



Cathedral Energy Services  
1949 North Pyrite Road  
Casper, Wyoming 82604

**145168**

5":100' - MD

6/5/2014 2:01:22 PM

**CATHEDRAL**

**Oper. Company:** EnCana Oil & Gas (USA) Inc.

**Country:** U.S.A.

**State / Province:** Colorado

**County / Parish:** Weld

**Started:** 06/01/2014 06:00 AM

**API/UWI:** 05-123-384500-00

**Field:** Wattenburg (Codell)

**Well:** Bohrer 2D-19H-E368

**Rig:** Patterson UTI Drilling 326

**Ended:** 06/05/2014 07:30 AM

Gamma Ray  
Section Plane: 90.00  
Magnetic North :8.60  
Gamma Attenuation Factor: 2.82  
Gamma Averaging: 7

**Personnel**

**Day Hand:** B. Stahlecker

**Night Hand:** M. Andrew

**Comp. Emp:** Norm McCreary

Maximum Temperature: 210 °f

**Location**

**Latitude:** 40.214400

**Longitude:** -105.052450

**Elev. GL:** 5059

**Elev. DF:**

**Elev. KB:** 5091

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

**Hole Data**

Size	From	To
12-1/4	0	893
8-3/4	893	7526
6-1/8	7526	11492

**Casing Data**

Size	From	To
9-5/8	0	893
7	0	7526
4-1/2	0	11492

**Bit Sizes**

Size	From	To
12-1/4	0	893
8-3/4	893	7526
6-1/8	7526	11492

**Mud Data**

Type	Weight	Density	Viscosity	Rm	Rmf	Rmc	From	To
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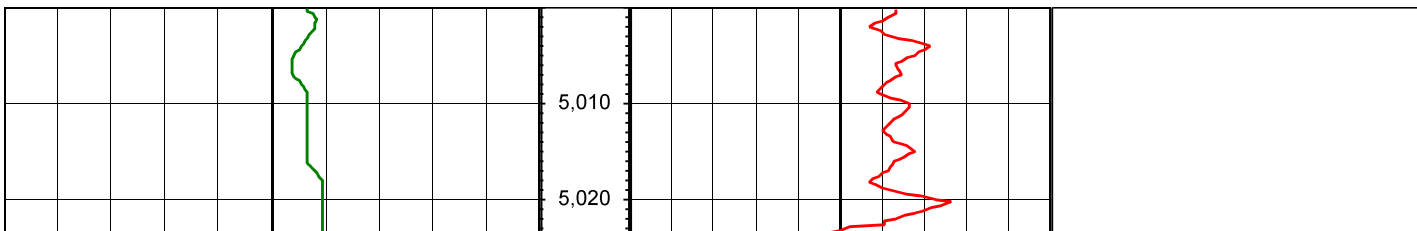
**Tool Run Data**

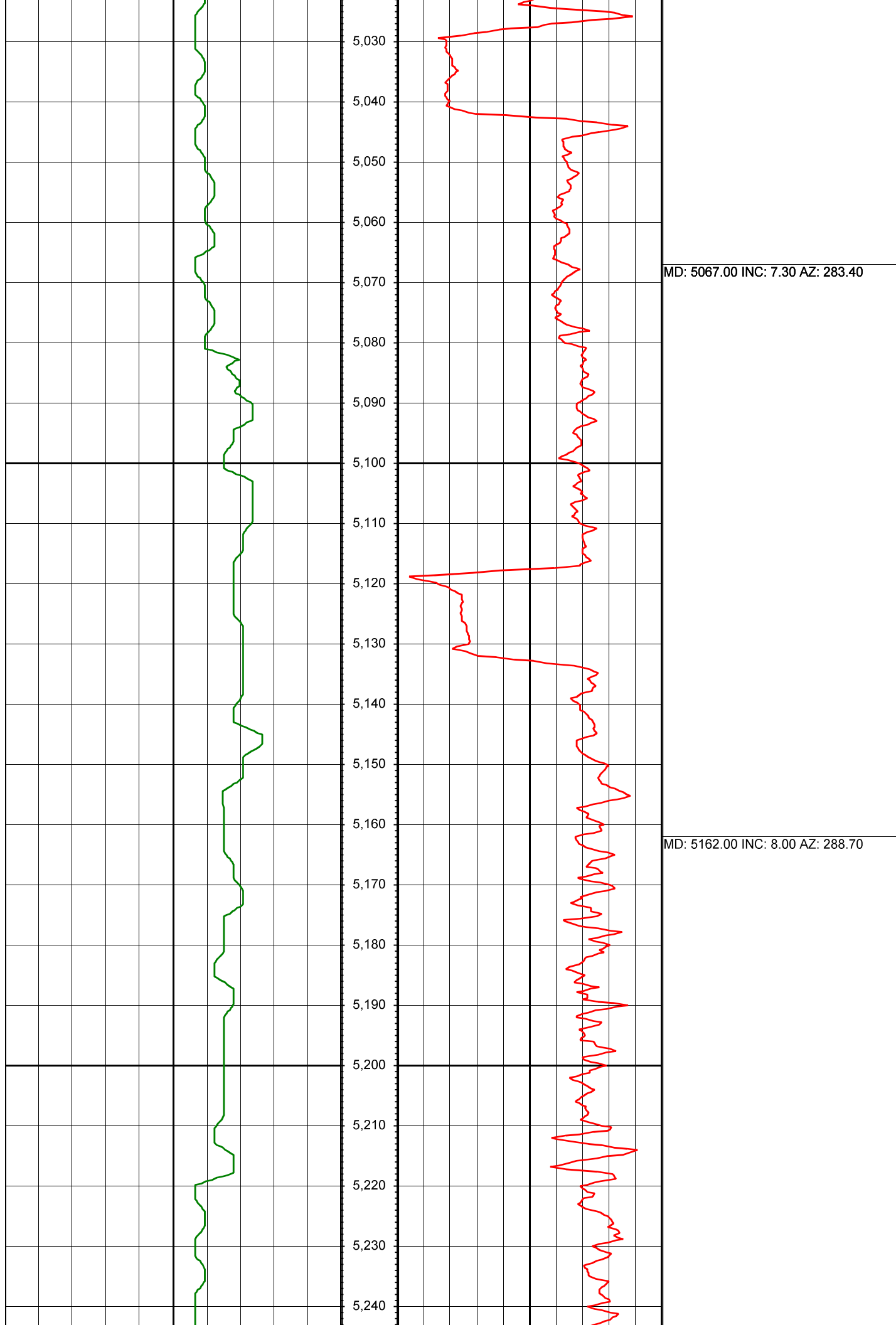
Serial Number	Gamma Offset	Resist. Offset	Start Time	Start Depth	End Time	End Depth
1167	36.08	0	5/31/2014 1:00:49 PM	893	6/2/2014 2:00:49 PM	7526
1354	39.17	0	6/3/2014 2:00:42 PM	7526	6/5/2014 3:45:42 AM	11492

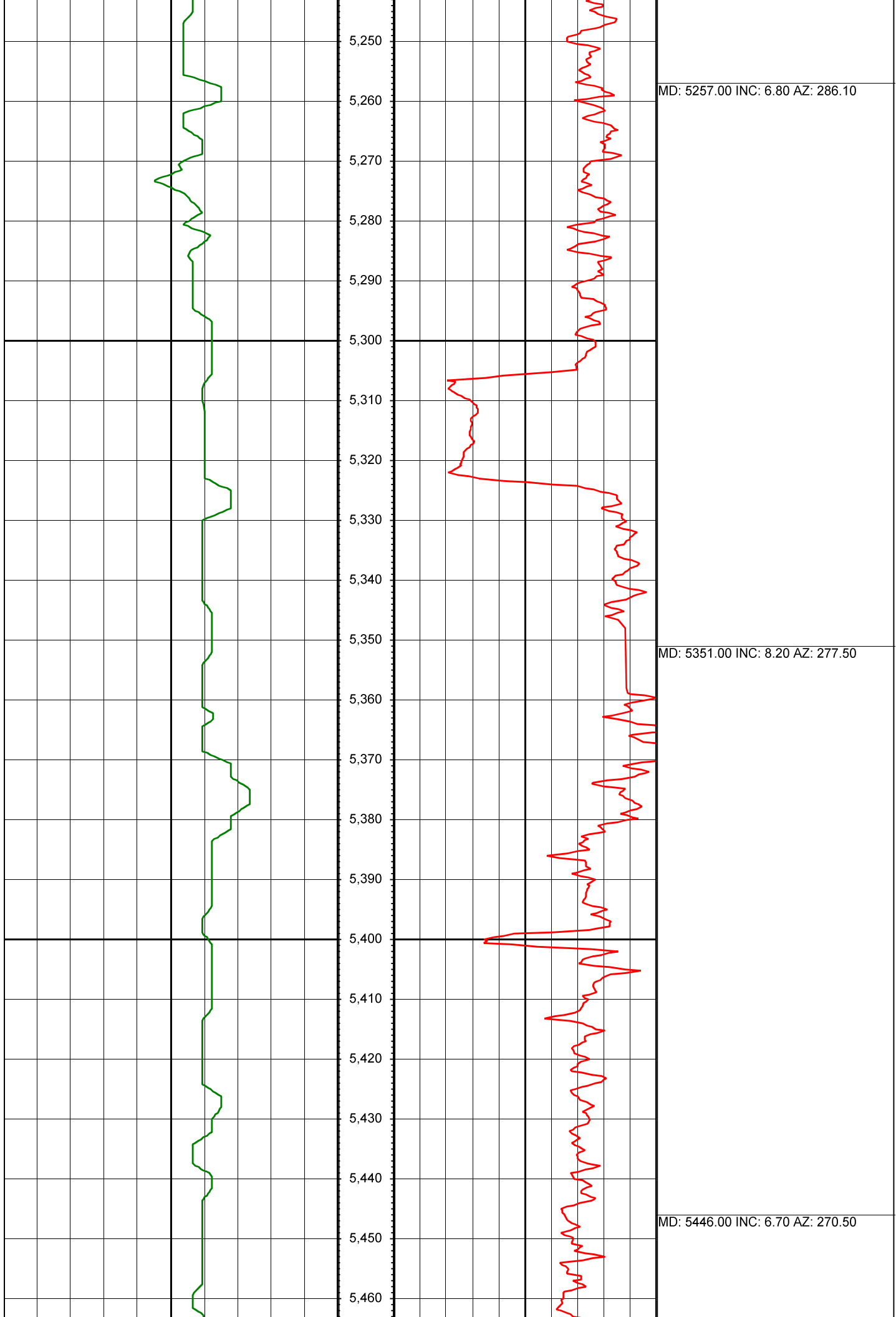
*All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost damages or expenses incurred or sustained by anyone resulting from an interpretation made by any of our officers, agents, or employees.*

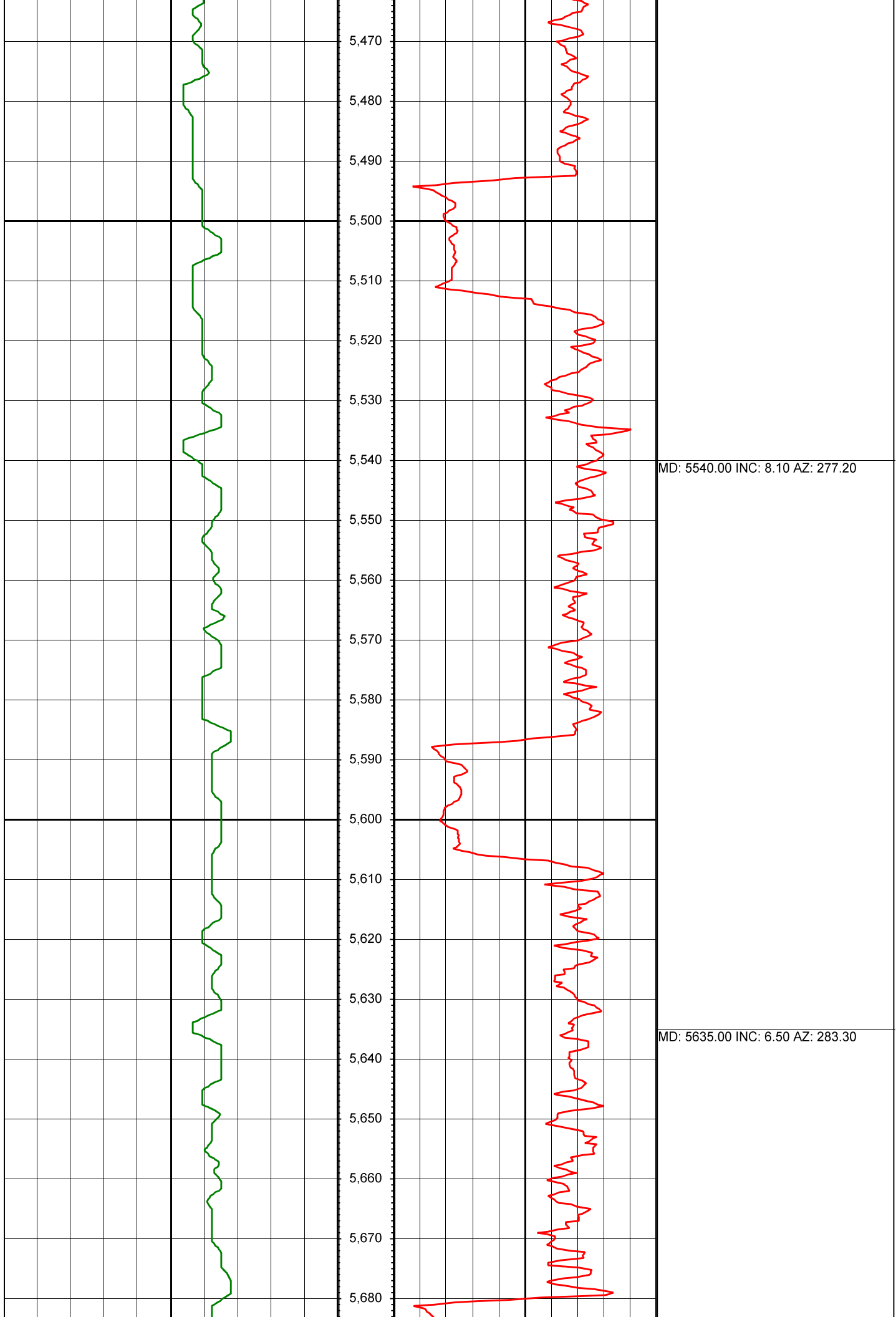
0.00      Gamma Ray (API)      150.00      MD      0.00      ROP (FT/HR)      600.00      Surveys (MD/INC/AZ)

