

# Rohn State LD09-67HN

**TVD**  
**2":100'**

**Company:** Noble Energy Inc  
**Well Name:** Rohn State LD09-67HN  
**UWI or LSD:** 05-123-37542  
**Rig Id:** H&P 273  
**State:** Colorado  
**County/Parish:** Weld  
**Country:** USA  
**Survey Company:** Ensign Directional  
**Job number:** 139452  
**Dir. Driller Days** Kody Wood  
**Dir. Driller Nights** Mike David  
**MWD/LWD Days** Brennan Knerr  
**MWD/LWD Nights** Jamey House

**Log measurements:**  
**Depth measured from:**  
**Maximum temperature:**

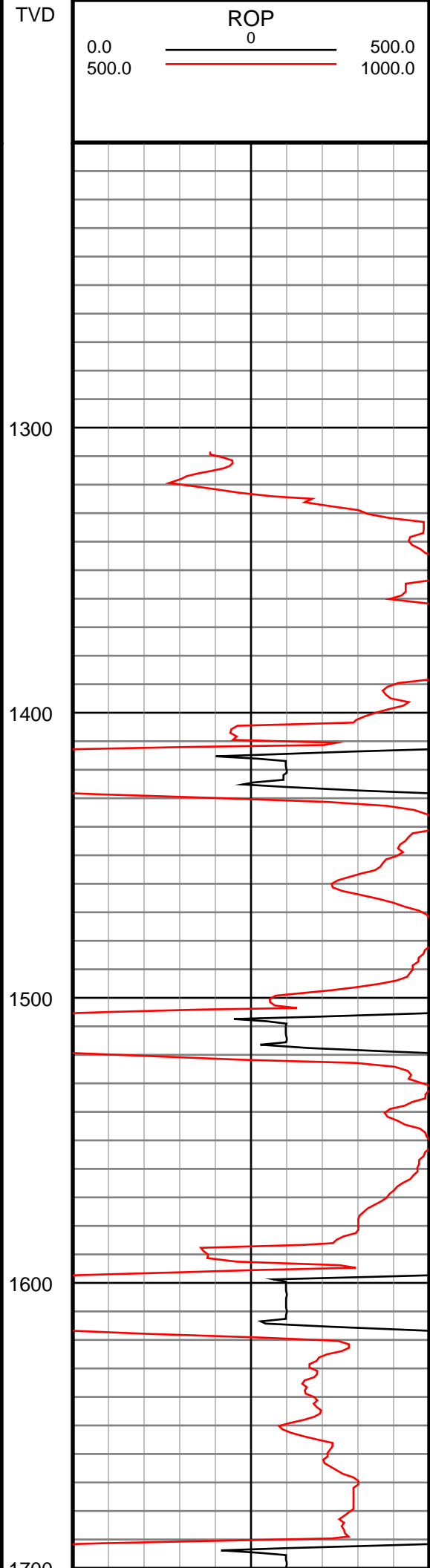
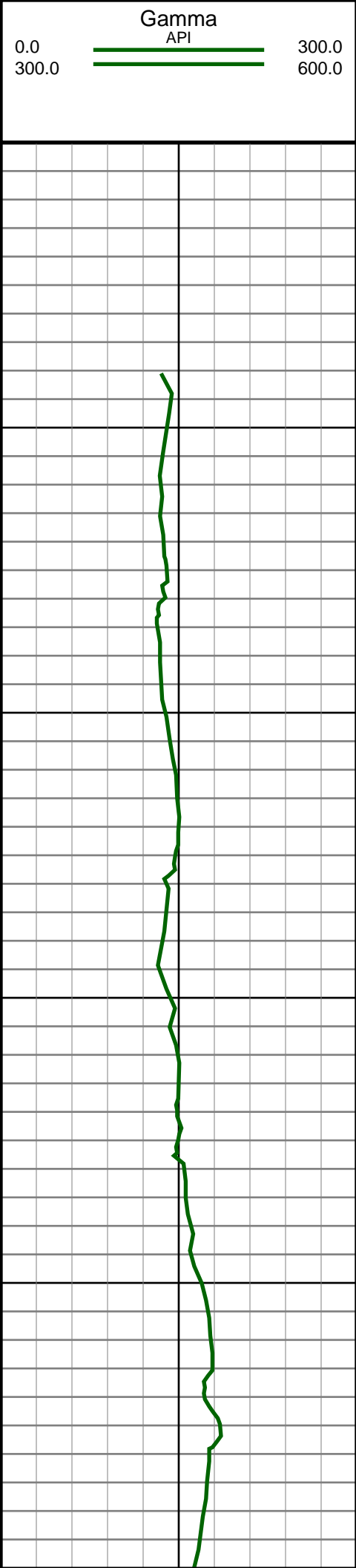
**Depth** **Date**  
**Start:** 1275 ft 10/4/2013  
**End:** 9687 ft 10/10/2013

