

TIMBRO STATE LD16-68-1HN

TVD
2":100'

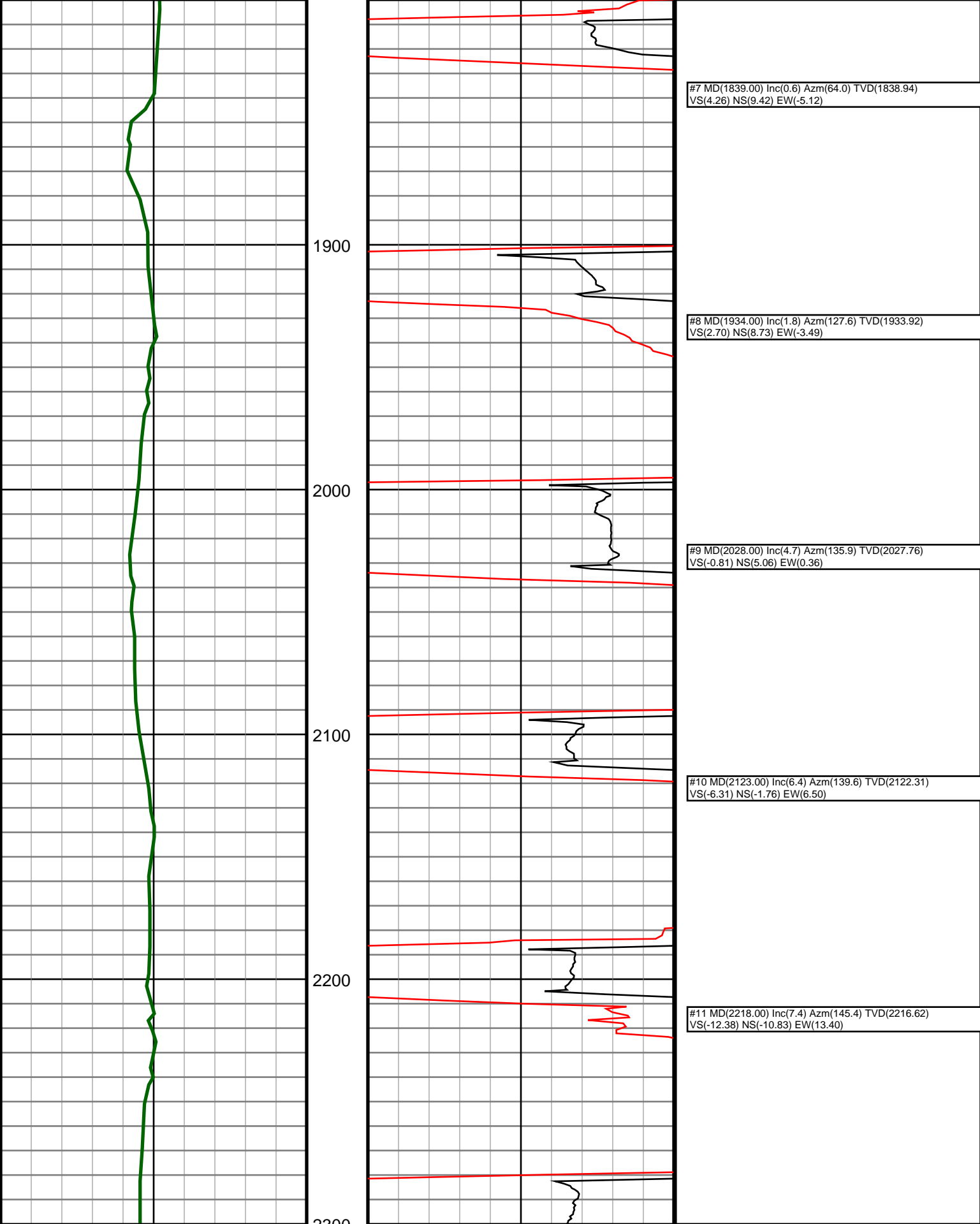
Company: Noble Energy Inc
Well Name: TIMBRO STATE LD16-68-1HN
UWI or LSD: 05-123-37493
Rig Id: H&P 273
State: Colorado
County/Parish: Weld
Country: USA
Survey Company: Ensign Directional
Job number: 139452
Dir. Driller Days Kody Wood
Dir. Driller Nights Brett Blank
MWD/LWD Days Tyler Teague
MWD/LWD Nights Jamey House

