



Oscar Y10-77HN

MD
1" : 100'

Company: Noble Energy Inc
Well Name: Oscar Y10-77HN

API: 05-123-38198

Rig Id: Precision 828

State: Colorado

County/Parish: Weld

Country: USA

Survey Company: Ensign Directional

Job number: 207-P828-29

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

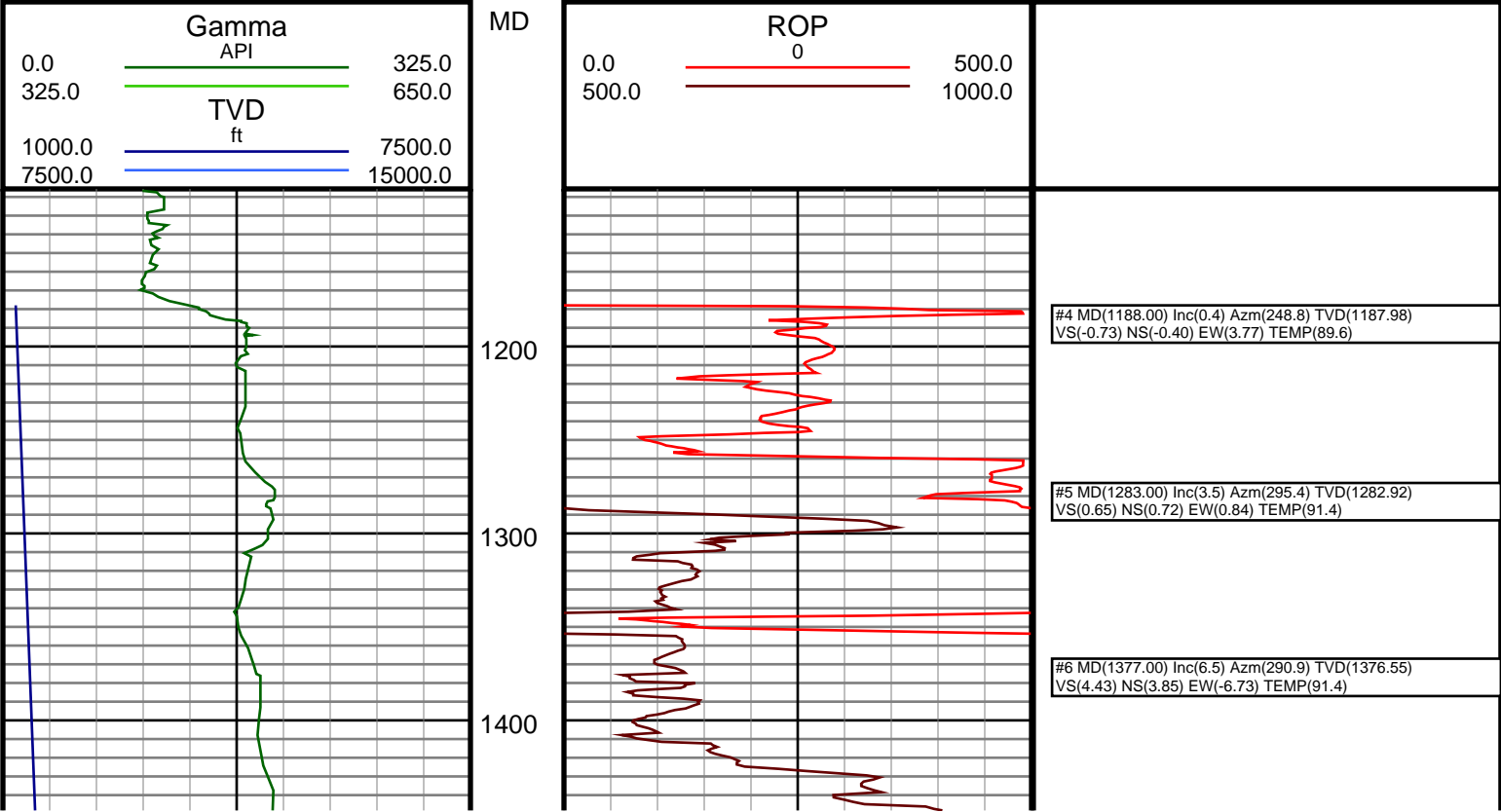
Maximum temperature:

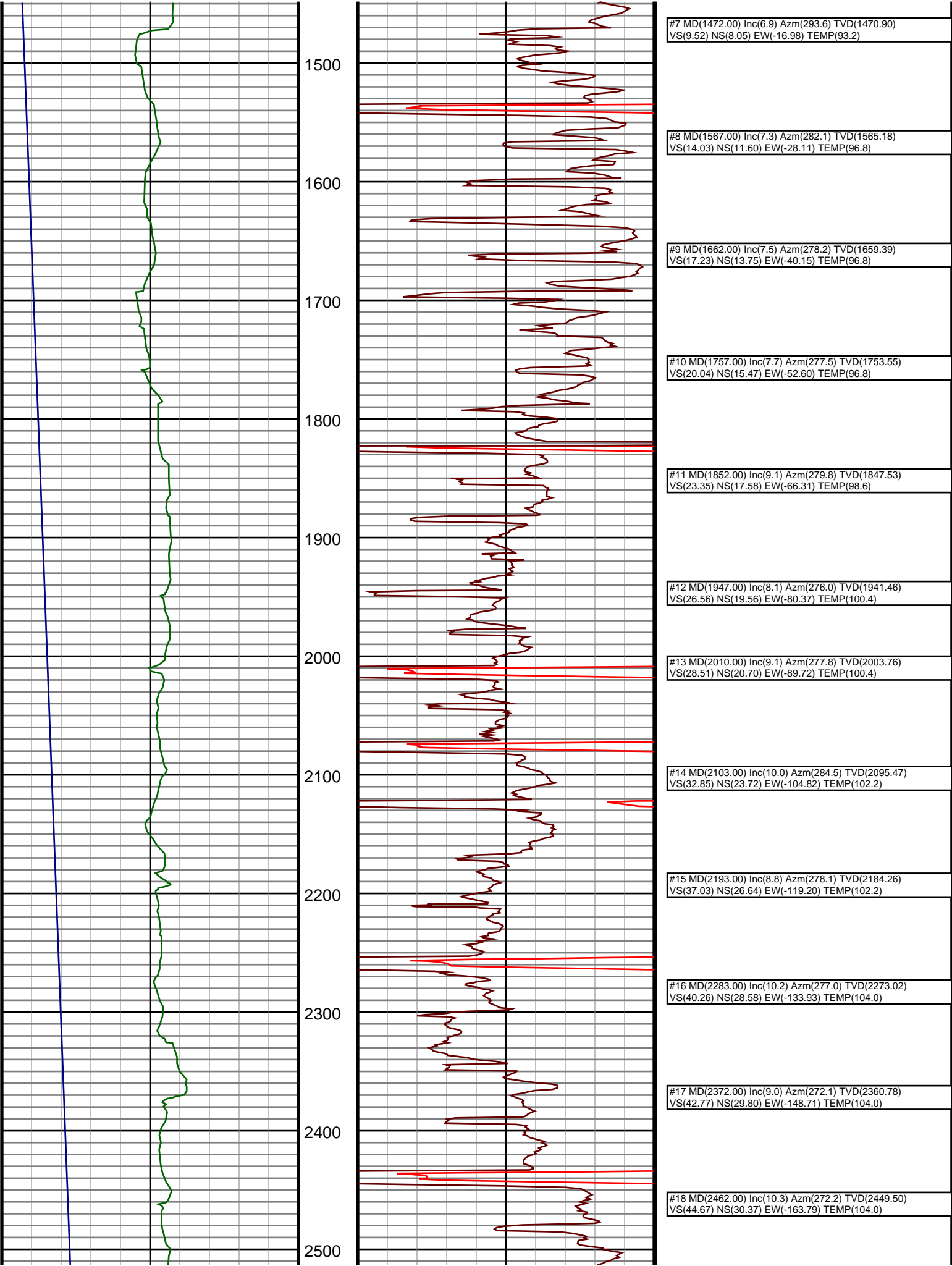
Depth **Date**
Start: 1168 ft 4/20/14
End: 14600 ft 4/28/14

