



SUPERIOR
Black Lick, Pa.
Mercer, Pa.
Wooster, Oh.
Cleveland, Ok.
Trinidad, Co.

COMPENSATED DENSITY NEUTRON LOG

Company XTO Energy Inc.
Well Apache Canyon 31-14
Field Purgatoire River
County Las Animas State Colorado

Location: API #: 05 071 09277 00

496' FSL & 1575' FWL

SEC 31 TWP 33S RGE 67W

Permanent Datum Ground Level Elevation 8208'
Log Measured From Ground Level
Drilling Measured From Ground Level

Other Services
dill
Elevation
K.B. -----
D.F. -----
G.L. 8208'

Date 2-23-07

Run Number One

Depth Driller 2700'

Depth Logger 2694'

Bottom Logged Interval 2670'

Top Log Interval Surface Casing

Casing Driller 8 5/8" @ 493'

Casing Logger 493'

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 8:30 P.M.

Time Logger on Bottom 11:00 P.M.

Maximum Recorded Temperature 120

Equipment Number T701

Location Trinidad

Recorded By L. Smith

Witnessed By Mr. Don Johnson

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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

Compensated Density Neutron Porosity Presented On Sandstone Matrix.
ABHV Calculated For 5.5" Casing.
Well Directions:
Bosque before Weston, up cherry canyon to T,
go right, first right to location.

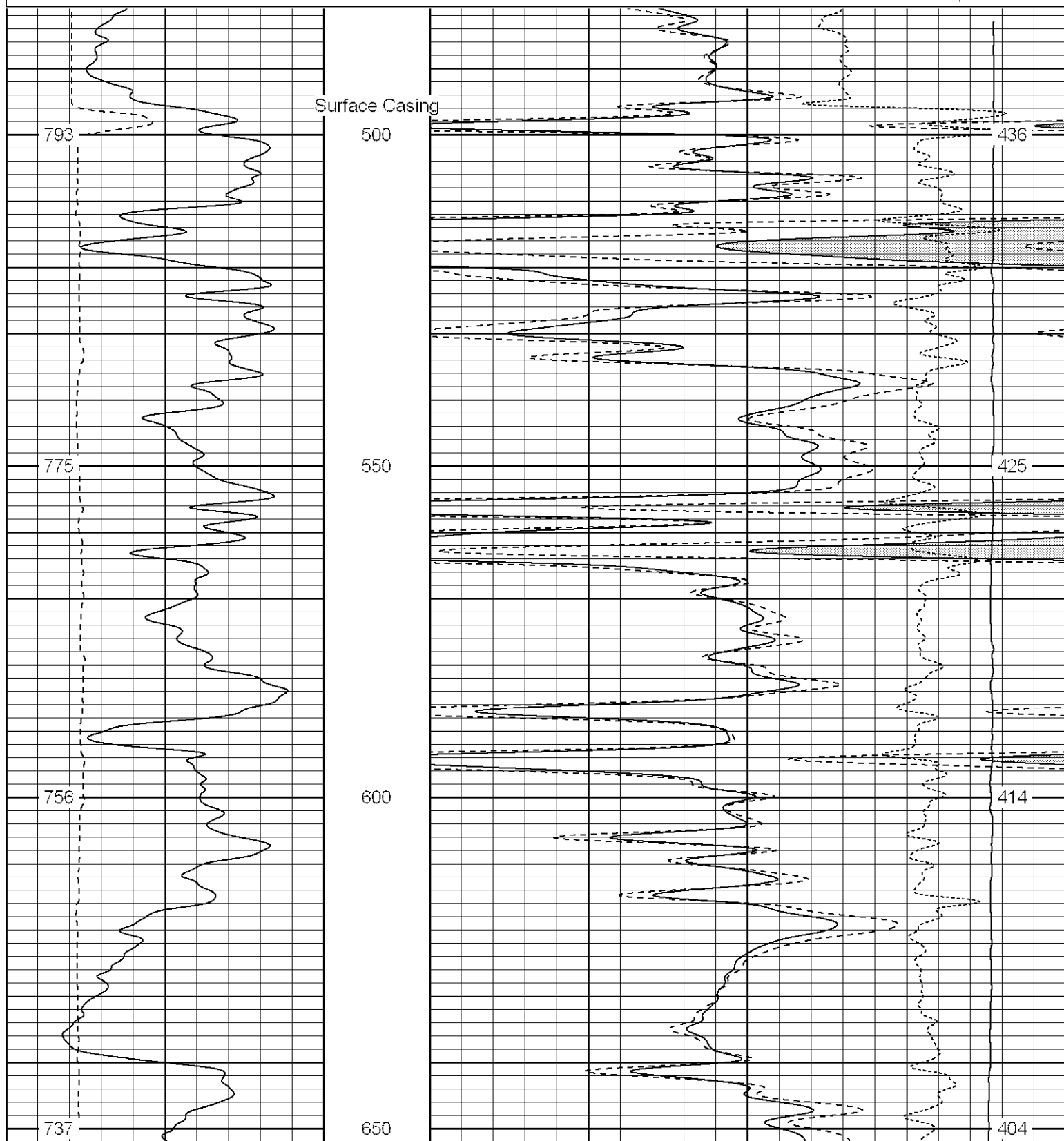


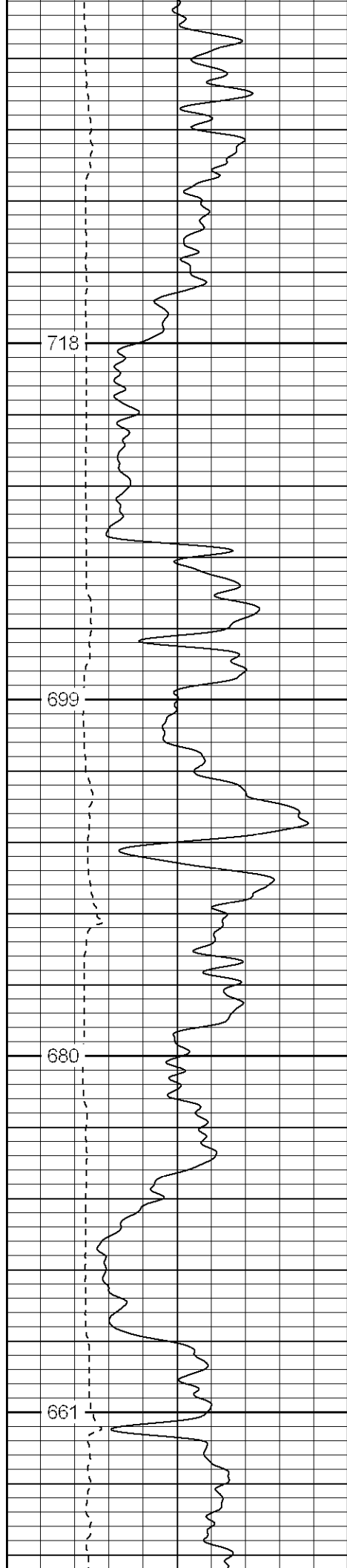
SUPERIOR
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Main Pass

Database File: xtoac3114.db
Dataset Pathname: pass2.1
Presentation Format: cdl
Dataset Creation: Sun Jun 24 01:01:33 2007 by Calc Open-Cased 070508
Charted by: Depth in Feet scaled 1:240

| | | | | | |
|------------|-----------|-----|------------|-------------|-----|
| 0 | GR (GAPI) | 200 | 2 | RHOB (g/cc) | 3 |
| 6 | DCAL (in) | 16 | 1 | RHOB (g/cc) | 2 |
| TBHV (ft3) | | | 30 | DPOR (pu) | -10 |
| | | | -0.5 | RHOC (g/cc) | 0.5 |
| | | | 4000 | LTEN (lb) | 0 |
| | | | ABHV (ft3) | | |



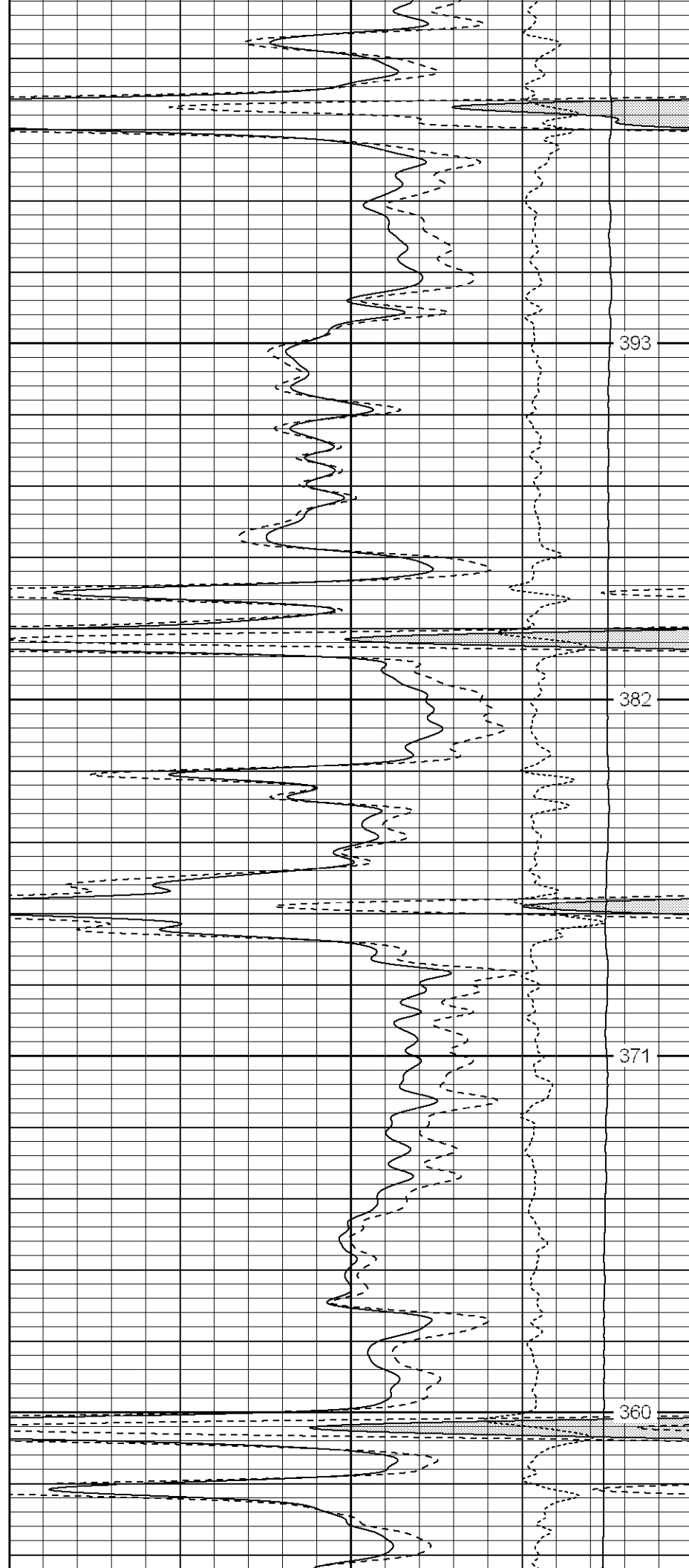


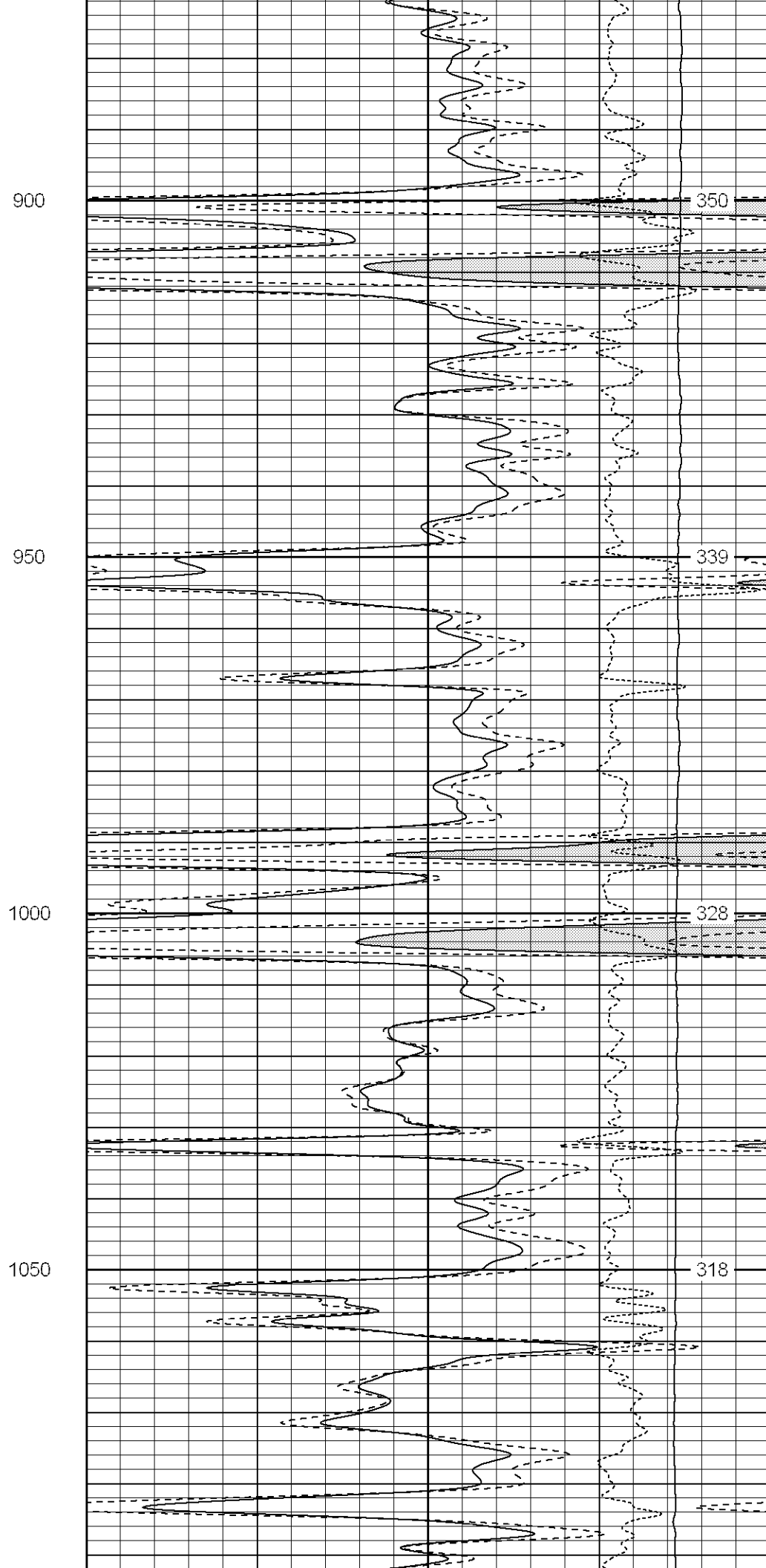
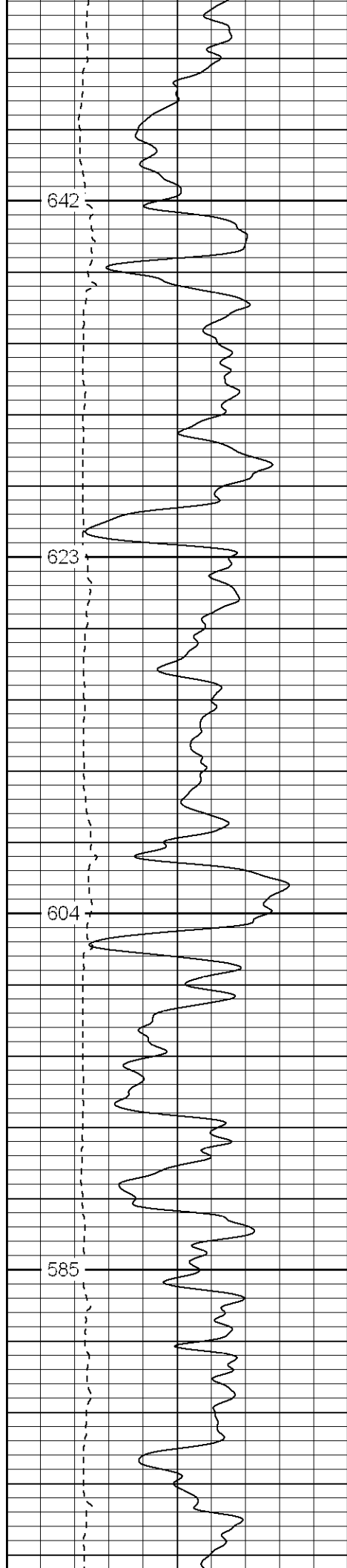
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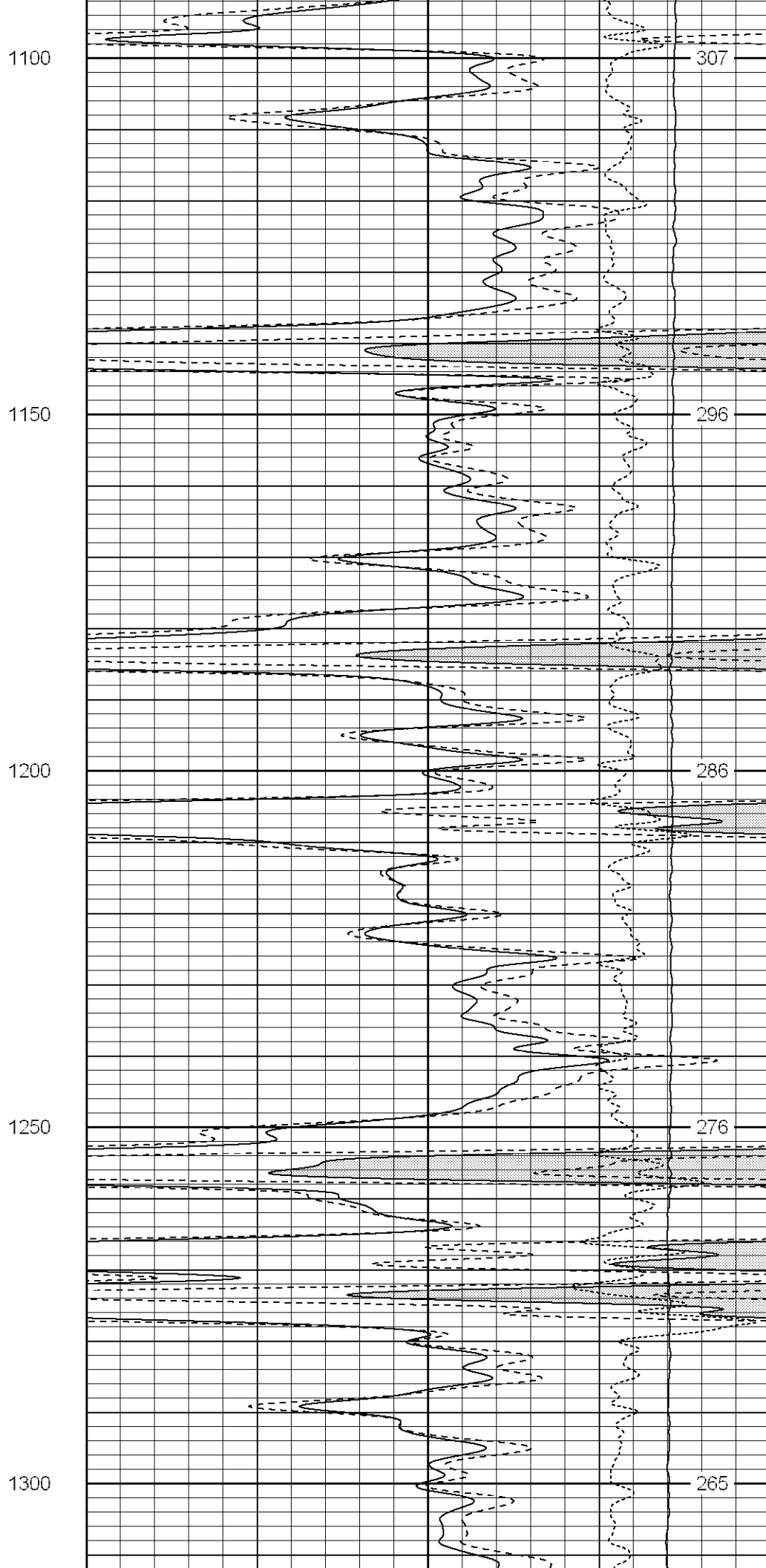
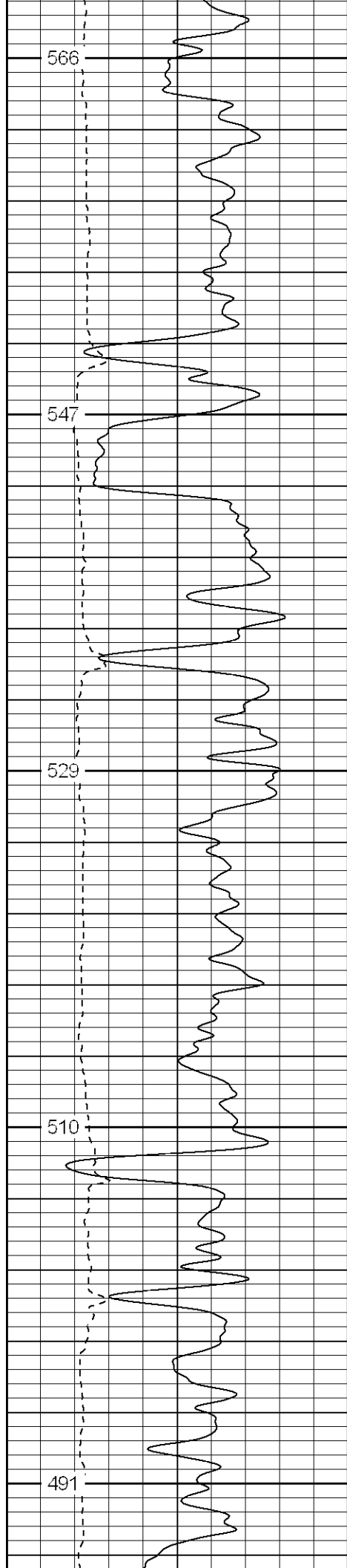
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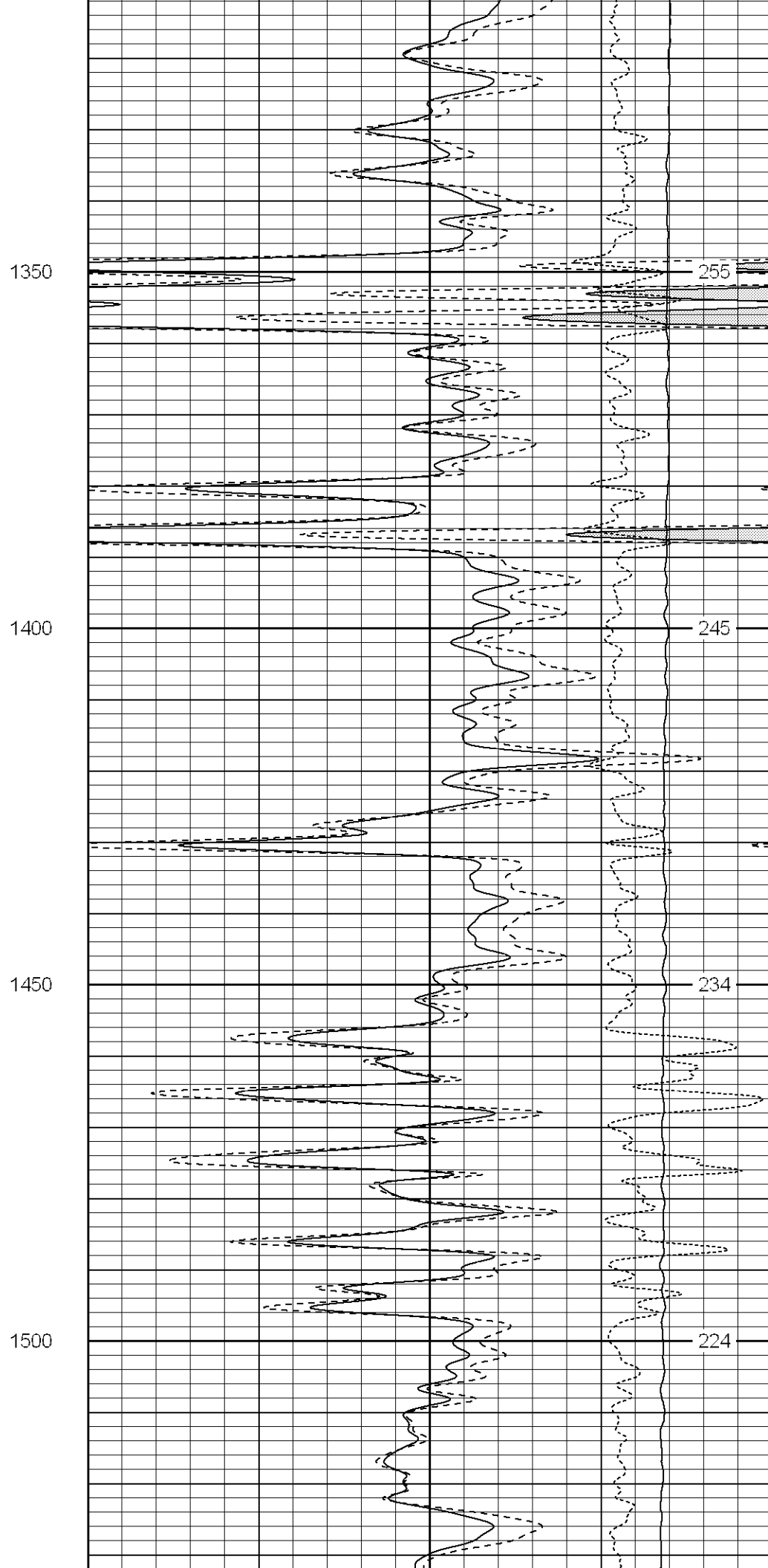
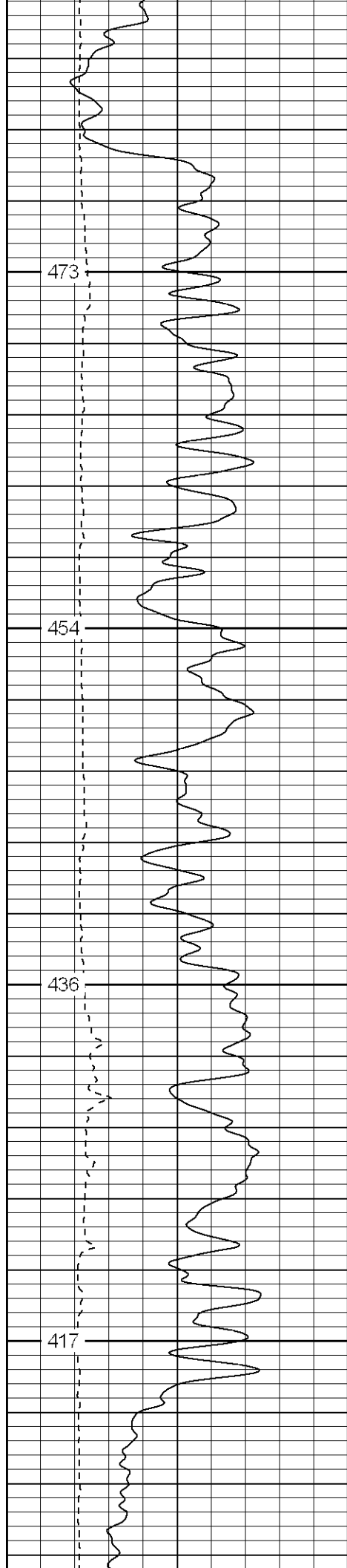
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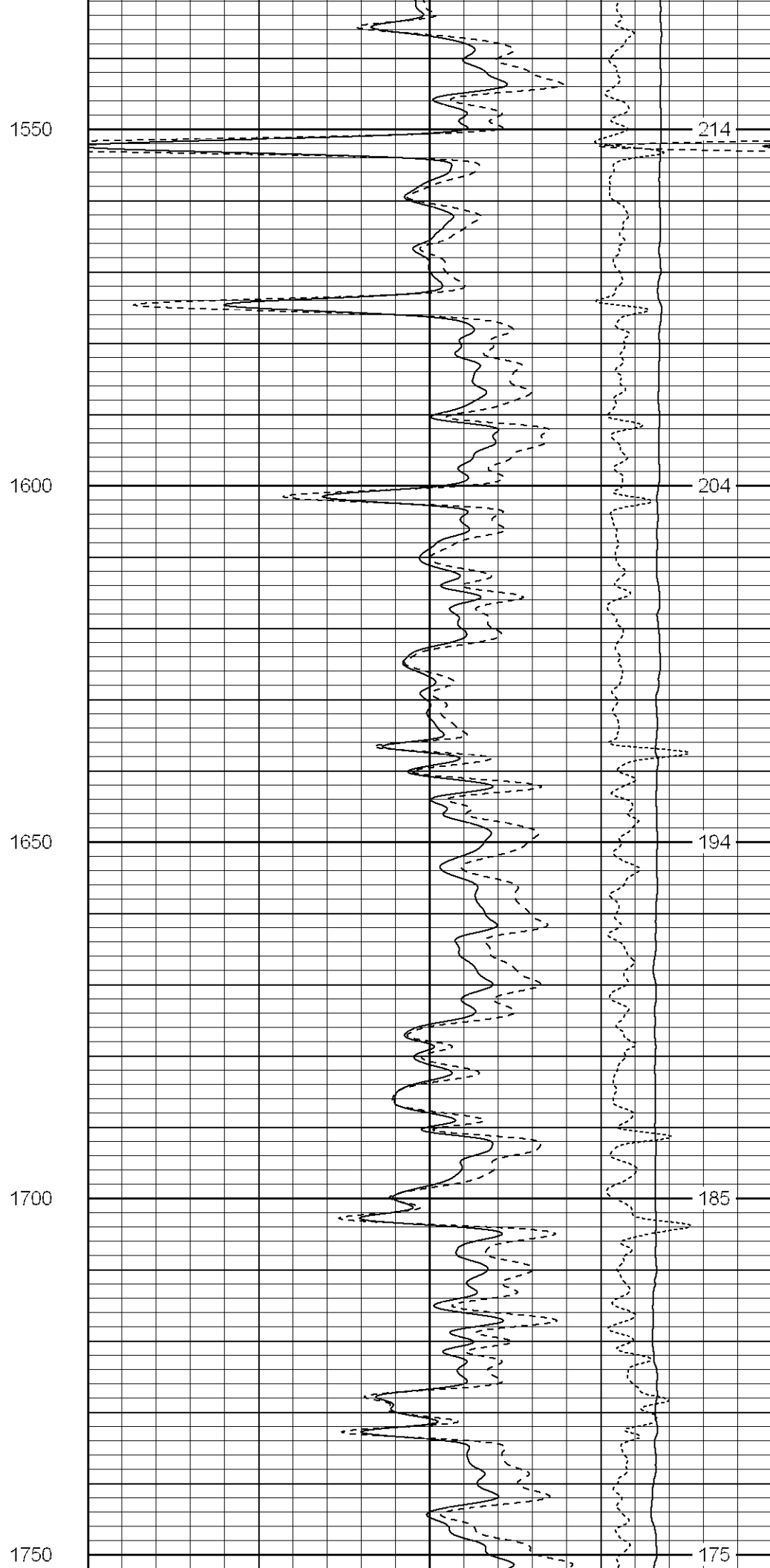
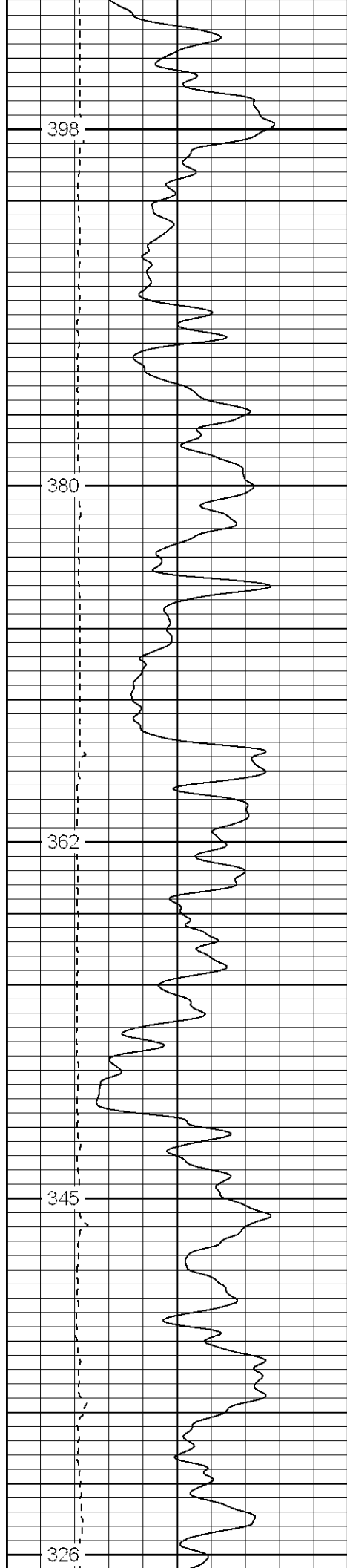
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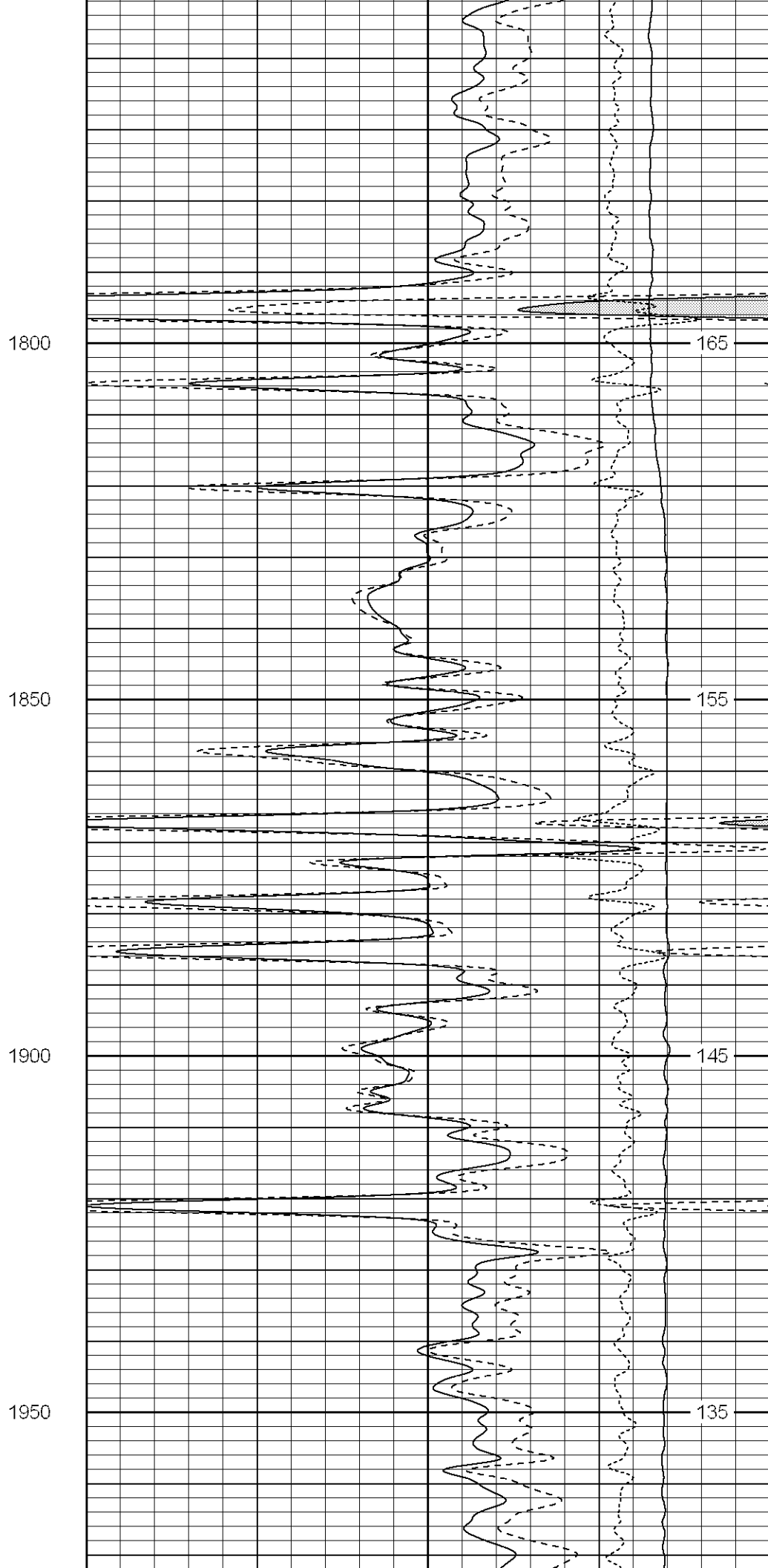
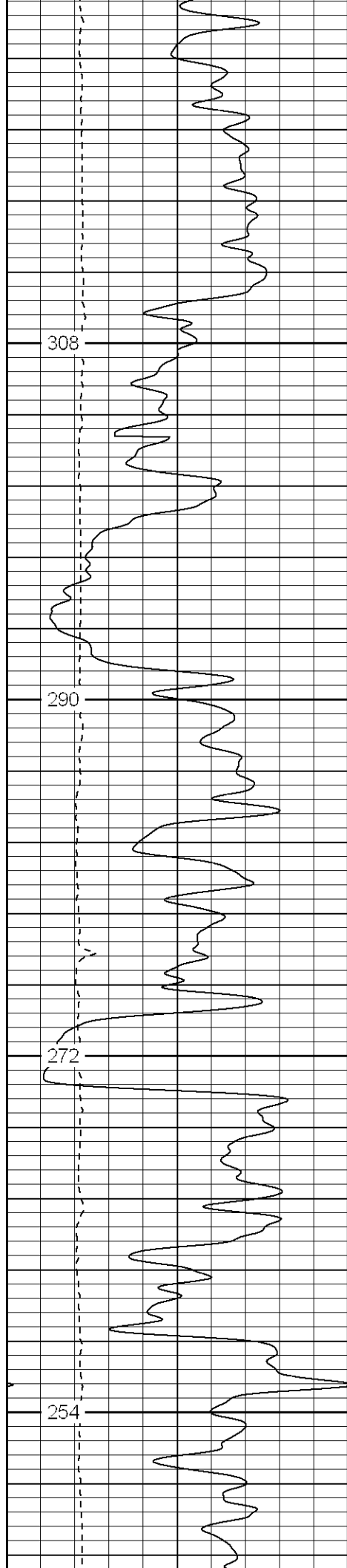


