



CATHEDRAL

Cathedral Energy Services
1949 North Pyrite Road
Casper, Wyoming 82604

145308

5"-100' - MD

11/3/2014 1:11:43 PM

Oper. Company: Encana Oil & Gas (USA) Inc.

Country: U.S.A.

State / Province: Colorado

County / Parish: Weld

Started: 09/16/2014 12:00 AM

API/UWI: 05-123-38094

Field: Wattenberg (Codell)

Well: Grant Hurt 1G-14H G268

Rig: Patterson Drilling 326

Ended: 09/23/2014 12:00 AM

Gamma Ray
Section Plane: 0
Magnetic North:8.51
Gamma Attenuation Factor: 2.928
Gamma Averaging: 7%

Personnel

Day Hand: M. Andrew

Night Hand: J. Minter

Comp. Emp: Mike Quintana

Maximum Temperature: 245 °f

Location

Latitude: 40.139280

Longitude: -104.966520

Elev. GL: 4888

Elev. DF:

Elev. KB: 4920

Log and Survey Depths Relative to Kelly Bushing (KB) Depth

Hole Data

Size	From	To
12-1/4	0	850
8-3/4	850	7869
6-1/8	7869	14535

Casing Data

Size	From	To
9-5/8	0	850
7	0	7869
5	0	14535

Bit Sizes

Size	From	To
12-1/4	0	850
8-3/4	850	7869
6-1/8	7869	14535

Mud Data

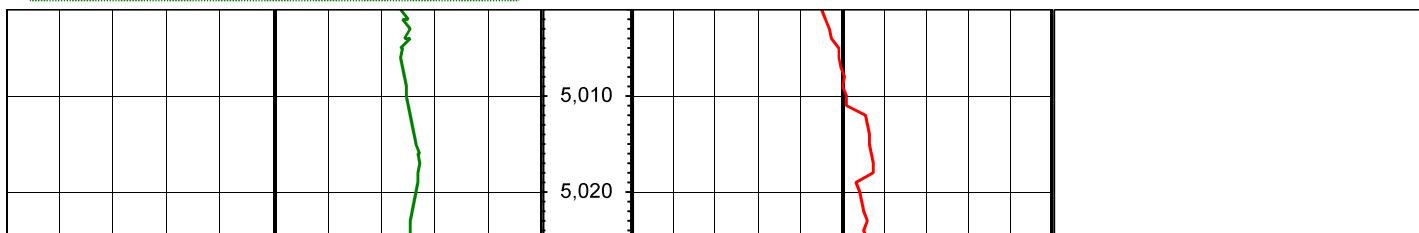
Type	Weight	Density	Viscosity	Rm	Rmf	Rmc	From	To
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Tool Run Data

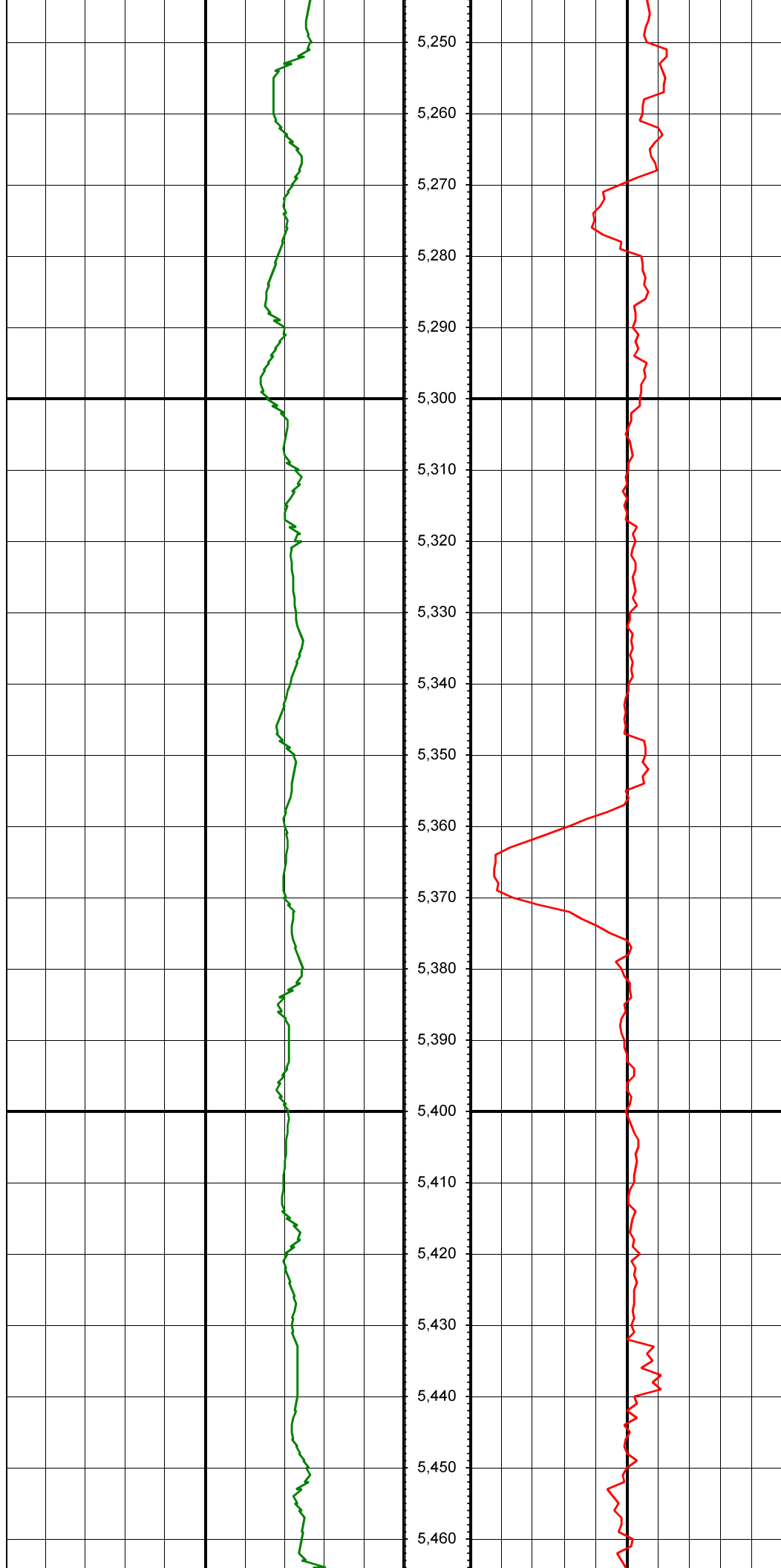
Serial Number	Gamma Offset	Resist. Offset	Start Time	Start Depth	End Time	End Depth
116	49.66	0	9/15/2014 1:43:06 AM	850	9/18/2014 1:43:06 AM	7896
2012	40.38	0	9/20/2014 1:43:47 AM	7896	9/23/2014 1:43:47 AM	14535

