



Cathedral Energy Services
1949 Pyrite Rd.
Casper, Wyoming
82604

145042

5":100' - TVD

2/13/2014 12:06:46 AM

Oper. Company: EnCana
Country: USA
State / Province: CO
County / Parish: United States
Started: 02/05/2014 05:00 AM

API/UWI: 05-123-37786-00
Field: DJ Basin
Well: Lochbuie 2G-31H
Rig: H&P 522
Ended: 02/12/2014 04:00 PM

Personnel

Day Hand: Clarke Van Oerle
Night Hand: Andrew Stewart
Comp. Emp: Cathedral Energy Service

Location

Latitude: 40.014080
Longitude: -104.711990
Elev. GL: 5007'
Elev. DF: 30'
Elev. KB: 5037'

Gamma Ray
ROP
Curve TD 7693'
Well TD 12,011'

Hole Data

Size	From	To
12.25	0	1512
8.75	1512	7693
6.125	7693	12011

Casing Data

Size	From	To
9 5/8	0	1505
7	0	7689
4 1/2	0	11999

Bit Sizes

Size	From	To
12.25	0	1512
8.75	1512	7693
6.125	7693	12011

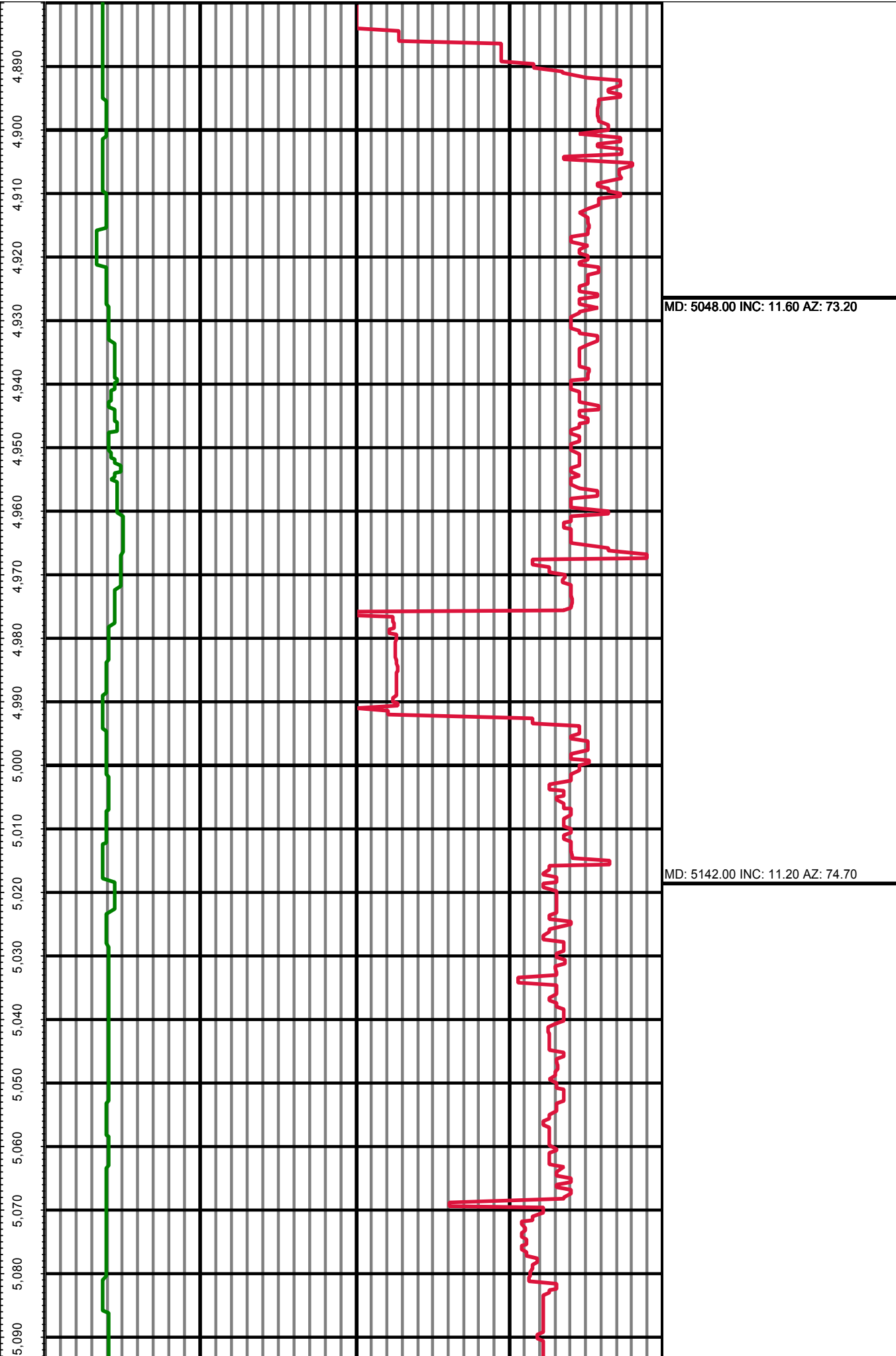
Mud Data

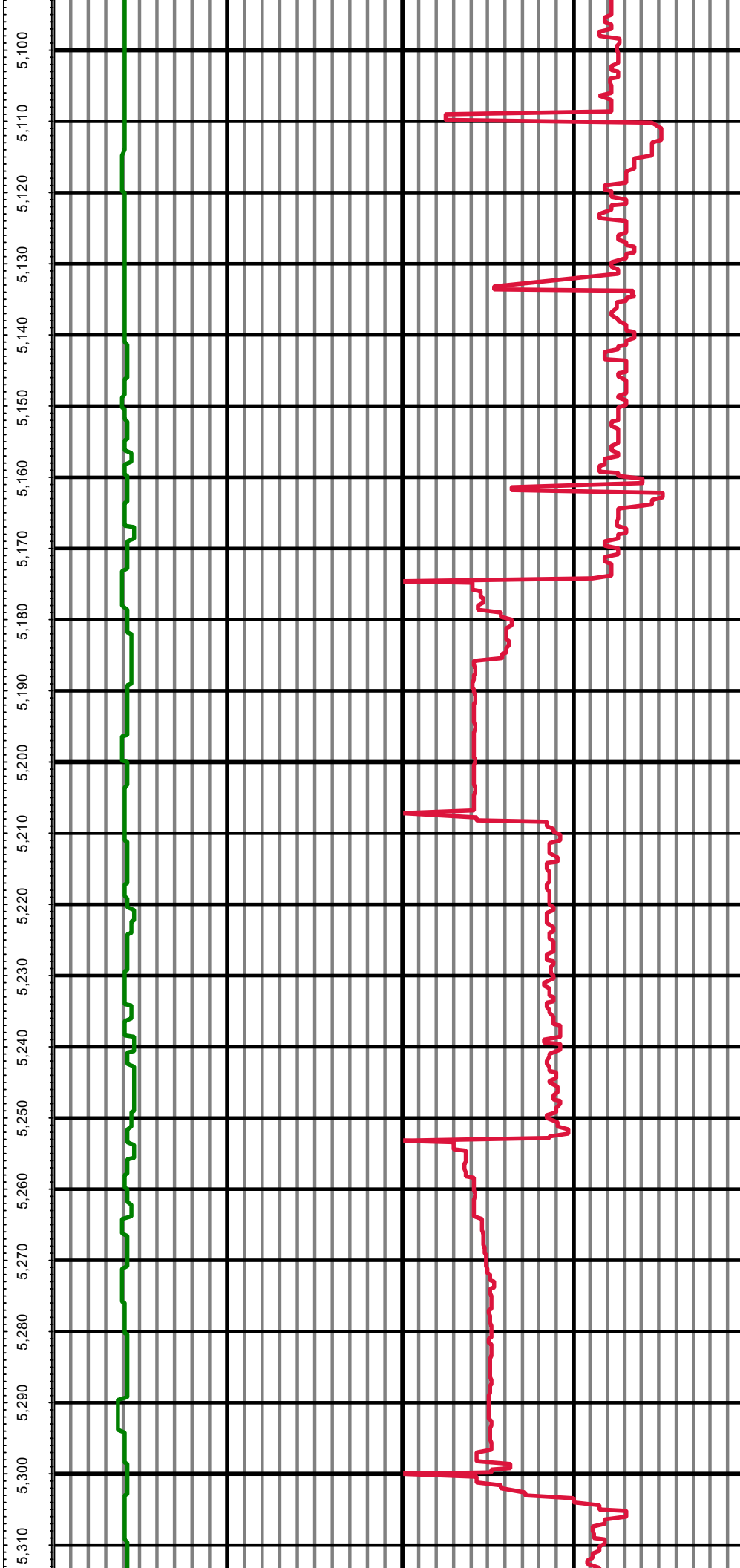
Type	Weight	Density	Viscosity	Rm	Rmf	Rmc	From	To
Water	8.4		28				0	4000
LSND	9.9		40				4000	7500
LSND	10.4		49				7500	12011

