



Cathedral Energy Services

Bernhardt 60-243

Scale 5":100' - MD

9/14/2016 7:08 PM

Oper. Company: PDC

State: Colorado

Well: Bernhardt 60-243

County: Weld

Field: DJ Basin

Country: USA

Rig: Ensign 124

Location: S6-T4N-R66W

Well ID: 05-123-40493-00

Start Date: 05/12/2015 10:00:00

Job Number: 155178

End Date: 05/21/2015 21:00:00

Latitude: 40.339120

Elev KB: 4726

Longitude: -104.825760

Elev DF: 4726

Elev GL: 4713

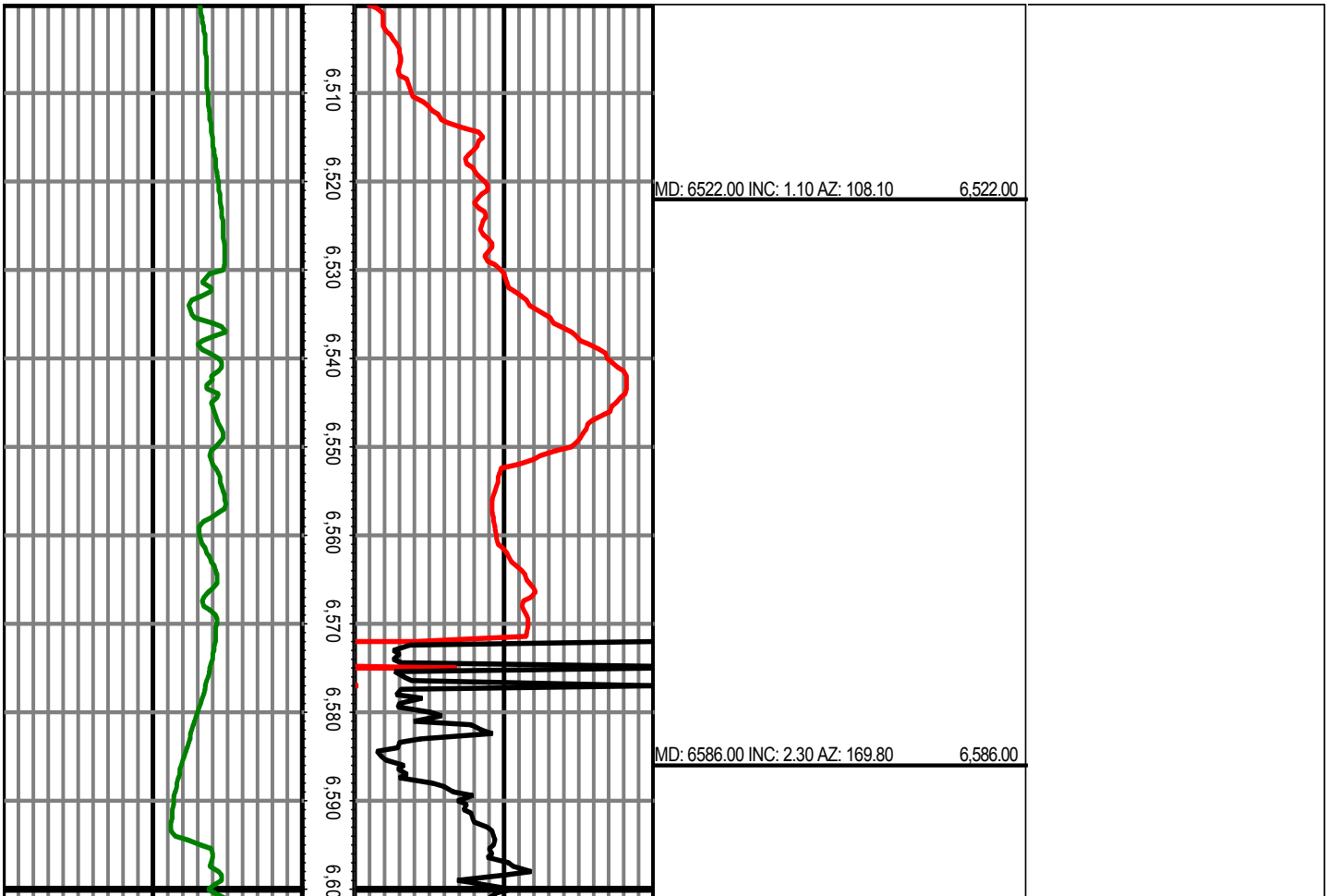
Operator 1: Richie Moulton

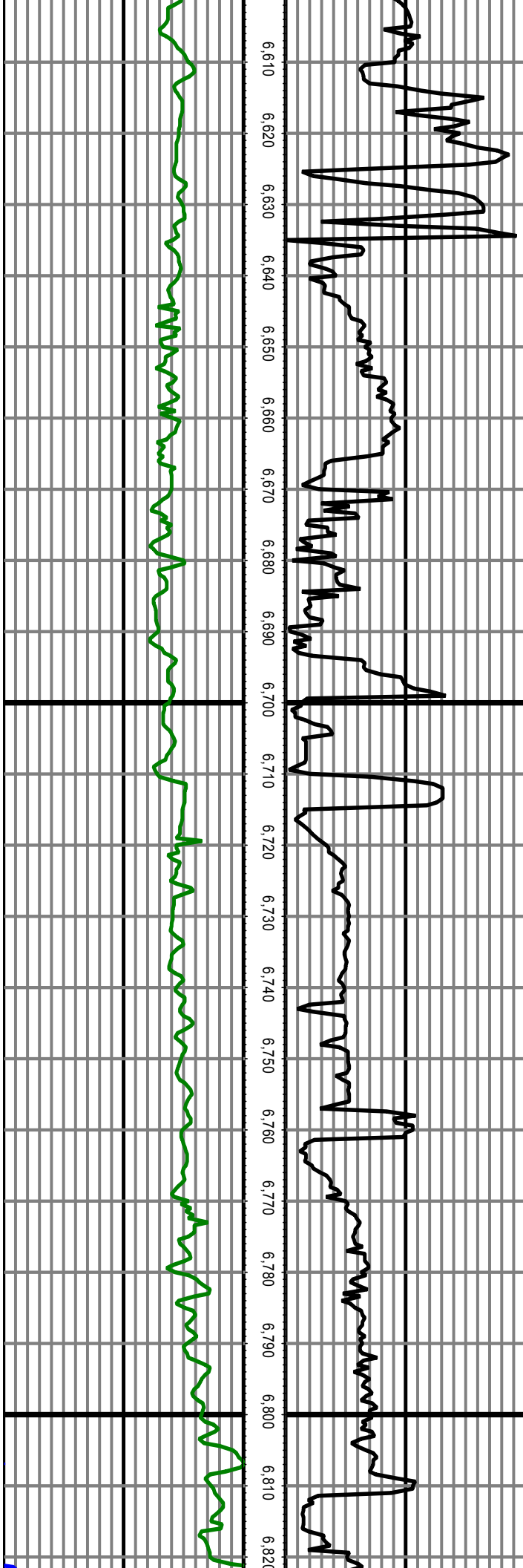
Operator 2: Trevor Kapsch

Hole Data			Casing Data		
Size	From	To	Size	From	To
13.5	0.00	937.00	9.625	0.00	937.00
8.75	937.00	7567.00	7	0.00	7554.00
6.125	7567.00	11830.00	0.00	0.00	0.00

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) on MD 150.00 MD 0.00 ROP(FT/HR) on MD300.00 Surveys (MD/INC/AZ)  
 150.00 2 300.00 FT 300.00 2 600.00