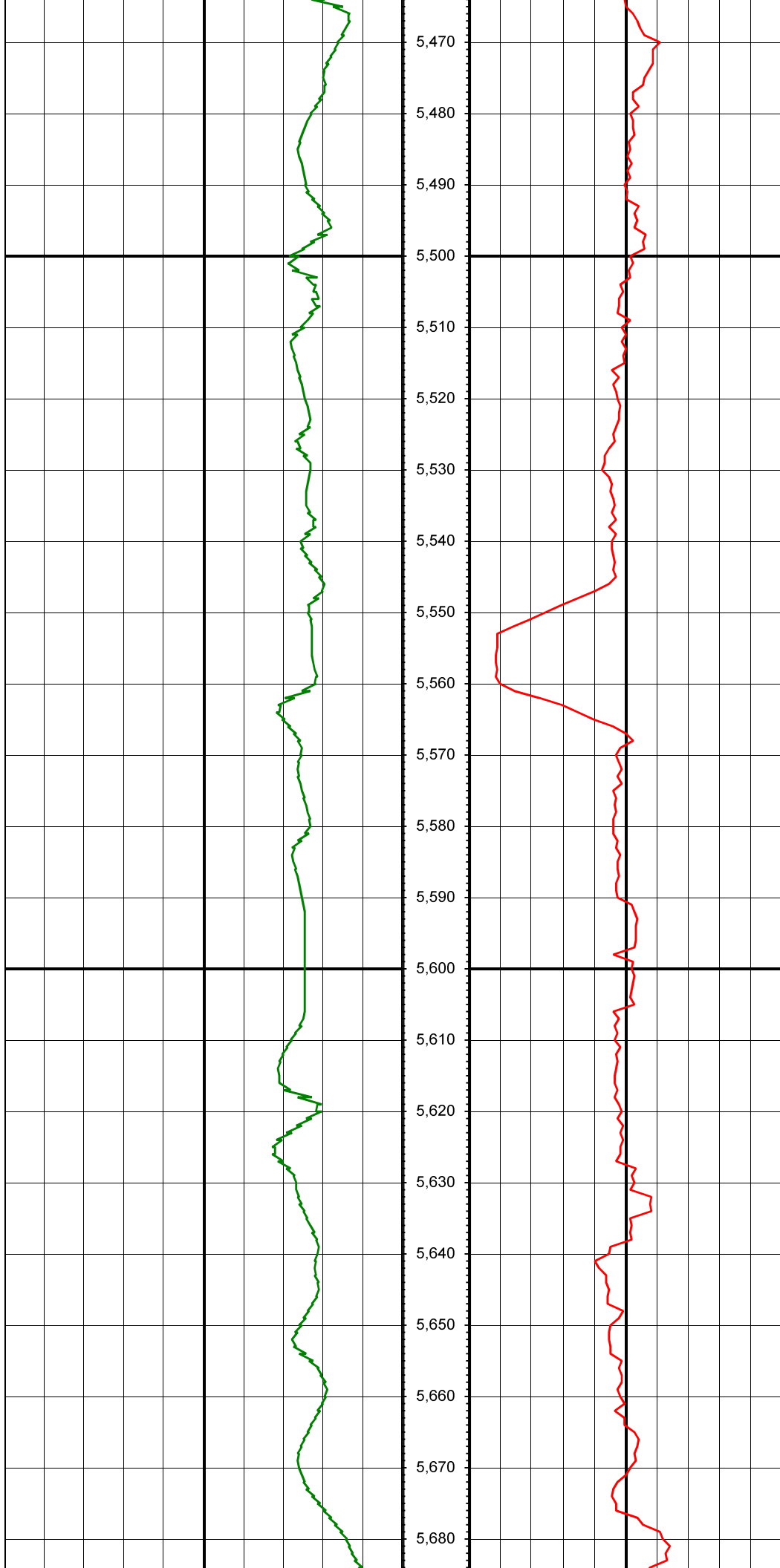
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost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

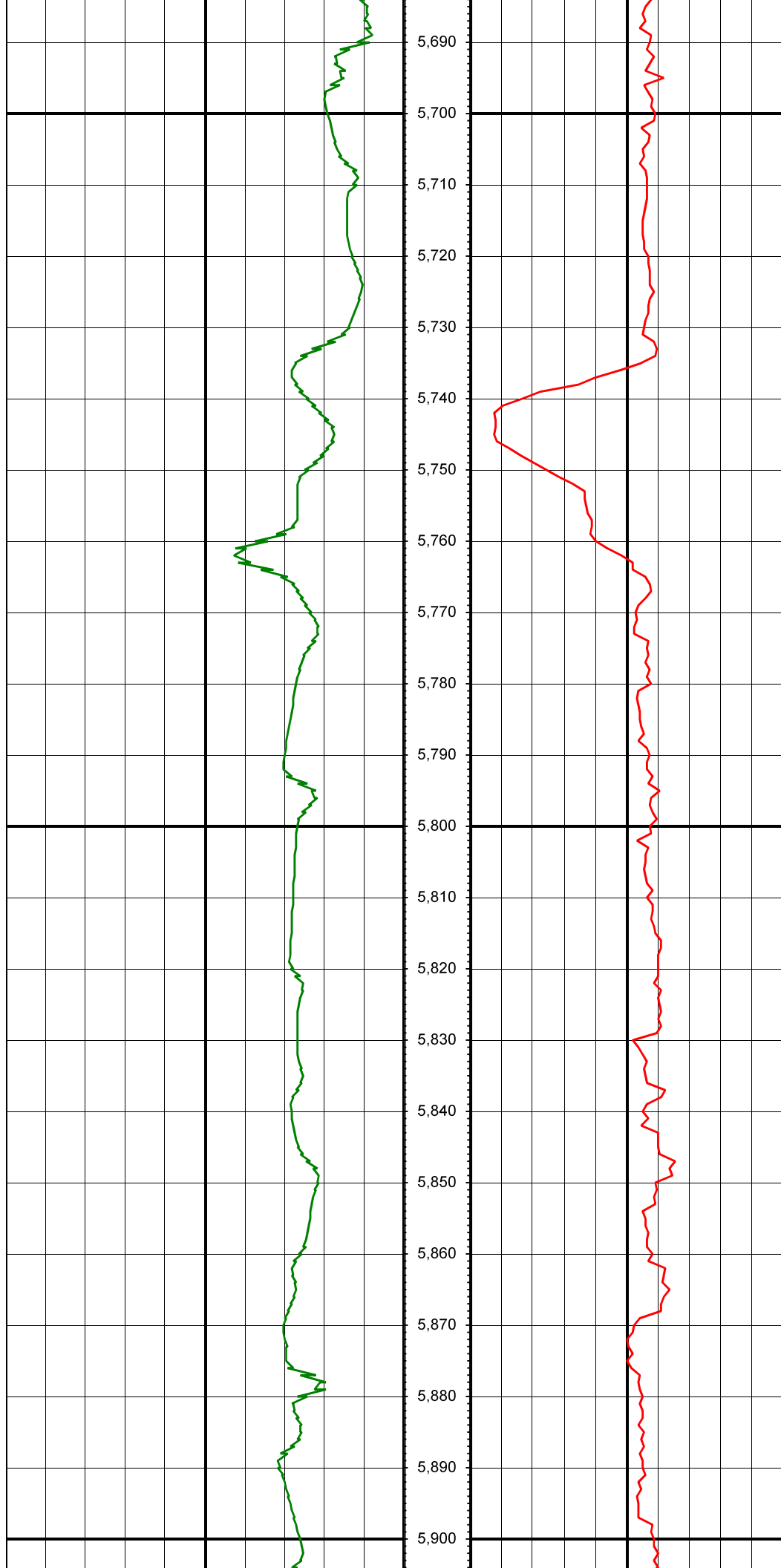
0.00 Gamma Ray (API) 150.00 MD 0.00 ROP (FT/HR) 600.00 Surveys (MD/INC/AZ)
150.00 2 300.00 FT

