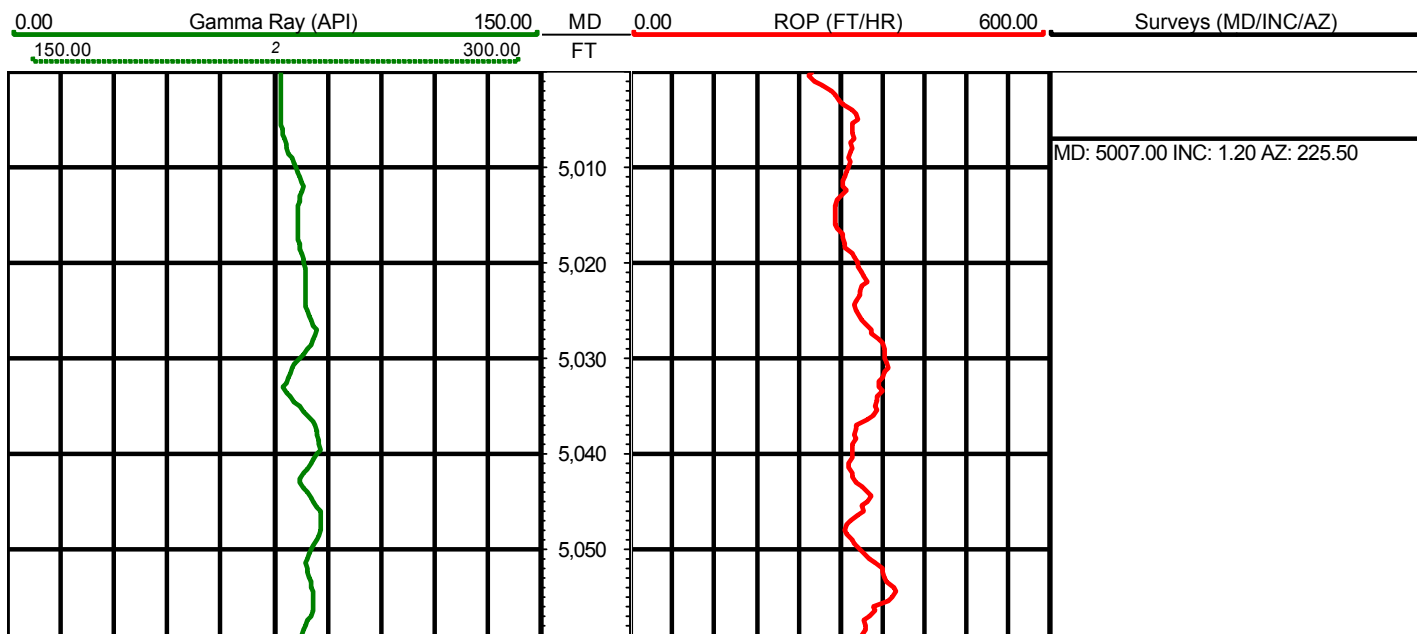
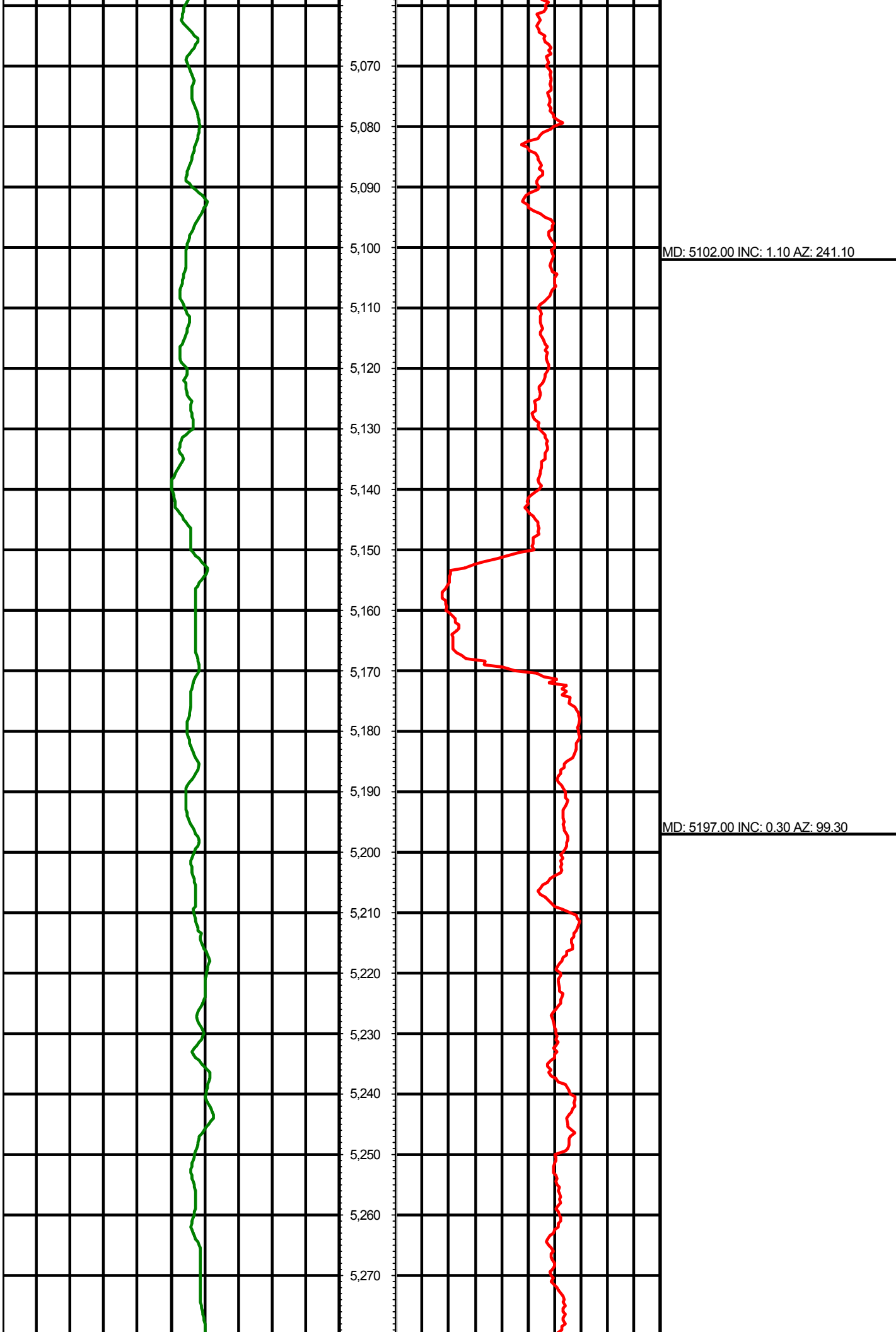


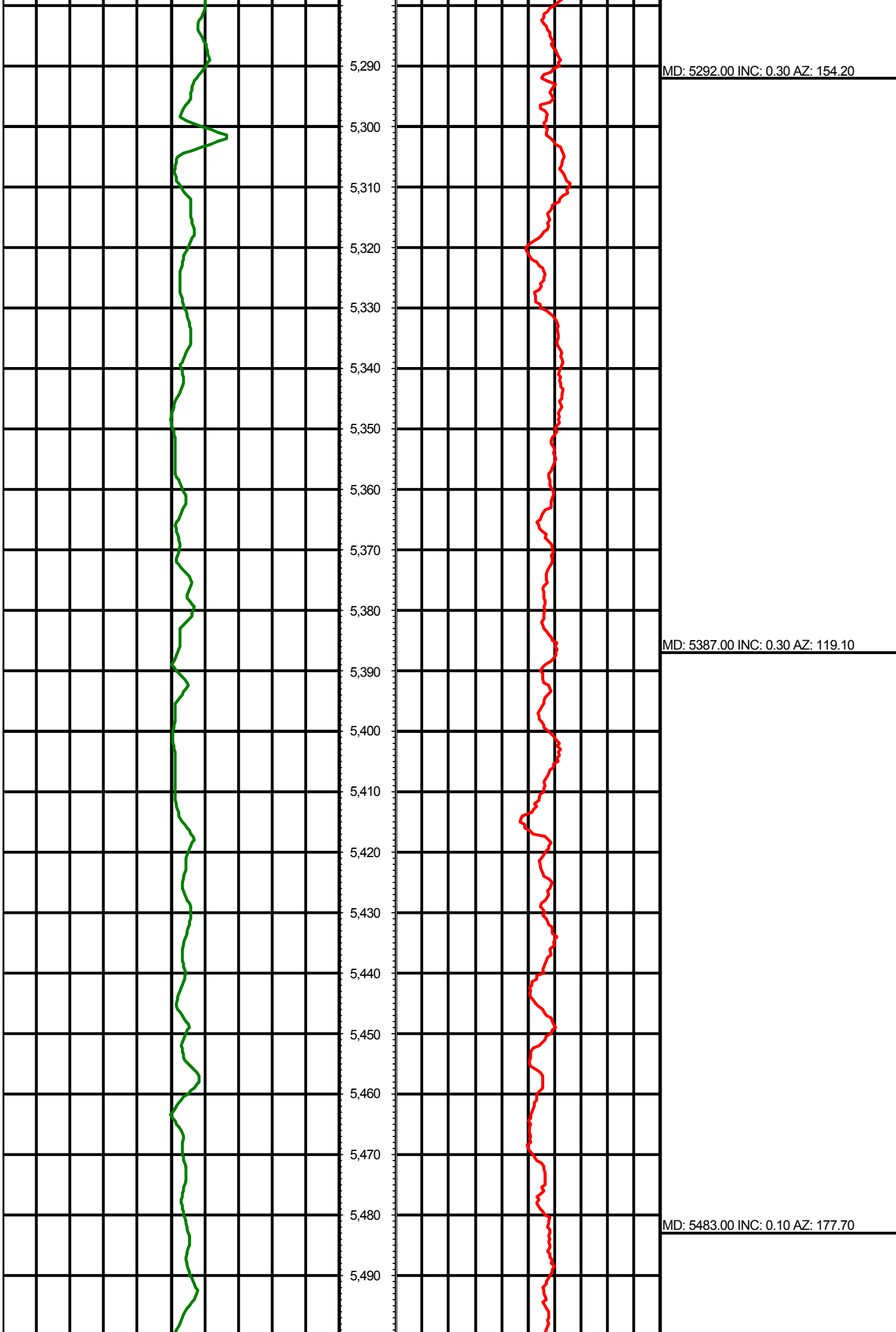
**Cathedral Energy Services**1949 North Pyrite Road
Casper, Wyoming 82604**Edith Ann-Duckworth 4D-21H 0268****Scale 5":100' - MD****7/21/2014 9:29 AM****Oper. Company:** Encana Oil & Gas**Well:** Edith Ann-Duckworth 4D-21H 0268**Field:** DJ Basin**Rig:** Patterson 272**Well ID:** 05 123 38081 00**Job Number:** 145209**State:** Colorado**County:** Weld**Country:** US**Location:** S21-T2N-R68W**Start Date:** 04/06/2014 11:30:00**End Date:** 07/19/2014 01:00:00**Latitude:** 40.117670**Longitude:** -105.003590**Elev KB:** 4954.5**Elev DF:****Elev GL:** 4926**Notes:** Log and Survey Depths Relative to Kelly Bushing (KB) Depth**Operator 1:** Richie Moulton**Operator 2:** Erick King

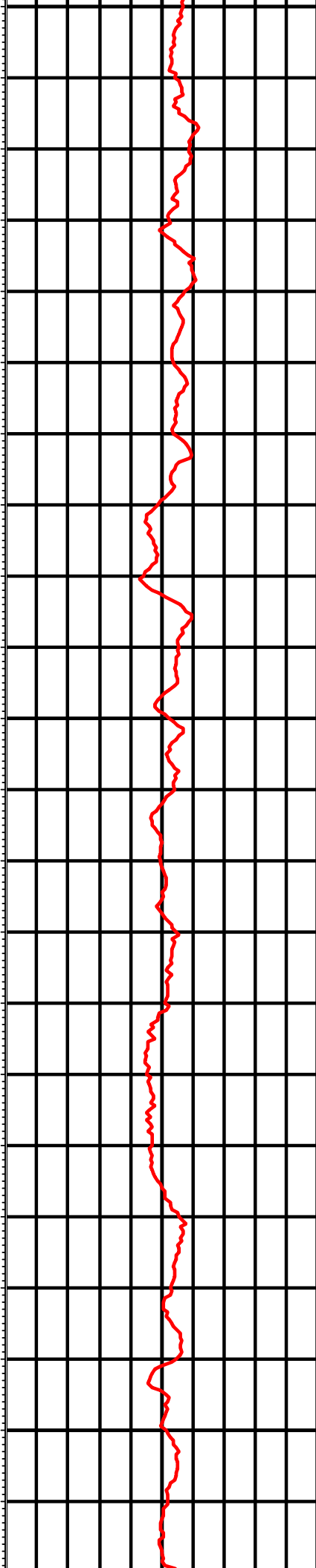
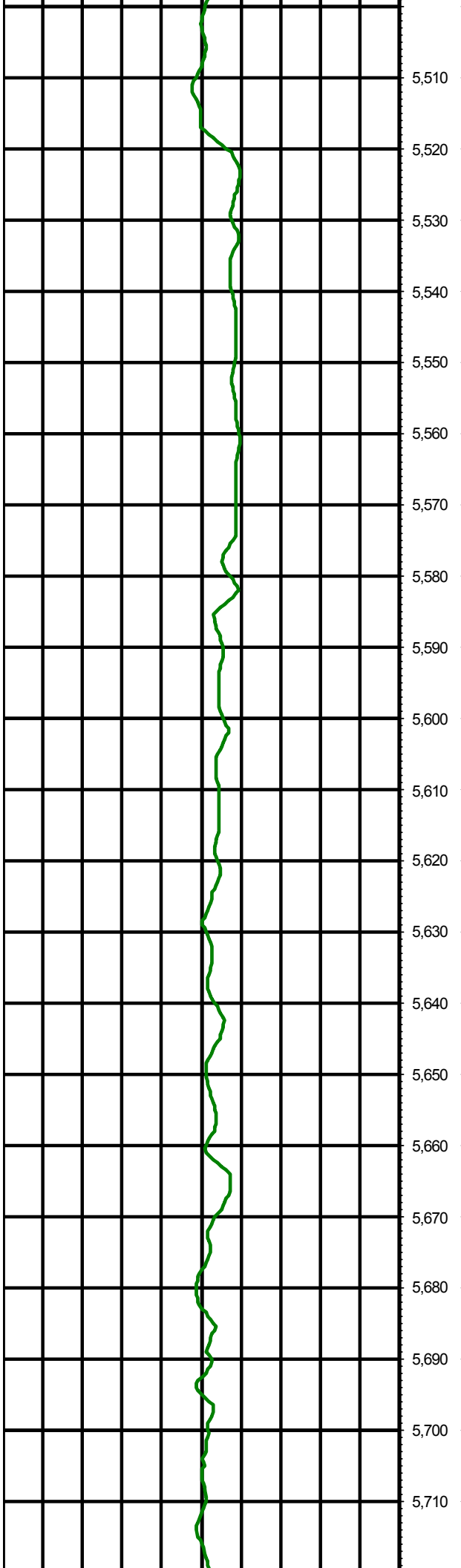
Tool Run Data	Run #1	Run #2	Run #3	Run #4	Run #5
Tool S/N	1519	1519	1519	1519	
Cal Factor	0	2.2	2.0	20.	
Gamma Offset	0.00	36.01	39.55	39.42	
Resistivity Offset	0.00	0.00	0.00	0.00	
Start Depth	0.00	954.00	7941.00	14026.00	
StartDate	4/6/2014	4/7/2014	7/10/2014	7/15/2014	
StartTime	11:30 PM	9:00 PM	10:30 AM	11:30 PM	
EndDepth	954.00	7941.00	14026.00	17188.00	
EndDate	4/6/2014	4/10/2014	7/15/2014	7/19/2014	
EndTime	6:45 PM	2:00 PM	9:30 PM	1:30 AM	
Hole Data			Casing Data		
Size	From	To	Size	From	To
12-1/4	0.00	954.00	9-5/8	0.00	915.00
8-3/4	954.00	7941.00	7	0.00	7900.00
6-1/8	7941.00	17188.00	4-1/2	0.00	17172.00

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.



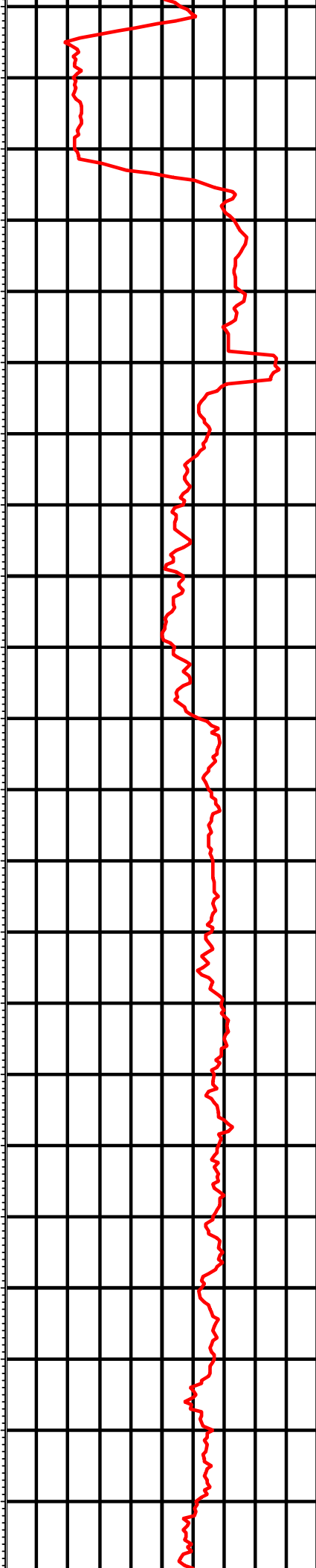
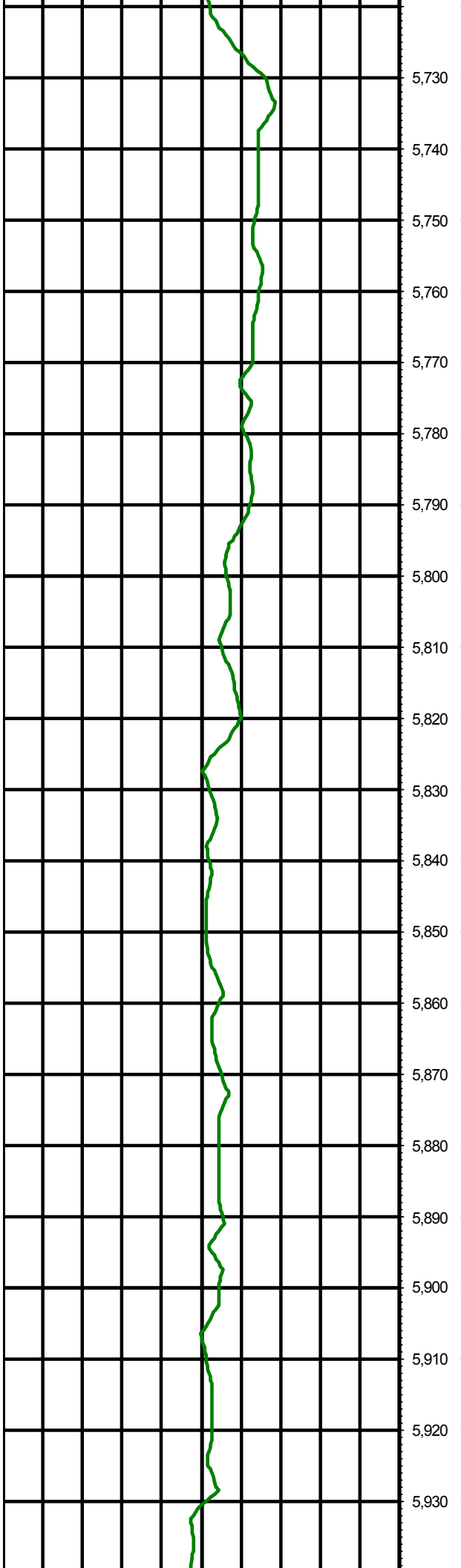






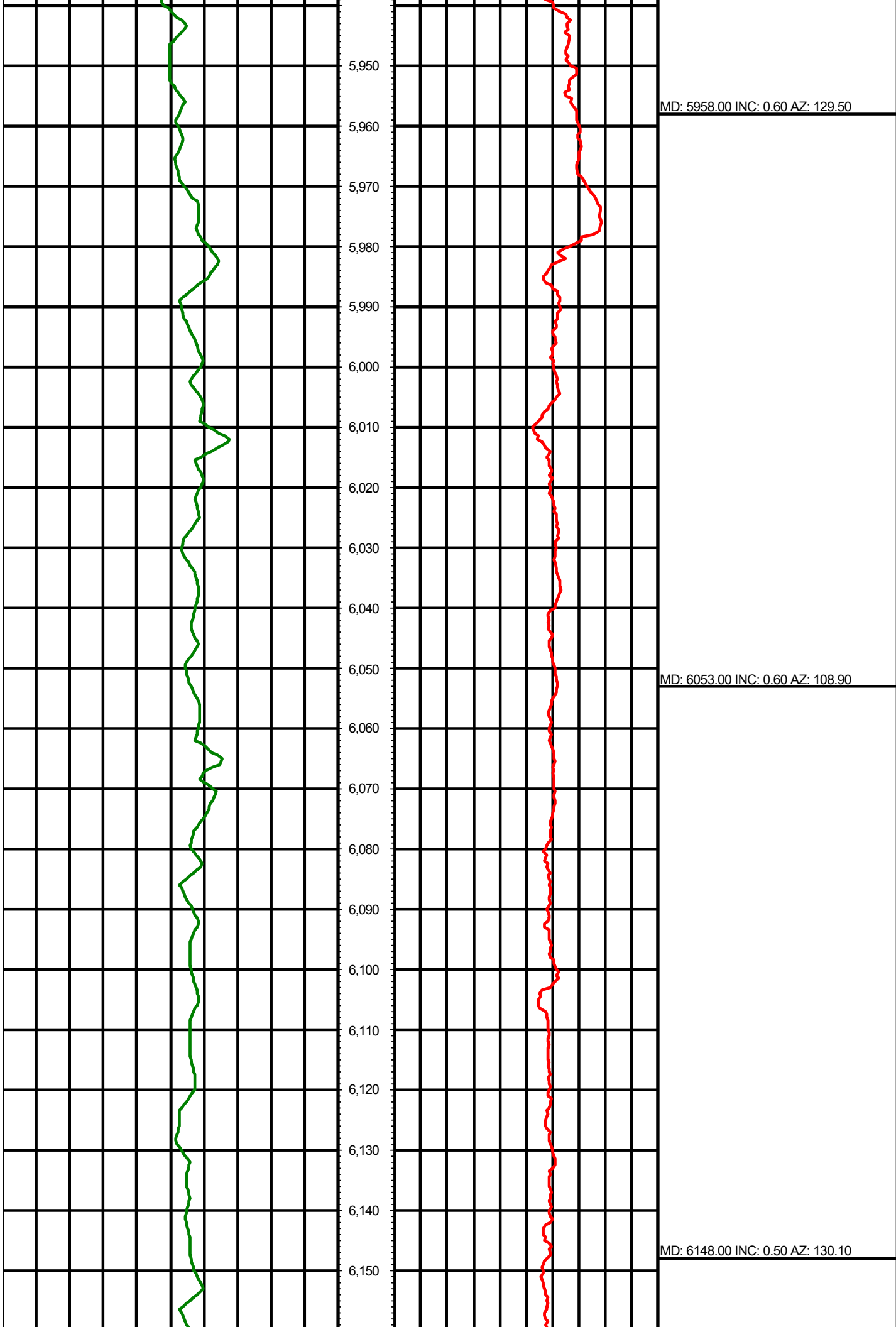
MD: 5578.00 INC: 0.30 AZ: 5.40

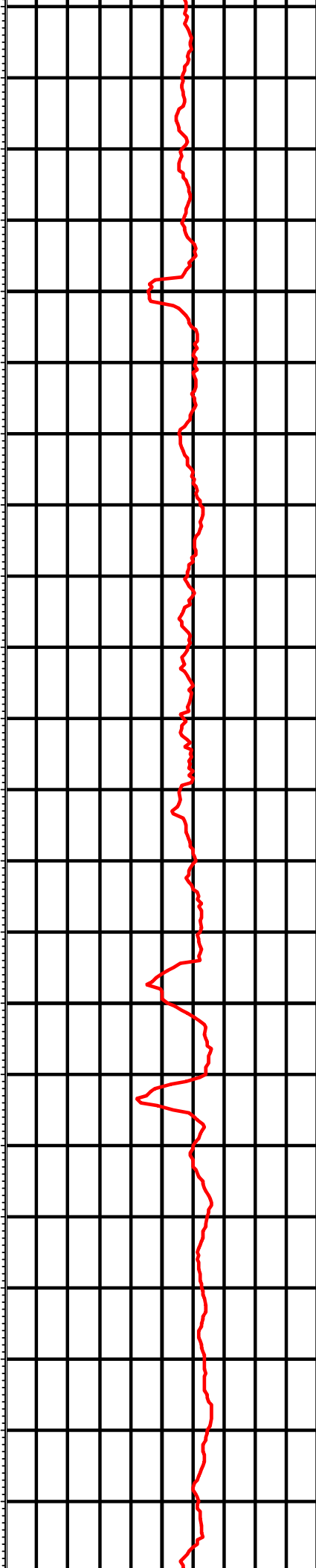
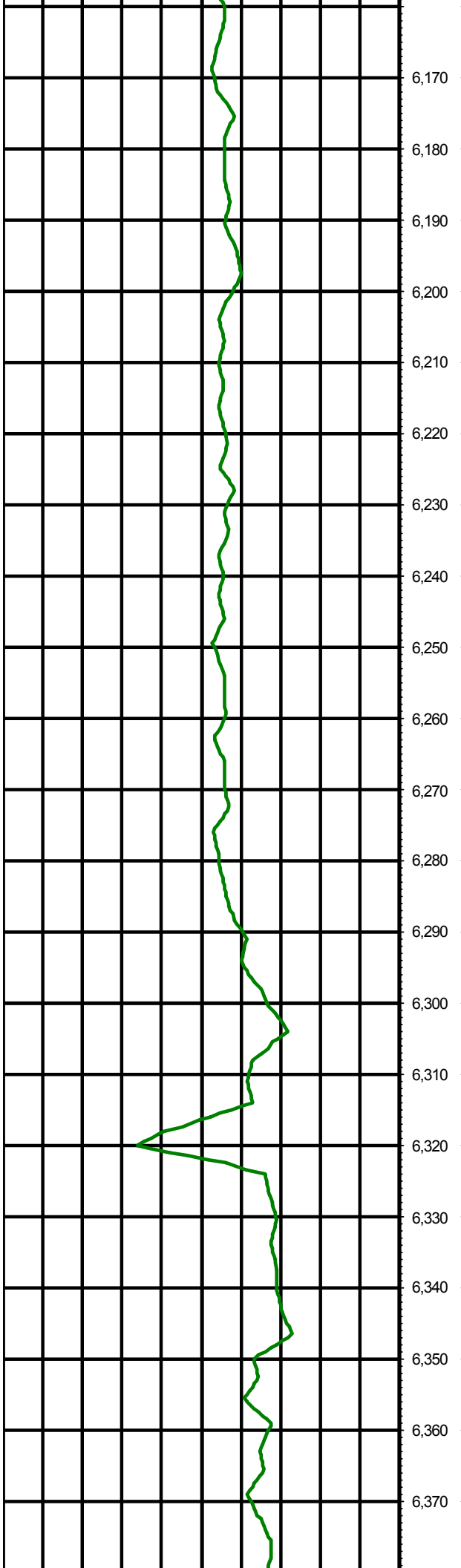
MD: 5673.00 INC: 0.40 AZ: 8.10



