



CROW CREEK STATE AC36-75-1HN **MD**
5":100'

Company: NOBLE ENERGY
Well Name: CROW CREEK STATE AC36-75-1HN
UWI or LSD: 05-123-37419
Rig Id: H&P 277
State: CO
County/Parish: WELD COUNTY
Country: USA
Survey Company: DRILTECH, LLC
Job number: 2013-278-IDDT-CO
MARK LARUE MWD OPERATOR
JOSH CAYLOR MWD OPERATOR

Log measurements: Gamma, ROP, Temp
Depth measured from: 700
Maximum temperature: 206

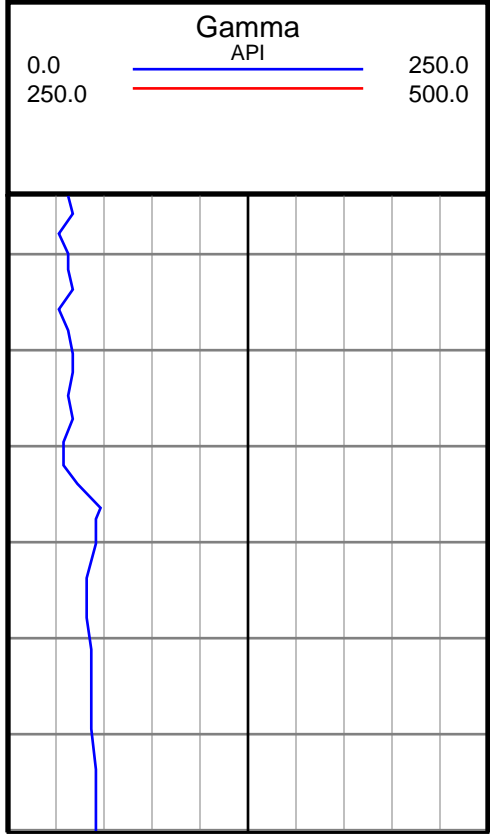
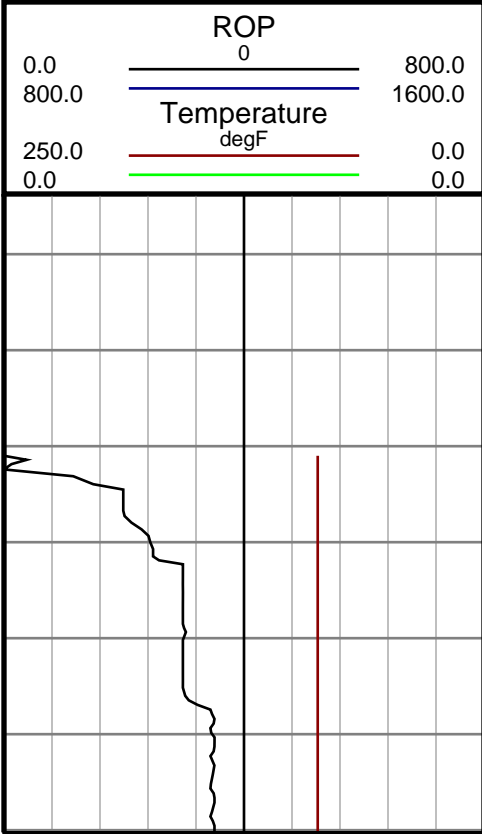
Depth Date
Start: 700 ft 9/28/2013
End: 11240 ft 10/4/2013

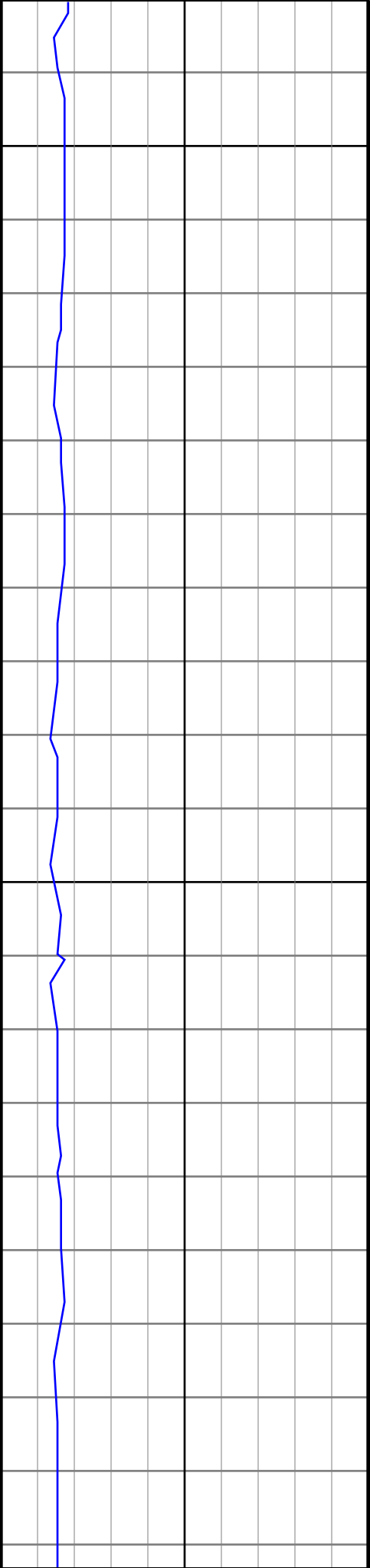
Casing Depth Size
Surface: 641 9.625
Intermediate: 7124 7.0
Mud Type: WATER BASE
Density: 9.2
Viscosity: 32
KB: Elevations
GL: GL:
DF: DF:

Run	Bit Size	Offsets	Gamma	Survey	Start	End	Start	End	Dates
1	8 3/4	39.00	56.00	641	6187	7136	9/28/2013	9/29/2013	
2	8 3/4	38.00	55.00	6187	7136	9/29/2013	9/30/2013		
3	6 1/8	44.00	61.00	7136	11244	10/2/2013	10/4/2013		
4									
5									
6									
7									
8									
9									
10									

DRILTECH, LLC 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.

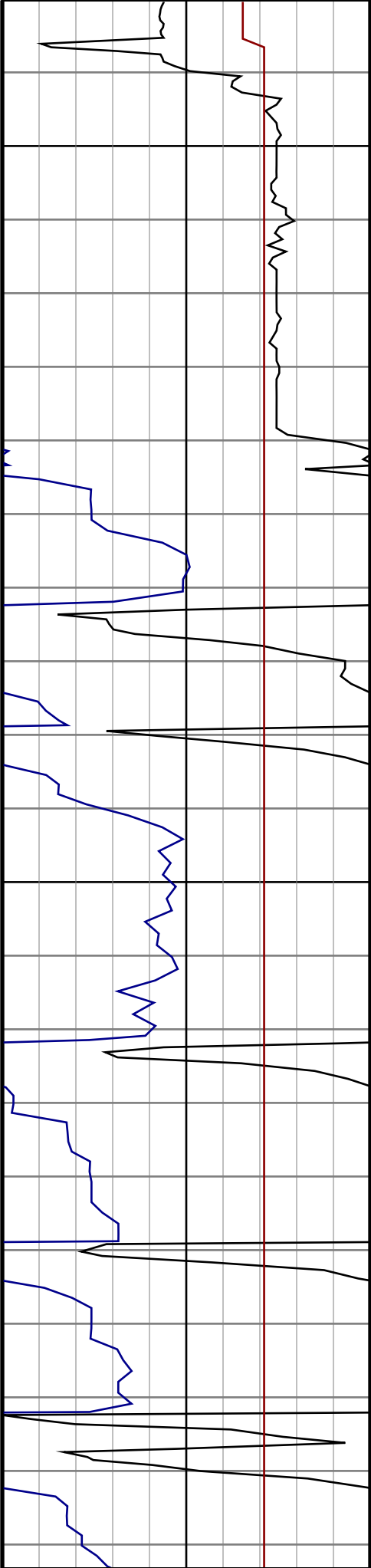
MD





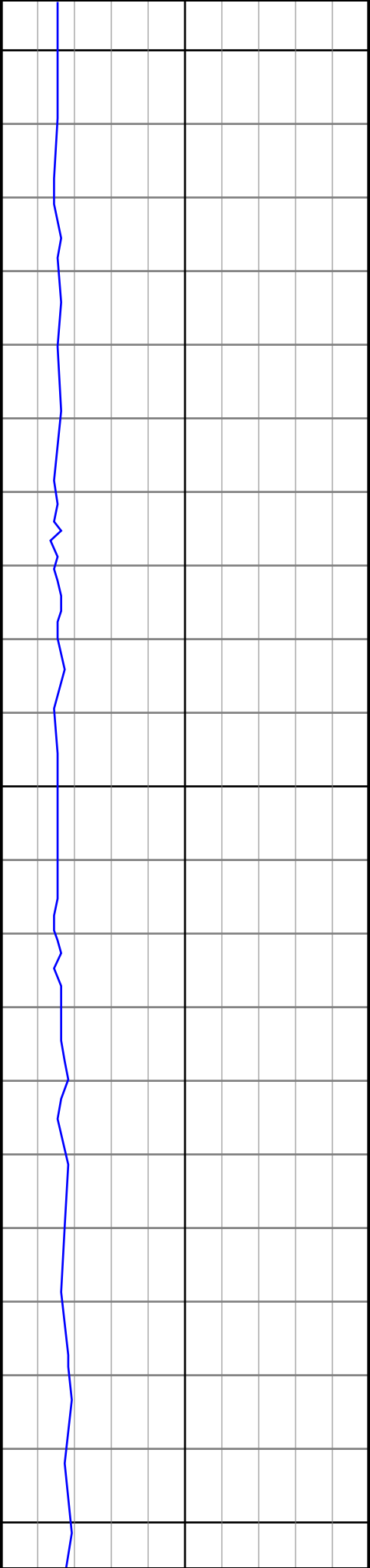
700

800



#4 MD(725.00) Inc(0.4) Azm(17.5) TVD(725.00)
VS(1.94) NS(1.84) EW(-0.76)

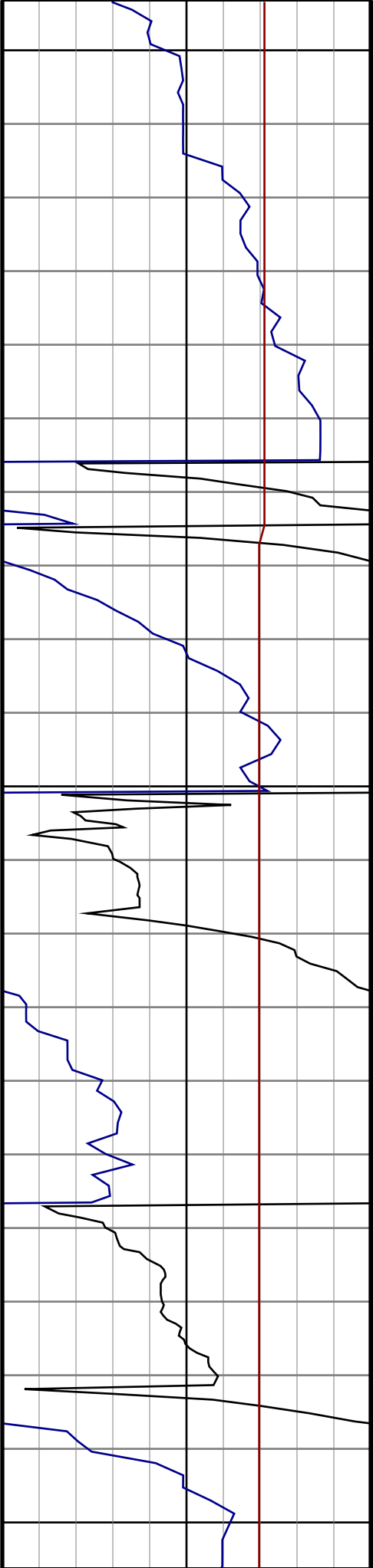
#5 MD(817.00) Inc(0.5) Azm(356.9) TVD(816.99)
VS(2.62) NS(2.54) EW(-0.69)



900

1000

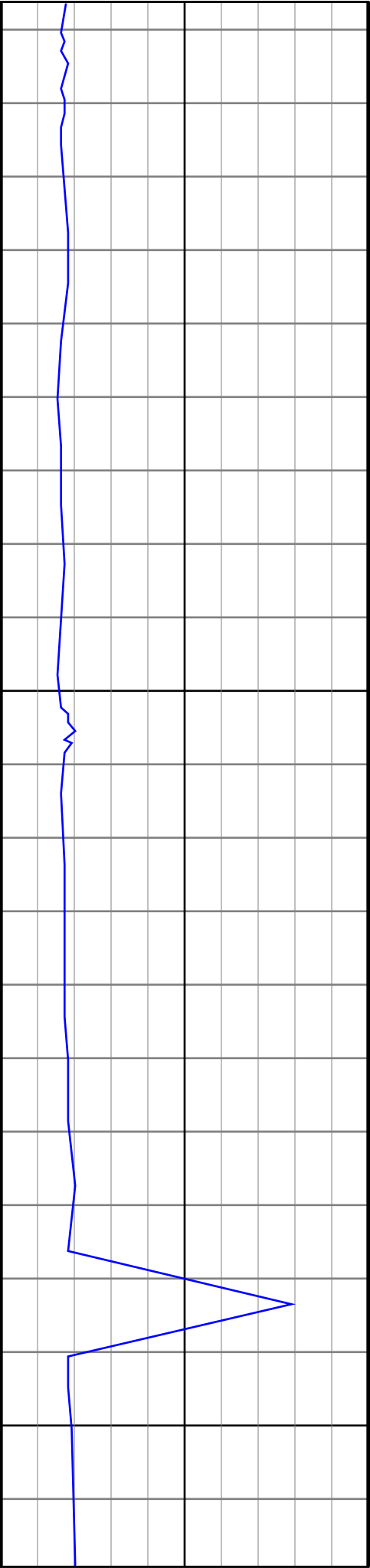
1100



#6 MD(911.00) Inc(0.2) Azm(85.7) TVD(910.99)
VS(3.01) NS(2.96) EW(-0.55)

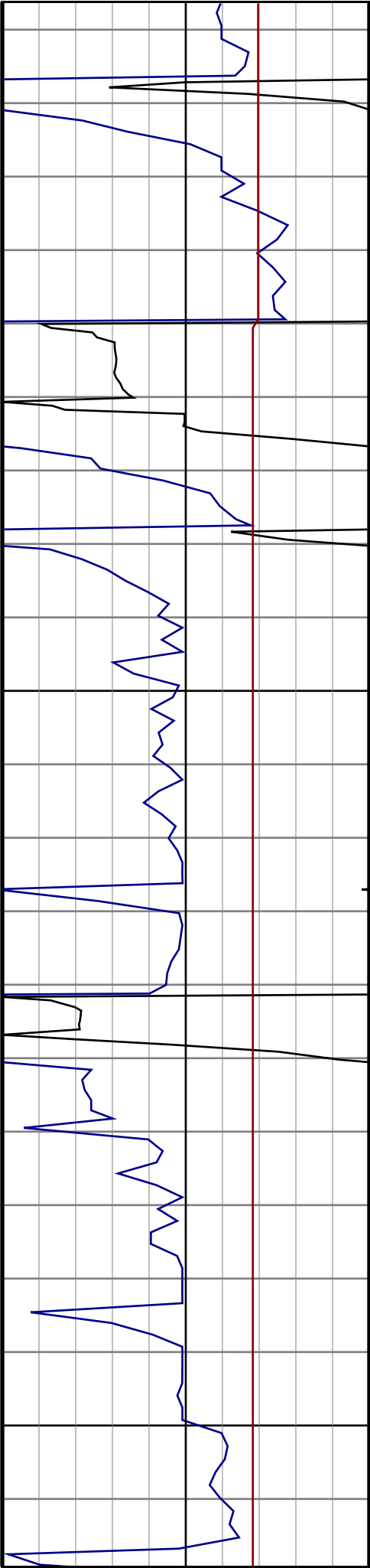
#7 MD(1005.00) Inc(0.4) Azm(249.9) TVD(1004.99)
VS(2.94) NS(2.86) EW(-0.69)

#8 MD(1097.00) Inc(3.3) Azm(215.6) TVD(1096.93)
VS(1.03) NS(0.60) EW(-2.53)



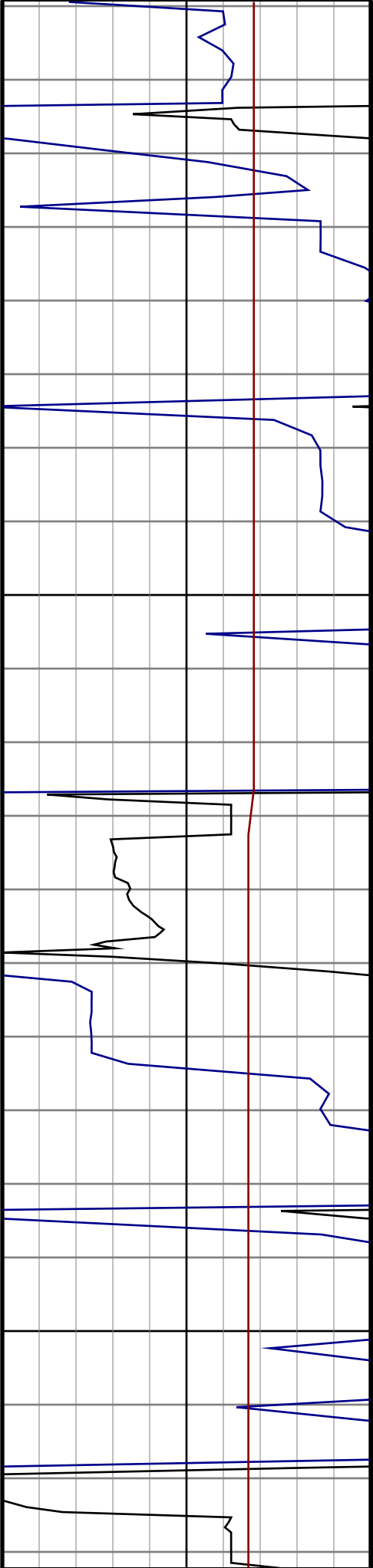
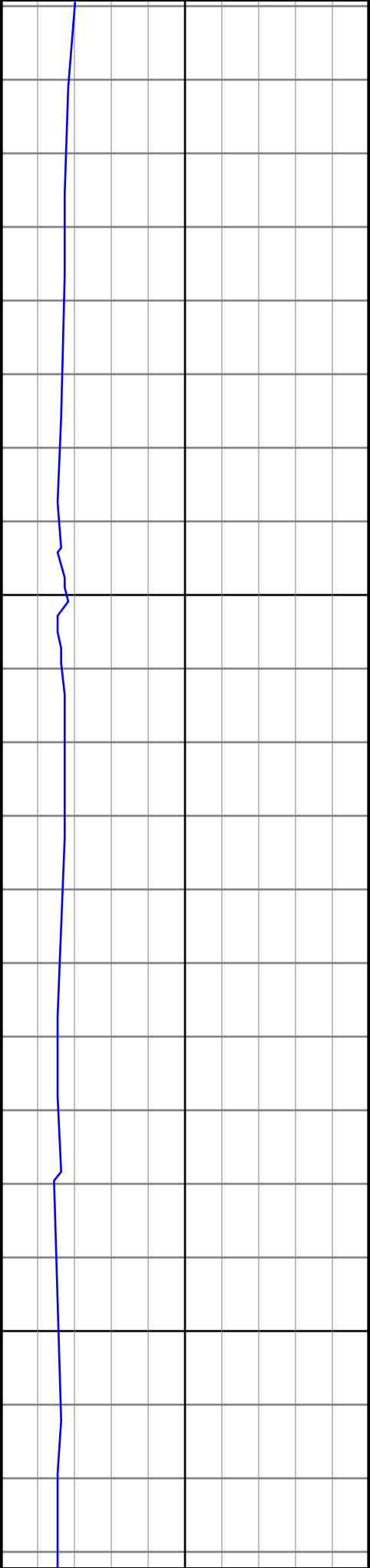
1200

1300



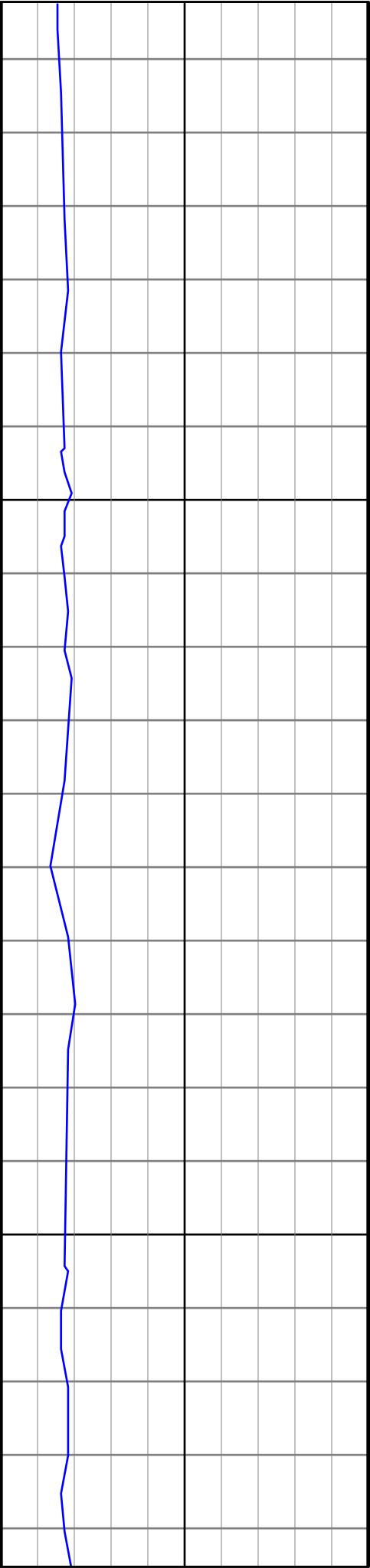
#9 MD(1189.00) Inc(4.6) Azm(204.9) TVD(1188.72)
VS(-3.84) NS(-4.90) EW(-5.63)

#10 MD(1282.00) Inc(5.1) Azm(205.8) TVD(1281.38)
VS(-10.25) NS(-12.00) EW(-9.00)



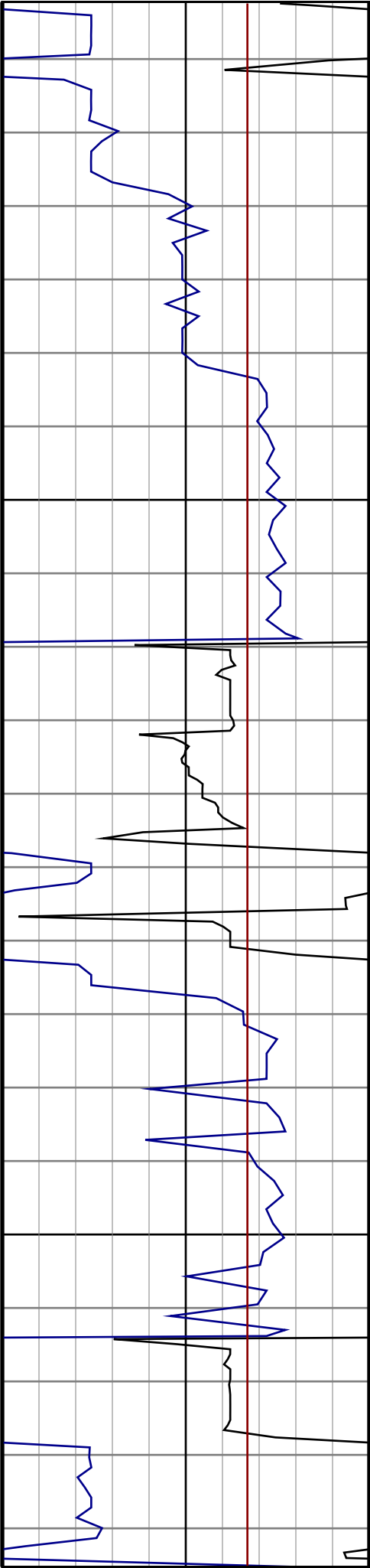
#11 MD(1376.00) Inc(4.9) Azm(204.2) TVD(1375.02)
VS(-16.96) NS(-19.43) EW(-12.46)

#12 MD(1469.00) Inc(6.0) Azm(206.5) TVD(1467.60)
VS(-24.15) NS(-27.40) EW(-16.26)



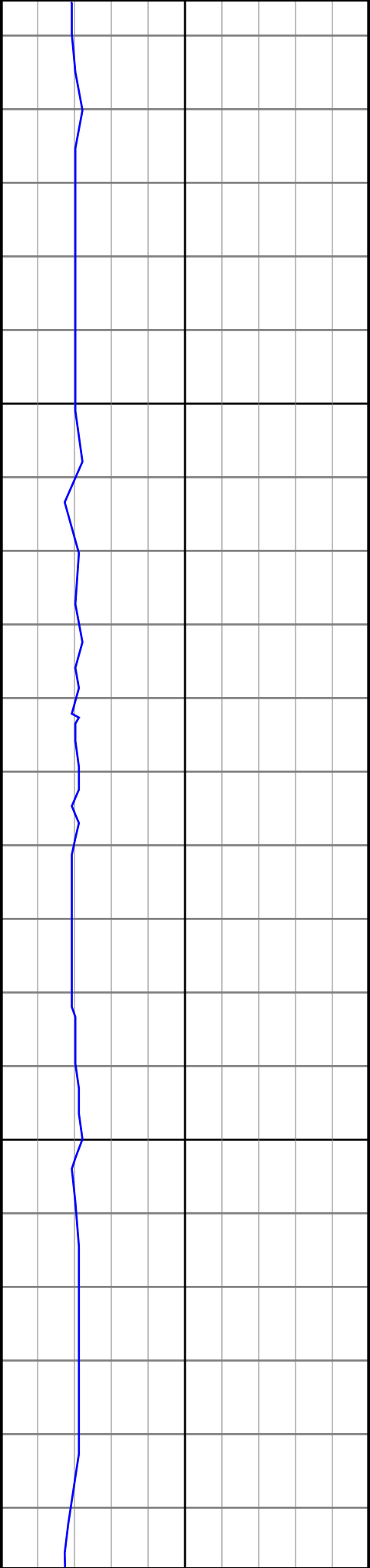
1600

1700



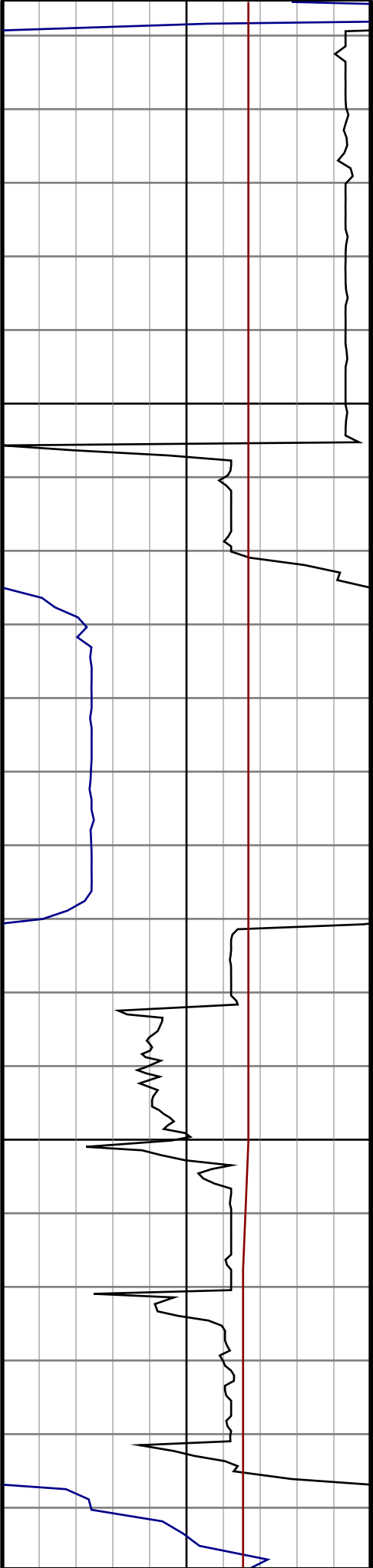
#13 MD(1564.00) Inc(6.3) Azm(209.1) TVD(1562.06)
VS(-32.18) NS(-36.40) EW(-21.01)

