

Company: Noble Energy Inc  
Well Name: Fiscus Federal LD15-76HN

API:

Rig Id: Precision 828

State: Colorado

County/Parish: Weld

Country: USA

Survey Company: Ensign Directional

Job number:

Company Man 1 Gary Stapleton

Directional Driller 1 Tyler Batchelder

Directional Driller 2 Matt Mason

MWD 1 Mark Bigler

MWD 2 Derek Saykally

Log measurements: Gamma

Depth measured from: KB

Maximum temperature:

Depth Date  
Start: 0 ft 11/11/2014  
End: 9886 ft 11/18/2014

Casing Depth Size  
Surface: 1185 9.625  
Intermediate: 5987 7

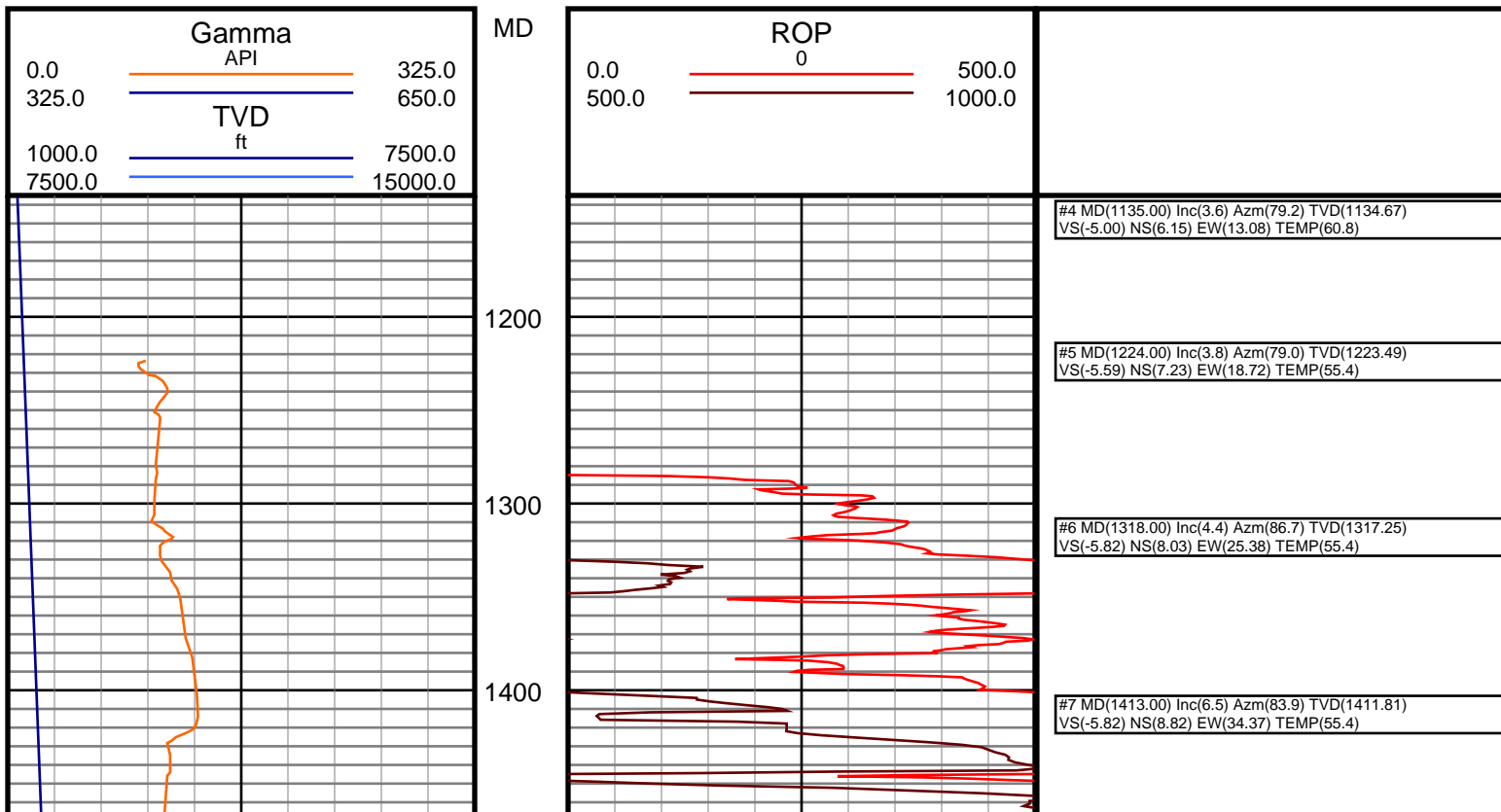
Mud Type: Water Based  
Density:  
Viscosity:  
Rm: Rmf: Rmc:

