



QES Directional Drilling

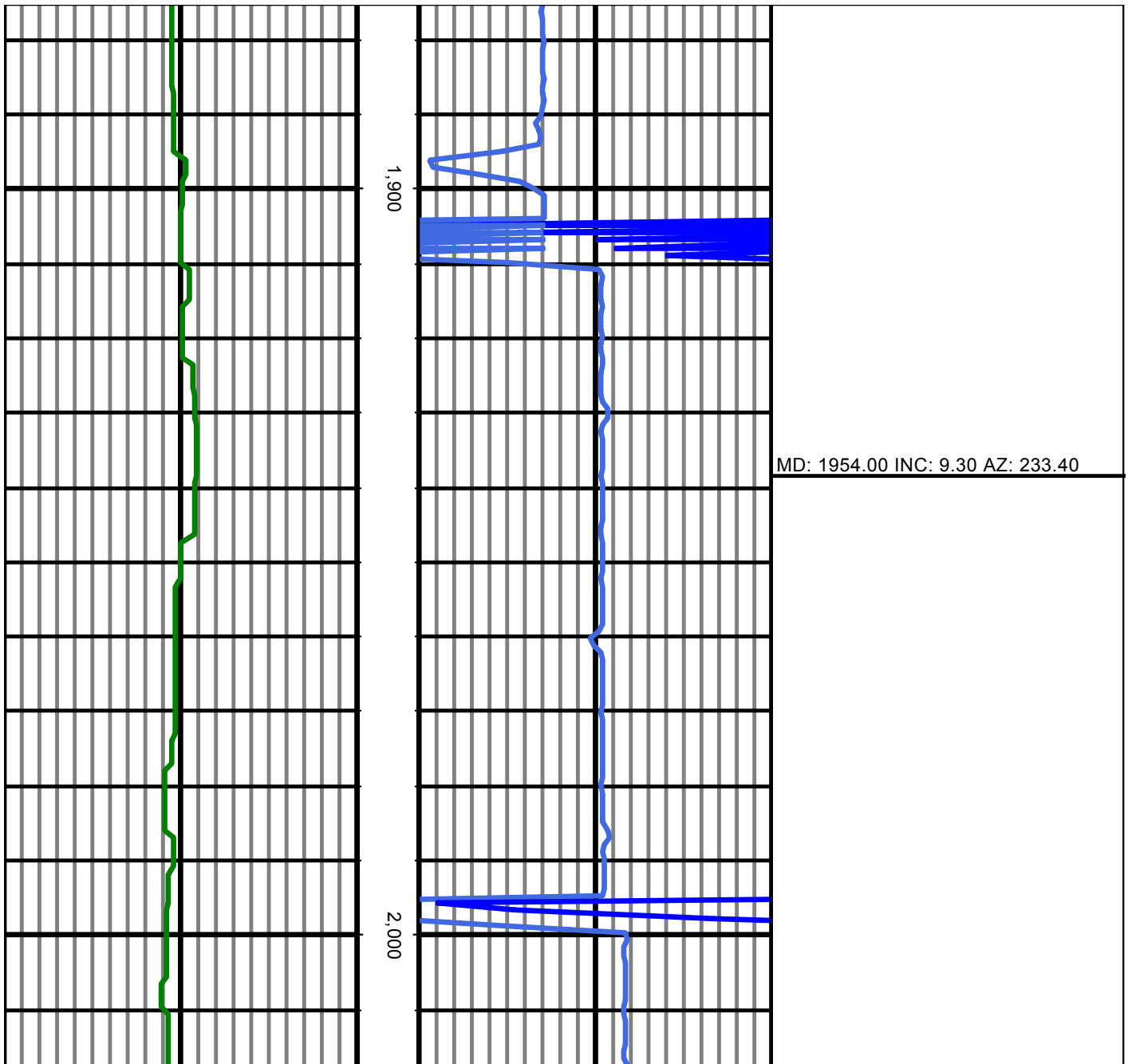
Ebert 11N
Scale 5":100' - TVD
5/30/2017 11:46 AM

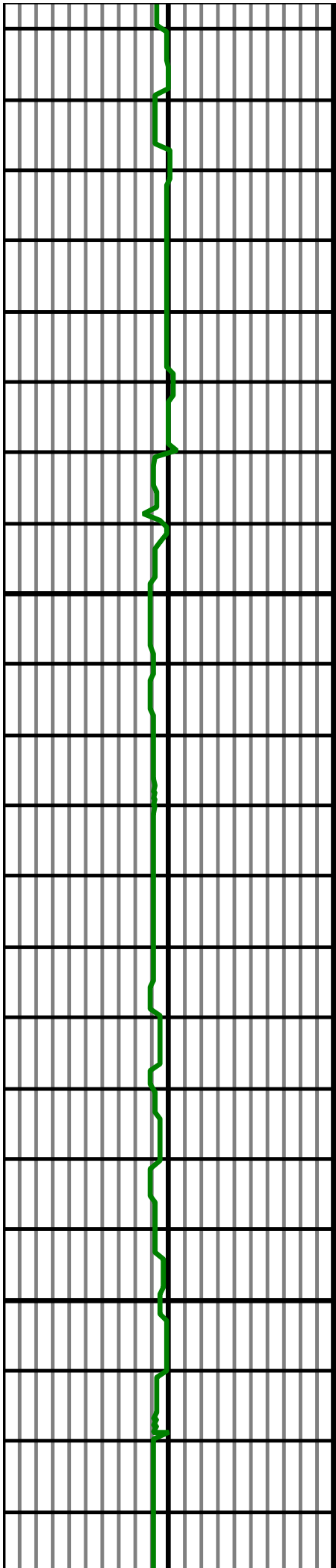
Oper. Company: PDC Energy
Well: Ebert 11N
Field: Wattenberg
Rig: Ensign 160
Well ID: 051234432600
Job Number: RM-170469

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.

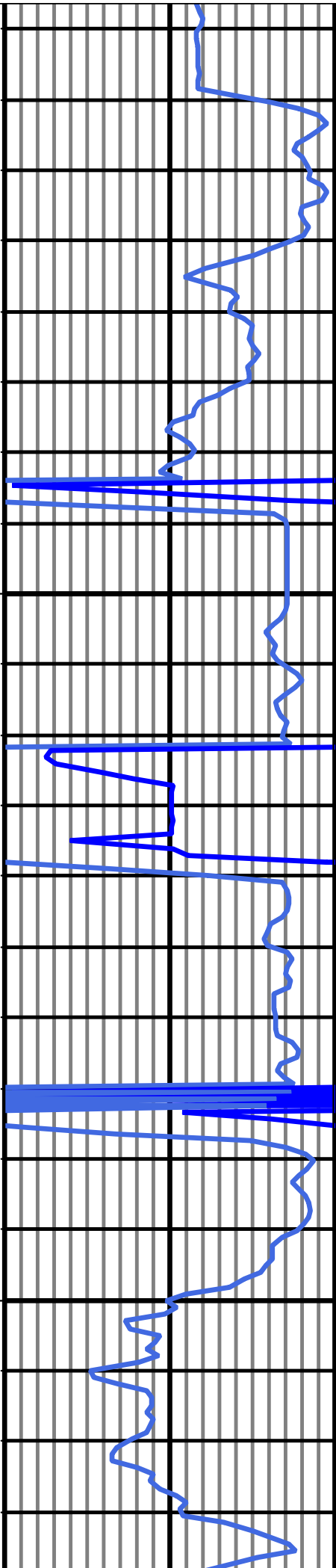
0.00 GR(API) 150.00 TVD 0.00 ROP(FT/HR) 300.00 Surveys (MD/INC/AZ)
150.00 2 300.00 FT 300.00 2 600.00