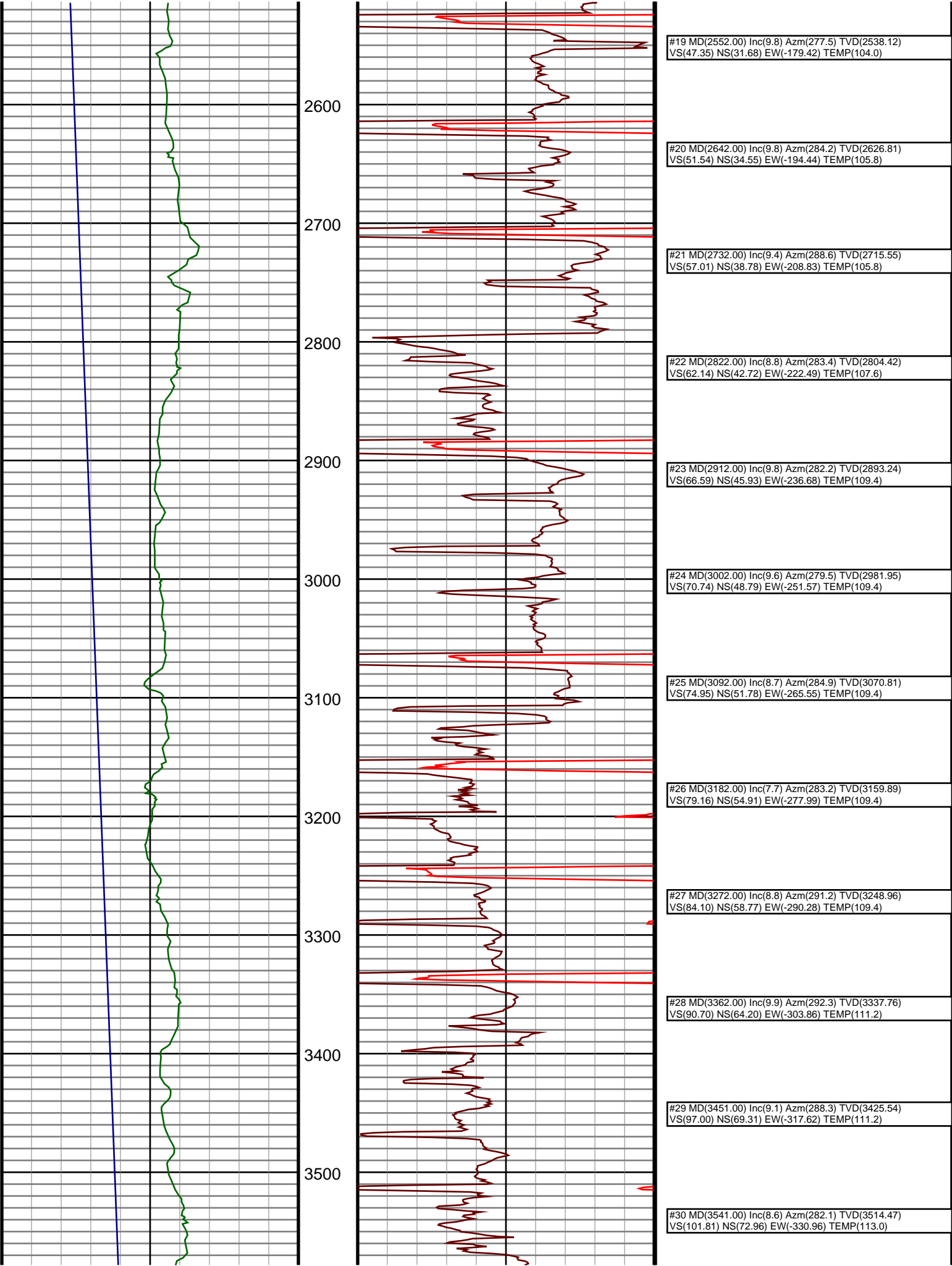
Casing	Depth	Size	Mud Type:	Water Based	Elevations
Surface:	1168	9.625	Density:		KB: 4946
Intermediate:	7343	7	Viscosity:		GL: 4930
			Rm:	Rmf:	DF: 4946

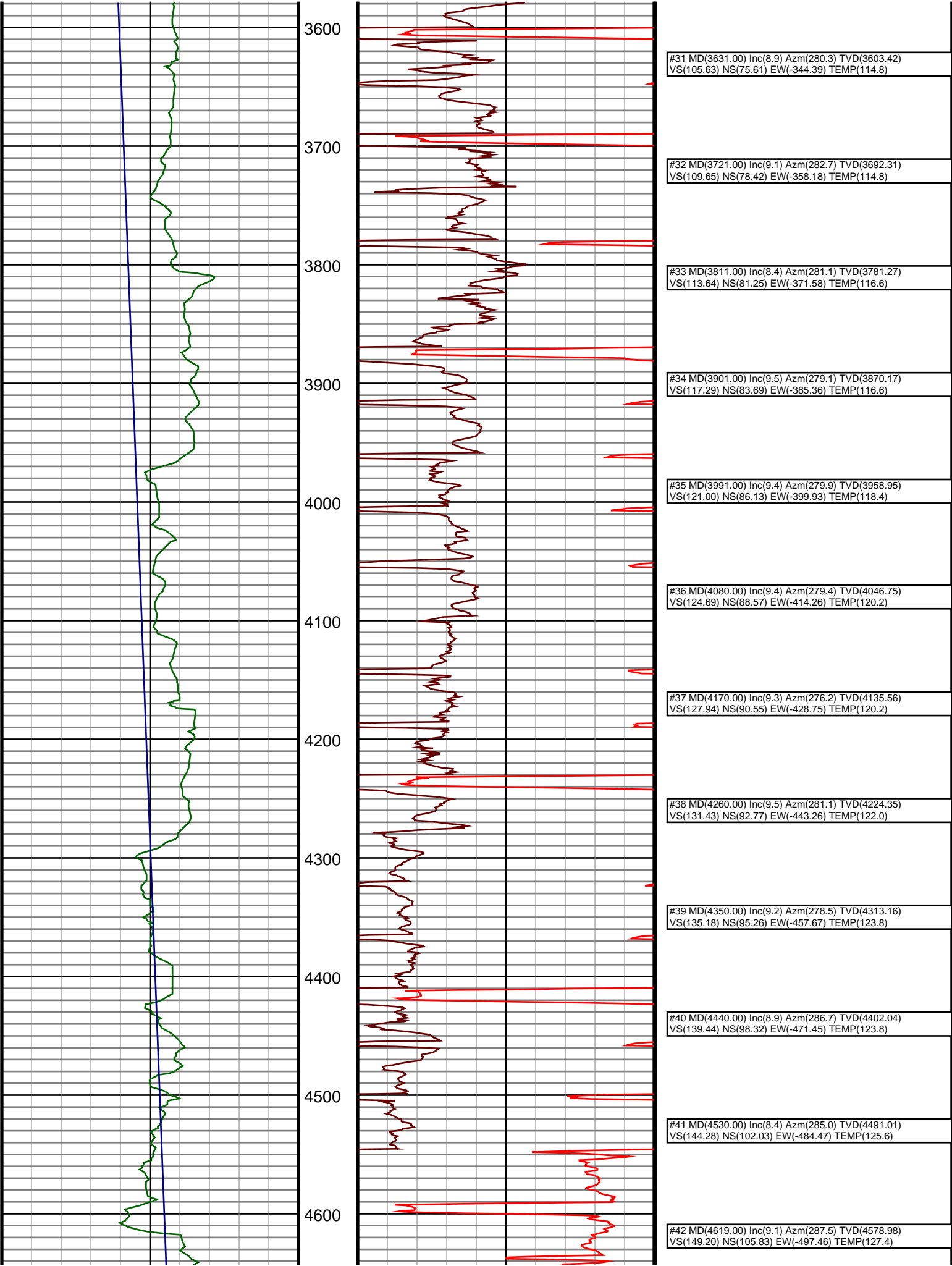
Run	Bit Size	Gamma	Survey	Start	End	Start	End
1	8 3/4	62.31	57.31	1168	7353	4/20/14	4/22/14
2	6 1/8	65.59	60.59	7353		4/23/14	
3							
4							
5							
6							
7							
8							
9							
10							

