



Cathedral Energy Services

**CATHEDRAL****145000**

5":100' - MD

1/16/2014 5:07:09 PM

**Oper. Company:** Encana Oil & Gas**Country:** US**State / Province:** CO**County / Parish:** Weld**Started:** 01/07/2014 12:30 PM**API/UWI:** 05-123-37784-00**Field:** DJ Basin**Well:** Lochbuie 2E-31H**Rig:** H&P 522**Ended:** 01/16/2014 12:30 PM**Personnel****Day Hand:** Jared Nichols**Night Hand:** Andrew Stewart**Comp. Emp:** Cathedral Energy Service**Location****Latitude:** 40.014080**Longitude:** -104.712200**Elev. GL:** 5008**Elev. DF:** 30**Elev. KB:** 5038**Hole Data**

Size	From	To
12.25	0	1512
8.75	1512	7708
6.125	7708	11932

**Casing Data**

Size	From	To
9 5/8	0	1502
7	0	7700
4 1/2	0	11922

**Bit Sizes**

Size	From	To
12.25	0	1512
8.75	1512	7708
6.125	7708	11836

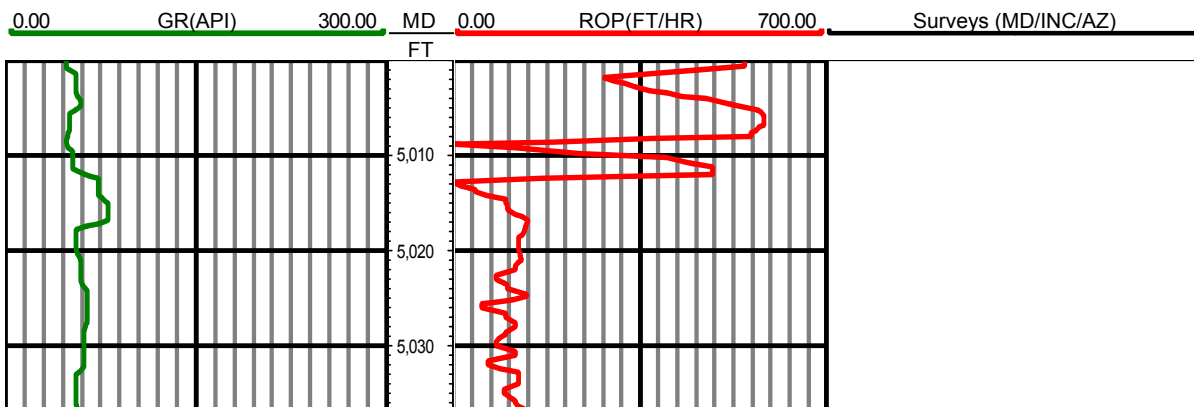
**Mud Data**

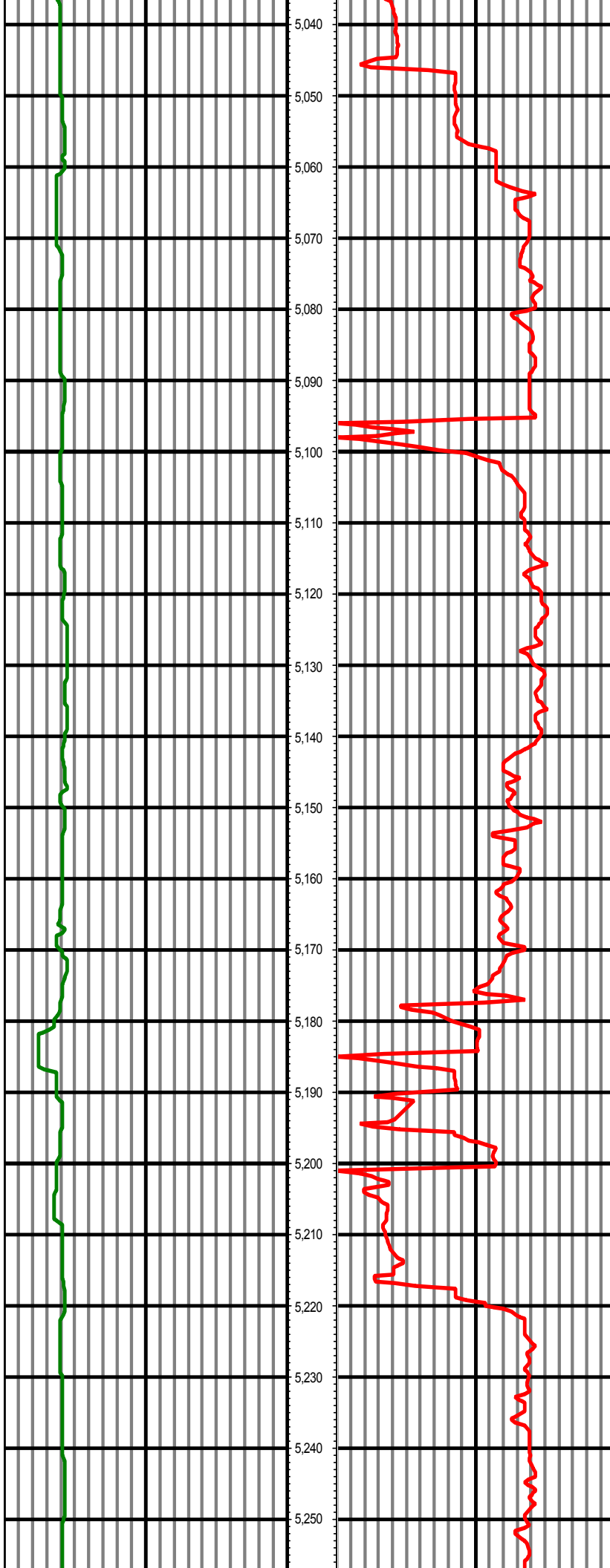
Type	Weight	Density	Viscosity	Rm	Rmf	Rmc	From	To
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**Tool Run Data**

Serial Number	Gamma Offset	Resist. Offset	Start Time	Start Depth	End Time	End Depth
235	36.77	0	1/7/2014 6:30:28 AM	1512	1/9/2014 7:30:28 AM	7708
235	38.26	0	1/11/2014 1:00:36 AM	7708	1/16/2014 12:00:36 PM	11836

*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.*

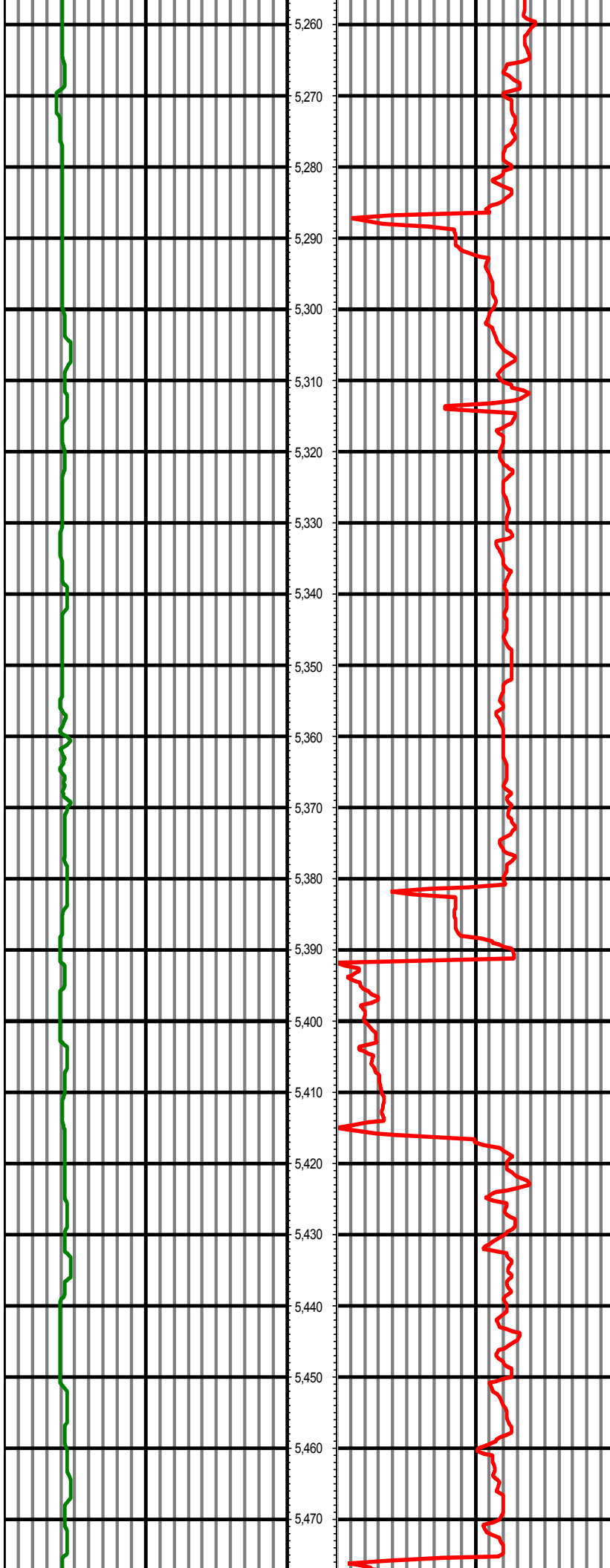




MD: 5049.00 INC: 2.30 AZ: 193.60

MD: 5143.00 INC: 2.90 AZ: 212.80

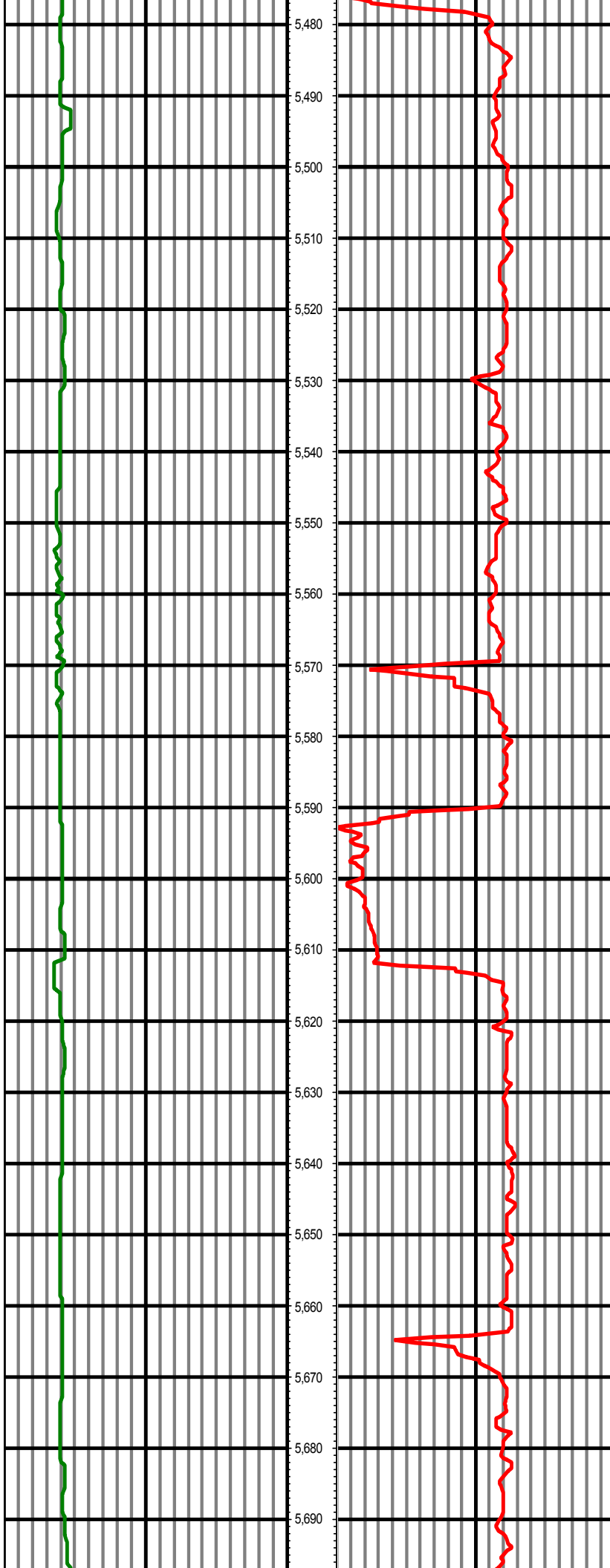
MD: 5238.00 INC: 2.50 AZ: 247.50



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MD: 5332.00 INC: 2.60 AZ: 240.80

