



VDL CCL GAMMA-RAY CEMENT BOND LOG

Pioneer Energy Services

Company KERR MCGEE OIL & GAS ONSHORE LP
Well BUUM 11-7 A
Field WATTENBERG
County WELD State COLORADO

Location: API # : 05123219310000 Other Services

SEC 7 TWP 2N RGE 65W

Permanent Datum GL Elevation 4960'
Log Measured From KB
Drilling Measured From KB

K.B. 4976'
D.F. 4975'
G.L. 4960'

Date APRIL 22/2013

Run Number ONE
Depth Driller 7988'
Depth Logger 4500'
Bottom Logged Interval 4500'
Top Log Interval 20'
Open Hole Size 7 7/8"
Type Fluid WATER
Density / Viscosity NA
Max. Recorded Temp. 205 DEG. F
Estimated Cement Top 860'
Time Well Ready NA
Time Logger on Bottom NA
Equipment Number 9605
Location FT MORGAN
Recorded By TODD YOUNG
Witnessed By JAY CHANDLER

Borehole Record Tubing Record

Run Number Bit From To Size Weight From To


Casing Record Size Wgt/Ft Top Bottom
Surface String 4.5 11.6 #
Prot. String
Production String
Liner

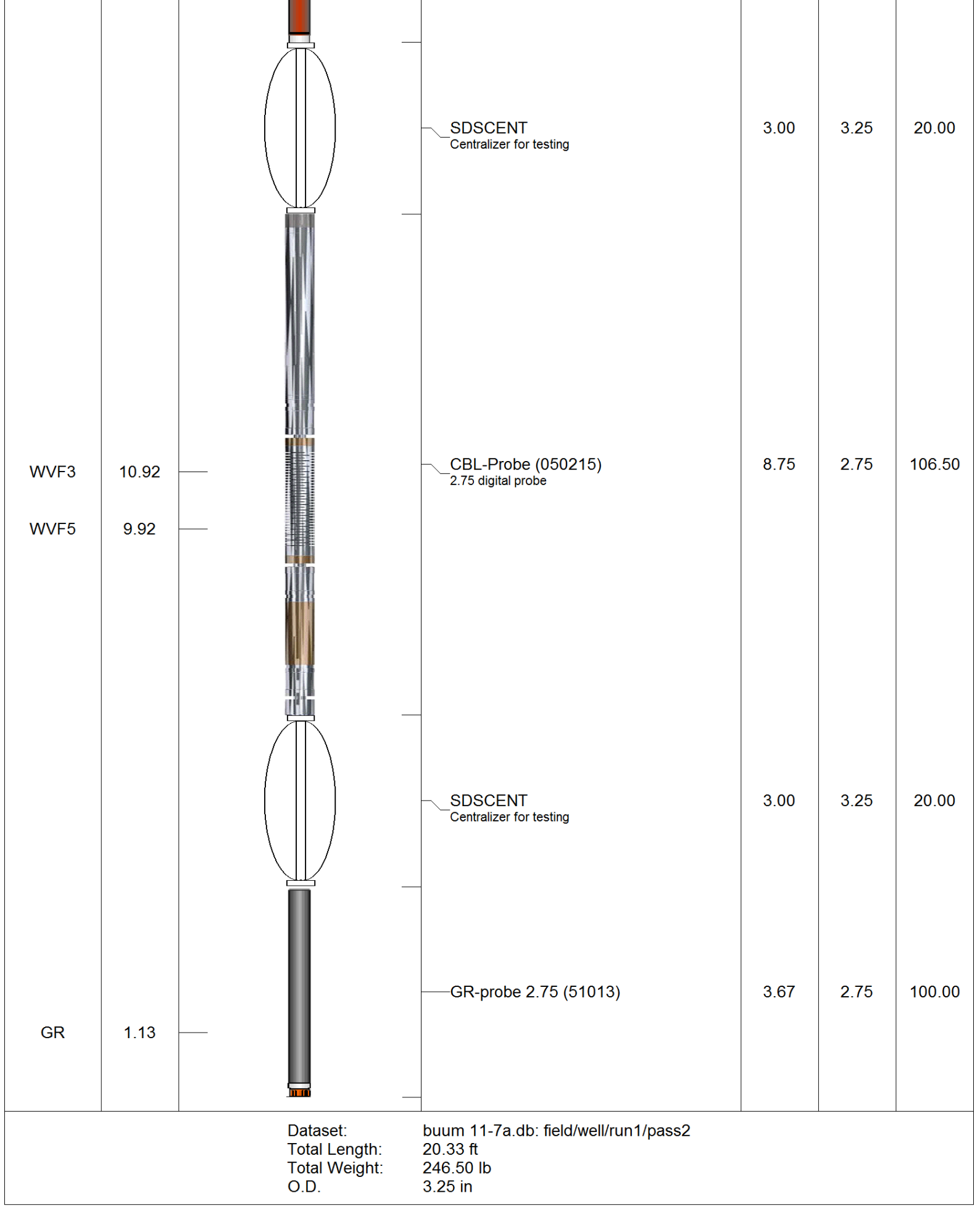
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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on 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.

