



Titan Directional Services, Inc.
20302 Park Row, Suite 1200
Katy, TX 77449

Ptasnik 4-30-9-59
Scale 5":100' - MD
5/11/2015 3:42 AM

Oper. Company: Carrizo Oil & Gas, Inc.
Well: Ptasnik 4-30-9-59
Field: Niobrara CONZ'83
Rig: Xtreme 19
Well ID: 05-123-41243-00
Job Number: TL15016

State: Colorado
County: Weld
Country: USA
Location: Keota
Start Date: 05/07/2015 10:30:00
End Date: 05/11/2015 03:30:00

Latitude: 40.7151916666667
Longitude: -104.028888888889

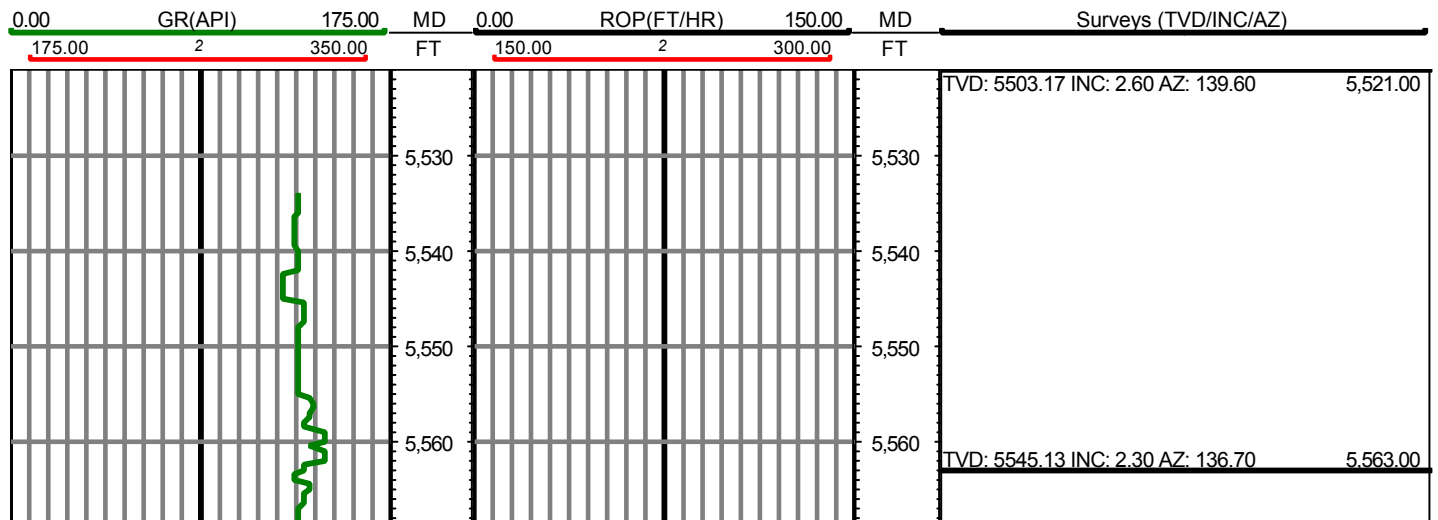
Elev KB: 17'
Elev DF: 4934'
Elev GL: 4917'

