



5" = 100' FEET MD

COMPANY : ANADARKO E&P ONSHORE LLC.
WELL : BANE 28N3-9H2
FIELD : WATTENBERG
COUNTY : WELD
STATE : COLORADO
COUNTRY : U.S.A.
UWI : 05-123-41308

COMPANY : ANADARKO E&P ONSHORE LLC.

WELL : BANE 28N3-9HZ

FIELD : WATTENBERG

COUNTY : WELD

STATE : COLORADO

COUNTRY : U.S.A.

UWI : 05-123-41308

WELL LOCATION

LAT:40°3'37.595"N LONG:104°39'54.979"W
N:14548919.40 ft E:1734074.95 ft

SEC:1N

TWP:65W

RANGE:09

OTHER SERVICES

DIRECTIONAL
ROP

DEPTH REF. : RKB

REF. HEIGHT : 25.000 ft

RKB to Ground Level

GROUND LEVEL : 4964.000 ft

G.L. to MEAN SEA LEVEL

BOREHOLE RECORD

DEVIATION RECORD

HOLE SIZE in	FROM ft	TO ft	INCLINATION deg	FROM ft	TO ft
8.5	1610	11720	0-21	1610	6632
			21-90	6632	7778
			90-94	7778	11720

CASING RECORD

CASING SIZE in	FROM ft	TO ft			
12	0	1610			

DRILLING CO. : H&P

RIG : 307

LWD UNIT NO. : C-46

DISTRICT : CASPER

SPUD DATE : 07/11/2015

LWD START DATE : 07/11/2015

DEPTH : 1610 ft

LWD END DATE : 1559

DEPTH : 11670 ft

TOTAL DEPTH : 11720 ft

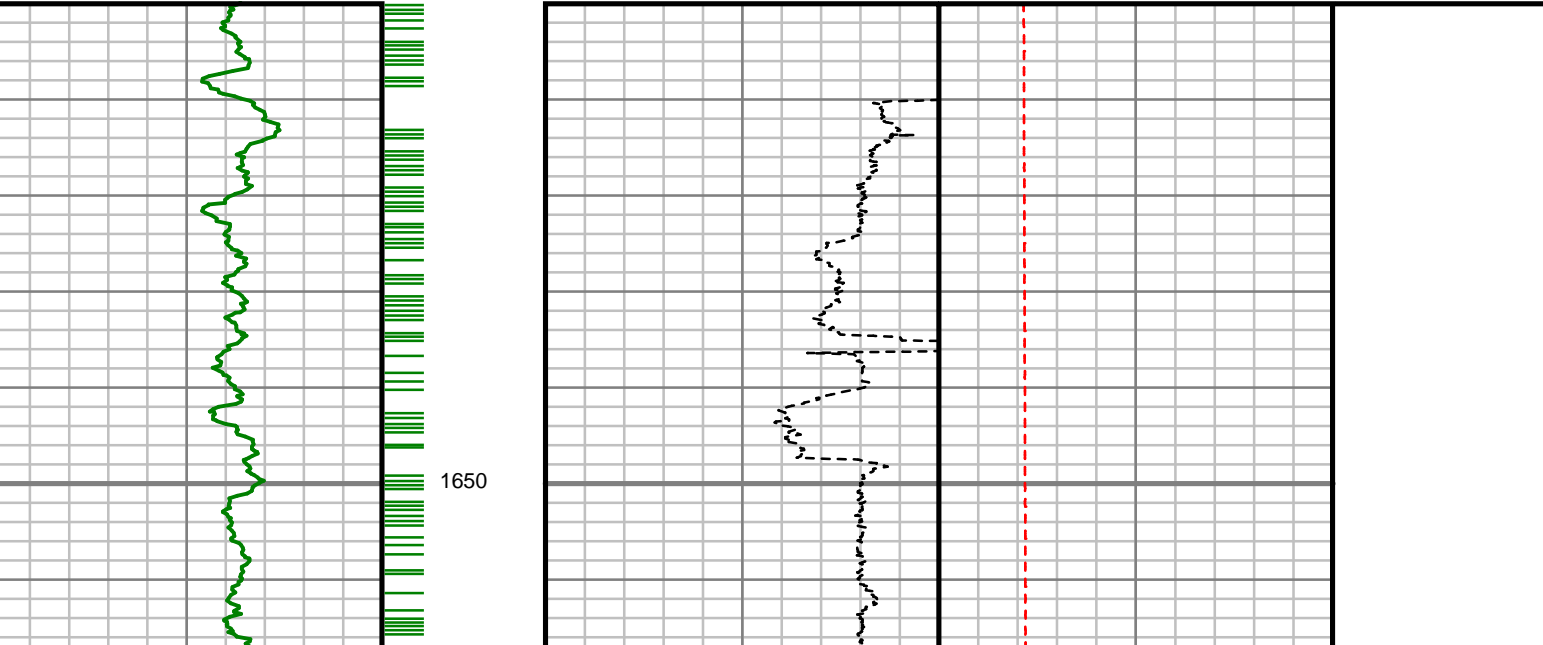
Run Data

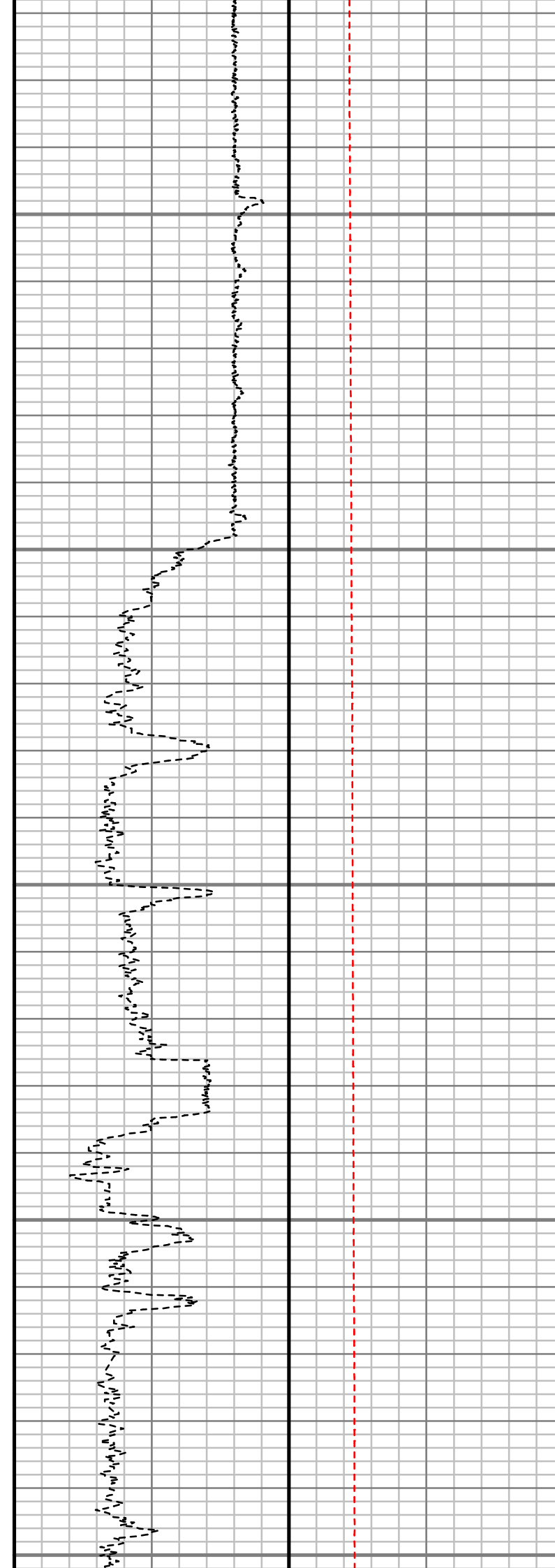
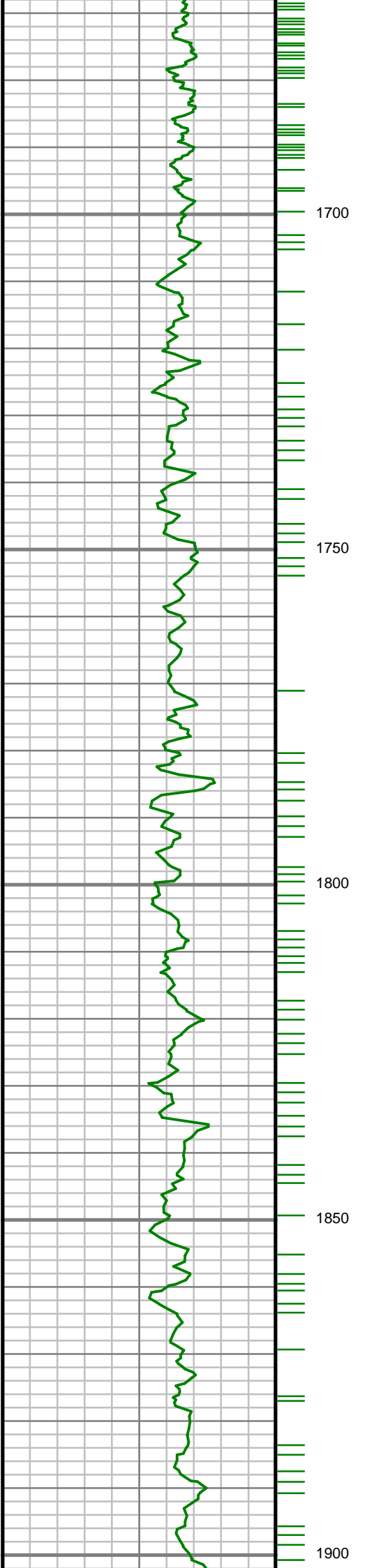
Run Data						
RUN NUMBER	1	2				
START DATE	07/11/2015	07/13/2015				
START TIME	1240	0800				
END DATE	07/13/2015	07/14/2015				
END TIME	0600	2300				
DEPTH IN (ft)	1602	8962				
DEPTH OUT (ft)	8962	11720				
LOG TOP (ft)	1559	8911				
LOG BOTTOM (ft)	8911	11668				
HOLE SIZE (in)	8.5	8.5				
MUD DATA @ (ft)	6995	8962				
MUD TYPE	OIL-BASED	OIL-BASED				
DENSITY (lb / gal)	9.5	9.55				
VISCOSITY (s / qt)	61	60				
pH	-	-				
FLUID LOSS (cm ³ / 30)	3.6	3.6				
SALINITY (ppm)	50000	50000				
Rm (ohmm @ deg F)	-	-				
Rmf (ohmm @ deg F)	-	-				
MAX TEMP (deg F)	201	219				
Rm @ MAX TEMP (ohmm)	-	-				
LWD ENGINEER #1	M. SCHUSTER	M. SCHUSTER				
LWD ENGINEER #2	B. GREER	B. GREER				
LWD ENGINEER #3	-	-				
LOG WITNESS #1	S. SADLE	S. SADLE				
LOG WITNESS #2	-	-				

[illegible]

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 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.

ANADARKO E&P ONSHORE LLC
BANE 28N3-9HZ
WATTENBERG FIELD
WELD COUNTY, COLORADO
05-123-41308

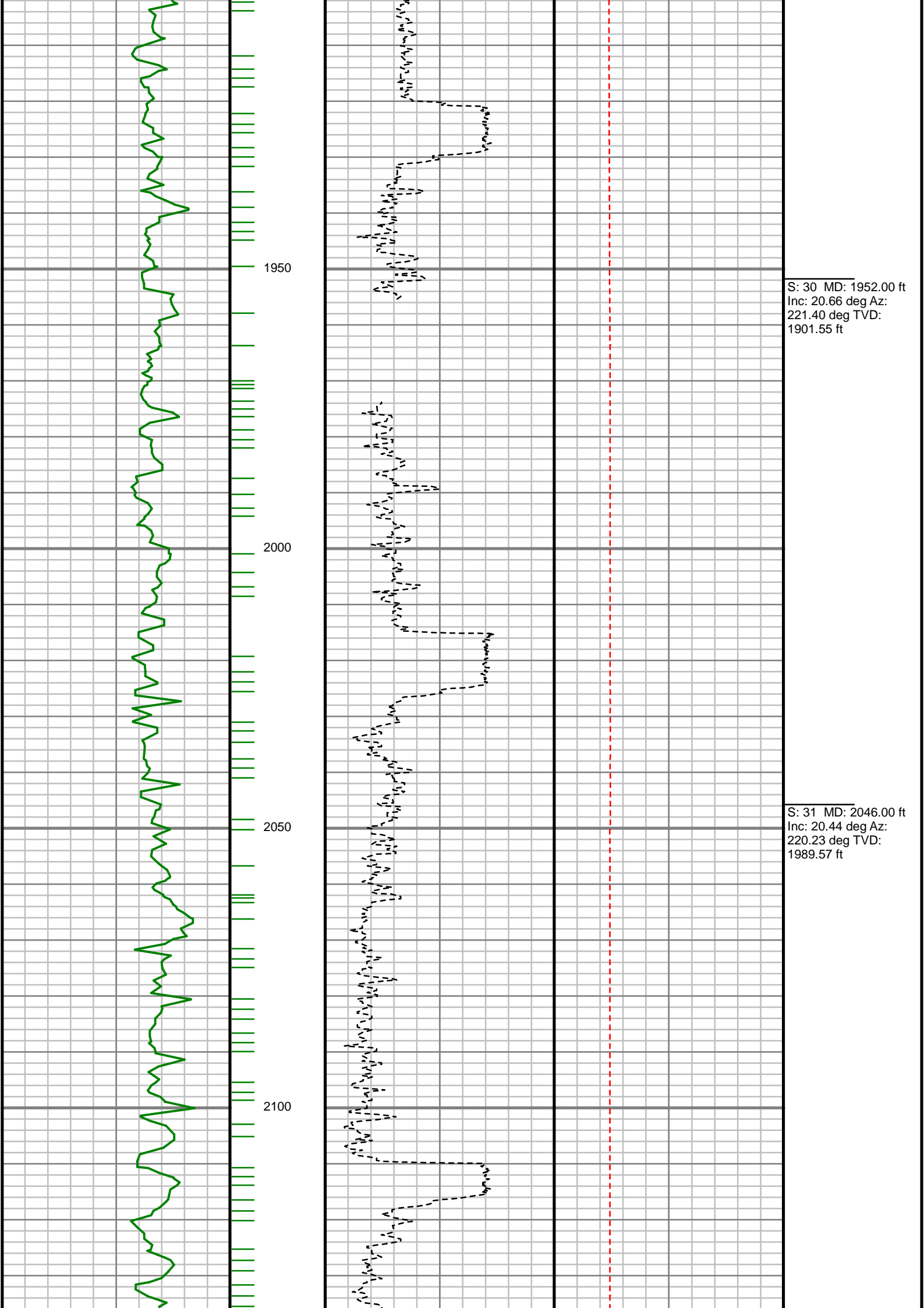
Gamma Ray (GR) Unit = aapi	MEASURED DEPTH 1:240 (ft)	Rate of Penetration (ROP) Unit = ft/hr	Tool Temperature (T-TEMP) Unit = °F	Comments
0 150	1650	1000 0	50 300	
				

