



Cathedral Energy Services

145030

5":100' - MD

2/16/2014 2:59:49 AM

Oper. Company: Encana Oil & Gas

Country: USA

State / Province: Colorado

County / Parish: Weld

API/UWI: 051233620600

Field: DJ Basin

Well: Liberty 2B-21H

Rig: Ensign 135

### Personnel

Day Hand: John Corby  
Night Hand: Kenneth Wagoner

### Location

Latitude: 40.215250  
Longitude: -105.008780  
Elev. GL: 5023  
Elev. DF: 5036  
Elev. KB: 5036

### Hole Data

Size	From	To
8.75	916	7433
6.125	7433	0

### Casing Data

Size	From	To
7	921	7383

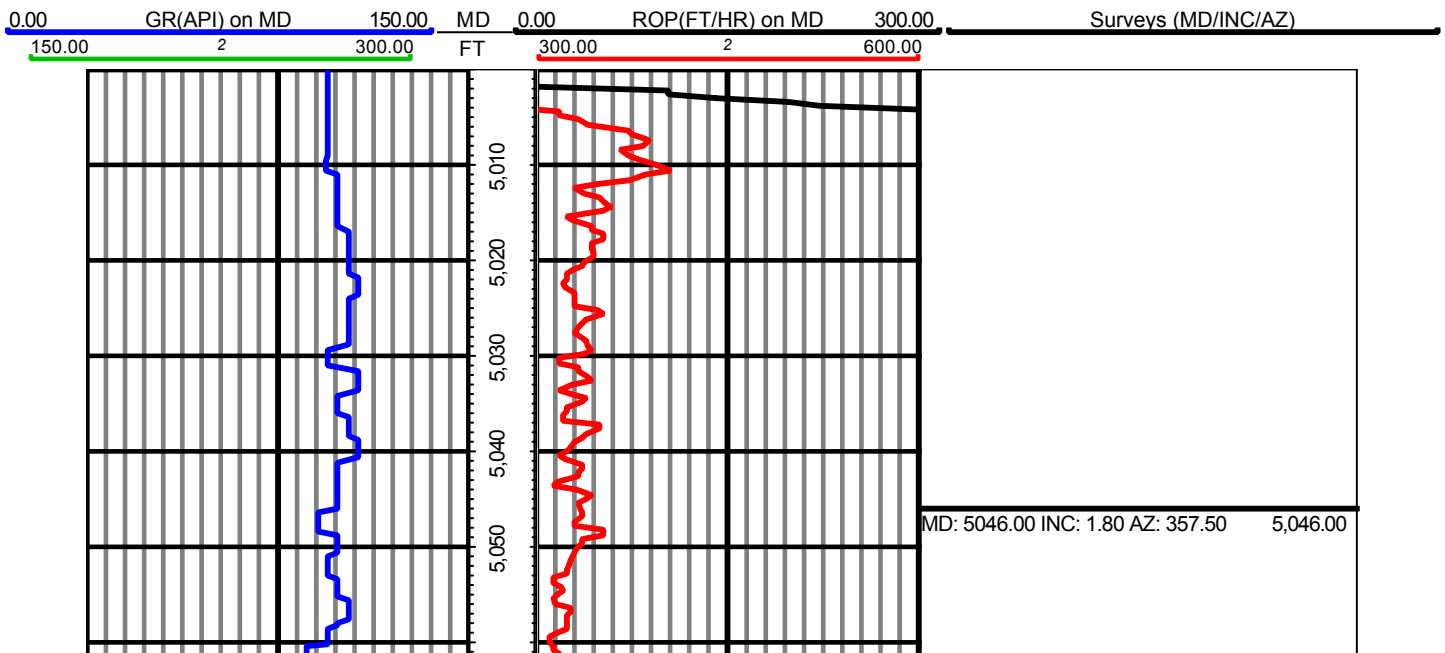
### Mud Data

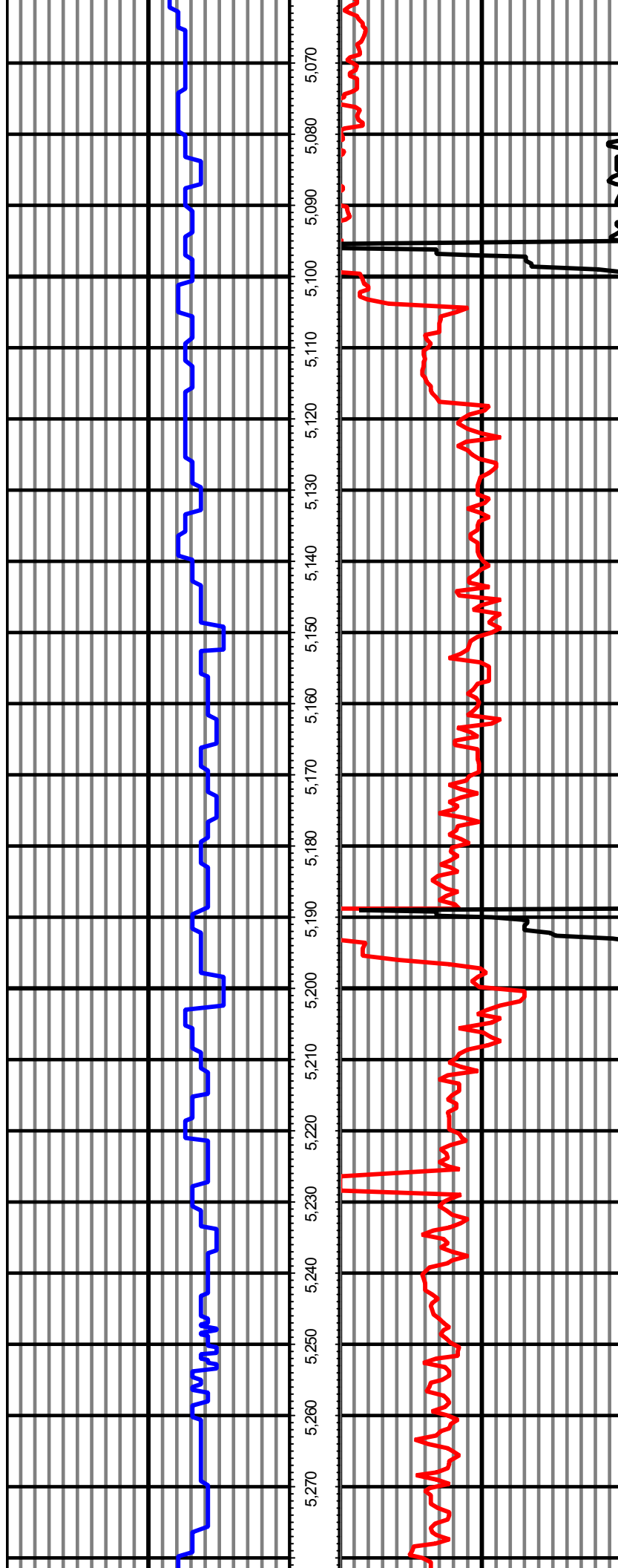
Weight	From	To
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### Tool Run Data

Serial Number	Gamma Offset	Resist. Offset	Start Time	Start Depth	End Time	End Depth
1061	36.8	0	2/8/2014 2:00:39 AM	916	2/10/2014 5:00:39 AM	7433
1061	35.42	0	2/11/2014 1:00:52 PM	7433	2/15/2014 1:42:52 PM	0

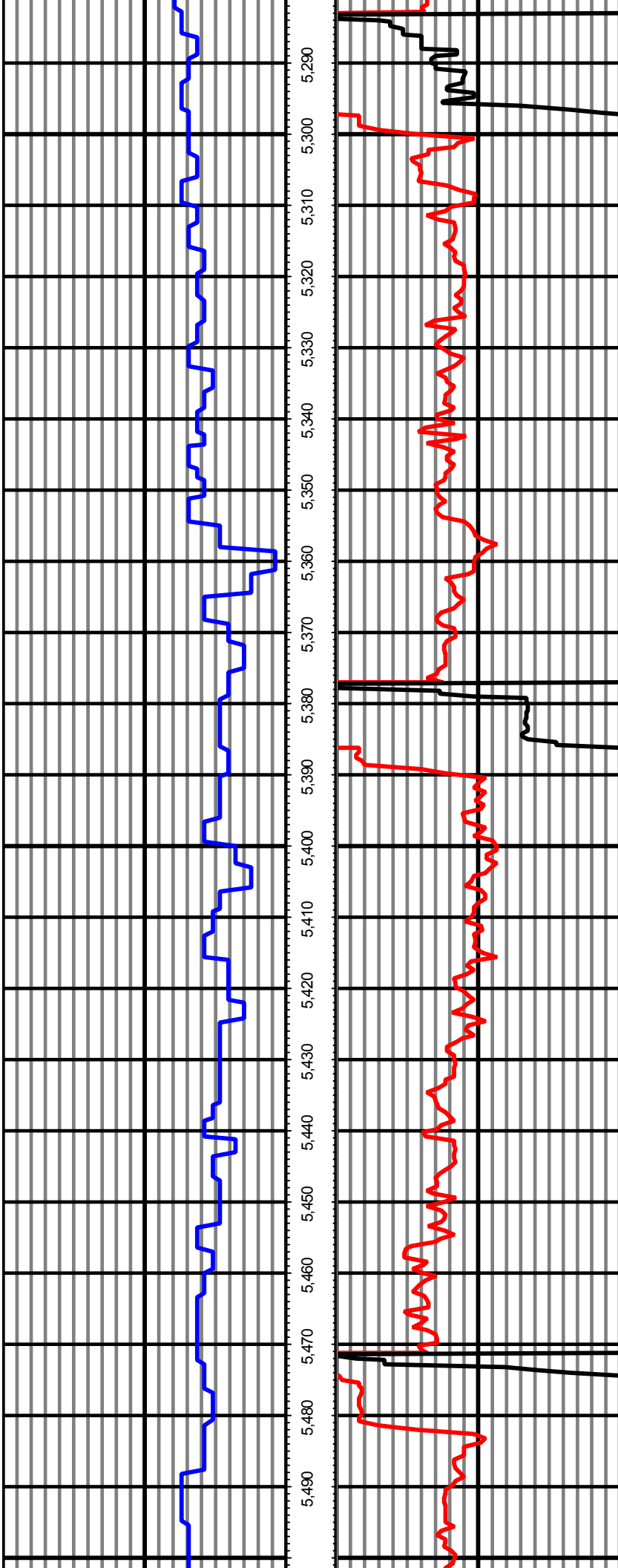
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost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





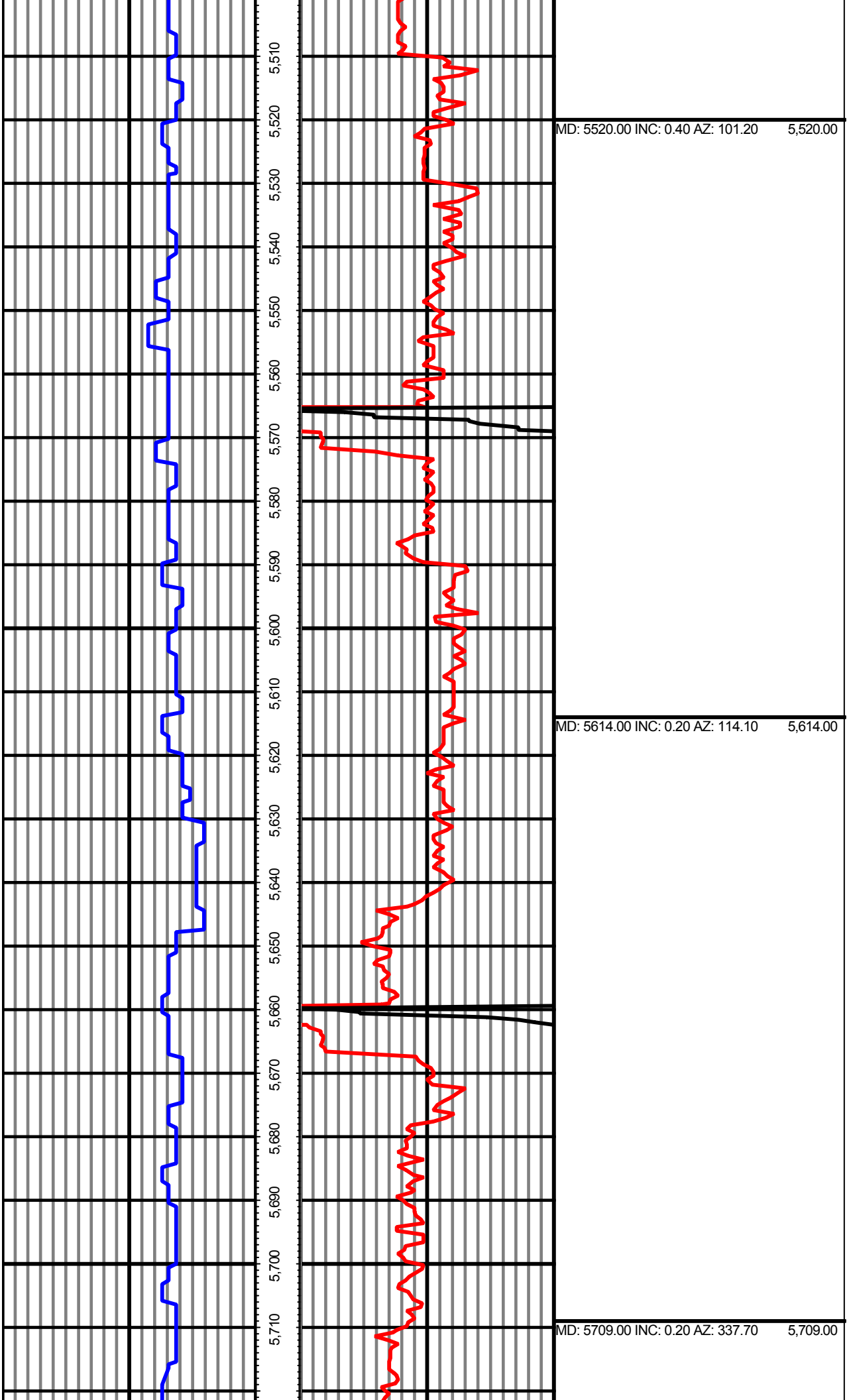
MD: 5140.00 INC: 1.80 AZ: 343.30 5,140.00