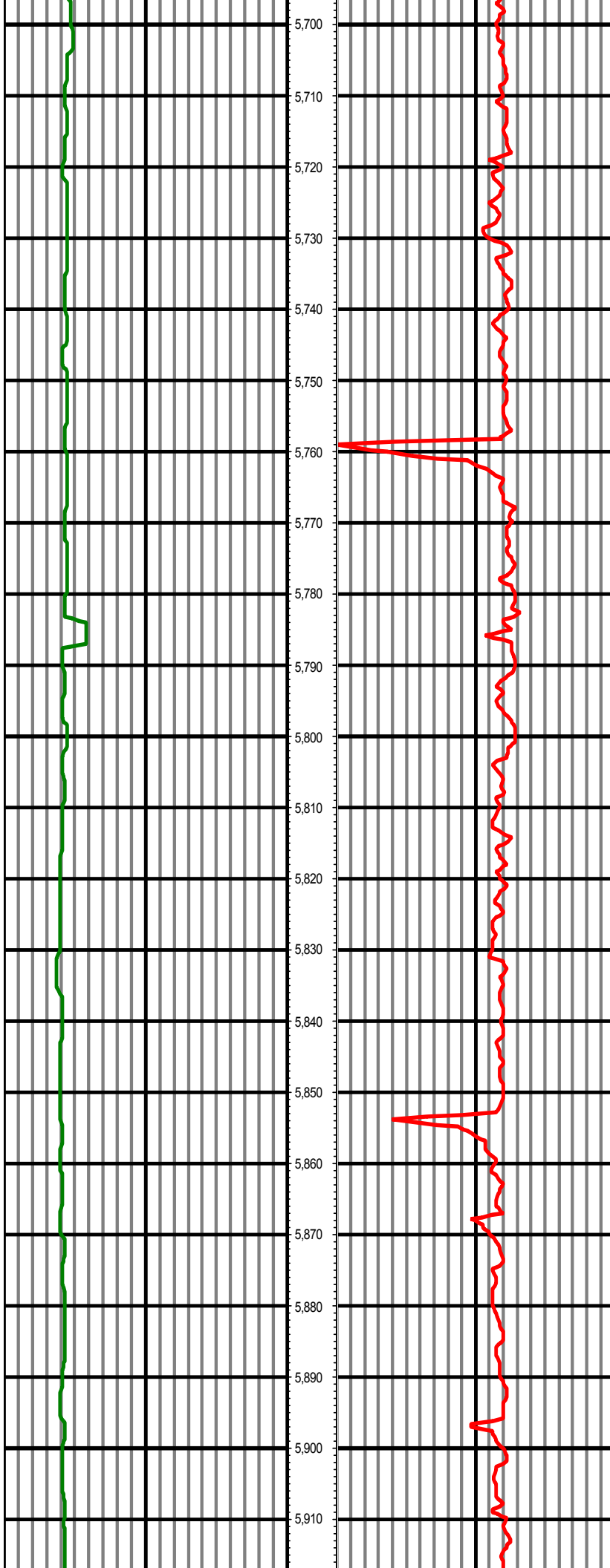
MD: 5427.00 INC: 0.40 AZ: 279.30



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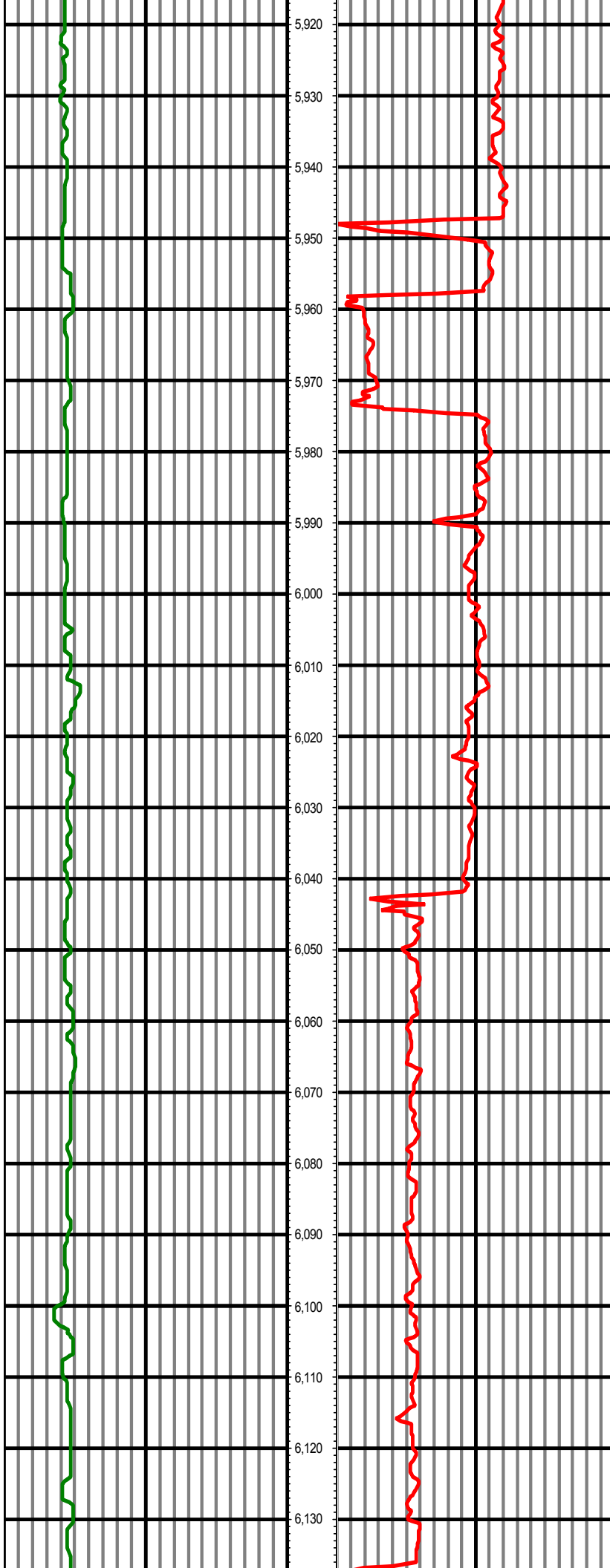
MD: 5616.00 INC: 0.40 AZ: 51.60



MD: 5711.00 INC: 1.10 AZ: 1.90

MD: 5805.00 INC: 1.20 AZ: 351.10

MD: 5900.00 INC: 1.50 AZ: 6.50



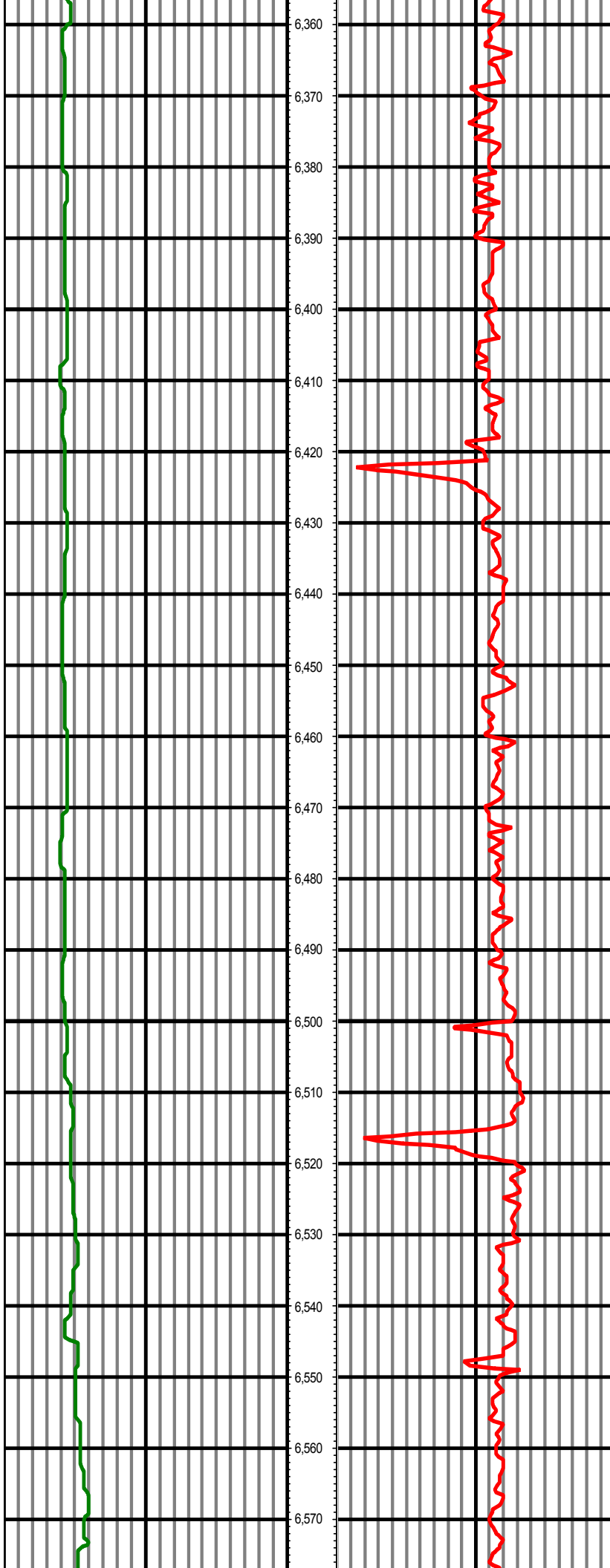
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MD: 6089.00 INC: 0.70 AZ: 40.90



MD: 6184.00 INC: 0.60 AZ: 12.90

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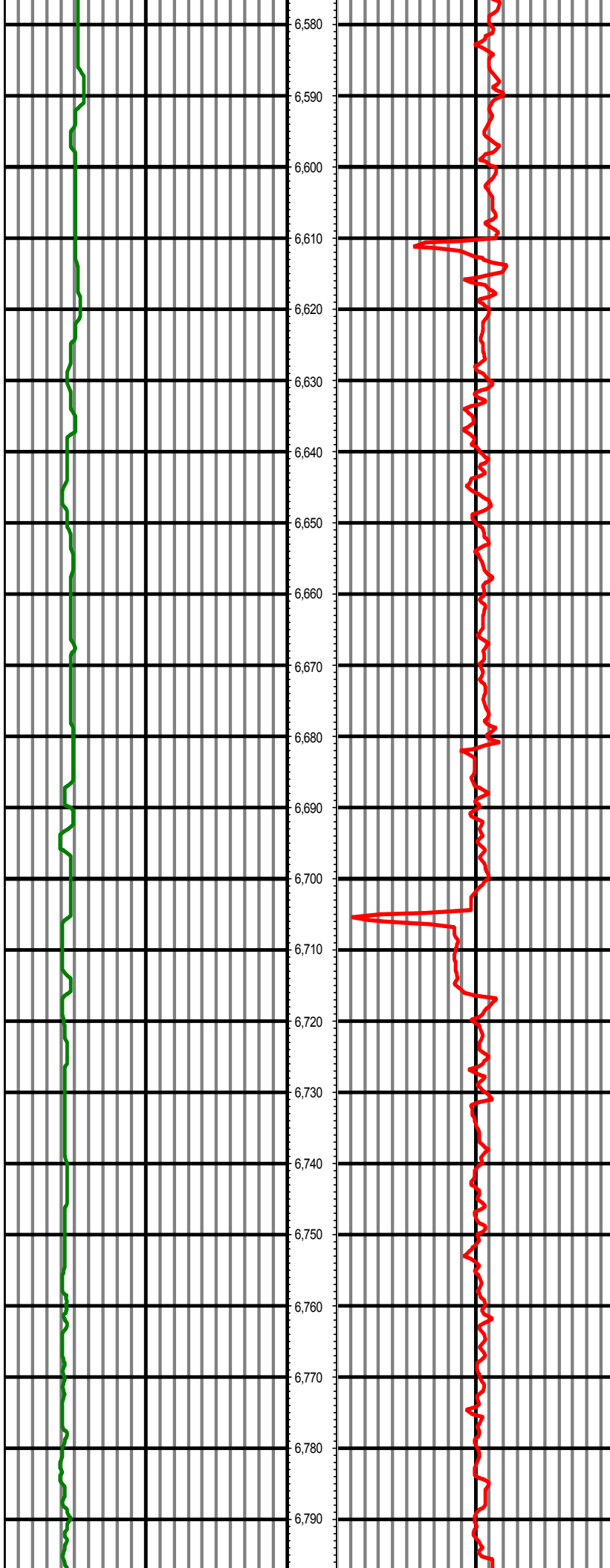


