



Cathedral Energy Services
1949 North Pyrite Road
Casper, Wyoming 82604

145160

5":100' - MD

5/30/2014 10:52:26 AM

CATHEDRAL

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

Country: U.S.A.

State / Province: Colorado

County / Parish: Weld

Started: 05/24/2014 12:00 AM

API/UWI: 05-123-384480000

Field: Wattenburg

Well: Bohrer 2C-19H-E368

Rig: Pattterson UTI Drilling 326

Ended: 05/29/2014 11:45 AM

Gamma Ray
Section Plane: 90
Magnetic North: 8.61
Gamma Attenuation Factor: 2.82
Gamma Averaging: 7

Personnel

Day Hand: B. Stahlecker

Night Hand: J. Minter

Comp. Emp: Norm McCreary

Maximum Temperature: 210 °f

Location

Latitude: 40.214420

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	843
8-3/4	843	7400
6-1/8	7400	11320

Casing Data

Size	From	To
9-5/8	0	843
7	0	7400
4-1/2	0	11320

Bit Sizes

Size	From	To
12-1/4	0	843
8-3/4	843	7400
6-1/8	7400	11320

Mud Data

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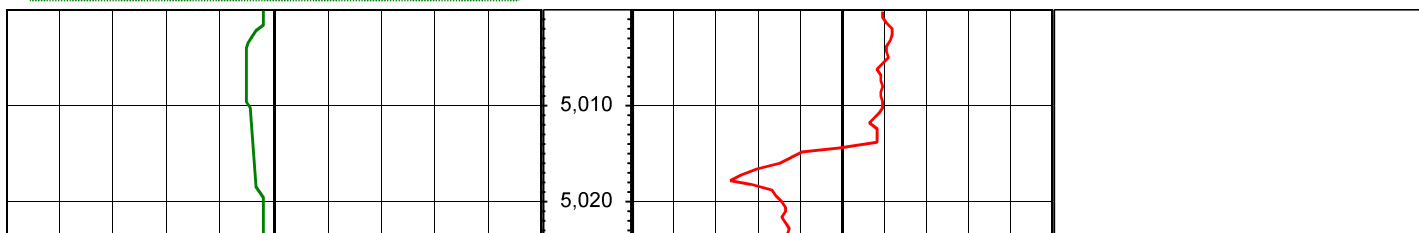
Tool Run Data

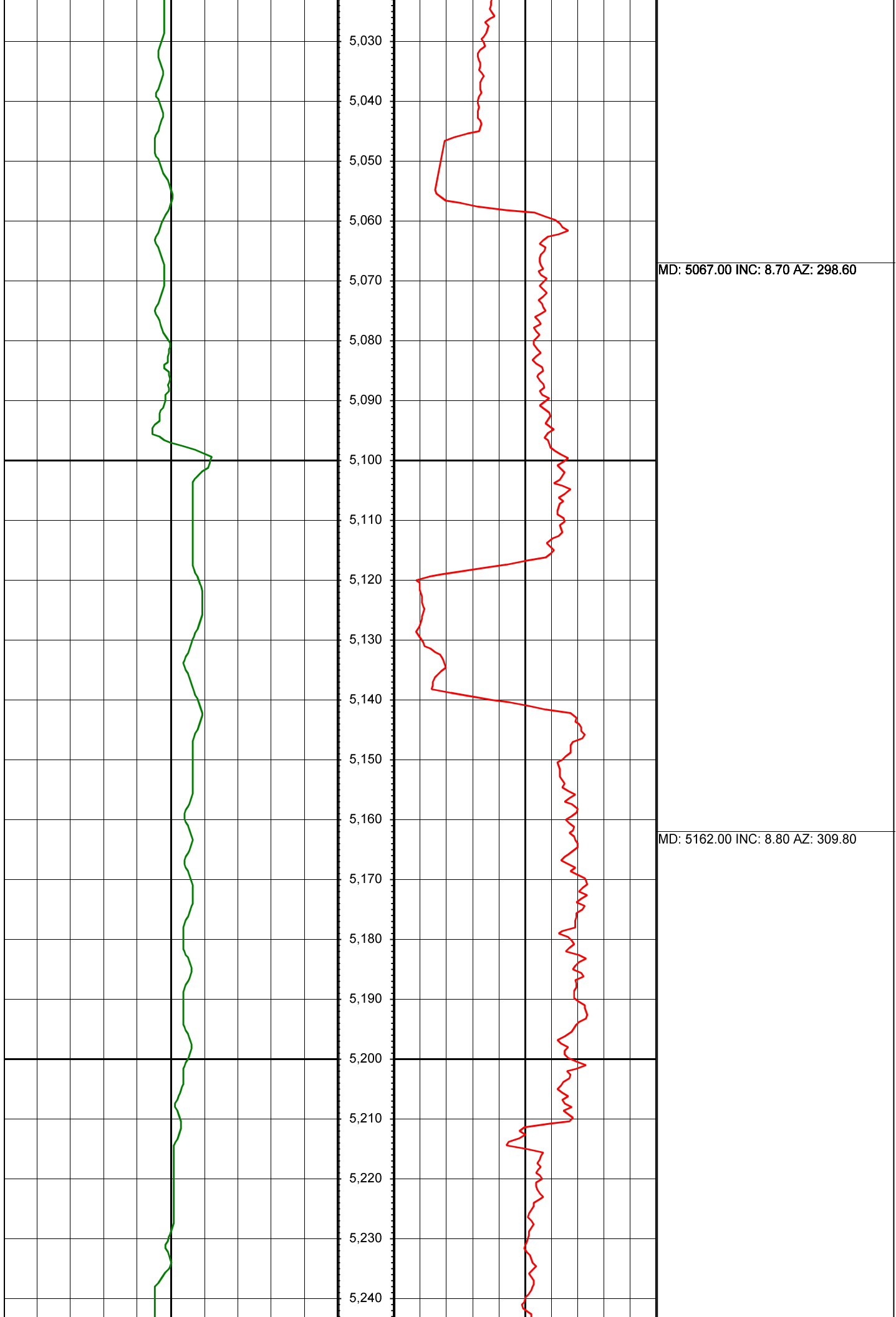
Serial Number	Gamma Offset	Resist. Offset	Start Time	Start Depth	End Time	End Depth
1522	36.4	0	5/23/2014 11:46:23 AM	843	5/26/2014 11:46:23 AM	7400
1529	38.4	0	5/27/2014 11:49:22 AM	7400	5/29/2014 12:49:22 PM	11320

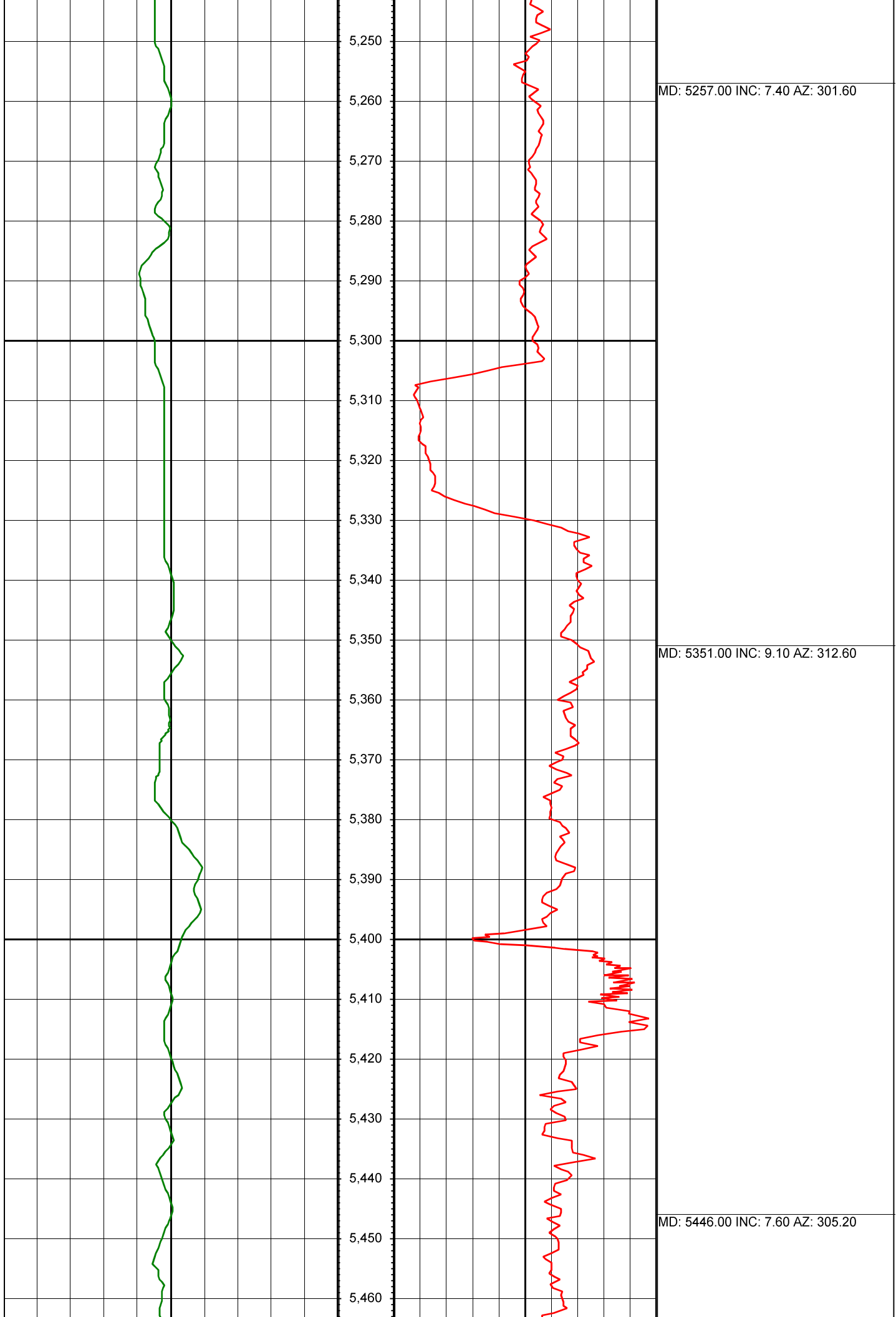
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost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

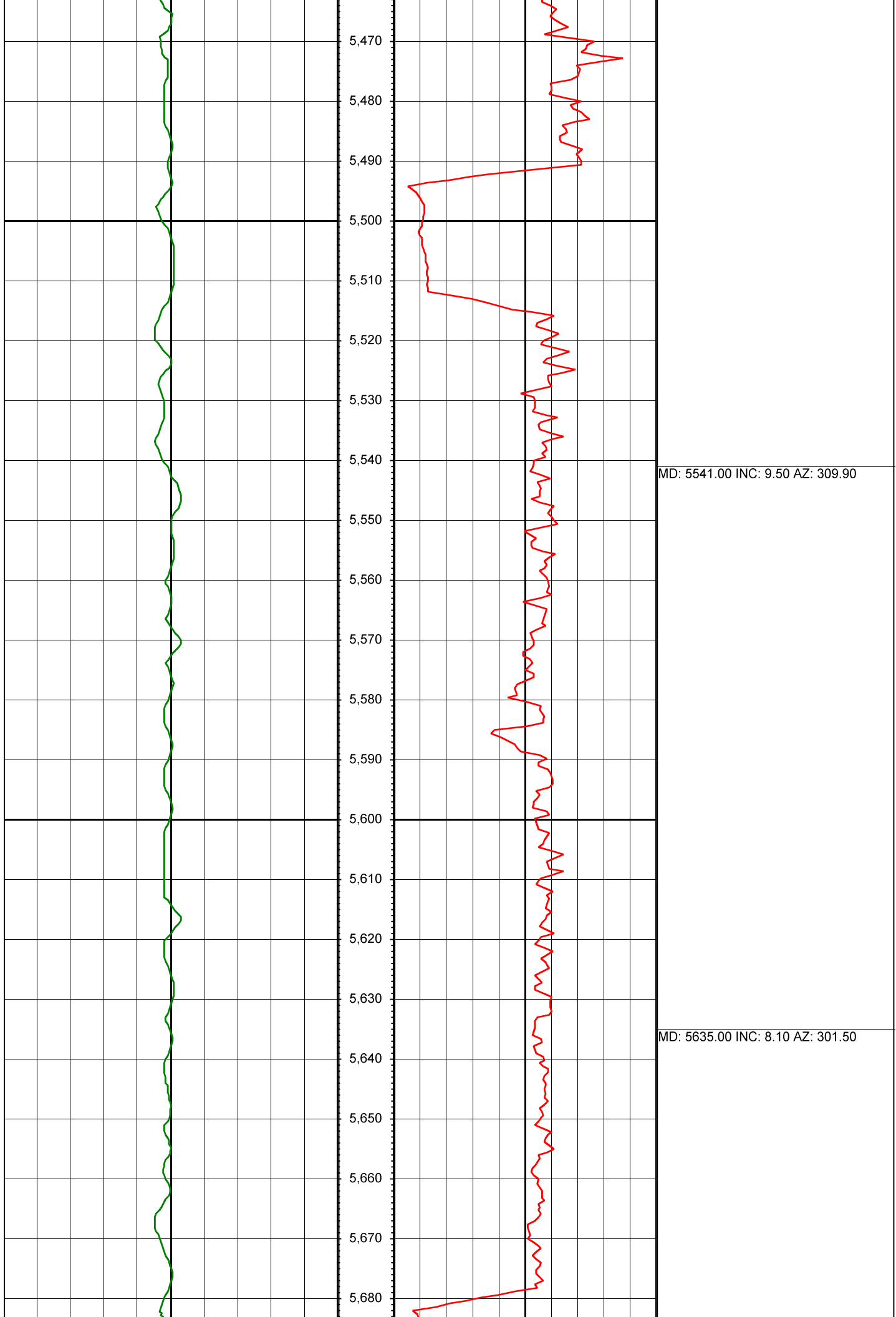
0.00 Gamma Ray (API) 150.00 MD 0.00 ROP (FT/HR) 600.00 Surveys (MD/INC/AZ)