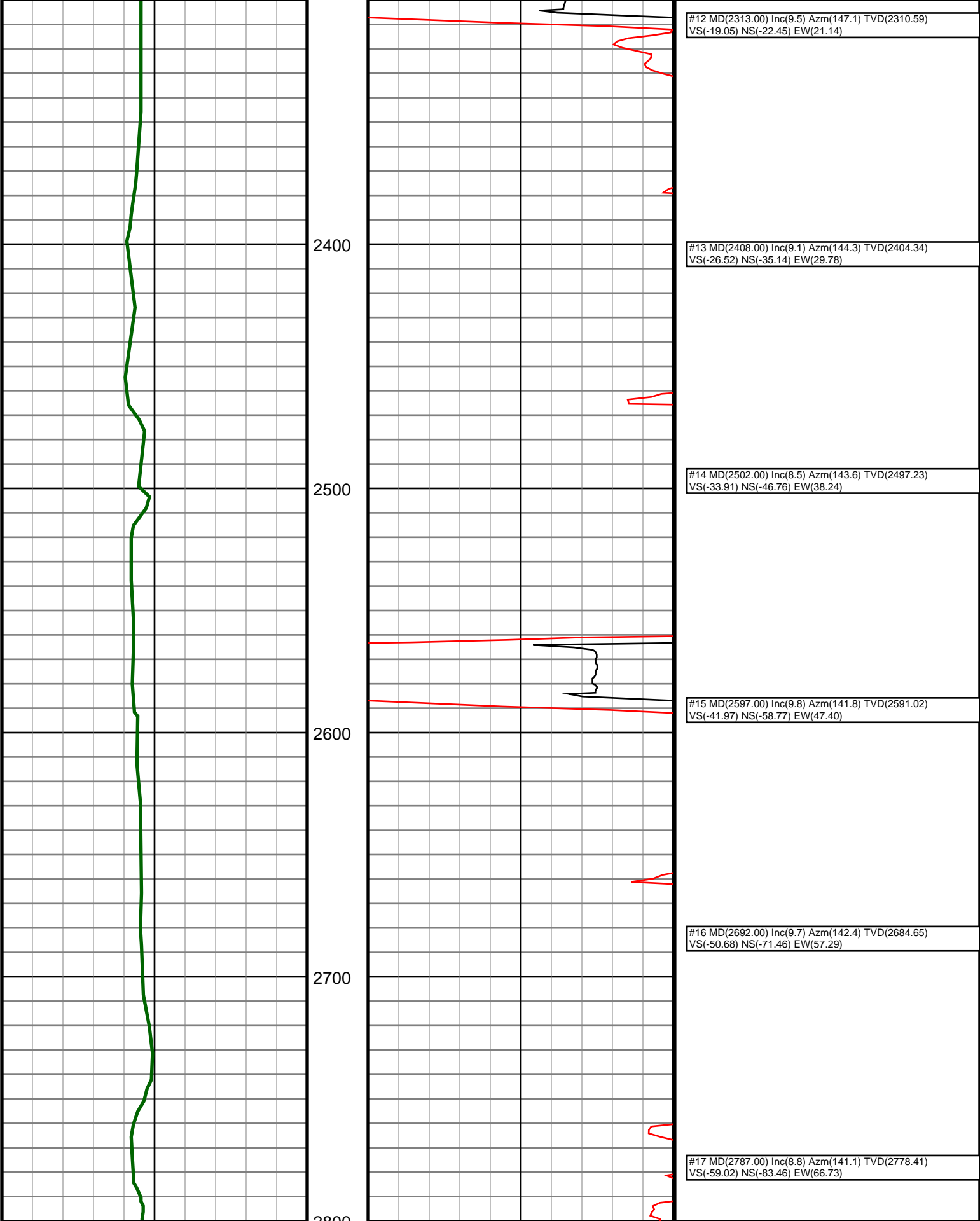
Log measurements:
Depth measured from:
Maximum temperature:

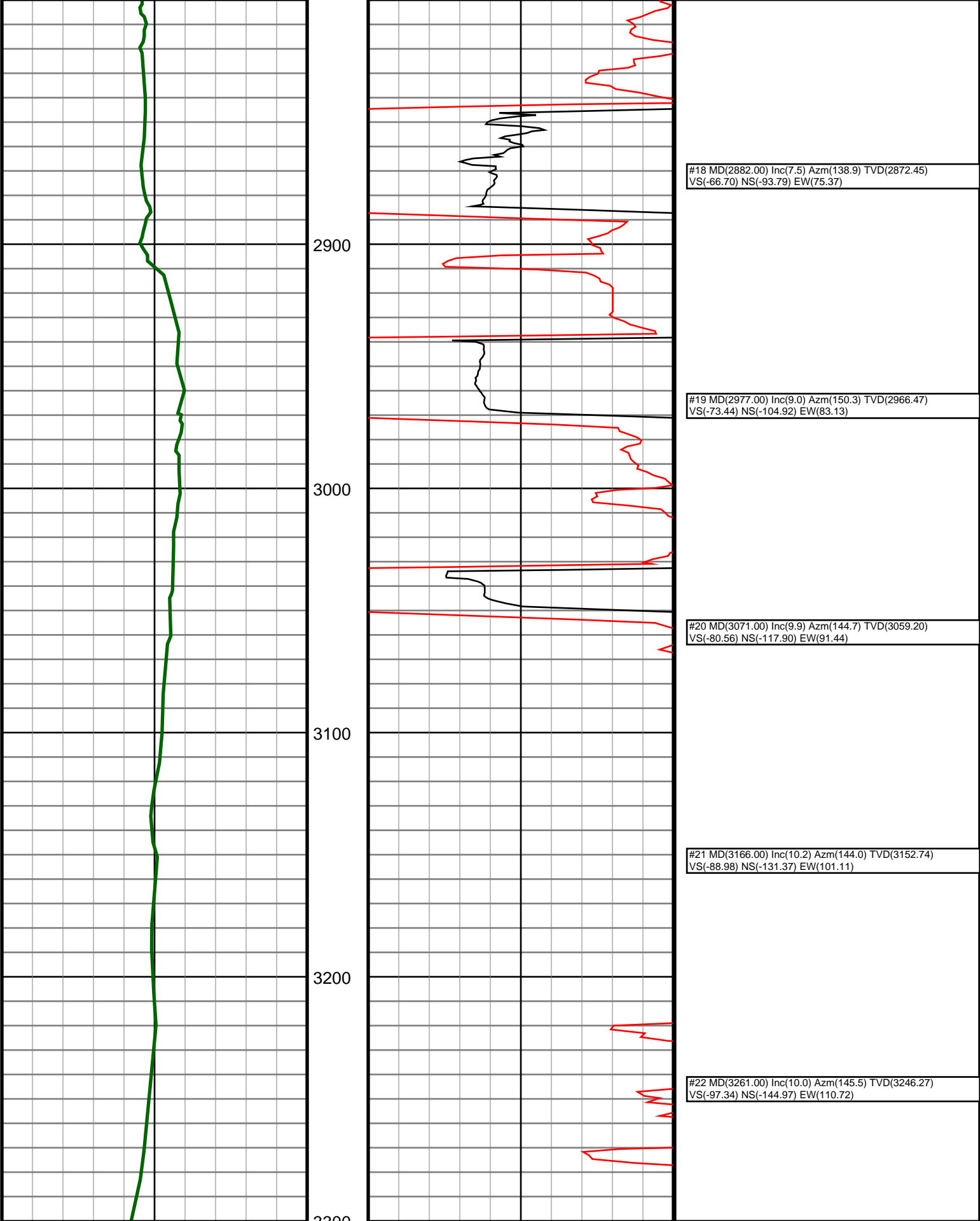
Depth **Date**
Start: 1265 ft 11/18/2013
End: 9870 ft 11/24/2013

