



Cathedral Energy Service  
1949 Pyrite Rd Casper Wy 82604

**135430**

5":100' - MD  
10/3/2013 2:15:30 PM

**Oper. Company:** Encana Oil & Gas  
**Country:** US  
**State / Province:** Colorado  
**County / Parish:** Weld  
**Started:** 09/28/2013 07:00 AM

**API/UWI:** 051233743900  
**Field:** DJ Basin  
**Well:** Marcus State 3F-36H  
**Rig:** Ensign 135  
**Ended:** 09/29/2013 02:30 PM

### Personnel

**Day Hand:** K Wagoner  
**Night Hand:** B Giannino  
**Comp. Emp:** CathedralEnergy Services

### Location

**Latitude:** 40.088280  
**Longitude:** -104.729960  
**Elev. GL:** 5039  
**Elev. DF:** 5052  
**Elev. KB:** 5052

### Hole Data

Size	From	To
8.75	0	7650
6.125	7650	11900

### Casing Data

Size	From	To
7in	0	7636
4.5	0	11880

### Bit Sizes

Size	From	To
8.75	1228	7650
6.125	7650	11900

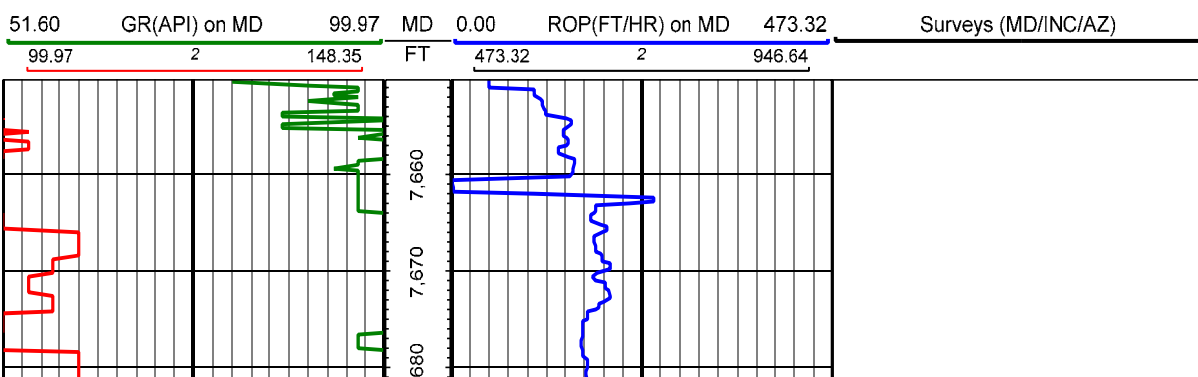
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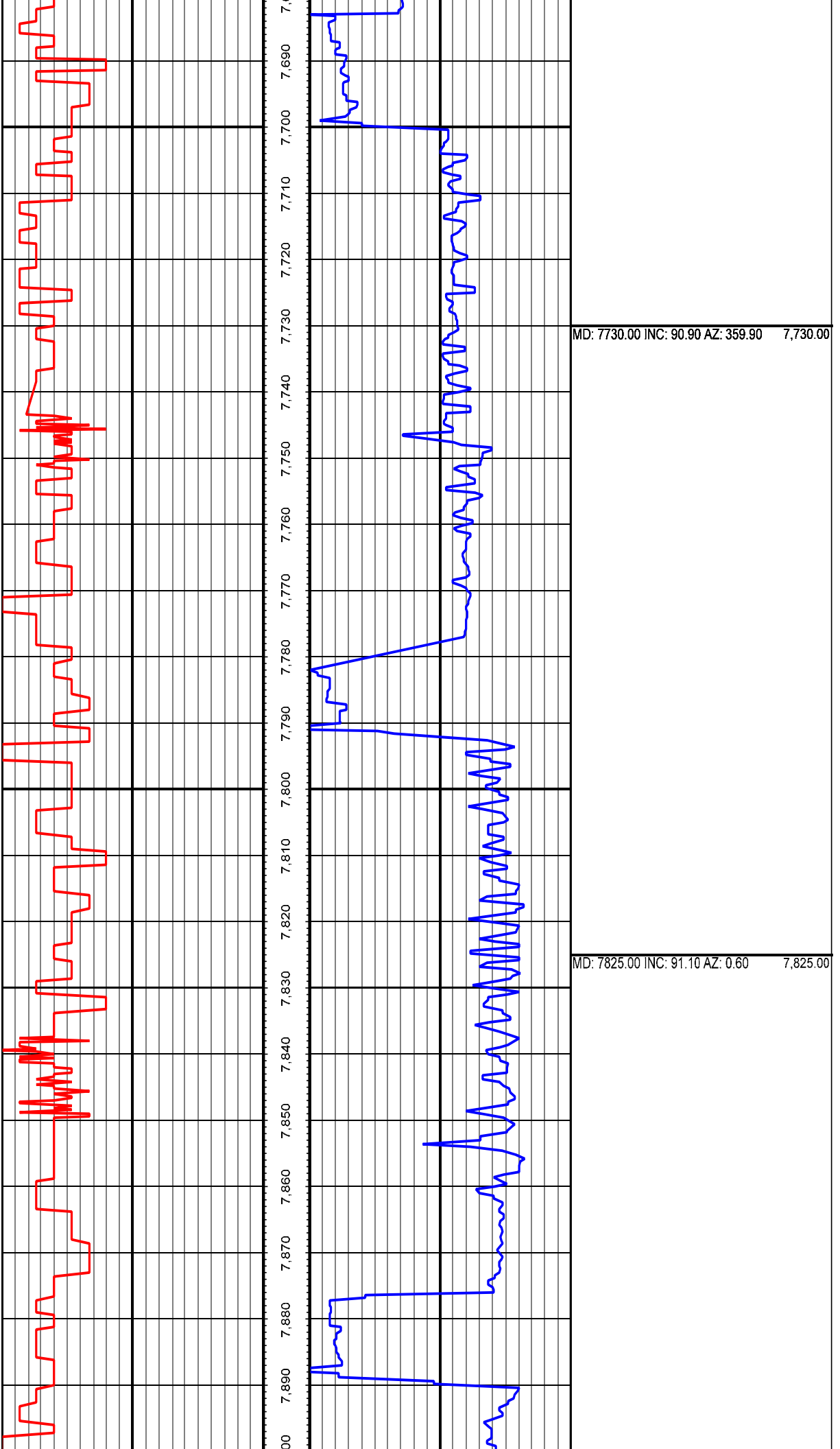
Type	Weight	Density	Viscosity	Rm	Rmf	Rmc	From	To
LSND	8.3	8.3	26.0				1228	7650
LSND	9.85	9.85	35.0				7650	11900

