

# Rohn State LD10-69-1HN <sup>MD</sup> <sub>1" : 100'</sub>

Company: Noble Energy Inc

Well Name: Rohn State LD10-69-1HN

API: 05-123-37619

Rig Id: Precision 828

State: Colorado

County/Parish: Weld

Country: USA

Survey Company: Ensign Directional

Job number: 05-123-37619

Company Man 1 Gary Stapleton

Directional Driller 1 Tyler Batchelder

Directional Driller 2 Matt Mason

Directional Driller 3 Dustin Davis

MWD 1 Mark Bigler

MWD 2 Derek Saykally

Log measurements: Gamma

Depth measured from: KB

Maximum temperature:

Depth Date  
Start: 1215 ft 10/18/2014  
End: 9551 ft 10/22/2014

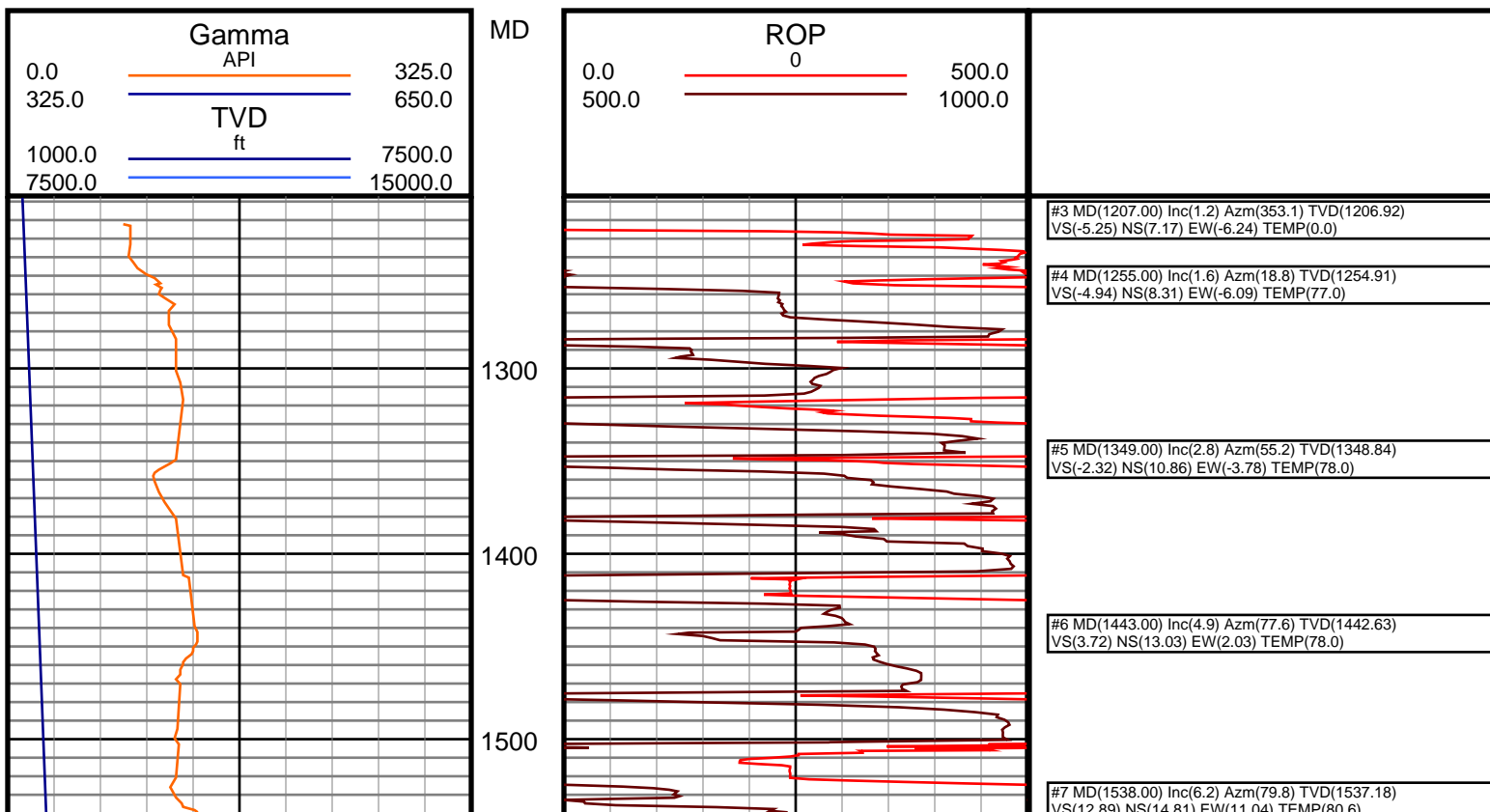
Casing Depth Size  
Surface: 1215 9.625  
Intermediate: 6250 7