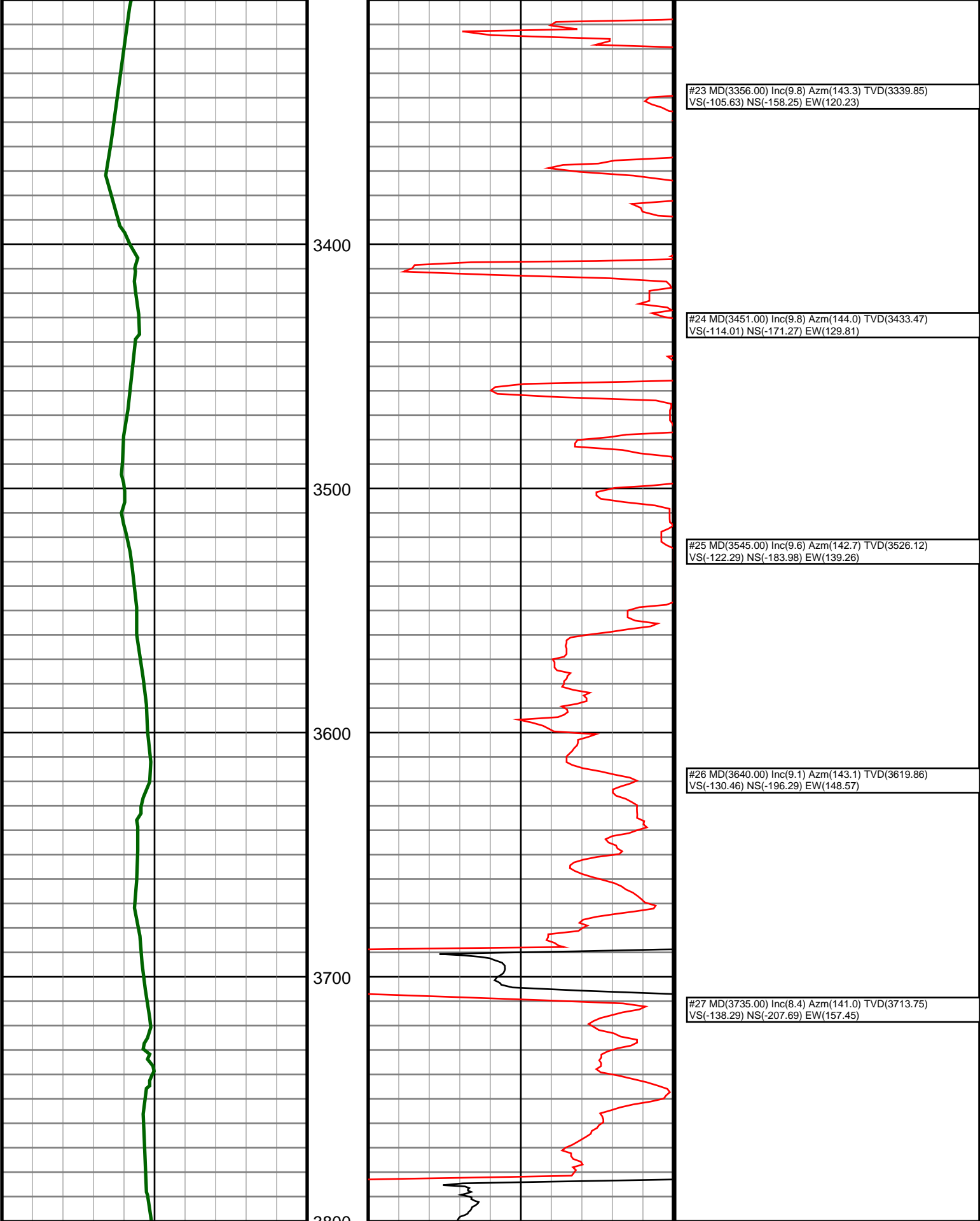
Casing	Depth	Size	Mud Type:	Elevations
Surface:	1255	9.625	Density:	KB: 4748
Intermediate:	6069	7	Viscosity:	GL: 4724
			Rm:	DF: 4748
			Rmf:	
			Rmc:	