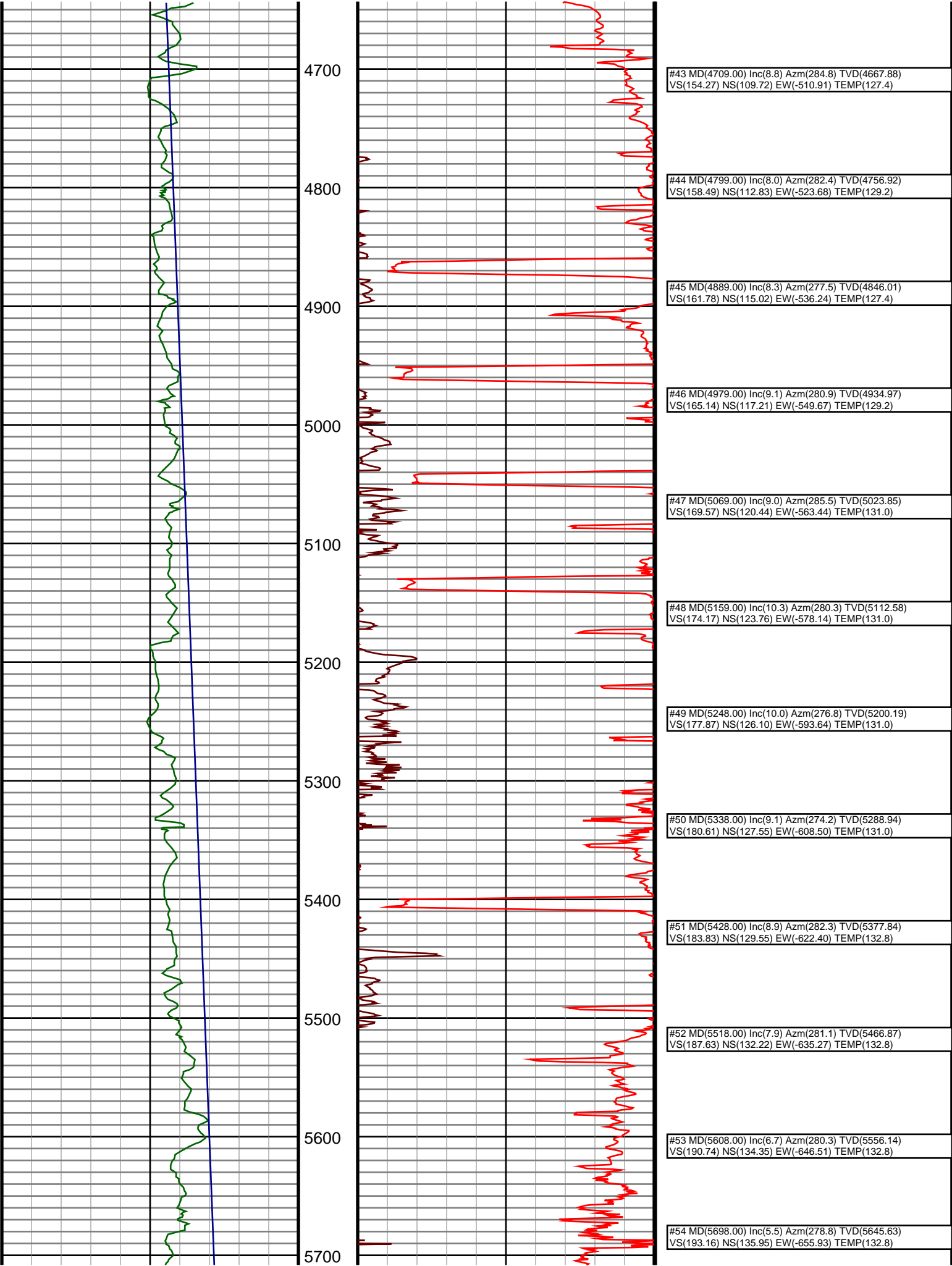
Ensign Directional uses its best efforts to provide its customers with accurate information and interpretations in conjunction with services performed but will not be held liable or responsible for the accuracy of such information or interpretation.