2,100

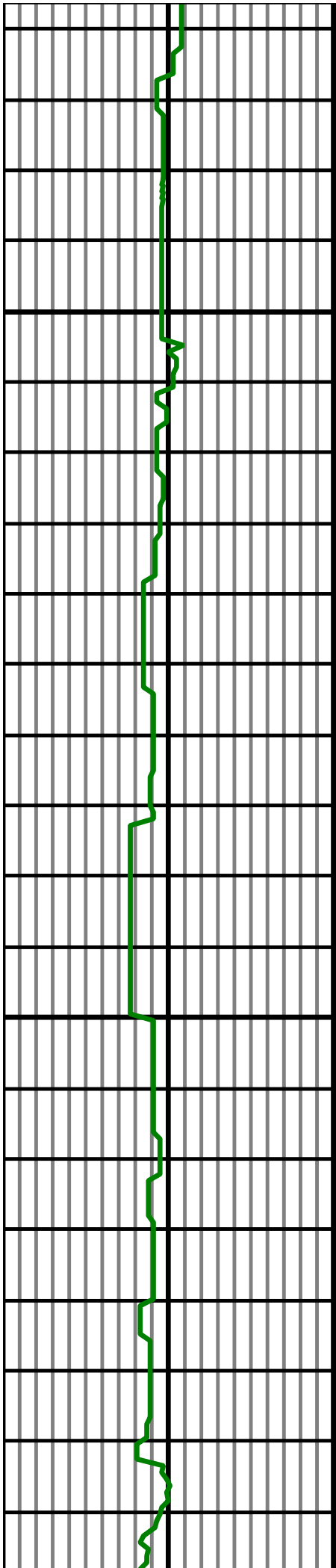
2,200



MD: 2044.00 INC: 8.80 AZ: 231.60

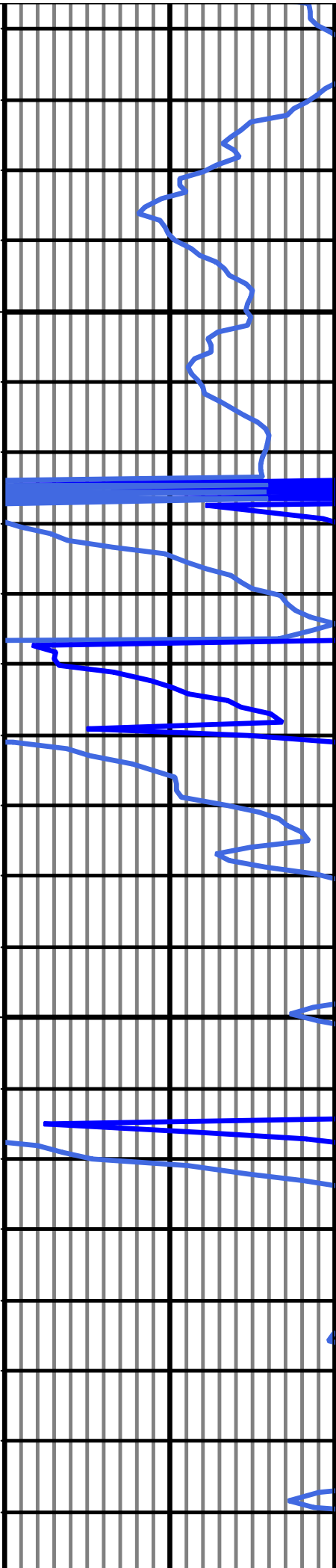
MD: 2134.00 INC: 8.90 AZ: 227.70

MD: 2224.00 INC: 10.20 AZ: 227.40



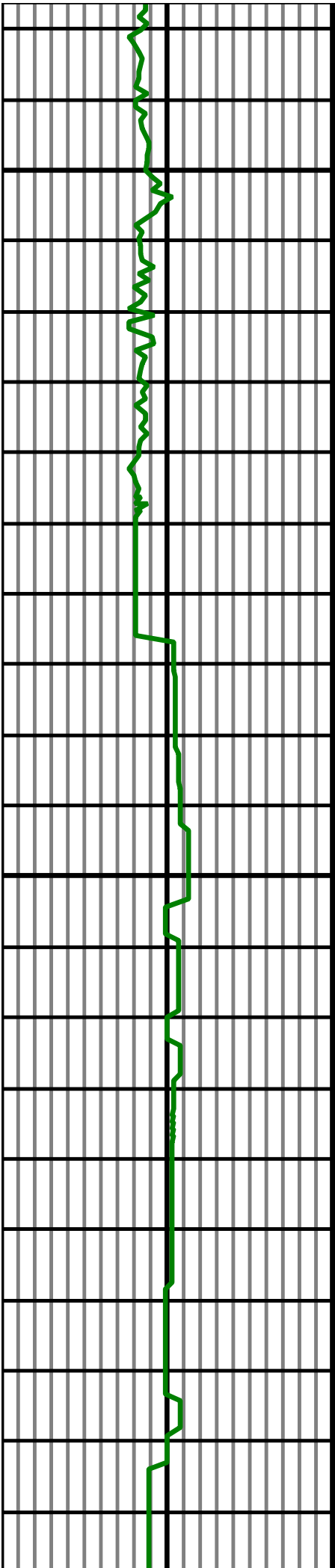
2,500

2,600



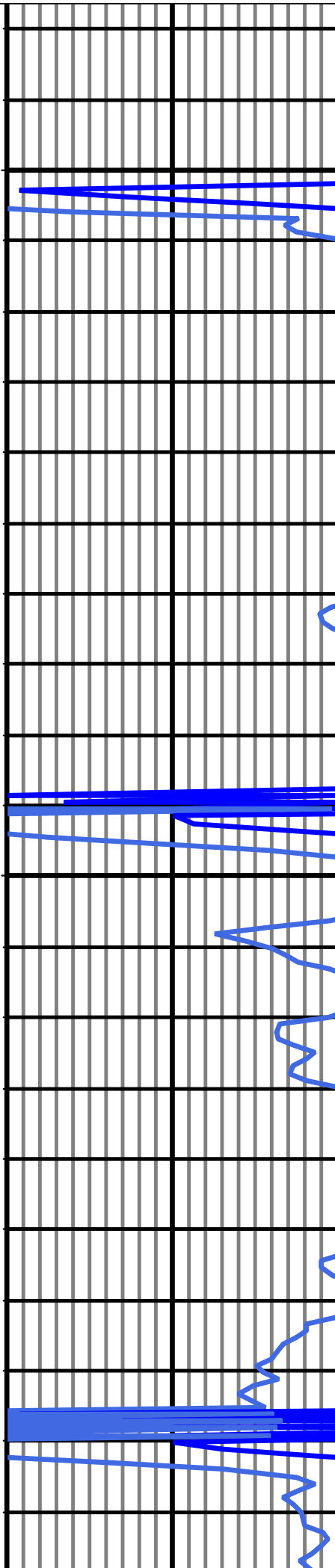
MD: 2492.00 INC: 9.10 AZ: 226.10

MD: 2581.00 INC: 9.90 AZ: 231.60



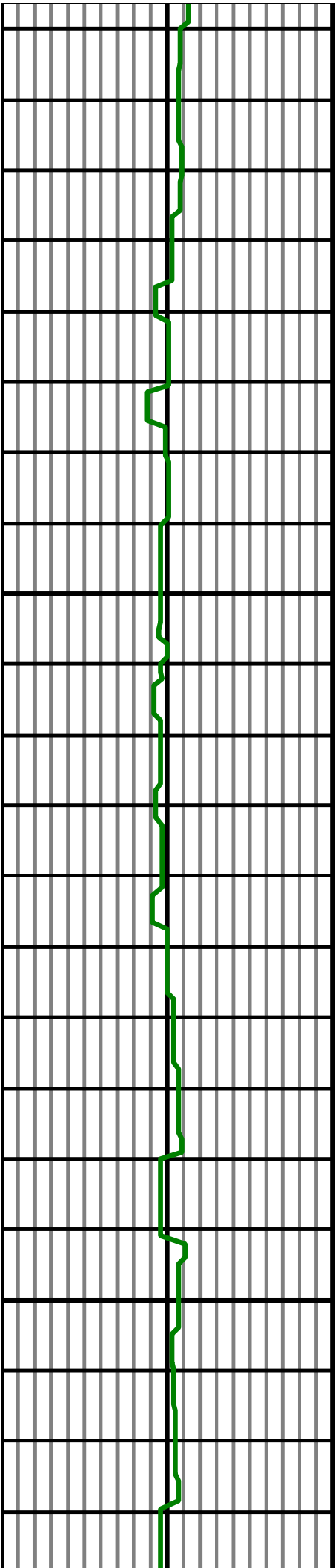
