



Directional Services

MATRIX K-29HN

TVD
5":100'

Company: Bayswater Exploration & Production, LLC

Well Name: Matrix K-29HN

API: 05-123-40702-00

Rig Id: Frontier 8

State: CO

County/Parish: Weld

Country: United States

Survey Company: Ensign Directional Services

Job number:

DIR. DRILLER DAY Kabel Skelton

DIR. DRILLER NIGHT Kody Woods

LWD/MWD DAYS Matt Brokaw

LWD/MWD NIGHTS Tyler Teague

Log measurements: Gamma

Depth measured from: Rig Floor

Maximum temperature:

Depth Date

Start: 7480 ft 3/10/2015

End: 11476 ft 3/11/2015

Casing Depth Size

Surface: 748 9.63

Intermediate: 7469 7

Mud Type:

Density:

Viscosity:

Rm:

Rmf:

Rmc:

Elevations

KB: 4730.5

GL: 4708

DF: 4730.5

Run Bit Size Gamma Survey

1 8.75 51.53 46.53

2 6.125 56.10 53.19

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Start End

760 7480

7480 11476

Start End

1/13/2015 1/15/2015

3/10/2015 3/11/15

Ensign Directional Services uses its best efforts to provide its customers with accurate information and interpretations in conjunction with services performed but will not be held liable or responsible for the accuracy of such information or interpretation.

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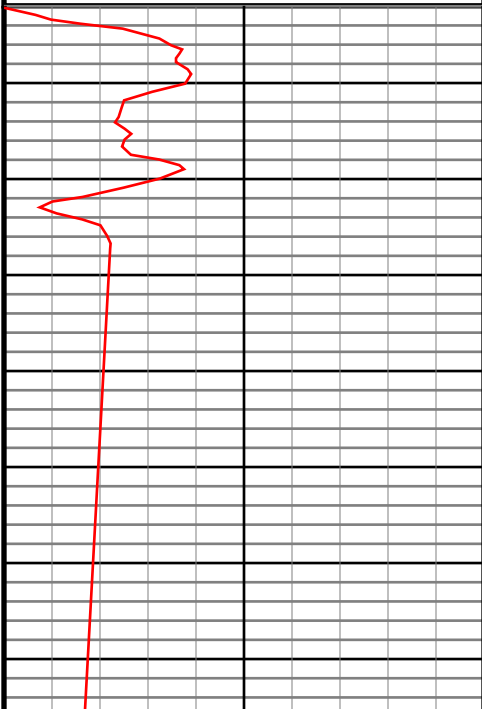
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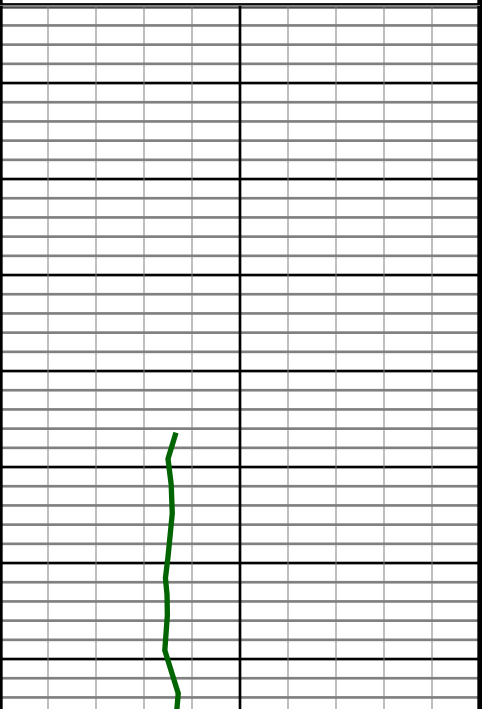
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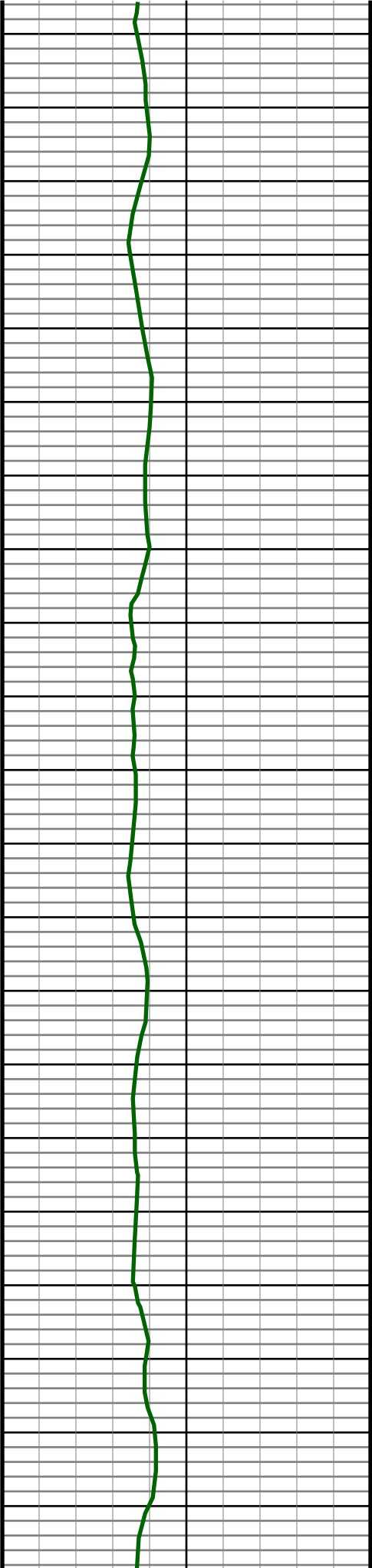


Gamma
API

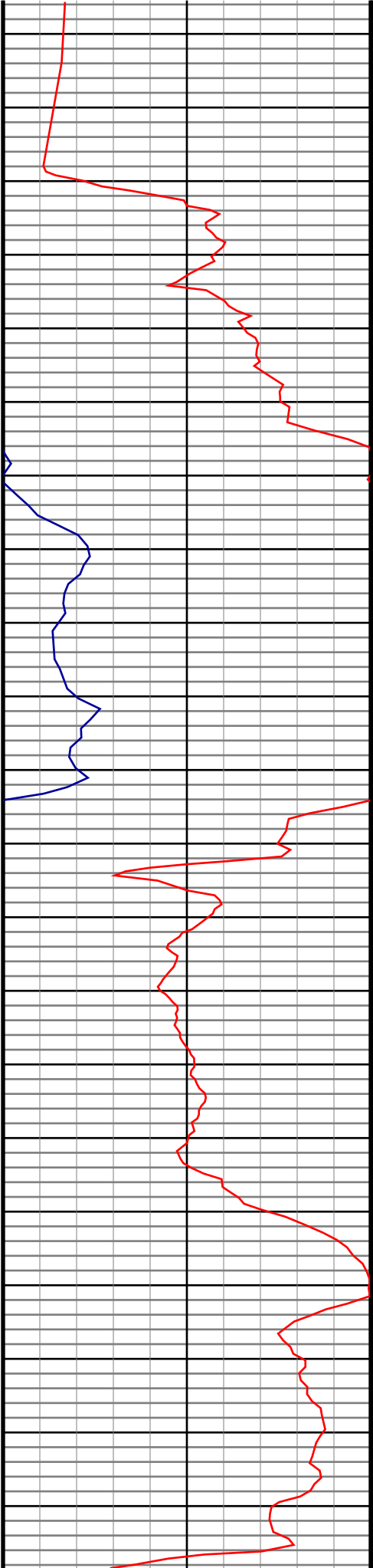
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#9 MD(828.00) Inc(1.1) Azm(327.4) TVD(827.95)
VS(6.03) NS(6.81) EW(-5.54) TEMP(0.0)

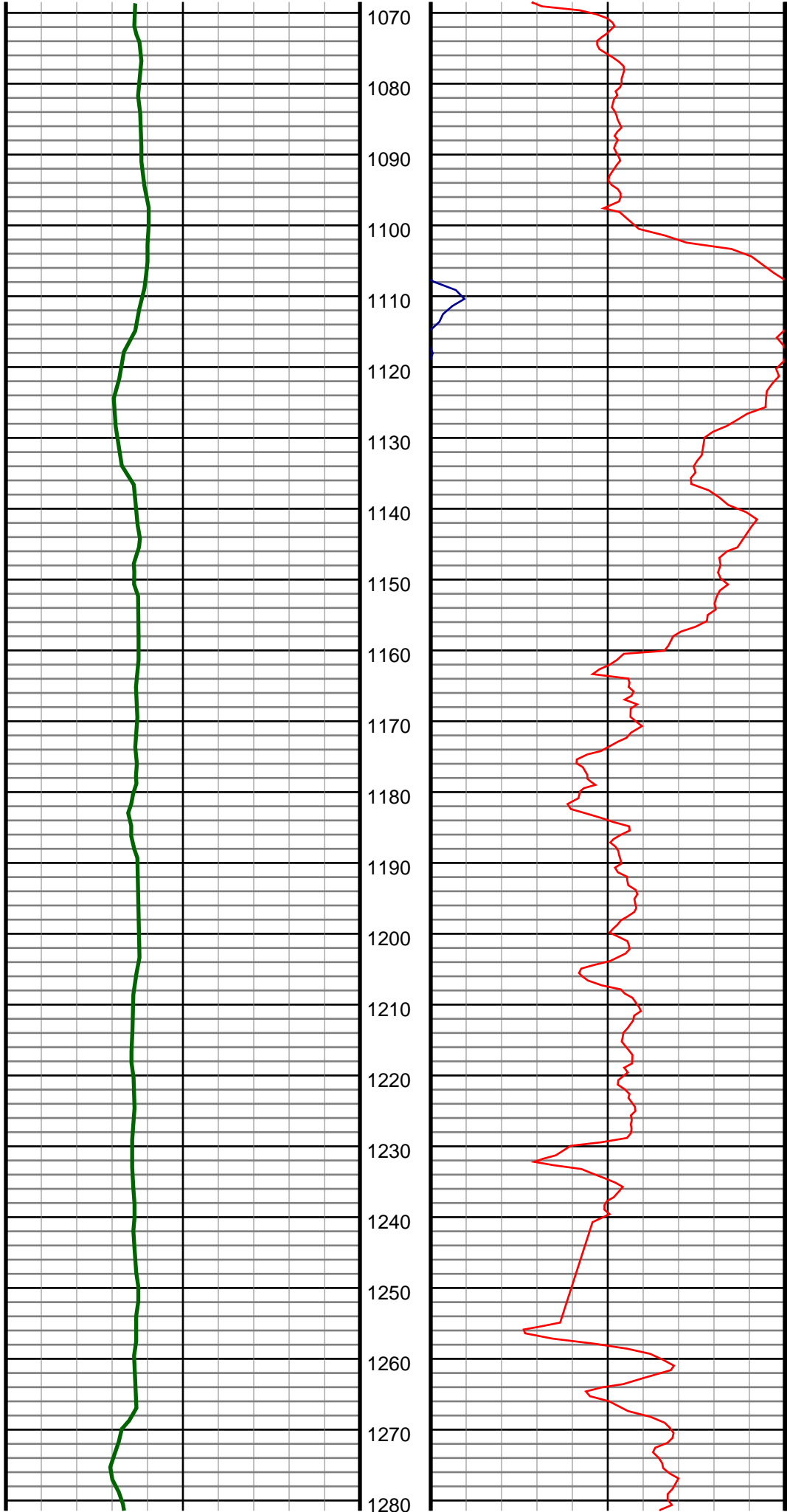


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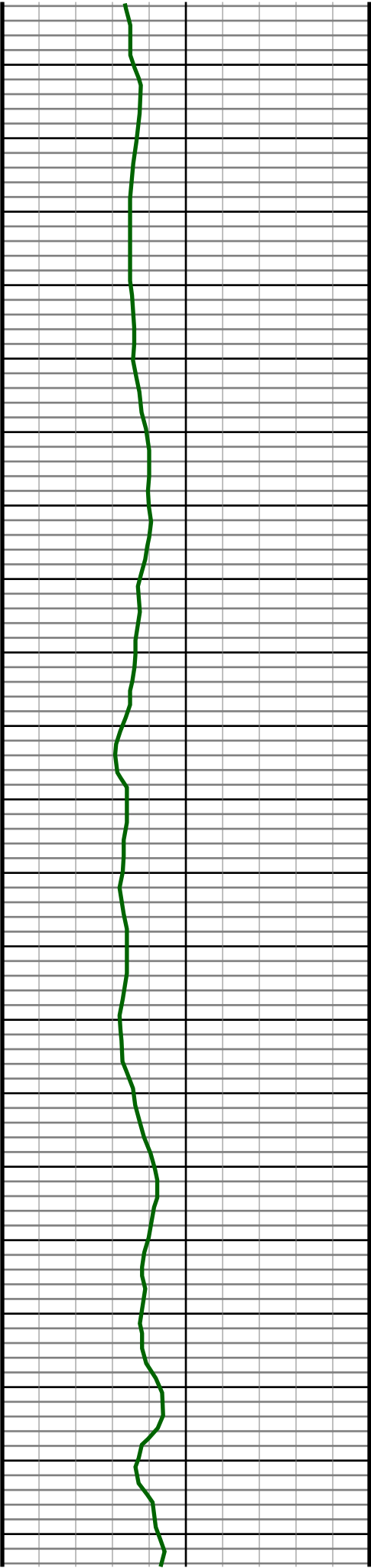
#10 MD(923.00) Inc(1.0) Azm(322.3) TVD(922.93)
VS(7.32) NS(8.23) EW(-6.54) TEMP(0.0)

#11 MD(1018.00) Inc(1.1) Azm(320.0) TVD(1017.92)
VS(8.52) NS(9.59) EW(-7.63) TEMP(0.0)

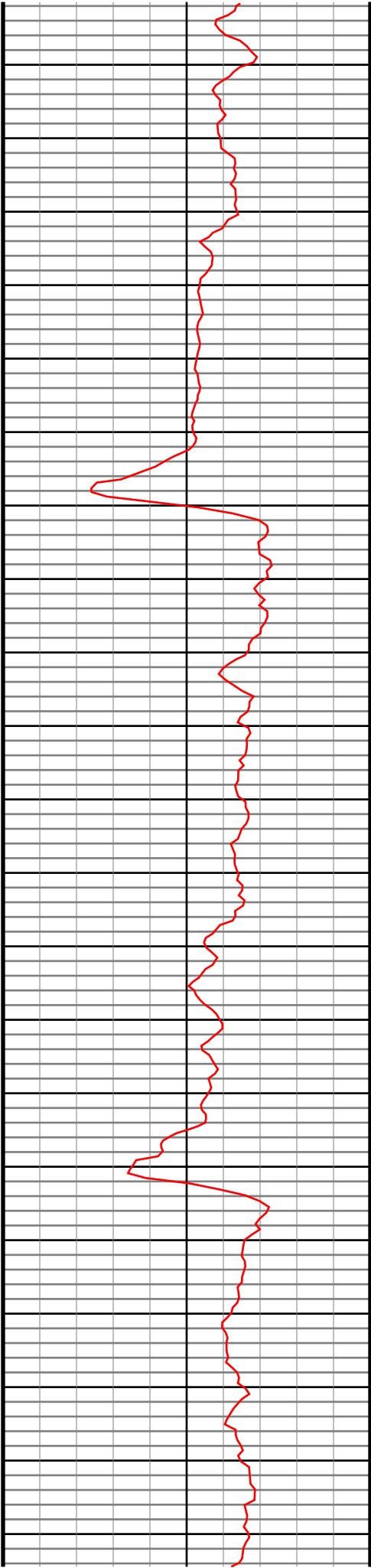


#12 MD(1113.00) Inc(0.9) Azm(318.1) TVD(1112.90)
VS(9.62) NS(10.84) EW(-8.71) TEMP(0.0)

