



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

Iceman State 32N-A16HZ

Scale 5":100' - MD

9/19/2015 6:37 PM

Oper. Company: Anadarko Petroleum Corporation

Well: Iceman State 32N-A16HZ

Field: Wattenburg

Rig: Precision 462

Well ID: 05123413430000

Job Number: R15353

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

State: CO

County: Weld

Country: USA

Location: 3N67WS15

Start Date: 09/14/2015 10:40:00

End Date: 09/19/2015 00:50:00

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: 0.00° (True North)

Operator 1: David Clancy

Operator 2: Austin Capaldo

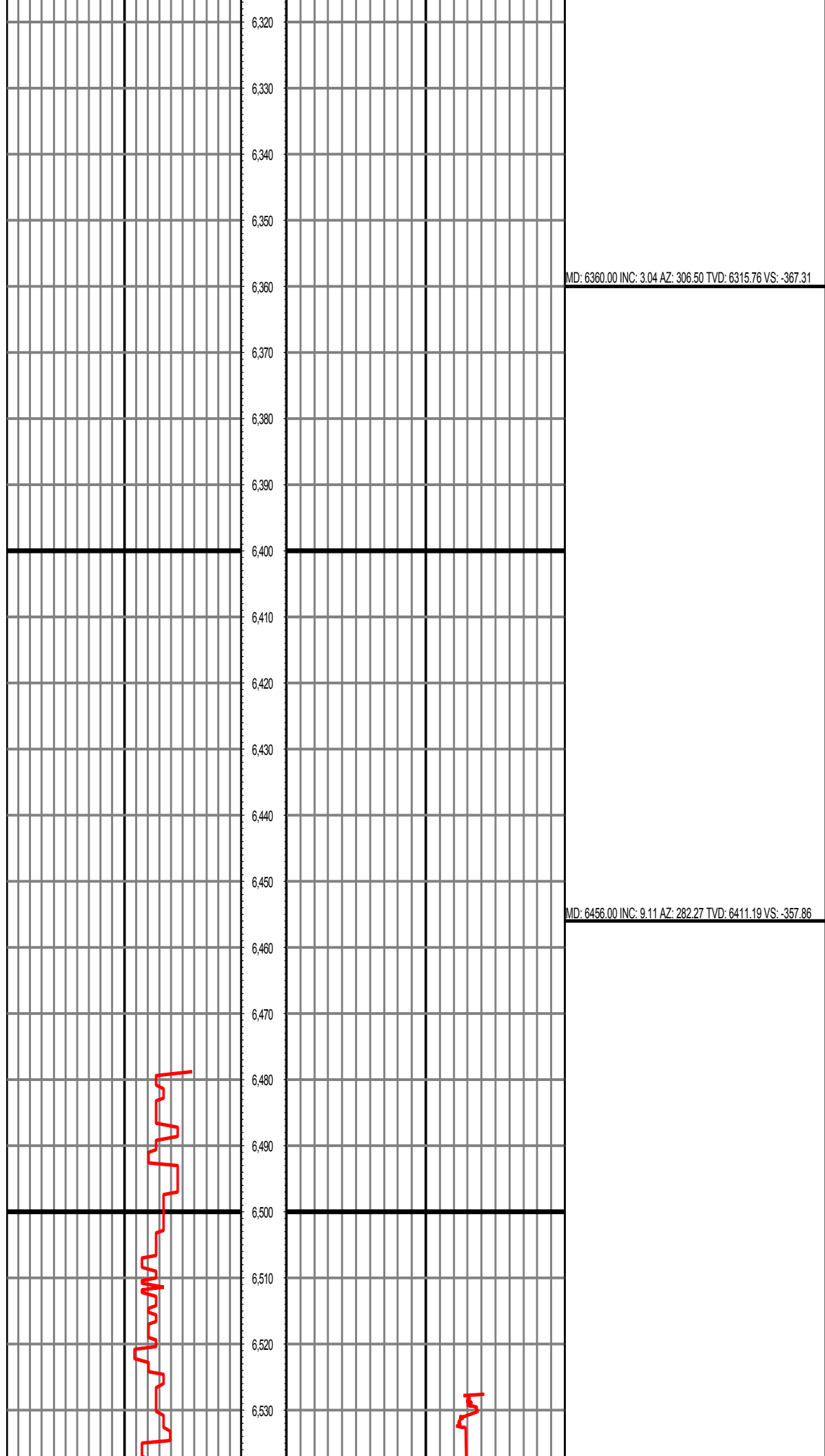
Notes: Smoothing: 7 Gap Fill: 10 Tool Type: Mud Pulse Calculation Method: Minimum Curvature

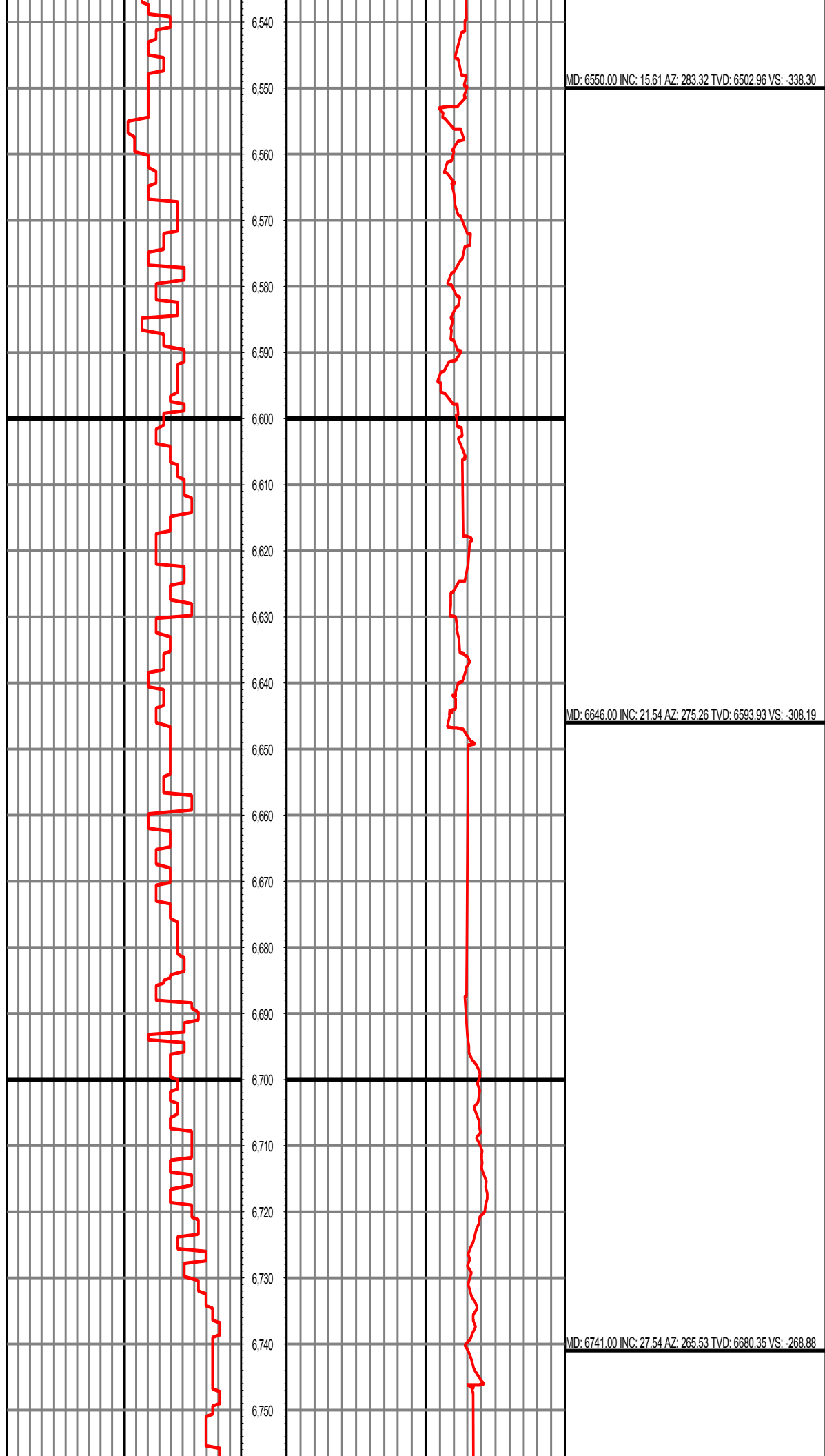
Tool Run Data	Run #1	Run #2	Run #3	Run #4	Run #5
Tool S/N	159	159	159		
Bit Size	8.5	8.5	8.5		
Cal Factor	1.15	1.15	1.15		
Survey Offset:	68.71	70.29	65.87		
Gamma Offset	66.67	68.29	63.84		
Resistivity Offset	0.00	0.00	0.00		
Start Depth	0.00	6907.00	7040.00		
StartDate	9/14/2015	9/16/2015	9/16/2015		
StartTime	10:40	04:30	18:00		
EndDepth	6907.00	7040.00	13029.00		
EndDate	9/16/2015	9/16/2015	9/19/2015		
EndTime	02:30	15:30	00:50		
Hole Data			Casing Data		
Size	From	To	Size	From	To
8.5	1624.00	13029.00	9 5/8	0.00	1624.00

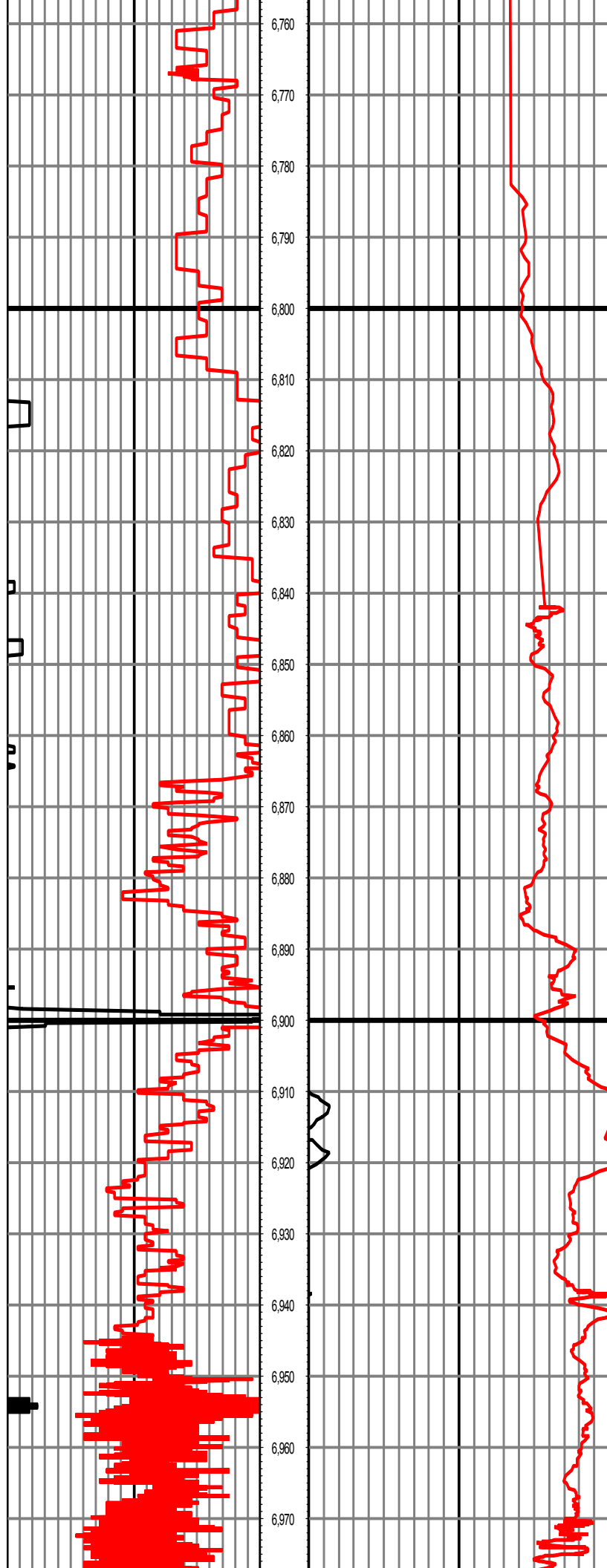
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost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