2,700

2,800



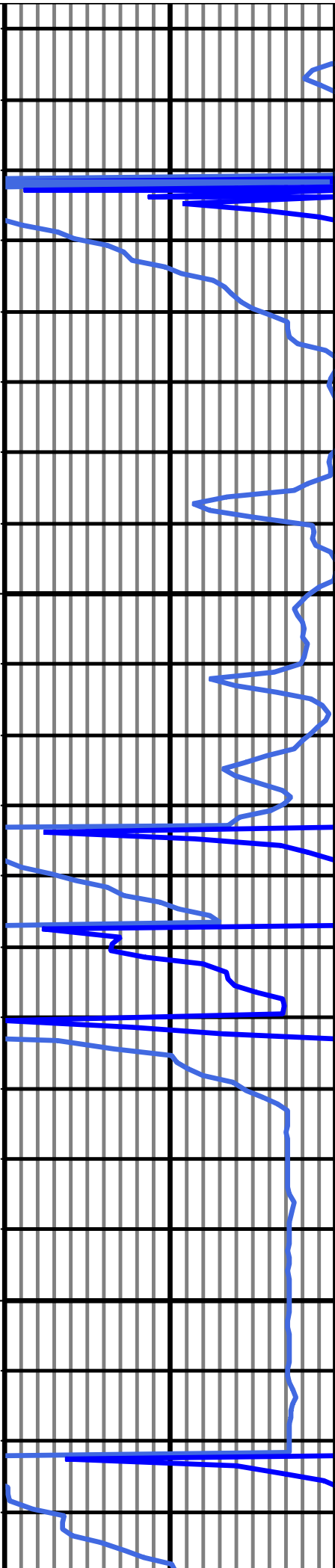
MD: 2760.00 INC: 10.10 AZ: 228.60

MD: 2849.00 INC: 9.90 AZ: 228.30



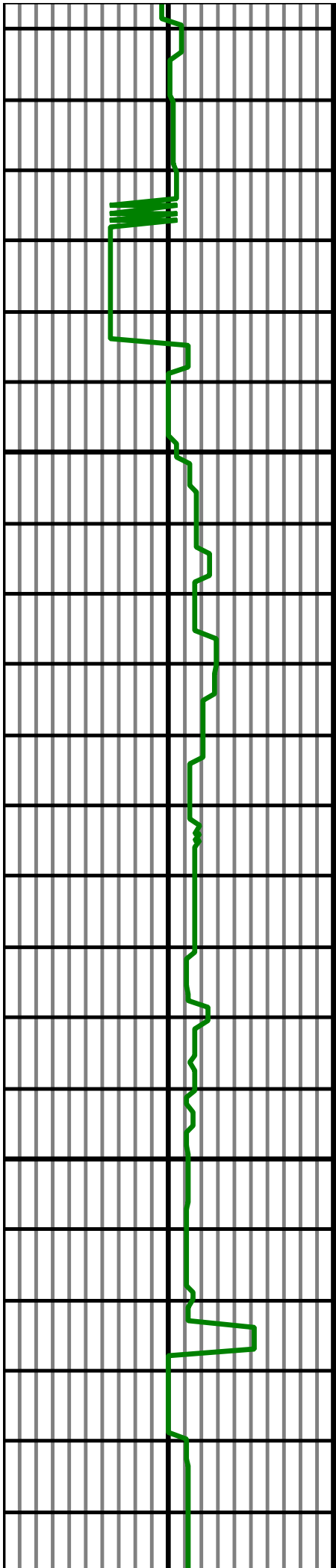
3,200

3,300



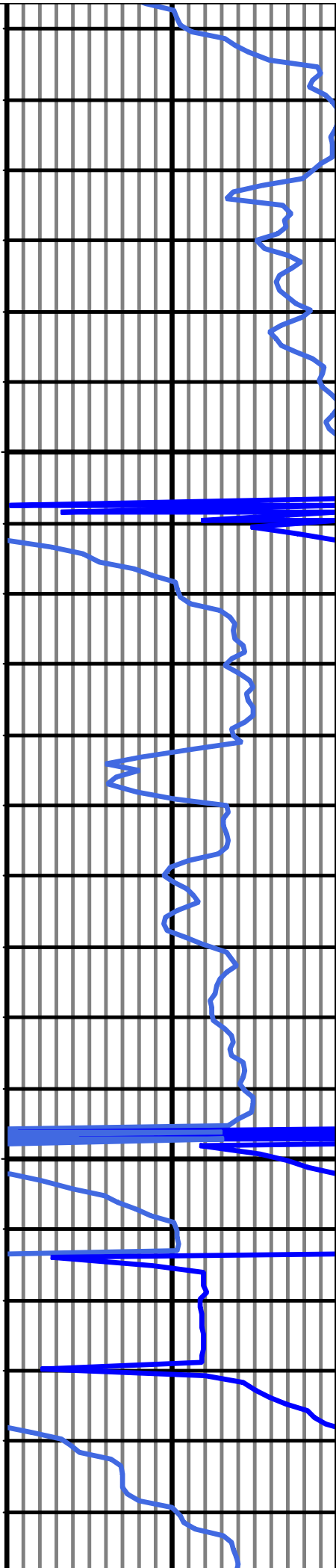
MD: 3209.00 INC: 7.80 AZ: 222.50

MD: 3298.00 INC: 9.60 AZ: 229.30



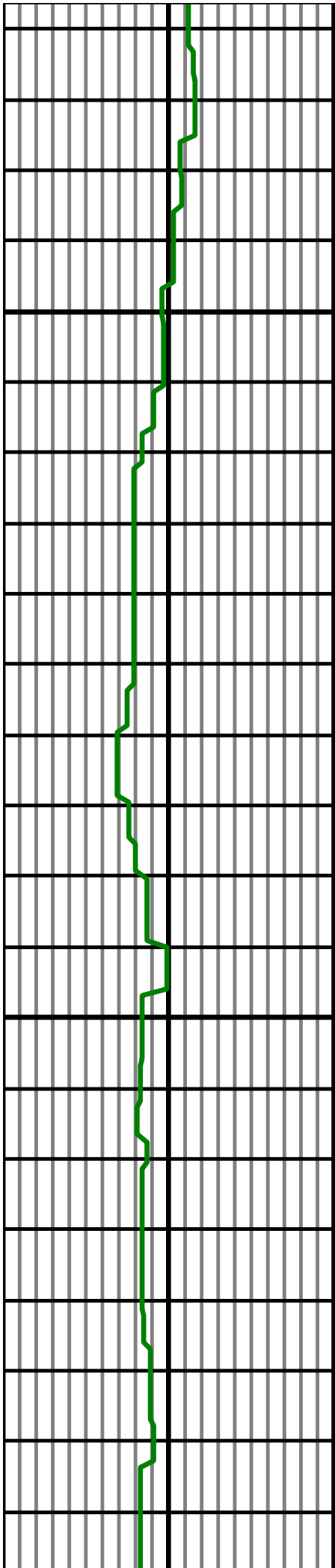
3,400

3,500



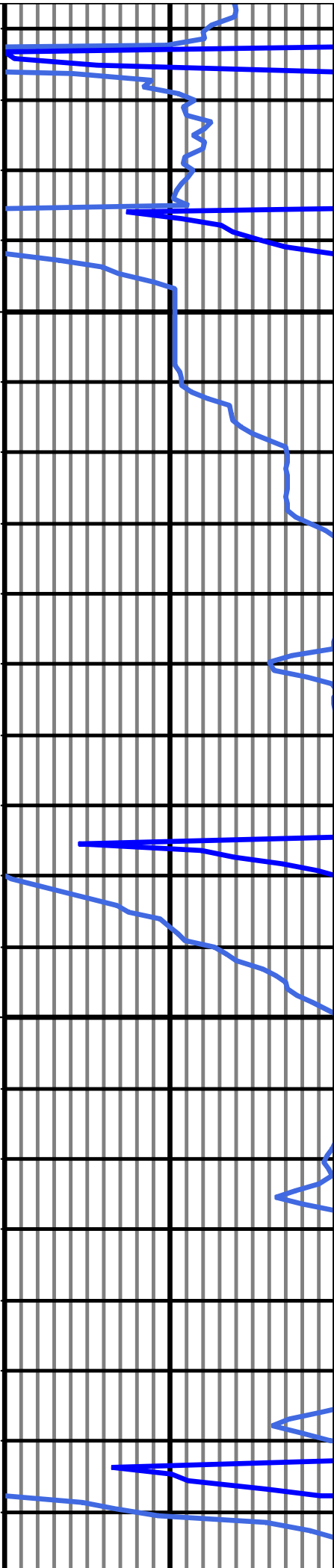