Tool Run Data

Serial Number	Gamma Offset	Resist. Offset	Start Time	Start Depth	End Time	End Depth
280	36.7	0	2/4/2014 3:00:51 PM	5000	2/5/2014 8:00:51 PM	6930
280	40.45	0	2/5/2014 9:00:24 PM	6930	2/6/2014 5:00:24 PM	7245
280	41.3	0	2/6/2014 9:00:21 AM	7245	2/8/2014 1:30:21 AM	7693
280	39.08	0	2/9/2014 1:30:06 PM	7693	2/12/2014 12:00:06 PM	11554
309	39.19	0	2/12/2014 1:00:20 AM	11554	2/12/2014 4:00:20 PM	12011

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.

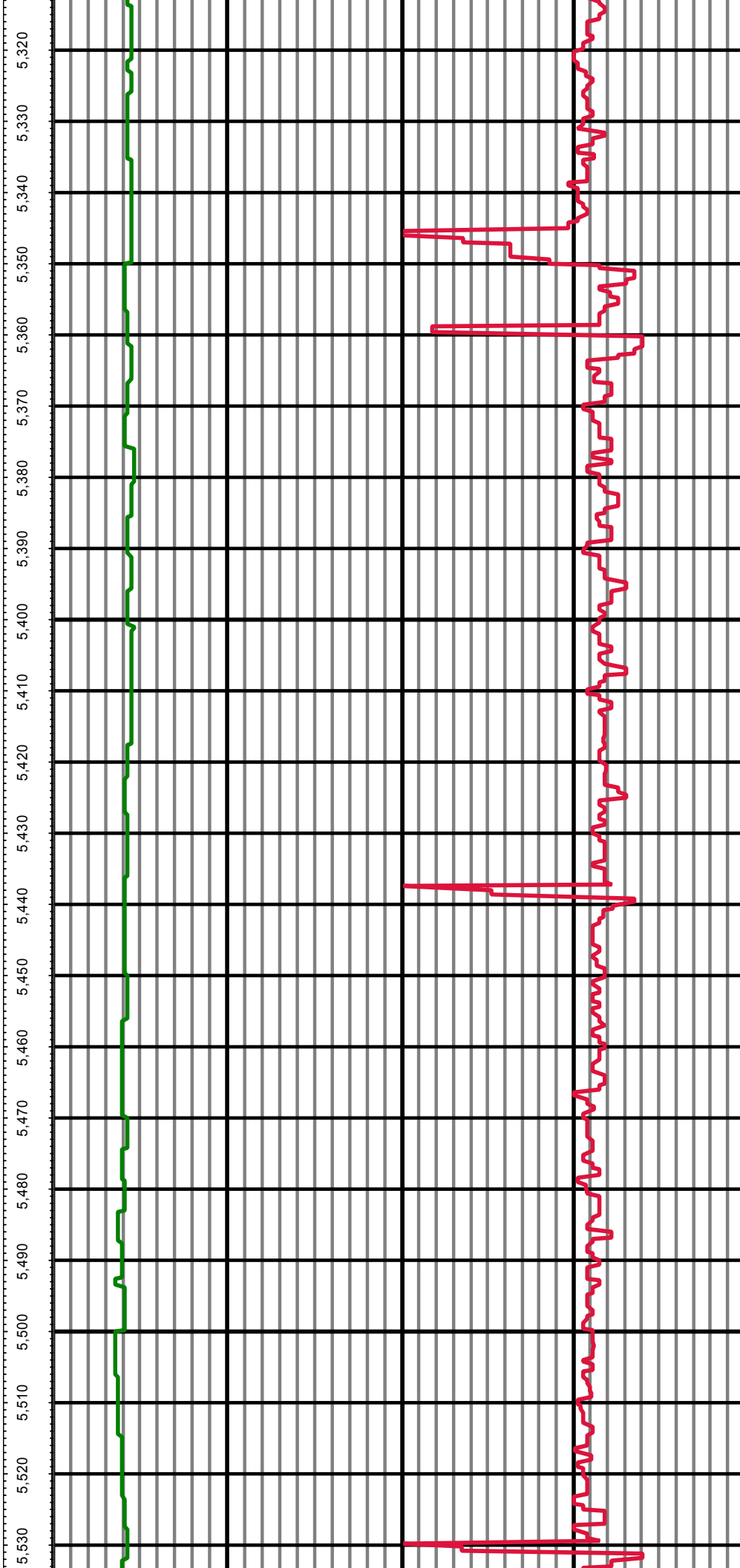




MD: 5237.00 INC: 10.50 AZ: 73.70

MD: 5331.00 INC: 9.90 AZ: 73.10

MD: 5426.00 INC: 13.60 AZ: 82.50



MD: 5521.00 INC: 12.30 AZ: 82.30

MD: 5615.00 INC: 11.50 AZ: 80.40

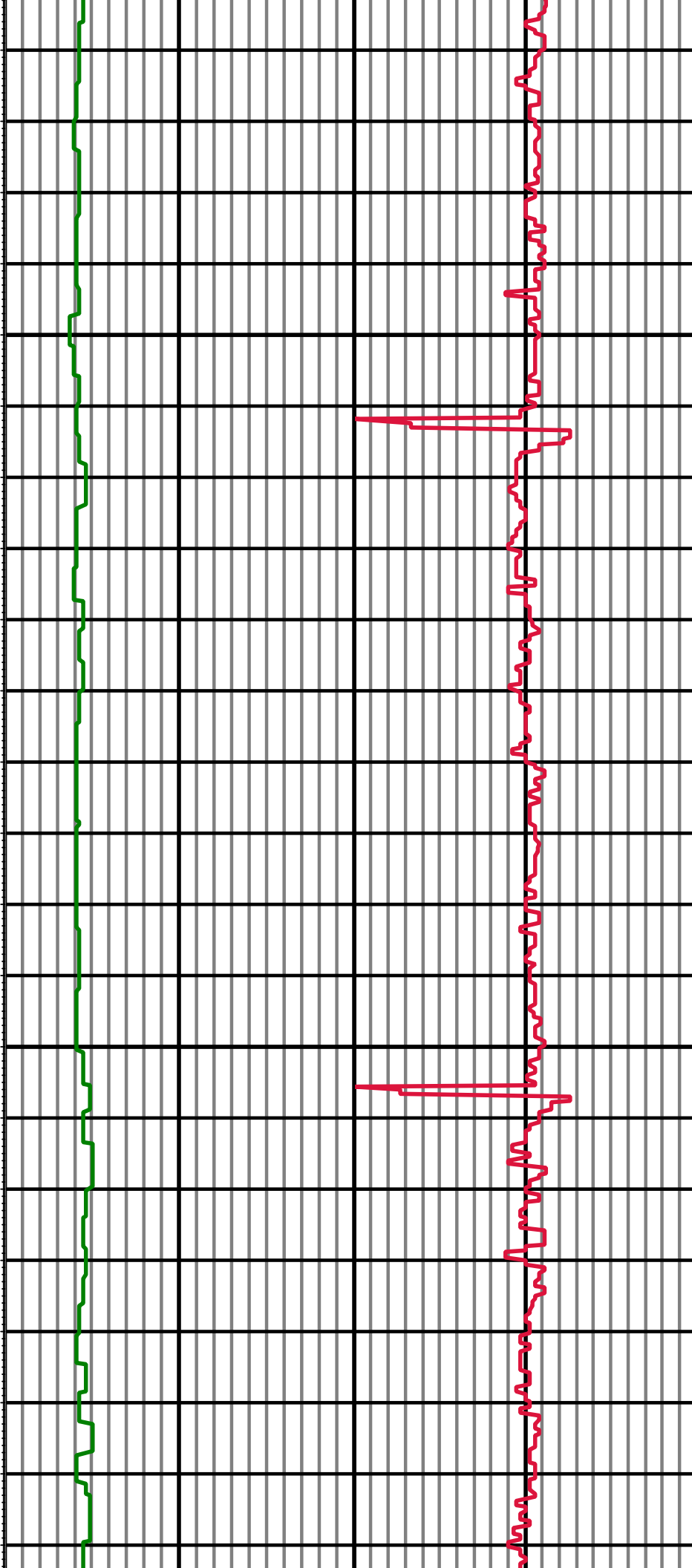
5,750 5,740 5,730 5,720 5,710 5,700 5,690 5,680 5,670 5,660 5,650 5,640 5,630 5,620 5,610 5,600 5,590 5,580 5,570 5,560 5,550 5,540



