

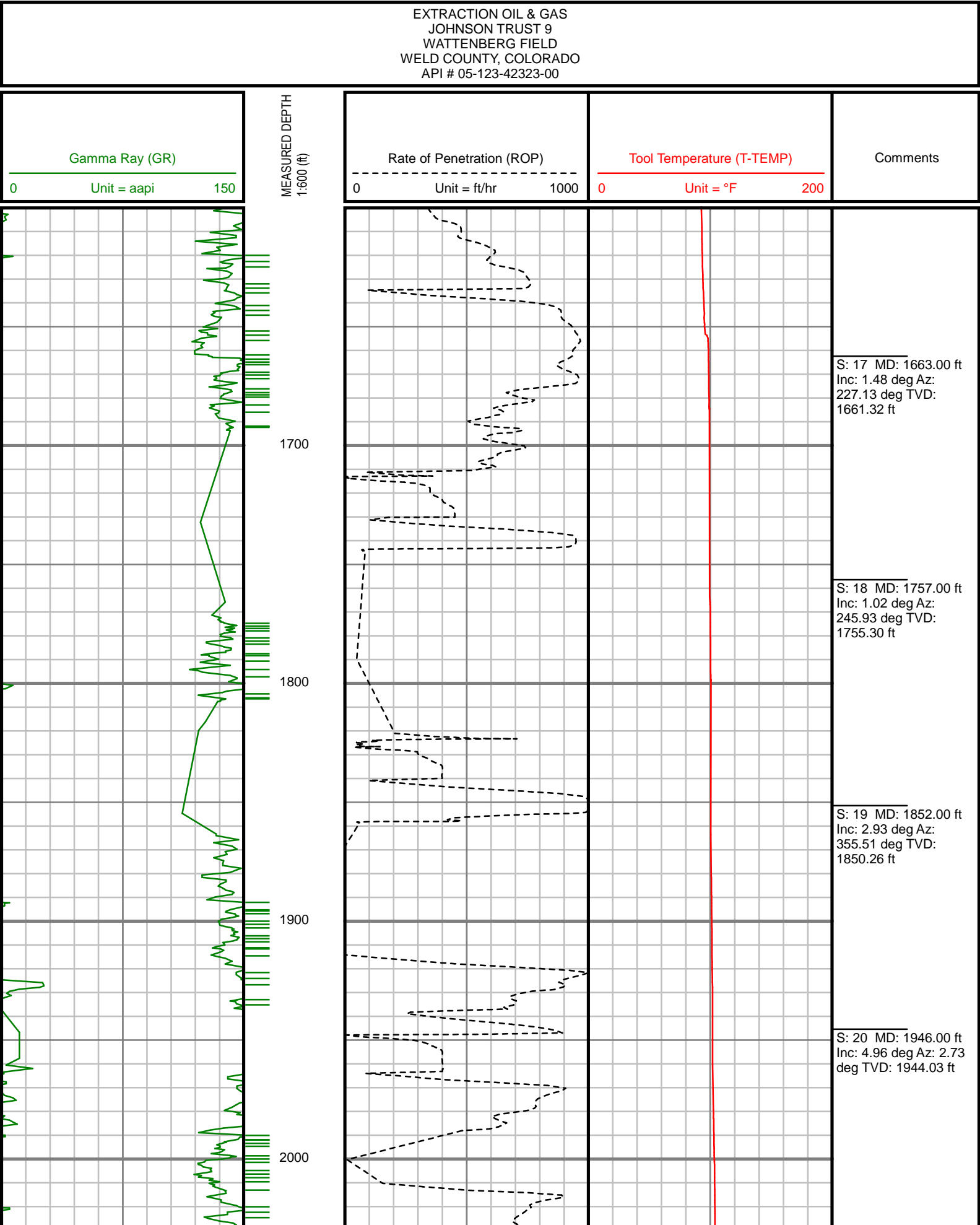
2" = 100' FEET MD

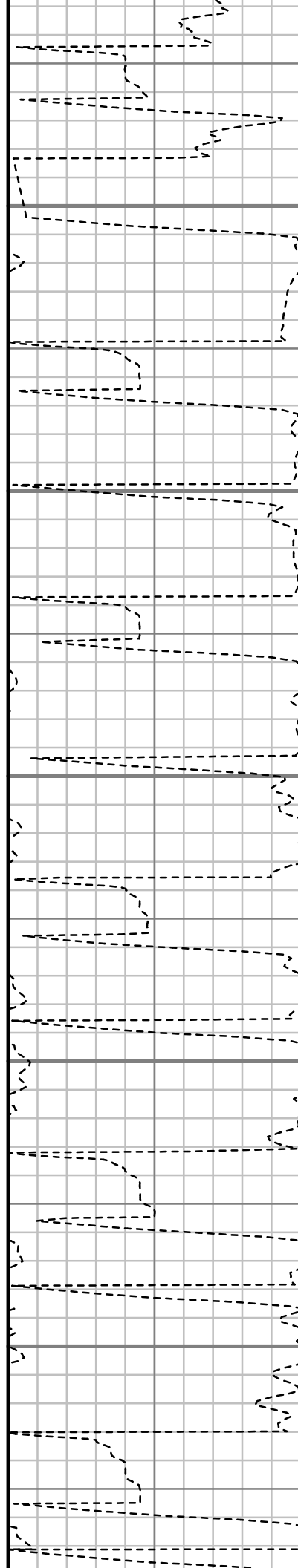
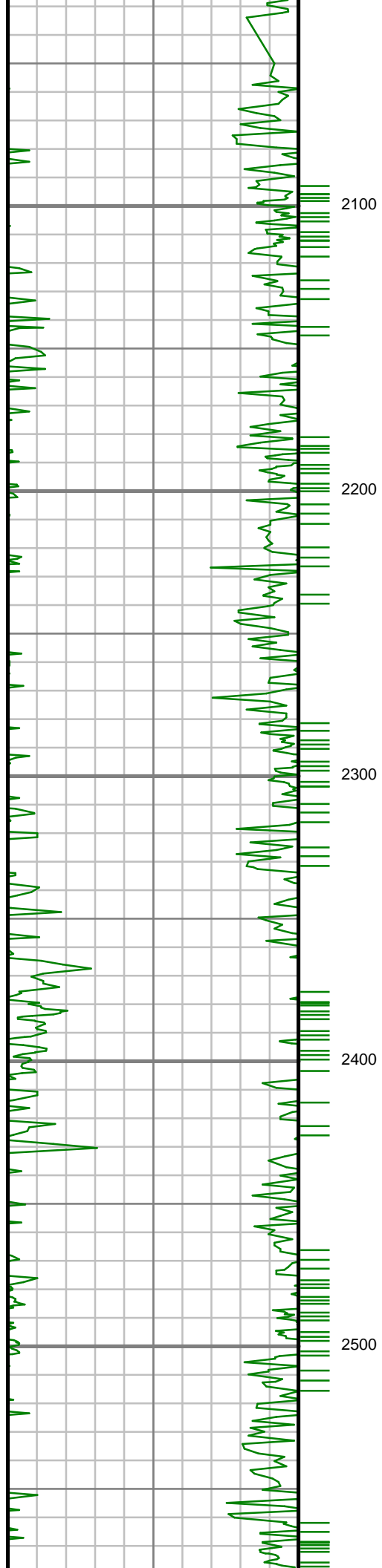
COMPANY : EXTRACTION OIL & GAS WELL : JOHNSON TRUST 9 PRODUCTION FIELD : WATTENBERG COUNTY : WELD STATE : COLORADO COUNTRY : U.S.A. UWI : 05-123-42323-00										COMPANY : EXTRACTION OIL & GAS WELL : JOHNSON TRUST 9 PRODUCTION FIELD : WATTENBERG COUNTY : WELD STATE : COLORADO COUNTRY : U.S.A. UWI : 05-123-42323-00																			
DEPTH REF. : RKB REF. HEIGHT : 24.500 ft GROUND LEVEL : 4923.000 ft										WELL LOCATION LAT:40°8'13.315"N LONG:104°57'34.632"W N:1293224.73 ft E:3151084.27 ft SEC:13 TWP:2N RANGE:68W										OTHER SERVICES DIRECTIONAL ROP									
BOREHOLE RECORD										DEVIATION RECORD																			
HOLE SIZE in		FROM ft		TO ft		INCLINATION deg		FROM ft		TO ft																			
13.5		0		1583		0 - 3		0		1500																			
7.875		1583		12341		3 - 20		1500		3083																			
						20 - 0		3083		6872																			
						0 - 90		6872		8007																			
						90 - 93		8007		12341																			
CASING RECORD																													
CASING SIZE in		FROM ft		TO ft																									
9.675		0		1558																									
										DRILLING CO.: PATTERSON RIG: 346																			
										LMD UNIT NO. : SPUD DATE: 02/07/2016 LMD START DATE: 02/07/2016 LMD END DATE: 02/12/2016																			
										DISTRICT: CASPER DEPTH: 1600 ft DEPTH: 12341 ft TOTAL DEPTH: 12341 ft																			

Remarks
EXTRACTION OIL & GAS PRODUCTION AFE# 14-526
SCIENTIFIC DRILLING INTERNATIONAL JOB# 343707
ALL REFERENCES IN THE DEPTH TRACK ARE AT BIT DEPTH.
ALL DATA IS MEMORY DATA UNLESS STATED OTHERWISE.
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO GAMMA RAY CURVE
RUN #1: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 128-280 / CONT = 822 / MWD EYE = 0972 / GAMMA RAY = 1375
BIT TO SENSOR OFFSETS: SURVEY = 59.73 / GAMMA RAY = 50.84
RUN #2: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 128-280 / CONT = 822 / MWD EYE = 0972 / GAMMA RAY = 1375
BIT TO SENSOR OFFSETS: SURVEY = 59.96 / GAMMA RAY = 51.07
RUN #3: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 128-280 / CONT = 822 / MWD EYE = 0972 / GAMMA RAY = 1375
BIT TO SENSOR OFFSETS: SURVEY = 59.26 / GAMMA RAY = 50.37
RUN #4: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 128-373 / CONT = 595 / MWD EYE = 1169 / GAMMA RAY = 1039
BIT TO SENSOR OFFSETS: SURVEY = 65.94 / GAMMA RAY = 57.10
MNEMONICS LIST:
GR = GAMMA RAY

[illegible]

All interpretations are opinions based on electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions as set out in our current price schedule.