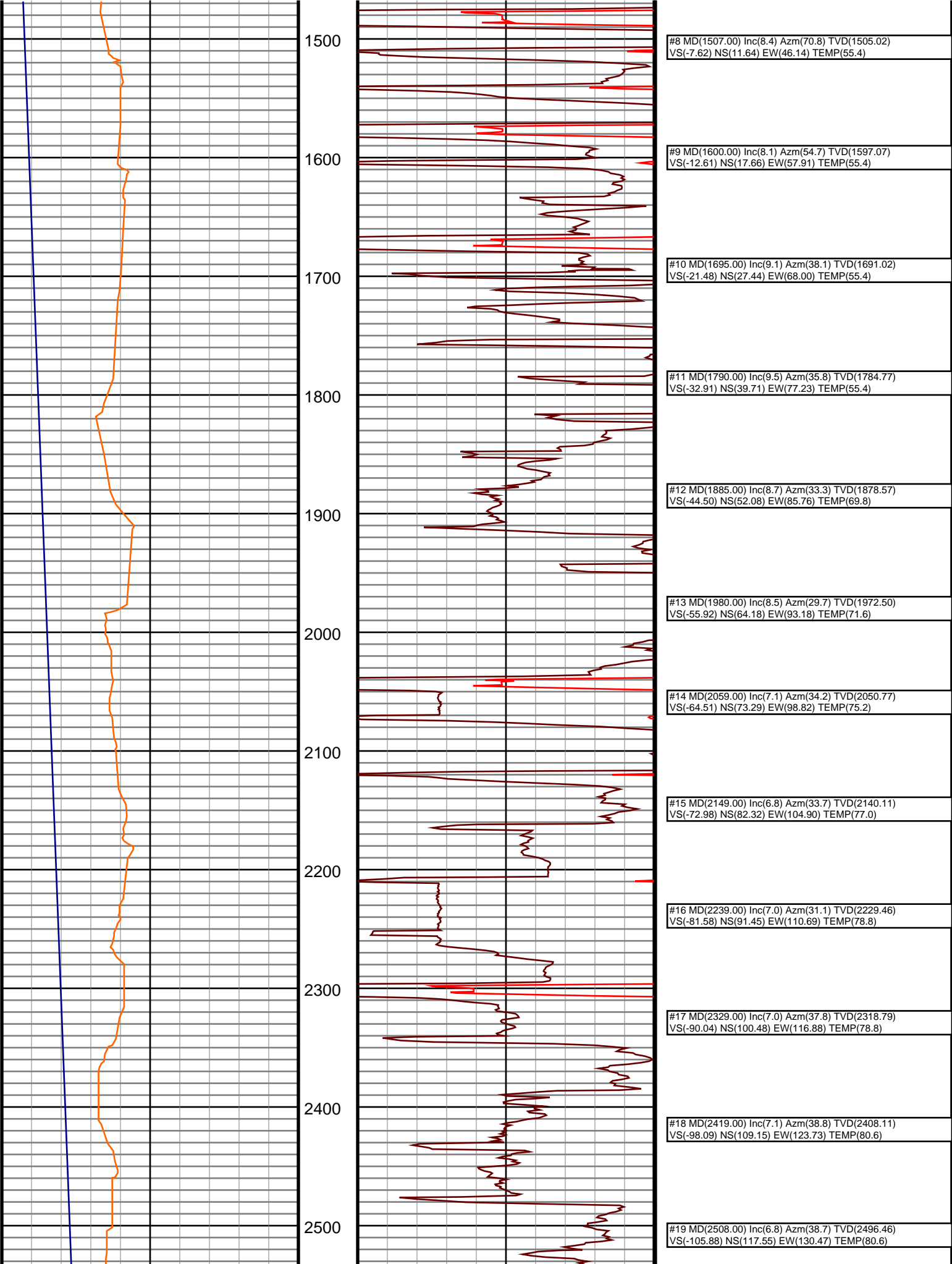
Elevations  
KB: 4733  
GL: 4717  
DF: 4733