MD: 5768.00 INC: 1.30 AZ: 109.30

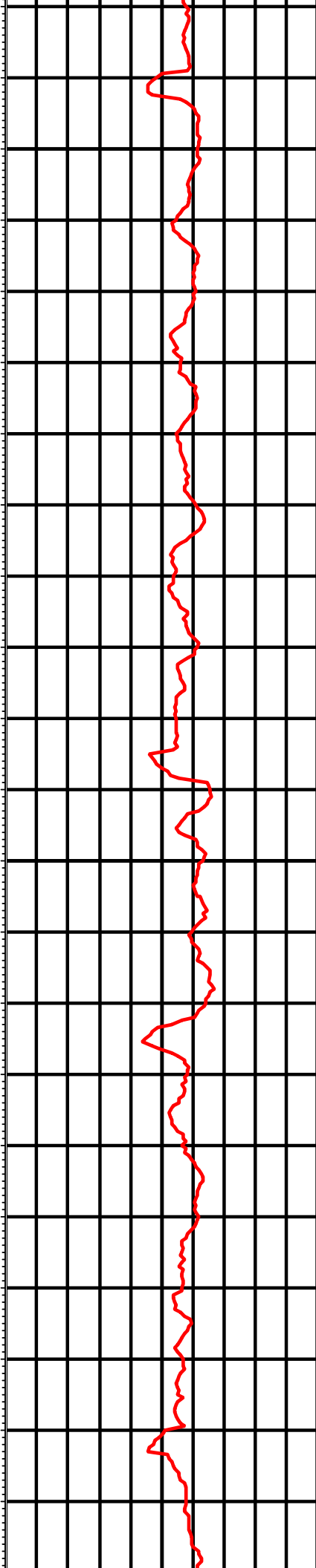
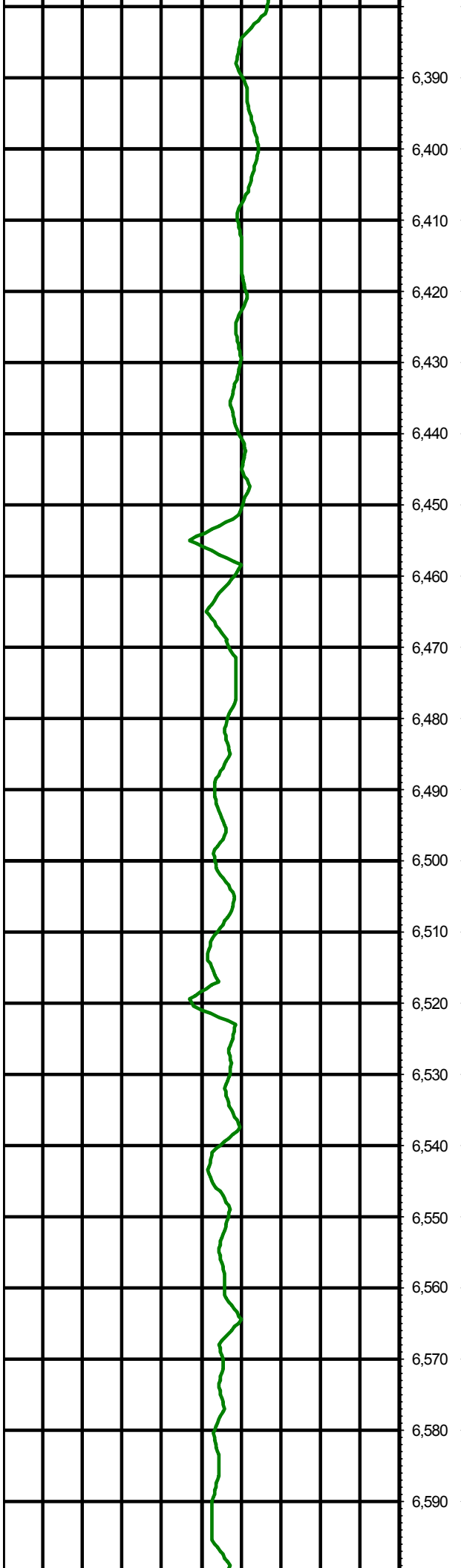
MD: 5863.00 INC: 0.90 AZ: 121.20





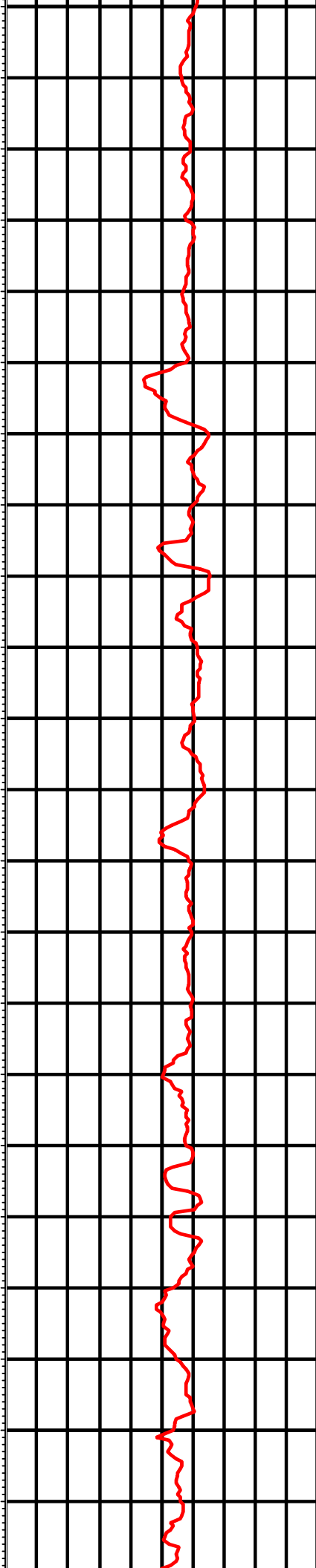
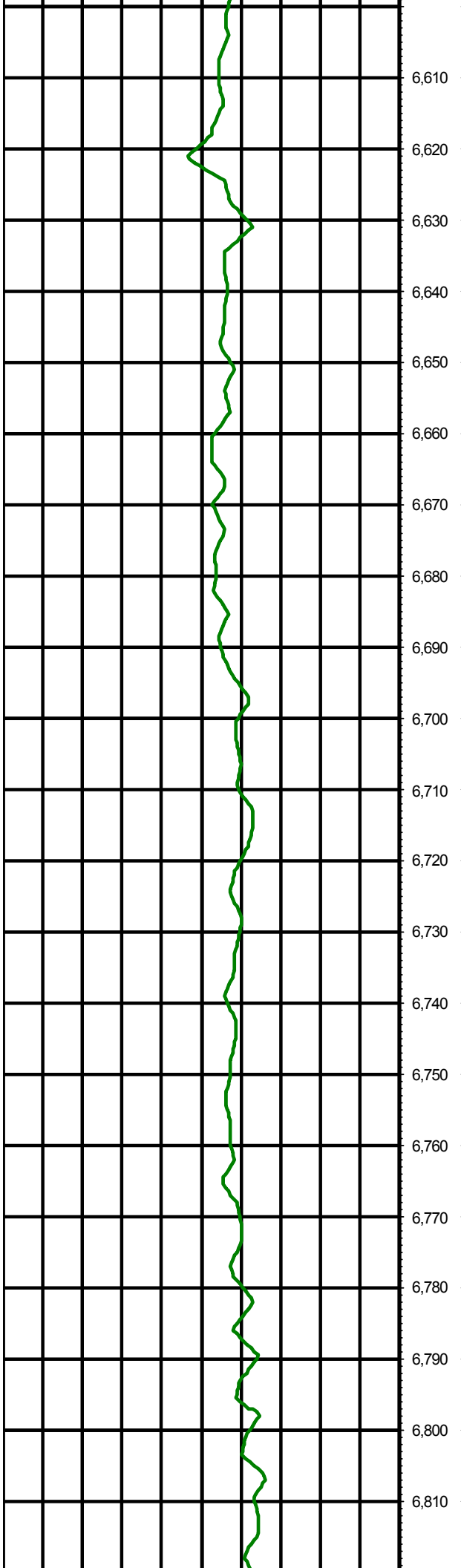
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MD: 6338.00 INC: 0.20 AZ: 140.70



MD: 6434.00 INC: 0.30 AZ: 95.20

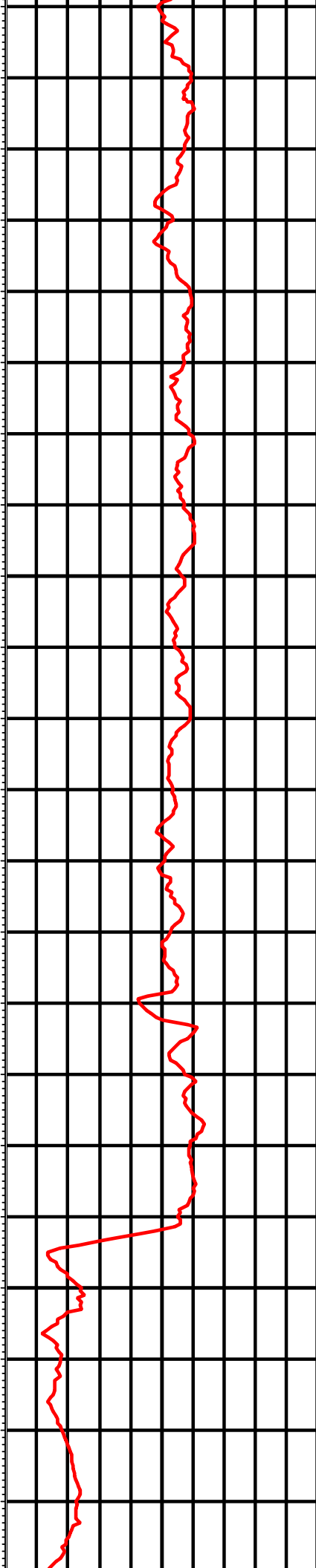
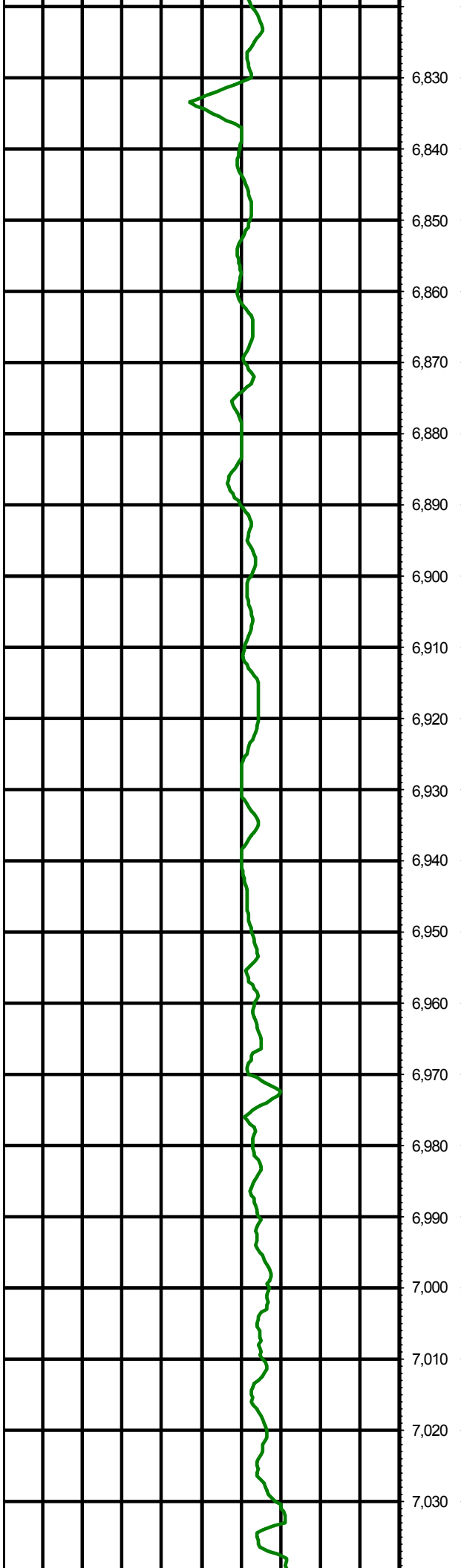
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MD: 6624.00 INC: 0.10 AZ: 299.20

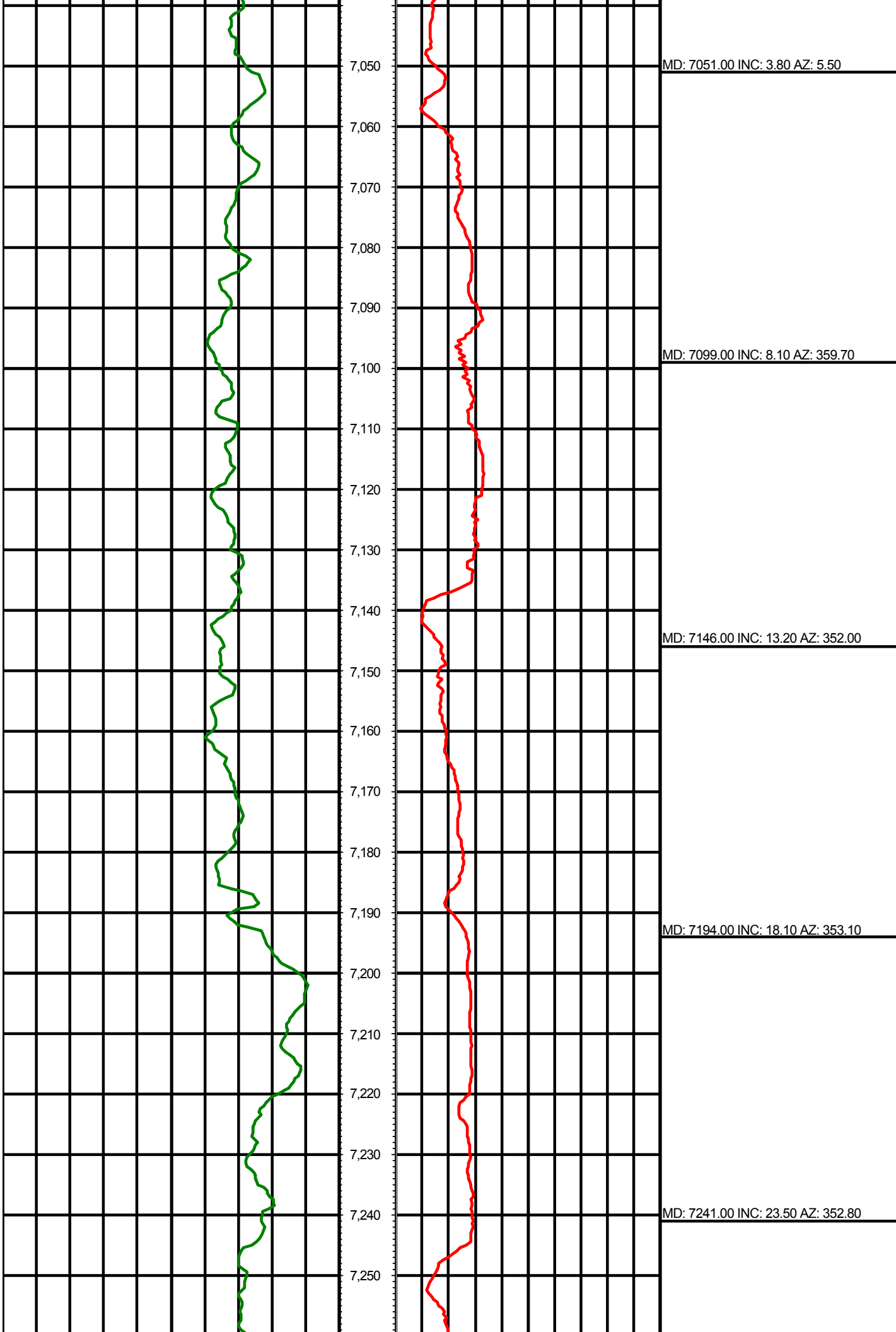
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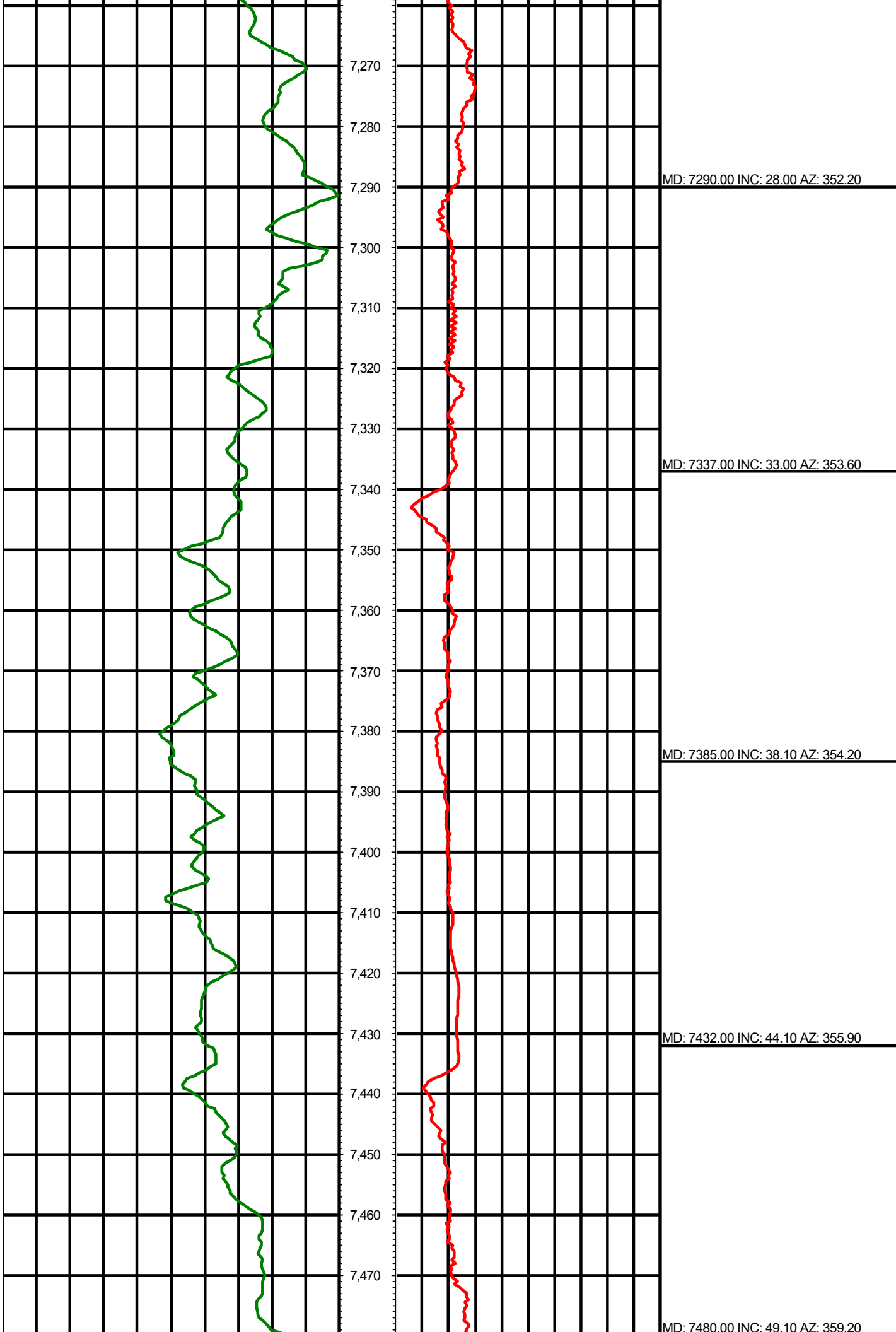
MD: 6814.00 INC: 0.40 AZ: 352.90