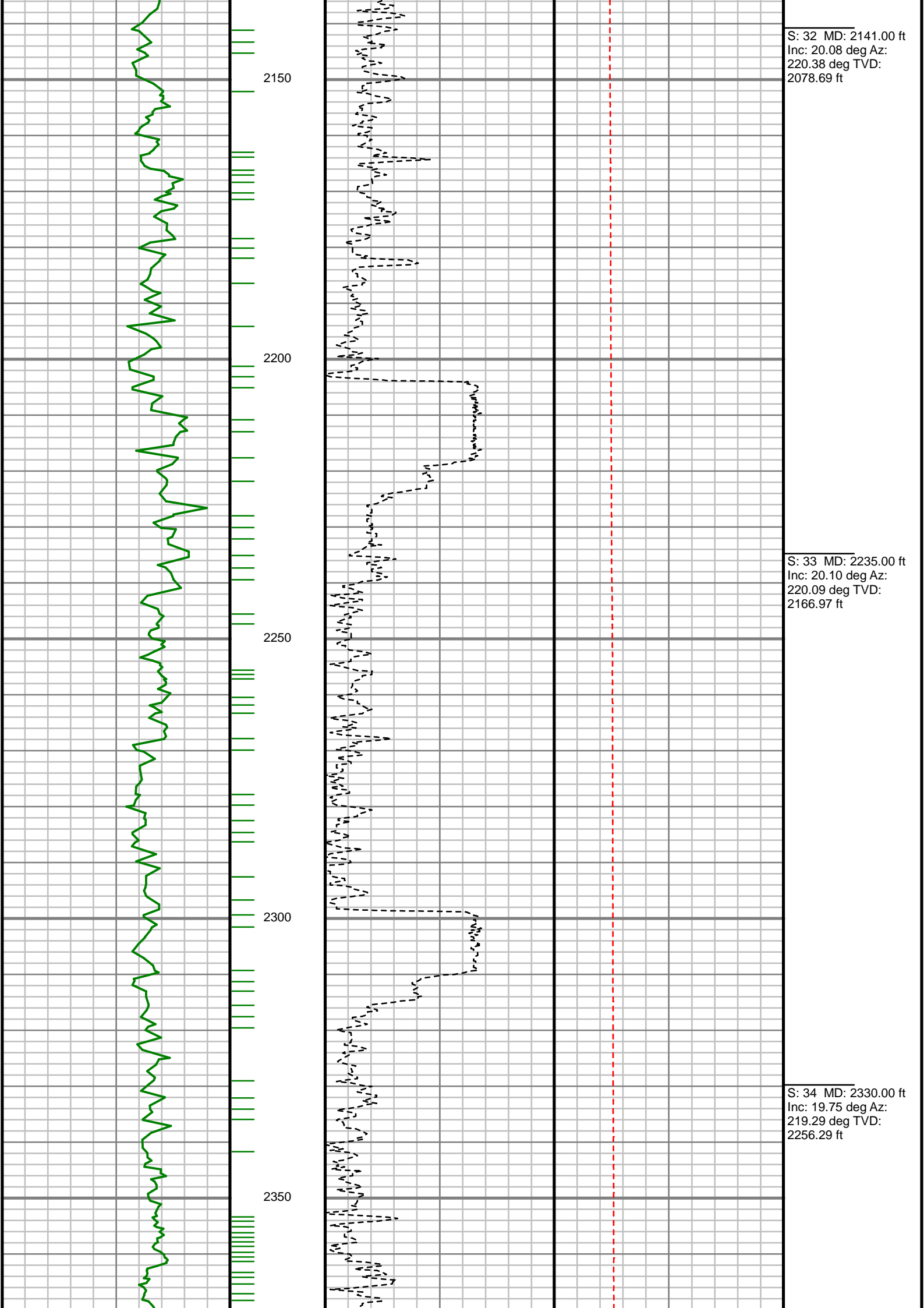


S: 27 MD: 1668.00 ft
Inc: 20.75 deg Az:
222.31 deg TVD:
1635.99 ft

S: 28 MD: 1763.00 ft
Inc: 20.89 deg Az:
220.85 deg TVD:
1724.78 ft

S: 29 MD: 1857.00 ft
Inc: 20.68 deg Az:
221.03 deg TVD:
1812.67 ft

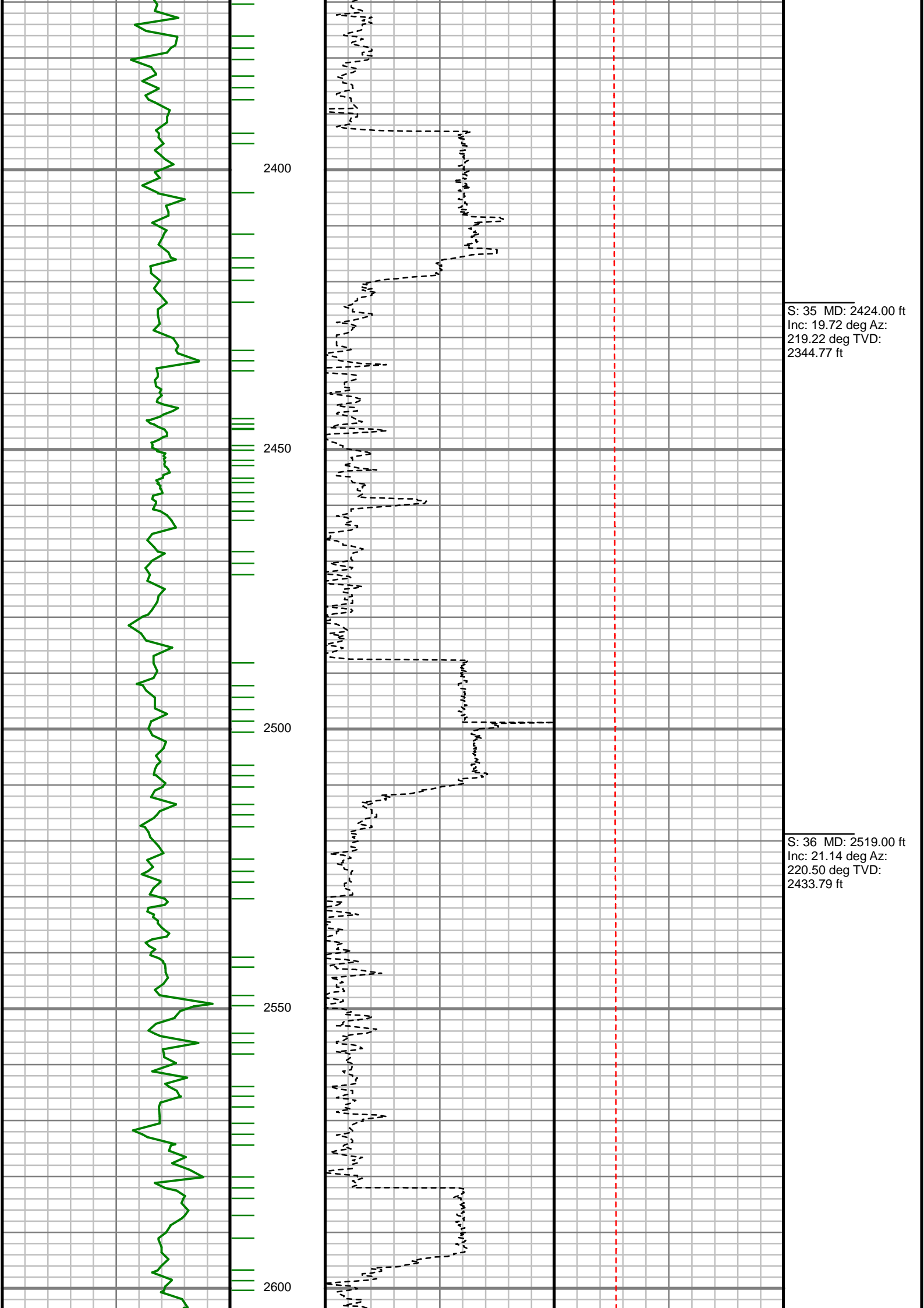


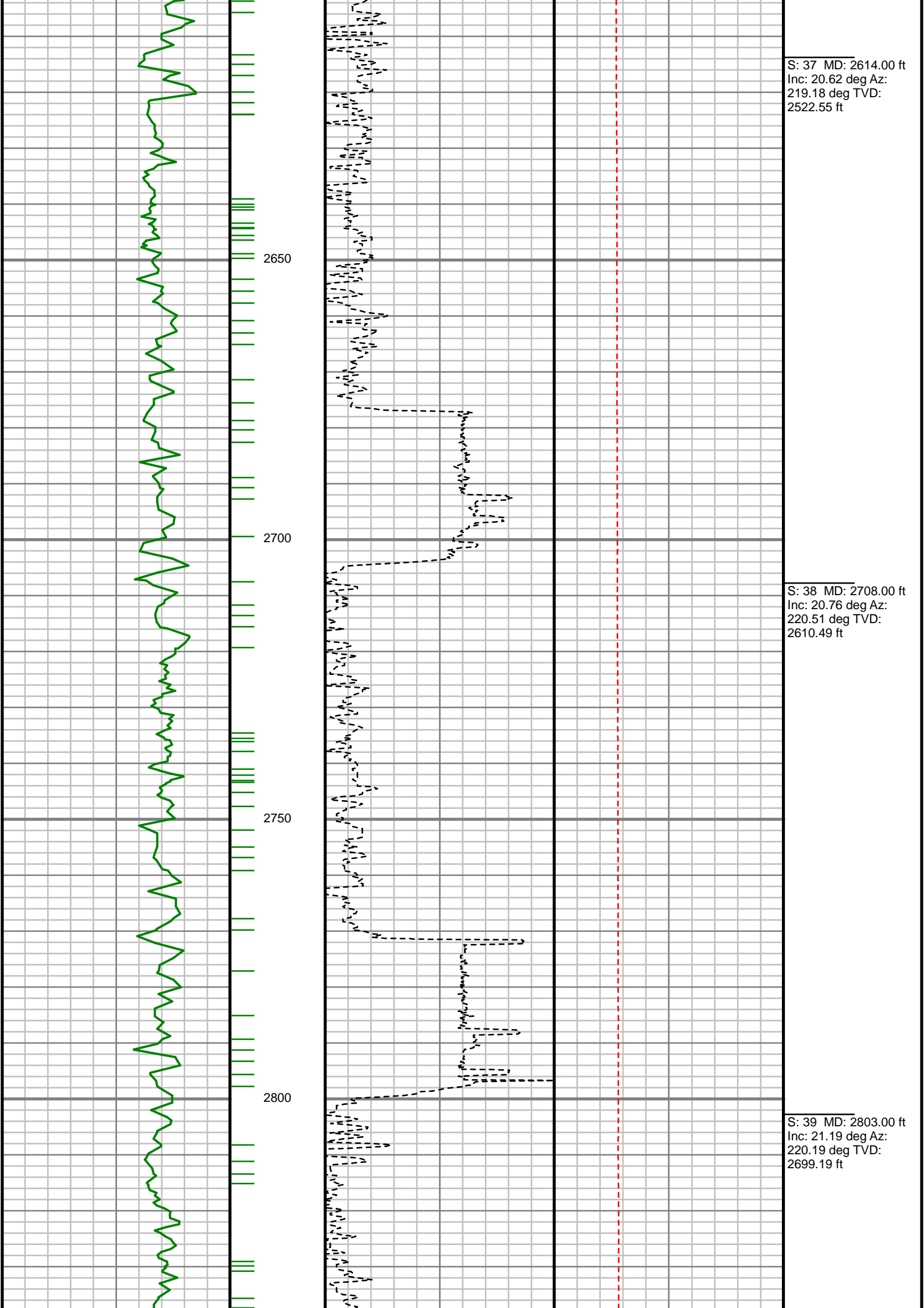


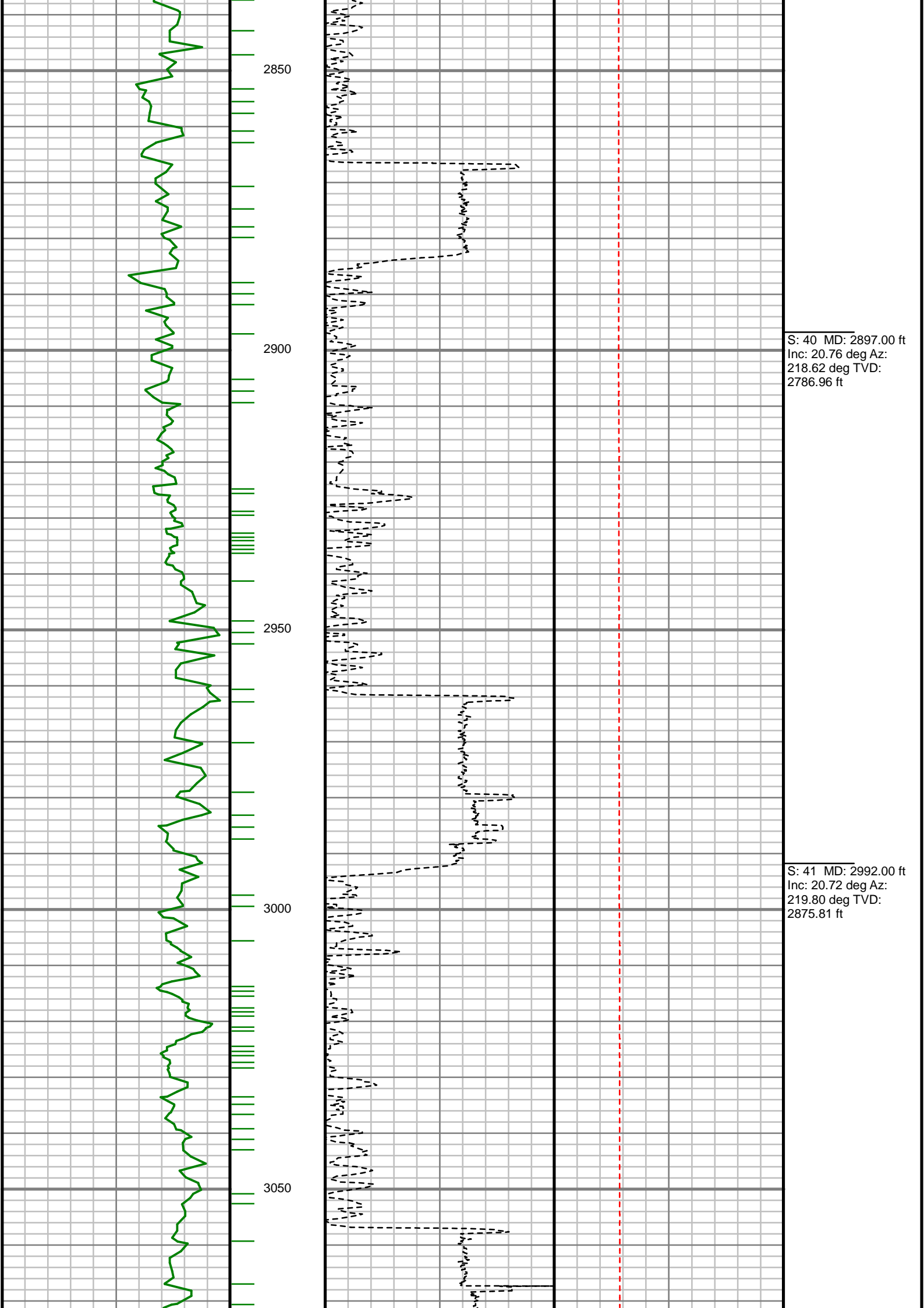
S: 32 MD: 2141.00 ft
Inc: 20.08 deg Az:
220.38 deg TVD:
2078.69 ft

