



Precision Directional Services, Inc.

27610 Commerce Oaks Drive
Oak Ridge North, TX 77385

70-Ranch-04-63-03-3340CH

Scale 5":100' - MD

1/12/2014 12:40 PM

Oper. Company: Bill Barrett Corporation
Well: 70-Ranch-04-63-03-3340CH
Field: Wattenburg
Rig: Nabors M37
Well ID: 05-123-37930
Job Number: DL2073
Notes:

State: Colorado
County: Weld
Country: USA
Start Date: 01/04/2014 00:01:00
End Date: 01/12/2014 11:30:00

Latitude: 40° 20' 21.660" North
Longitude: 104° 25' 58.044" West

Elev KB: 4,582'
Elev DF: 4,582'
Elev GL: 4,559'

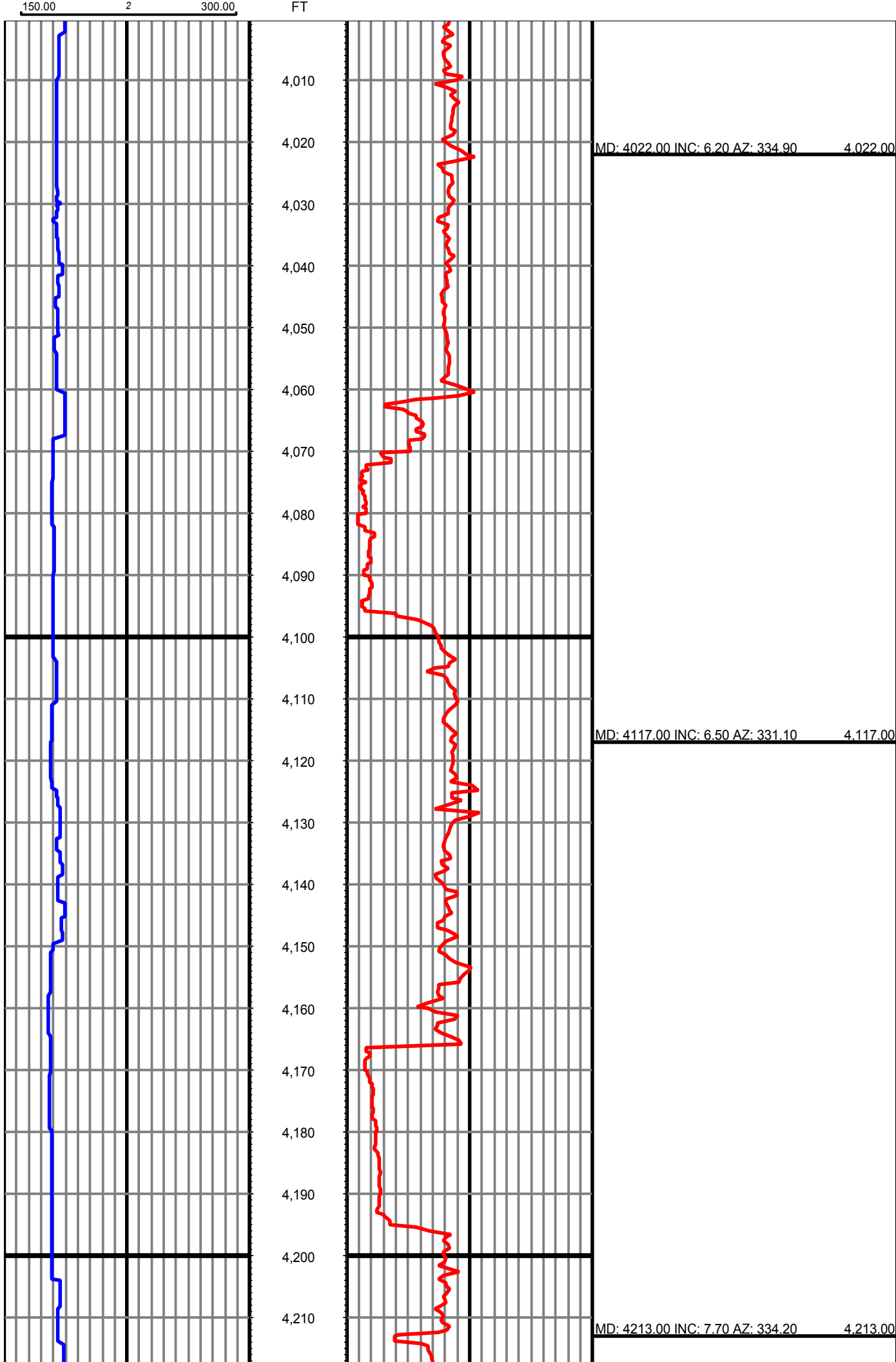
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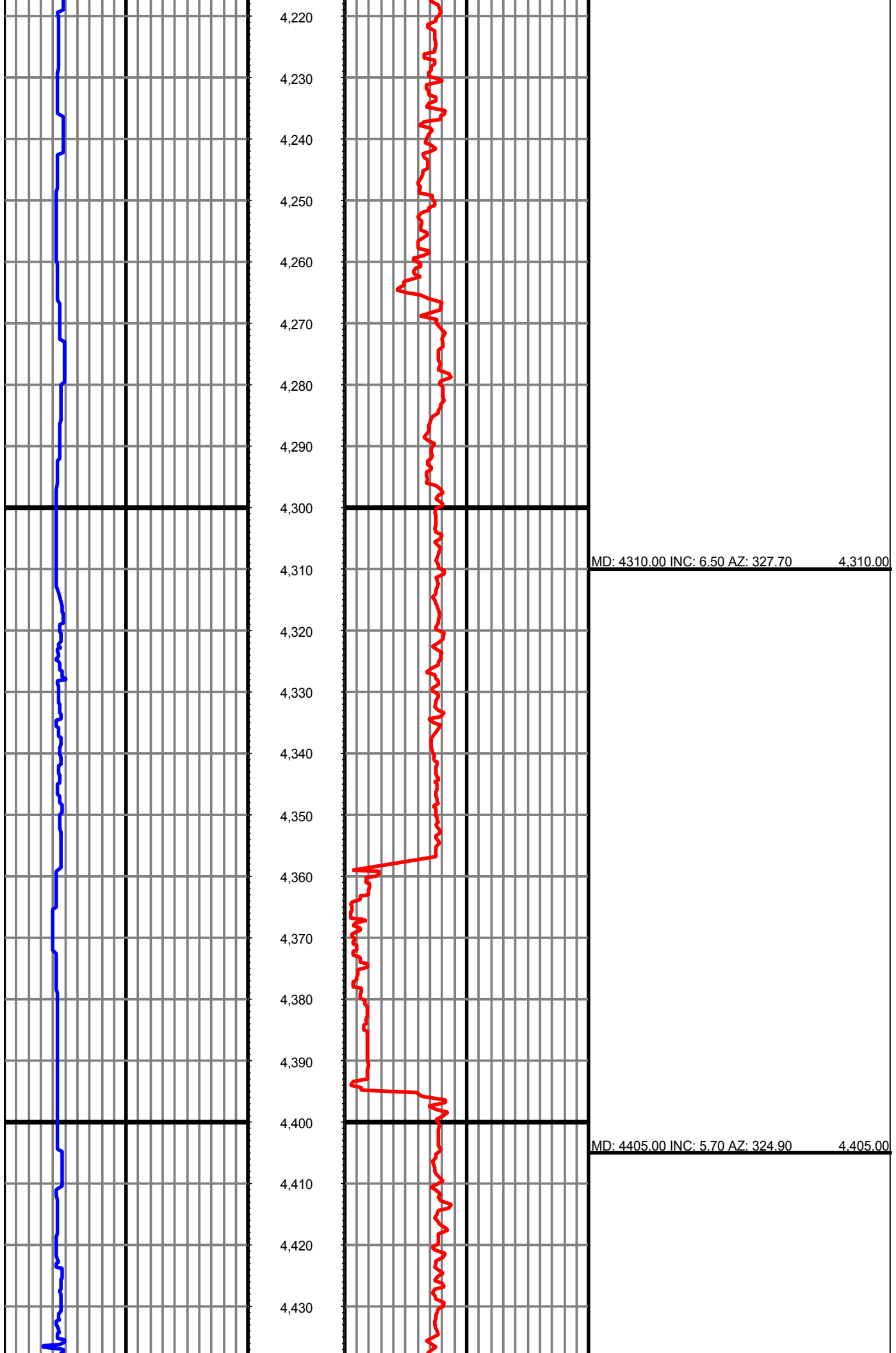
Operator 1: David Rask
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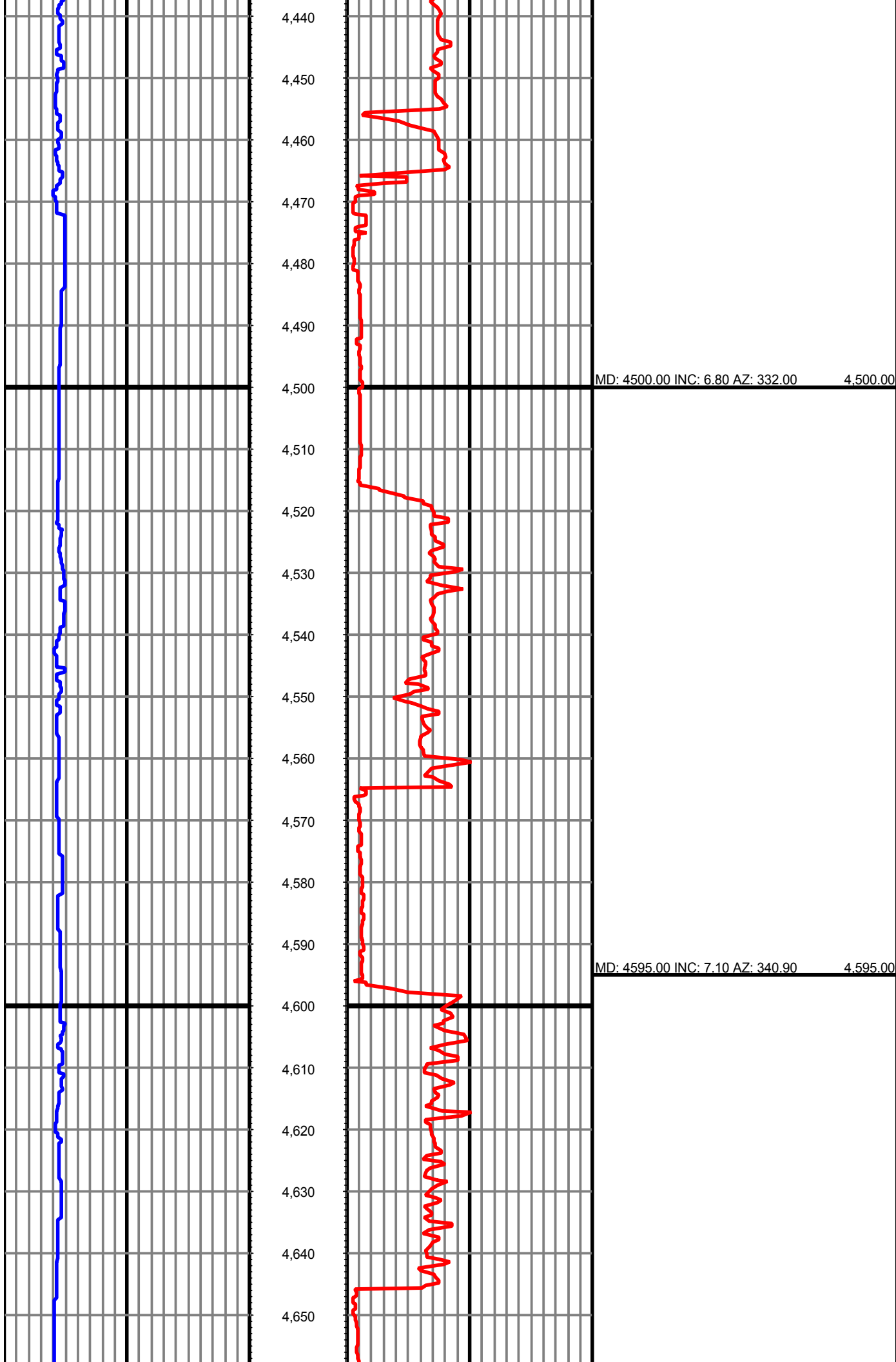
Operator 2: Andrew Skoog