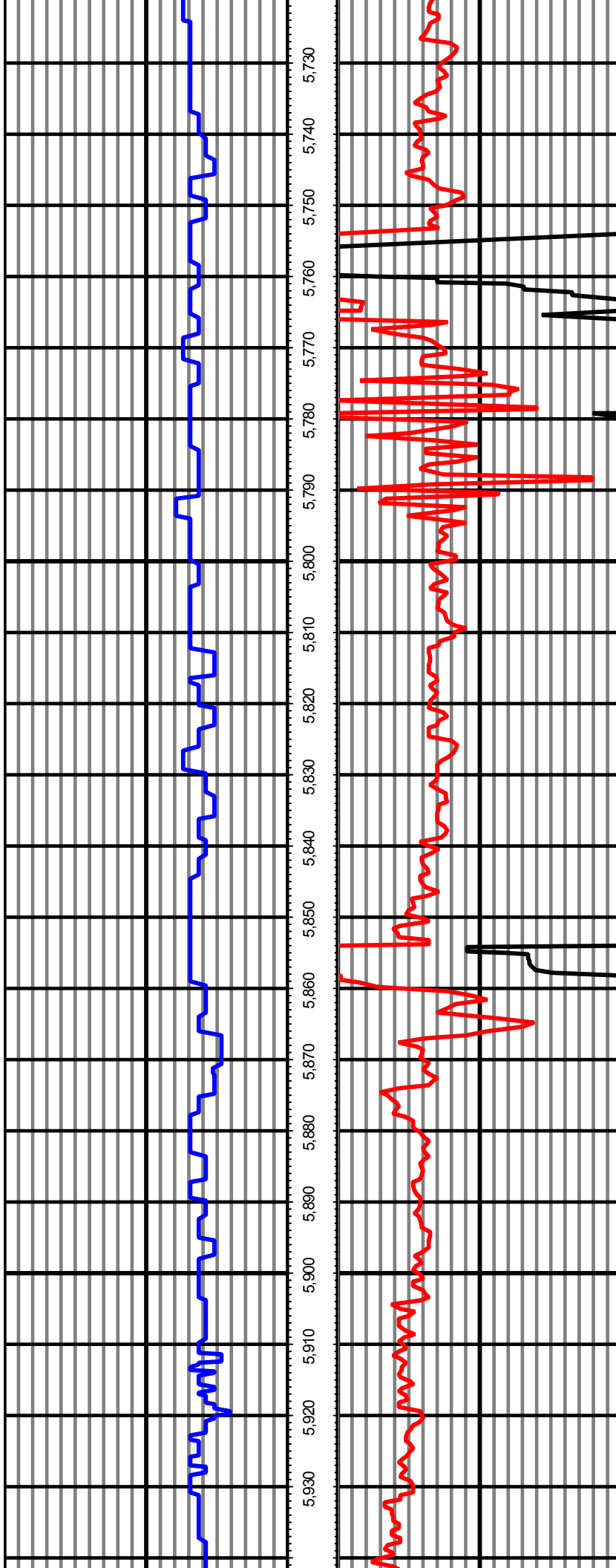
MD: 5235.00 INC: 1.50 AZ: 330.20 5,235.00



MD: 5330.00 INC: 0.90 AZ: 90.60 5,330.00

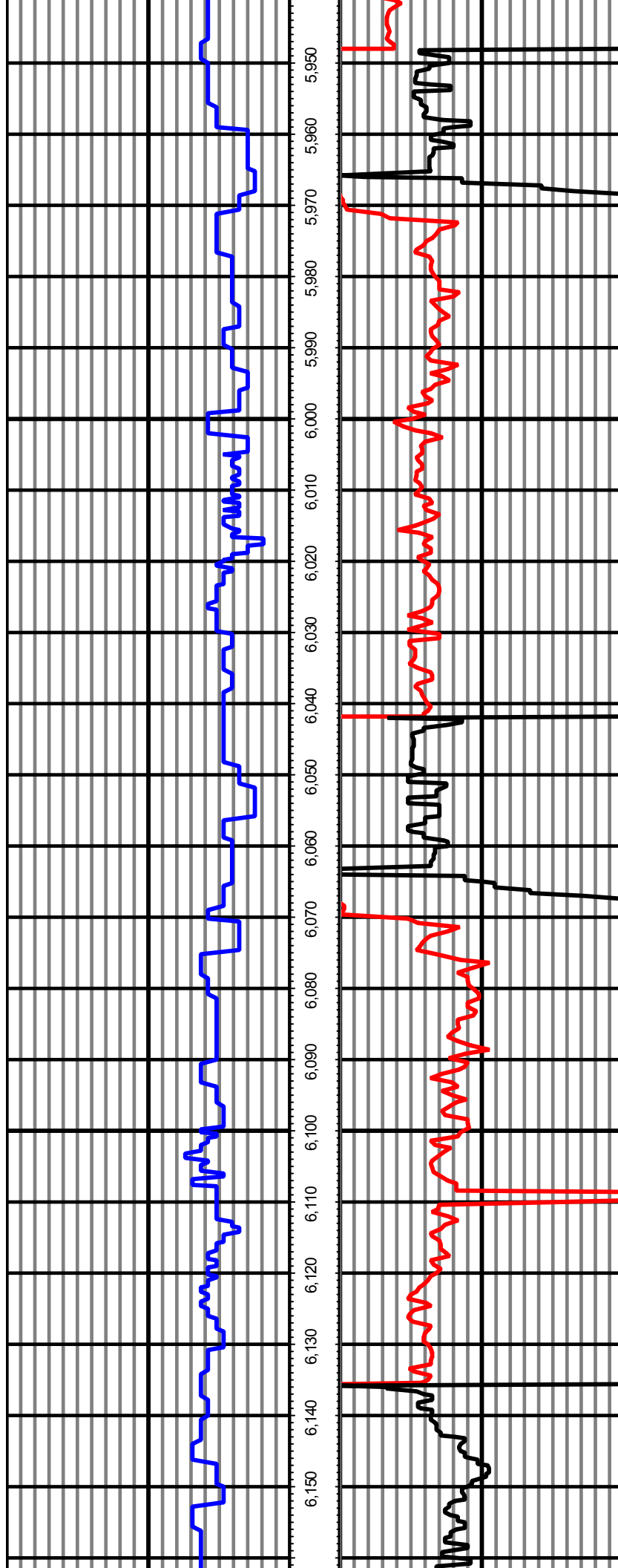
MD: 5425.00 INC: 0.50 AZ: 88.30 5,425.00





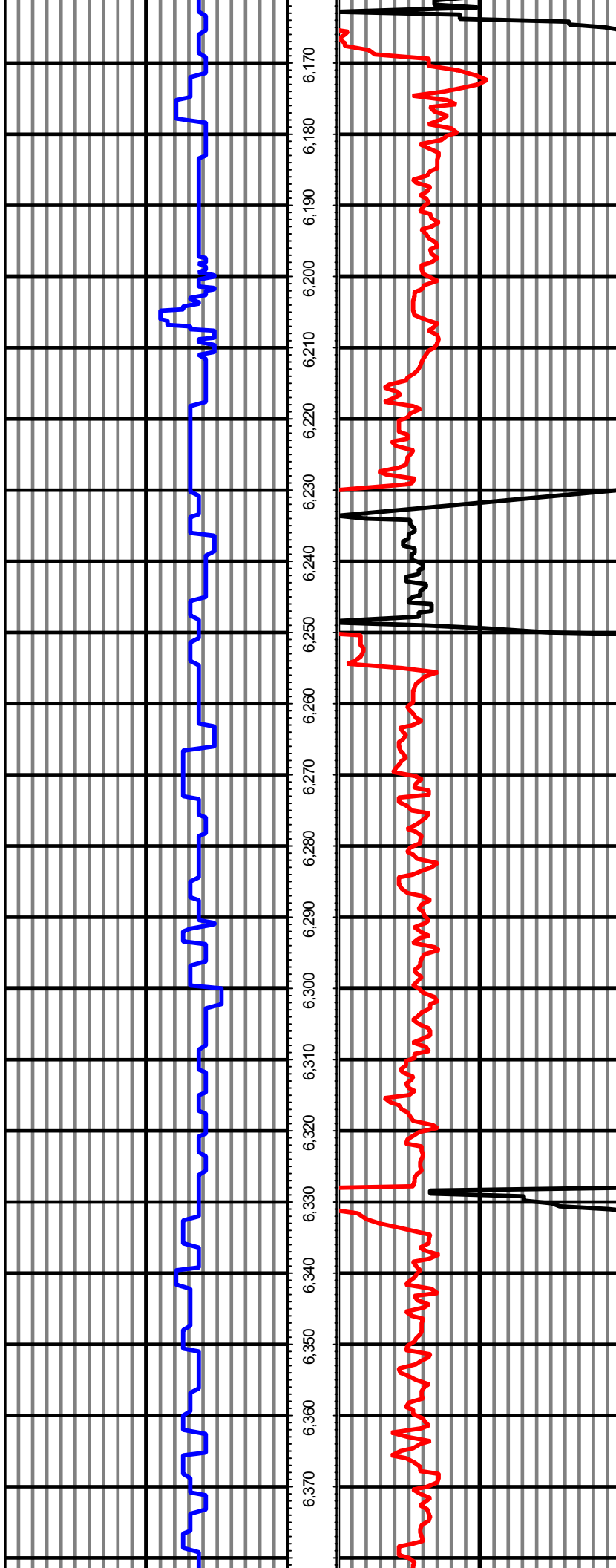
MD: 5804.00 INC: 0.40 AZ: 294.40 5,804.00

MD: 5899.00 INC: 0.80 AZ: 272.60 5,899.00



MD: 5994.00 INC: 0.80 AZ: 356.00 5,994.00

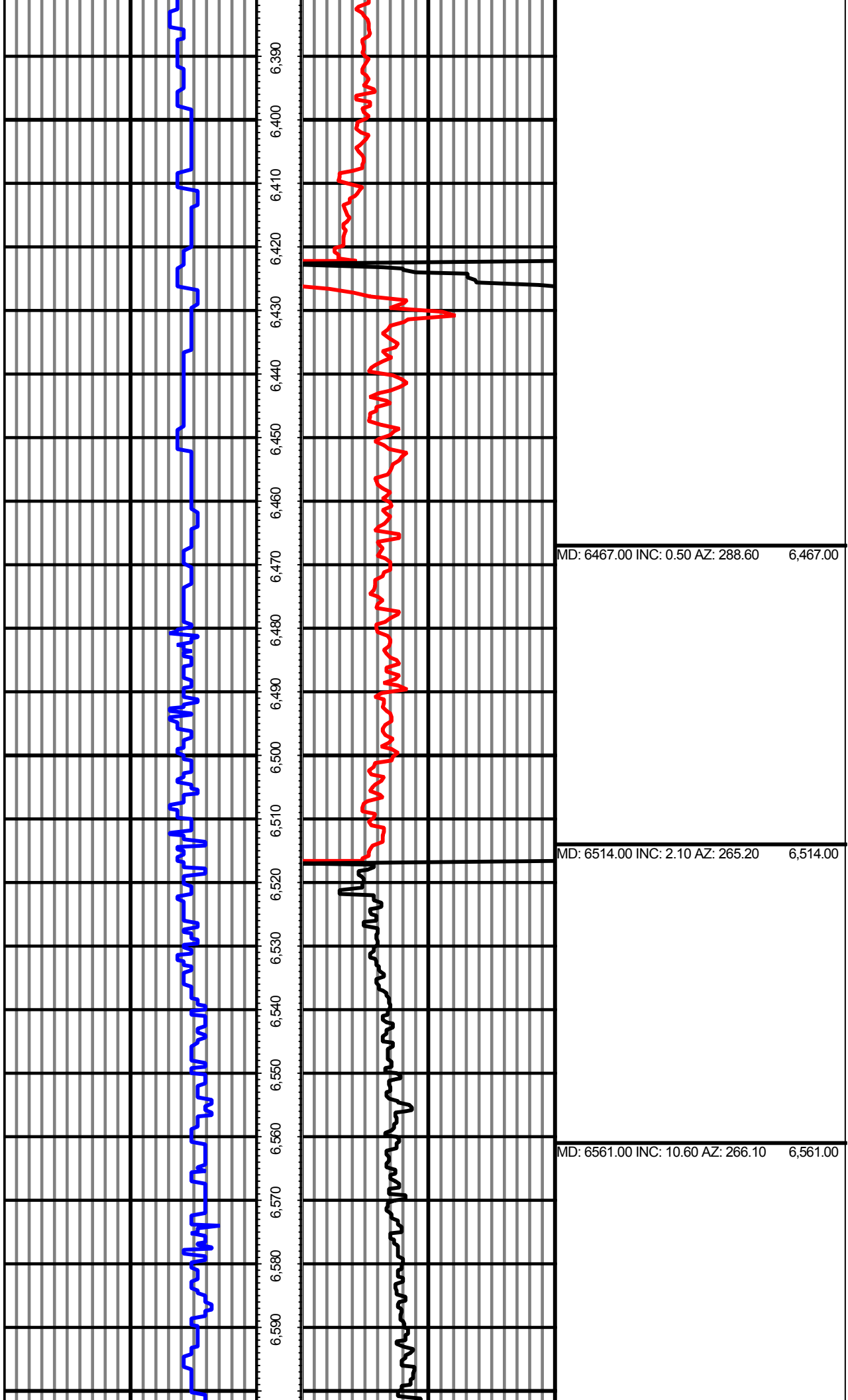
MD: 6088.00 INC: 1.20 AZ: 327.40 6,088.00