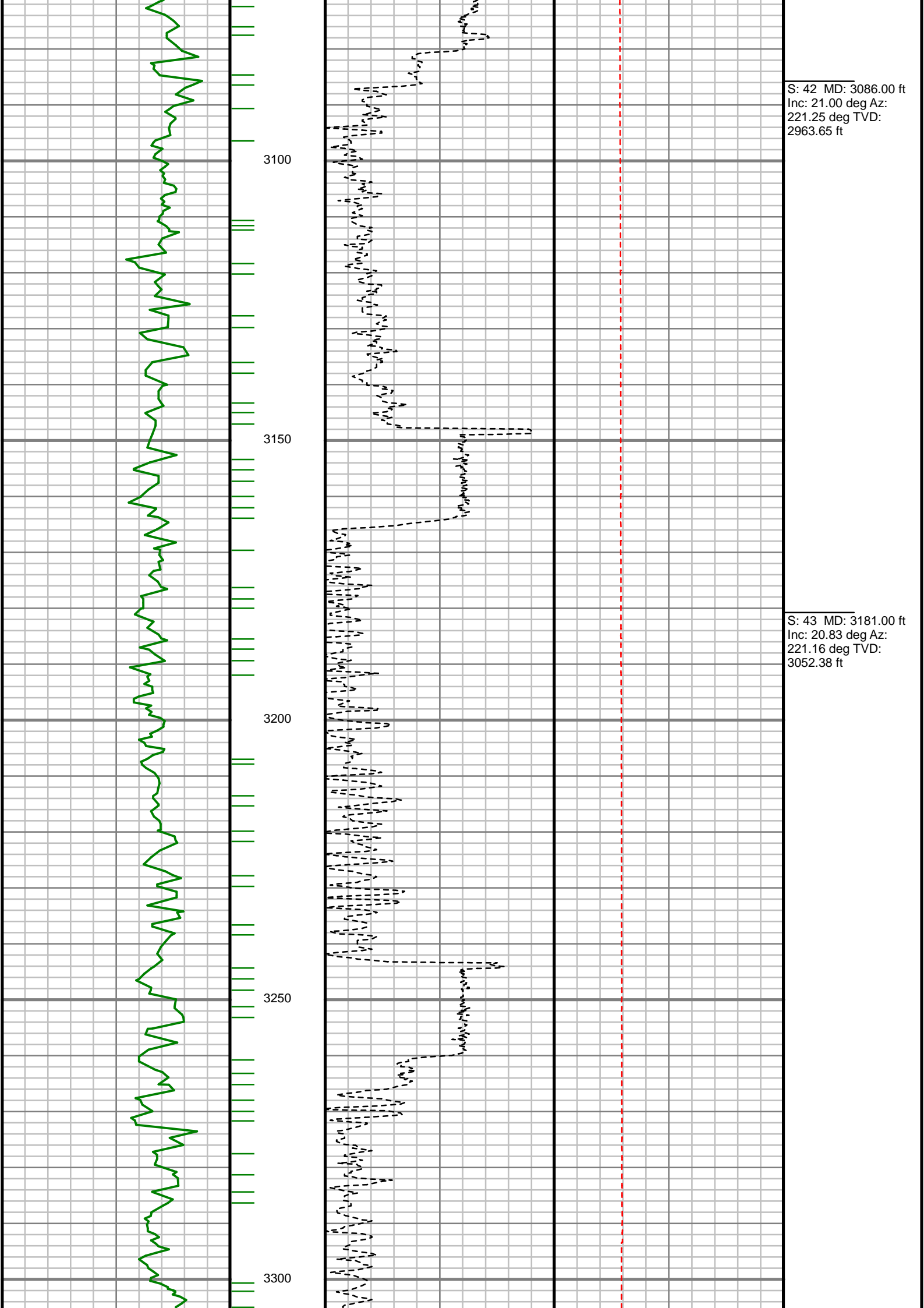
S: 33 MD: 2235.00 ft
Inc: 20.10 deg Az:
220.09 deg TVD:
2166.97 ft

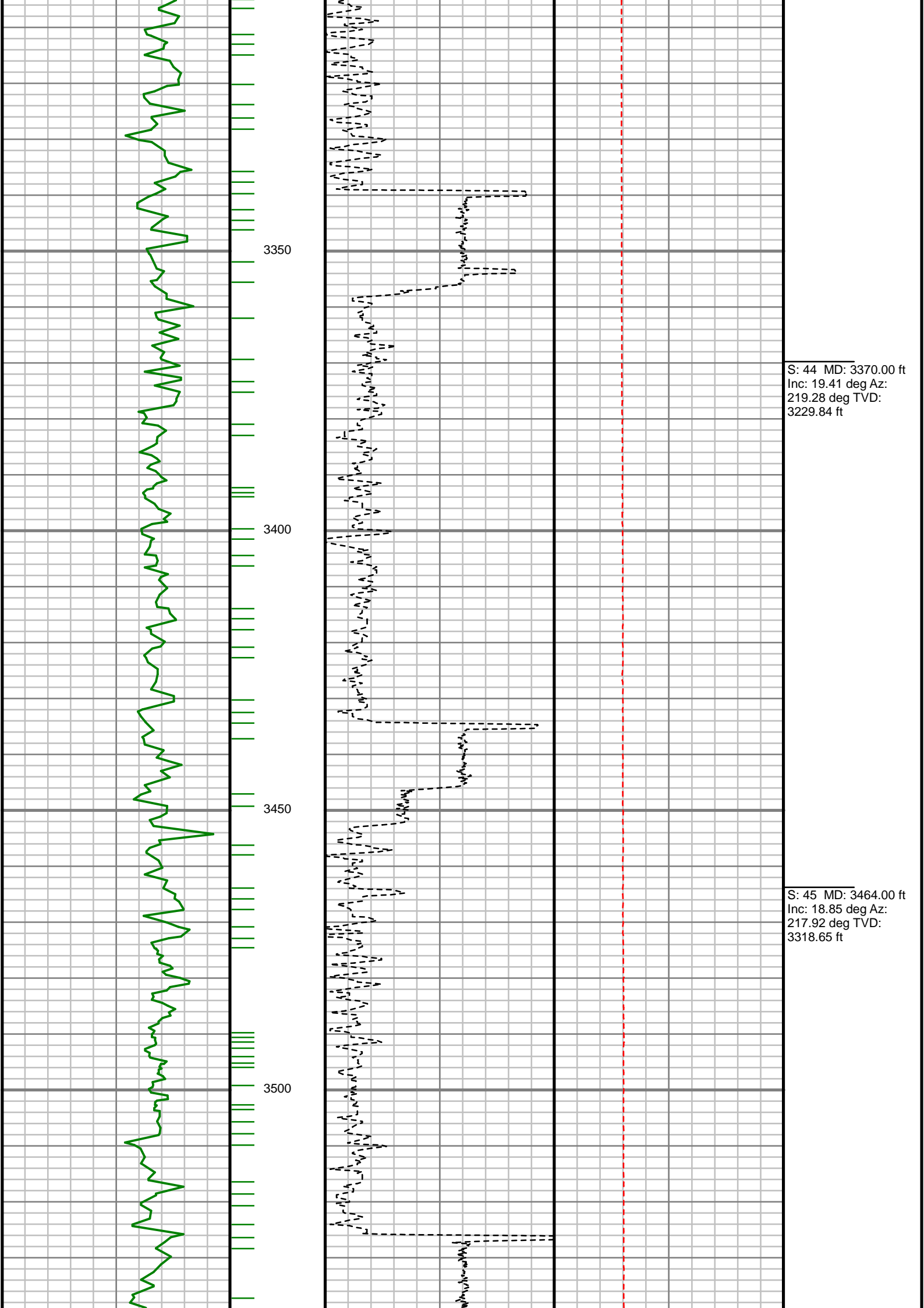
S: 34 MD: 2330.00 ft
Inc: 19.75 deg Az:
219.29 deg TVD:
2256.29 ft

