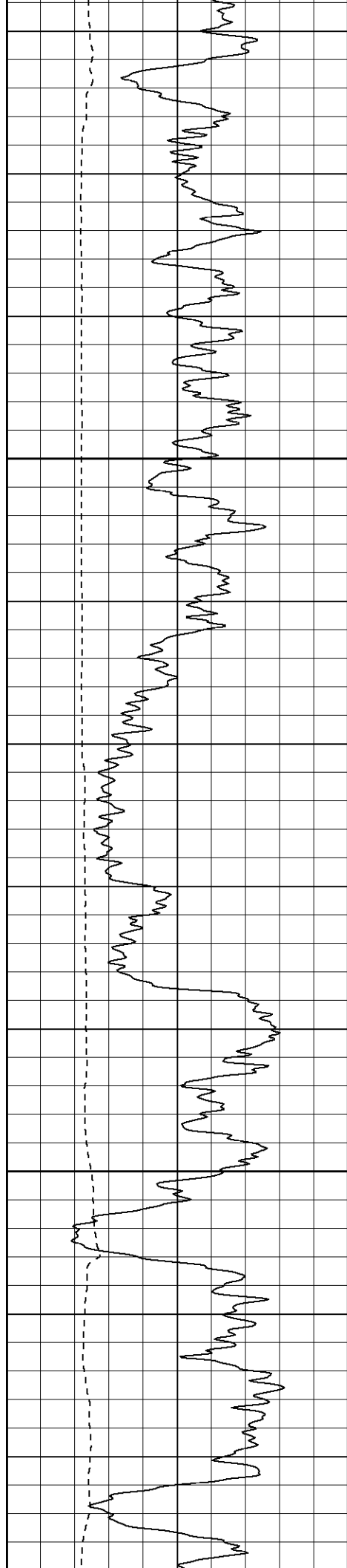
High Resolution Pass

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 Charted by: Depth in Feet scaled 1:120

| | | | | | |
|-----------|--|-----|-------------|--|-----|
| GR (GAPI) | | | RHOB (g/cc) | | |
| 0 | | 200 | 1 | | 3 |
| DCAL (in) | | | RHOC (g/cc) | | |
| 6 | | 16 | -0.5 | | 0.5 |
| | | | | | |

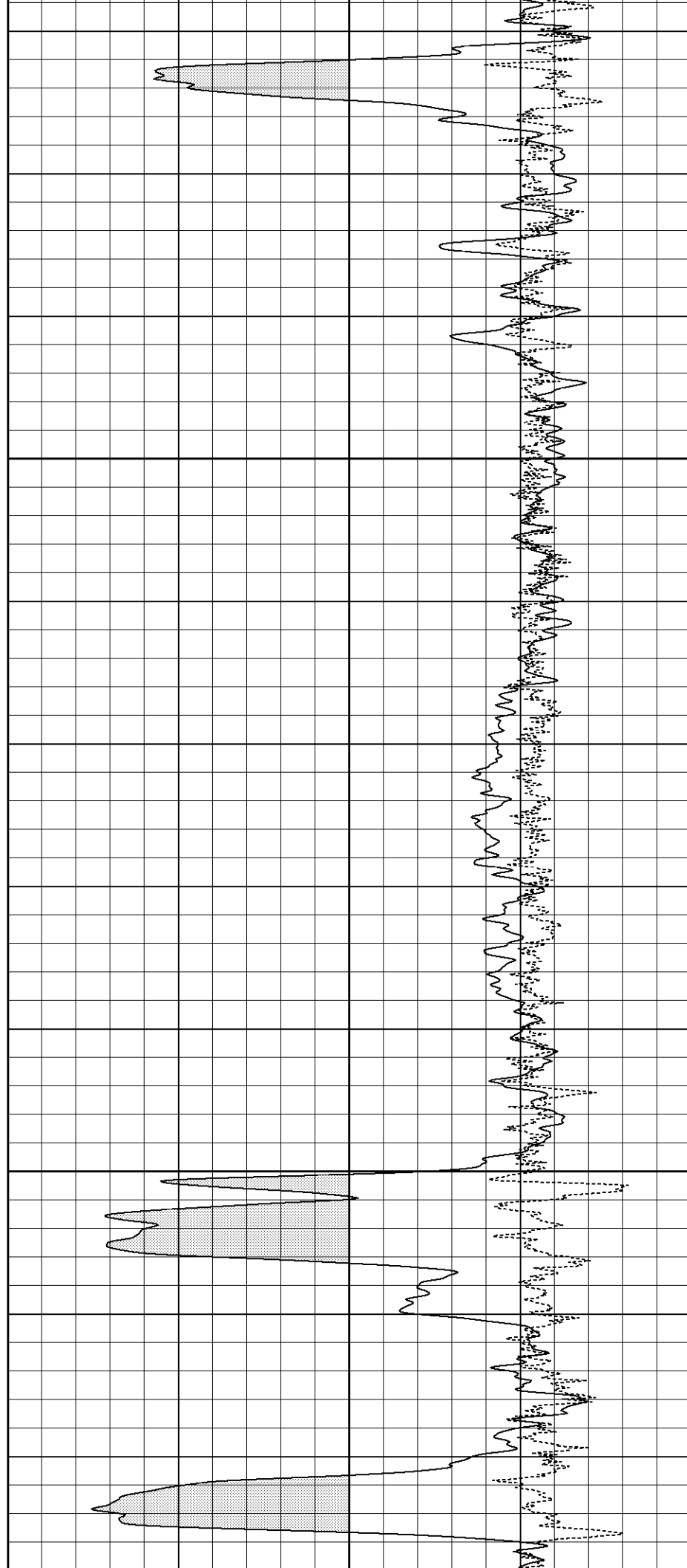


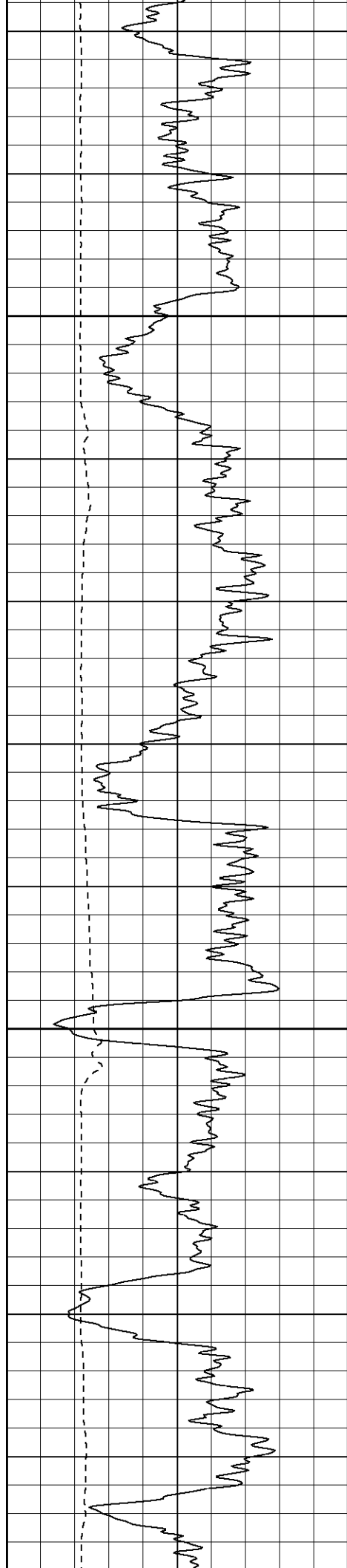




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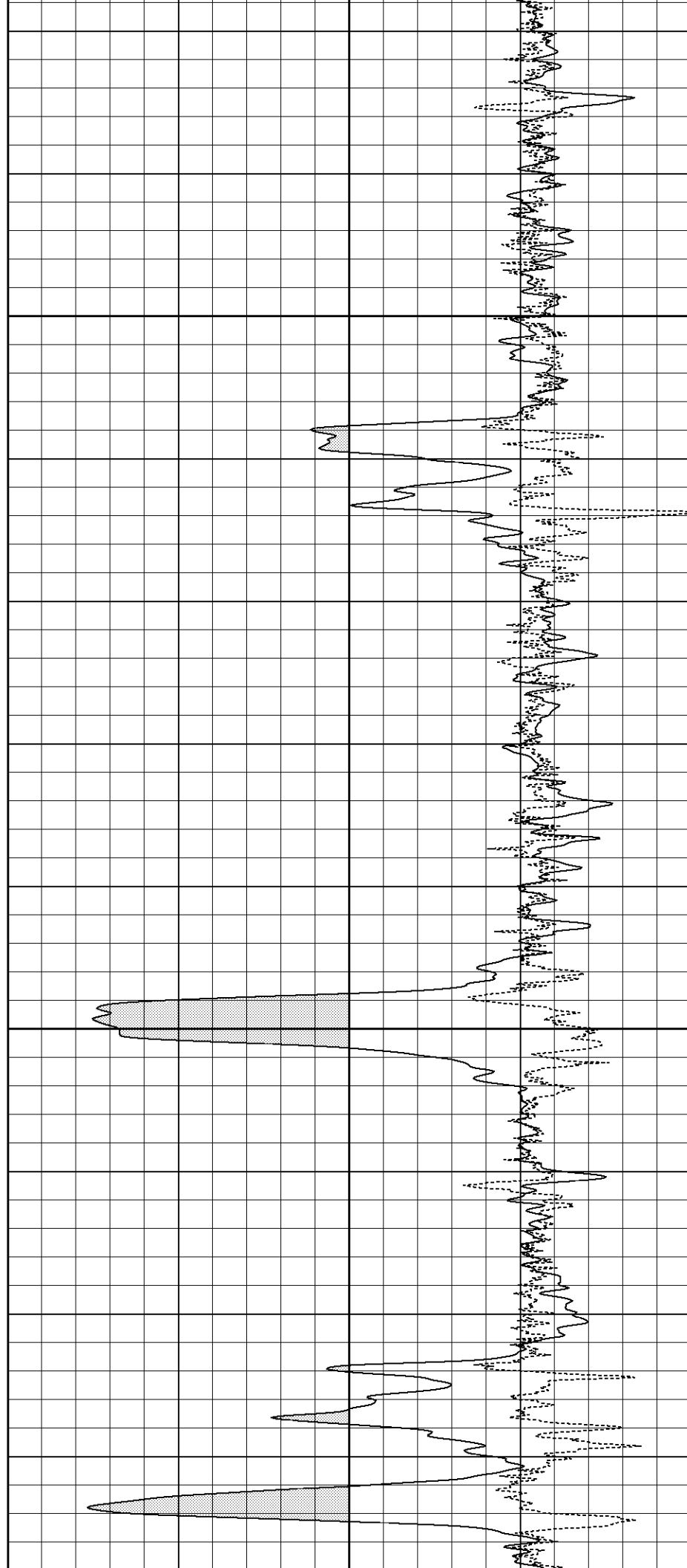
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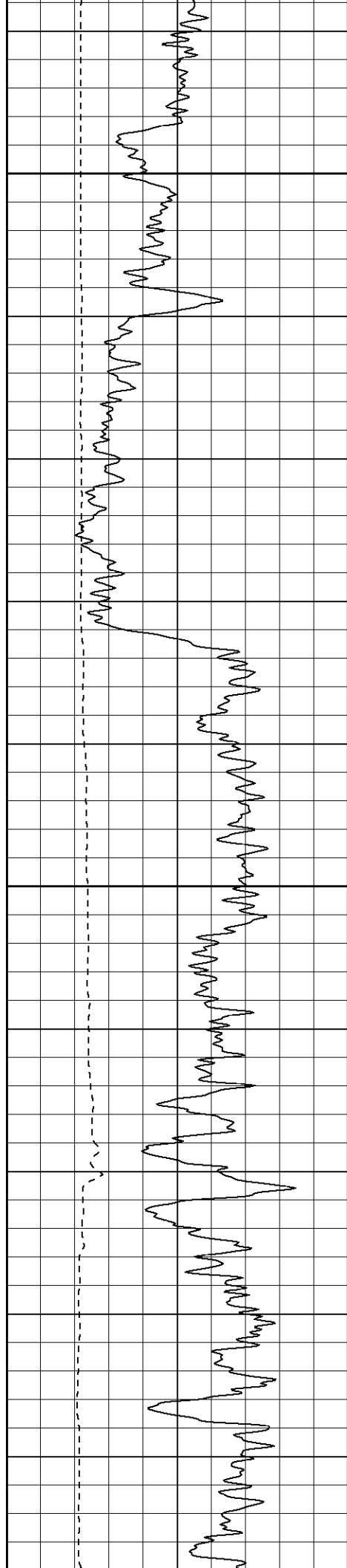