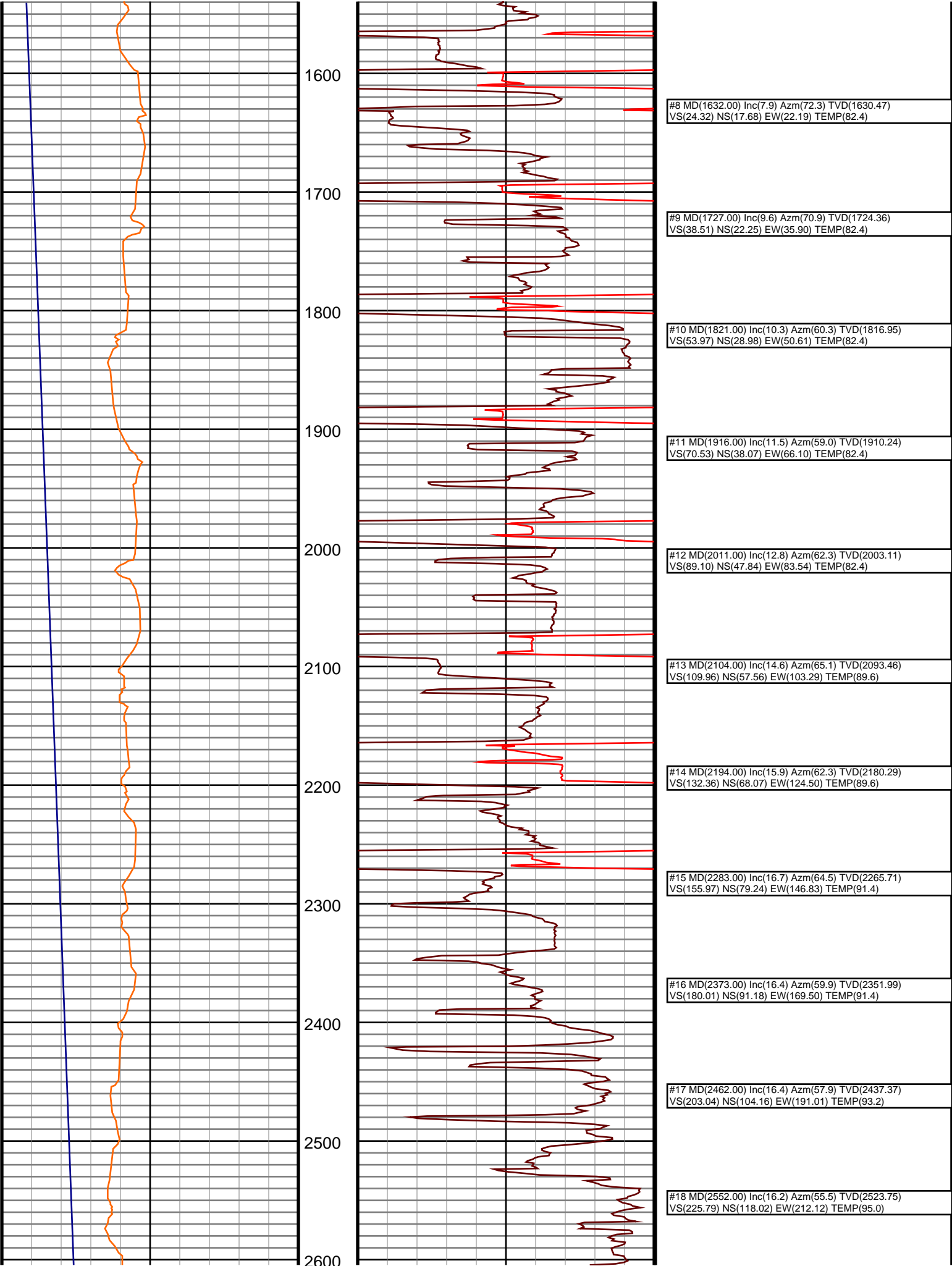
Mud Type: Water Based  
Density:  
Viscosity:  
Rm: Rmf: Rmc:

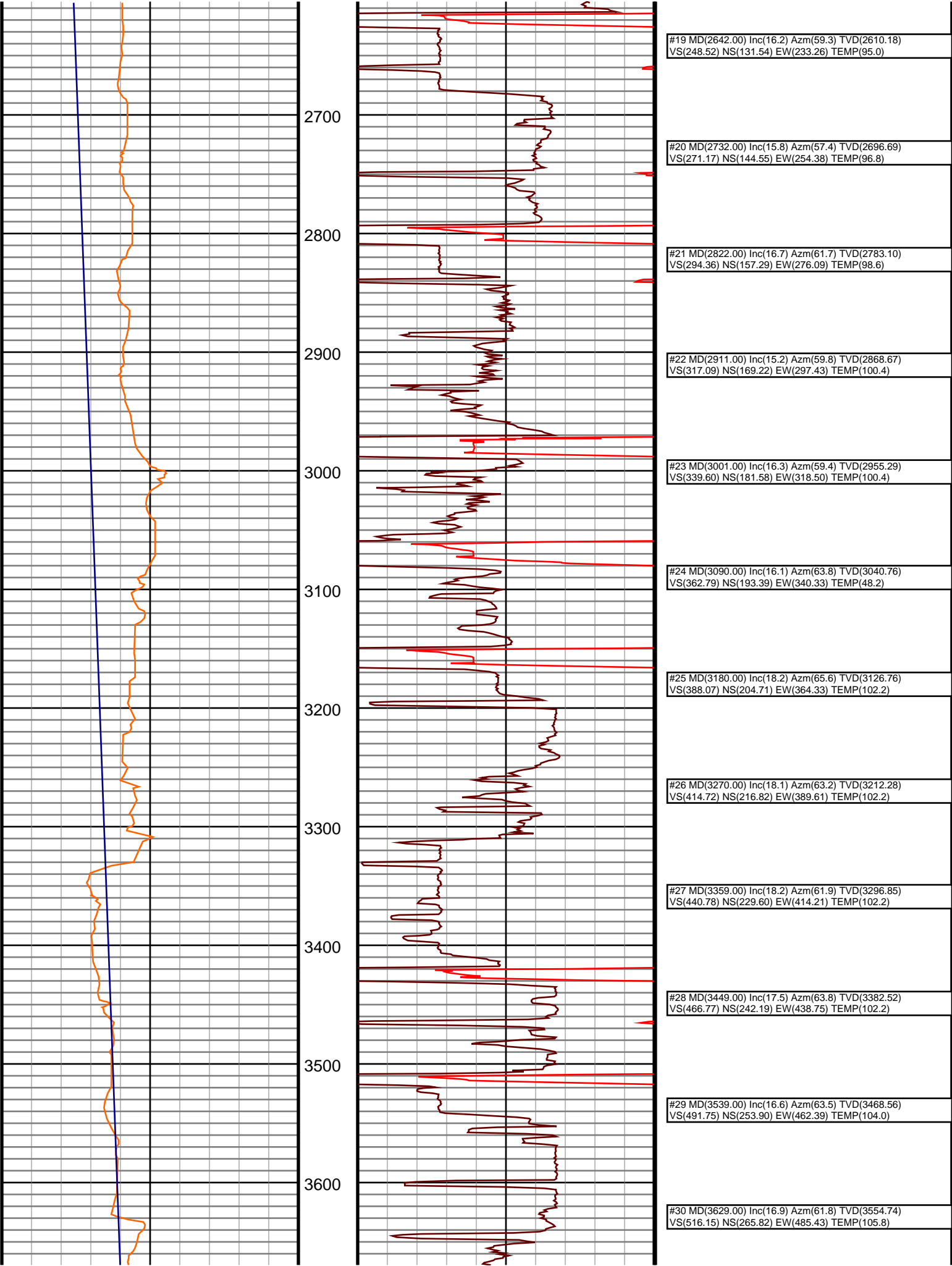
Elevations  
KB: 4755  
GL: 4739  
DF: 4755

