



**Premier Directional Drilling**  
12941 North Freeway Suite 400  
Houston, Texas 77060  
PH: #281-673-4000

**Wilson Ranch 32N-N27HZ**

**Scale 5":100' - MD**

**11/21/2015 9:05 PM**

**Oper. Company:** Anadarko Petroleum Corporation

**Well:** Wilson Ranch 32N-N27HZ

**Field:** Wattenberg

**Rig:** Precision 462

**Well ID:** 05123412990000

**Job Number:** R15413

**Notes:** LWD Real Time Data Log  
Gamma Correction Determined by Pipe ID & OD, Mud Weight & Bit Size

**State:** CO

**County:** Weld

**Country:** USA

**Location:** 4N-68W-26

**Start Date:** 11/16/2015 03:58:00

**End Date:** 11/21/2015 19:36:40

**Latitude:** 40.286223

**Longitude:** -104.962903

**Elev KB:** 20'

**Elev DF:** 5012'

**Elev GL:** 4992'

**Notes:** Datum: NAD1983 Map Zone: 13N (108 W to 102 W) Total Correction: 8.43° Grid Convergence: 0.02° (True North)

**Operator 1:** Austin Capaldo

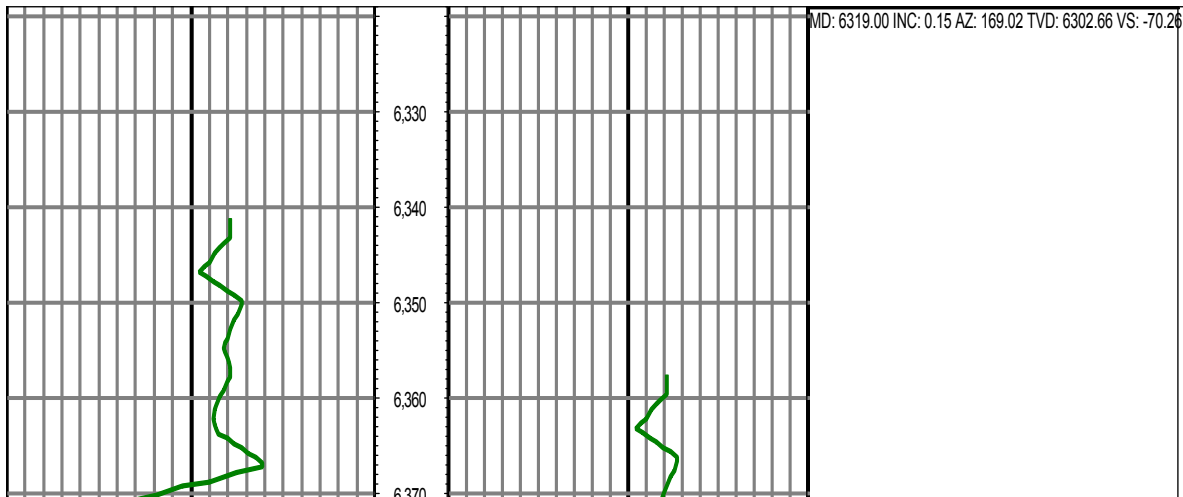
**Operator 2:** David Clancy

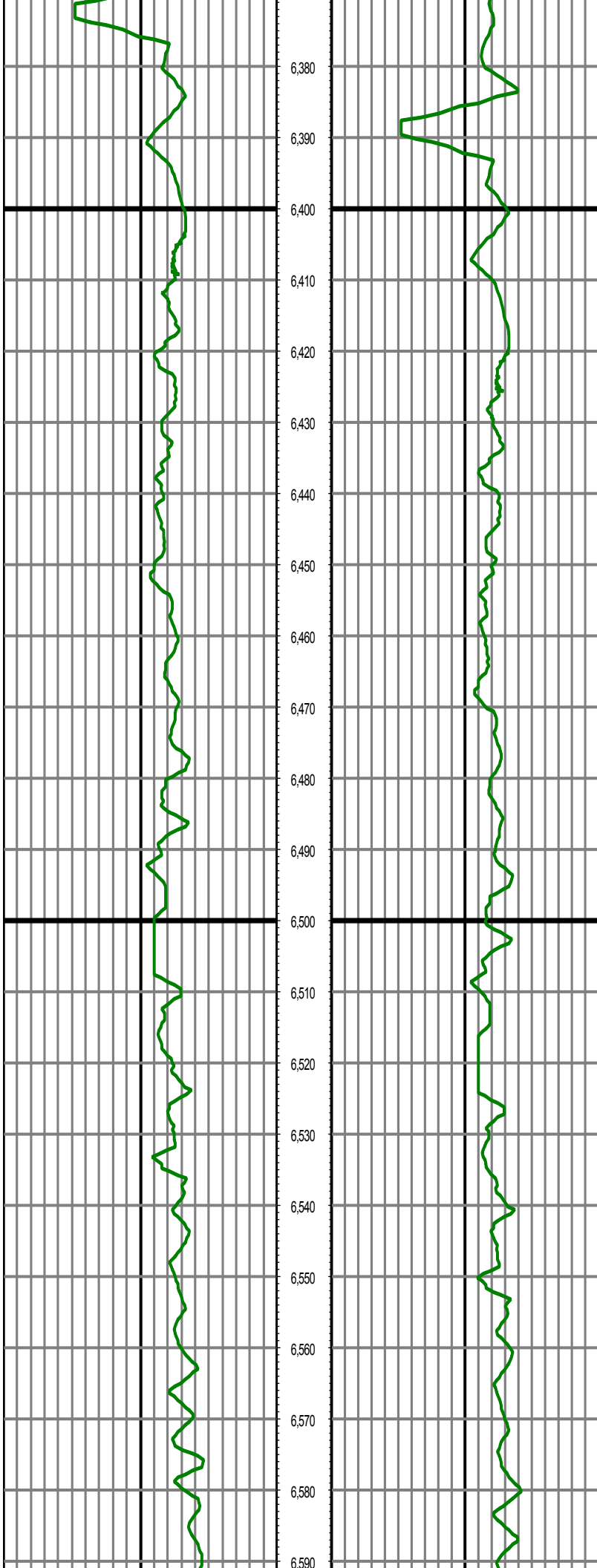
**Notes:** Smoothing: 6 Gap Fill: 10 Tool Type: Mud Pulse Calculation Method: Minimum Curvature

Tool Run Data	Run #1	Run #2	Run #3	Run #4	Run #5
Tool S/N	335				
Bit Size	8.5				
Cal Factor	1.07				
Survey Offset:	67.00				
Gamma Offset	61.90				
Resistivity Offset	0.00				
Start Depth	6357.00				
StartDate	11/16/2015				
StartTime	15:58				
EndDepth	16516.00				
EndDate	11/21/2015				
EndTime	19:36				
Hole Data			Casing Data		
Size	From	To	Size	From	To
8 1/2	1839.00	16516.00	9 5/8	0.00	1821.00

*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.*

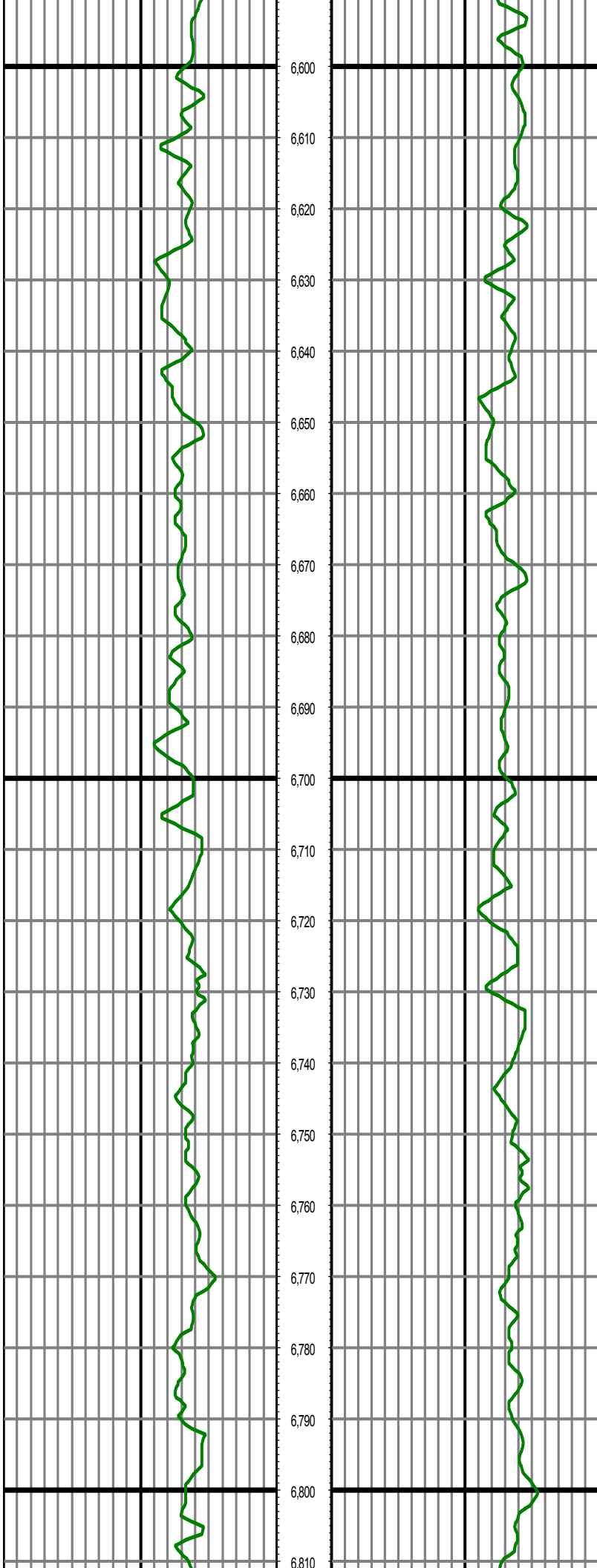
0.00 GR(API) on TVD 200.00 MD 0.00 GR(API) on MD 200.00 Surveys (MD/INC/AZ/TVD/VS)  
200.00 2 400.00 FT 200.00 2 400.00





MD: 6415.00 INC: 0.32 AZ: 252.46 TVD: 6398.66 VS: -70.03

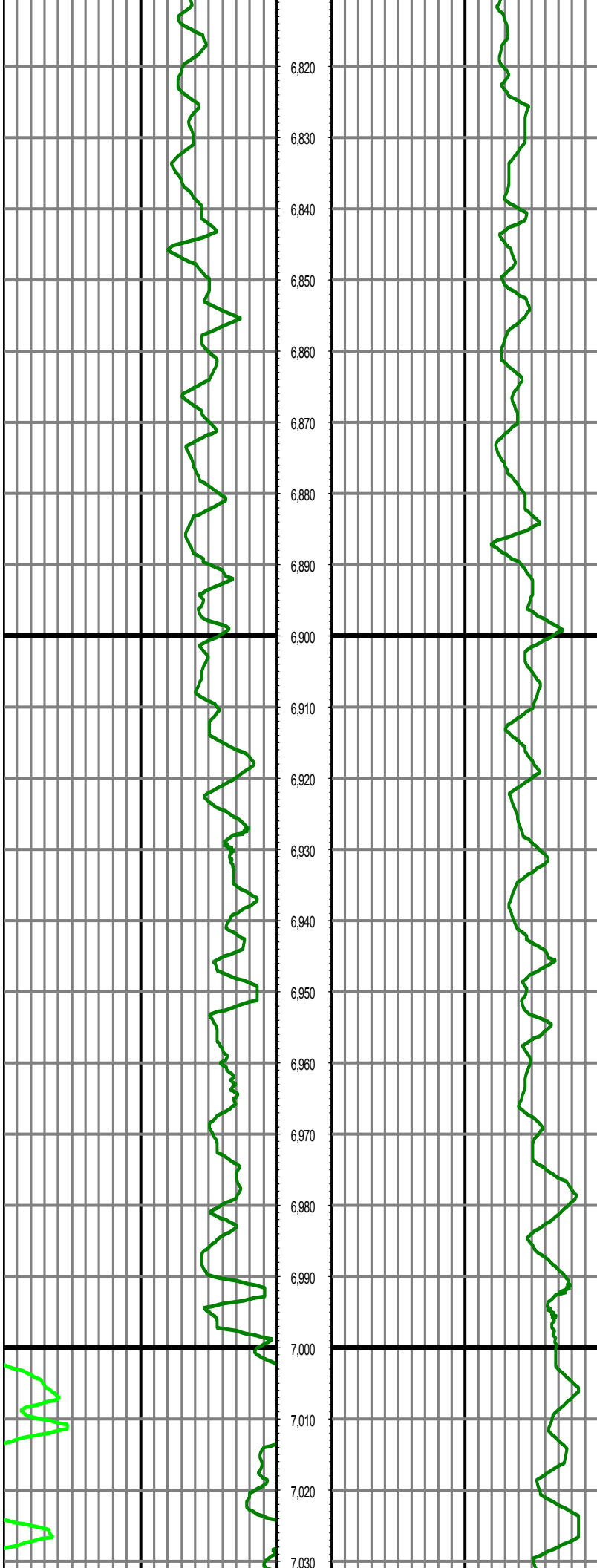
MD: 6510.00 INC: 3.46 AZ: 266.51 TVD: 6493.60 VS: -66.92



MD: 6605.00 INC: 12.75 AZ: 274.20 TVD: 6587.55 VS: -53.5

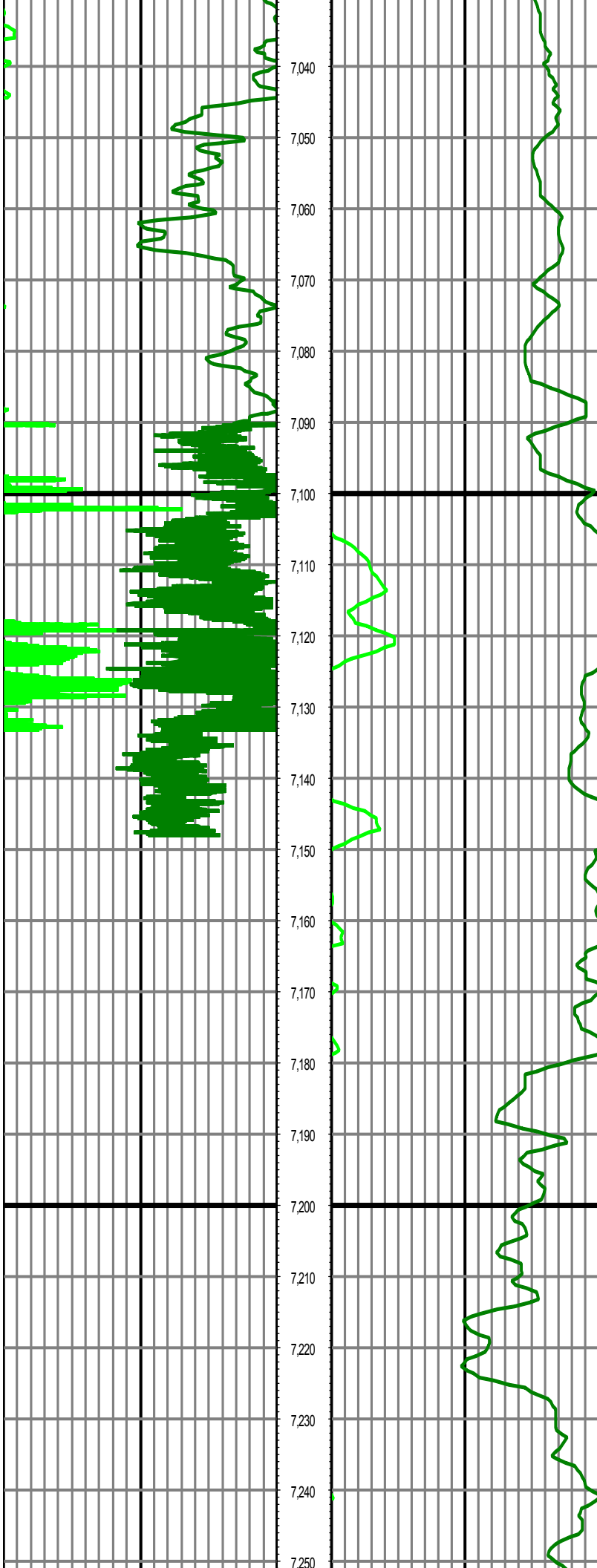
MD: 6700.00 INC: 21.05 AZ: 280.91 TVD: 6678.37 VS: -26.30