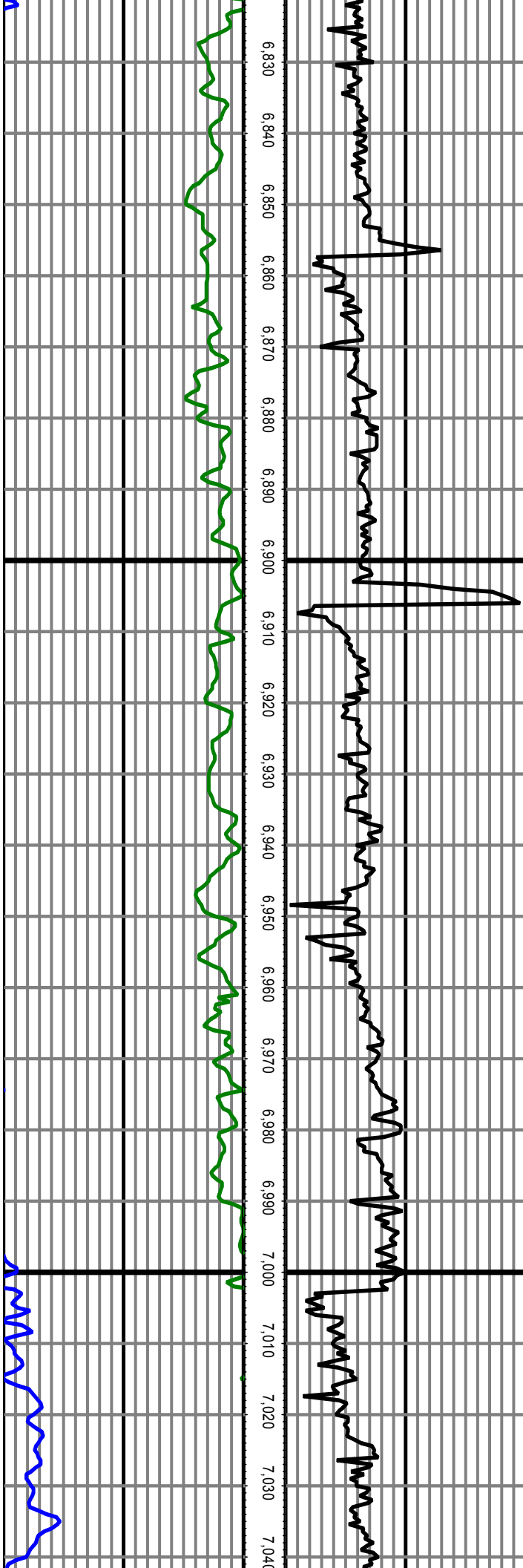
MD: 6618.00 INC: 4.00 AZ: 184.00 6,618.00

MD: 6665.00 INC: 7.80 AZ: 187.90 6,665.00

MD: 6714.00 INC: 9.20 AZ: 193.20 6,714.00

MD: 6761.00 INC: 13.40 AZ: 187.20 6,761.00

MD: 6809.00 INC: 17.30 AZ: 182.60 6,809.00



MD: 6856.00 INC: 21.00 AZ: 186.10 6.856.00

MD: 6905.00 INC: 24.30 AZ: 185.00 6.905.00

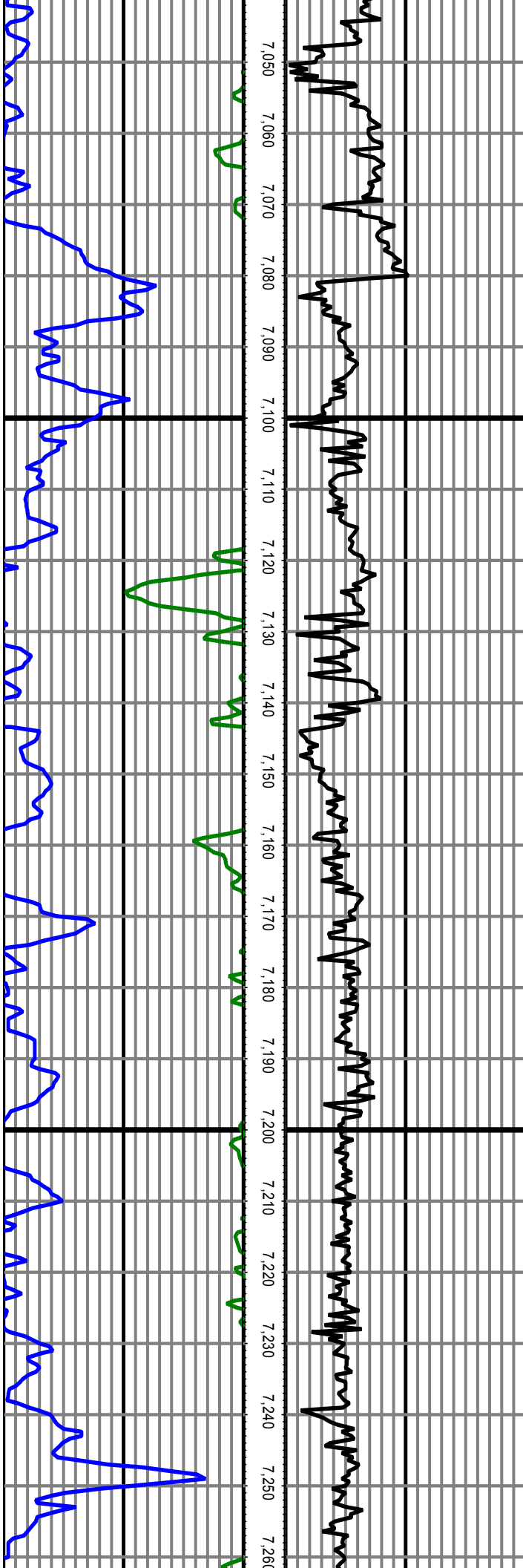
MD: 6952.00 INC: 28.10 AZ: 182.80 6.952.00

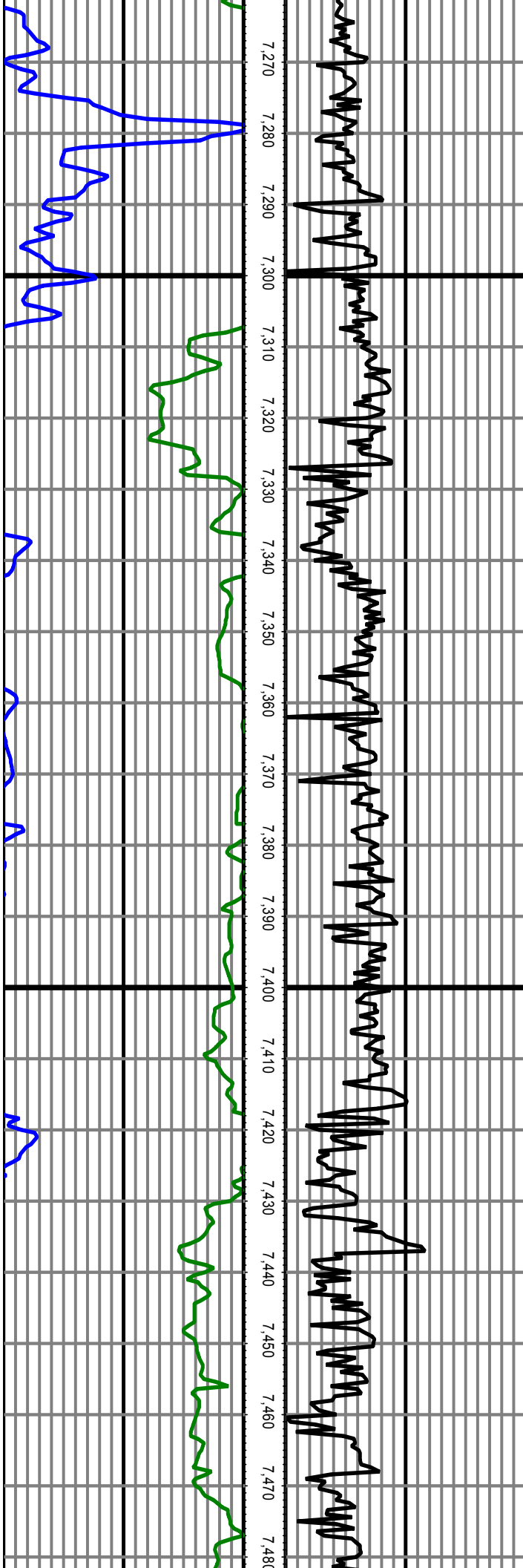
MD: 7000.00 INC: 32.30 AZ: 180.70 7.000.00