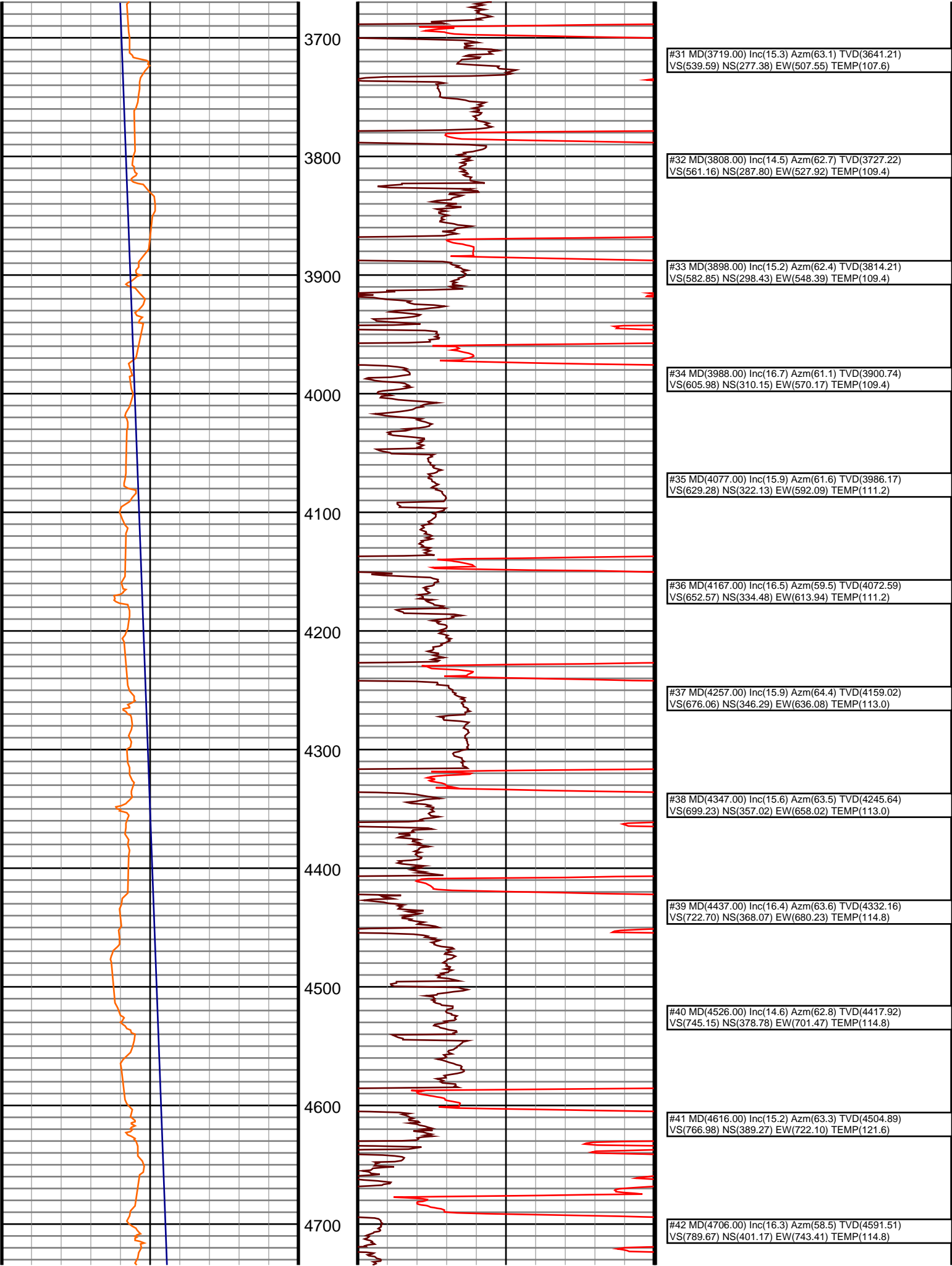
Run	Bit Size	Gamma	Survey	Offsets	Start	End	Start	End	Dates
1	8 3/4	61.32	56.32	1215	6160	9551	10/18/2014	10/20/2014	
2	6 1/8	60.95	55.95	6160	9551		10/21/2014	10/22/2014	
3									
4									
5									
6									
7									
8									
9									
10									

