



CATHEDRAL

Cathedral Energy Services

1949 North Pyrite Road
Casper, Wyoming 82604

145344

5":100' - MD

11/5/2014 3:26:34 PM

Oper. Company: Encana Oil & Gas (USA) Inc.

Country: U.S.A.

State / Province: Colorado

County / Parish: Weld

Started: 10/05/2014 01:00 AM

API/UWI: 05-123-37586-00

Field: Wattenberg (Niobrara)

Well: Drieth 1A-6H-A368

Rig: Ensign Drilling 135

Ended: 10/13/2014 06:46 PM

Gamma Ray

Section Plane: 270.00

Magnetic North: 8.75

Gamma Attenuation Factor: 4.12
3.01

Gamma Averaging: 7%

Personnel

Day Hand: K. Wagoner

Night Hand: T. Mueller

Comp. Emp:

Maximum Temperature: 208°F

Location

Latitude: 40.260180

Longitude: -105.038150

Elev. GL: 5087

Elev. DF:

Elev. KB: 5100

Log and Survey Depths Relative to Kelly Bushing (KB) Depth

Hole Data

Size	From	To
12-1/4	80	855
8-3/4	855	7312
6-1/8	7312	11498

Casing Data

Size	From	To
9-5/8	0	845
7	0	7292

Bit Sizes

Size	From	To
12-1/4	0	855
8-3/4	855	7312
6-1/6	7312	11498

Mud Data

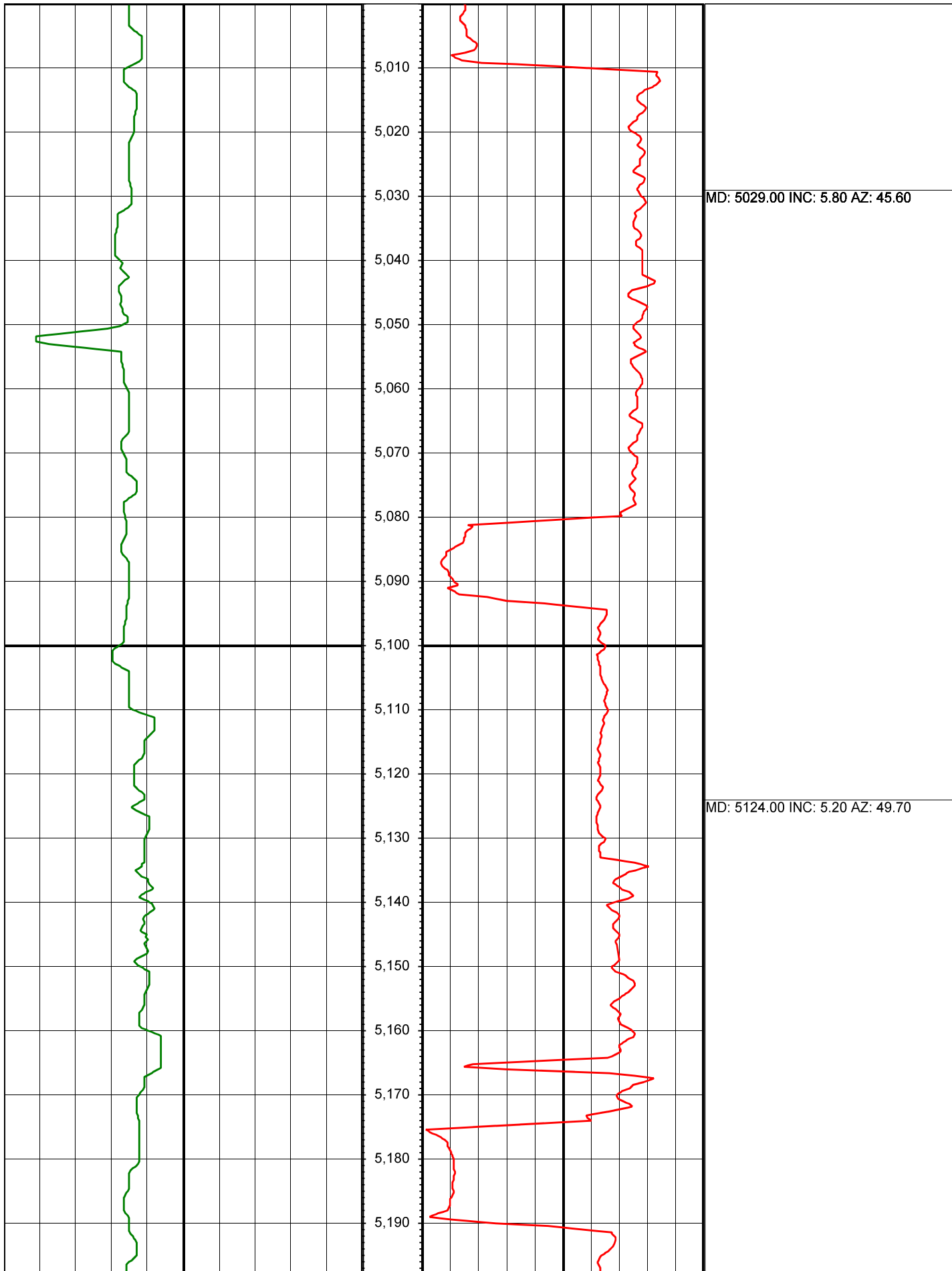
Type	Weight	Density	Viscosity	Rm	Rmf	Rmc	From	To
Water/LSND	9.2						855	7082
Water/LSND	10.2						7082	7312
Water/LSND	10.2						7312	7312
Water/LSND	10.2						7312	7486
Water/LSND	10.2						7486	7752
Water/LSND	10.4						7752	11498

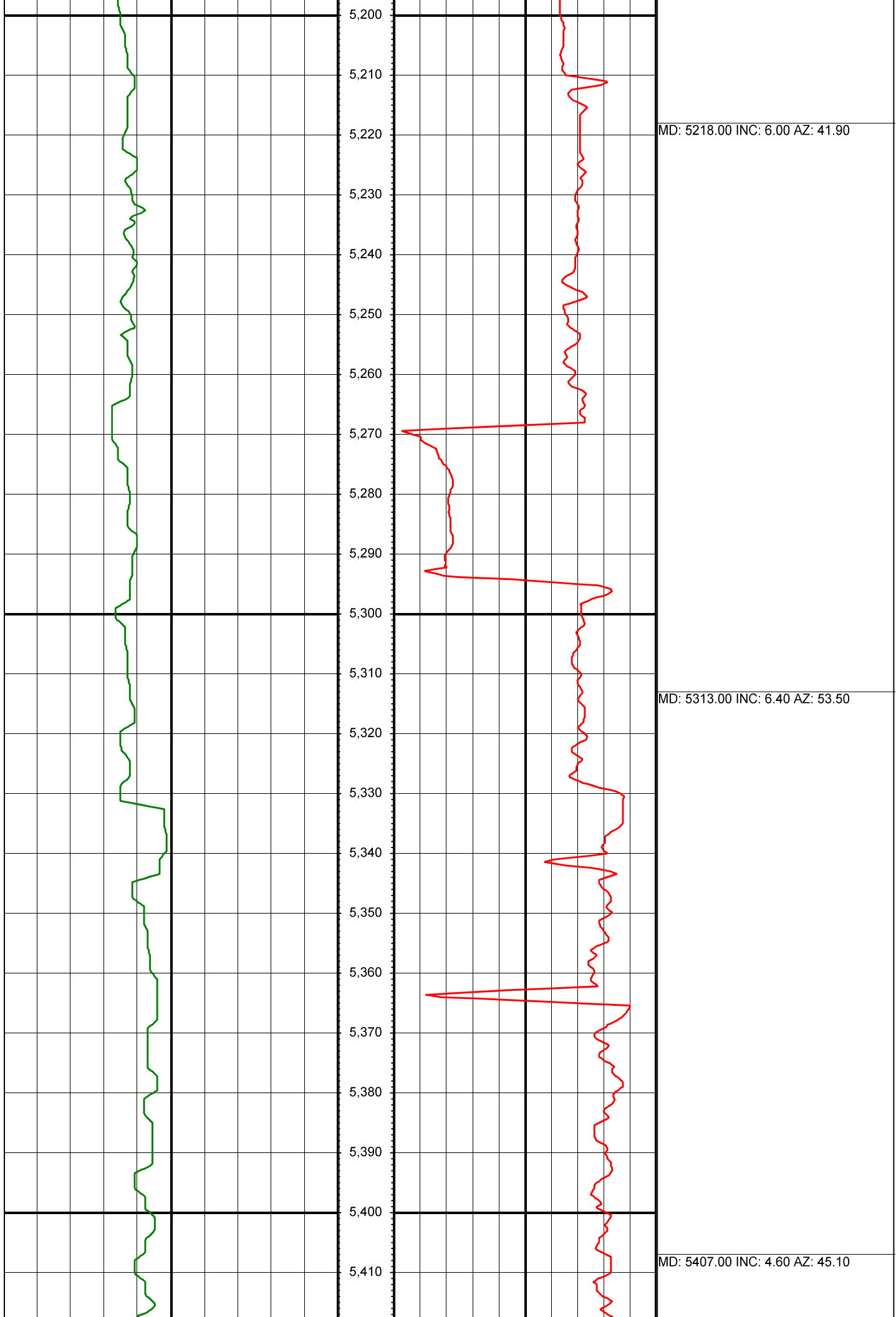
Tool Run Data

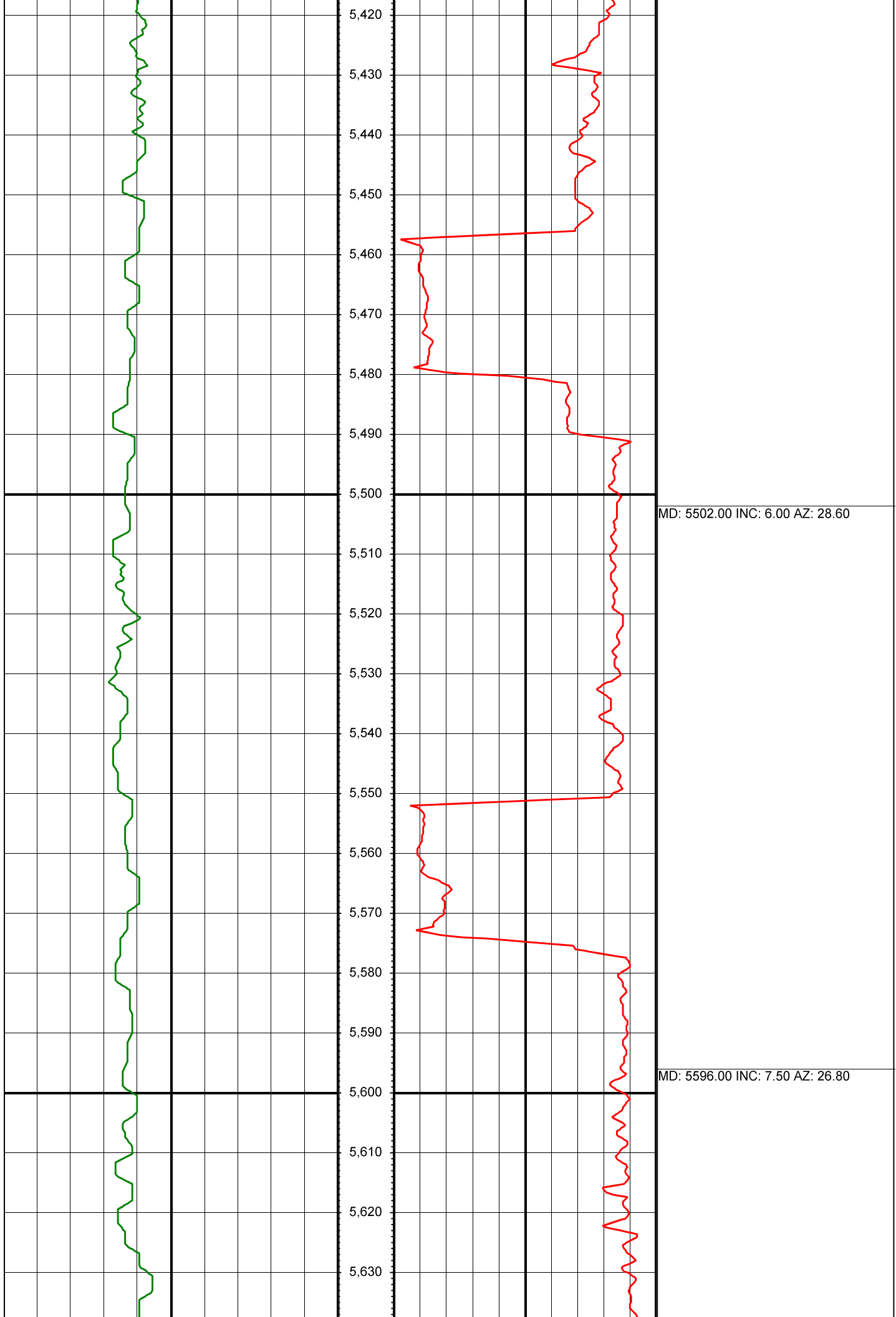
Serial Number	Gamma Offset	Resist. Offset	Start Time	Start Depth	End Time	End Depth
2018	40.29	0	10/4/2014 7:00:48 AM	5000	10/6/2014 10:38:48 AM	7082
2018	41.93	0	10/6/2014 12:00:37 PM	7082	10/7/2014 11:00:37 AM	7312
2018	41.93	0	10/8/2014 8:00:19 AM	7312	10/9/2014 7:30:19 AM	7312
2018	40.4	0	10/10/2014 12:30:53 PM	7312	10/11/2014 6:30:53 AM	7486
2018	3.013	0	10/11/2014 7:30:24 AM	7486	10/12/2014 12:00:24 AM	7752
2018	39.93	0	10/12/2014 2:00:48 PM	7752	10/14/2014 10:00:48 AM	11498