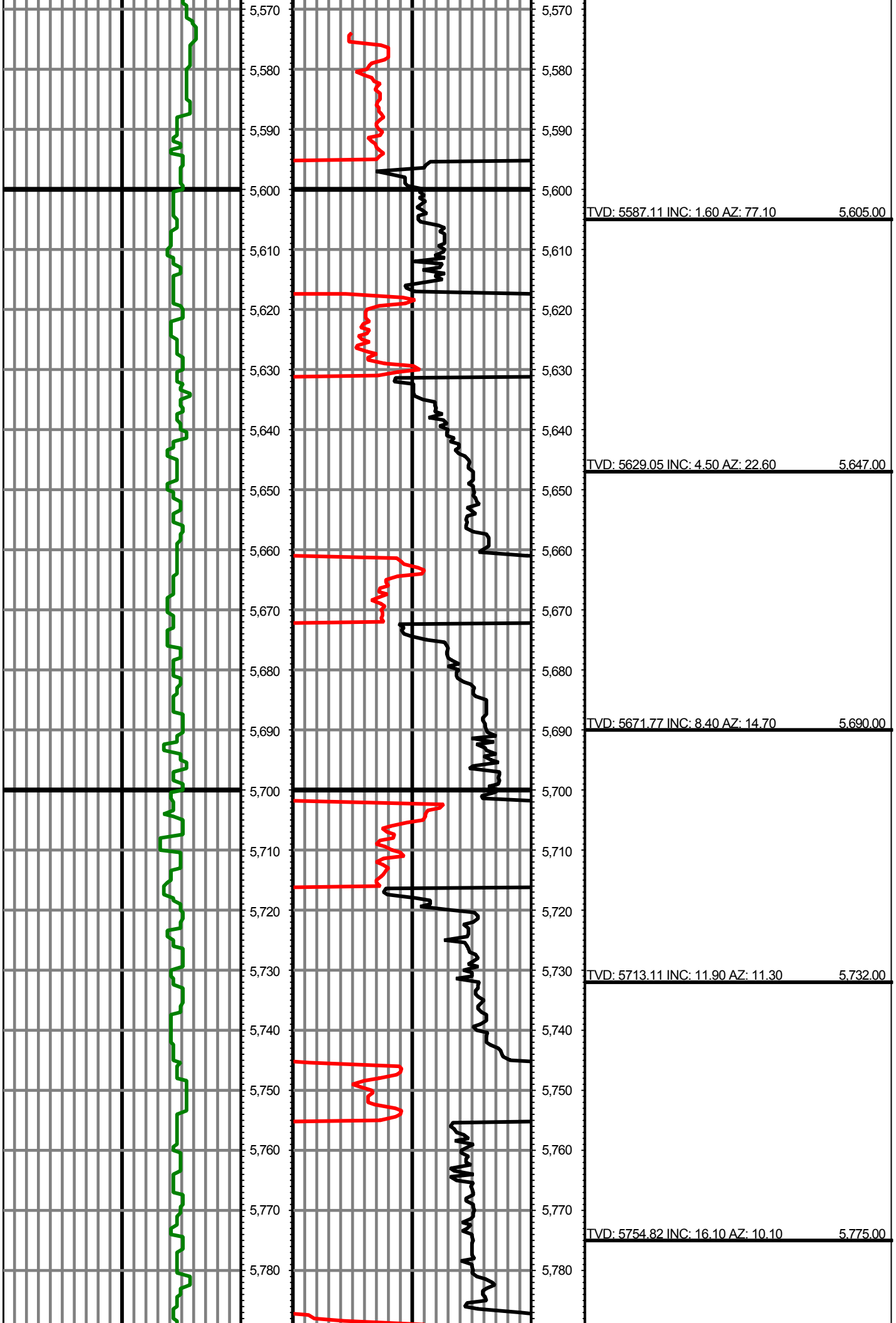
Operator 1: Paul Brown

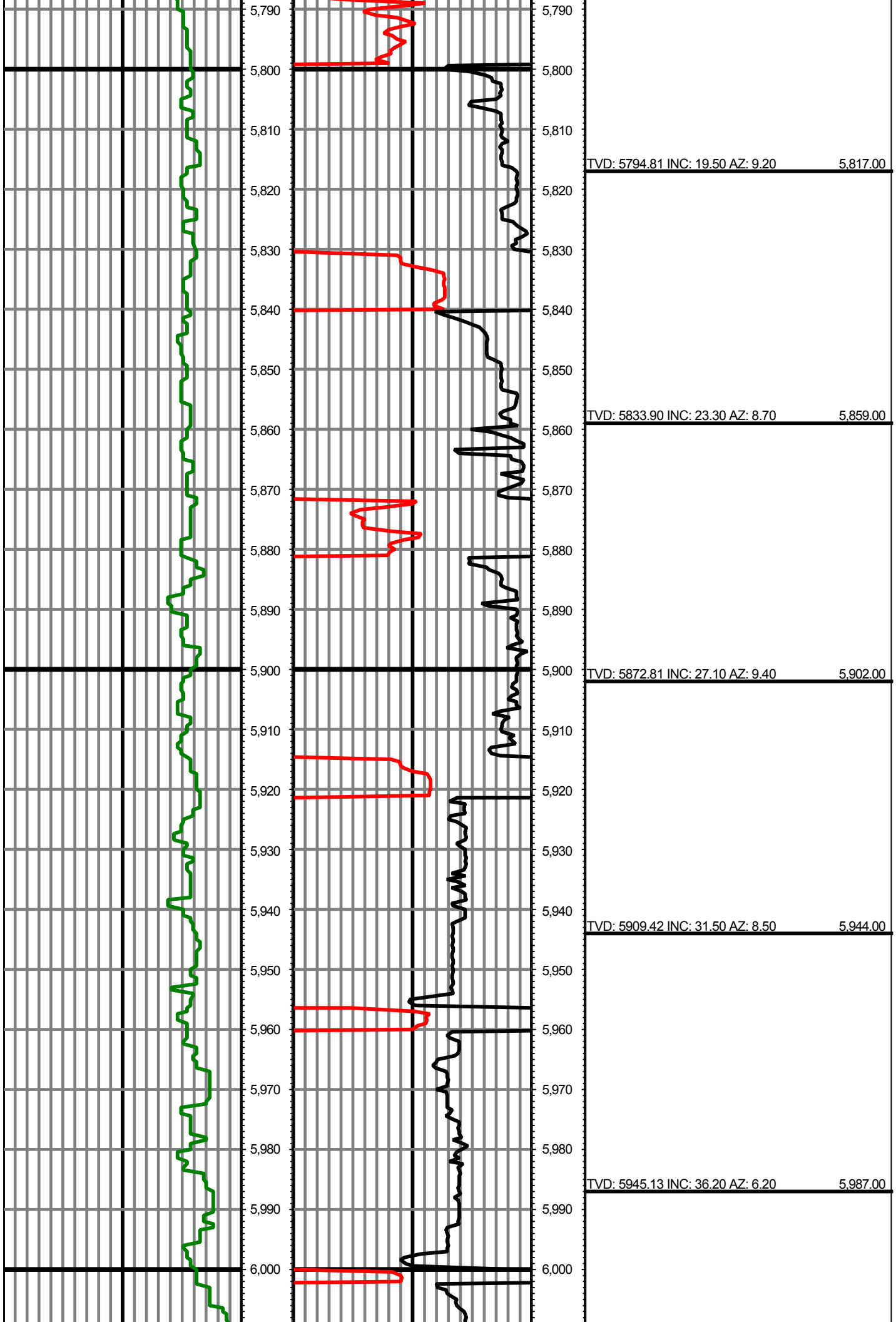
Operator 2: Skylar Thompson

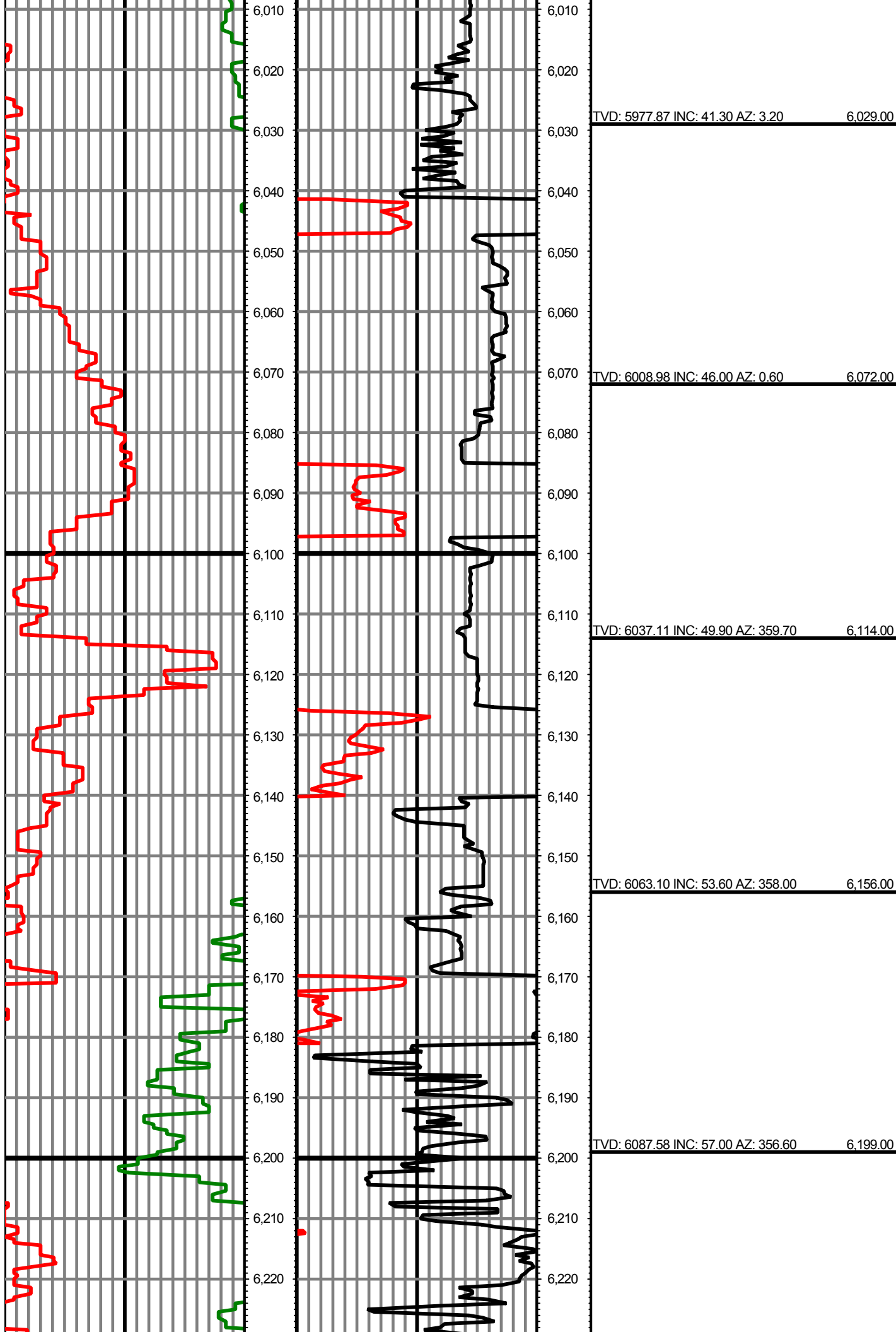
Tool Run Data	Run #1	Run #2	Run #3	Run #4	Run #5
Tool S/N	N/A	N/A	TG507	TG507	
Bit Size	12 1/4	8 3/4	8 3/4	6 1/8	
Cal Factor	0	0	4.74	2.28	
Survey Offset:	56.00	49.00	51.00	51.00	
Gamma Offset	0.00	0.00	40.00	40.00	
Resistivity Offset	0.00	0.00	0.00	0.00	
Start Depth	0.00	1670.00	5573.00	6361.00	
StartDate	5/4/2015	5/6/2015	5/7/2015	5/9/2015	
StartTime	20:15	06:00	07:00	00:10	
EndDepth	1670.00	5573.00	6361.00	10931.00	
EndDate	5/5/2015	5/7/2015	5/8/2015	5/11/2015	
EndTime	10:45	06:20	03:00	03:30	
Mud Type	WBM	WBM	WBM	WBM	
Temperature	75	131	141	190	
Hole Data			Casing Data		
Size	From	To	Size	From	To
12 1/4	0.00	1670.00	9 5/8	0.00	1650.00
8 3/4	1670.00	6361.00	7	0.00	6341.00
6 1/8	6361.00	10931.00	4.5	0.00	10931.00

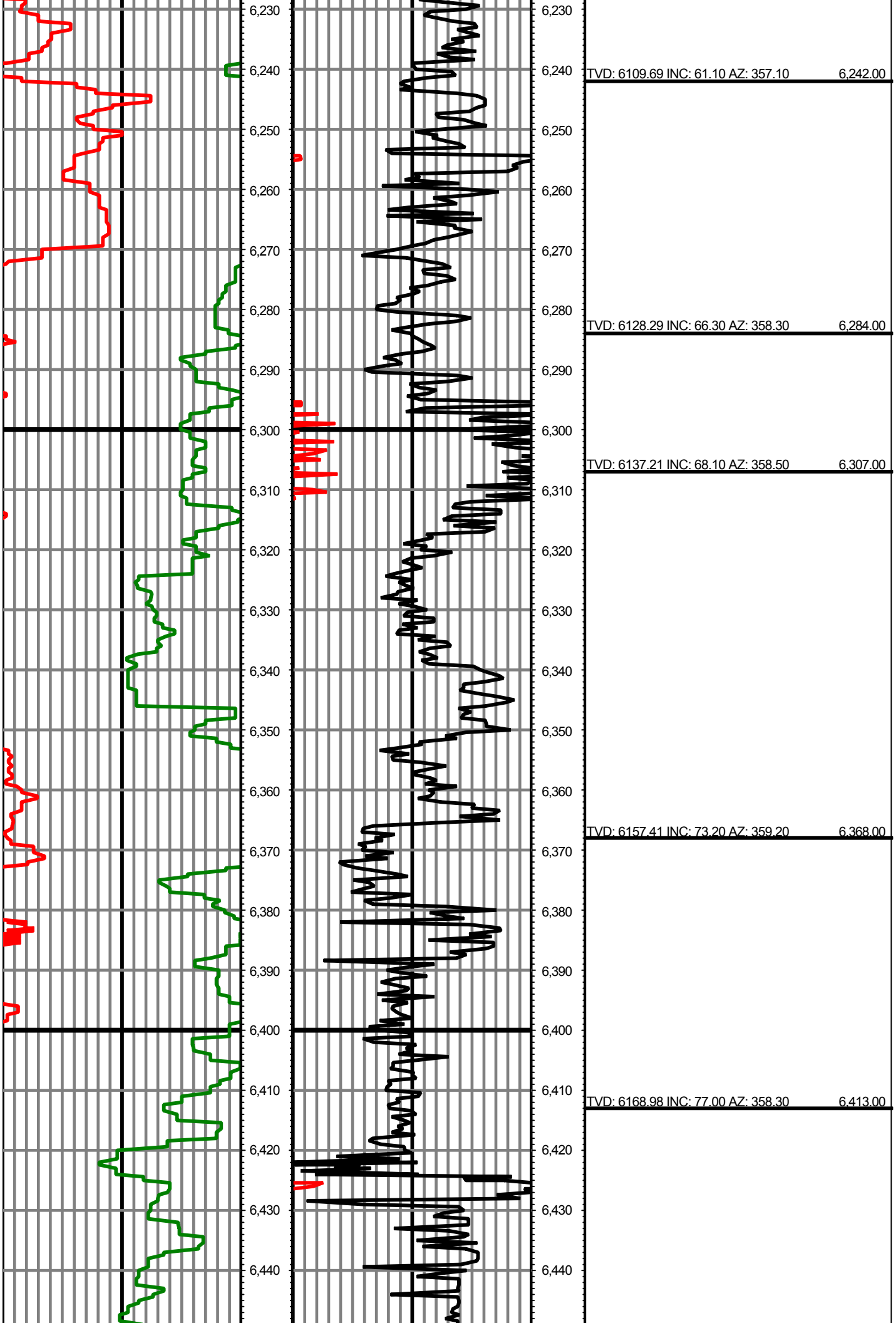
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost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