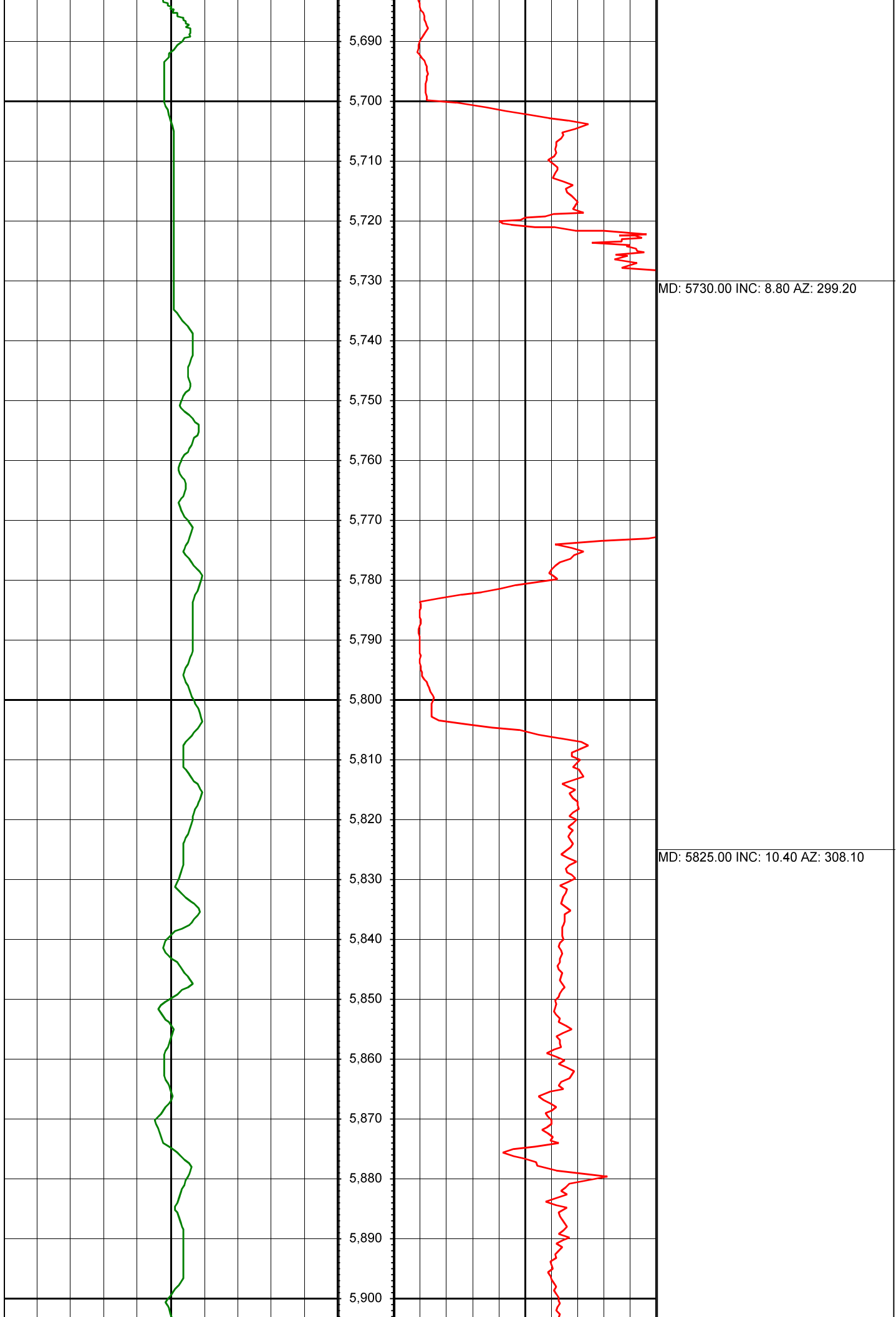
150.00 2 300.00 FT

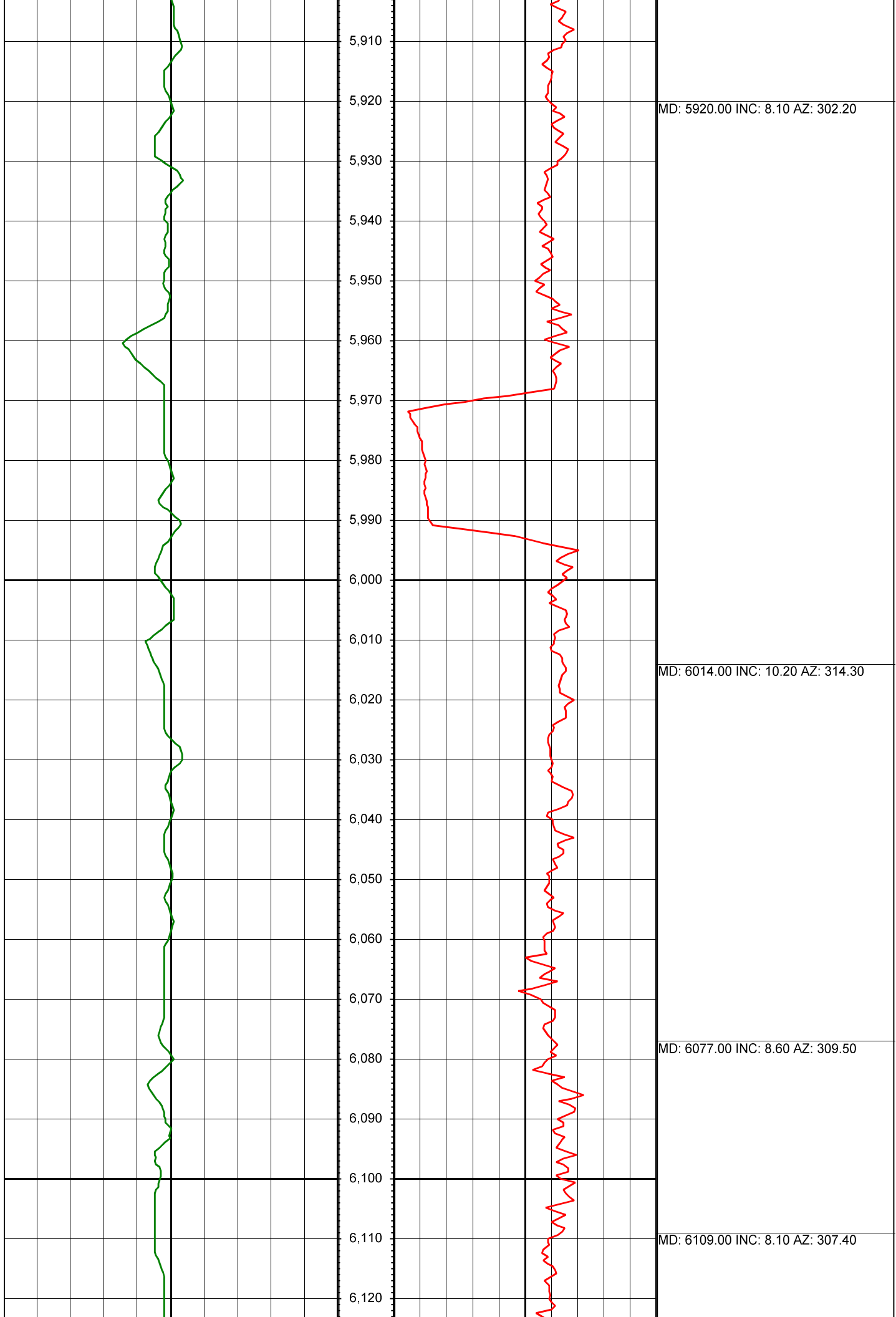


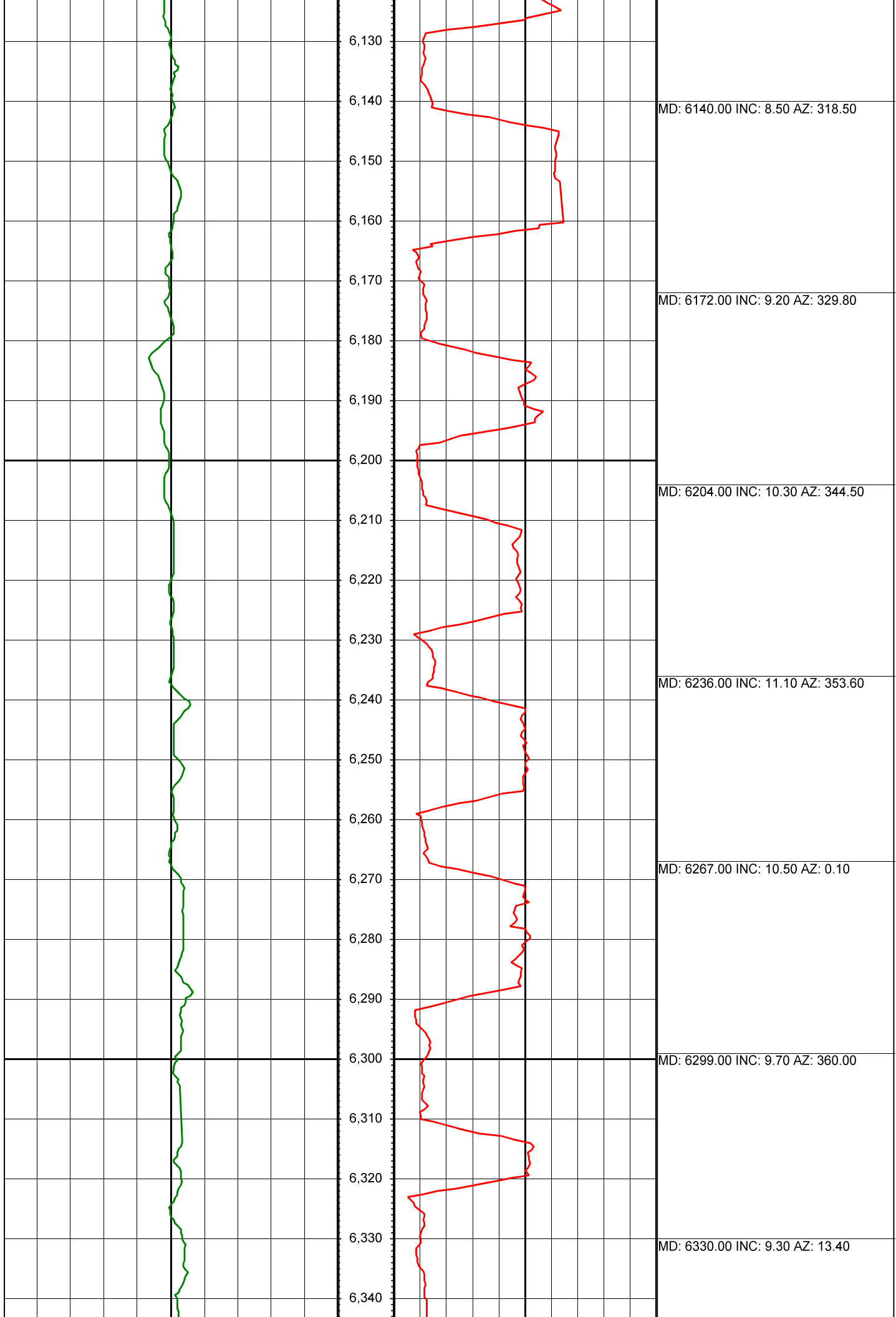


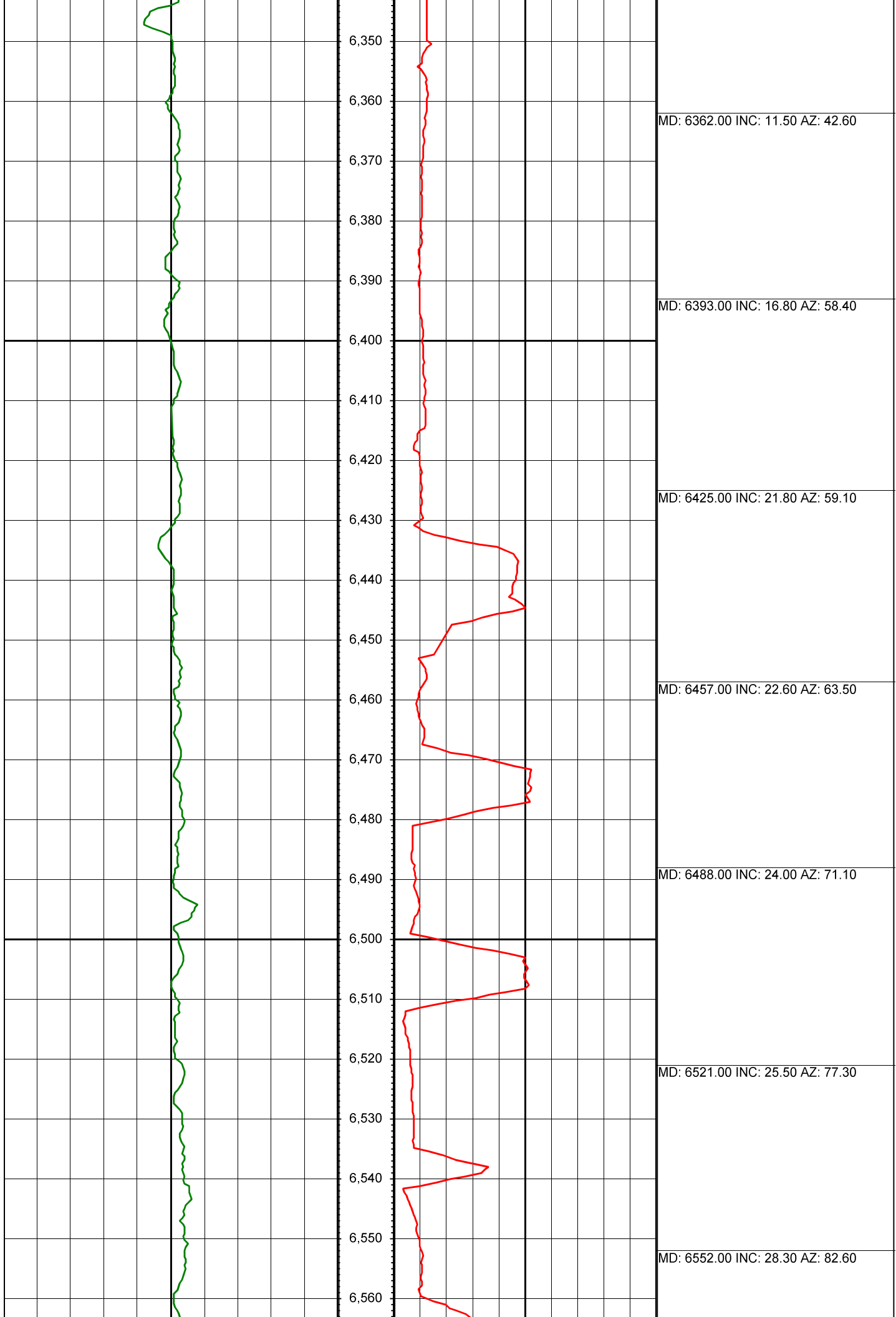


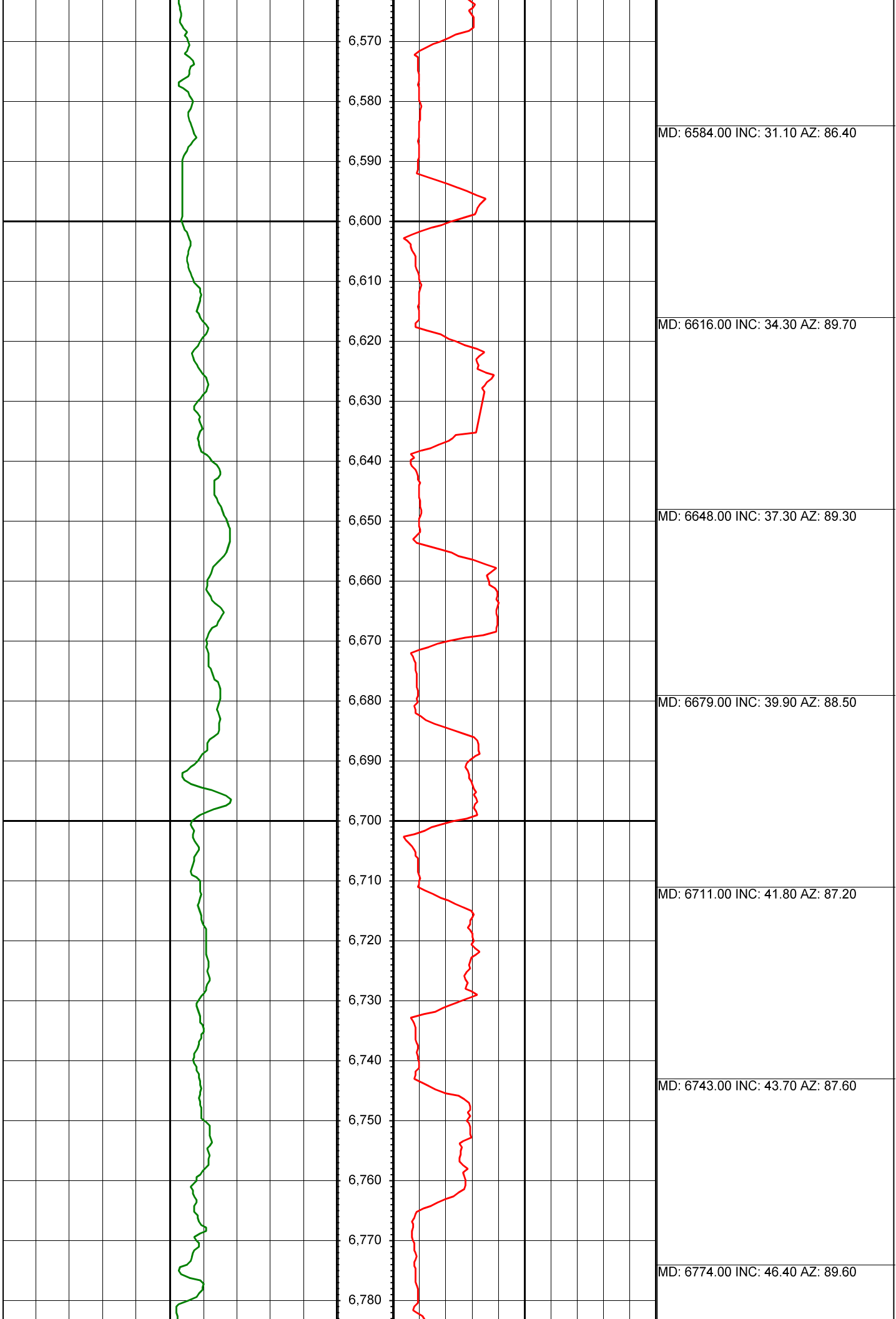


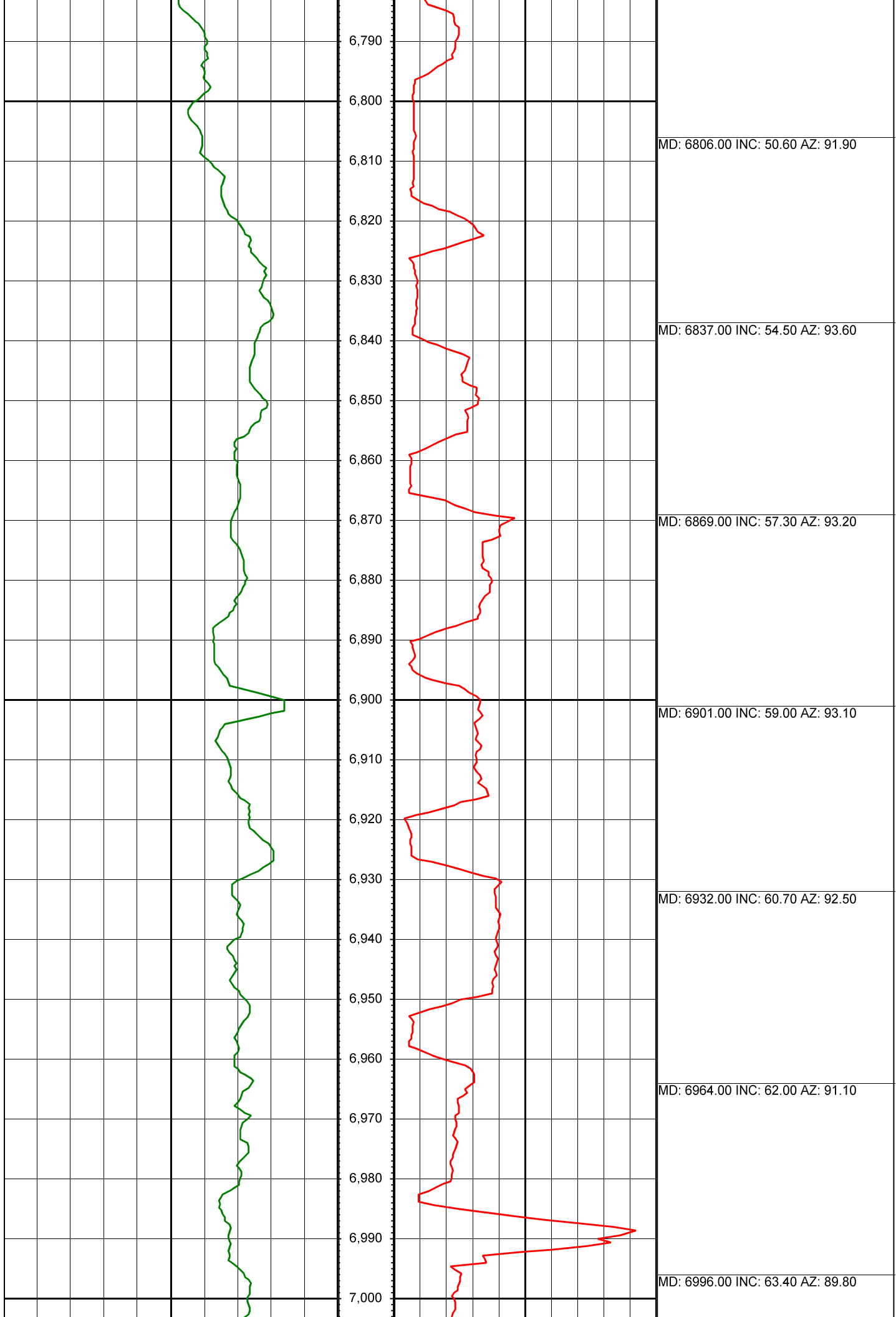