**Casing Depth Size**  
**Surface:** 1249 9.625  
**Intermediate:**

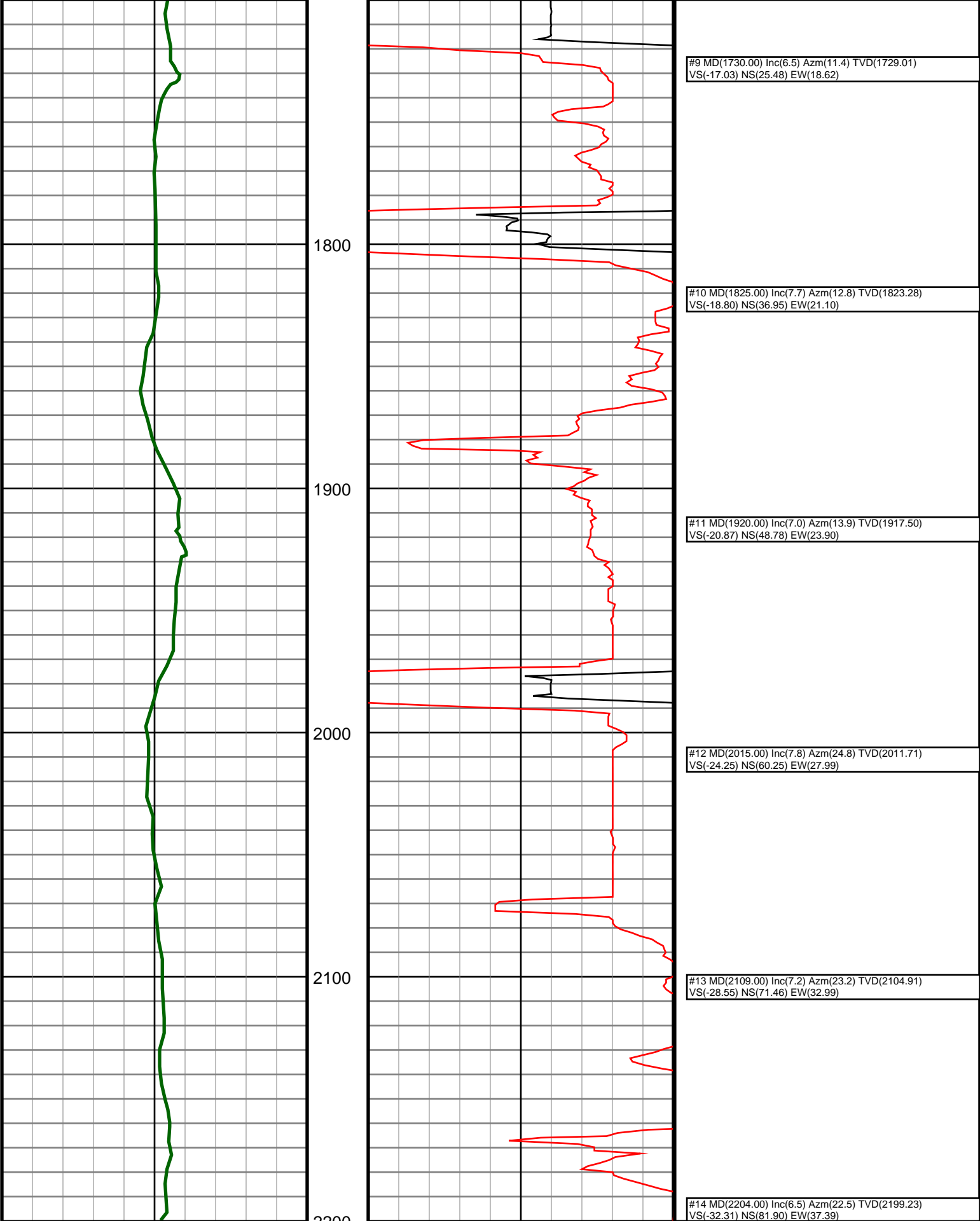
**Mud Type:**  
**Density:**  
**Viscosity:**  
**Rm:** **Rmf:** **Rmc:**