MD: 3477.00 INC: 8.70 AZ: 224.00

MD: 3567.00 INC: 10.40 AZ: 227.70



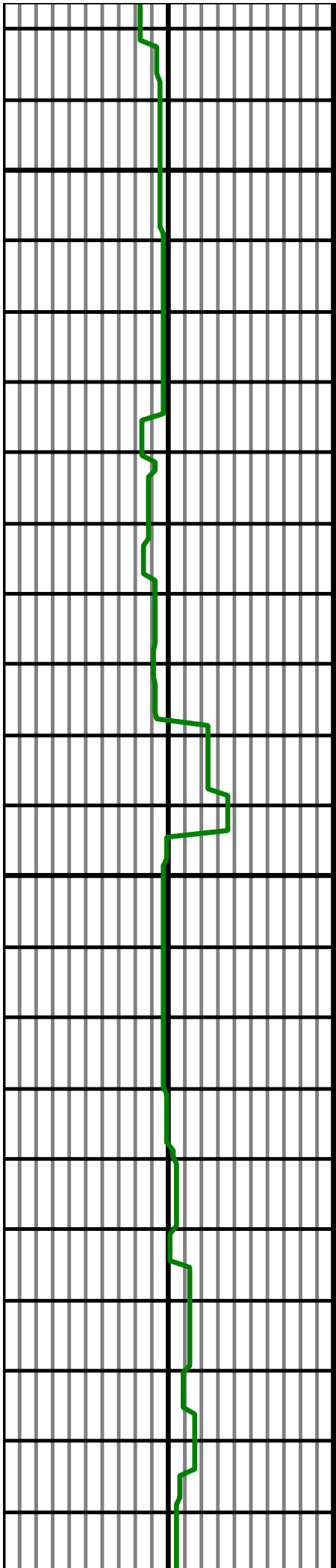
3,600

3,700



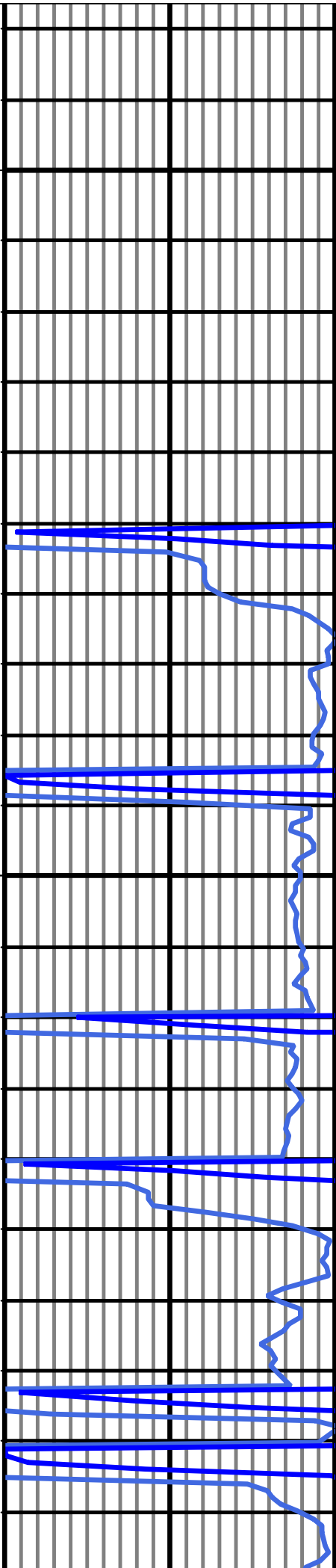
MD: 3657.00 INC: 10.60 AZ: 226.70

MD: 3746.00 INC: 10.60 AZ: 225.40



3,800

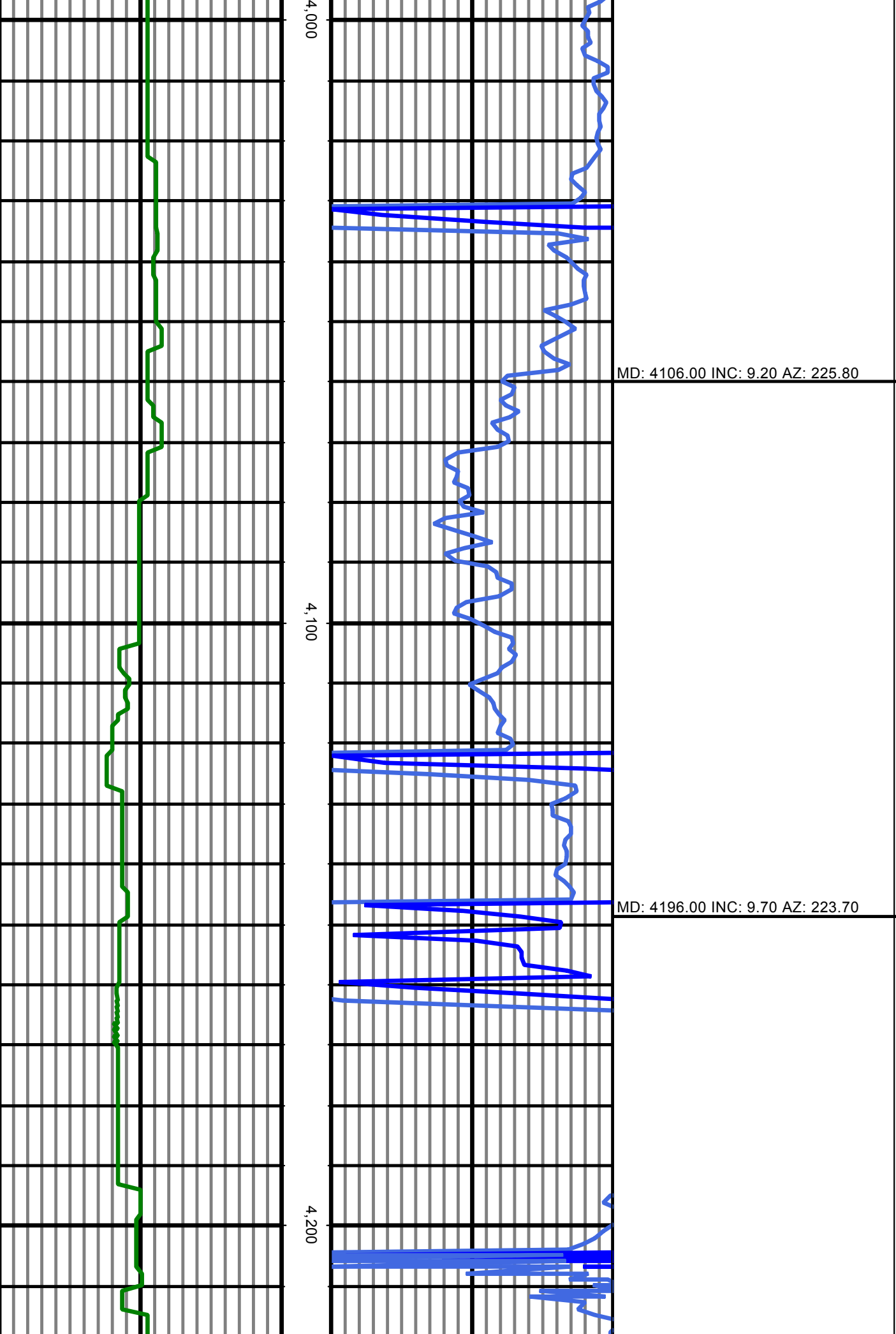
3,900

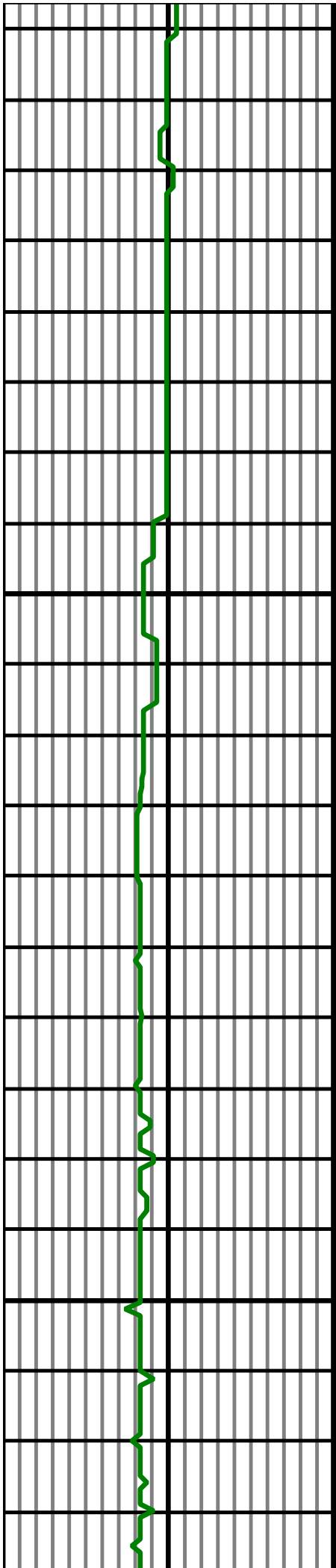


MD: 3836.00 INC: 10.80 AZ: 224.20

MD: 3926.00 INC: 10.60 AZ: 223.20