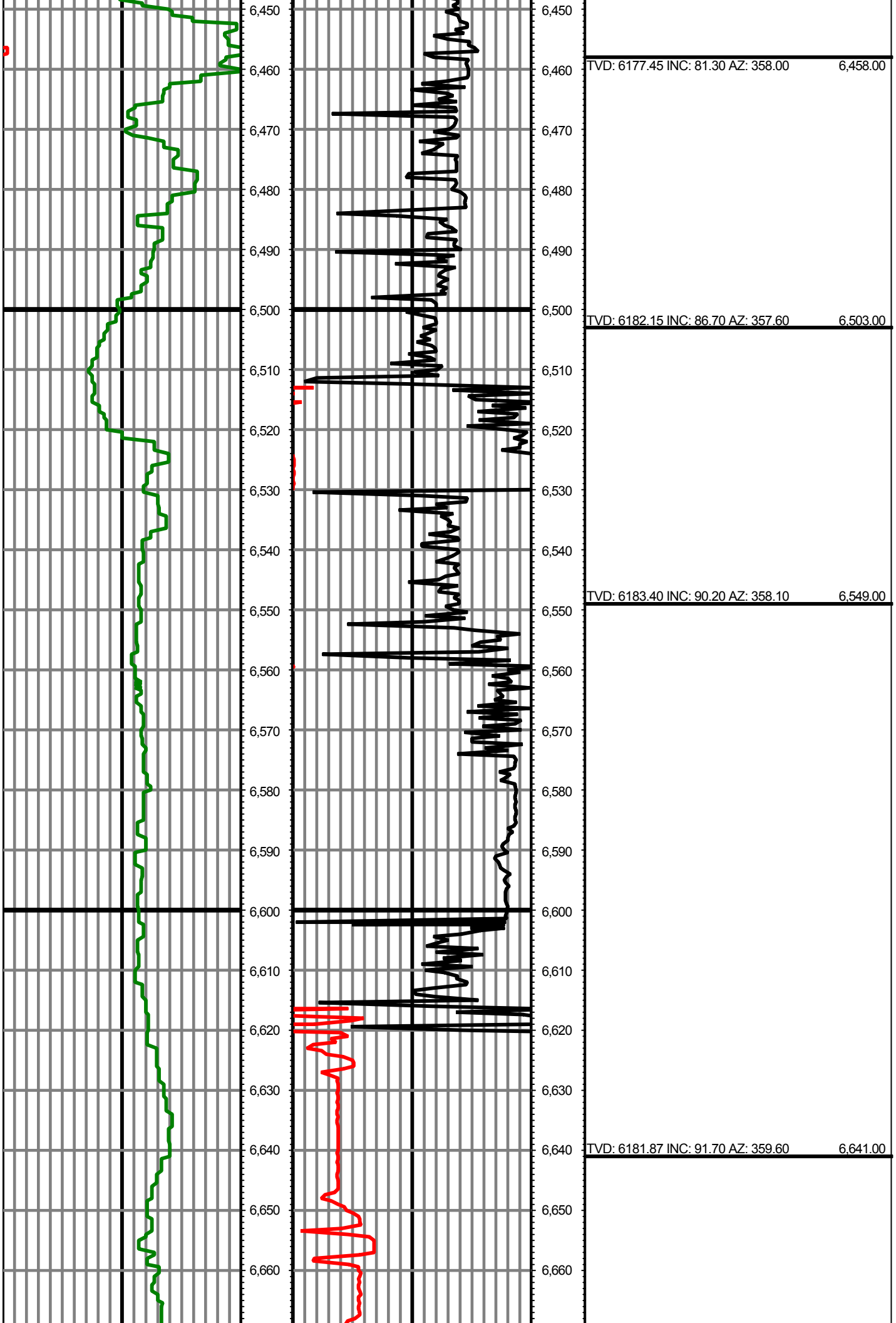


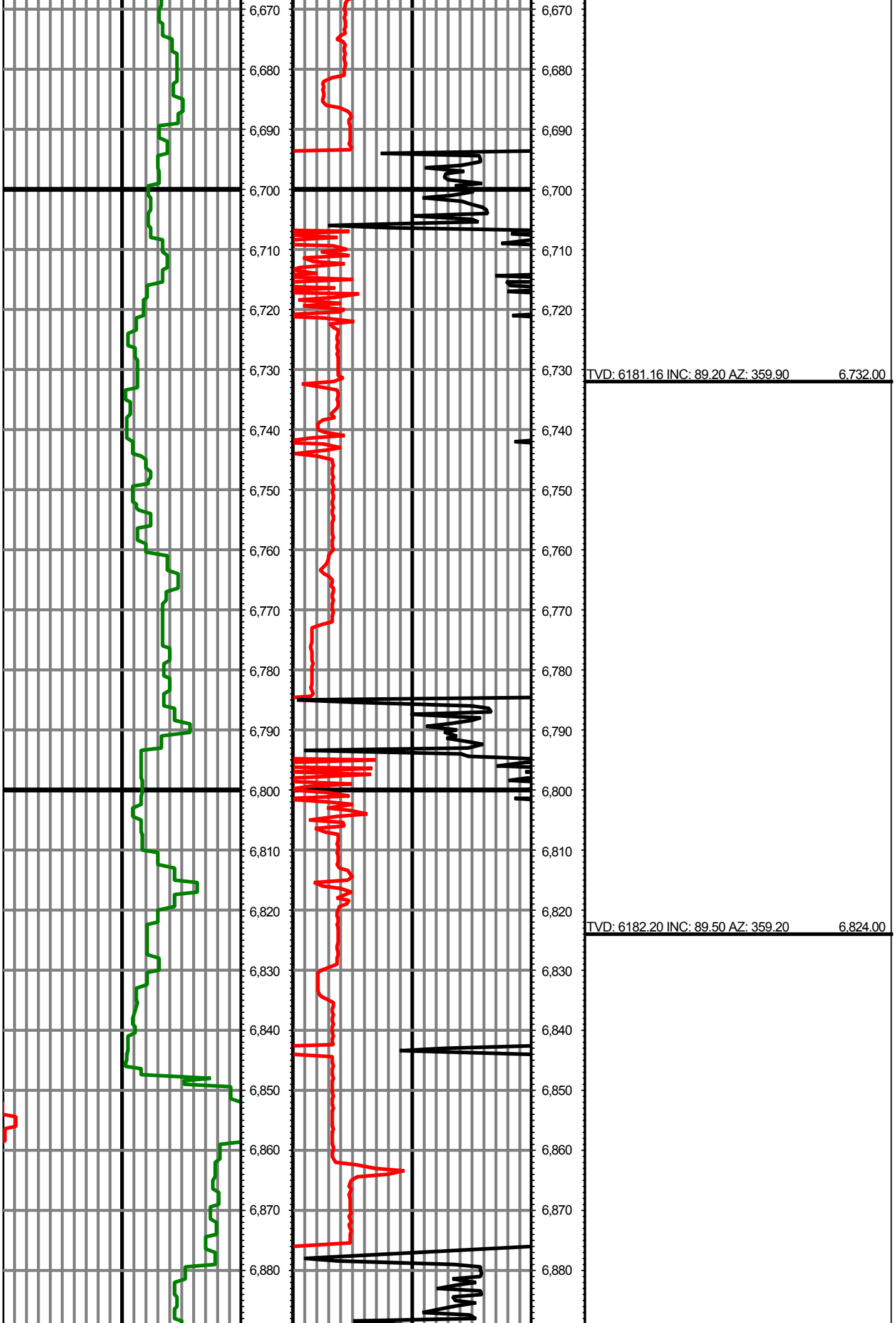


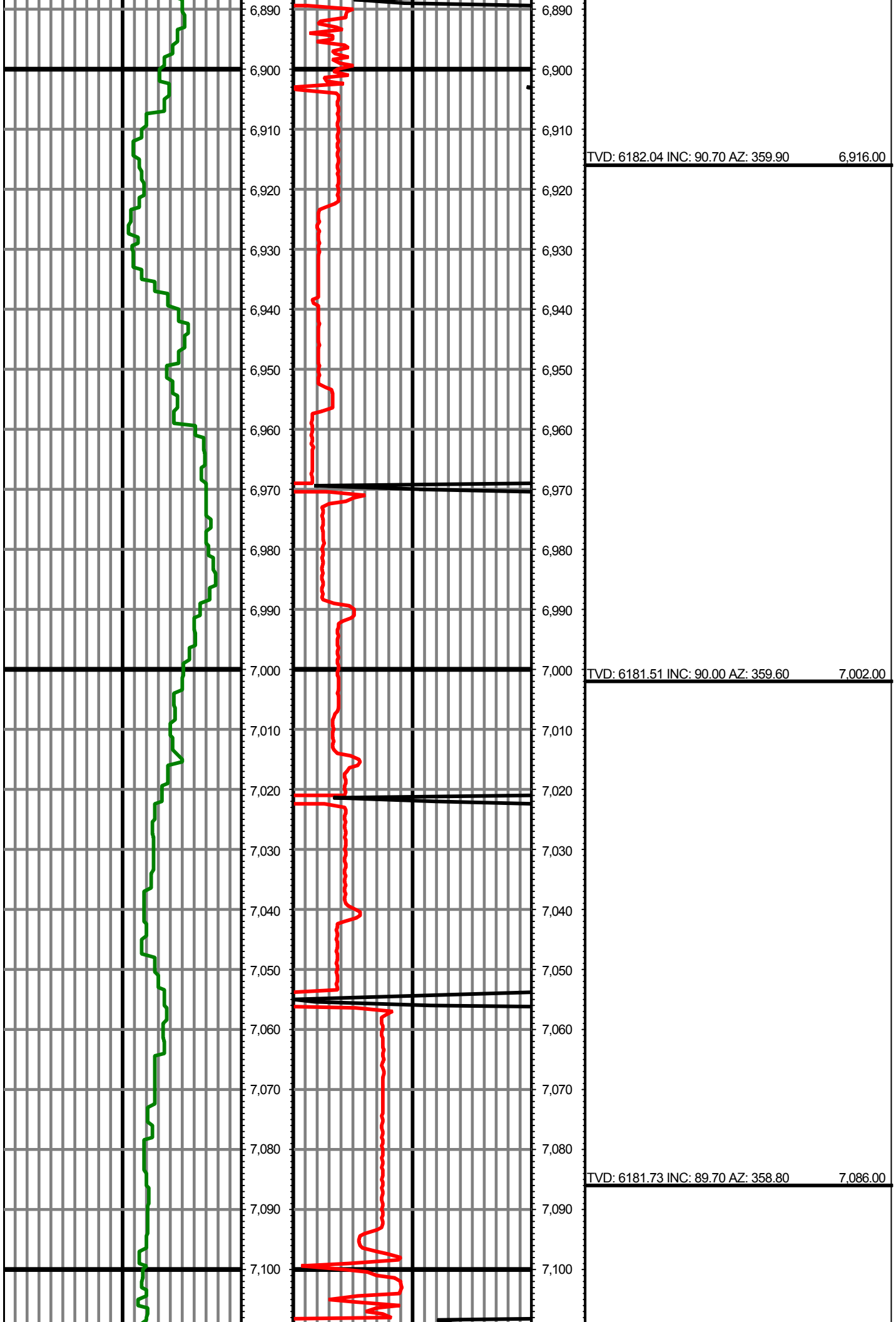


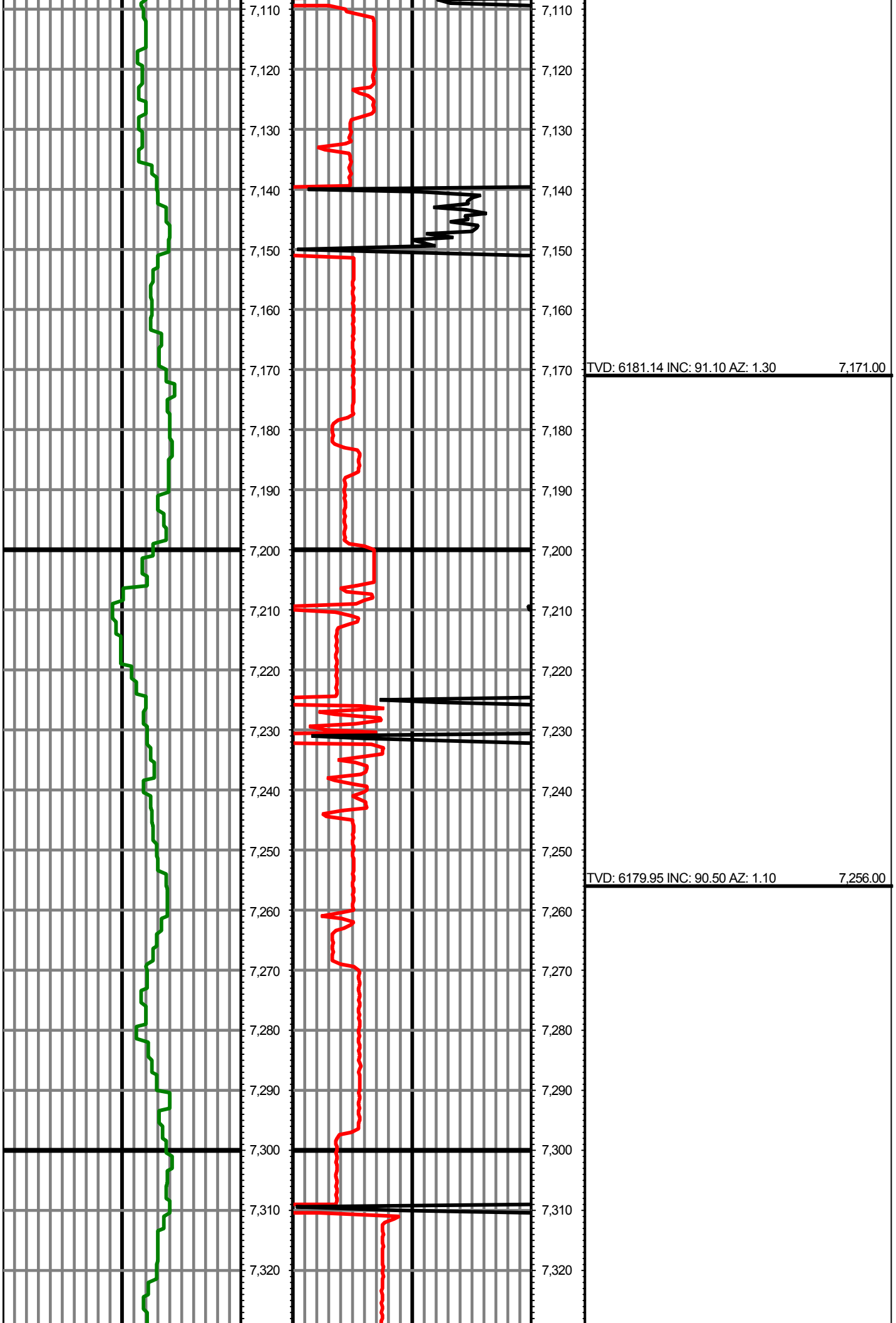


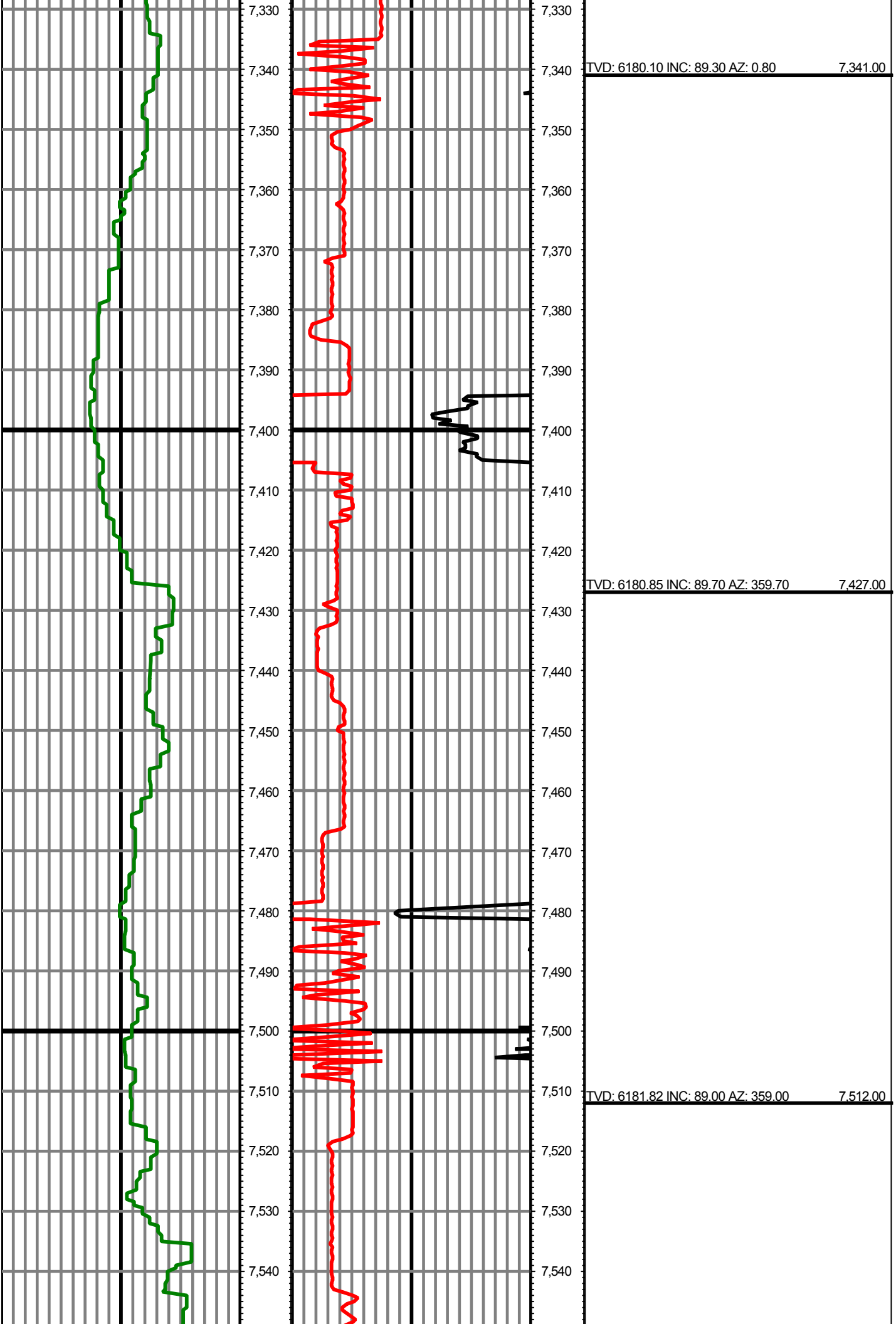


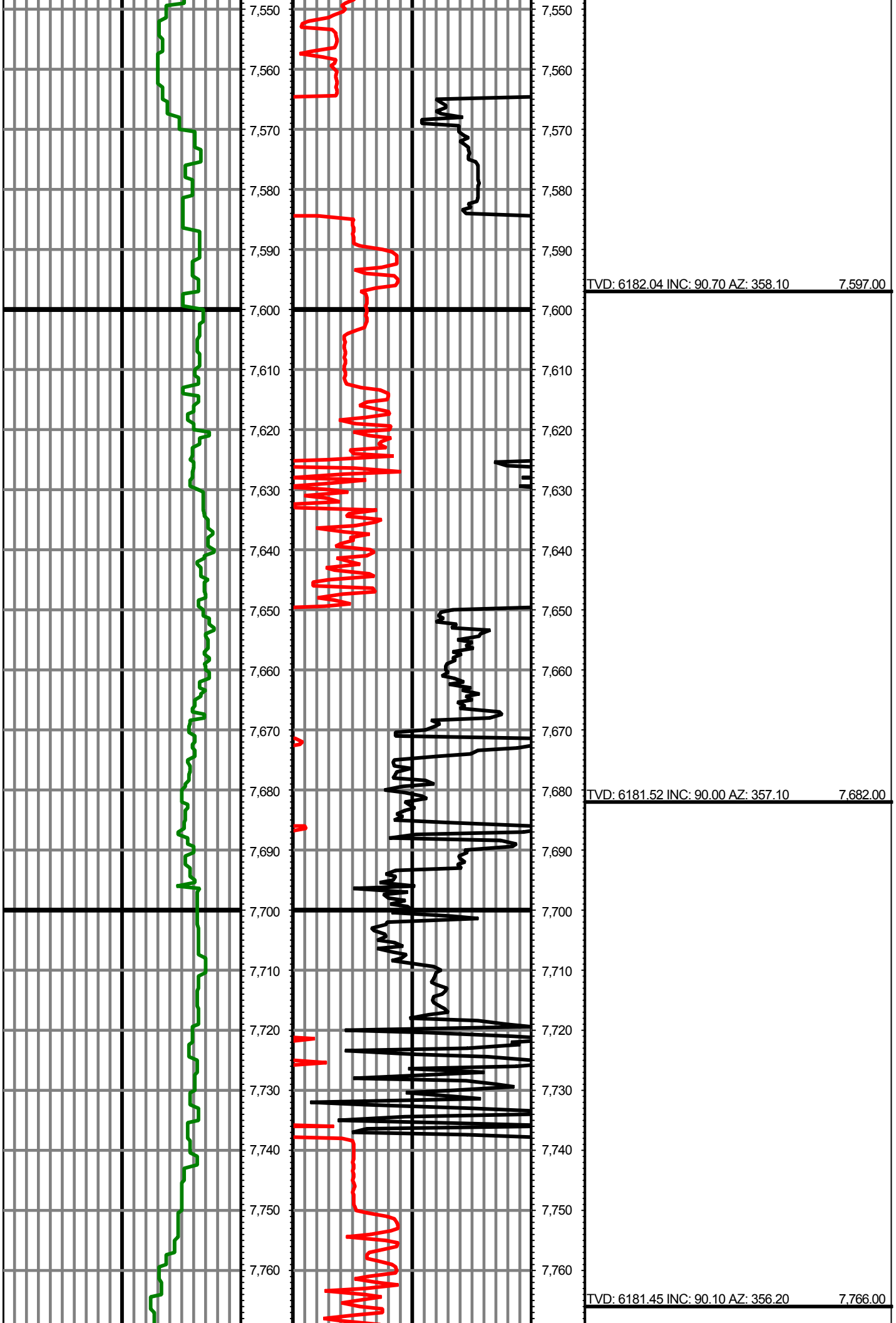