MD: 5710.00 INC: 10.60 AZ: 80.30

MD: 5804.00 INC: 9.10 AZ: 76.00

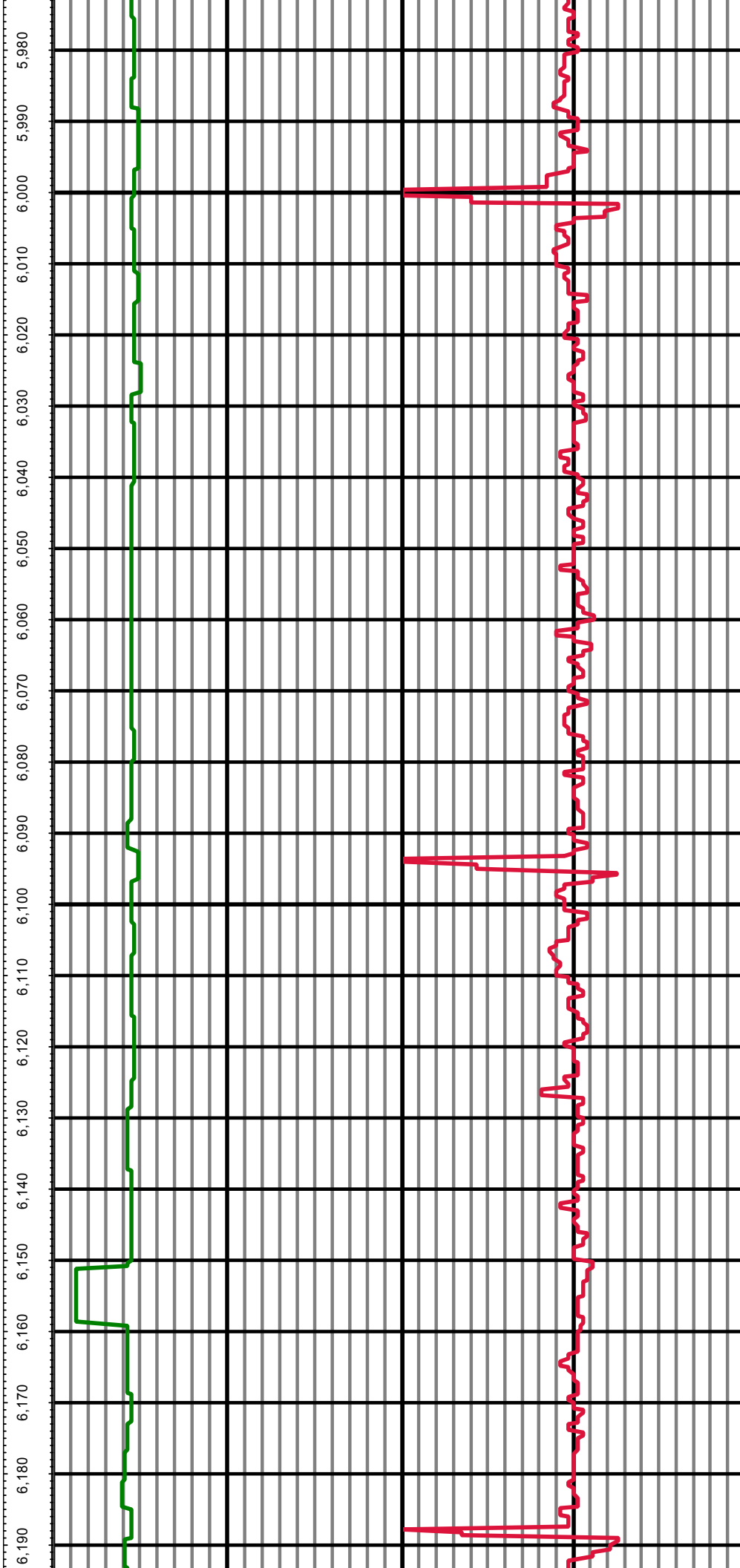
5,970 5,960 5,950 5,940 5,930 5,920 5,910 5,900 5,890 5,880 5,870 5,860 5,850 5,840 5,830 5,820 5,810 5,800 5,790 5,780 5,770 5,760



