Horsetail 07H-1846

MD
5":100'

Company: Whiting Oil and Gas Corp
Well Name: Horsetail 07H-1846
API: 05-123-41839-00
County/Parish: Weld County
State: Colorado
Country: USA
Job number: GC-170005
Field: Niobrara
Rig Id: Unit 406
Survey Company: Precision Directional Services, Inc.

Log measurements: GR, ROP
Depth measured from: 2000 ft
Maximum temperature: 218.9

	Depth	Date
Start:	0 ft	02/16/2017
End:	14040 ft	02/20/2017

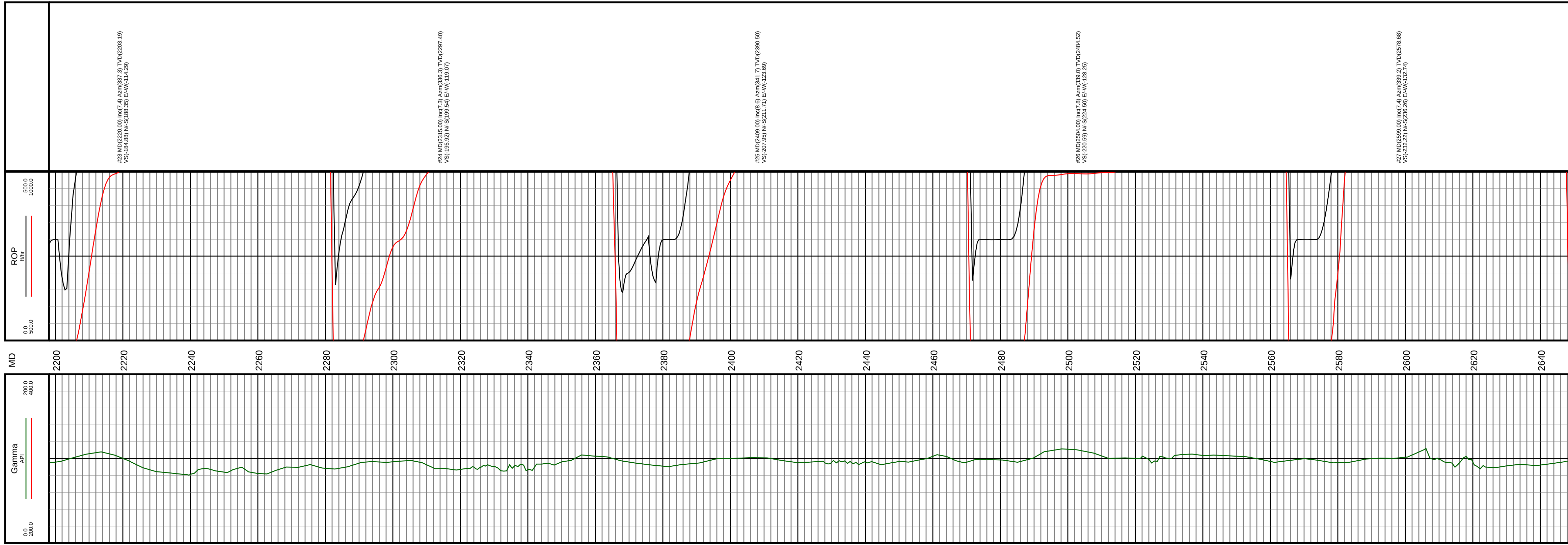
Casing	Depth	Size
Surface:	2092 ft	9 5/8"
Intermediate:		

Mud Type: WBM
Density: 10.4
Viscosity: 41
Rm: **Rmf:** **Rmc:**

Elevations
KB: 4933 ft
GL: 4912 ft
DF: 21 ft

		Offsets		Depths		Dates	
Run	Bit Size	Gamma	Survey	Start	End	Start	End
1	13 1/2"		57.00 ft	0 ft	1213 ft	02/16/2017	02/16/2017
2	13 1/2"		57.00 ft	1213 ft	2092 ft	02/16/2017	02/17/2017
3	8 1/2"	46.00 ft	59.00 ft	2092 ft	14040 ft	02/17/2017	02/20/2017
4							
5							
6							
7							
8							
9							
10							

Precision Directional Services, Inc. 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.



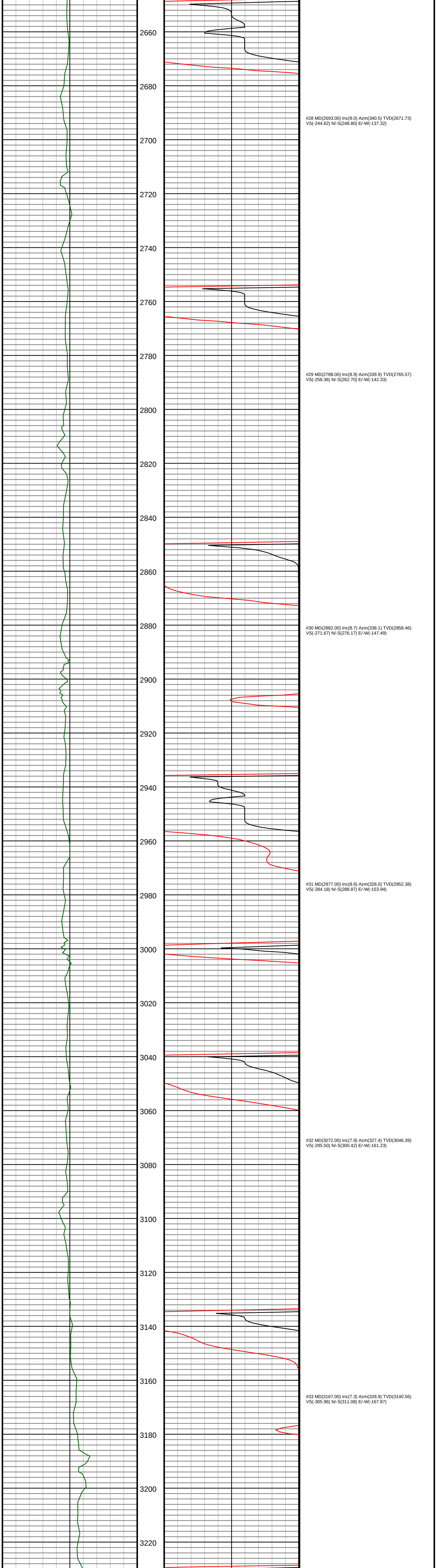
#23 MD(2220.00) Inc(7.4) Azm(337.3) TVD(2203.19) VS(-184.88) N/-S(188.35) E/-W(-114.29)

#24 MD(2315.00) Inc(7.3) Azm(336.3) TVD(2297.40) VS(-195.92) N/-S(199.54) E/-W(-119.07)

#25 MD(2409.00) Inc(8.6) Azm(341.7) TVD(2390.50) VS(-207.95) N/-S(211.71) E/-W(-123.69)

#26 MD(2504.00) Inc(7.8) Azm(339.0) TVD(2484.52) VS(-220.59) N/-S(224.50) E/-W(-128.25)

#27 MD(2599.00) Inc(7.4) Azm(339.2) TVD(2578.68) VS(-232.22) N/-S(236.26) E/-W(-132.74)