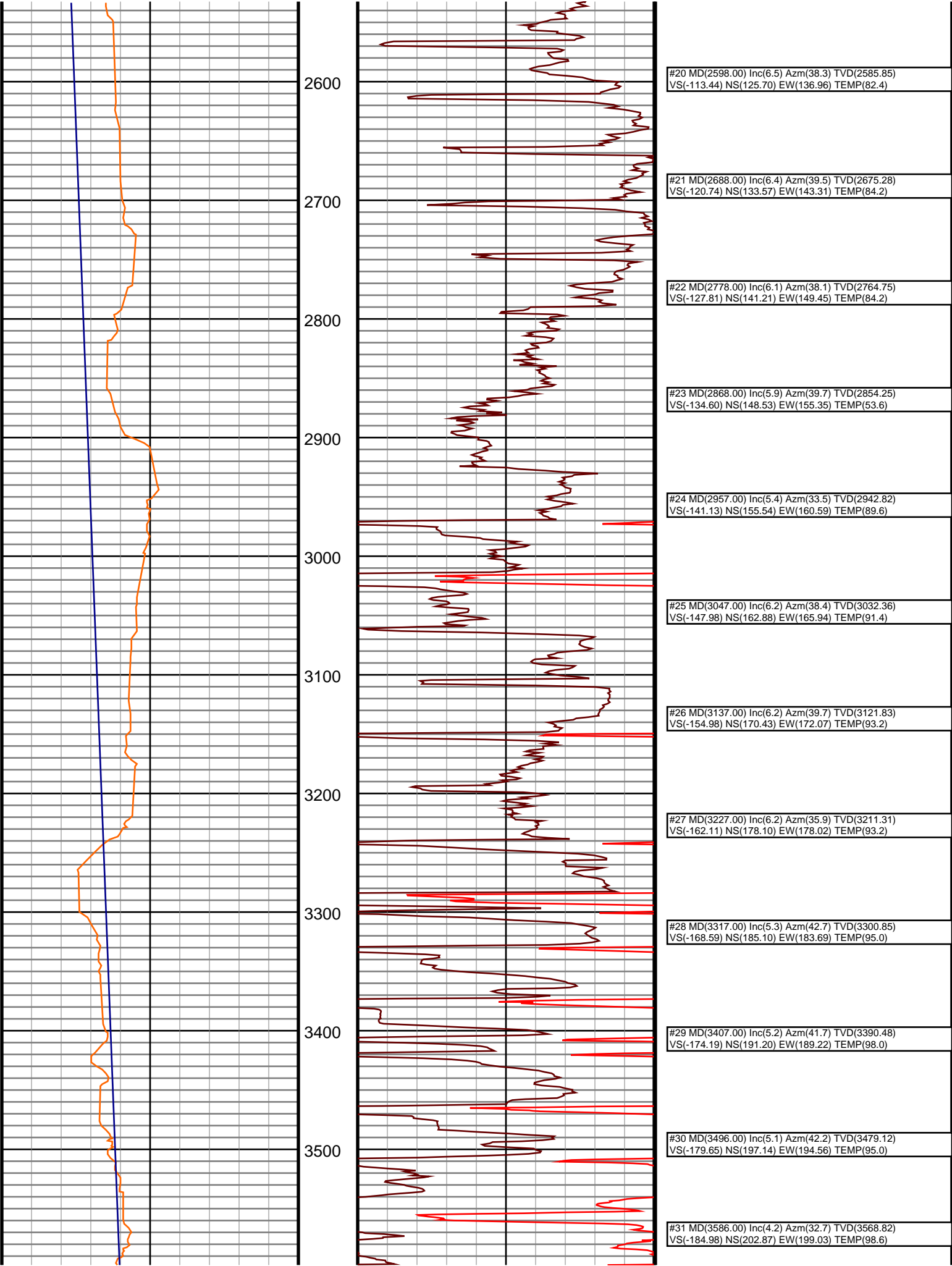
Run	Bit Size	Gamma	Survey	Offsets	Start	End	Start	End	Dates
1	13 1/2	70.08	65.08	0	1200	1200	11/11/2014	11/12/2014	
2	8 3/4	61.17	56.17	1200	5992	5992	11/12/2014	11/14/2014	
3	6 1/8	61.24	56.24	5992	6314	6314	11/16/2014	11/17/2014	
4	6 1/8	61.24	56.24	6314	9886	9886	11/17/2014	11/18/2014	
5									
6									
7									
8									
9									
10									

Directional Surface

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.