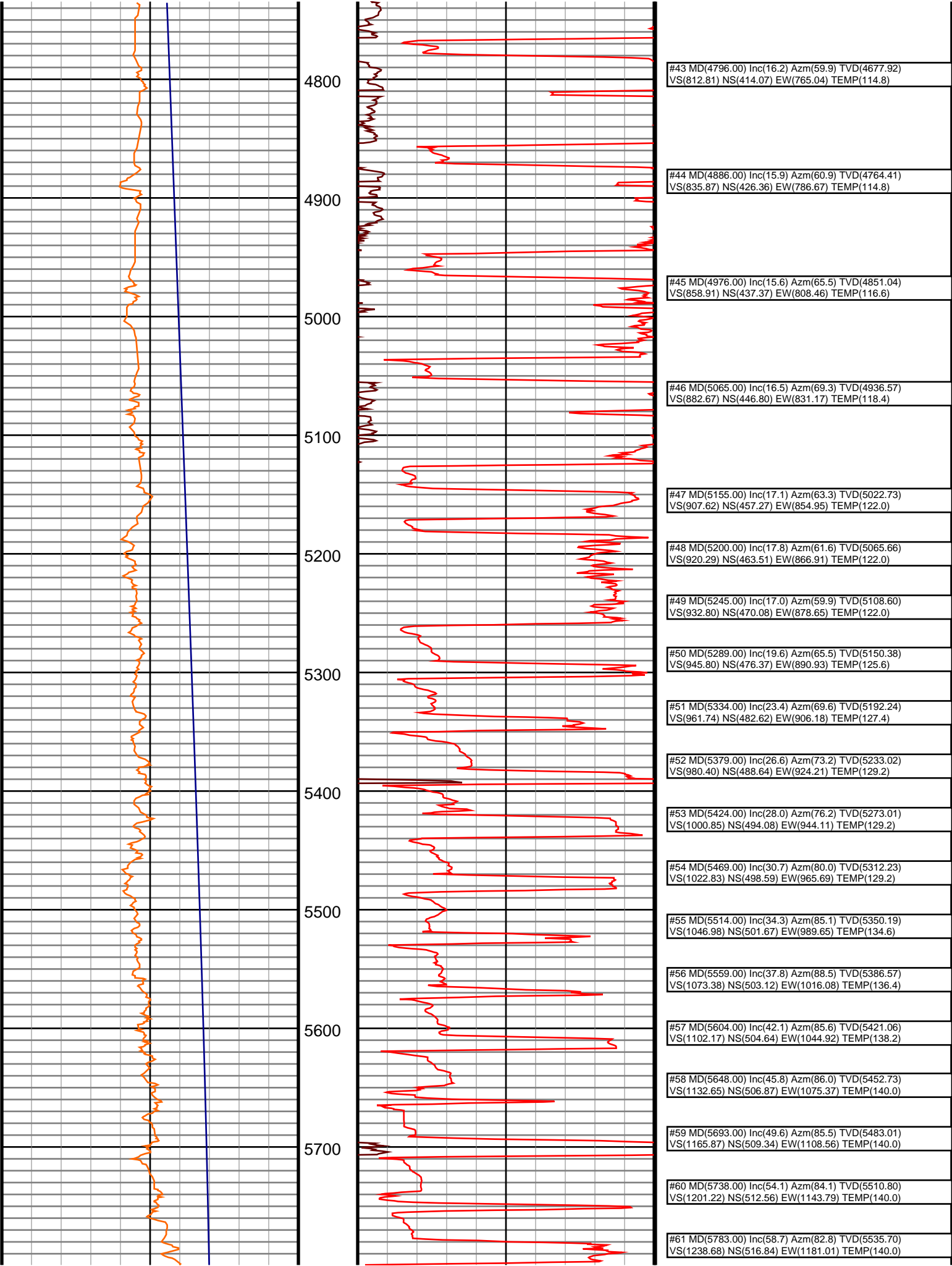
Ensign Directional uses its best efforts to provide its customers with accurate information and interpretations in conjunction with services performed but will not be held liable or responsible for the accuracy of such information or interpretation.