#28 MD(2693.00) Inc(9.0) Azm(340.5) TVD(2671.73)
VS(-244.62) N/-S(248.80) E/-W(-137.32)

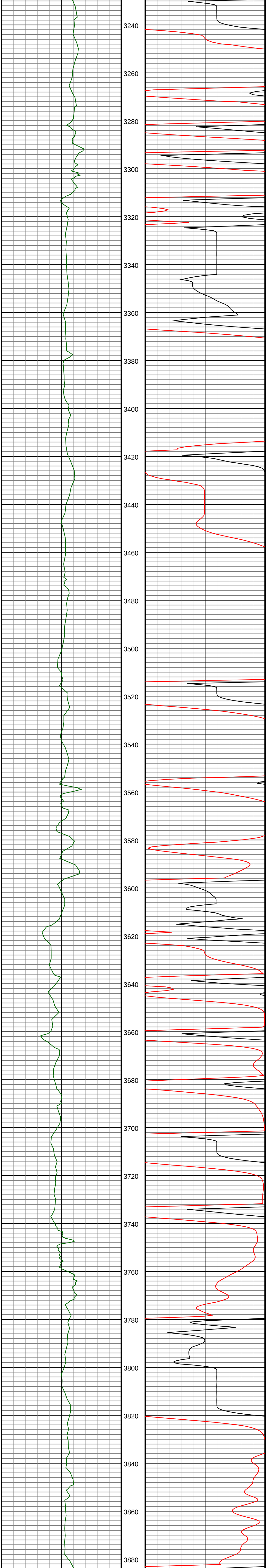
#29 MD(2788.00) Inc(8.9) Azm(339.9) TVD(2765.57)
VS(-258.36) N/-S(262.70) E/-W(-142.33)

#30 MD(2882.00) Inc(8.7) Azm(338.1) TVD(2858.46)
VS(-271.67) N/-S(276.17) E/-W(-147.49)

#31 MD(2977.00) Inc(8.6) Azm(328.0) TVD(2952.38)
VS(-284.18) N/-S(288.87) E/-W(-153.94)

#32 MD(3072.00) Inc(7.9) Azm(327.4) TVD(3046.39)
VS(-295.50) N/-S(300.42) E/-W(-161.23)

#33 MD(3167.00) Inc(7.3) Azm(328.9) TVD(3140.56)
VS(-305.96) N/-S(311.08) E/-W(-167.87)



#34 MD(3262.00) Inc(5.8) Azm(333.9) TVD(3234.94)
VS(-315.24) N/-S(320.52) E/-W(-173.08)

#35 MD(3356.00) Inc(7.6) Azm(334.9) TVD(3328.29)
VS(-325.00) N/-S(330.42) E/-W(-177.81)

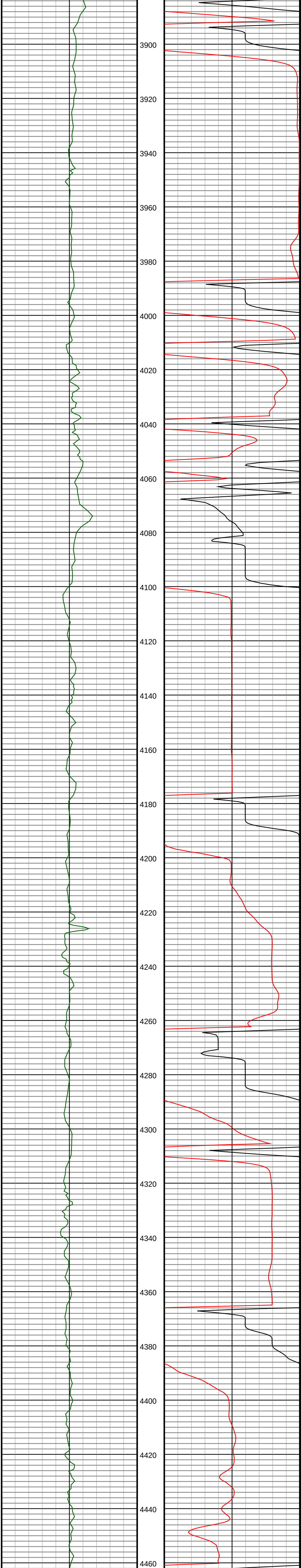
#36 MD(3451.00) Inc(7.4) Azm(337.2) TVD(3422.48)
VS(-336.18) N/-S(341.76) E/-W(-182.86)

#37 MD(3546.00) Inc(7.1) Azm(338.2) TVD(3516.72)
VS(-347.10) N/-S(352.82) E/-W(-187.41)

#38 MD(3640.00) Inc(8.5) Azm(334.8) TVD(3609.86)
VS(-358.58) N/-S(364.45) E/-W(-192.51)

#39 MD(3735.00) Inc(8.3) Azm(335.3) TVD(3703.84)
VS(-370.98) N/-S(377.03) E/-W(-198.35)

#40 MD(3829.00) Inc(7.5) Azm(323.5) TVD(3796.95)
VS(-381.91) N/-S(388.16) E/-W(-204.84)



#41 MD(3923.00) Inc(6.8) Azm(322.7) TVD(3890.22)
VS(-391.07) N/-S(397.53) E/-W(-211.86)

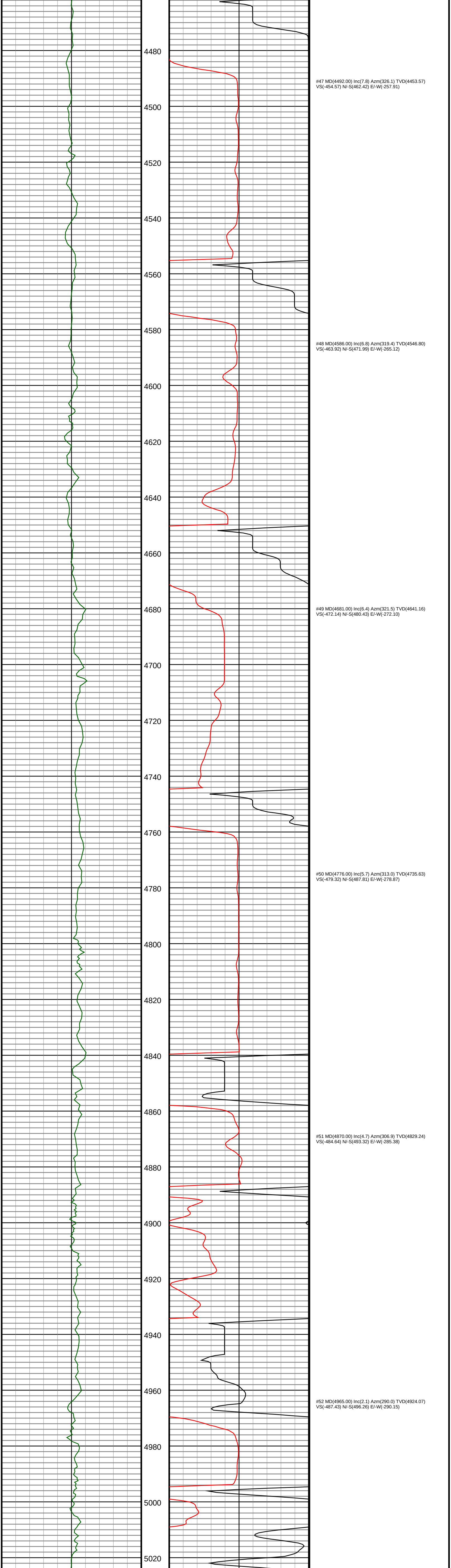
#42 MD(4018.00) Inc(6.5) Azm(322.7) TVD(3984.58)
VS(-399.64) N/-S(406.30) E/-W(-218.54)