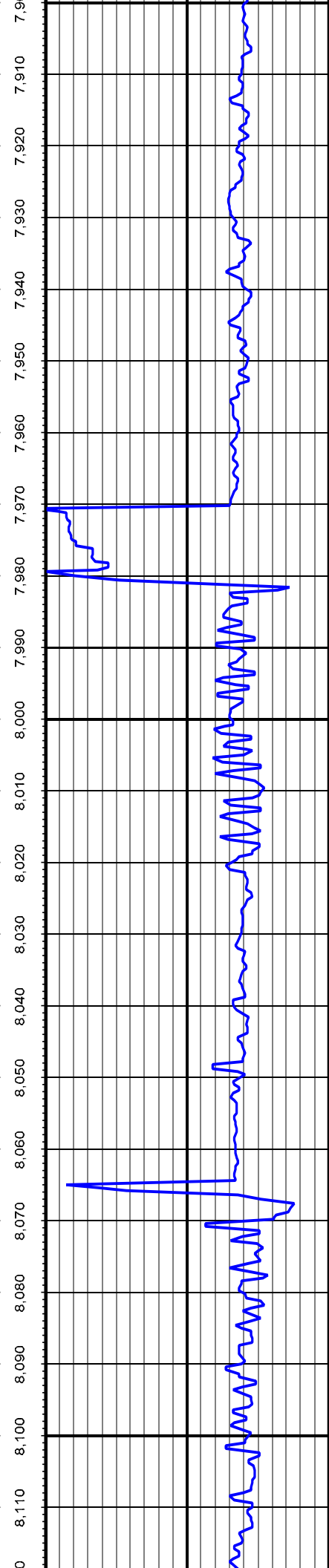
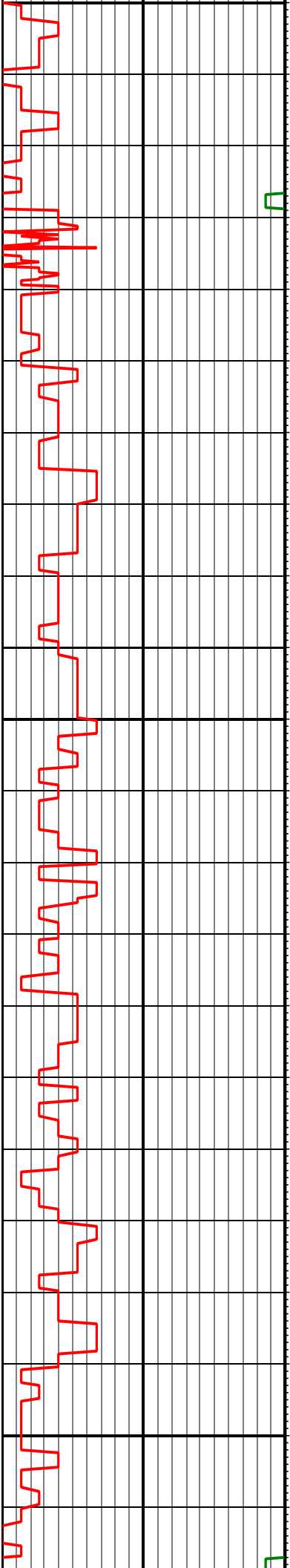
### Tool Run Data

Serial Number	Gamma Offset	Resist. Offset	Start Time	Start Depth	End Time	End Depth
1182	38.81	0	9/28/2013 7:00:03 AM	5000	9/29/2013 2:30:03 PM	7650
1140	38.86	0	10/1/2013 9:30:16 AM	7650	10/2/2013 5:30:16 AM	11900

*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.*



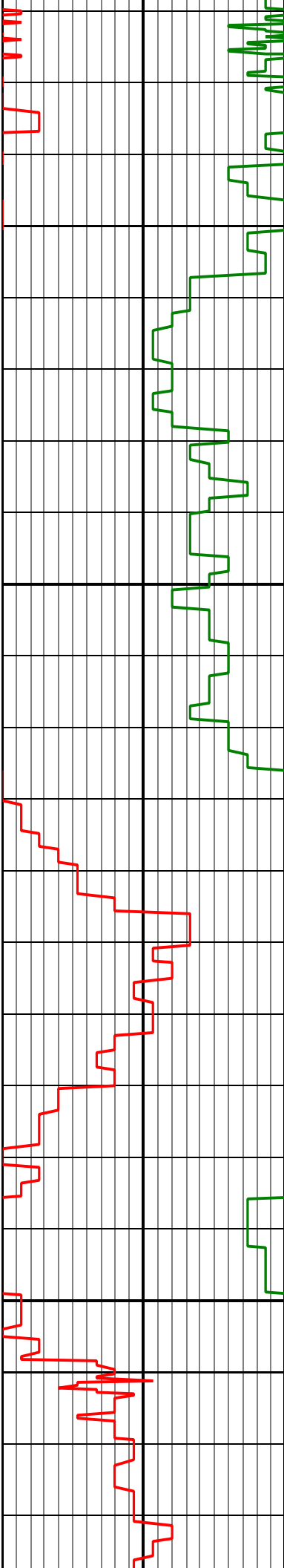




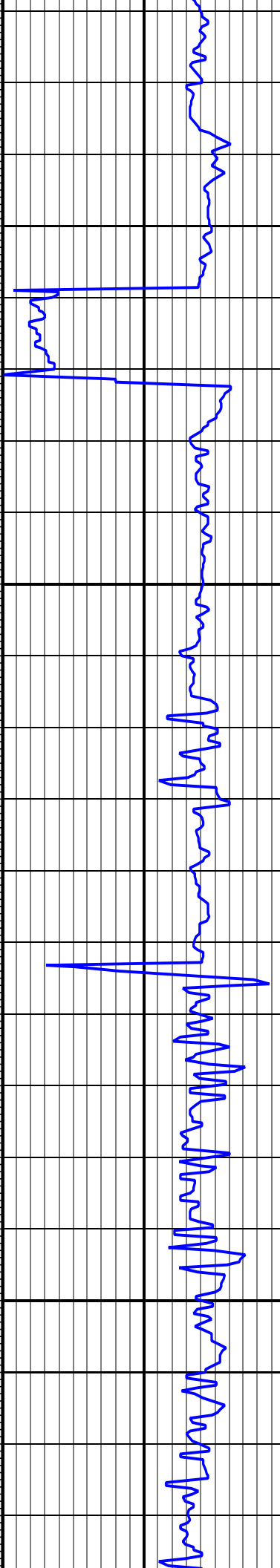
MD: 7920.00 INC: 90.50 AZ: 1.50 7,920.00

MD: 8014.00 INC: 89.70 AZ: 1.10 8,014.00

MD: 8109.00 INC: 90.30 AZ: 0.90 8,109.00

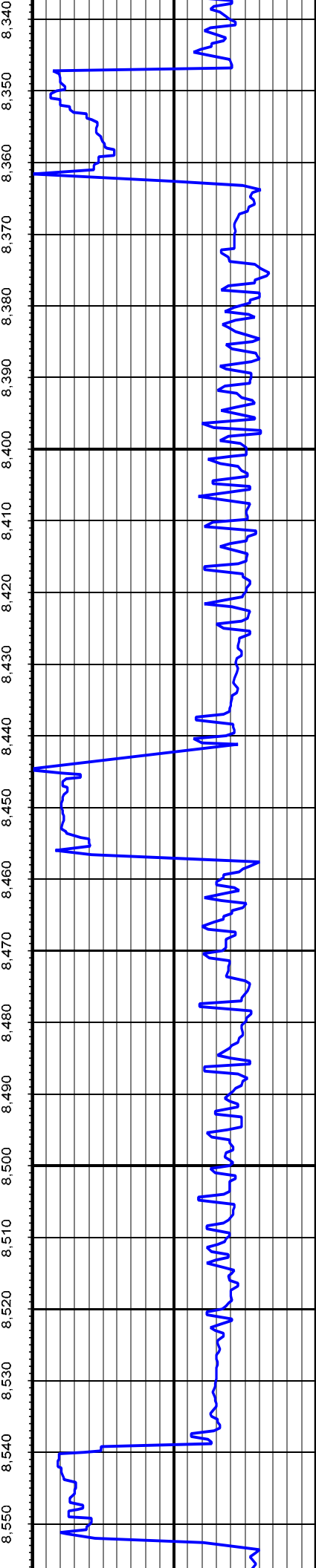
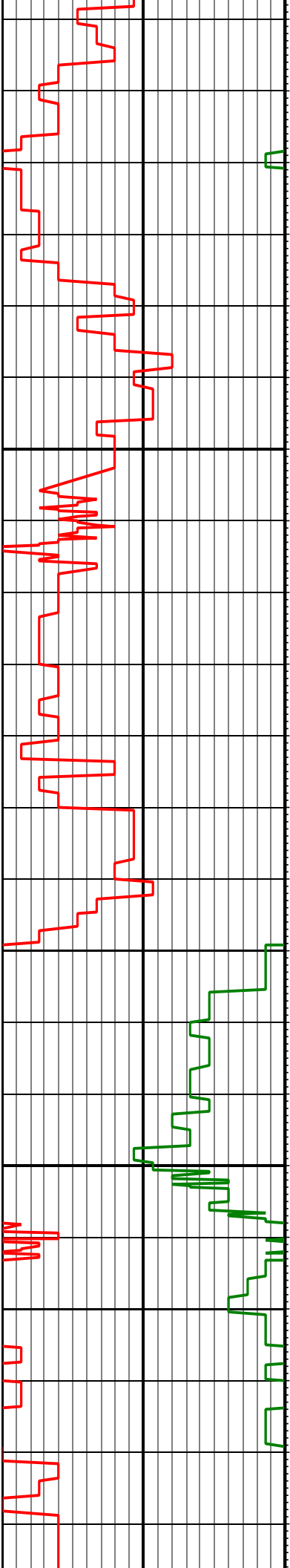