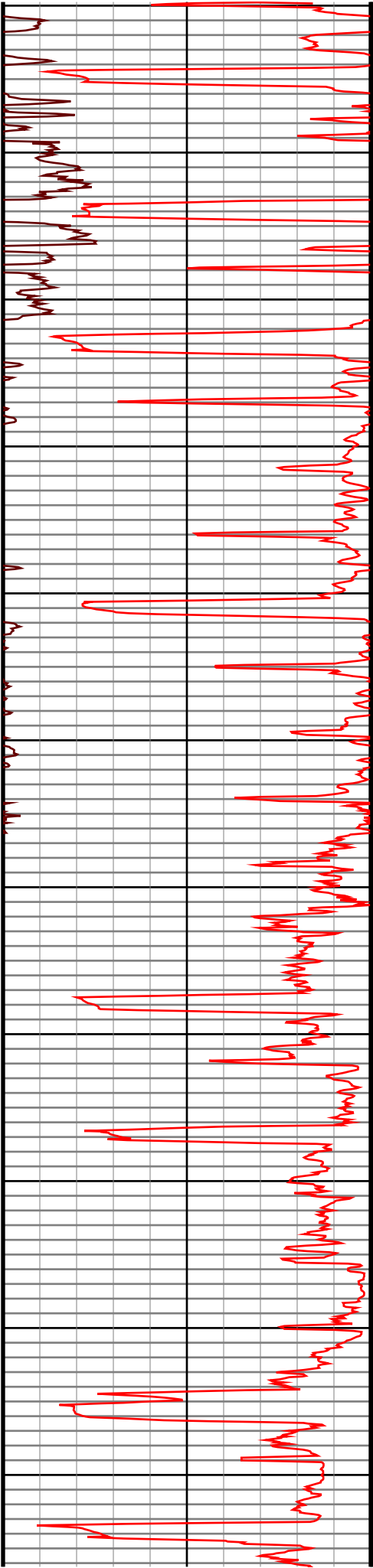




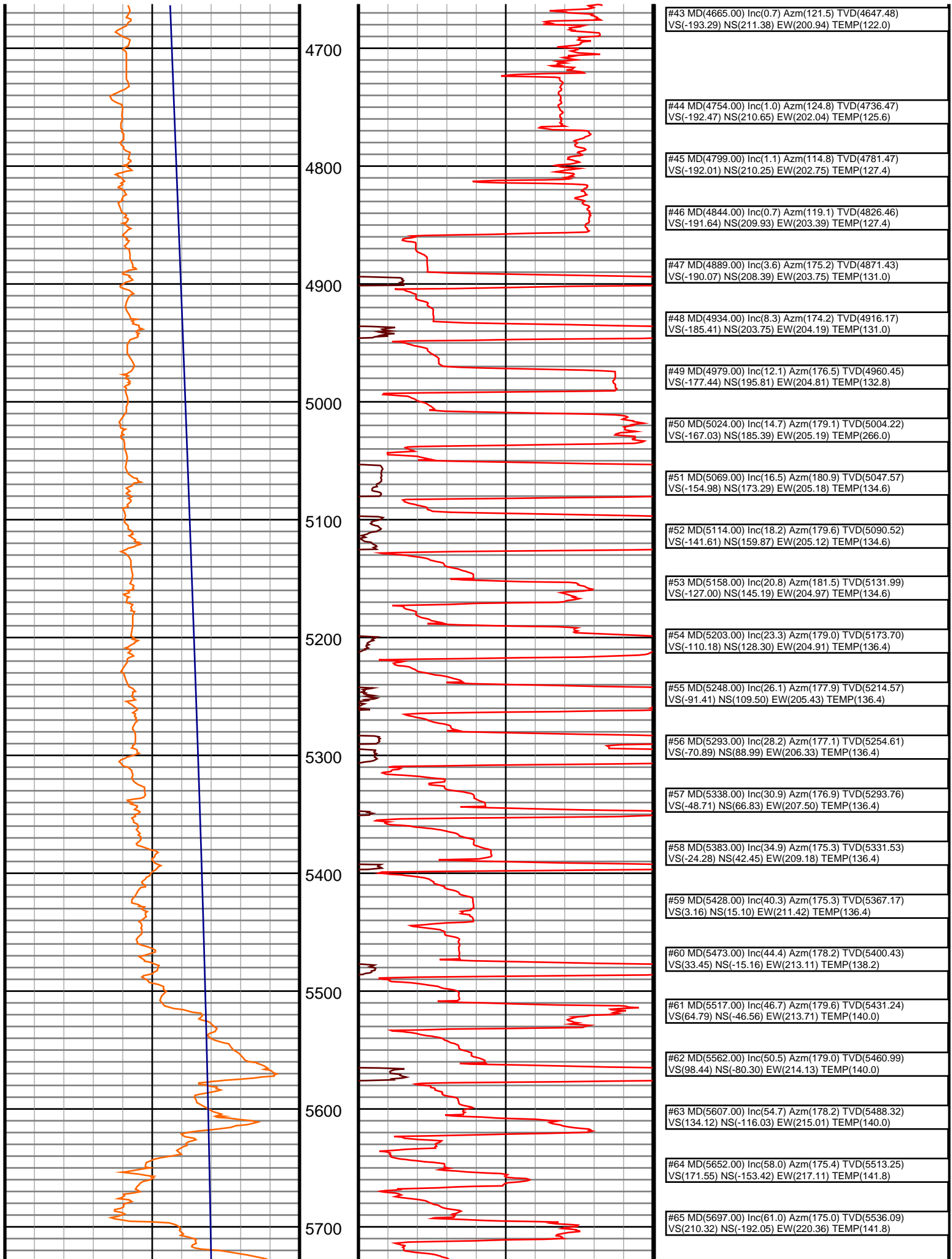


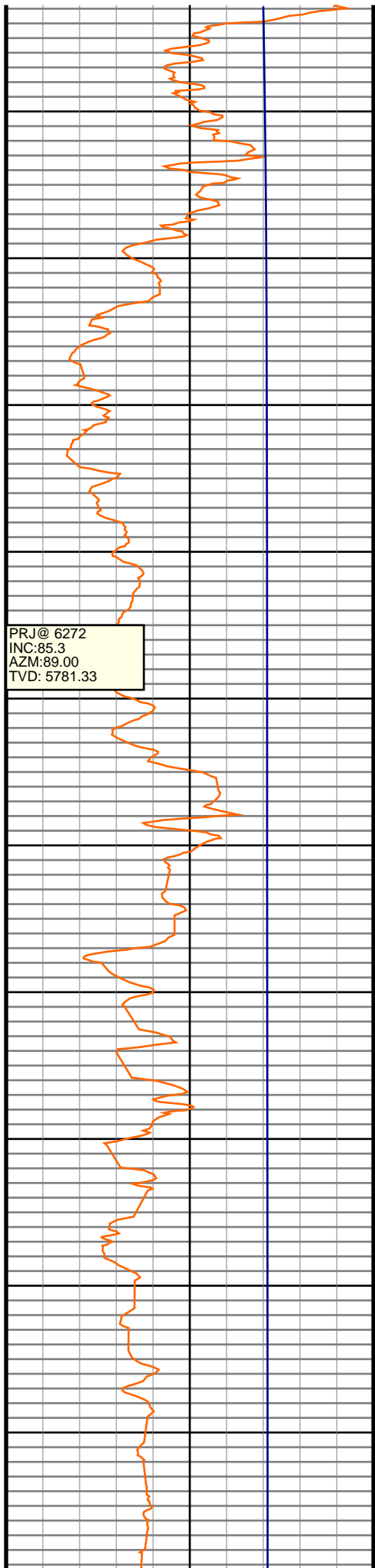


3600  
3700  
3800  
3900  
4000  
4100  
4200  
4300  
4400  
4500  
4600



#32 MD(3676.00) Inc(2.5) Azm(39.3) TVD(3658.67) VS(-189.00) NS(207.17) EW(202.05) TEMP(100.4)
#33 MD(3766.00) Inc(1.7) Azm(64.4) TVD(3748.61) VS(-190.88) NS(209.26) EW(204.50) TEMP(104.0)
#34 MD(3855.00) Inc(0.7) Azm(103.8) TVD(3837.59) VS(-191.17) NS(209.70) EW(206.22) TEMP(104.0)
#35 MD(3945.00) Inc(0.9) Azm(85.4) TVD(3927.58) VS(-190.99) NS(209.63) EW(207.46) TEMP(105.8)
#36 MD(4035.00) Inc(0.4) Azm(262.1) TVD(4017.58) VS(-190.97) NS(209.64) EW(207.85) TEMP(105.8)
#37 MD(4125.00) Inc(0.7) Azm(305.1) TVD(4107.57) VS(-191.30) NS(209.92) EW(207.09) TEMP(107.6)
#38 MD(4215.00) Inc(1.1) Azm(299.7) TVD(4197.56) VS(-192.15) NS(210.66) EW(205.89) TEMP(111.2)
#39 MD(4305.00) Inc(1.2) Azm(40.6) TVD(4287.55) VS(-193.30) NS(211.80) EW(205.75) TEMP(113.0)
#40 MD(4395.00) Inc(1.1) Azm(269.8) TVD(4377.54) VS(-194.03) NS(212.52) EW(205.50) TEMP(116.6)
#41 MD(4485.00) Inc(1.5) Azm(272.2) TVD(4467.52) VS(-194.25) NS(212.56) EW(203.46) TEMP(118.4)
#42 MD(4575.00) Inc(1.3) Azm(242.7) TVD(4557.49) VS(-194.01) NS(212.14) EW(201.38) TEMP(118.4)