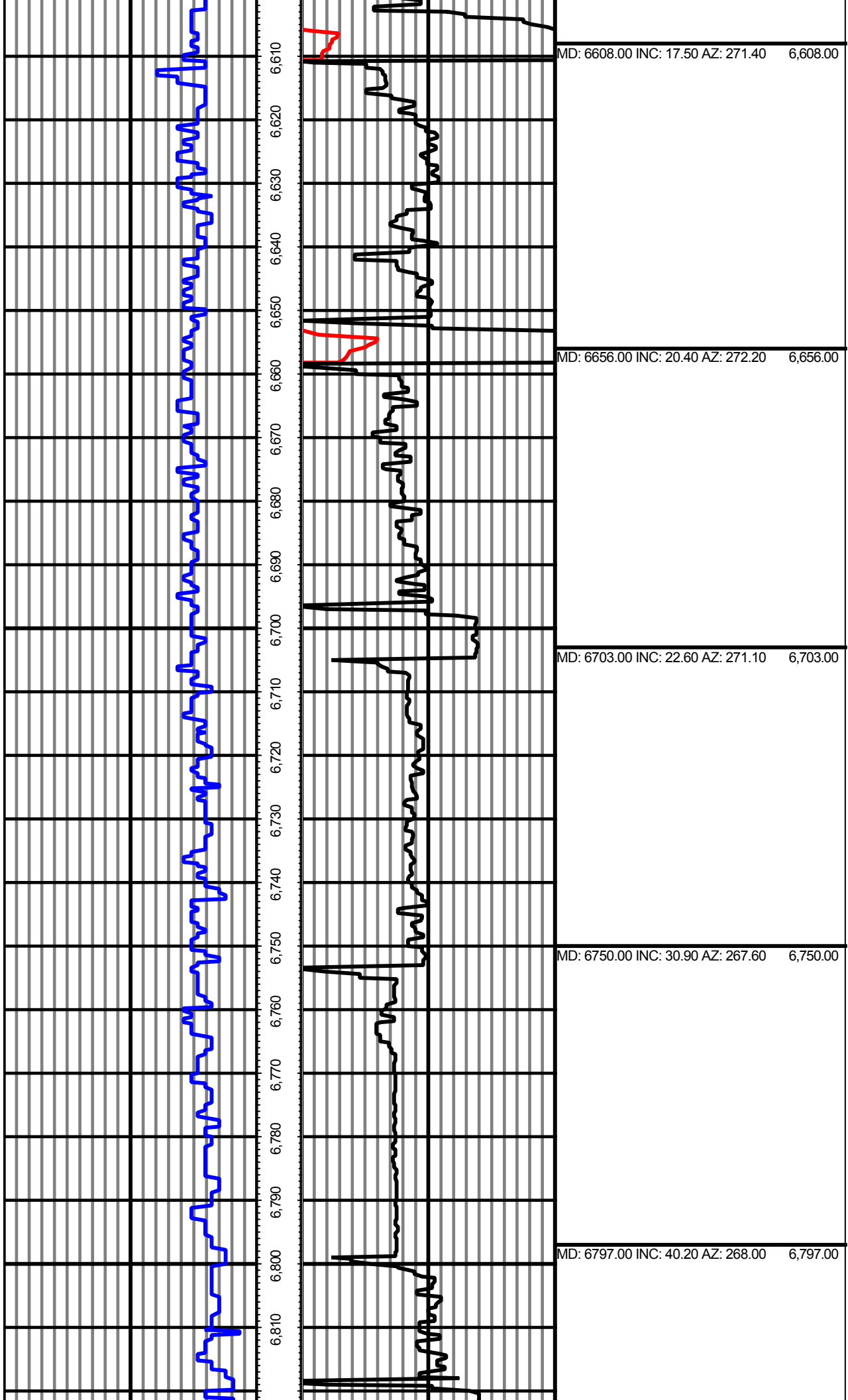
MD: 6183.00 INC: 2.20 AZ: 218.20 6,183.00

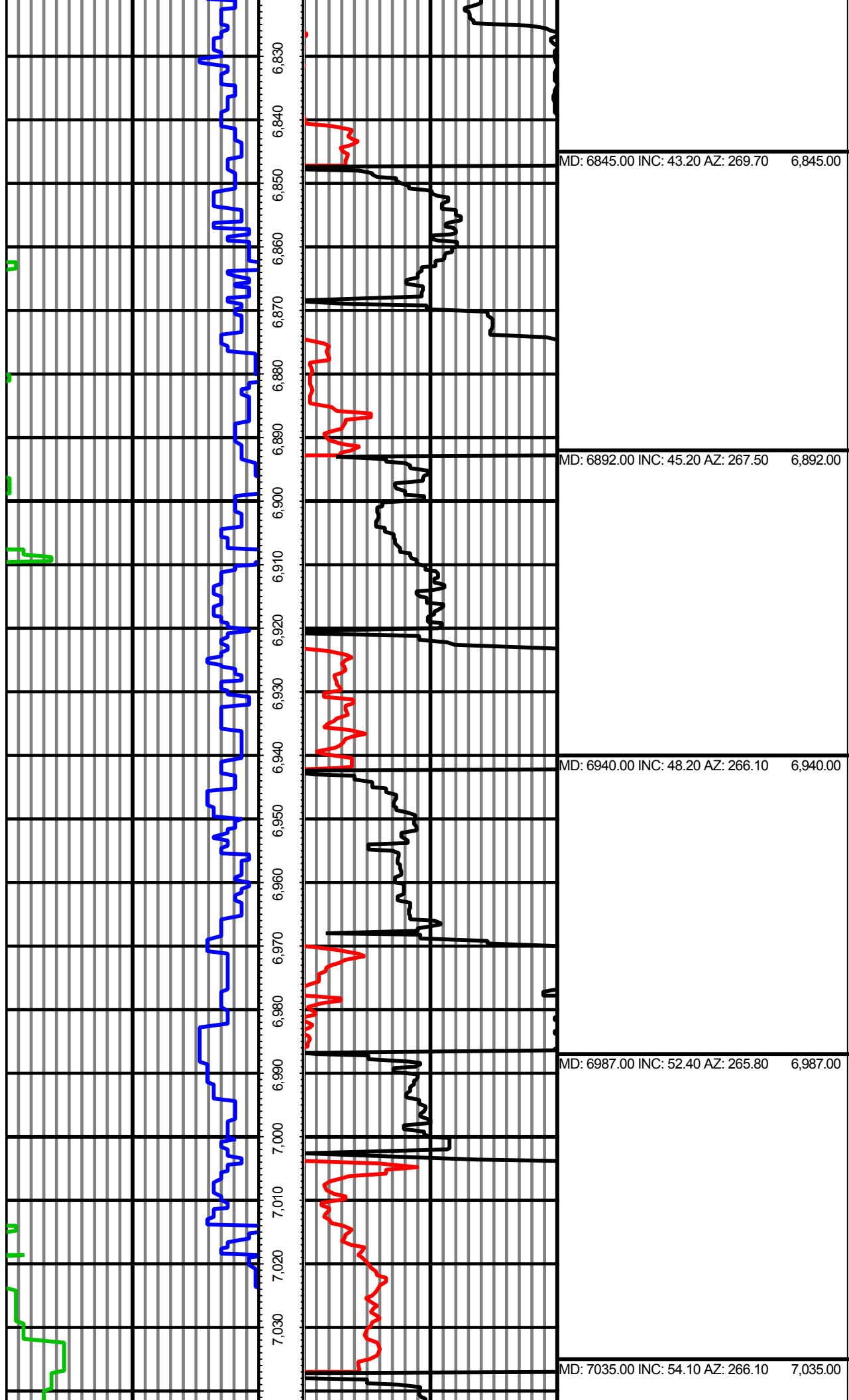
MD: 6278.00 INC: 1.10 AZ: 100.30 6,278.00

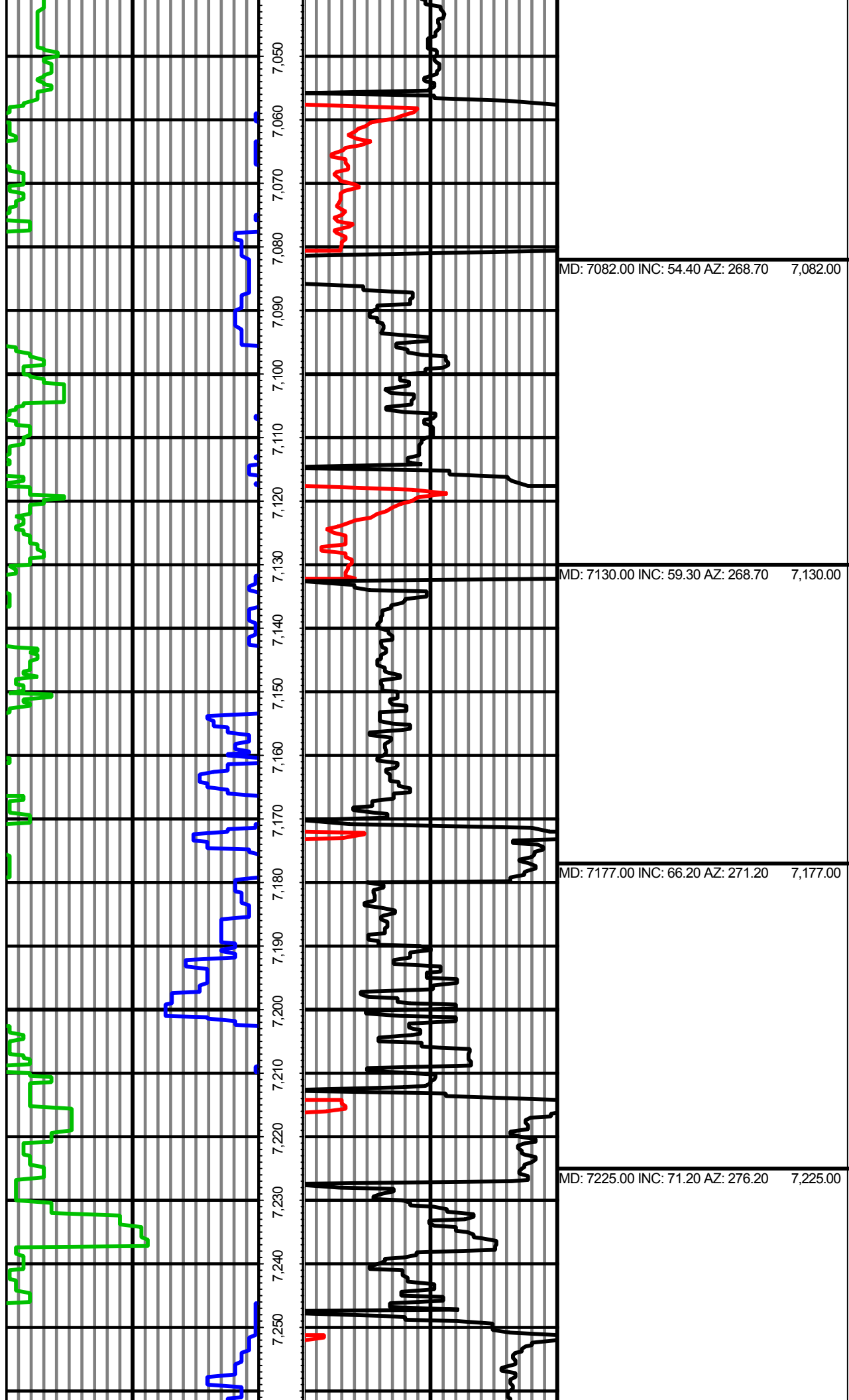
MD: 6372.00 INC: 0.30 AZ: 114.00 6,372.00