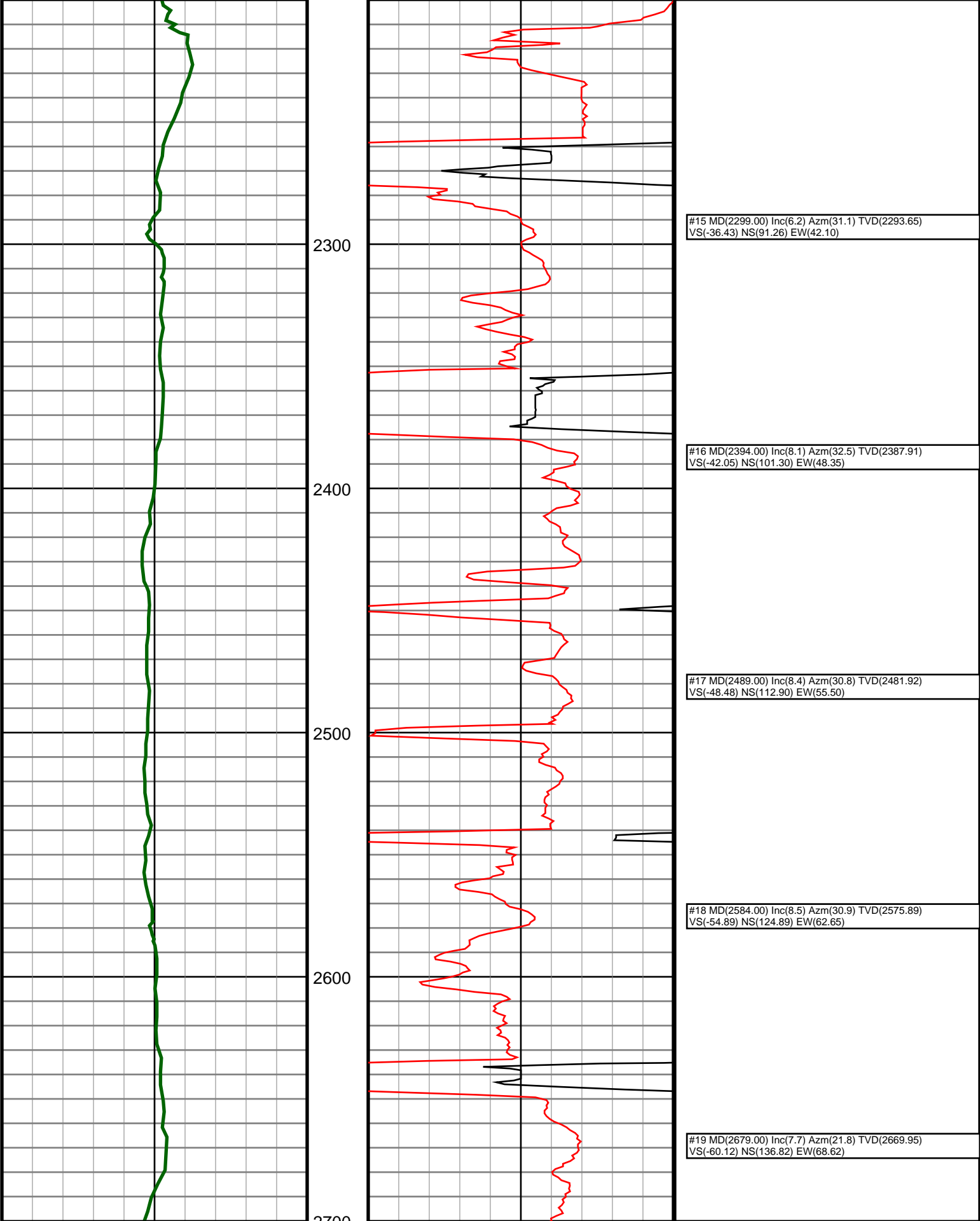
**Elevations**  
**KB:** 4736  
**GL:** 4712  
**DF:** 4736

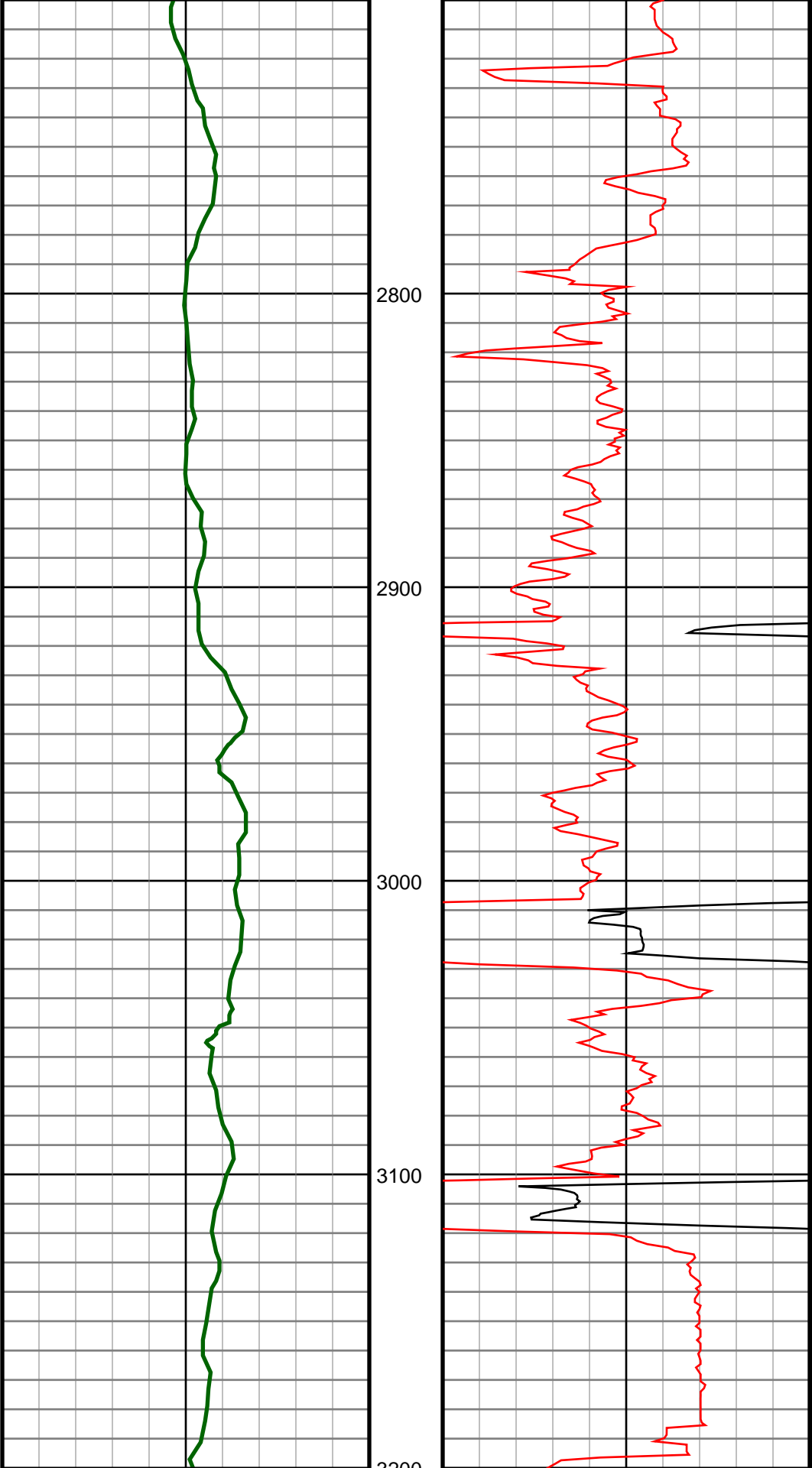
Run	Bit Size	Offsets		Depths		Dates	
		Gamma	Survey	Start	End	Start	End
1	8.75	-1.00	50.00	0	1300	10/4/2013	10/4/2013
2	8.75	57.38	52.38	1300	4981	10/5/2013	10/5/2013
3	8.75	61.83	56.83	4981	6154	10/6/2013	10/6/2013
4	6.125	71.44	66.44	6154	7456	10/7/2013	10/7/2013
5	6.125	71.51	66.51	7456	9687	10/8/2013	10/10/2013
6							
7							
8							
9							
10							