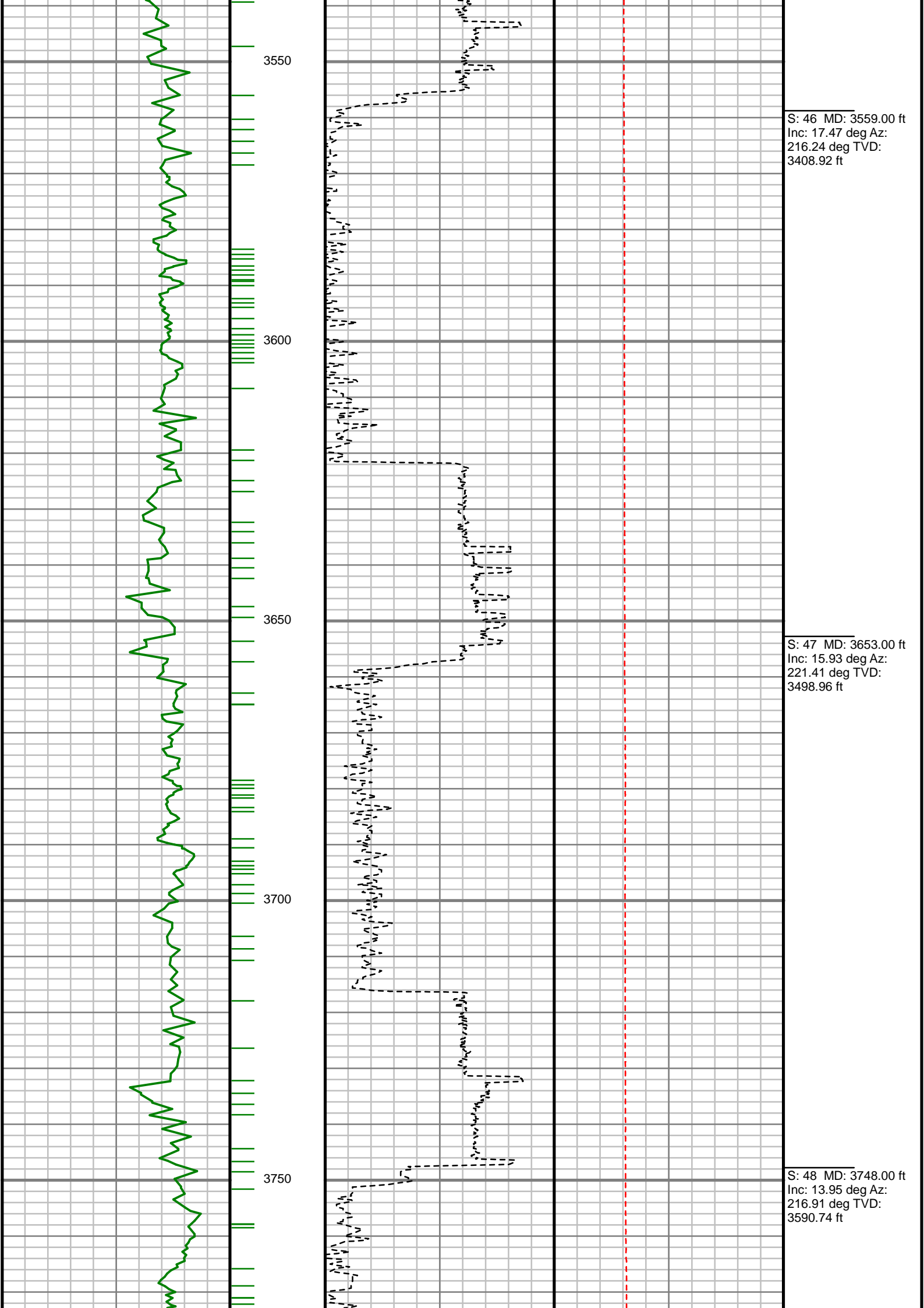








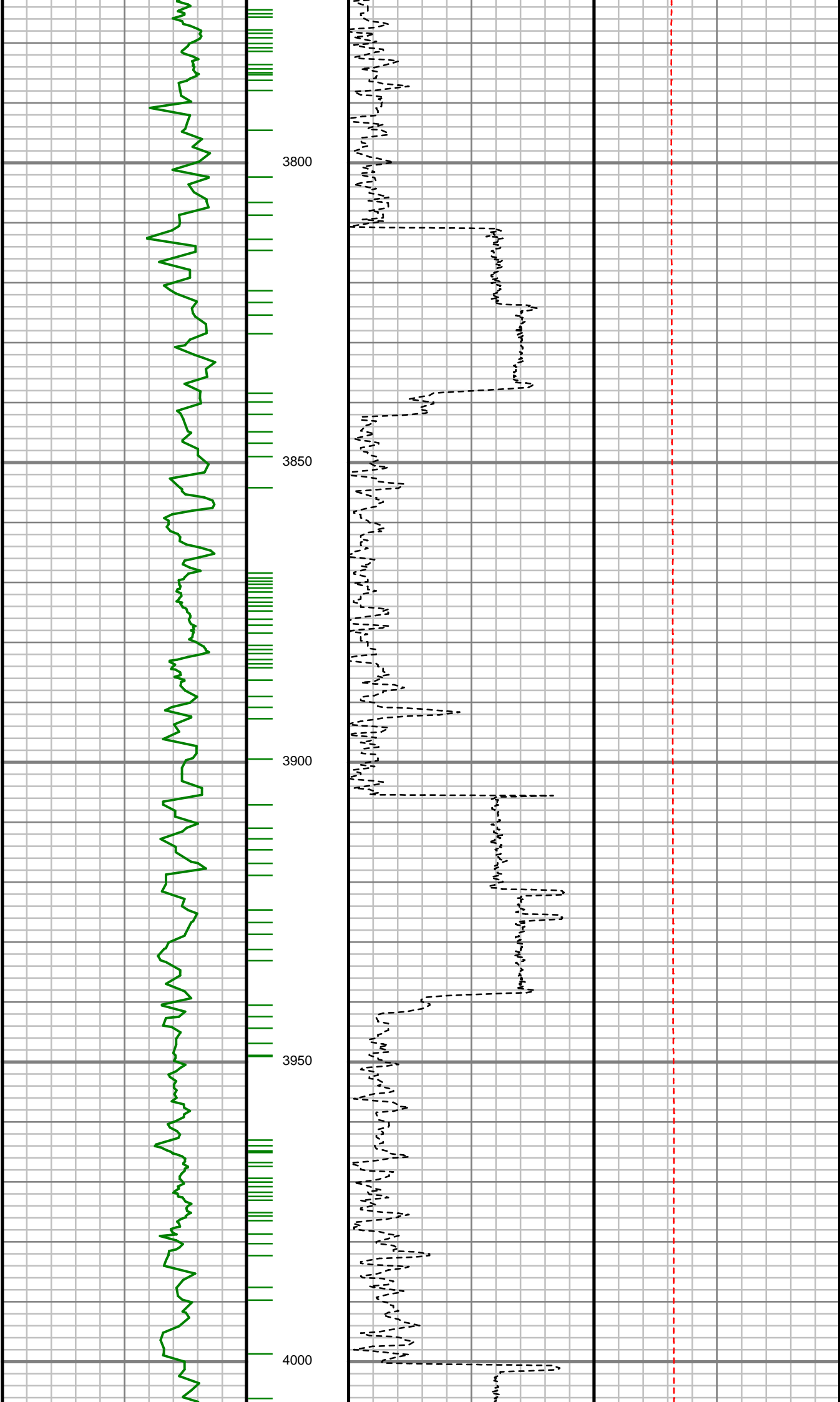




S: 46 MD: 3559.00 ft
Inc: 17.47 deg Az:
216.24 deg TVD:
3408.92 ft

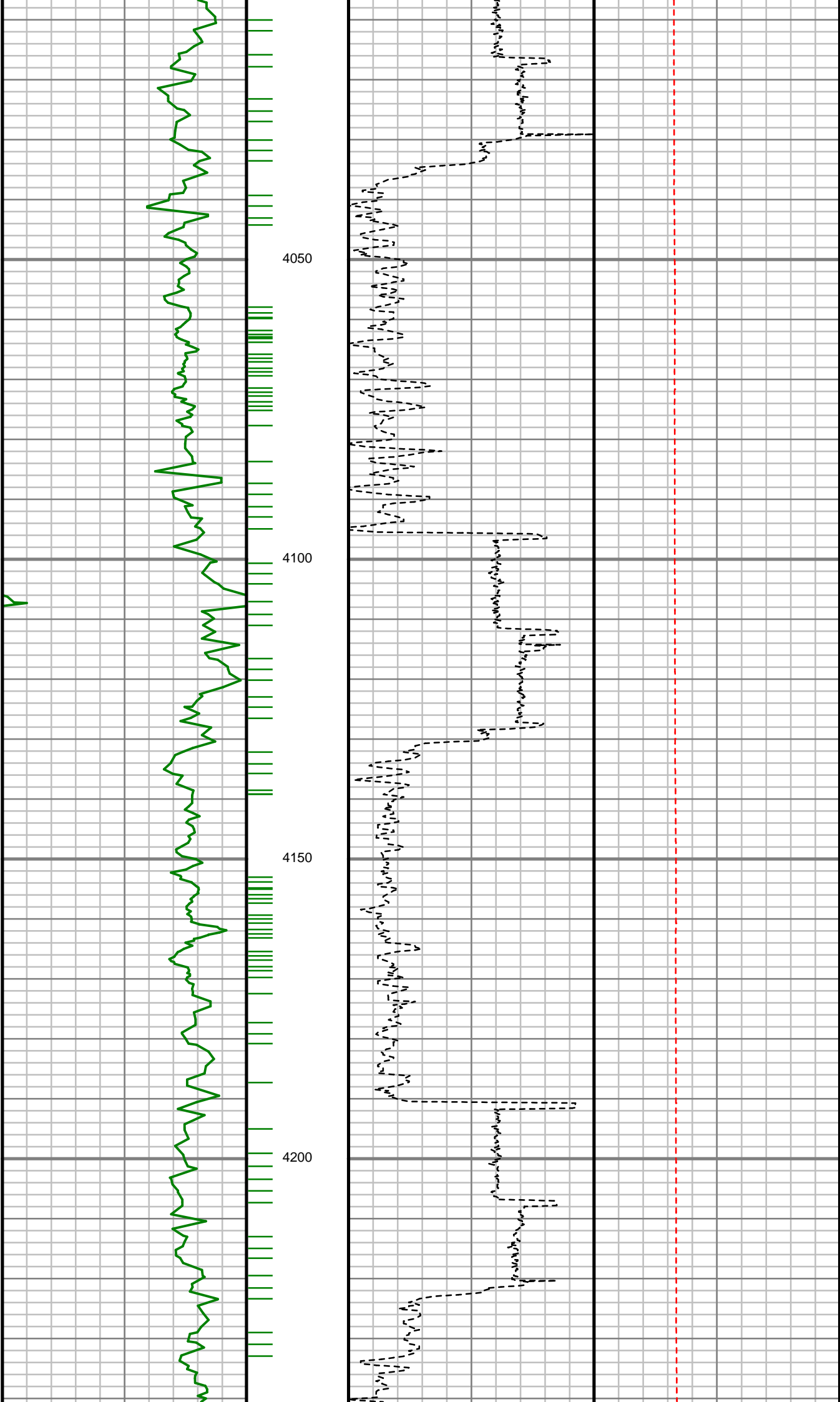
S: 47 MD: 3653.00 ft
Inc: 15.93 deg Az:
221.41 deg TVD:
3498.96 ft

S: 48 MD: 3748.00 ft
Inc: 13.95 deg Az:
216.91 deg TVD:
3590.74 ft



S: 49 MD: 3842.00 ft
Inc: 11.80 deg Az:
218.51 deg TVD:
3682.37 ft

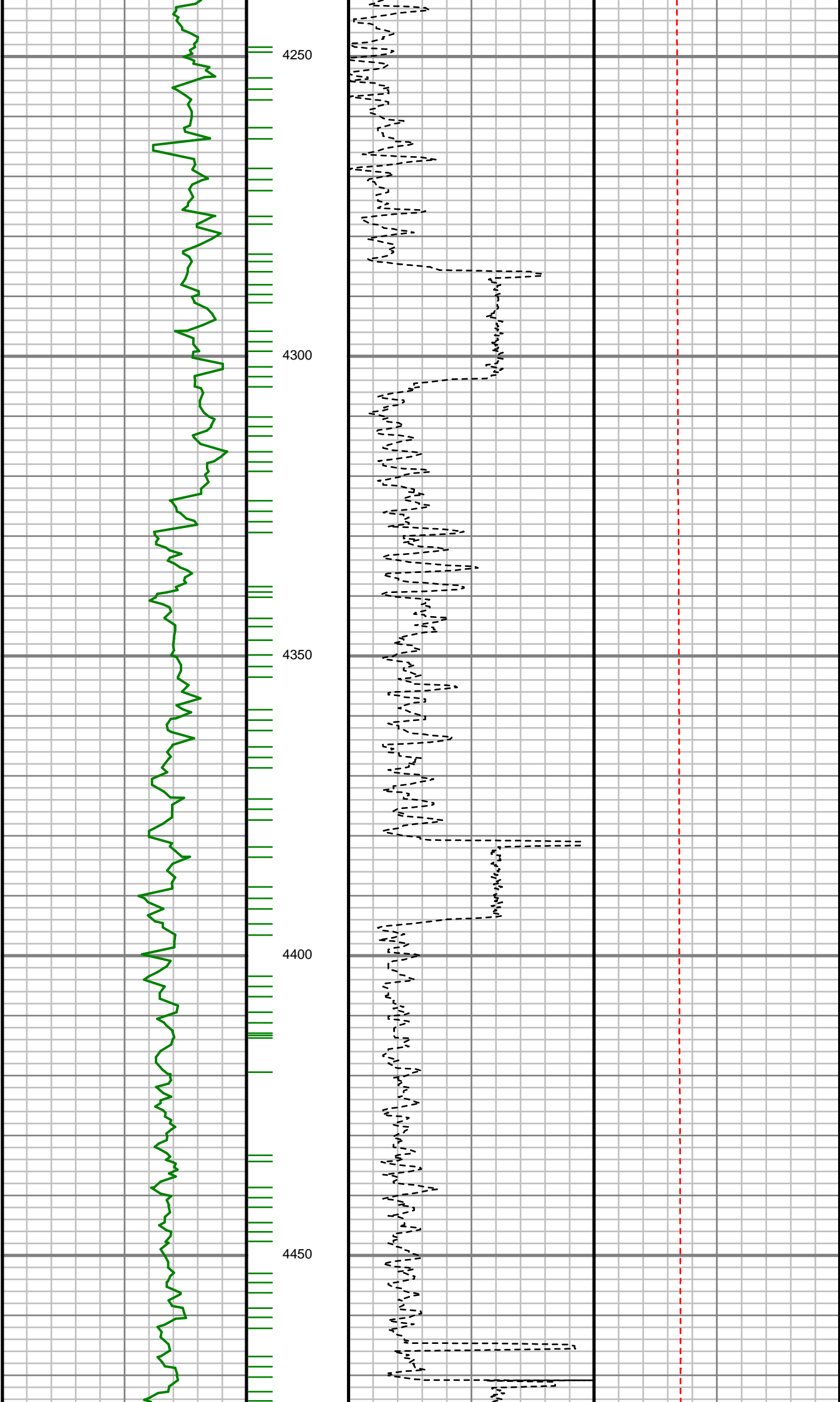
S: 50 MD: 3937.00 ft
Inc: 9.62 deg Az:
224.19 deg TVD:
3775.72 ft



S: 51 MD: 4031.00 ft
Inc: 7.34 deg Az:
228.66 deg TVD:
3868.68 ft

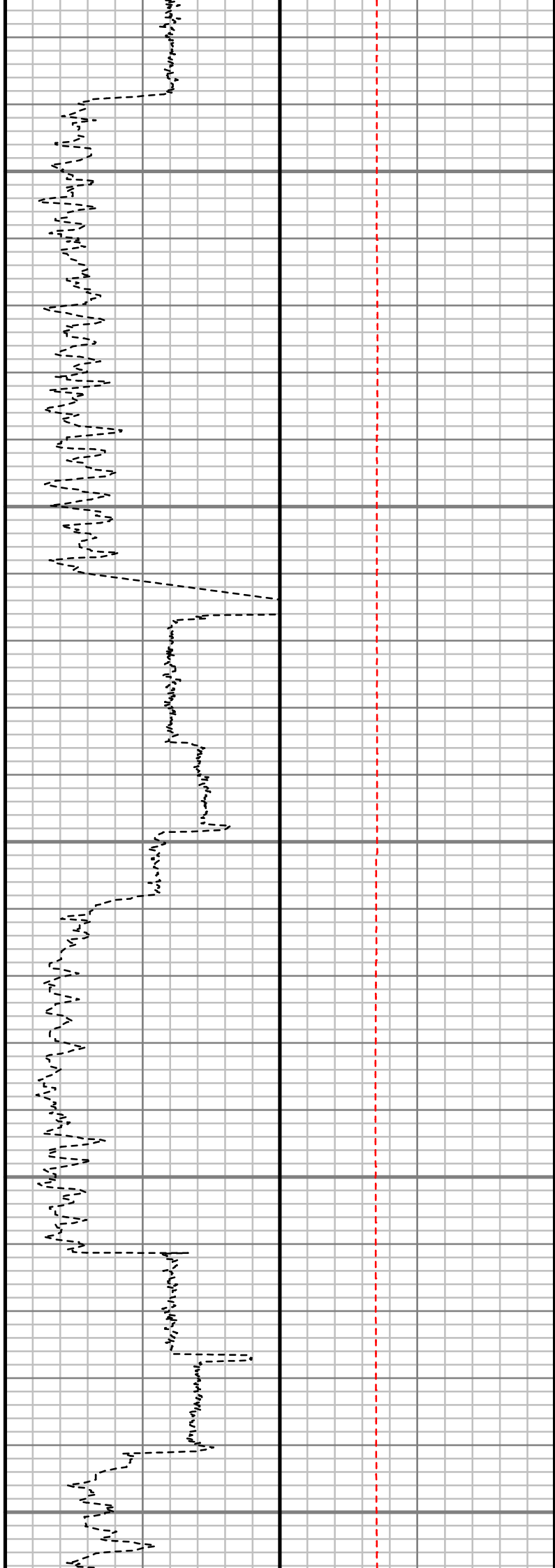
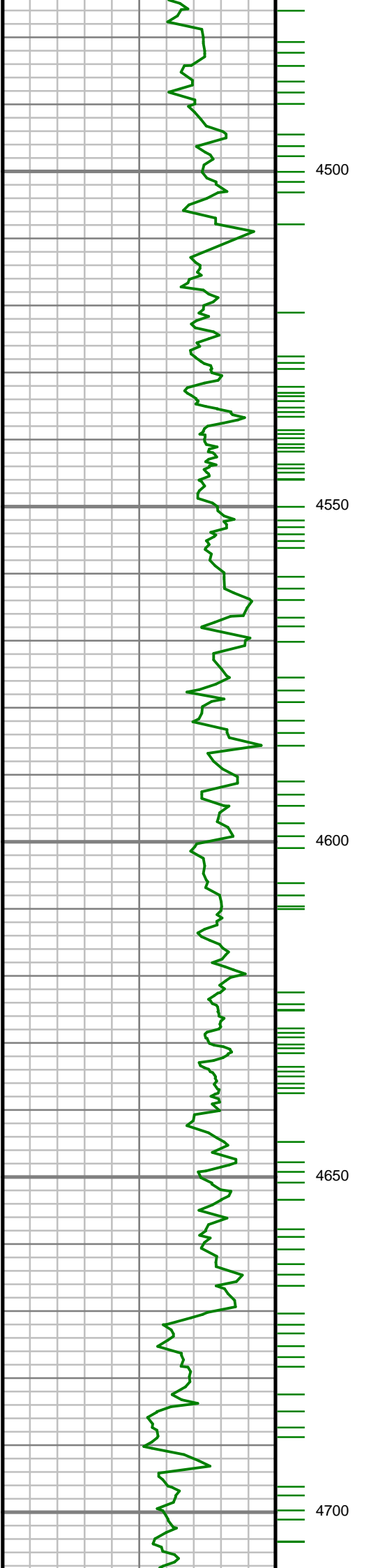
S: 52 MD: 4126.00 ft
Inc: 6.03 deg Az:
229.52 deg TVD:
3963.03 ft