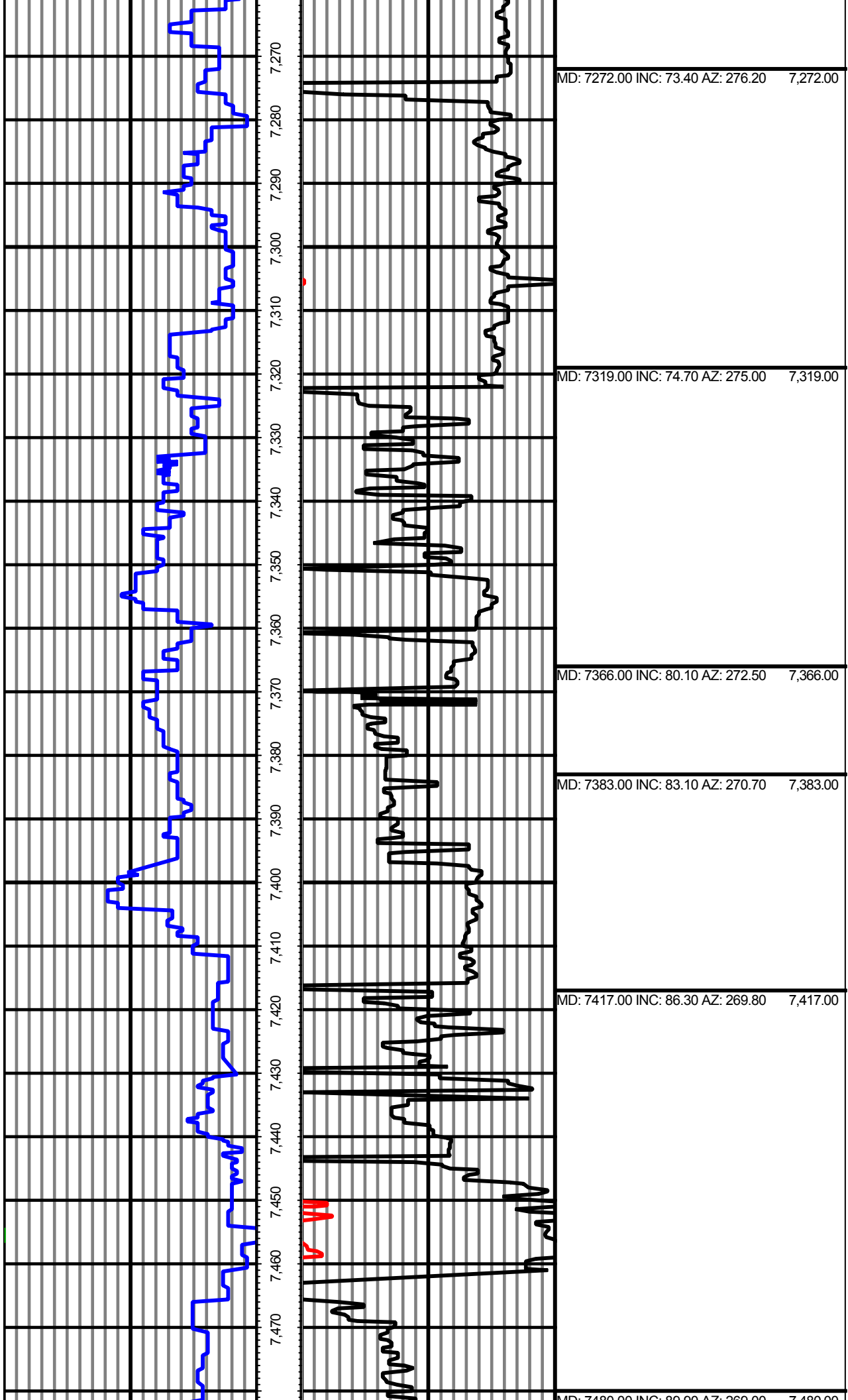


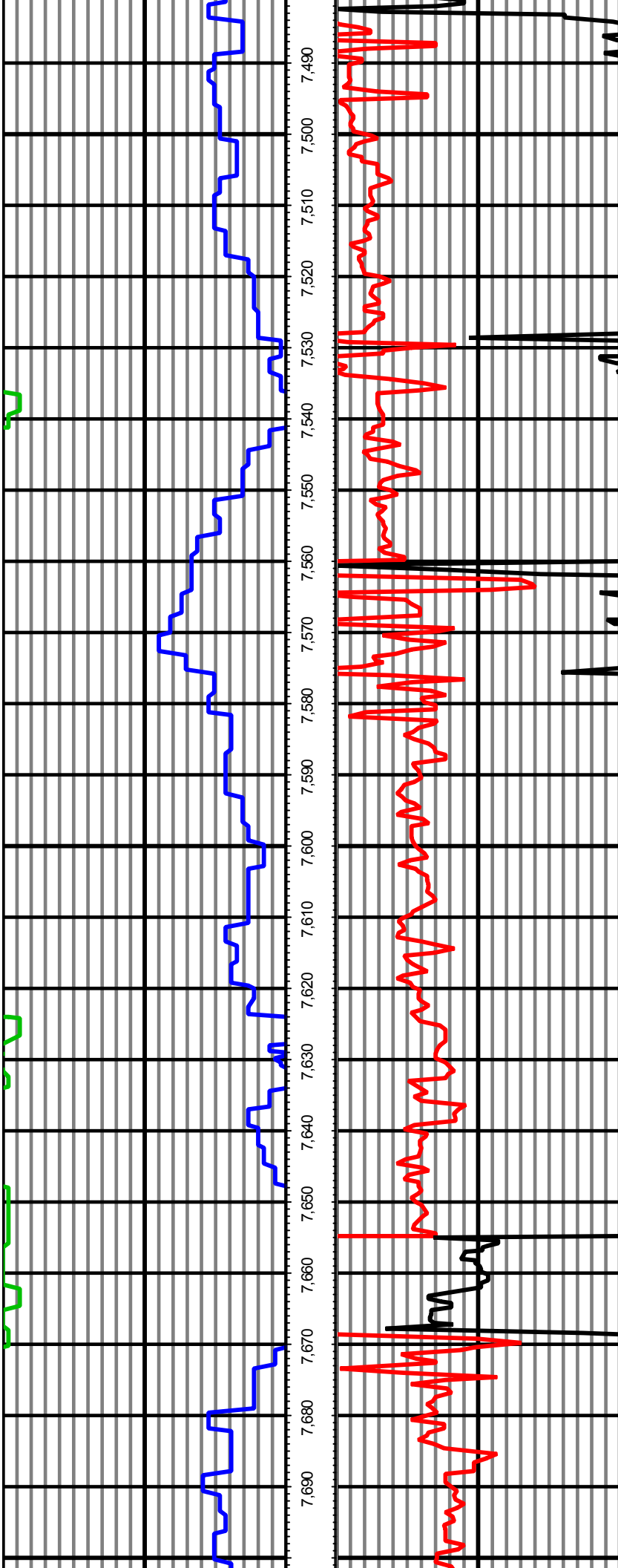










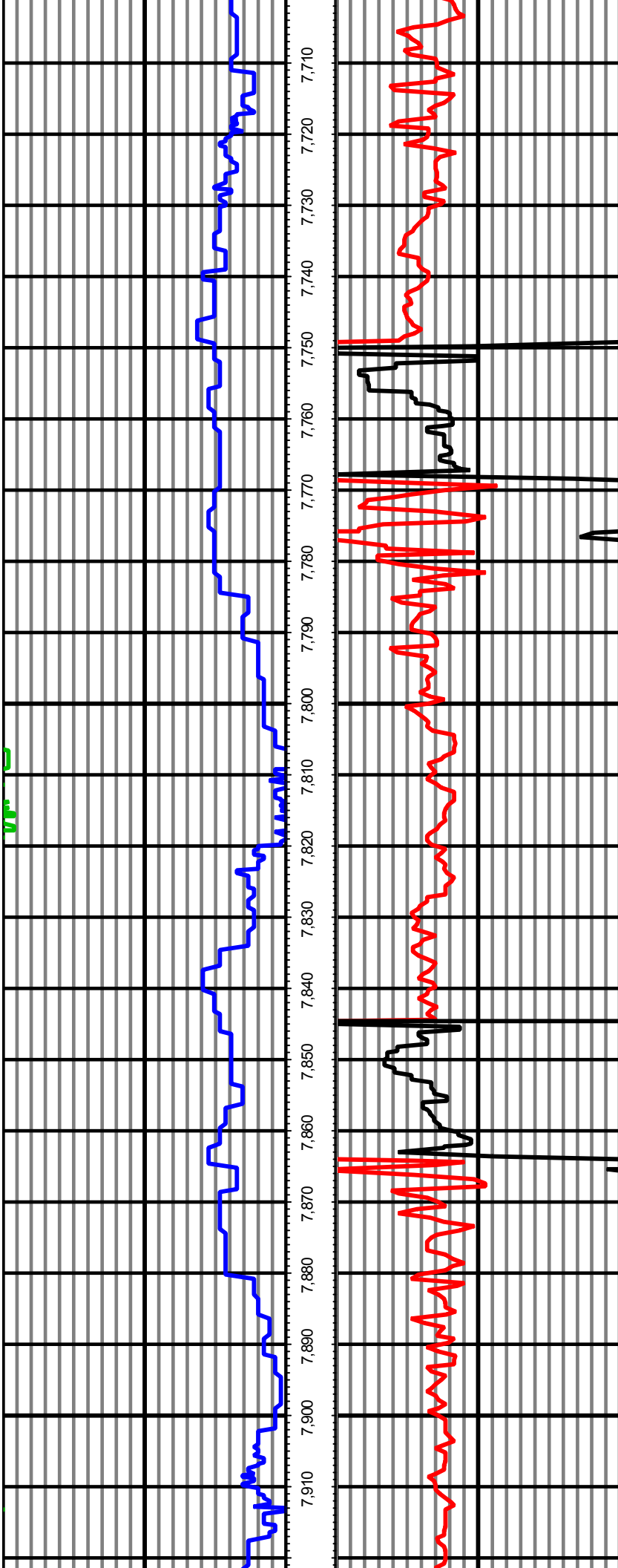


MD: 7480.00 INC: 89.90 AZ: 269.00 7,480.00

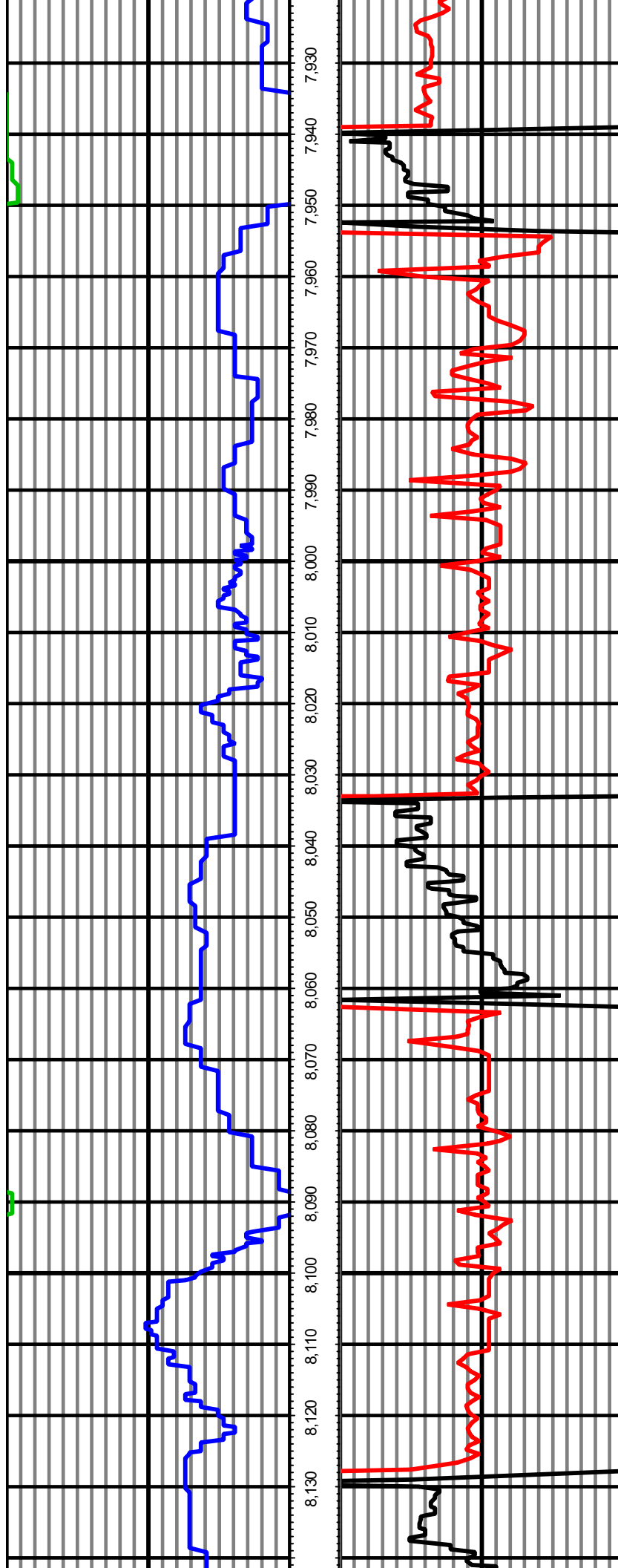
MD: 7512.00 INC: 90.50 AZ: 269.40 7,512.00