150.00      2      300.00      FT

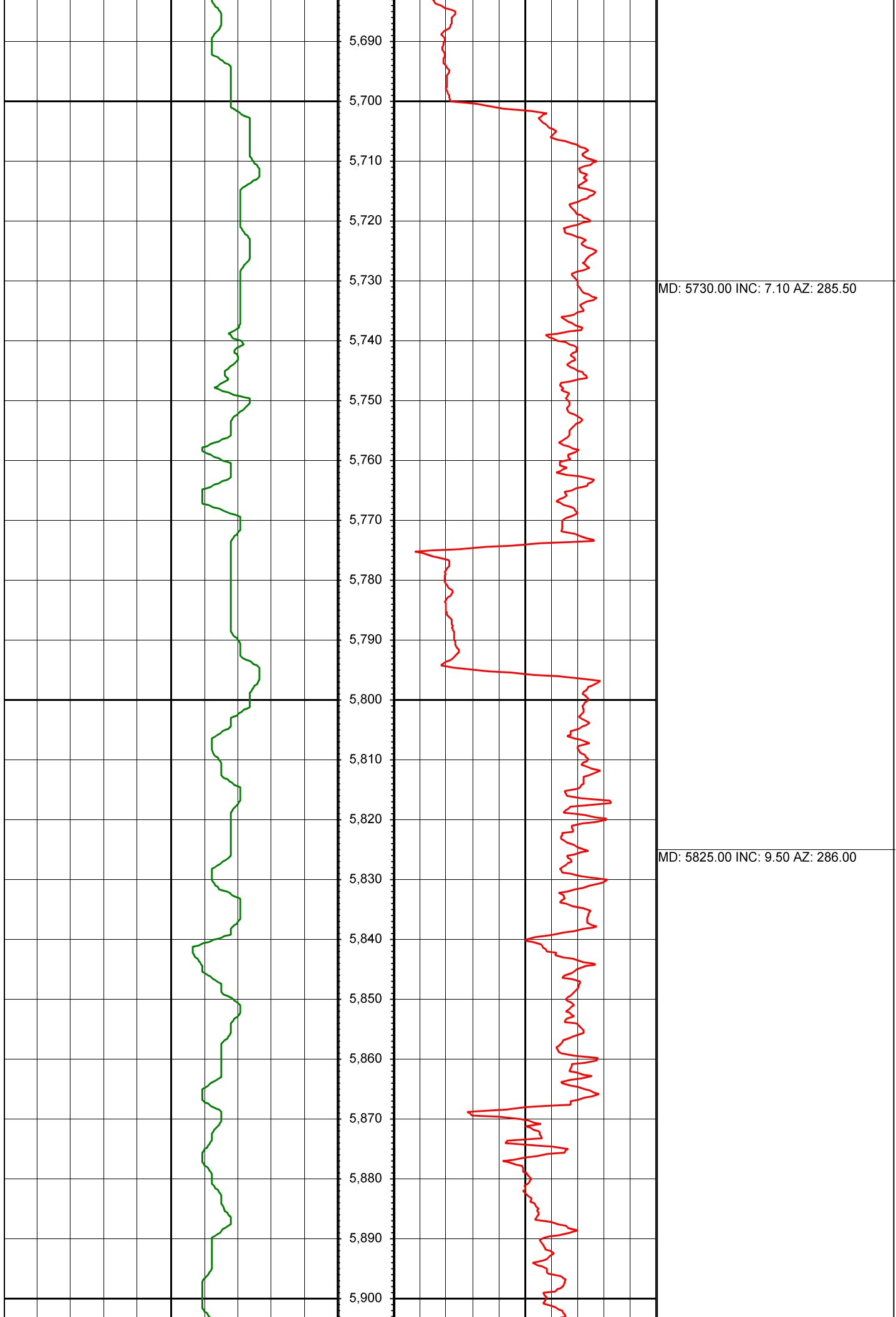


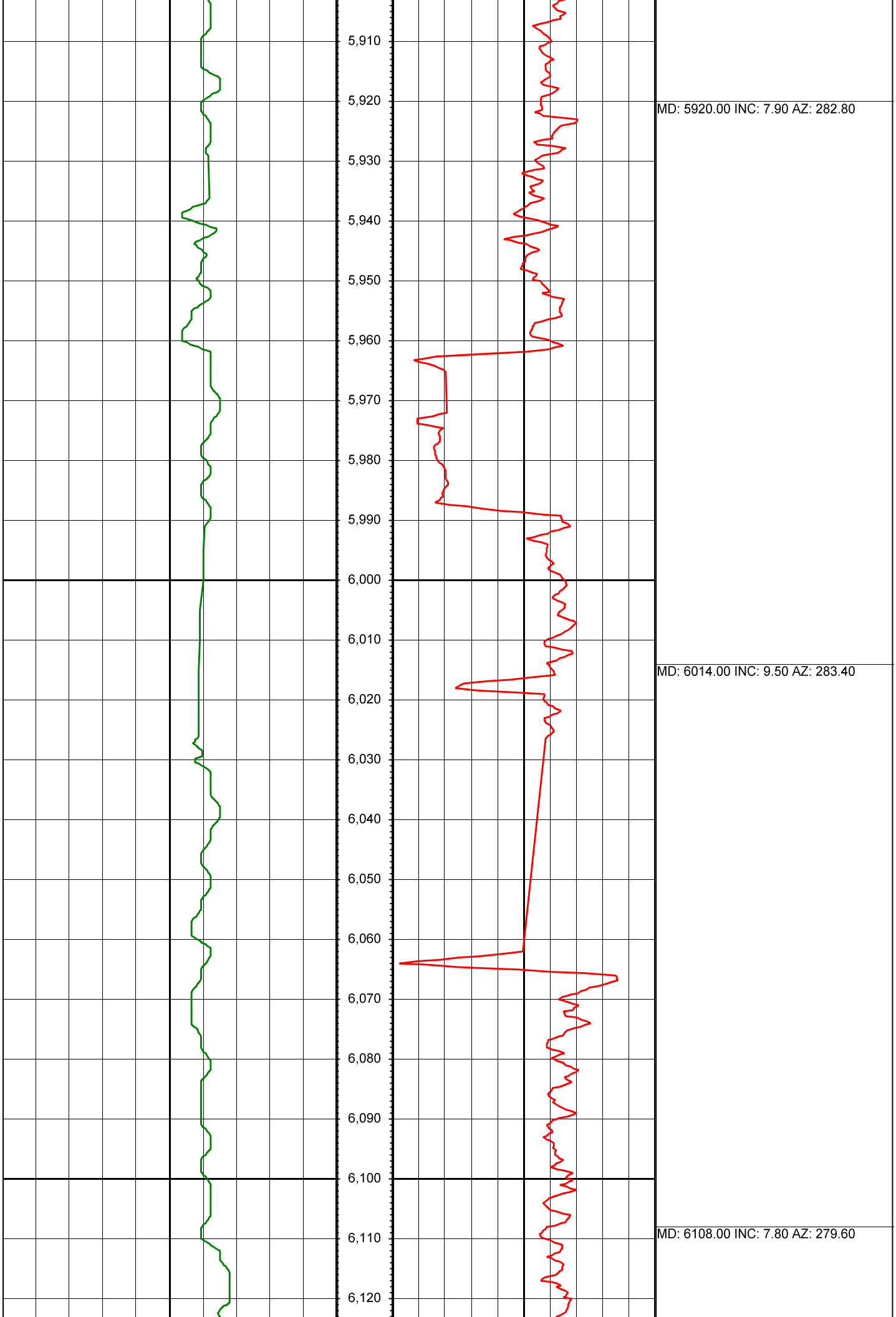


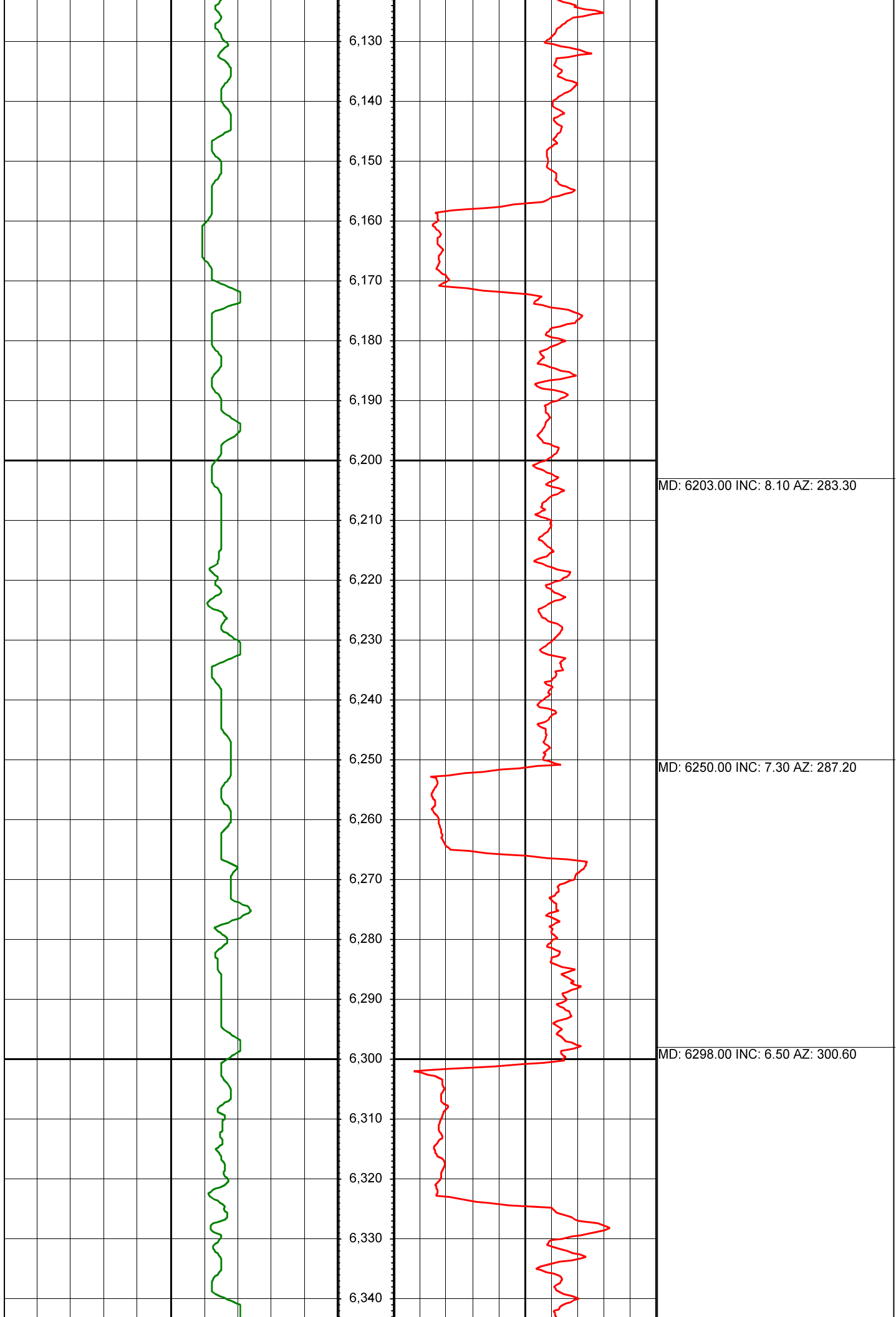


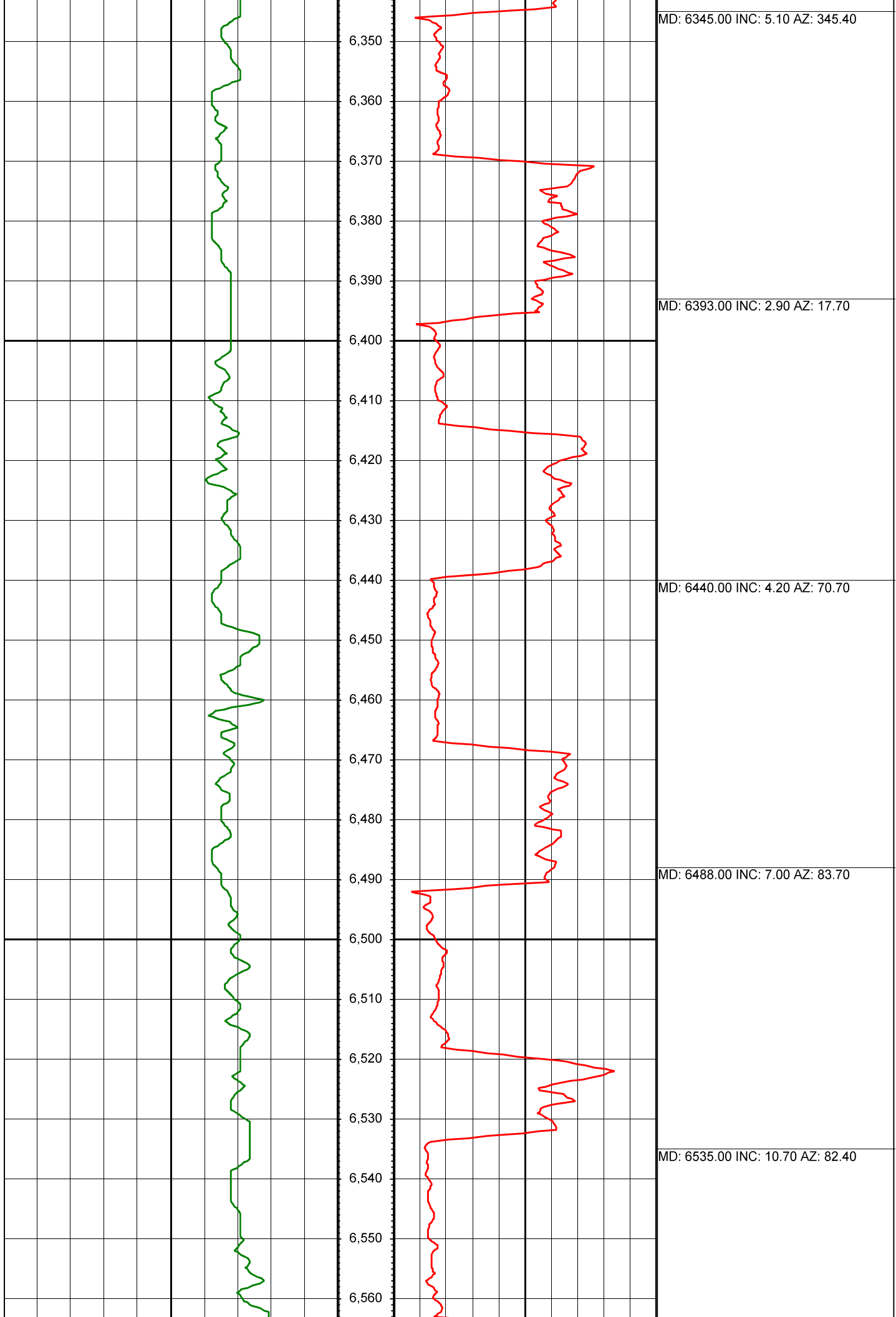


