



DDC

RM-13721

1":100' - MD

9/22/2013 10:44:28 AM

Oper. Company: Noble Energy Inc
Country: Weld
State / Province: Colorado
County / Parish: United States
Started: 09/18/2013 11:00 AM

API/UWI: 05-123-37545
Field: Wildcat
Well: Rohn State LD09-68-HN
Rig: H&P 326
Ended: 09/22/2013 09:00 AM

Personnel

Day Hand: Bob Kubistek
Night Hand: Chris Abbott
Comp. Emp:

Location

Latitude: 40° 46' 14.484 N
Longitude: 103° 51' 42.120 W
Elev. GL: 4740
Elev. DF: 30
Elev. KB: 4770

Hole Data

Size	From	To
13 3/4"	0	1254
8 3/4"	1254	6133
6 1/8"	6133	9716

Casing Data

Size	From	To
9 5/8	0	1254
7"	1254	6133
4 1/2"	6133	9716

Bit Sizes

Size	From	To
13 3/4	0	1254
8 3/4	1254	6133
6 1/8	6133	9716

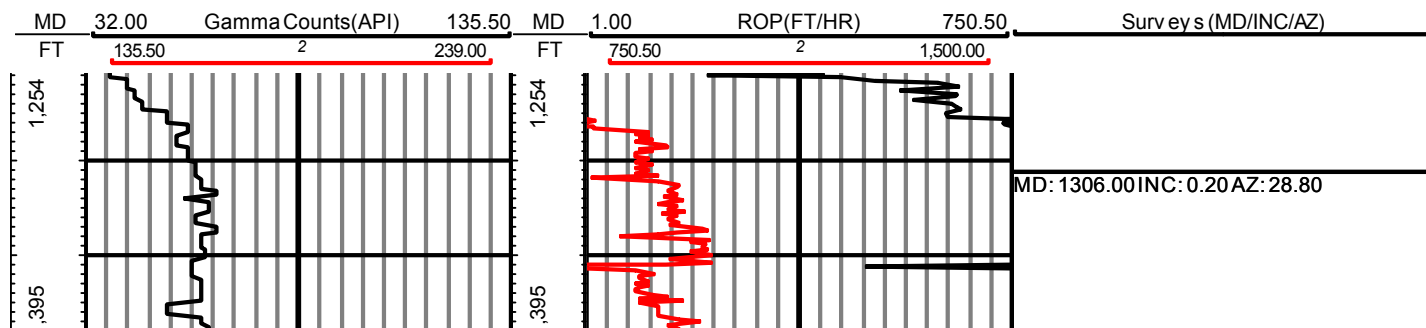
Mud Data

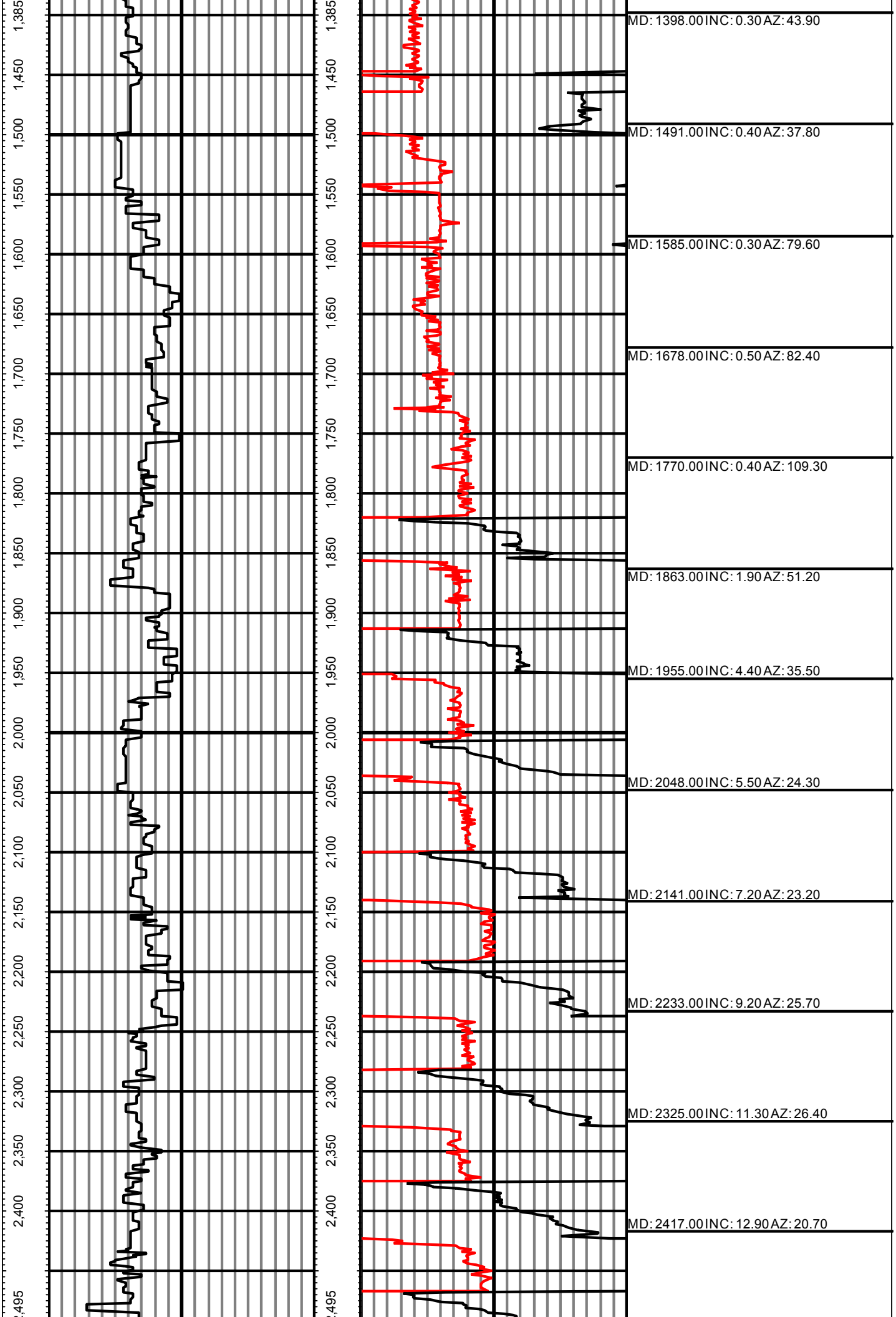
Type	Weight	Density	Viscosity	Rm	Rmf	Rmc	From	To
LSND	10.5	36					1254	9716

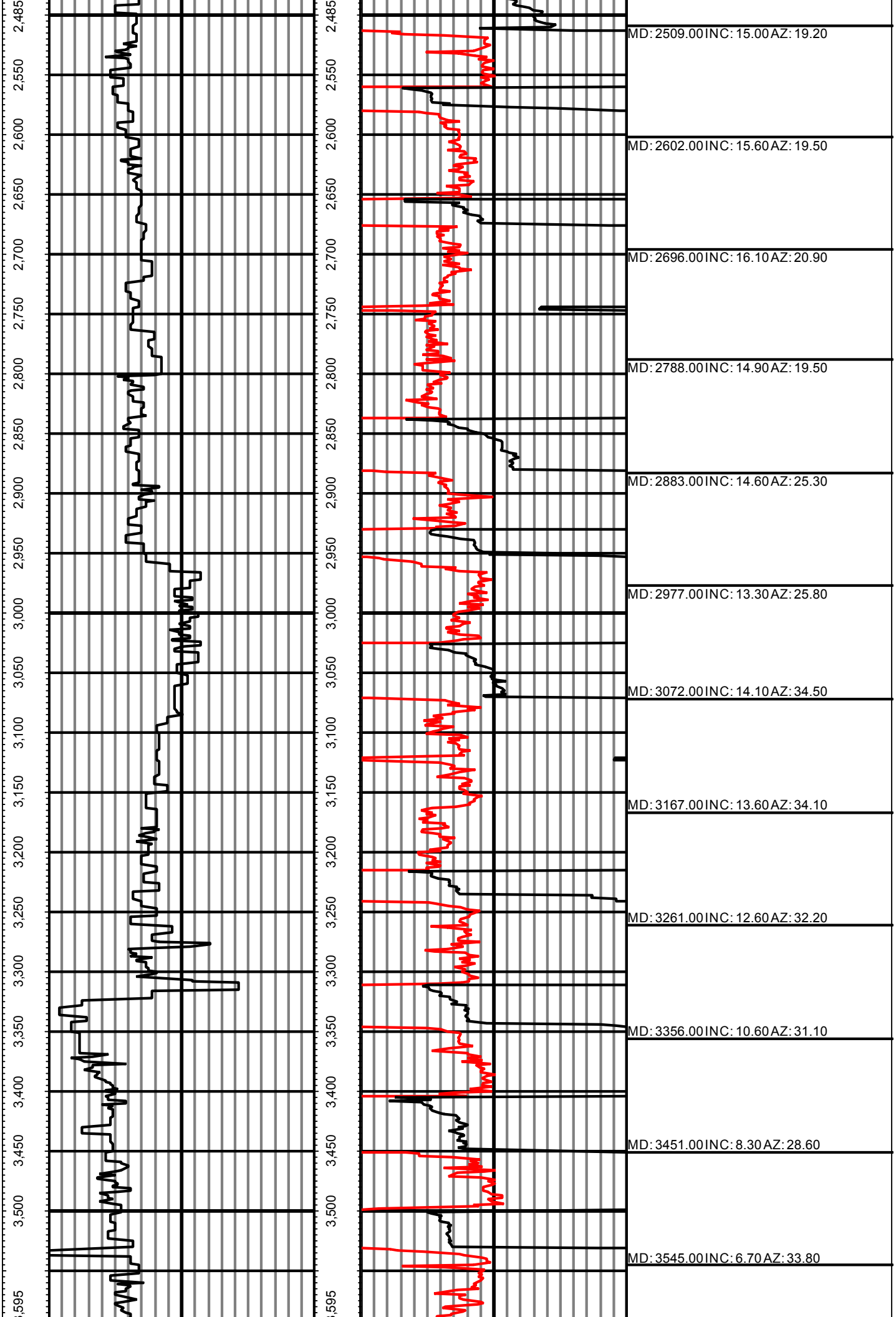
Tool Run Data

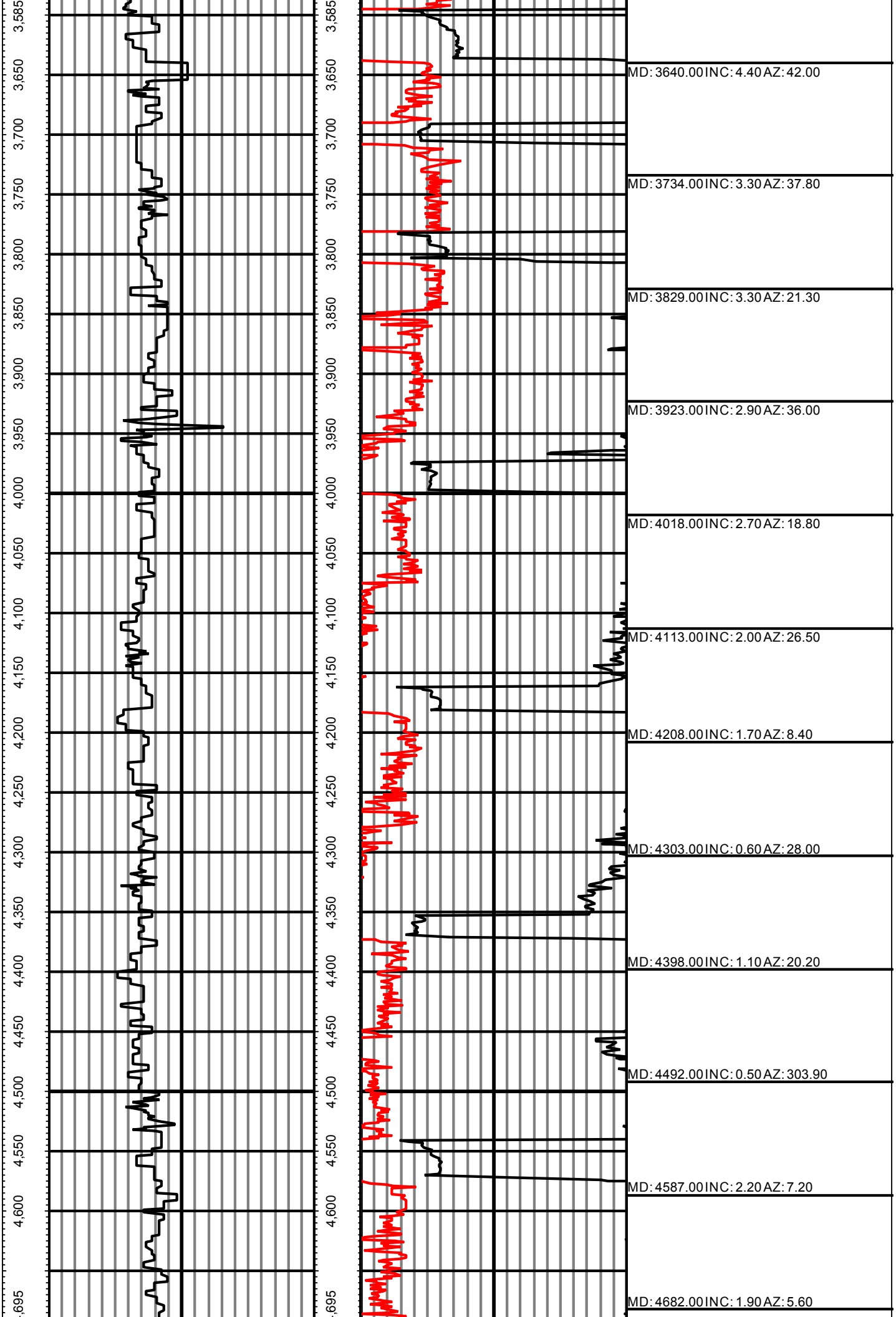
Serial Number	Gamma Offset	Resist. Offset	Start Time	Start Depth	End Time	End Depth
1882	36	0	9/18/2013 11:00:07 AM	1254	9/19/2013 6:30:07 AM	4983
1882	44	0	9/19/2013 7:00:26 AM	4983	9/20/2013 2:00:26 AM	6133
1882	51	0	9/20/2013 11:30:18 PM	6133	9/22/2013 9:00:18 AM	9716

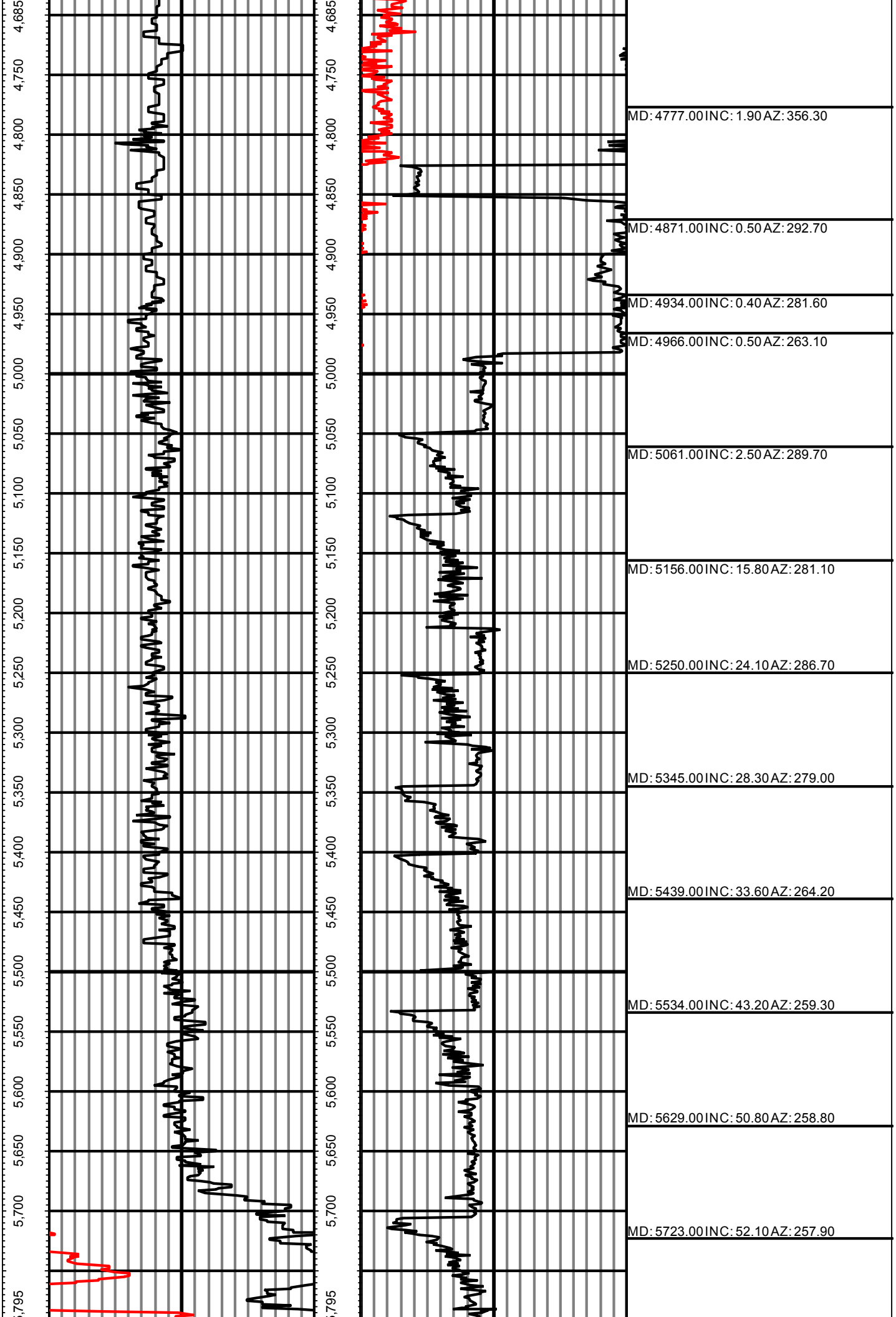
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost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