#14 MD(1659.00) Inc(7.2) Azm(211.0) TVD(1656.40)
VS(-40.72) NS(-46.06) EW(-26.61)



1800

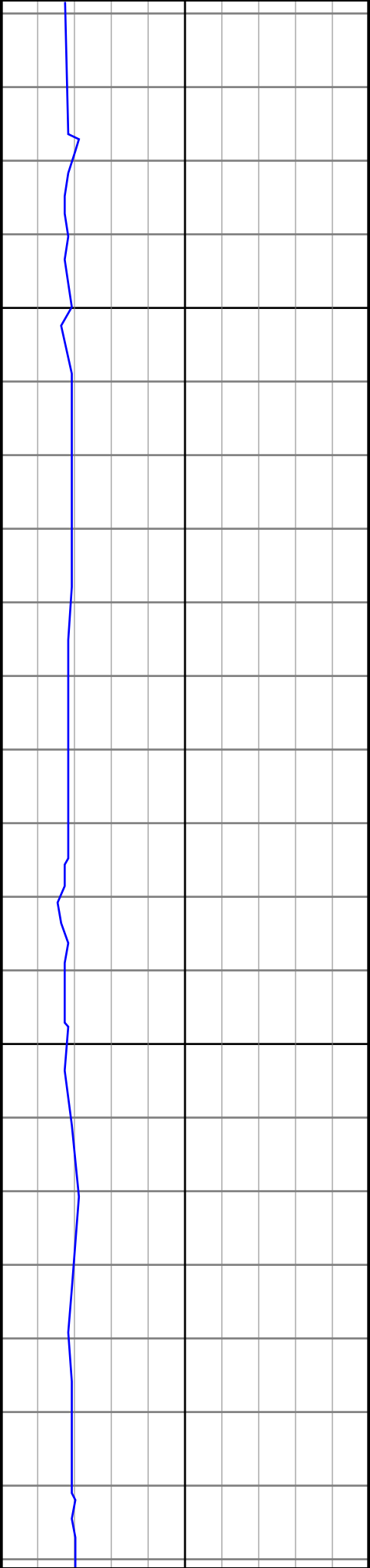
1900



#15 MD(1754.00) Inc(7.2) Azm(210.3) TVD(1750.65)
VS(-49.75) NS(-56.30) EW(-32.68)

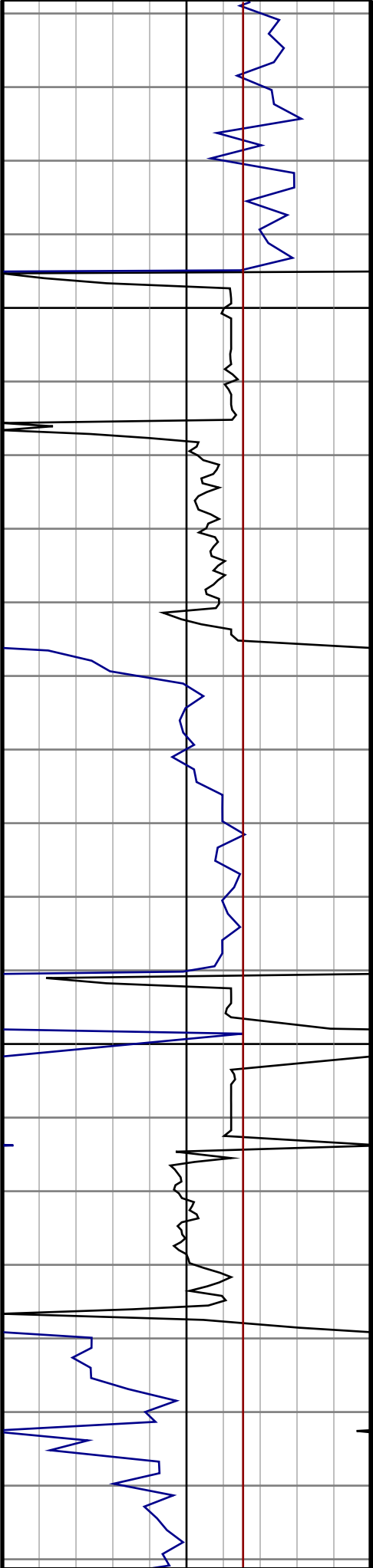
#16 MD(1850.00) Inc(6.3) Azm(208.4) TVD(1845.98)
VS(-58.46) NS(-66.13) EW(-38.22)

#17 MD(1945.00) Inc(7.0) Azm(237.9) TVD(1940.37)
VS(-64.72) NS(-73.79) EW(-45.61)



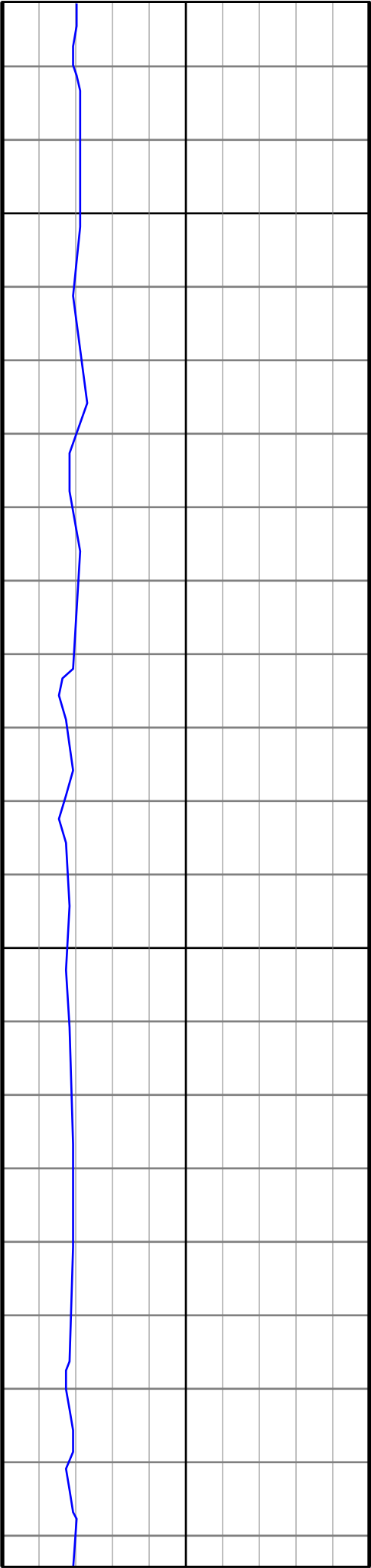
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2100



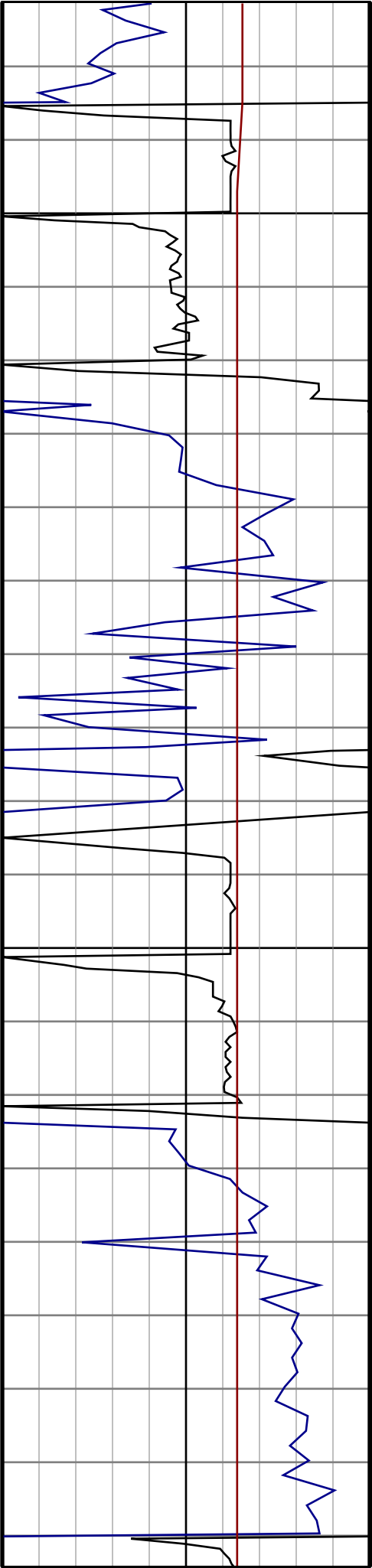
#18 MD(2040.00) Inc(7.4) Azm(255.9) TVD(2034.63)
VS(-67.33) NS(-78.36) EW(-56.45)

#19 MD(2135.00) Inc(8.3) Azm(259.0) TVD(2128.74)
VS(-67.88) NS(-81.16) EW(-69.11)



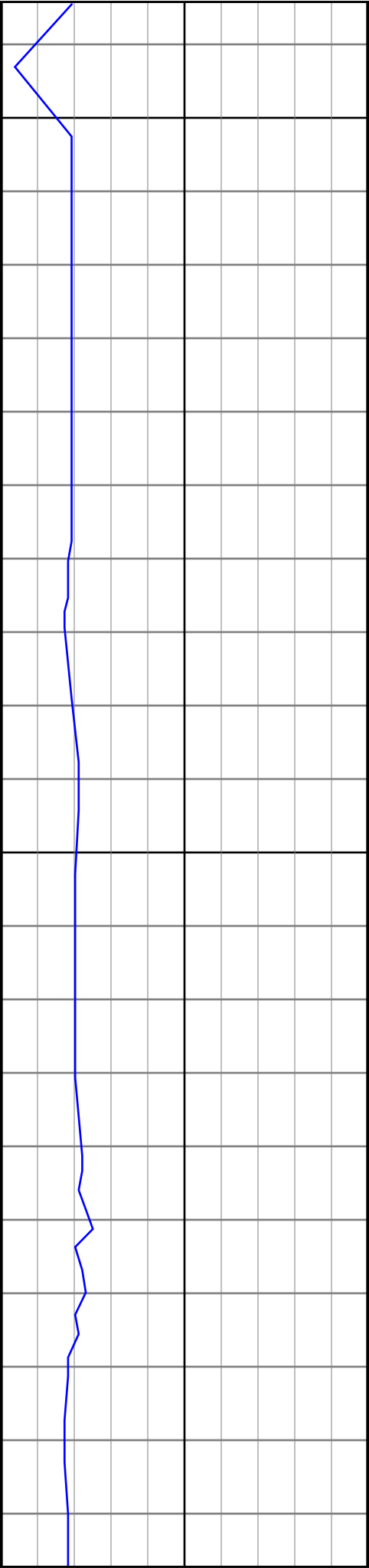
2200

2300



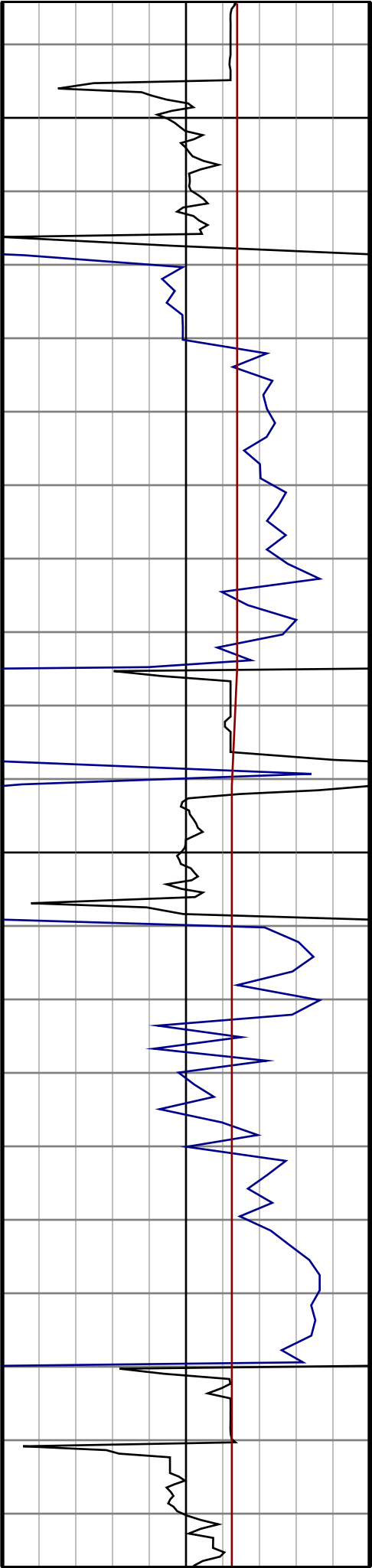
#20 MD(2230.00) Inc(9.3) Azm(253.9) TVD(2222.62)
VS(-68.81) NS(-84.59) EW(-83.22)

#21 MD(2325.00) Inc(10.2) Azm(260.1) TVD(2316.25)
VS(-69.60) NS(-88.17) EW(-98.88)



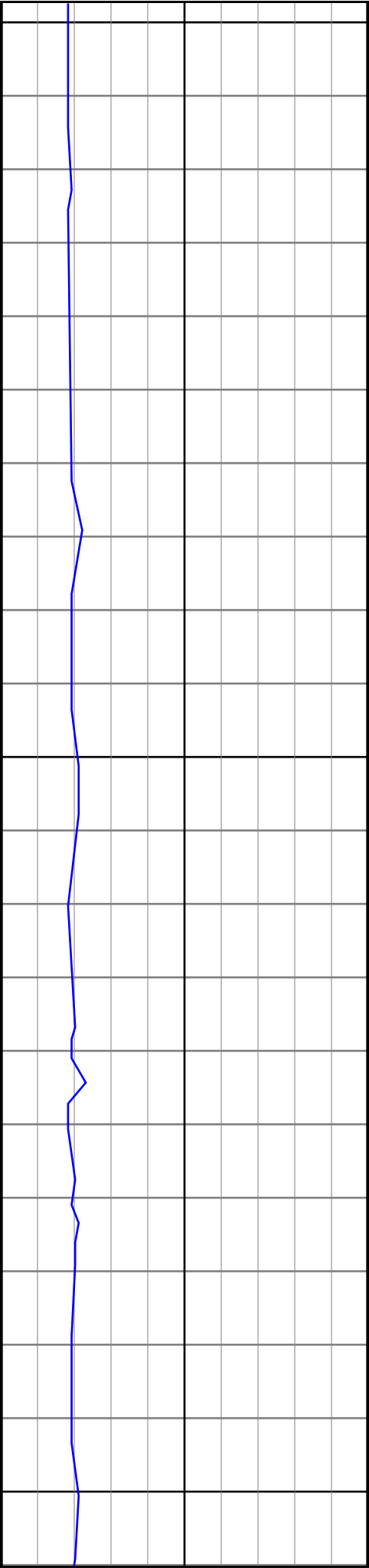
2400

2500



#22 MD(2420.00) Inc(11.1) Azm(260.6) TVD(2409.61)
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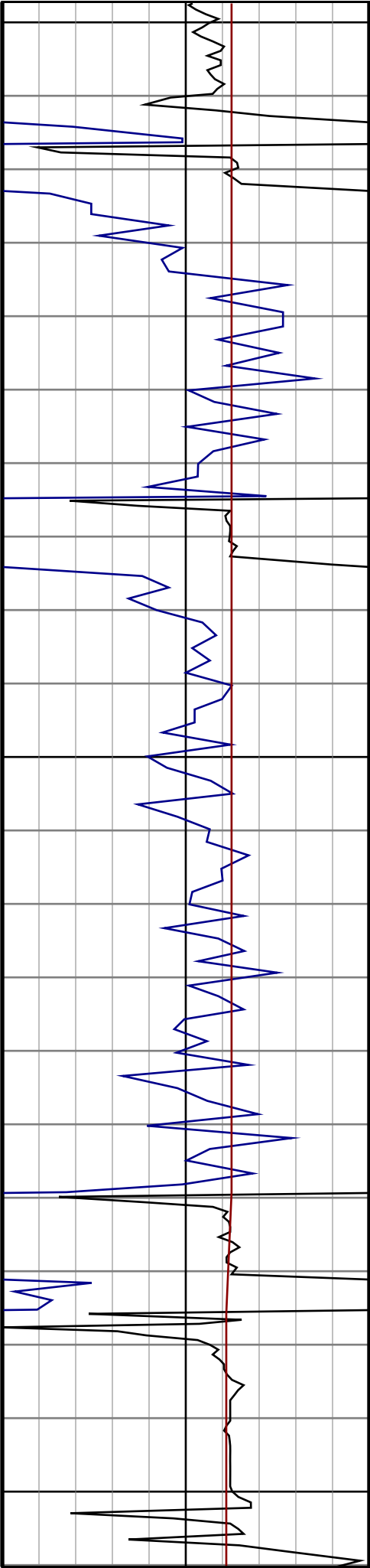
#23 MD(2515.00) Inc(10.9) Azm(261.8) TVD(2502.87)
VS(-69.09) NS(-93.88) EW(-134.10)



2600

2700

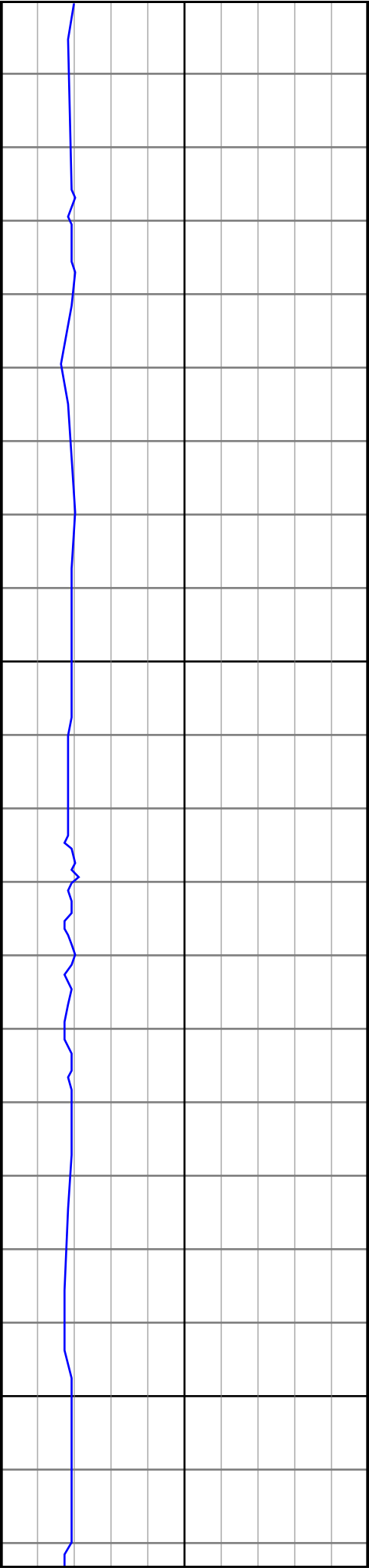
2800



#24 MD(2610.00) Inc(12.0) Azm(255.5) TVD(2595.98)
VS(-69.57) NS(-97.64) EW(-152.55)

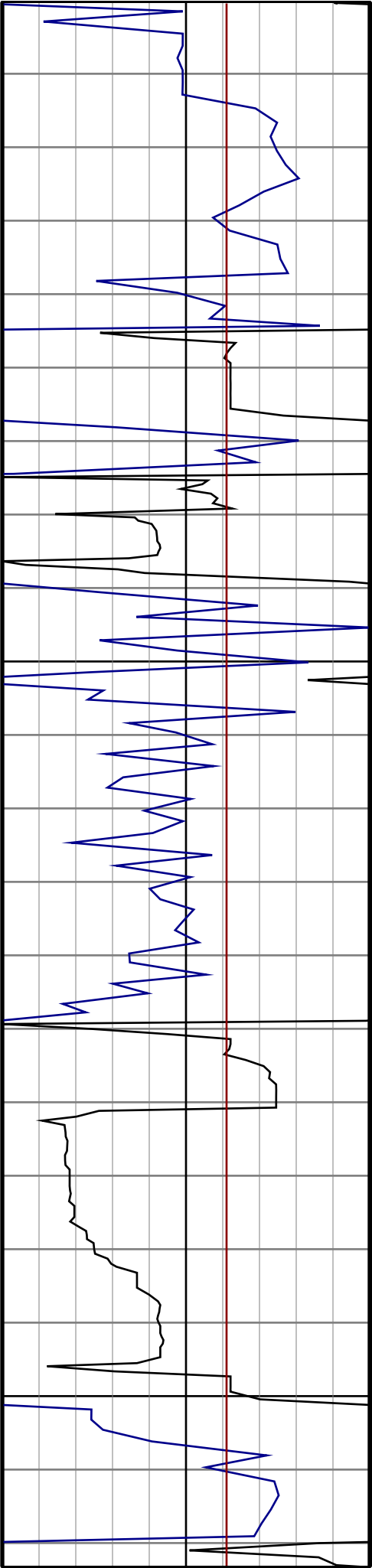
#25 MD(2705.00) Inc(11.6) Azm(254.6) TVD(2688.97)
VS(-71.24) NS(-102.65) EW(-171.32)

#26 MD(2801.00) Inc(10.4) Azm(254.1) TVD(2783.21)
VS(-73.03) NS(-107.58) EW(-188.96)



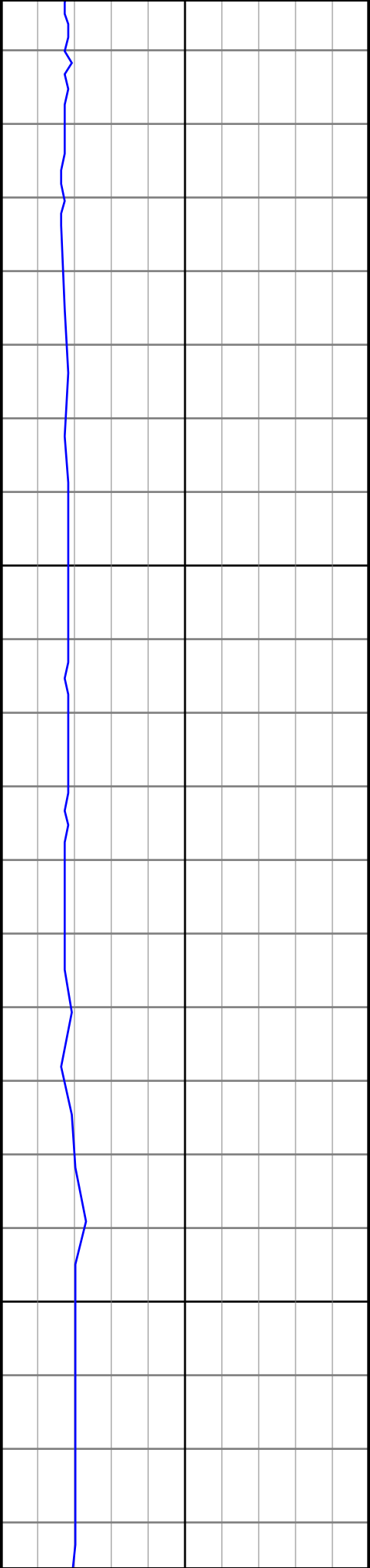
2900

3000



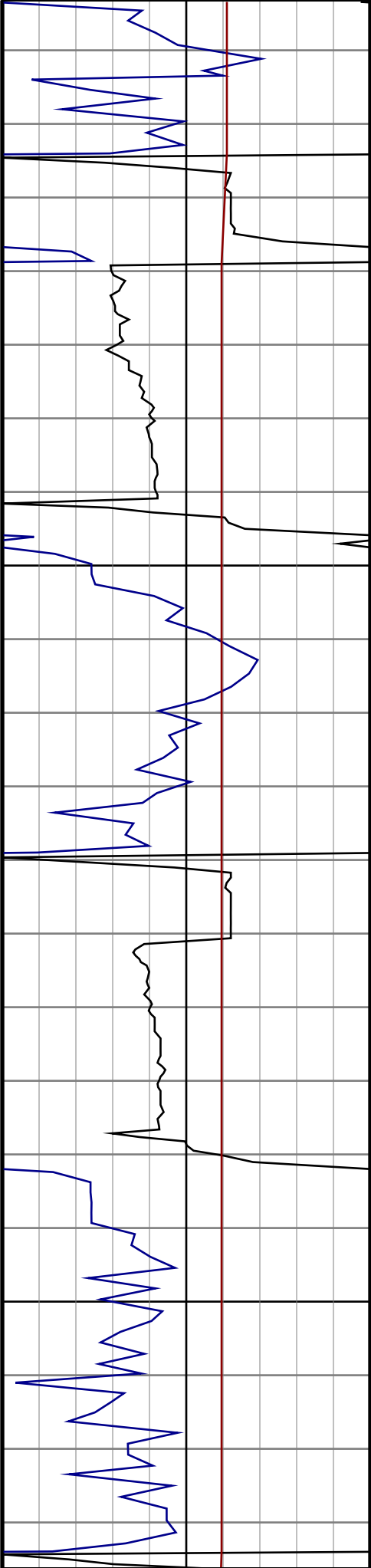
#27 MD(2896.00) Inc(10.2) Azm(248.8) TVD(2876.68)
VS(-75.53) NS(-112.97) EW(-205.05)

#28 MD(2991.00) Inc(10.9) Azm(254.1) TVD(2970.07)
VS(-78.08) NS(-118.48) EW(-221.53)