#13 MD(1205.00) Inc(0.8) Azm(321.9) TVD(1204.89)
VS(10.54) NS(11.88) EW(-9.59) TEMP(0.0)



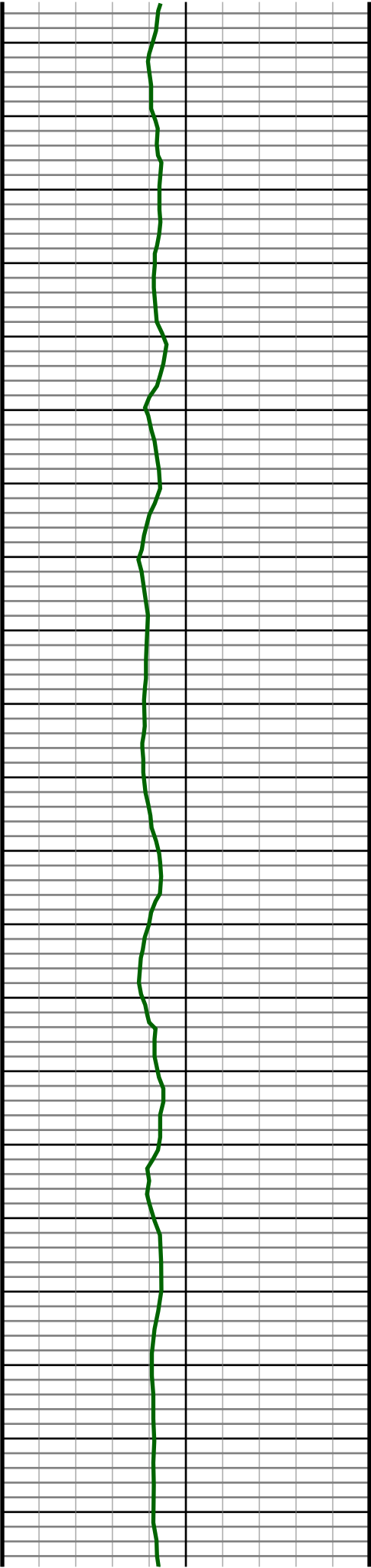
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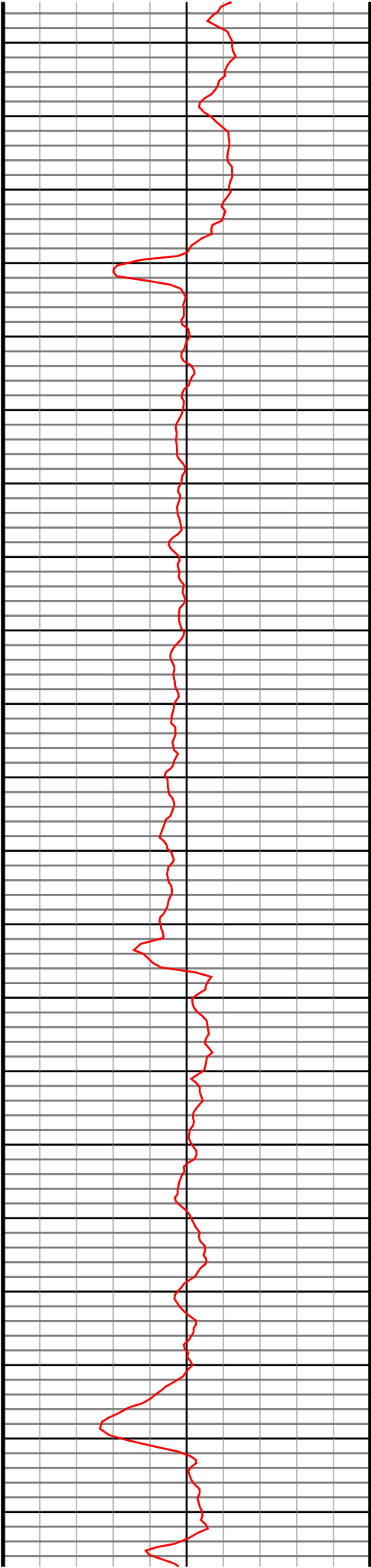
#14 MD(1297.00) Inc(0.8) Azm(303.7) TVD(1296.88)
VS(11.27) NS(12.75) EW(-10.52) TEMP(0.0)

#15 MD(1389.00) Inc(0.8) Azm(324.4) TVD(1388.87)
VS(12.03) NS(13.62) EW(-11.43) TEMP(0.0)

#16 MD(1481.00) Inc(0.6) Azm(304.0) TVD(1480.87)
VS(12.71) NS(14.42) EW(-12.20) TEMP(0.0)

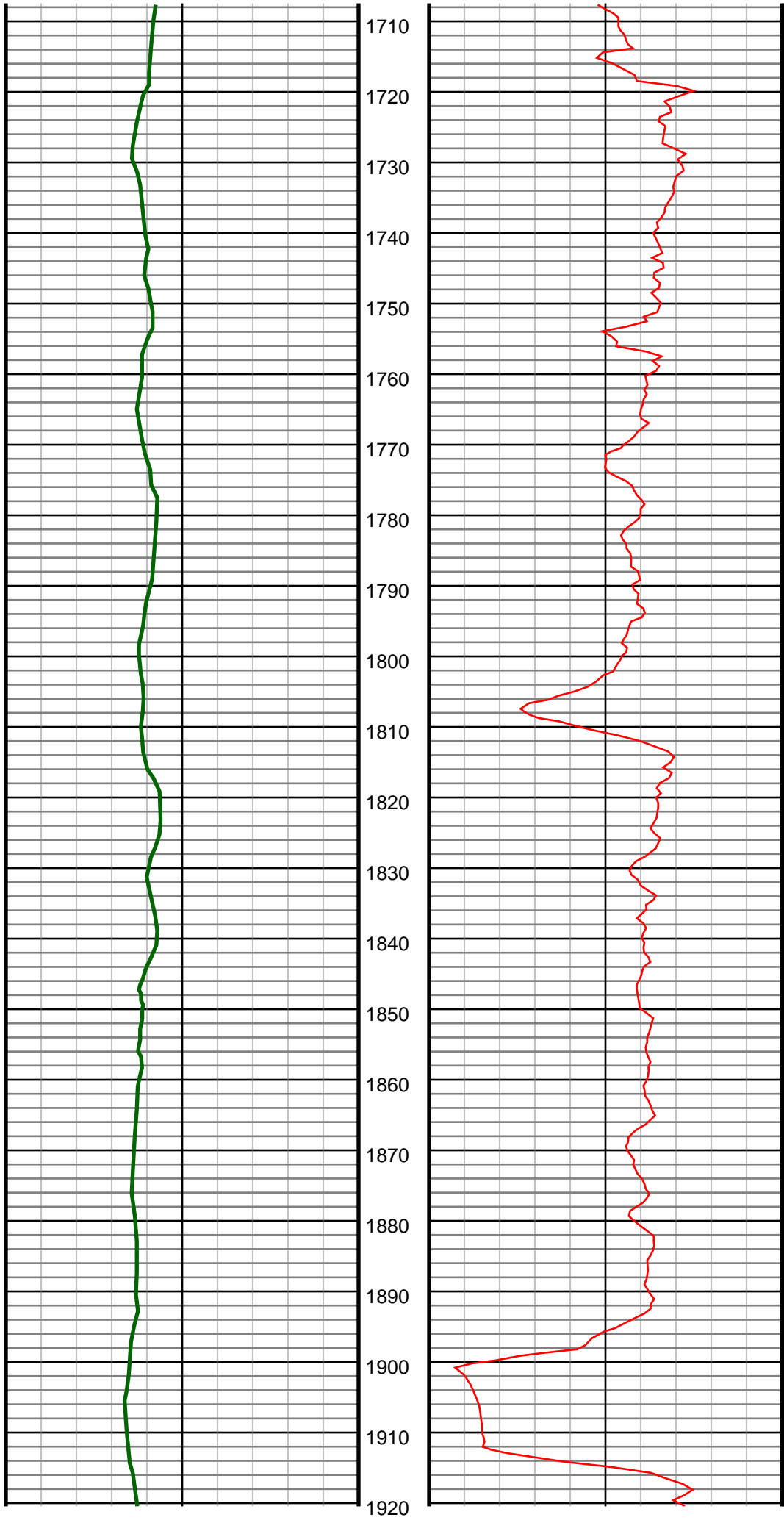


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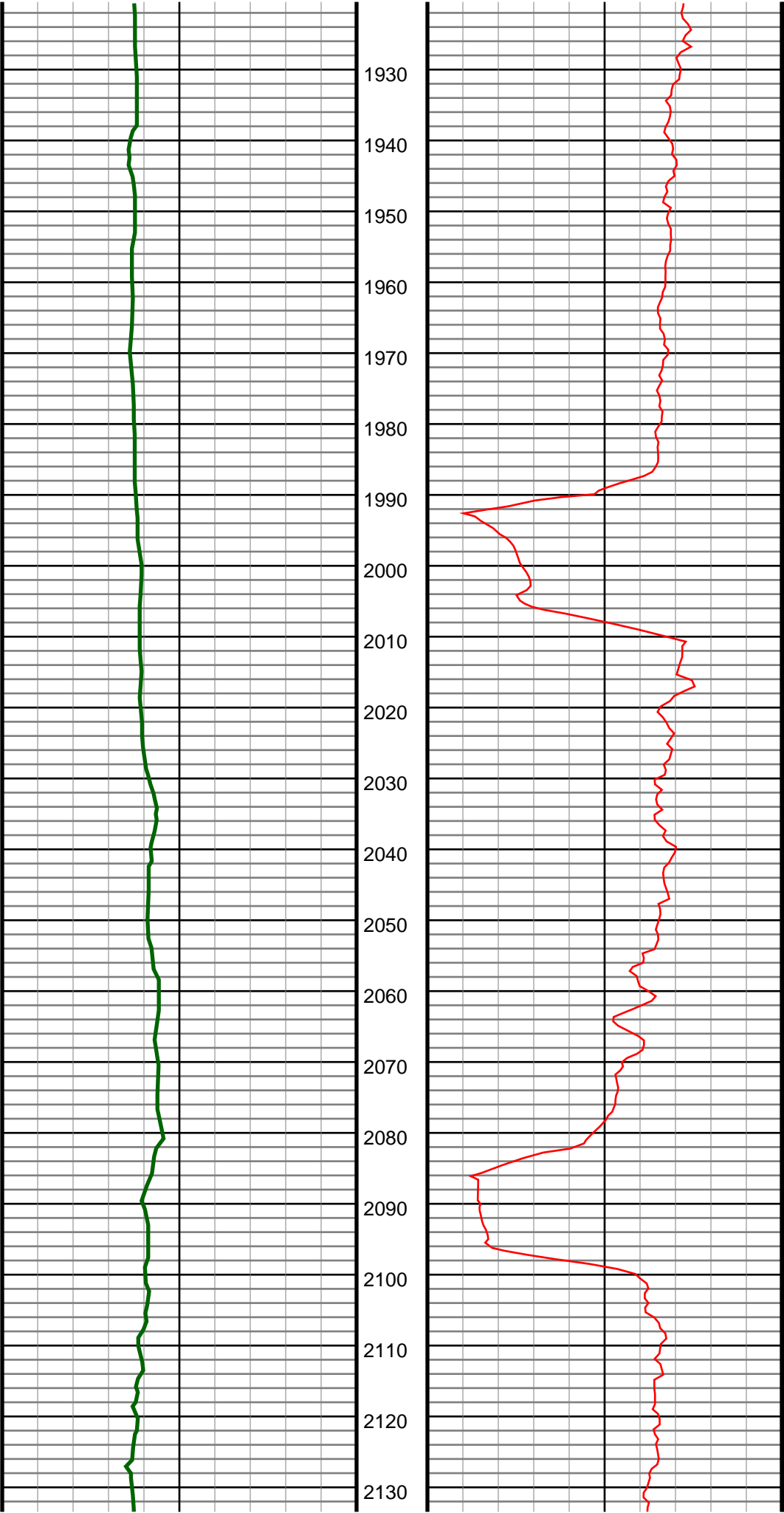
#17 MD(1574.00) Inc(0.5) Azm(286.3) TVD(1573.86)
VS(12.99) NS(14.80) EW(-13.00) TEMP(0.0)

#18 MD(1666.00) Inc(0.4) Azm(232.5) TVD(1665.86)
VS(12.83) NS(14.72) EW(-13.64) TEMP(0.0)



#19 MD(1758.00) Inc(0.4) Azm(149.9) TVD(1757.86)
VS(12.35) NS(14.25) EW(-13.73) TEMP(0.0)

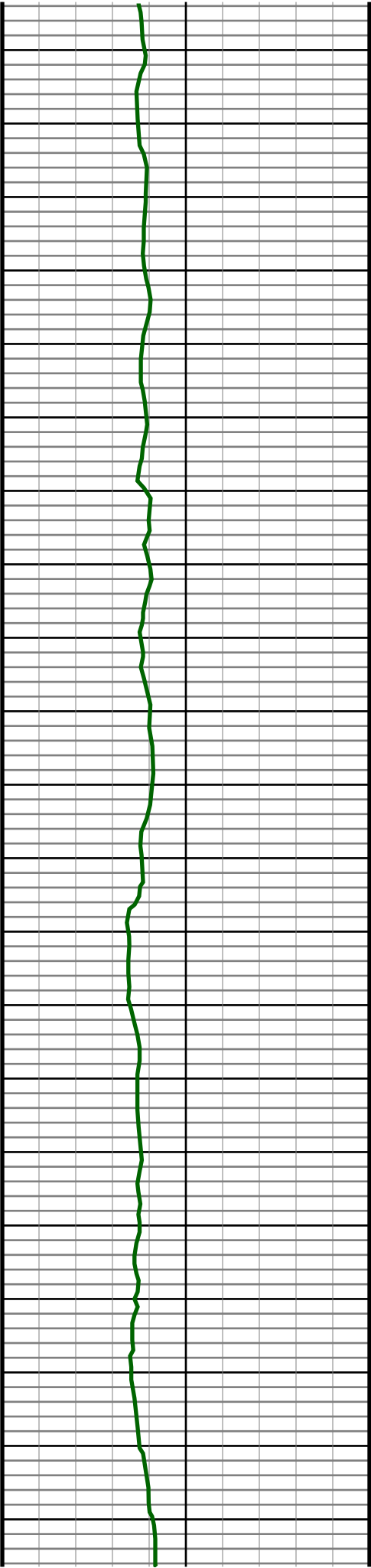
#20 MD(1850.00) Inc(0.4) Azm(20.3) TVD(1849.86)
VS(12.40) NS(14.27) EW(-13.46) TEMP(0.0)