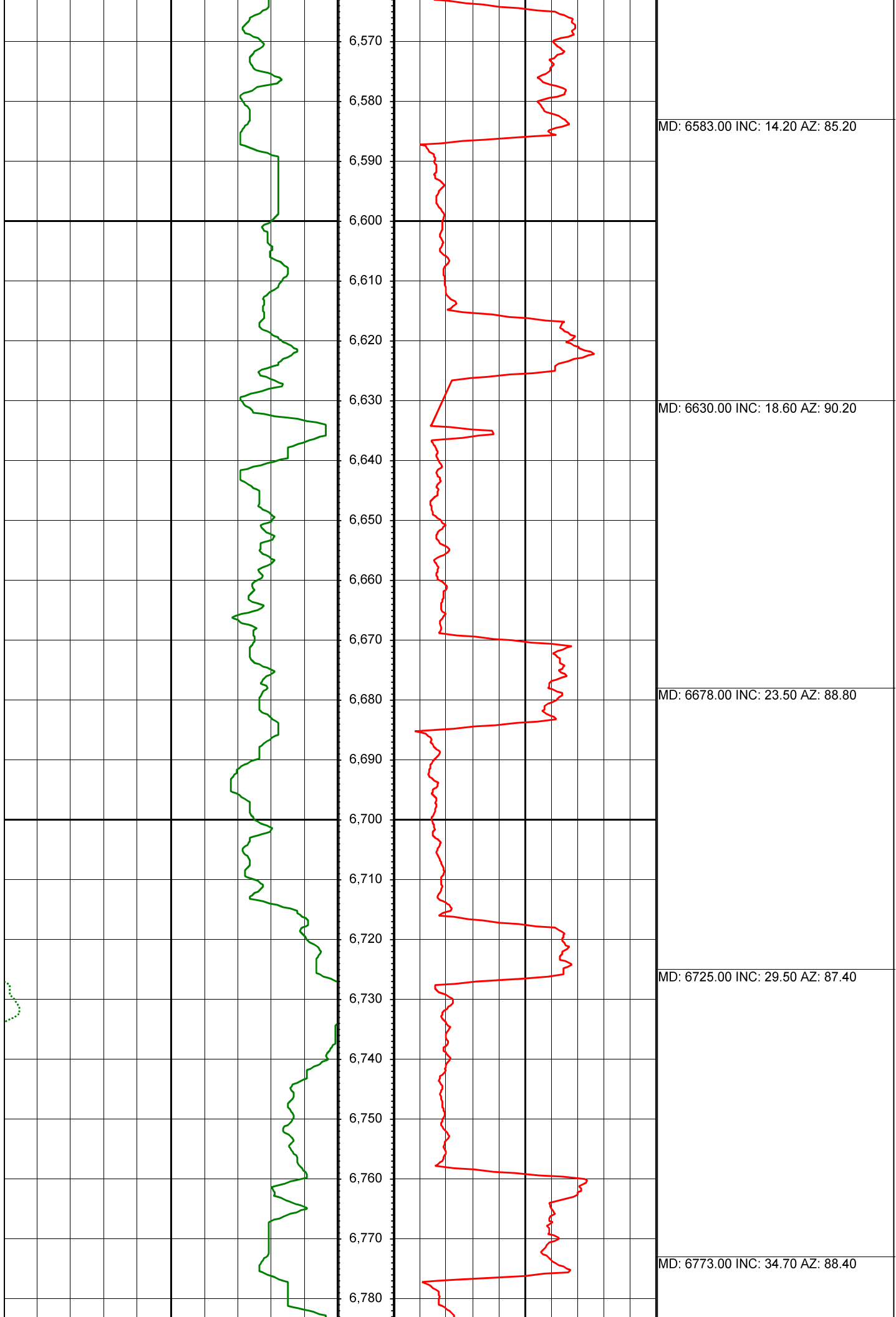


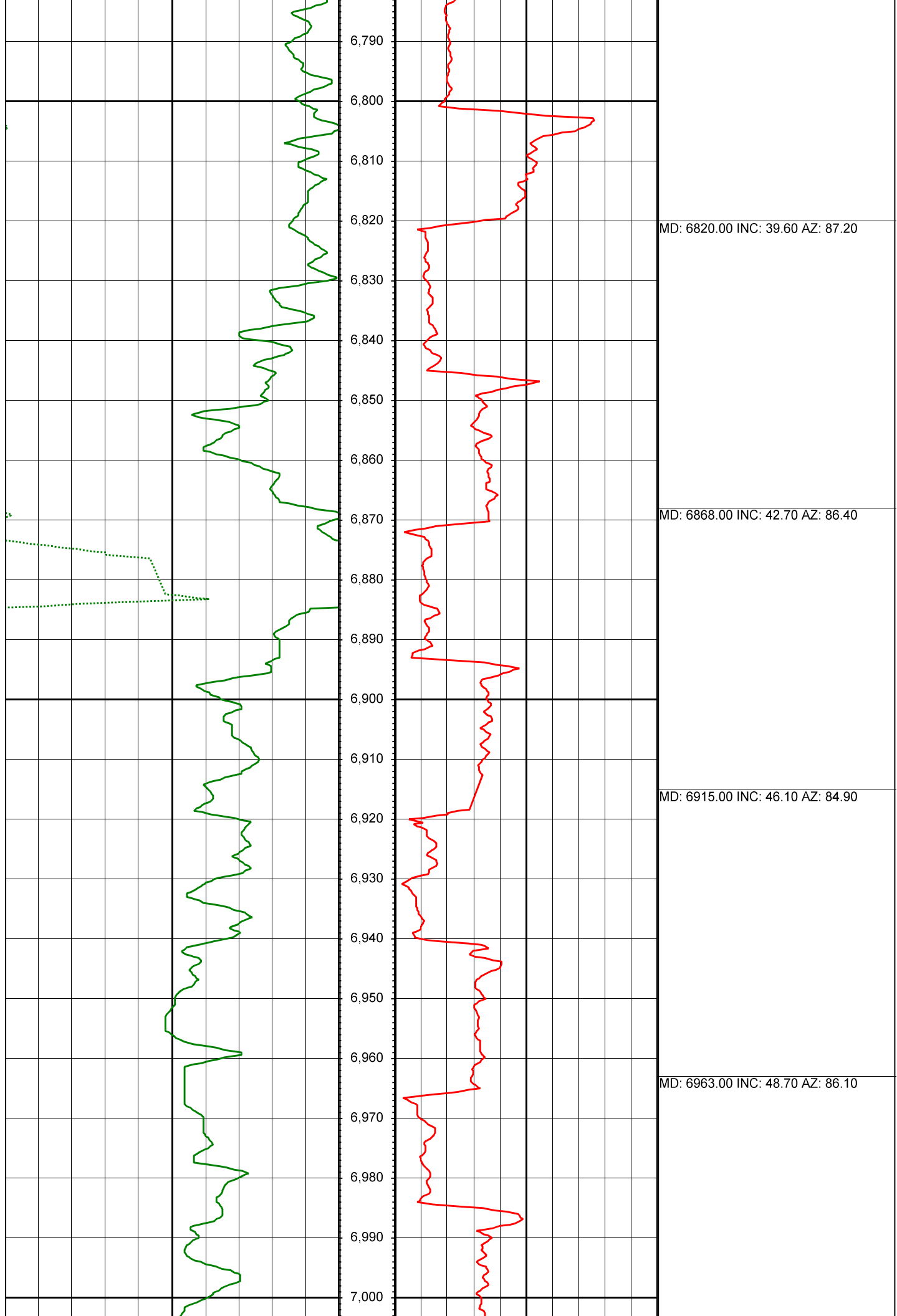


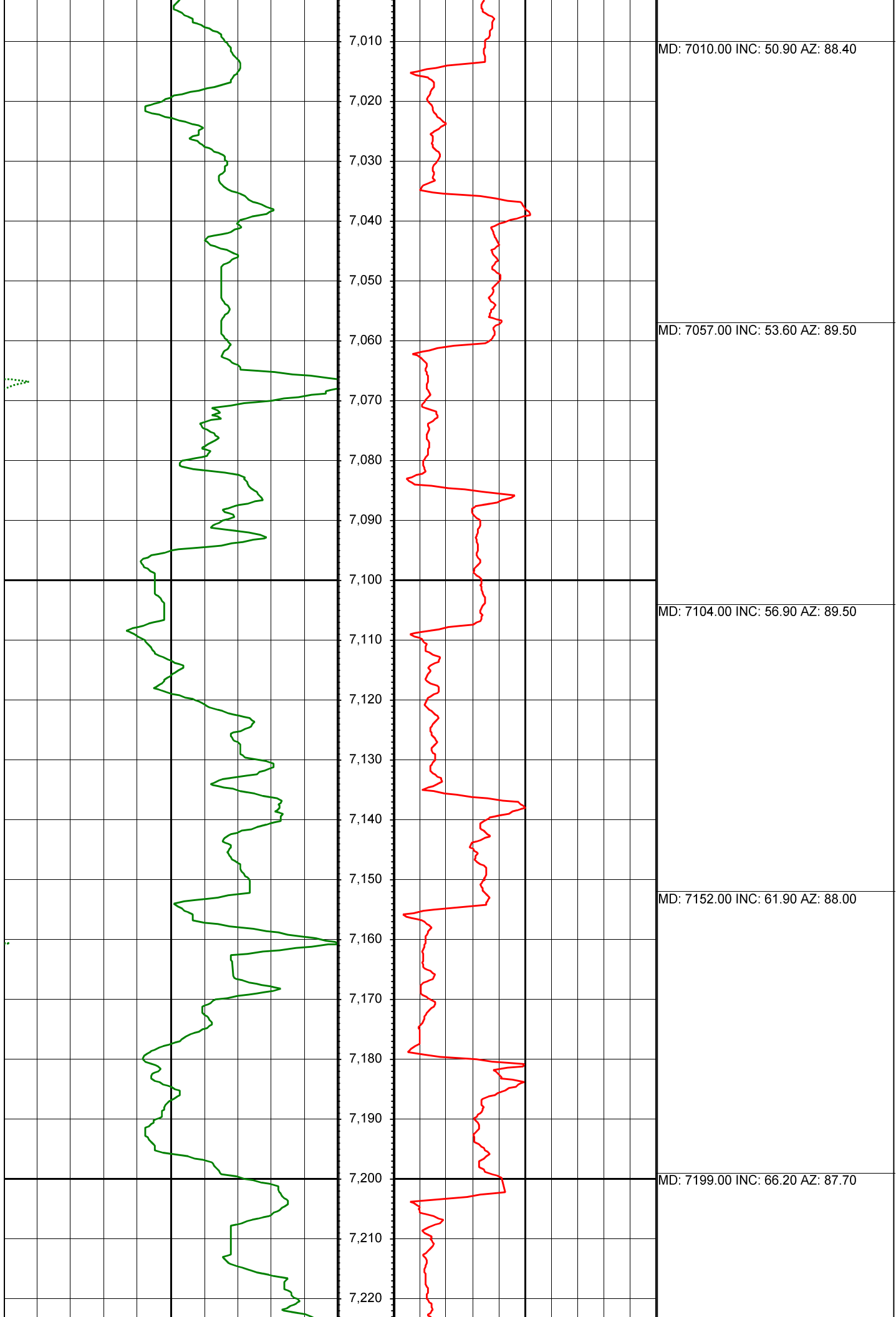


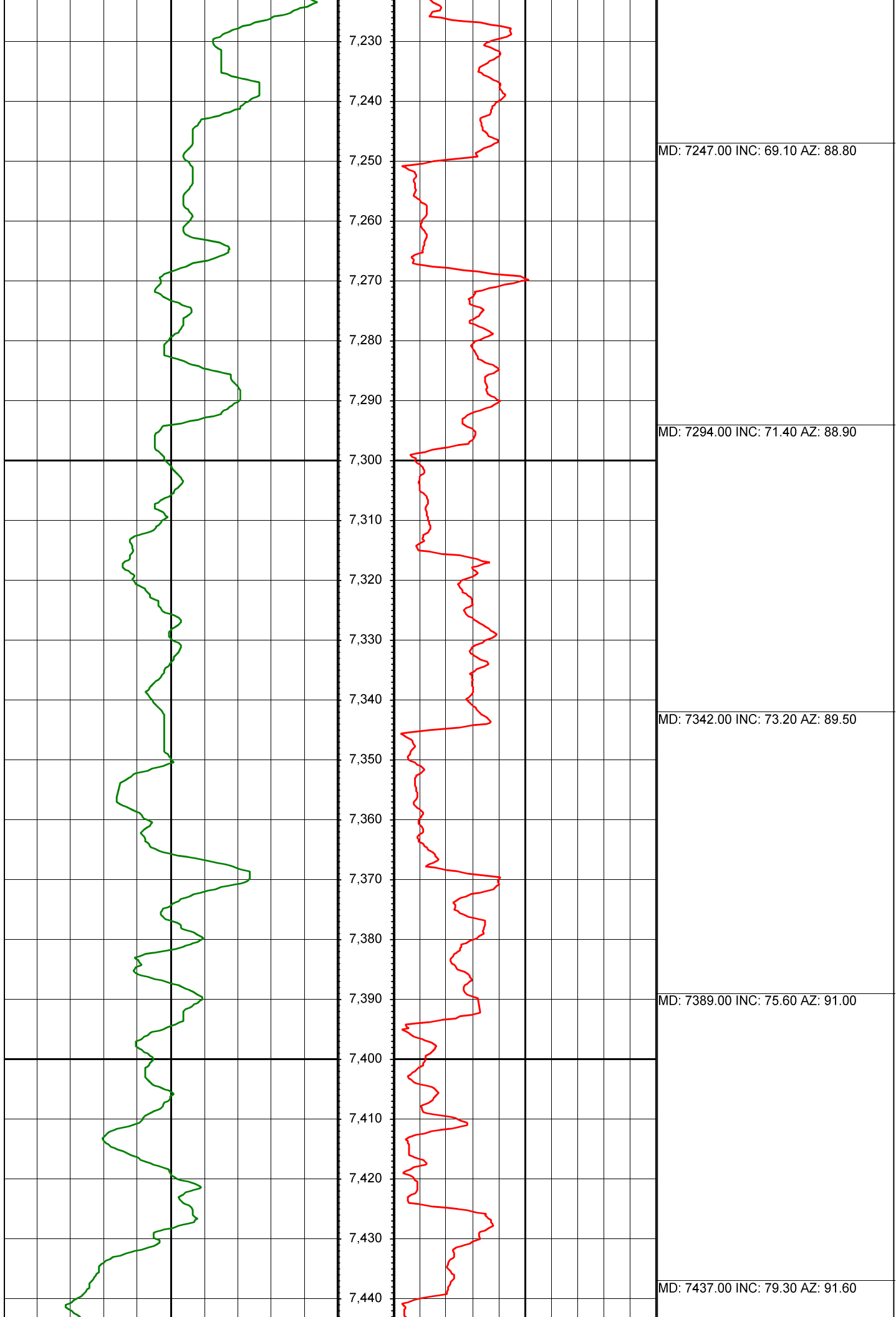




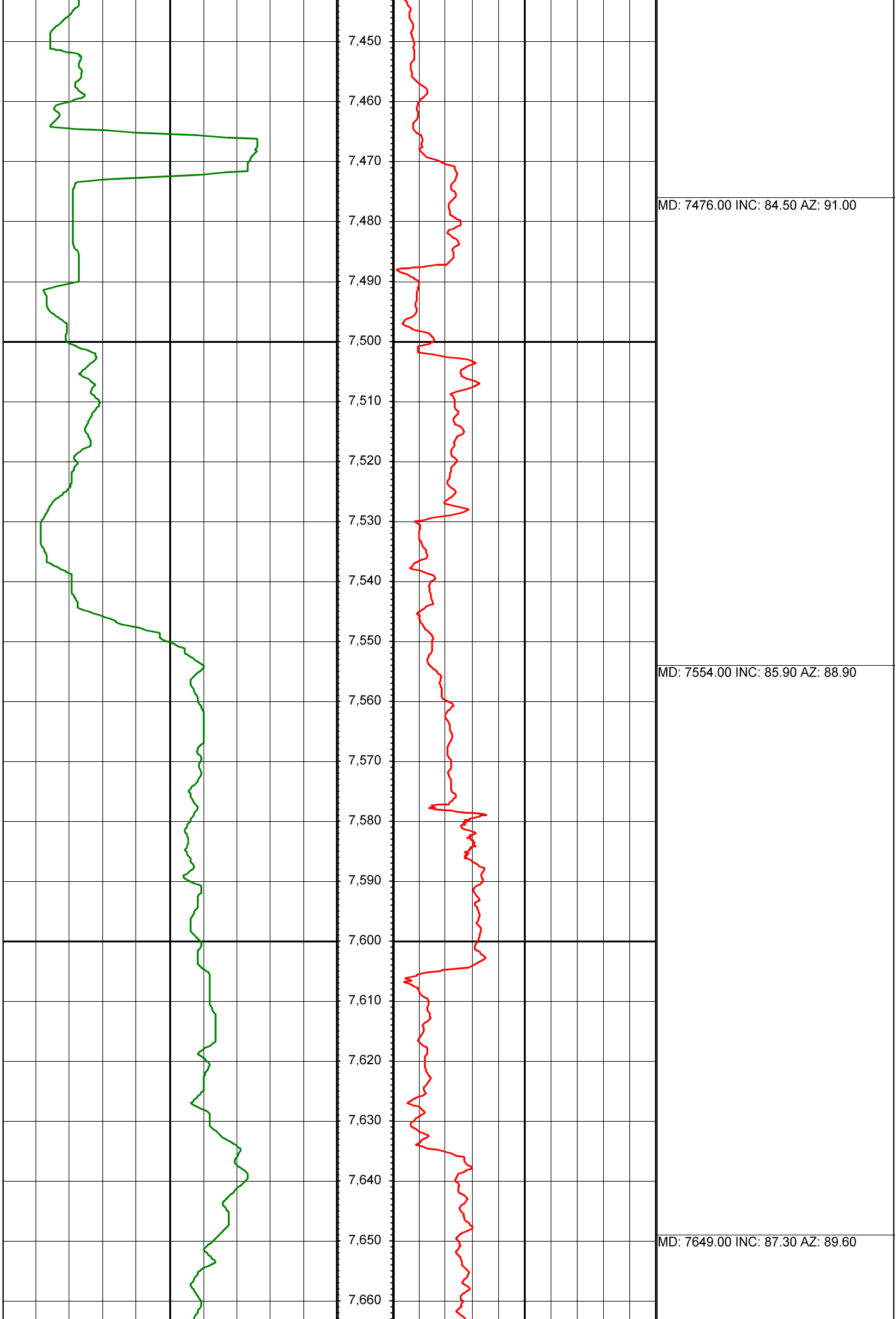