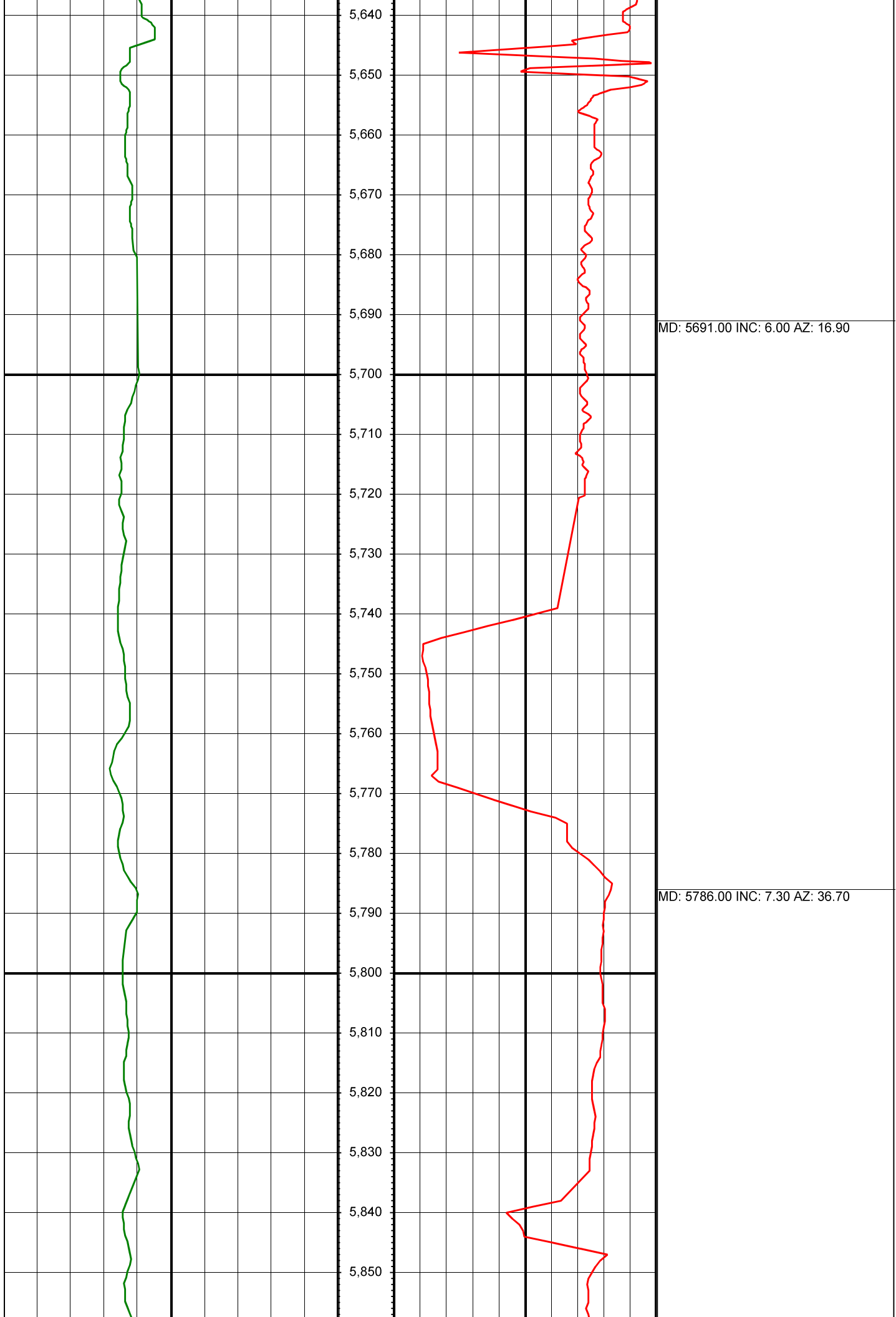
0.00 Gamma Ray (API) 150.00 MD 0.00 ROP (FT/HR) 600.00 Surveys (MD/INC/AZ)

