



Precision Directional Services, Inc
PDSI
27610 Commerce Oaks Drive
Oak Ridge North, TX 77385
713-805-4436

DL1623

2":100' - MD
4/26/2013 10:55:12 AM

Oper. Company: Carrizo Oil & Gas, Inc
Country: USA
State / Province: Colorado
County / Parish: Weld
Started: 04/19/2013 03:00 PM

API/UWI: 05-123-36865
Field: Niobrara CONZ'83
Well: Nelson 3-17-9-60
Rig: Xtreme 19
Ended: 04/26/2013 11:00 AM

Personnel

Day Hand: Wes Highnote
Night Hand: Neil LaRubbio
Comp. Emp: Gabe Vela

Location

Latitude: 40 44'34.894N
Longitude: 104 07'16.677W
Elev. GL: 4991
Elev. DF: 5008
Elev. KB: 17

Hole Data

Size	From	To
12 1/4	0	1431
8 3/4	1431	6640
6 1/8	6640	10715

Casing Data

Size	From	To
9 5/8	0	1431
7	0	6624
4 1/2	6624	10715

Bit Sizes

Size	From	To
12 1/4	0	1431
8 3/4	1431	6640
6 1/8	6640	10715

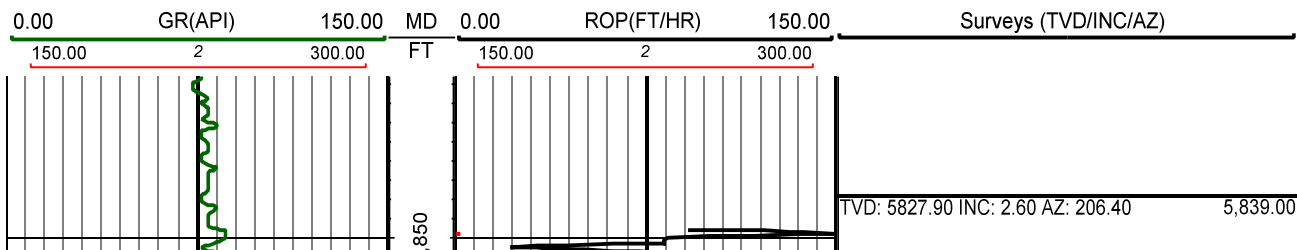
Mud Data

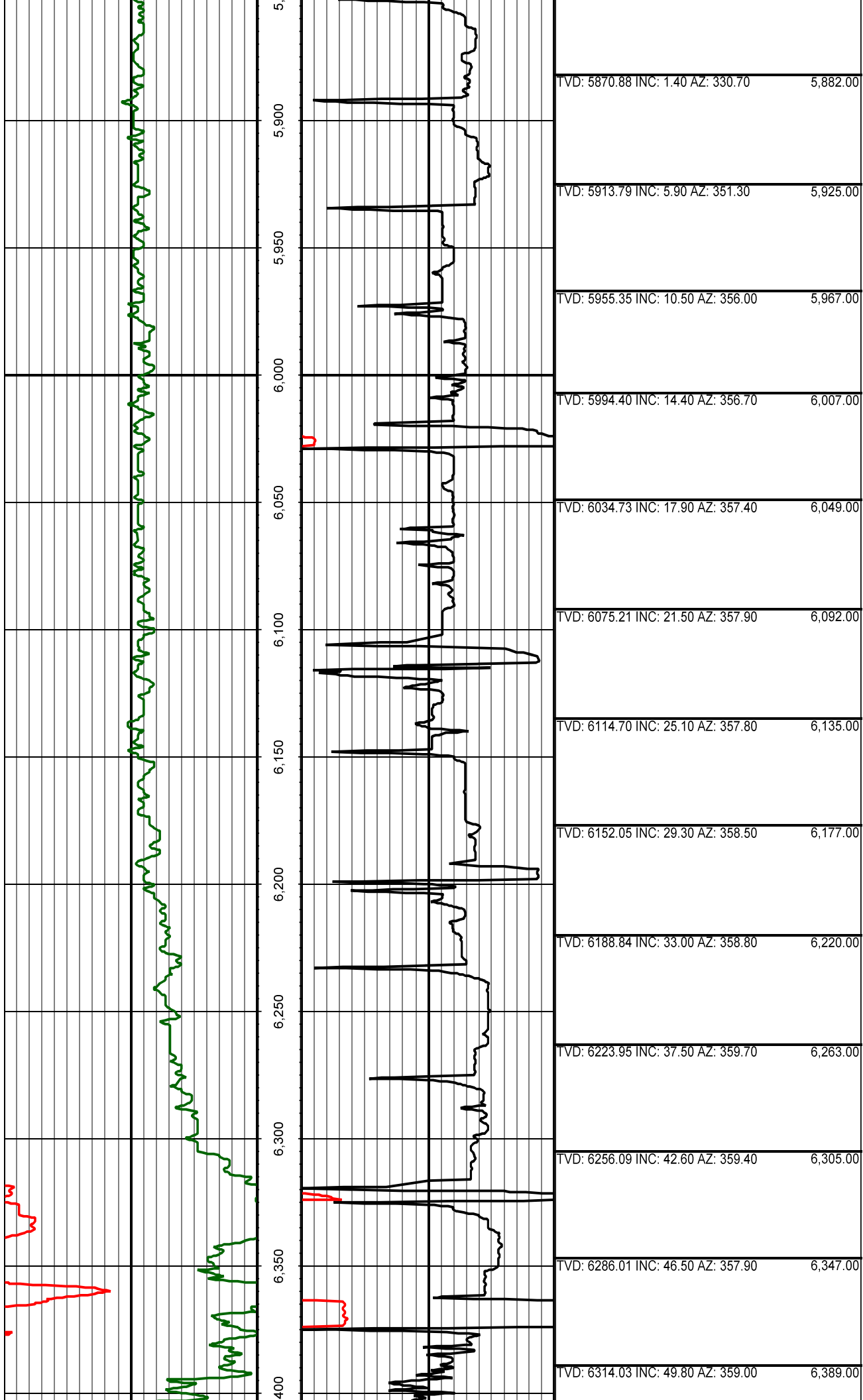
Type	Weight	Density	Viscosity	Rm	Rmf	Rmc	From	To
WBM	8.4	8.4	27	N/A	N/A	N/A	0	1431
WBM	9.0	9.0	35	N/A	N/A	N/A	1431	5846
WBM	9.6	9.6	40	N/A	N/A	N/A	5846	0