#43 MD(4113.00) Inc(8.5) Azm(323.1) TVD(4078.75)
VS(-409.34) N/-S(416.23) E/-W(-226.04)

#44 MD(4208.00) Inc(8.3) Azm(323.8) TVD(4172.73)
VS(-420.26) N/-S(427.40) E/-W(-234.33)

#45 MD(4303.00) Inc(9.1) Azm(326.8) TVD(4266.64)
VS(-431.81) N/-S(439.20) E/-W(-242.49)

#46 MD(4397.00) Inc(8.5) Azm(326.4) TVD(4359.53)
VS(-443.56) N/-S(451.19) E/-W(-250.40)



#47 MD(4492.00) Inc(7.8) Azm(326.1) TVD(4453.57)
VS(-454.57) N/-S(462.42) E/-W(-257.91)

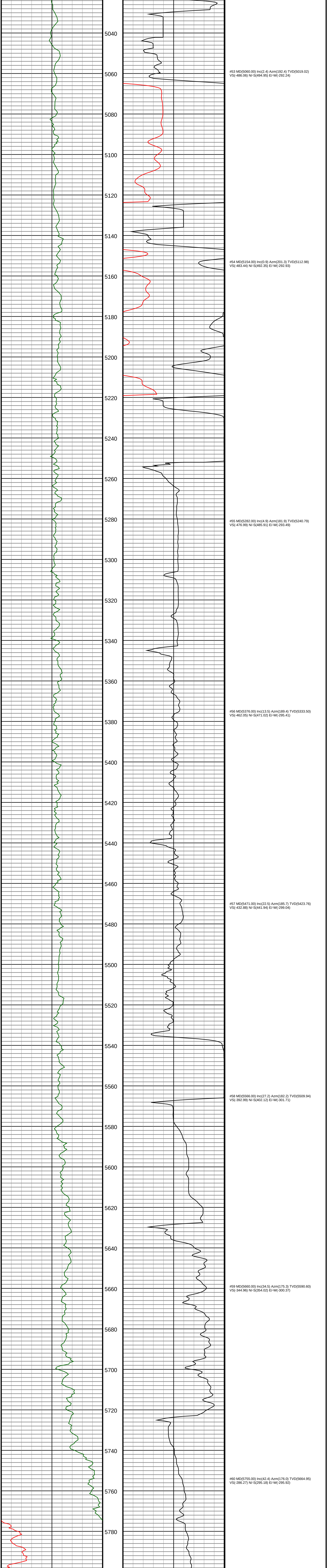
#48 MD(4586.00) Inc(6.8) Azm(319.4) TVD(4546.80)
VS(-463.92) N/-S(471.99) E/-W(-265.12)

#49 MD(4681.00) Inc(6.4) Azm(321.5) TVD(4641.16)
VS(-472.14) N/-S(480.43) E/-W(-272.10)

#50 MD(4776.00) Inc(5.7) Azm(313.0) TVD(4735.63)
VS(-479.32) N/-S(487.81) E/-W(-278.87)

#51 MD(4870.00) Inc(4.7) Azm(306.9) TVD(4829.24)
VS(-484.64) N/-S(493.32) E/-W(-285.38)

#52 MD(4965.00) Inc(2.1) Azm(290.0) TVD(4924.07)
VS(-487.43) N/-S(496.26) E/-W(-290.15)



#53 MD(5060.00) Inc(2.4) Azm(192.4) TVD(5019.02)
VS(-486.06) N/-S(494.95) E/-W(-292.24)

#54 MD(5154.00) Inc(0.9) Azm(201.3) TVD(5112.98)
VS(-483.44) N/-S(492.35) E/-W(-292.93)

#55 MD(5282.00) Inc(4.9) Azm(181.9) TVD(5240.79)
VS(-476.99) N/-S(485.91) E/-W(-293.49)

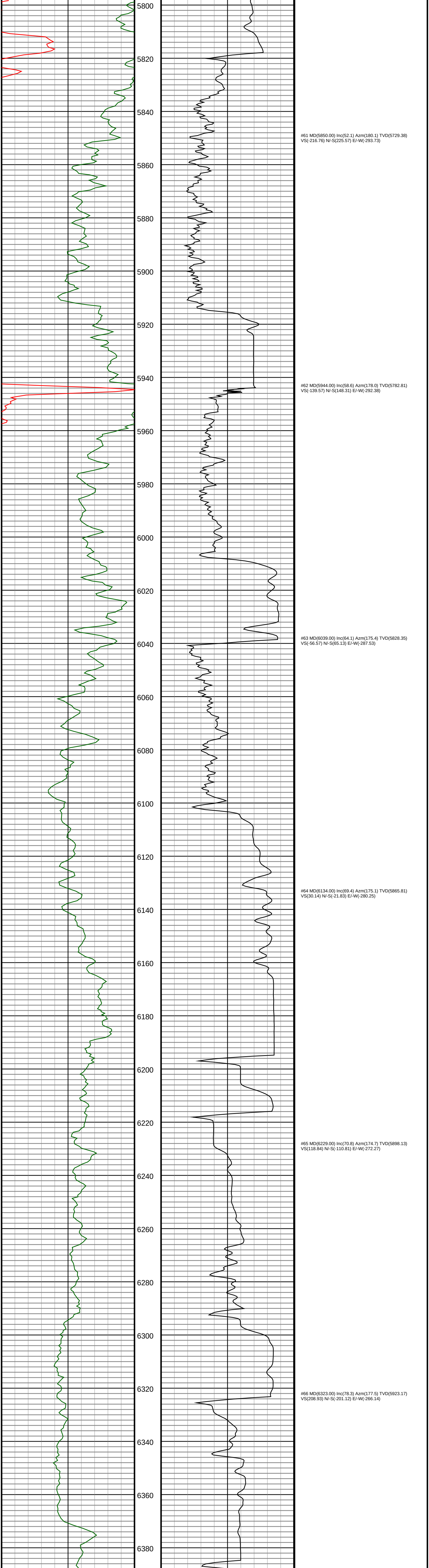
#56 MD(5376.00) Inc(13.5) Azm(189.4) TVD(5333.50)
VS(-462.05) N/-S(471.02) E/-W(-295.41)

#57 MD(5471.00) Inc(22.5) Azm(185.7) TVD(5423.76)
VS(-432.88) N/-S(441.94) E/-W(-299.04)

#58 MD(5566.00) Inc(27.2) Azm(182.2) TVD(5509.94)
VS(-392.99) N/-S(402.12) E/-W(-301.71)

#59 MD(5660.00) Inc(34.5) Azm(175.3) TVD(5590.60)
VS(-344.96) N/-S(354.02) E/-W(-300.37)