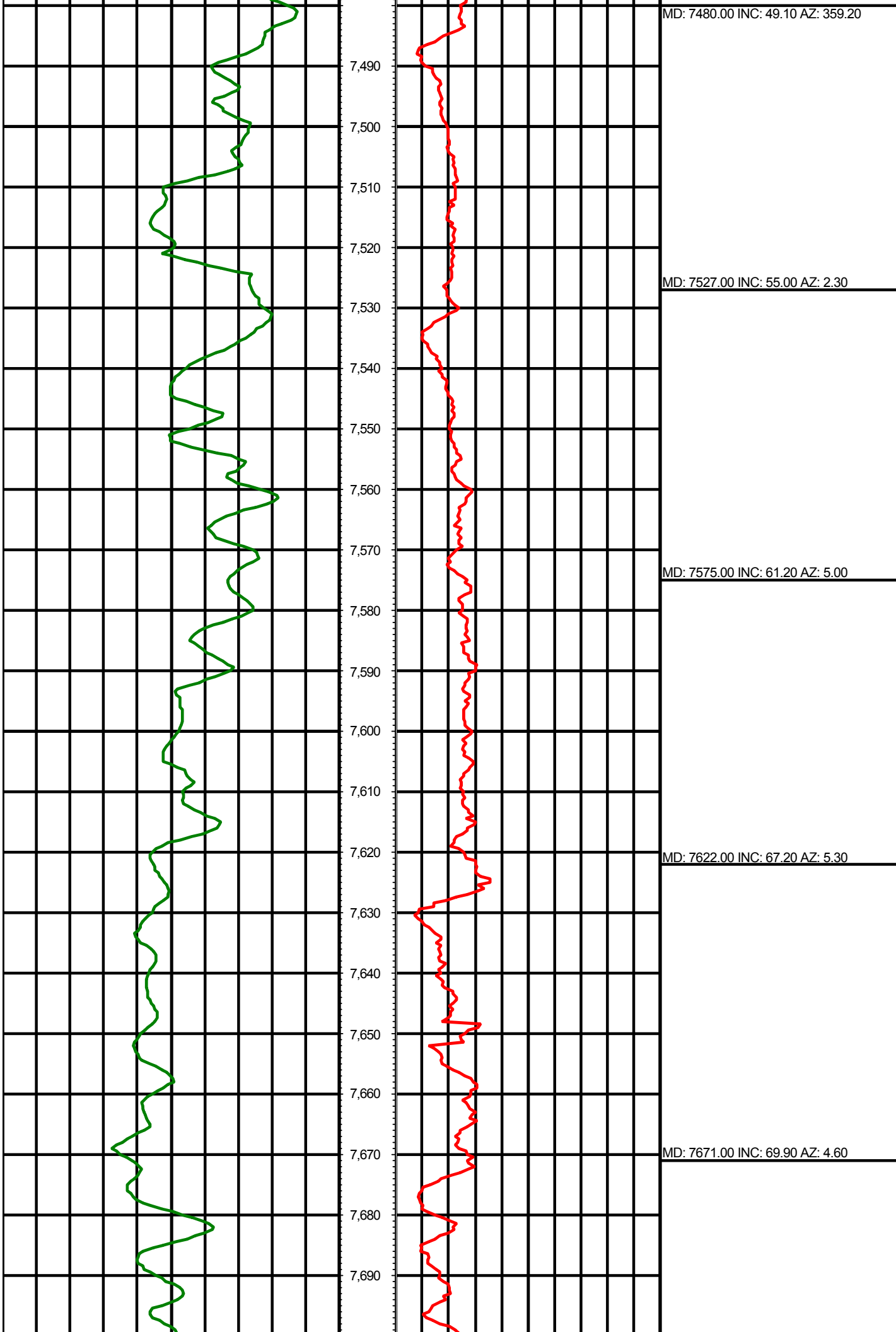


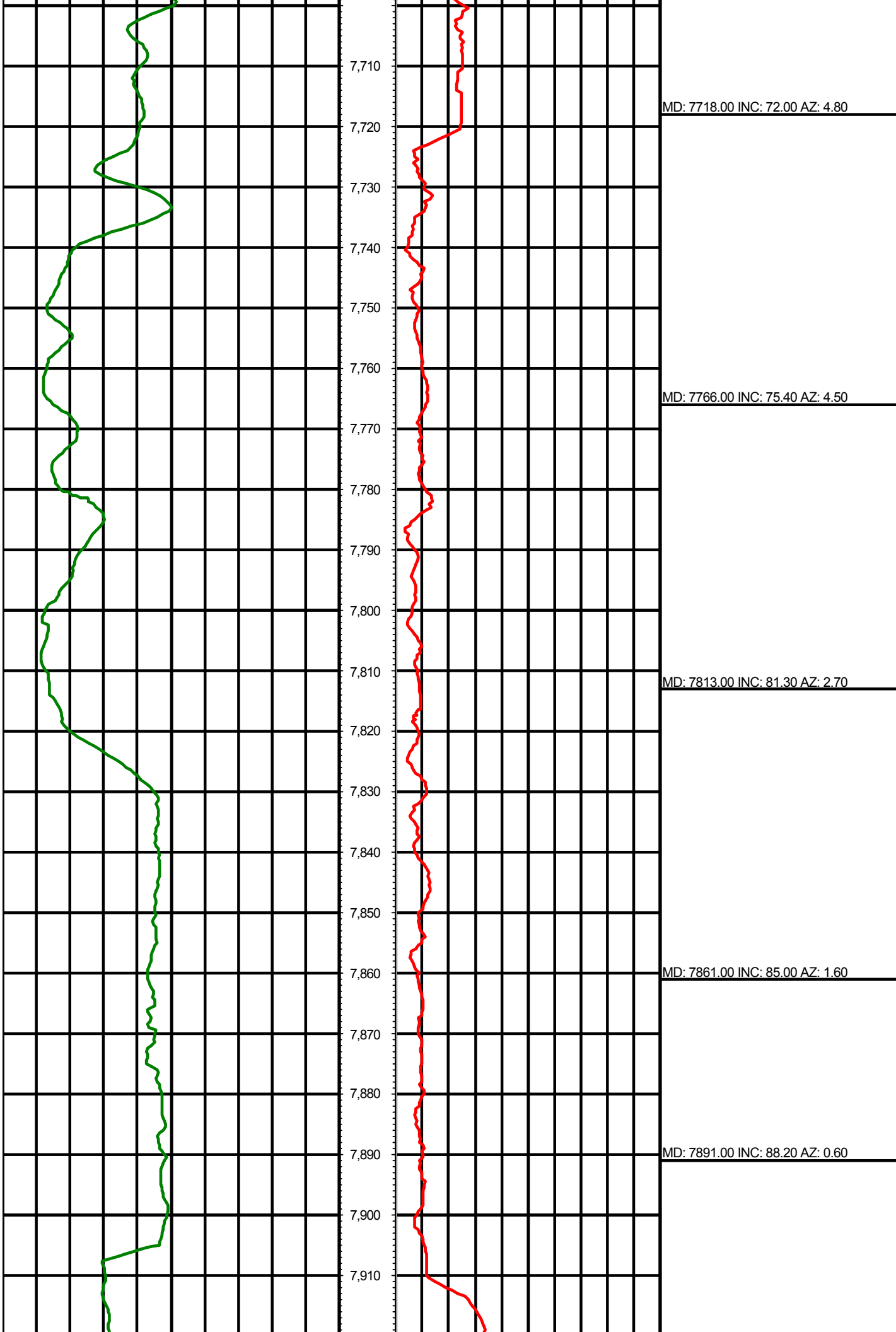
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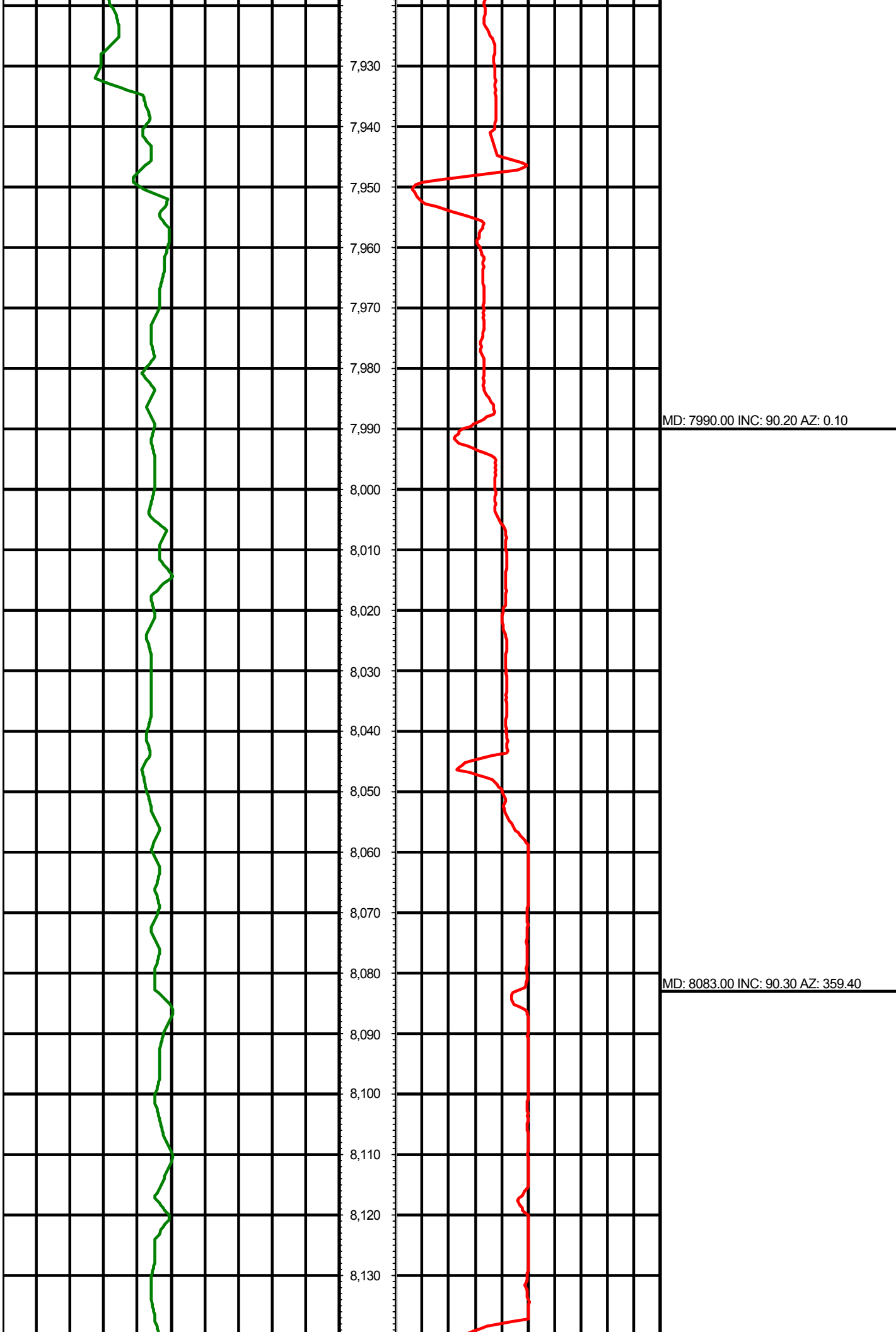
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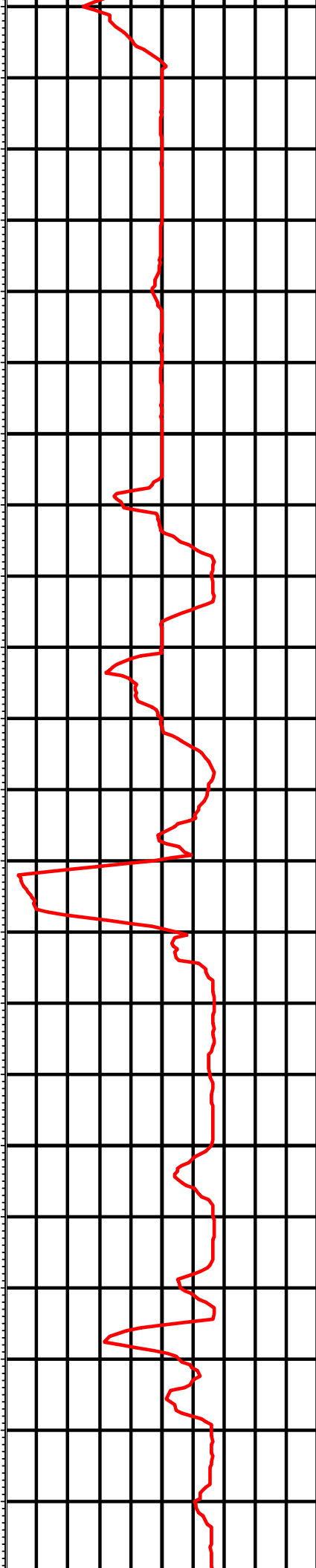
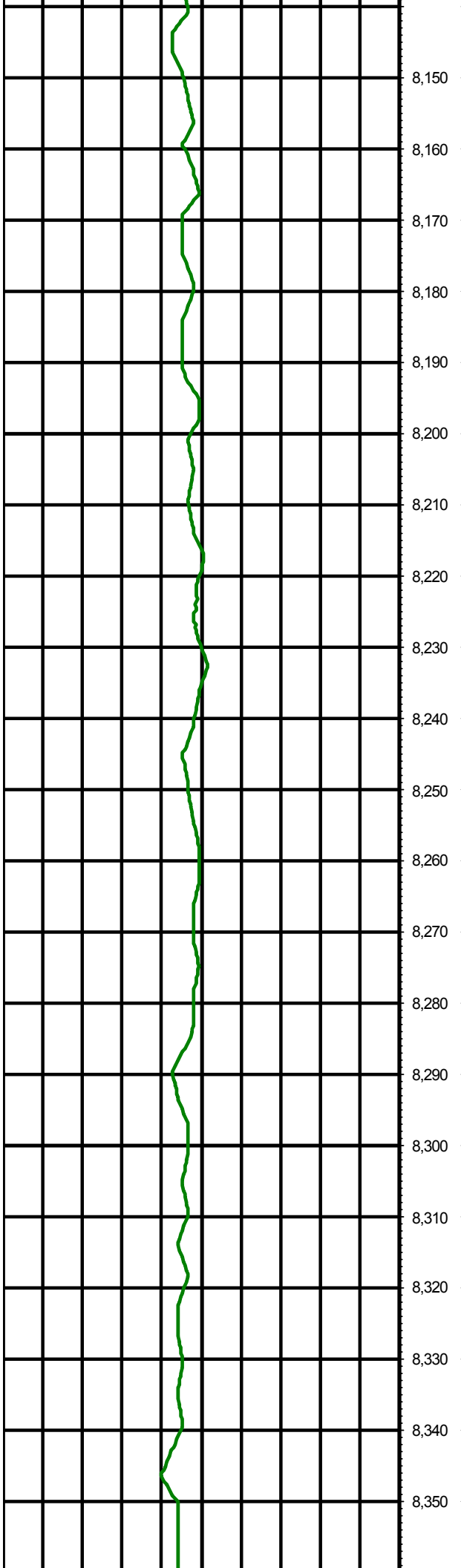












MD: 8177.00 INC: 90.20 AZ: 359.30

MD: 8270.00 INC: 91.10 AZ: 0.00

MD: 8364.00 INC: 90.70 AZ: 359.50

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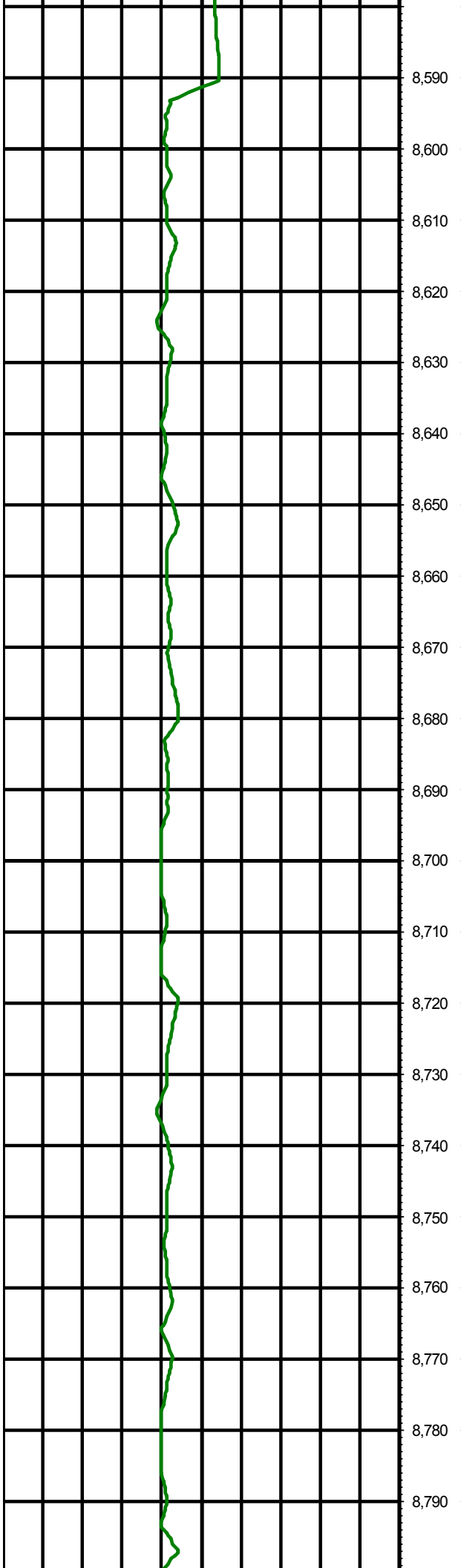
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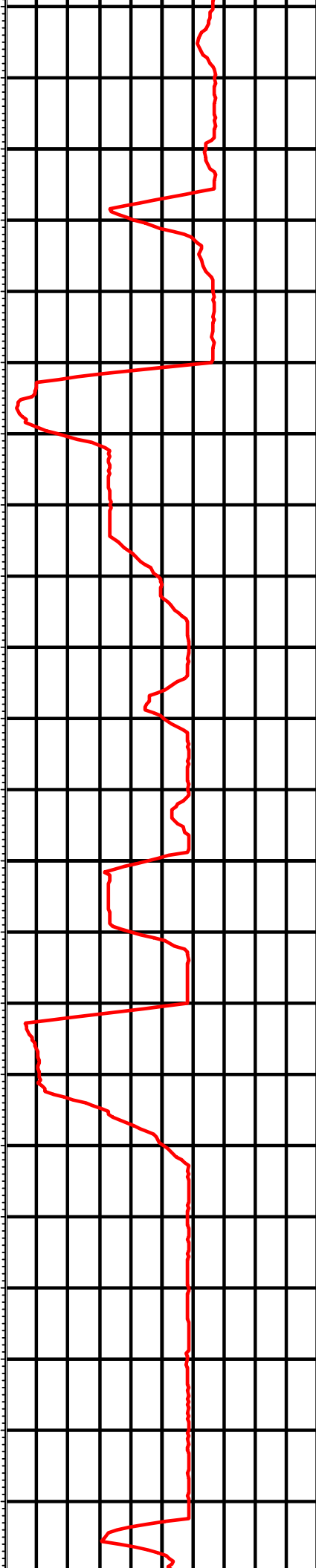
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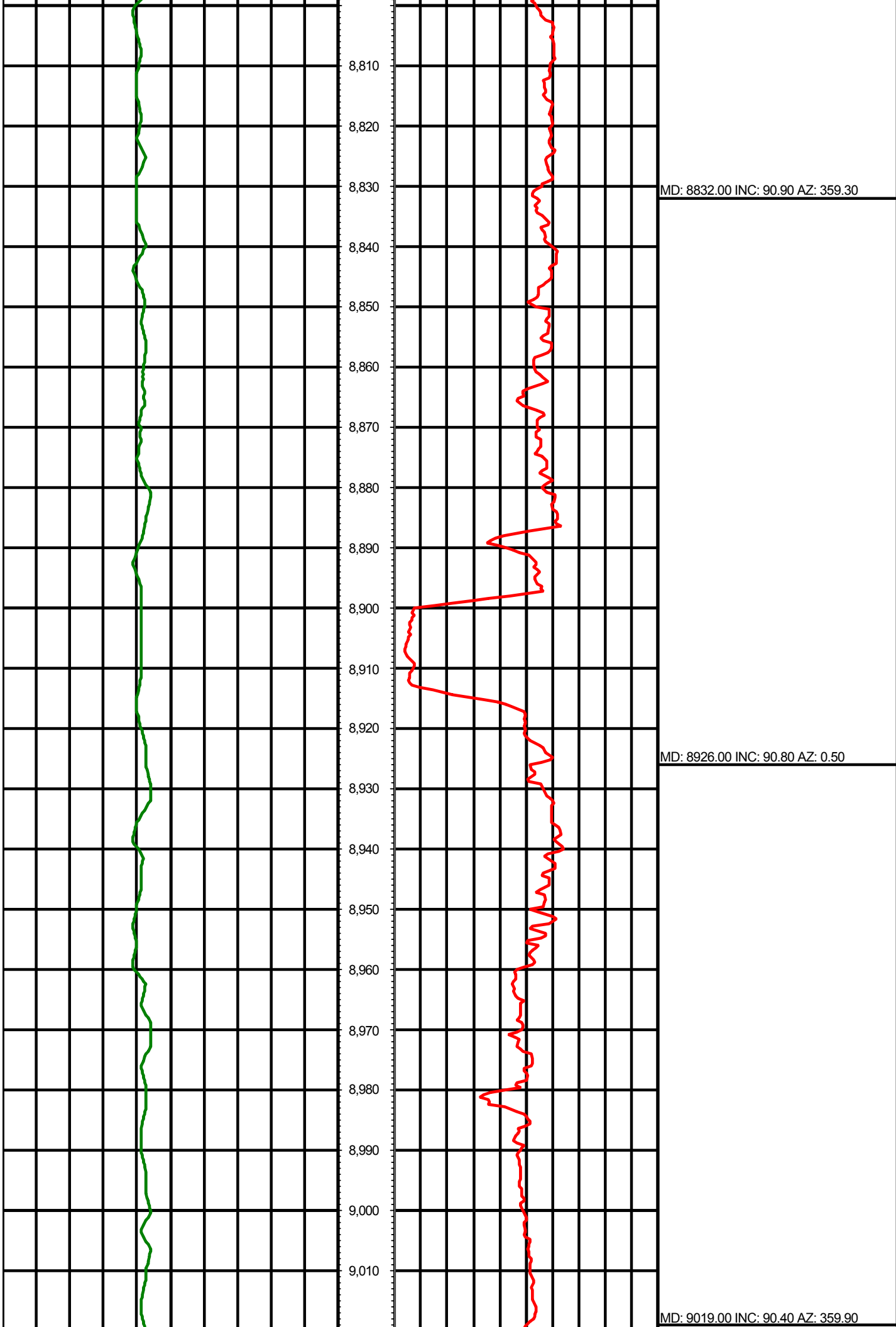


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MD: 8644.00 INC: 90.40 AZ: 359.20