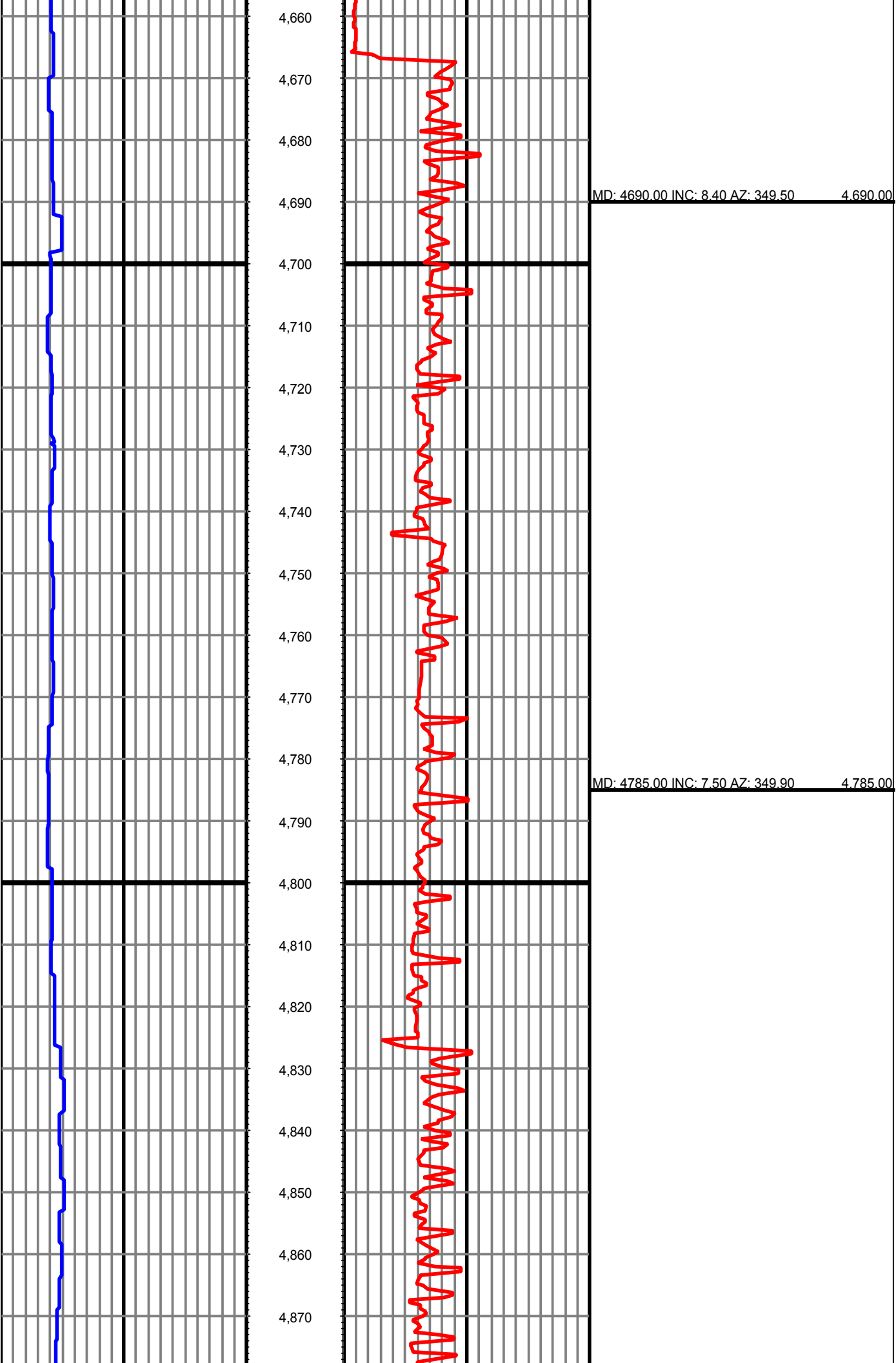
Tool Run Data	Run #1	Run #2	Run #3	Run #4	Run #5
Tool S/N	6038	6132	6132	6040	6040
Bit Size	8 3/4	8 3/4	8 3/4	8 3/4	6 1/8"
Cal Factor	3.53	3.50	3.50	3.07	1.27
Gamma Offset	41.00	41.00	41.00	41.00	39.00
Resisitivity Offset	48.00	48.00	61.00	61.00	59.00
Start Depth	830.00	4475.00	5865.00	5948.00	6798.00
StartDate	1/4/2014	1/5/2014	1/6/2014	1/7/2014	1/9/2014
StartTime	4:00 PM	3:30 PM	12:30 PM	4:00 PM	6:00 AM
EndDepth	4475.00	5865.00	5948.00	6798.00	10865.00
EndDate	1/5/2014	1/6/2014	1/7/2014	1/8/2014	1/12/2014
EndTime	4:30 PM	10:30 AM	1:30 PM	2:00 PM	11:30 AM
Mud Type	Water Based	Water Based	Water Based	Water Based	Water Based
Mud Weight	9.0	9.0	9.0	9.0	9.0
Funnel Viscosity					
Plastic Viscosity					
Yield Point					
Gel Strength					
Solids Content					
Sand Content					
Mud Alkalinity					
Filtrate Alkalinity					
Chlorides					
Mud RM					
Mud RMF					
Mud RMC					
Mud RM at BHT					
Hole Data			Casing Data		
Size	From	To	Size	From	To
12 1/4	0.00	755.00	9 5/8"	0.00	755.00
8 3/4	755.00	6798.00	7"	755.00	6789.00
6 1/8	6798.00	10865.00			

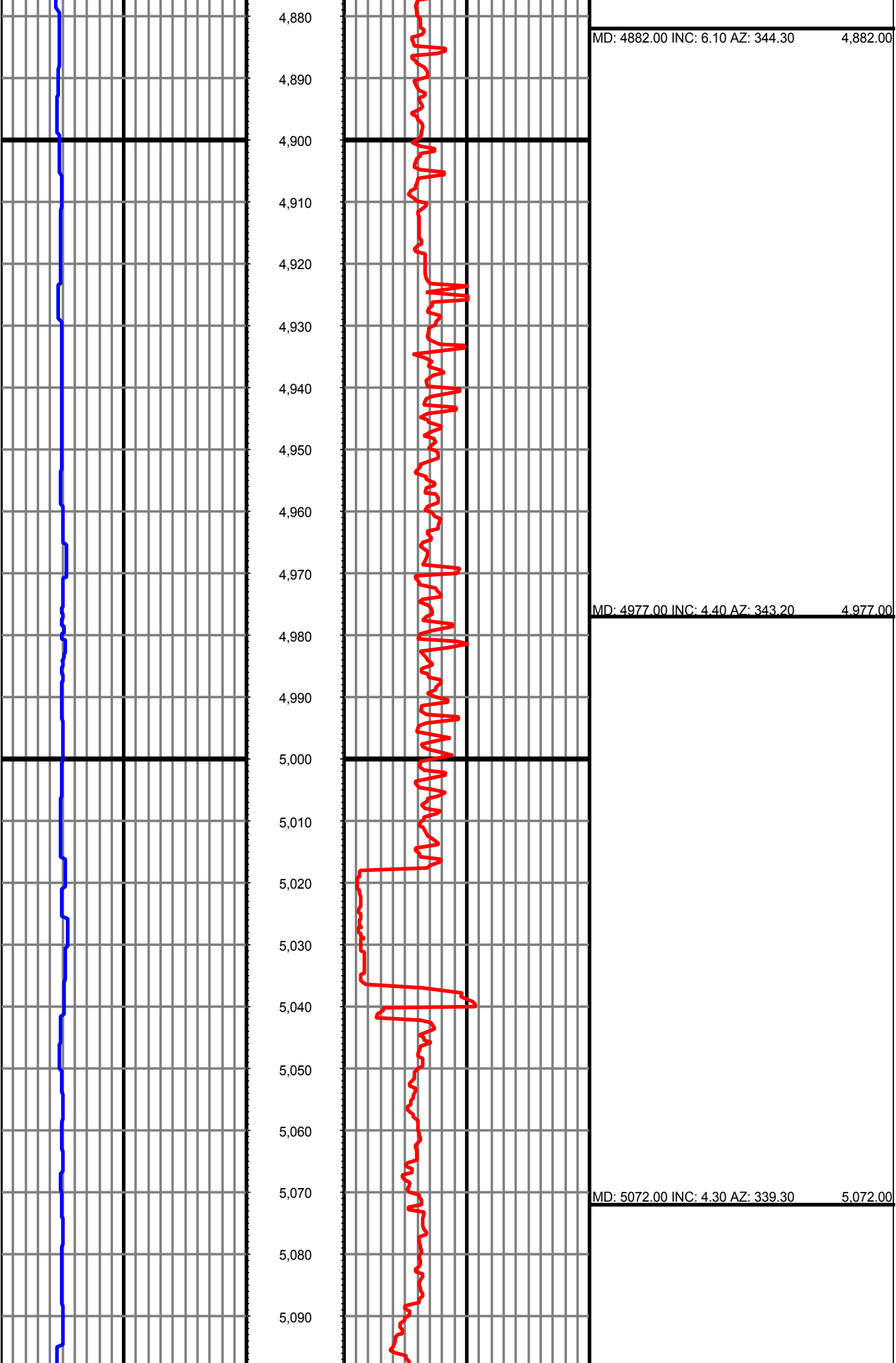
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost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









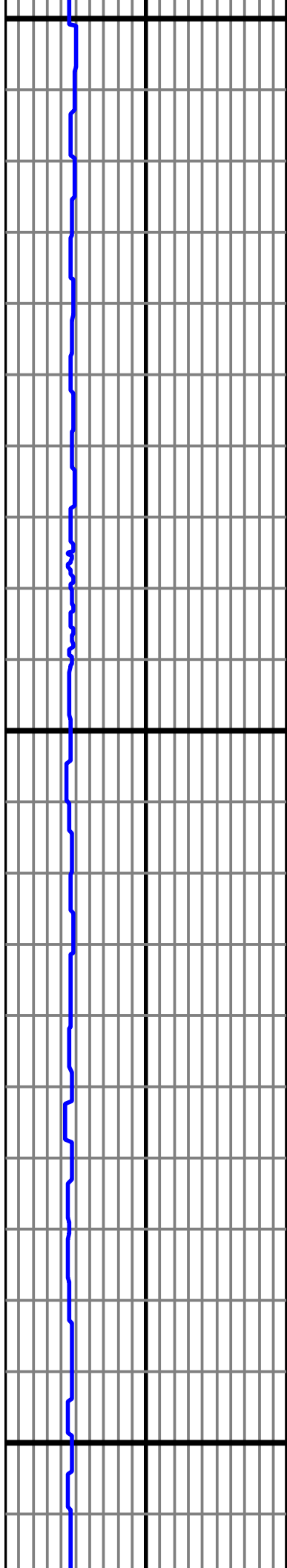


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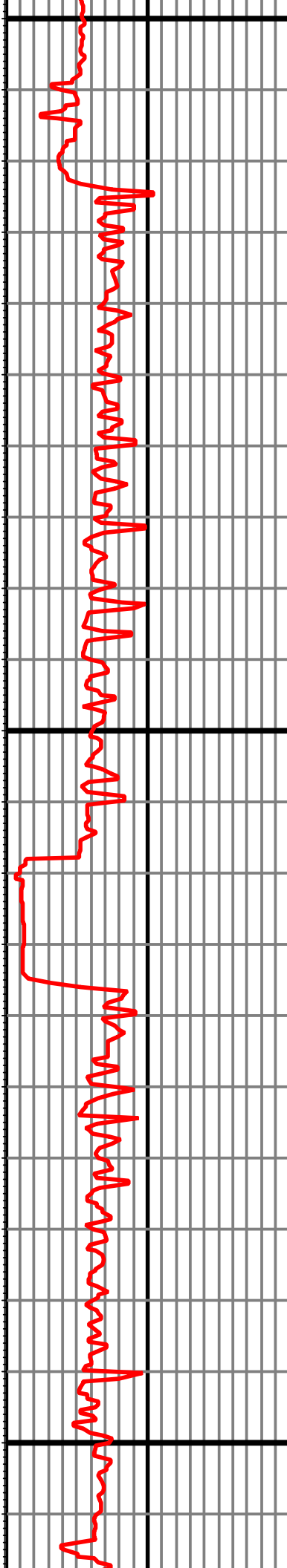
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MD: 4977.00 INC: 4.40 AZ: 343.20 4,977.00

