



CROW CREEK STATE AC36-72HN MD 5":100'

Company: NOBLE ENERGY
Well Name: CROW CREEK STATE AC36-72HN
UWI or LSD: 05-123-37418
Rig Id: H&P 277
State: CO
County/Parish: WELD COUNTY
Country: USA
Survey Company: DRILTECH, LLC
Job number: 2013-336-IDDT-CO
MARK LARUE MWD OPERATOR
JOSH CAYLOR MWD OPERATOR

Log measurements: Gamma, ROP, Temp
Depth measured from: 641
Maximum temperature: 216.7

Depth Date
Start: 641 ft 11-10-2013
End: 11211 ft 11-15-2013

Casing Depth Size
Surface: 631 9 5/8
Intermediate: 7061 7

Mud Type: WATER BASE
Density: 9.3
Viscosity: 33
Rm: Rmf: Rmc:

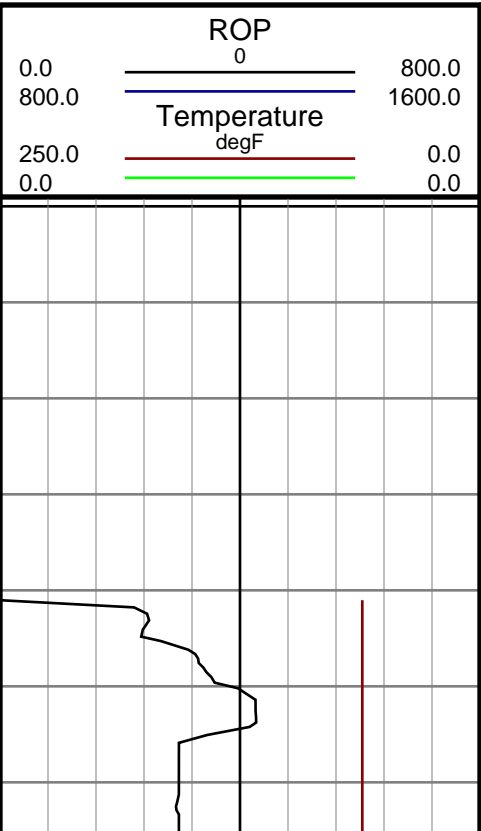
Elevations
KB: 4872
GL: 4848
DF:

Run	Bit Size	Offsets	Gamma	Survey	Start	End	Start	End	Dates
1	8 3/4	42.00	54.00		631	6123	11/10/2013	11/11/2013	
2	8 3/4	35.00	47.00		6123	7071	11/11/2013	11/12/2013	
3	6 1/8	42.00	54.00		7071	11211	11/13/2013	11/15/2013	
4									
5									
6									
7									
8									
9									
10									

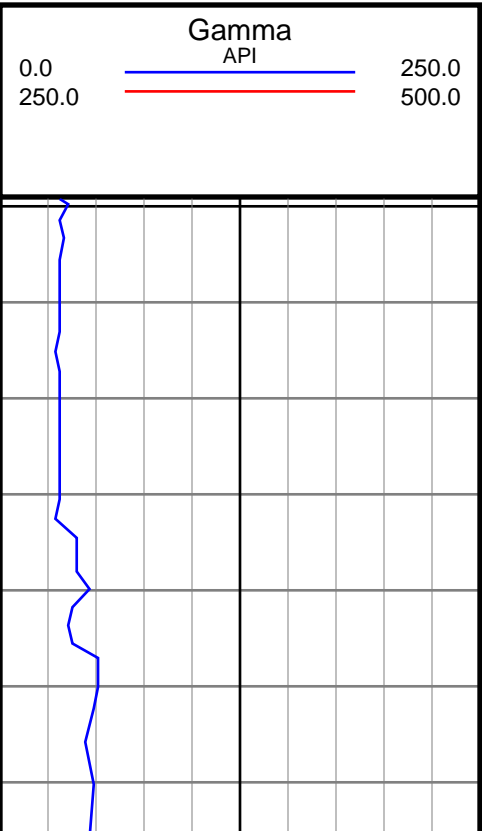
DRILTECH, LLC uses its best efforts to provide its customers with accurate information and interpretations in conjunction with services performed but will not be held liable or responsible for the accuracy of such information or interpretation.

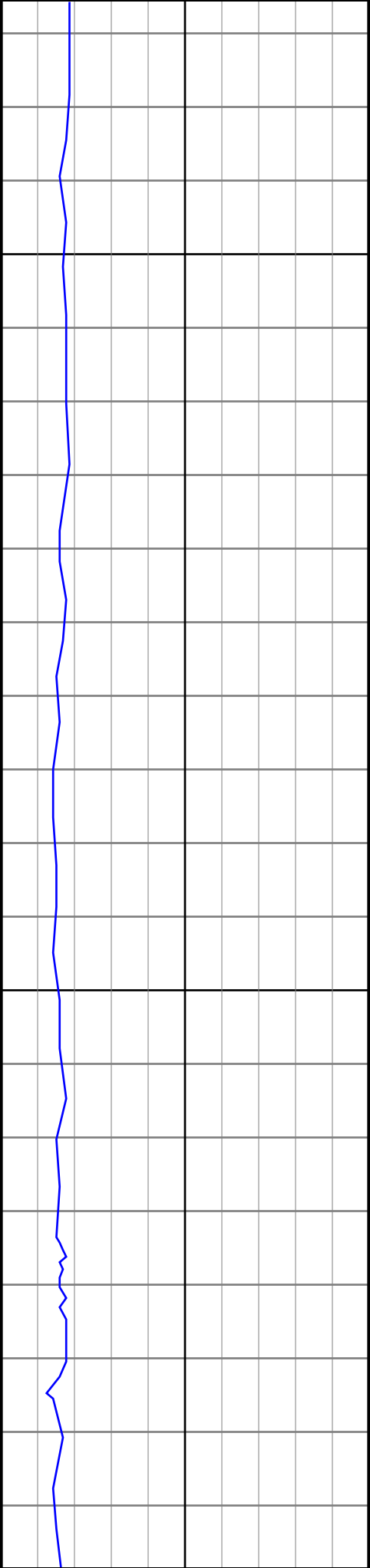
MD

600



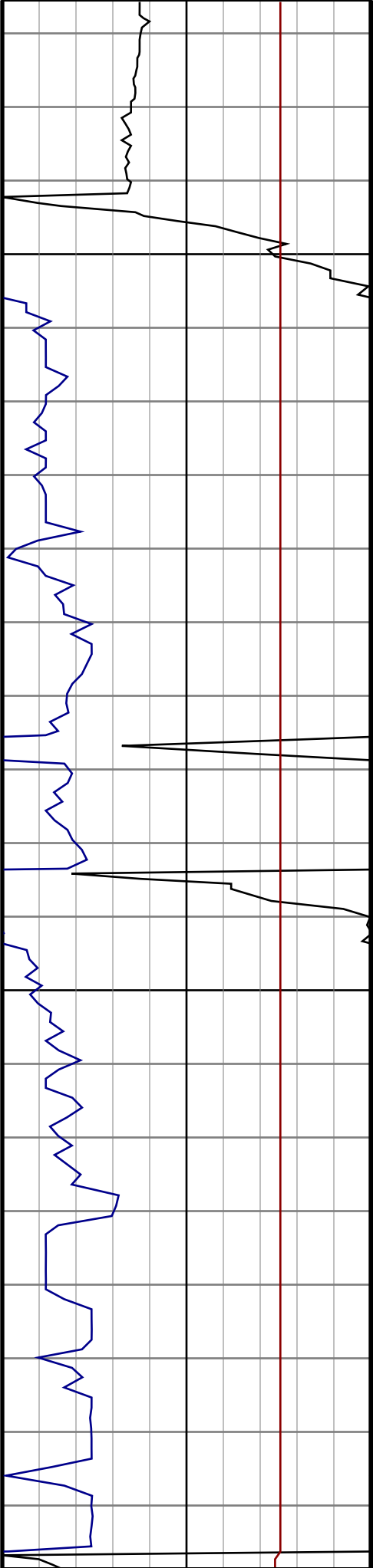
#2 MD(641.00) Inc(0.8) Azm(225.5) TVD(640.99)
VS(-2.18) NS(-1.78) EW(-2.88)





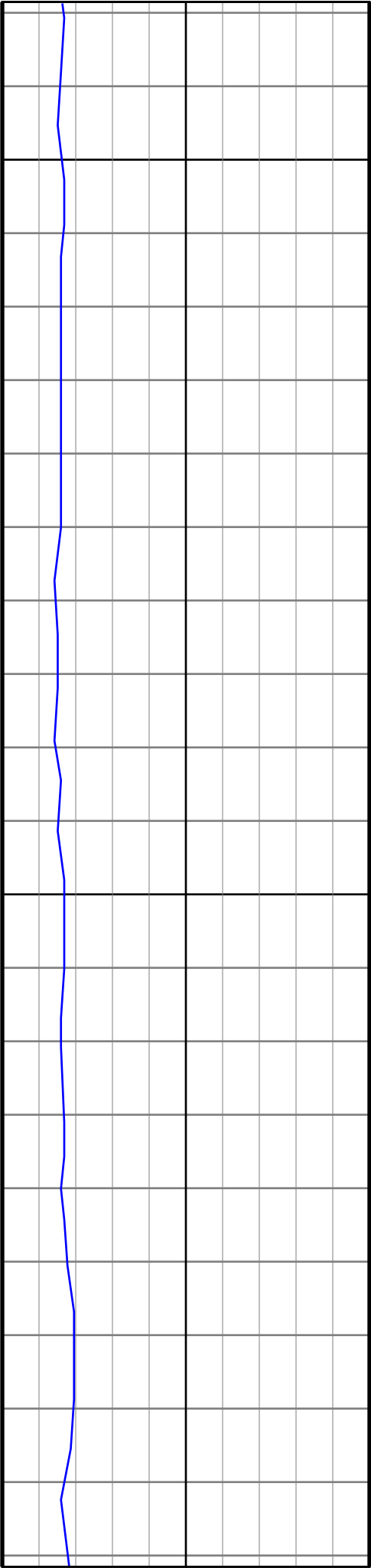
700

800



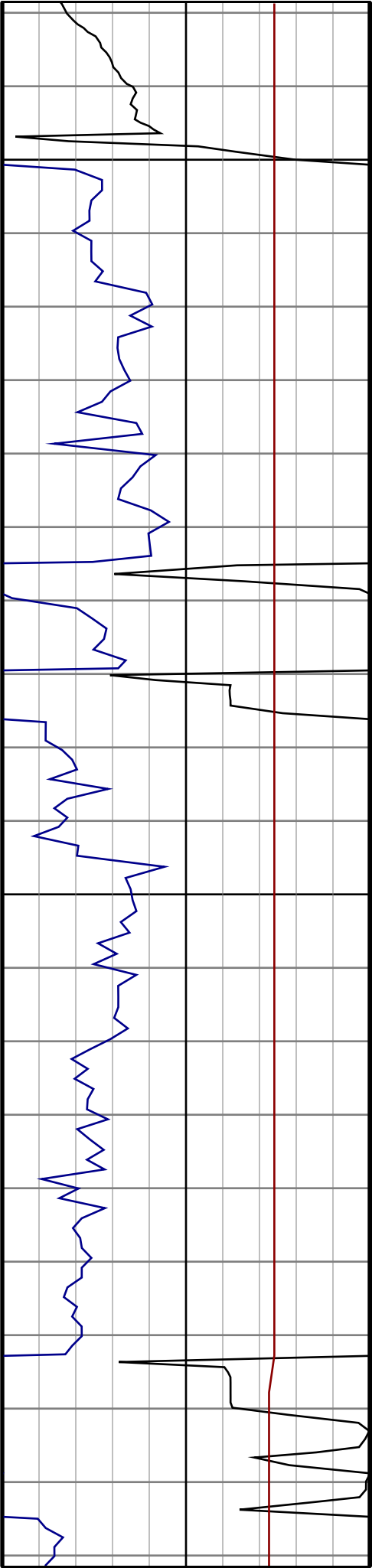
#3 MD(731.00) Inc(0.7) Azm(244.3) TVD(730.98)
VS(-2.99) NS(-2.46) EW(-3.82)

#4 MD(824.00) Inc(0.9) Azm(242.3) TVD(823.97)
VS(-3.74) NS(-3.05) EW(-4.98)



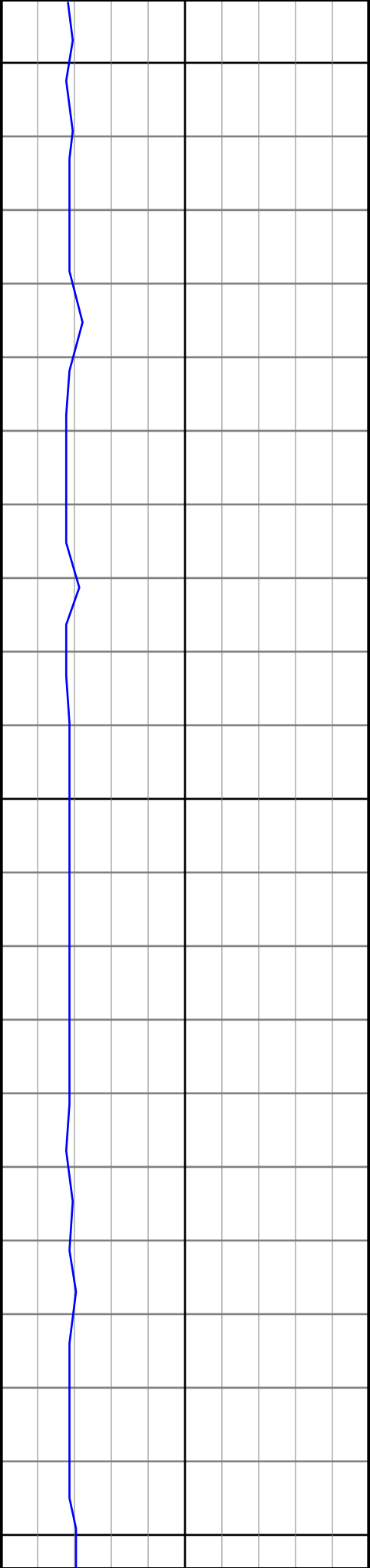
900

1000



#5 MD(918.00) Inc(0.9) Azm(33.7) TVD(917.96)
VS(-3.50) NS(-2.78) EW(-5.23)

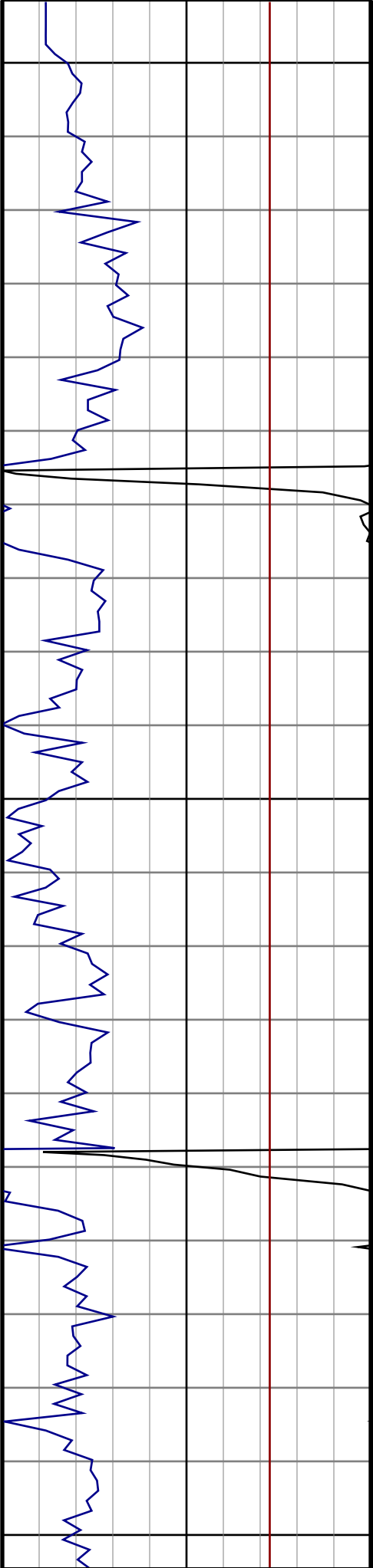
#6 MD(1012.00) Inc(1.2) Azm(41.9) TVD(1011.95)
VS(-2.02) NS(-1.43) EW(-4.16)



1100

1200

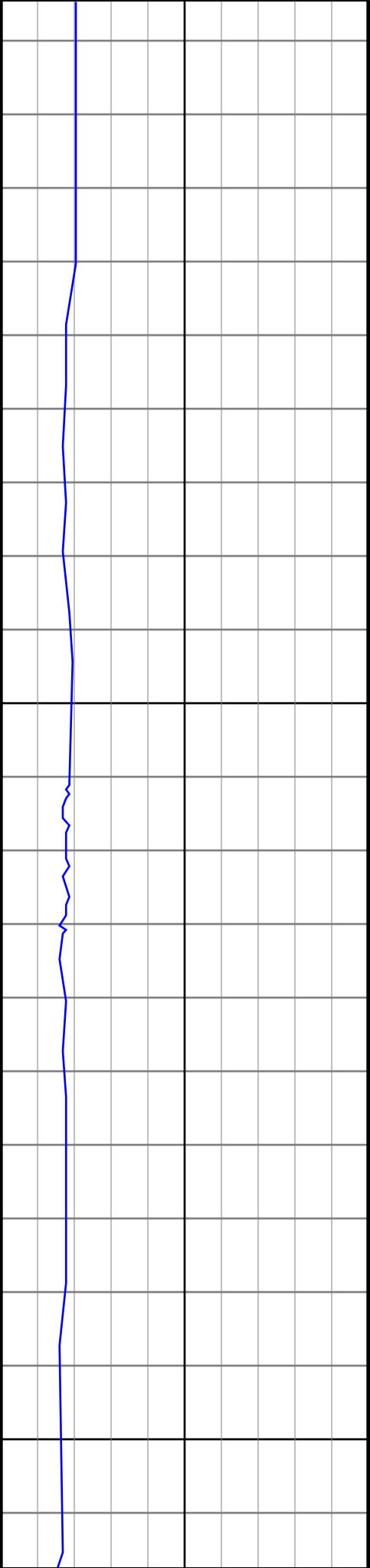
1300



#7 MD(1104.00) Inc(1.2) Azm(50.0) TVD(1103.93)
VS(-0.50) NS(-0.10) EW(-2.78)

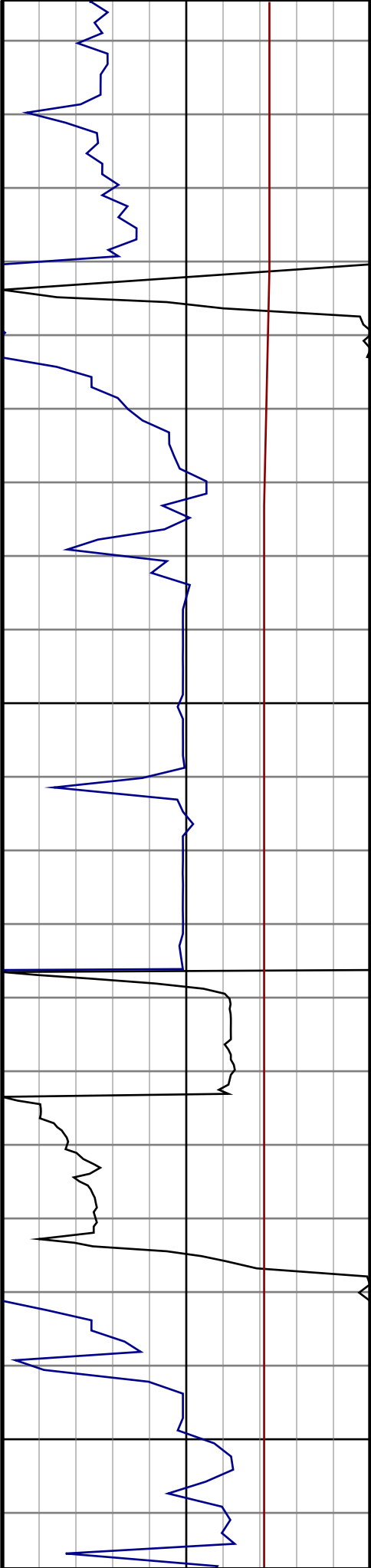
#8 MD(1196.00) Inc(1.2) Azm(47.2) TVD(1195.91)
VS(0.97) NS(1.18) EW(-1.33)

#9 MD(1289.00) Inc(1.4) Azm(53.7) TVD(1288.88)
VS(2.53) NS(2.51) EW(0.30)



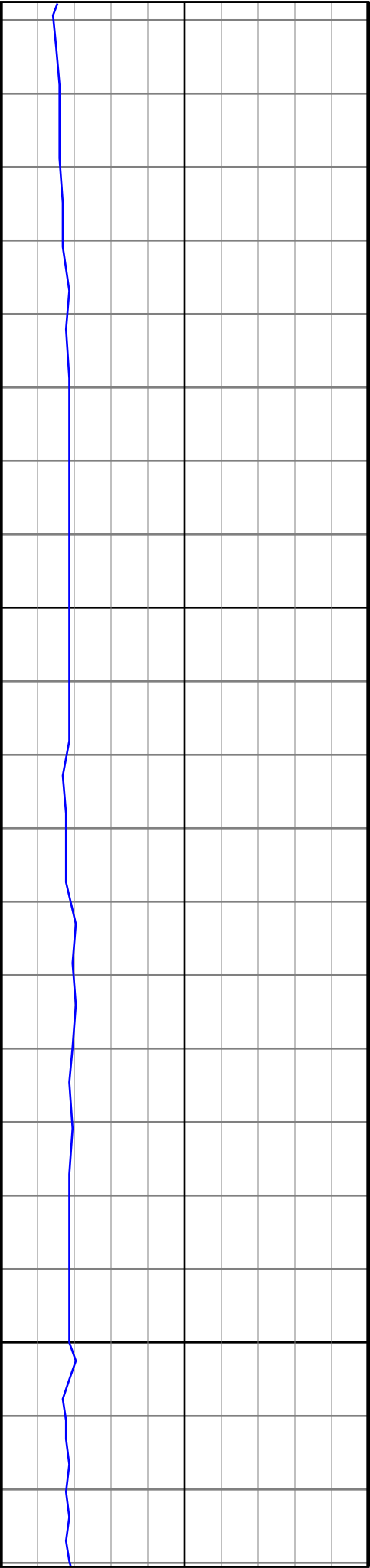
1400

1500



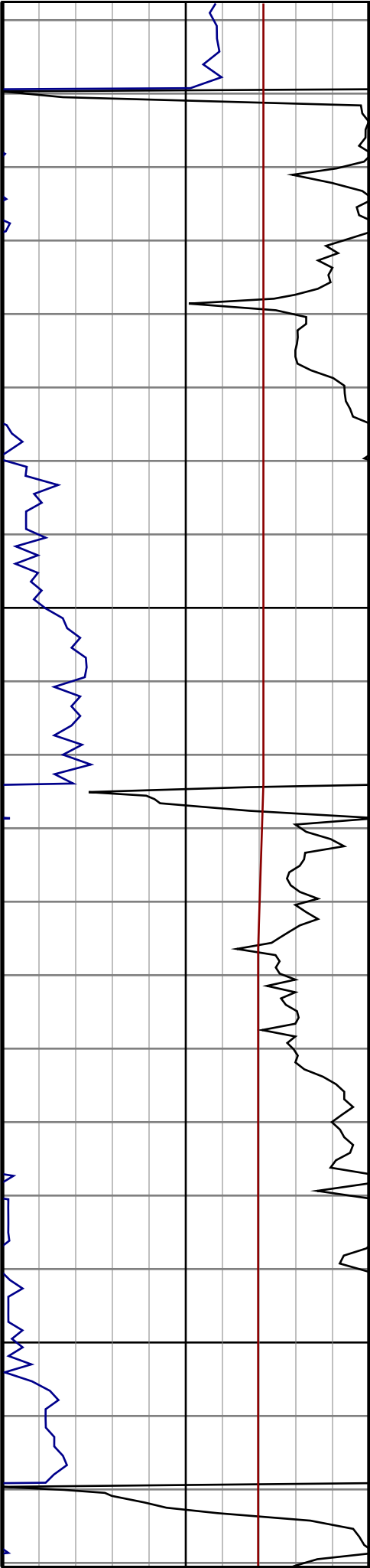
#10 MD(1383.00) Inc(1.2) Azm(56.3) TVD(1382.86)
VS(3.99) NS(3.74) EW(2.04)

#11 MD(1476.00) Inc(1.8) Azm(101.5) TVD(1475.83)
VS(4.56) NS(3.99) EW(4.28)