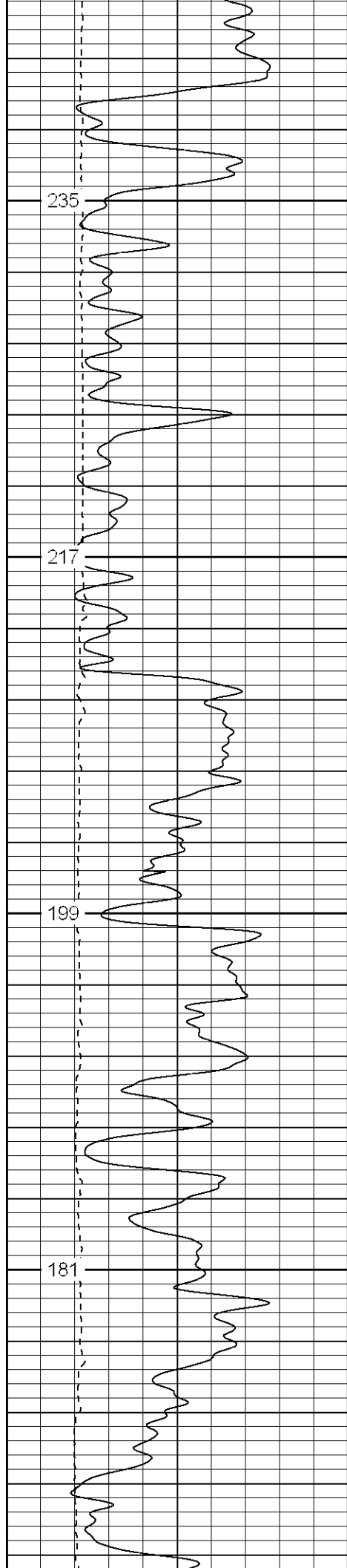










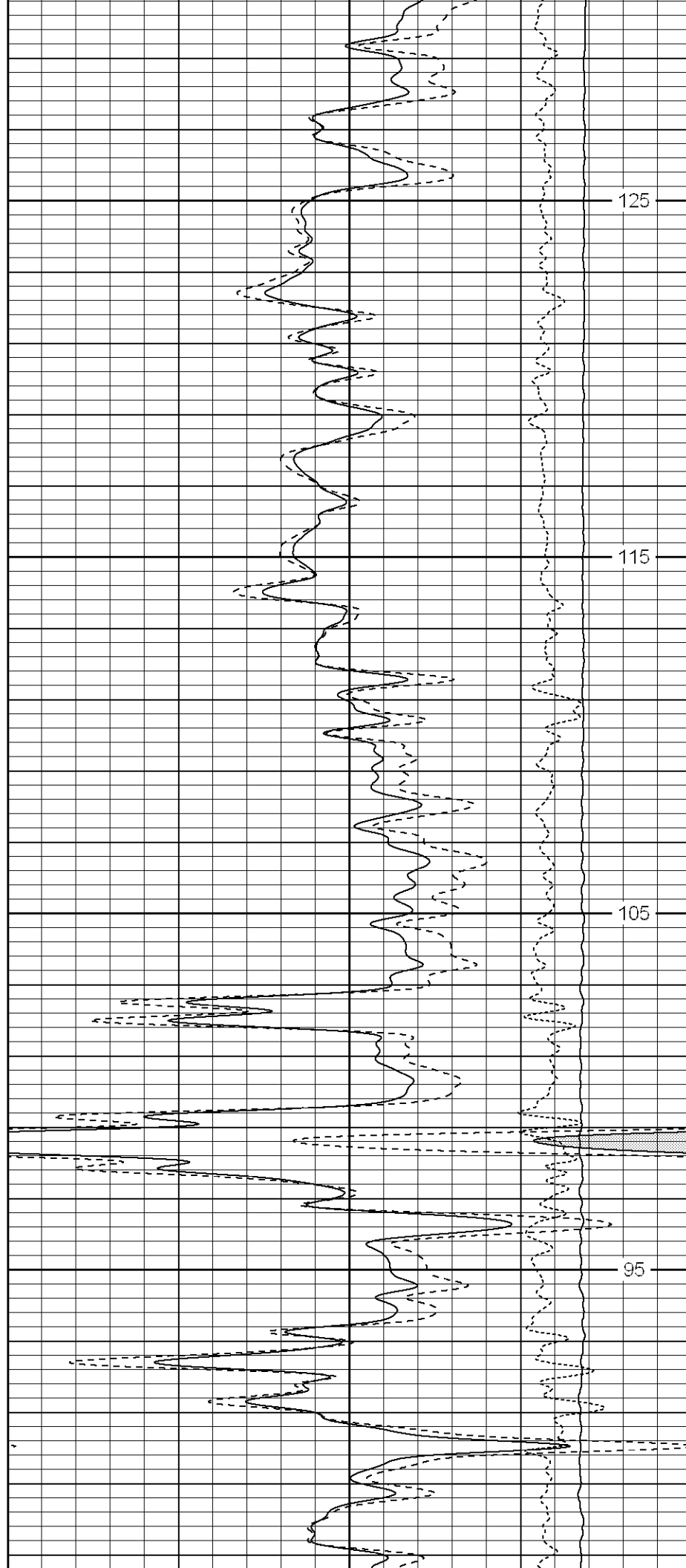


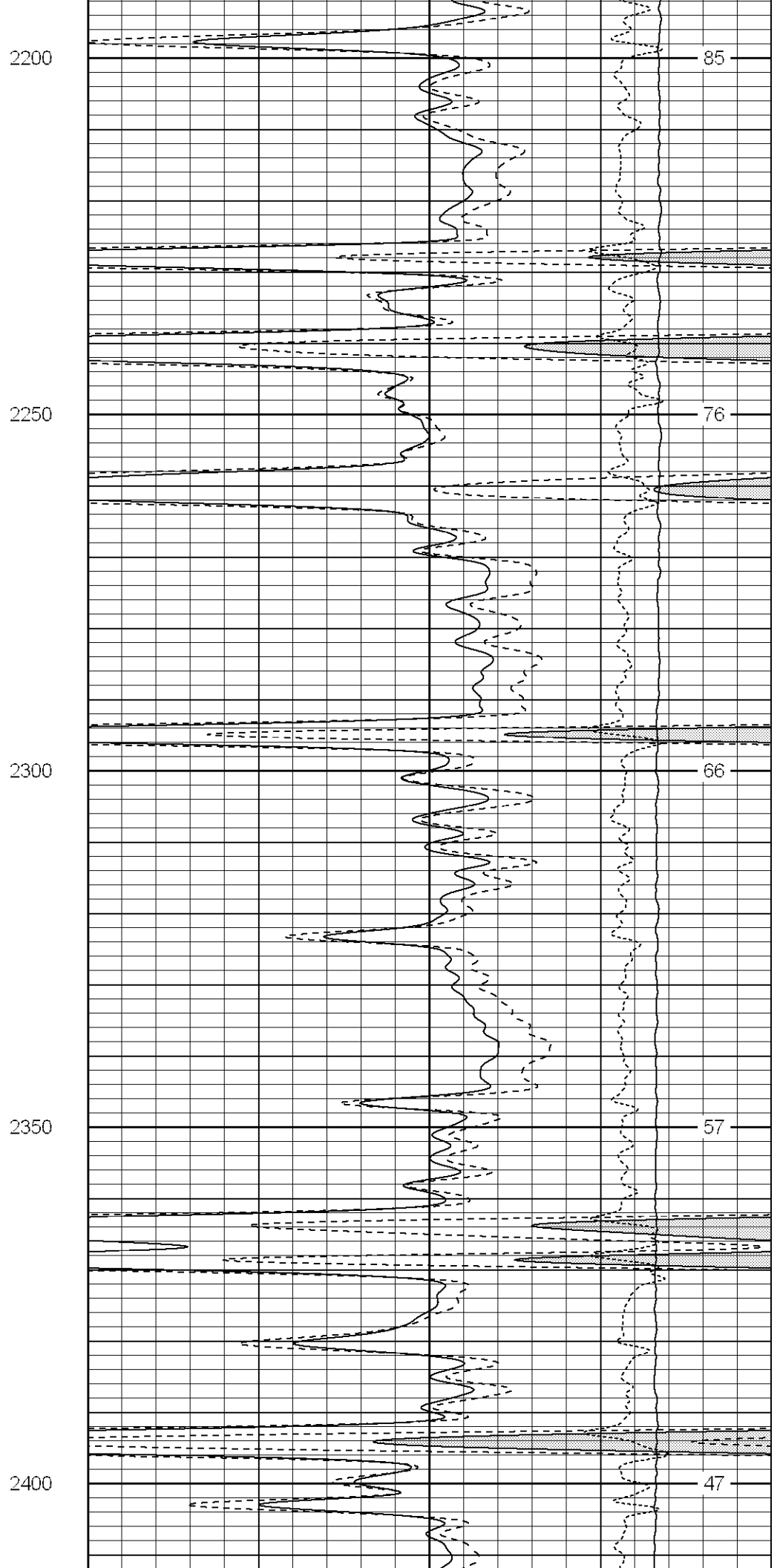
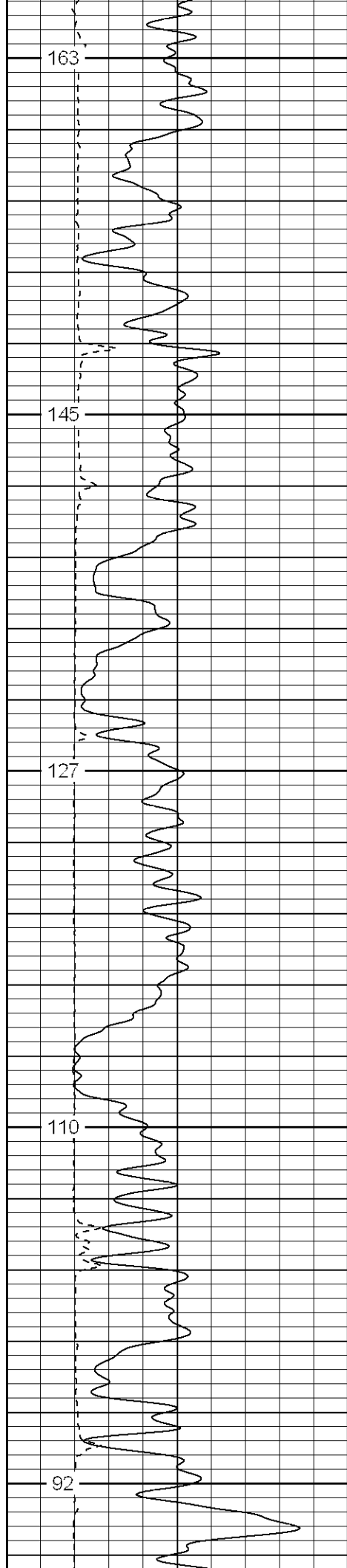
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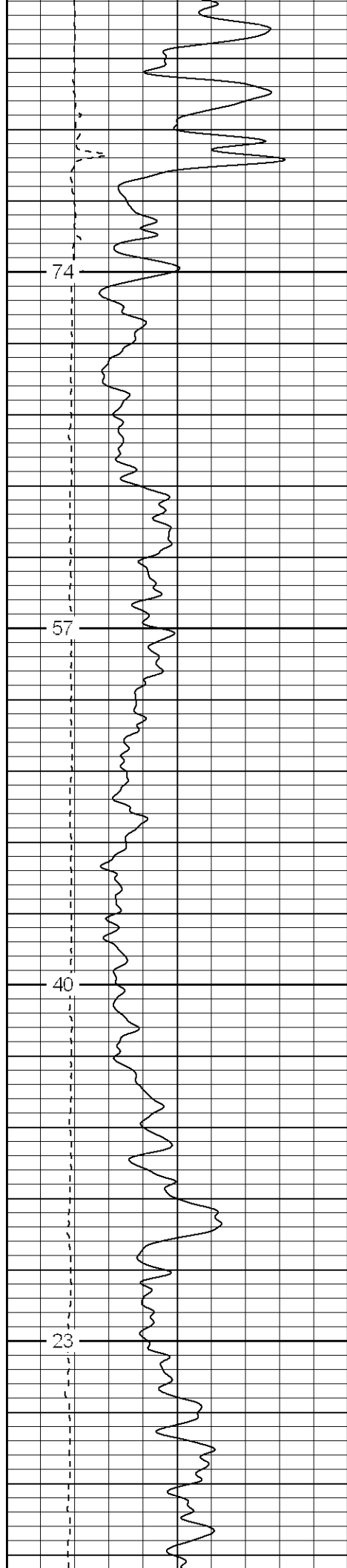
2050