MD: 6795.00 INC: 25.66 AZ: 279.52 TVD: 6765.57 VS: 10.77



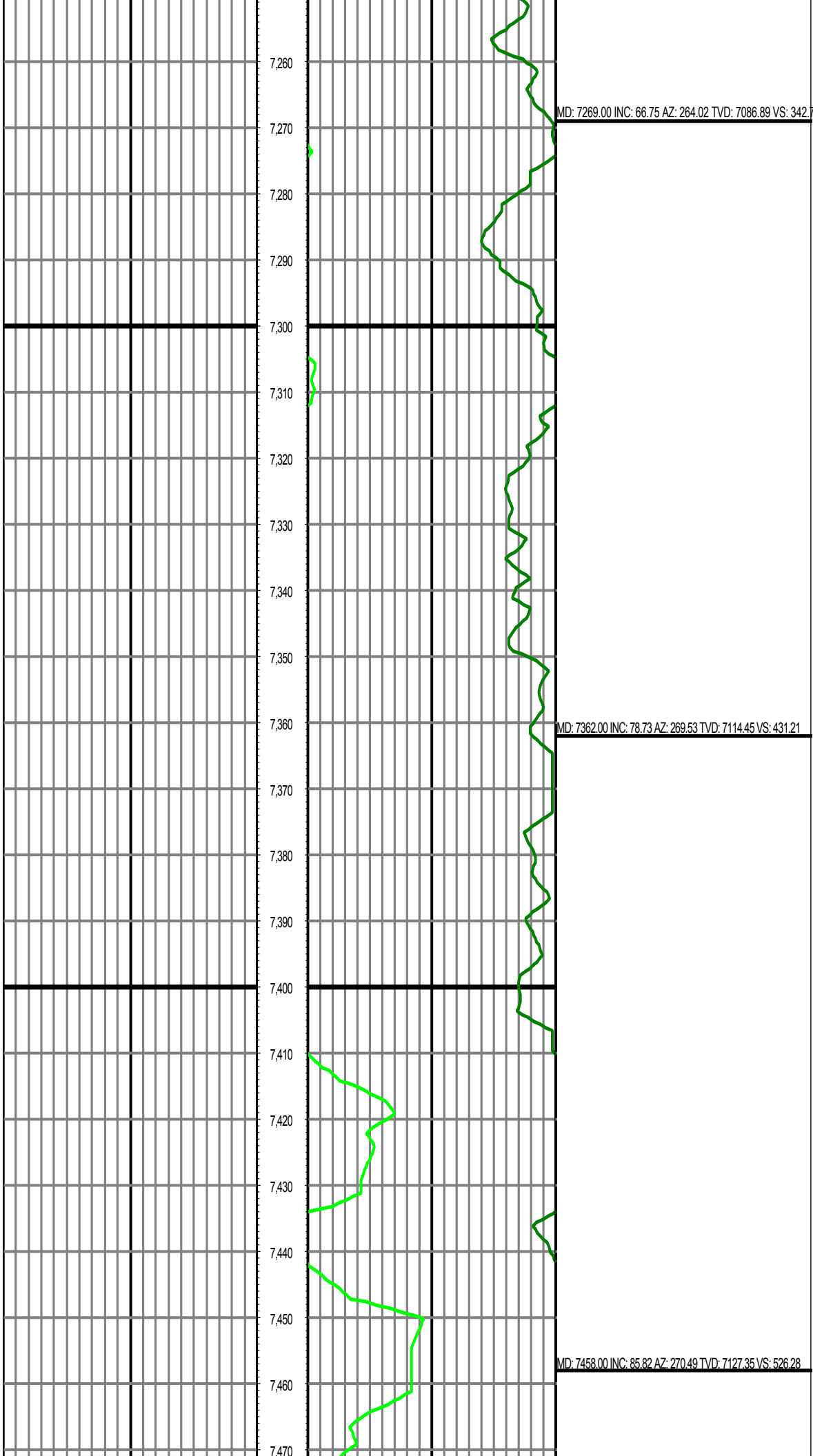
MD: 6890.00 INC: 33.42 AZ: 267.09 TVD: 6848.23 VS: 57.30

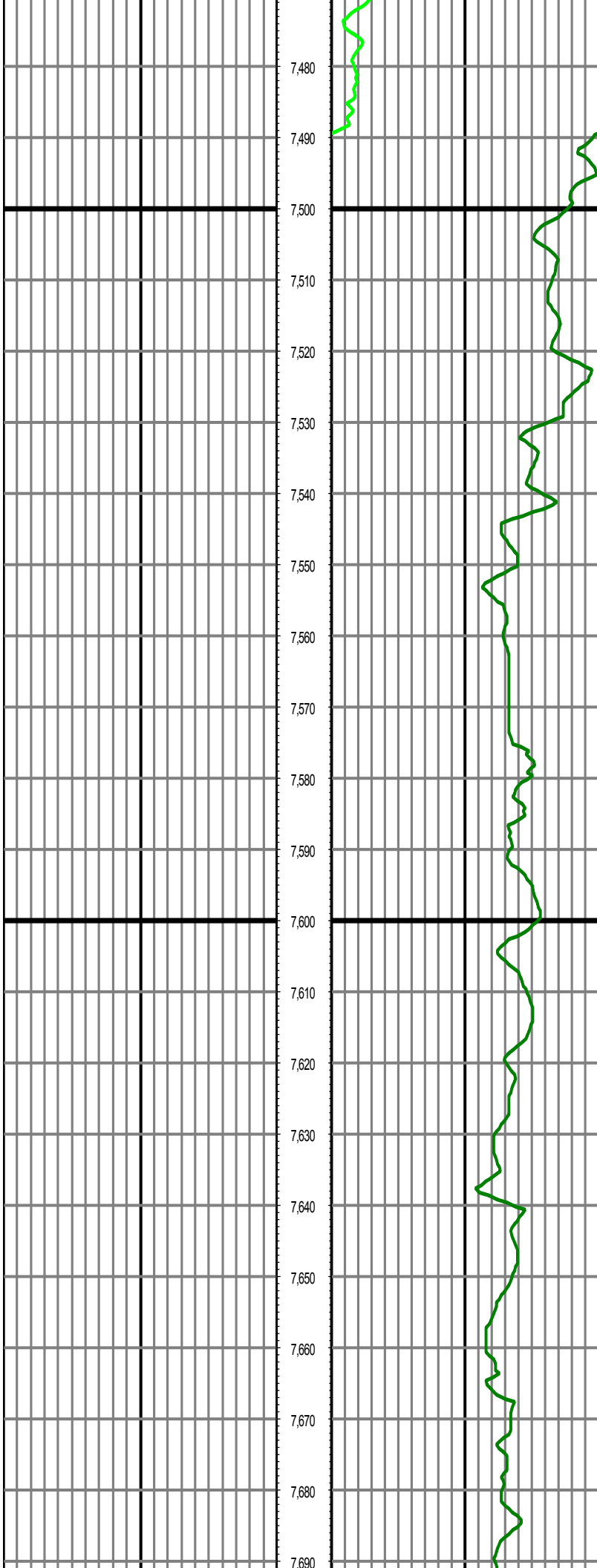
MD: 6985.00 INC: 42.88 AZ: 259.69 TVD: 6922.89 VS: 115.8



MD: 7080.00 INC: 51.47 AZ: 260.36 TVD: 6987.41 VS: 183.5

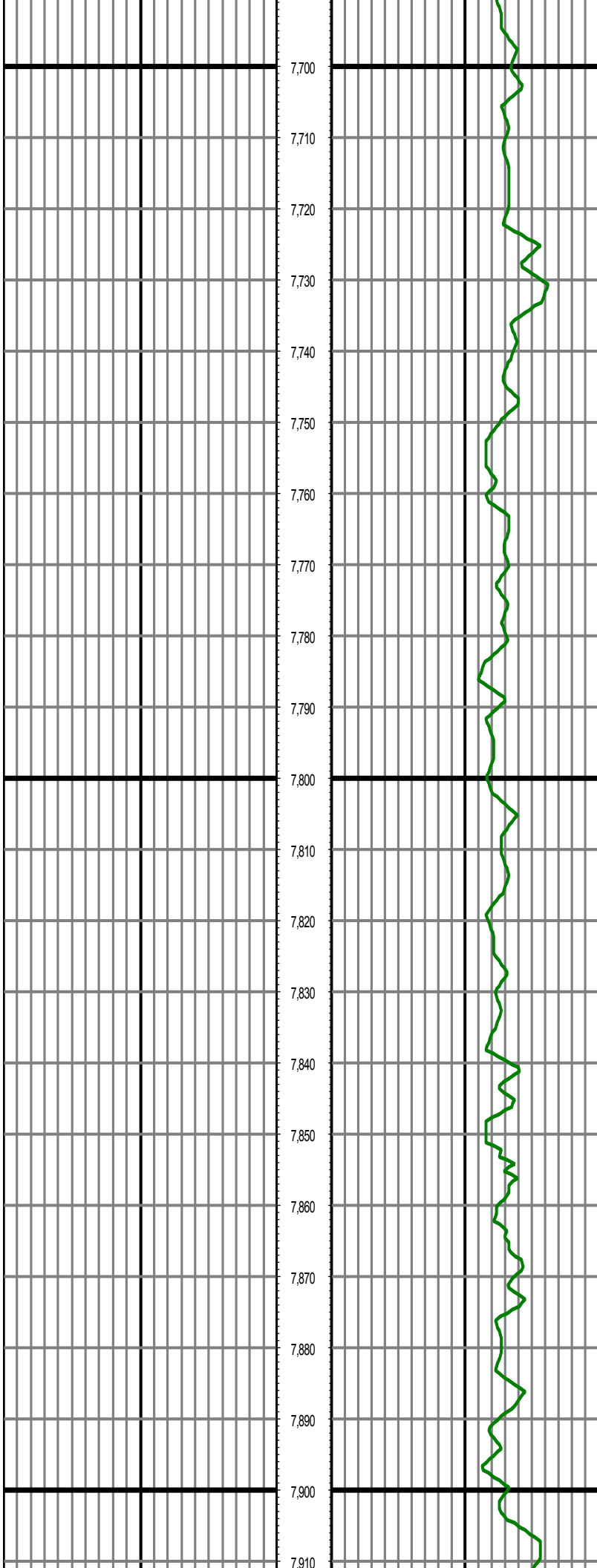
MD: 7174.00 INC: 57.13 AZ: 264.05 TVD: 7042.25 VS: 259.48





MD: 7553.00 INC: 88.89 AZ: 270.33 TVD: 7131.73 VS: 621.1

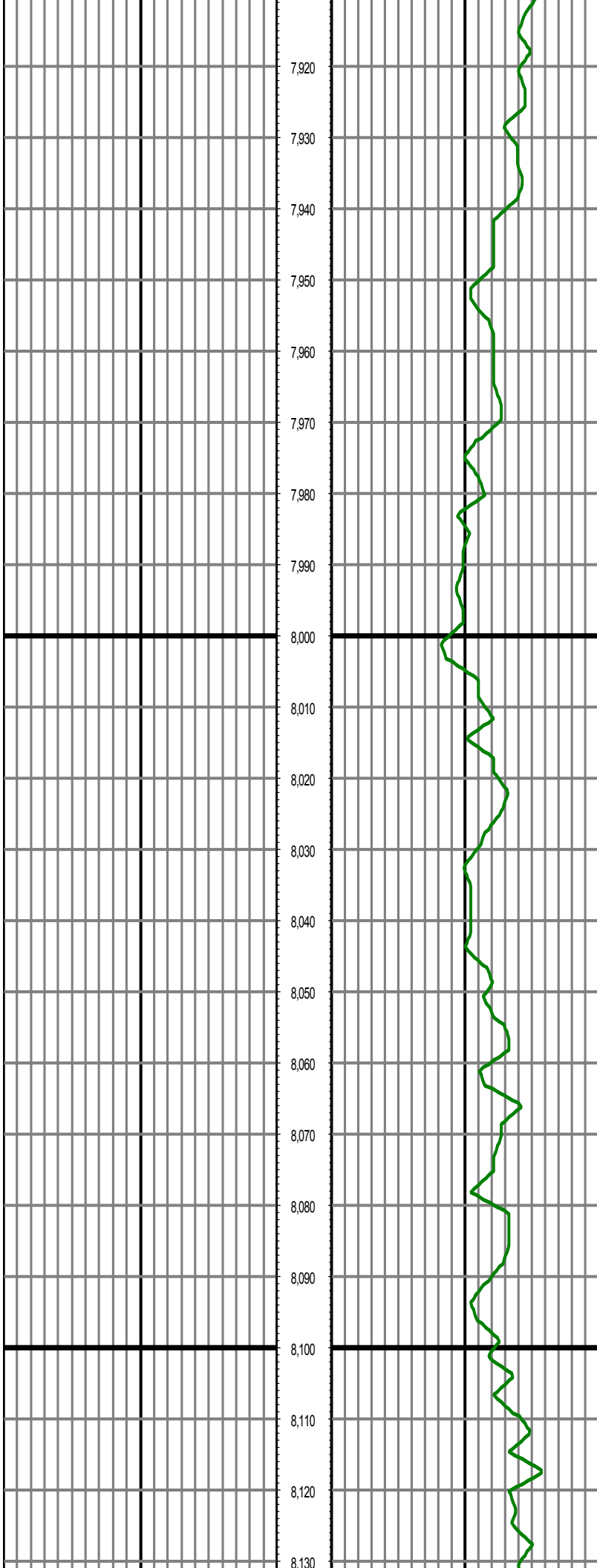
MD: 7647.00 INC: 90.68 AZ: 271.66 TVD: 7132.08 VS: 715.15



MD: 7742.00 INC: 89.11 AZ: 272.25 TVD: 7132.26 VS: 810.1

MD: 7837.00 INC: 90.30 AZ: 272.12 TVD: 7132.75 VS: 905.03

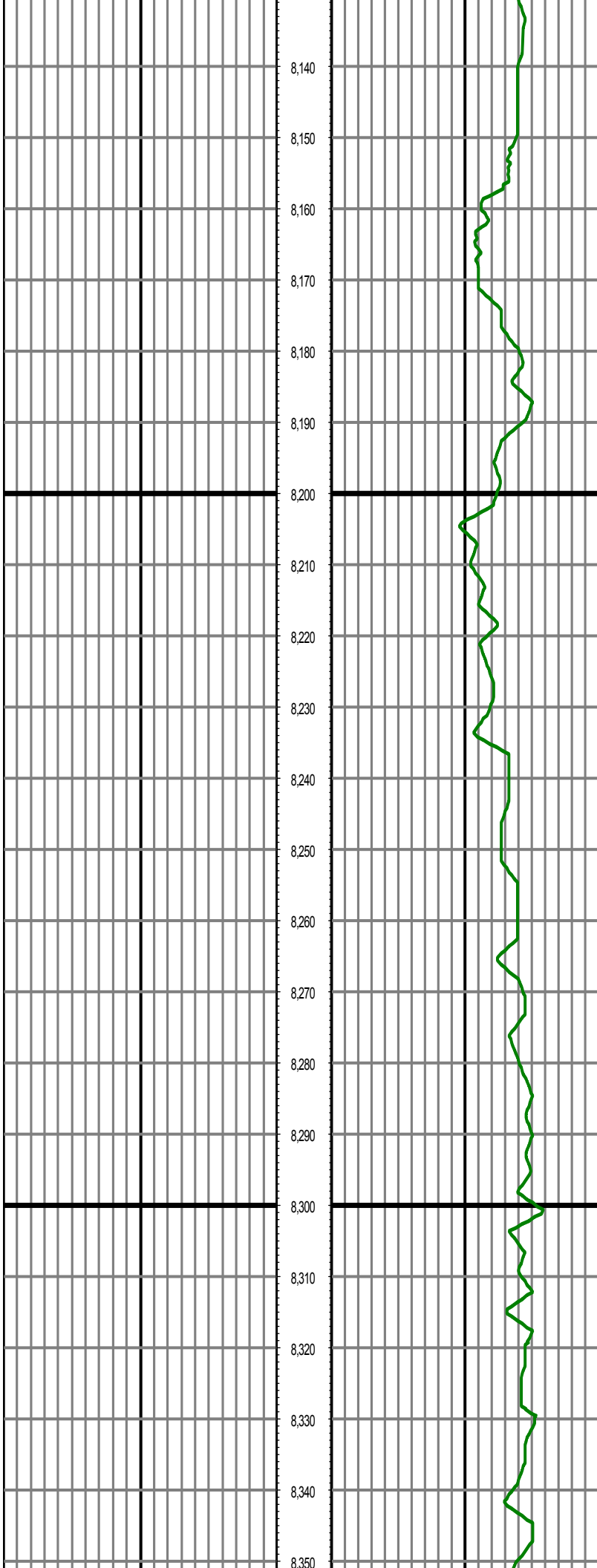




MD: 7933.00 INC: 86.98 AZ: 271.51 TVD: 7135.03 VS: 1000

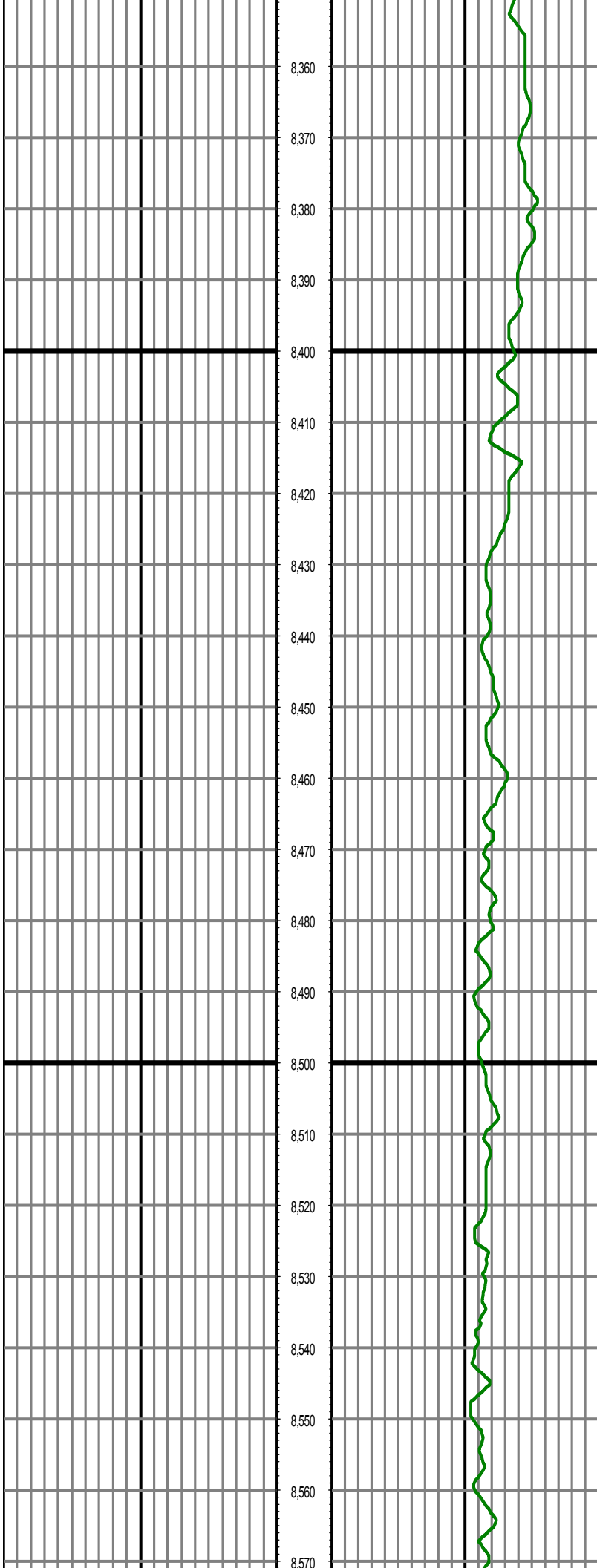
MD: 8028.00 INC: 87.05 AZ: 270.55 TVD: 7139.97 VS: 1095.81