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

					MD: 6265.00 INC: 1.76 AZ: 335.53 TVD: 6220.84 VS: -369.91
		6,270			
		6,280			
		6,290			
		6,300			
		6,310			



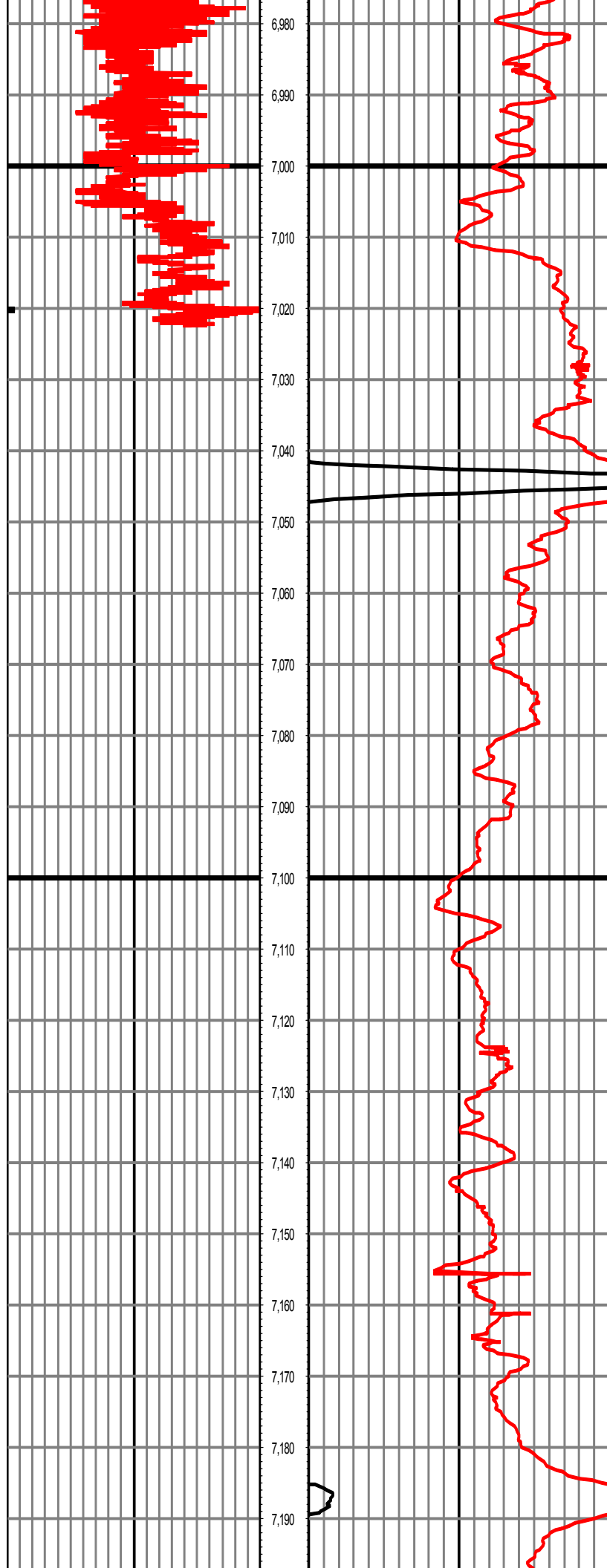




MD: 6836.00 INC: 32.87 AZ: 261.55 TVD: 6762.43 VS: -221.40

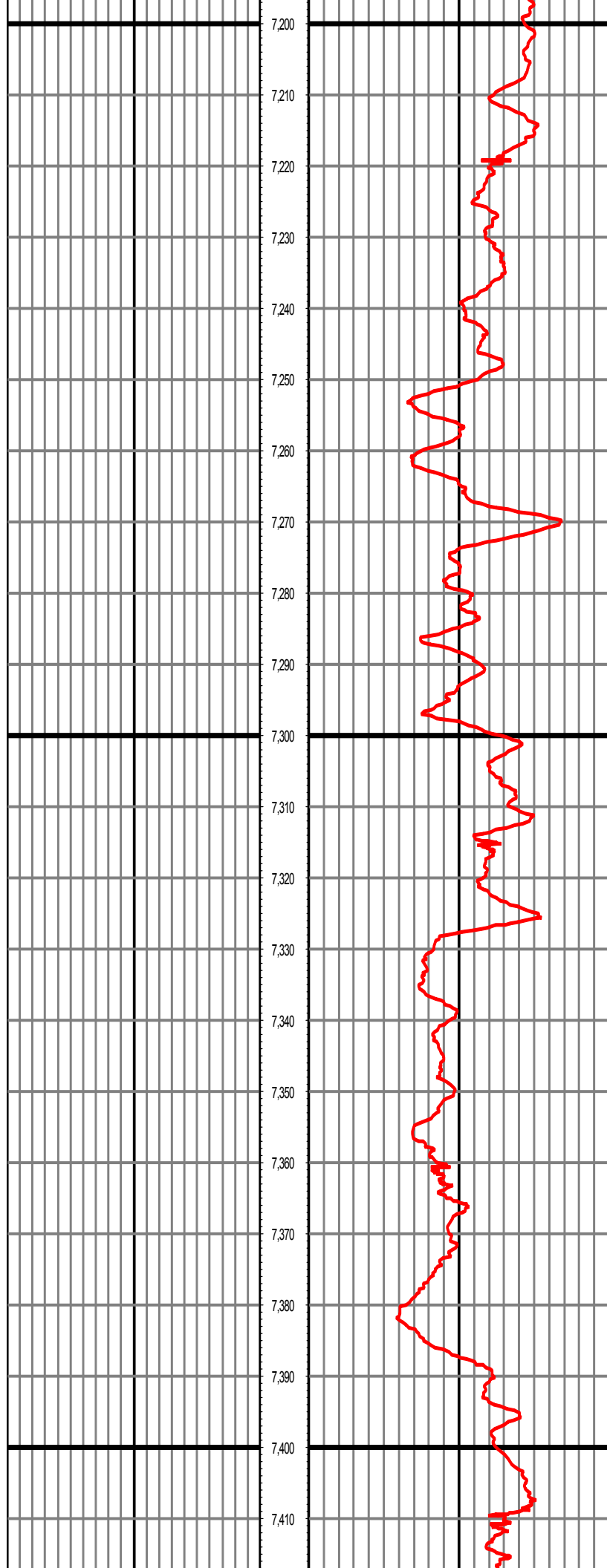
MD: 6931.00 INC: 43.55 AZ: 267.13 TVD: 6836.99 VS: -162.98

MD: 6963.00 INC: 51.02 AZ: 268.39 TVD: 6858.68 VS: -139.49



MD: 7026.00 INC: 62.87 AZ: 273.58 TVD: 6893.00 VS: -86.84

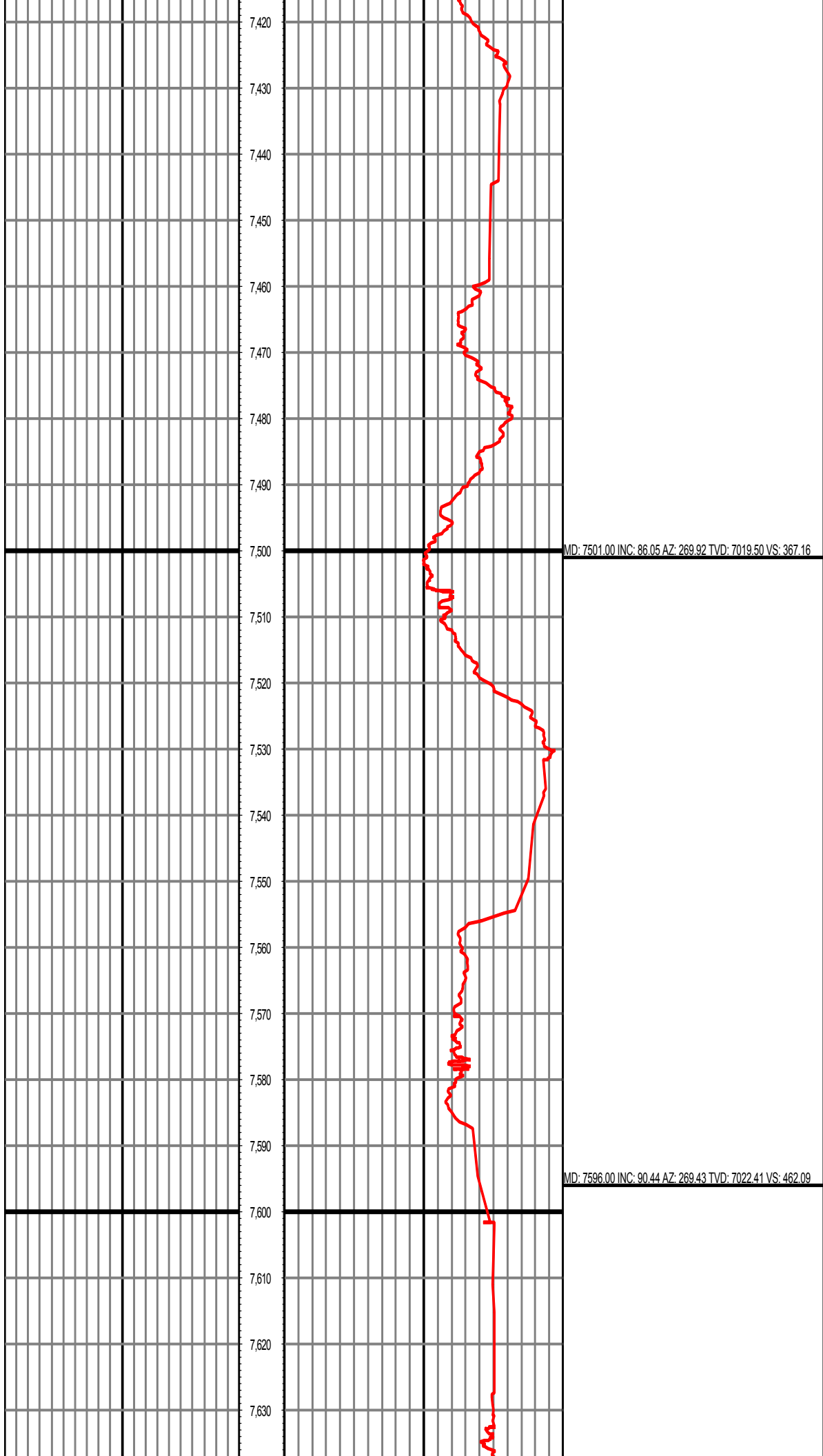
MD: 7121.00 INC: 67.58 AZ: 273.62 TVD: 6932.80 VS: -0.83

