



QES Directional Drilling

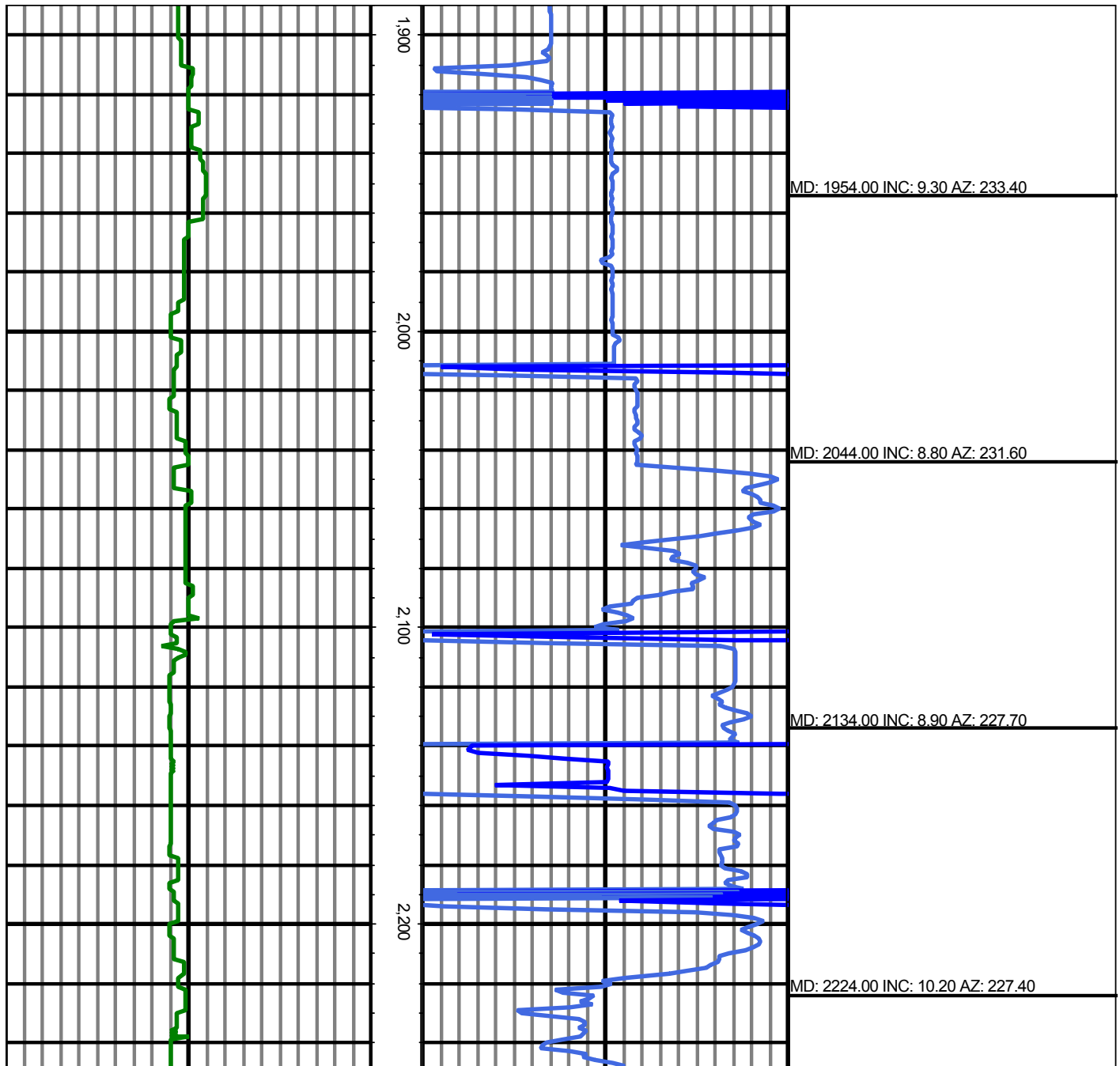
**Ebert 11N**  
**Scale 2":100' - MD**  
**5/30/2017 11:45 AM**

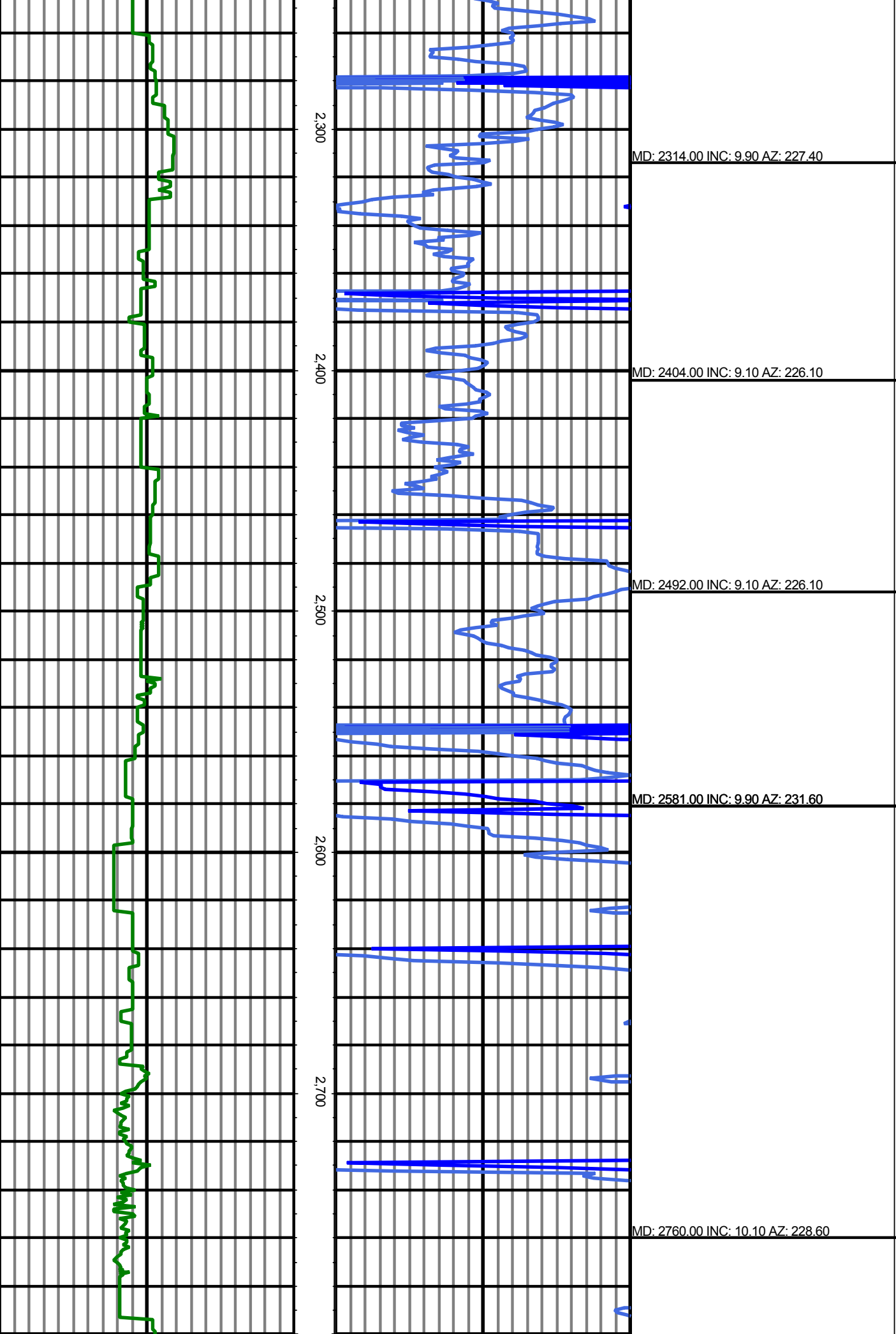
**Oper. Company:** PDC Energy  
**Well:** Ebert 11N  
**Field:** Wattenberg  
**Rig:** Ensign 160  
**Well ID:** 051234432600  
**Job Number:** RM-170469