S: 21 MD: 2041.00 ft  
Inc: 7.67 deg Az: 4.17  
deg TVD: 2038.45 ft

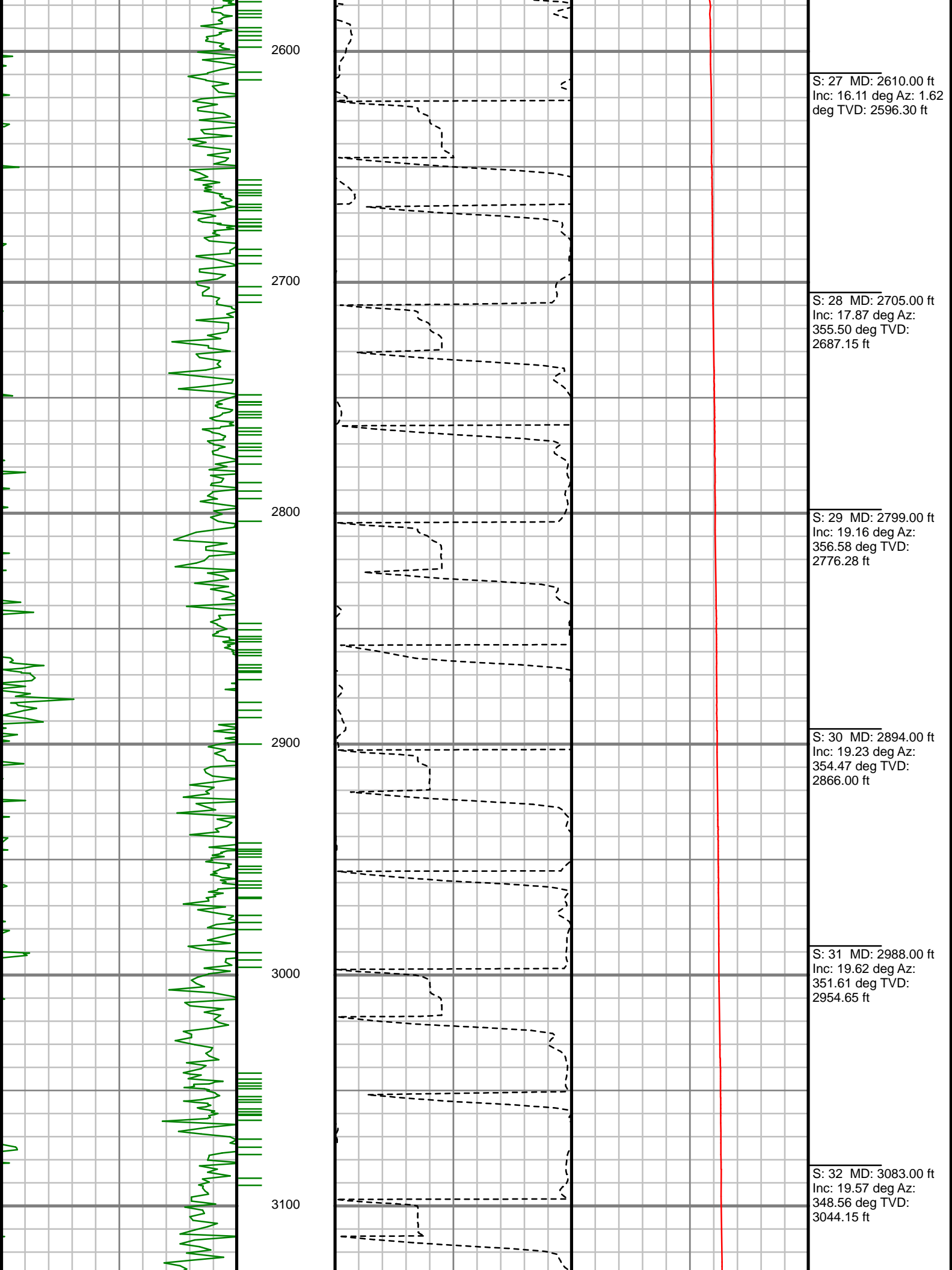
S: 22 MD: 2135.00 ft  
Inc: 10.13 deg Az:  
11.87 deg TVD:  
2131.31 ft

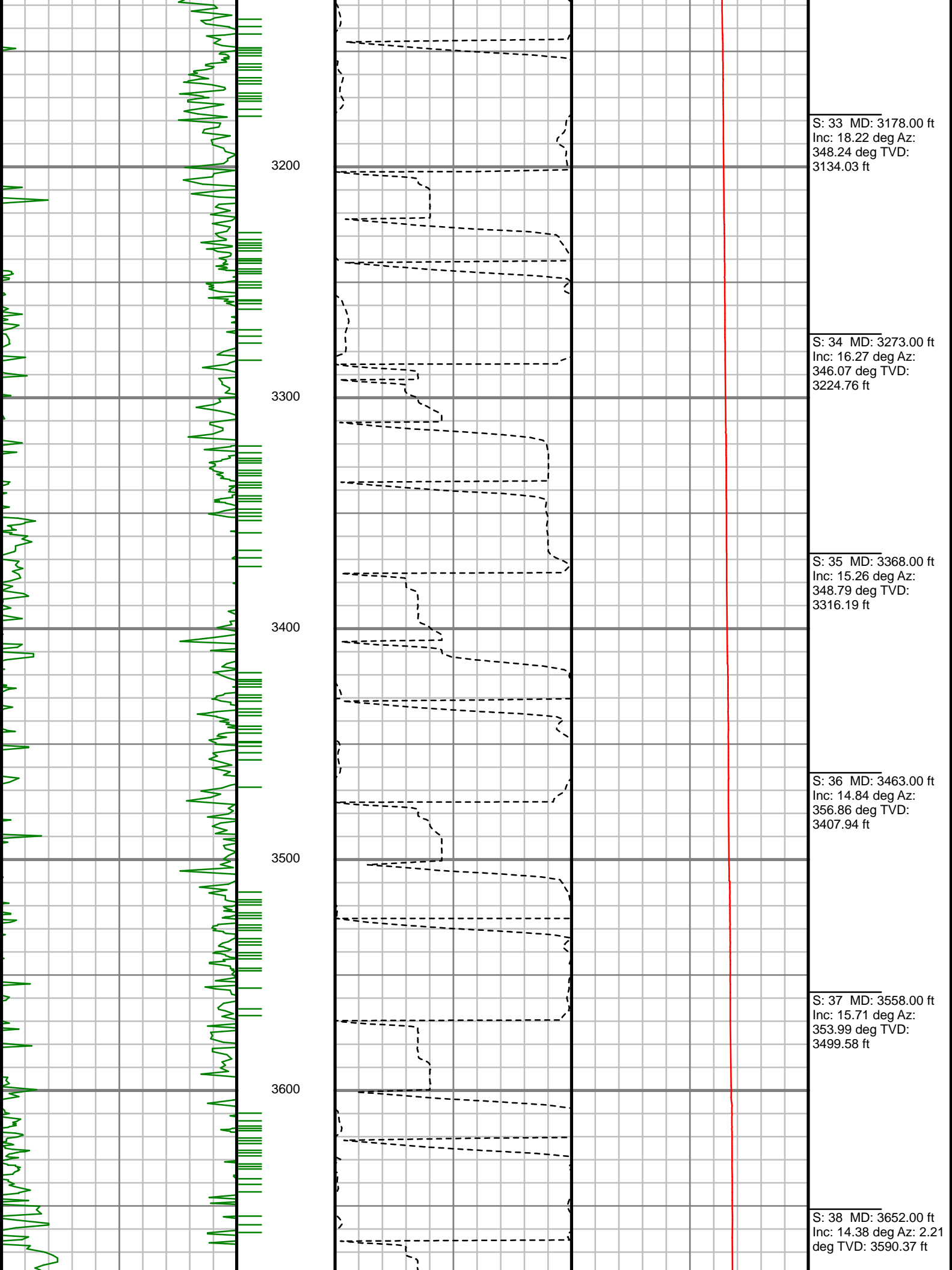
S: 23 MD: 2230.00 ft  
Inc: 11.12 deg Az: 8.27  
deg TVD: 2224.68 ft

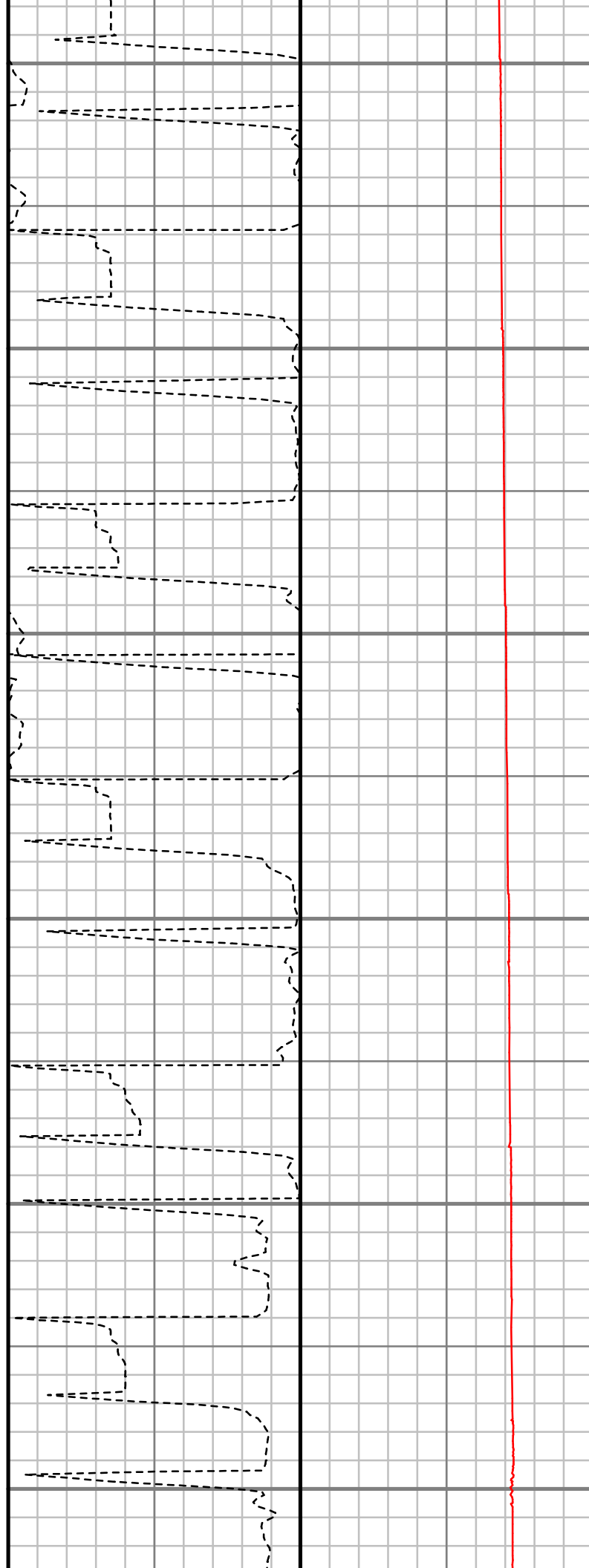
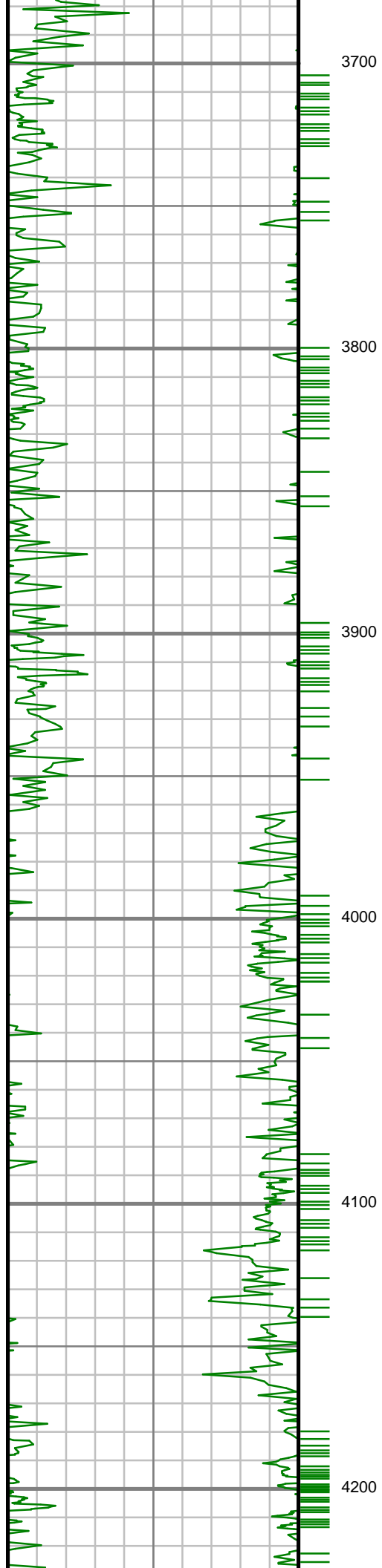
S: 24 MD: 2325.00 ft  
Inc: 10.26 deg Az: 3.58  
deg TVD: 2318.03 ft