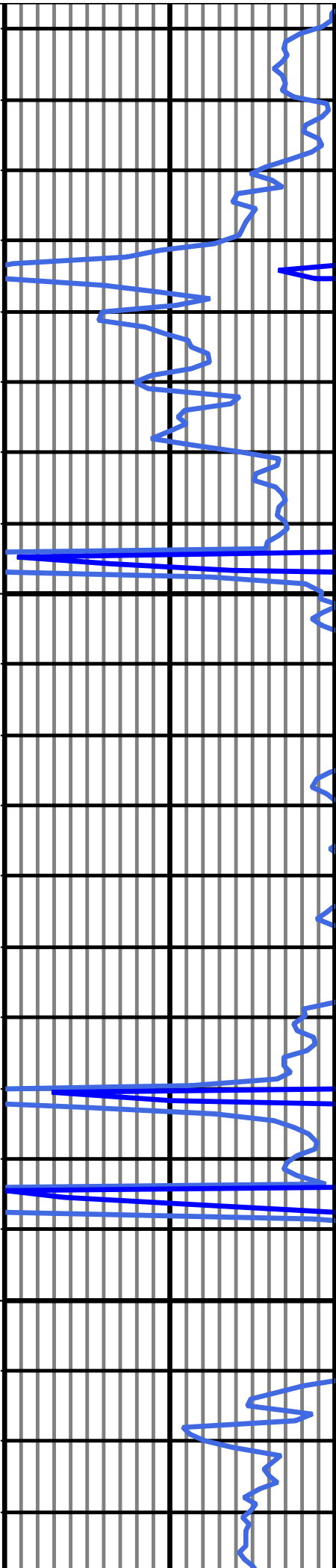
MD: 4016.00 INC: 10.00 AZ: 224.70





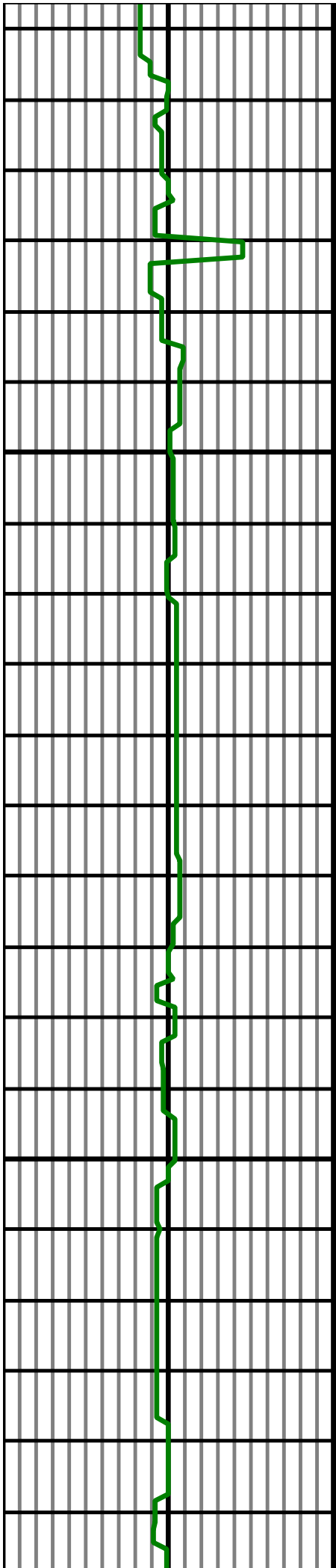
4,300

4,400



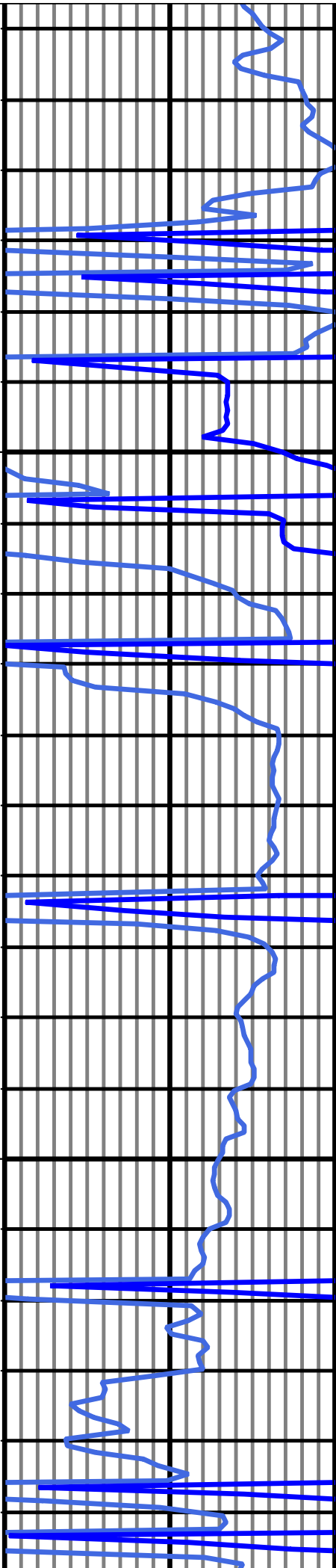
MD: 4286.00 INC: 9.60 AZ: 223.30

MD: 4466.00 INC: 9.10 AZ: 221.80



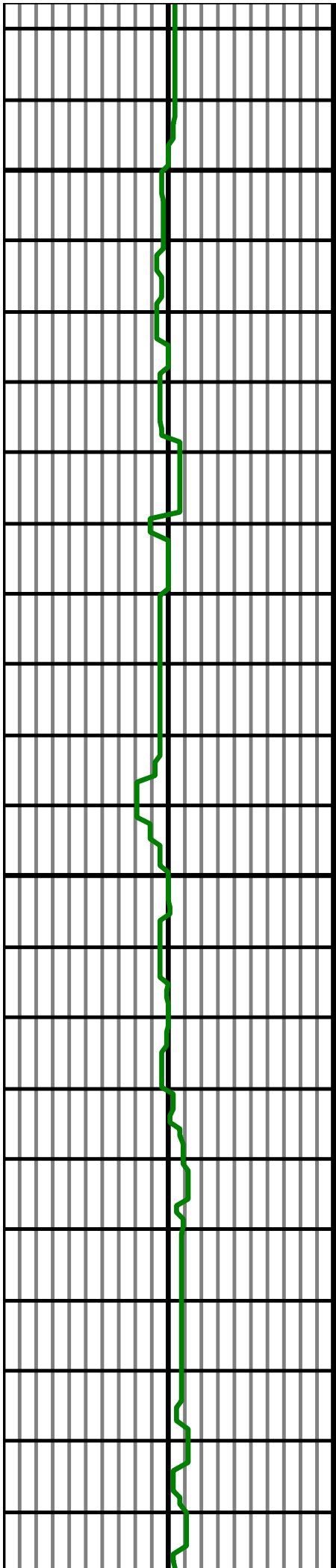
4,500

4,600



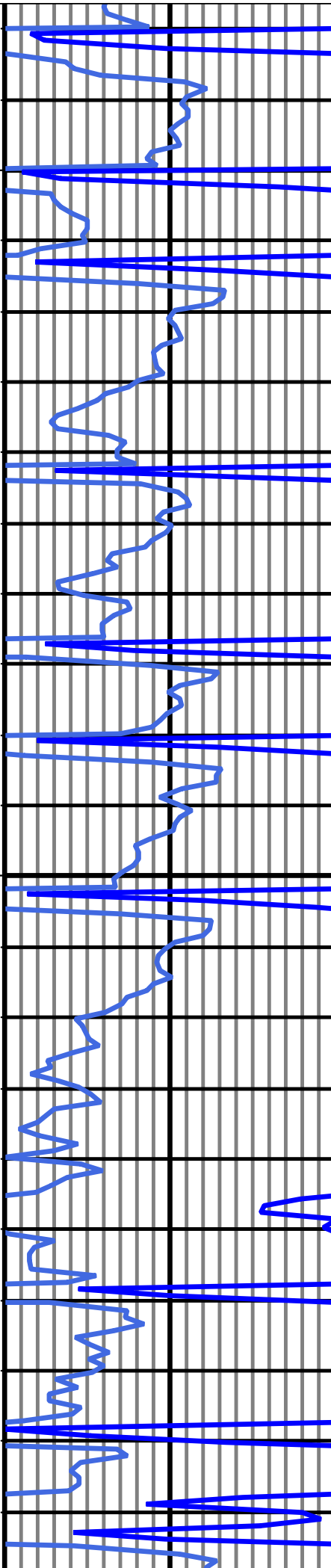
MD: 4557.00 INC: 10.60 AZ: 229.30

MD: 4647.00 INC: 9.90 AZ: 228.40



