



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

Iceman State 12N-B6HZ

Scale 5":100' - MD

9/28/2015 3:45 AM

Oper. Company: Anadarko Petroleum Corporation

Well: Iceman State 12N-B6HZ

Field: Wattenburg

Rig: Precision 462

Well ID: 05123413420000

Job Number: R15355

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

State: CO

County: USA

Country: Weld

Location: 3N67WS15

Start Date: 09/26/2015 05:25:10

End Date: 09/28/2015 03:25:30

Latitude: 40.227330

Longitude: -104.882655

Elev KB: 20'

Elev DF: 4817'

Elev GL: 4797'

Notes: Datum: NAD1983 Map Zone: 13N (108 W to 102 W) Total Correction: 8.43° Grid Convergence: 0.07° (True North)

Operator 1: David Clancy

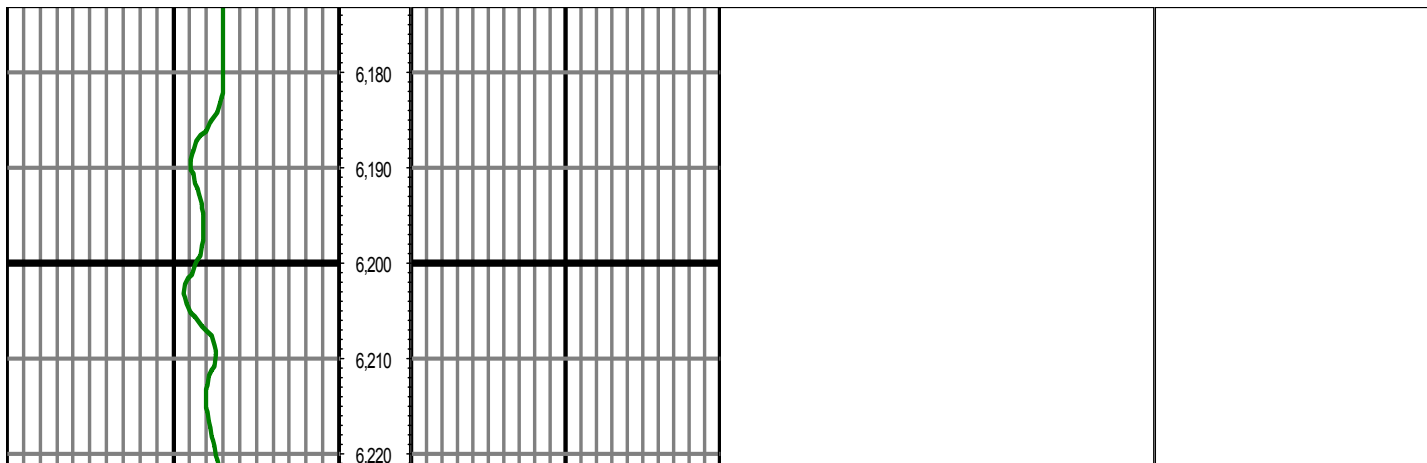
Operator 2: Austin Capaldo

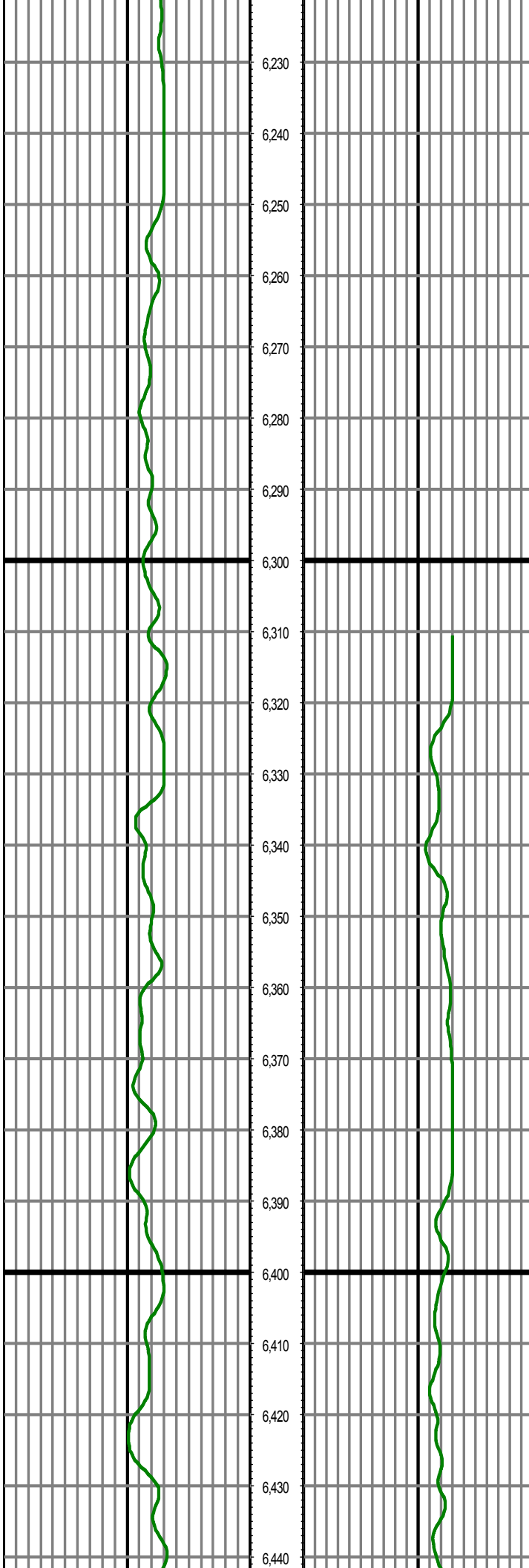
Notes: Smoothing: 7 Gap Fill: 10 Tool Type: Mud Pulse Calculation Method: Minimum Curvature

Tool Run Data	Run #1	Run #2	Run #3	Run #4	Run #5
Tool S/N	338				
Bit Size	8 1/2				
Cal Factor	5.634				
Survey Offset:	69.00				
Gamma Offset	64.00				
Resistivity Offset	0.00				
Start Depth	6311.00				
StartDate	9/26/2015				
StartTime	05:30				
EndDepth	13254.00				
EndDate	9/28/2015				
EndTime	03:30				
Mud Type	OBM				
Hole Data			Casing Data		
Size	From	To	Size	From	To
8 1/2	1645.00	13254.00	9 5/8	0.00	1645.00

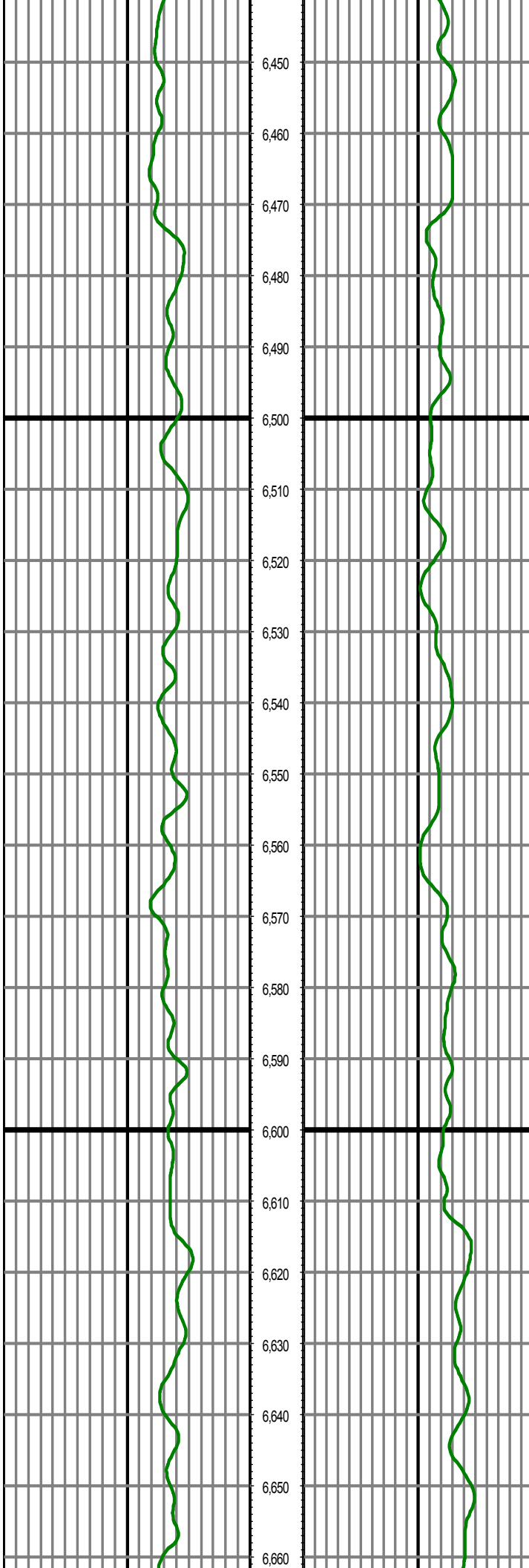
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost 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





