



**GAMMA RAY / NEUTRON
LOG**

MIDWEST WIRELINE

Company Griffin Management LLC
Well Amber #1
Field Turkey Creek Camp
County Pratt
State Kansas

Company Griffin Management LLC
Well Amber #1
Field Turkey Creek Camp
County Pratt State Kansas

Location: API #: 15-151-22540-00-00
2310 FNL 330 FEL
SEC 28 TWP 29S RGE 15W
Permanent Datum Ground Level Elevation 1998
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing
Other Services
CDL/DIL
MEL
K.B. 2003
D.F.
G.L. 1998

| | | | | | | | |
|------------------------|------------|------|-----|-------|------|------|-----|
| Date | 2/2/2022 | | | | | | |
| Run Number | One | | | | | | |
| Type Log | GRN | | | | | | |
| Depth Driller | 4820 | | | | | | |
| Depth Logger | 4819 | | | | | | |
| Bottom Logged Interval | 4790 | | | | | | |
| Top Logged Interval | 2800 | | | | | | |
| Type Fluid In Hole | Chemical | | | | | | |
| Salinity, PPM CL | 8000 | | | | | | |
| Density | 9.5 | | | | | | |
| Level | Full | | | | | | |
| Max. Rec. Temp. F | 124 | | | | | | |
| Operating Rig Time | 3 Hours | | | | | | |
| Equipment -- Location | P-24 HAYS | | | | | | |
| Recorded By | D. Schmidt | | | | | | |
| Witnessed By | JR Griffin | | | | | | |
| Borehole Record | | | | | | | |
| Run No. | Bit | From | To | Size | Wgt. | From | To |
| One | 12.25 | 0 | 255 | 8.625 | 23 | 0 | 255 |
| Two | 7.875 | 255 | TD | | | | |
| Casing Record | | | | | | | |

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.

Comments

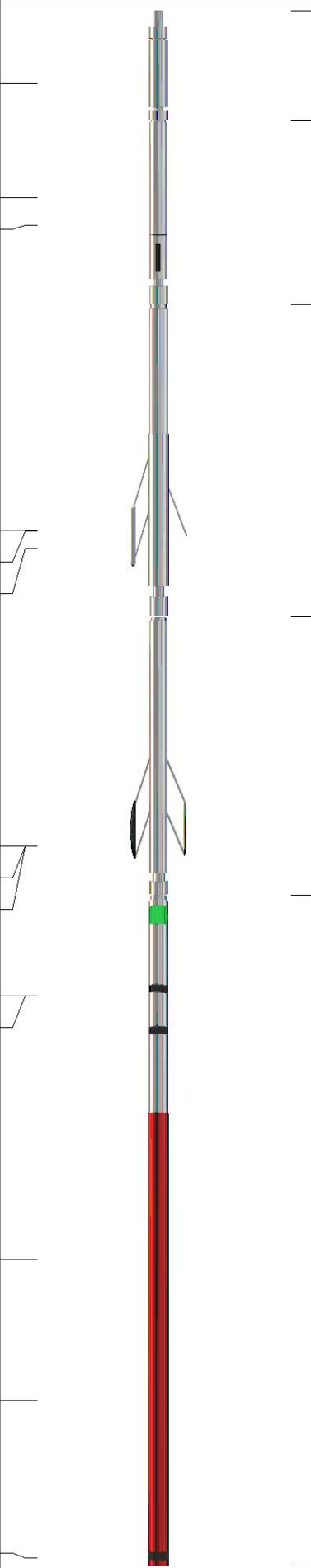
N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Haviland,
East to 140th, South to 100th, East to 130th, 1/2 East,
South into

Log Measured From: Kelly Bushing 5 Ft. Above Permanent Datum

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www.pioneerenergy.com 785-625-3858

| | | | |
|--|-----------|---|------------------------------|
| Your Pioneer Energy Services Crew | | This Log Record Was Witnessed By | |
| Engineer: D. Schmidt | Operator: | Primary Witness: JR Griffin | Secondary Witness: Eli Felts |
| Operator: | Operator: | Secondary Witness: | Secondary Witness: |
| Operator: | | Secondary Witness: | |

| Sensor | Offset (ft) | Schematic | Description | Length (ft) | O.D. (in) | Weight (lb) |
|--------------------|-------------------------|---|------------------|-------------|-----------|-------------|
| GR | 40.33 |  | GR-M&W (101) | 3.00 | 3.50 | 50.00 |
| CNLSC CNSSC | 37.23 36.48 | | CNT-M&W (207-MW) | 5.00 | 3.50 | 100.00 |
| LSD DCAL SSD | 28.18 28.17 27.68 | | CDL-M&W (301-01) | 8.50 | 4.00 | 250.00 |
| ML-PSIML (402) | | | 7.58 | 4.00 | 65.00 | |
| MCAL MI MN | 19.58 19.58 19.58 | | | | | |
| RLL3F RLL3 | 15.50 15.50 | | | | | |
| DIL-M&W (501 HT) | | | 18.25 | 3.50 | 220.00 | |
| CILD | 8.33 | | | | | |
| CILM | 4.50 | | | | | |
| SP | 0.20 | | | | | |

Dataset: griffin_amber 1.db: field/well/stkml/pass4.1
 Total length: 42.33 ft
 Total weight: 685.00 lb
 O.D.: 4.00 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\griffin_amber 1.db
 Dataset field/well/stkml/pass3.1/_vars_

Top - Bottom

| A | BOREID | BOTTEMP | CASEOD | CASETHCK | FLUIDDEN | M | MATRXDEN |
|-----------|-------------|-------------|-------------|-----------|-----------|-------|--------------|
| 1 | in 7.875 | degF 100 | in 5.5 | in 0 | g/cc 1 | 2 | g/cc 2.71 |
| NPORSEL | PERFS | SNDERR | SNDERRM | SPSHIFT | SRFTEMP | SZCOR | TDEPTH |
| Limestone | 0 | mmho/m 0 | mmho/m 0 | mV 270 | degF 0 | Off | ft 0 |

Variable Description

A : Cement Factor (a)
 BOREID : Borehole I.D.
 BOTTEMP : Bottom Hole Temperature
 CASEOD : Casing O.D.
 CASETHCK : Casing Thickness
 FLUIDDEN : Fluid Density
 M : Cement Exp (m)
 MATRXDEN : Matrix Density