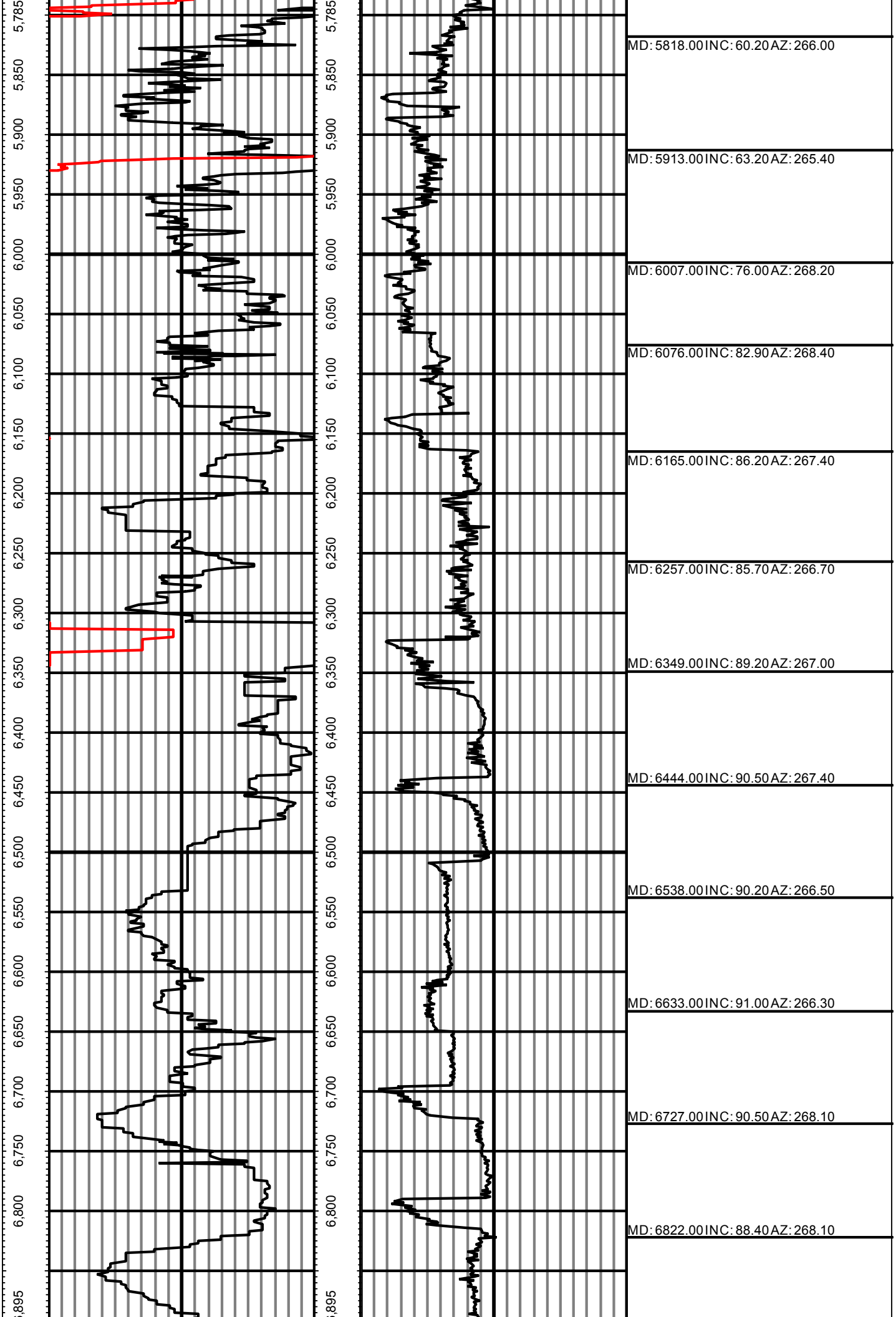


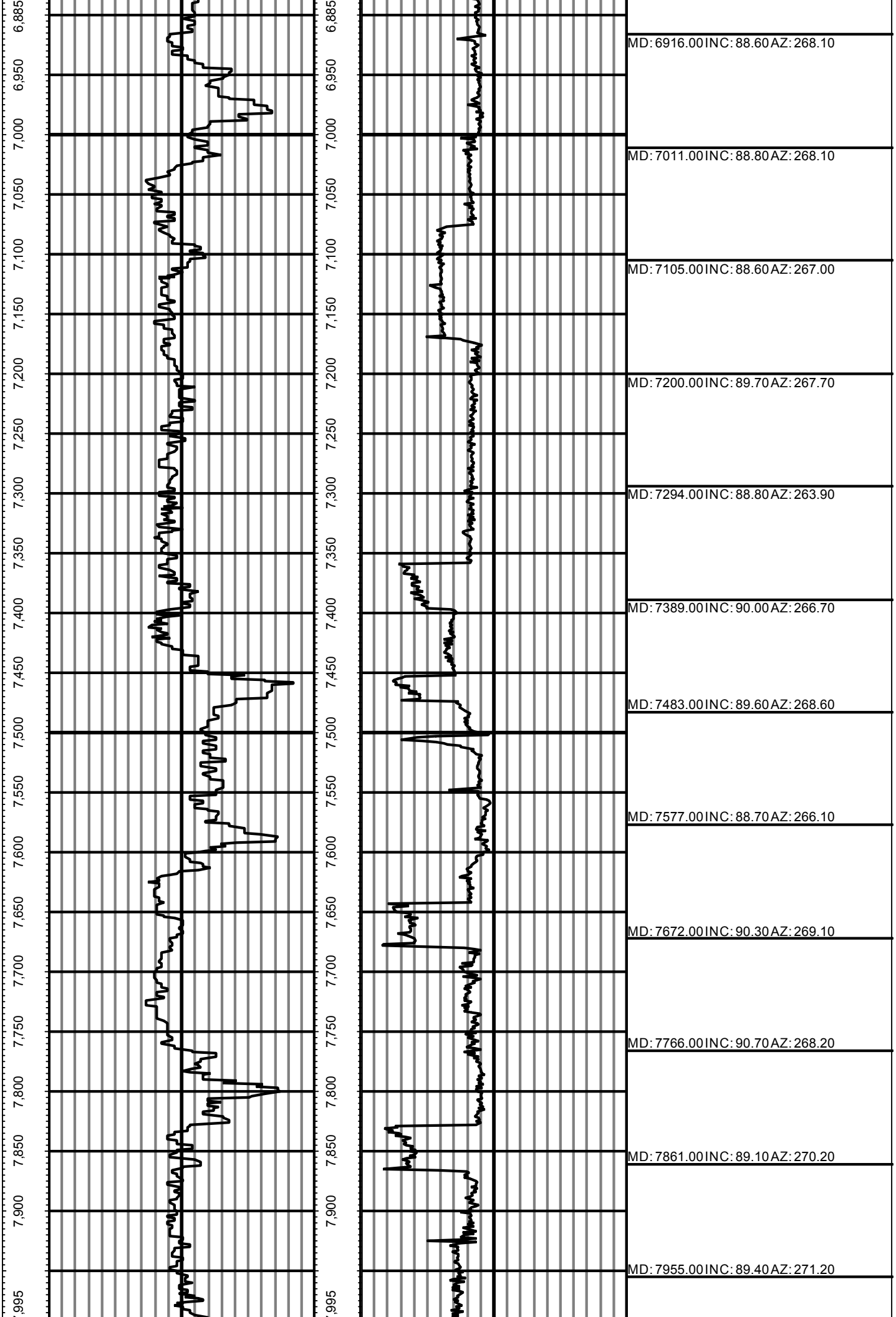


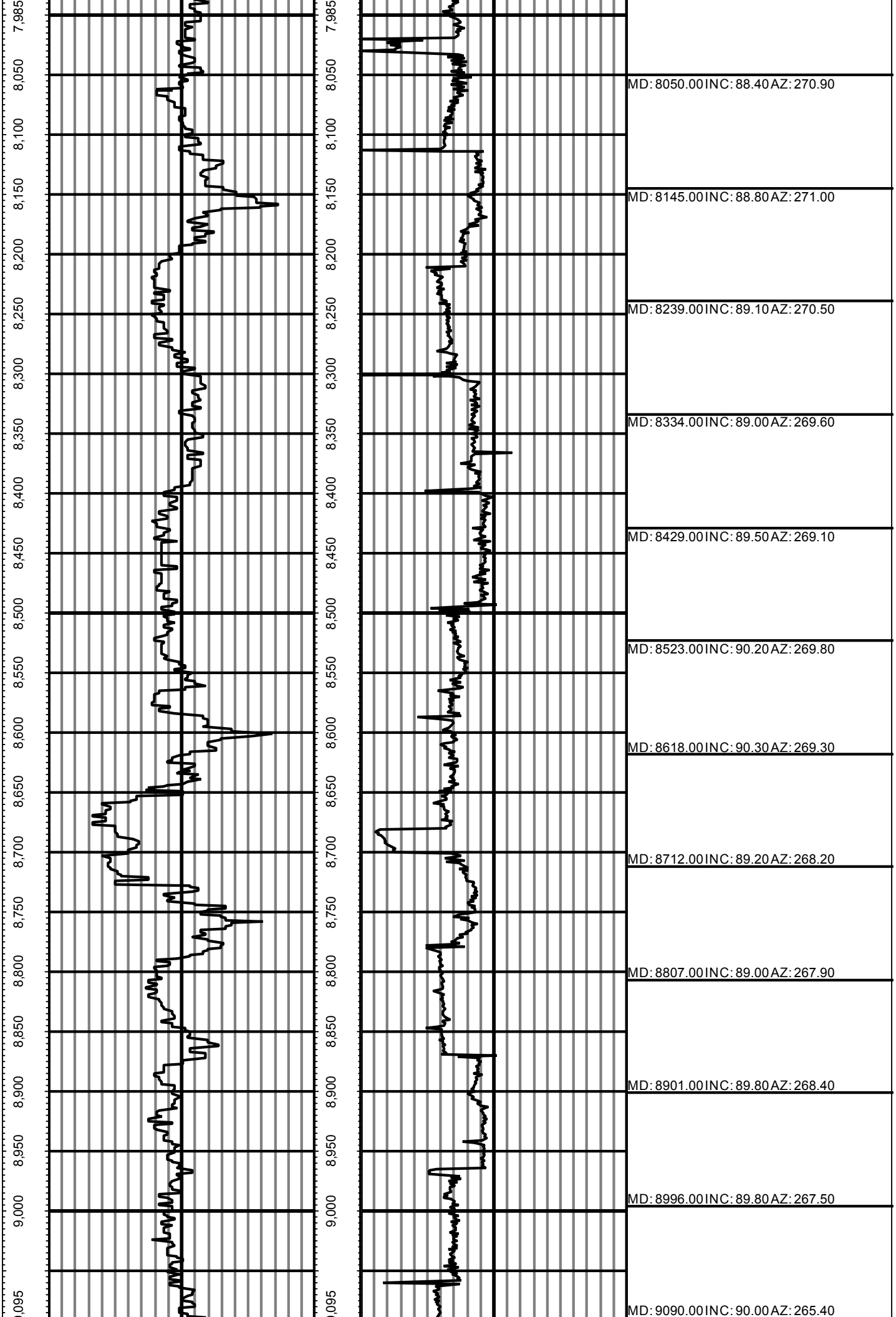


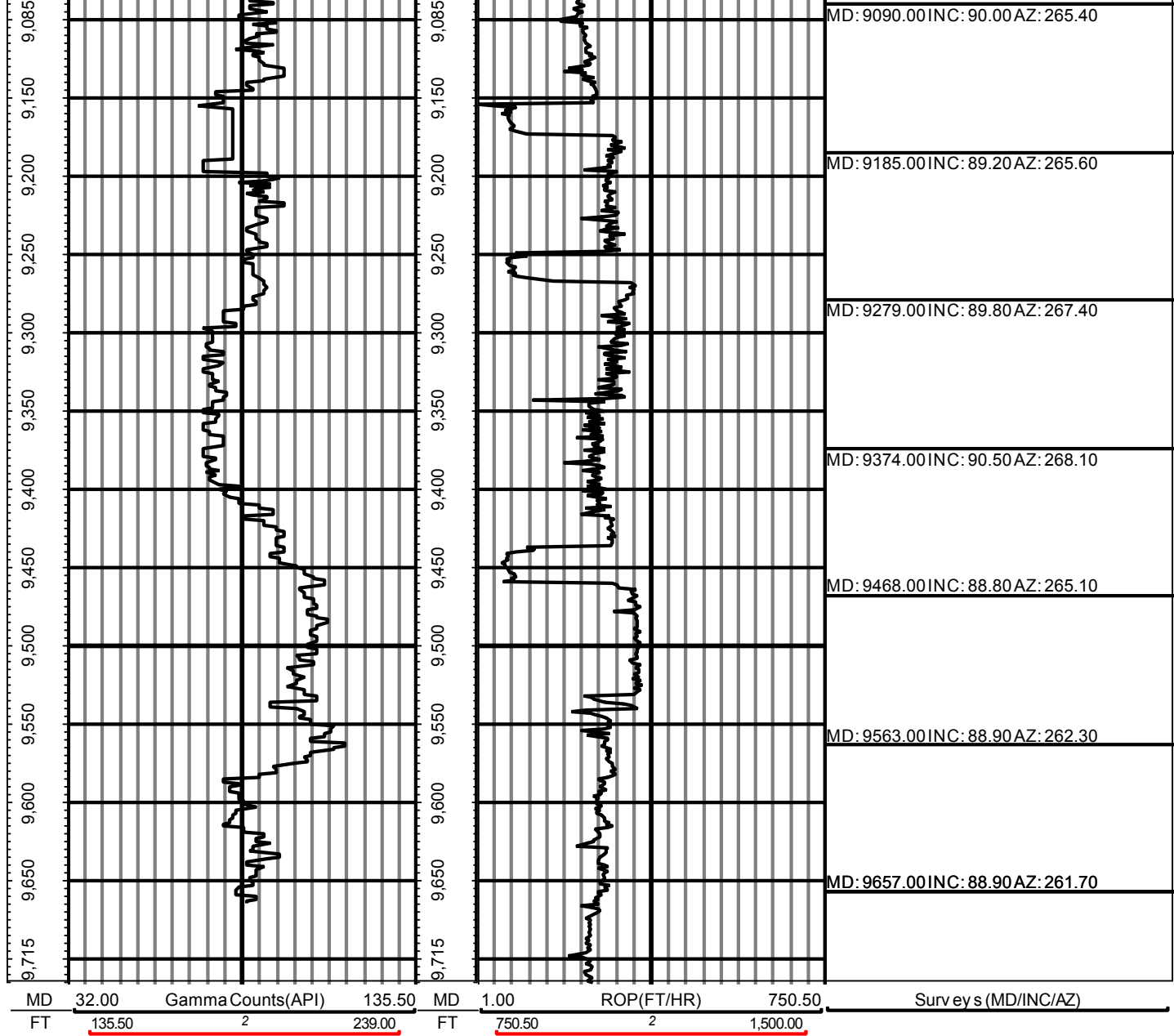














DDC

RM-13721

5":100' - MD

9/22/2013 10:44:56 AM

Oper. Company: Noble Energy Inc
Country: Weld
State / Province: Colorado
County / Parish: United States
Started: 09/18/2013 11:00 AM

API/UWI: 05-123-37545
Field: Wildcat
Well: Rohn State LD09-68-HN
Rig: H&P 326
Ended: 09/22/2013 09:00 AM

Personnel

Day Hand: Bob Kubistek
Night Hand: Chris Abbott
Comp. Emp:

Location

Latitude: 40° 46' 14.484 N
Longitude: 103° 51' 42.120 W
Elev. GL: 4740
Elev. DF: 30
Elev. KB: 4770

Hole Data

Size	From	To
13 3/4"	0	1254
8 3/4"	1254	6133
6 1/8"	6133	9716

Casing Data

Size	From	To
9 5/8	0	1254
7"	1254	6133
4 1/2"	6133	9716

Bit Sizes

Size	From	To
13 3/4	0	1254
8 3/4	1254	6133
6 1/8	6133	9716

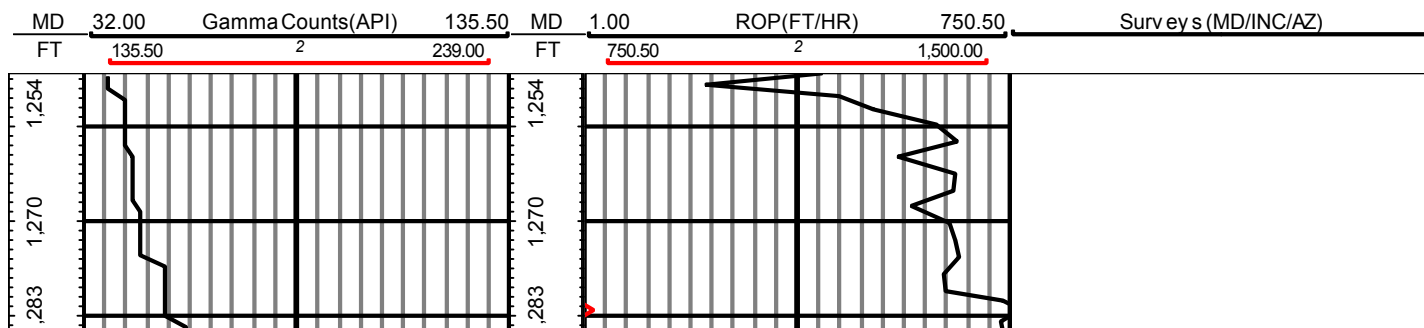
Mud Data

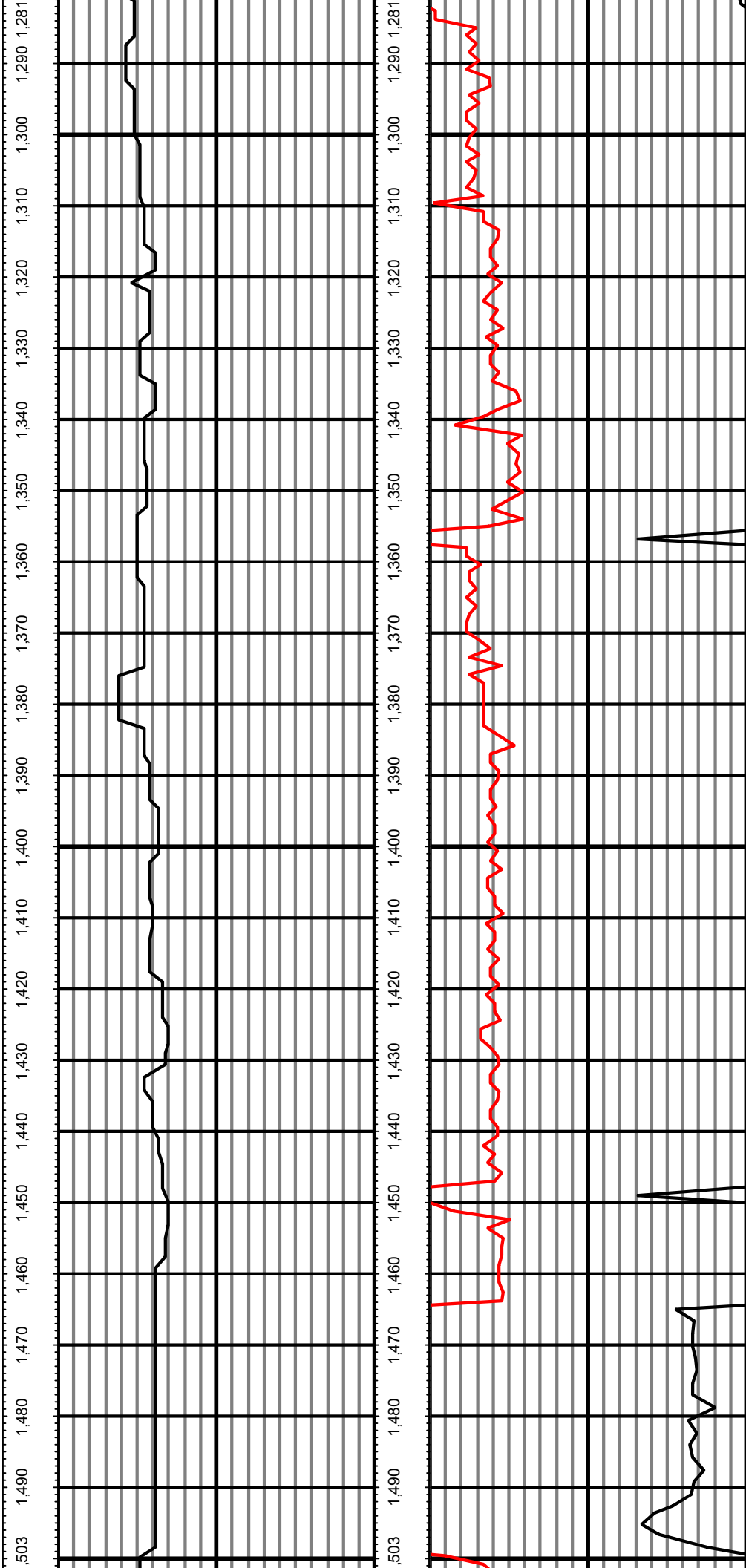
Type	Weight	Density	Viscosity	Rm	Rmf	Rmc	From	To
LSND	10.5	36					1254	9716

Tool Run Data

Serial Number	Gamma Offset	Resist. Offset	Start Time	Start Depth	End Time	End Depth
1882	36	0	9/18/2013 11:00:07 AM	1254	9/19/2013 6:30:07 AM	4983
1882	44	0	9/19/2013 7:00:26 AM	4983	9/20/2013 2:00:26 AM	6133
1882	51	0	9/20/2013 11:30:18 PM	6133	9/22/2013 9:00:18 AM	9716

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.

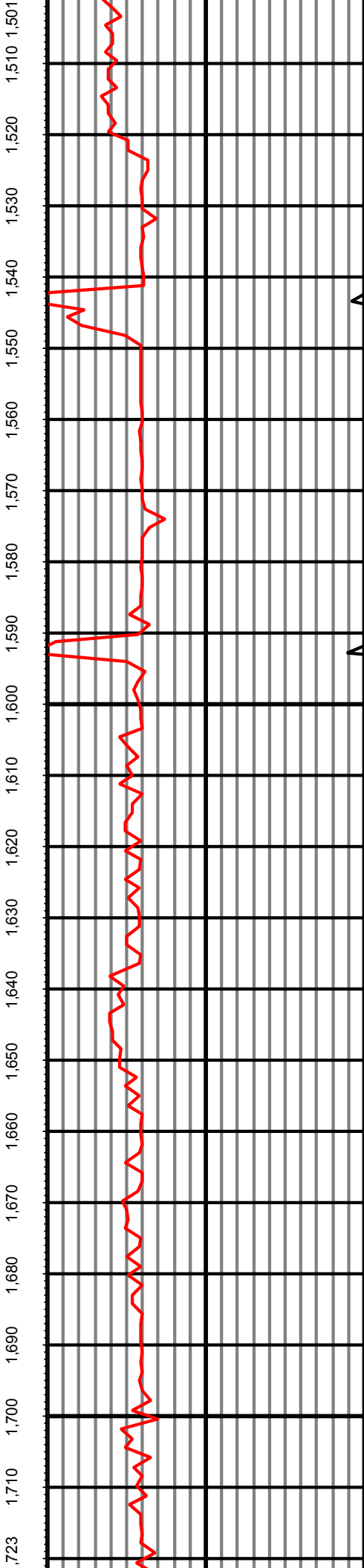
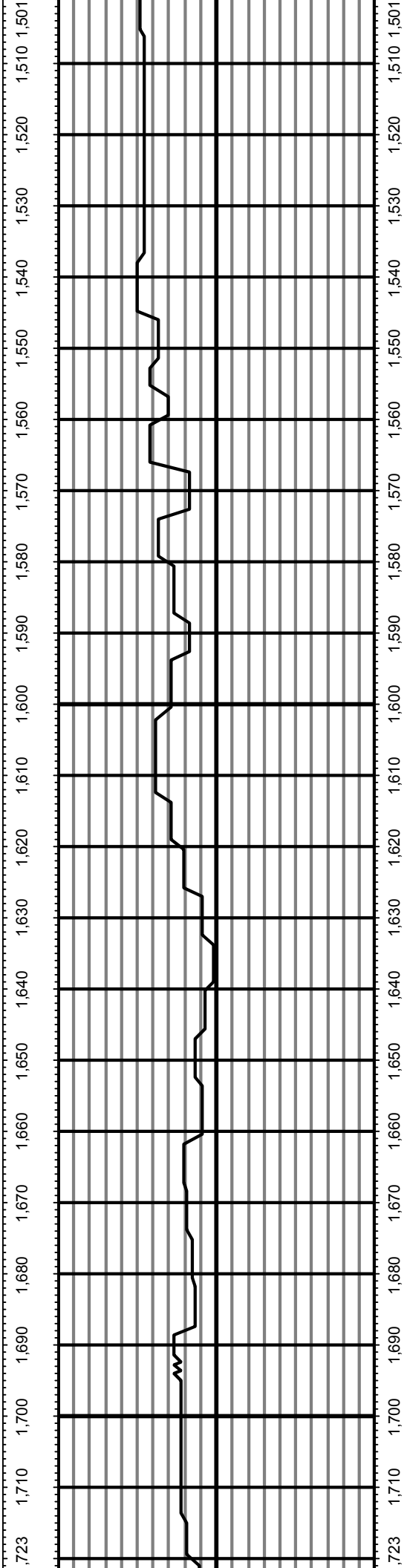