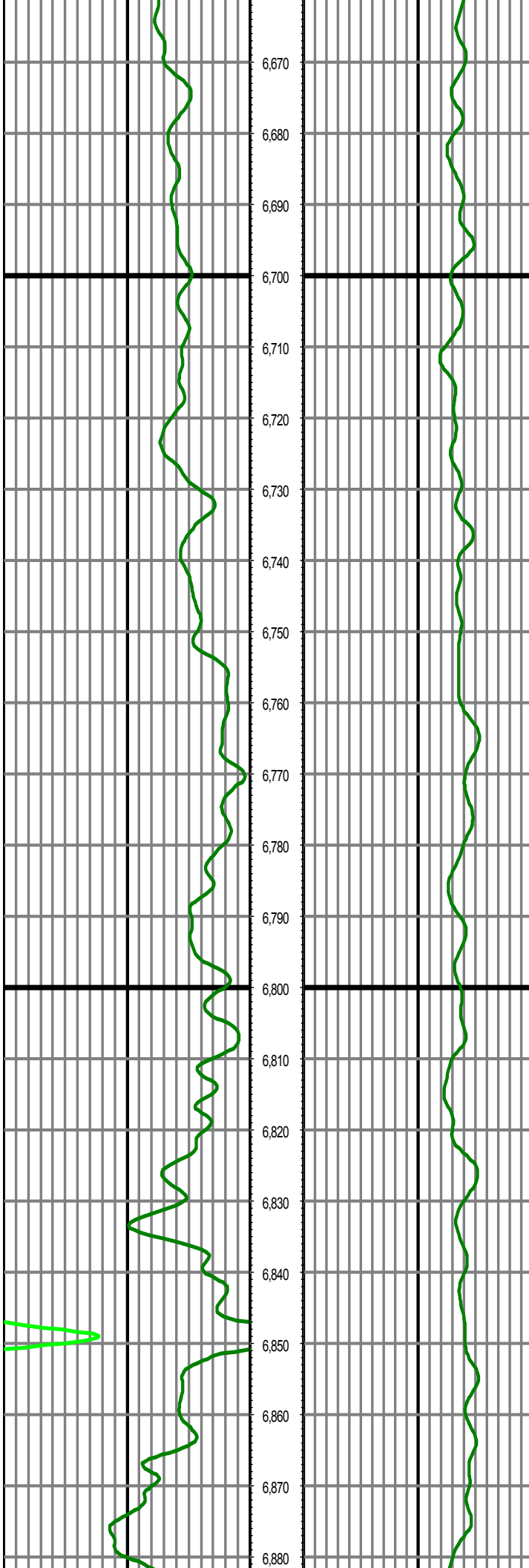
MD: 6360.00 INC: 2.10 AZ: 294.38 TVD: 6222.59 VS: -332.20



MD: 6455.00 INC: 1.94 AZ: 298.22 TVD: 6317.53 VS: -329.21

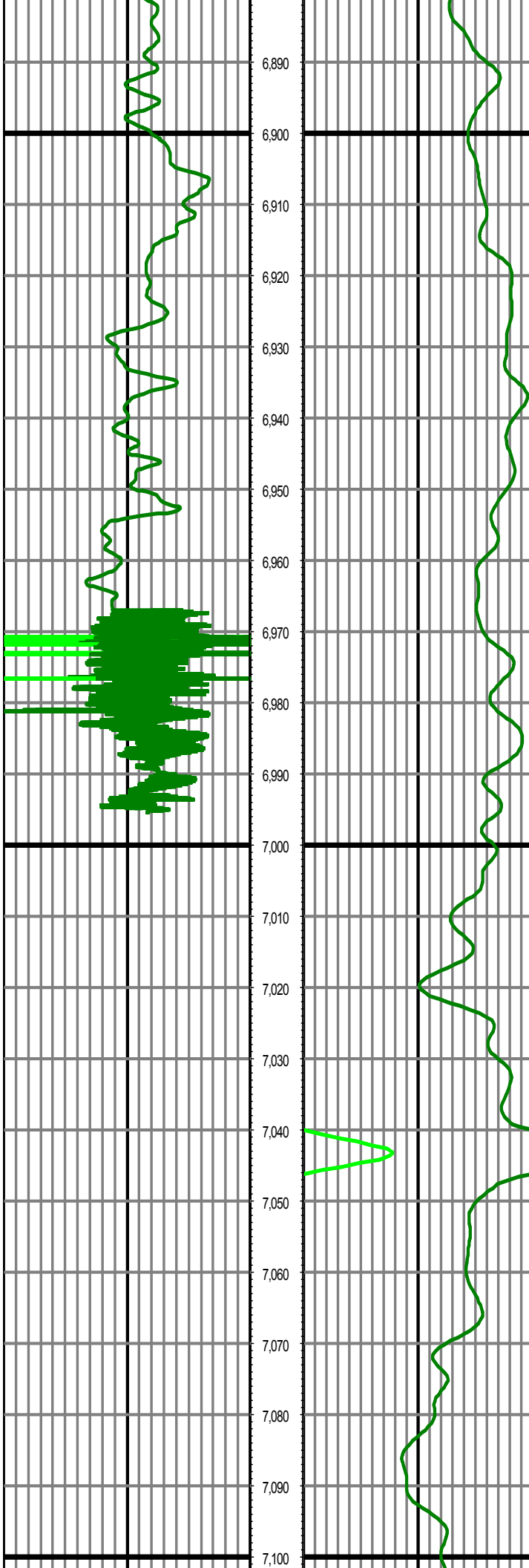
MD: 6549.00 INC: 8.32 AZ: 280.84 TVD: 6411.11 VS: -321.14

MD: 6645.00 INC: 15.15 AZ: 284.17 TVD: 6505.05 VS: -302.16



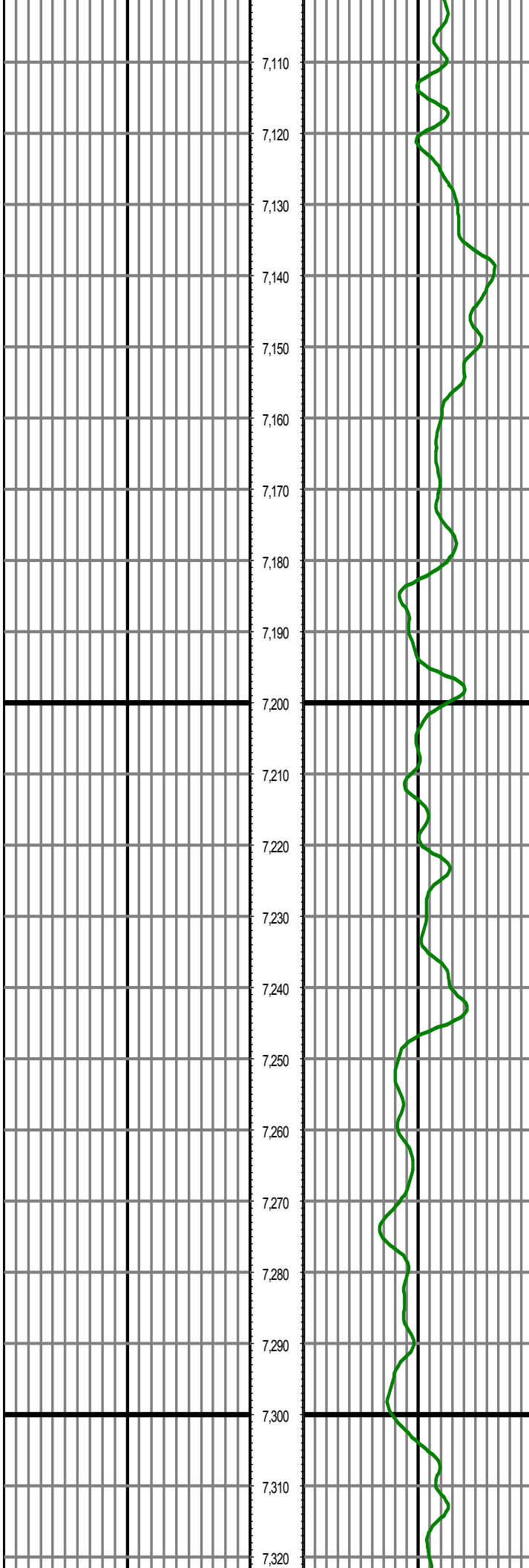
MD: 6740.00 INC: 20.88 AZ: 277.37 TVD: 6595.37 VS: -273.35