MD: 8124.00 INC: 86.96 AZ: 270.47 TVD: 7144.99 VS: 1191.67



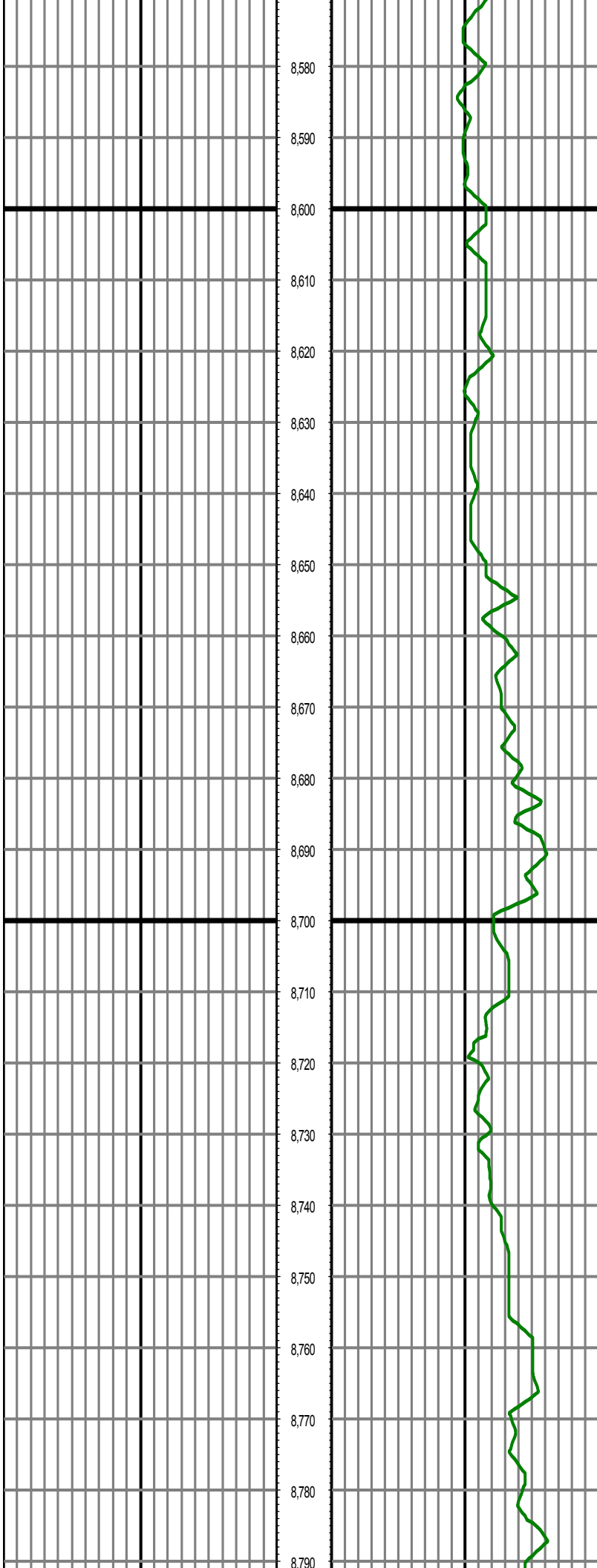
MD: 8218.00 INC: 89.43 AZ: 269.45 TVD: 7147.95 VS: 1285

MD: 8313.00 INC: 90.41 AZ: 269.78 TVD: 7148.08 VS: 1380.61



MD: 8409.00 INC: 90.86 AZ: 269.02 TVD: 7147.02 VS: 1476

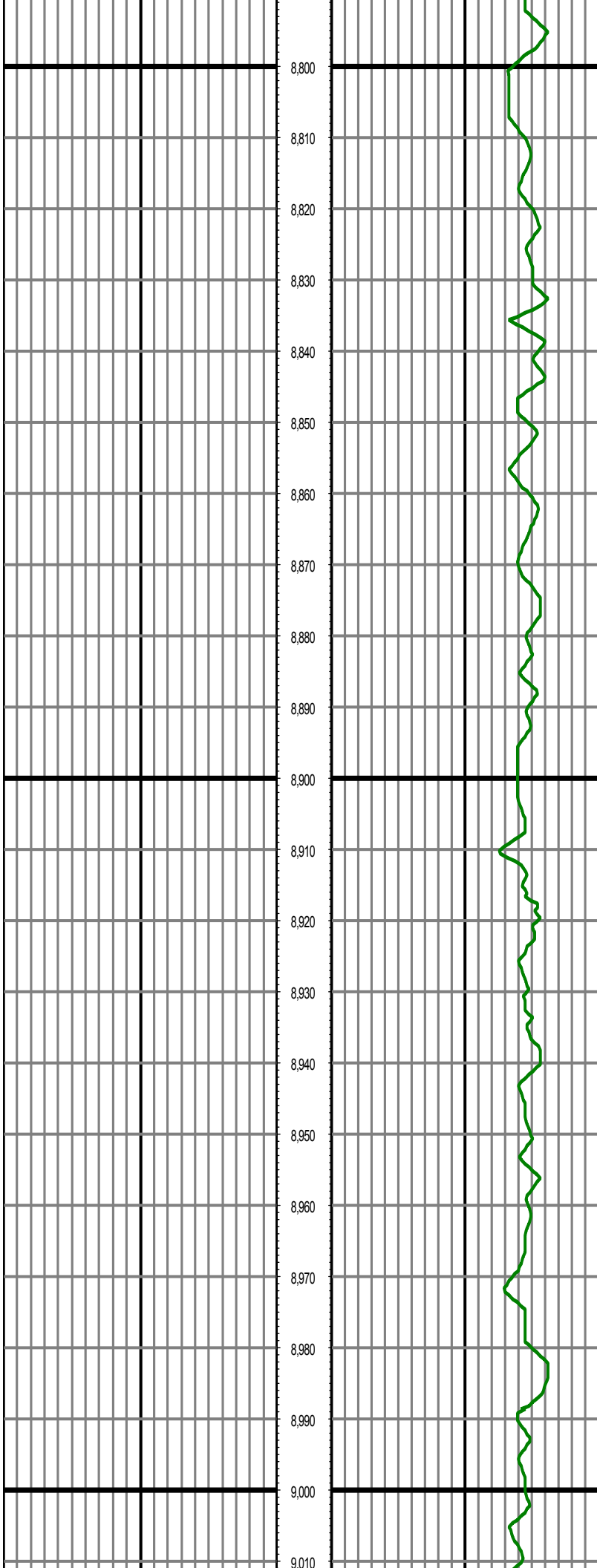
MD: 8503.00 INC: 90.32 AZ: 268.00 TVD: 7146.05 VS: 1570.55



MD: 8598.00 INC: 90.56 AZ: 269.27 TVD: 7145.32 VS: 1665

MD: 8693.00 INC: 91.85 AZ: 268.53 TVD: 7143.32 VS: 1760.47

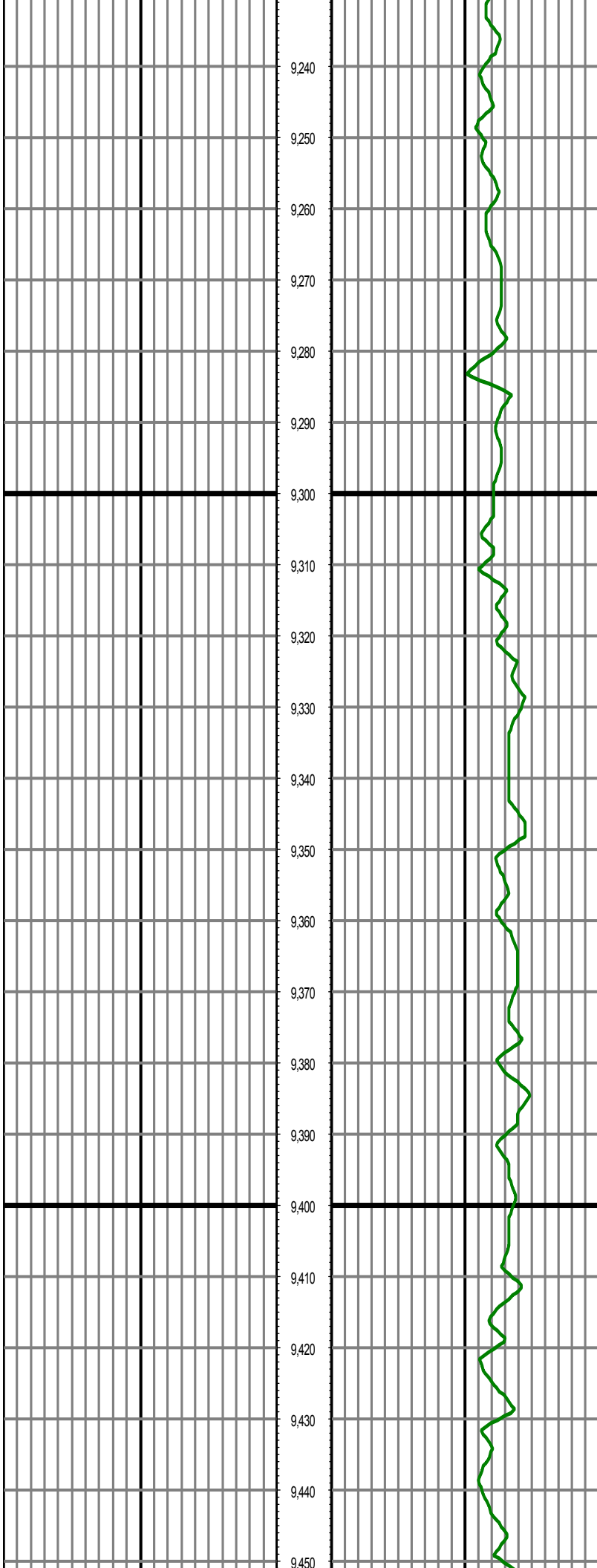
MD: 8788.00 INC: 90.13 AZ: 270.80 TVD: 7141.68 VS: 1855.45



MD: 8883.00 INC: 89.84 AZ: 269.39 TVD: 7141.71 VS: 1950

MD: 8978.00 INC: 90.84 AZ: 272.17 TVD: 7141.14 VS: 2045.42





MD: 9260.00 INC: 90.35 AZ: 272.85 TVD: 7138.45 VS: 2327

MD: 9355.00 INC: 89.93 AZ: 271.94 TVD: 7138.22 VS: 2421.99

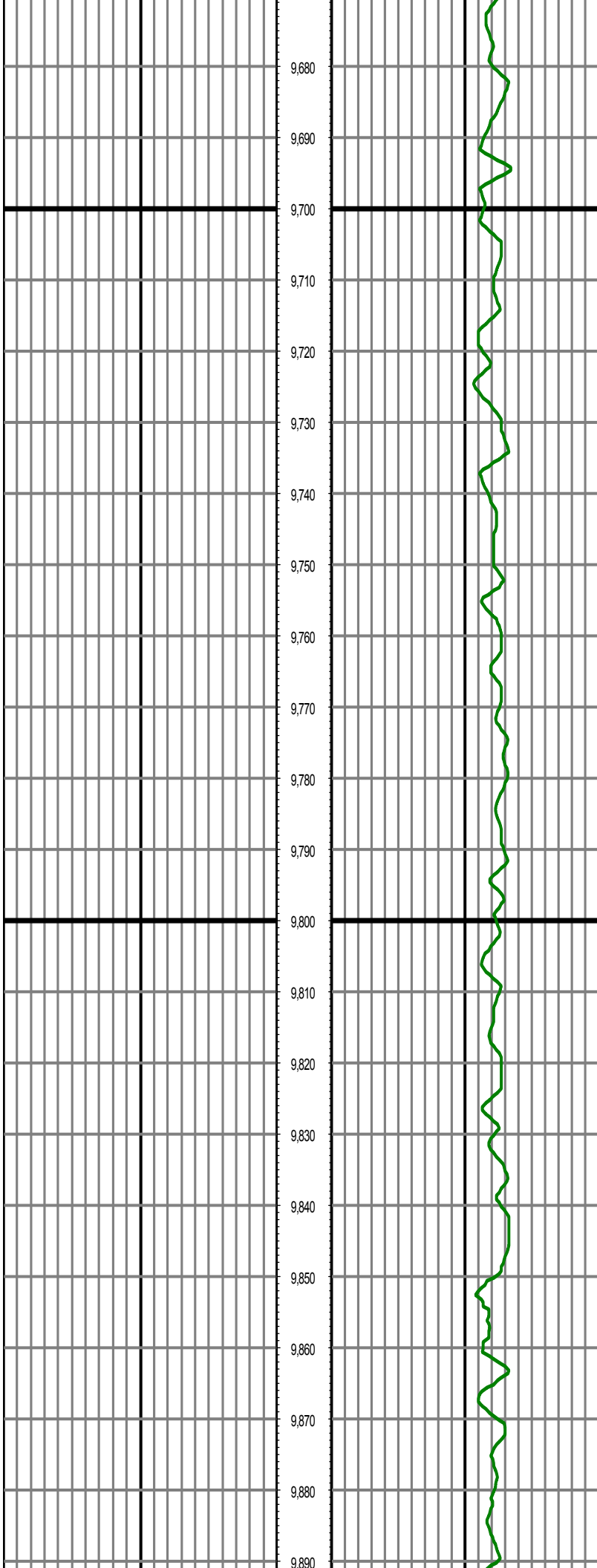
MD: 9450.00 INC: 89.86 AZ: 270.88 TVD: 7138.39 VS: 2516.97

MD: 9450.00 INC: 89.86 AZ: 270.88 TVD: 7138.39 VS: 2516

MD: 9545.00 INC: 90.33 AZ: 270.61 TVD: 7138.23 VS: 2611.96

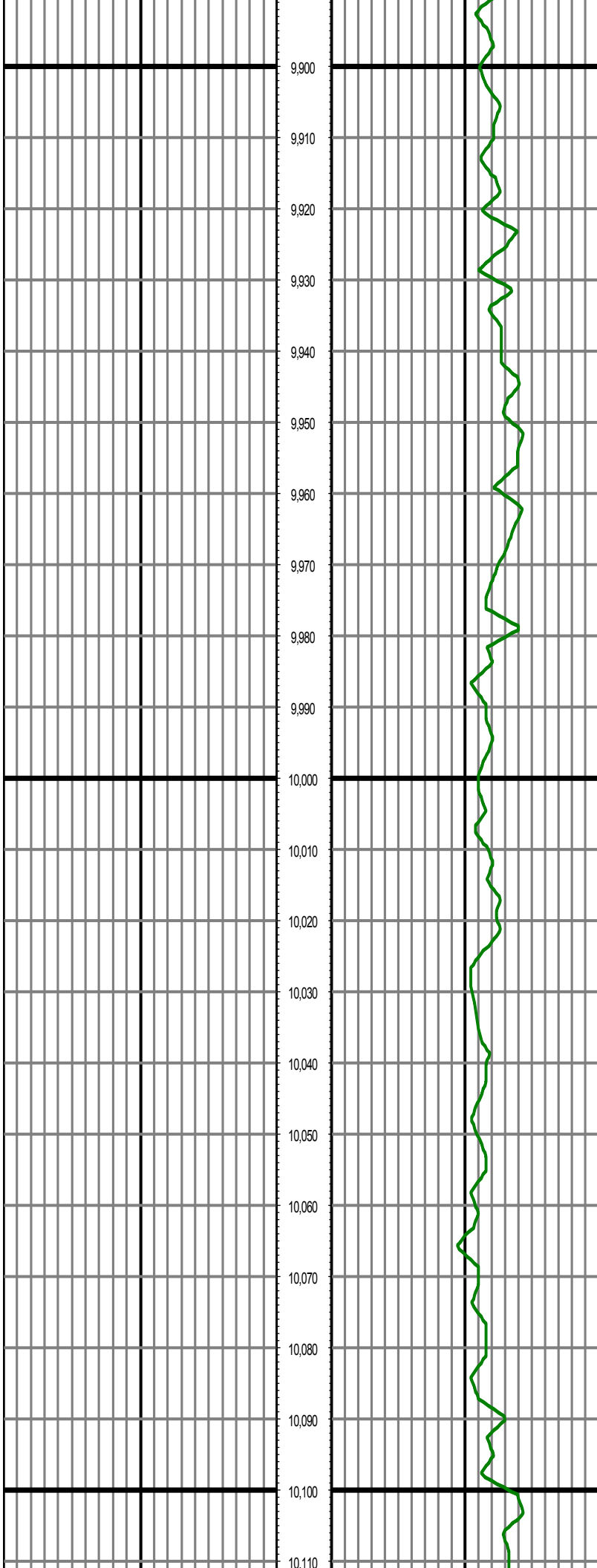
MD: 9639.00 INC: 89.61 AZ: 269.44 TVD: 7138.28 VS: 2705.96