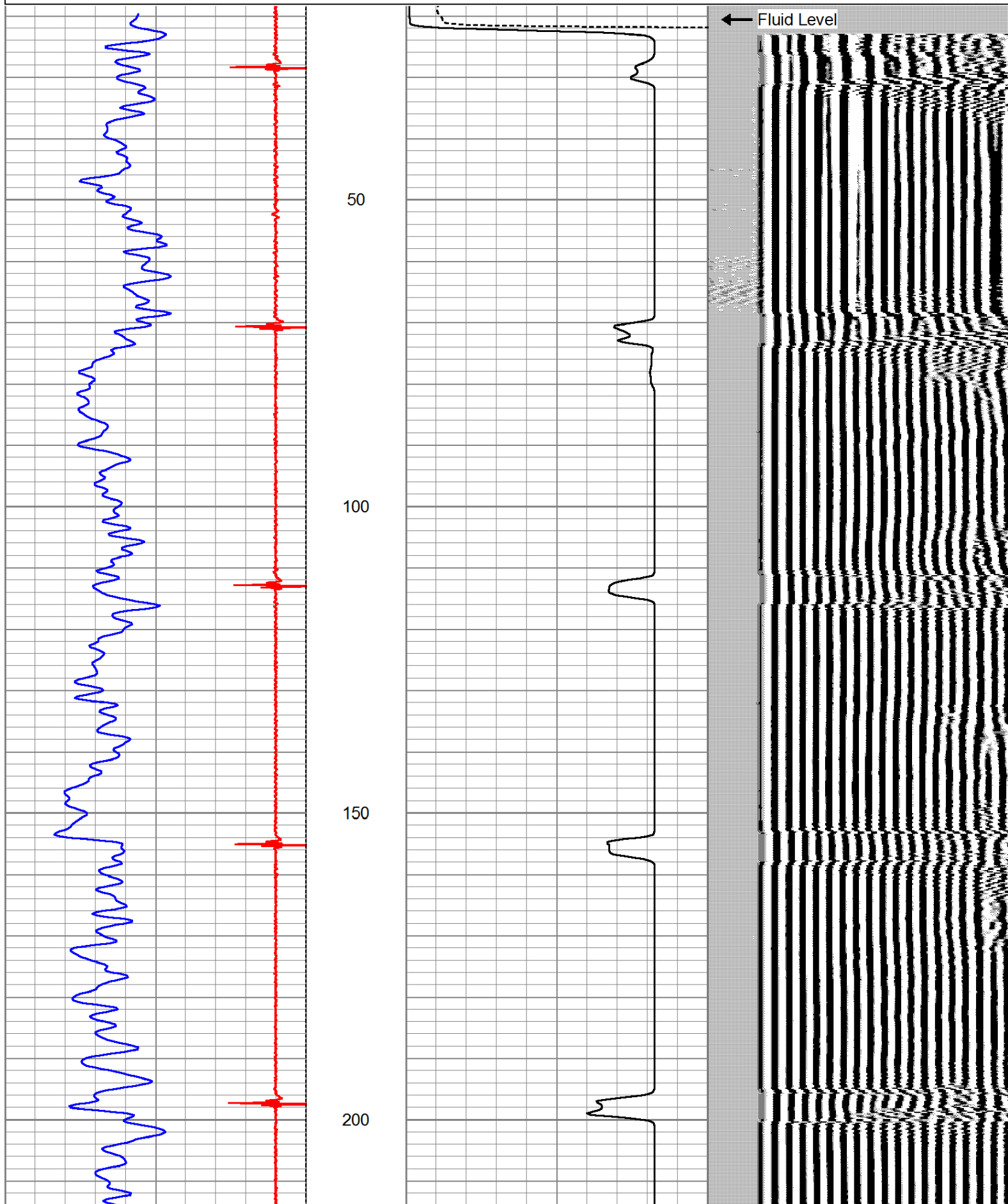
Comments

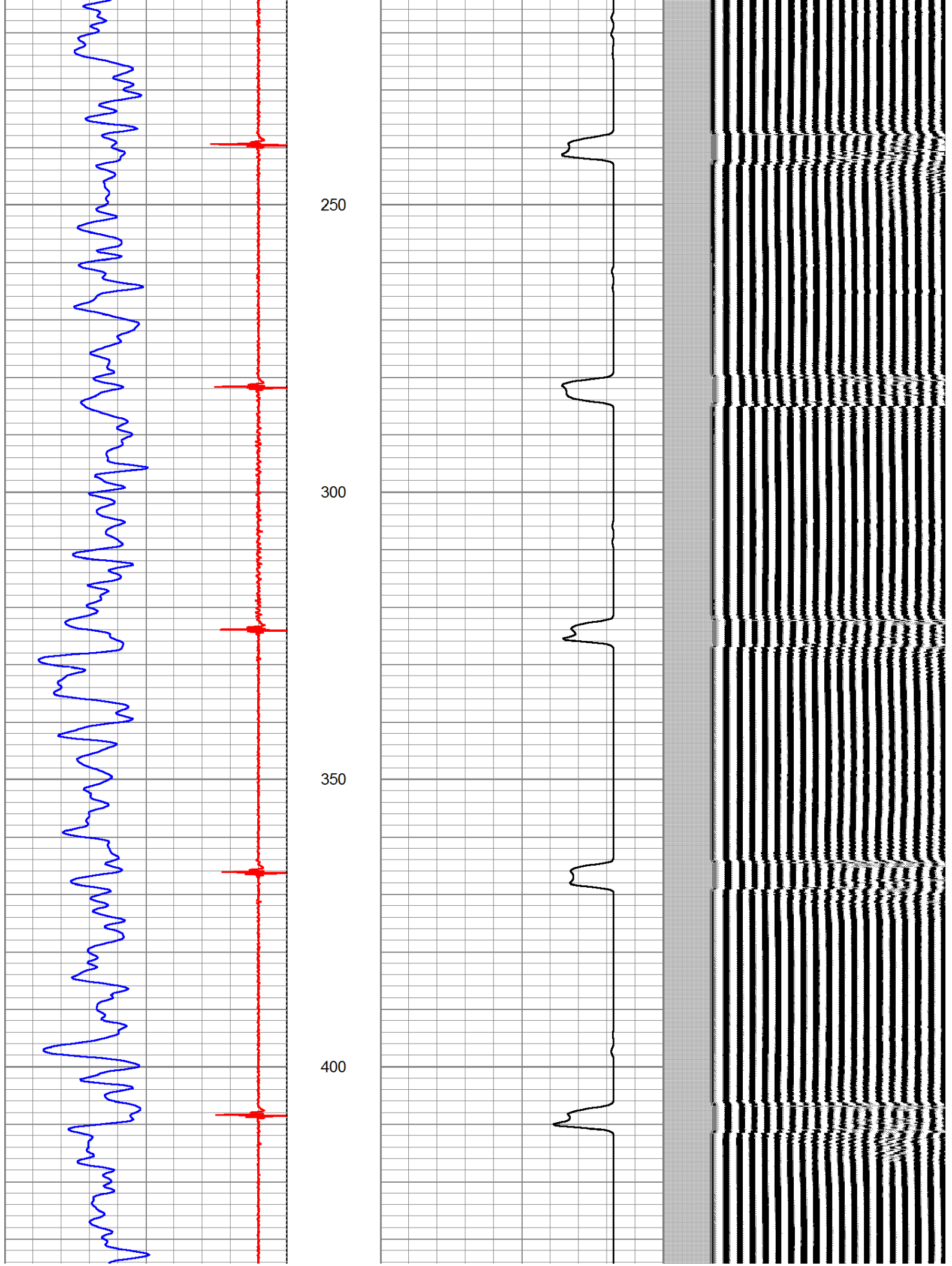
SO#2-203820
NOT CORRILATED
THANK YOU FOR USING
PIONEER ENERGY SERVICES

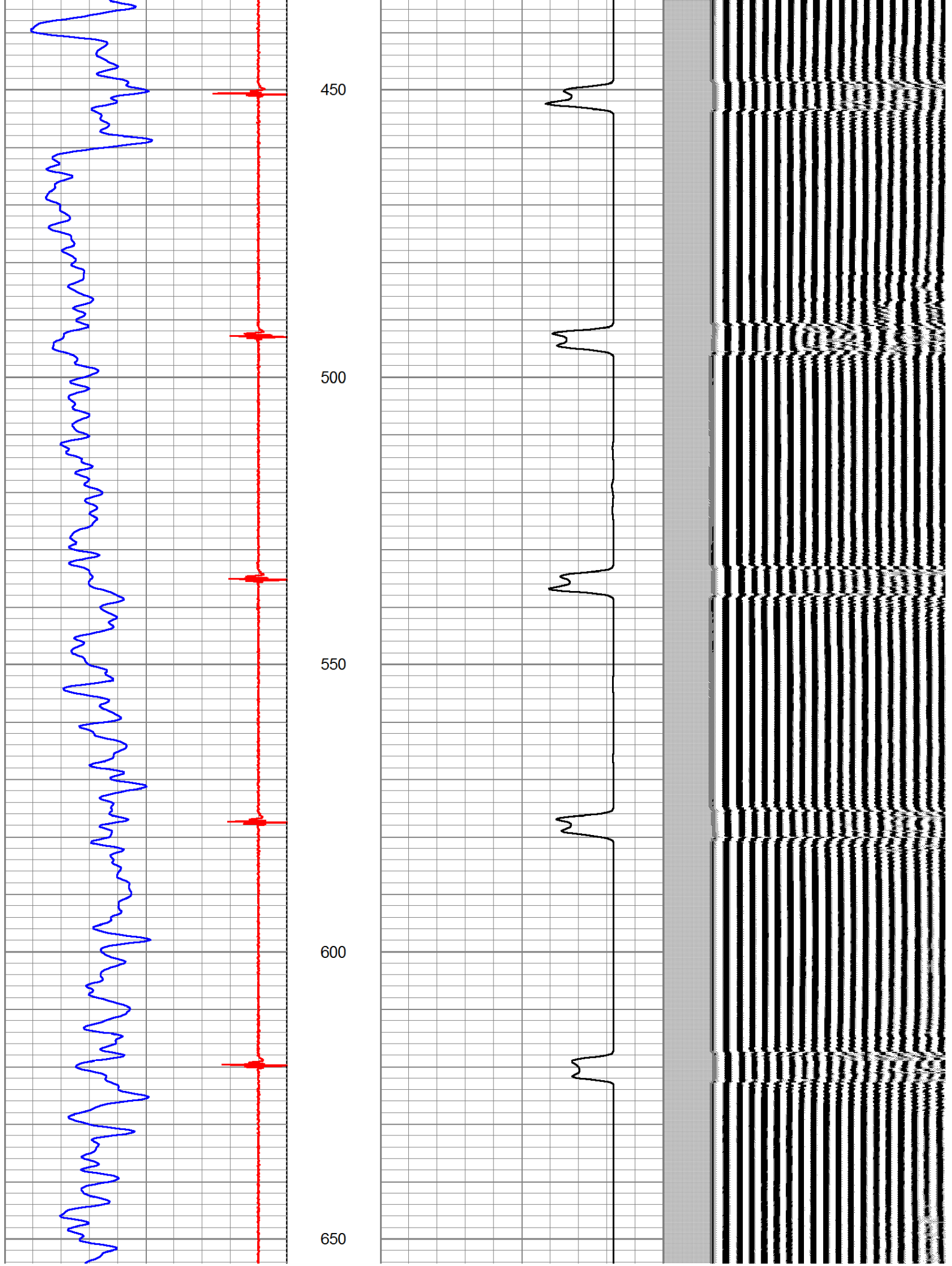
| Sensor | Offset (ft) | Schematic | Description | Len (ft) | OD (in) | Wt (lb) |
|--------|-------------|---|-------------------|----------|---------|---------|
| CCL | 19.31 |  | CCL-titan01 (01t) | 1.92 | 2.75 | |

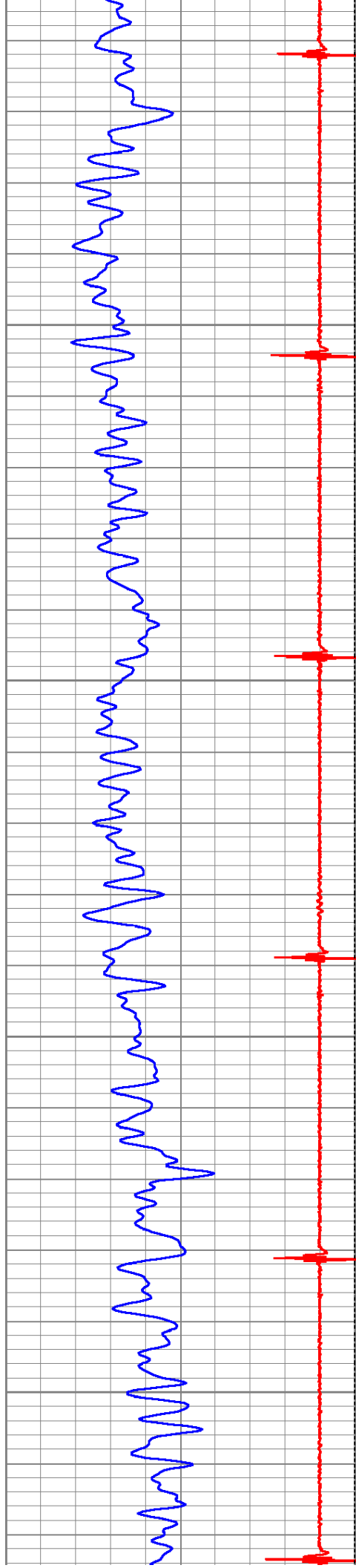


| | | | | | | | | | |
|---|------------------|-----|------------|---|--------------------------|-----|-----|------------------|------|
| 9 | Collar Locator | -1 | LTEN | 0 | Amplified Amplitude (mV) | 10 | 200 | Variable Density | 1200 |
| 0 | Gamma Ray (GAPI) | 200 | 0 (lb)2000 | 0 | Amplitude (mV) | 100 | | | |







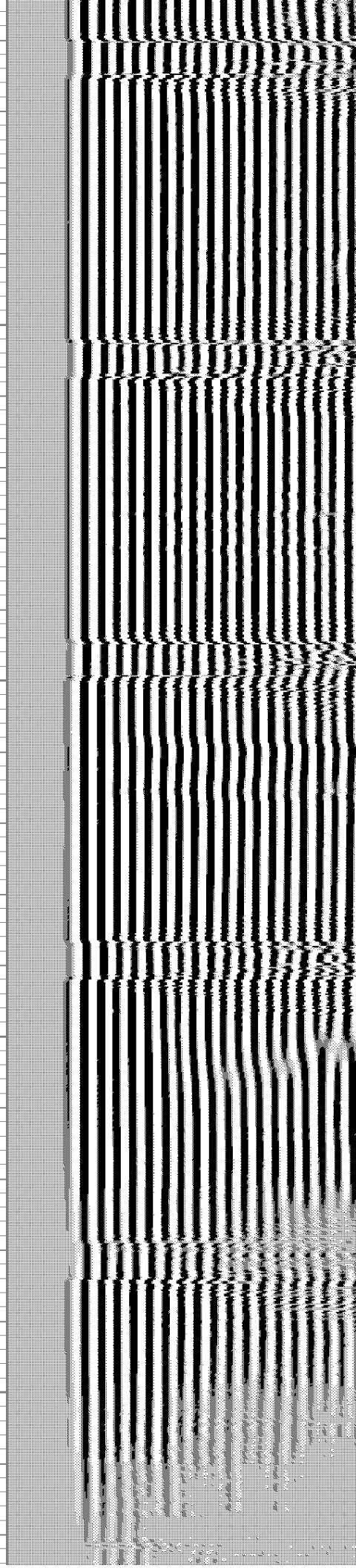
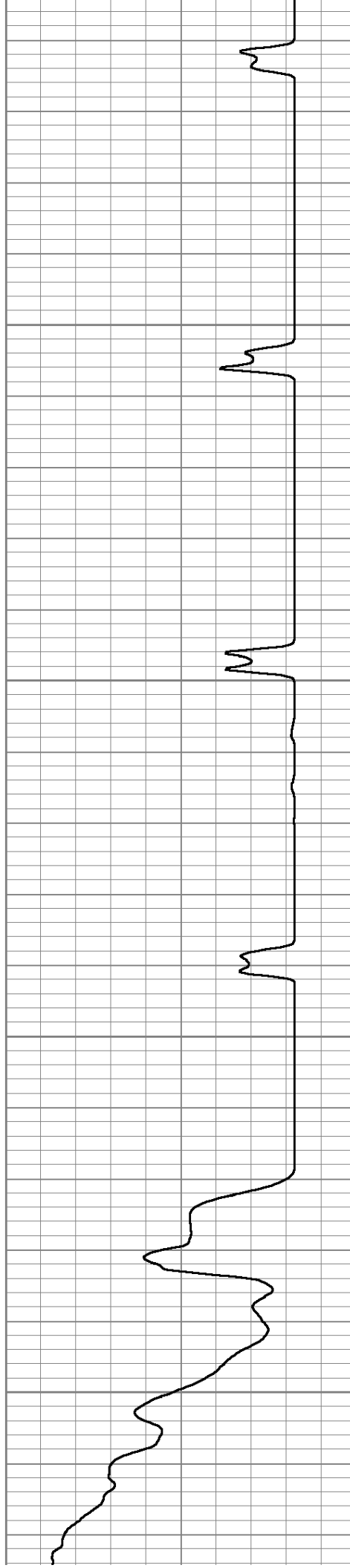