MD: 6835.00 INC: 25.60 AZ: 269.39 TVD: 6682.65 VS: -236.02



MD: 6931.00 INC: 34.50 AZ: 266.14 TVD: 6765.67 VS: -188.05

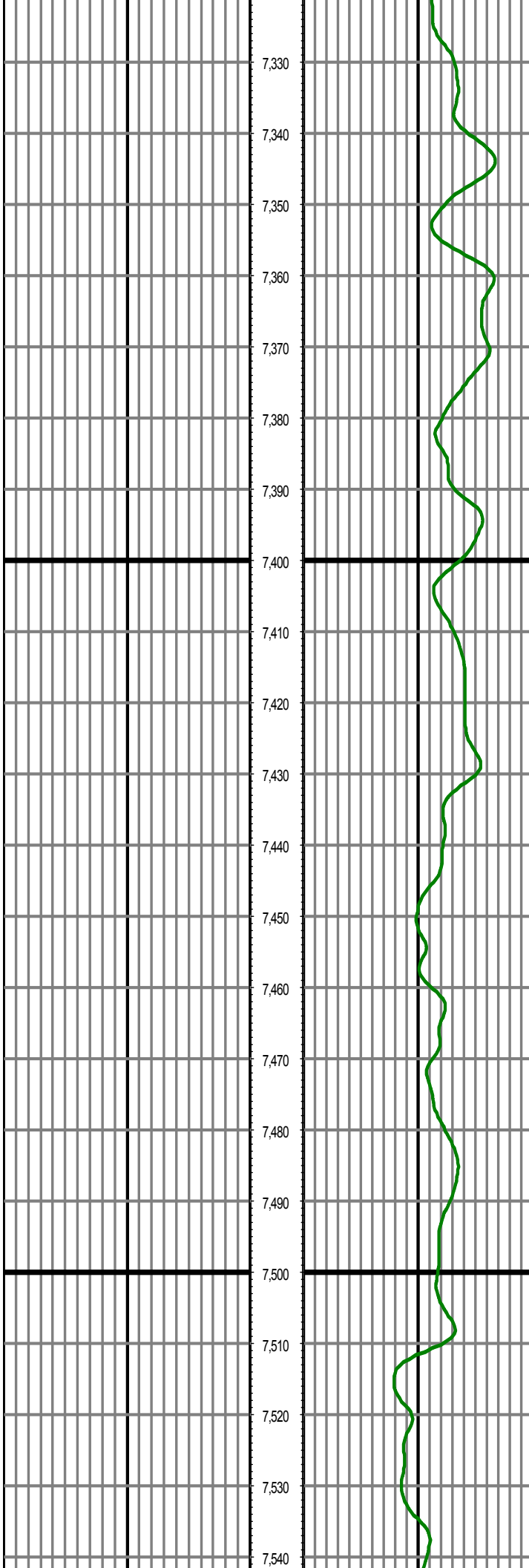
MD: 7026.00 INC: 45.77 AZ: 263.51 TVD: 6838.19 VS: -127.14



MD: 7121.00 INC: 56.24 AZ: 265.62 TVD: 6897.89 VS: -53.69

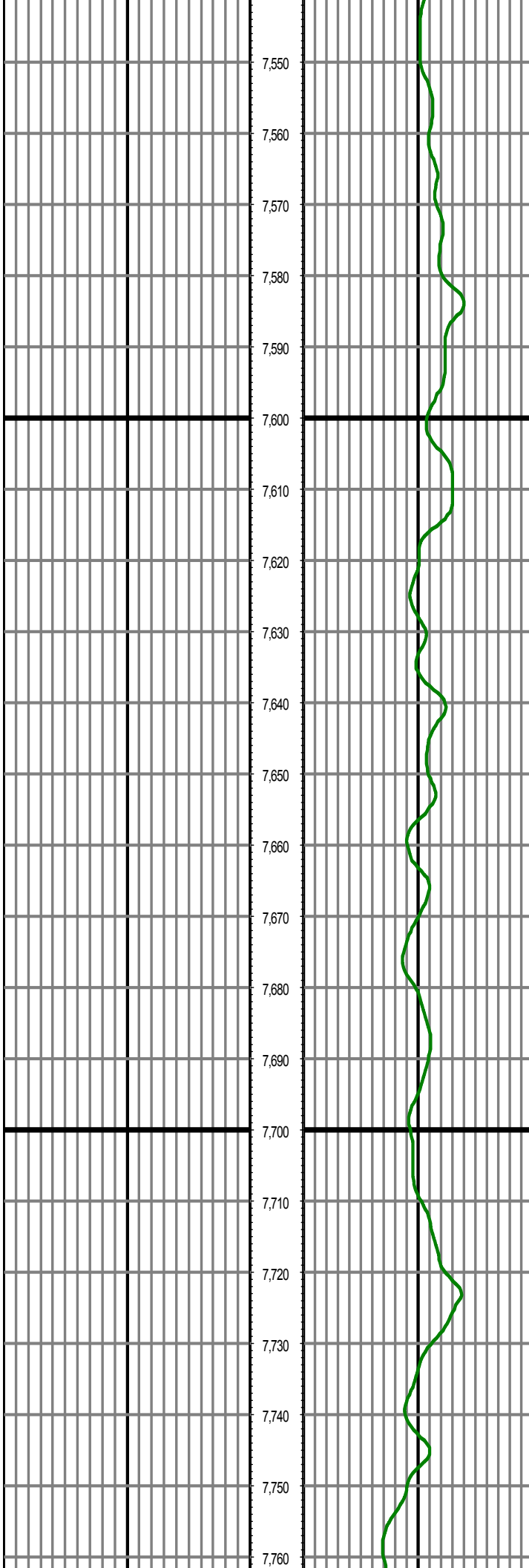
MD: 7216.00 INC: 66.05 AZ: 267.57 TVD: 6943.68 VS: 29.30

MD: 7311.00 INC: 74.79 AZ: 270.95 TVD: 6975.50 VS: 118.70



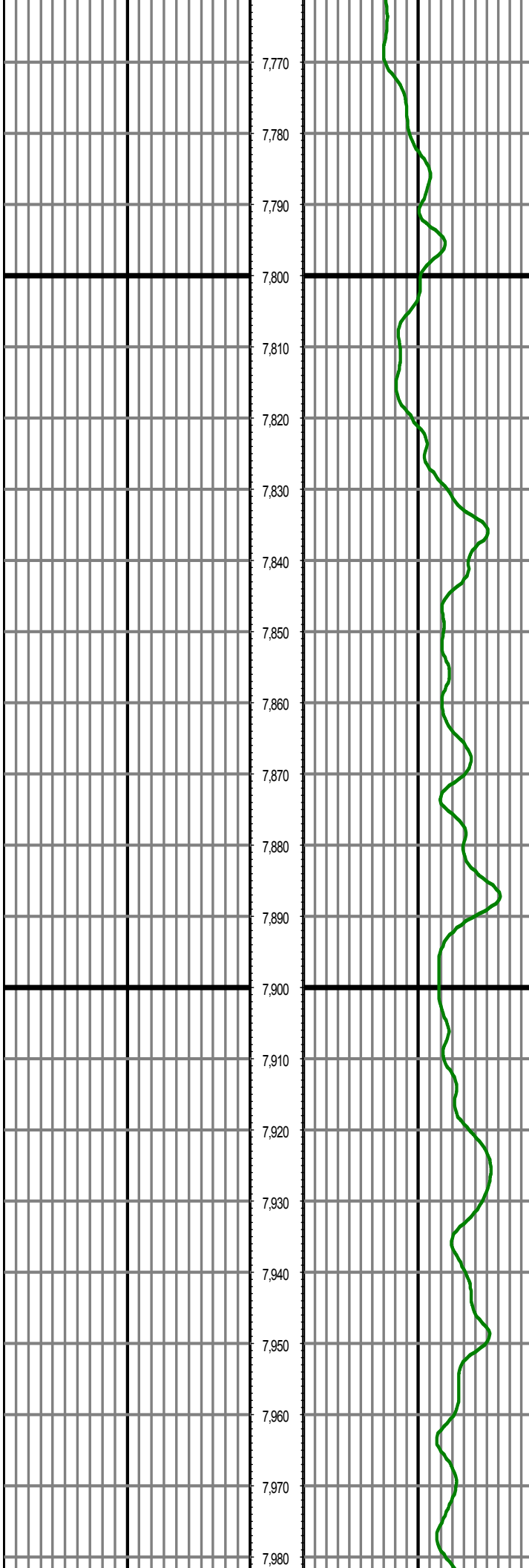
MD: 7406.00 INC: 84.10 AZ: 272.66 TVD: 6992.88 VS: 211.92