8,120 8,130 8,140 8,150 8,160 8,170 8,180 8,190 8,200 8,210 8,220 8,230 8,240 8,250 8,260 8,270 8,280 8,290 8,300 8,310 8,320 8,330



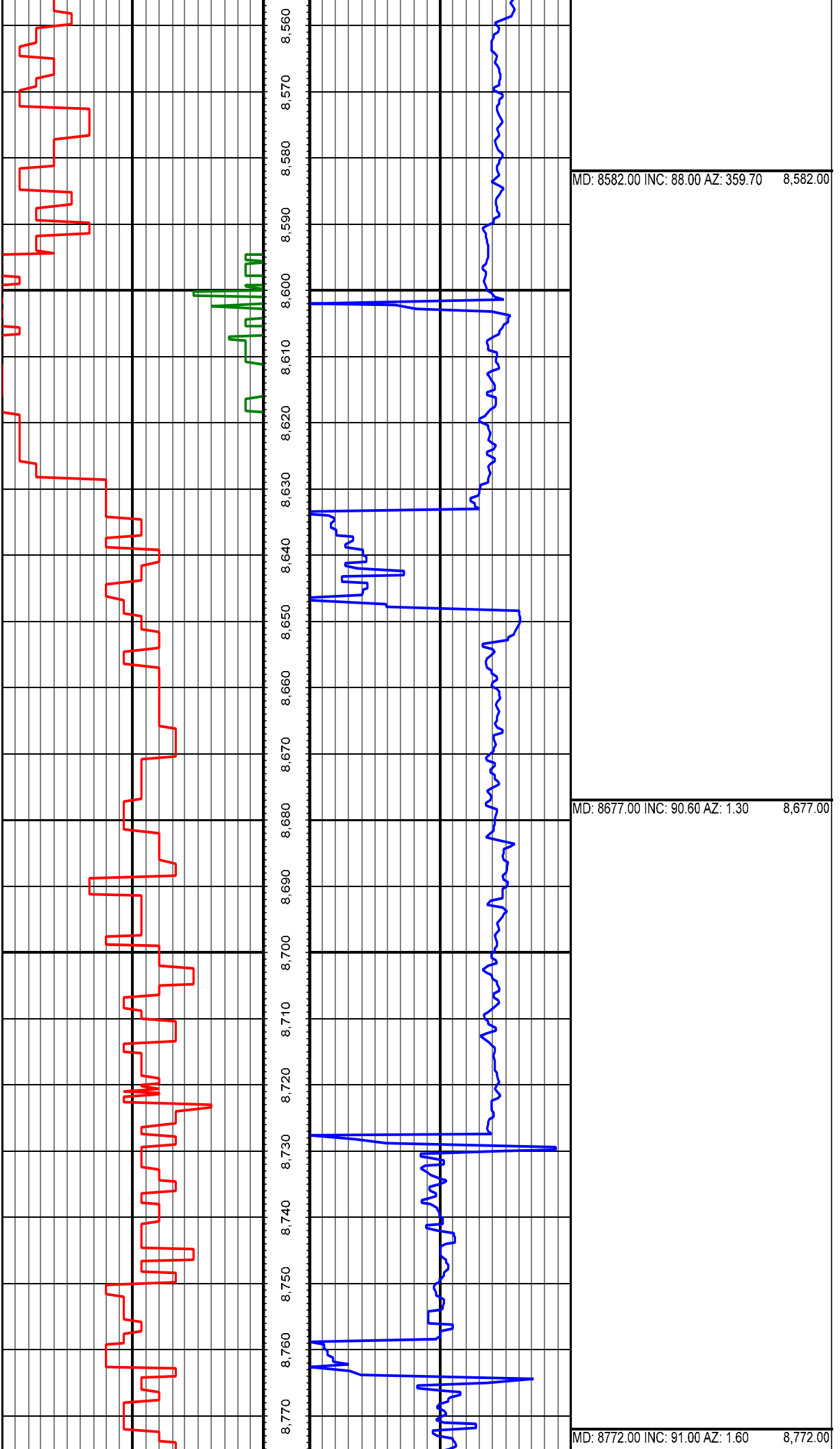
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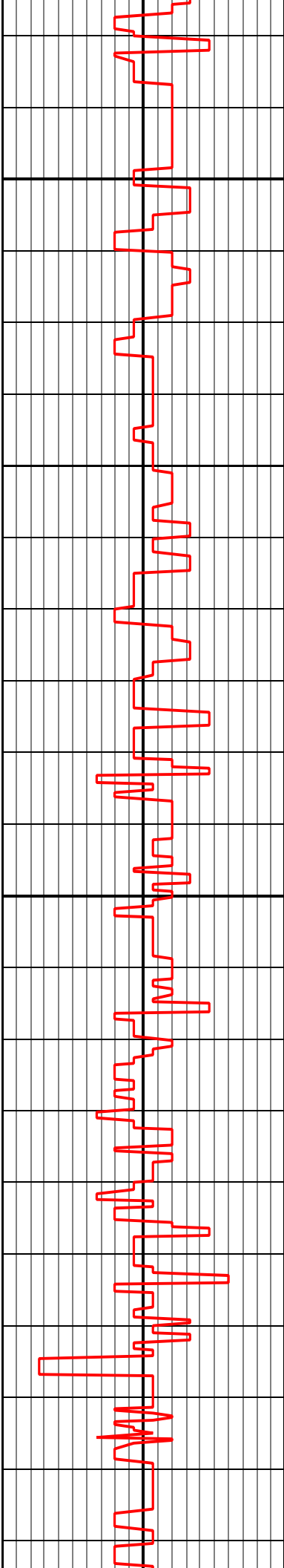
MD: 8298.00 INC: 88.90 AZ: 359.80 8,298.00



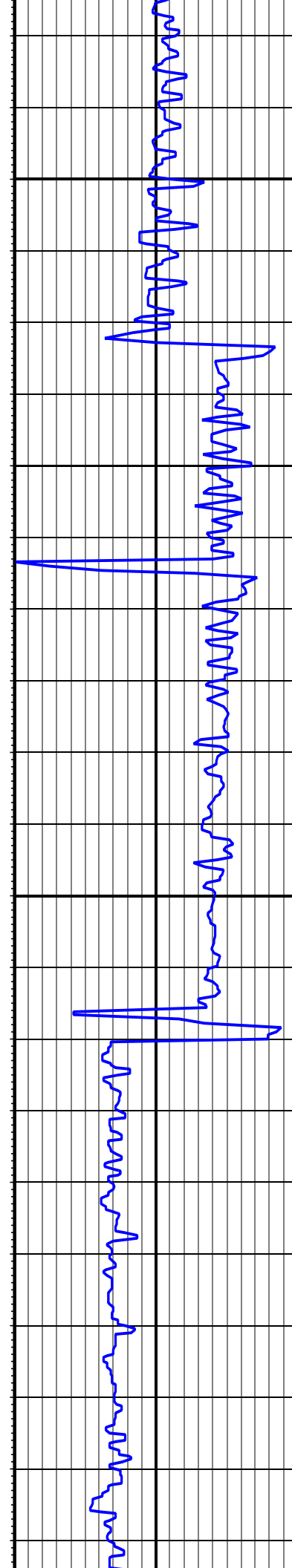
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MD: 8488.00 INC: 86.90 AZ: 359.40 8,488.00