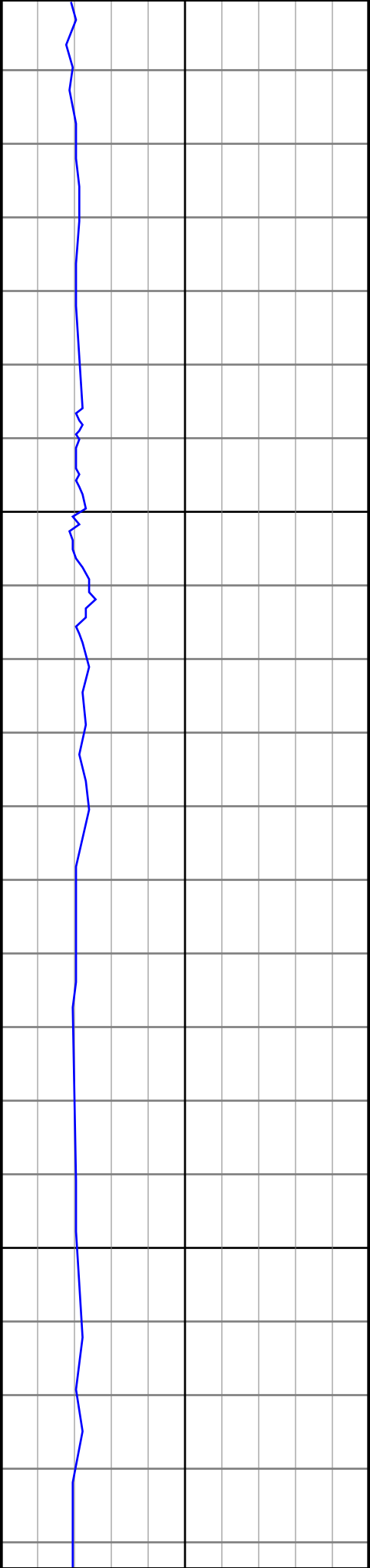
1600

1700



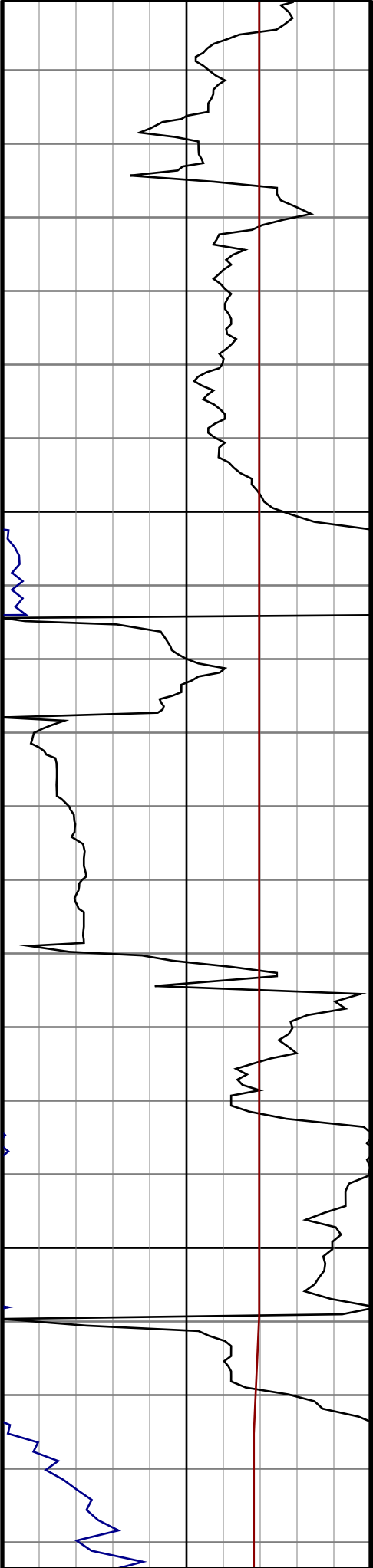
#12 MD(1571.00) Inc(1.8) Azm(112.9) TVD(1570.78)
VS(4.11) NS(3.11) EW(7.12)

#13 MD(1666.00) Inc(1.9) Azm(106.8) TVD(1665.73)
VS(3.50) NS(2.07) EW(10.00)



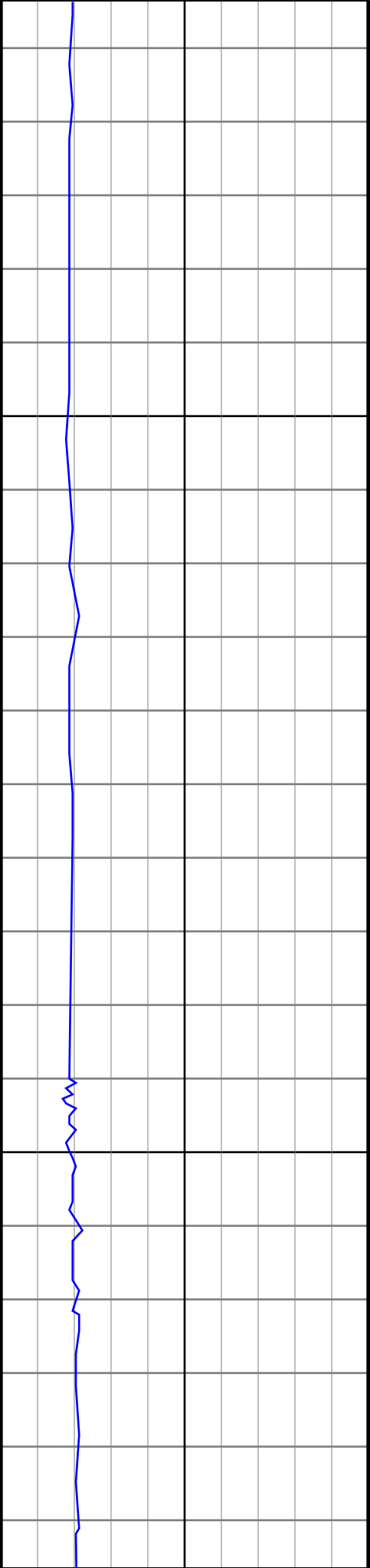
1800

1900



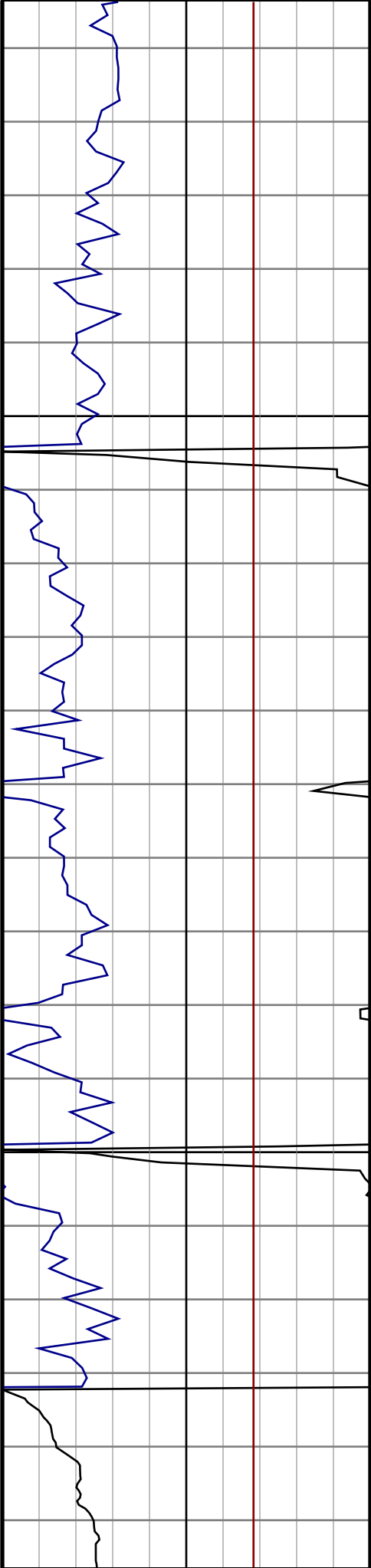
#14 MD(1761.00) Inc(2.1) Azm(109.8) TVD(1760.68)
VS(2.92) NS(1.03) EW(13.15)

#15 MD(1857.00) Inc(2.8) Azm(146.0) TVD(1856.59)
VS(0.83) NS(-1.51) EW(16.11)



2000

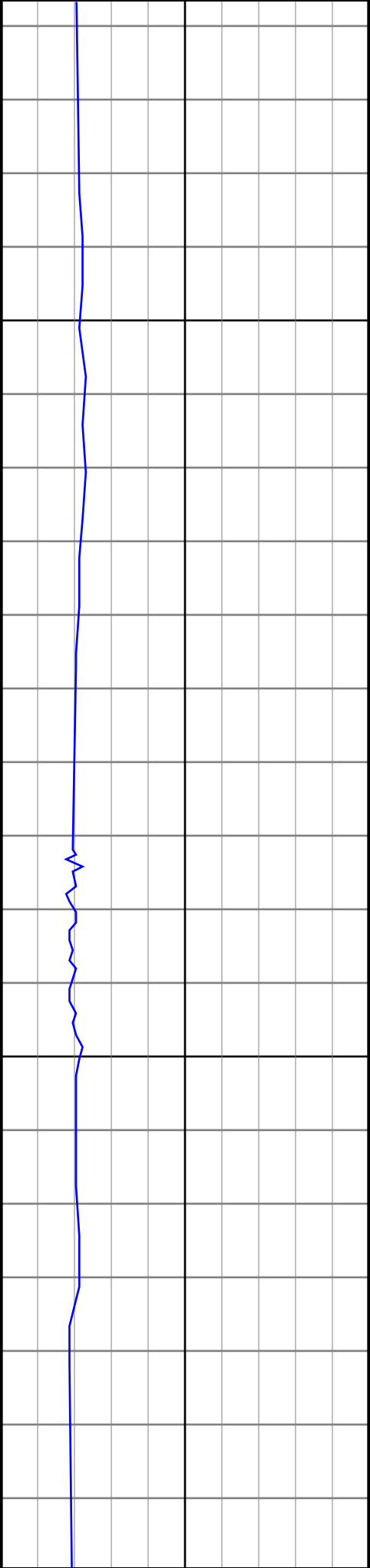
2100



#16 MD(1952.00) Inc(2.6) Azm(148.8) TVD(1951.49)
VS(-2.54) NS(-5.28) EW(18.53)

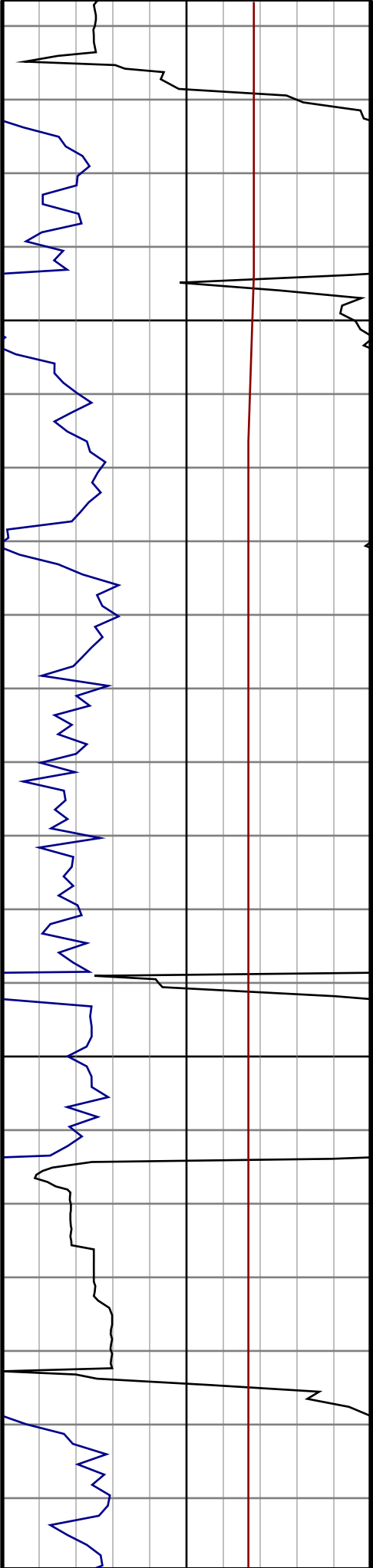
#17 MD(2047.00) Inc(2.3) Azm(144.6) TVD(2046.40)
VS(-5.58) NS(-8.67) EW(20.75)

#18 MD(2142.00) Inc(3.0) Azm(137.2) TVD(2141.30)
VS(-8.52) NS(-12.05) EW(23.54)



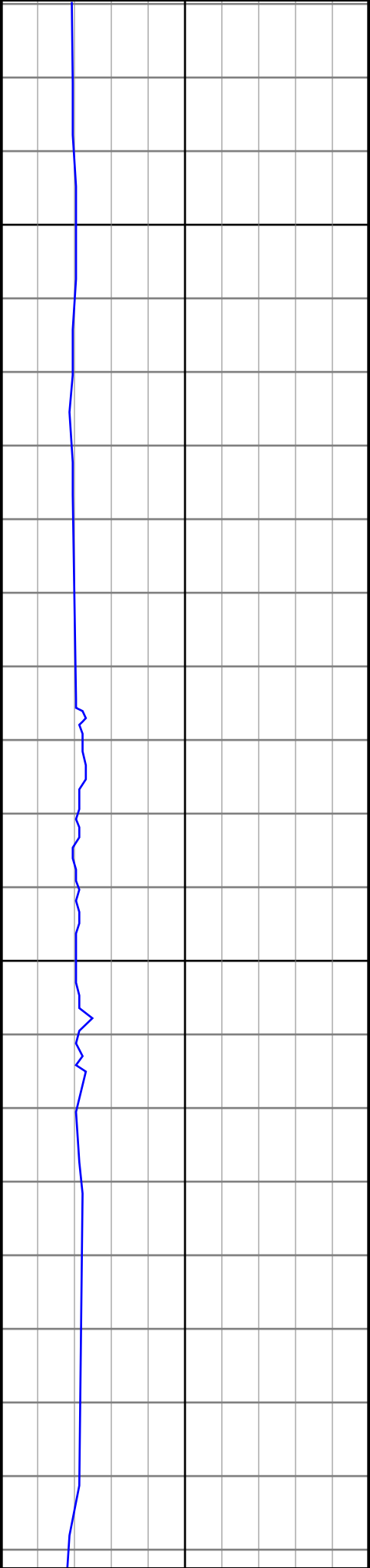
2200

2300



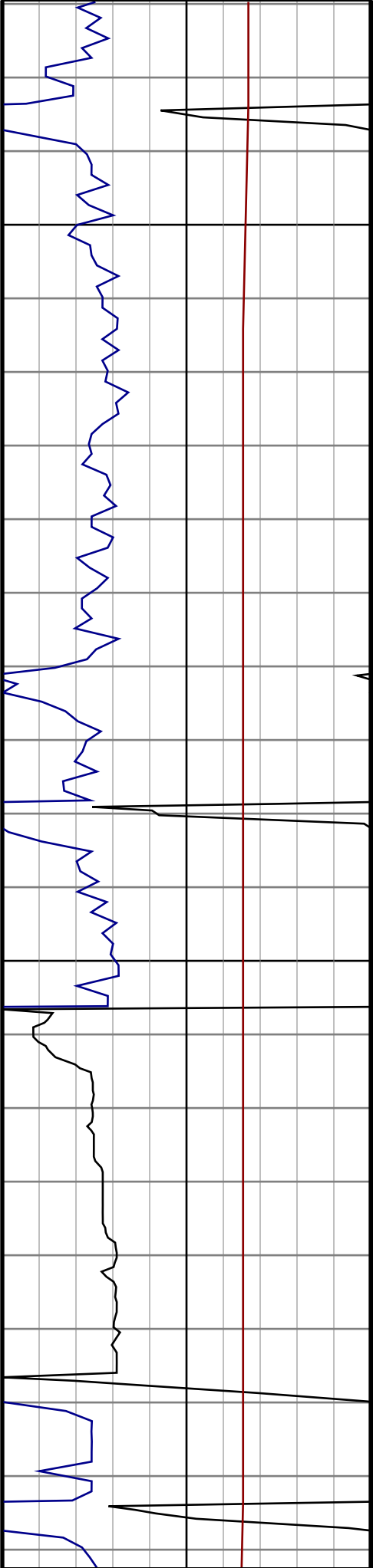
#19 MD(2237.00) Inc(3.7) Azm(139.0) TVD(2236.14)
VS(-12.08) NS(-16.19) EW(27.24)

#20 MD(2332.00) Inc(5.1) Azm(133.9) TVD(2330.85)
VS(-16.54) NS(-21.43) EW(32.29)



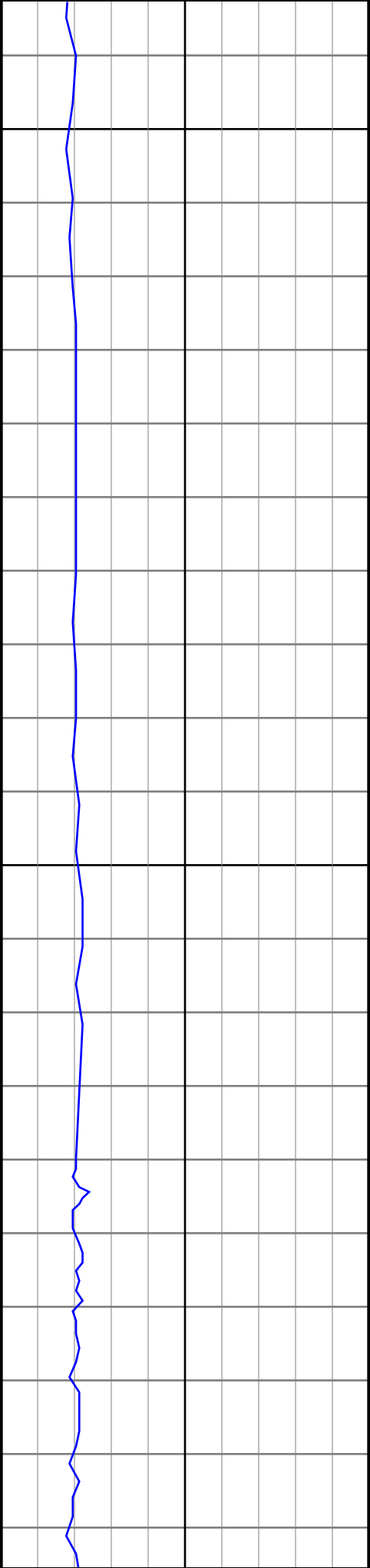
2400

2500



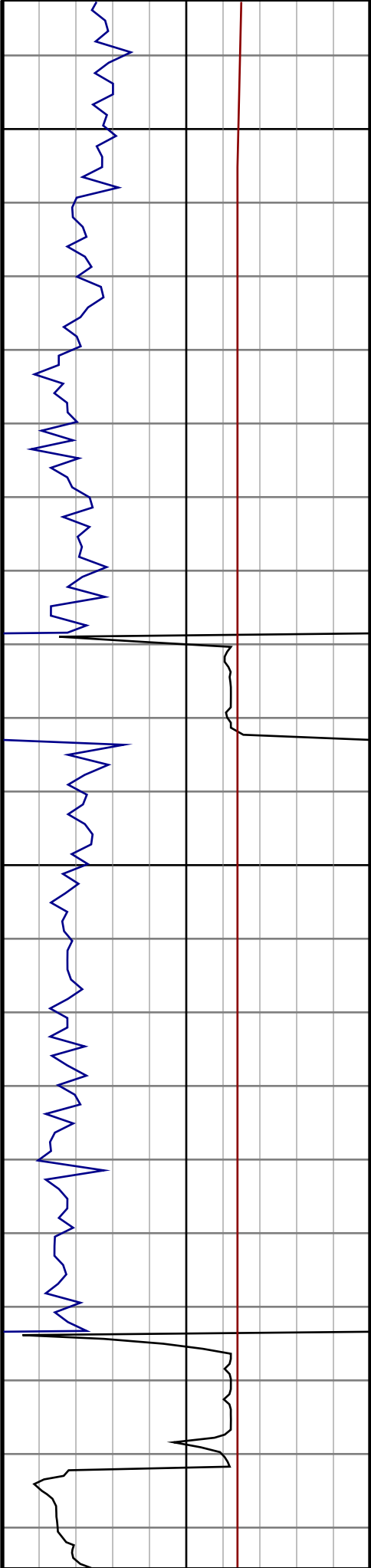
#21 MD(2428.00) Inc(4.2) Azm(131.9) TVD(2426.54)
VS(-20.97) NS(-26.74) EW(37.99)

#22 MD(2522.00) Inc(4.6) Azm(117.9) TVD(2520.26)
VS(-24.14) NS(-30.80) EW(43.88)



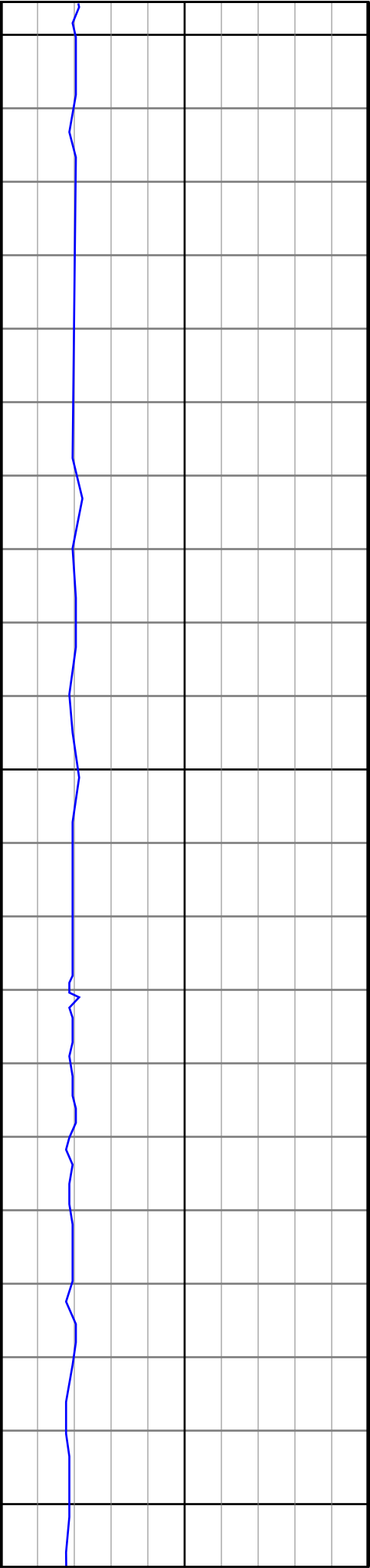
2600

2700



#23 MD(2617.00) Inc(6.5) Azm(109.3) TVD(2614.82)
VS(-26.44) NS(-34.36) EW(52.32)

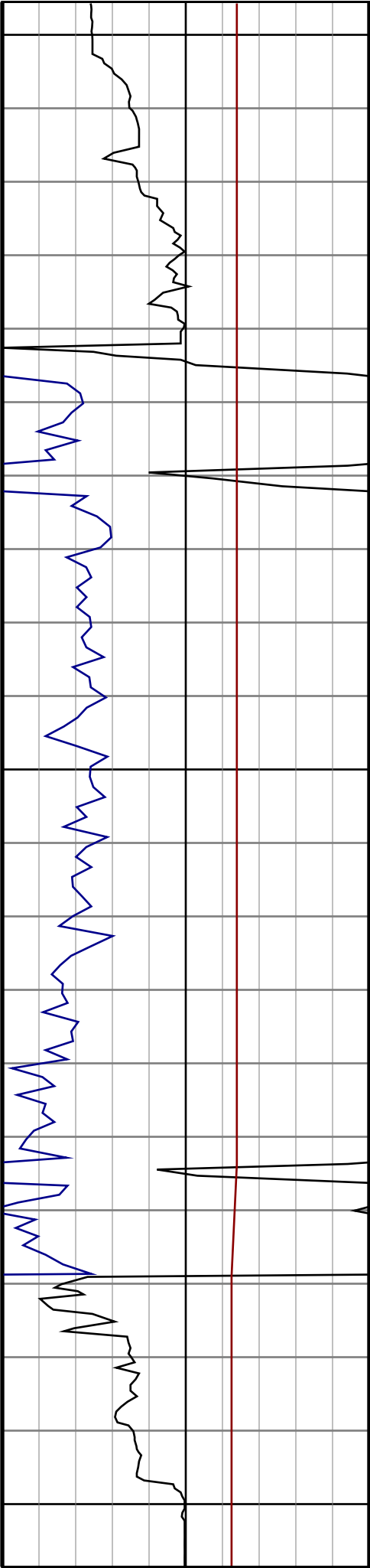
#24 MD(2713.00) Inc(5.8) Azm(107.5) TVD(2710.26)
VS(-28.25) NS(-37.62) EW(62.08)



2800

2900

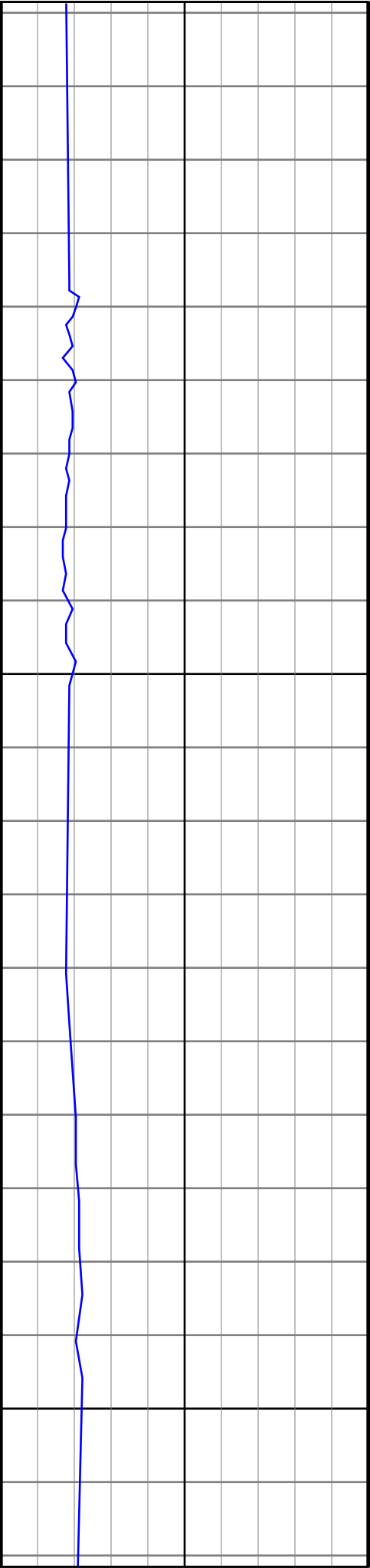
3000



#25 MD(2808.00) Inc(7.4) Azm(100.3) TVD(2804.63)
VS(-29.23) NS(-40.15) EW(72.67)

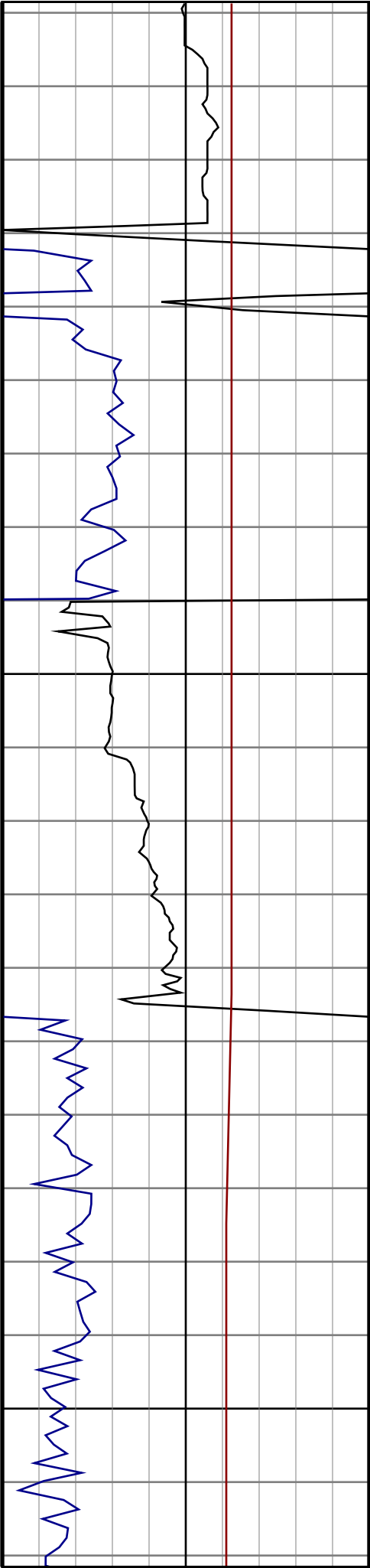
#26 MD(2903.00) Inc(8.8) Azm(102.4) TVD(2898.68)
VS(-29.96) NS(-42.81) EW(85.79)