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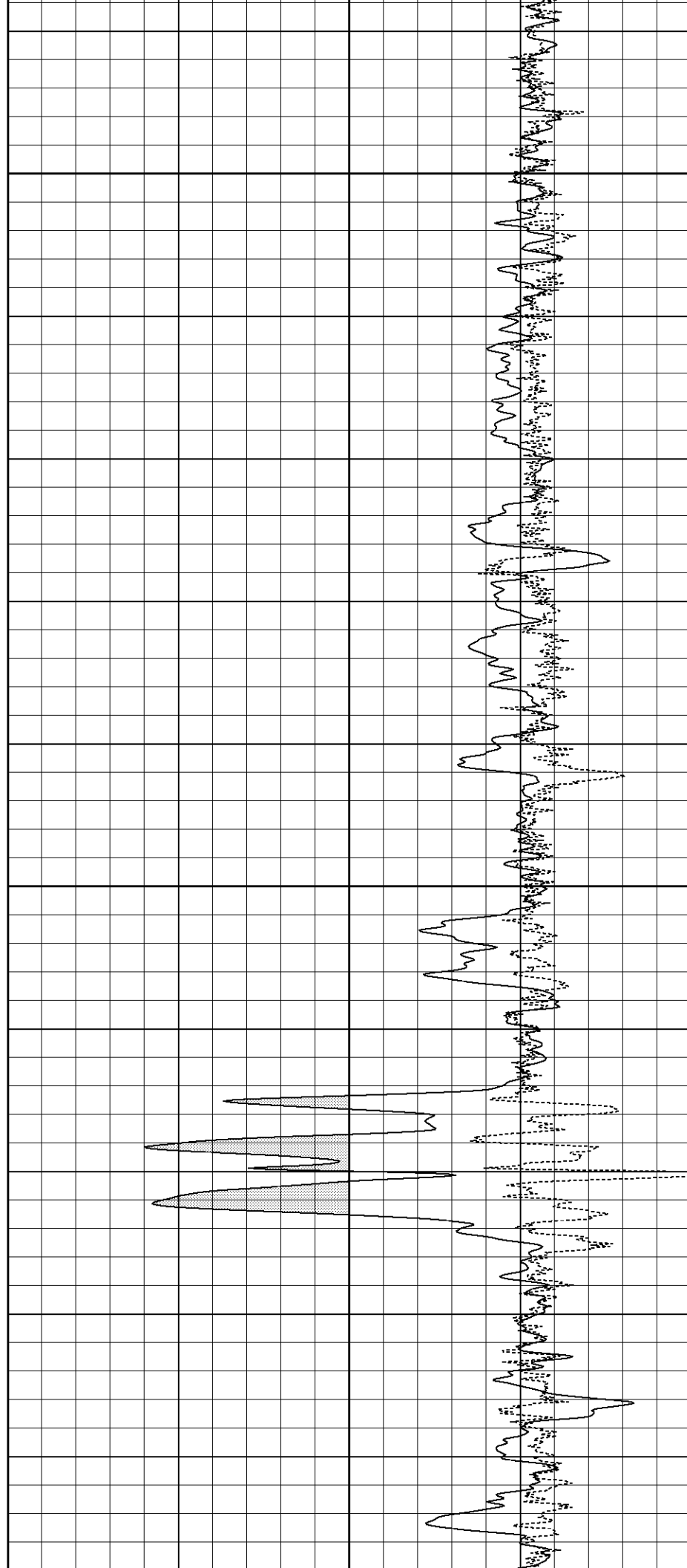
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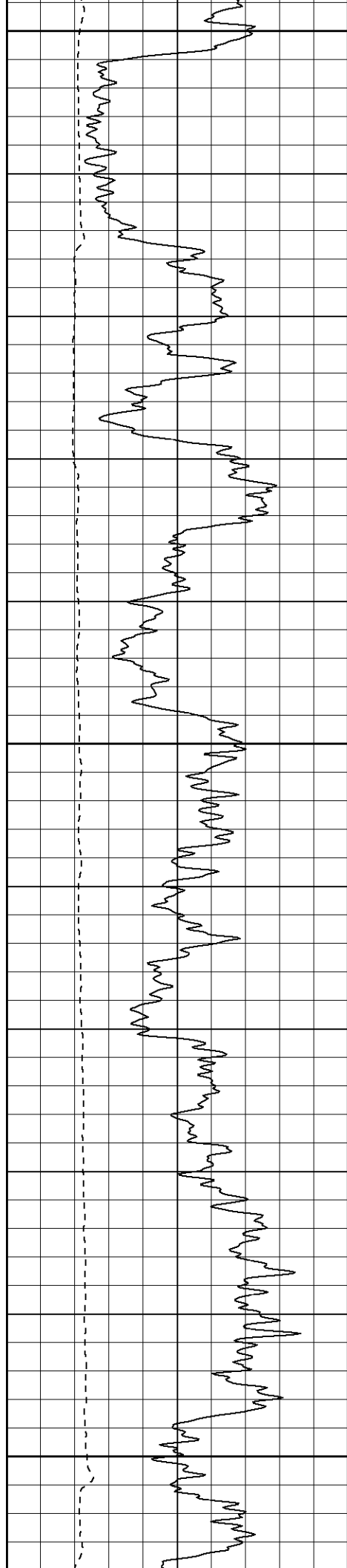




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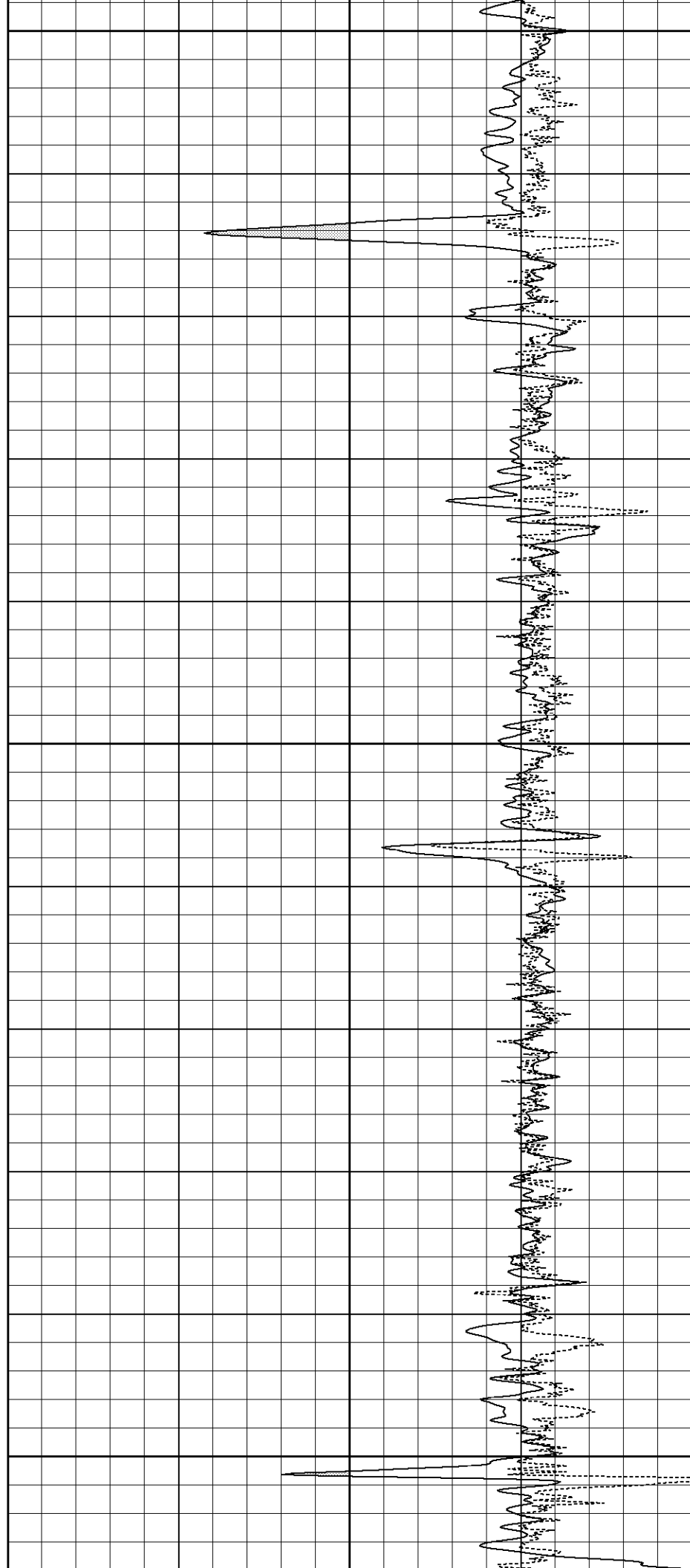