MD: 5072.00 INC: 4.30 AZ: 339.30 5,072.00

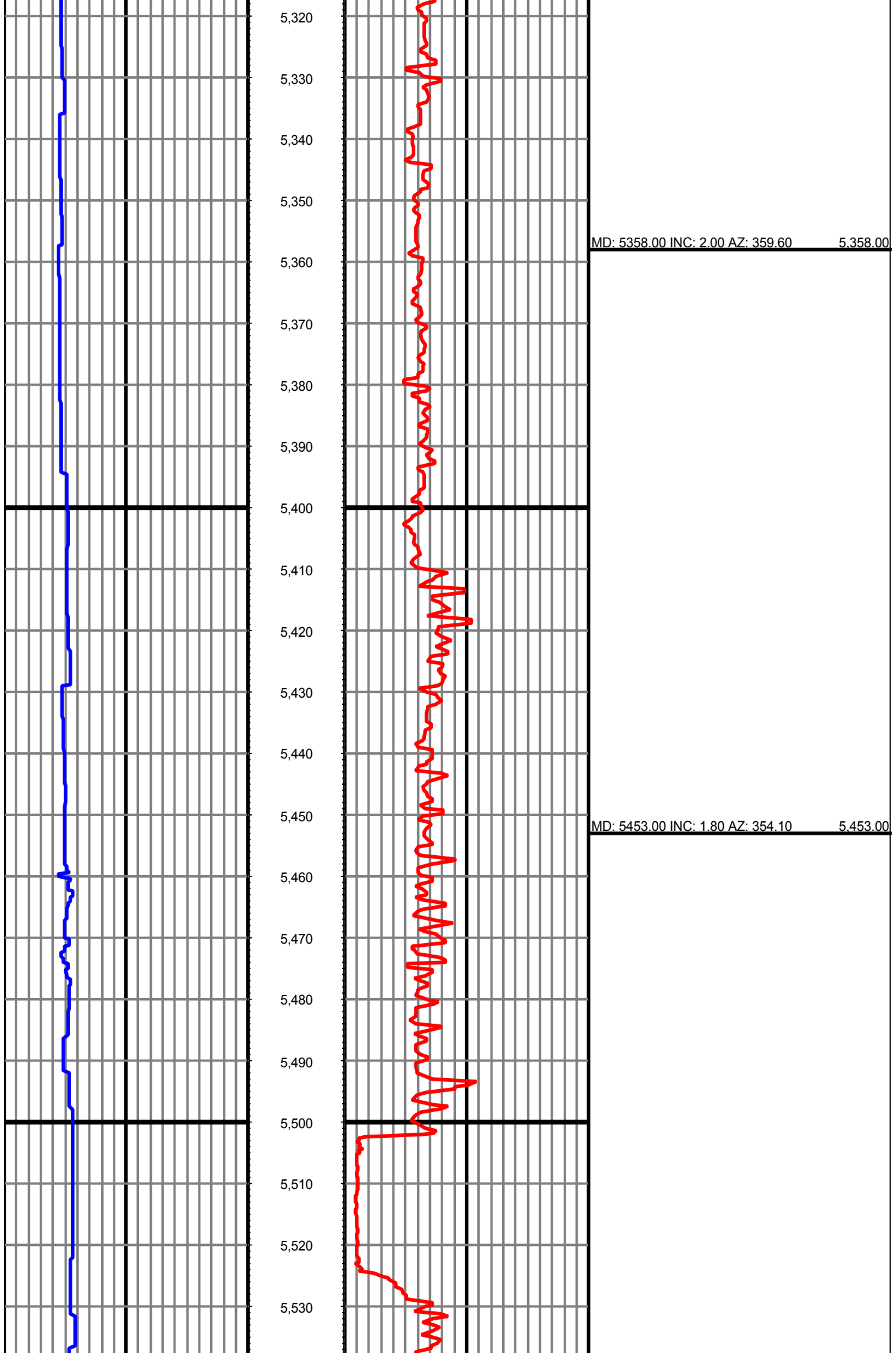


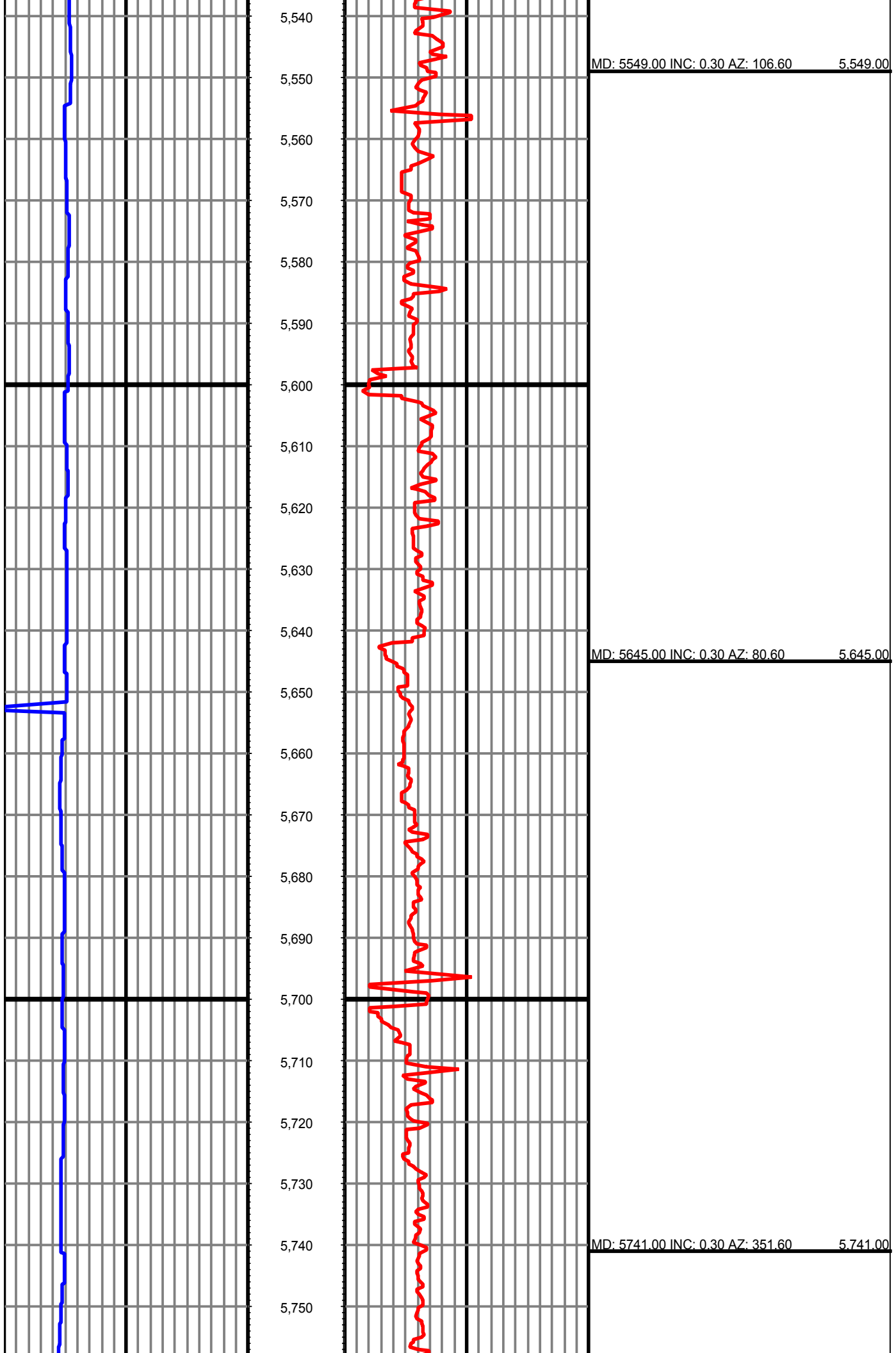
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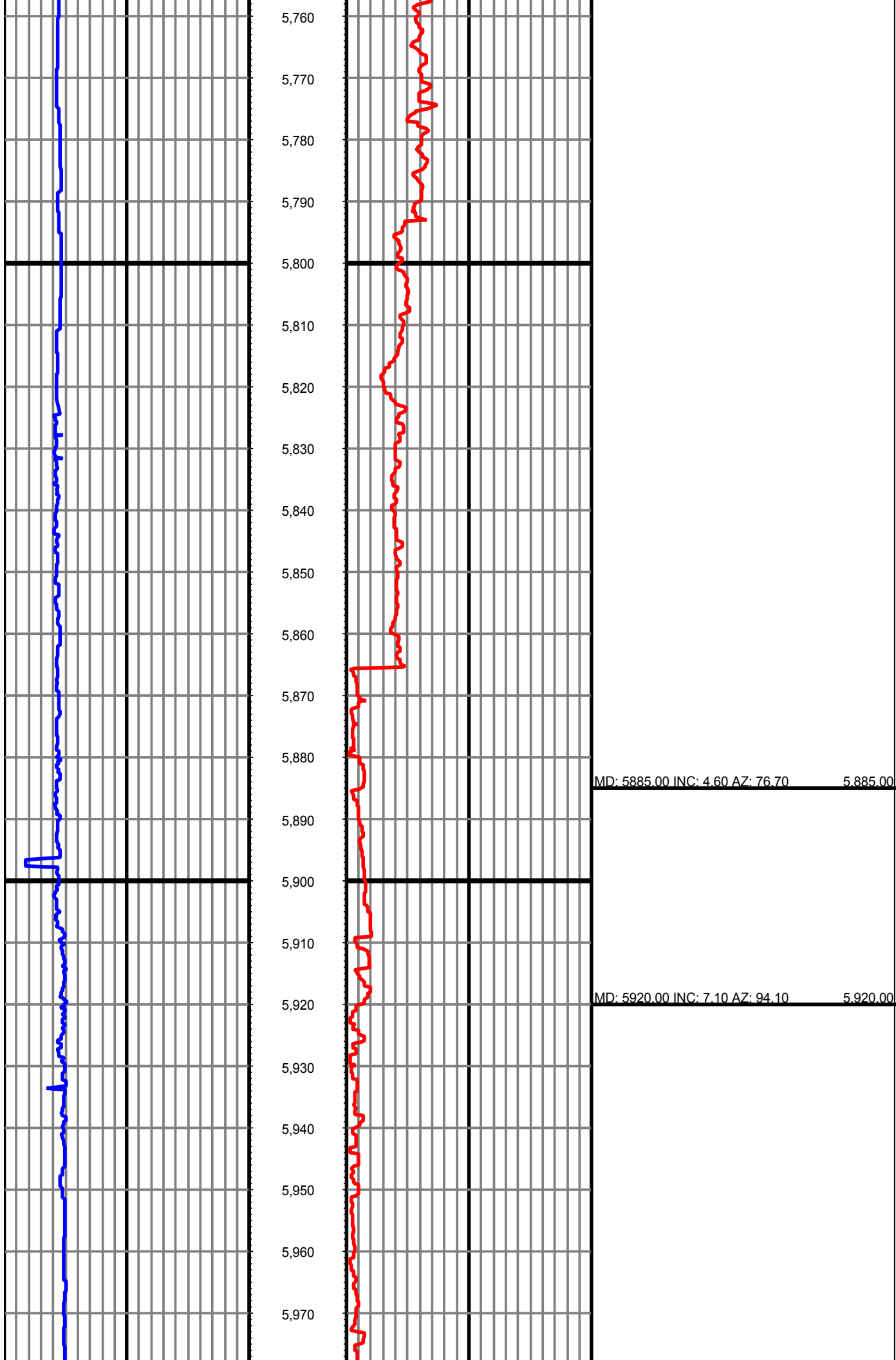


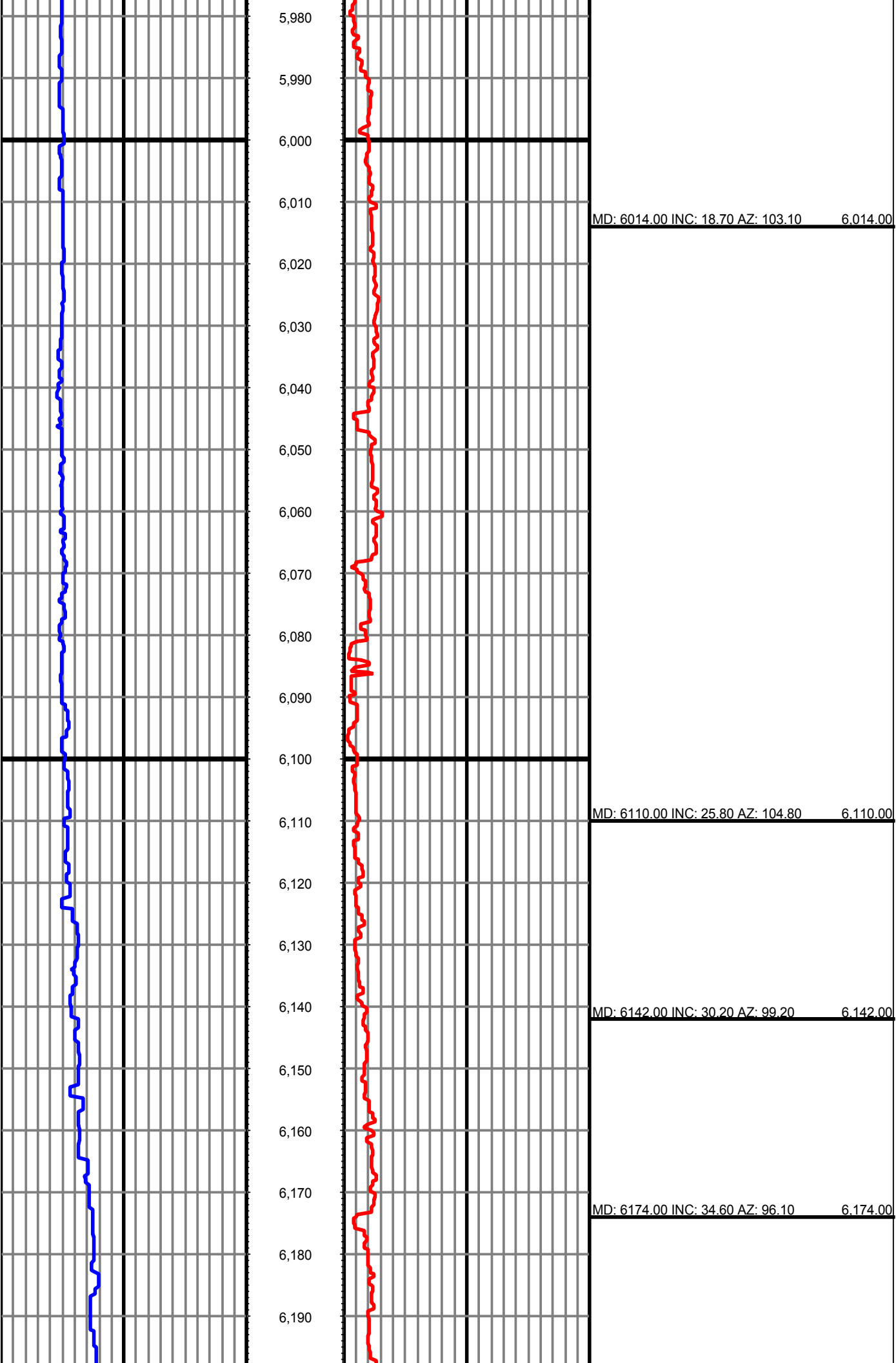
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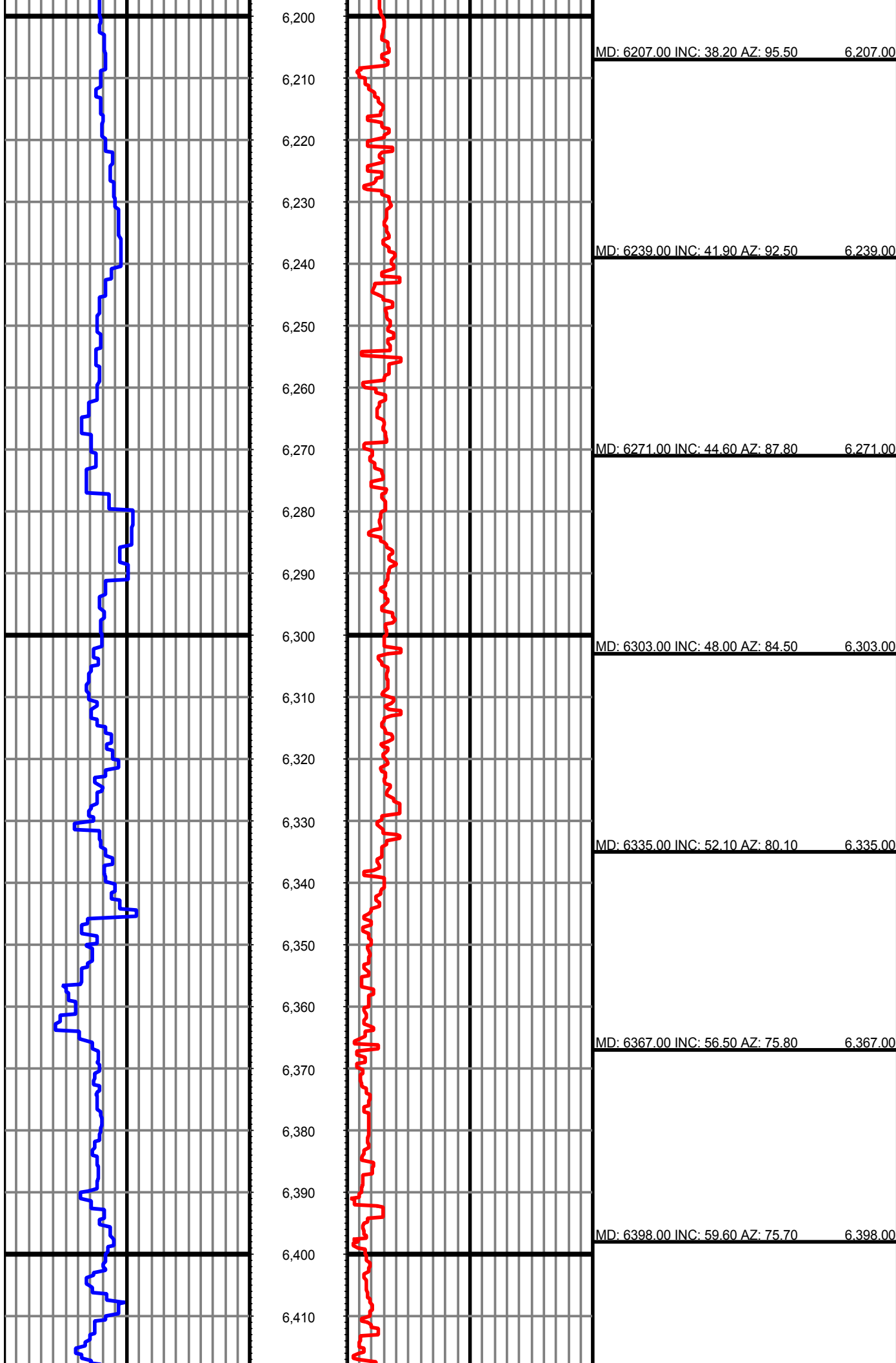
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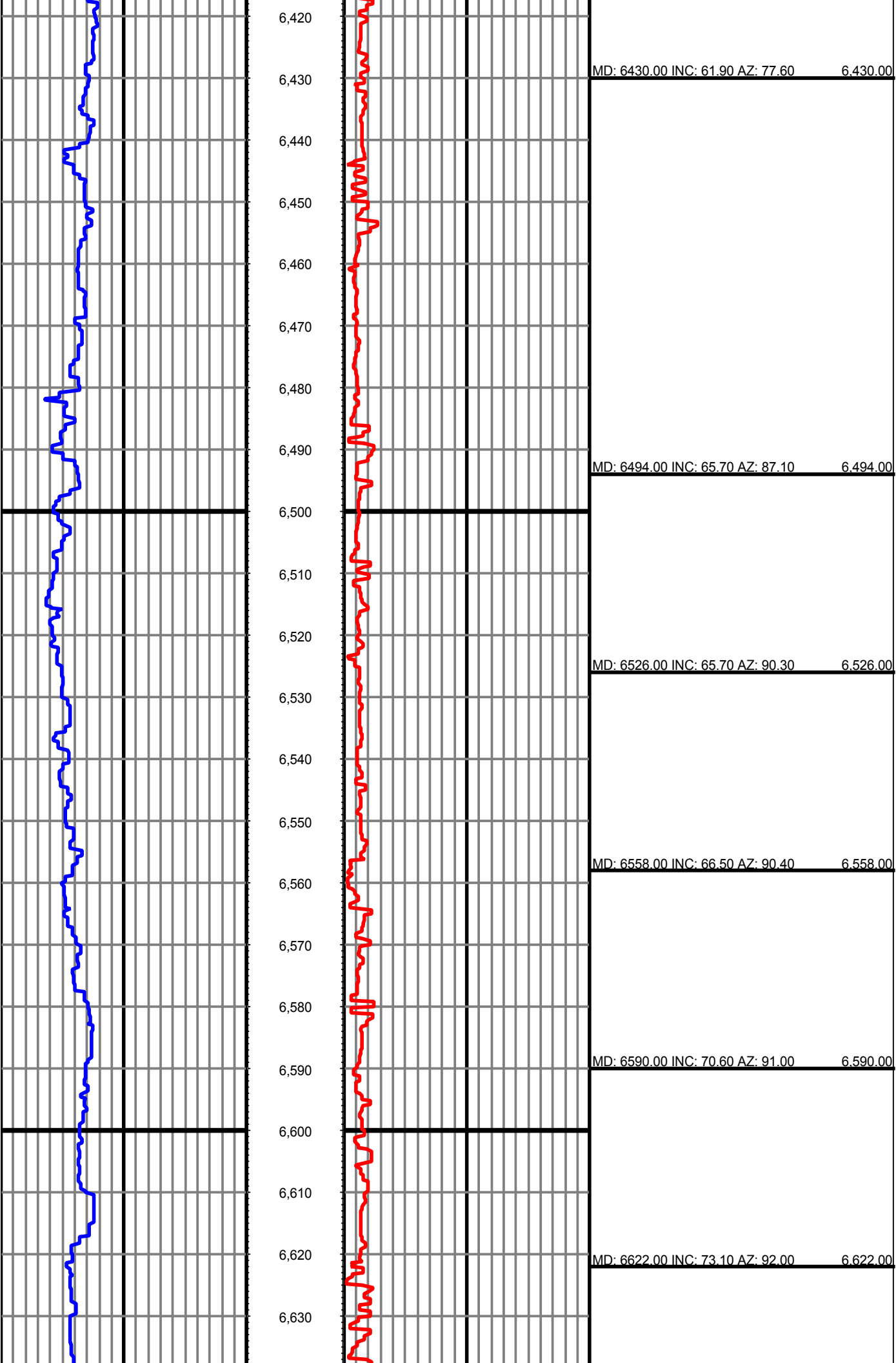