#60 MD(5755.00) Inc(42.4) Azm(176.0) TVD(5664.95)
VS(-286.27) N/-S(295.18) E/-W(-295.92)



#61 MD(5850.00) Inc(52.1) Azm(180.1) TVD(5729.38)
VS(-216.76) N/-S(225.57) E/-W(-293.73)

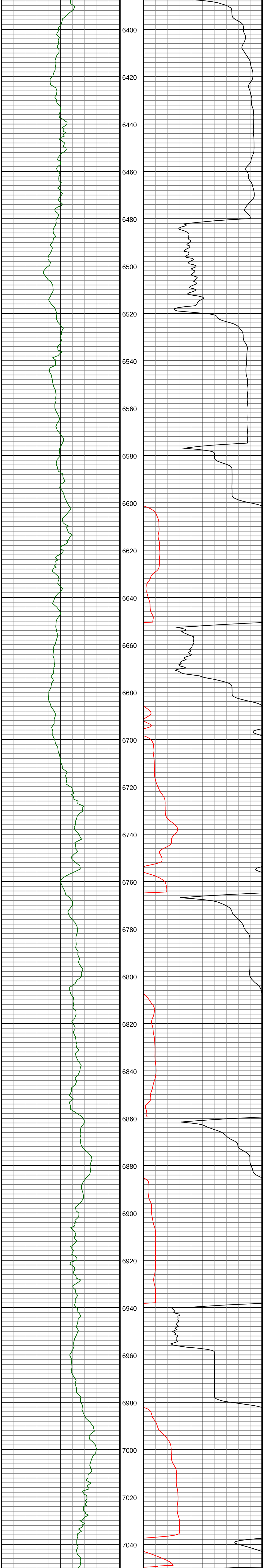
#62 MD(5944.00) Inc(58.6) Azm(178.0) TVD(5782.81)
VS(-139.57) N/-S(148.31) E/-W(-292.38)

#63 MD(6039.00) Inc(64.1) Azm(175.4) TVD(5828.35)
VS(-56.57) N/-S(65.13) E/-W(-287.53)

#64 MD(6134.00) Inc(69.4) Azm(175.1) TVD(5865.81)
VS(30.14) N/-S(-21.83) E/-W(-280.25)

#65 MD(6229.00) Inc(70.8) Azm(174.7) TVD(5898.13)
VS(118.84) N/-S(-110.81) E/-W(-272.27)

#66 MD(6323.00) Inc(78.3) Azm(177.5) TVD(5923.17)
VS(208.93) N/-S(-201.12) E/-W(-266.14)



#67 MD(6418.00) Inc(84.8) Azm(178.5) TVD(5937.16)
VS(302.65) N/-S(-294.98) E/-W(-262.84)

#68 MD(6513.00) Inc(88.2) Azm(180.1) TVD(5942.97)
VS(397.37) N/-S(-389.78) E/-W(-261.68)

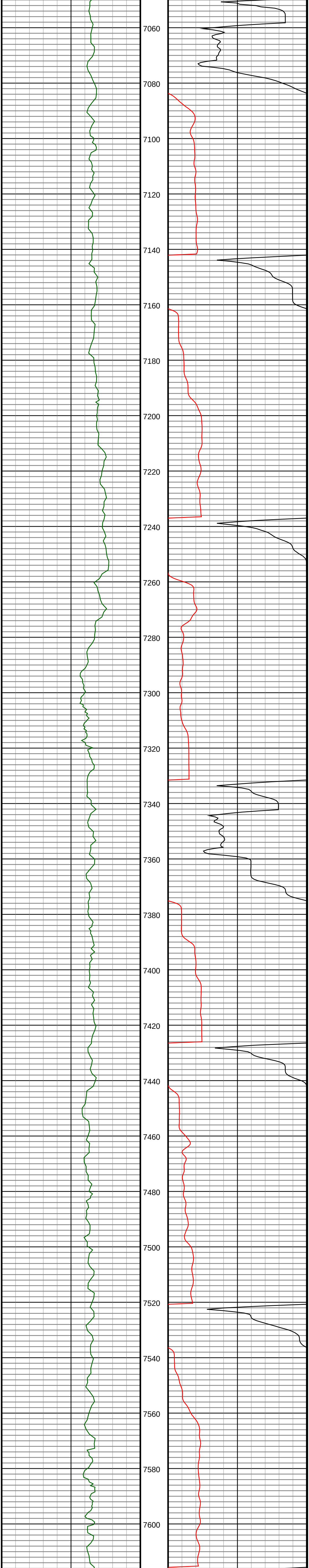
#69 MD(6607.00) Inc(88.1) Azm(179.6) TVD(5945.99)
VS(491.27) N/-S(-483.73) E/-W(-261.40)

#70 MD(6702.00) Inc(88.6) Azm(181.3) TVD(5948.72)
VS(586.20) N/-S(-578.68) E/-W(-262.08)

#71 MD(6797.00) Inc(88.5) Azm(180.6) TVD(5951.15)
VS(681.16) N/-S(-673.64) E/-W(-263.61)

#72 MD(6891.00) Inc(88.1) Azm(180.7) TVD(5953.98)
VS(775.10) N/-S(-767.59) E/-W(-264.66)

#73 MD(6986.00) Inc(89.3) Azm(181.4) TVD(5956.13)
VS(870.07) N/-S(-862.55) E/-W(-266.36)



#74 MD(7081.00) Inc(91.1) Azm(181.3) TVD(5955.80)
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#75 MD(7175.00) Inc(91.4) Azm(180.8) TVD(5953.77)
VS(1059.04) N/-S(-1051.48) E/-W(-270.35)

#76 MD(7270.00) Inc(91.9) Azm(180.0) TVD(5951.05)
VS(1153.97) N/-S(-1146.43) E/-W(-271.07)

#77 MD(7364.00) Inc(90.4) Azm(180.5) TVD(5949.16)
VS(1247.92) N/-S(-1240.41) E/-W(-271.54)

#78 MD(7459.00) Inc(90.6) Azm(181.2) TVD(5948.34)
VS(1342.91) N/-S(-1335.40) E/-W(-272.98)

#79 MD(7553.00) Inc(91.1) Azm(182.6) TVD(5946.96)
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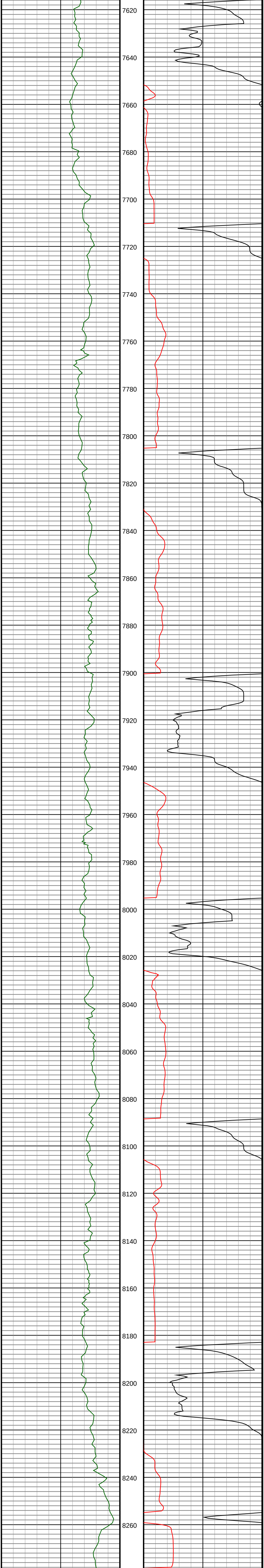