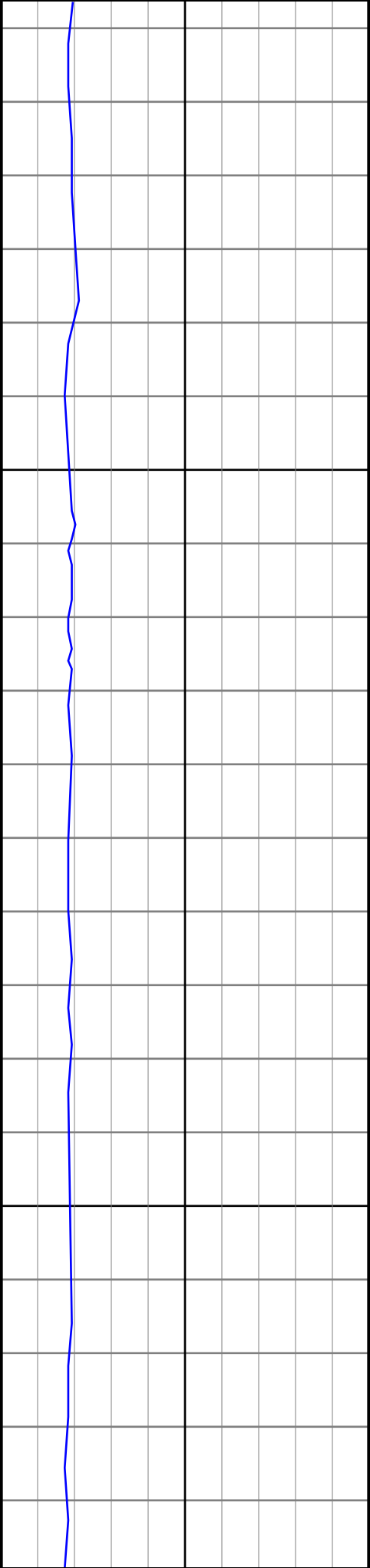
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3200



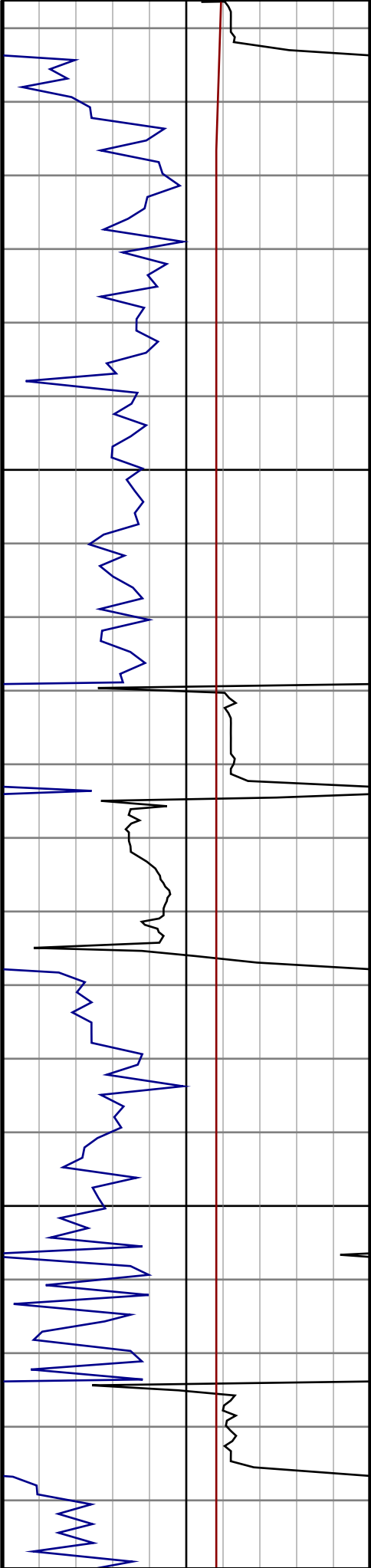
#29 MD(3086.00) Inc(11.8) Azm(263.2) TVD(3063.22)
VS(-78.45) NS(-122.09) EW(-239.82)

#30 MD(3181.00) Inc(13.7) Azm(266.9) TVD(3155.88)
VS(-76.55) NS(-123.85) EW(-260.70)



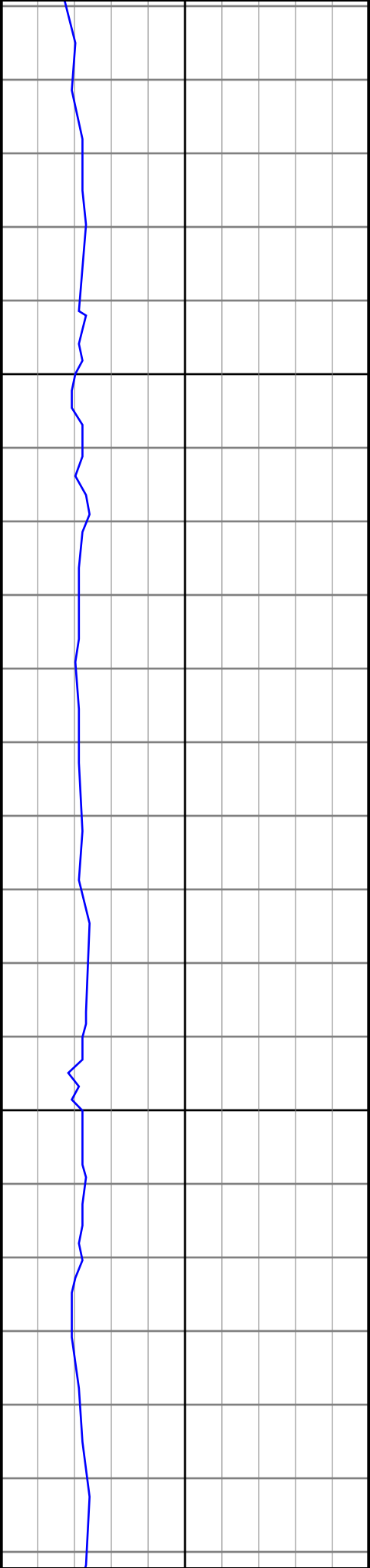
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3400



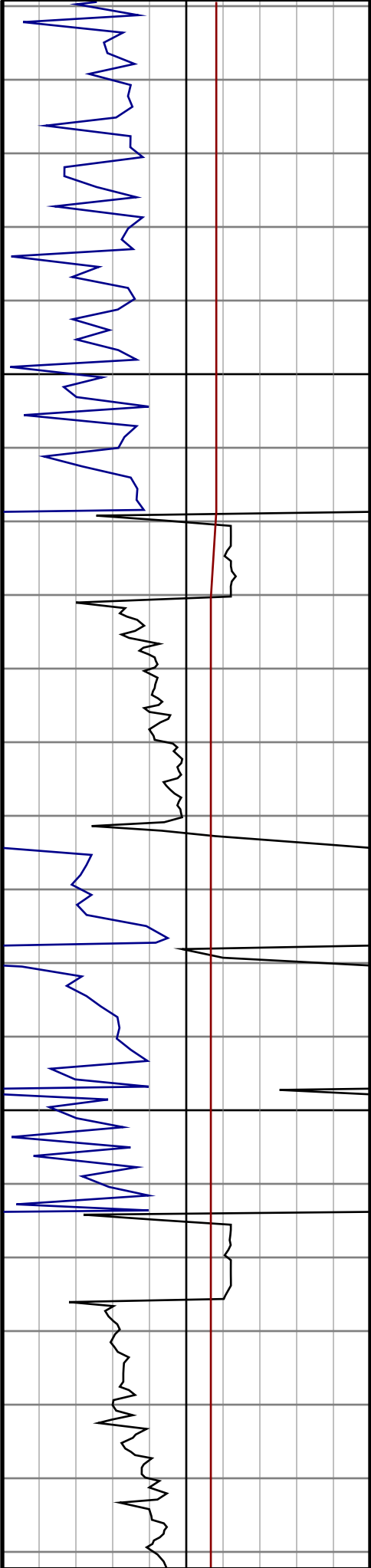
#31 MD(3277.00) Inc(12.3) Azm(265.3) TVD(3249.42)
VS(-74.23) NS(-125.30) EW(-282.24)

#32 MD(3372.00) Inc(12.8) Azm(264.8) TVD(3342.15)
VS(-72.40) NS(-127.08) EW(-302.81)



3500

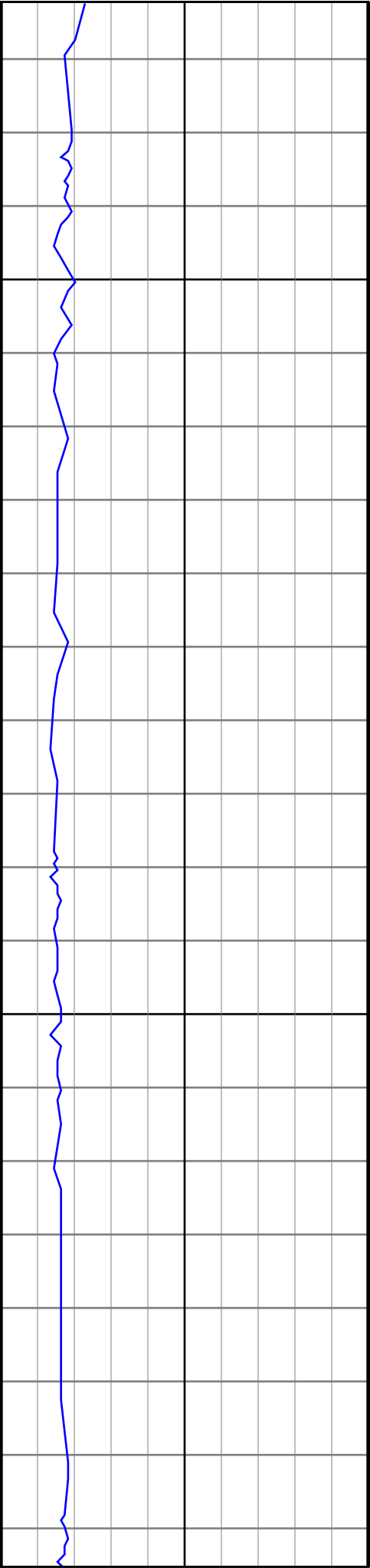
3600



#33 MD(3467.00) Inc(10.0) Azm(261.5) TVD(3435.26)
VS(-71.29) NS(-129.26) EW(-321.45)

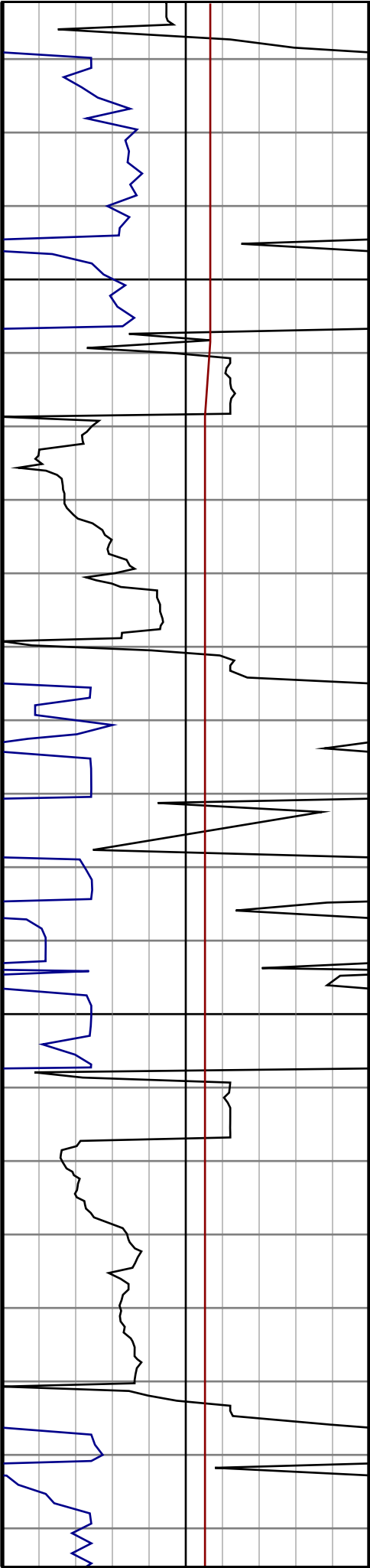
#34 MD(3562.00) Inc(8.6) Azm(269.9) TVD(3529.02)
VS(-69.85) NS(-130.49) EW(-336.71)

#35 MD(3657.00) Inc(8.8) Azm(265.2) TVD(3622.92)
VS(-67.96) NS(-131.11) EW(-351.06)



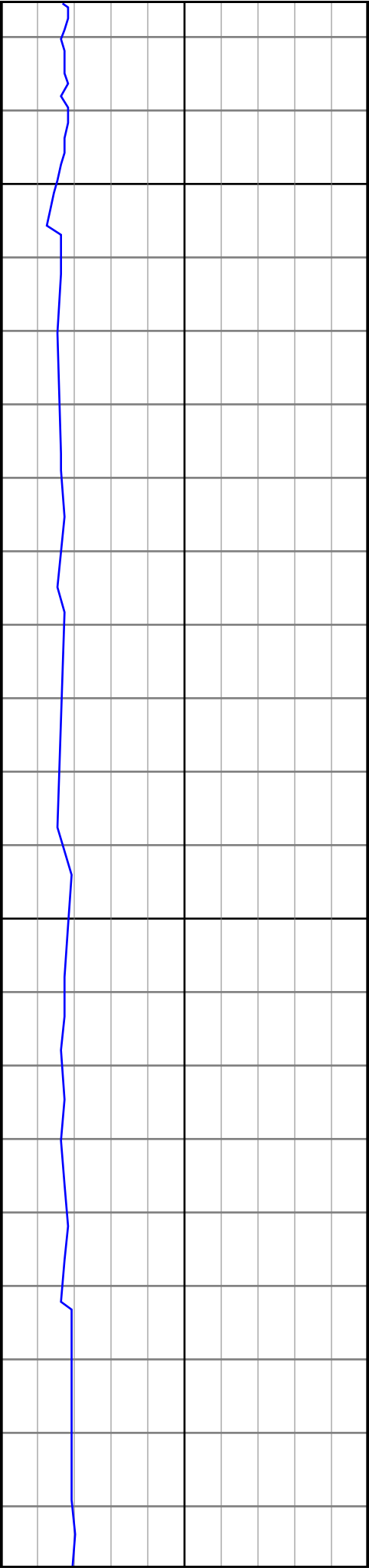
3700

3800



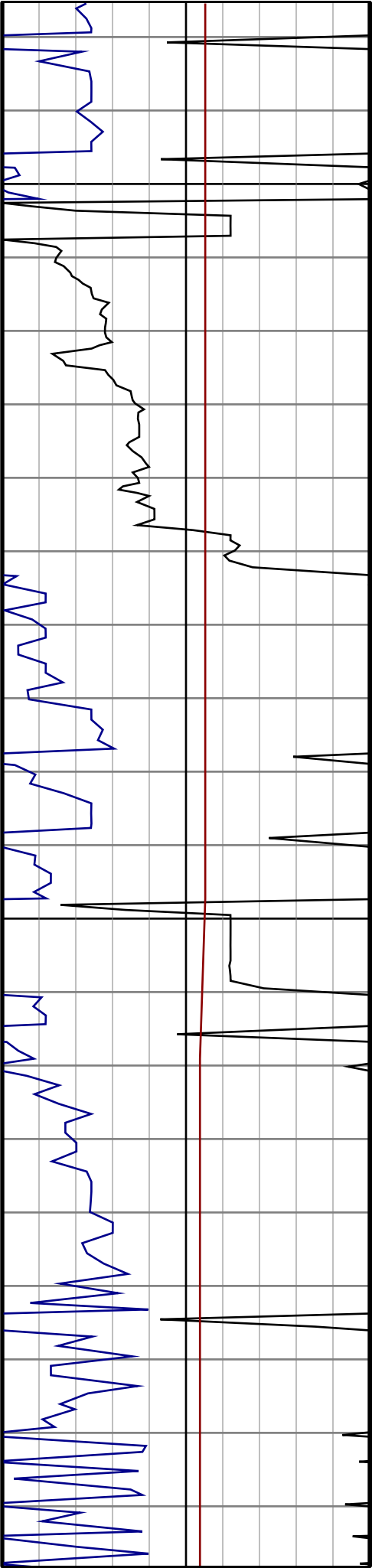
#36 MD(3753.00) Inc(10.0) Azm(267.1) TVD(3717.63)
VS(-66.26) NS(-132.14) EW(-366.70)

#37 MD(3848.00) Inc(12.1) Azm(264.9) TVD(3810.87)
VS(-64.38) NS(-133.45) EW(-384.86)



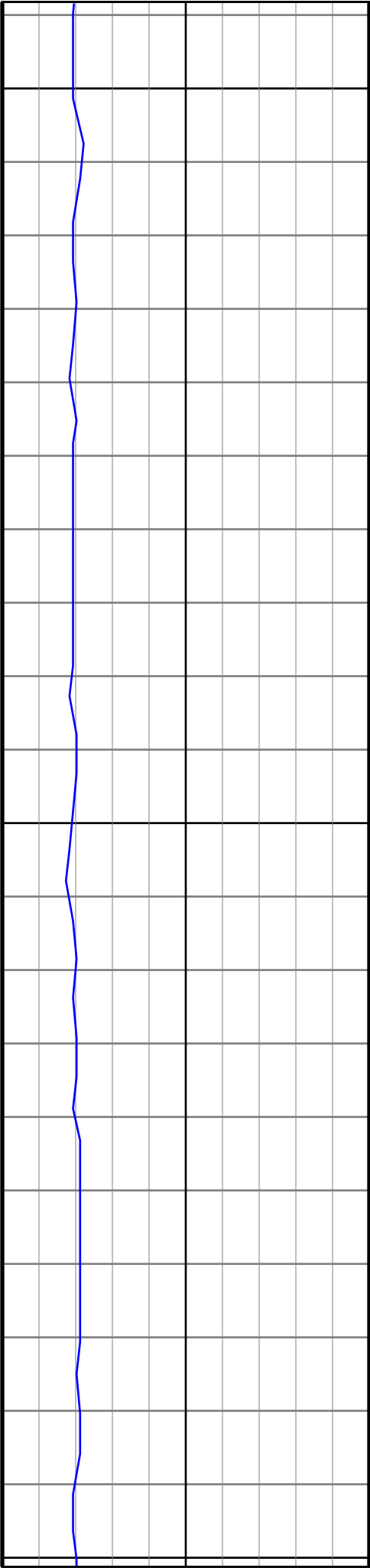
3900

4000



#38 MD(3943.00) Inc(15.5) Azm(261.1) TVD(3903.11)
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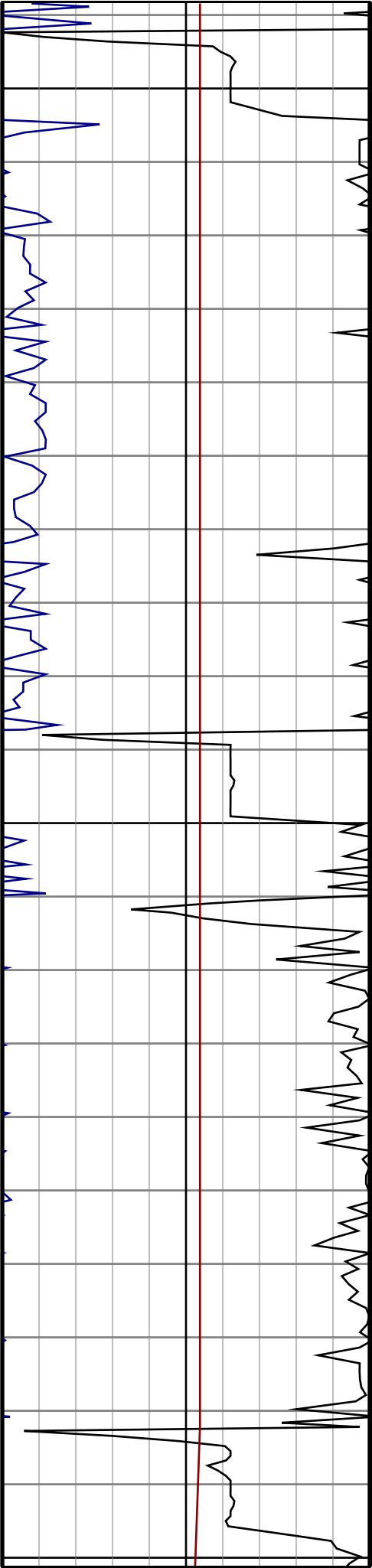
#39 MD(4038.00) Inc(16.2) Azm(260.2) TVD(3994.50)
VS(-62.97) NS(-140.52) EW(-432.92)



4100

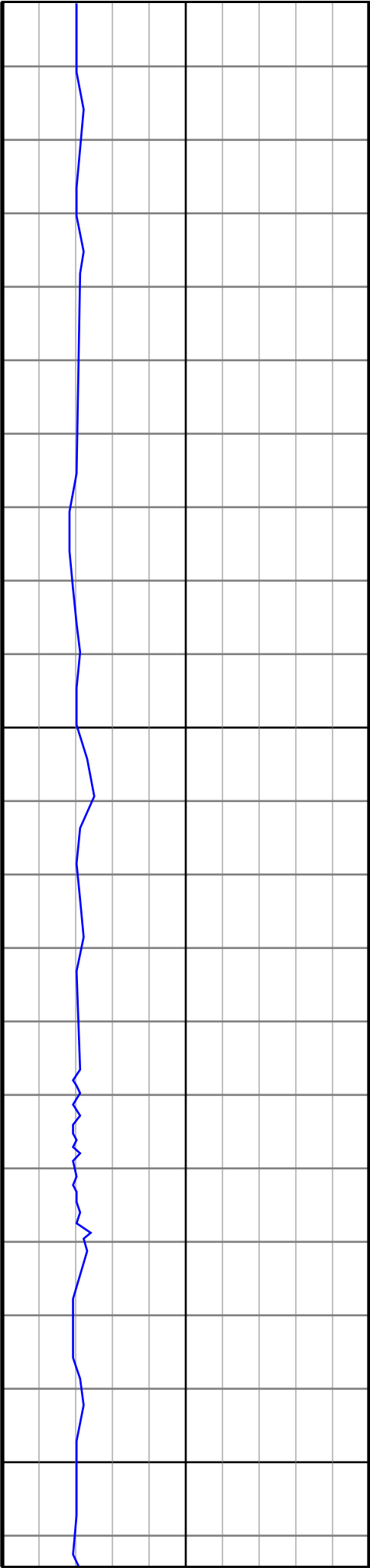
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4300



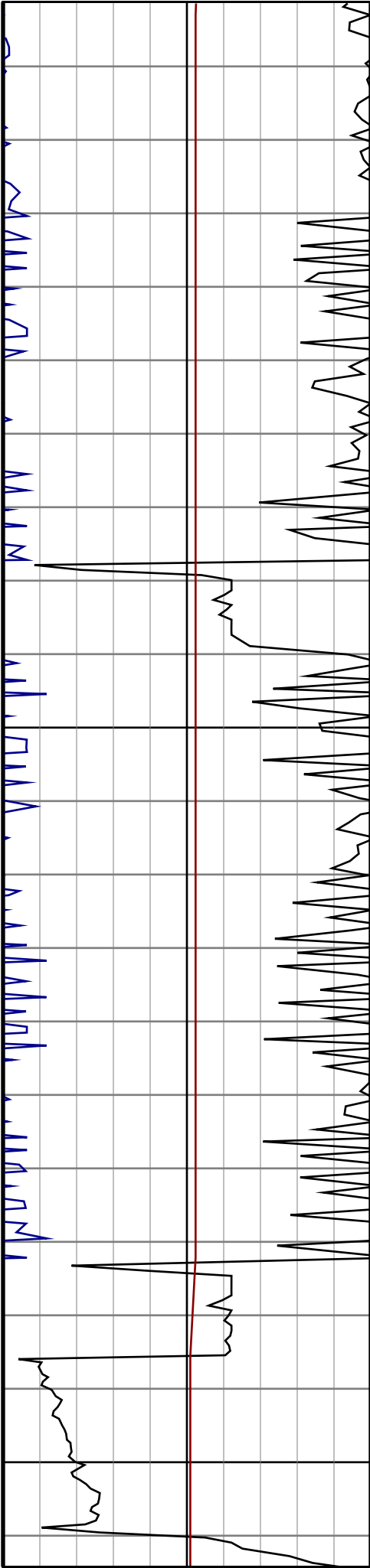
#40 MD(4133.00) Inc(15.5) Azm(257.6) TVD(4085.89)
VS(-63.44) NS(-145.50) EW(-458.38)

#41 MD(4228.00) Inc(14.6) Azm(257.6) TVD(4177.63)
VS(-64.46) NS(-150.79) EW(-482.47)