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MD: 6430.00 INC: 61.90 AZ: 77.60 6,430.00

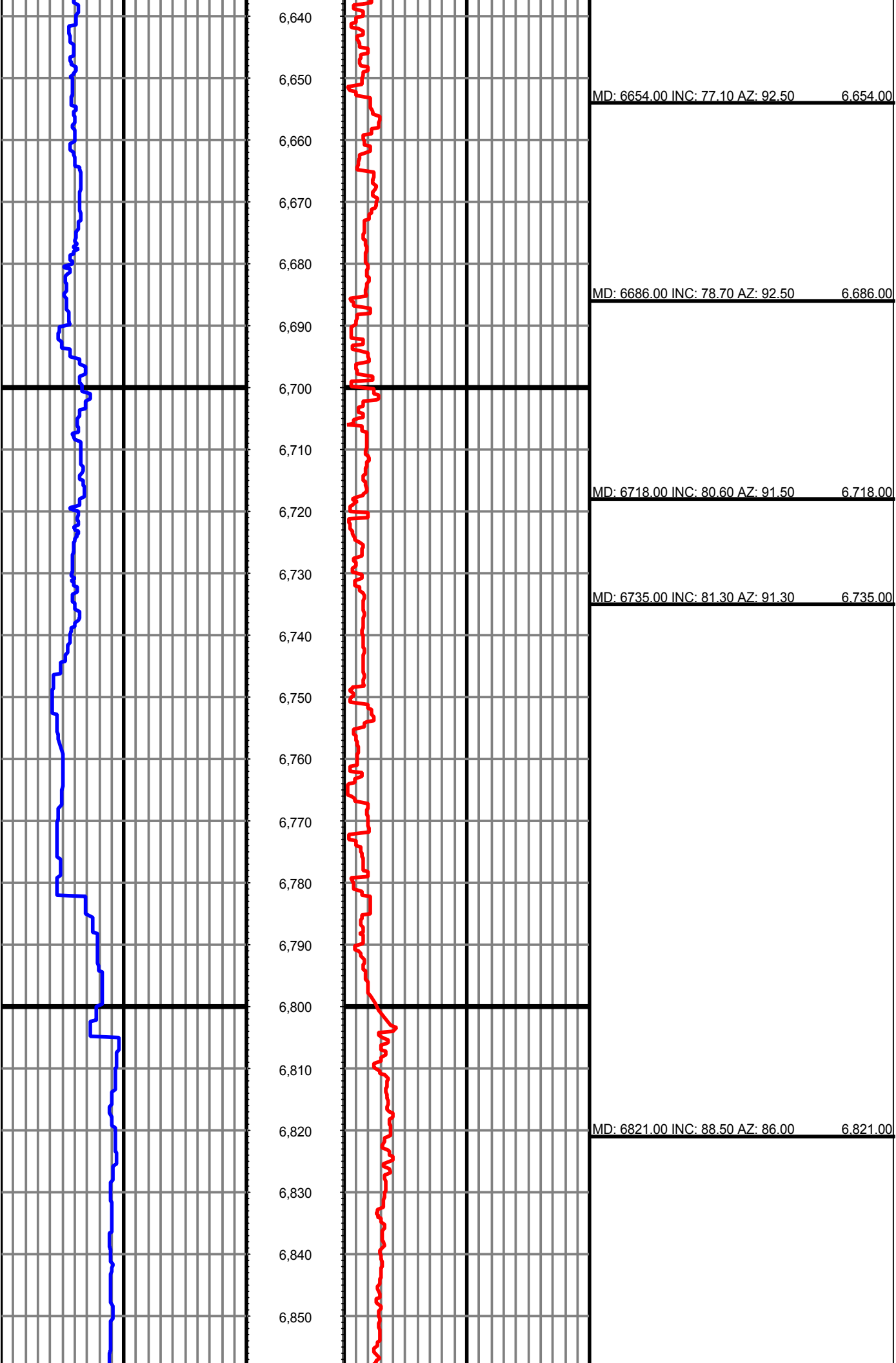
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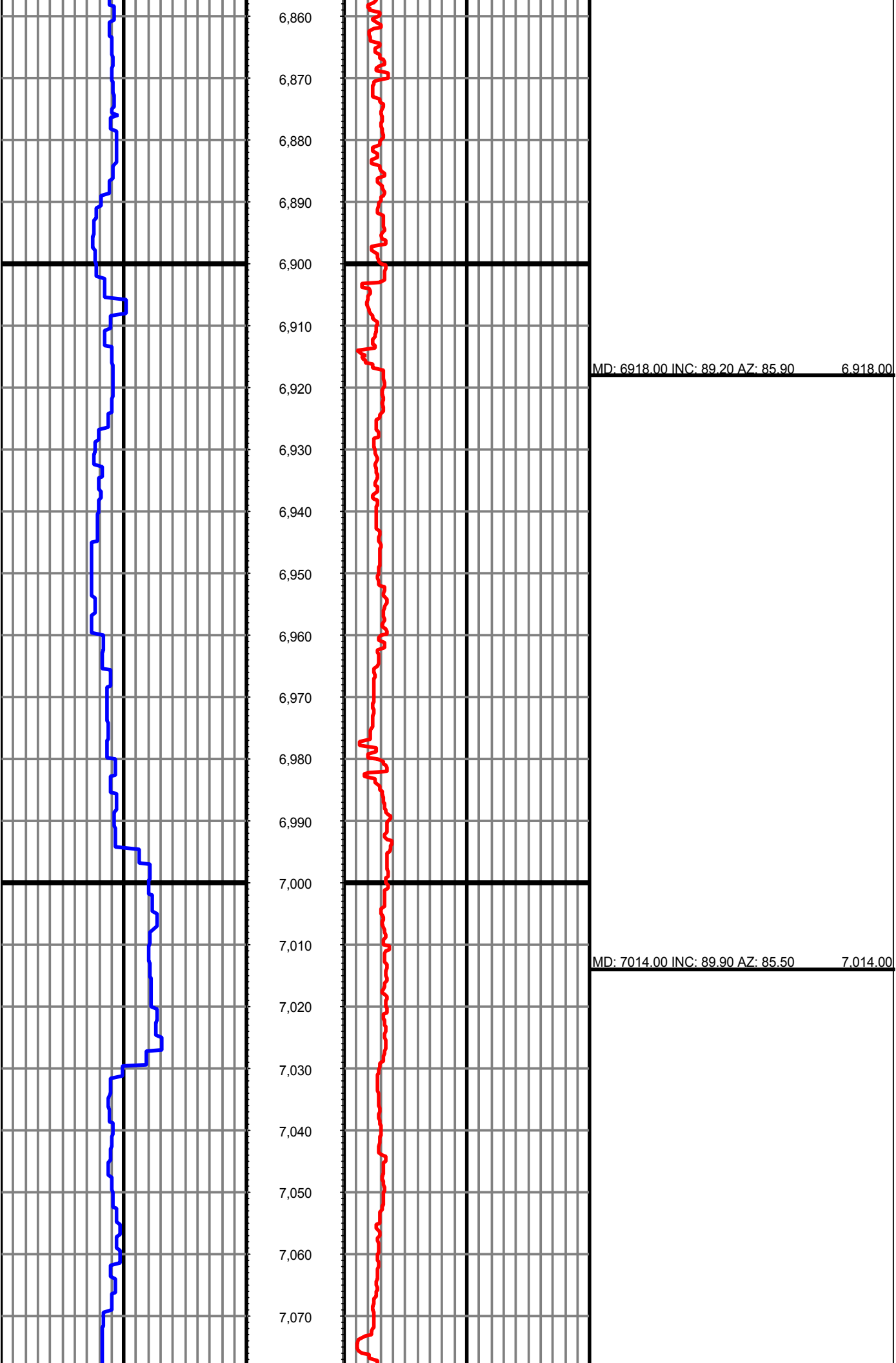
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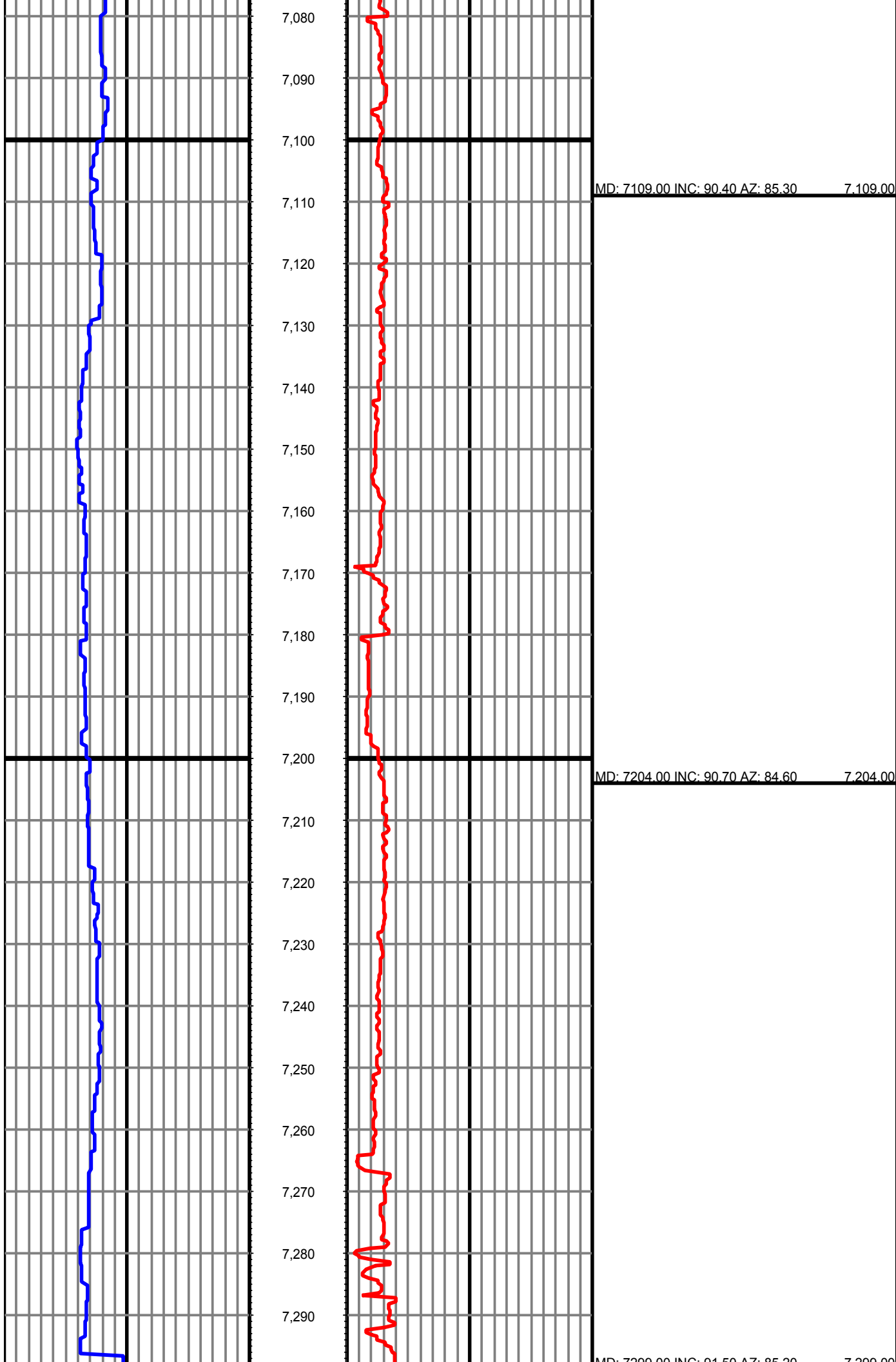
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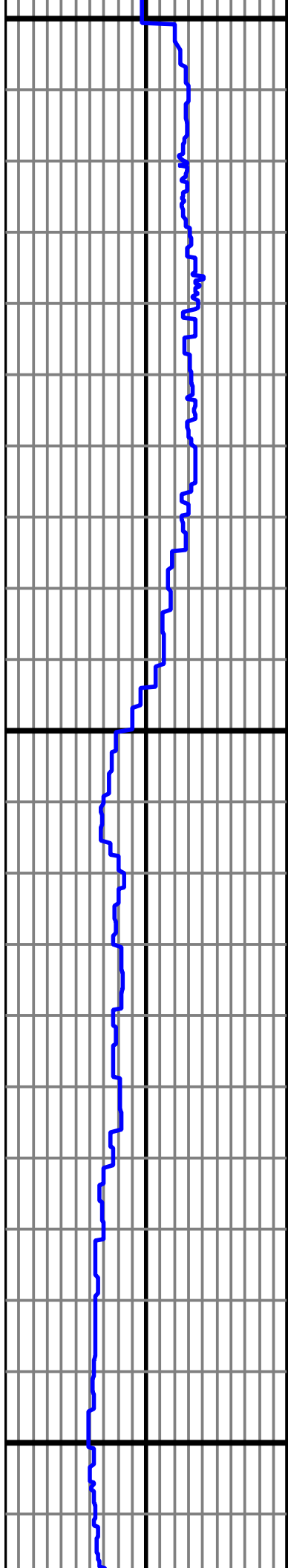
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MD: 6622.00 INC: 73.10 AZ: 92.00 6,622.00