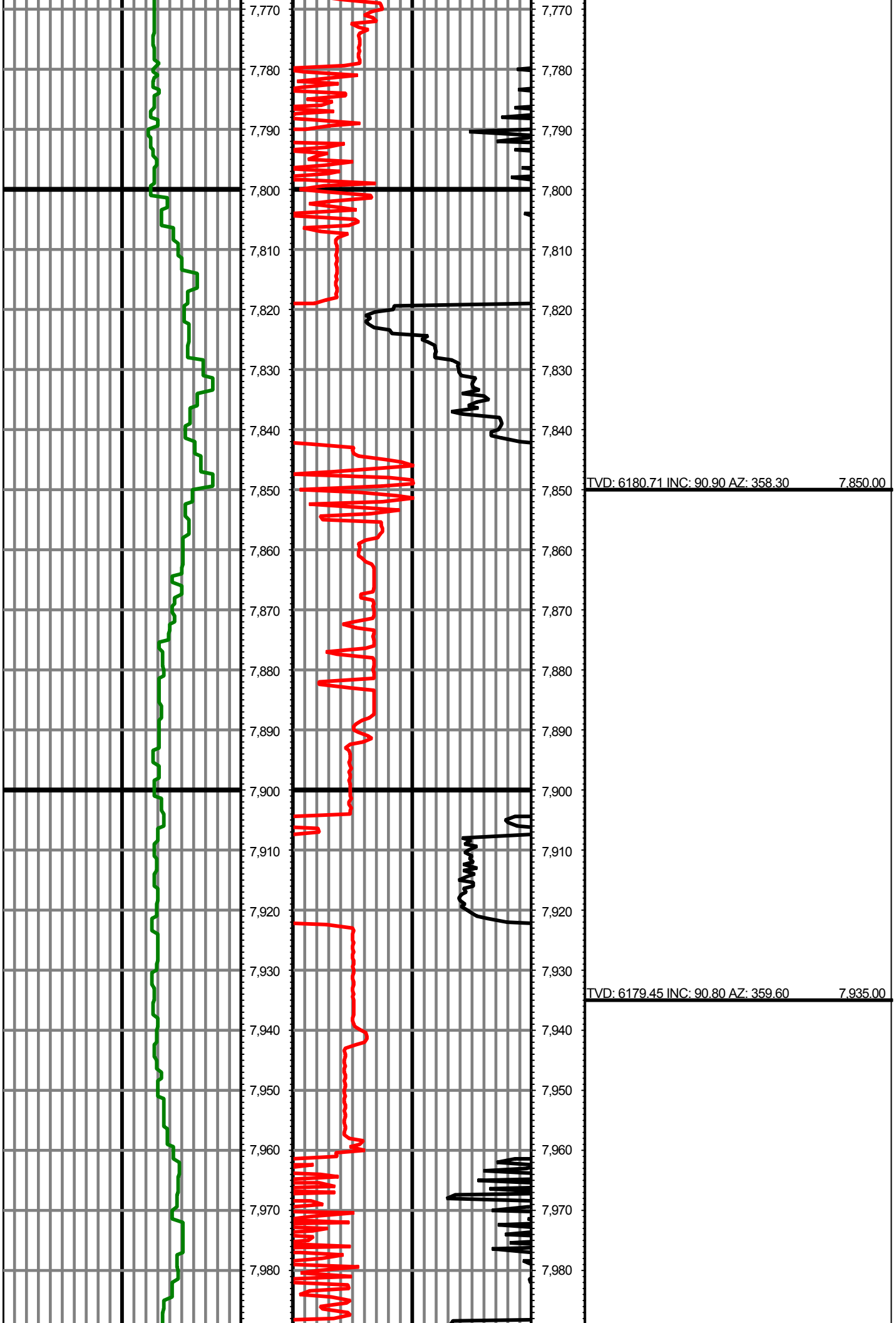


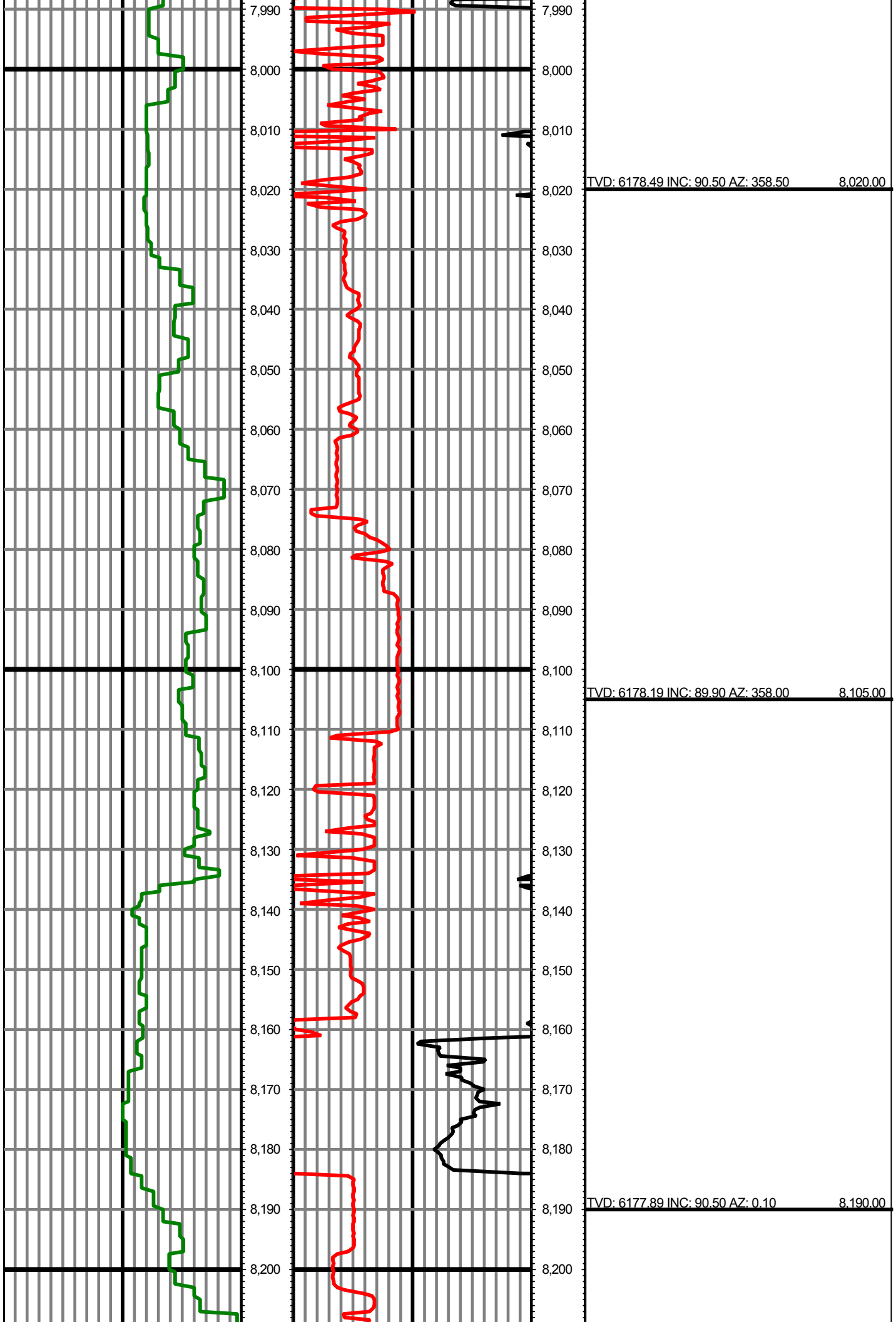


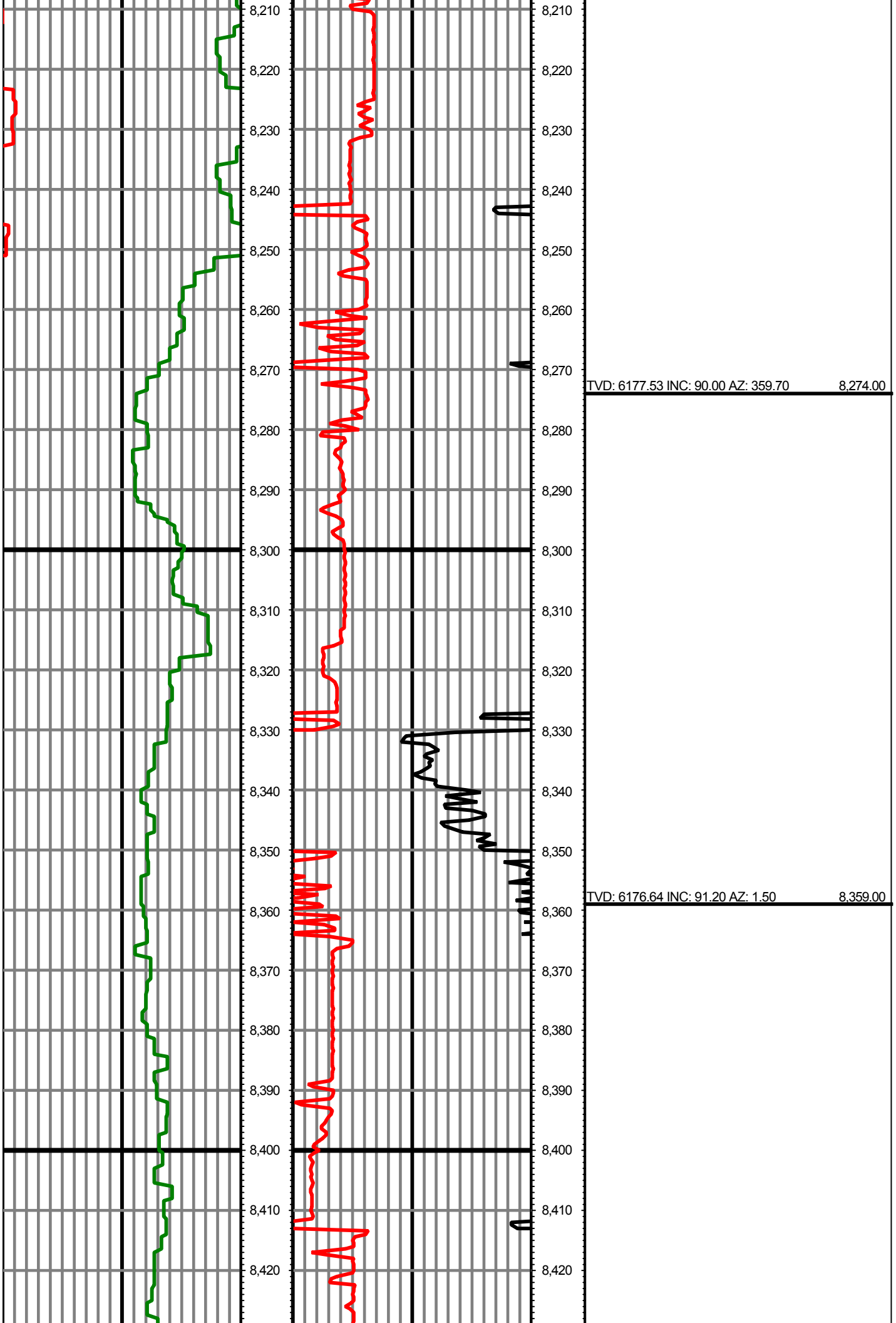


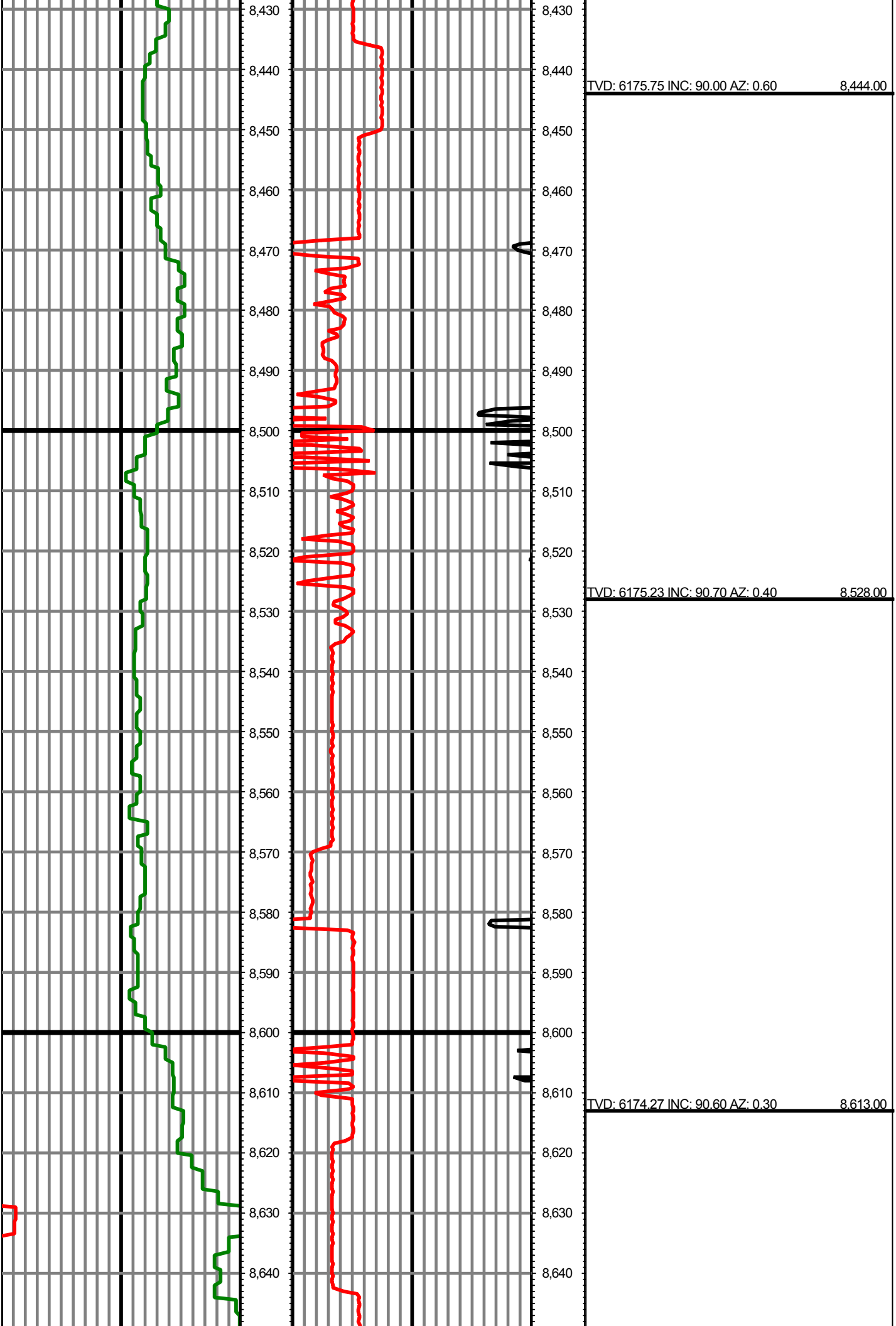


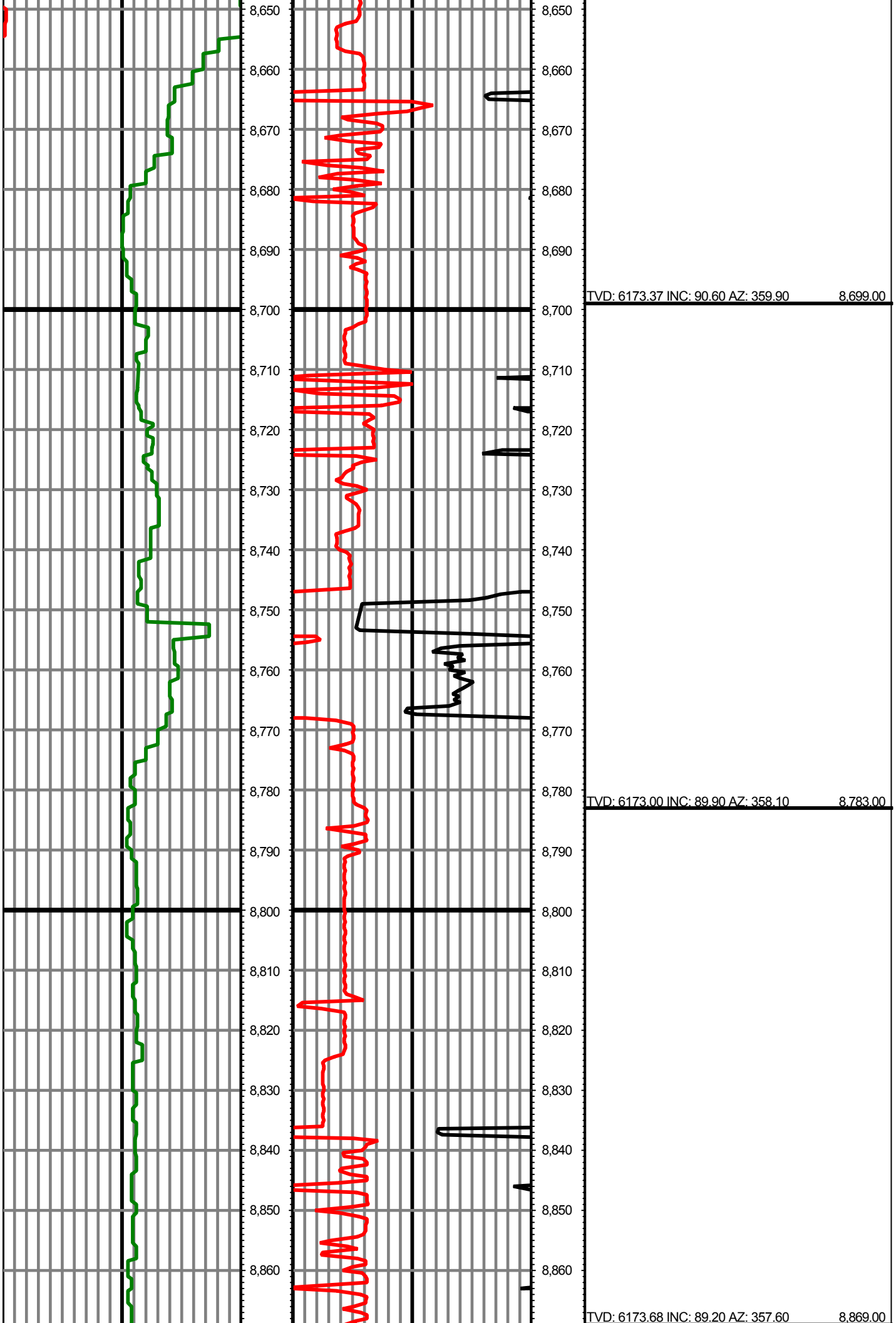


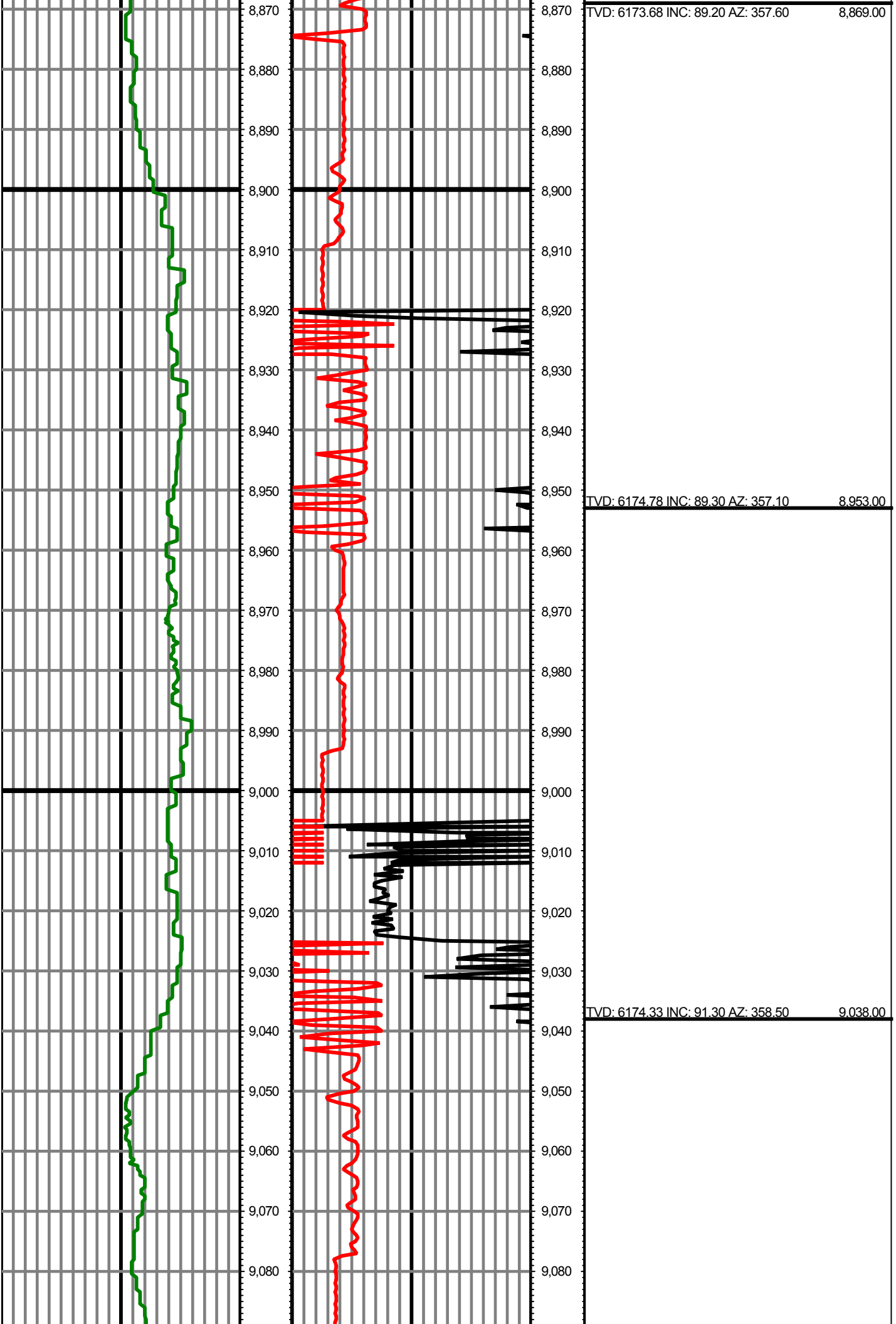


