

Rohn State LD10-69-1HN TVD 1" : 100'

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

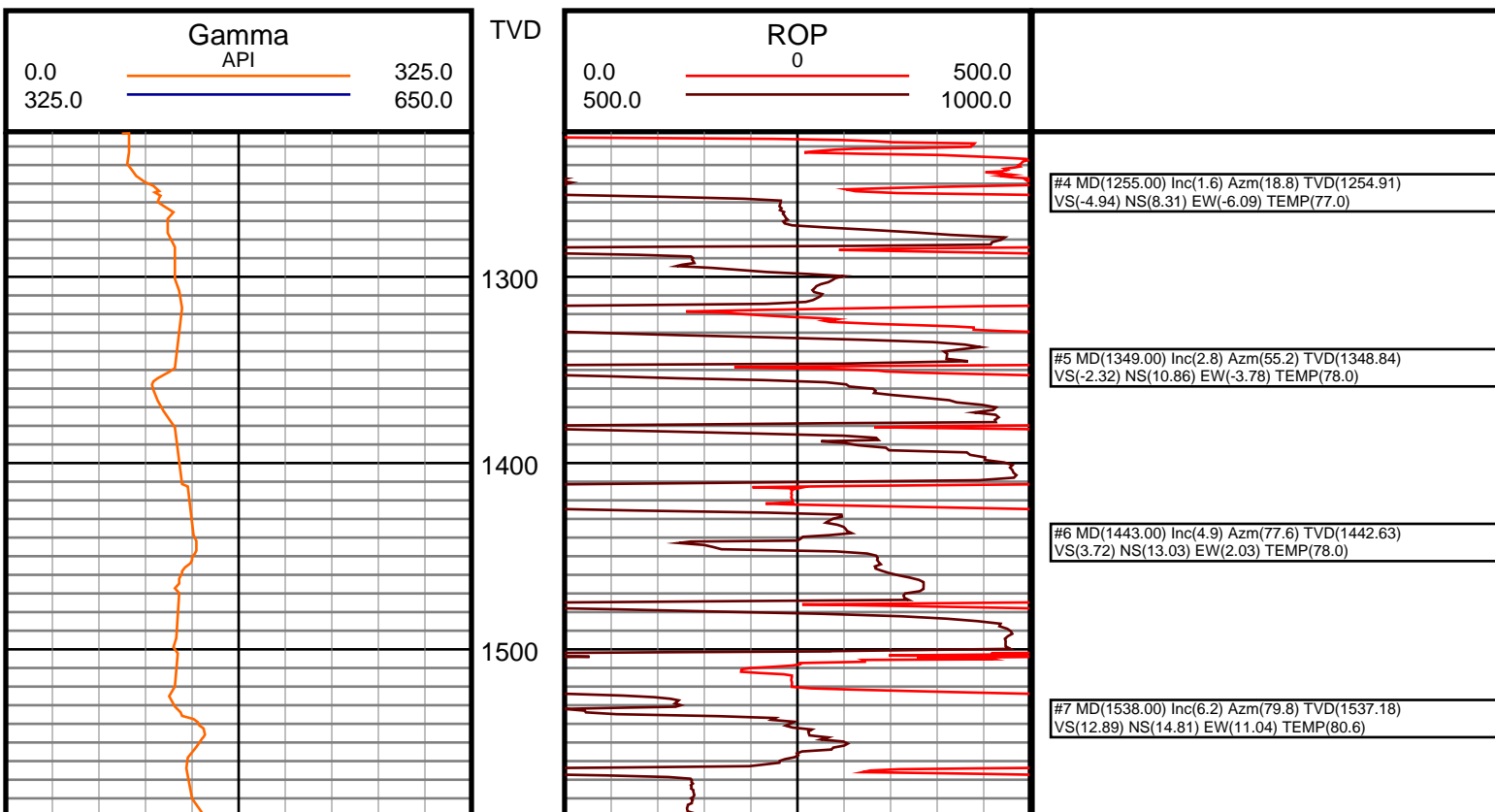
Maximum temperature:

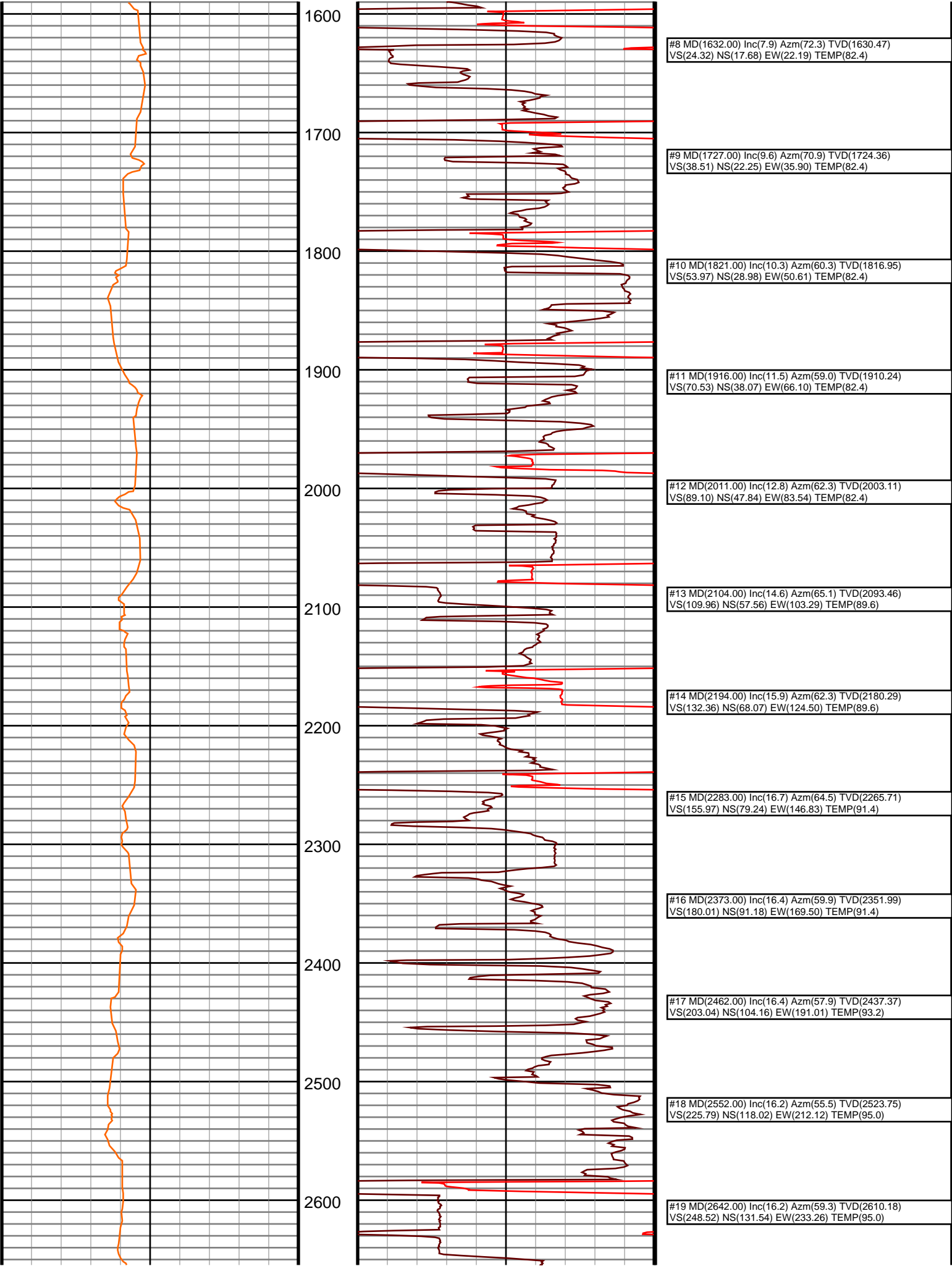
Depth Date
Start: 1215 ft 10/18/2014
End: 9551 ft 10/22/2014