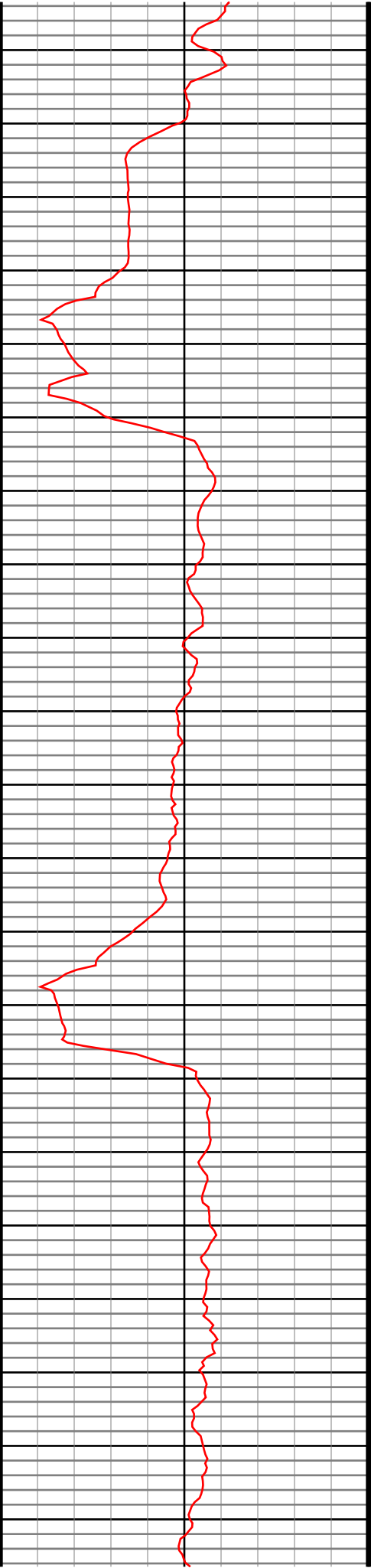
#21 MD(1942.00) Inc(1.5) Azm(133.9) TVD(1941.85)
VS(12.00) NS(13.74) EW(-12.48) TEMP(0.0)

#22 MD(2034.00) Inc(3.1) Azm(150.6) TVD(2033.77)
VS(9.30) NS(10.73) EW(-10.39) TEMP(0.0)

#23 MD(2126.00) Inc(5.0) Azm(134.0) TVD(2125.54)
VS(4.92) NS(5.78) EW(-6.28) TEMP(0.0)

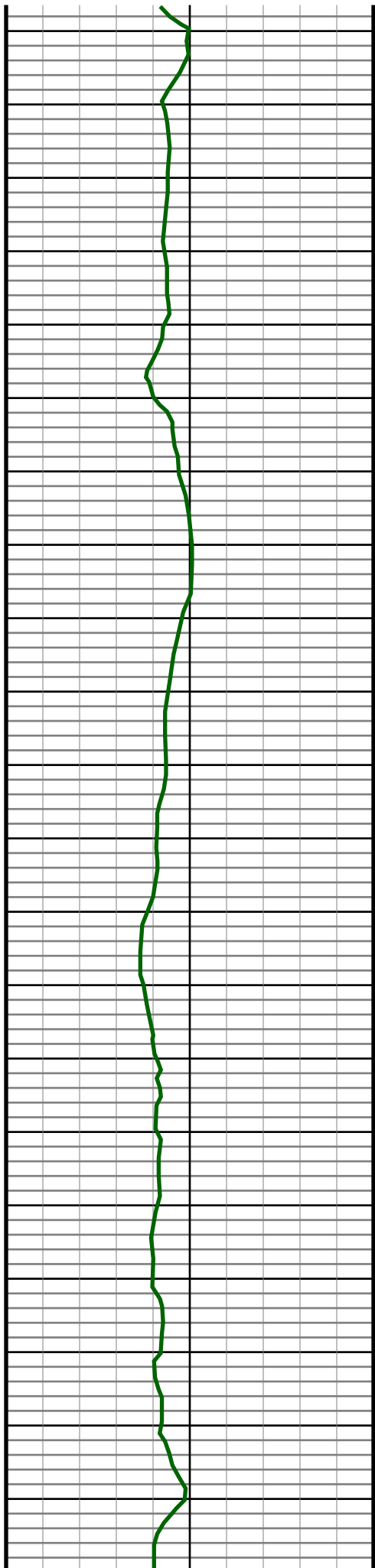


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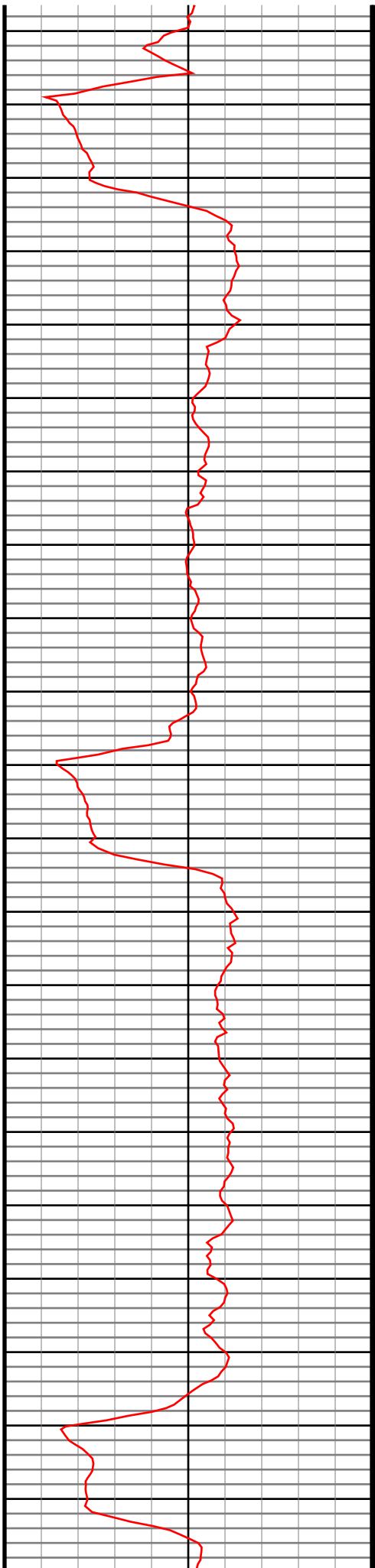


#24 MD(2218.00) Inc(7.1) Azm(127.4) TVD(2217.02)
VS(-0.31) NS(-0.46) EW(1.12) TEMP(0.0)

#25 MD(2310.00) Inc(7.7) Azm(125.2) TVD(2308.26)
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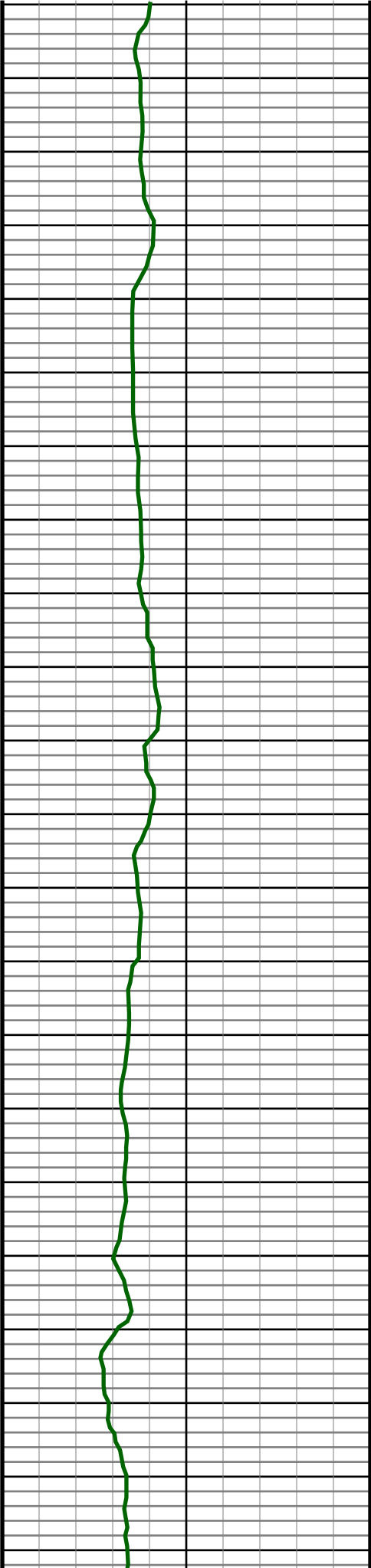


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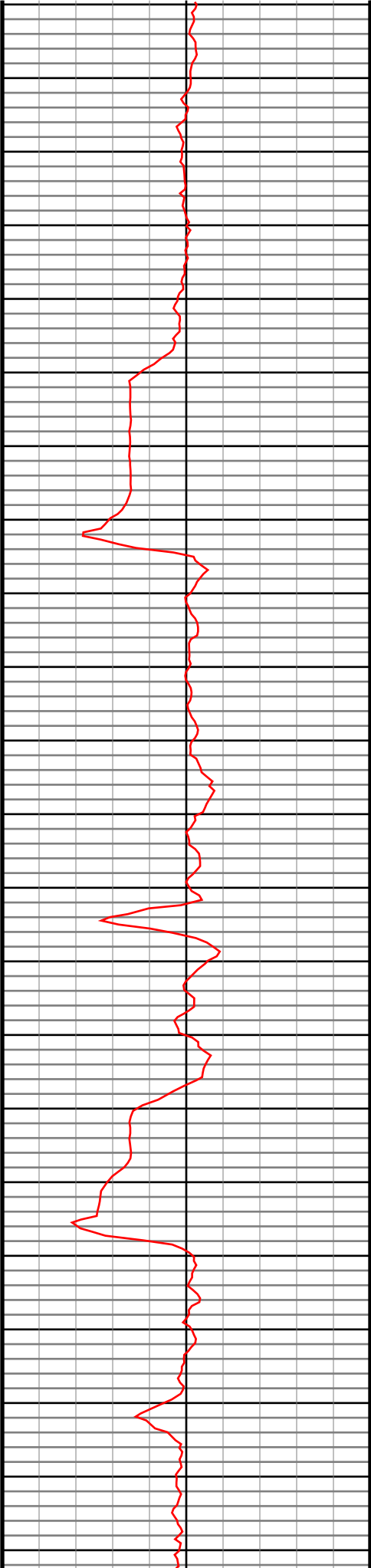


#26 MD(2403.00) Inc(8.7) Azm(131.7) TVD(2400.31)
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#27 MD(2495.00) Inc(9.5) Azm(141.2) TVD(2491.15)
VS(-22.04) NS(-26.28) EW(30.97) TEMP(0.0)



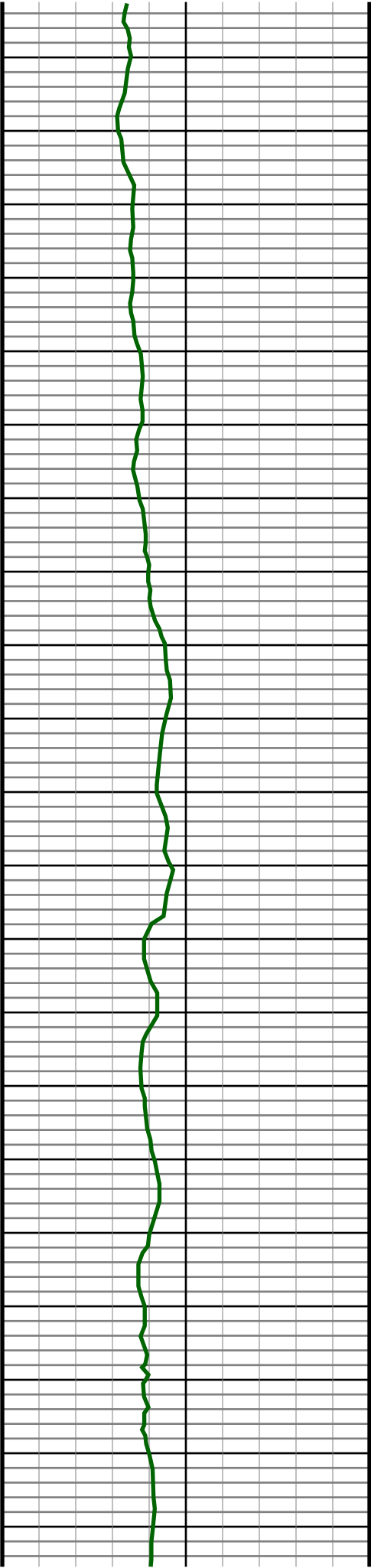
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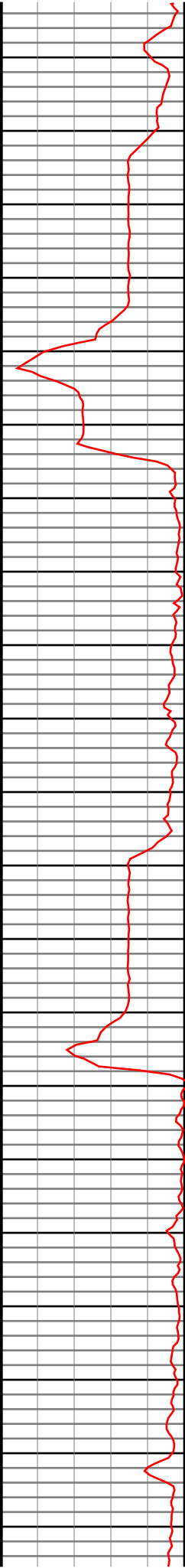
#28 MD(2590.00) Inc(10.9) Azm(133.3) TVD(2584.65)
VS(-32.73) NS(-38.55) EW(42.42) TEMP(0.0)

#29 MD(2685.00) Inc(10.5) Azm(129.6) TVD(2678.00)
VS(-42.59) NS(-50.23) EW(55.62) TEMP(0.0)

#30 MD(2781.00) Inc(10.6) Azm(130.3) TVD(2772.38)
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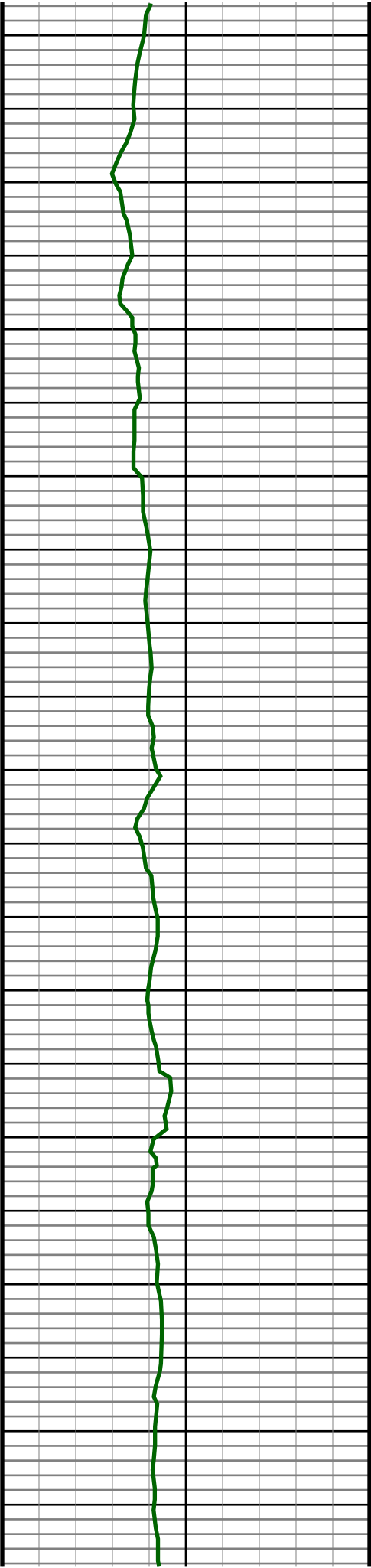