2100

2150





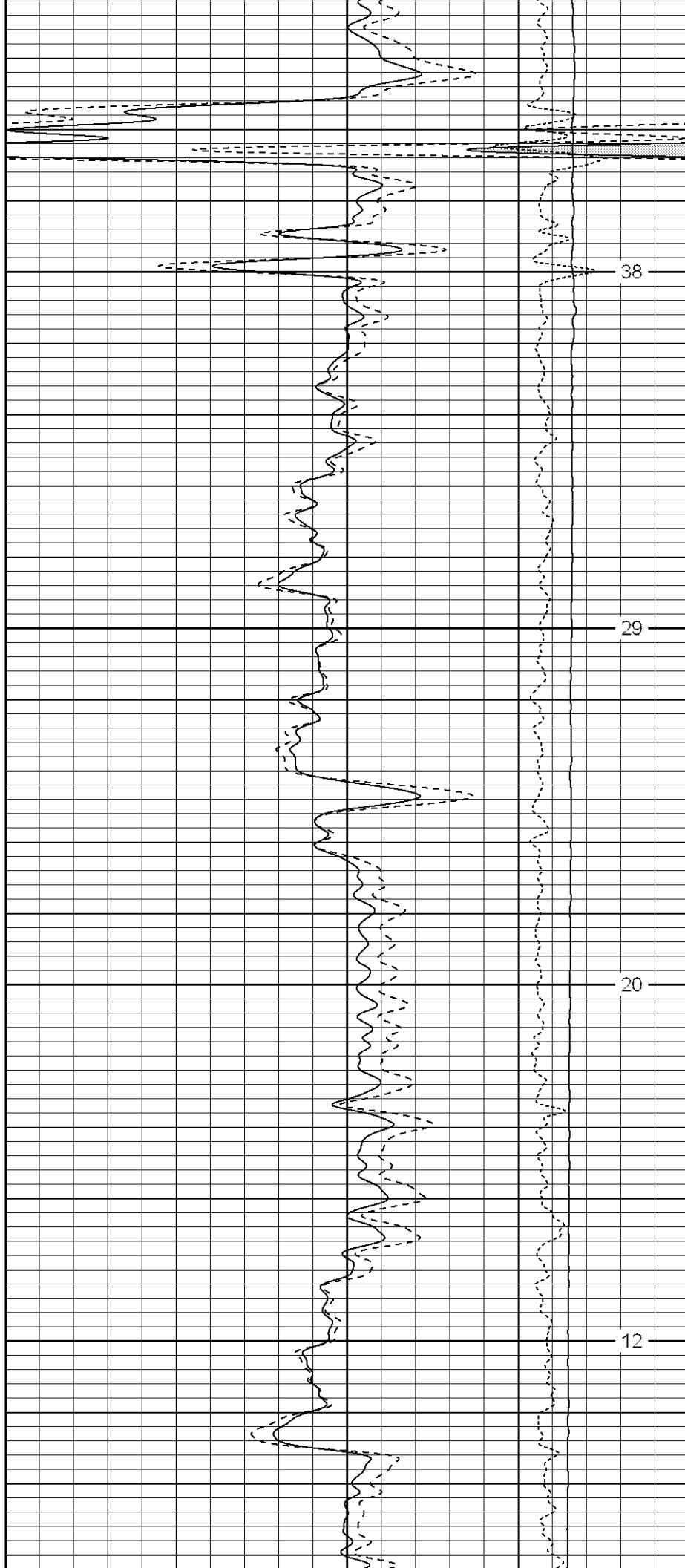


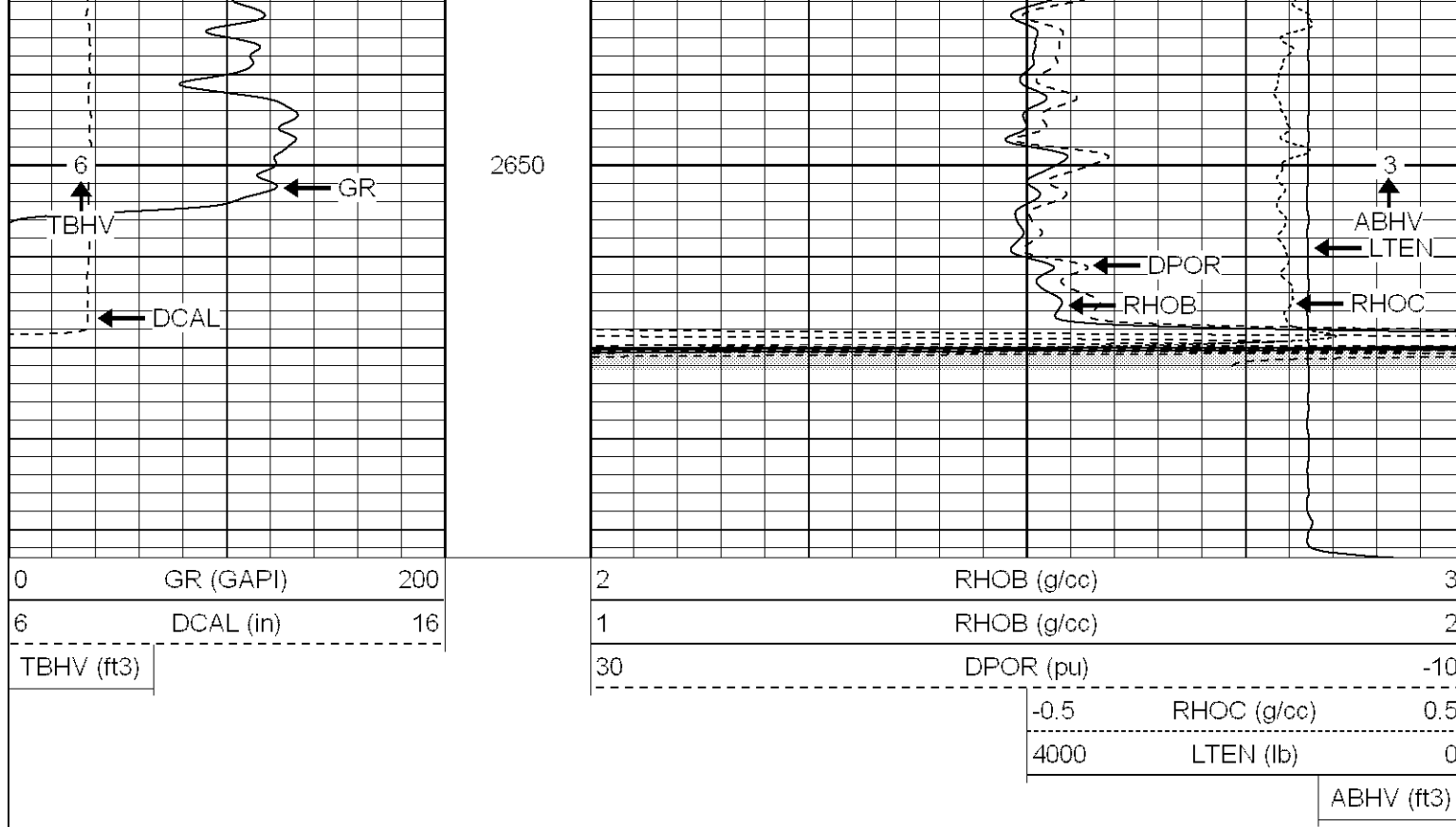
2450

2500

2550

2600





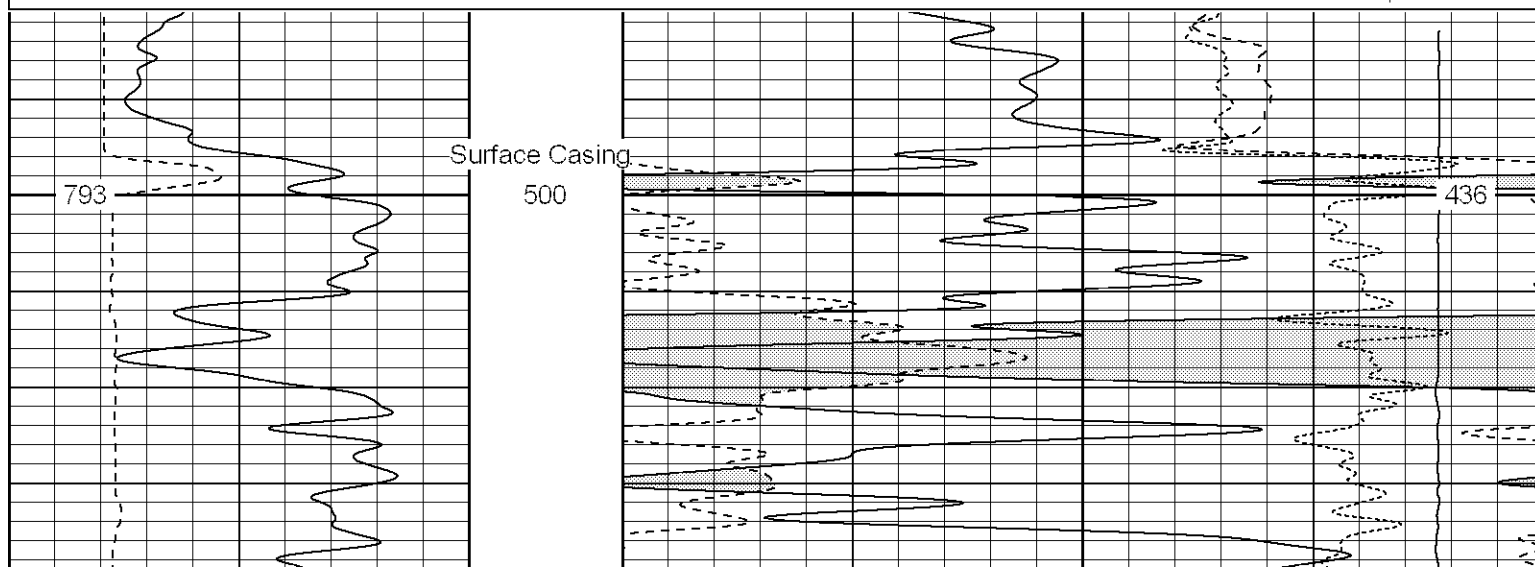
SUPERIOR

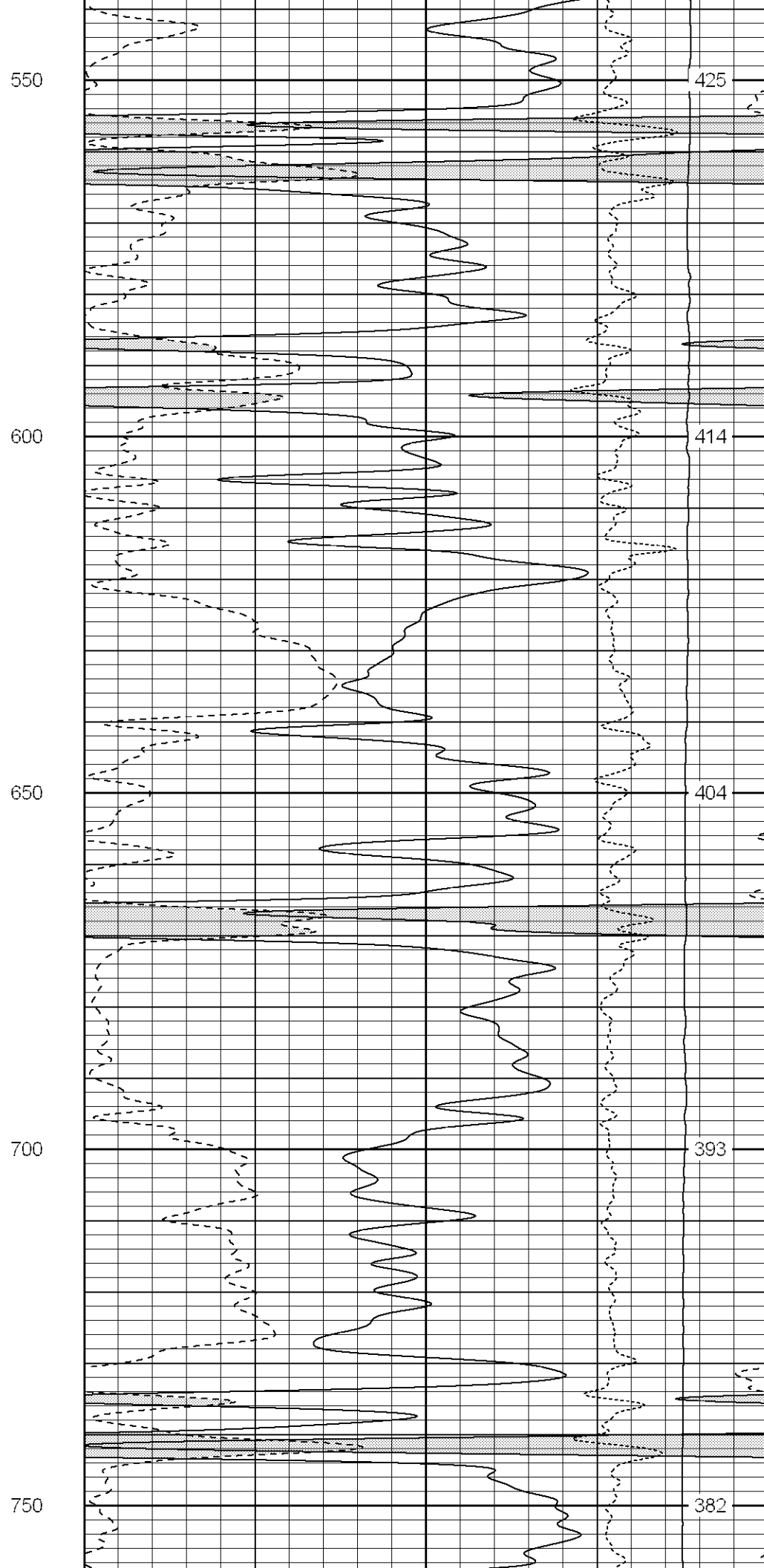
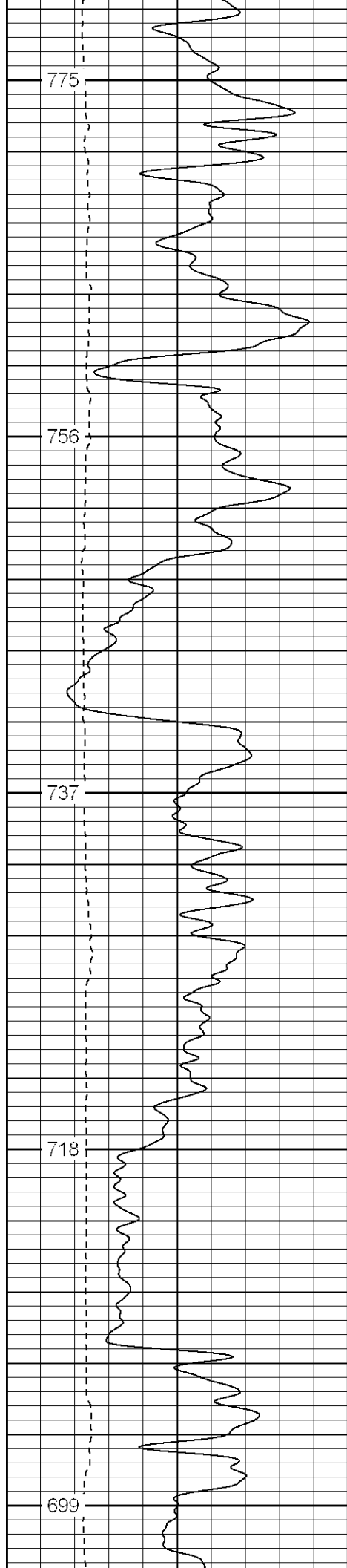
Black Lick, Pa.
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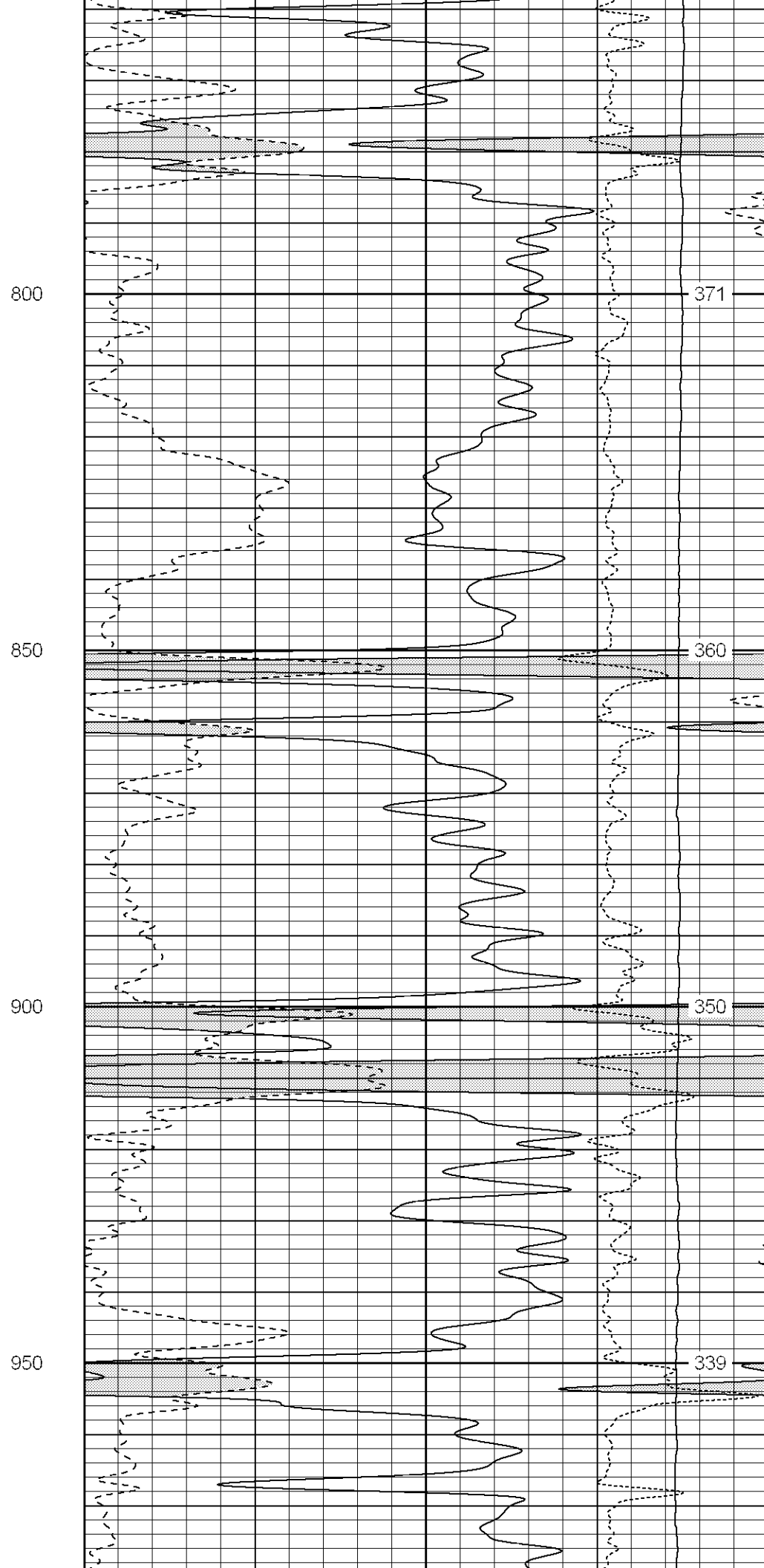
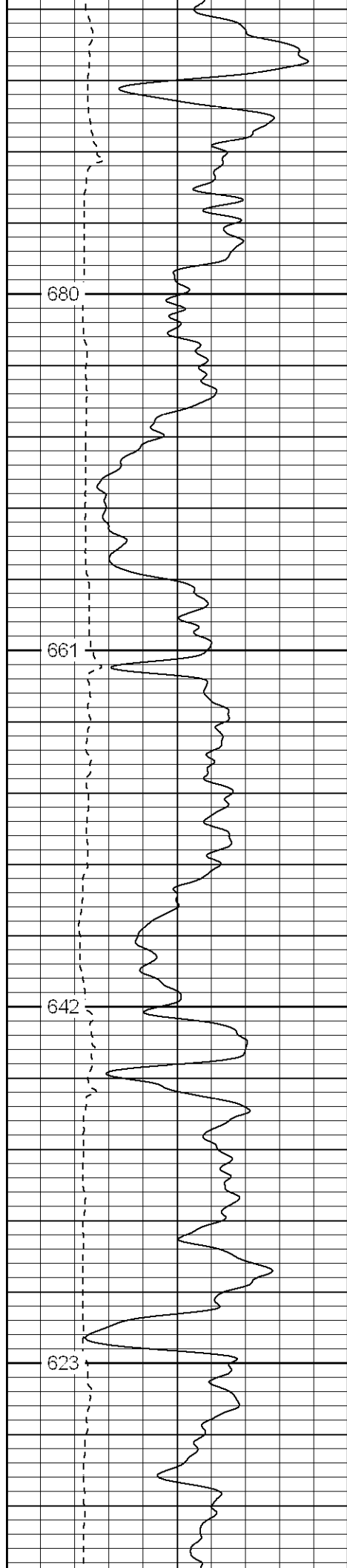
Main Pass

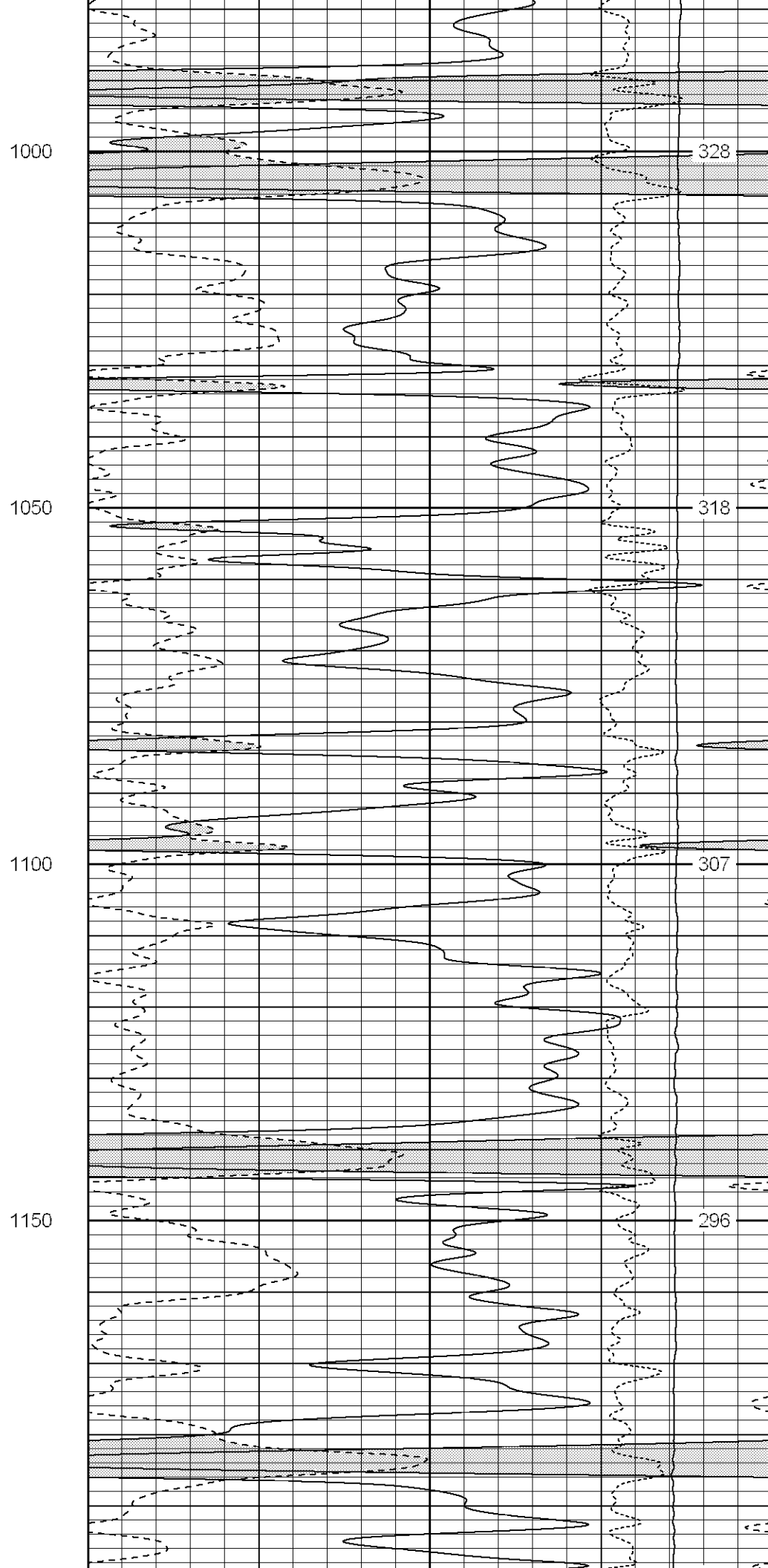
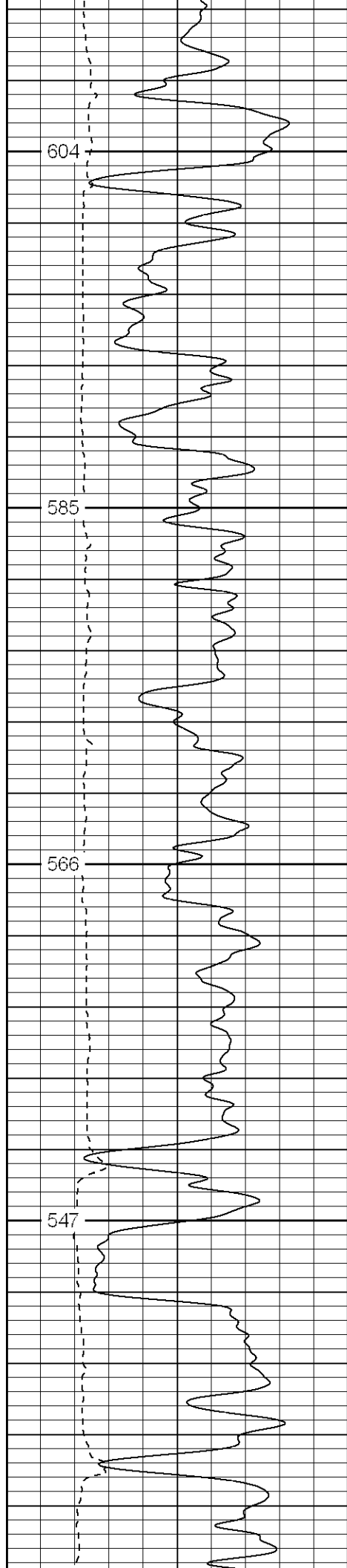
Database File: xtoac3114.db
Dataset Pathname: pass2.1
Presentation Format: cdnl
Dataset Creation: Sun Jun 24 01:01:33 2007 by Calc Open-Cased 070508
Charted by: Depth in Feet scaled 1:240

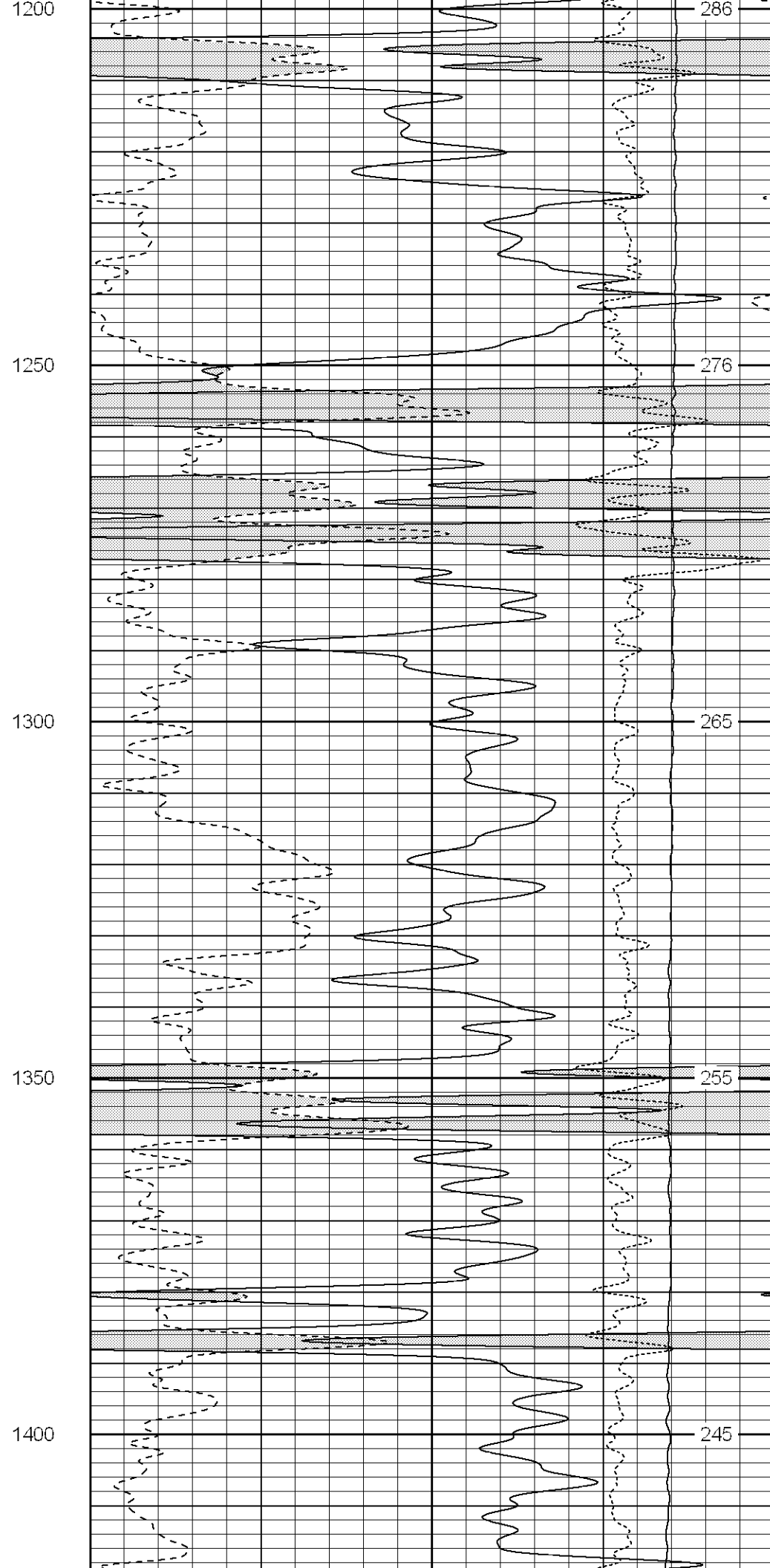
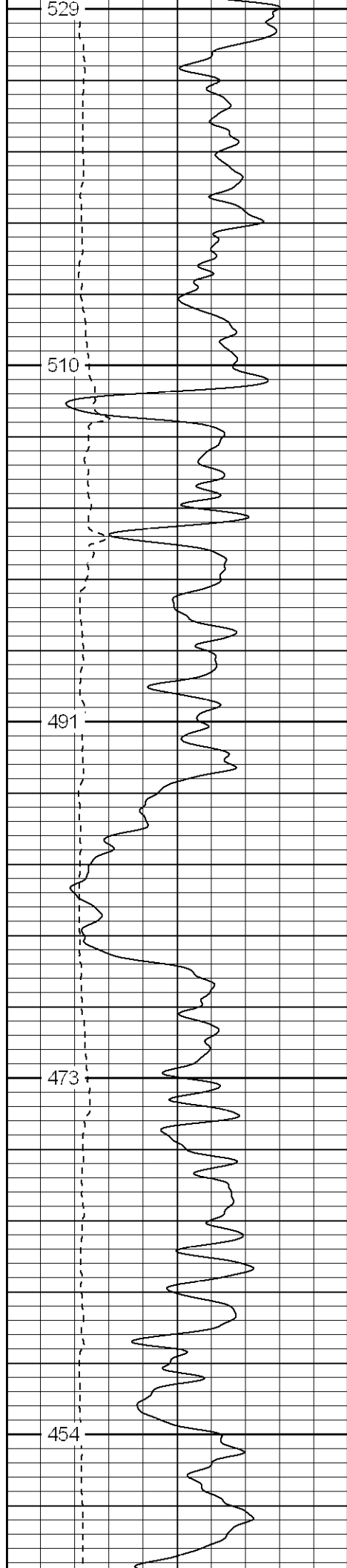
| | | | | | |
|------------|-----------|-----|------|-------------|-----|
| 0 | GR (GAPI) | 200 | 30 | NPOR (pu) | -10 |
| 6 | DCAL (in) | 16 | 30 | DPOR (pu) | -10 |
| TBHV (ft3) | | | -0.5 | RHOC (g/cc) | 0.5 |
| | | | 4000 | LTEN (lb) | 0 |
| | | | | ABHV (ft3) | |

