

Oscar Y10-77-1HC

TV D
1" : 100'

Company: Noble Energy Inc
Well Name: Oscar Y10-77-1HC

API: 05-123-38197

Rig Id: Precision 828

State: Colorado

County/Parish: Weld

Country: USA

Survey Company: Ensign Directional

Job number: 207-P828-28

Company Man 1 Gary Stapleton

Directional Driller 1 Tyler Batchelder

Directional Driller 2 Matt Mason

MWD 1 Nick Jones

MWD 2 Damien Hunter

Log measurements: Gamma

Depth measured from: KB

Maximum temperature:

Depth Date
Start: 1180 ft 4/3/2014
End: 14740 ft 4/12/2014

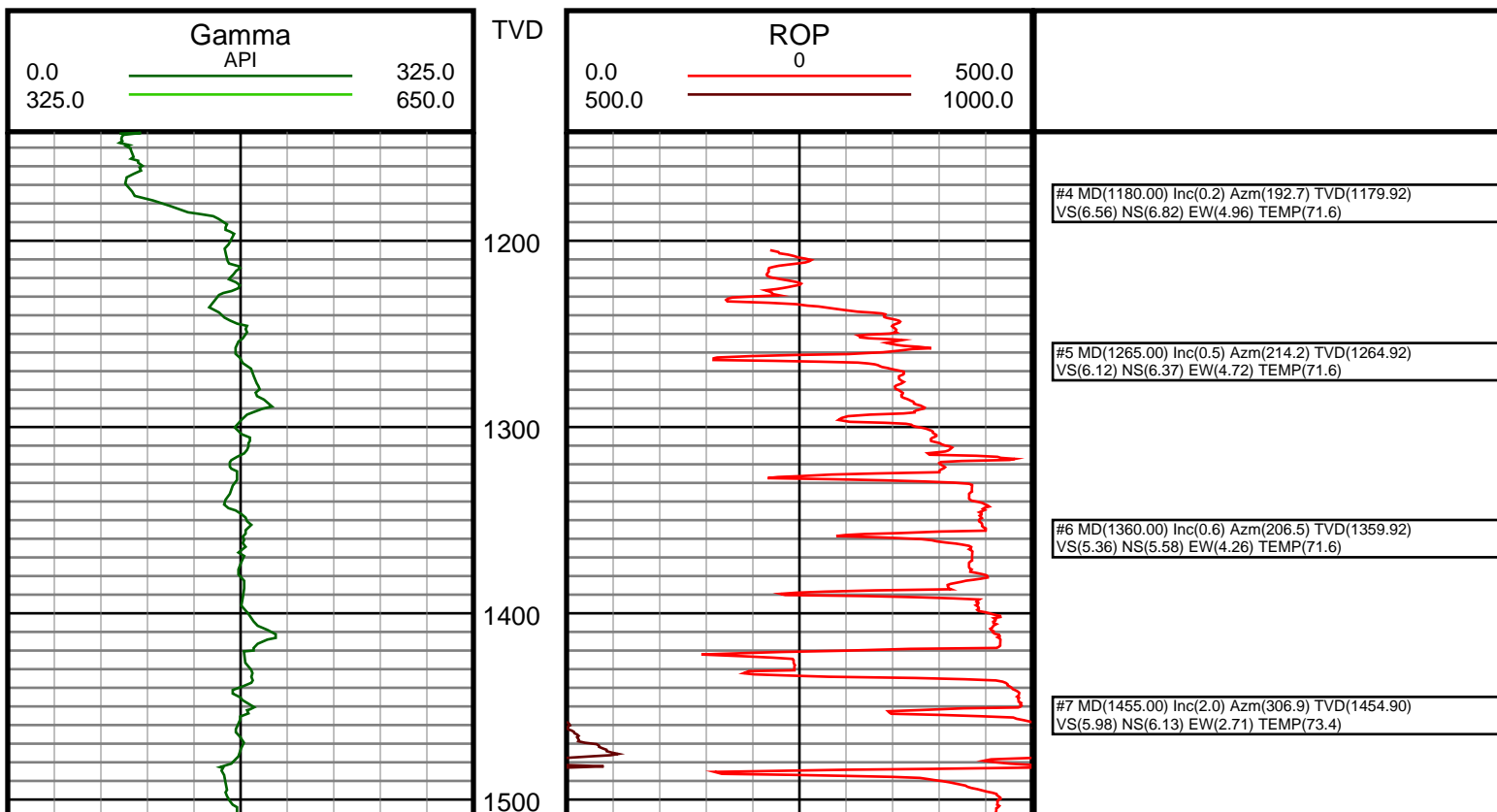
Casing Depth Size
Surface: 1163 9.625
Intermediate: 7504 7