#27 MD(2998.00) Inc(10.2) Azm(100.1) TVD(2992.38)
VS(-30.74) NS(-45.84) EW(101.17)



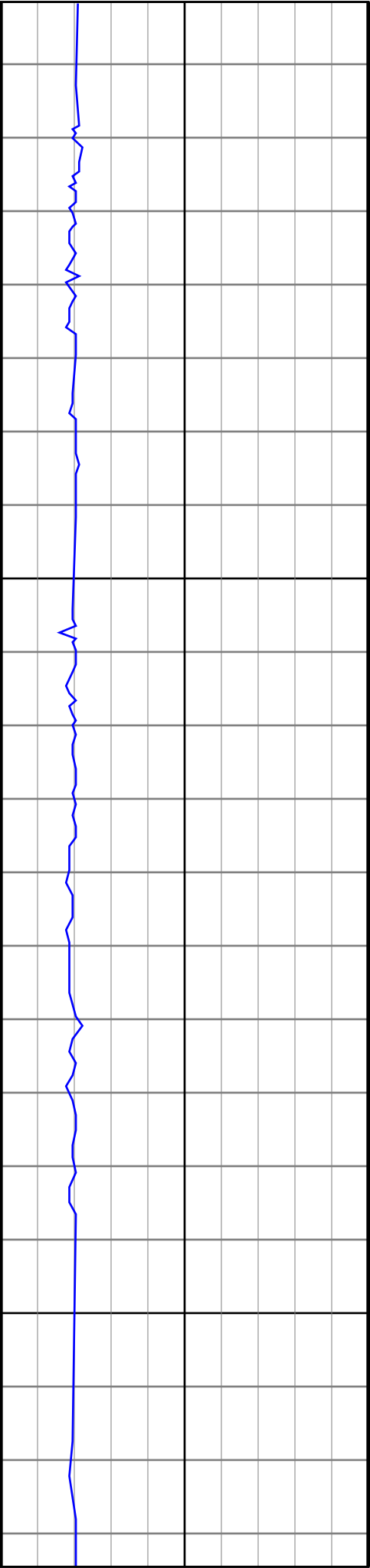
3100

3200



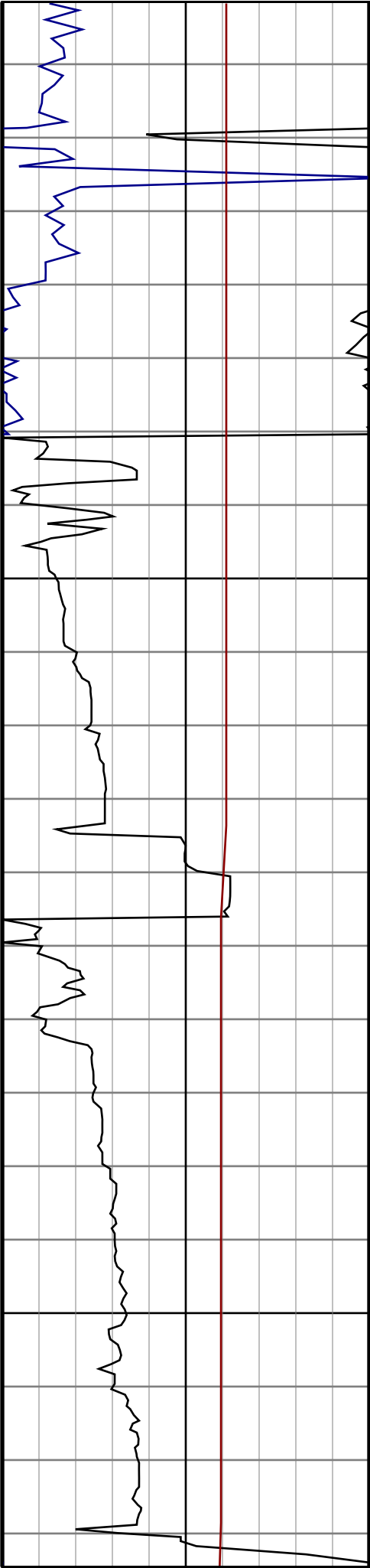
#28 MD(3093.00) Inc(13.0) Azm(95.2) TVD(3085.43)
VS(-30.42) NS(-48.29) EW(120.10)

#29 MD(3188.00) Inc(14.3) Azm(93.6) TVD(3177.74)
VS(-28.88) NS(-49.99) EW(142.45)



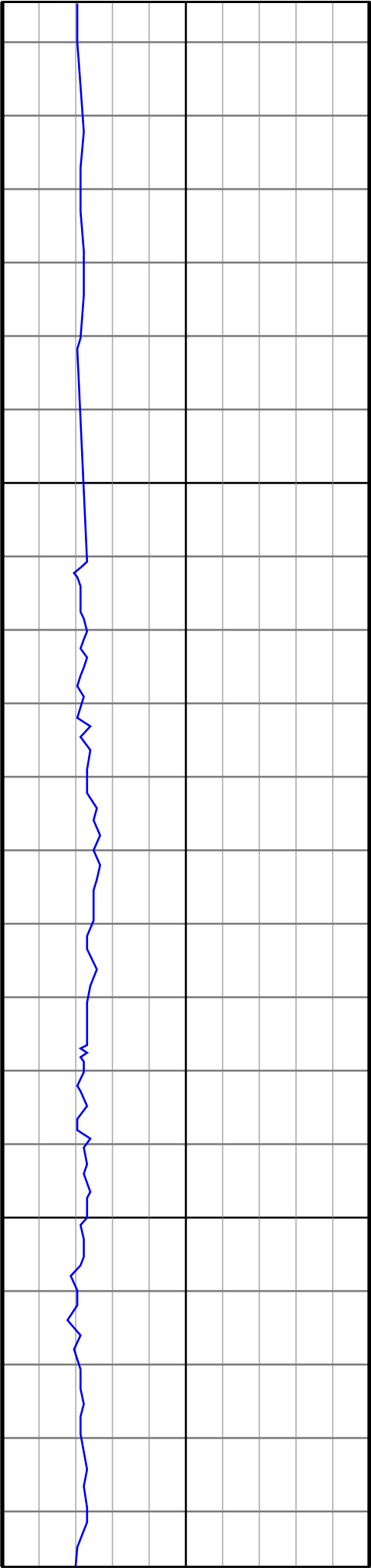
3300

3400



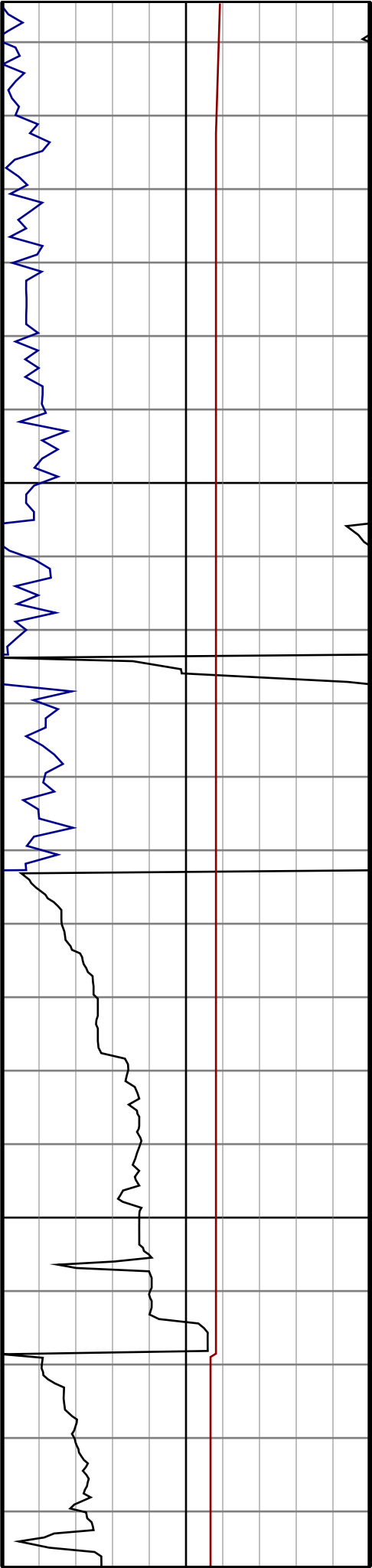
#30 MD(3284.00) Inc(12.8) Azm(90.4) TVD(3271.07)
VS(-26.44) NS(-50.81) EW(164.92)

#31 MD(3379.00) Inc(14.6) Azm(98.4) TVD(3363.37)
VS(-25.01) NS(-52.63) EW(187.29)



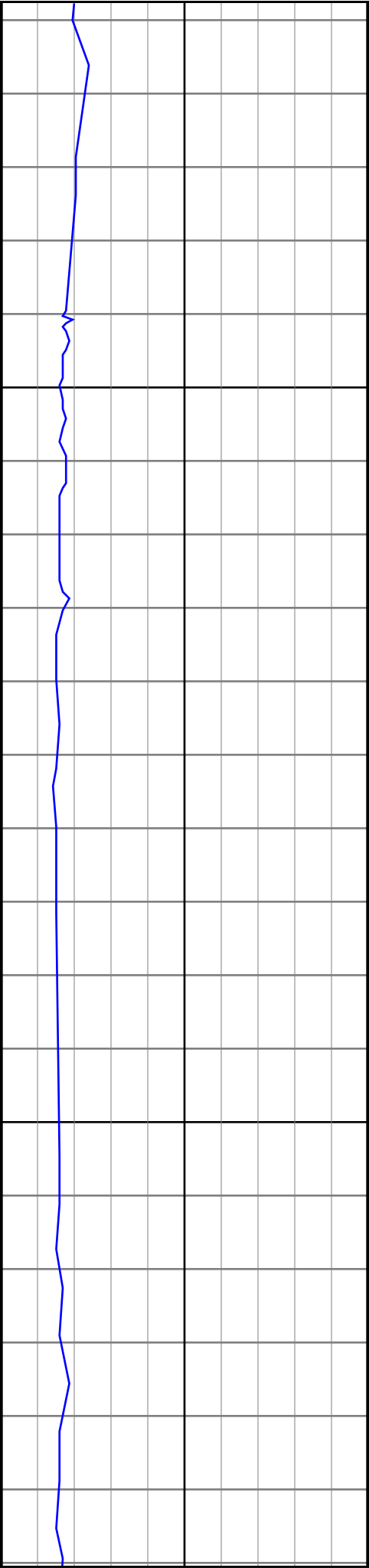
3500

3600



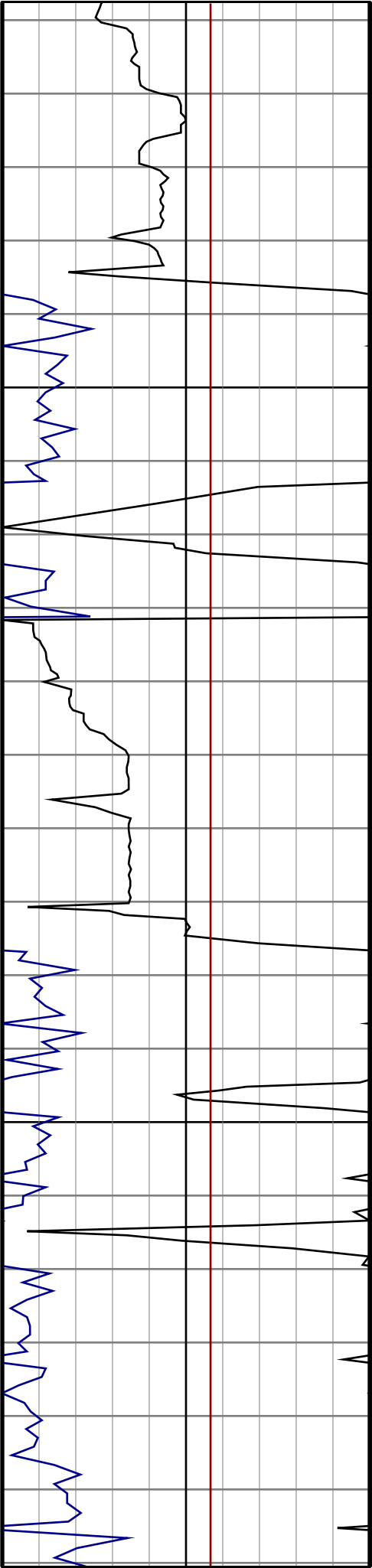
#32 MD(3474.00) Inc(14.6) Azm(101.5) TVD(3455.31)
VS(-25.70) NS(-56.77) EW(210.87)

#33 MD(3569.00) Inc(13.0) Azm(100.1) TVD(3547.56)
VS(-26.70) NS(-61.03) EW(233.12)



3700

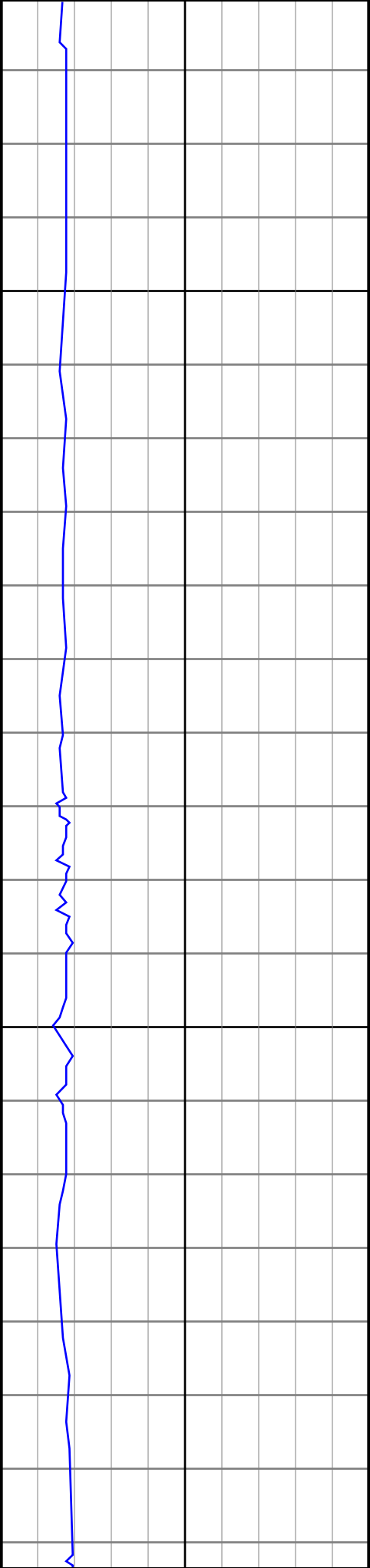
3800



#34 MD(3665.00) Inc(16.2) Azm(111.4) TVD(3640.47)
VS(-30.07) NS(-67.81) EW(256.23)

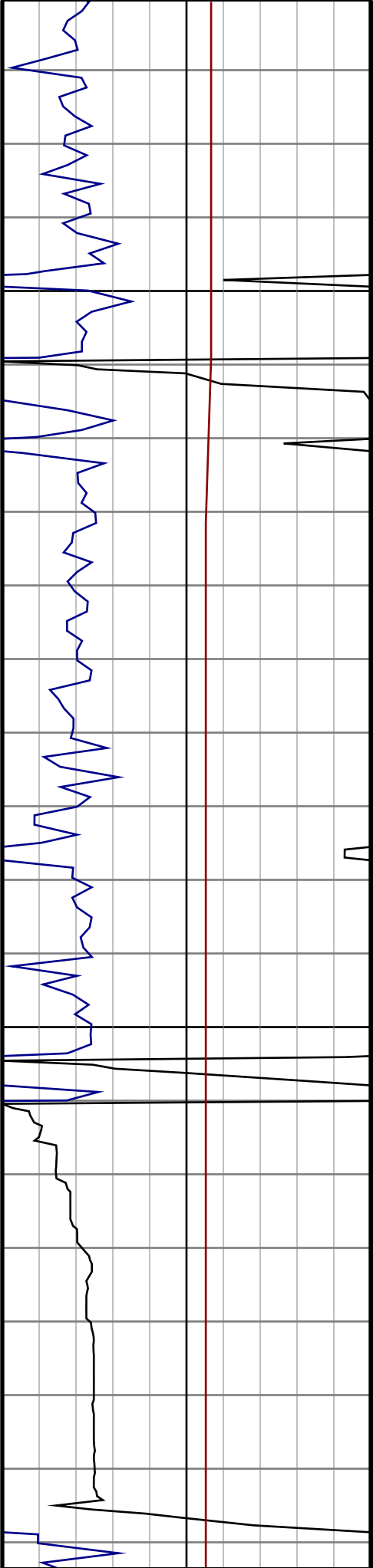
#35 MD(3760.00) Inc(20.1) Azm(110.1) TVD(3730.72)
VS(-36.41) NS(-78.26) EW(283.91)

#36 MD(3855.00) Inc(22.9) Azm(109.4) TVD(3819.11)
VS(-43.30) NS(-90.02) EW(316.68)



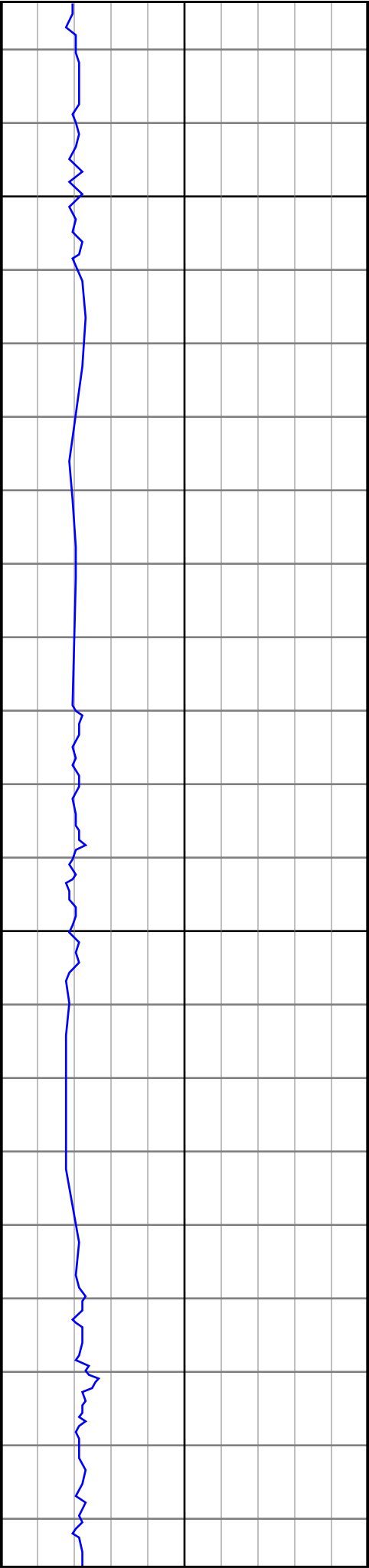
3900

4000



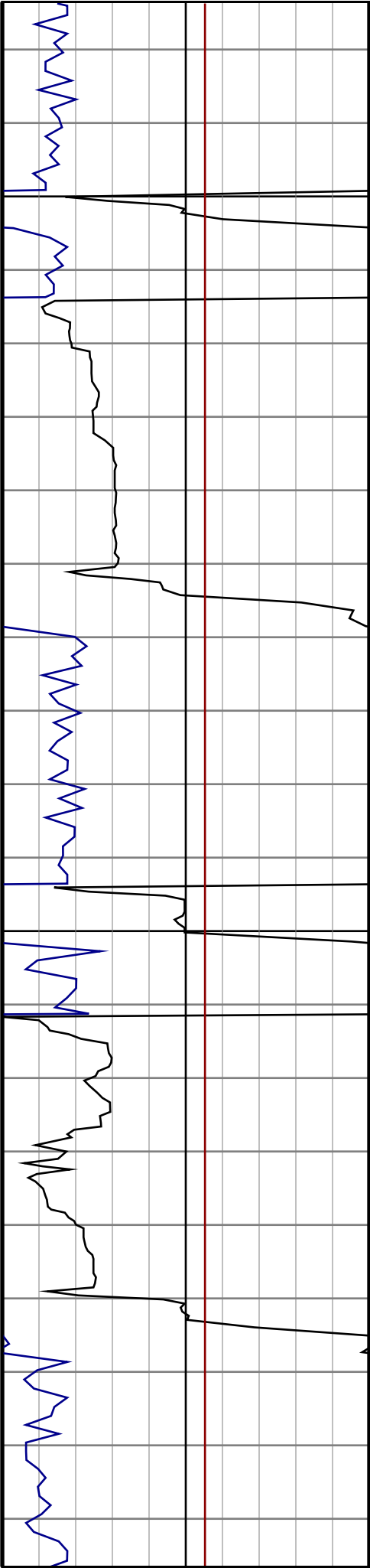
#37 MD(3950.00) Inc(25.5) Azm(109.8) TVD(3905.75)
VS(-50.93) NS(-103.08) EW(353.36)

#38 MD(4045.00) Inc(23.6) Azm(109.8) TVD(3992.16)
VS(-58.79) NS(-116.45) EW(390.50)



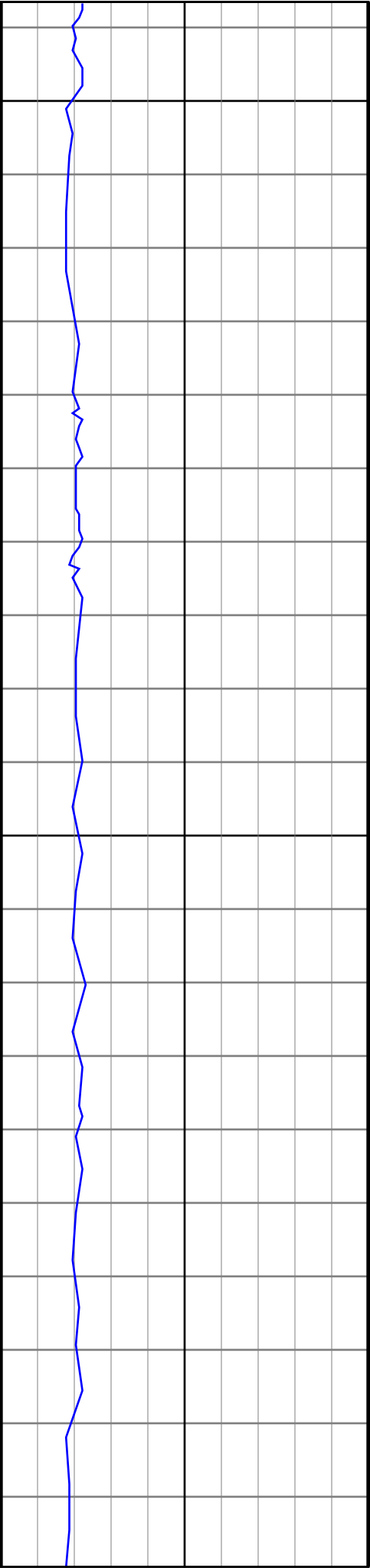
4100

4200



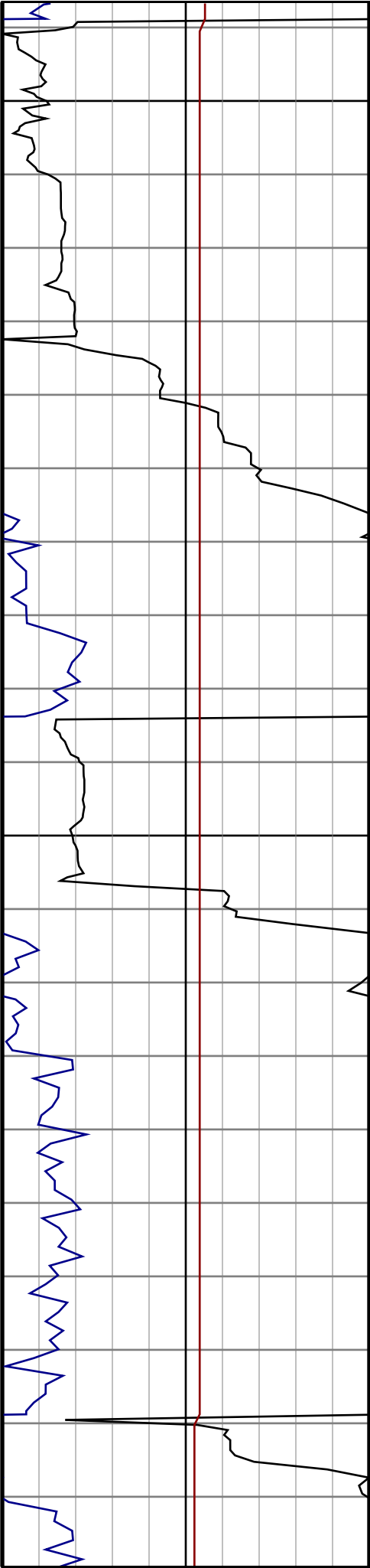
#39 MD(4140.00) Inc(20.6) Azm(105.6) TVD(4080.17)
VS(-64.70) NS(-127.39) EW(424.50)

#40 MD(4236.00) Inc(20.1) Azm(105.7) TVD(4170.18)
VS(-68.97) NS(-136.40) EW(456.64)



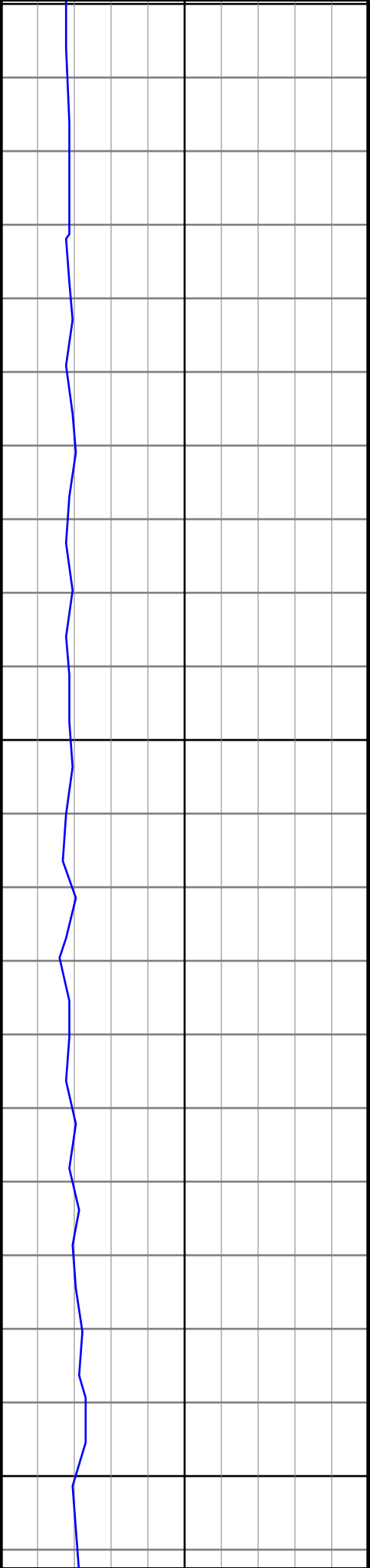
4300

4400



#41 MD(4331.00) Inc(16.5) Azm(102.7) TVD(4260.36)
VS(-72.10) NS(-143.78) EW(485.53)