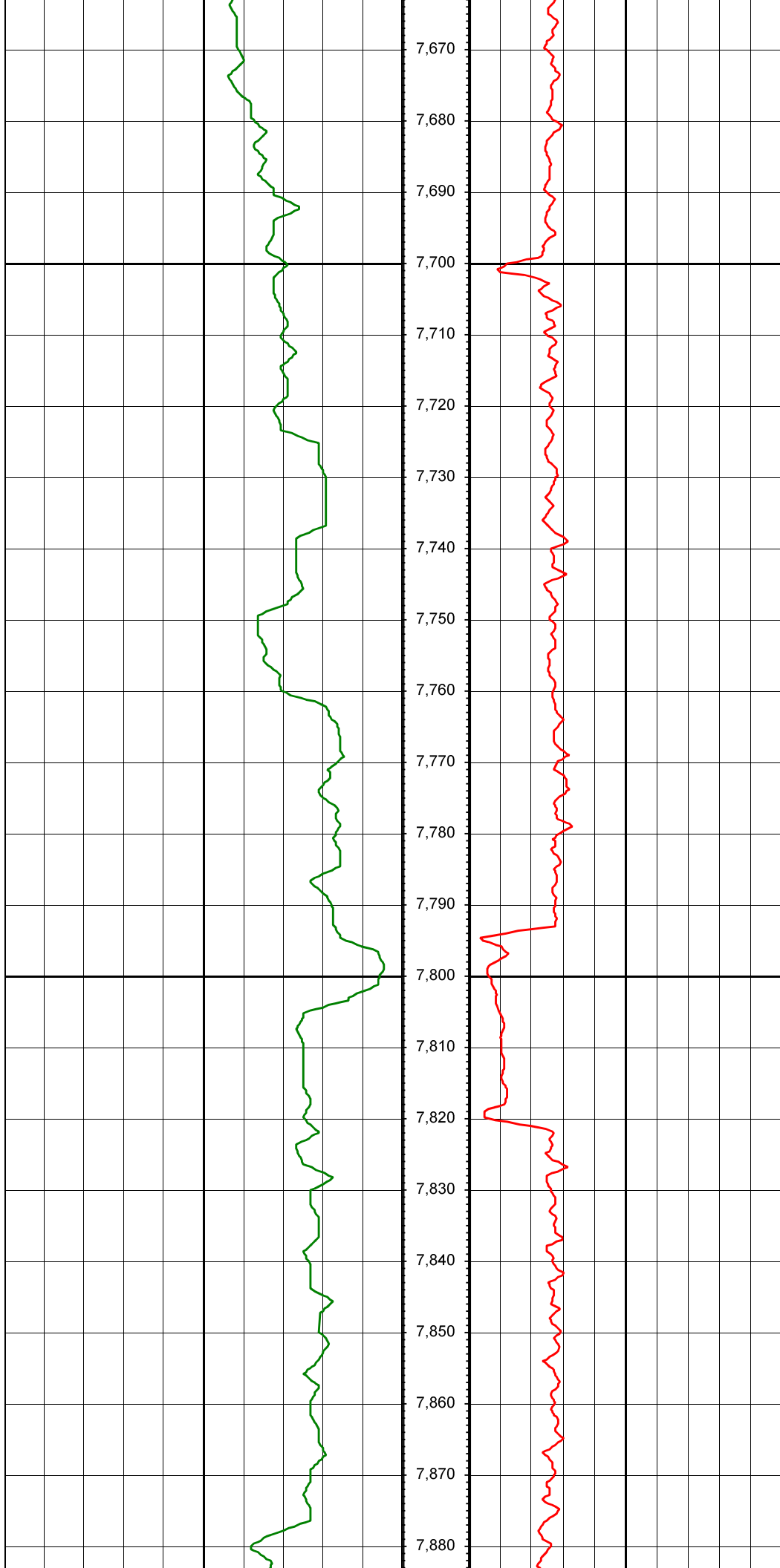












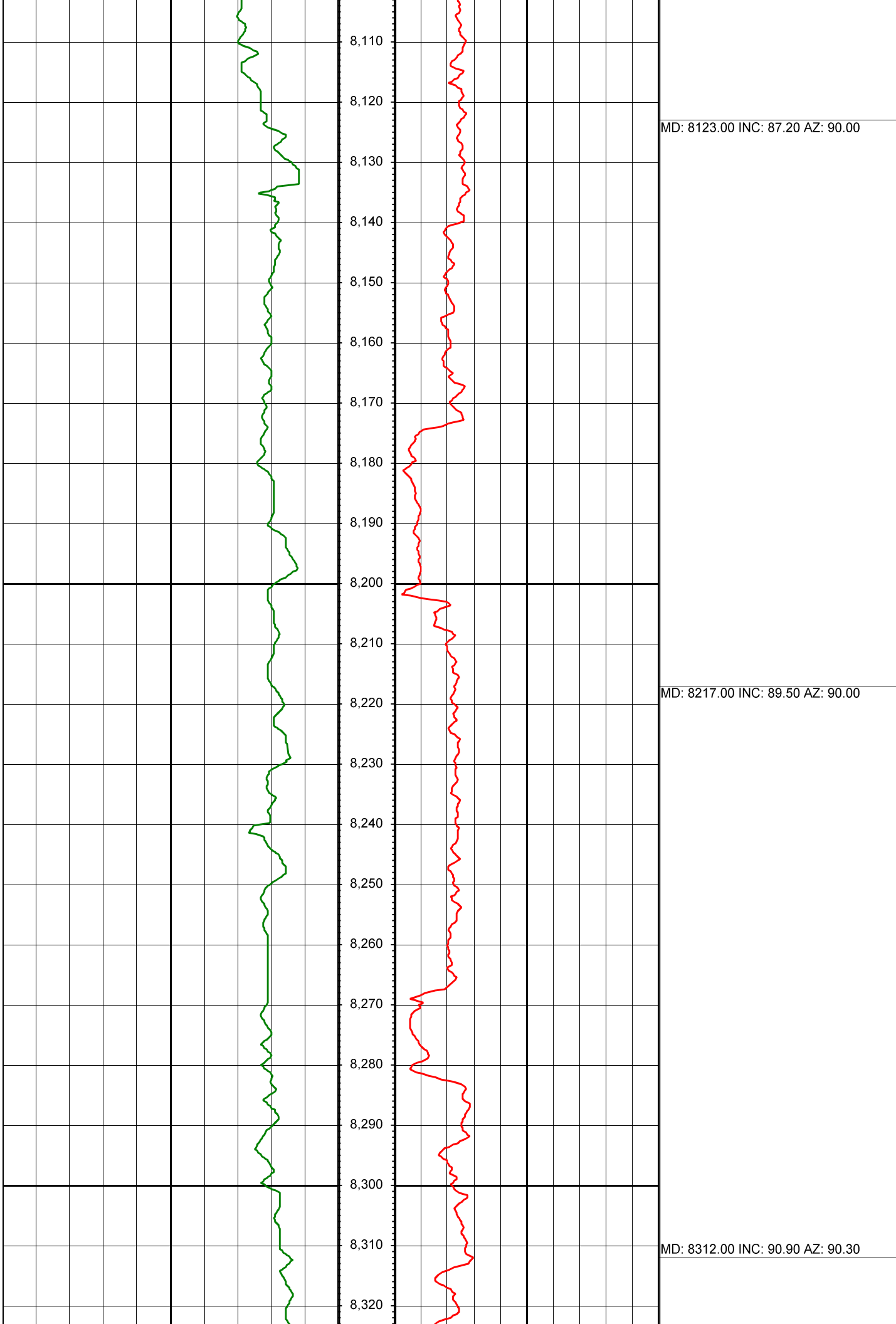
MD: 7743.00 INC: 86.50 AZ: 89.30

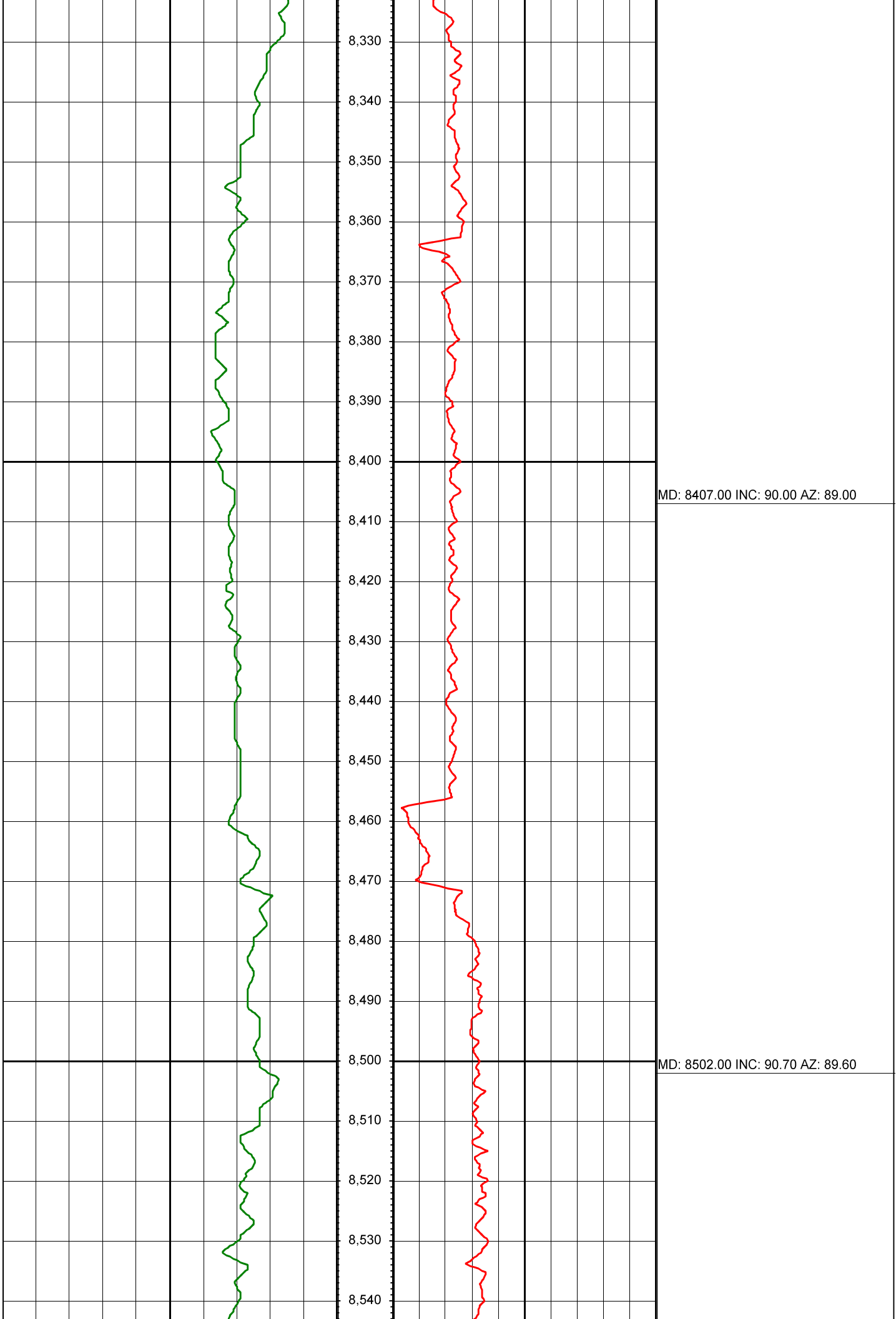
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