



Precision Directional Services, Inc.

Precision Directional Services, Inc.
27610 Commerce Oaks Drive
Oak Ridge North, Texas

Willow Bend LD 18-361HC

Scale 5":100' - MD

2/25/2015 3:05 PM

Oper. Company: Great Western Operating Company

Well: Willow Bend LD 18-361HC

Field: DJ Basin

Rig: Xtreme 17

Well ID:

Job Number: DL2528

State: Colorado

County: Adams County

Country: USA

Location: Adams County

Start Date: 02/18/2015 00:00:00

End Date: 02/25/2015 14:35:02

Latitude: 39° 58'15"449"N

Longitude: 104° 55'25"590"W

Elev KB: 5247.30'

Elev DF: 16.2'

Elev GL: 5231.10'

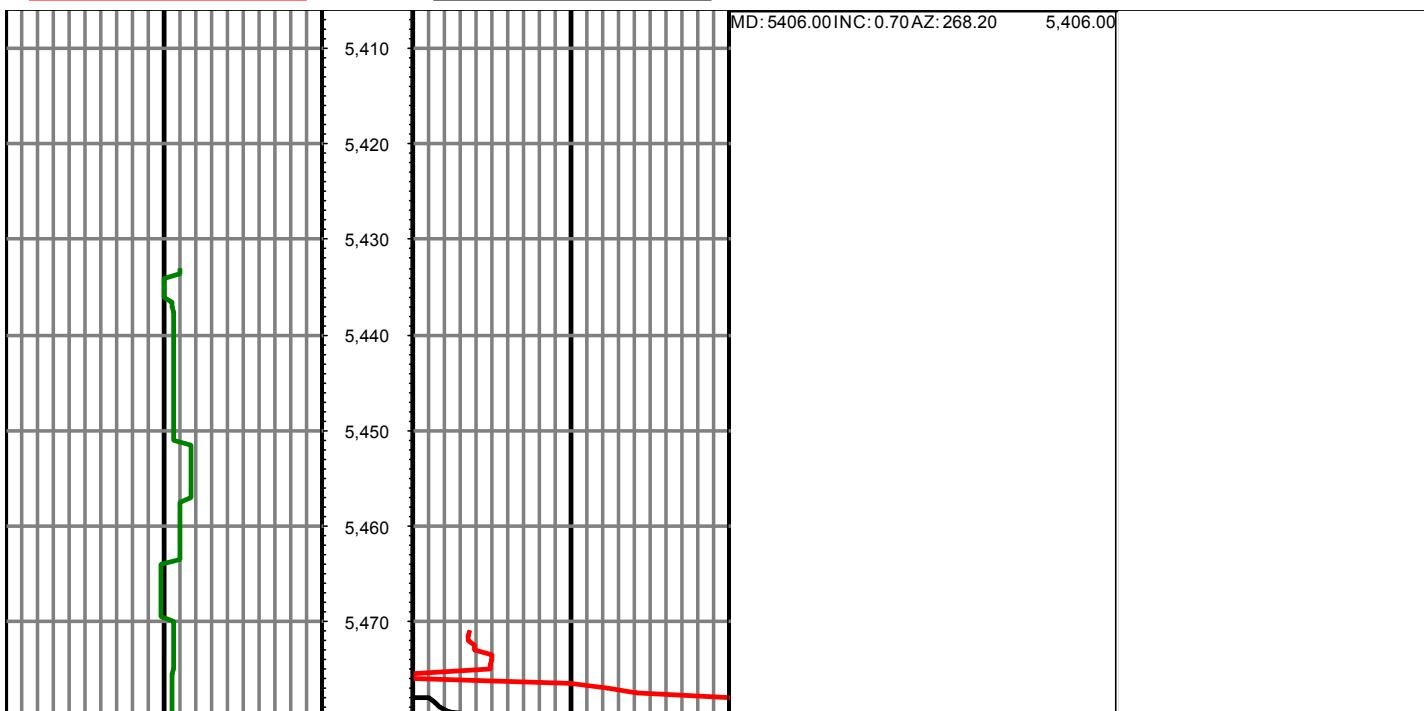
Operator 1: Andrew Thomson

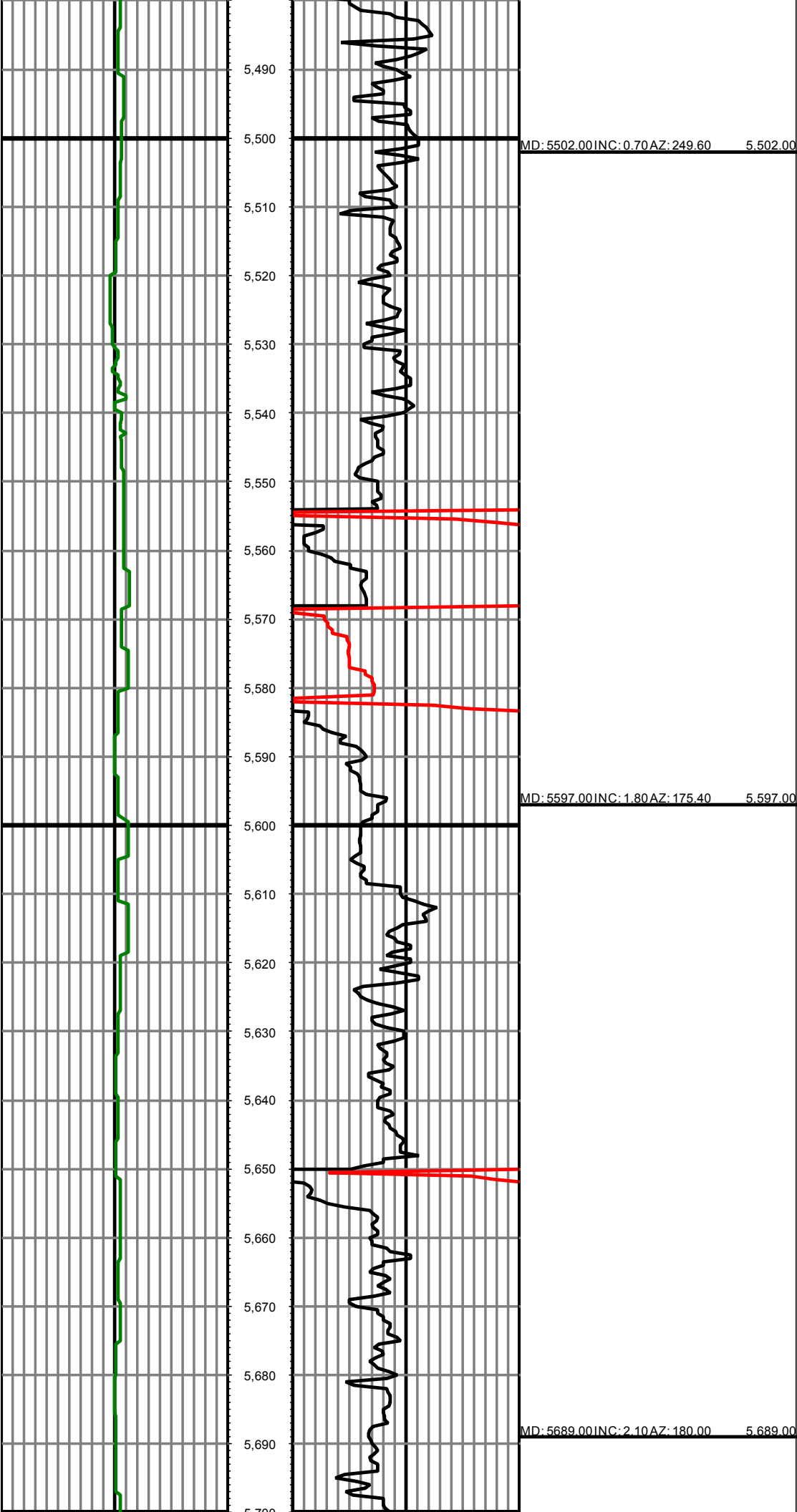
Operator 2: Neil LaRubbio

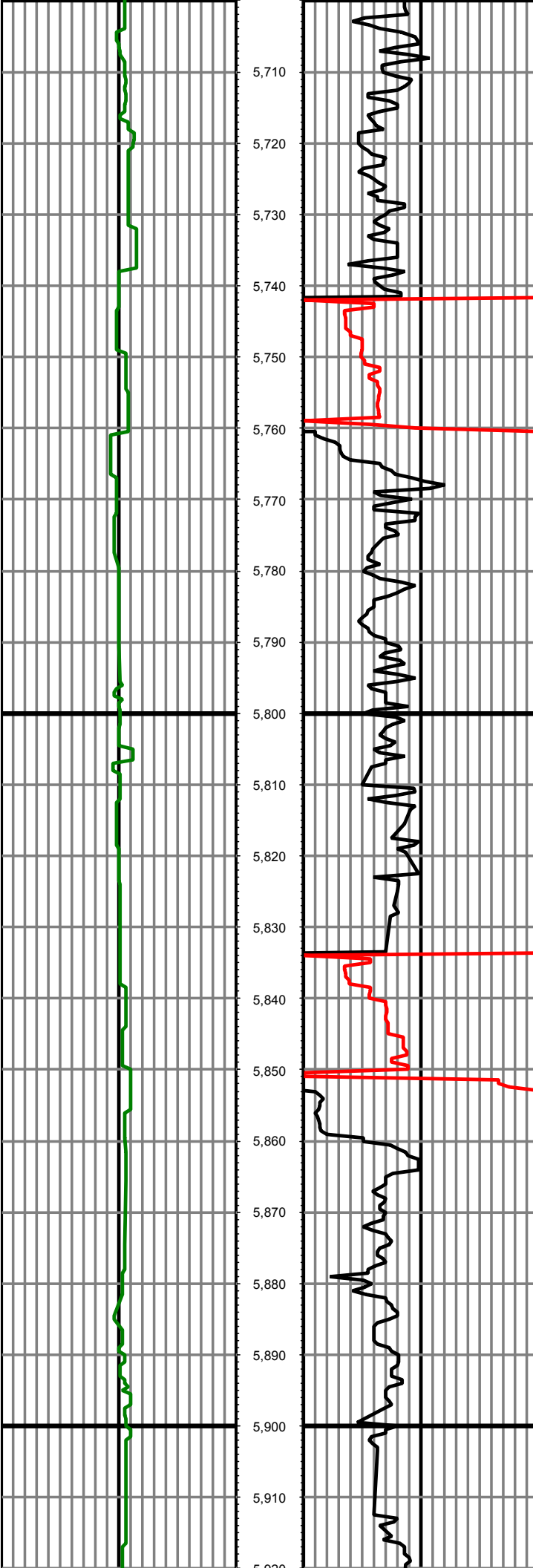
Tool Run Data	Run #1	Run #2	Run #3	Run #4	Run #5
Tool S/N	G1182				
Gamma Offset	38.00				
Resistivity Offset	0.00				
Start Depth	1320.00				
StartDate	2/18/2015				
StartTime	2:32 PM				
EndDepth	12667.00				
EndDate	2/25/2015				
EndTime	3:00 PM				
Hole Data			Casing Data		
Size	From	To	Size	From	To
7 7/8	1320.00	12667.00	7	1320.00	12667.00

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) 150.00 MD 0.00 ROP(FT/HR) 250.00 Surveys (MD/INC/AZ)
150.00 2 300.00 FT 250.00 2 500.00