5800

5900

6000

6100

6200

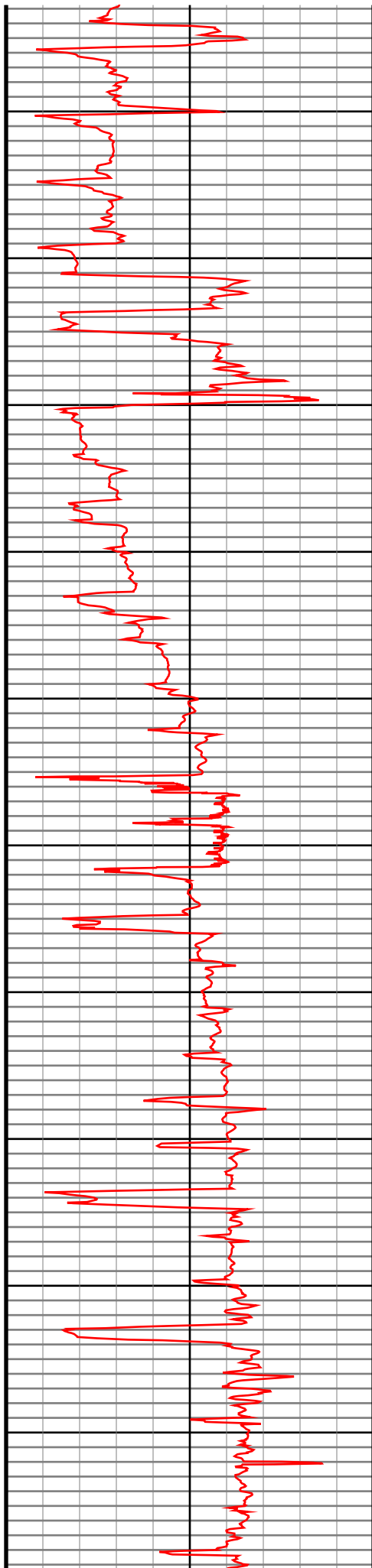
6300

6400

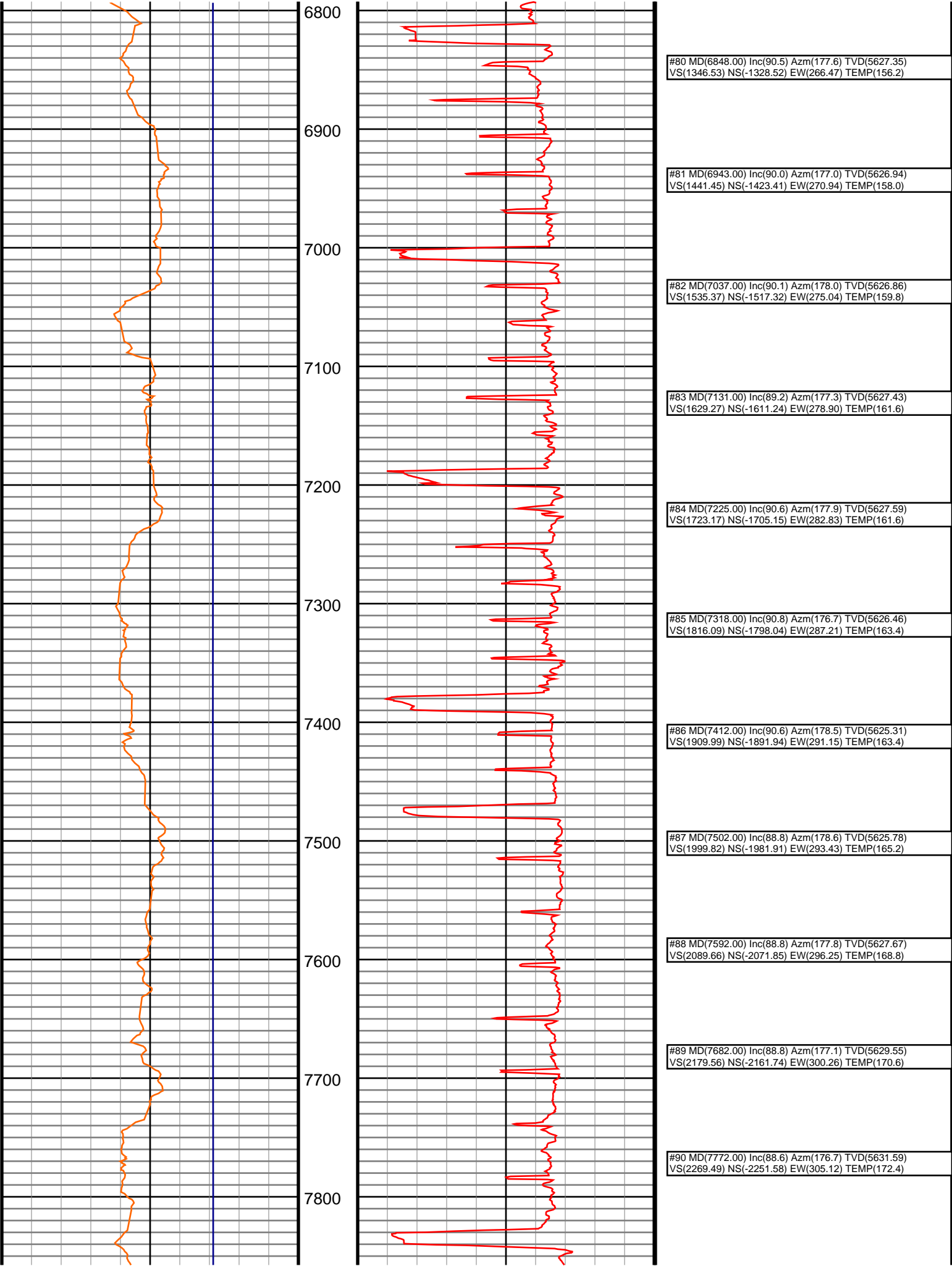