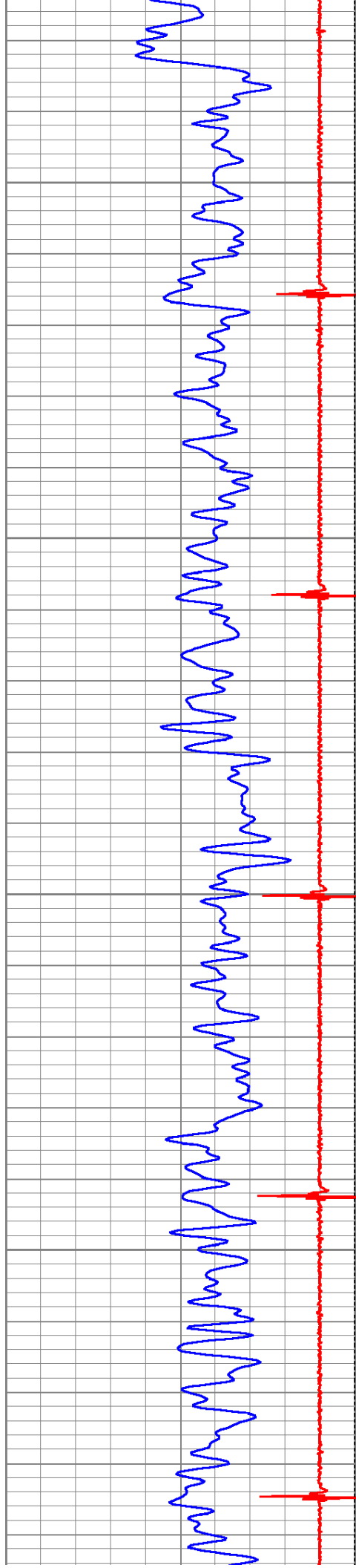
700

750

800

850



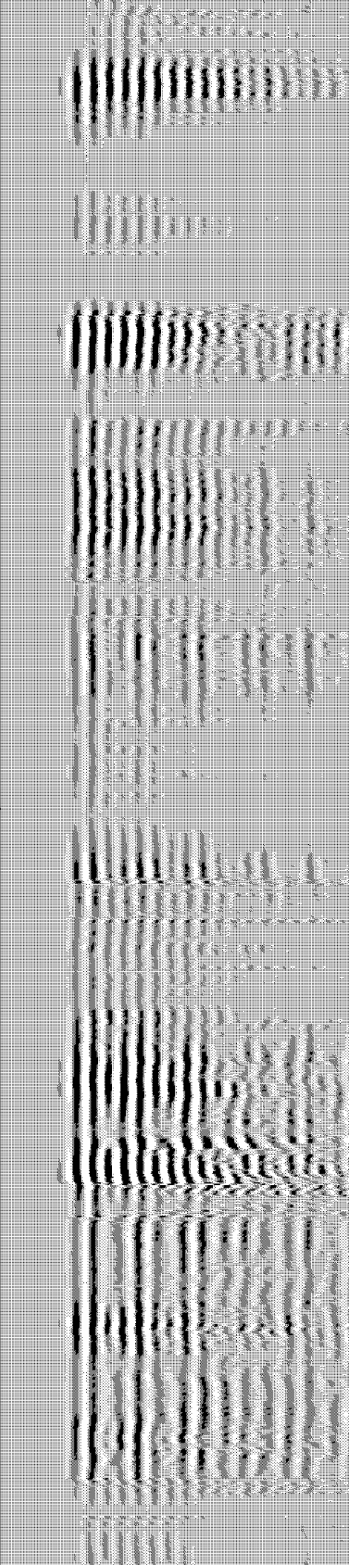
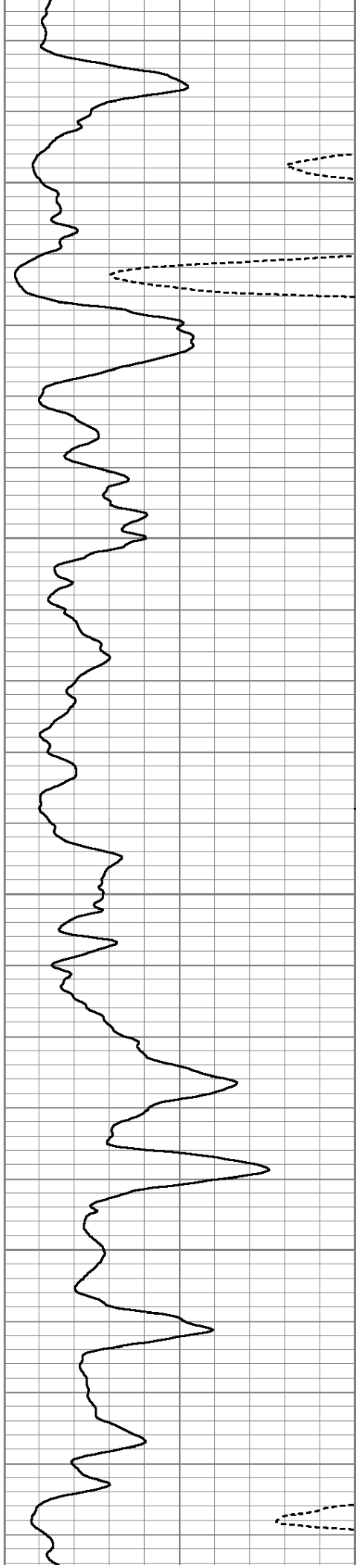


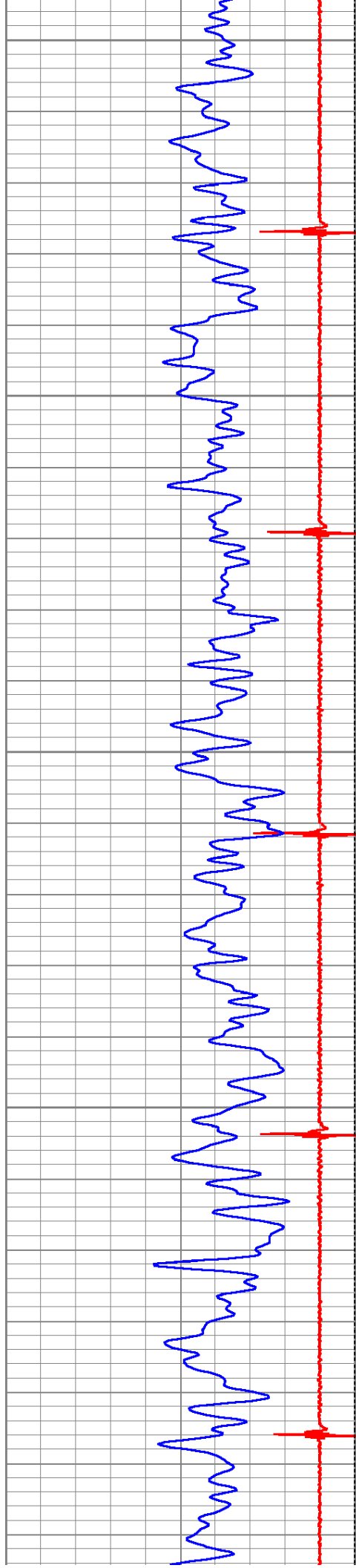
900

950

1000

1050





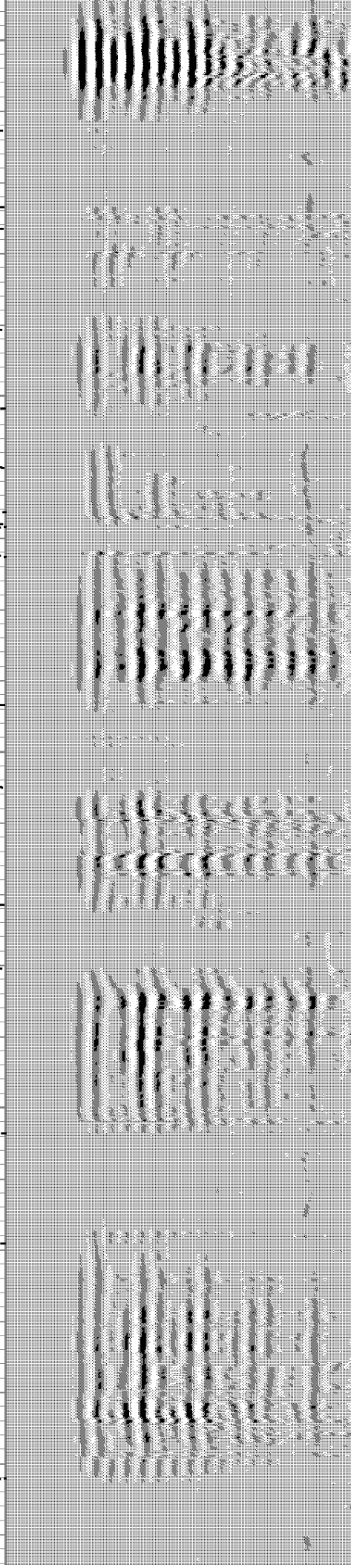
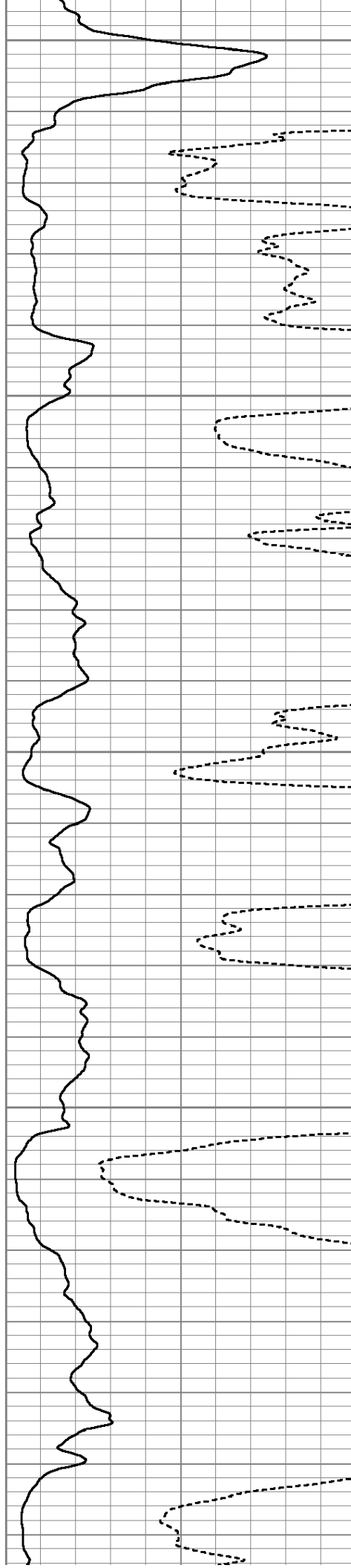
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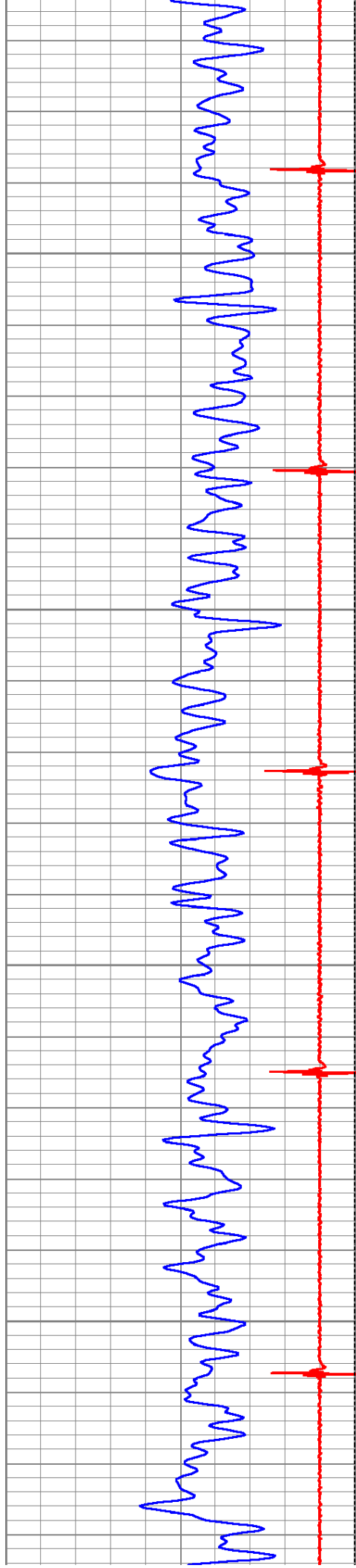
1150

1200

1250

1300



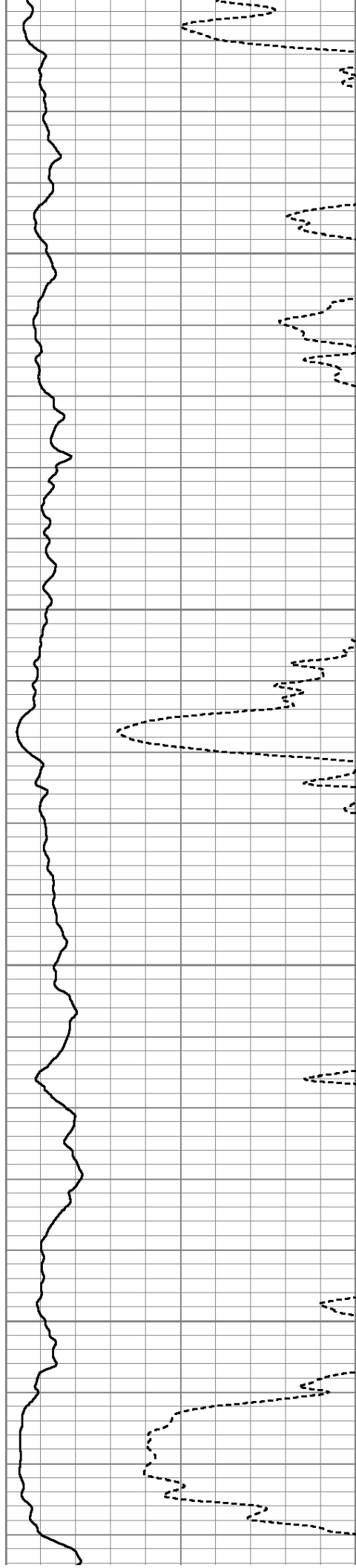


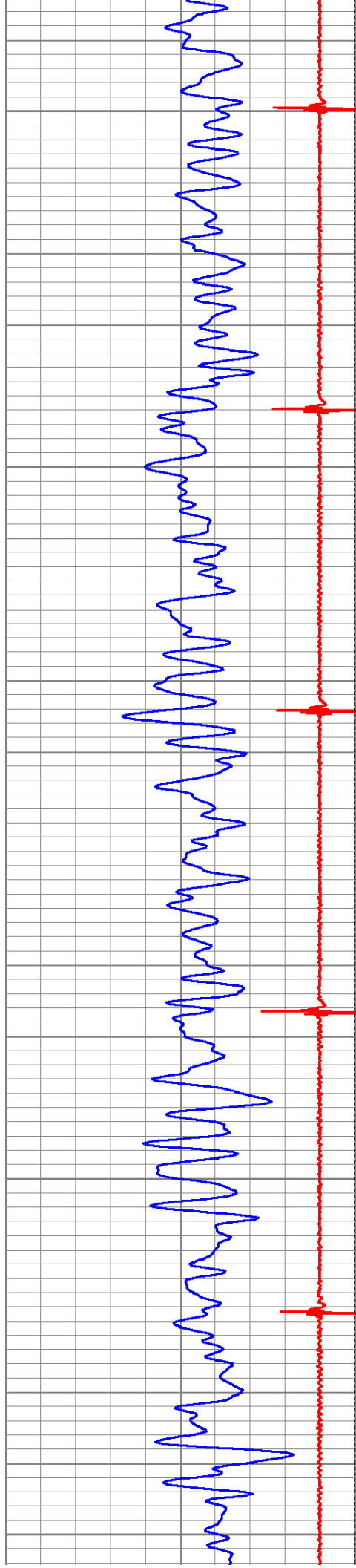
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1400