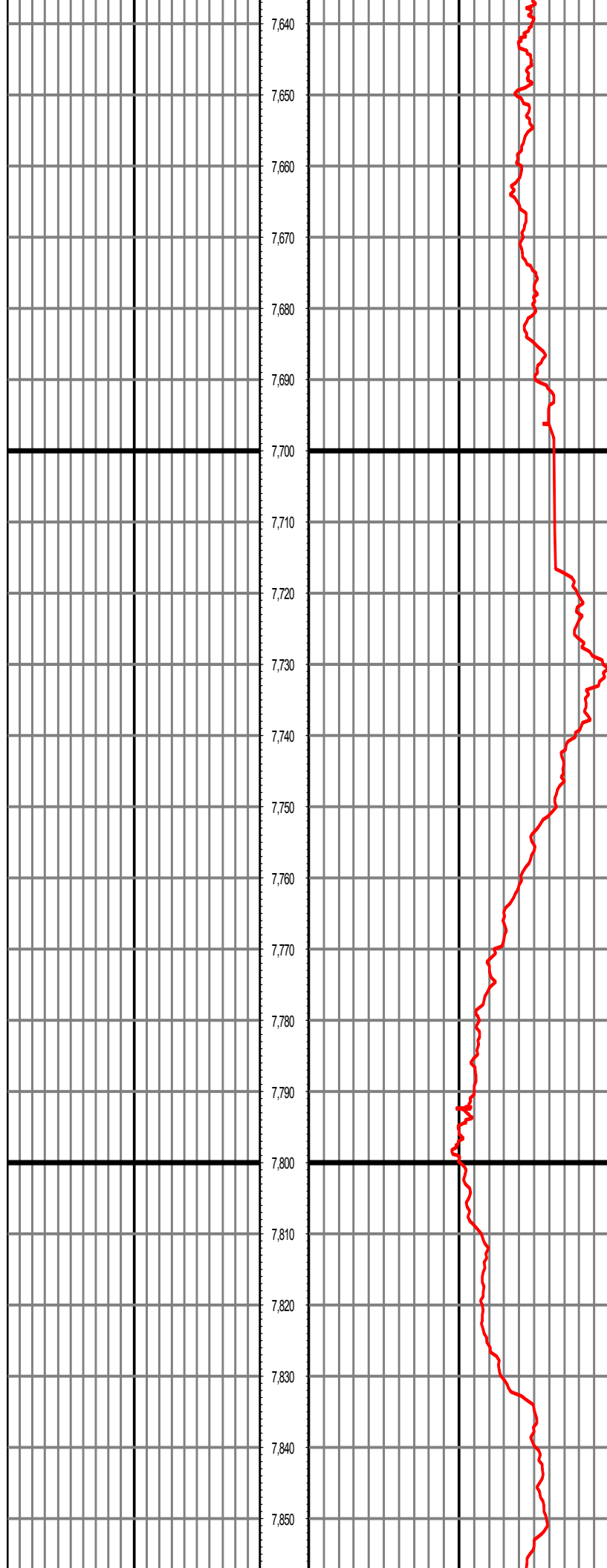


MD: 7216.00 INC: 72.59 AZ: 272.62 TVD: 6965.15 VS: 88.28

MD: 7311.00 INC: 76.45 AZ: 272.53 TVD: 6990.50 VS: 179.69

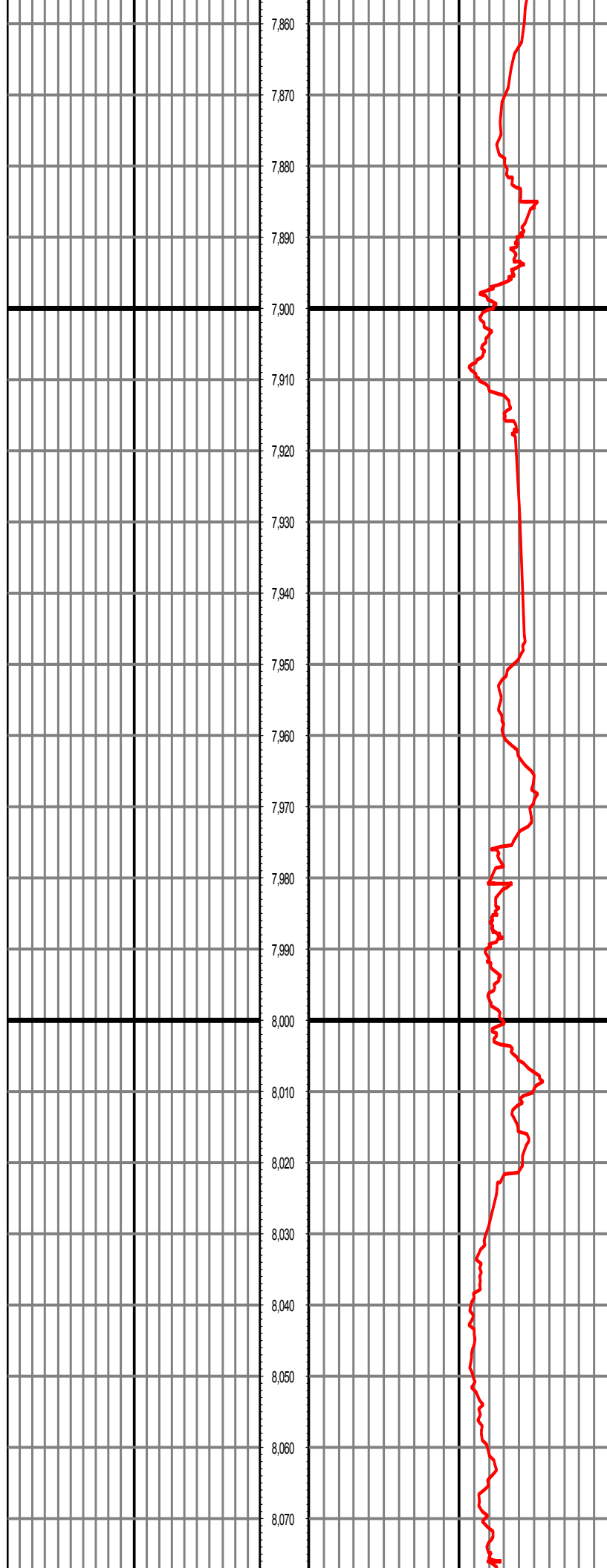
MD: 7406.00 INC: 81.17 AZ: 270.69 TVD: 7008.93 VS: 272.79





MD: 7692.00 INC: 91.17 AZ: 269.78 TVD: 7021.06 VS: 558.08

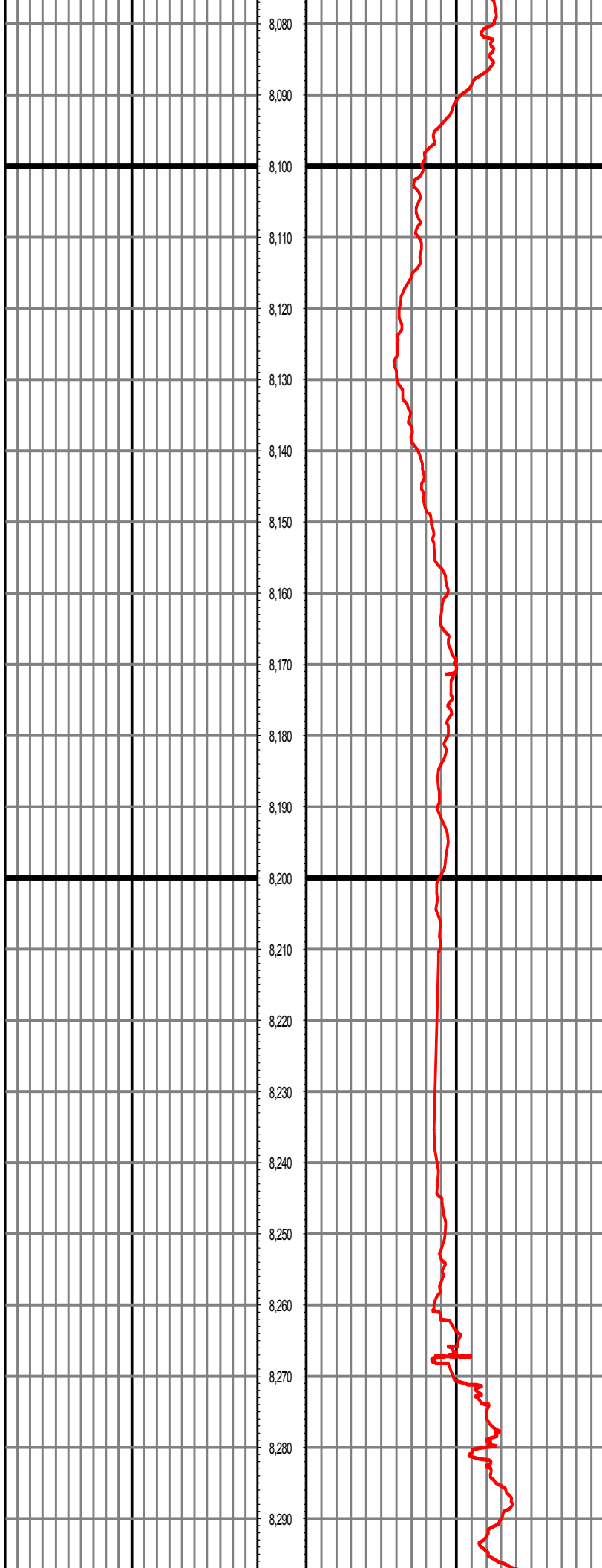
MD: 7787.00 INC: 91.82 AZ: 268.99 TVD: 7018.58 VS: 653.04



MD: 7882.00 INC: 93.35 AZ: 268.25 TVD: 7014.30 VS: 747.93

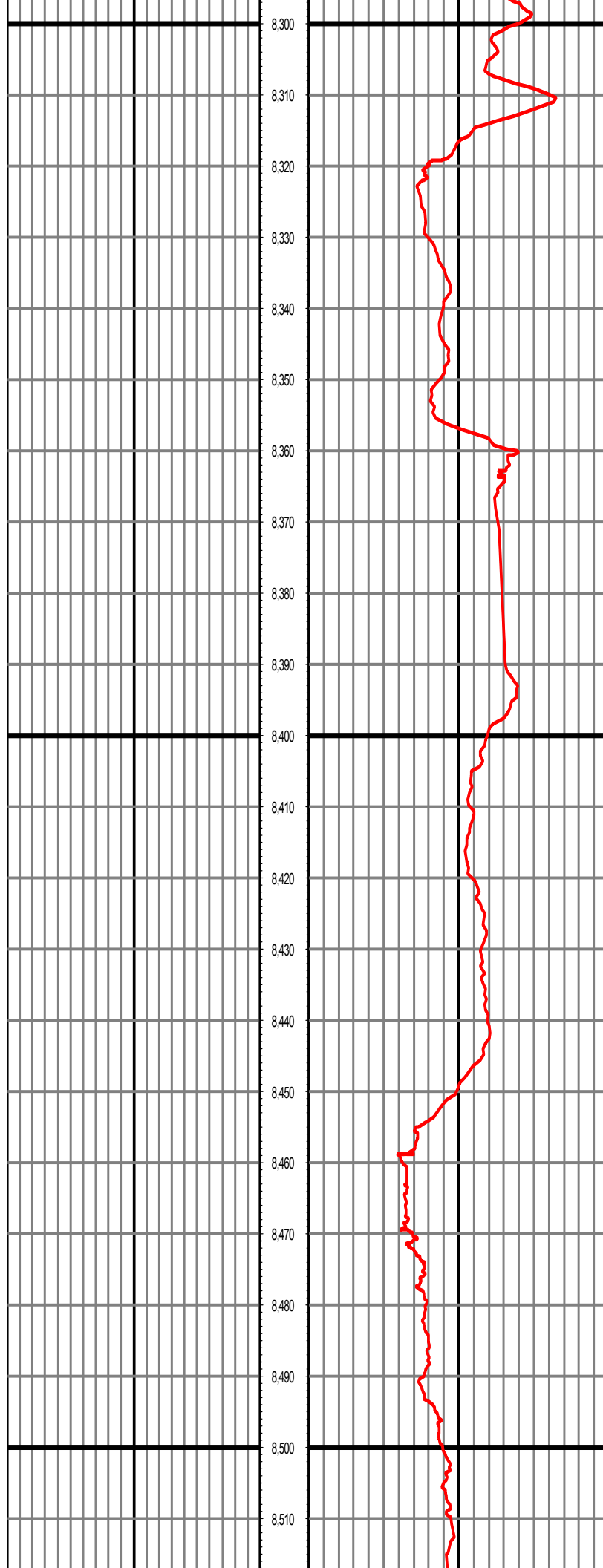
MD: 7976.00 INC: 93.04 AZ: 268.17 TVD: 7009.06 VS: 841.76