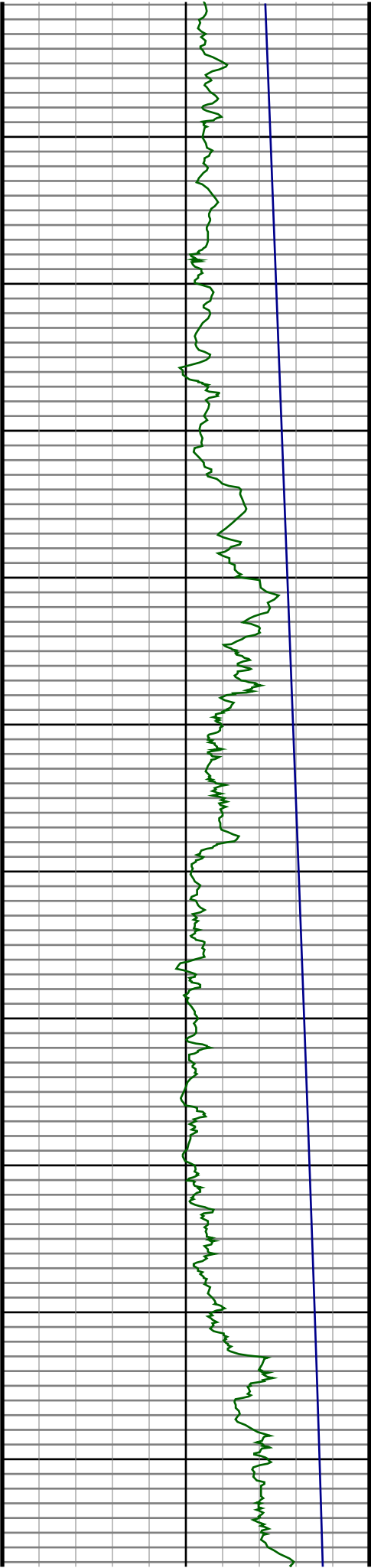












5800

5900

6000

6100

6200

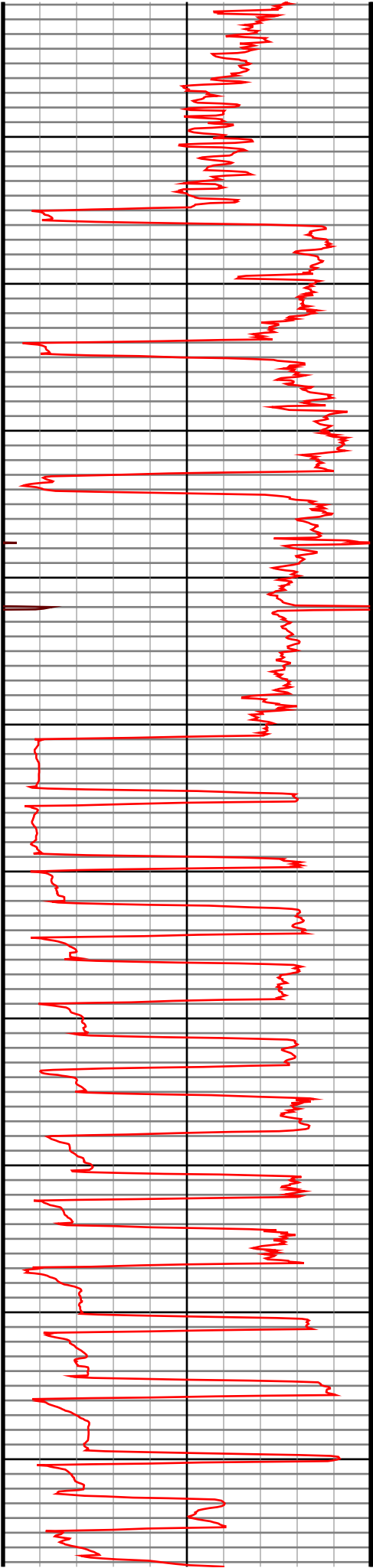
6300

6400

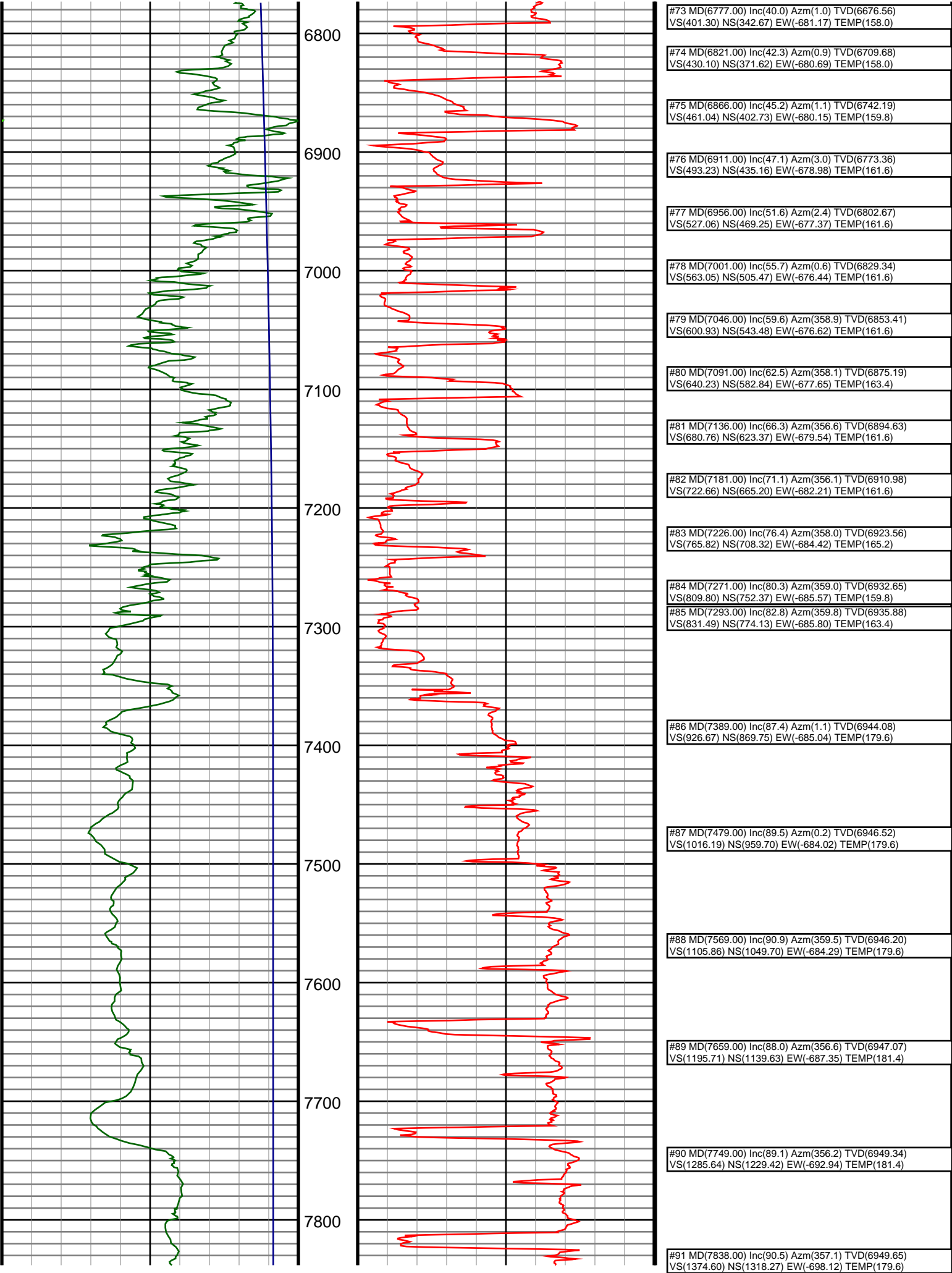
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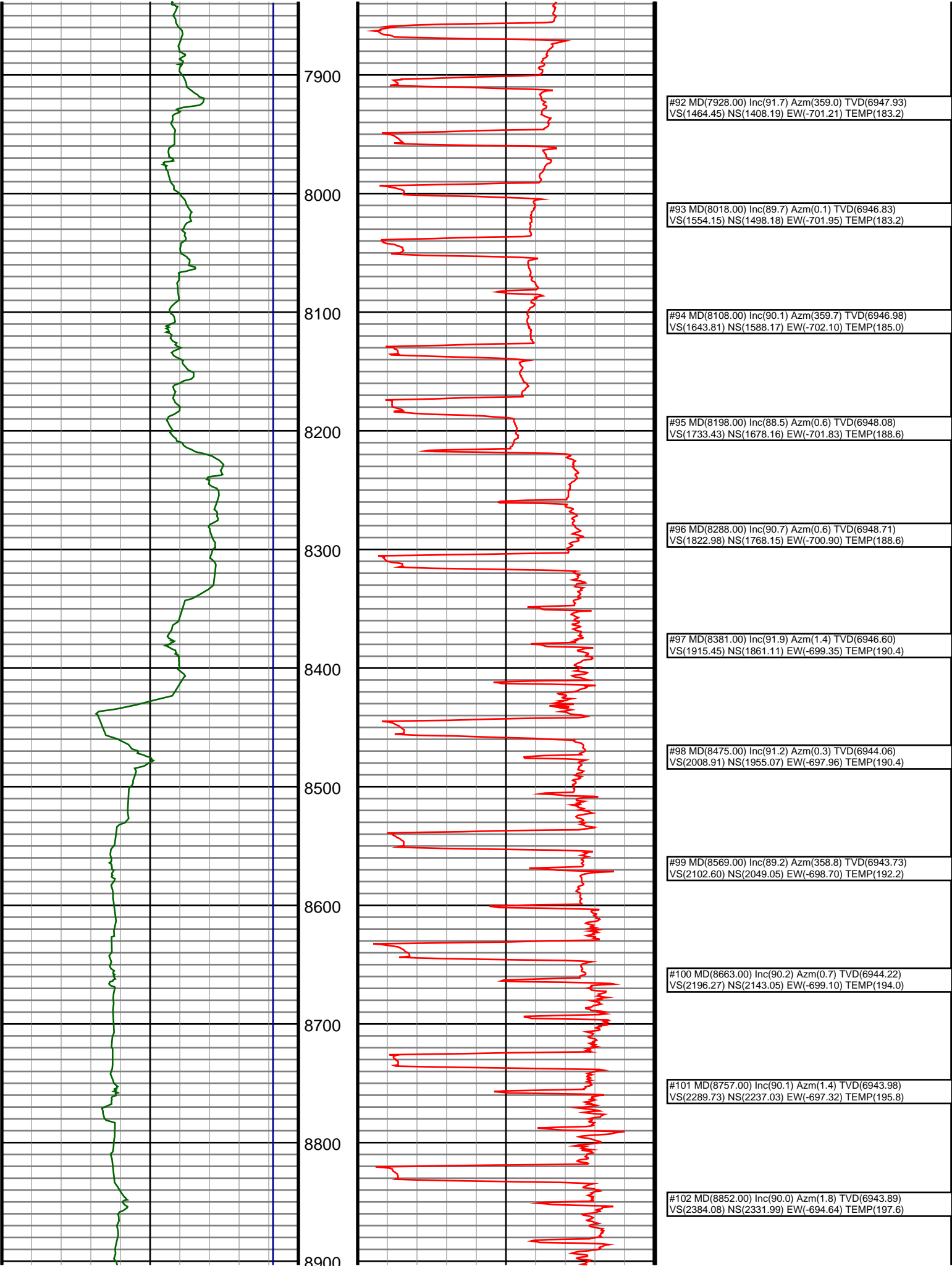
6600