1450

1500





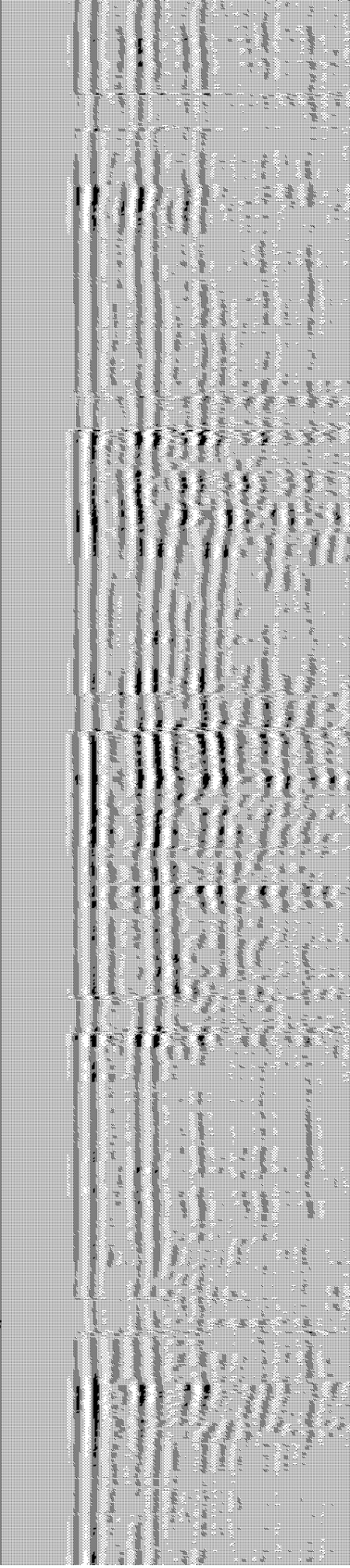
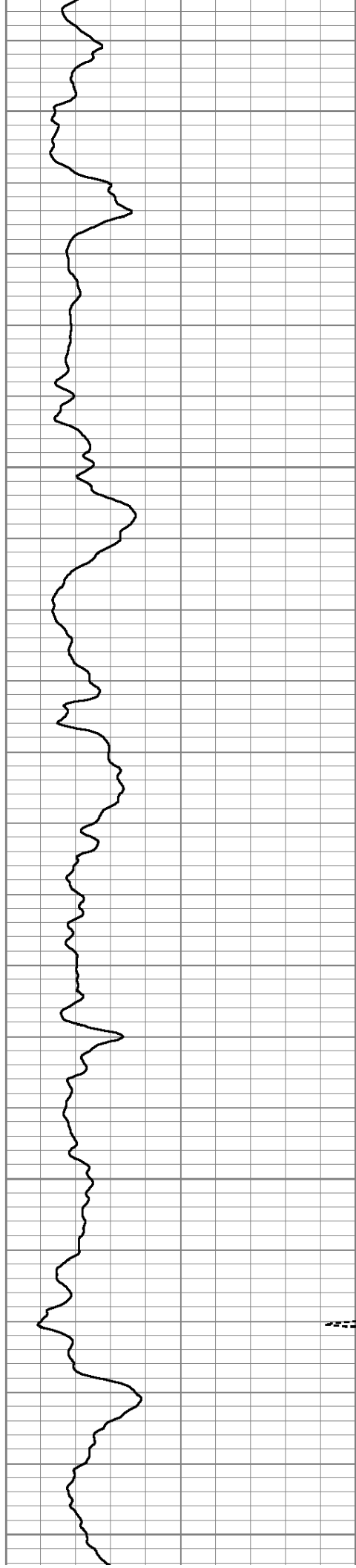
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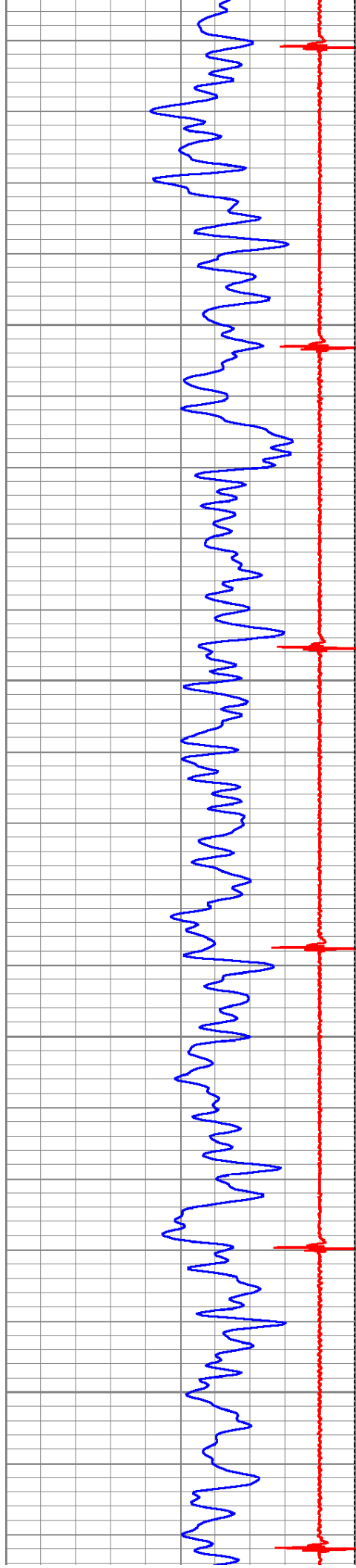
1600

1650

1700

1750



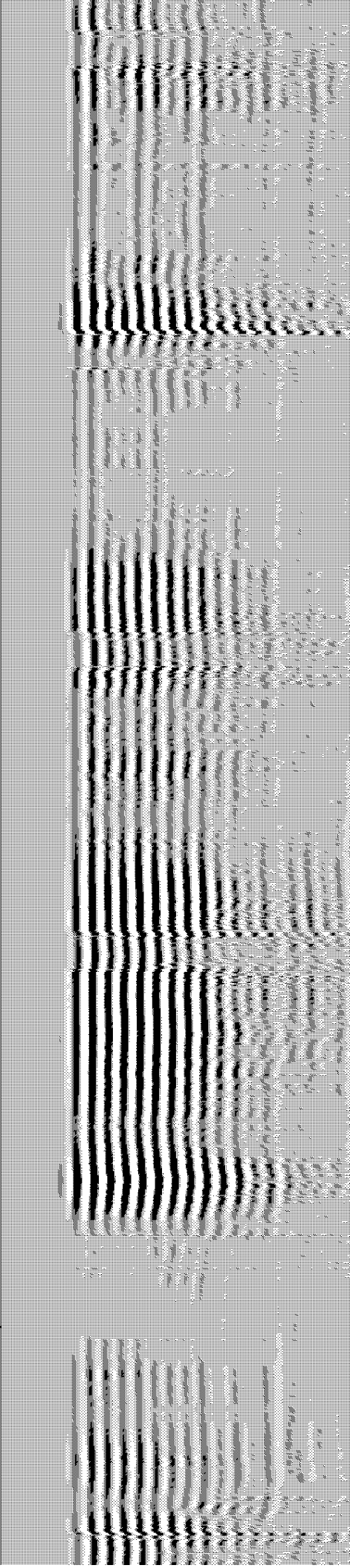
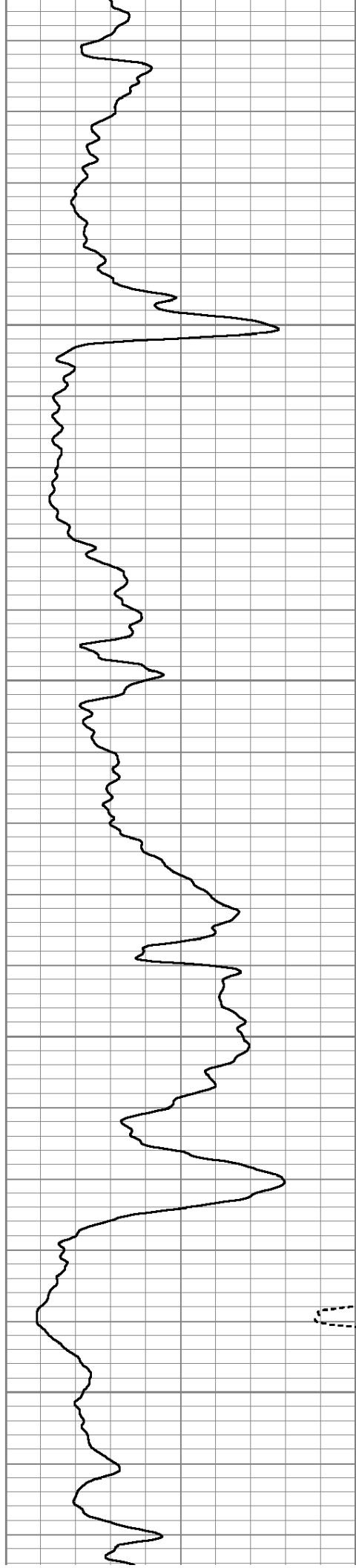