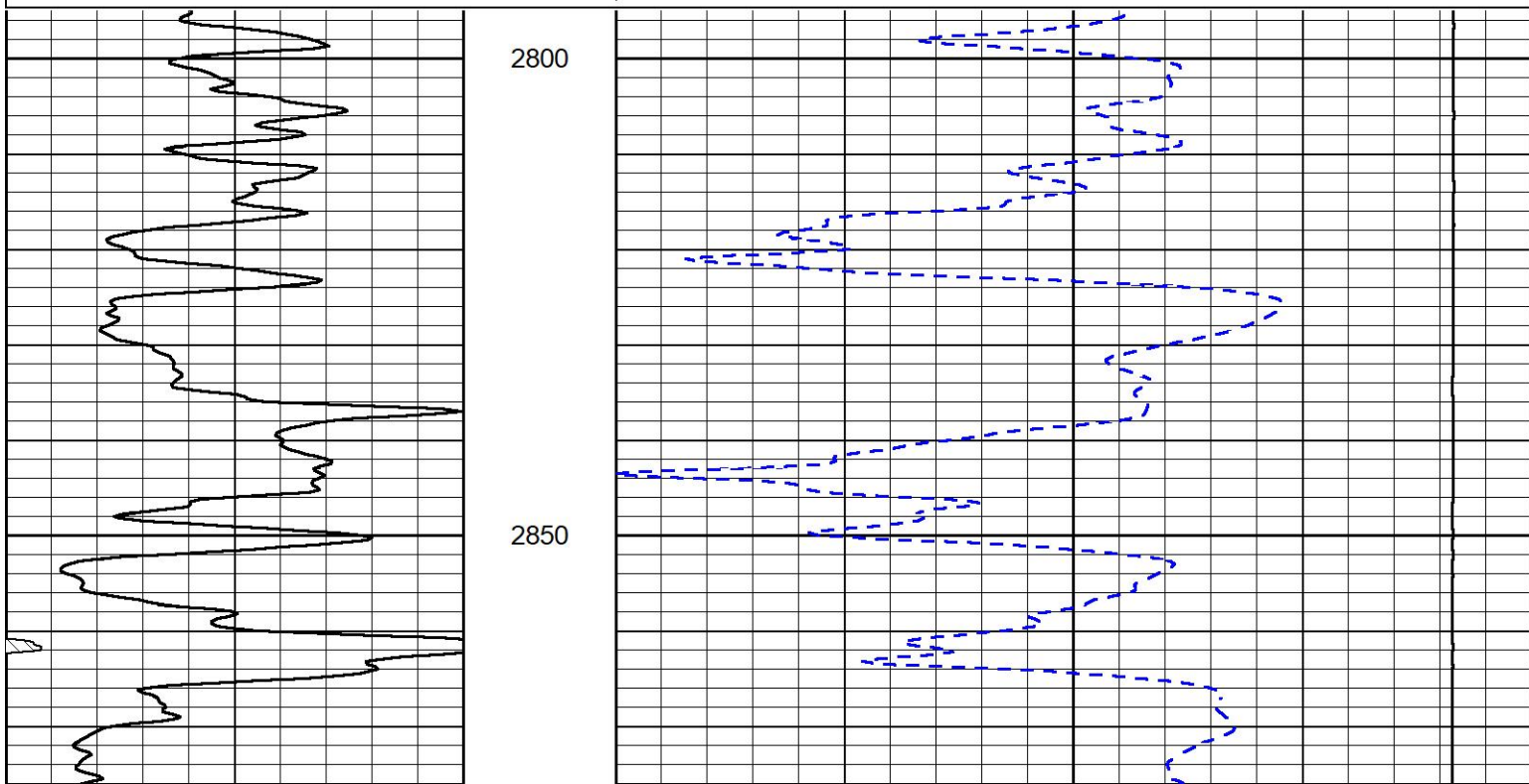
NPORSEL : Neutron Porosity Curve Select
 PERFS : Perforation Flag
 SNDERR : Deep Sonde Error Correction
 SNDERRM : Medium Sonde Error Correction
 SPSHIFT : S.P. Baseline Offset
 SRFTEMP : Surface Temperature
 SZCOR : CN Size Cor. ?
 TDEPTH : Total Depth

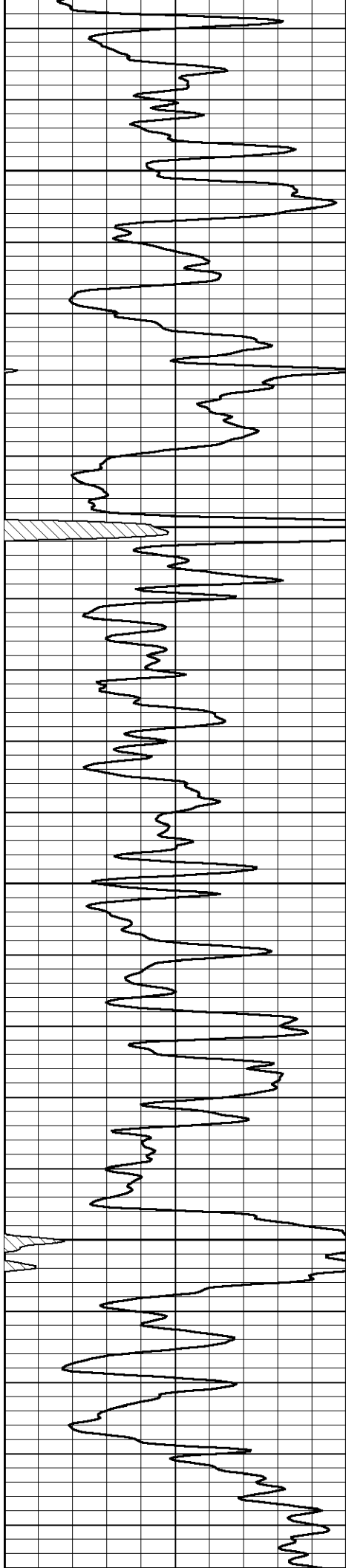


MAIN PASS

Database File griffin_amber 1.db
 Dataset Pathname stkml/pass3.1
 Presentation Format cnl
 Dataset Creation Thu Feb 03 02:15:10 2022
 Charted by Depth in Feet scaled 1:240

| | | | | | |
|---|------------------|-----|-------|--------------------------|-----|
| 0 | Gamma Ray (GAPI) | 150 | 30 | Compensated Neutron (pu) | -10 |
| | | | 15000 | Line Tension (lb) | 0 |