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MD: 6467.00 INC: 0.80 AZ: 118.80

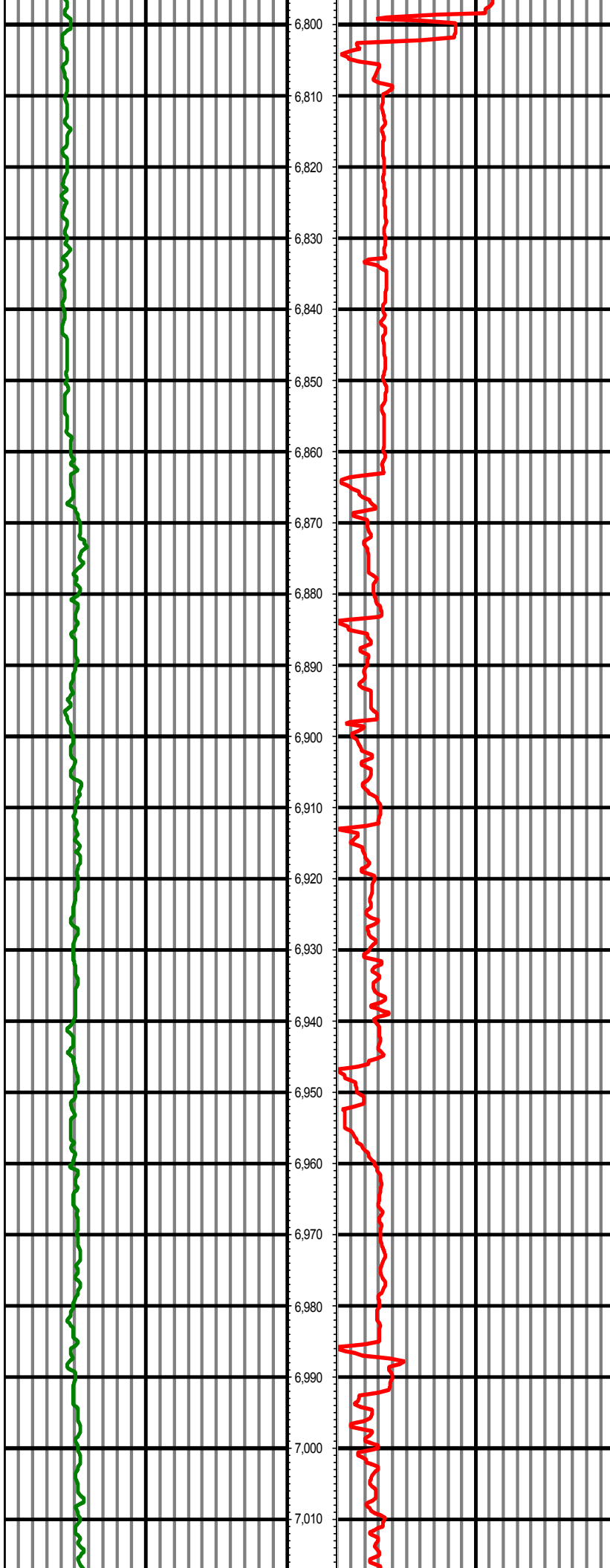
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MD: 6657.00 INC: 1.20 AZ: 99.30

MD: 6751.00 INC: 1.10 AZ: 105.30

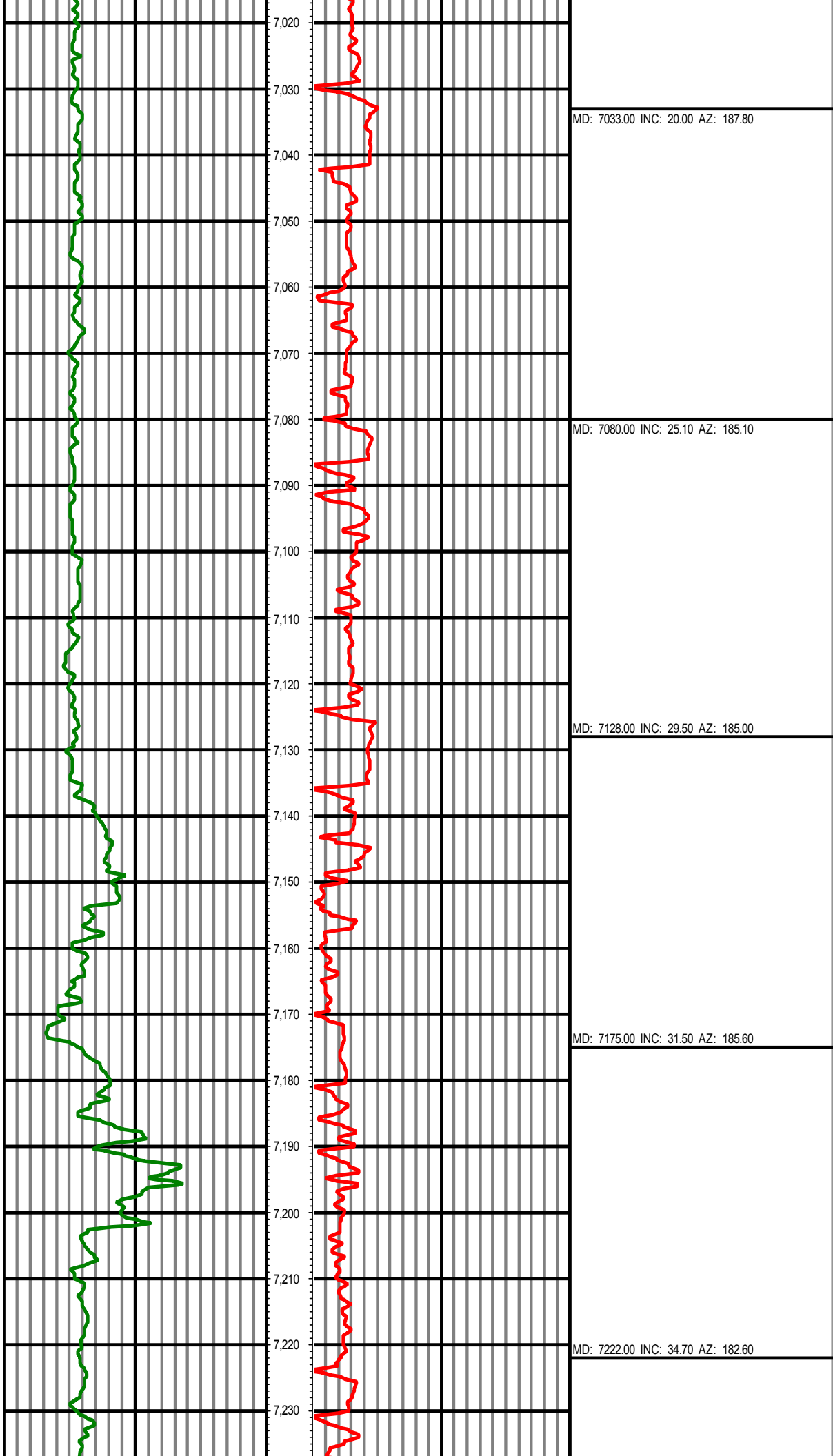


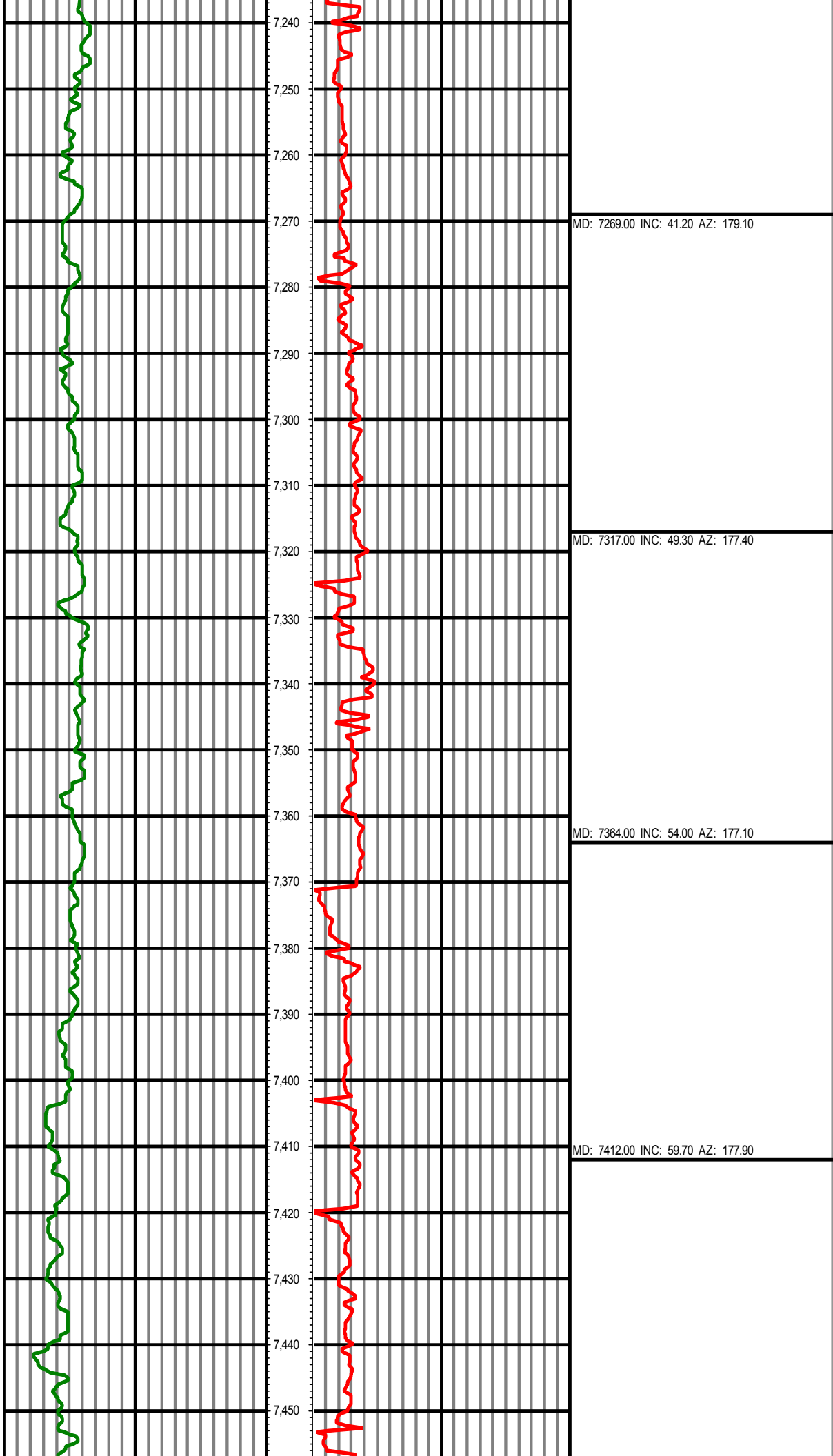
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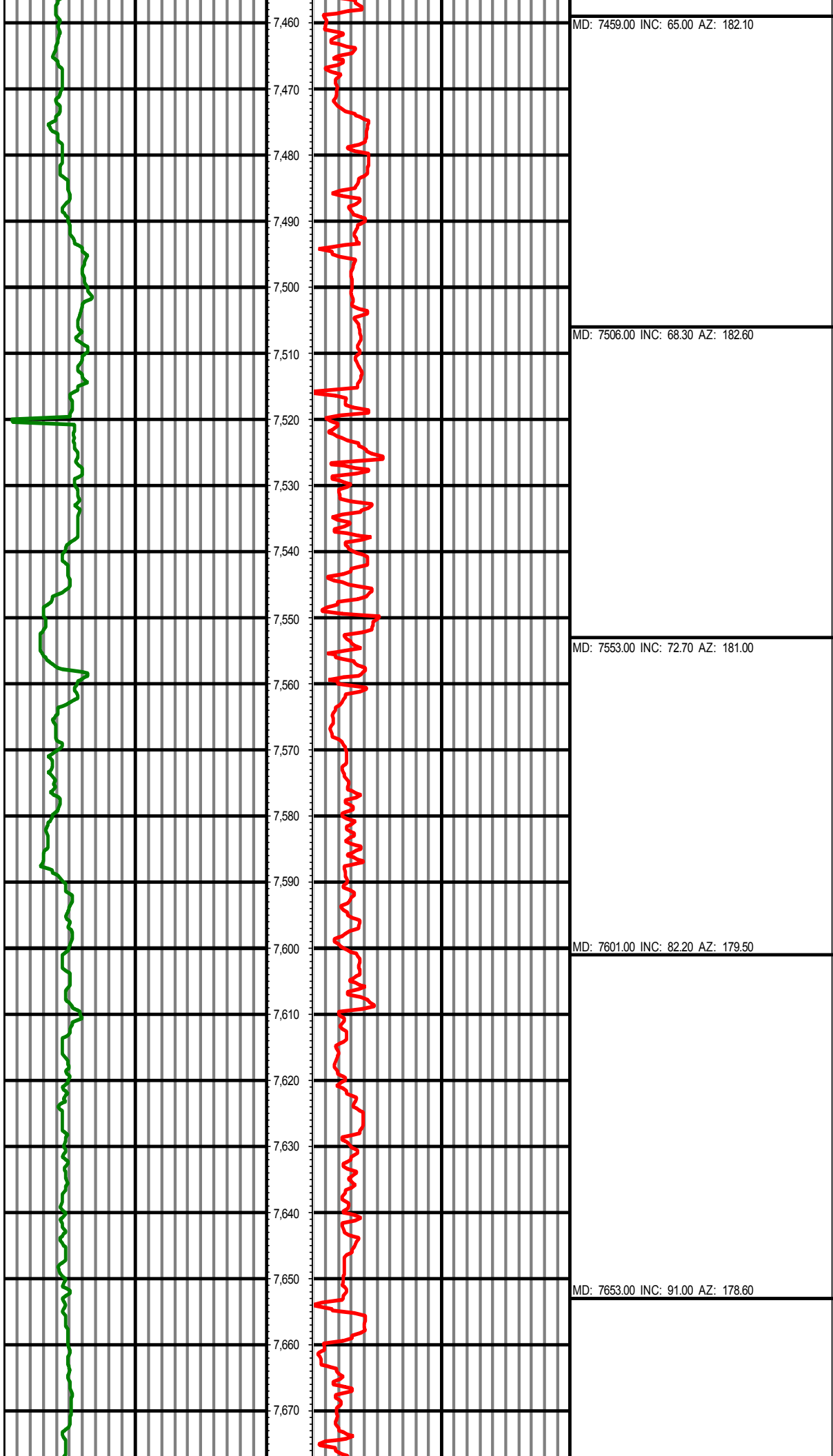
MD: 6891.00 INC: 3.50 AZ: 168.20