MD: 7501.00 INC: 92.94 AZ: 272.60 TVD: 6995.33 VS: 306.66



MD: 7596.00 INC: 94.48 AZ: 272.02 TVD: 6989.19 VS: 401.34

MD: 7692.00 INC: 93.59 AZ: 272.83 TVD: 6982.43 VS: 496.98



MD: 7787.00 INC: 91.47 AZ: 273.95 TVD: 6978.24 VS: 591.67

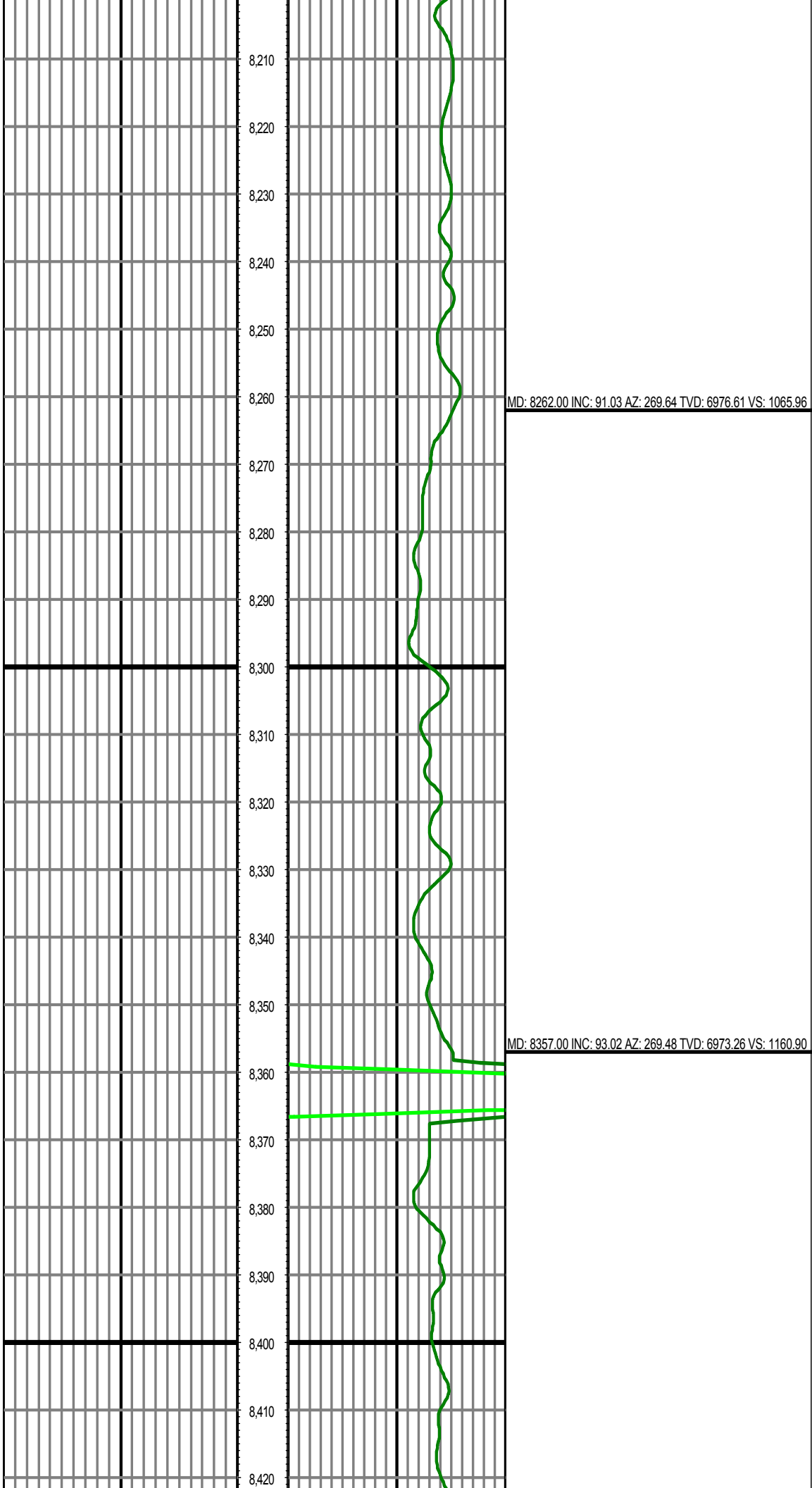
MD: 7882.00 INC: 90.93 AZ: 273.58 TVD: 6976.25 VS: 686.40

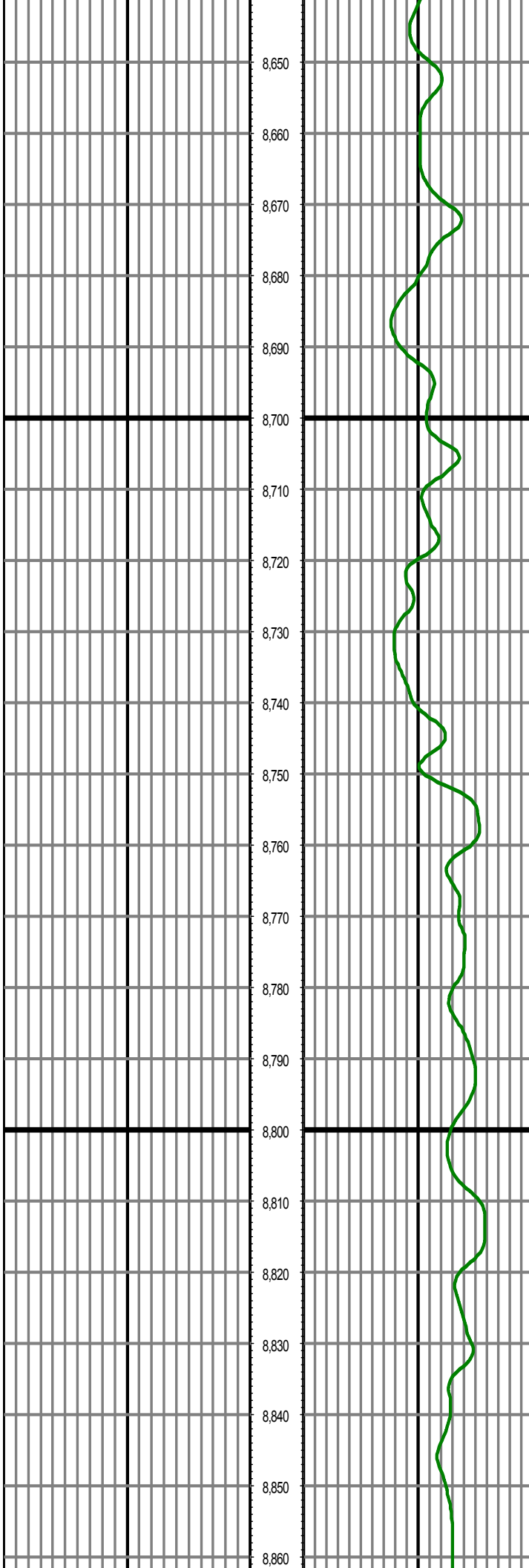
MD: 7977.00 INC: 89.49 AZ: 274.00 TVD: 6975.90 VS: 781.13