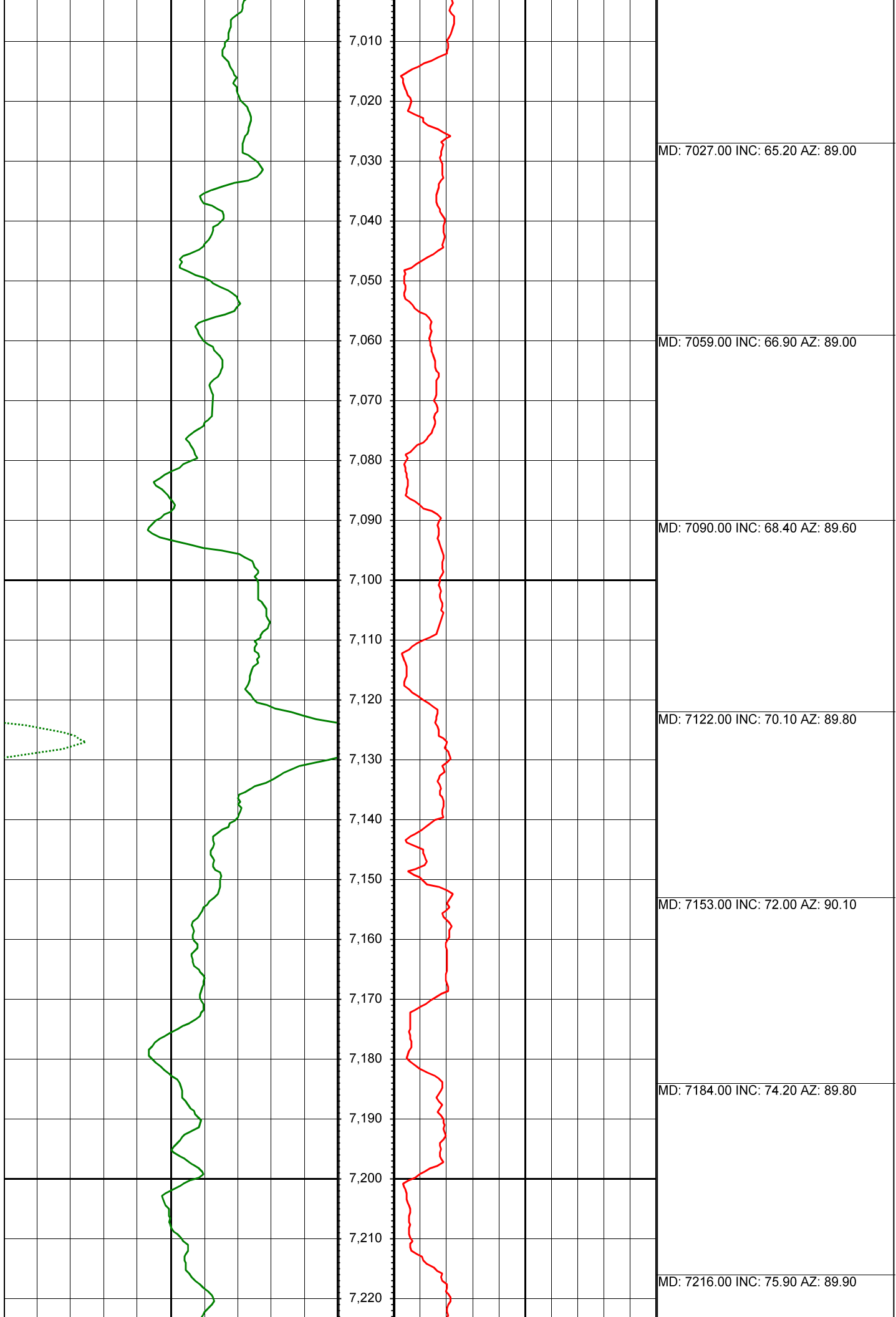


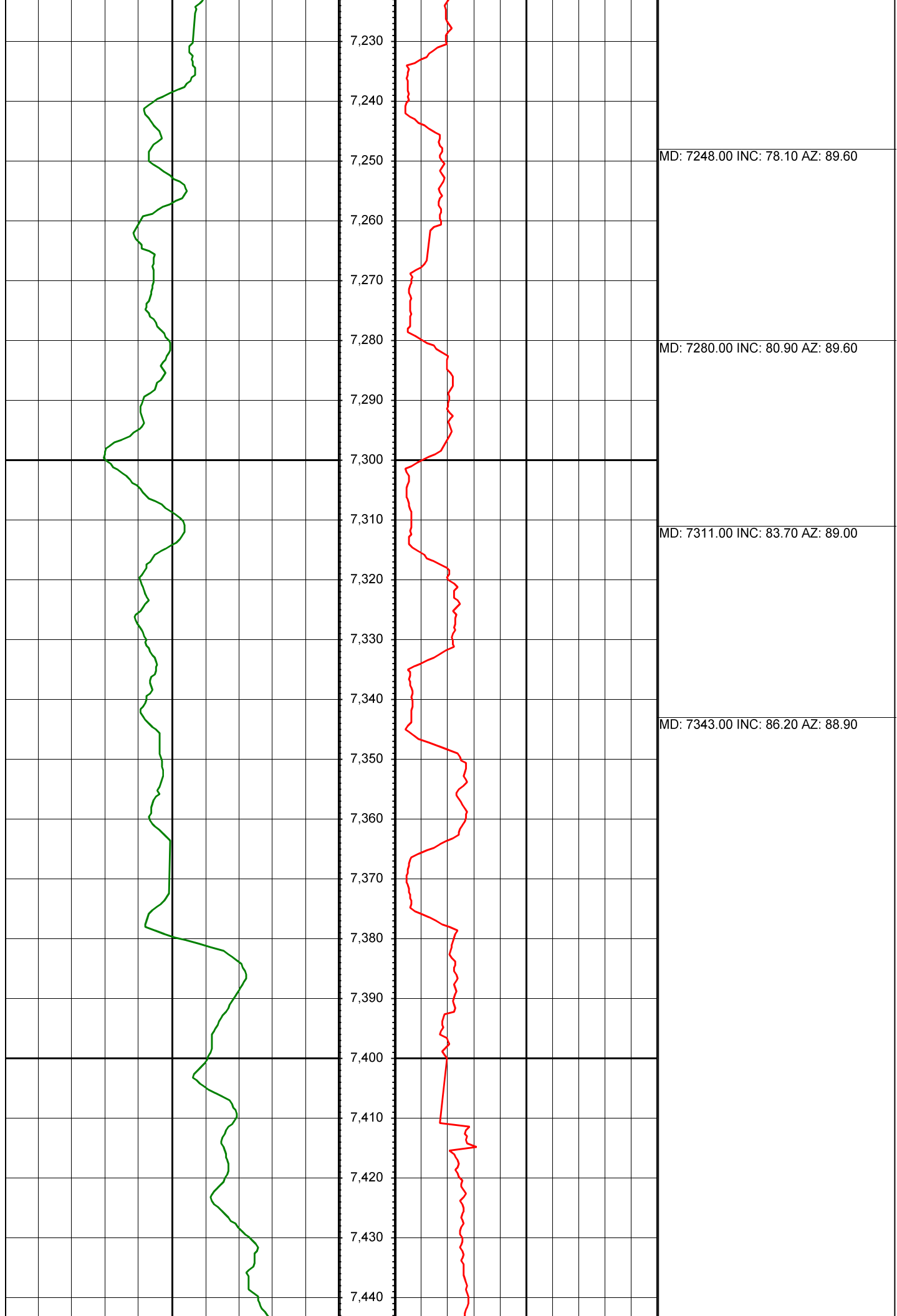


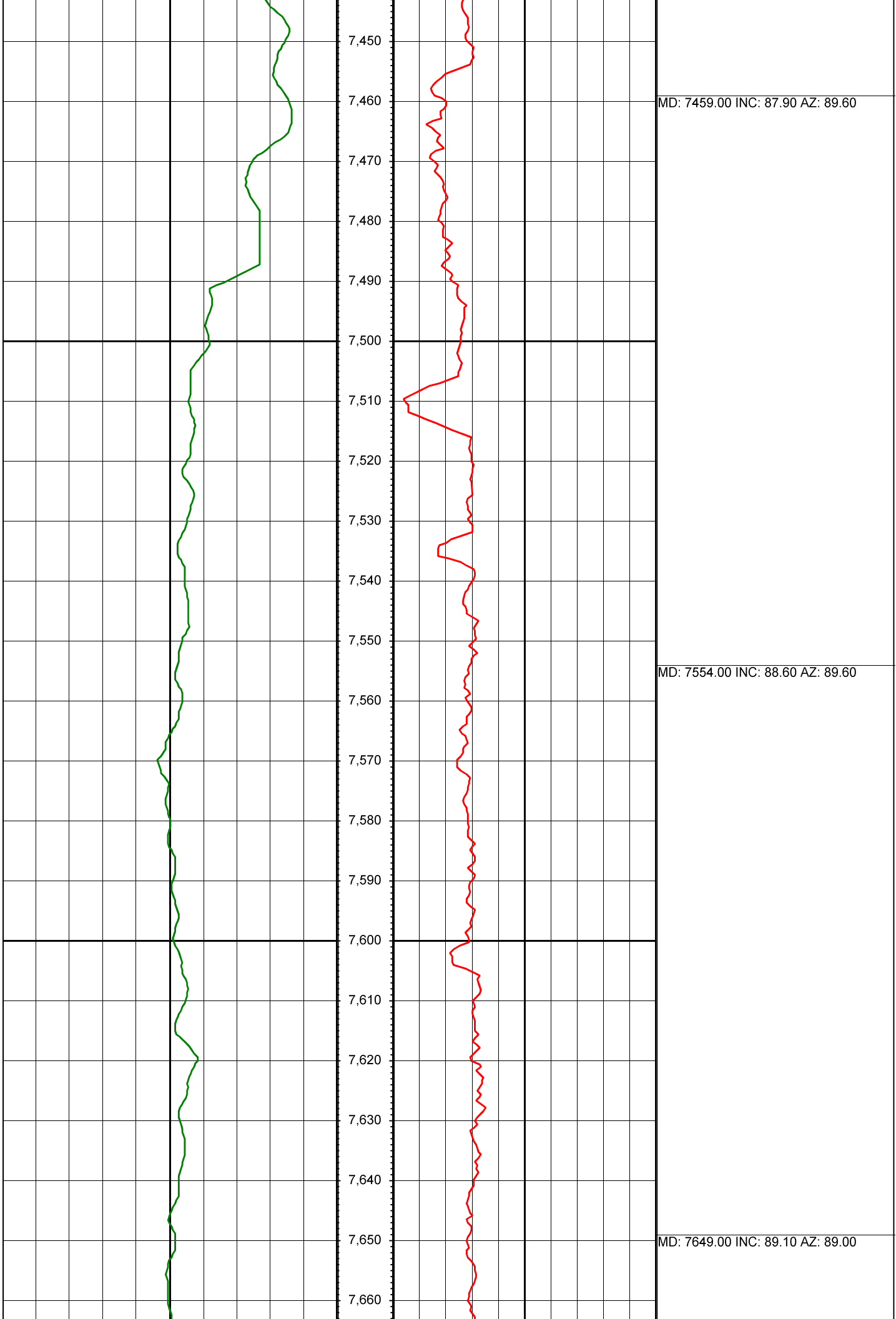


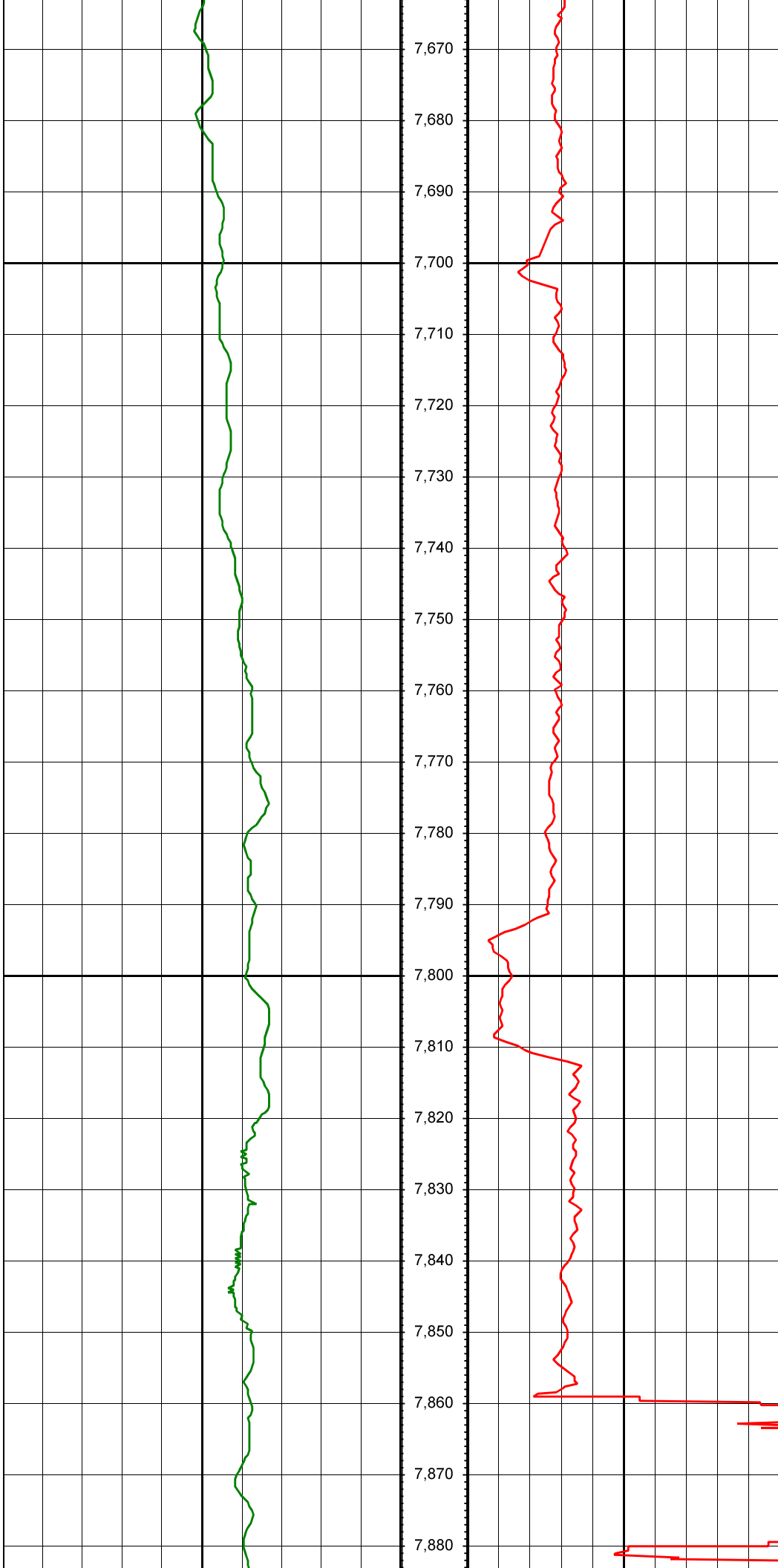












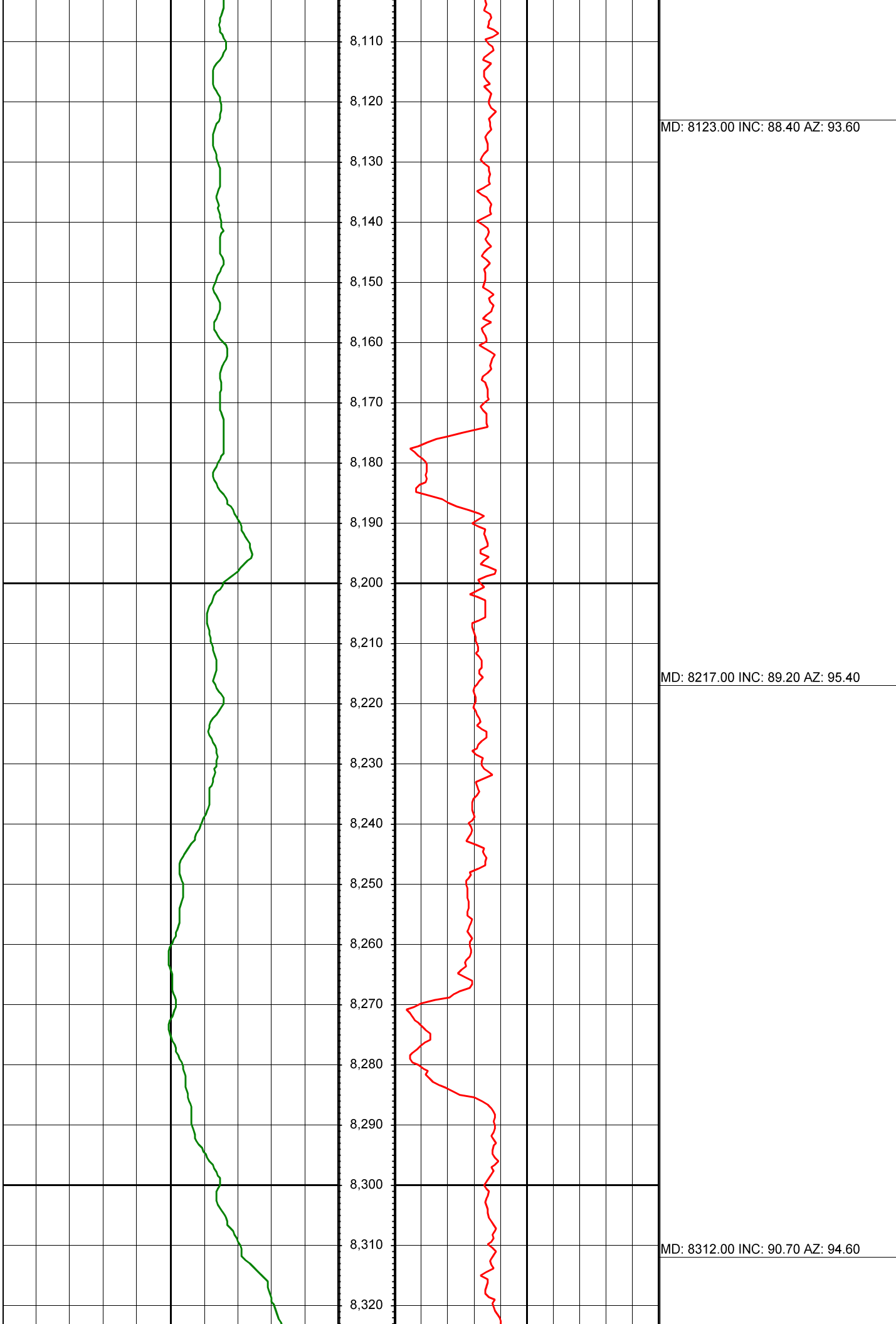
MD: 7743.00 INC: 89.30 AZ: 88.20