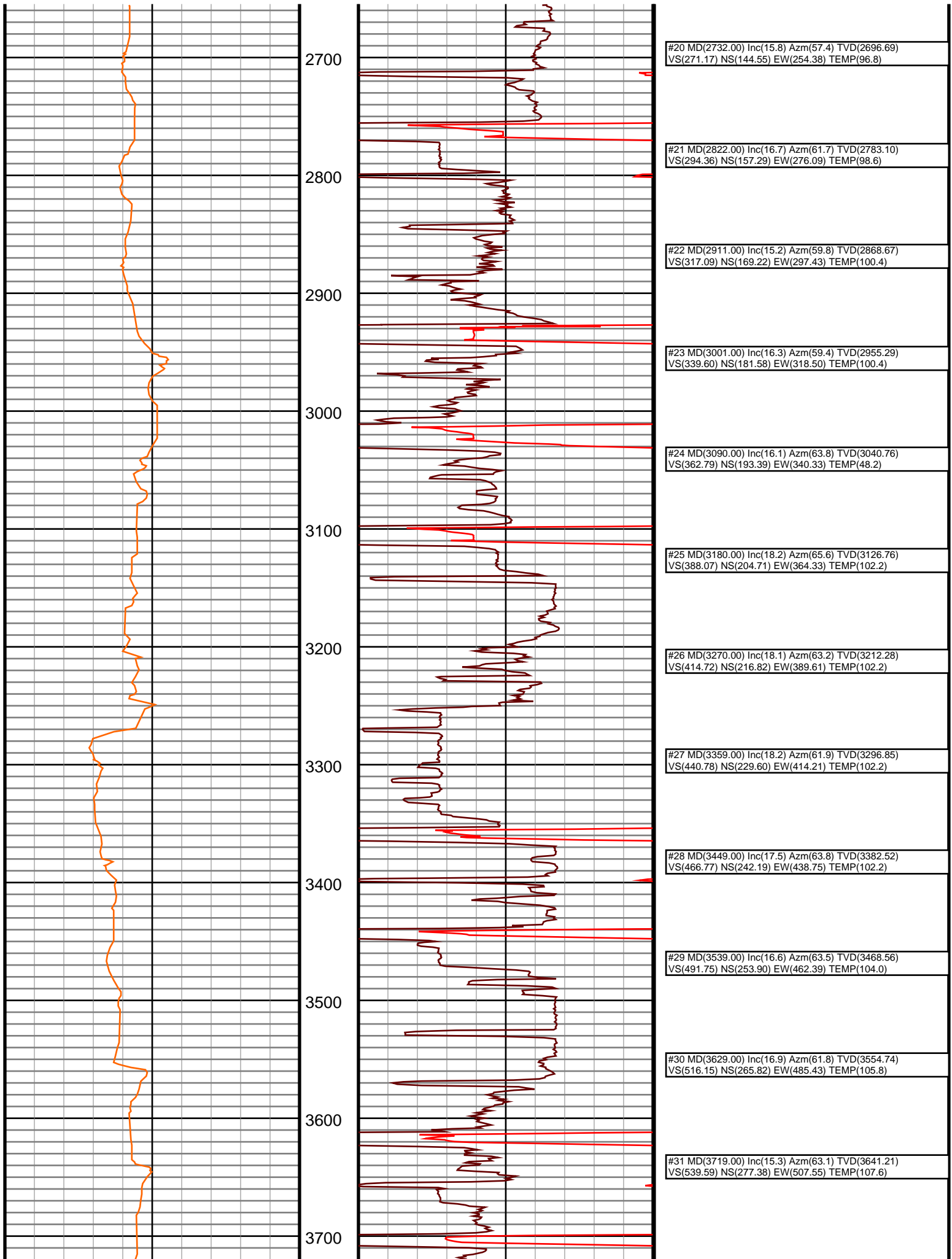
Casing	Depth	Size	Mud Type:	Elevations
Surface:	1215	9.625	Water Based	KB: 4755
Intermediate:	6250	7	Density:	GL: 4739
			Viscosity:	DF: 4755
			Rm:	
			Rmf:	
			Rmc:	