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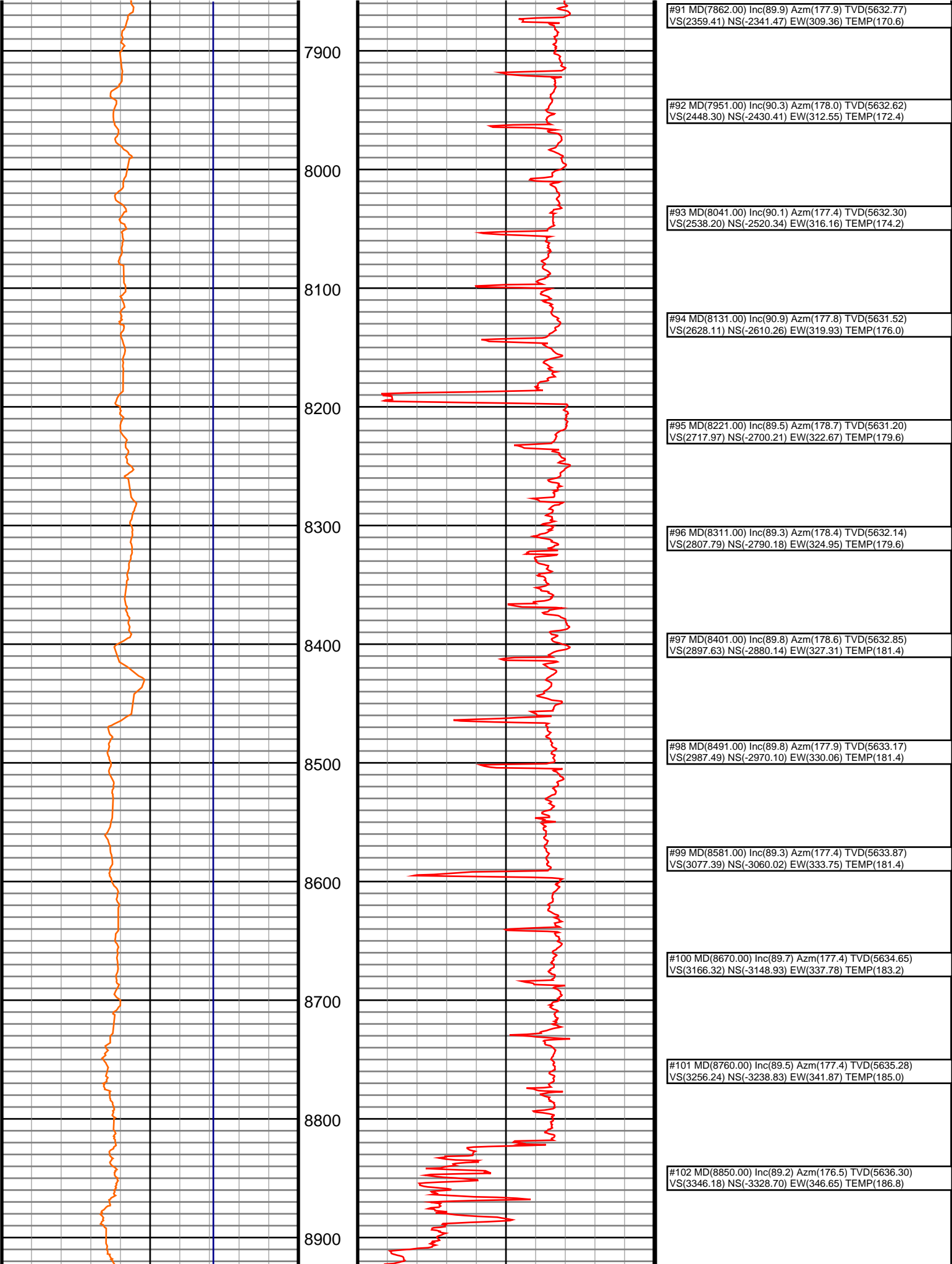
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6700