MD: 8072.00 INC: 89.33 AZ: 271.20 TVD: 6976.88 VS: 875.99

MD: 8167.00 INC: 89.98 AZ: 269.93 TVD: 6977.45 VS: 970.97

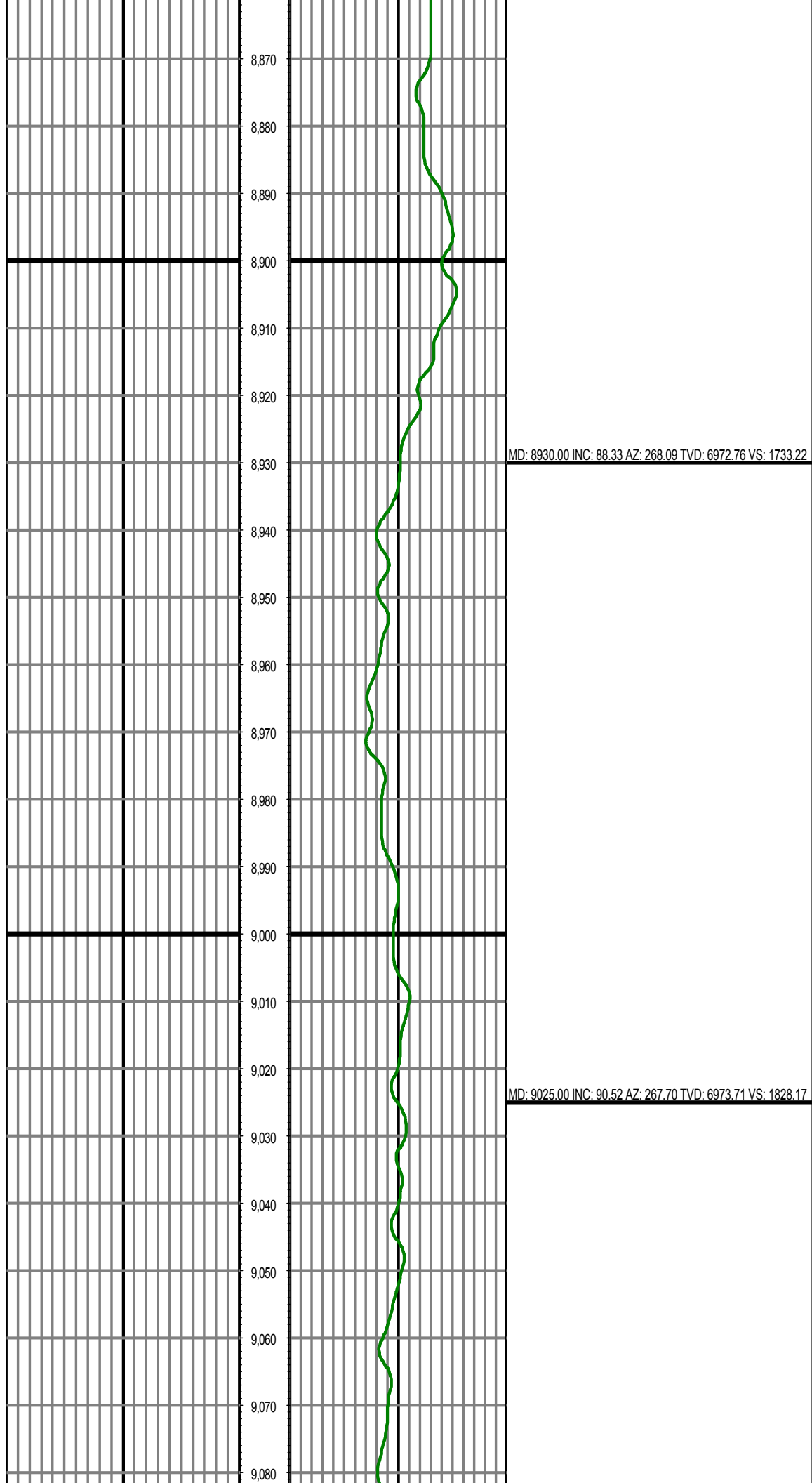




MD: 8644.00 INC: 89.05 AZ: 266.40 TVD: 6967.62 VS: 1447.60

MD: 8739.00 INC: 89.66 AZ: 265.55 TVD: 6968.69 VS: 1542.40

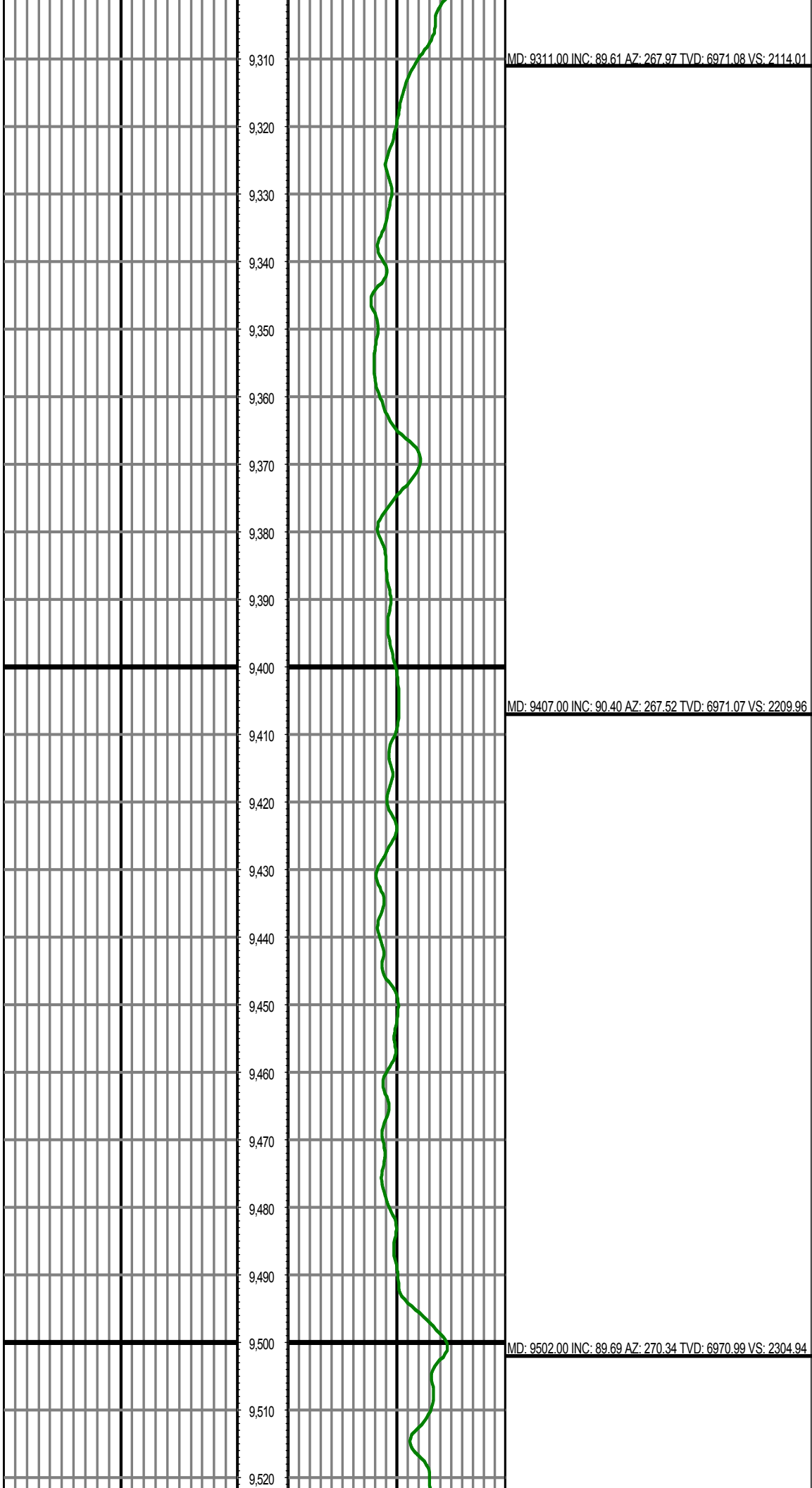
MD: 8834.00 INC: 88.57 AZ: 268.31 TVD: 6970.16 VS: 1637.28

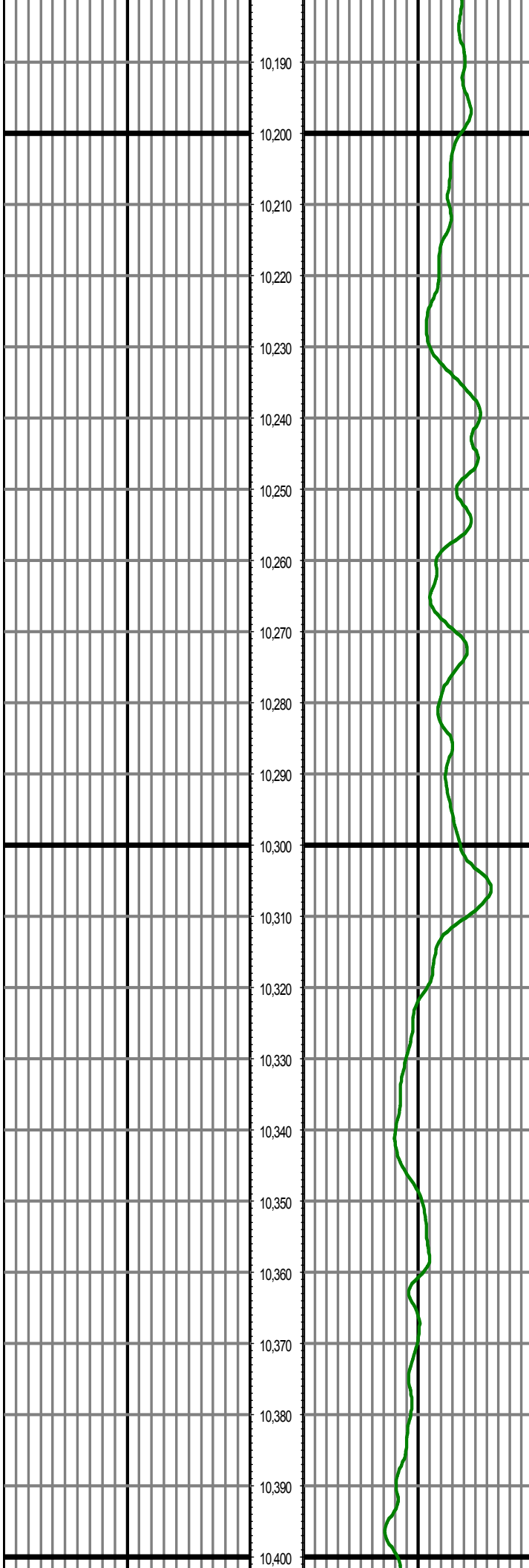




MD: 9121.00 INC: 92.08 AZ: 267.58 TVD: 6971.53 VS: 1924.09

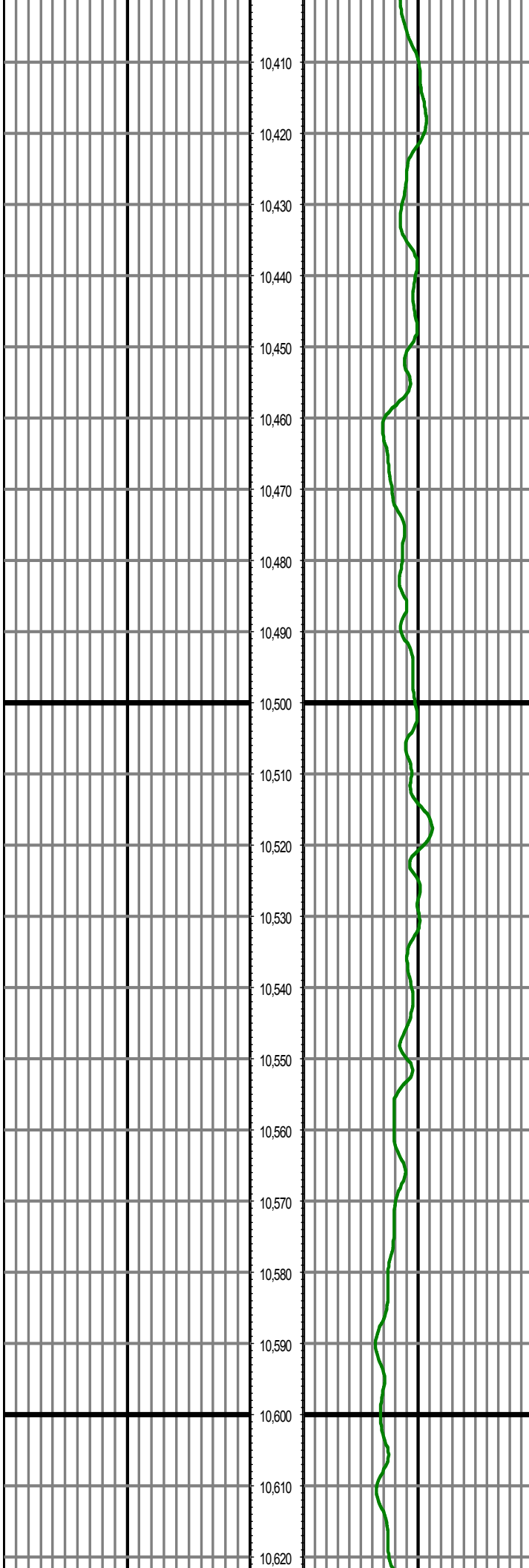
MD: 9216.00 INC: 89.43 AZ: 268.54 TVD: 6970.28 VS: 2019.04