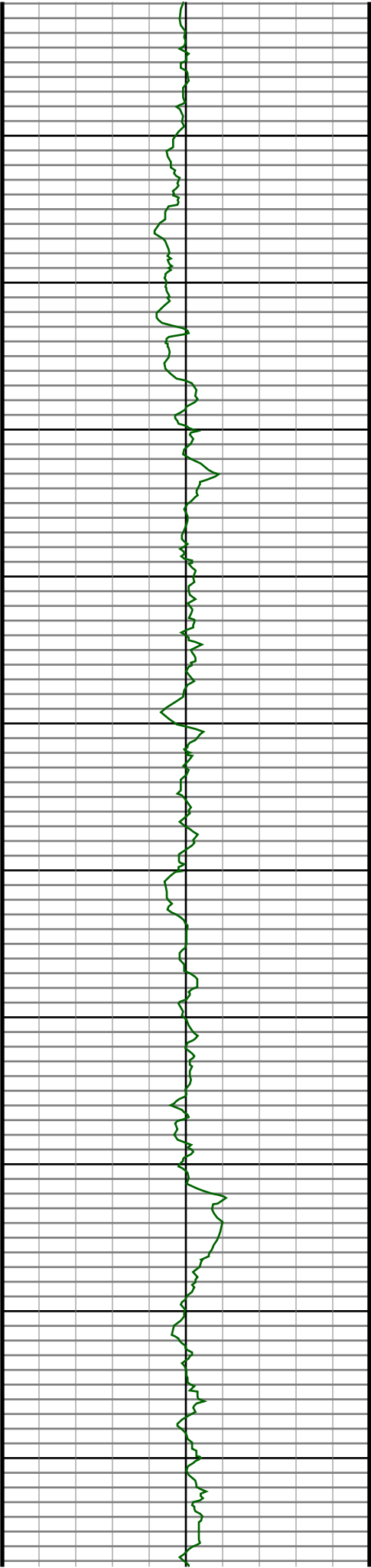
Mud Type: Water Based
Density:
Viscosity:
Rm: **Rmf:** **Rmc:**

Elevations
KB: 4945
GL: 4929
DF: 4945

Run	Bit Size	Gamma	Survey	Start	End	Start	End
1	8 3/4	63.58	58.58	1180	7514	4/3/2014	4/7/14
2	6 1/8	66.18	66.68	7514	14740	4/8/14	4/12/14
3							
4							
5							
6							
7							
8							
9							
10							

Ensign Directional 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.





1600

1700

1800

1900

2000

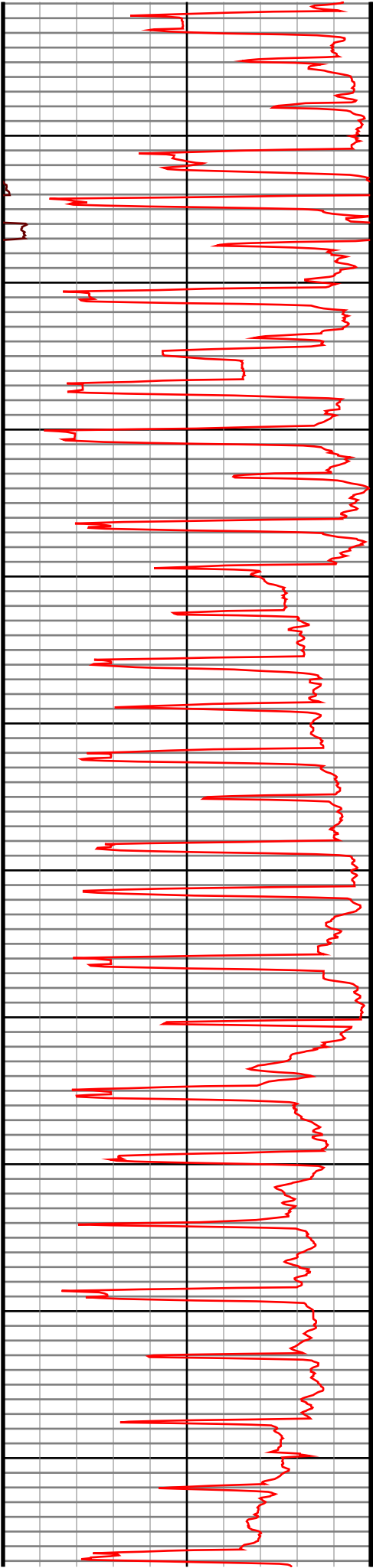
2100

2200

2300

2400

2500



#8 MD(1550.00) Inc(4.0) Azm(317.7) TVD(1549.76)
VS(9.61) NS(9.58) EW(-0.84) TEMP(75.2)