#5 MD(1357.00) Inc(1.1) Azm(41.7) TVD(1356.96) VS(-7.24) NS(3.80) EW(7.49)
#6 MD(1450.00) Inc(2.6) Azm(42.4) TVD(1449.91) VS(-9.12) NS(6.02) EW(9.51)
#7 MD(1540.00) Inc(3.9) Azm(34.6) TVD(1539.76) VS(-11.98) NS(10.05) EW(12.62)
#8 MD(1635.00) Inc(4.9) Azm(22.5) TVD(1634.48) VS(-14.97) NS(16.46) EW(16.01)







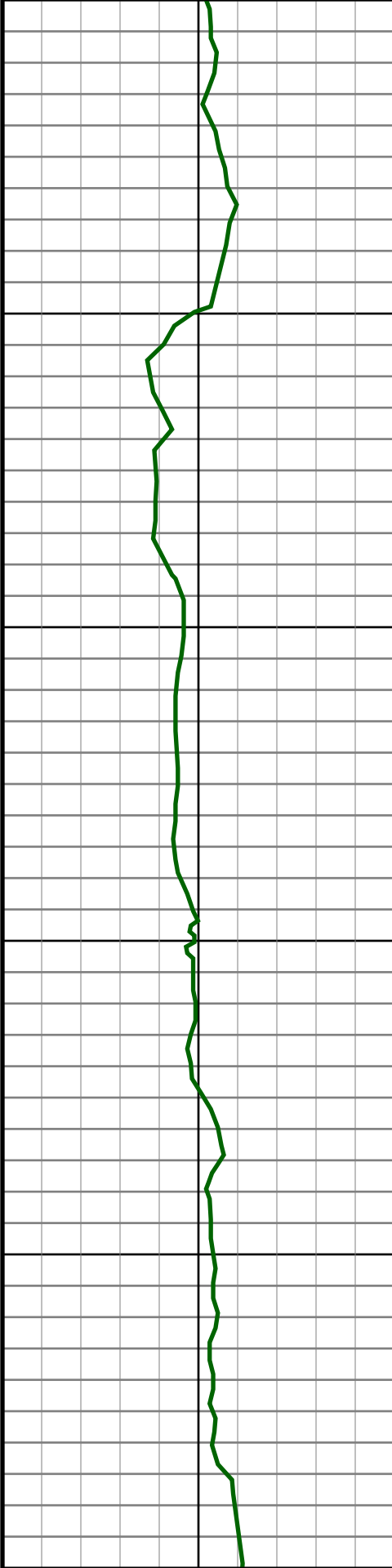
#20 MD(2773.00) Inc(7.3) Azm(20.6) TVD(2763.14)  
VS(-63.85) NS(148.26) EW(73.06)

#21 MD(2868.00) Inc(6.3) Azm(20.6) TVD(2857.47)  
VS(-67.15) NS(158.79) EW(77.02)

#22 MD(2963.00) Inc(5.0) Azm(15.5) TVD(2952.01)  
VS(-69.55) NS(167.66) EW(79.96)

#23 MD(3058.00) Inc(5.7) Azm(21.6) TVD(3046.60)  
VS(-71.87) NS(176.03) EW(82.80)

#24 MD(3153.00) Inc(6.8) Azm(32.2) TVD(3141.03)  
VS(-76.04) NS(185.18) EW(87.54)