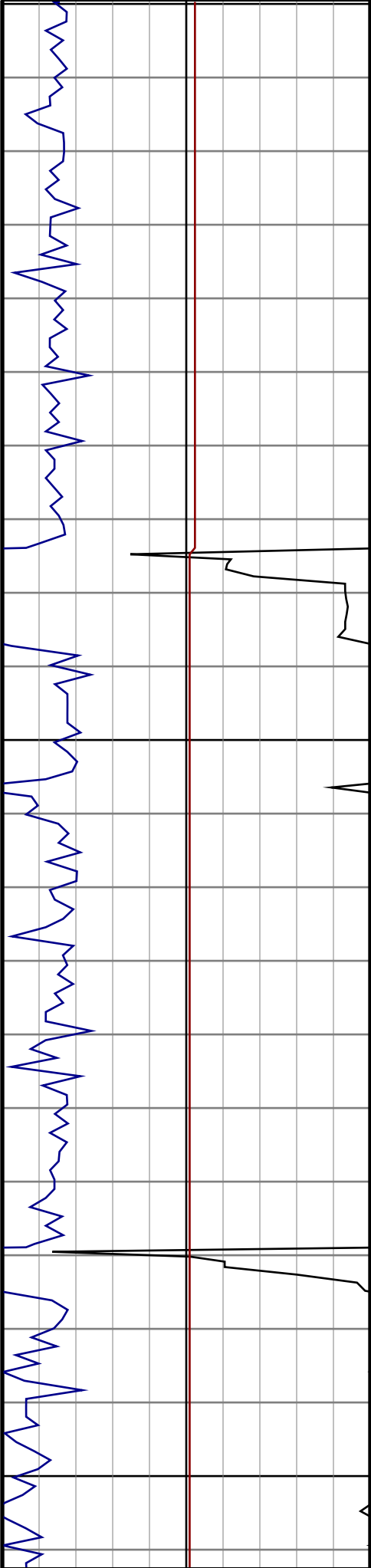
#42 MD(4426.00) Inc(13.5) Azm(98.9) TVD(4352.12)
VS(-73.25) NS(-148.47) EW(509.65)



4500

4600

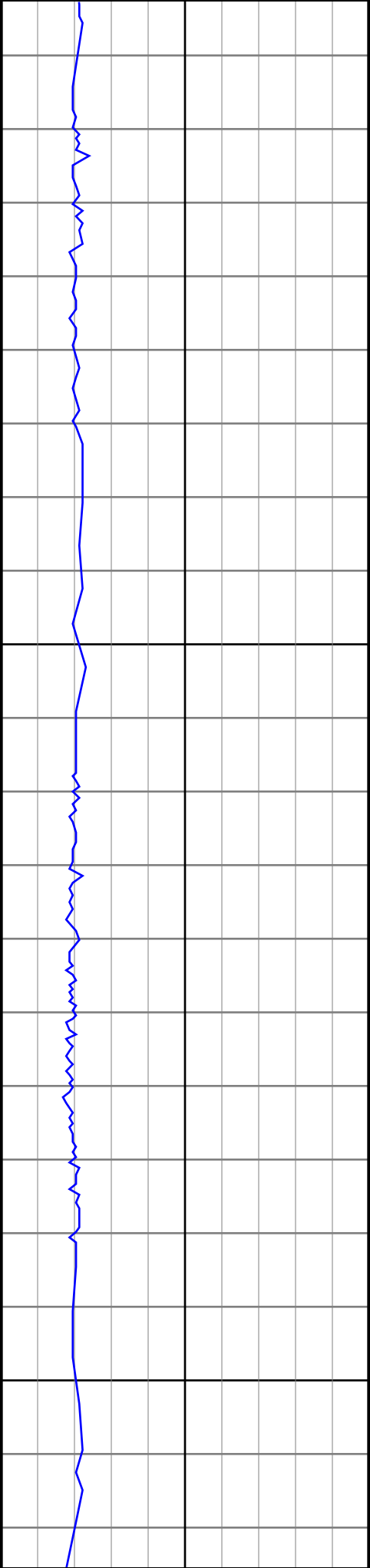
4700



#43 MD(4521.00) Inc(12.0) Azm(97.1) TVD(4444.77)
VS(-73.15) NS(-151.40) EW(530.41)

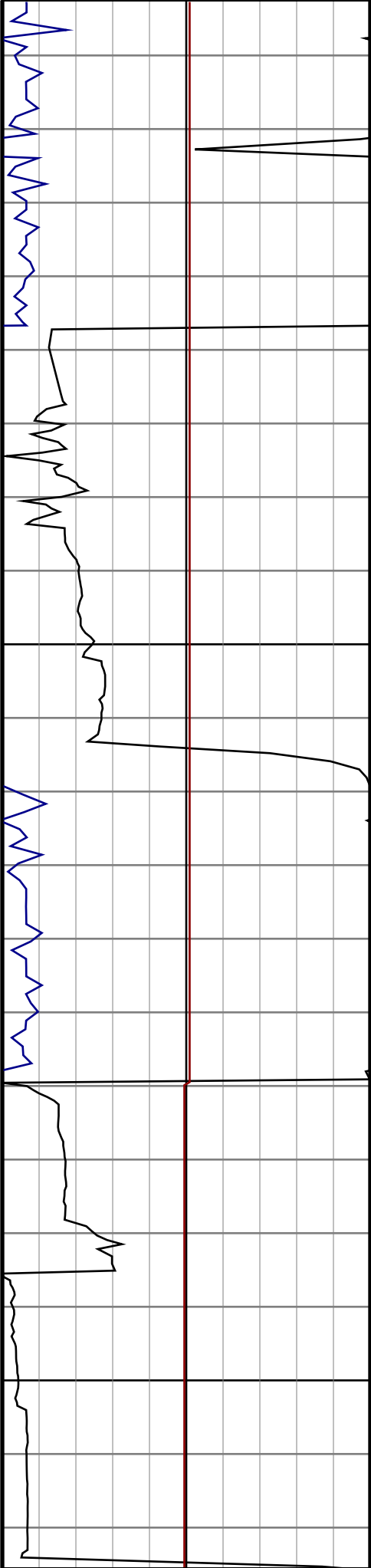
#44 MD(4616.00) Inc(10.7) Azm(97.3) TVD(4537.91)
VS(-72.79) NS(-153.74) EW(548.95)

#45 MD(4711.00) Inc(8.8) Azm(91.8) TVD(4631.54)
VS(-71.81) NS(-155.09) EW(564.97)



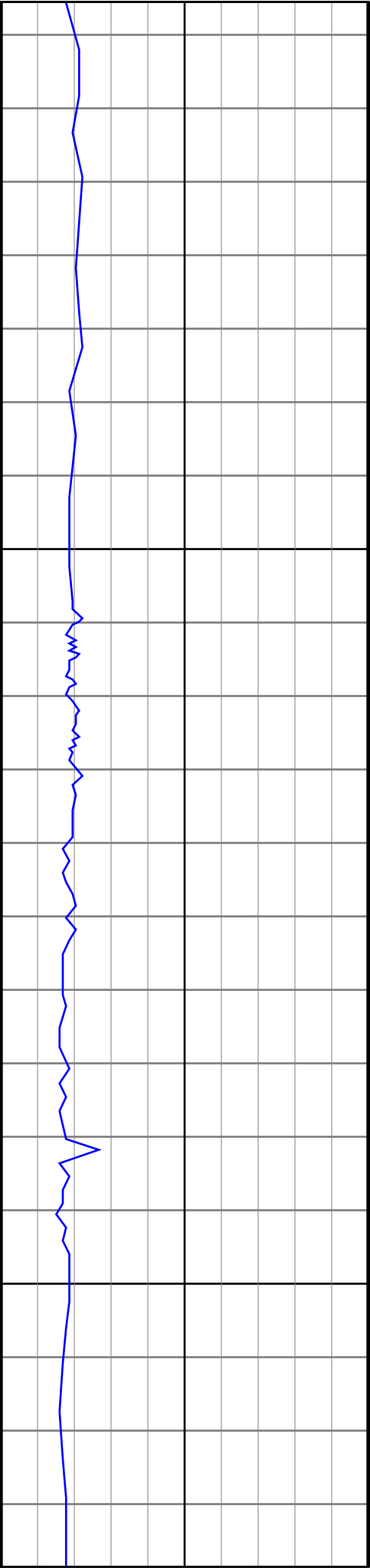
4800

4900



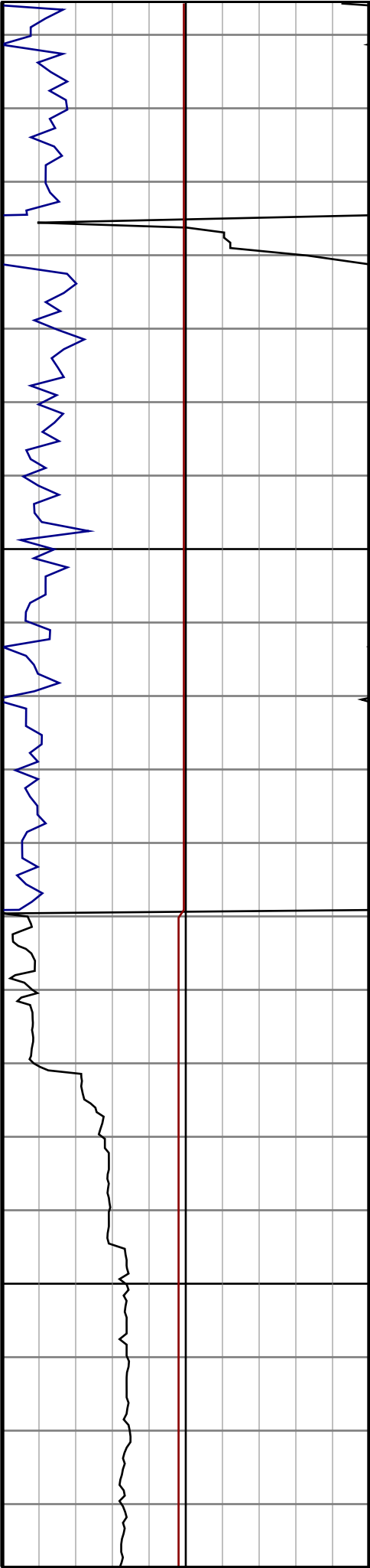
#46 MD(4807.00) Inc(6.5) Azm(90.3) TVD(4726.68)
VS(-70.22) NS(-155.35) EW(577.74)

#47 MD(4902.00) Inc(7.6) Azm(93.4) TVD(4820.96)
VS(-68.93) NS(-155.75) EW(589.39)



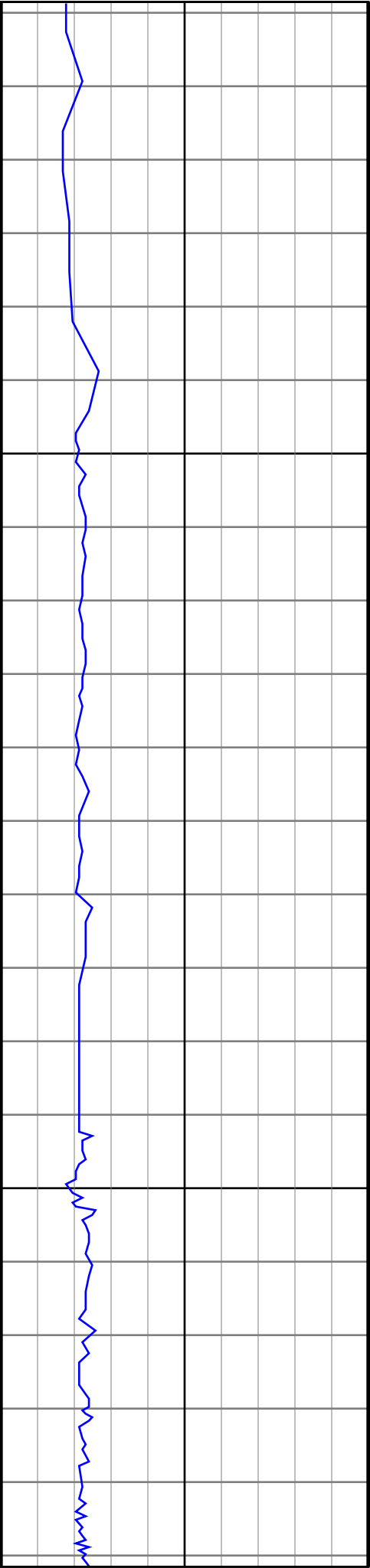
5000

5100



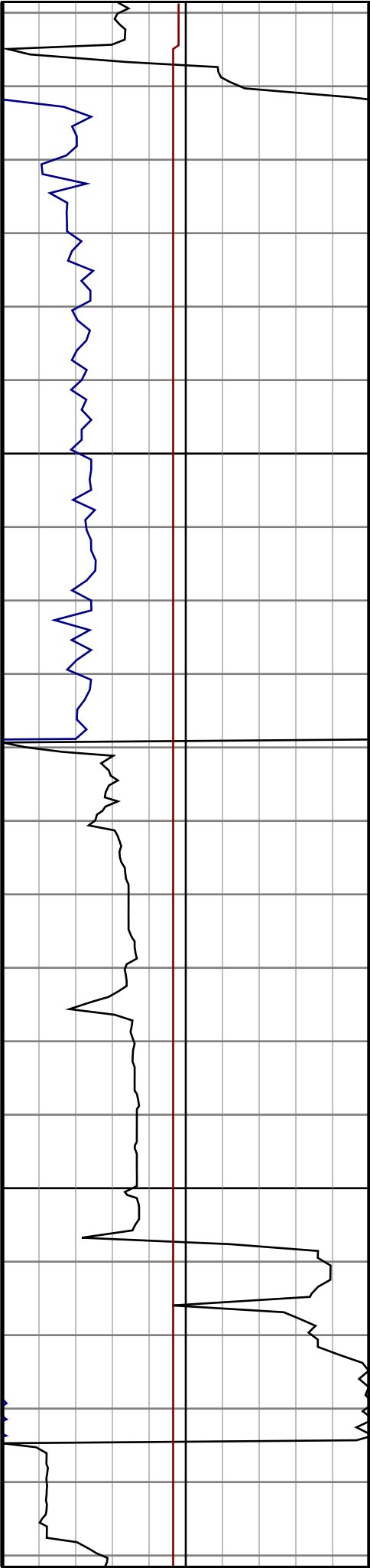
#48 MD(4997.00) Inc(6.9) Azm(90.8) TVD(4915.20)
VS(-67.65) NS(-156.21) EW(601.37)

#49 MD(5092.00) Inc(7.7) Azm(99.2) TVD(5009.43)
VS(-67.00) NS(-157.30) EW(613.36)



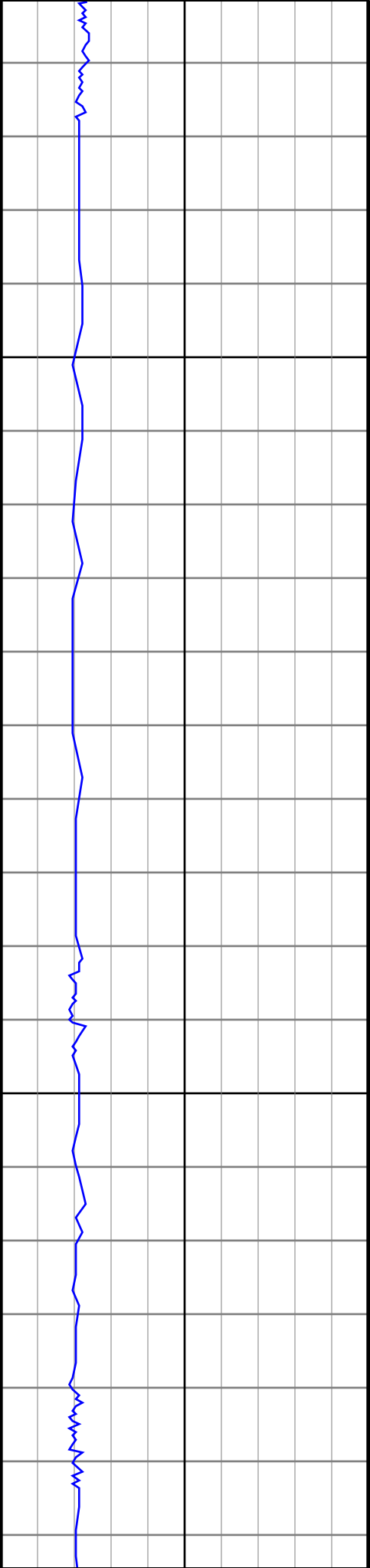
5200

5300



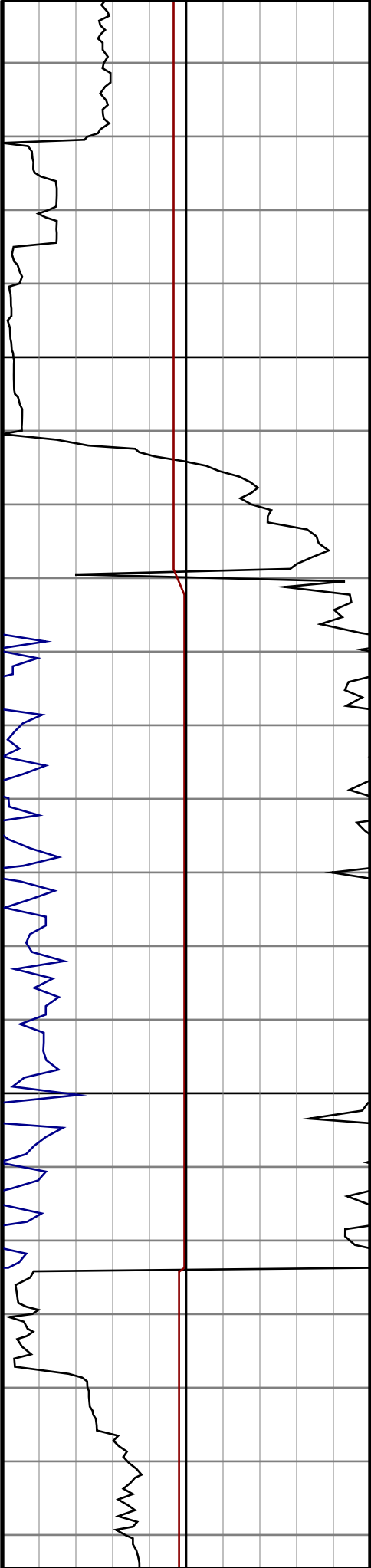
#50 MD(5187.00) Inc(7.6) Azm(101.7) TVD(5103.59)
VS(-67.47) NS(-159.59) EW(625.79)

#51 MD(5282.00) Inc(6.5) Azm(104.3) TVD(5197.87)
VS(-68.41) NS(-162.20) EW(637.15)



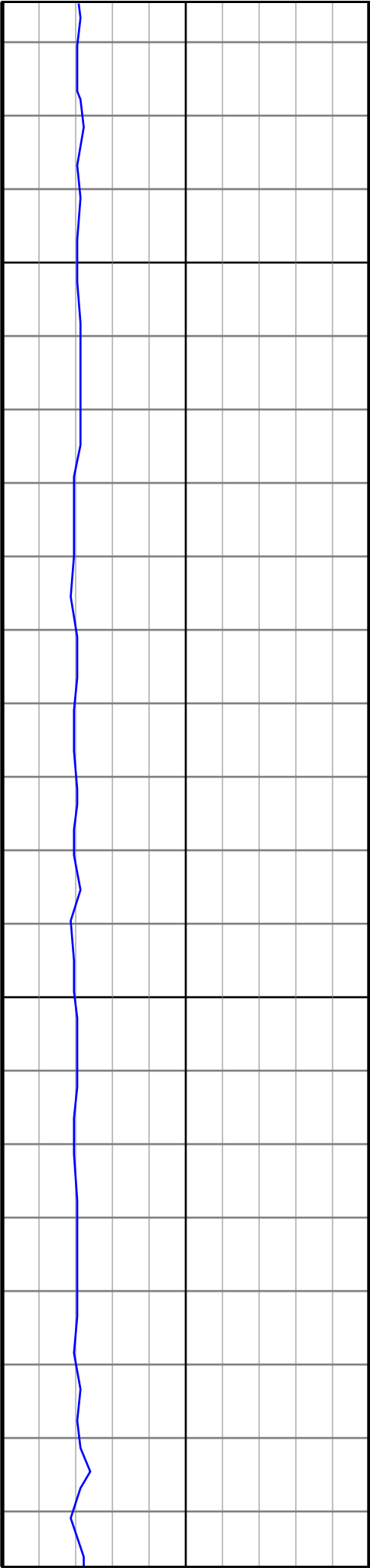
5400

5500



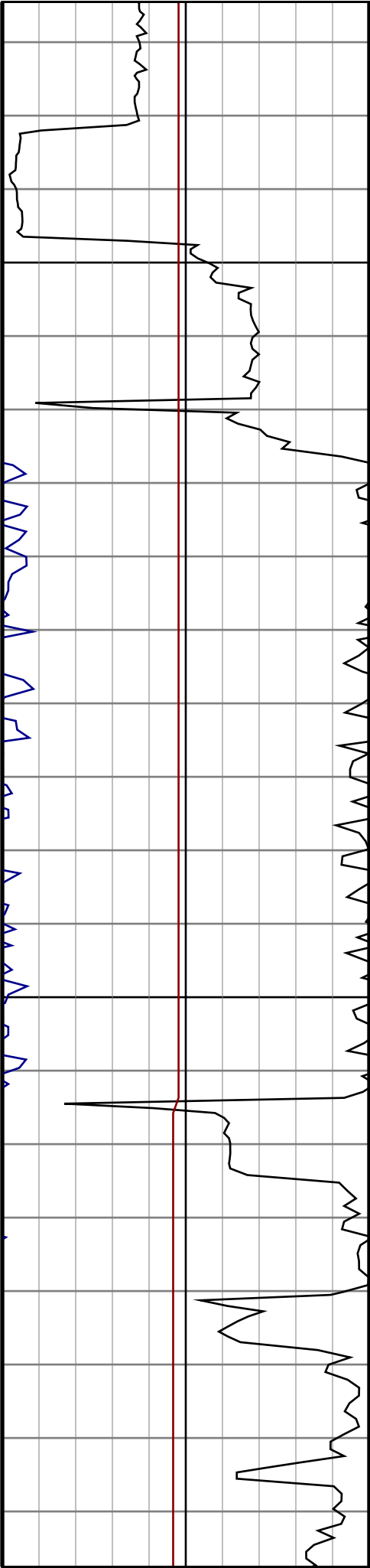
#52 MD(5378.00) Inc(5.1) Azm(108.9) TVD(5293.37)
VS(-69.76) NS(-164.92) EW(646.46)

#53 MD(5473.00) Inc(5.1) Azm(108.2) TVD(5388.00)
VS(-71.26) NS(-167.61) EW(654.46)



5600

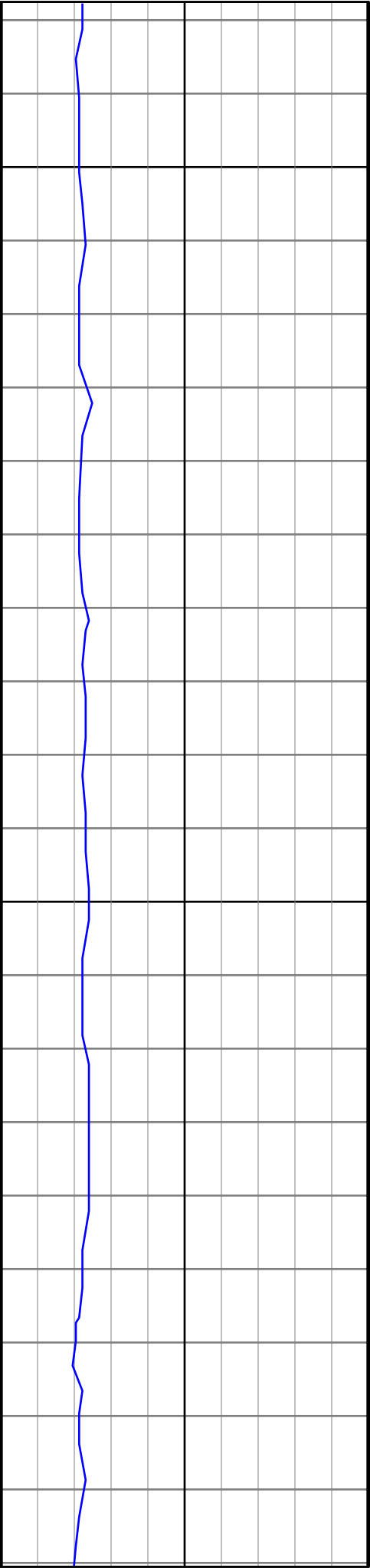
5700



#54 MD(5568.00) Inc(4.2) Azm(115.8) TVD(5482.68)
VS(-73.03) NS(-170.44) EW(661.61)