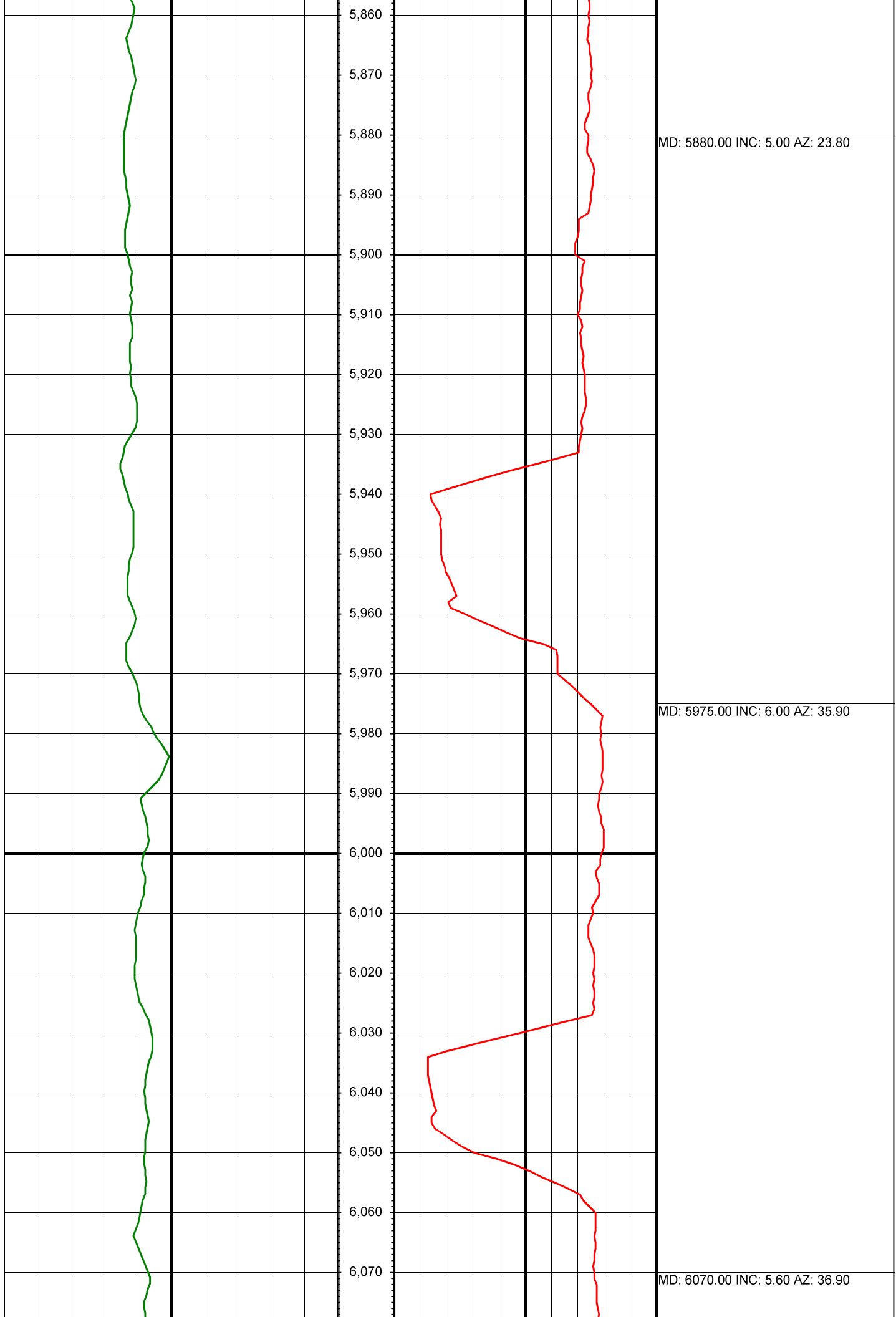
150.00 2 300.00 FT

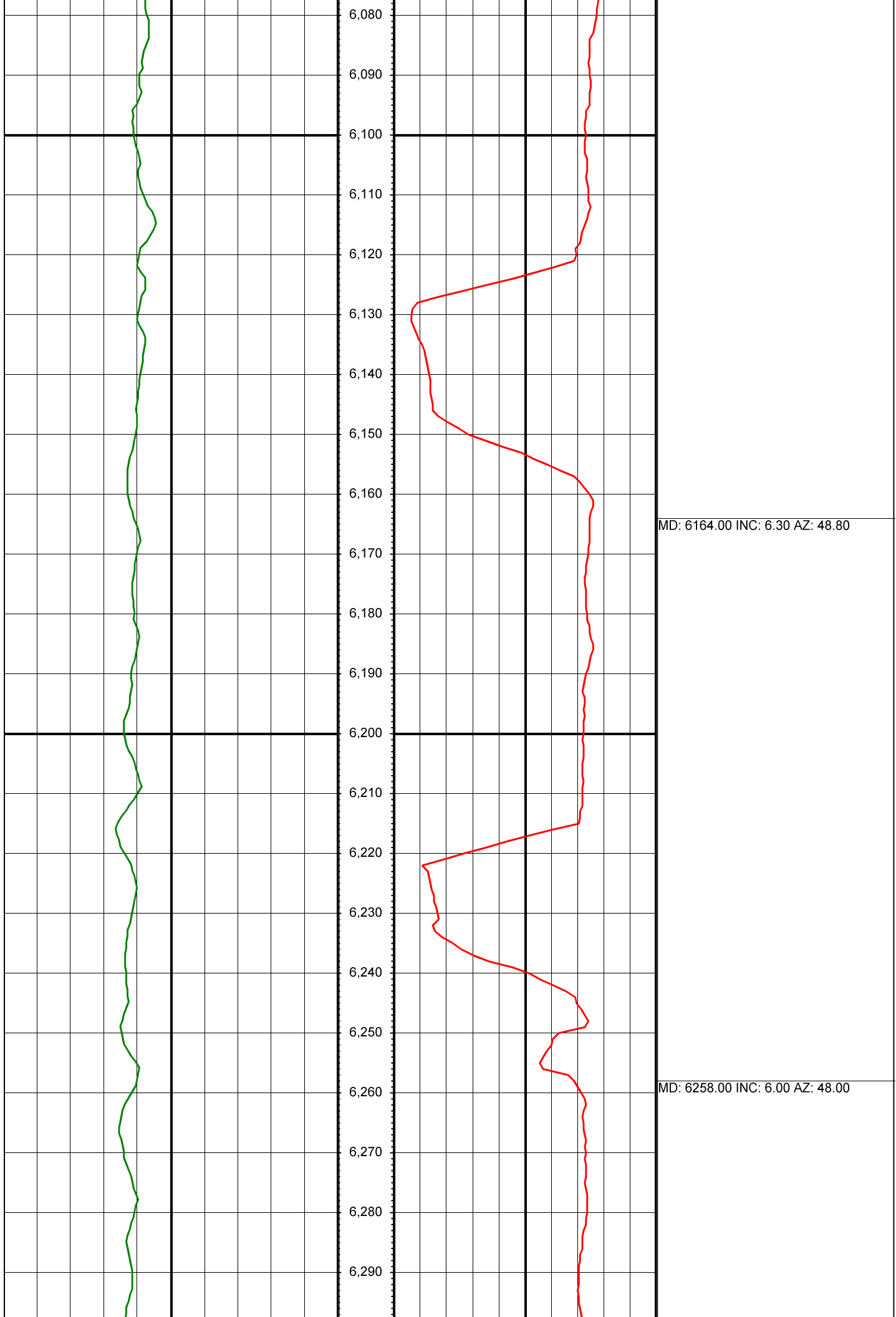


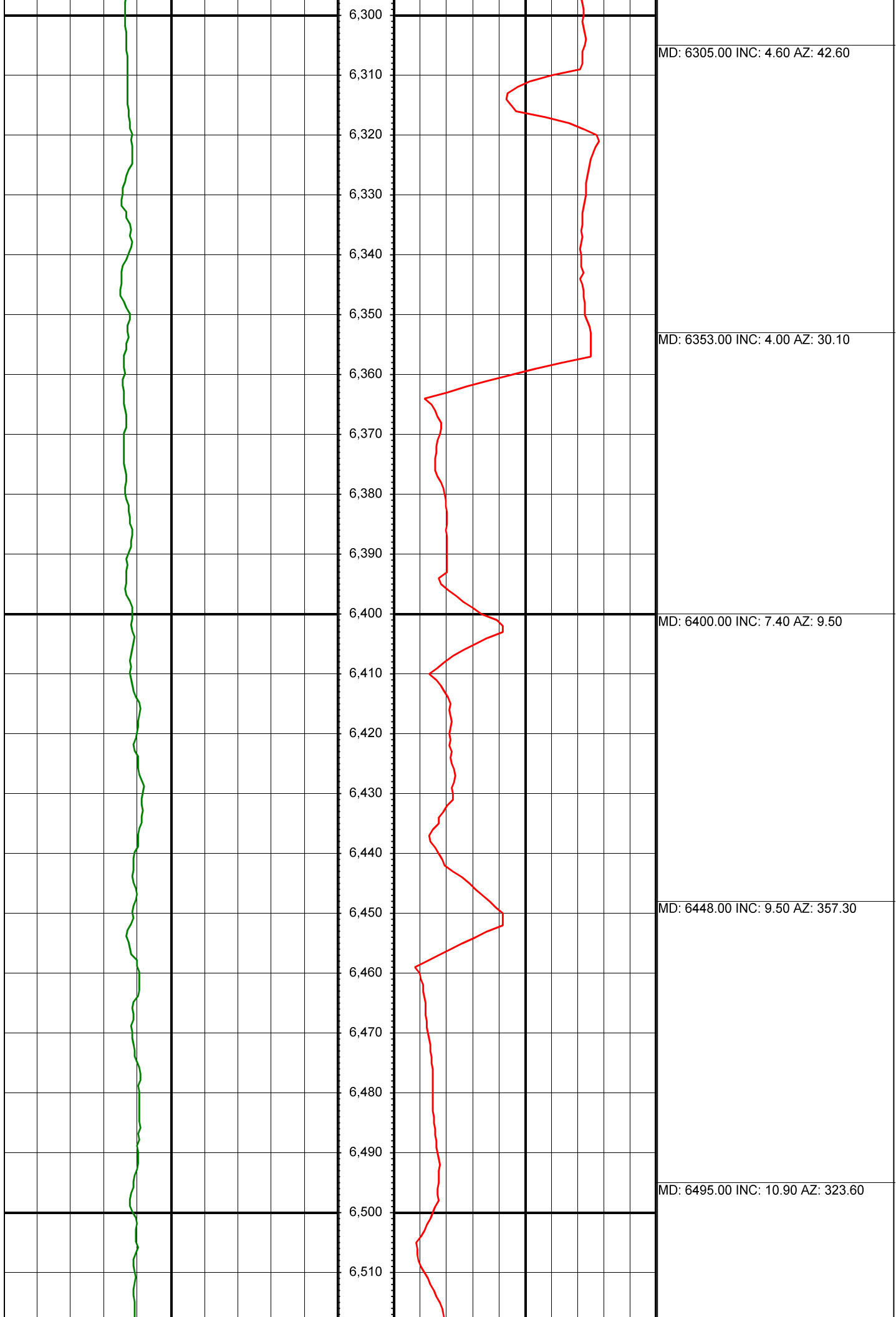


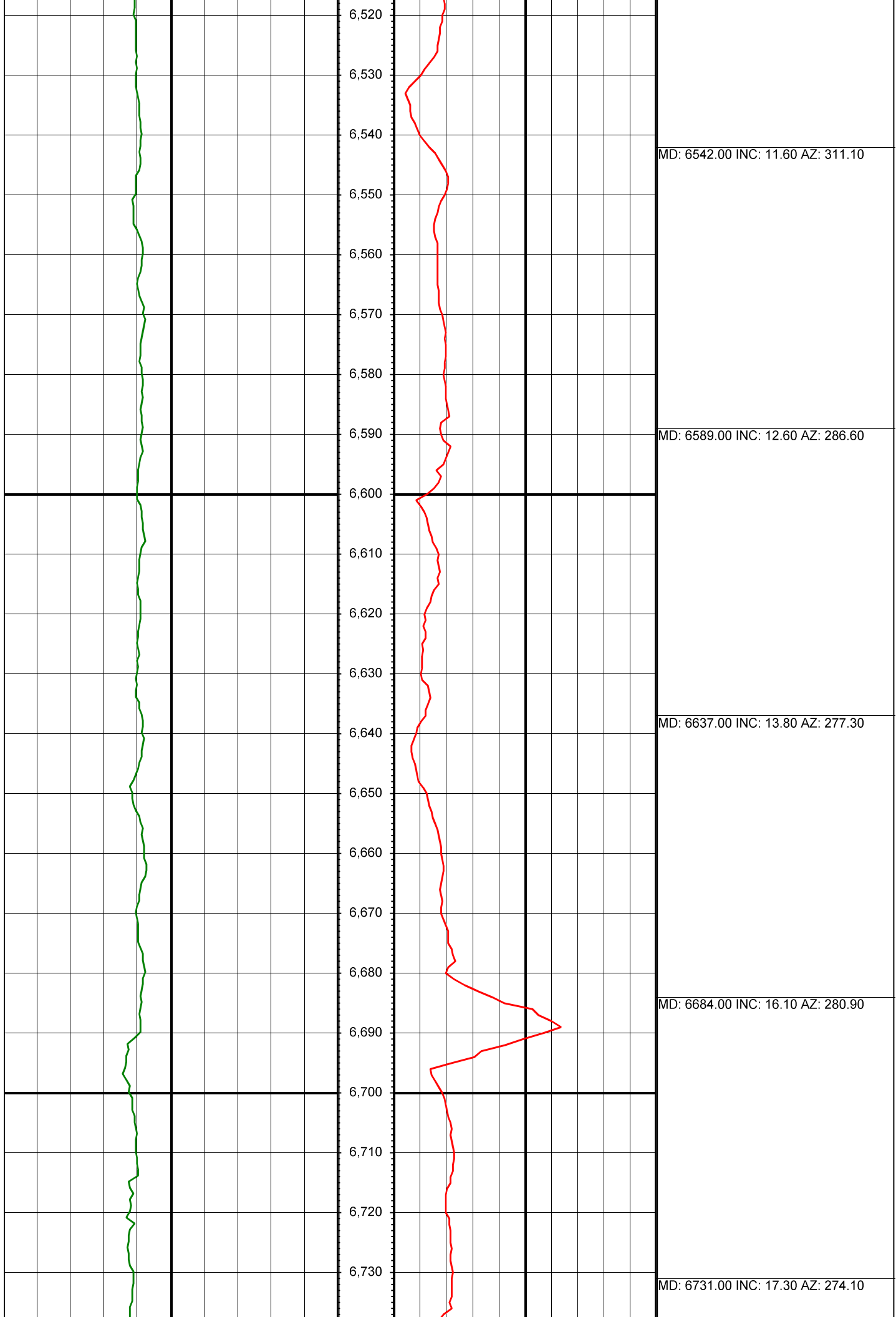


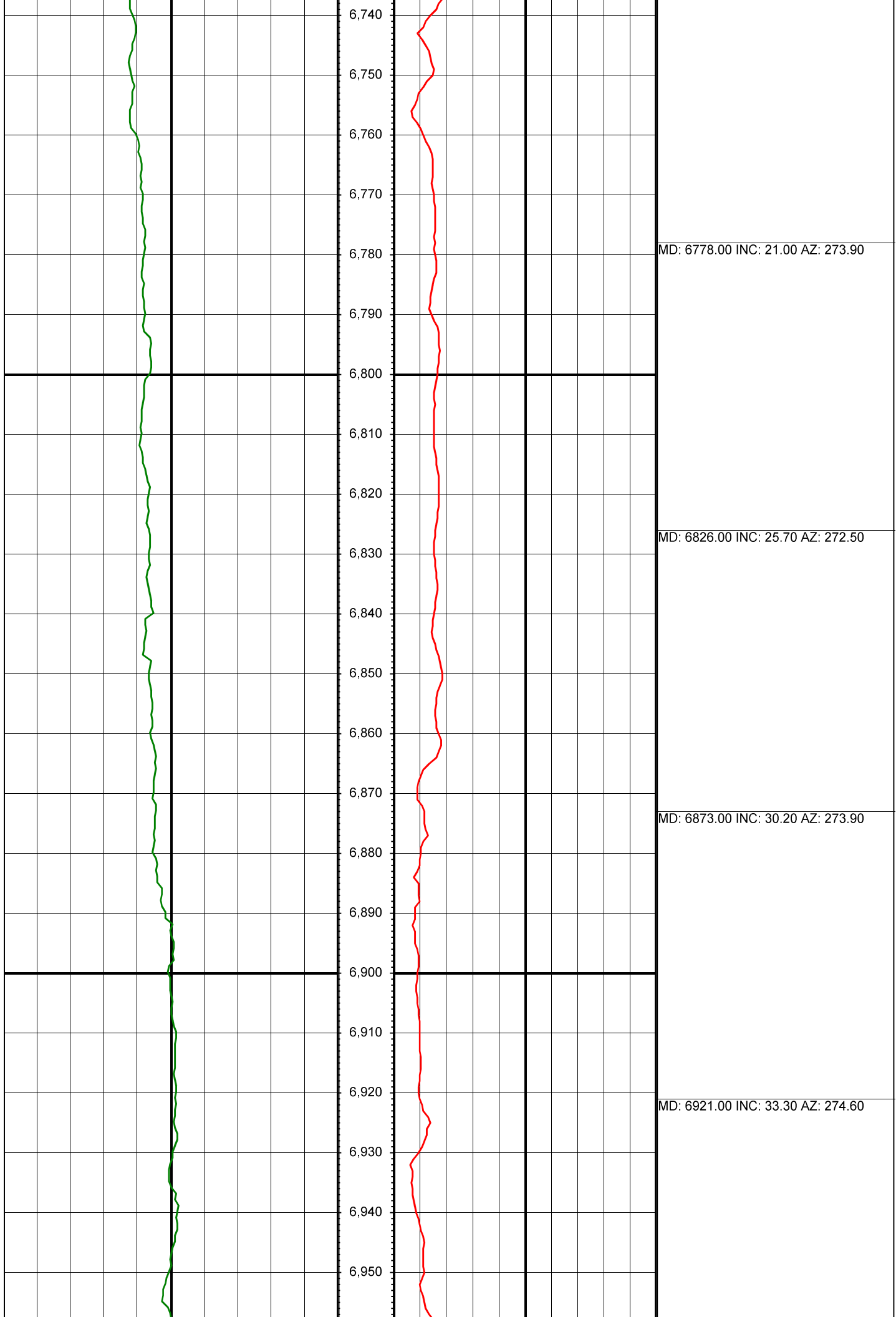