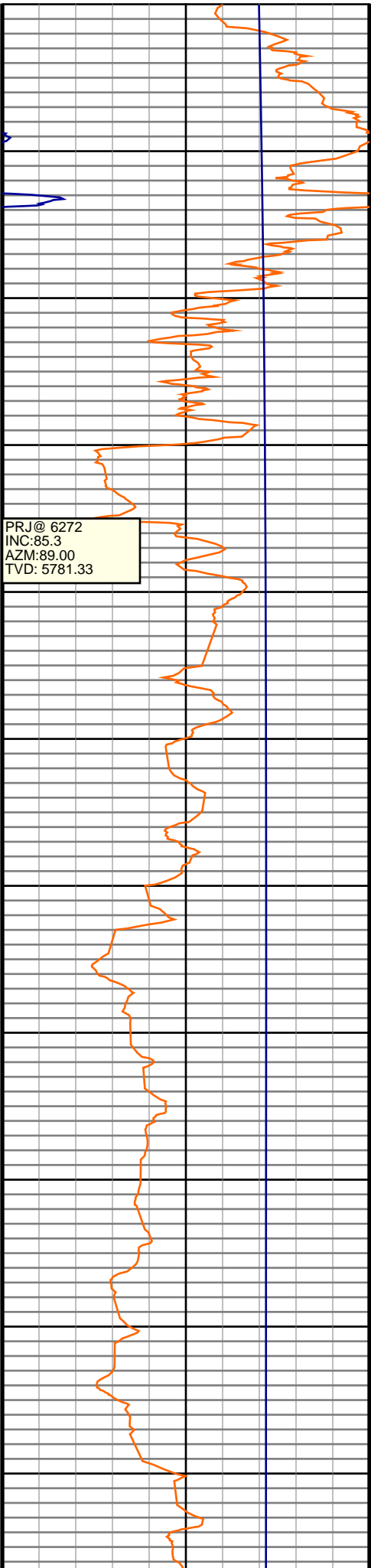




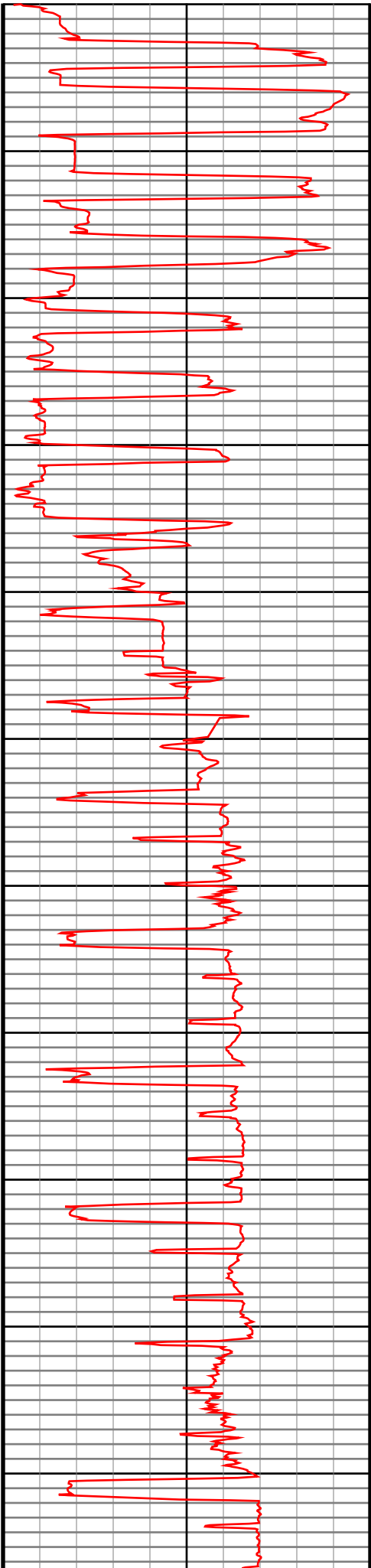




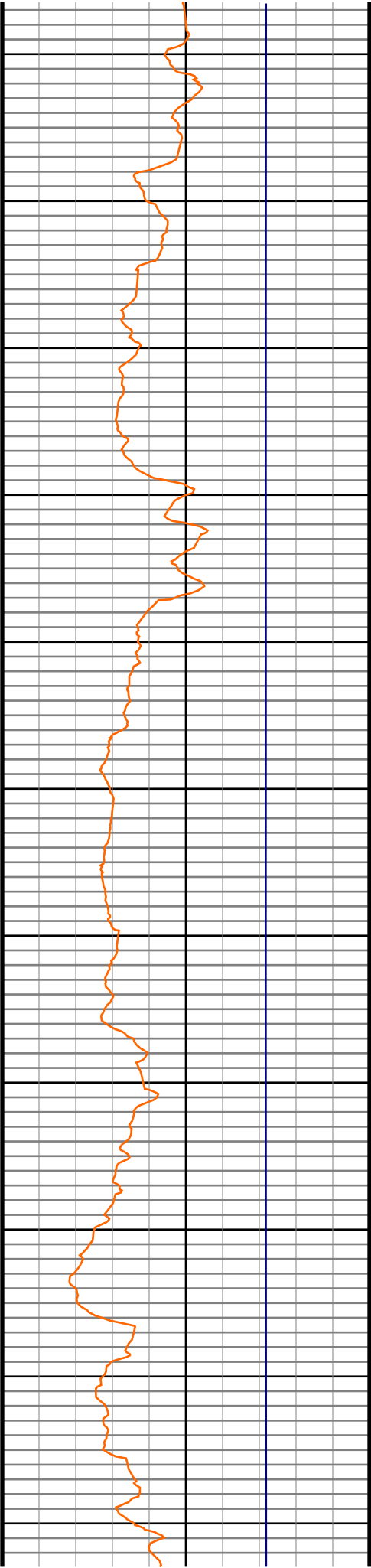




5800  
5900  
6000  
6100  
6200  
6300  
6400  
6500  
6600  
6700  
6800



#62 MD(5828.00) Inc(61.5) Azm(83.5) TVD(5558.13) VS(1277.68) NS(521.49) EW(1219.74) TEMP(145.4)
#63 MD(5873.00) Inc(63.5) Azm(84.2) TVD(5578.91) VS(1317.59) NS(525.77) EW(1259.42) TEMP(147.2)
#64 MD(5918.00) Inc(66.9) Azm(85.6) TVD(5597.78) VS(1358.39) NS(529.39) EW(1300.10) TEMP(147.2)
#65 MD(5963.00) Inc(70.2) Azm(86.1) TVD(5614.24) VS(1400.19) NS(532.42) EW(1341.87) TEMP(149.0)
#66 MD(6008.00) Inc(74.0) Azm(84.9) TVD(5628.06) VS(1442.95) NS(535.78) EW(1384.55) TEMP(149.0)
#67 MD(6053.00) Inc(76.7) Azm(85.7) TVD(5639.44) VS(1486.42) NS(539.35) EW(1427.94) TEMP(150.8)
#68 MD(6102.00) Inc(79.6) Azm(88.1) TVD(5649.51) VS(1534.23) NS(541.94) EW(1475.82) TEMP(149.0)
#69 MD(6182.00) Inc(84.6) Azm(88.5) TVD(5660.50) VS(1613.03) NS(544.28) EW(1555.00) TEMP(163.4)
#70 MD(6275.00) Inc(87.2) Azm(88.4) TVD(5667.15) VS(1705.28) NS(546.79) EW(1647.72) TEMP(161.6)
#71 MD(6369.00) Inc(88.5) Azm(86.5) TVD(5670.67) VS(1798.85) NS(550.97) EW(1741.55) TEMP(163.4)
#72 MD(6464.00) Inc(90.2) Azm(86.3) TVD(5671.75) VS(1893.61) NS(556.94) EW(1836.35) TEMP(163.4)