MD: 10262.00 INC: 87.99 AZ: 268.73 TVD: 6970.29 VS: 3064.70

MD: 10357.00 INC: 87.20 AZ: 268.03 TVD: 6974.27 VS: 3159.60



MD: 10452.00 INC: 87.13 AZ: 267.72 TVD: 6978.97 VS: 3254.44

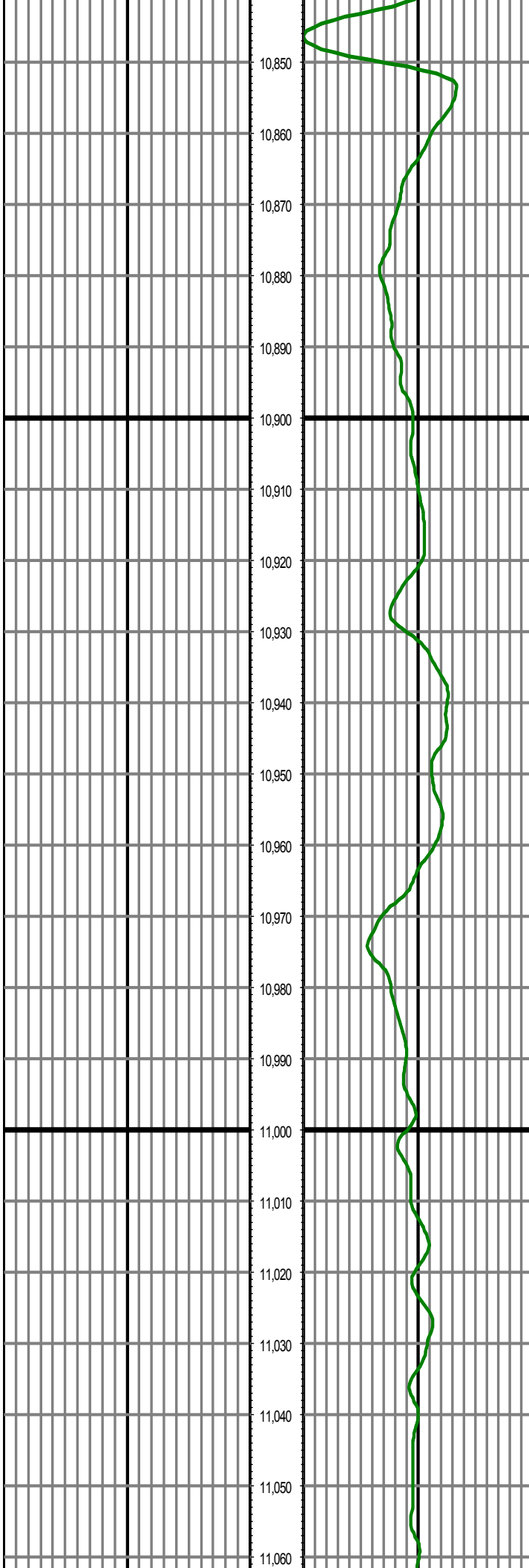
MD: 10547.00 INC: 88.84 AZ: 266.07 TVD: 6982.31 VS: 3349.27



MD: 10642.00 INC: 89.77 AZ: 265.50 TVD: 6983.47 VS: 3444.06

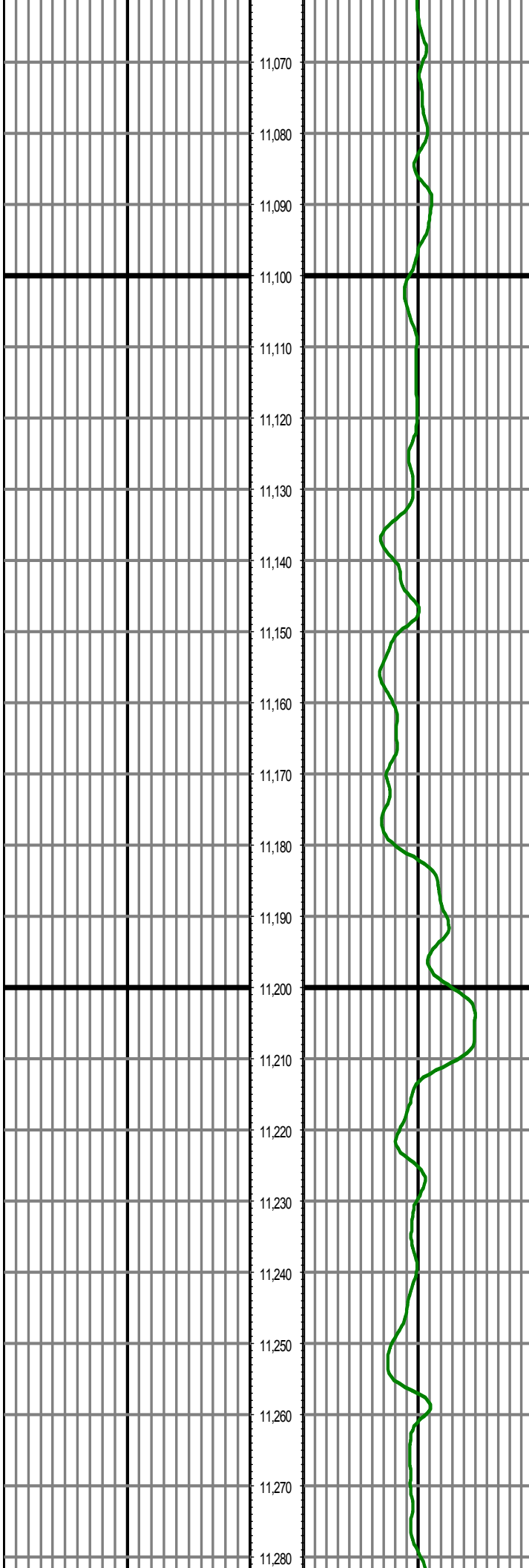
MD: 10737.00 INC: 90.47 AZ: 264.62 TVD: 6983.27 VS: 3538.76

MD: 10832.00 INC: 91.68 AZ: 264.50 TVD: 6981.49 VS: 3633.38



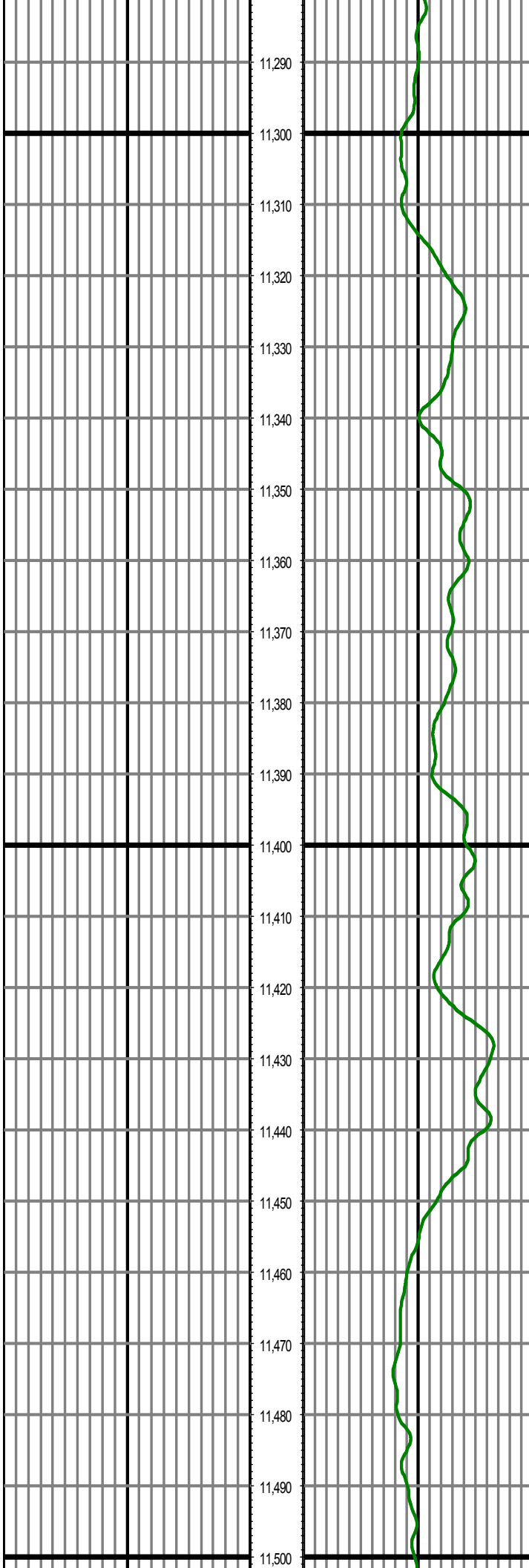
MD: 10927.00 INC: 91.61 AZ: 266.09 TVD: 6978.76 VS: 3728.08