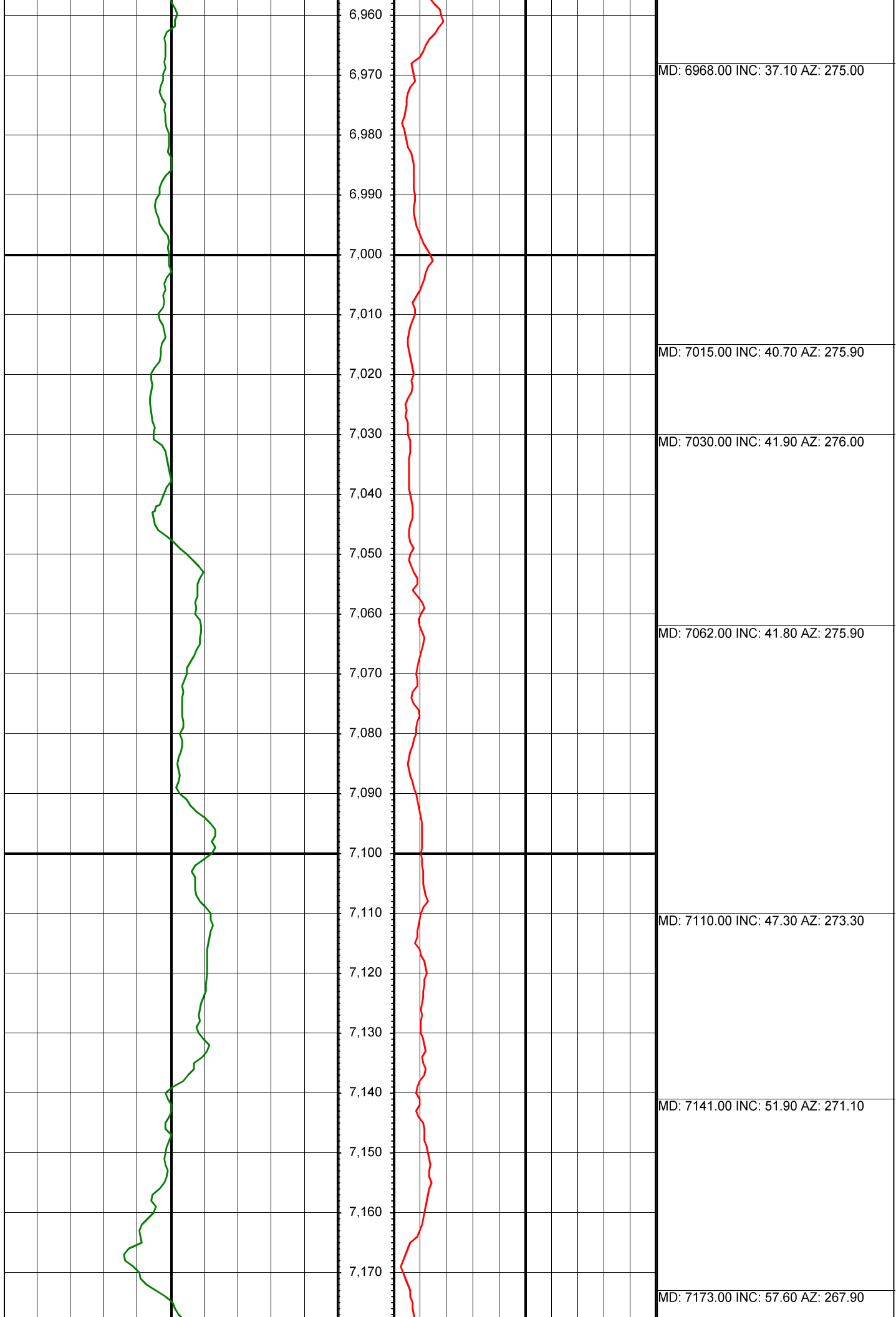


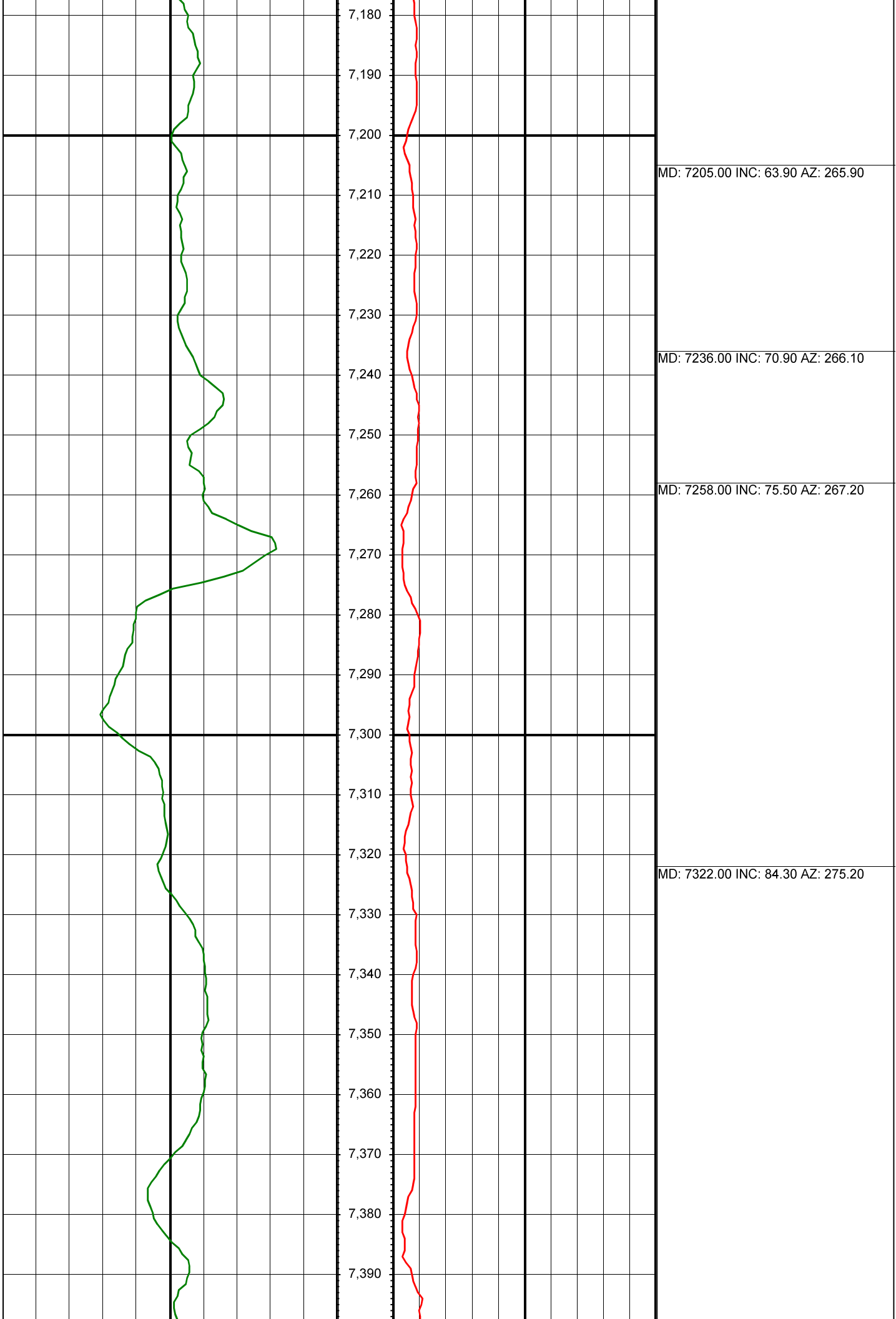


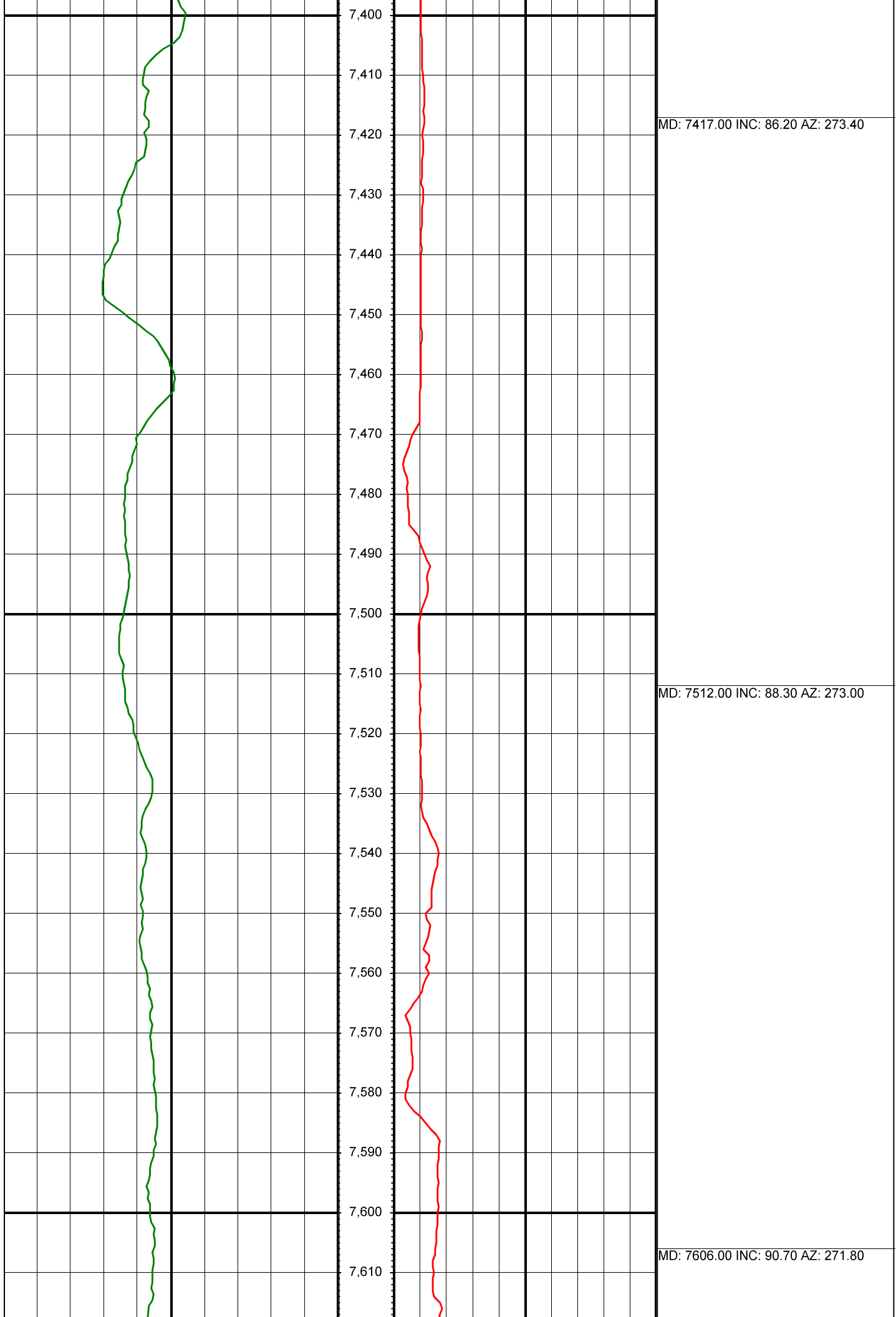


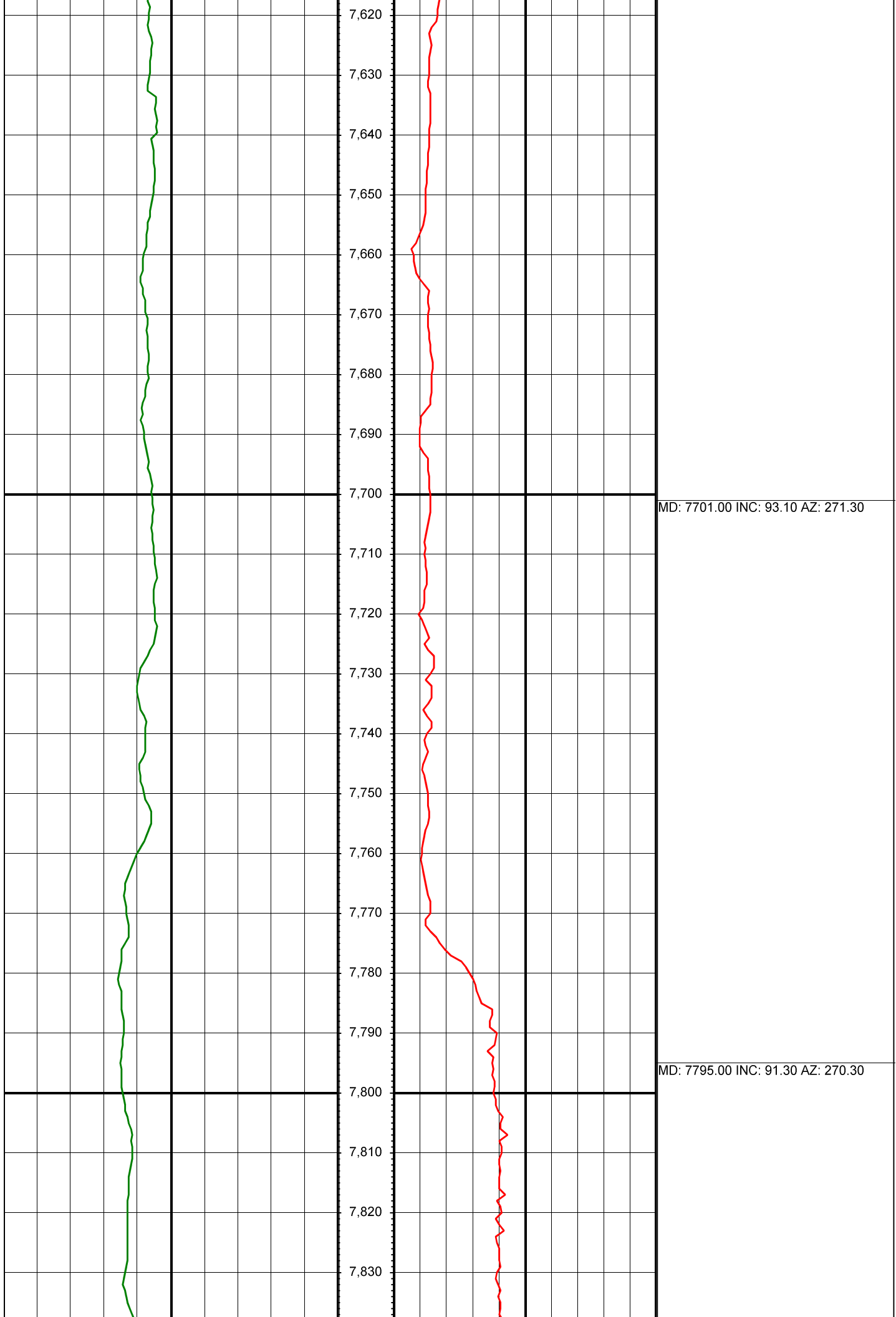


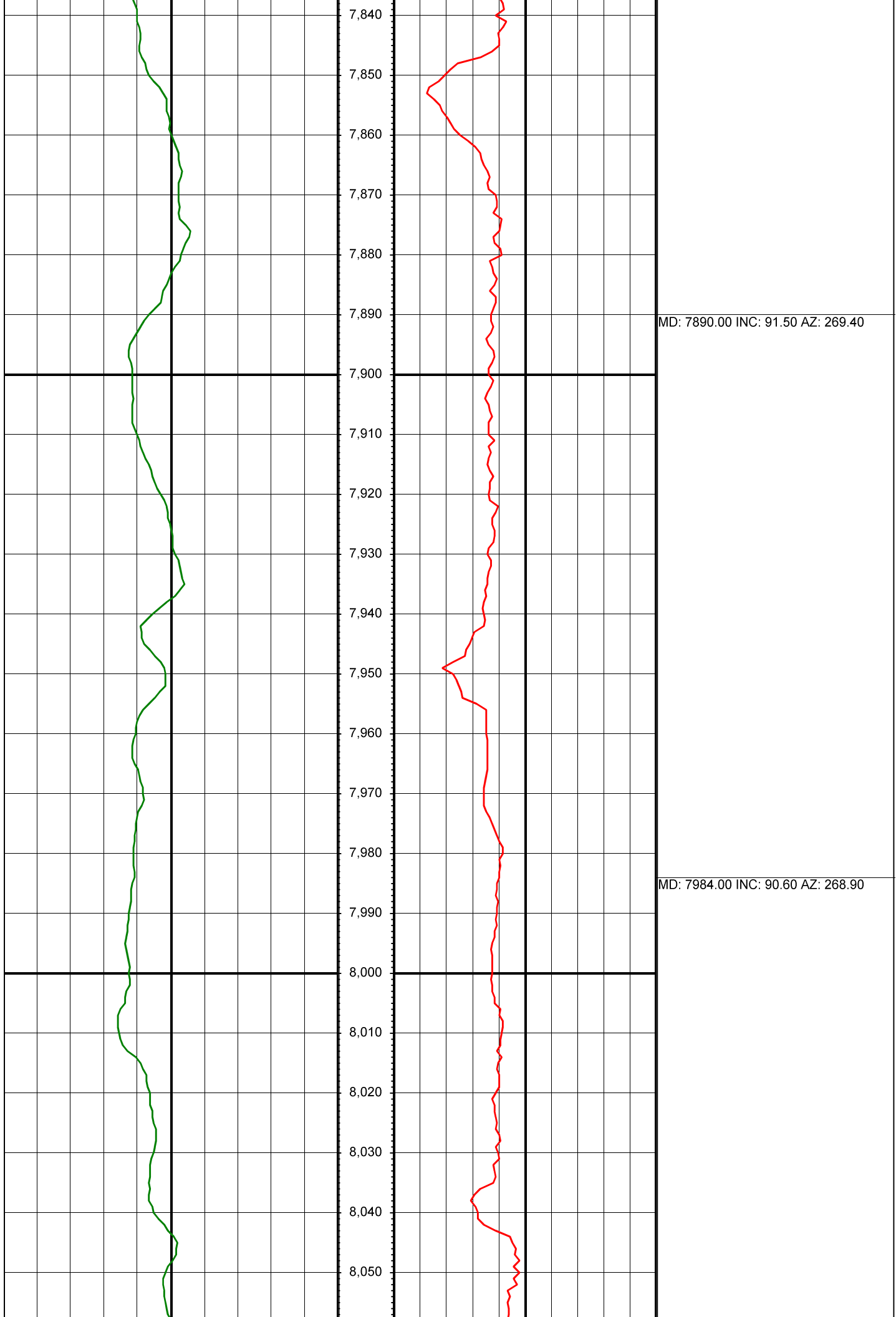