MD: 7047.00 INC: 37.10 AZ: 180.40 7,047.00

MD: 7096.00 INC: 41.80 AZ: 182.10 7,096.00

MD: 7191.00 INC: 52.10 AZ: 182.20 7,191.00

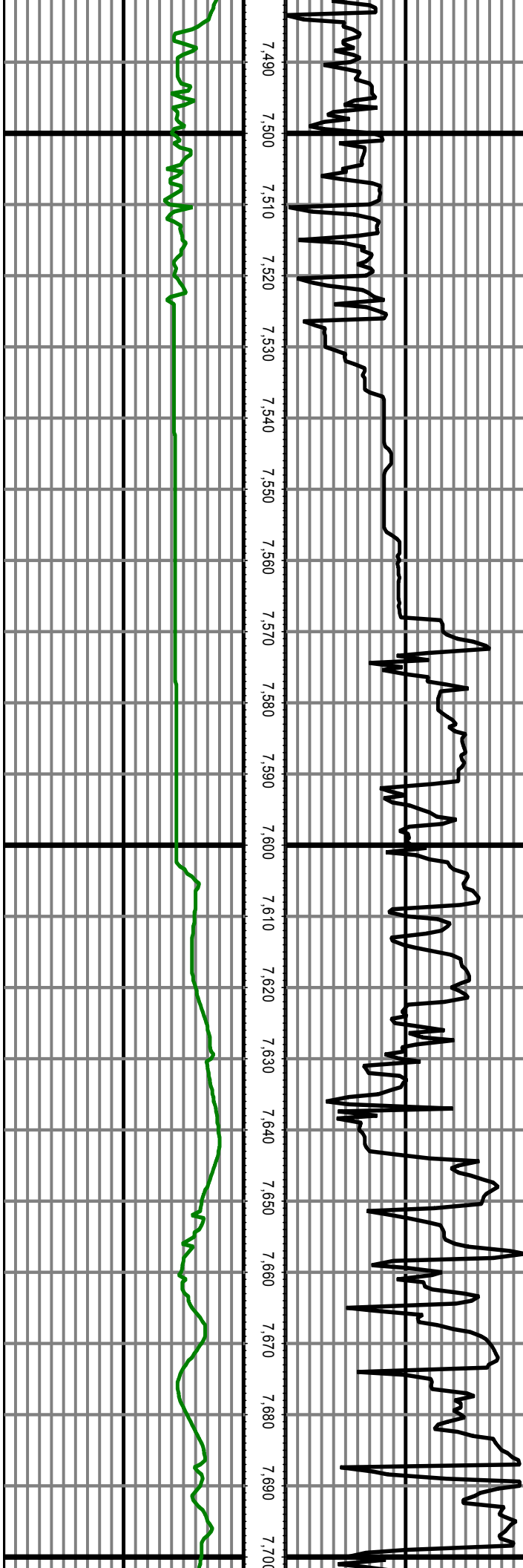




MD: 7286.00 INC: 63.20 AZ: 181.60 7,286.00

MD: 7381.00 INC: 75.10 AZ: 181.60 7,381.00

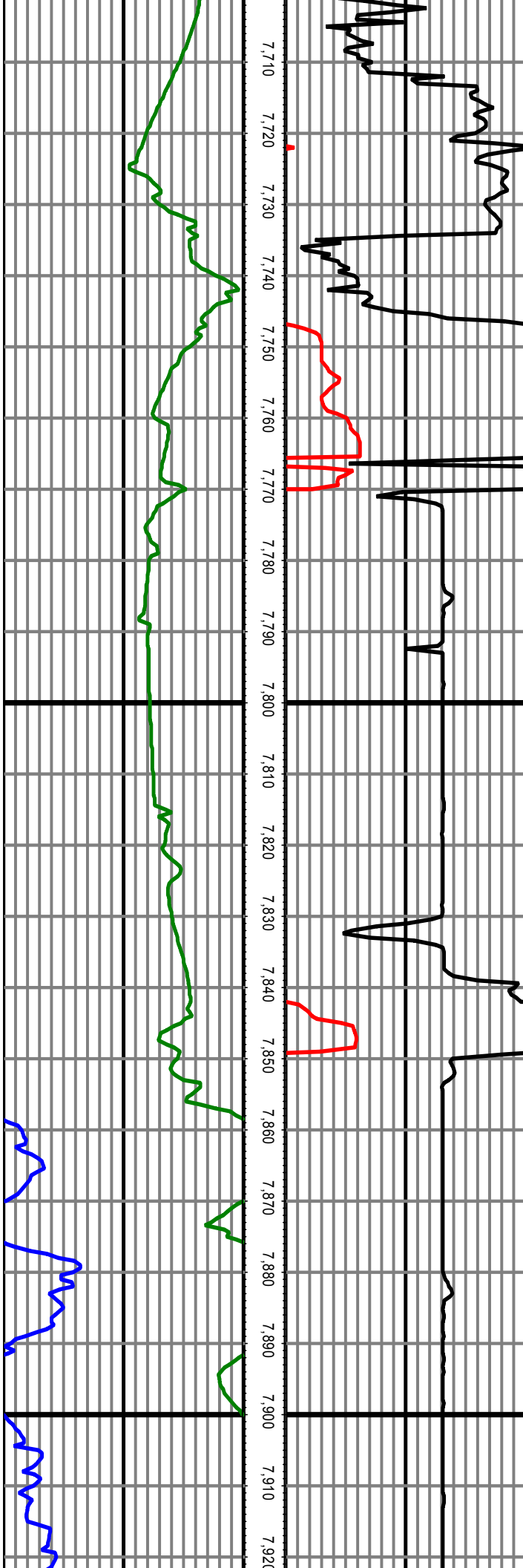
MD: 7477.00 INC: 86.80 AZ: 180.70 7,477.00



MD: 7517.00 INC: 91.20 AZ: 180.00 7,517.00

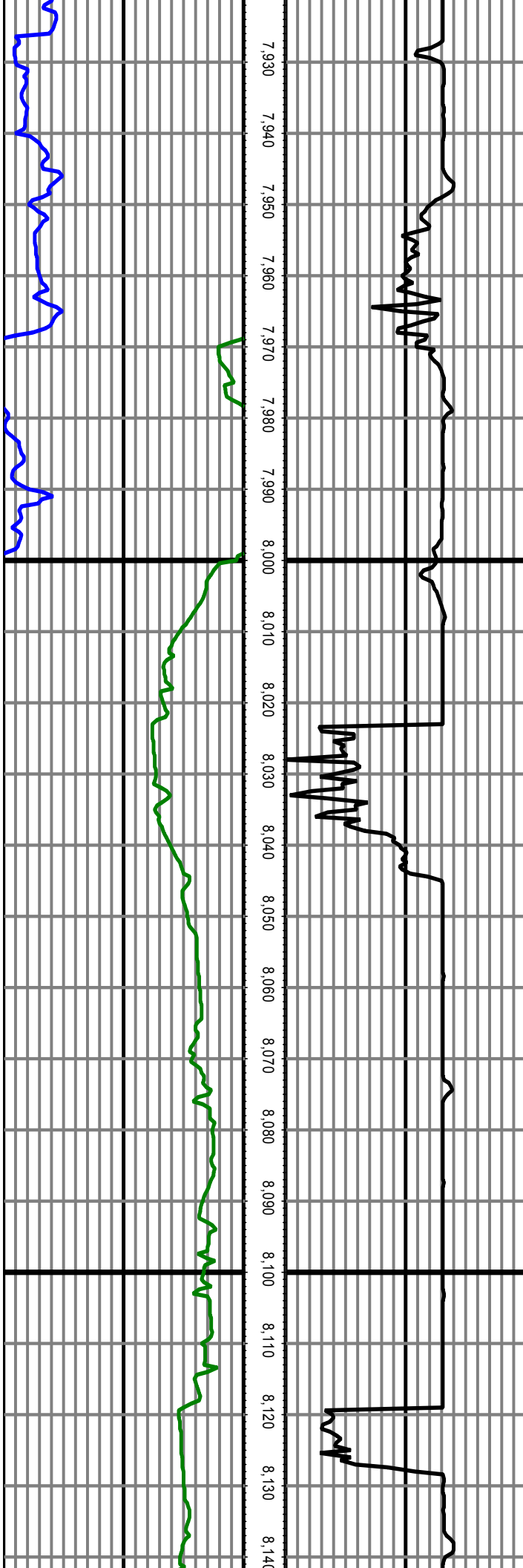
MD: 7597.00 INC: 91.40 AZ: 181.20 7,597.00