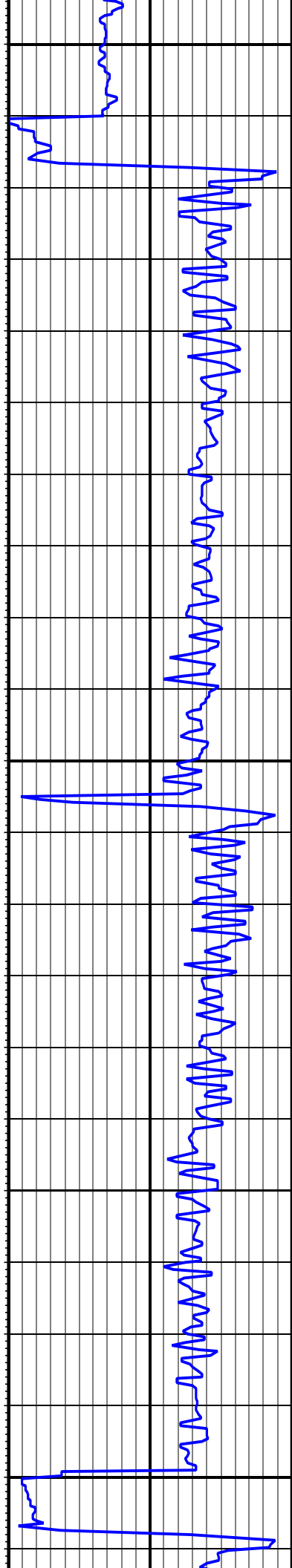
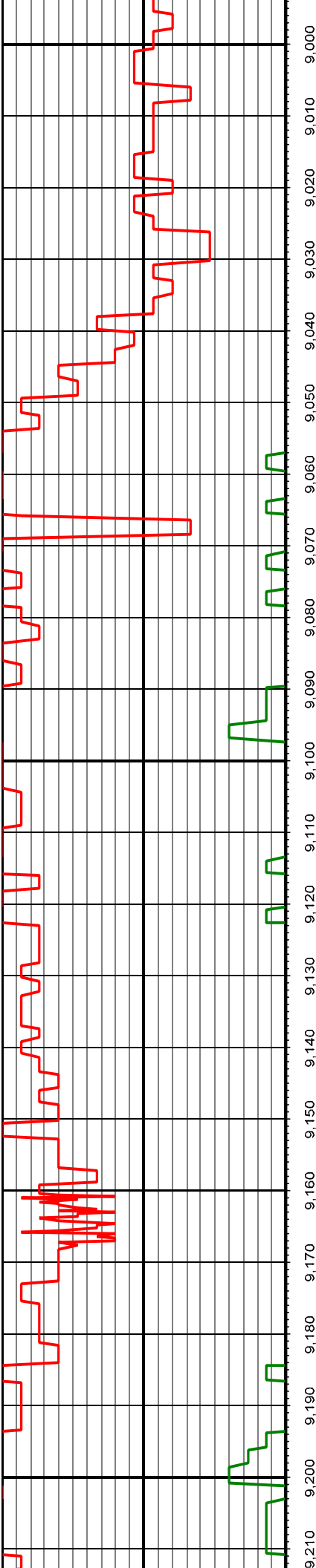


8,990 8,980 8,970 8,960 8,950 8,940 8,930 8,920 8,910 8,900 8,890 8,880 8,870 8,860 8,850 8,840 8,830 8,820 8,810 8,800 8,790 8,780