MD: 7607.00 INC: 91.00 AZ: 269.20 7,607.00

MD: 7702.00 INC: 91.70 AZ: 269.70 7,702.00

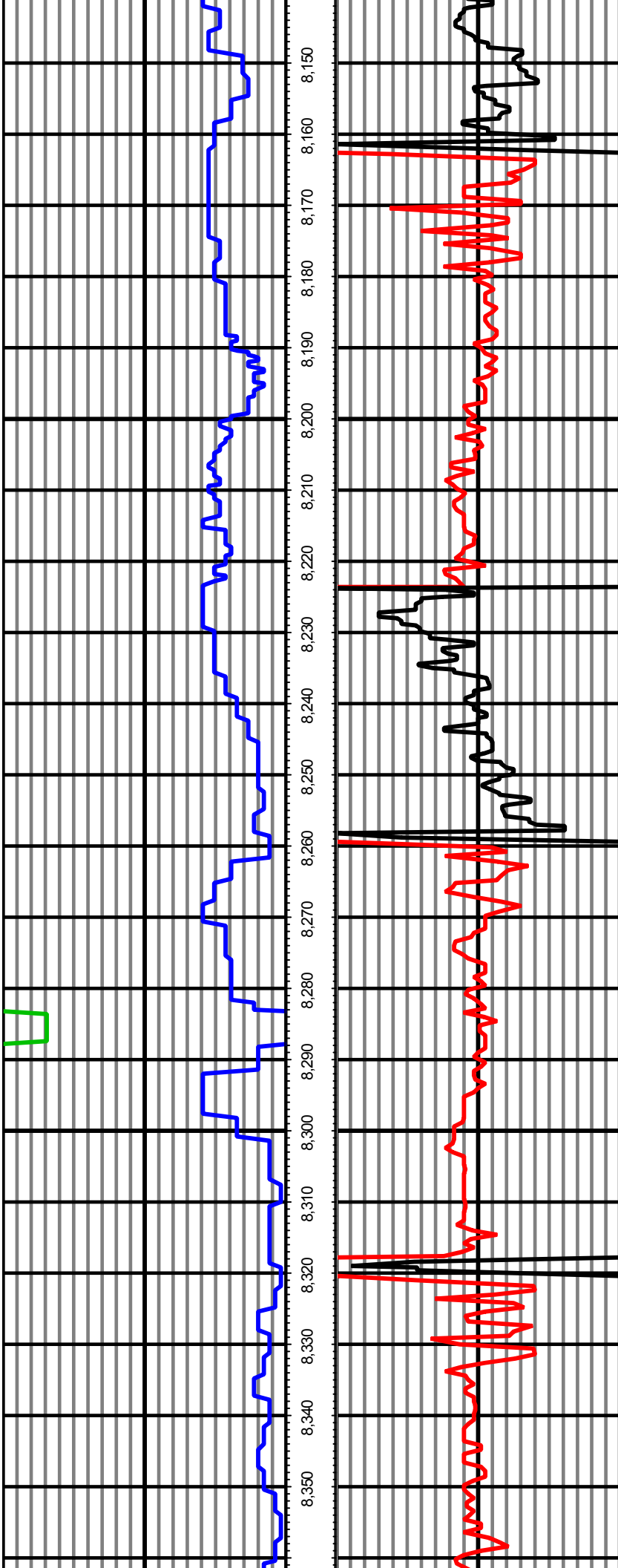


MD: 7792.00 INC: 93.70 AZ: 209.10 7,792.00	
MD: 7797.00 INC: 93.70 AZ: 271.30 7,797.00	
MD: 7891.00 INC: 93.50 AZ: 271.90 7,891.00	



MD: 7986.00 INC: 94.50 AZ: 272.40 7.986.00

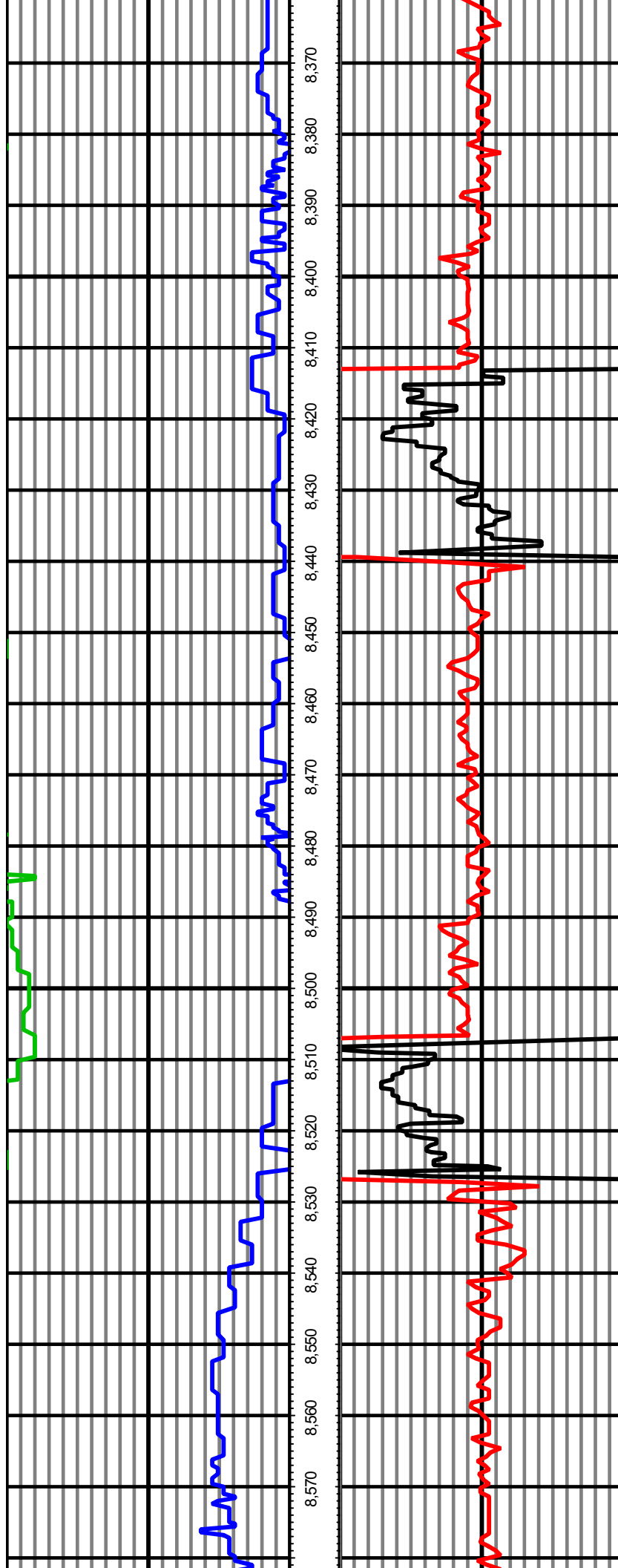
MD: 8081.00 INC: 93.90 AZ: 271.70 8.081.00