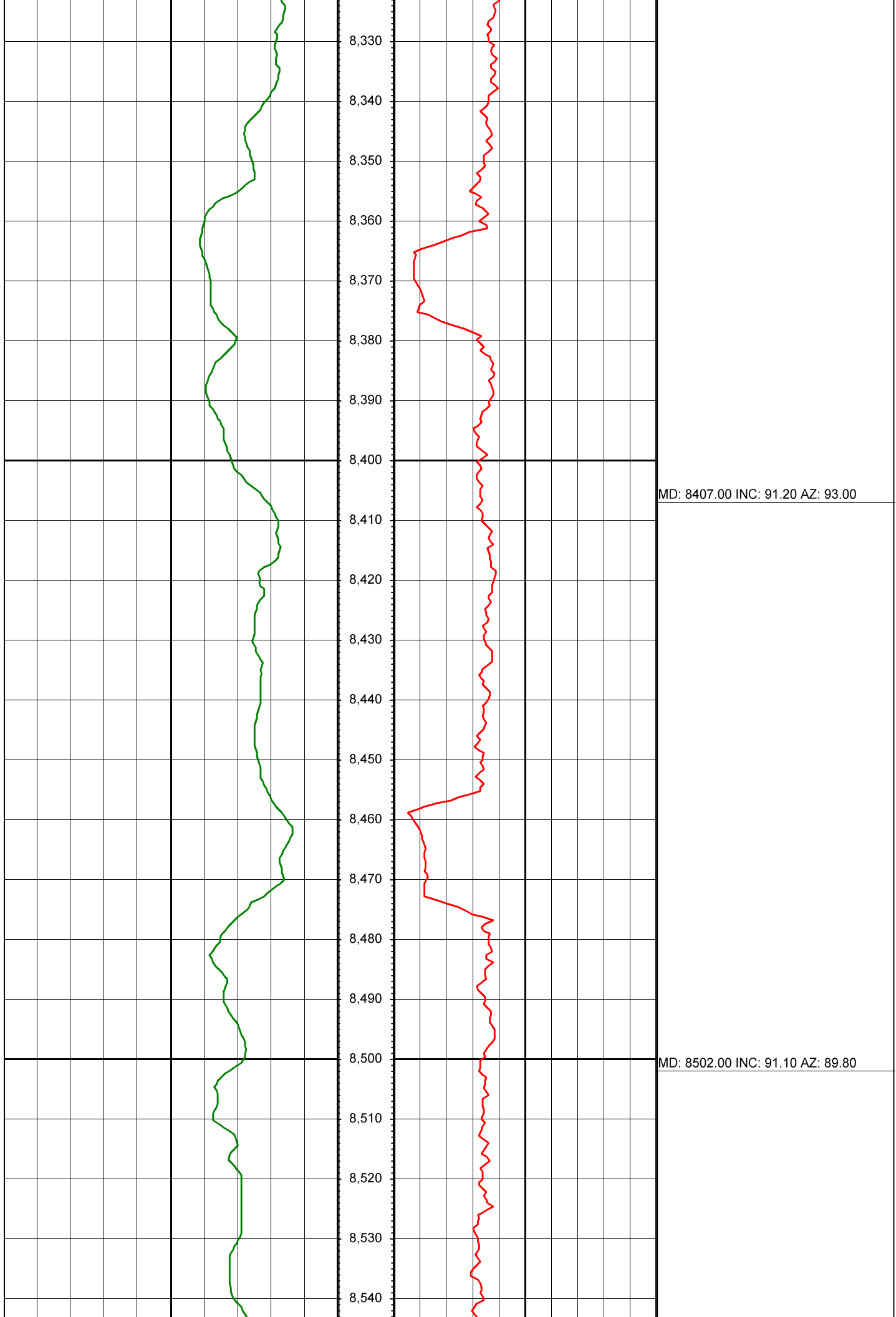
MD: 7839.00 INC: 88.40 AZ: 89.90

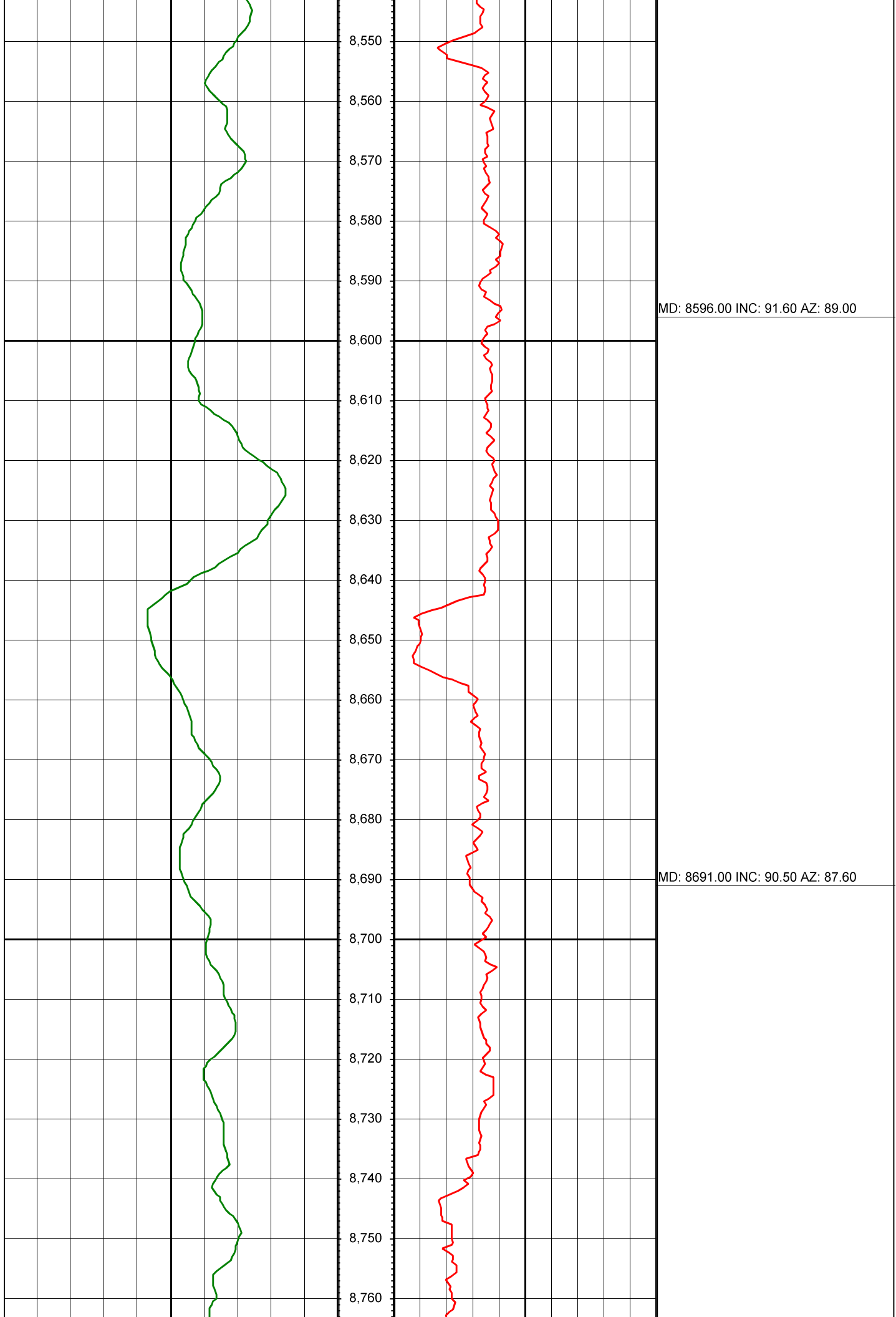


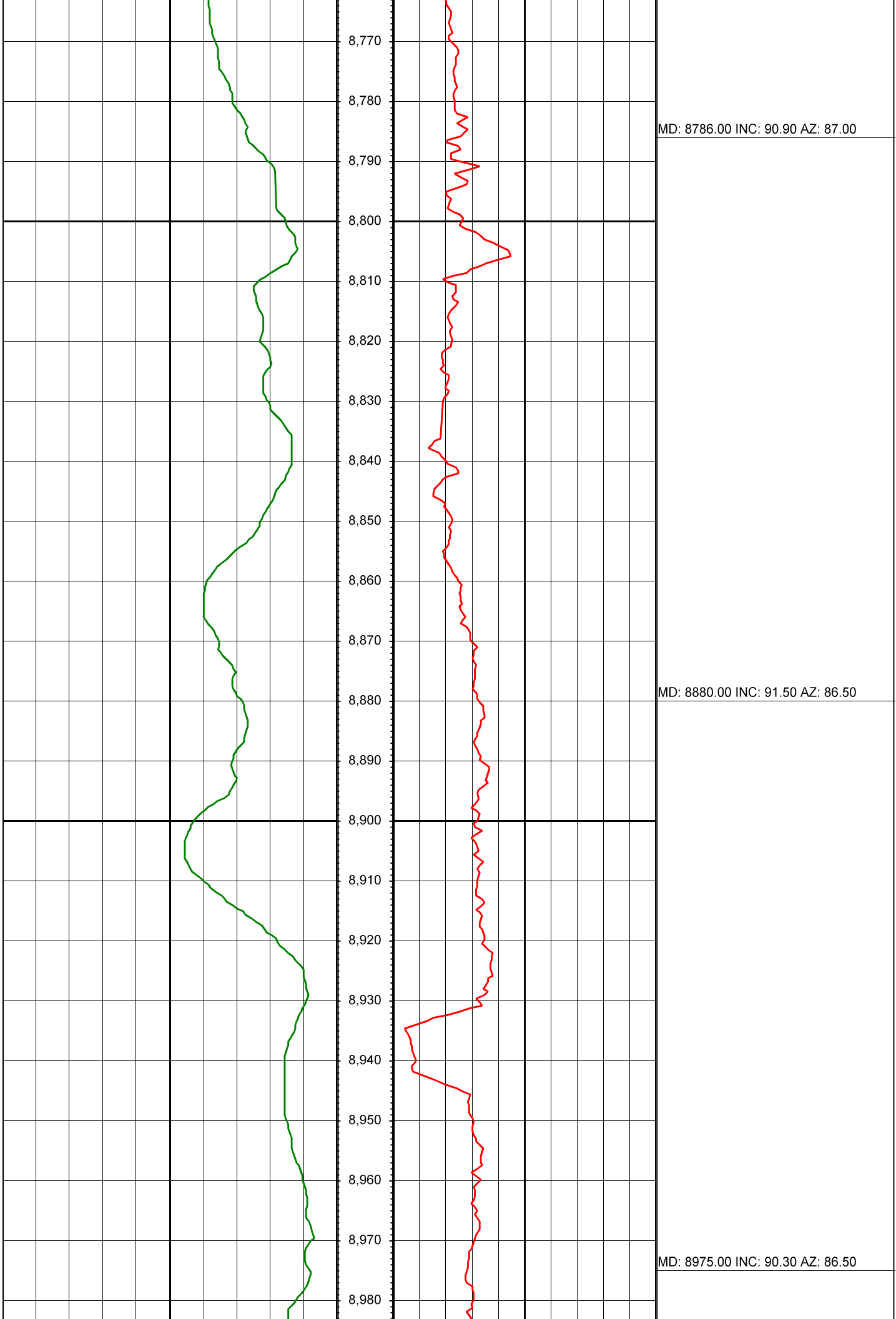
MD: 7934.00 INC: 87.90 AZ: 91.20

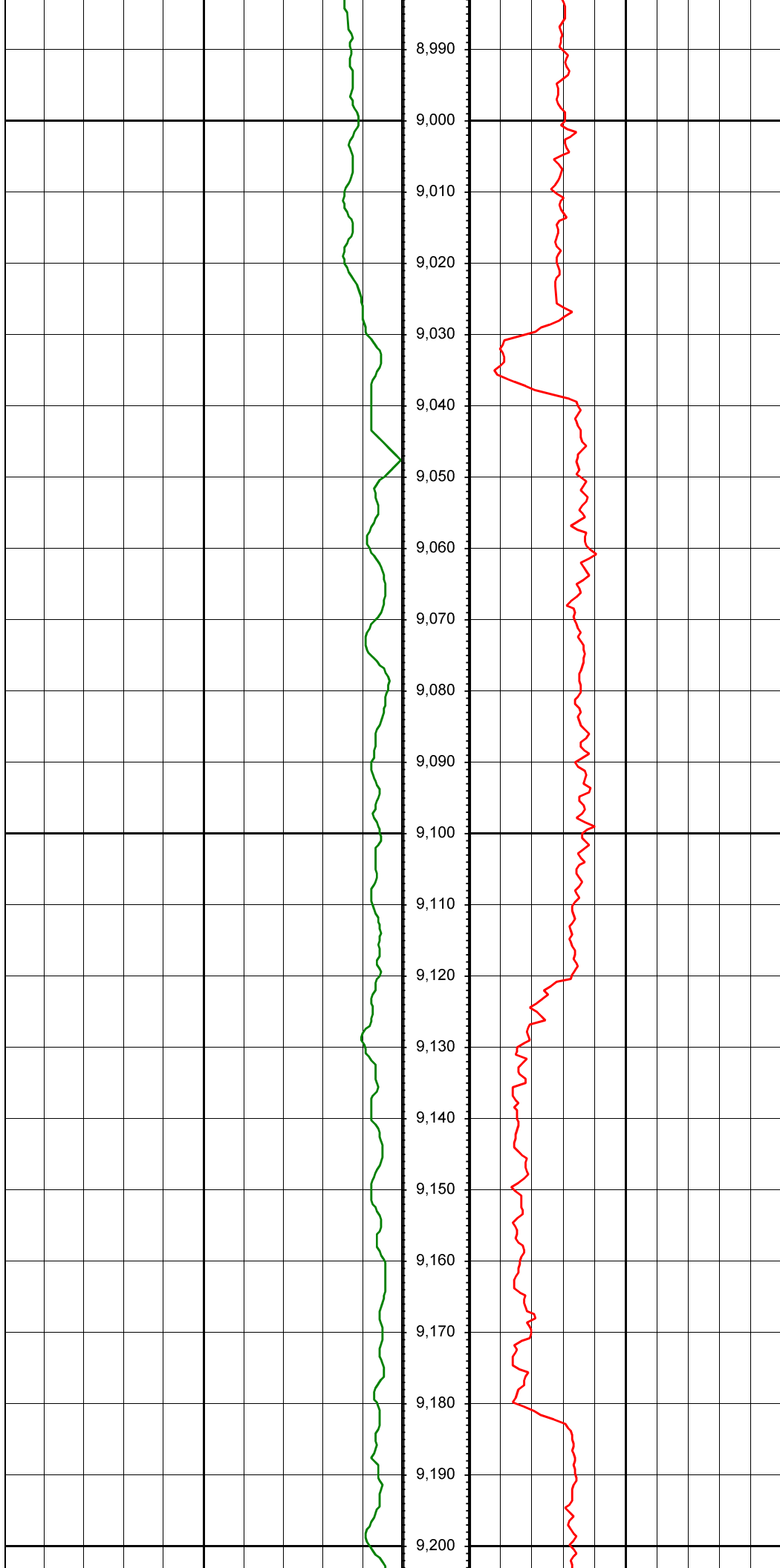