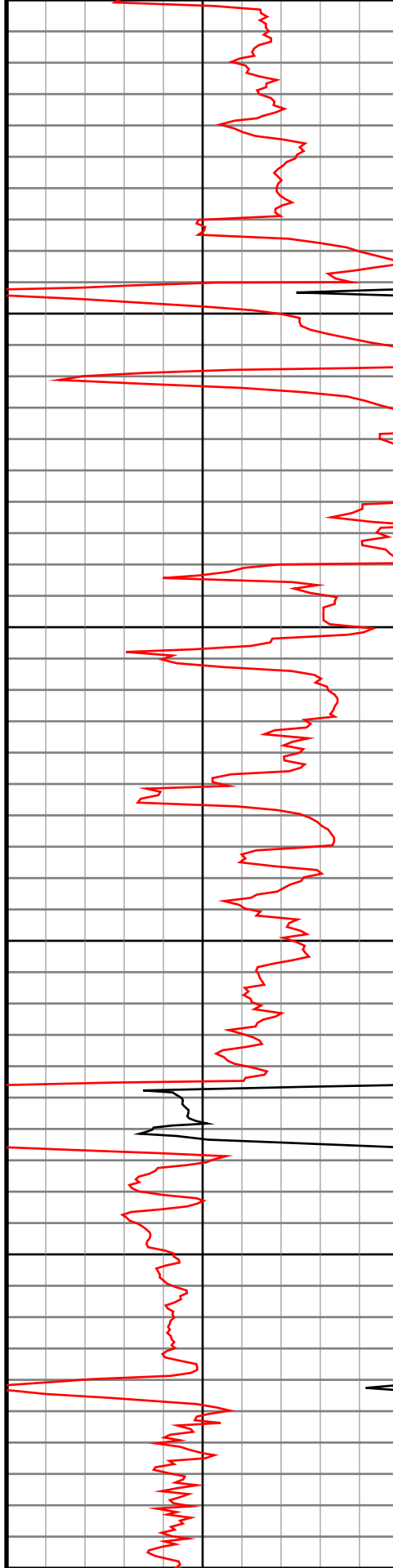
3300

3400

3500

3600

3700

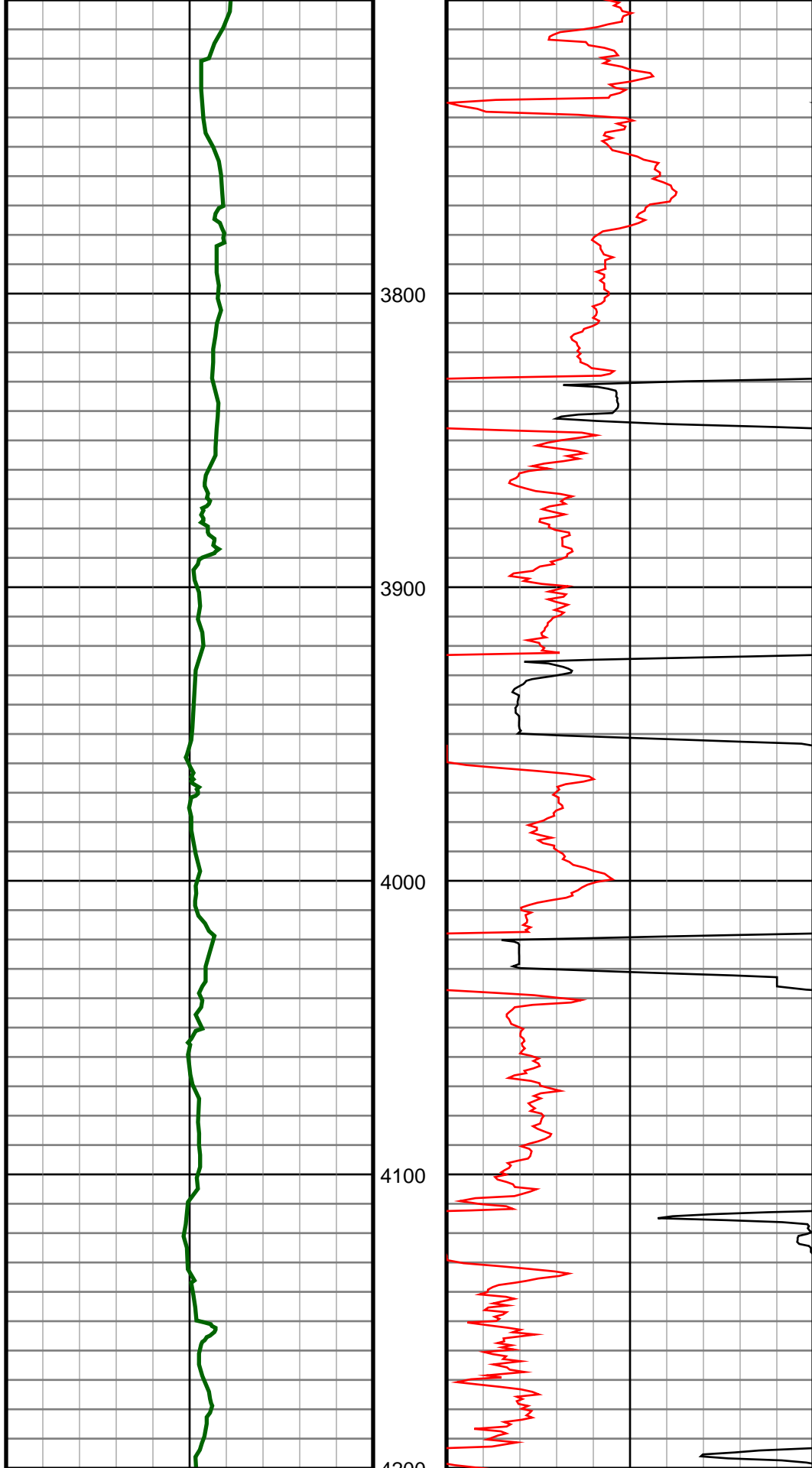


#25 MD(3341.00) Inc(7.8) Azm(31.1) TVD(3327.51)  
VS(-87.29) NS(205.52) EW(100.06)