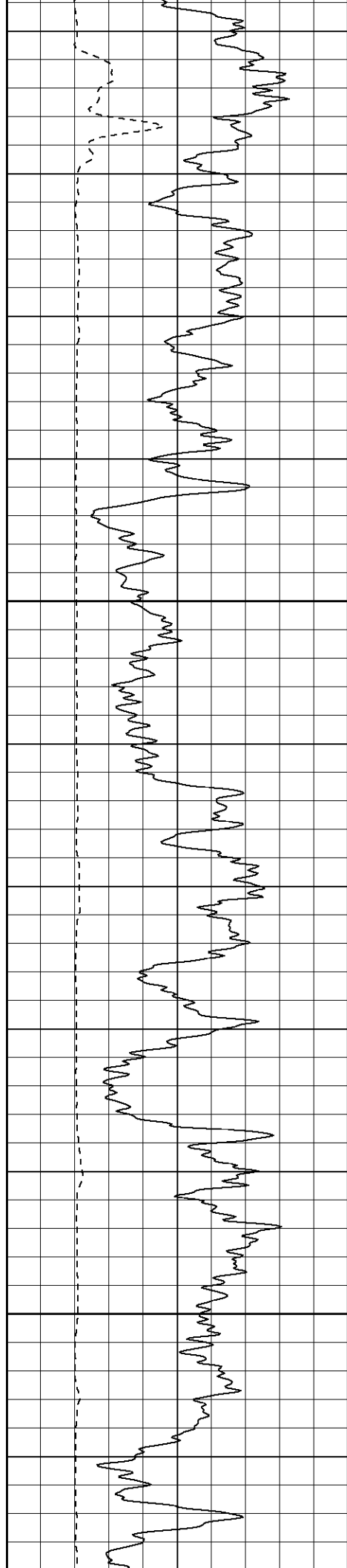


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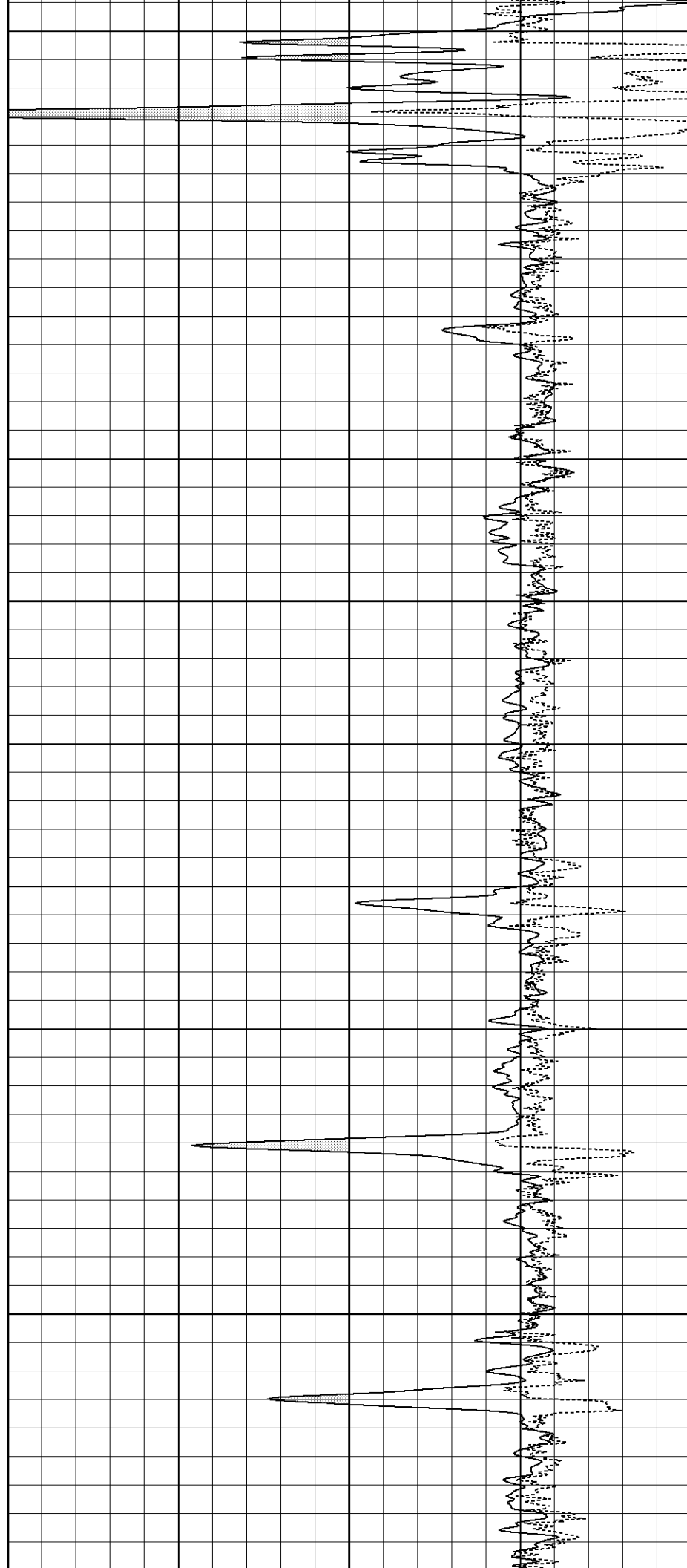
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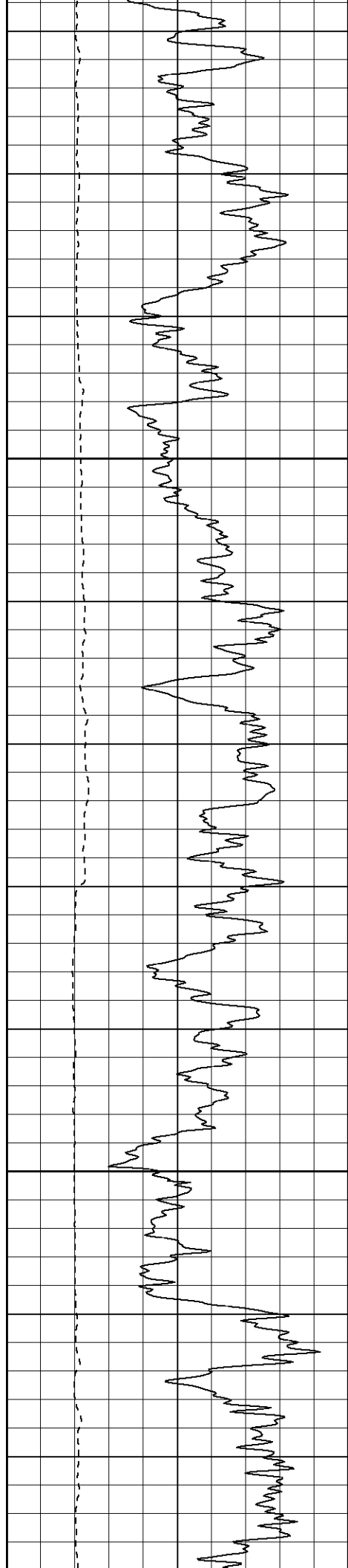




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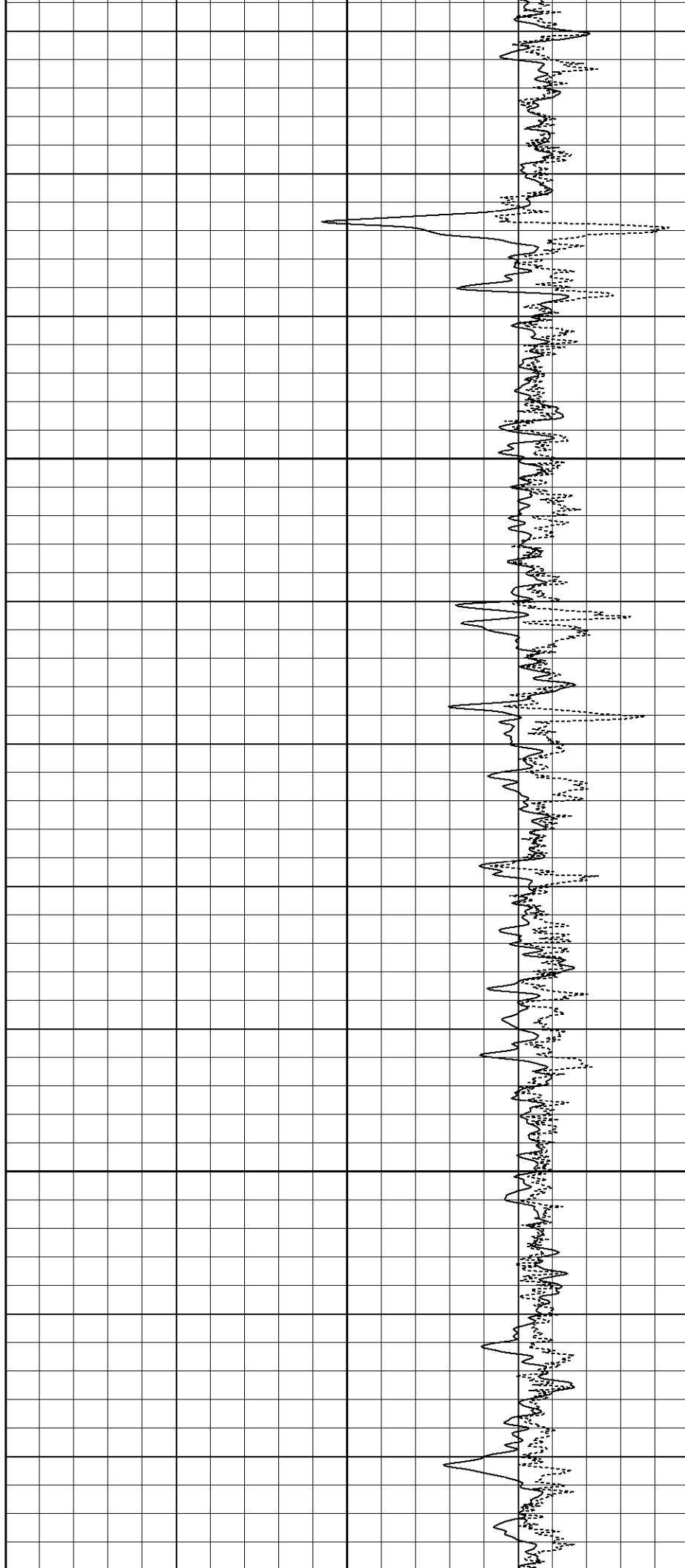
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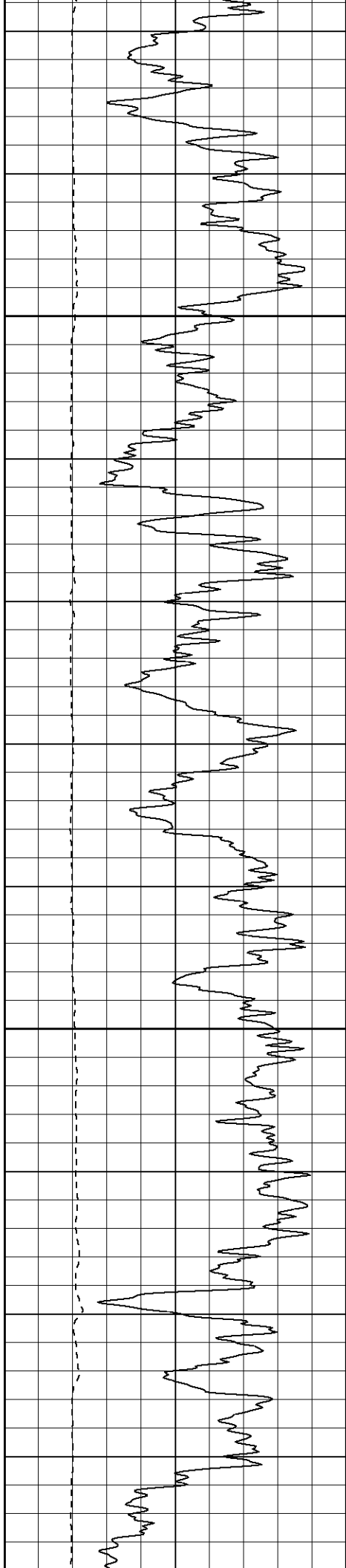