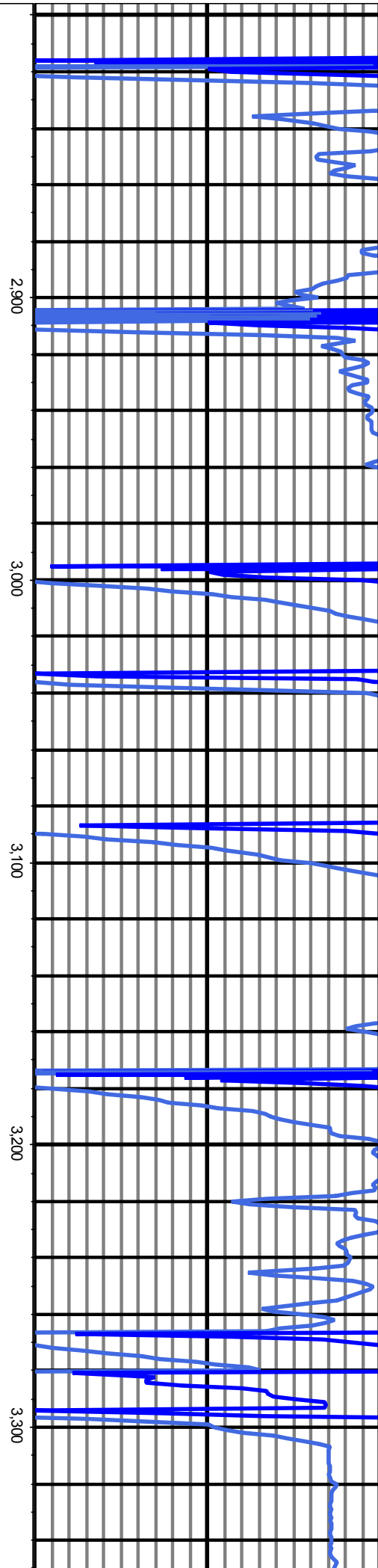
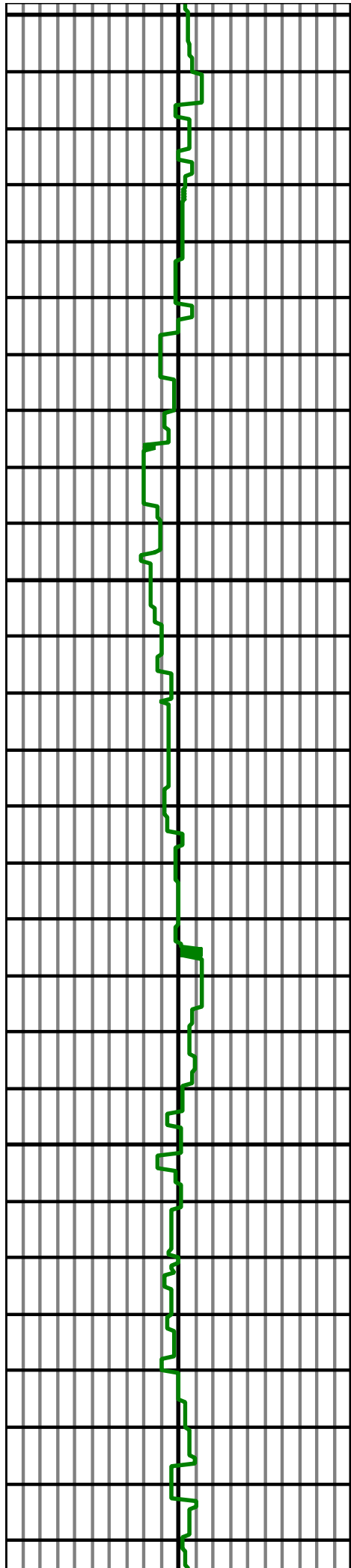
**State:** Colorado  
**County:** Weld  
**Country:** United States America  
**Location:** Ebert  
**Start Date:**  
**End Date:**

*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.*

0.00 150.00 300.00 MD 0.00 300.00 600.00 ROP(FT/HR) 2 Surveys (MD/INC/AZ)







MD: 2849.00 INC: 9.90 AZ: 228.30

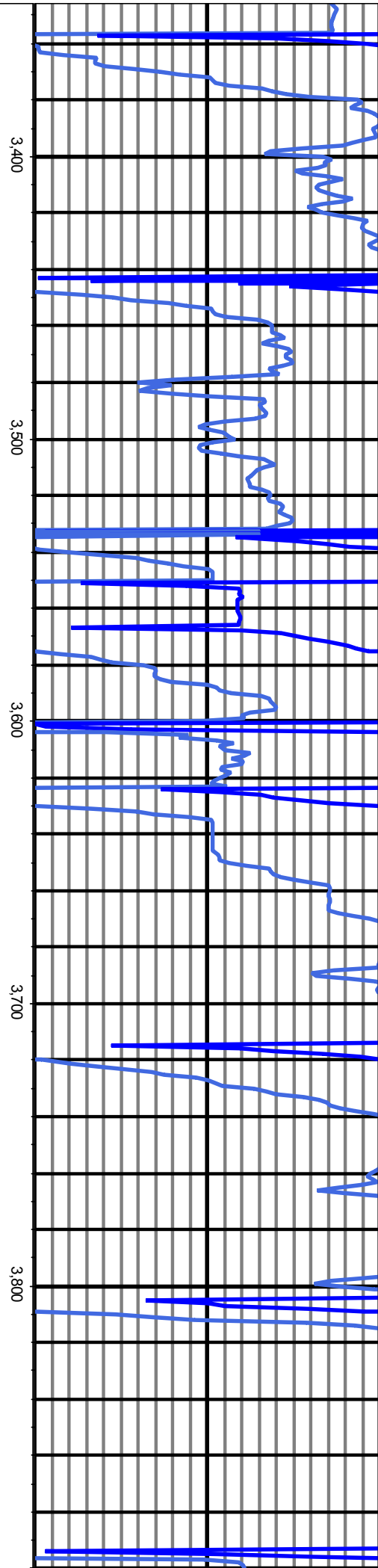
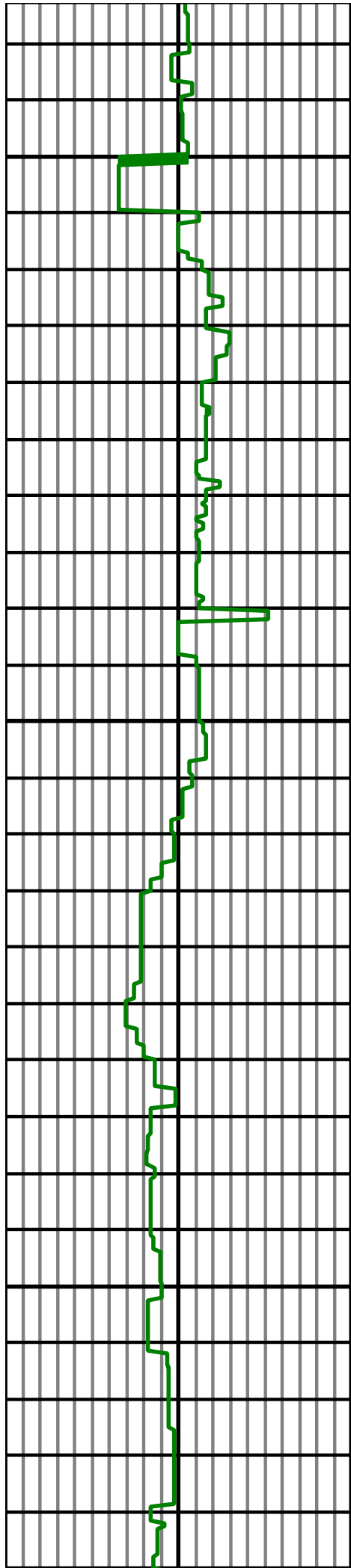
MD: 2939.00 INC: 9.70 AZ: 228.40