MD: 8072.00 INC: 90.91 AZ: 267.90 TVD: 7005.75 VS: 937.67



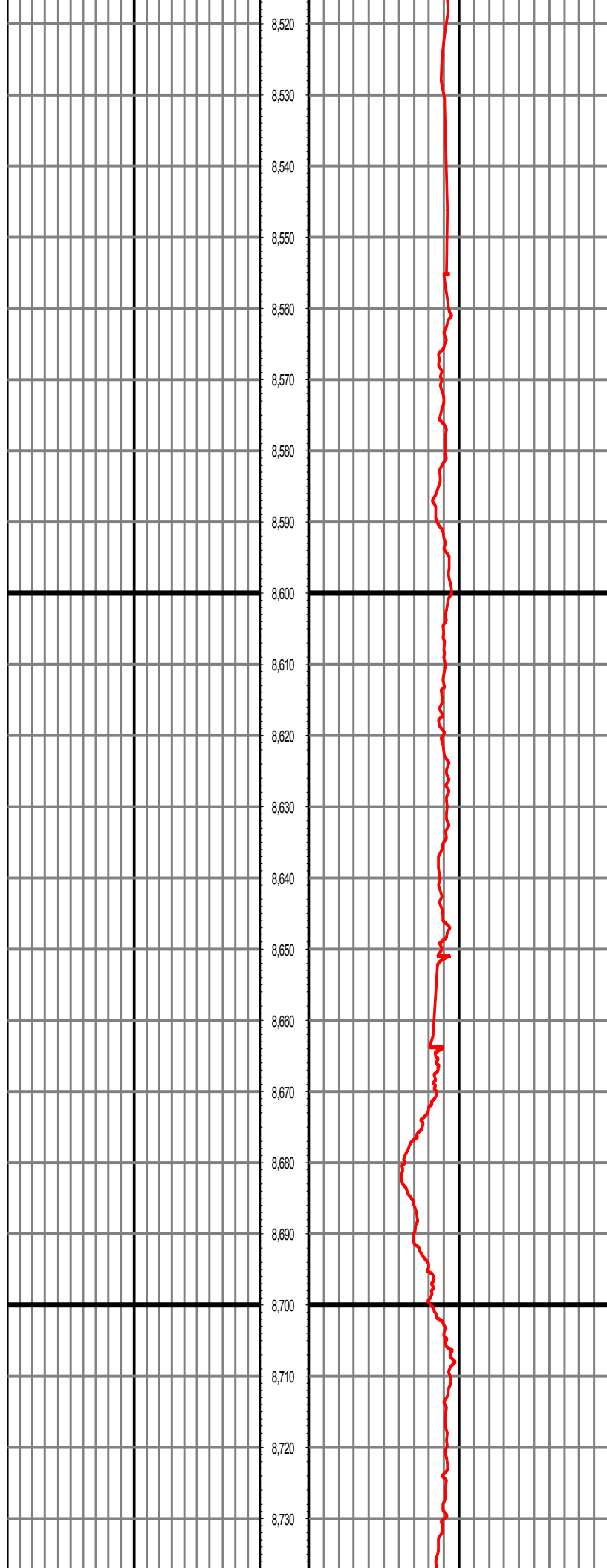
MD: 8167.00 INC: 90.63 AZ: 267.69 TVD: 7004.47 VS: 1032.62

MD: 8262.00 INC: 92.38 AZ: 266.64 TVD: 7001.98 VS: 1127.51



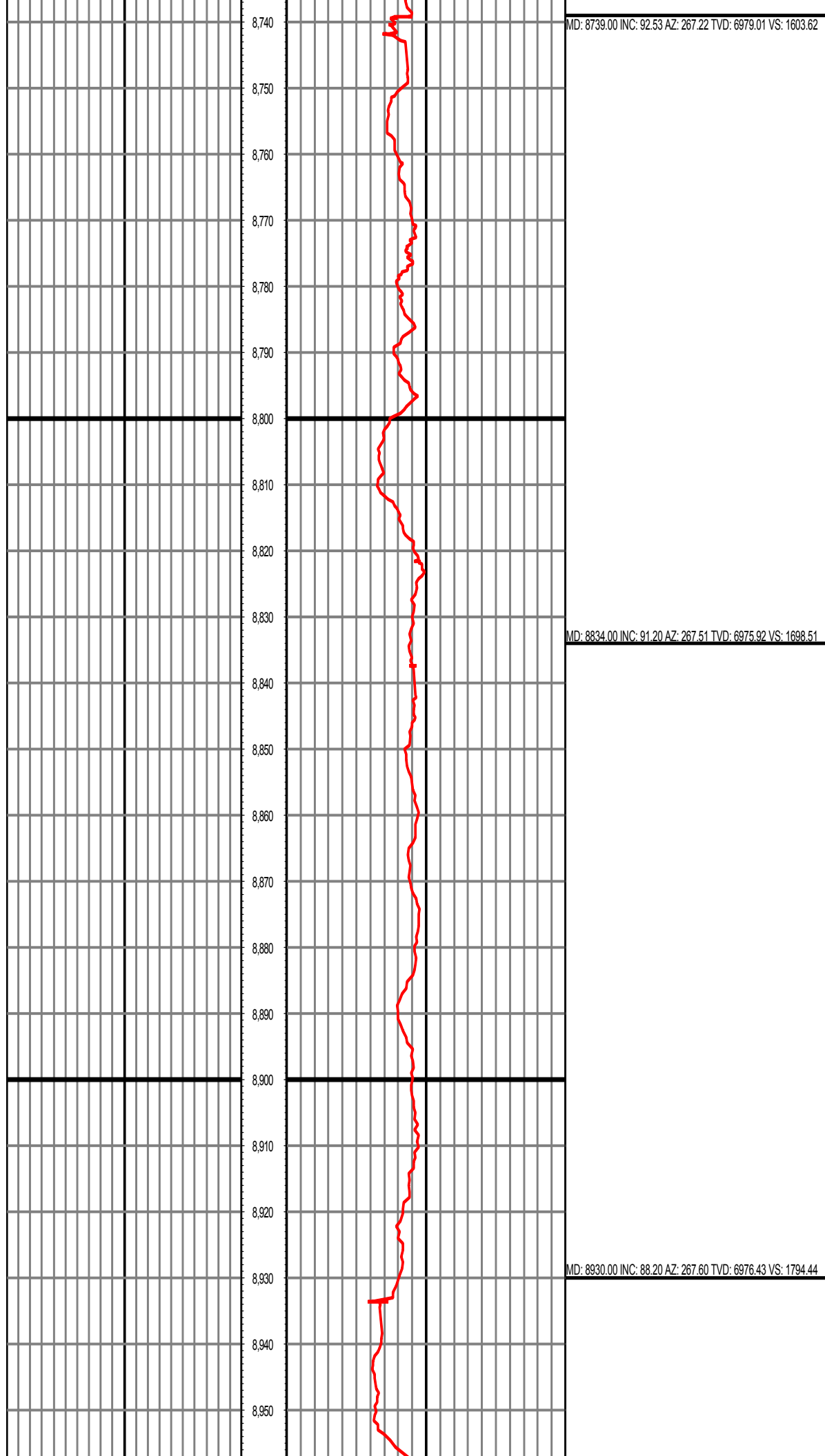
MD: 8357.00 INC: 92.67 AZ: 266.94 TVD: 6997.79 VS: 1222.31

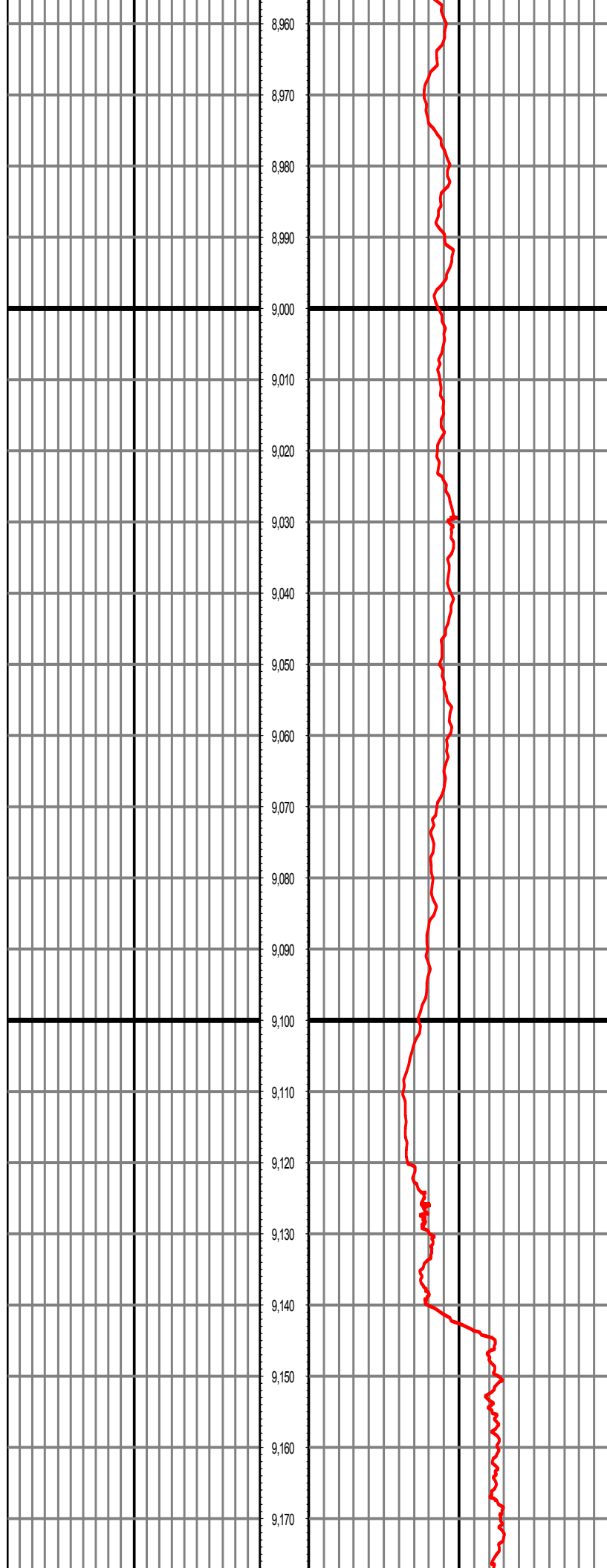
MD: 8453.00 INC: 93.27 AZ: 267.50 TVD: 6992.82 VS: 1318.10