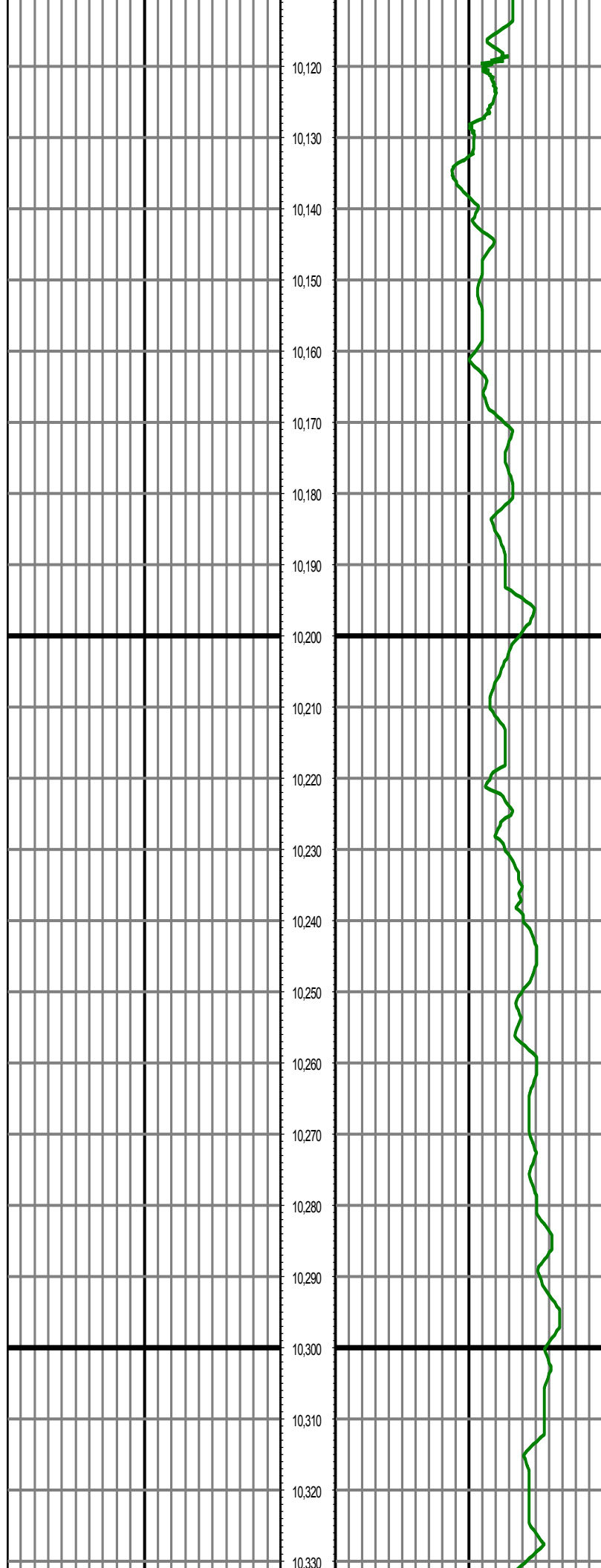
MD: 9734.00 INC: 90.26 AZ: 268.62 TVD: 7138.39 VS: 2800.00

MD: 9829.00 INC: 89.82 AZ: 267.60 TVD: 7138.32 VS: 2895.88



MD: 9924.00 INC: 90.42 AZ: 270.91 TVD: 7138.12 VS: 2990

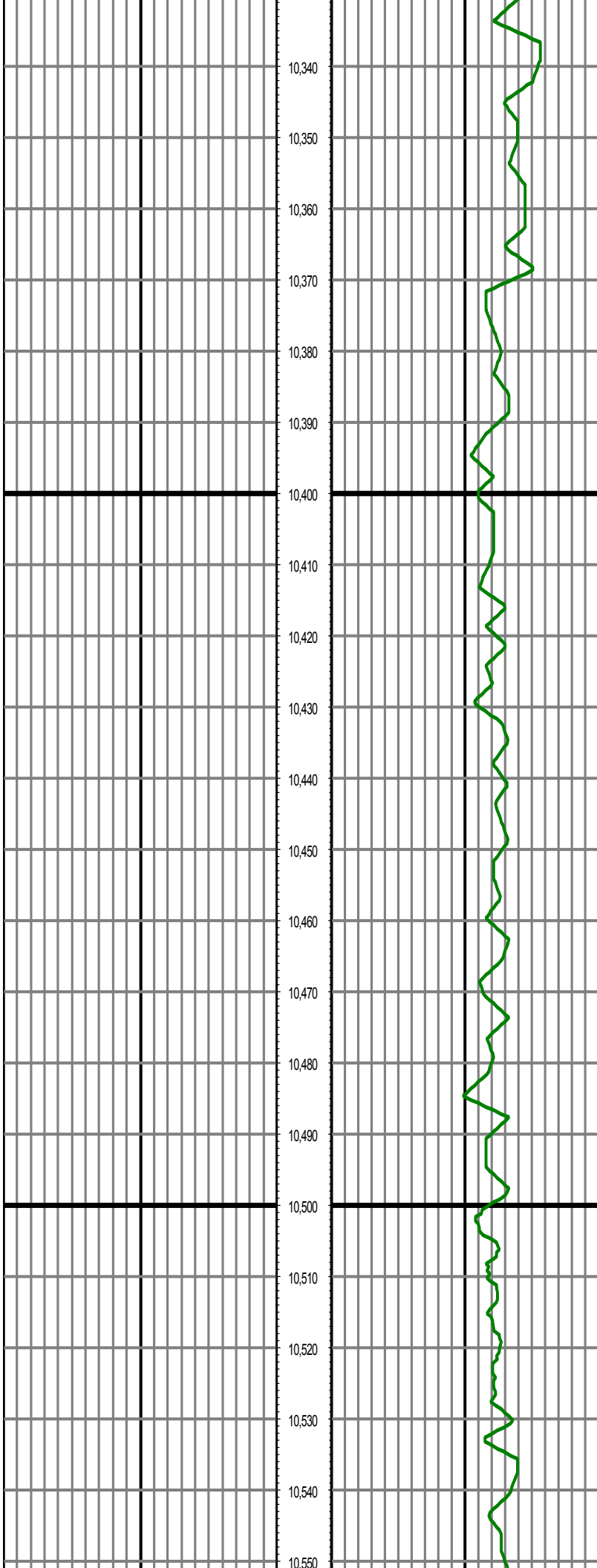
MD: 10019.00 INC: 90.97 AZ: 270.93 TVD: 7136.97 VS: 308



MD: 10113.00 INC: 91.61 AZ: 270.38 TVD: 7134.86 VS: 317%

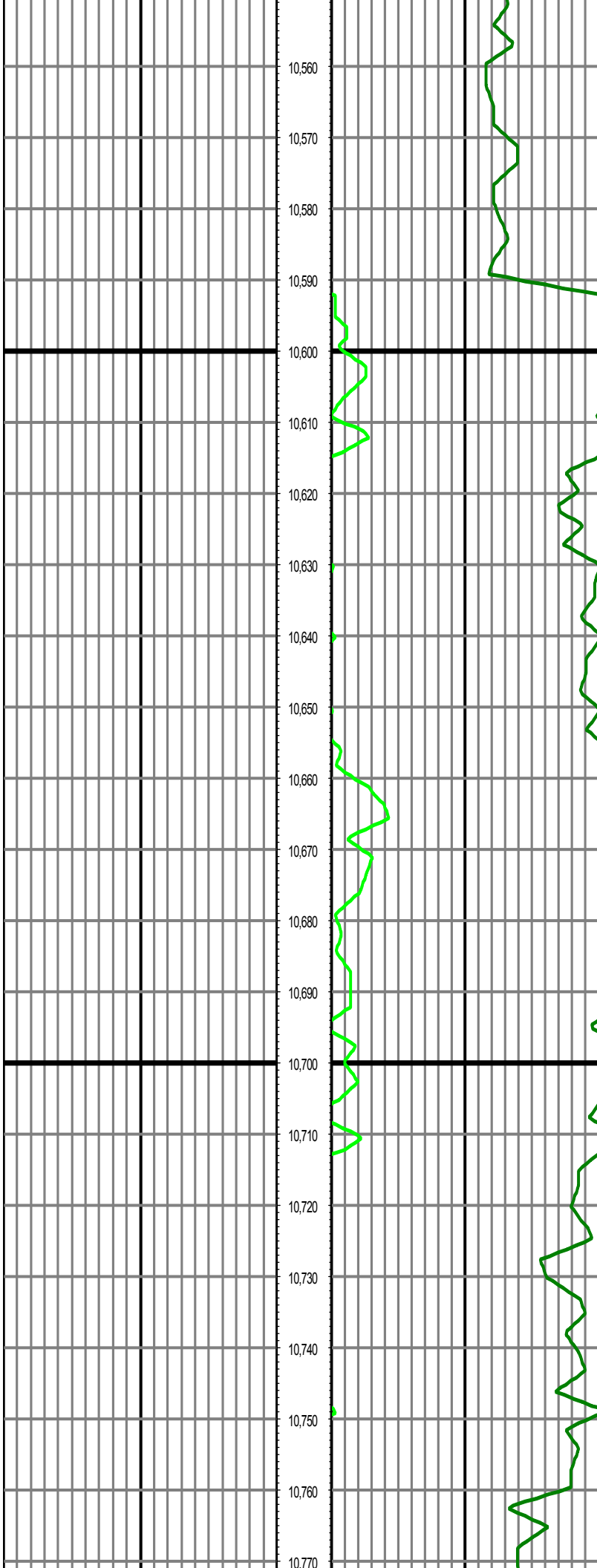
MD: 10206.00 INC: 90.34 AZ: 271.22 TVD: 7133.27 VS: 3272.79

MD: 10300.00 INC: 88.49 AZ: 270.97 TVD: 7134.23 VS: 3366.77



MD: 10394.00 INC: 89.07 AZ: 270.01 TVD: 7136.23 VS: 346

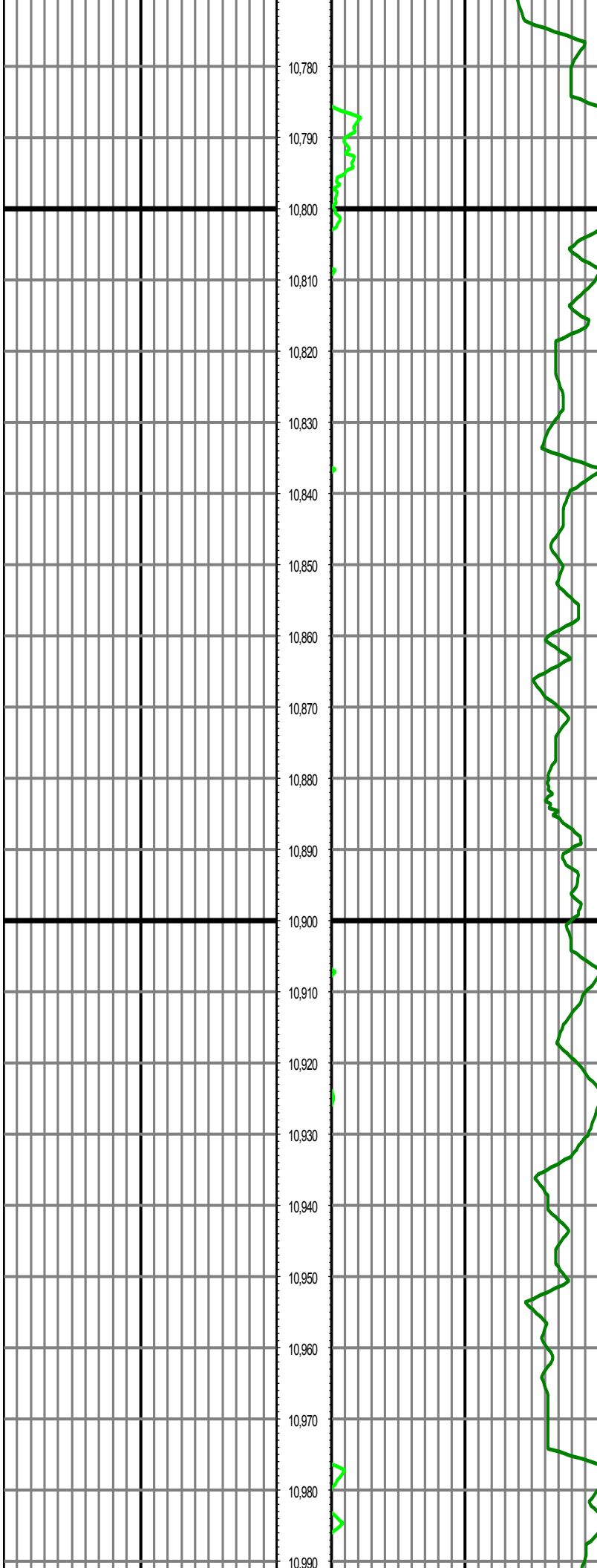
MD: 10488.00 INC: 89.88 AZ: 267.28 TVD: 7137.10 VS: 3554.70



MD: 10582.00 INC: 88.59 AZ: 269.82 TVD: 7138.35 VS: 364

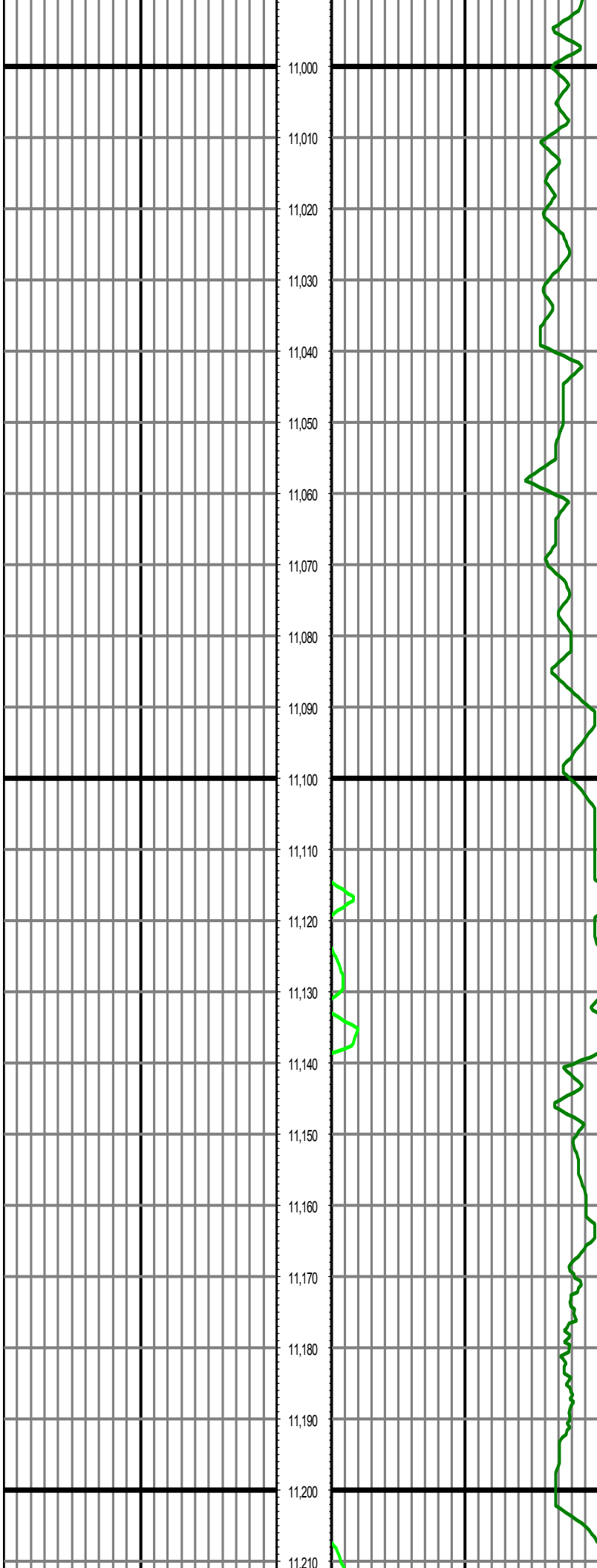
MD: 10676.00 INC: 89.25 AZ: 269.60 TVD: 7140.12 VS: 3742.62

MD: 10768.00 INC: 89.92 AZ: 269.31 TVD: 7140.79 VS: 3834.61



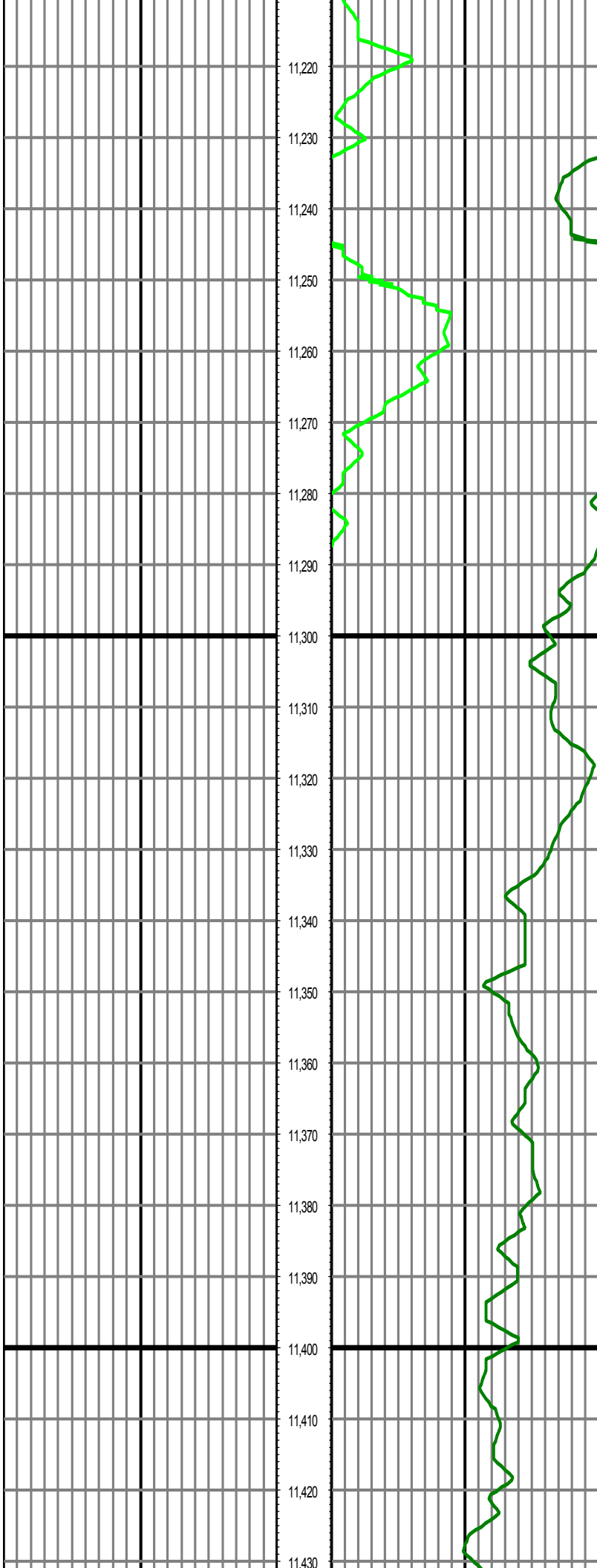
MD: 10861.00 INC: 90.31 AZ: 270.76 TVD: 7140.60 VS: 392