S: 53 MD: 4220.00 ft
Inc: 4.09 deg Az:
223.81 deg TVD:
4056.66 ft



S: 54 MD: 4315.00 ft
Inc: 3.45 deg Az:
223.34 deg TVD:
4151.46 ft

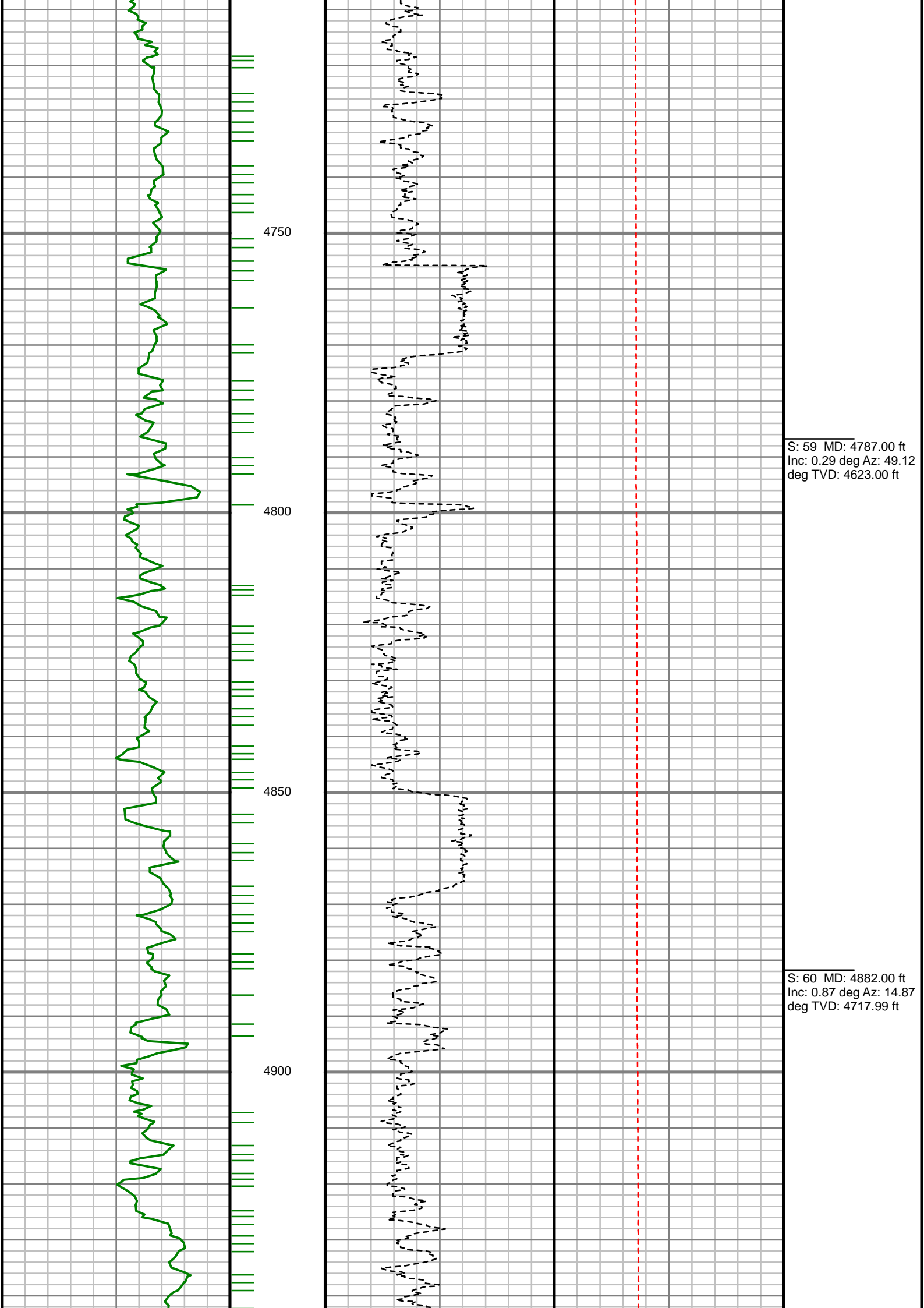
S: 55 MD: 4409.00 ft
Inc: 3.32 deg Az:
221.61 deg TVD:
4245.29 ft

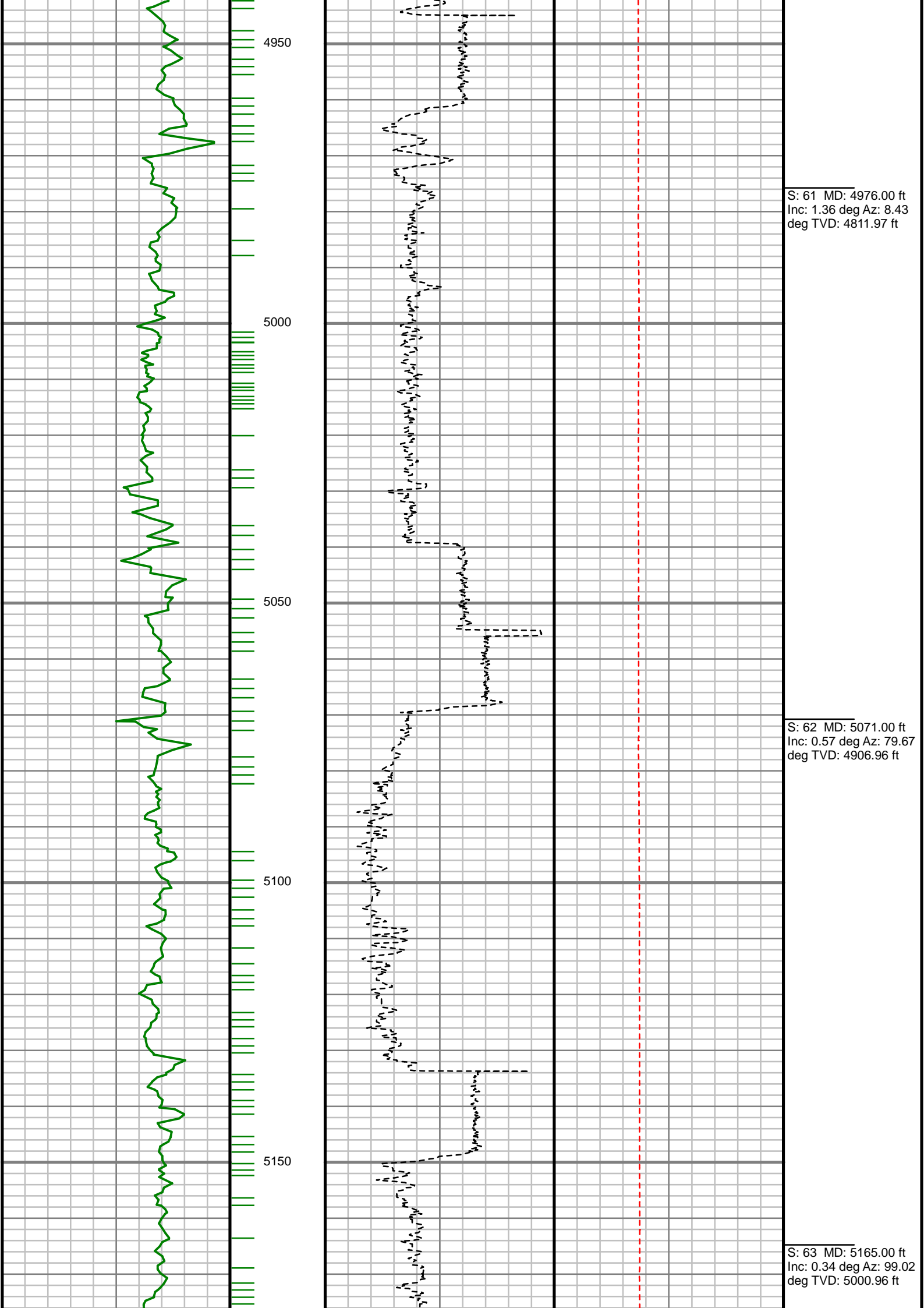


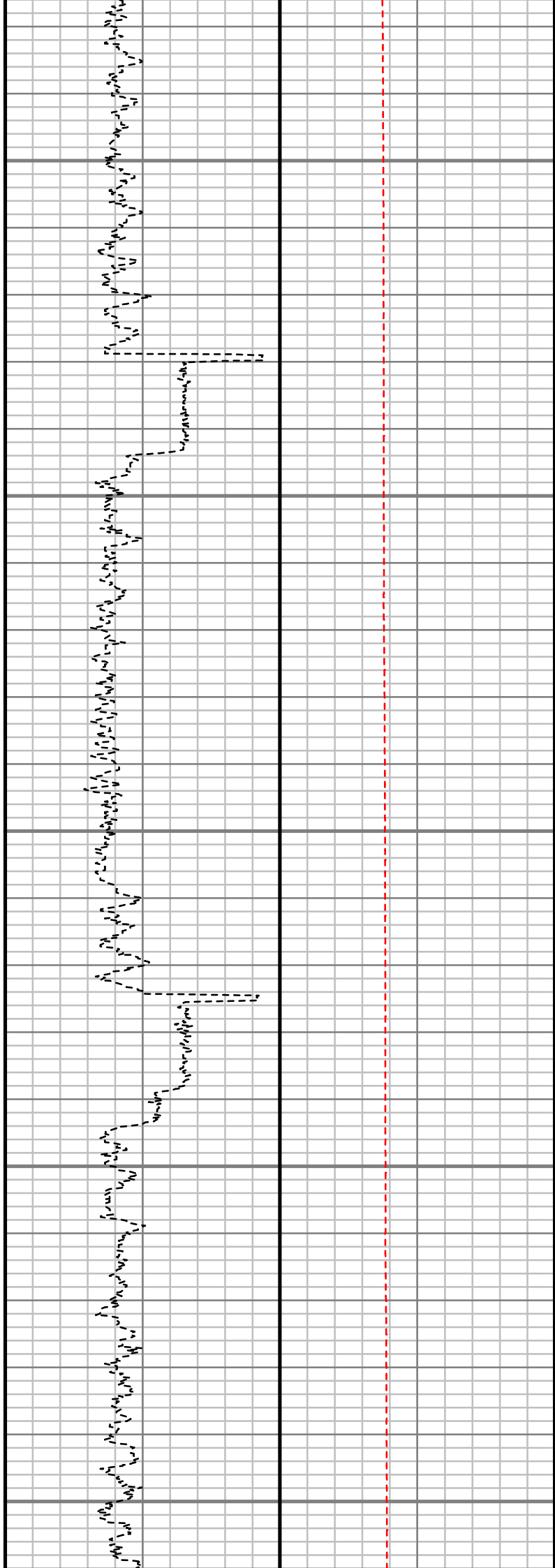
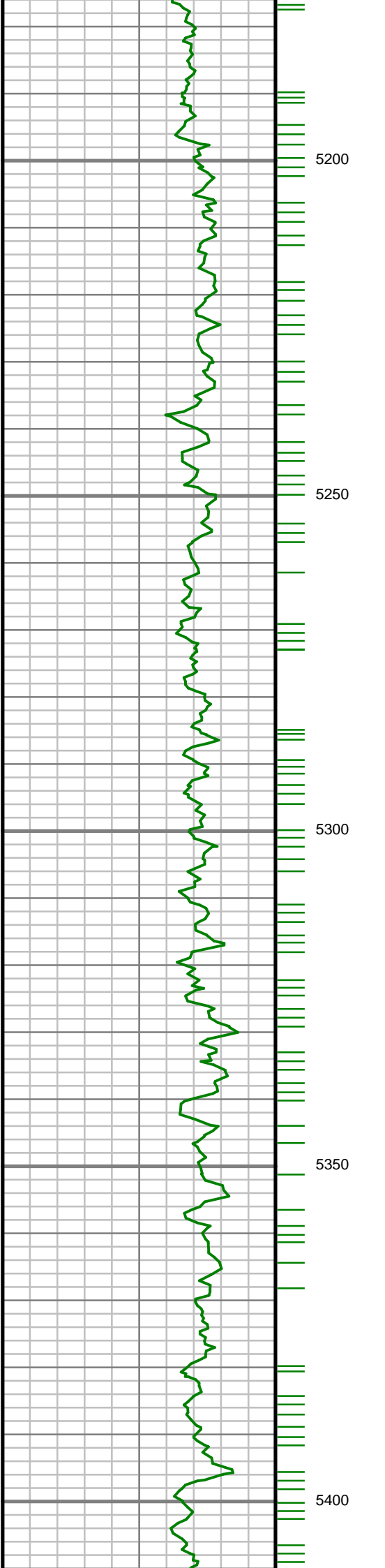
S: 56 MD: 4504.00 ft
Inc: 3.29 deg Az:
222.78 deg TVD:
4340.14 ft