MD: 1306.00 INC: 0.20 AZ: 28.80

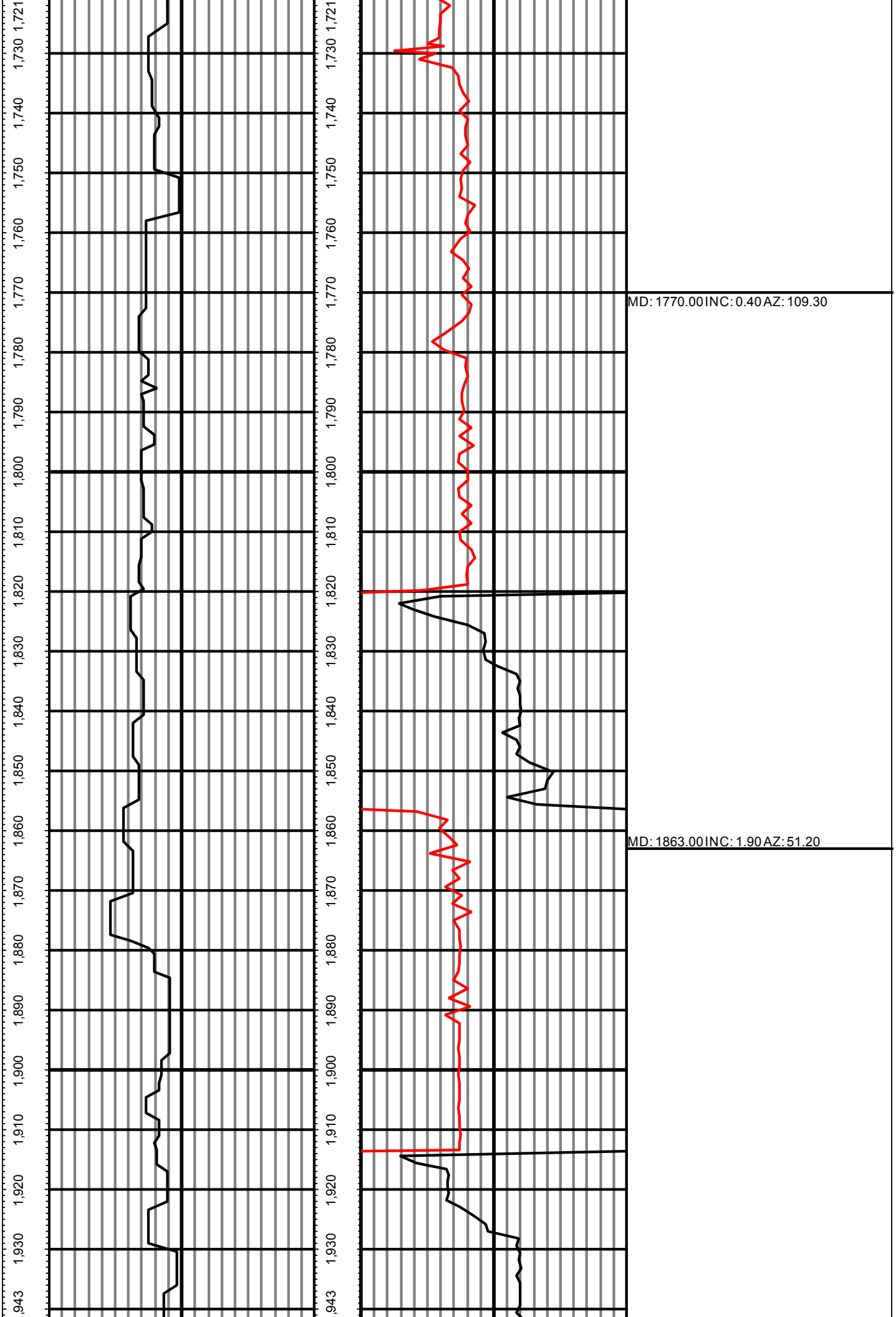
MD: 1398.00 INC: 0.30 AZ: 43.90

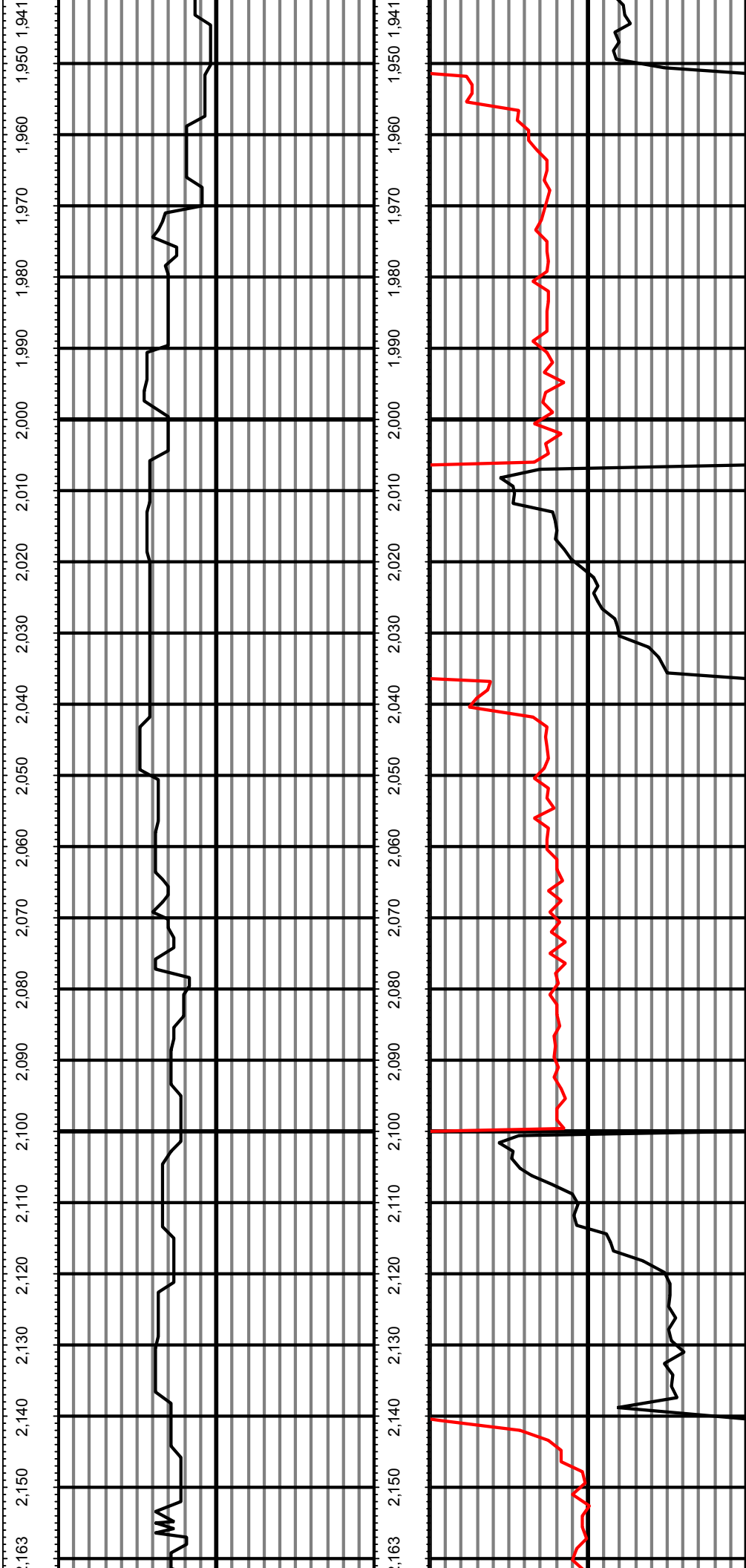
MD: 1491.00 INC: 0.40 AZ: 37.80



MD: 1585.00 INC: 0.30 AZ: 79.60

MD: 1678.00 INC: 0.50 AZ: 82.40

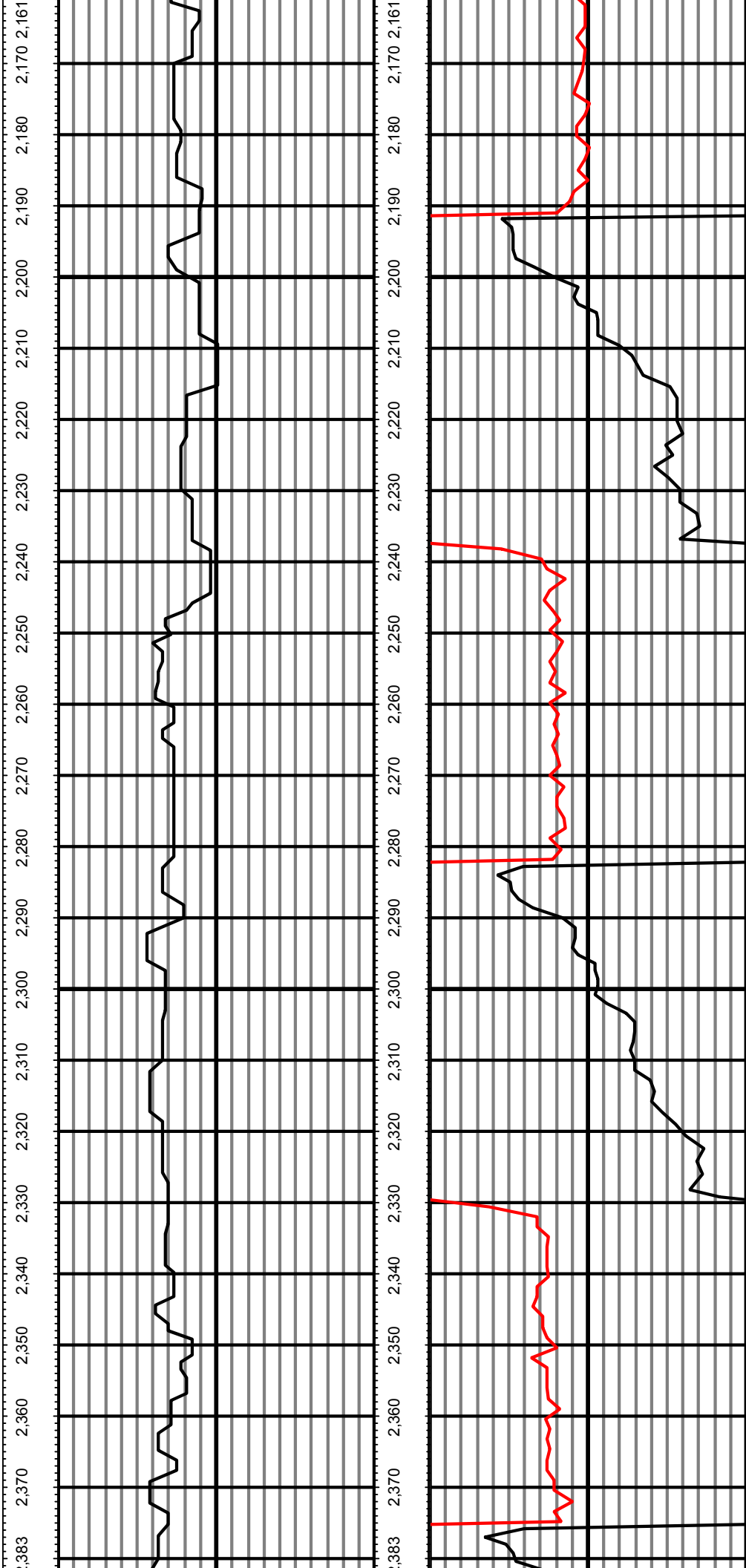




MD: 1955.00 INC: 4.40 AZ: 35.50

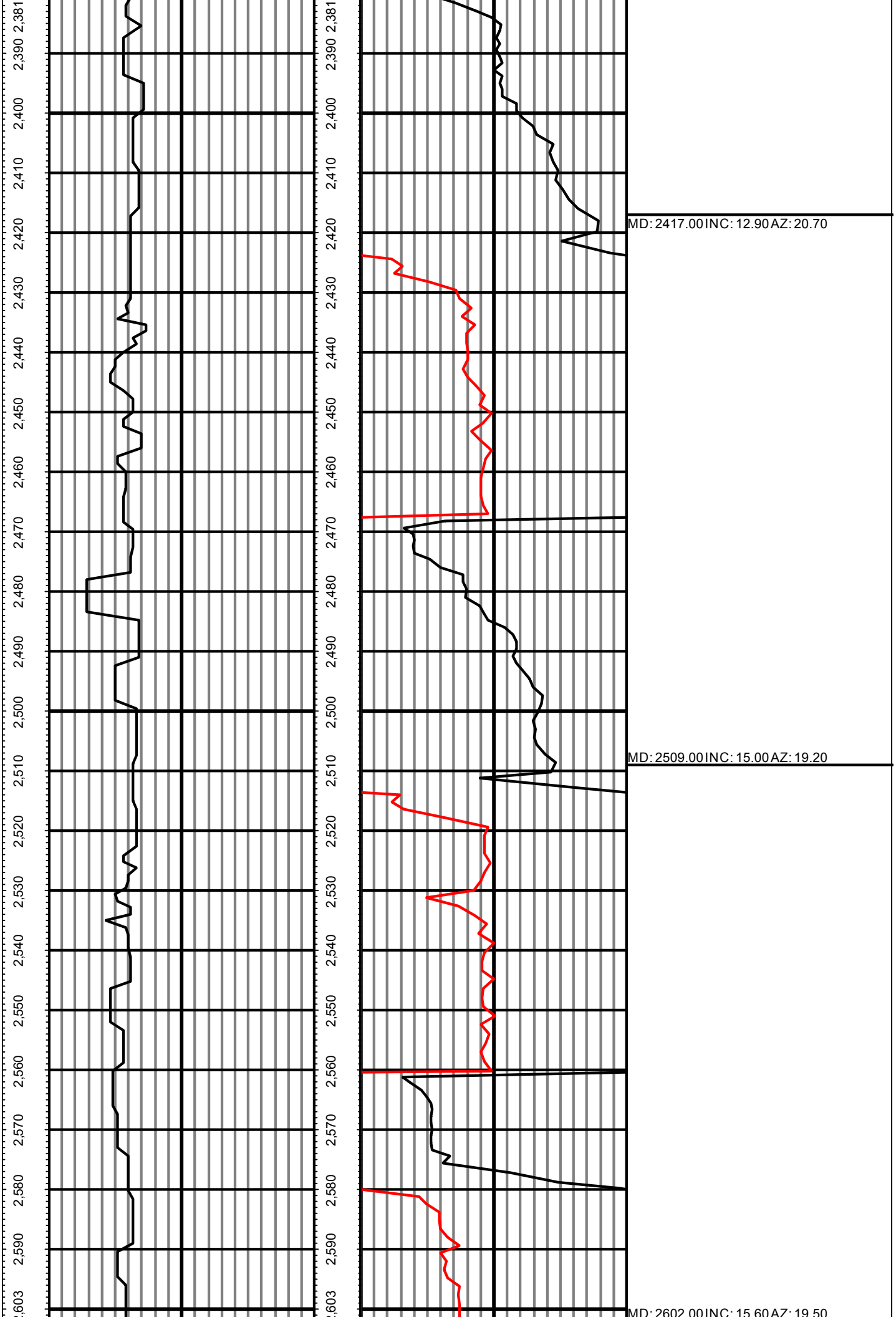
MD: 2048.00 INC: 5.50 AZ: 24.30

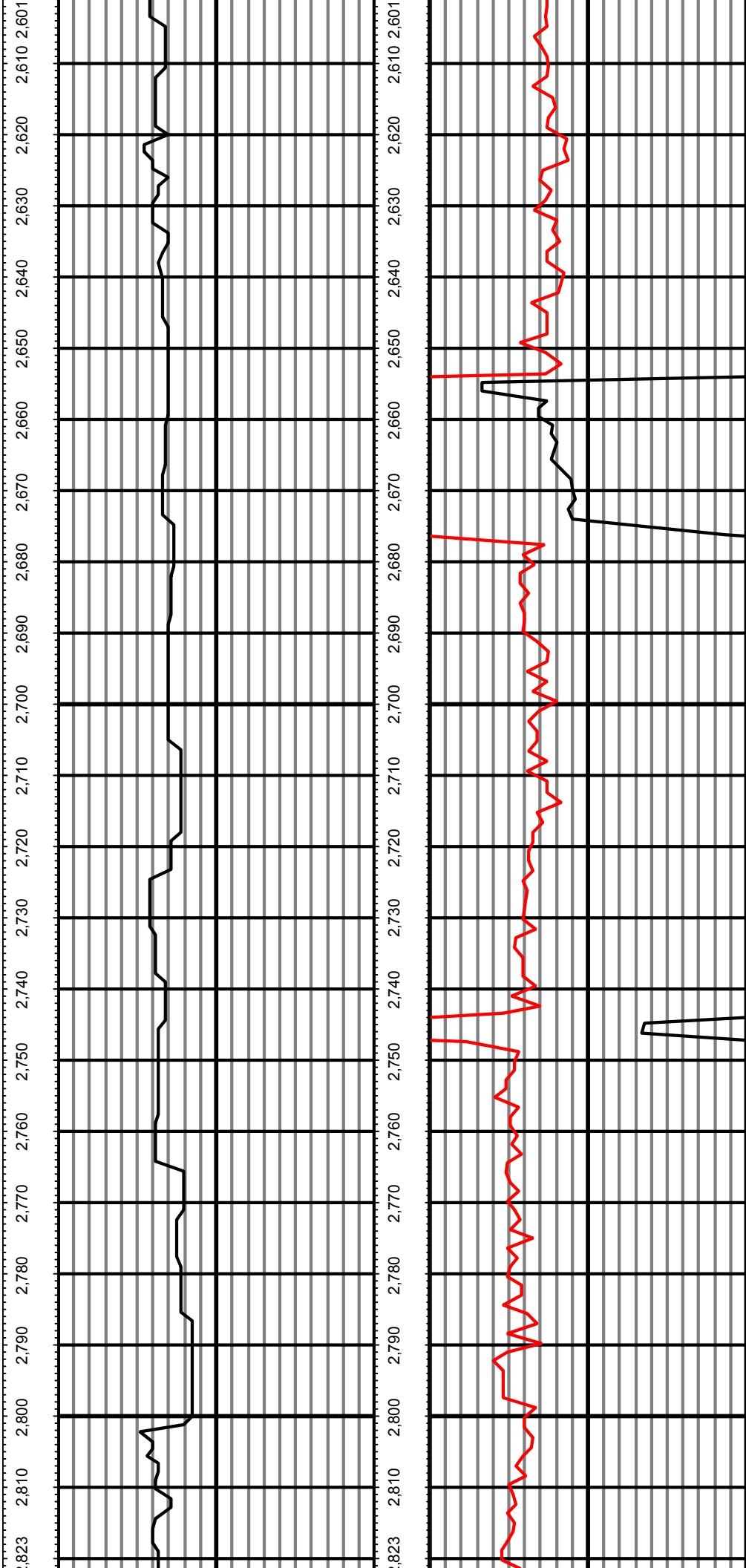
MD: 2141.00 INC: 7.20 AZ: 23.20



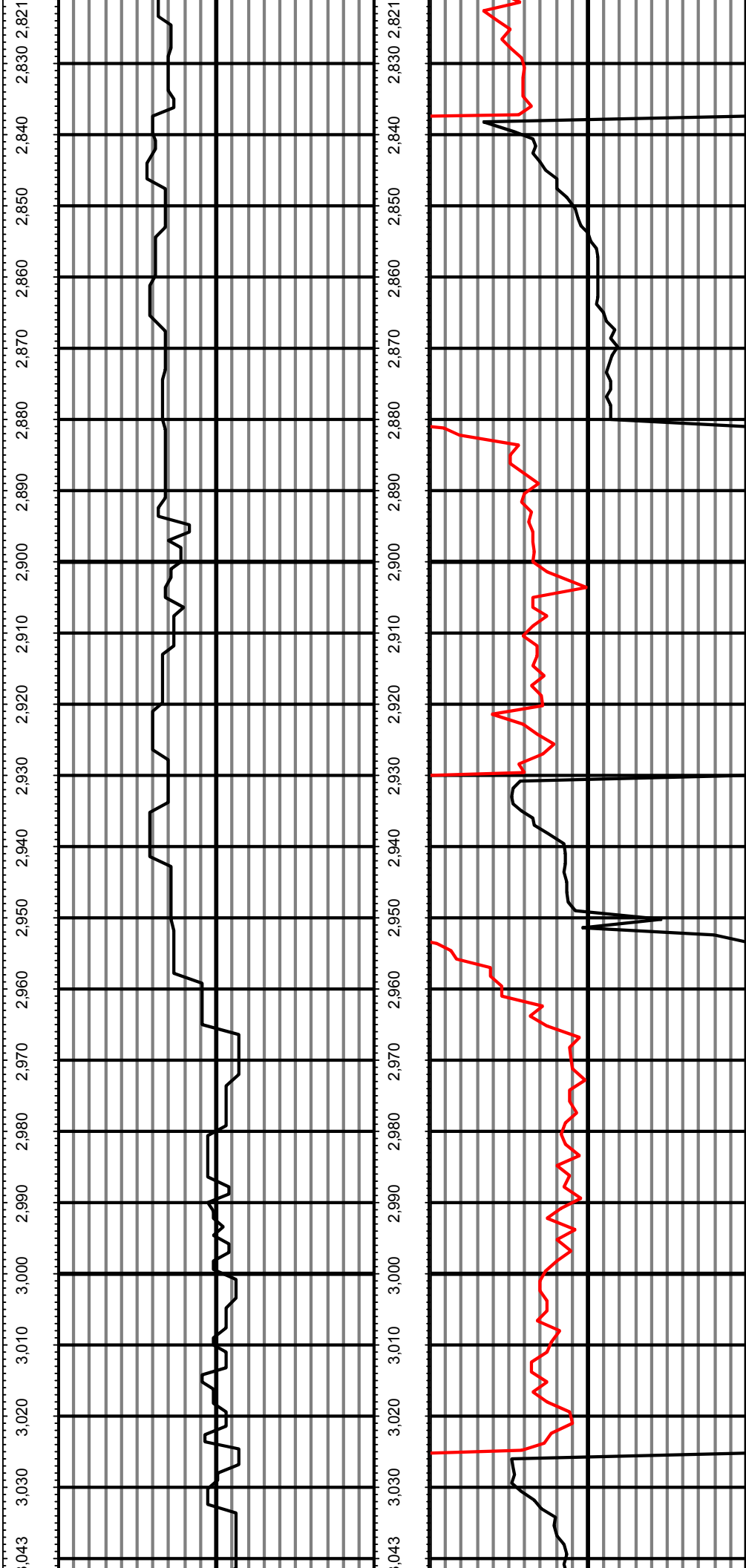
MD: 2233.00 INC: 9.20 AZ: 25.70

MD: 2325.00 INC: 11.30 AZ: 26.40



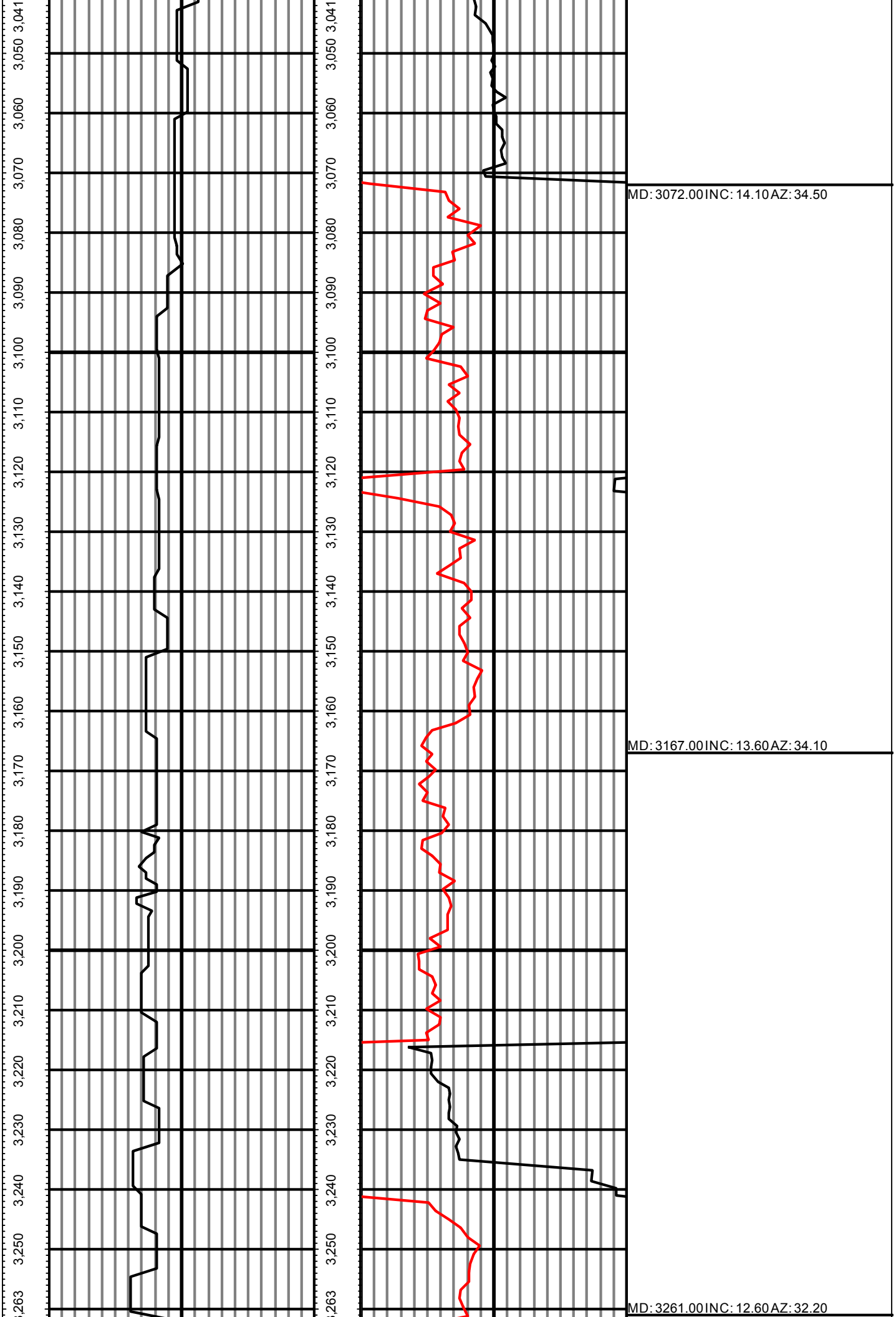


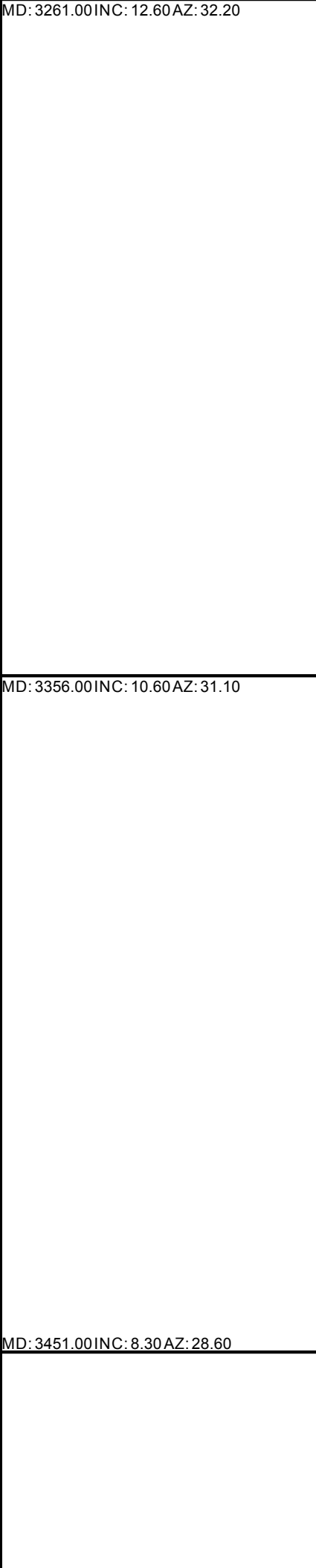
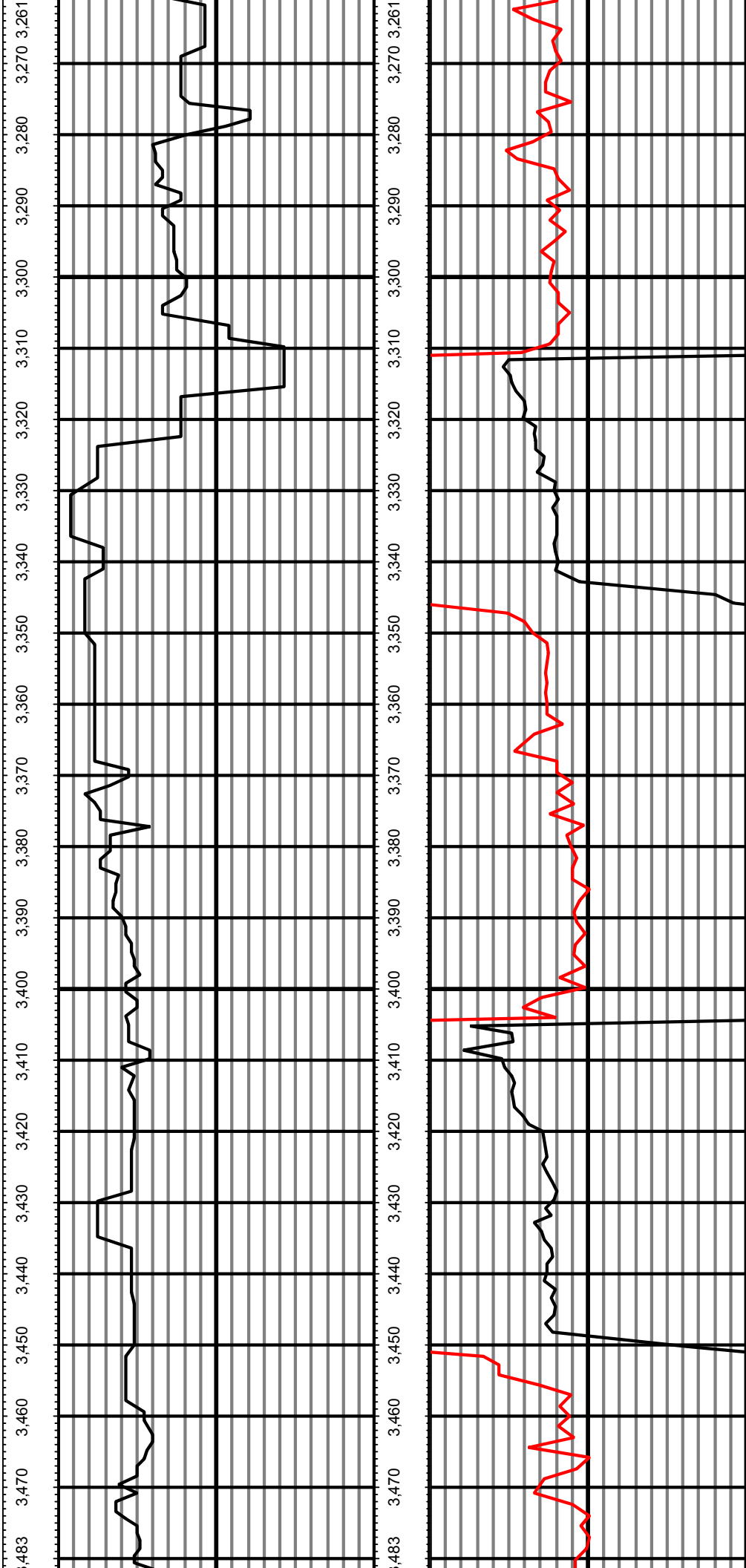
MD: 2602.00 INC: 15.60 AZ: 19.50
MD: 2696.00 INC: 16.10 AZ: 20.90
MD: 2788.00 INC: 14.90 AZ: 19.50