MD: 8176.00 INC: 92.90 AZ: 271.50 8,176.00

MD: 8270.00 INC: 90.70 AZ: 270.50 8,270.00

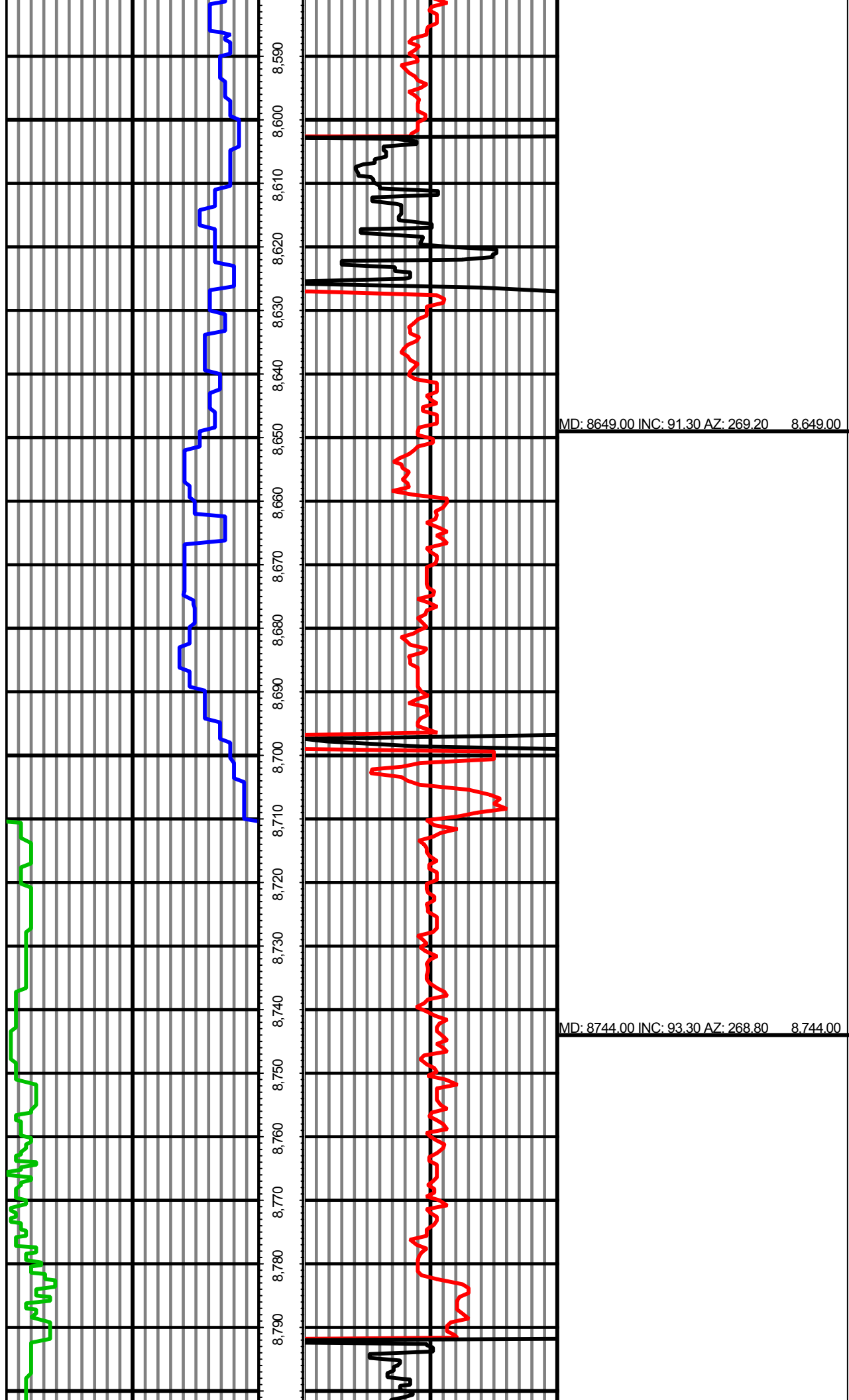


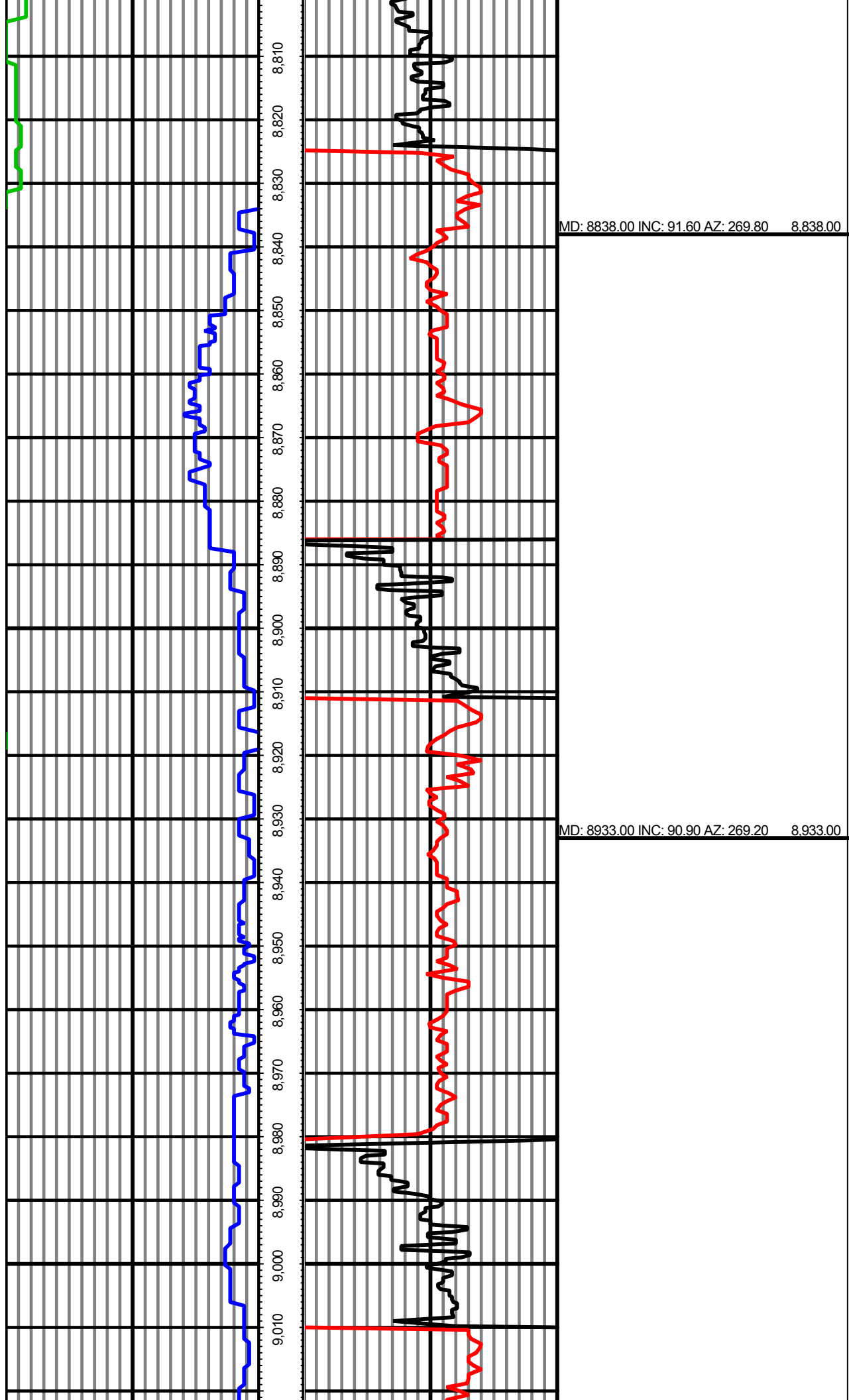


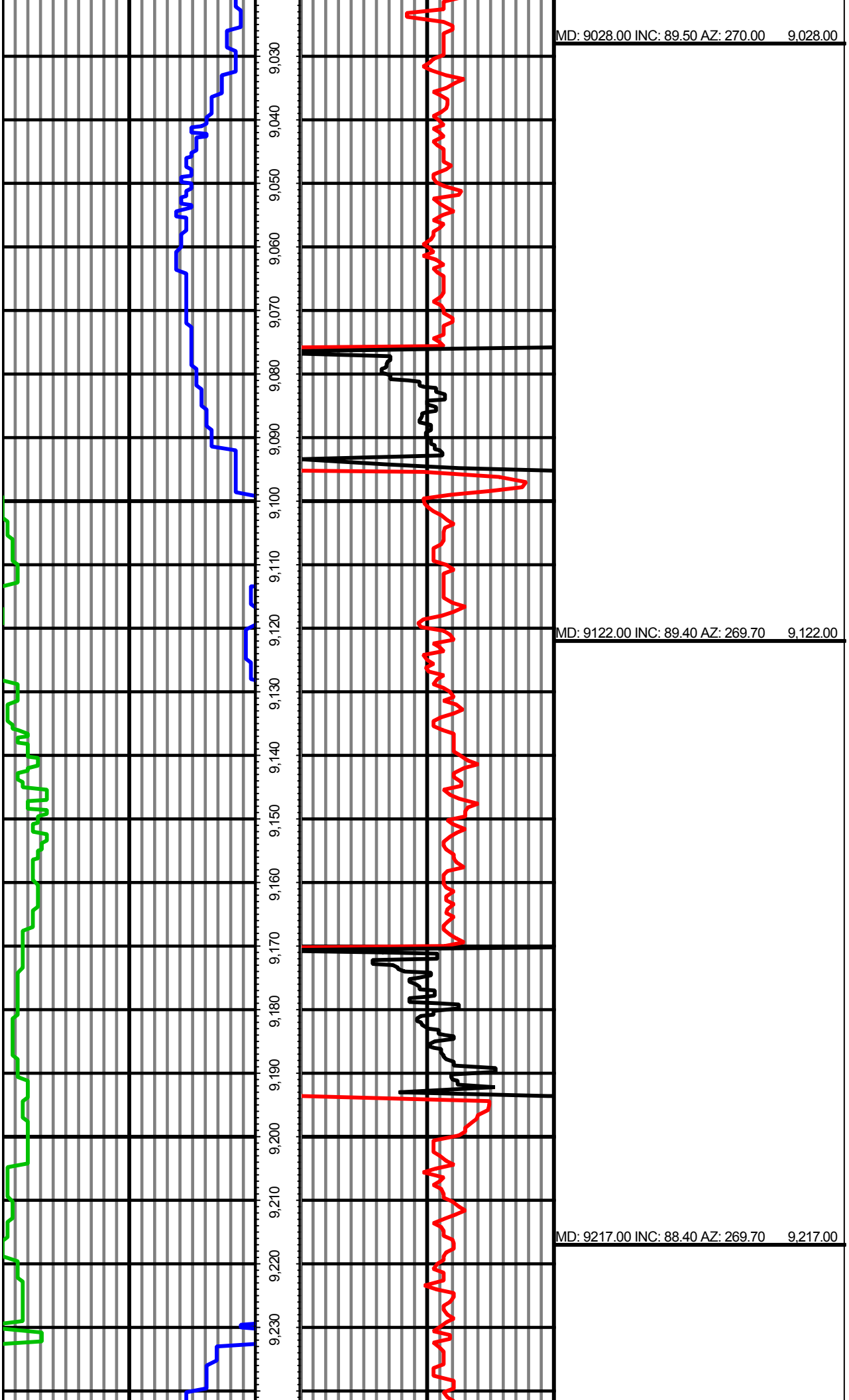
MD: 8365.00 INC: 91.80 AZ: 270.40 8,365.00

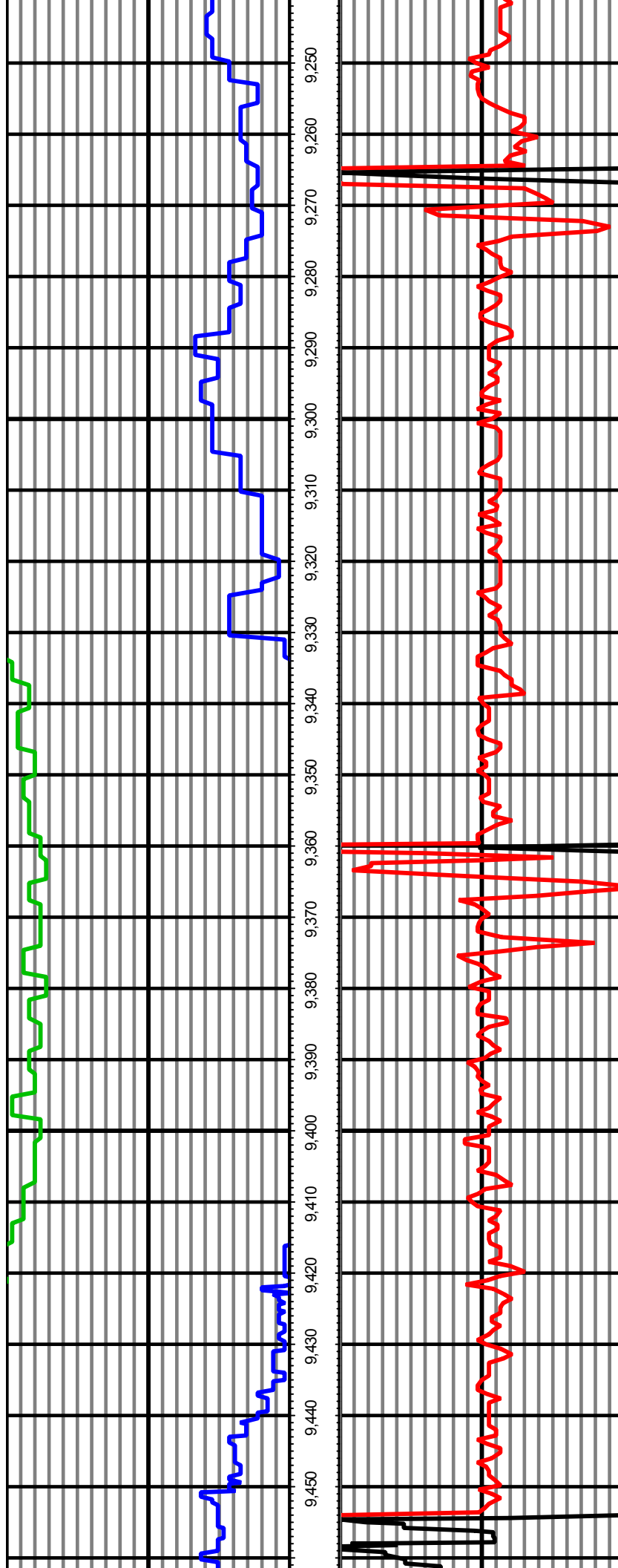
MD: 8460.00 INC: 91.50 AZ: 269.70 8,460.00