S: 25 MD: 2420.00 ft  
Inc: 11.08 deg Az:  
356.85 deg TVD:  
2411.39 ft

S: 26 MD: 2515.00 ft  
Inc: 12.87 deg Az: 4.02  
deg TVD: 2504.33 ft







S: 39 MD: 3747.00 ft  
Inc: 14.71 deg Az: 2.89  
deg TVD: 3682.32 ft

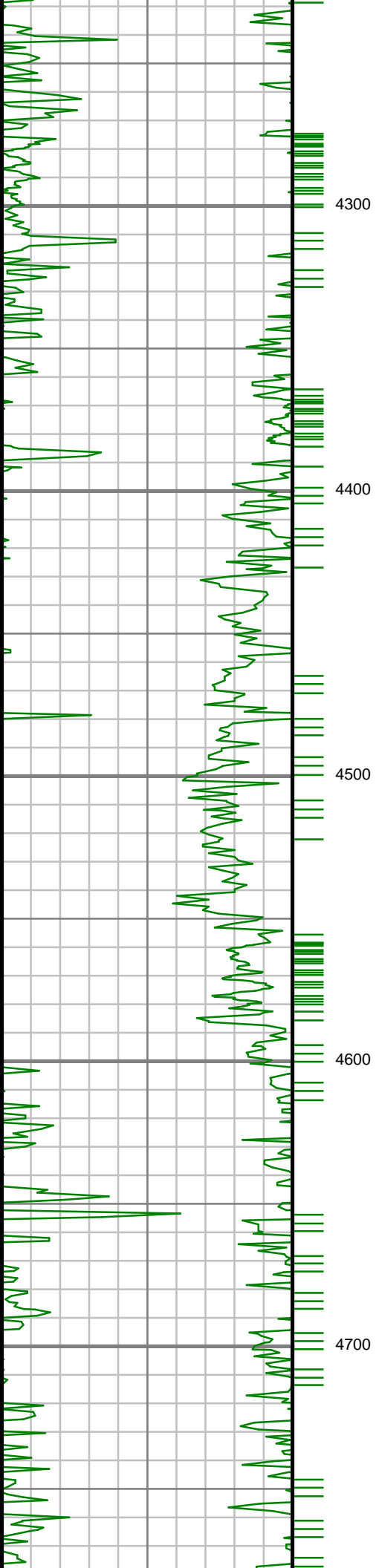
S: 40 MD: 3842.00 ft  
Inc: 14.88 deg Az: 1.64  
deg TVD: 3774.17 ft

S: 41 MD: 3937.00 ft  
Inc: 14.07 deg Az: 5.71  
deg TVD: 3866.16 ft

S: 42 MD: 4031.00 ft  
Inc: 14.33 deg Az: 0.94  
deg TVD: 3957.29 ft

S: 43 MD: 4126.00 ft  
Inc: 16.11 deg Az: 0.34  
deg TVD: 4048.95 ft

S: 44 MD: 4221.00 ft



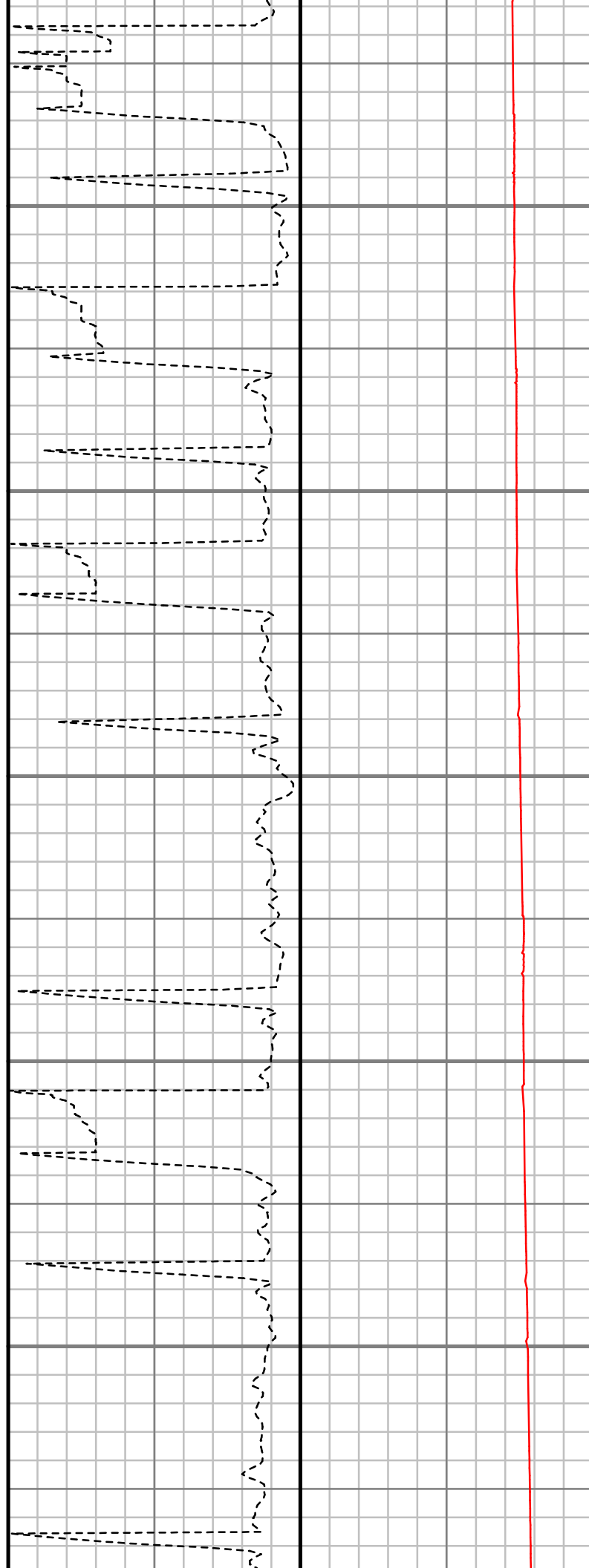
4300

4400

4500

4600

4700



Inc: 13.97 deg Az: 0.80  
deg TVD: 4140.69 ft

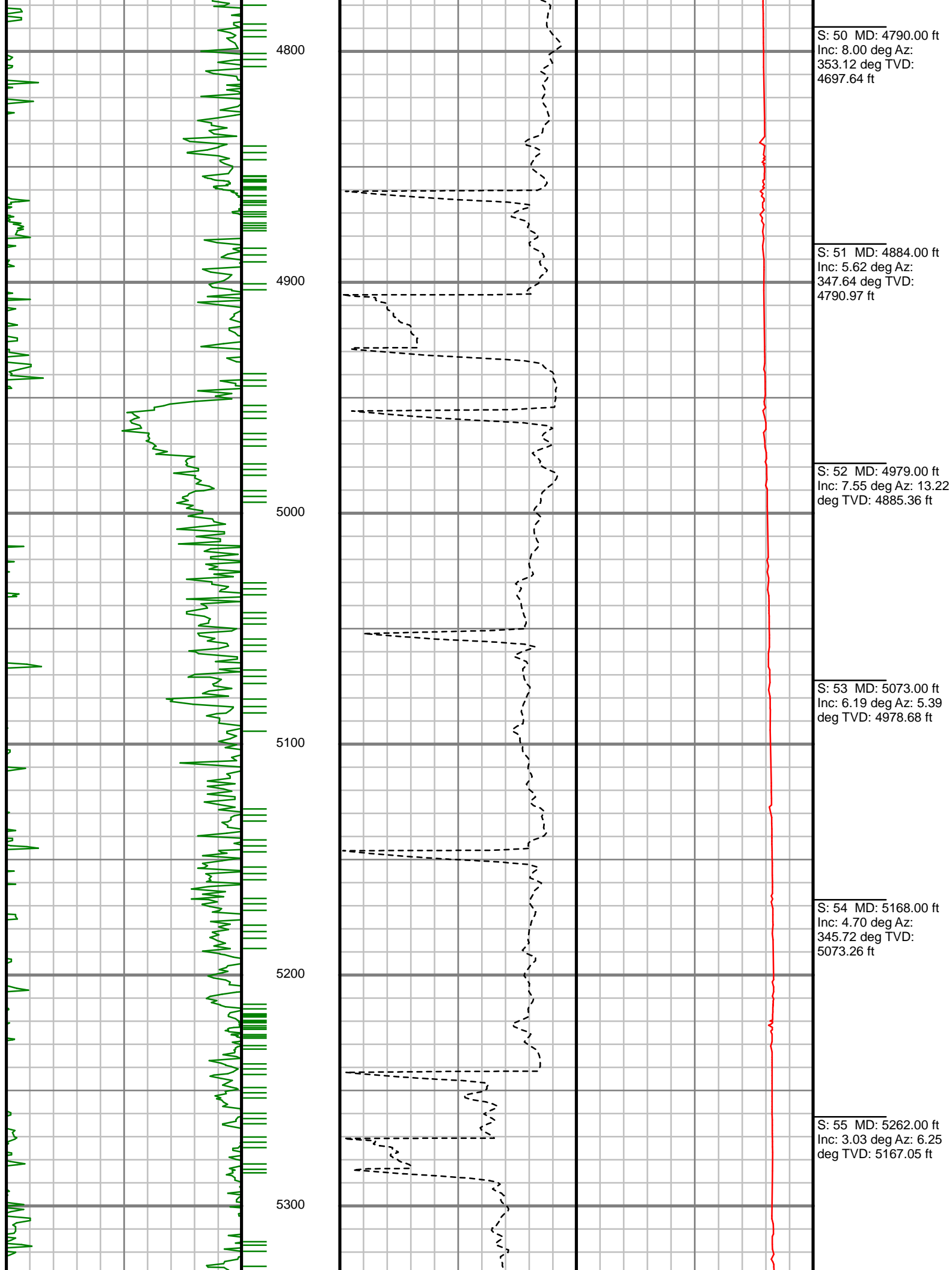
S: 45 MD: 4316.00 ft  
Inc: 11.96 deg Az: 1.79  
deg TVD: 4233.27 ft