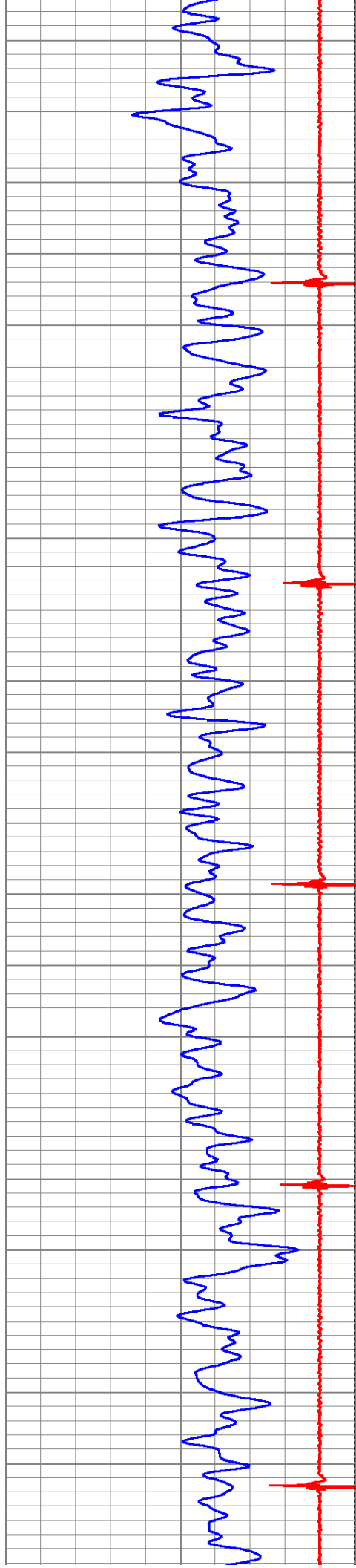
1800

1850

1900

1950



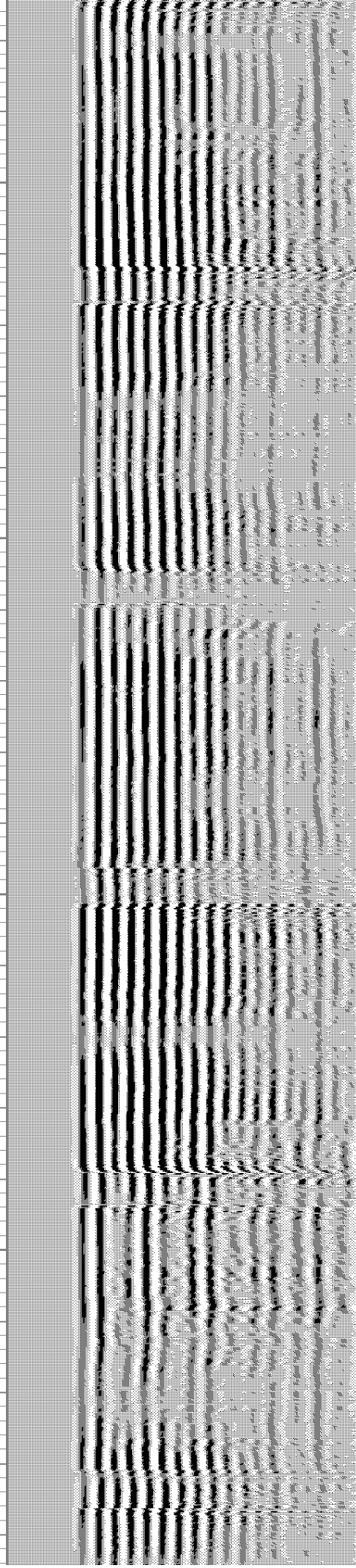
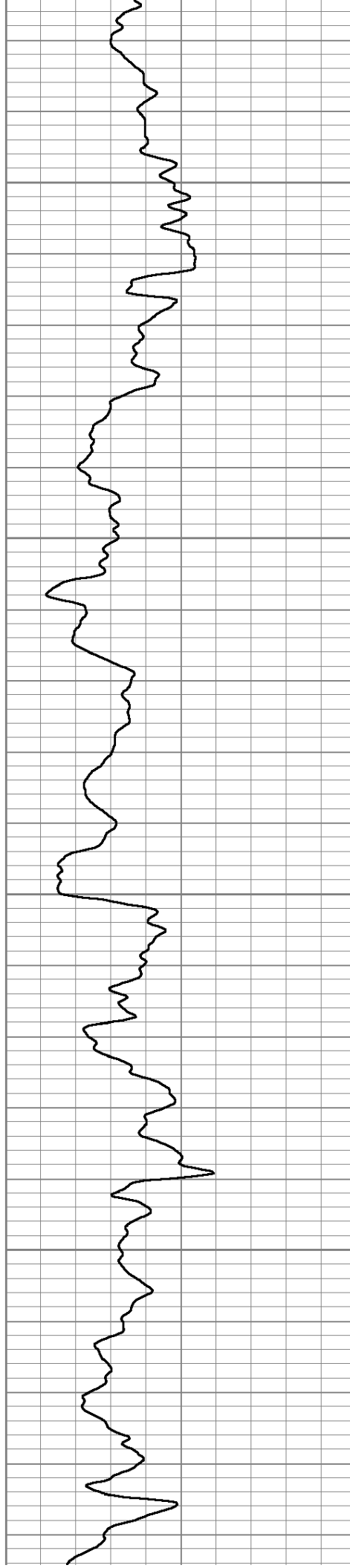


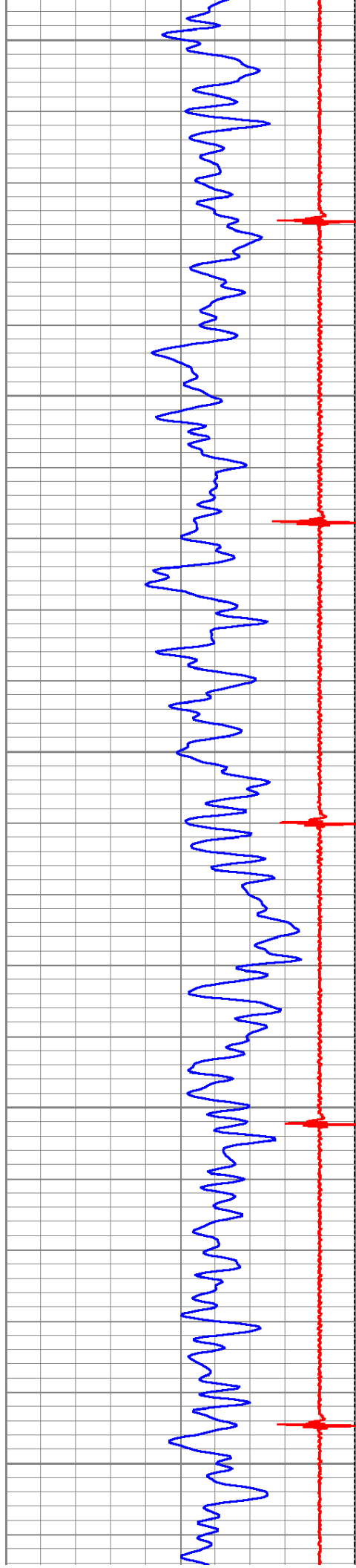
2000

2050

2100

2150





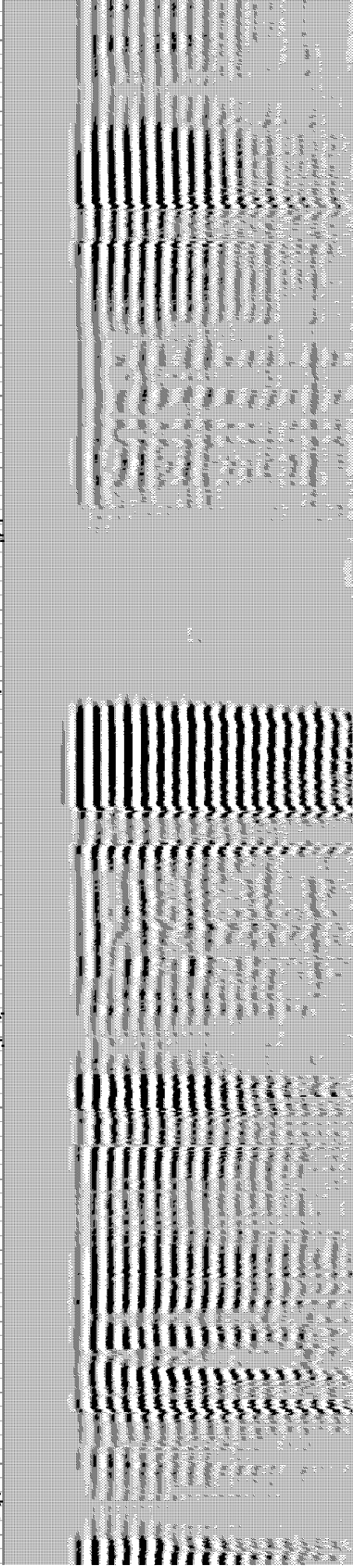
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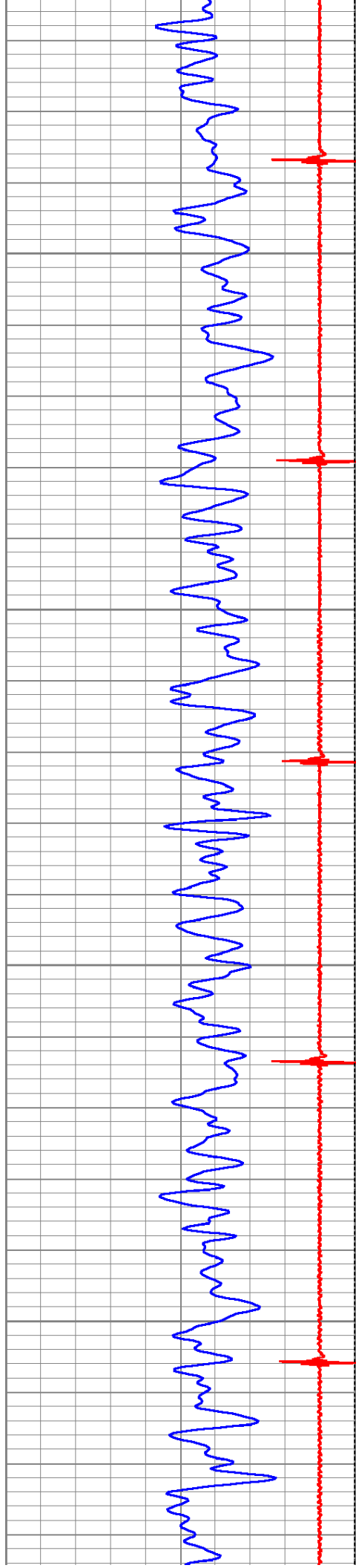
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2300

2350

2400



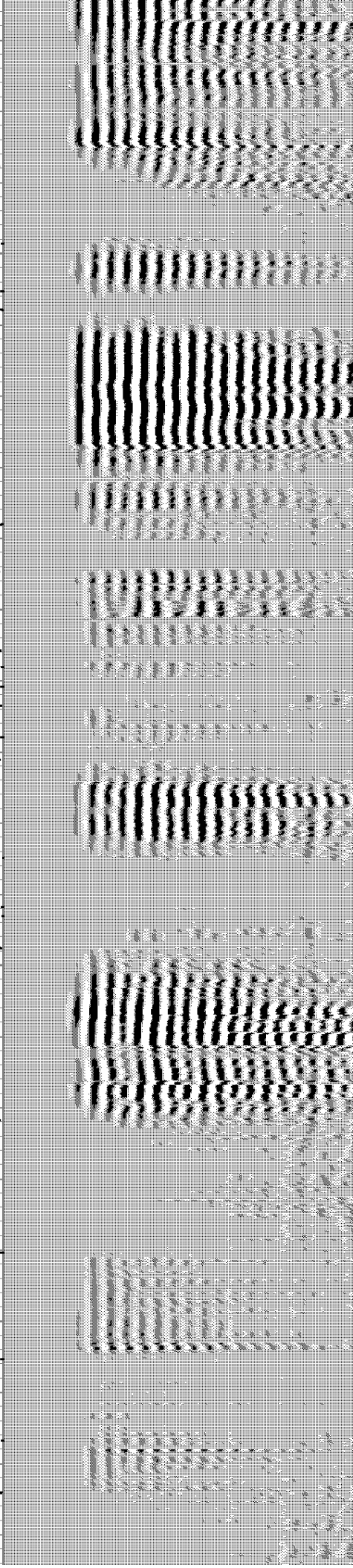
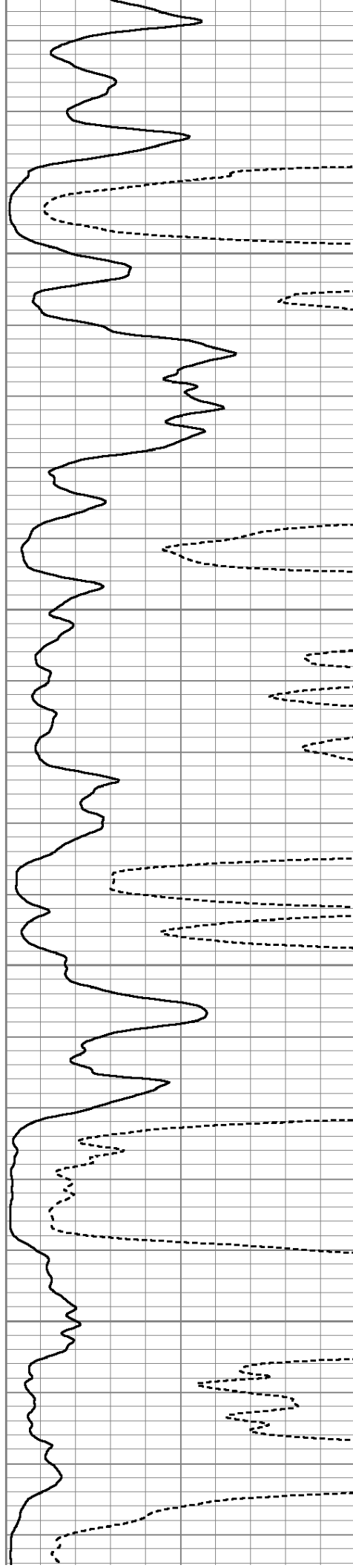