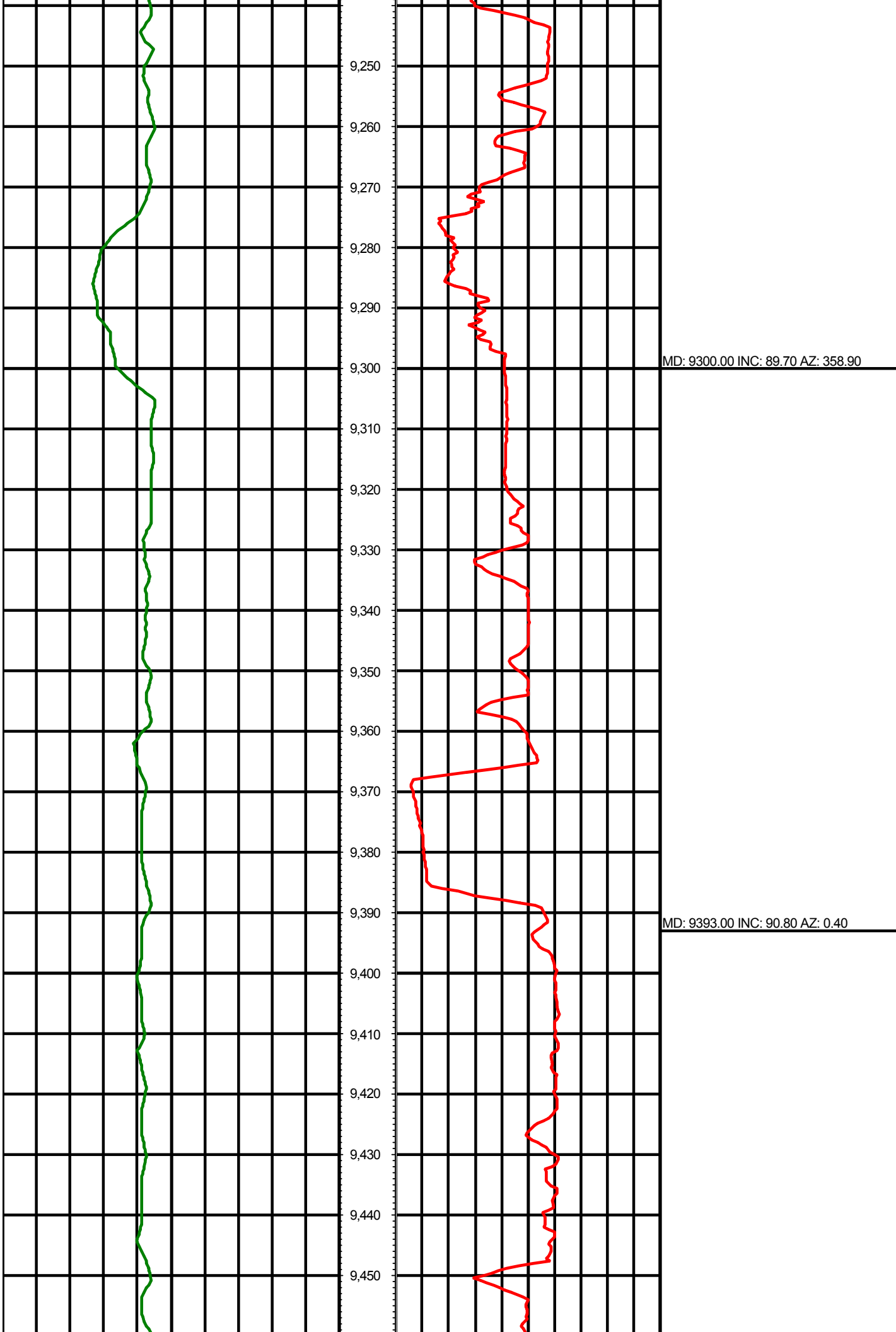
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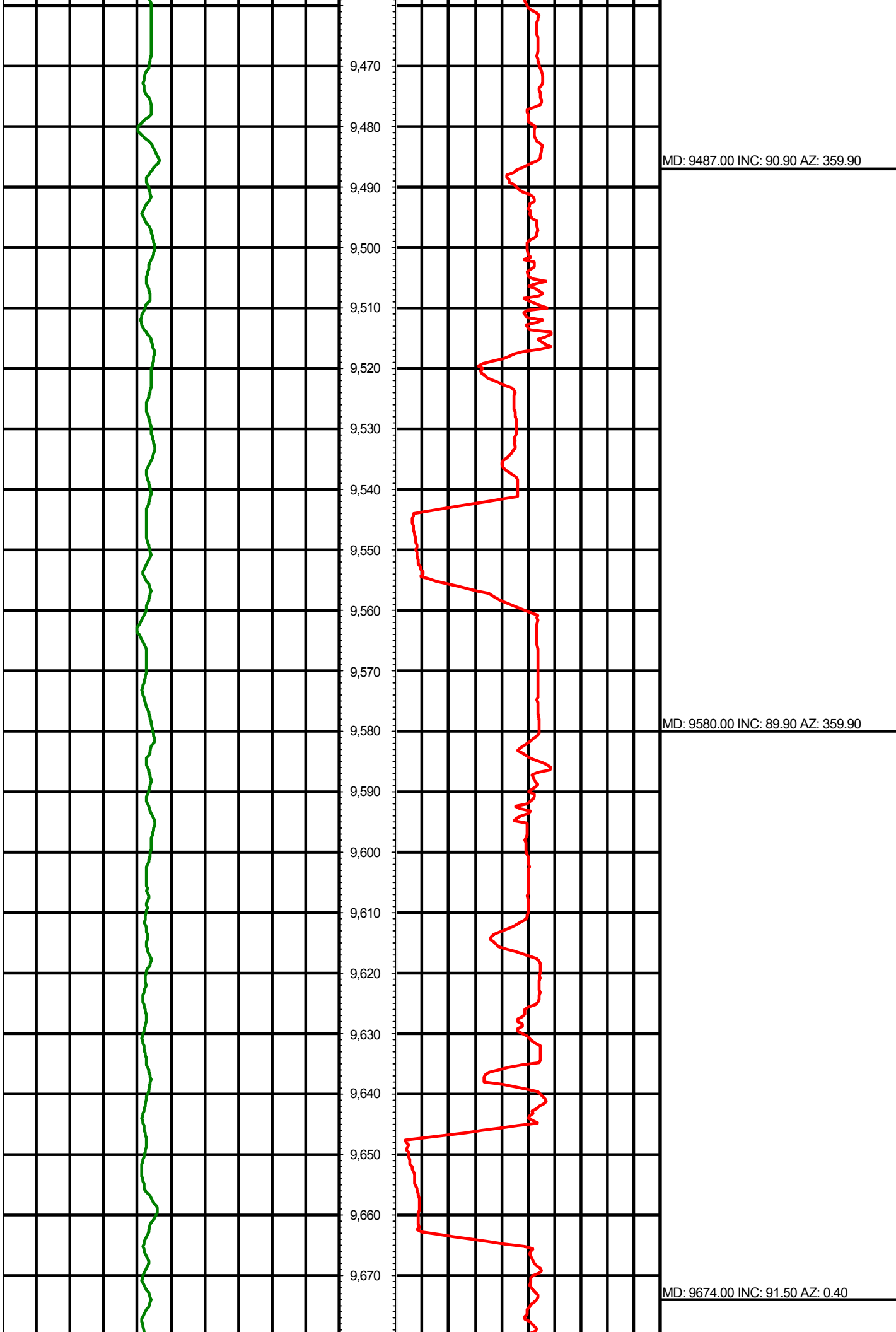


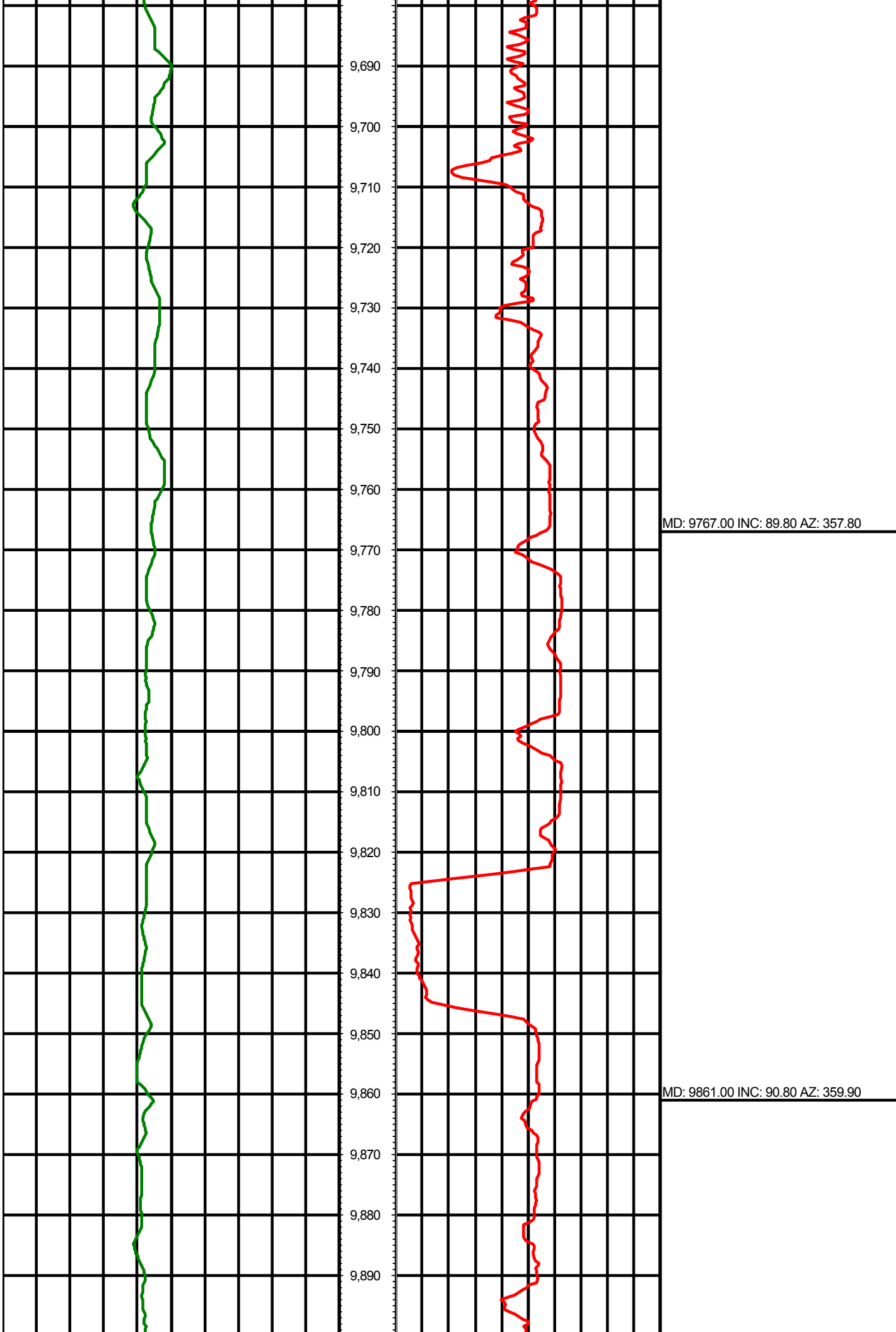
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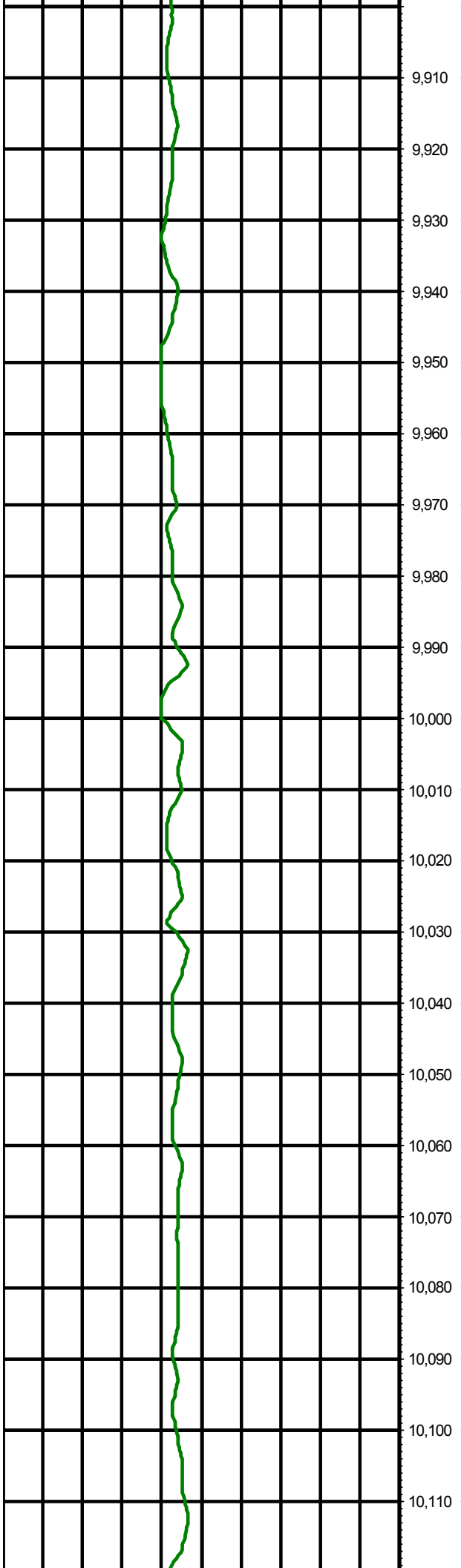
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MD: 9206.00 INC: 90.90 AZ: 0.50

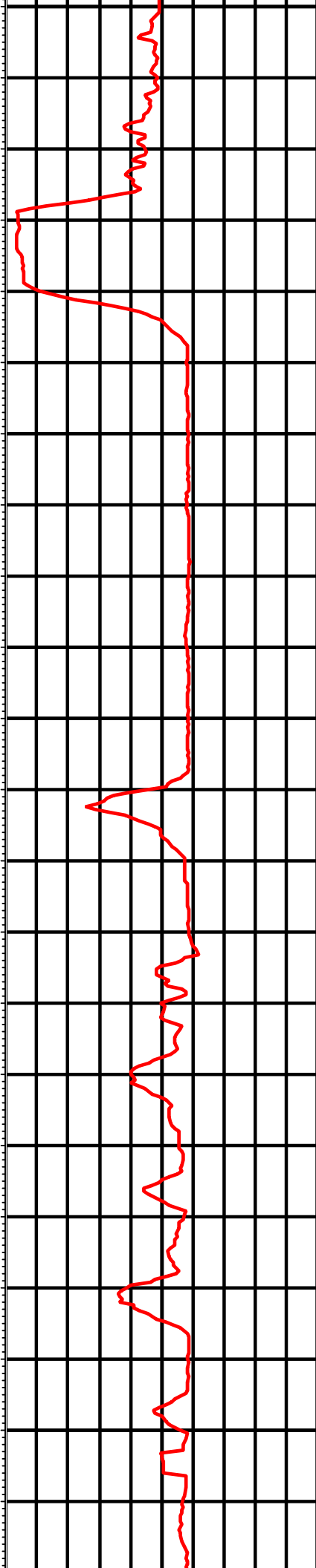






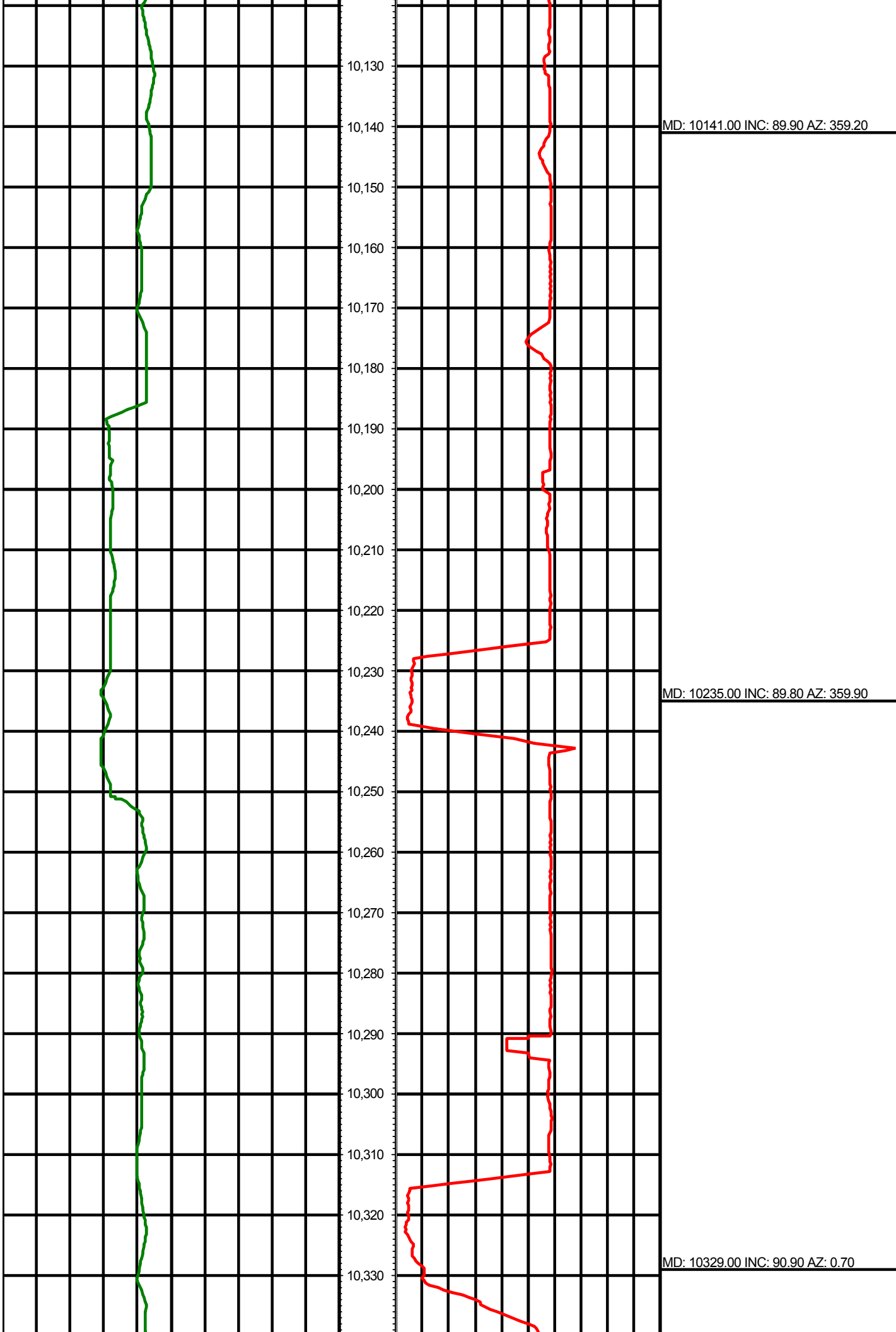


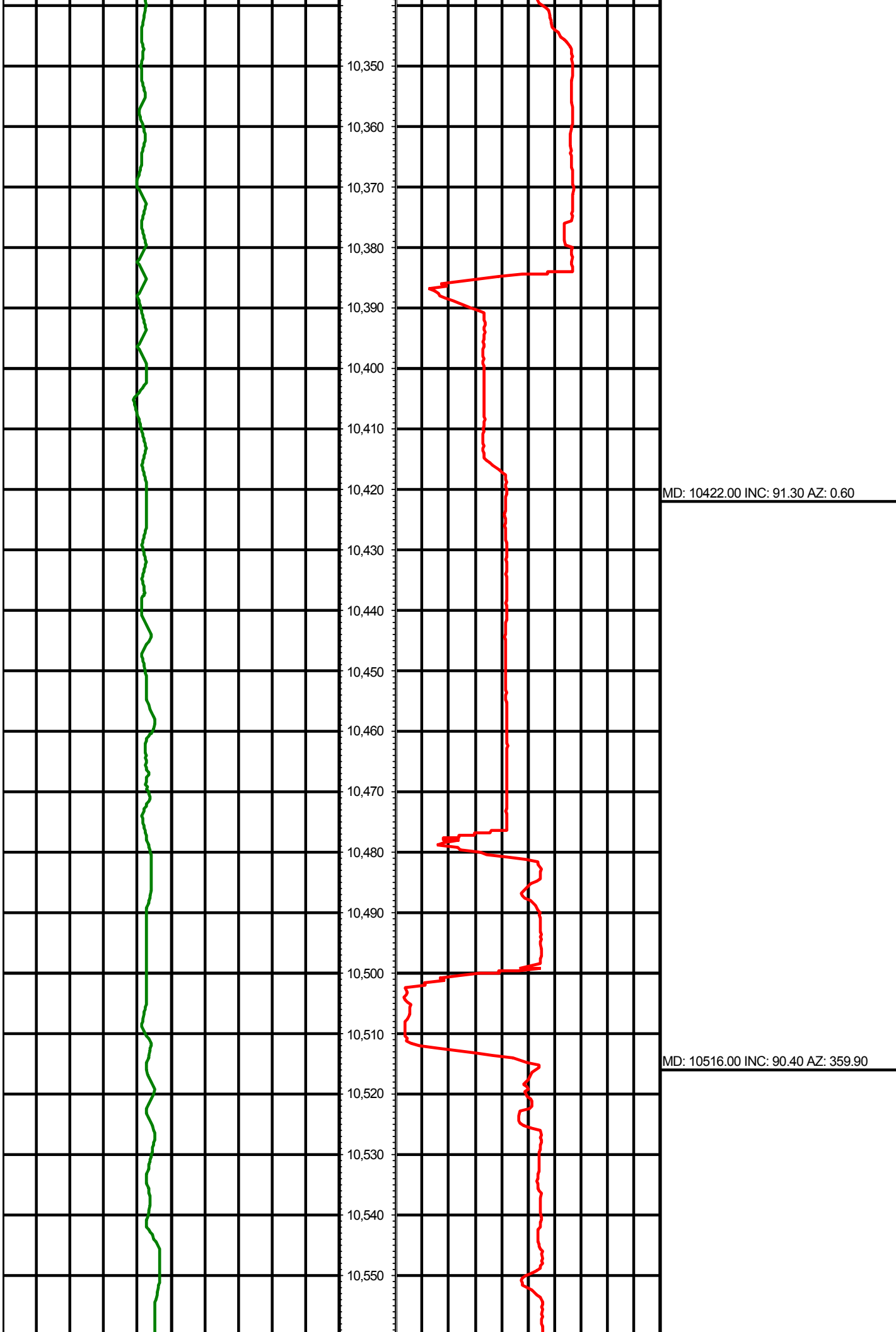
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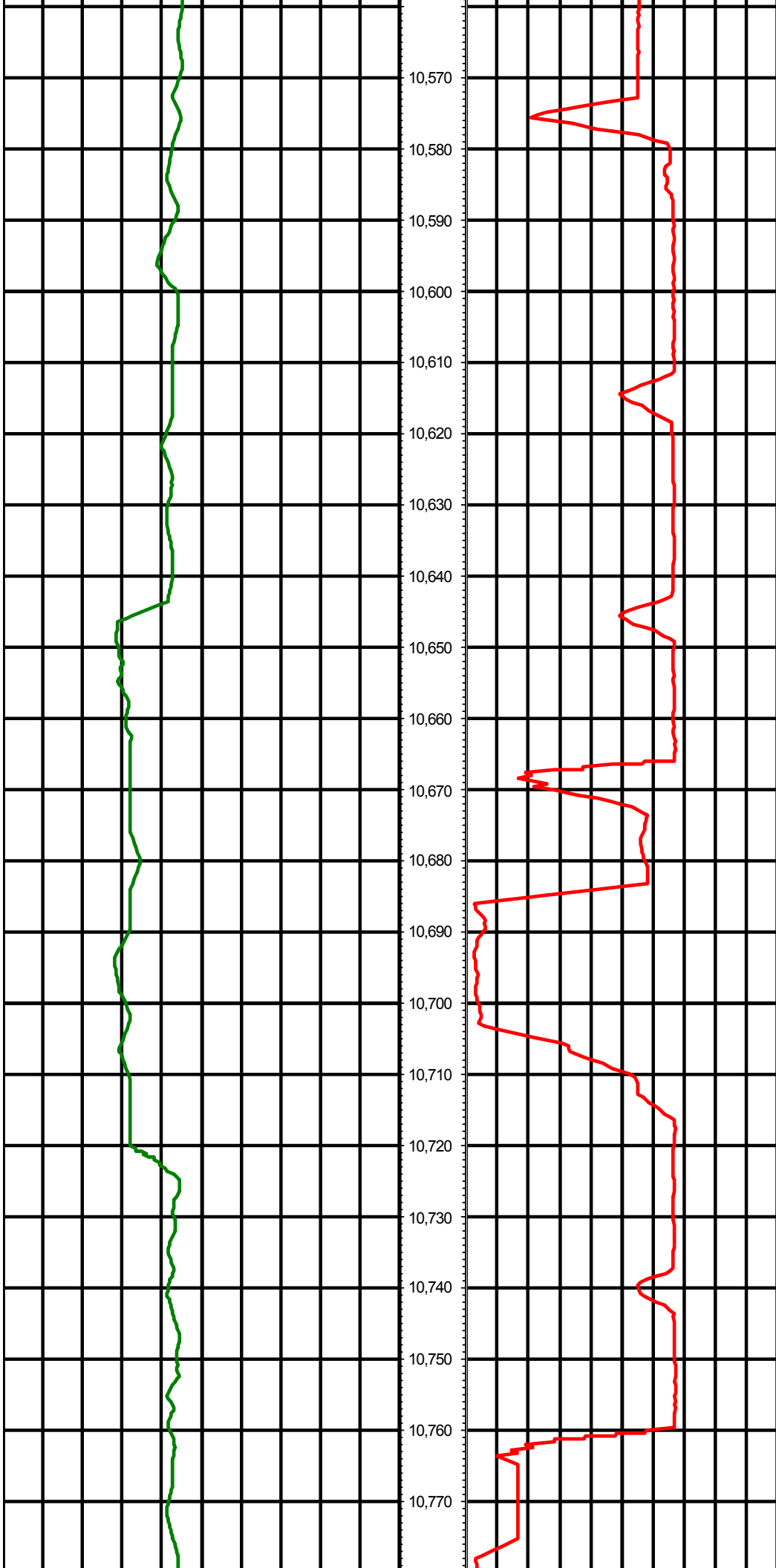