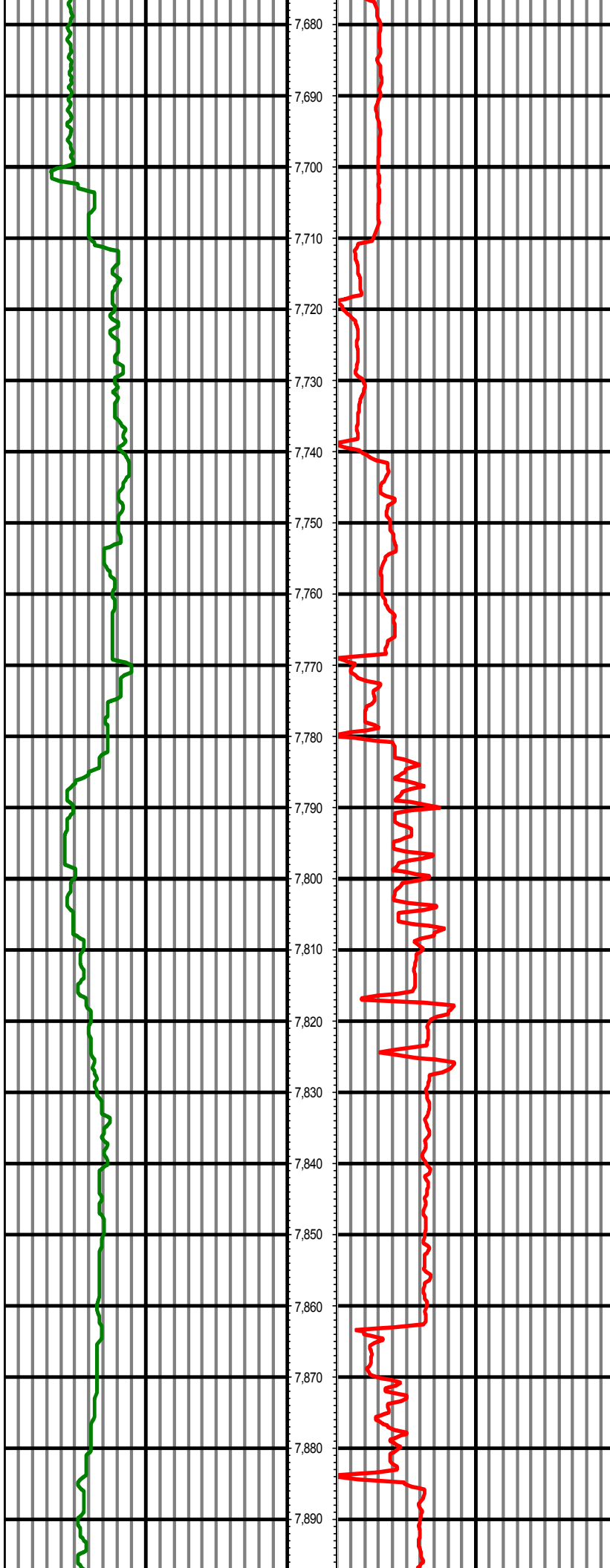
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MD: 6986.00 INC: 15.00 AZ: 189.70