4400

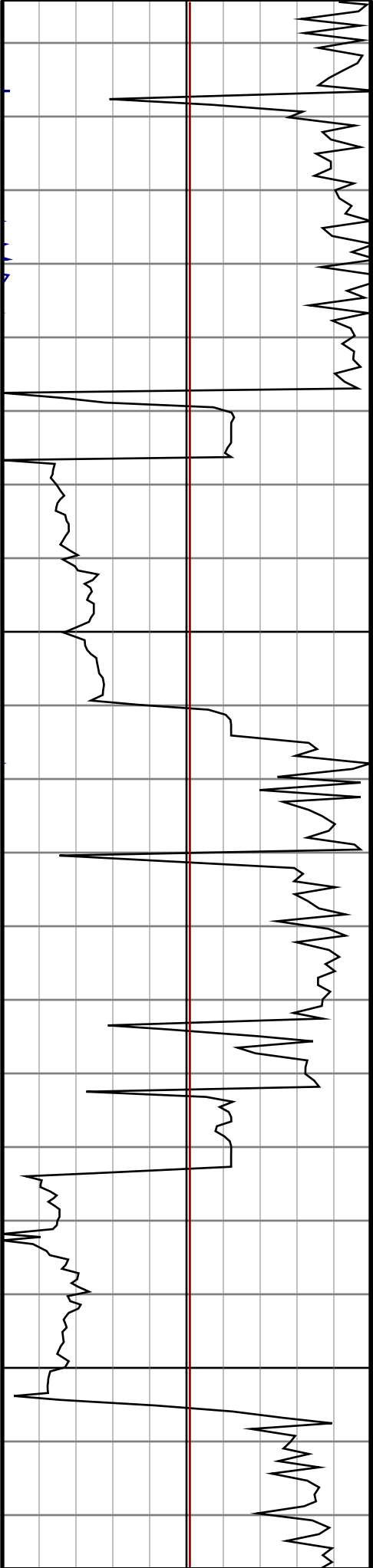
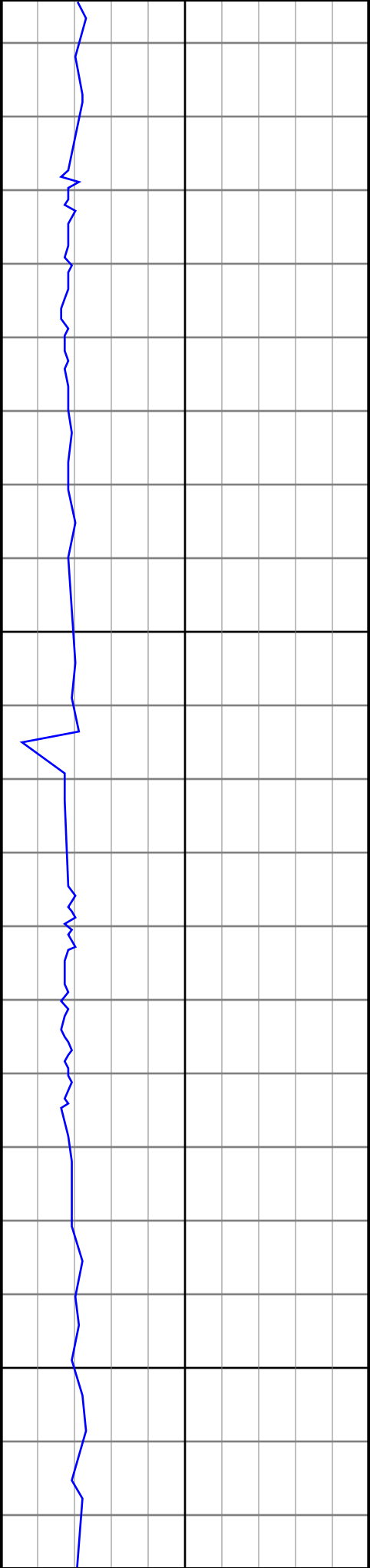
4500



#42 MD(4324.00) Inc(12.8) Azm(256.2) TVD(4270.90)
VS(-65.66) NS(-155.93) EW(-504.62)

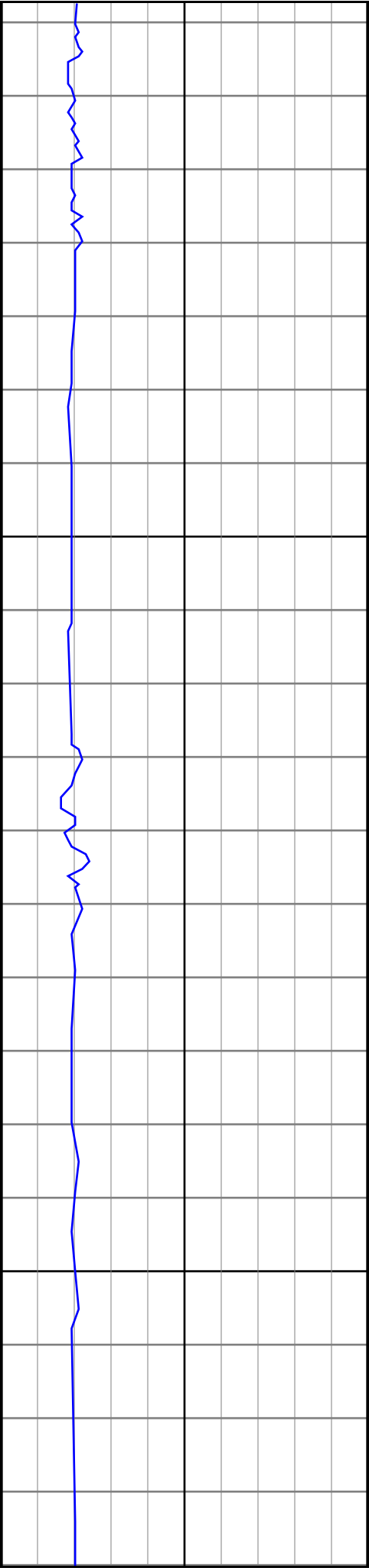
#43 MD(4419.00) Inc(11.3) Azm(253.9) TVD(4363.80)
VS(-67.34) NS(-161.02) EW(-523.78)

#44 MD(4514.00) Inc(9.7) Azm(256.9) TVD(4457.21)
VS(-68.75) NS(-165.42) EW(-540.52)



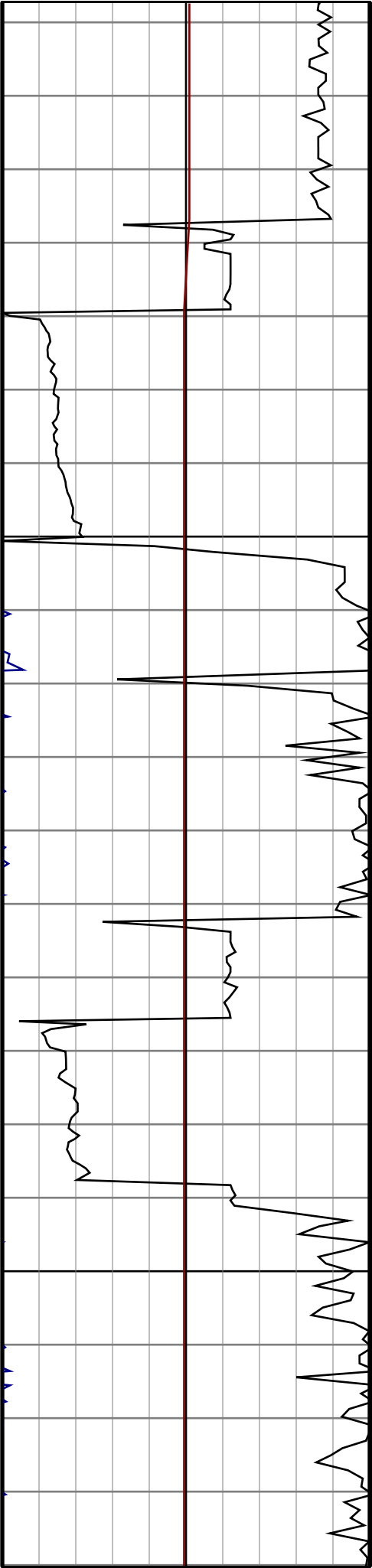
#45 MD(4609.00) Inc(9.7) Azm(263.4) TVD(4550.85)
VS(-68.70) NS(-168.15) EW(-556.26)

#46 MD(4704.00) Inc(10.0) Azm(258.1) TVD(4644.45)
VS(-68.49) NS(-170.77) EW(-572.29)



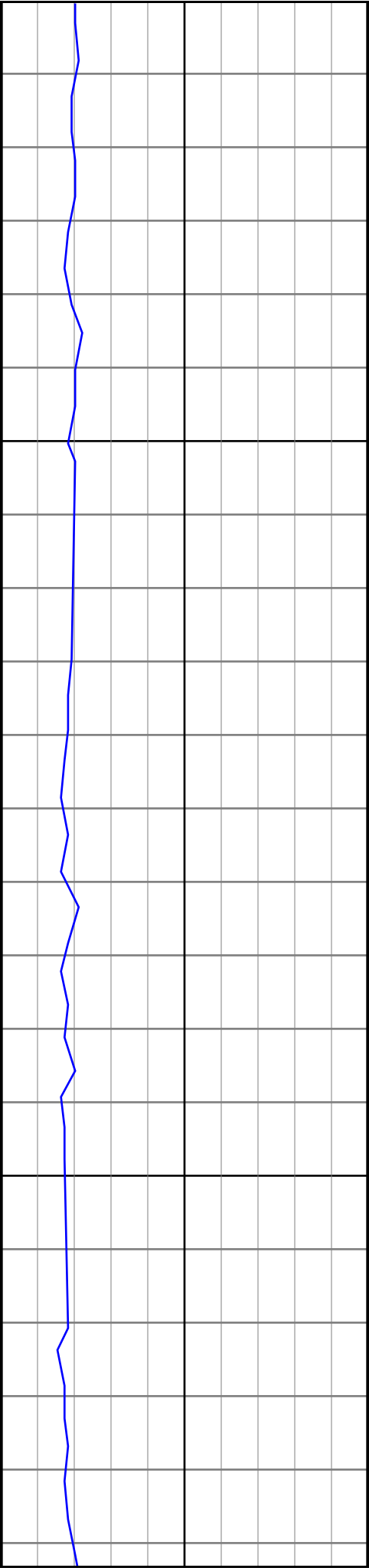
4800

4900



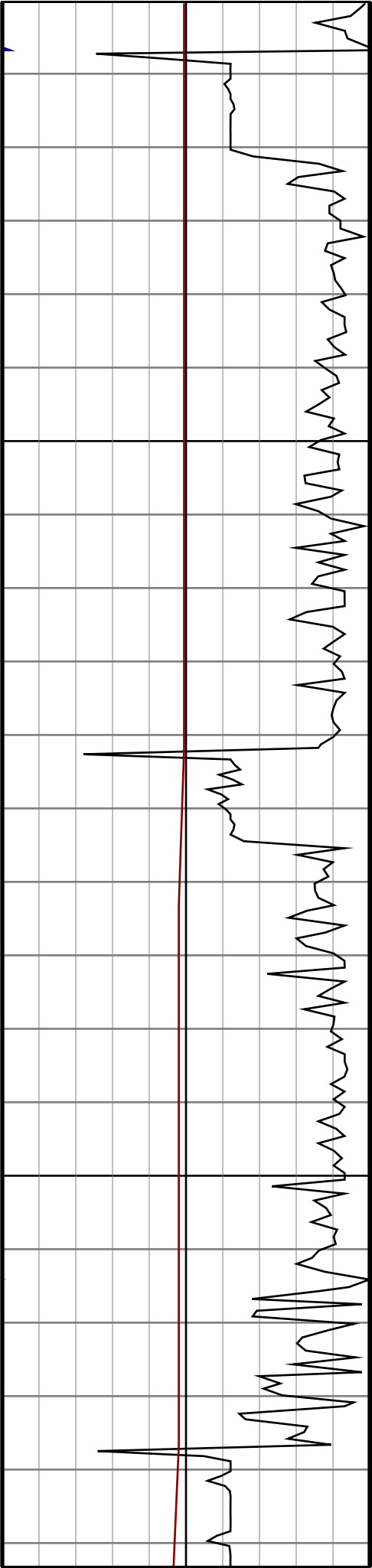
#47 MD(4800.00) Inc(10.0) Azm(261.3) TVD(4739.00)
VS(-68.57) NS(-173.75) EW(-588.68)

#48 MD(4895.00) Inc(10.7) Azm(263.9) TVD(4832.45)
VS(-67.77) NS(-175.94) EW(-605.60)



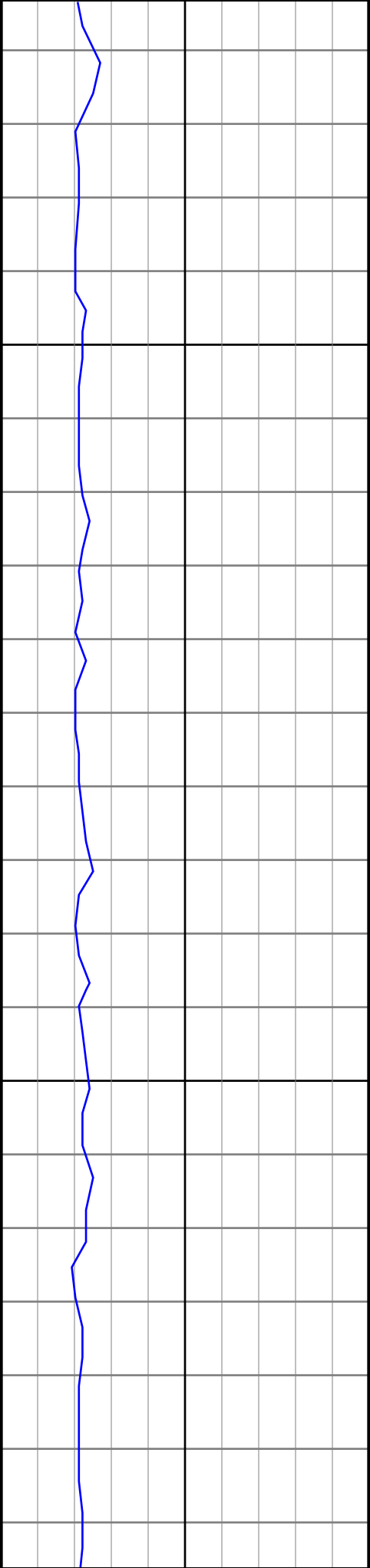
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5100



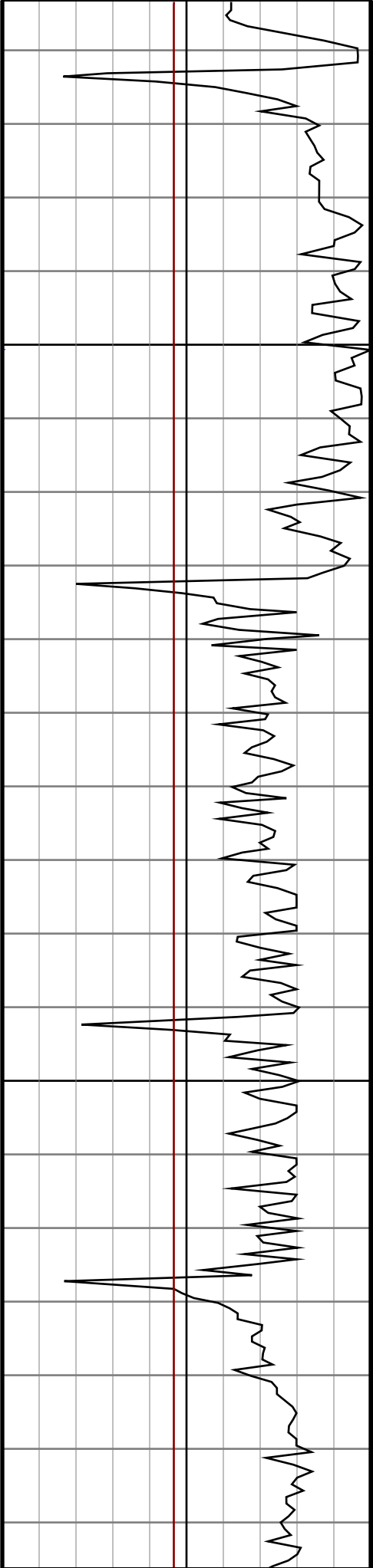
#49 MD(4990.00) Inc(8.8) Azm(261.8) TVD(4926.07)
VS(-66.94) NS(-177.91) EW(-621.57)

#50 MD(5085.00) Inc(8.6) Azm(261.0) TVD(5019.98)
VS(-66.58) NS(-180.06) EW(-635.78)



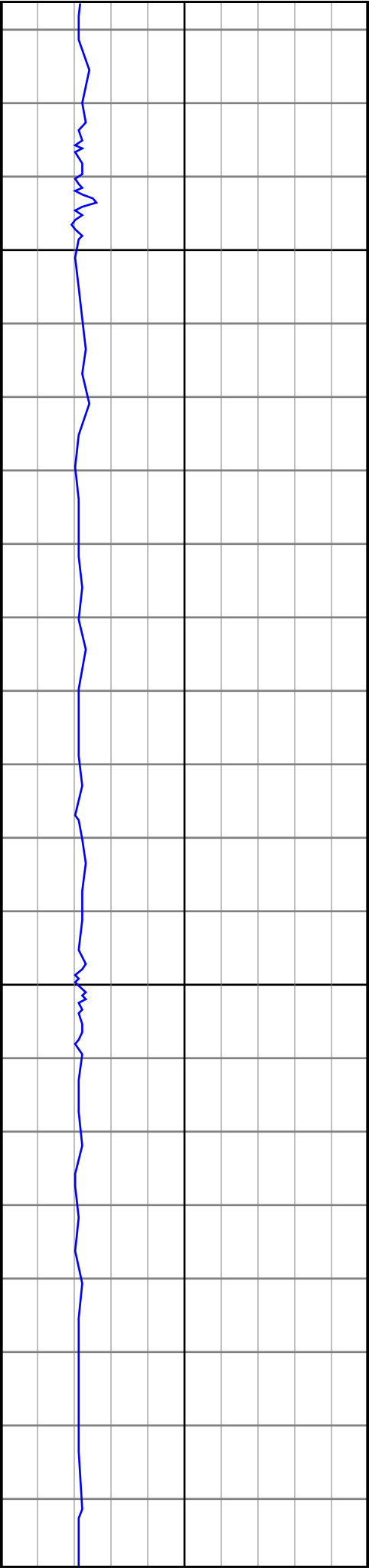
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5300



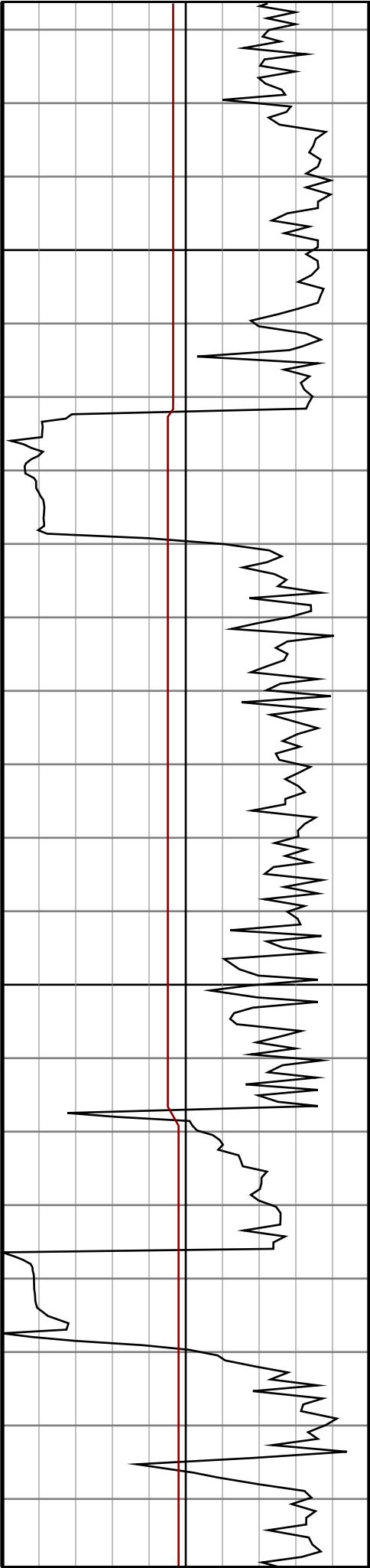
#51 MD(5180.00) Inc(6.9) Azm(261.3) TVD(5114.11)
VS(-66.32) NS(-182.03) EW(-648.43)

#52 MD(5275.00) Inc(4.9) Azm(260.2) TVD(5208.60)
VS(-66.17) NS(-183.59) EW(-658.07)



5400

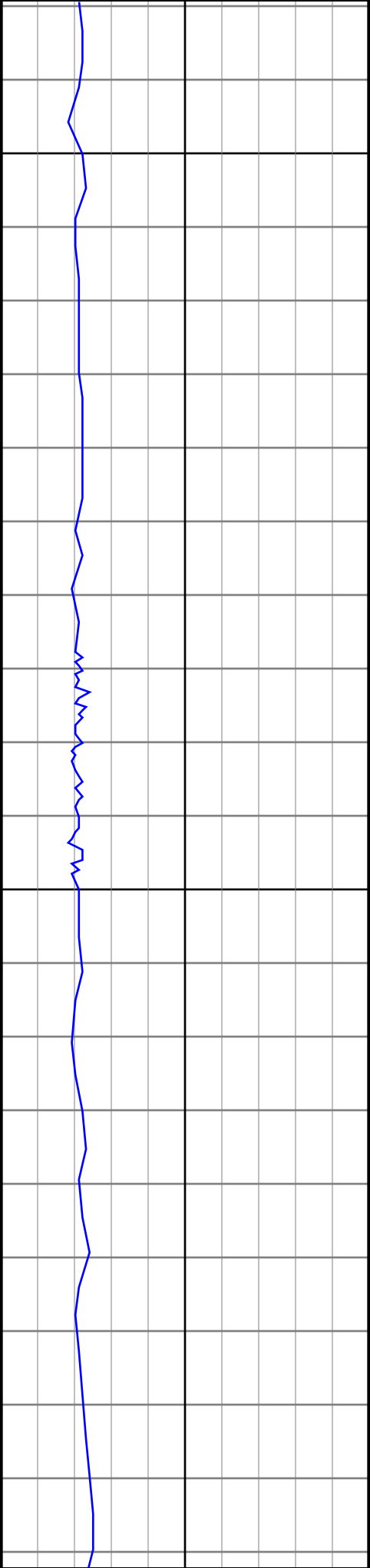
5500



#53 MD(5370.00) Inc(3.5) Azm(250.8) TVD(5303.35)
VS(-66.61) NS(-185.23) EW(-664.81)

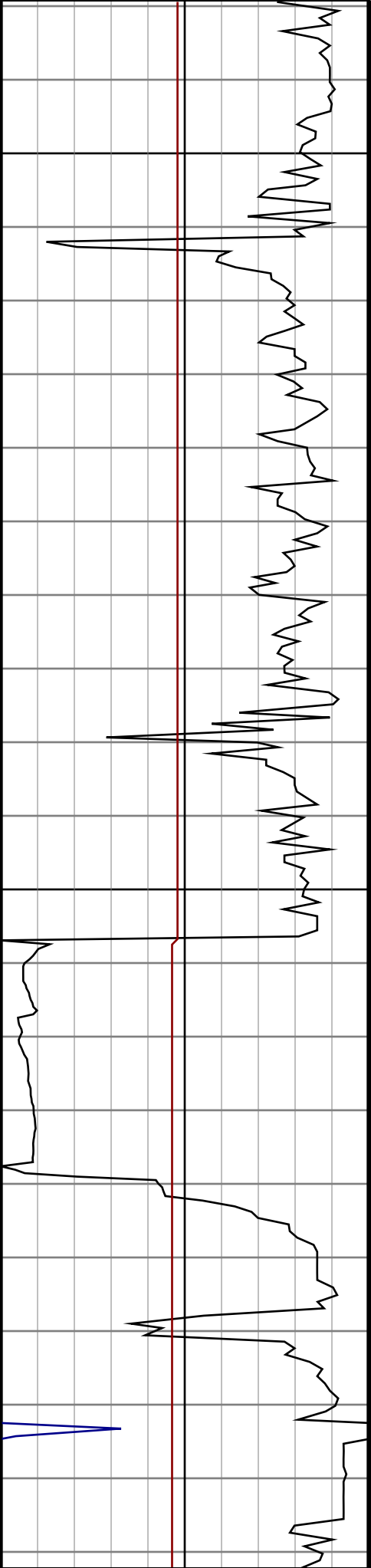
#54 MD(5466.00) Inc(3.3) Azm(266.8) TVD(5399.18)
VS(-66.75) NS(-186.35) EW(-670.34)

#55 MD(5561.00) Inc(3.0) Azm(249.5) TVD(5494.04)
VS(-66.88) NS(-187.37) EW(-675.39)



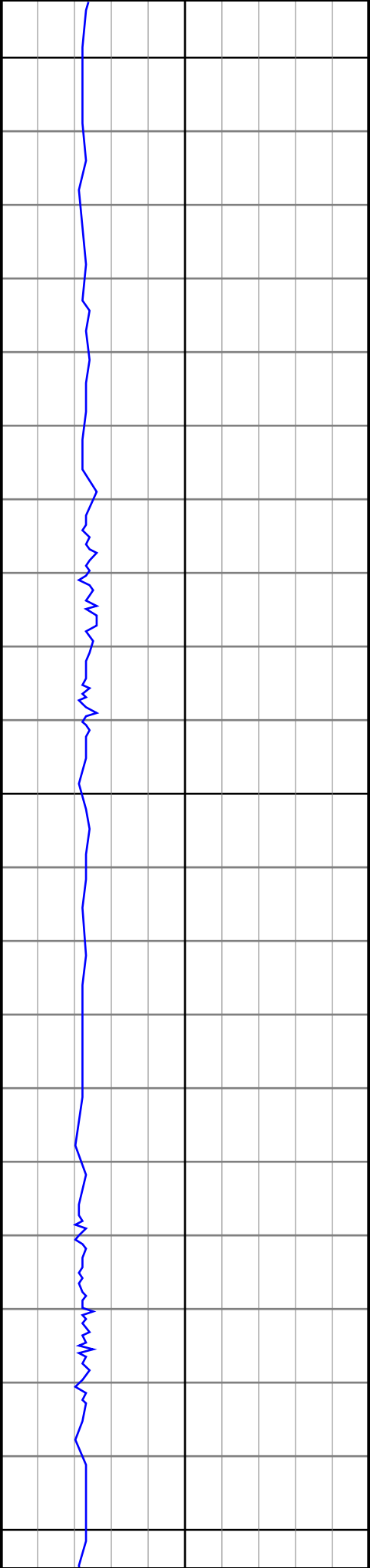
5600

5700



#56 MD(5656.00) Inc(1.9) Azm(234.4) TVD(5588.95)
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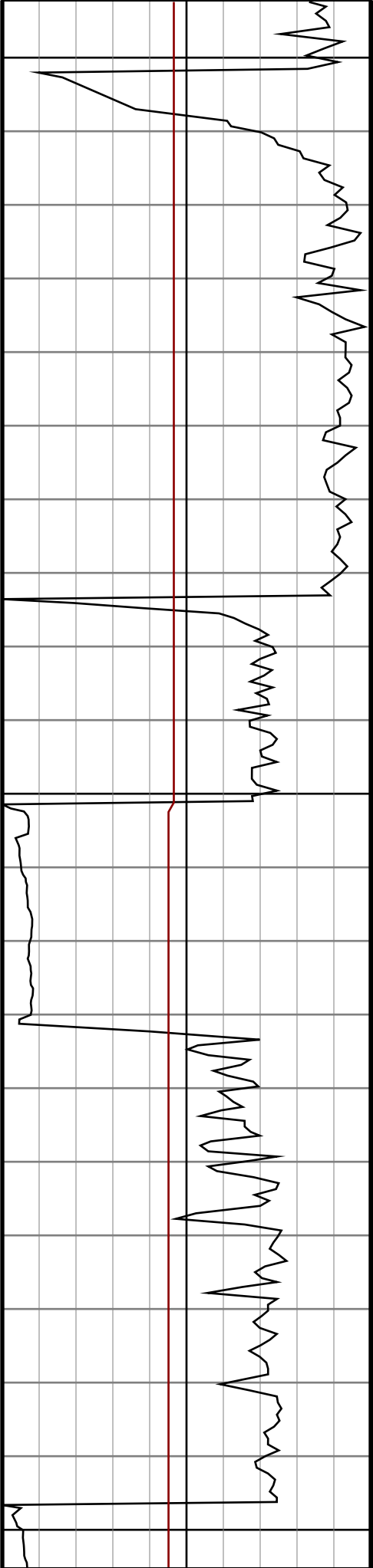
#57 MD(5751.00) Inc(3.0) Azm(267.3) TVD(5683.87)
VS(-68.37) NS(-190.19) EW(-682.77)



