



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

Ptasnik 3-30-9-59
Scale 5":100' - MD
5/2/2015 9:50 PM

Oper. Company: Carrizo Oil & Gas, Inc.
Well: Ptasnik 3-30-9-59
Field: Niobrara CONZ'83
Rig: Xtreme 19
Well ID: 05-123-41242-00
Job Number: TL15015

State: Colorado
County: Weld
Country: USA
Location: Keota
Start Date: 04/29/2015 09:00:00
End Date: 05/02/2015 21:45:00

Latitude: 40 42' 54.69
Longitude: 104 1' 44.00

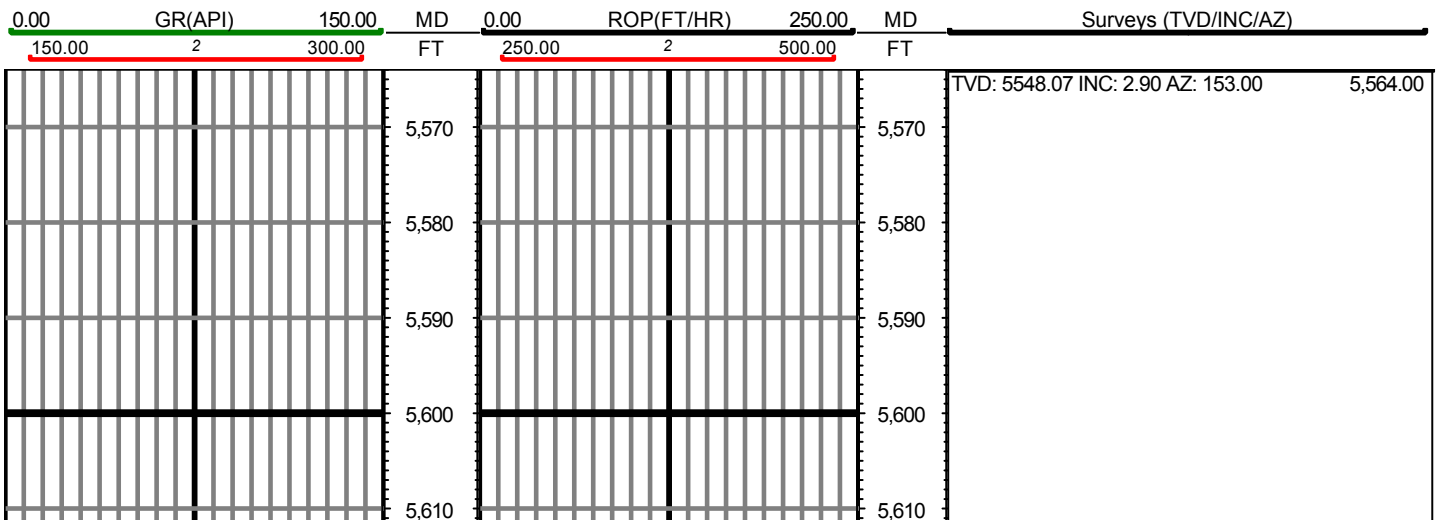
Elev KB: 17
Elev DF: 4934
Elev GL: 4917

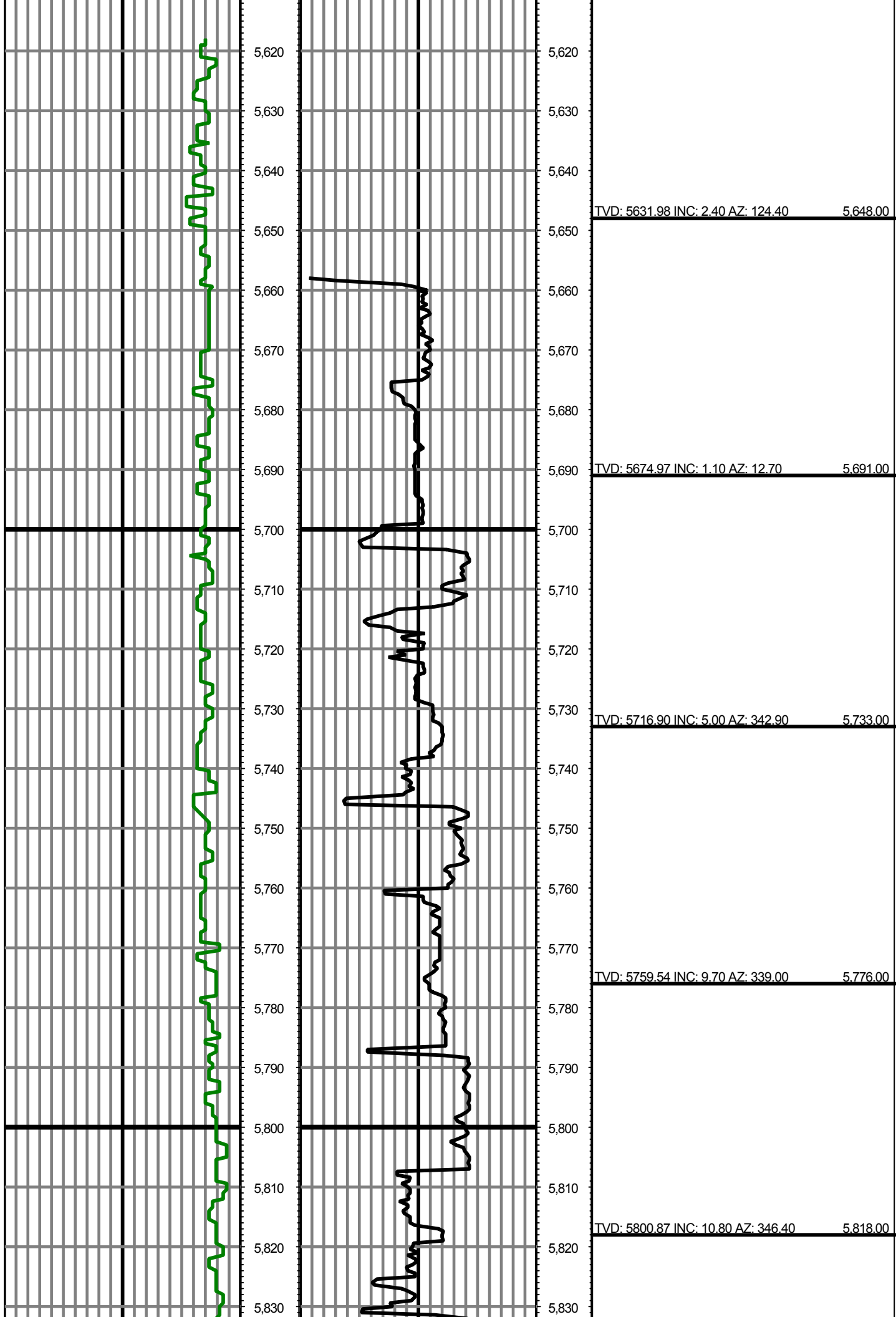
Operator 1: Skylar Thompson

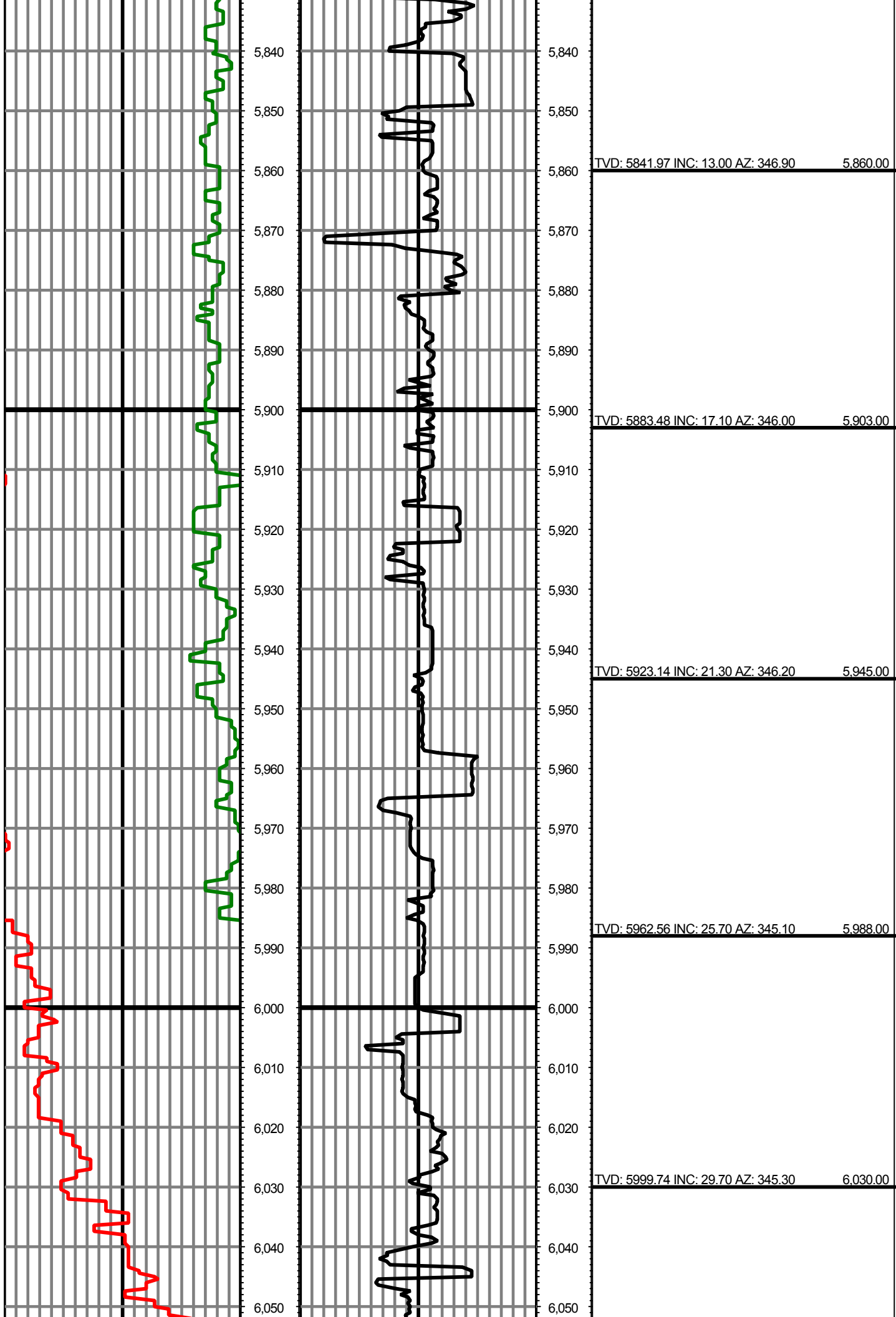
Operator 2: Paul Brown

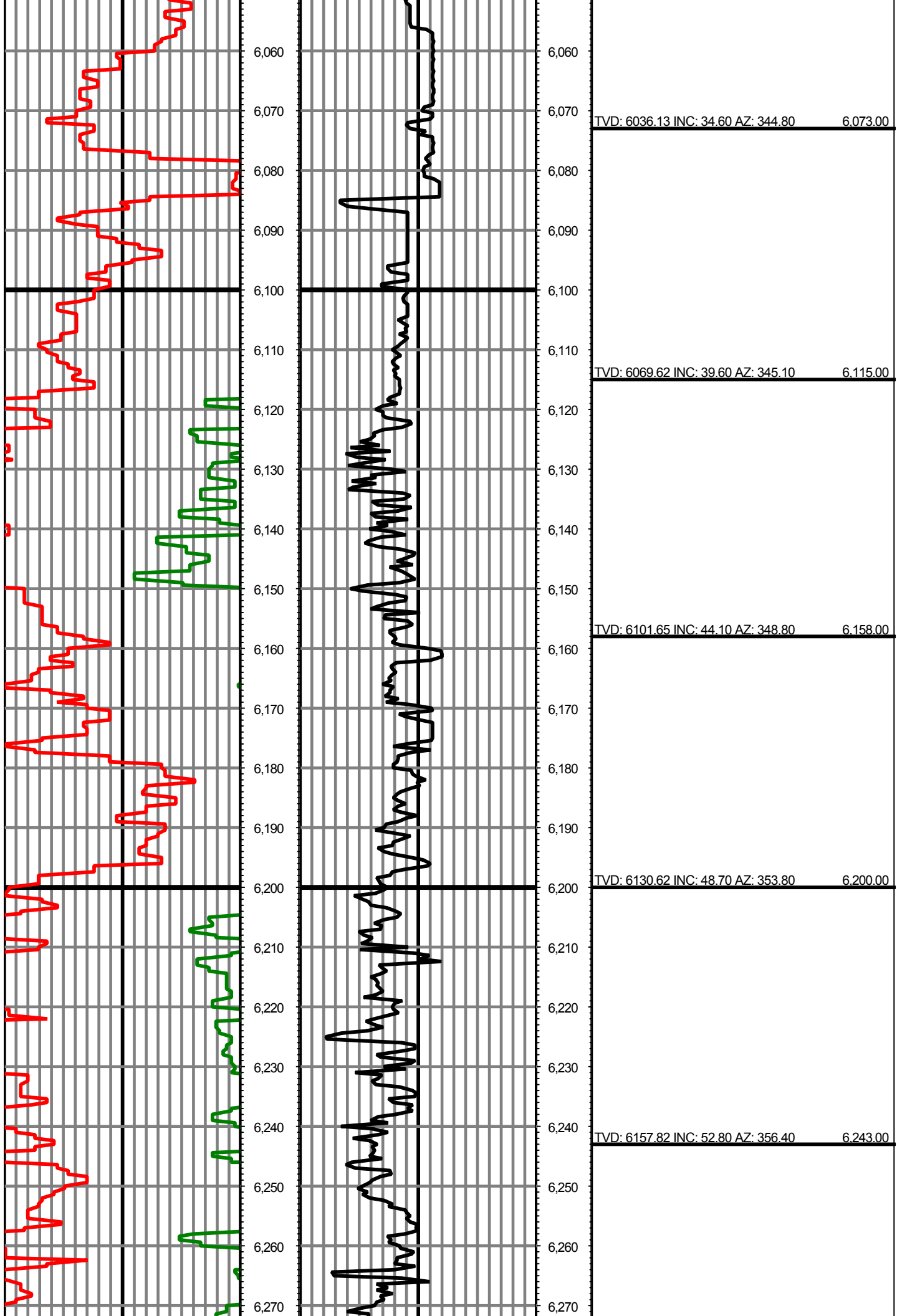
Tool Run Data	Run #1	Run #2	Run #3	Run #4	Run #5
Tool S/N	N/A	N/A	TG507	TG507	