MD: 8867.00 INC: 90.40 AZ: 1.00 8,867.00

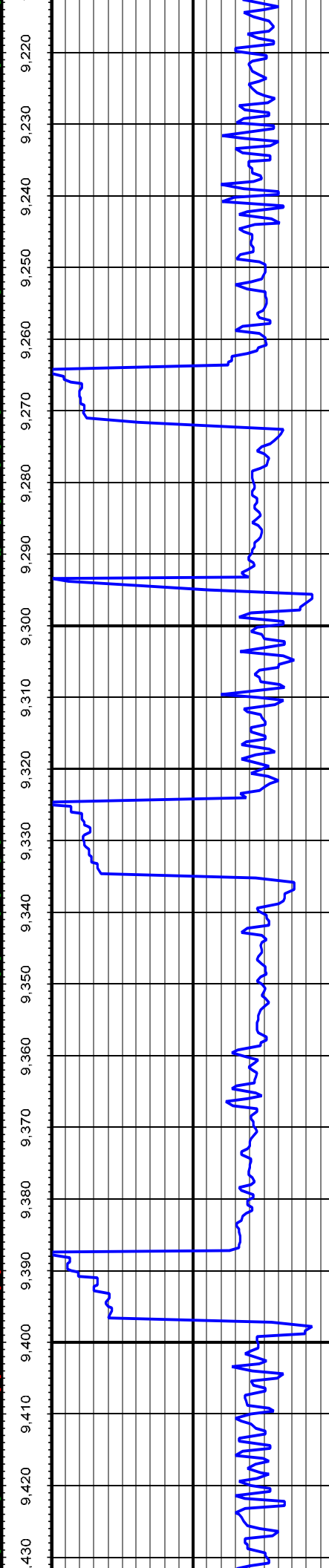
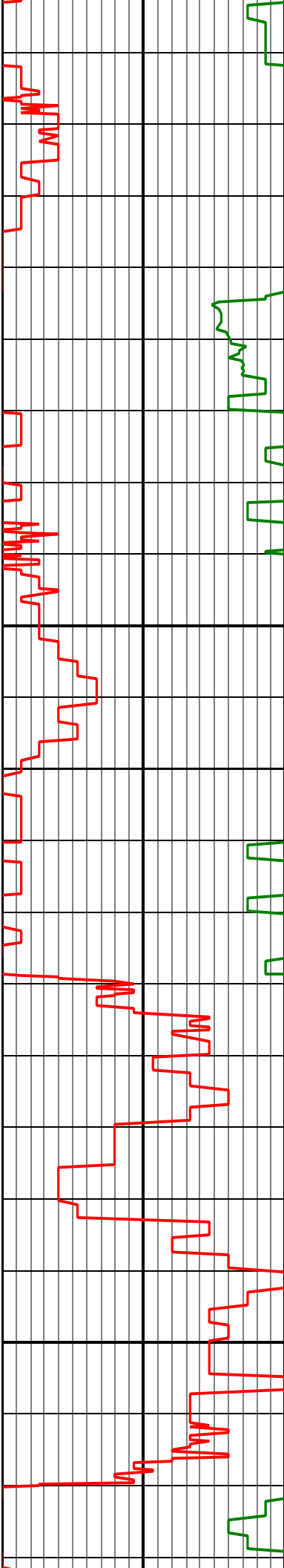
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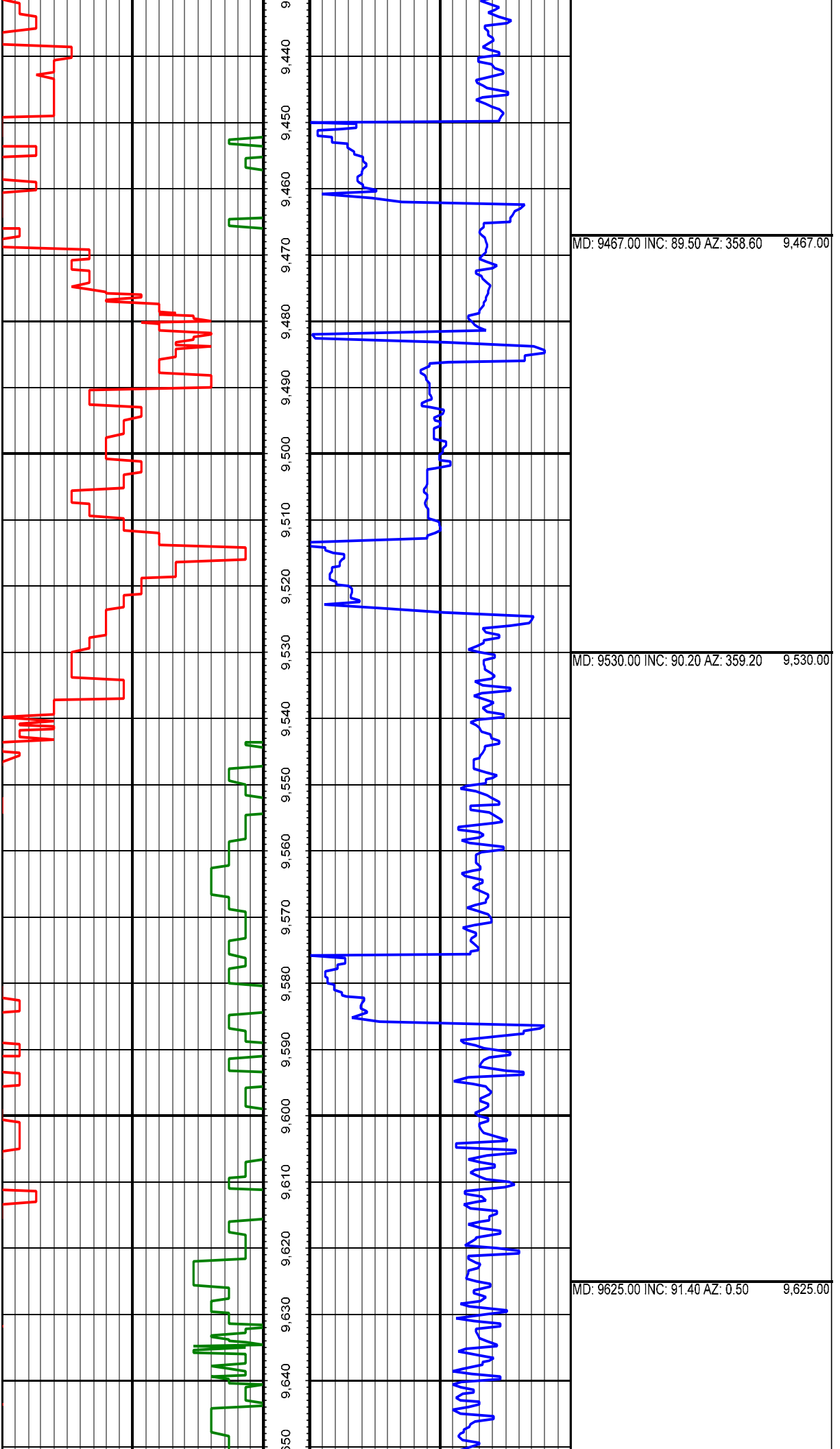
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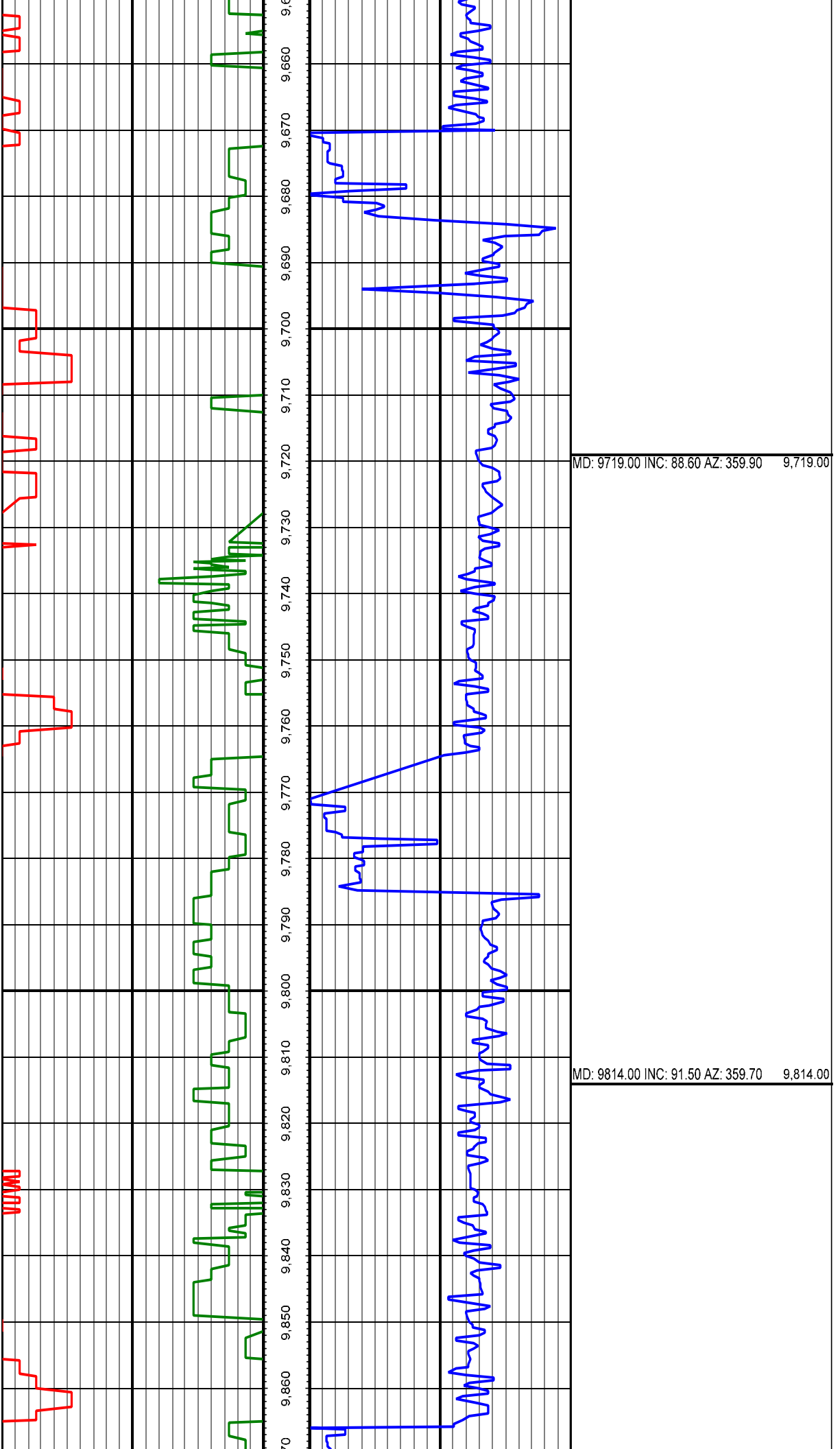
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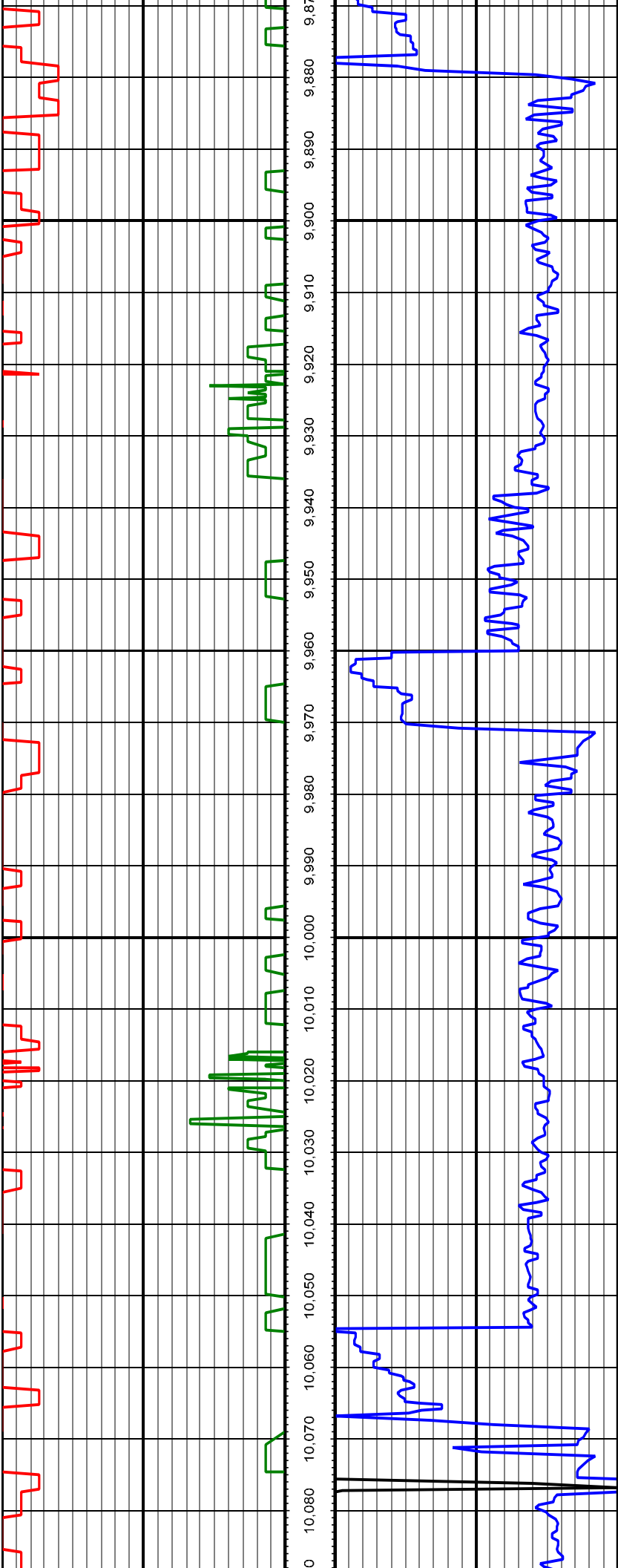