MD: 9954.00 INC: 91.00 AZ: 1.10

MD: 10048.00 INC: 90.90 AZ: 0.50

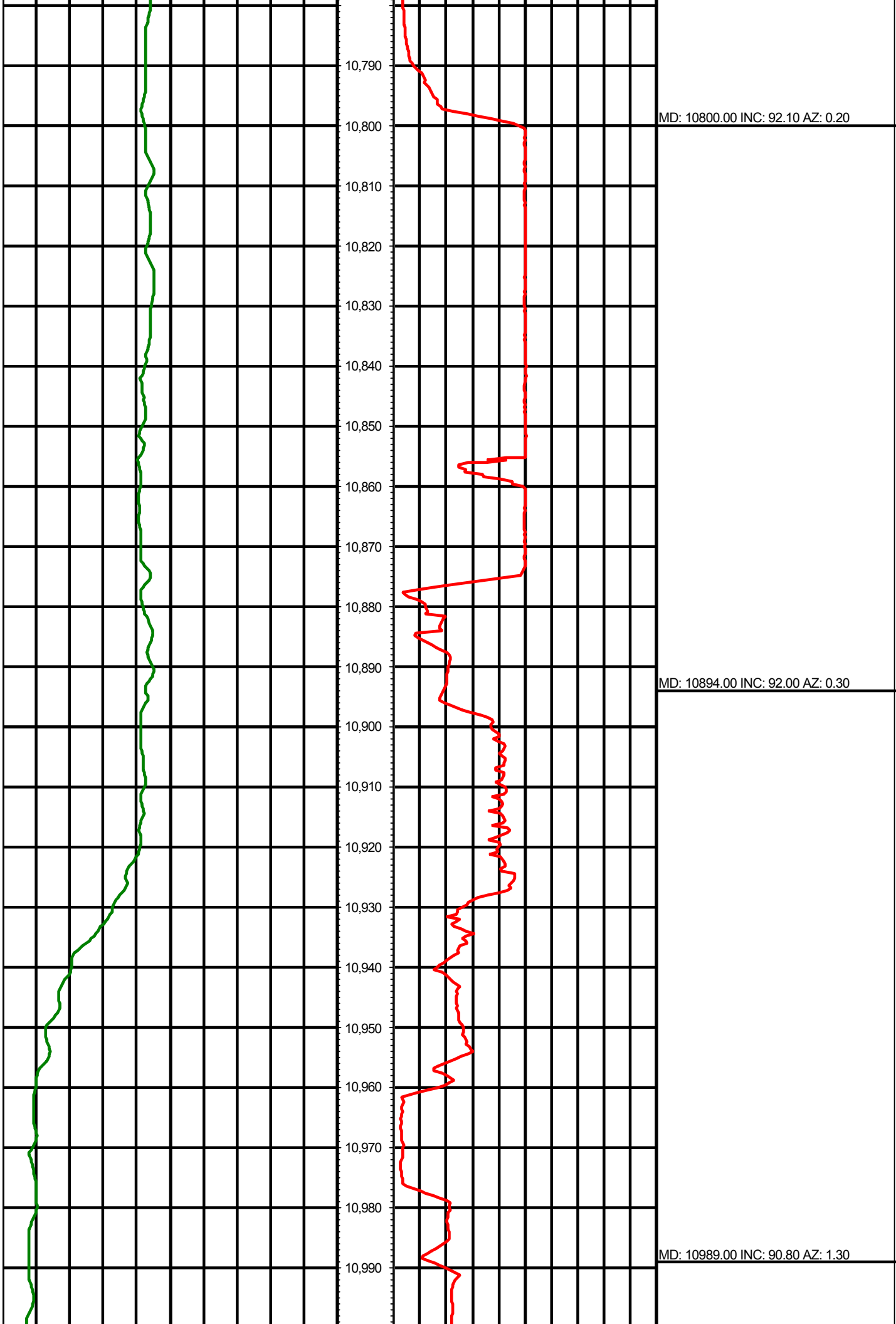


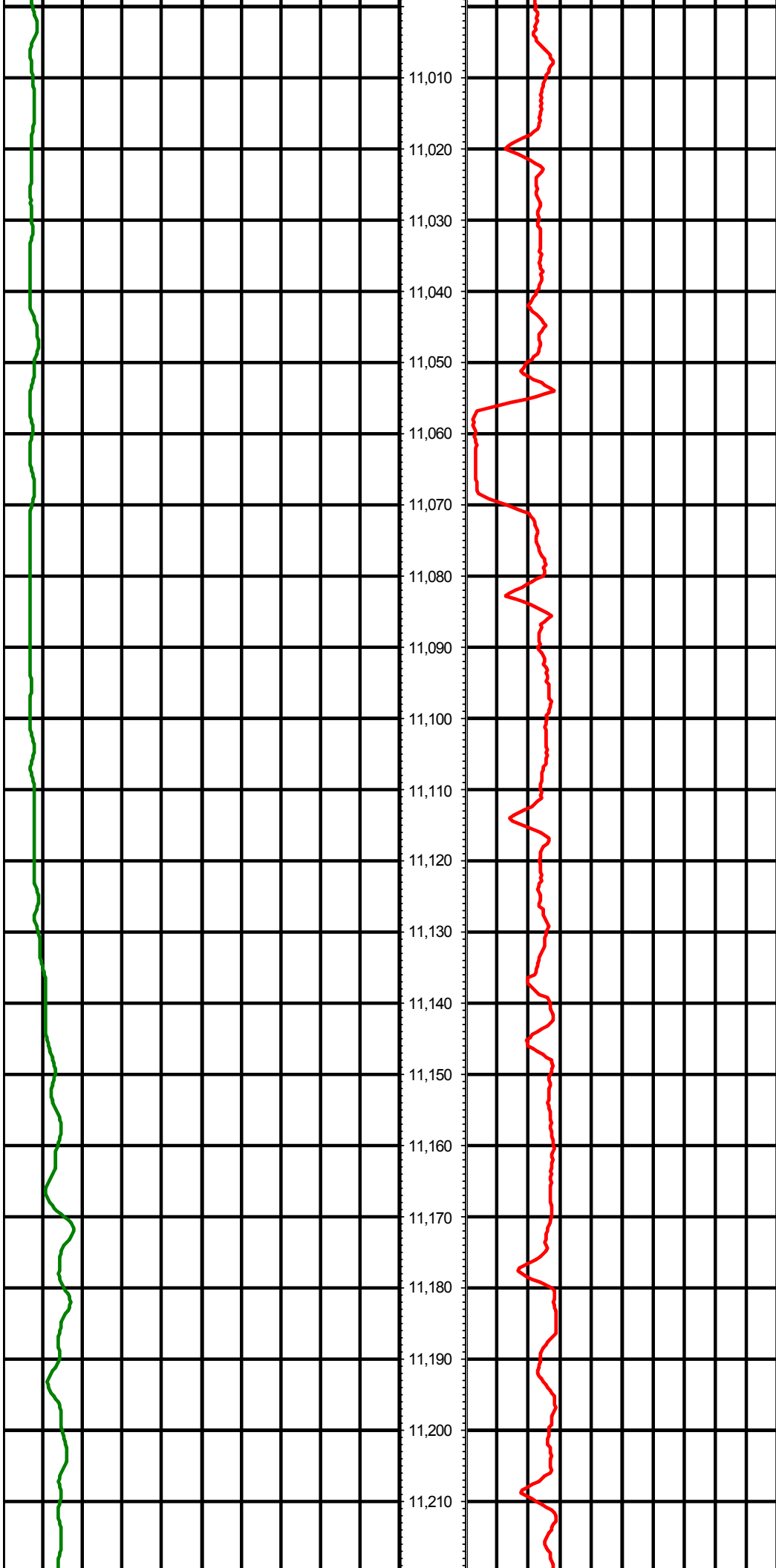




MD: 10611.00 INC: 89.70 AZ: 357.90

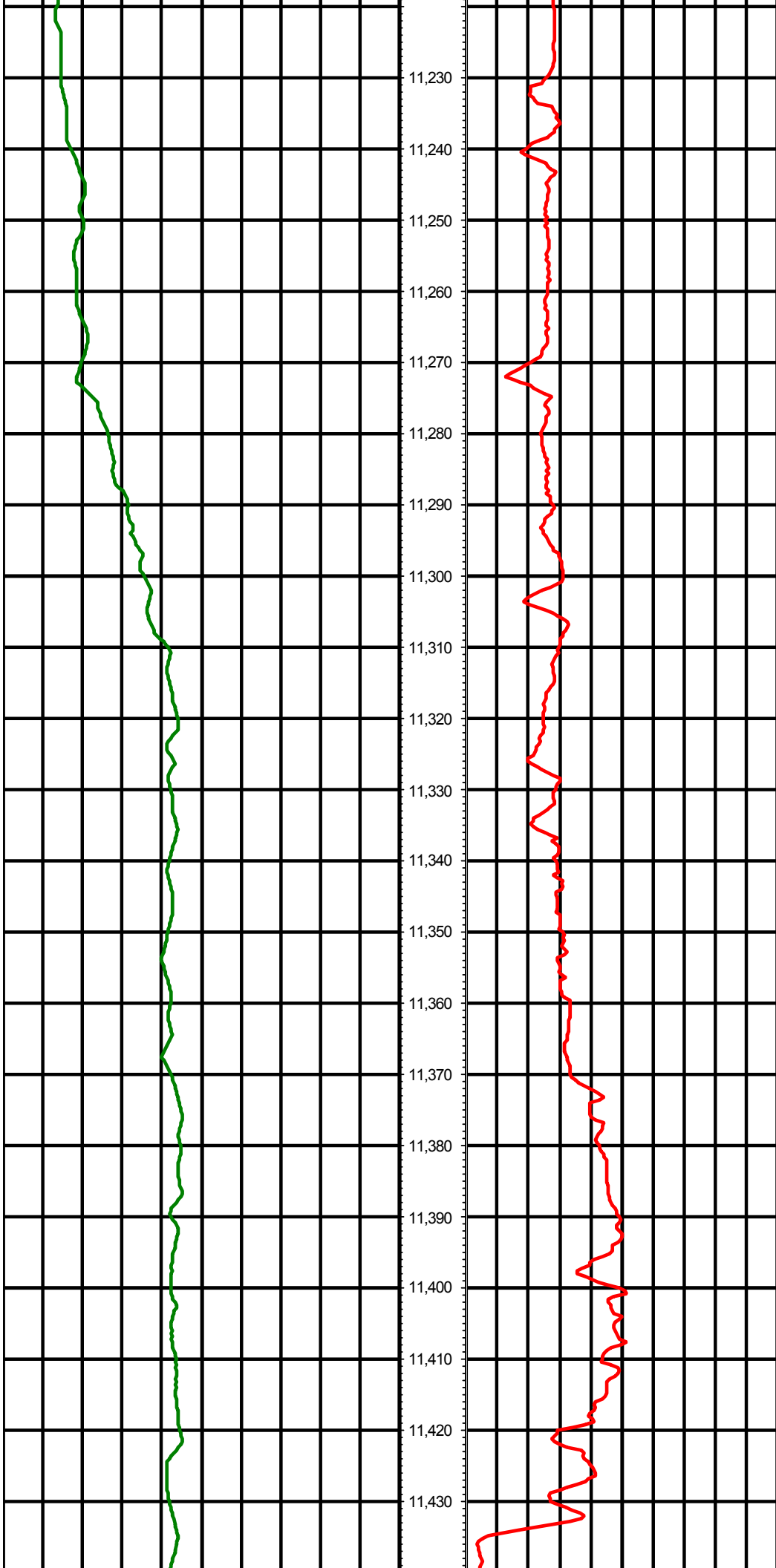
MD: 10705.00 INC: 89.30 AZ: 358.80





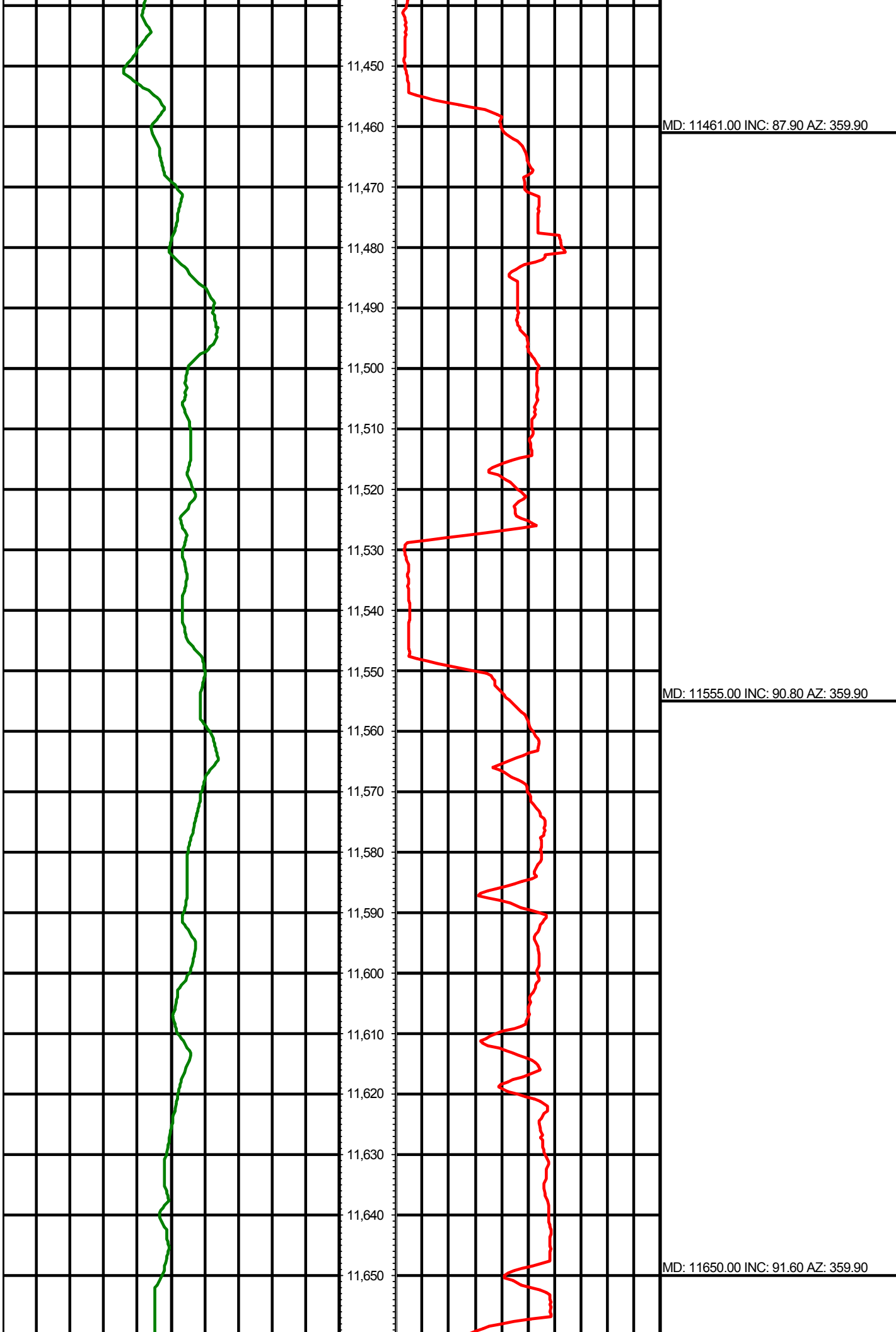
MD: 11083.00 INC: 88.70 AZ: 2.10

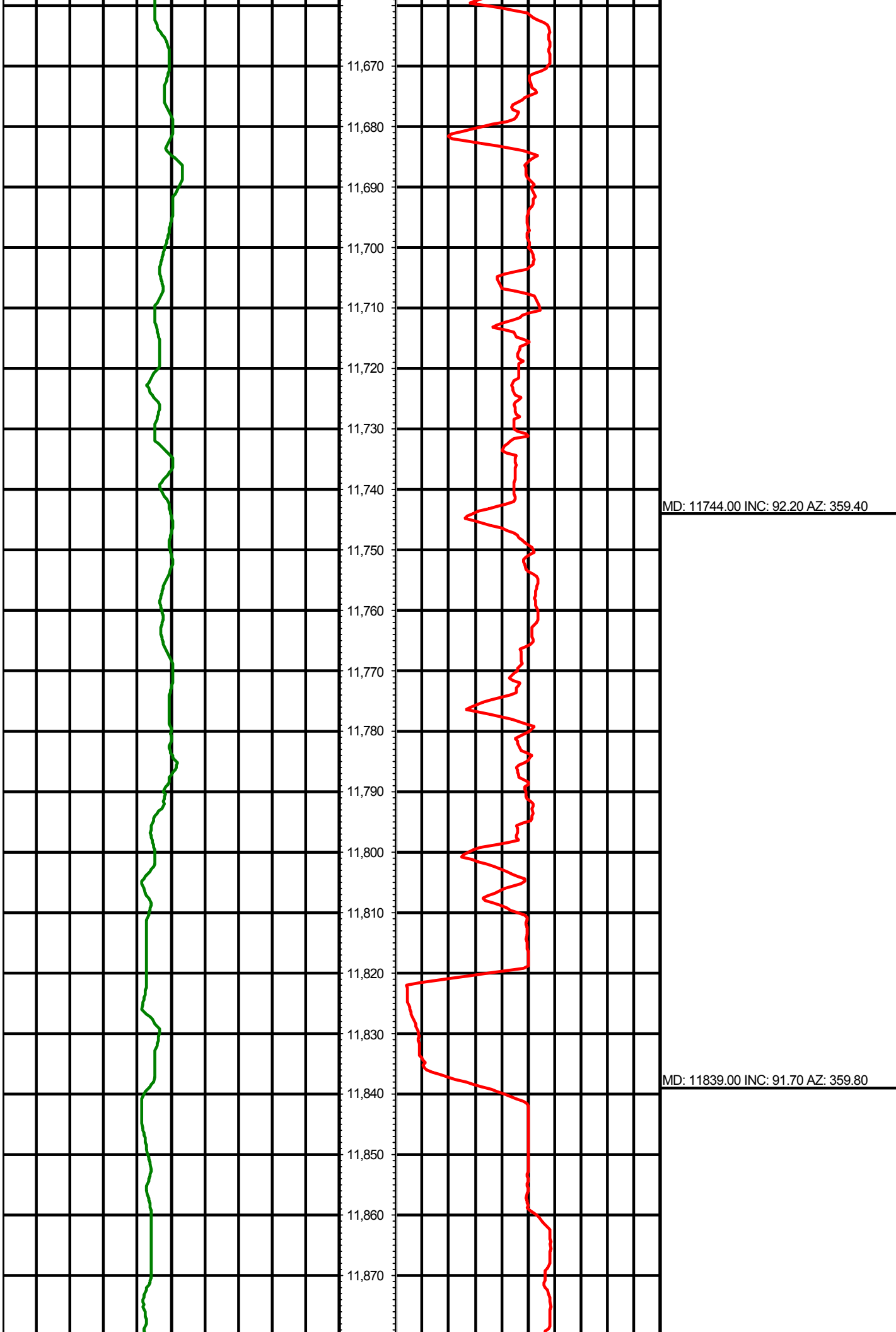
MD: 11177.00 INC: 88.90 AZ: 2.10

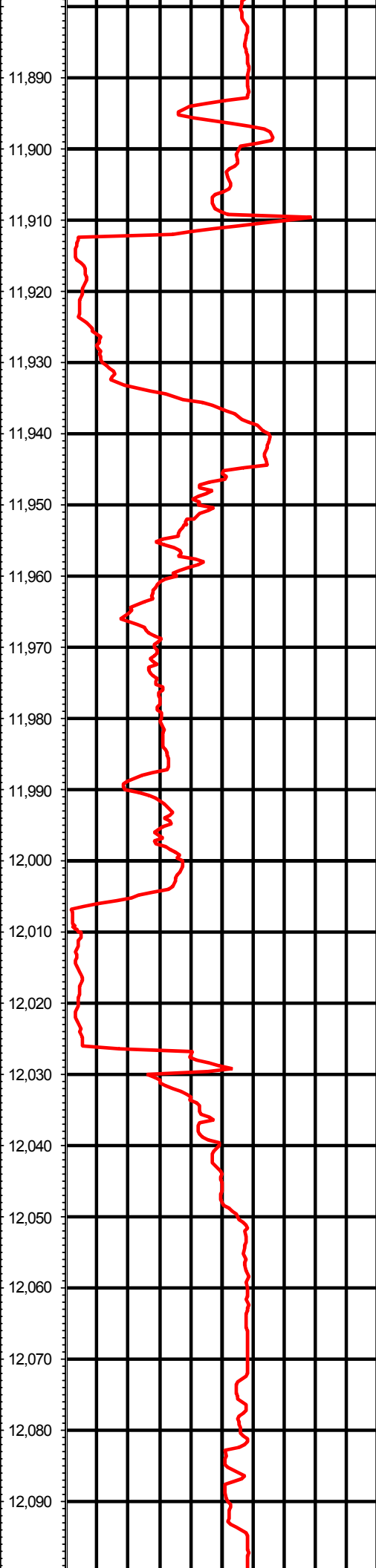
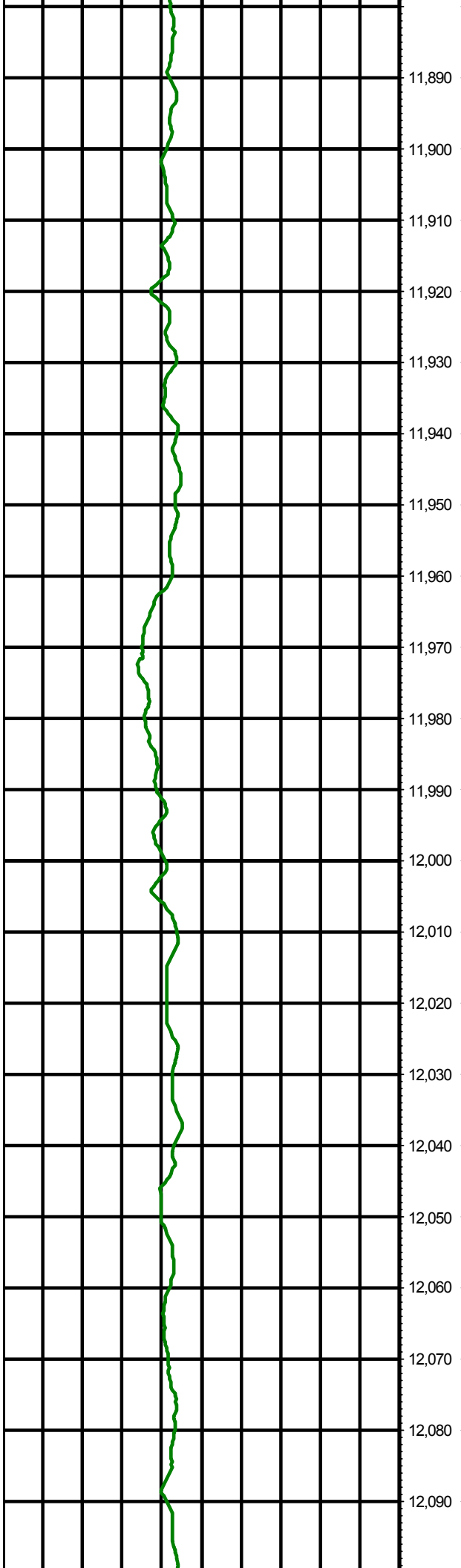