MD: 3029.00 INC: 9.50 AZ: 227.70

MD: 3119.00 INC: 8.70 AZ: 226.10

MD: 3209.00 INC: 7.80 AZ: 222.50

MD: 3298.00 INC: 9.60 AZ: 229.30



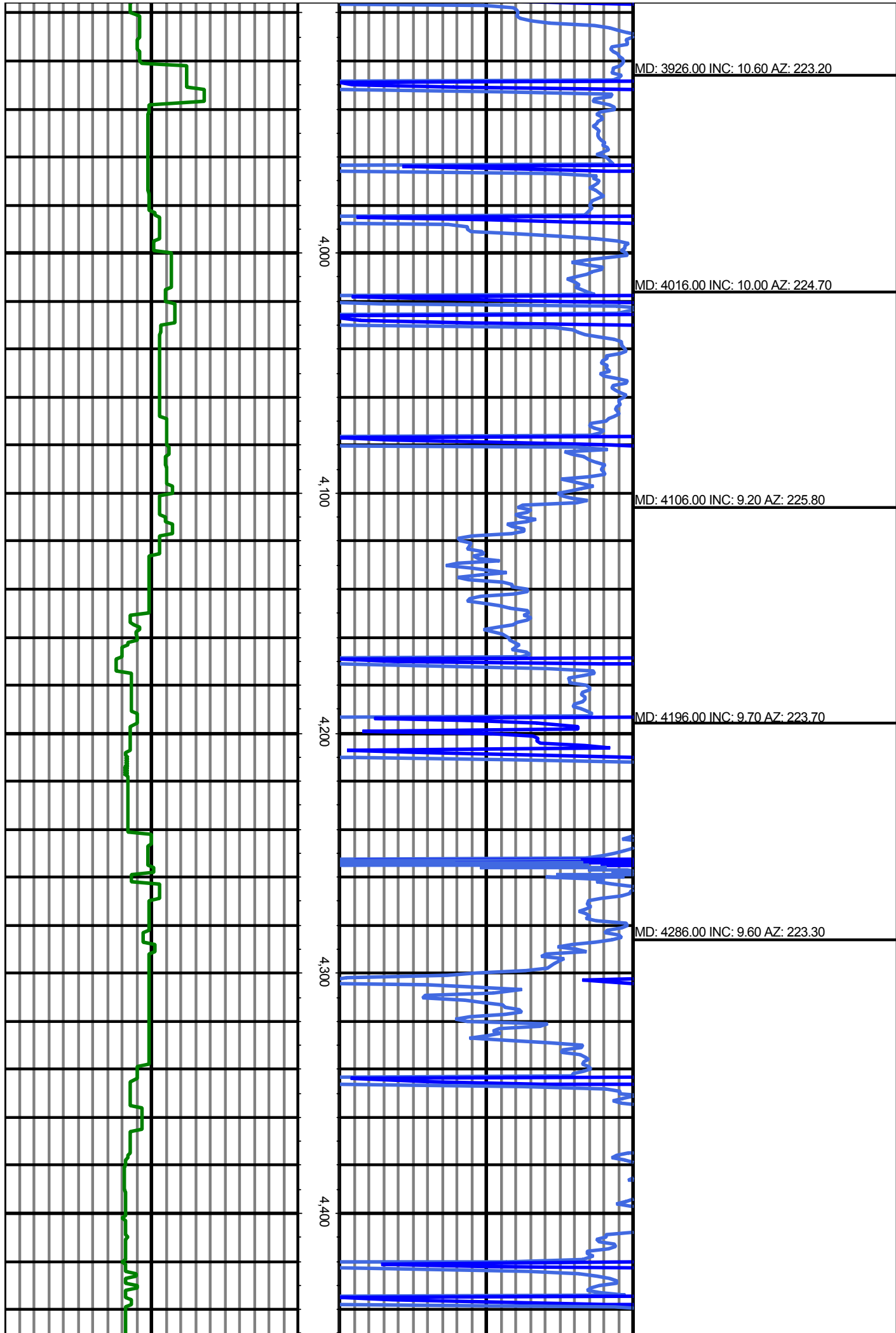
MD: 3477.00 INC: 8.70 AZ: 224.00