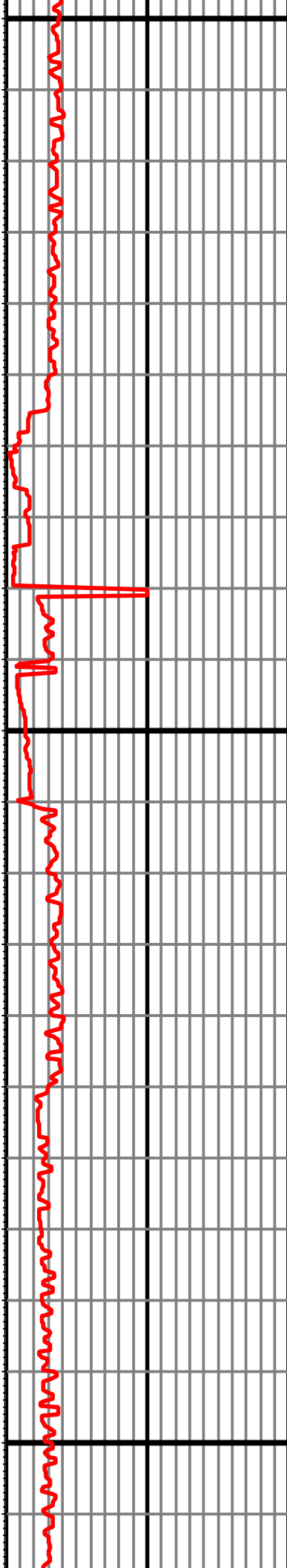








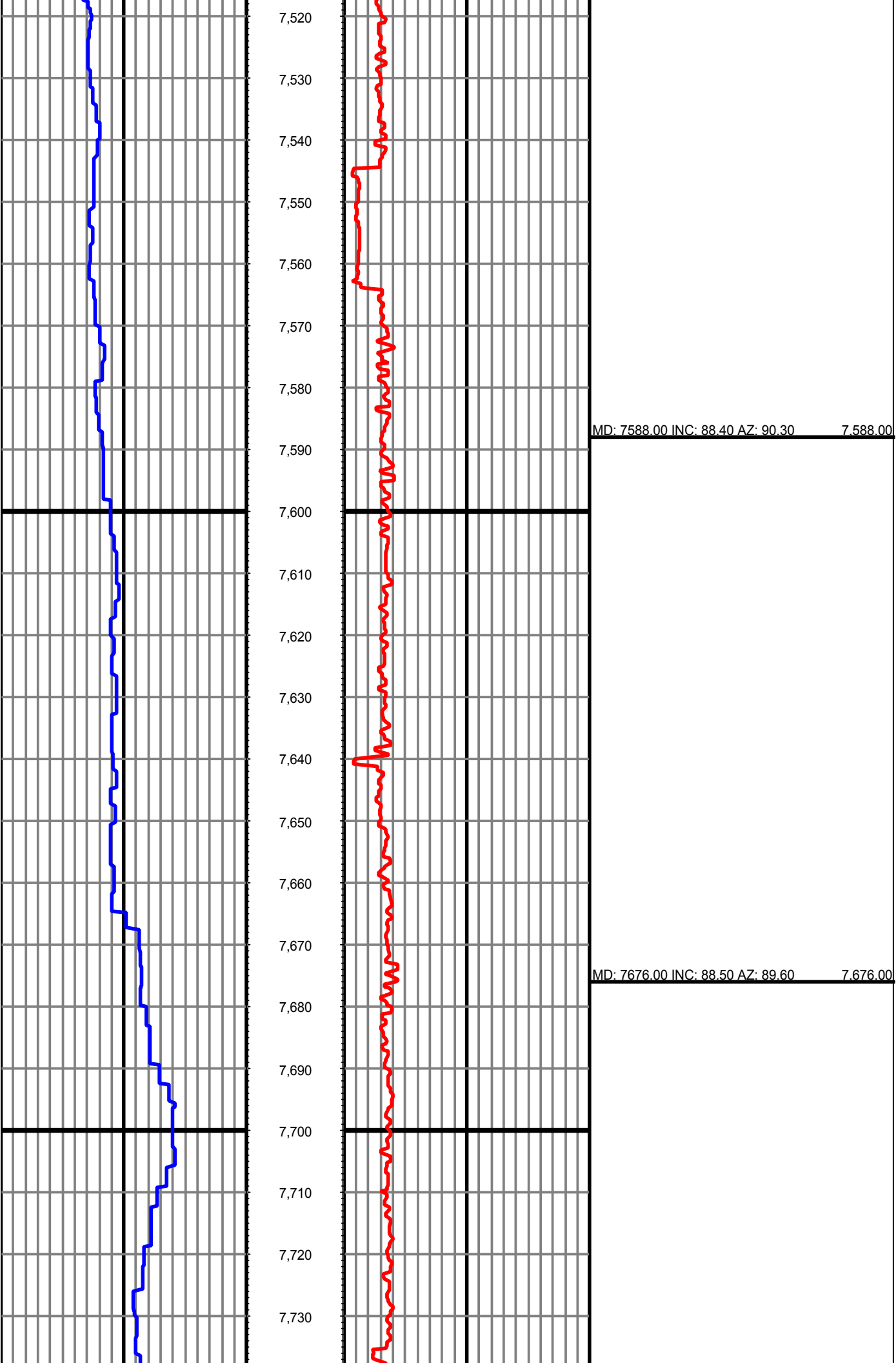
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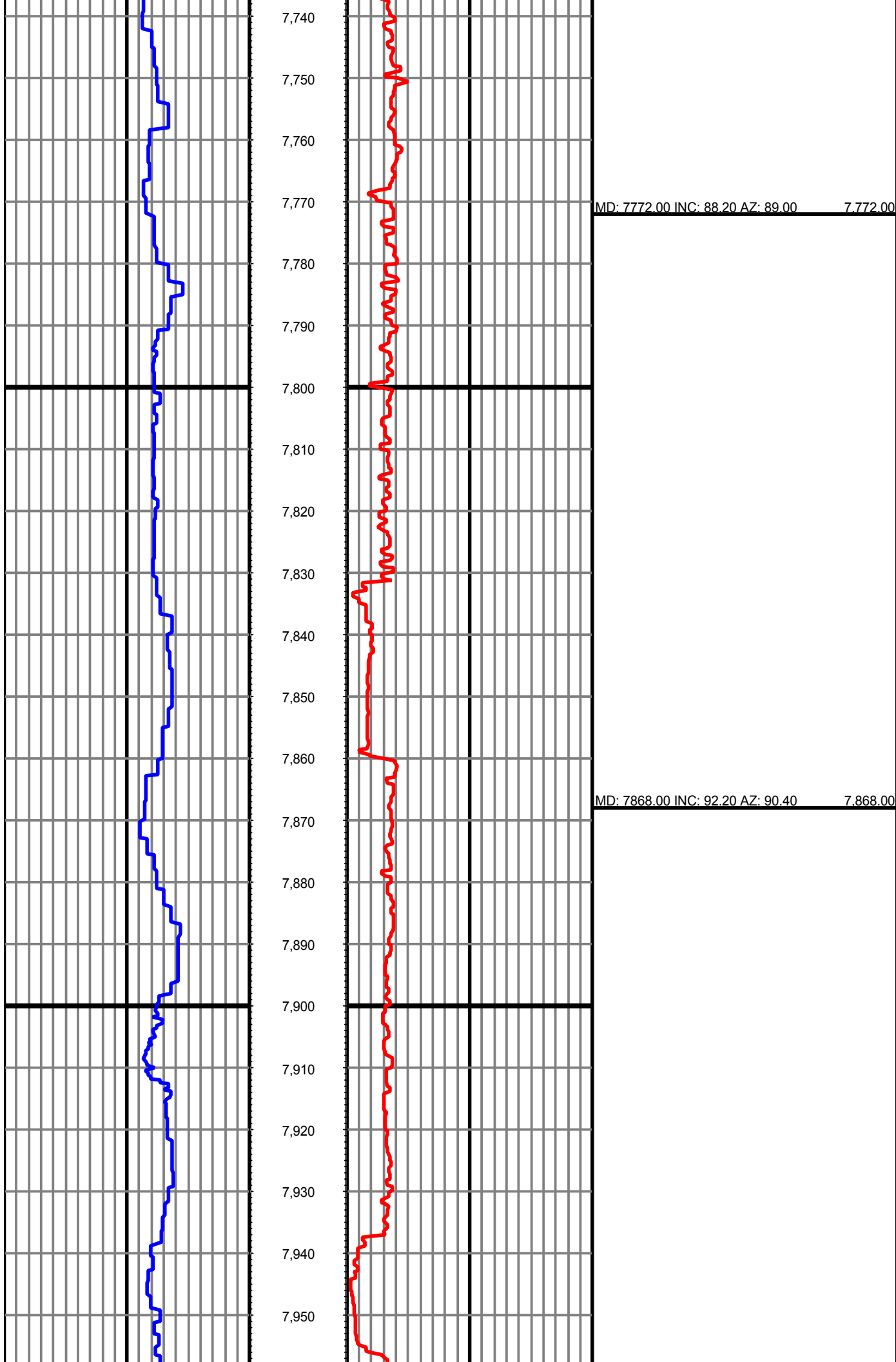


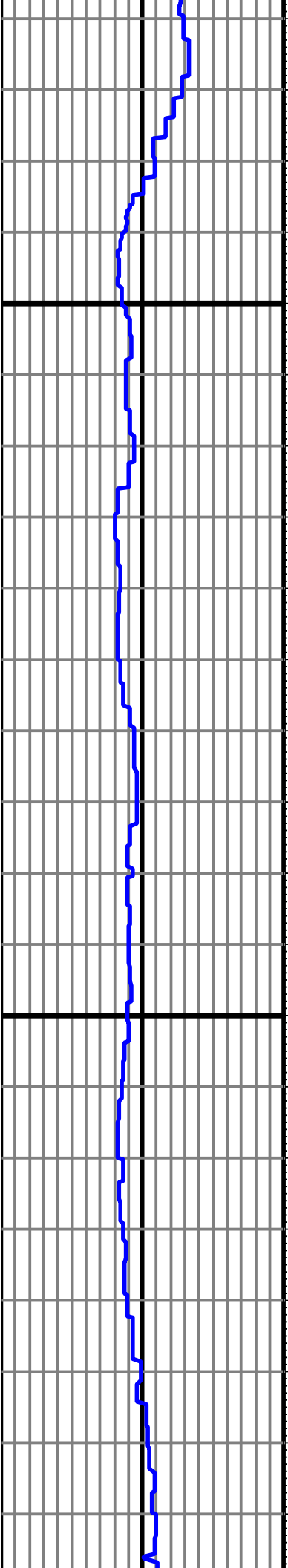
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MD: 7389.00 INC: 90.30 AZ: 86.70 7,389.00