MD: 7682.00 INC: 91.30 AZ: 180.90 7,682.00



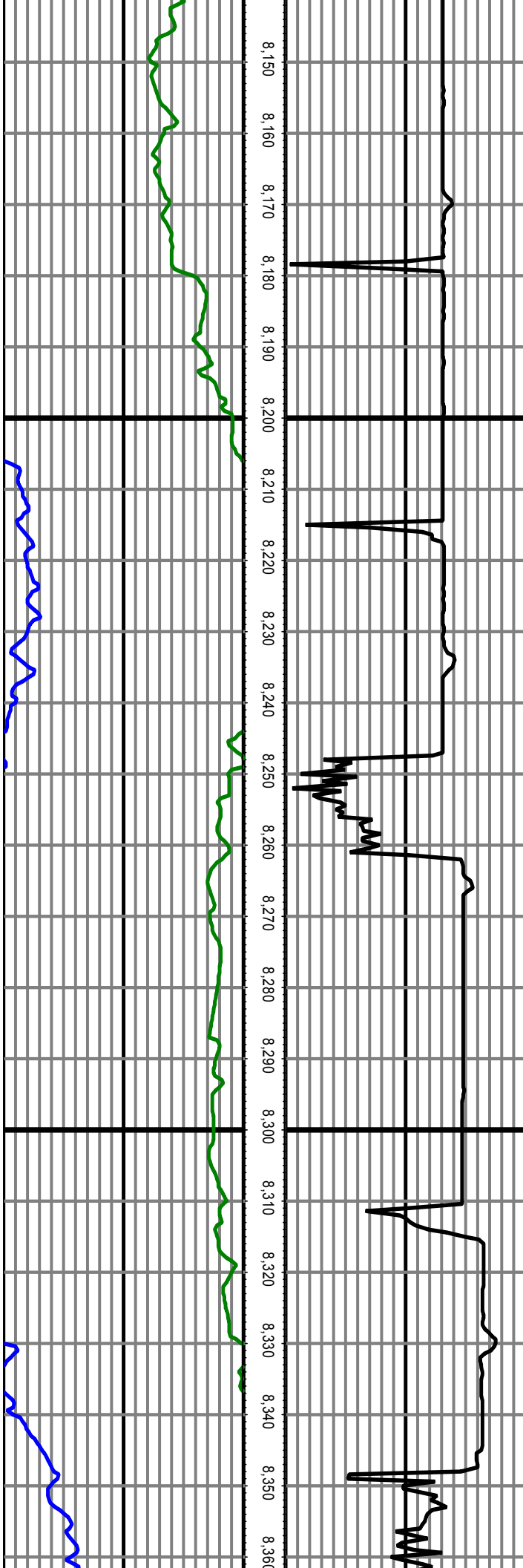
MD: 7777.00 INC: 90.00 AZ: 180.70 7,777.00

MD: 7873.00 INC: 90.50 AZ: 181.50 7,873.00



MD: 7968.00 INC: 90.70 AZ: 181.10 7,968.00

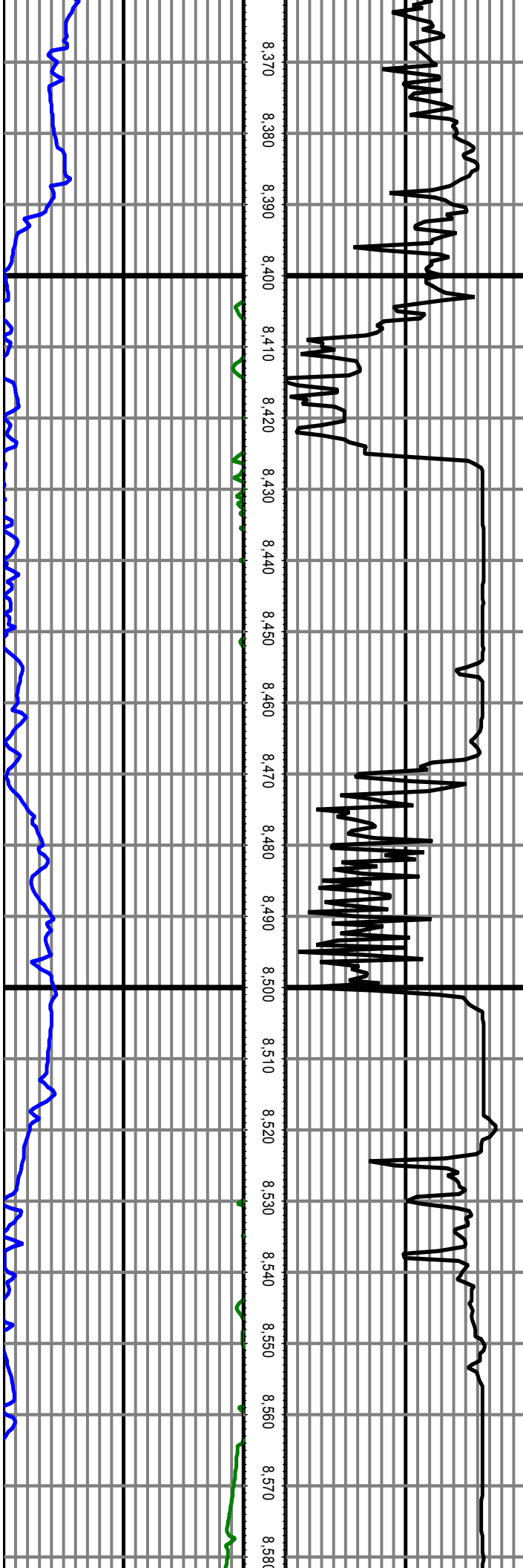
MD: 8064.00 INC: 89.50 AZ: 180.30 8,064.00



MD: 8159.00 INC: 90.60 AZ: 177.00 8,159.00

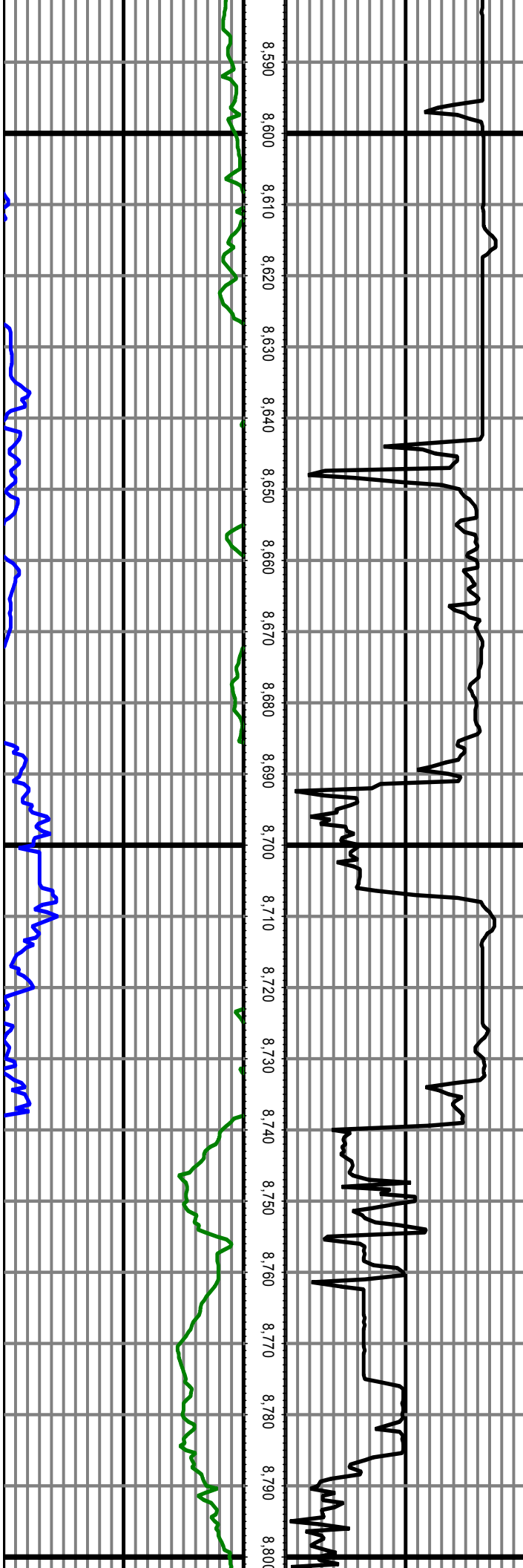
MD: 8255.00 INC: 90.60 AZ: 179.30 8,255.00

MD: 8350.00 INC: 91.10 AZ: 177.10 8,350.00



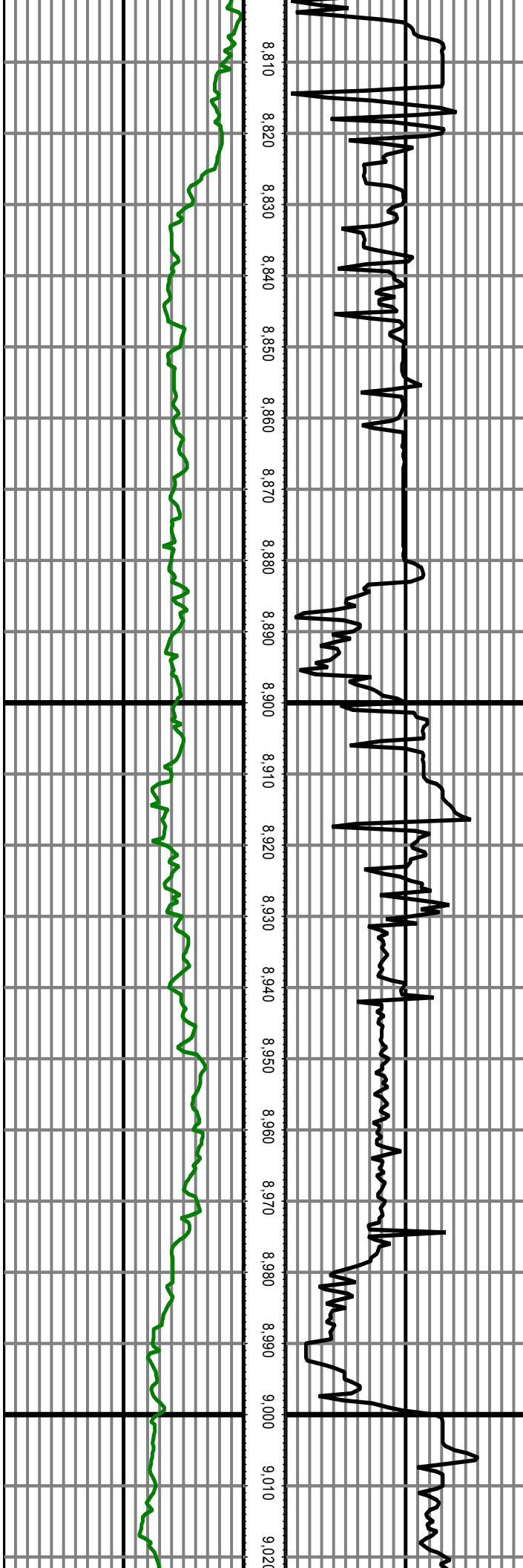
MD: 8445.00 INC: 89.30 AZ: 180.70 8,445.00