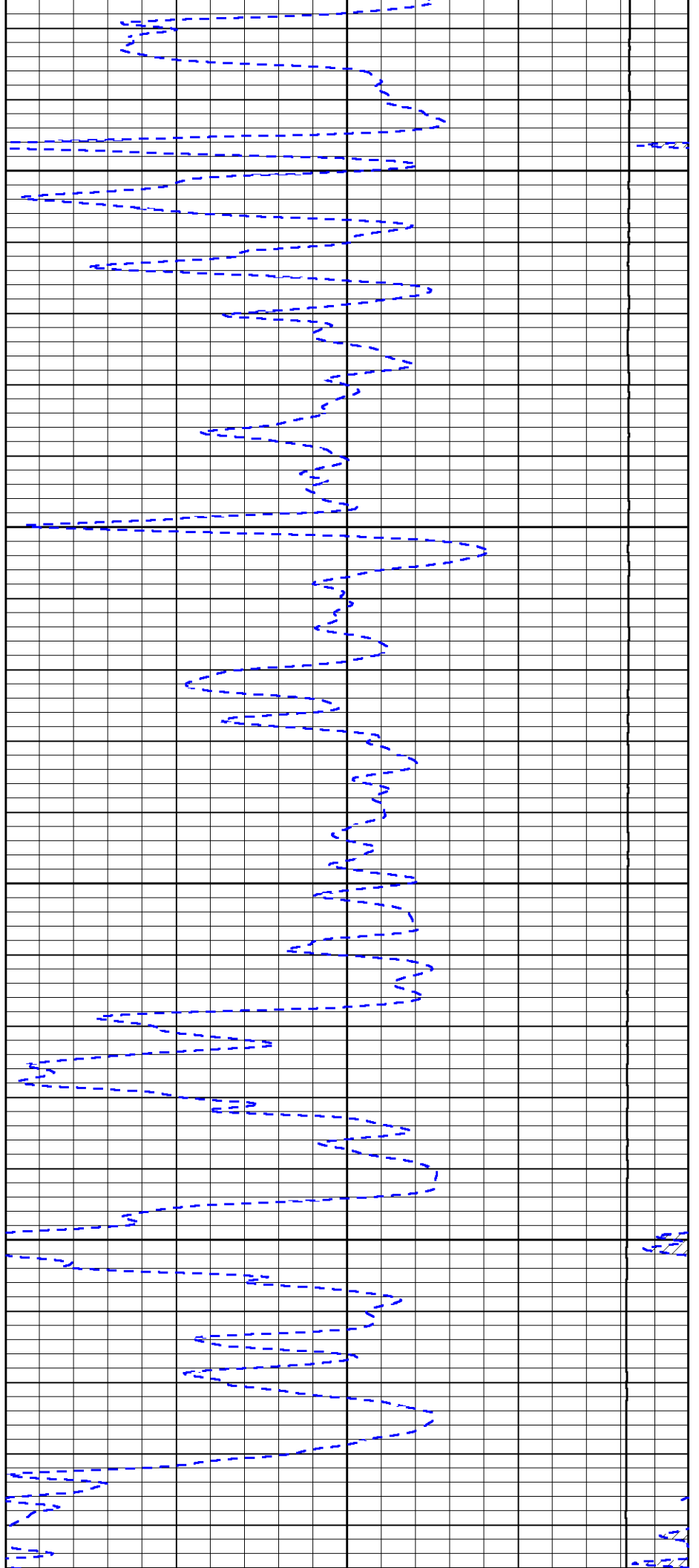


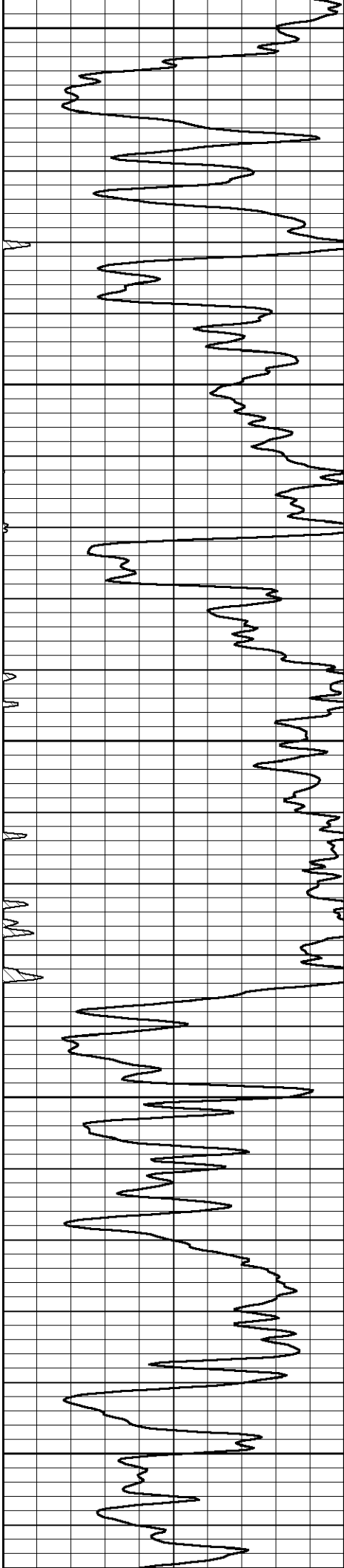
2900

2950

3000

3050





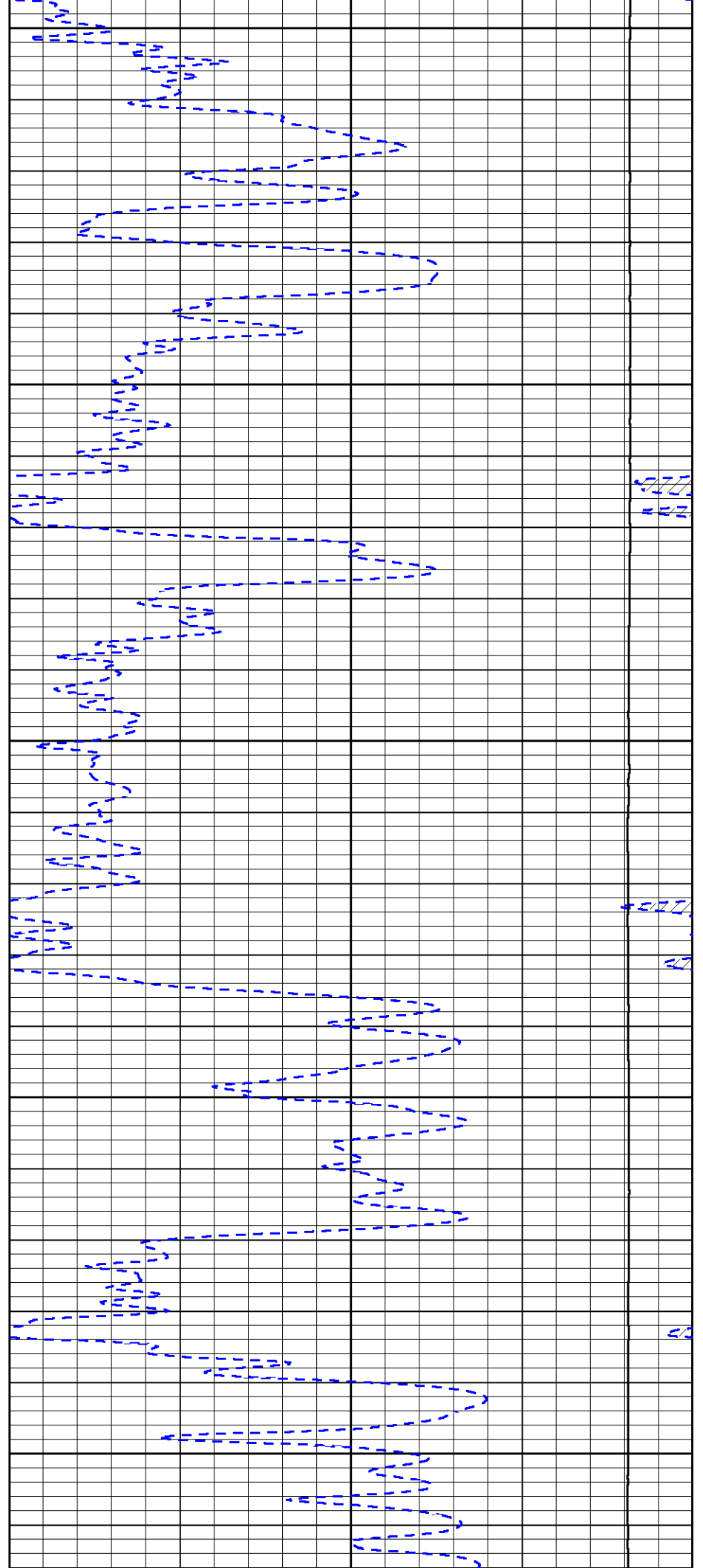
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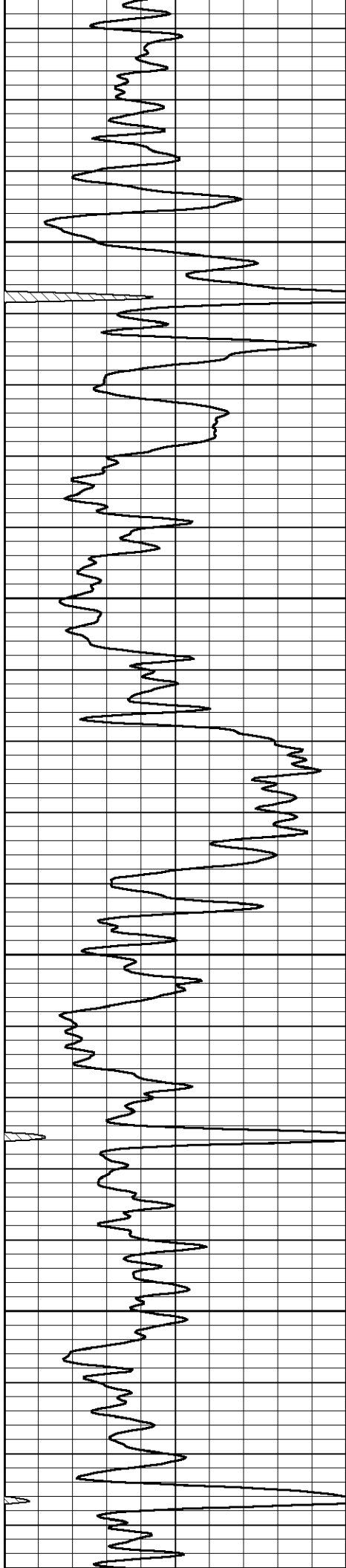
3150