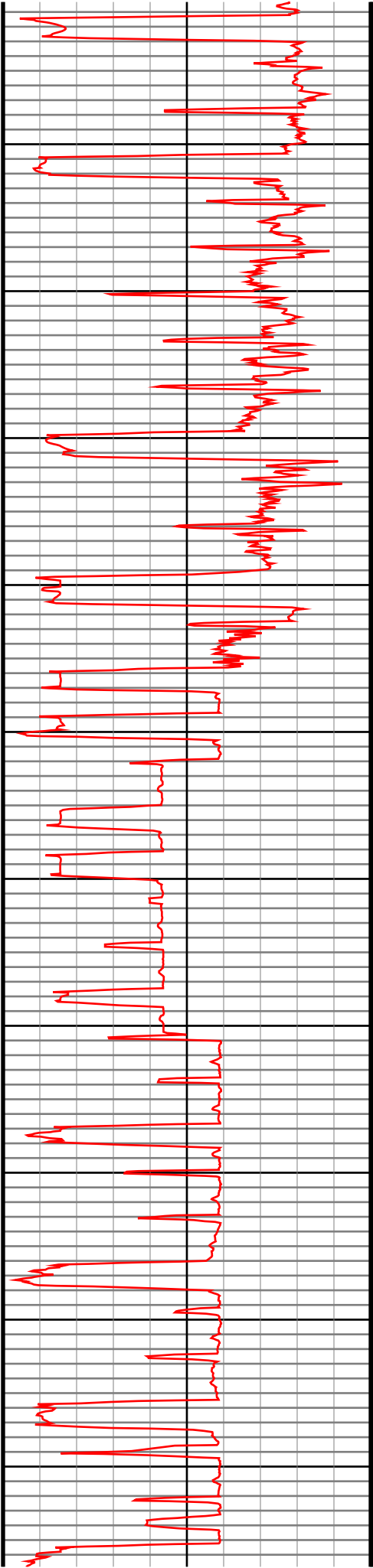
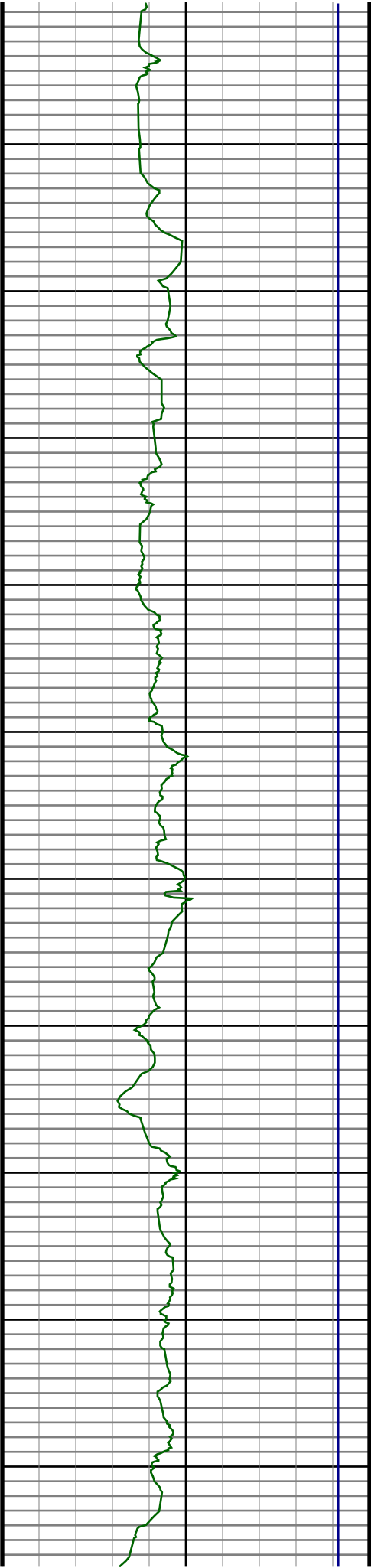
6700