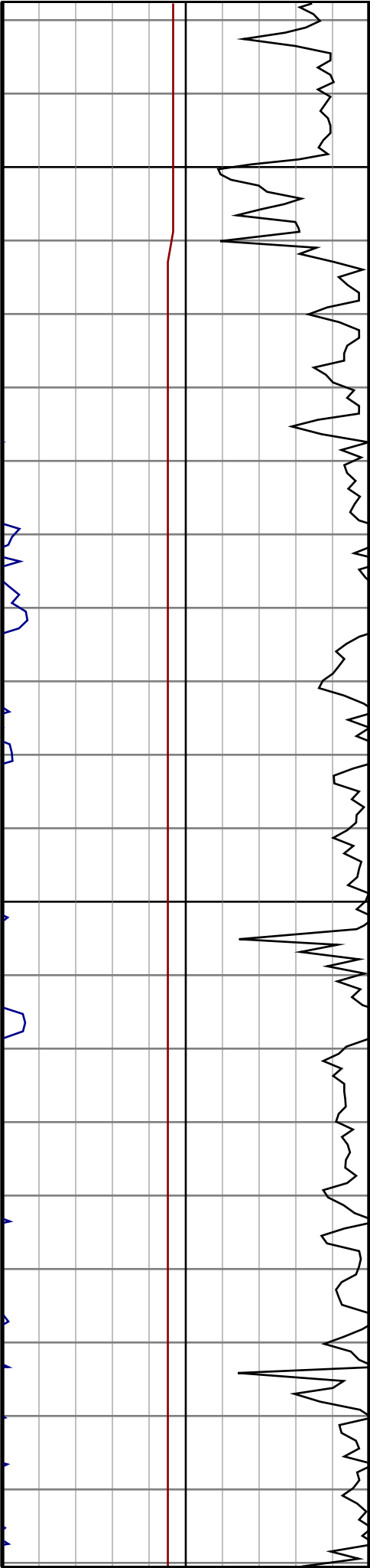
#55 MD(5663.00) Inc(4.4) Azm(118.0) TVD(5577.42)
VS(-75.30) NS(-173.67) EW(667.96)

#56 MD(5758.00) Inc(2.8) Azm(119.6) TVD(5672.23)
VS(-77.37) NS(-176.52) EW(673.19)



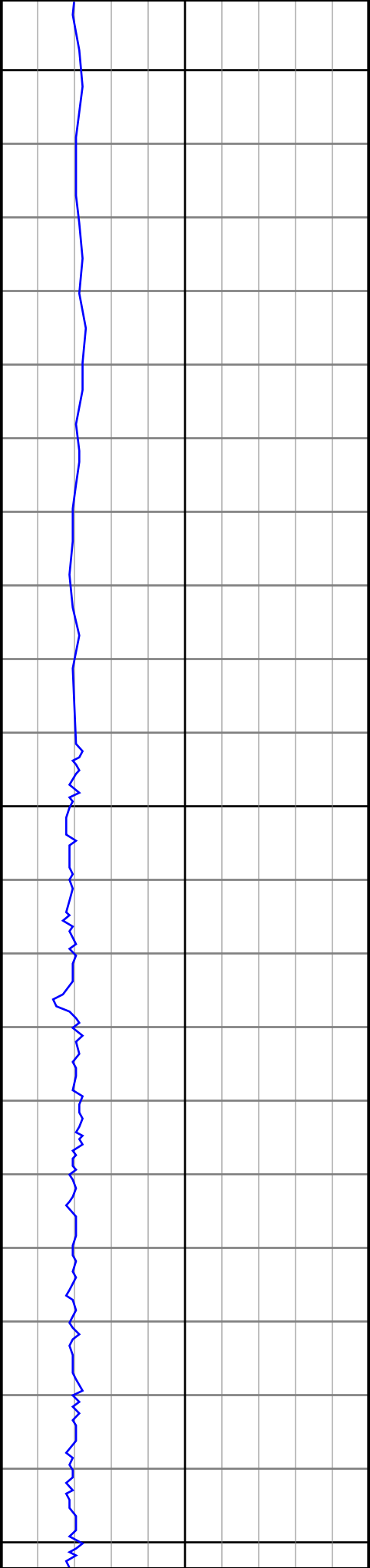
5800

5900



#57 MD(5853.00) Inc(2.3) Azm(125.4) TVD(5767.13)
VS(-79.08) NS(-178.77) EW(676.76)

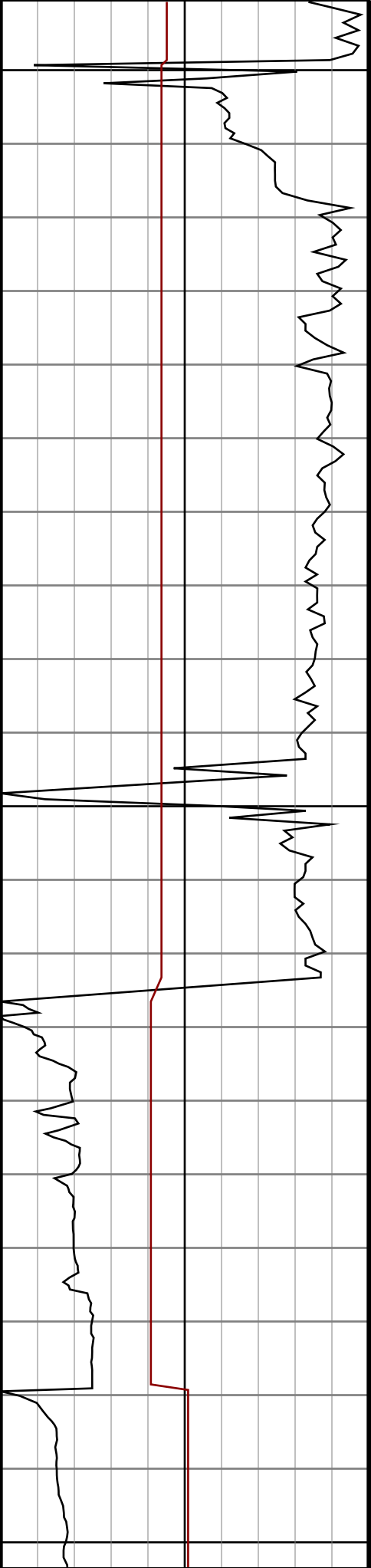
#58 MD(5949.00) Inc(1.8) Azm(136.0) TVD(5863.07)
VS(-80.88) NS(-180.97) EW(679.38)



6000

6100

6200

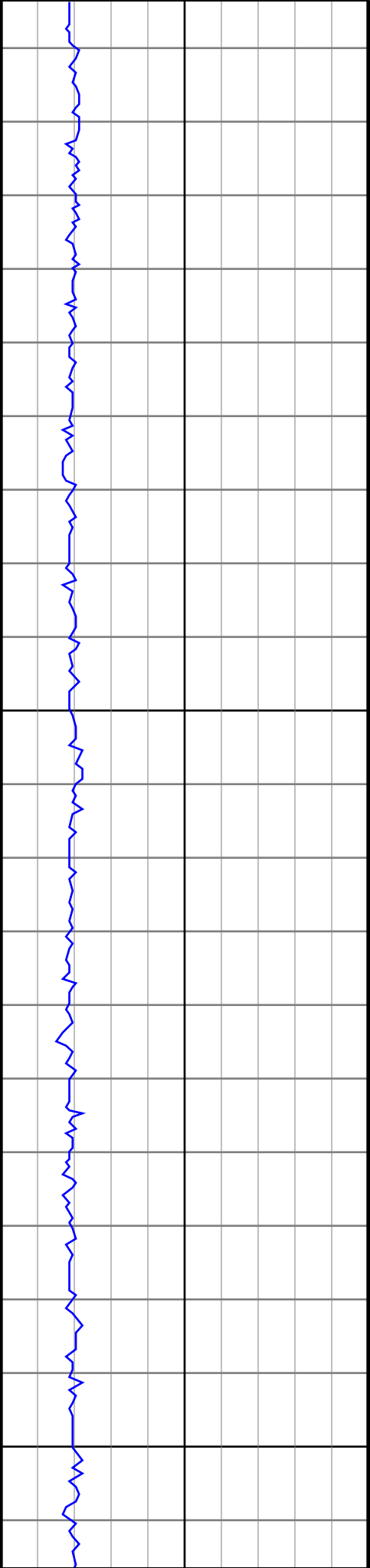


#59 MD(6044.00) Inc(1.2) Azm(151.3) TVD(5958.04)
VS(-82.59) NS(-182.92) EW(680.90)

#60 MD(6069.00) Inc(1.1) Azm(151.8) TVD(5983.03)
VS(-82.99) NS(-183.36) EW(681.13)

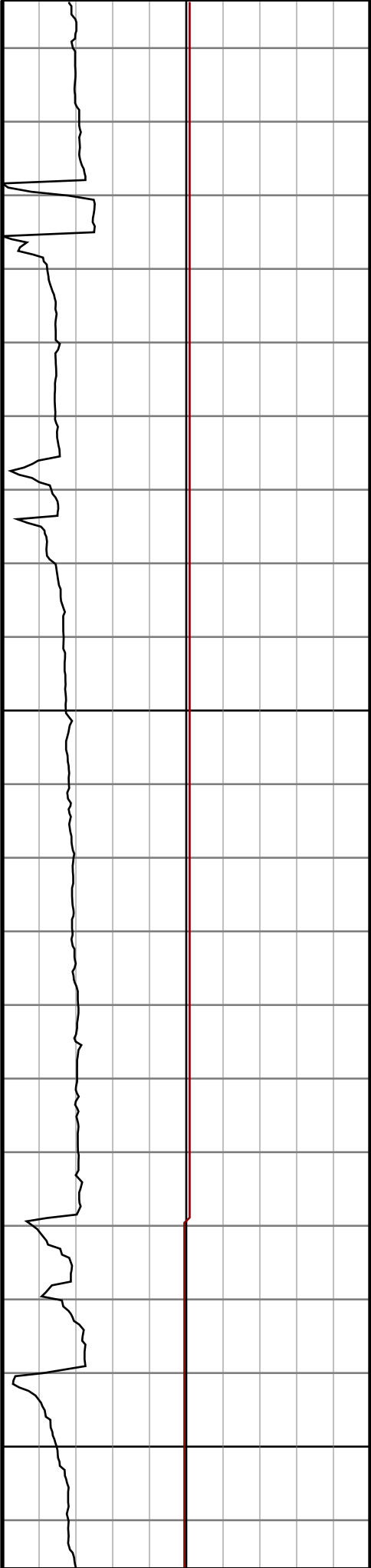
#61 MD(6133.00) Inc(0.1) Azm(257.9) TVD(6047.03)
VS(-83.51) NS(-183.91) EW(681.37)

#62 MD(6181.00) Inc(4.3) Azm(8.7) TVD(6094.98)
VS(-81.72) NS(-182.14) EW(681.60)



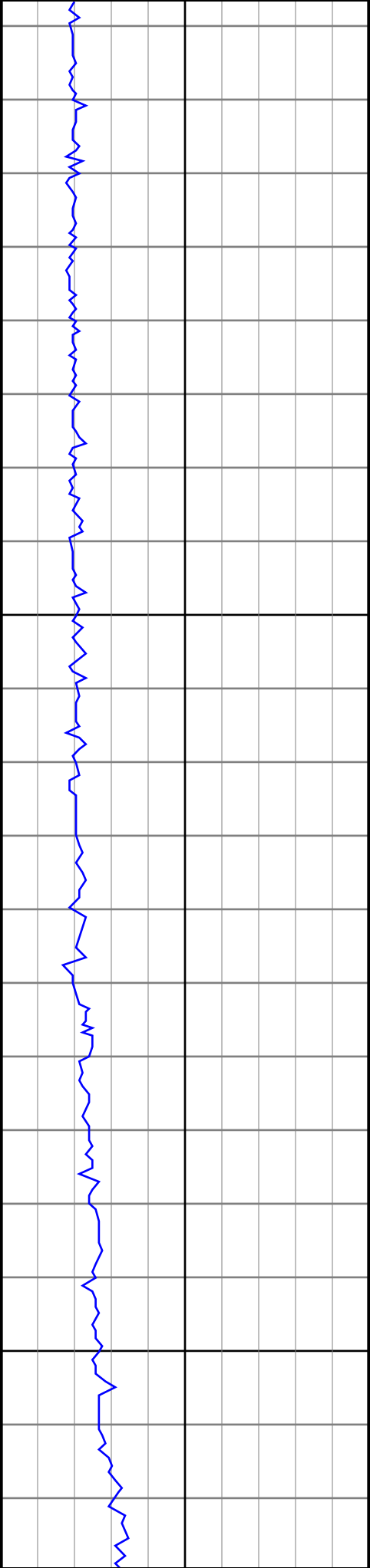
6300

6400



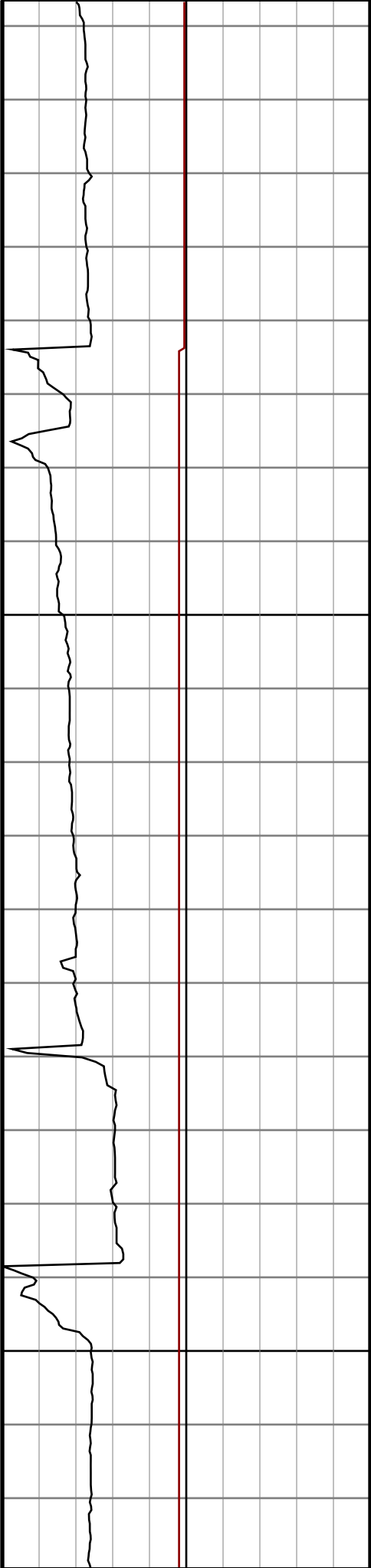
#63 MD(6228.00) Inc(8.4) Azm(14.7) TVD(6141.69)
VS(-76.54) NS(-177.08) EW(682.74)

#64 MD(6324.00) Inc(17.1) Azm(7.9) TVD(6235.23)
VS(-55.42) NS(-156.27) EW(686.47)



6500

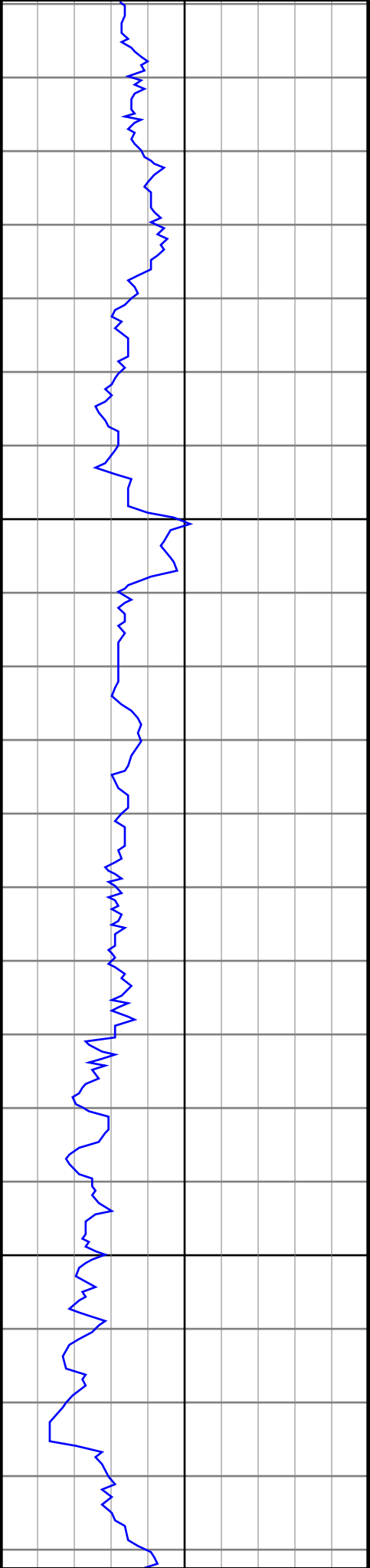
6600



#65 MD(6419.00) Inc(26.6) Azm(5.8) TVD(6323.31)
VS(-20.12) NS(-121.20) EW(690.54)

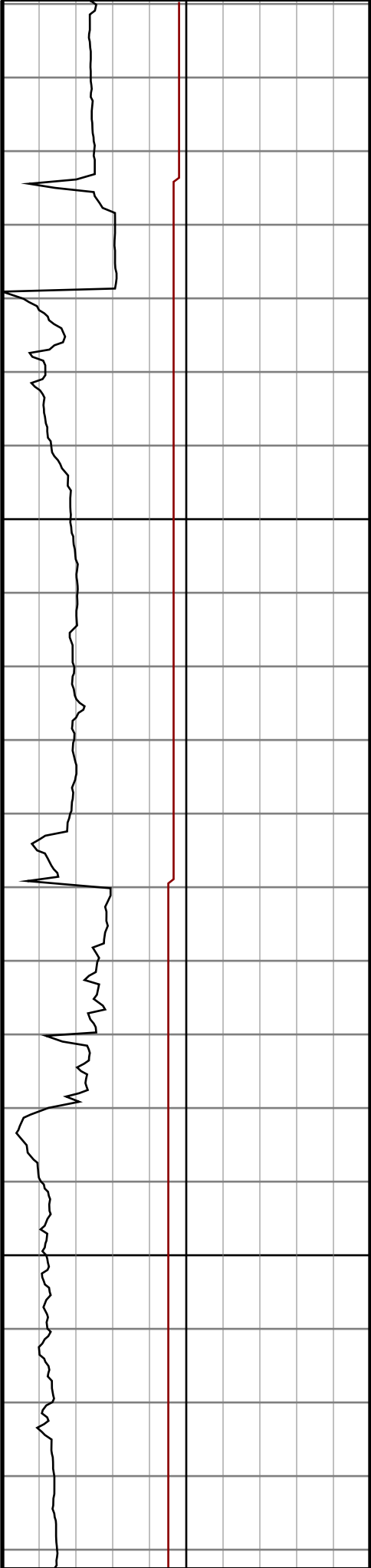
#66 MD(6514.00) Inc(37.7) Azm(5.4) TVD(6403.62)
VS(30.29) NS(-70.96) EW(695.44)

#67 MD(6609.00) Inc(43.9) Azm(6.1) TVD(6475.50)
VS(92.28) NS(-9.23) EW(701.68)



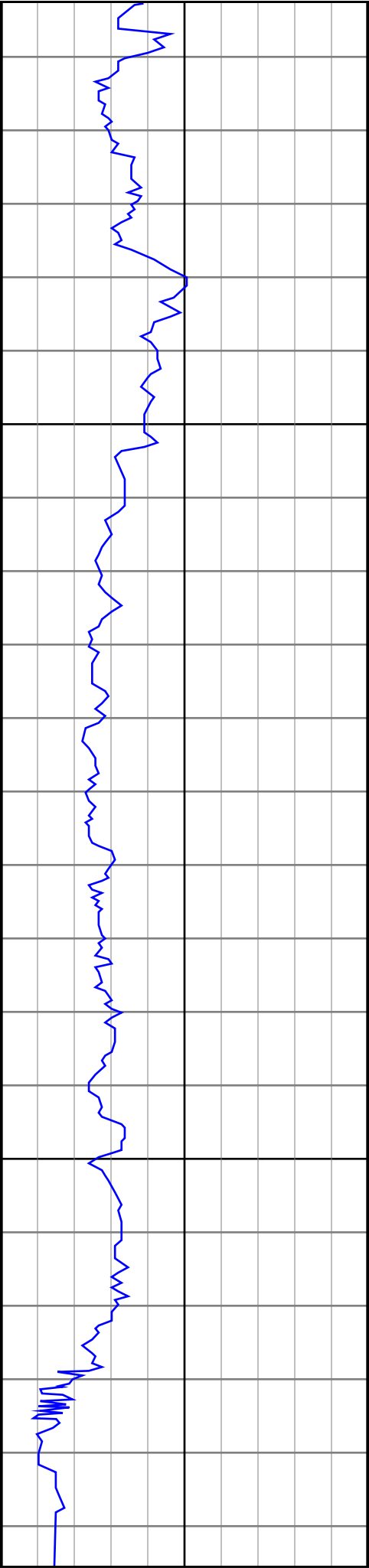
6700

6800



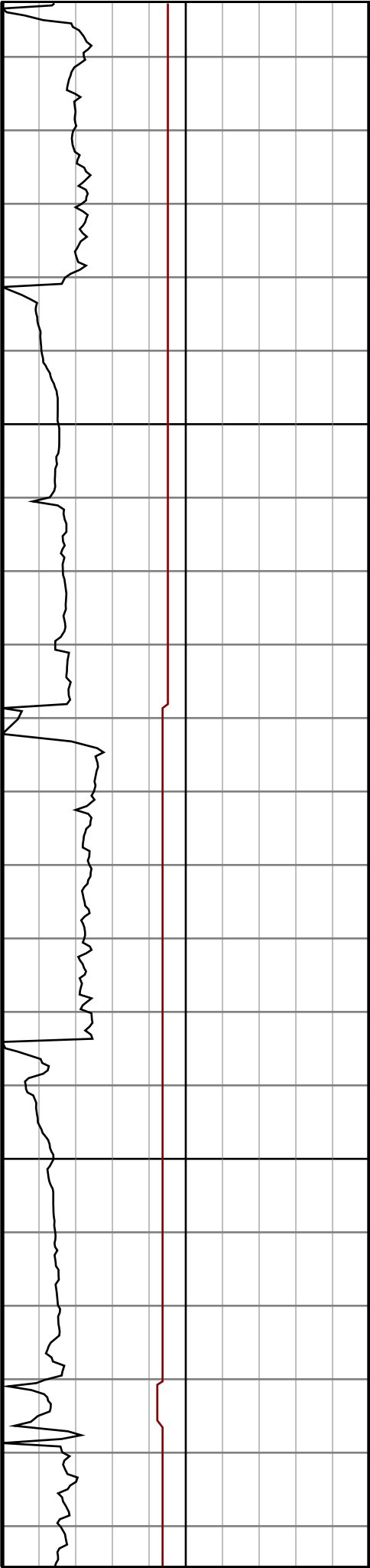
#68 MD(6704.00) Inc(54.3) Azm(4.7) TVD(6537.61)
VS(163.88) NS(62.16) EW(708.36)

#69 MD(6799.00) Inc(62.6) Azm(1.6) TVD(6587.29)
VS(244.42) NS(142.91) EW(712.71)



6900

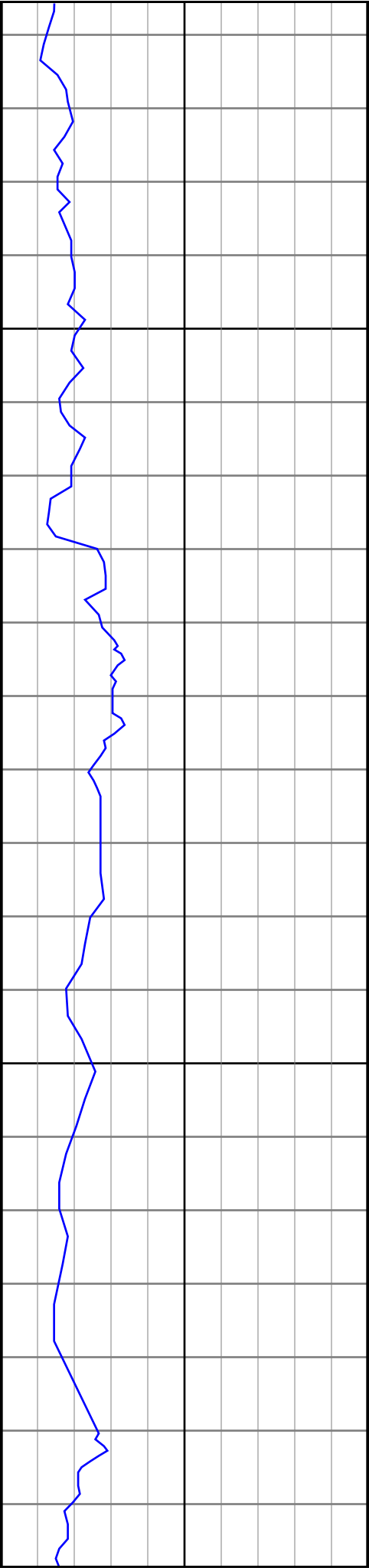
7000



#70 MD(6895.00) Inc(71.2) Azm(0.7) TVD(6624.92)
VS(331.95) NS(231.11) EW(714.46)

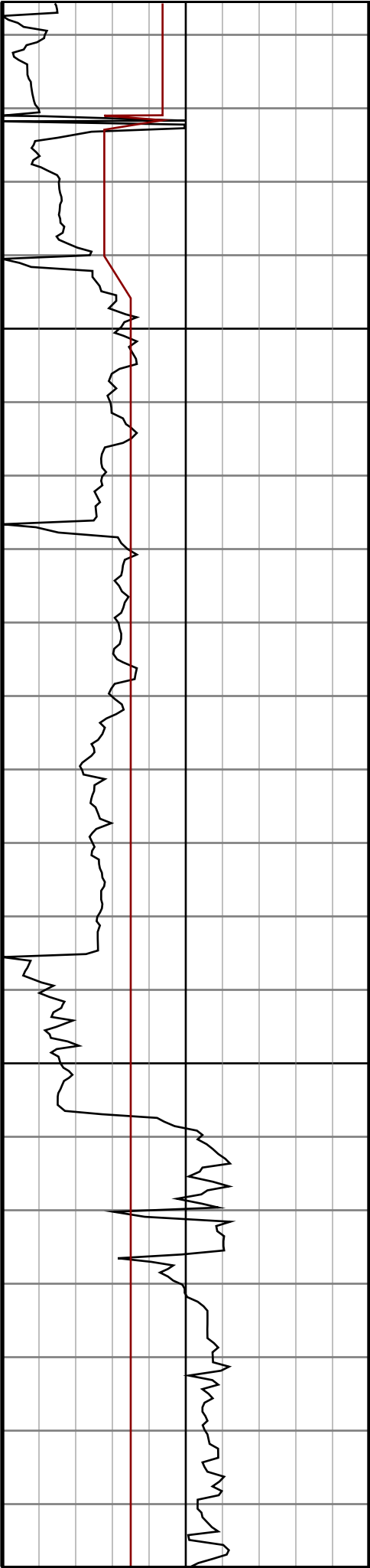
#71 MD(6990.00) Inc(79.2) Azm(0.5) TVD(6649.16)
VS(422.89) NS(322.88) EW(715.41)