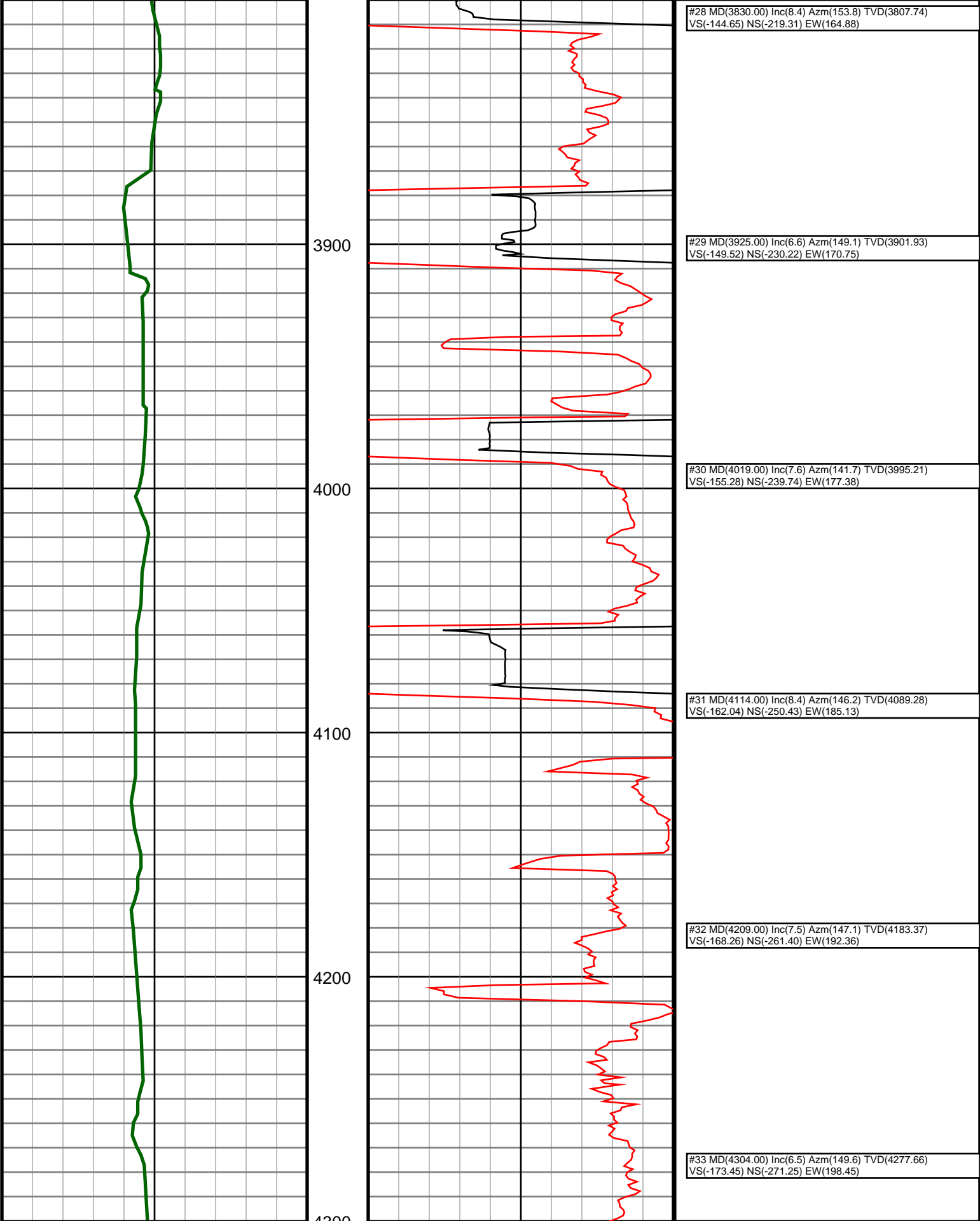
Run	Bit Size	Offsets	Gamma Survey	Start	Depths	End	Start	Dates	End
1	8.75	-1.00	-1.00	0	1265		11/17/2013		11/18/2013
2	8.75	61.91	56.91	1265	4945		11/18/2013		11/19/2013
3	8.75	61.86	56.86	4945	6080		11/19/2013		11/20/2013
4	6.125	71.35	66.35	6080	7448		11/21/2013		11/22/2013
5	6.125	72.11	67.11	7448	9870		11/22/2013		11/24/2013
6									
7									
8									
9									
10									