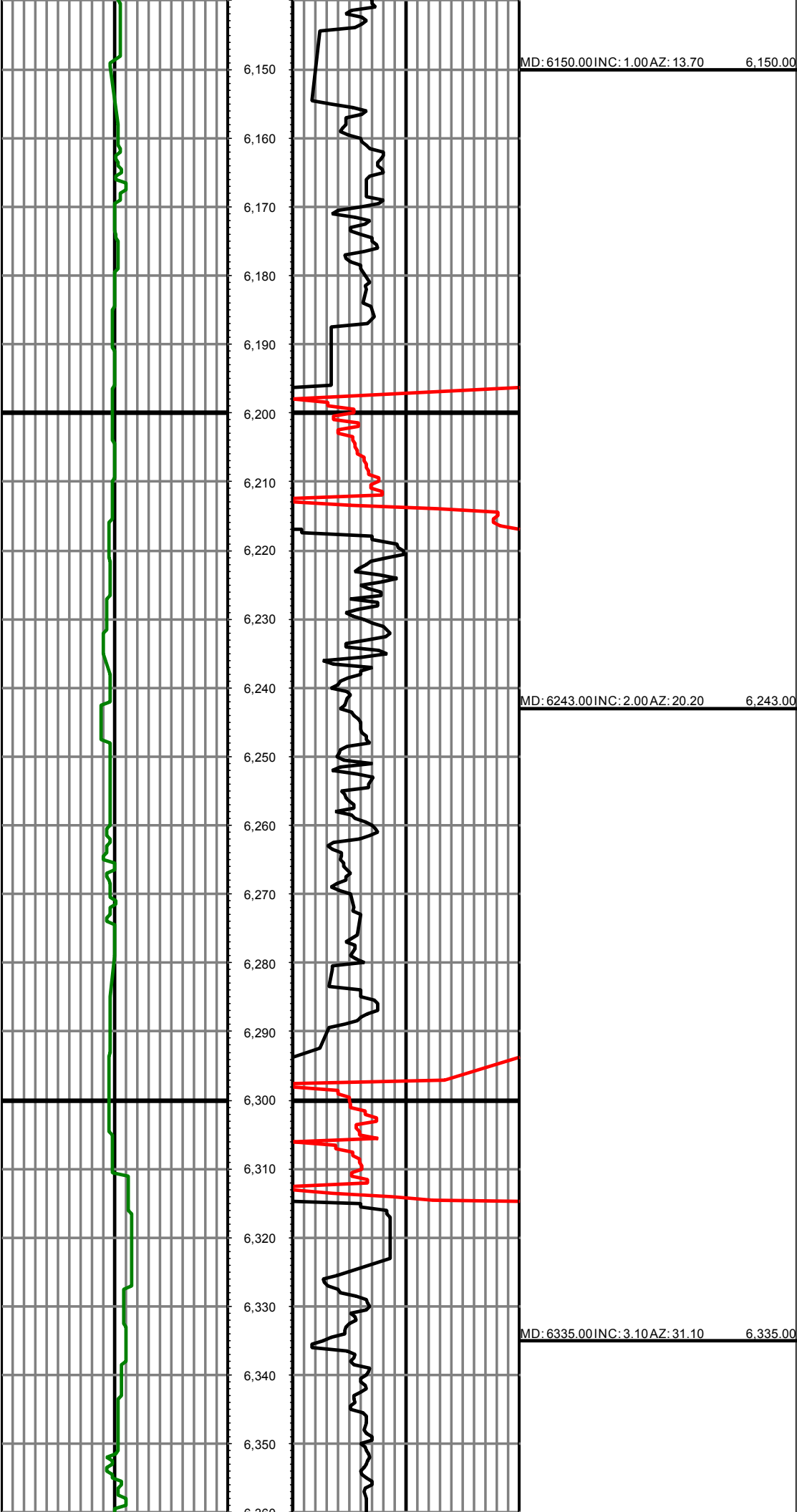


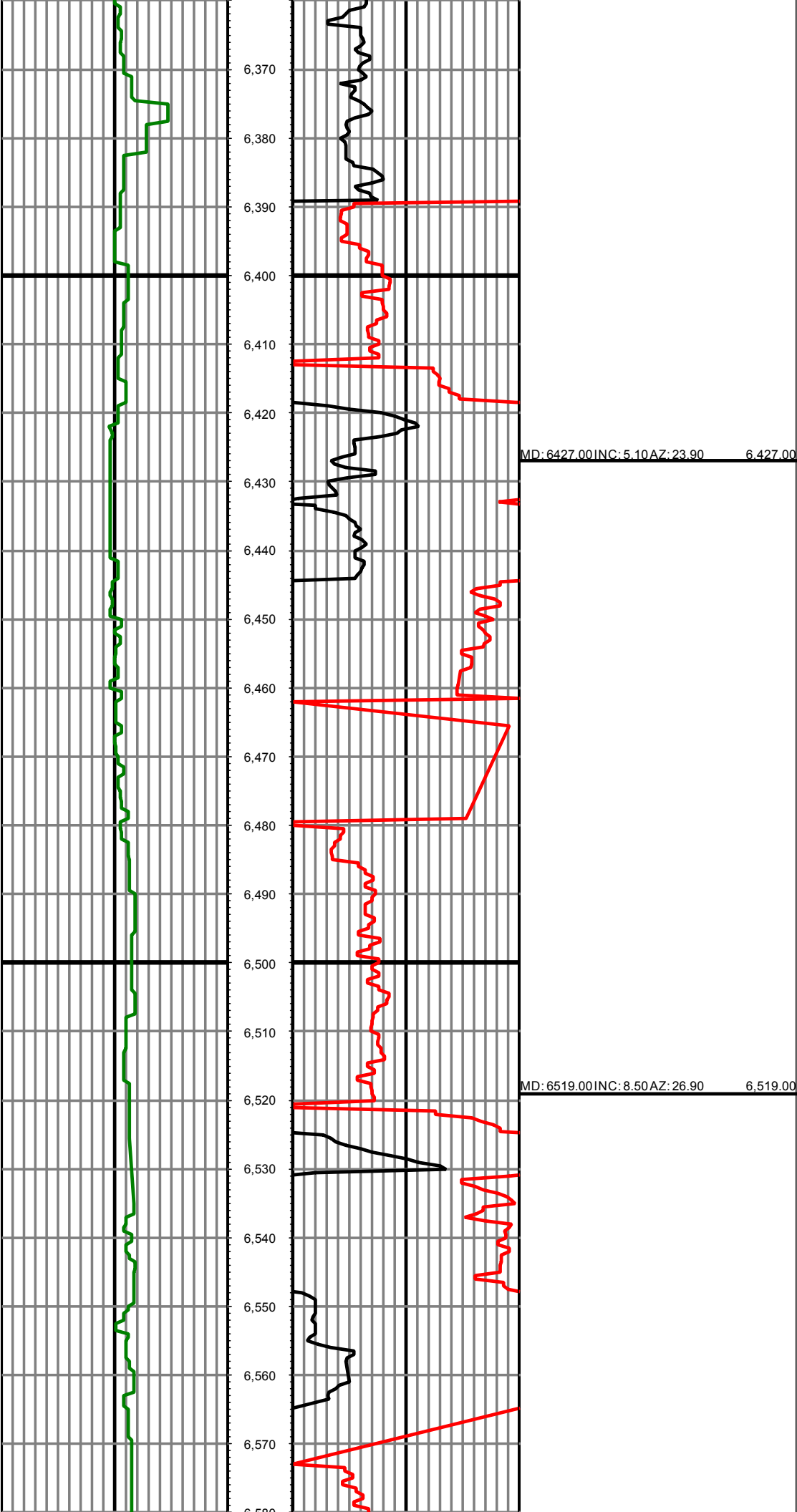
MD: 5781.00 INC: 1.40 AZ: 116.90 5,781.00

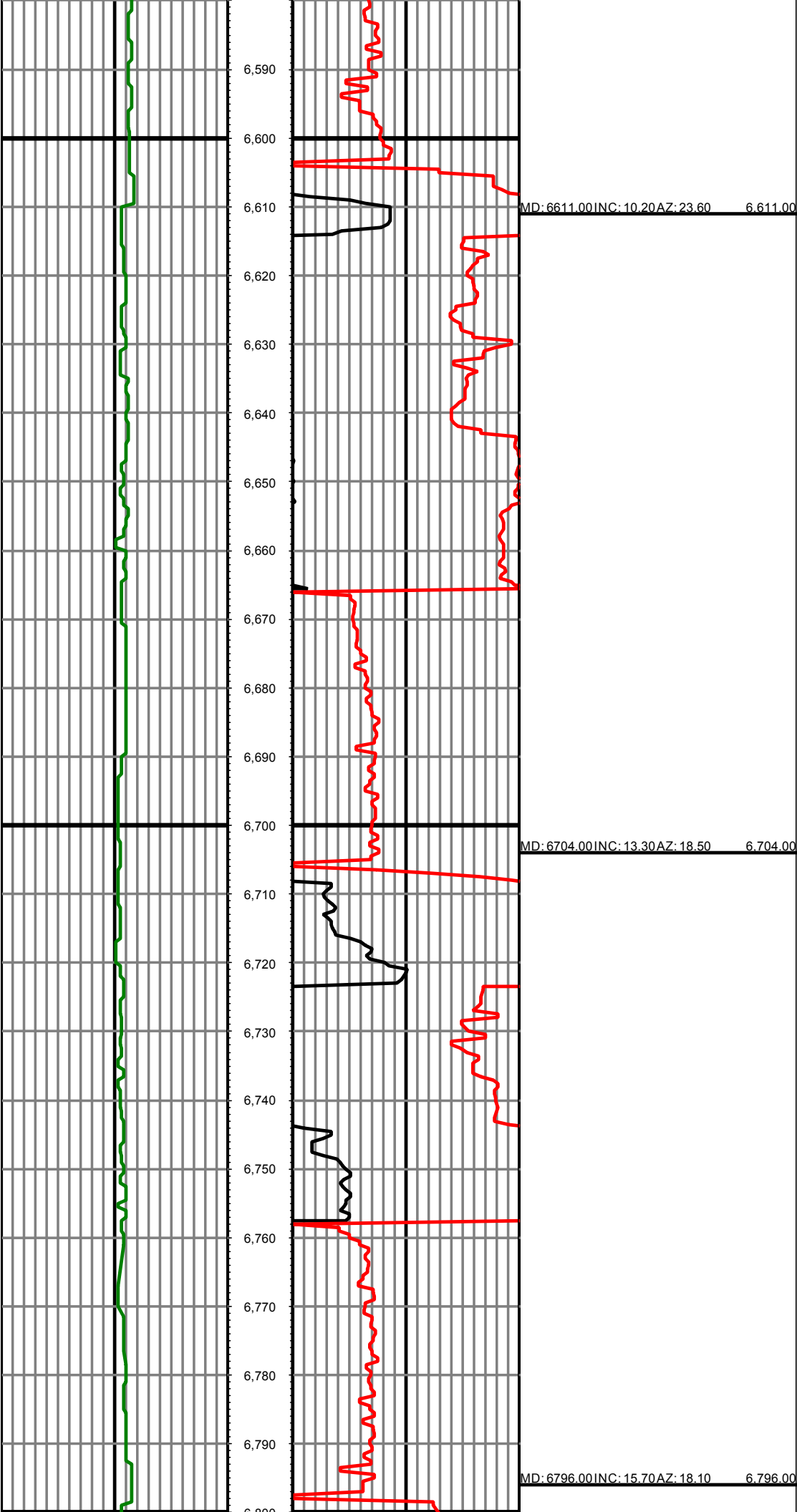
MD: 5874.00 INC: 1.90 AZ: 51.70 5,874.00

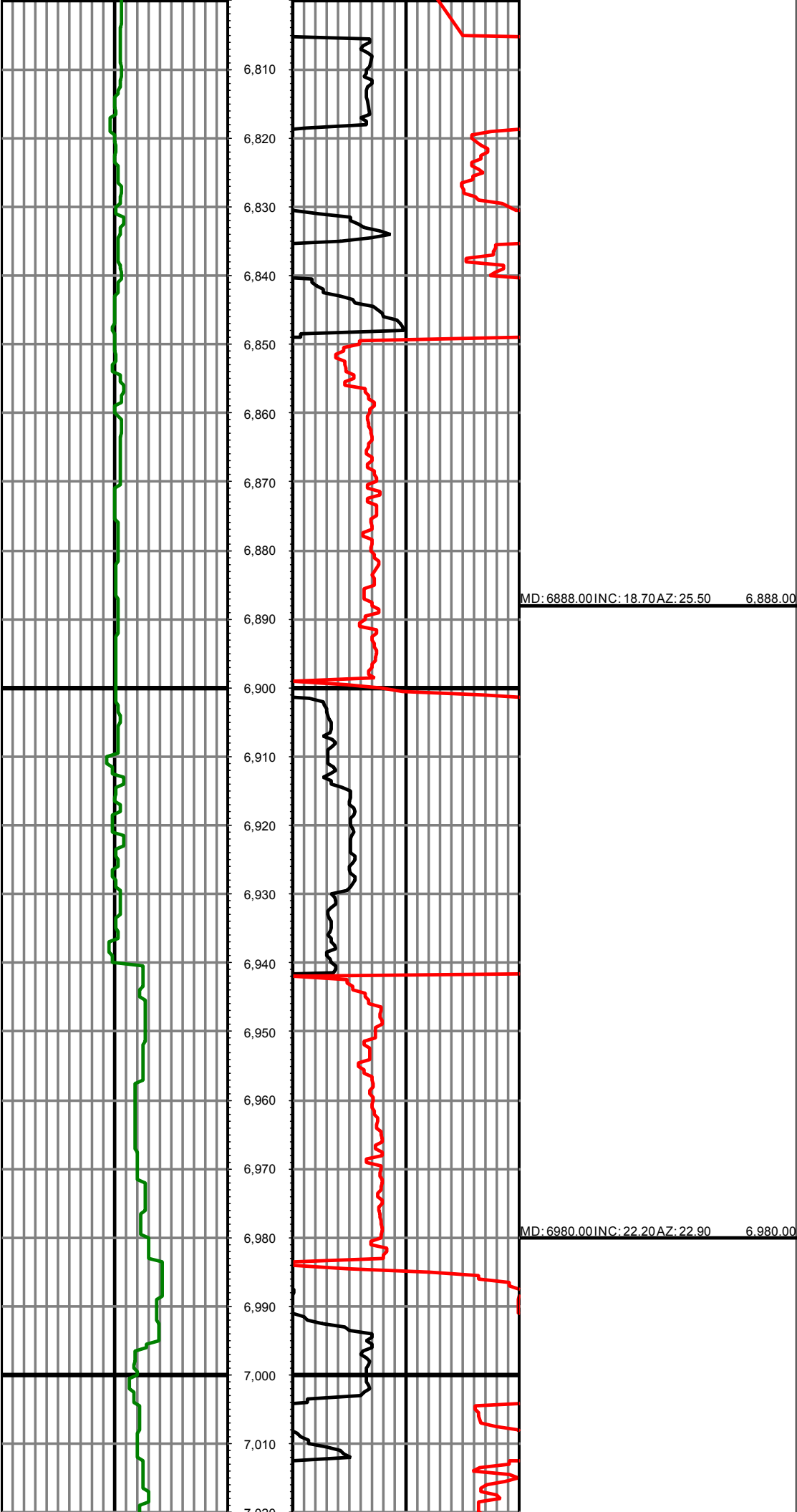
MD: 5966.00 INC: 2.60 AZ: 23.00 5.966.00

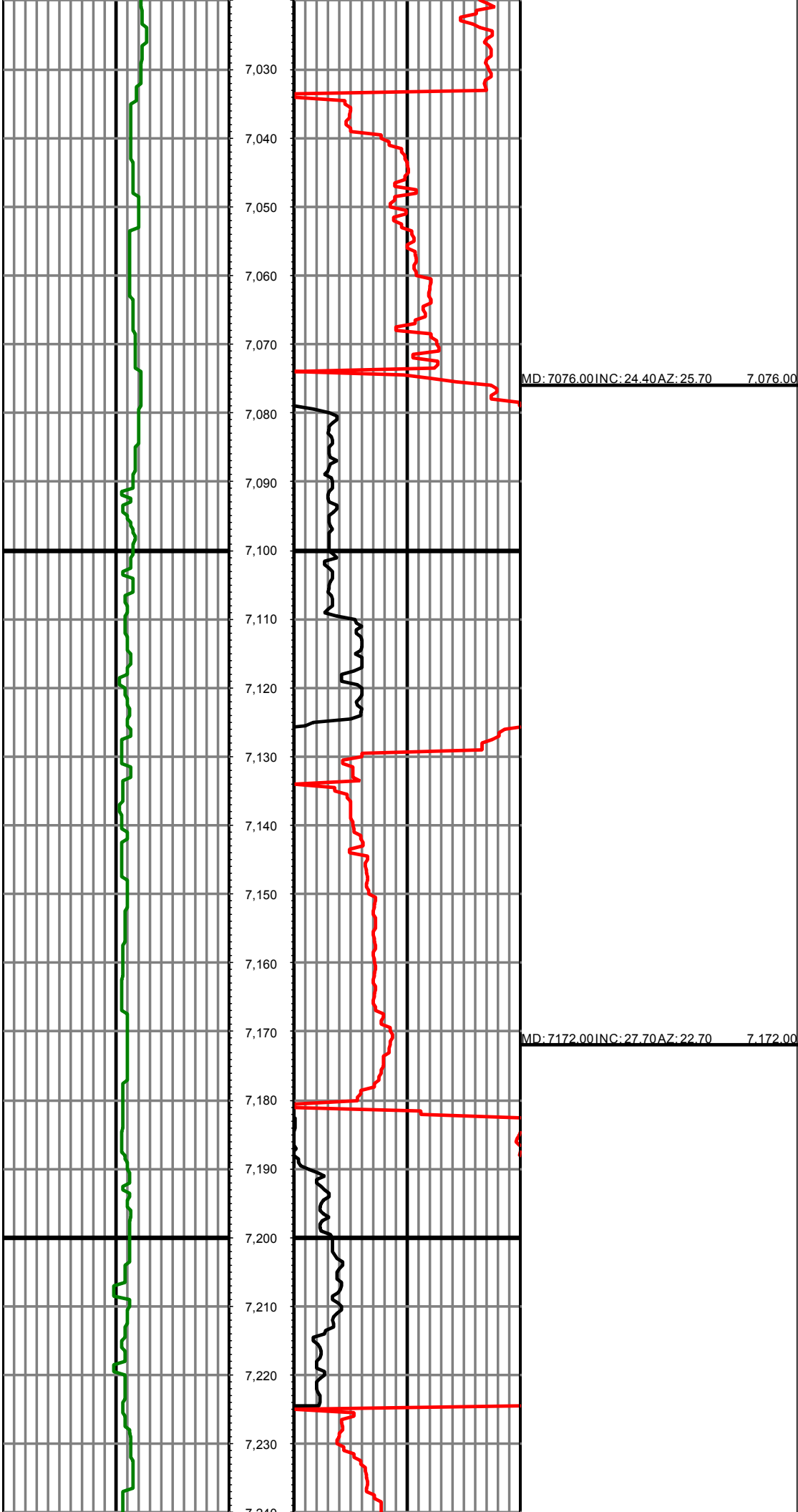
MD: 6058.00 INC: 1.90 AZ: 16.00 6.058.00