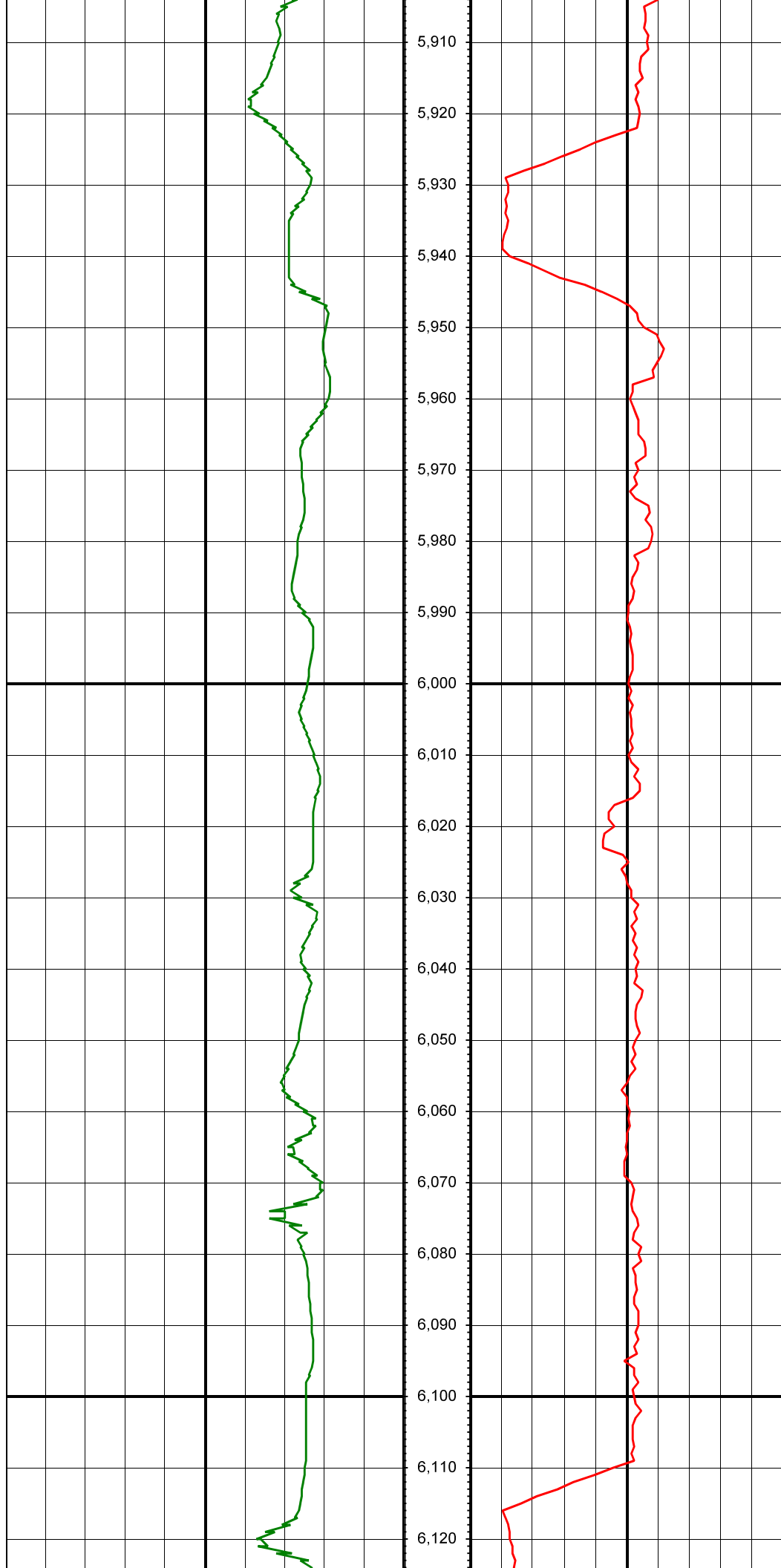


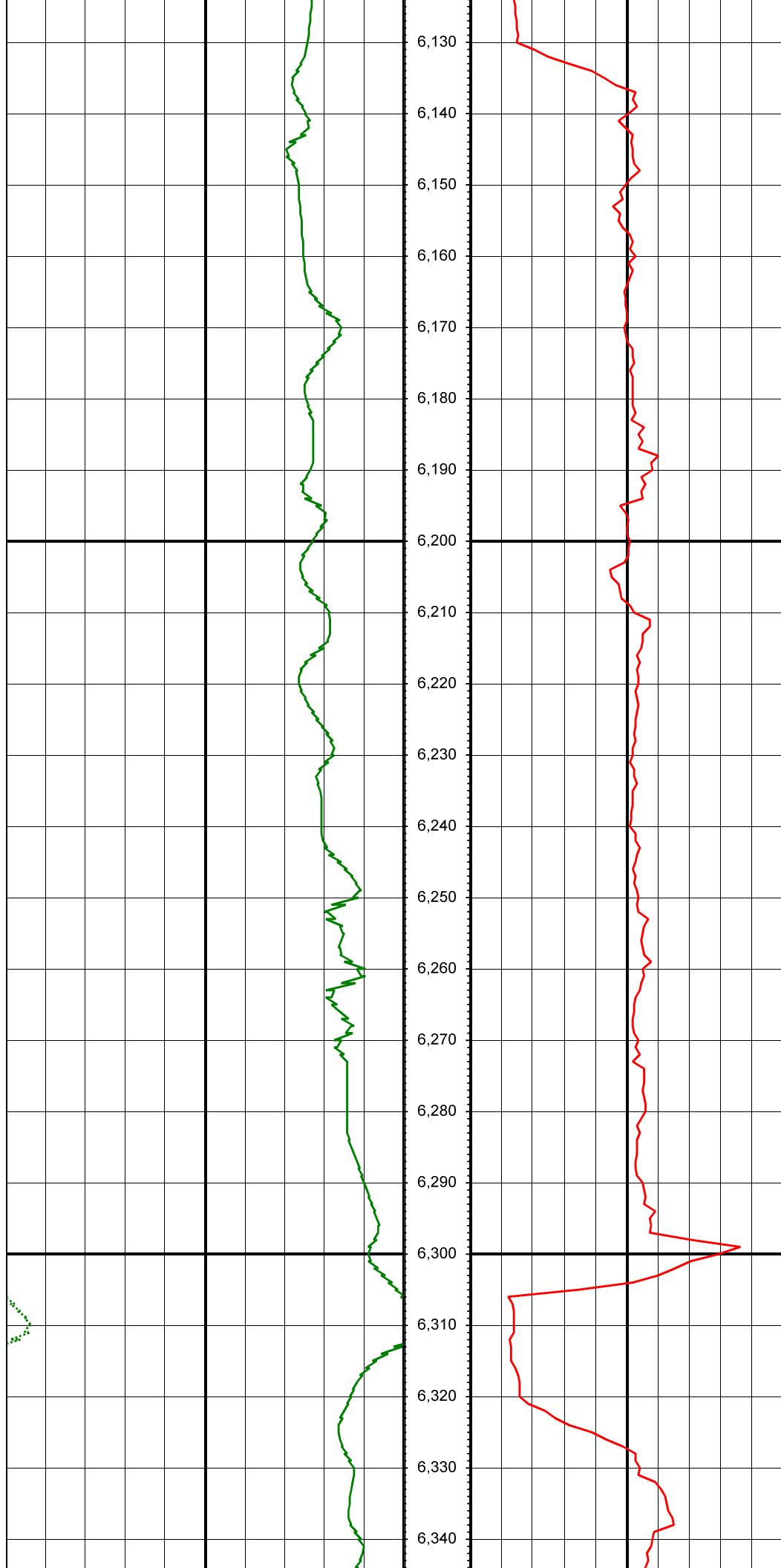