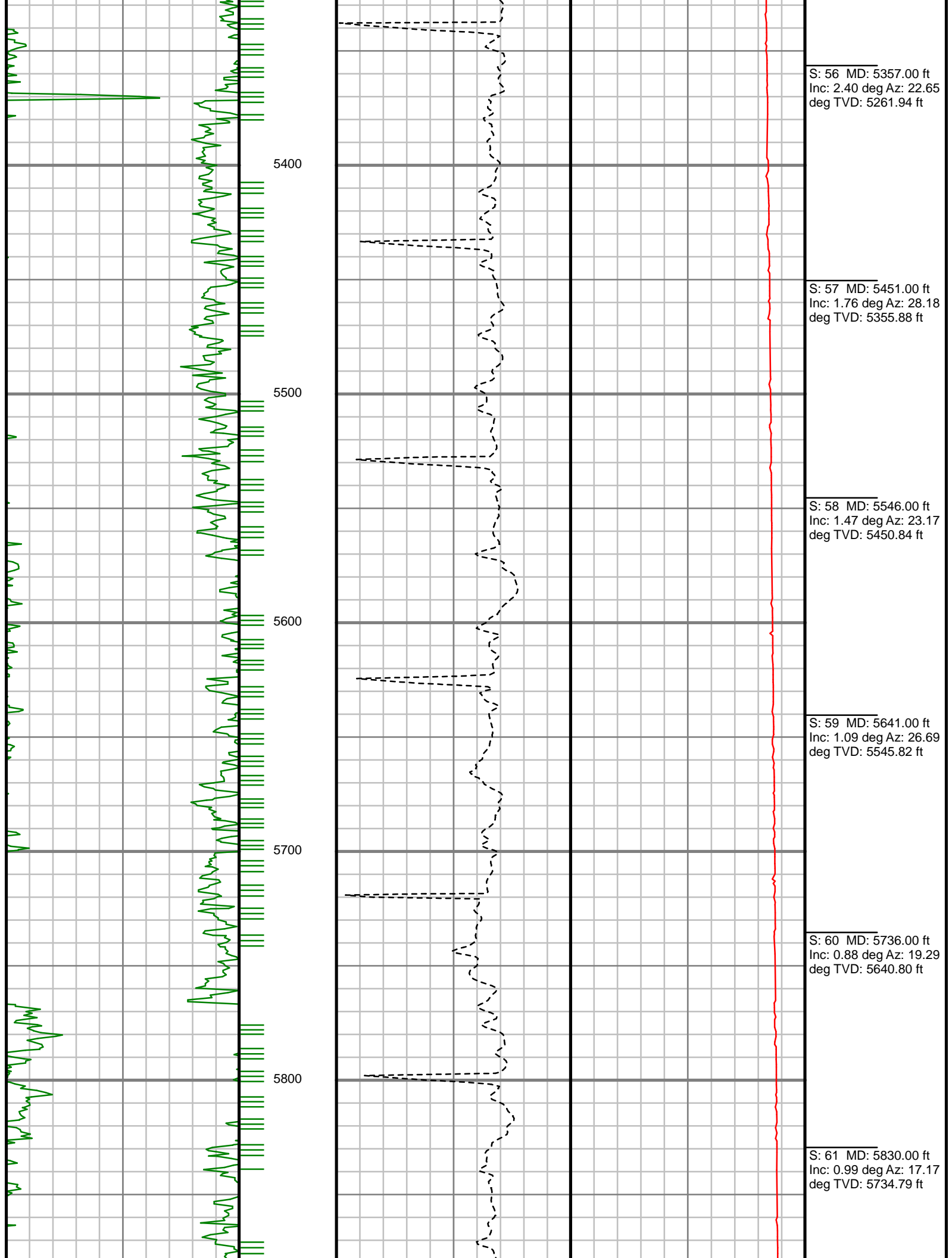
S: 46 MD: 4410.00 ft  
Inc: 12.20 deg Az:  
359.76 deg TVD:  
4325.19 ft

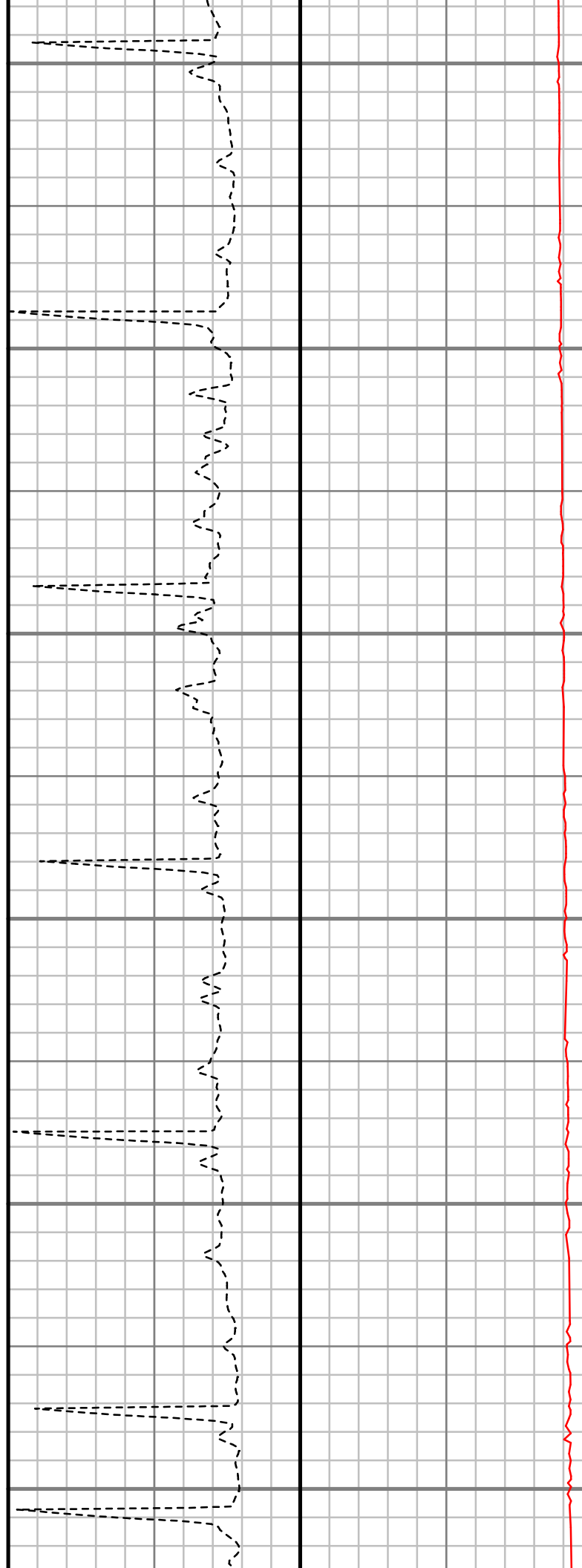
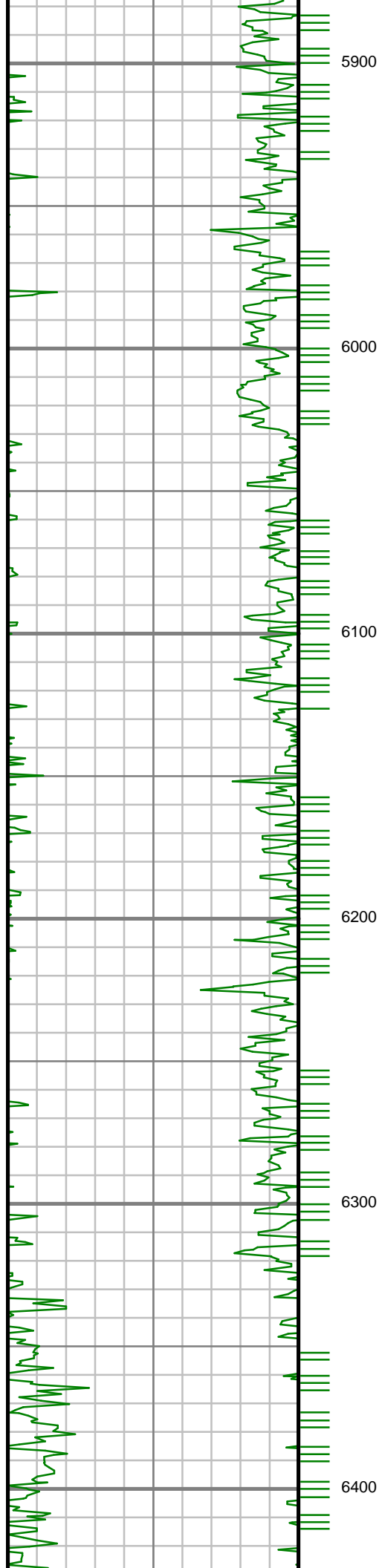
S: 47 MD: 4506.00 ft  
Inc: 12.04 deg Az:  
351.54 deg TVD:  
4419.05 ft