#80 MD(7648.00) Inc(89.2) Azm(183.4) TVD(5946.68)
VS(1531.86) N/-S(-1524.20) E/-W(-281.07)

#81 MD(7743.00) Inc(89.0) Azm(182.5) TVD(5948.17)
VS(1626.83) N/-S(-1619.06) E/-W(-285.97)

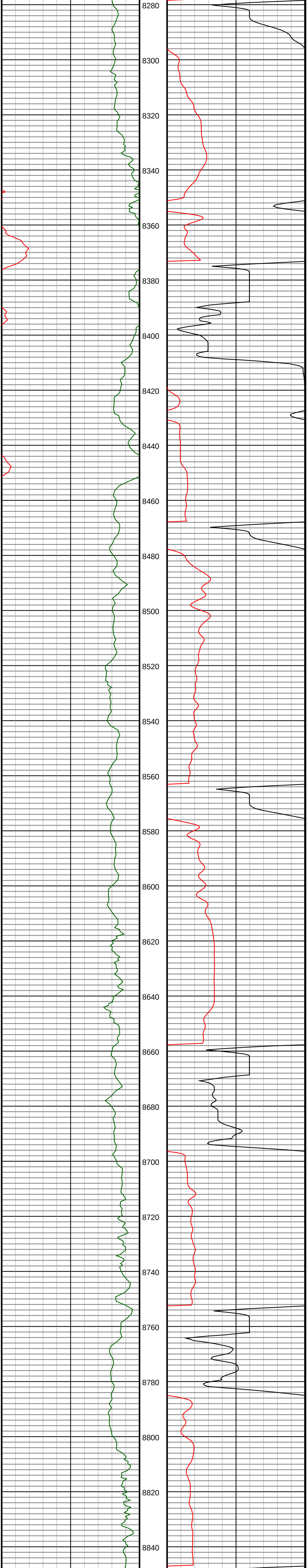
#82 MD(7838.00) Inc(89.1) Azm(182.0) TVD(5949.77)
VS(1721.81) N/-S(-1713.97) E/-W(-289.67)

#83 MD(7932.00) Inc(88.6) Azm(179.4) TVD(5951.63)
VS(1815.77) N/-S(-1807.94) E/-W(-290.84)

#84 MD(8027.00) Inc(90.0) Azm(178.2) TVD(5952.75)
VS(1910.64) N/-S(-1902.91) E/-W(-288.91)

#85 MD(8122.00) Inc(90.1) Azm(177.8) TVD(5952.65)
VS(2005.44) N/-S(-1997.85) E/-W(-285.61)

#86 MD(8217.00) Inc(89.4) Azm(179.0) TVD(5953.08)
VS(2100.28) N/-S(-2092.81) E/-W(-282.97)



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#88 MD(8406.00) Inc(90.7) Azm(179.2) TVD(5954.07)
VS(2289.02) N/-S(-2281.75) E/-W(-278.81)

#89 MD(8501.00) Inc(91.2) Azm(180.6) TVD(5952.45)
VS(2383.96) N/-S(-2376.74) E/-W(-278.70)

#90 MD(8595.00) Inc(92.0) Azm(183.6) TVD(5949.82)
VS(2477.91) N/-S(-2470.62) E/-W(-282.18)

#91 MD(8690.00) Inc(90.6) Azm(182.5) TVD(5947.66)
VS(2572.85) N/-S(-2565.46) E/-W(-287.20)

#92 MD(8785.00) Inc(91.1) Azm(182.2) TVD(5946.22)
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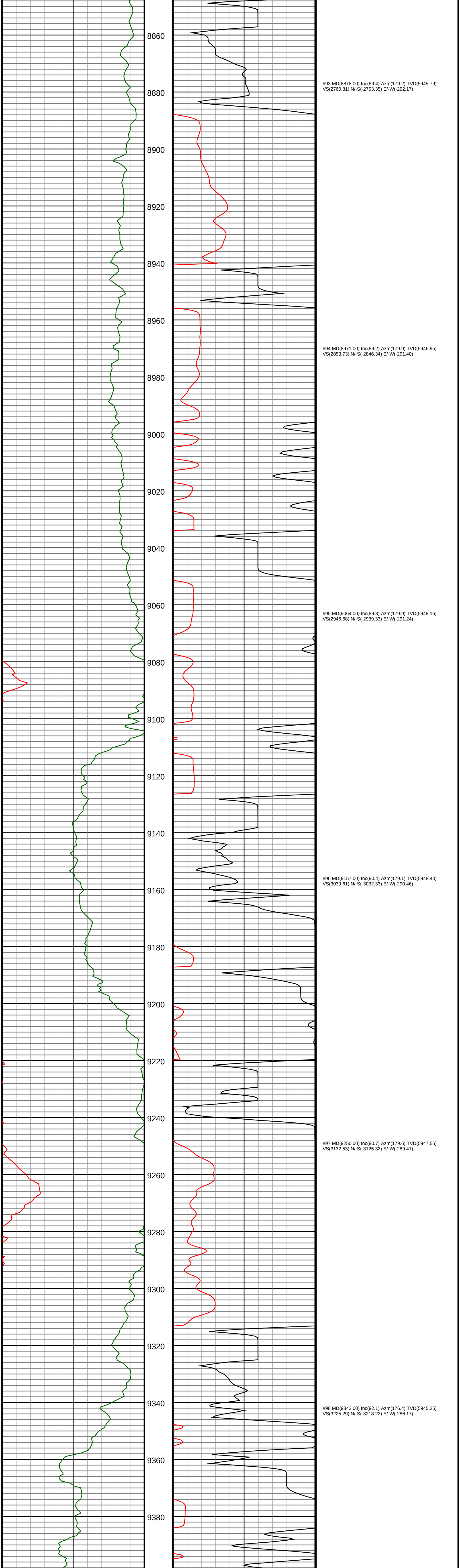

#93 MD(8878.00) Inc(89.4) Azm(179.2) TVD(5945.79)
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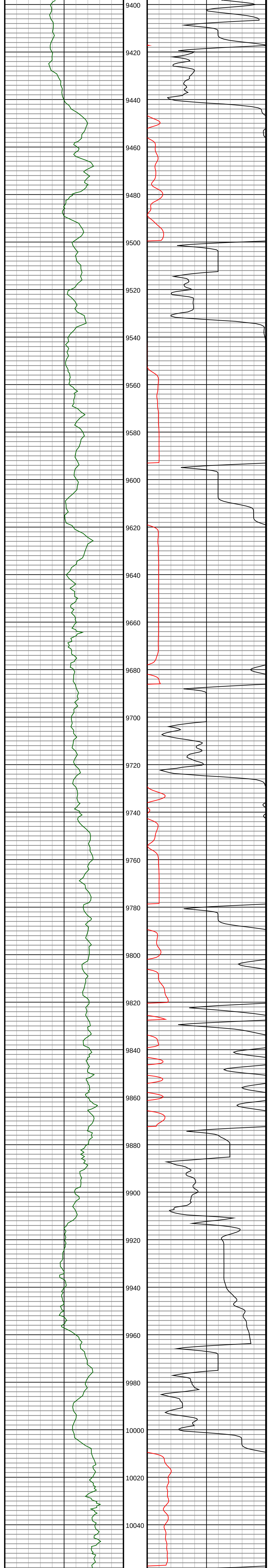
#94 MD(8971.00) Inc(89.2) Azm(179.9) TVD(5946.95)
VS(2853.73) N/-S(-2846.34) E/-W(-291.40)