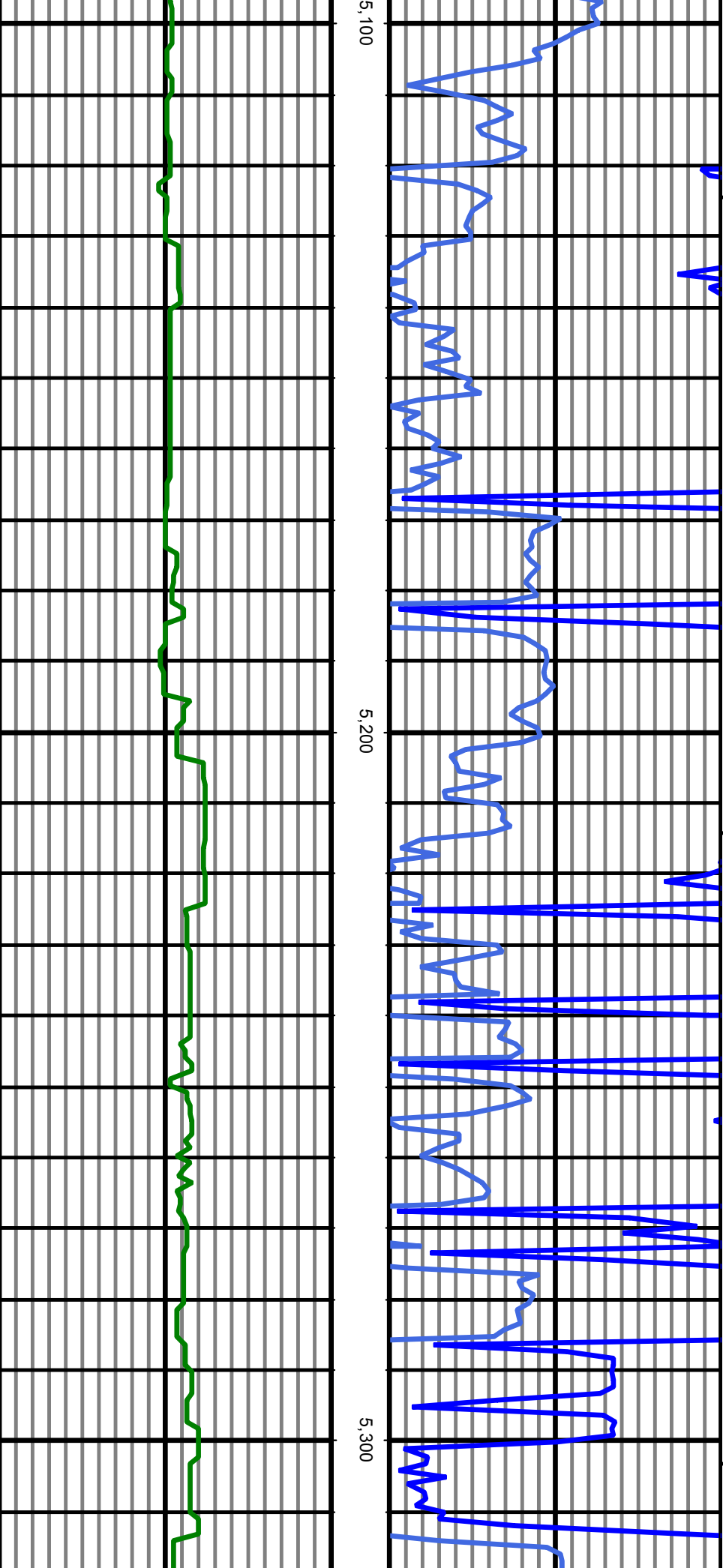
4,900

5,000



MD: 5007.00 INC: 10.90 AZ: 227.70

MD: 5097.00 INC: 10.50 AZ: 228.30



5,100

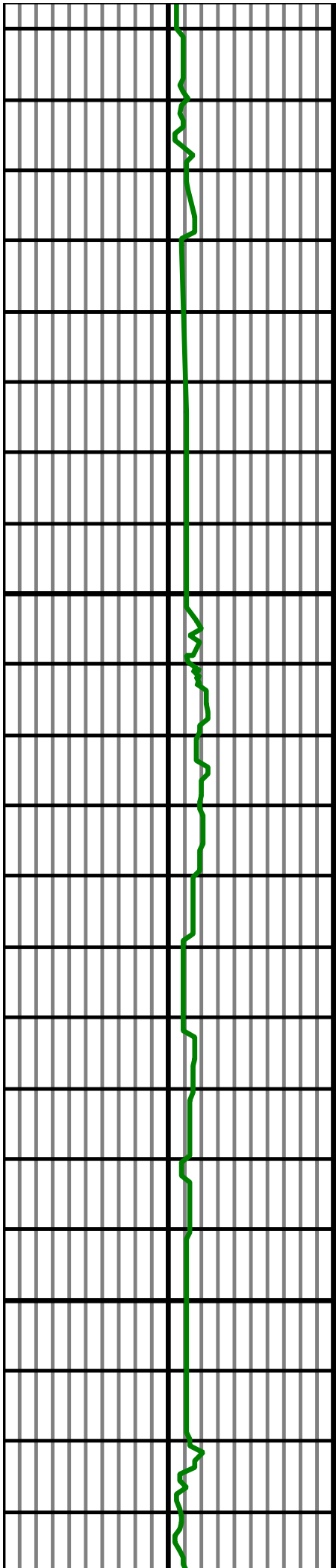
5,200

5,300

MD: 5187.00 INC: 9.70 AZ: 226.00

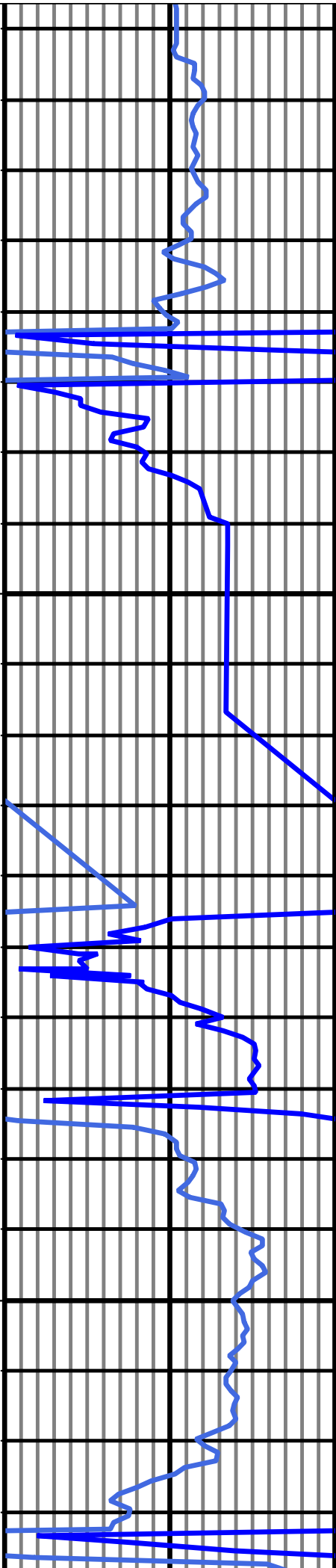
MD: 5278.00 INC: 8.90 AZ: 223.70

MD: 5368.00 INC: 8.50 AZ: 221.10



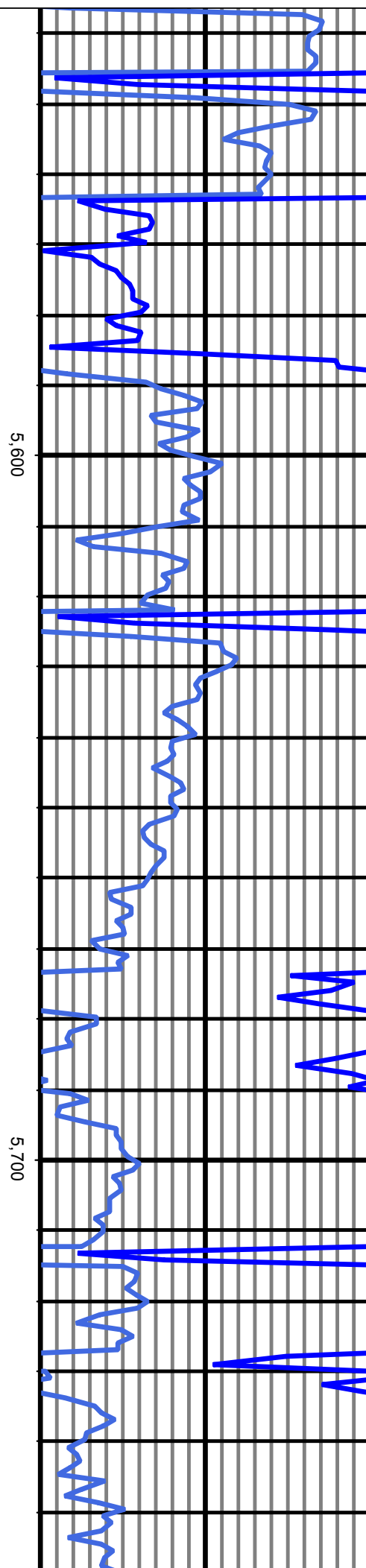
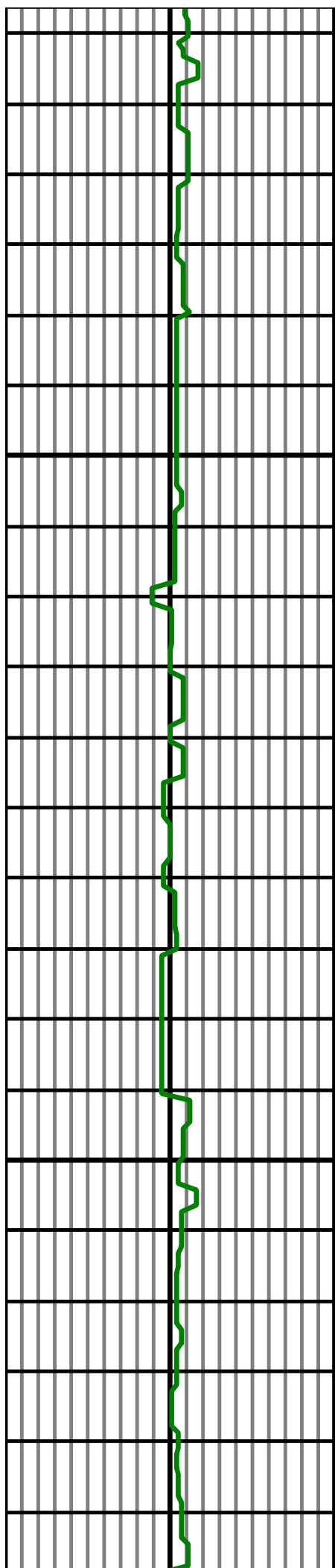
5,400