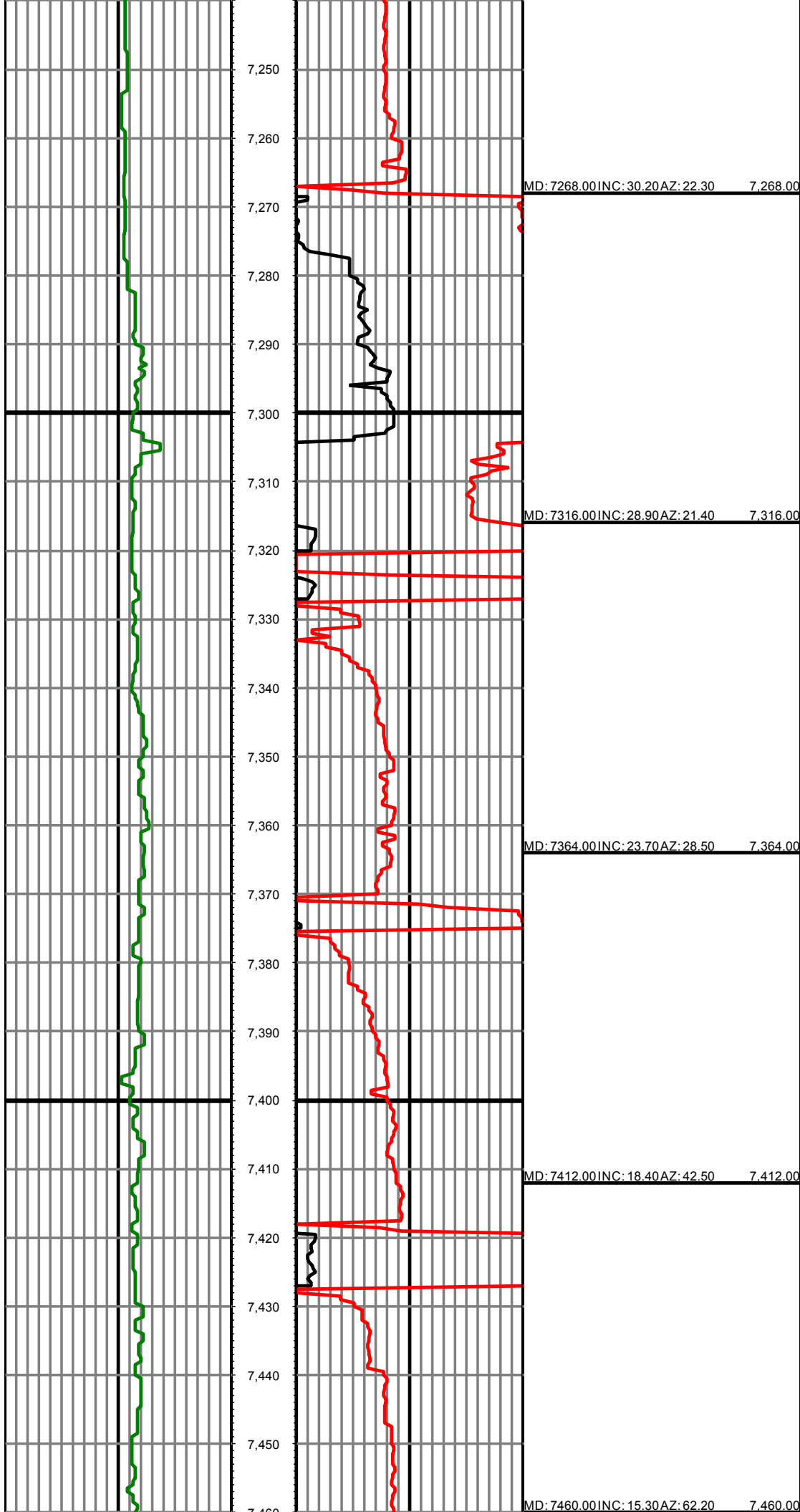












MD: 7460.00 INC: 15.30 AZ: 62.20 7,460.00

7,470

7,480

7,490

7,500

MD: 7508.00 INC: 13.90 AZ: 80.90 7,508.00

7,510

7,520

7,530

7,540

7,550

MD: 7556.00 INC: 13.90 AZ: 102.10 7,556.00

7,560

7,570

7,580

7,590

7,600

MD: 7604.00 INC: 14.60 AZ: 123.40 7,604.00

7,610

7,620

7,630

7,640

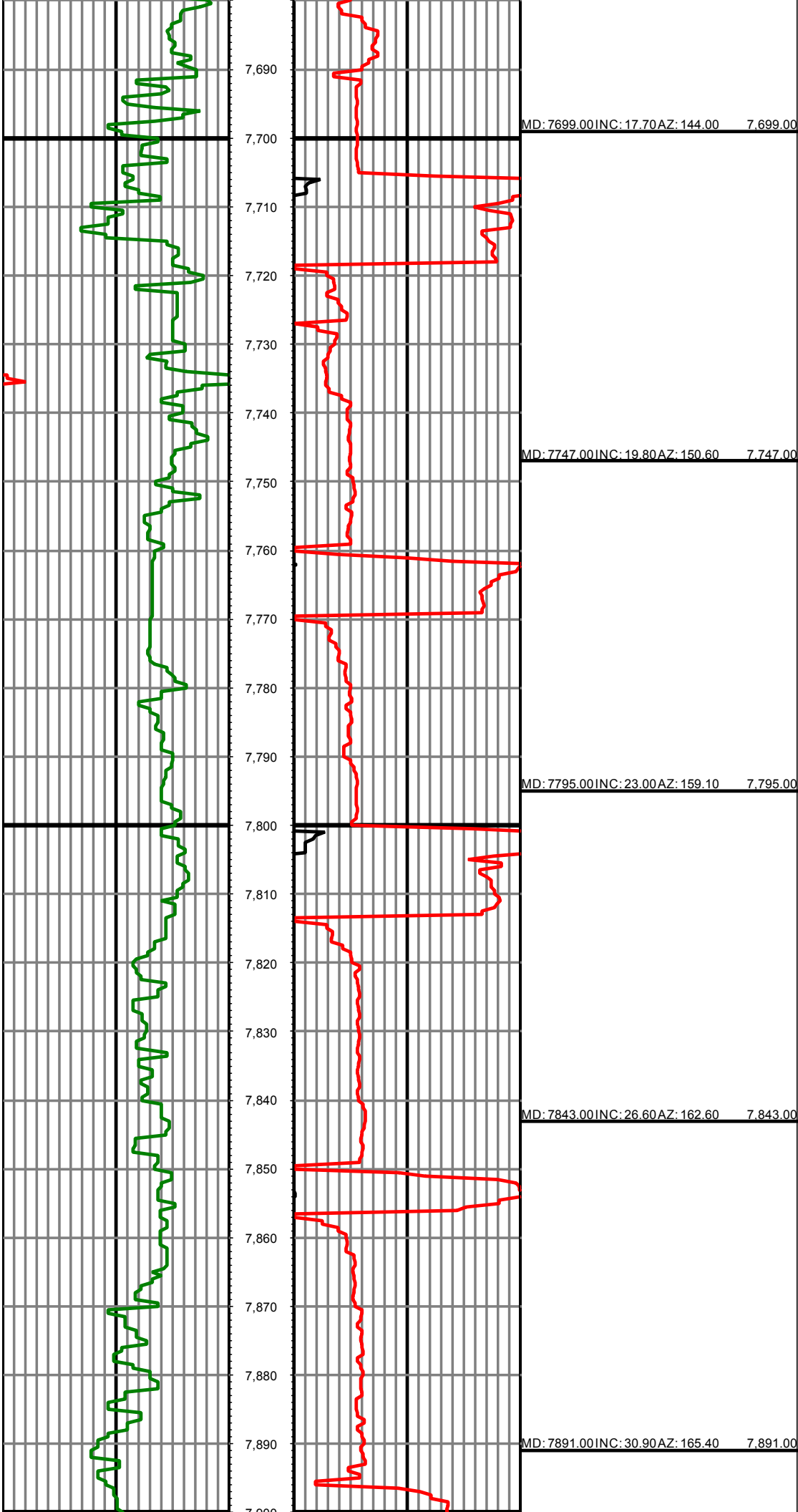
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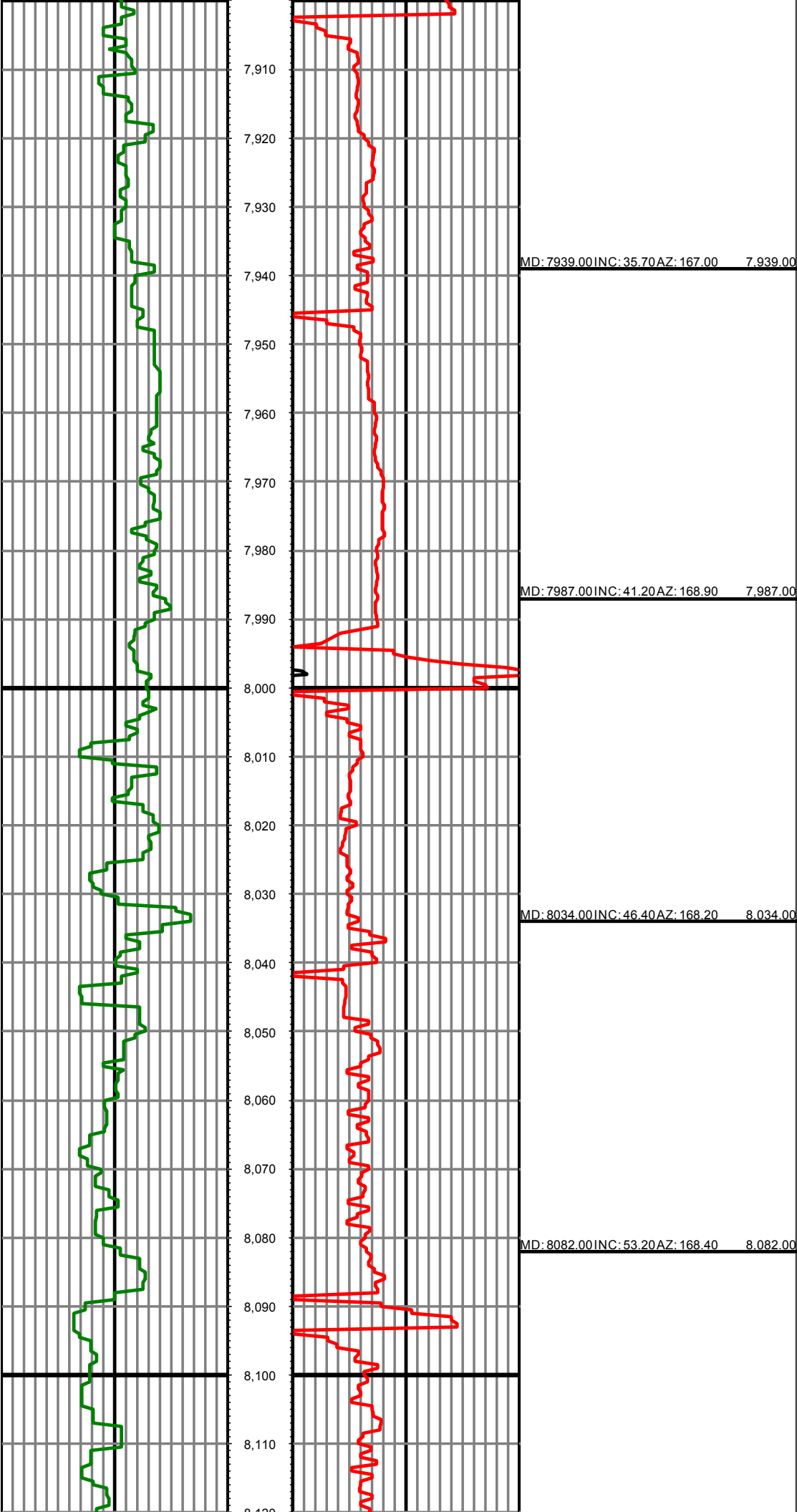
MD: 7651.00 INC: 15.70 AZ: 137.30 7,651.00