3200

3250

3300



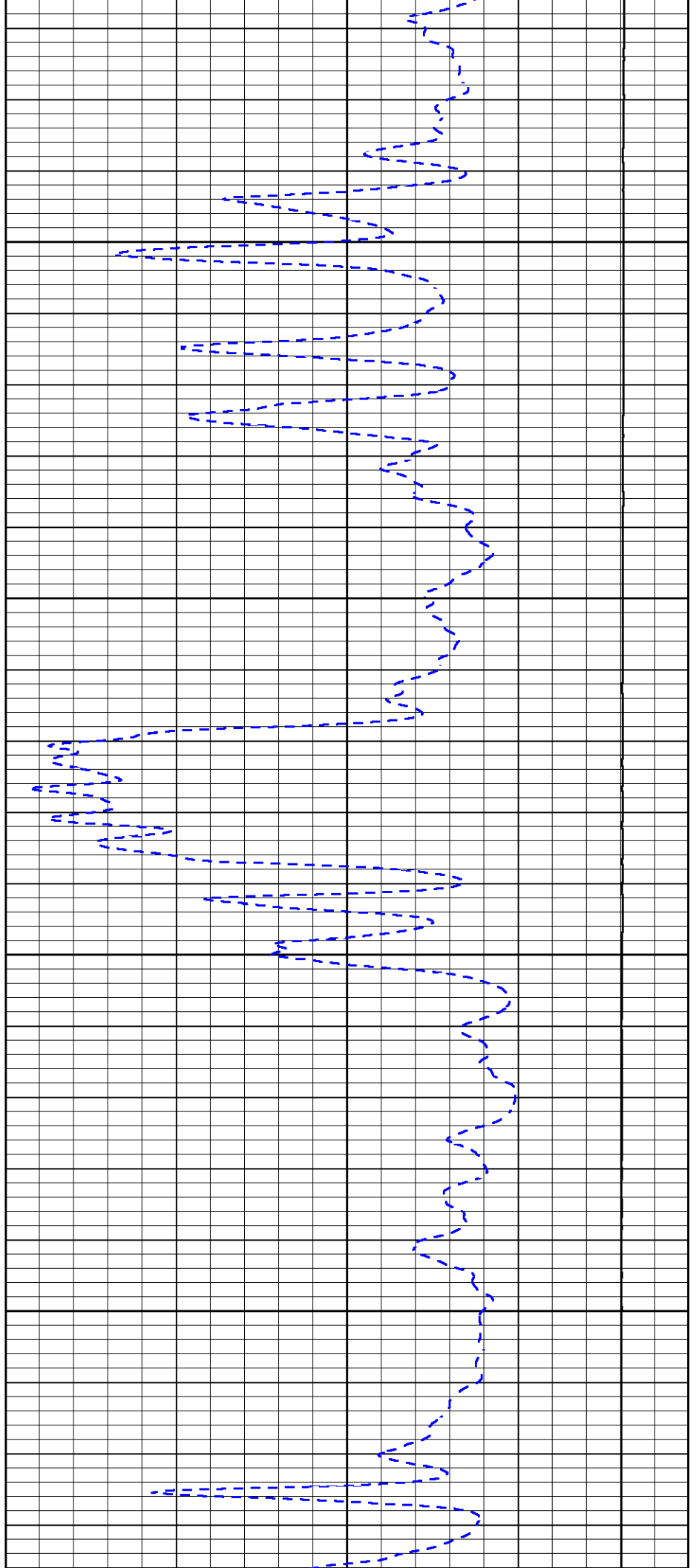


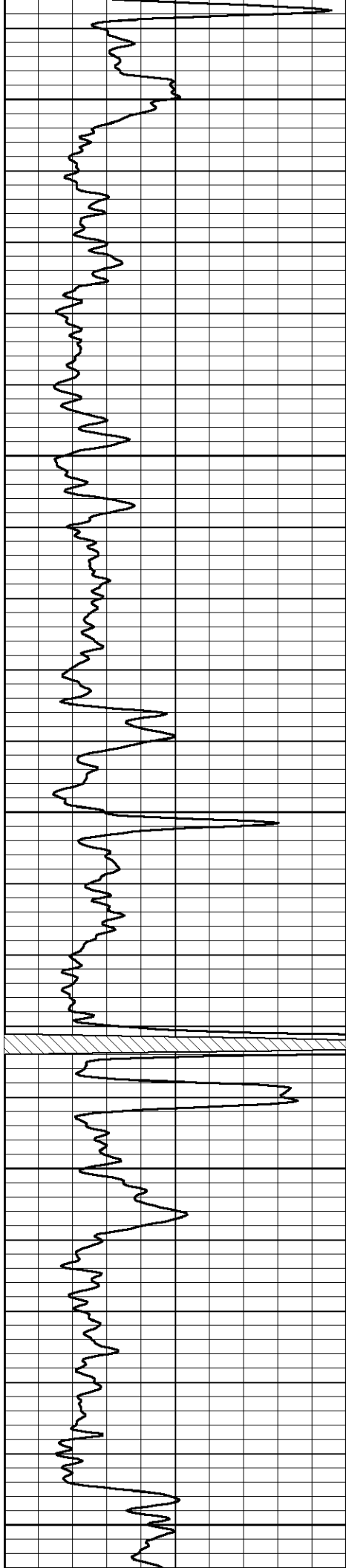
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3400