#72 MD(7024.00) Inc(83.4) Azm(0.7) TVD(6654.31)
VS(456.19) NS(356.48) EW(715.77)



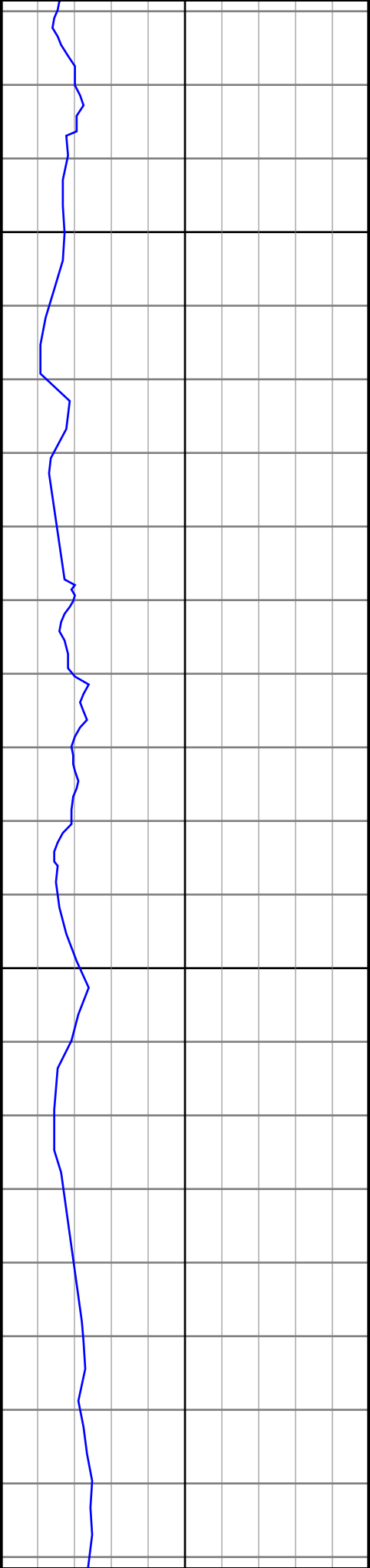
7100

7200



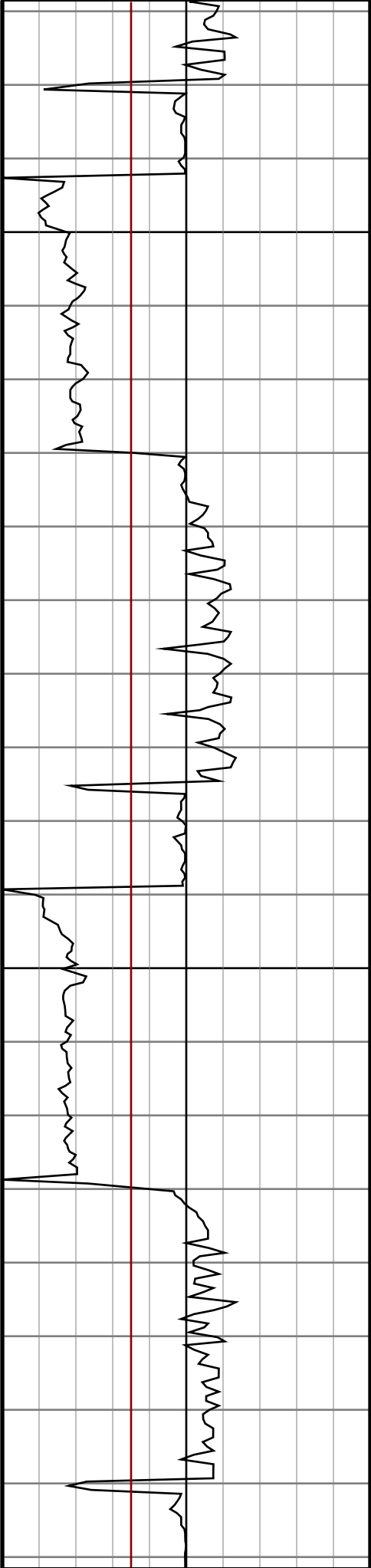
#73 MD(7133.00) Inc(85.2) Azm(0.8) TVD(6665.13)
VS(563.70) NS(464.93) EW(717.19)

#74 MD(7229.00) Inc(85.5) Azm(1.3) TVD(6672.91)
VS(658.62) NS(560.60) EW(718.94)



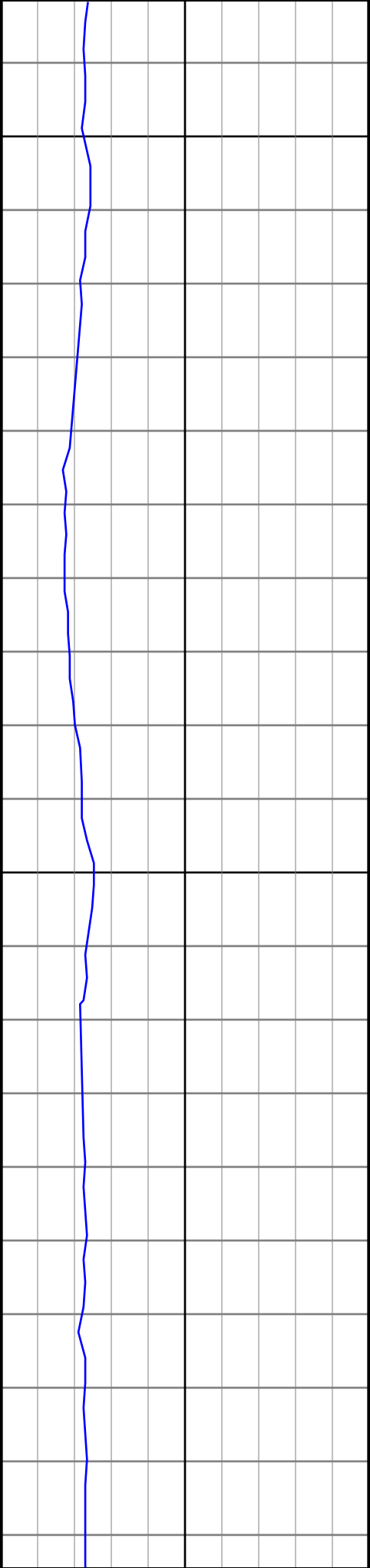
7300

7400



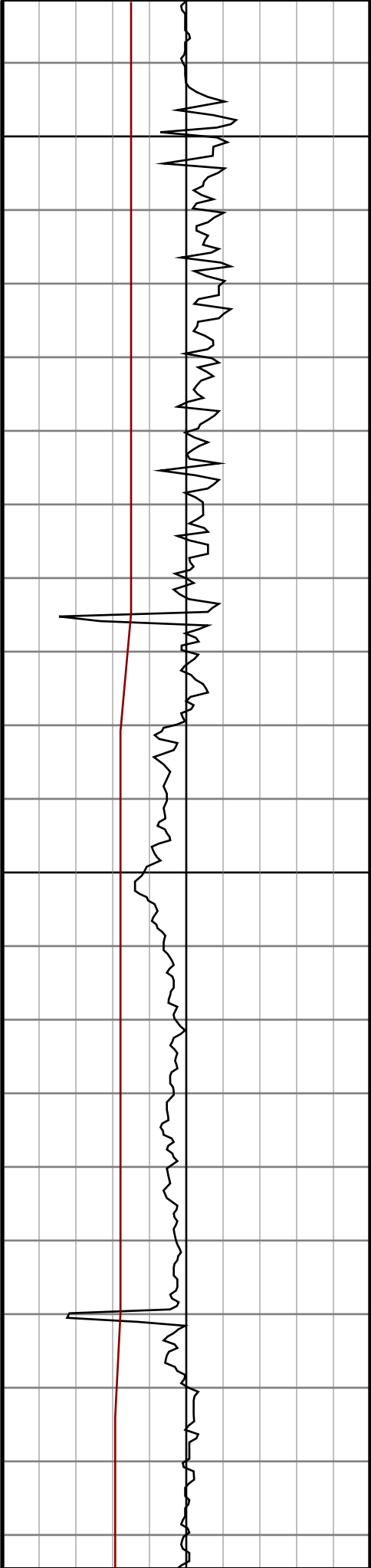
#75 MD(7324.00) Inc(86.7) Azm(359.6) TVD(6679.38)
VS(752.50) NS(655.37) EW(719.68)

#76 MD(7419.00) Inc(89.0) Azm(358.0) TVD(6682.94)
VS(846.12) NS(750.27) EW(717.69)



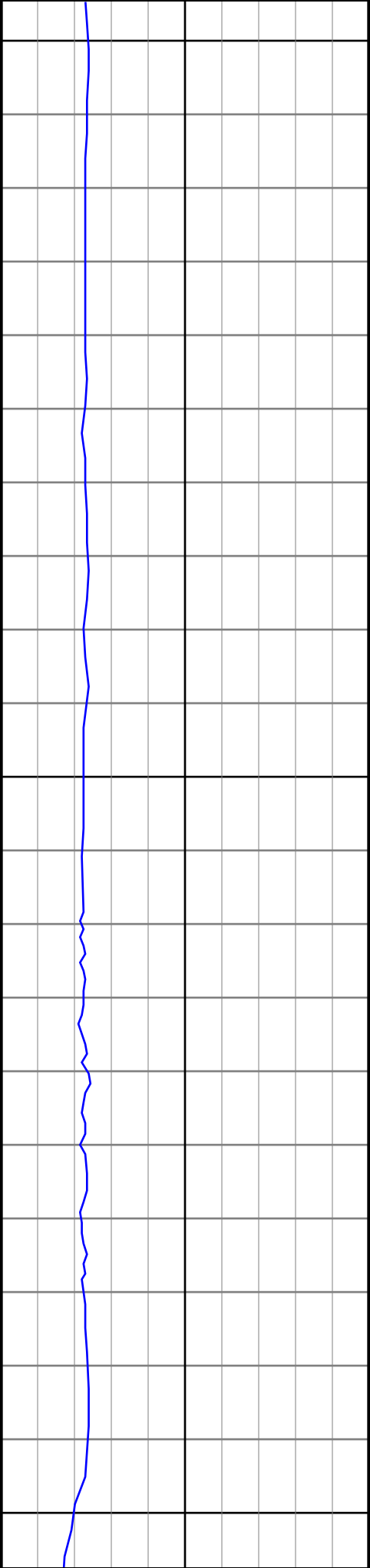
7500

7600



#77 MD(7514.00) Inc(91.3) Azm(357.6) TVD(6682.69)
VS(939.52) NS(645.19) EW(714.05)

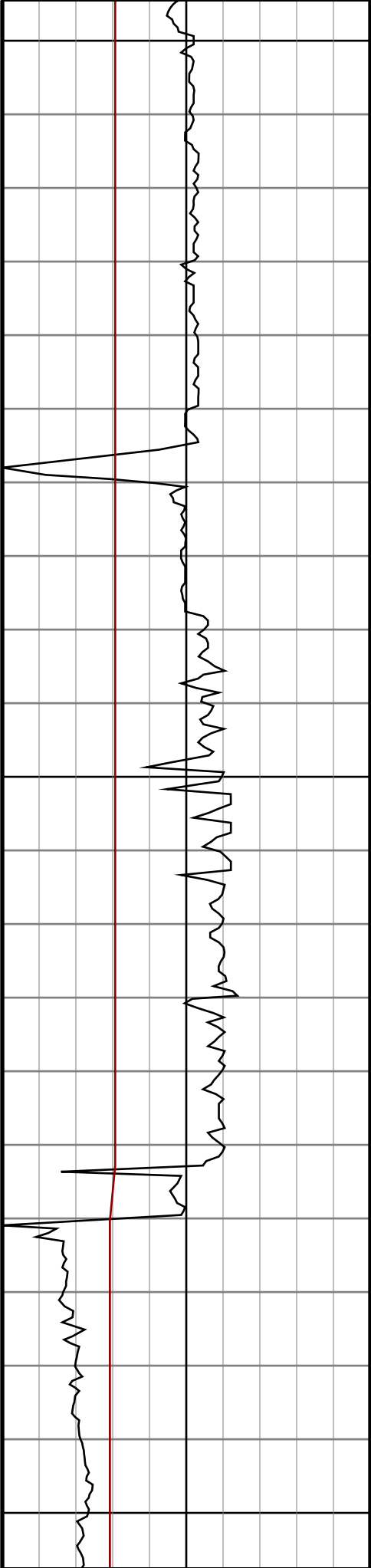
#78 MD(7609.00) Inc(89.0) Azm(356.2) TVD(6682.44)
VS(1032.63) NS(940.05) EW(708.91)



7700

7800

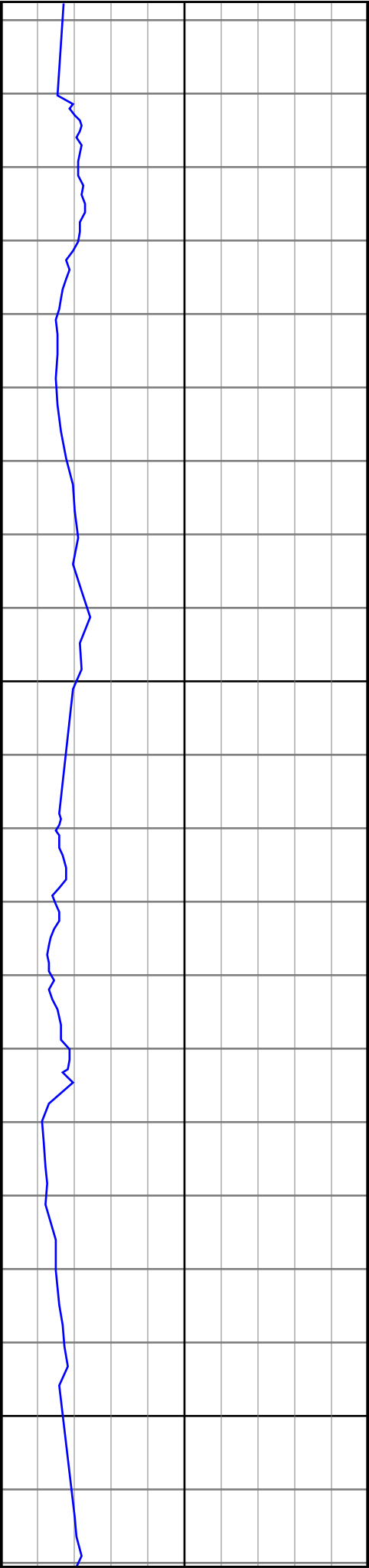
7900



#79 MD(7704.00) Inc(89.4) Azm(354.3) TVD(6683.77)
VS(1125.16) NS(1034.71) EW(701.05)

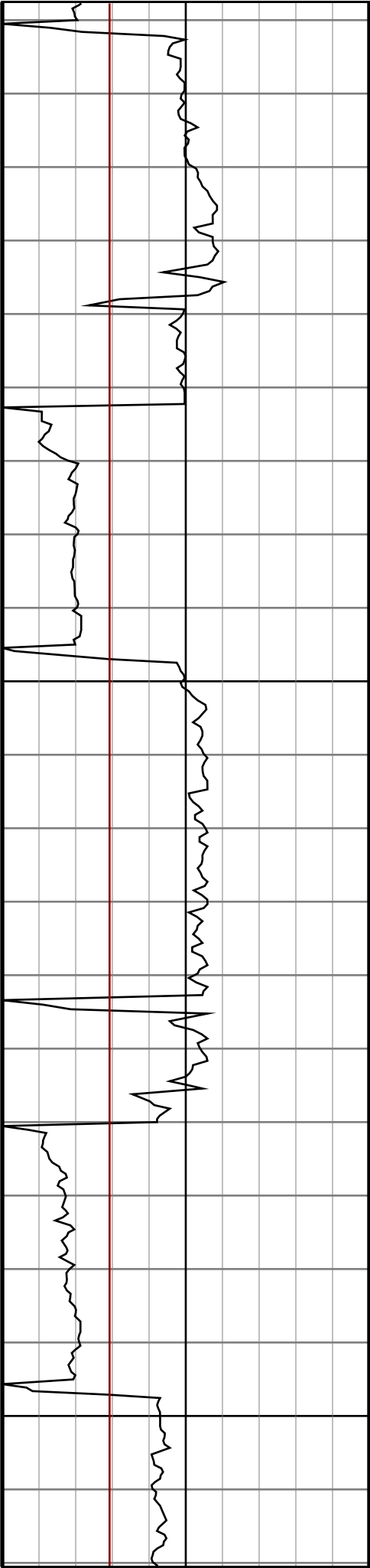
#80 MD(7800.00) Inc(89.4) Azm(352.9) TVD(6684.77)
VS(1218.01) NS(1130.10) EW(690.34)

#81 MD(7895.00) Inc(91.5) Azm(355.7) TVD(6684.03)
VS(1310.17) NS(1224.61) EW(680.91)



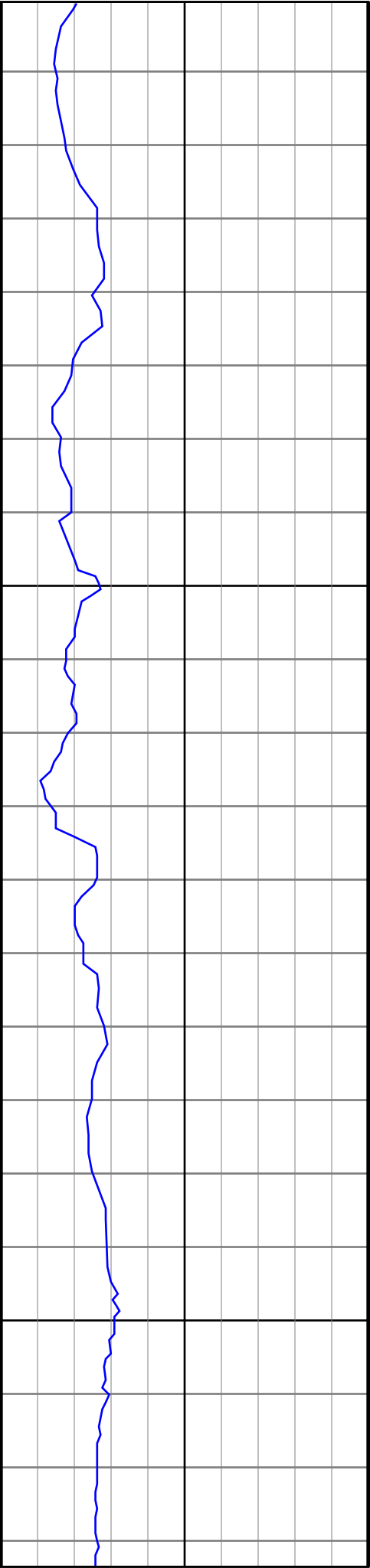
8000

8100



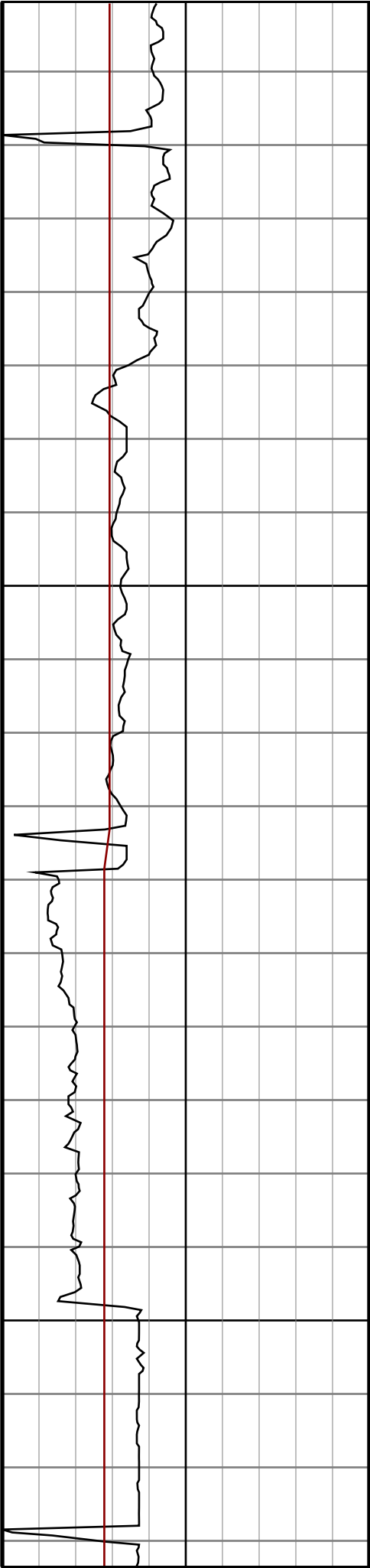
#82 MD(7990.00) Inc(94.3) Azm(358.5) TVD(6679.22)
VS(1403.22) NS(1319.35) EW(676.11)

#83 MD(8085.00) Inc(94.3) Azm(0.8) TVD(6672.10)
VS(1496.86) NS(1414.07) EW(675.53)



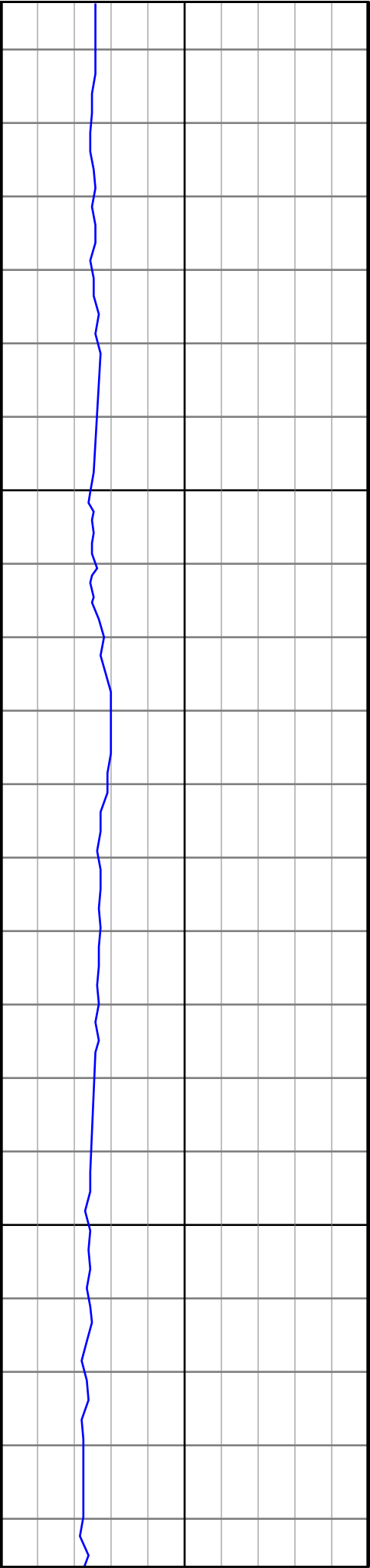
8200

8300



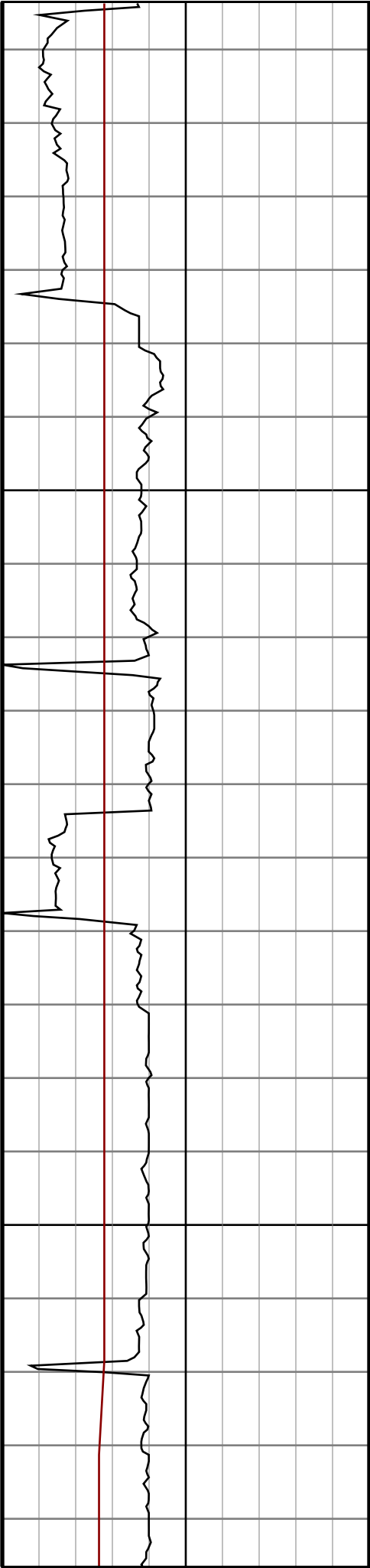
#84 MD(8181.00) Inc(95.5) Azm(0.6) TVD(6663.90)
VS(1591.67) NS(1509.72) EW(676.70)

#85 MD(8276.00) Inc(93.4) Azm(1.7) TVD(6656.53)
VS(1685.64) NS(1604.40) EW(678.60)