5800

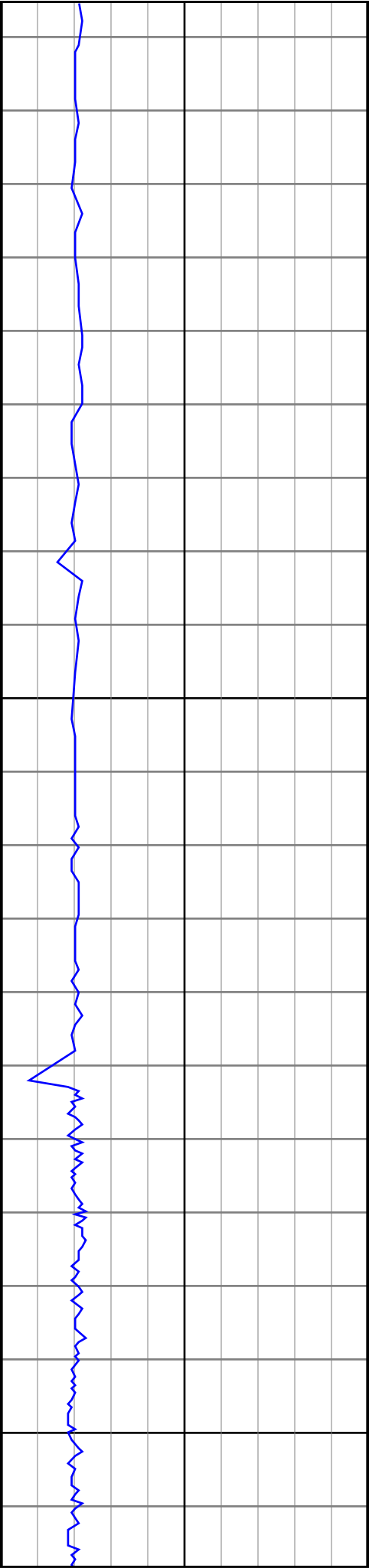
5900

6000



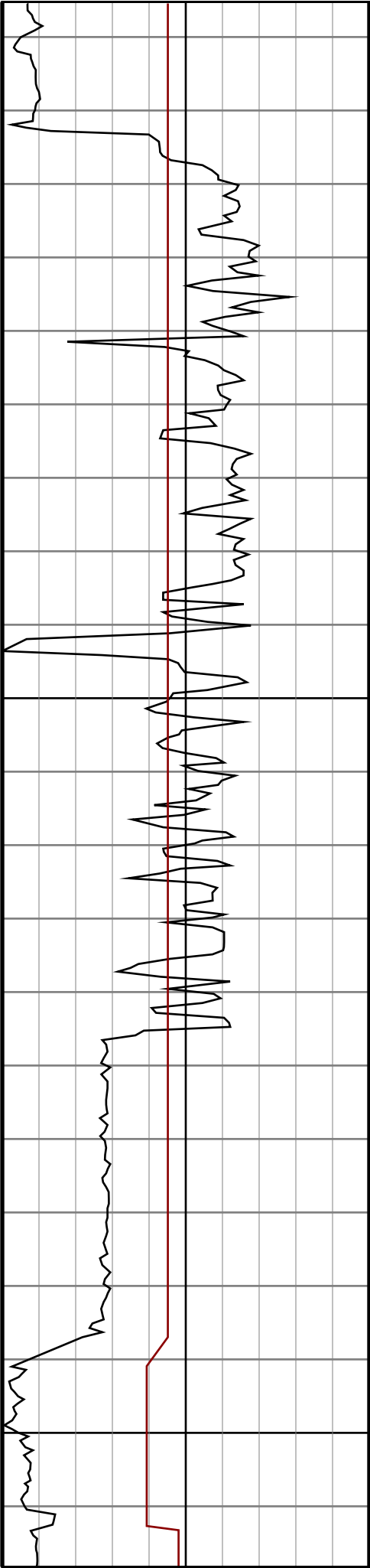
#58 MD(5846.00) Inc(2.1) Azm(258.7) TVD(5778.77)
VS(-68.09) NS(-190.65) EW(-686.96)

#59 MD(5941.00) Inc(3.0) Azm(259.0) TVD(5873.68)
VS(-68.17) NS(-191.47) EW(-691.11)



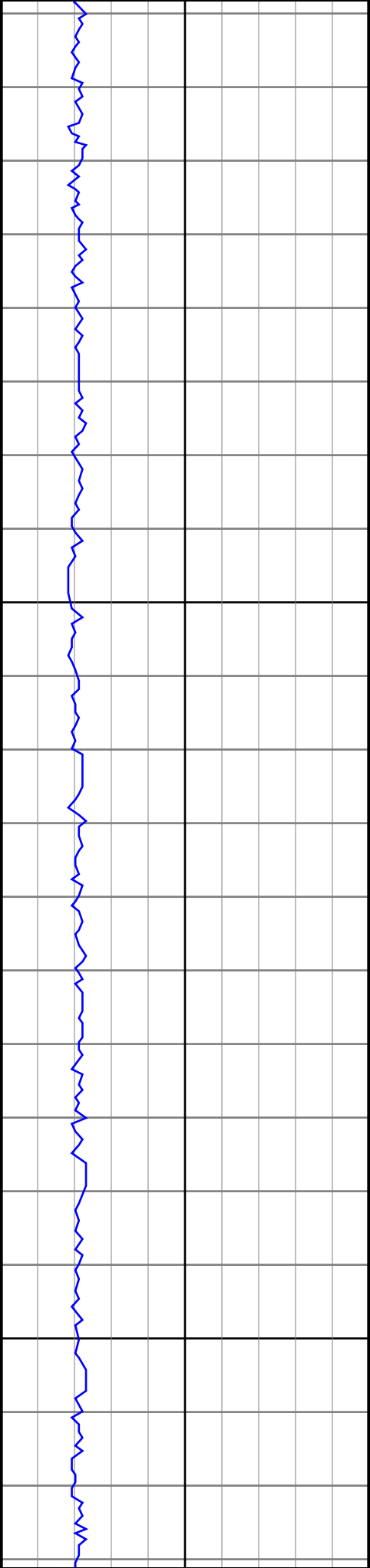
6100

6200



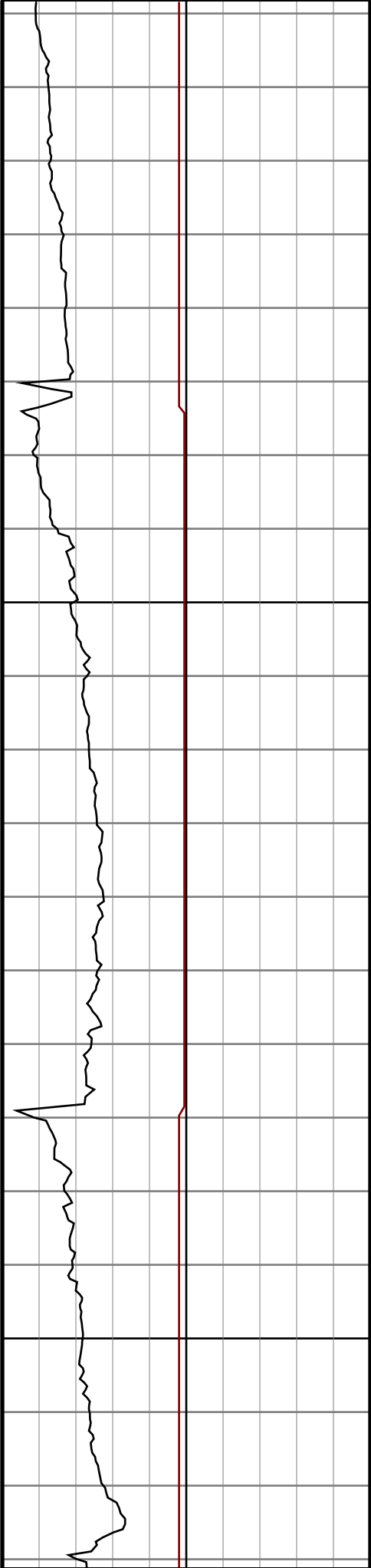
#60 MD(6037.00) Inc(4.0) Azm(274.0) TVD(5969.50)
VS(-67.40) NS(-191.71) EW(-696.91)

#61 MD(6132.00) Inc(2.5) Azm(267.8) TVD(6064.34)
VS(-66.32) NS(-191.56) EW(-702.29)



6300

6400



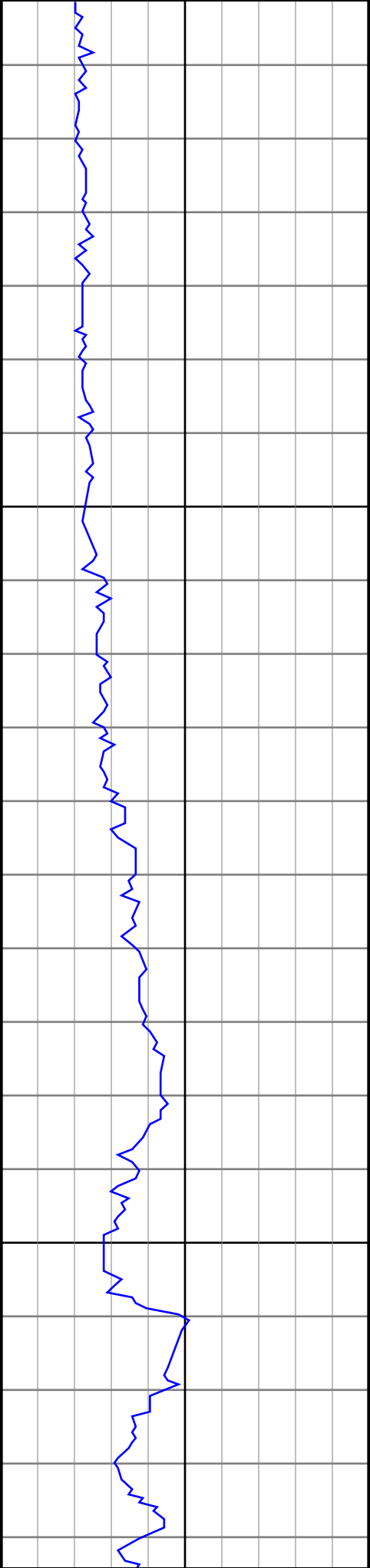
#62 MD(6220.00) Inc(2.6) Azm(301.9) TVD(6152.26)
VS(-64.72) NS(-190.58) EW(-705.90)

#63 MD(6268.00) Inc(7.2) Azm(321.8) TVD(6200.07)
VS(-61.34) NS(-187.64) EW(-708.69)

#64 MD(6315.00) Inc(12.1) Azm(324.2) TVD(6246.40)
VS(-54.31) NS(-181.32) EW(-713.39)

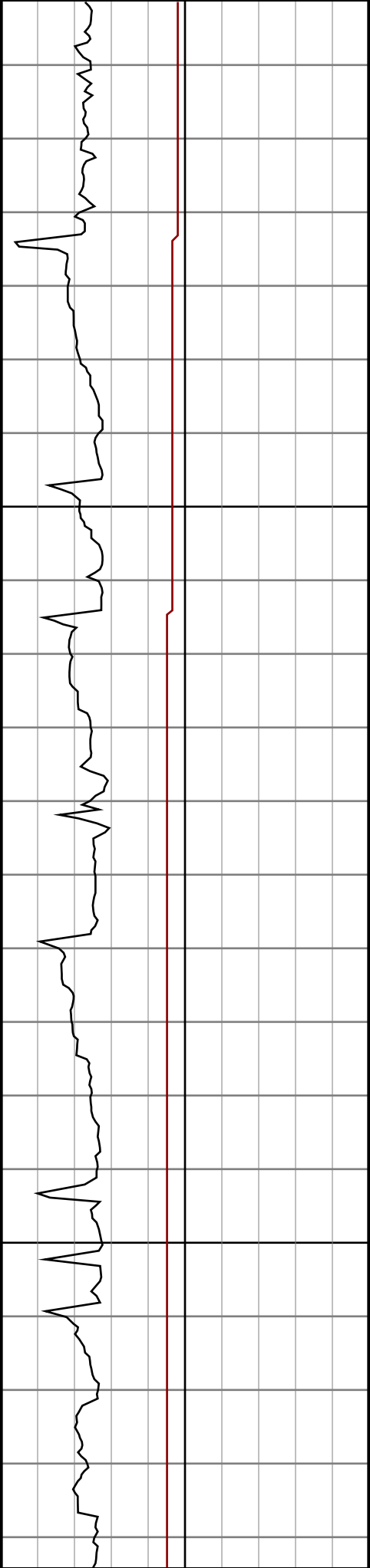
#65 MD(6363.00) Inc(18.4) Azm(333.4) TVD(6292.69)
VS(-42.50) NS(-170.46) EW(-719.73)

#66 MD(6411.00) Inc(23.5) Azm(337.2) TVD(6337.50)
VS(-25.89) NS(-154.85) EW(-726.84)



6500

6600

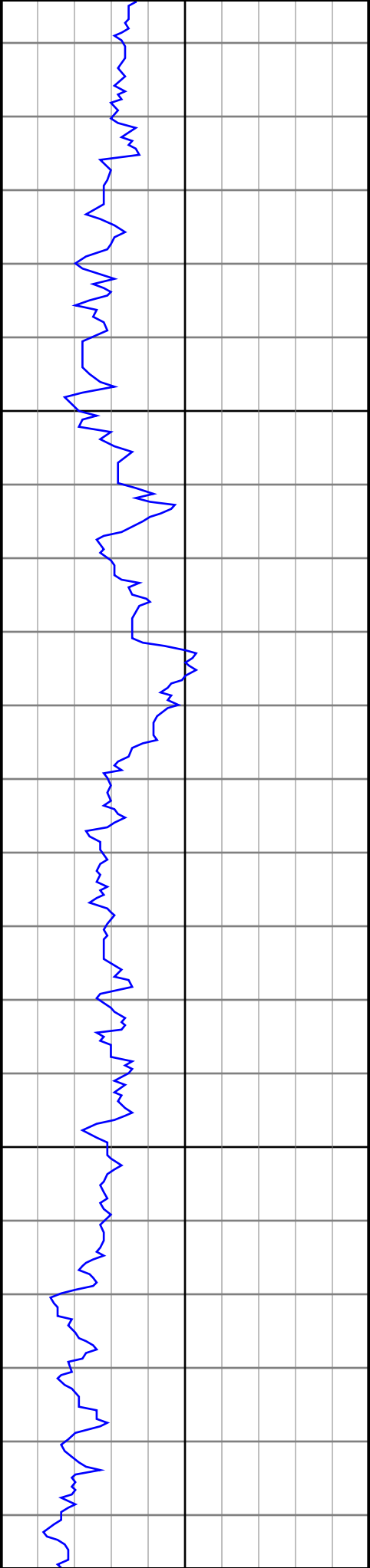


#67 MD(6458.00) Inc(29.6) Azm(338.0) TVD(6379.53)
VS(-5.38) NS(-135.43) EW(-734.83)

#68 MD(6506.00) Inc(33.2) Azm(340.1) TVD(6420.49)
VS(19.17) NS(-112.07) EW(-743.74)

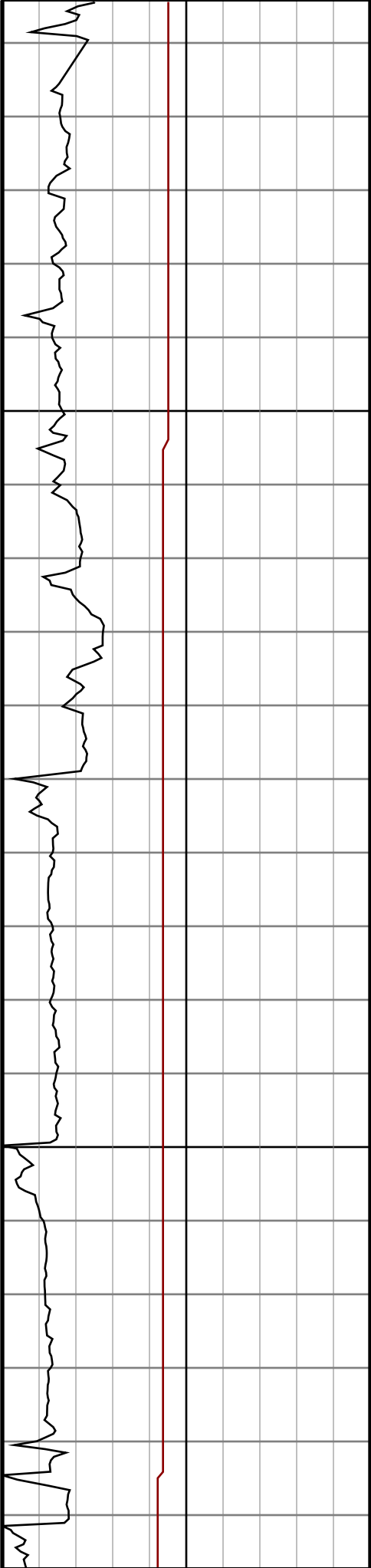
#69 MD(6553.00) Inc(35.4) Azm(344.4) TVD(6459.32)
VS(45.40) NS(-86.86) EW(-751.79)

#70 MD(6601.00) Inc(39.1) Azm(351.1) TVD(6497.54)
VS(74.40) NS(-58.49) EW(-757.87)



6700

6800



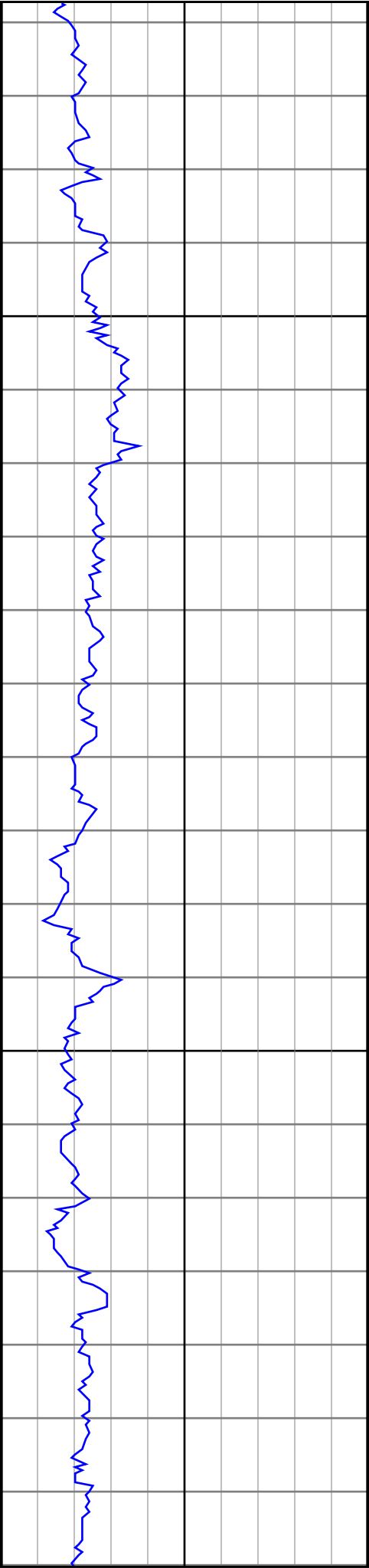
#71 MD(6648.00) Inc(43.4) Azm(356.3) TVD(6532.88)
VS(105.29) NS(-27.71) EW(-761.21)

#72 MD(6696.00) Inc(46.6) Azm(357.1) TVD(6566.81)
VS(138.99) NS(6.17) EW(-763.16)

#73 MD(6744.00) Inc(49.8) Azm(0.3) TVD(6598.81)
VS(174.34) NS(41.93) EW(-763.94)

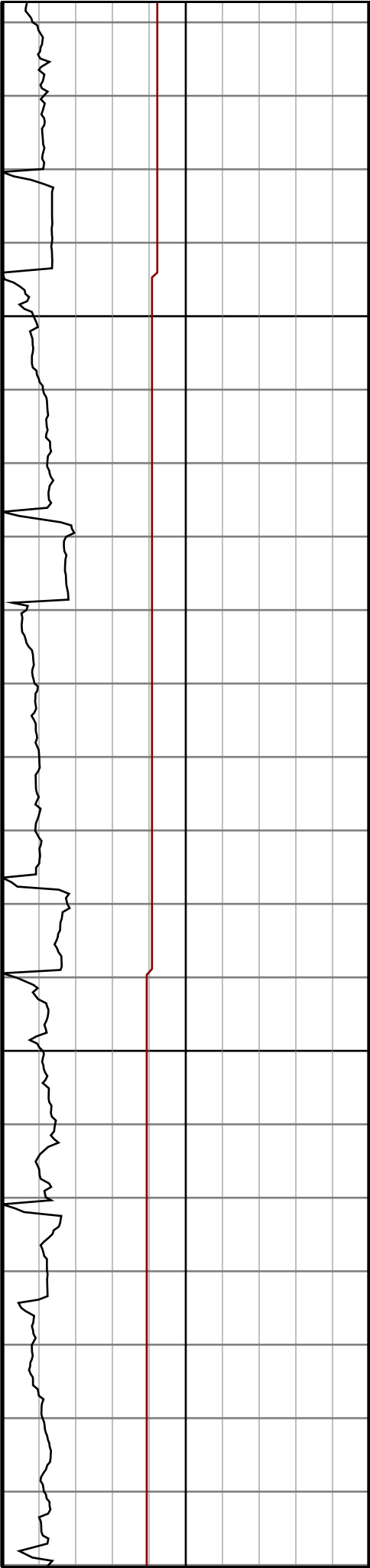
#74 MD(6791.00) Inc(54.4) Azm(4.0) TVD(6627.68)
VS(210.56) NS(78.97) EW(-762.52)

#75 MD(6839.00) Inc(60.6) Azm(5.5) TVD(6653.46)
VS(249.68) NS(119.29) EW(-759.15)



6900

7000

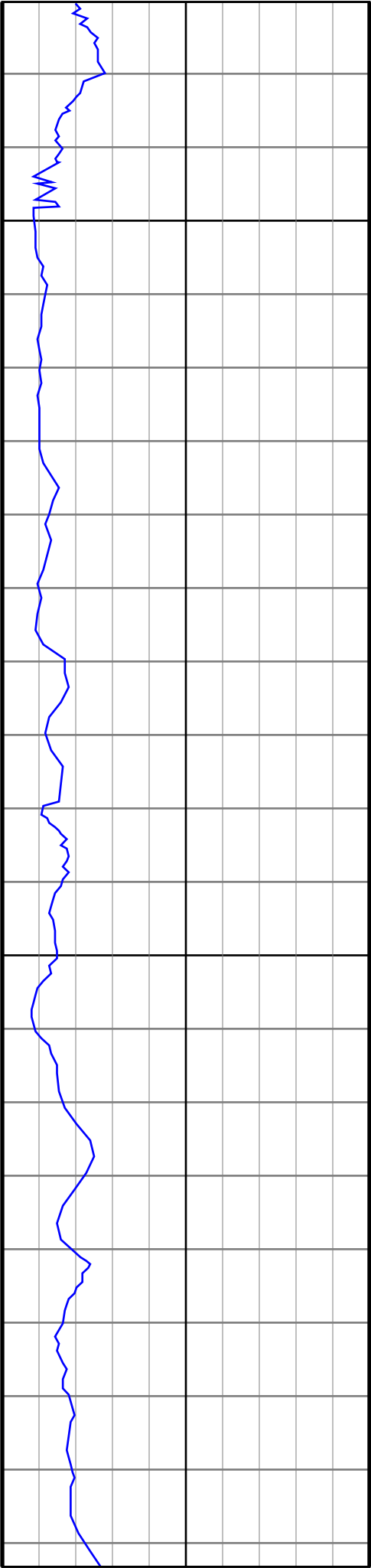


#76 MD(6886.00) Inc(64.4) Azm(5.5) TVD(6675.16)
VS(289.84) NS(160.78) EW(-755.15)

#77 MD(6934.00) Inc(68.4) Azm(4.9) TVD(6694.37)
VS(332.27) NS(204.57) EW(-751.17)

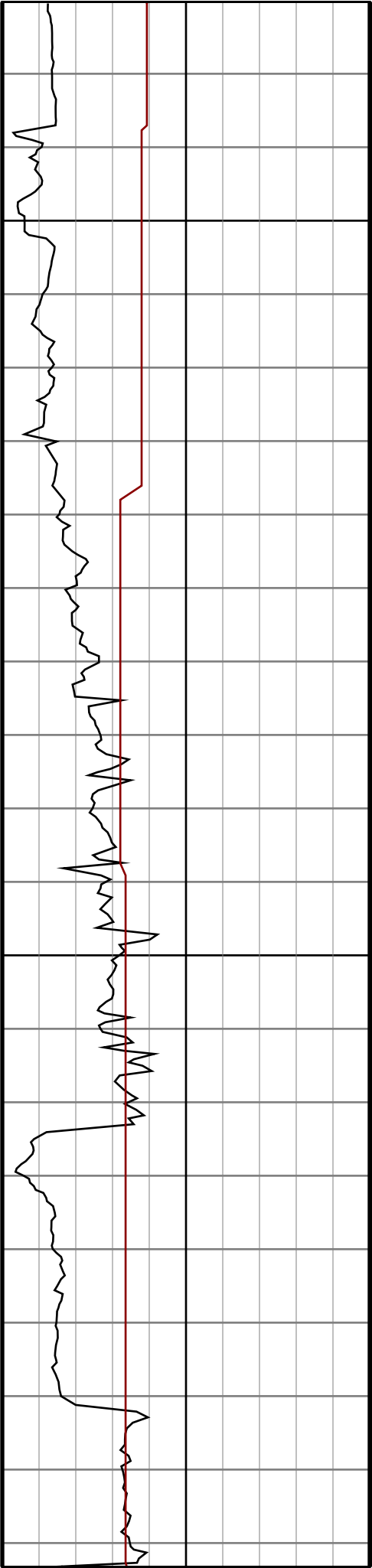
#78 MD(6982.00) Inc(73.0) Azm(3.3) TVD(6710.23)
VS(376.19) NS(249.75) EW(-747.94)

#79 MD(7029.00) Inc(76.2) Azm(2.9) TVD(6722.71)
VS(420.32) NS(294.99) EW(-745.49)