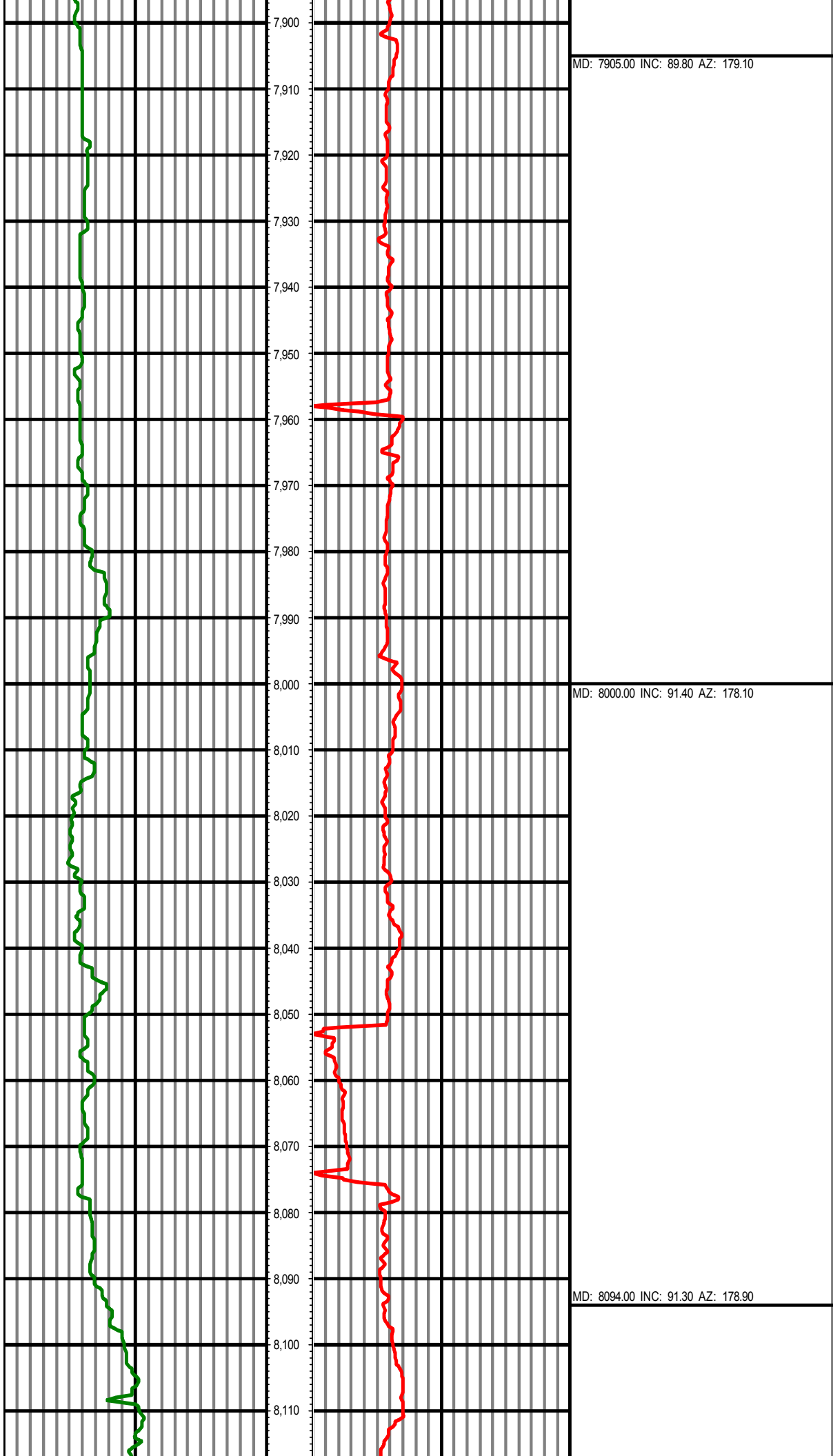


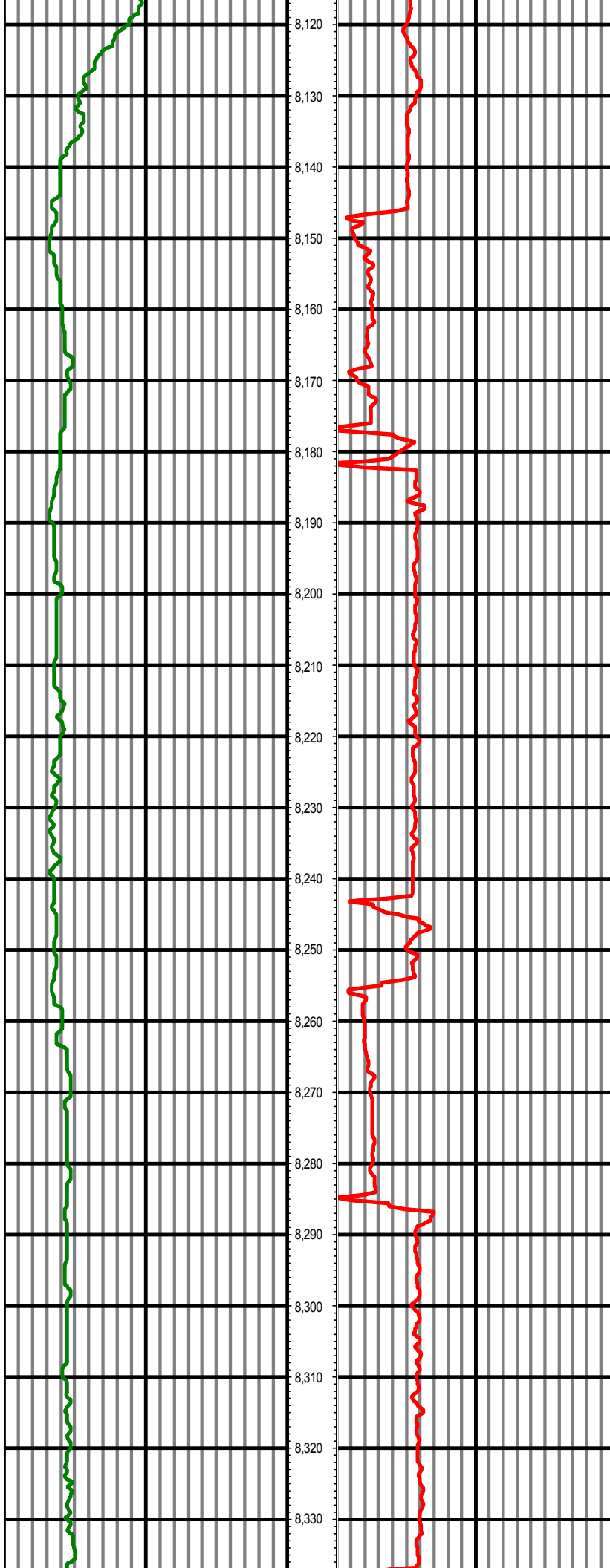




MD: 7716.00 INC: 90.70 AZ: 178.60

MD: 7811.00 INC: 91.10 AZ: 179.10

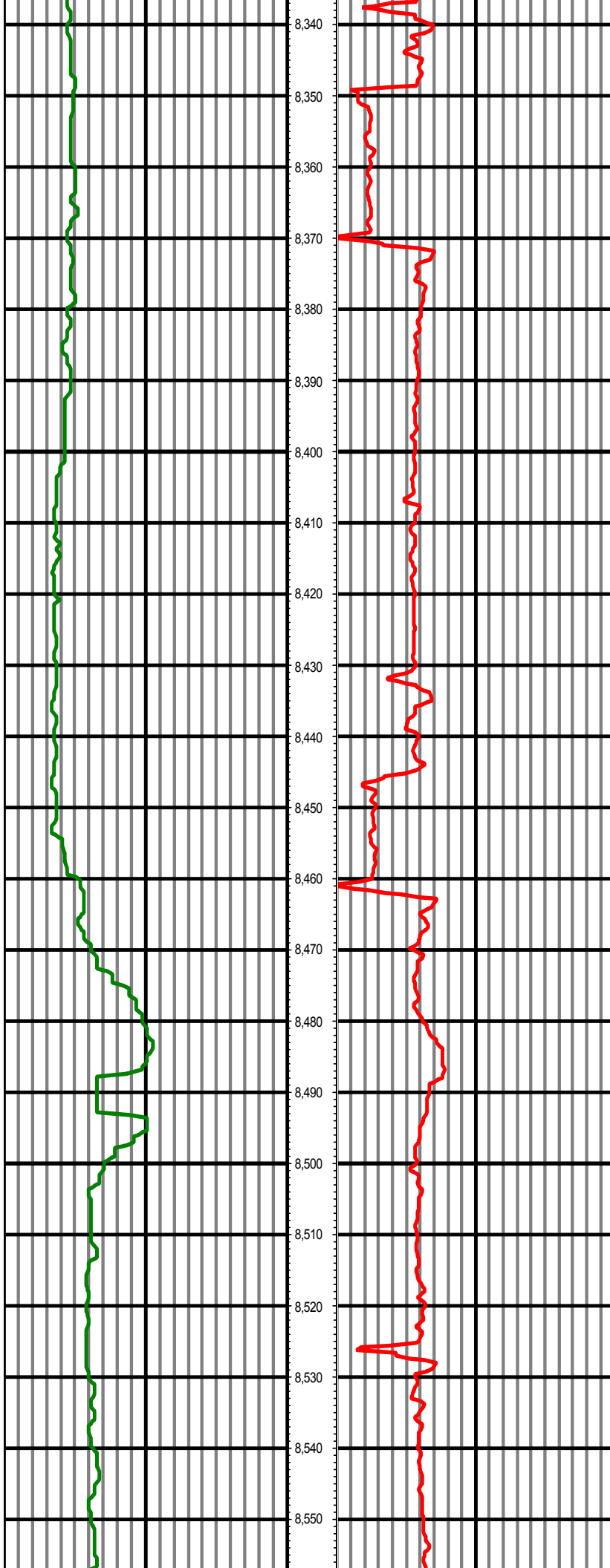




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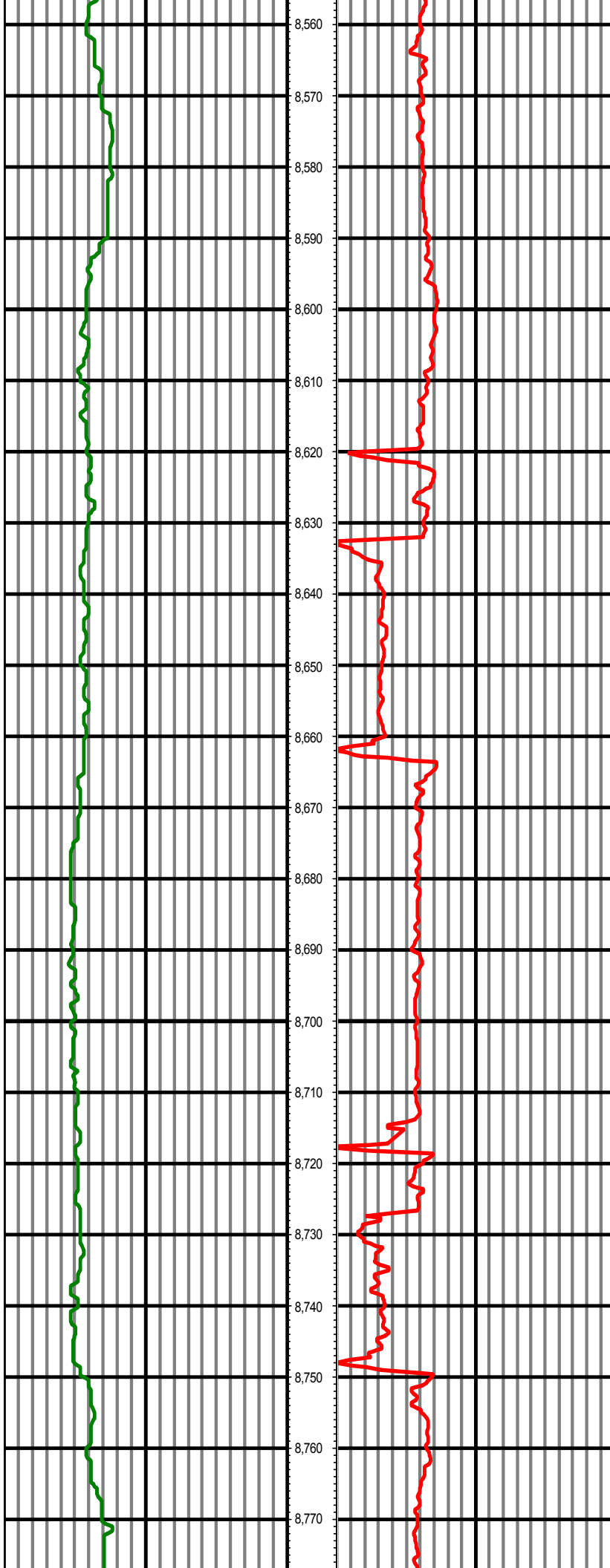
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MD: 8378.00 INC: 88.40 AZ: 180.60

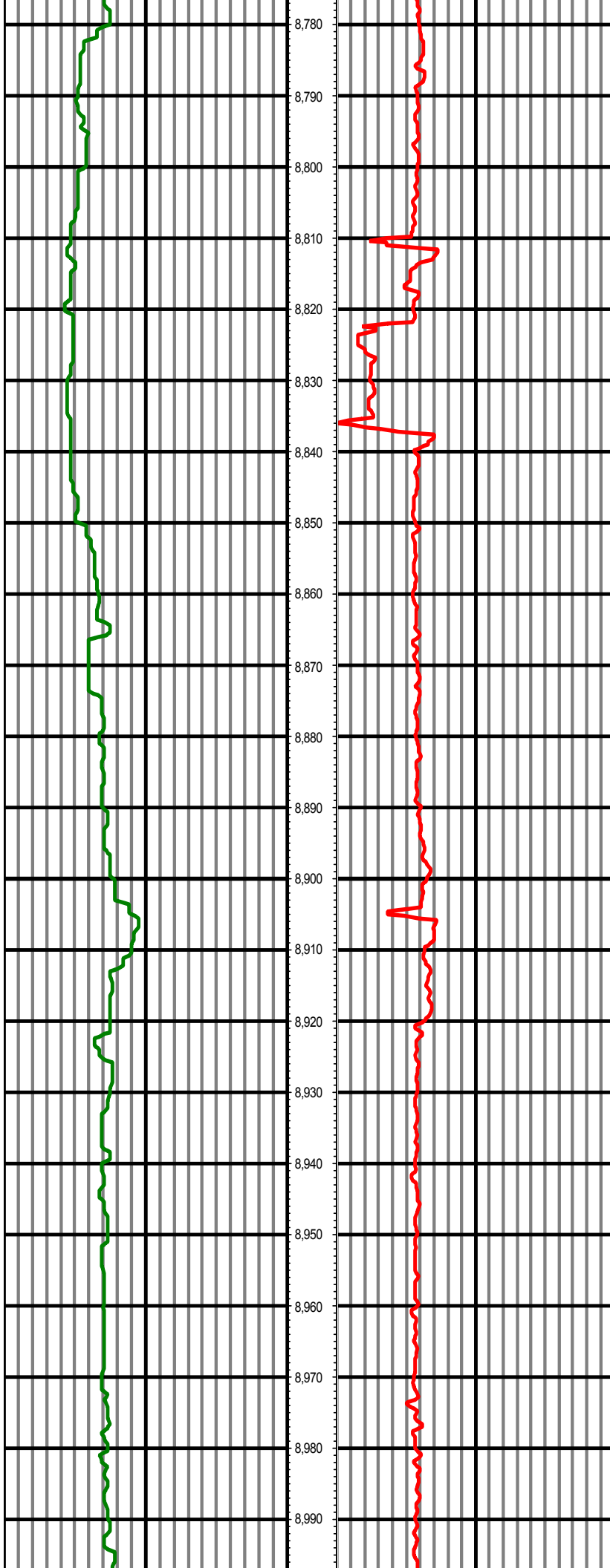
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MD: 8567.00 INC: 88.90 AZ: 179.70