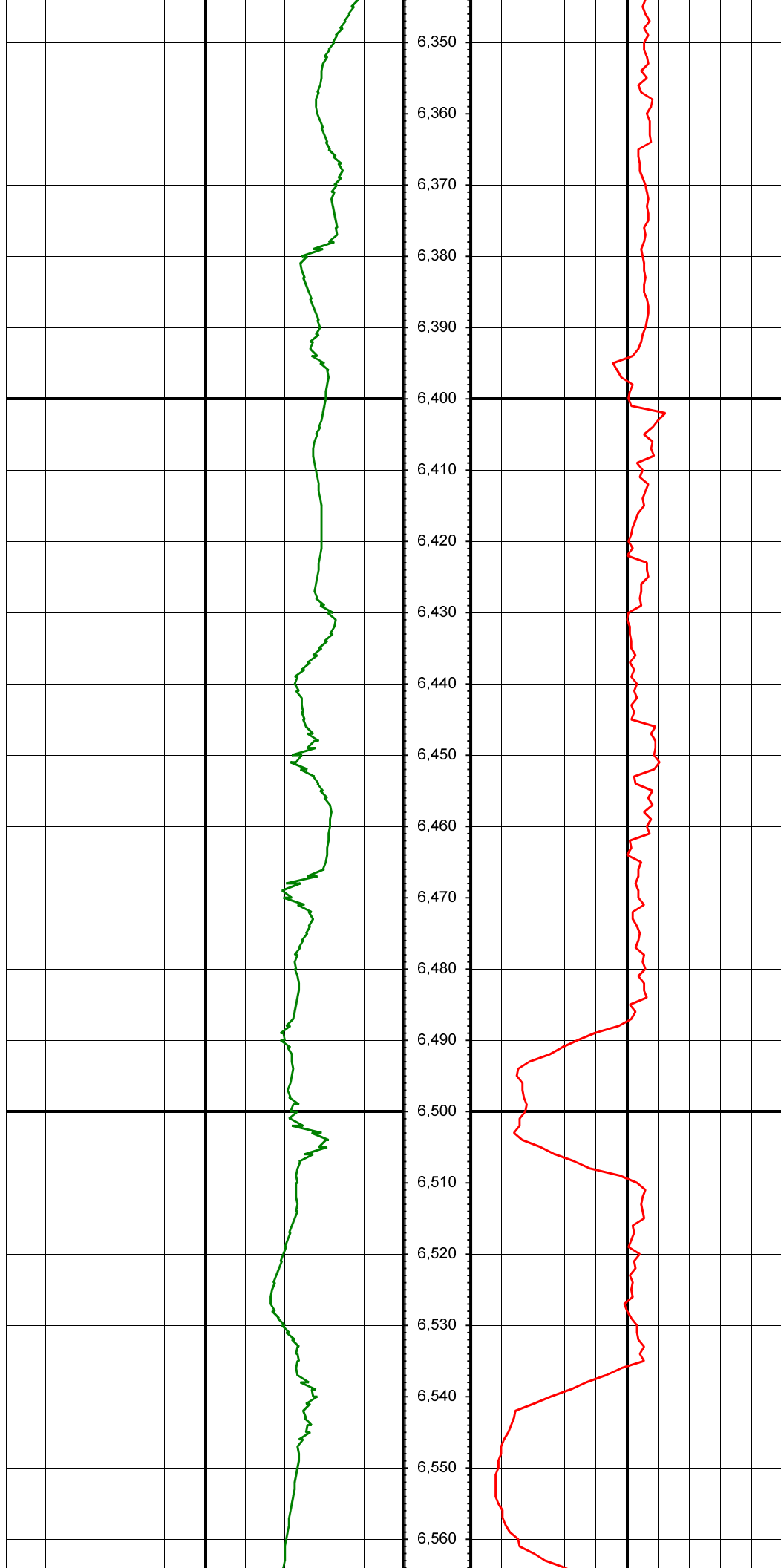




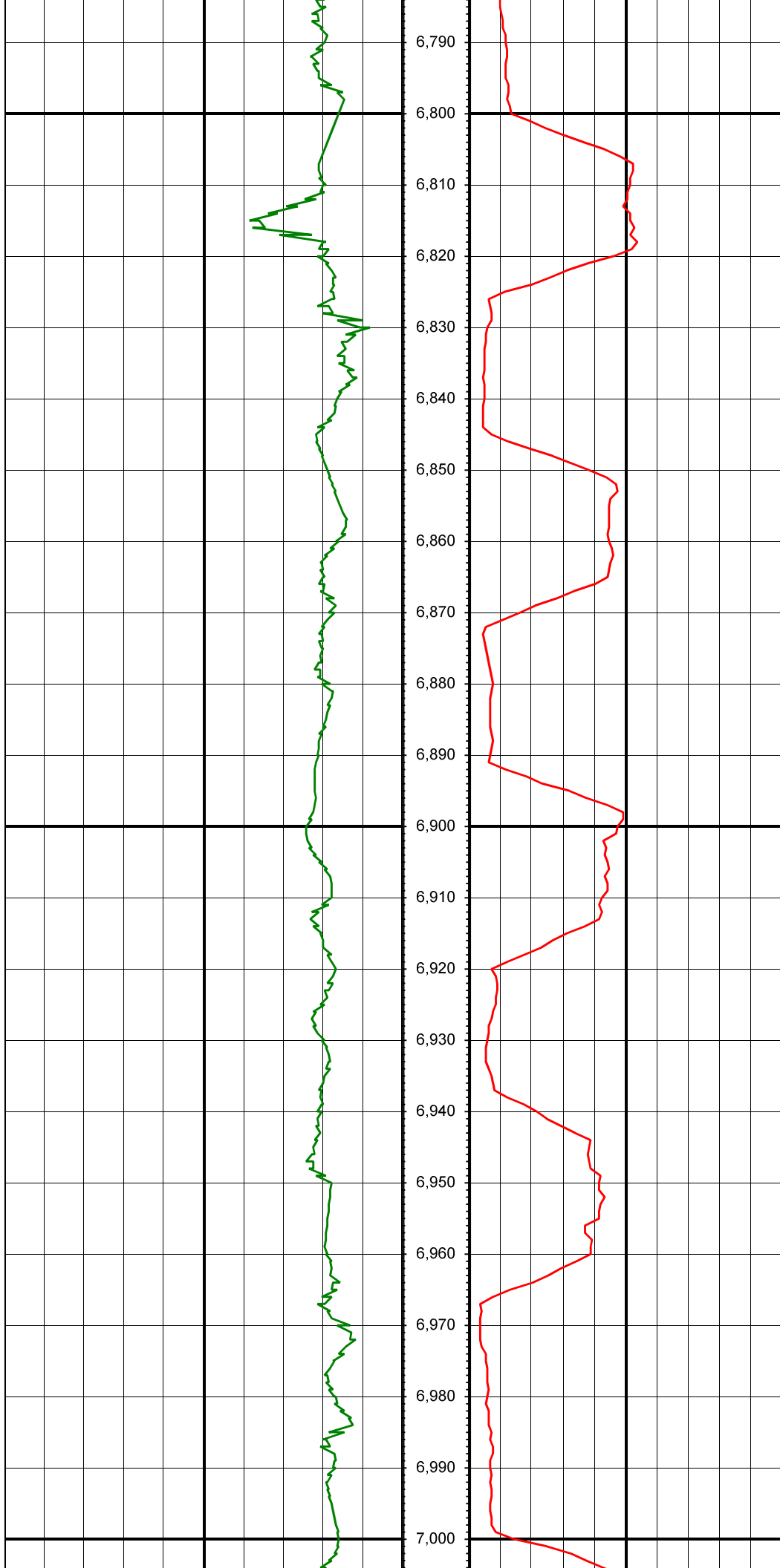


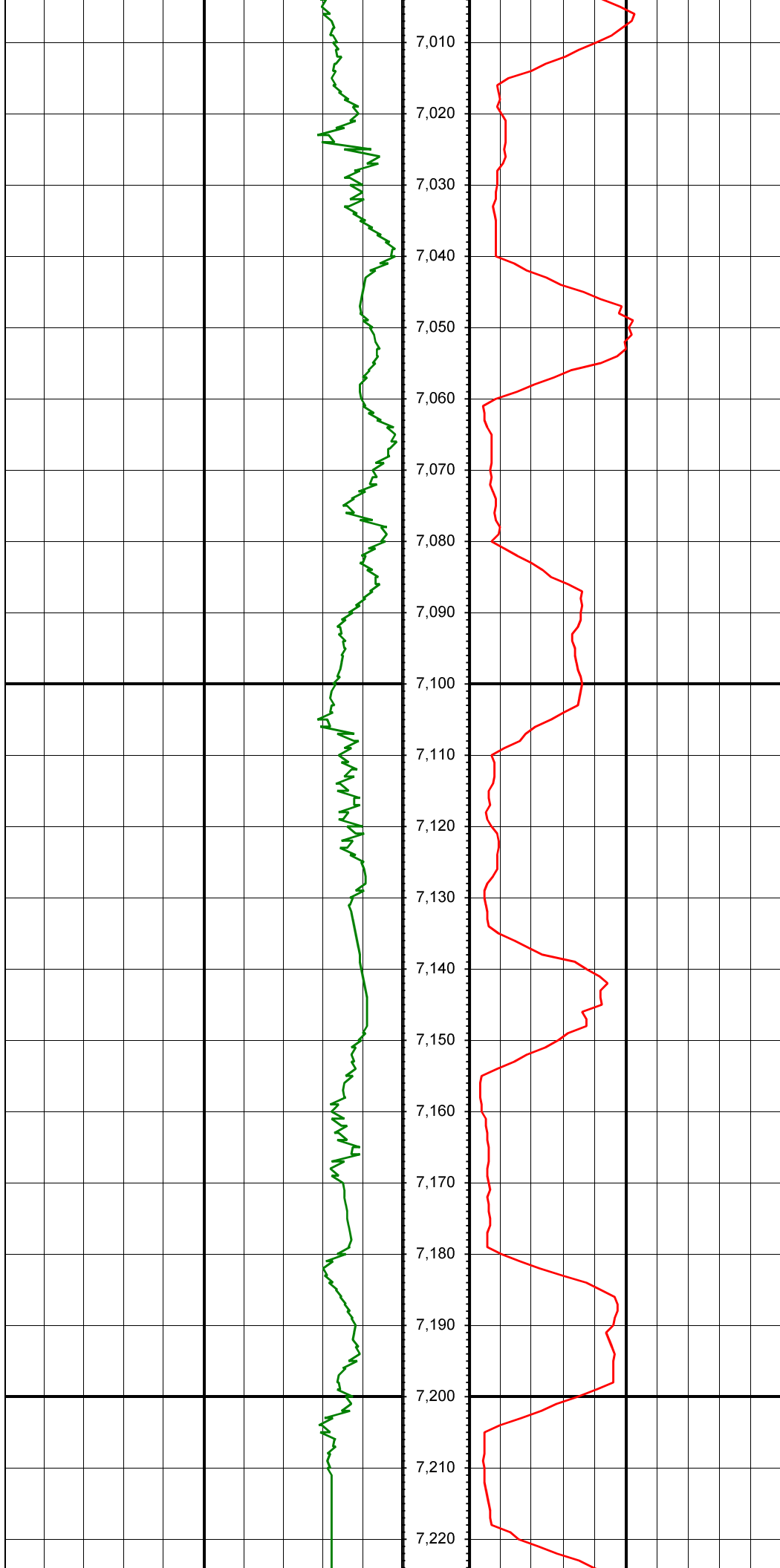