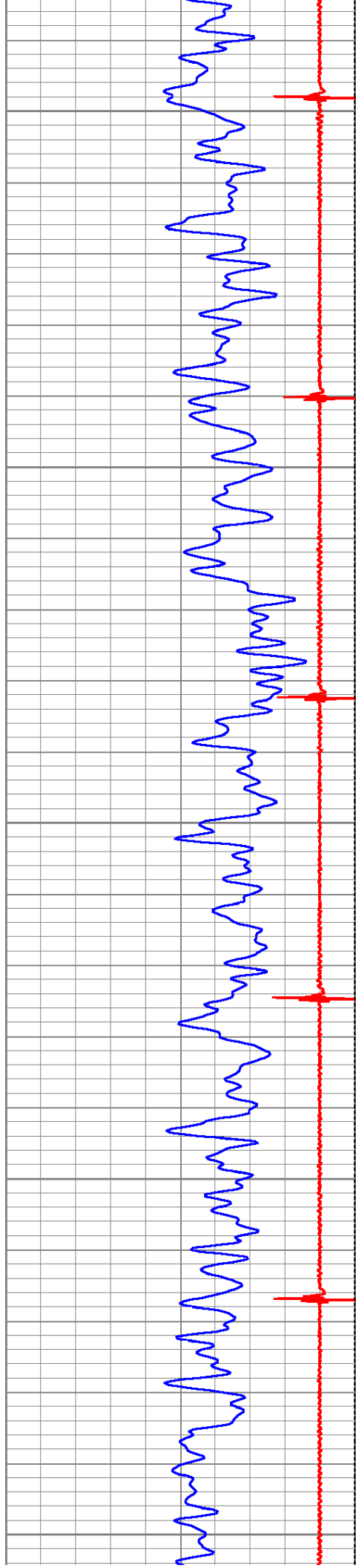
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2500

2550

2600





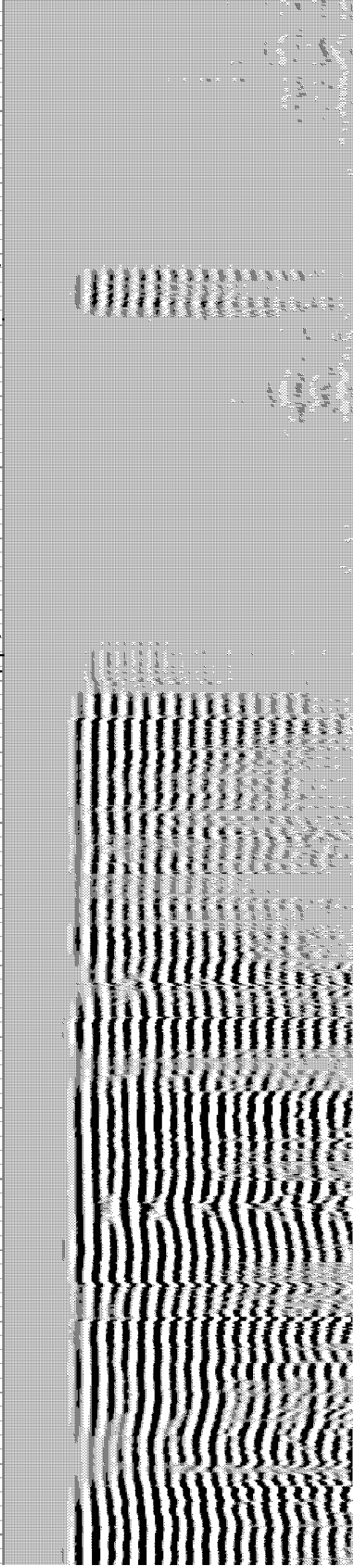
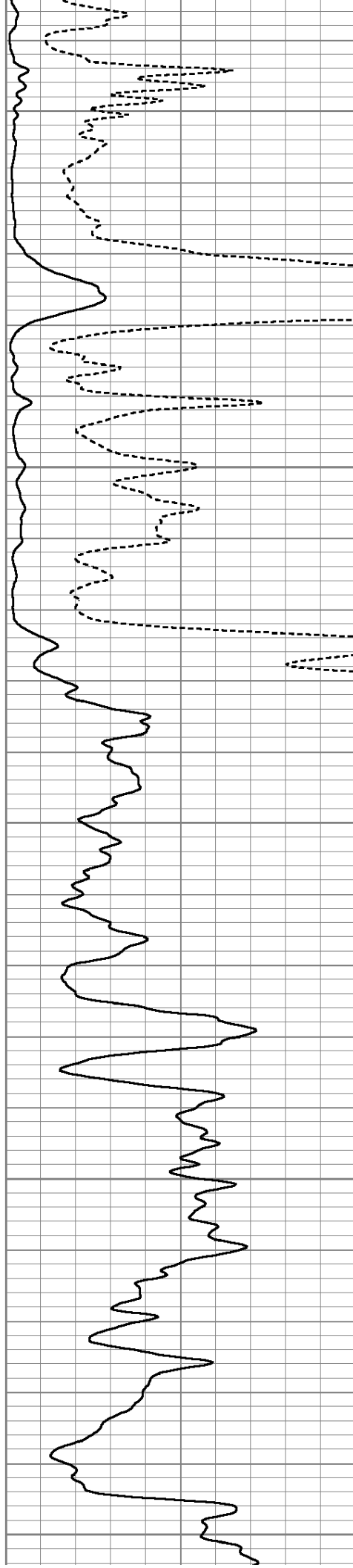
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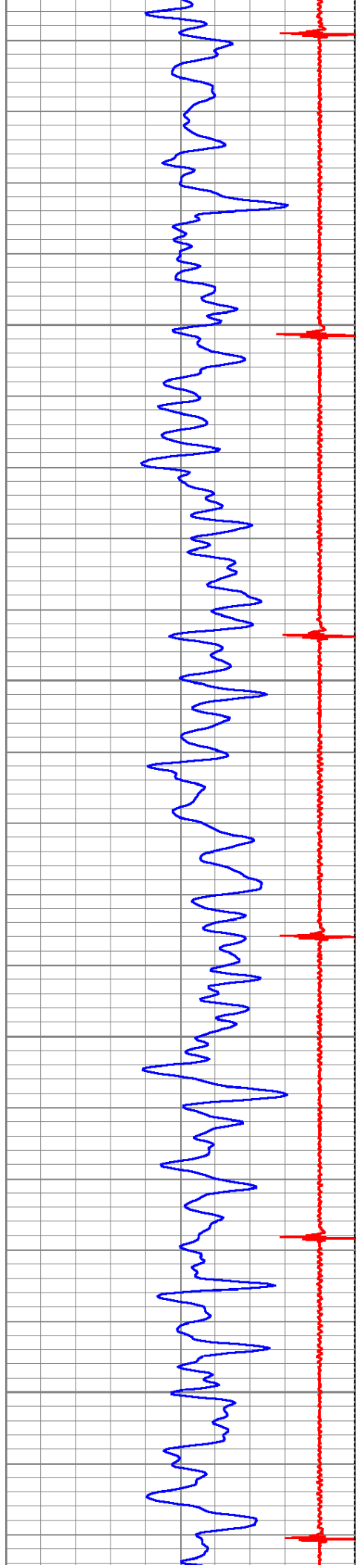
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2800

2850



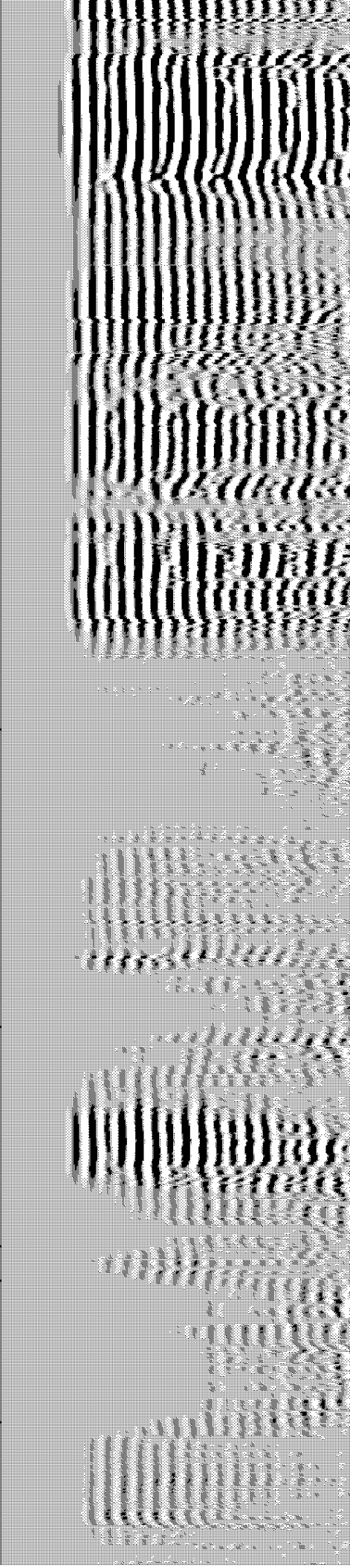
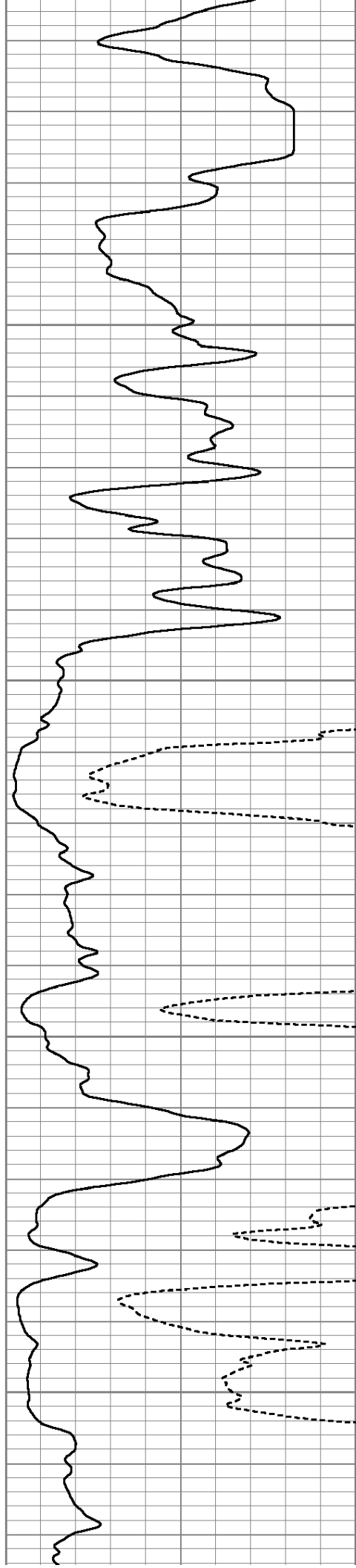


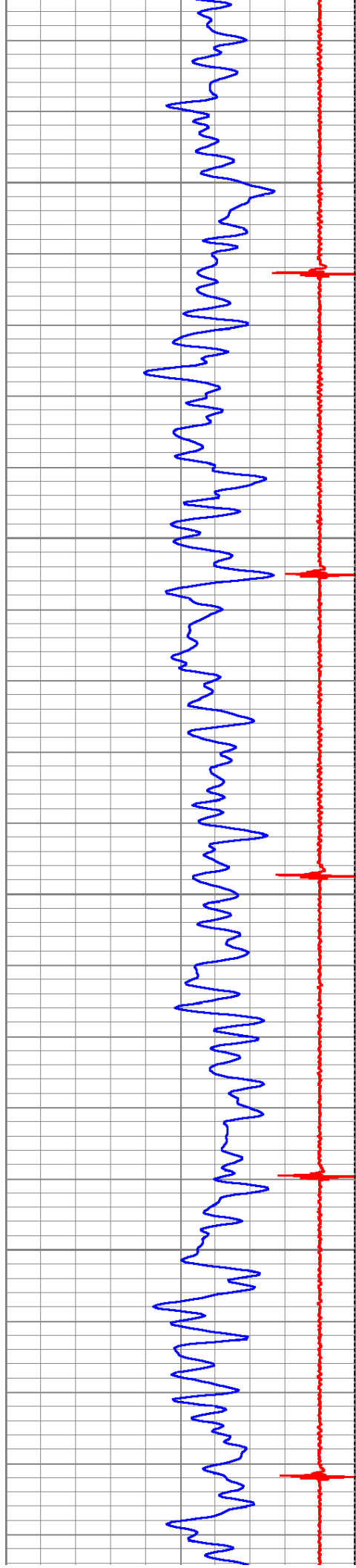
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2950