MD: 8662.00 INC: 89.00 AZ: 182.30

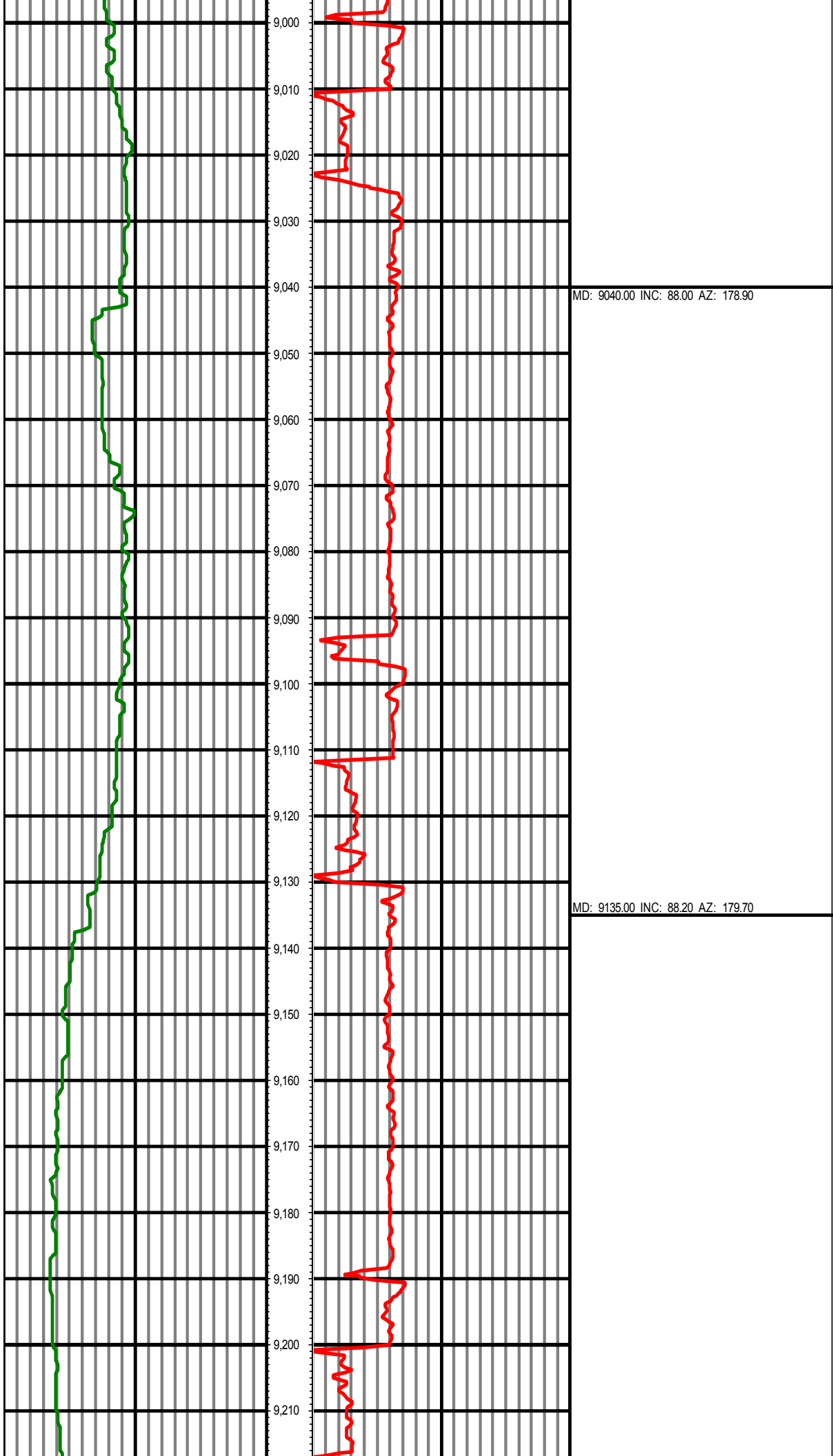
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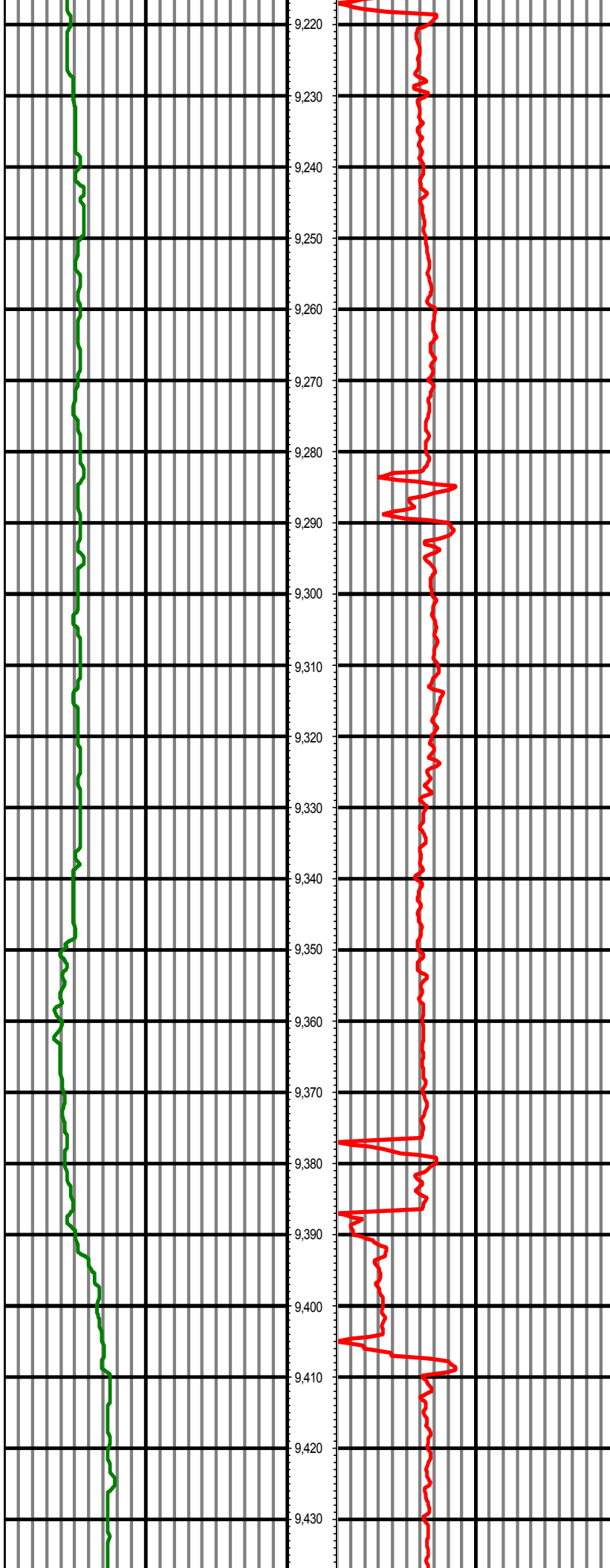


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MD: 8851.00 INC: 87.60 AZ: 181.30

MD: 8945.00 INC: 88.10 AZ: 179.30





MD: 9229.00 INC: 88.40 AZ: 180.50

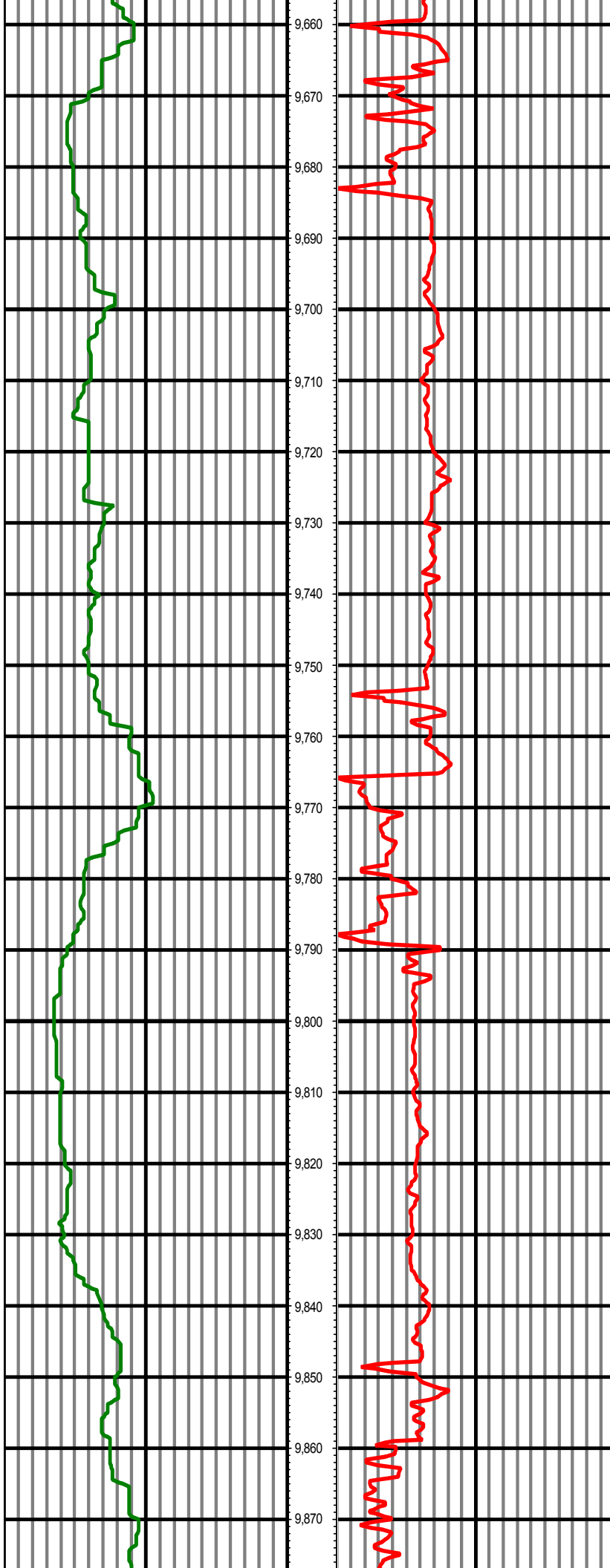
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MD: 9418.00 INC: 88.80 AZ: 180.60



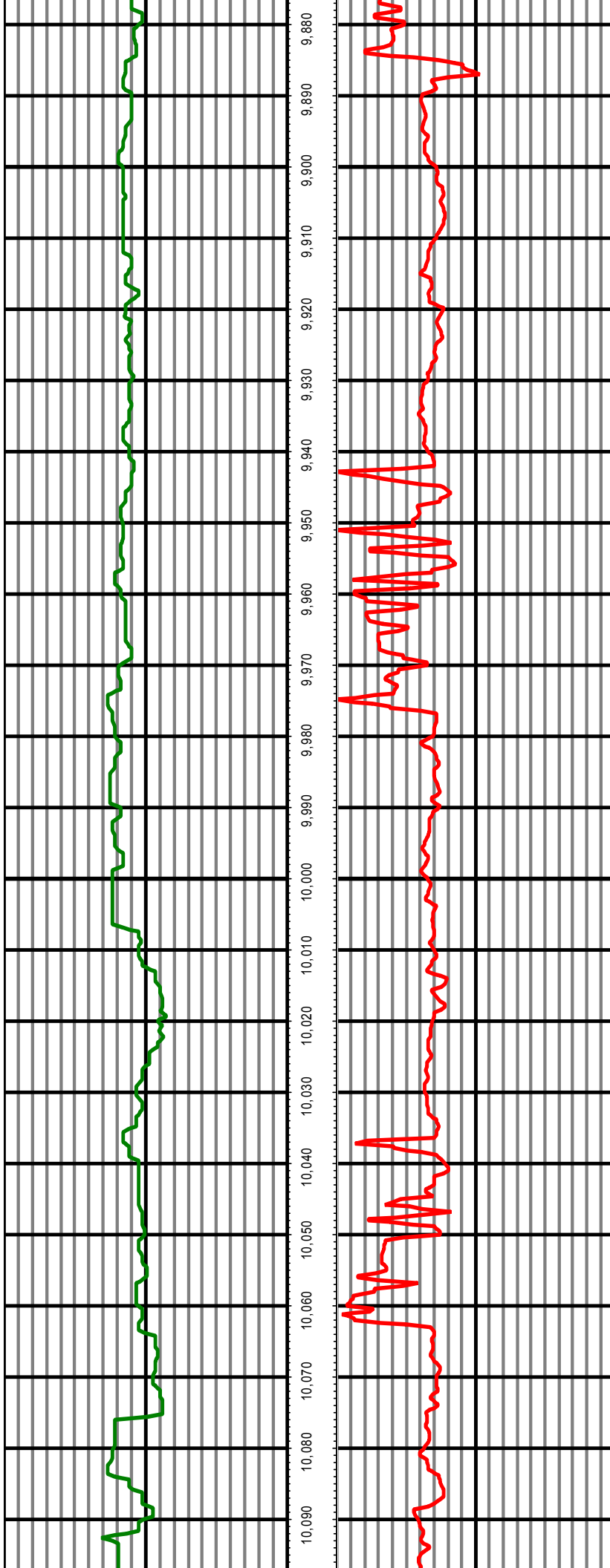
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MD: 9607.00 INC: 89.70 AZ: 179.20