#55 MD(5788.00) Inc(4.9) Azm(271.5) TVD(5735.26) VS(194.63) NS(136.71) EW(-664.04) TEMP(134.6)
#56 MD(5878.00) Inc(3.4) Azm(294.5) TVD(5825.03) VS(196.39) NS(137.92) EW(-670.31) TEMP(136.4)
#57 MD(5968.00) Inc(1.5) Azm(282.5) TVD(5914.94) VS(198.06) NS(139.28) EW(-673.89) TEMP(138.2)
#58 MD(6058.00) Inc(0.4) Azm(291.3) TVD(6004.93) VS(198.56) NS(139.65) EW(-675.33) TEMP(140.0)
#59 MD(6148.00) Inc(0.2) Azm(3.9) TVD(6094.92) VS(198.85) NS(139.92) EW(-675.61) TEMP(143.6)
#60 MD(6193.00) Inc(0.6) Azm(33.6) TVD(6139.92) VS(199.11) NS(140.20) EW(-675.48) TEMP(145.4)
#61 MD(6237.00) Inc(4.2) Azm(9.0) TVD(6183.88) VS(200.86) NS(141.98) EW(-675.10) TEMP(145.4)
#62 MD(6282.00) Inc(9.2) Azm(4.1) TVD(6228.56) VS(206.01) NS(147.20) EW(-674.58) TEMP(145.4)
#63 MD(6327.00) Inc(12.4) Azm(0.6) TVD(6272.75) VS(214.37) NS(155.62) EW(-674.28) TEMP(145.4)
#64 MD(6372.00) Inc(14.8) Azm(356.3) TVD(6316.49) VS(224.93) NS(166.19) EW(-674.60) TEMP(147.2)
#65 MD(6417.00) Inc(16.5) Azm(354.5) TVD(6359.82) VS(237.06) NS(178.29) EW(-675.58) TEMP(149.0)
#66 MD(6462.00) Inc(18.8) Azm(351.4) TVD(6402.70) VS(250.69) NS(191.82) EW(-677.28) TEMP(150.8)
#67 MD(6507.00) Inc(21.1) Azm(355.3) TVD(6445.00) VS(266.03) NS(207.06) EW(-679.02) TEMP(150.8)
#68 MD(6552.00) Inc(22.8) Azm(357.5) TVD(6486.74) VS(282.84) NS(223.85) EW(-680.07) TEMP(152.6)
#69 MD(6597.00) Inc(25.8) Azm(359.0) TVD(6527.75) VS(301.33) NS(242.36) EW(-680.62) TEMP(154.4)
#70 MD(6642.00) Inc(29.9) Azm(359.1) TVD(6567.52) VS(322.29) NS(263.37) EW(-680.97) TEMP(154.4)
#71 MD(6686.00) Inc(34.9) Azm(358.8) TVD(6604.66) VS(345.80) NS(286.94) EW(-681.40) TEMP(158.0)
#72 MD(6731.00) Inc(38.1) Azm(0.5) TVD(6640.83) VS(372.47) NS(313.70) EW(-681.55) TEMP(158.0)







#103 MD(8947.00) Inc(89.9) Azm(359.1) TVD(6943.98)
VS(2478.64) NS(2426.98) EW(-693.86) TEMP(197.6)

#104 MD(9041.00) Inc(88.3) Azm(357.4) TVD(6945.45)
VS(2572.46) NS(2520.92) EW(-696.72) TEMP(199.4)

#105 MD(9136.00) Inc(90.6) Azm(357.5) TVD(6946.36)
VS(2667.36) NS(2615.81) EW(-700.97) TEMP(201.2)

#106 MD(9230.00) Inc(90.7) Azm(358.1) TVD(6945.30)
VS(2761.24) NS(2709.74) EW(-704.58) TEMP(203.0)

#107 MD(9324.00) Inc(89.2) Azm(356.1) TVD(6945.38)
VS(2855.16) NS(2803.61) EW(-709.37) TEMP(203.0)

#108 MD(9418.00) Inc(88.3) Azm(357.6) TVD(6947.43)
VS(2949.09) NS(2897.43) EW(-714.59) TEMP(203.0)

#109 MD(9512.00) Inc(90.3) Azm(0.7) TVD(6948.58)
VS(3042.81) NS(2991.40) EW(-715.97) TEMP(203.0)

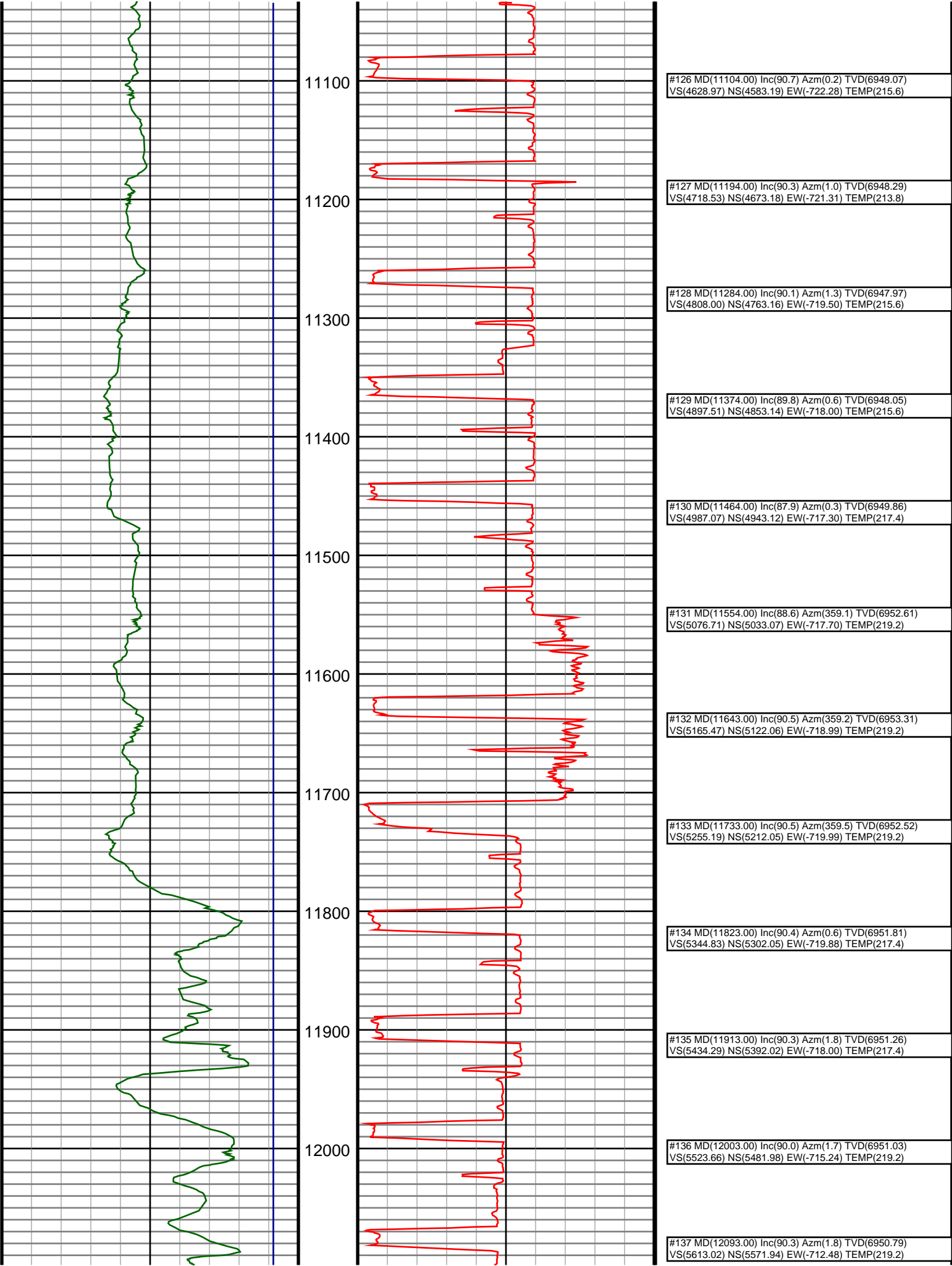
#110 MD(9607.00) Inc(90.5) Azm(0.7) TVD(6947.92)
VS(3137.33) NS(3086.39) EW(-714.83) TEMP(206.6)