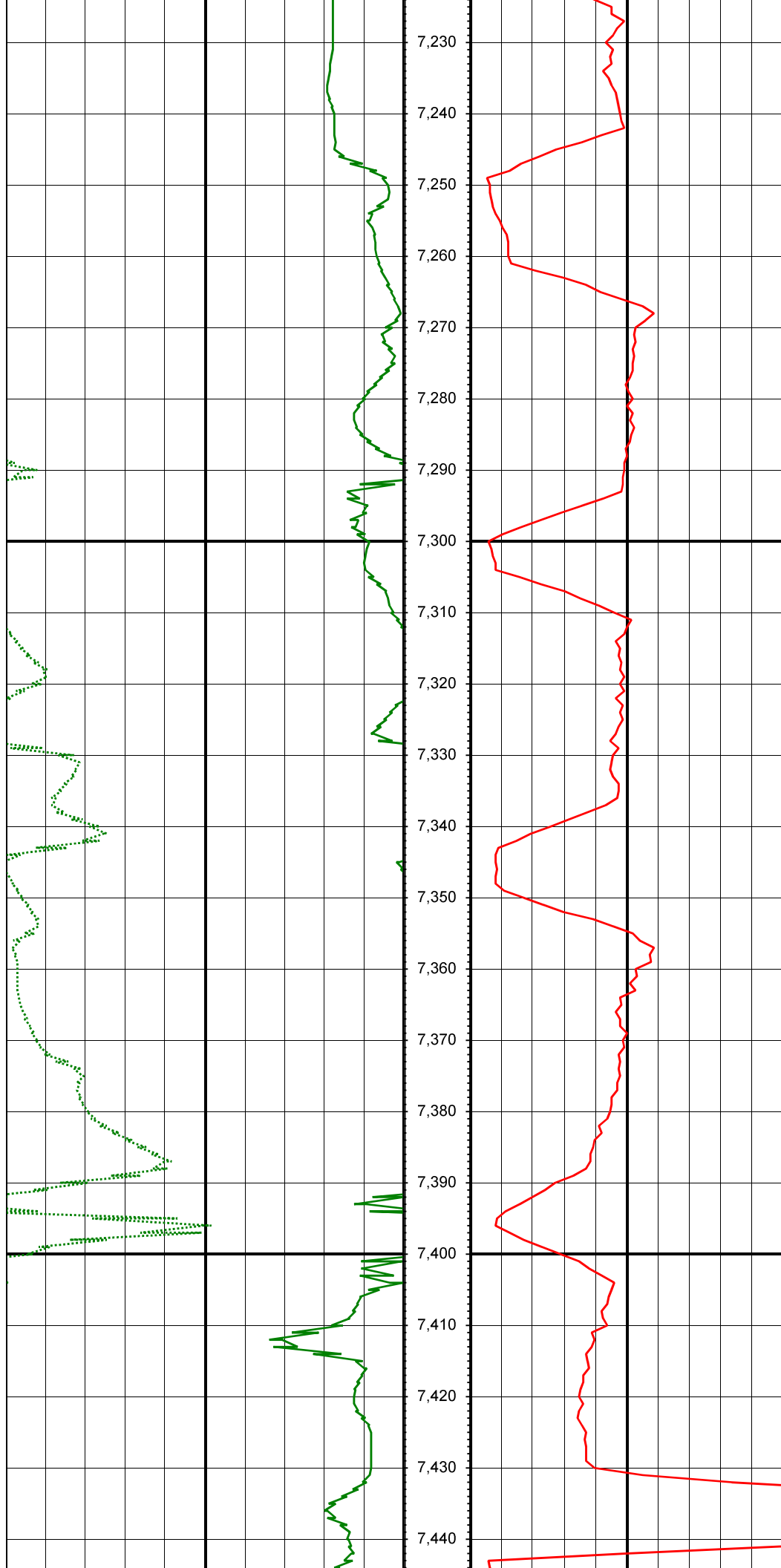


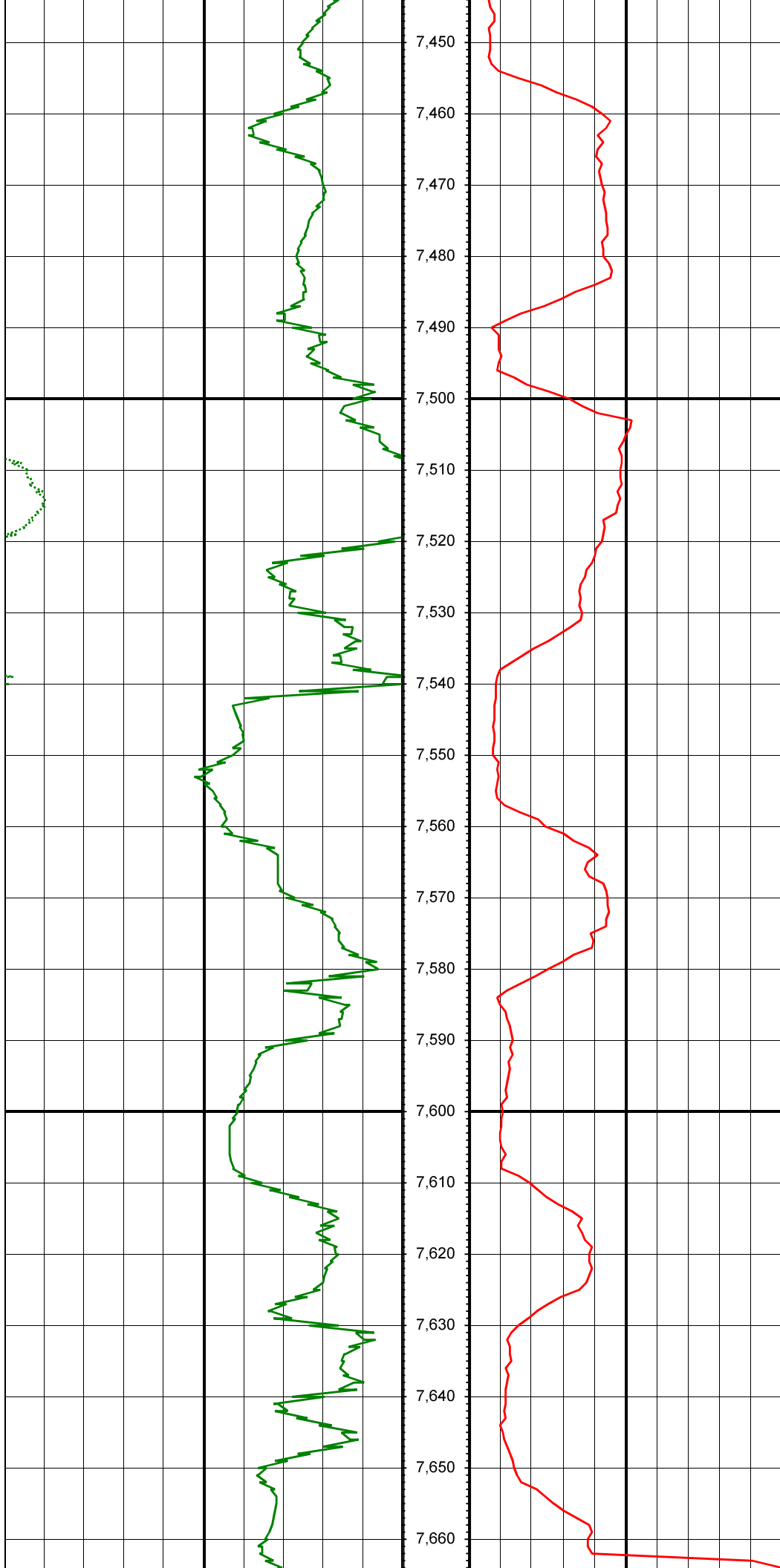