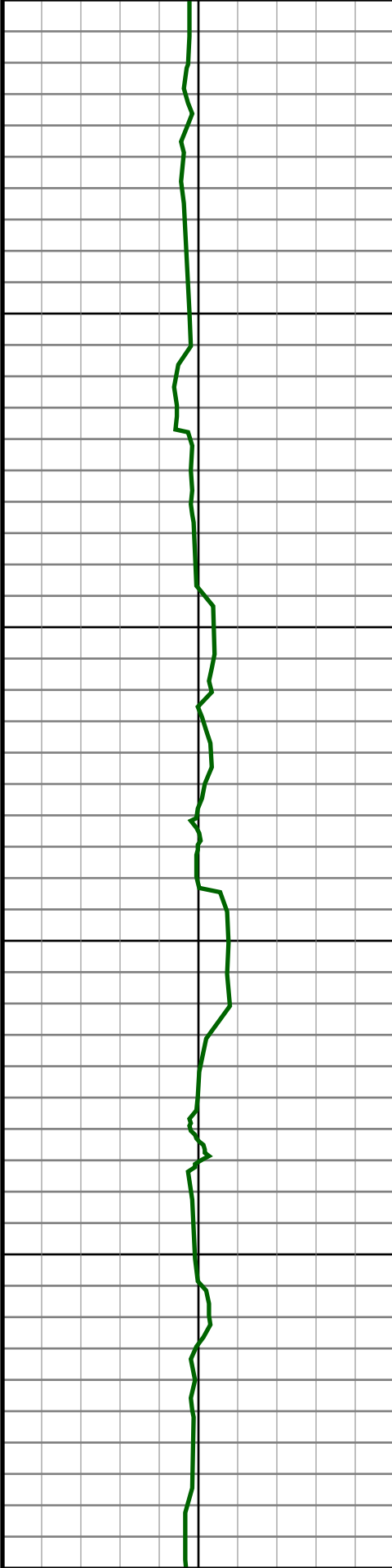












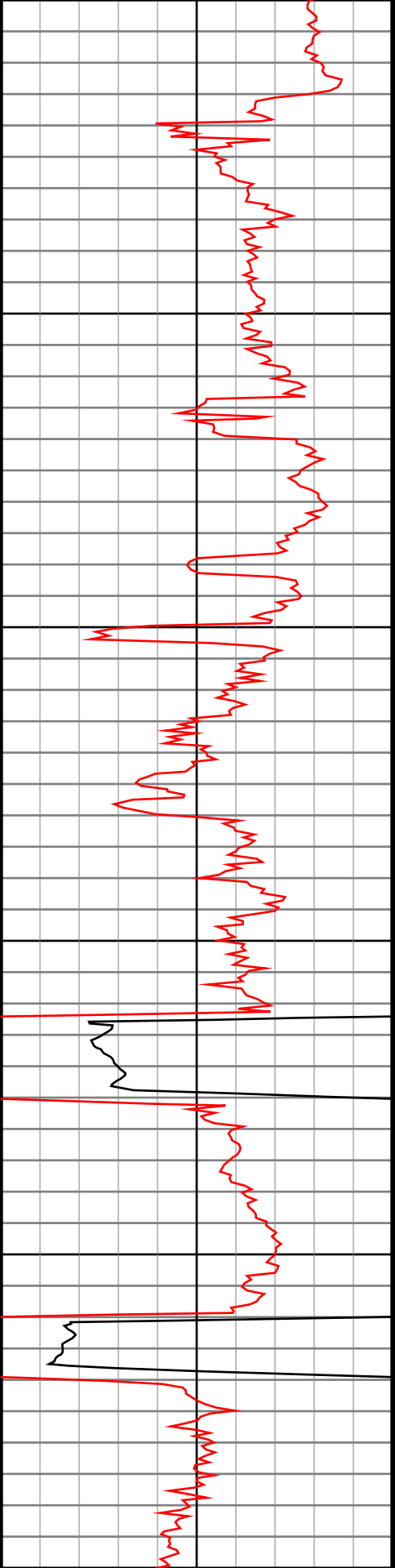
4400

4500

4600

4700

4800



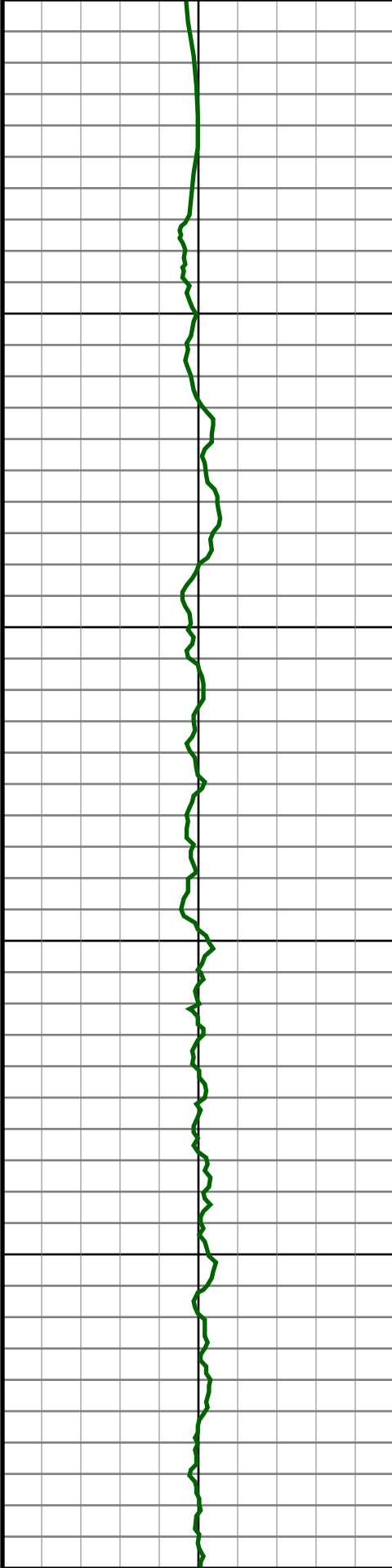
#34 MD(4399.00) Inc(5.5) Azm(152.4) TVD(4372.14)
VS(-177.49) NS(-279.92) EW(203.28)

#35 MD(4494.00) Inc(4.4) Azm(159.2) TVD(4466.78)
VS(-180.21) NS(-287.36) EW(206.68)

#36 MD(4588.00) Inc(3.5) Azm(162.2) TVD(4560.56)
VS(-181.82) NS(-293.47) EW(208.84)

#37 MD(4683.00) Inc(2.2) Azm(195.6) TVD(4655.45)
VS(-181.81) NS(-297.98) EW(209.24)

#38 MD(4778.00) Inc(0.6) Azm(193.9) TVD(4750.42)
VS(-181.00) NS(-300.22) EW(208.63)