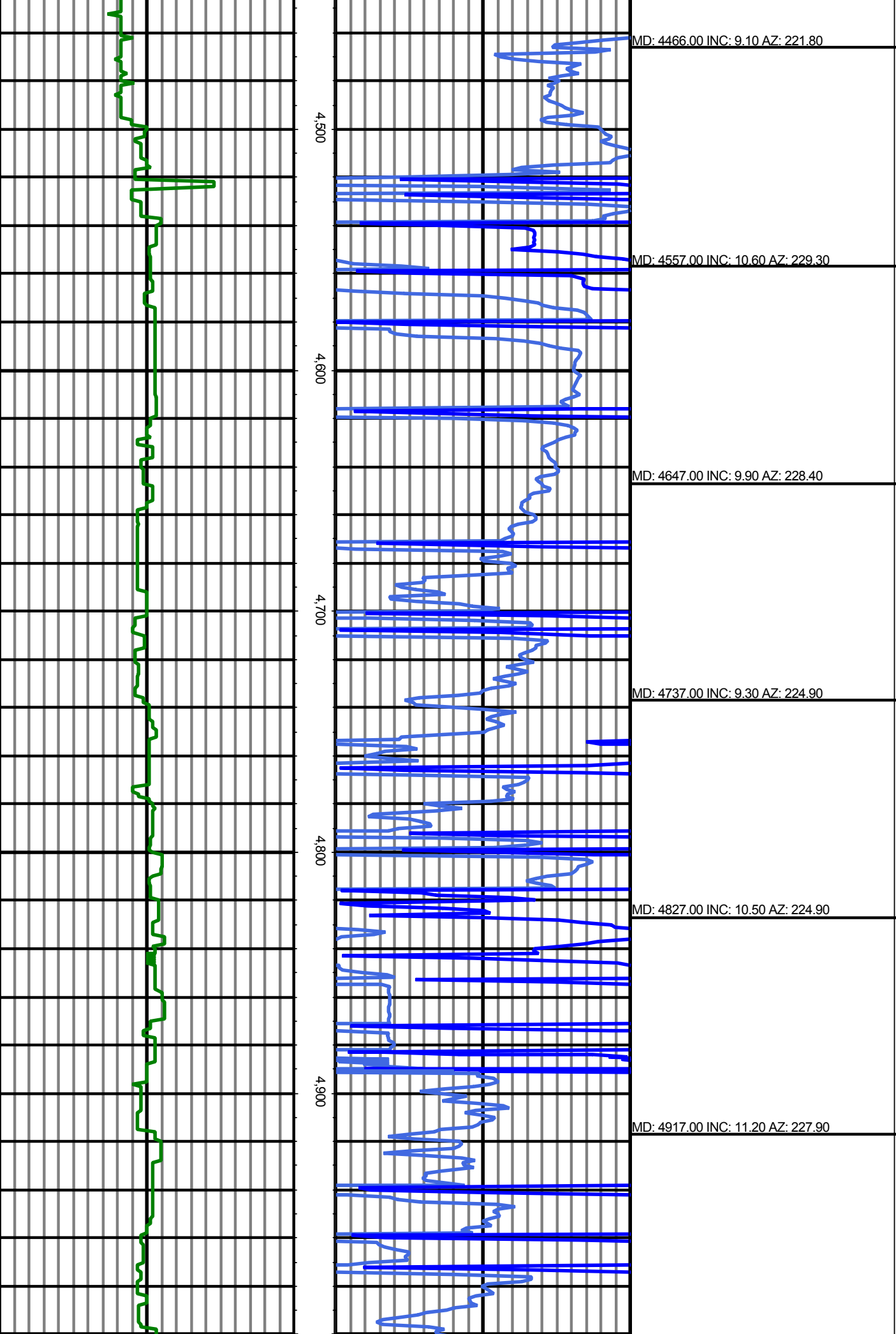
MD: 3567.00 INC: 10.40 AZ: 227.70

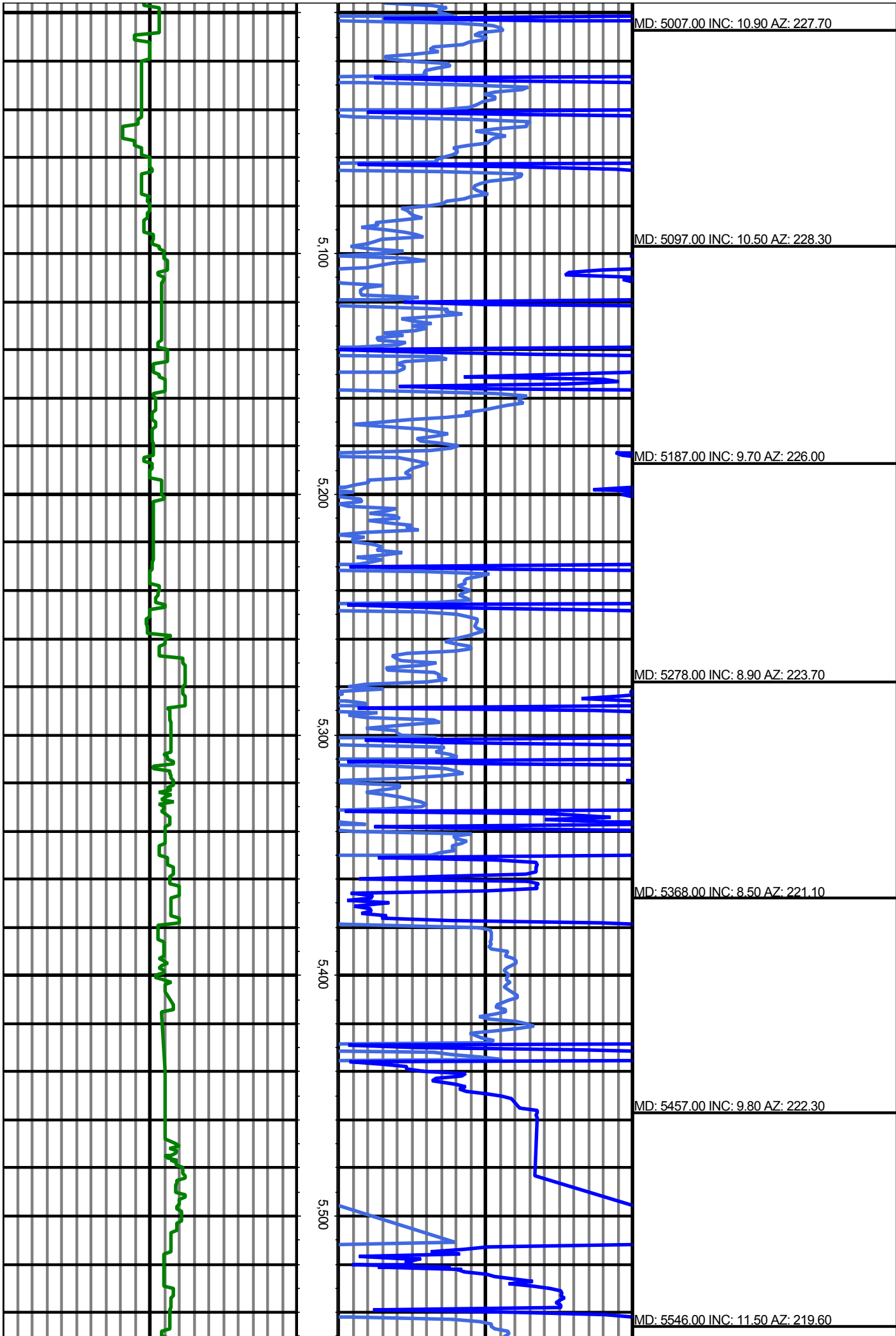
MD: 3657.00 INC: 10.60 AZ: 226.70

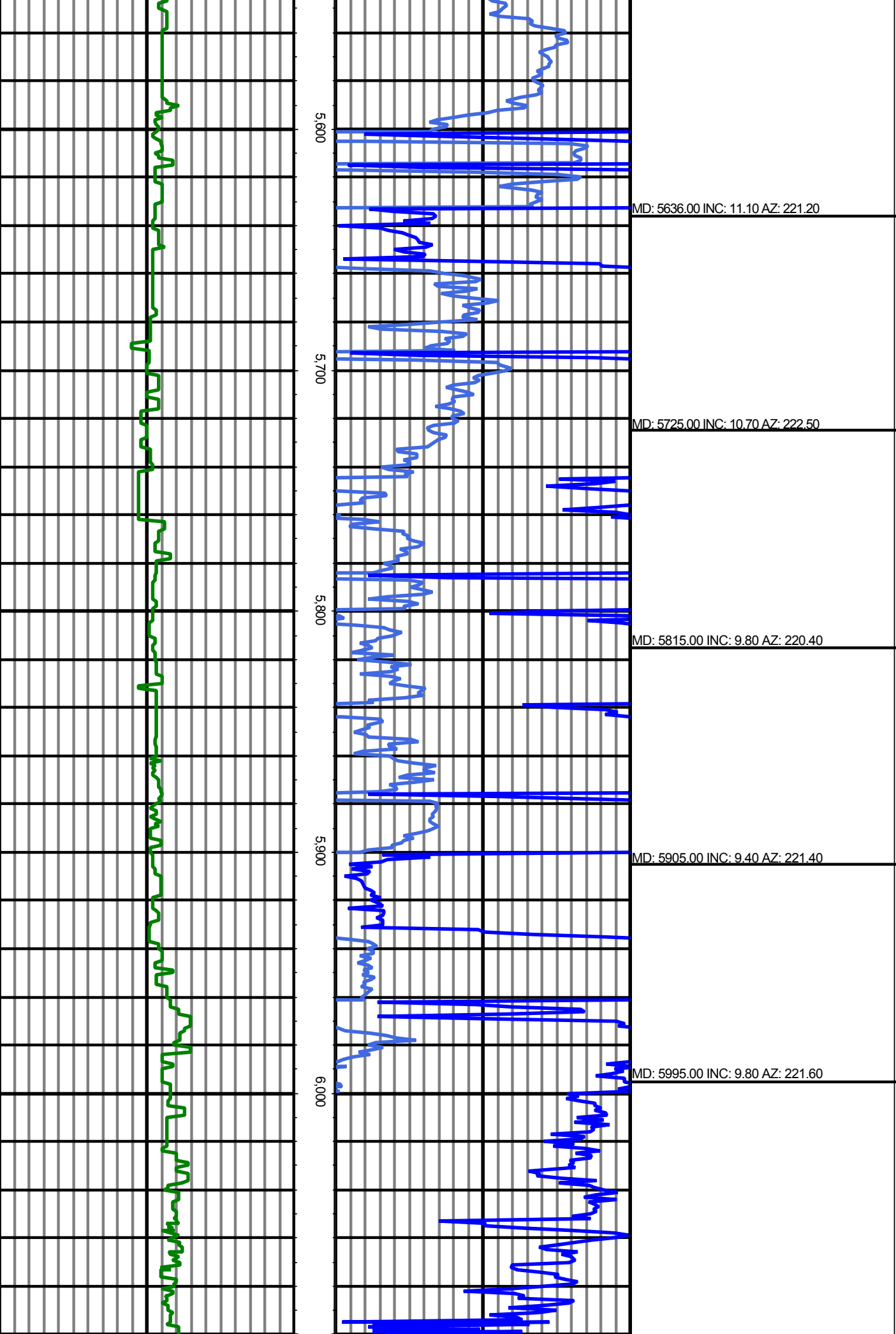
MD: 3746.00 INC: 10.60 AZ: 225.40