MD: 8548.00 INC: 92.77 AZ: 267.66 TVD: 6987.81 VS: 1412.92

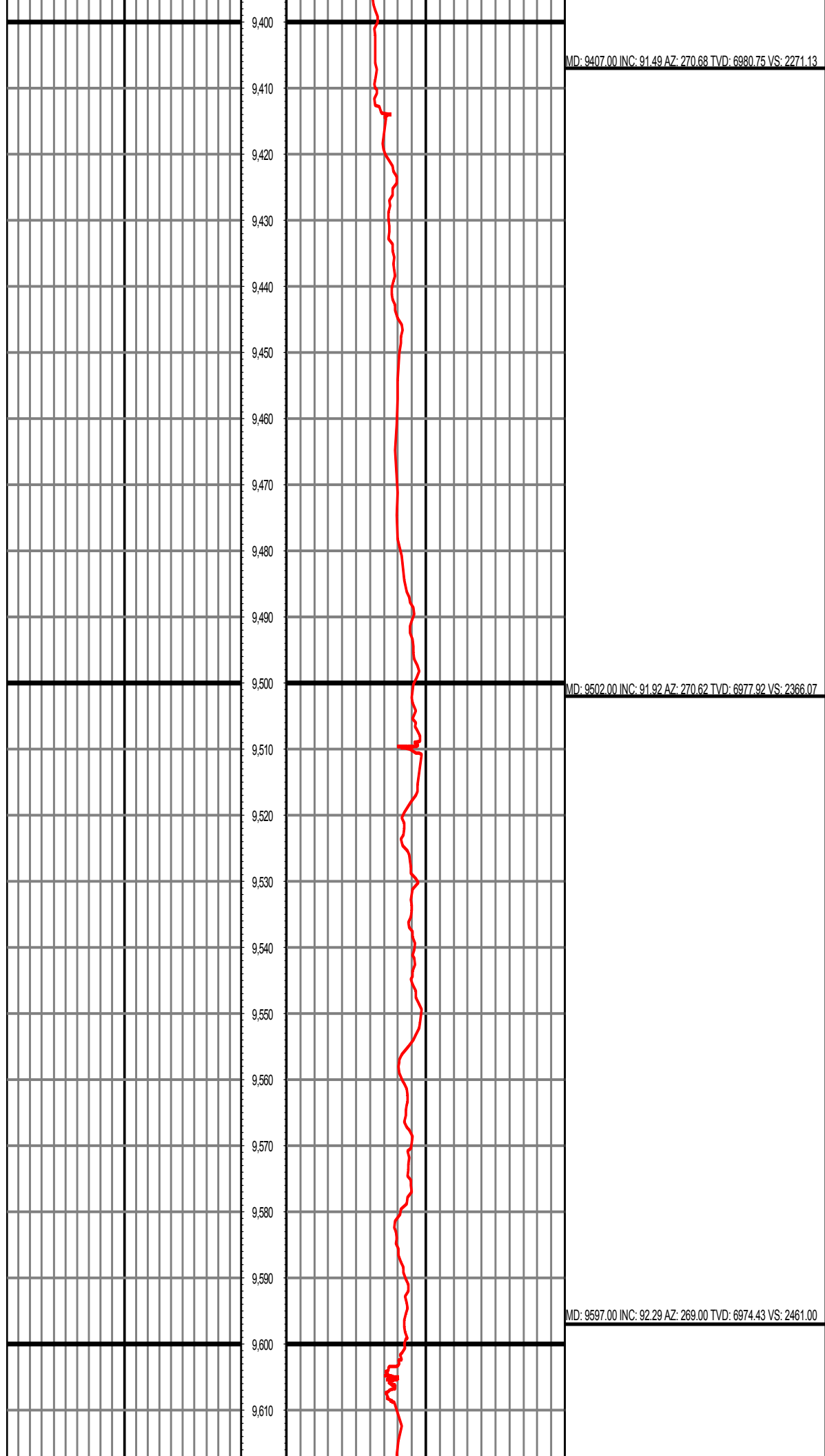
MD: 8644.00 INC: 92.63 AZ: 267.98 TVD: 6983.29 VS: 1508.77

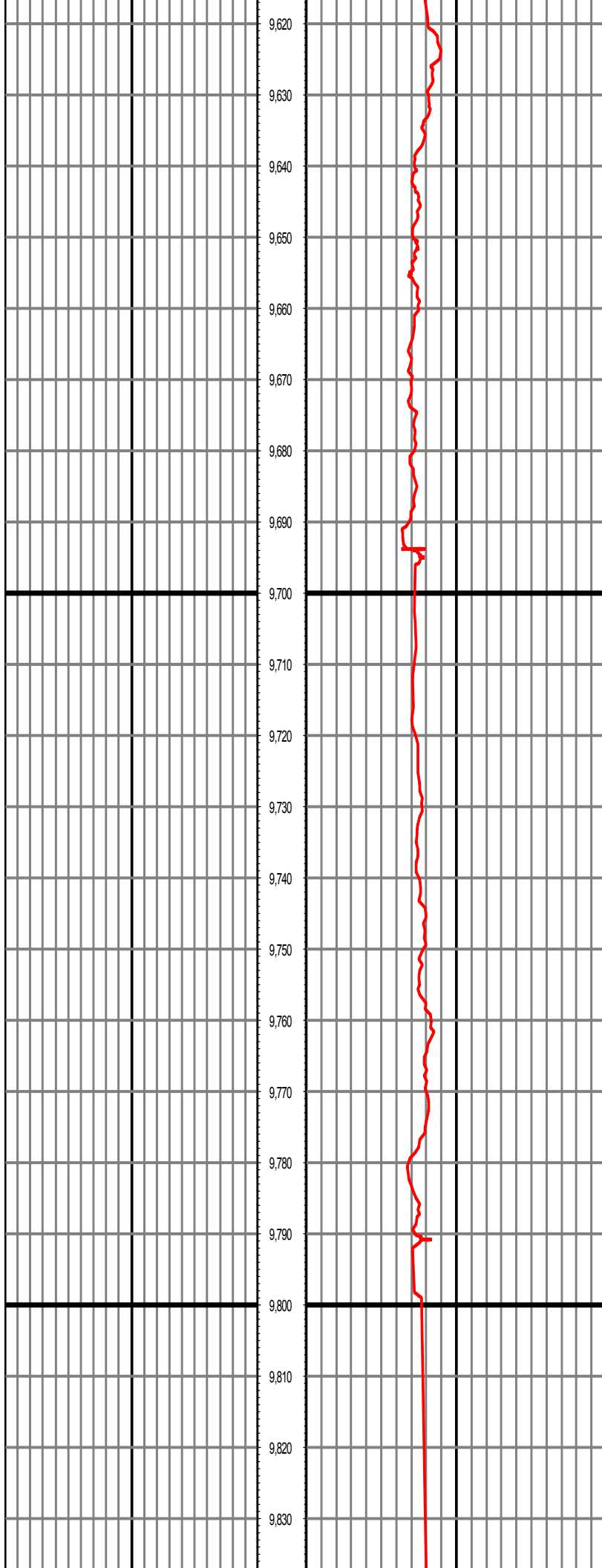




MD: 9025.00 INC: 88.39 AZ: 267.50 TVD: 6979.25 VS: 1889.34

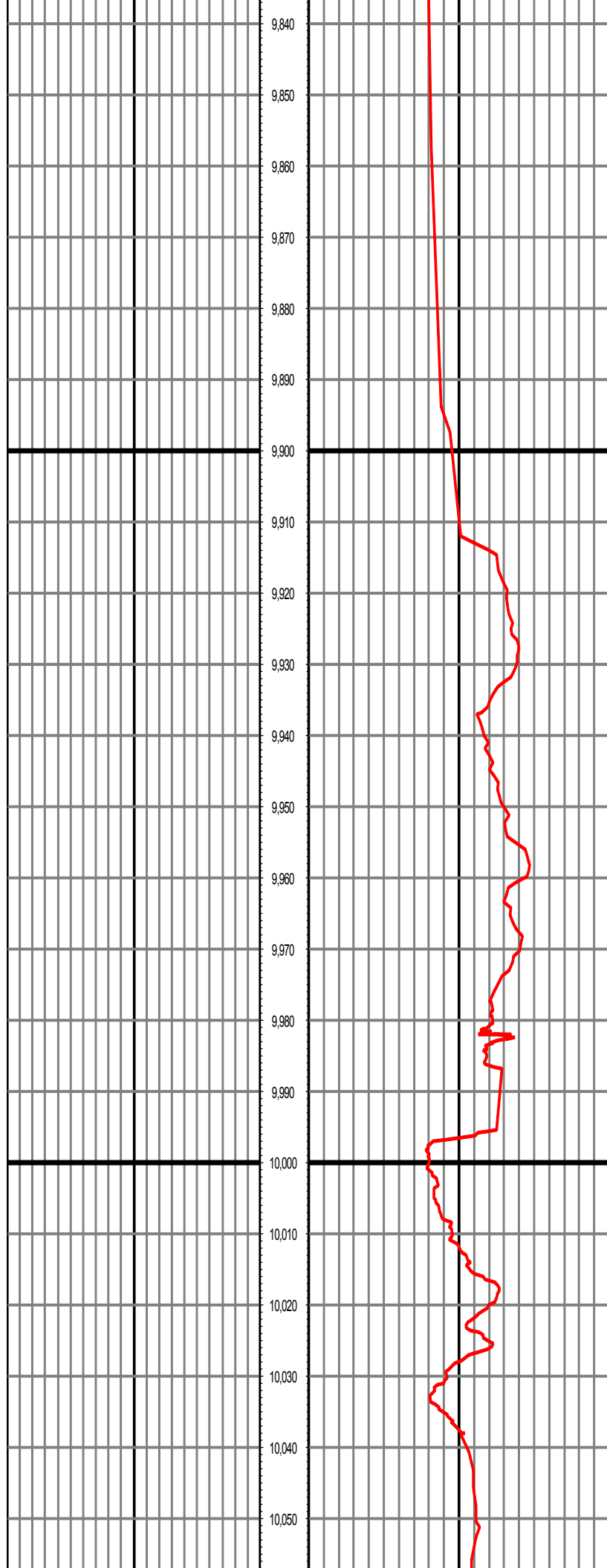
MD: 9121.00 INC: 88.63 AZ: 267.02 TVD: 6981.75 VS: 1985.24





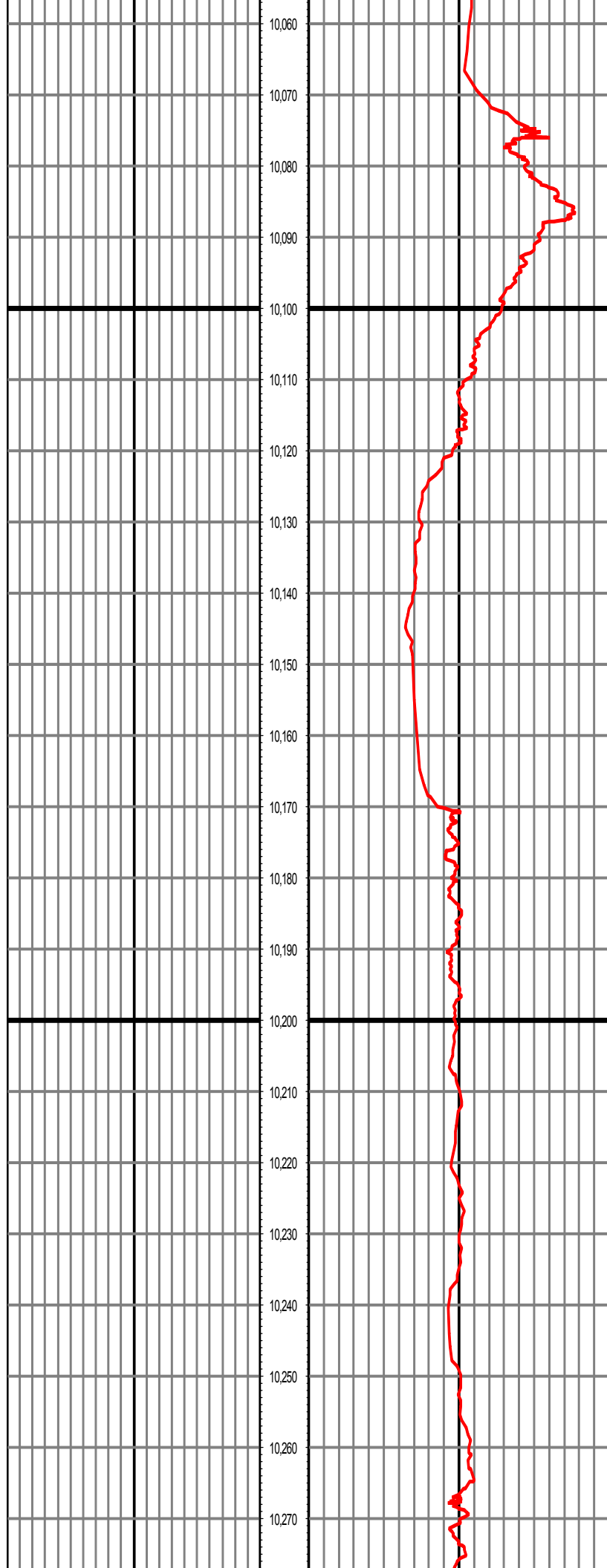
MD: 9693.00 INC: 91.38 AZ: 270.82 TVD: 6971.36 VS: 2556.94