MD: 8541.00 INC: 89.50 AZ: 179.90 8,541.00



MD: 8636.00 INC: 90.40 AZ: 175.90 8,636.00

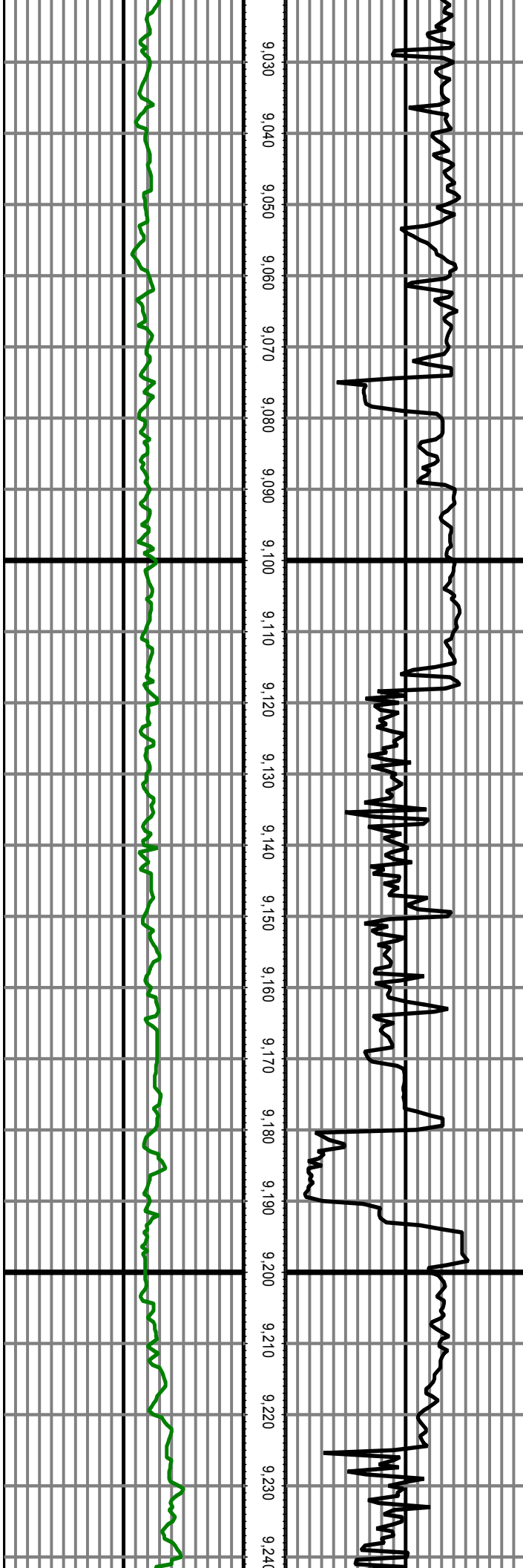
MD: 8732.00 INC: 90.40 AZ: 178.50 8,732.00



MD: 8827.00 INC: 88.70 AZ: 178.00 8,827.00

MD: 8922.00 INC: 89.30 AZ: 179.00 8,922.00

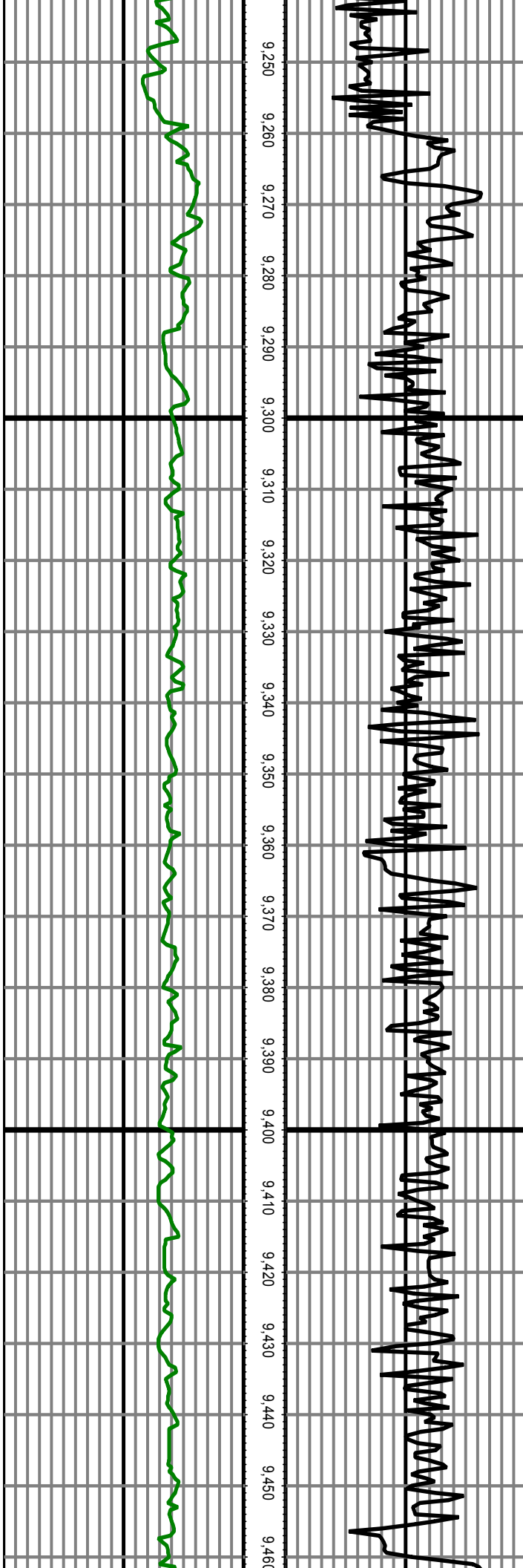
MD: 9018.00 INC: 90.00 AZ: 184.10 9,018.00



9,030 9,040 9,050 9,060 9,070 9,080 9,090 9,100 9,110 9,120 9,130 9,140 9,150 9,160 9,170 9,180 9,190 9,200 9,210 9,220 9,230 9,240

MD: 9113.00 INC: 90.40 AZ: 184.30 9,113.00

MD: 9209.00 INC: 89.30 AZ: 180.70 9,209.00

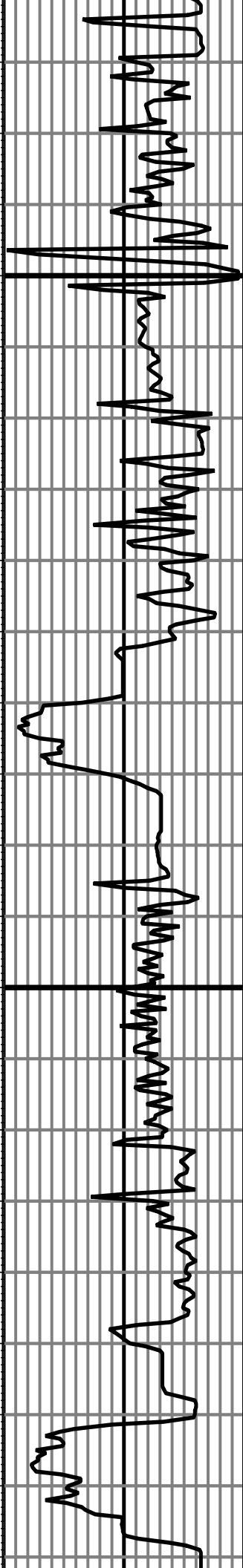
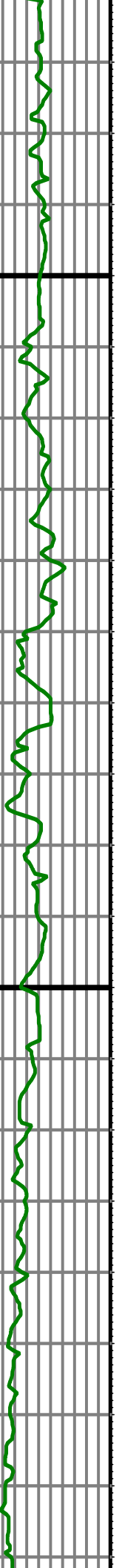