#9 MD(1645.00) Inc(5.9) Azm(305.1) TVD(1644.41)
VS(15.19) NS(14.84) EW(-7.07) TEMP(76.0)

#10 MD(1740.00) Inc(7.2) Azm(295.0) TVD(1738.79)
VS(20.99) NS(20.16) EW(-16.46) TEMP(77.0)

#11 MD(1835.00) Inc(8.7) Azm(275.4) TVD(1832.89)
VS(24.83) NS(23.36) EW(-29.01) TEMP(80.6)

#12 MD(1930.00) Inc(7.6) Azm(265.2) TVD(1926.93)
VS(25.68) NS(23.51) EW(-42.42) TEMP(82.4)

#13 MD(2025.00) Inc(5.4) Azm(269.9) TVD(2021.32)
VS(25.71) NS(22.97) EW(-53.16) TEMP(84.2)

#14 MD(2104.00) Inc(5.3) Azm(271.3) TVD(2099.97)
VS(26.16) NS(23.05) EW(-60.52) TEMP(84.2)

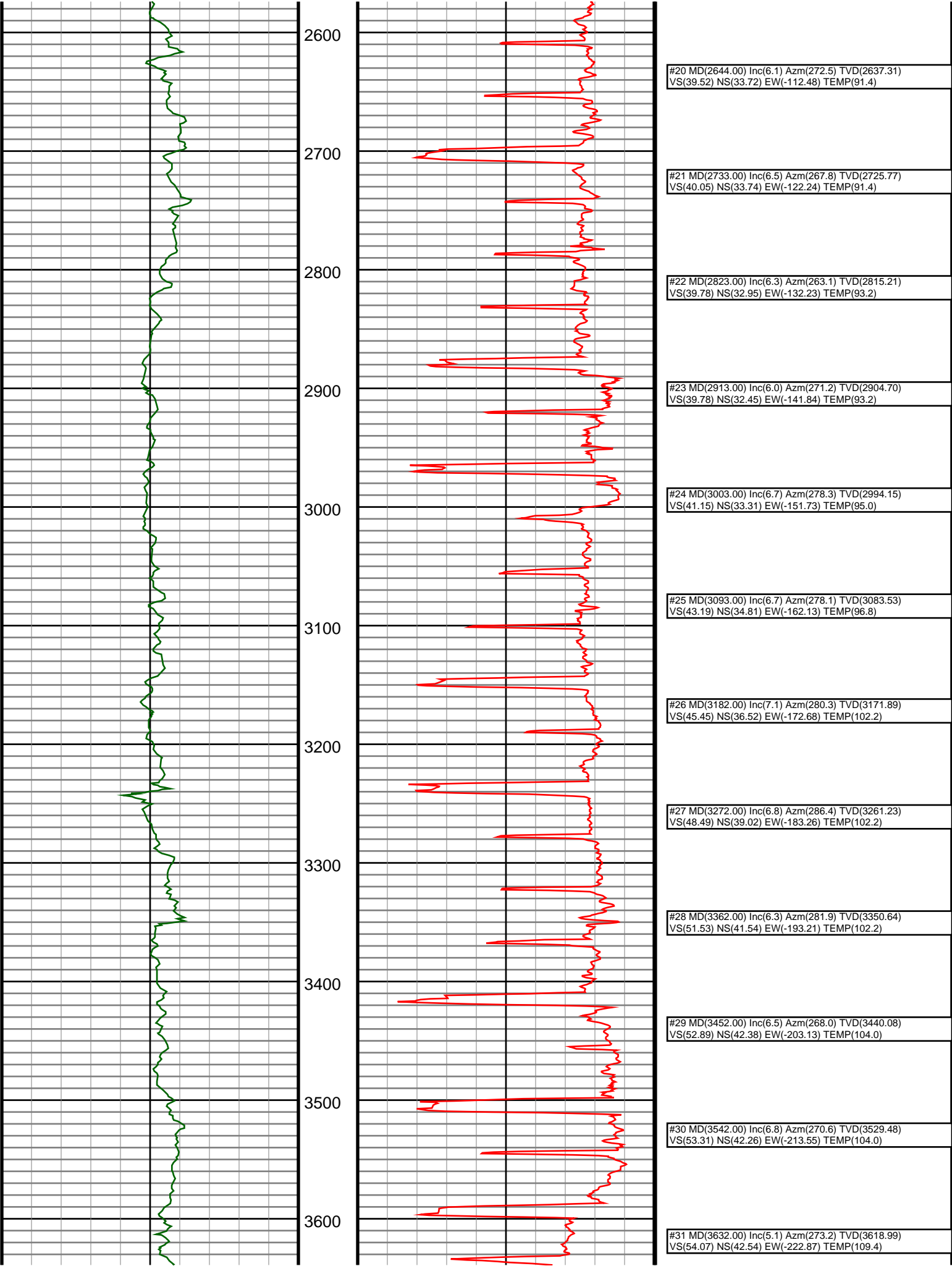
#15 MD(2194.00) Inc(4.9) Azm(278.6) TVD(2189.62)
VS(27.25) NS(23.72) EW(-68.48) TEMP(86.0)