3450

3500





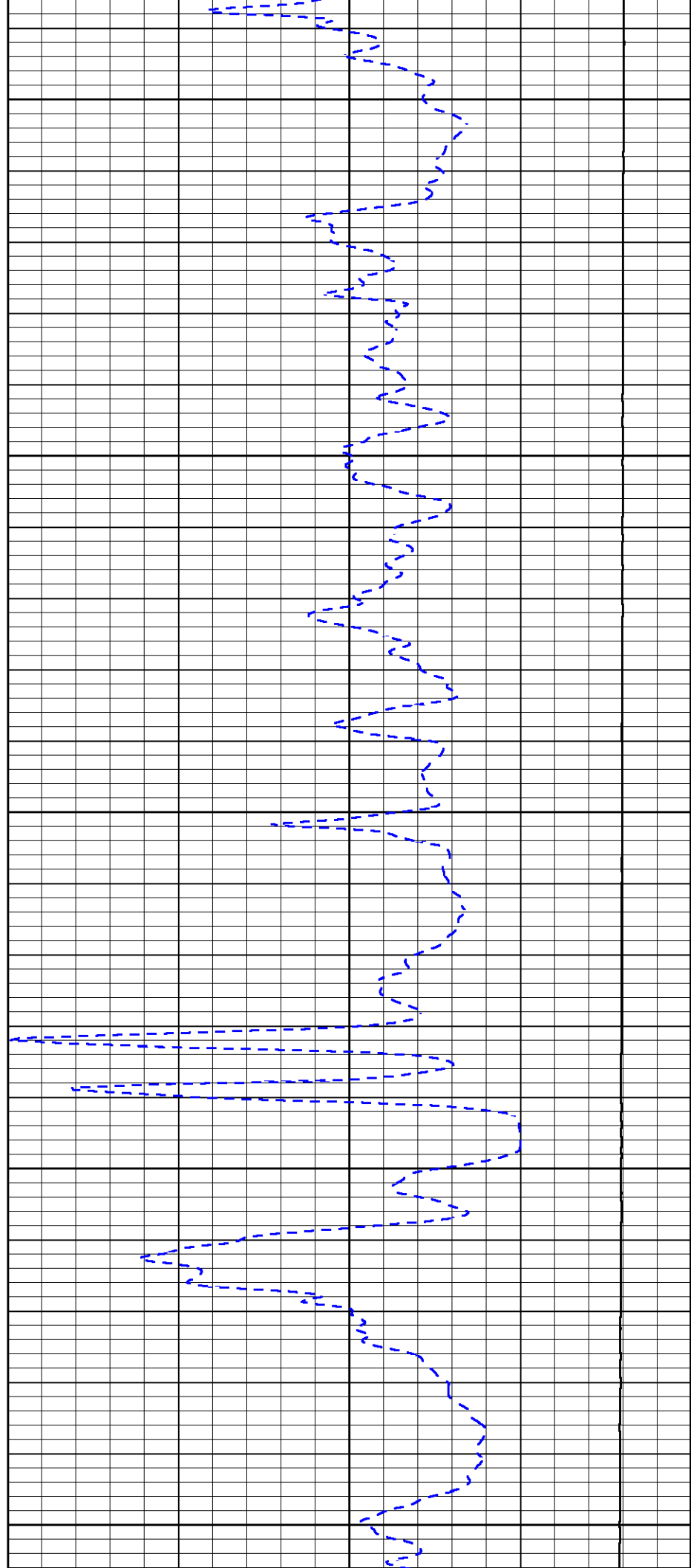
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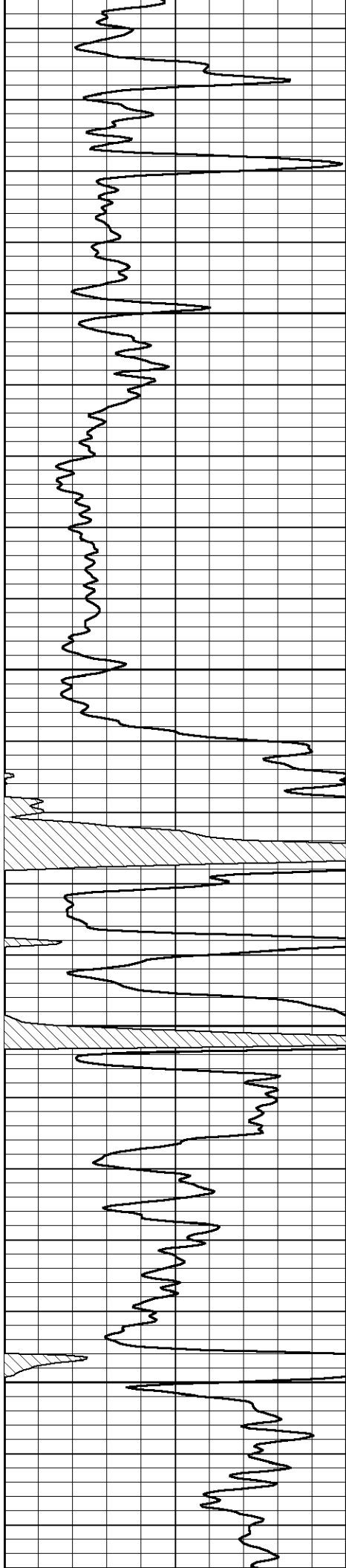
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3650