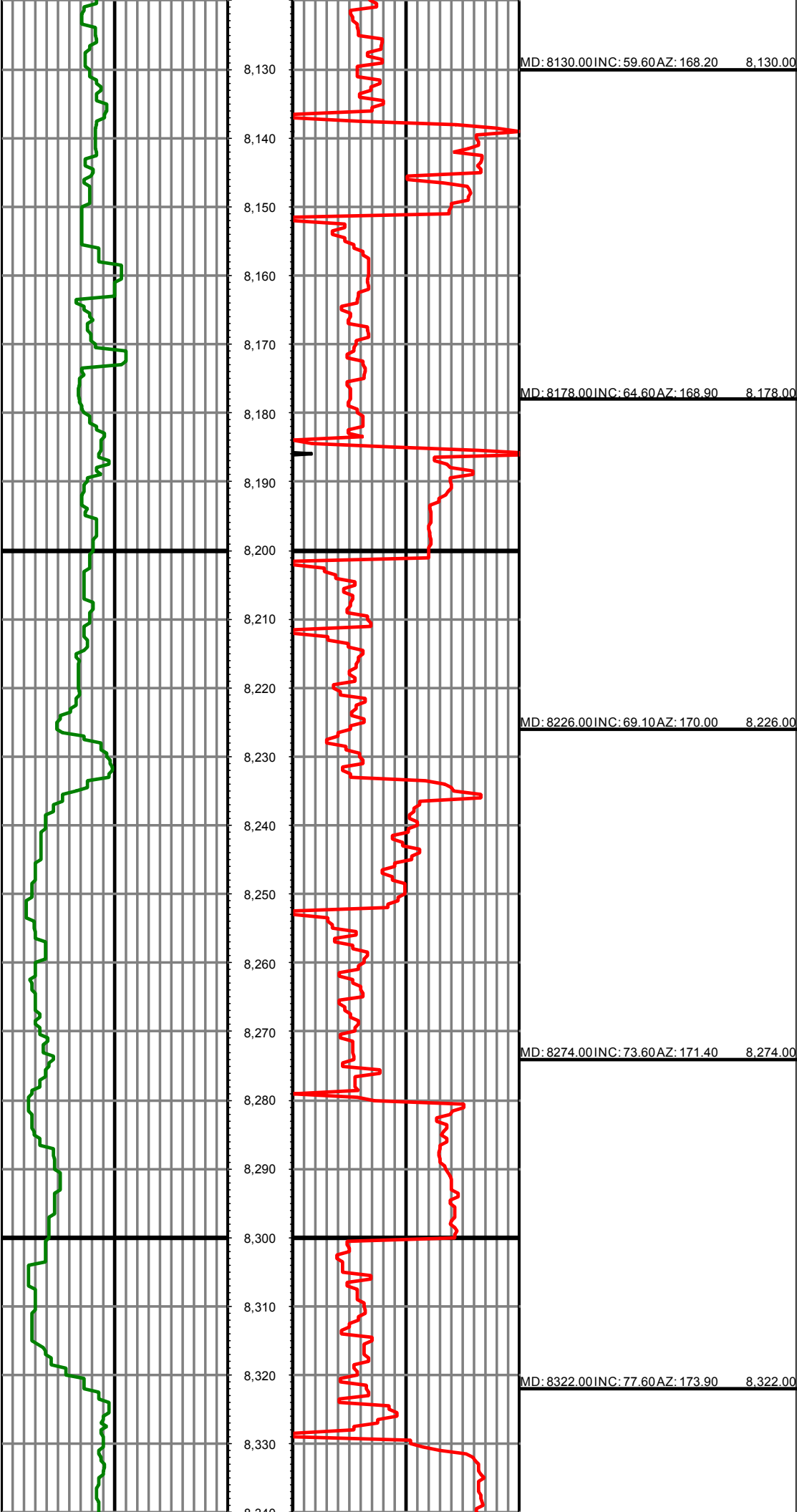
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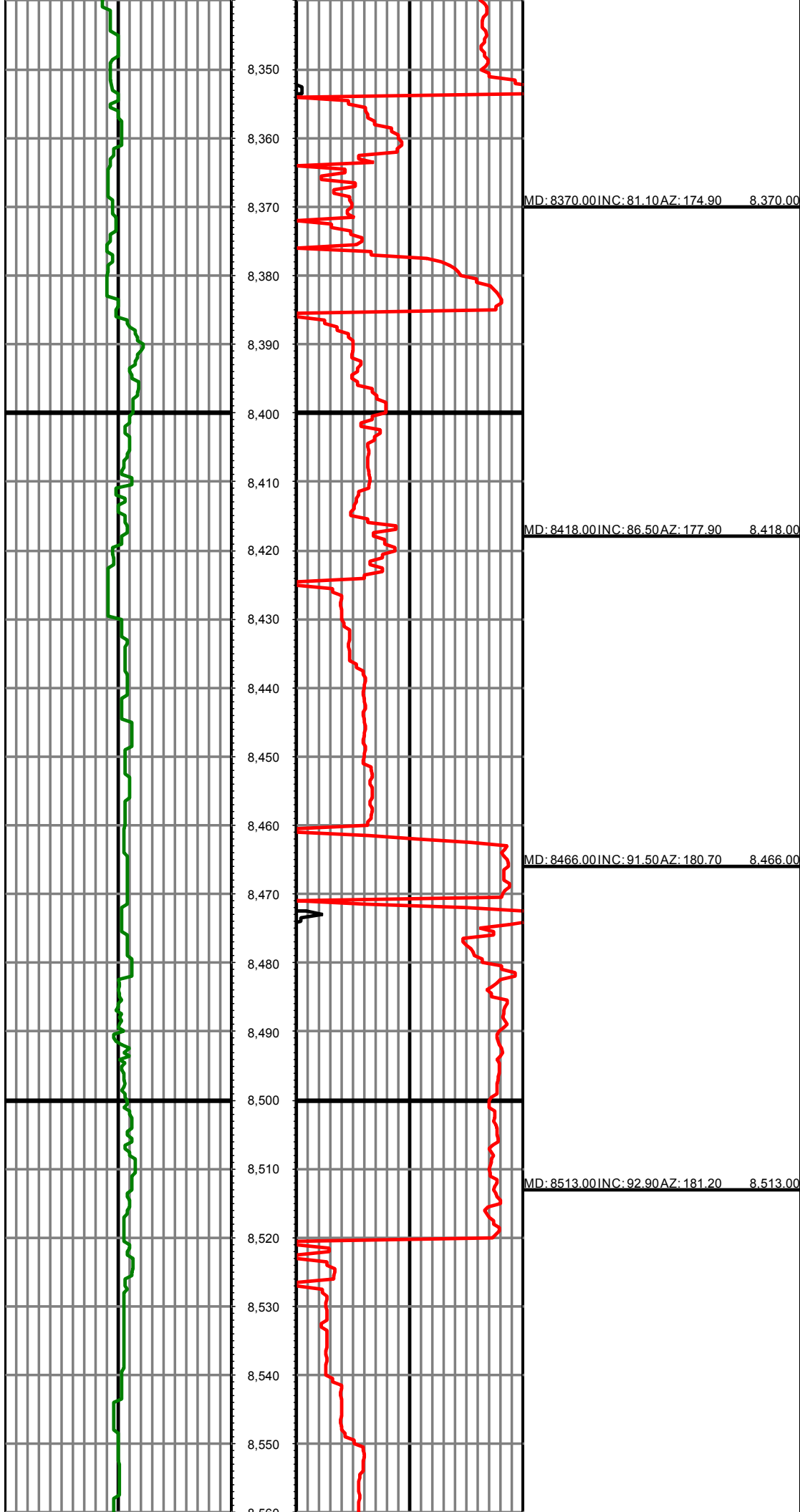
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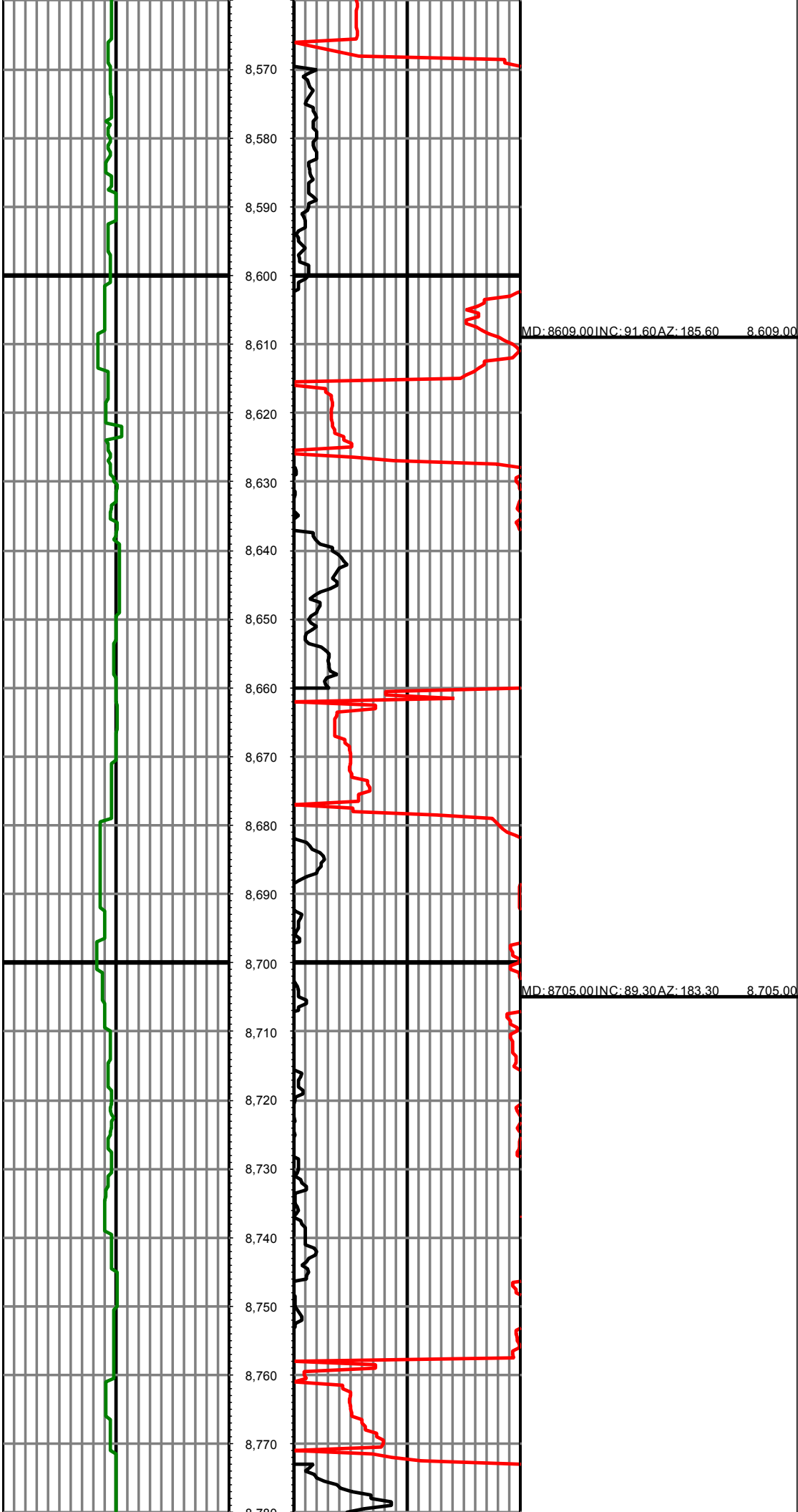
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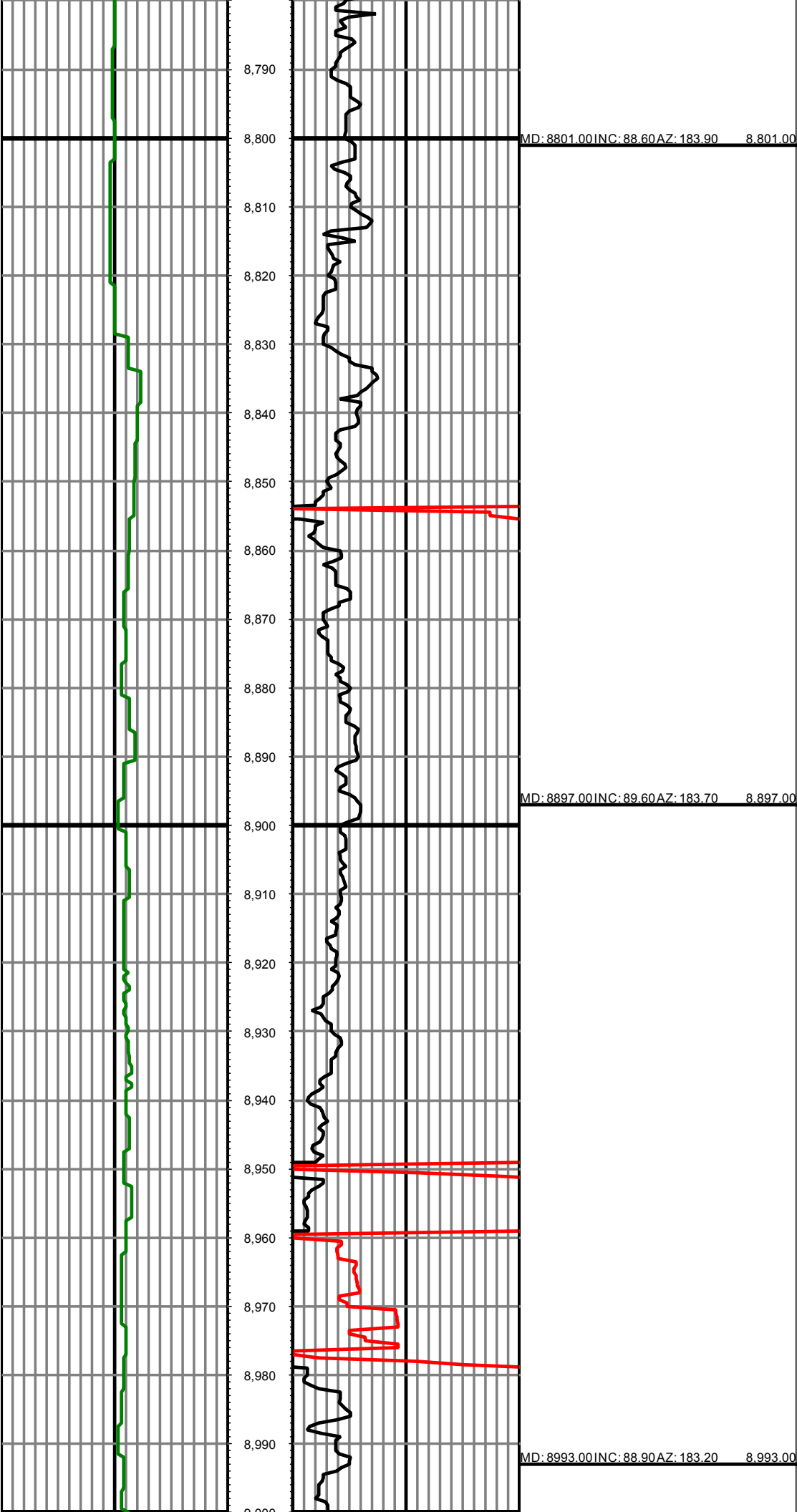