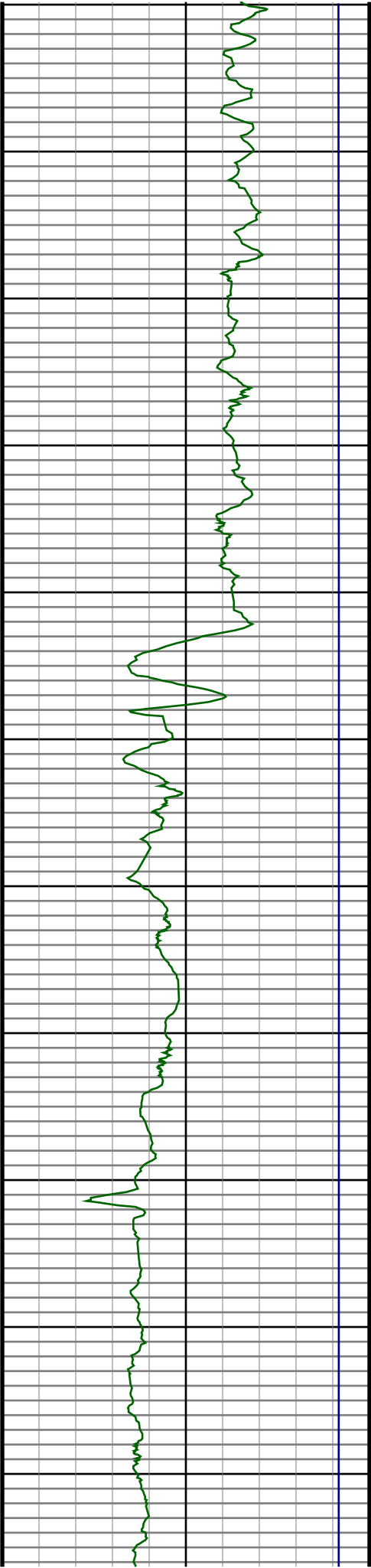
#111 MD(9701.00) Inc(90.5) Azm(0.1) TVD(6947.10)
VS(3230.90) NS(3180.38) EW(-714.17) TEMP(201.2)

#112 MD(9795.00) Inc(90.6) Azm(0.2) TVD(6946.19)
VS(3324.51) NS(3274.38) EW(-713.88) TEMP(203.0)

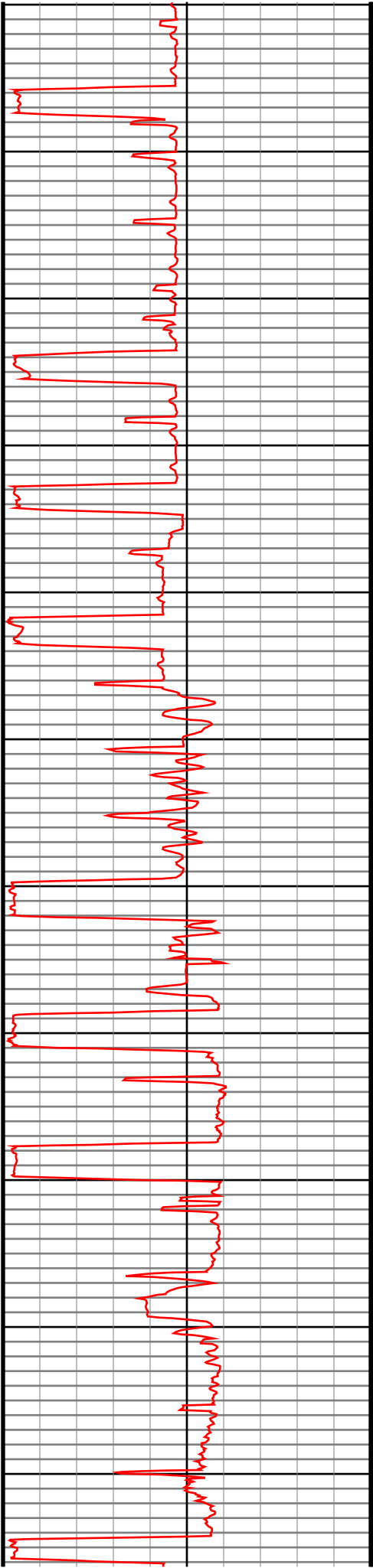
#113 MD(9890.00) Inc(88.1) Azm(359.1) TVD(6947.27)
VS(3419.17) NS(3369.36) EW(-714.42) TEMP(203.0)







12100
12200
12300
12400
12500
12600
12700
12800
12900
13000
13100



#138 MD(12183.00) Inc(88.2) Azm(0.6) TVD(6951.97)
VS(5702.47) NS(5661.90) EW(-710.58) TEMP(221.0)

#139 MD(12272.00) Inc(89.9) Azm(359.9) TVD(6953.45)
VS(5791.08) NS(5750.89) EW(-710.20) TEMP(222.8)

#140 MD(12362.00) Inc(88.8) Azm(0.3) TVD(6954.47)
VS(5880.71) NS(5840.88) EW(-710.07) TEMP(221.0)

#141 MD(12452.00) Inc(88.1) Azm(0.4) TVD(6956.90)
VS(5970.28) NS(5930.84) EW(-709.52) TEMP(222.8)

#142 MD(12542.00) Inc(89.6) Azm(0.7) TVD(6958.71)
VS(6059.83) NS(6020.82) EW(-708.65) TEMP(222.8)

#143 MD(12632.00) Inc(90.2) Azm(359.2) TVD(6958.87)
VS(6149.48) NS(6110.81) EW(-708.76) TEMP(226.4)