MD: 8554.00 INC: 91.70 AZ: 269.00 8,554.00



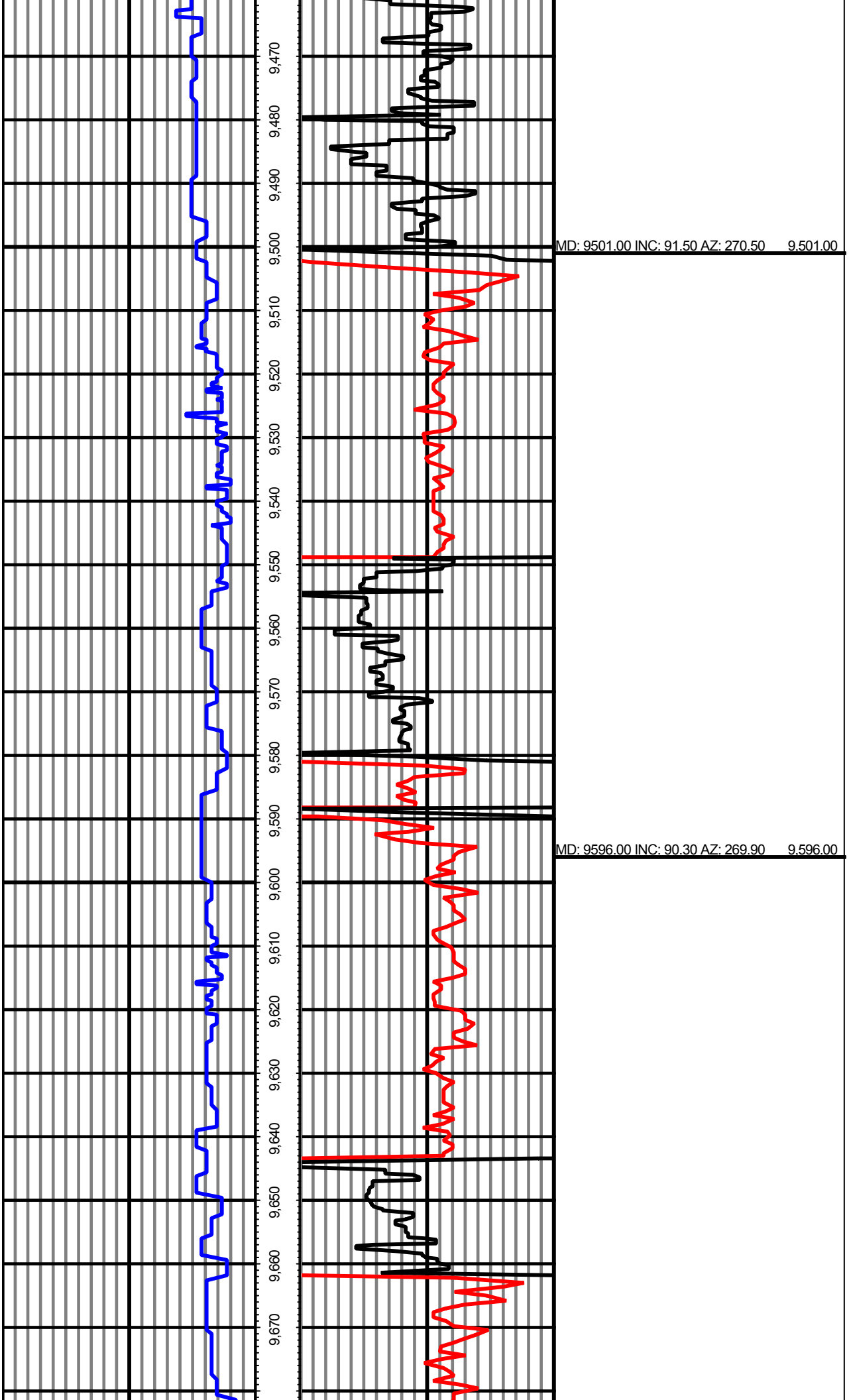


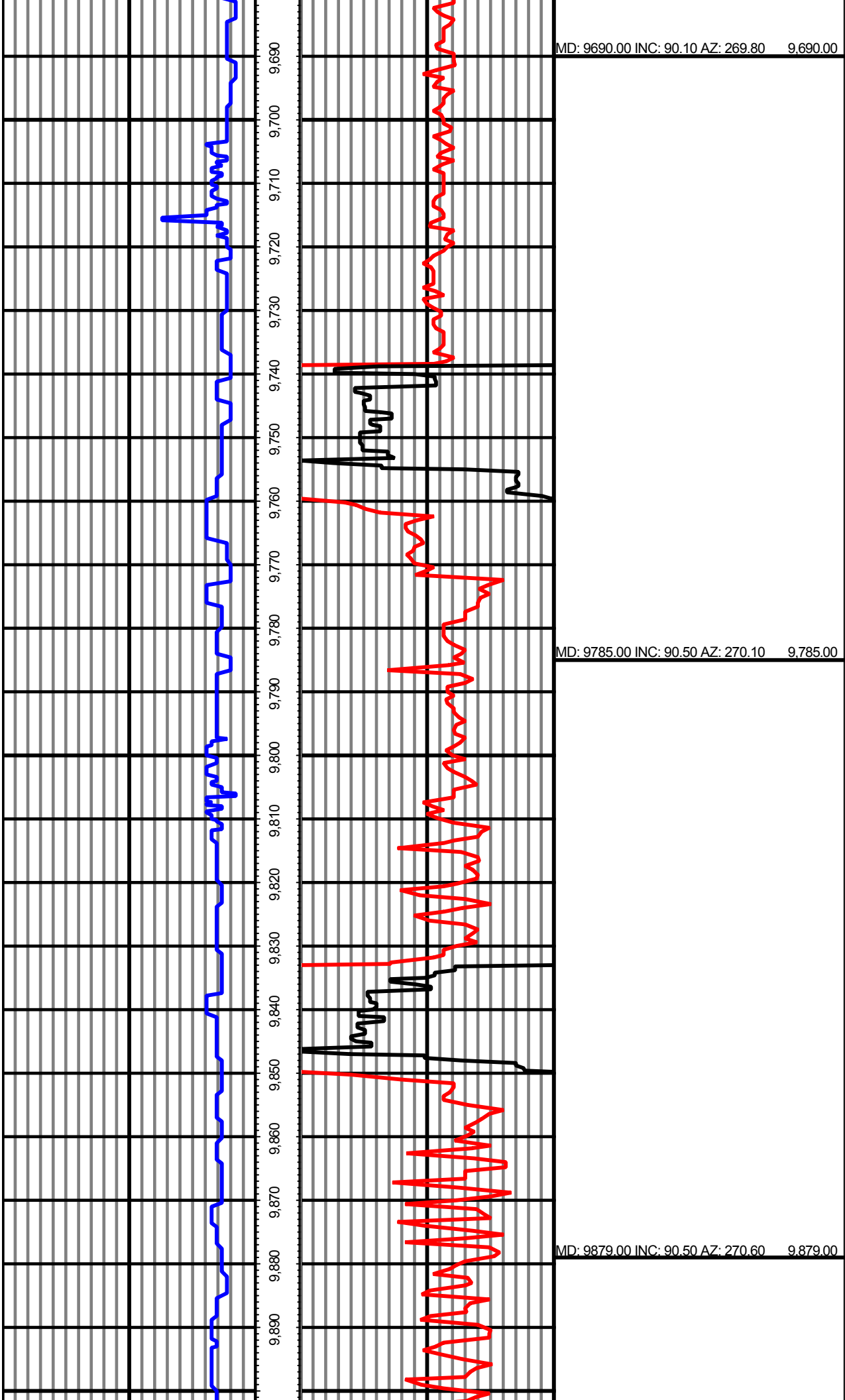


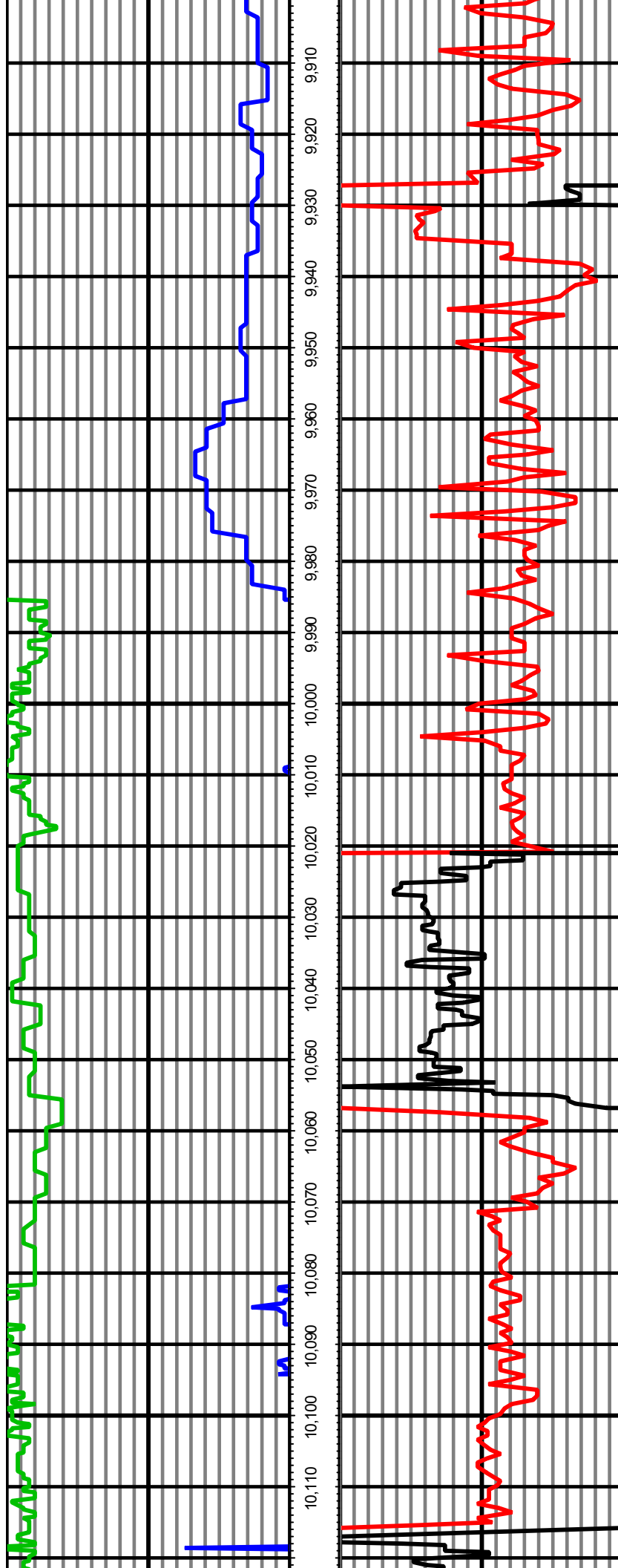


MD: 9312.00 INC: 89.50 AZ: 269.30 9.312.00

MD: 9406.00 INC: 91.70 AZ: 269.70 9.406.00



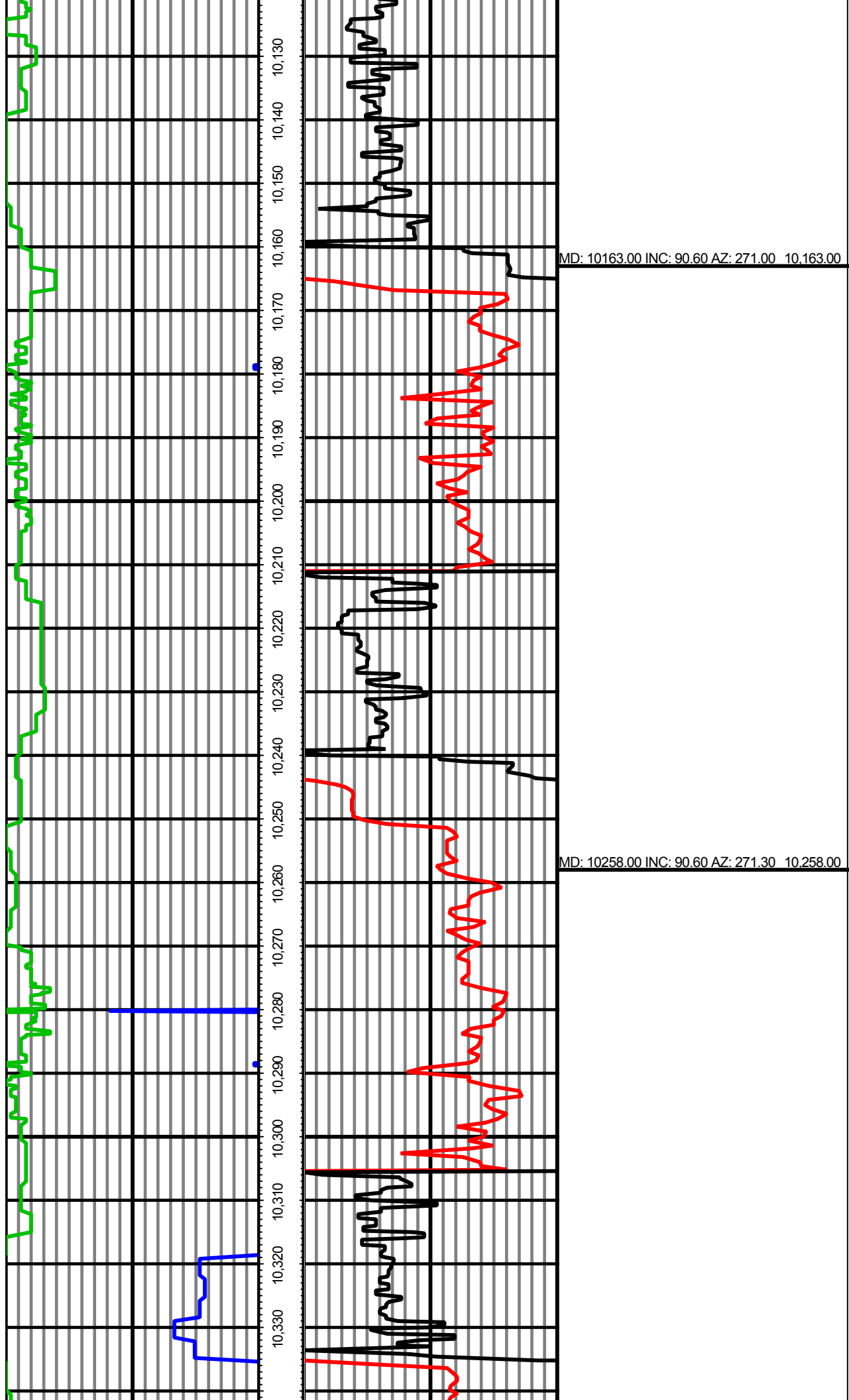


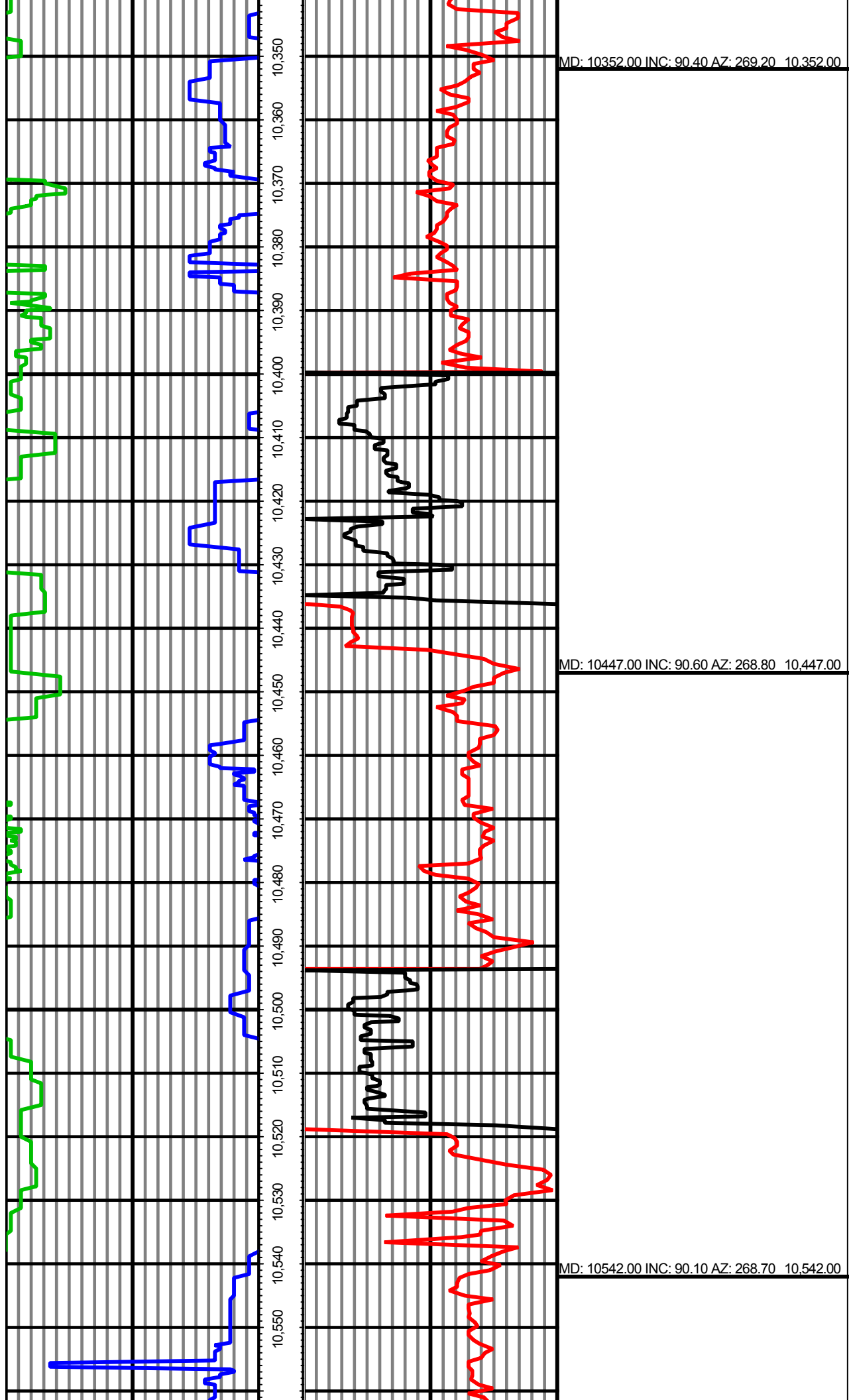


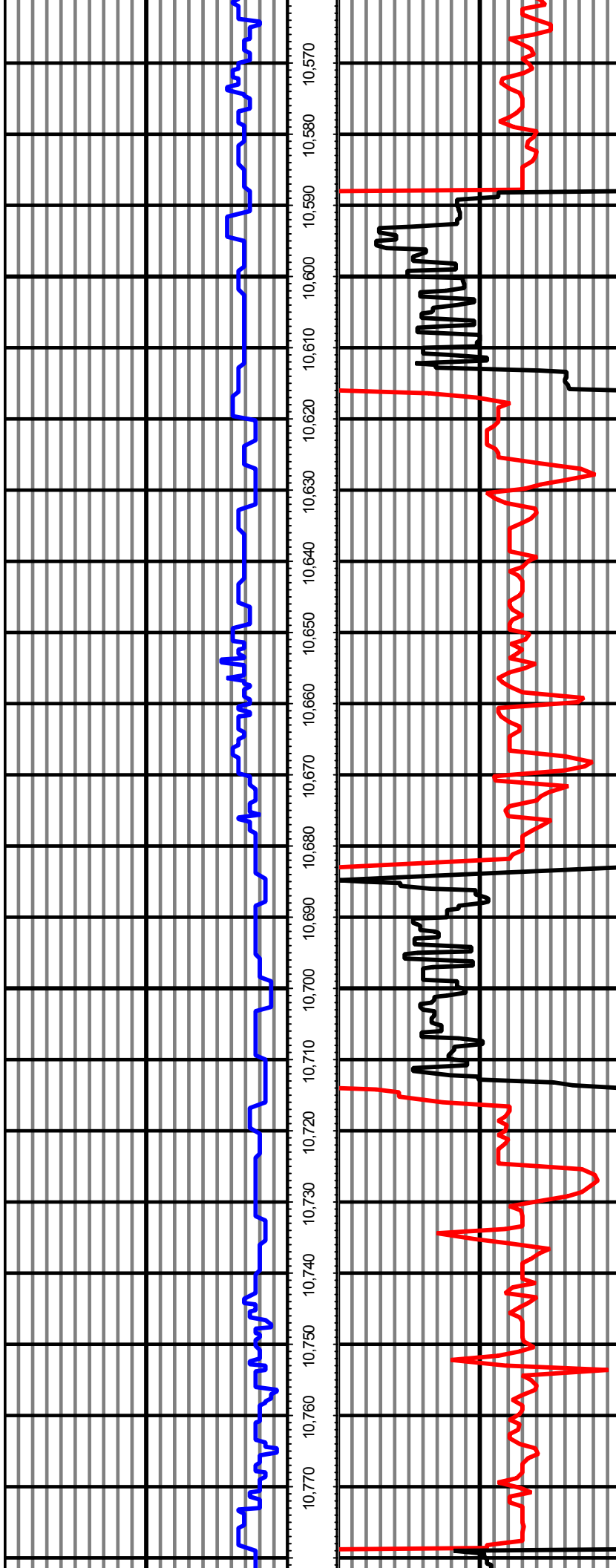