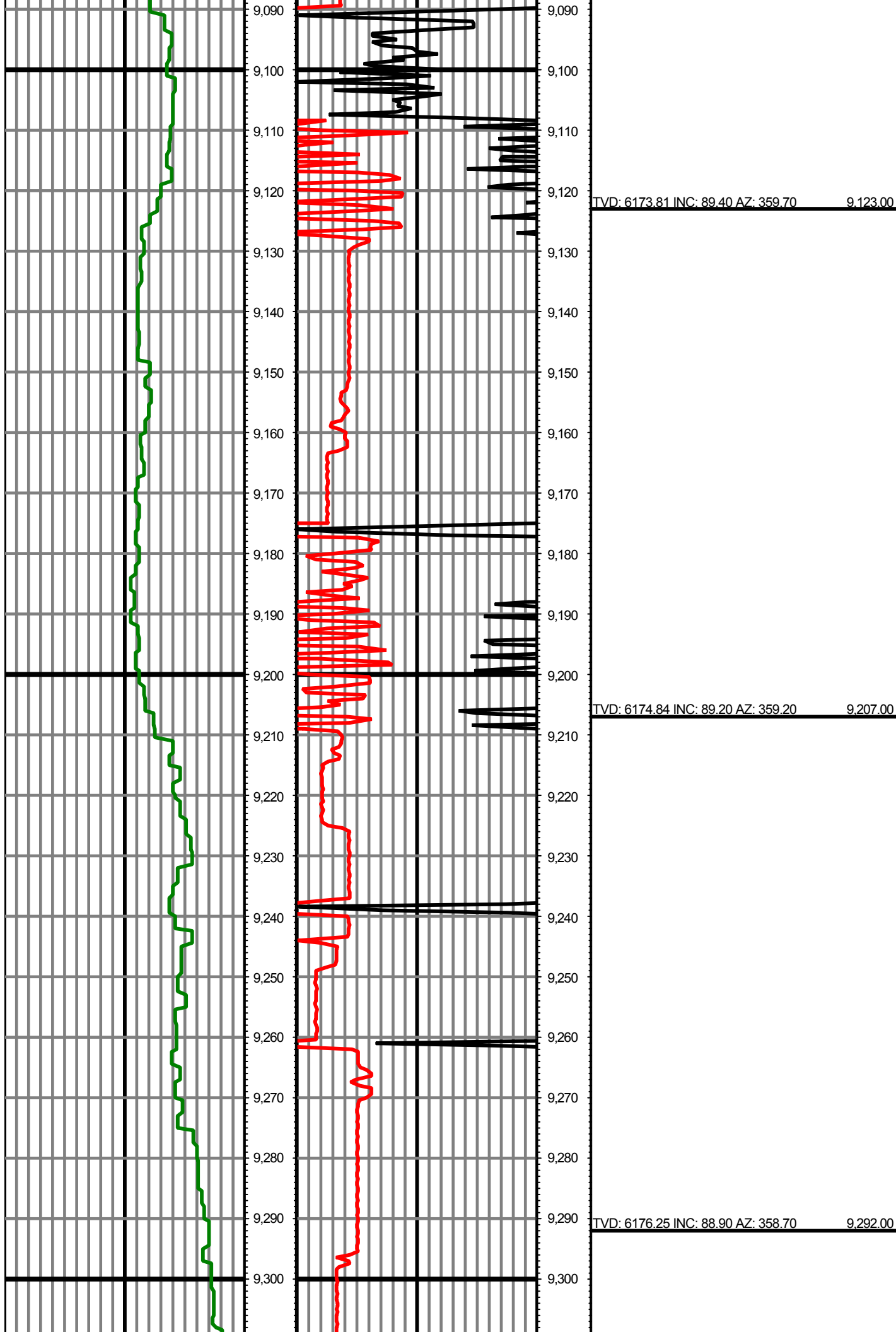


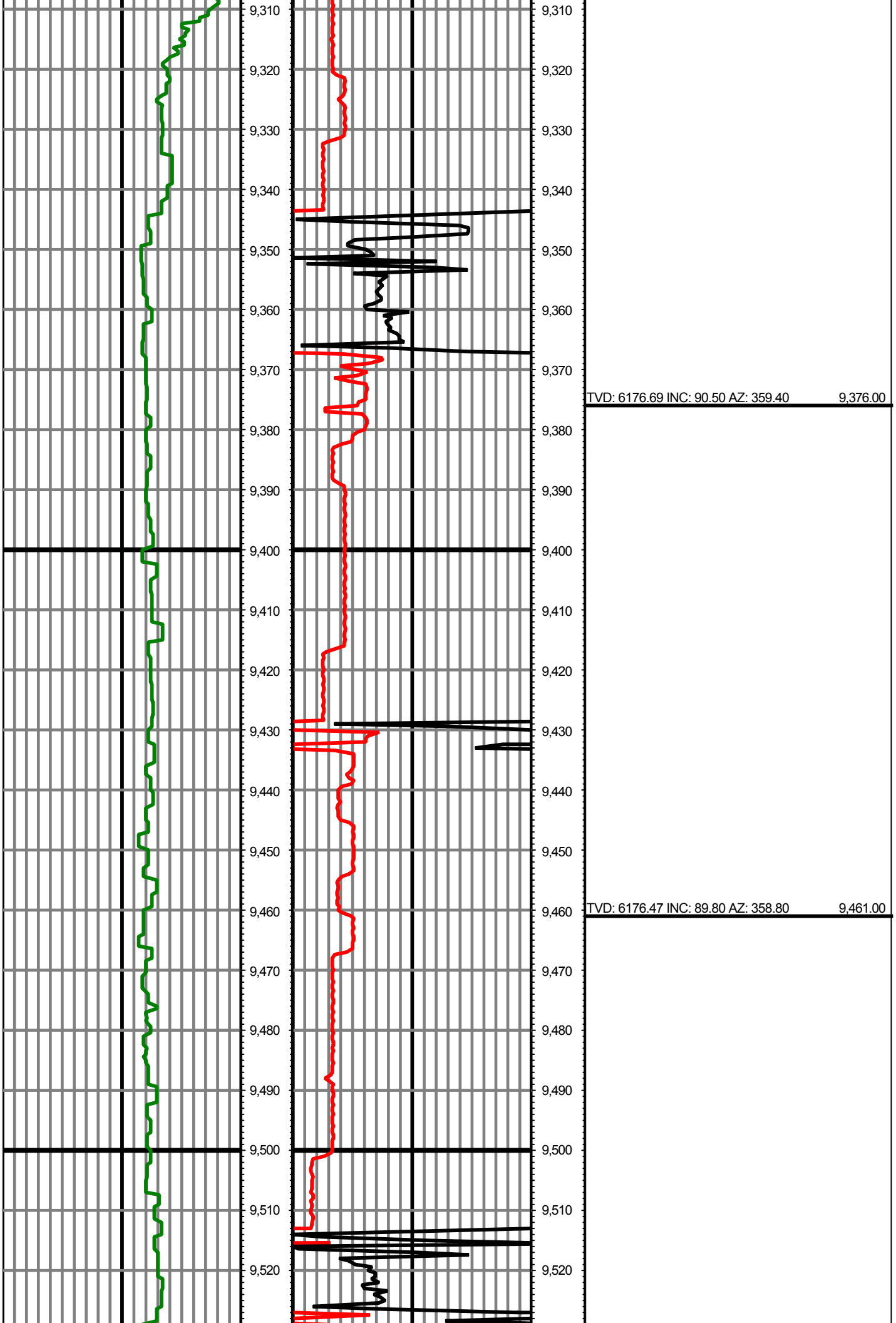


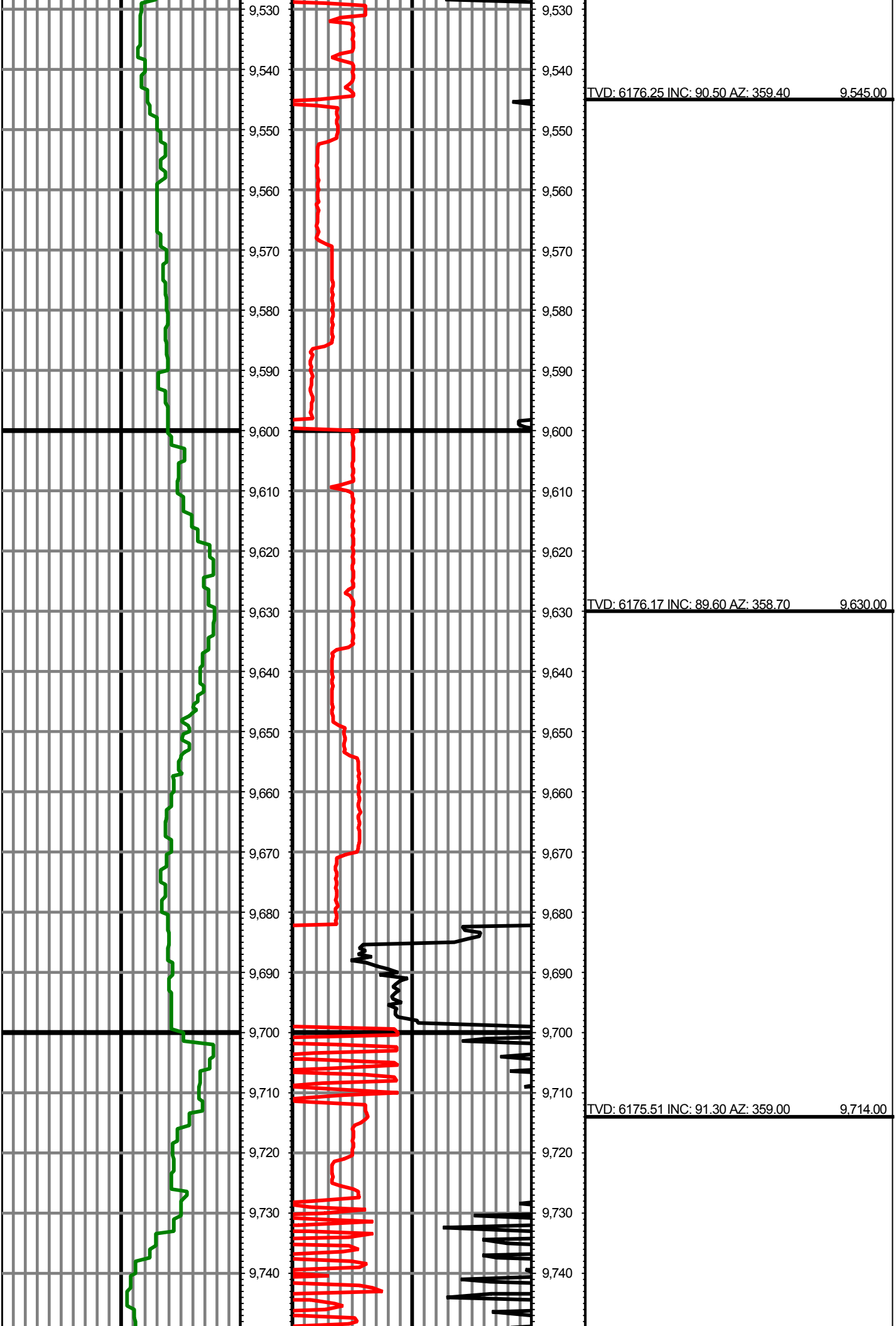


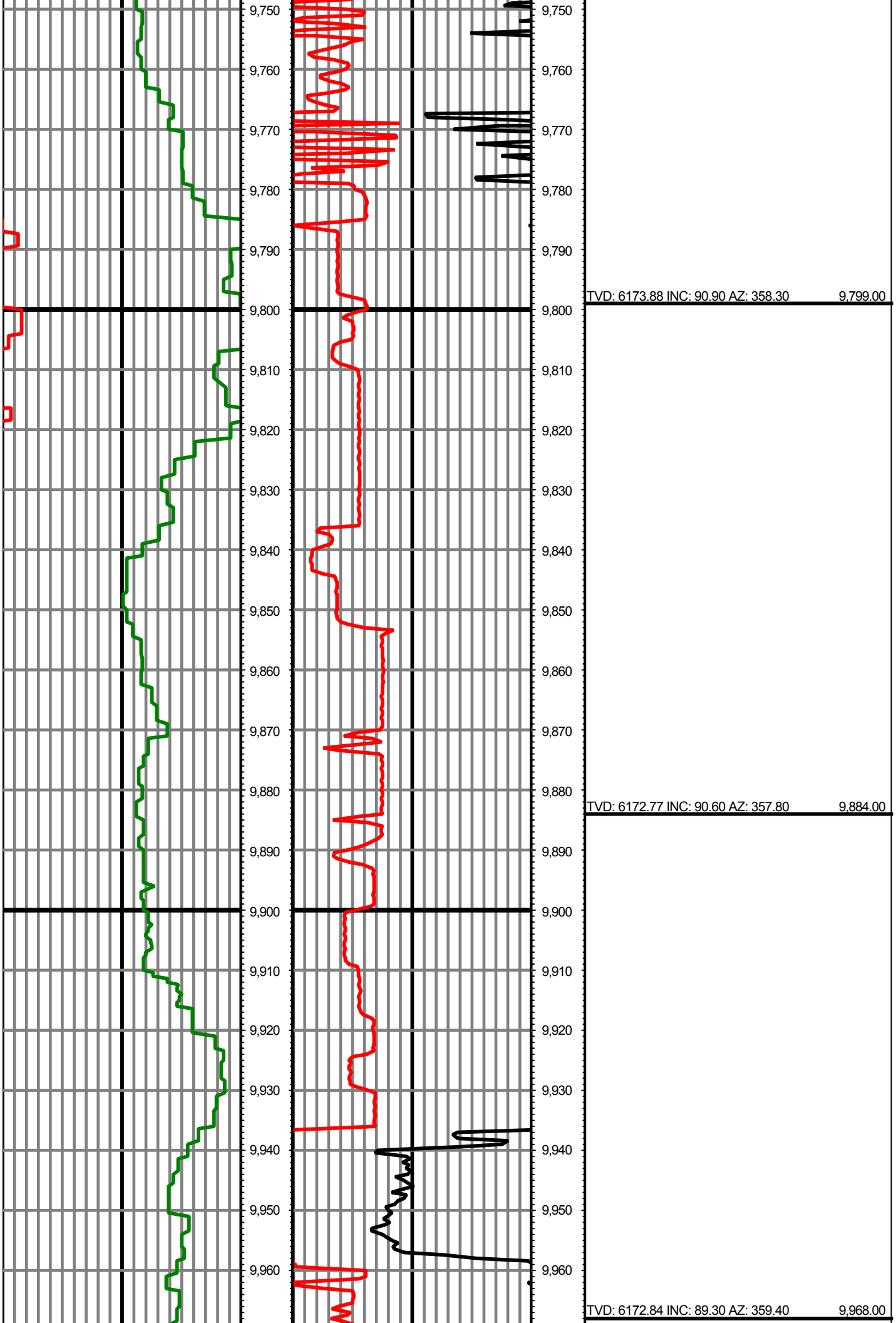












TVD: 6172.84 INC: 89.30 AZ: 359.40 9,968.00

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 