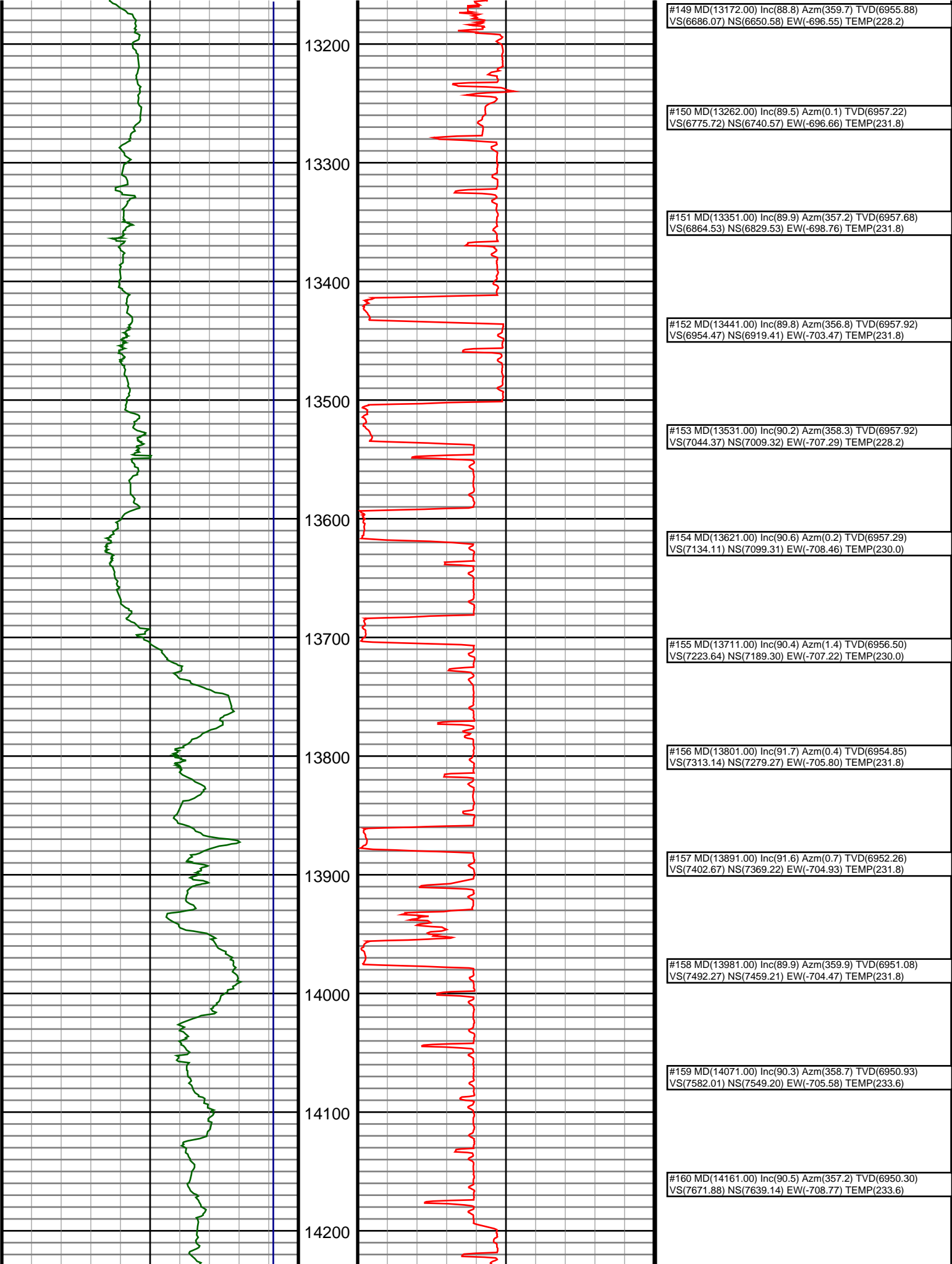
#144 MD(12722.00) Inc(90.1) Azm(0.6) TVD(6958.63)
VS(6239.15) NS(6200.81) EW(-708.94) TEMP(224.6)

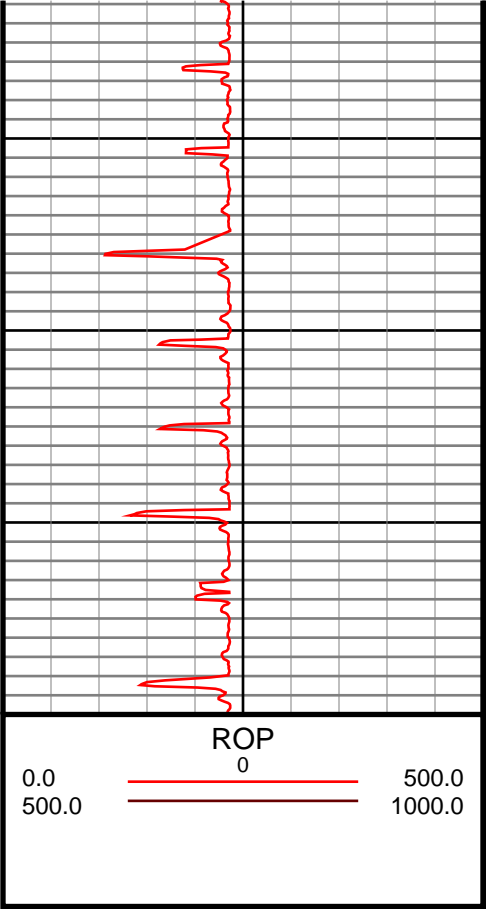
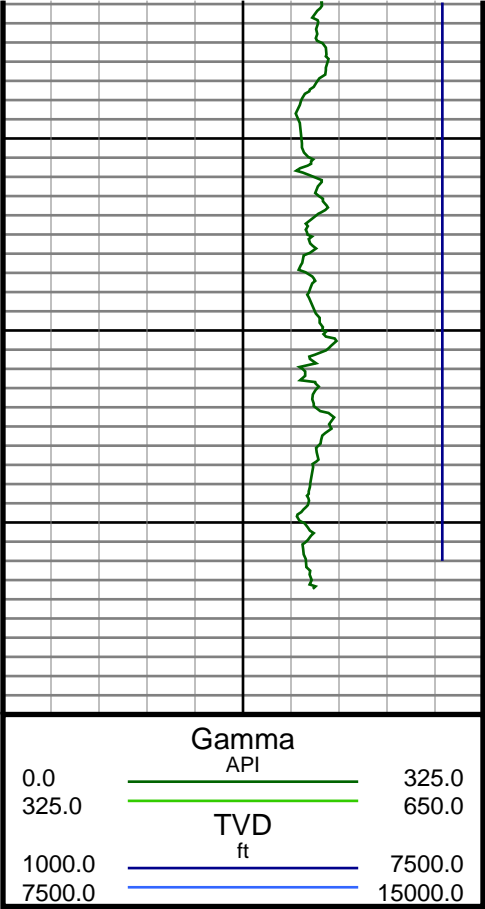
#145 MD(12812.00) Inc(90.2) Azm(1.2) TVD(6958.39)
VS(6328.66) NS(6290.80) EW(-707.53) TEMP(226.4)

#146 MD(12902.00) Inc(90.3) Azm(3.0) TVD(6958.00)
VS(6417.96) NS(6380.74) EW(-704.24) TEMP(224.6)

#147 MD(12992.00) Inc(90.4) Azm(1.9) TVD(6957.45)
VS(6507.19) NS(6470.65) EW(-700.40) TEMP(228.2)

#148 MD(13082.00) Inc(91.4) Azm(1.6) TVD(6956.04)
VS(6596.54) NS(6560.60) EW(-697.62) TEMP(230.0)





#161 MD(14250.00) Inc(90.2) Azm(355.9) TVD(6949.76)
VS(7760.84) NS(7727.98) EW(-714.08) TEMP(235.4)

#162 MD(14340.00) Inc(90.1) Azm(354.8) TVD(6949.52)
VS(7850.83) NS(7817.68) EW(-721.35) TEMP(237.2)

#163 MD(14430.00) Inc(90.1) Azm(353.6) TVD(6949.36)
VS(7940.82) NS(7907.22) EW(-730.44) TEMP(237.2)

#164 MD(14520.00) Inc(90.6) Azm(352.4) TVD(6948.81)
VS(8030.77) NS(7996.54) EW(-741.43) TEMP(129.2)