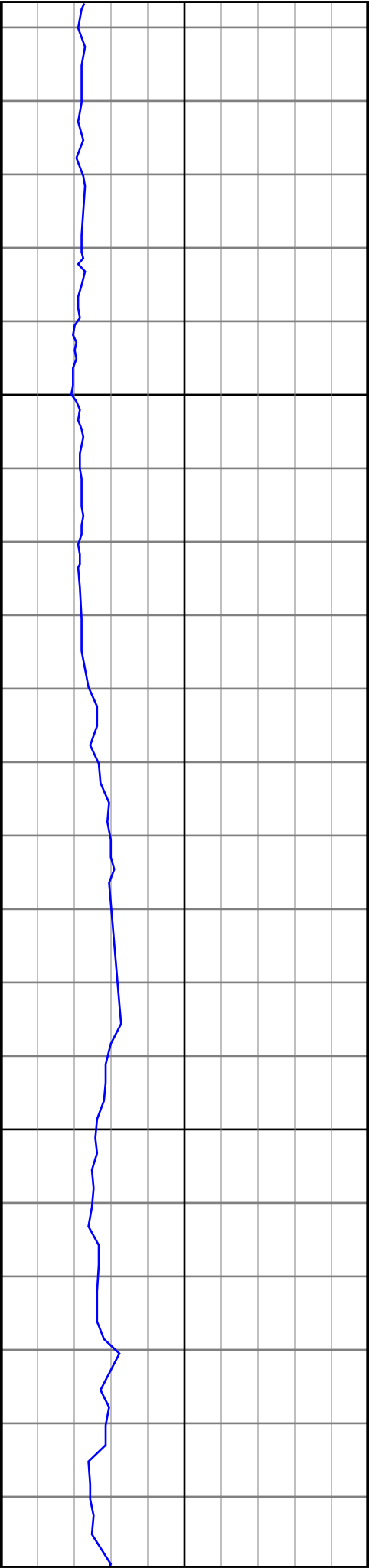
8400

8500



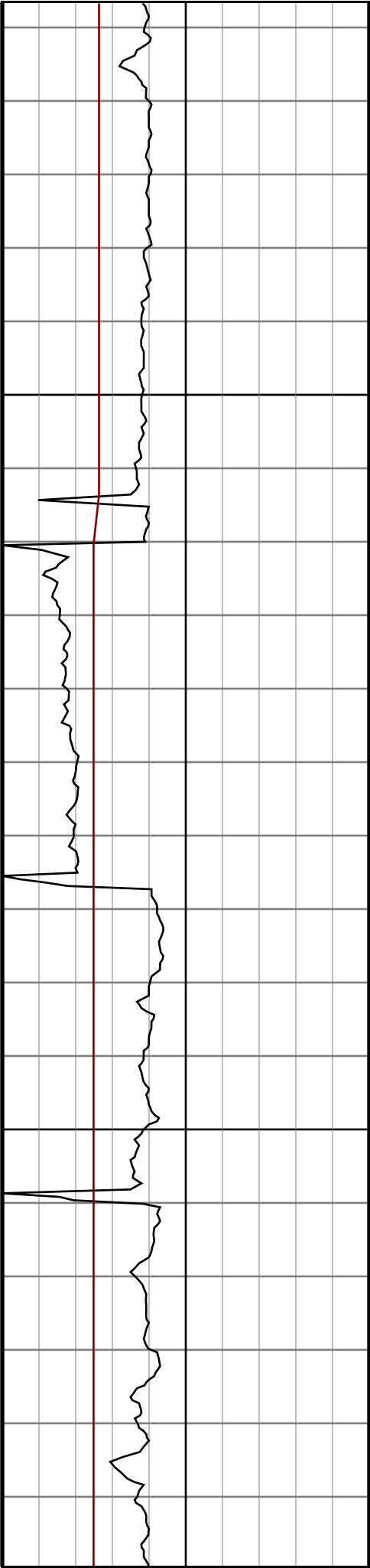
#86 MD(8371.00) Inc(89.7) Azm(3.3) TVD(6653.96)
VS(1780.09) NS(1699.26) EW(682.74)

#87 MD(8466.00) Inc(89.4) Azm(3.8) TVD(6654.70)
VS(1874.76) NS(1794.07) EW(688.63)



8600

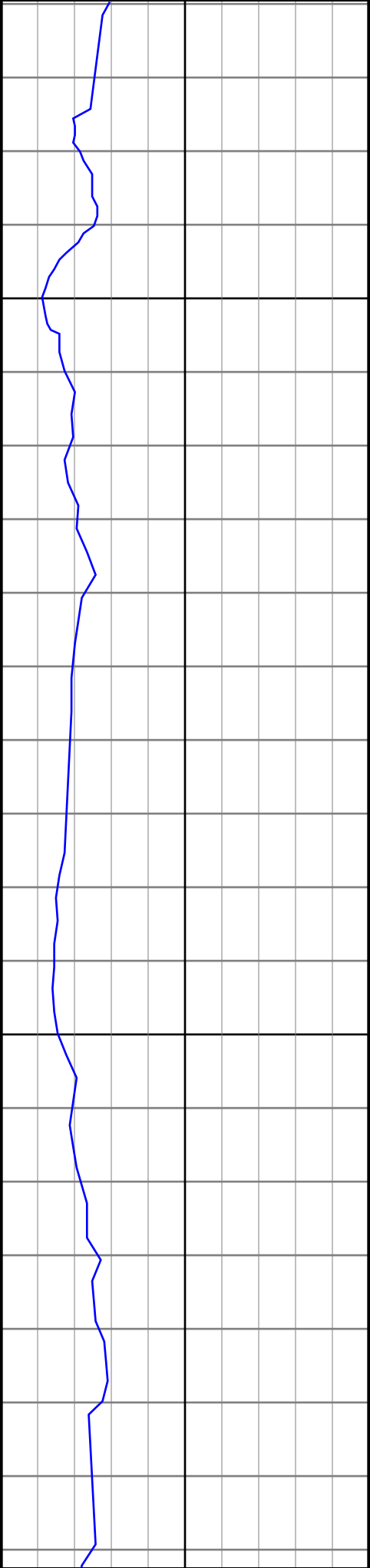
8700



#88 MD(8561.00) Inc(90.3) Azm(4.0) TVD(6654.95)
VS(1969.48) NS(1888.85) EW(695.09)

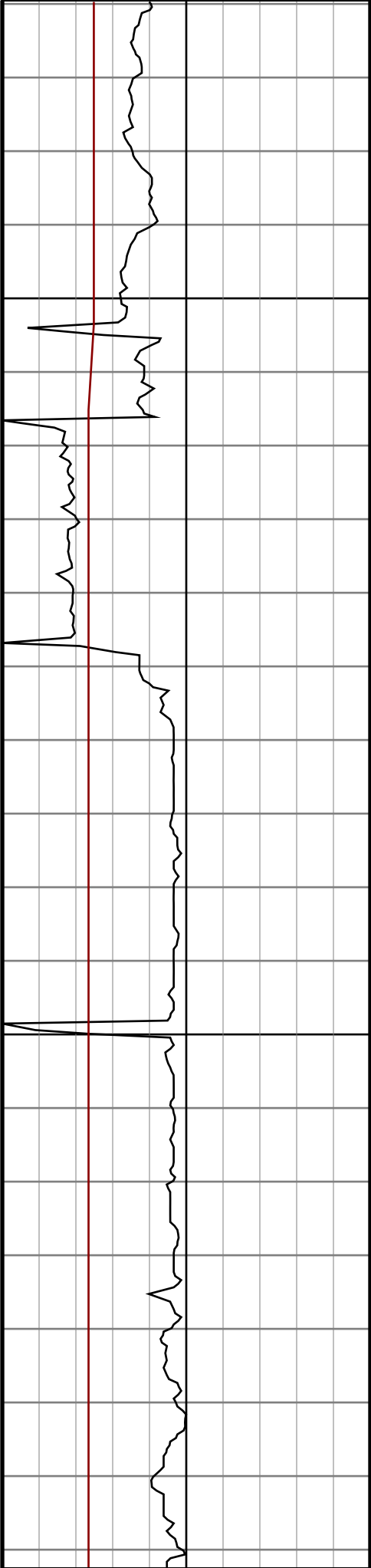
#89 MD(8656.00) Inc(86.6) Azm(2.9) TVD(6657.52)
VS(2064.09) NS(1983.63) EW(700.80)

#90 MD(8752.00) Inc(85.3) Azm(2.4) TVD(6664.30)
VS(2159.38) NS(2079.28) EW(705.23)



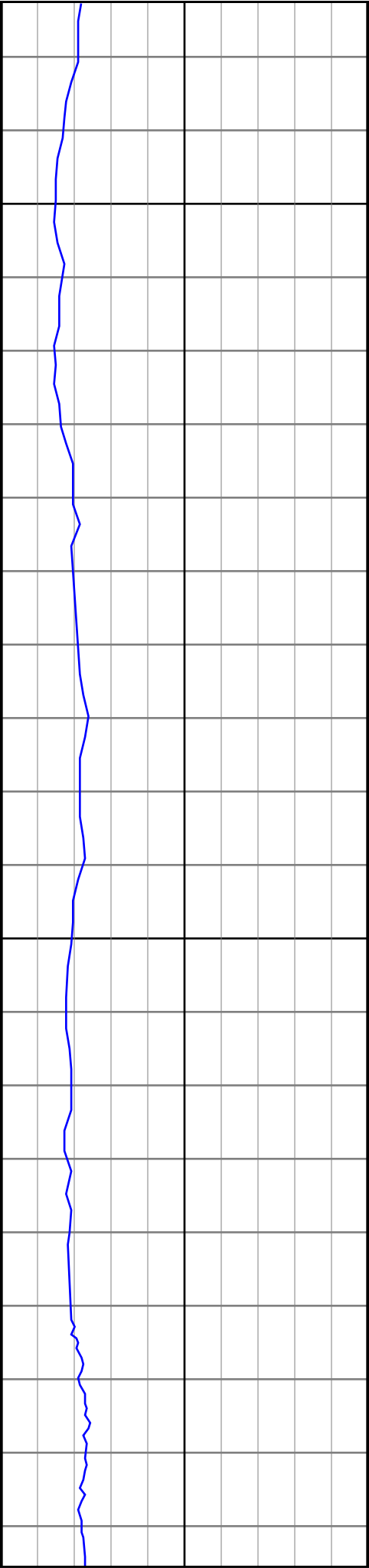
8800

8900



#91 MD(8847.00) Inc(87.6) Azm(1.1) TVD(6670.18)
VS(2253.56) NS(2174.05) EW(708.12)

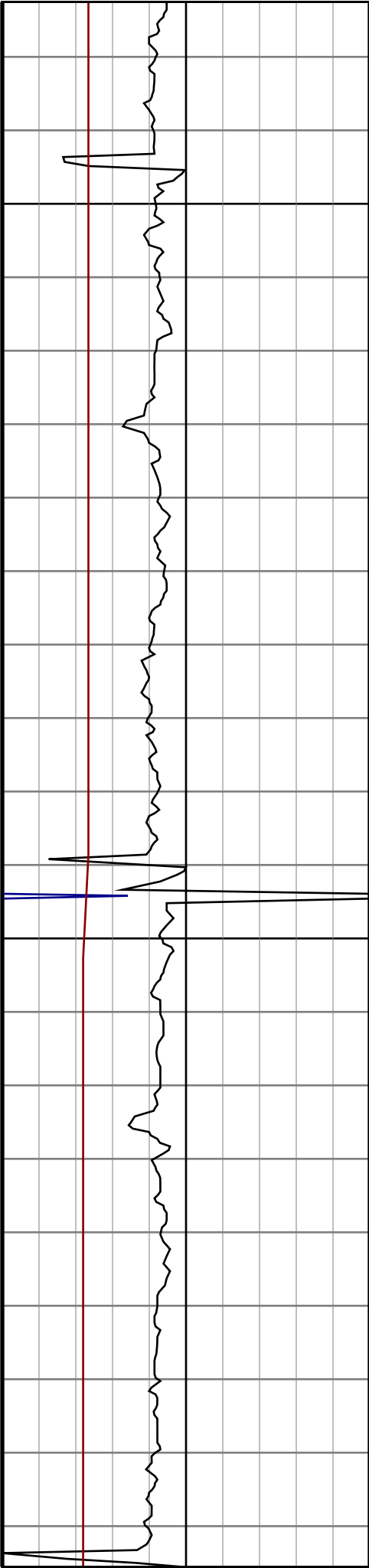
#92 MD(8942.00) Inc(87.8) Azm(0.6) TVD(6674.00)
VS(2347.68) NS(2268.96) EW(709.53)



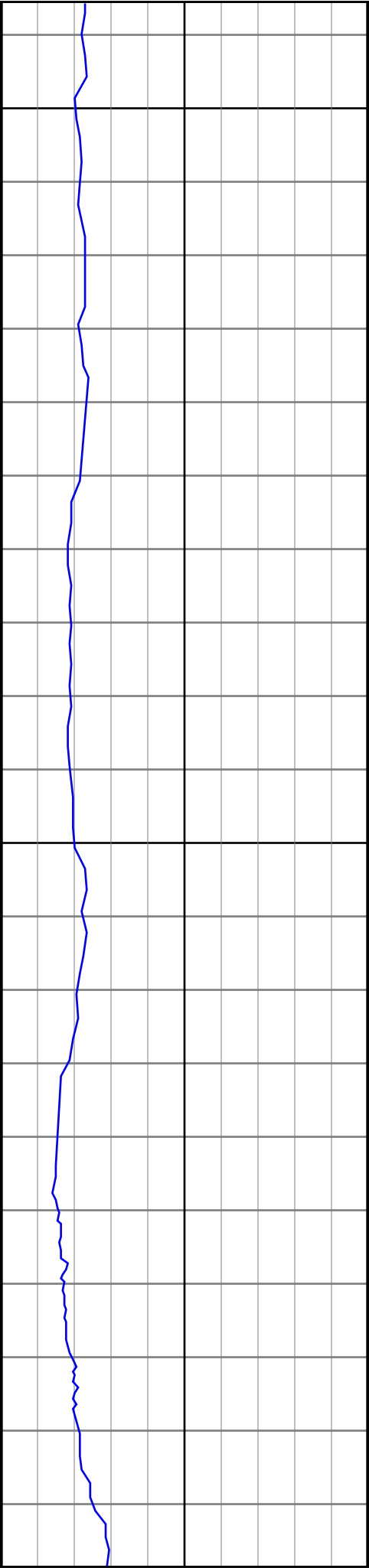
9000

9100

#93 MD(9037.00) Inc(88.0) Azm(0.1) TVD(6677.48)
VS(2441.71) NS(2363.89) EW(710.11)

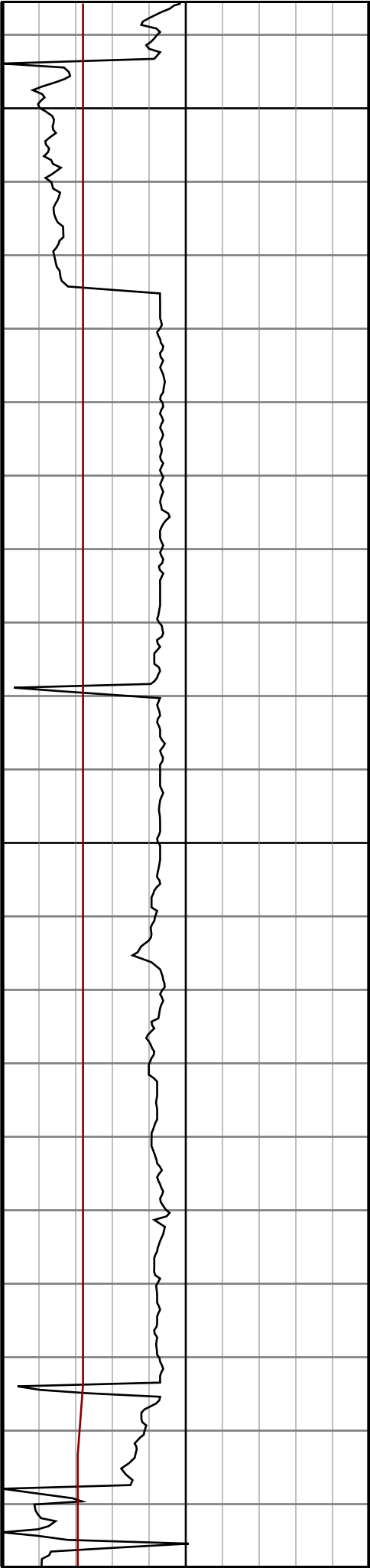


#94 MD(9133.00) Inc(90.3) Azm(0.4) TVD(6678.90)
VS(2536.74) NS(2459.88) EW(710.53)



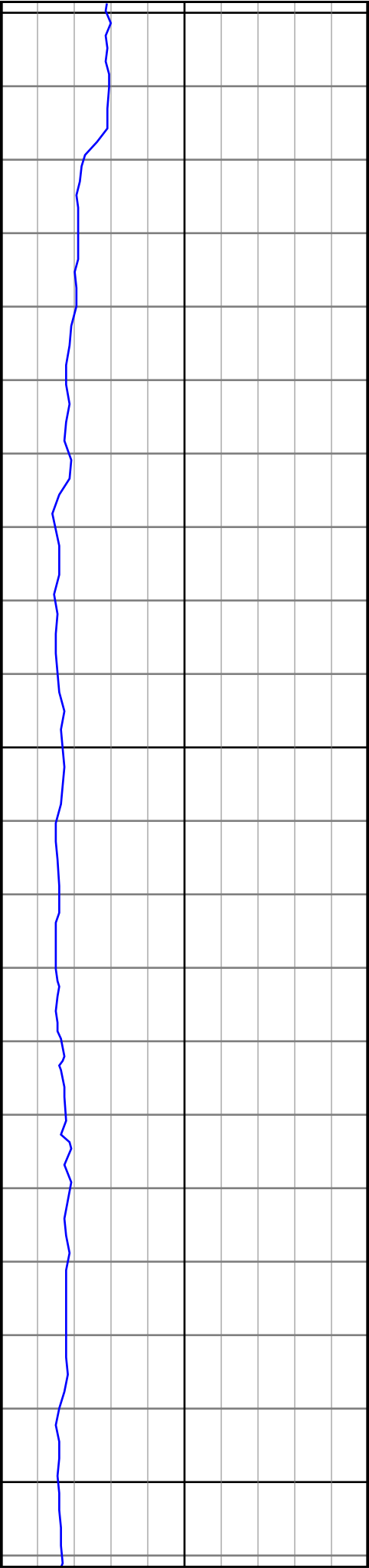
9200

9300



#95 MD(9228.00) Inc(88.7) Azm(0.3) TVD(6679.73)
VS(2630.82) NS(2554.87) EW(711.11)

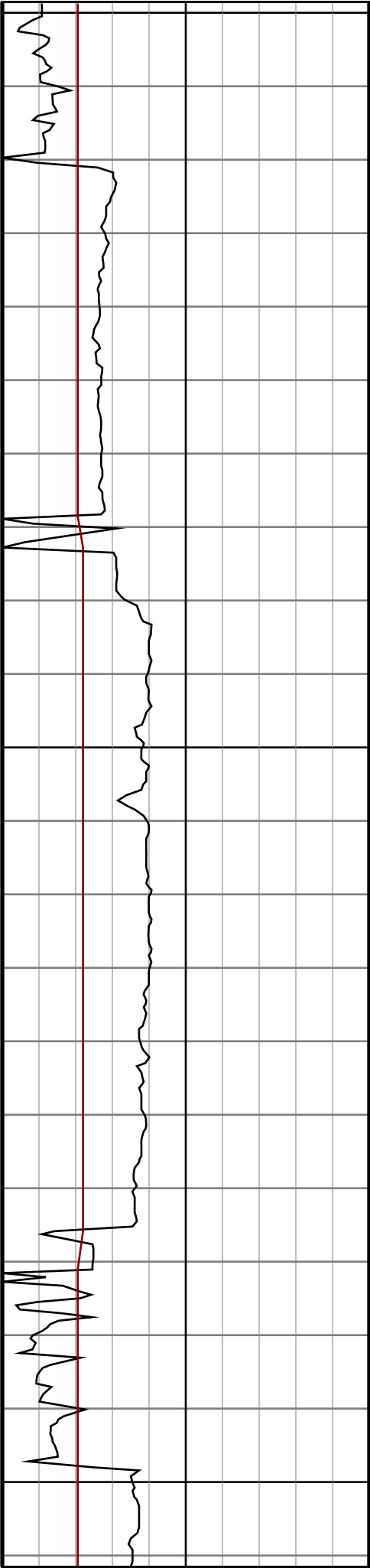
#96 MD(9323.00) Inc(90.4) Azm(0.6) TVD(6680.48)
VS(2724.92) NS(2649.86) EW(711.86)



9400

9500

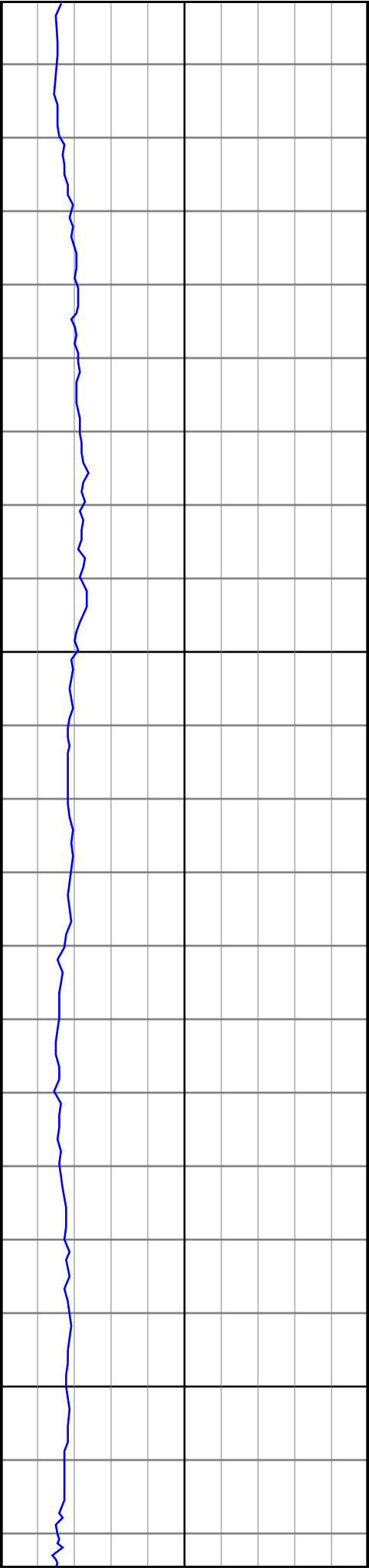
9600



#97 MD(9418.00) Inc(88.7) Azm(359.4) TVD(6681.22)
VS(2818.91) NS(2744.85) EW(711.86)

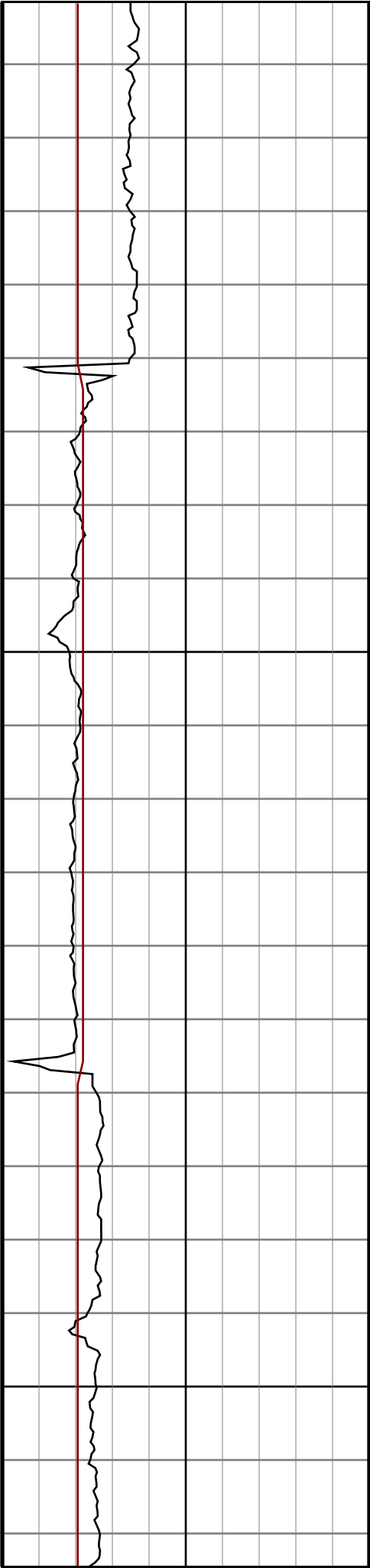
#98 MD(9513.00) Inc(90.4) Azm(359.7) TVD(6681.97)
VS(2912.80) NS(2839.84) EW(711.11)

#99 MD(9608.00) Inc(88.3) Azm(358.7) TVD(6683.05)
VS(3006.59) NS(2934.82) EW(709.78)



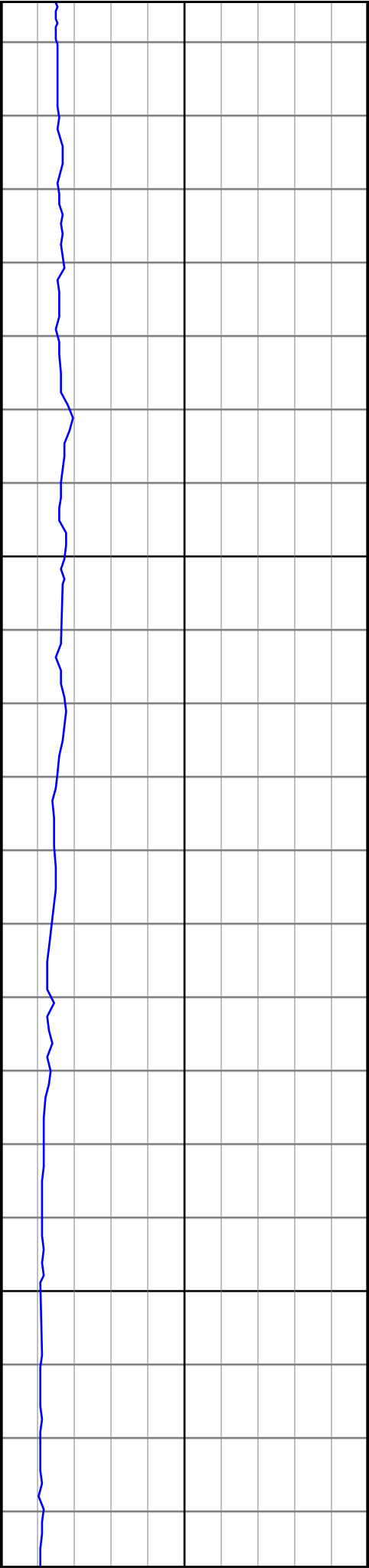
9700

9800



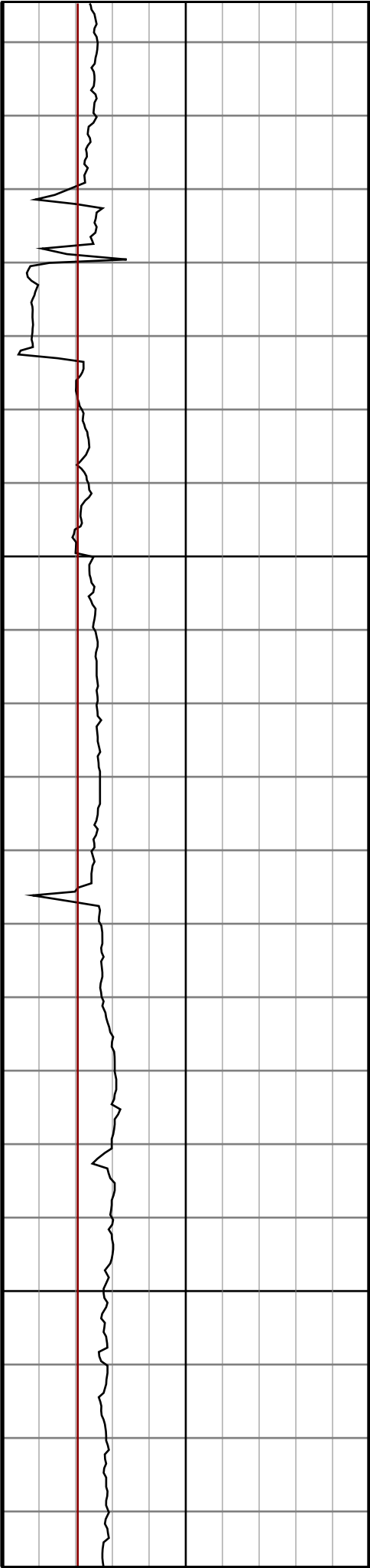
#100 MD(9704.00) Inc(88.7) Azm(358.3) TVD(6685.56)
VS(3101.15) NS(3030.75) EW(707.27)