10,120 10,130 10,140 10,150 10,160 10,170 10,180

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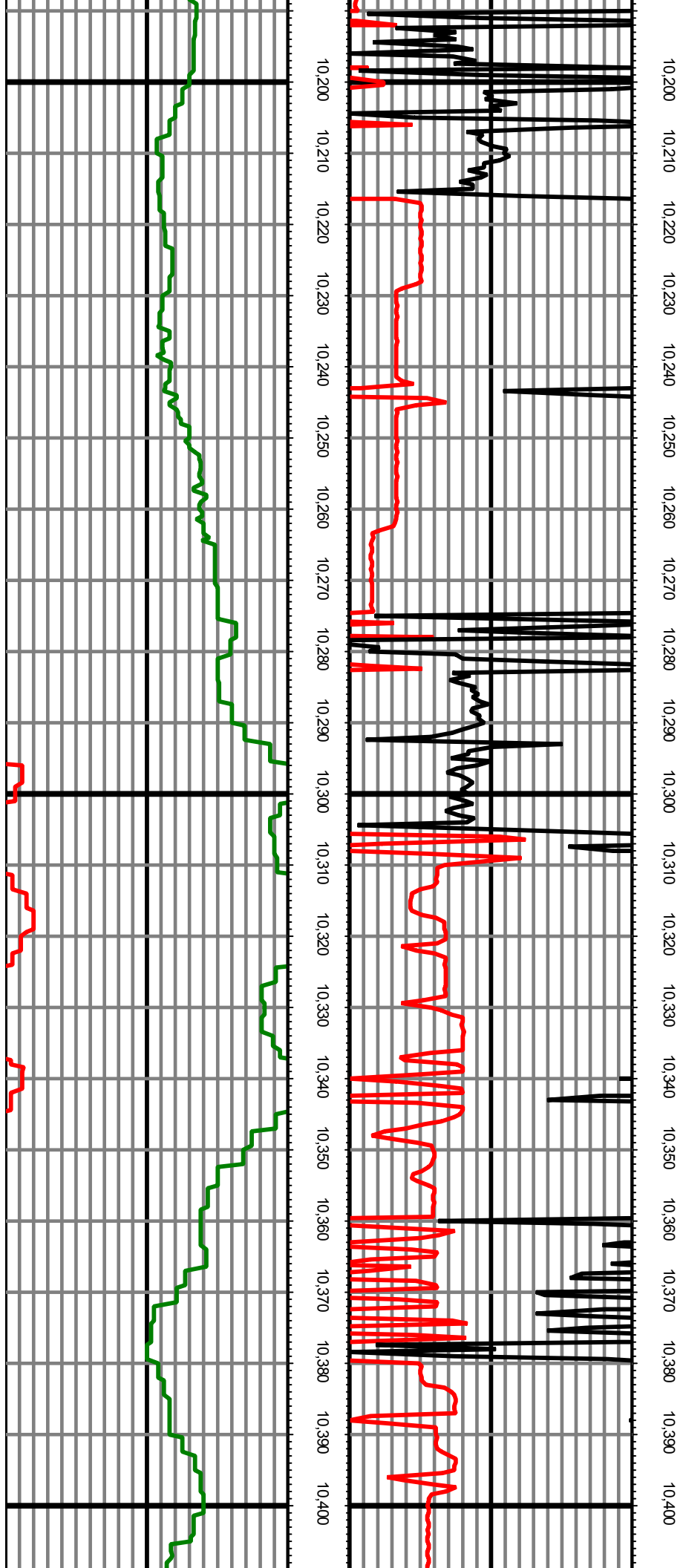
TVD: 6174.03 INC: 89.10 AZ: 358.50 10,053.00

TVD: 6175.81 INC: 88.50 AZ: 357.80 10,138.00

TVD: 6176.92 INC: 90.00 AZ: 358.30 10,223.00