MD: 3836.00 INC: 10.80 AZ: 224.20

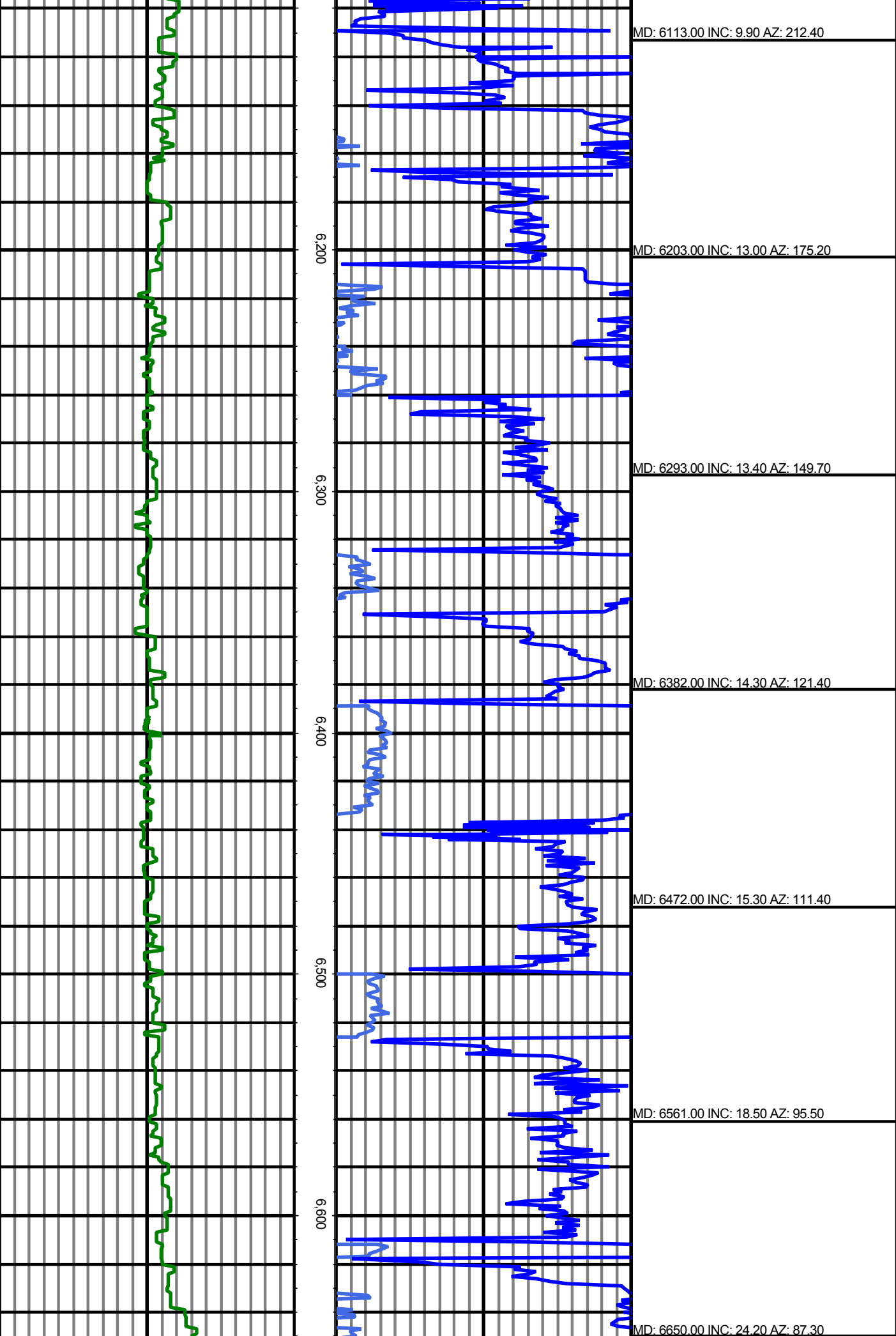


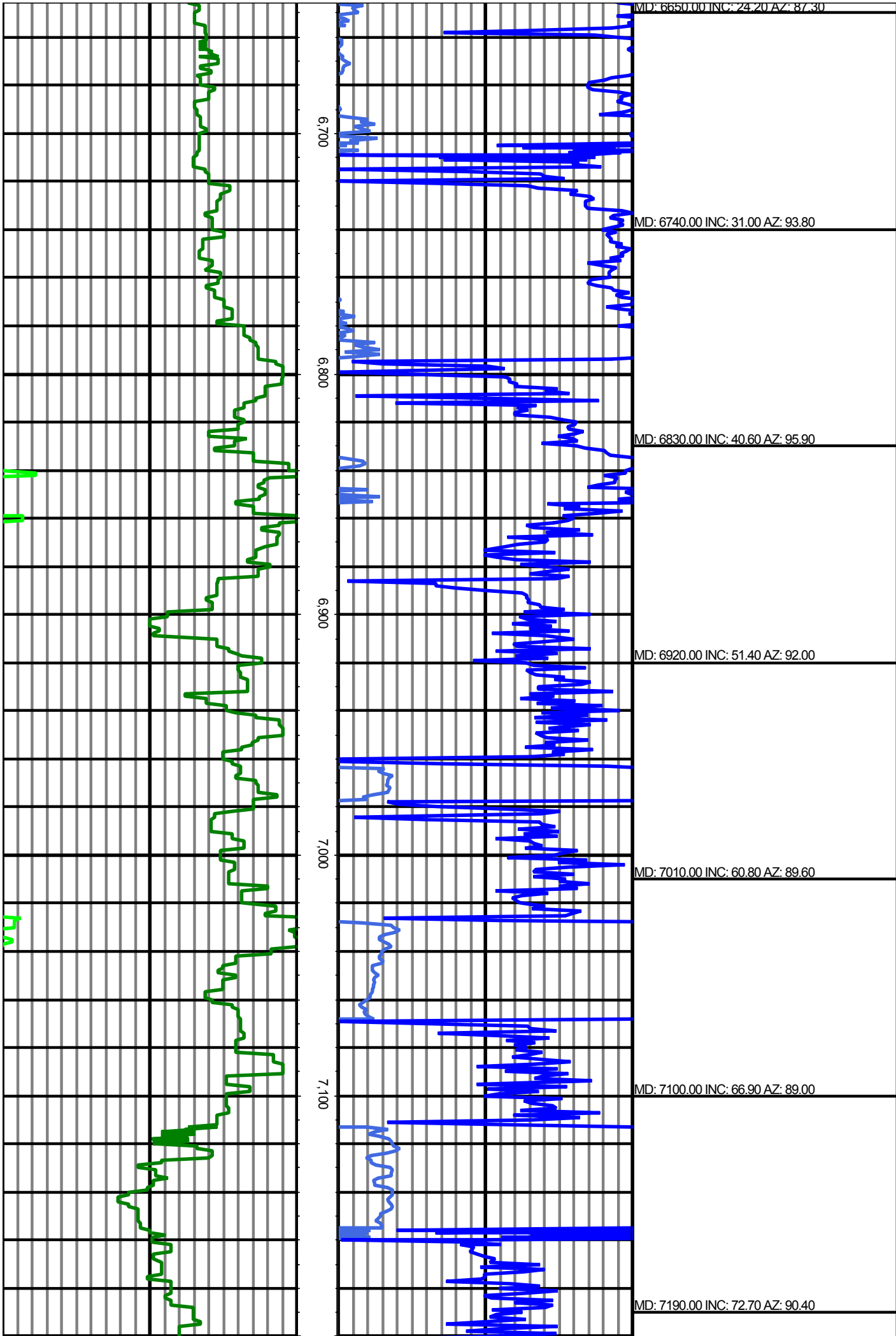


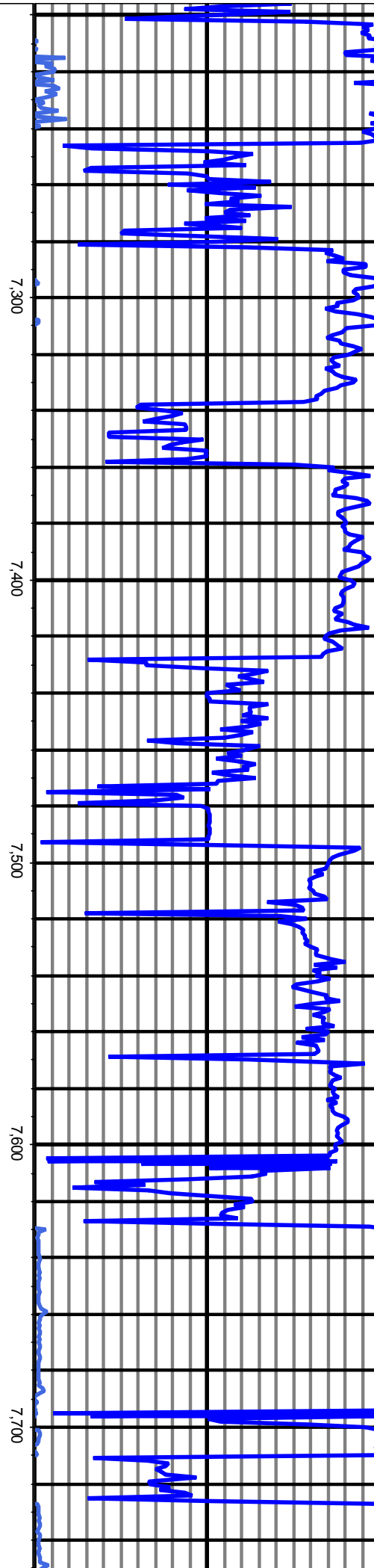
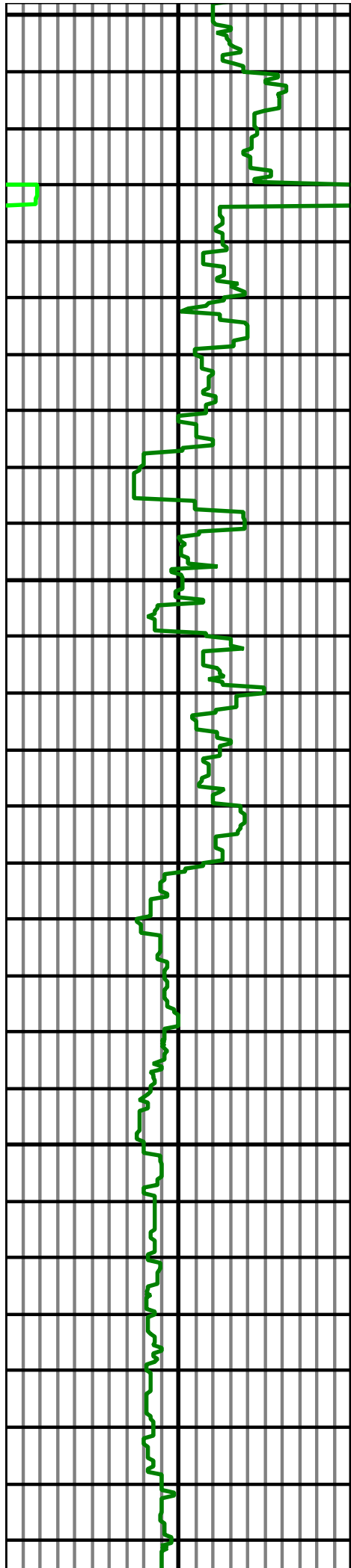