MD: 11272.00 INC: 89.40 AZ: 2.20

MD: 11367.00 INC: 87.40 AZ: 1.20

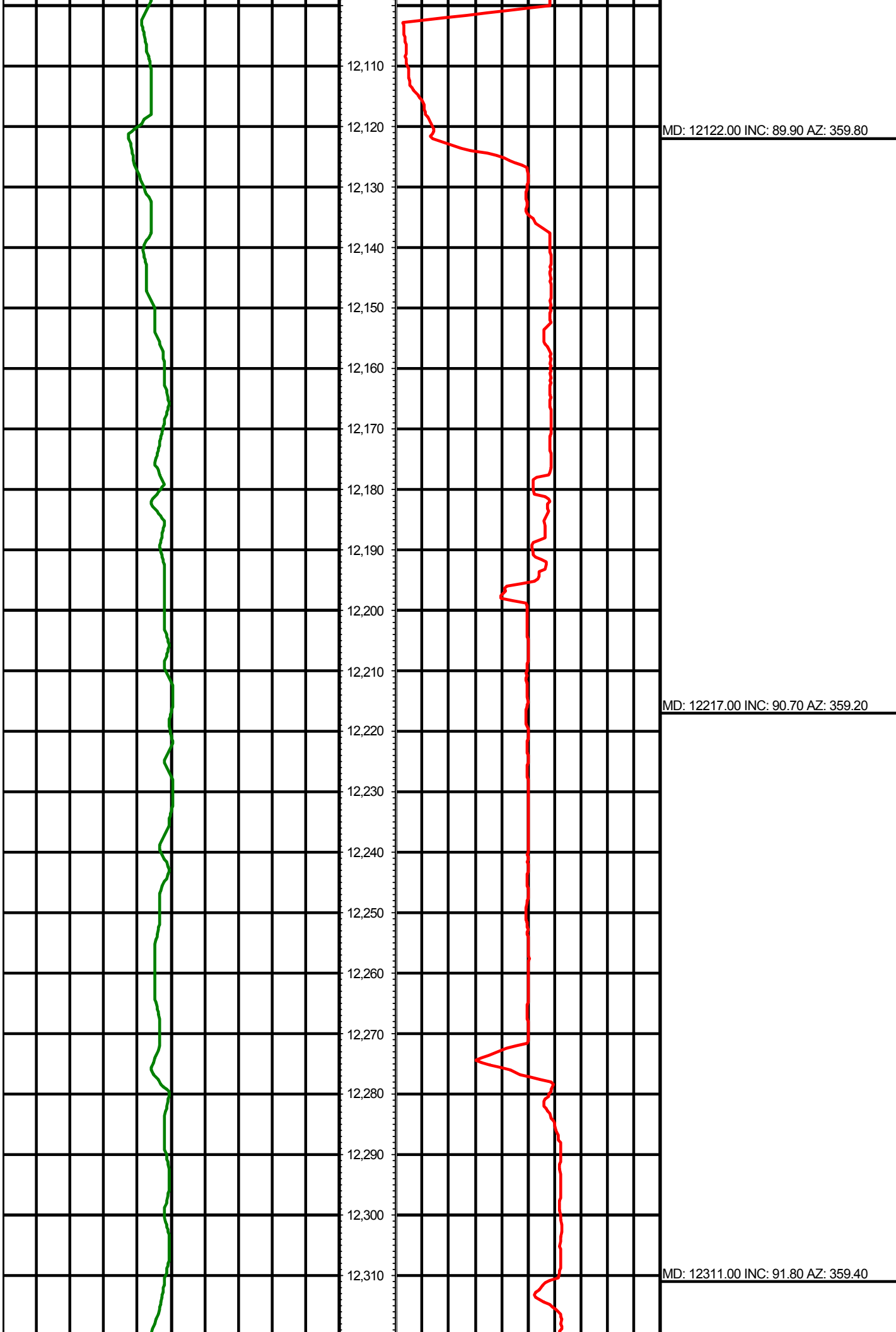


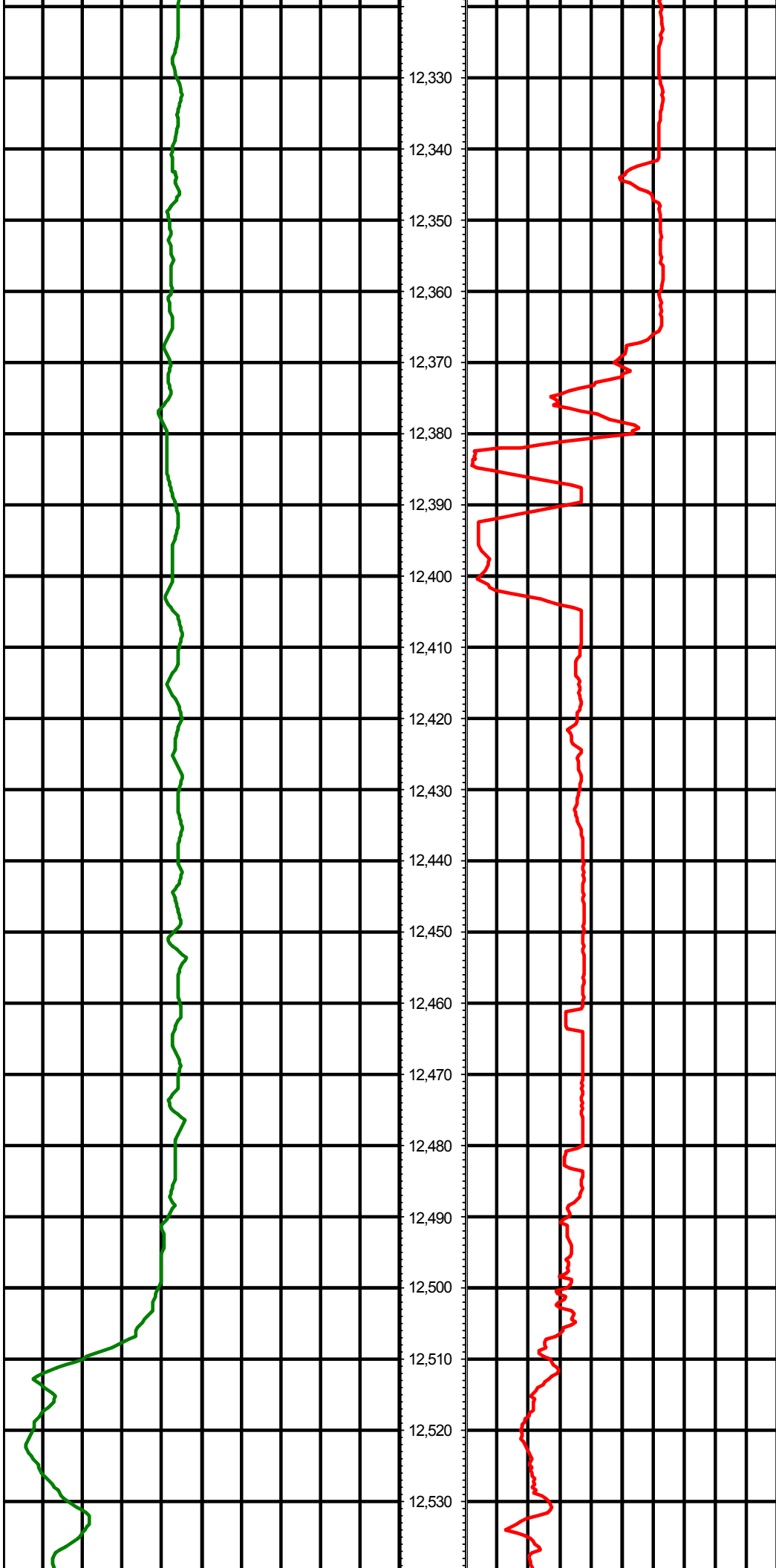




MD: 11934.00 INC: 91.30 AZ: 0.60

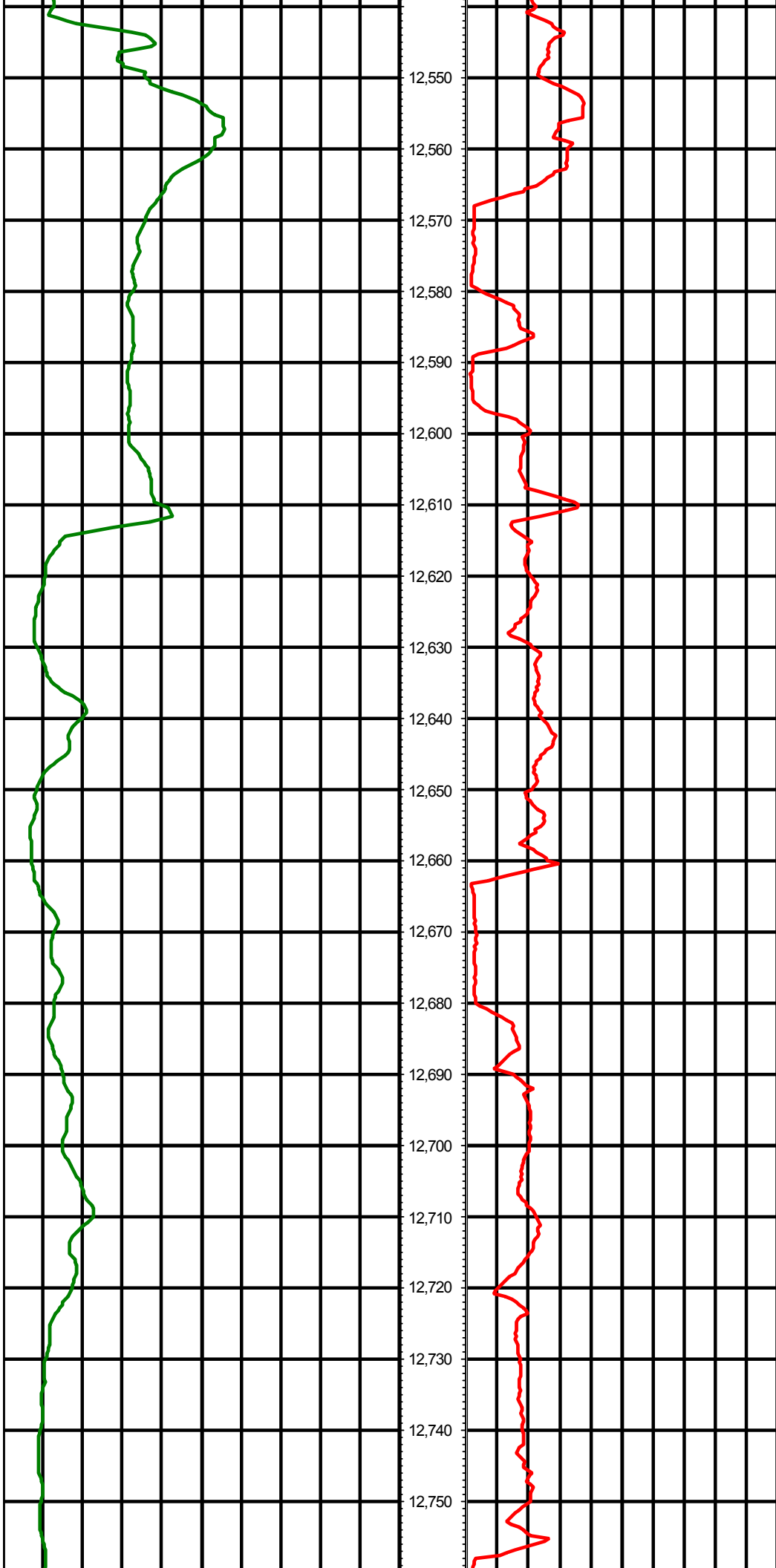
MD: 12028.00 INC: 87.90 AZ: 0.40





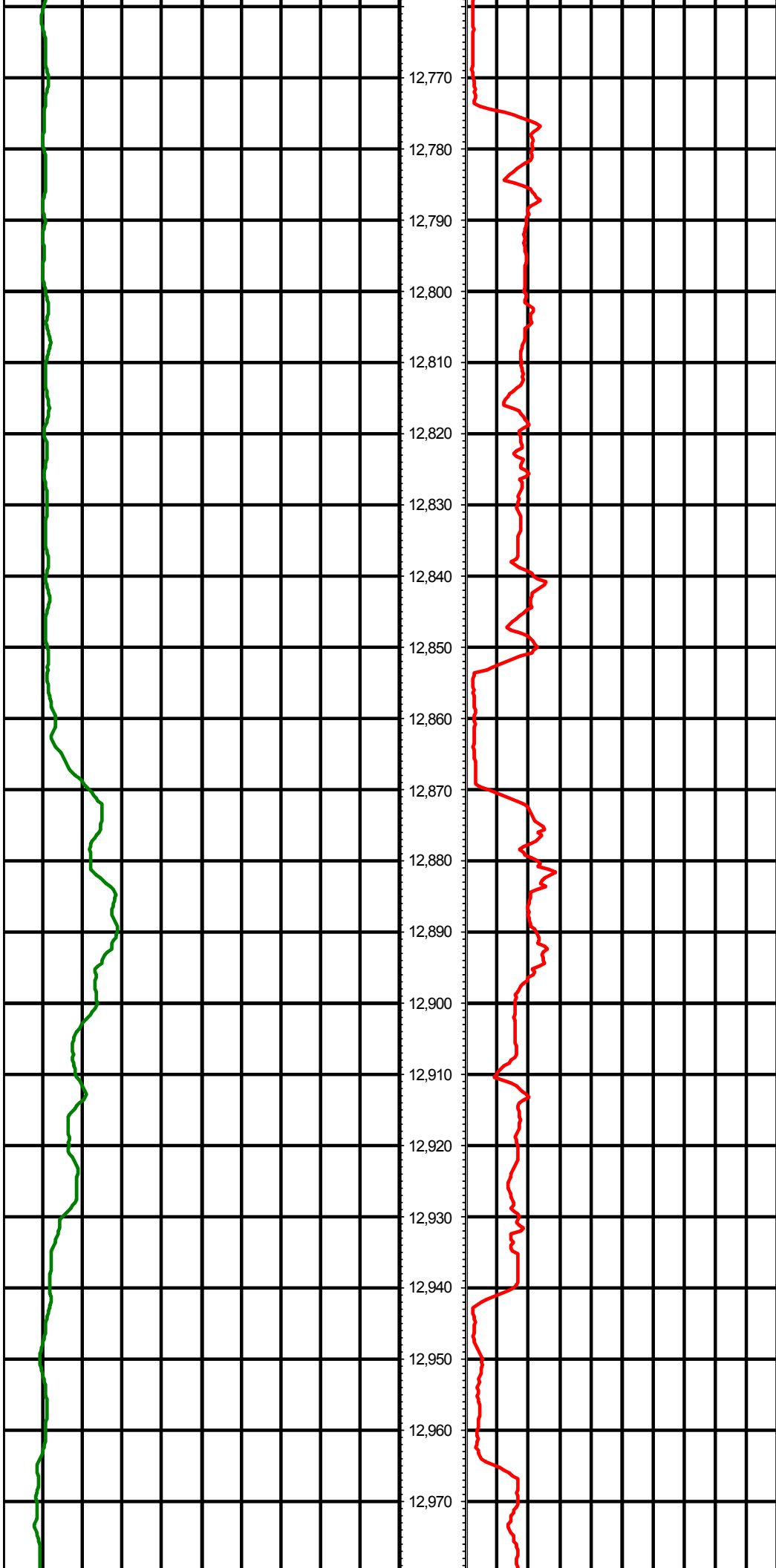
MD: 12406.00 INC: 90.90 AZ: 358.80

MD: 12501.00 INC: 89.90 AZ: 357.80



MD: 12595.00 INC: 91.10 AZ: 359.00

MD: 12690.00 INC: 91.60 AZ: 0.30

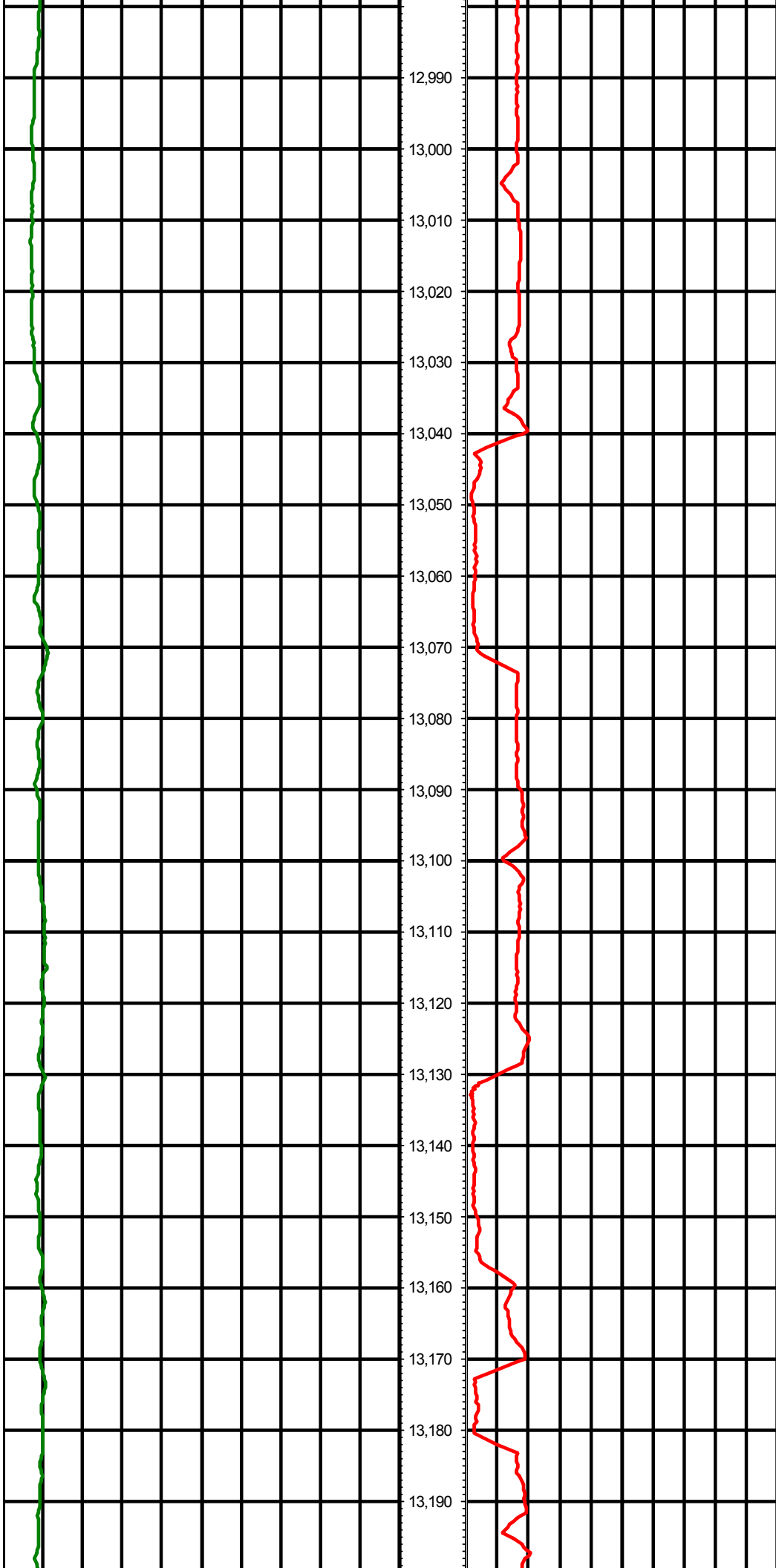


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MD: 12785.00 INC: 90.90 AZ: 0.60

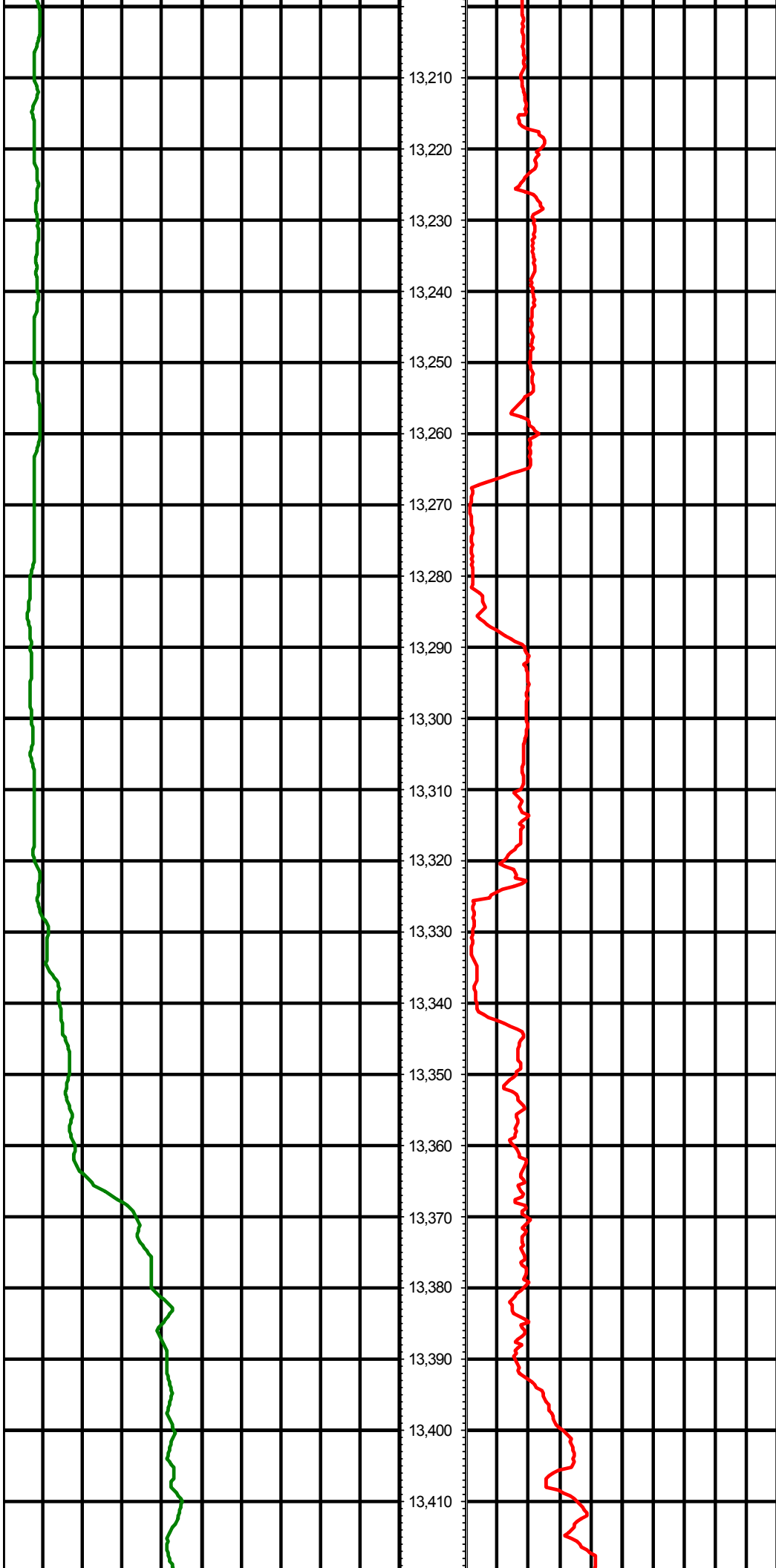
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MD: 12973.00 INC: 90.80 AZ: 1.70



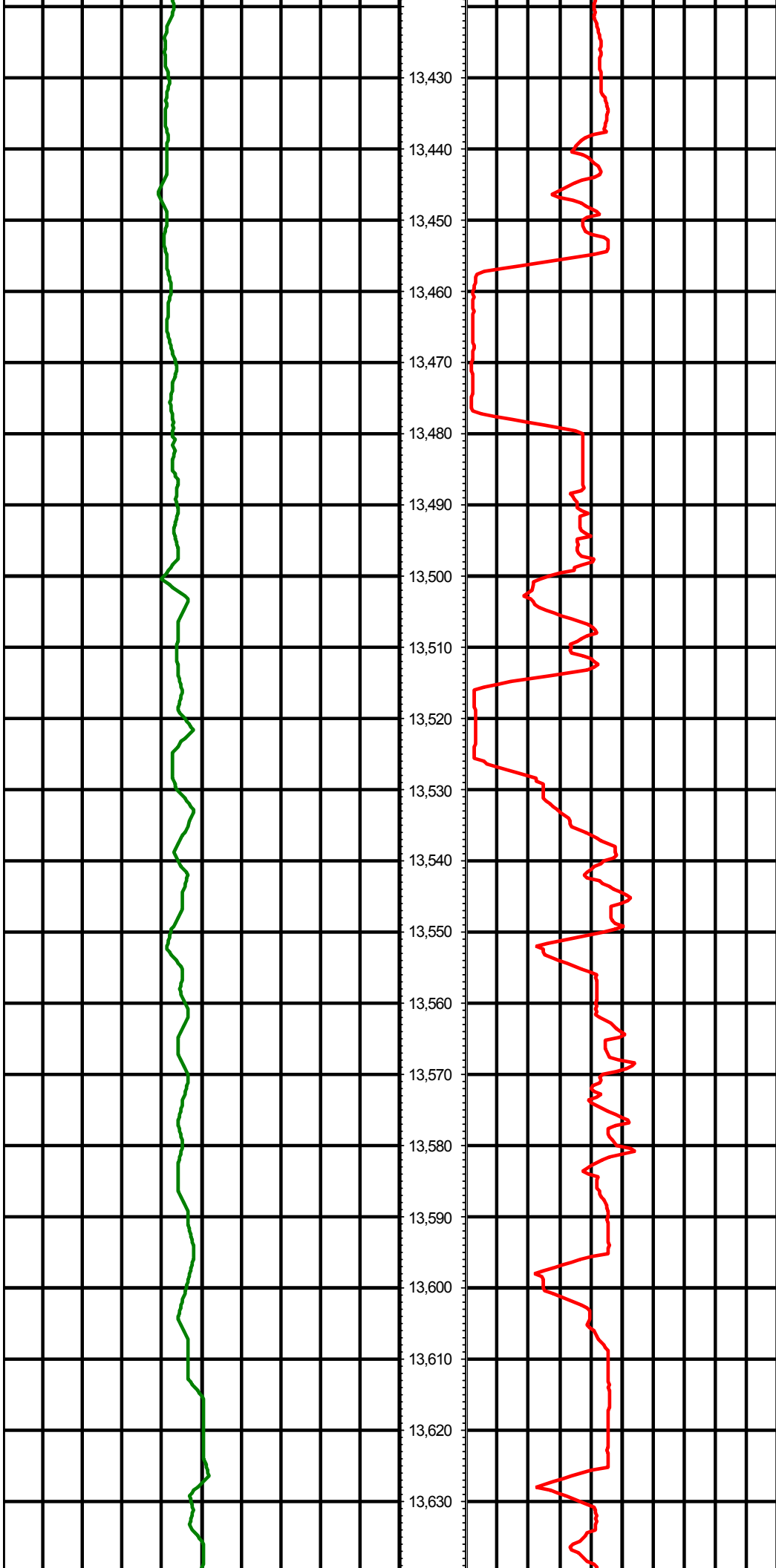
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MD: 13162.00 INC: 89.60 AZ: 1.10