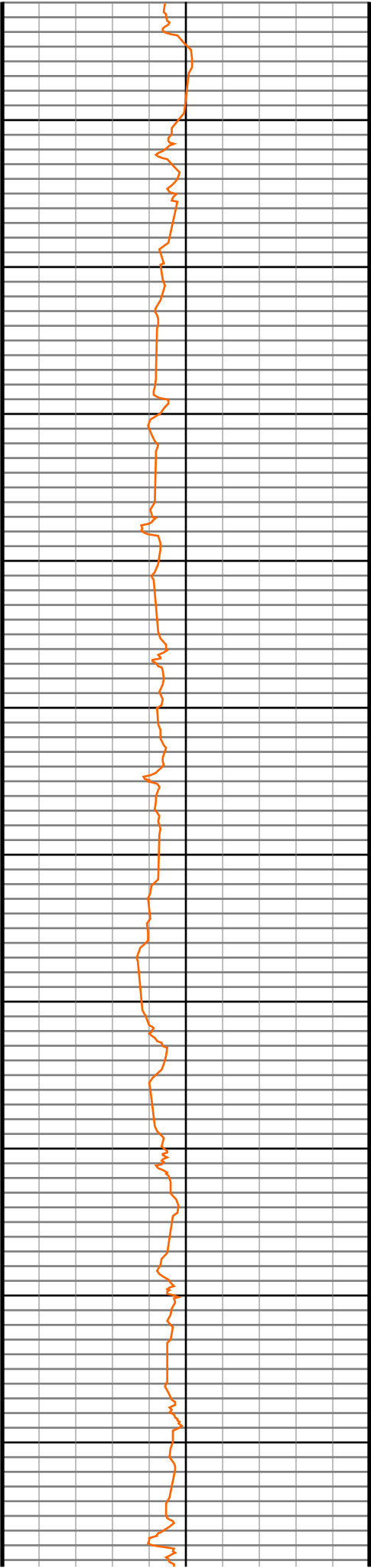
Run	Bit Size	Offsets	Gamma	Survey	Start	End	Start	End
1	8 3/4	61.32	56.32	1215	6160	9551	10/18/2014	10/20/2014
2	6 1/8	60.95	55.95	6160	9551		10/21/2014	10/22/2014
3								
4								
5								
6								
7								
8								
9								
10								

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.









3800

3900

4000

4100

4200

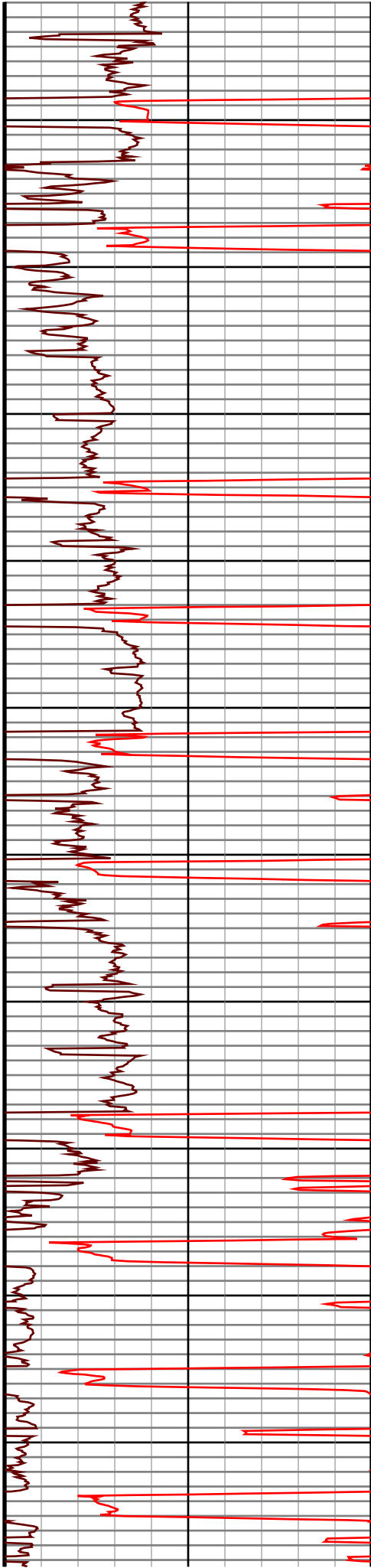
4300

4400

4500

4600

4700



#32 MD(3808.00) Inc(14.5) Azm(62.7) TVD(3727.22)
VS(561.16) NS(287.80) EW(527.92) TEMP(109.4)

#33 MD(3898.00) Inc(15.2) Azm(62.4) TVD(3814.21)
VS(582.85) NS(298.43) EW(548.39) TEMP(109.4)

#34 MD(3988.00) Inc(16.7) Azm(61.1) TVD(3900.74)
VS(605.98) NS(310.15) EW(570.17) TEMP(109.4)

#35 MD(4077.00) Inc(15.9) Azm(61.6) TVD(3986.17)
VS(629.28) NS(322.13) EW(592.09) TEMP(111.2)