MD: 7280.00 INC: 78.40 AZ: 92.40

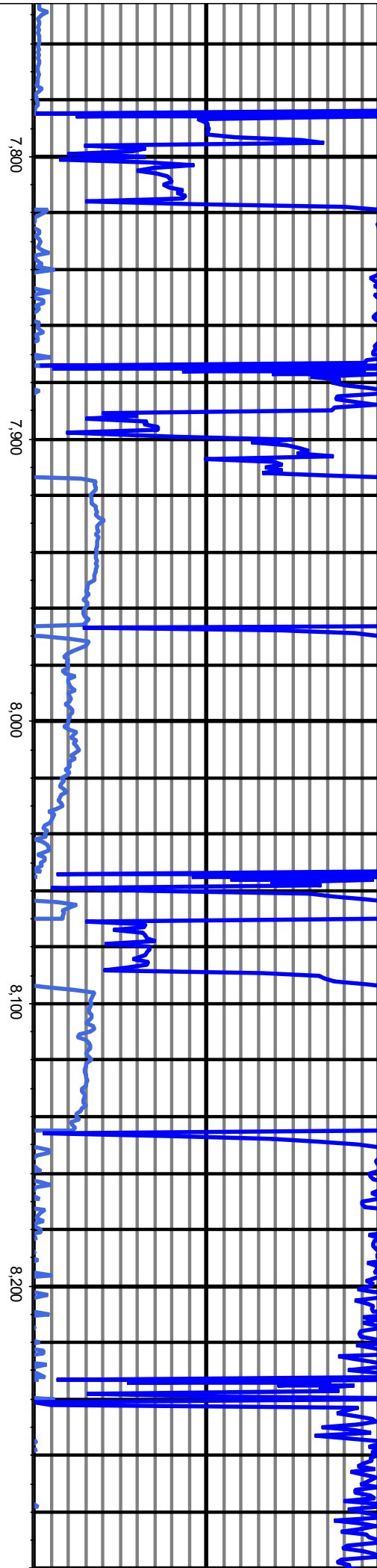
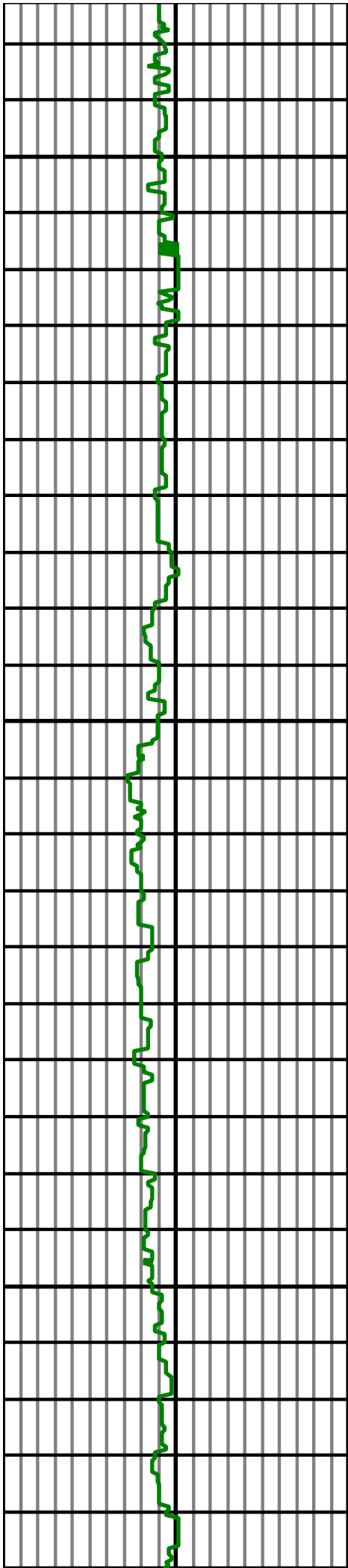
MD: 7370.00 INC: 80.30 AZ: 93.80

MD: 7460.00 INC: 84.60 AZ: 90.30

MD: 7550.00 INC: 87.60 AZ: 88.20

MD: 7640.00 INC: 90.10 AZ: 89.00

MD: 7730.00 INC: 89.80 AZ: 89.70



MD: 7819.00 INC: 90.10 AZ: 92.40

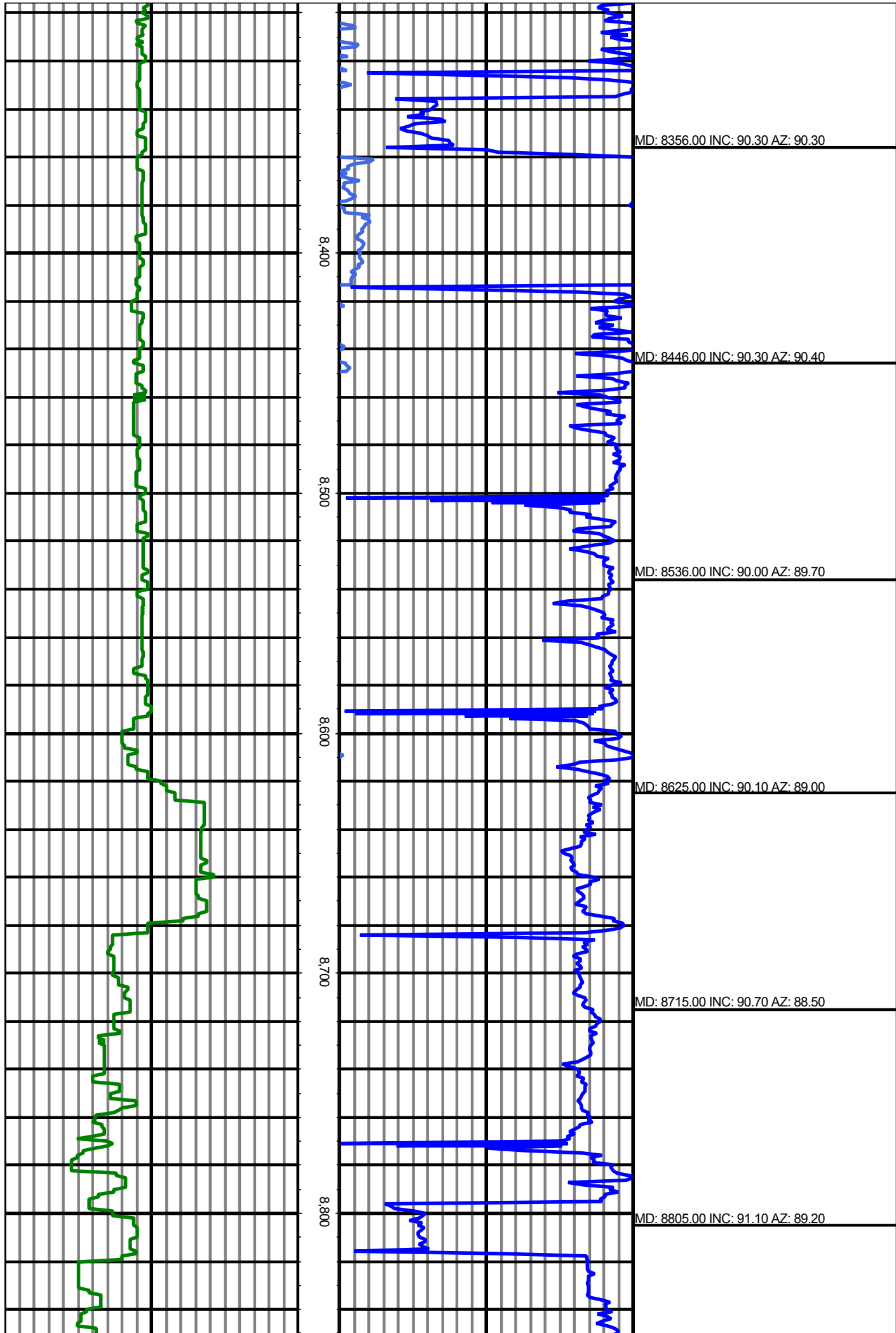
MD: 7909.00 INC: 91.10 AZ: 91.30

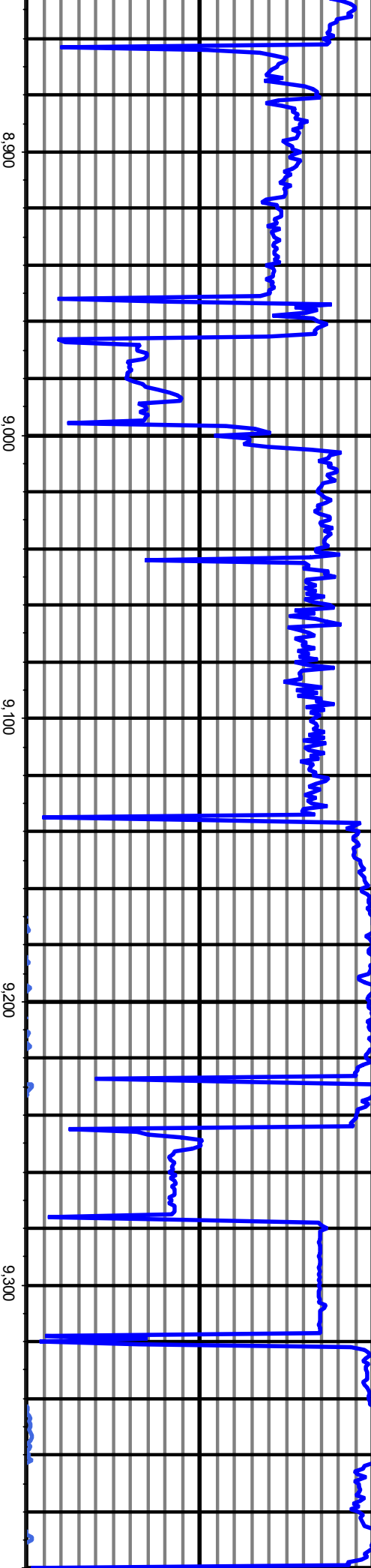
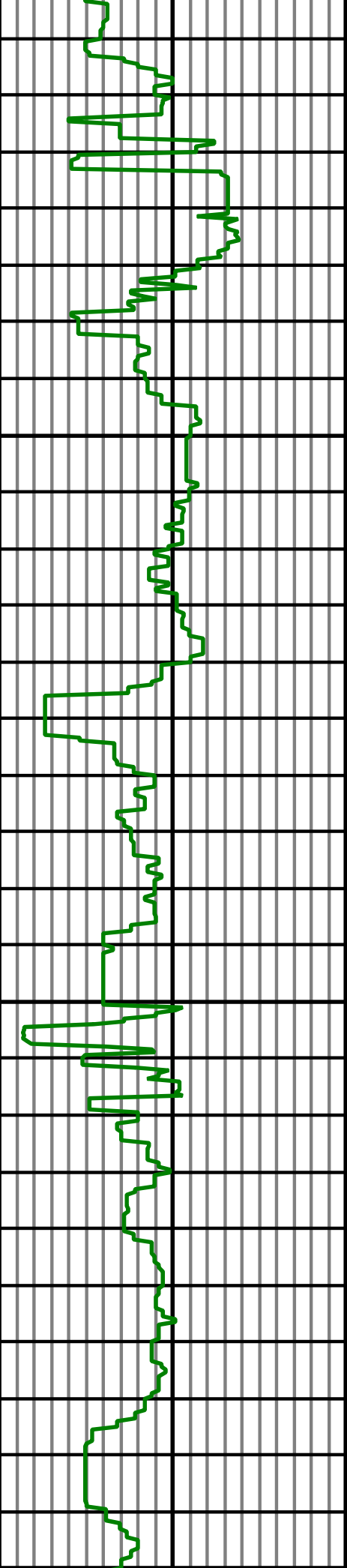
MD: 7998.00 INC: 91.50 AZ: 90.80