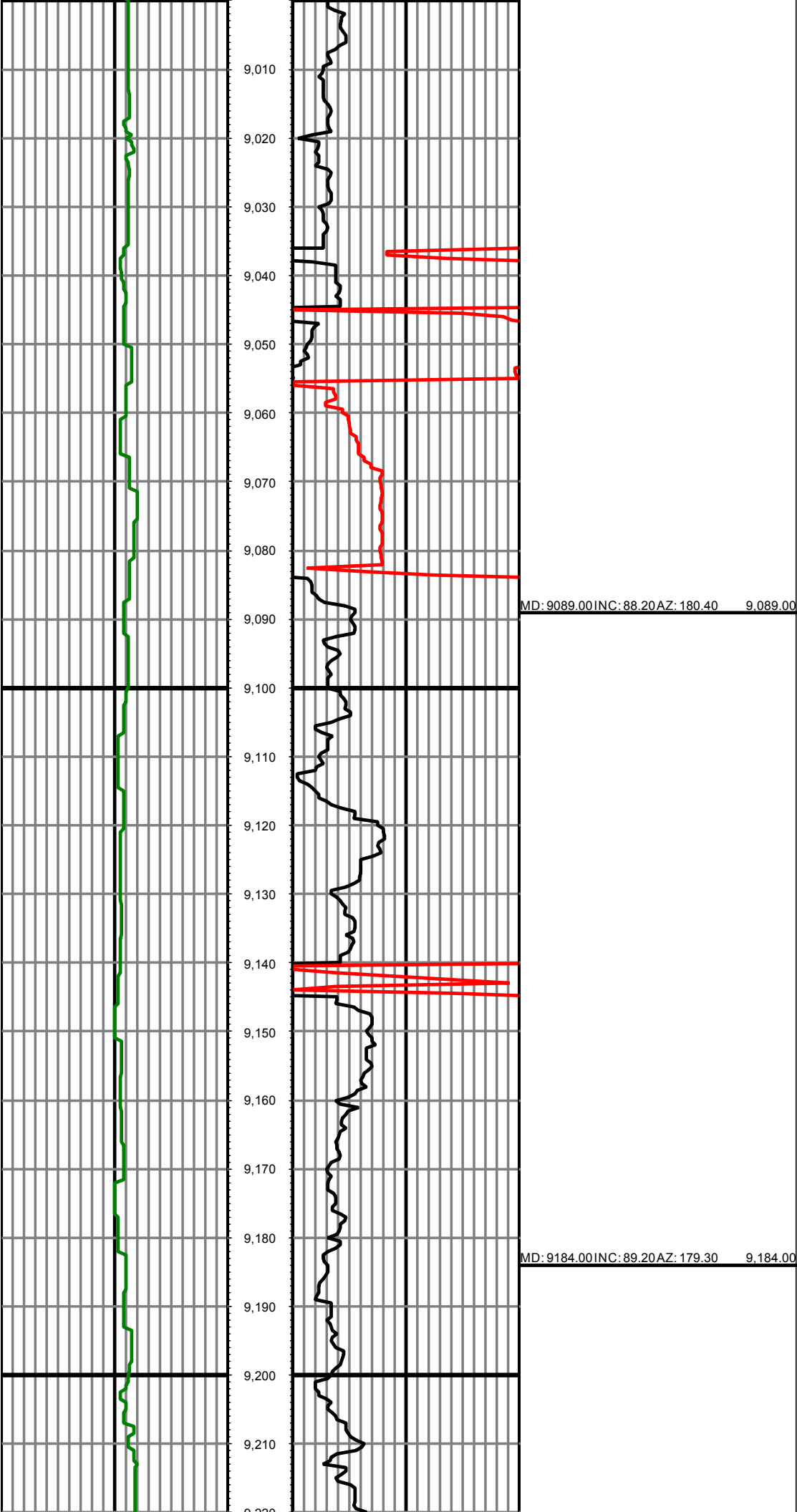


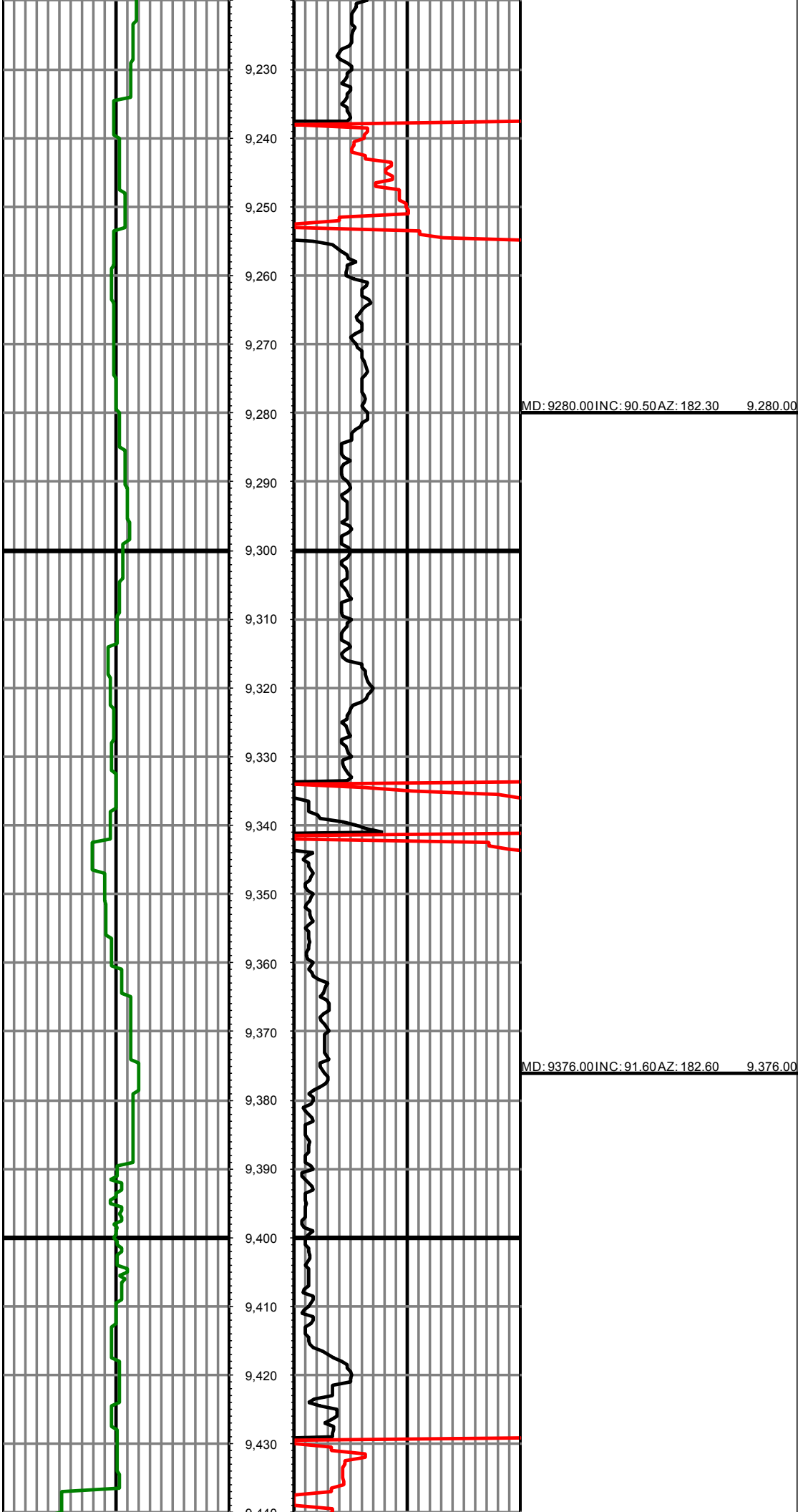


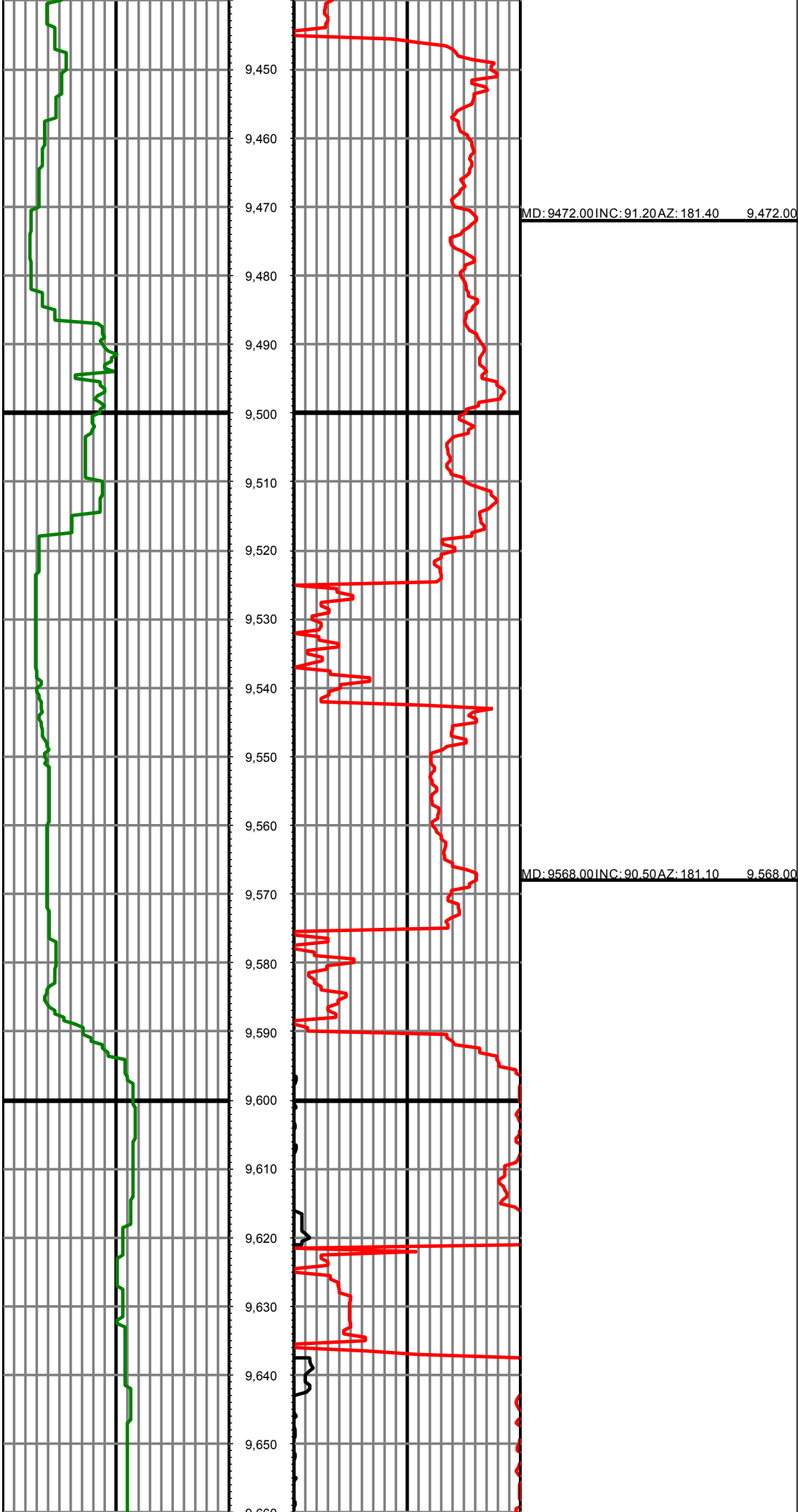












MD: 9664.00 INC: 88.50 AZ: 180.90 9,664.00

9,670

9,680

9,690

9,700

9,710

9,720

9,730

9,740

9,750

9,760

9,770

9,780

9,790

9,800

9,810

9,820

9,830

9,840

9,850

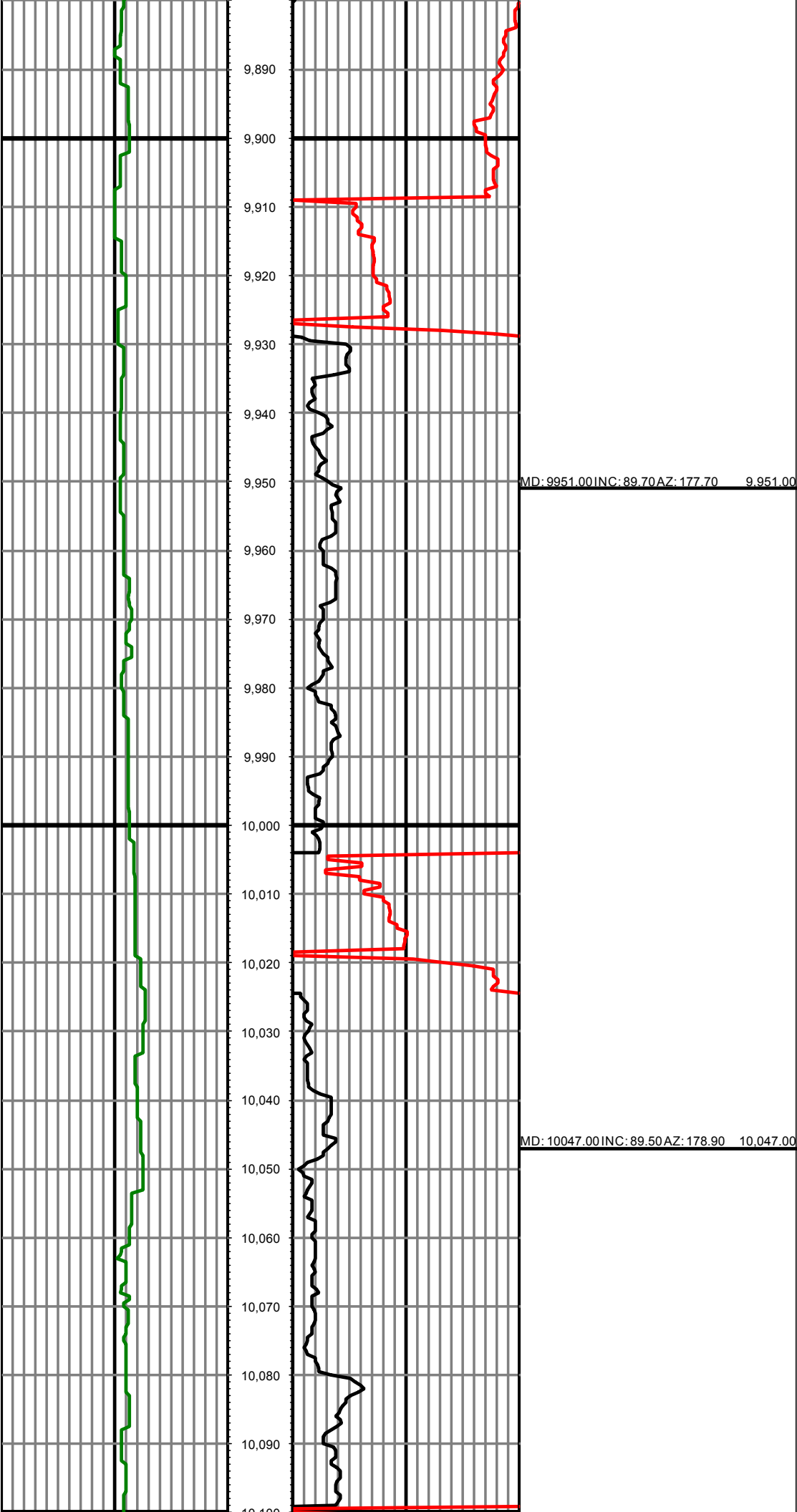