5,500



MD: 5457.00 INC: 9.80 AZ: 222.30

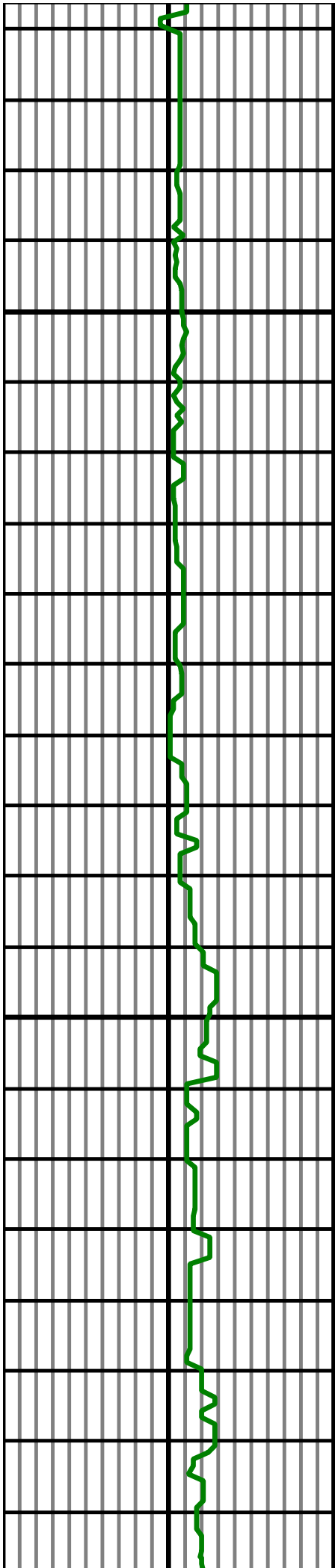
MD: 5546.00 INC: 11.50 AZ: 219.60



MD: 5636.00 INC: 11.10 AZ: 221.20

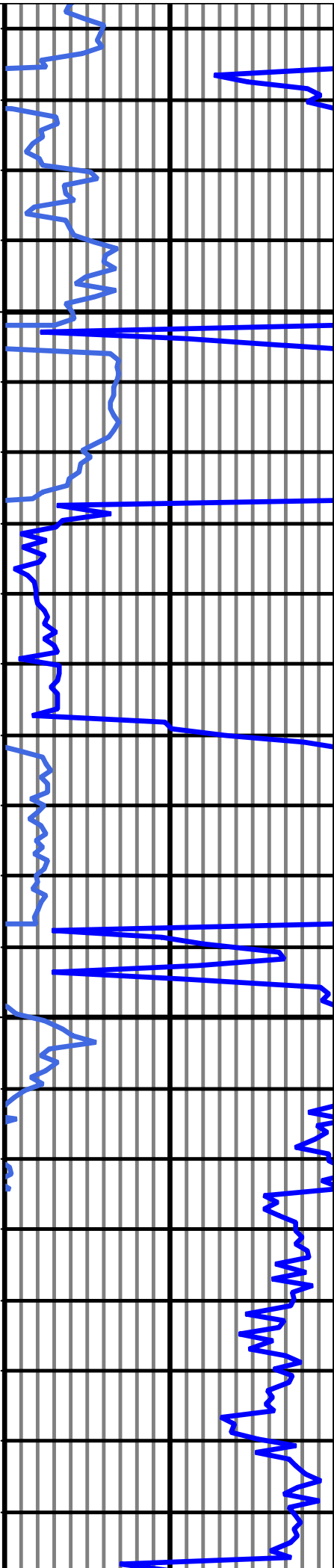
MD: 5725.00 INC: 10.70 AZ: 222.50

MD: 5815.00 INC: 9.80 AZ: 220.40



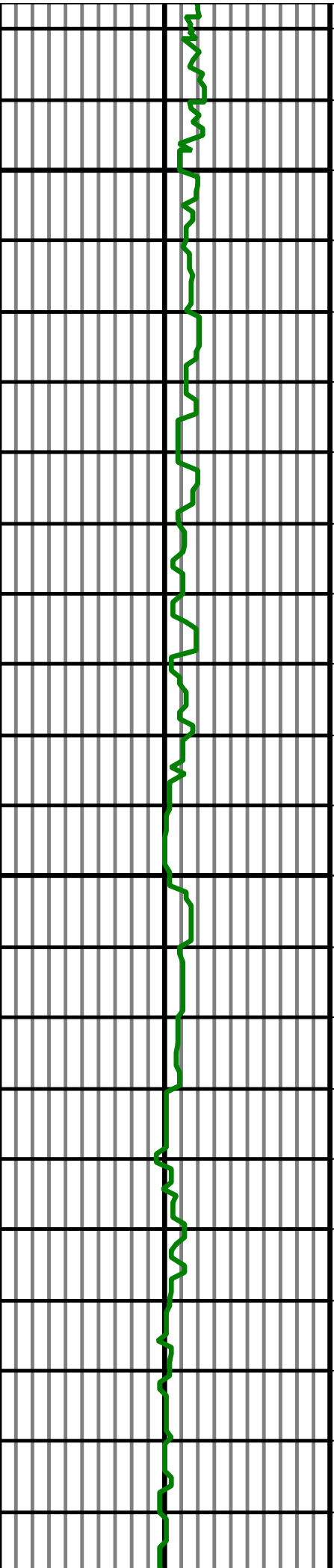
5,800

5,900



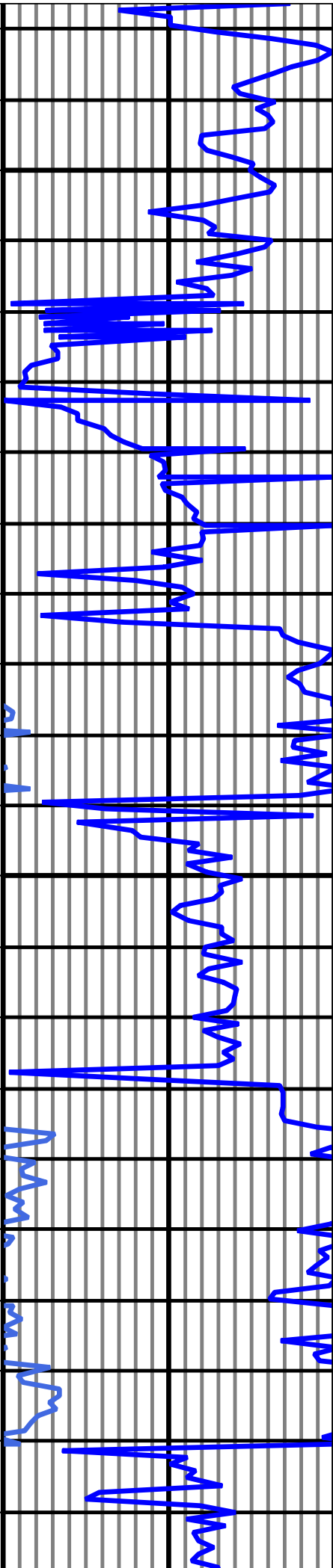
MD: 5905.00 INC: 9.40 AZ: 221.40

MD: 5995.00 INC: 9.80 AZ: 221.60



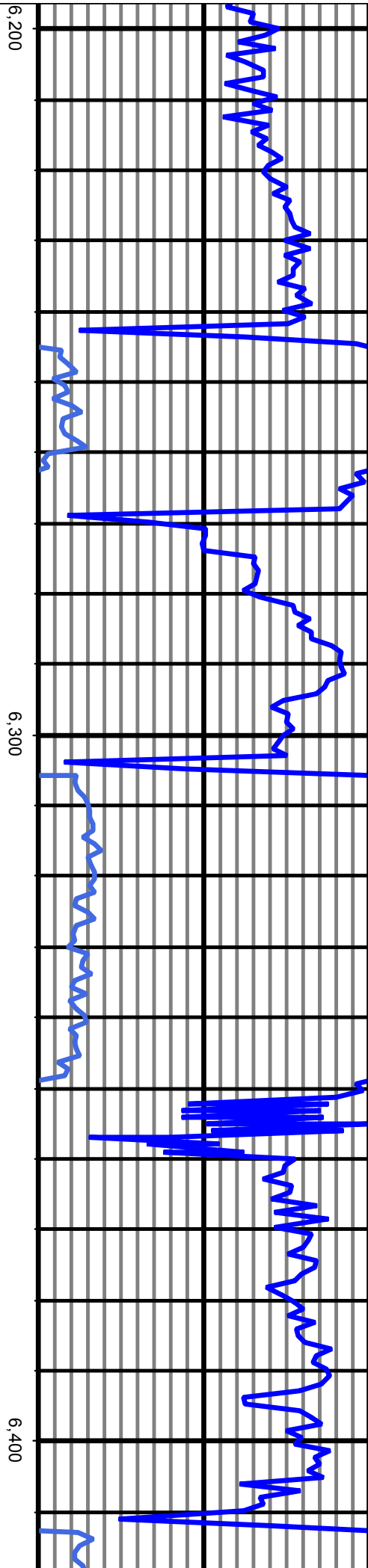
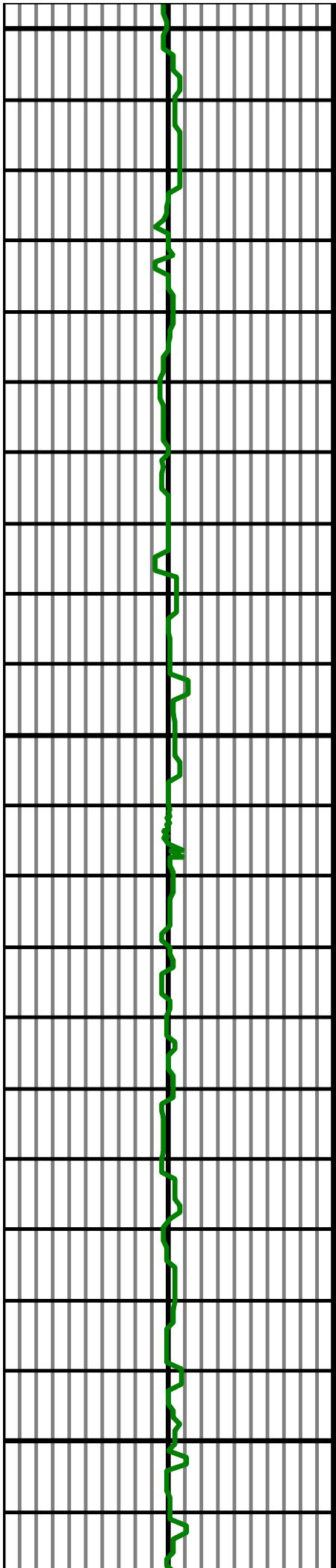
6,000