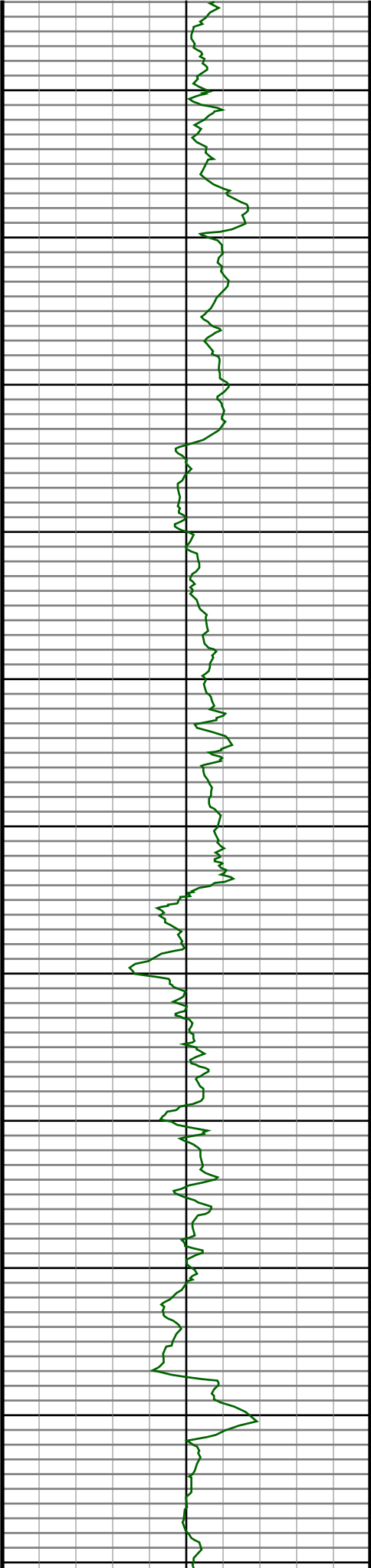
#16 MD(2284.00) Inc(4.9) Azm(282.8) TVD(2279.29)
VS(29.06) NS(25.15) EW(-76.03) TEMP(87.8)

#17 MD(2374.00) Inc(5.8) Azm(290.2) TVD(2368.90)
VS(31.90) NS(27.57) EW(-84.04) TEMP(89.6)

#18 MD(2464.00) Inc(6.6) Azm(285.6) TVD(2458.37)
VS(35.34) NS(30.53) EW(-93.29) TEMP(89.6)

#19 MD(2554.00) Inc(6.1) Azm(279.6) TVD(2547.82)
VS(38.03) NS(32.72) EW(-102.99) TEMP(89.6)