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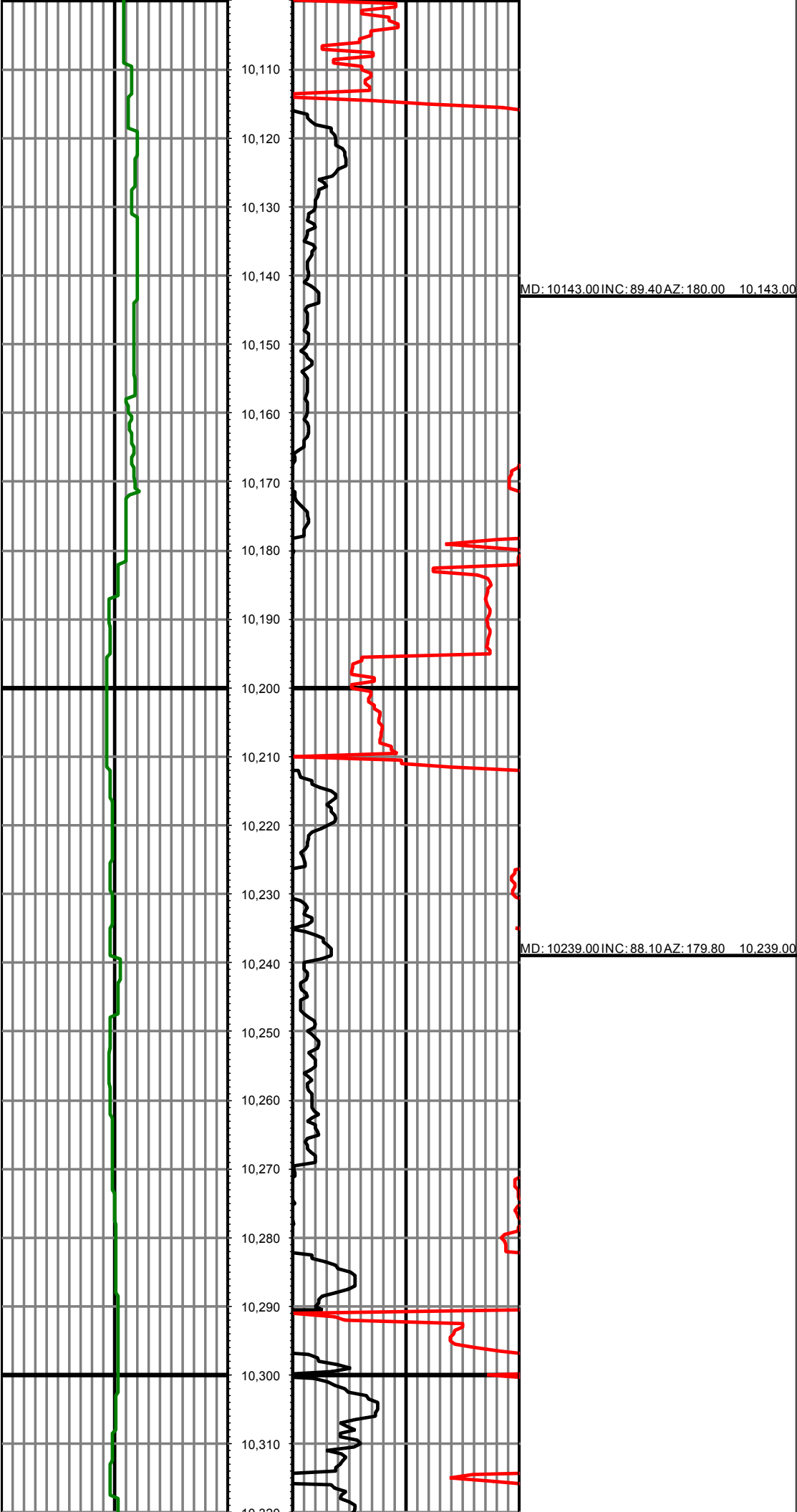
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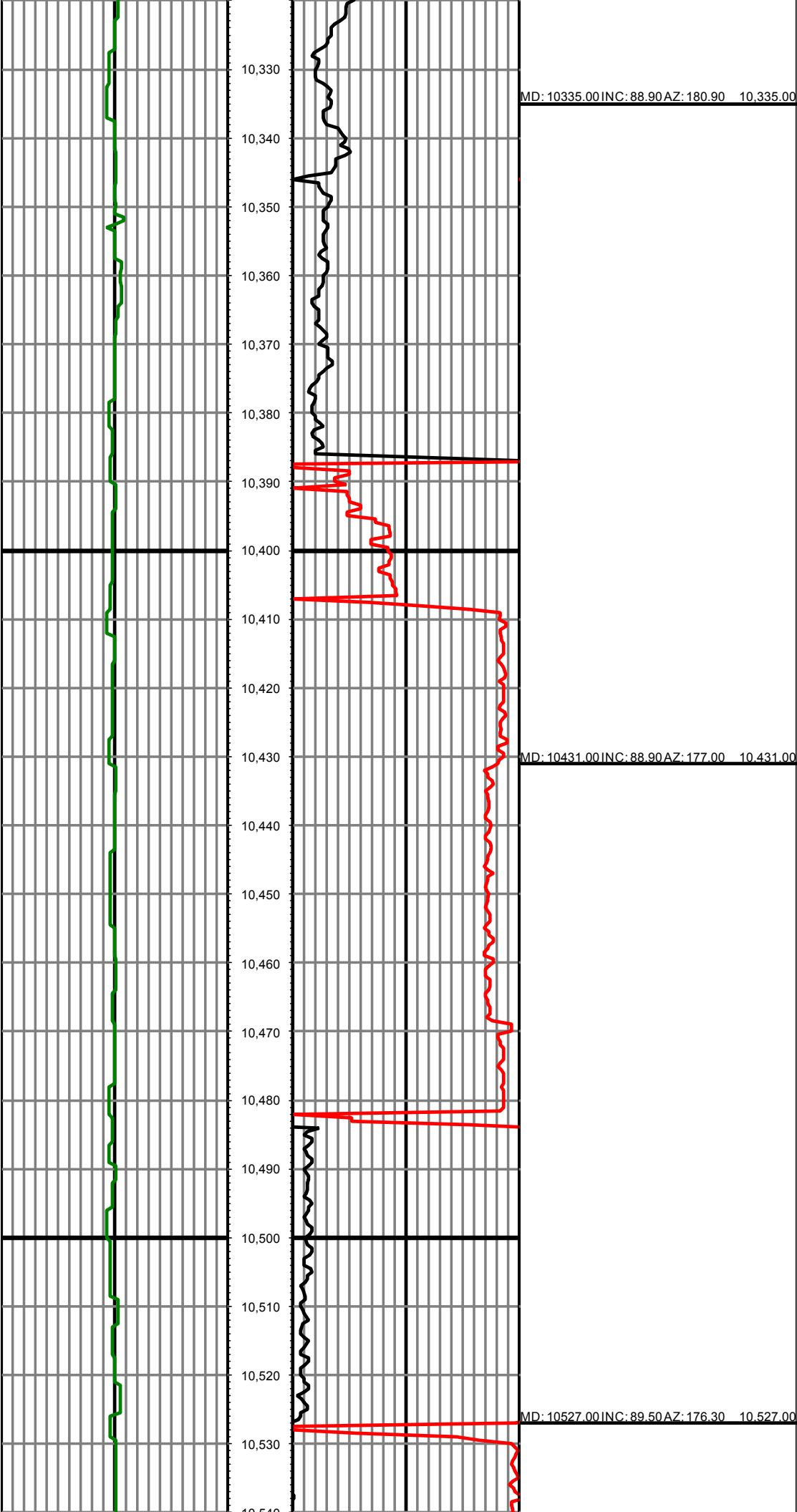
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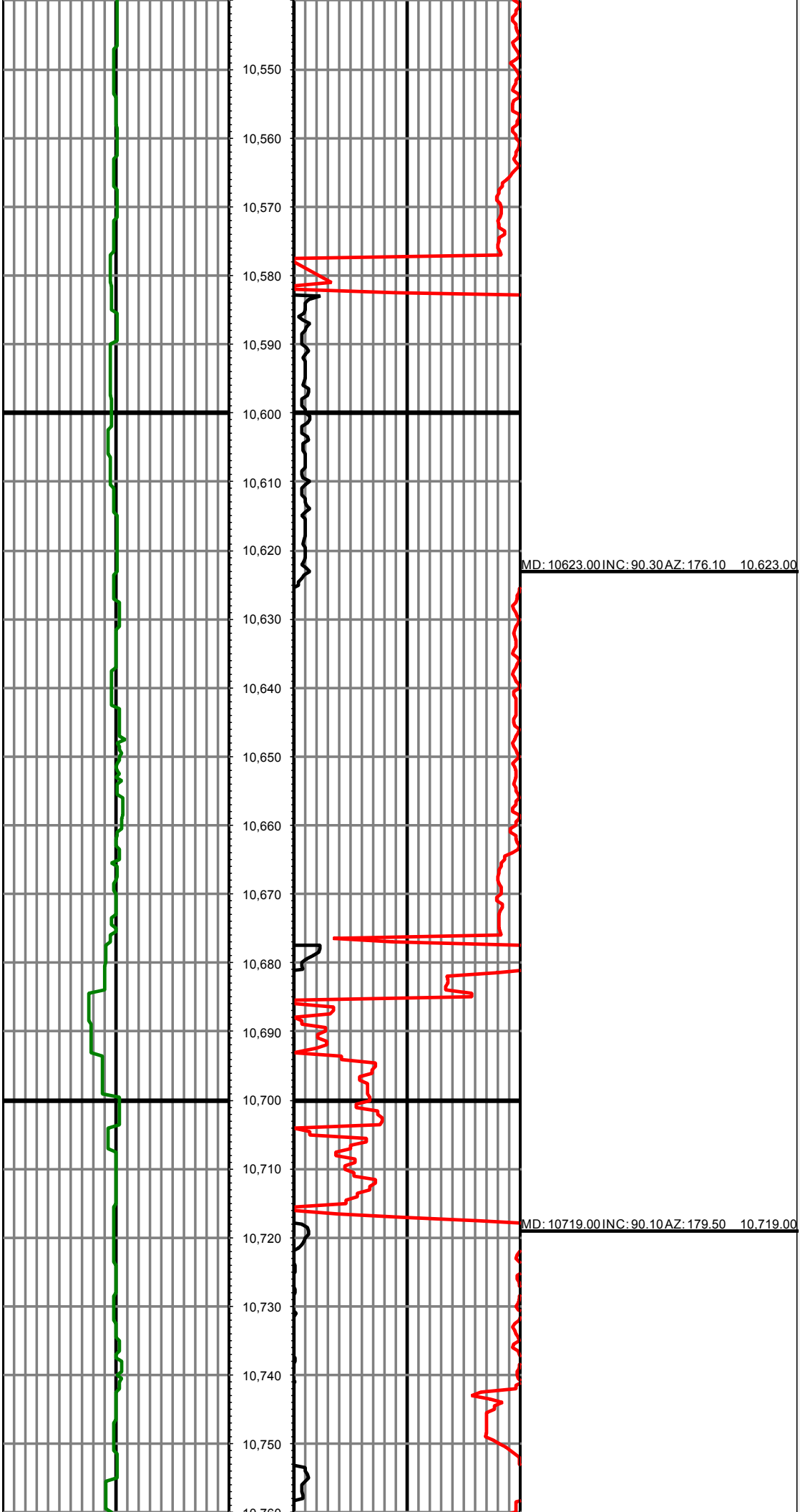
MD: 9760.00 INC: 89.50 AZ: 182.10 9,760.00