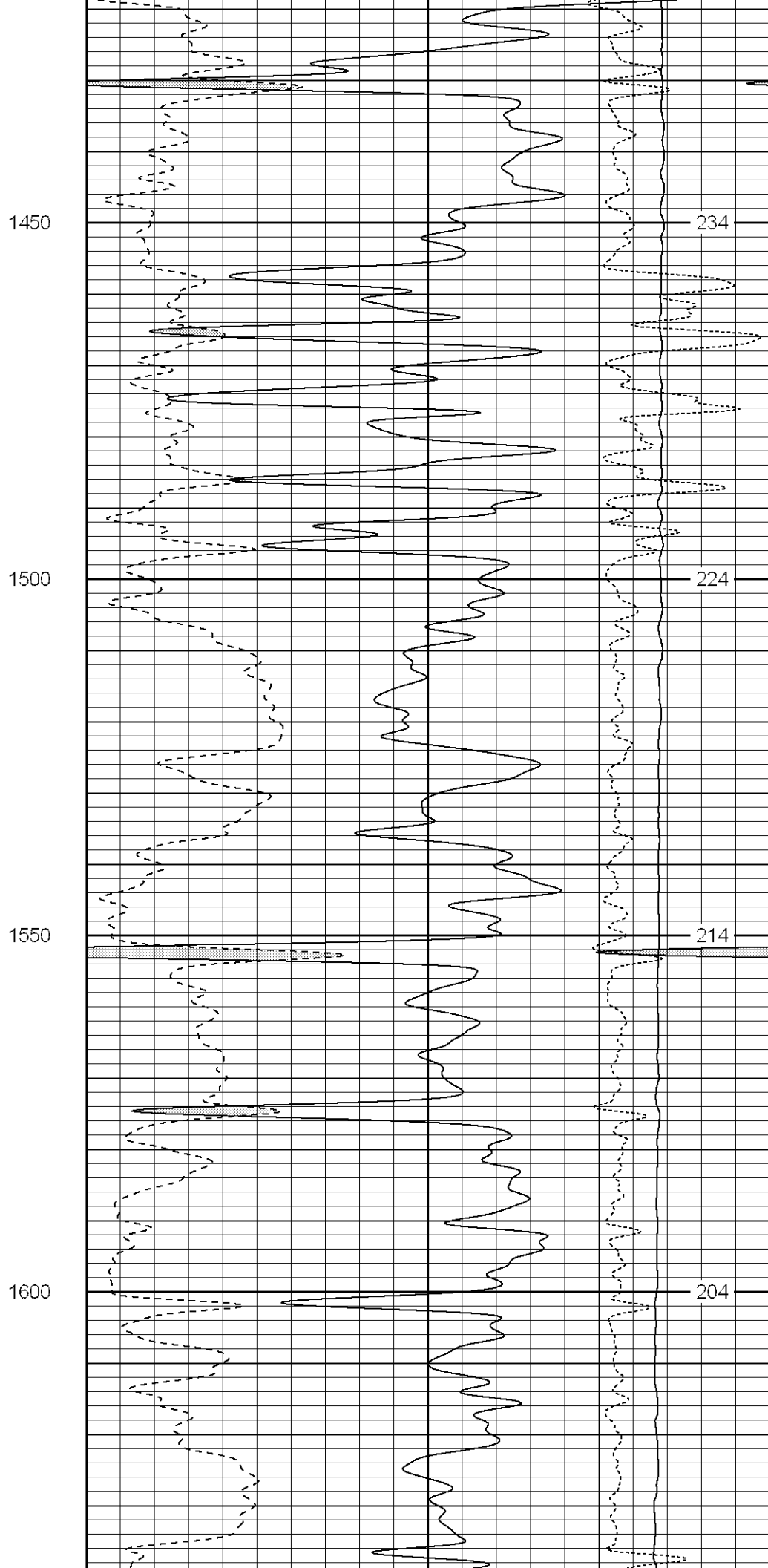
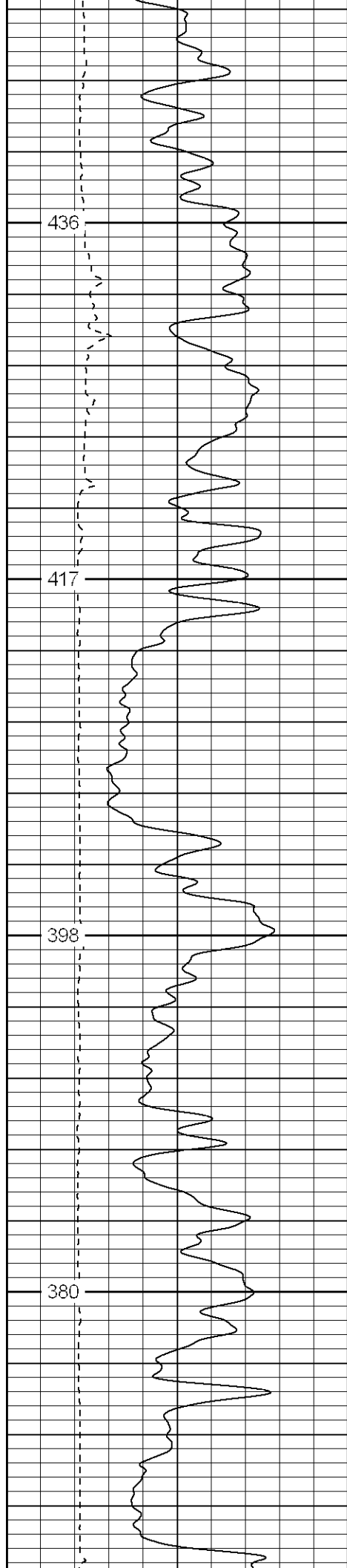


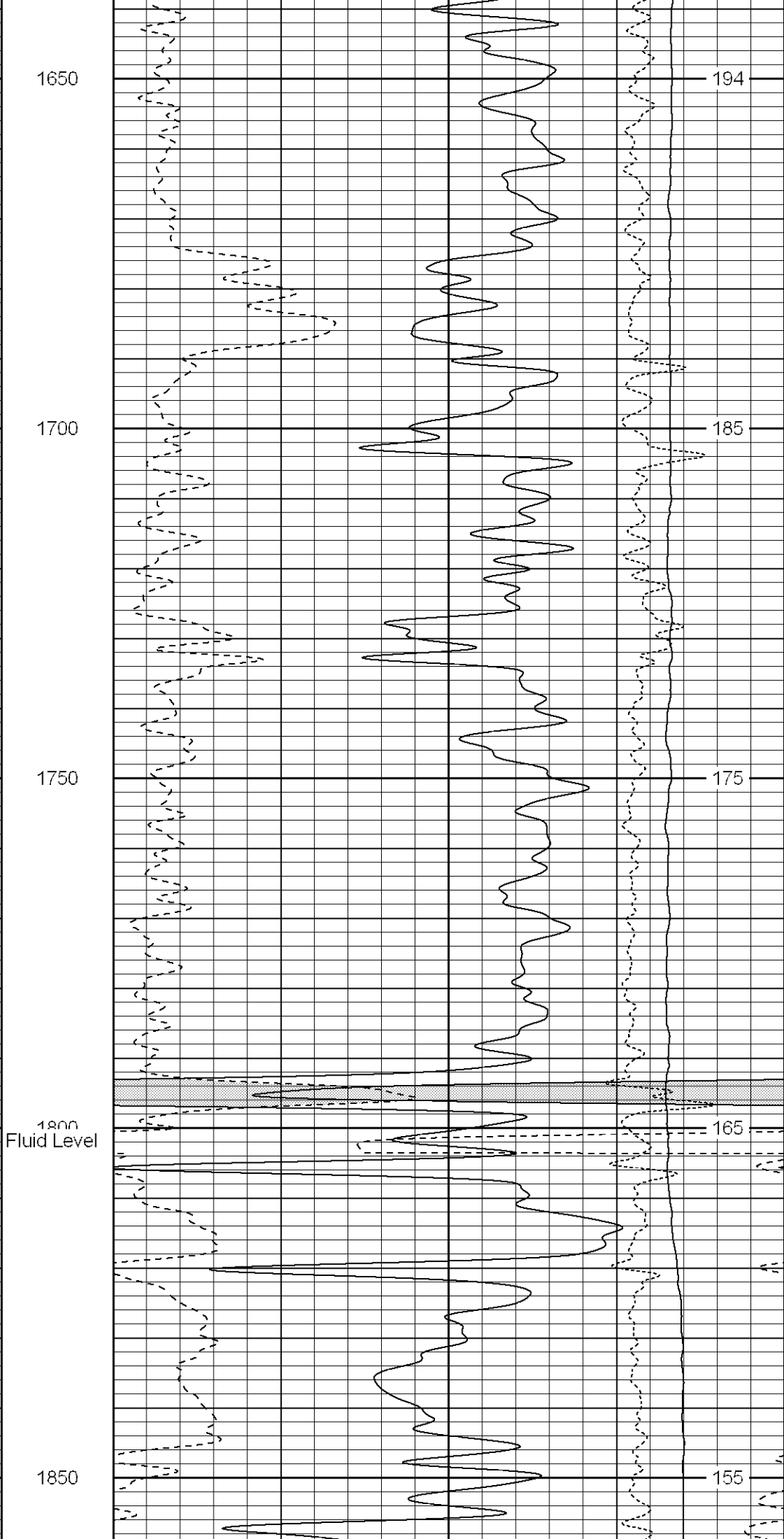
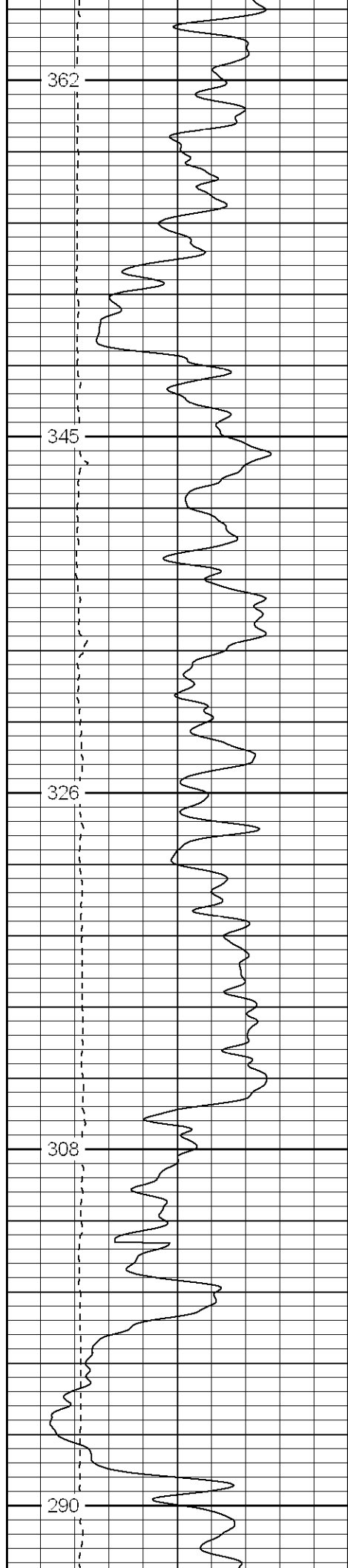


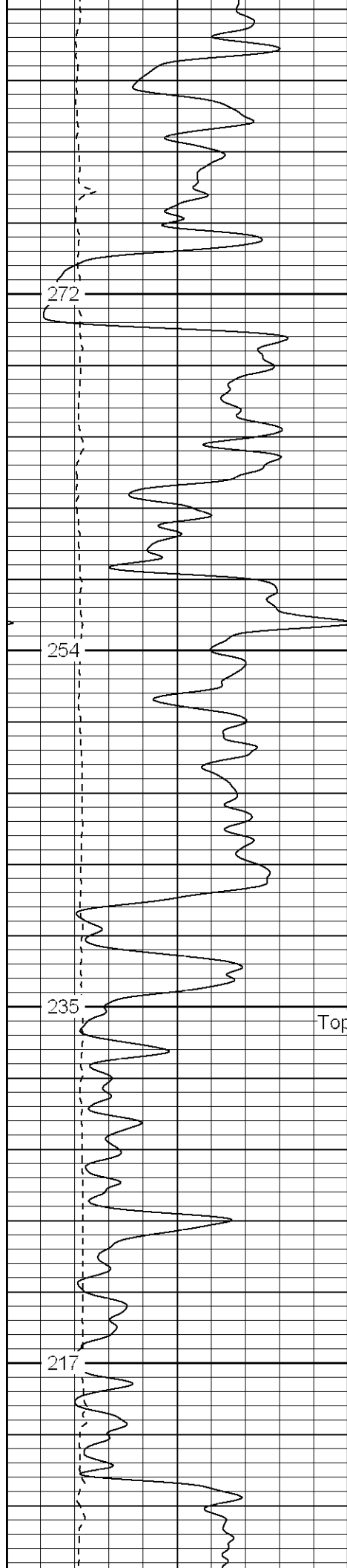










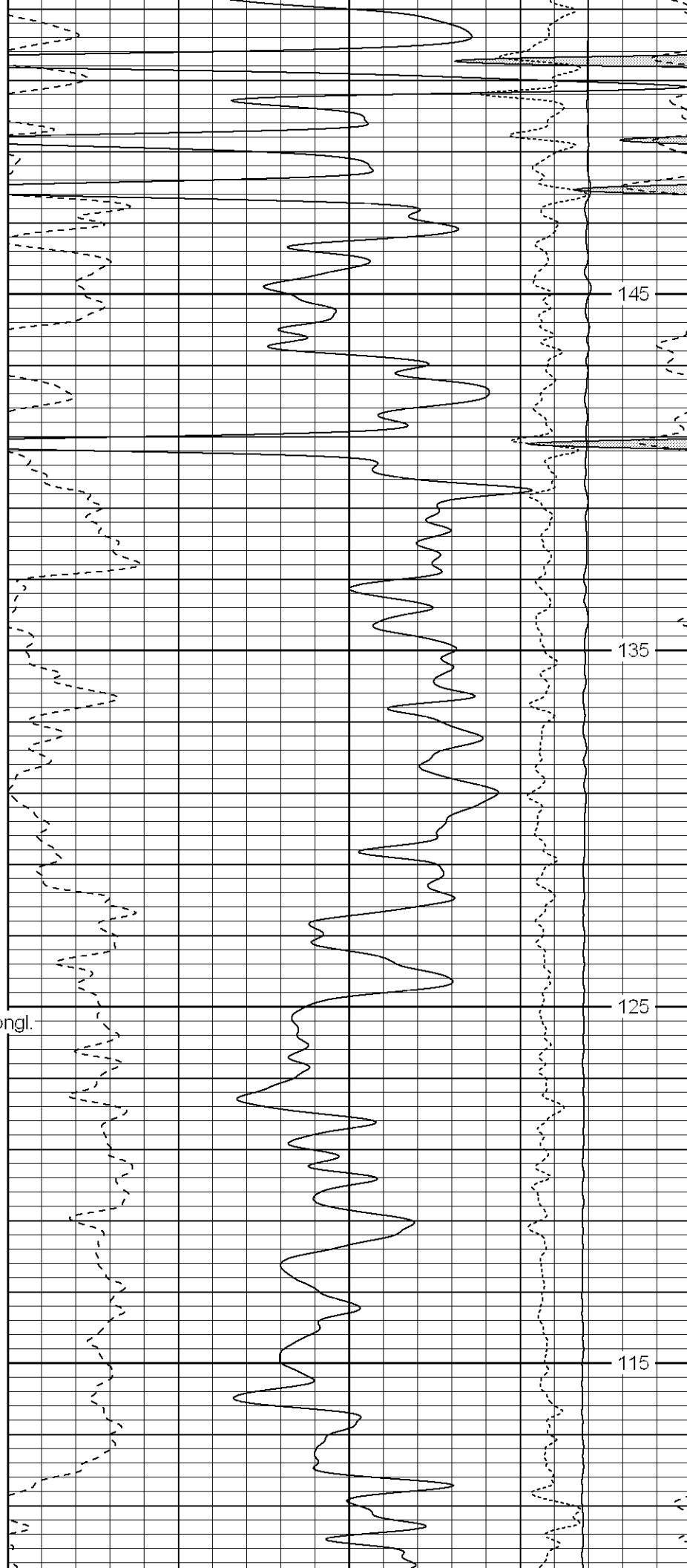


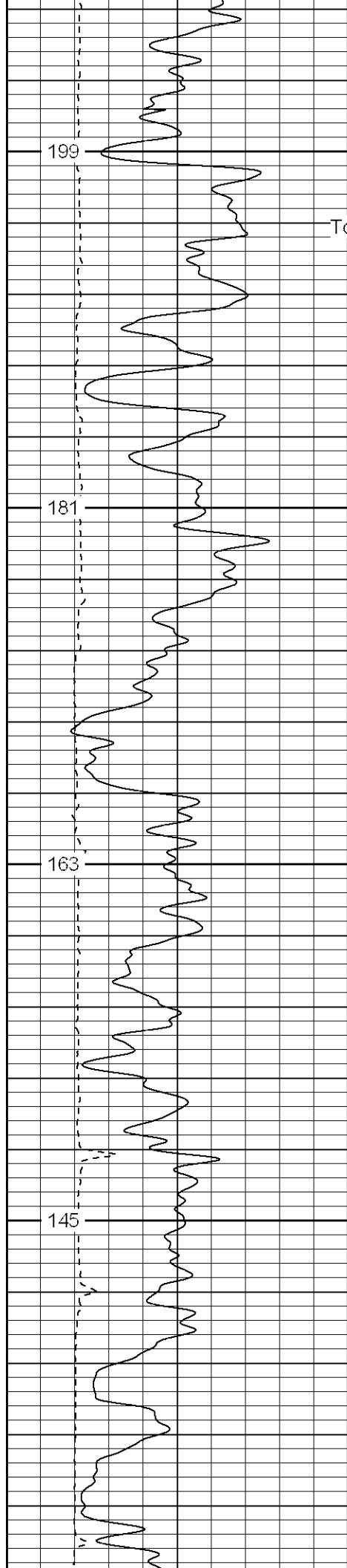
1900

1950

2000
Top of Raton congl.

2050





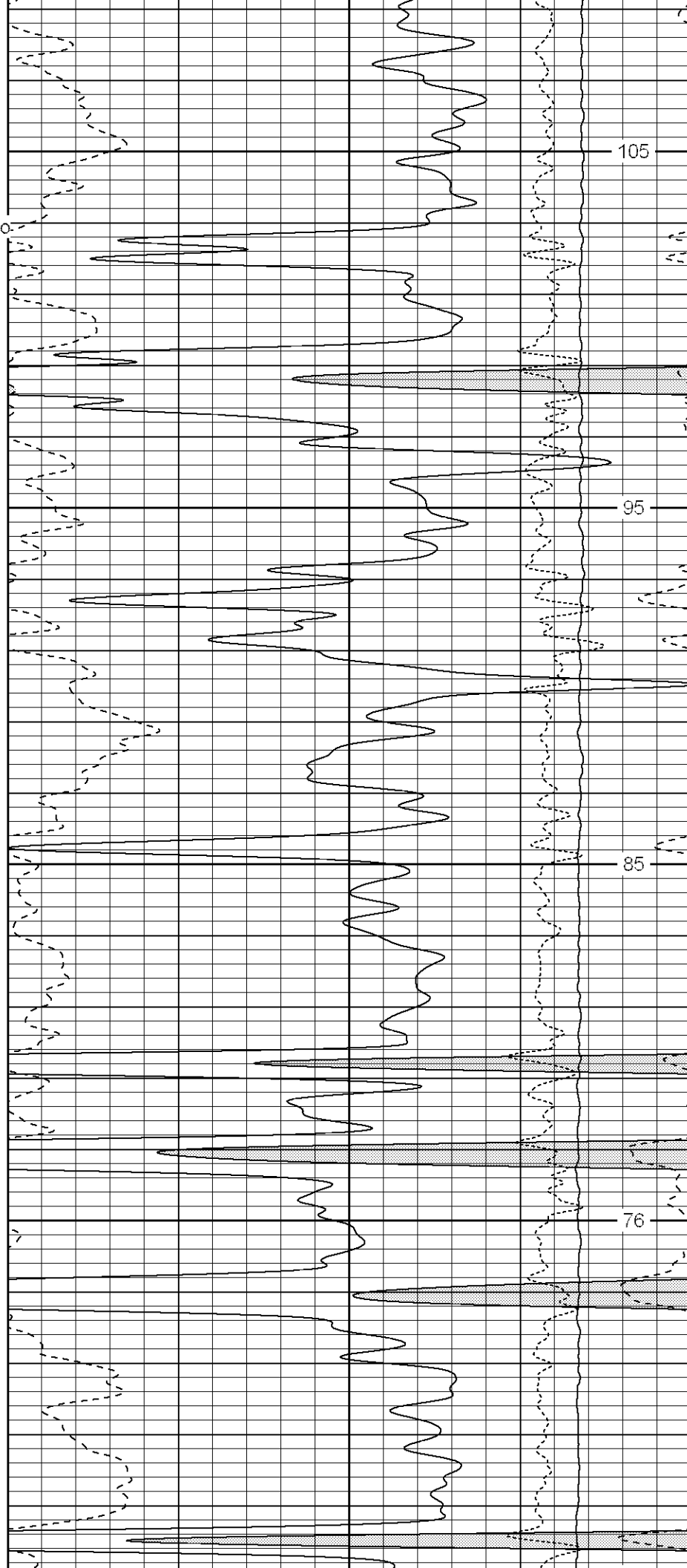
Top of Vermejo

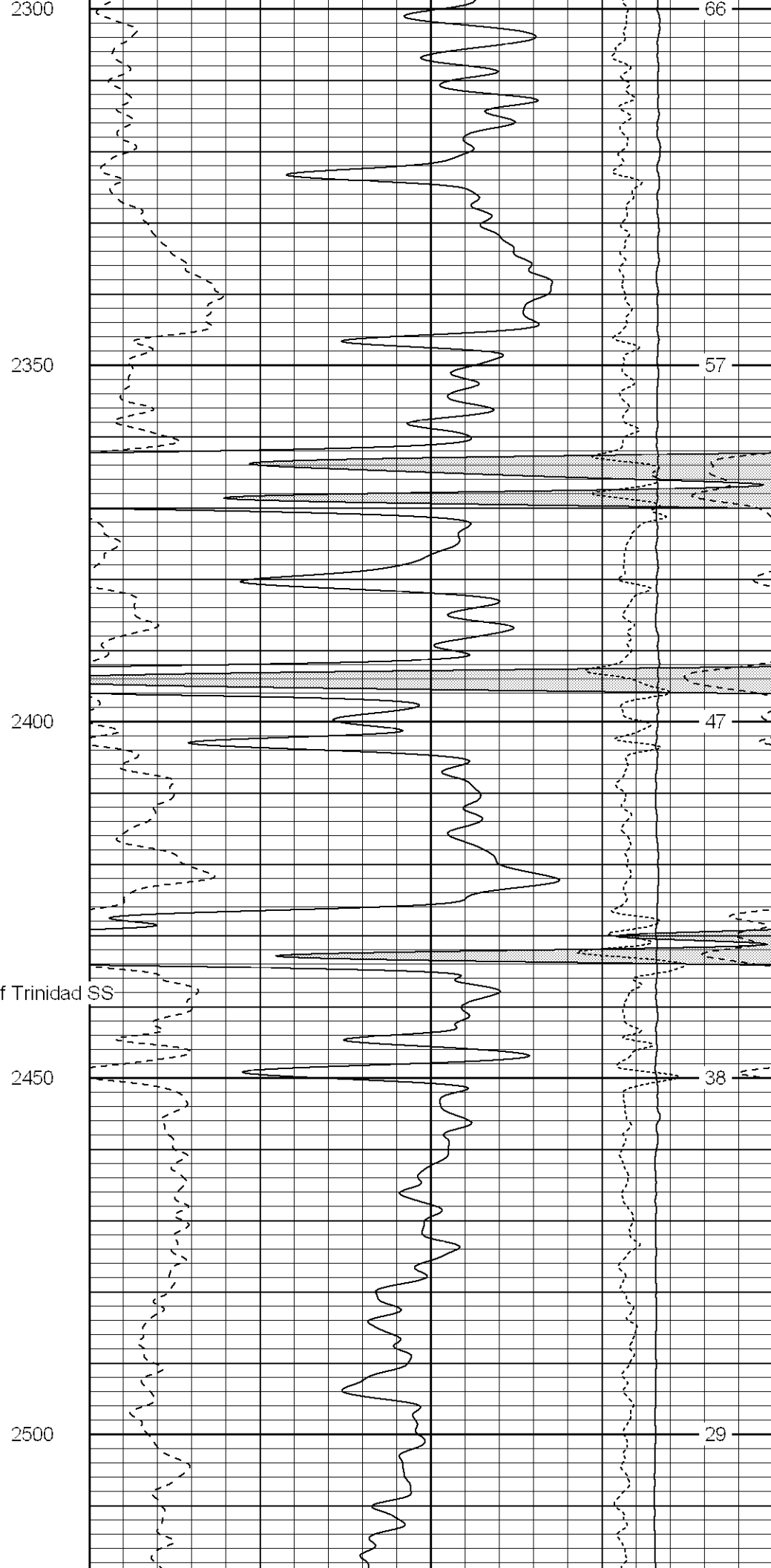
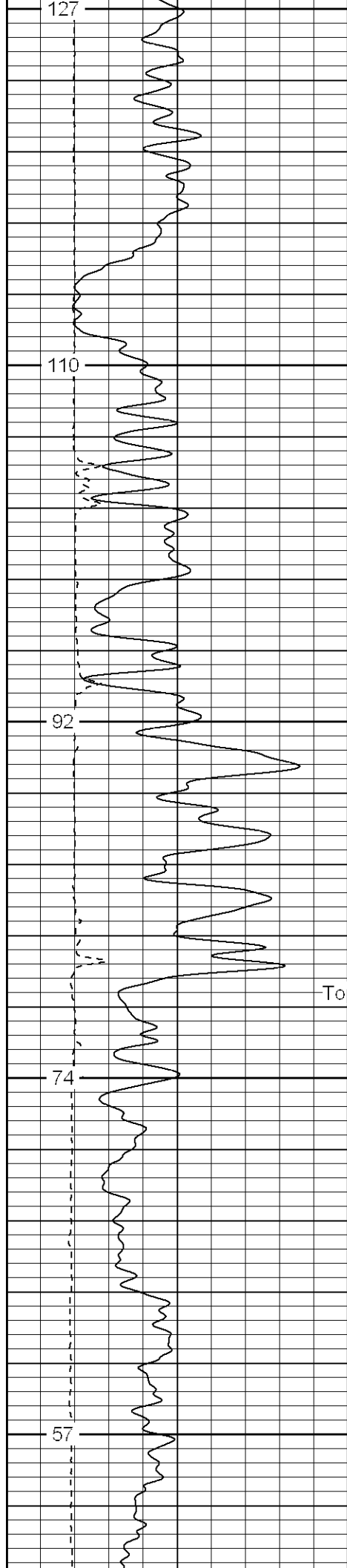
2100

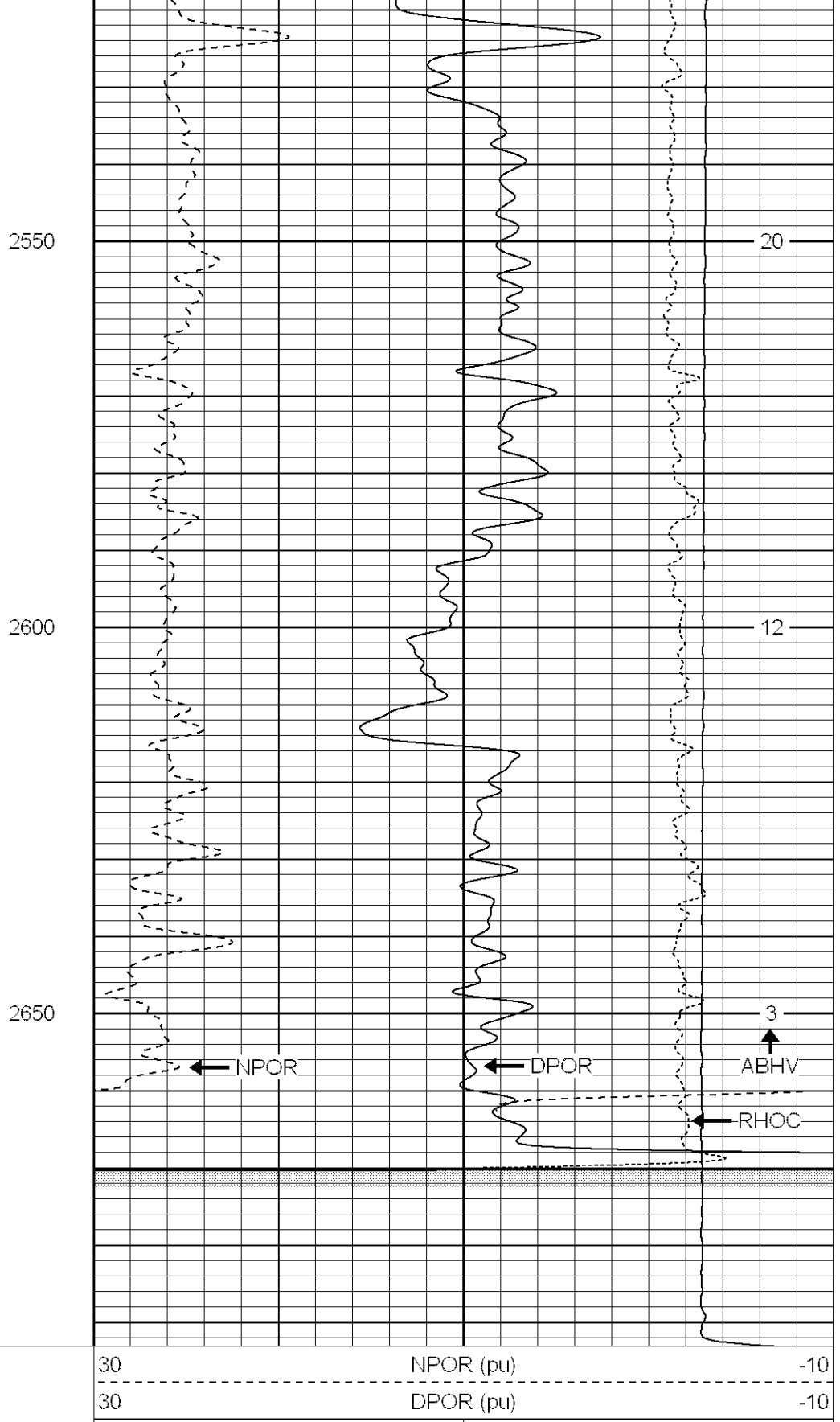
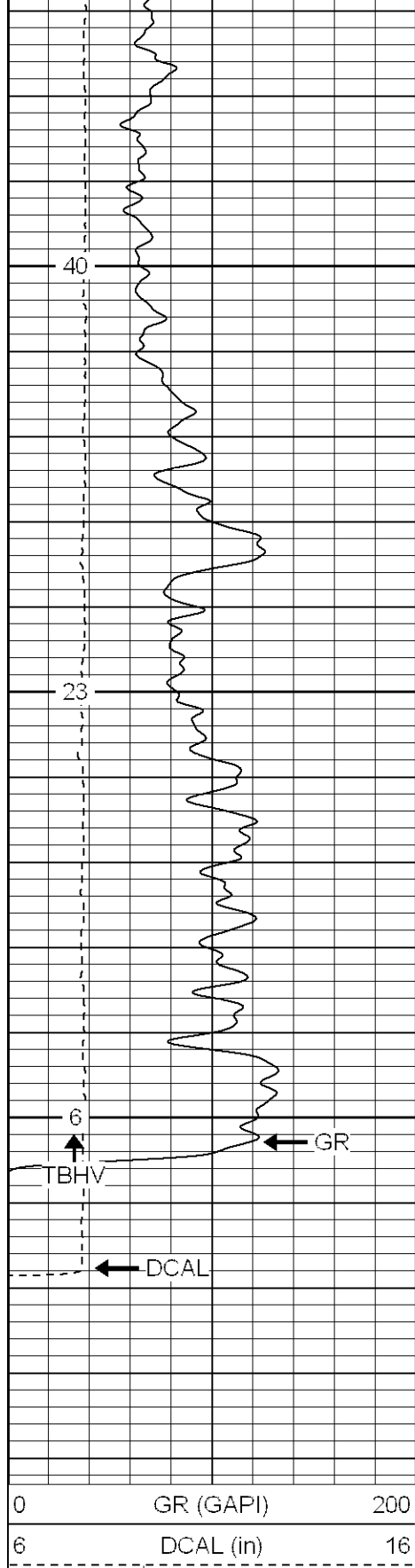
2150