Bit Size	12 1/4	8 3/4	8 3/4	6 1/8	
Cal Factor	N/A	N/A	4.72	2.28	
Survey Offset:	55.00	50.00	51.00	51.00	
Gamma Offset	0.00	0.00	40.00	40.00	
Resistivity Offset	0.00	0.00	0.00	0.00	
Start Depth	0.00	1640.00	5659.00	6453.00	
StartDate	4/26/2015	4/27/2015	4/29/2015	4/30/2015	
StartTime	11:30	17:15	06:30	18:30	
EndDepth	1640.00	5659.00	6453.00	11019.00	
EndDate	4/27/2015	4/29/2015	4/30/2015	5/2/2015	
EndTime	01:30	05:15	03:50	21:45	
Mud Type	WBM	WBM	WBM	WBM	
Temperature	77	136	147	192	
Hole Data			Casing Data		
Size	From	To	Size	From	To
12 1/4	0.00	1640.00	9 5/8	0.00	1620.00
8 3/4	1640.00	6453.00	7	0.00	6446.00
6 1/8	6453.00	11019.00			

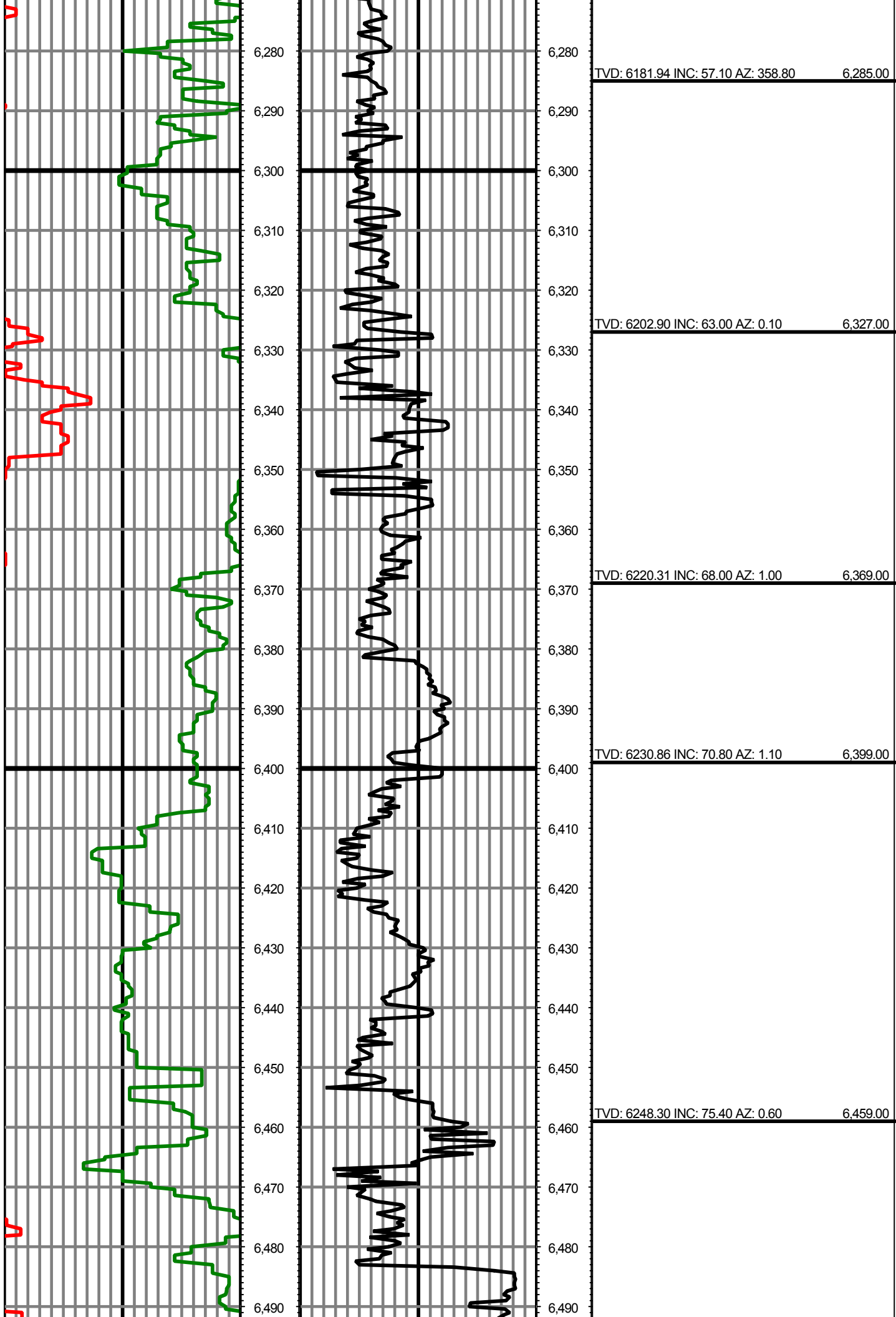
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost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