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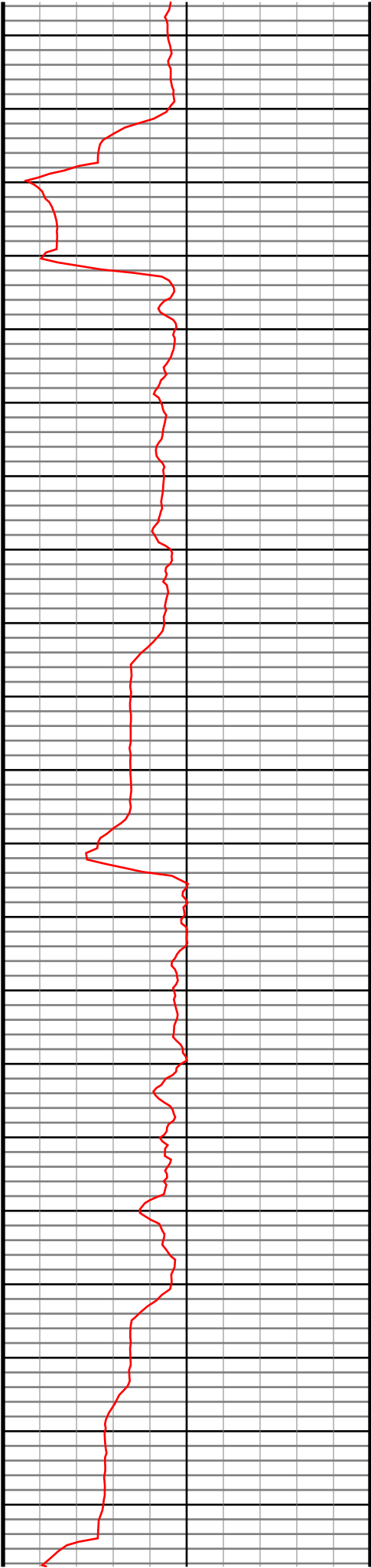


#31 MD(2876.00) Inc(10.6) Azm(136.3) TVD(2865.76)
VS(-62.26) NS(-73.49) EW(81.80) TEMP(0.0)

#32 MD(2971.00) Inc(9.9) Azm(133.5) TVD(2959.25)
VS(-72.55) NS(-85.43) EW(93.76) TEMP(0.0)

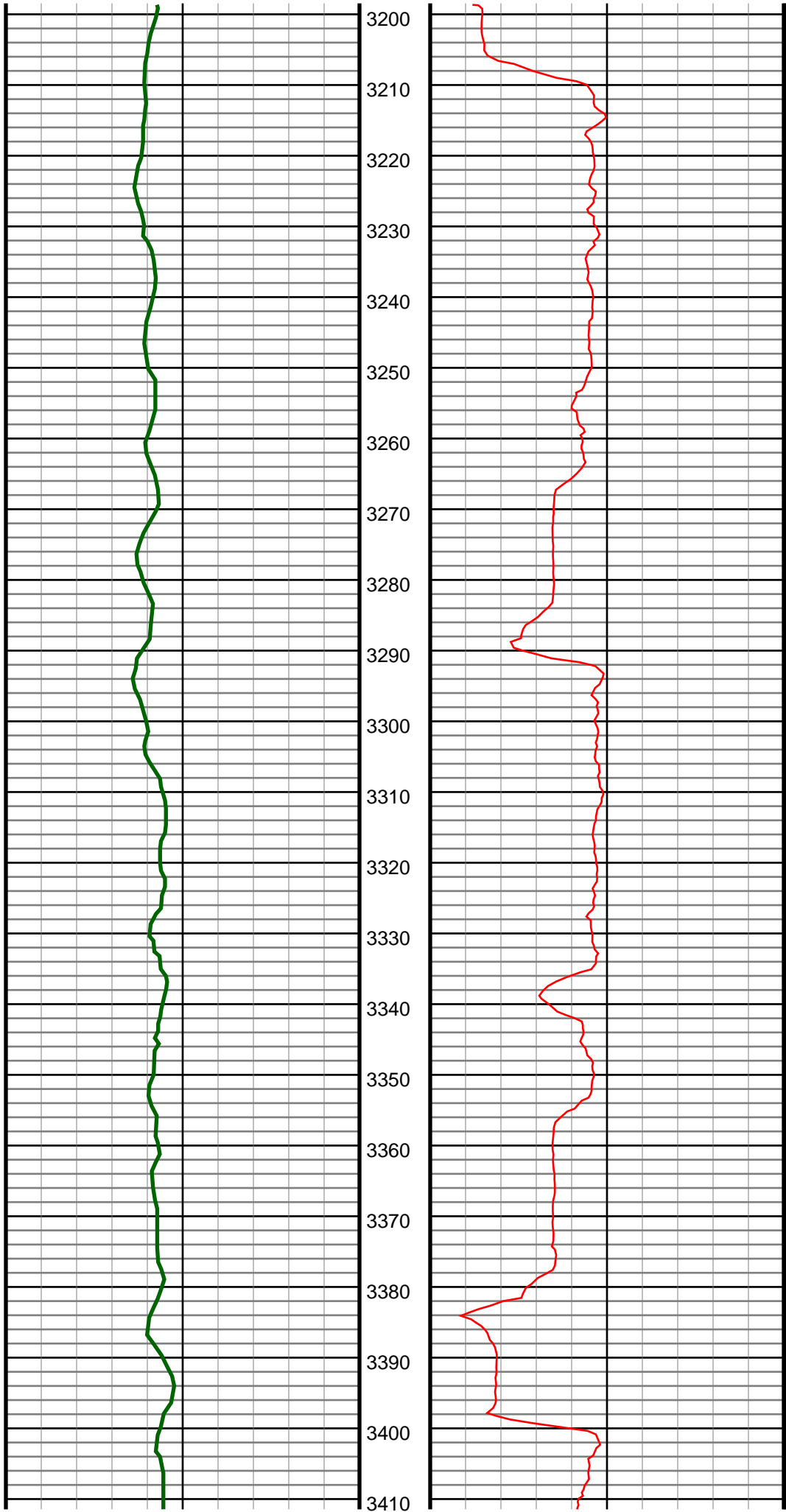


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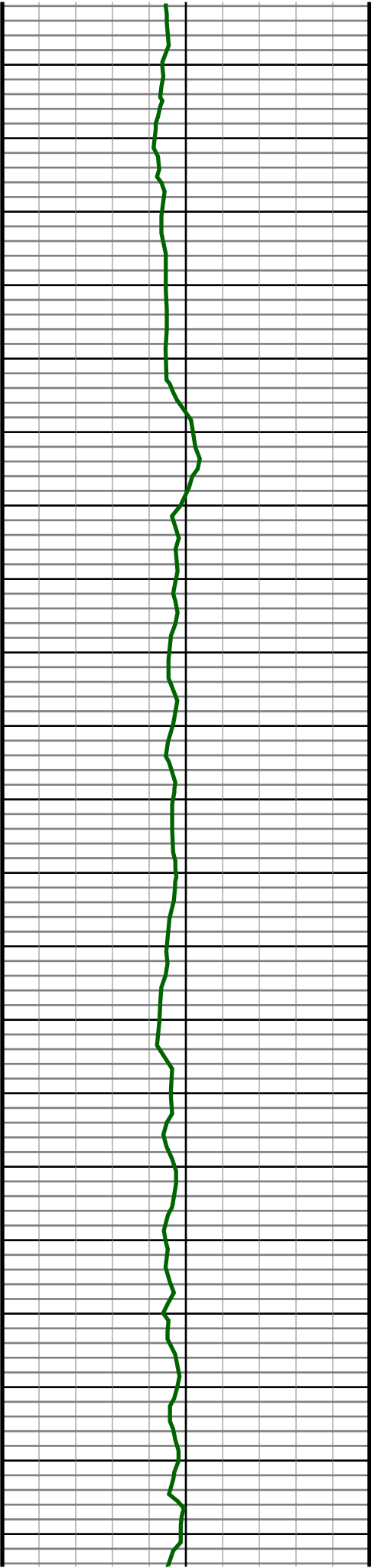
#33 MD(3066.00) Inc(10.9) Azm(136.8) TVD(3052.69)
VS(-83.05) NS(-97.59) EW(105.83) TEMP(0.0)

#34 MD(3161.00) Inc(9.8) Azm(135.8) TVD(3146.14)
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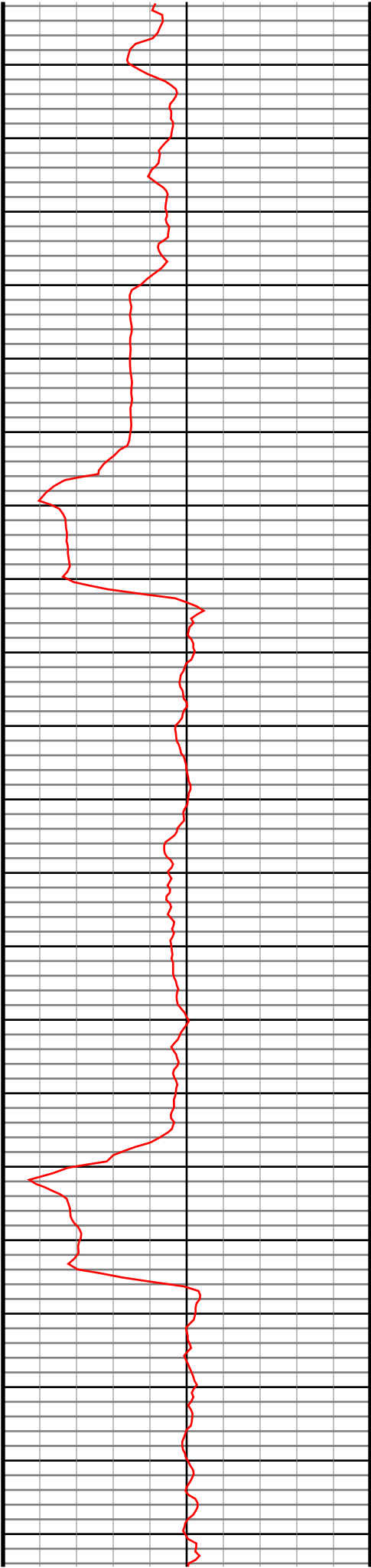


#35 MD(3257.00) Inc(10.0) Azm(139.0) TVD(3240.71)
VS(-104.36) NS(-122.09) EW(128.78) TEMP(0.0)

#36 MD(3352.00) Inc(9.1) Azm(135.6) TVD(3334.39)
VS(-114.47) NS(-133.68) EW(139.45) TEMP(0.0)



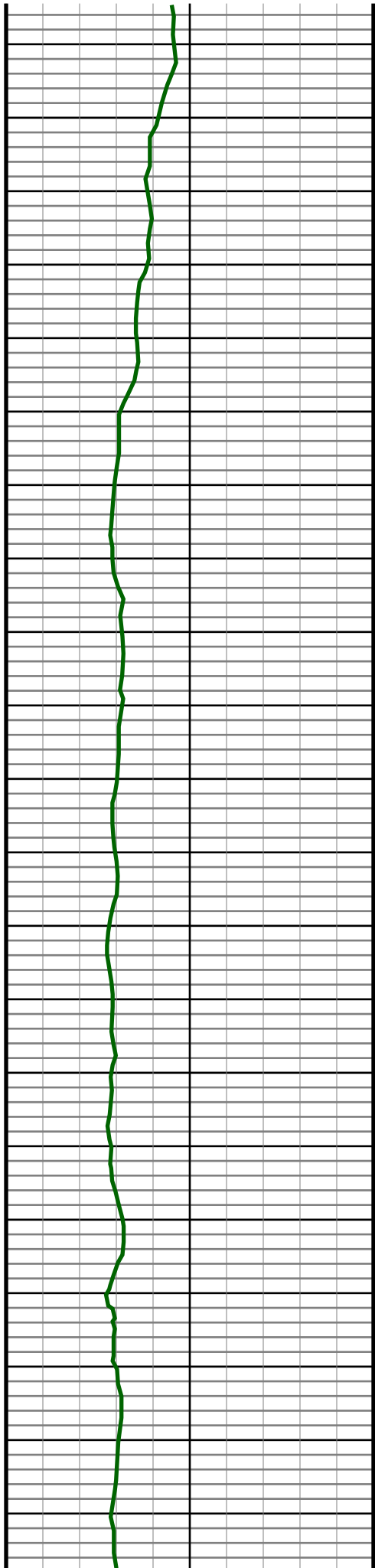
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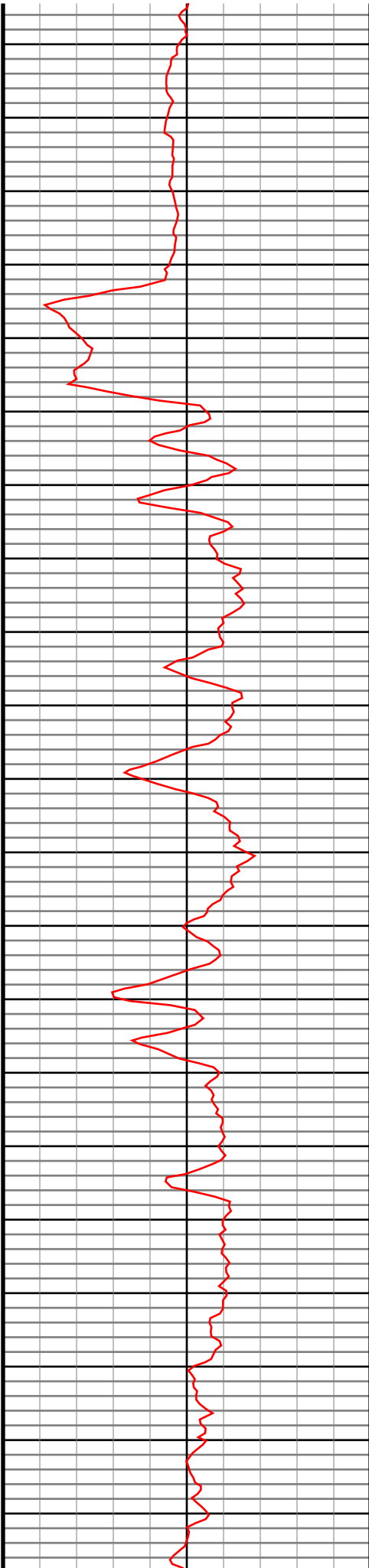
#37 MD(3447.00) Inc(9.3) Azm(142.6) TVD(3428.17)
VS(-124.55) NS(-145.15) EW(149.37) TEMP(0.0)

#38 MD(3542.00) Inc(10.0) Azm(143.5) TVD(3521.83)
VS(-135.93) NS(-157.87) EW(158.94) TEMP(0.0)

#39 MD(3637.00) Inc(10.6) Azm(143.5) TVD(3615.30)
VS(-148.16) NS(-171.53) EW(169.04) TEMP(0.0)