2200

2250







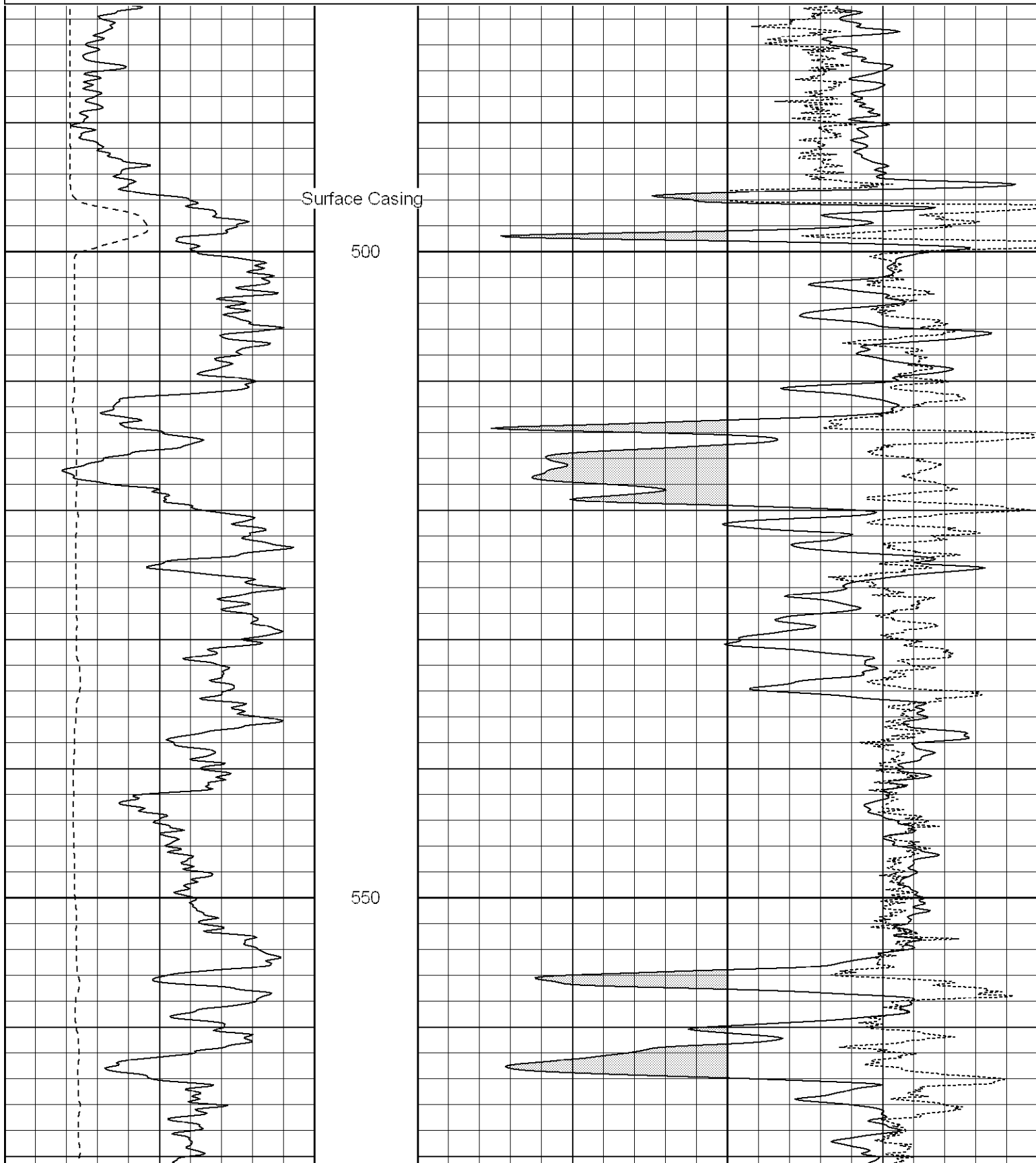
SUPERIOR
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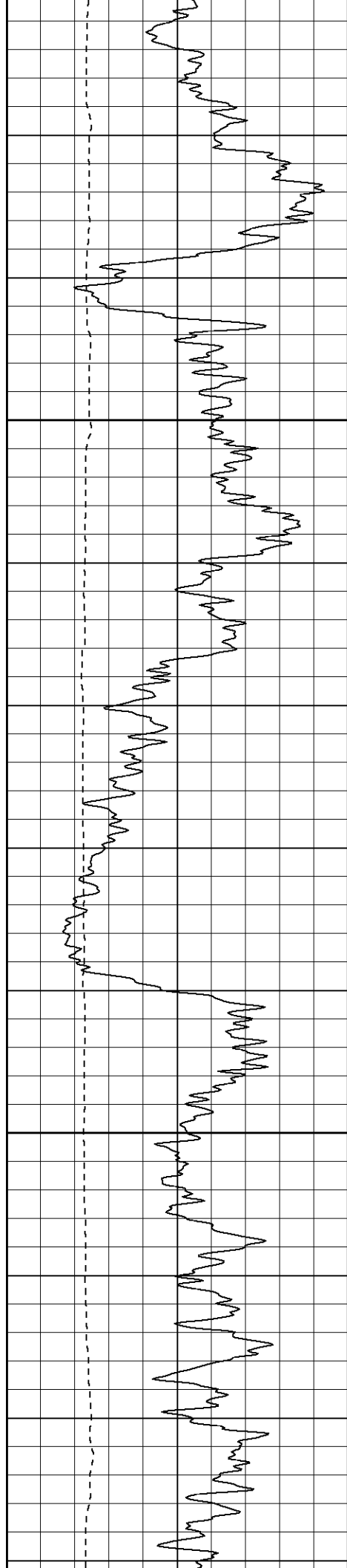
High Resolution Pass

Database File: xtoac3114.db
Dataset Pathname: pass2.3
Presentation Format: cdlhr
Dataset Creation: Mon Jun 25 08:32:53 2007 by Calc Open-Cased 070508
Charted by: Depth in Feet scaled 1:120

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

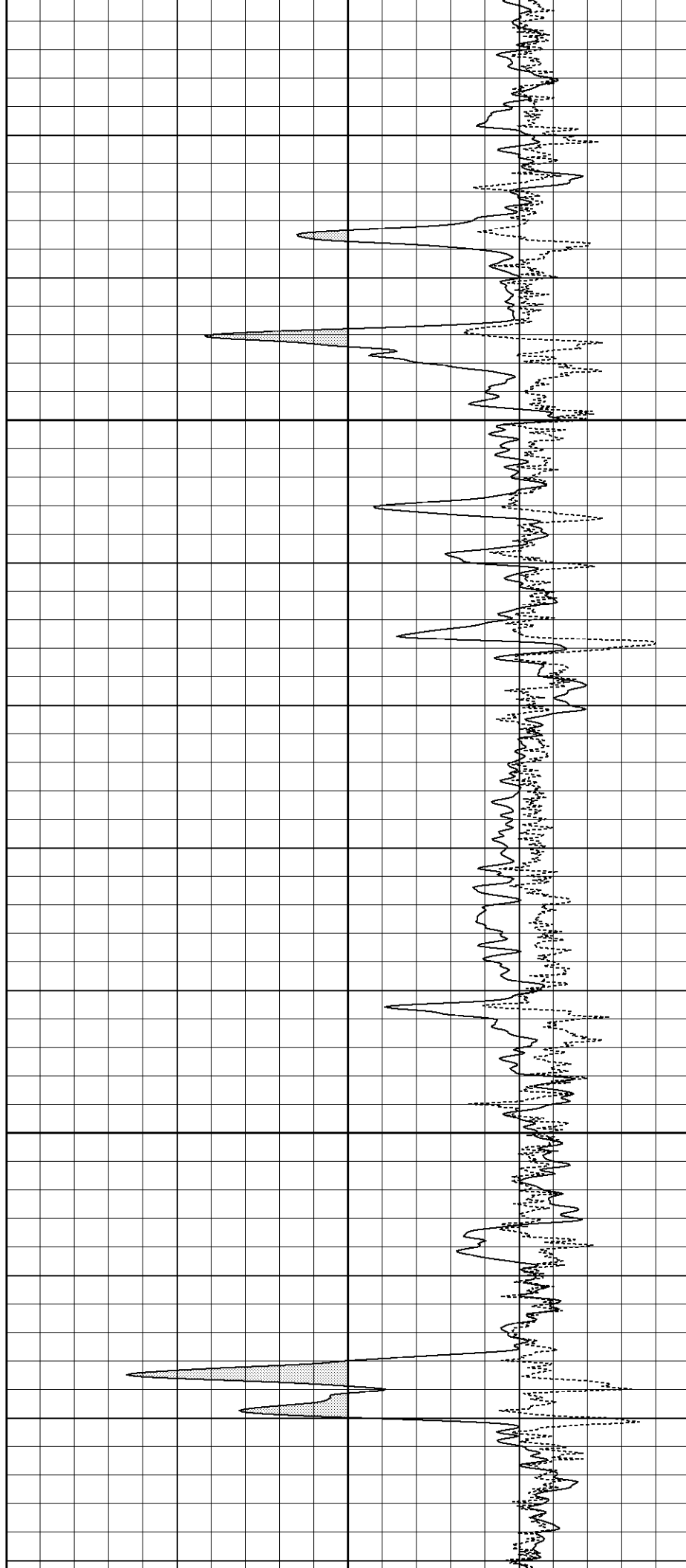
| | | |
|------|-------------|-----|
| 1 | RHOB (g/cc) | 3 |
| -0.5 | RHOC (g/cc) | 0.5 |

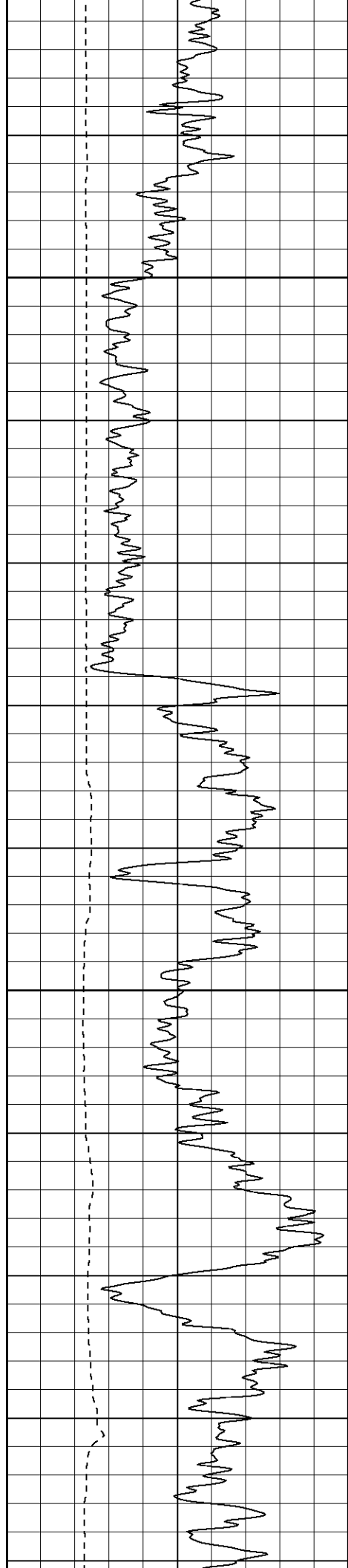




600

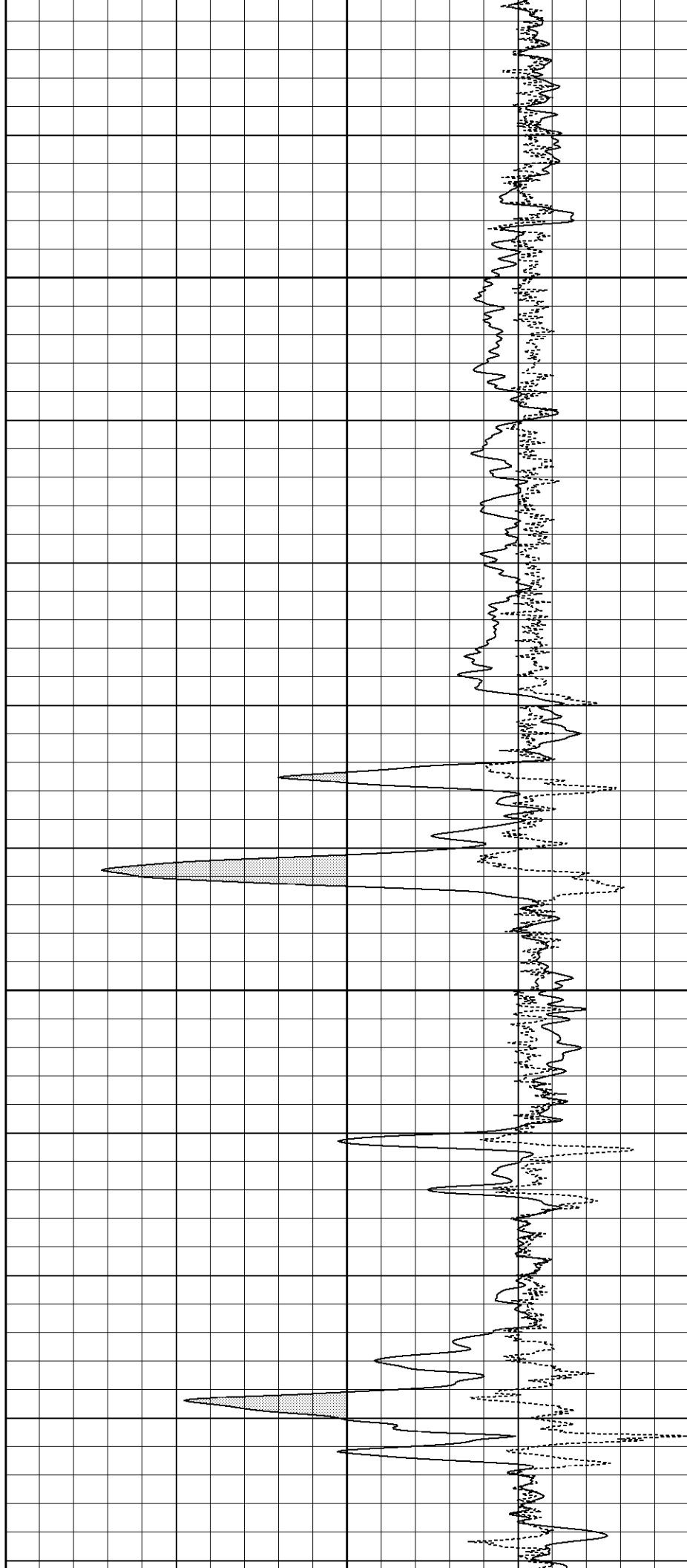
650

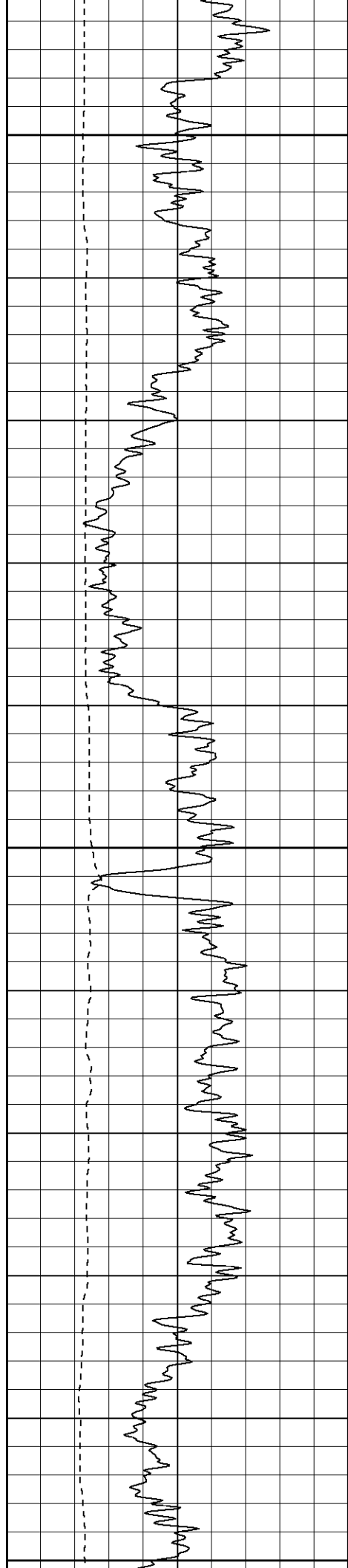




700

750

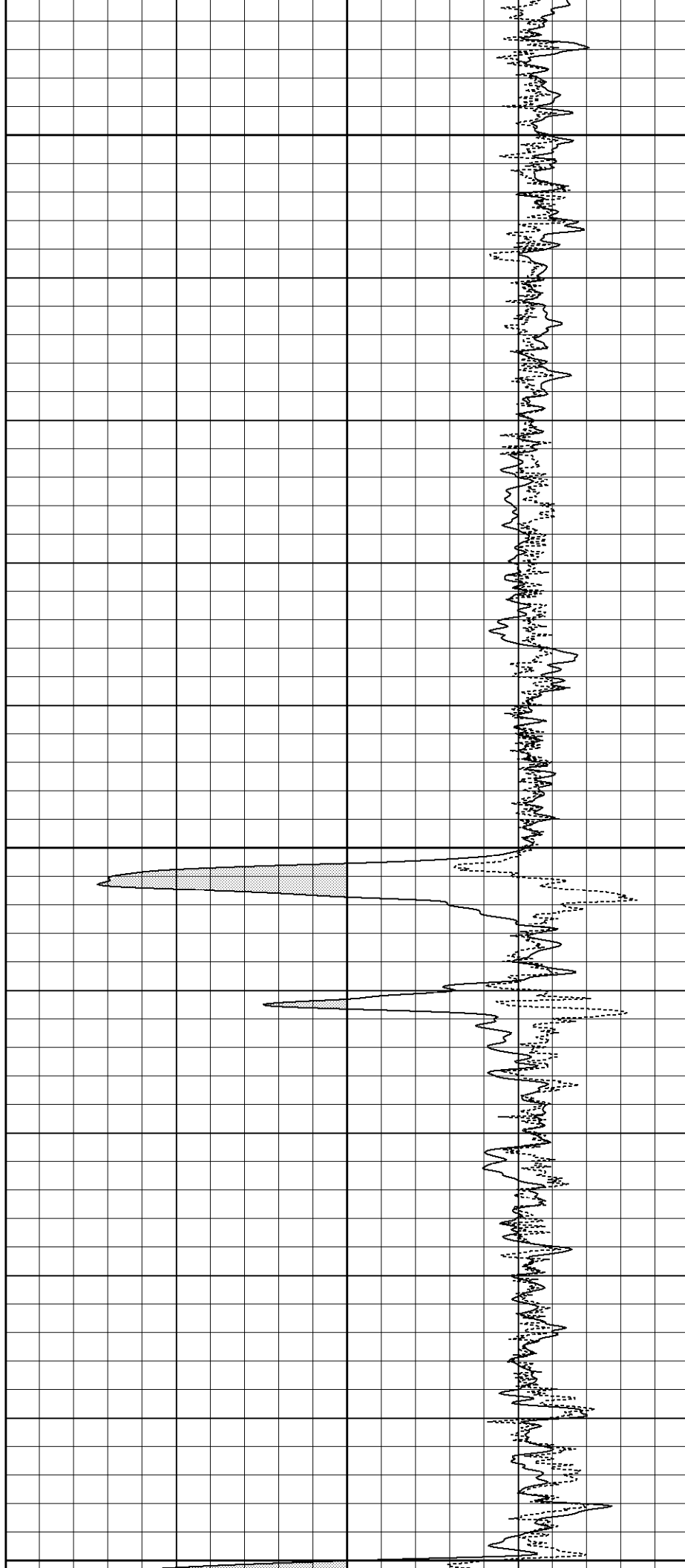


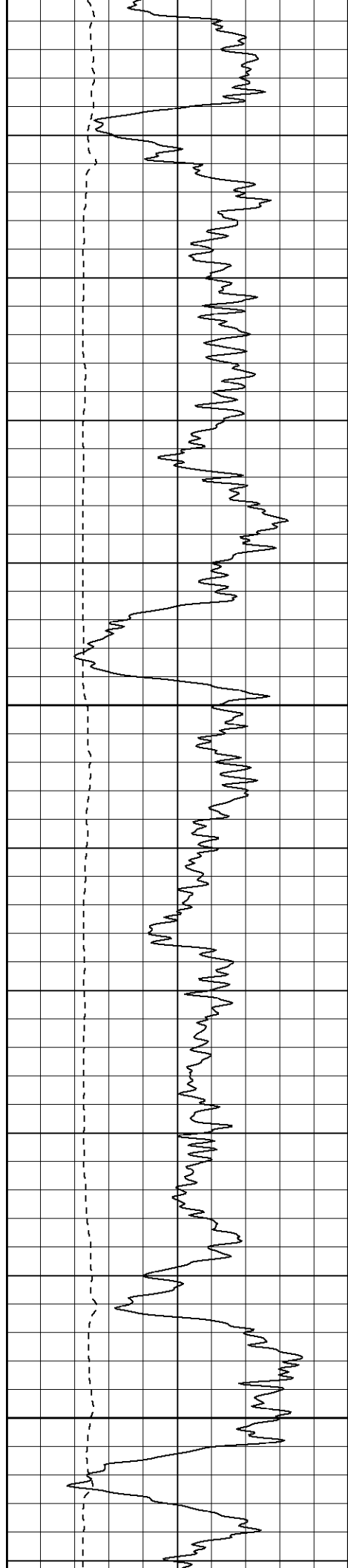


800

850

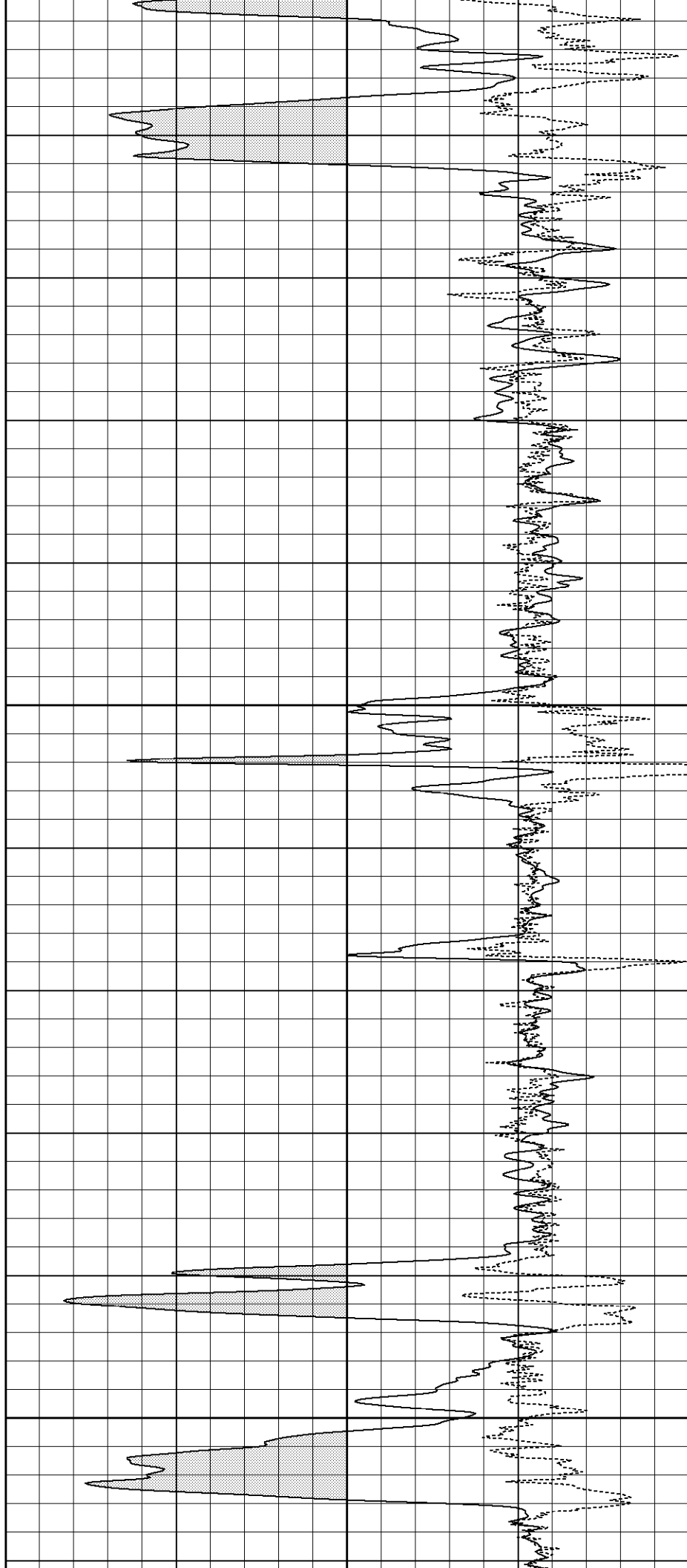
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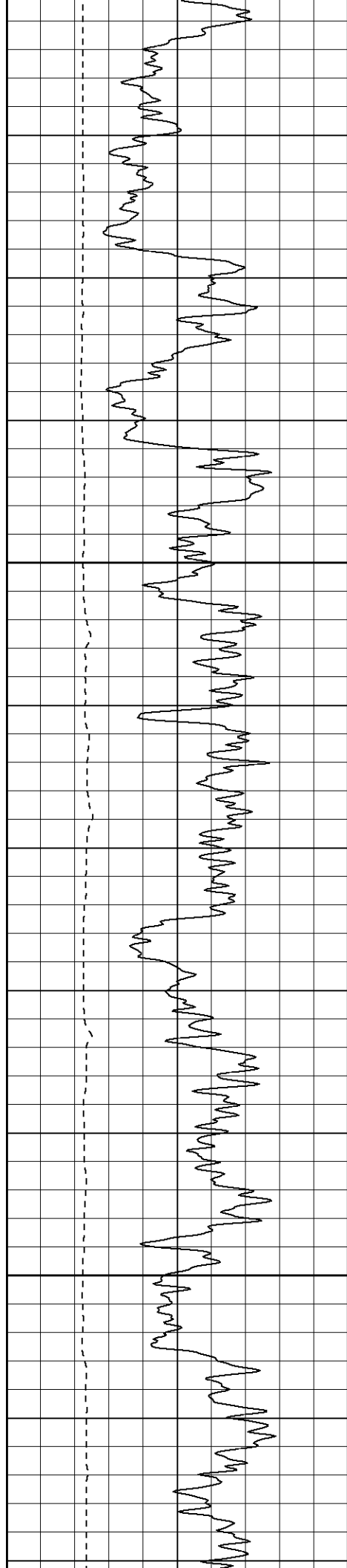