MD: 9702.00 INC: 90.40 AZ: 179.80

MD: 9797.00 INC: 89.90 AZ: 179.70

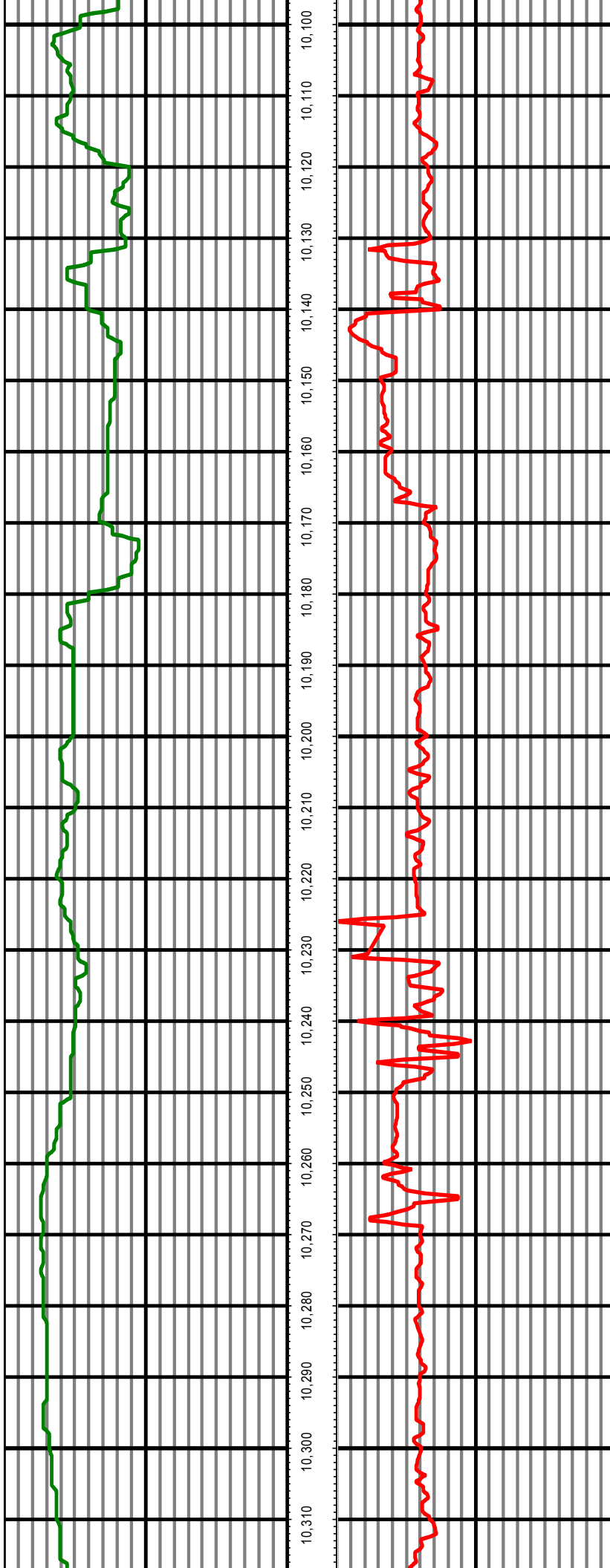


MD: 9891.00 INC: 89.20 AZ: 179.00

MD: 9986.00 INC: 89.30 AZ: 179.90

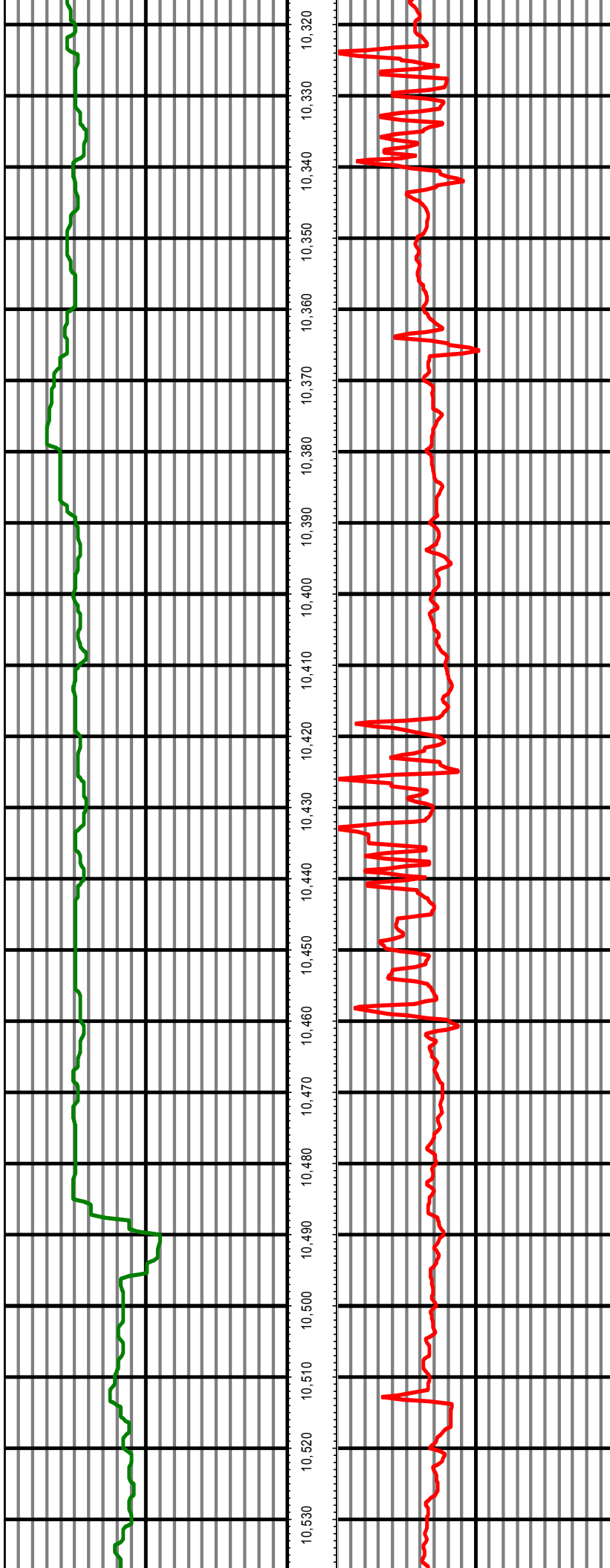
MD: 10080.00 INC: 91.00 AZ: 180.10





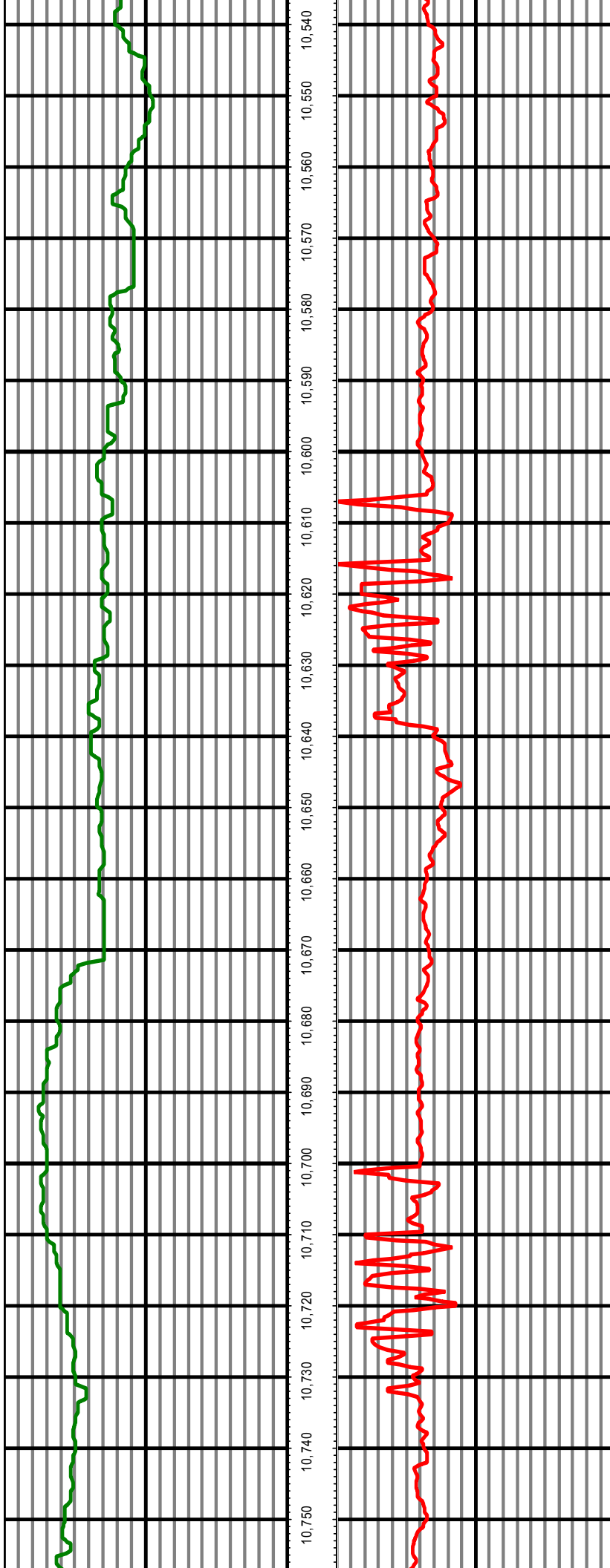
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MD: 10270.00 INC: 89.50 AZ: 180.10



MD: 10364.00 INC: 91.30 AZ: 179.40

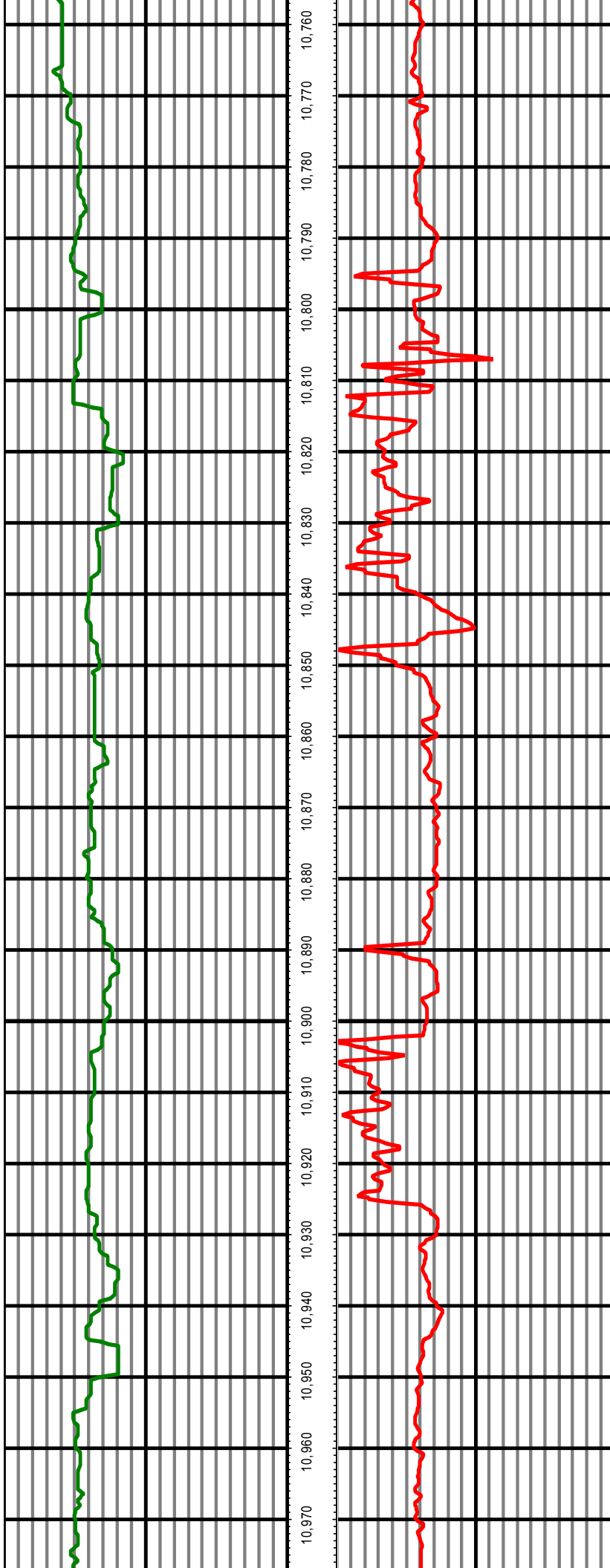
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MD: 10553.00 INC: 91.60 AZ: 180.50