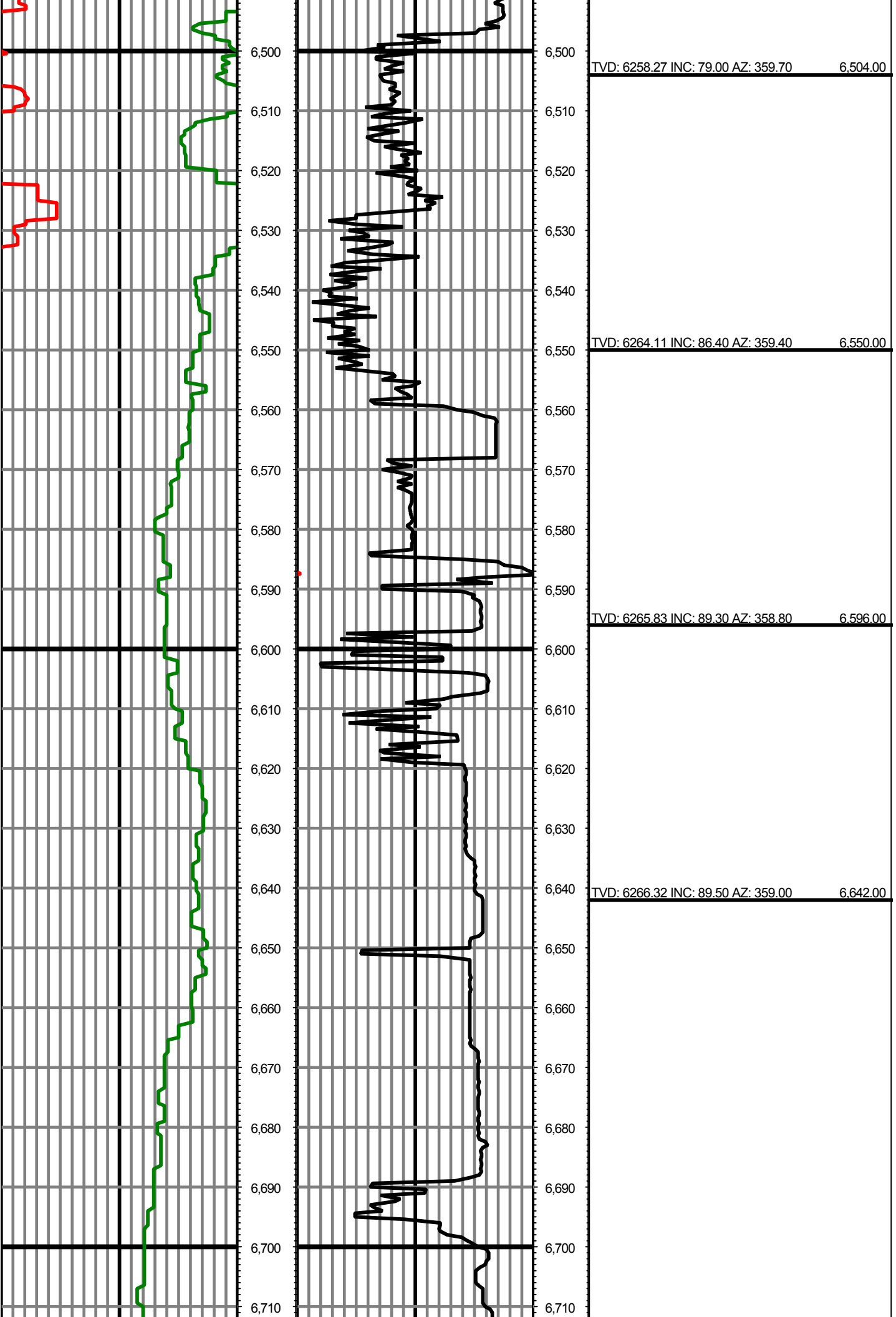


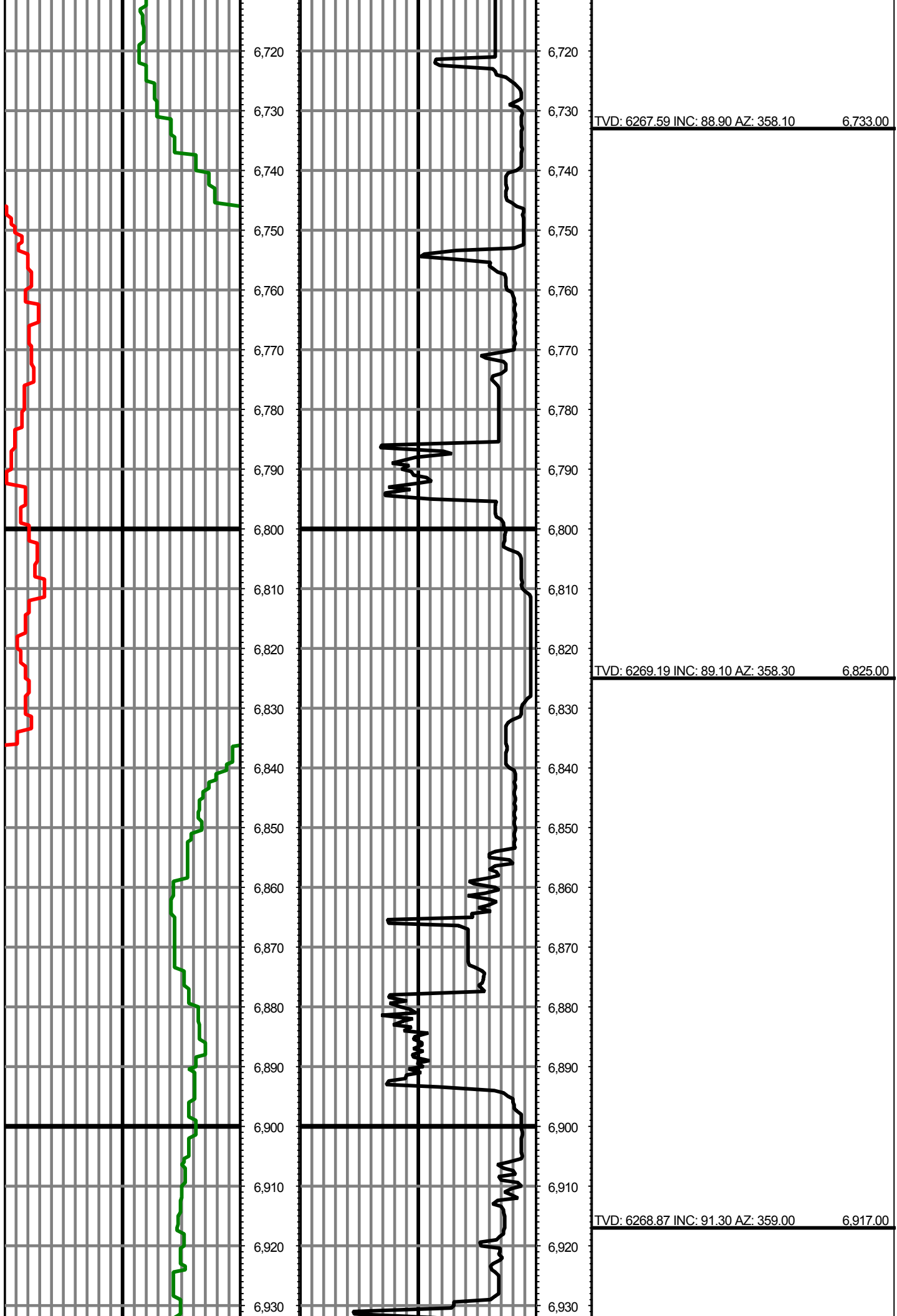


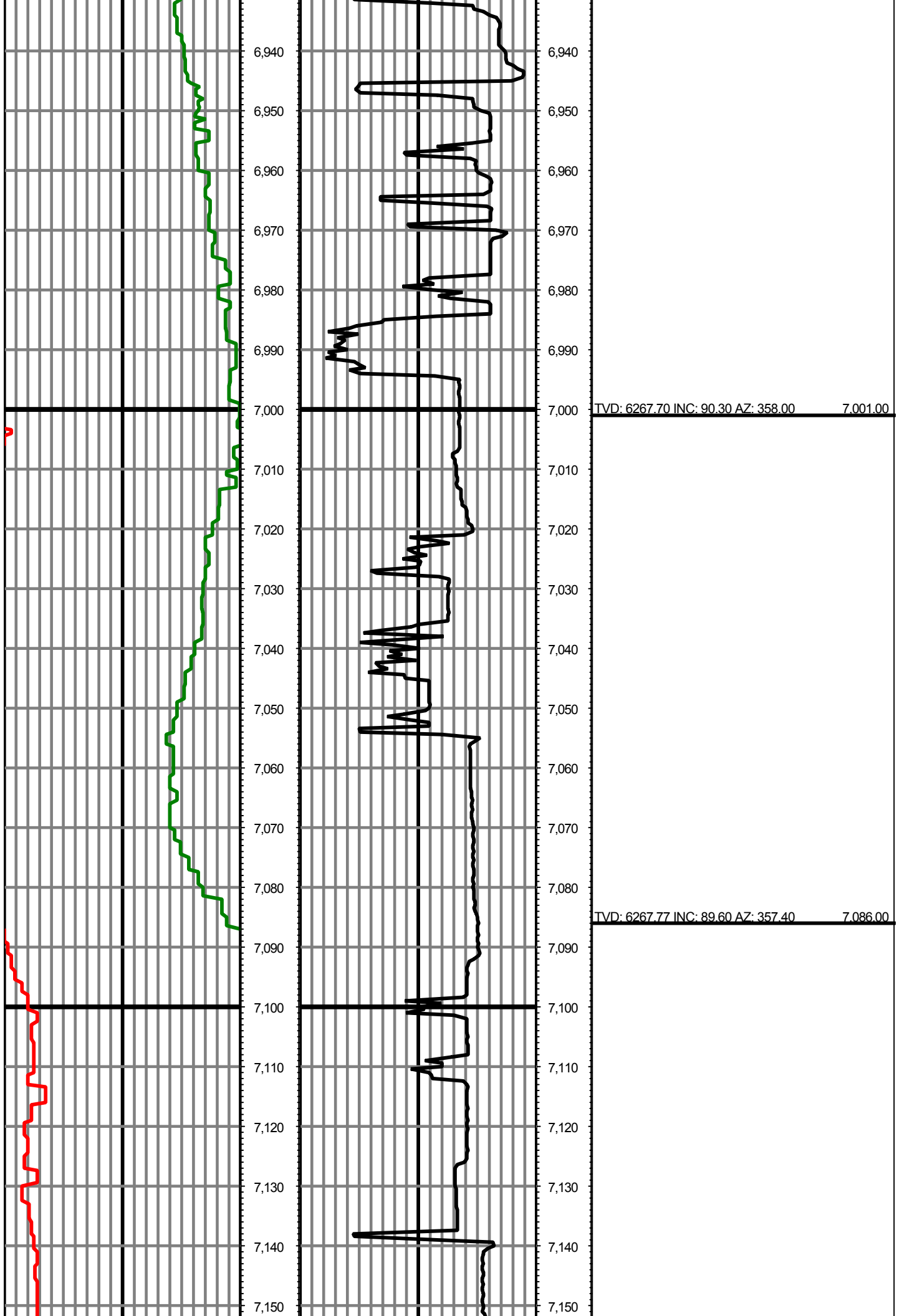