MD: 11022.00 INC: 90.63 AZ: 268.02 TVD: 6976.90 VS: 3822.96



MD: 11117.00 INC: 91.96 AZ: 267.74 TVD: 6974.75 VS: 3917.90

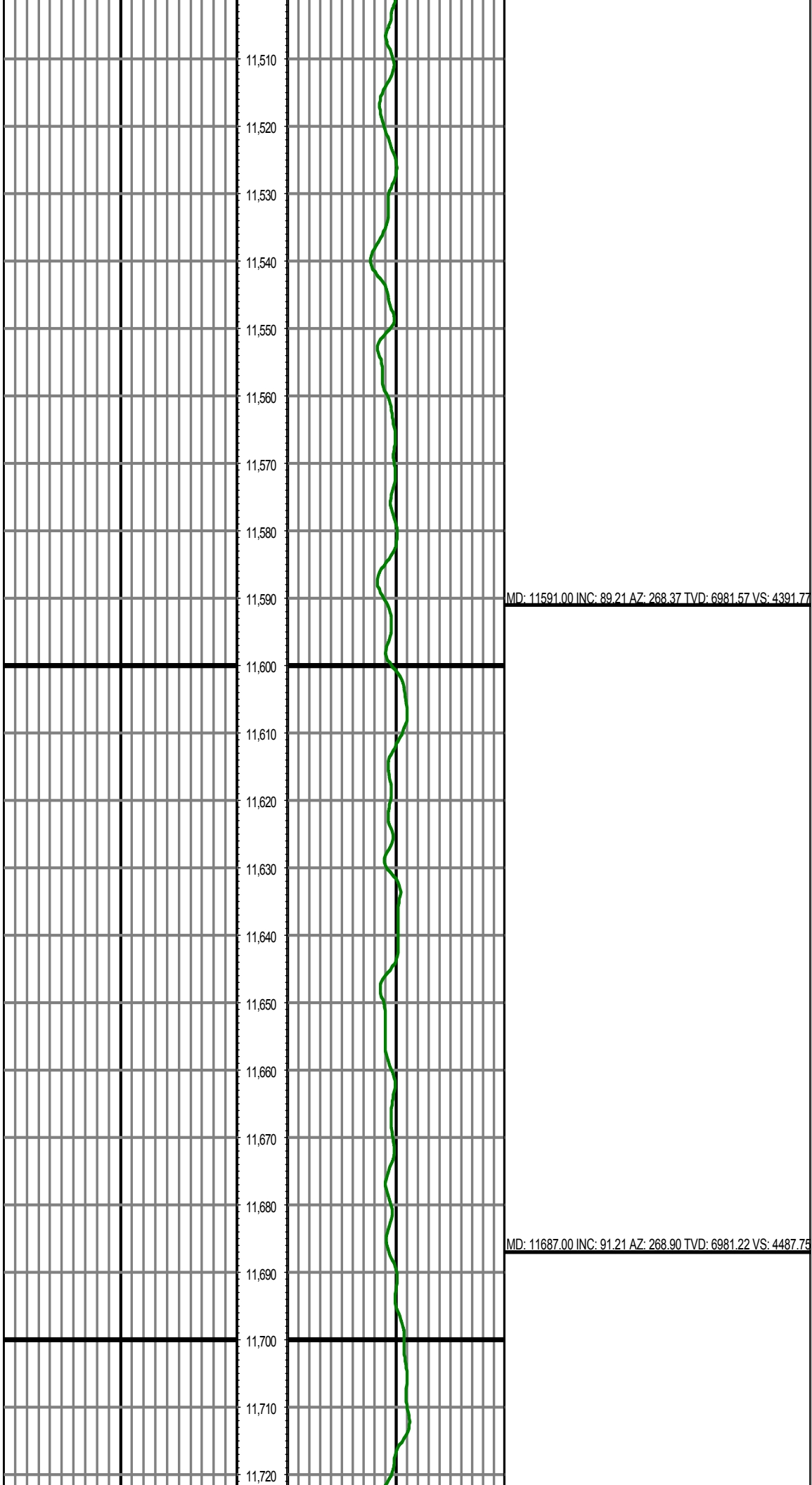
MD: 11212.00 INC: 89.39 AZ: 270.10 TVD: 6973.63 VS: 4012.87