#95 MD(9064.00) Inc(89.3) Azm(179.9) TVD(5948.16)
VS(2946.68) N/-S(-2939.33) E/-W(-291.24)

#96 MD(9157.00) Inc(90.4) Azm(179.1) TVD(5948.40)
VS(3039.61) N/-S(-3032.33) E/-W(-290.46)

#97 MD(9250.00) Inc(90.7) Azm(179.6) TVD(5947.55)
VS(3132.53) N/-S(-3125.32) E/-W(-289.41)

#98 MD(9343.00) Inc(92.1) Azm(176.4) TVD(5945.25)
VS(3225.29) N/-S(-3218.22) E/-W(-286.17)



#99 MD(9436.00) Inc(90.2) Azm(176.6) TVD(5943.37)
VS(3317.88) N/-S(-3311.02) E/-W(-280.49)

#100 MD(9529.00) Inc(89.4) Azm(178.1) TVD(5943.72)
VS(3410.61) N/-S(-3403.92) E/-W(-276.20)

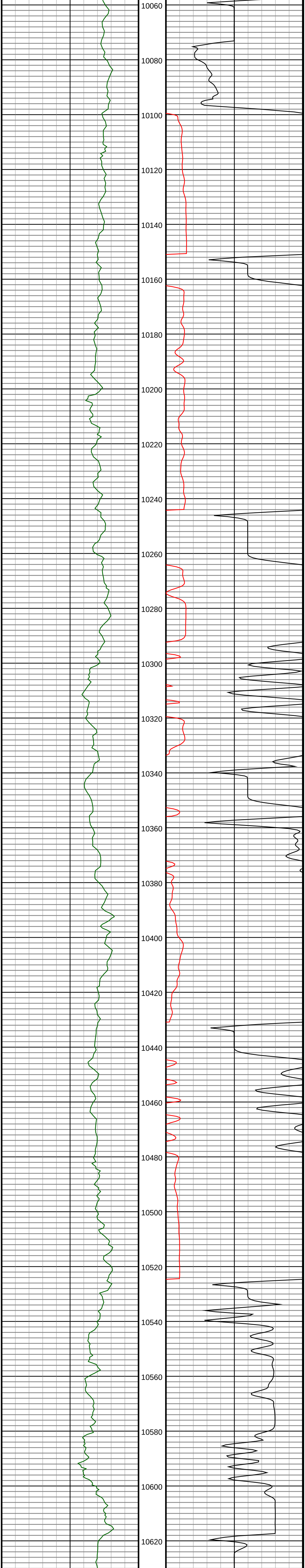
#101 MD(9623.00) Inc(89.6) Azm(177.8) TVD(5944.57)
VS(3504.41) N/-S(-3497.85) E/-W(-272.88)

#102 MD(9716.00) Inc(88.4) Azm(179.7) TVD(5946.21)
VS(3597.27) N/-S(-3590.81) E/-W(-270.92)

#103 MD(9809.00) Inc(88.1) Azm(177.9) TVD(5949.03)
VS(3690.11) N/-S(-3683.75) E/-W(-269.01)

#104 MD(9903.00) Inc(88.6) Azm(178.9) TVD(5951.71)
VS(3783.91) N/-S(-3777.67) E/-W(-266.40)

#105 MD(9996.00) Inc(90.6) Azm(179.9) TVD(5952.32)
VS(3876.83) N/-S(-3870.66) E/-W(-265.41)



#106 MD(10089.00) Inc(91.0) Azm(182.1) TVD(5951.00)
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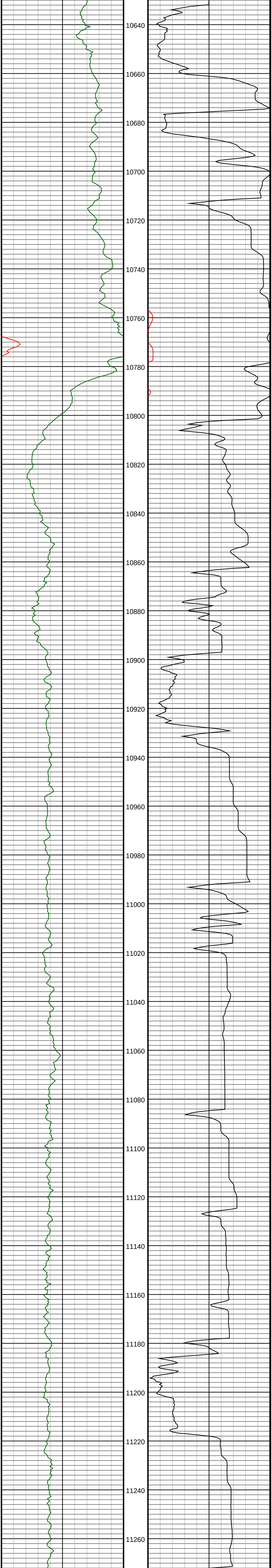
#107 MD(10182.00) Inc(91.2) Azm(181.9) TVD(5949.21)
VS(4062.79) N/-S(-4056.55) E/-W(-270.27)

#108 MD(10275.00) Inc(91.3) Azm(181.2) TVD(5947.17)
VS(4155.76) N/-S(-4149.50) E/-W(-272.77)

#109 MD(10369.00) Inc(91.3) Azm(180.6) TVD(5945.00)
VS(4249.73) N/-S(-4243.46) E/-W(-274.25)

#110 MD(10462.00) Inc(90.8) Azm(178.8) TVD(5943.30)
VS(4342.65) N/-S(-4336.44) E/-W(-273.80)

#111 MD(10555.00) Inc(90.2) Azm(177.5) TVD(5942.51)
VS(4435.47) N/-S(-4429.39) E/-W(-270.80)



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#113 MD(10741.00) Inc(89.2) Azm(178.9) TVD(5943.48)
VS(4621.16) N/-S(-4615.31) E/-W(-265.81)

#114 MD(10836.00) Inc(88.6) Azm(178.6) TVD(5945.33)
VS(4716.02) N/-S(-4710.27) E/-W(-263.77)

#115 MD(10929.00) Inc(91.5) Azm(180.3) TVD(5945.22)
VS(4808.94) N/-S(-4803.25) E/-W(-262.92)

#116 MD(11022.00) Inc(91.4) Azm(179.2) TVD(5942.80)
VS(4901.85) N/-S(-4896.22) E/-W(-262.53)

#117 MD(11116.00) Inc(90.8) Azm(175.9) TVD(5940.94)
VS(4995.57) N/-S(-4990.10) E/-W(-258.50)