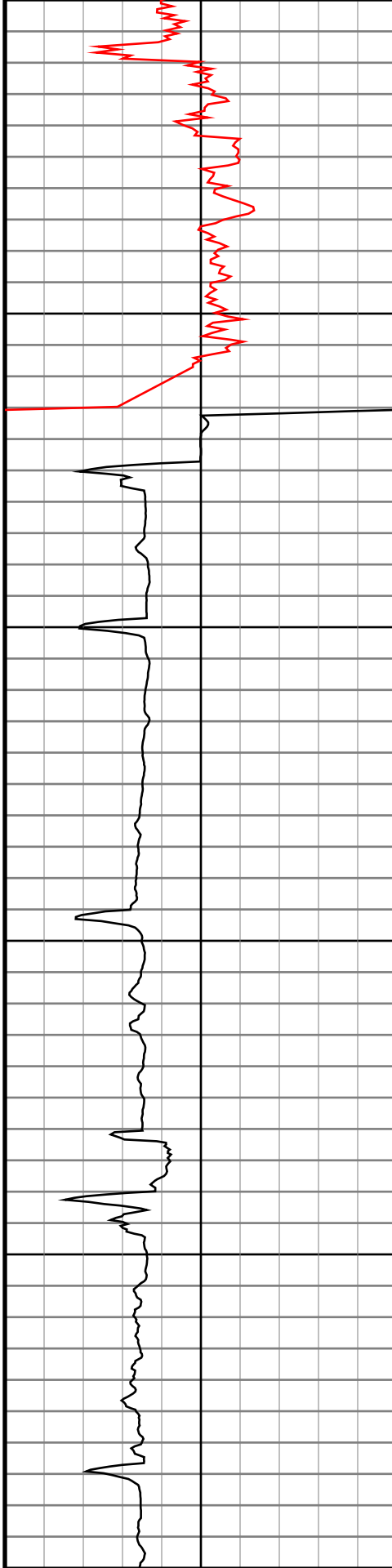
4900

5000

5100

5200

5300



#39 MD(4873.00) Inc(0.7) Azm(163.3) TVD(4845.41)
VS(-180.96) NS(-301.26) EW(208.67)

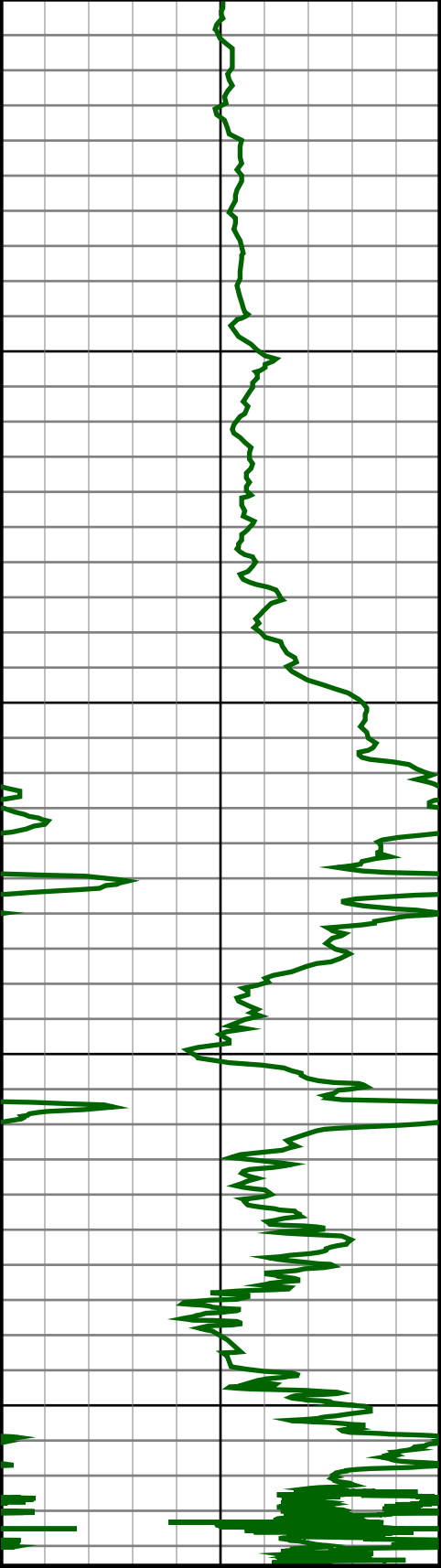
#40 MD(4966.00) Inc(0.6) Azm(229.0) TVD(4938.40)
VS(-180.68) NS(-302.12) EW(208.47)