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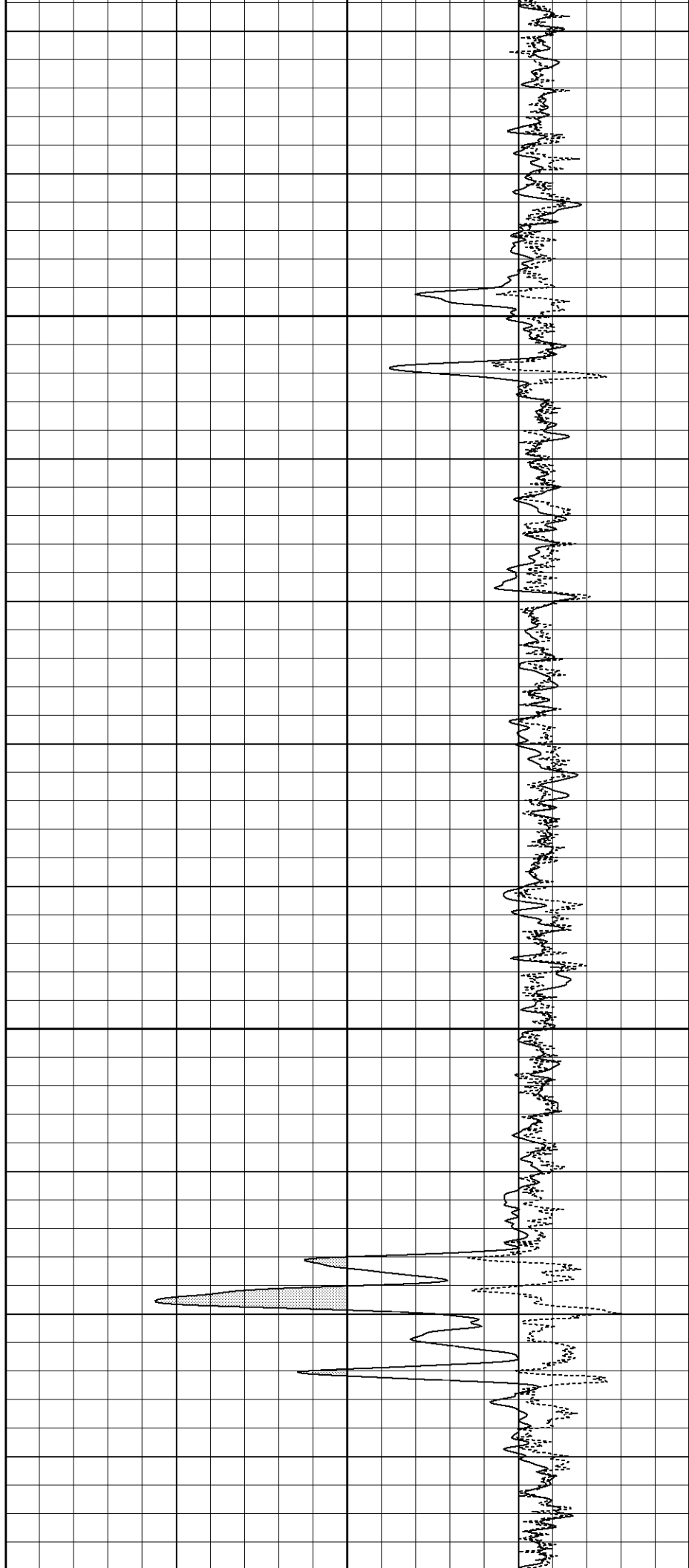
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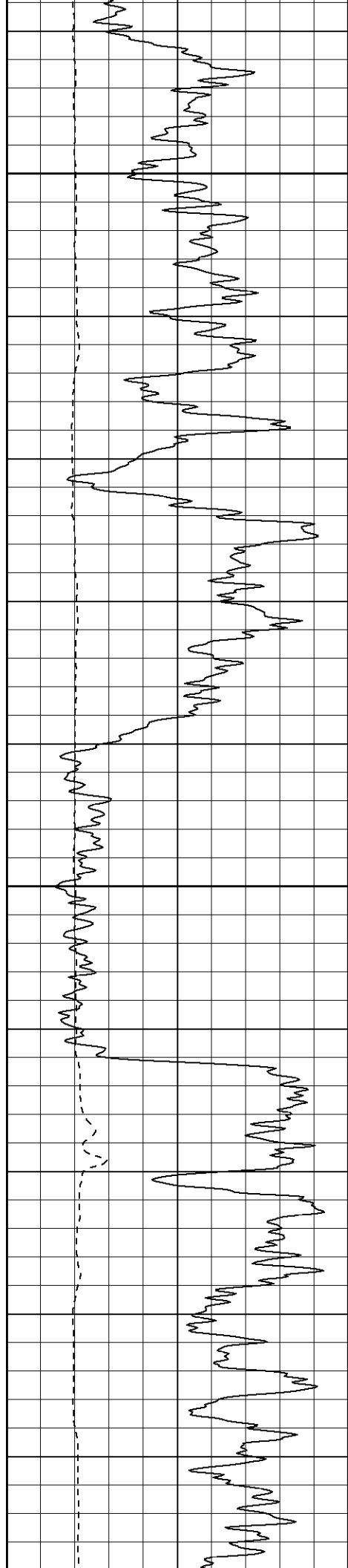




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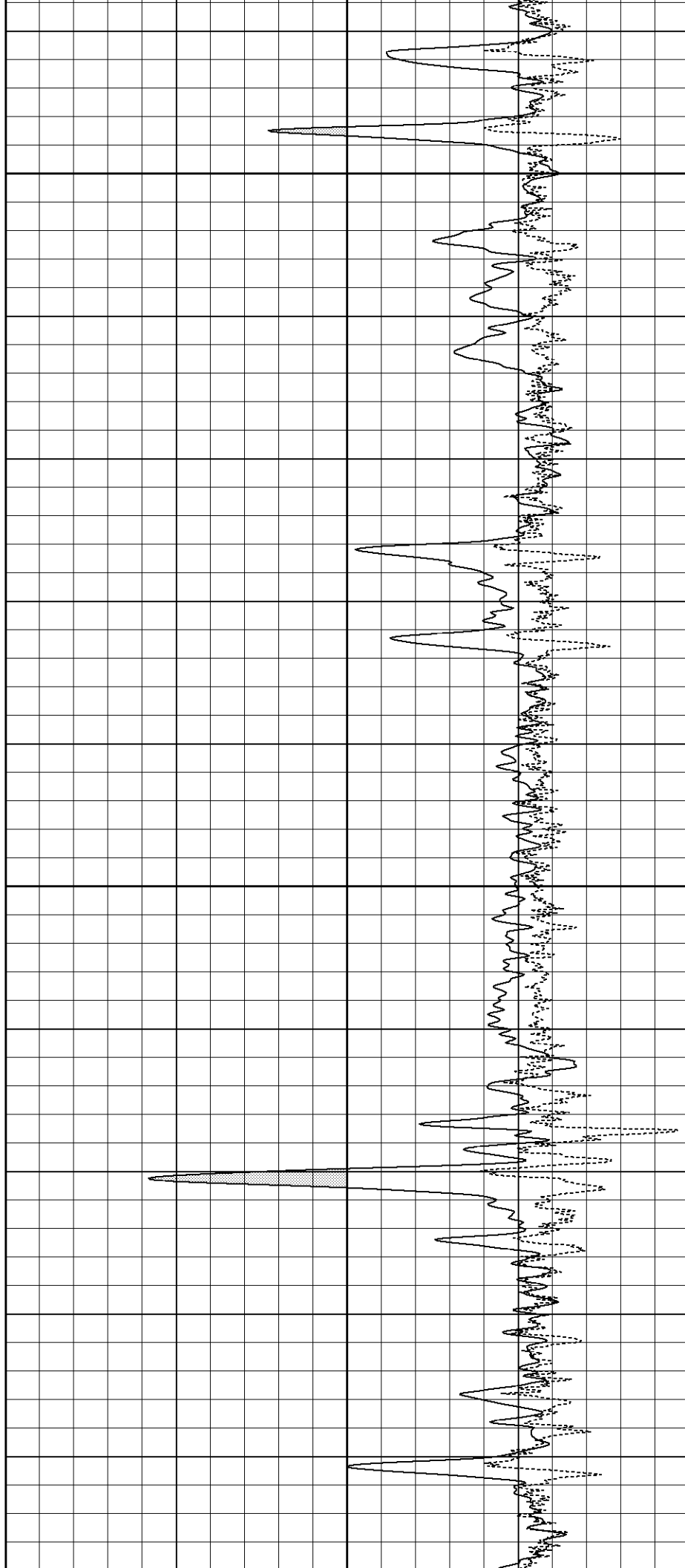
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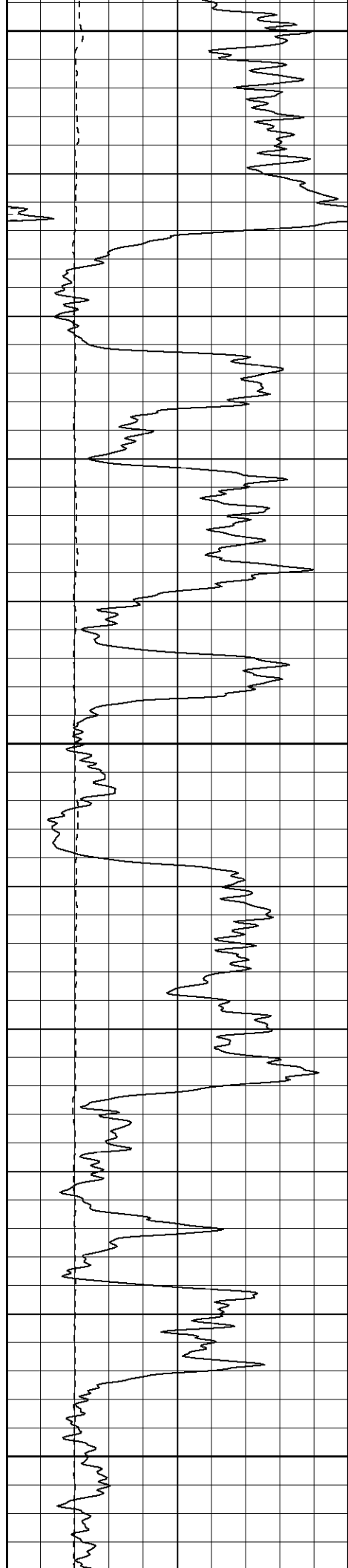