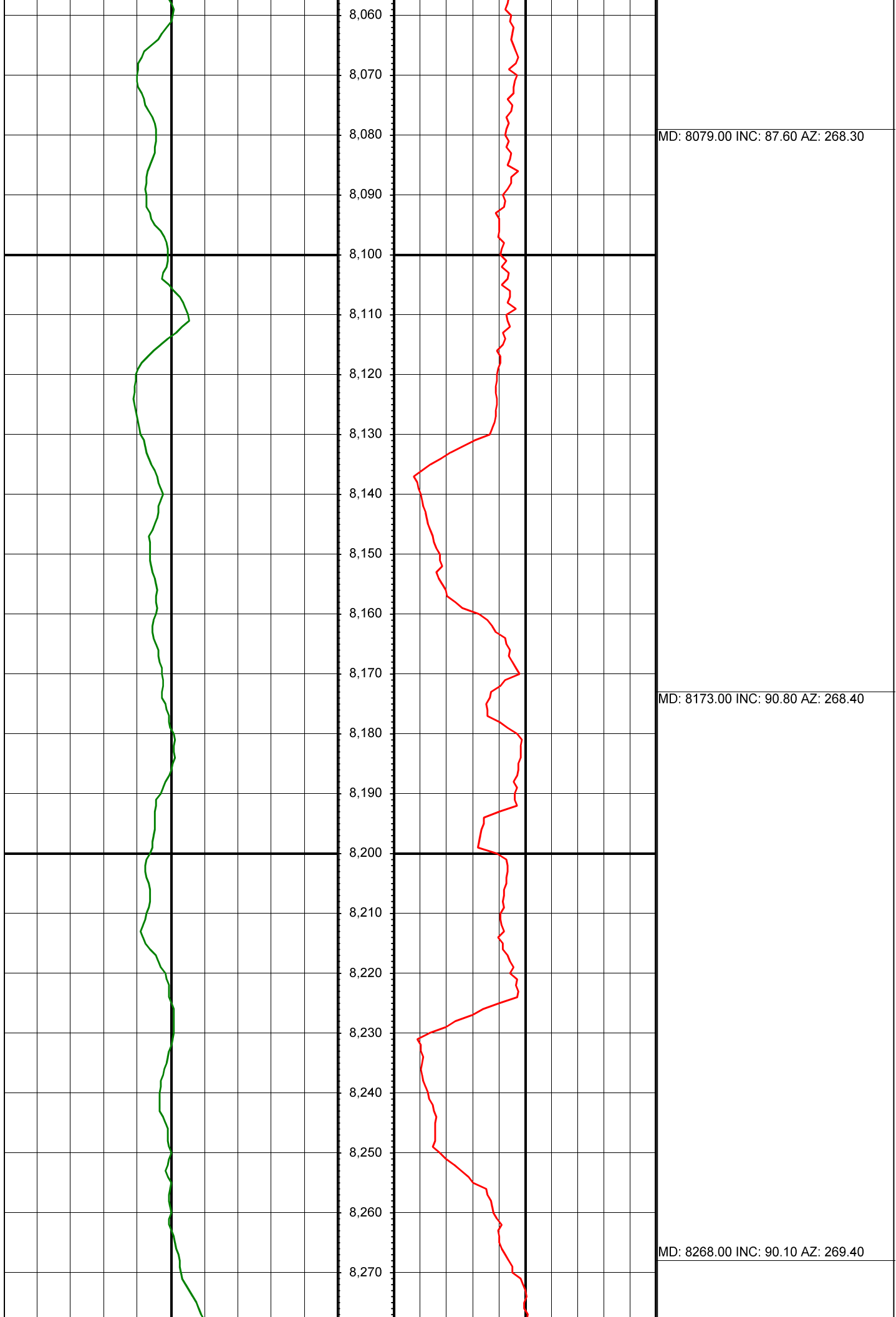


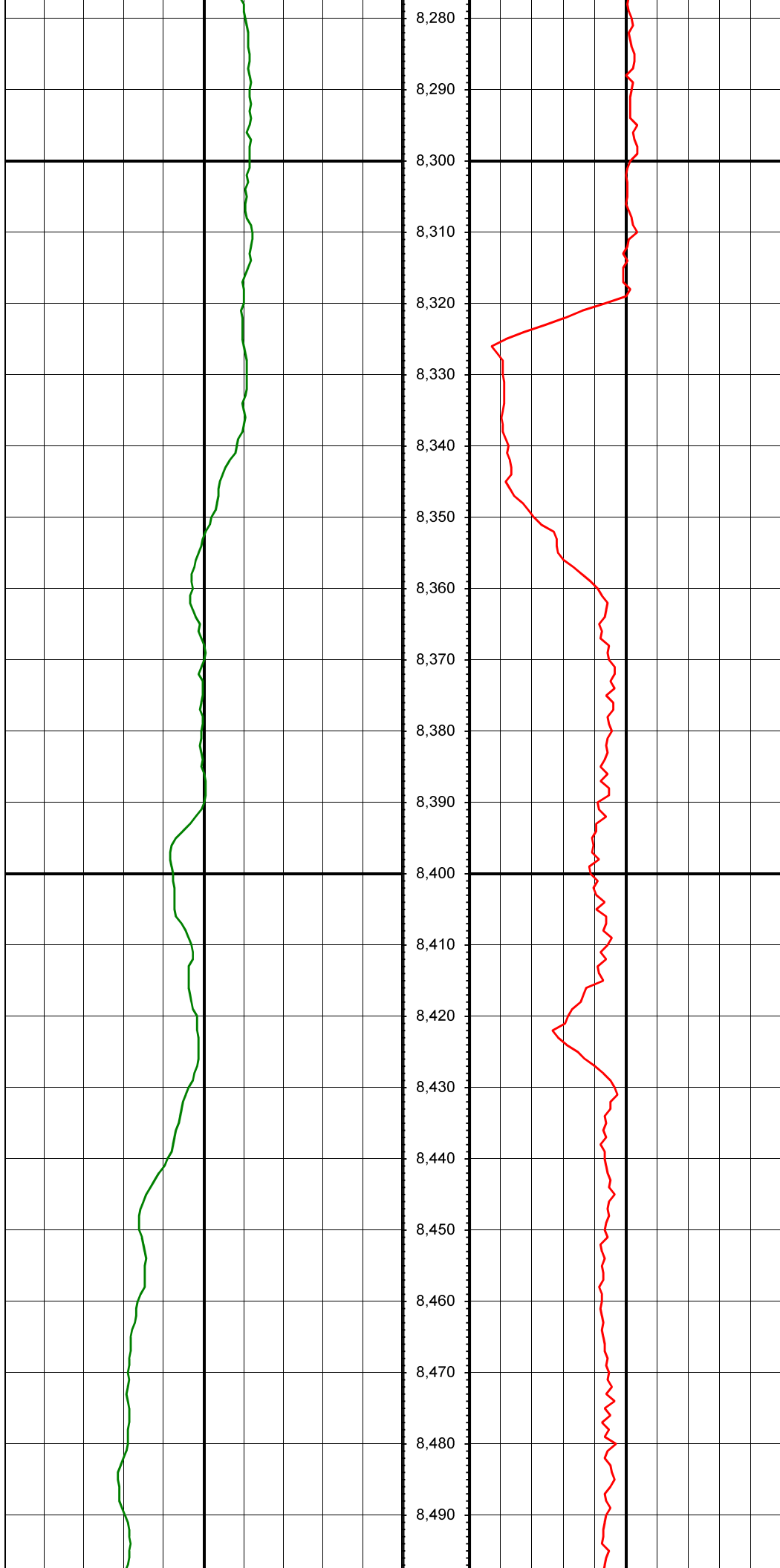






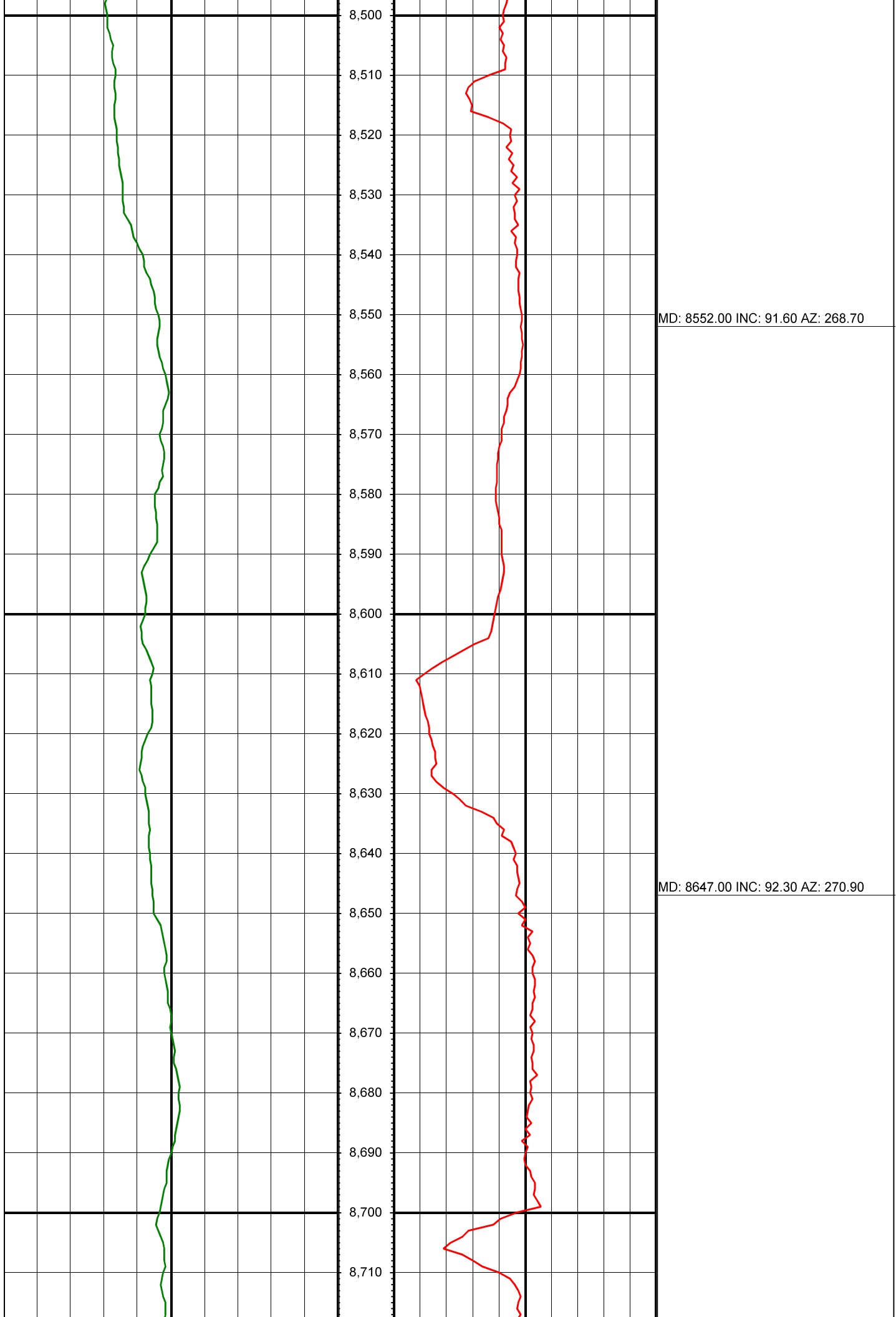


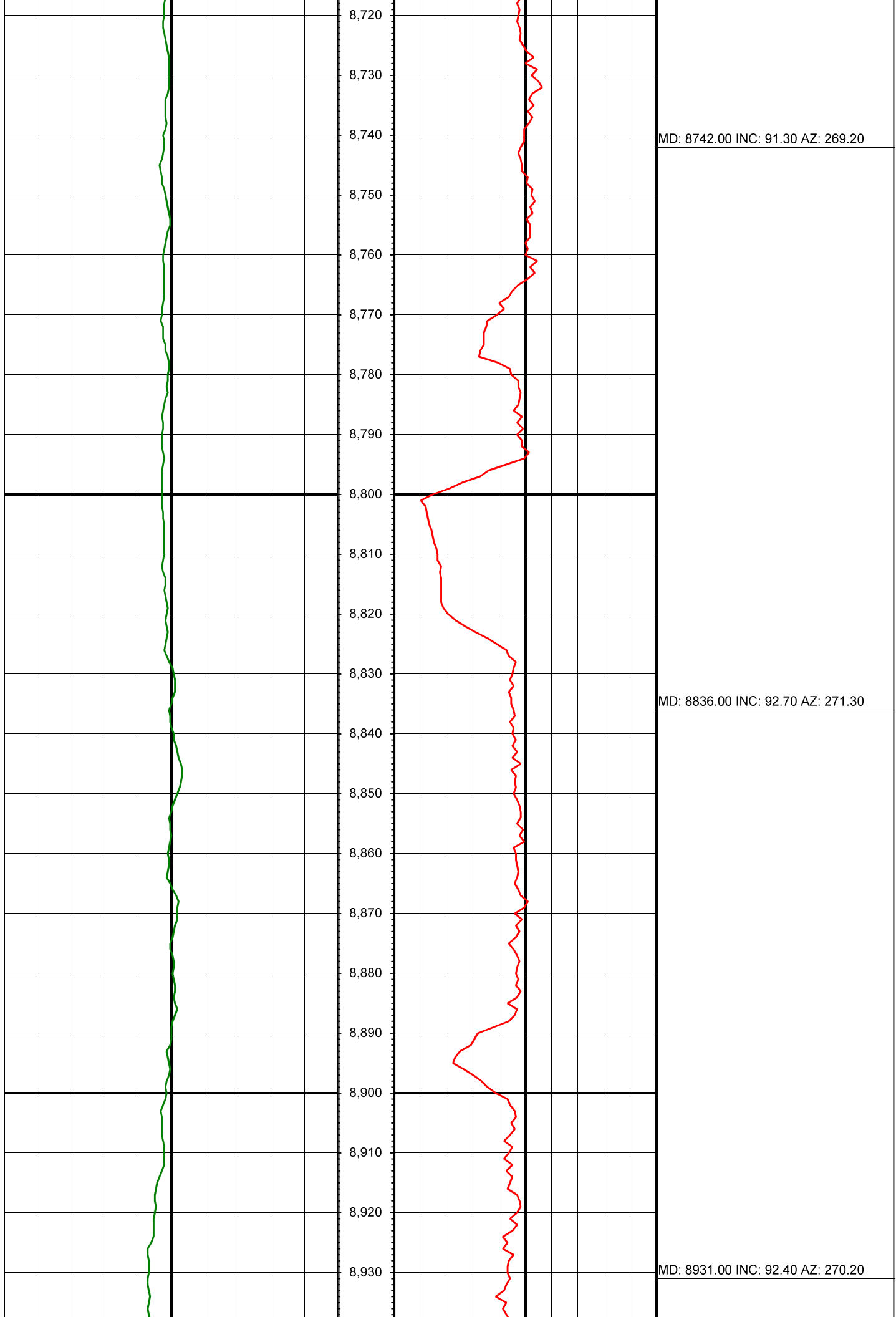


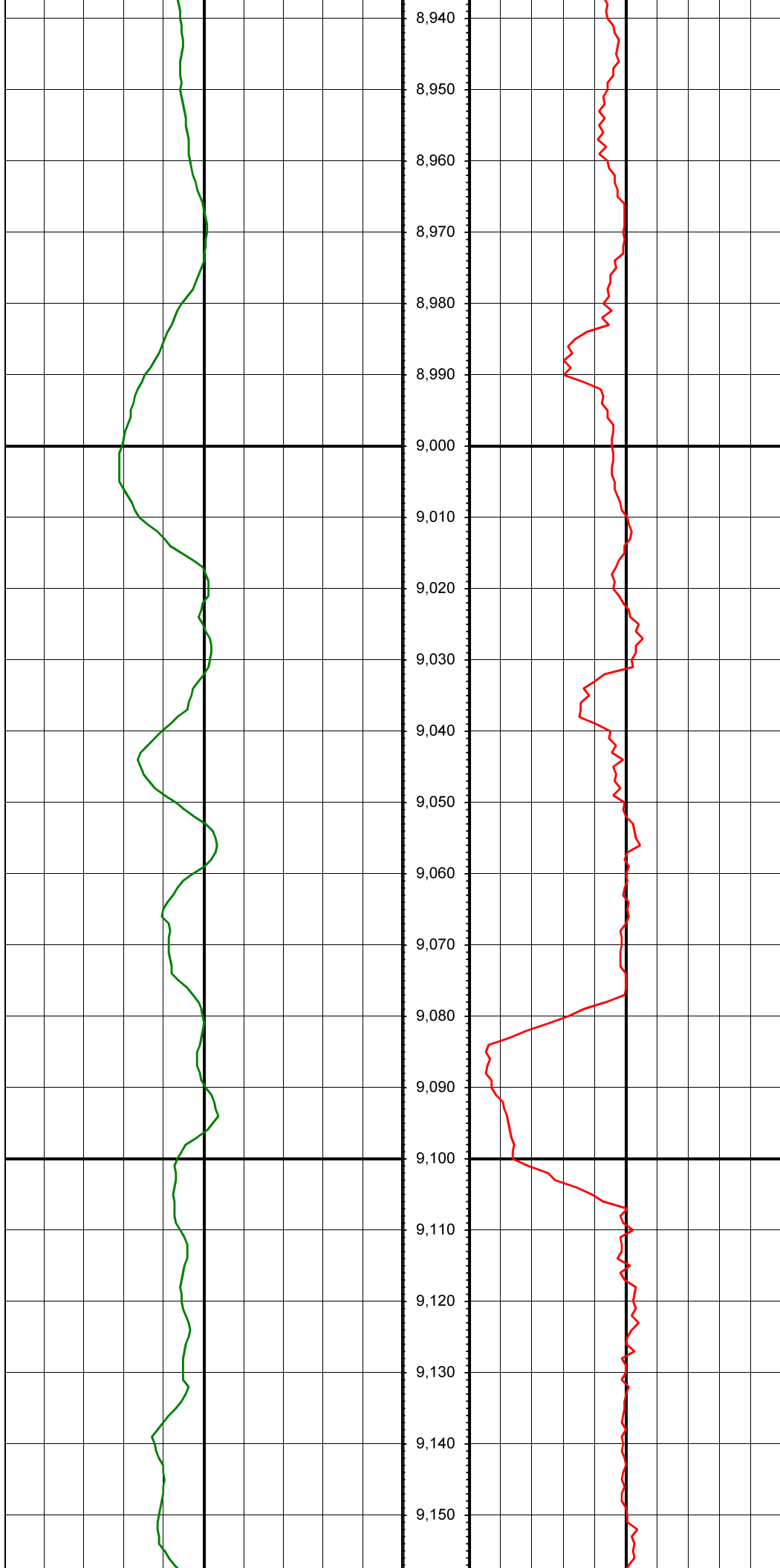