MD: 10956.00 INC: 89.43 AZ: 270.16 TVD: 7140.82 VS: 4022.61



MD: 11050.00 INC: 89.82 AZ: 269.92 TVD: 7141.43 VS: 411.1

MD: 11144.00 INC: 90.28 AZ: 269.45 TVD: 7141.35 VS: 4210.60

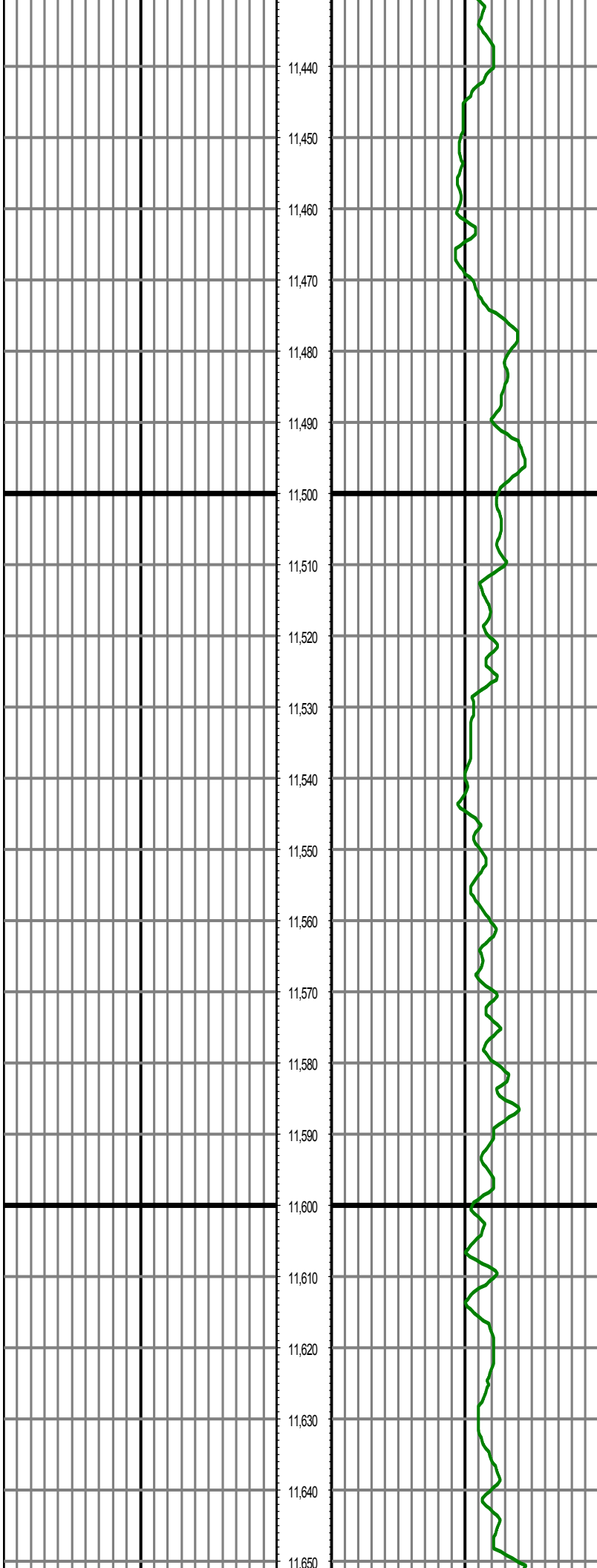


MD: 11238.00 INC: 89.06 AZ: 271.72 TVD: 7141.89 VS: 430

MD: 11333.00 INC: 88.75 AZ: 271.82 TVD: 7143.71 VS: 4399.53

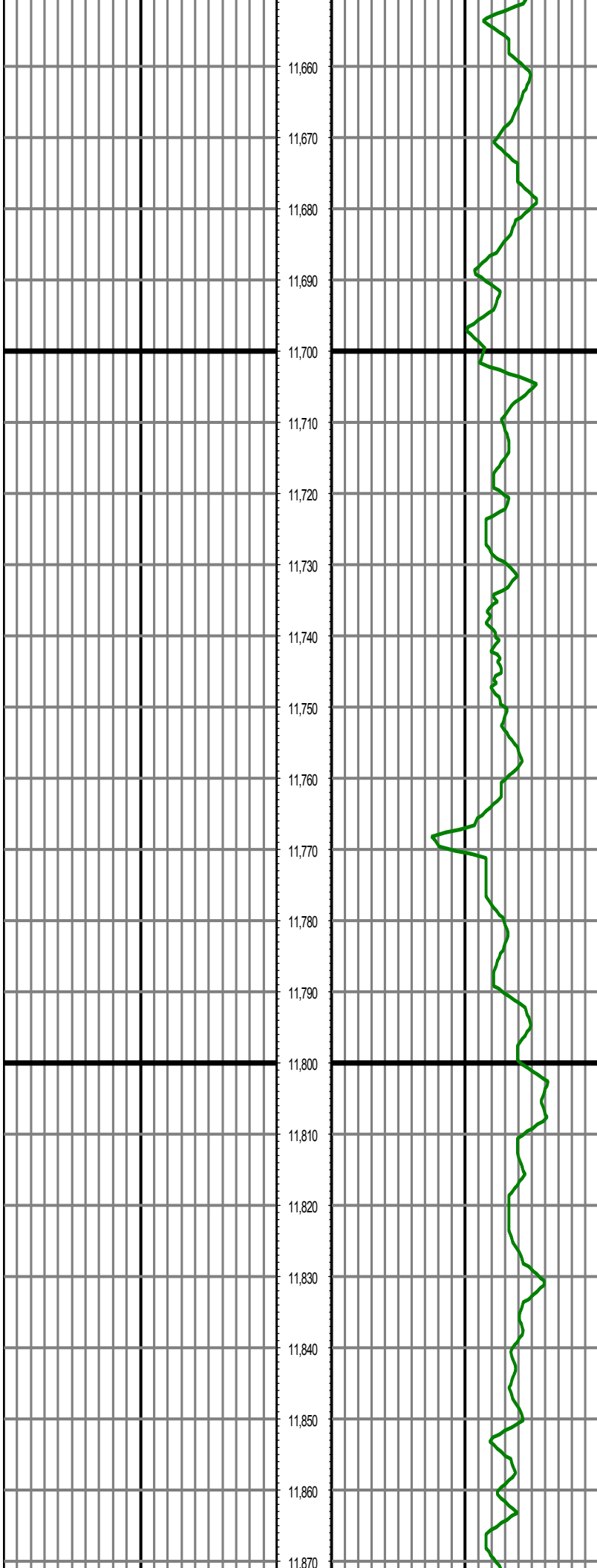
MD: 11429.00 INC: 89.12 AZ: 271.48 TVD: 7145.49 VS: 4495.48





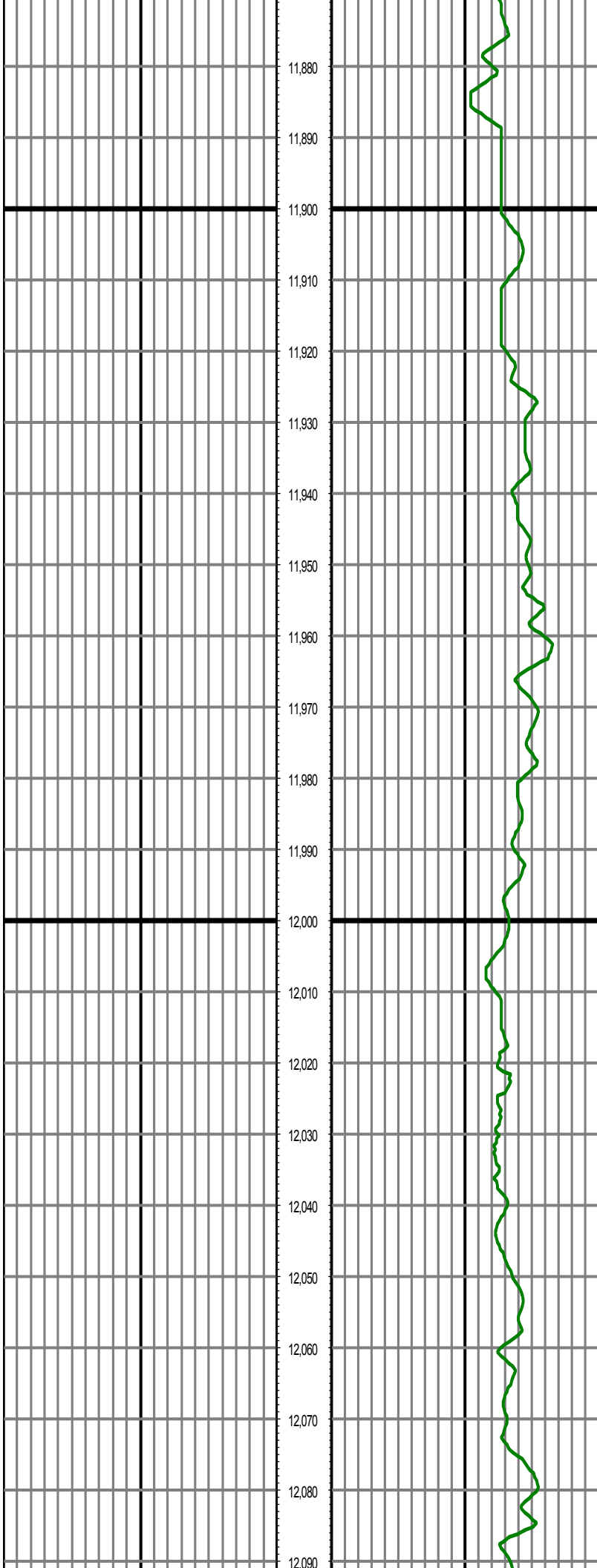
MD: 11523.00 INC: 89.76 AZ: 271.67 TVD: 7146.41 VS: 4589

MD: 11619.00 INC: 90.81 AZ: 271.14 TVD: 7145.93 VS: 4685.42



MD: 11714.00 INC: 91.56 AZ: 270.87 TVD: 7143.97 VS: 478

MD: 11809.00 INC: 89.23 AZ: 271.28 TVD: 7143.31 VS: 4875.37



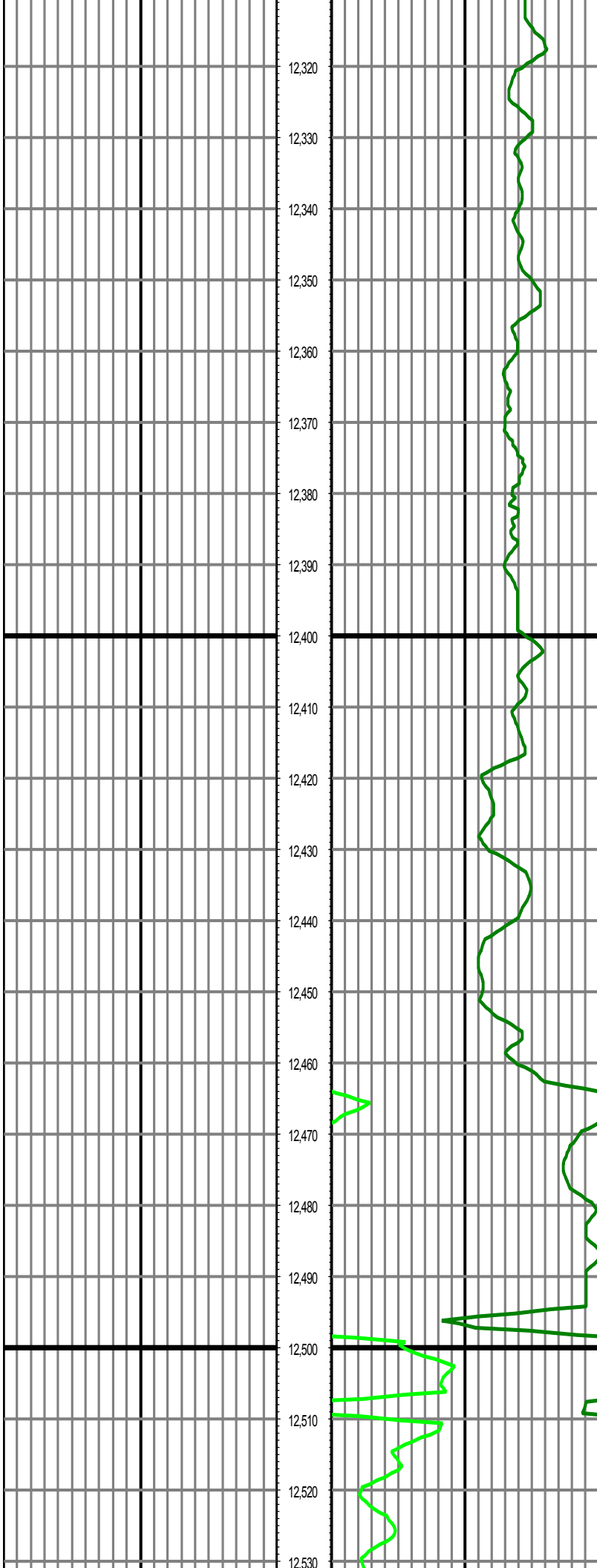
MD: 11904.00 INC: 90.08 AZ: 270.82 TVD: 7143.89 VS: 497

MD: 11999.00 INC: 91.11 AZ: 270.50 TVD: 7142.90 VS: 5065.34

MD: 12094.00 INC: 90.25 AZ: 269.37 TVD: 7141.77 VS: 516

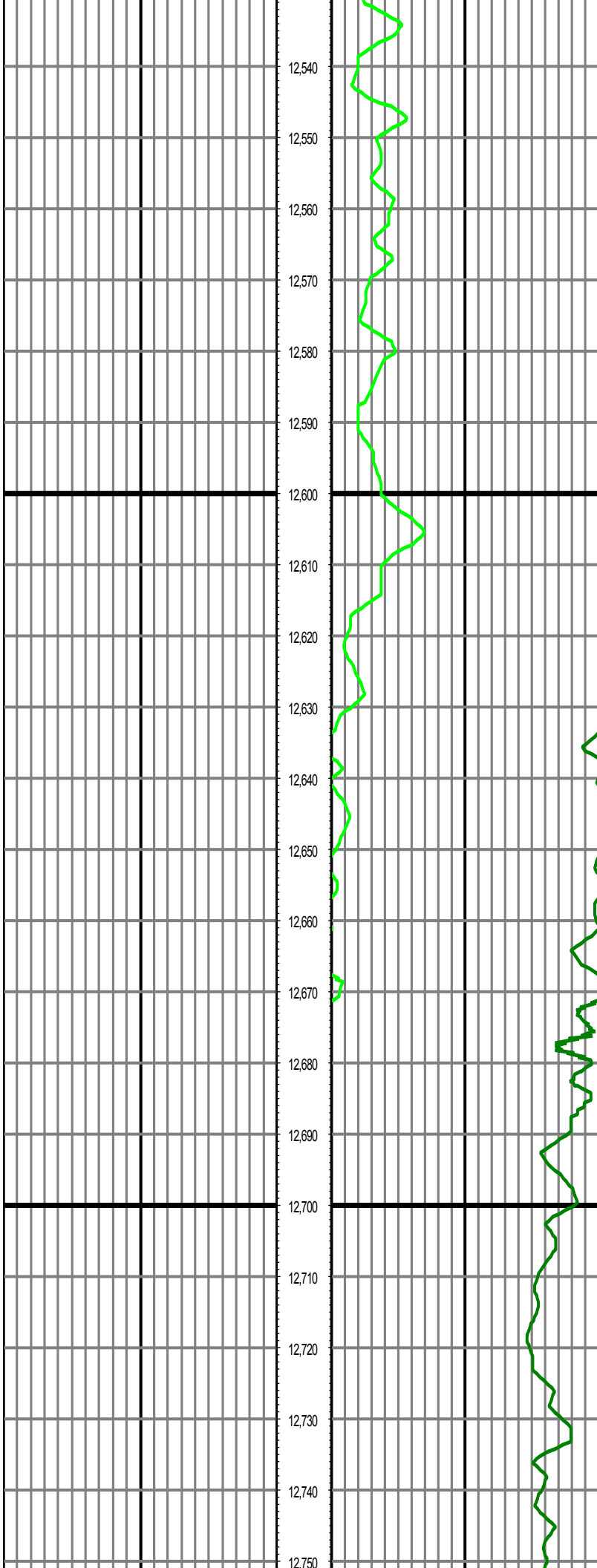
MD: 12189.00 INC: 91.82 AZ: 269.01 TVD: 7140.06 VS: 5255.30