MD: 2883.00 INC: 14.60 AZ: 25.30

MD: 2977.00 INC: 13.30 AZ: 25.80

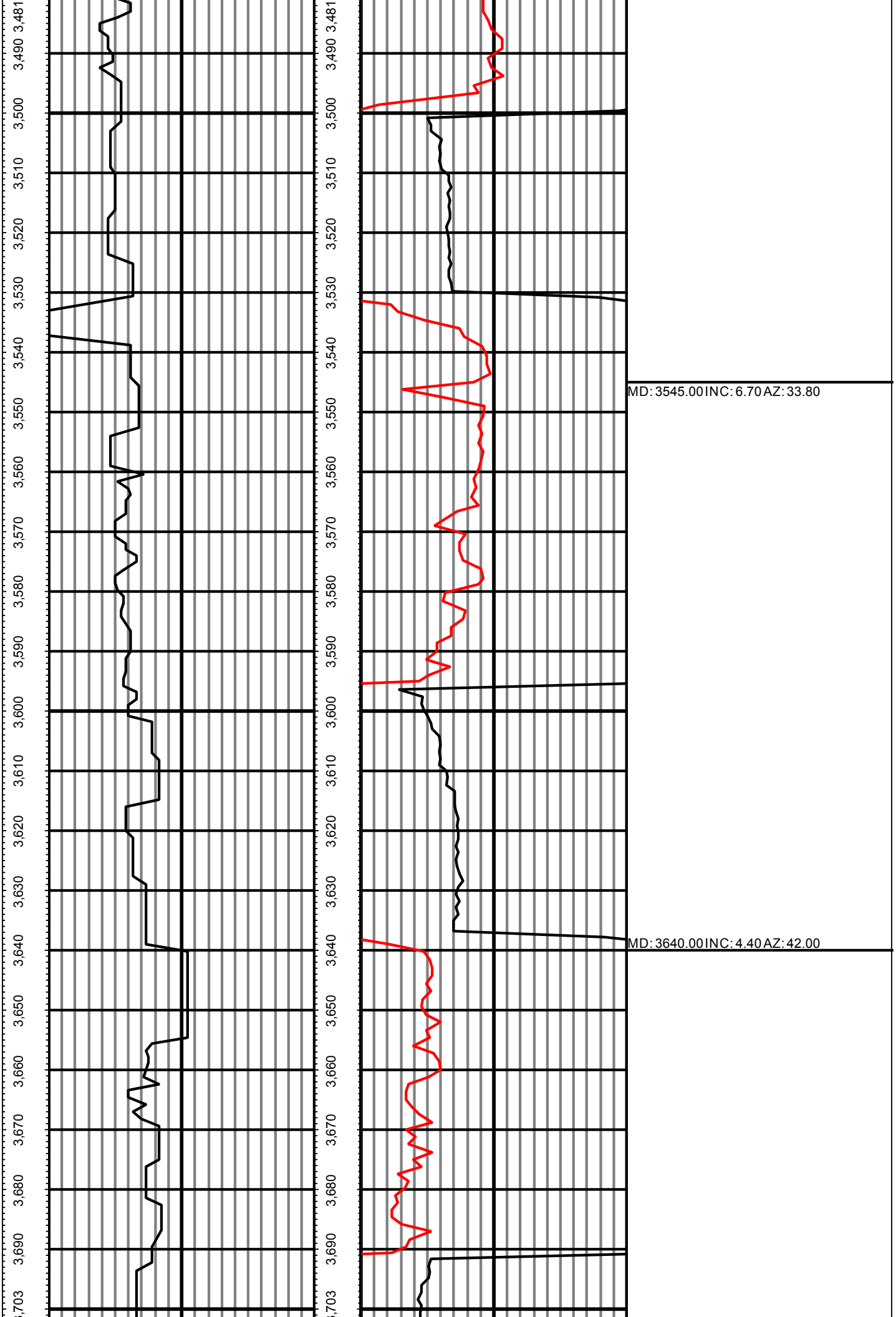


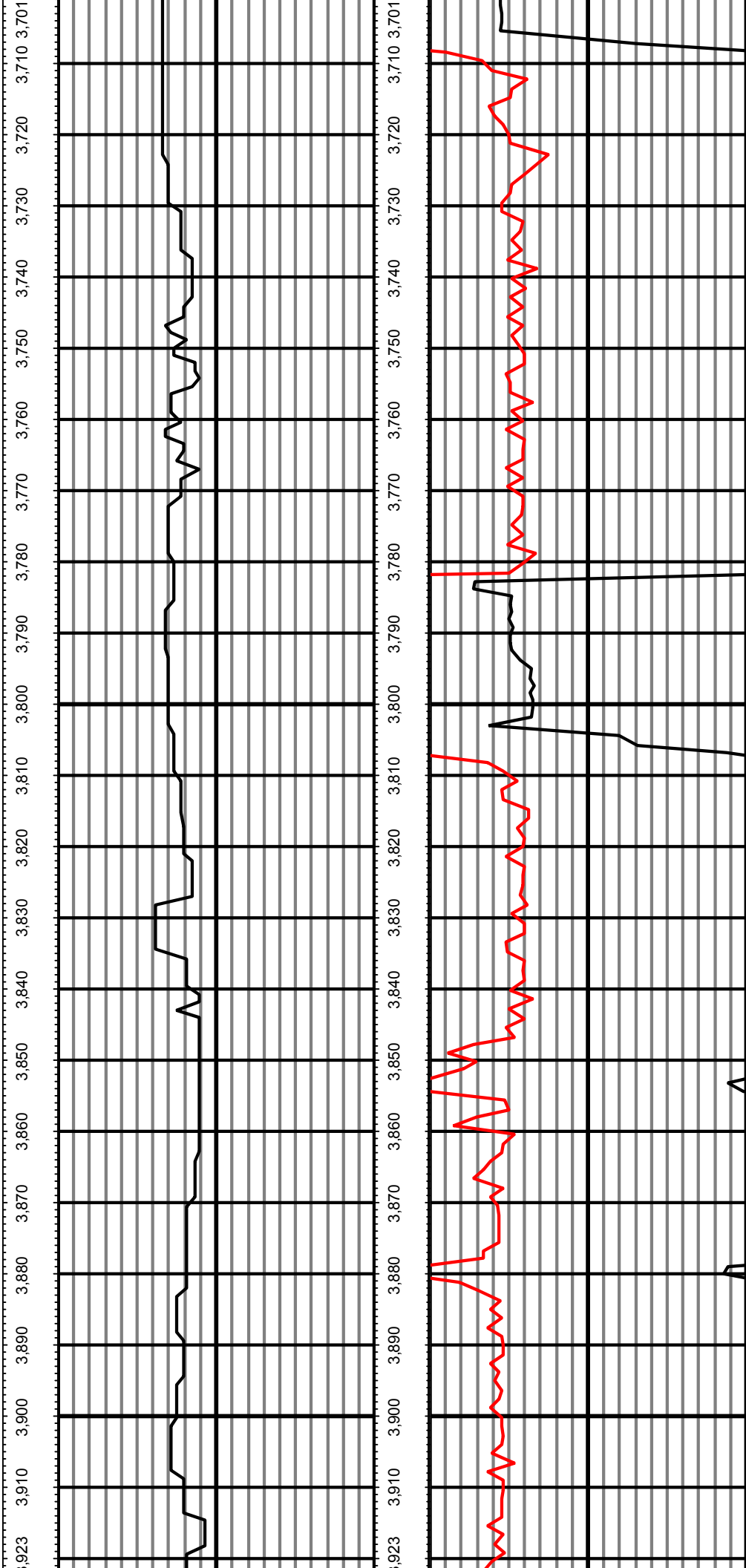


MD: 3261.00 INC: 12.60 AZ: 32.20

MD: 3356.00 INC: 10.60 AZ: 31.10

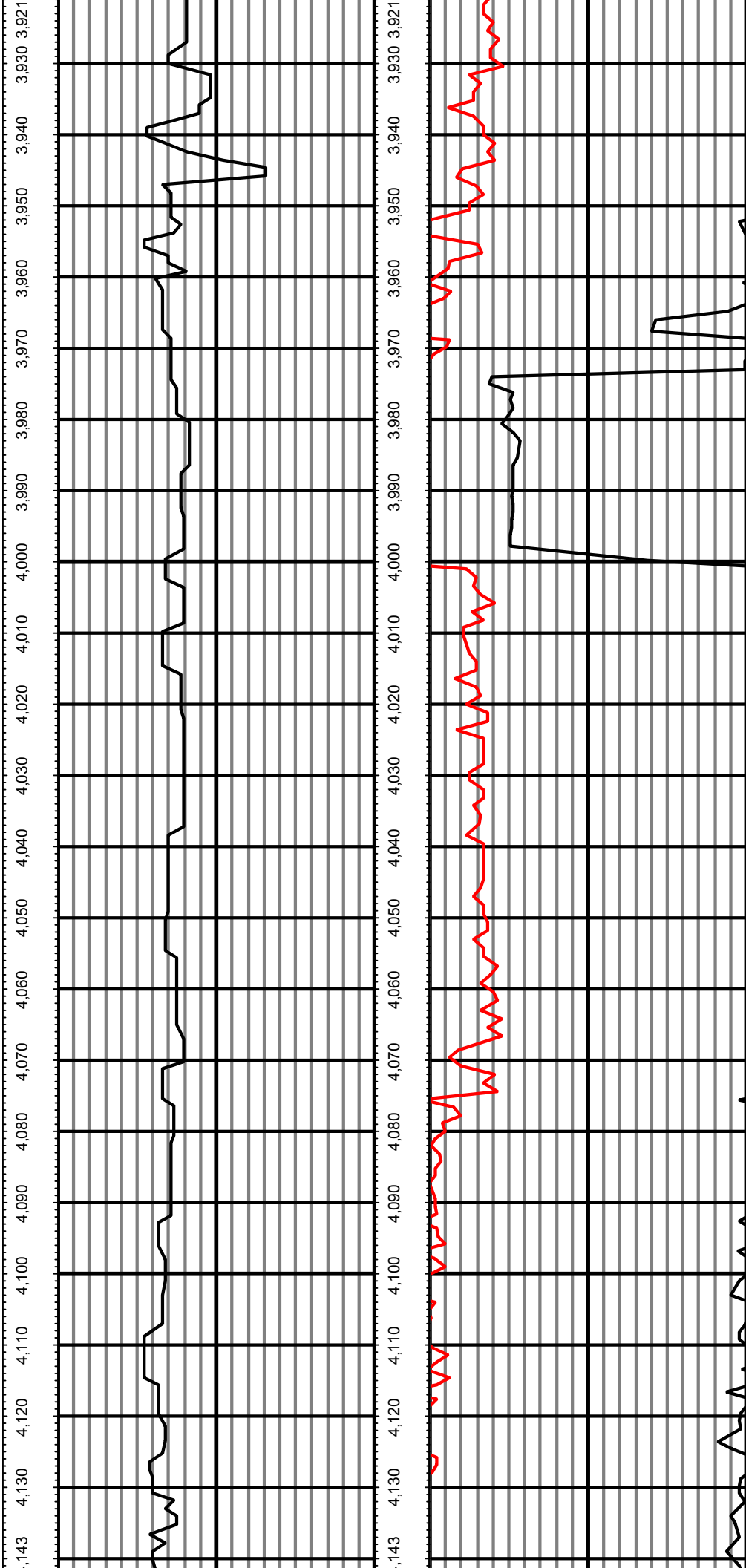
MD: 3451.00 INC: 8.30 AZ: 28.60





MD: 3734.00 INC: 3.30 AZ: 37.80

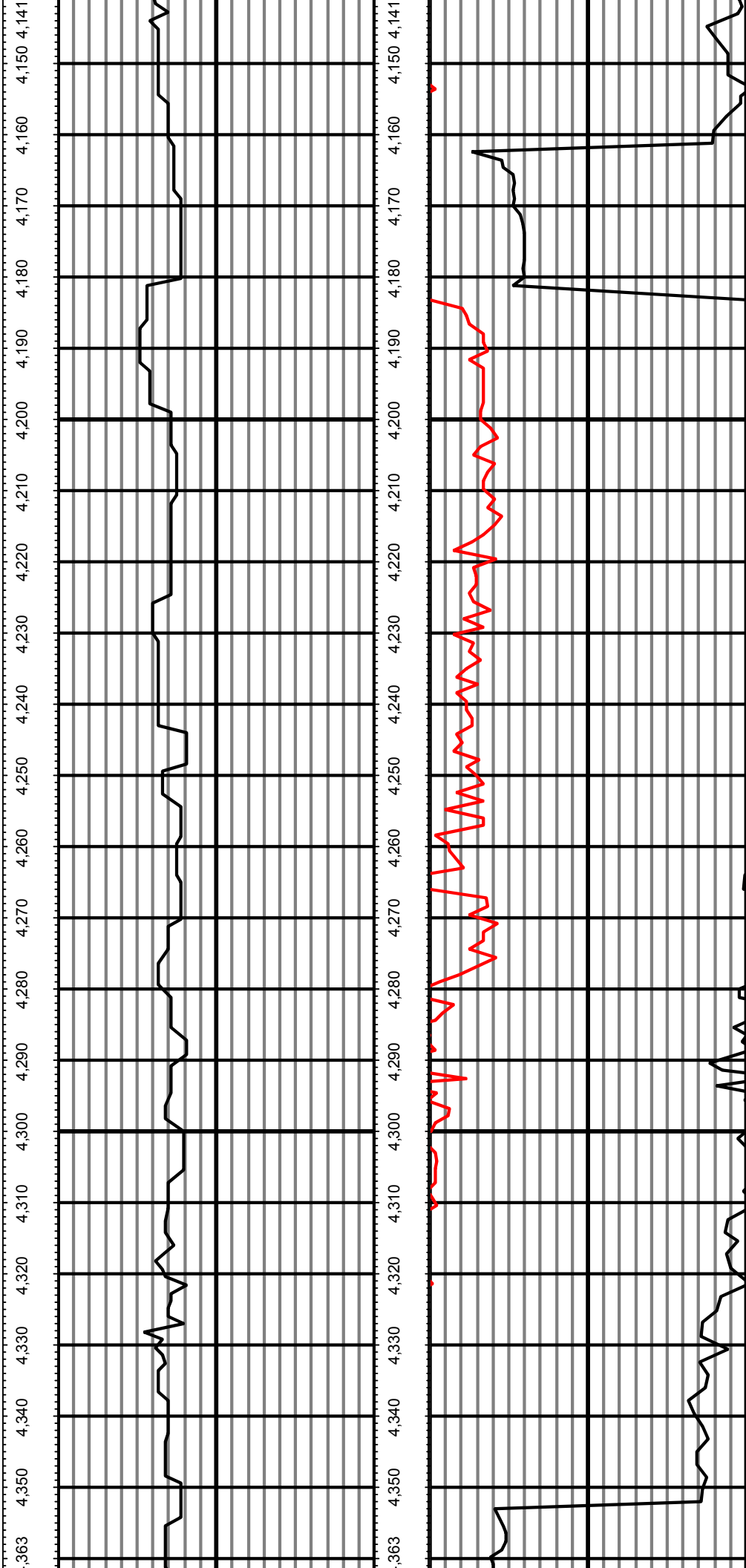
MD: 3829.00 INC: 3.30 AZ: 21.30



MD: 3923.00 INC: 2.90 AZ: 36.00

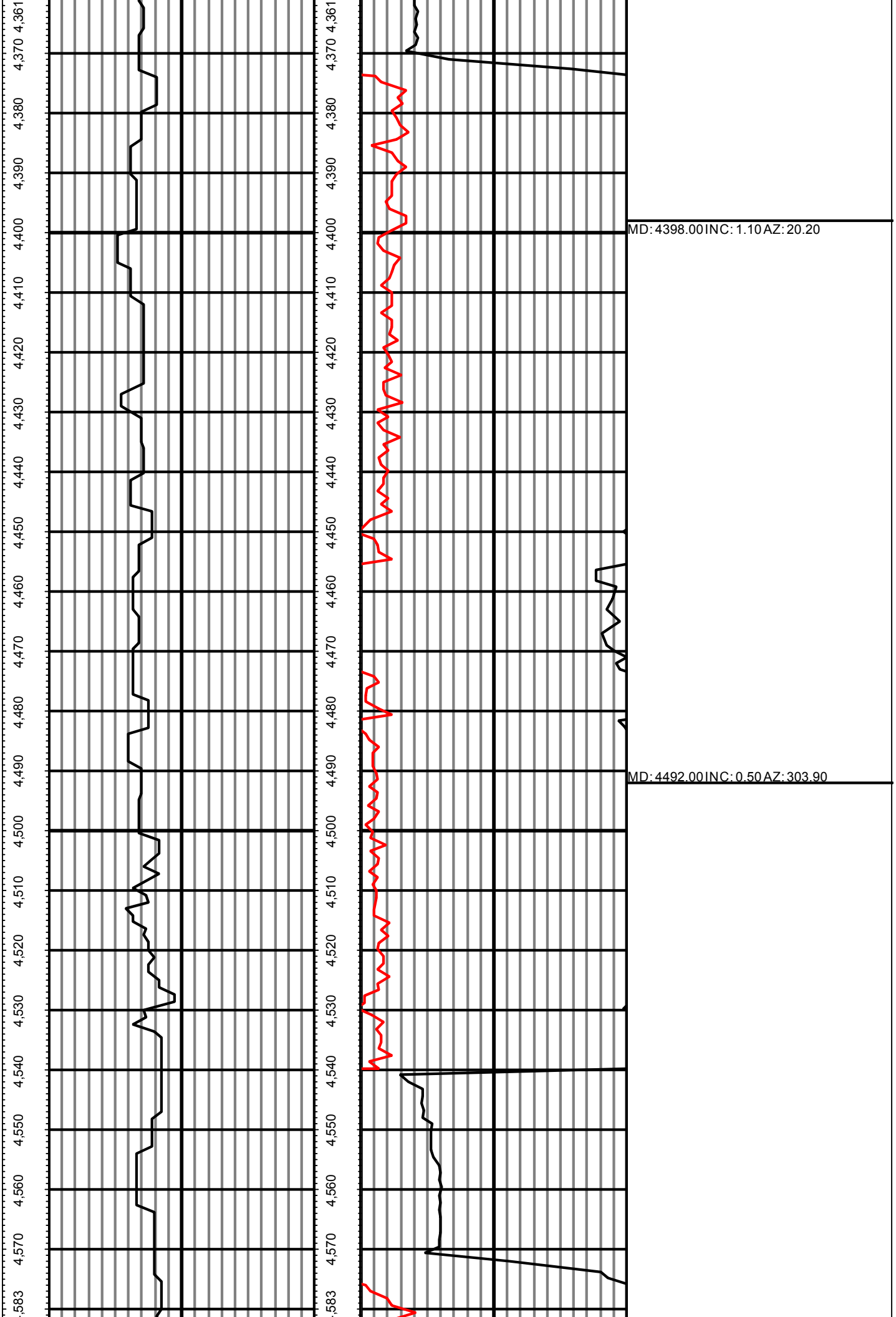
MD: 4018.00 INC: 2.70 AZ: 18.80

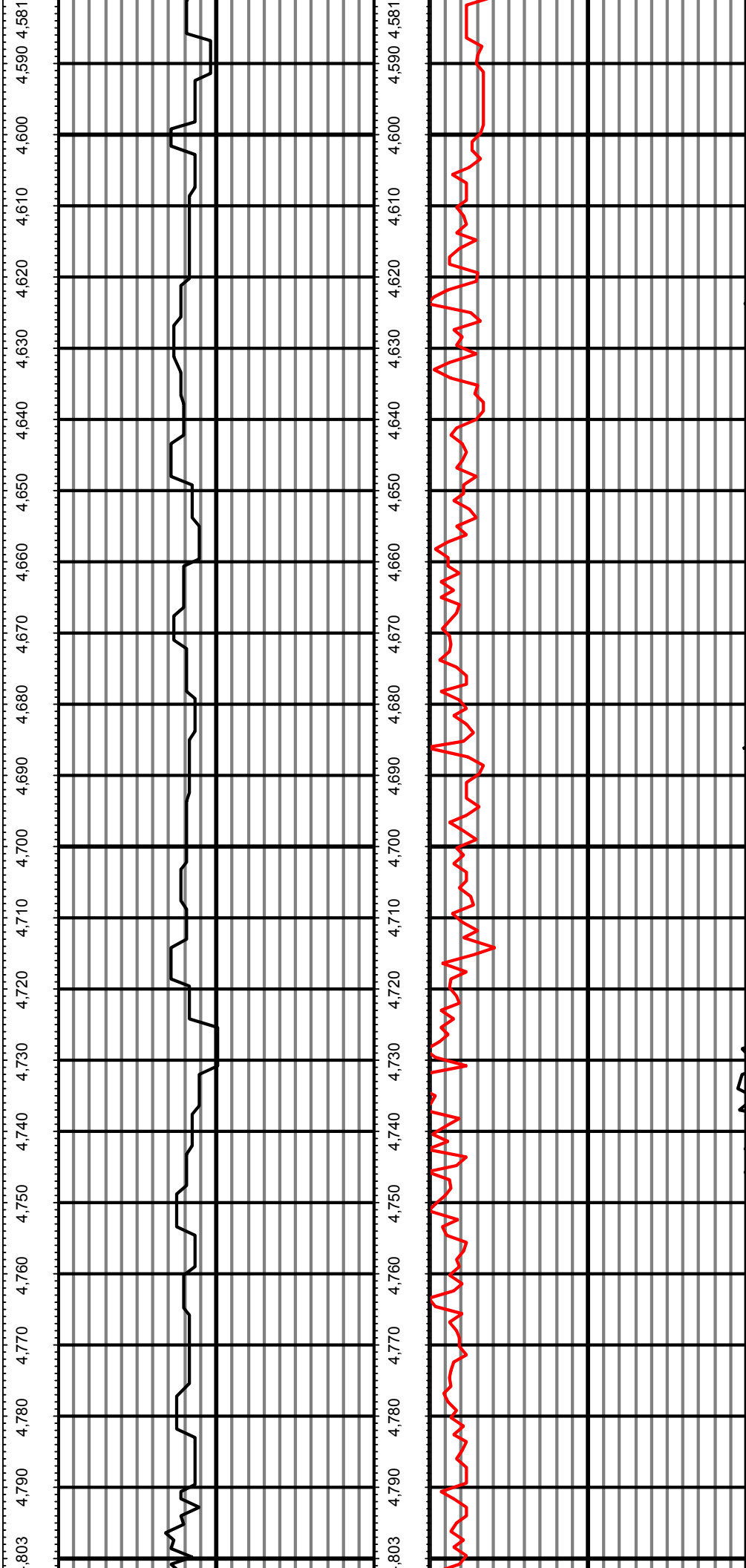
MD: 4113.00 INC: 2.00 AZ: 26.50