#118 MD(11209.00) Inc(91.0) Azm(178.8) TVD(5939.43)
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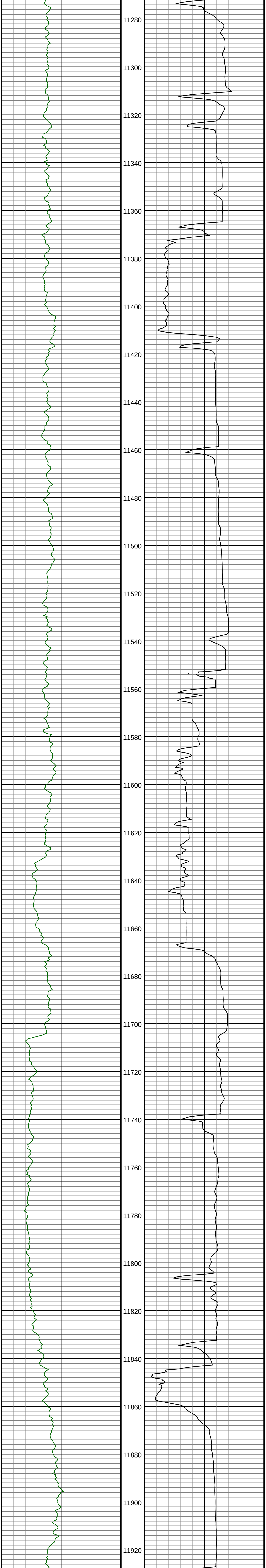

#119 MD(11302.00) Inc(90.0) Azm(173.7) TVD(5938.59)
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#120 MD(11396.00) Inc(92.0) Azm(179.9) TVD(5936.91)
VS(5274.42) N/-S(-5269.53) E/-W(-242.87)

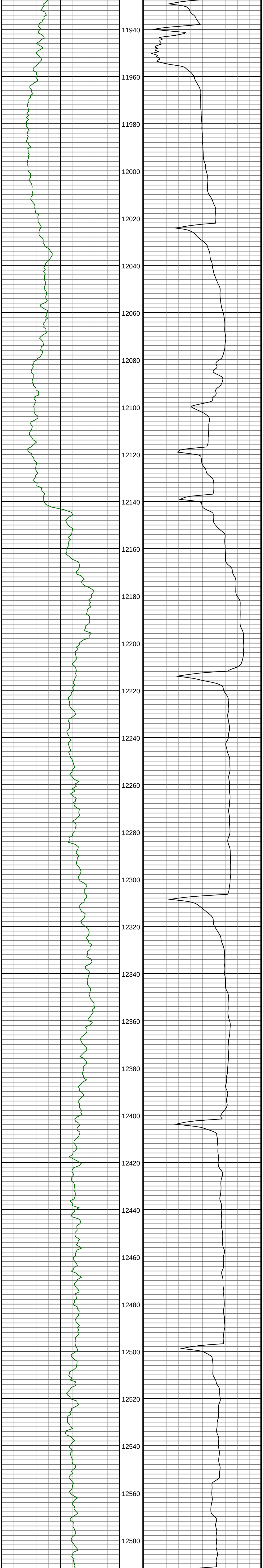
#121 MD(11489.00) Inc(91.7) Azm(180.1) TVD(5933.86)
VS(5367.33) N/-S(-5362.48) E/-W(-242.90)

#122 MD(11582.00) Inc(91.5) Azm(179.8) TVD(5931.26)
VS(5460.25) N/-S(-5455.44) E/-W(-242.85)

#123 MD(11676.00) Inc(91.3) Azm(179.0) TVD(5929.00)
VS(5554.15) N/-S(-5549.41) E/-W(-241.92)

#124 MD(11771.00) Inc(91.6) Azm(178.1) TVD(5926.60)
VS(5648.97) N/-S(-5644.35) E/-W(-239.58)

#125 MD(11866.00) Inc(92.2) Azm(179.6) TVD(5923.47)
VS(5743.81) N/-S(-5739.28) E/-W(-237.76)



#126 MD(11960.00) Inc(91.4) Azm(181.2) TVD(5920.55)
VS(5837.73) N/-S(-5833.23) E/-W(-238.48)

#127 MD(12055.00) Inc(90.6) Azm(180.8) TVD(5918.87)
VS(5932.71) N/-S(-5928.20) E/-W(-240.16)

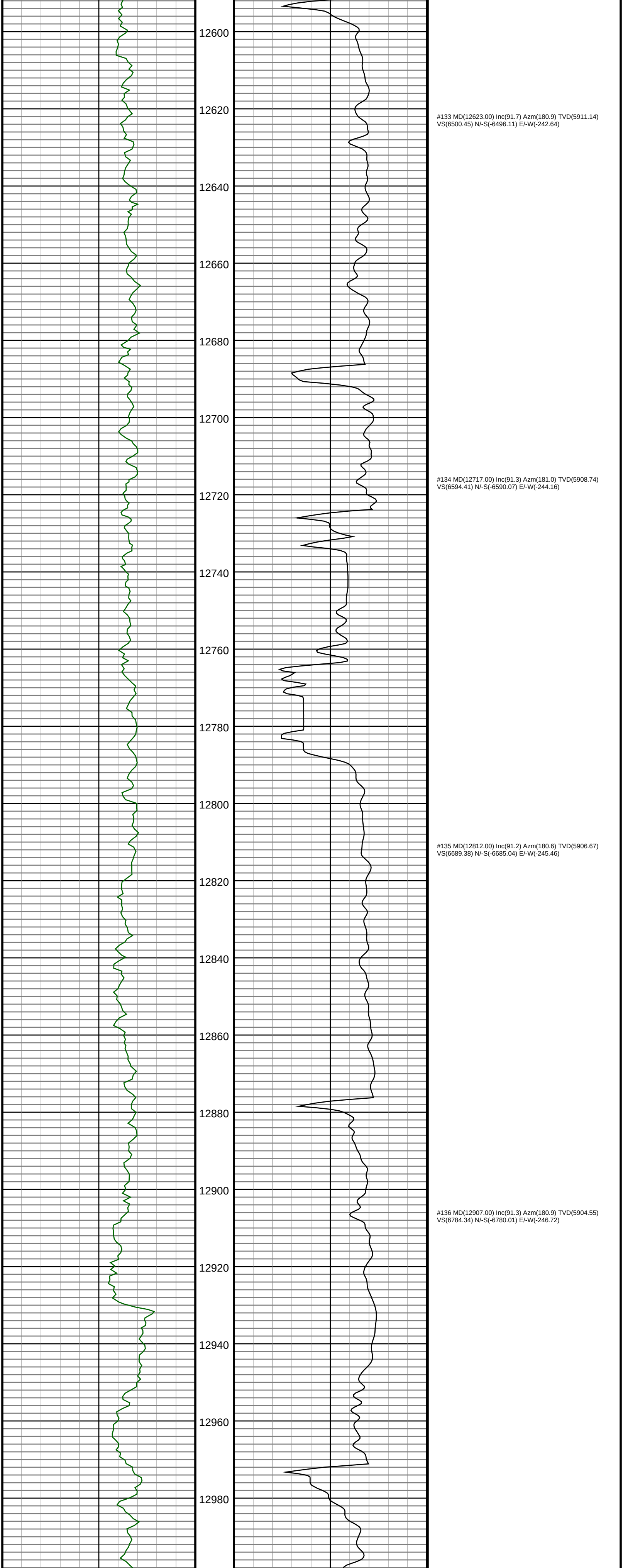
#128 MD(12150.00) Inc(90.9) Azm(180.4) TVD(5917.60)
VS(6027.68) N/-S(-6023.18) E/-W(-241.13)