3000

3050



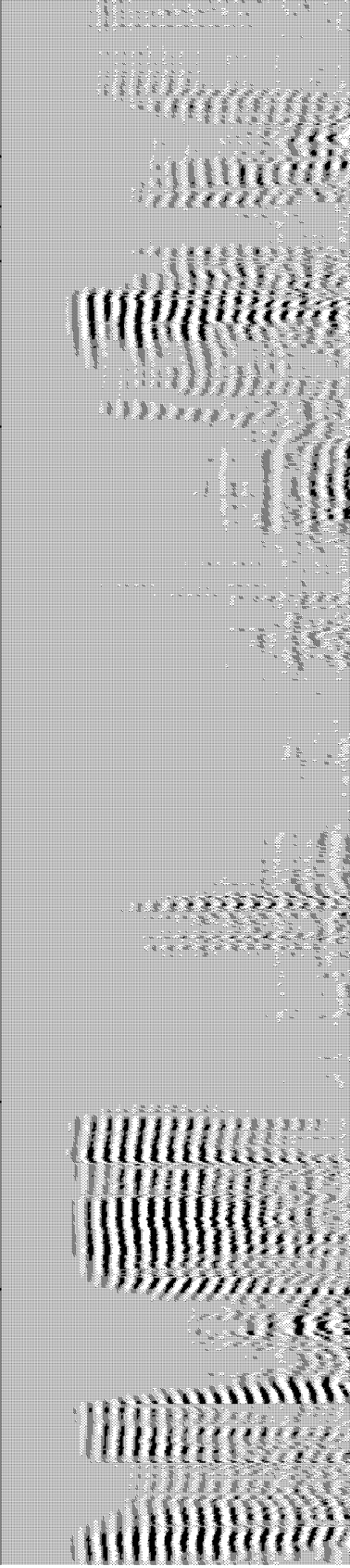
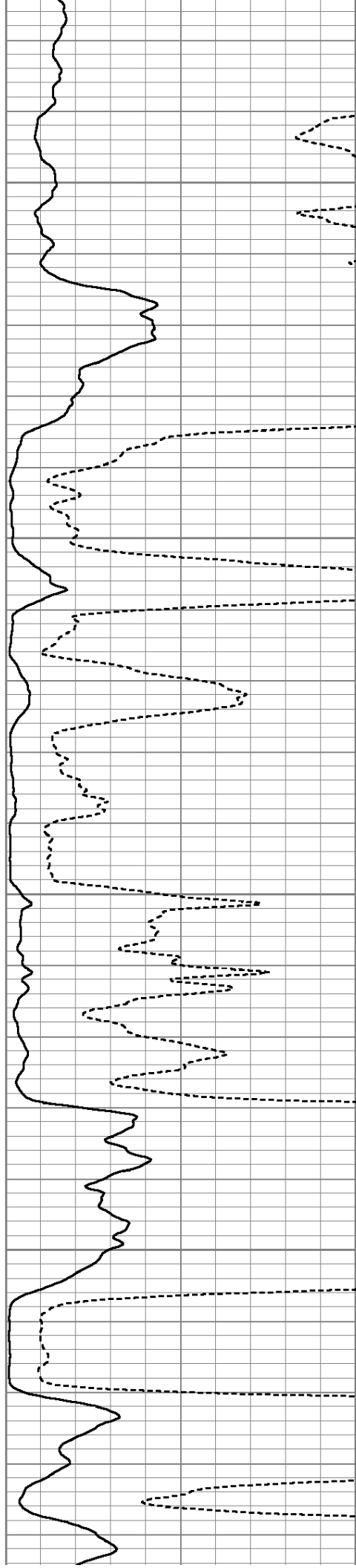


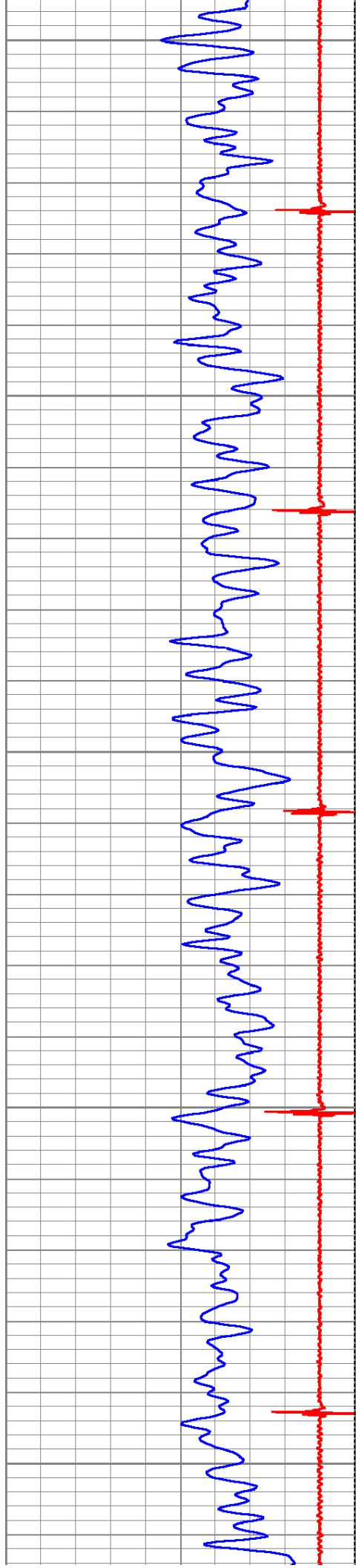
3100

3150

3200

3250





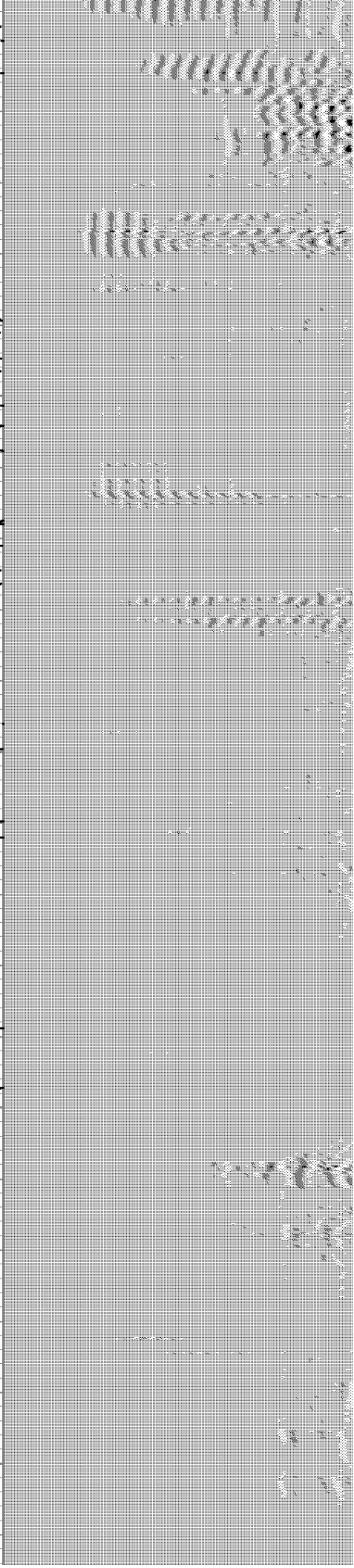
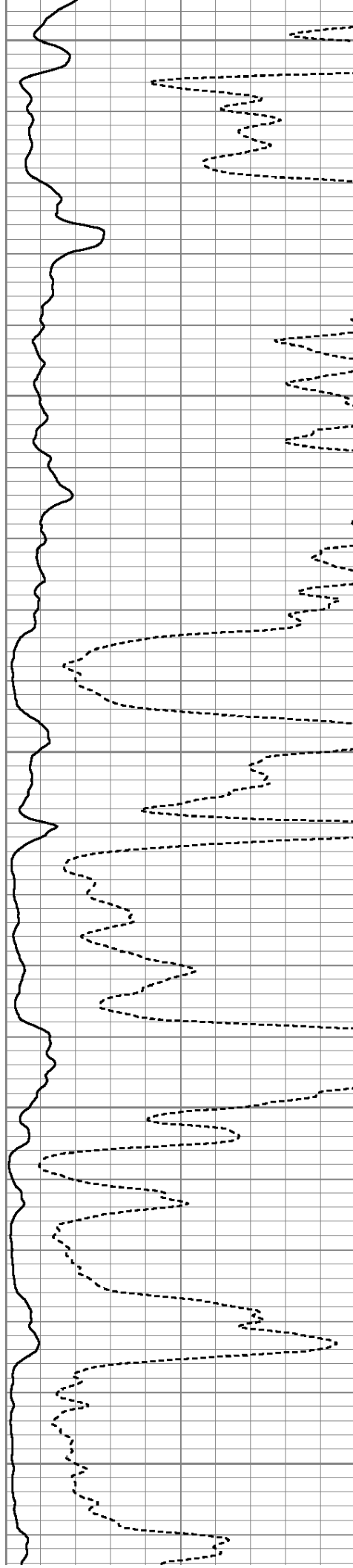
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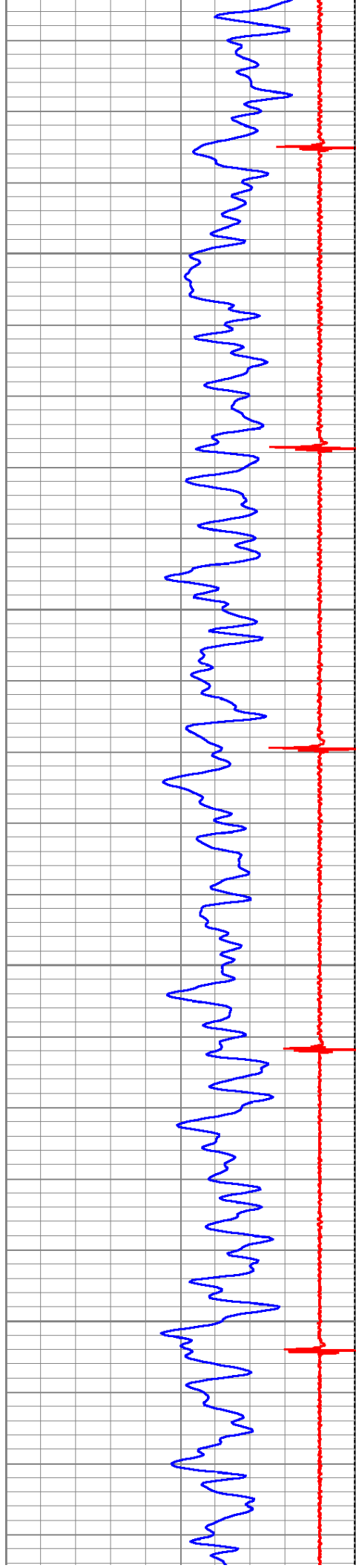
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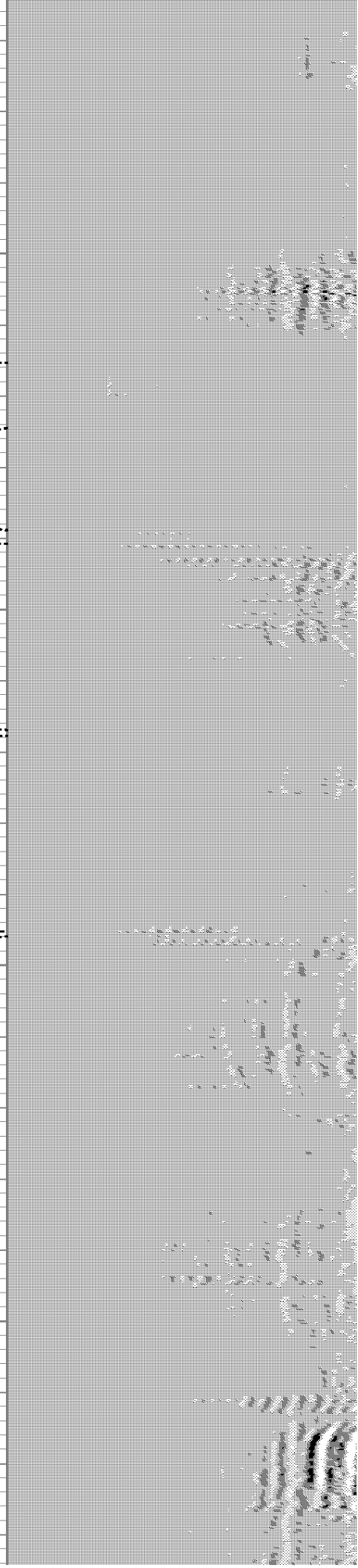
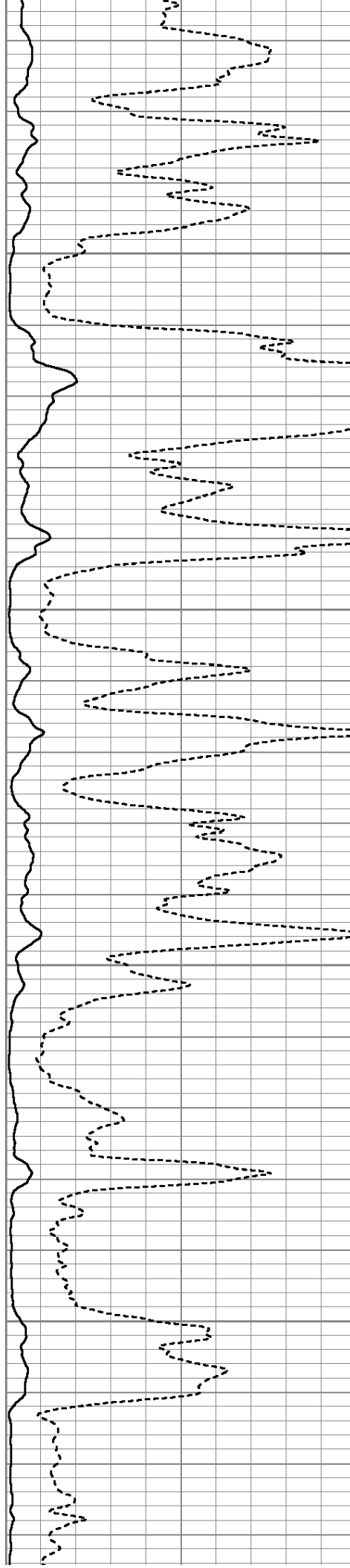