MD: 12284.00 INC: 89.95 AZ: 270.24 TVD: 7138.59 VS: 5350.28



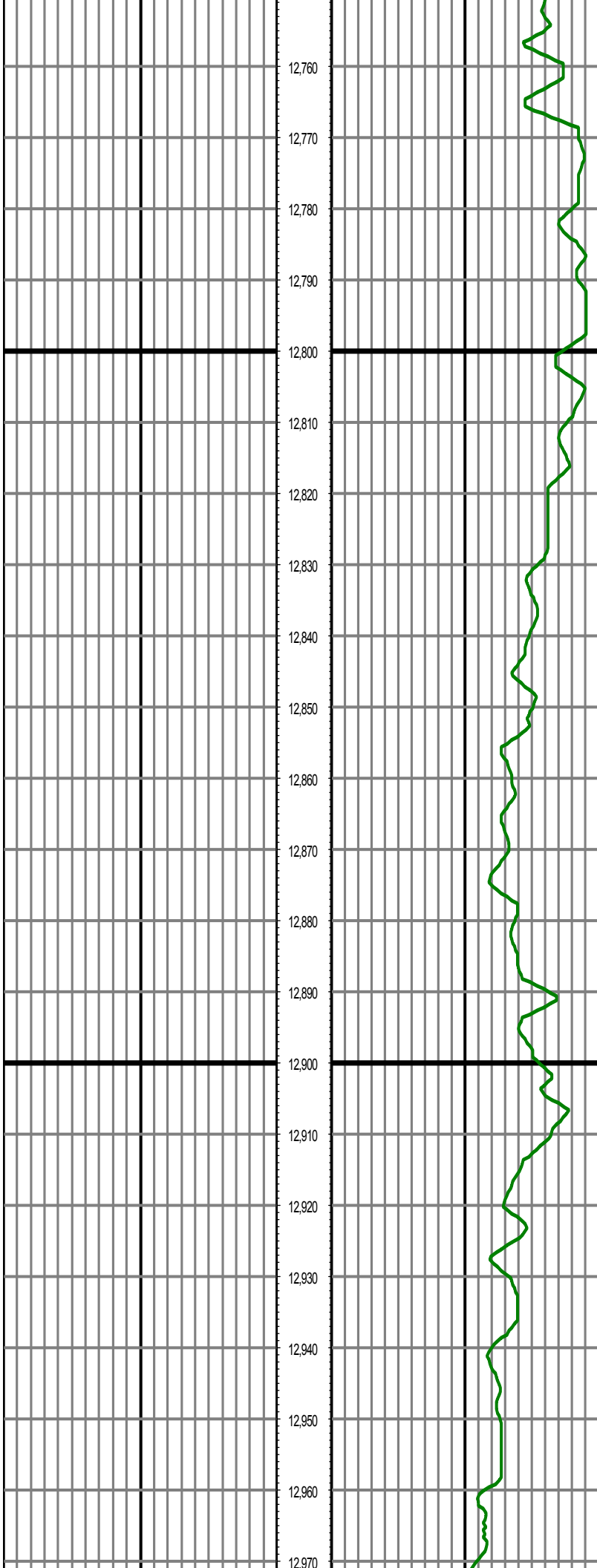
MD: 12380.00 INC: 89.91 AZ: 270.26 TVD: 7138.71 VS: 544

MD: 12474.00 INC: 87.69 AZ: 269.89 TVD: 7140.68 VS: 5540.25



MD: 12569.00 INC: 88.51 AZ: 269.29 TVD: 7143.83 VS: 563

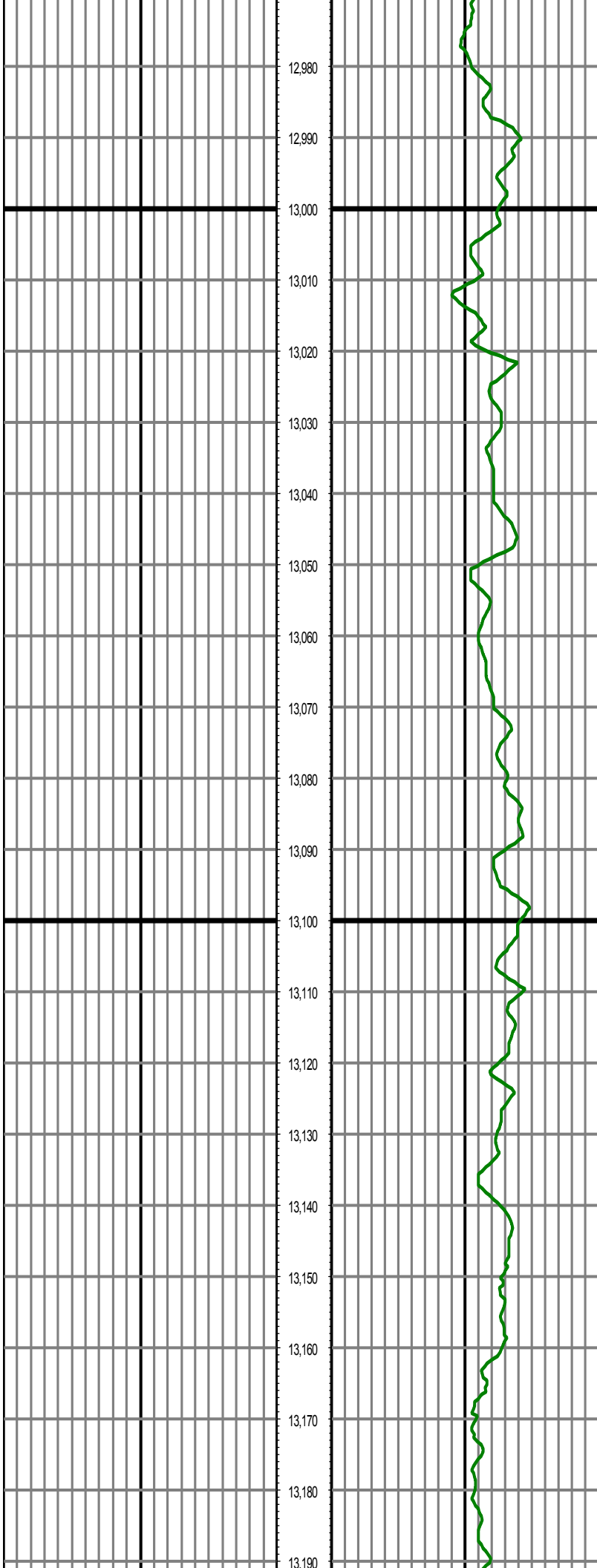
MD: 12663.00 INC: 89.07 AZ: 268.82 TVD: 7145.81 VS: 5729.15



MD: 12758.00 INC: 90.06 AZ: 268.75 TVD: 7146.53 VS: 582

MD: 12854.00 INC: 90.73 AZ: 268.84 TVD: 7145.87 VS: 5920.10

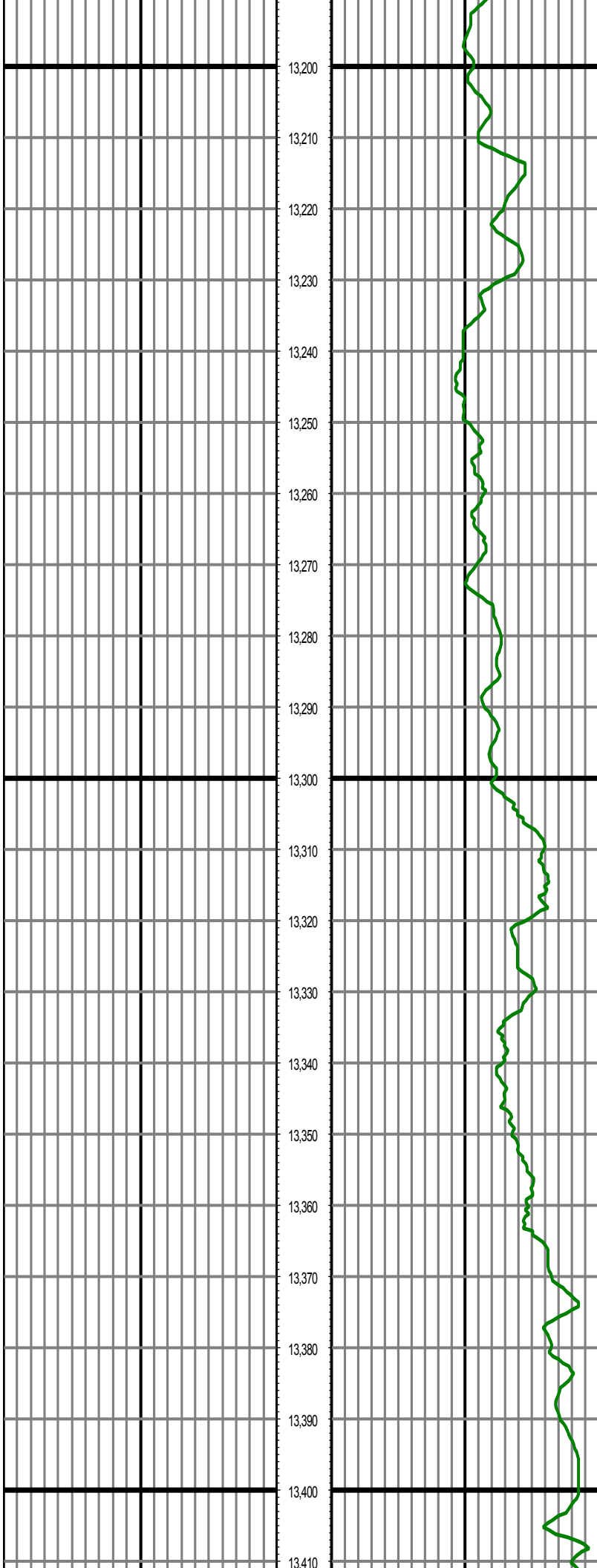
MD: 12948.00 INC: 91.30 AZ: 268.32 TVD: 7144.20 VS: 6014.05



MD: 13042.00 INC: 90.44 AZ: 270.34 TVD: 7142.78 VS: 610

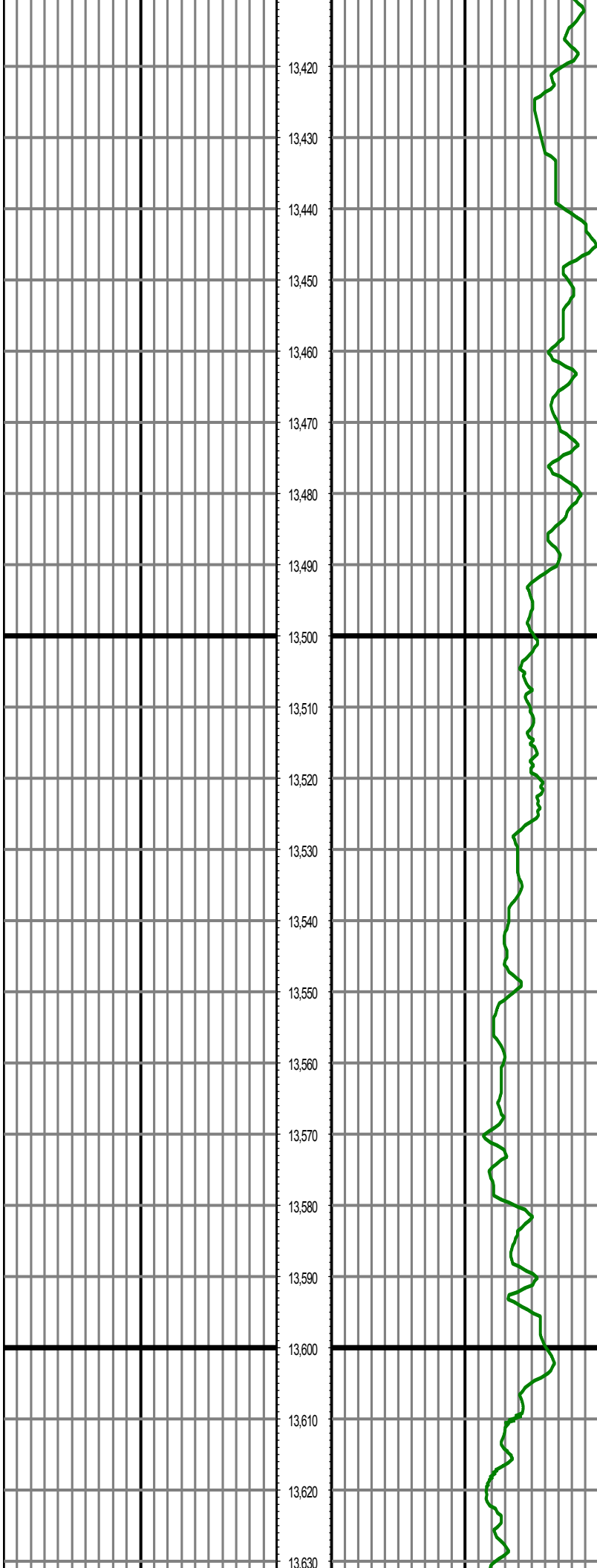
MD: 13136.00 INC: 91.86 AZ: 270.39 TVD: 7140.89 VS: 6202.00





MD: 13229.00 INC: 92.50 AZ: 271.27 TVD: 7137.35 VS: 629

MD: 13324.00 INC: 92.75 AZ: 271.04 TVD: 7133.00 VS: 6389.81



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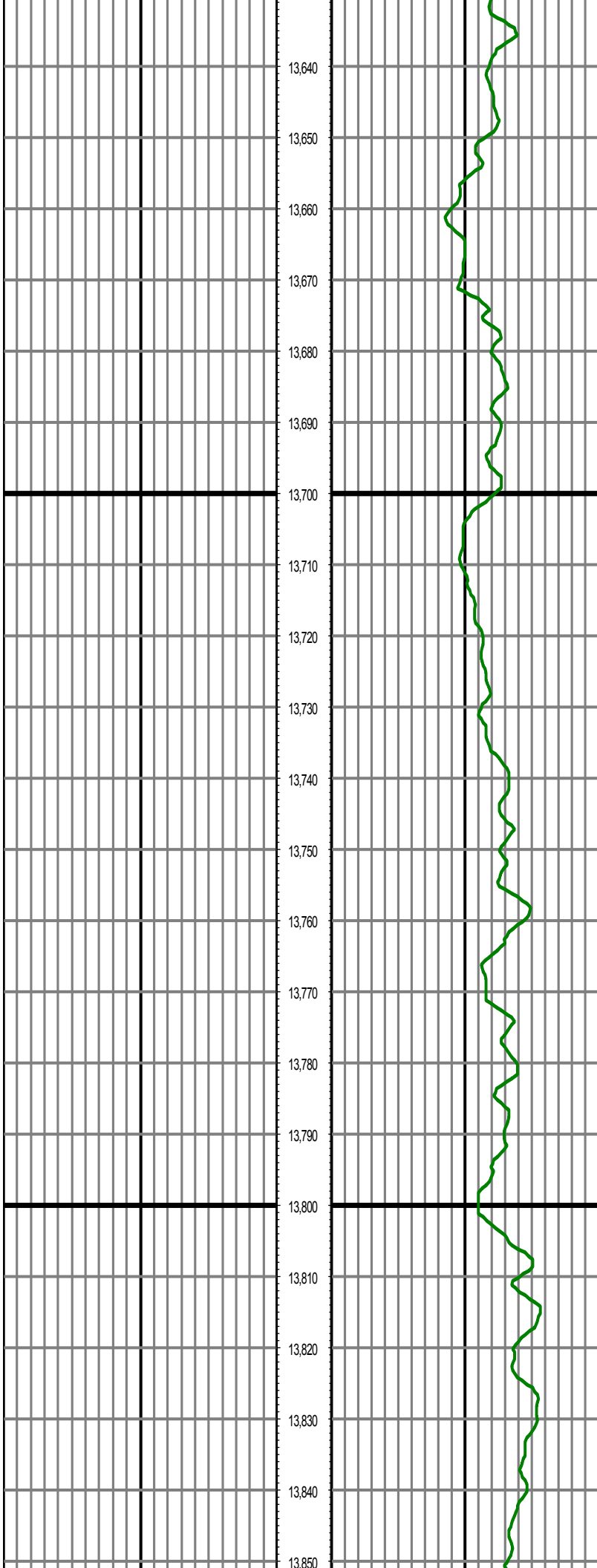
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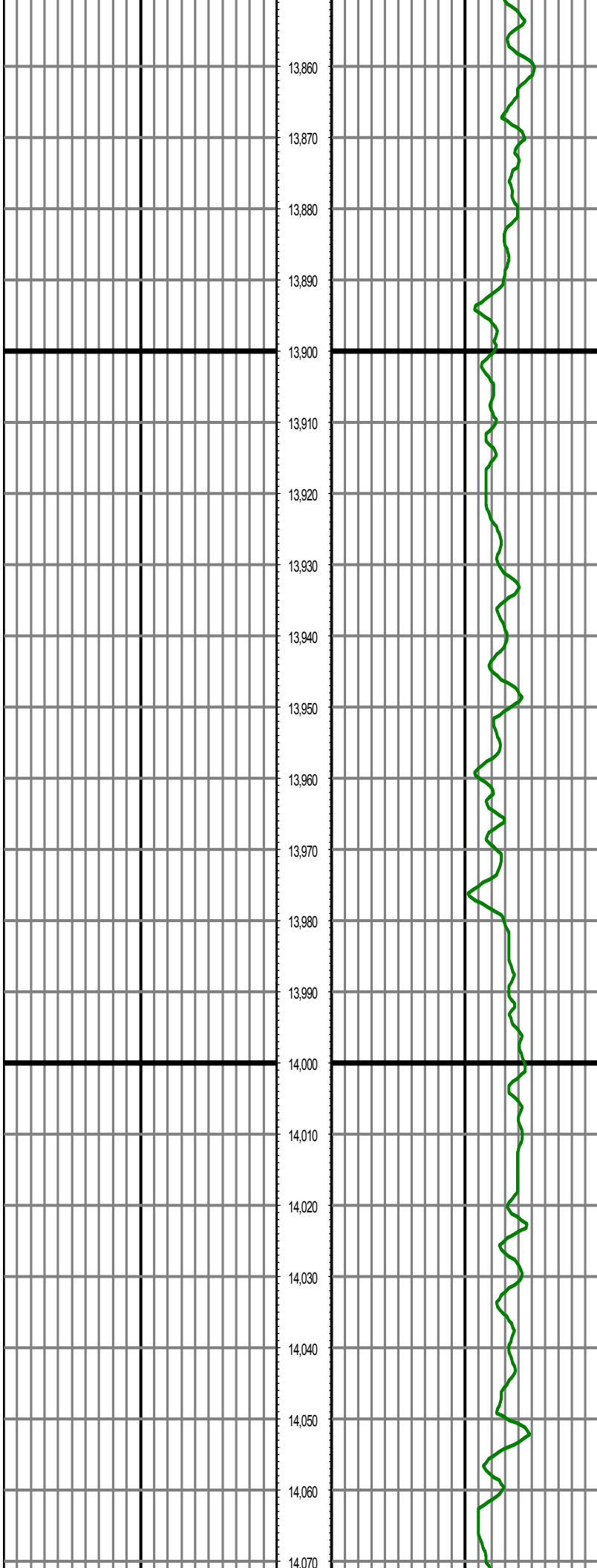
MD: 13511.00 INC: 90.14 AZ: 270.50 TVD: 7130.96 VS: 6576.76