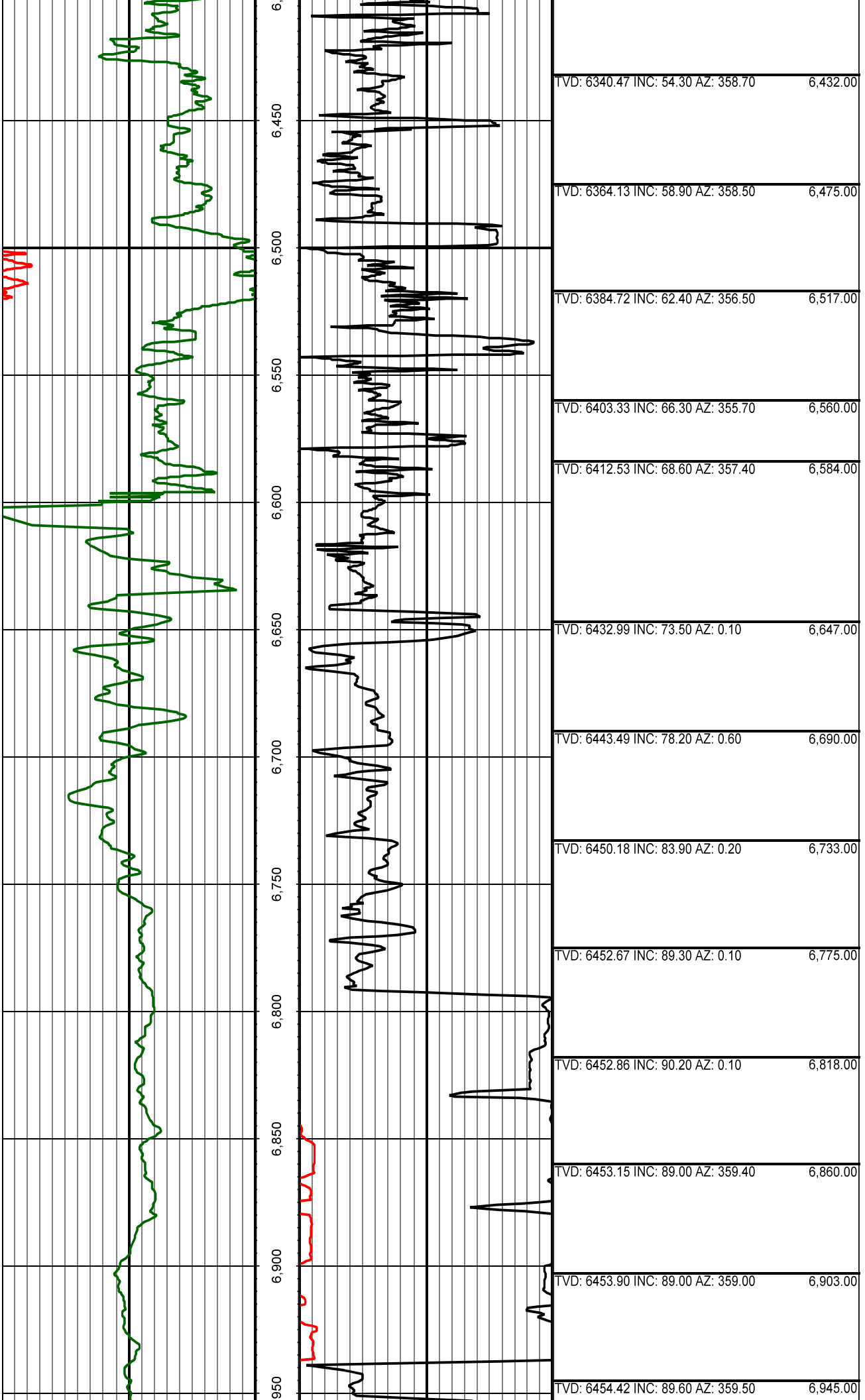
Tool Run Data

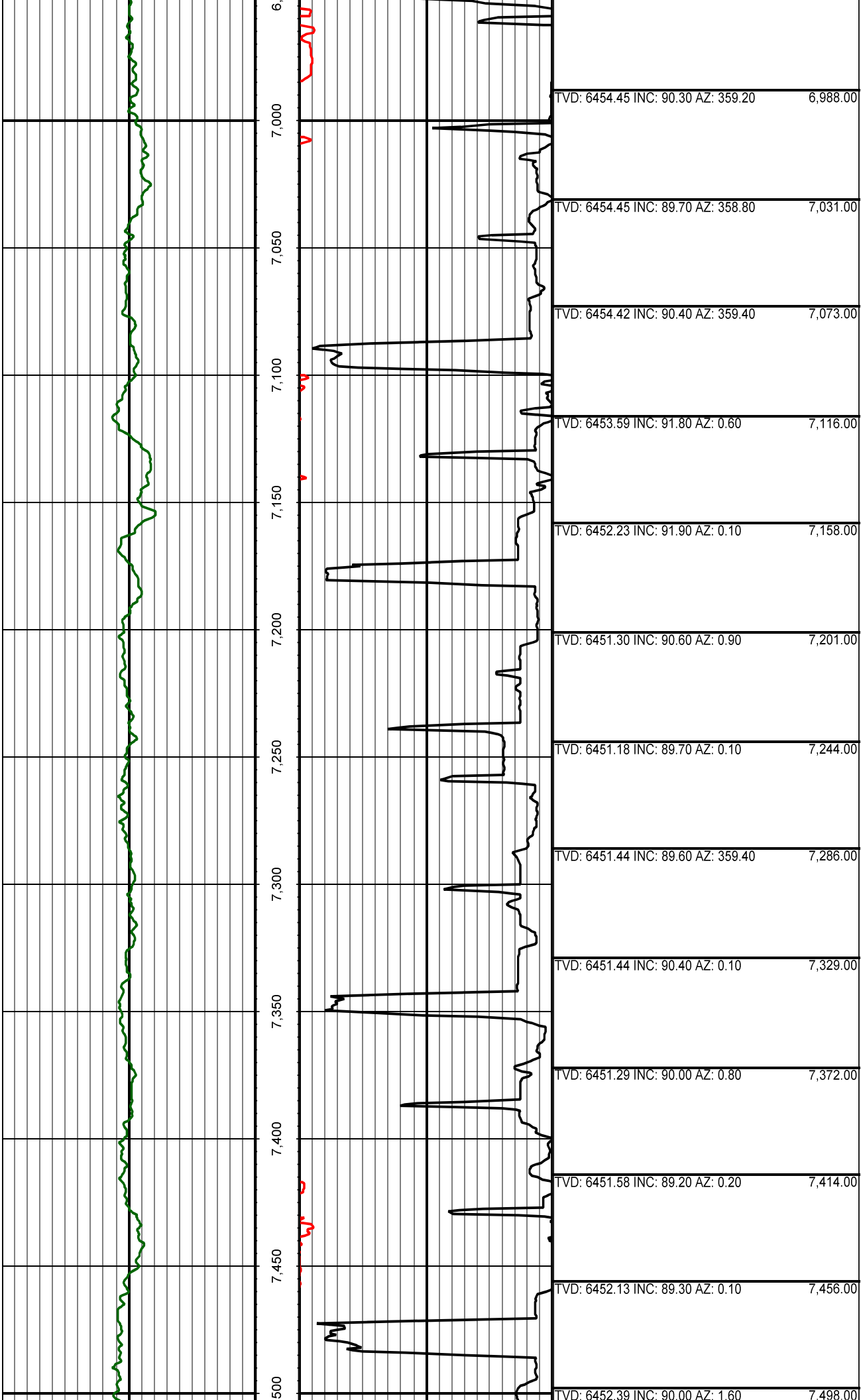
Serial Number	Gamma Offset	Resist. Offset	Start Time	Start Depth	End Time	End Depth
G2034	40	0	4/19/2013 3:00:17 PM	5846	4/20/2013 7:30:17 PM	6640
G2034	41	0	4/22/2013 4:30:15 AM	6640	4/24/2013 2:30:15 AM	8389
G1204	41	0	4/24/2013 3:30:58 AM	8389	4/26/2013 11:00:58 AM	10715