7100

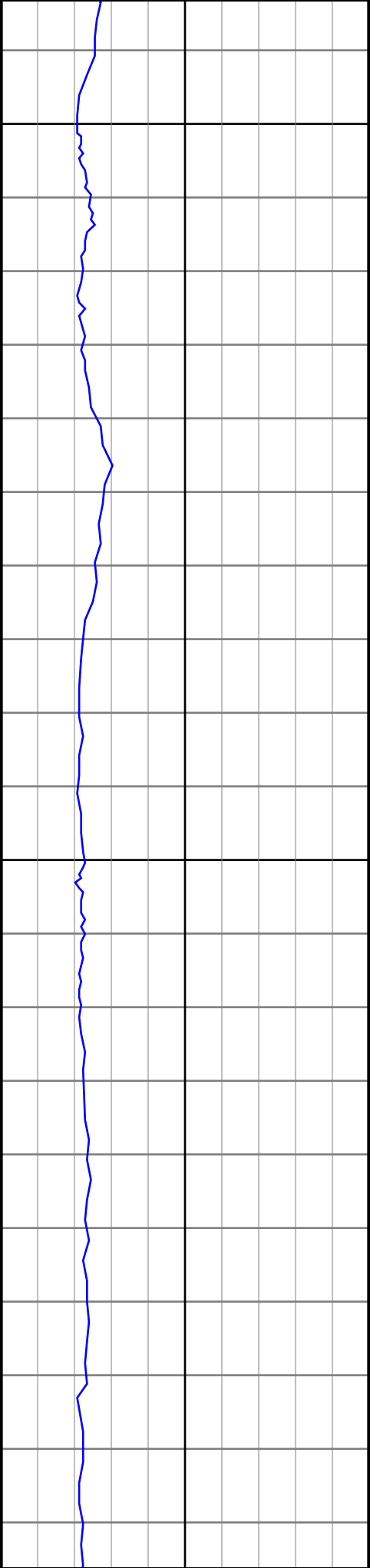
7200



#80 MD(7077.00) Inc(79.0) Azm(1.4) TVD(6733.02)
VS(466.14) NS(341.83) EW(-743.74)

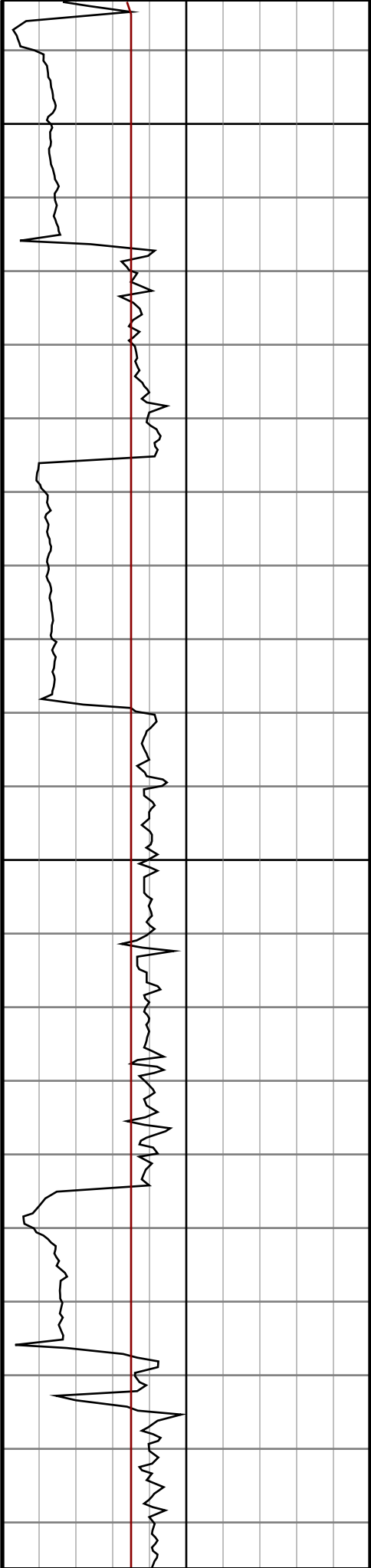
#81 MD(7160.00) Inc(82.7) Azm(359.2) TVD(6746.21)
VS(546.73) NS(423.75) EW(-743.32)

#82 MD(7223.00) Inc(81.6) Azm(358.0) TVD(6754.82)
VS(608.43) NS(486.14) EW(-744.84)



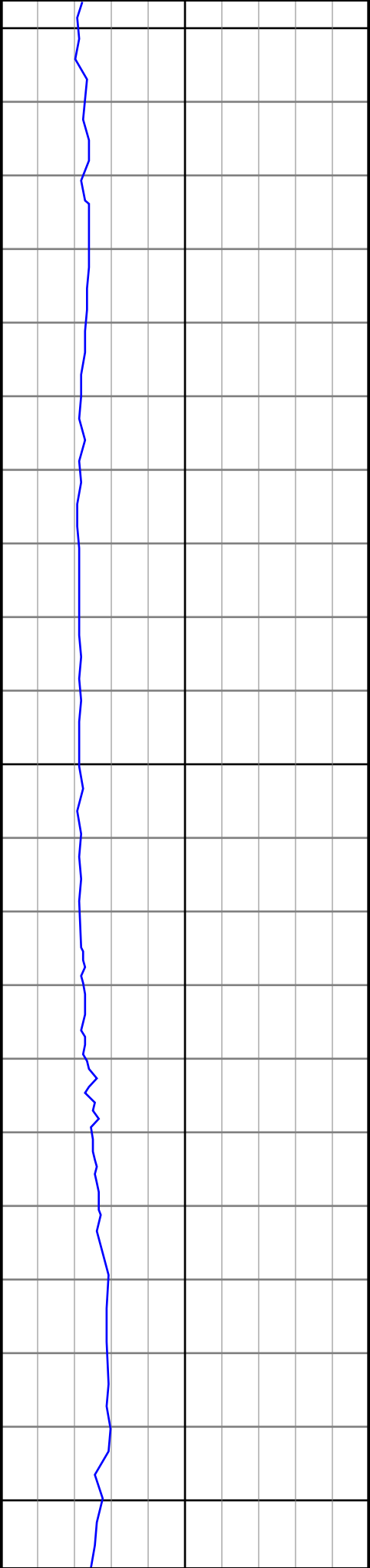
7300

7400



#83 MD(7318.00) Inc(86.7) Azm(359.4) TVD(6764.50)
VS(701.81) NS(580.59) EW(-746.98)

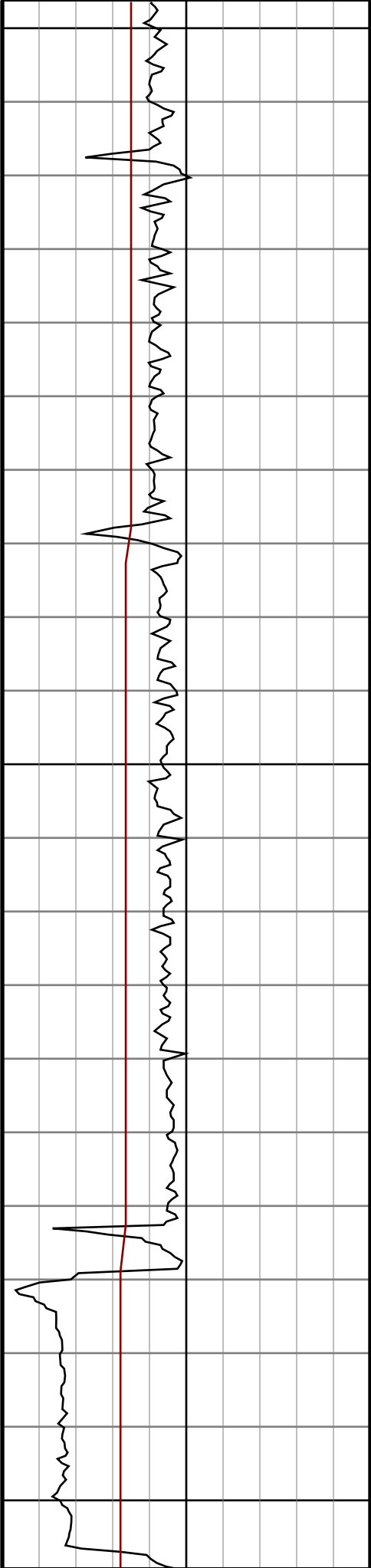
#84 MD(7414.00) Inc(89.2) Azm(0.4) TVD(6767.93)
VS(796.30) NS(676.52) EW(-747.14)



7500

7600

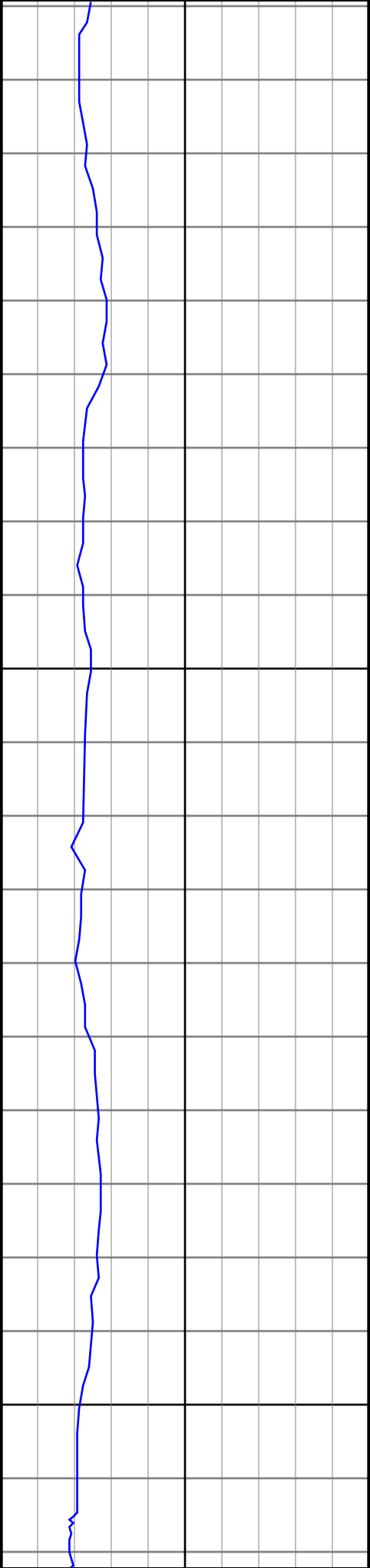
7700



#85 MD(7509.00) Inc(89.9) Azm(359.9) TVD(6768.68)
VS(889.80) NS(771.51) EW(-746.90)

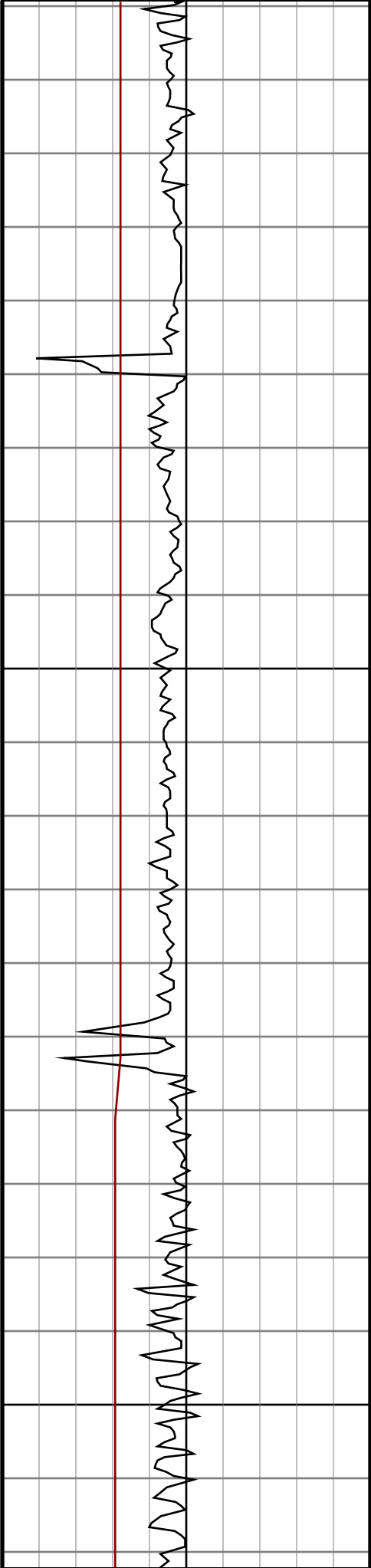
#86 MD(7604.00) Inc(89.2) Azm(359.6) TVD(6769.43)
VS(983.42) NS(866.51) EW(-747.31)

#87 MD(7699.00) Inc(91.1) Azm(359.4) TVD(6769.18)
VS(1077.10) NS(961.50) EW(-748.14)



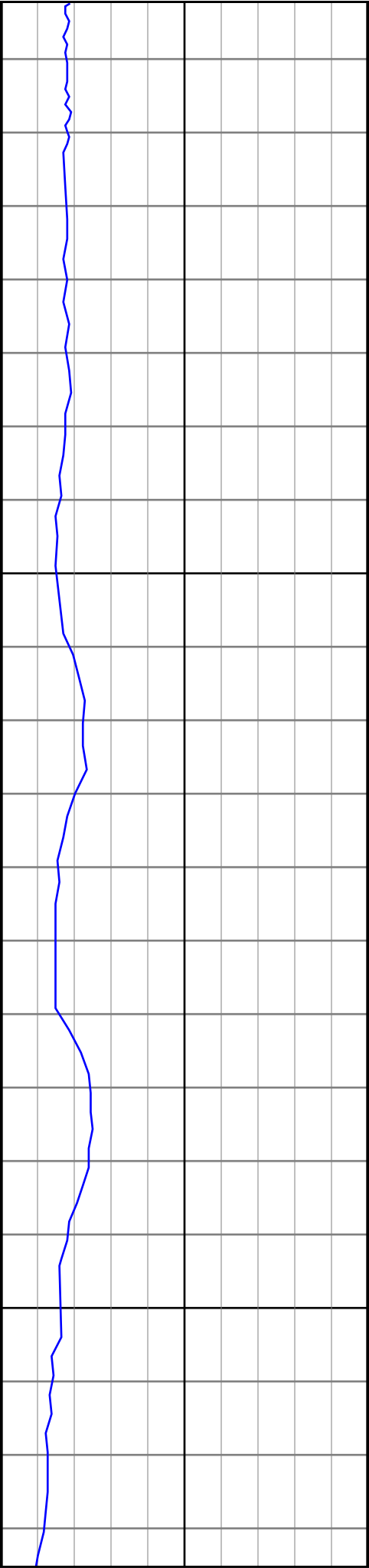
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7900



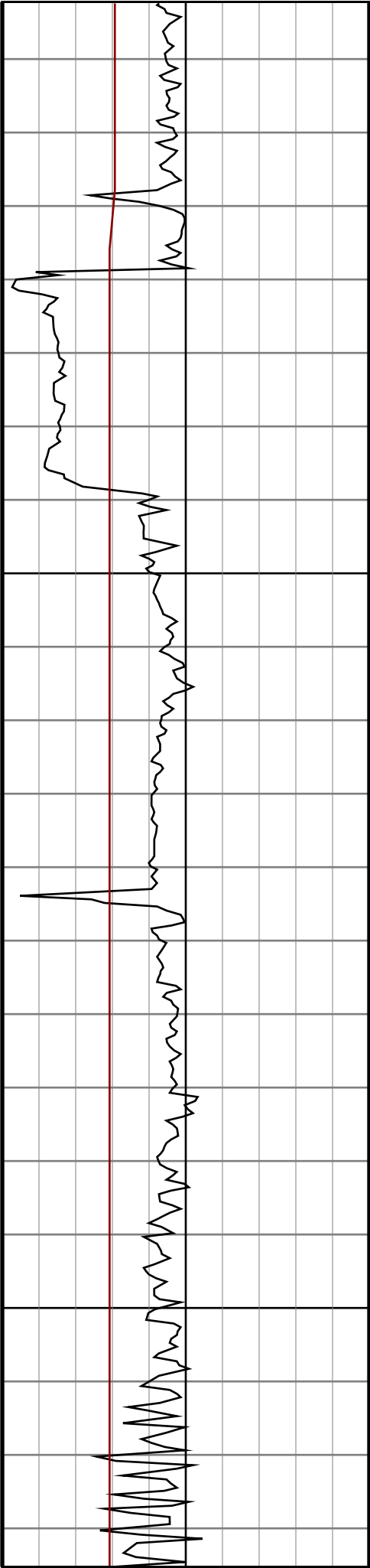
#88 MD(7794.00) Inc(91.3) Azm(358.9) TVD(6767.19)
VS(1170.87) NS(1056.47) EW(-749.55)

#89 MD(7889.00) Inc(90.6) Azm(357.8) TVD(6765.61)
VS(1264.84) NS(1151.41) EW(-752.28)



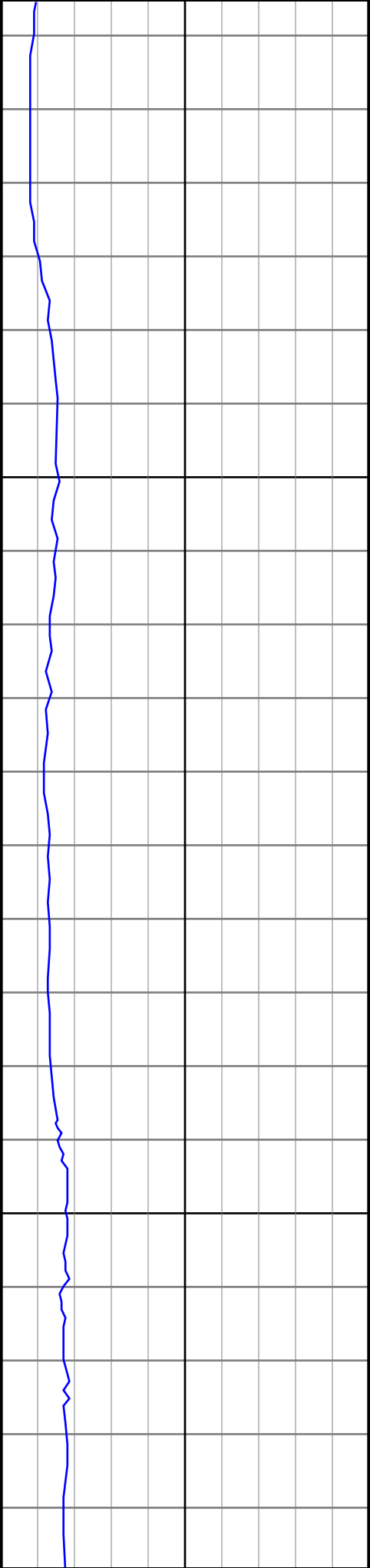
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8100



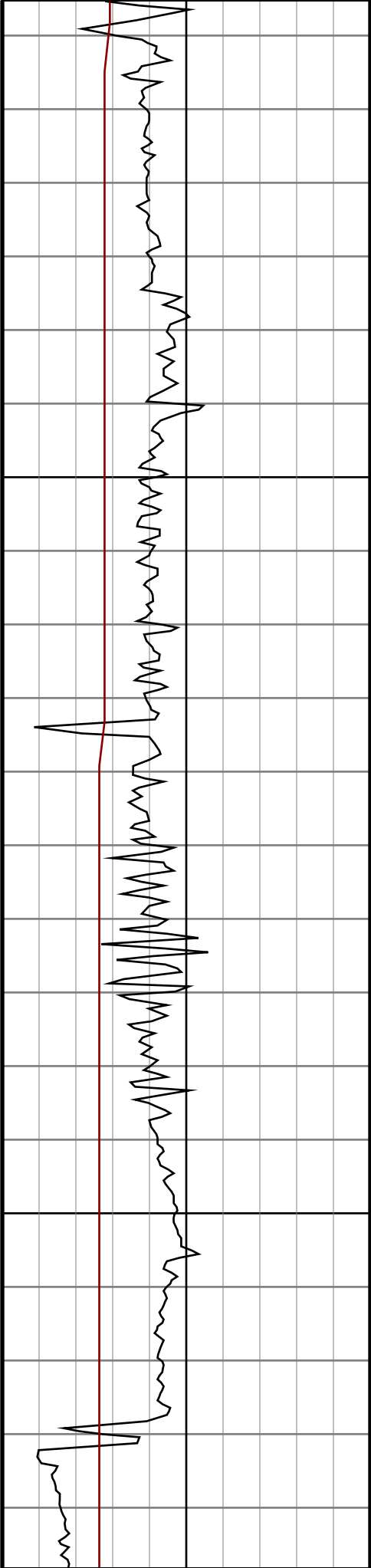
#90 MD(7985.00) Inc(91.7) Azm(358.7) TVD(6763.69)
VS(1359.82) NS(1247.35) EW(-755.21)

#91 MD(8080.00) Inc(92.0) Azm(359.0) TVD(6760.62)
VS(1453.63) NS(1342.28) EW(-757.12)



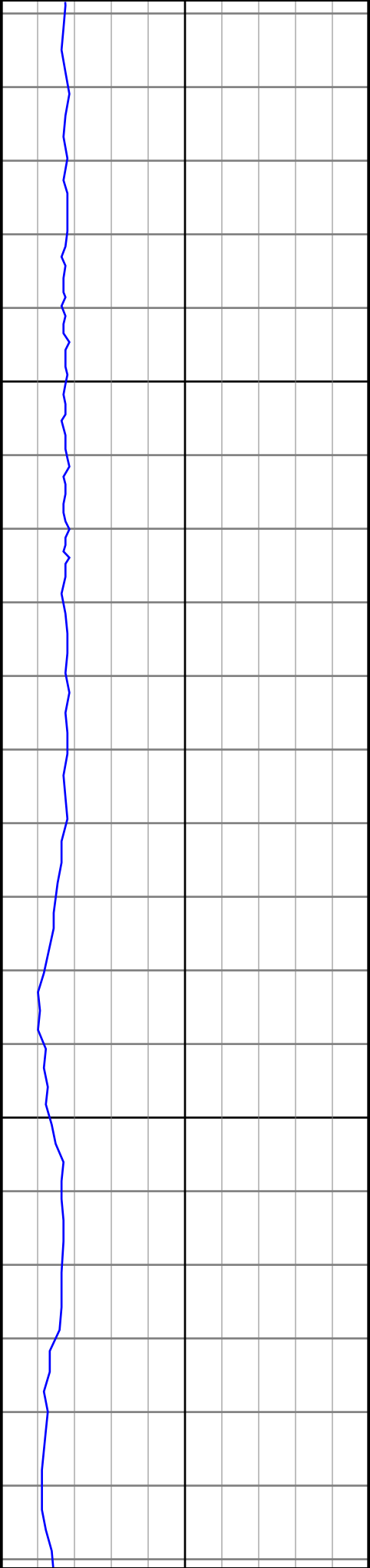
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8300



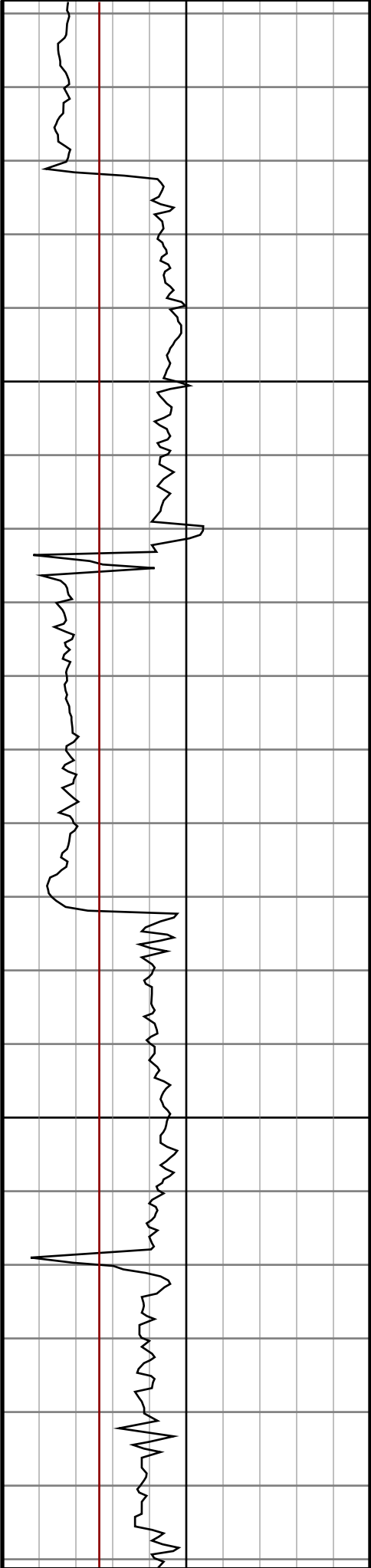
#92 MD(8175.00) Inc(91.5) Azm(357.8) TVD(6757.72)
VS(1547.56) NS(1437.20) EW(-759.77)

#93 MD(8270.00) Inc(89.9) Azm(356.4) TVD(6756.56)
VS(1641.81) NS(1532.06) EW(-764.58)



8400

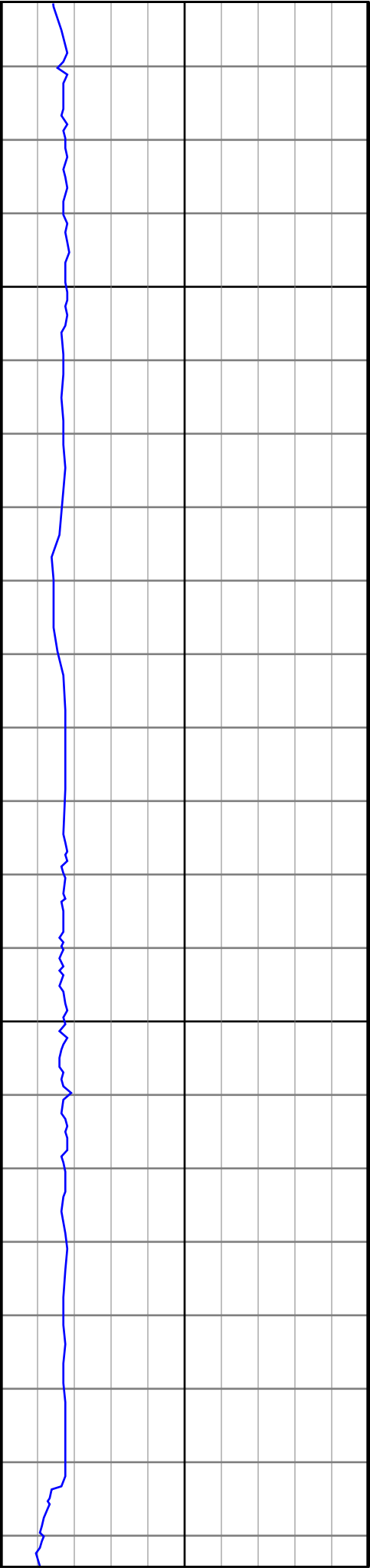
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#94 MD(8365.00) Inc(89.6) Azm(356.8) TVD(6756.97)
VS(1736.17) NS(1626.89) EW(-770.21)