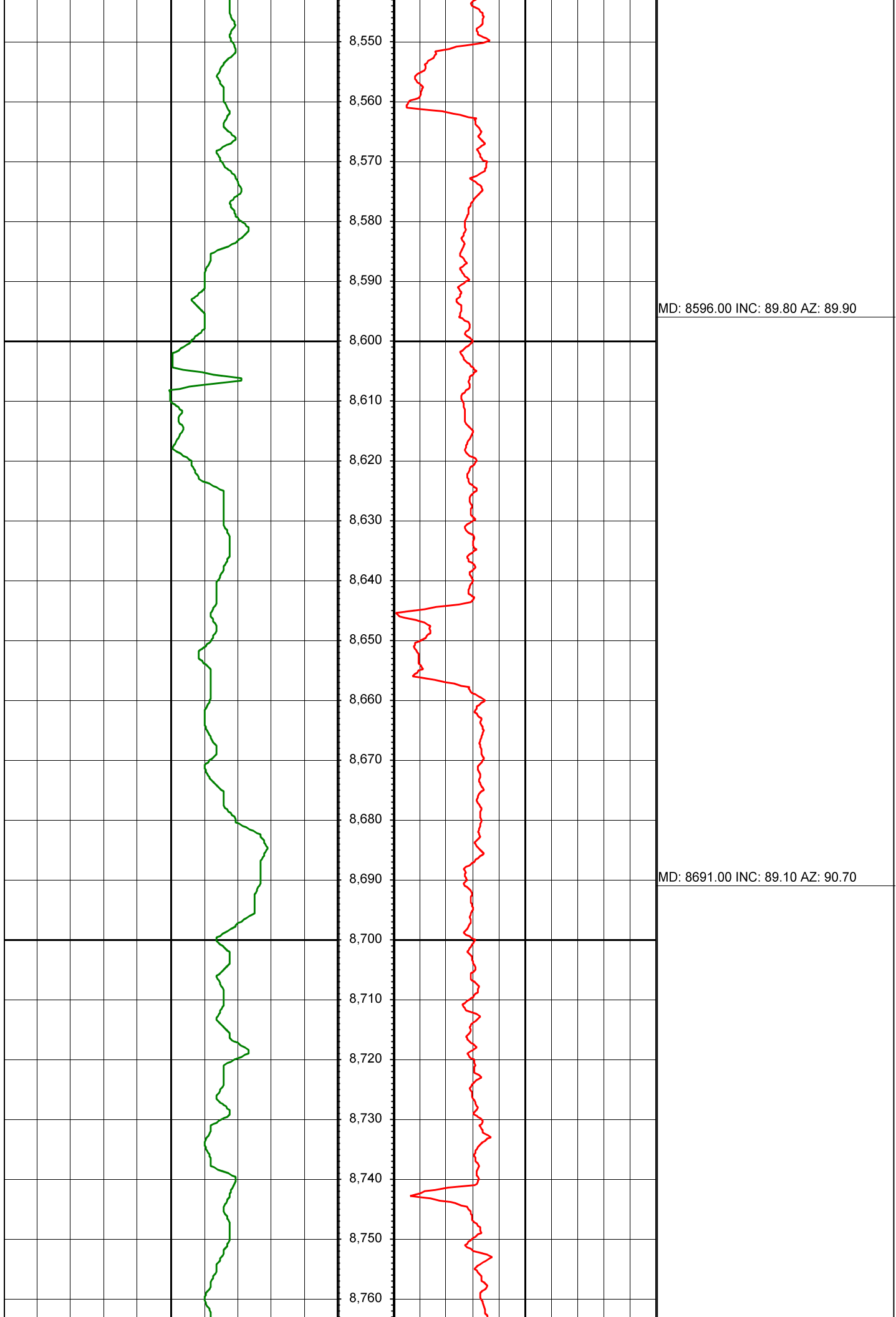


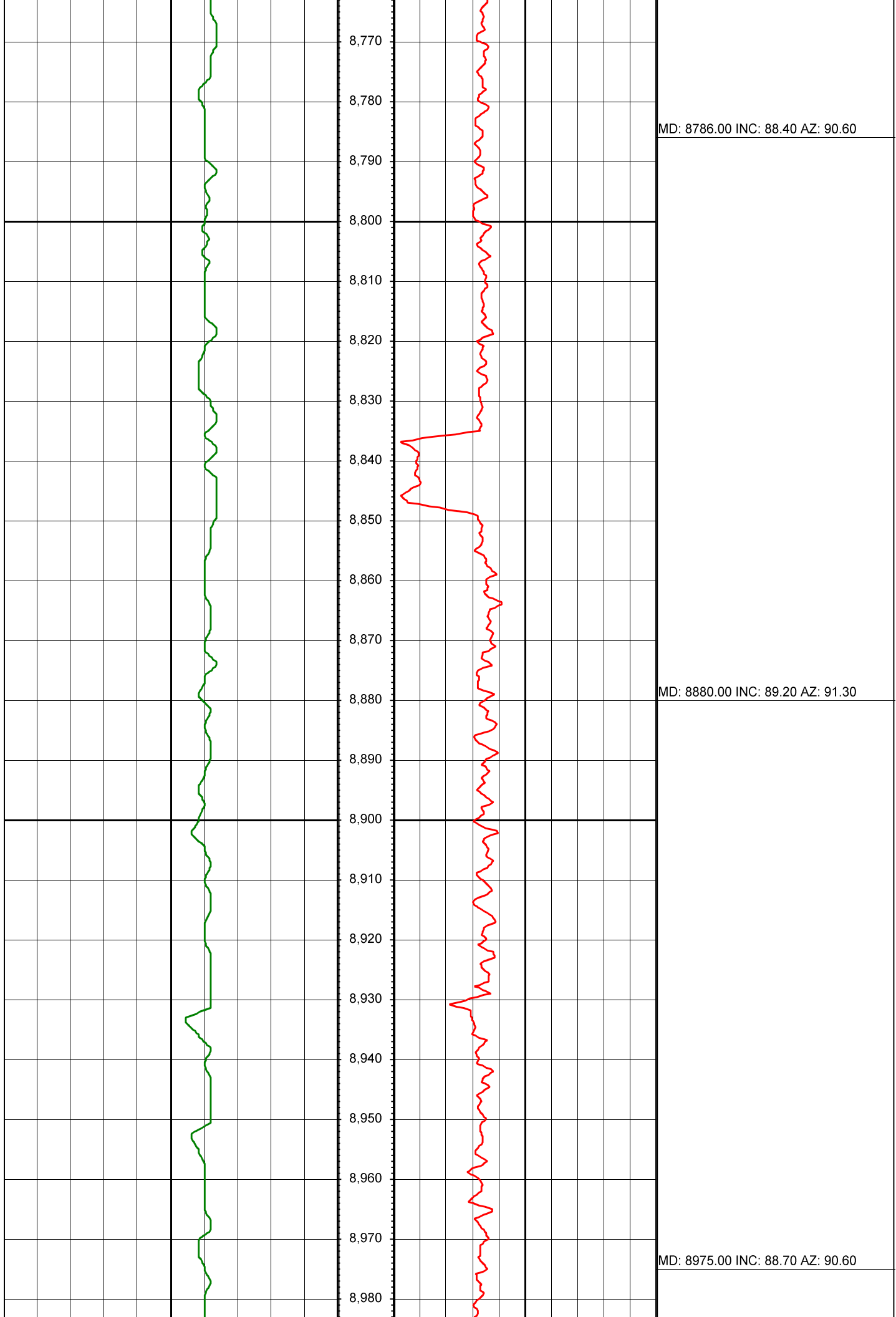
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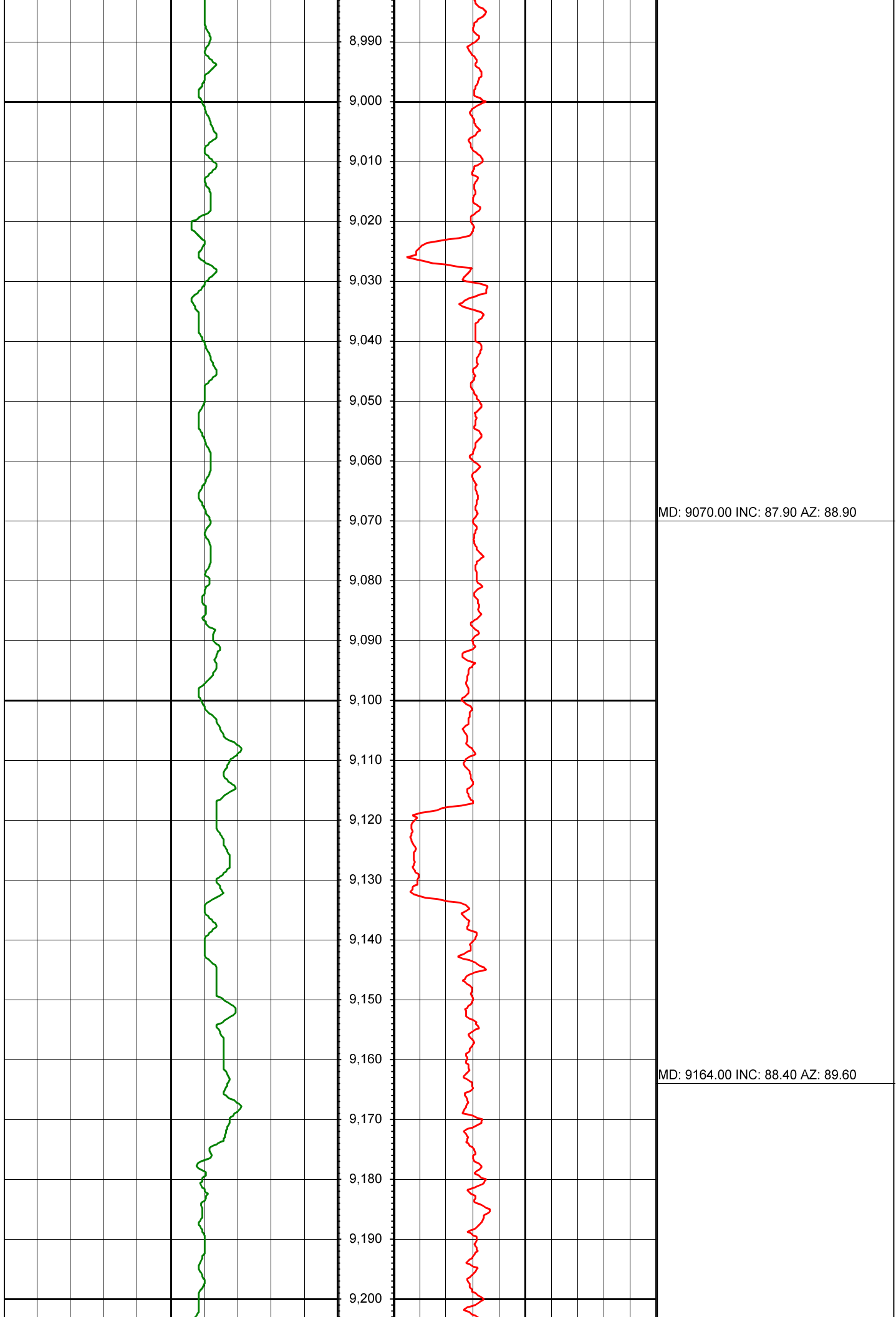
MD: 8028.00 INC: 88.20 AZ: 90.60