3700

3750



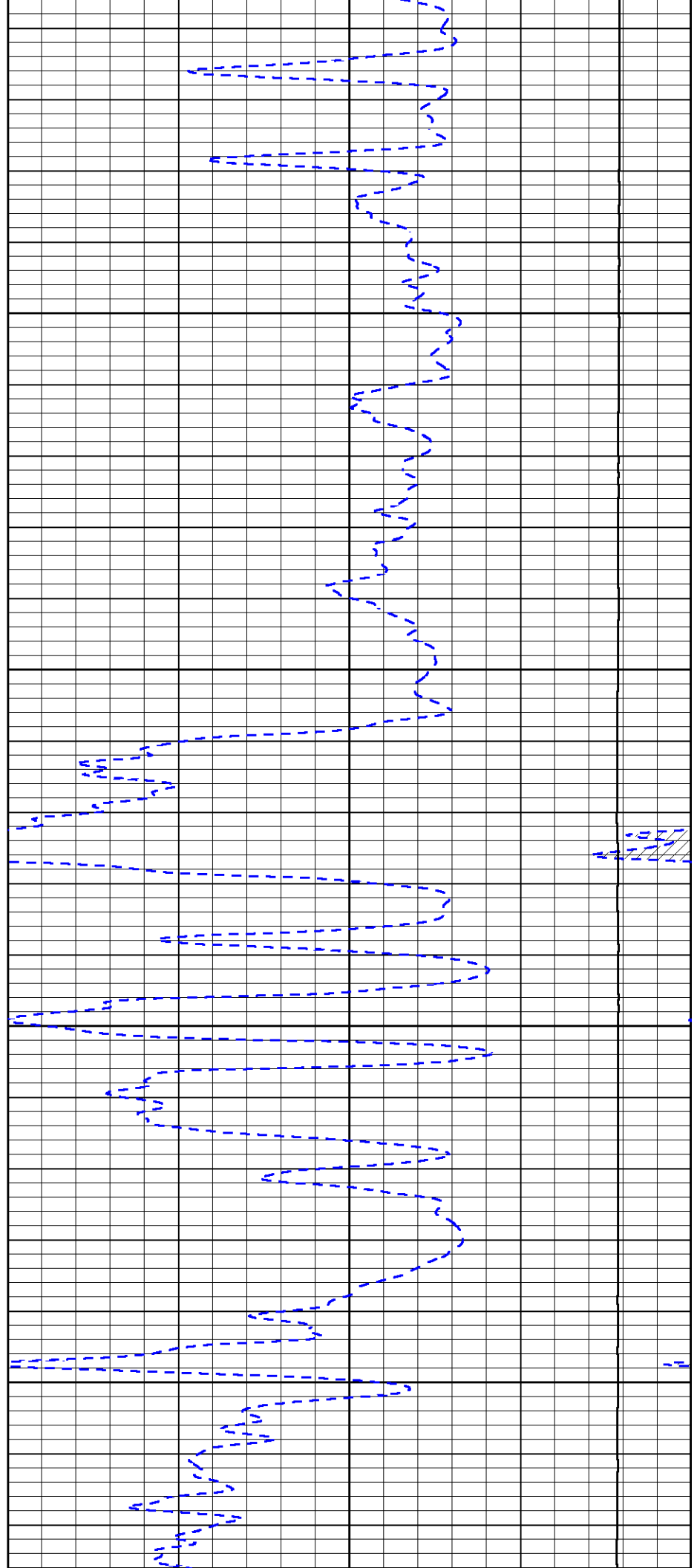


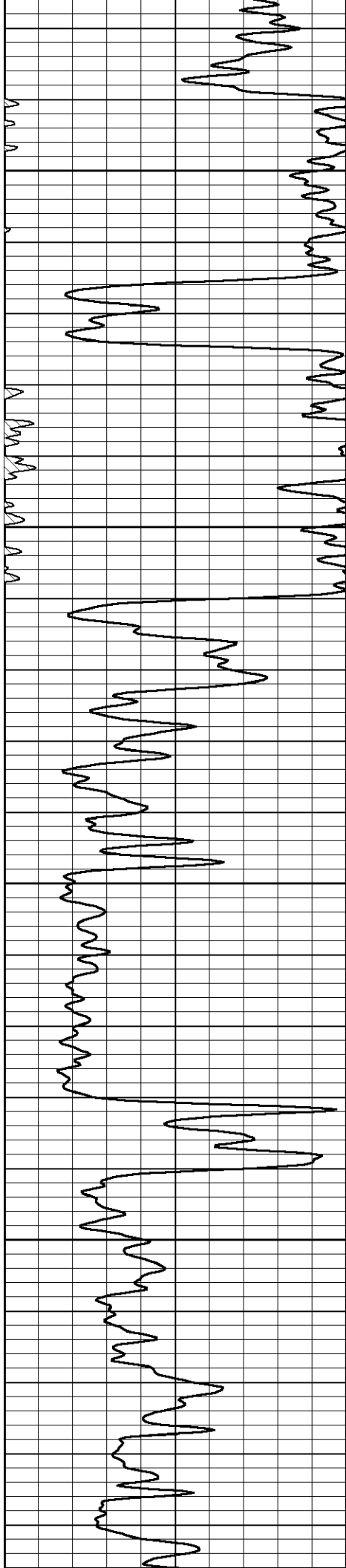
3800

3850

3900

3950



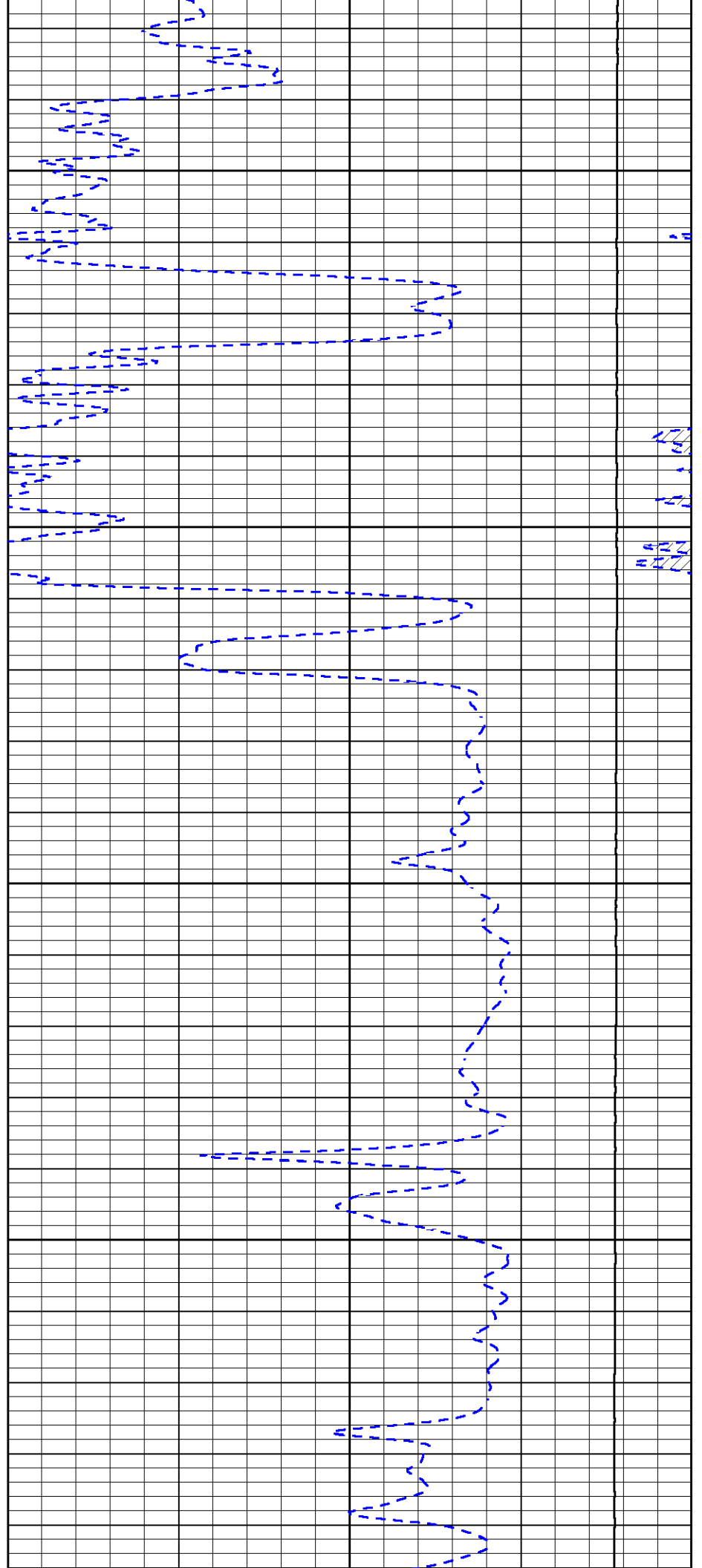


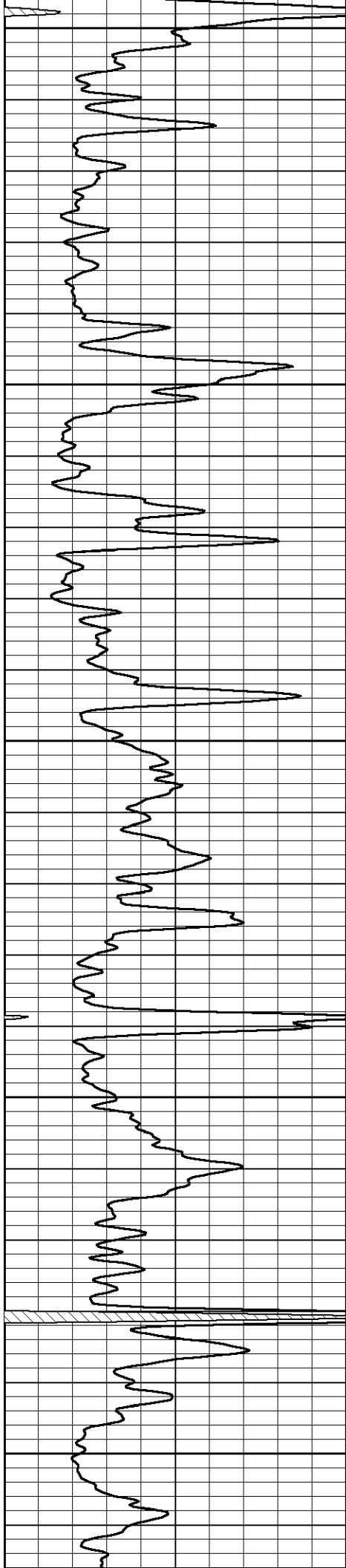
4000