9,250 9,260 9,270 9,280 9,290 9,300 9,310 9,320 9,330 9,340 9,350 9,360 9,370 9,380 9,390 9,400 9,410 9,420 9,430 9,440 9,450 9,460

MD: 9304.00 INC: 89.80 AZ: 179.70 9,304.00

MD: 9399.00 INC: 90.30 AZ: 179.90 9,399.00

9,470  
9,480  
9,490  
9,500  
9,510  
9,520  
9,530  
9,540  
9,550  
9,560  
9,570  
9,580  
9,590  
9,600  
9,610  
9,620  
9,630  
9,640  
9,650  
9,660  
9,670  
9,680



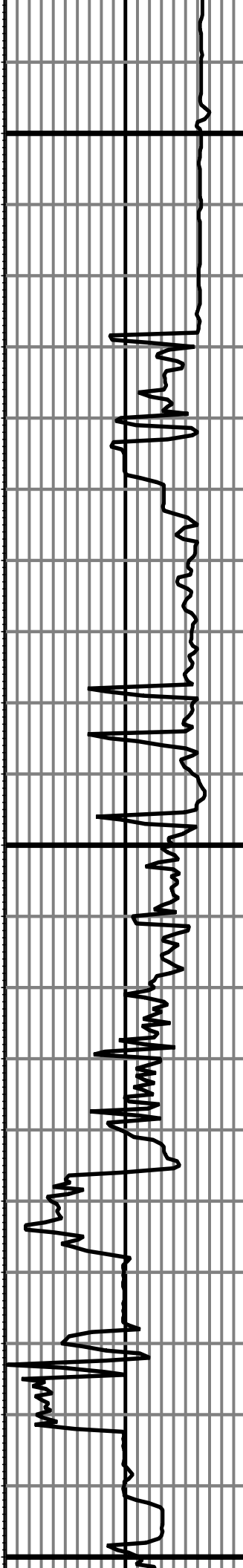
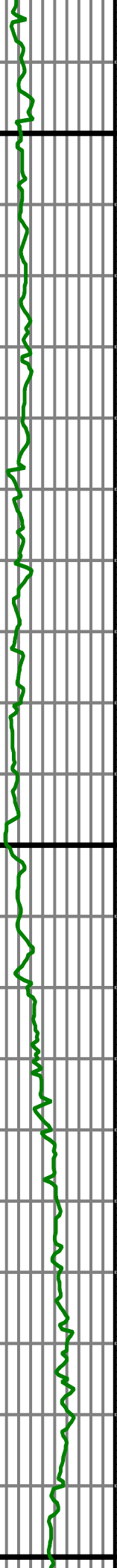
MD: 9495.00 INC: 90.70 AZ: 182.60 9,495.00

MD: 9590.00 INC: 90.40 AZ: 183.70 9,590.00

MD: 9685.00 INC: 89.70 AZ: 179.30

9.685.00

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  
9.860  
9.870  
9.880  
9.890  
9.900

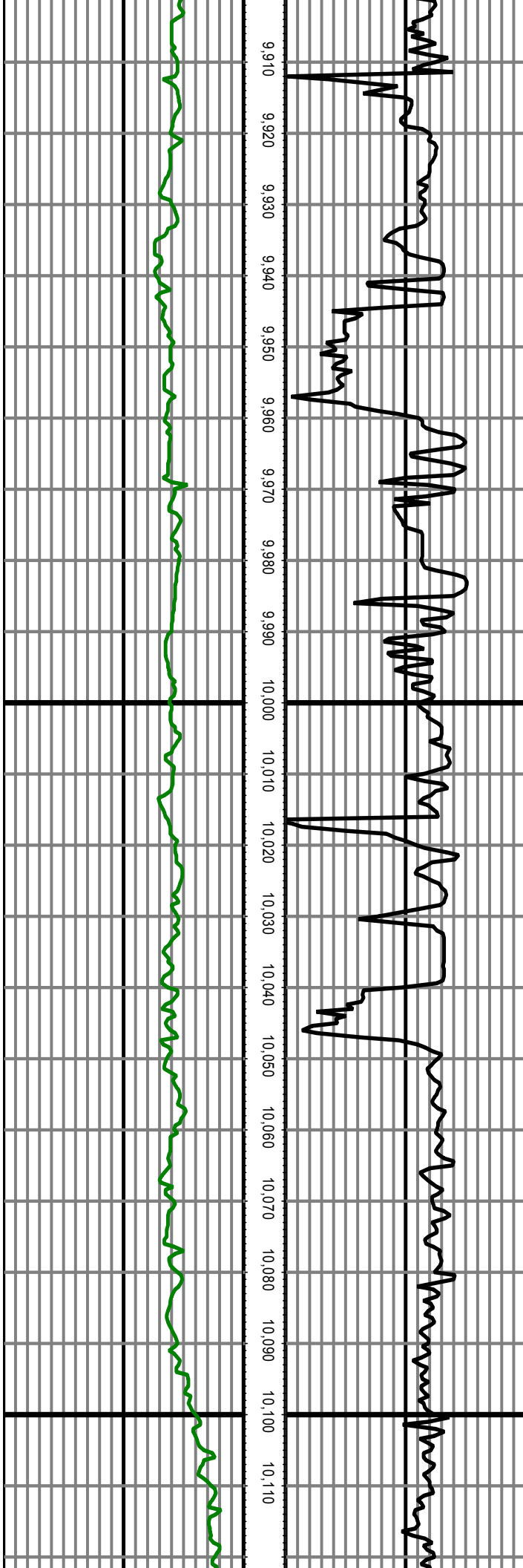


MD: 9781.00 INC: 90.50 AZ: 177.10

9.781.00

MD: 9876.00 INC: 91.10 AZ: 177.90

9.876.00

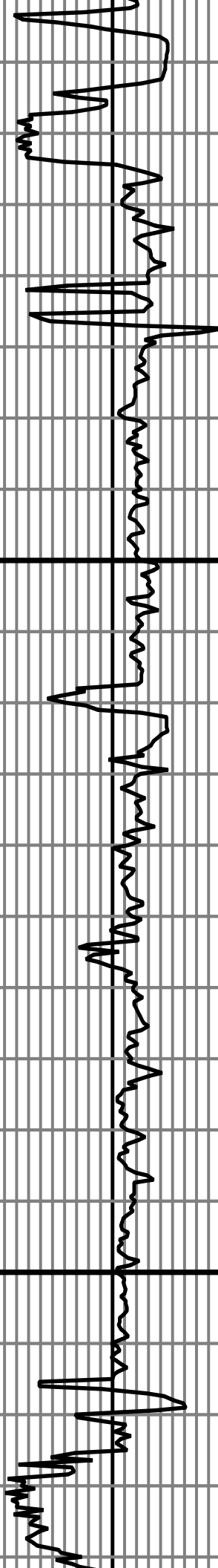
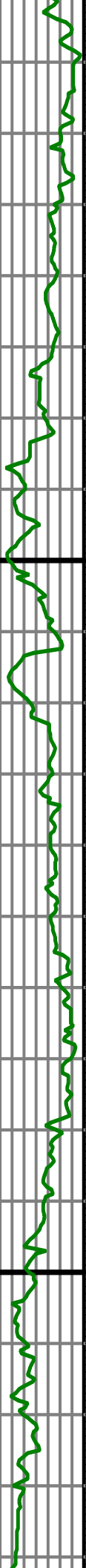


9.910  
9.920  
9.930  
9.940  
9.950  
9.960  
9.970  
9.980  
9.990  
10.000  
10.010  
10.020  
10.030  
10.040  
10.050  
10.060  
10.070  
10.080  
10.090  
10.100  
10.110

MD: 9971.00 INC: 91.40 AZ: 178.70 9.971.00

MD: 10067.00 INC: 91.50 AZ: 181.40 10.067.00

10,130 10,140 10,150 10,160 10,170 10,180 10,190 10,200 10,210 10,220 10,230 10,240 10,250 10,260 10,270 10,280 10,290 10,300 10,310 10,320 10,330