MD: 5899.00 INC: 7.60 AZ: 72.80

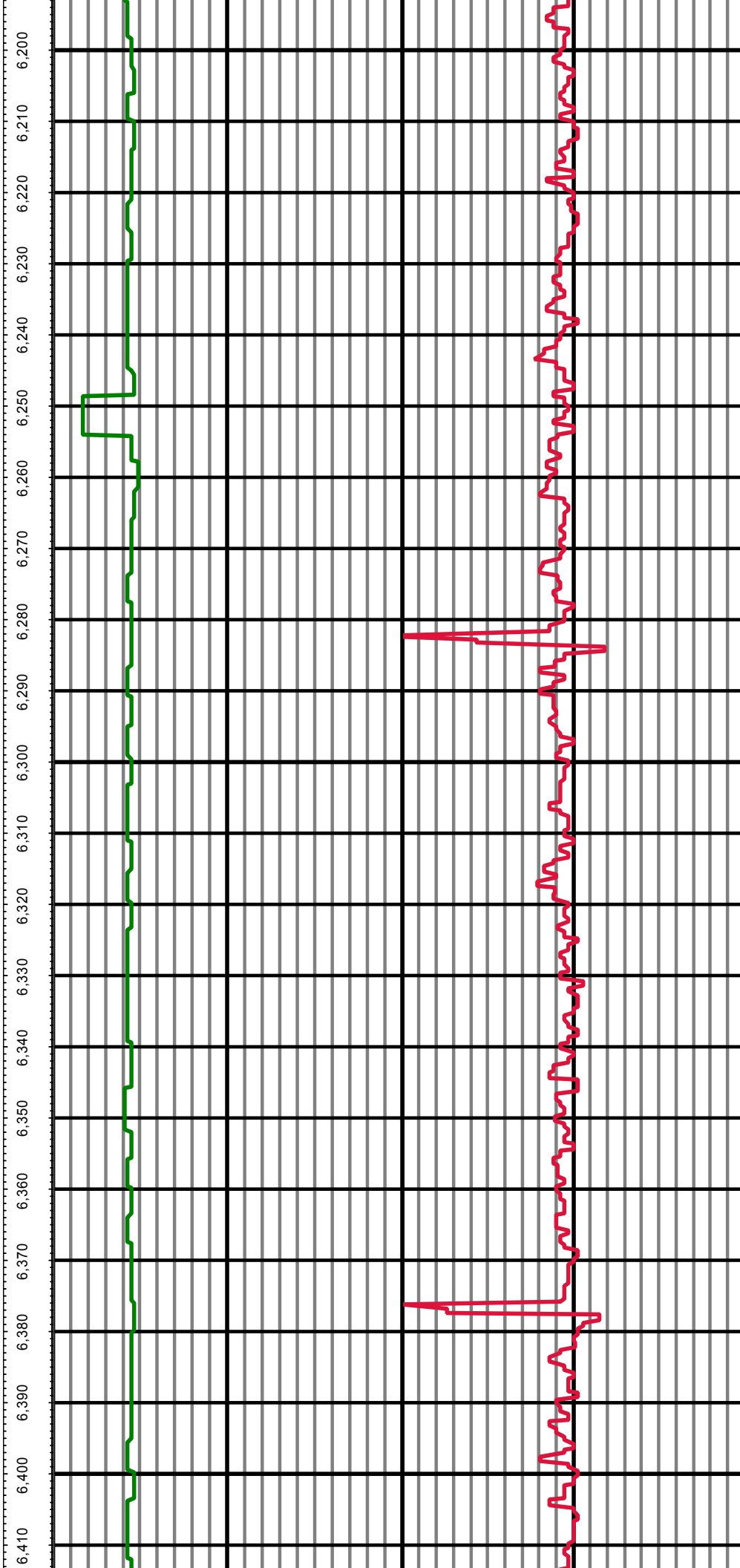
MD: 5993.00 INC: 6.40 AZ: 72.20

MD: 6088.00 INC: 5.30 AZ: 72.60



MD: 6183.00 INC: 4.60 AZ: 68.60

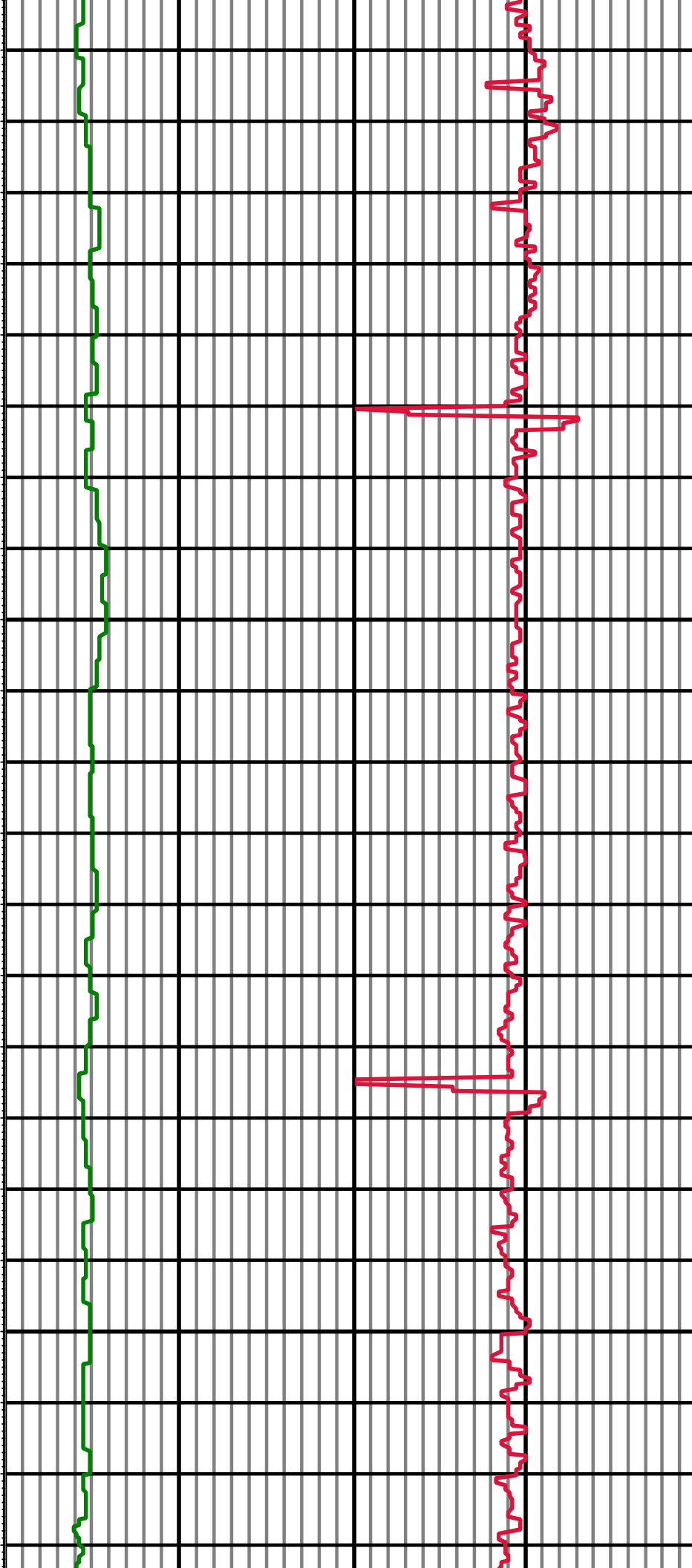
MD: 6277.00 INC: 4.00 AZ: 70.10