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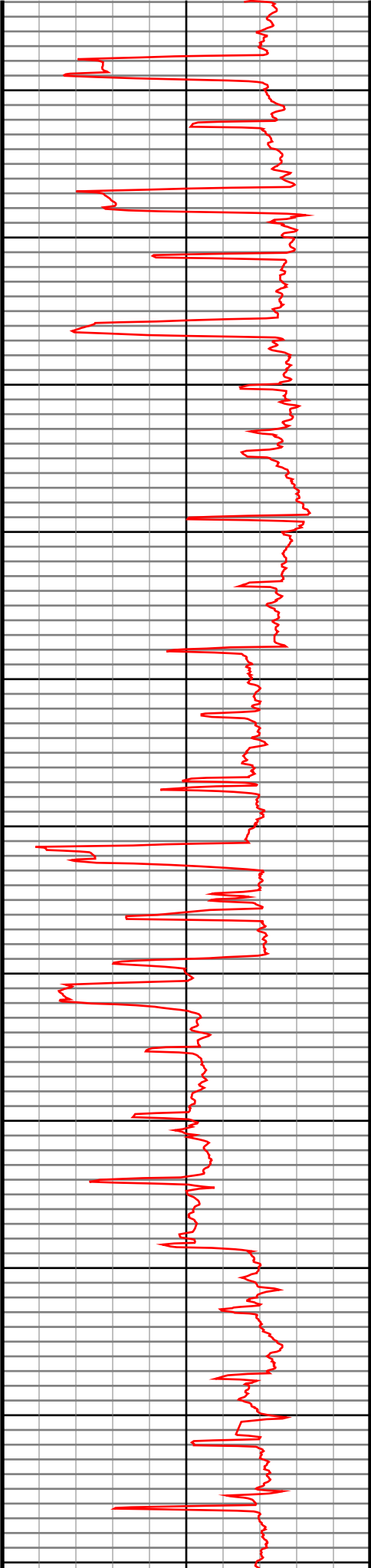
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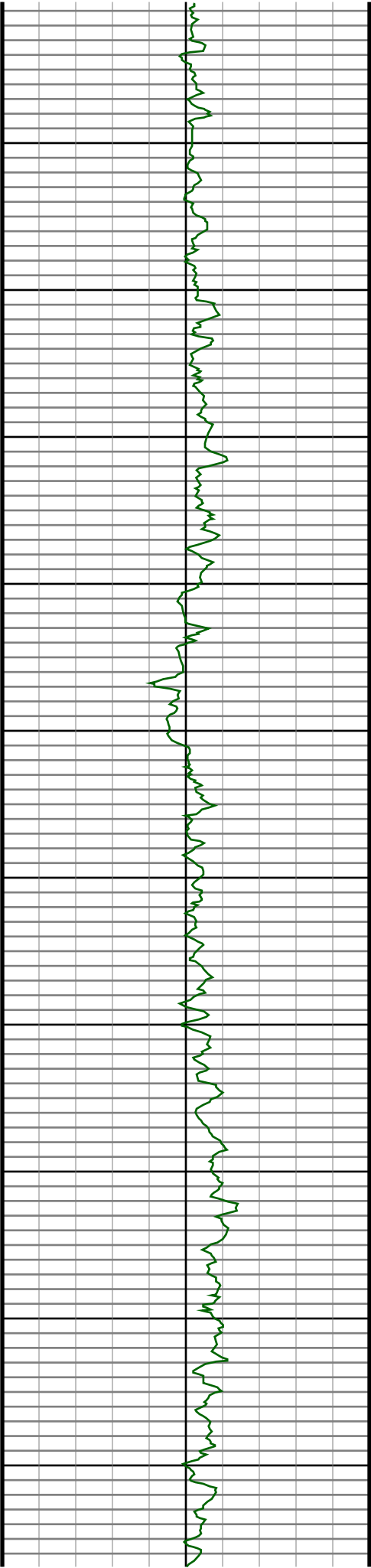
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4700



#32 MD(3721.00) Inc(5.0) Azm(275.5) TVD(3707.65) VS(55.07) NS(43.13) EW(-230.68) TEMP(109.4)
#33 MD(3811.00) Inc(5.0) Azm(289.8) TVD(3797.31) VS(57.16) NS(44.84) EW(-238.28) TEMP(109.4)
#34 MD(3901.00) Inc(5.8) Azm(289.0) TVD(3886.91) VS(60.39) NS(47.65) EW(-246.27) TEMP(111.2)
#35 MD(3991.00) Inc(6.2) Azm(284.9) TVD(3976.41) VS(63.58) NS(50.38) EW(-255.26) TEMP(111.2)
#36 MD(4081.00) Inc(6.5) Azm(284.8) TVD(4065.86) VS(66.63) NS(52.93) EW(-264.89) TEMP(111.2)
#37 MD(4171.00) Inc(6.1) Azm(280.5) TVD(4155.32) VS(69.30) NS(55.10) EW(-274.51) TEMP(113.0)
#38 MD(4261.00) Inc(6.0) Azm(280.4) TVD(4244.82) VS(71.50) NS(56.82) EW(-283.84) TEMP(116.6)
#39 MD(4351.00) Inc(7.0) Azm(289.3) TVD(4334.24) VS(74.67) NS(59.48) EW(-293.64) TEMP(116.6)
#40 MD(4441.00) Inc(6.8) Azm(289.0) TVD(4423.59) VS(78.74) NS(63.03) EW(-303.86) TEMP(118.4)
#41 MD(4531.00) Inc(6.7) Azm(287.0) TVD(4512.96) VS(82.53) NS(66.30) EW(-313.92) TEMP(118.4)
#42 MD(4620.00) Inc(6.7) Azm(285.9) TVD(4601.36) VS(85.98) NS(69.24) EW(-323.87) TEMP(120.2)
#43 MD(4710.00) Inc(6.6) Azm(283.3) TVD(4690.75) VS(89.13) NS(71.87) EW(-333.96) TEMP(122.0)