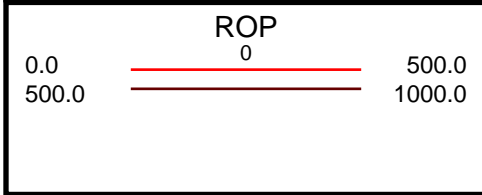
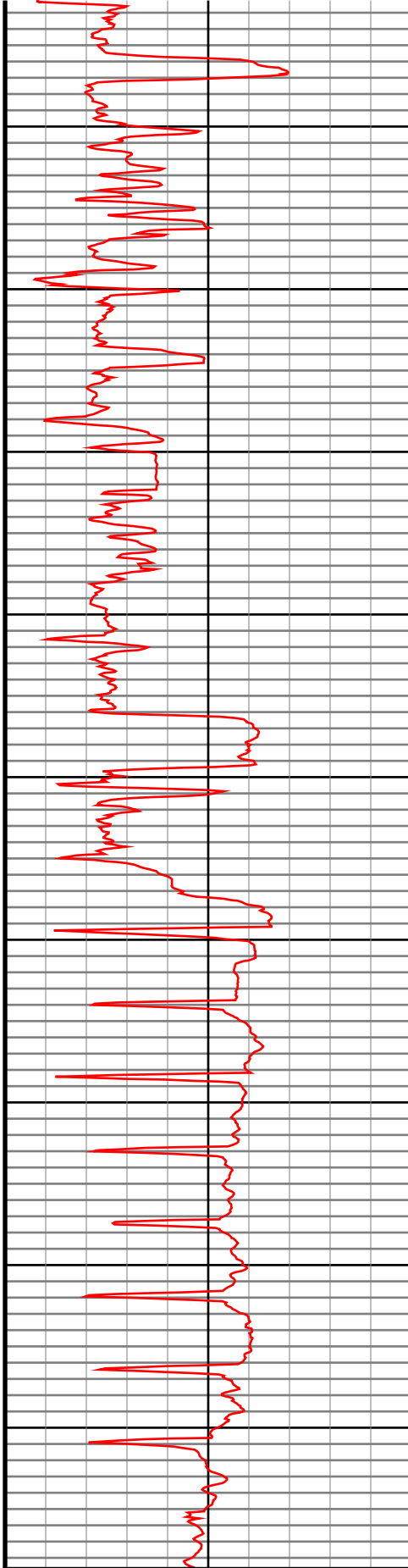
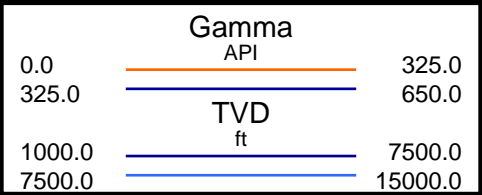
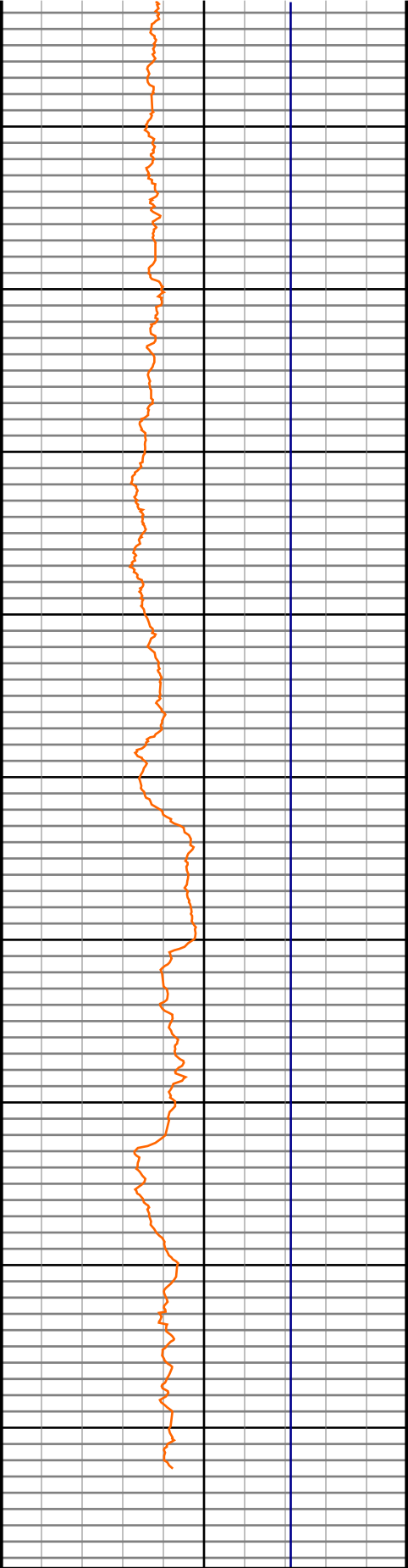