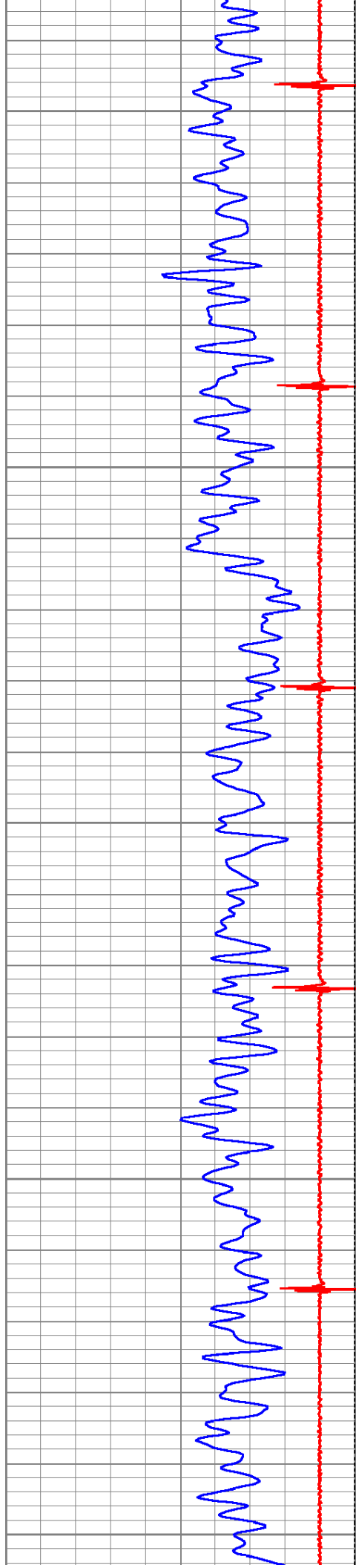
3550

3600

3650

3700





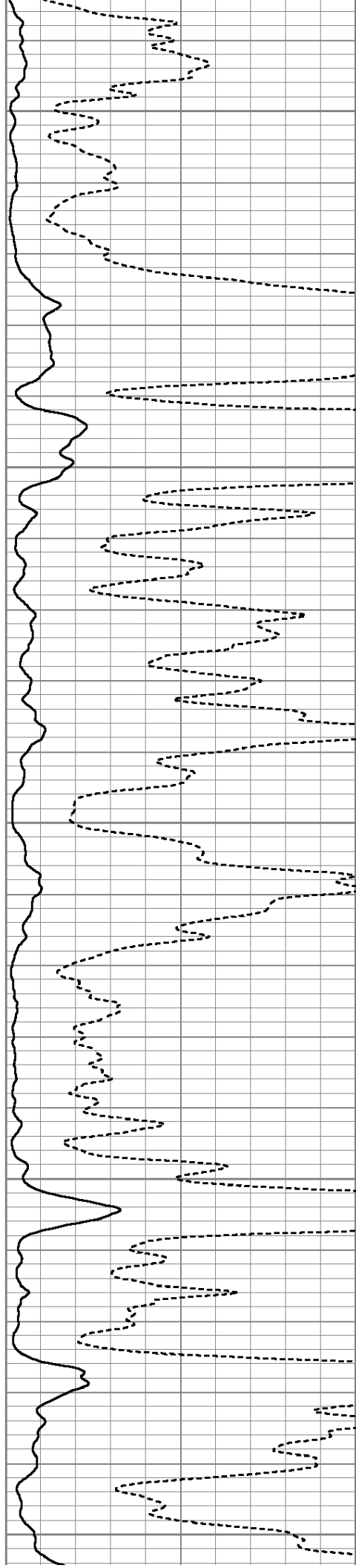
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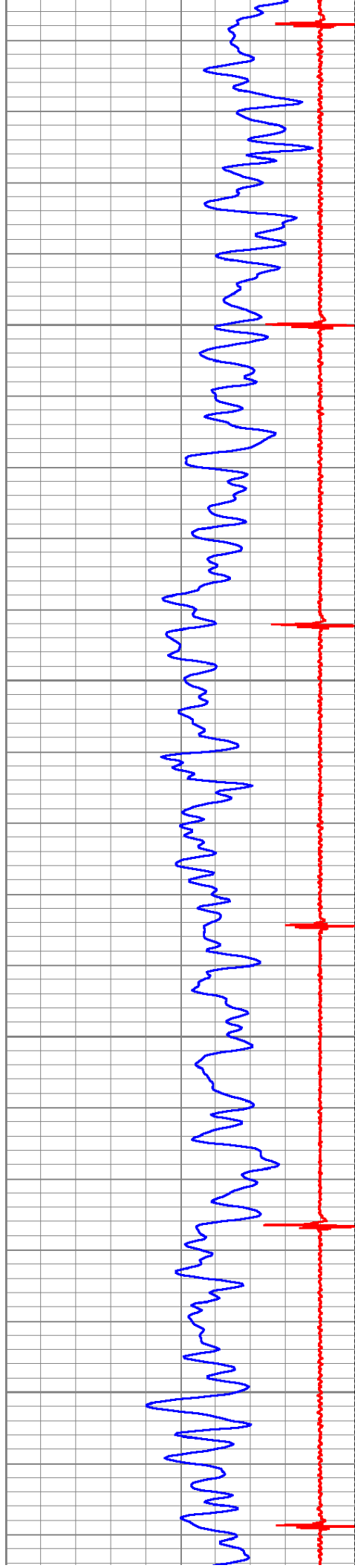
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3850

3900

3950



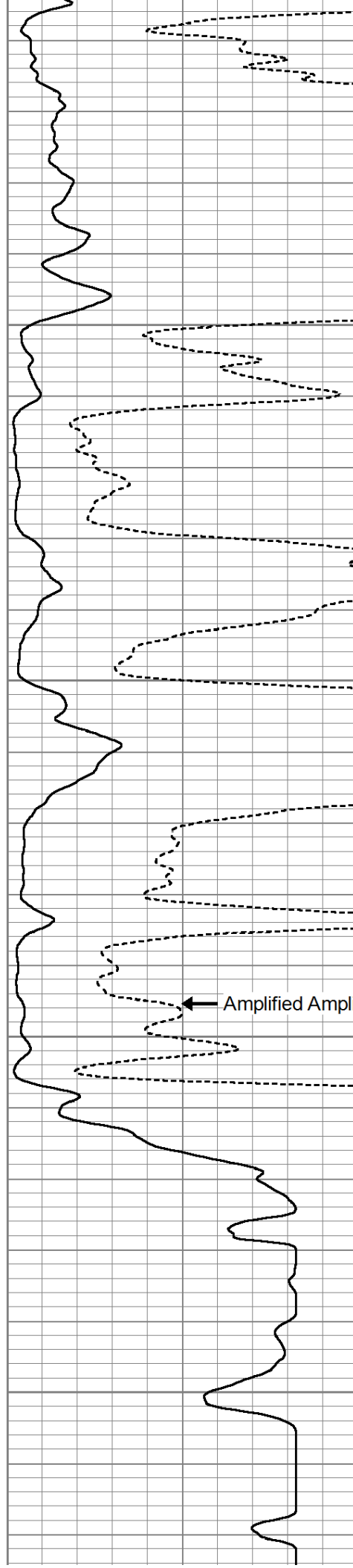


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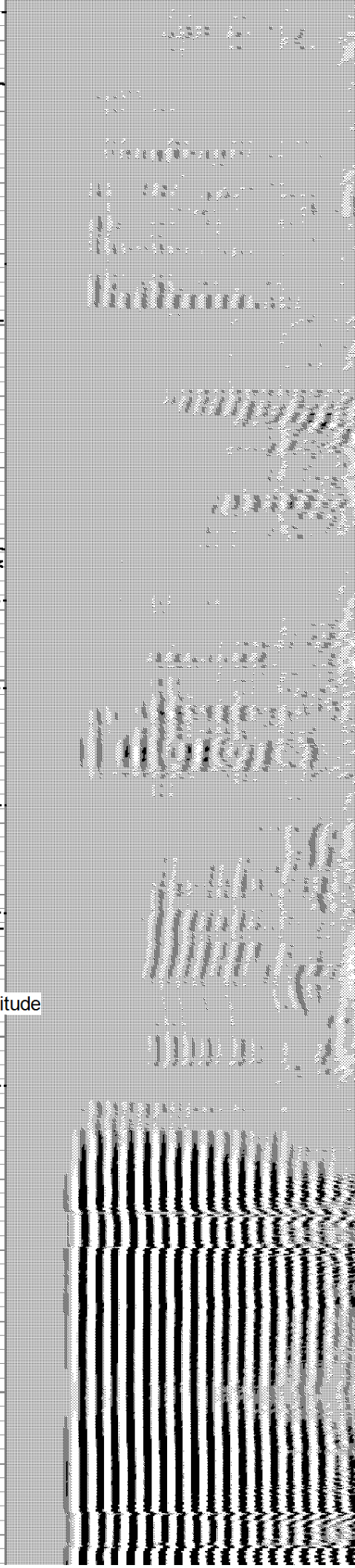
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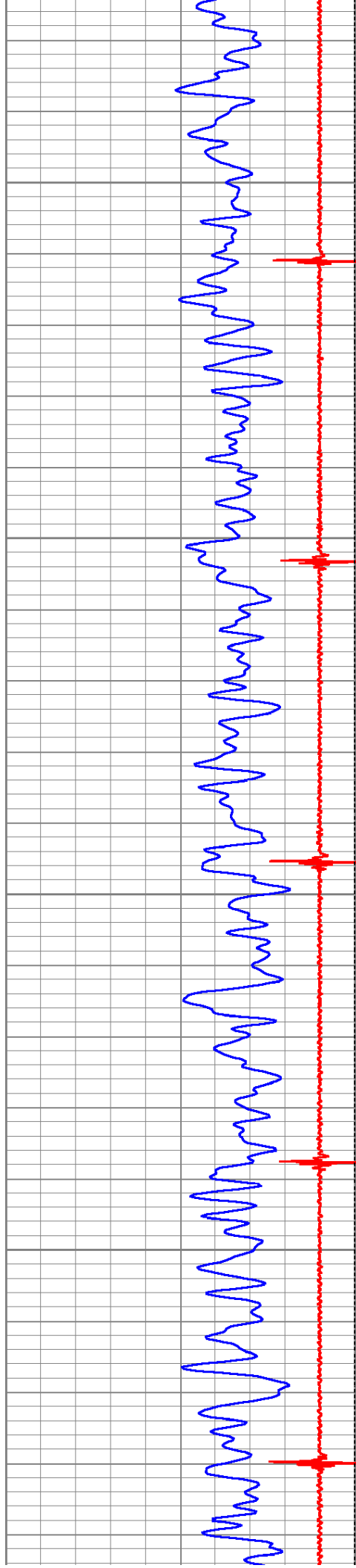
4100

4150



Amplified Amplitude





4200

4250

4300

4350