MD: 13257.00 INC: 90.30 AZ: 0.70

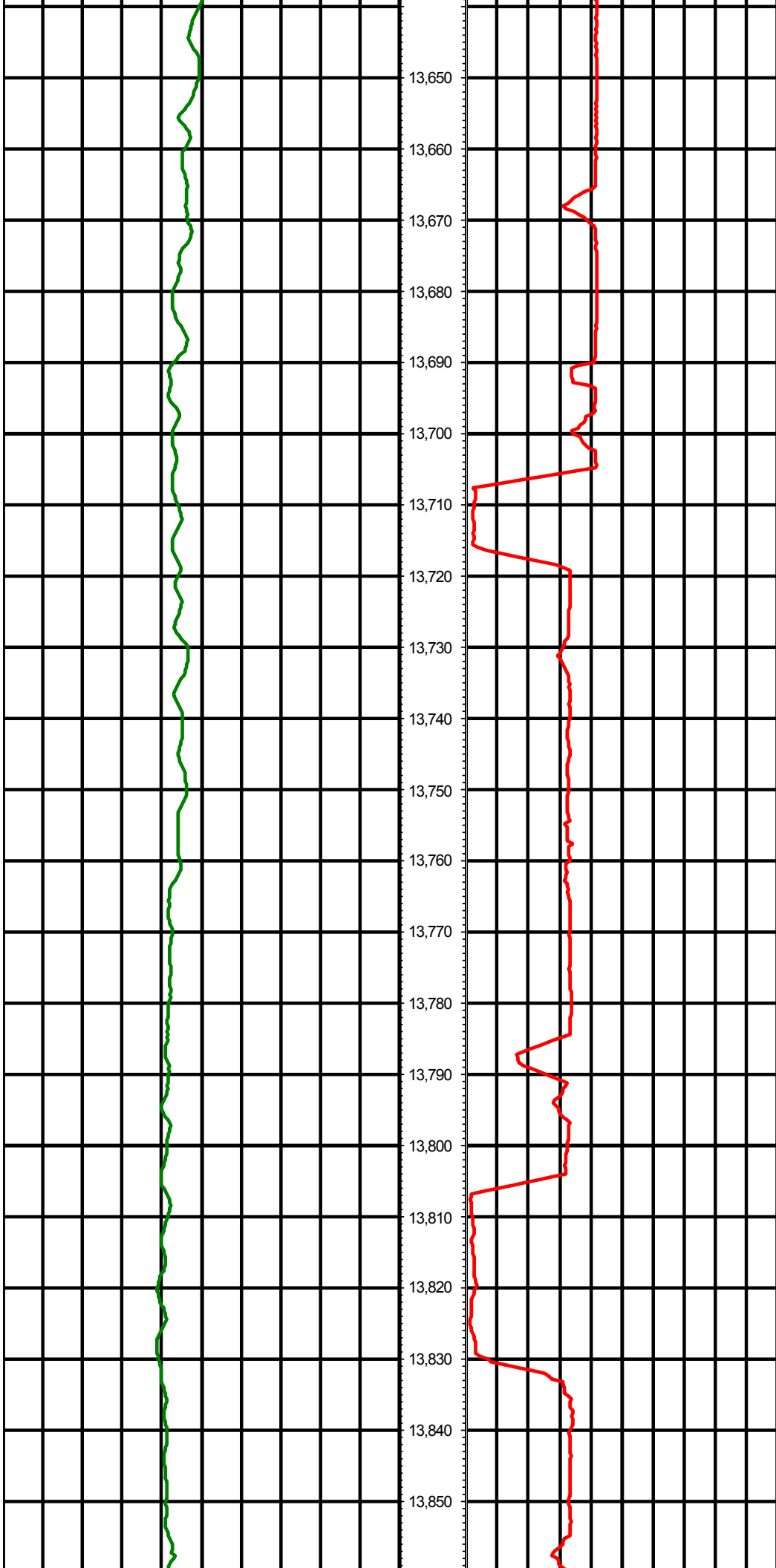
MD: 13352.00 INC: 87.80 AZ: 1.20



MD: 13447.00 INC: 86.50 AZ: 359.50

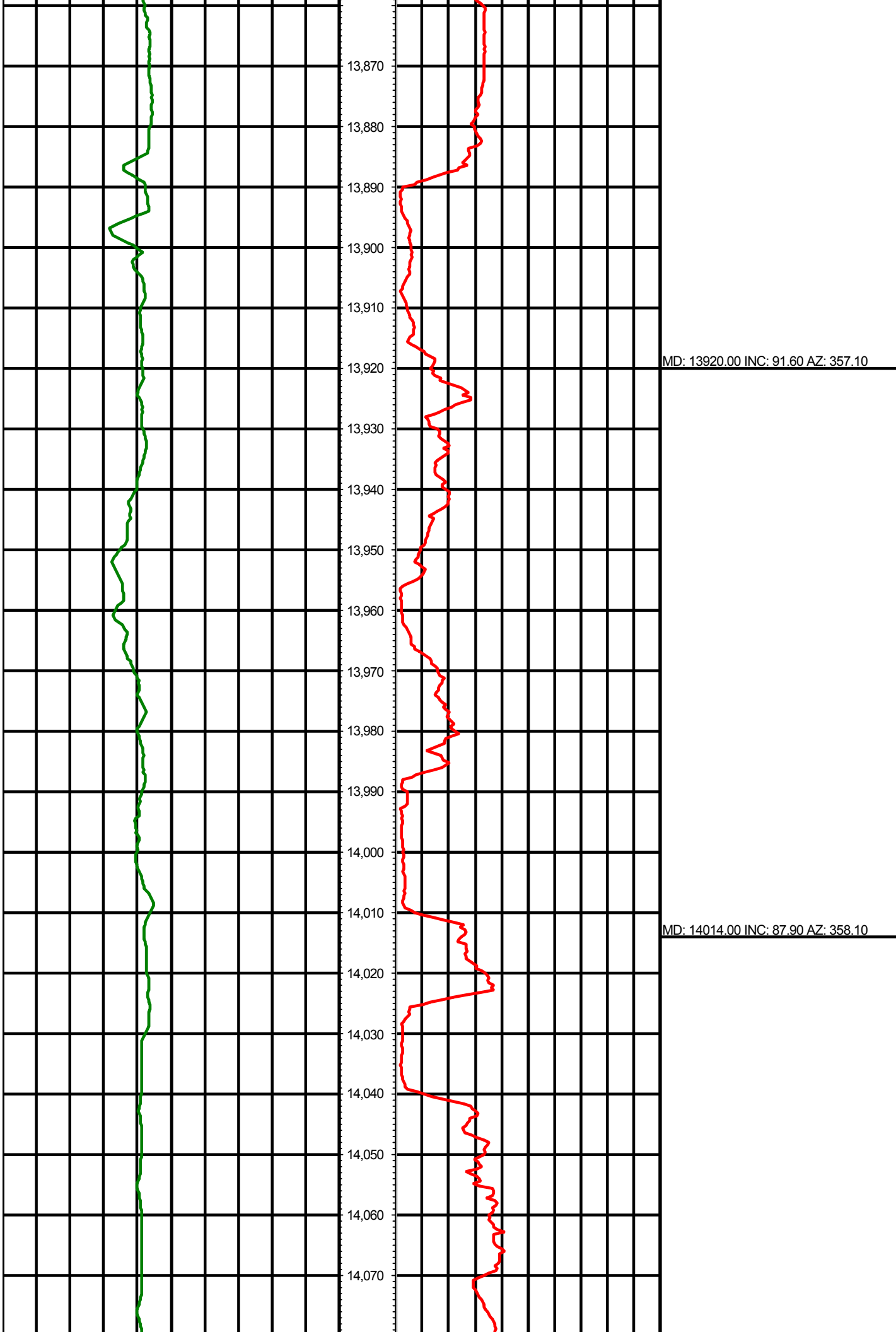
MD: 13542.00 INC: 89.00 AZ: 359.00

MD: 13637.00 INC: 90.70 AZ: 358.40



MD: 13731.00 INC: 91.40 AZ: 357.70

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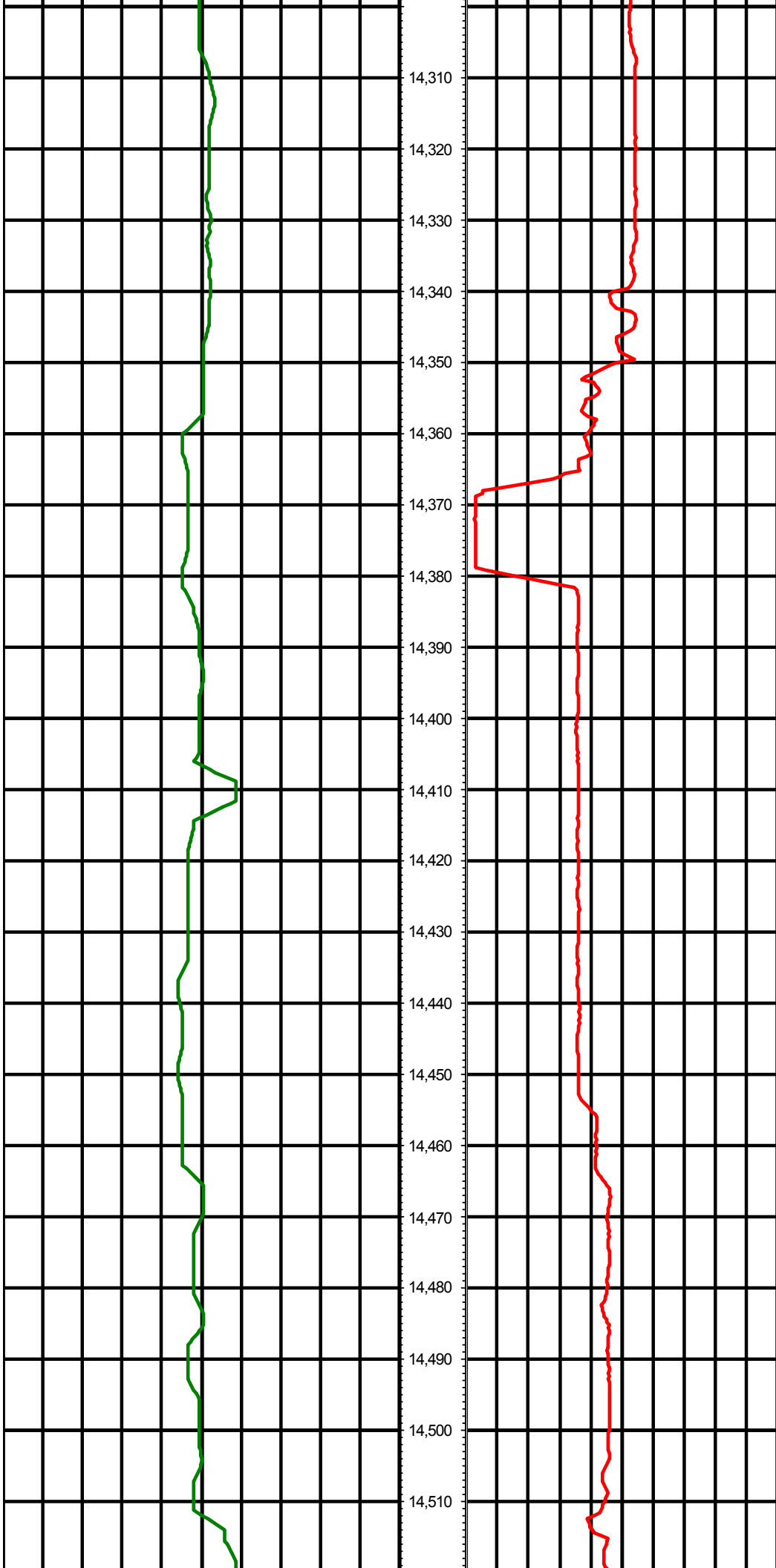


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MD: 14108.00 INC: 88.60 AZ: 359.70

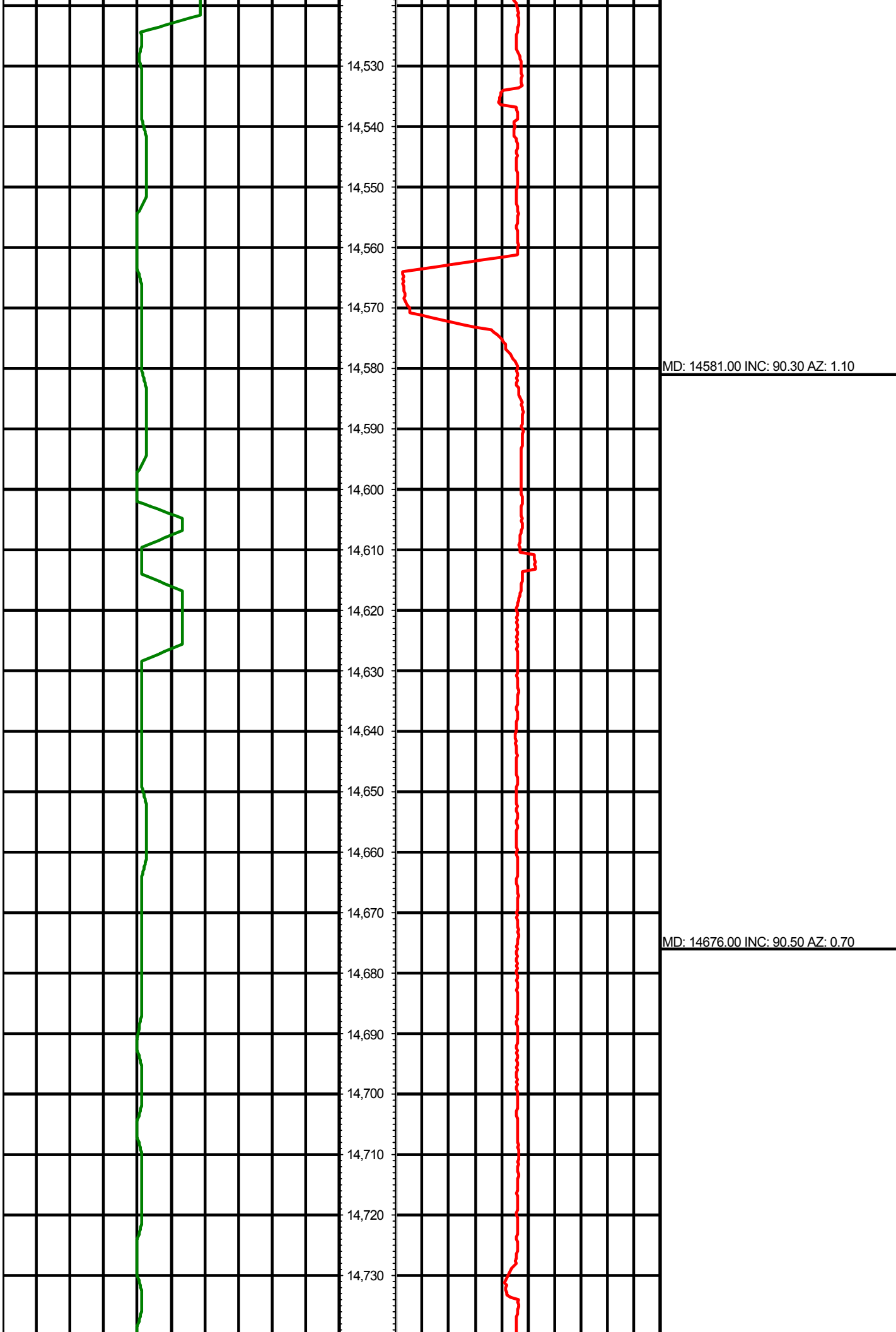
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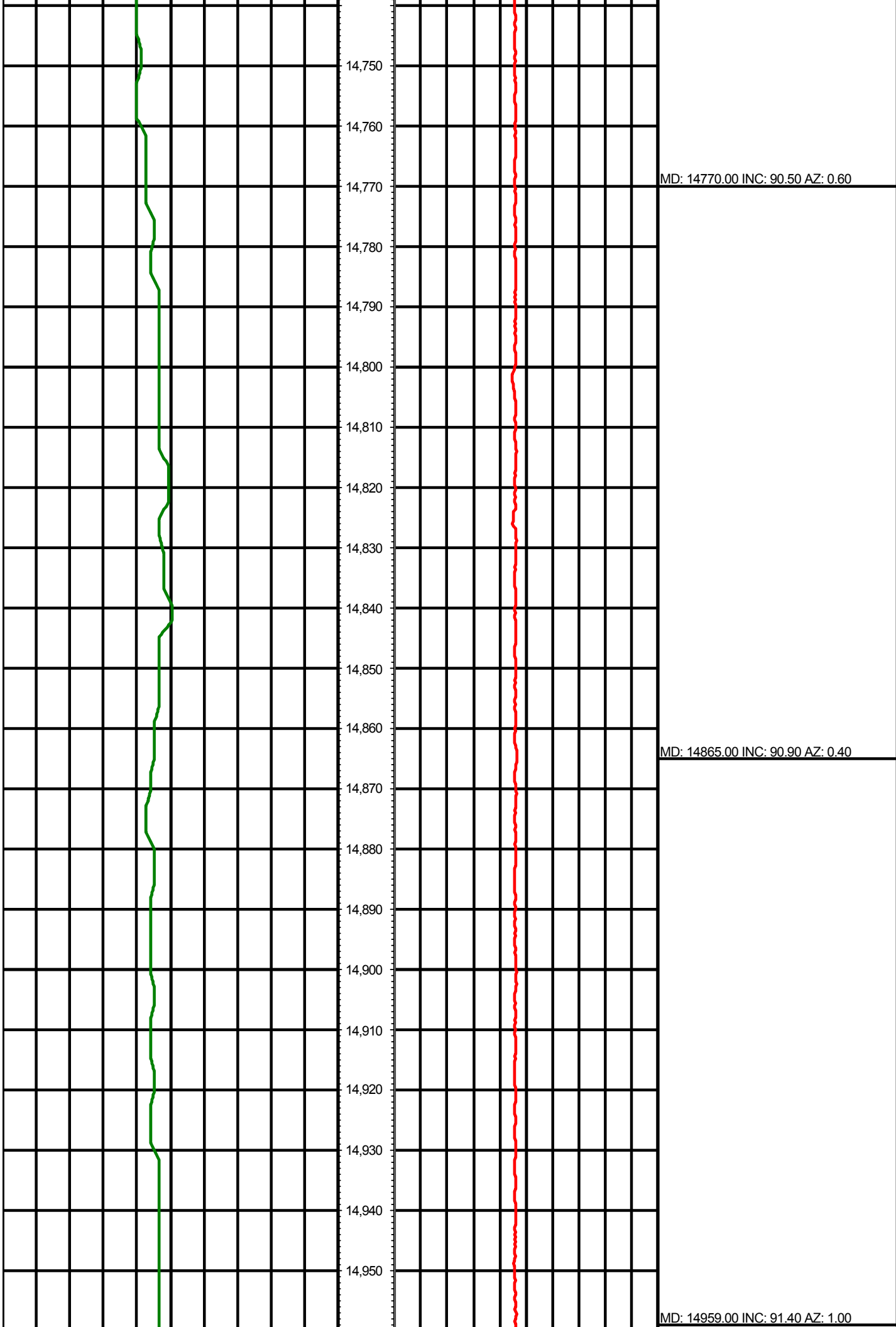
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MD: 14392.00 INC: 91.60 AZ: 0.80

MD: 14487.00 INC: 91.70 AZ: 0.80



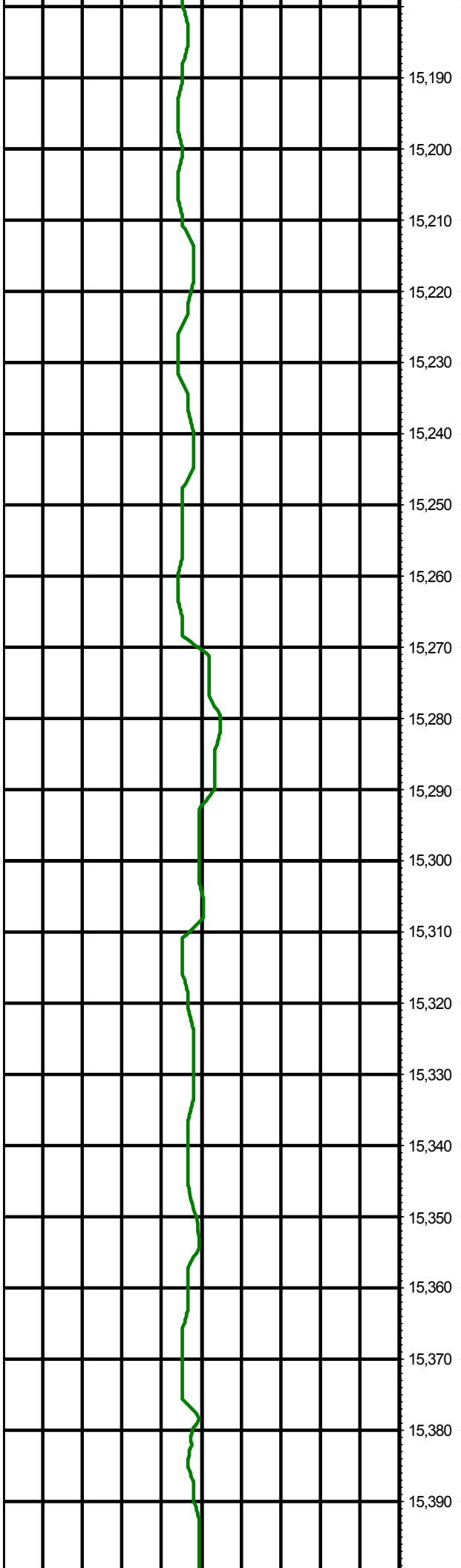


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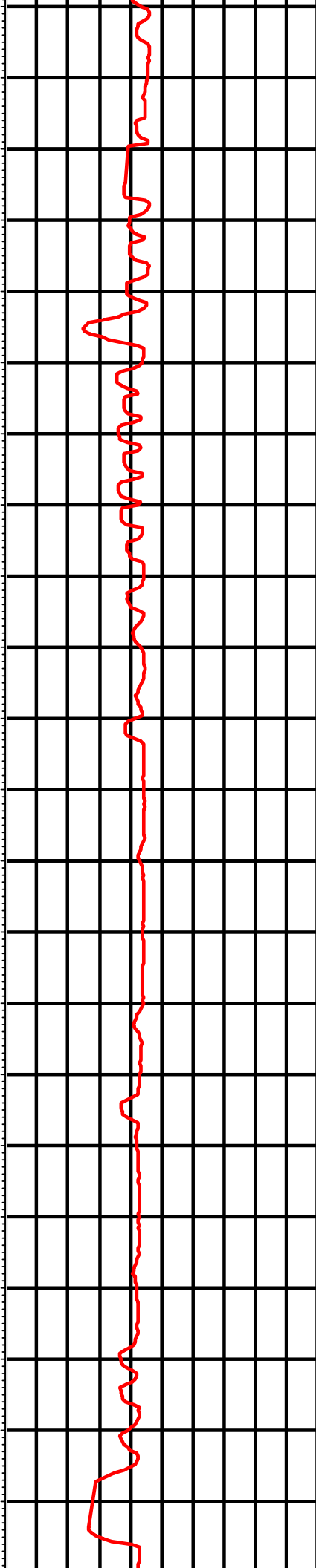
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MD: 15054.00 INC: 89.60 AZ: 1.90