S: 48 MD: 4600.00 ft  
Inc: 11.65 deg Az:  
354.11 deg TVD:  
4511.05 ft

S: 49 MD: 4695.00 ft  
Inc: 11.82 deg Az:  
357.55 deg TVD:  
4604.07 ft







S: 62 MD: 5925.00 ft  
Inc: 1.38 deg Az: 19.02  
deg TVD: 5829.77 ft

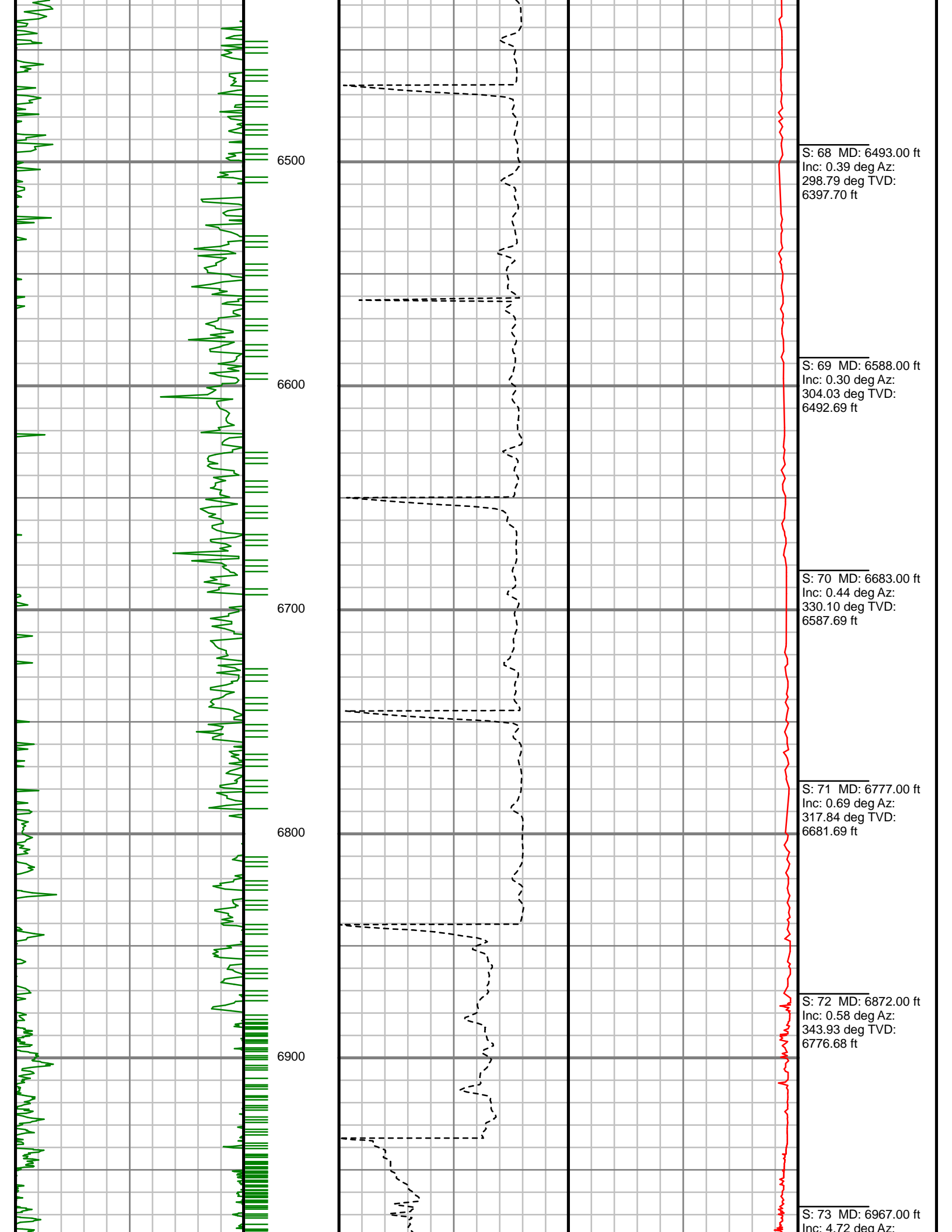
S: 63 MD: 6020.00 ft  
Inc: 1.22 deg Az: 8.76  
deg TVD: 5924.75 ft

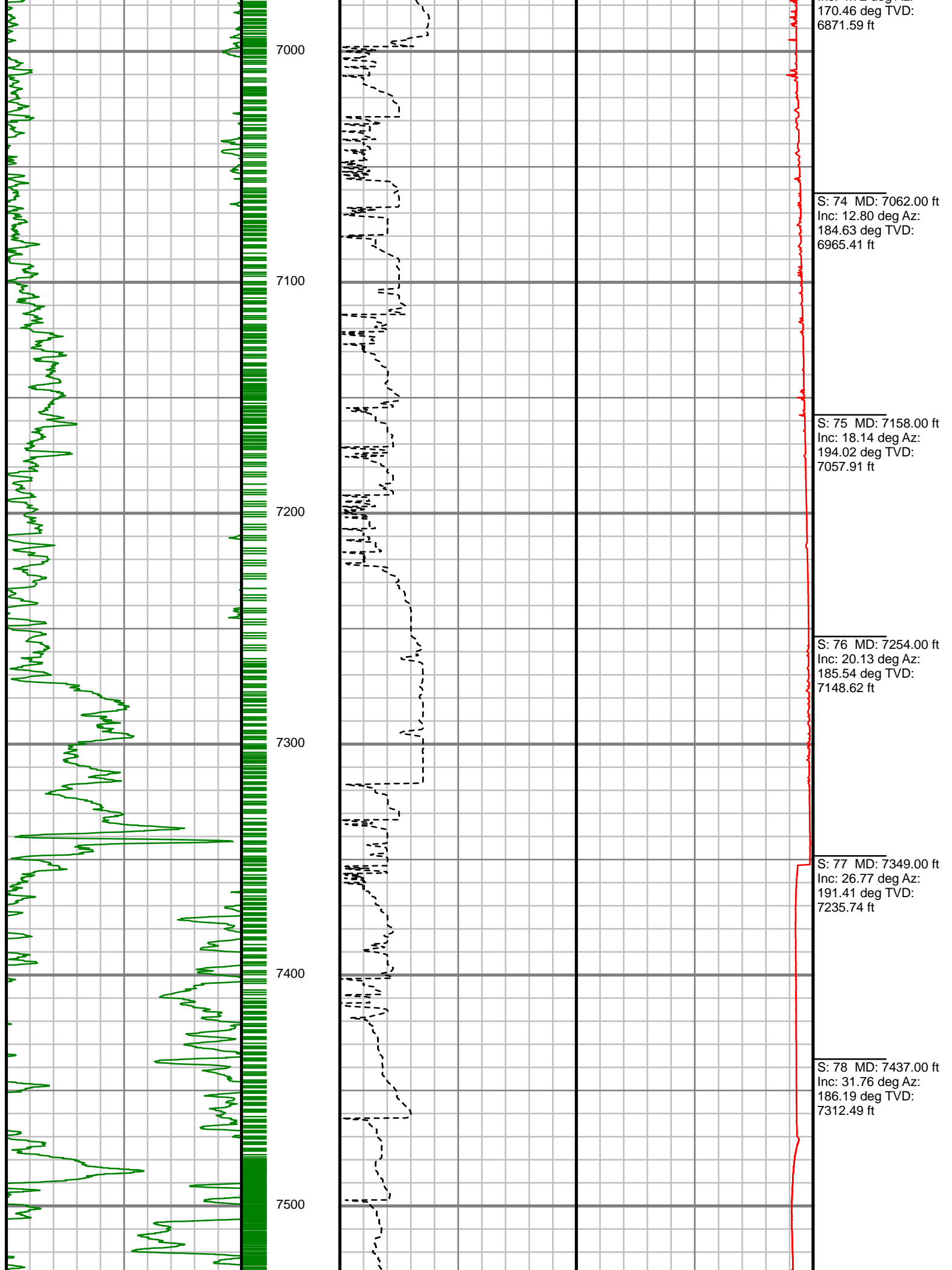
S: 64 MD: 6115.00 ft  
Inc: 1.07 deg Az:  
341.21 deg TVD:  
6019.73 ft

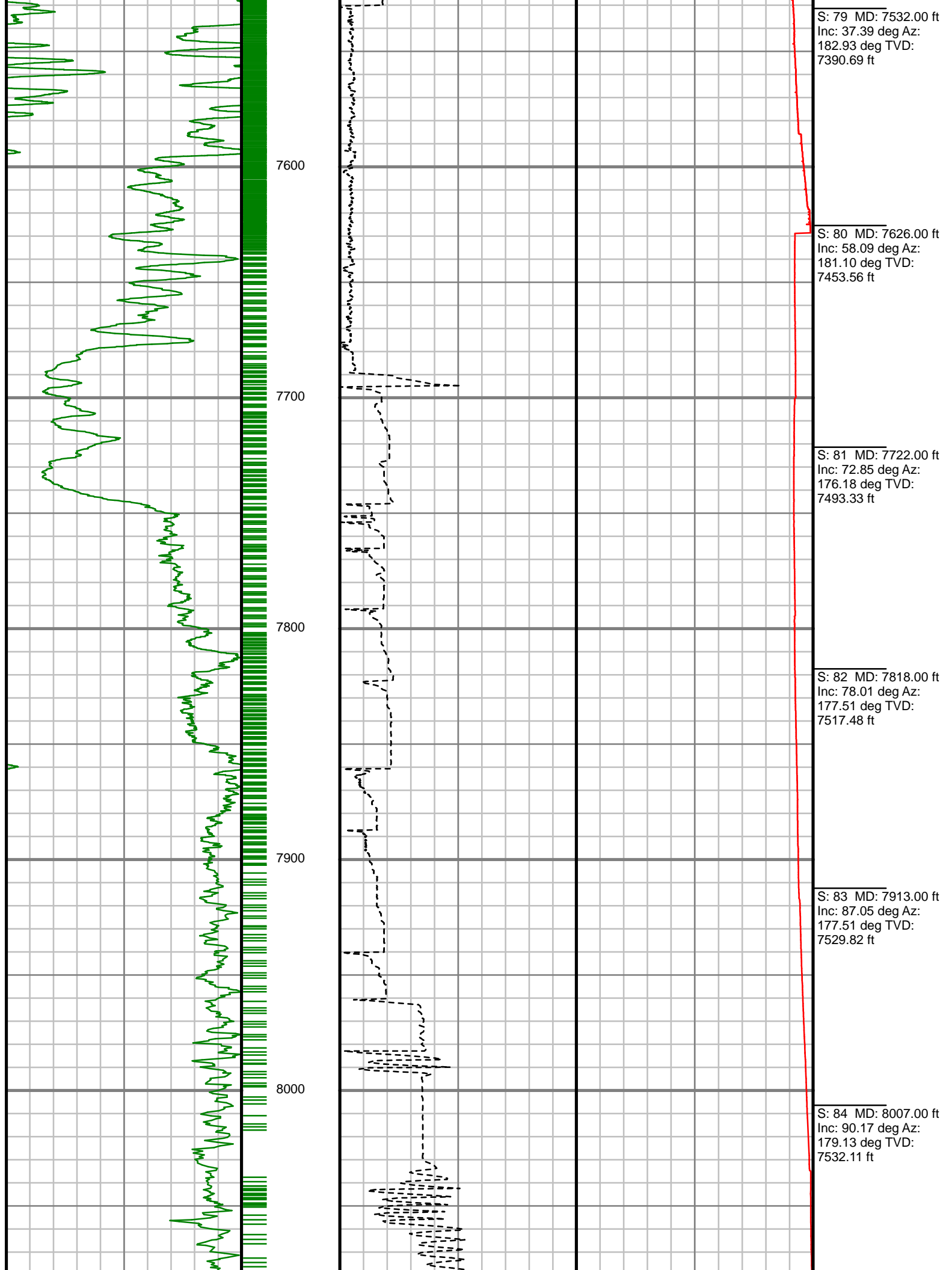
S: 65 MD: 6209.00 ft  
Inc: 0.77 deg Az:  
329.01 deg TVD:  
6113.71 ft