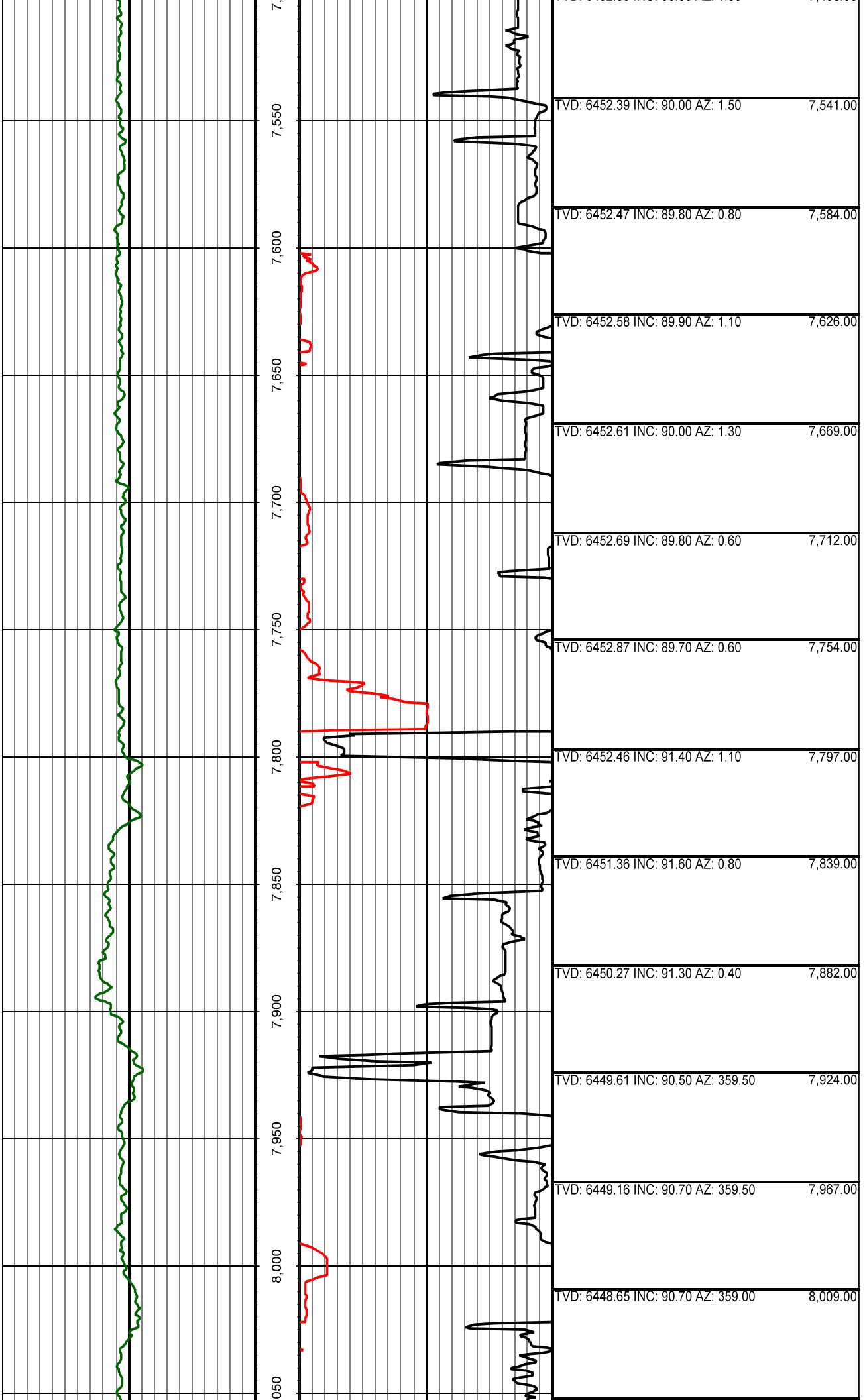
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost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