#26 MD(3436.00) Inc(8.6) Azm(31.8) TVD(3421.54)  
VS(-93.64) NS(217.08) EW(107.13)

#27 MD(3531.00) Inc(9.6) Azm(30.4) TVD(3515.34)  
VS(-100.59) NS(229.95) EW(114.88)

#28 MD(3626.00) Inc(8.2) Azm(27.9) TVD(3609.19)  
VS(-106.97) NS(242.77) EW(122.06)



#29 MD(3721.00) Inc(7.3) Azm(27.1) TVD(3703.32)  
VS(-112.18) NS(254.13) EW(127.98)

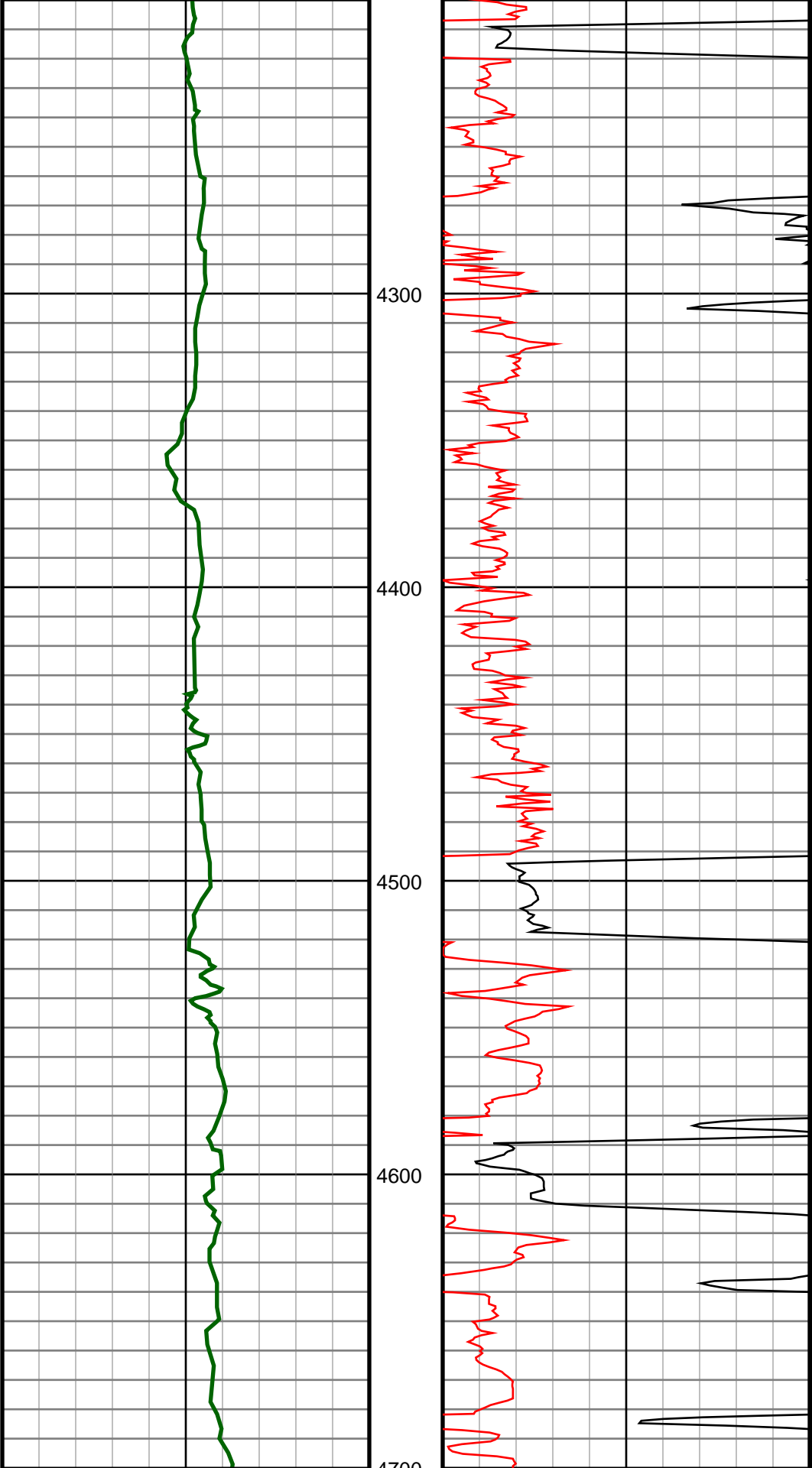
#30 MD(3815.00) Inc(5.3) Azm(26.5) TVD(3796.75)  
VS(-116.27) NS(263.33) EW(132.64)

#31 MD(3910.00) Inc(5.5) Azm(23.6) TVD(3891.33)  
VS(-119.55) NS(271.43) EW(136.42)

#32 MD(4005.00) Inc(5.8) Azm(19.5) TVD(3985.87)  
VS(-122.43) NS(280.12) EW(139.85)

#33 MD(4100.00) Inc(6.5) Azm(16.7) TVD(4080.32)  
VS(-124.98) NS(289.80) EW(142.99)