MD: 9788.00 INC: 91.01 AZ: 271.97 TVD: 6969.38 VS: 2651.87



MD: 9882.00 INC: 92.90 AZ: 271.18 TVD: 6966.17 VS: 2745.75

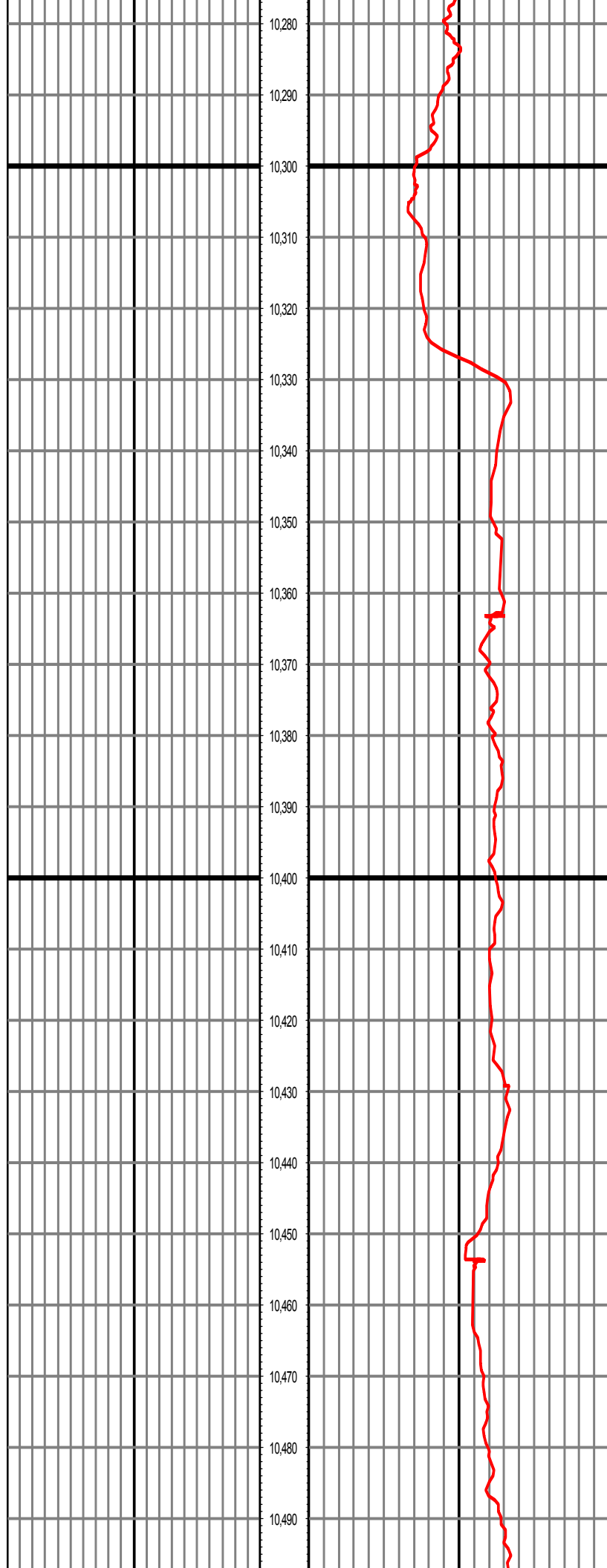
MD: 9978.00 INC: 95.14 AZ: 270.09 TVD: 6959.44 VS: 2841.48



MD: 10072.00 INC: 94.89 AZ: 270.20 TVD: 6951.22 VS: 2935.12

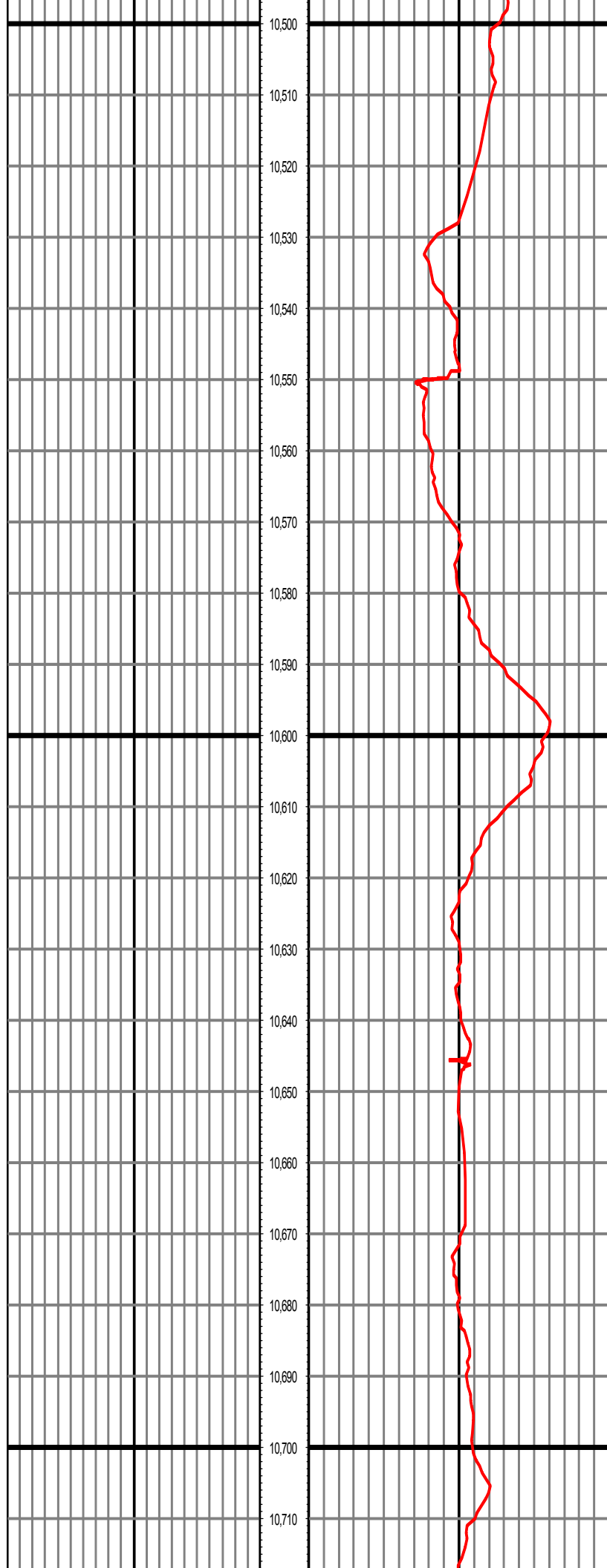
MD: 10166.00 INC: 91.55 AZ: 271.21 TVD: 6945.94 VS: 3028.93

MD: 10262.00 INC: 90.13 AZ: 272.43 TVD: 6944.54 VS: 3124.84



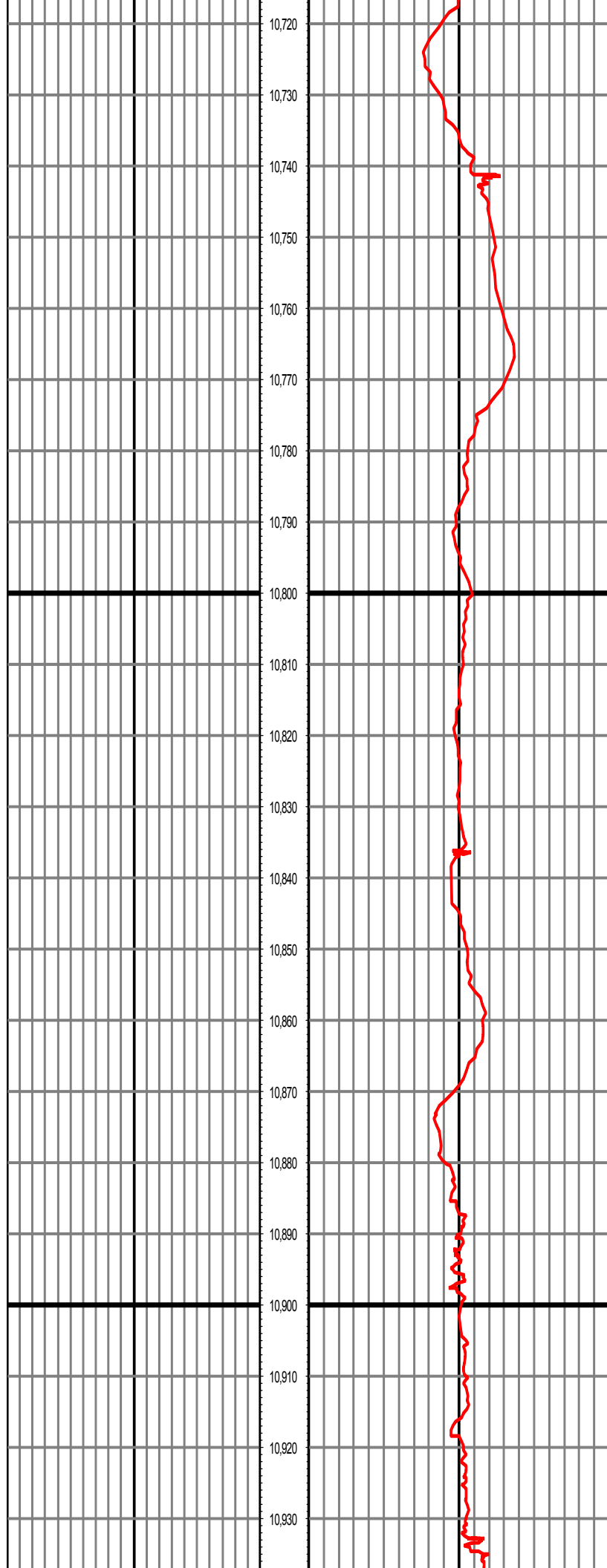
MD: 10357.00 INC: 87.98 AZ: 272.20 TVD: 6946.10 VS: 3219.70