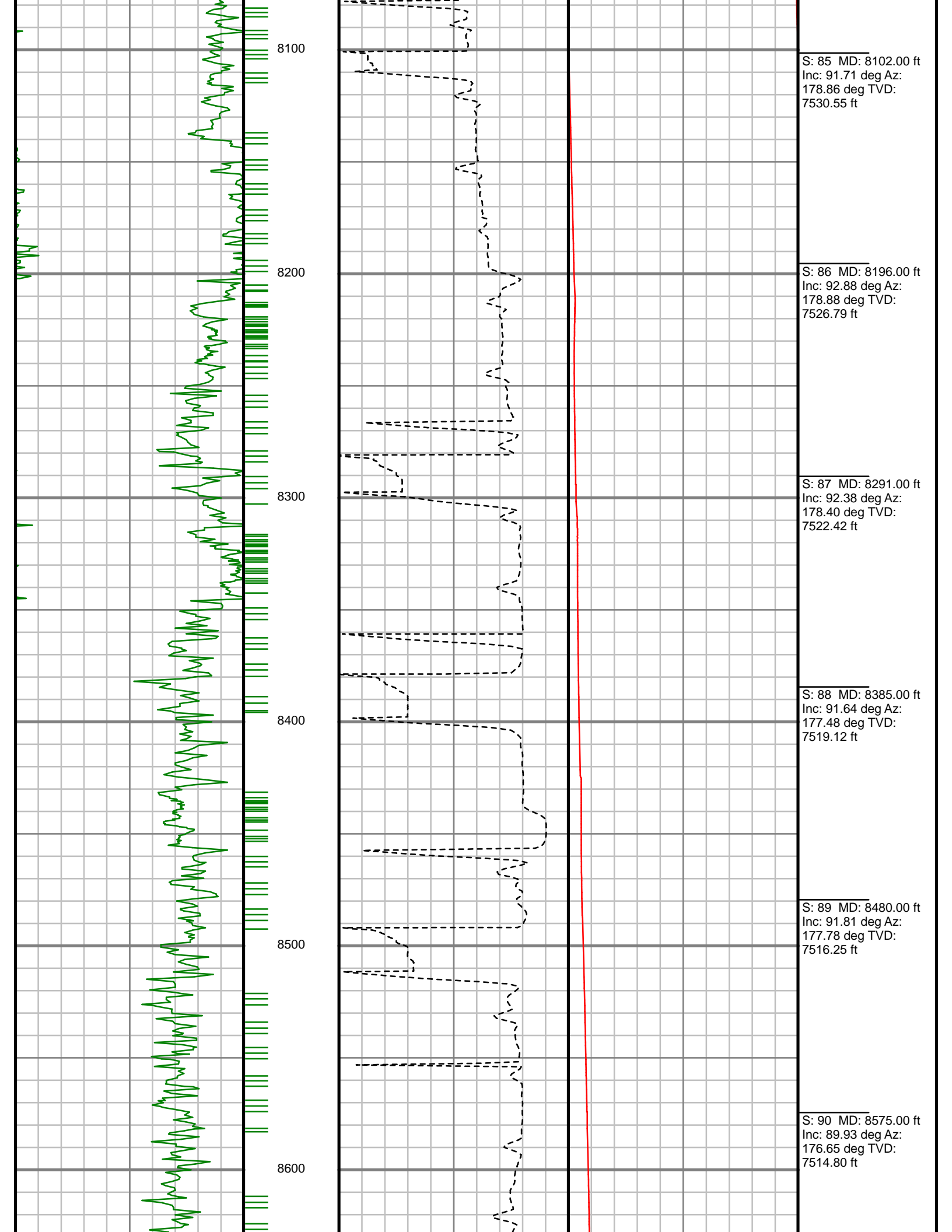
S: 66 MD: 6304.00 ft  
Inc: 0.69 deg Az:  
340.37 deg TVD:  
6208.71 ft

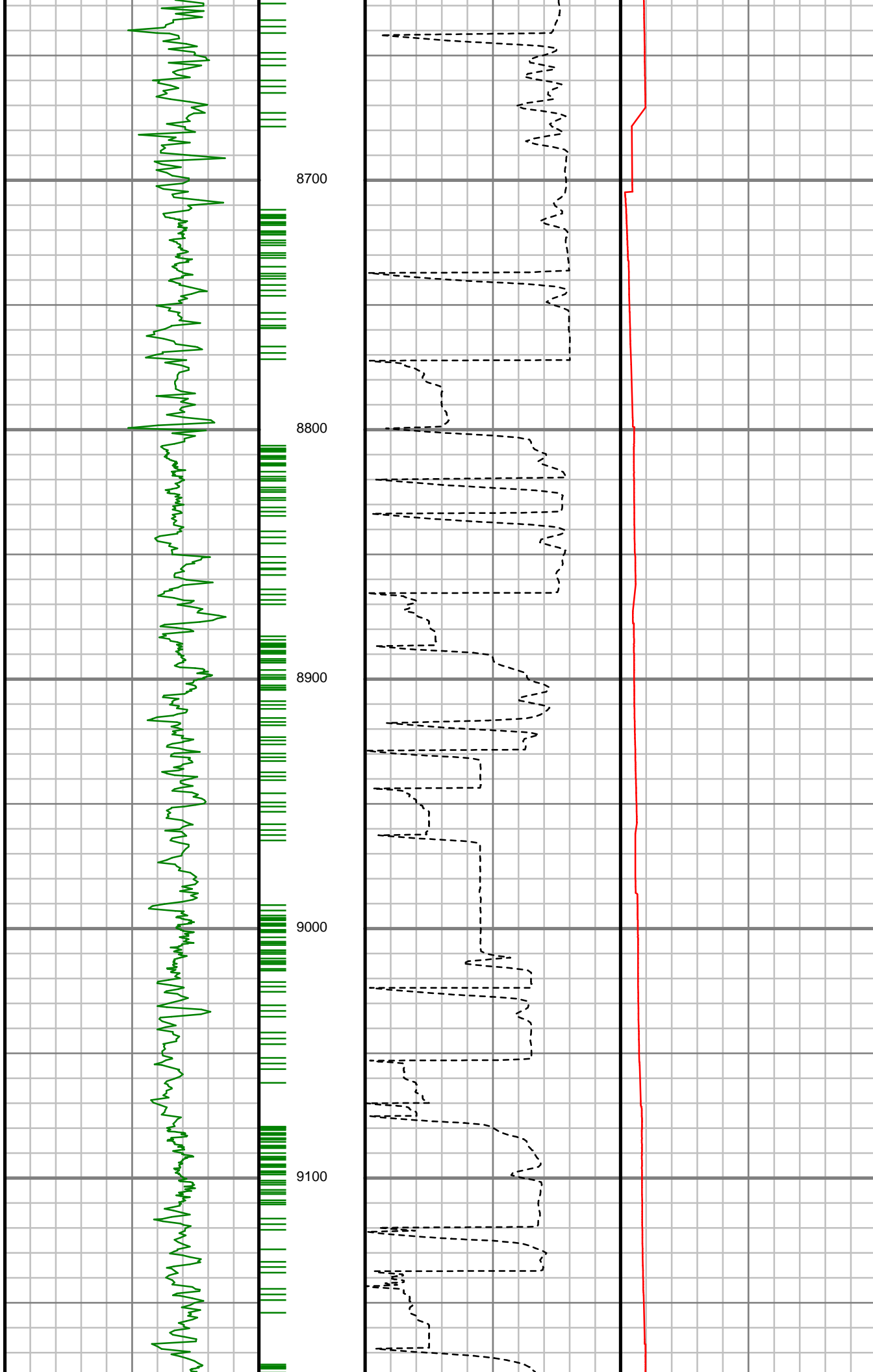
S: 67 MD: 6399.00 ft  
Inc: 0.74 deg Az:  
319.28 deg TVD:  
6303.70 ft











S: 91 MD: 8669.00 ft  
Inc: 90.81 deg Az:  
175.81 deg TVD:  
7514.20 ft

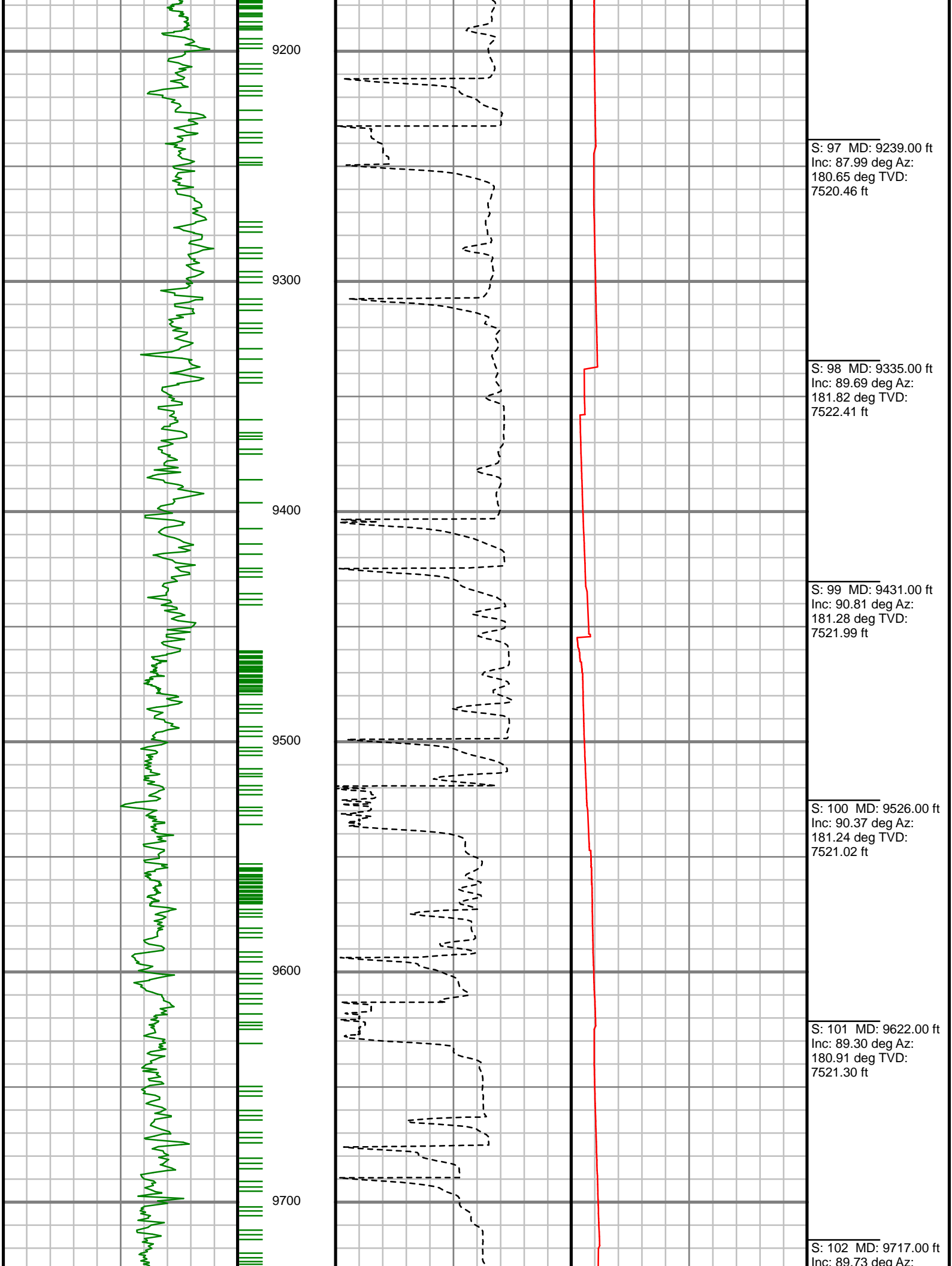
S: 92 MD: 8764.00 ft  
Inc: 91.61 deg Az:  
176.19 deg TVD:  
7512.20 ft