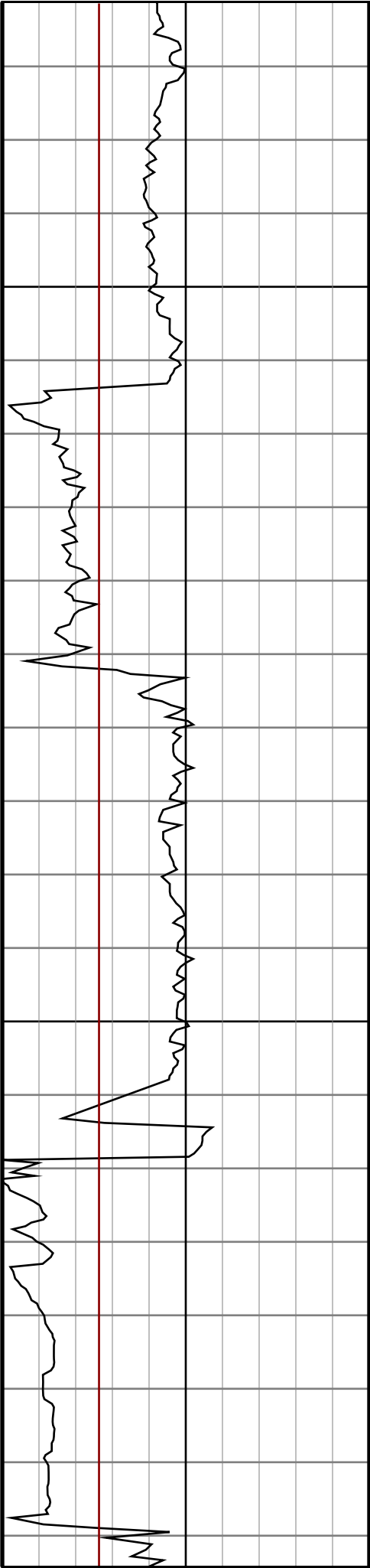
#95 MD(8461.00) Inc(90.6) Azm(358.7) TVD(6756.80)
VS(1831.28) NS(1722.81) EW(-773.98)

#96 MD(8556.00) Inc(91.1) Azm(358.3) TVD(6755.39)
VS(1925.22) NS(1817.77) EW(-776.47)



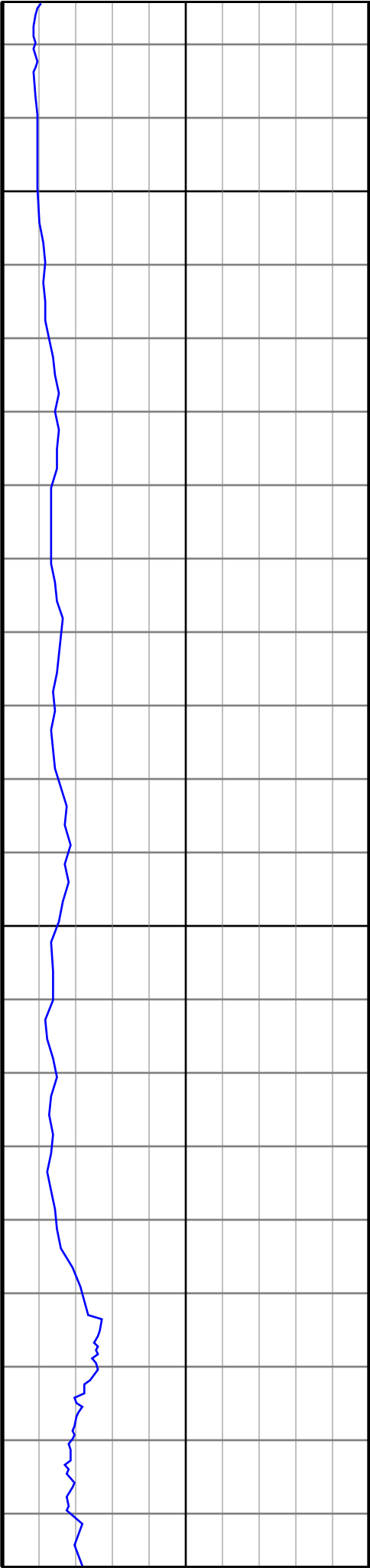
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8700



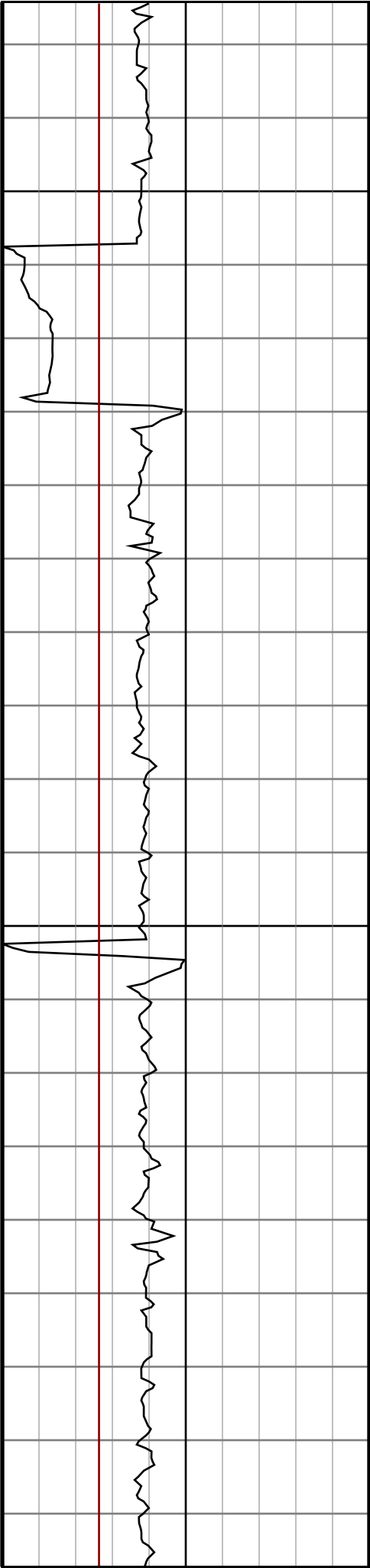
#97 MD(8651.00) Inc(90.4) Azm(358.3) TVD(6754.15)
VS(2019.21) NS(1912.72) EW(-779.28)

#98 MD(8746.00) Inc(90.6) Azm(359.9) TVD(6753.32)
VS(2113.00) NS(2007.70) EW(-780.78)



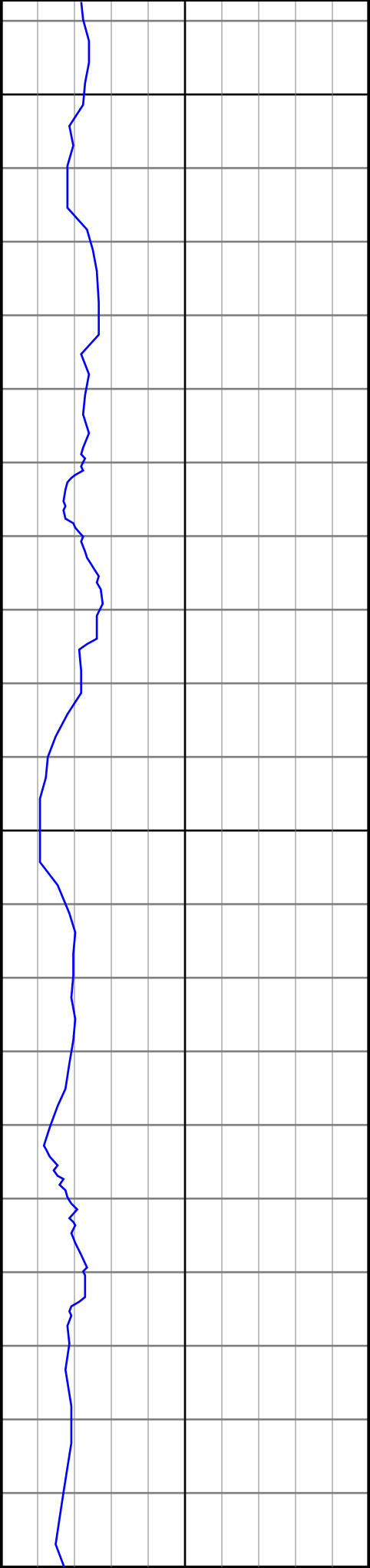
8800

8900



#99 MD(8841.00) Inc(93.1) Azm(1.8) TVD(6750.25)
VS(2206.23) NS(2102.63) EW(-779.37)

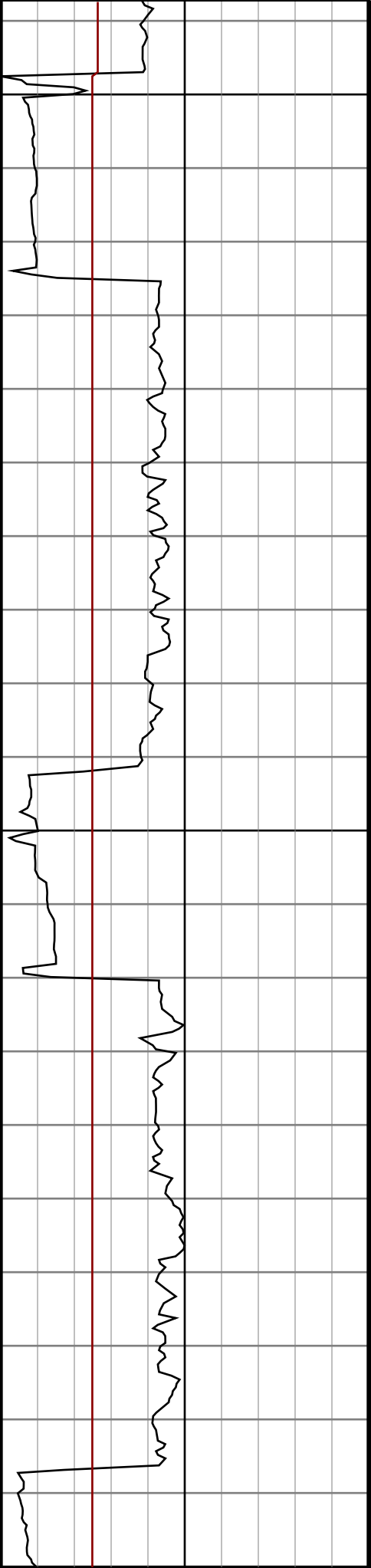
#100 MD(8937.00) Inc(93.3) Azm(0.4) TVD(6744.90)
VS(2300.28) NS(2198.46) EW(-777.53)



9000

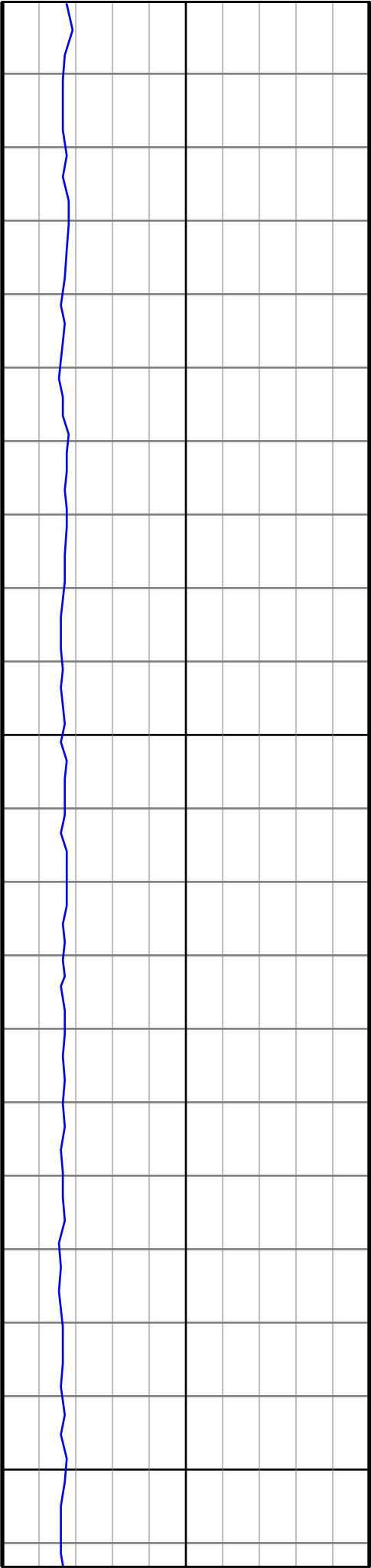
9100

9200



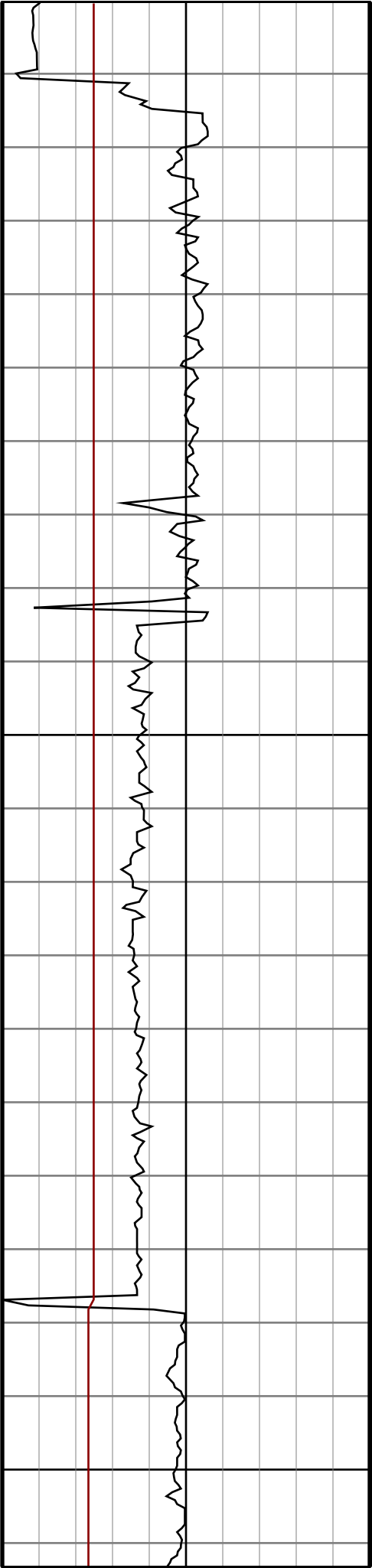
#101 MD(9032.00) Inc(93.8) Azm(1.8) TVD(6739.01)
VS(2393.31) NS(2293.26) EW(-775.71)

#102 MD(9127.00) Inc(92.4) Azm(1.3) TVD(6733.88)
VS(2486.24) NS(2388.08) EW(-773.14)



9300

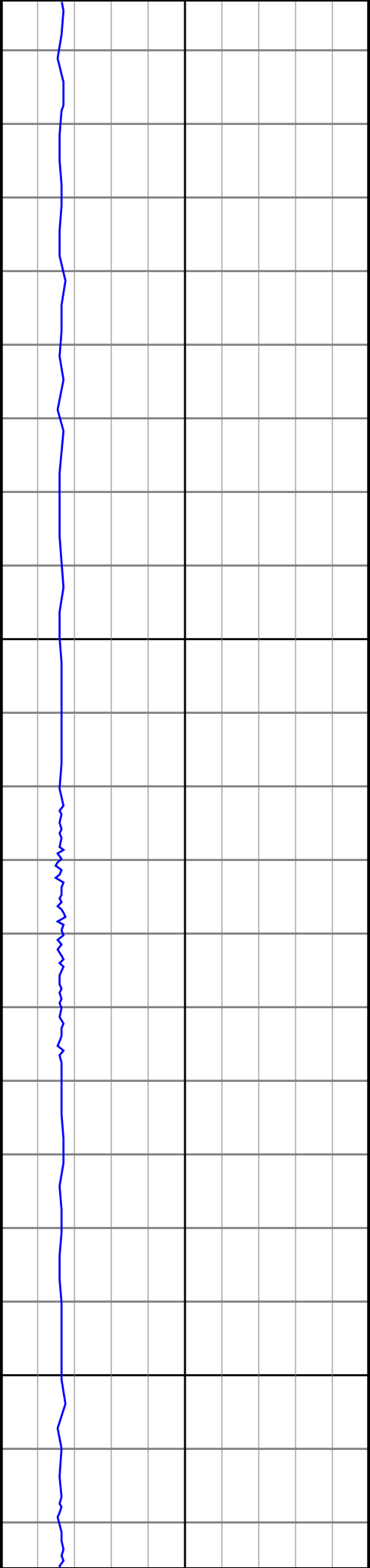
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#103 MD(9222.00) Inc(89.6) Azm(0.4) TVD(6732.22)
VS(2579.50) NS(2483.05) EW(-771.74)

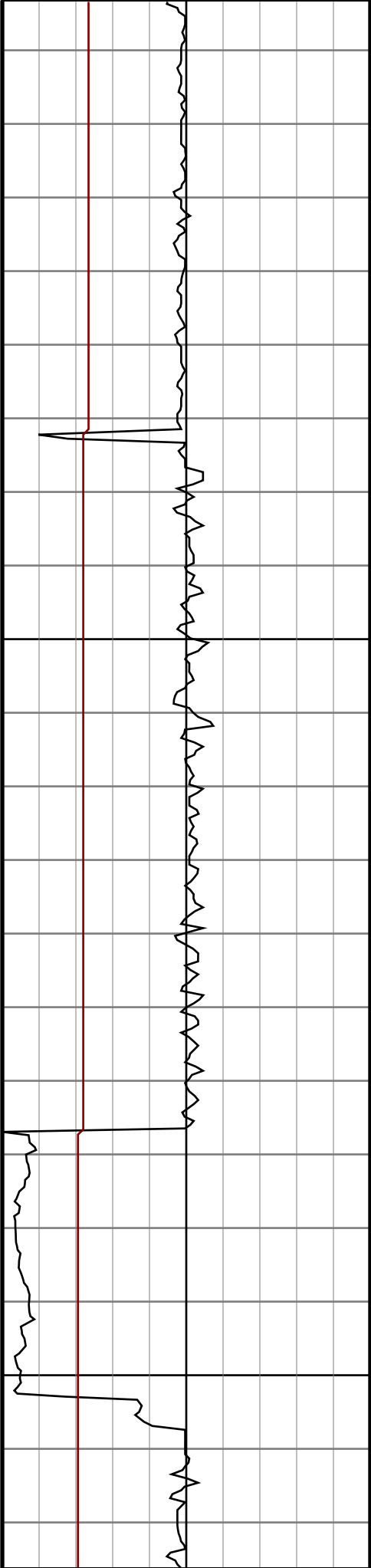
#104 MD(9317.00) Inc(89.2) Azm(0.8) TVD(6733.21)
VS(2672.87) NS(2578.03) EW(-770.74)

#105 MD(9413.00) Inc(89.6) Azm(2.9) TVD(6734.22)
VS(2766.80) NS(2673.97) EW(-767.64)



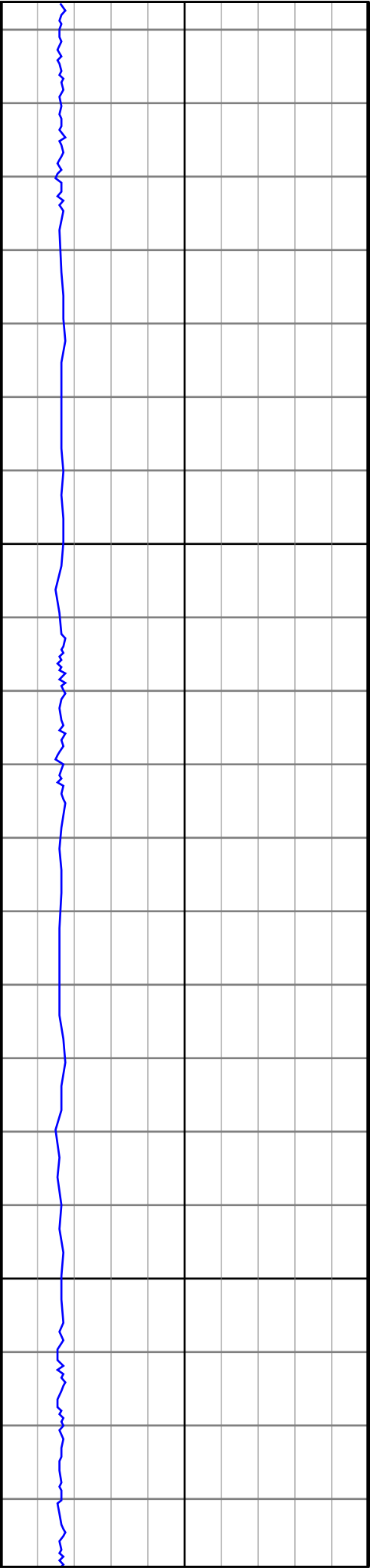
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9600



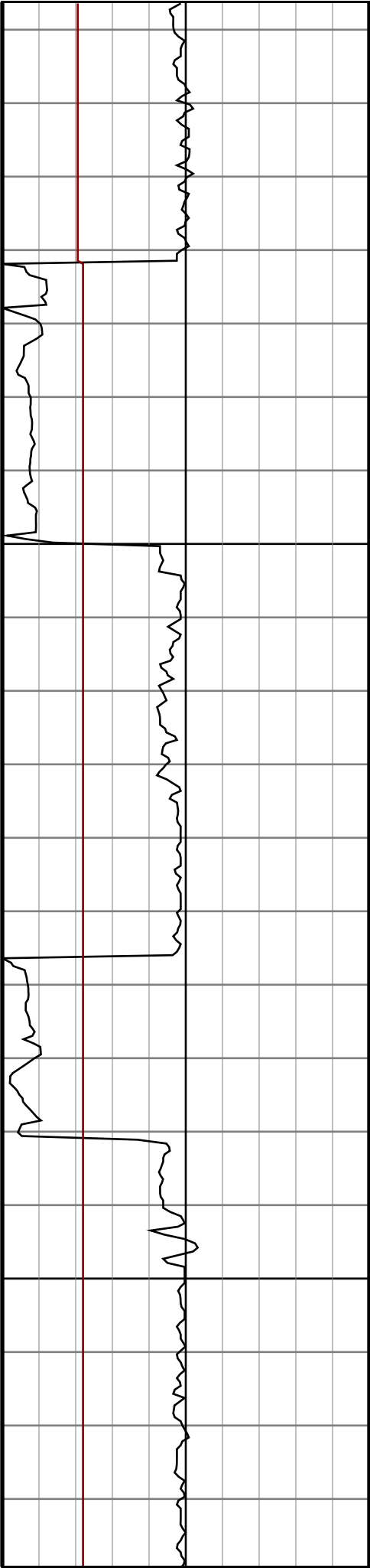
#106 MD(9508.00) Inc(89.6) Azm(5.4) TVD(6734.88)
VS(2858.90) NS(2768.71) EW(-760.77)

#107 MD(9603.00) Inc(89.0) Azm(4.1) TVD(6736.04)
VS(2950.74) NS(2863.38) EW(-752.90)



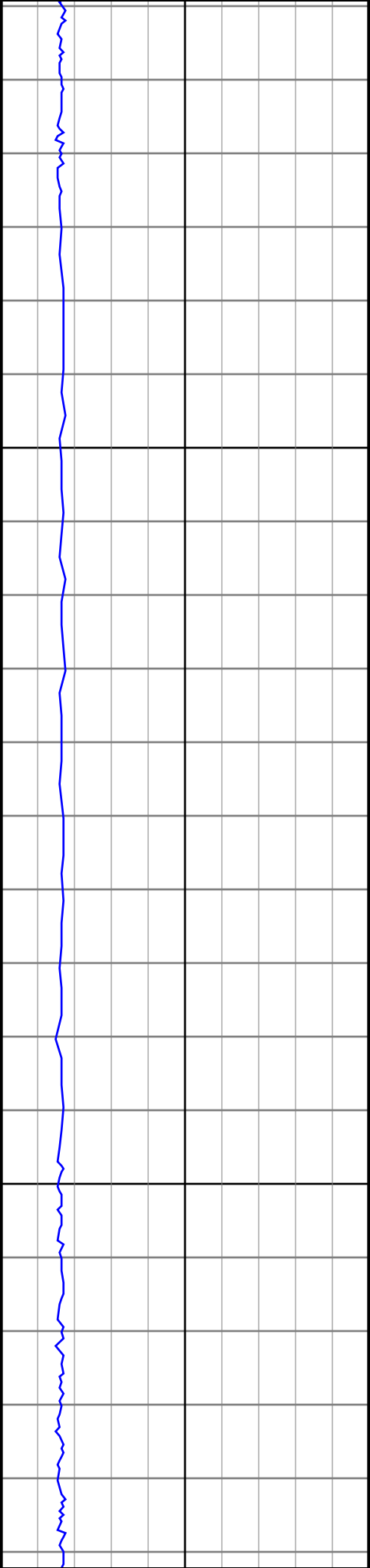
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9800



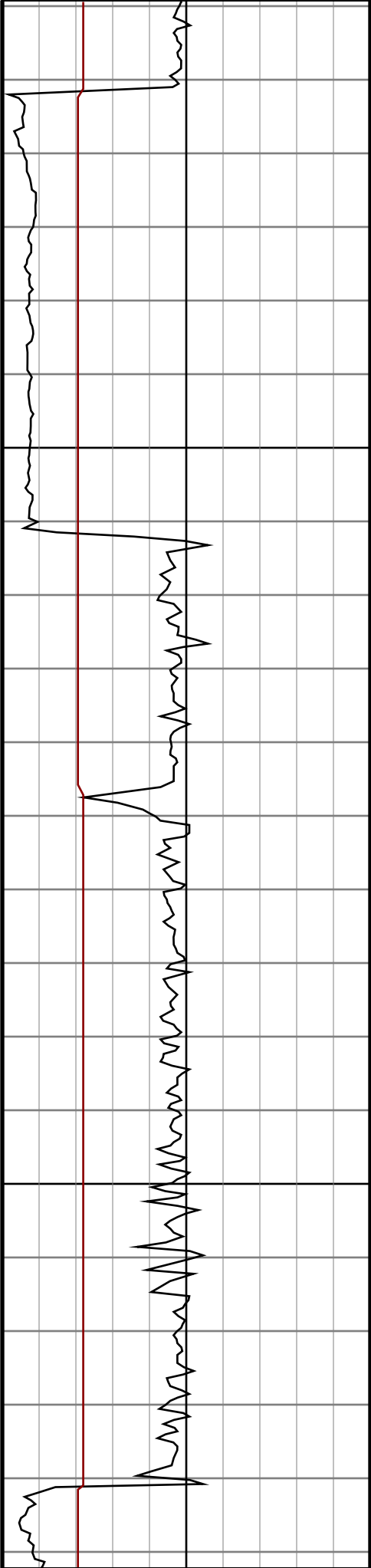
#108 MD(9698.00) Inc(89.0) Azm(2.4) TVD(6737.70)
VS(3043.19) NS(2958.21) EW(-747.52)