#129 MD(12244.00) Inc(90.5) Azm(180.4) TVD(5916.47)
VS(6121.65) N/-S(-6117.17) E/-W(-241.74)

#130 MD(12339.00) Inc(90.2) Azm(180.1) TVD(5915.90)
VS(6216.62) N/-S(-6212.17) E/-W(-242.15)

#131 MD(12434.00) Inc(90.6) Azm(179.5) TVD(5915.21)
VS(6311.56) N/-S(-6307.17) E/-W(-241.81)

#132 MD(12528.00) Inc(91.3) Azm(180.3) TVD(5913.61)
VS(6405.50) N/-S(-6401.15) E/-W(-241.65)

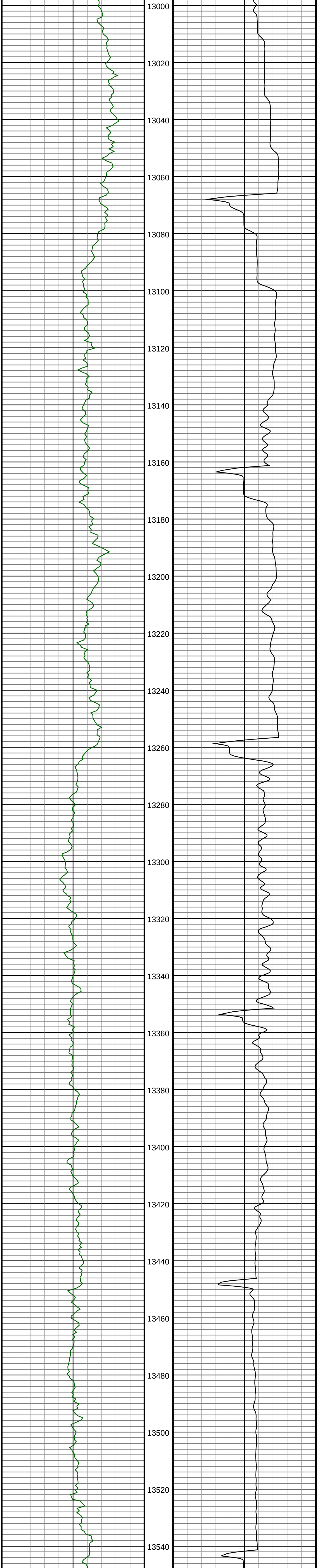


#133 MD(12623.00) Inc(91.7) Azm(180.9) TVD(5911.14)
VS(6500.45) N/-S(-6496.11) E/-W(-242.64)

#134 MD(12717.00) Inc(91.3) Azm(181.0) TVD(5908.74)
VS(6594.41) N/-S(-6590.07) E/-W(-244.16)

#135 MD(12812.00) Inc(91.2) Azm(180.6) TVD(5906.67)
VS(6689.38) N/-S(-6685.04) E/-W(-245.46)

#136 MD(12907.00) Inc(91.3) Azm(180.9) TVD(5904.55)
VS(6784.34) N/-S(-6780.01) E/-W(-246.72)



#137 MD(13002.00) Inc(91.6) Azm(180.0) TVD(5902.11)
VS(6879.29) N/-S(-6874.97) E/-W(-247.51)

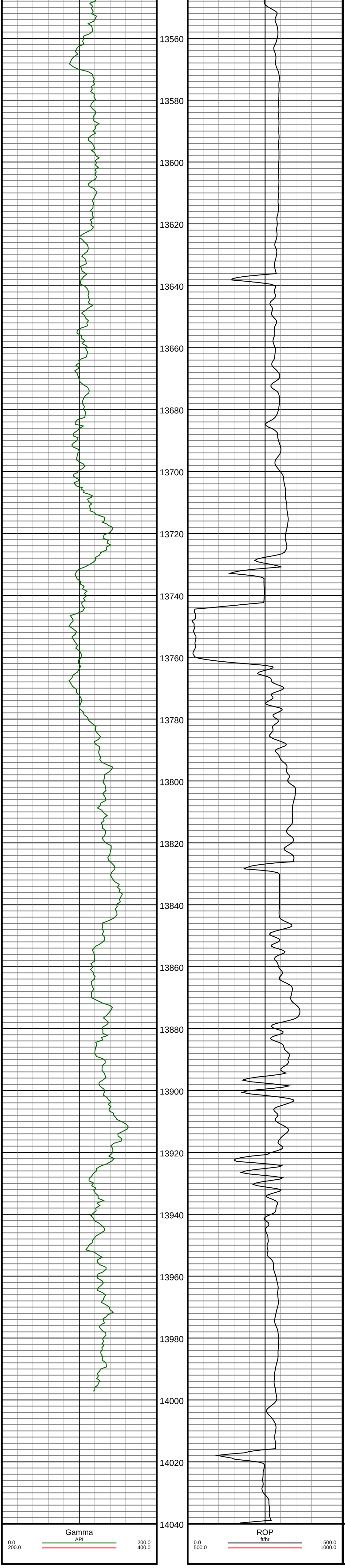
#138 MD(13097.00) Inc(91.7) Azm(179.4) TVD(5899.36)
VS(6974.19) N/-S(-6969.93) E/-W(-247.07)

#139 MD(13191.00) Inc(91.4) Azm(178.8) TVD(5896.82)
VS(7068.06) N/-S(-7063.88) E/-W(-245.58)

#140 MD(13286.00) Inc(91.1) Azm(178.4) TVD(5894.77)
VS(7162.89) N/-S(-7158.83) E/-W(-243.20)

#141 MD(13381.00) Inc(91.0) Azm(178.9) TVD(5893.05)
VS(7257.74) N/-S(-7253.79) E/-W(-240.92)

#142 MD(13475.00) Inc(90.6) Azm(178.8) TVD(5891.72)
VS(7351.61) N/-S(-7347.76) E/-W(-239.01)



#143 MD(13570.00) Inc(90.3) Azm(178.9) TVD(5890.94)
VS(7446.49) N/-S(-7442.74) E/-W(-237.07)

#144 MD(13664.00) Inc(89.9) Azm(178.0) TVD(5890.81)
VS(7540.34) N/-S(-7536.70) E/-W(-234.53)

#145 MD(13759.00) Inc(92.0) Azm(178.1) TVD(5889.29)
VS(7635.14) N/-S(-7631.63) E/-W(-231.38)

#146 MD(13854.00) Inc(91.5) Azm(178.0) TVD(5886.46)
VS(7729.90) N/-S(-7726.53) E/-W(-228.16)

#147 MD(13948.00) Inc(91.8) Azm(177.7) TVD(5883.78)
VS(7823.65) N/-S(-7820.43) E/-W(-224.57)

#148 MD(13978.00) Inc(91.7) Azm(177.2) TVD(5882.87)
VS(7853.55) N/-S(-7850.38) E/-W(-223.21)