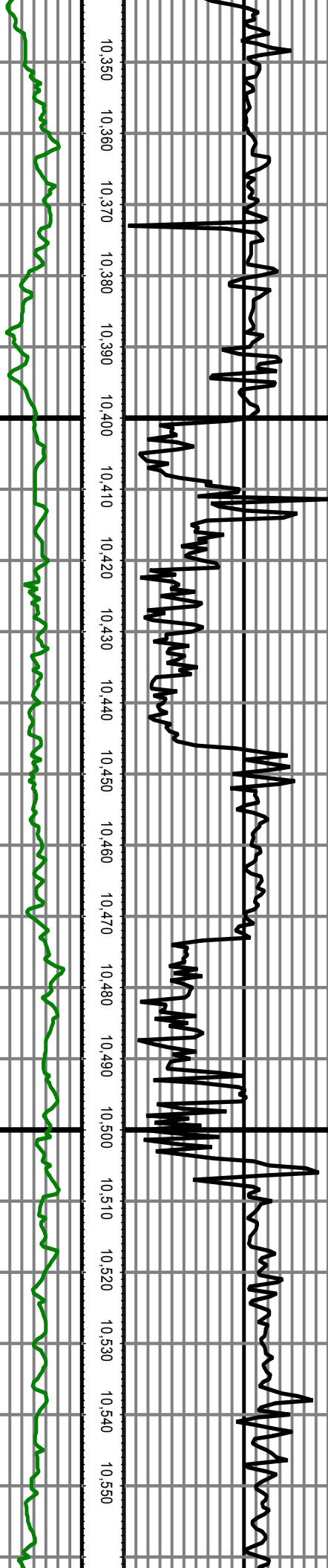


MD: 10162.00 INC: 90.80 AZ: 180.90 10,162.00

MD: 10258.00 INC: 91.30 AZ: 177.40 10,258.00

MD: 10353.00 INC: 91.30 AZ: 184.30 10,353.00

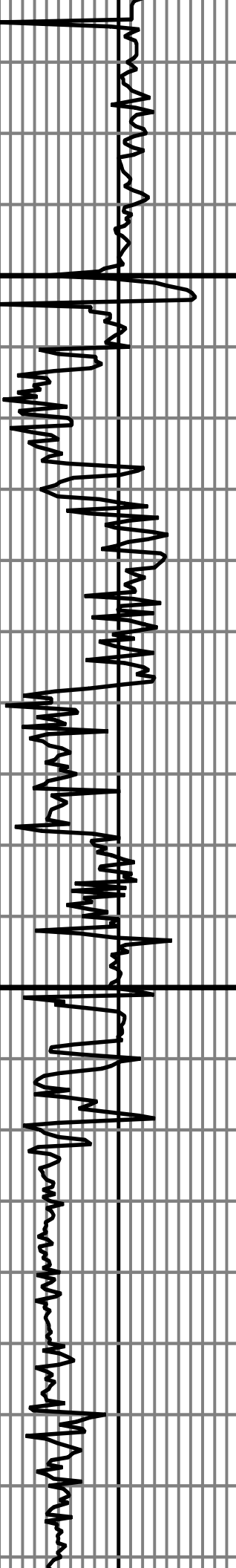
10,350 10,360 10,370 10,380 10,390 10,400 10,410 10,420 10,430 10,440 10,450 10,460 10,470 10,480 10,490 10,500 10,510 10,520 10,530 10,540 10,550



MD: 10449.00 INC: 90.10 AZ: 185.20 10,449.00

MD: 10544.00 INC: 90.40 AZ: 182.20 10,544.00

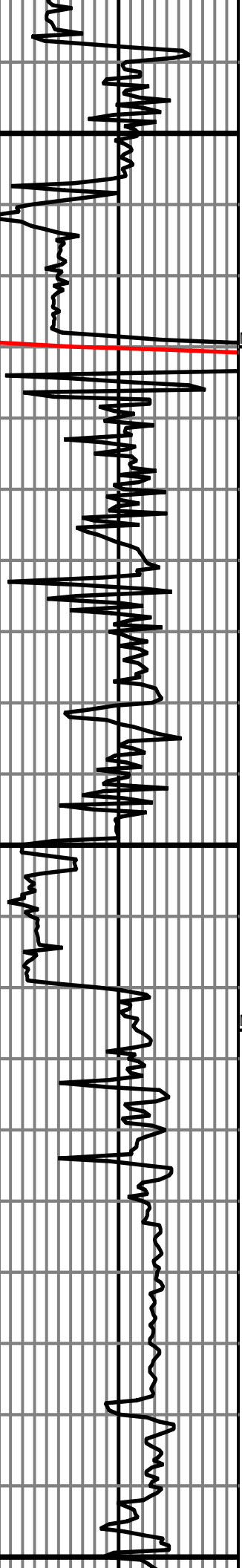
10.570 10.580 10.590 10.600 10.610 10.620 10.630 10.640 10.650 10.660 10.670 10.680 10.690 10.700 10.710 10.720 10.730 10.740 10.750 10.760 10.770



MD: 10640.00 INC: 90.00 AZ: 179.70 10.640.00

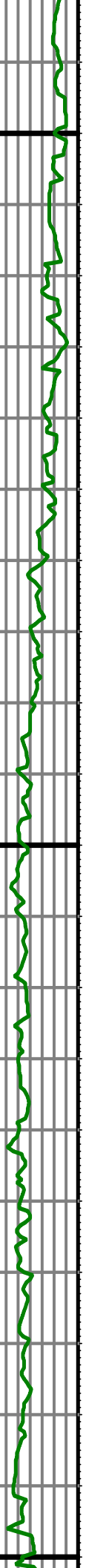
MD: 10735.00 INC: 90.60 AZ: 182.00 10.735.00