MD: 8028.00 INC: 89.60 AZ: 94.00











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9,000

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9,020

9,030

9,040

9,050

9,060

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9,080

9,090

9,100

9,110

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9,130

9,140

9,150

9,160

9,170

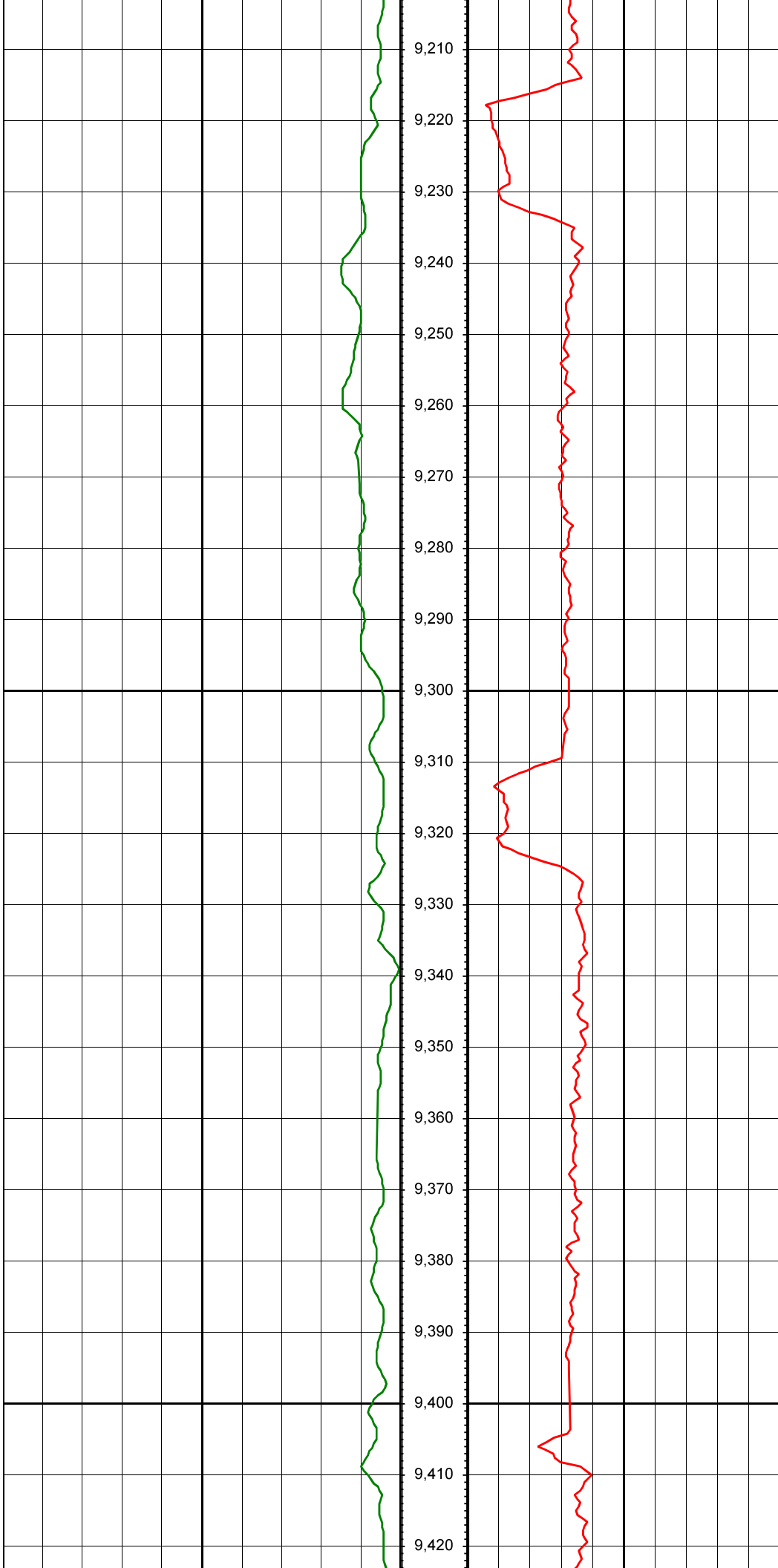
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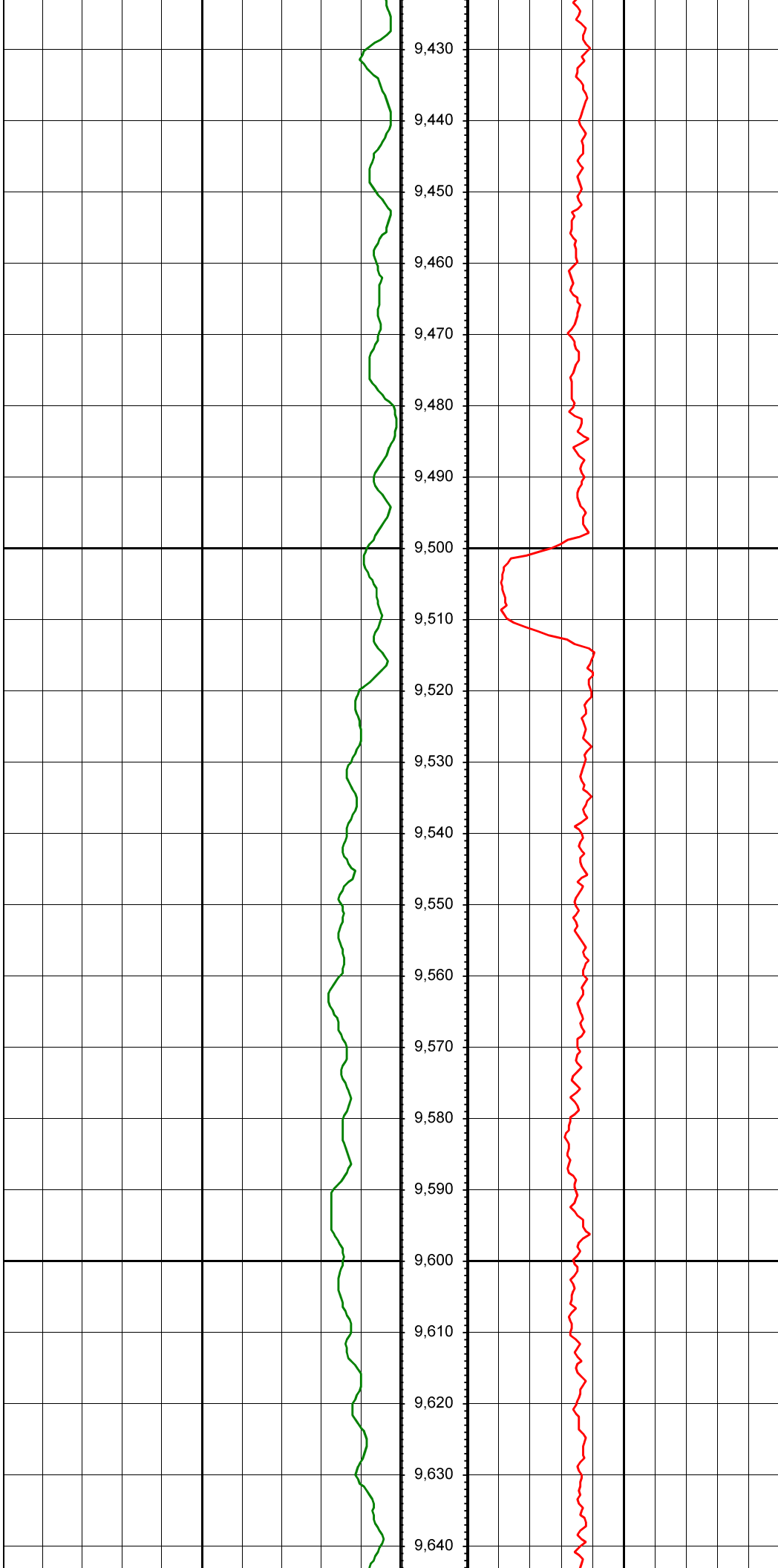
MD: 9070.00 INC: 89.70 AZ: 87.60