MD: 15149.00 INC: 89.60 AZ: 0.40

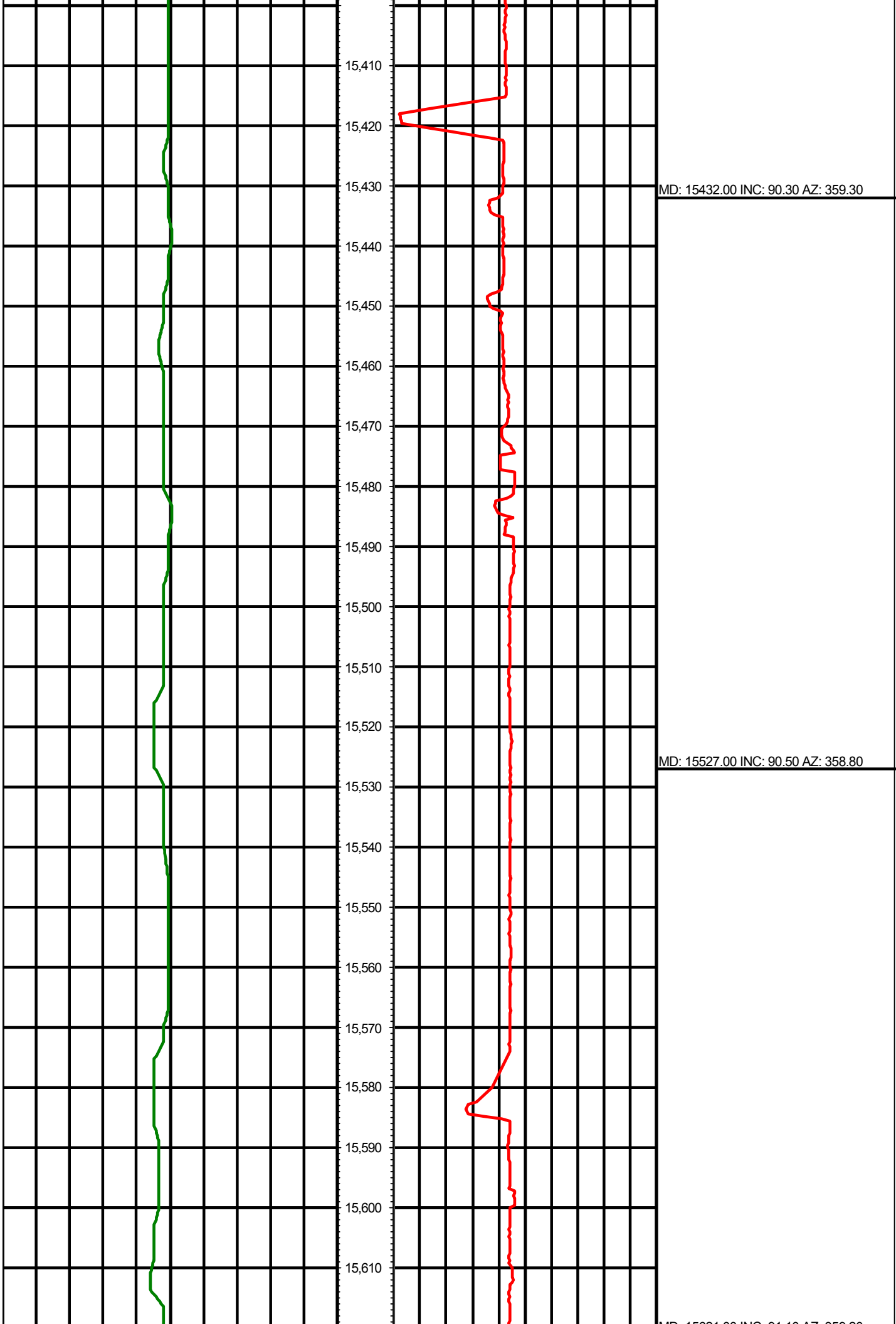


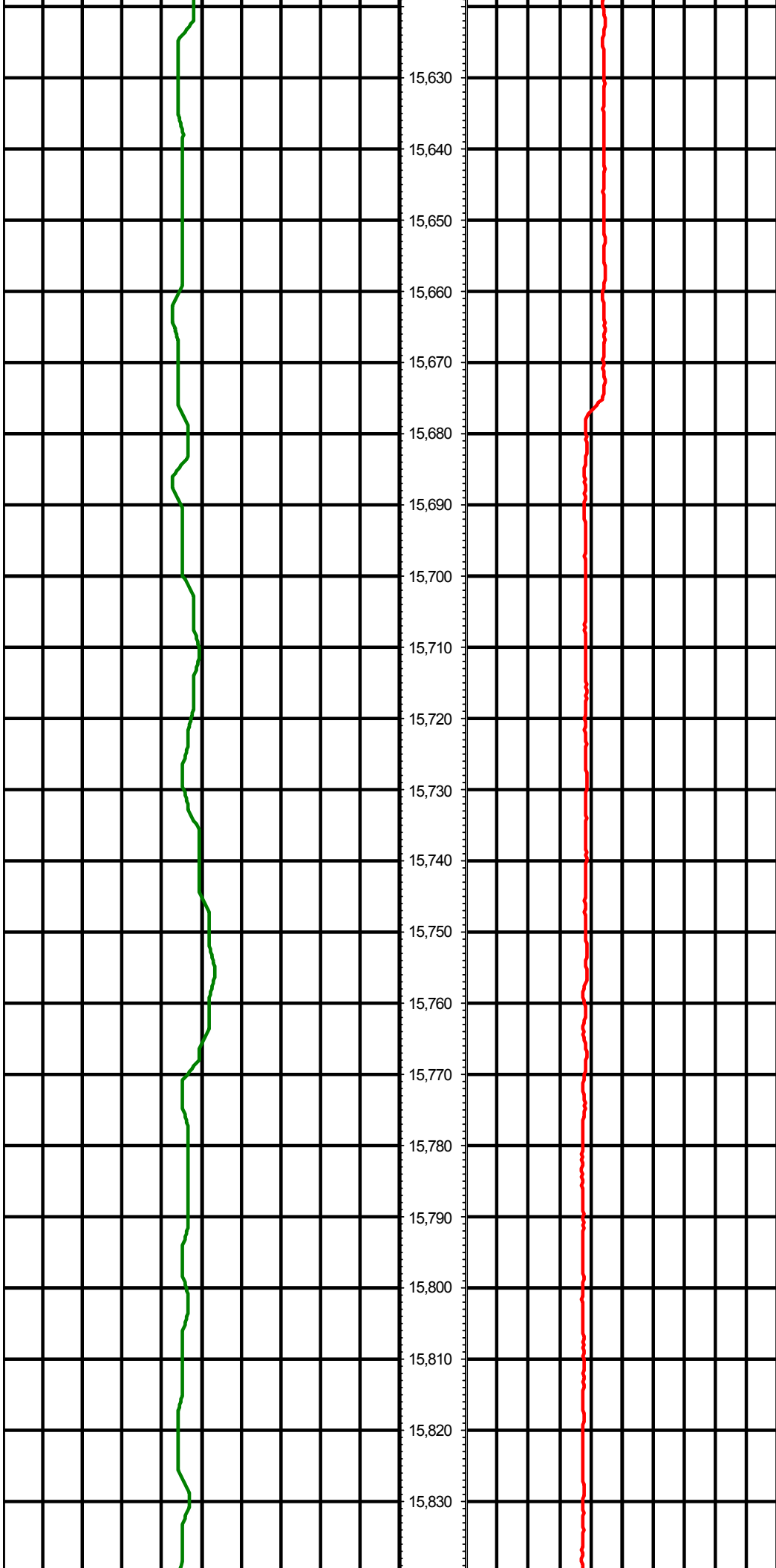
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MD: 15243.00 INC: 89.90 AZ: 359.90

MD: 15338.00 INC: 90.10 AZ: 0.20

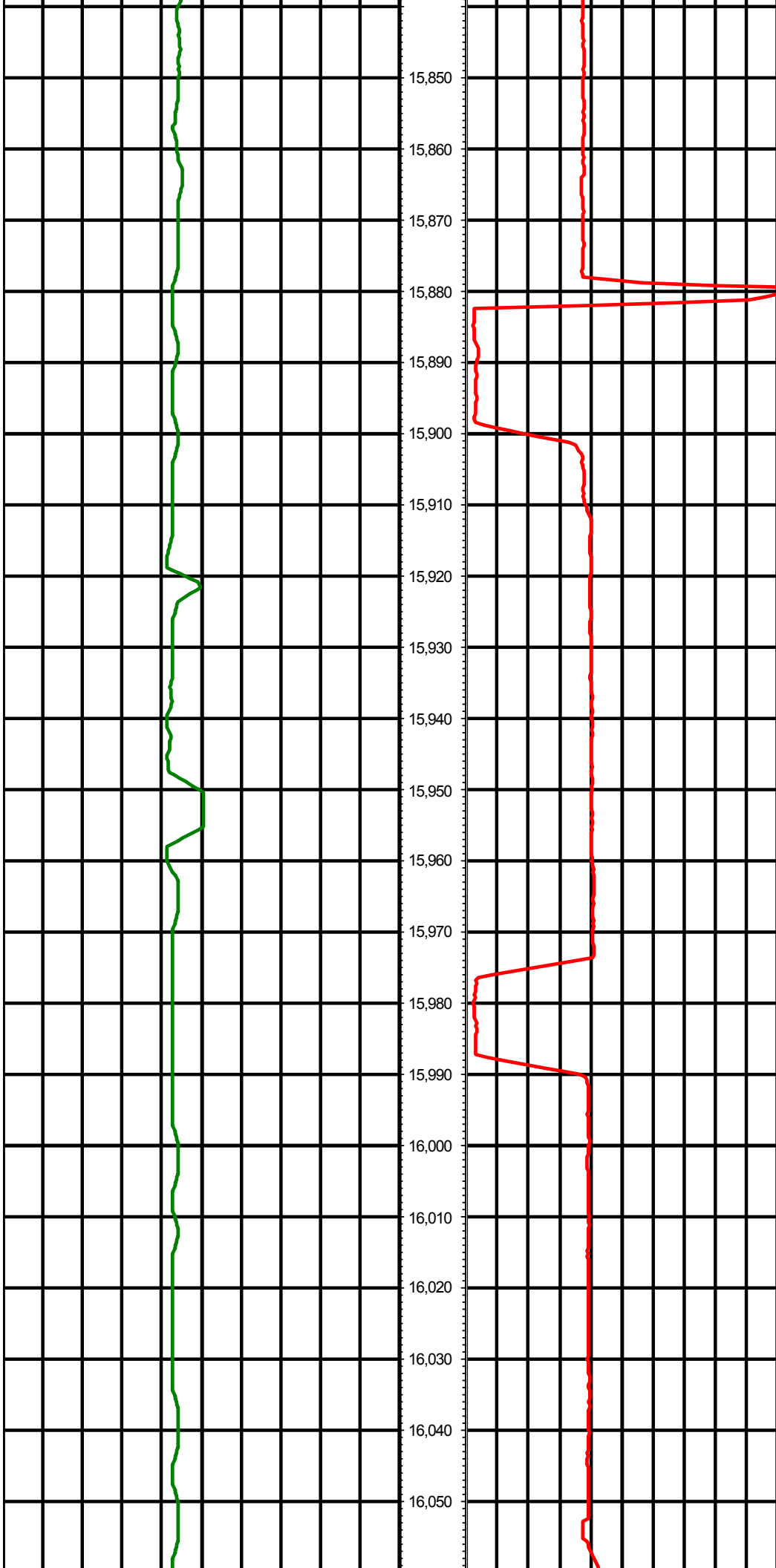




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MD: 15716.00 INC: 91.30 AZ: 358.40

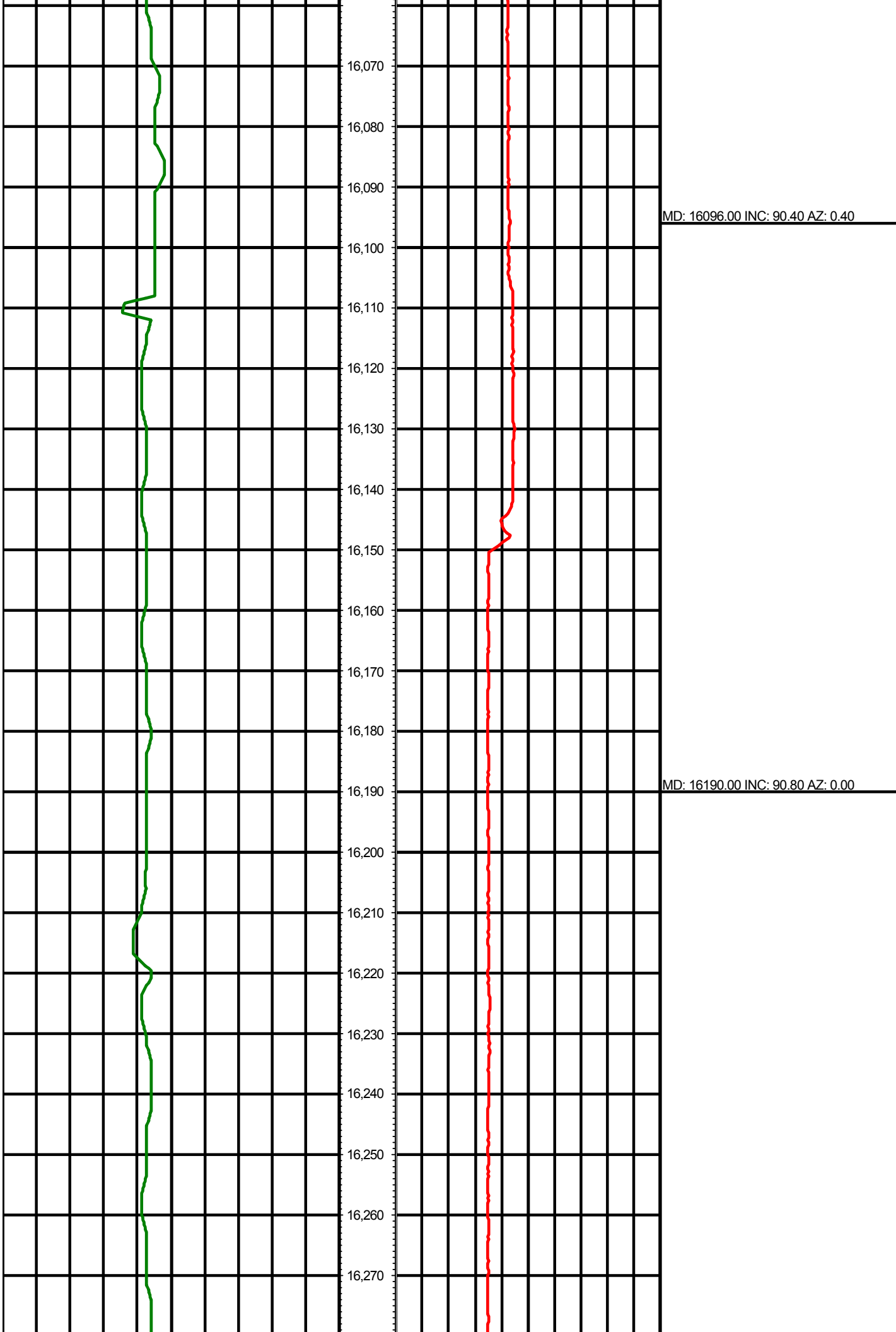
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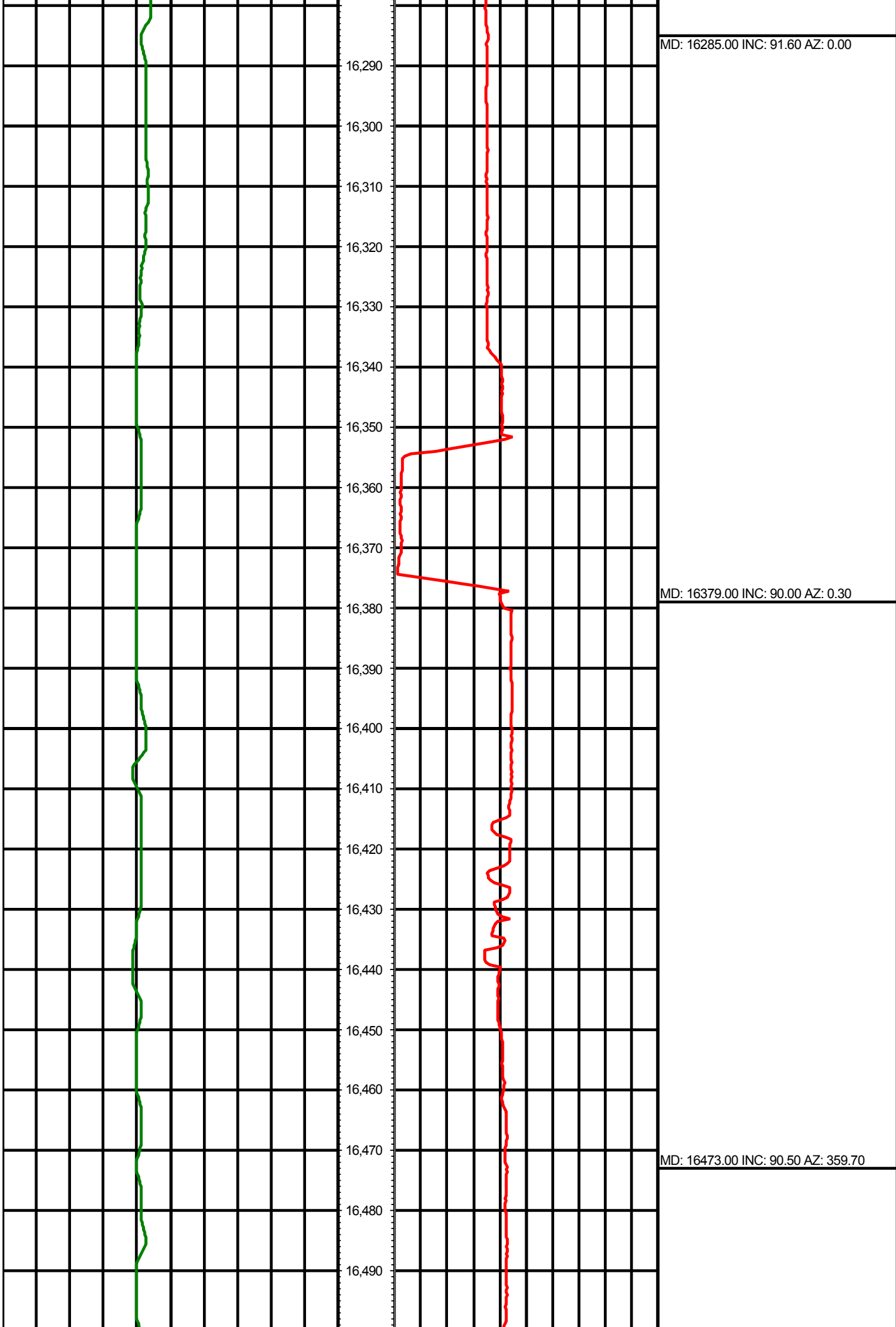


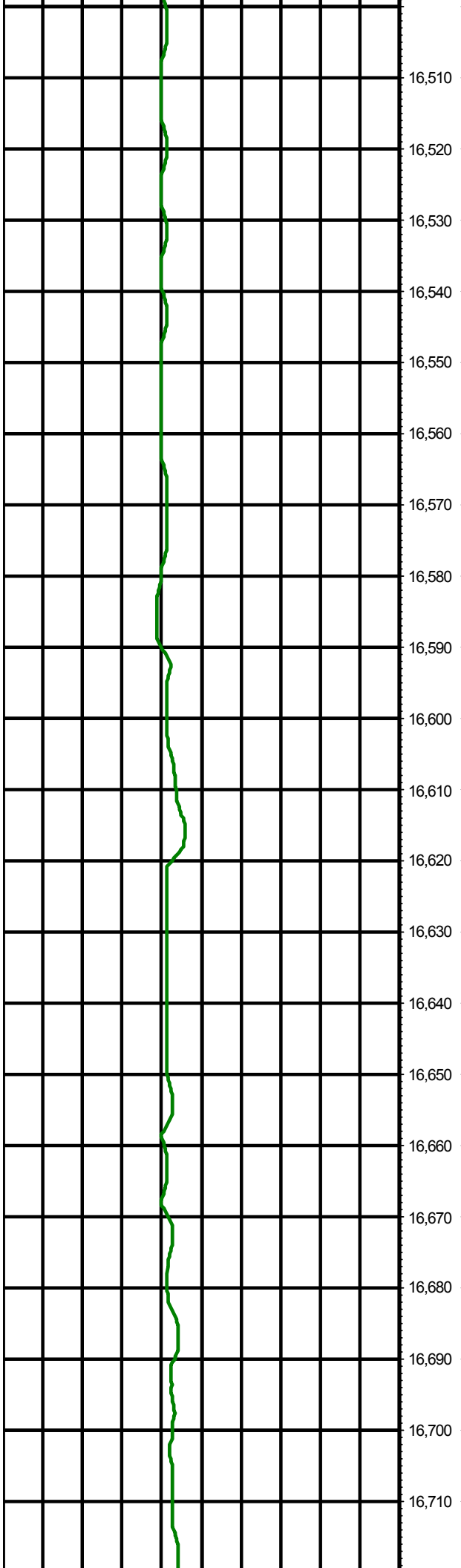
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MD: 15906.00 INC: 90.50 AZ: 359.30

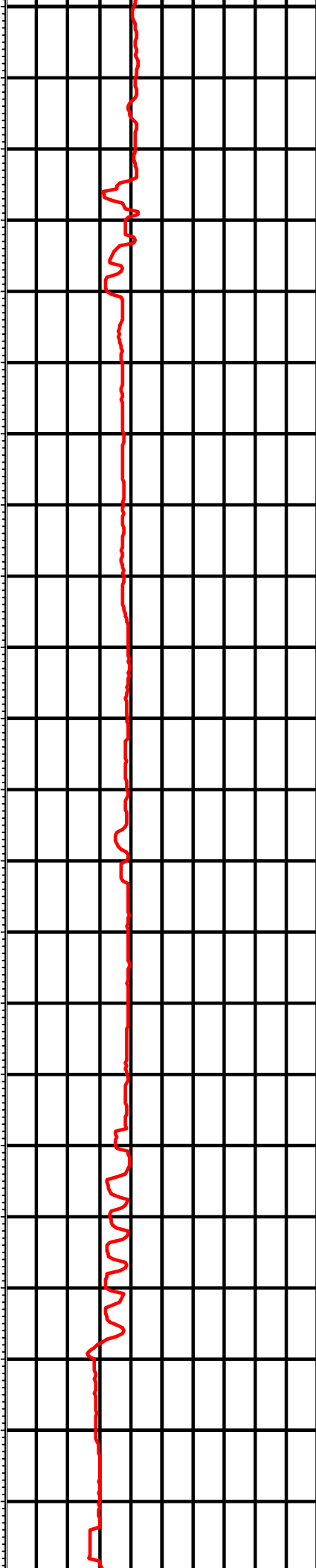
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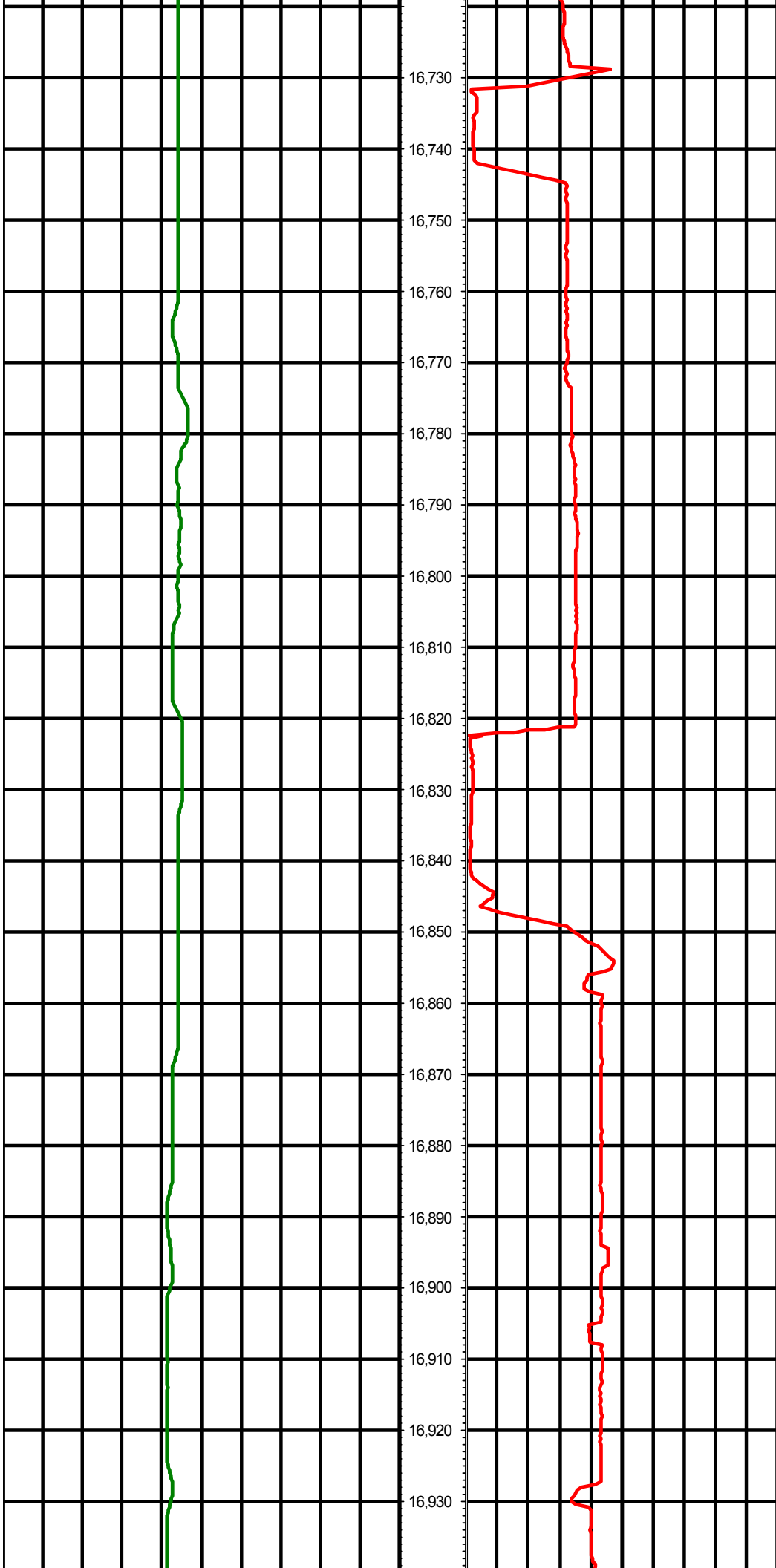


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MD: 16567.00 INC: 90.90 AZ: 359.70

MD: 16662.00 INC: 91.30 AZ: 359.20



MD: 16756.00 INC: 91.20 AZ: 0.20

MD: 16851.00 INC: 89.10 AZ: 0.40