MD: 8363.00 INC: 91.90 AZ: 271.30

MD: 8457.00 INC: 92.30 AZ: 270.30

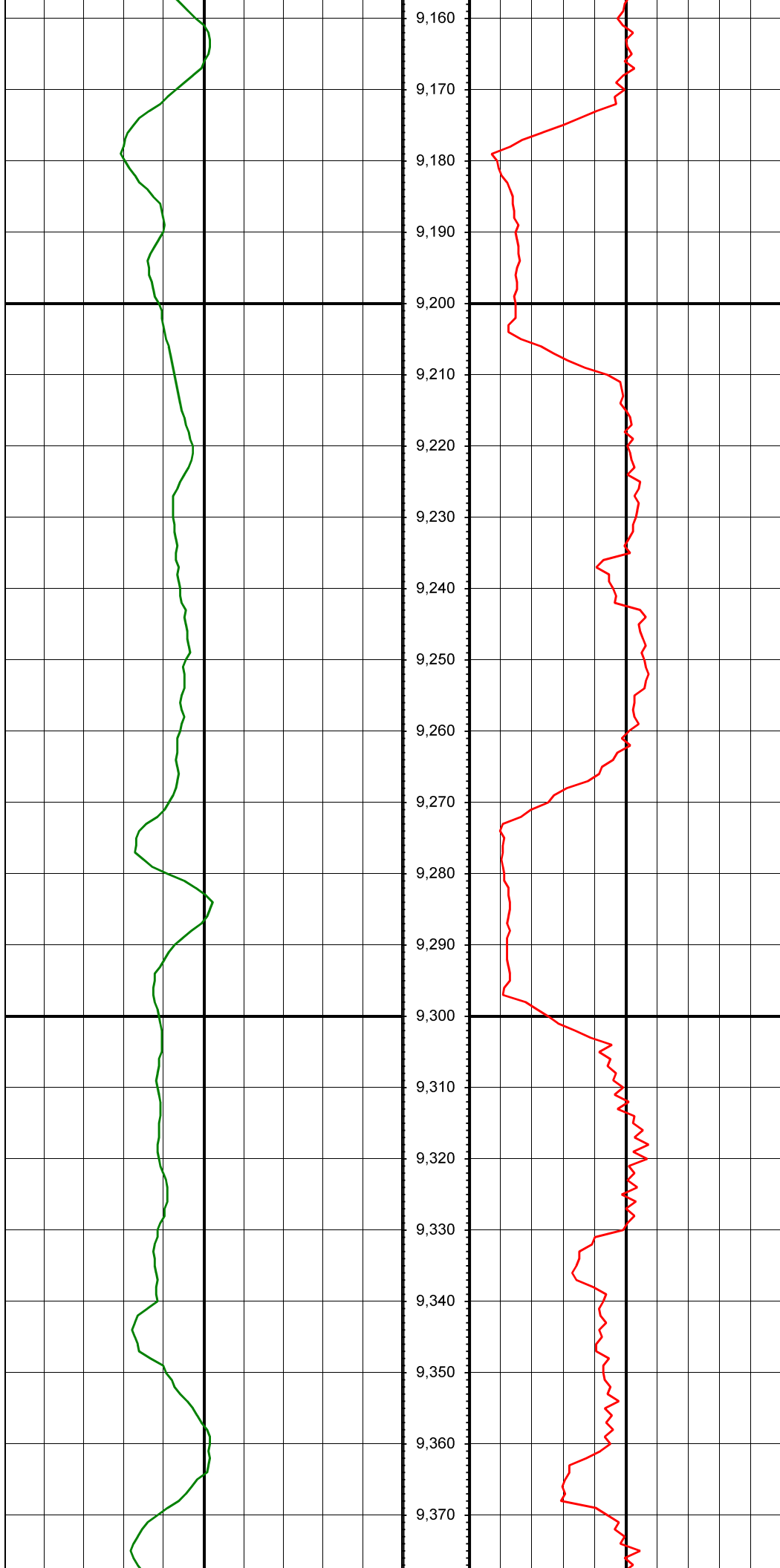






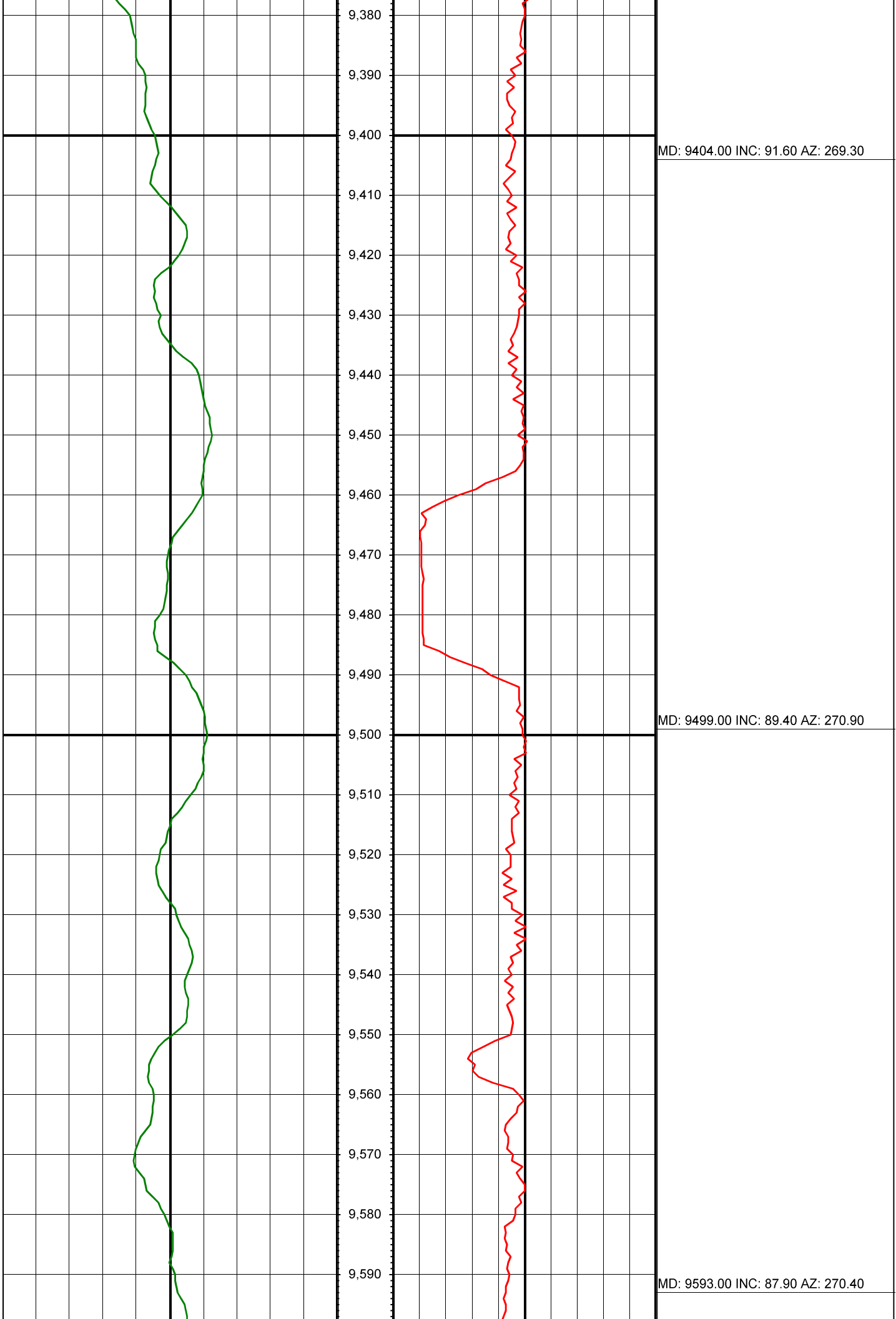
MD: 9026.00 INC: 93.70 AZ: 270.00

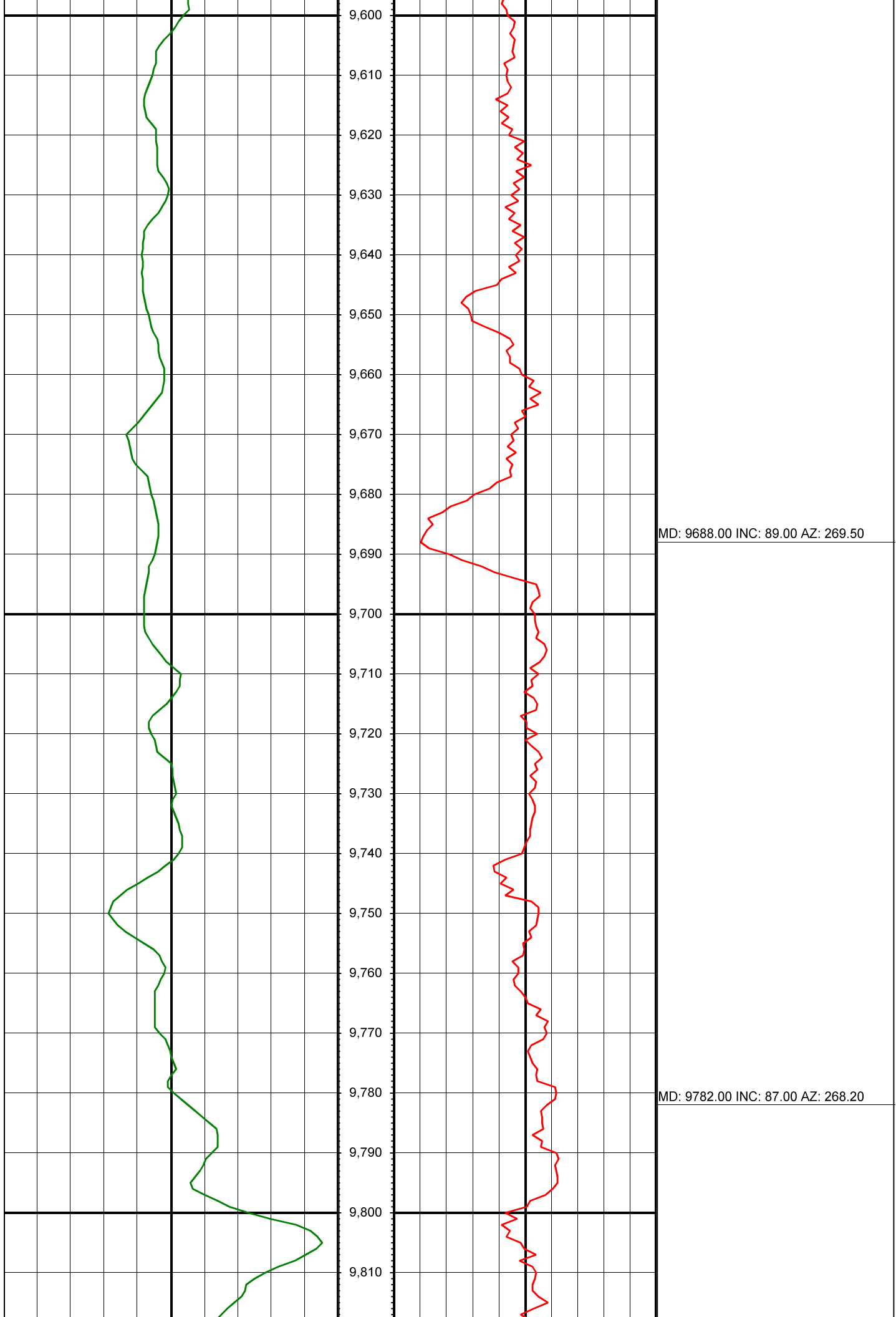