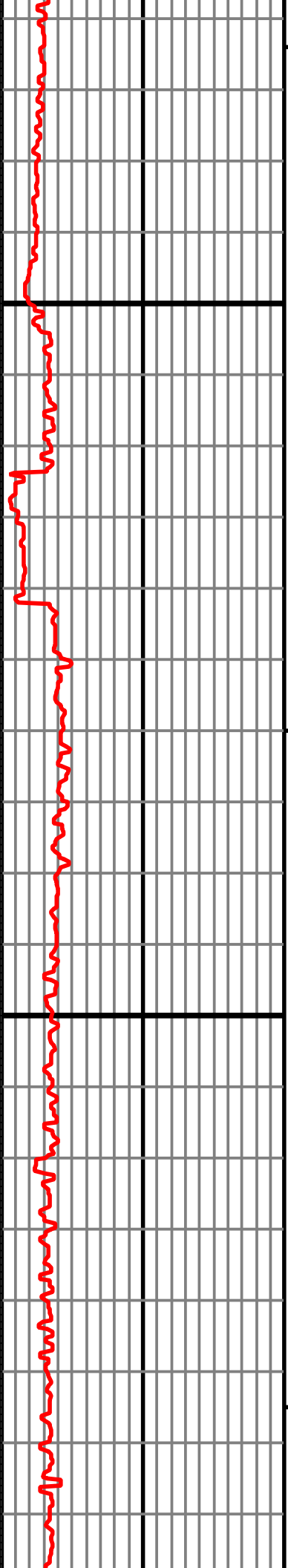
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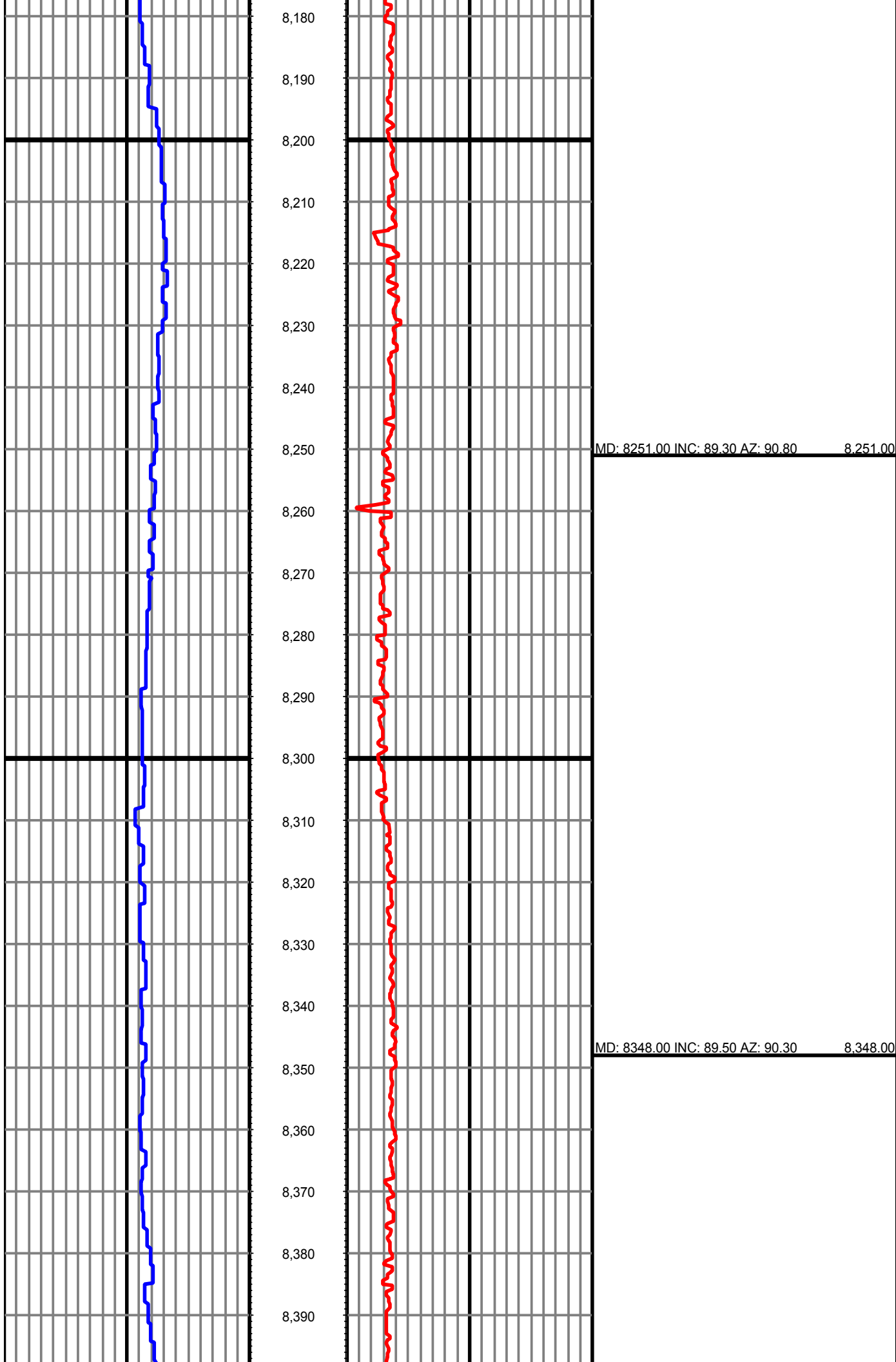
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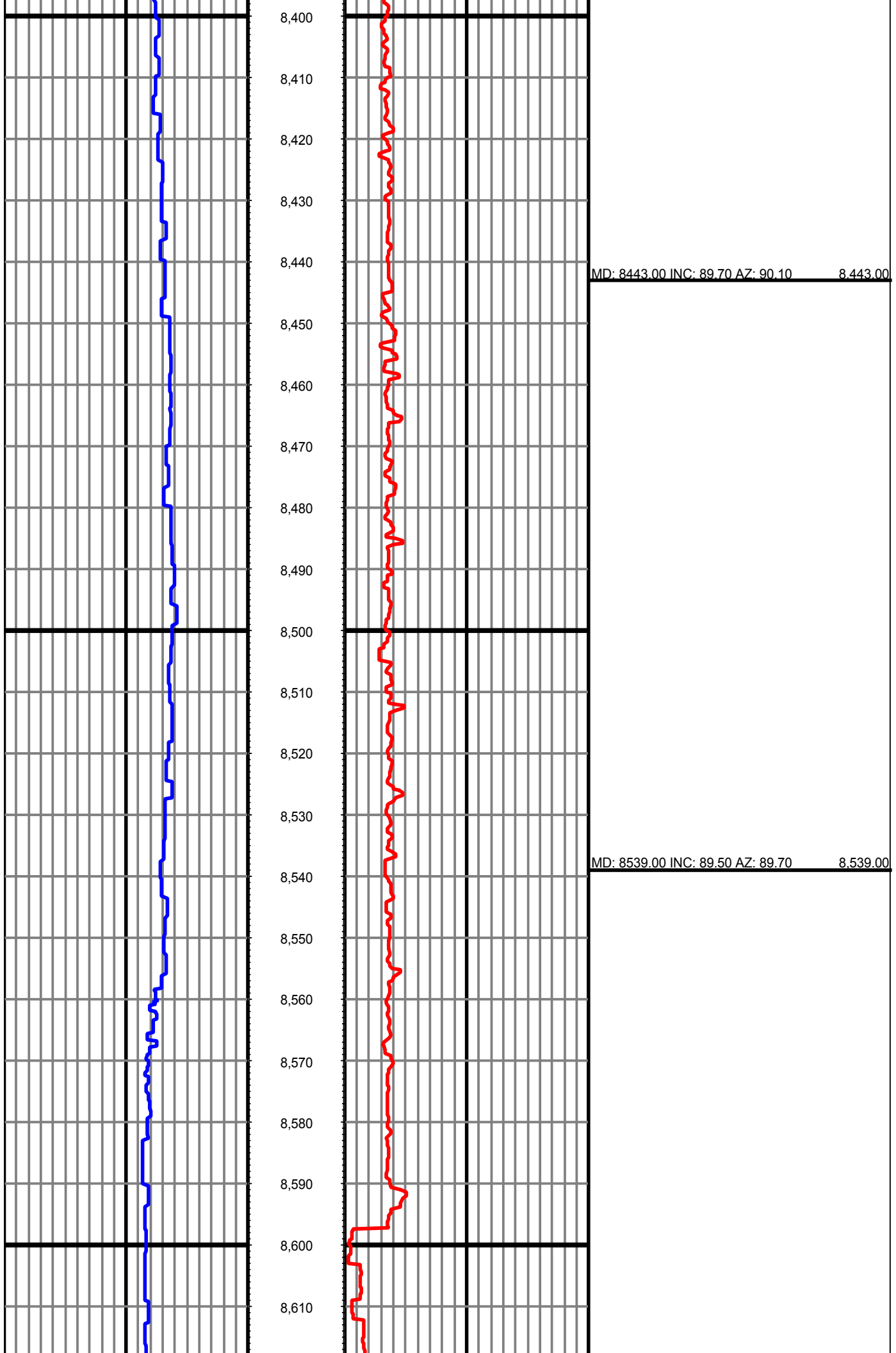


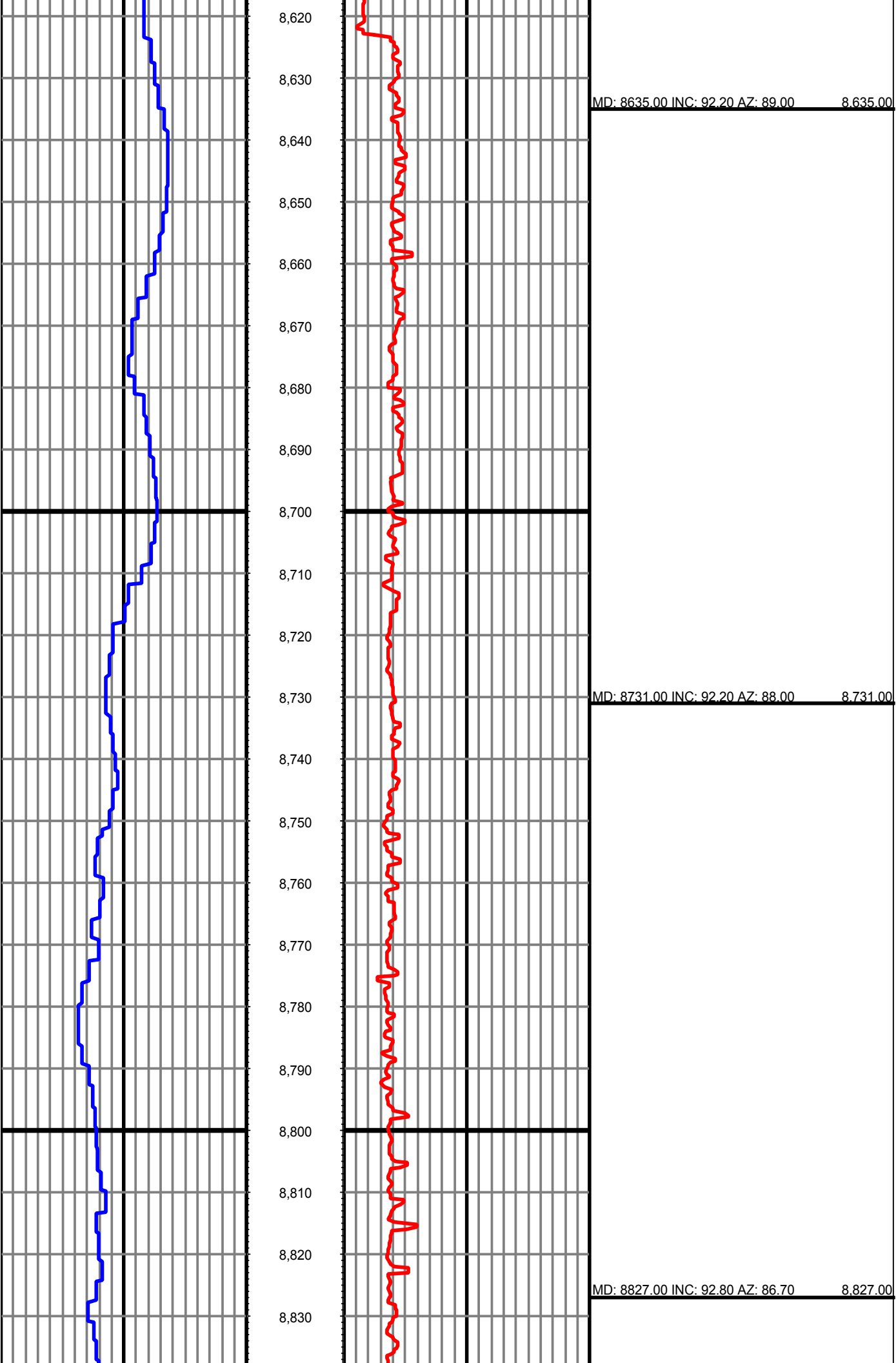
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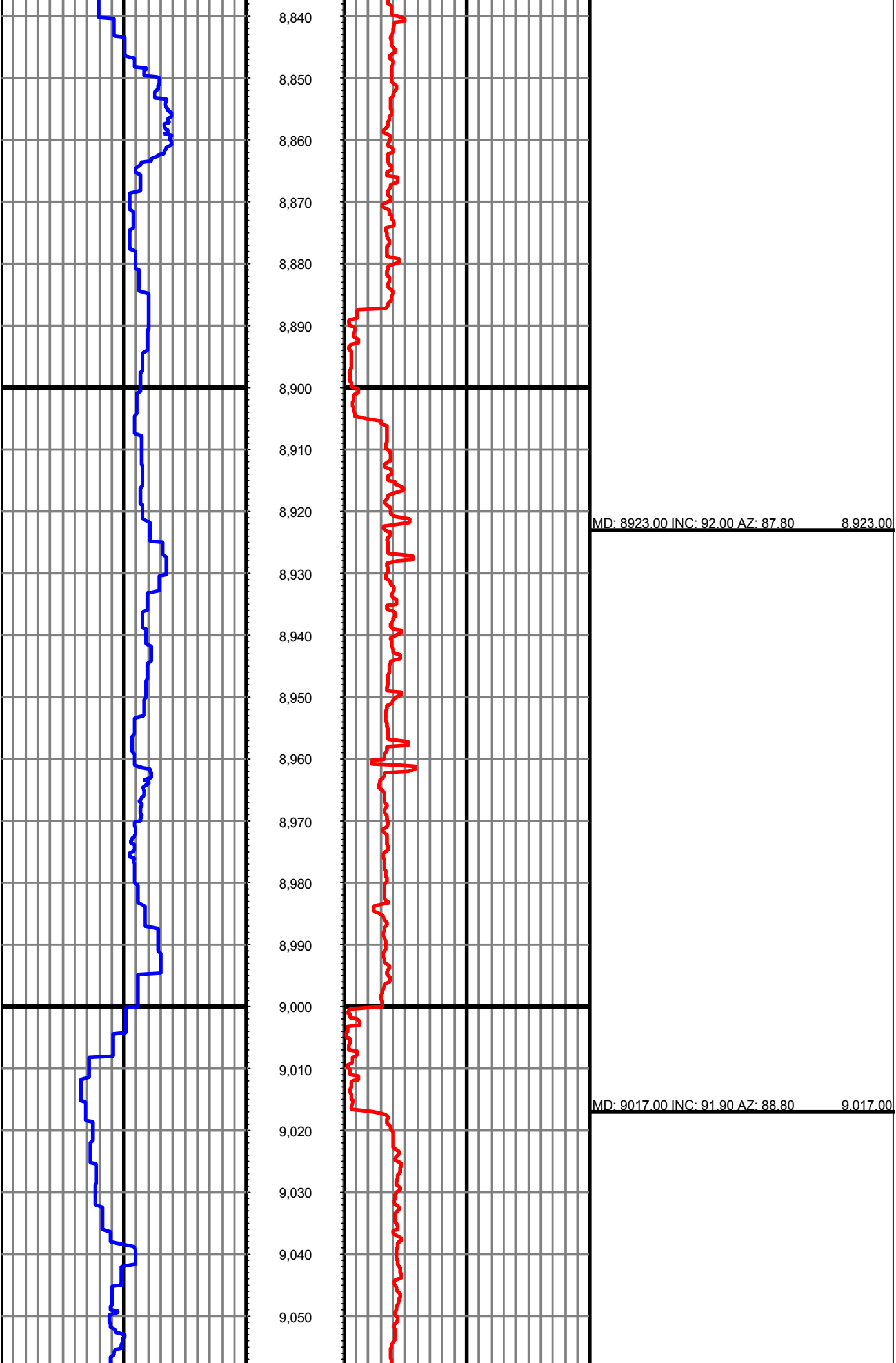
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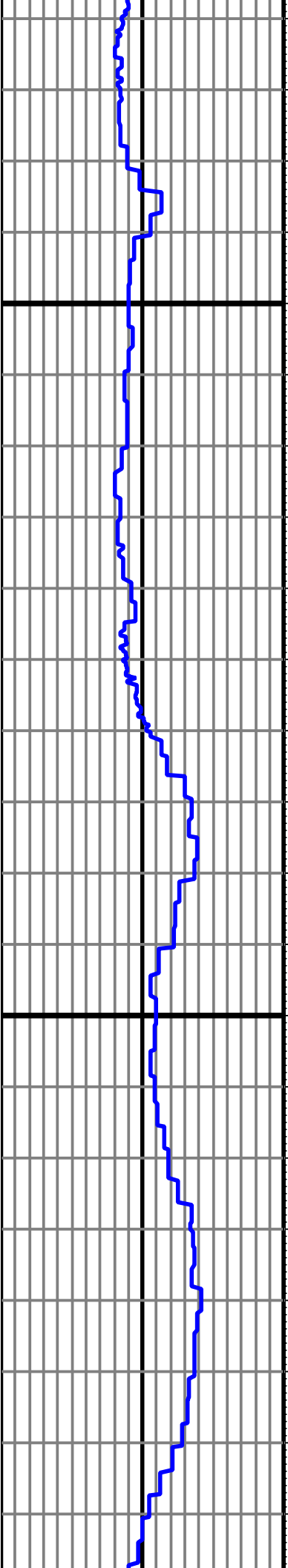
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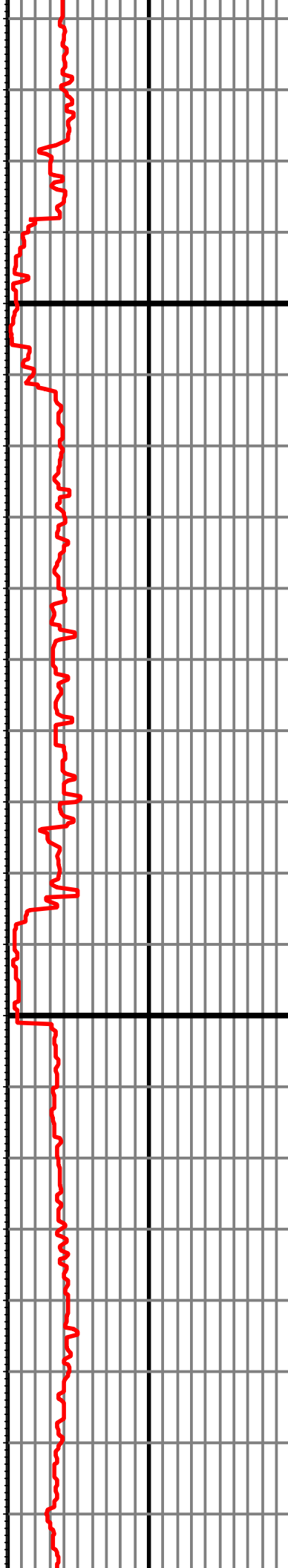