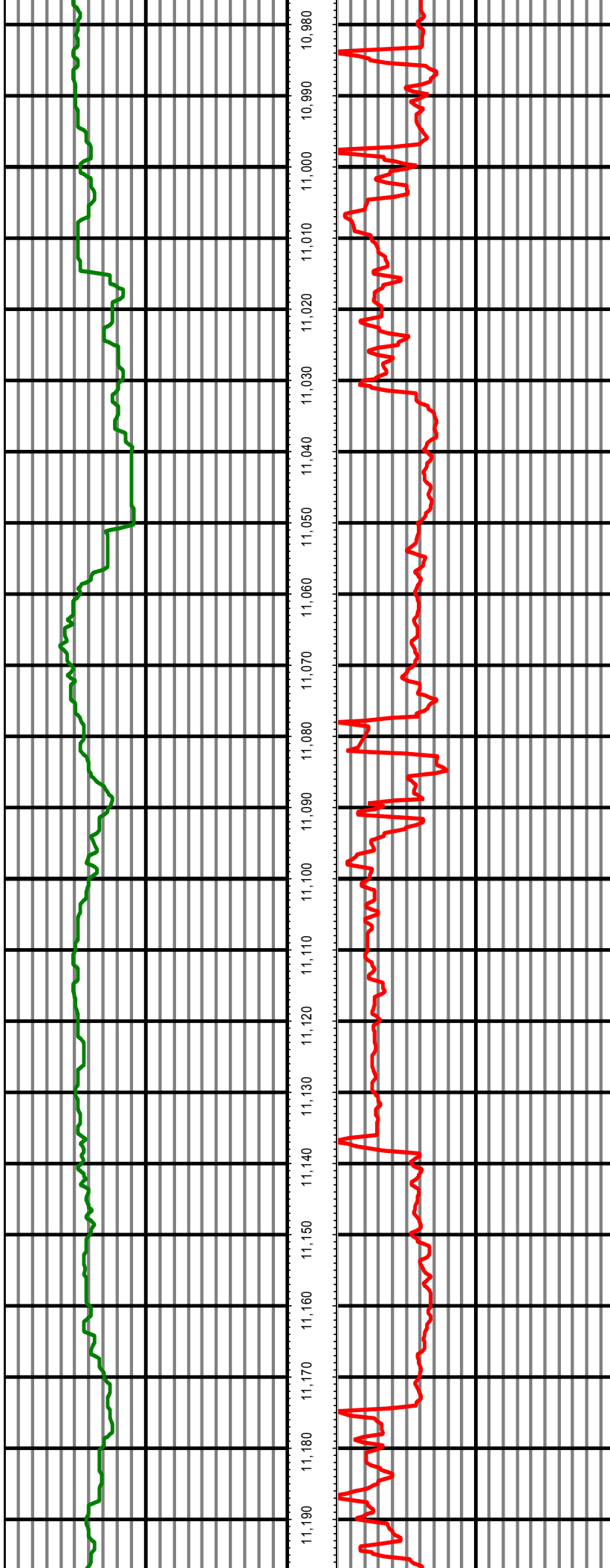
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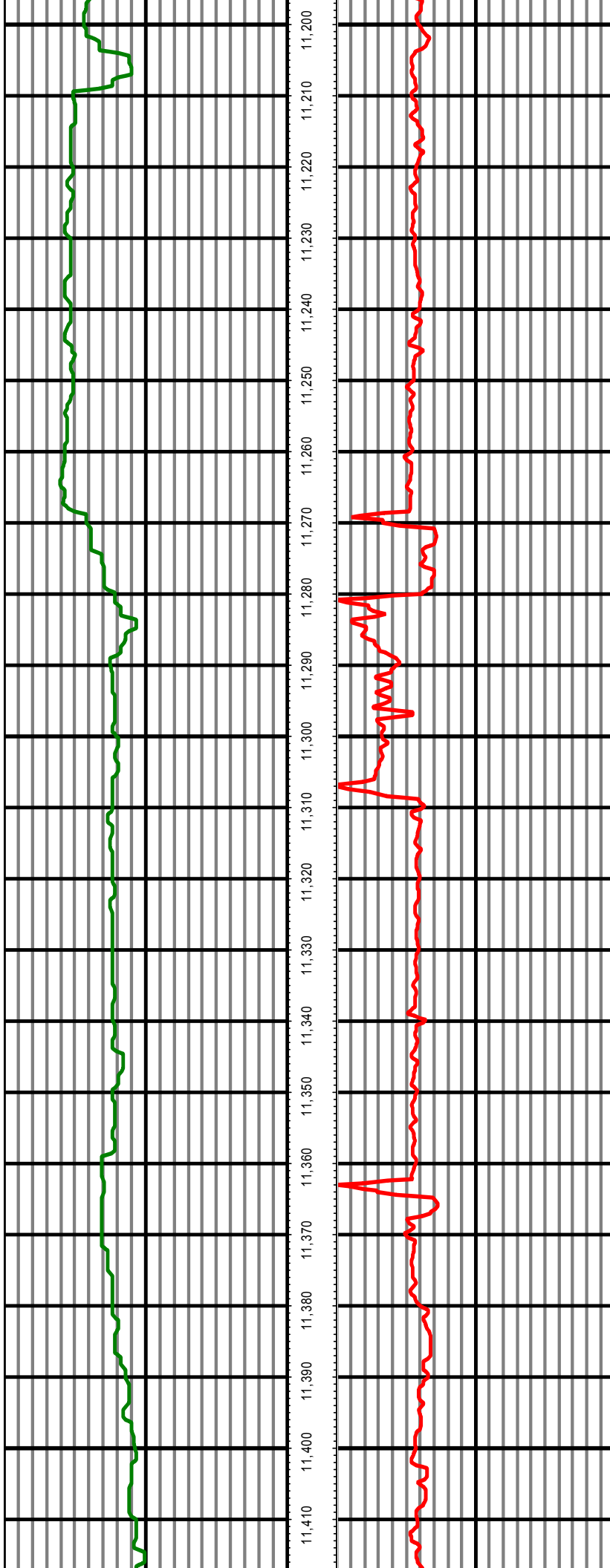
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MD: 10932.00 INC: 91.20 AZ: 178.10



MD: 11026.00 INC: 92.50 AZ: 179.80

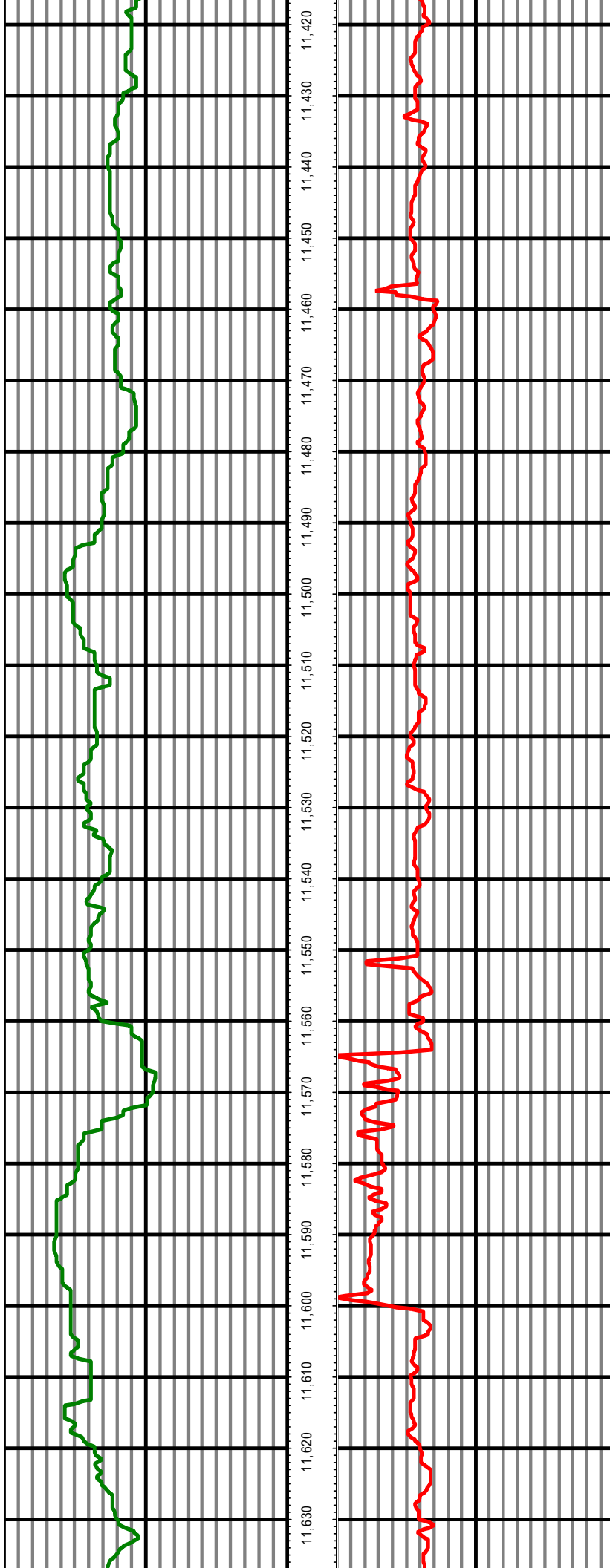
MD: 11121.00 INC: 91.40 AZ: 181.30



MD: 11215.26 INC: 90.50 AZ: 181.70

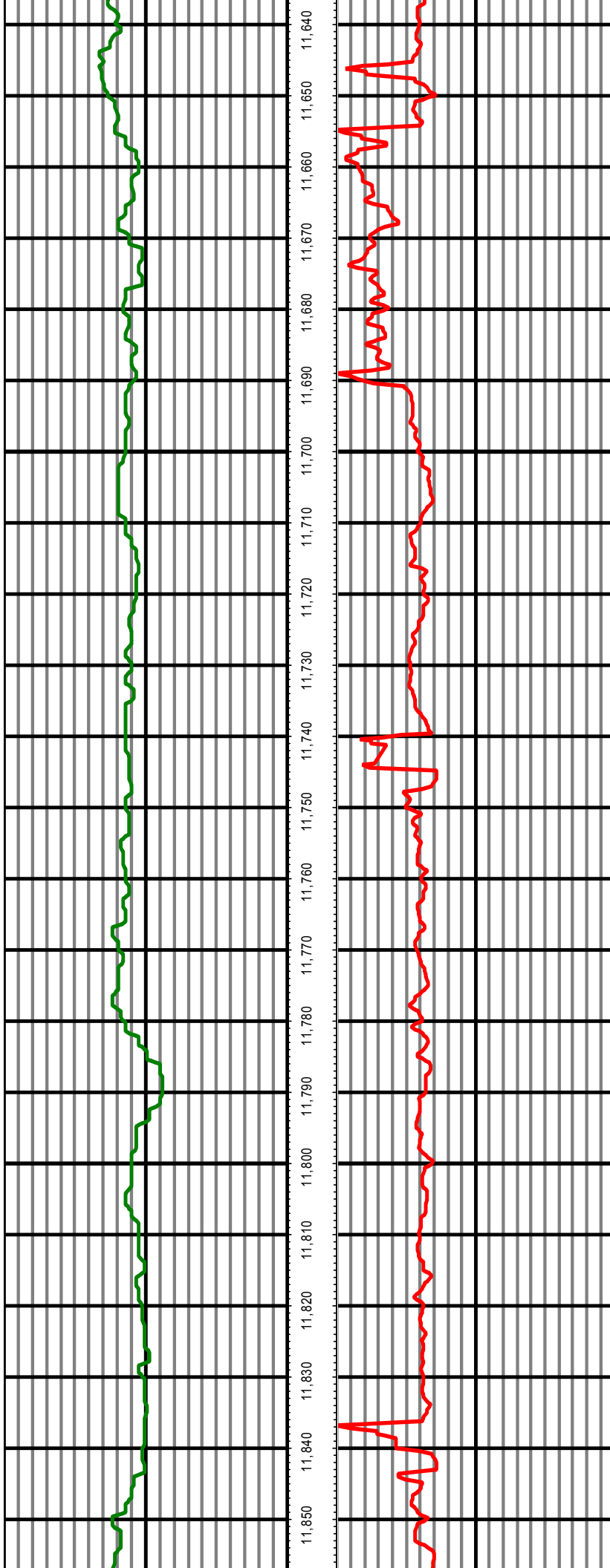
MD: 11310.00 INC: 89.30 AZ: 181.40

MD: 11404.00 INC: 90.10 AZ: 180.50



MD: 11499.00 INC: 91.70 AZ: 180.20

MD: 11594.00 INC: 91.20 AZ: 179.50



MD: 11688.00 INC: 90.10 AZ: 180.50

MD: 11783.00 INC: 91.10 AZ: 179.30