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 10,970 10,980 10,990

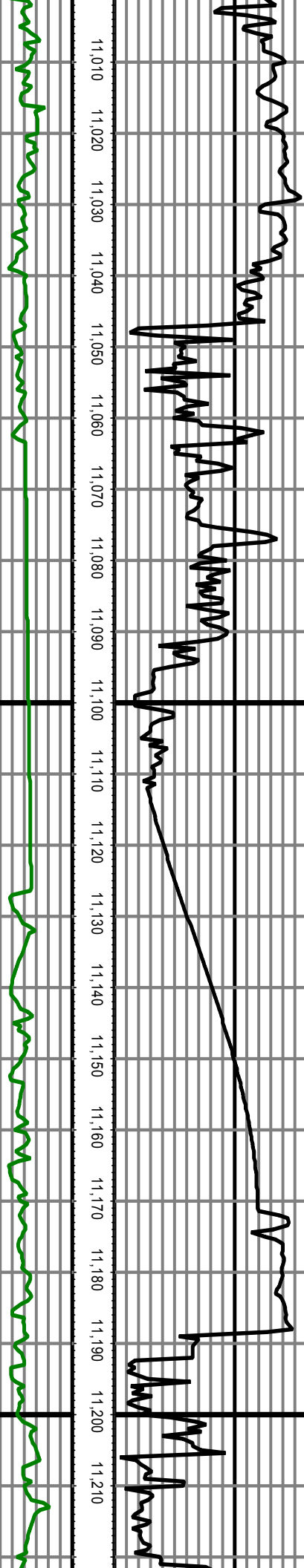


MD: 10830.00 INC: 90.00 AZ: 181.80 10,830.00

MD: 10926.00 INC: 89.90 AZ: 177.70 10,926.00



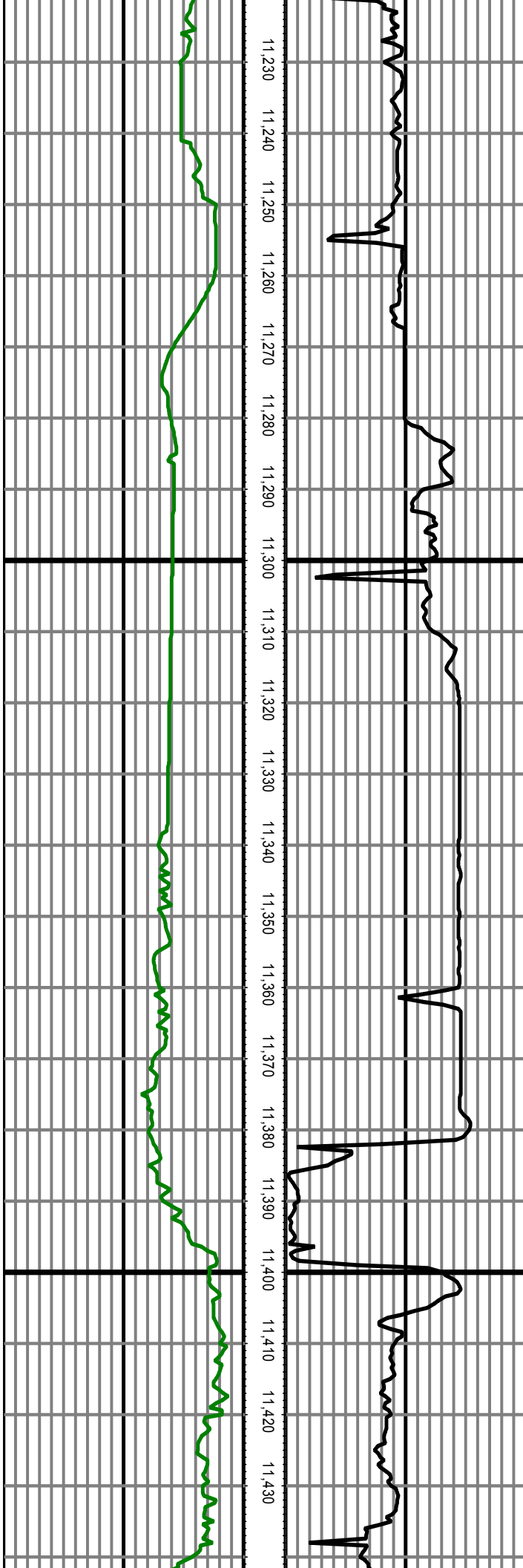
11,010 11,020 11,030 11,040 11,050 11,060 11,070 11,080 11,090 11,100 11,110 11,120 11,130 11,140 11,150 11,160 11,170 11,180 11,190 11,200 11,210



MD: 11022.00 INC: 90.50 AZ: 182.70 11,022.00

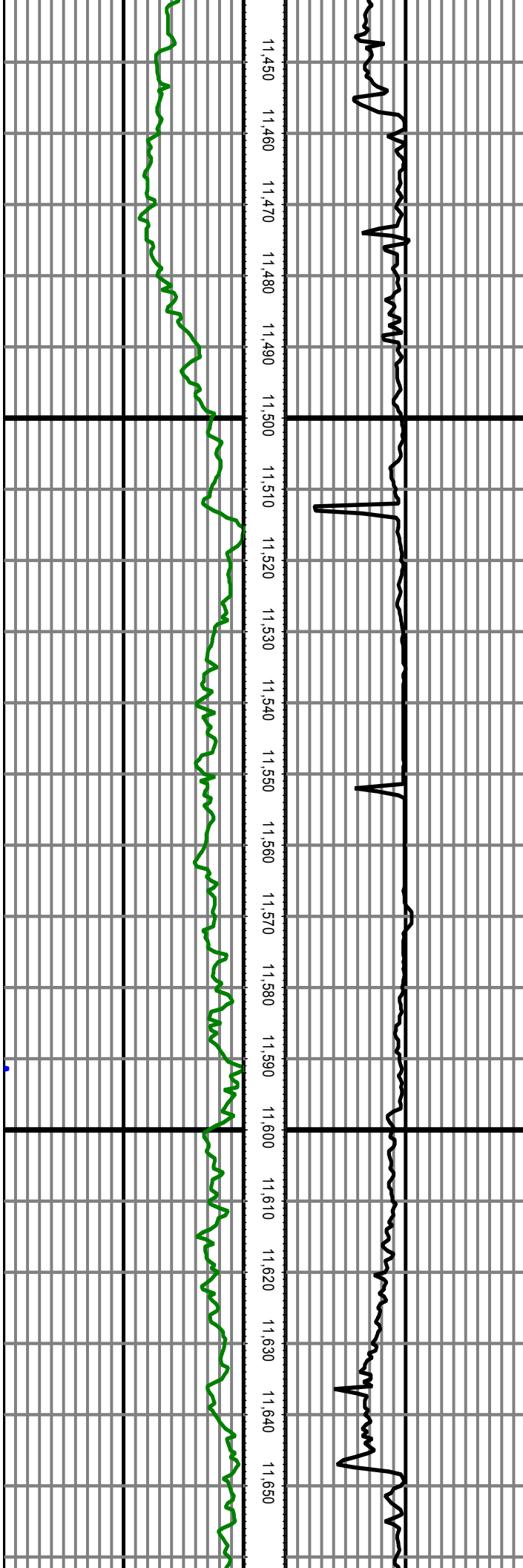
MD: 11117.00 INC: 90.80 AZ: 181.40 11,117.00

MD: 11212.00 INC: 90.20 AZ: 173.60 11,212.00



MD: 11308.00 INC: 90.00 AZ: 180.70 11,308.00

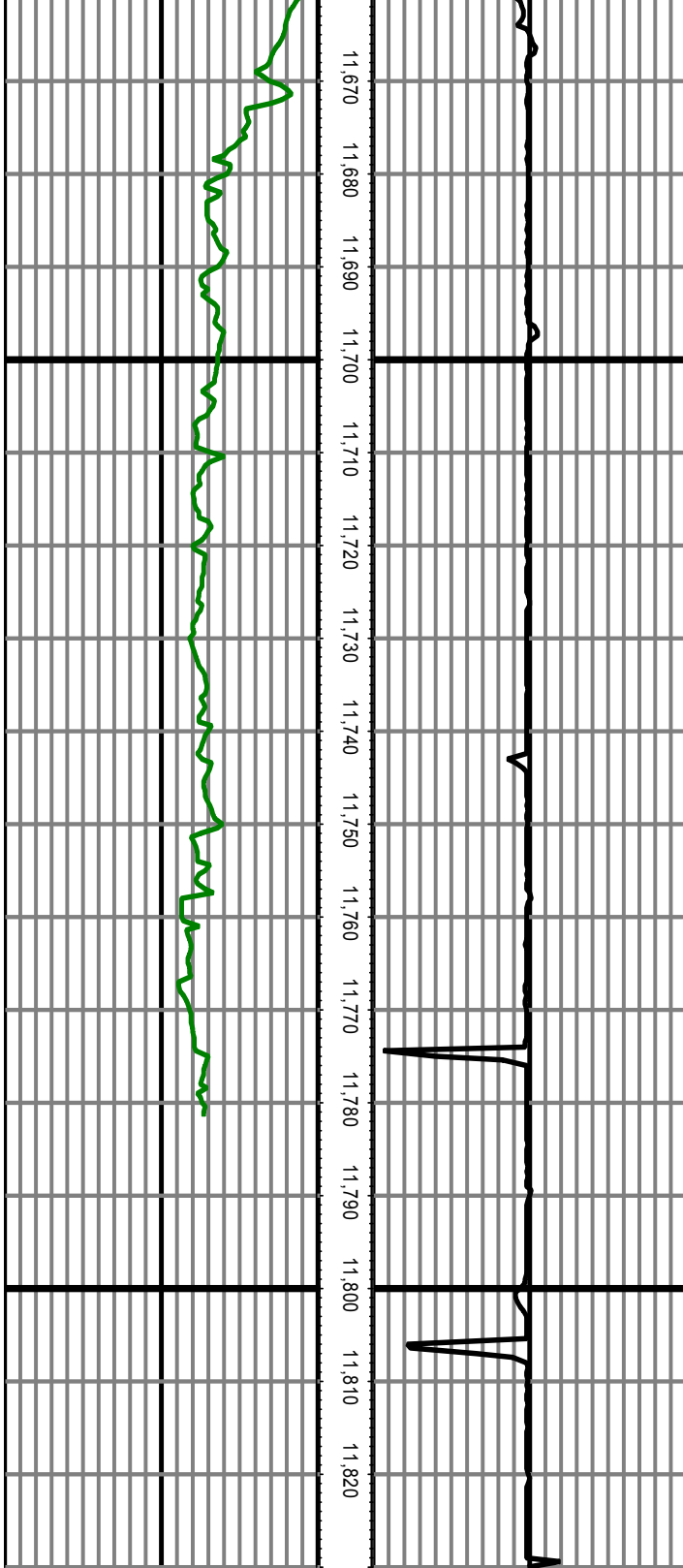
MD: 11403.00 INC: 90.10 AZ: 173.40 11,403.00



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 11,630 11,640 11,650

MD: 11499.00 INC: 91.00 AZ: 172.40 11,499.00

MD: 11594.00 INC: 91.10 AZ: 183.40 11,594.00



MD: 11689.00 INC: 91.80 AZ: 182.50 11,689.00

MD: 11776.00 INC: 91.90 AZ: 183.70 11,776.00

0.00 GR(API) on MD 150.00  
 150.00 2 300.00

MD 0.00 ROP(FT/HR) on MD 300.00  
 FT 300.00 2 600.00

Surveys (MD/INC/AZ)