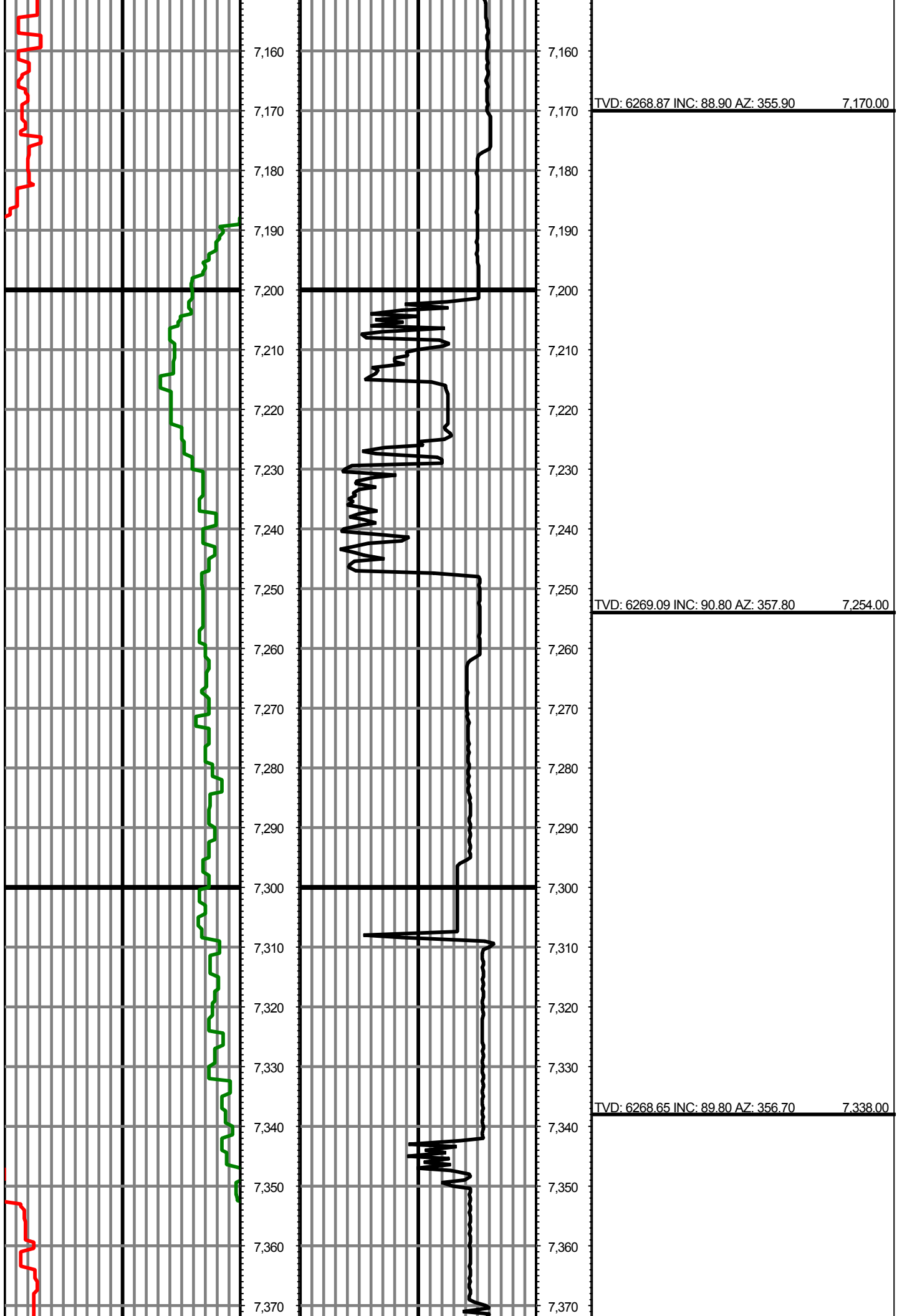


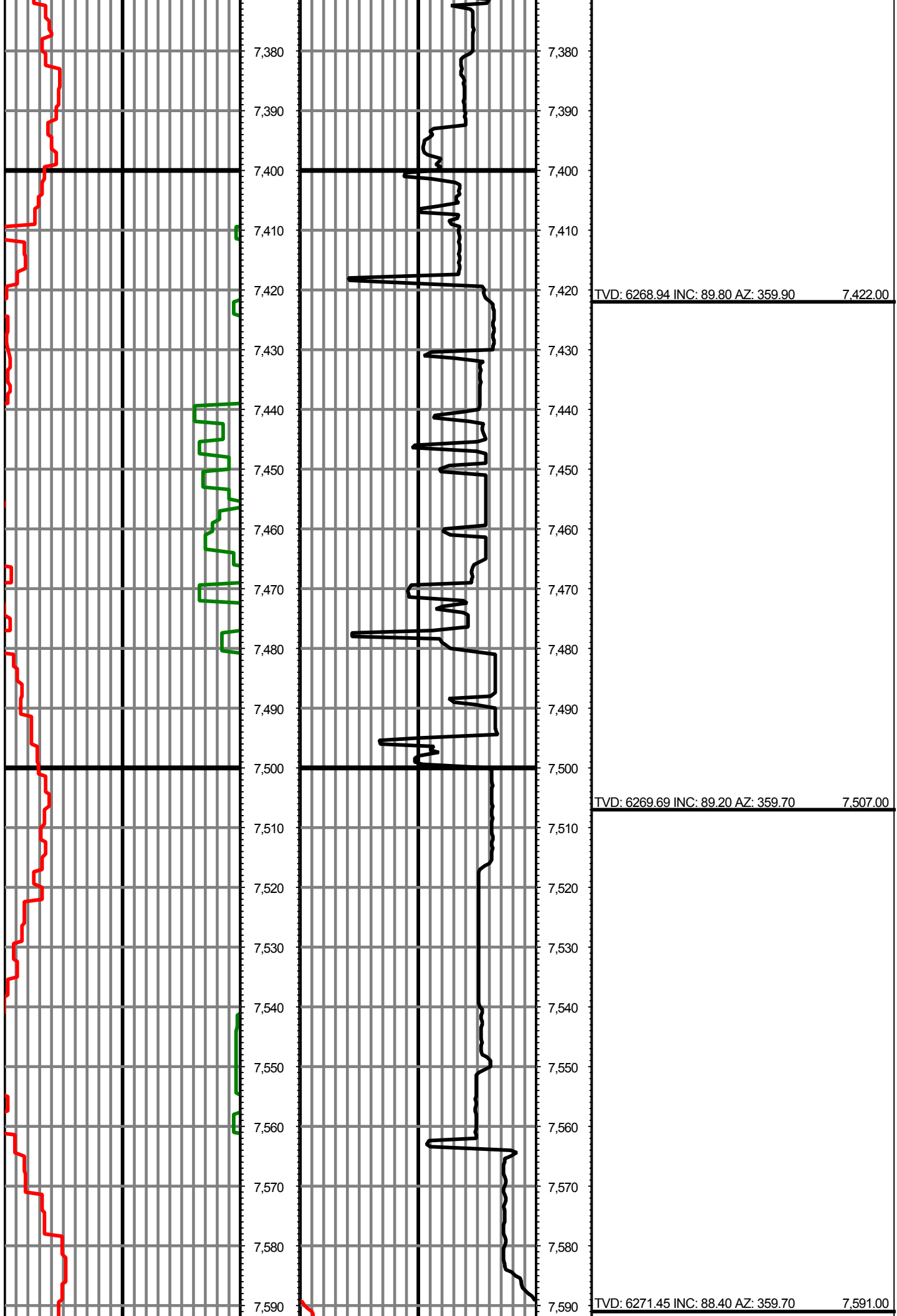




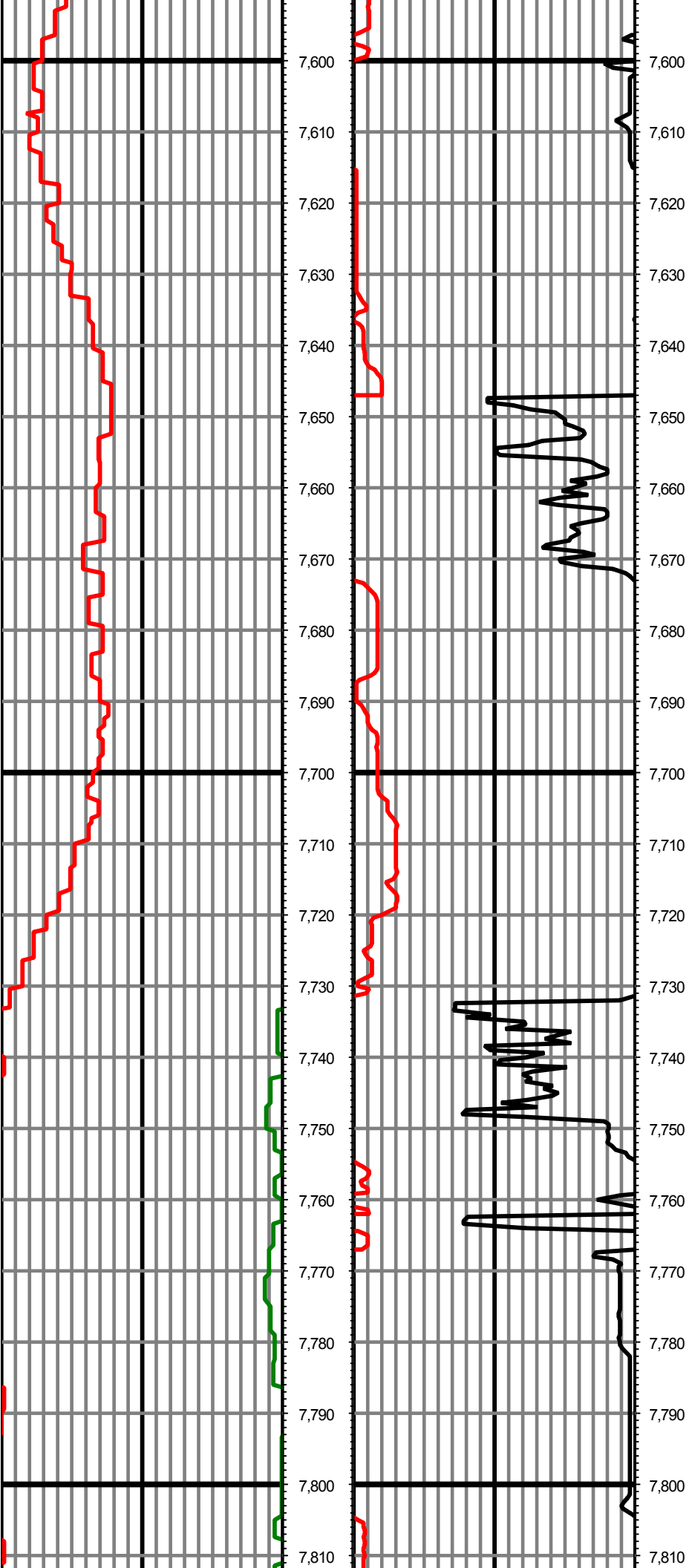