MD: 9164.00 INC: 88.70 AZ: 87.20



MD: 9259.00 INC: 89.40 AZ: 88.10

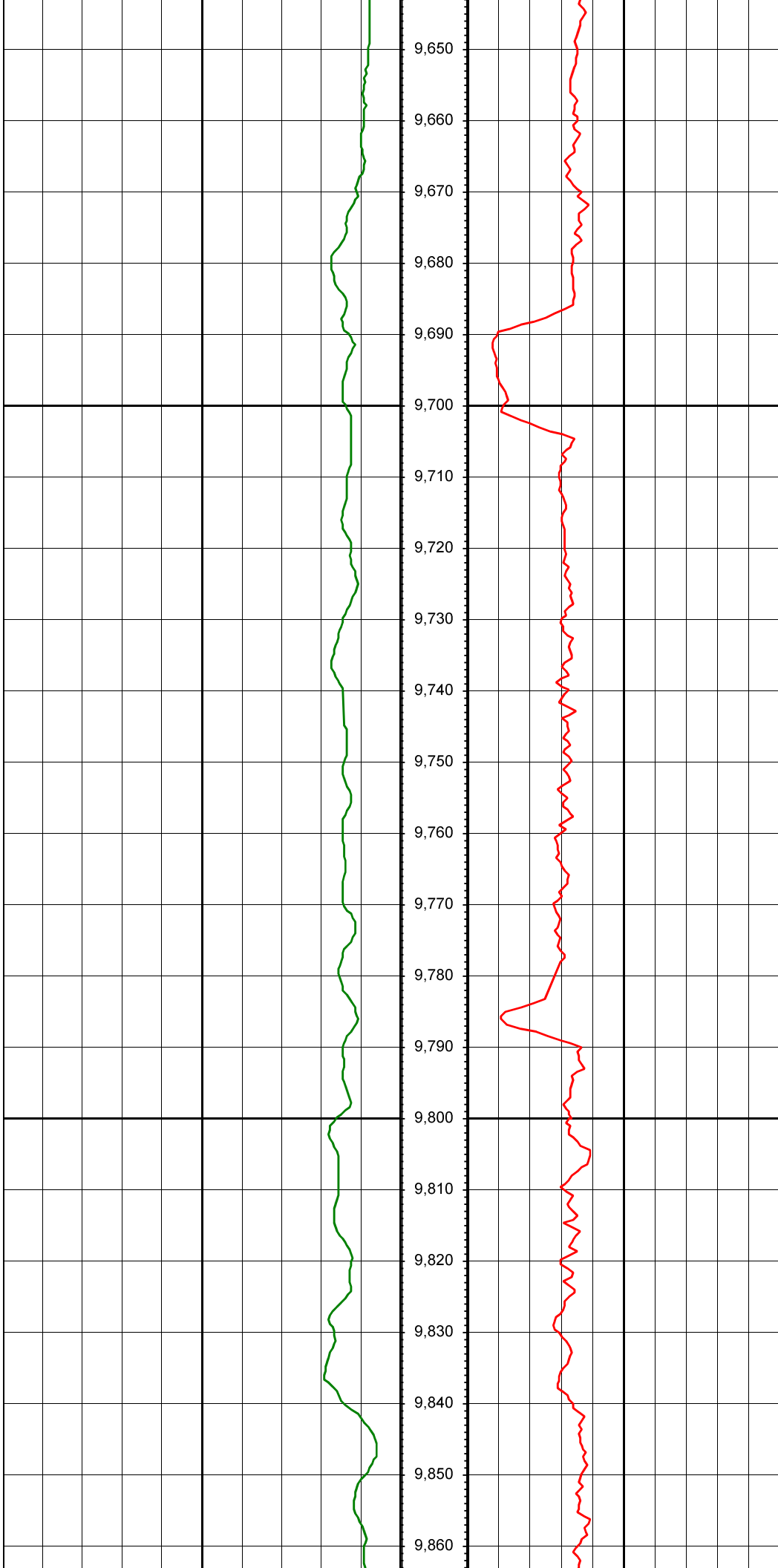
MD: 9353.00 INC: 89.20 AZ: 90.30



MD: 9448.00 INC: 89.20 AZ: 91.50

MD: 9543.00 INC: 89.80 AZ: 91.50

MD: 9638.00 INC: 88.70 AZ: 90.00



9,650

9,660

9,670

9,680

9,690

9,700

9,710

9,720

9,730

9,740

9,750

9,760

9,770

9,780

9,790

9,800

9,810

9,820

9,830

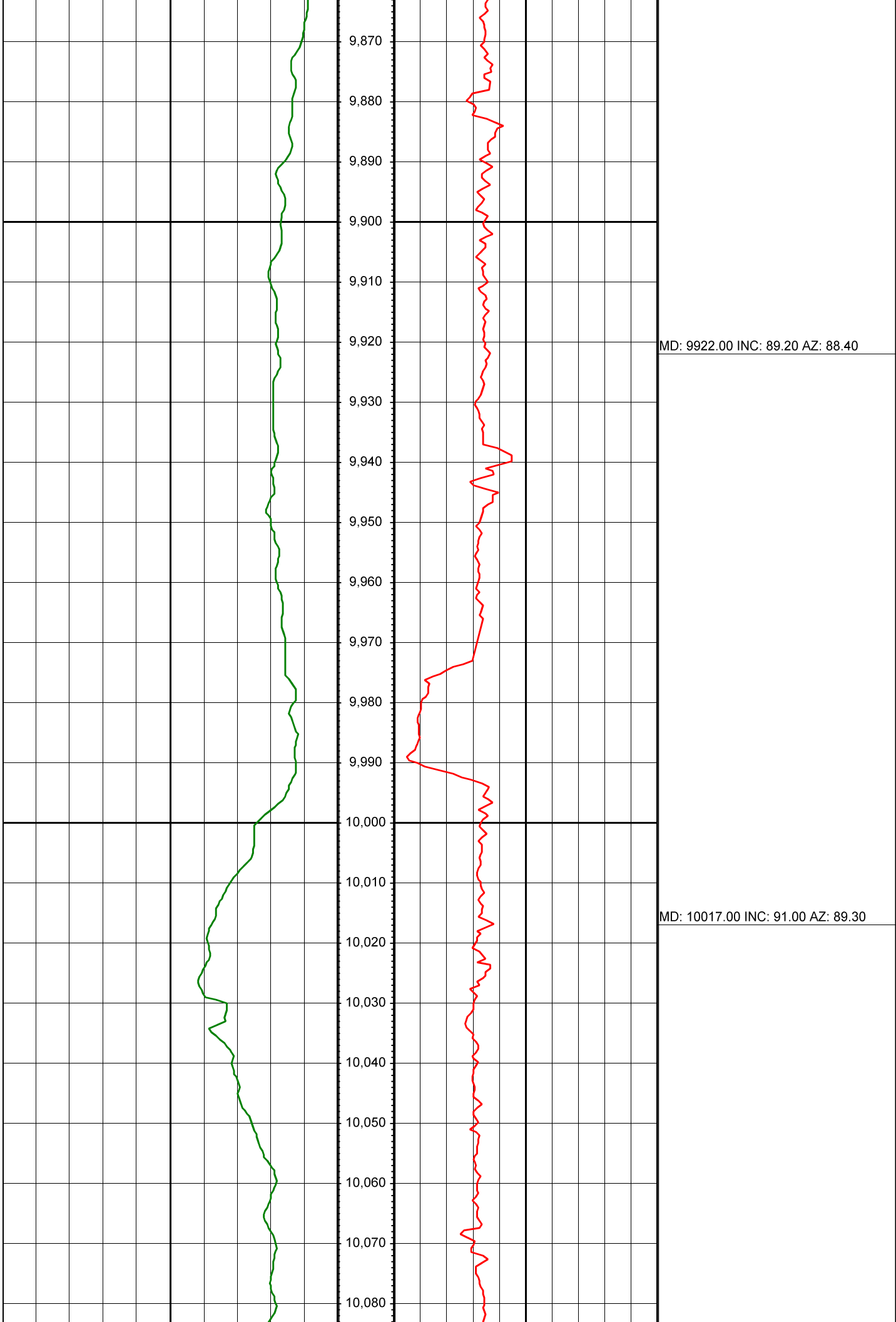
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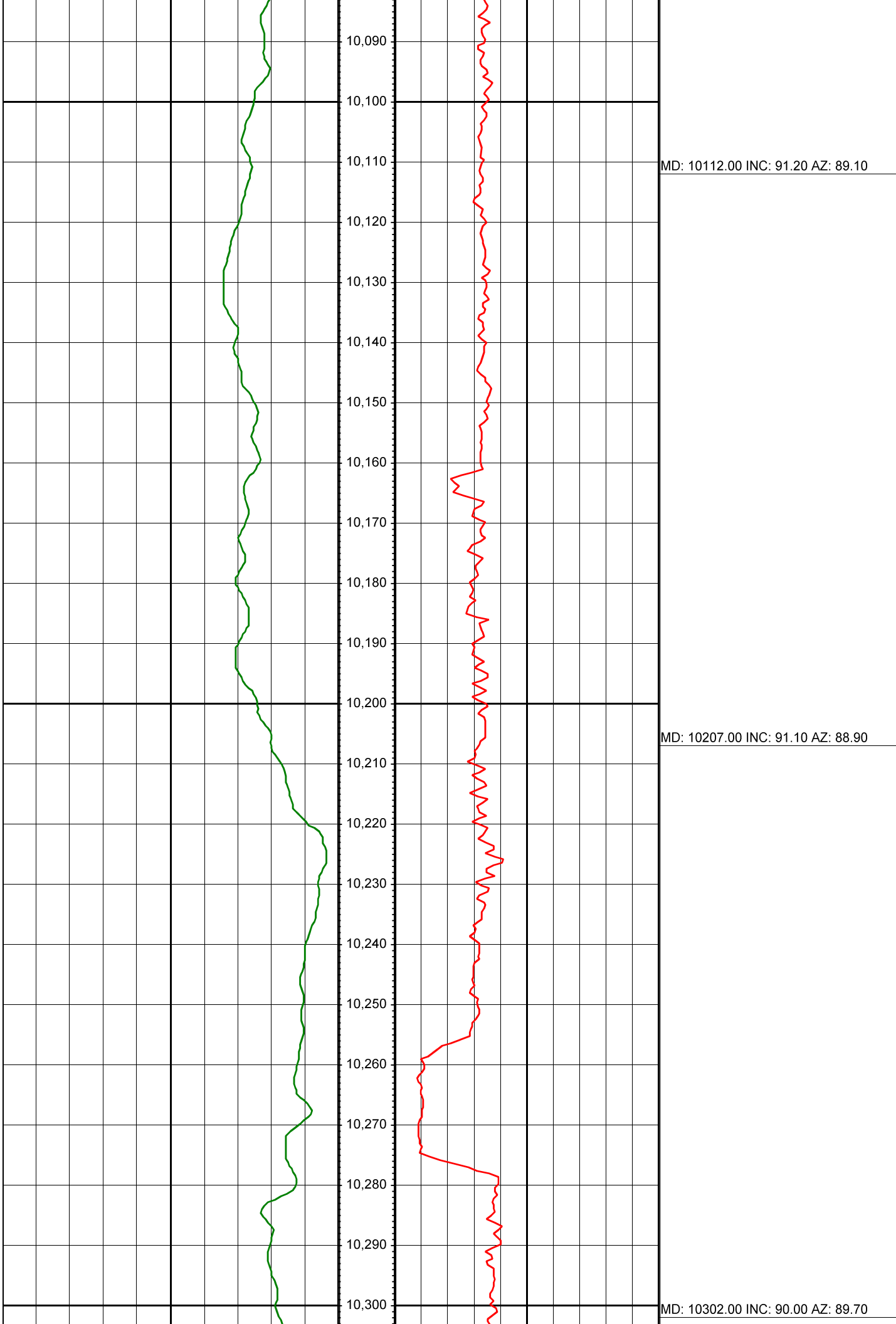
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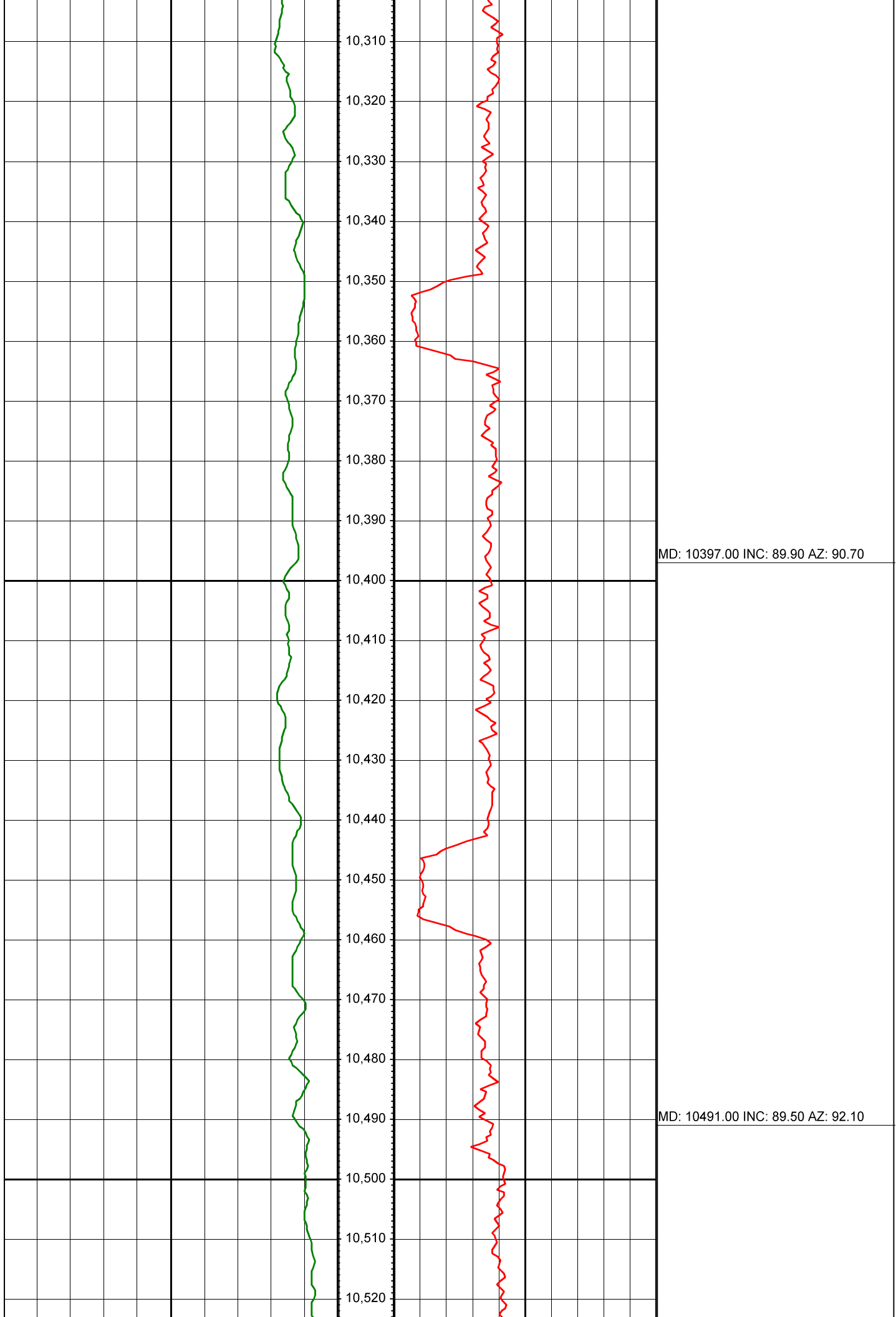
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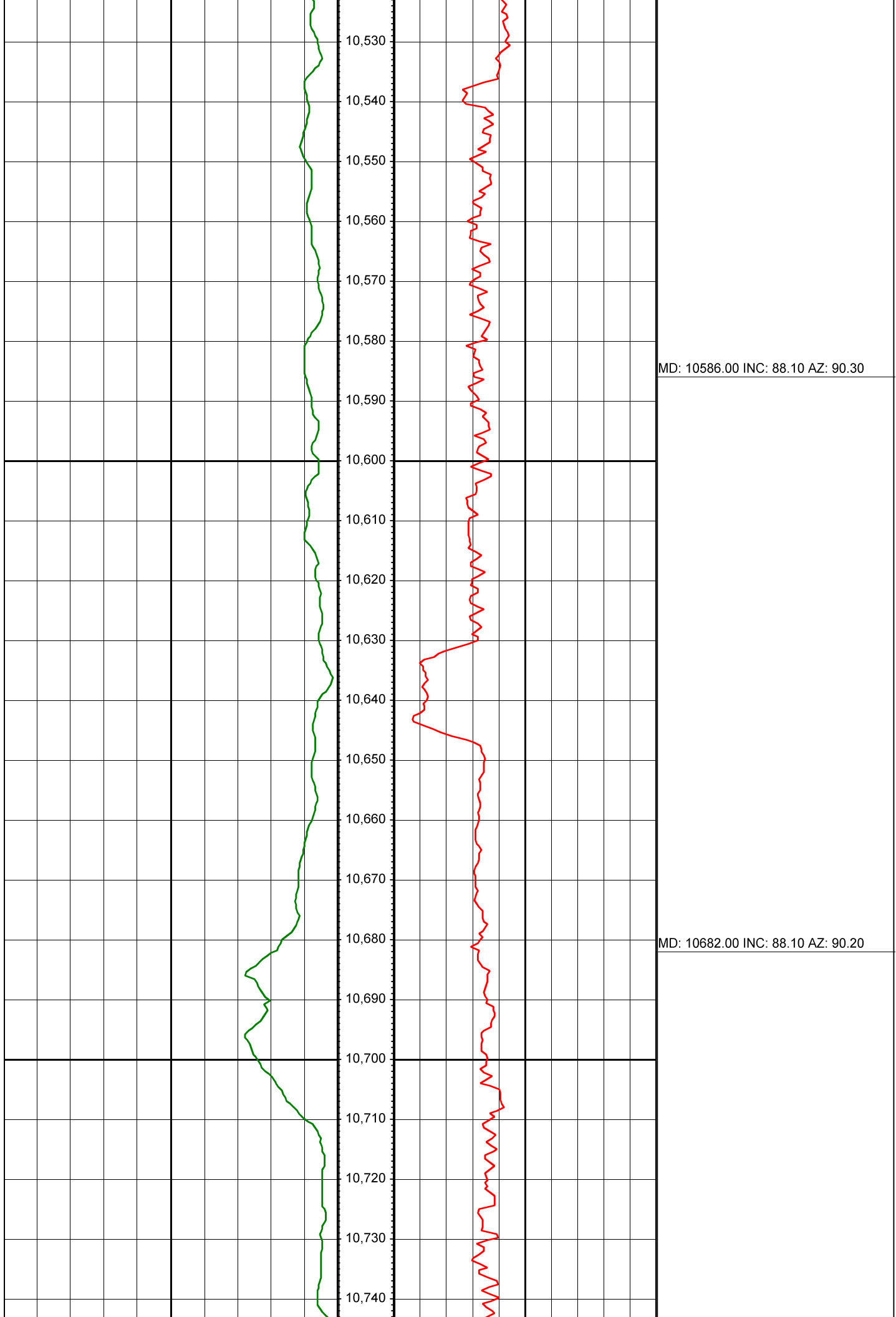
MD: 9733.00 INC: 90.30 AZ: 89.70