MD: 8088.00 INC: 90.50 AZ: 91.20

MD: 8177.00 INC: 90.90 AZ: 89.70

MD: 8266.00 INC: 91.20 AZ: 89.40





MD: 8895.00 INC: 91.60 AZ: 90.10

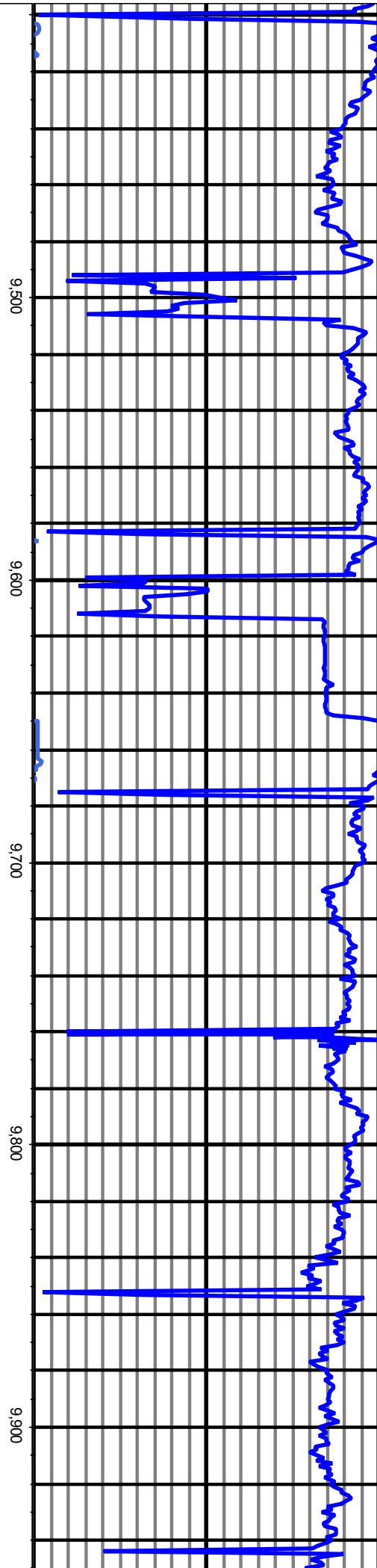
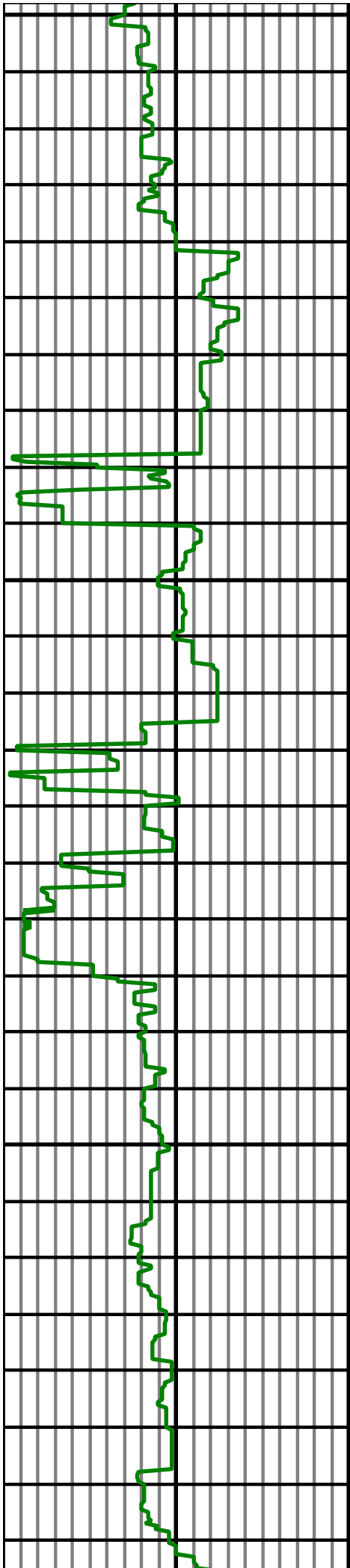
MD: 8985.00 INC: 90.60 AZ: 91.70