#36 MD(4167.00) Inc(16.5) Azm(59.5) TVD(4072.59)
VS(652.57) NS(334.48) EW(613.94) TEMP(111.2)

#37 MD(4257.00) Inc(15.9) Azm(64.4) TVD(4159.02)
VS(676.06) NS(346.29) EW(636.08) TEMP(113.0)

#38 MD(4347.00) Inc(15.6) Azm(63.5) TVD(4245.64)
VS(699.23) NS(357.02) EW(658.02) TEMP(113.0)

#39 MD(4437.00) Inc(16.4) Azm(63.6) TVD(4332.16)
VS(722.70) NS(368.07) EW(680.23) TEMP(114.8)

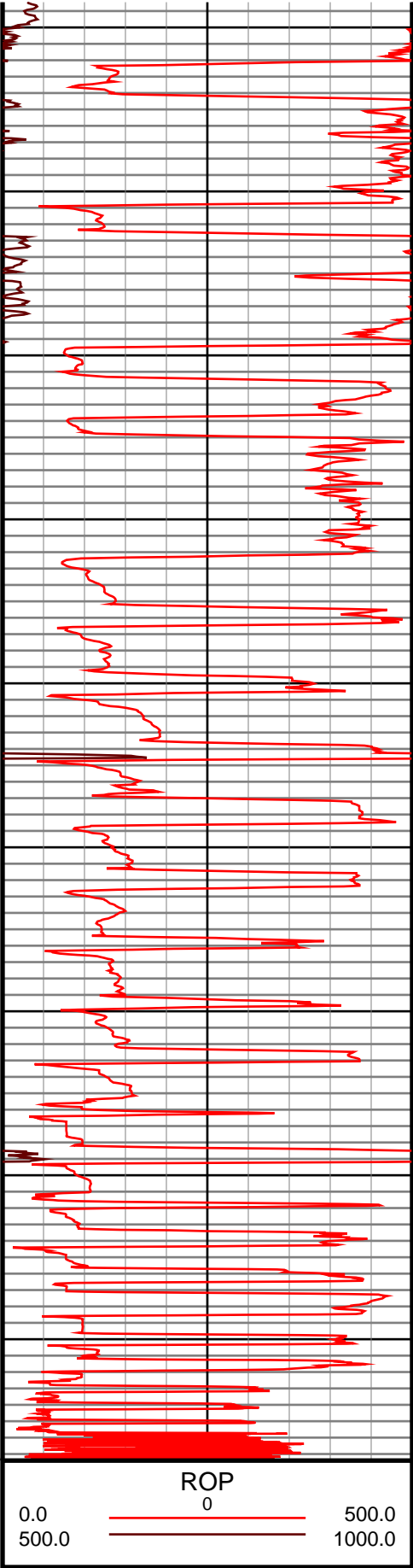
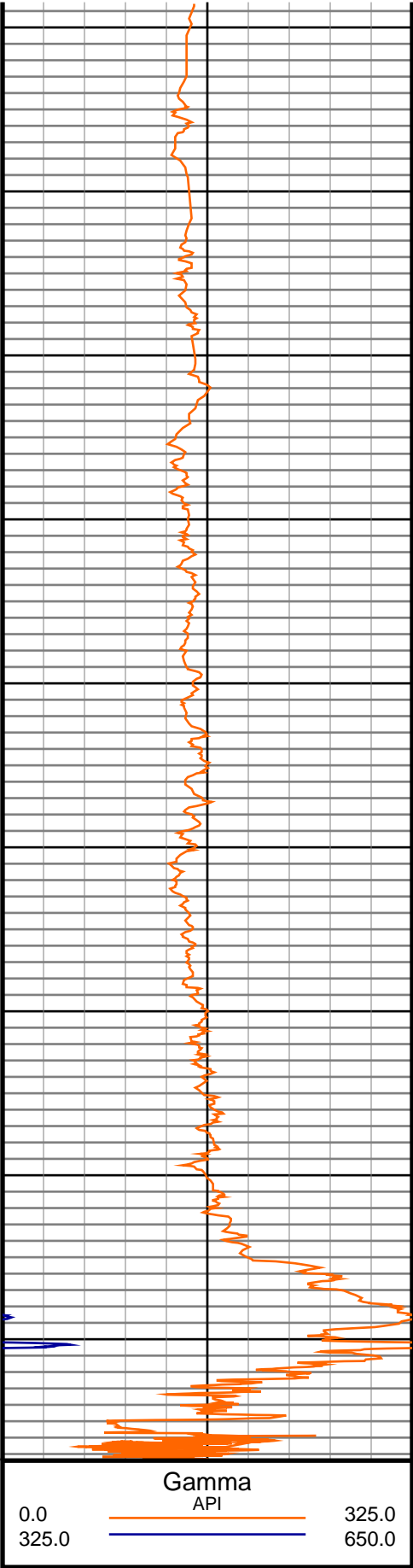
#40 MD(4526.00) Inc(14.6) Azm(62.8) TVD(4417.92)
VS(745.15) NS(378.78) EW(701.47) TEMP(114.8)