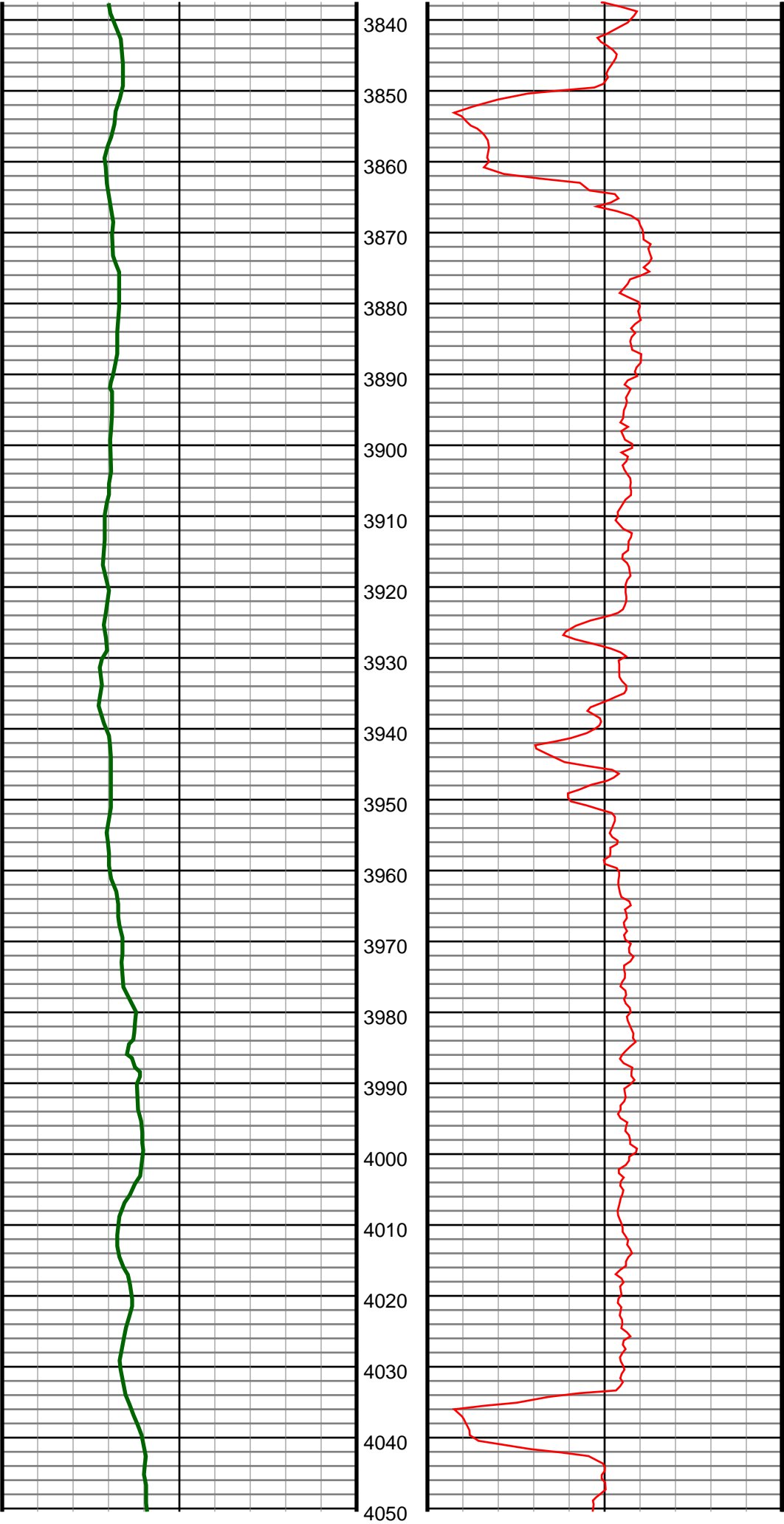


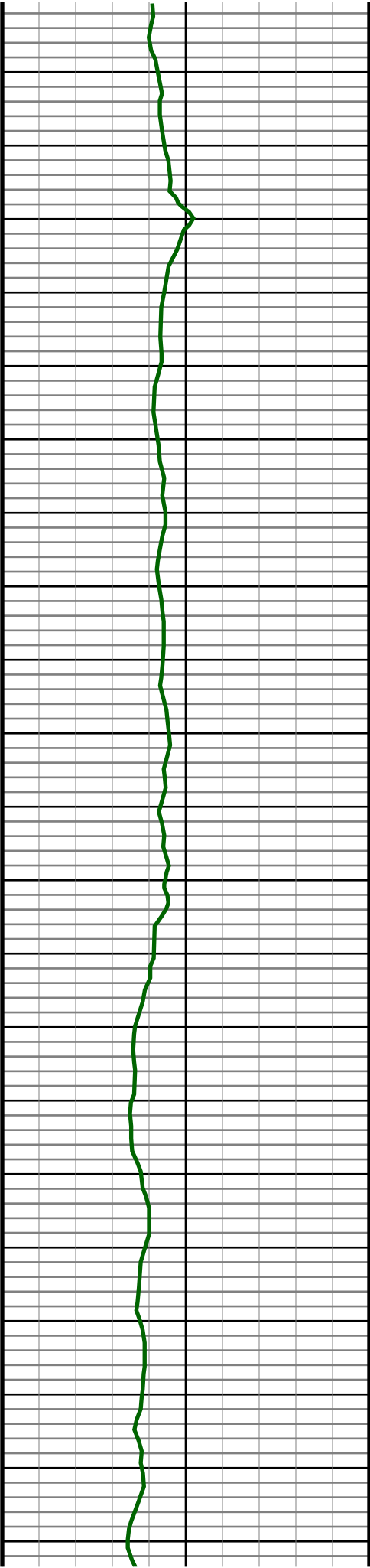
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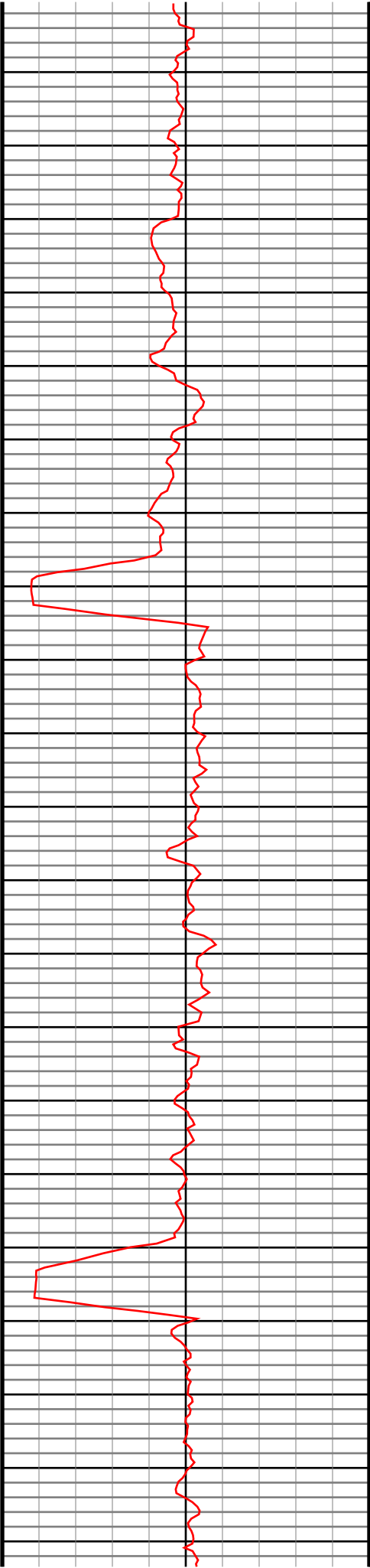
#40 MD(3733.00) Inc(13.0) Azm(144.9) TVD(3709.26)
VS(-162.48) NS(-187.46) EW(180.50) TEMP(0.0)

#41 MD(3828.00) Inc(13.5) Azm(146.5) TVD(3801.73)
VS(-178.72) NS(-205.45) EW(192.77) TEMP(0.0)



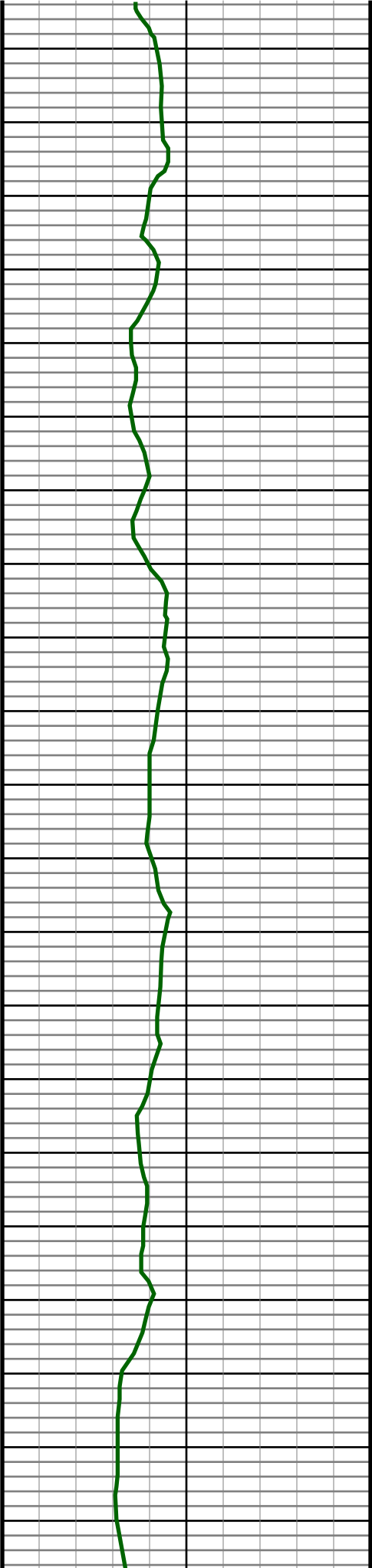


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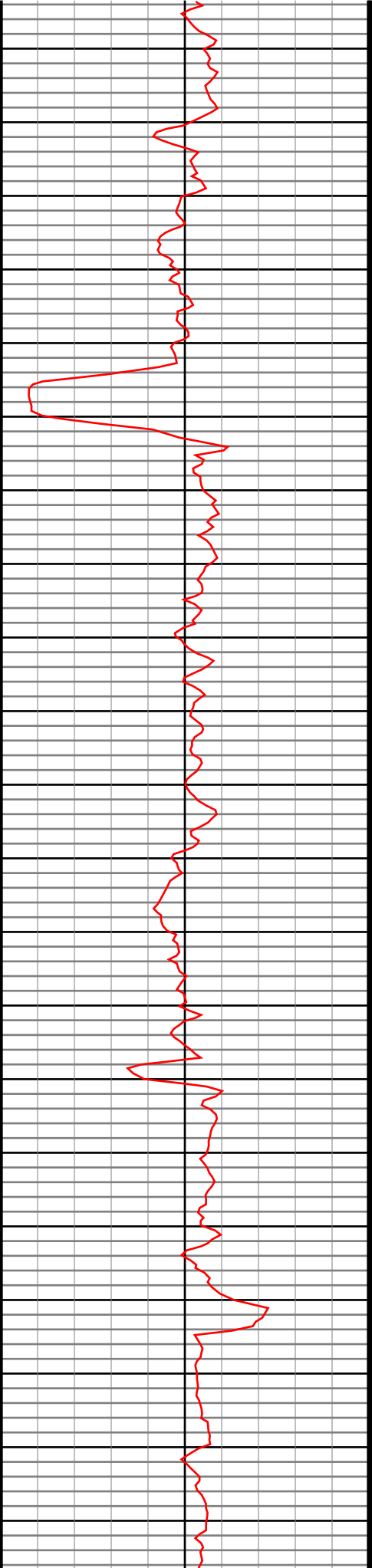


#44 MD(4113.00) Inc(13.1) Azm(140.2) TVD(4077.94)
VS(-228.38) NS(-261.12) EW(235.53) TEMP(0.0)

#45 MD(4209.00) Inc(11.4) Azm(129.6) TVD(4171.76)
VS(-240.81) NS(-275.53) EW(249.80) TEMP(0.0)



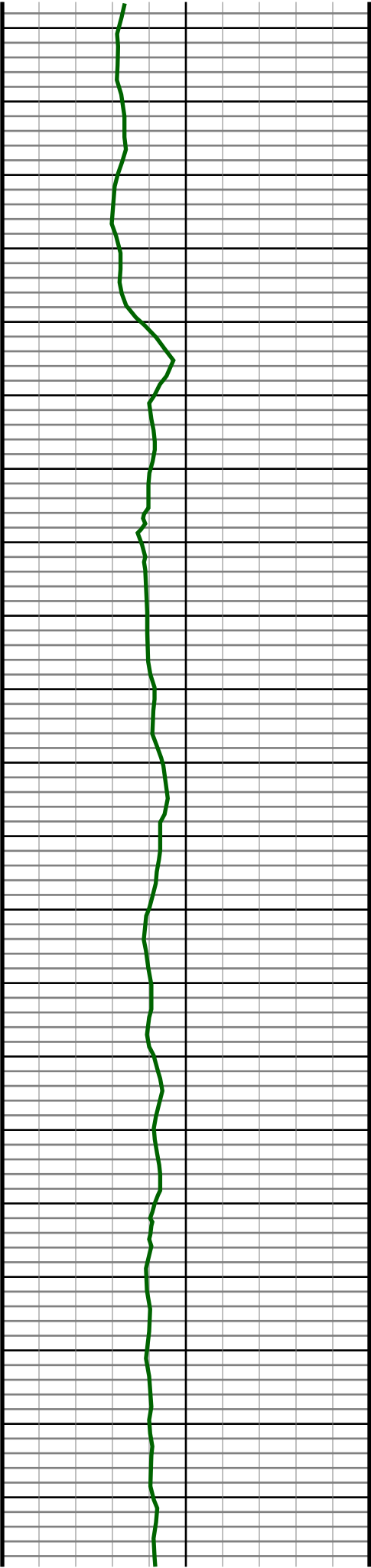
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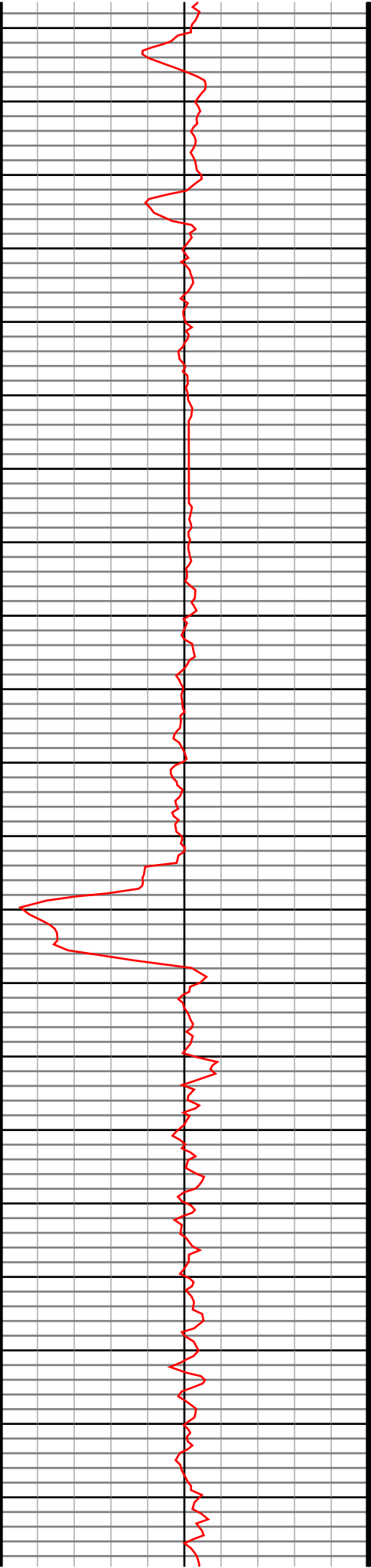
#46 MD(4304.00) Inc(10.2) Azm(132.3) TVD(4265.08)
VS(-250.62) NS(-287.18) EW(263.26) TEMP(0.0)

#47 MD(4399.00) Inc(9.4) Azm(137.9) TVD(4358.69)
VS(-260.46) NS(-298.59) EW(274.68) TEMP(0.0)

#48 MD(4494.00) Inc(8.9) Azm(138.6) TVD(4452.48)
VS(-270.33) NS(-309.86) EW(284.74) TEMP(0.0)