MD: 9075.00 INC: 90.40 AZ: 92.40

MD: 9165.00 INC: 91.00 AZ: 91.00

MD: 9254.00 INC: 89.20 AZ: 90.60

MD: 9344.00 INC: 87.70 AZ: 91.30



MD: 9434.00 INC: 87.80 AZ: 90.30

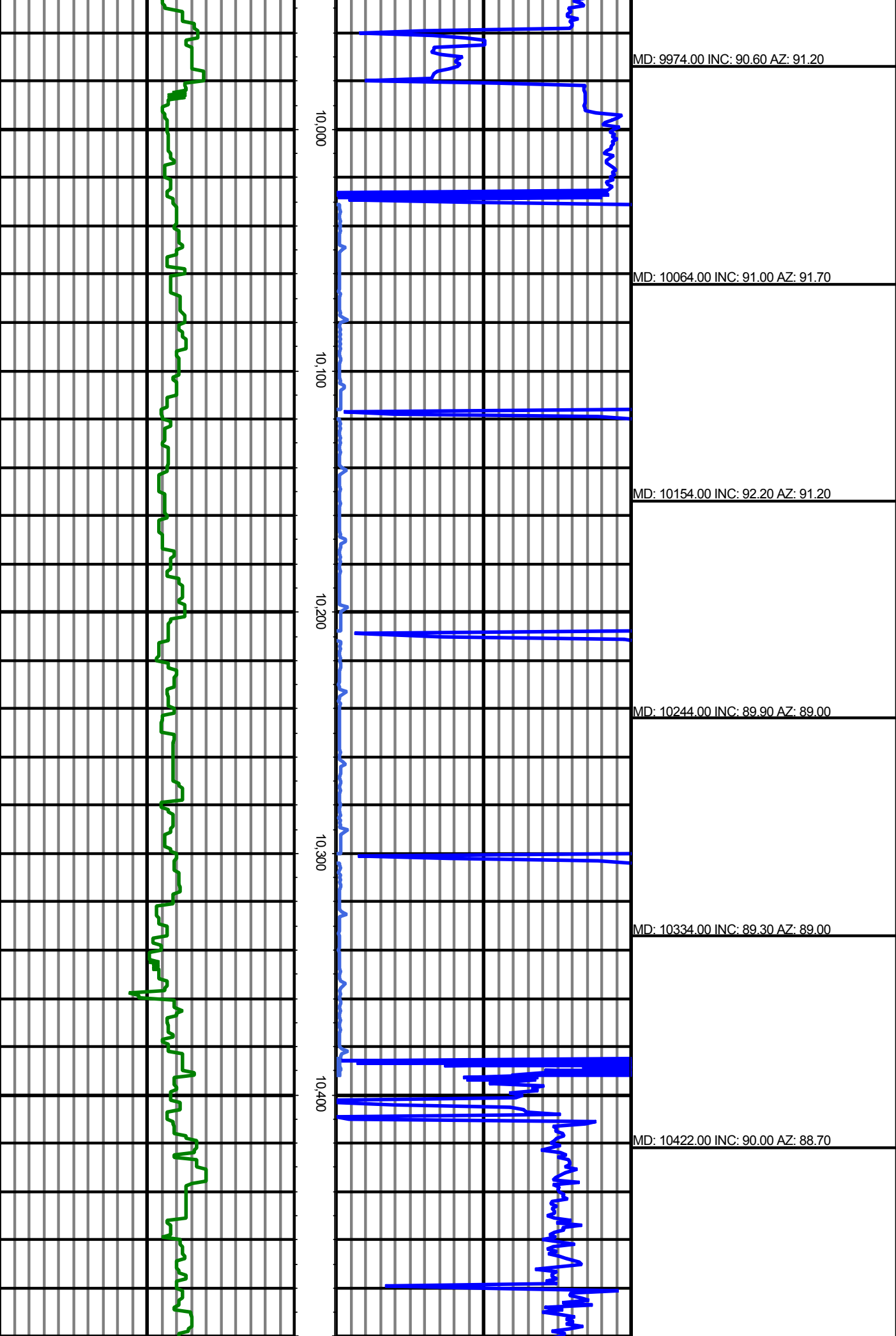
MD: 9524.00 INC: 89.00 AZ: 90.40

MD: 9614.00 INC: 90.80 AZ: 91.50

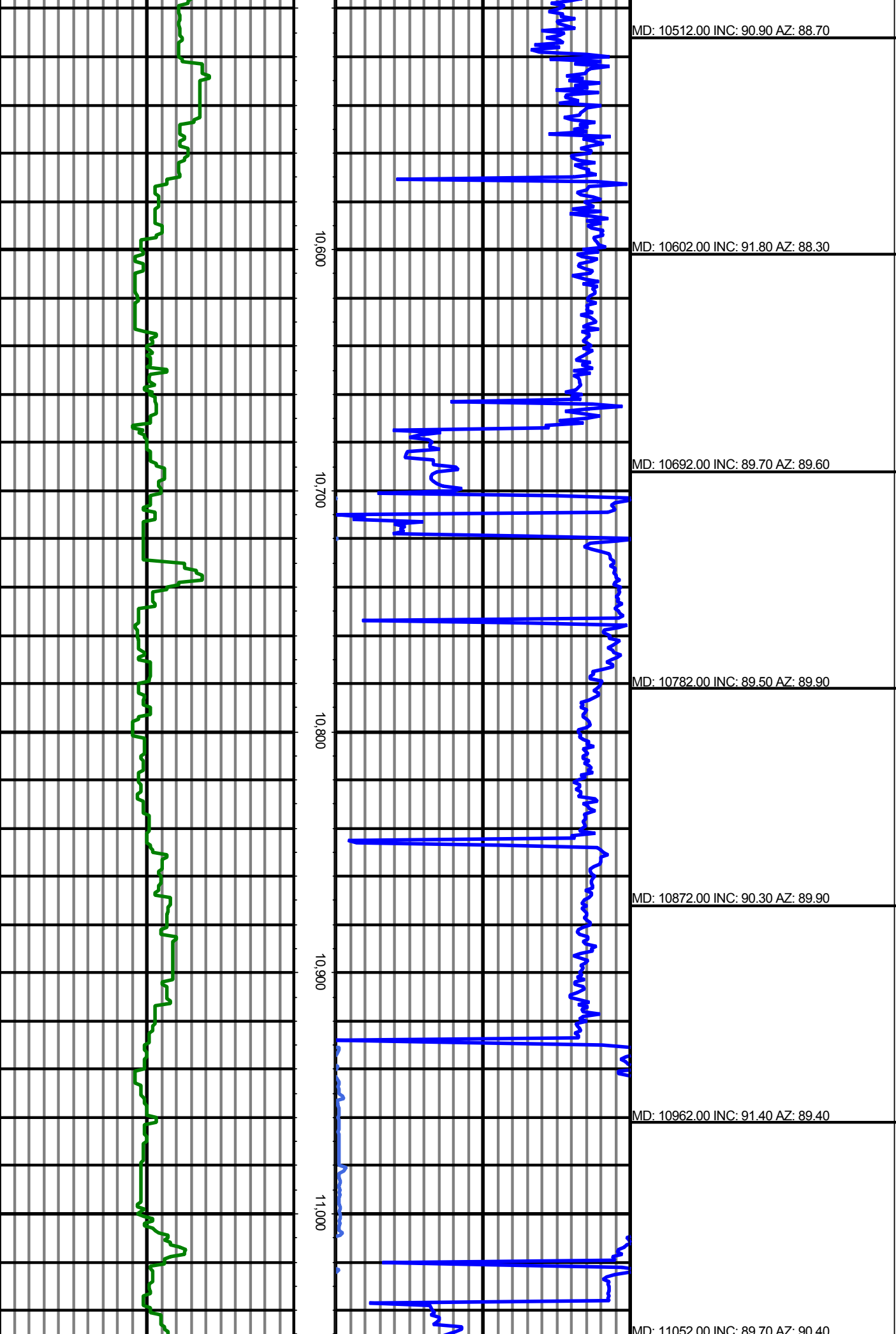
MD: 9704.00 INC: 90.60 AZ: 91.70

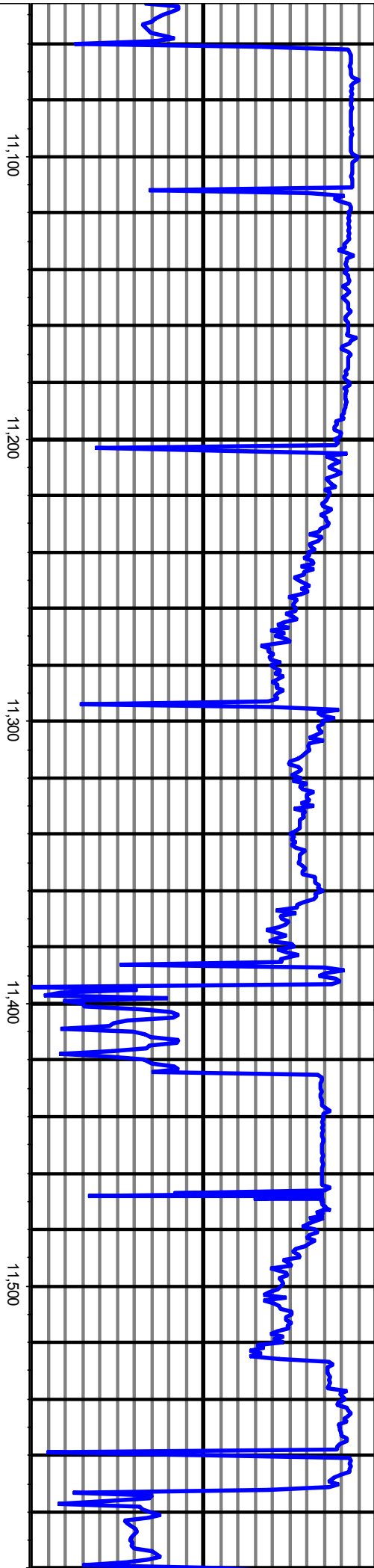
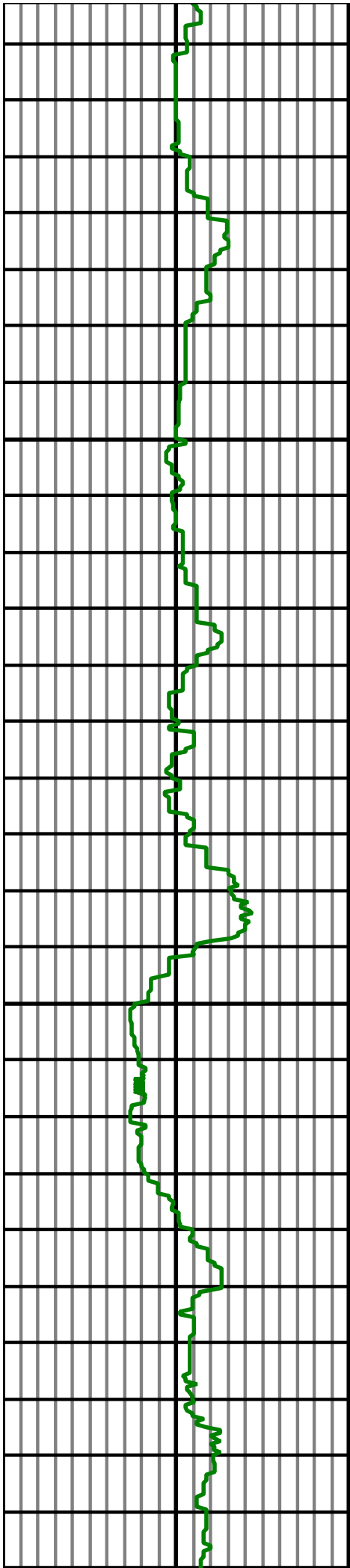
MD: 9794.00 INC: 91.00 AZ: 90.80

MD: 9885.00 INC: 91.80 AZ: 89.70









MD: 11052.00 INC: 89.70 AZ: 90.40
MD: 11142.00 INC: 89.60 AZ: 91.00
MD: 11232.00 INC: 90.70 AZ: 90.30
MD: 11322.00 INC: 92.20 AZ: 89.70
MD: 11413.00 INC: 91.90 AZ: 92.20
MD: 11502.00 INC: 92.40 AZ: 92.60
MD: 11592.00 INC: 90.00 AZ: 92.70