#34 MD(4195.00) Inc(5.5) Azm(18.5) TVD(4174.80)  
VS(-127.39) NS(299.27) EW(145.98)



#35 MD(4290.00) Inc(5.4) Azm(10.5) TVD(4269.37)  
VS(-129.11) NS(307.98) EW(148.24)

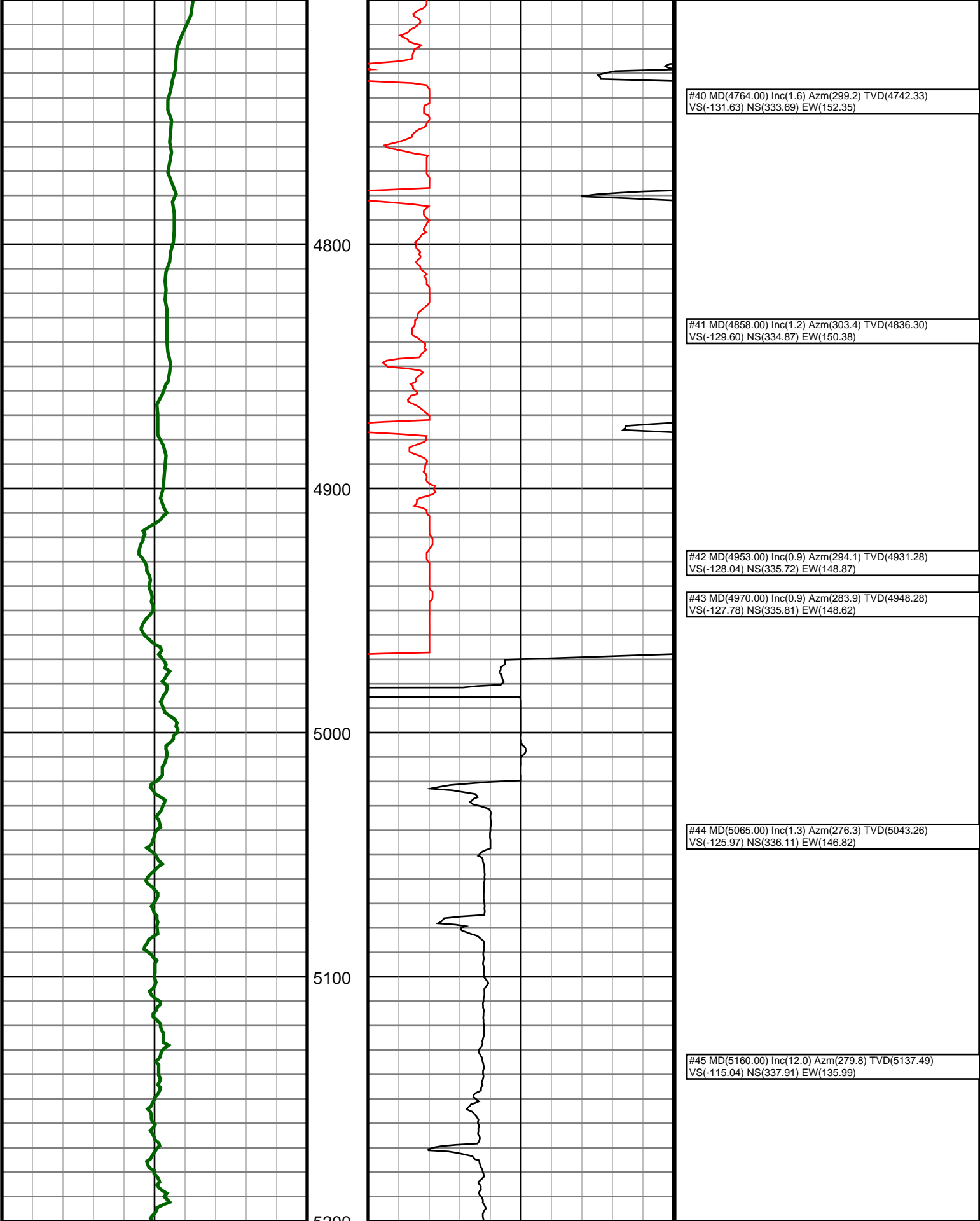
#36 MD(4384.00) Inc(5.4) Azm(19.3) TVD(4362.96)  
VS(-130.85) NS(316.50) EW(150.51)