950

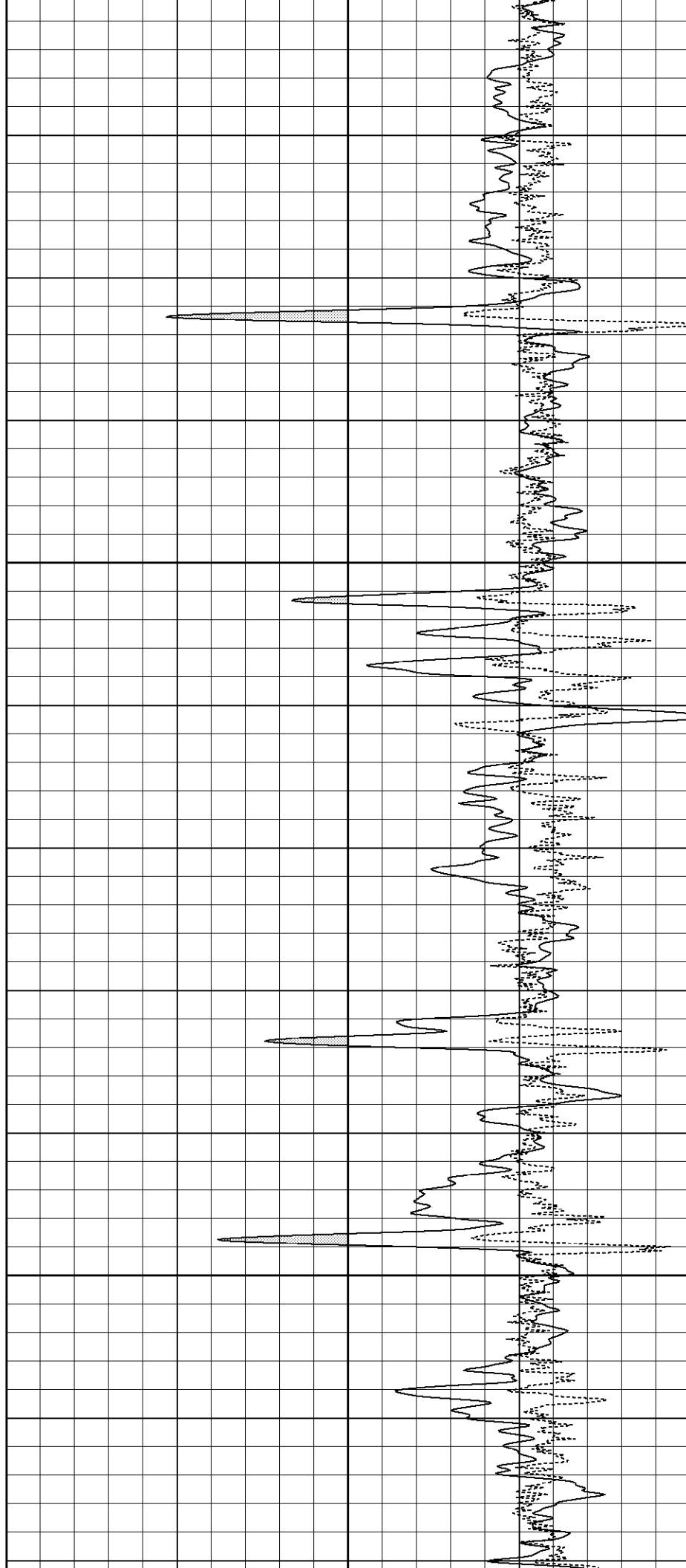
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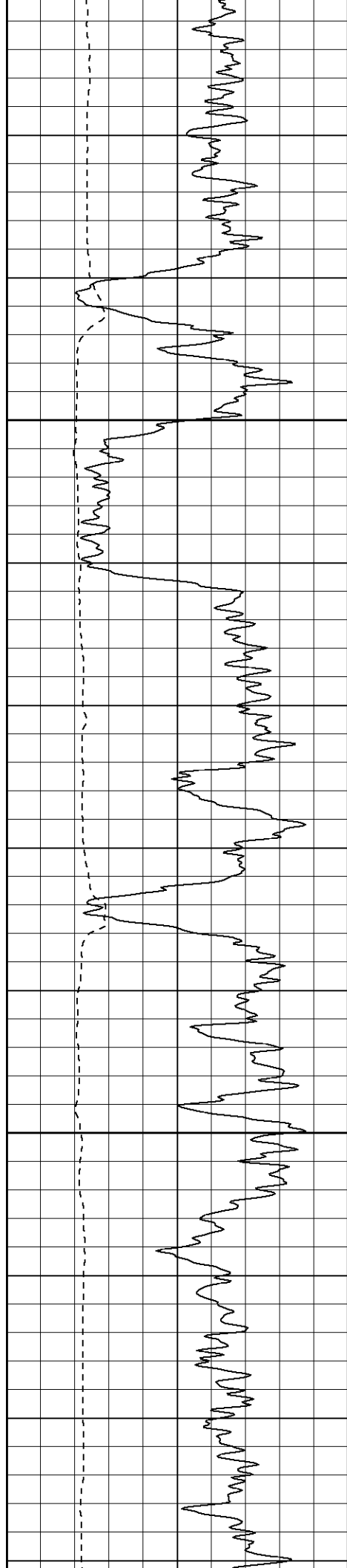




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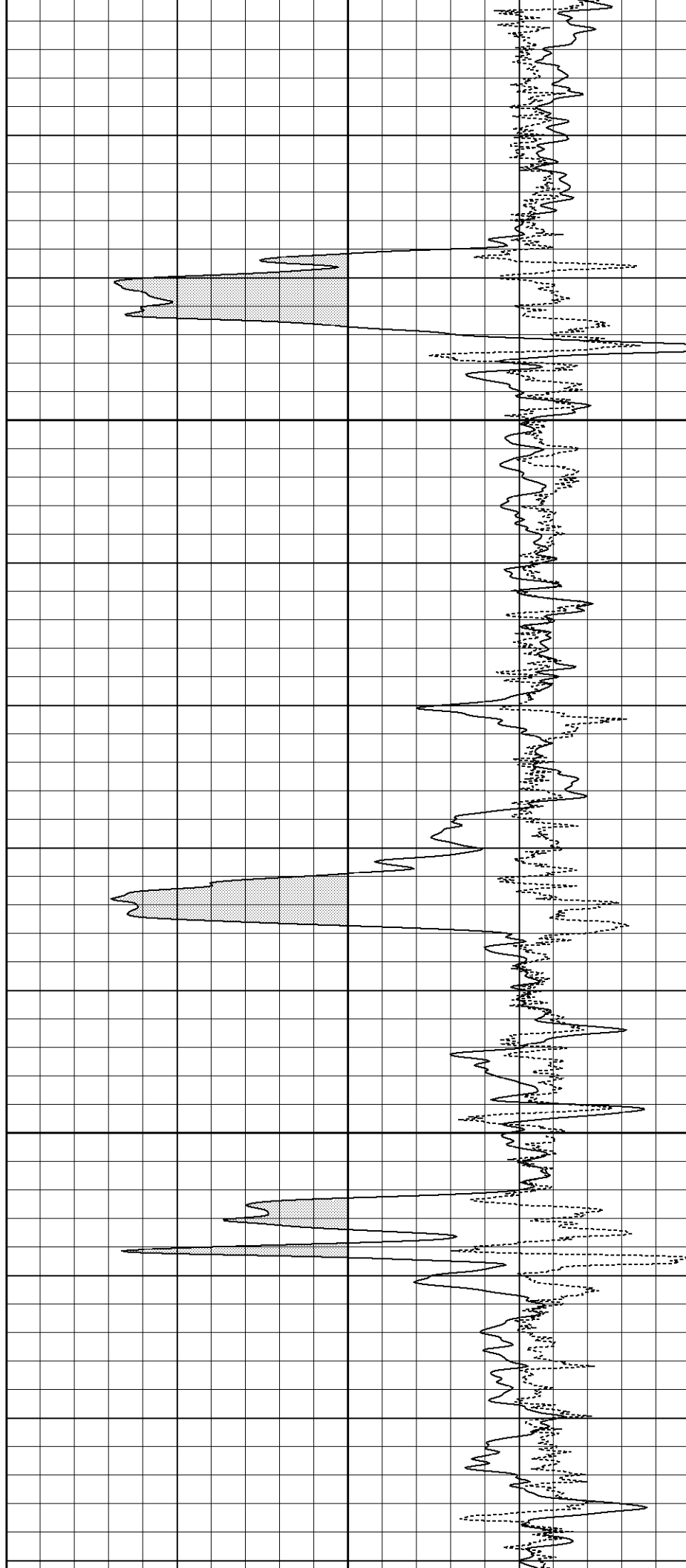
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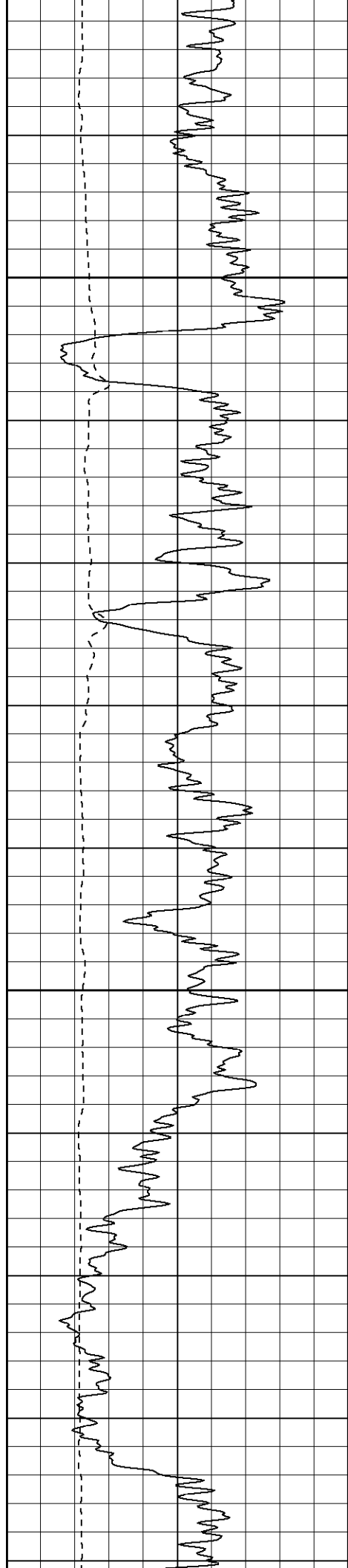




1150

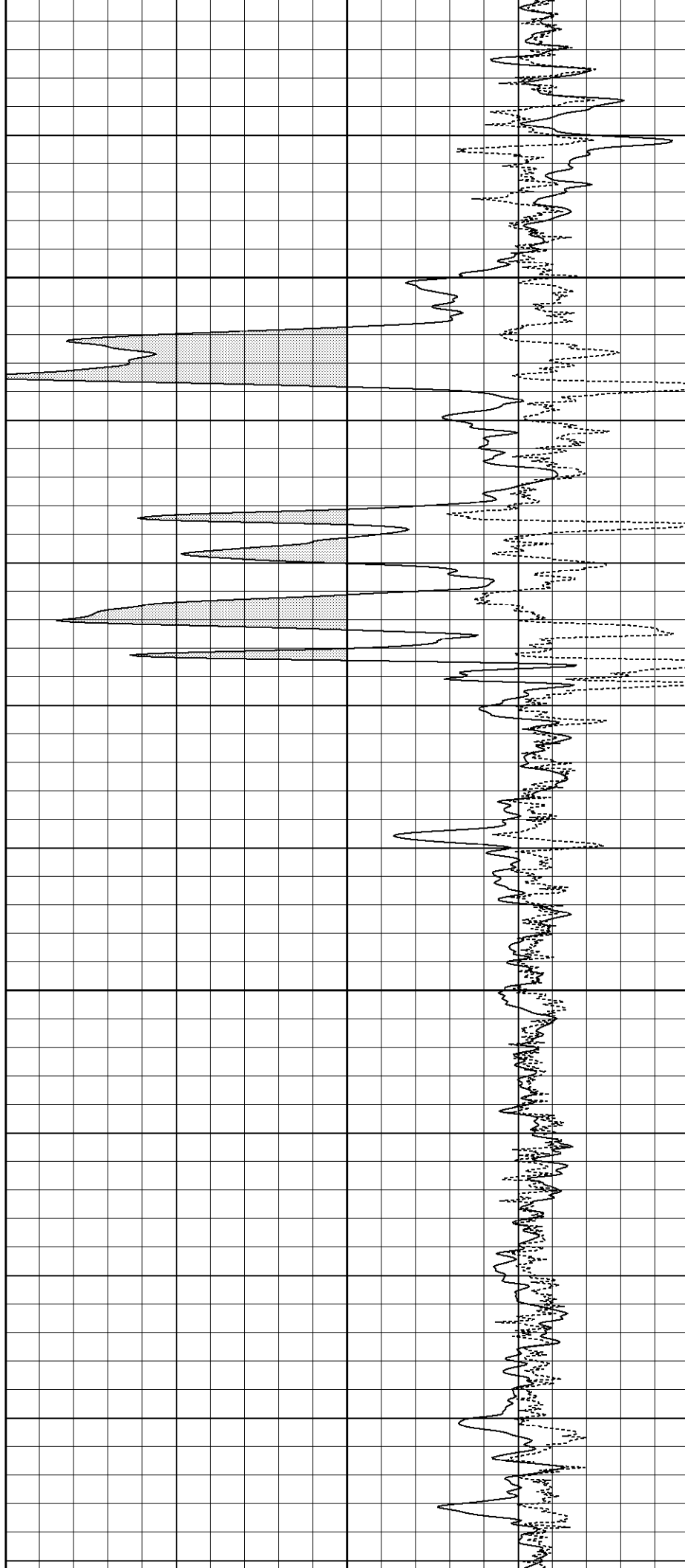
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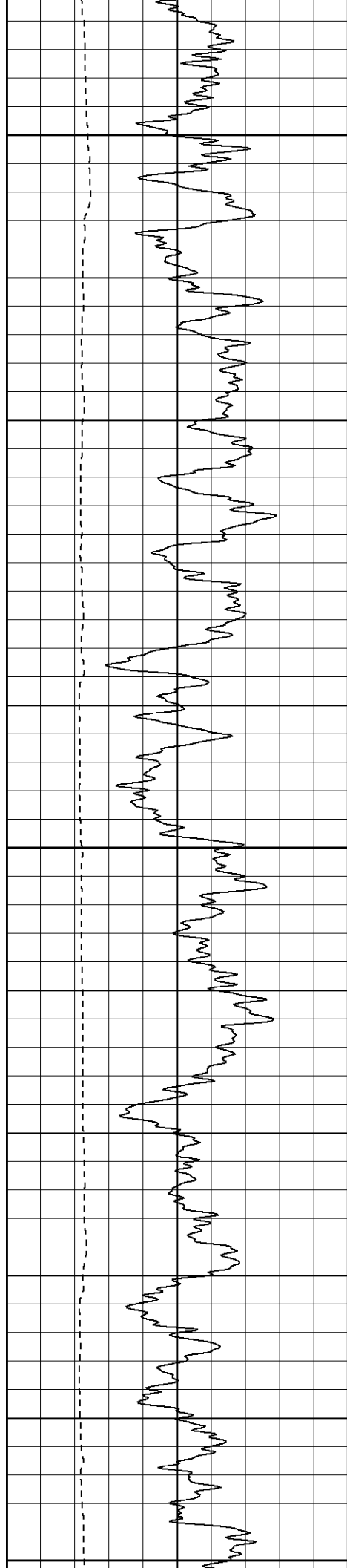




1250

1300

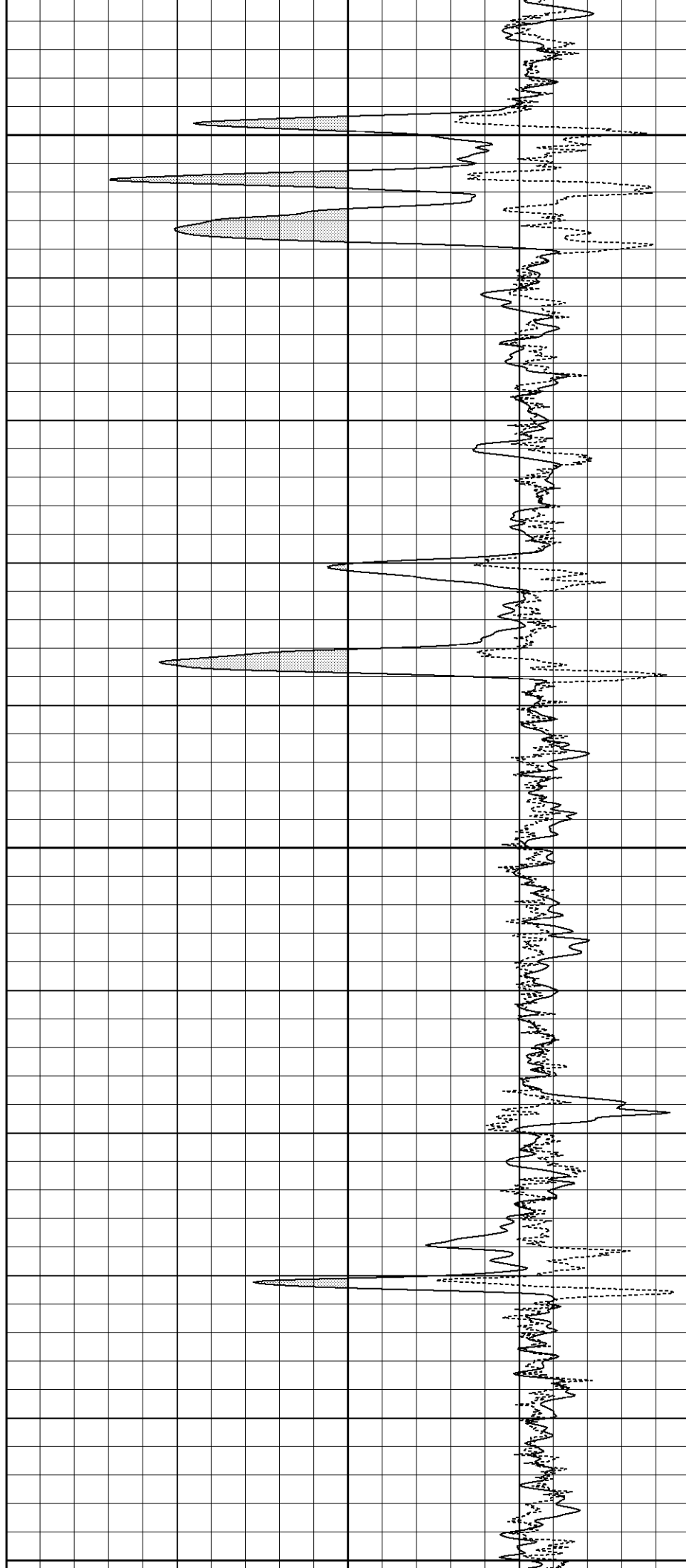


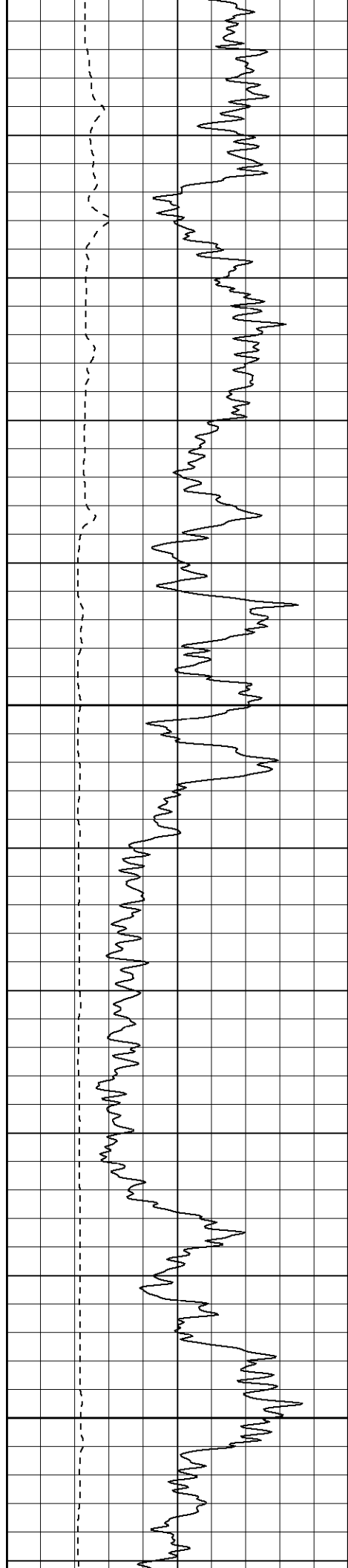


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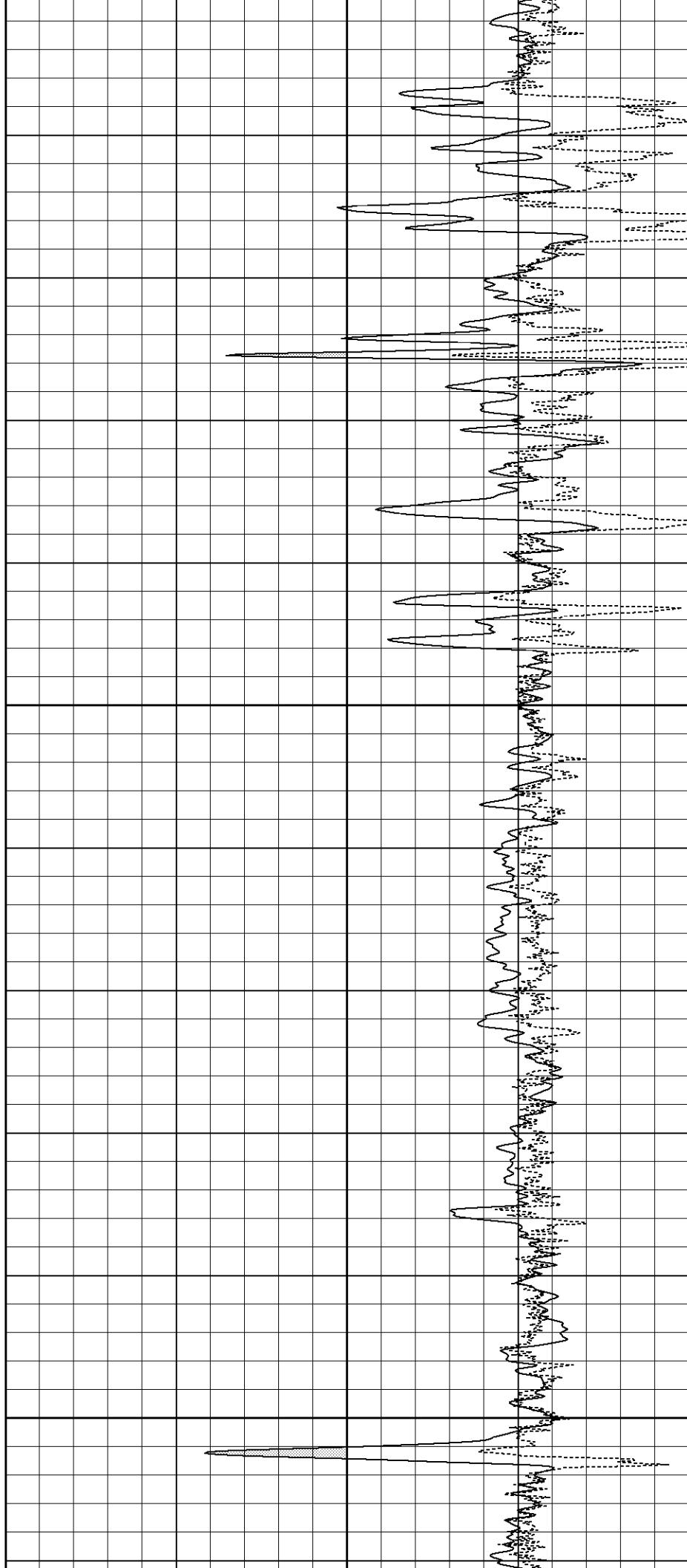
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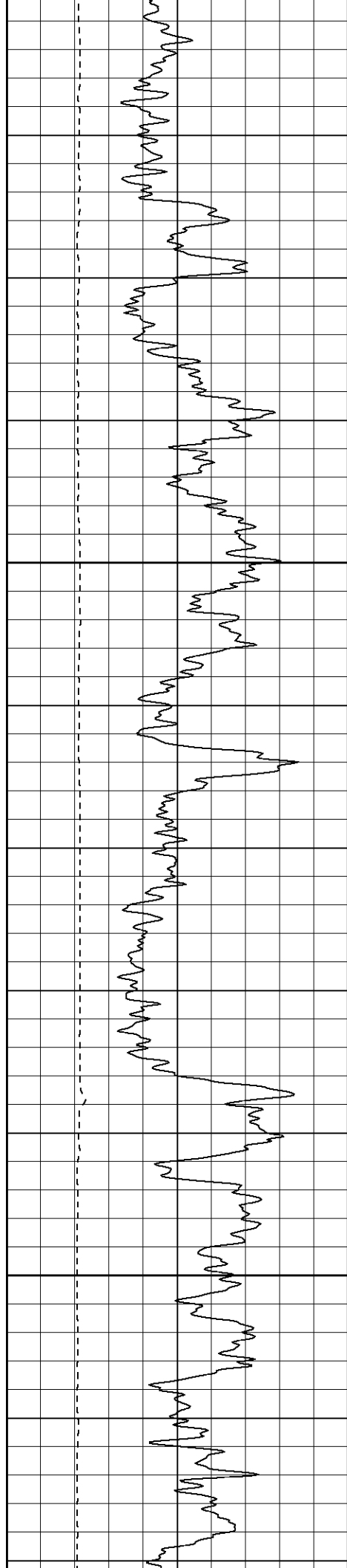




1500

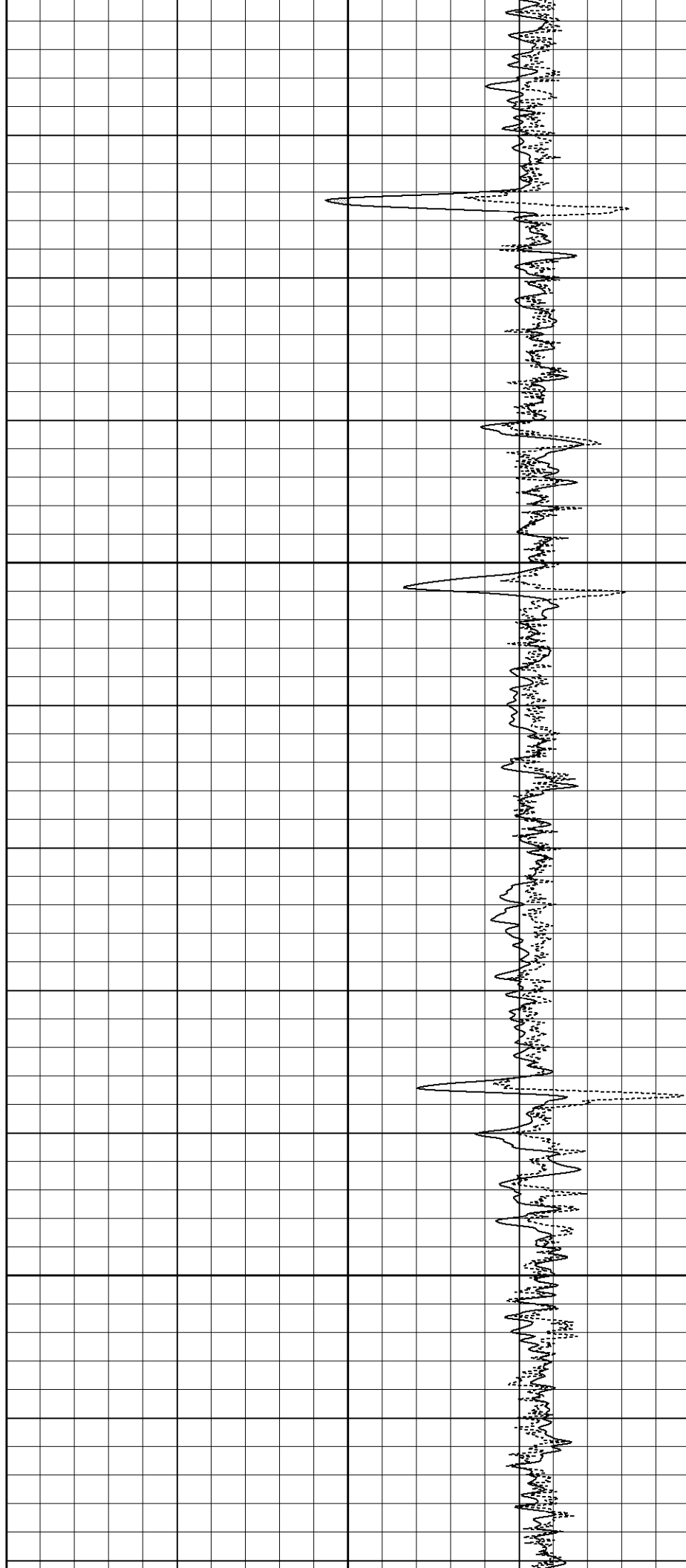
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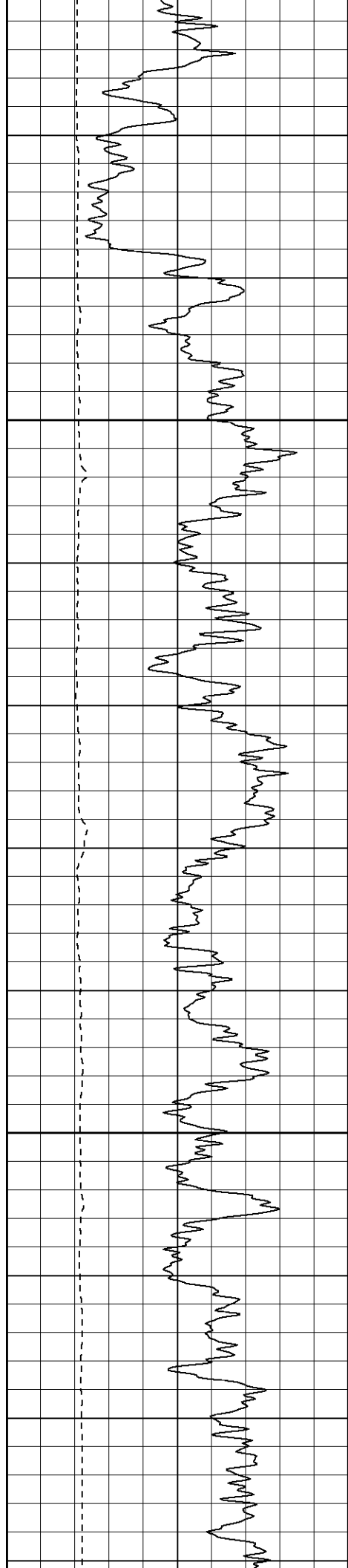