1200

1250

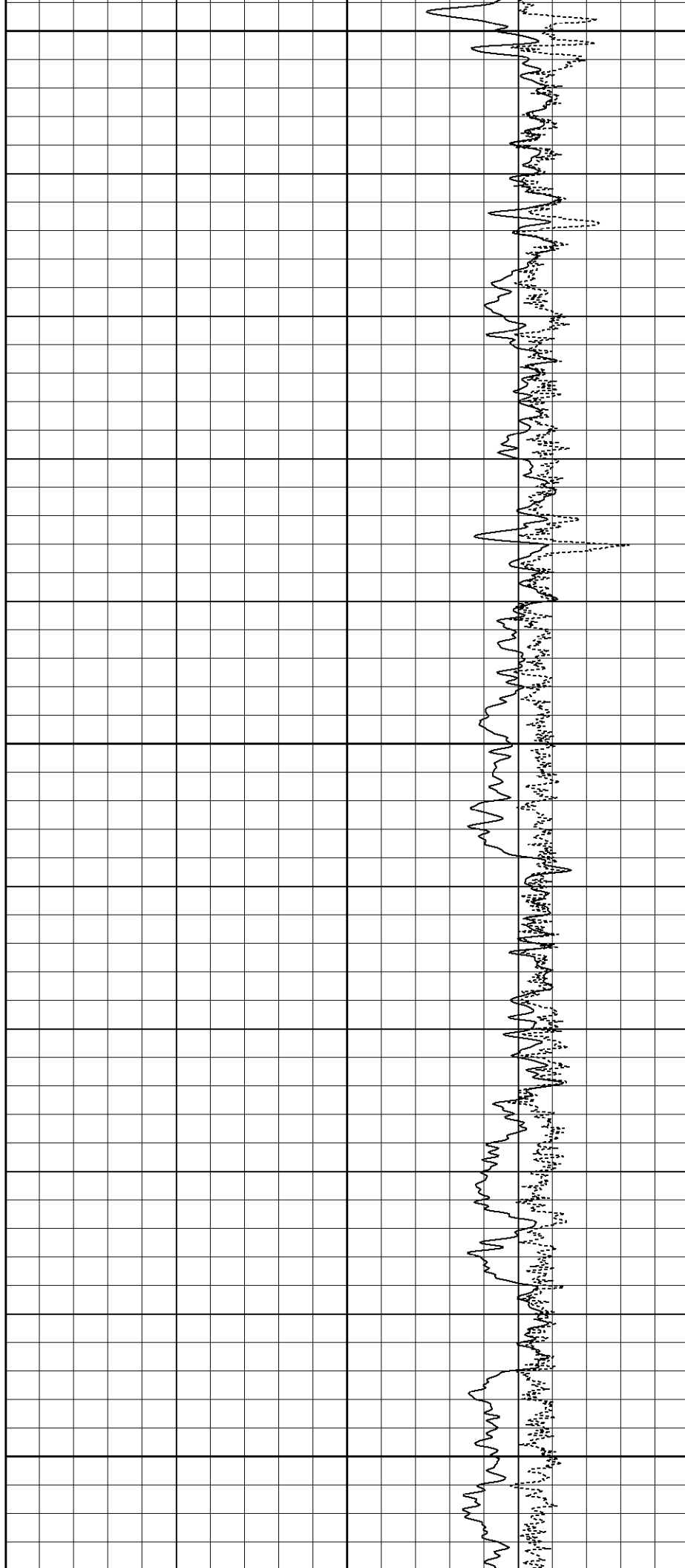


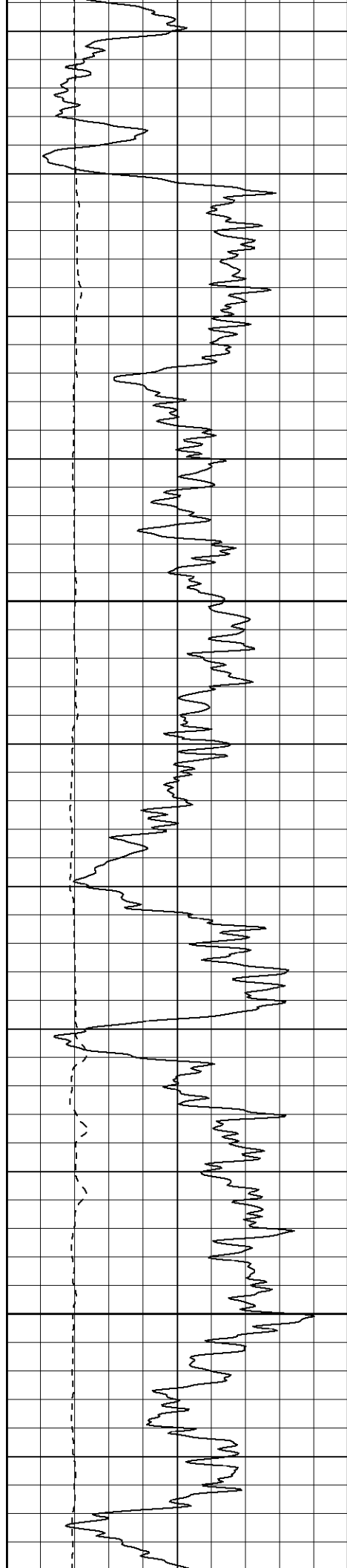


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1350

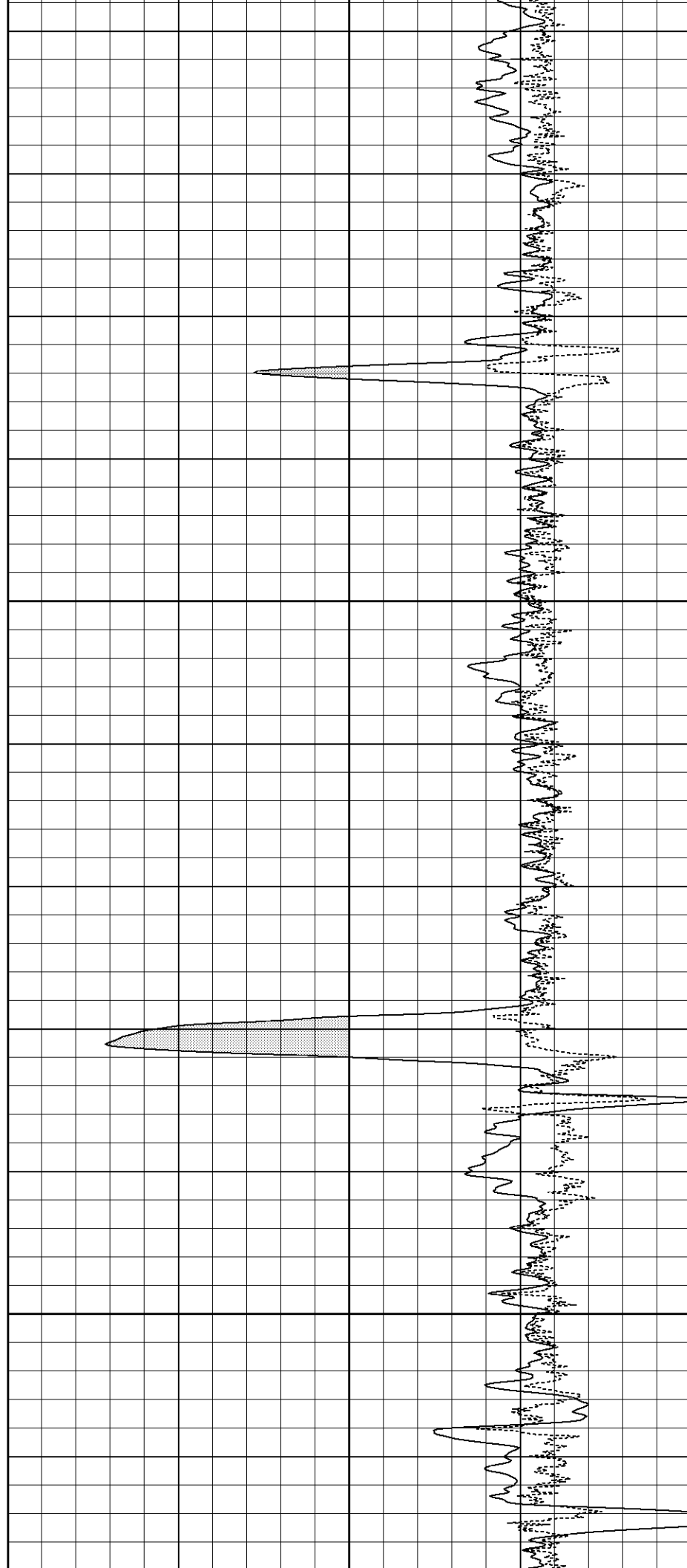
1400

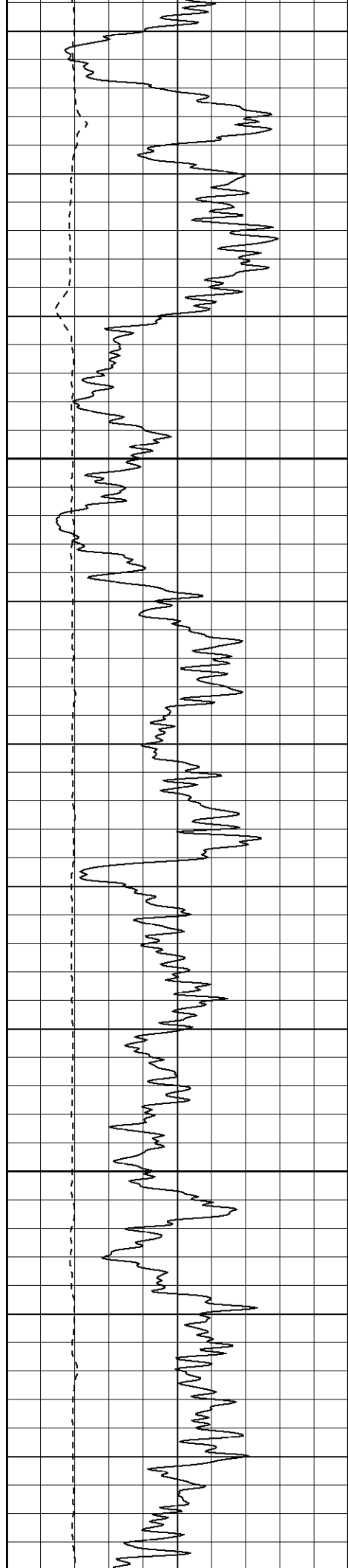




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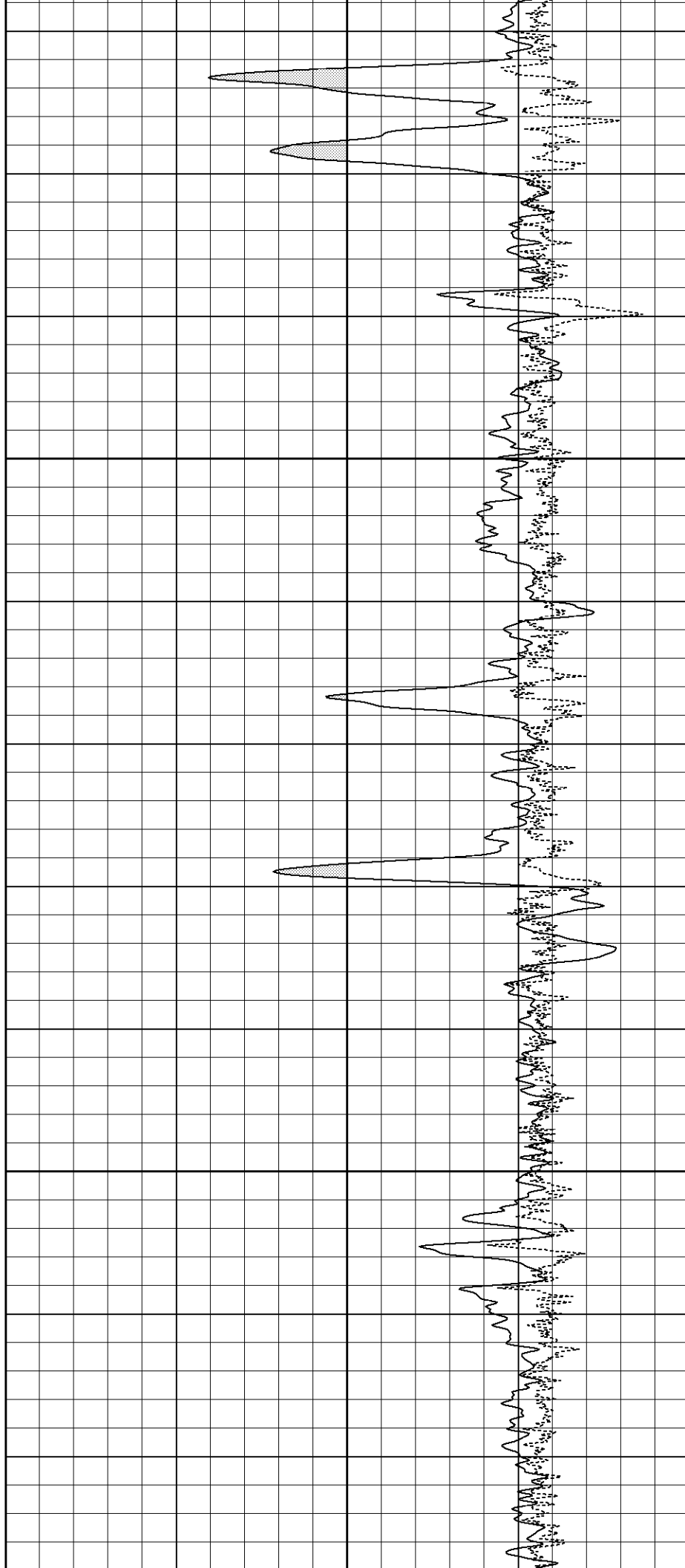