#73 MD(6557.00) Inc(92.0) Azm(88.6) TVD(5669.97) VS(1986.23) NS(561.07) EW(1929.23) TEMP(161.6)
#74 MD(6651.00) Inc(90.0) Azm(86.0) TVD(5668.33) VS(2079.87) NS(565.50) EW(2023.10) TEMP(163.4)
#75 MD(6745.00) Inc(90.1) Azm(85.5) TVD(5668.24) VS(2173.71) NS(572.47) EW(2116.84) TEMP(167.0)
#76 MD(6838.00) Inc(90.2) Azm(86.4) TVD(5668.00) VS(2266.53) NS(579.04) EW(2209.61) TEMP(167.0)



6900

7000

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7400

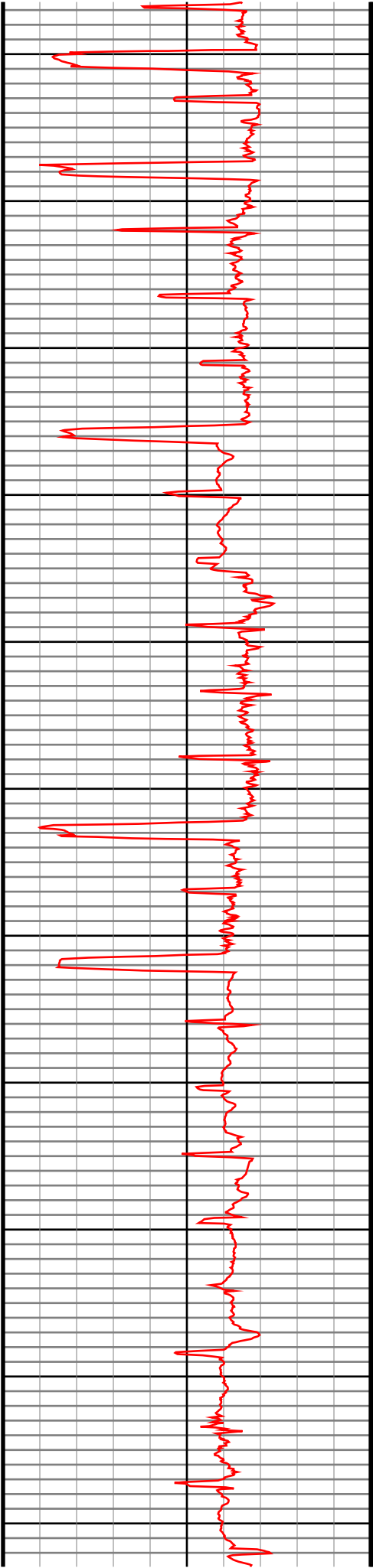
7500

7600

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#77 MD(6915.00) Inc(91.9) Azm(89.5) TVD(5666.59)  
VS(2343.16) NS(581.79) EW(2286.54) TEMP(167.0)

#78 MD(7005.00) Inc(90.5) Azm(89.8) TVD(5664.70)  
VS(2432.42) NS(582.34) EW(2376.51) TEMP(168.8)

#79 MD(7094.00) Inc(91.0) Azm(89.0) TVD(5663.54)  
VS(2520.76) NS(583.27) EW(2465.50) TEMP(174.2)

#80 MD(7184.00) Inc(89.5) Azm(87.7) TVD(5663.15)  
VS(2610.28) NS(585.86) EW(2555.46) TEMP(174.2)

#81 MD(7274.00) Inc(89.7) Azm(87.3) TVD(5663.77)  
VS(2699.93) NS(589.79) EW(2645.37) TEMP(176.0)

#82 MD(7364.00) Inc(90.2) Azm(87.1) TVD(5663.85)  
VS(2789.62) NS(594.18) EW(2735.26) TEMP(179.6)

#83 MD(7454.00) Inc(91.0) Azm(90.1) TVD(5662.91)  
VS(2879.08) NS(596.38) EW(2825.22) TEMP(179.6)