1600

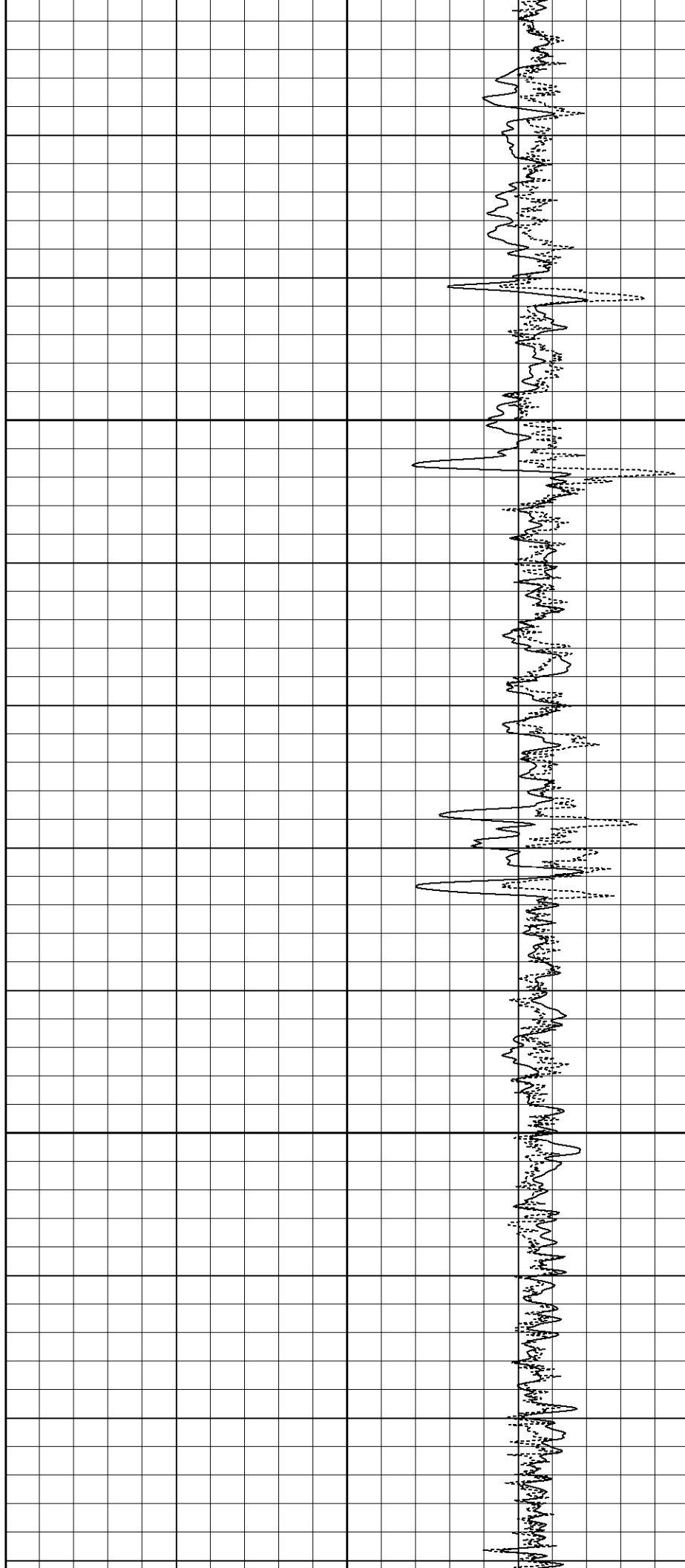
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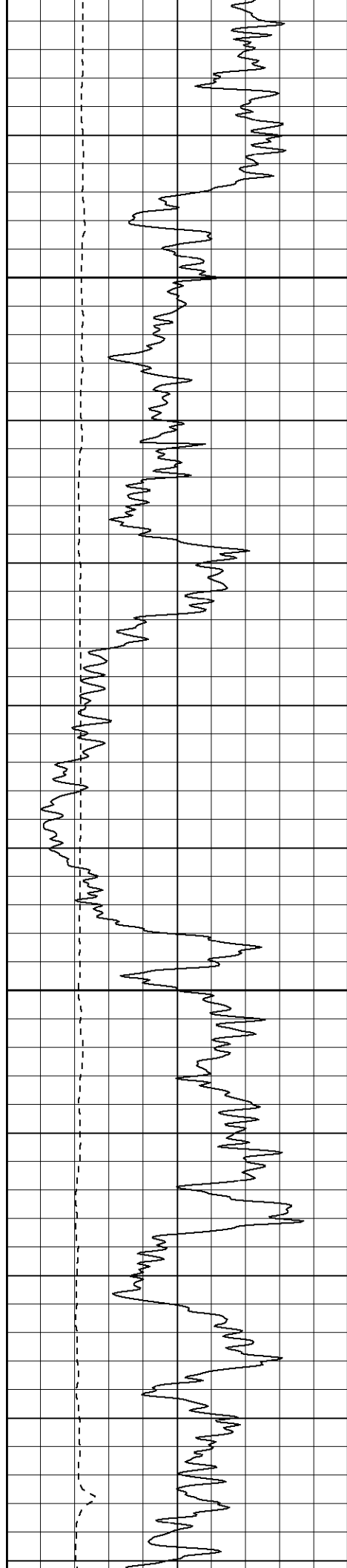




1700

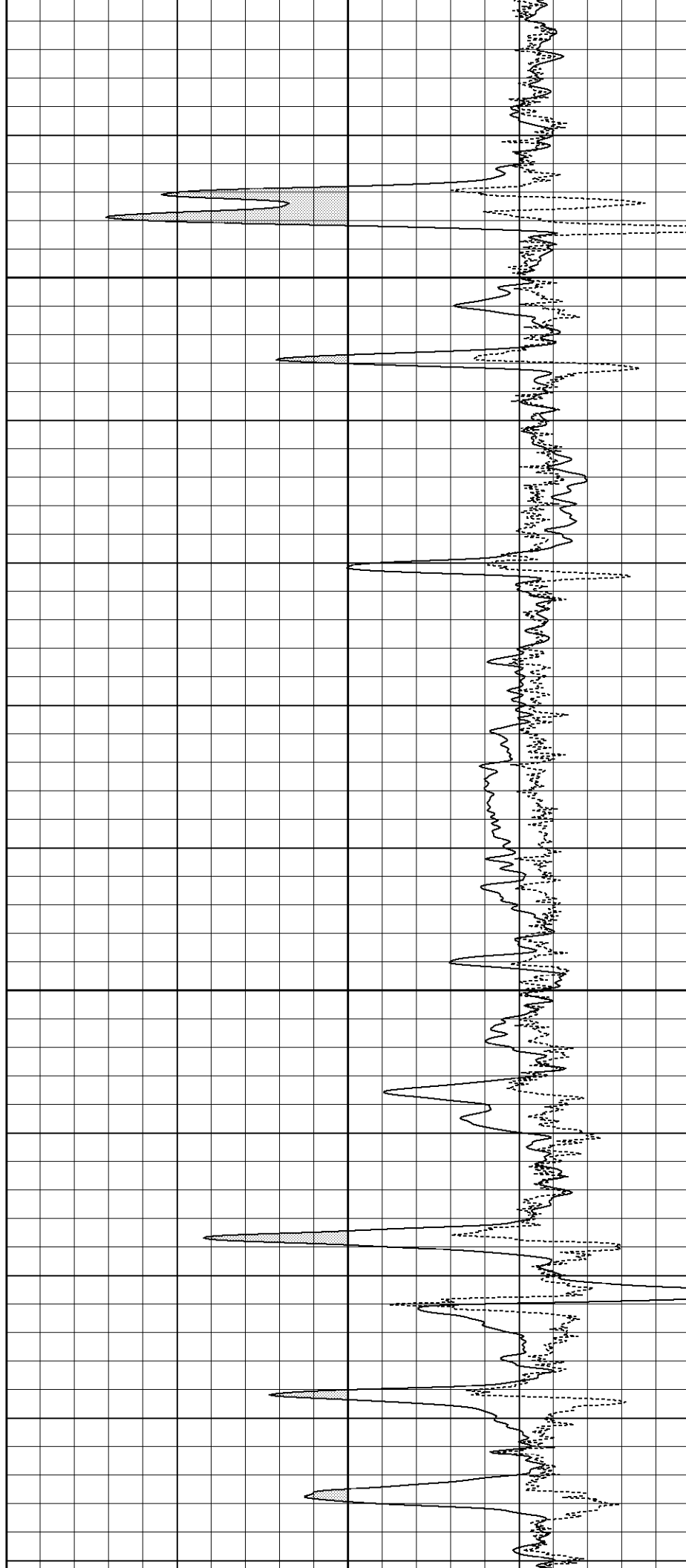
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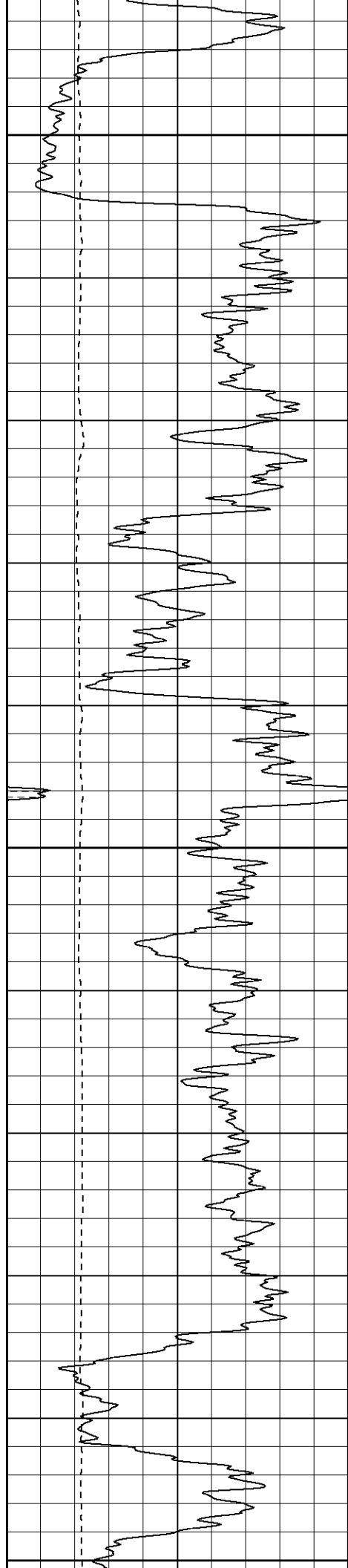




1800

1850

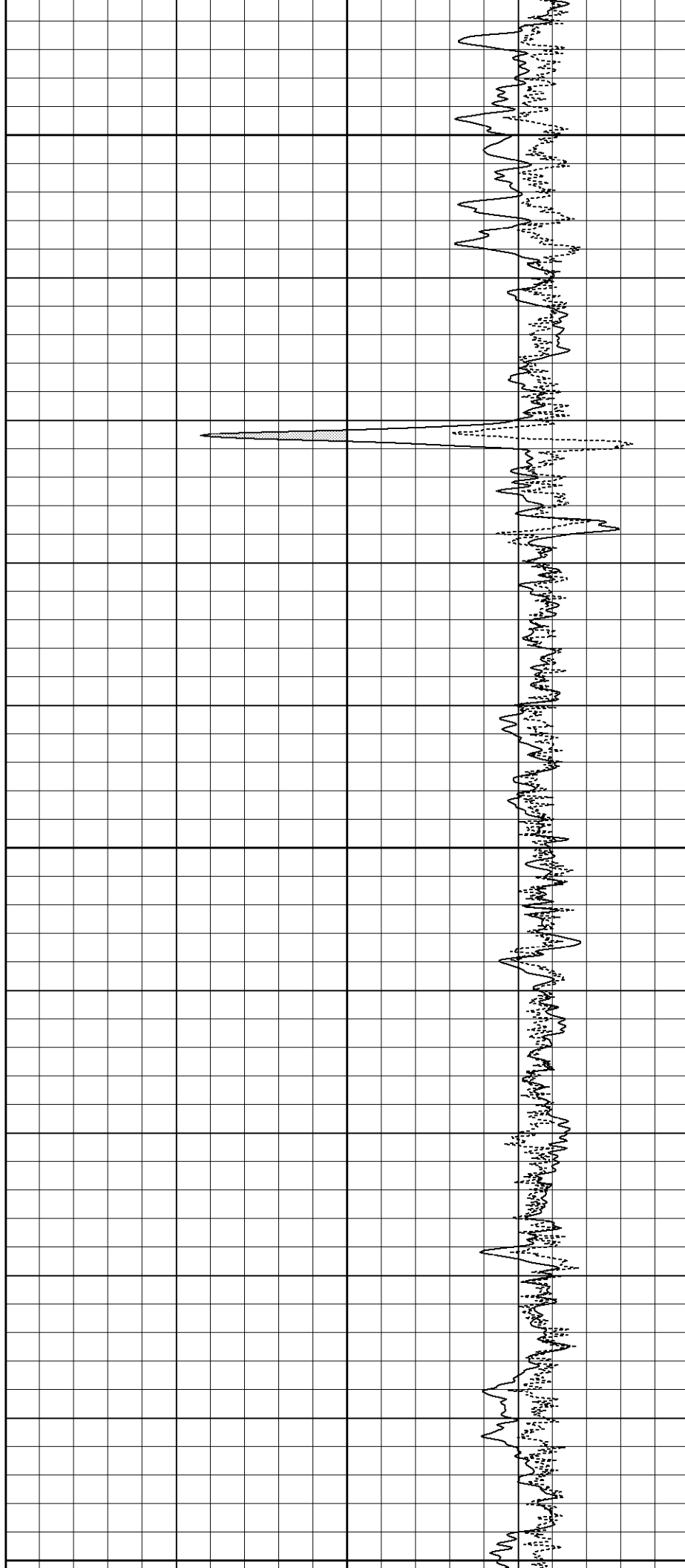


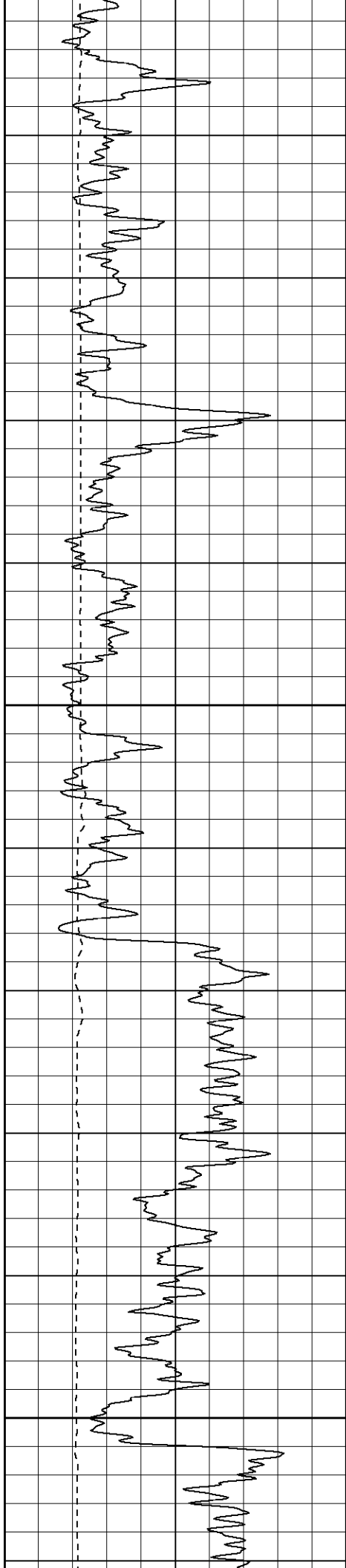


1900

1950

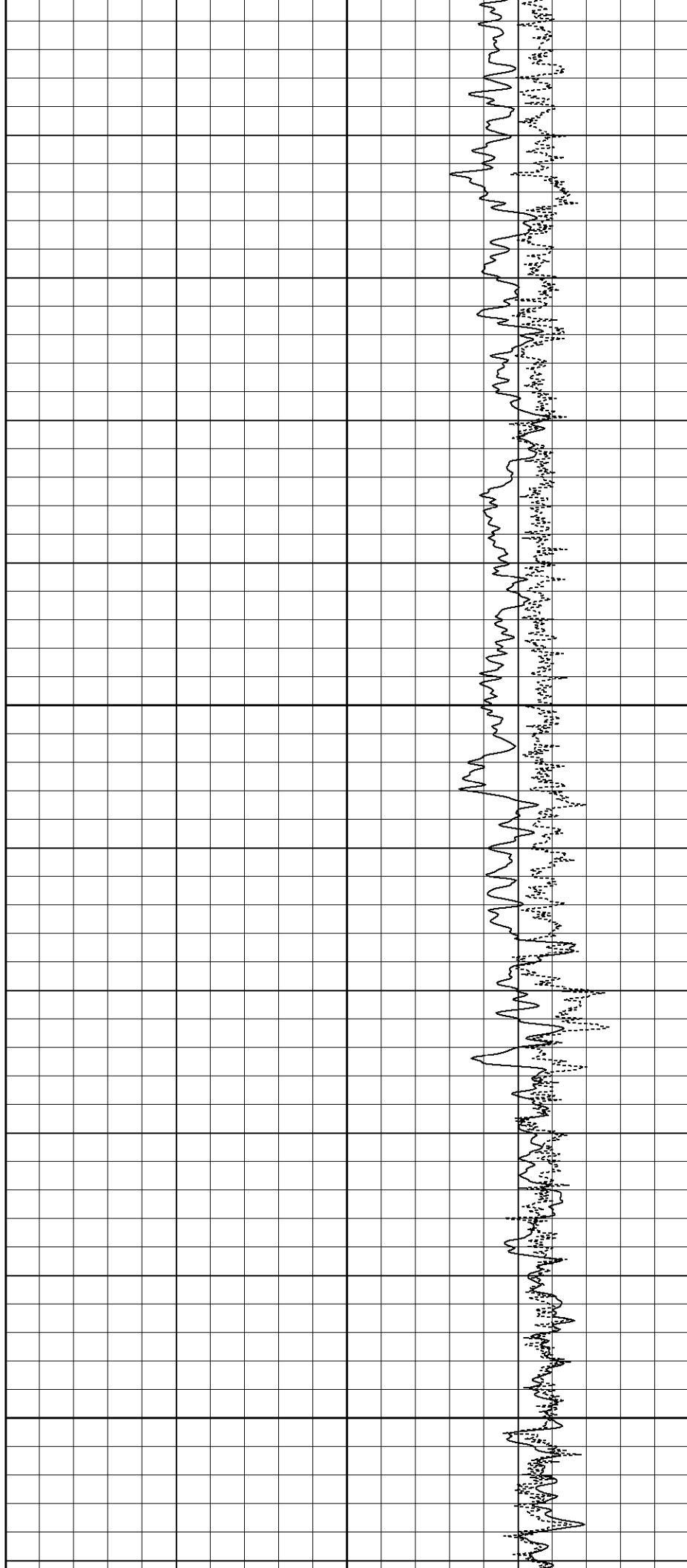
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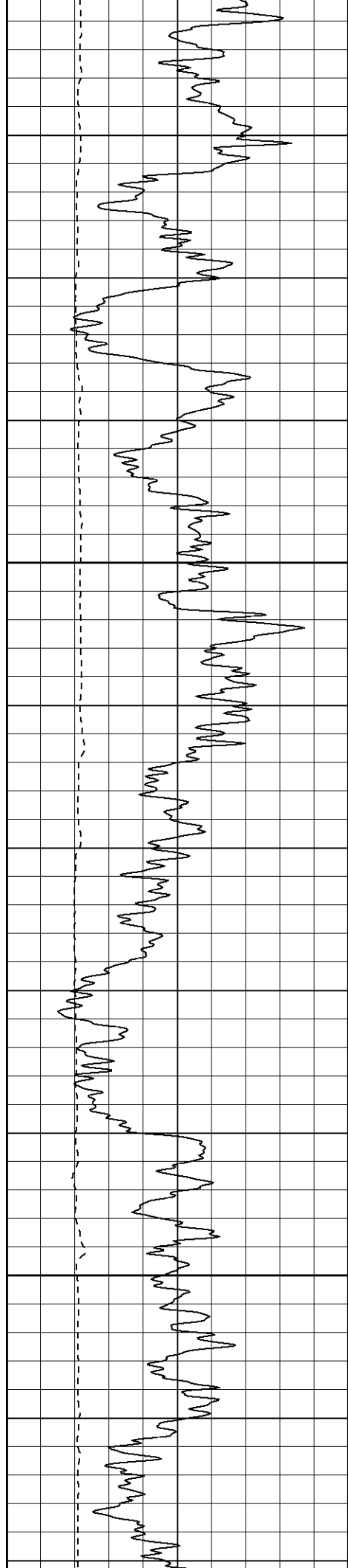




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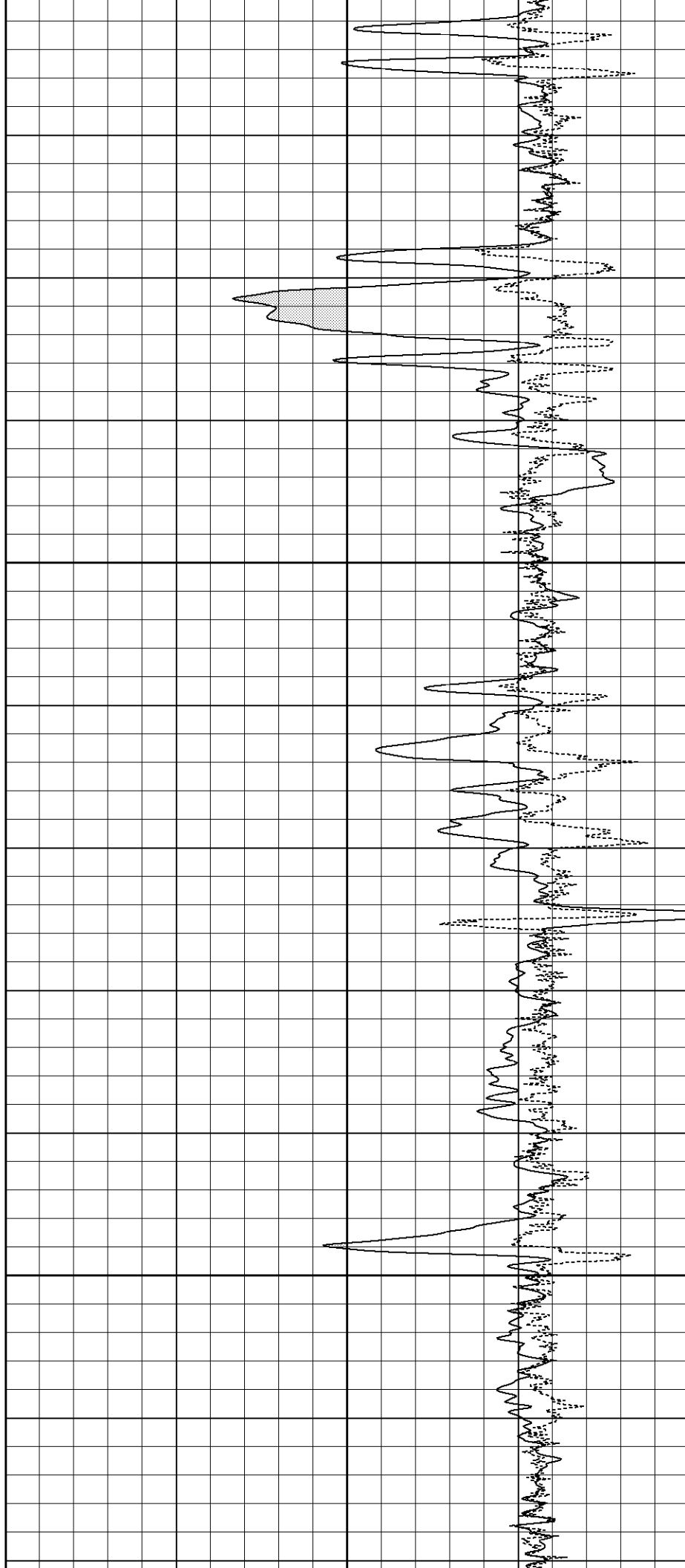
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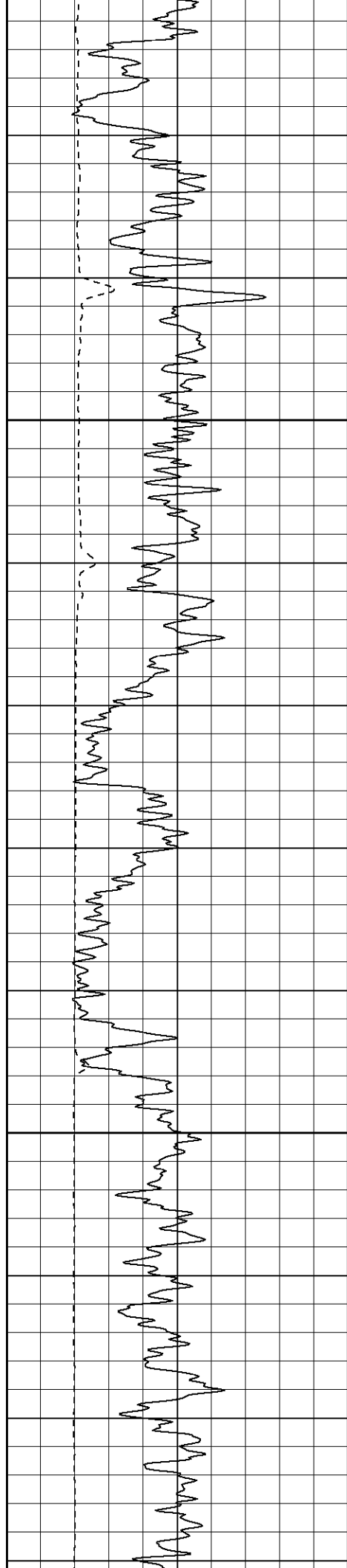