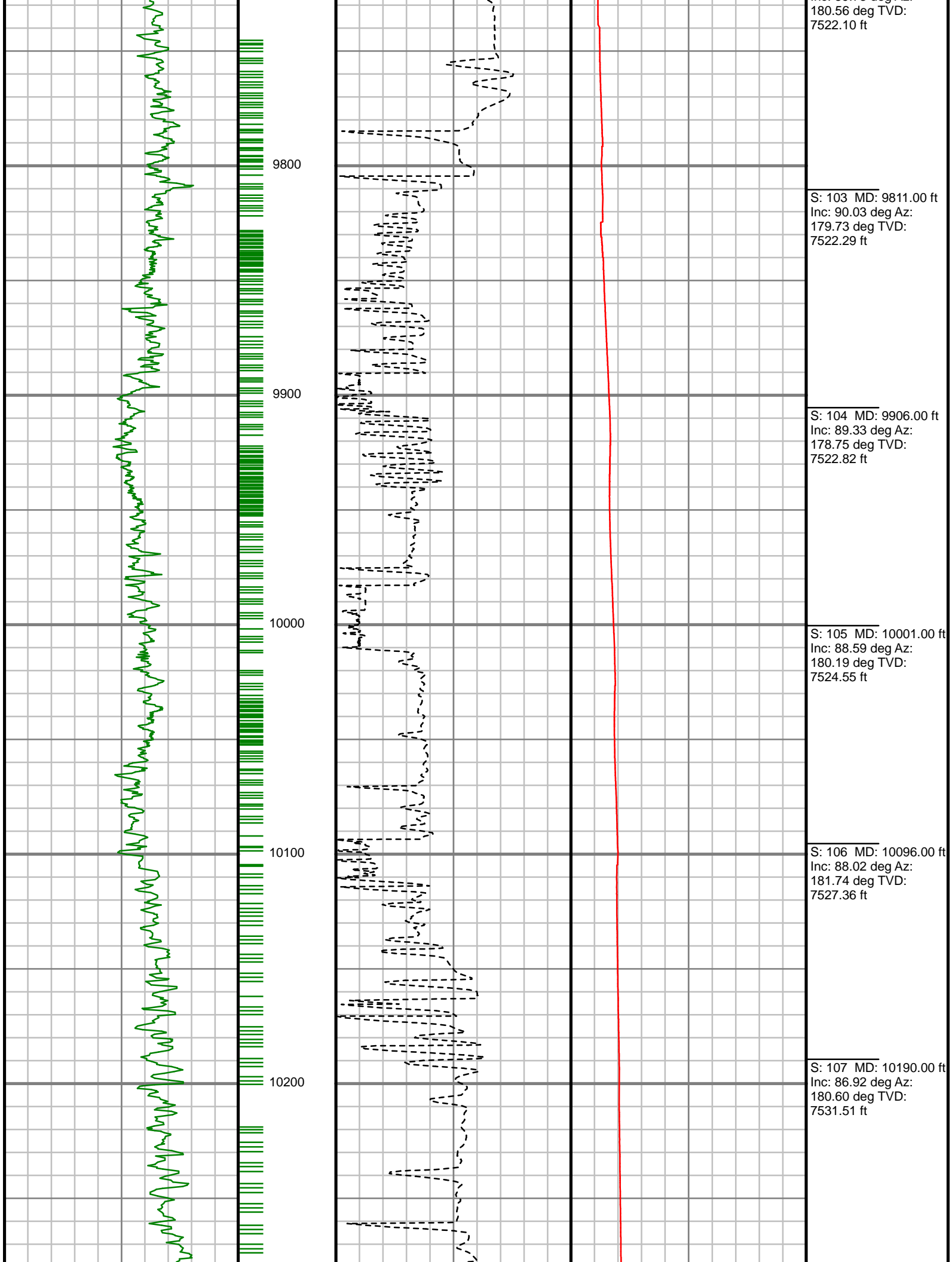
S: 93 MD: 8860.00 ft  
Inc: 91.41 deg Az:  
177.54 deg TVD:  
7509.67 ft

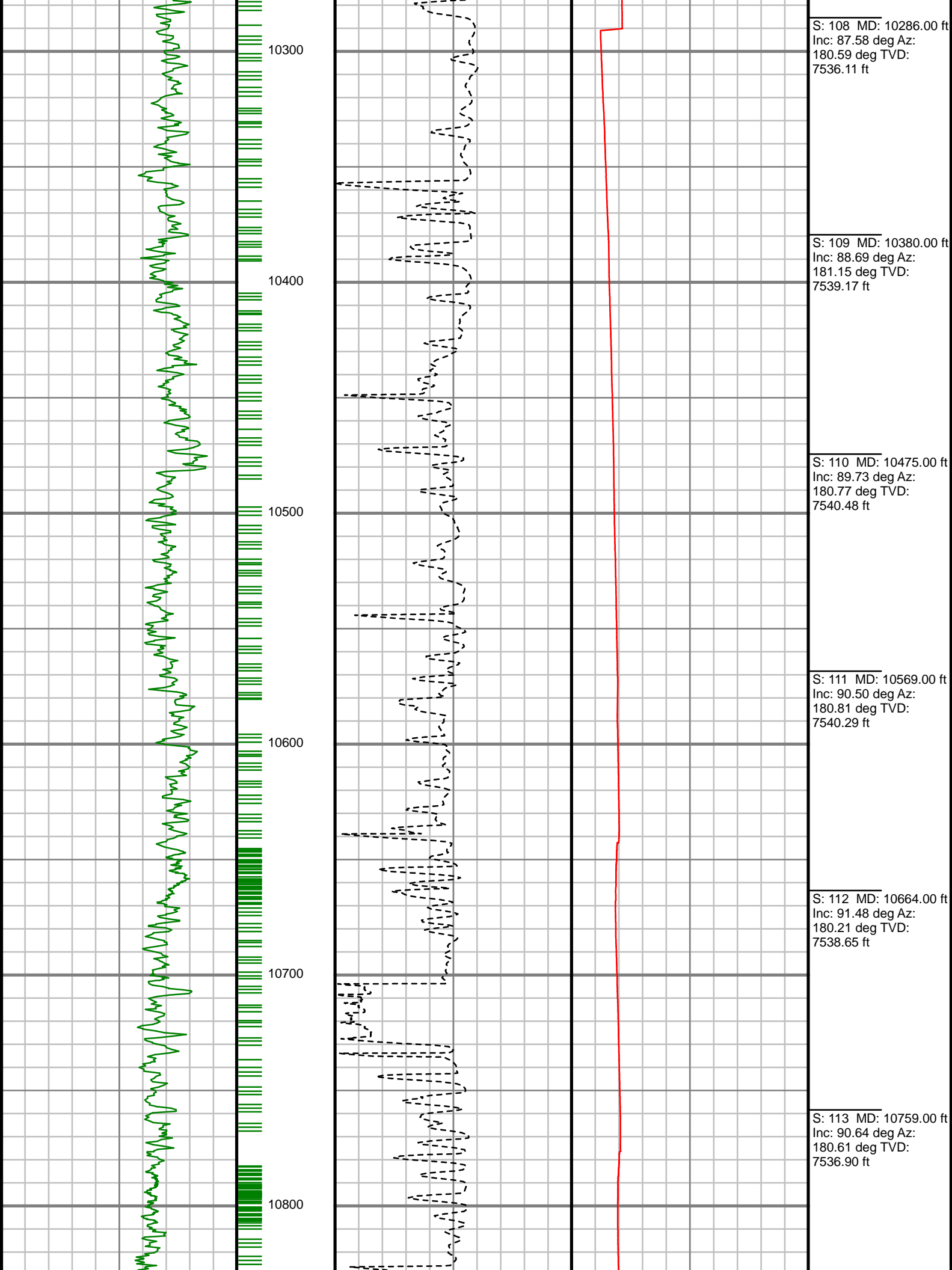
S: 94 MD: 8954.00 ft  
Inc: 88.29 deg Az:  
177.34 deg TVD:  
7509.92 ft