6,100



MD: 6113.00 INC: 9.90 AZ: 212.40

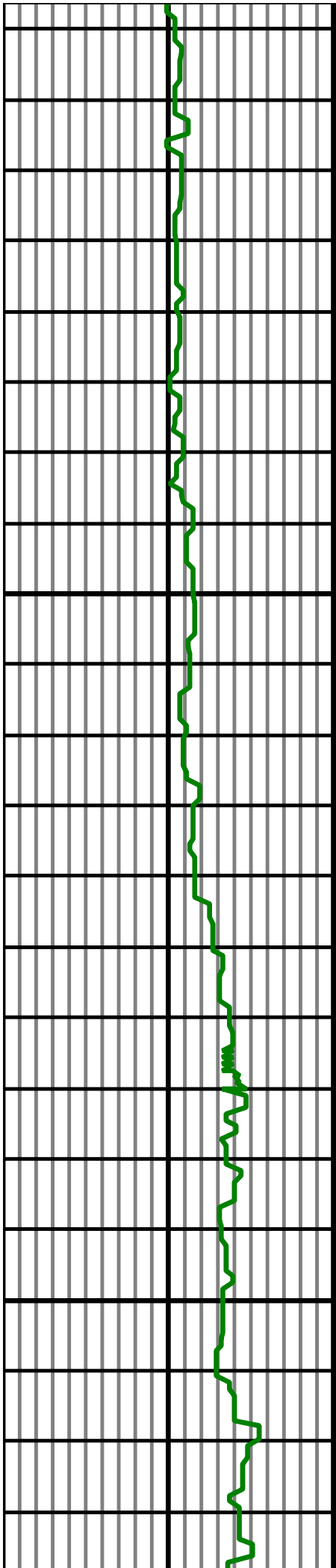
MD: 6203.00 INC: 13.00 AZ: 175.20



MD: 6293.00 INC: 13.40 AZ: 149.70

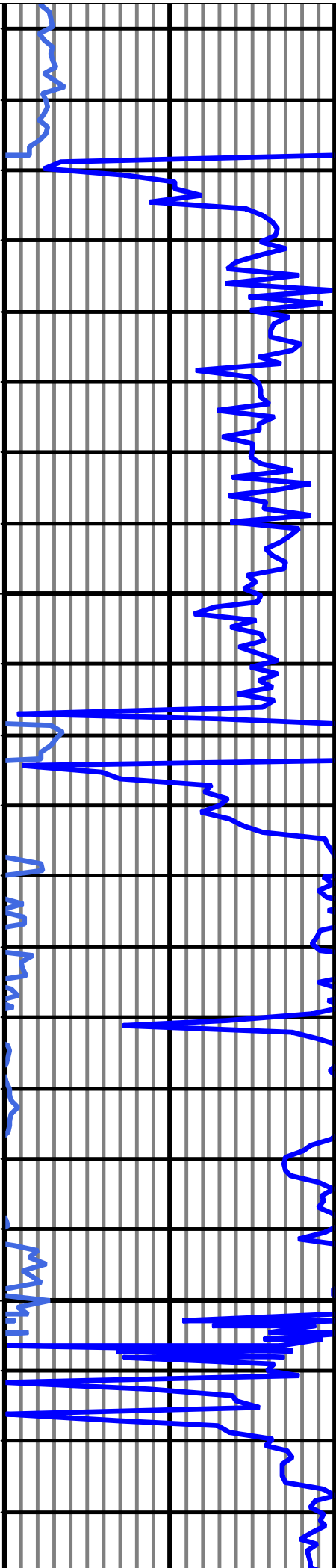
MD: 6382.00 INC: 14.30 AZ: 121.40

MD: 6472.00 INC: 15.30 AZ: 111.40



6,500

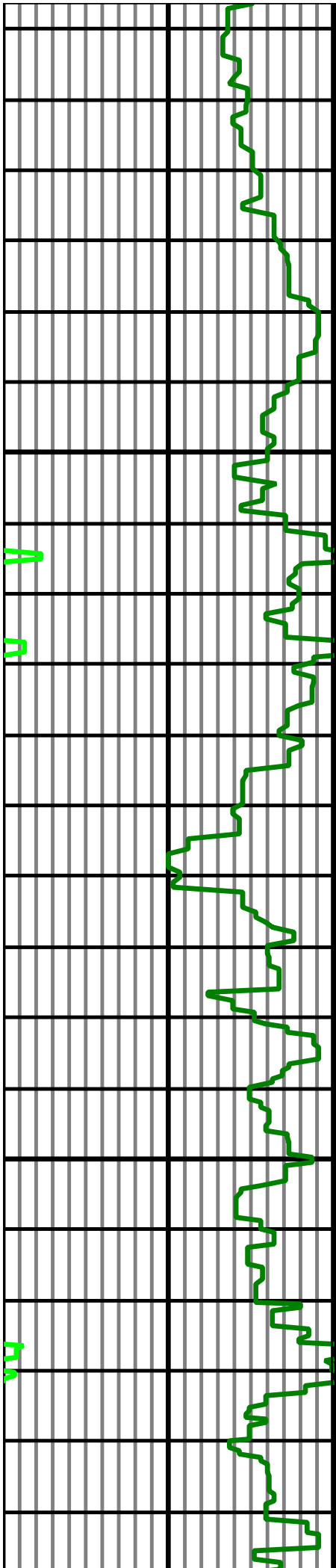
009'9



MD: 6561.00 INC: 18.50 AZ: 95.50

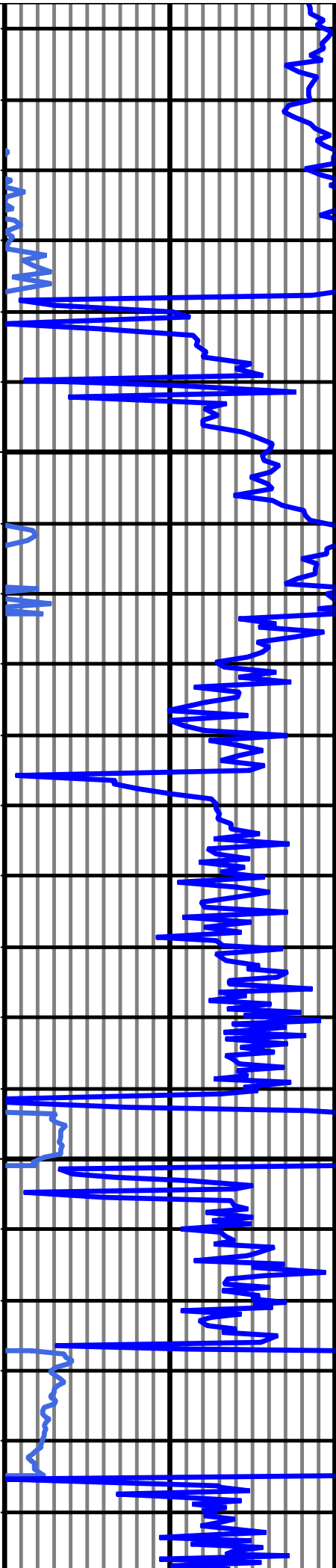
MD: 6650.00 INC: 24.20 AZ: 87.30

MD: 6740.00 INC: 31.00 AZ: 93.80



6,700

6,800



MD: 6830.00 INC: 40.60 AZ: 95.90

MD: 6920.00 INC: 51.40 AZ: 92.00

MD: 7010.00 INC: 60.80 AZ: 89.60

MD: 7100.00 INC: 66.90 AZ: 89.00