4050

4100

4150





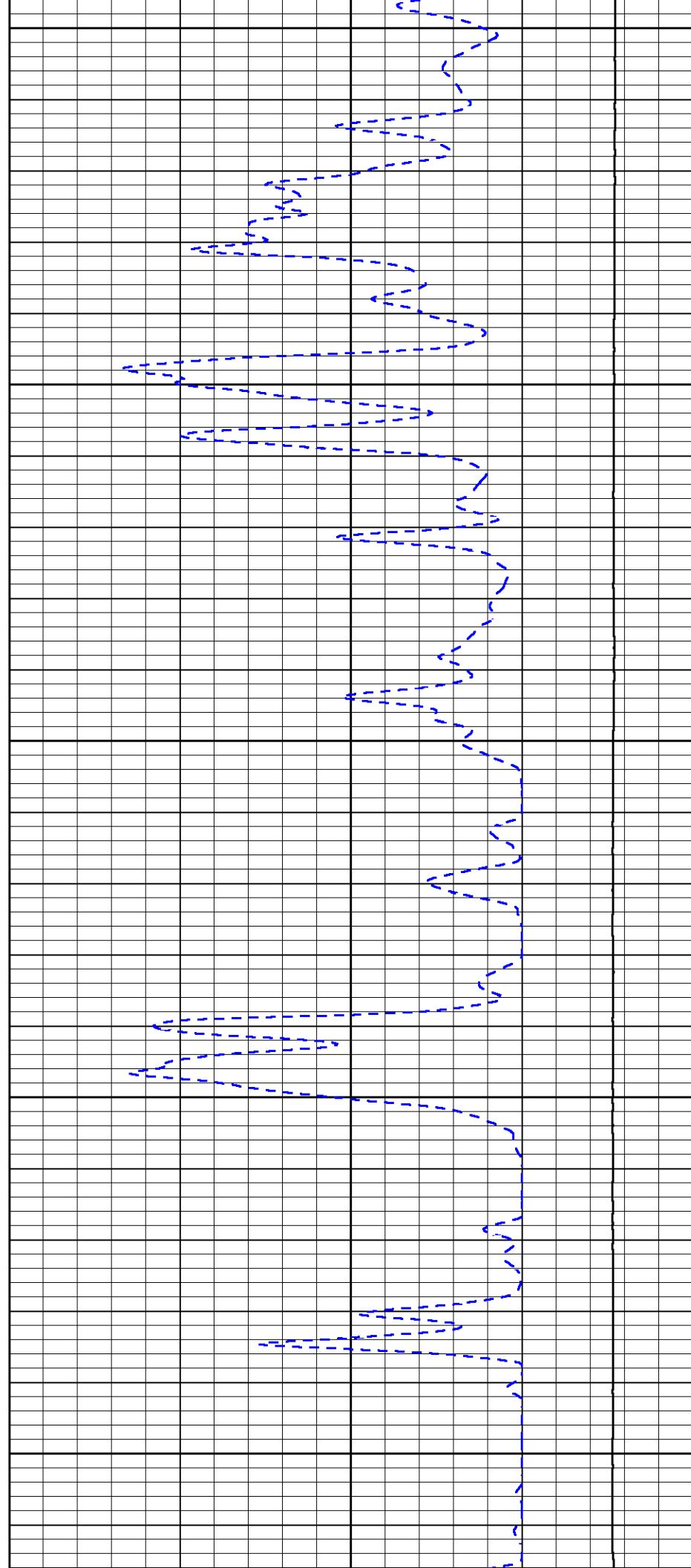
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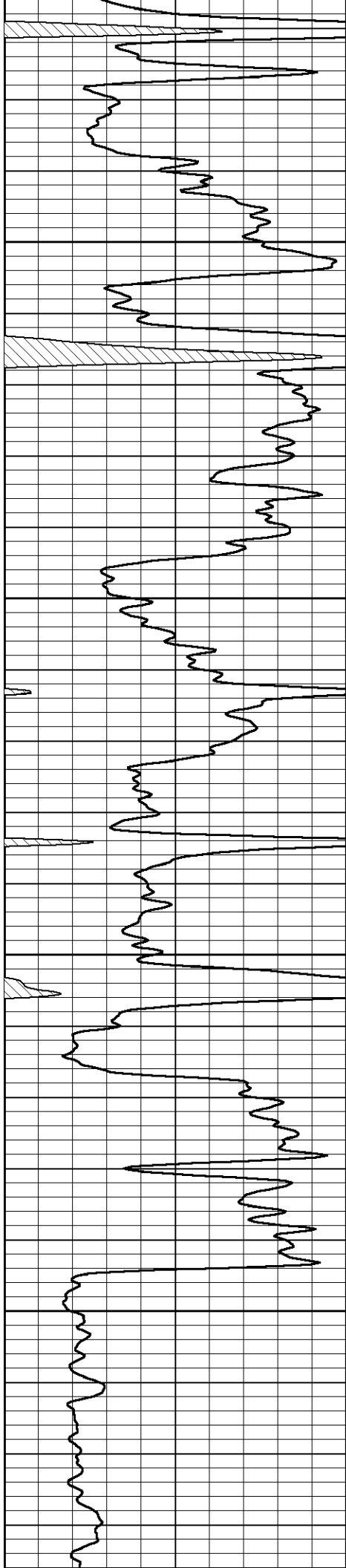
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4300