MD:4208.00INC:1.70AZ:8.40

MD:4303.00INC:0.60AZ:28.00

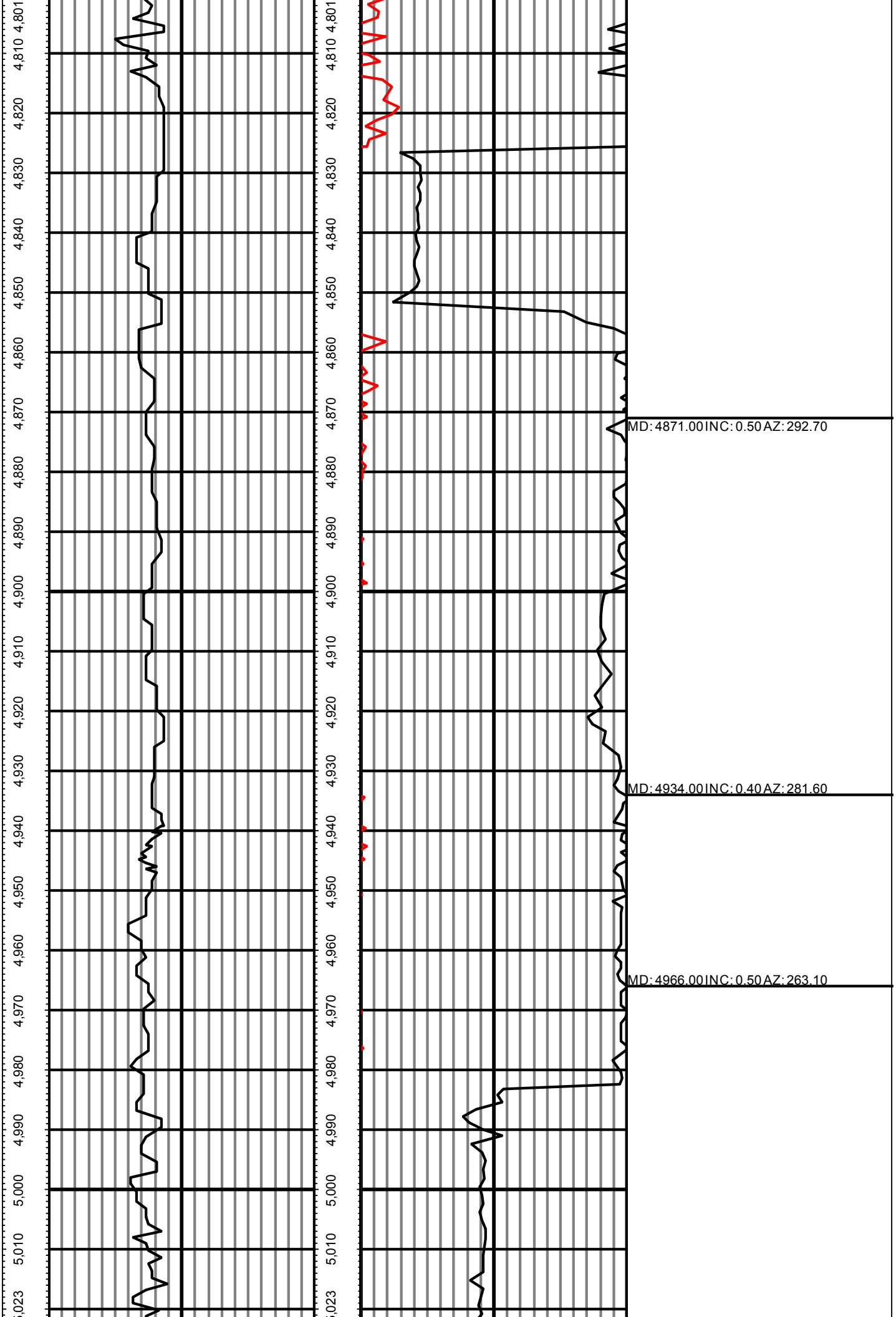


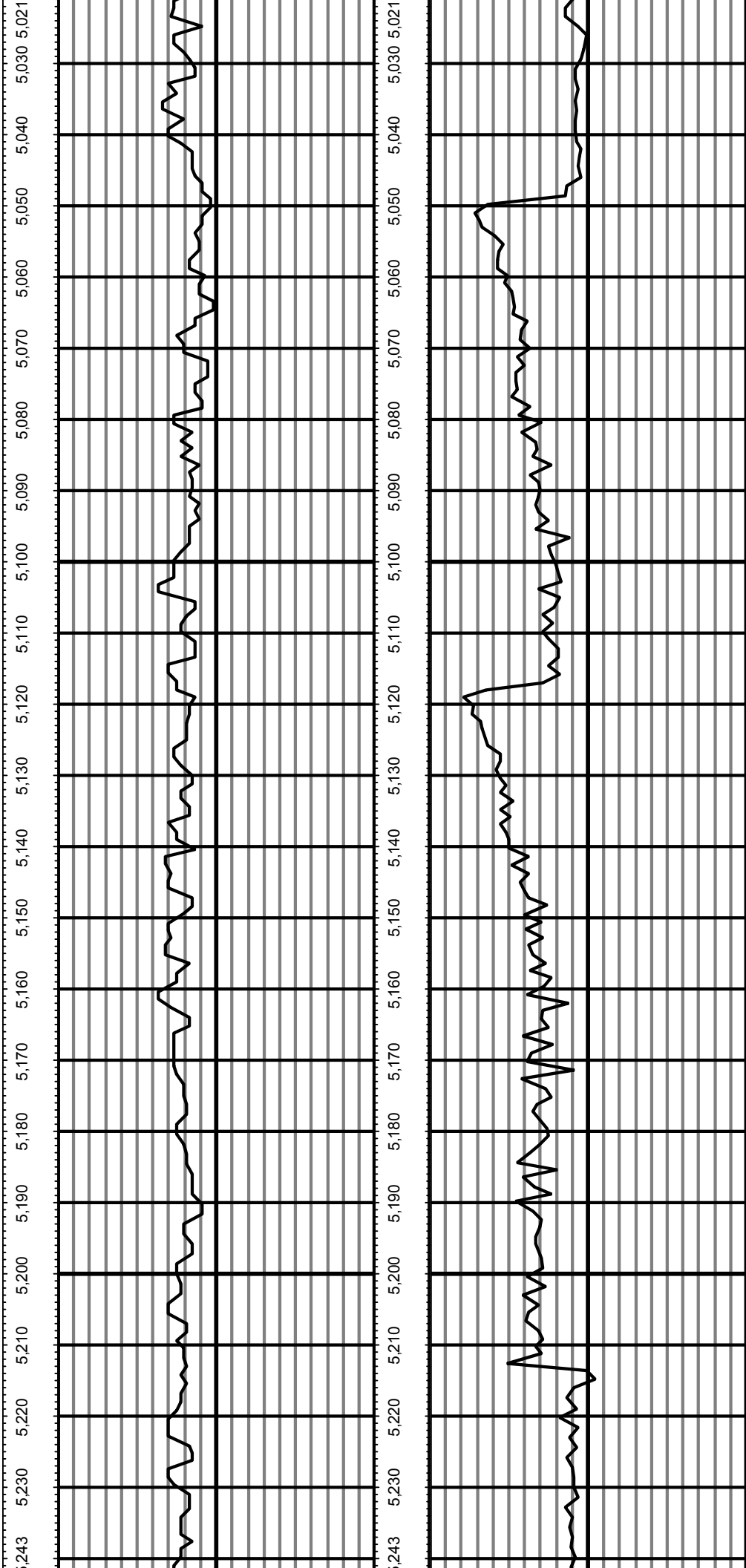


MD:4587.00INC:2.20AZ:7.20

MD:4682.00INC:1.90AZ:5.60

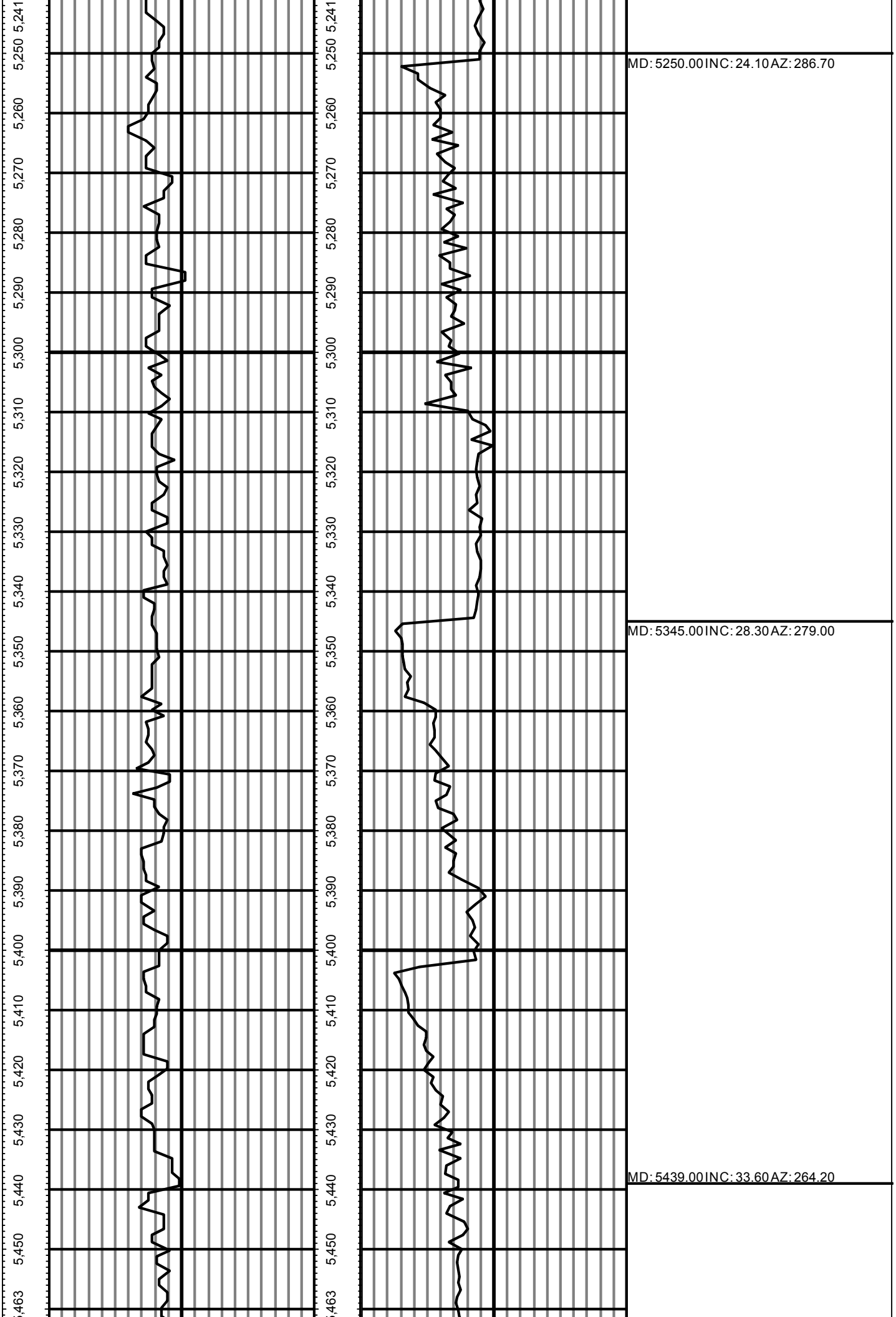
MD:4777.00INC:1.90AZ:356.30

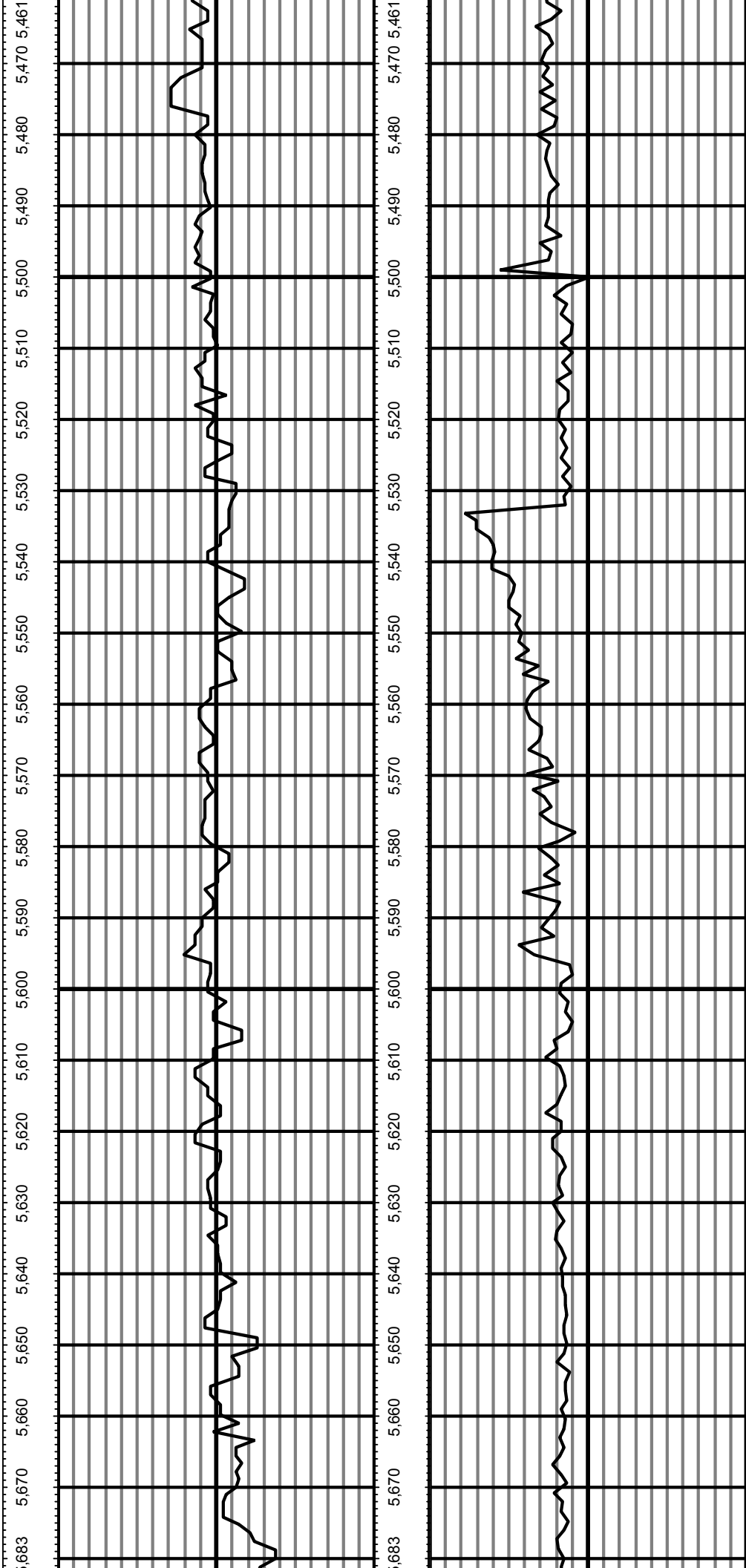




MD: 5061.00 INC: 2.50 AZ: 289.70

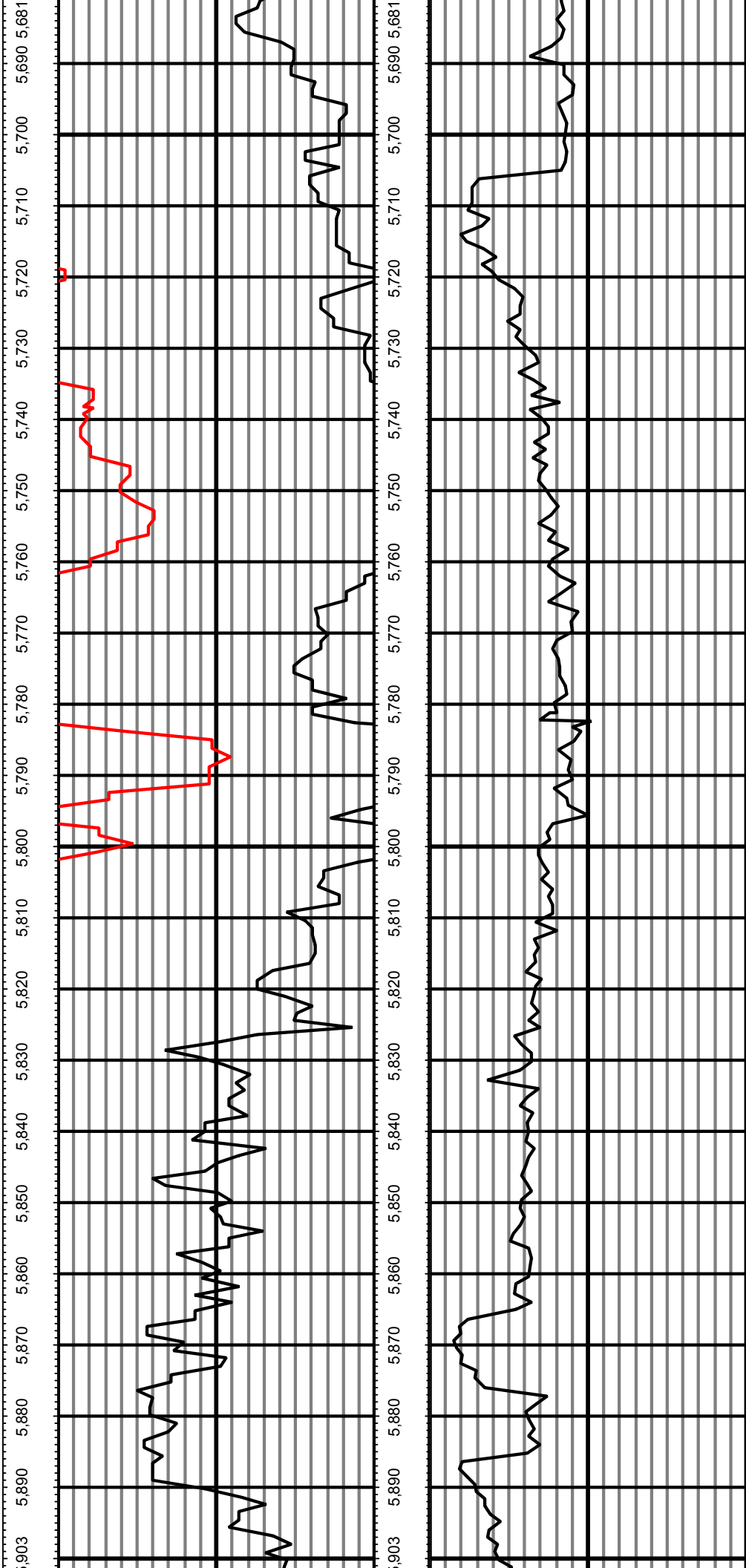
MD: 5156.00 INC: 15.80 AZ: 281.10





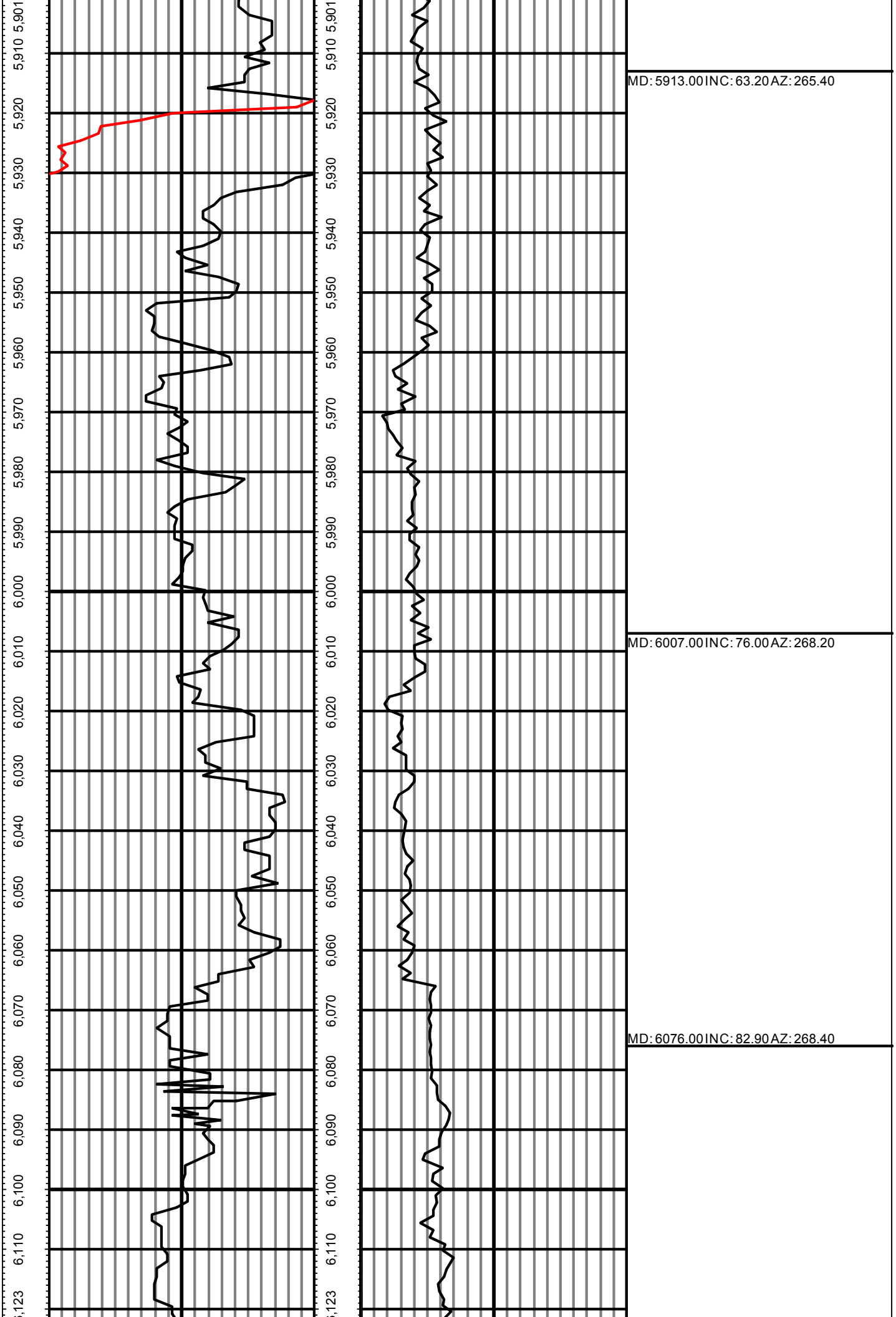
MD: 5534.00 INC: 43.20 AZ: 259.30

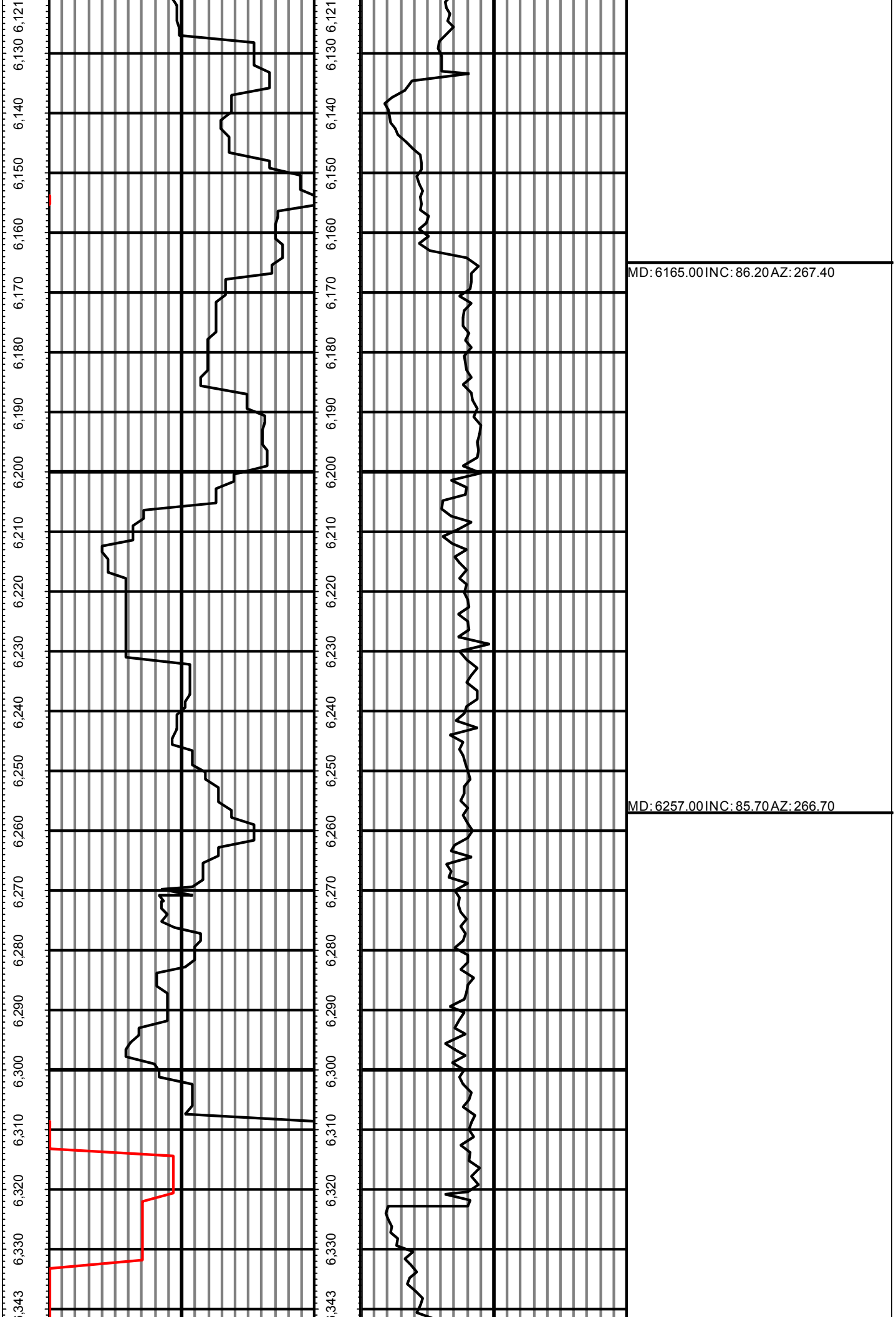
MD: 5629.00 INC: 50.80 AZ: 258.80

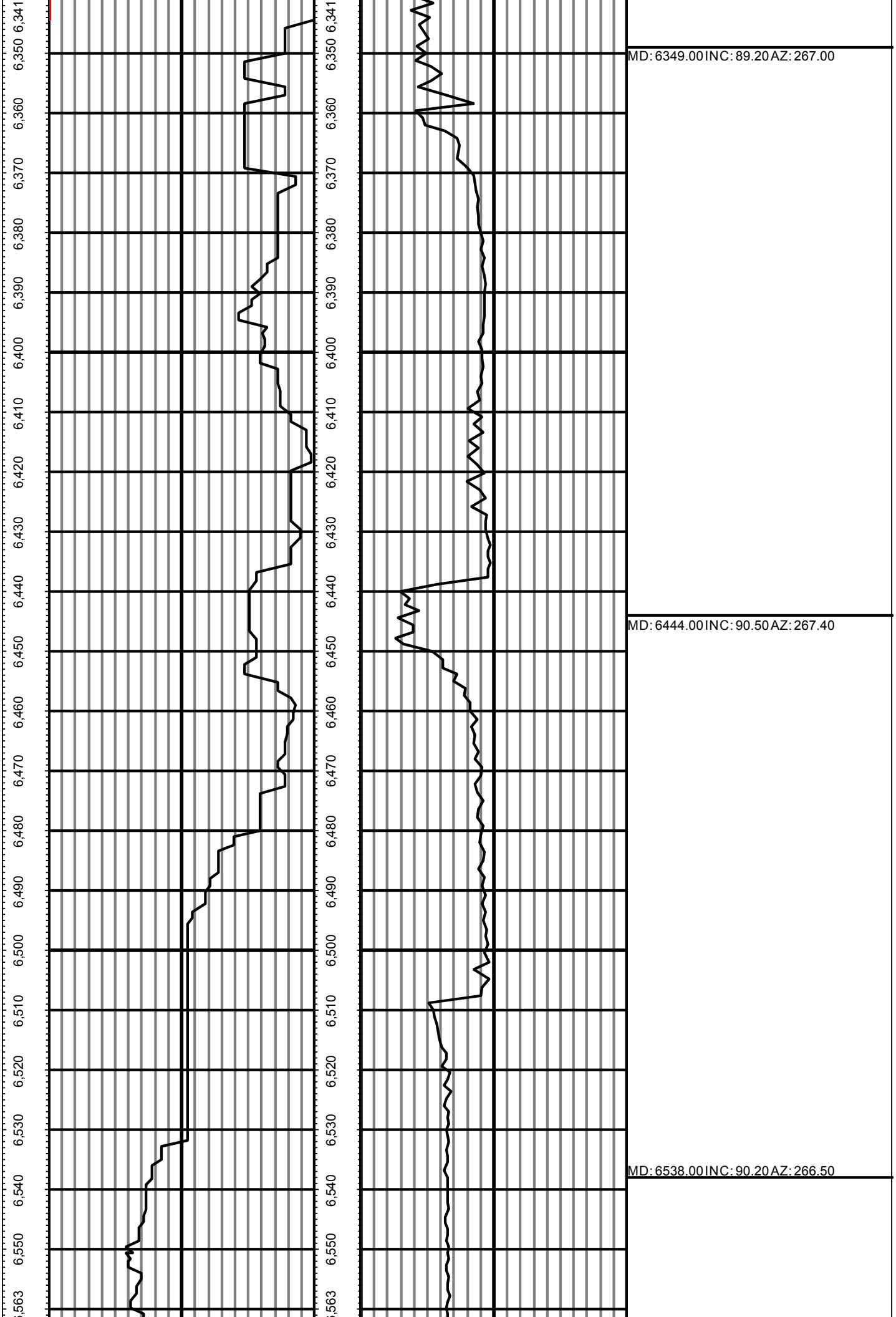