MD: 10452.00 INC: 87.99 AZ: 273.03 TVD: 6949.44 VS: 3314.50



MD: 10547.00 INC: 88.53 AZ: 272.26 TVD: 6952.33 VS: 3409.31

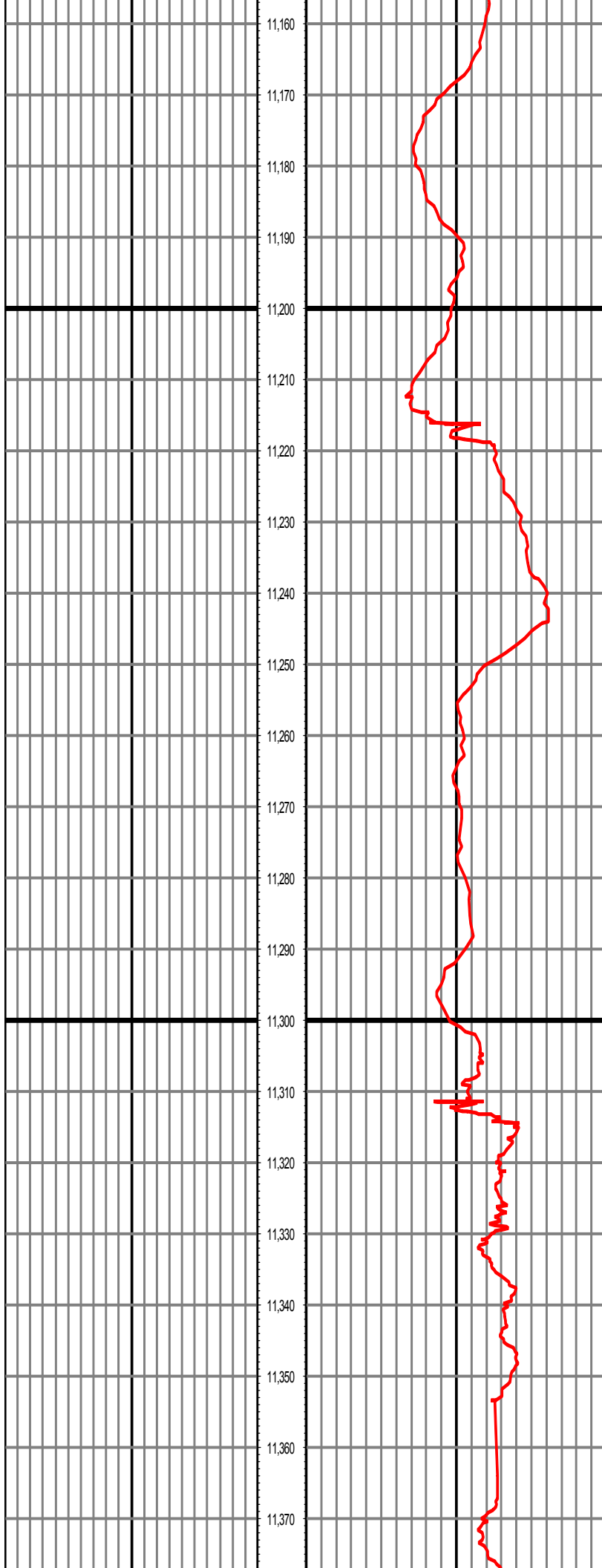
MD: 10642.00 INC: 88.53 AZ: 272.29 TVD: 6954.76 VS: 3504.17



MD: 10737.00 INC: 89.04 AZ: 272.16 TVD: 6956.78 VS: 3599.04

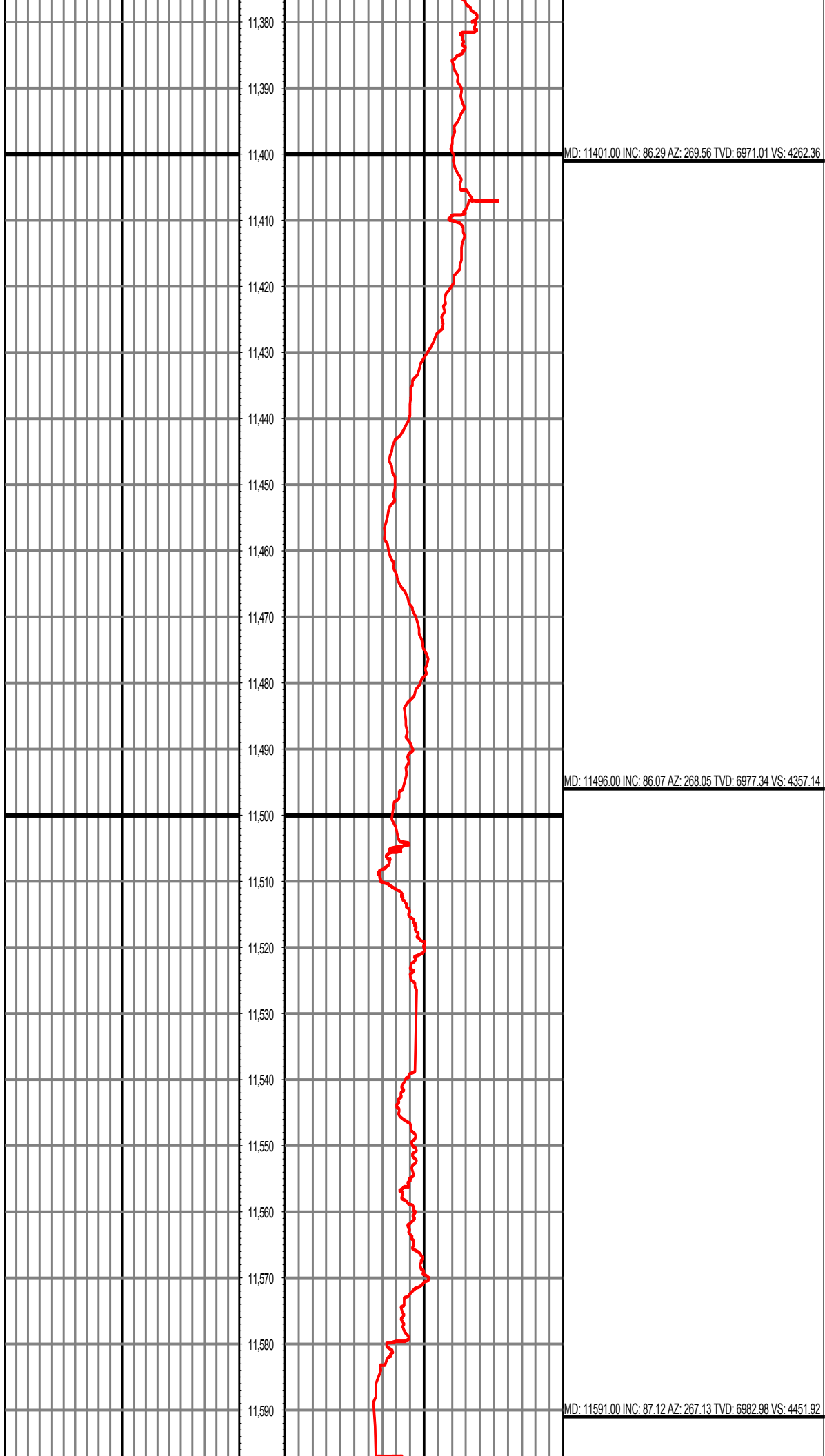
MD: 10832.00 INC: 90.44 AZ: 270.34 TVD: 6957.21 VS: 3693.98

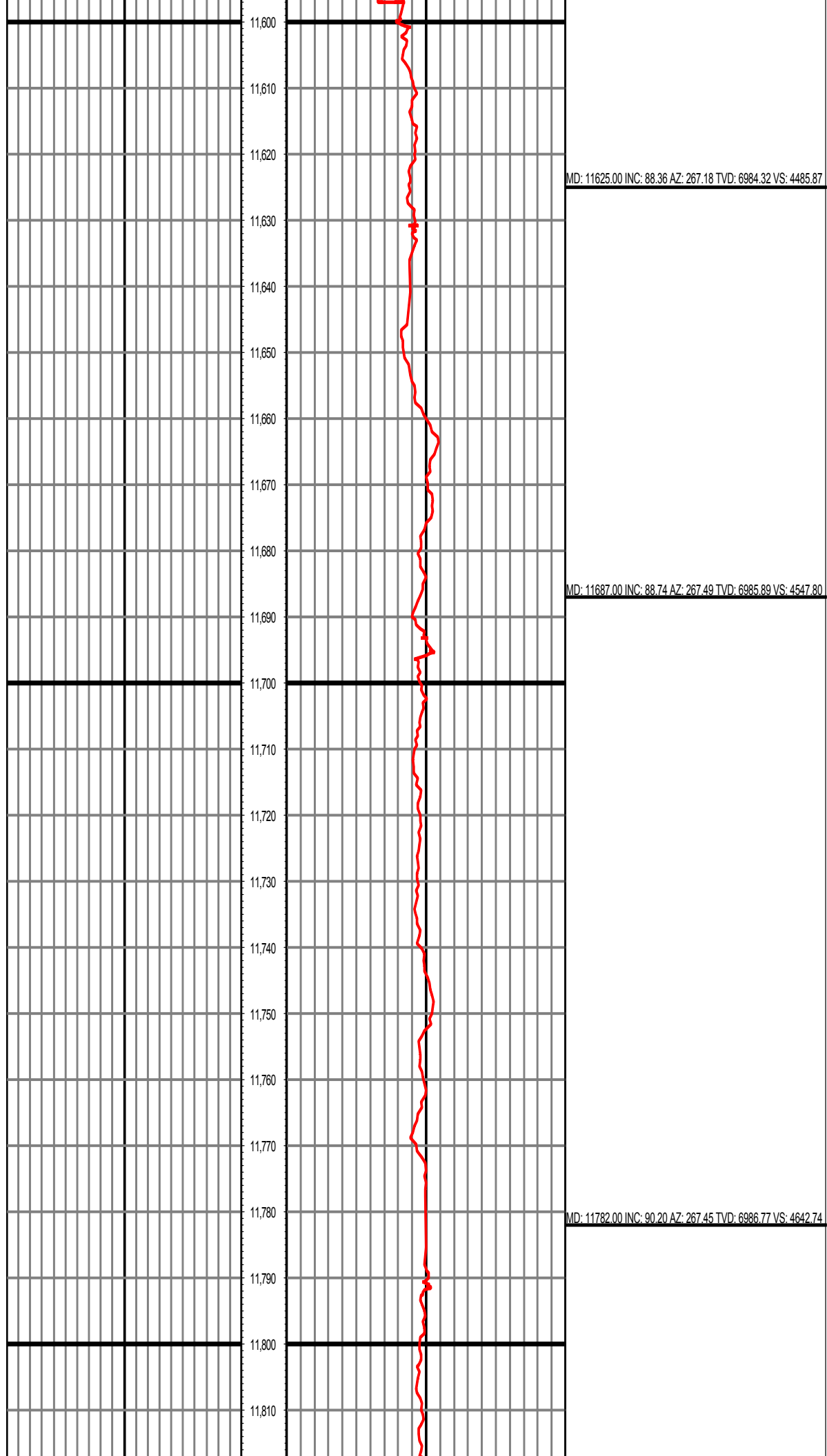
MD: 10927.00 INC: 92.12 AZ: 270.00 TVD: 6955.09 VS: 3788.95