MD: 9214.00 INC: 90.80 AZ: 357.80		9,214.00
MD: 9277.00 INC: 88.30 AZ: 357.60		9,277.00
MD: 9340.00 INC: 88.50 AZ: 358.00		9,340.00
MD: 9404.00 INC: 88.80 AZ: 358.40		9,404.00

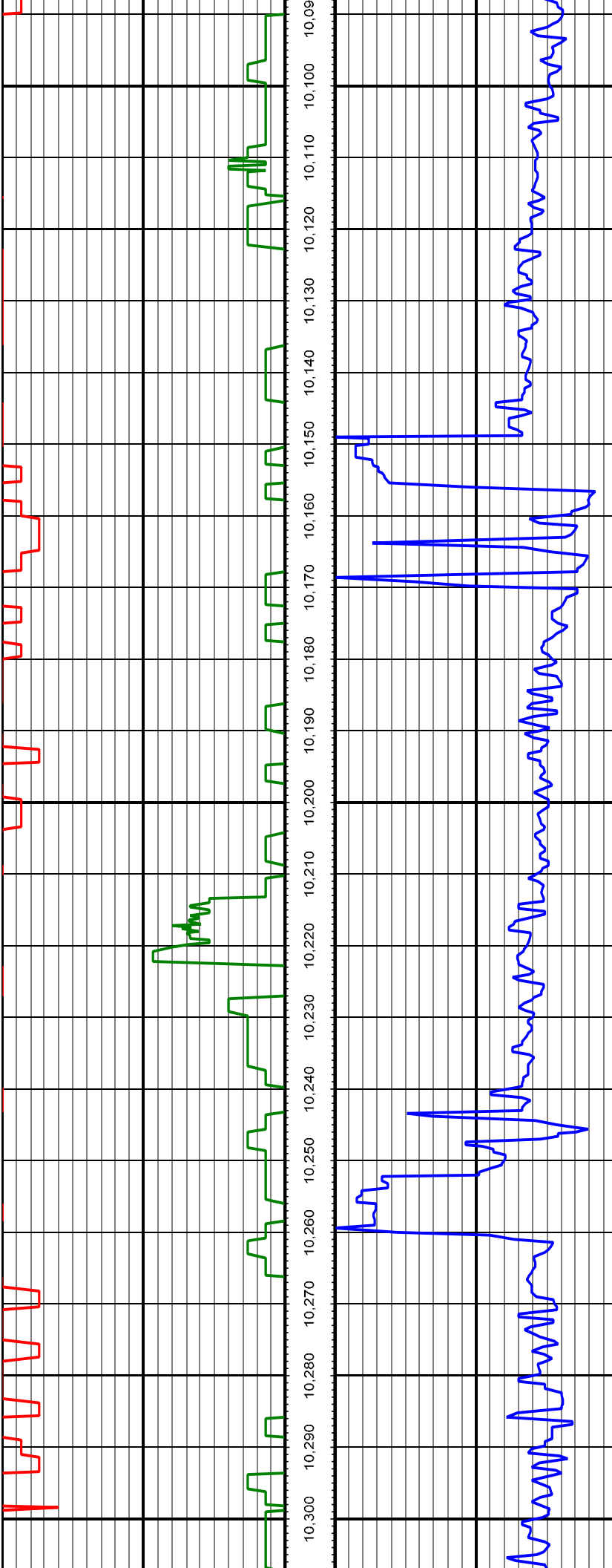






MD: 9909.00 INC: 90.00 AZ: 359.00 9,909.00

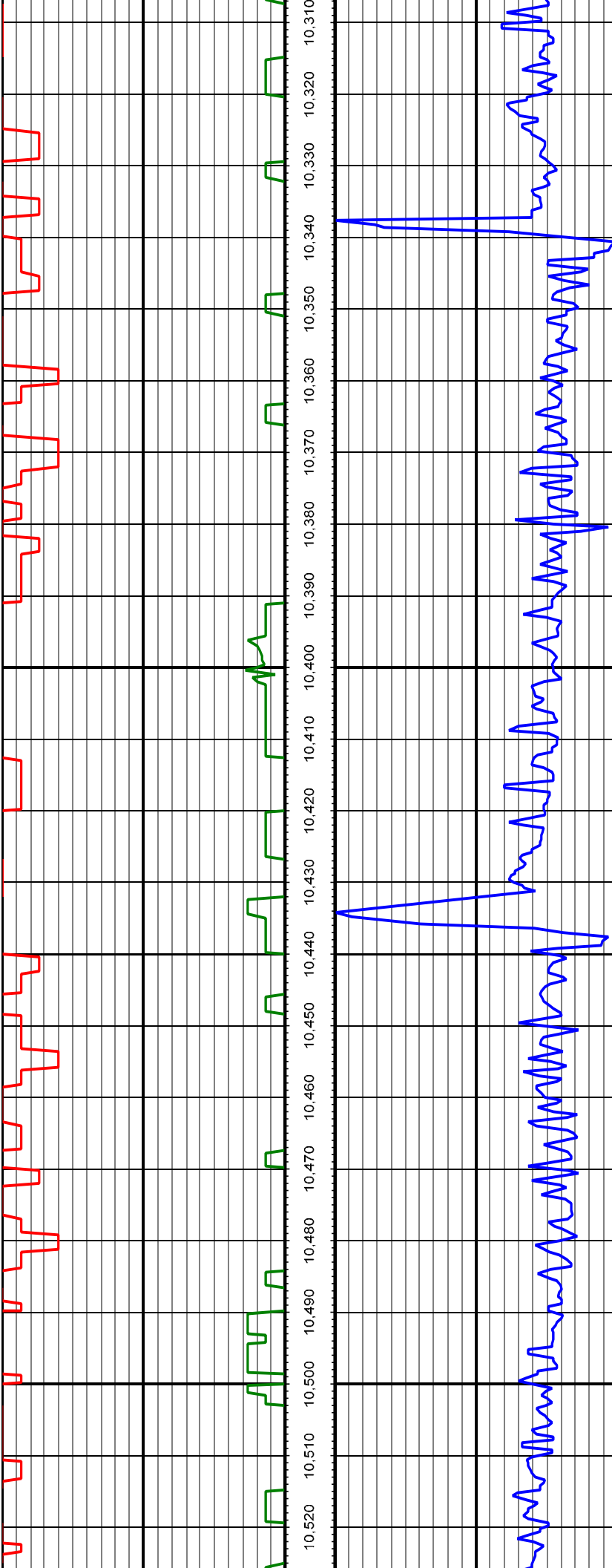
MD: 10004.00 INC: 89.90 AZ: 359.70 10,004.00