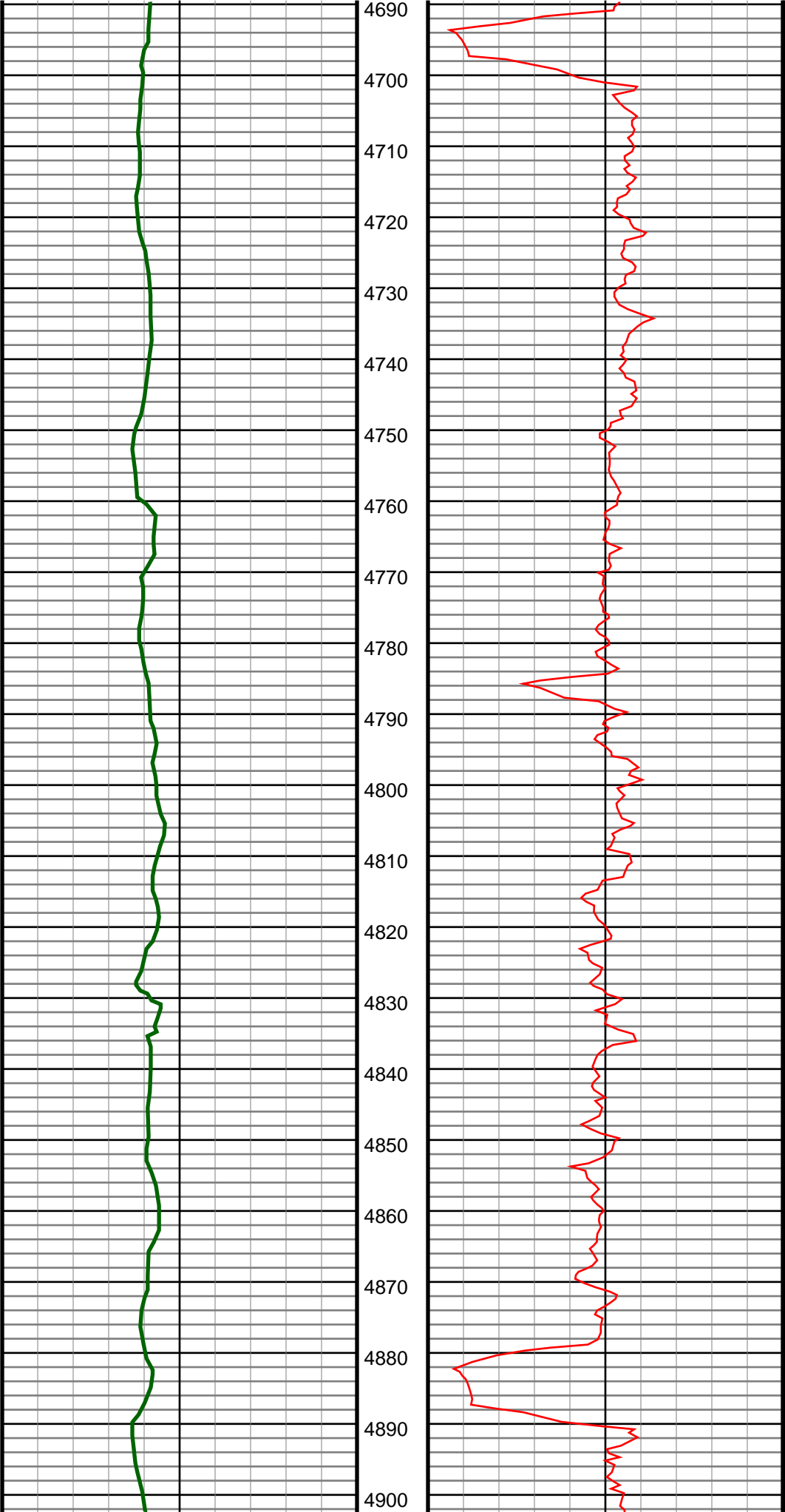


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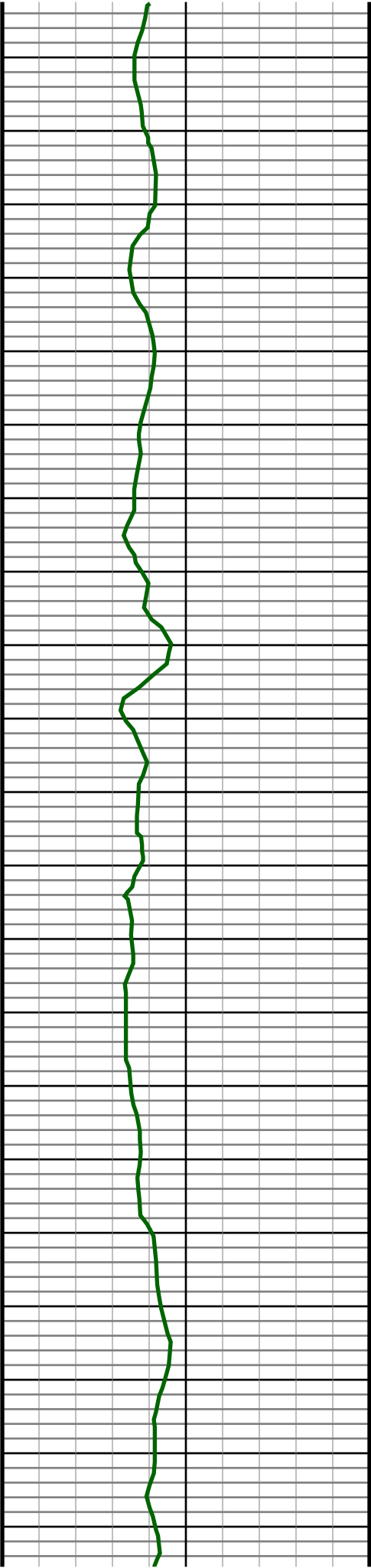
#49 MD(4589.00) Inc(8.3) Azm(137.4) TVD(4546.41)
VS(-279.57) NS(-320.42) EW(294.24) TEMP(0.0)

#50 MD(4684.00) Inc(8.7) Azm(132.5) TVD(4640.37)
VS(-288.09) NS(-330.32) EW(304.18) TEMP(0.0)

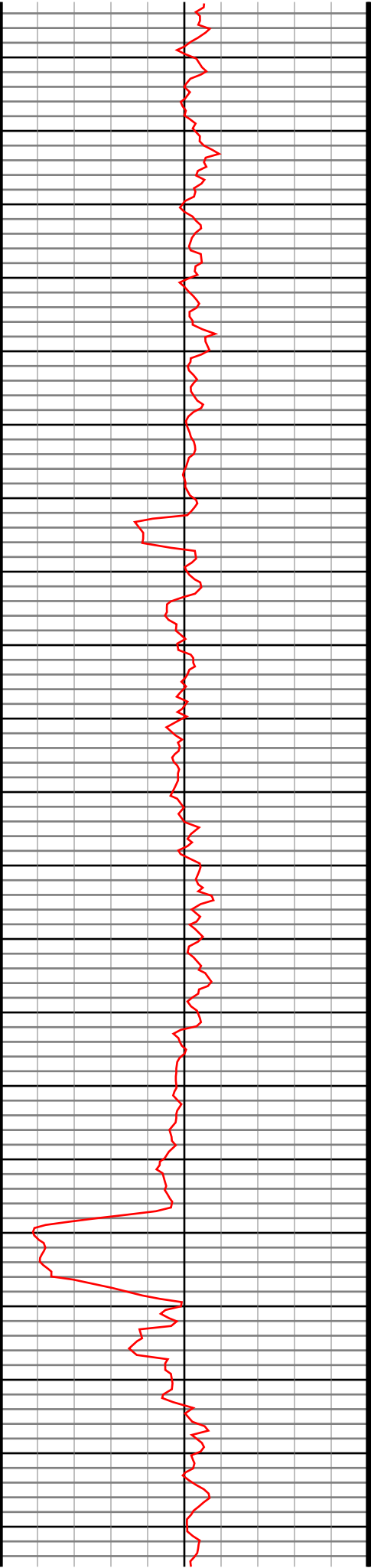


#51 MD(4780.00) Inc(9.7) Azm(134.0) TVD(4735.13)
VS(-297.08) NS(-340.85) EW(315.35) TEMP(0.0)

#52 MD(4875.00) Inc(8.4) Azm(133.0) TVD(4828.95)
VS(-305.88) NS(-351.14) EW(326.19) TEMP(0.0)



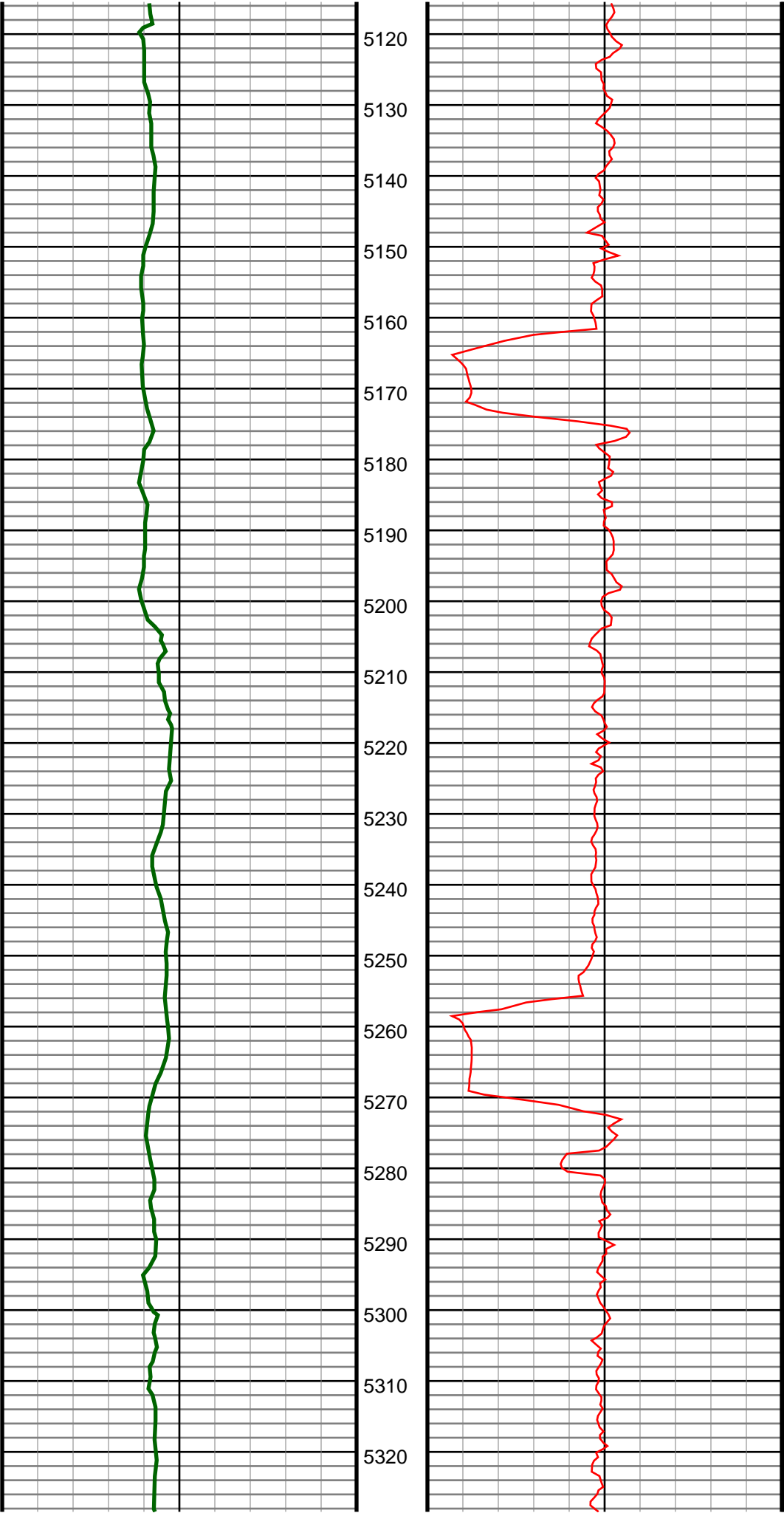
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#53 MD(4970.00) Inc(9.3) Azm(133.2) TVD(4922.82)
VS(-314.40) NS(-361.13) EW(336.86) TEMP(0.0)

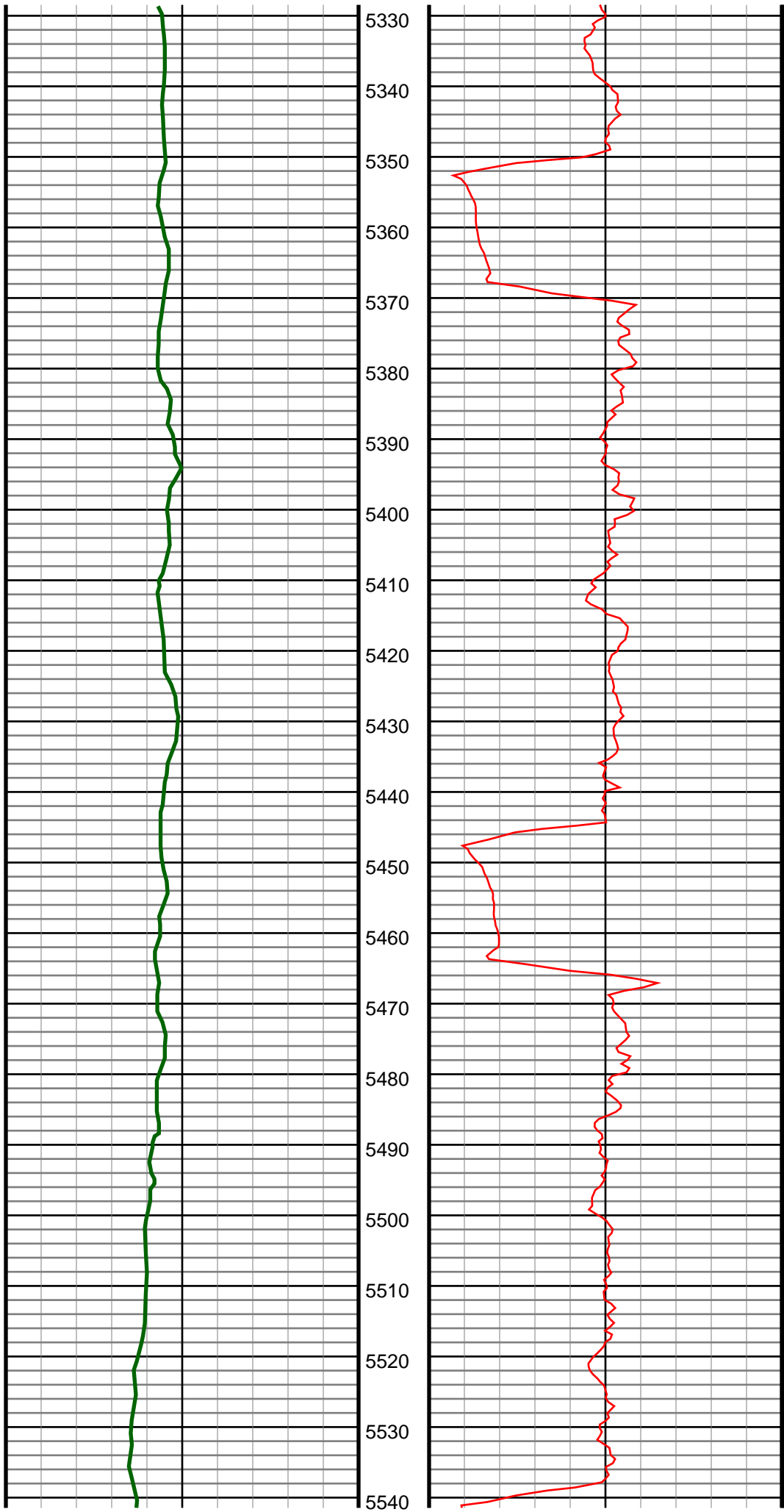
#54 MD(5065.00) Inc(8.7) Azm(131.6) TVD(5016.65)
VS(-322.92) NS(-371.15) EW(347.83) TEMP(0.0)

#55 MD(5161.00) Inc(7.2) Azm(134.7) TVD(5111.72)
VS(-330.64) NS(-380.20) EW(357.53) TEMP(0.0)