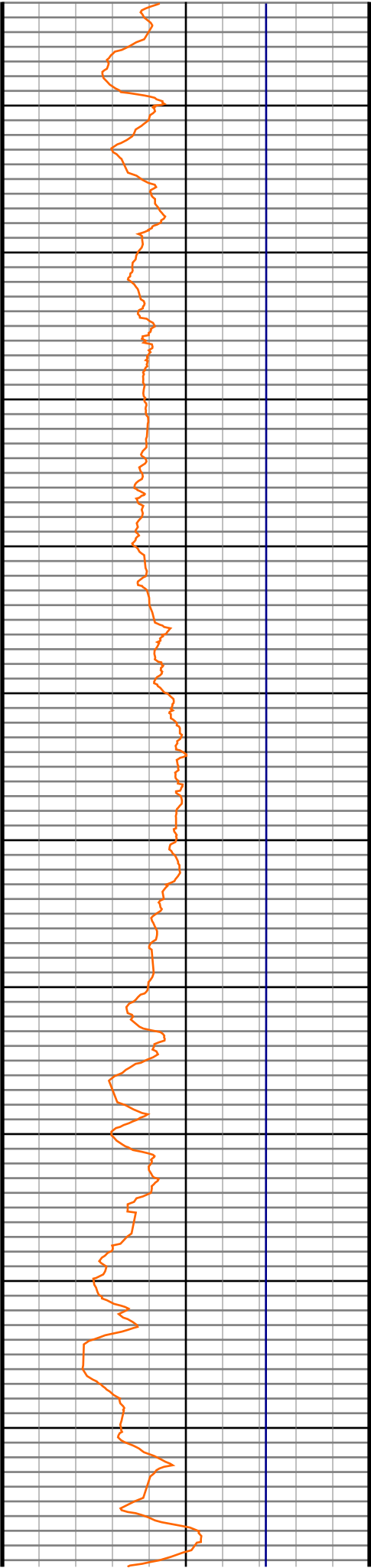
#84 MD(7543.00) Inc(89.3) Azm(87.7) TVD(5662.68)  
VS(2967.51) NS(598.09) EW(2914.19) TEMP(181.4)

#85 MD(7633.00) Inc(89.1) Azm(87.3) TVD(5663.93)  
VS(3057.15) NS(602.02) EW(3004.10) TEMP(183.2)

#86 MD(7723.00) Inc(89.1) Azm(87.3) TVD(5665.35)  
VS(3146.82) NS(606.26) EW(3093.99) TEMP(185.0)

#87 MD(7812.00) Inc(88.9) Azm(87.3) TVD(5666.90)  
VS(3235.49) NS(610.45) EW(3182.87) TEMP(186.8)

#88 MD(7902.00) Inc(88.6) Azm(86.6) TVD(5668.86)  
VS(3325.19) NS(615.24) EW(3272.72) TEMP(188.6)



8000

8100

8200

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8400

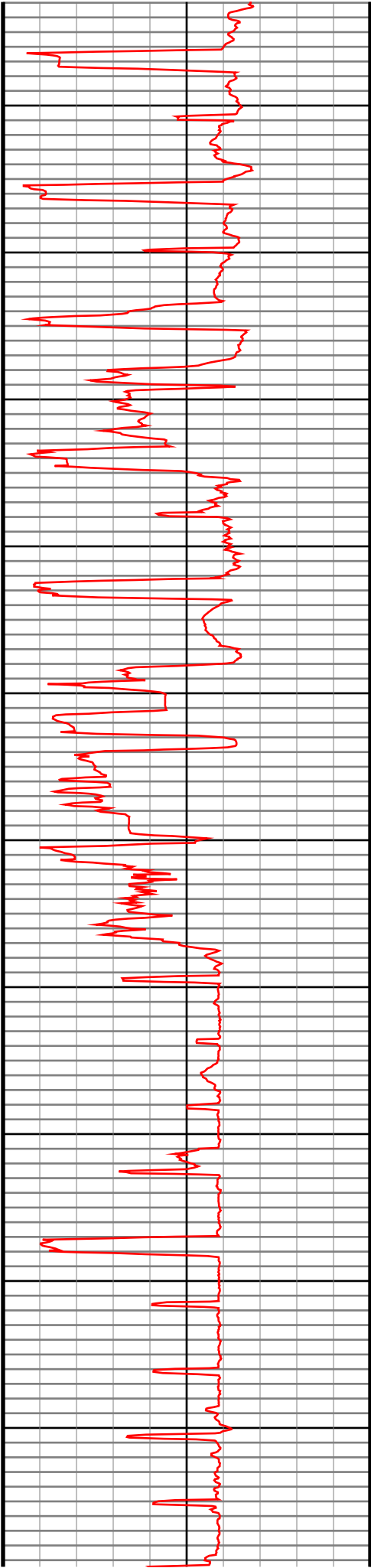
8500

8600

8700

8800

8900



#89 MD(7992.00) Inc(88.9) Azm(87.3) TVD(5670.83)  
VS(3414.89) NS(620.02) EW(3362.57) TEMP(188.6)

#90 MD(8082.00) Inc(89.6) Azm(88.1) TVD(5672.01)  
VS(3504.50) NS(623.63) EW(3452.49) TEMP(188.6)

#91 MD(8172.00) Inc(90.1) Azm(88.2) TVD(5672.24)  
VS(3594.06) NS(626.54) EW(3542.44) TEMP(190.4)

#92 MD(8262.00) Inc(90.8) Azm(88.4) TVD(5671.53)  
VS(3683.58) NS(629.21) EW(3632.40) TEMP(188.6)

#93 MD(8352.00) Inc(88.7) Azm(87.9) TVD(5671.93)  
VS(3773.13) NS(632.11) EW(3722.35) TEMP(188.6)

#94 MD(8442.00) Inc(89.6) Azm(89.1) TVD(5673.26)  
VS(3862.62) NS(634.47) EW(3812.31) TEMP(194.0)

#95 MD(8532.00) Inc(90.9) Azm(91.3) TVD(5672.87)  
VS(3951.79) NS(634.16) EW(3902.30) TEMP(194.0)

#96 MD(8621.00) Inc(91.4) Azm(90.6) TVD(5671.08)  
VS(4039.79) NS(632.68) EW(3991.27) TEMP(192.2)