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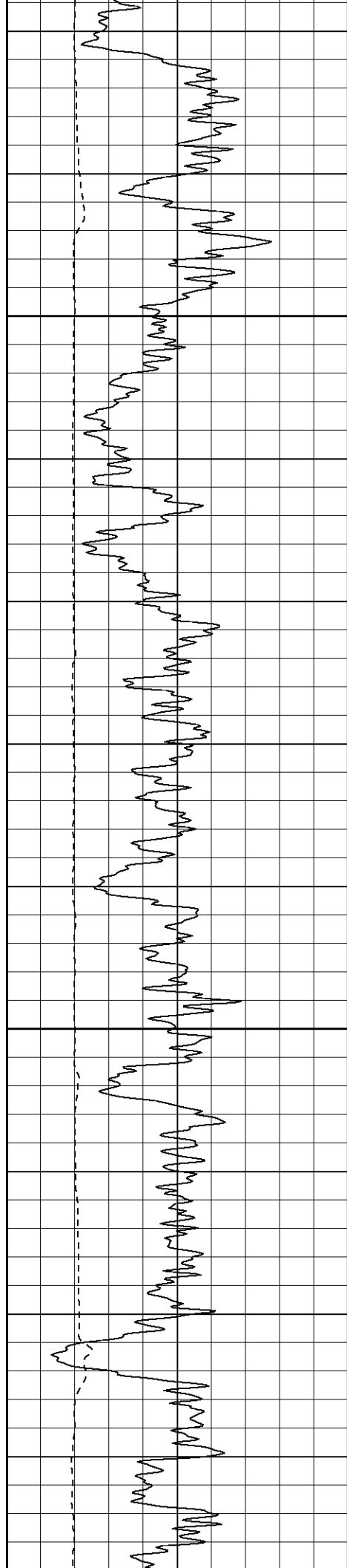




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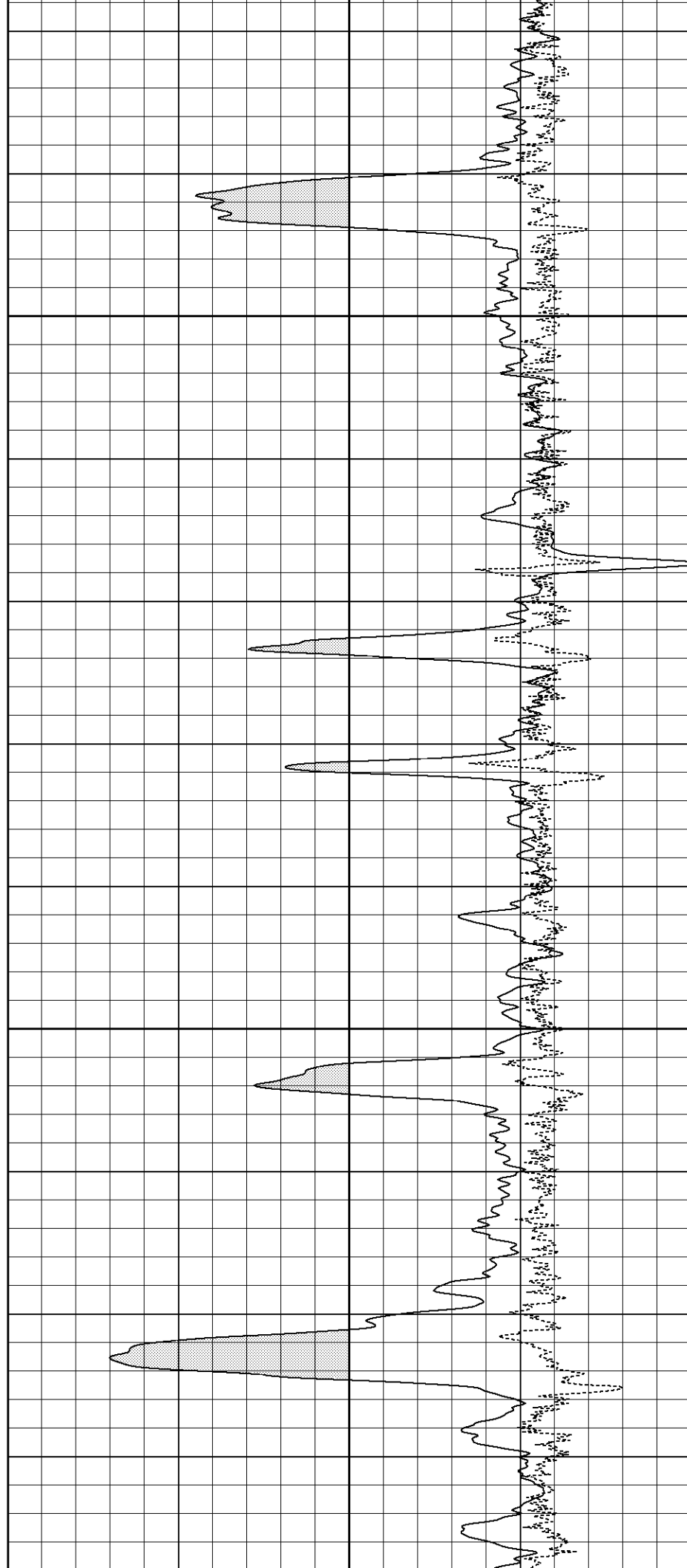
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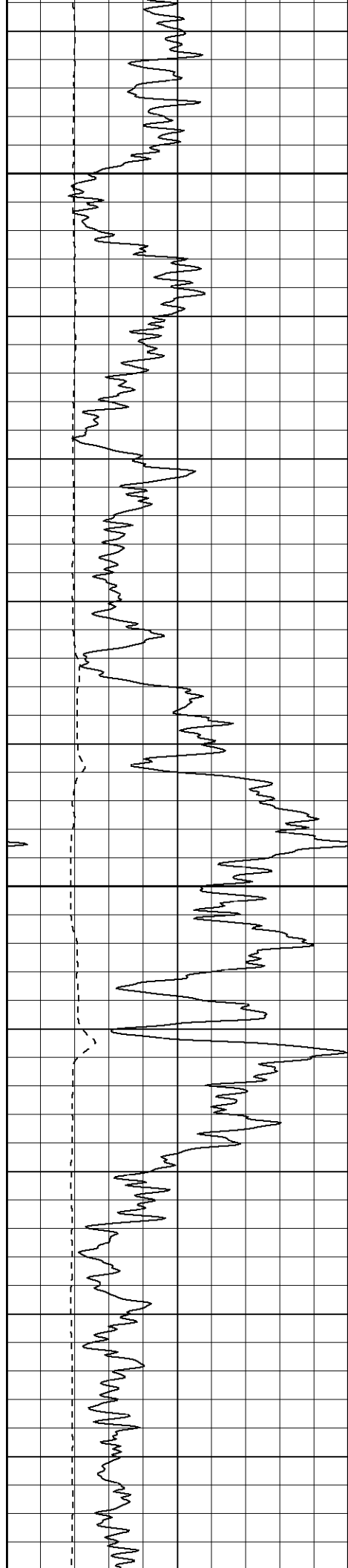