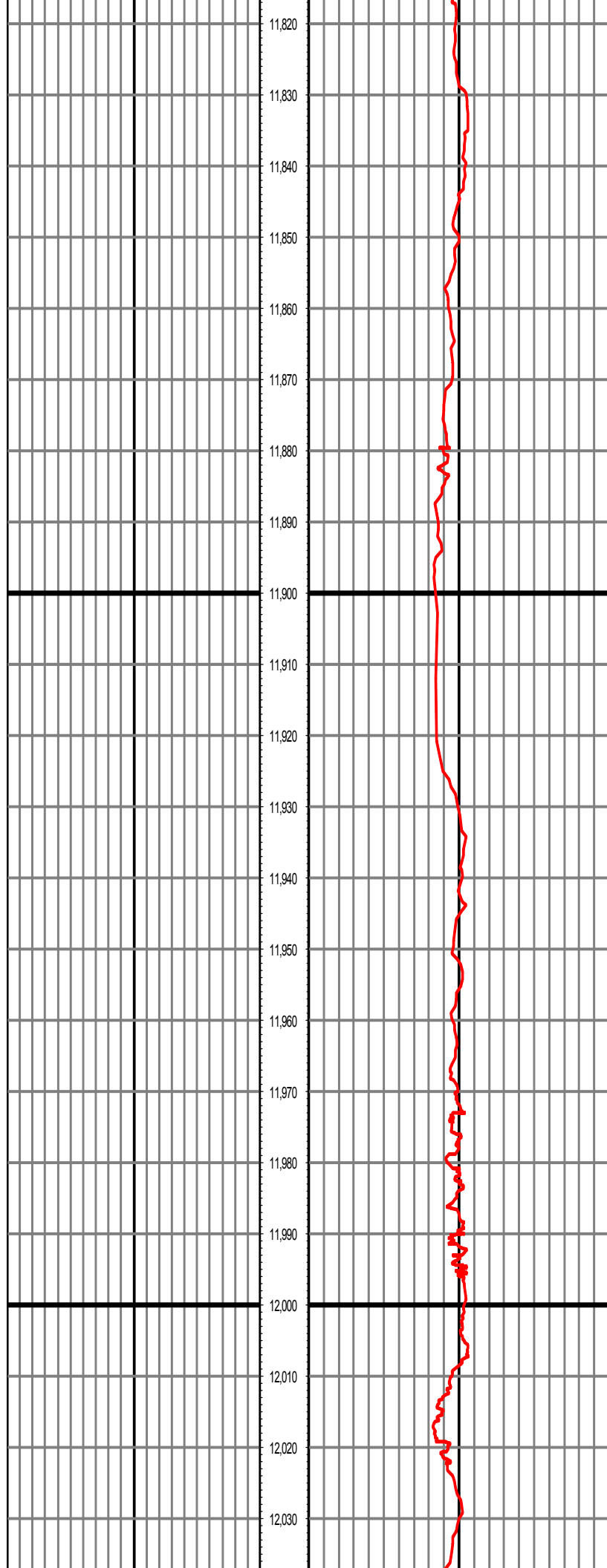


MD: 11212.00 INC: 86.99 AZ: 269.57 TVD: 6958.94 VS: 4073.75

MD: 11306.00 INC: 86.04 AZ: 269.29 TVD: 6964.65 VS: 4167.58

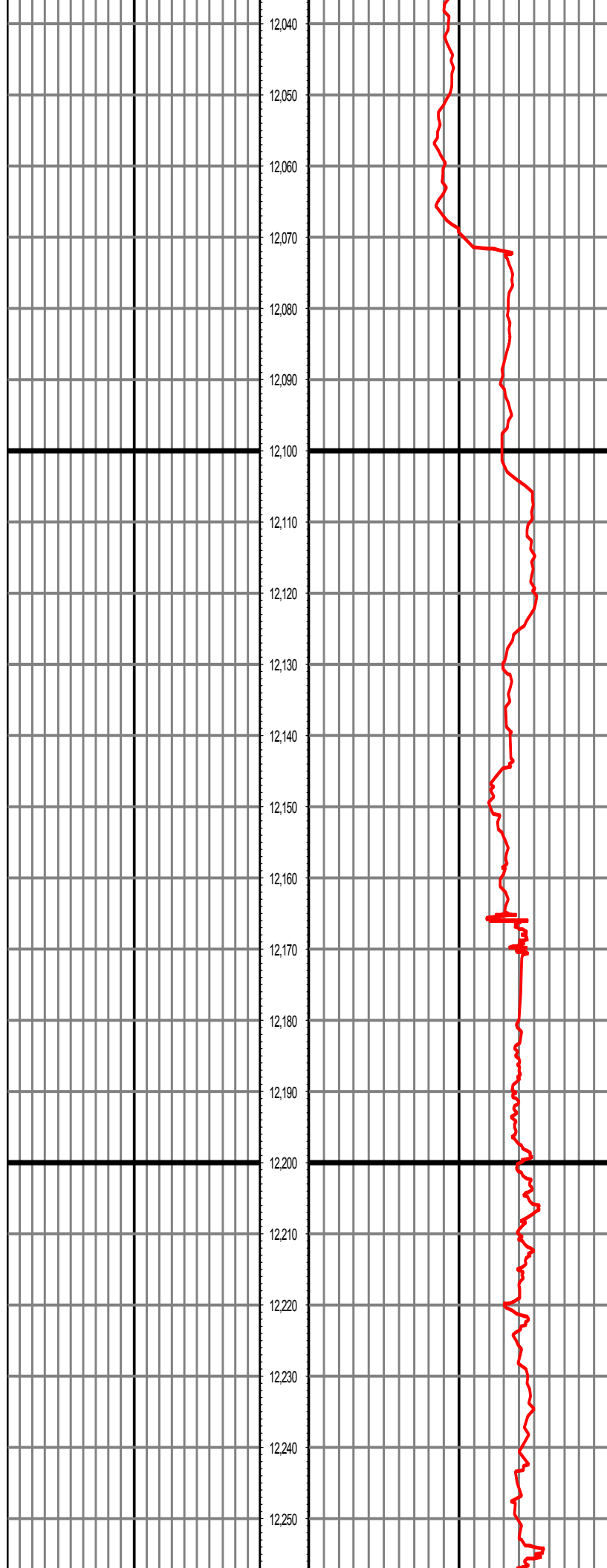






MD: 11877.00 INC: 90.25 AZ: 266.99 TVD: 6986.40 VS: 4737.66

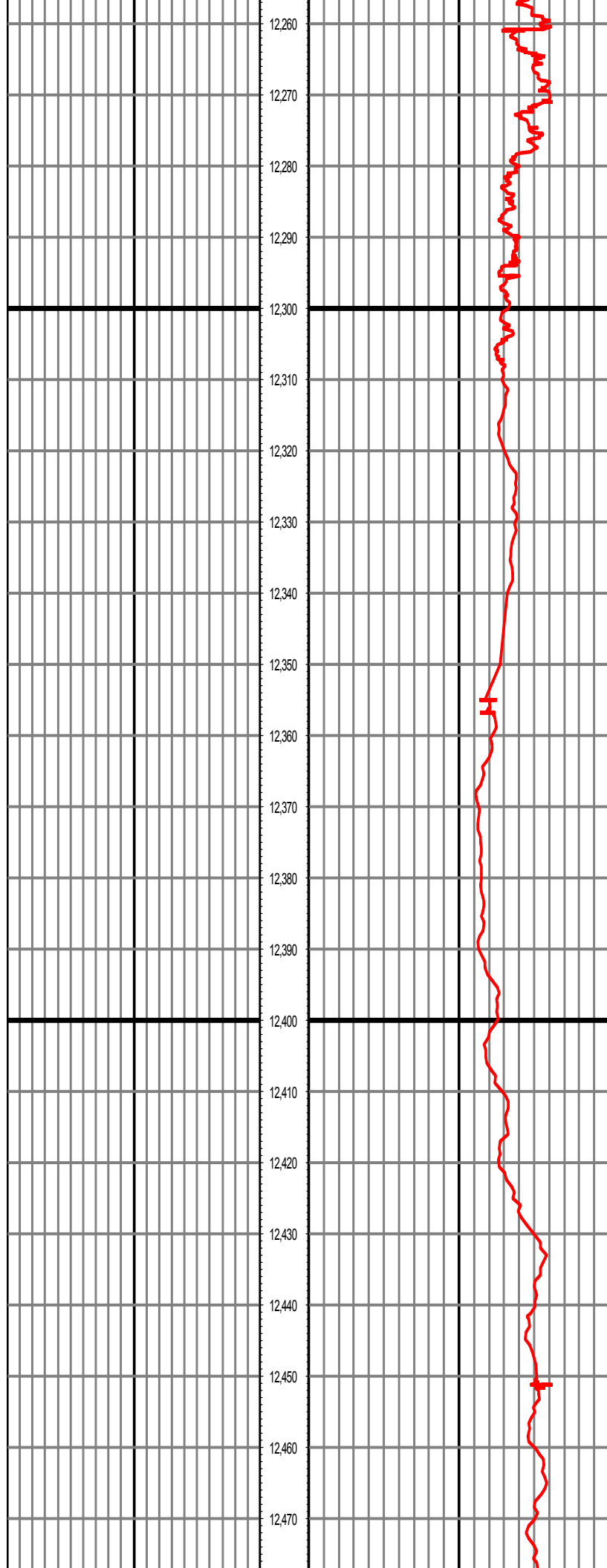
MD: 11972.00 INC: 91.66 AZ: 267.09 TVD: 6984.81 VS: 4832.56



MD: 12068.00 INC: 91.53 AZ: 266.43 TVD: 6982.14 VS: 4928.42

MD: 12163.00 INC: 91.28 AZ: 266.36 TVD: 6979.81 VS: 5023.25

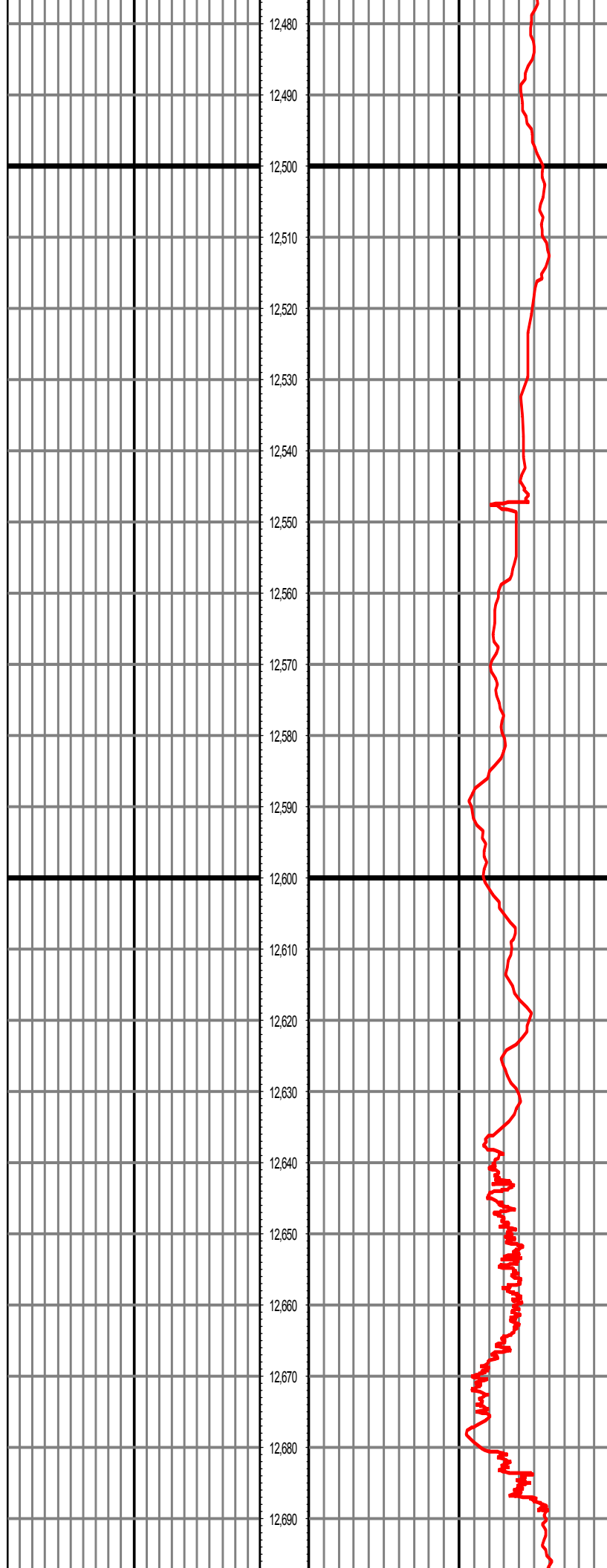
MD: 12258.00 INC: 91.01 AZ: 266.90 TVD: 6977.91 VS: 5118.12



MD: 12258.00 INC: 91.01 AZ: 266.99 TVD: 6977.91 VS: 5118.12

MD: 12353.00 INC: 90.61 AZ: 268.02 TVD: 6976.57 VS: 5213.05

MD: 12449.00 INC: 90.60 AZ: 267.71 TVD: 6975.56 VS: 5309.01



MD: 12544.00 INC: 91.94 AZ: 268.22 TVD: 6973.45 VS: 5403.95

MD: 12640.00 INC: 93.75 AZ: 267.07 TVD: 6968.69 VS: 5499.77