S: 57 MD: 4598.00 ft
Inc: 2.26 deg Az:
239.42 deg TVD:
4434.03 ft

S: 58 MD: 4693.00 ft
Inc: 0.50 deg Az:
184.19 deg TVD:
4529.00 ft

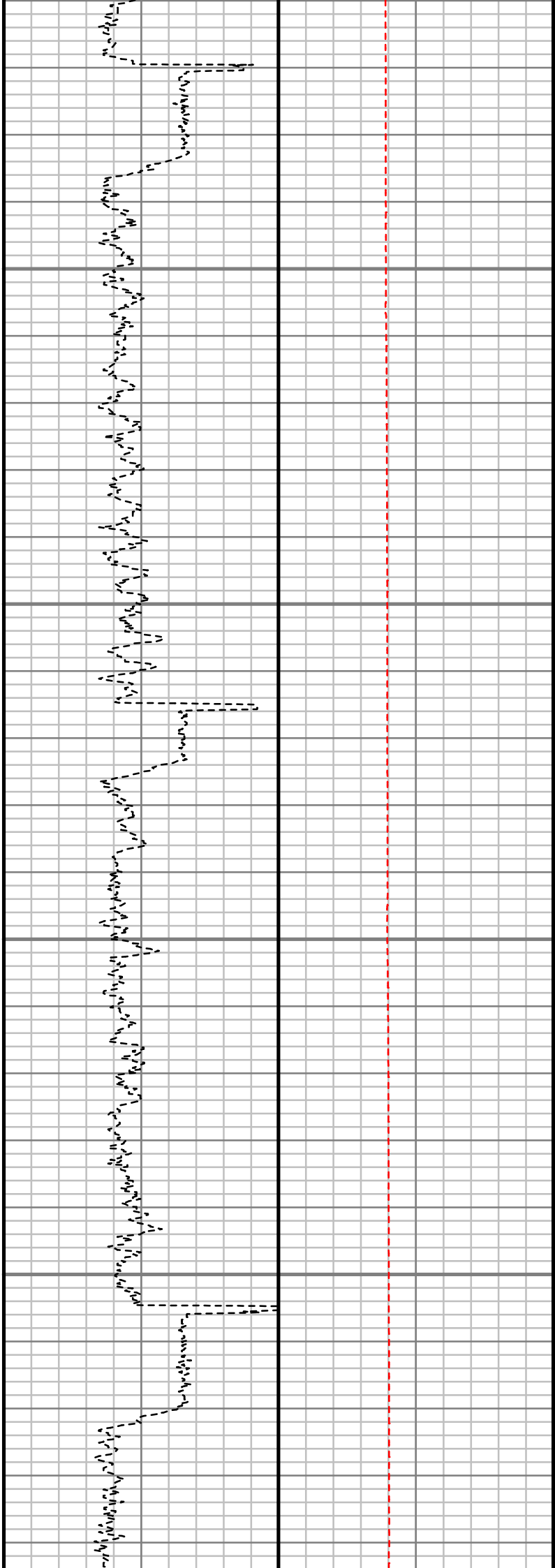
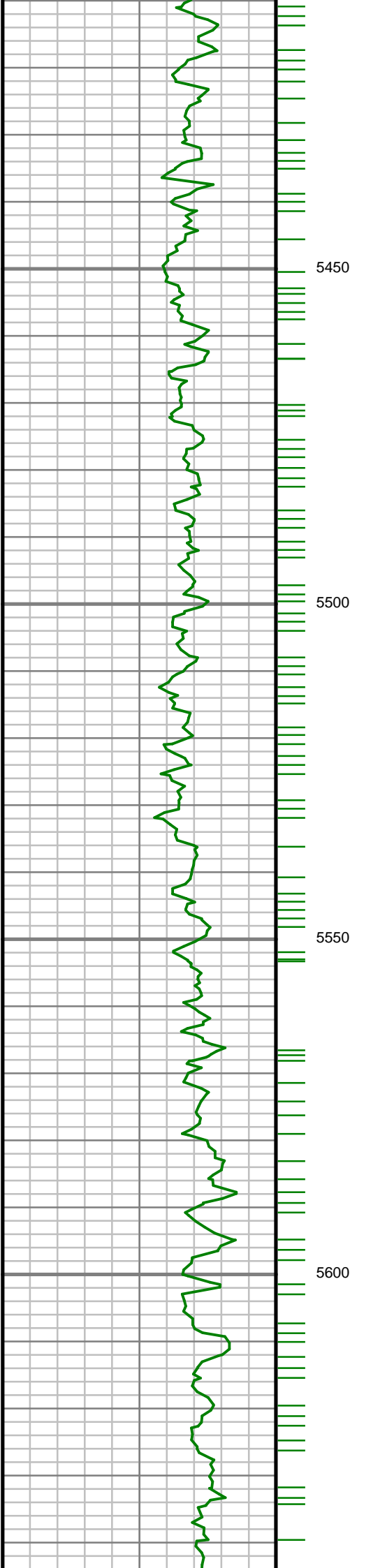






S: 64 MD: 5260.00 ft
Inc: 0.30 deg Az: 80.04
deg TVD: 5095.96 ft

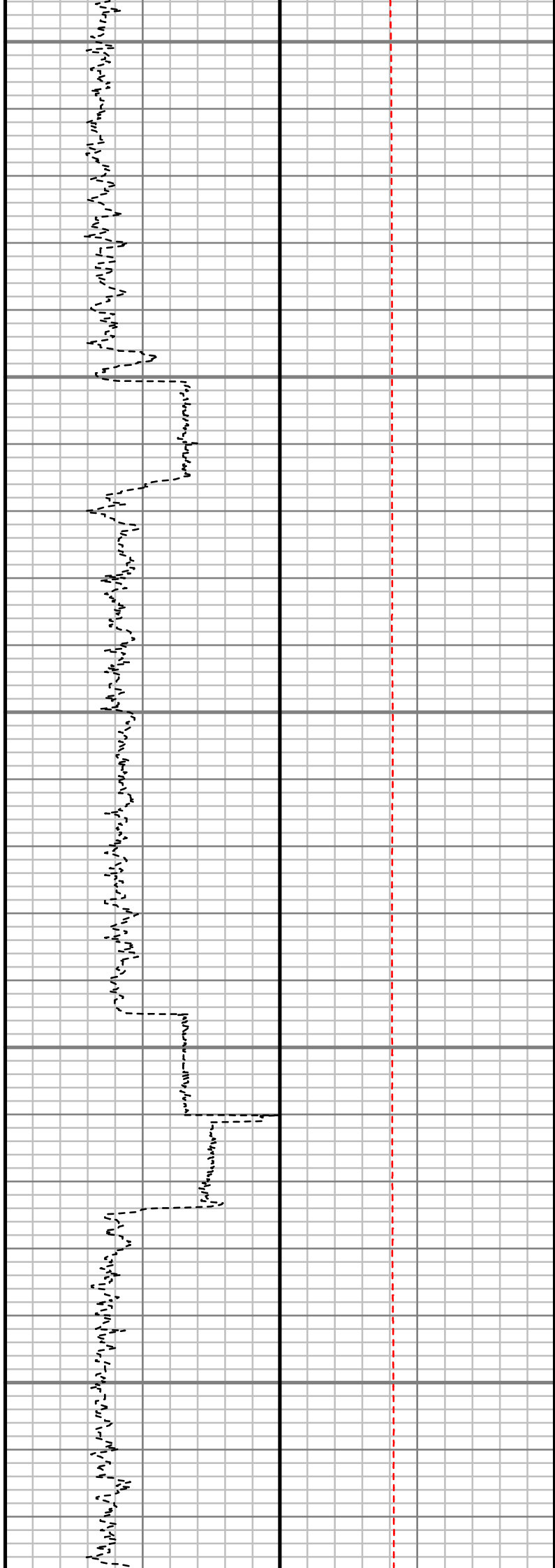
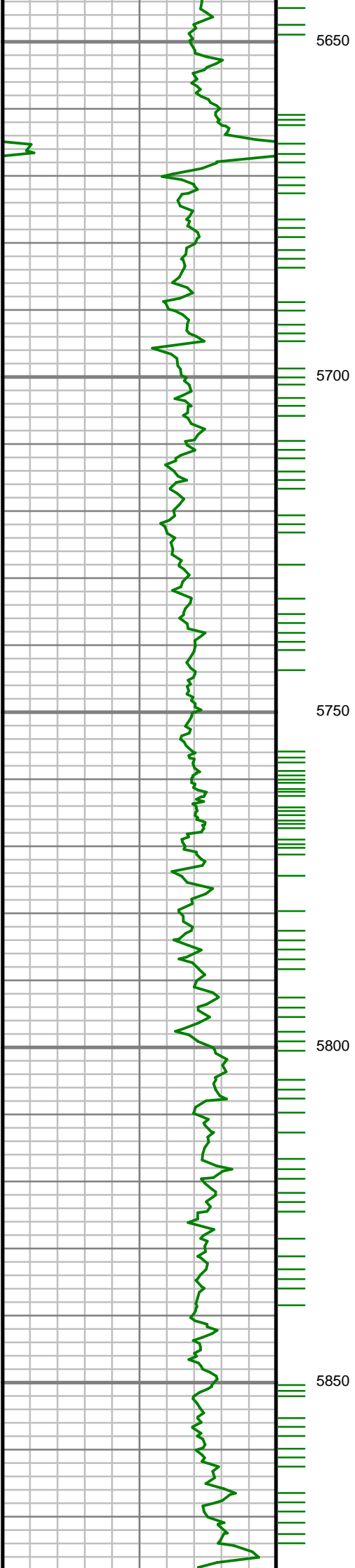
S: 65 MD: 5354.00 ft
Inc: 0.33 deg Az: 6.56
deg TVD: 5189.96 ft



S: 66 MD: 5448.00 ft
Inc: 0.72 deg Az: 16.39
deg TVD: 5283.95 ft

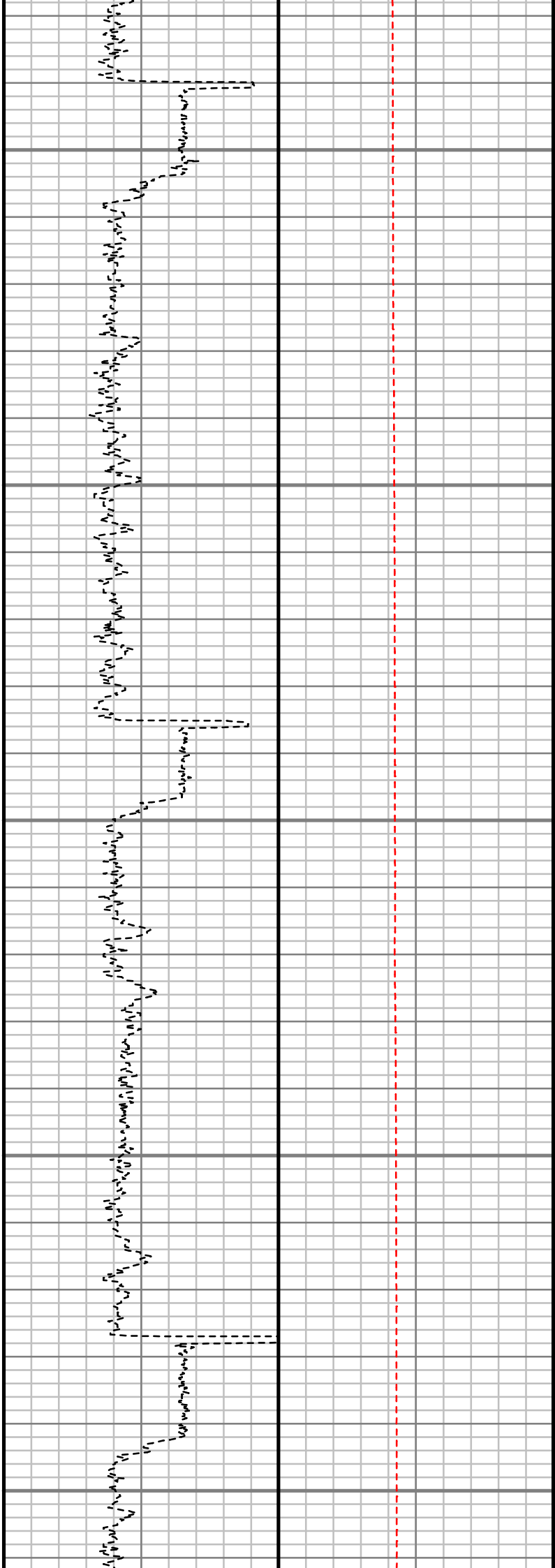
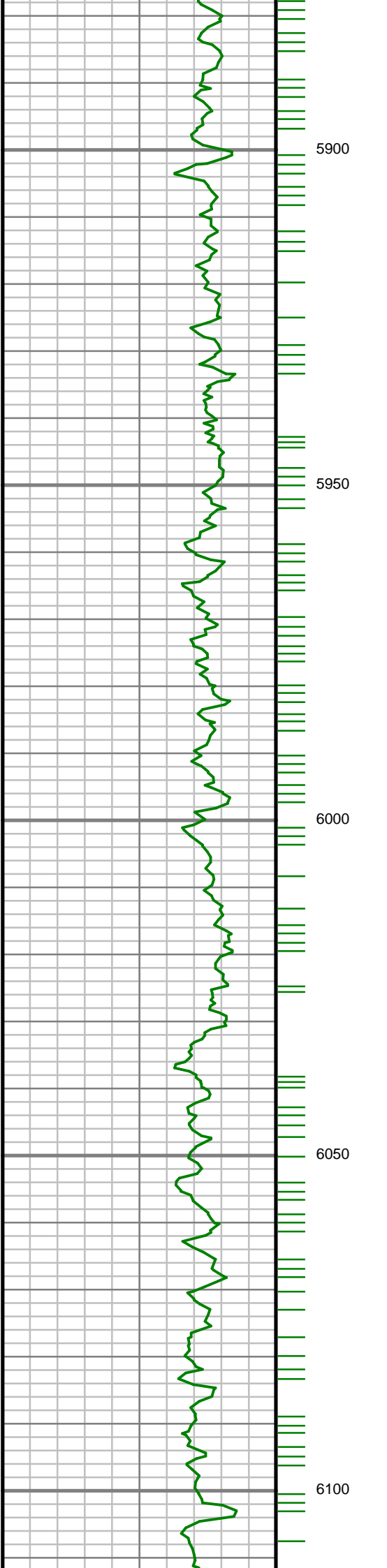
S: 67 MD: 5543.00 ft
Inc: 0.66 deg Az: 9.59
deg TVD: 5378.95 ft