TVD: 6175.96 INC: 91.30 AZ: 0.80 10,308.00

TVD: 6174.40 INC: 90.80 AZ: 0.10 10,393.00

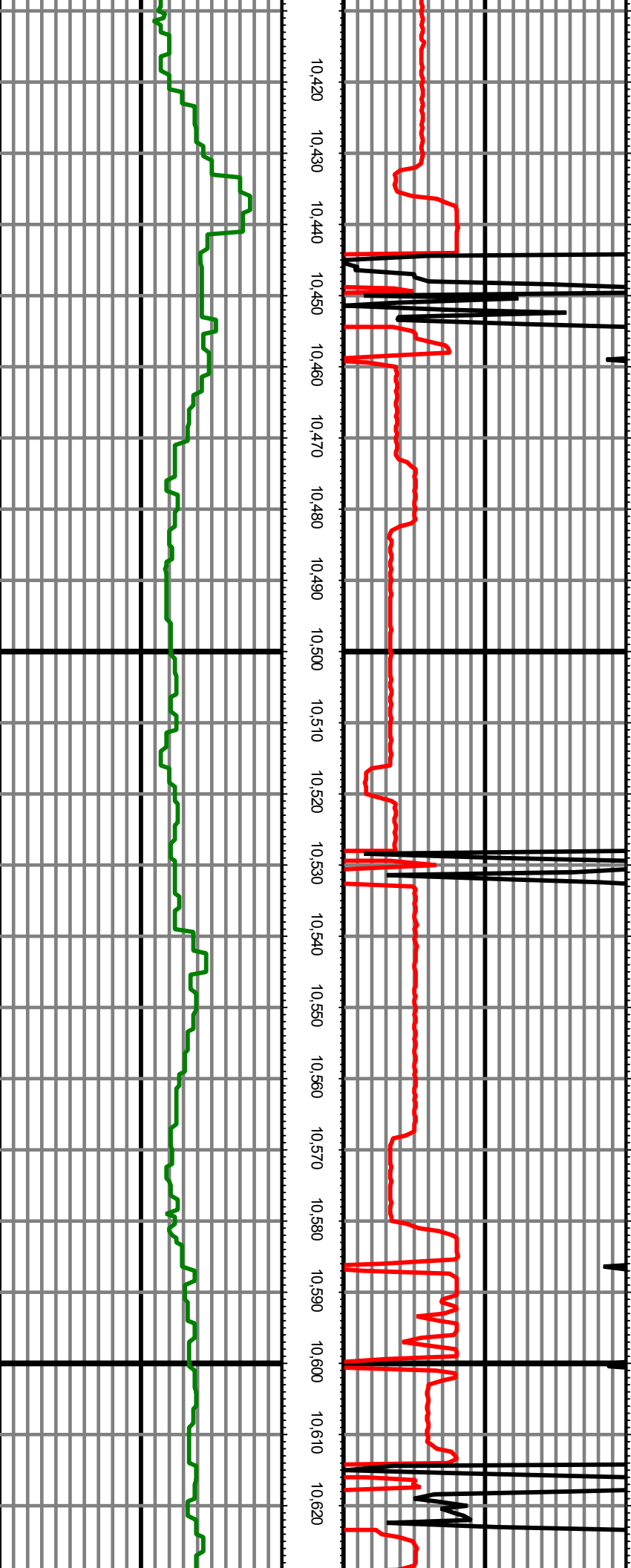


TVD: 6173.74 INC: 90.10 AZ: 0.40 10,477.00

TVD: 6173.67 INC: 90.00 AZ: 0.40 10,562.00

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 10,560 10,570 10,580 10,590 10,600 10,610 10,620

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TVD: 6175.00 INC: 88.20 AZ: 358.70 10,647.00

TVD: 6178.04 INC: 87.70 AZ: 357.60 10,732.00

TVD: 6181.97 INC: 87.00 AZ: 356.60 10,817.00