#101 MD(9799.00) Inc(89.9) Azm(359.0) TVD(6686.72)
VS(3194.80) NS(3125.72) EW(705.03)



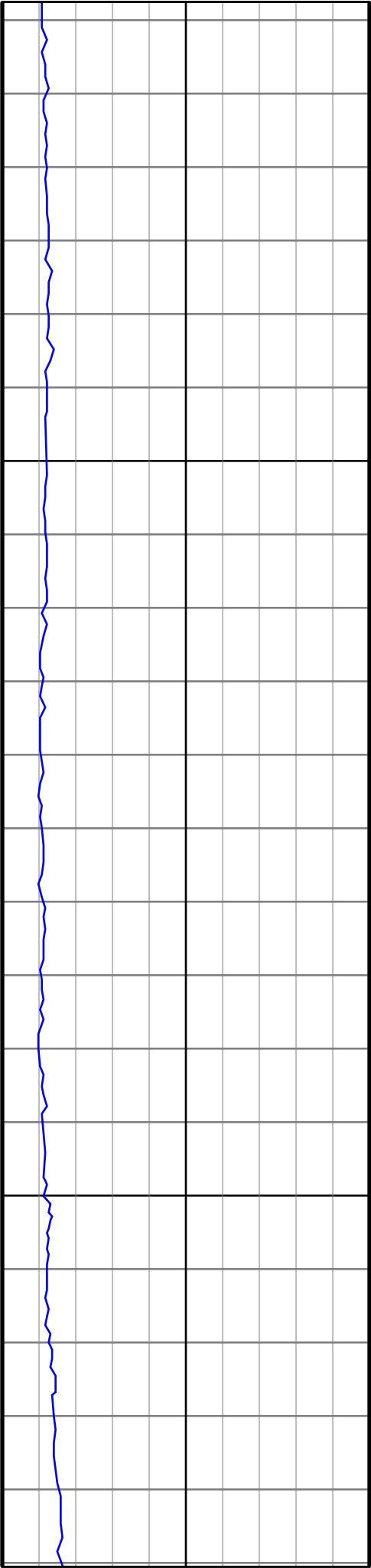
9900

10000



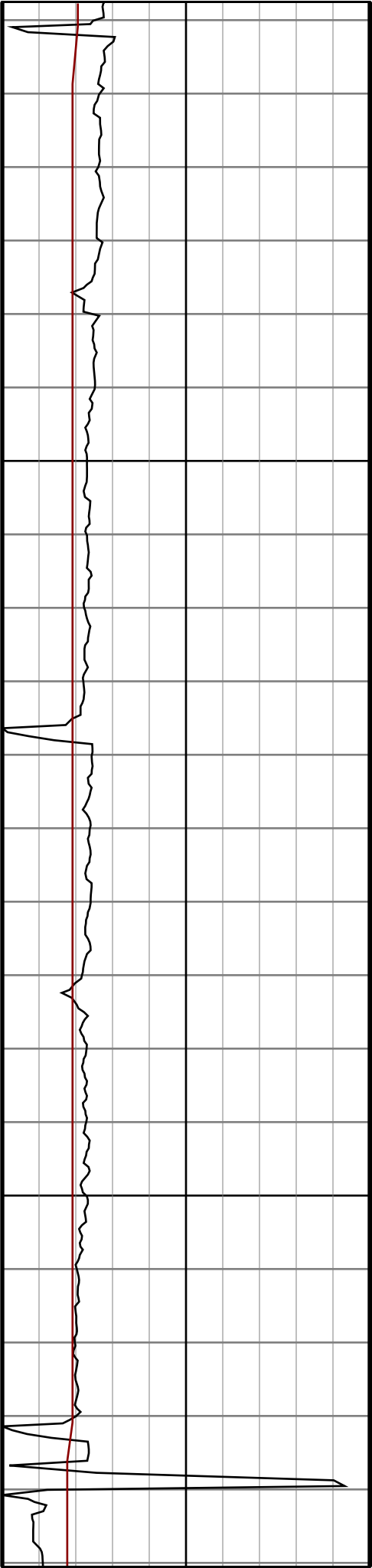
#102 MD(9894.00) Inc(88.2) Azm(359.0) TVD(6688.30)
VS(3288.53) NS(3220.69) EW(703.38)

#103 MD(9989.00) Inc(88.9) Azm(359.0) TVD(6690.70)
VS(3382.25) NS(3315.64) EW(701.72)



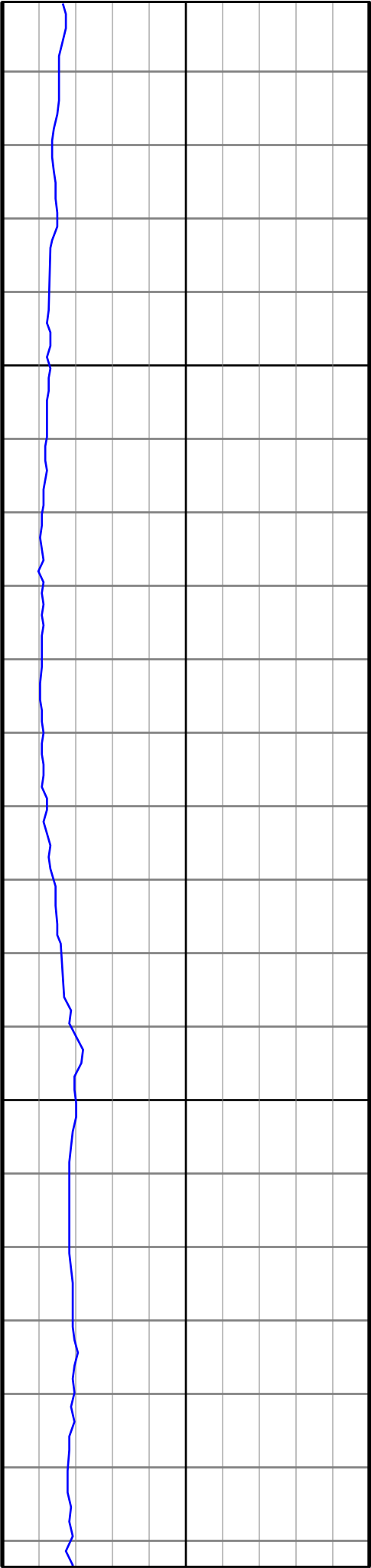
10100

10200



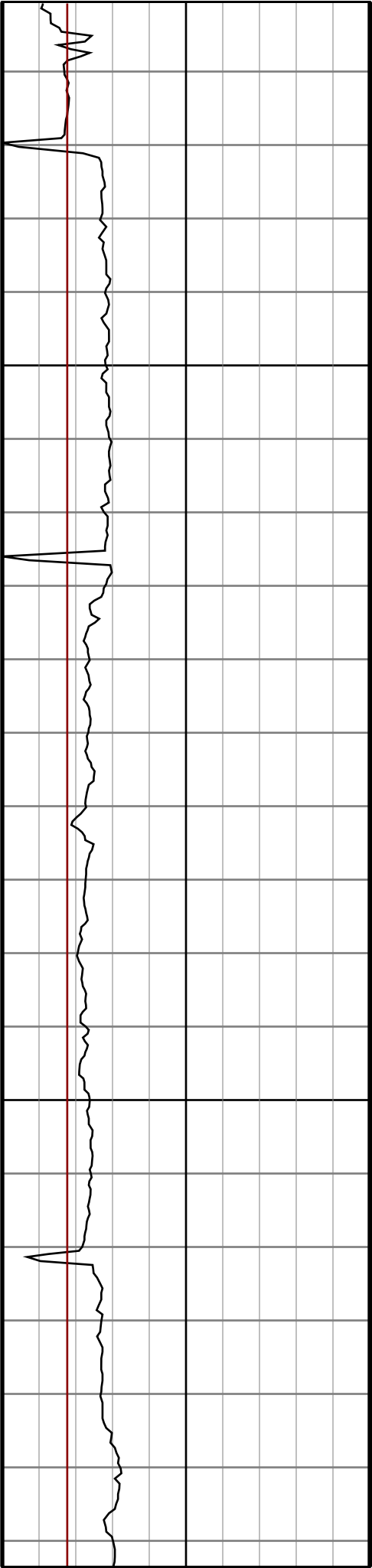
#104 MD(10084.00) Inc(89.9) Azm(359.0) TVD(6691.69)
VS(3475.99) NS(3410.62) EW(700.06)

#105 MD(10180.00) Inc(90.8) Azm(359.0) TVD(6691.11)
VS(3570.72) NS(3506.60) EW(698.39)



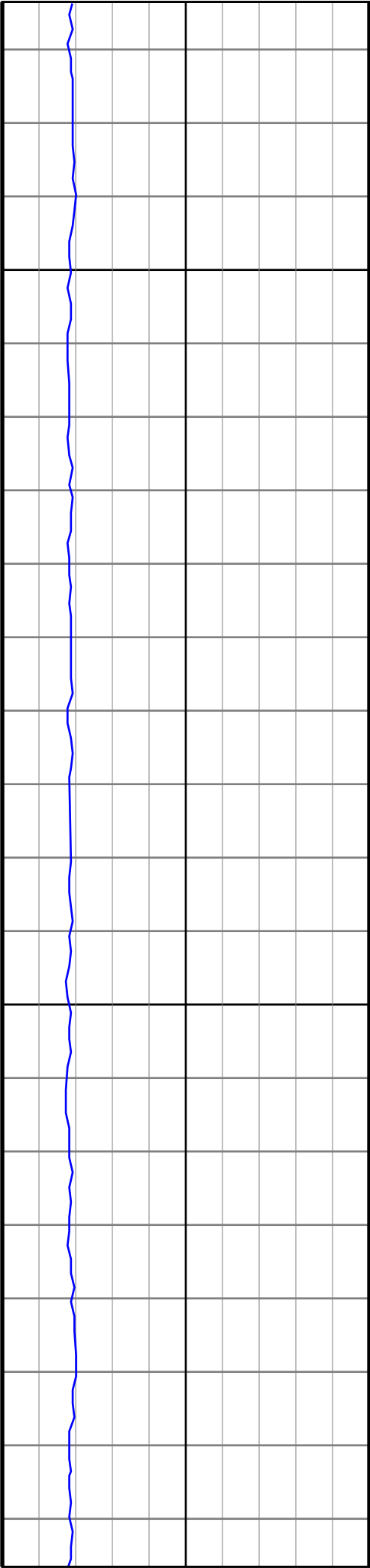
10300

10400



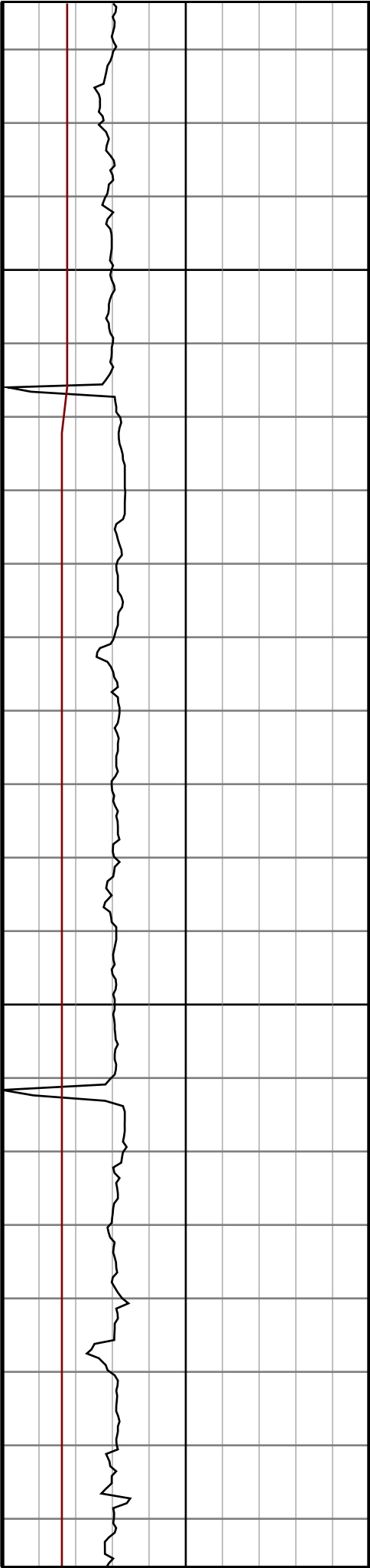
#106 MD(10275.00) Inc(88.5) Azm(359.6) TVD(6691.69)
VS(3664.54) NS(3601.59) EW(697.23)

#107 MD(10370.00) Inc(89.2) Azm(359.6) TVD(6693.59)
VS(3758.43) NS(3696.56) EW(696.56)



10500

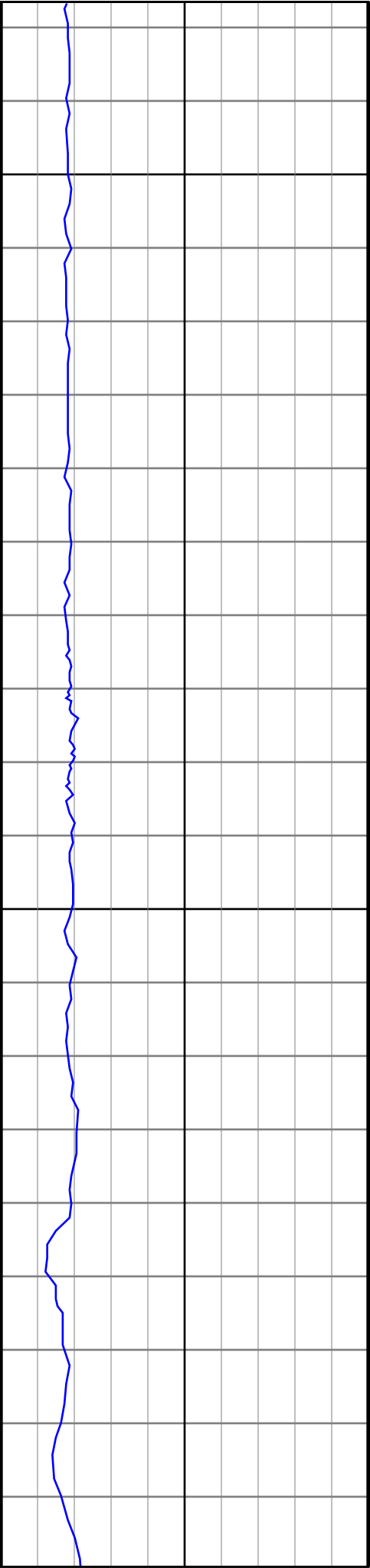
10600



#108 MD(10465.00) Inc(90.1) Azm(359.9) TVD(6694.17)
VS(3852.36) NS(3791.56) EW(696.15)

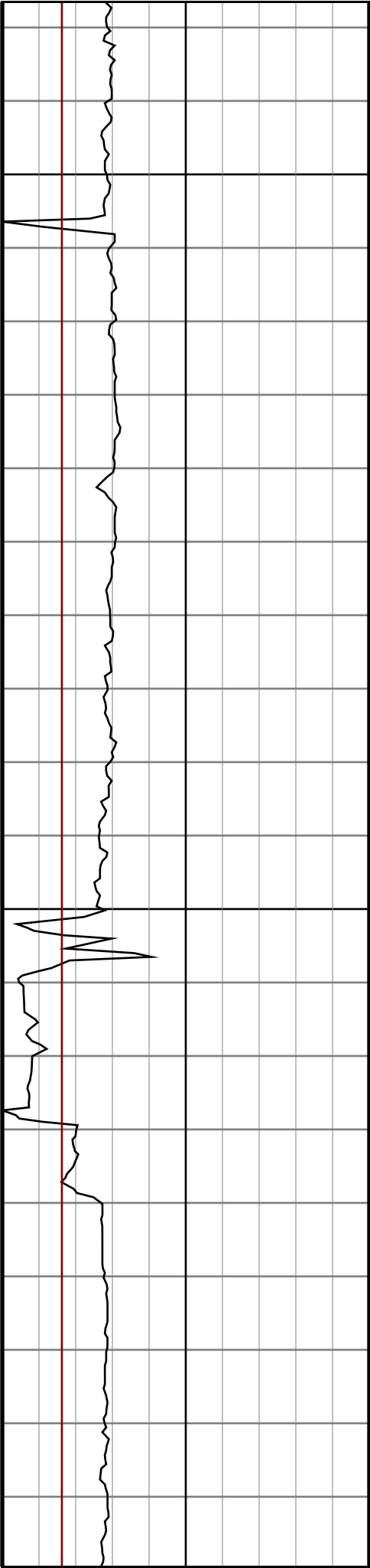
#109 MD(10560.00) Inc(90.1) Azm(0.1) TVD(6694.01)
VS(3946.37) NS(3886.56) EW(696.15)

#110 MD(10656.00) Inc(89.7) Azm(359.7) TVD(6694.18)
VS(4041.33) NS(3982.56) EW(695.98)



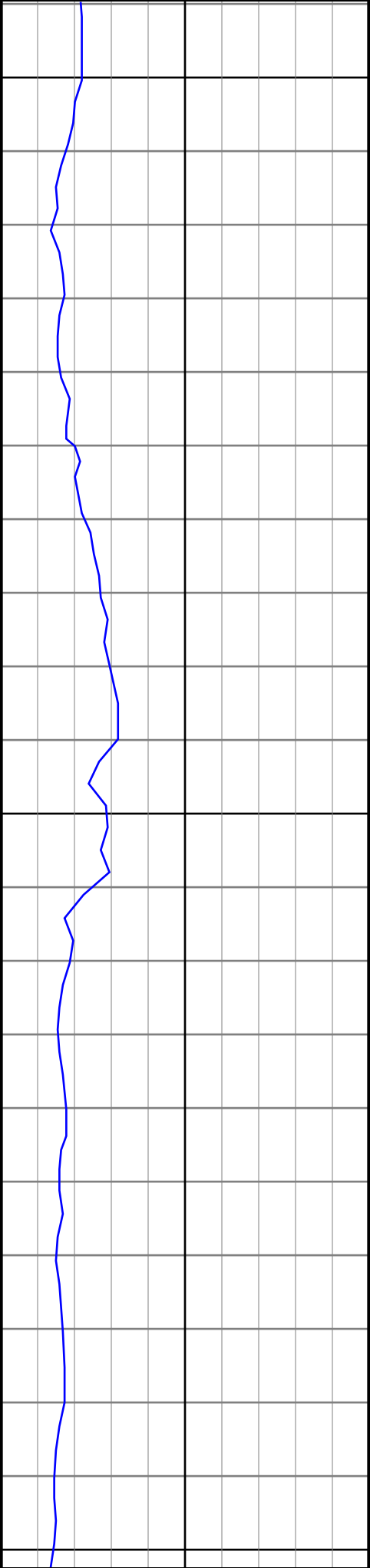
10700

10800



#111 MD(10751.00) Inc(90.3) Azm(0.6) TVD(6694.18)
VS(4135.37) NS(4077.56) EW(696.23)

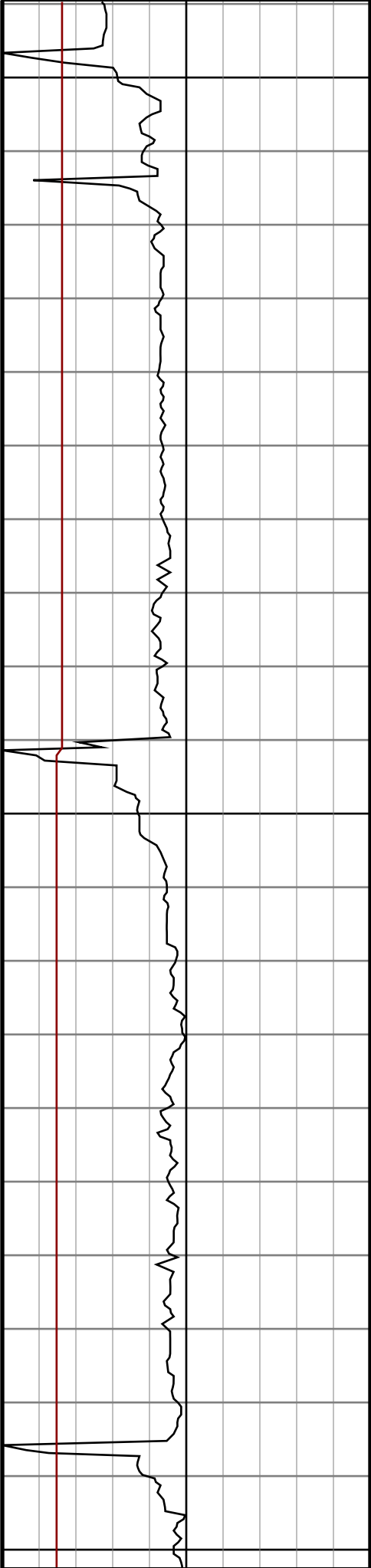
#112 MD(10846.00) Inc(88.0) Azm(358.2) TVD(6695.59)
VS(4229.20) NS(4172.53) EW(695.24)



10900

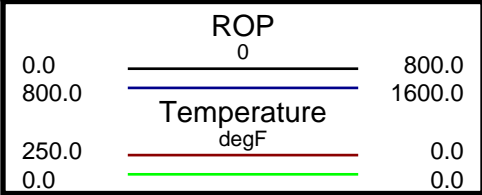
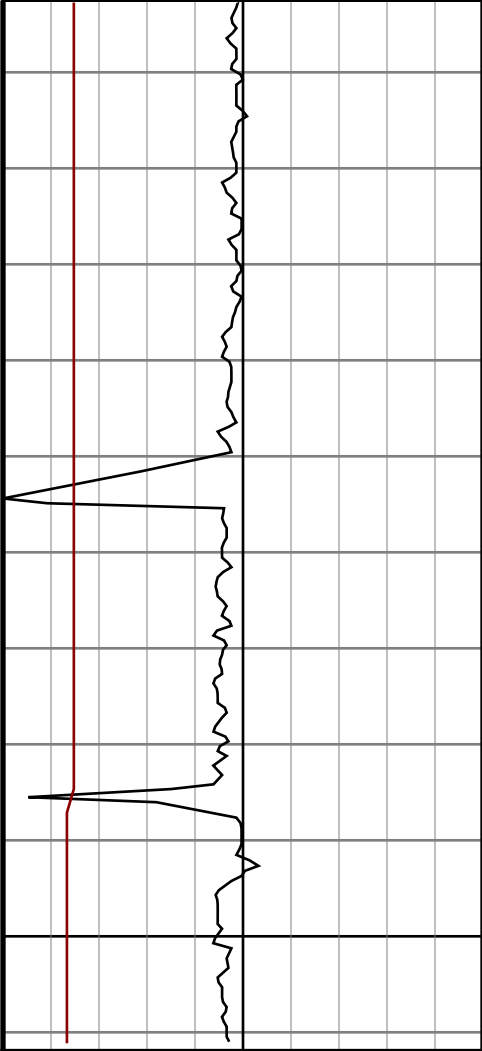
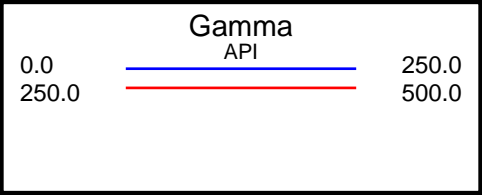
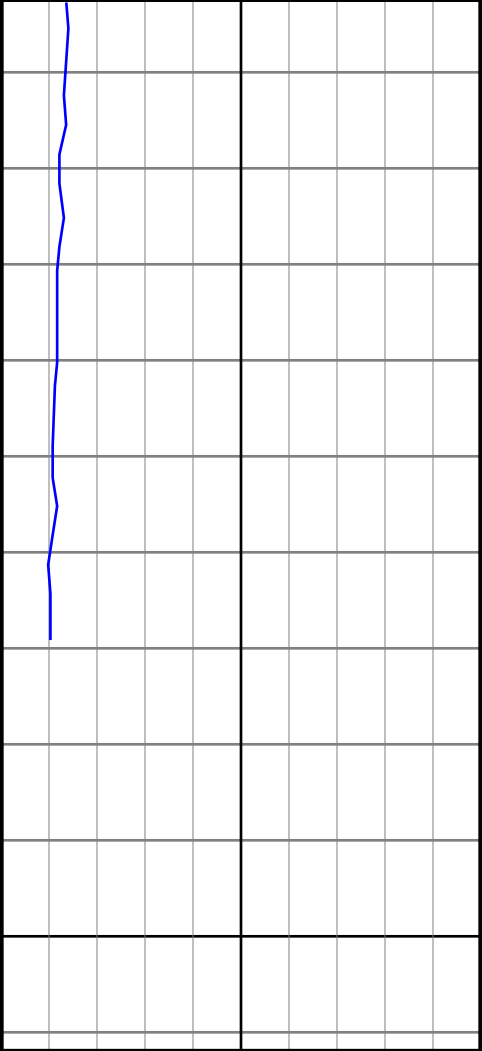
11000

11100



#113 MD(10941.00) Inc(89.2) Azm(358.0) TVD(6697.91)
VS(4322.67) NS(4267.45) EW(692.09)

#114 MD(11036.00) Inc(88.7) Azm(357.1) TVD(6699.65)
VS(4415.98) NS(4362.34) EW(688.03)



#115 MD(11131.00) Inc(89.6) Azm(356.6) TVD(6701.06)
VS(4509.07) NS(4457.19) EW(682.81)

#116 MD(11157.00) Inc(89.7) Azm(356.6) TVD(6701.22)
VS(4534.53) NS(4483.14) EW(681.26)

#117 MD(11211.00) Inc(89.7) Azm(356.6) TVD(6701.50)
VS(4587.41) NS(4537.04) EW(678.06)

11200