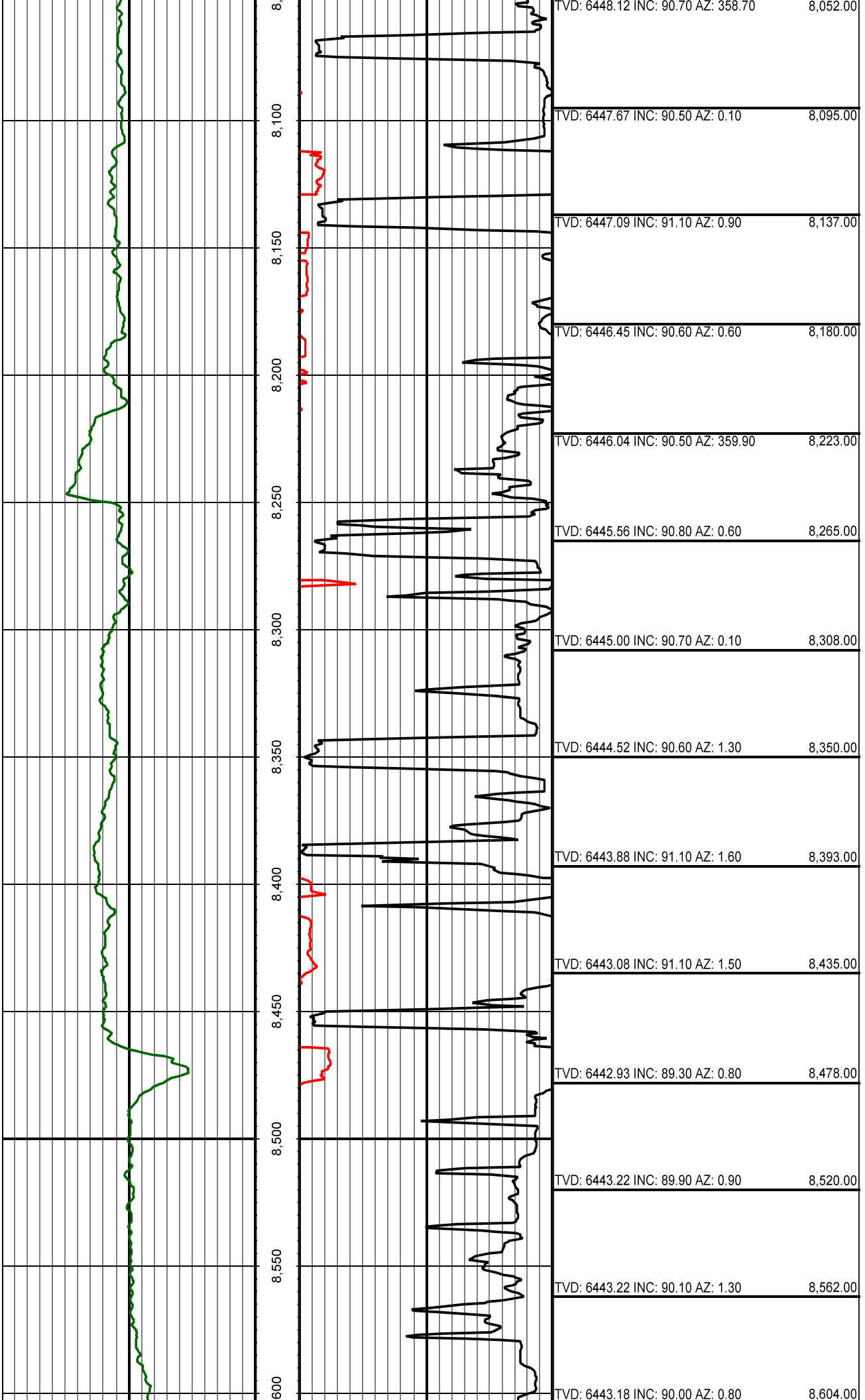


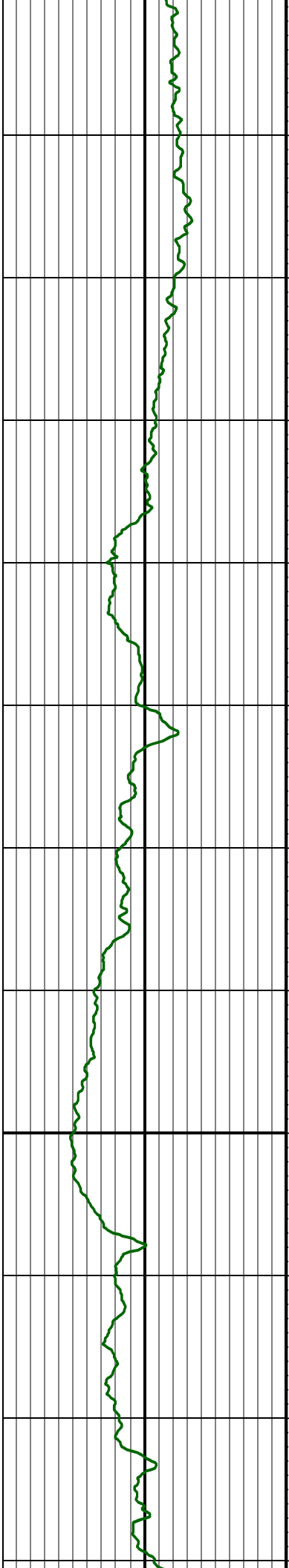




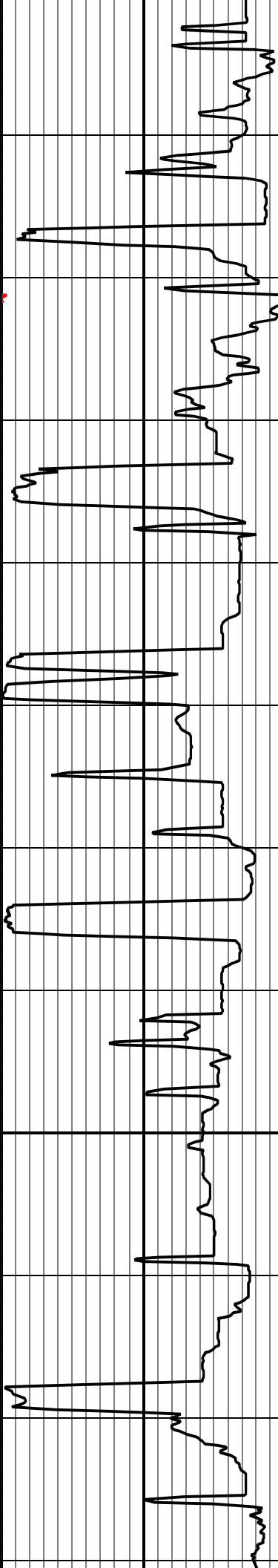








8,650
8,700
8,750
8,800
8,850
8,900
8,950
9,000
9,050
9,100
150



TVD: 6443.22 INC: 89.90 AZ: 359.50	8,646.00
TVD: 6443.48 INC: 89.40 AZ: 358.70	8,689.00
TVD: 6443.85 INC: 89.60 AZ: 358.10	8,731.00
TVD: 6444.60 INC: 88.40 AZ: 359.00	8,774.00
TVD: 6445.81 INC: 88.30 AZ: 359.20	8,816.00
TVD: 6447.12 INC: 88.20 AZ: 359.50	8,859.00
TVD: 6448.48 INC: 88.10 AZ: 359.40	8,901.00
TVD: 6449.60 INC: 88.90 AZ: 1.50	8,944.00
TVD: 6450.35 INC: 89.10 AZ: 1.50	8,987.00
TVD: 6451.22 INC: 88.60 AZ: 1.10	9,030.00
TVD: 6452.17 INC: 88.80 AZ: 1.10	9,072.00
TVD: 6452.84 INC: 89.40 AZ: 2.20	9,115.00
TVD: 6453.10 INC: 89.90 AZ: 1.90	9,158.00