MD: 10099.00 INC: 90.20 AZ: 1.50 10,099.00

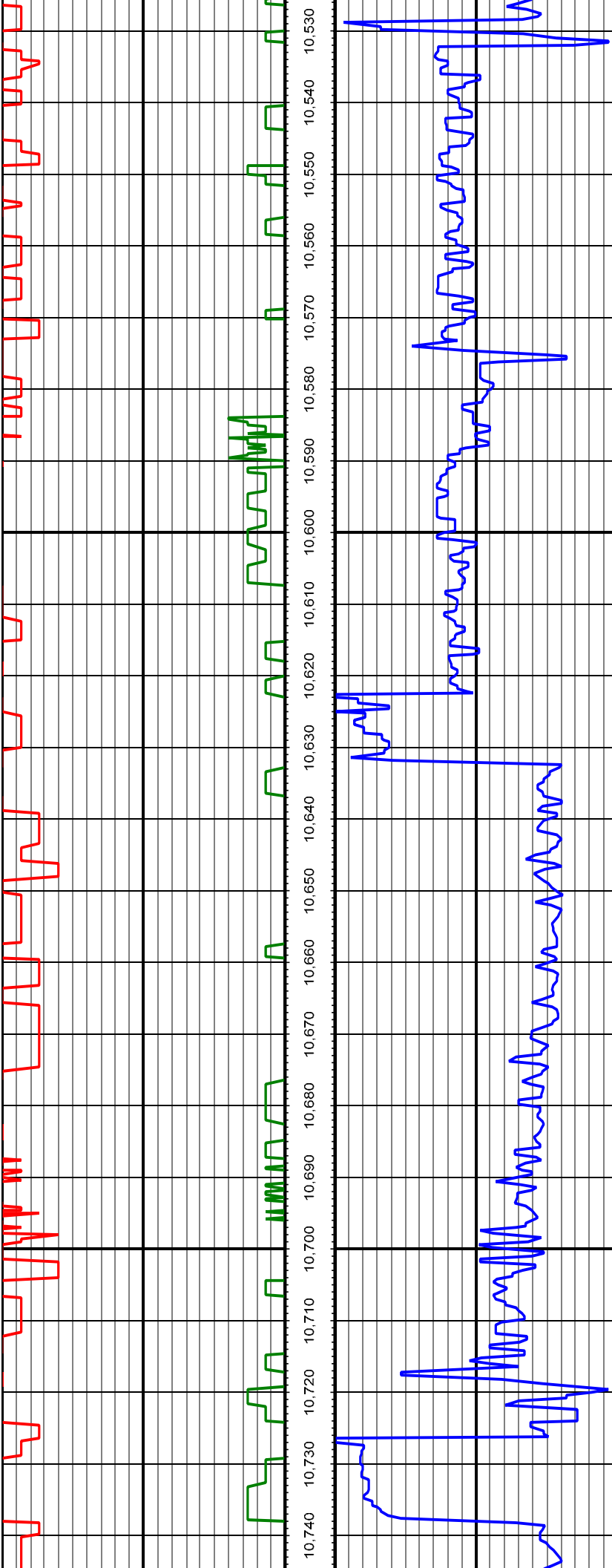
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MD: 10288.00 INC: 90.00 AZ: 1.00 10,288.00



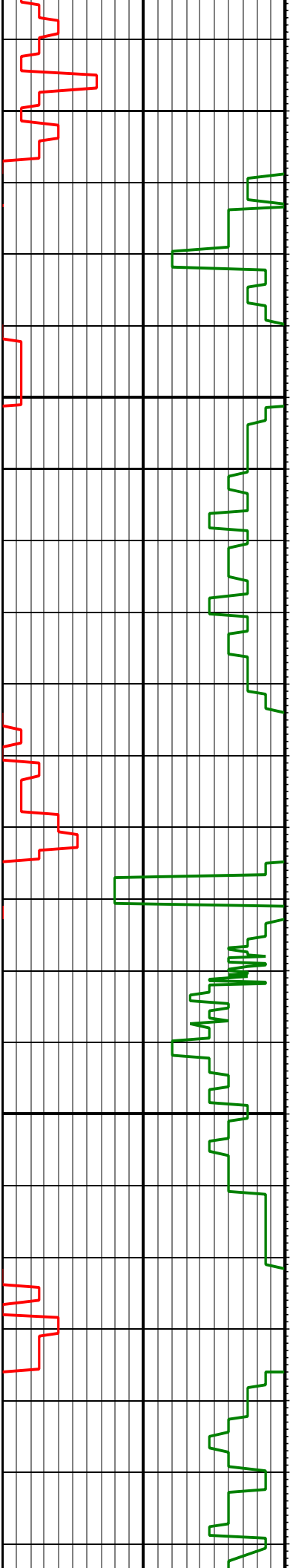
MD: 10383.00 INC: 90.00 AZ: 1.40 10,383.00

MD: 10477.00 INC: 90.10 AZ: 1.60 10,477.00



MD: 10572.00 INC: 90.20 AZ: 0.80 10,572.00

MD: 10667.00 INC: 90.50 AZ: 2.00 10,667.00



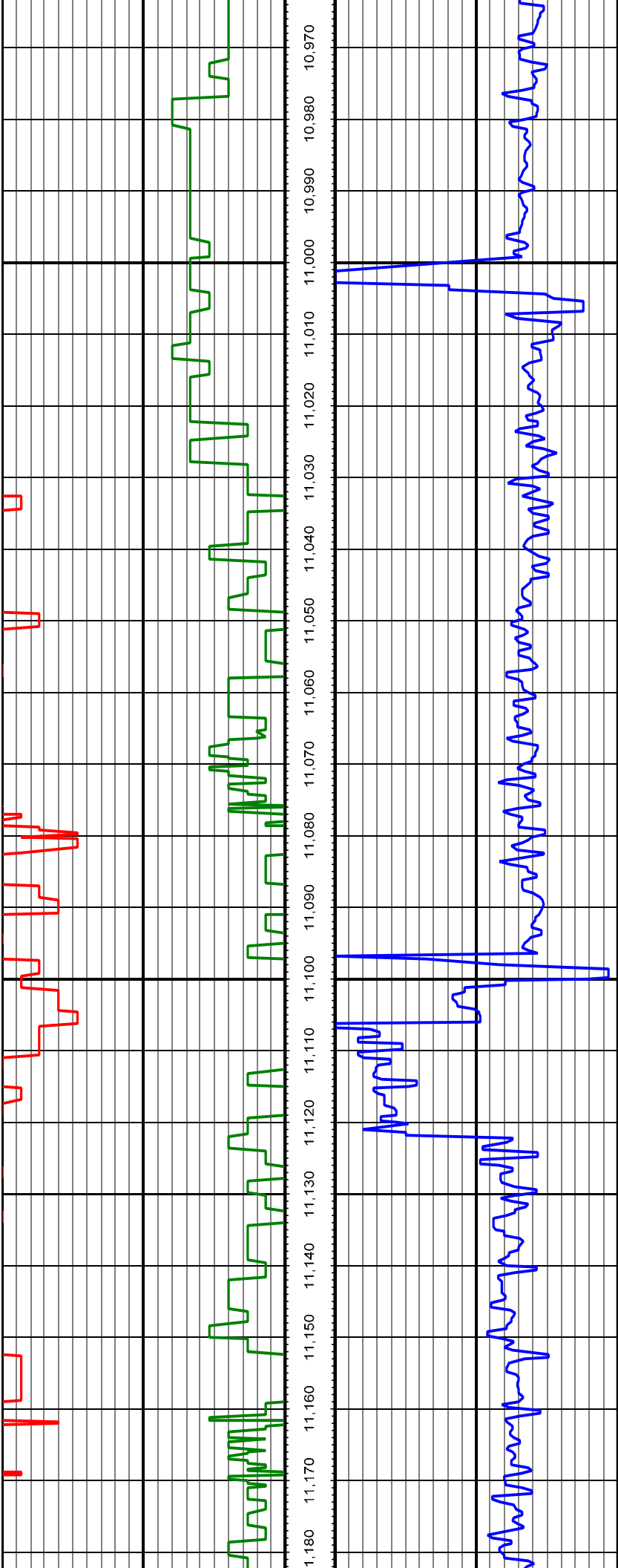
10,750 10,760 10,770 10,780 10,790 10,800 10,810 10,820 10,830 10,840 10,850 10,860 10,870 10,880 10,890 10,900 10,910 10,920 10,930 10,940 10,950 10,960