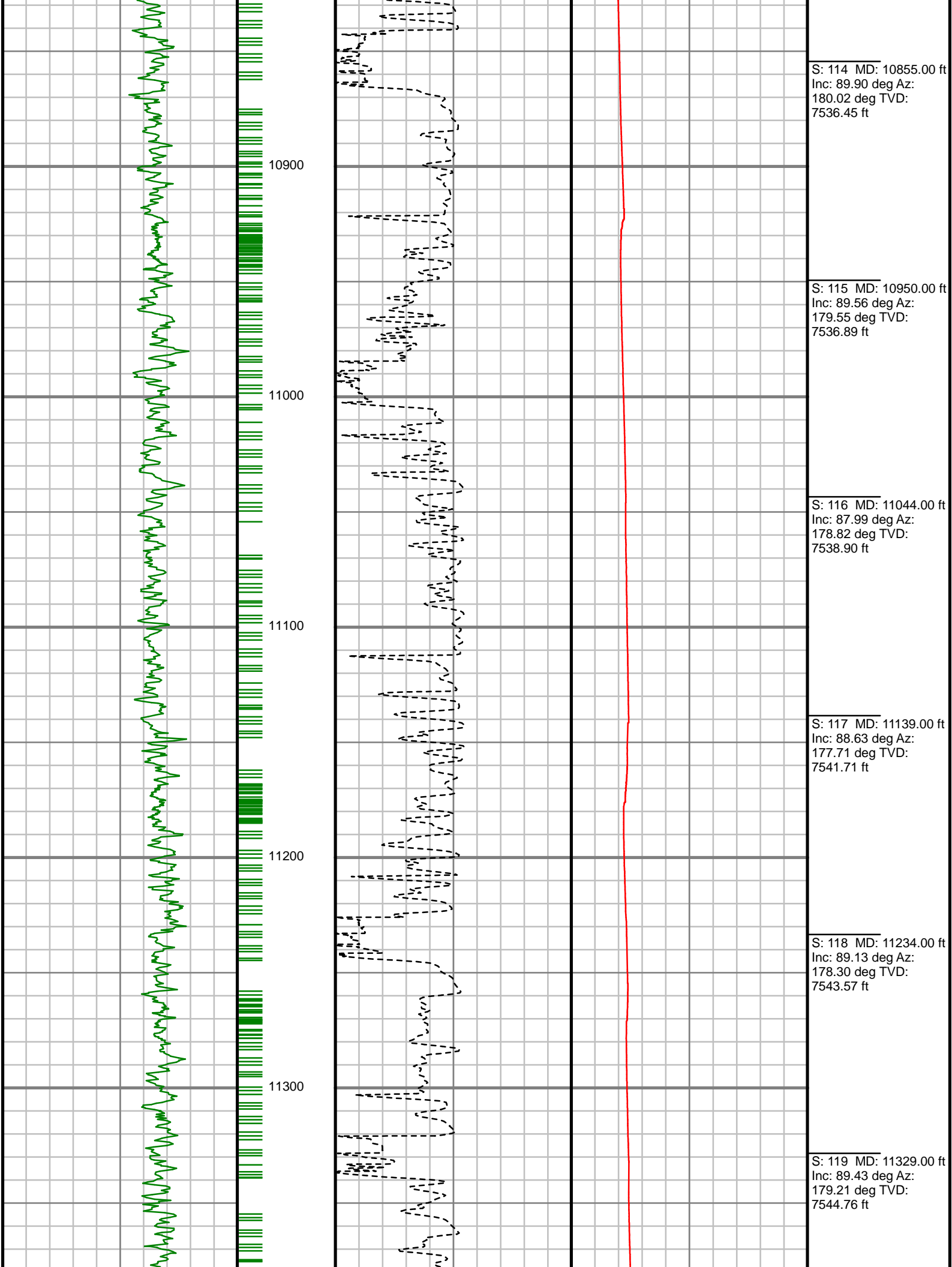
S: 95 MD: 9049.00 ft  
Inc: 87.95 deg Az:  
177.28 deg TVD:  
7513.04 ft

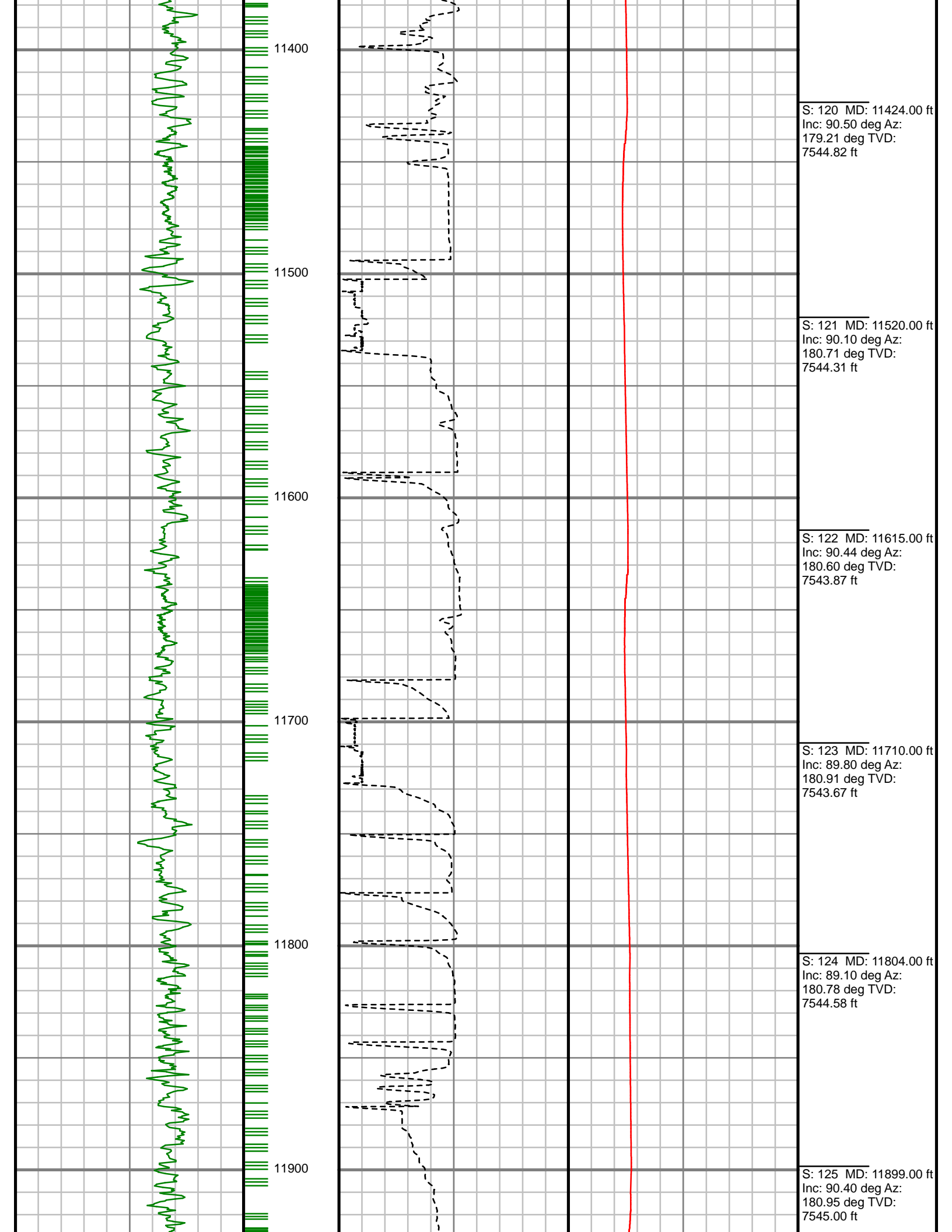
S: 96 MD: 9144.00 ft  
Inc: 87.55 deg Az:  
178.28 deg TVD:  
7516.76 ft

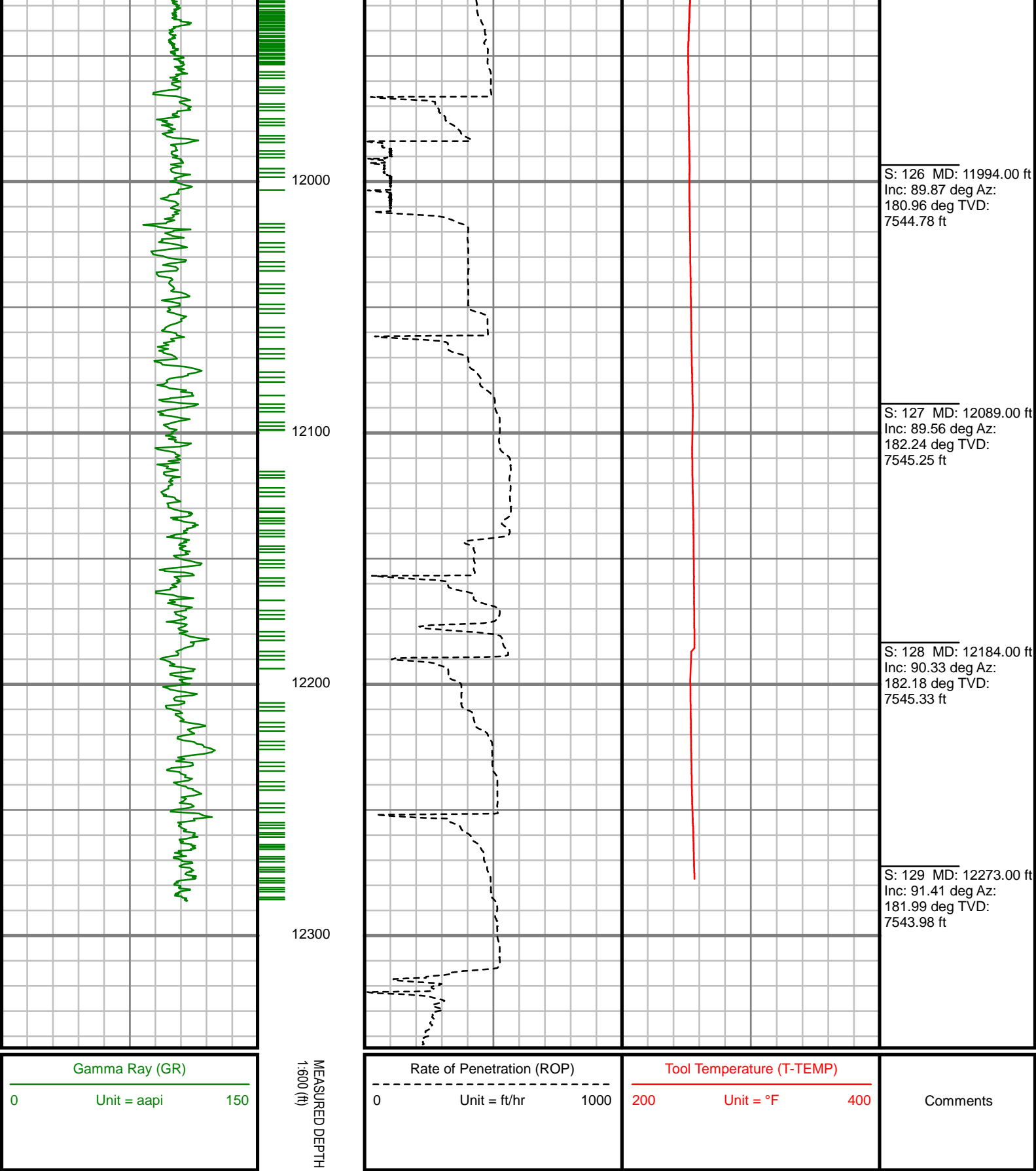












2" = 100' FEET MD