S: 68 MD: 5637.00 ft
Inc: 0.81 deg Az: 8.66
deg TVD: 5472.94 ft



S: 69 MD: 5732.00 ft
Inc: 1.04 deg Az: 2.66
deg TVD: 5567.93 ft

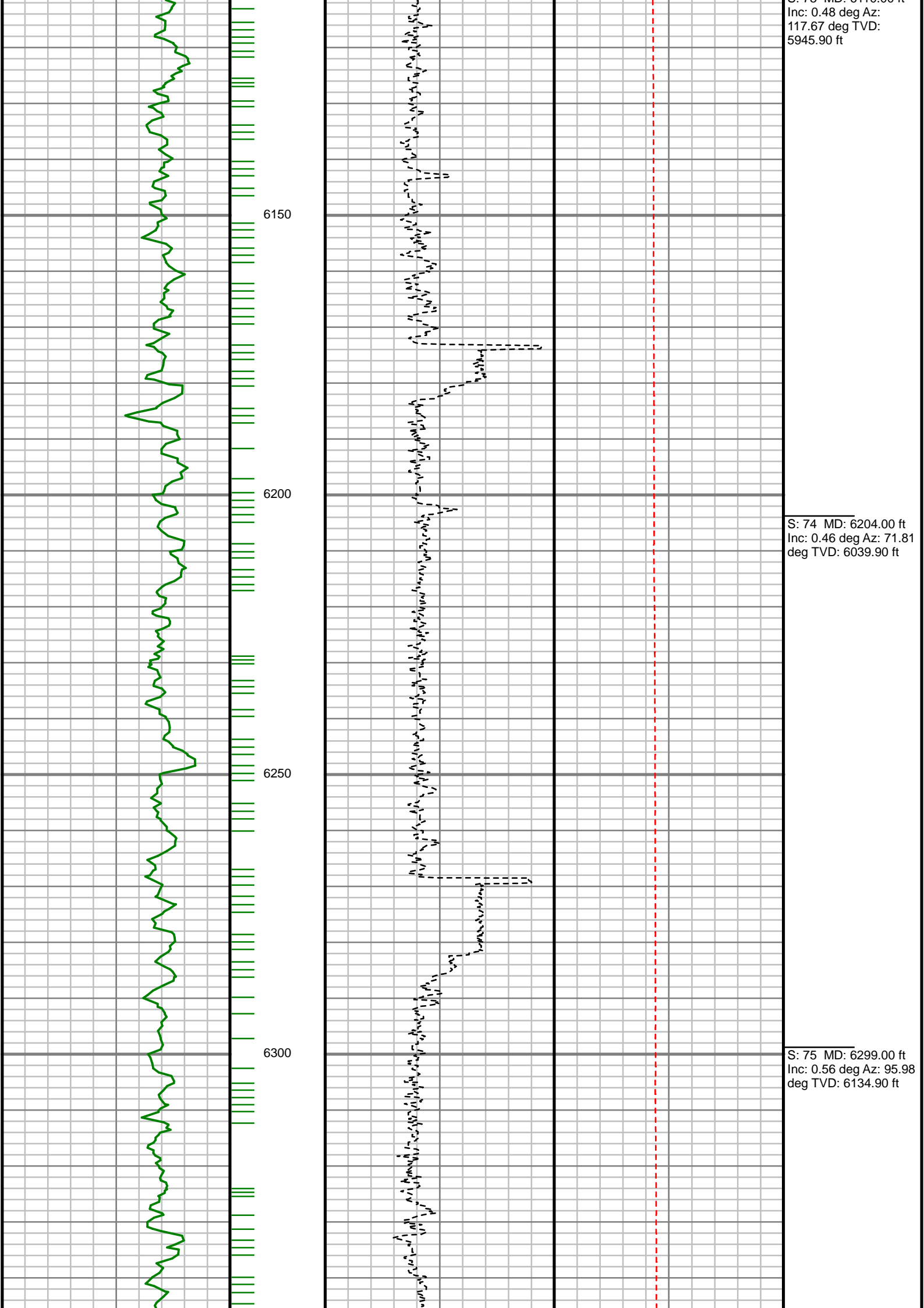
S: 70 MD: 5826.00 ft
Inc: 0.82 deg Az:
171.64 deg TVD:
5661.92 ft

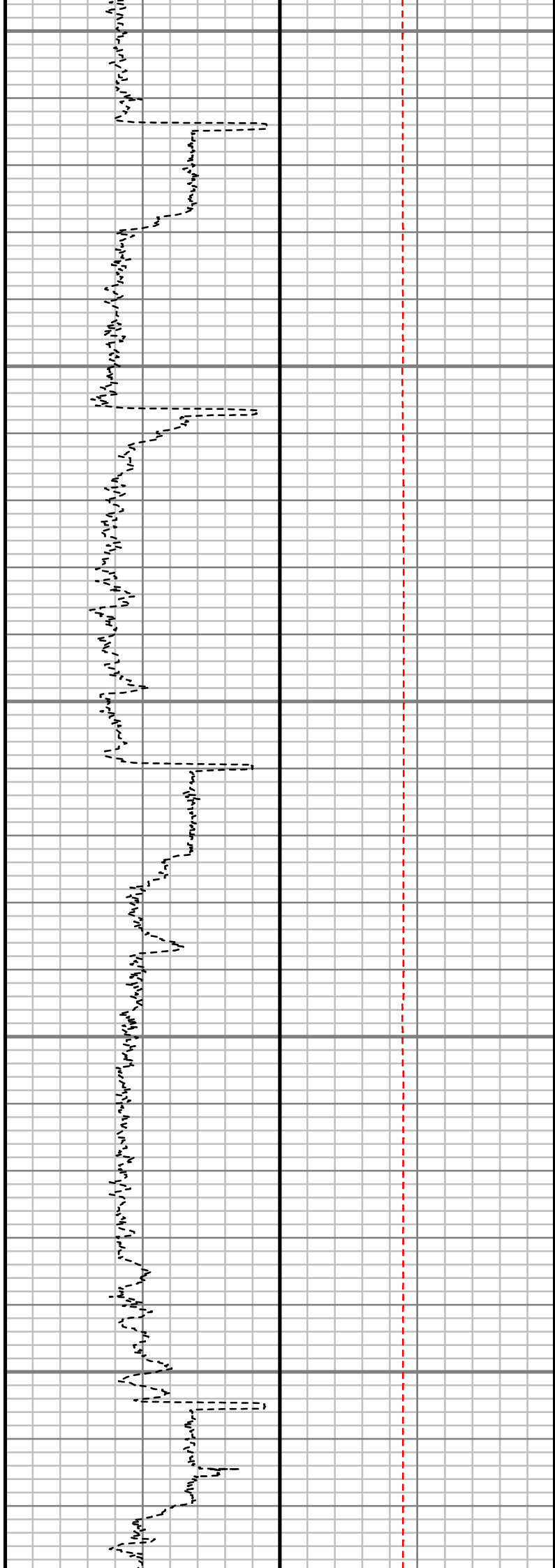
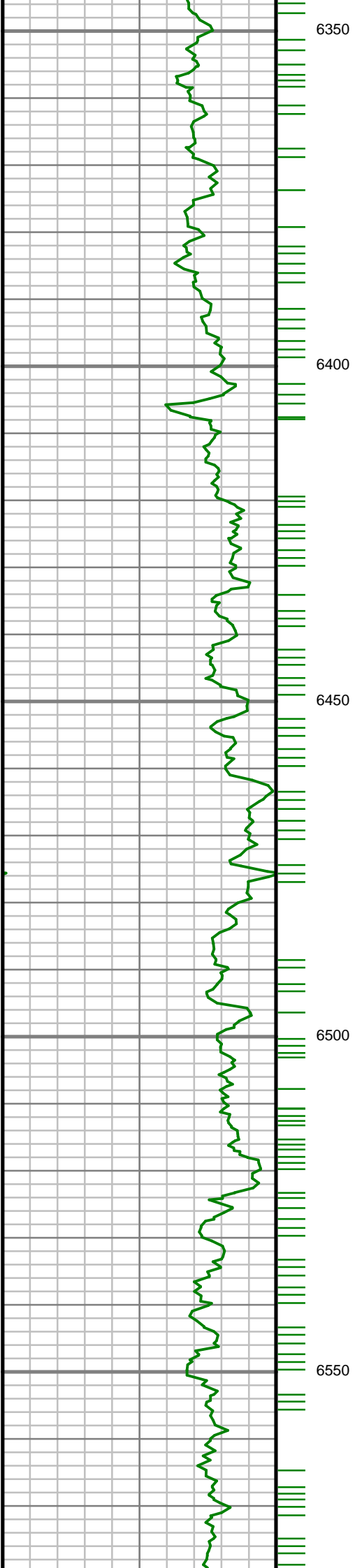


S: 71 MD: 5921.00 ft
Inc: 0.51 deg Az:
152.58 deg TVD:
5756.91 ft

S: 72 MD: 6015.00 ft
Inc: 0.80 deg Az:
110.49 deg TVD:
5850.91 ft

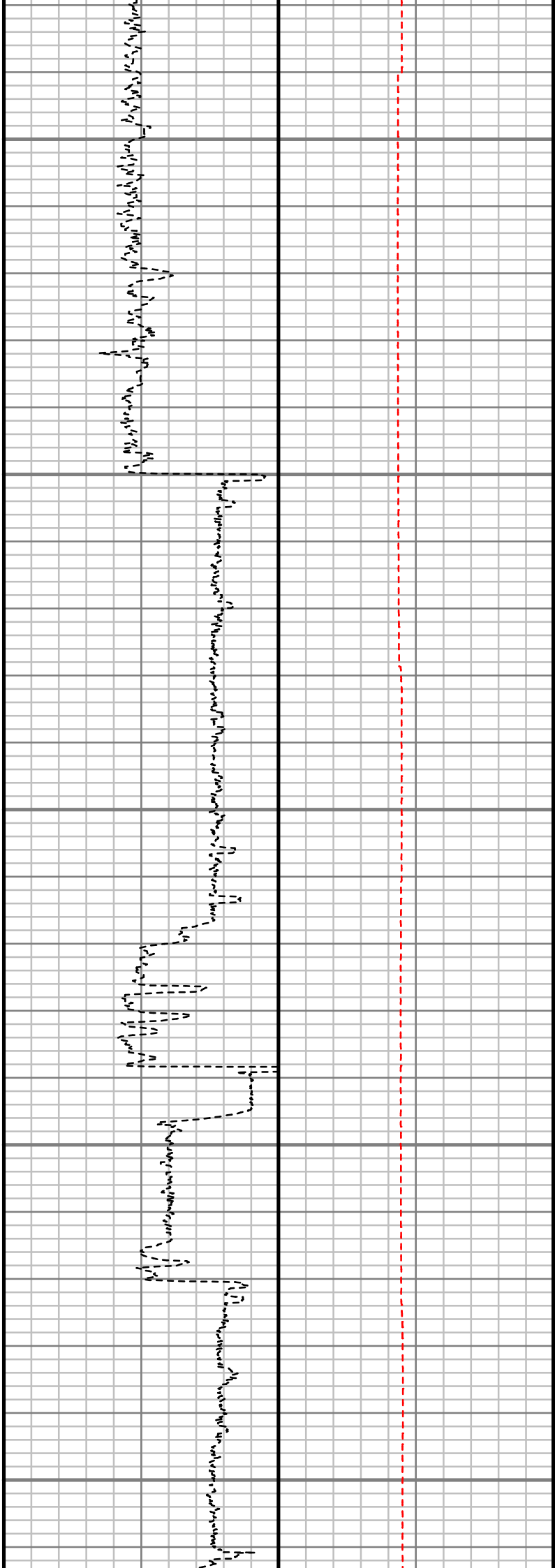
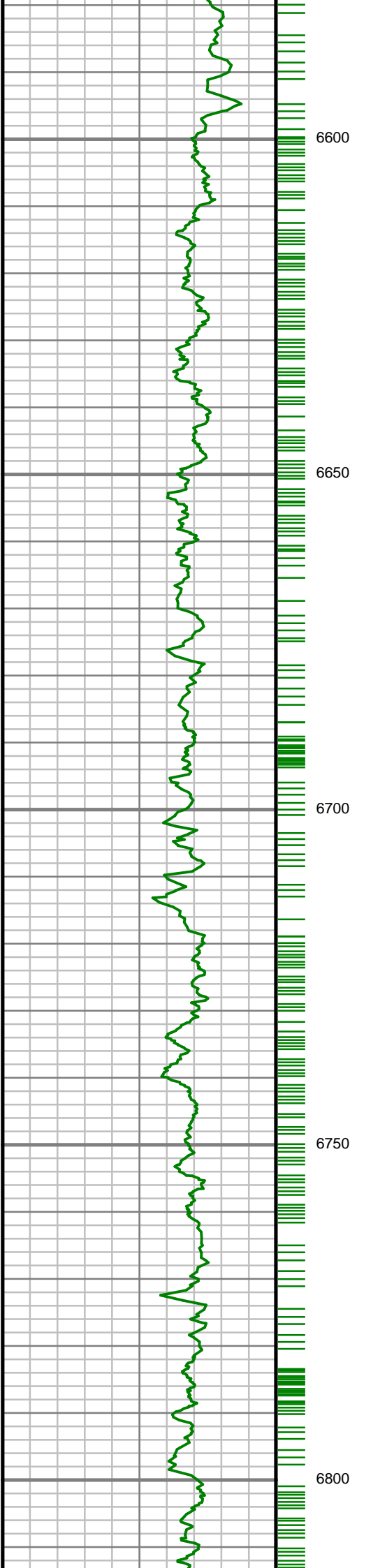
S: 73 MD: 6110.00 ft