MD: 10761.00 INC: 89.30 AZ: 1.60 10,761.00

MD: 10856.00 INC: 90.40 AZ: 1.60 10,856.00

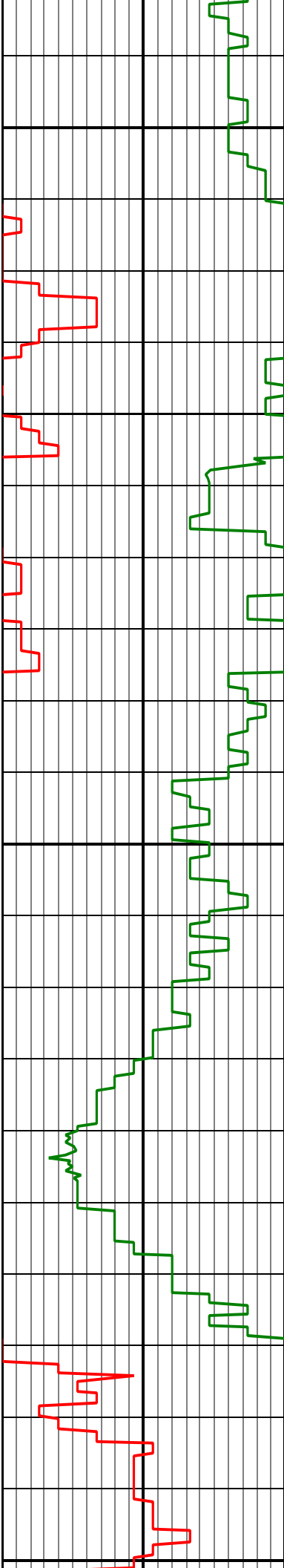
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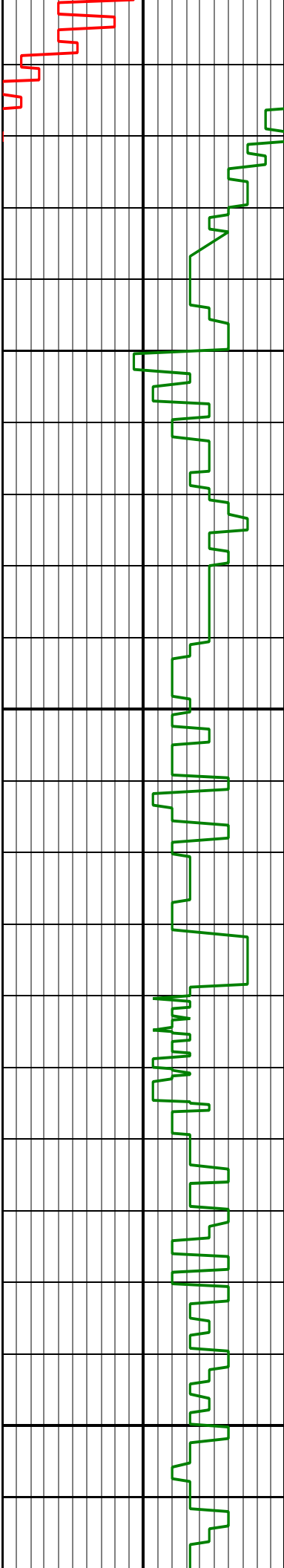
MD: 11045.00 INC: 91.40 AZ: 0.70 11,045.00

MD: 11140.00 INC: 90.70 AZ: 359.60 11,140.00



MD: 11234.00 INC: 88.30 AZ: 359.00 11,234.00

MD: 11329.00 INC: 88.70 AZ: 358.10 11,329.00

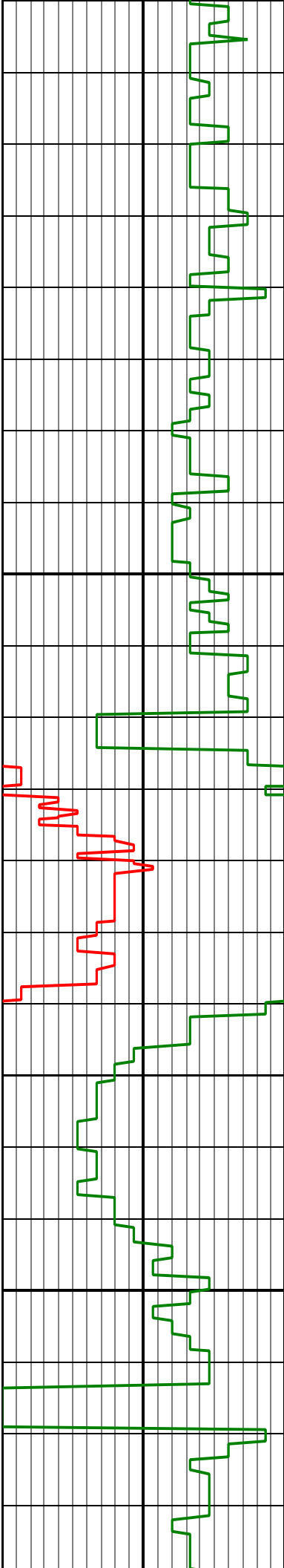


11,320 11,330 11,340 11,350 11,360 11,370 11,380 11,390 11,400 11,410 11,420 11,430 11,440 11,450 11,460 11,470 11,480 11,490 11,500 11,510 11,520 11,530 11,540 11,550 11,560 11,570 11,580 11,590 11,600 11,610 11,620

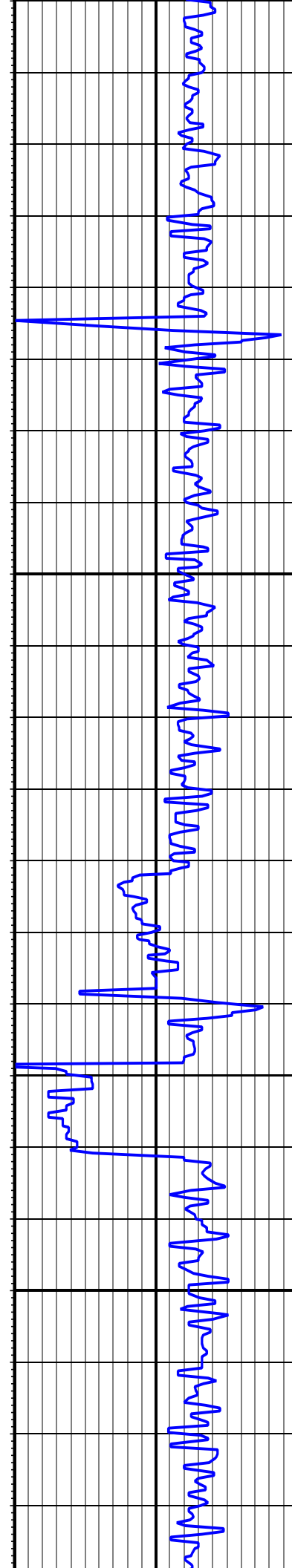
MD: 11424.00 INC: 89.10 AZ: 357.60 11,424.00

MD: 11519.00 INC: 90.10 AZ: 356.50 11,519.00

MD: 11614.00 INC: 89.70 AZ: 356.90 11,614.00



11,640 11,650 11,660 11,670 11,680 11,690 11,700 11,710 11,720 11,730 11,740 11,750 11,760 11,770 11,780 11,790 11,800 11,810 11,820 11,830 11,840



MD: 11708.00 INC: 91.10 AZ: 357.90 11,708.00

MD: 11802.00 INC: 91.30 AZ: 358.10 11,802.00