MD: 9974.00 INC: 92.10 AZ: 270.70 9,974.00

MD: 10069.00 INC: 91.90 AZ: 271.80 10,069.00



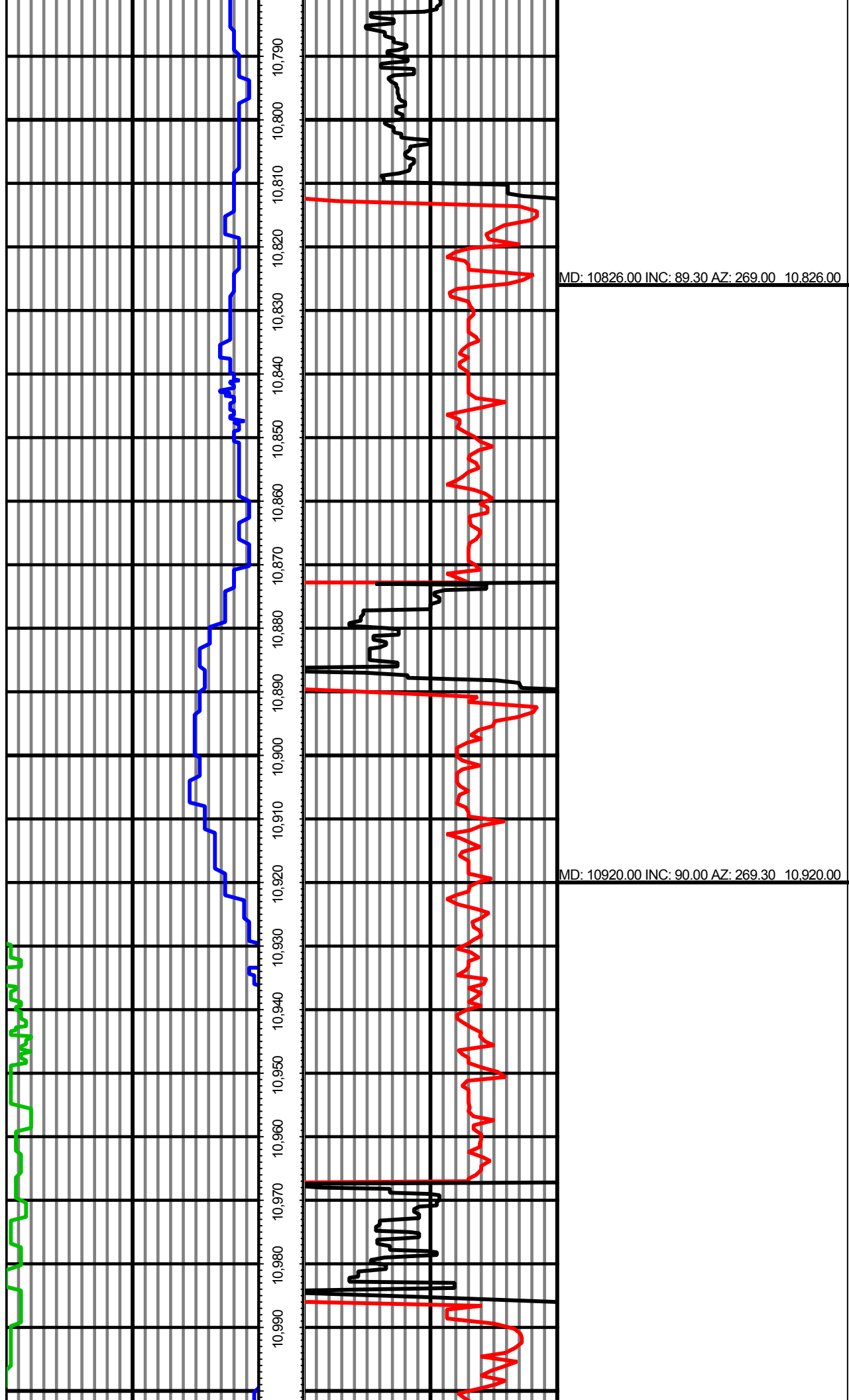


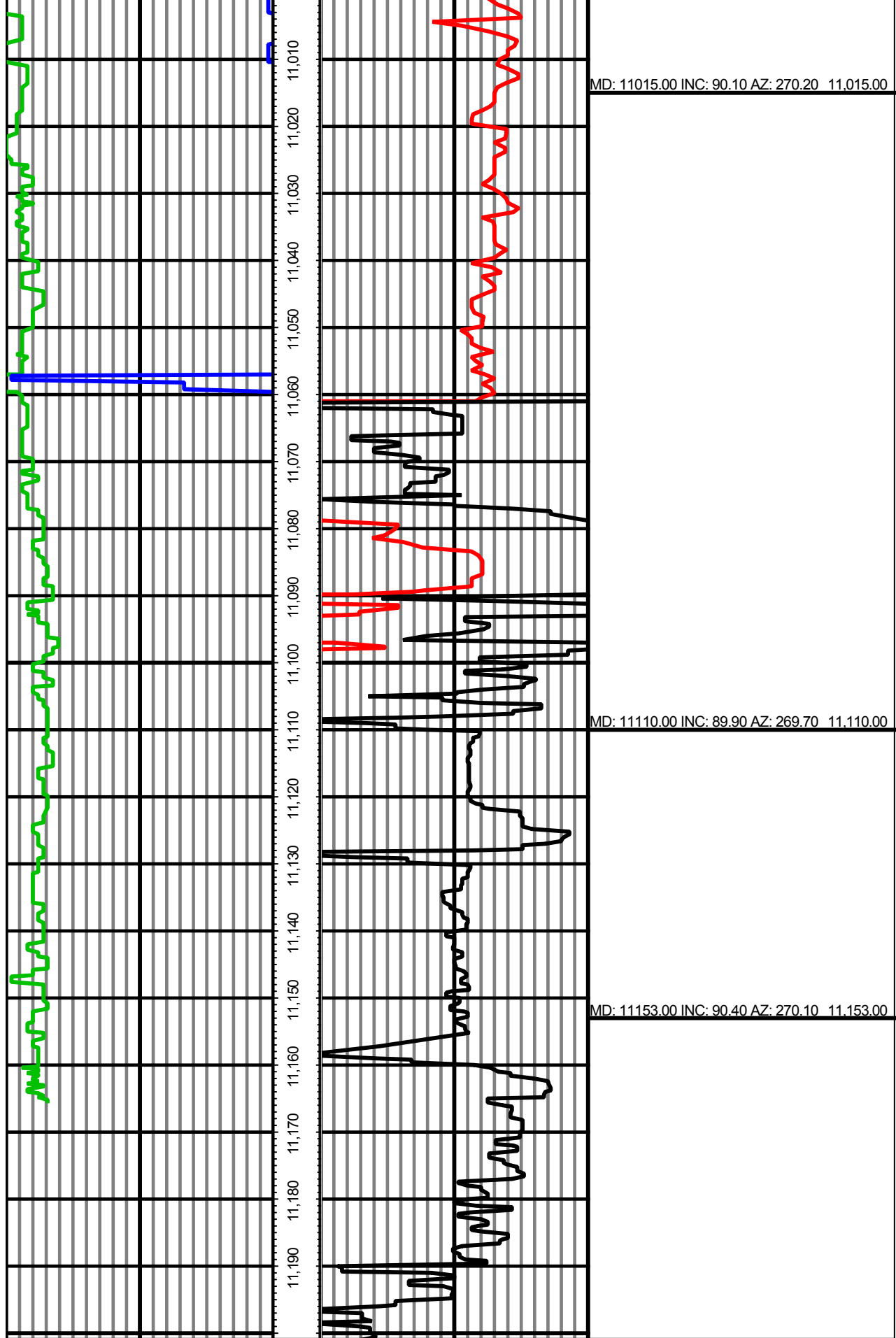




MD: 10636.00 INC: 90.70 AZ: 268.90 10.636.00

MD: 10731.00 INC: 90.50 AZ: 268.70 10.731.00





0.00 GR(API) on MD 150.00 MD 0.00 ROP(FT/HR) on MD 300.00 Surveys (MD/INC/AZ)

150.00 2 300.00 FT 300.00 2 600.00