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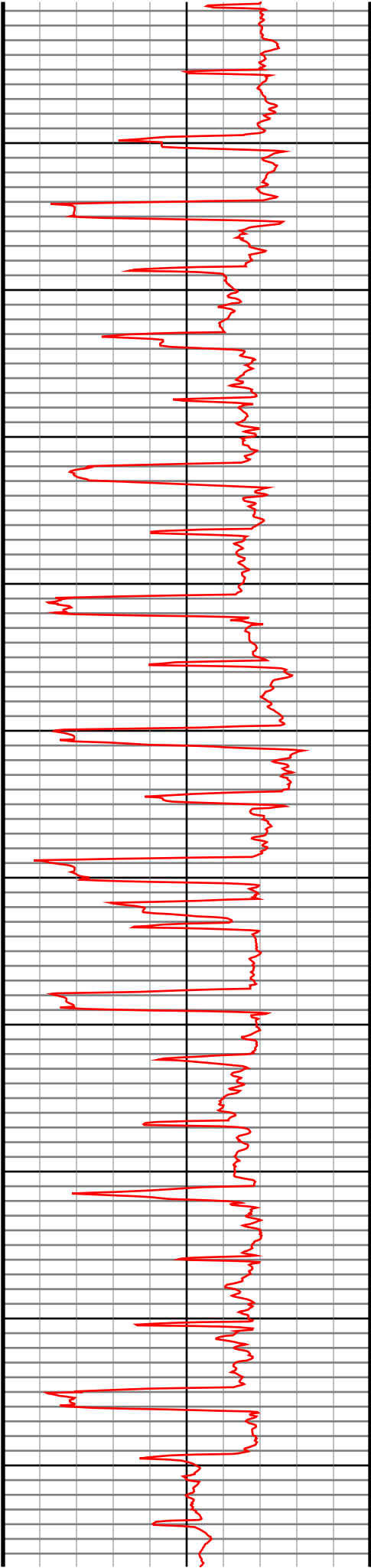
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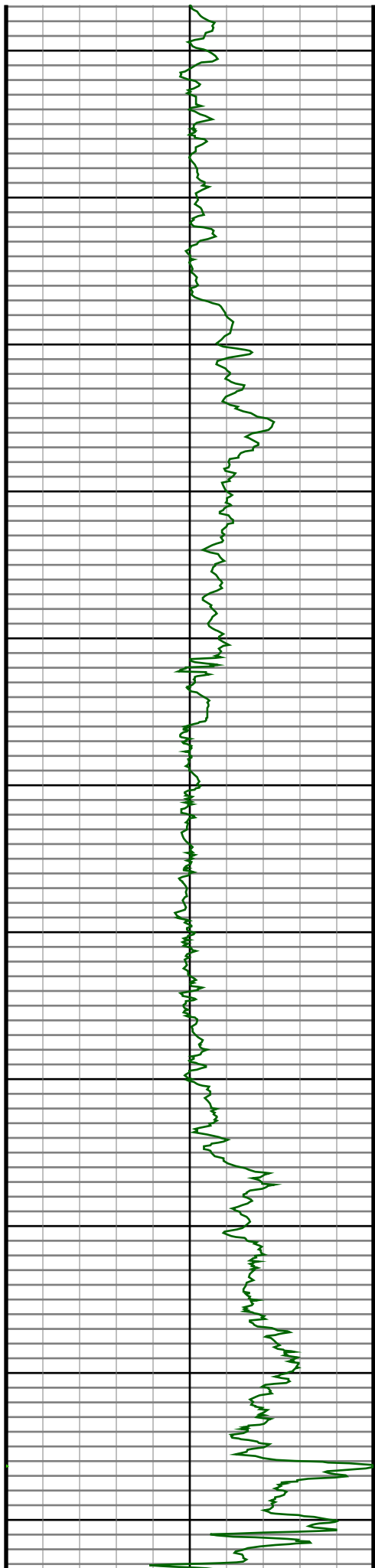
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#44 MD(4800.00) Inc(5.5) Azm(275.9) TVD(4780.25) VS(91.25) NS(73.50) EW(-343.28) TEMP(122.0)
#45 MD(4890.00) Inc(5.1) Azm(284.6) TVD(4869.87) VS(93.12) NS(74.95) EW(-351.44) TEMP(122.0)
#46 MD(4980.00) Inc(4.4) Azm(278.9) TVD(4959.56) VS(95.04) NS(76.50) EW(-358.72) TEMP(122.0)
#47 MD(5070.00) Inc(4.7) Azm(269.2) TVD(5049.27) VS(95.89) NS(76.98) EW(-365.82) TEMP(123.8)
#48 MD(5159.00) Inc(4.7) Azm(275.1) TVD(5137.98) VS(96.54) NS(77.25) EW(-373.10) TEMP(123.8)
#49 MD(5249.00) Inc(2.9) Azm(274.9) TVD(5227.77) VS(97.37) NS(77.77) EW(-379.04) TEMP(127.4)
#50 MD(5339.00) Inc(1.3) Azm(256.8) TVD(5317.71) VS(97.51) NS(77.74) EW(-382.30) TEMP(127.4)
#51 MD(5428.00) Inc(1.0) Azm(44.8) TVD(5406.70) VS(97.85) NS(78.06) EW(-382.74) TEMP(122.0)
#52 MD(5518.00) Inc(1.1) Azm(54.3) TVD(5496.69) VS(98.84) NS(79.12) EW(-381.48) TEMP(123.8)
#53 MD(5608.00) Inc(1.7) Azm(45.6) TVD(5586.66) VS(100.19) NS(80.56) EW(-379.83) TEMP(125.6)
#54 MD(5698.00) Inc(0.8) Azm(3.1) TVD(5676.64) VS(101.70) NS(82.12) EW(-378.84) TEMP(125.6)
#55 MD(5788.00) Inc(0.9) Azm(32.4) TVD(5766.63) VS(102.90) NS(83.34) EW(-378.43) TEMP(127.4)