#41 MD(4616.00) Inc(15.2) Azm(63.3) TVD(4504.89)
VS(766.98) NS(389.27) EW(722.10) TEMP(121.6)

#42 MD(4706.00) Inc(16.3) Azm(58.5) TVD(4591.51)
VS(789.67) NS(401.17) EW(743.41) TEMP(114.8)

#43 MD(4796.00) Inc(16.2) Azm(59.9) TVD(4677.92)
VS(812.81) NS(414.07) EW(765.04) TEMP(114.8)

#44 MD(4886.00) Inc(15.9) Azm(60.9) TVD(4764.41)
VS(835.87) NS(426.36) EW(786.67) TEMP(114.8)



#45 MD(4976.00) Inc(15.6) Azm(65.5) TVD(4851.04)
VS(858.91) NS(437.37) EW(808.46) TEMP(116.6)

#46 MD(5065.00) Inc(16.5) Azm(69.3) TVD(4936.57)
VS(882.67) NS(446.80) EW(831.17) TEMP(118.4)

#47 MD(5155.00) Inc(17.1) Azm(63.3) TVD(5022.73)
VS(907.62) NS(457.27) EW(854.95) TEMP(122.0)

#48 MD(5200.00) Inc(17.8) Azm(61.6) TVD(5065.66)
VS(920.29) NS(463.51) EW(866.91) TEMP(122.0)

#49 MD(5245.00) Inc(17.0) Azm(59.9) TVD(5108.60)
VS(932.80) NS(470.08) EW(878.65) TEMP(122.0)

#50 MD(5289.00) Inc(19.6) Azm(65.5) TVD(5150.38)
VS(945.80) NS(476.37) EW(890.93) TEMP(125.6)

#51 MD(5334.00) Inc(23.4) Azm(69.6) TVD(5192.24)
VS(961.74) NS(482.62) EW(906.18) TEMP(127.4)

#52 MD(5379.00) Inc(26.6) Azm(73.2) TVD(5233.02)
VS(980.40) NS(488.64) EW(924.21) TEMP(129.2)

#53 MD(5424.00) Inc(28.0) Azm(76.2) TVD(5273.01)
VS(1000.85) NS(494.08) EW(944.11) TEMP(129.2)

#54 MD(5469.00) Inc(30.7) Azm(80.0) TVD(5312.23)
VS(1022.83) NS(498.59) EW(965.69) TEMP(129.2)

#55 MD(5514.00) Inc(34.3) Azm(85.1) TVD(5350.19)
VS(1046.98) NS(501.67) EW(989.65) TEMP(134.6)

#56 MD(5559.00) Inc(37.8) Azm(88.5) TVD(5386.57)
VS(1073.38) NS(503.12) EW(1016.08) TEMP(136.4)

#57 MD(5604.00) Inc(42.1) Azm(85.6) TVD(5421.06)
VS(1102.17) NS(504.64) EW(1044.92) TEMP(138.2)

#58 MD(5648.00) Inc(45.8) Azm(86.0) TVD(5452.73)
VS(1132.65) NS(506.87) EW(1075.37) TEMP(140.0)

#59 MD(5693.00) Inc(49.6) Azm(85.5) TVD(5483.01)
VS(1165.87) NS(509.34) EW(1108.56) TEMP(140.0)

#60 MD(5738.00) Inc(54.1) Azm(84.1) TVD(5510.80)
VS(1201.22) NS(512.56) EW(1143.79) TEMP(140.0)

#61 MD(5783.00) Inc(58.7) Azm(82.8) TVD(5535.70)
VS(1238.68) NS(516.84) EW(1181.01) TEMP(140.0)

#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)

#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)

#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)

#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)