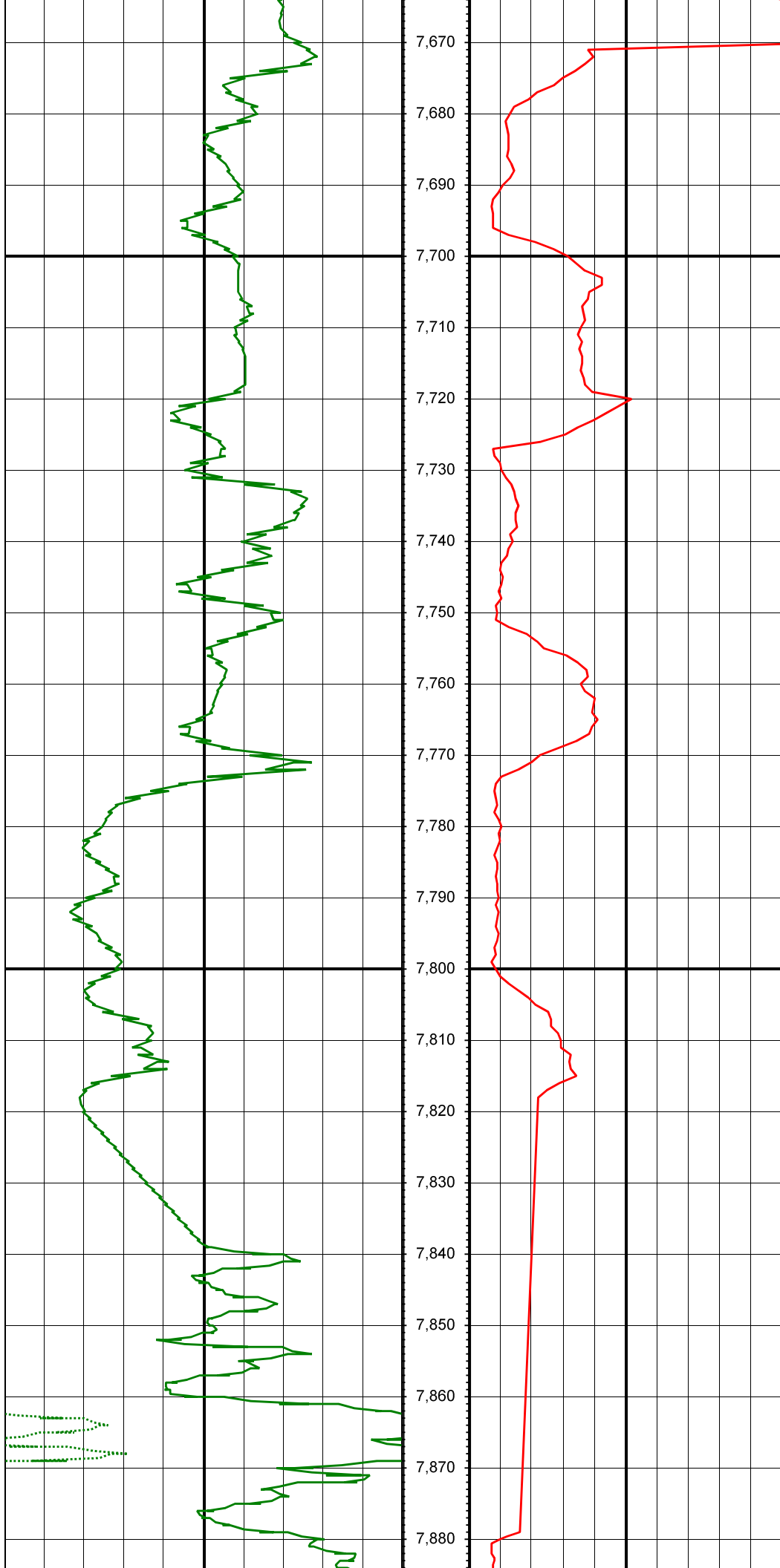




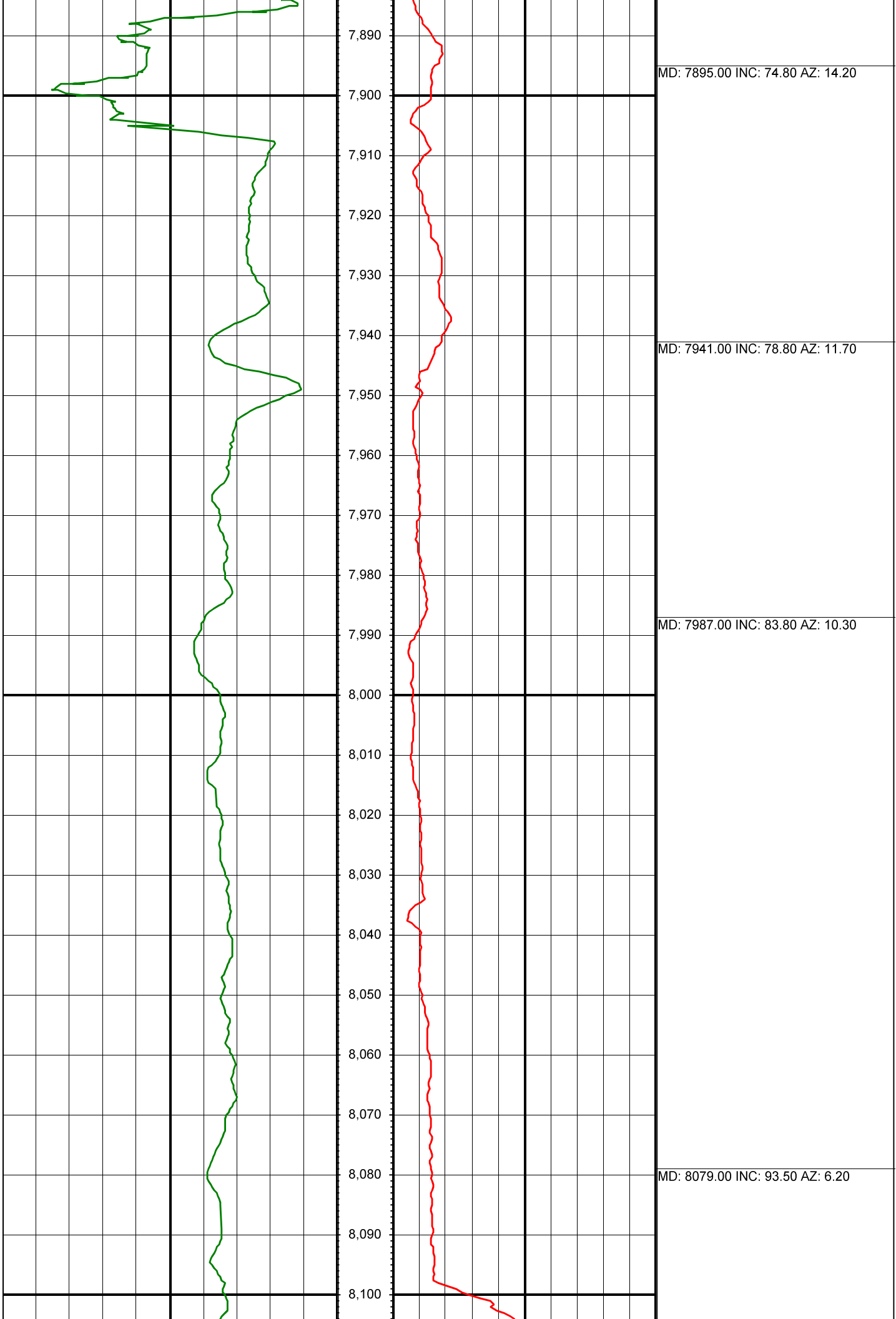


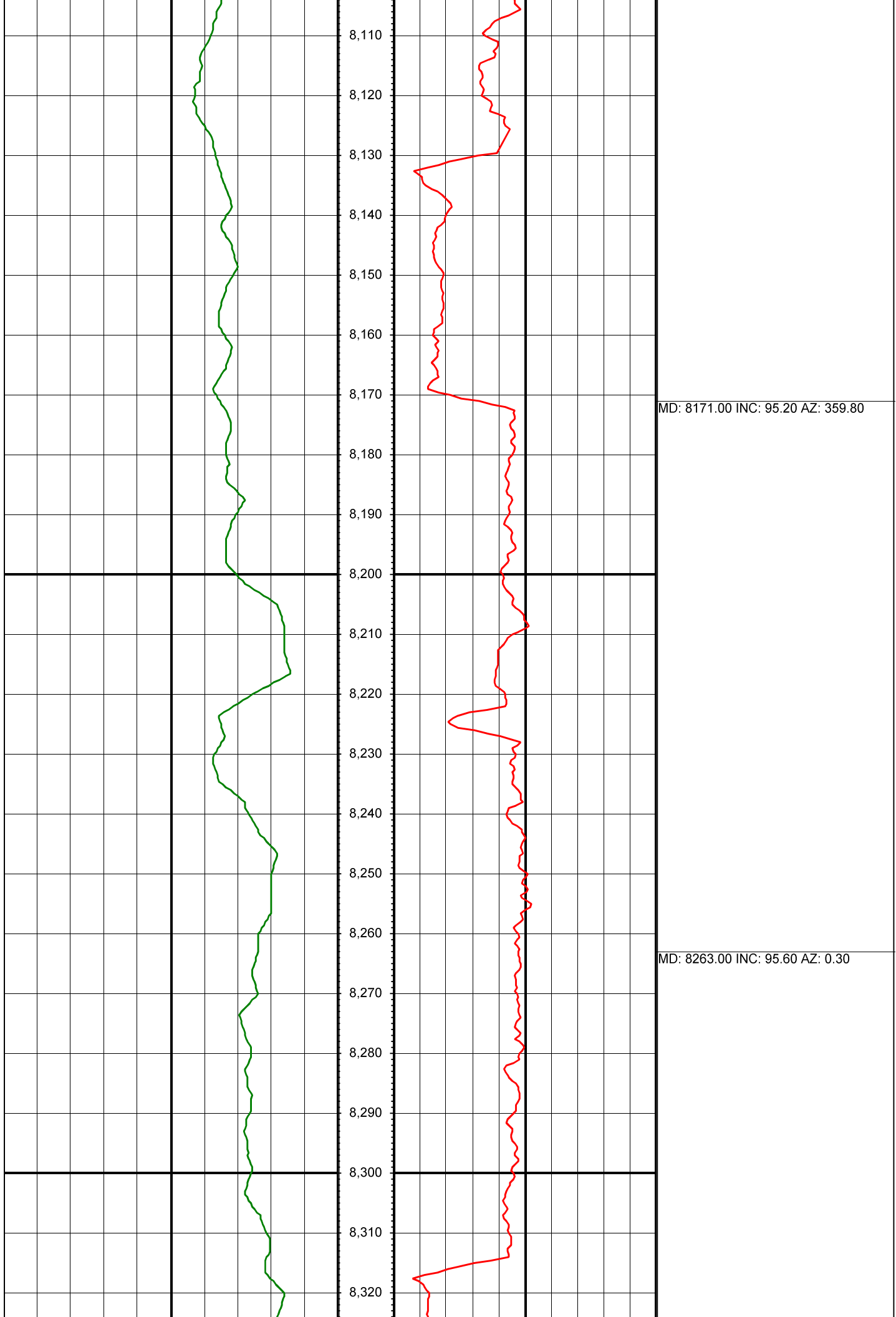