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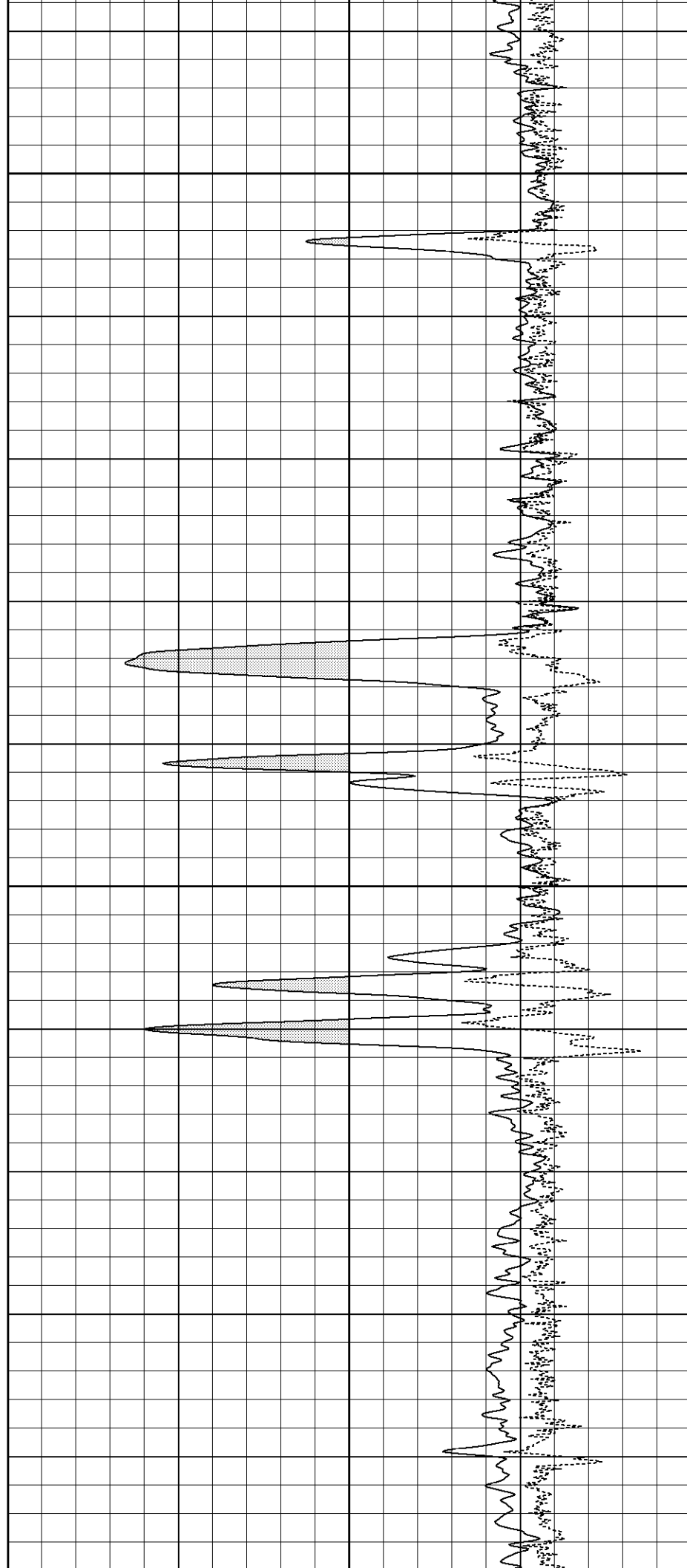
1700





1750

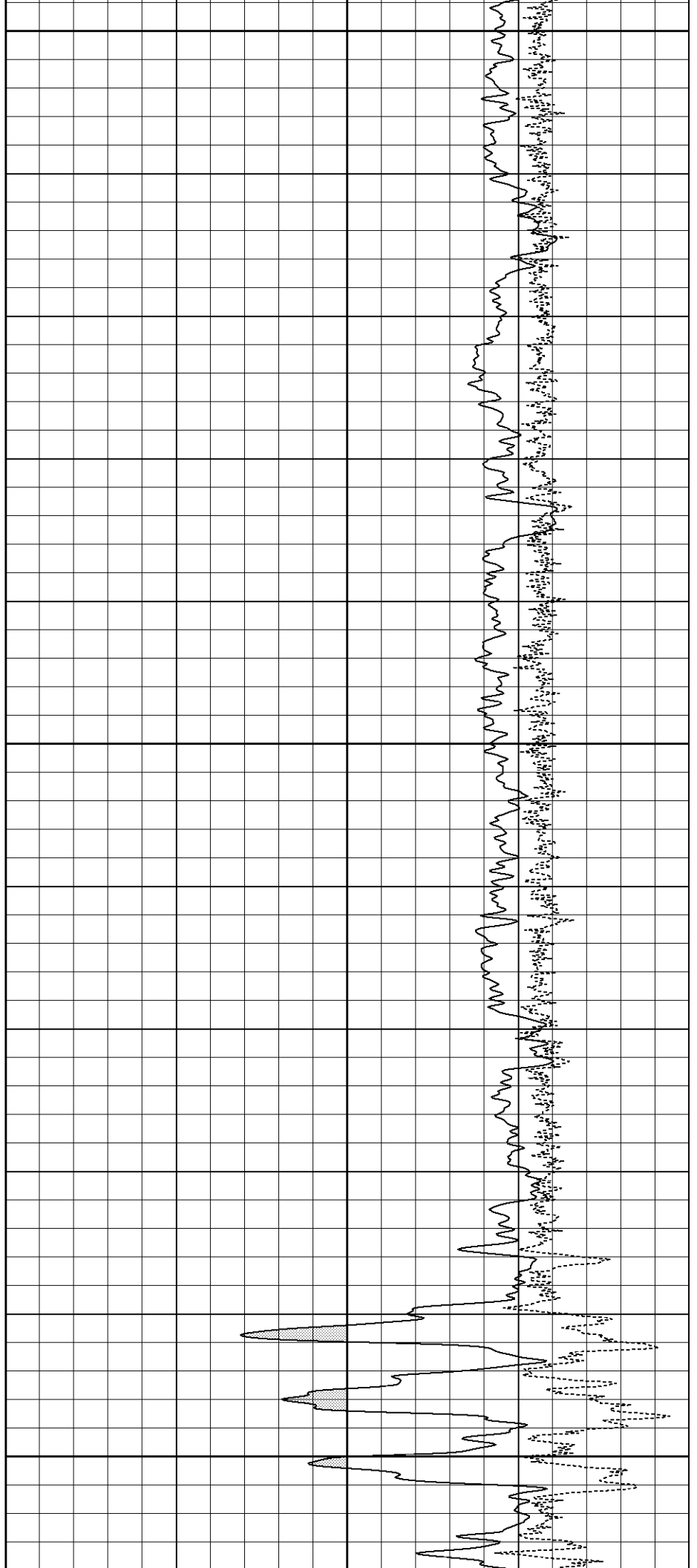
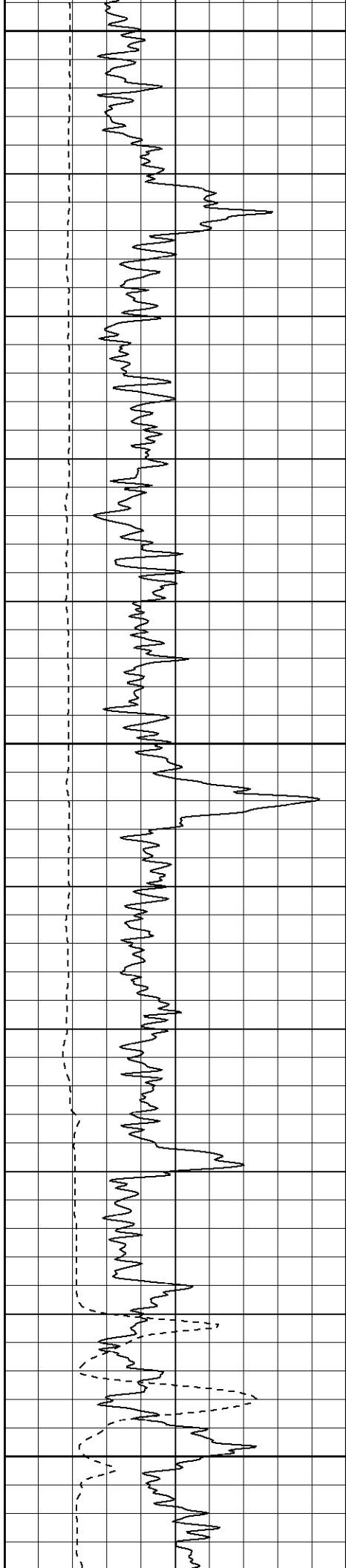
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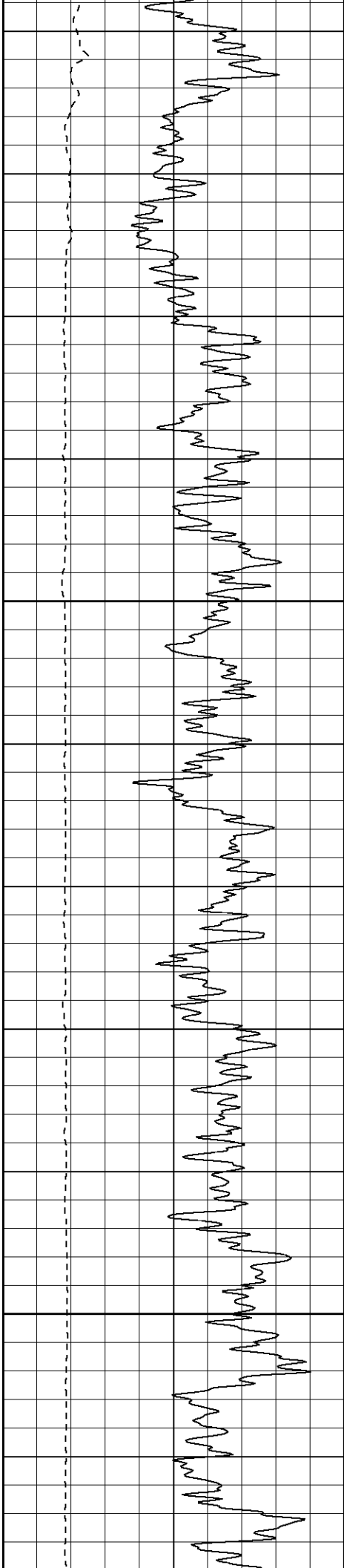