#109 MD(9793.00) Inc(89.4) Azm(2.4) TVD(6739.03)
VS(3135.95) NS(3053.12) EW(-743.54)



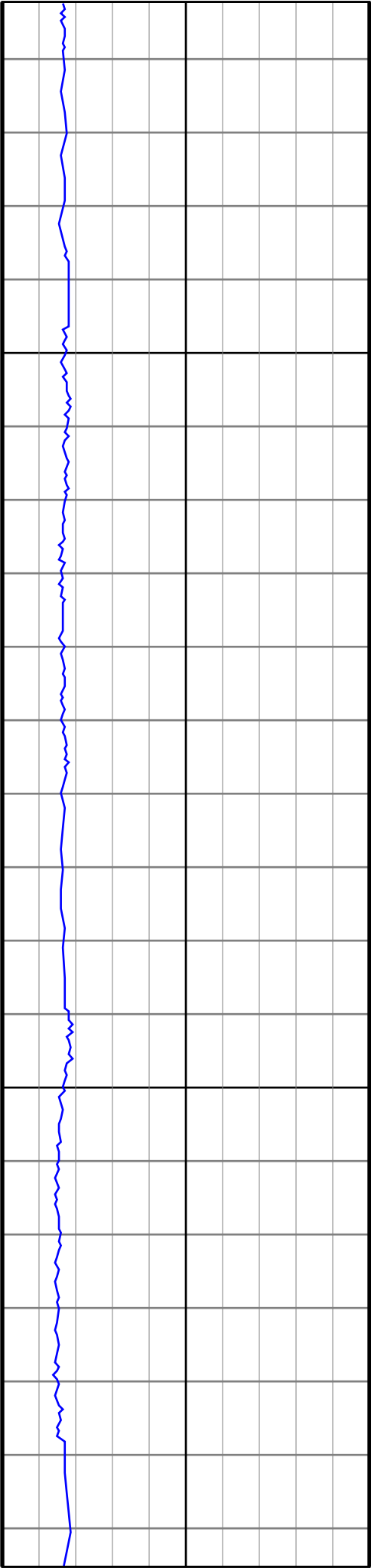
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10000

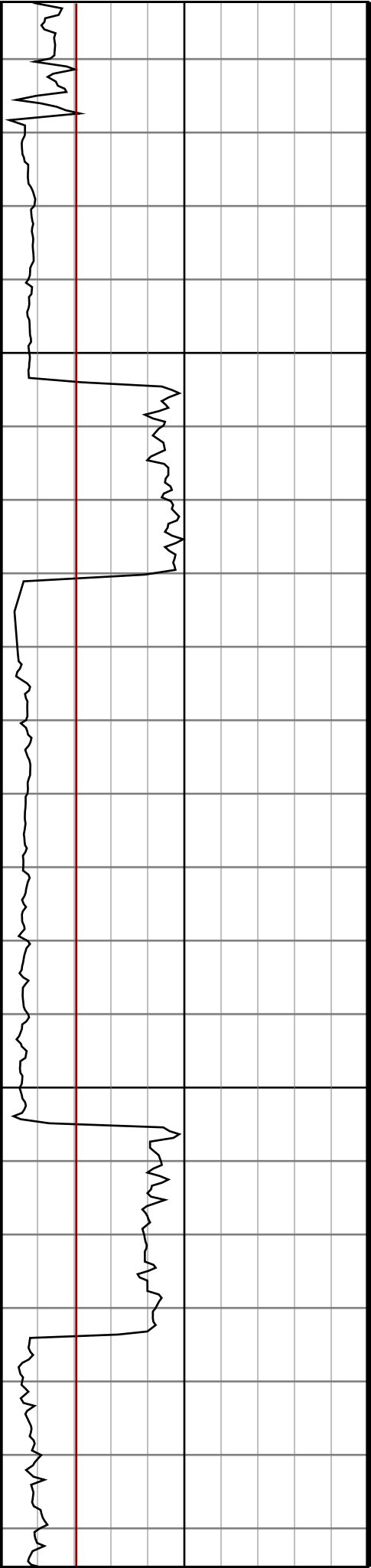


#110 MD(9888.00) Inc(89.4) Azm(0.3) TVD(6740.02)
VS(3229.07) NS(3148.08) EW(-741.30)

#111 MD(9984.00) Inc(89.9) Azm(0.6) TVD(6740.61)
VS(3323.47) NS(3244.07) EW(-740.55)



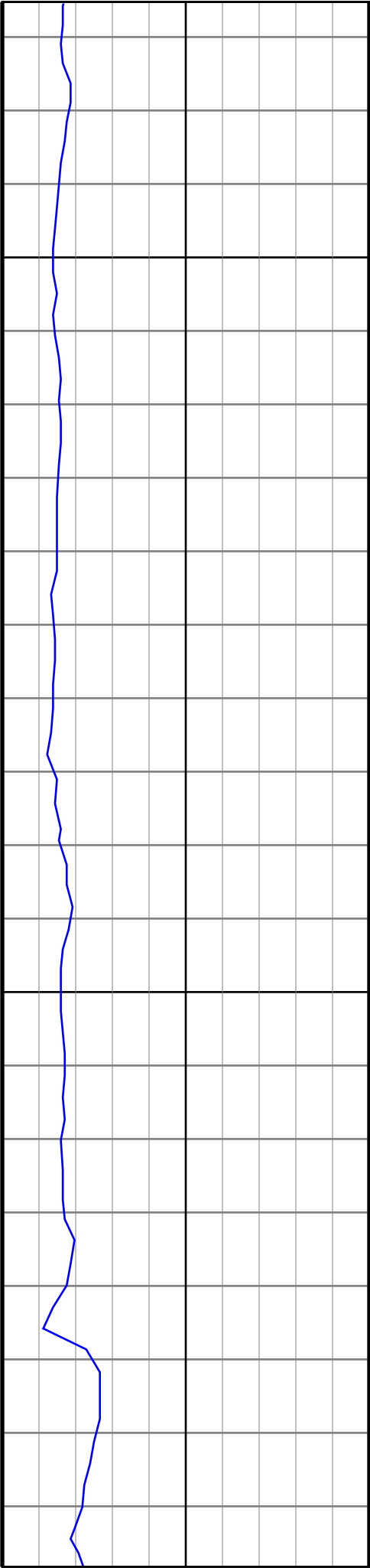
10100



#112 MD(10079.00) Inc(89.7) Azm(1.3) TVD(6740.94)
VS(3416.73) NS(3339.06) EW(-738.97)

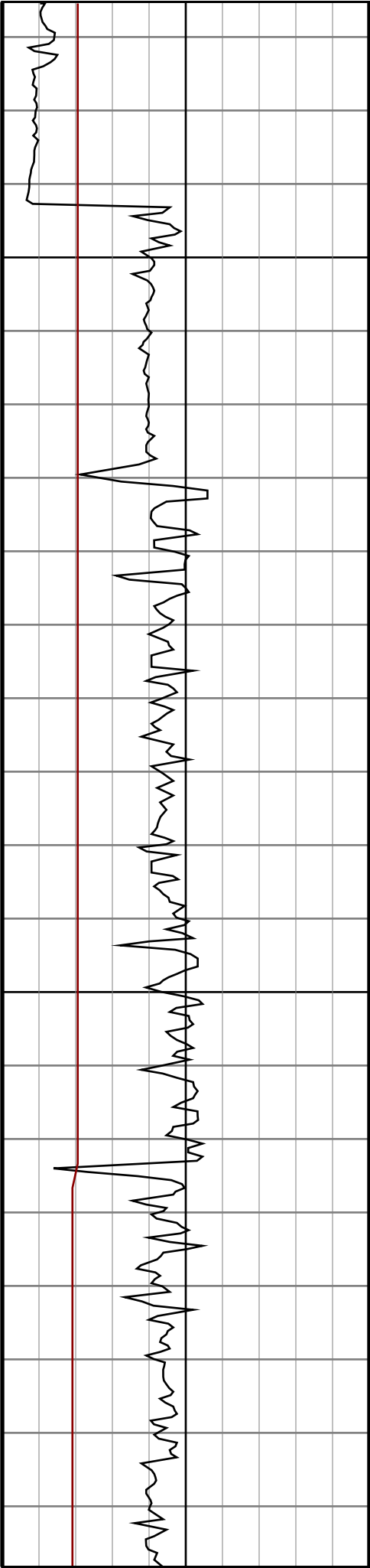
#113 MD(10174.00) Inc(89.2) Azm(359.4) TVD(6741.85)
VS(3510.17) NS(3434.05) EW(-738.39)

10200



10300

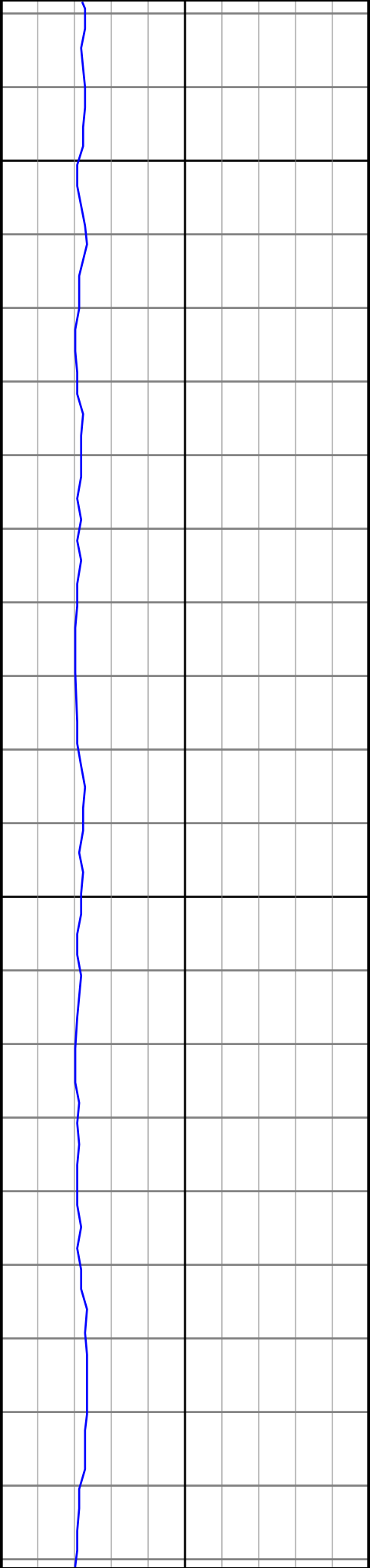
10400



#114 MD(10269.00) Inc(90.3) Azm(356.0) TVD(6742.27)
VS(3604.29) NS(3528.96) EW(-742.20)

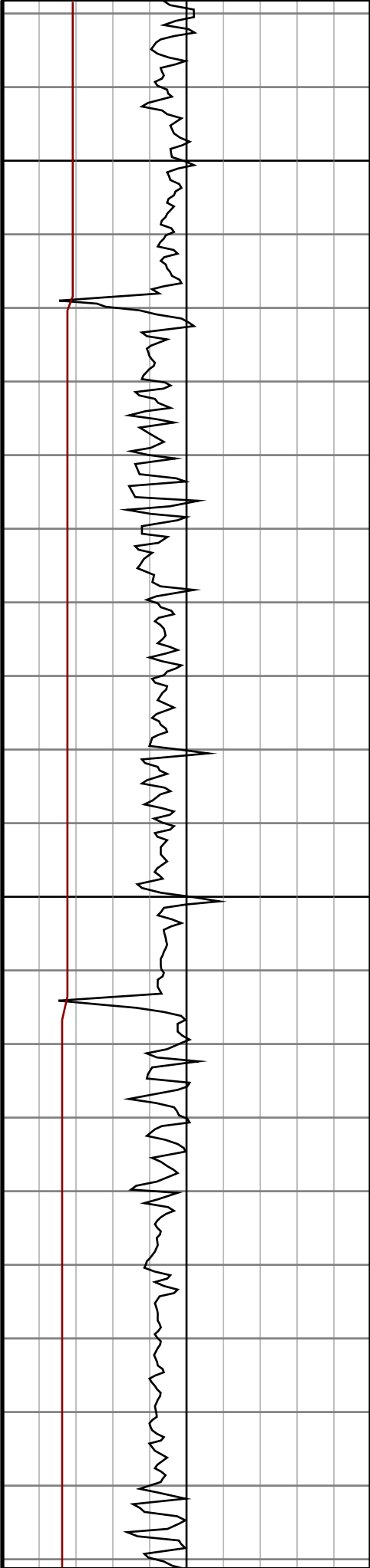
#115 MD(10365.00) Inc(88.7) Azm(353.9) TVD(6743.10)
VS(3699.91) NS(3624.57) EW(-750.65)

#116 MD(10460.00) Inc(87.8) Azm(354.3) TVD(6746.01)
VS(3794.62) NS(3719.02) EW(-760.41)



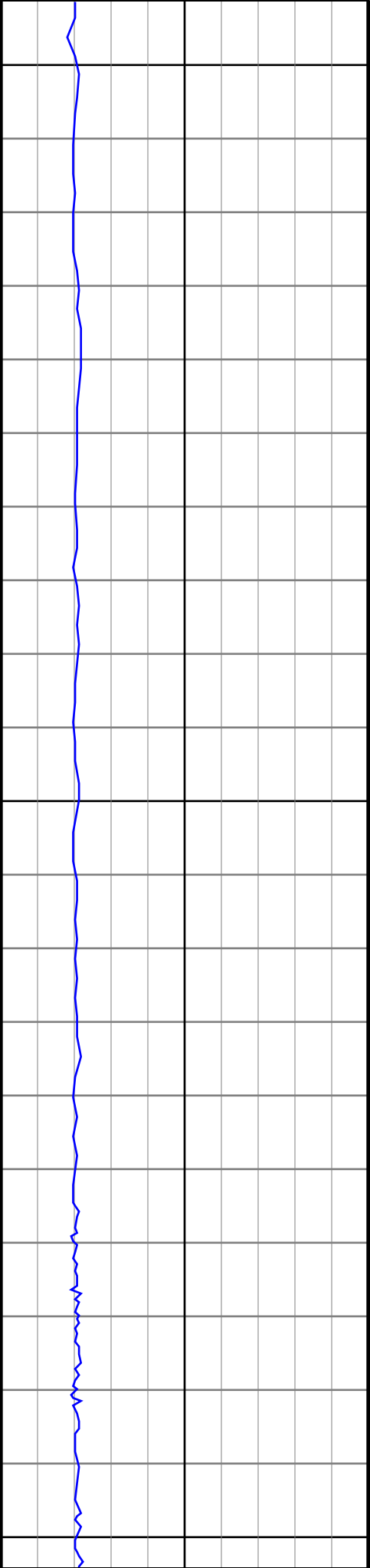
10500

10600



#117 MD(10555.00) Inc(89.4) Azm(355.0) TVD(6748.33)
VS(3889.27) NS(3813.58) EW(-769.27)

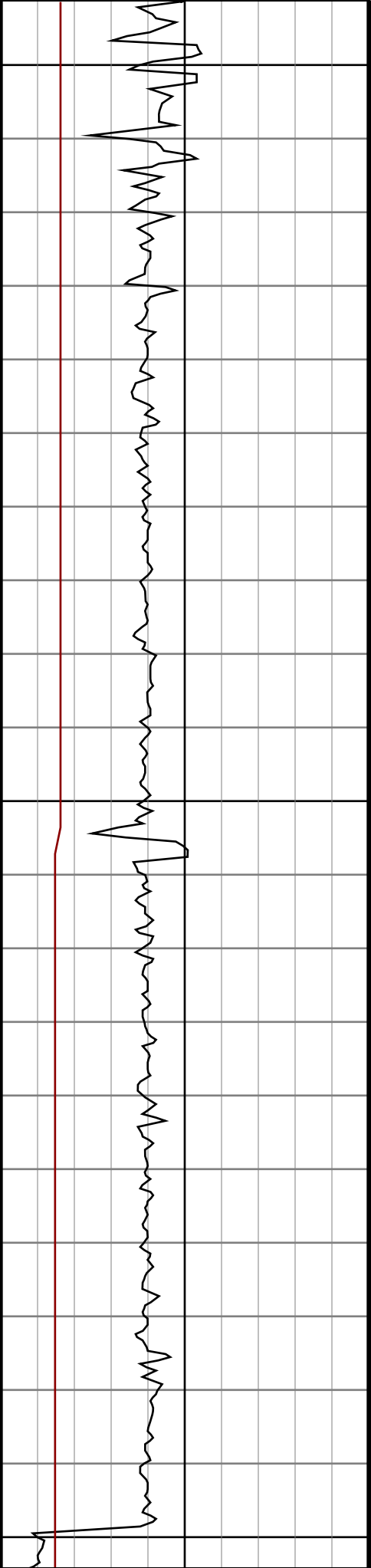
#118 MD(10650.00) Inc(89.2) Azm(353.6) TVD(6749.49)
VS(3983.99) NS(3908.10) EW(-778.70)



10700

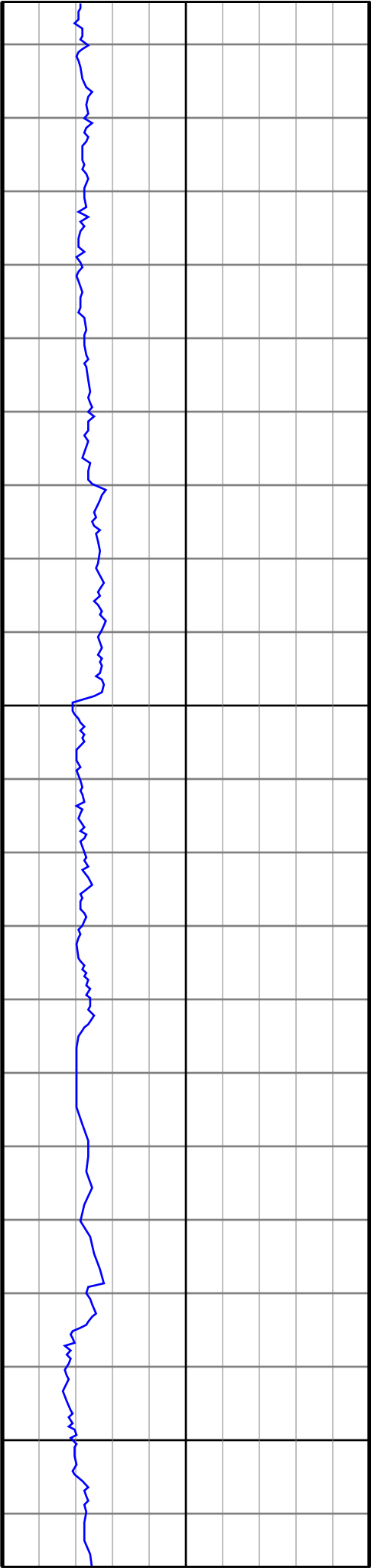
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10900



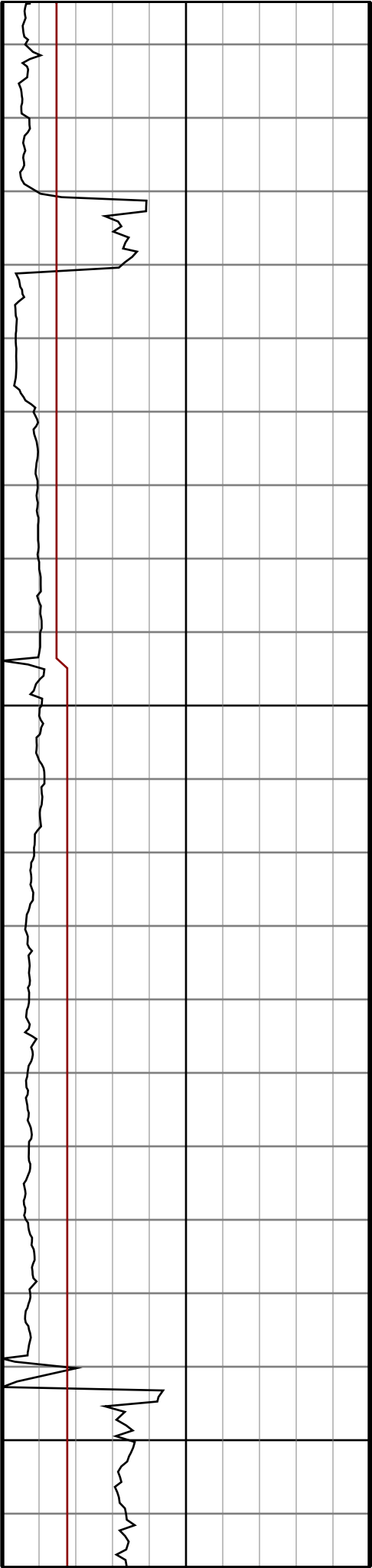
#119 MD(10745.00) Inc(89.9) Azm(353.6) TVD(6750.23)
VS(4078.80) NS(4002.50) EW(-789.29)

#120 MD(10840.00) Inc(90.1) Azm(350.6) TVD(6750.23)
VS(4173.72) NS(4096.59) EW(-802.35)



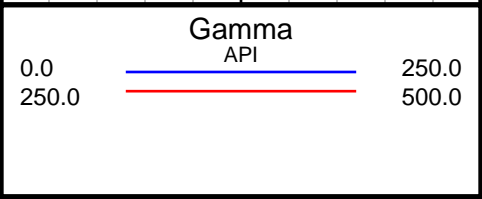
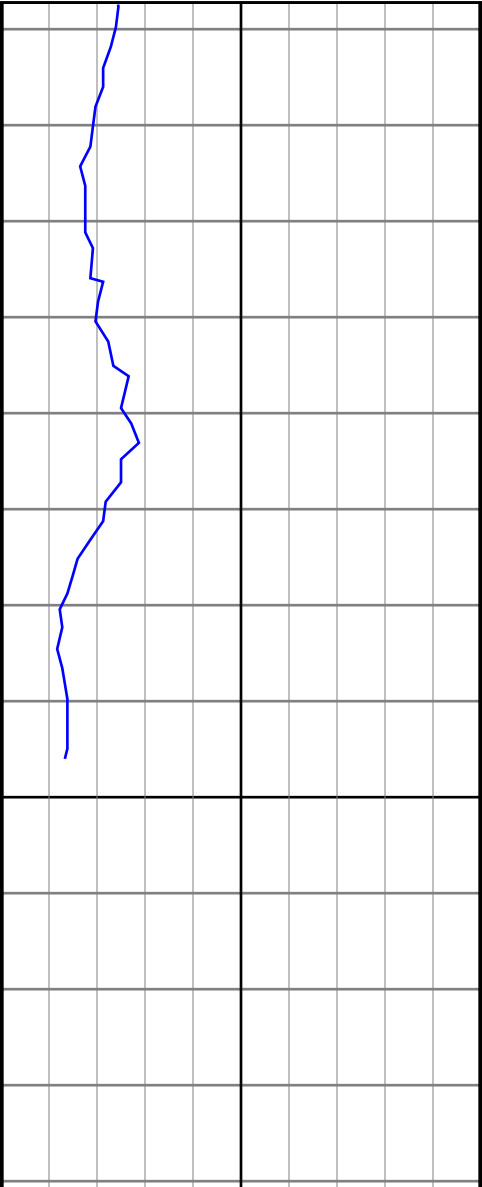
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11100

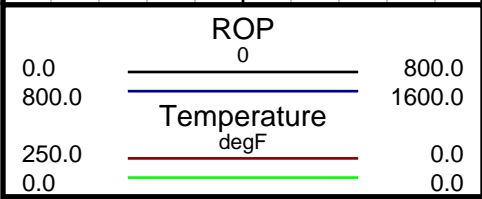
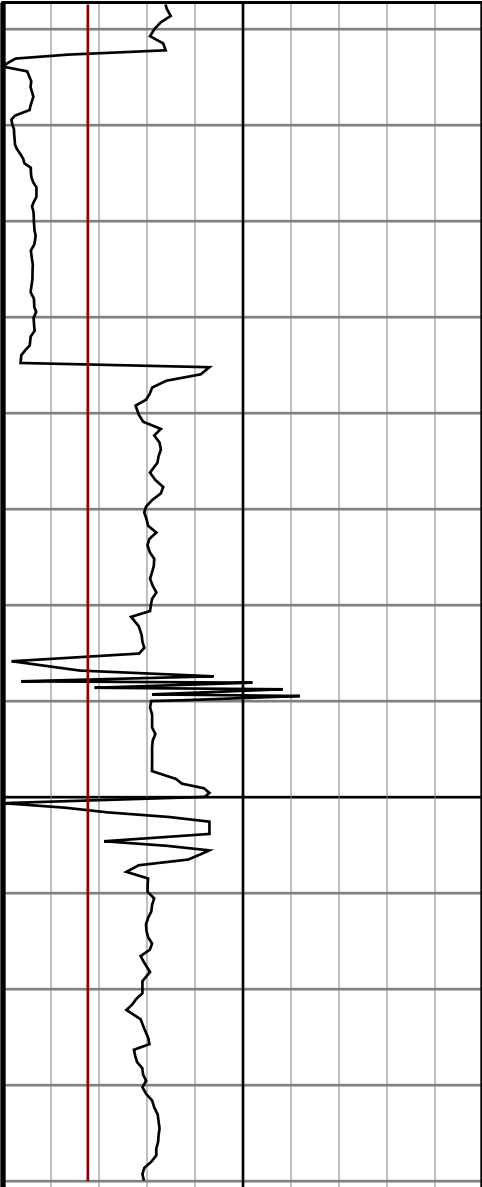


#121 MD(10936.00) Inc(90.1) Azm(348.8) TVD(6750.07)
VS(4269.71) NS(4191.04) EW(-819.51)

#122 MD(11031.00) Inc(88.9) Azm(356.9) TVD(6750.90)
VS(4364.51) NS(4285.22) EW(-831.33)



11200



#123 MD(11126.00) Inc(86.7) Azm(359.7) TVD(6754.54)
VS(4458.42) NS(4380.09) EW(-834.14)

#124 MD(11179.00) Inc(86.0) Azm(1.5) TVD(6757.92)
VS(4510.41) NS(4432.98) EW(-833.59)

#125 MD(11240.00) Inc(86.0) Azm(1.5) TVD(6762.17)
VS(4570.03) NS(4493.81) EW(-832.00)