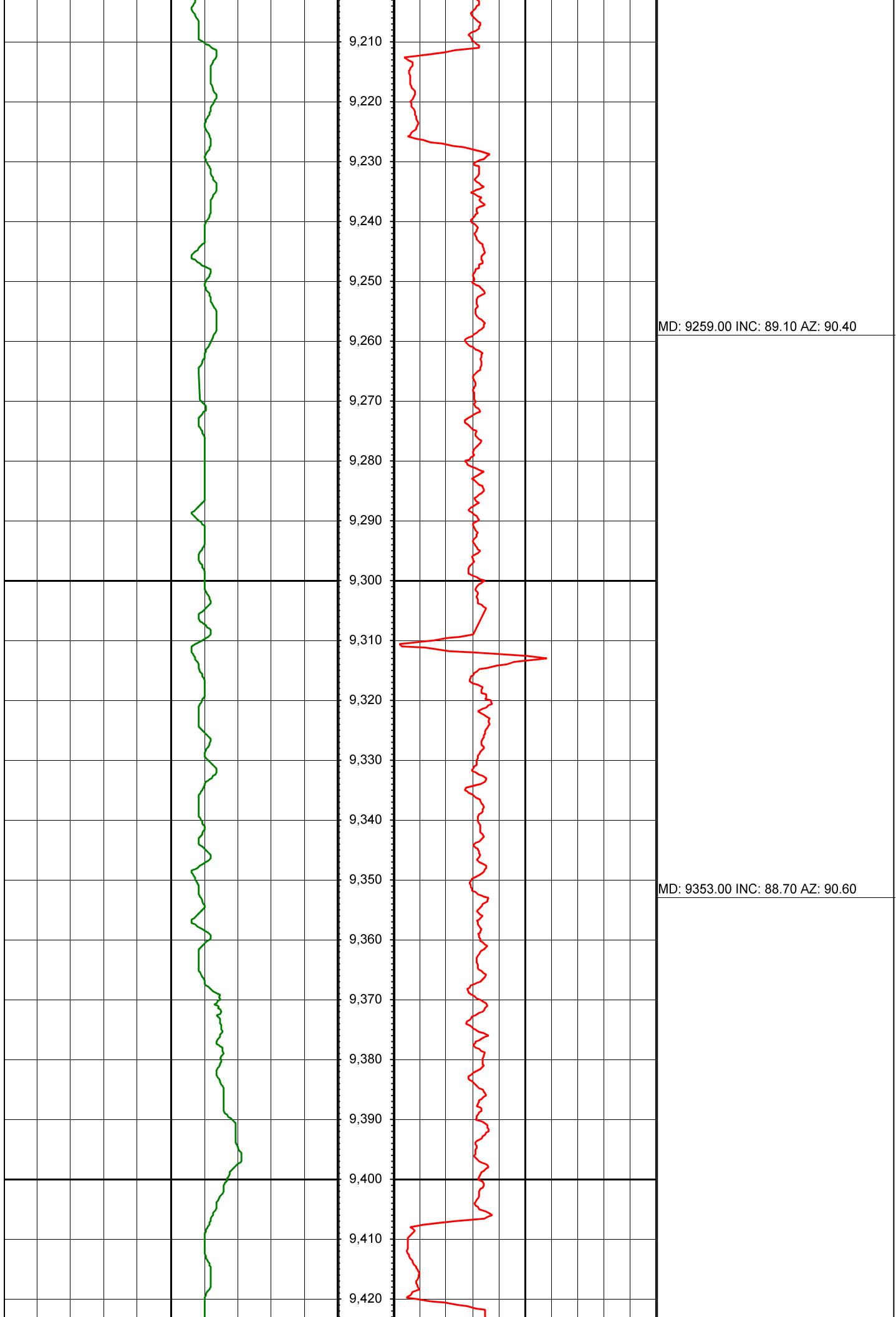


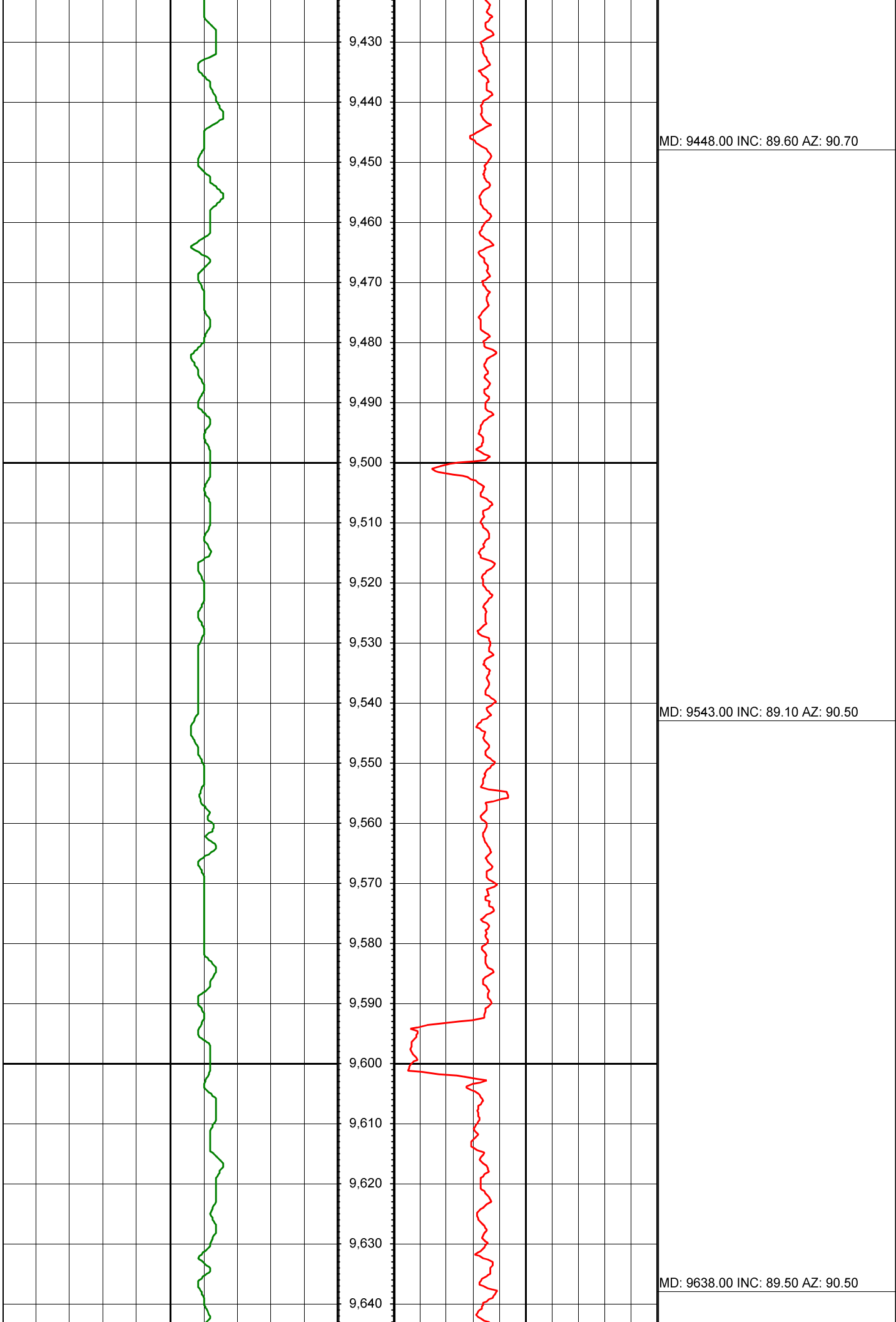


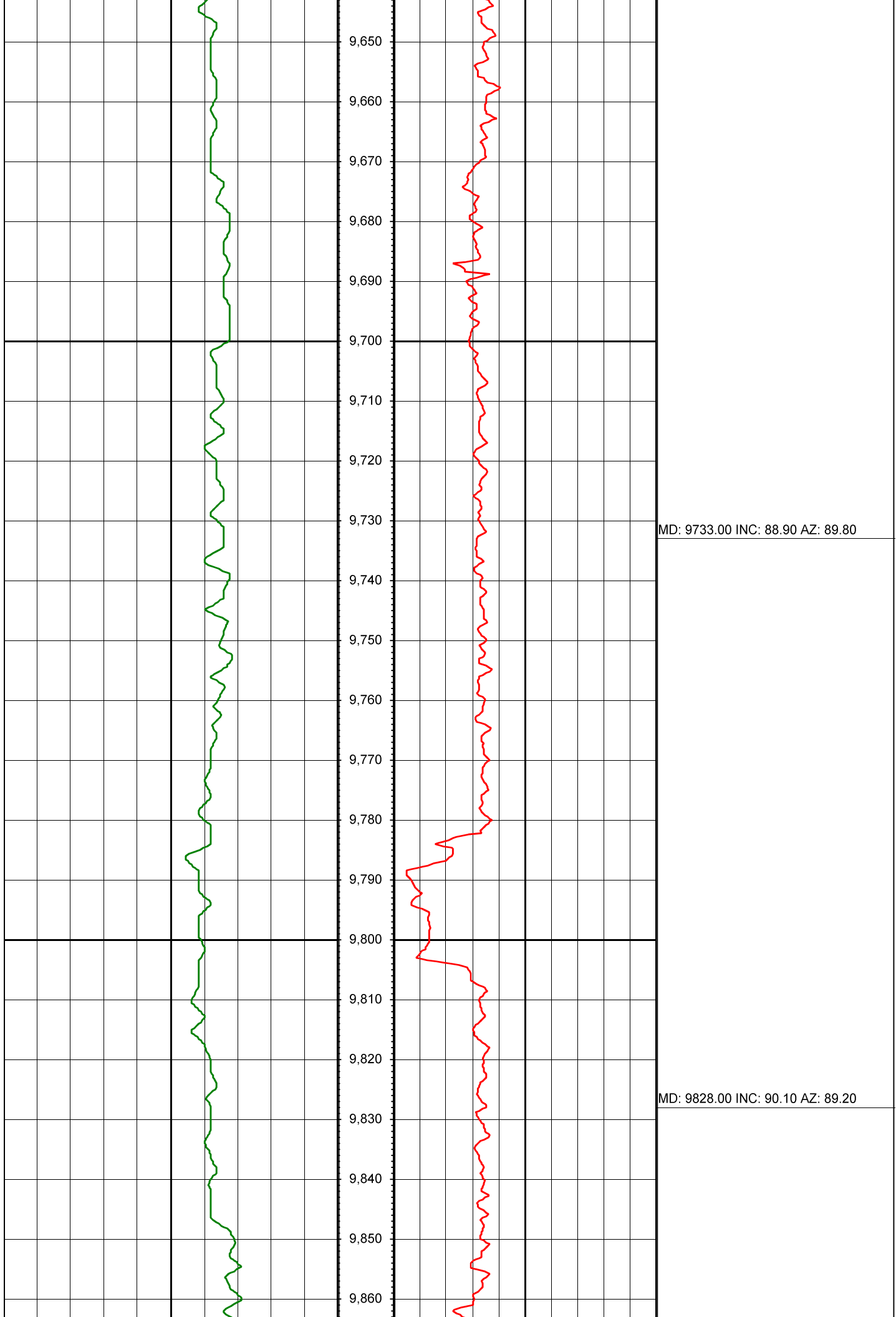


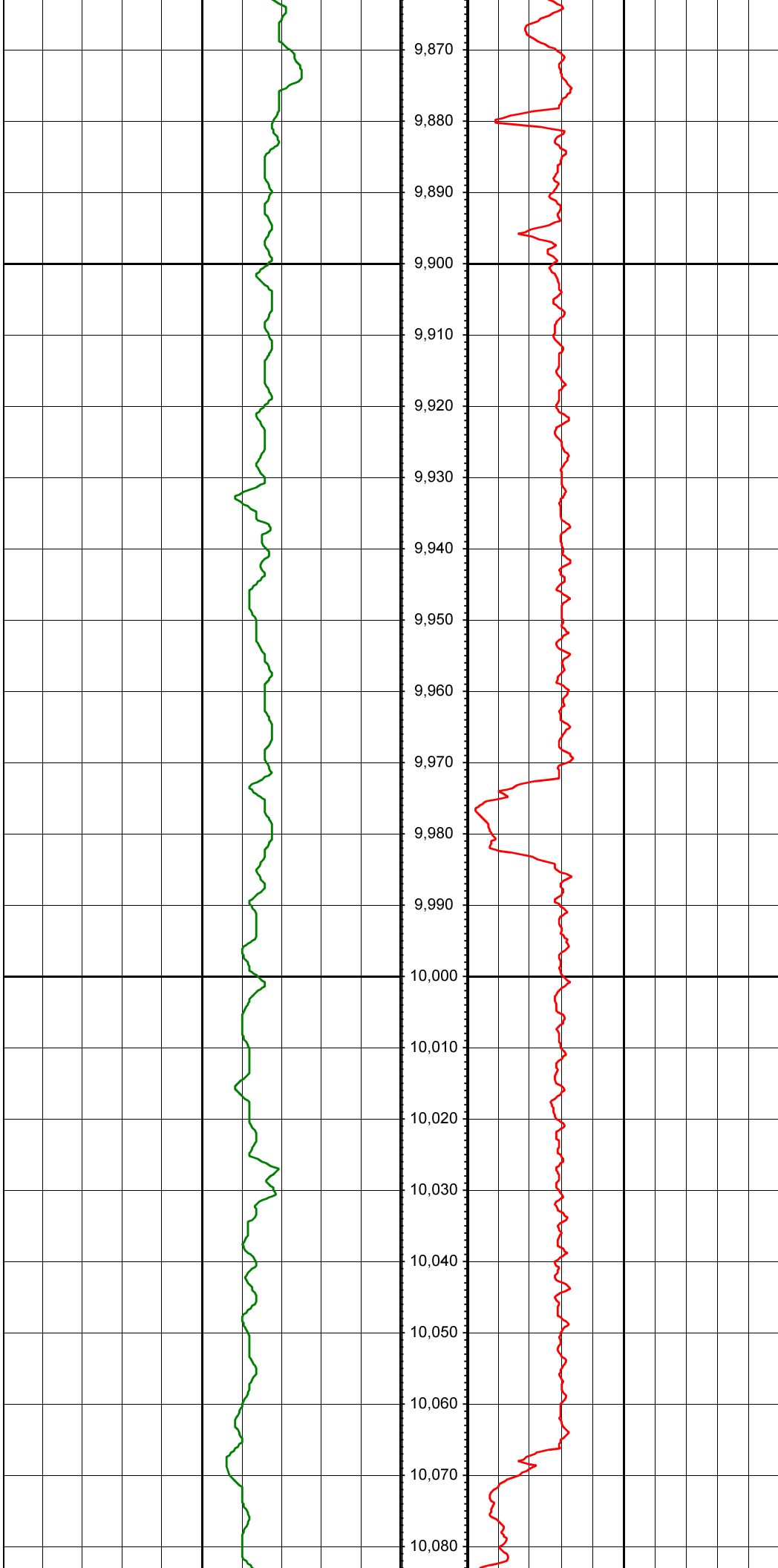






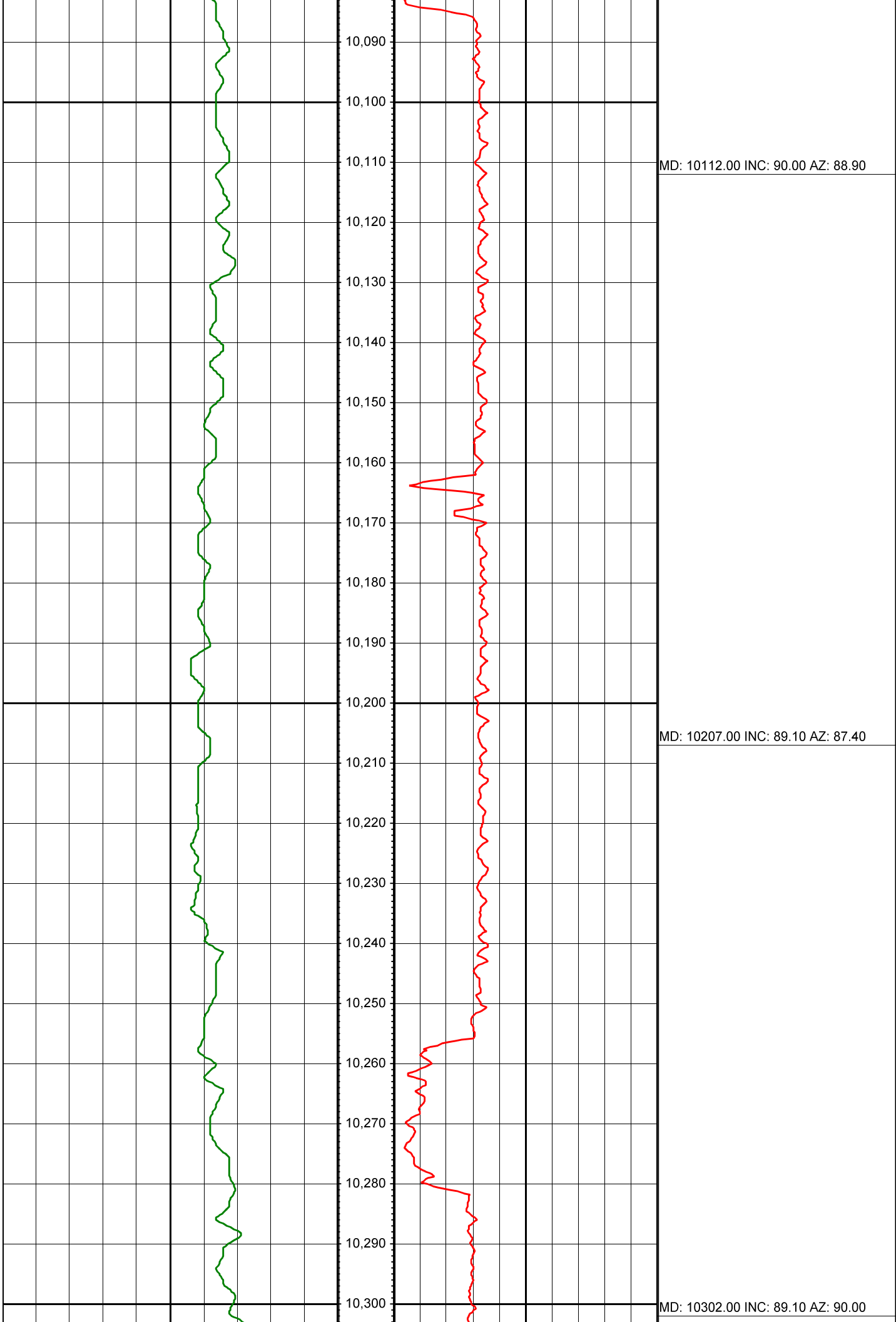


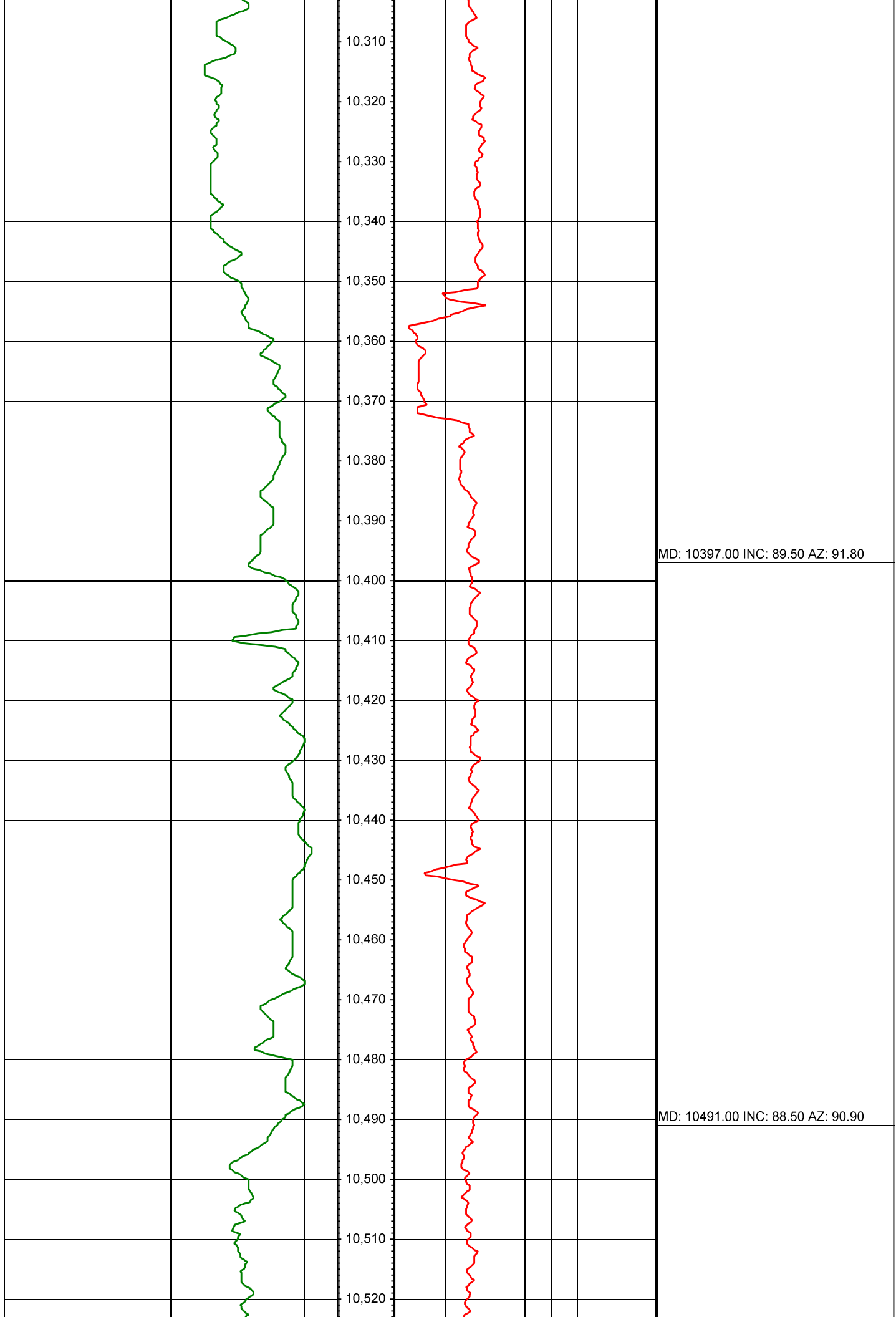


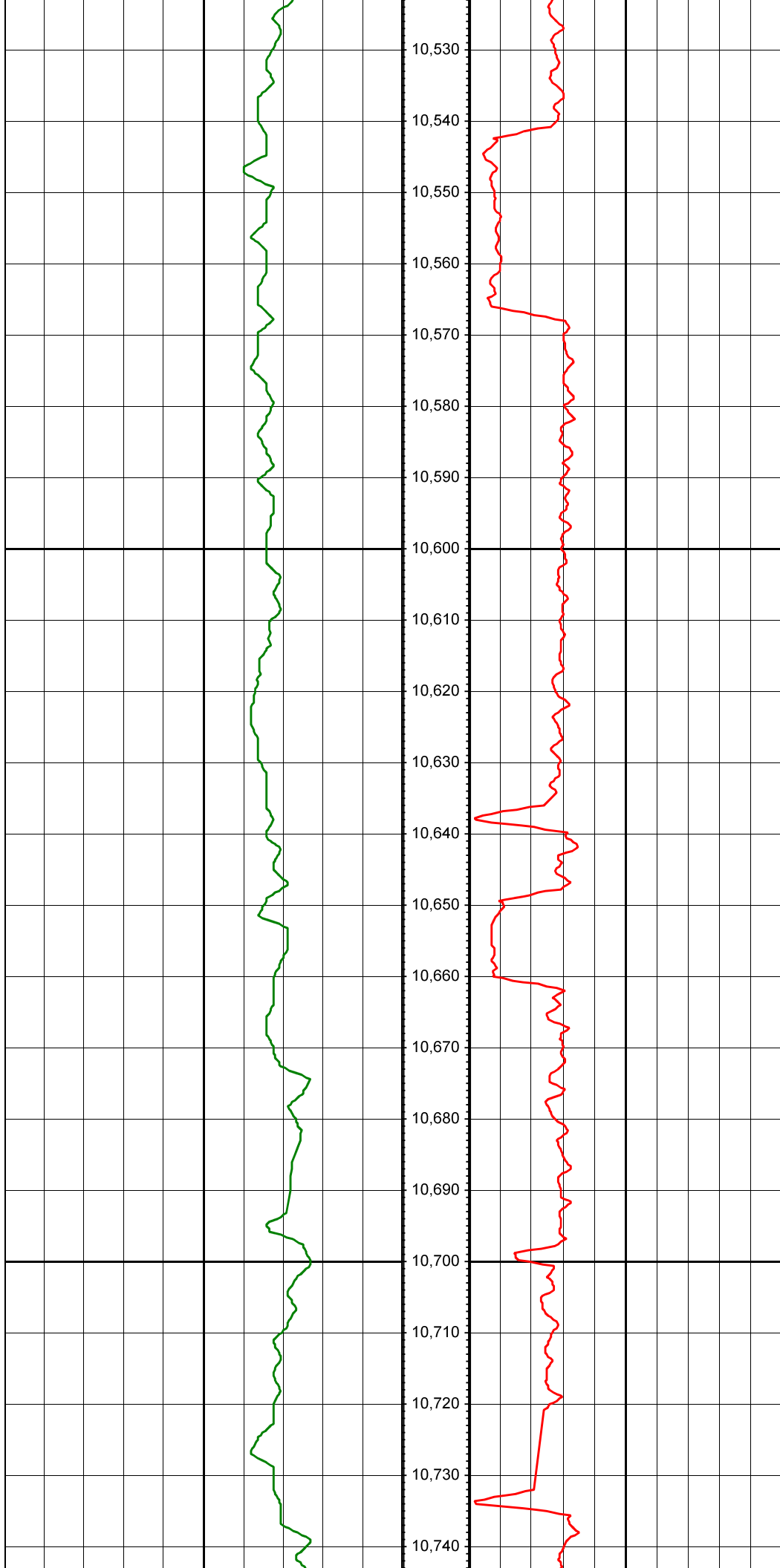