1850

1900

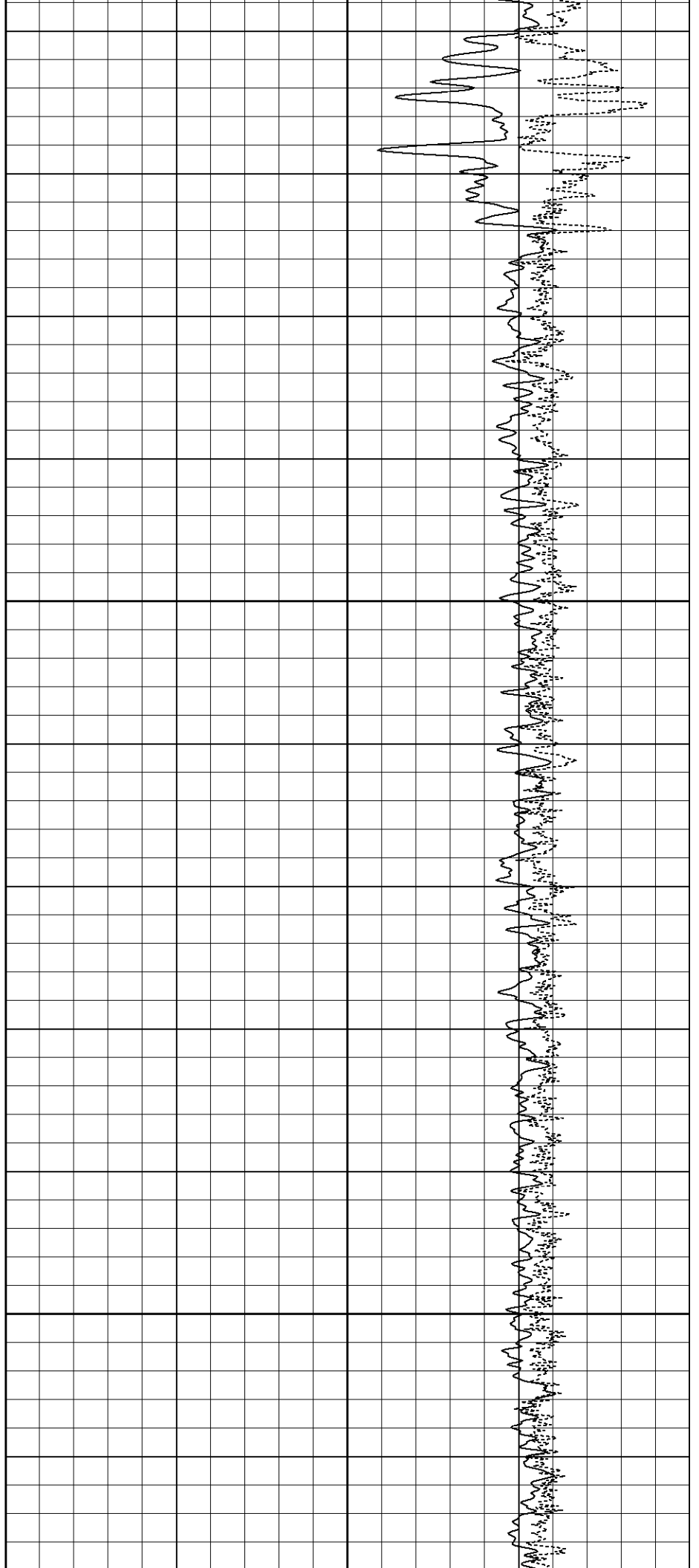
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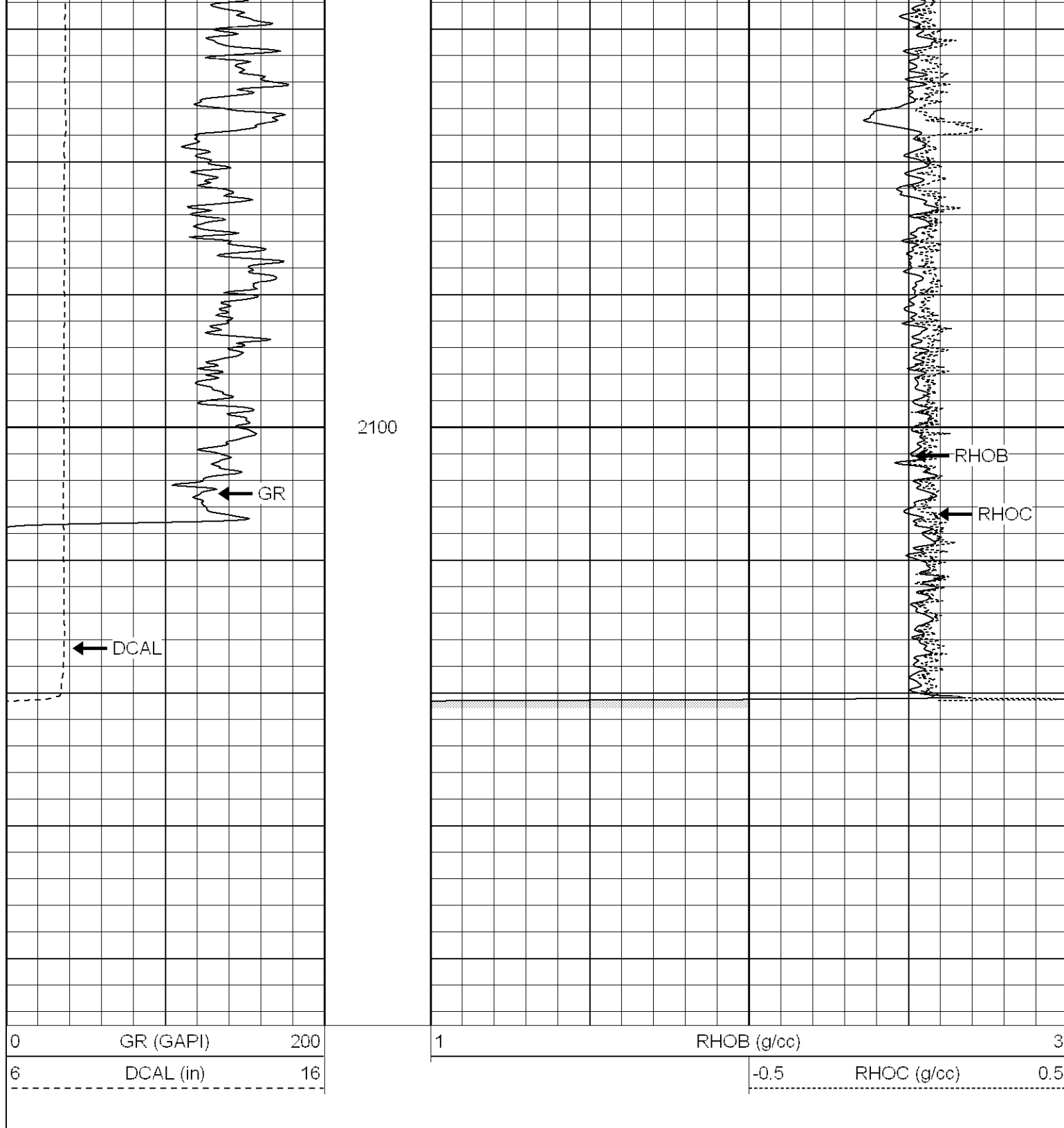




2000

2050





Dual Induction Calibration Report

| | |
|-------------------------|--------------------------|
| Serial-Model: | 5375-G |
| Surface Cal Performed: | Mon Feb 13 14:55:47 2006 |
| Downhole Cal Performed: | Tue Feb 14 01:05:06 2006 |

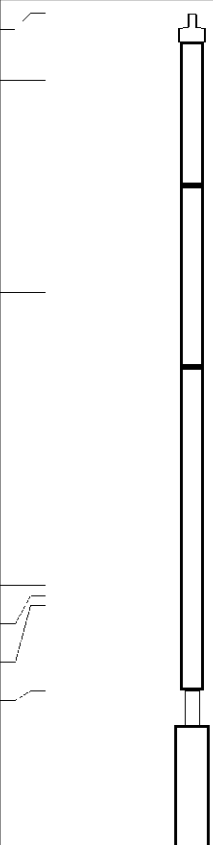
Compensated Density Calibration Report

| | |
|-------------------------------|--------------------------|
| Serial-Model: | 902-2.75POH |
| Source / Verifier: | / |
| Master Calibration Performed: | Thu Feb 02 11:11:37 2006 |

Master Calibration

| | Density | | Far Detector | Near Detector | |
|---------------------|---------|------|-----------------------------|---------------|-----|
| Magnesium | 1.710 | g/cc | 937.77 | 456.05 | cps |
| Aluminum | 2.590 | g/cc | 165.72 | 224.56 | cps |
| Spine Angle = 67.77 | | | Density/Spine Ratio = 0.470 | | |
| | Size | | Reading | | |
| Small Ring | 8.65 | in | 2.31 | V | |
| Large Ring | 17.00 | in | 4.47 | V | |

| | | |
|------------------------------|--------------------------|----------|
| Neutron Calibration Report | | |
| Serial Number: | 802 | |
| Tool Model: | 2.75POH | |
| Performed: | Thu Feb 16 09:30:49 2006 | |
| Calibrator Value: | 1 | NAPI |
| Calibrator Reading: | 1 | cps |
| Sensitivity: | 1 | NAPI/cps |
| Gamma Ray Calibration Report | | |
| Serial Number: | 804 | |
| Tool Model: | 2.75POH | |
| Performed: | Thu Feb 09 14:37:22 2006 | |
| Calibrator Value: | 1.0 | GAPI |
| Background Reading: | 0.0 | cps |
| Calibrator Reading: | 1.0 | cps |
| Sensitivity: | 0.8100 | GAPI/cps |

| Sensor | Offset (ft) | Schematic | Description | Len (ft) | OD (in) | Wt (lb) |
|--------|-------------|---|---------------------------------------|----------|---------|---------|
| CHD | 39.37 |  | None | 0.75 | 1.50 | 5.00 |
| GR | 37.64 | | GR-2.75POH (804) Probe | 3.73 | 2.75 | 43.00 |
| NEU | 32.10 | | NEU-2.75POH (802) Probe Epithermal | 4.75 | 2.75 | 58.00 |
| LSD | 24.47 | | CDL-2.75POH (902) Probe | 8.43 | 2.75 | 106.00 |
| DCAL | 24.19 | | Probe | 0.89 | 3.50 | 20.00 |
| SSD | 23.95 | | | | | |
| 10pin | 21.72 | | | | | |