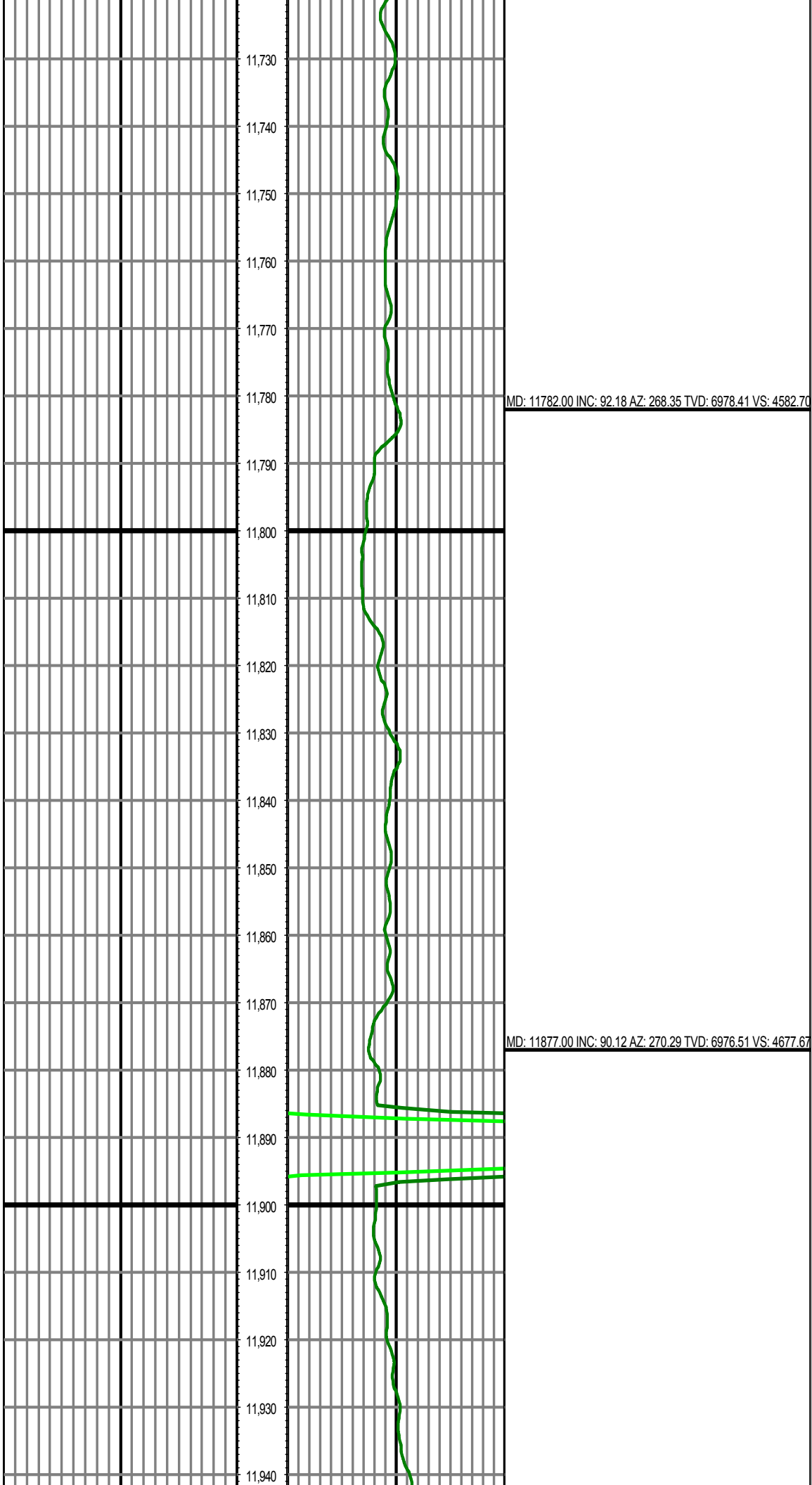


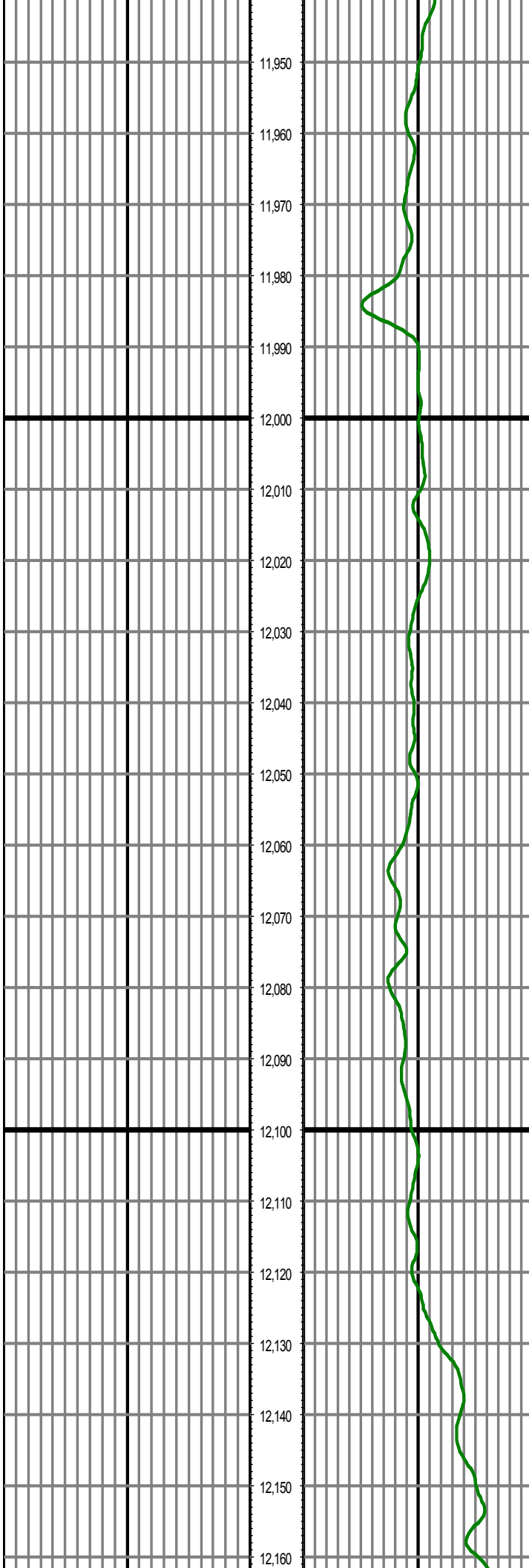
MD: 11306.00 INC: 88.50 AZ: 269.35 TVD: 6975.37 VS: 4106.85

MD: 11401.00 INC: 88.57 AZ: 269.44 TVD: 6977.79 VS: 4201.82

MD: 11496.00 INC: 88.83 AZ: 269.17 TVD: 6979.95 VS: 4296.79



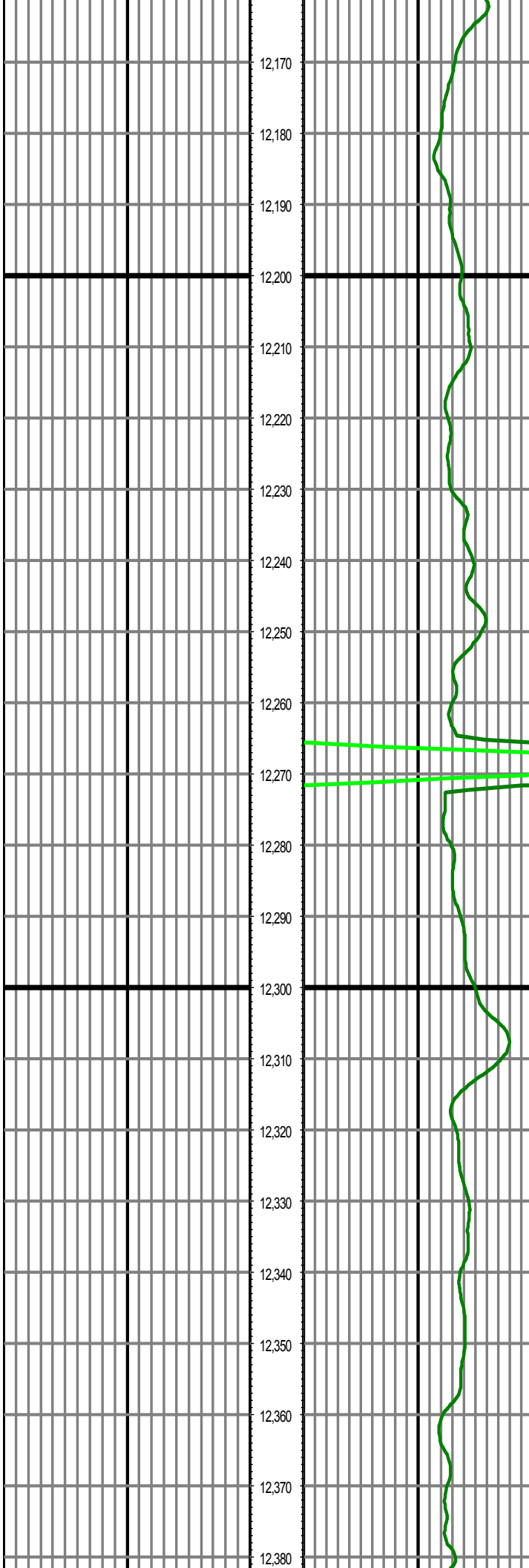




MD: 11973.00 INC: 89.84 AZ: 270.91 TVD: 6976.54 VS: 4773.65

MD: 12068.00 INC: 91.23 AZ: 270.77 TVD: 6975.65 VS: 4868.62

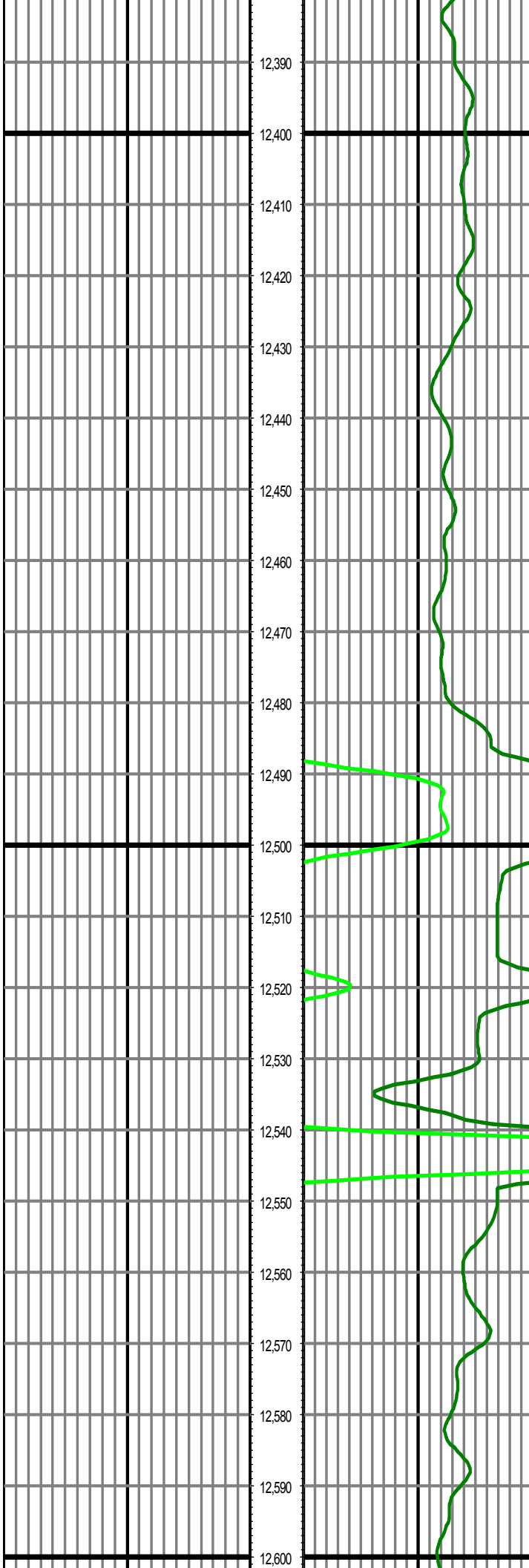
MD: 12163.00 INC: 92.61 AZ: 270.49 TVD: 6973.70 VS: 4928.55



MD: 12163.00 INC: 92.31 AZ: 270.49 TVD: 6972.72 VS: 4963.56

MD: 12258.00 INC: 90.25 AZ: 271.59 TVD: 6970.60 VS: 5058.50

MD: 12353.00 INC: 89.08 AZ: 271.13 TVD: 6971.15 VS: 5153.44



MD: 12449.00 INC: 89.90 AZ: 270.55 TVD: 6972.01 VS: 5249.42

MD: 12544.00 INC: 90.86 AZ: 270.39 TVD: 6971.38 VS: 5344.40