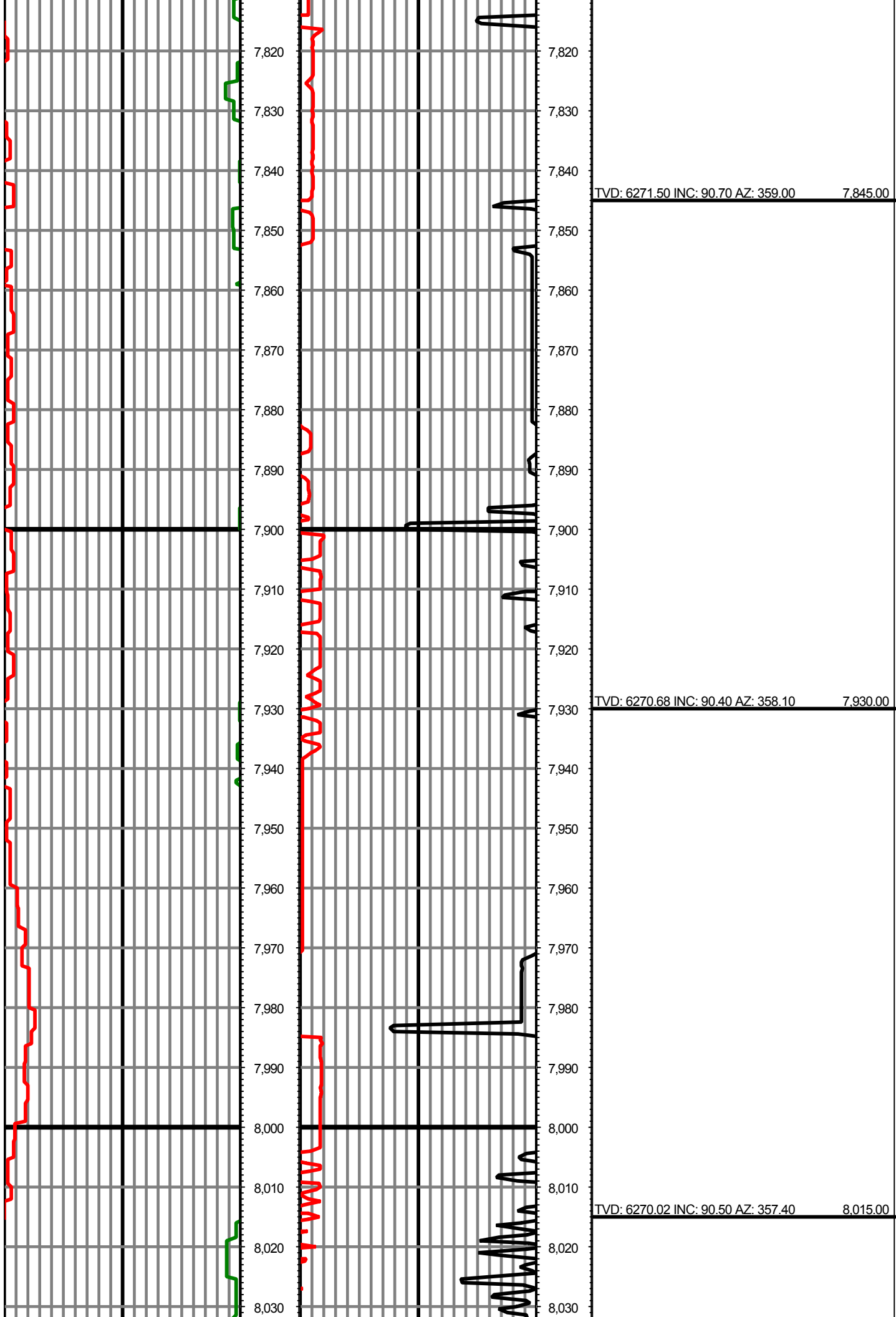


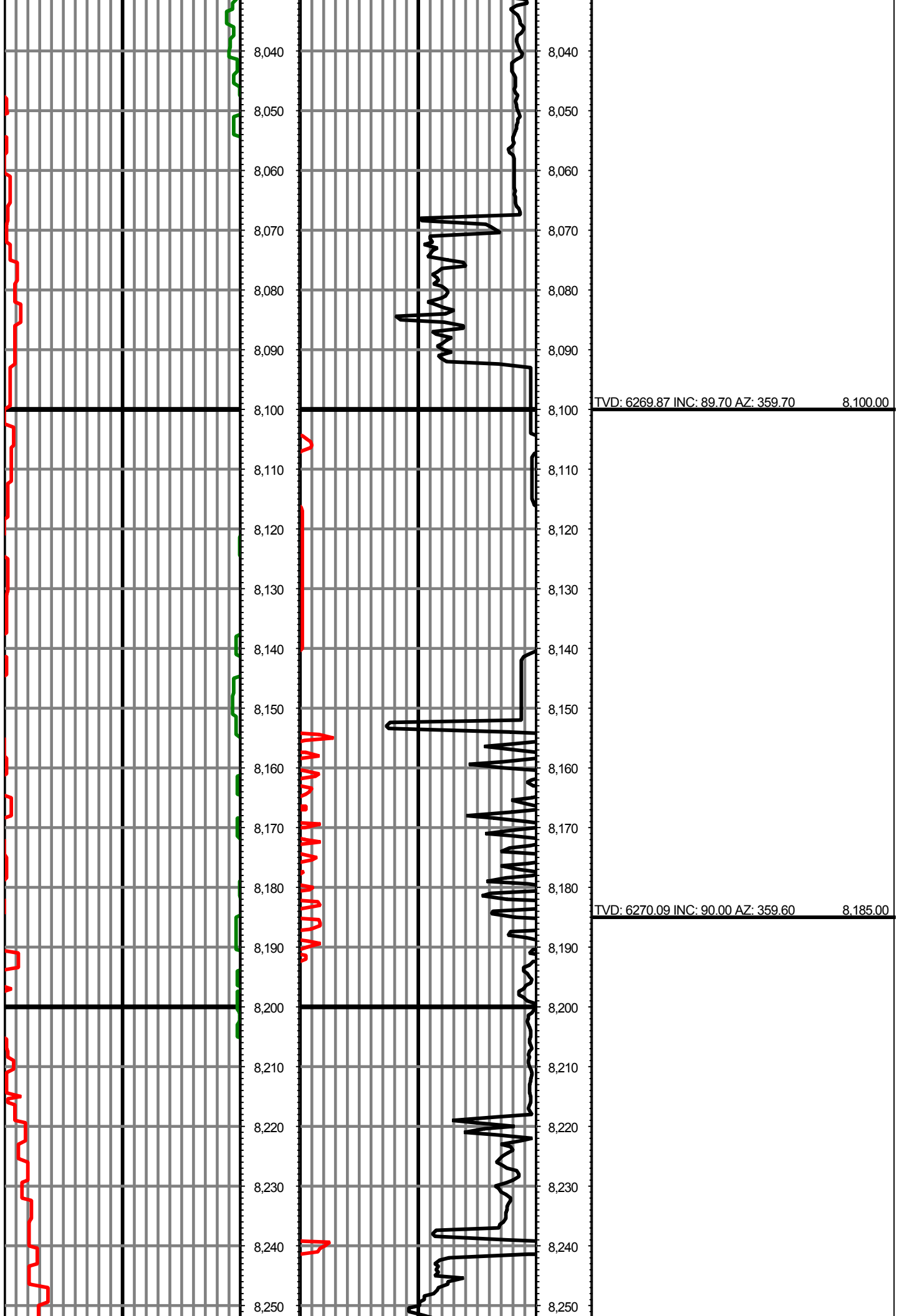
TVD: 6271.45 INC: 88.40 AZ: 359.70 7,591.00