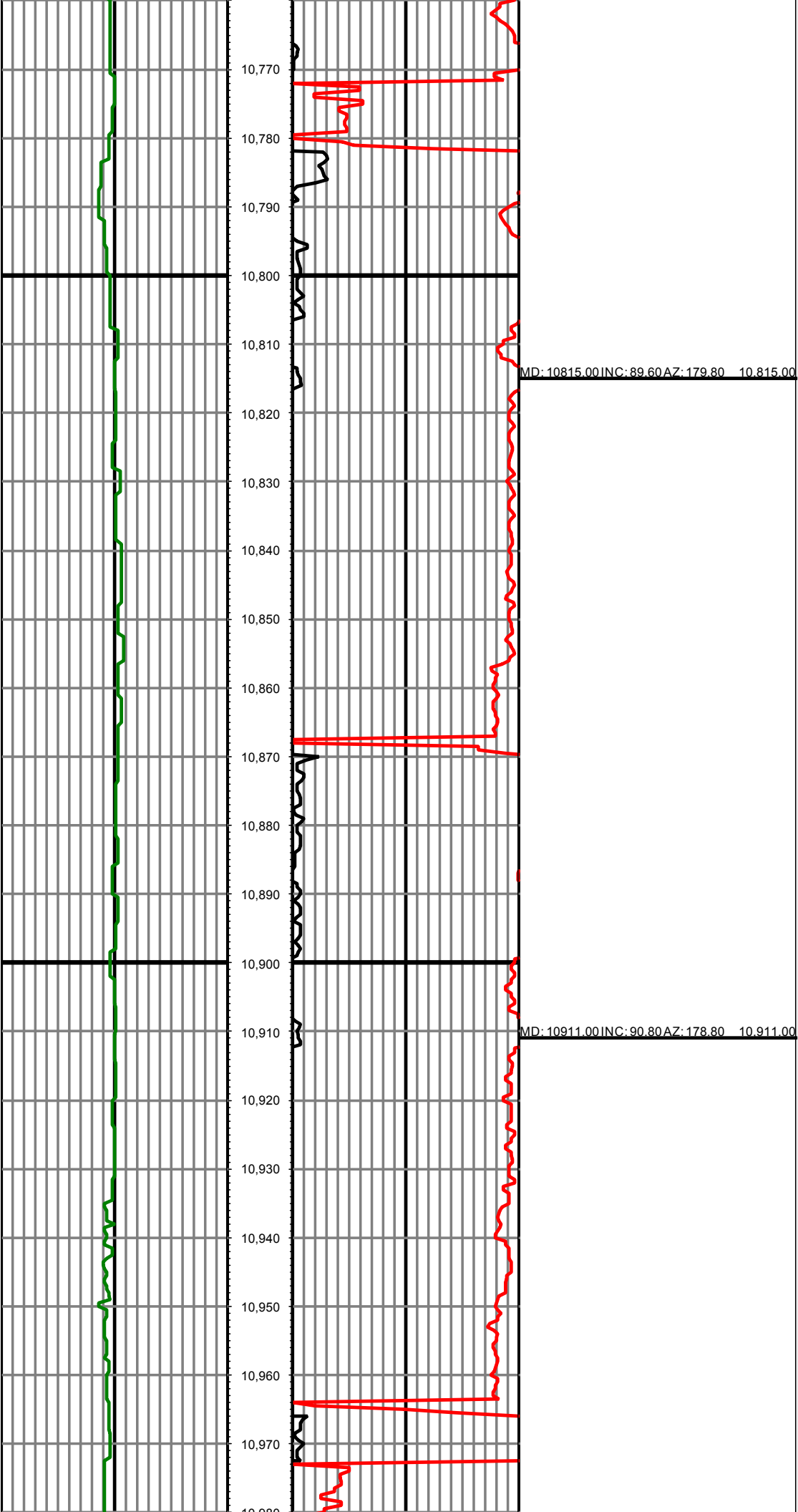
MD: 9856.00 INC: 89.60 AZ: 181.60 9,856.00