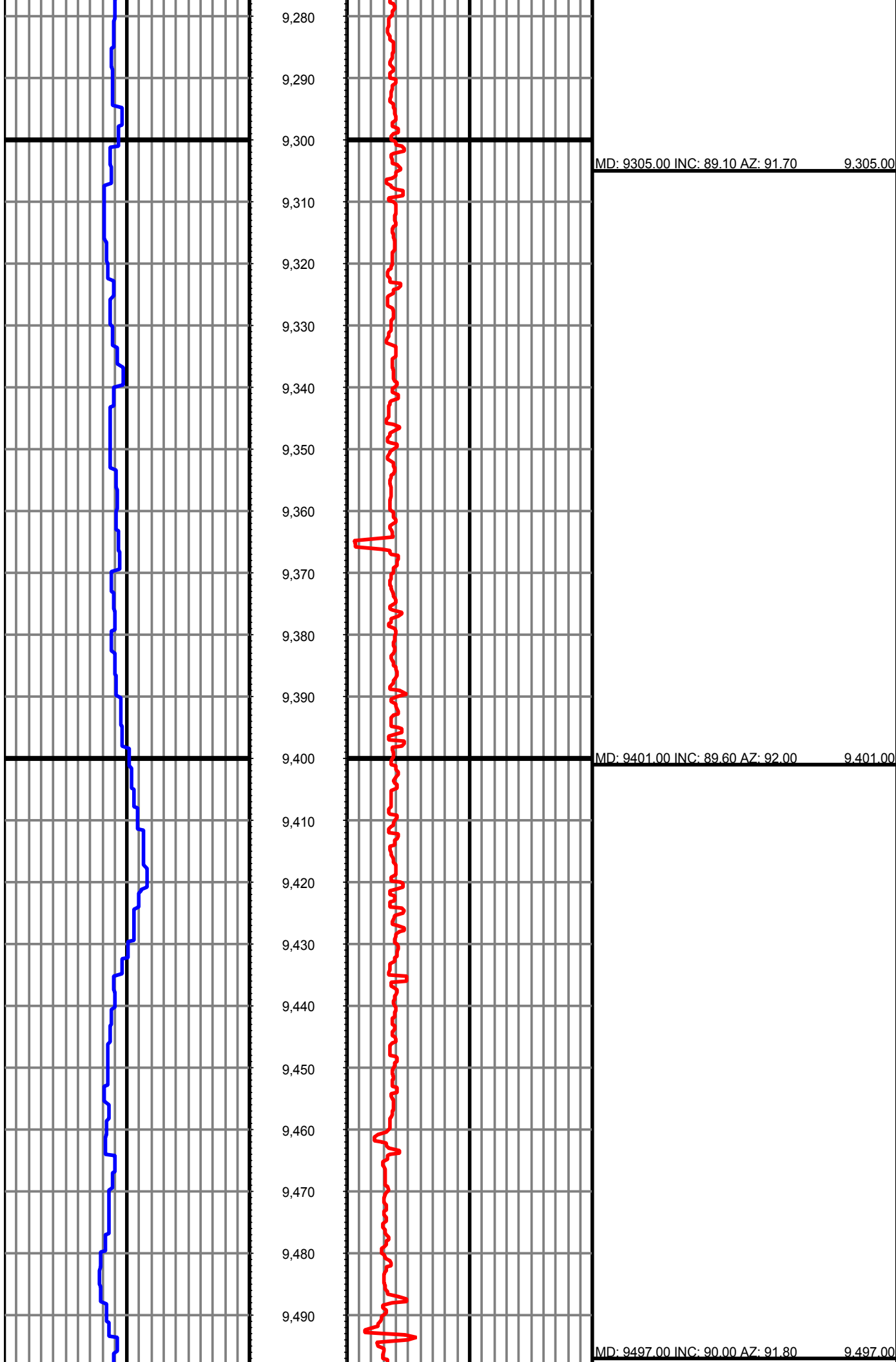


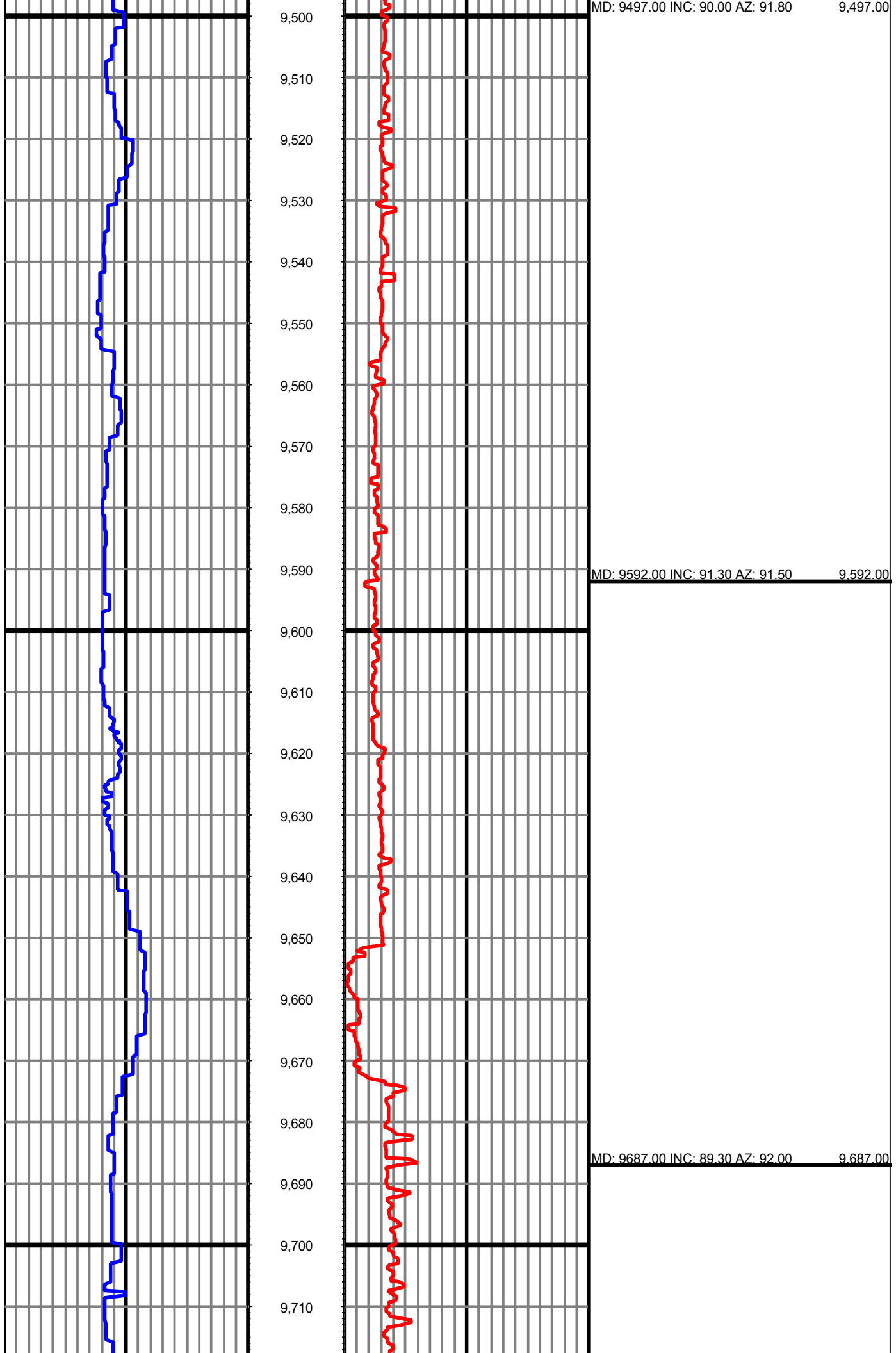
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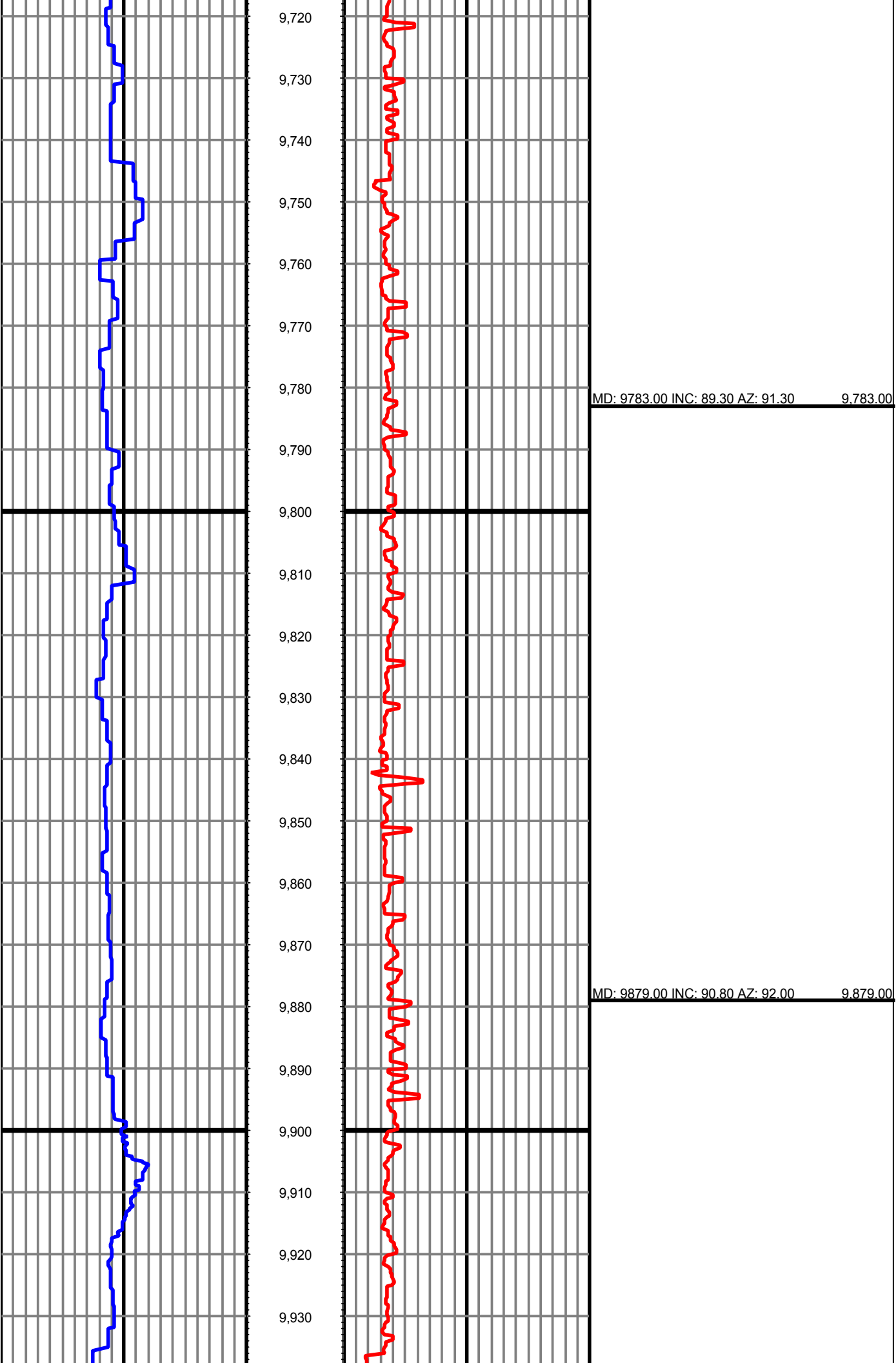