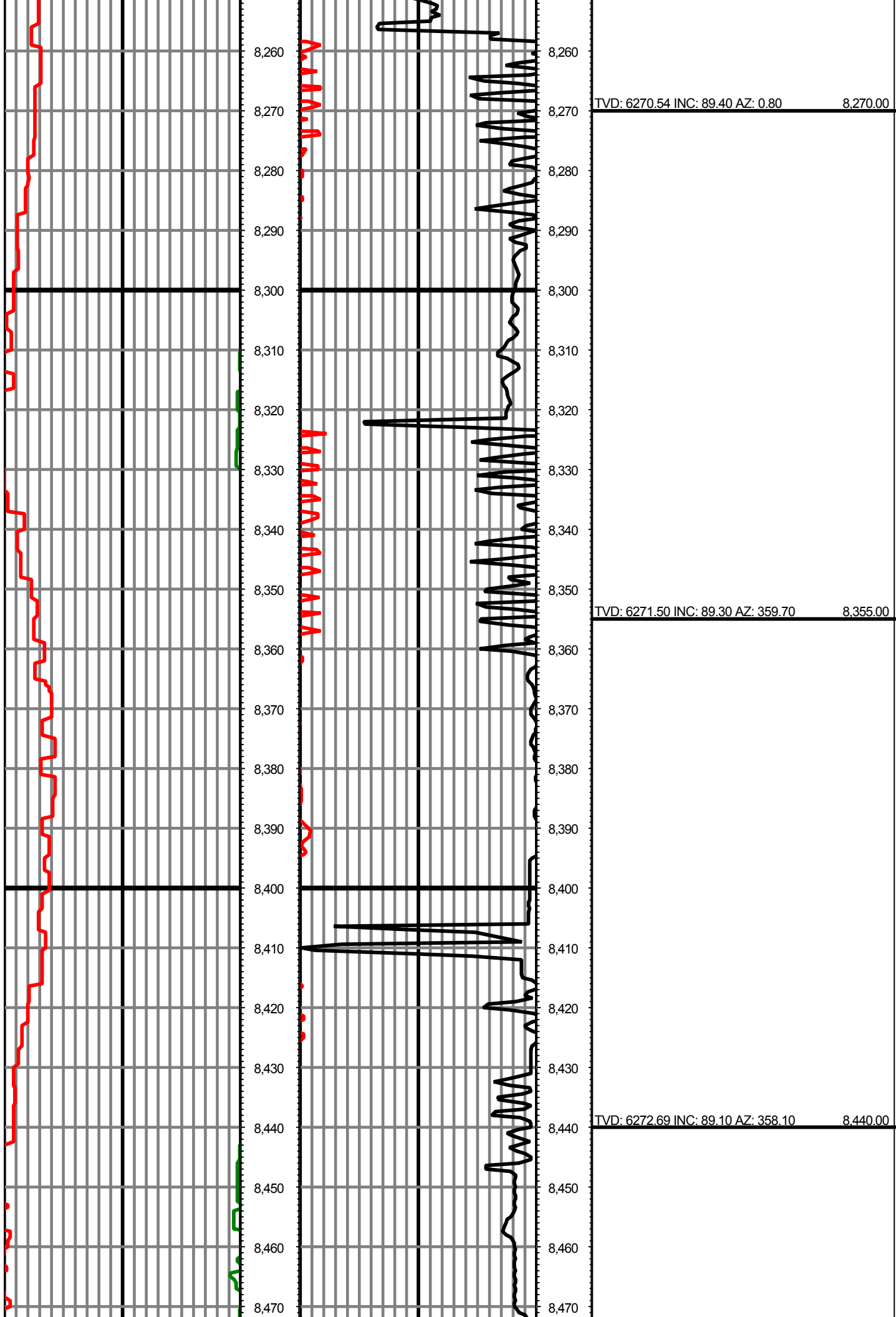


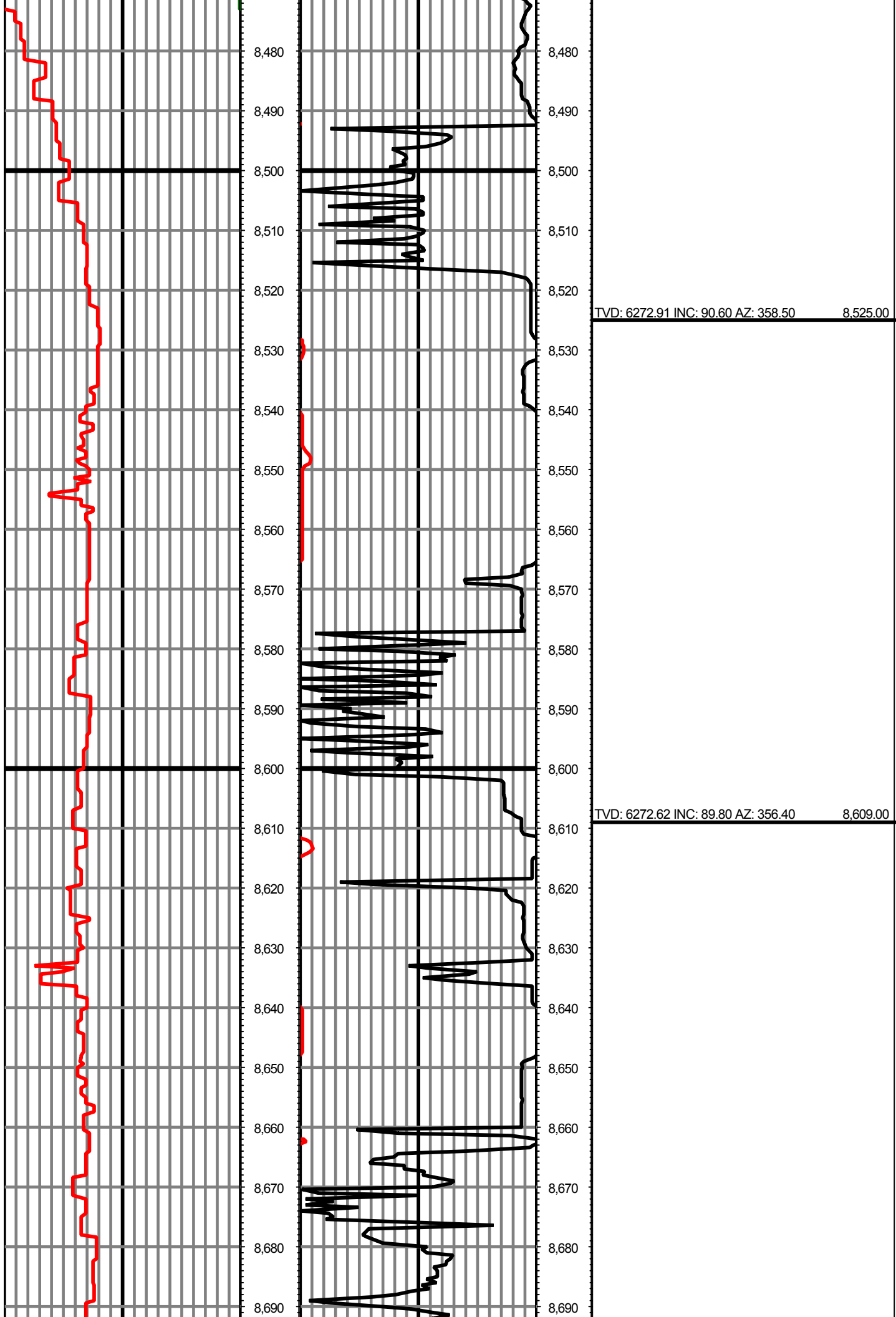
TVD: 6273.13 INC: 89.30 AZ: 0.10 7,675.00