MD: 9922.00 INC: 89.80 AZ: 89.60

MD: 10017.00 INC: 89.10 AZ: 89.20



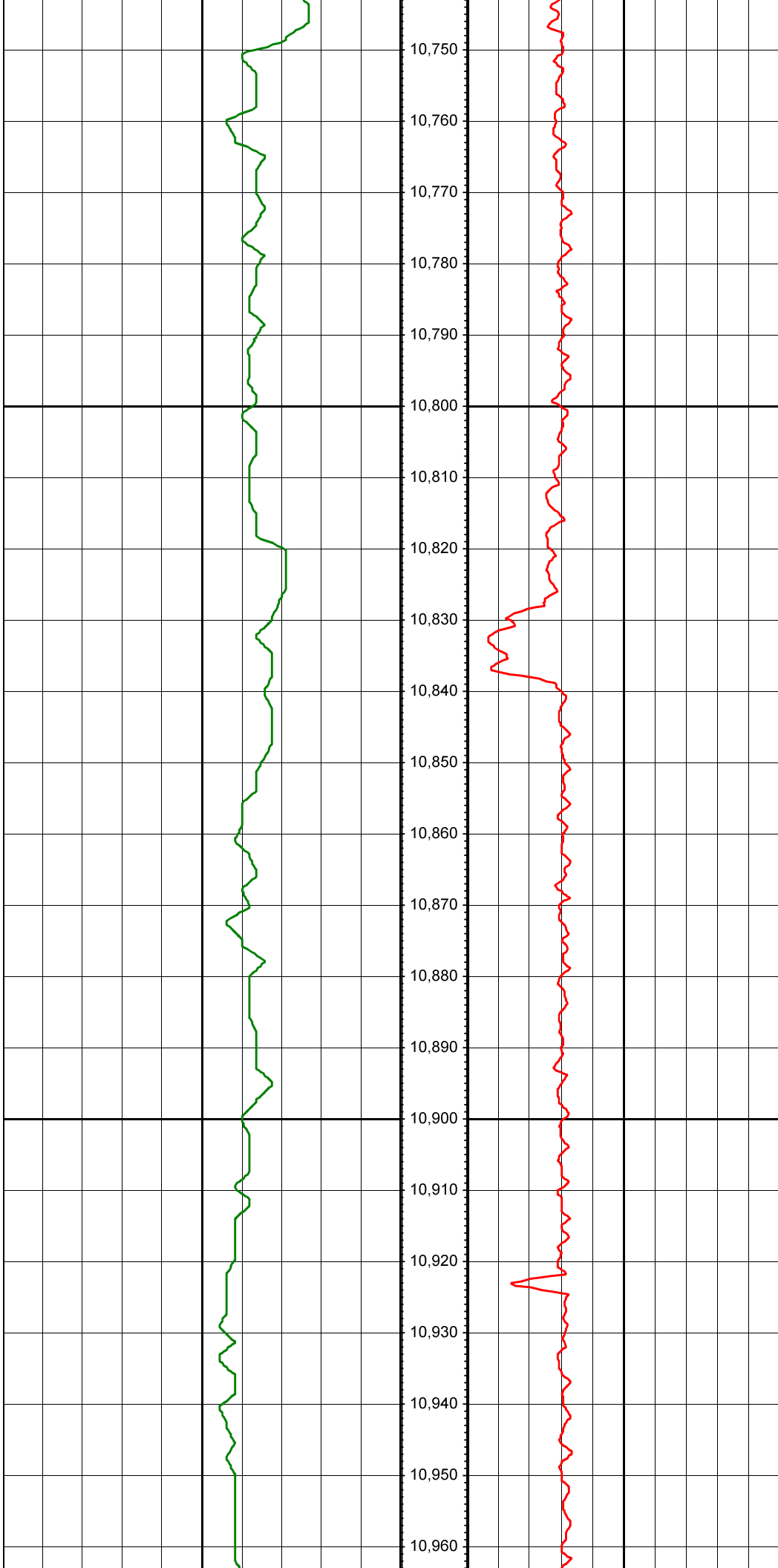




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MD: 10586.00 INC: 90.90 AZ: 91.10

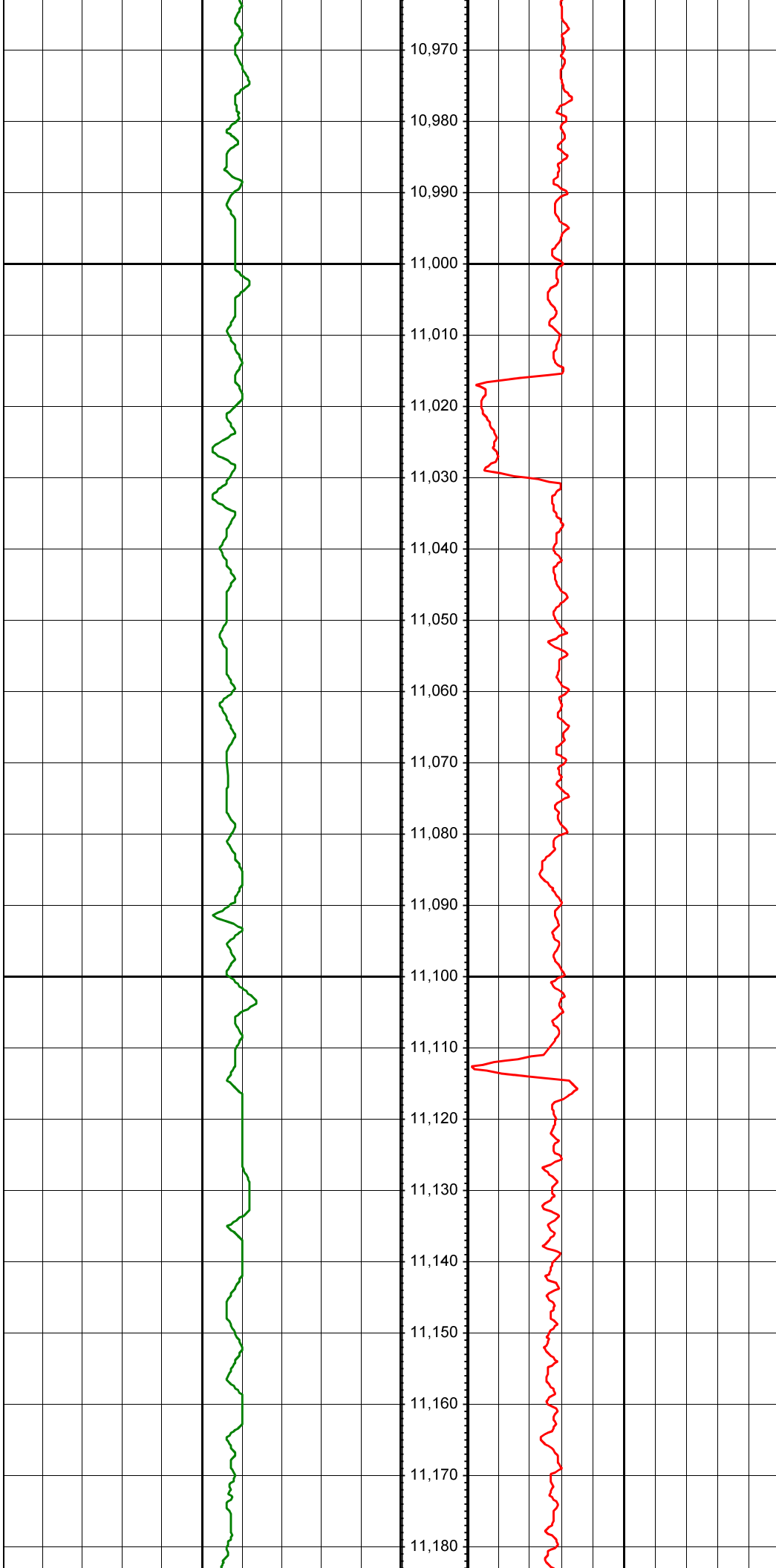
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MD: 10776.00 INC: 91.50 AZ: 91.70