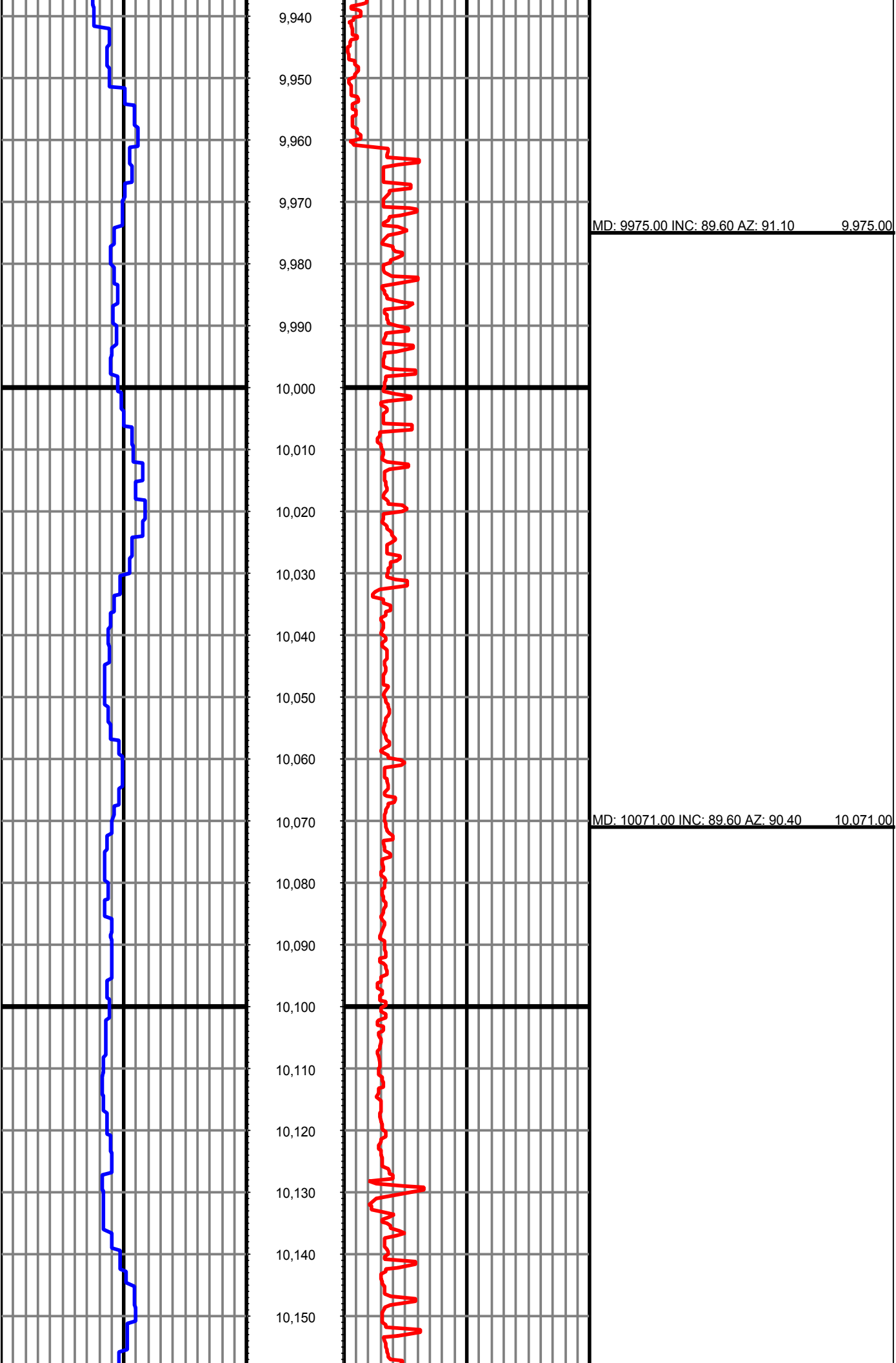
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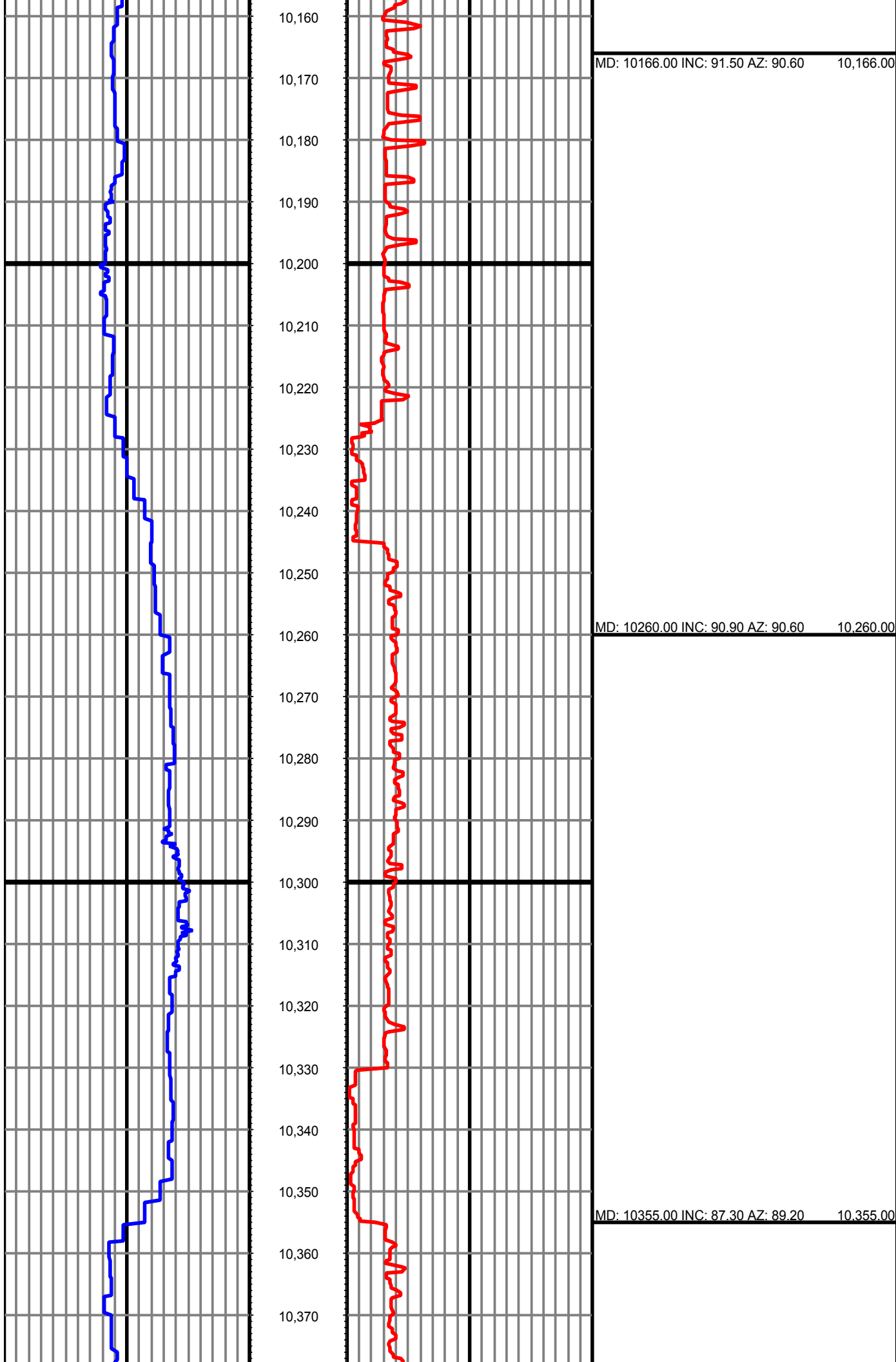
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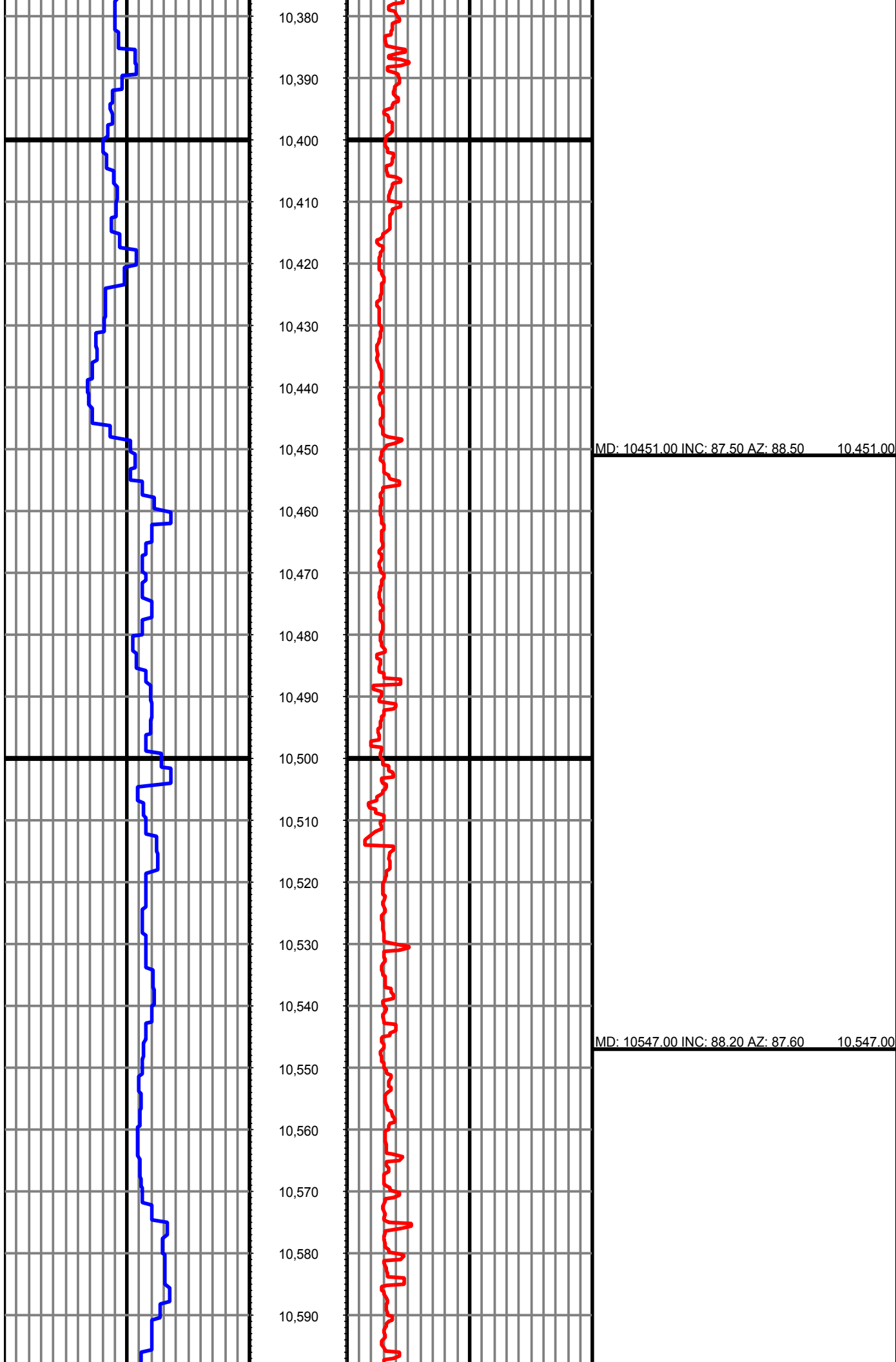


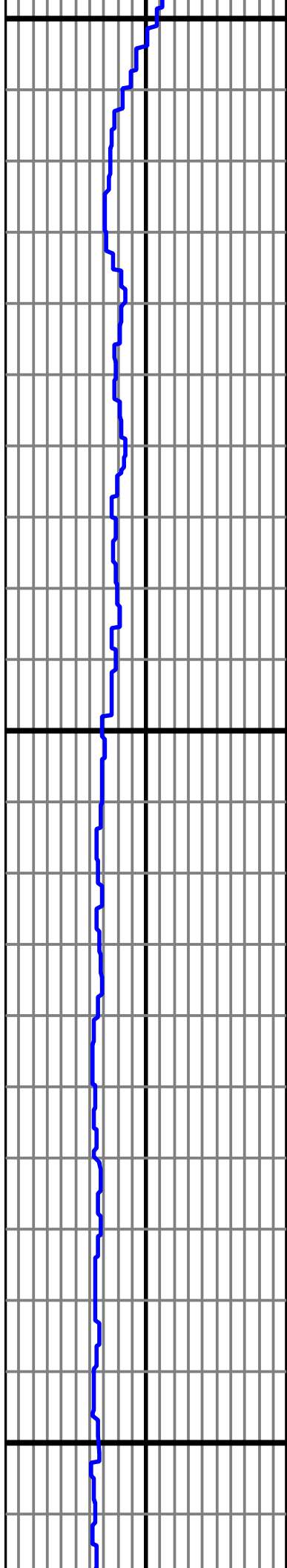




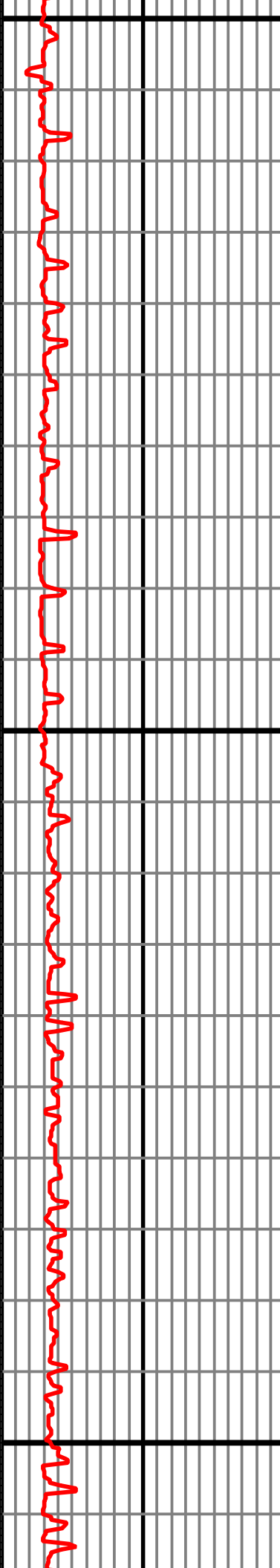








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MD: 10642.00 INC: 88.70 AZ: 86.90 10,642.00

MD: 10739.00 INC: 89.70 AZ: 86.20 10,739.00

MD: 10804.00 INC: 90.00 AZ: 85.00 10,804.00