MD: 13603.00 INC: 87.46 AZ: 270.32 TVD: 7132.89 VS: 6668.73



MD: 13696.00 INC: 88.11 AZ: 270.21 TVD: 7136.48 VS: 676

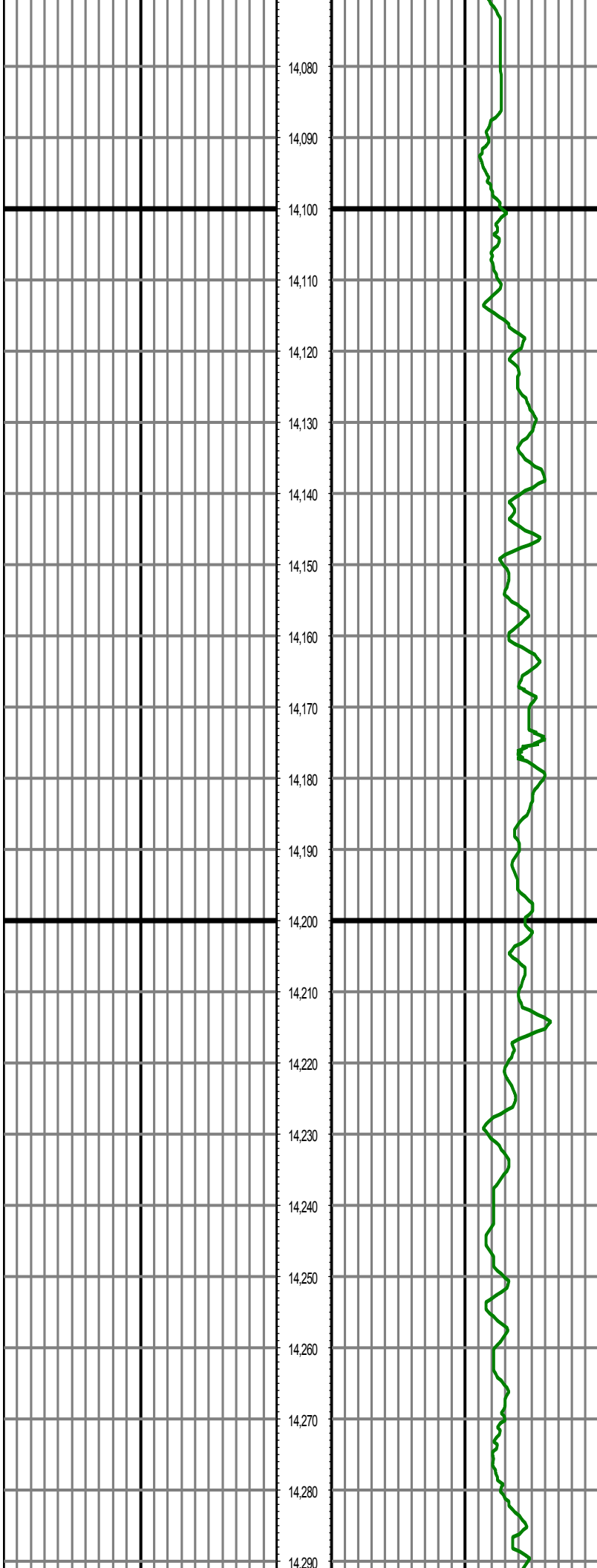
MD: 13789.00 INC: 88.41 AZ: 269.63 TVD: 7139.30 VS: 6854.62



MD: 13881.00 INC: 88.88 AZ: 269.14 TVD: 7141.48 VS: 694

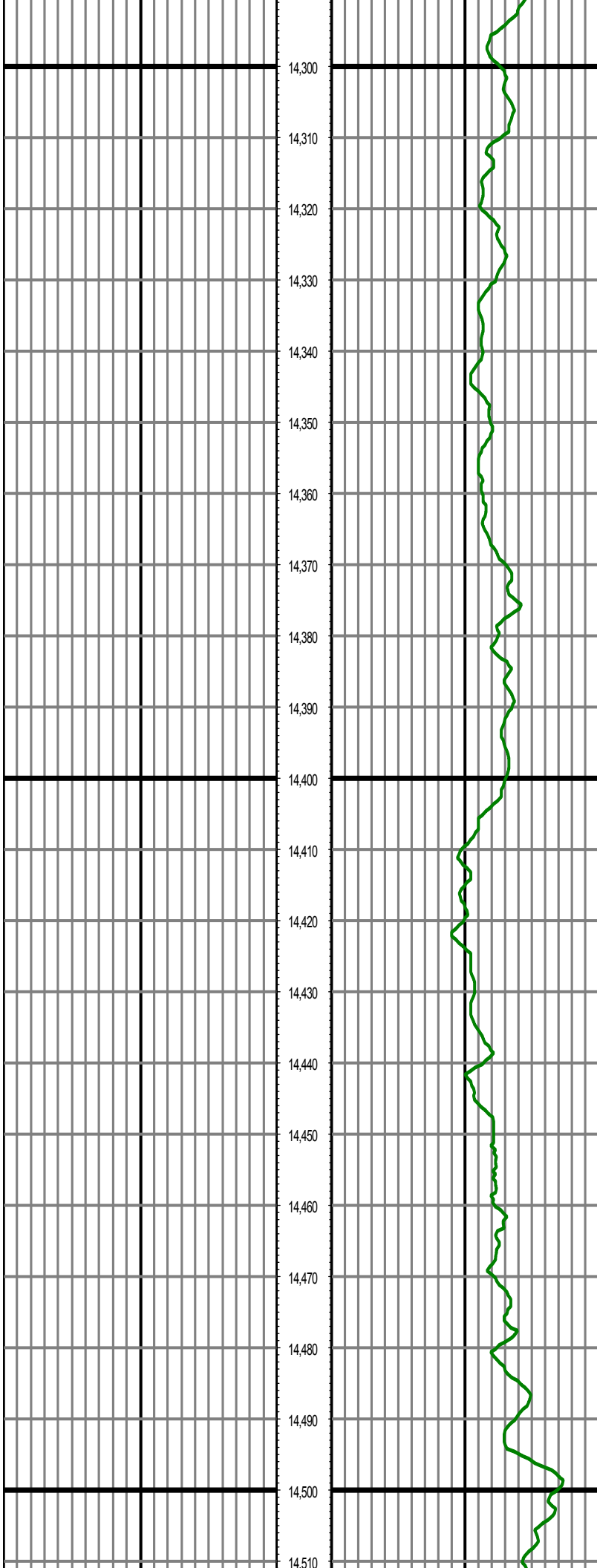
MD: 13975.00 INC: 89.44 AZ: 268.98 TVD: 7142.86 VS: 7040.56

MD: 14069.00 INC: 89.81 AZ: 267.96 TVD: 7143.47 VS: 7134.51



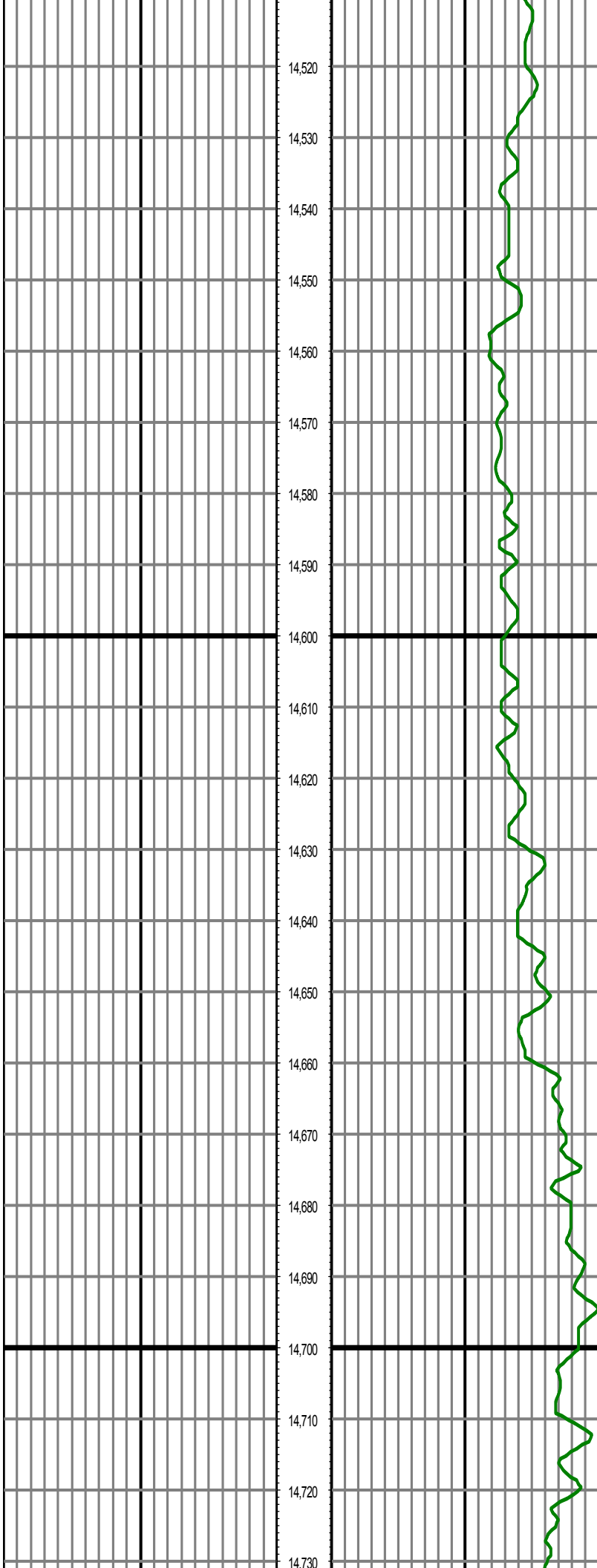
MD: 14161.00 INC: 89.84 AZ: 270.51 TVD: 7143.75 VS: 722

MD: 14254.00 INC: 90.79 AZ: 270.56 TVD: 7143.24 VS: 7319.49



MD: 14348.00 INC: 89.70 AZ: 272.69 TVD: 7142.84 VS: 741

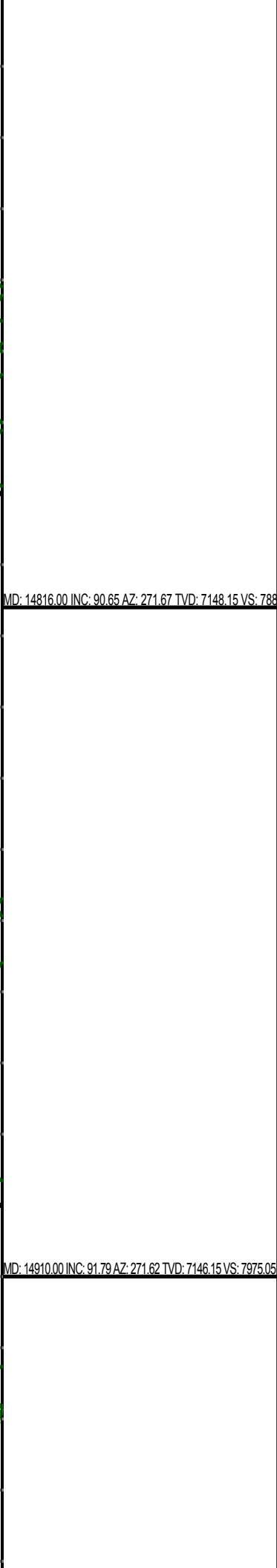
MD: 14441.00 INC: 90.62 AZ: 272.43 TVD: 7142.58 VS: 7506.36



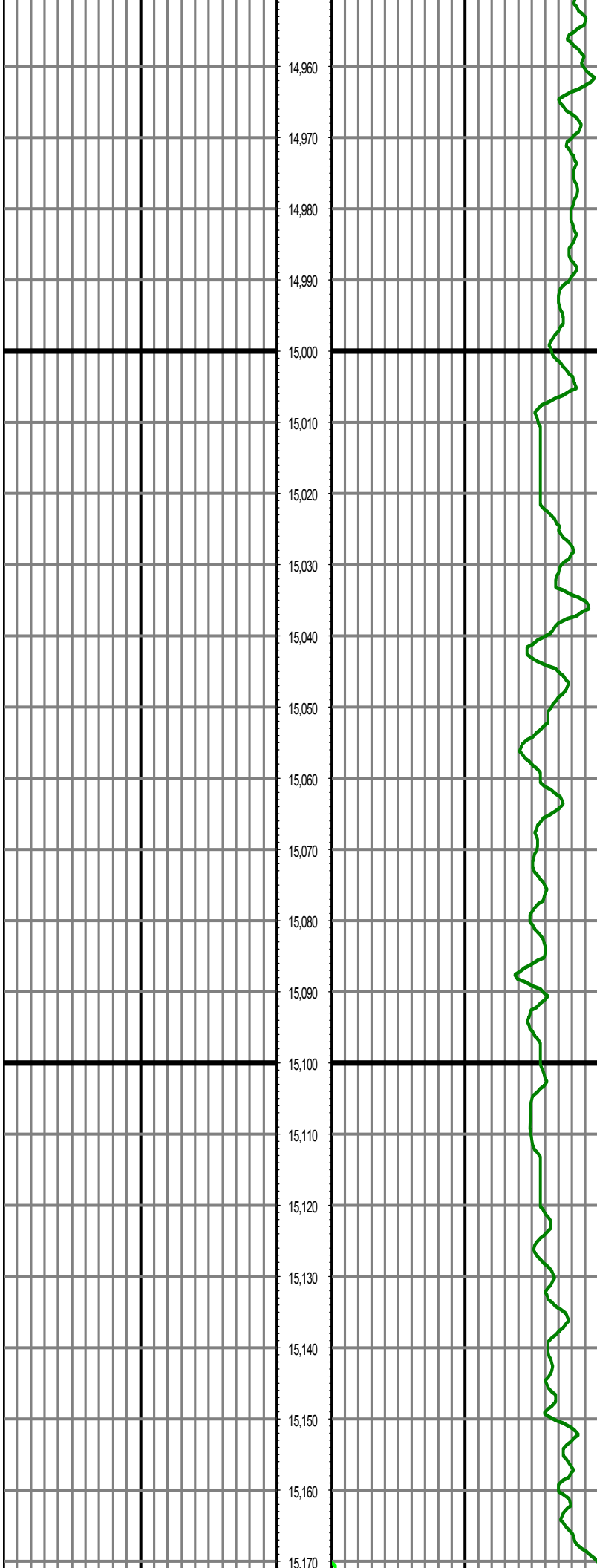
MD: 14535.00 INC: 87.95 AZ: 272.21 TVD: 7143.75 VS: 760