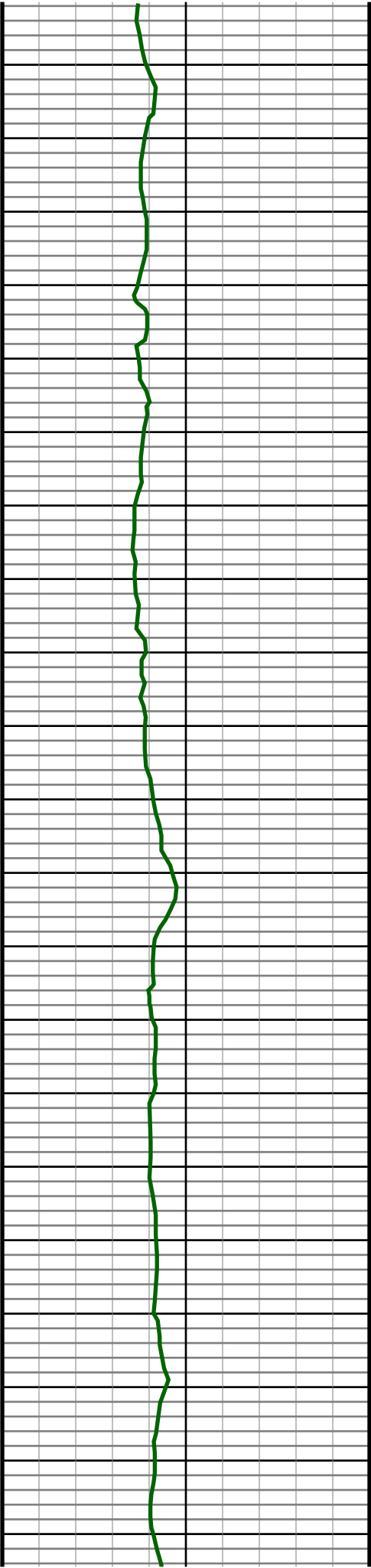
#56 MD(5256.00) Inc(6.9) Azm(139.1) TVD(5206.01)
VS(-338.03) NS(-388.71) EW(365.50) TEMP(0.0)

#57 MD(5351.00) Inc(7.5) Azm(136.3) TVD(5300.26)
VS(-345.71) NS(-397.50) EW(373.52) TEMP(0.0)

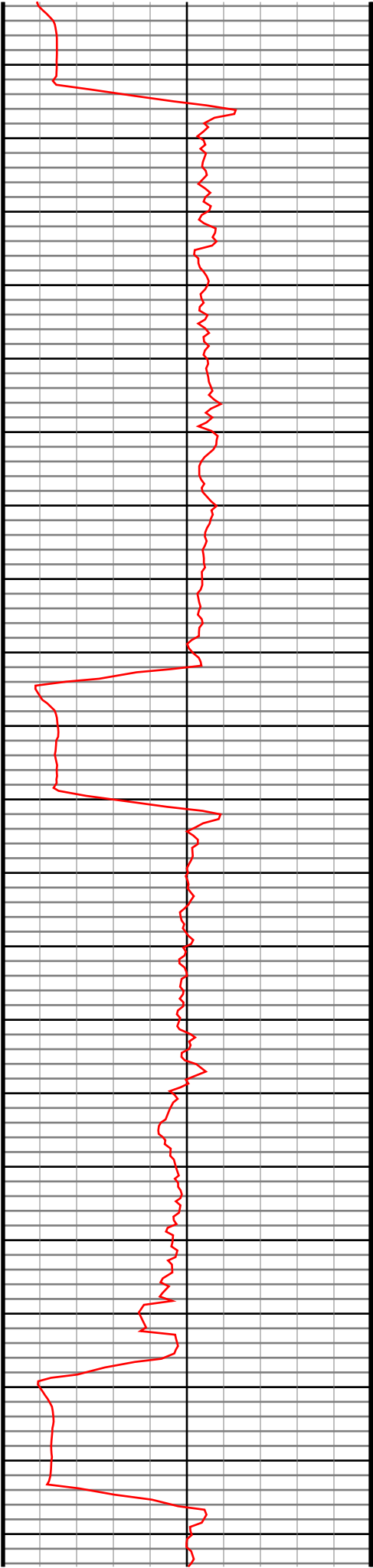


#58 MD(5446.00) Inc(8.1) Azm(138.1) TVD(5394.38)
VS(-353.96) NS(-406.96) EW(382.27) TEMP(0.0)

#59 MD(5541.00) Inc(8.8) Azm(135.8) TVD(5488.35)
VS(-362.83) NS(-417.16) EW(391.81) TEMP(0.0)

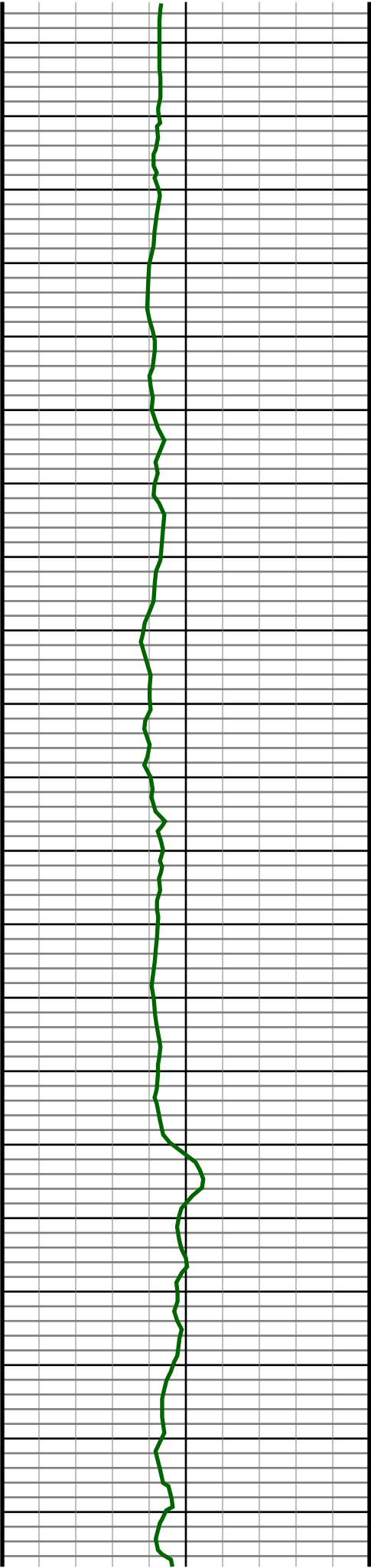


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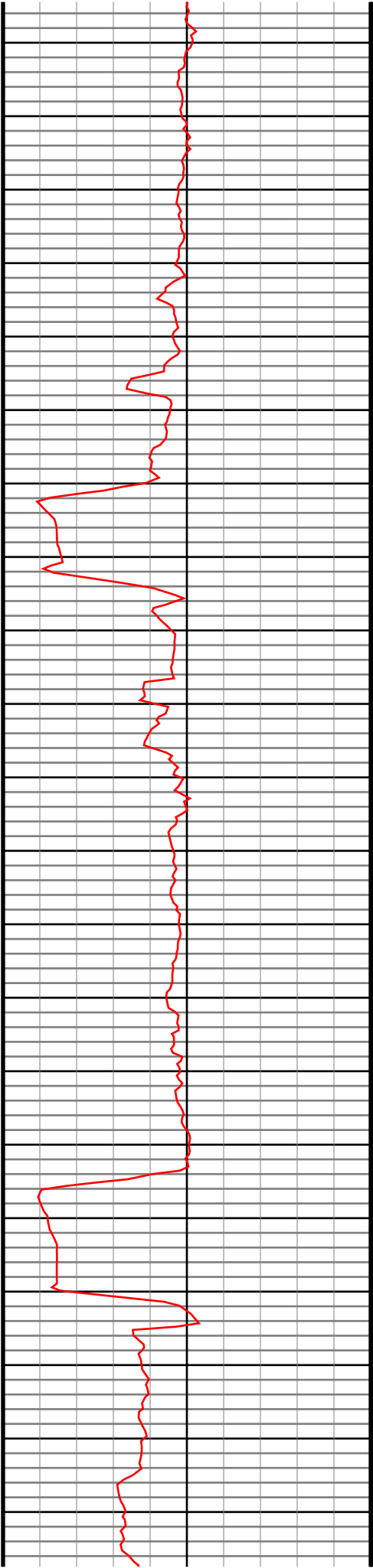


#60 MD(5636.00) Inc(8.7) Azm(136.7) TVD(5582.24)
VS(-371.89) NS(-427.59) EW(401.80) TEMP(0.0)

#61 MD(5731.00) Inc(9.2) Azm(138.1) TVD(5676.08)
VS(-381.38) NS(-438.48) EW(411.80) TEMP(0.0)



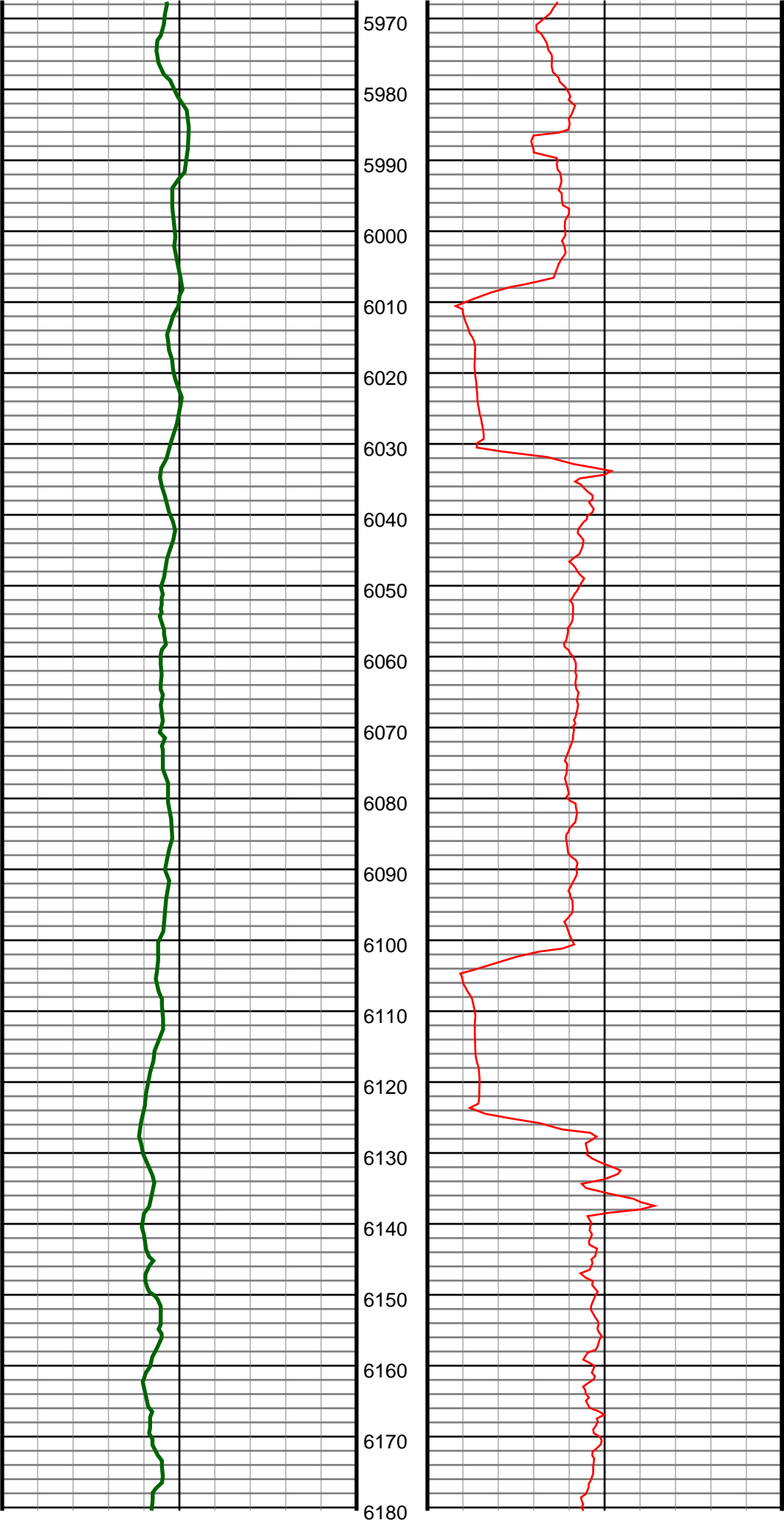
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#62 MD(5826.00) Inc(9.8) Azm(137.9) TVD(5769.78)
VS(-391.57) NS(-450.13) EW(422.29) TEMP(0.0)

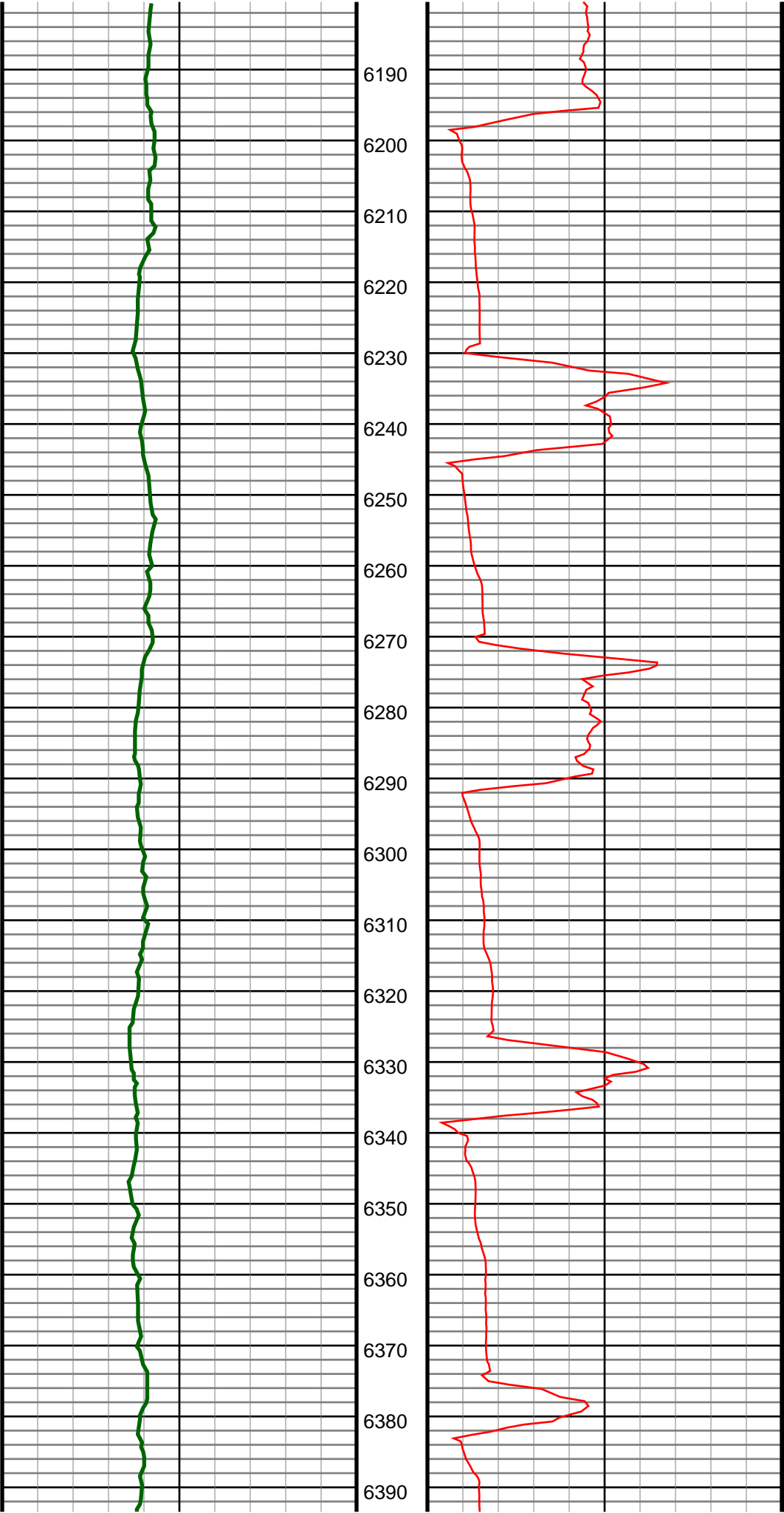
#63 MD(5922.00) Inc(9.4) Azm(135.1) TVD(5864.44)
VS(-401.66) NS(-461.74) EW(433.31) TEMP(0.0)