MD: 10871.00 INC: 89.70 AZ: 91.40

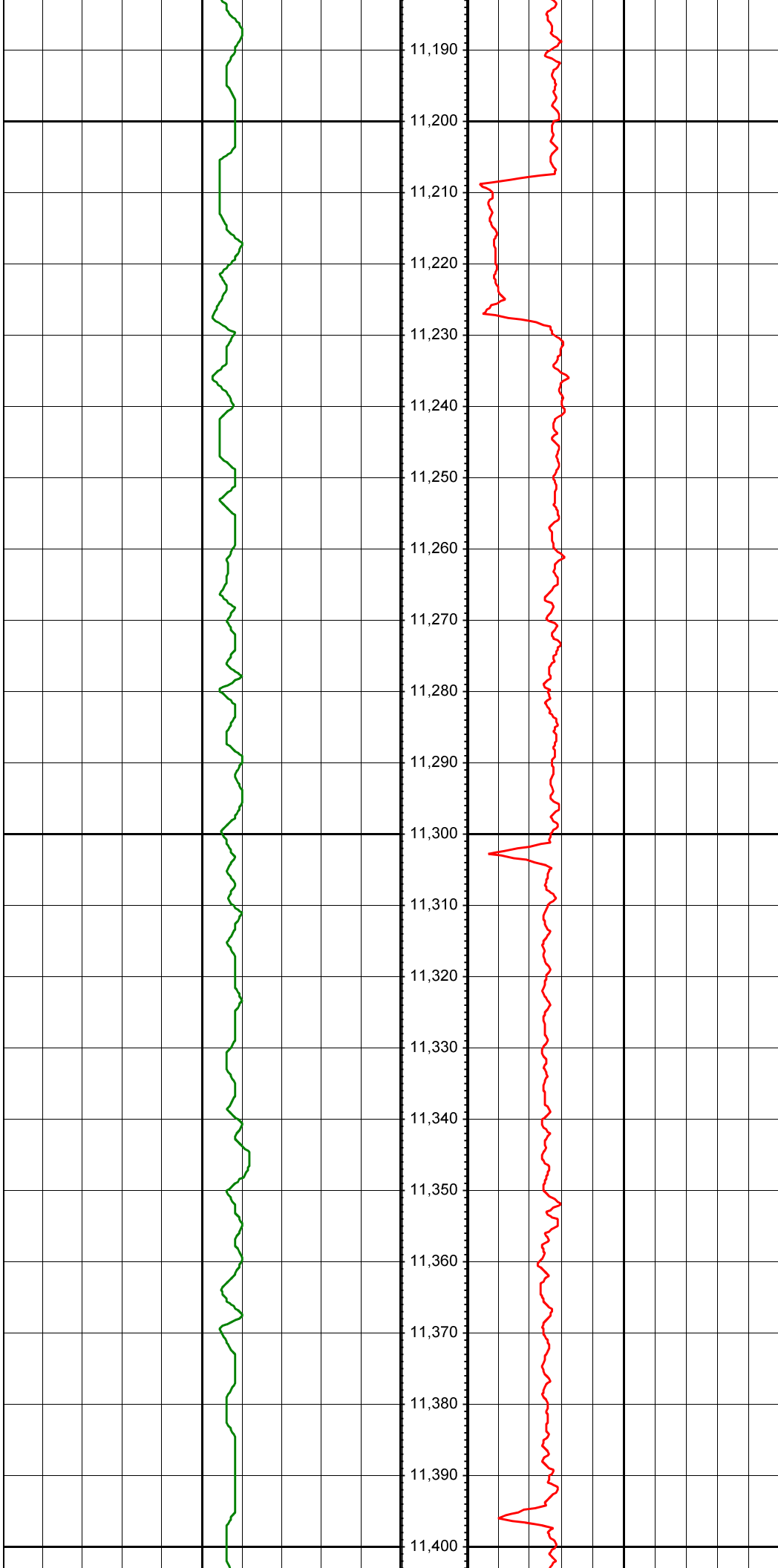




MD: 10966.00 INC: 89.30 AZ: 91.50

MD: 11061.00 INC: 89.40 AZ: 90.30

MD: 11155.00 INC: 88.70 AZ: 90.60



MD: 11250.00 INC: 89.80 AZ: 89.60

MD: 11345.00 INC: 89.50 AZ: 90.50