TVD: 6272.83 INC: 91.10 AZ: 1.00 7,760.00





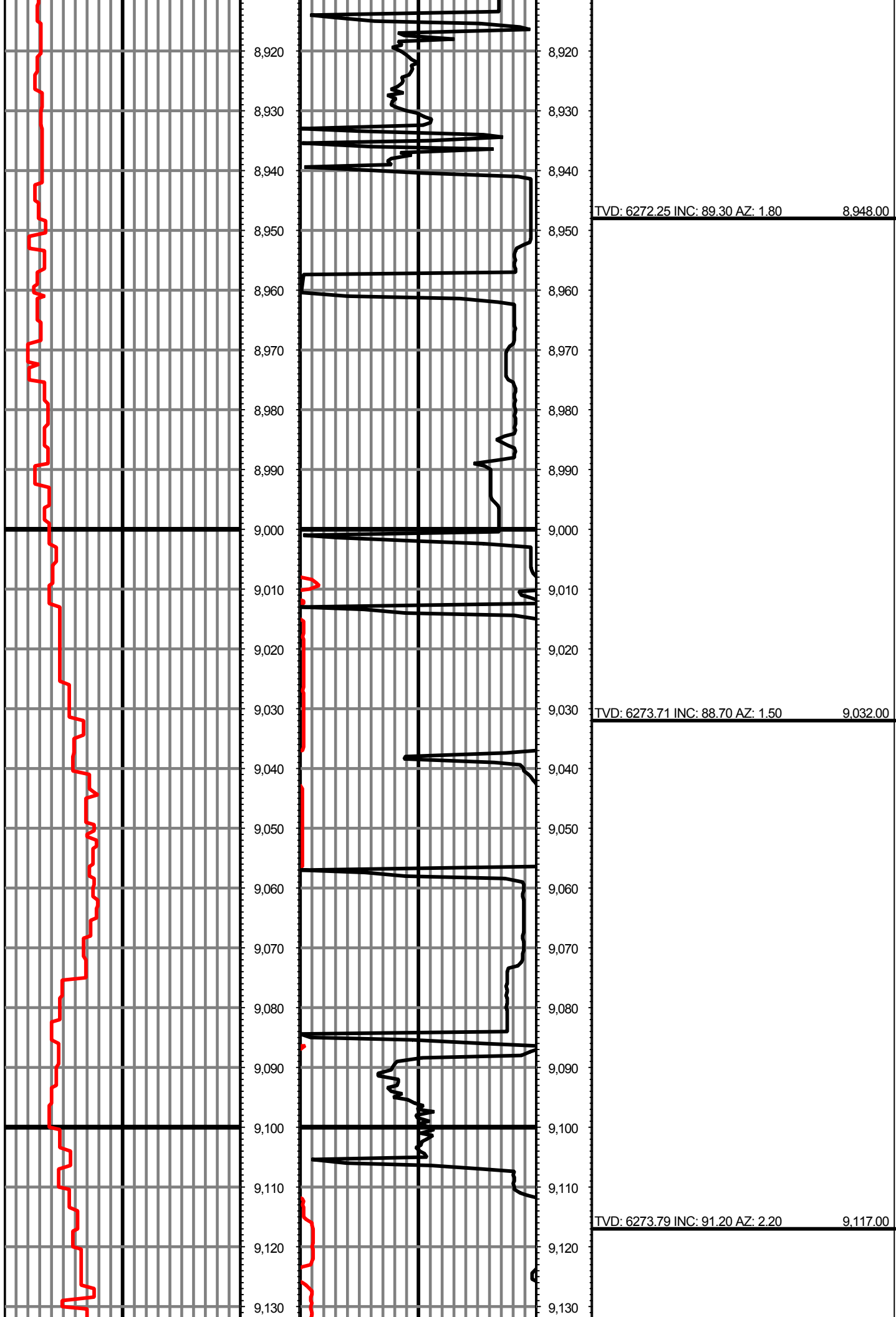


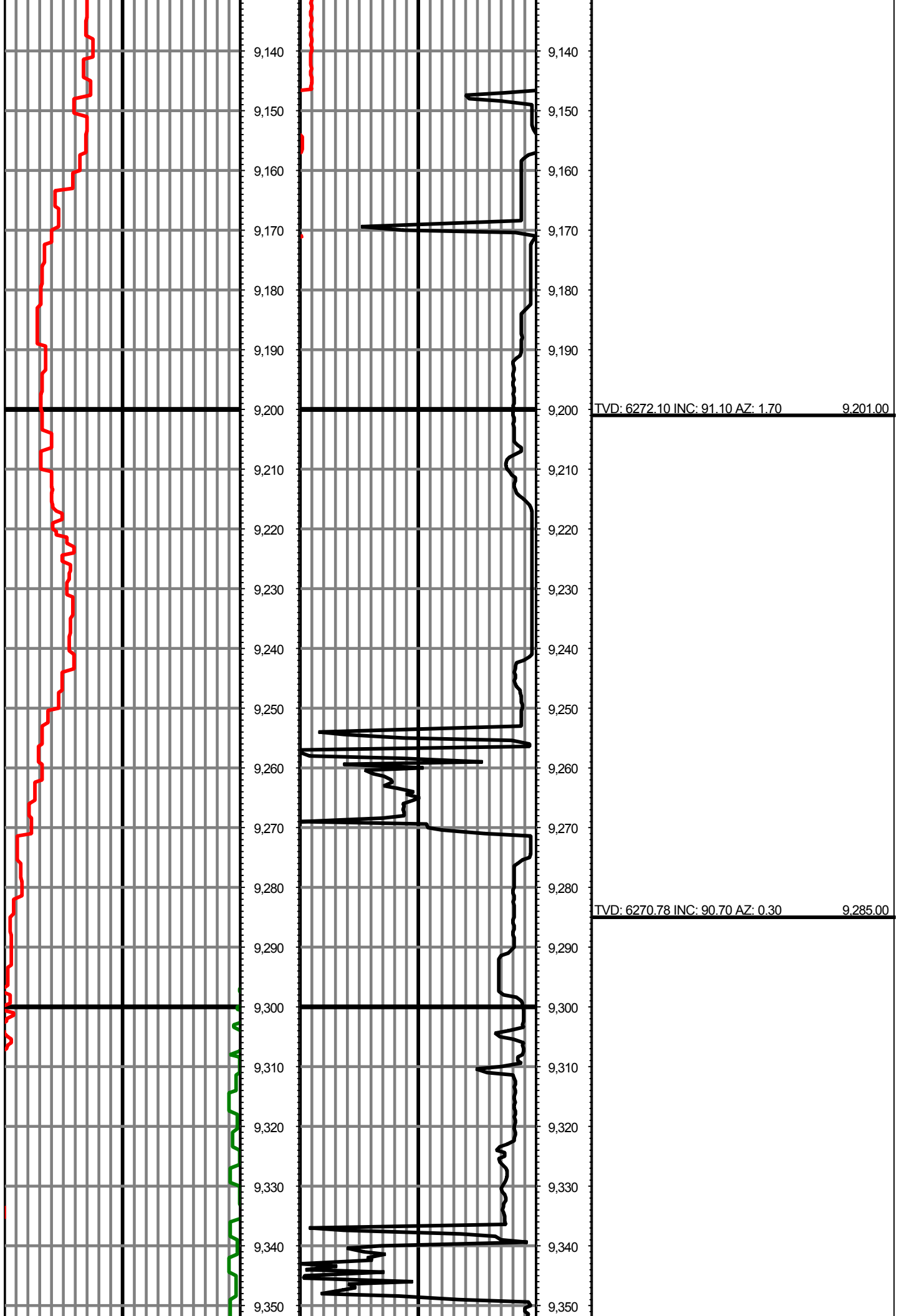


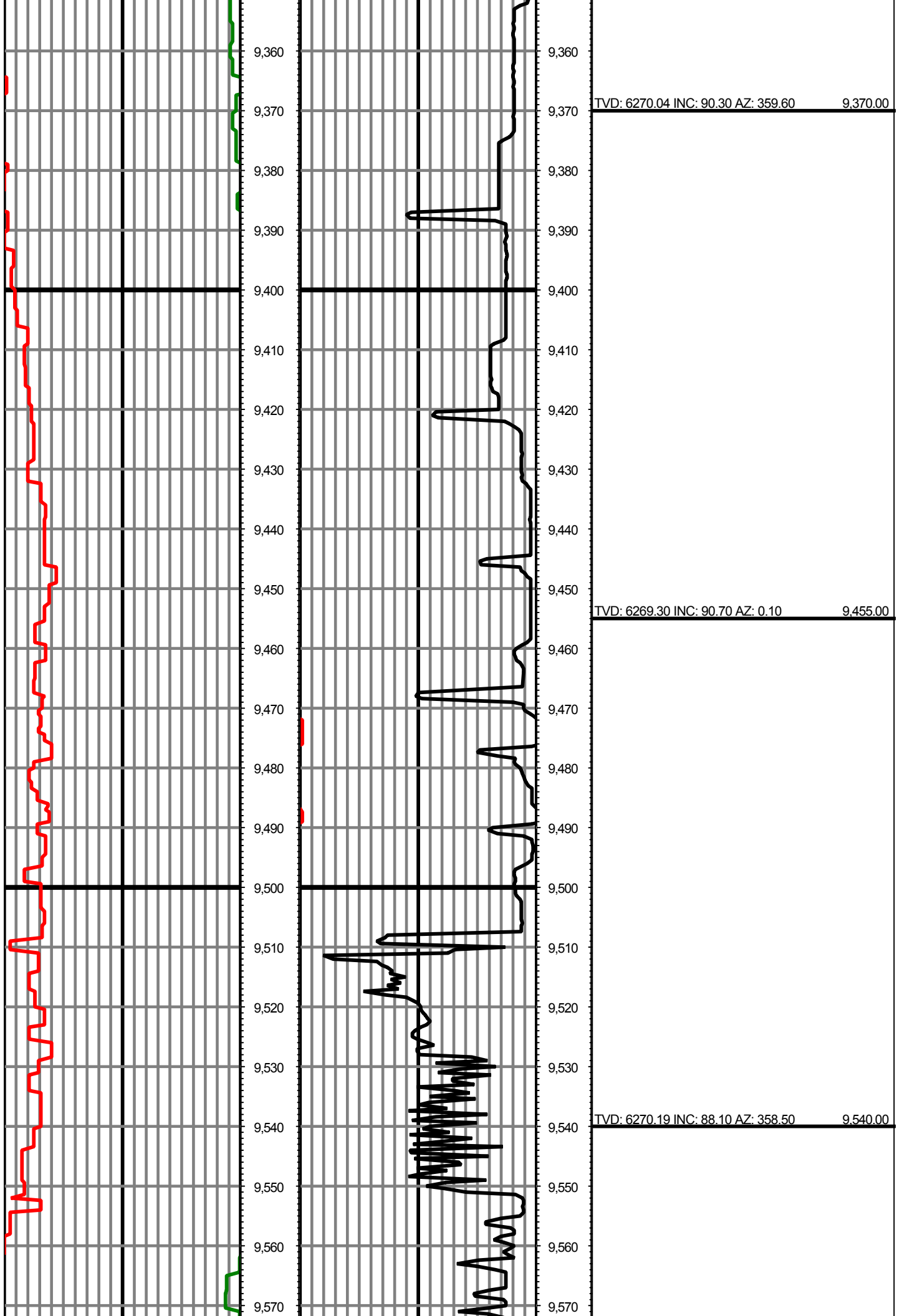
TVD: 6272.76 INC: 90.00 AZ: 357.40 8,694.00

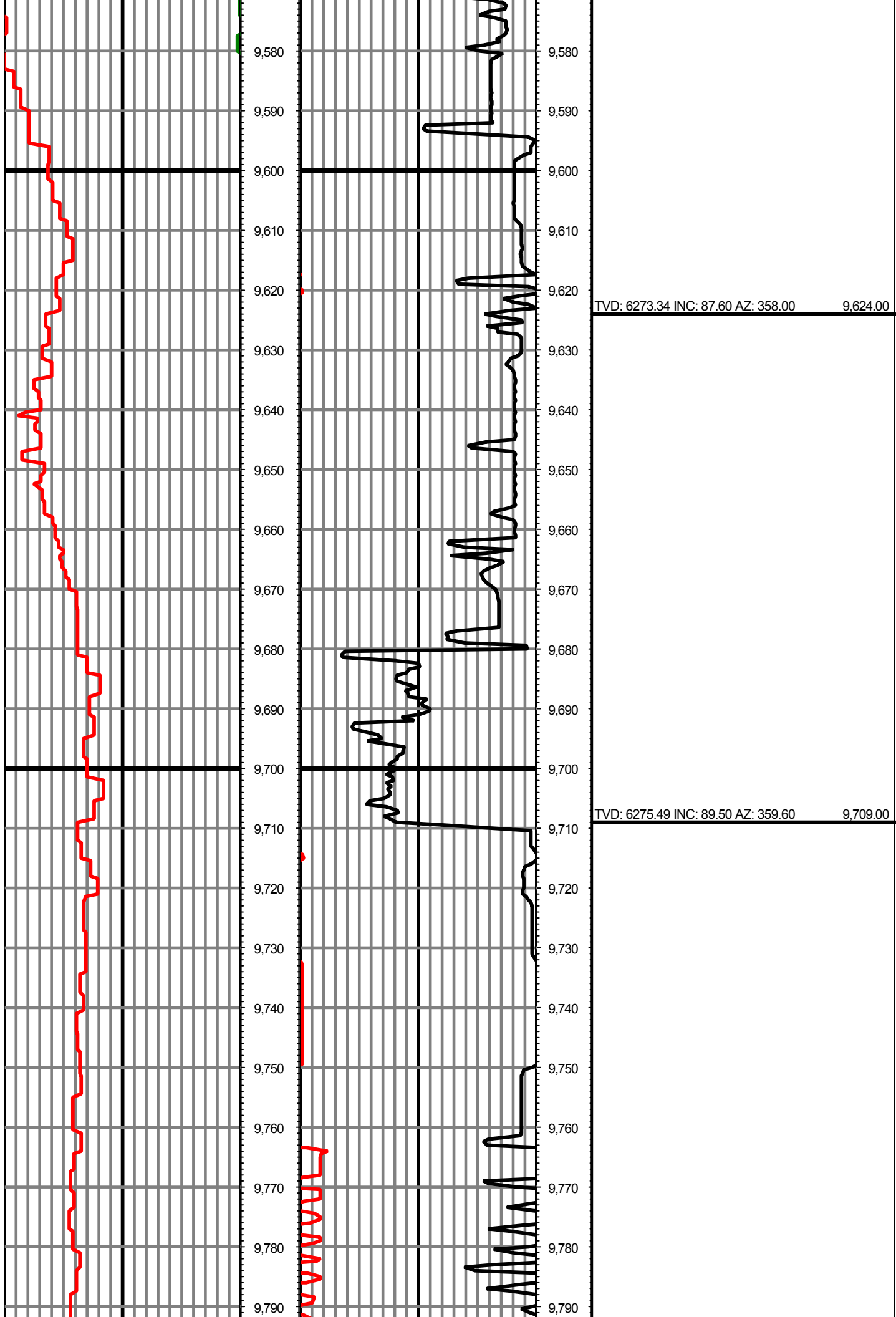
TVD: 6272.84 INC: 89.90 AZ: 356.90 8,779.00

TVD: 6272.32 INC: 90.80 AZ: 359.00 8,864.00









TVD: 6276.53 INC: 89.10 AZ: 358.80 9,794.00

TVD: 6275.86 INC: 91.80 AZ: 0.10 9,879.00

TVD: 6273.56 INC: 91.30 AZ: 359.40 9,964.00