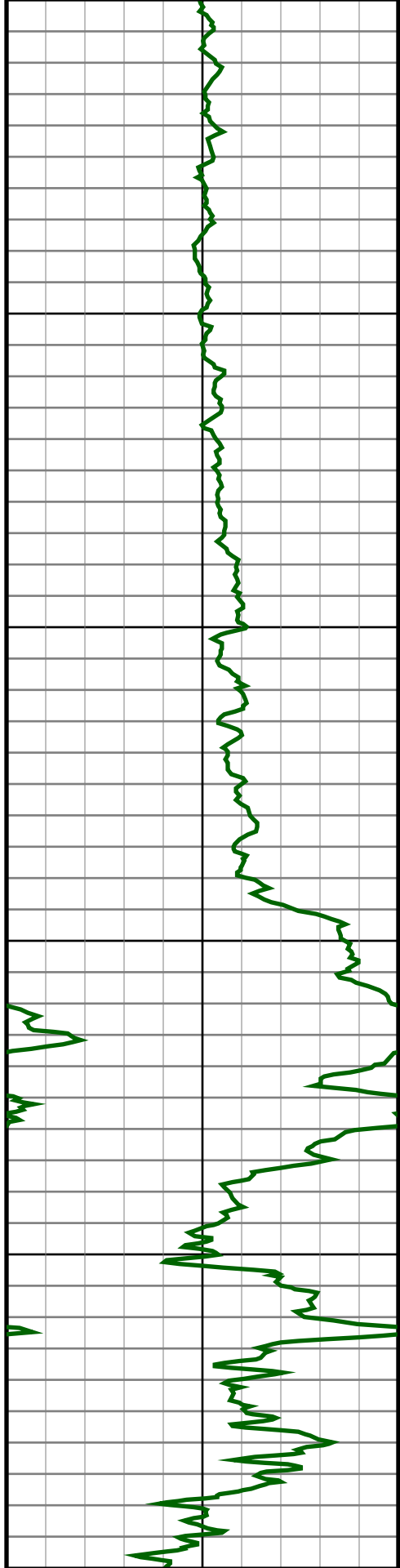
#37 MD(4479.00) Inc(4.7) Azm(24.6) TVD(4457.59)  
VS(-133.47) NS(324.26) EW(153.61)

#38 MD(4574.00) Inc(2.2) Azm(9.0) TVD(4552.41)  
VS(-135.04) NS(329.60) EW(155.51)

#39 MD(4669.00) Inc(1.7) Azm(305.5) TVD(4647.36)  
VS(-134.02) NS(332.22) EW(154.65)







5300

5400

5500

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5700



#46 MD(5255.00) Inc(22.1) Azm(283.0) TVD(5228.19)  
VS(-87.53) NS(343.63) EW(108.77)

#47 MD(5349.00) Inc(32.4) Azm(278.6) TVD(5311.66)  
VS(-44.89) NS(351.39) EW(66.52)

#48 MD(5444.00) Inc(40.3) Azm(271.4) TVD(5388.15)  
VS(11.28) NS(355.96) EW(10.53)

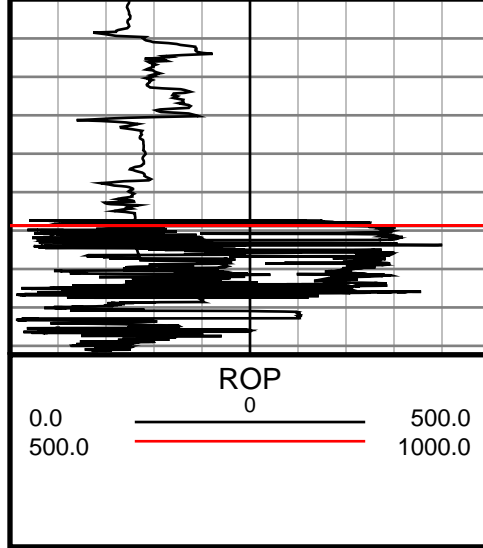
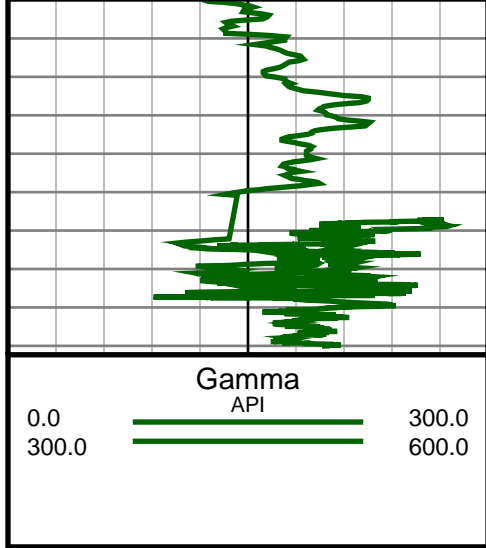
#49 MD(5539.00) Inc(41.6) Azm(270.9) TVD(5459.90)  
VS(73.49) NS(357.20) EW(-51.72)

#50 MD(5634.00) Inc(43.9) Azm(270.7) TVD(5529.65)  
VS(137.90) NS(358.10) EW(-116.19)

#51 MD(5729.00) Inc(48.4) Azm(269.8) TVD(5595.45)  
VS(206.28) NS(358.38) EW(-184.68)

#52 MD(5823.00) Inc(55.8) Azm(266.3) TVD(5653.16)  
VS(280.03) NS(355.75) EW(-258.74)

#53 MD(5918.00) Inc(65.2) Azm(265.3) TVD(5699.89)  
VS(361.87) NS(349.66) EW(-341.10)



#54 MD(6013.00) Inc(69.8) Azm(266.0) TVD(5736.24)  
VS(448.79) NS(343.02) EW(-428.60)

#76 MD(8050.00) Inc(89.0) Azm(269.8) TVD(5767.76)  
VS(2470.54) NS(261.98) EW(-2459.12)

#86 MD(8999.00) Inc(87.8) Azm(267.0) TVD(5777.83)  
9687.0:Bit Projection @9687' INC: 88.9 AZM: 269.1  
TVD: 5792.04 VS: 4101.46

#87 MD(9000.00) Inc(88.9) Azm(269.1) TVD(5792.04)  
VS(4101.46) NS(230.71) EW(-4095.02)