MD: 9120.00 INC: 96.00 AZ: 272.50

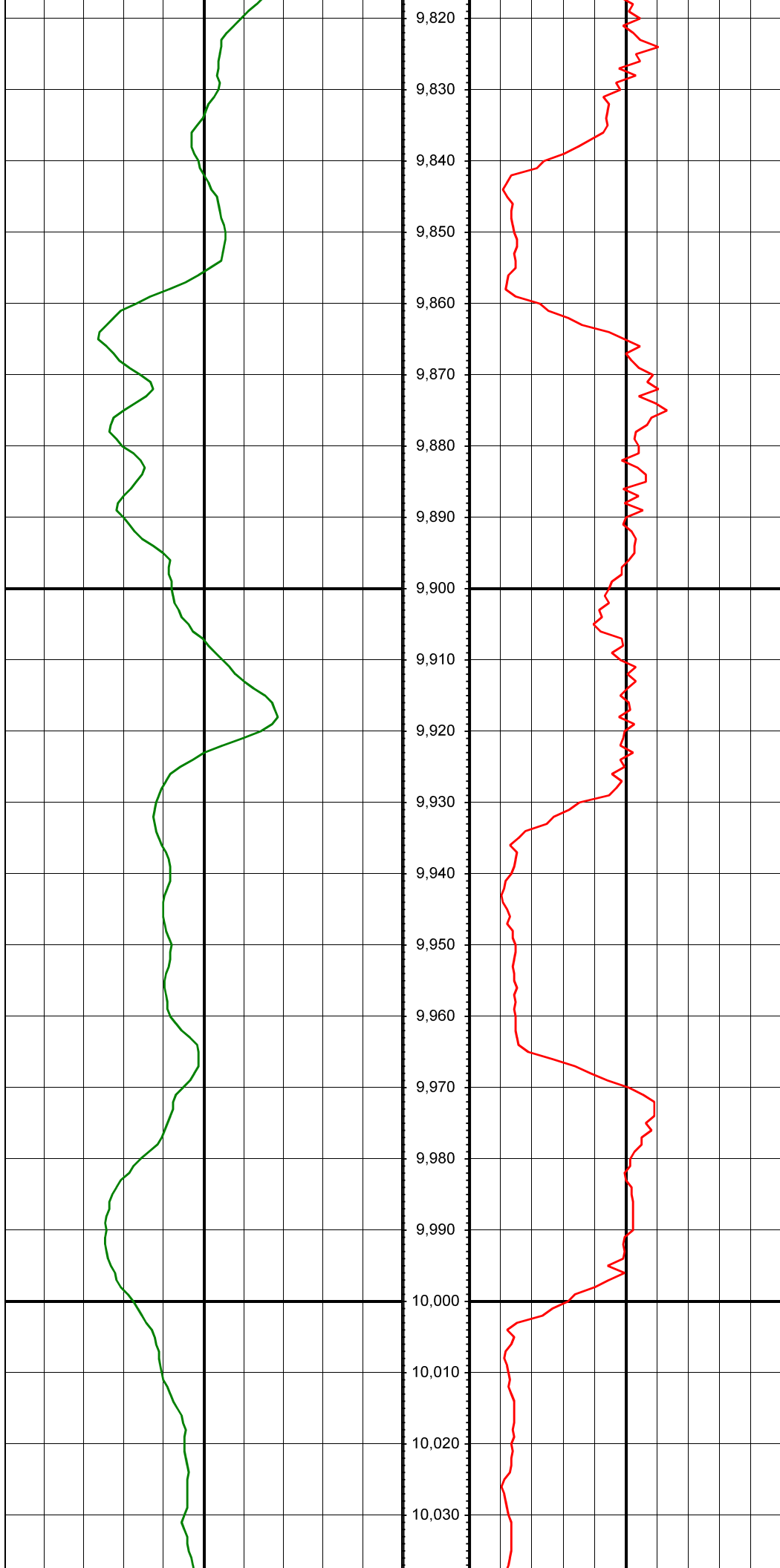


MD: 9215.00 INC: 94.00 AZ: 272.40

MD: 9309.00 INC: 89.20 AZ: 271.50

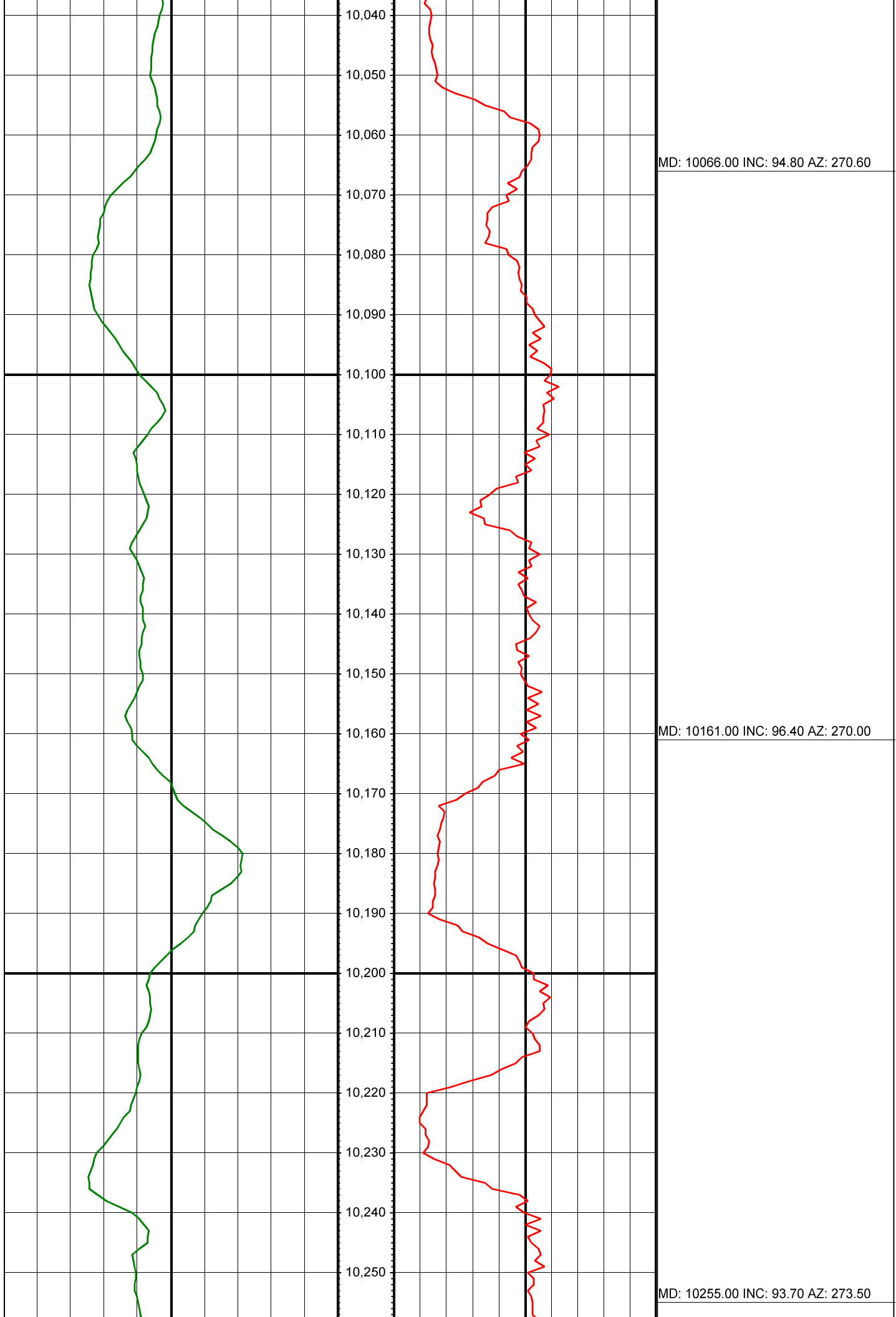