4350

4400



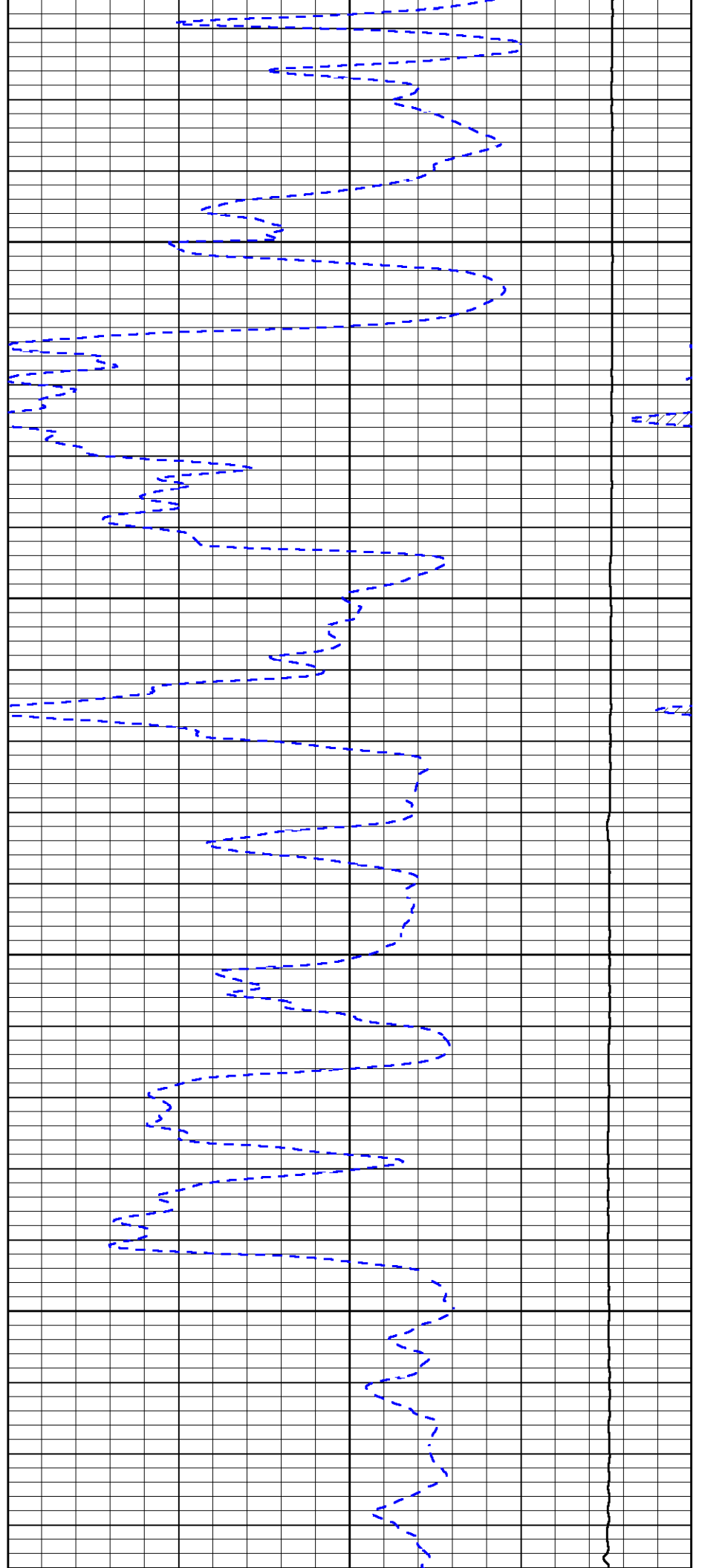


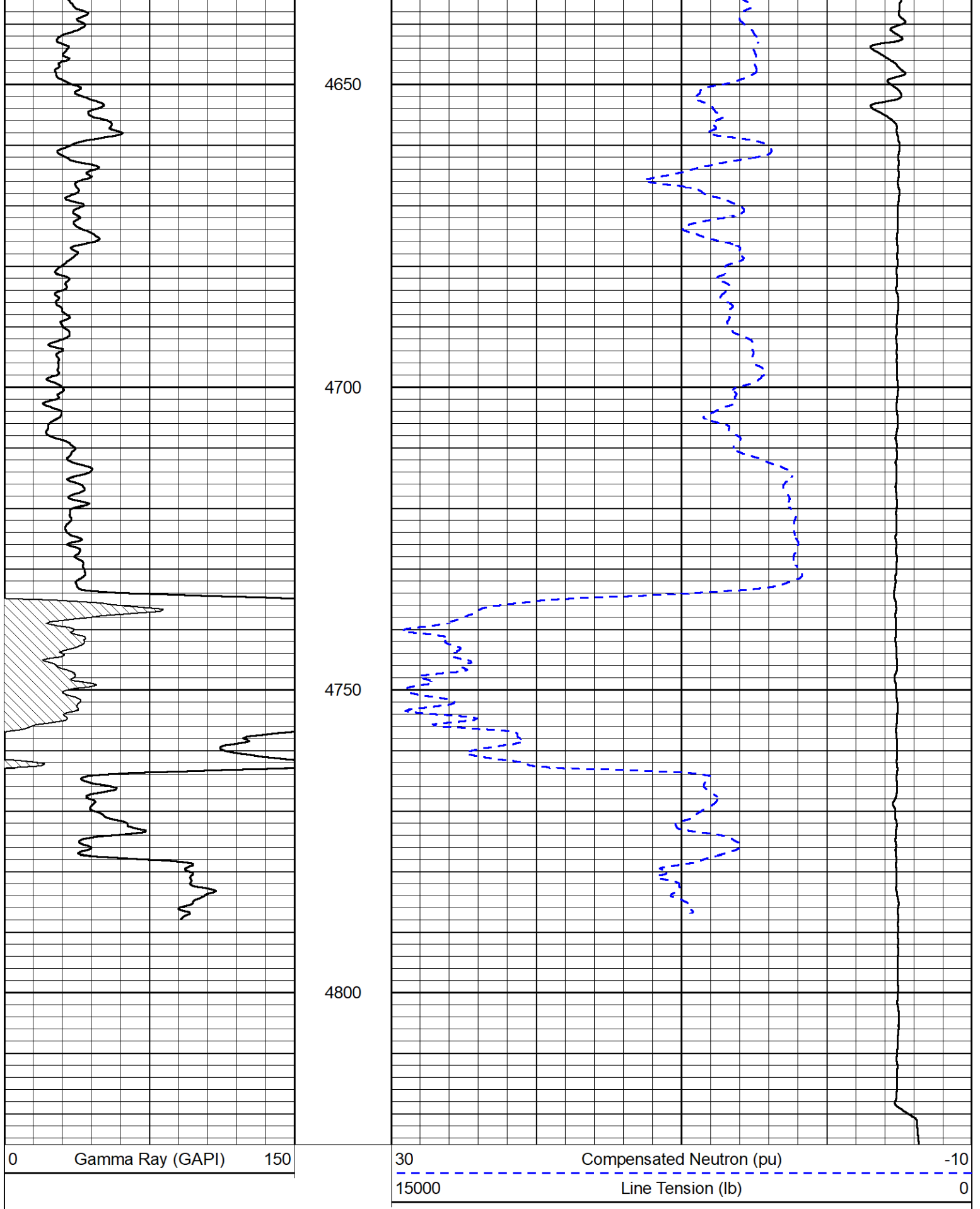
4450

4500

4550

4600





Calibration Report

Database File griffin_amber 1.db
 Dataset Pathname stkml/pass3.1
 Dataset Creation Thu Feb 03 02:15:10 2022

Dual Induction Calibration Report

Serial-Model: 501 HT-M&W
 Surface Cal Performed: Mon Jan 24 19:13:55 2022

| Loop: | Readings | | References | | | Results | |
|--------|----------|----------|------------|---------|--------|---------|---------|
| | Air | Loop | Air | Loop | | m | b |
| Deep | 83.639 | 487.104 | 0.000 | 183.000 | mmho/m | 0.420 | -35.500 |
| Medium | 113.335 | 1585.690 | 0.000 | 442.000 | mmho/m | 0.300 | -32.000 |

Microlog Calibration Report

Serial-Model: 402-PSIML
 Performed: Mon Jan 24 20:31:16 2022

| | Readings | | References | | | Results | |
|---------|----------|--------|------------|---------|-------|------------|-----------|
| | Zero | Cal | Zero | Cal | | m | b |
| Normal | 0.0000 | 1.0000 | 0.0000 | 1.0000 | Ohm-m | 21000.0000 | 0.2000 |
| Inverse | 0.0000 | 1.0000 | 0.0000 | 1.0000 | Ohm-m | 24000.0000 | 0.0000 |
| Caliper | 1.0052 | 1.0858 | 5.0000 | 16.5000 | in | 125.0000 | -123.8500 |

Compensated Density Calibration Report

Serial-Model: 301-01-M&W
 Source #: 20762B
 Master Calibration Performed: Thu Feb 3 00:43:14 2022

Master Calibration

| | Density | | Far Detector | Near Detector | |
|---------------------|---------|------|-----------------------------|---------------|-----|
| Magnesium | 1.755 | g/cc | 3559.05 | 2566.81 | cps |
| Aluminum | 2.675 | g/cc | 664.63 | 1636.12 | cps |
| Spine Angle = 74.98 | | | Density/Spine Ratio = 0.530 | | |
| | Size | | Reading | | |
| Small Ring | 8.00 | in | 1.16 | | |
| Large Ring | 13.00 | in | 1.01 | | |

Compensated Neutron Calibration Report

Serial-Model: 207-MW-M&W
 Source #: 100046B
 Master Calibration Performed: Mon Nov 29 15:06:24 2021

Master Calibration

| Detector | Readings | Target | Normalization |
|-------------|-------------|-------------|---------------|
| Short Space | 6240.00 cps | 1000.00 cps | 1.6025 |
| Long Space | 460.00 cps | 1000.00 cps | 1.9500 |

Gamma Ray Calibration Report

Serial Number: 101
 M&W

| | | |
|---------------------|--------------------------|----------|
| Tool Model: | M&W | |
| Performed: | Mon Jan 24 19:14:46 2022 | |
| Calibrator Value: | 500.0 | GAPI |
| Background Reading: | 24.0 | cps |
| Calibrator Reading: | 637.0 | cps |
| Sensitivity: | 0.5500 | GAPI/cps |



| | |
|---------|------------------------|
| Company | Griffin Management LLC |
| Well | Amber #1 |
| Field | Turkey Creek Camp |
| County | Pratt |
| State | Kansas |