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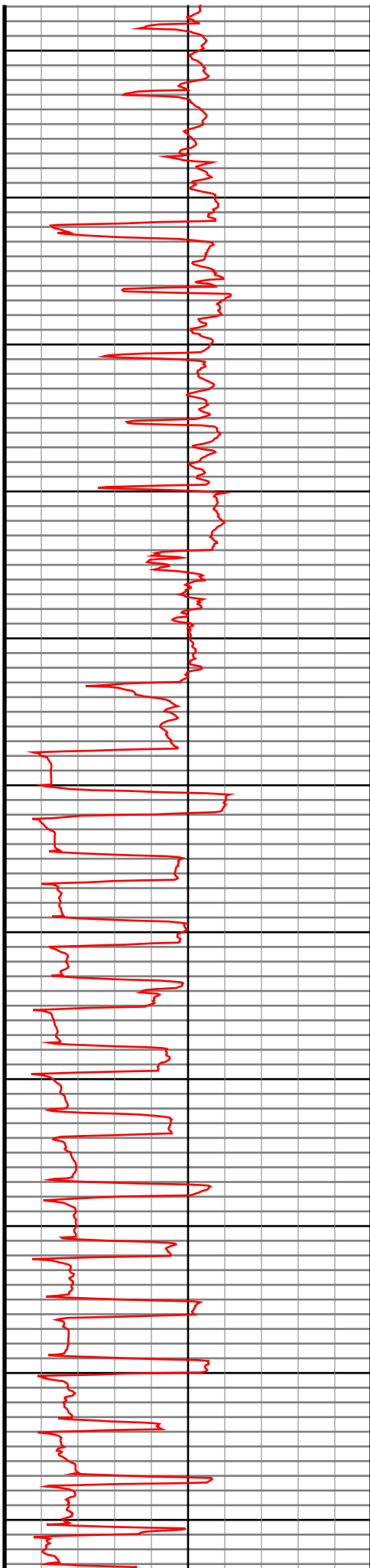
6400

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6800



#56 MD(5878.00) Inc(0.8) Azm(62.3) TVD(5856.62)
VS(103.74) NS(84.23) EW(-377.49) TEMP(129.2)

#57 MD(5968.00) Inc(0.8) Azm(322.6) TVD(5946.62)
VS(104.52) NS(85.02) EW(-377.32) TEMP(131.0)

#58 MD(6058.00) Inc(0.9) Azm(327.5) TVD(6036.61)
VS(105.66) NS(86.12) EW(-378.08) TEMP(168.8)

#59 MD(6148.00) Inc(1.2) Azm(358.6) TVD(6126.59)
VS(107.21) NS(87.65) EW(-378.48) TEMP(132.8)

#60 MD(6238.00) Inc(1.2) Azm(356.4) TVD(6216.57)
VS(109.10) NS(89.54) EW(-378.57) TEMP(134.6)

#61 MD(6282.00) Inc(1.8) Azm(359.9) TVD(6260.56)
VS(110.25) NS(90.69) EW(-378.60) TEMP(134.6)

#62 MD(6327.00) Inc(4.3) Azm(4.6) TVD(6305.49)
VS(112.63) NS(93.08) EW(-378.46) TEMP(134.6)

#63 MD(6371.00) Inc(7.3) Azm(3.9) TVD(6349.26)
VS(117.04) NS(97.51) EW(-378.14) TEMP(136.4)

#64 MD(6416.00) Inc(10.3) Azm(0.3) TVD(6393.73)
VS(123.89) NS(104.39) EW(-377.92) TEMP(-61.6)