MD: 6372.00 INC: 3.90 AZ: 76.20

MD: 6466.00 INC: 3.40 AZ: 77.90

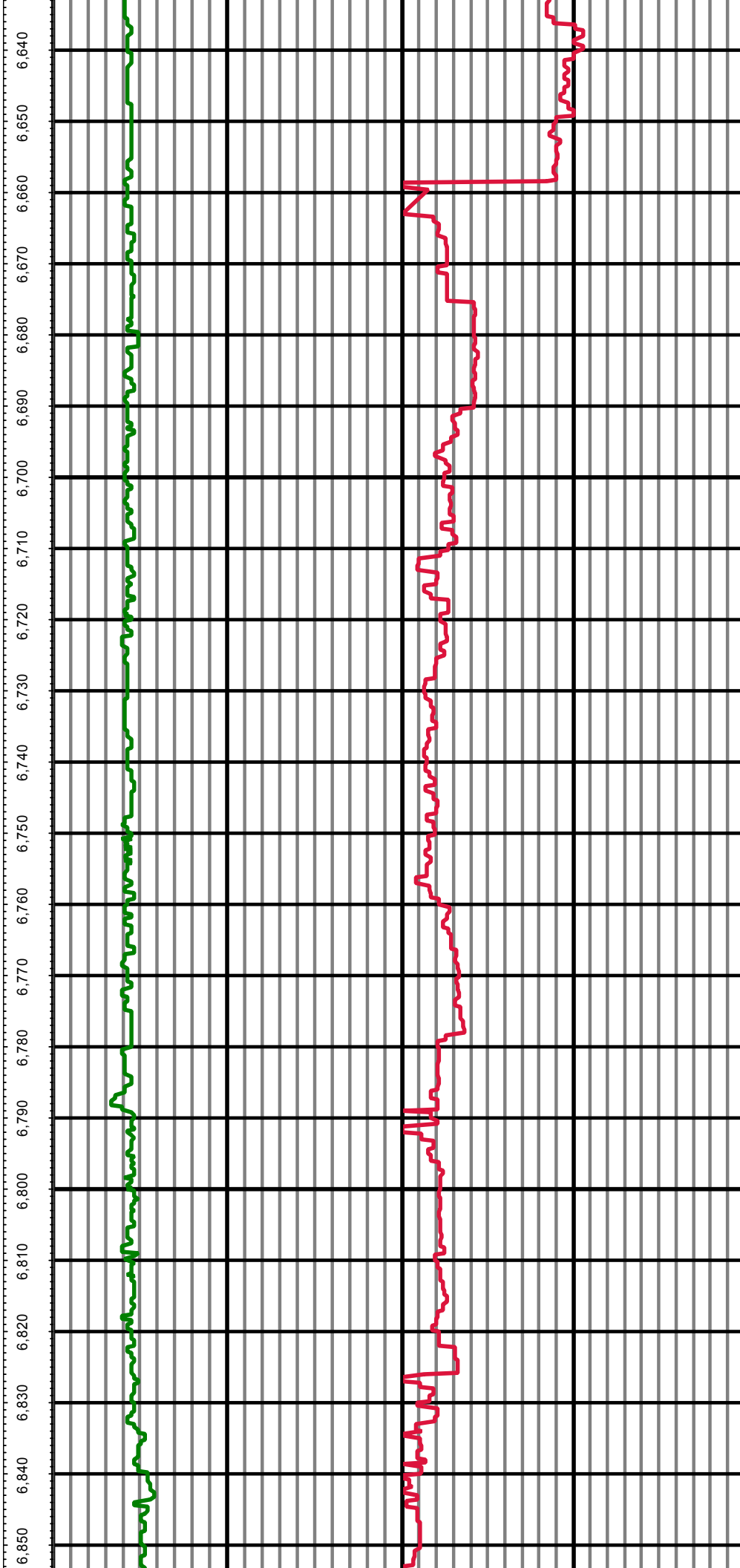
6,630 6,620 6,610 6,600 6,590 6,580 6,570 6,560 6,550 6,540 6,530 6,520 6,510 6,500 6,490 6,480 6,470 6,460 6,450 6,440 6,430 6,420



MD: 6561.00 INC: 2.90 AZ: 79.70

MD: 6656.00 INC: 2.10 AZ: 81.40

MD: 6750.00 INC: 1.10 AZ: 74.20



MD: 6845.00 INC: 1.00 AZ: 149.20

MD: 6876.00 INC: 1.90 AZ: 177.10

MD: 6940.00 INC: 5.10 AZ: 202.80

MD: 6987.00 INC: 9.40 AZ: 202.80