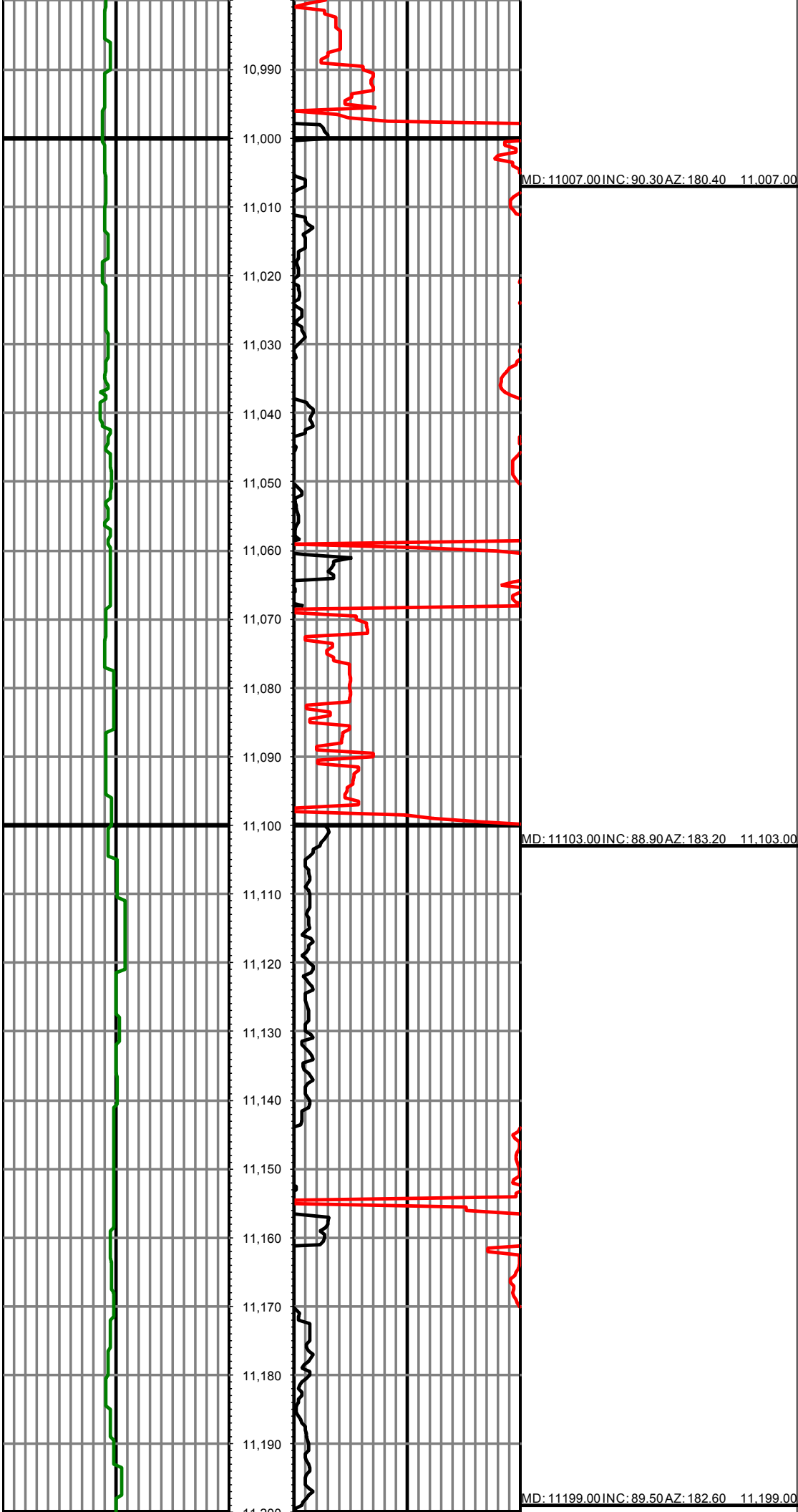








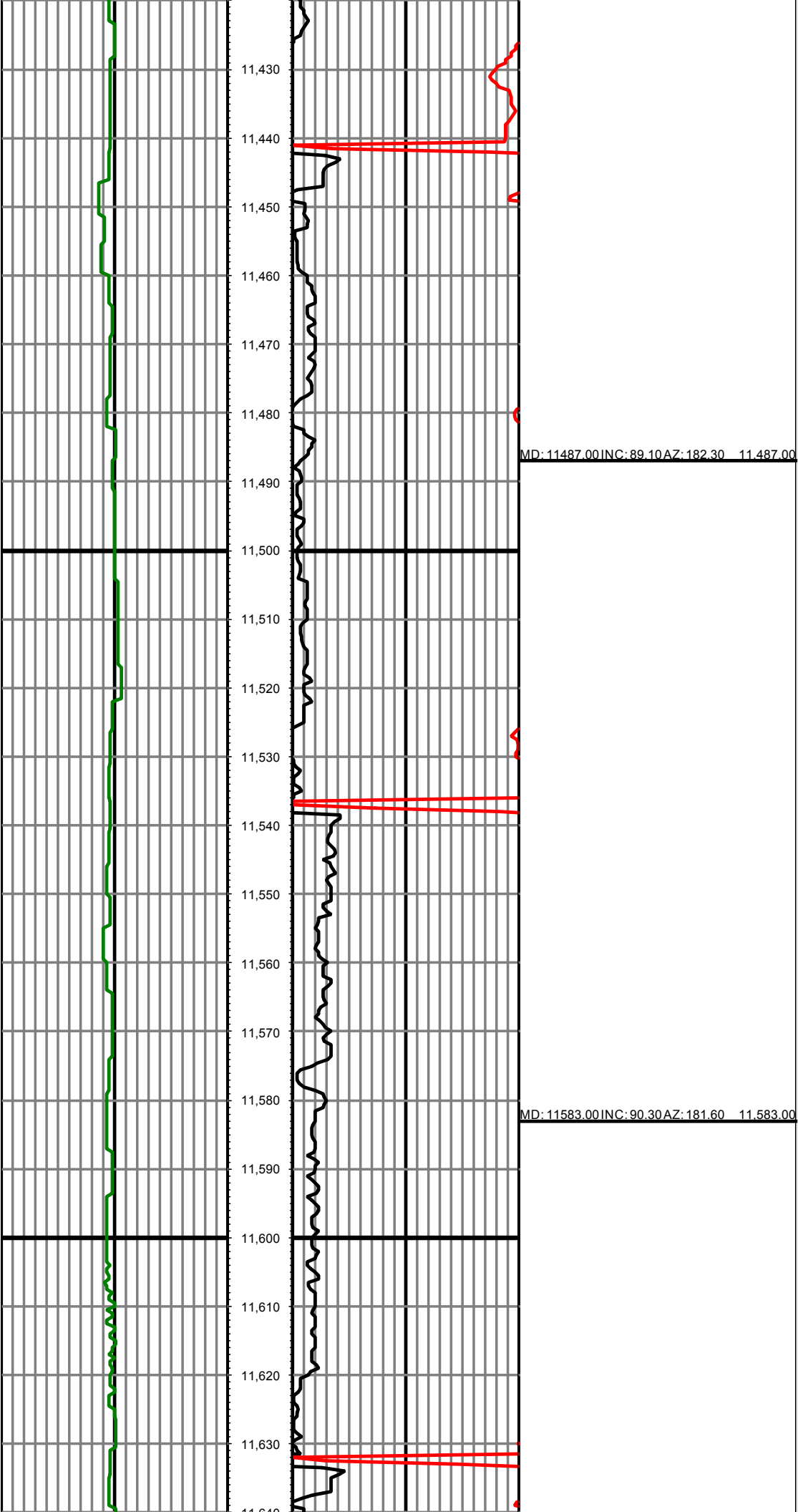


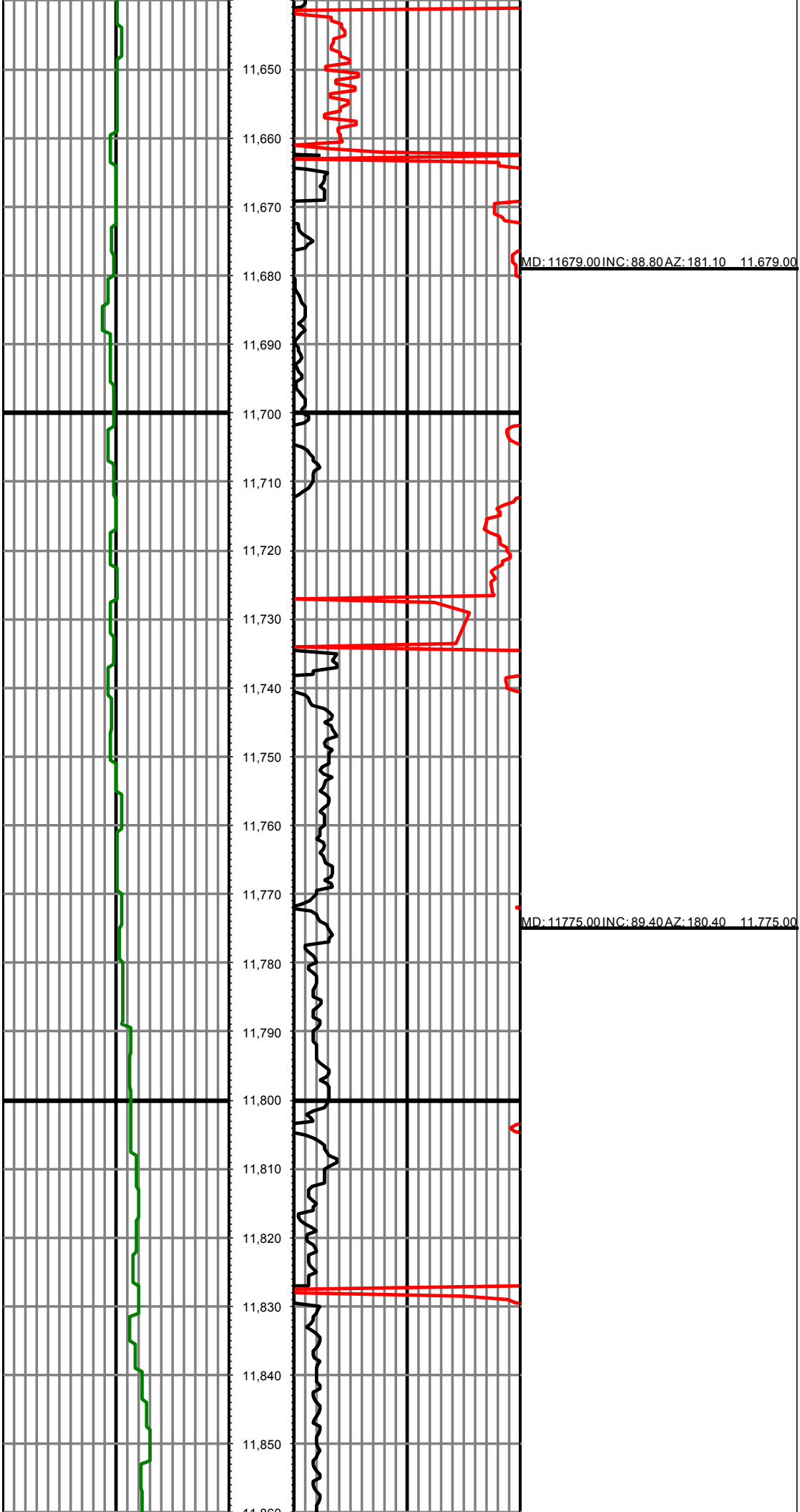


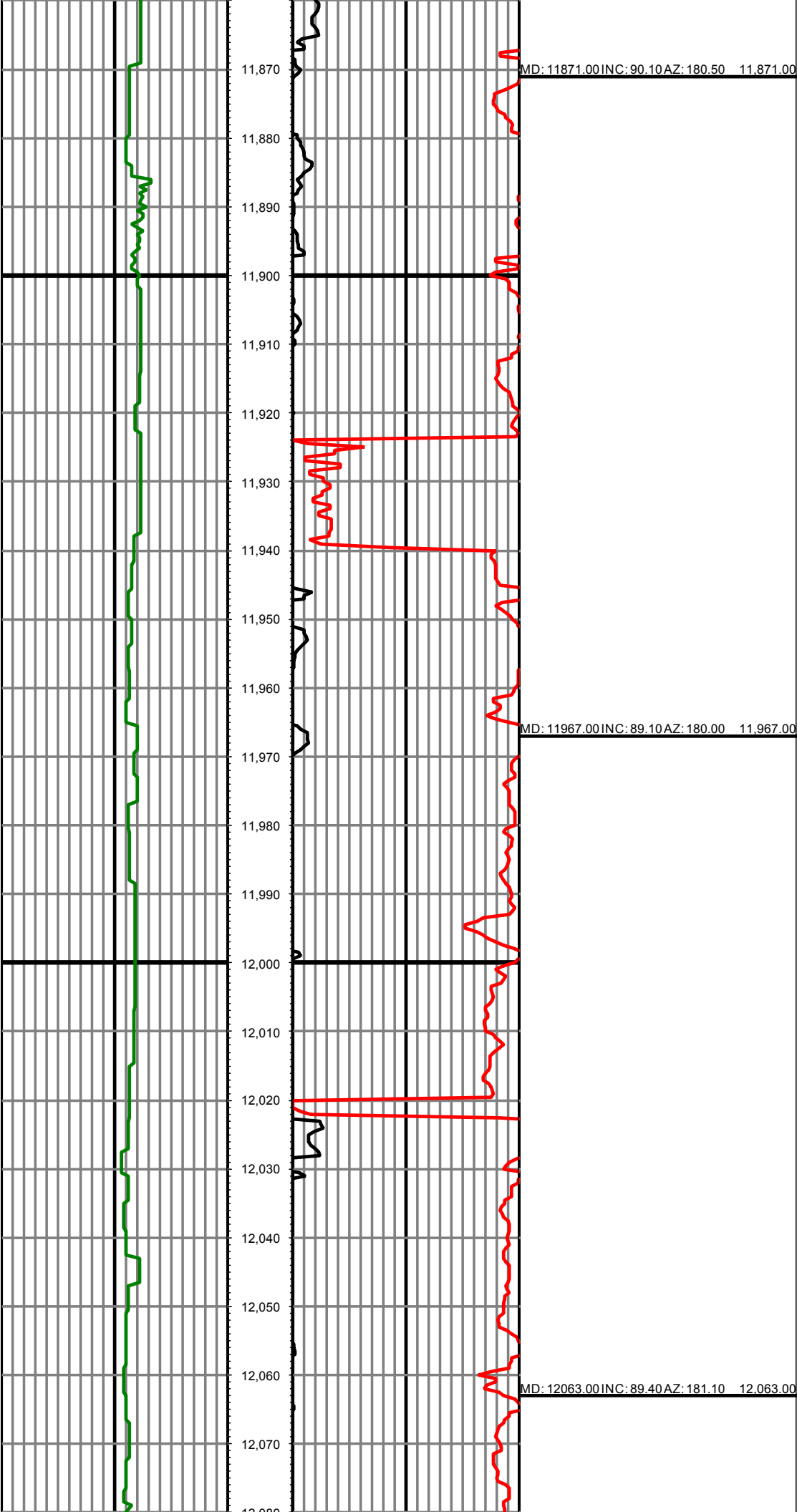
MD: 11199.00 INC: 89.50 AZ: 182.60 11,199.00

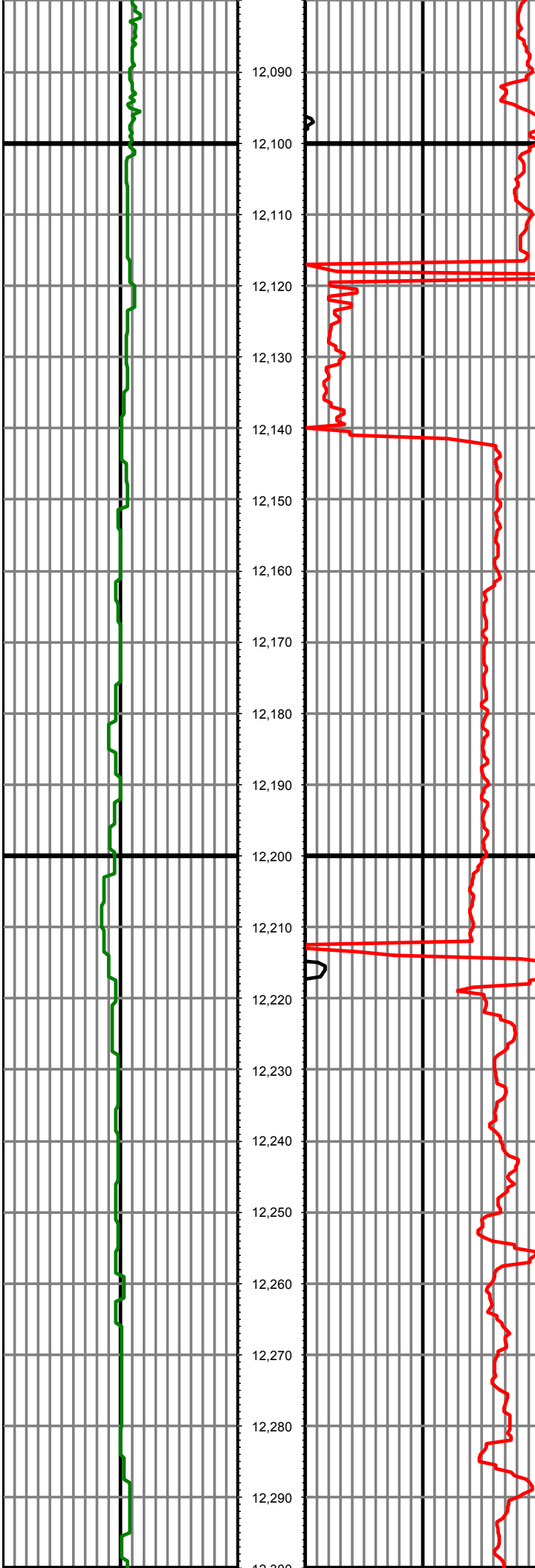
MD: 11295.00 INC: 90.40 AZ: 182.60 11,295.00

MD: 11391.00 INC: 88.50 AZ: 183.00 11,391.00









12,090

12,100

12,110

12,120

12,130

12,140

12,150

12,160

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12,190

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12,210

12,220

12,230

12,240

12,250

12,260

12,270

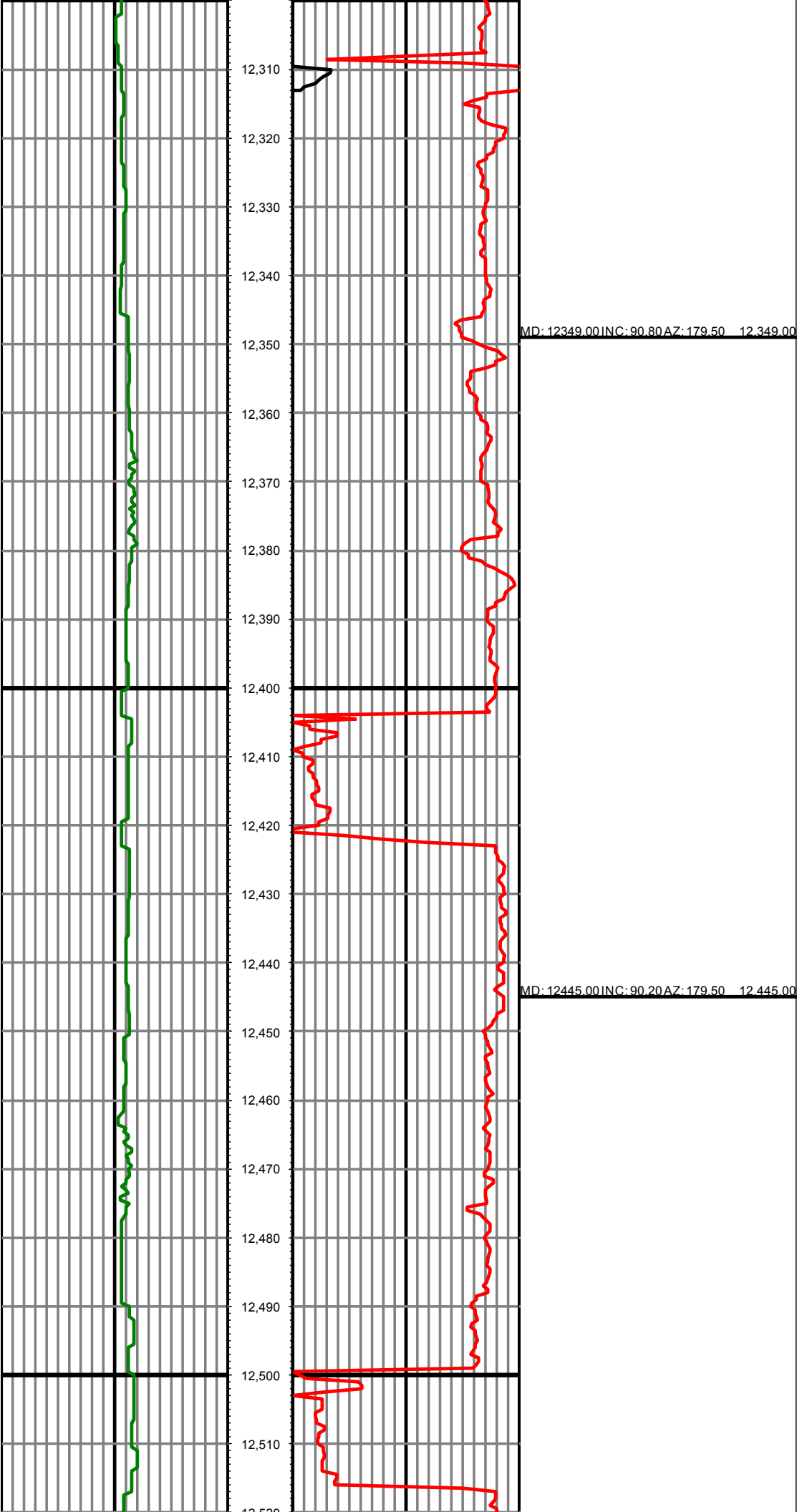
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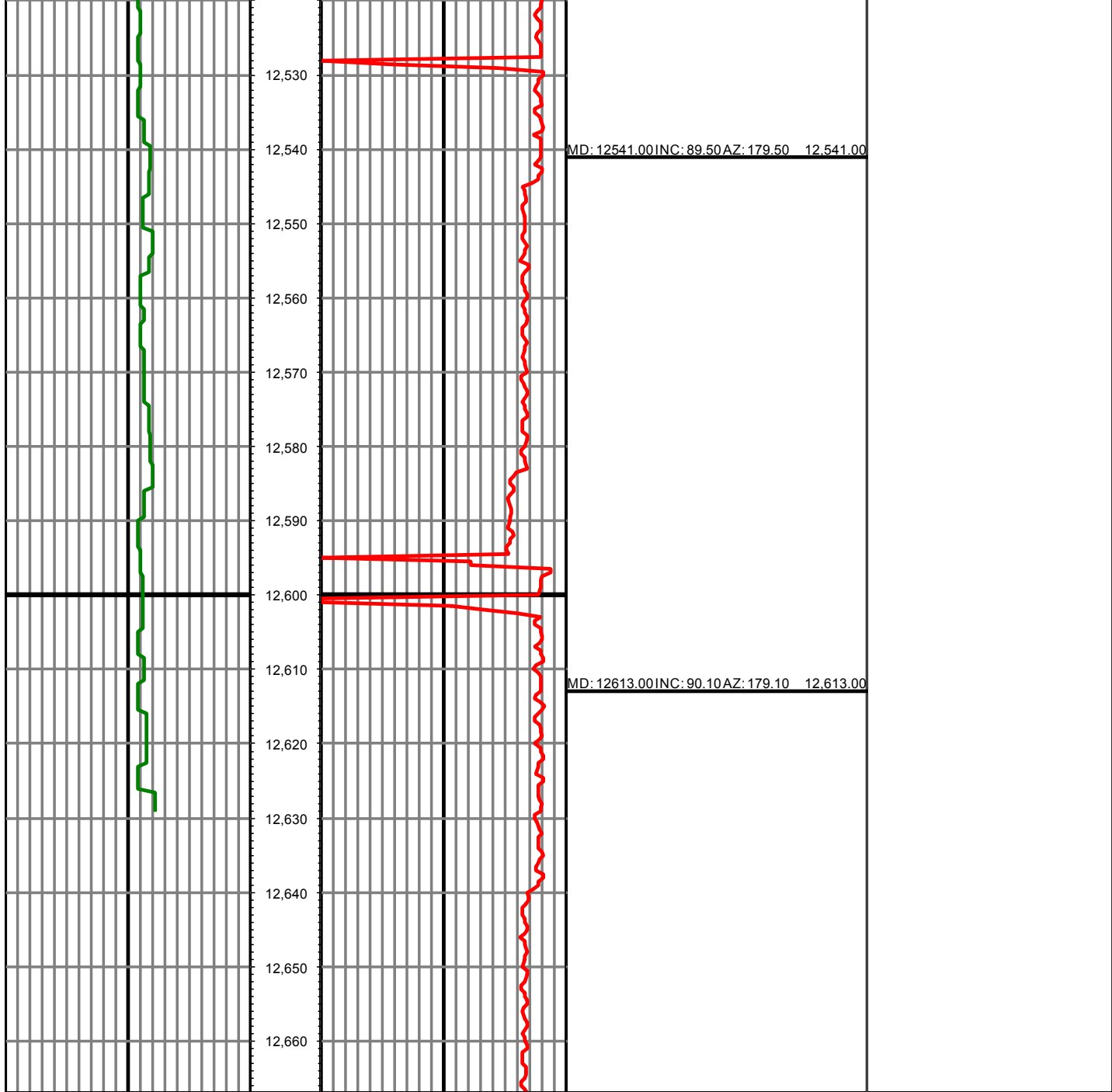
12,290

12,300

MD: 12158.00 INC: 89.60 AZ: 178.90 12,158.00

MD: 12254.00 INC: 90.10 AZ: 178.90 12,254.00





0.00 GR(API) 150.00 MD 0.00 ROP(FT/HR) 250.00 Surveys (MD/INC/AZ)
150.00 2 300.00 FT 250.00 2 500.00