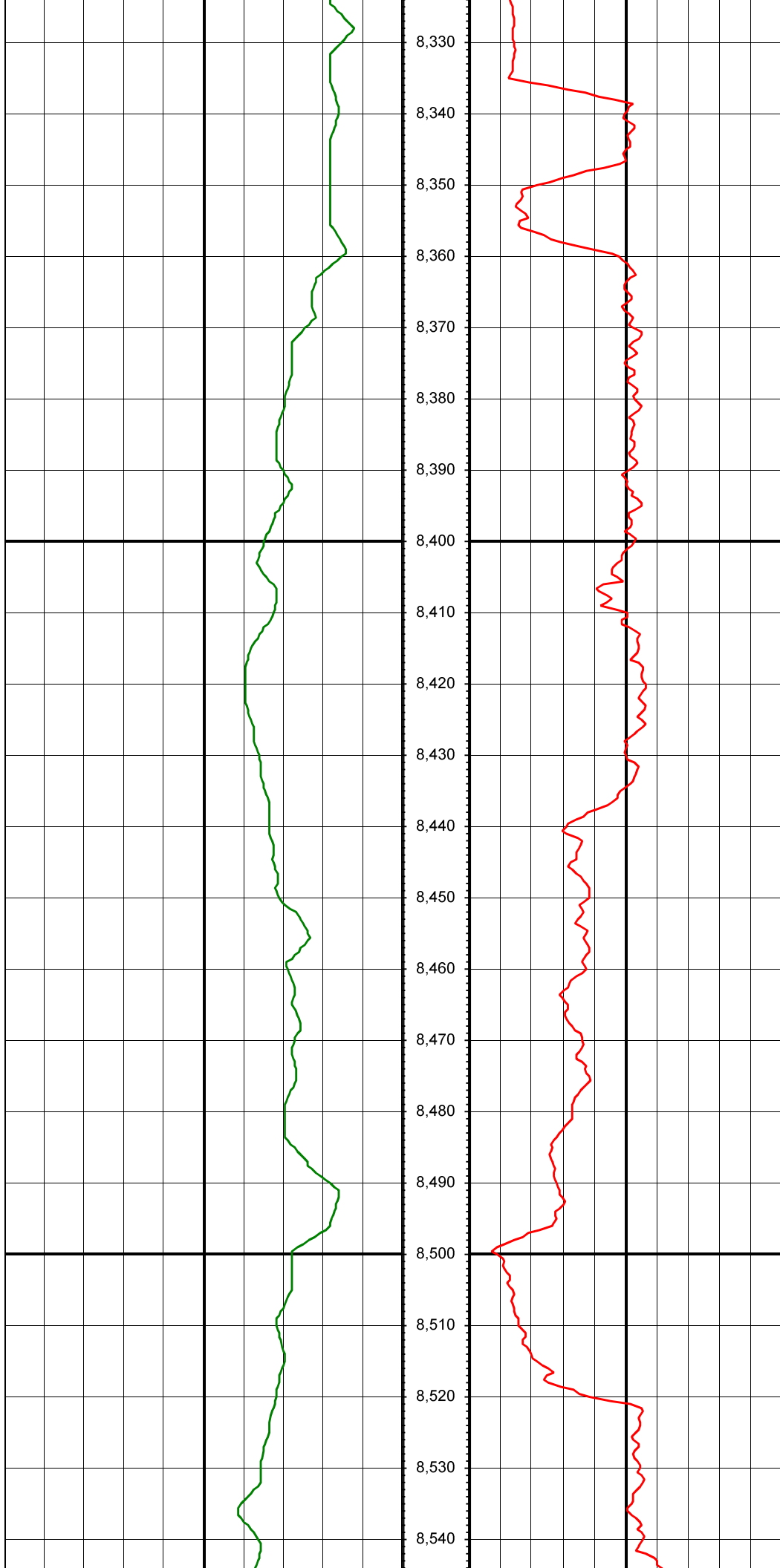




MD: 7750.00 INC: 65.73 AZ: 6.92







MD: 8355.00 INC: 94.20 AZ: 358.70

MD: 8447.00 INC: 94.20 AZ: 358.90

MD: 8539.00 INC: 92.80 AZ: 357.90