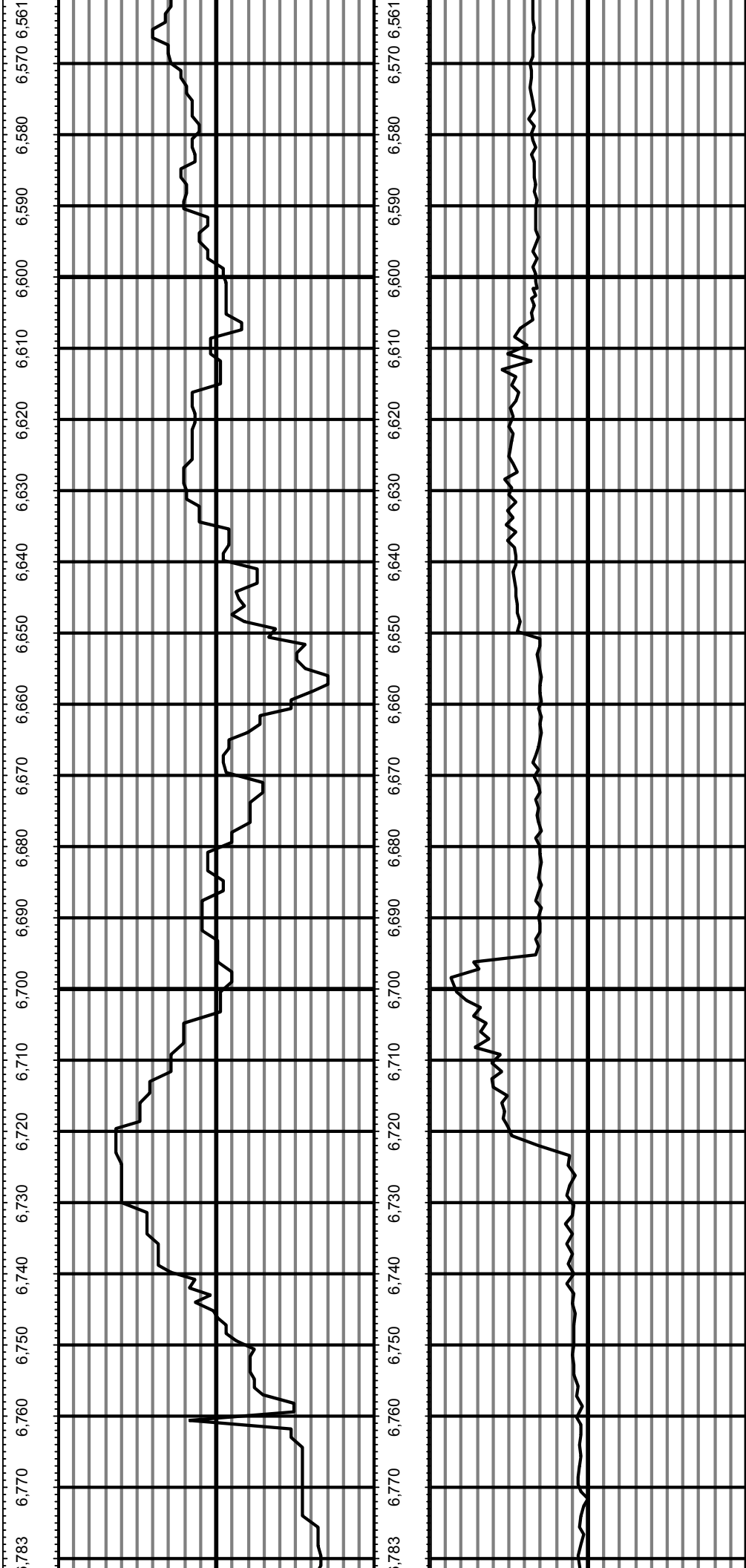
MD: 5723.00 INC: 52.10 AZ: 257.90

MD: 5818.00 INC: 60.20 AZ: 266.00



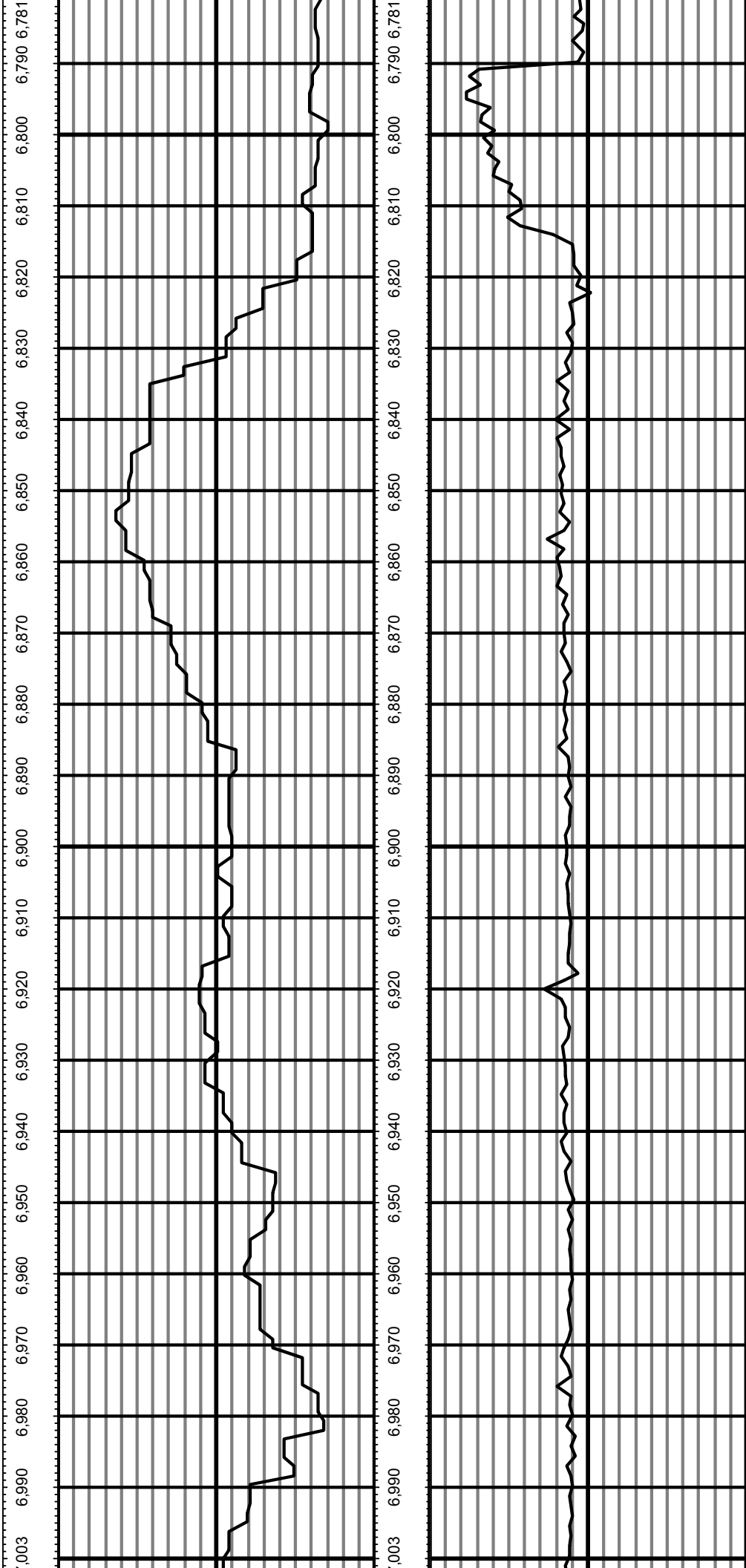






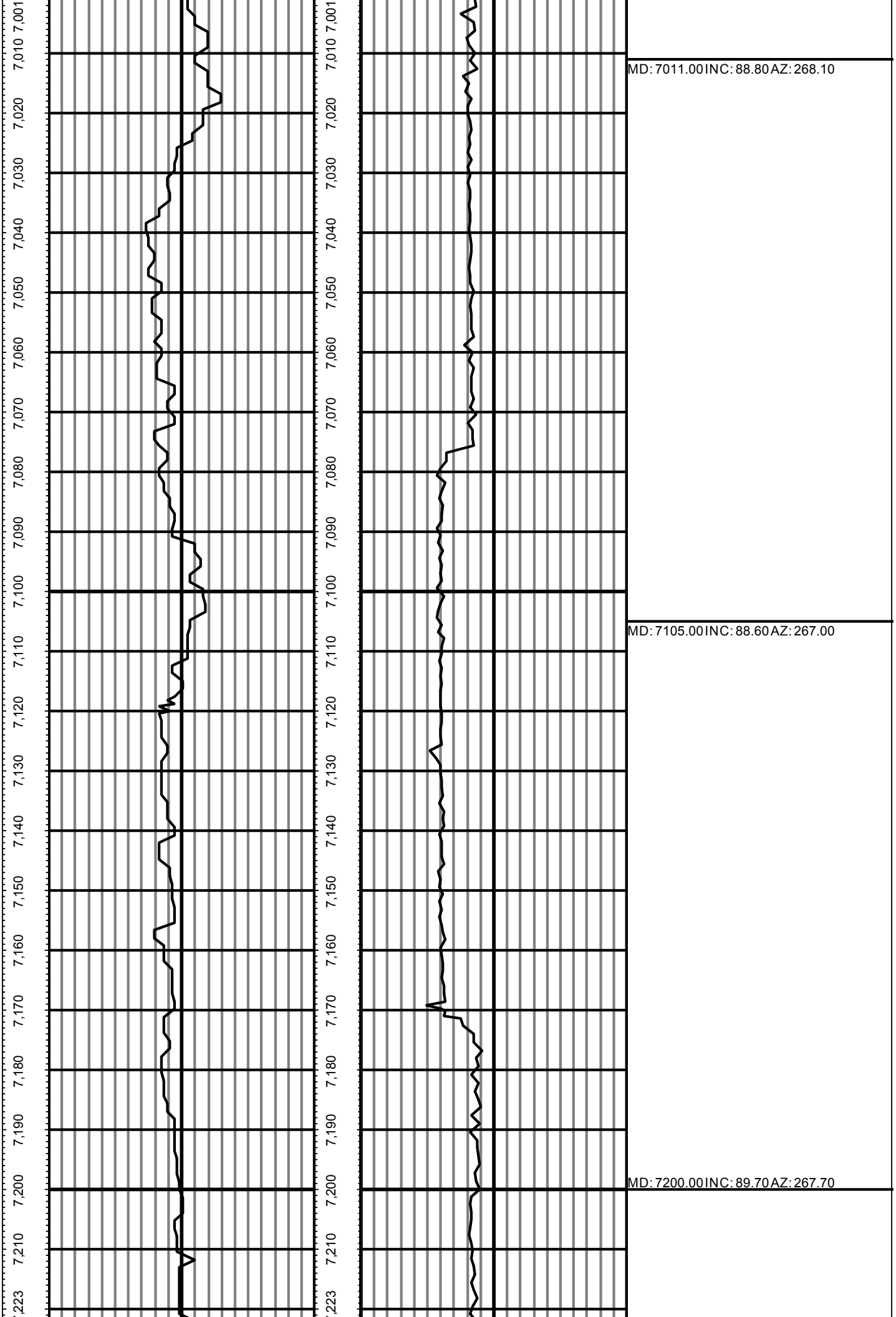
MD: 6633.00 INC: 91.00 AZ: 266.30

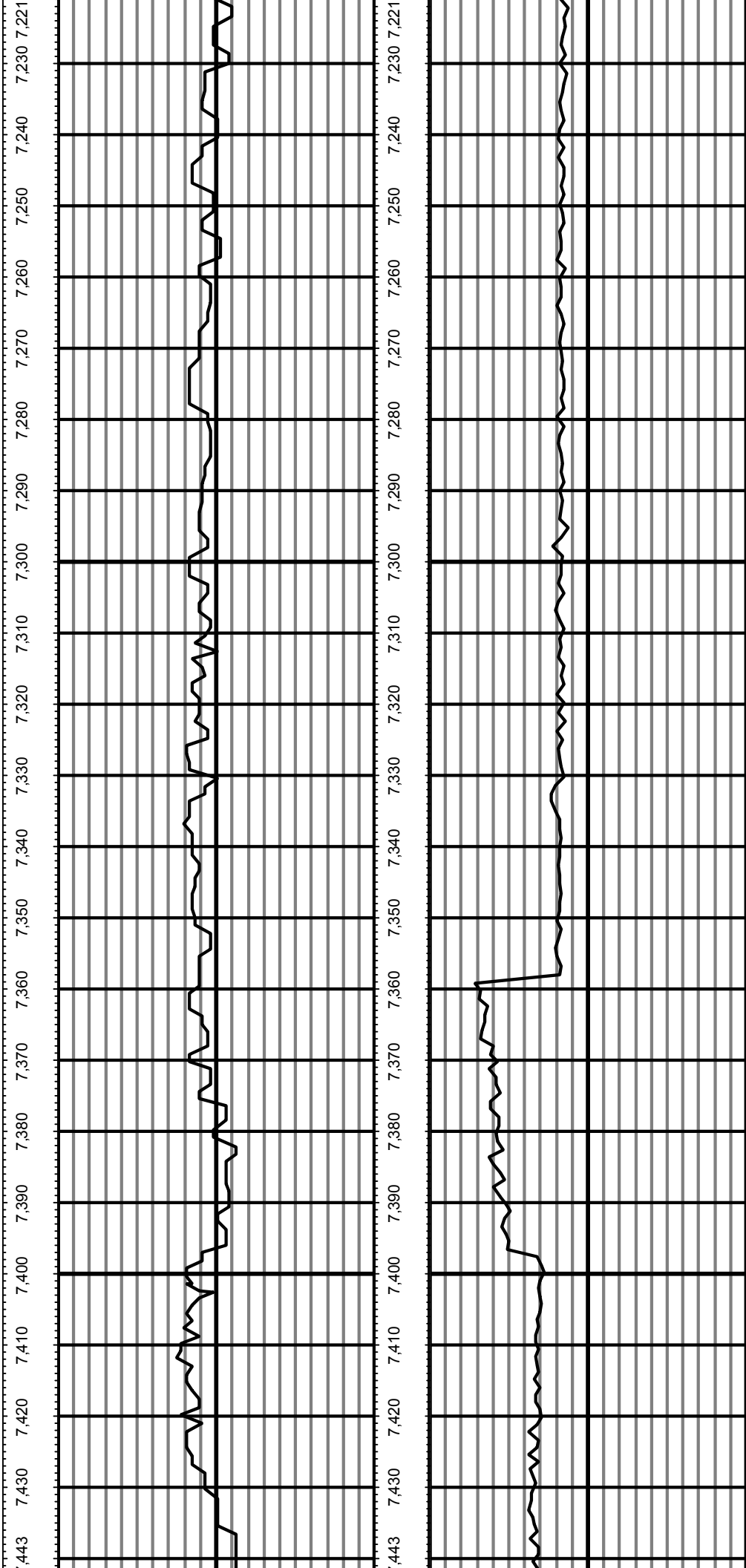
MD: 6727.00 INC: 90.50 AZ: 268.10



MD: 6822.00 INC: 88.40 AZ: 268.10

MD: 6916.00 INC: 88.60 AZ: 268.10

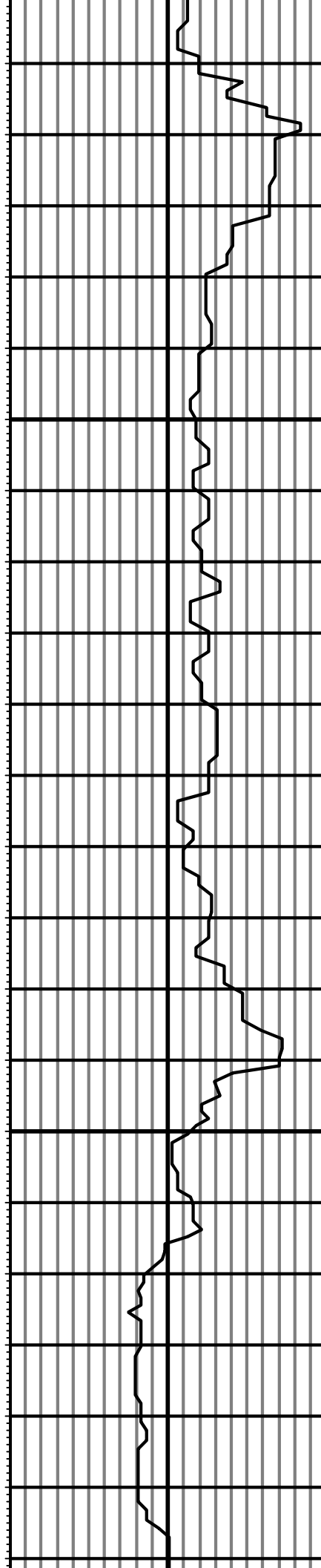




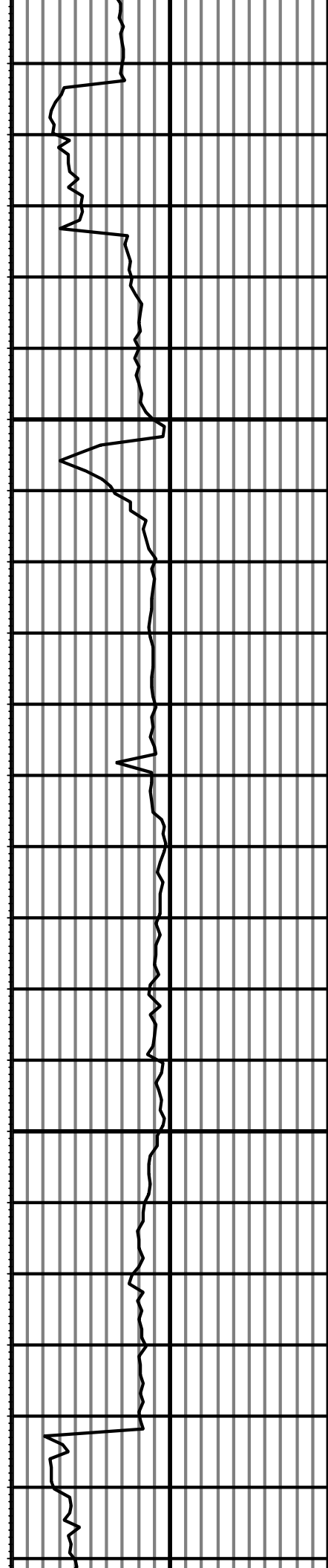
MD: 7294.00 INC: 88.80 AZ: 263.90

MD: 7389.00 INC: 90.00 AZ: 266.70