#41 MD(5060.00) Inc(10.5) Azm(282.8) TVD(5031.86)
VS(-172.11) NS(-300.55) EW(199.72)

#42 MD(5155.00) Inc(18.6) Azm(278.8) TVD(5123.74)
VS(-149.12) NS(-296.30) EW(176.27)

#43 MD(5250.00) Inc(23.0) Azm(268.6) TVD(5212.55)
VS(-115.87) NS(-294.44) EW(142.72)

#44 MD(5345.00) Inc(32.1) Azm(268.1) TVD(5296.69)
VS(-72.06) NS(-295.73) EW(98.84)



5400

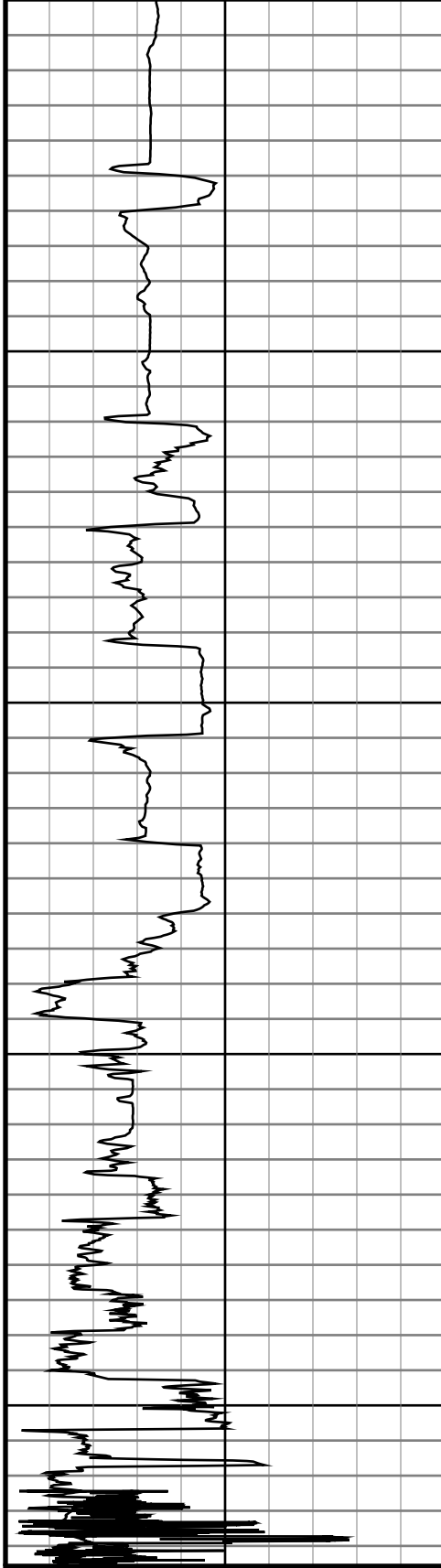
5500

5600

5700

Gamma
API

0.0 200.0 400.0



ROP

0.0 500.0 1000.0

#45 MD(5440.00) Inc(40.4) Azm(266.5) TVD(5373.24)
VS(-15.98) NS(-298.45) EW(42.79)

#46 MD(5535.00) Inc(47.3) Azm(266.3) TVD(5441.71)
VS(49.77) NS(-302.59) EW(-22.86)

#47 MD(5630.00) Inc(52.8) Azm(265.9) TVD(5502.69)
VS(122.55) NS(-307.55) EW(-95.49)

#48 MD(5724.00) Inc(57.4) Azm(266.5) TVD(5556.46)
VS(199.60) NS(-312.65) EW(-172.39)

#49 MD(5819.00) Inc(60.8) Azm(266.8) TVD(5605.23)
VS(281.07) NS(-317.41) EW(-253.76)

#50 MD(5914.00) Inc(68.9) Azm(269.6) TVD(5645.58)
VS(366.83) NS(-320.03) EW(-339.63)

#51 MD(6020.00) Inc(75.3) Azm(271.2) TVD(5678.15)
VS(467.17) NS(-319.31) EW(-440.44)

#52 MD(6092.00) Inc(79.6) Azm(270.9) TVD(5693.79)
VS(537.03) NS(-318.02) EW(-510.69)

#53 MD(6154.00) Inc(79.1) Azm(271.0) TVD(5705.25)
VS(597.62) NS(-317.01) EW(-571.61)

9850.0:Bit Projection @9870' INC: 90.3 AZM: 266.1
TVD: 5736.09 VS: 4296.73
#93 MD(9870.00) Inc(90.3) Azm(266.1) TVD(5736.09)
VS(4296.73) NS(-384.88) EW(-4279.46)