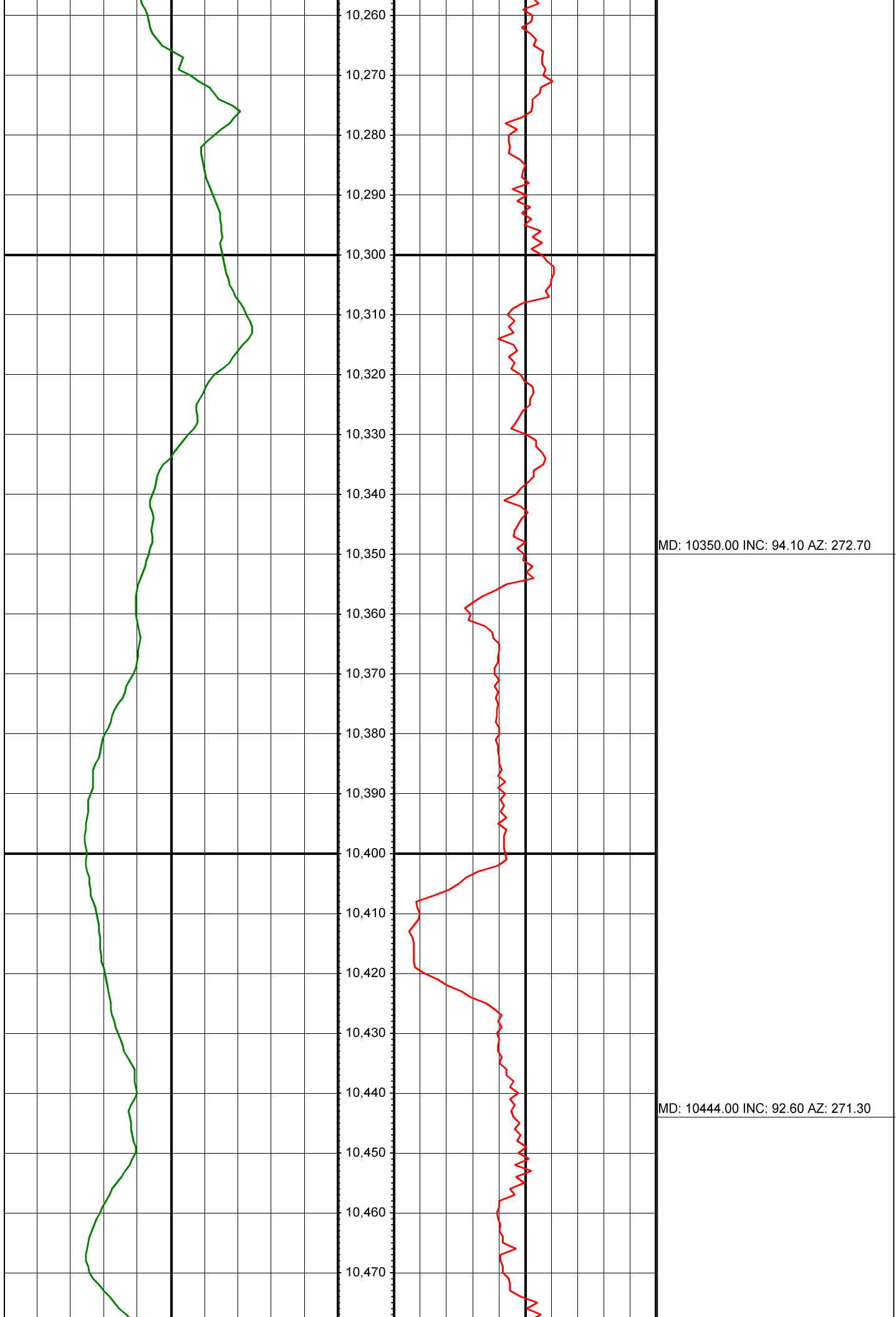


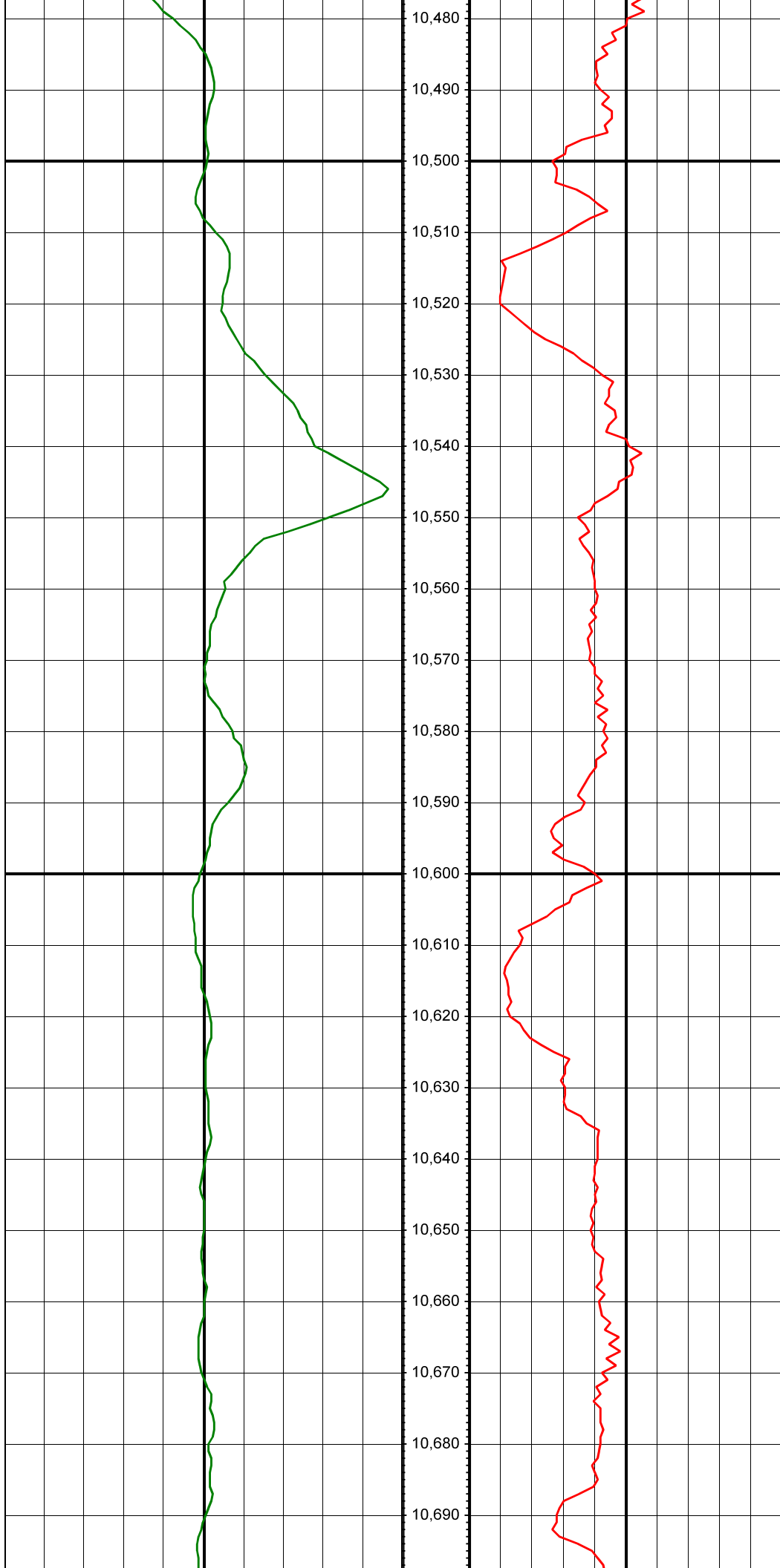


MD: 9877.00 INC: 87.80 AZ: 268.40

MD: 9972.00 INC: 89.80 AZ: 268.50







MD: 10539.00 INC: 92.50 AZ: 271.40

MD: 10634.00 INC: 90.80 AZ: 270.50