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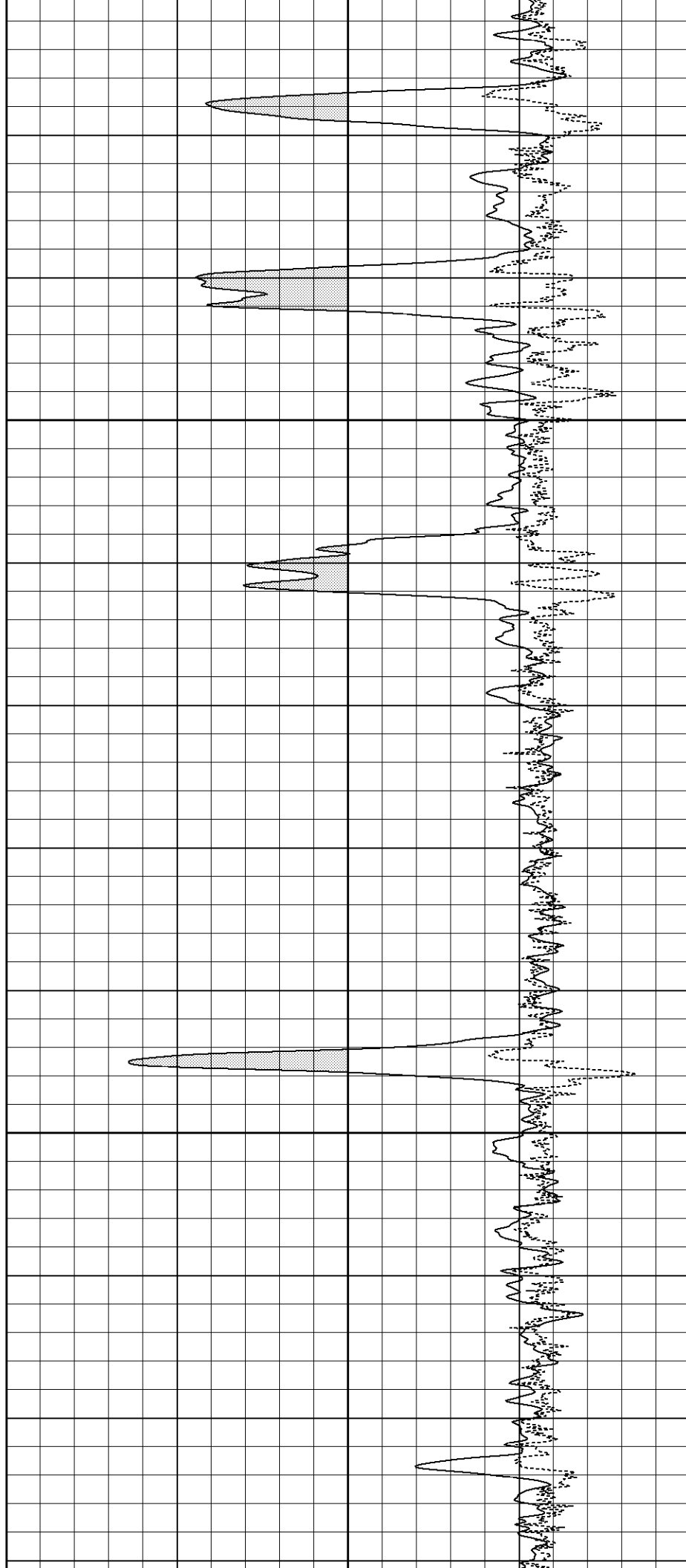
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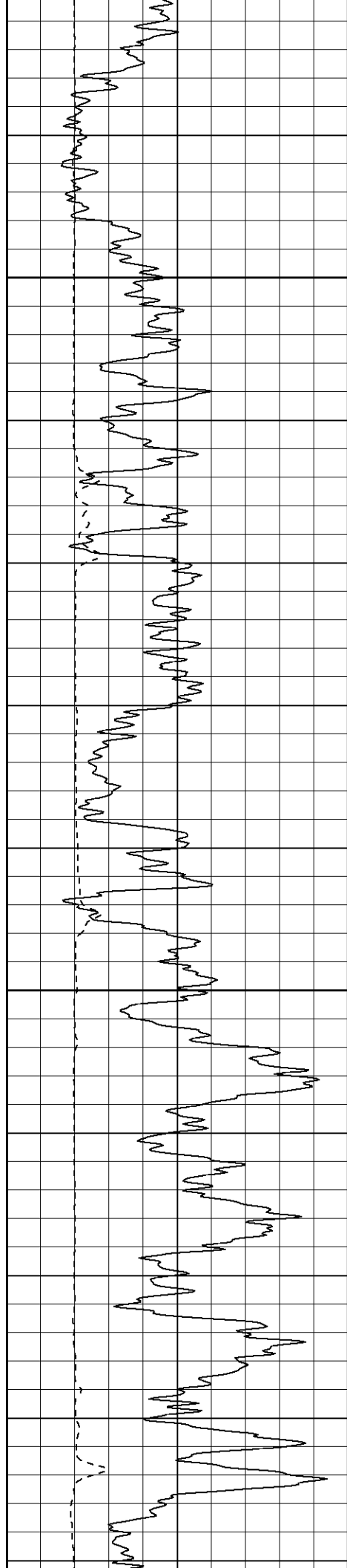




2250

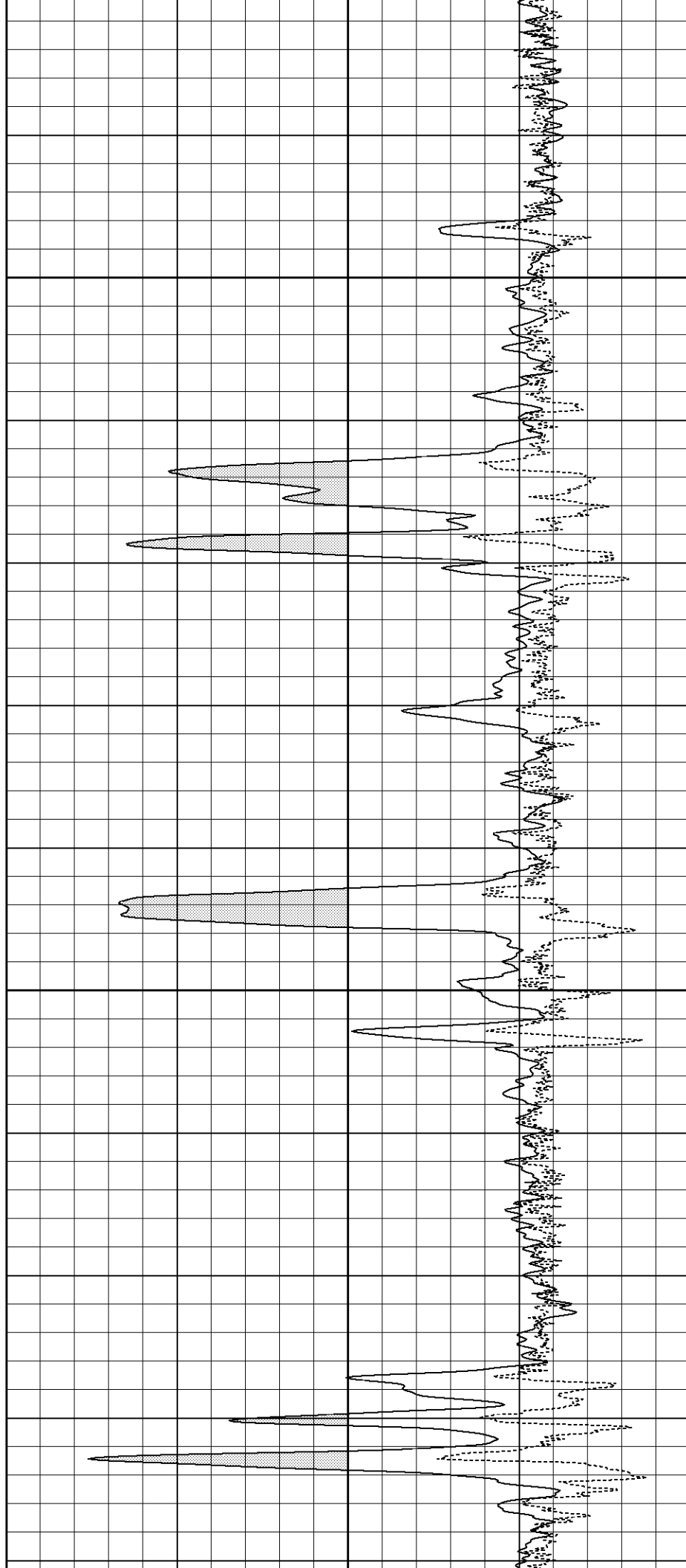
2300

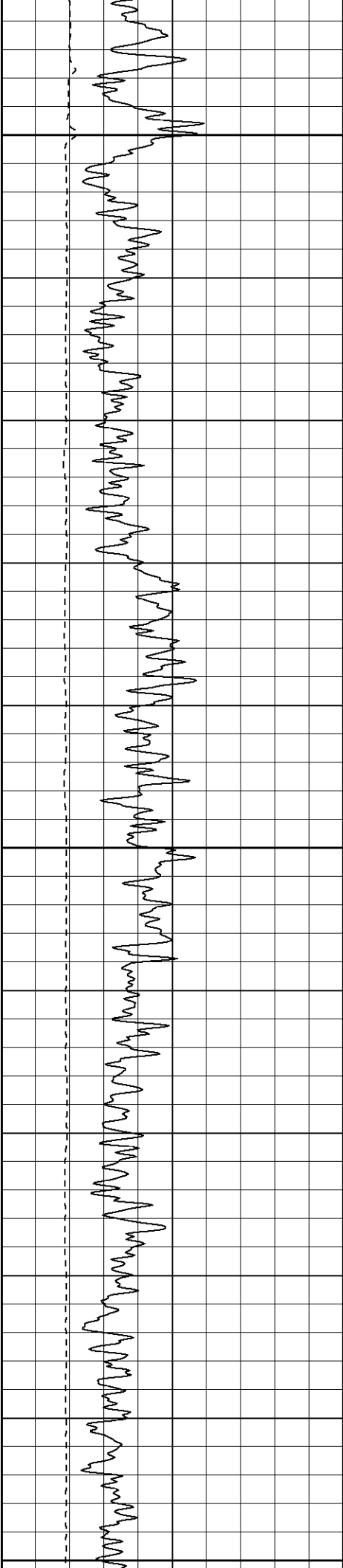




2350

2400

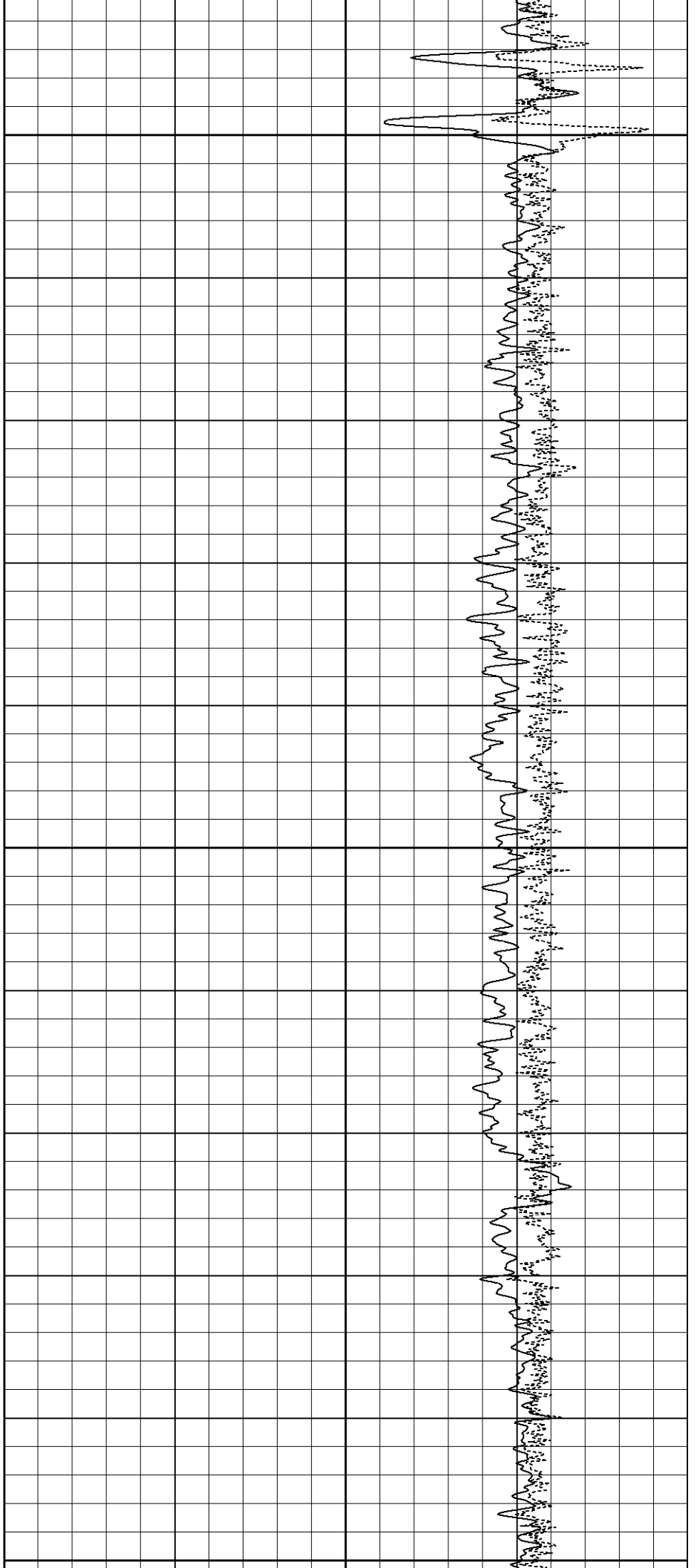


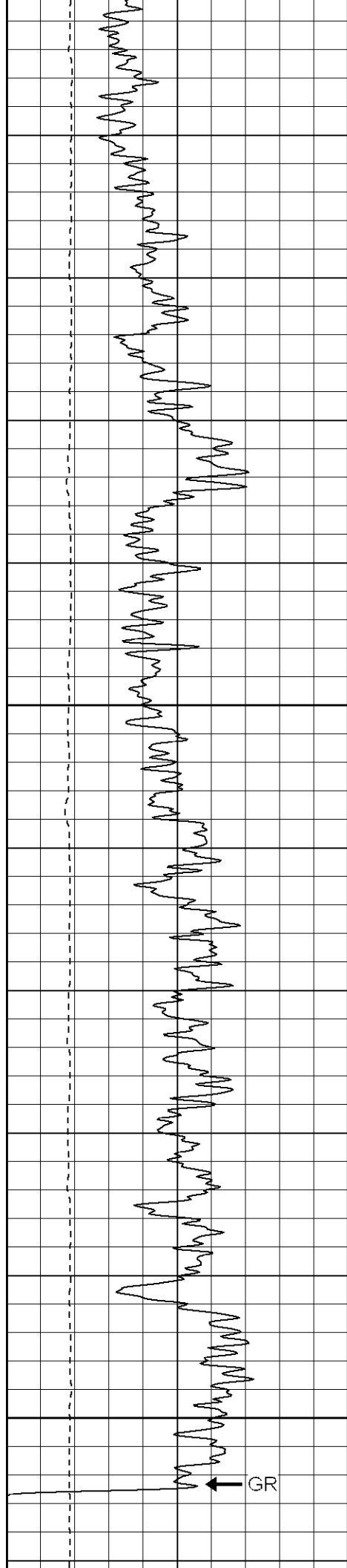


2450

2500

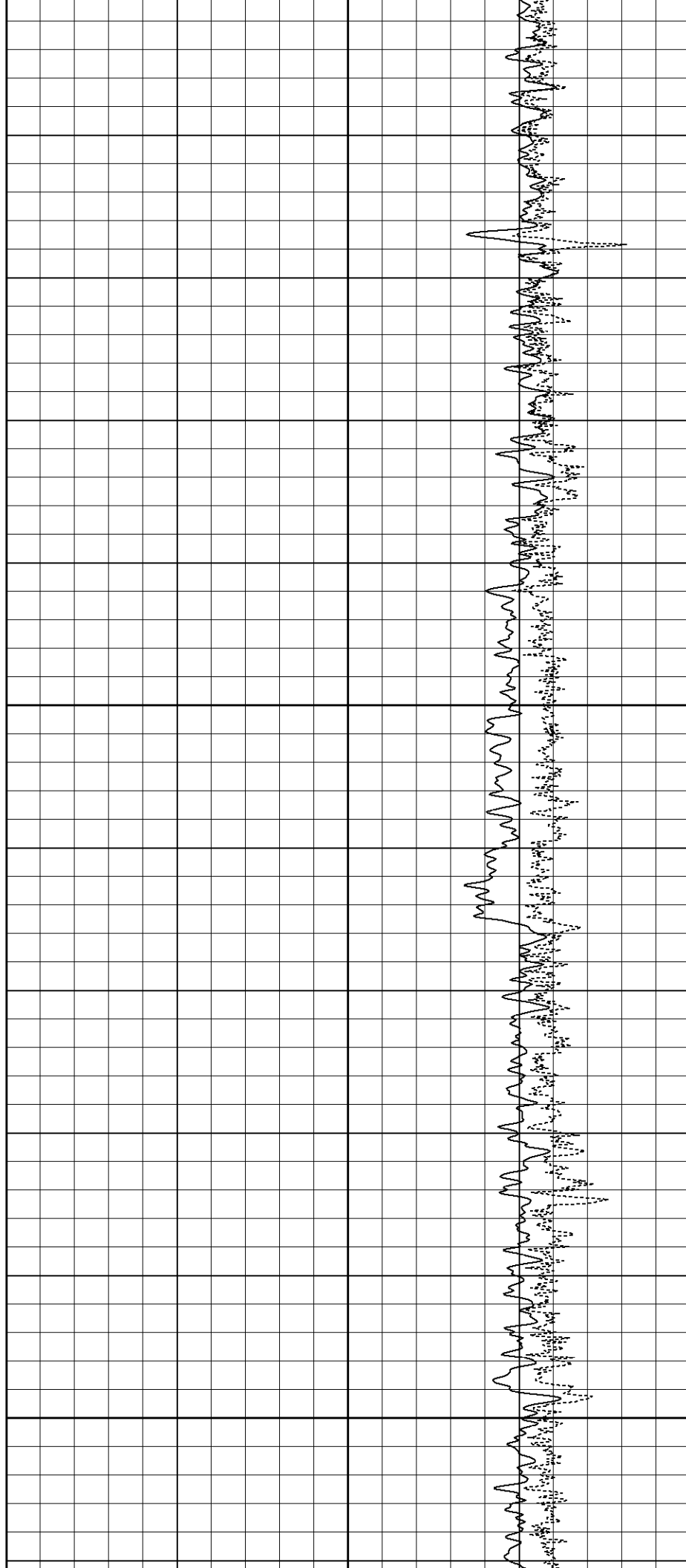
2550

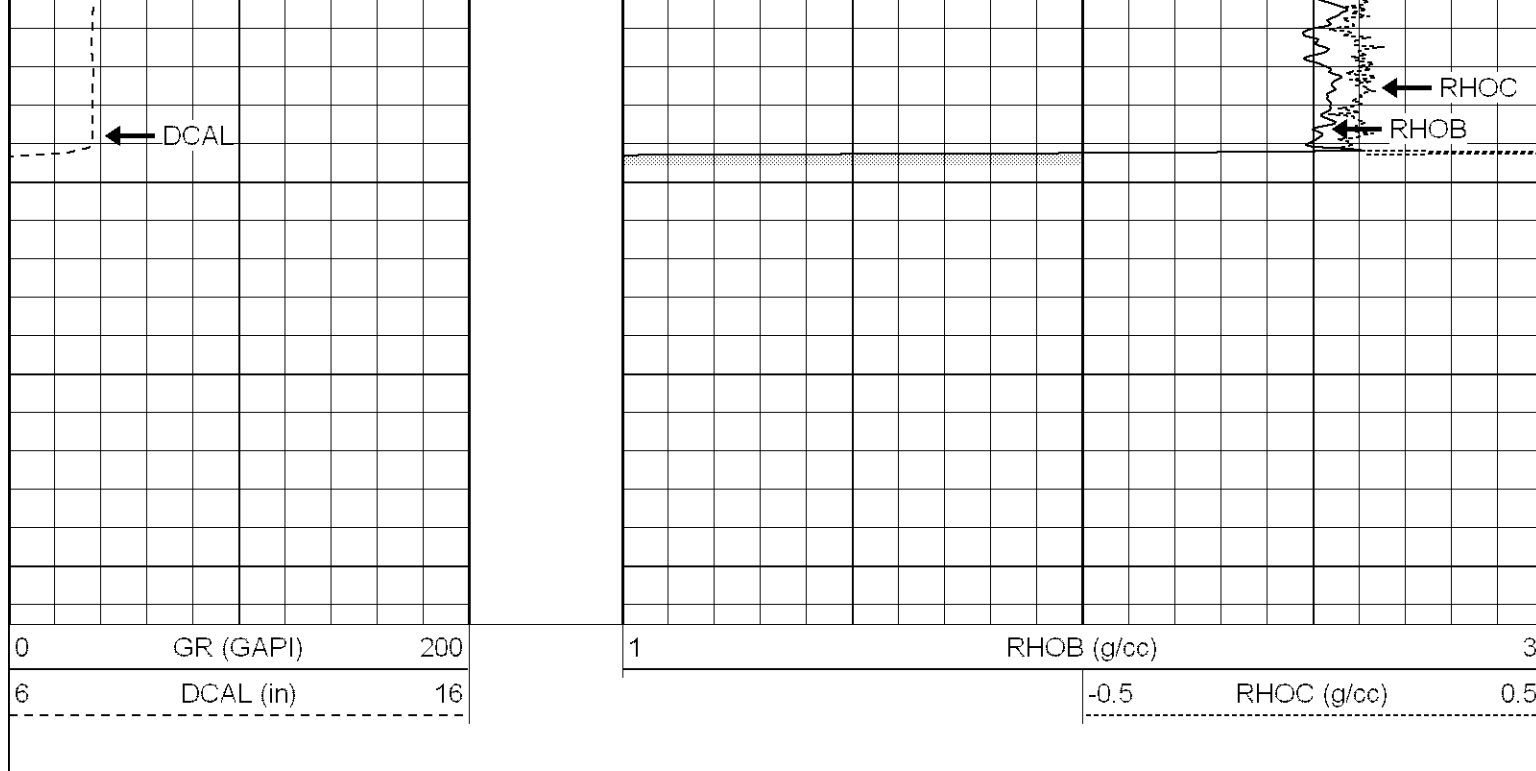




2600

2650





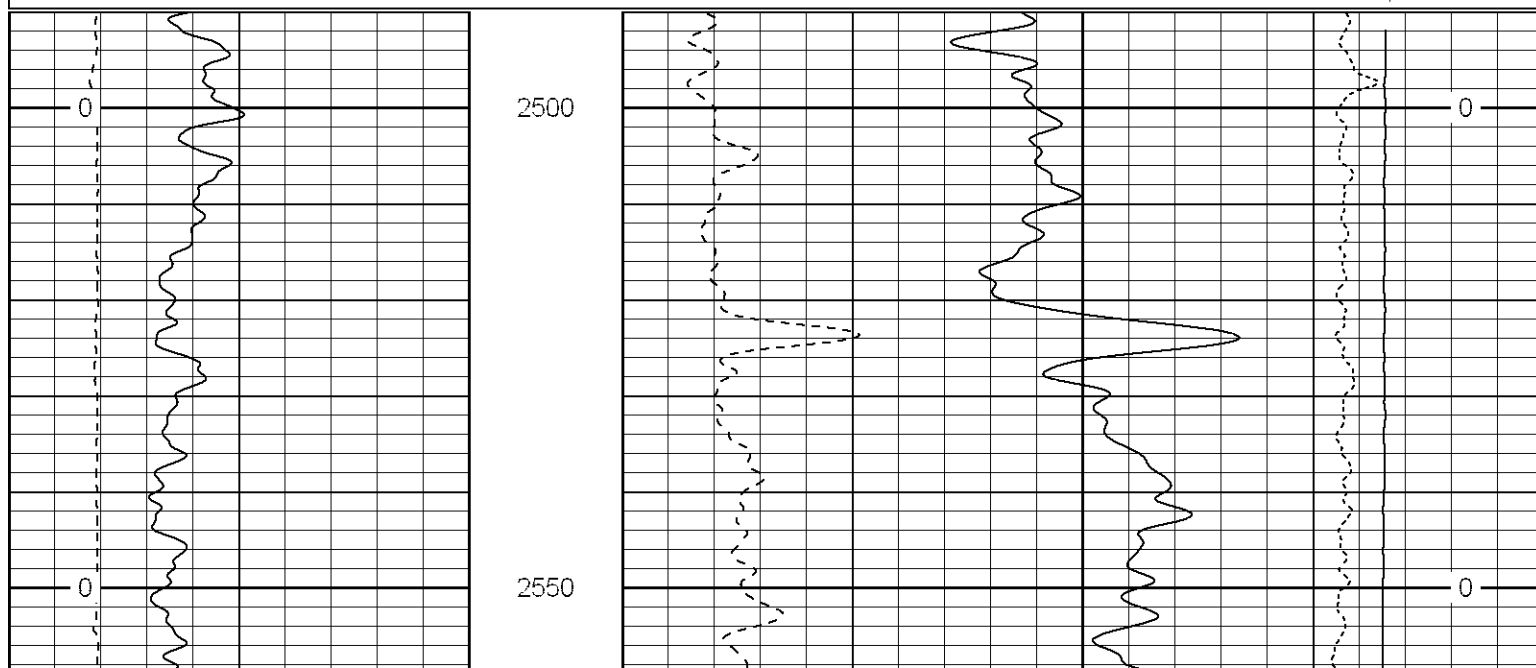
SUPERIOR

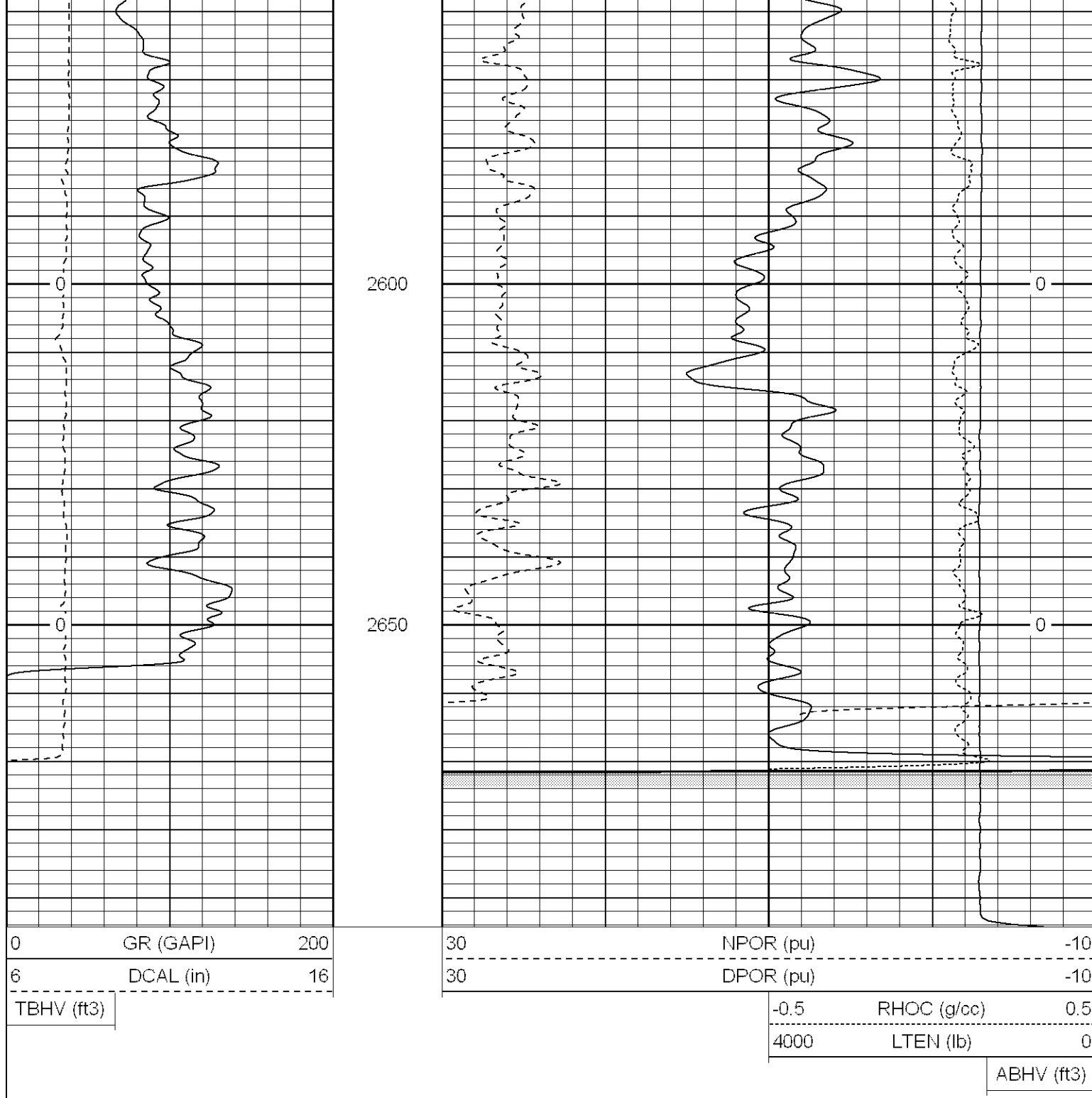
Black Lick, Pa.
Mercer, Pa.
Wooster, Oh.
Cleveland, Ok.
Trinidad, Co.

Repeat Pass

Database File: xtoac3114.db
Dataset Pathname: pass1.1
Presentation Format: cdnl
Dataset Creation: Sun Jun 24 00:30:37 2007 by Calc Open-Cased 070508
Charted by: Depth in Feet scaled 1:240

| | | | | | |
|------------|-----------|-----|----------------------|-----------|-----|
| 0 | GR (GAPI) | 200 | 30 | NPOR (pu) | -10 |
| 6 | DCAL (in) | 16 | 30 | DPOR (pu) | -10 |
| TBHV (ft3) | | | -0.5 RHOC (g/cc) 0.5 | | |
| | | | 4000 LTEN (lb) 0 | | |
| | | | ABHV (ft3) | | |





Calibration Report

Database File: xtoac3114.db
 Dataset Pathname: pass1
 Dataset Creation: Sat Jun 23 23:15:51 2007 by Log Open-Cased 070508

Dual Induction Calibration Report

Serial-Model: 5375-G
 Surface Cal Performed: Sat Jun 23 23:10:54 2007
 Downhole Cal Performed: Sat Jun 23 23:11:58 2007

Surface Calibration

Readings

References

Results