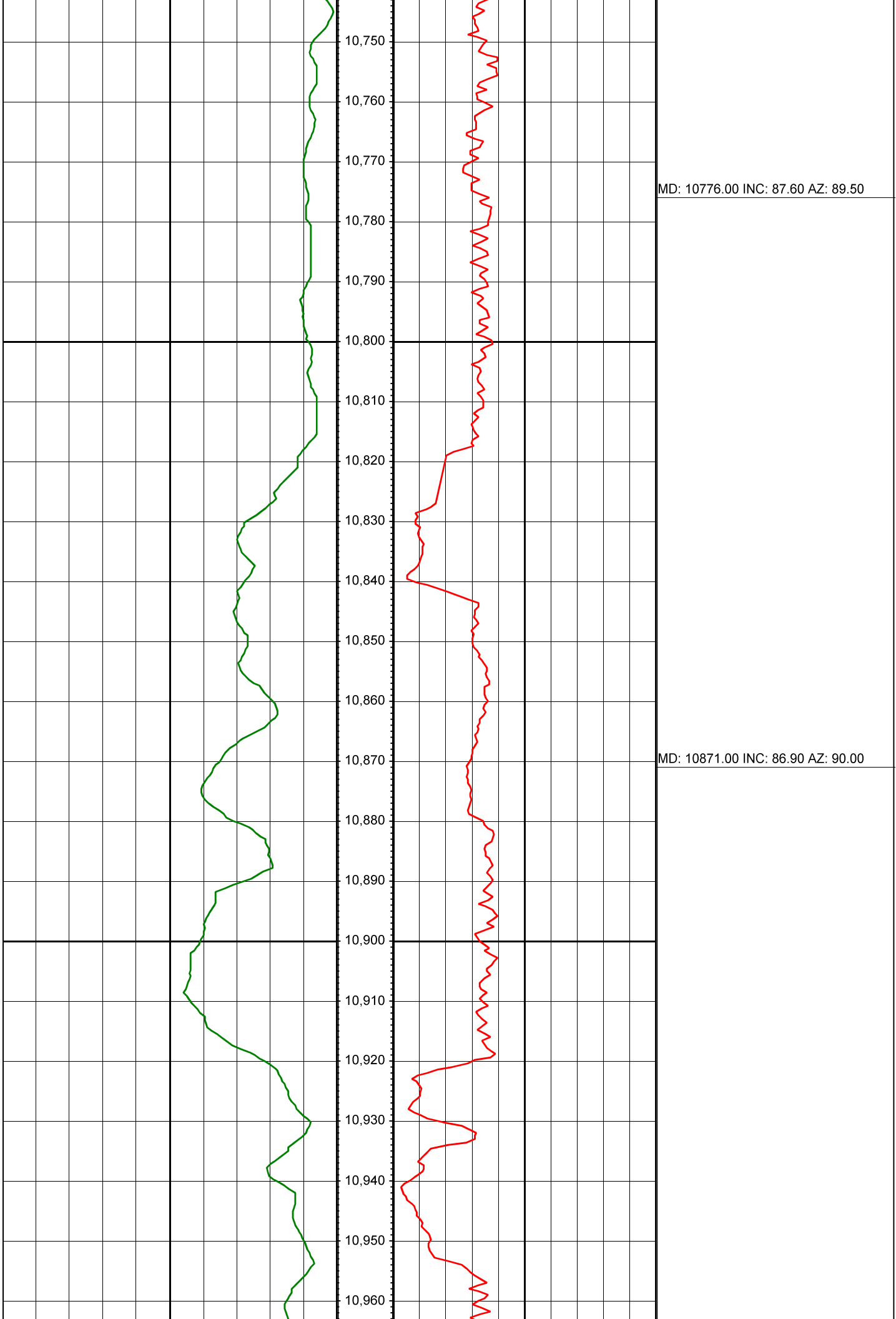
MD: 9828.00 INC: 90.40 AZ: 89.60

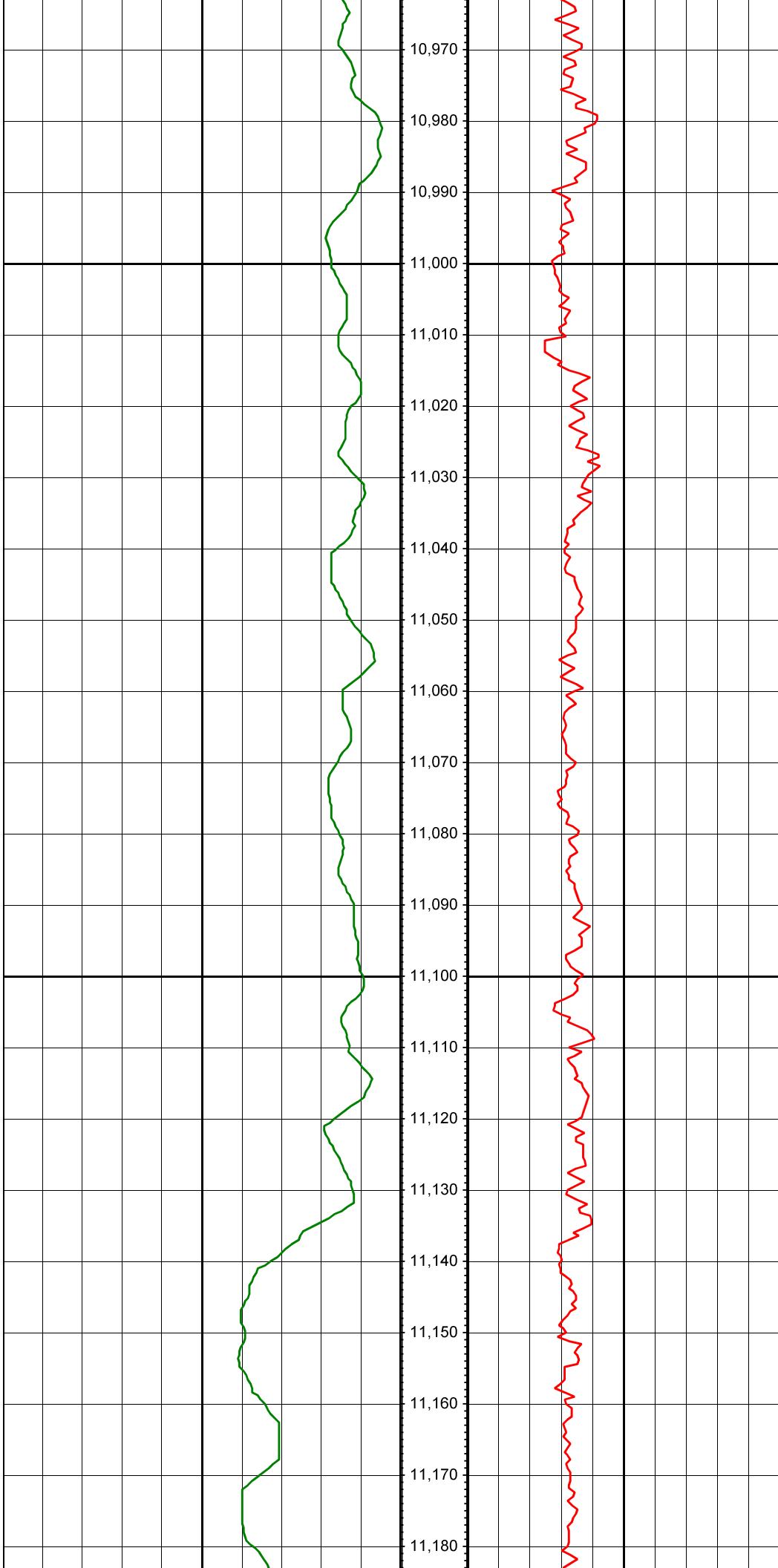












MD: 10966.00 INC: 87.70 AZ: 90.80

MD: 11061.00 INC: 87.20 AZ: 90.30

MD: 11155.00 INC: 87.10 AZ: 90.10