7,441 7,450 7,460 7,470 7,480 7,490 7,500 7,510 7,520 7,530 7,540 7,550 7,560 7,570 7,580 7,590 7,600 7,610 7,620 7,630 7,640 7,650 7,663

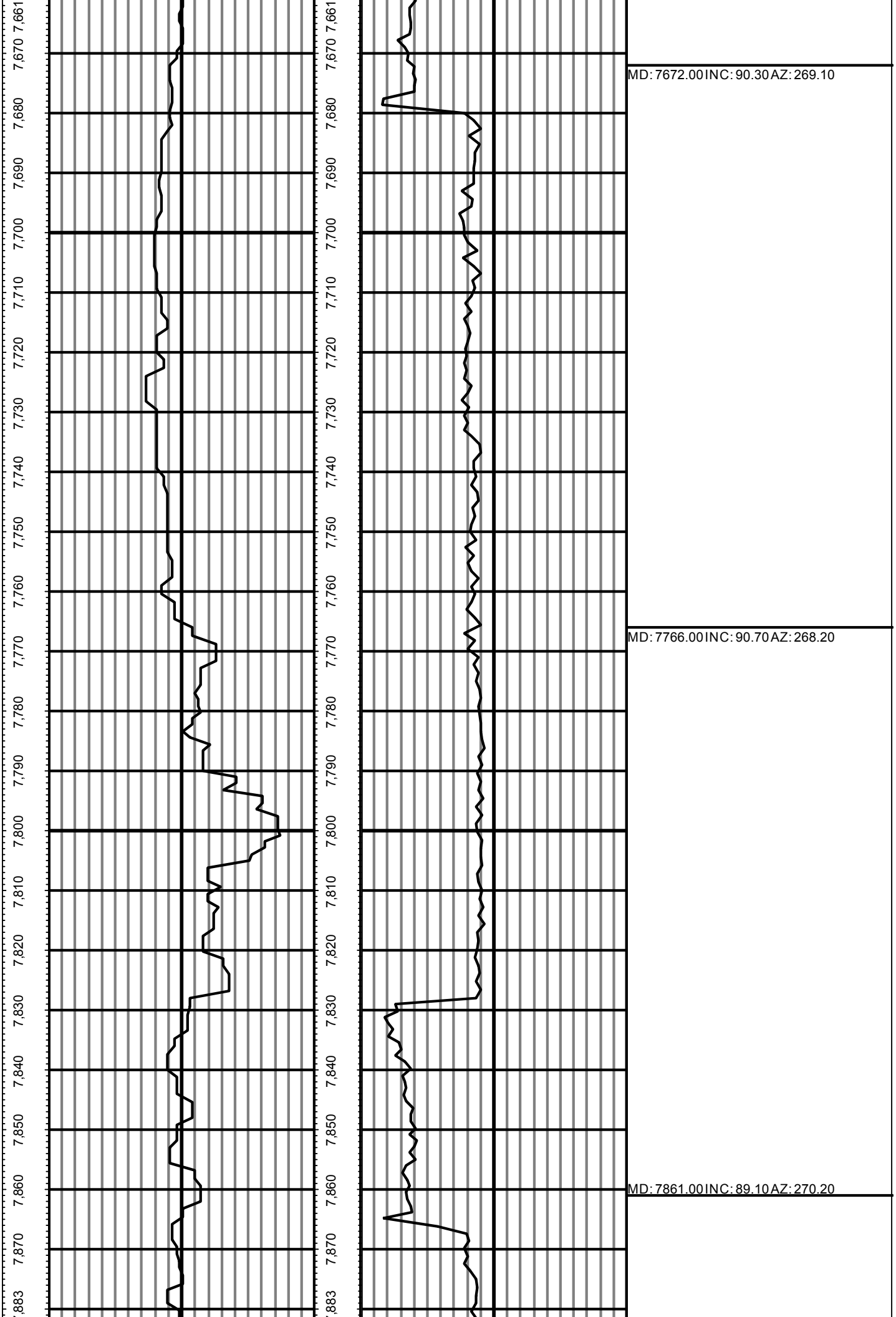


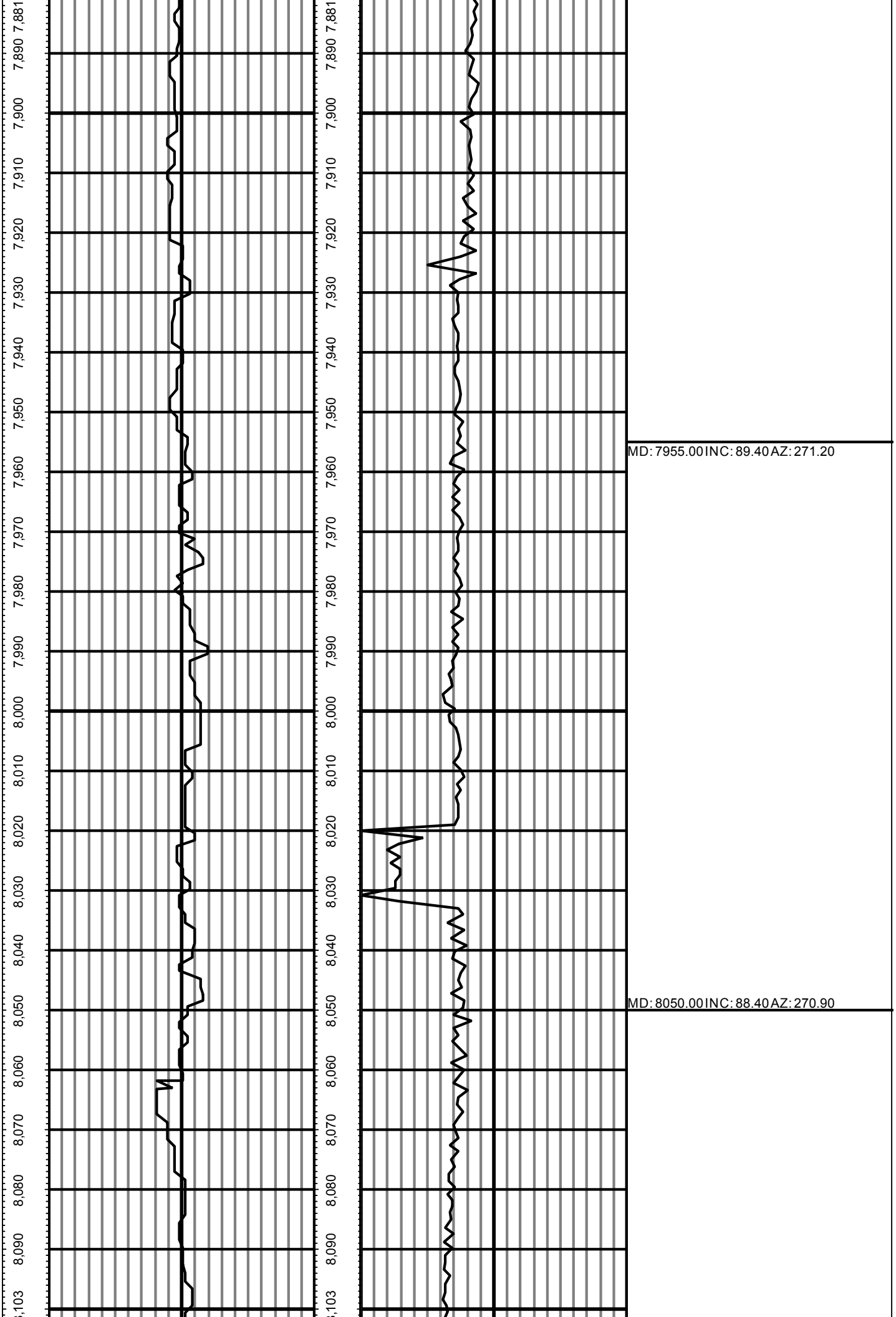
7,441 7,450 7,460 7,470 7,480 7,490 7,500 7,510 7,520 7,530 7,540 7,550 7,560 7,570 7,580 7,590 7,600 7,610 7,620 7,630 7,640 7,650 7,663



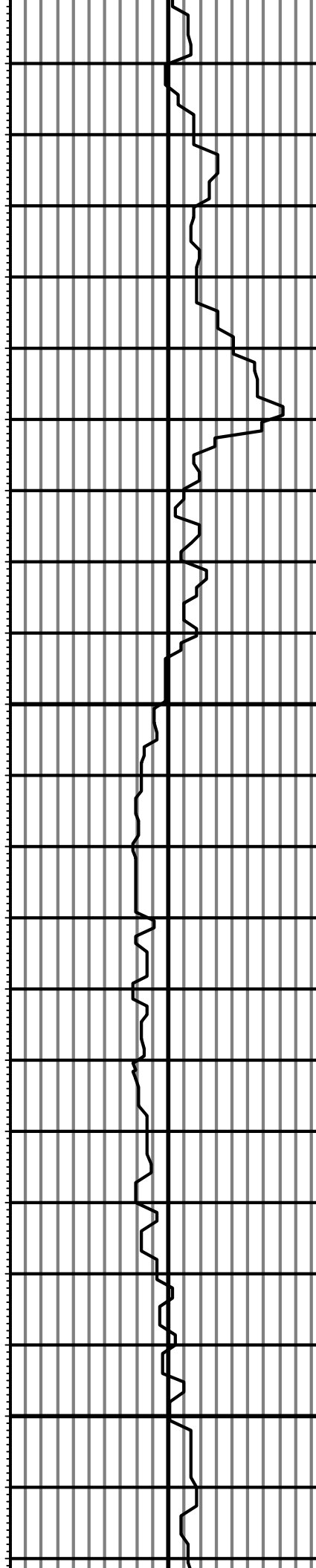
MD: 7483.00 INC: 89.60 AZ: 268.60

MD: 7577.00 INC: 88.70 AZ: 266.10

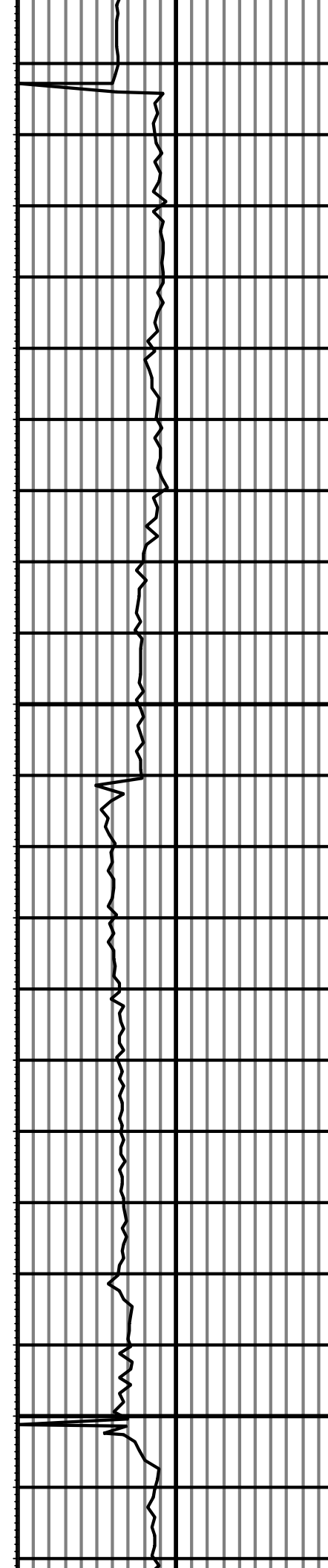




8,110 8,101 8,120 8,130 8,140 8,150 8,160 8,170 8,180 8,190 8,200 8,210 8,220 8,230 8,240 8,250 8,260 8,270 8,280 8,290 8,300 8,310 8,323