MD: 14630.00 INC: 88.46 AZ: 271.64 TVD: 7146.73 VS: 7695.19

MD: 14723.00 INC: 89.57 AZ: 271.58 TVD: 7148.33 VS: 7788.14







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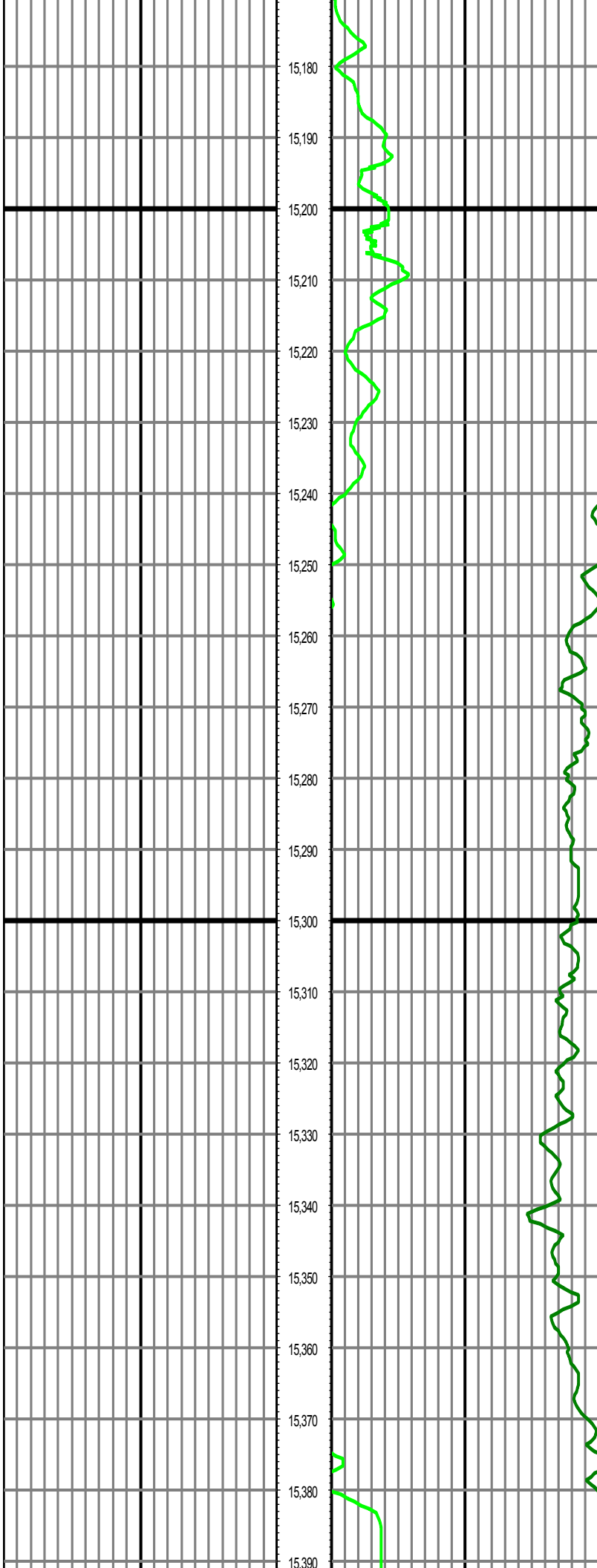
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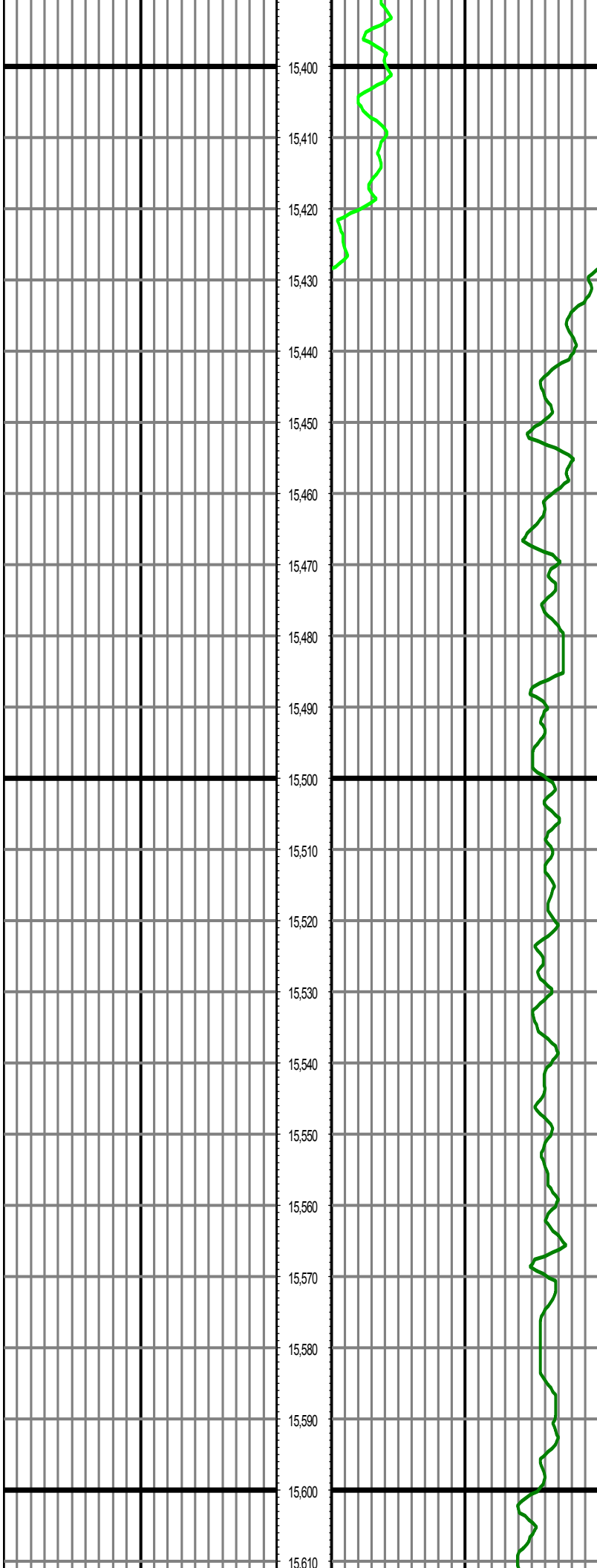
MD: 15095.00 INC: 90.07 AZ: 272.18 TVD: 7144.41 VS: 8159.94



MD: 15188.00 INC: 90.90 AZ: 271.67 TVD: 7143.62 VS: 825

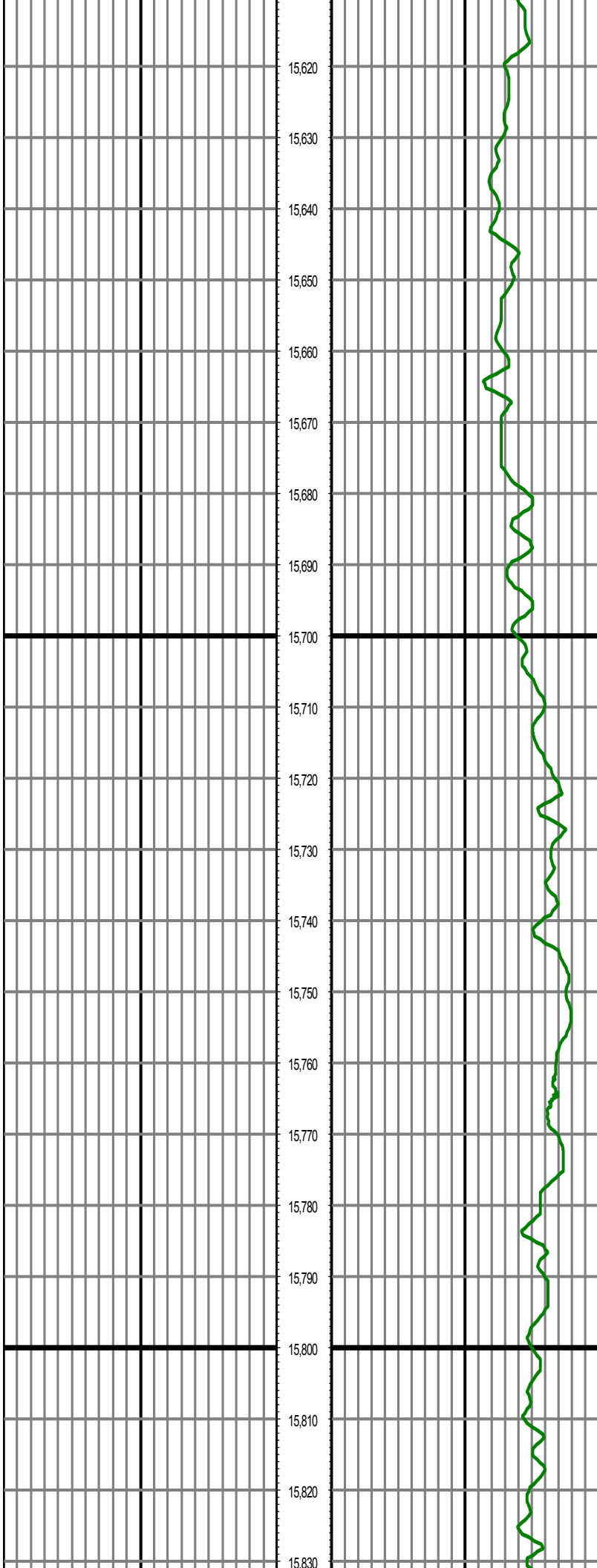
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MD: 15376.00 INC: 88.91 AZ: 268.38 TVD: 7140.43 VS: 8440.80



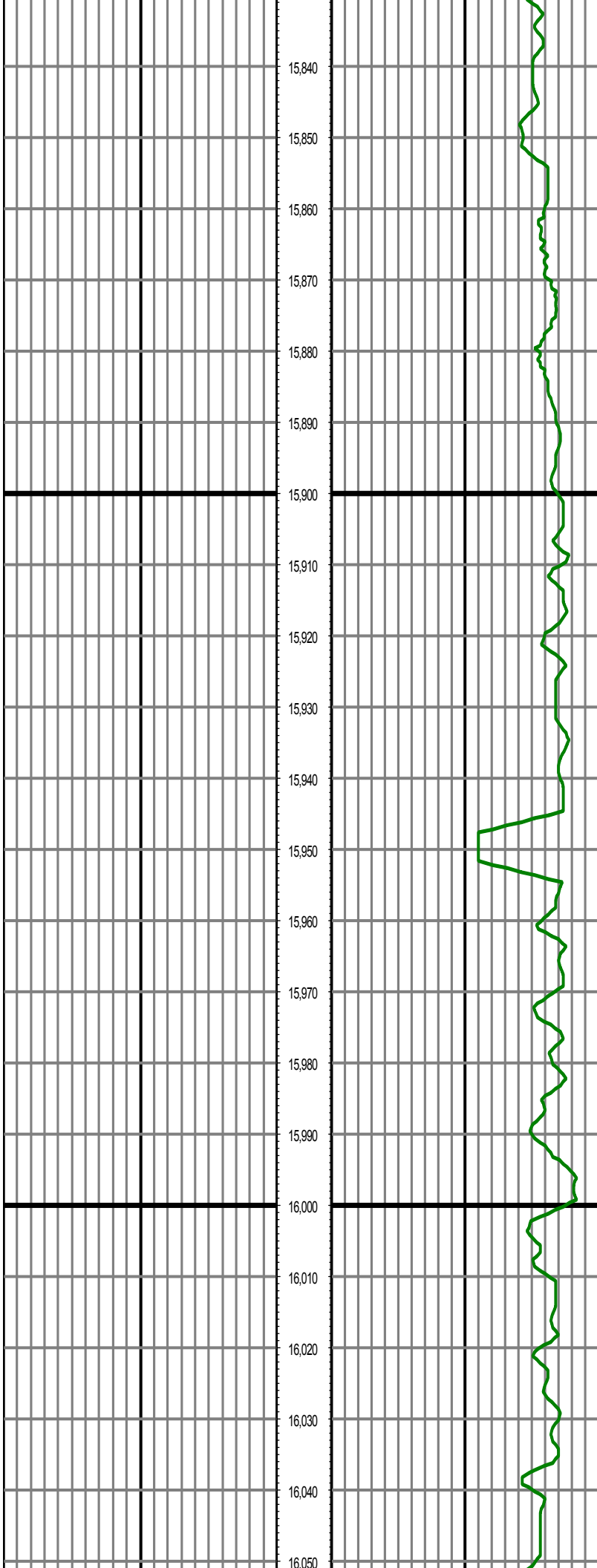
MD: 15470.00 INC: 88.61 AZ: 268.16 TVD: 7142.47 VS: 853

MD: 15564.00 INC: 88.62 AZ: 268.14 TVD: 7144.74 VS: 8628.65



MD: 15658.00 INC: 89.48 AZ: 268.11 TVD: 7146.30 VS: 872

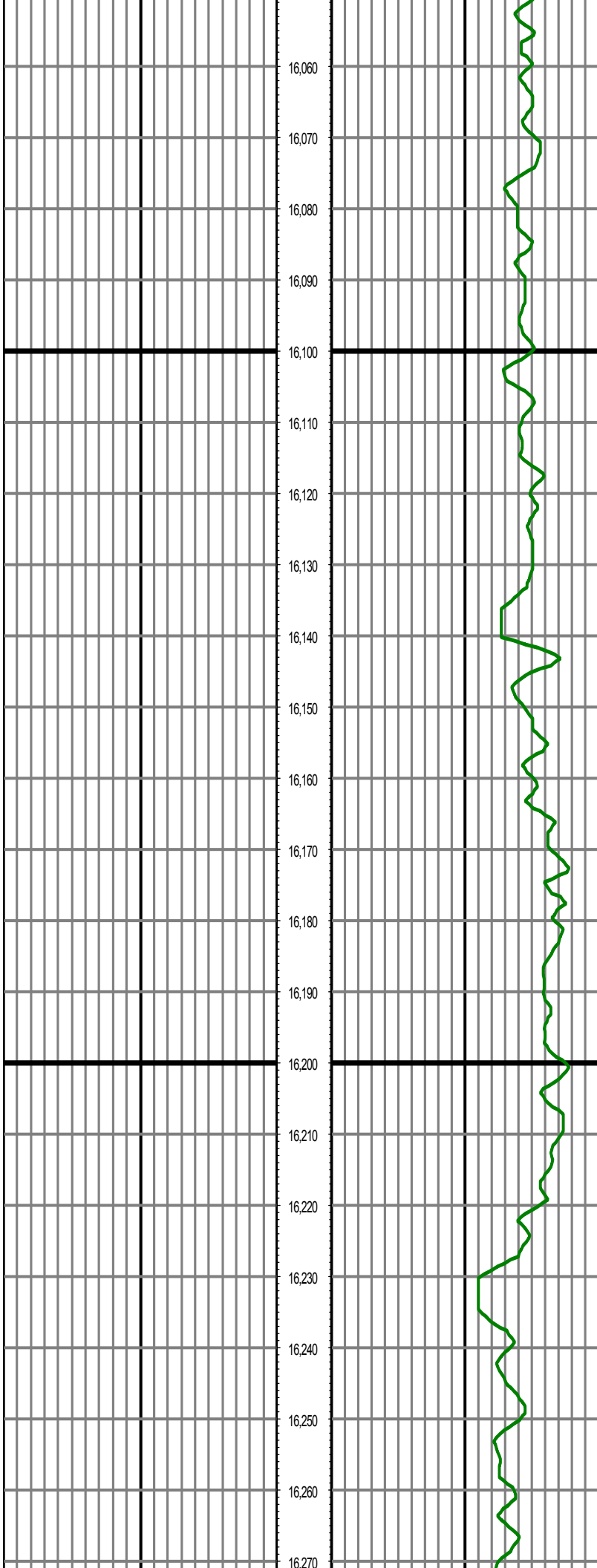
MD: 15753.00 INC: 90.05 AZ: 267.69 TVD: 7146.69 VS: 8817.50



MD: 15848.00 INC: 90.73 AZ: 267.62 TVD: 7146.04 VS: 891

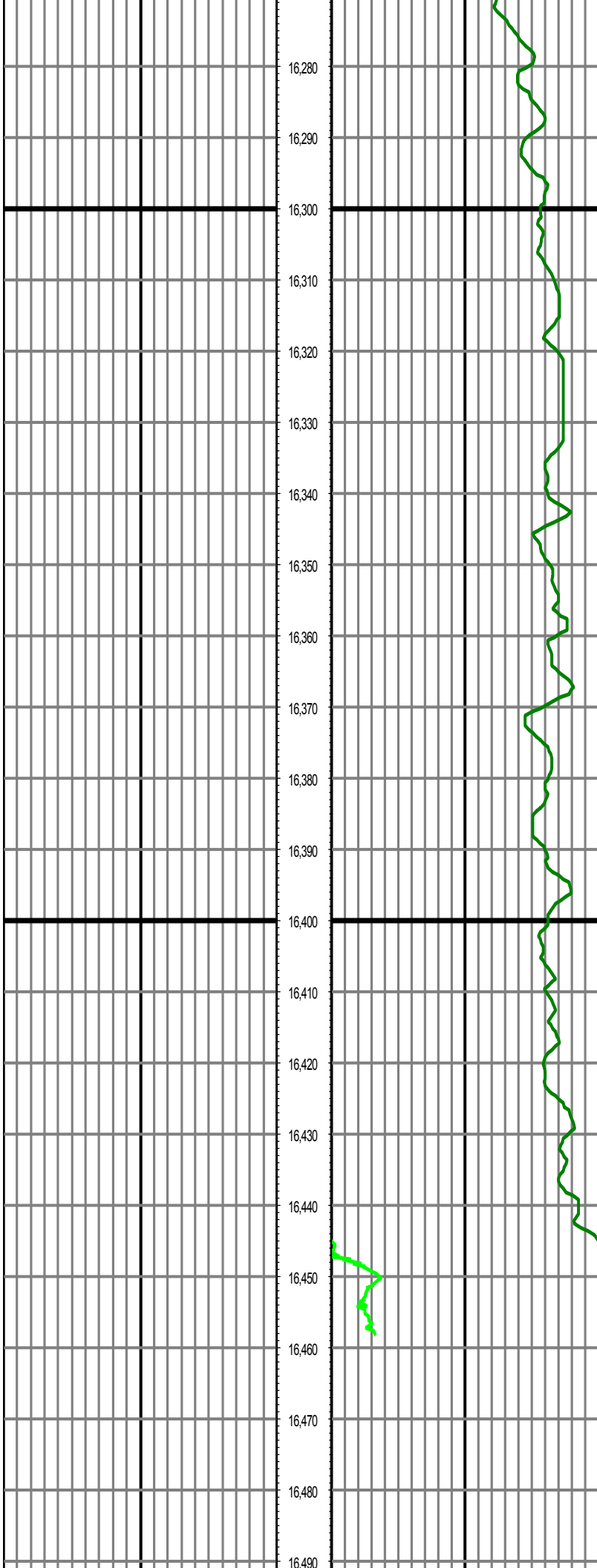
MD: 15941.00 INC: 89.83 AZ: 269.89 TVD: 7145.59 VS: 9005.38

MD: 16036.00 INC: 89.92 AZ: 271.36 TVD: 7145.79 VS: 9100.37



MD: 16128.00 INC: 90.73 AZ: 270.81 TVD: 7145.27 VS: 919

MD: 16222.00 INC: 91.55 AZ: 270.52 TVD: 7143.40 VS: 9286.33



MD: 16316.00 INC: 92.25 AZ: 270.08 TVD: 7140.29 VS: 938

MD: 16409.00 INC: 92.11 AZ: 269.73 TVD: 7136.75 VS: 9473.21

MD: 16449.00 INC: 92.32 AZ: 270.01 TVD: 7135.20 VS: 9513.18