#64 MD(6017.00) Inc(8.6) Azm(135.8) TVD(5958.27)
VS(-410.81) NS(-472.33) EW(443.73) TEMP(0.0)



#65 MD(6112.00) Inc(9.5) Azm(136.1) TVD(6052.08)
VS(-420.11) NS(-483.07) EW(454.12) TEMP(0.0)

#66 MD(6207.00) Inc(9.4) Azm(122.1) TVD(6145.81)
VS(-428.25) NS(-492.85) EW(466.13) TEMP(0.0)



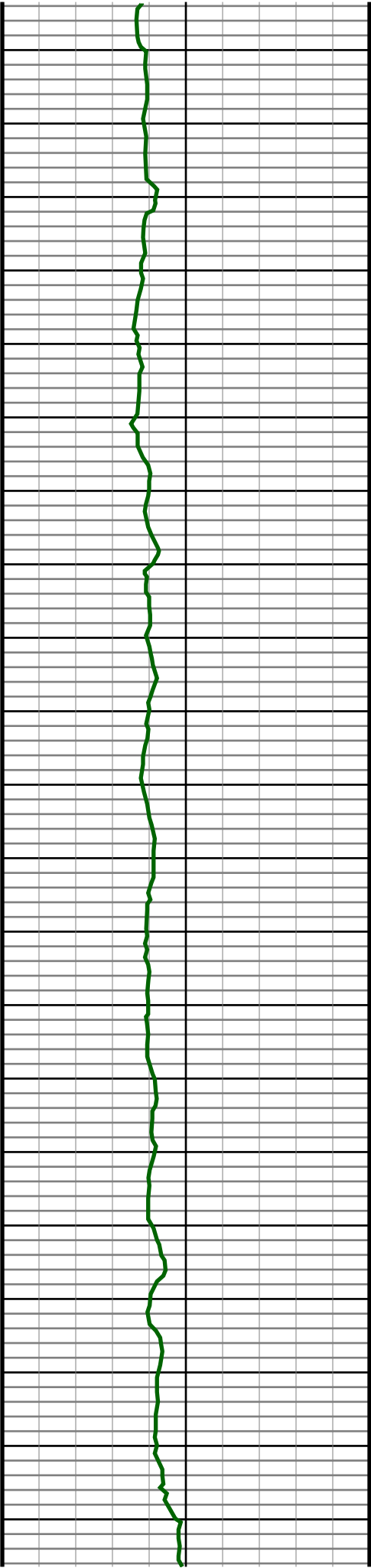
#67 MD(6255.00) Inc(7.9) Azm(115.8) TVD(6193.26)
VS(-430.92) NS(-496.36) EW(472.42) TEMP(0.0)

#68 MD(6303.00) Inc(9.6) Azm(86.6) TVD(6240.72)
VS(-431.20) NS(-497.56) EW(479.39) TEMP(0.0)

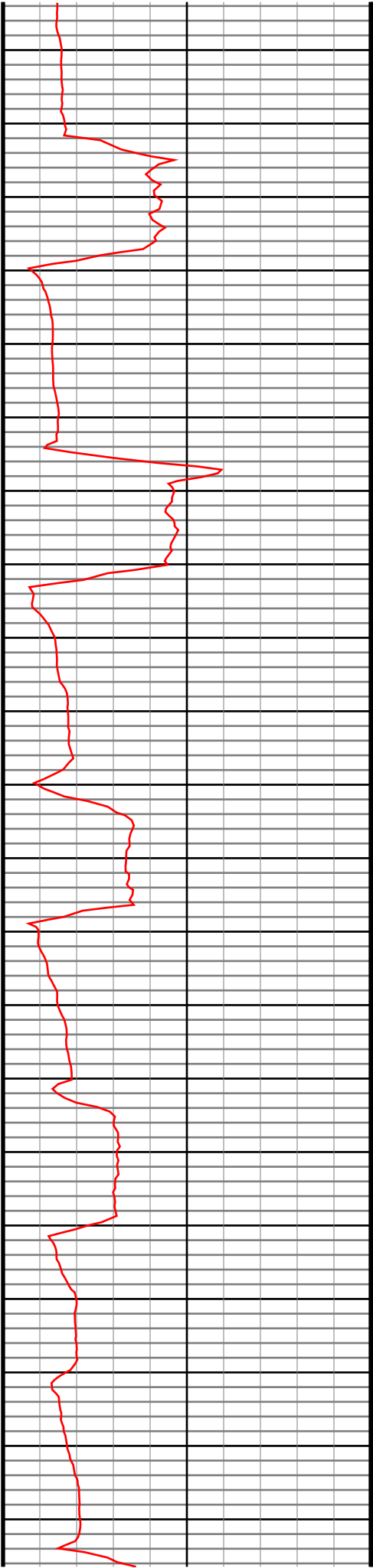
#69 MD(6351.00) Inc(12.7) Azm(70.4) TVD(6287.82)
VS(-428.05) NS(-495.55) EW(488.36) TEMP(0.0)

#70 MD(6398.00) Inc(15.5) Azm(51.4) TVD(6333.42)
VS(-421.17) NS(-489.90) EW(498.14) TEMP(0.0)

#71 MD(6446.00) Inc(18.1) Azm(32.4) TVD(6379.41)
VS(-409.79) NS(-479.59) EW(507.16) TEMP(0.0)



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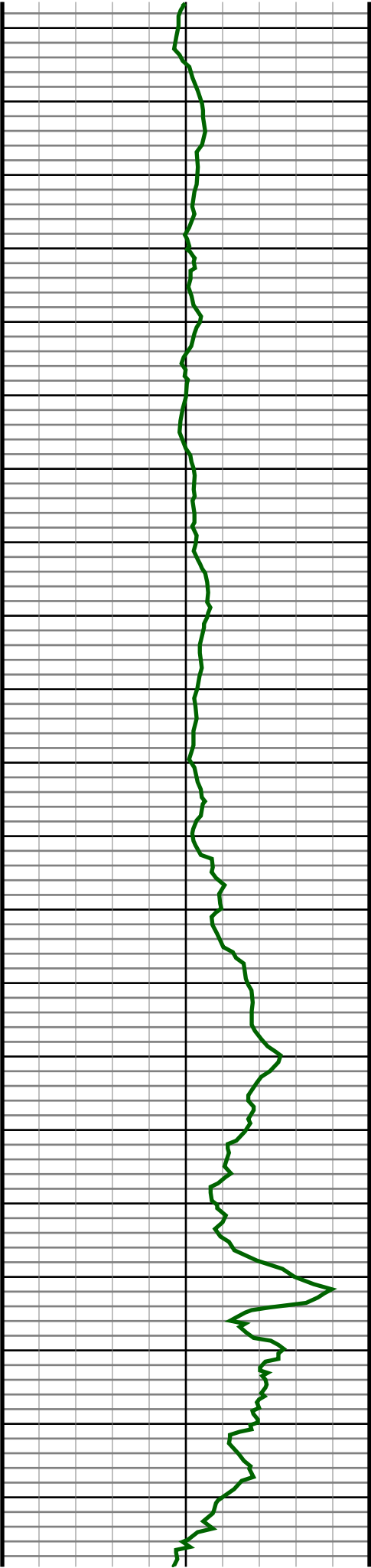
#72 MD(6493.00) Inc(18.5) Azm(15.0) TVD(6424.06)
VS(-395.76) NS(-466.22) EW(513.01) TEMP(0.0)

#73 MD(6541.00) Inc(20.1) Azm(5.0) TVD(6469.38)
VS(-379.97) NS(-450.64) EW(515.70) TEMP(0.0)

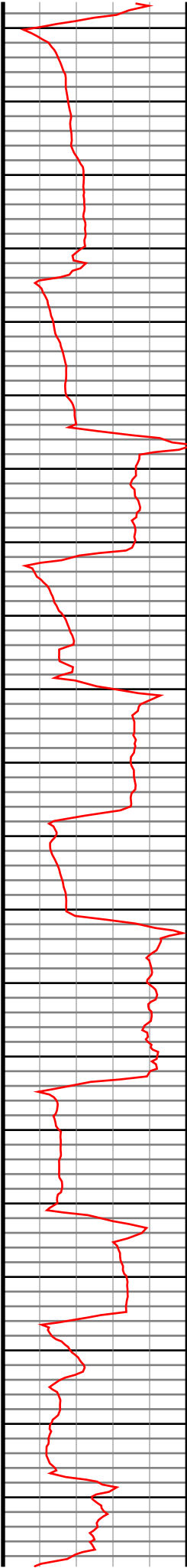
#74 MD(6588.00) Inc(21.1) Azm(4.1) TVD(6513.37)
VS(-363.45) NS(-434.15) EW(517.01) TEMP(0.0)

#75 MD(6636.00) Inc(22.7) Azm(6.1) TVD(6557.91)
VS(-345.57) NS(-416.33) EW(518.61) TEMP(0.0)

#76 MD(6683.00) Inc(28.0) Azm(11.5) TVD(6600.37)
VS(-325.48) NS(-396.48) EW(521.77) TEMP(0.0)



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#77 MD(6731.00) Inc(35.3) Azm(12.9) TVD(6641.21)
VS(-300.40) NS(-371.89) EW(527.12) TEMP(0.0)

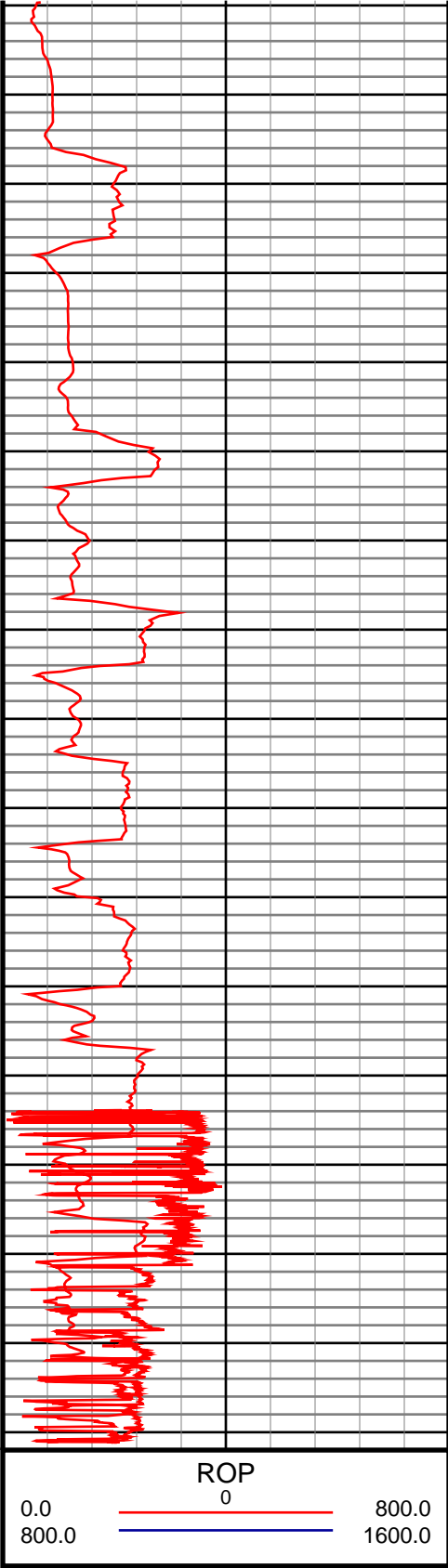
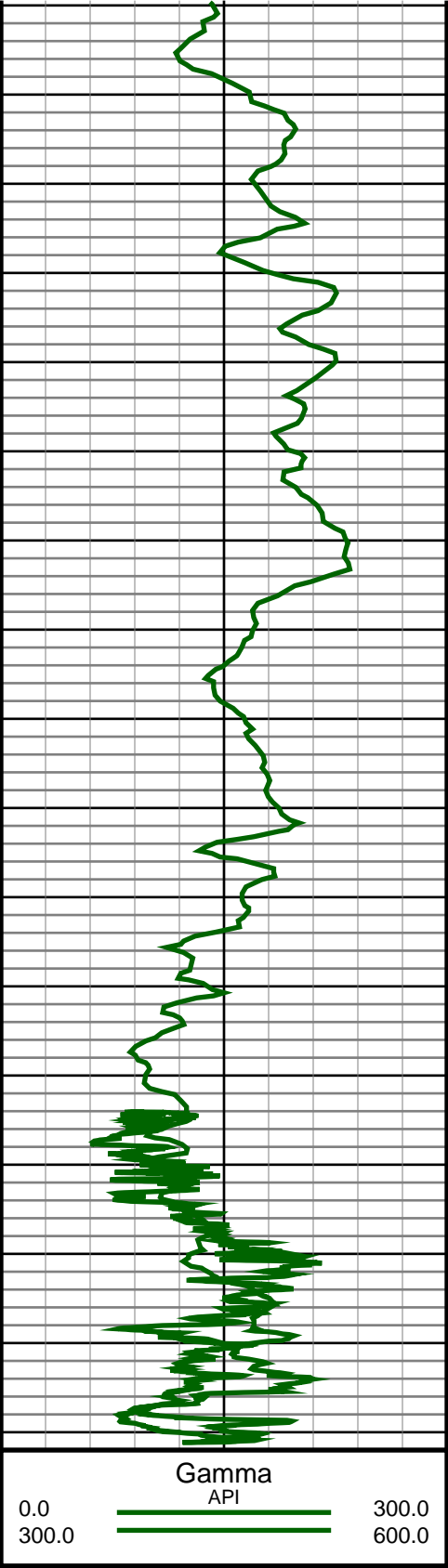
#78 MD(6778.00) Inc(39.1) Azm(12.4) TVD(6678.64)
VS(-272.11) NS(-344.16) EW(533.34) TEMP(0.0)

#79 MD(6826.00) Inc(41.9) Azm(11.0) TVD(6715.13)
VS(-241.02) NS(-313.64) EW(539.65) TEMP(0.0)

#80 MD(6873.00) Inc(43.0) Azm(10.3) TVD(6749.81)
VS(-209.35) NS(-282.47) EW(545.51) TEMP(0.0)

#81 MD(6921.00) Inc(46.5) Azm(9.2) TVD(6783.90)
VS(-175.59) NS(-249.17) EW(551.22) TEMP(0.0)

#82 MD(6969.00) Inc(49.9) Azm(6.9) TVD(6815.89)
VS(-139.82) NS(-213.74) EW(556.21) TEMP(0.0)



#83 MD(7017.00) Inc(54.0) Azm(4.5) TVD(6845.47)
VS(-102.05) NS(-176.14) EW(559.94) TEMP(0.0)

#84 MD(7064.00) Inc(59.8) Azm(3.8) TVD(6871.12)
VS(-62.76) NS(-136.89) EW(562.78) TEMP(0.0)

#85 MD(7112.00) Inc(64.7) Azm(3.1) TVD(6893.47)
VS(-20.40) NS(-94.50) EW(565.33) TEMP(0.0)

#86 MD(7159.00) Inc(68.1) Azm(3.3) TVD(6912.28)
VS(22.54) NS(-51.50) EW(567.74) TEMP(0.0)

#87 MD(7207.00) Inc(69.3) Azm(3.3) TVD(6929.72)
VS(67.15) NS(-6.86) EW(570.31) TEMP(0.0)

#135 MD(11421.00) Inc(90.4) Azm(358.0) TVD(6944.27)
VS(4235.78) NS(4199.76) EW(551.20) TEMP(0.0)