#65 MD(6461.00) Inc(12.3) Azm(0.4) TVD(6437.85)
VS(132.70) NS(113.21) EW(-377.87) TEMP(136.4)

#66 MD(6506.00) Inc(14.5) Azm(0.2) TVD(6481.62)
VS(143.11) NS(123.63) EW(-377.82) TEMP(138.2)

#67 MD(6551.00) Inc(17.1) Azm(0.5) TVD(6524.92)
VS(155.34) NS(135.88) EW(-377.74) TEMP(140.0)

#68 MD(6596.00) Inc(20.4) Azm(359.0) TVD(6567.53)
VS(169.78) NS(150.35) EW(-377.82) TEMP(140.0)

#69 MD(6641.00) Inc(23.6) Azm(358.3) TVD(6609.24)
VS(186.63) NS(167.20) EW(-378.22) TEMP(141.8)

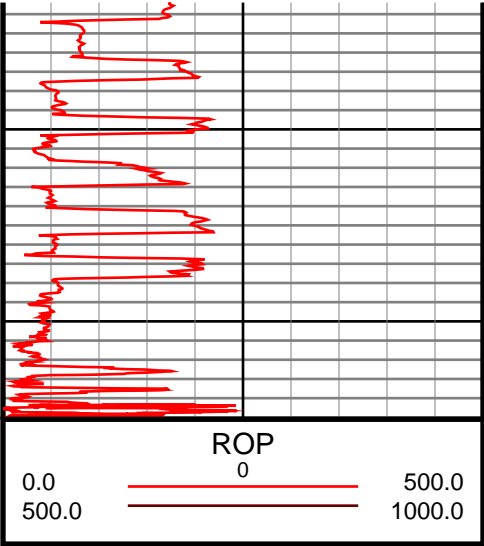
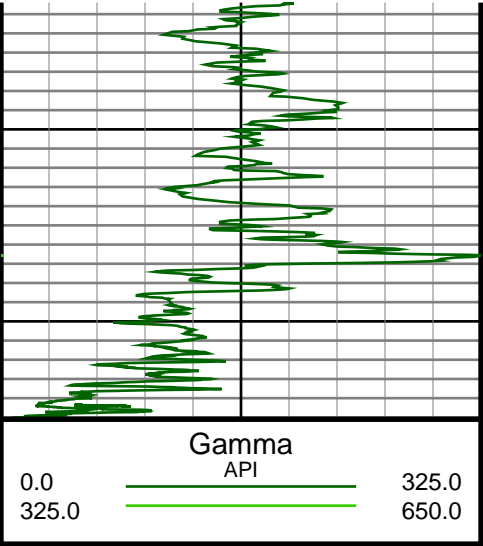
#70 MD(6686.00) Inc(26.5) Azm(356.7) TVD(6650.01)
VS(205.68) NS(186.23) EW(-379.07) TEMP(143.6)

#71 MD(6731.00) Inc(29.0) Azm(356.7) TVD(6689.83)
VS(226.63) NS(207.14) EW(-380.27) TEMP(145.4)

#72 MD(6776.00) Inc(31.9) Azm(358.6) TVD(6728.62)
VS(249.43) NS(229.92) EW(-381.19) TEMP(145.4)

#73 MD(6821.00) Inc(36.1) Azm(0.2) TVD(6765.92)
VS(274.56) NS(255.08) EW(-381.44) TEMP(145.4)

#74 MD(6866.00) Inc(40.4) Azm(1.0) TVD(6801.25)
VS(302.36) NS(282.93) EW(-381.14) TEMP(145.4)



#76 MD(6955.00) Inc(47.3) Azm(358.7) TVD(6865.33) VS(363.96) NS(344.61) EW(-381.14) TEMP(147.2)
#77 MD(7000.00) Inc(51.0) Azm(356.7) TVD(6894.76) VS(397.98) NS(378.61) EW(-382.52) TEMP(149.0)
#78 MD(7045.00) Inc(54.1) Azm(356.0) TVD(6922.12) VS(433.70) NS(414.26) EW(-384.80) TEMP(147.2)
#79 MD(7090.00) Inc(56.8) Azm(356.8) TVD(6947.64) VS(470.76) NS(451.24) EW(-387.12) TEMP(147.2)
#80 MD(7135.00) Inc(59.9) Azm(357.7) TVD(6971.25) VS(509.06) NS(489.50) EW(-388.96) TEMP(147.2)
#82 MD(7225.00) Inc(69.9) Azm(359.0) TVD(7009.88) VS(590.19) NS(570.64) EW(-390.81) TEMP(150.8)
#92 MD(7928.00) Inc(89.8) Azm(0.3) TVD(7043.73) VS(1286.98) NS(1268.85) EW(-381.71) TEMP(172.4)