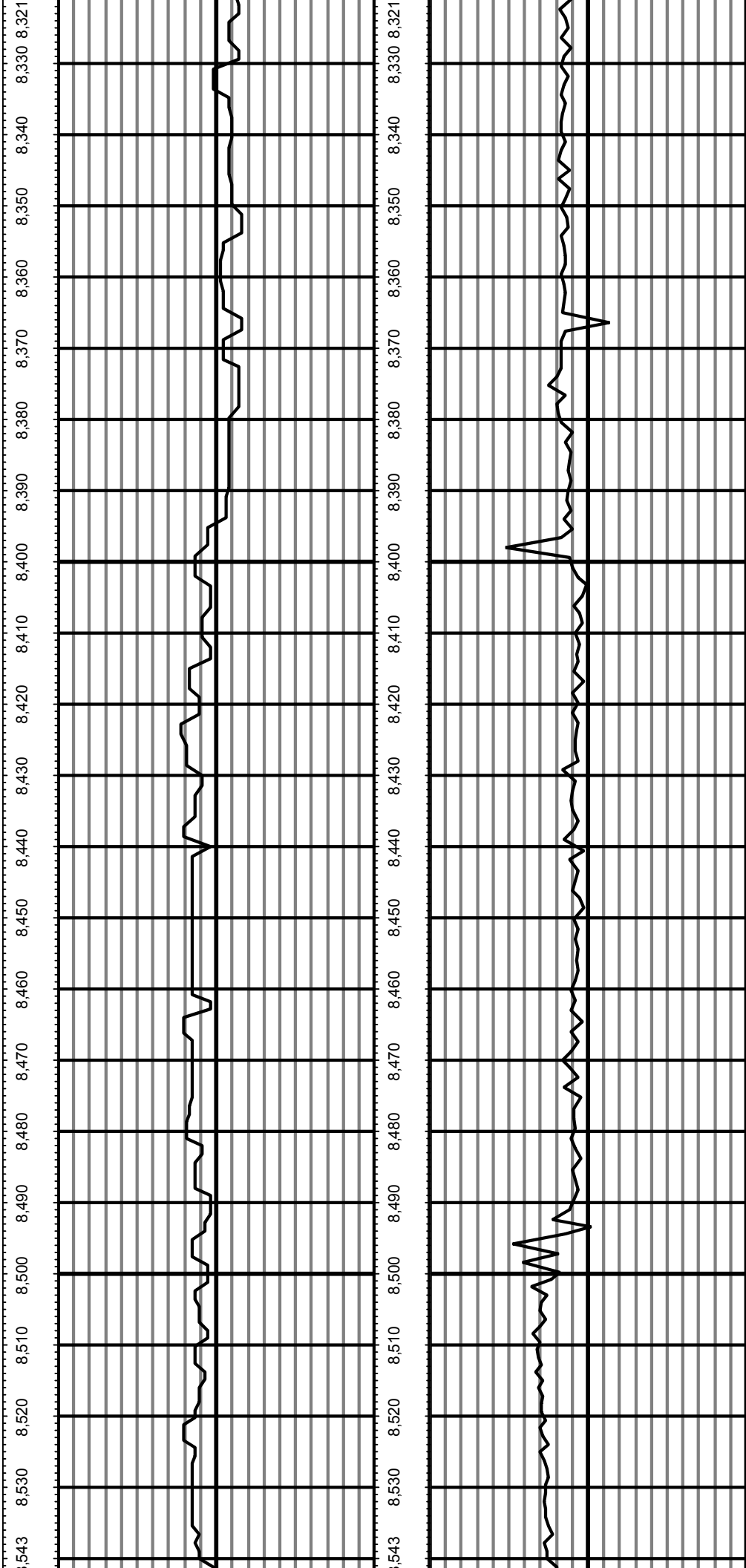


8,110 8,101 8,120 8,130 8,140 8,150 8,160 8,170 8,180 8,190 8,200 8,210 8,220 8,230 8,240 8,250 8,260 8,270 8,280 8,290 8,300 8,310 8,323



MD: 8145.00 INC: 88.80 AZ: 271.00

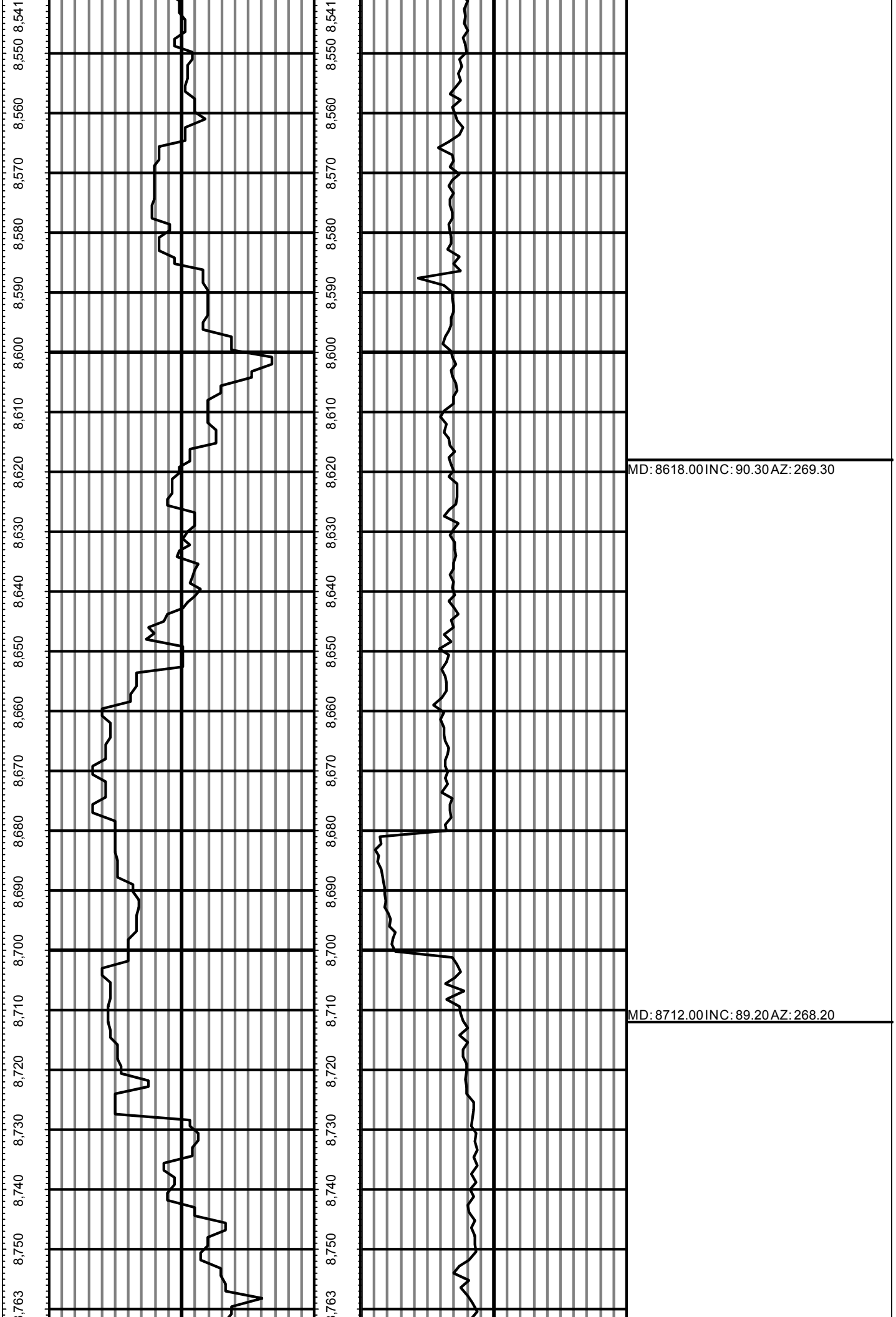
MD: 8239.00 INC: 89.10 AZ: 270.50



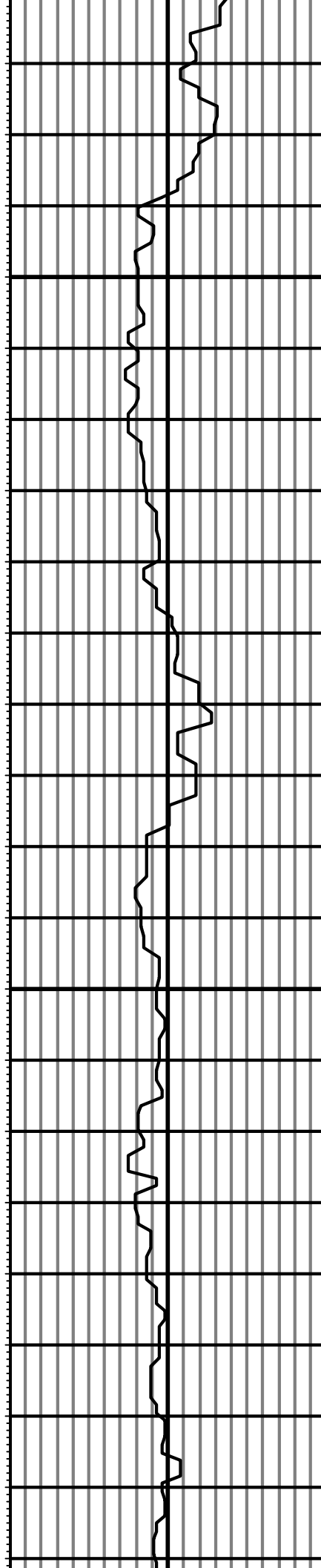
MD: 8334.00 INC: 89.00 AZ: 269.60

MD: 8429.00 INC: 89.50 AZ: 269.10

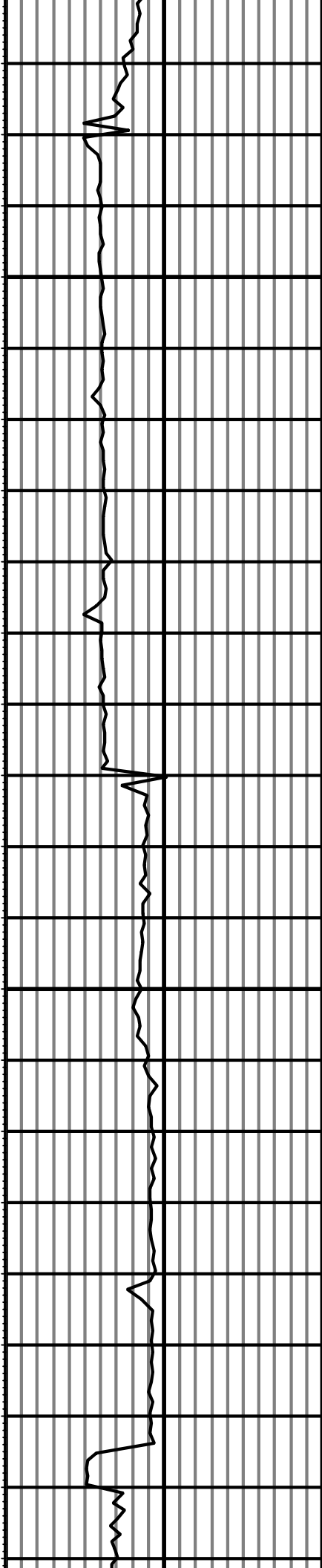
MD: 8523.00 INC: 90.20 AZ: 269.80



8,761 8,770 8,780 8,790 8,800 8,810 8,820 8,830 8,840 8,850 8,860 8,870 8,880 8,890 8,900 8,910 8,920 8,930 8,940 8,950 8,960 8,970 8,983



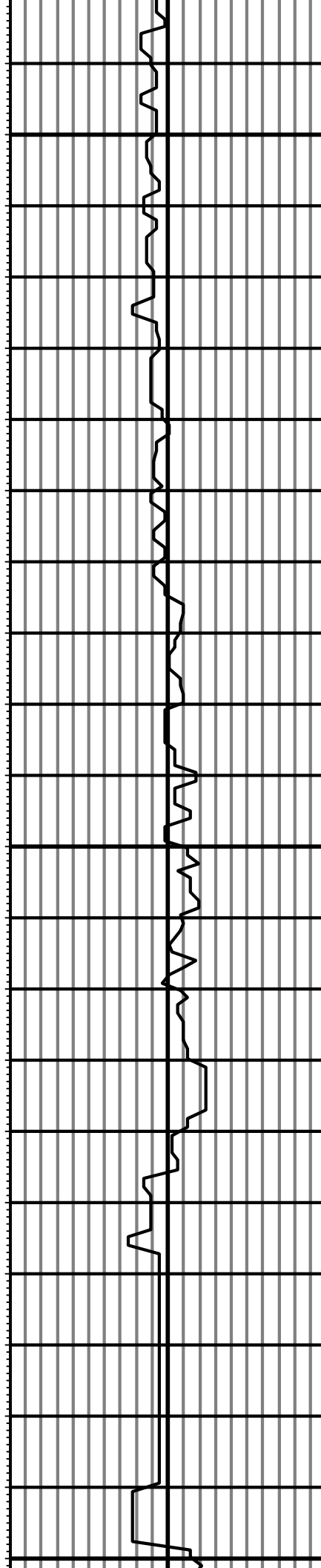
8,761 8,770 8,780 8,790 8,800 8,810 8,820 8,830 8,840 8,850 8,860 8,870 8,880 8,890 8,900 8,910 8,920 8,930 8,940 8,950 8,960 8,970 8,983



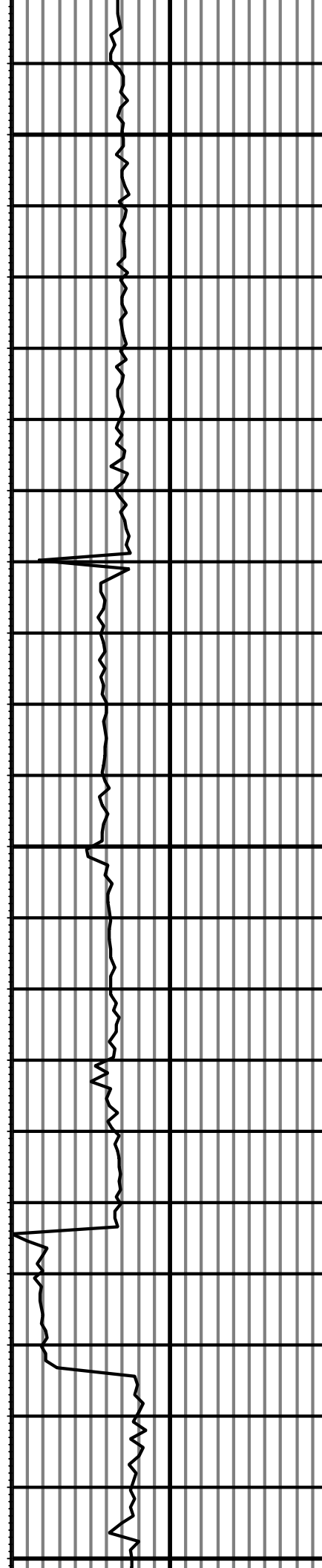
MD: 8807.00 INC: 89.00 AZ: 267.90

MD: 8901.00 INC: 89.80 AZ: 268.40

8,990 8,981
9,000
9,010
9,020
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
203



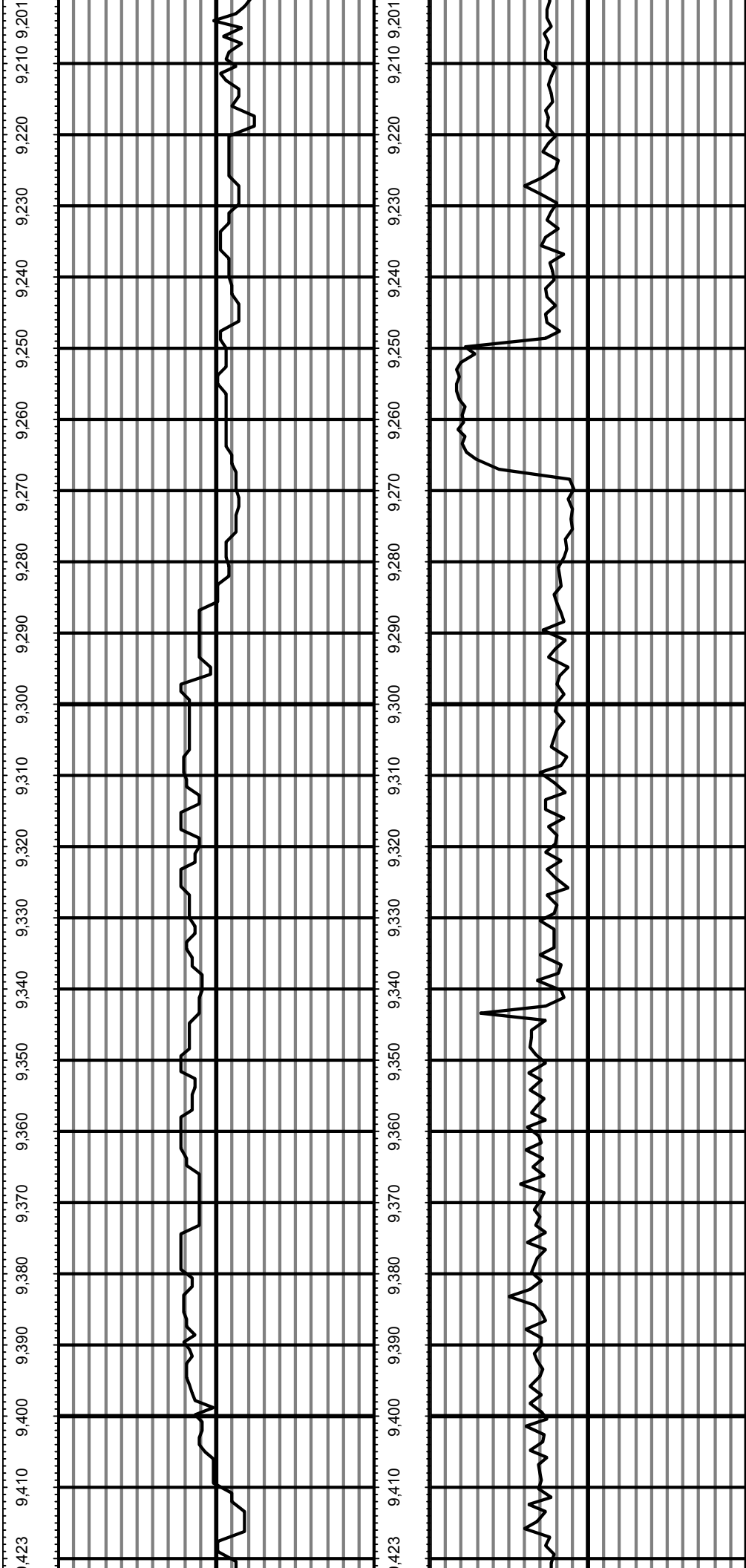
8,990 8,981
9,000
9,010
9,020
9,030
9,040
9,050
9,060
9,070
9,080
9,090
9,100
9,110
9,120
9,130
9,140
9,150
9,160
9,170
9,180
9,190
203



MD: 8996.00 INC: 89.80 AZ: 267.50

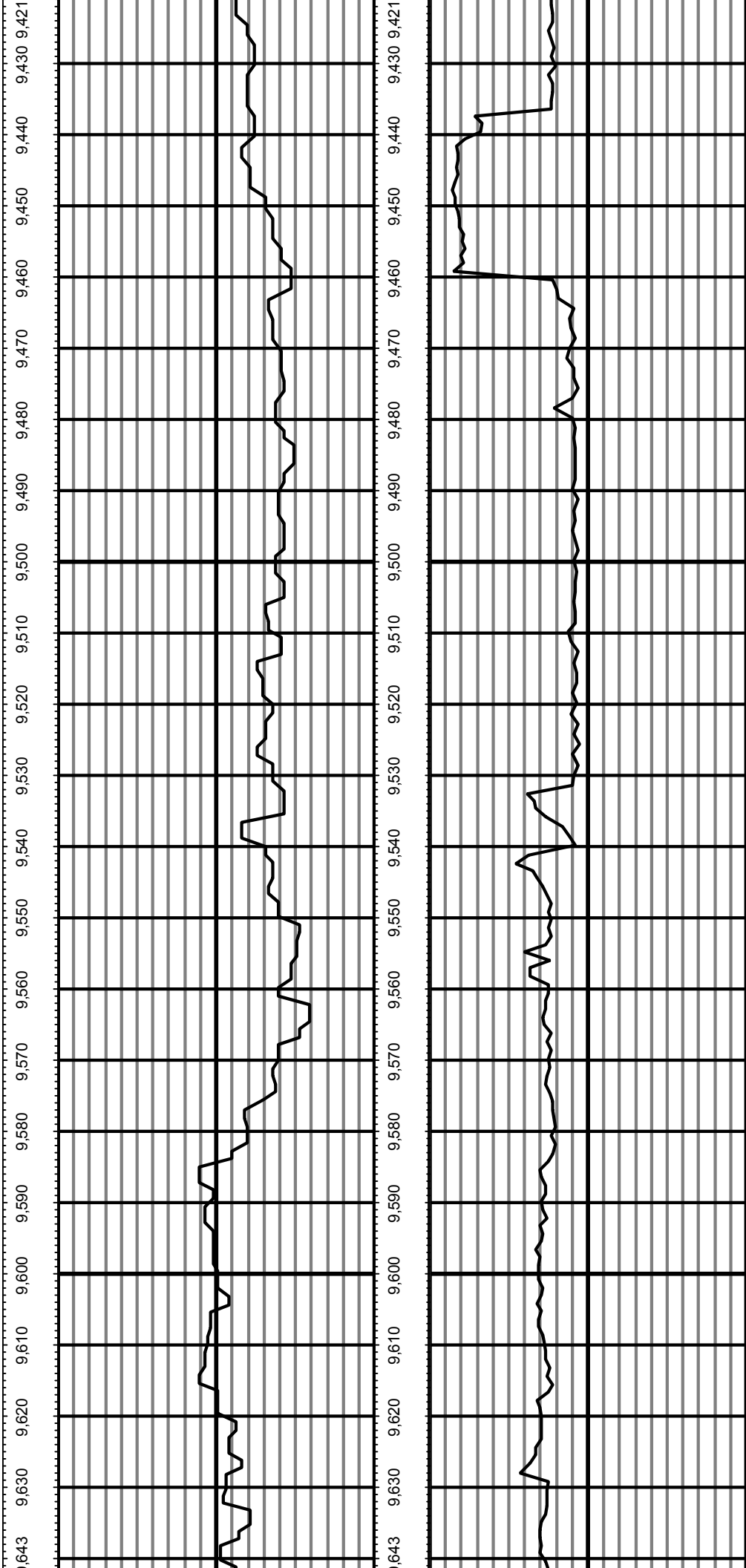
MD: 9090.00 INC: 90.00 AZ: 265.40

MD: 9185.00 INC: 89.20 AZ: 265.60



MD: 9279.00 INC: 89.80 AZ: 267.40

MD: 9374.00 INC: 90.50 AZ: 268.10



MD: 9468.00 INC: 88.80 AZ: 265.10

MD: 9563.00 INC: 88.90 AZ: 262.30