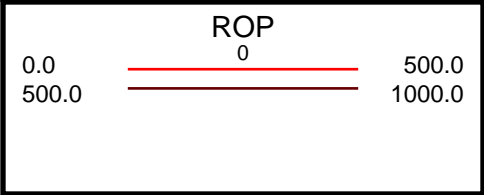
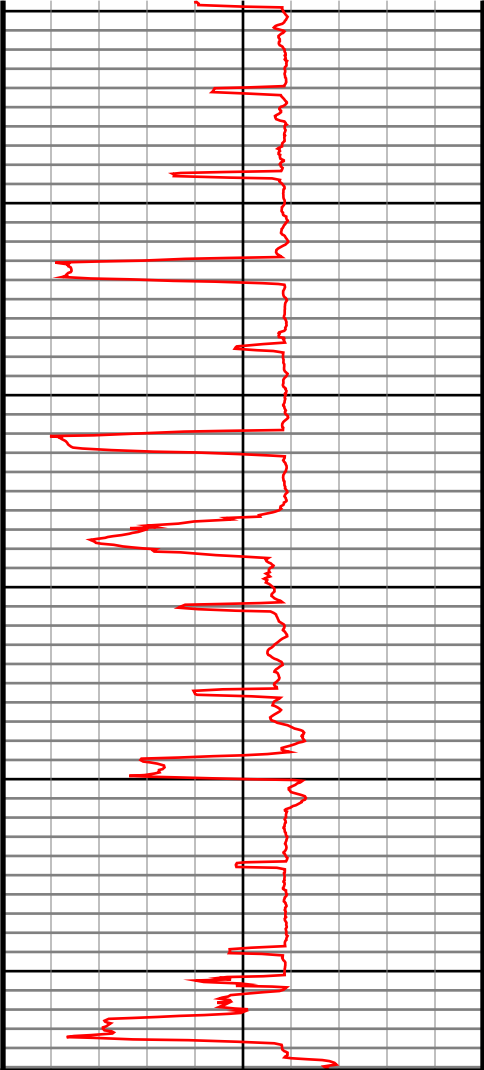
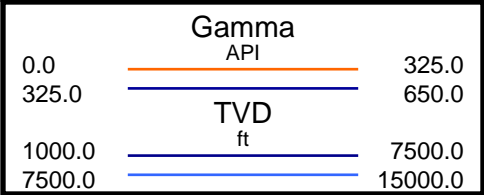
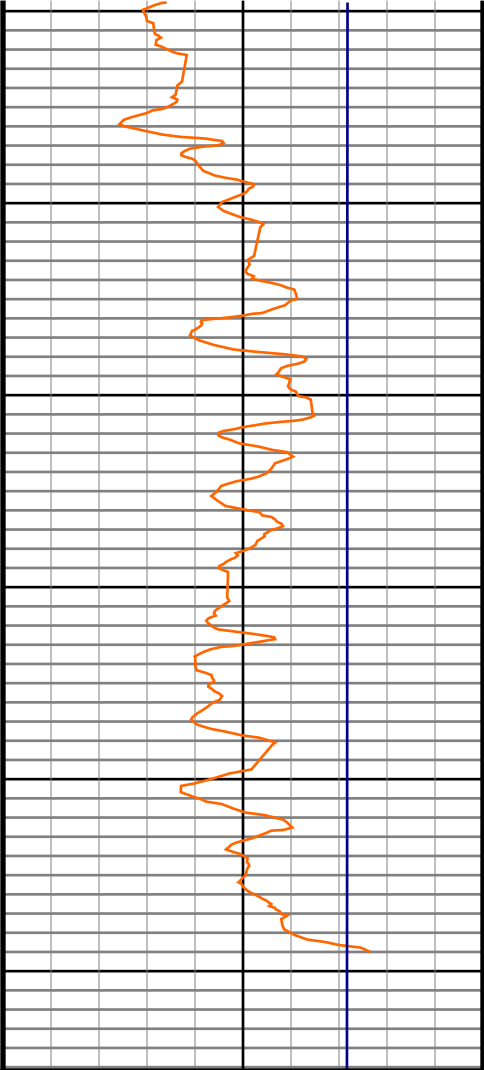
#97 MD(8711.00) Inc(91.8) Azm(90.6) TVD(5668.57)  
VS(4128.85) NS(631.74) EW(4081.23) TEMP(195.8)

#98 MD(8801.00) Inc(89.9) Azm(89.2) TVD(5667.24)  
VS(4218.07) NS(631.90) EW(4171.21) TEMP(195.8)

#99 MD(8891.00) Inc(90.5) Azm(88.9) TVD(5666.92)  
VS(4307.47) NS(633.39) EW(4261.20) TEMP(197.6)

#100 MD(8981.00) Inc(91.0) Azm(88.2) TVD(5665.74)  
VS(4396.96) NS(635.67) EW(4351.16) TEMP(199.4)





#101 MD(9071.00) Inc(91.7) Azm(88.2) TVD(5663.62)  
VS(4486.48) NS(638.49) EW(4441.09) TEMP(201.2)

#102 MD(9161.00) Inc(90.9) Azm(86.8) TVD(5661.58)  
VS(4576.10) NS(642.42) EW(4530.98) TEMP(199.4)

#103 MD(9251.00) Inc(89.7) Azm(87.4) TVD(5661.11)  
VS(4665.80) NS(646.97) EW(4620.86) TEMP(201.2)

#104 MD(9340.00) Inc(90.3) Azm(86.5) TVD(5661.11)  
VS(4754.53) NS(651.71) EW(4709.73) TEMP(190.2)

#105 MD(9430.00) Inc(91.1) Azm(85.8) TVD(5660.01)  
VS(4844.33) NS(657.75) EW(4799.52) TEMP(203.0)

#106 MD(9493.00) Inc(91.2) Azm(84.8) TVD(5658.75)  
VS(4907.24) NS(662.91) EW(4862.29) TEMP(201.2)