#66 MD(5742.00) Inc(64.0) Azm(177.3) TVD(5556.87) VS(250.22) NS(-231.87) EW(223.03) TEMP(141.8)
#67 MD(5787.00) Inc(68.4) Azm(179.1) TVD(5575.02) VS(291.31) NS(-273.01) EW(224.31) TEMP(141.8)
#68 MD(5832.00) Inc(73.6) Azm(179.3) TVD(5589.67) VS(333.74) NS(-315.54) EW(224.90) TEMP(143.6)
#69 MD(5877.00) Inc(79.9) Azm(178.8) TVD(5599.98) VS(377.41) NS(-359.32) EW(225.63) TEMP(143.6)
#70 MD(5934.00) Inc(85.2) Azm(178.1) TVD(5607.37) VS(433.81) NS(-415.79) EW(227.16) TEMP(145.4)
#71 MD(6007.00) Inc(86.5) Azm(177.9) TVD(5612.65) VS(506.52) NS(-488.56) EW(229.70) TEMP(147.2)
#72 MD(6101.00) Inc(88.4) Azm(177.1) TVD(5616.83) VS(600.34) NS(-582.37) EW(233.80) TEMP(140.0)
#73 MD(6195.00) Inc(90.0) Azm(176.4) TVD(5618.14) VS(694.28) NS(-676.20) EW(239.13) TEMP(140.0)
#74 MD(6288.00) Inc(90.1) Azm(178.1) TVD(5618.06) VS(787.21) NS(-769.09) EW(243.59) TEMP(163.4)
#75 MD(6381.00) Inc(88.6) Azm(177.9) TVD(5619.12) VS(880.08) NS(-862.03) EW(246.83) TEMP(152.6)
#76 MD(6475.00) Inc(87.9) Azm(177.6) TVD(5621.99) VS(973.93) NS(-955.91) EW(250.52) TEMP(154.4)
#77 MD(6568.00) Inc(89.1) Azm(177.6) TVD(5624.42) VS(1066.81) NS(-1048.80) EW(254.42) TEMP(152.6)
#78 MD(6660.00) Inc(89.6) Azm(177.6) TVD(5625.47) VS(1158.71) NS(-1140.71) EW(258.27) TEMP(152.6)
#79 MD(6754.00) Inc(88.8) Azm(177.4) TVD(5626.78) VS(1252.62) NS(-1234.61) EW(262.37) TEMP(156.2)









#103 MD(8940.00) Inc(90.1) Azm(180.1) TVD(5636.85)  
VS(3436.02) NS(-3418.64) EW(349.32) TEMP(186.8)

#104 MD(9030.00) Inc(88.9) Azm(179.8) TVD(5637.63)  
VS(3525.69) NS(-3508.63) EW(349.40) TEMP(188.6)

#105 MD(9120.00) Inc(90.5) Azm(178.6) TVD(5638.10)  
VS(3615.45) NS(-3598.62) EW(350.66) TEMP(188.6)

#106 MD(9209.00) Inc(89.8) Azm(178.3) TVD(5637.87)  
VS(3704.29) NS(-3687.59) EW(353.07) TEMP(190.4)

#107 MD(9299.00) Inc(89.9) Azm(178.1) TVD(5638.11)  
VS(3794.16) NS(-3777.54) EW(355.89) TEMP(190.4)

#108 MD(9389.00) Inc(89.6) Azm(177.8) TVD(5638.50)  
VS(3884.04) NS(-3867.48) EW(359.11) TEMP(192.2)

#109 MD(9478.00) Inc(90.1) Azm(177.8) TVD(5638.73)  
VS(3972.94) NS(-3956.42) EW(362.53) TEMP(194.0)

#110 MD(9568.00) Inc(89.5) Azm(177.2) TVD(5639.05)  
VS(4062.86) NS(-4046.33) EW(366.45) TEMP(194.0)

#111 MD(9658.00) Inc(90.2) Azm(177.2) TVD(5639.28)  
VS(4152.79) NS(-4136.22) EW(370.85) TEMP(194.0)

#112 MD(9748.00) Inc(90.6) Azm(177.4) TVD(5638.65)  
VS(4242.72) NS(-4226.12) EW(375.09) TEMP(192.2)

#113 MD(9828.00) Inc(90.2) Azm(176.9) TVD(5638.10)  
VS(4322.66) NS(-4306.02) EW(379.07) TEMP(190.4)