S: 76 MD: 6393.00 ft
Inc: 0.38 deg Az: 83.42
deg TVD: 6228.89 ft

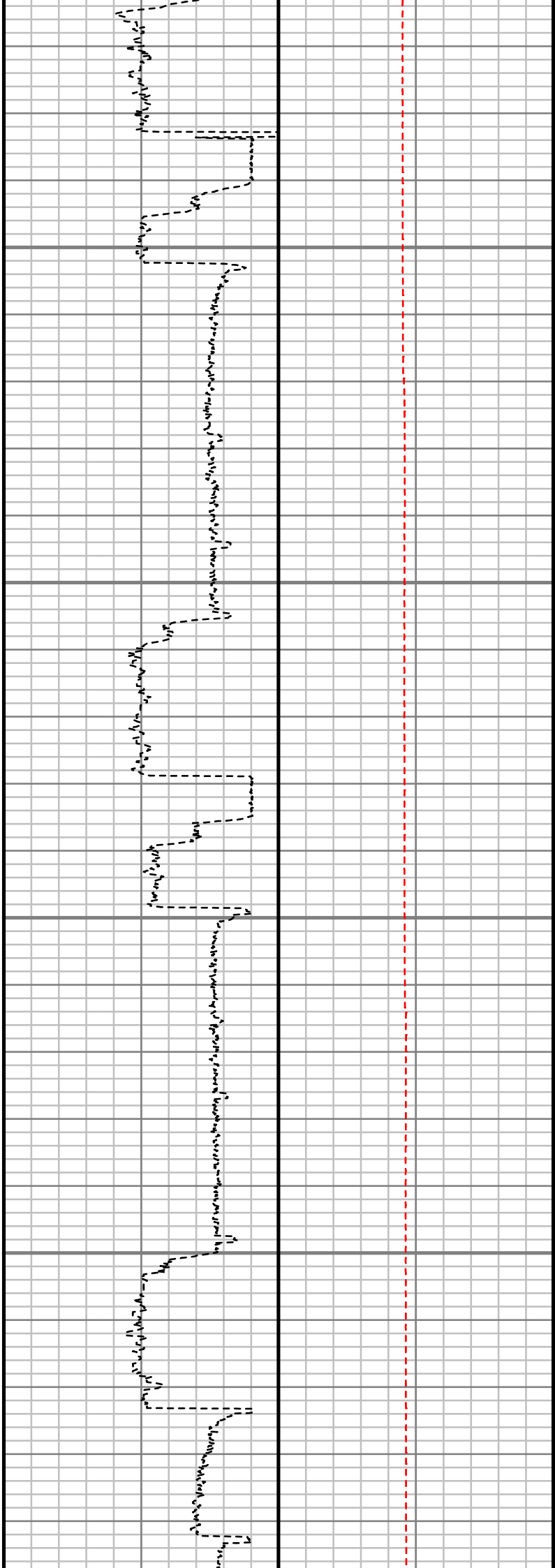
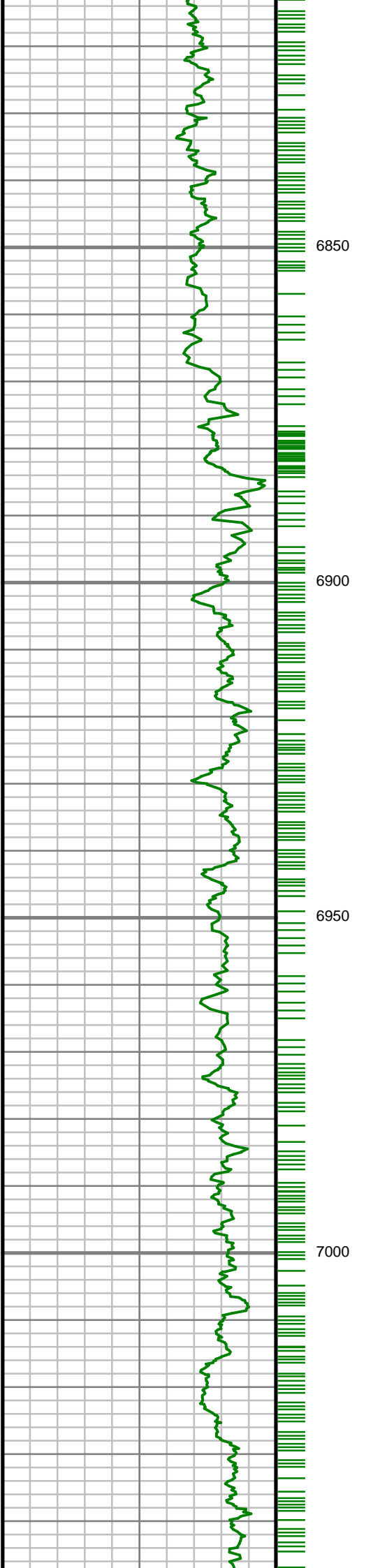
S: 77 MD: 6488.00 ft
Inc: 0.40 deg Az:
147.72 deg TVD:
6323.89 ft



S: 78 MD: 6582.00 ft
Inc: 0.53 deg Az:
178.67 deg TVD:
6417.89 ft

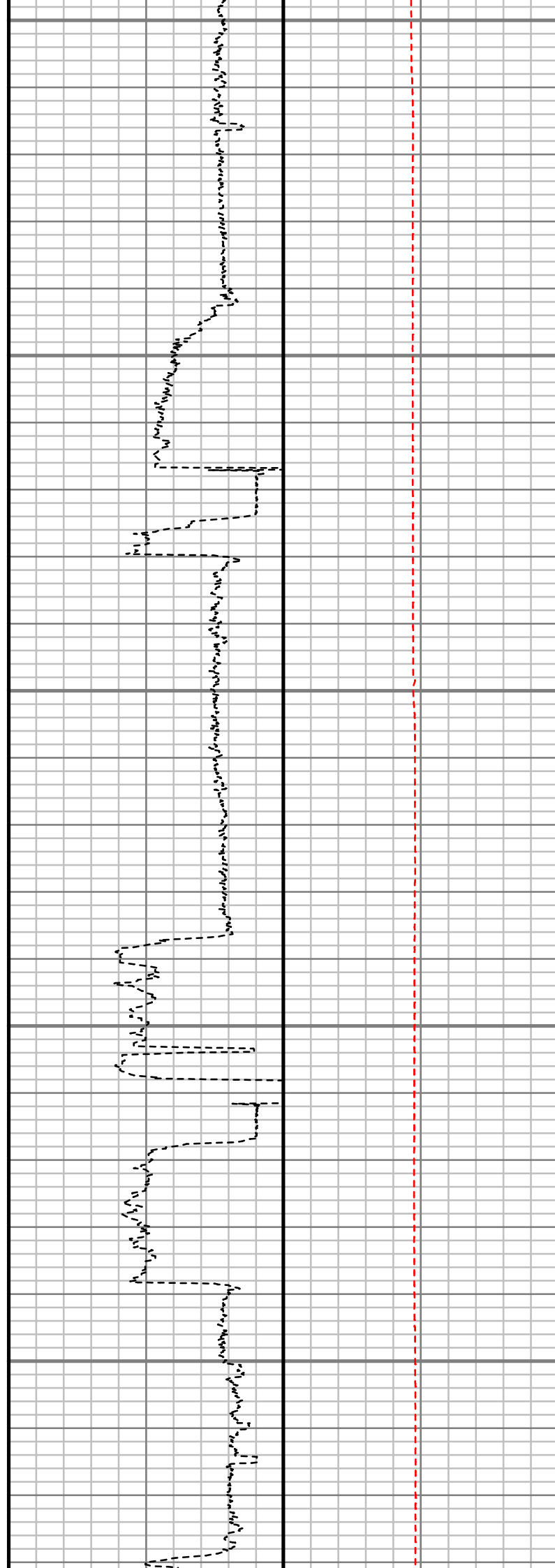
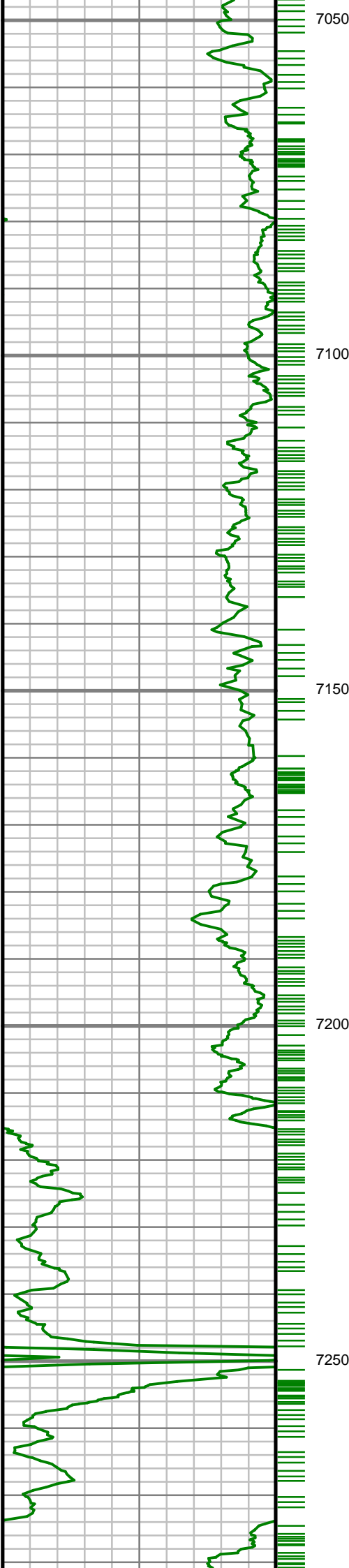
S: 79 MD: 6677.00 ft
Inc: 6.88 deg Az:
349.74 deg TVD:
6512.68 ft

S: 80 MD: 6771.00 ft
Inc: 13.06 deg Az:
351.97 deg TVD:
6605.21 ft



S: 81 MD: 6865.00 ft
Inc: 21.31 deg Az:
355.56 deg TVD:
6694.94 ft

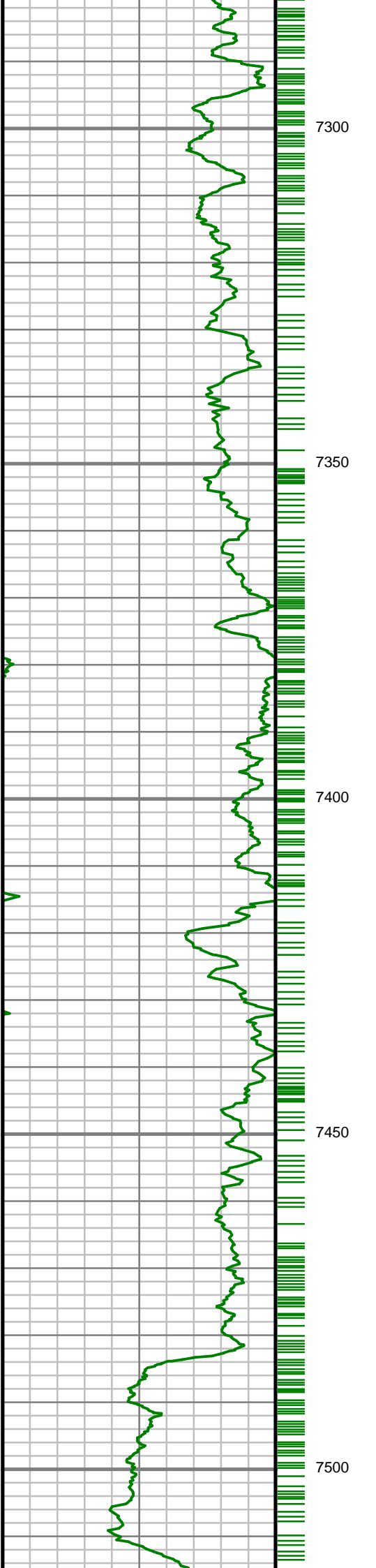
S: 82 MD: 6960.00 ft
Inc: 29.73 deg Az:
353.60 deg TVD:
6780.60 ft



S: 83 MD: 7055.00 ft
Inc: 37.74 deg Az:
355.04 deg TVD:
6859.54 ft

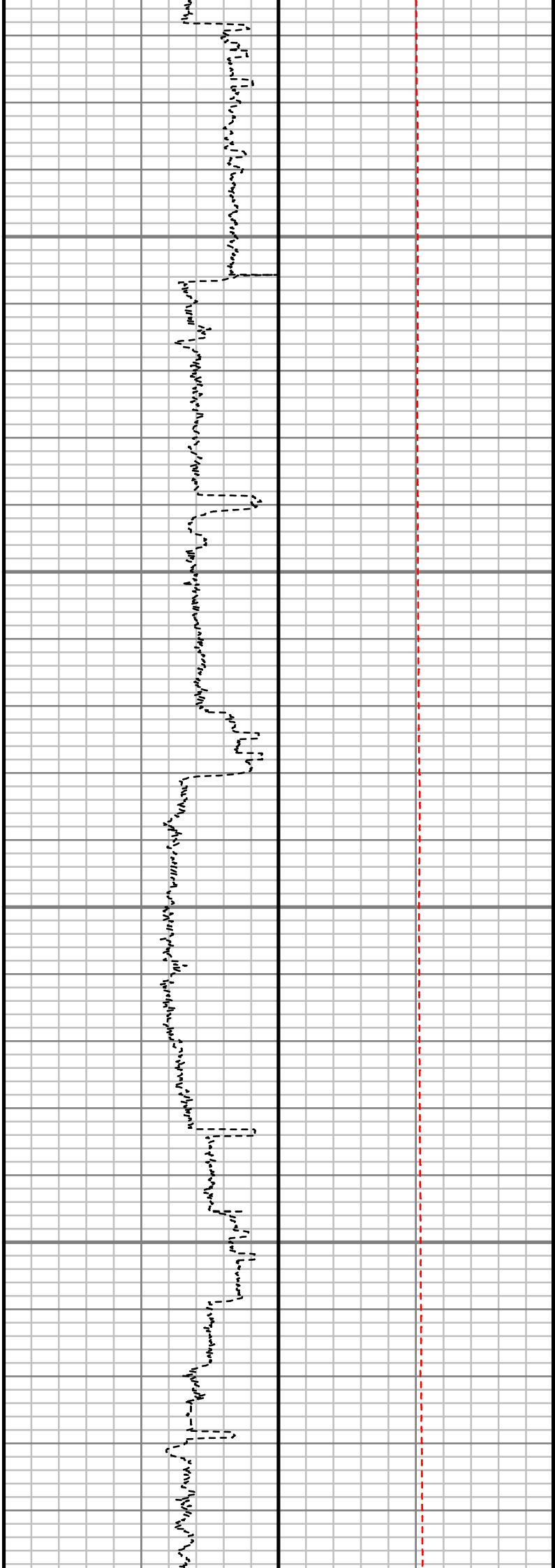
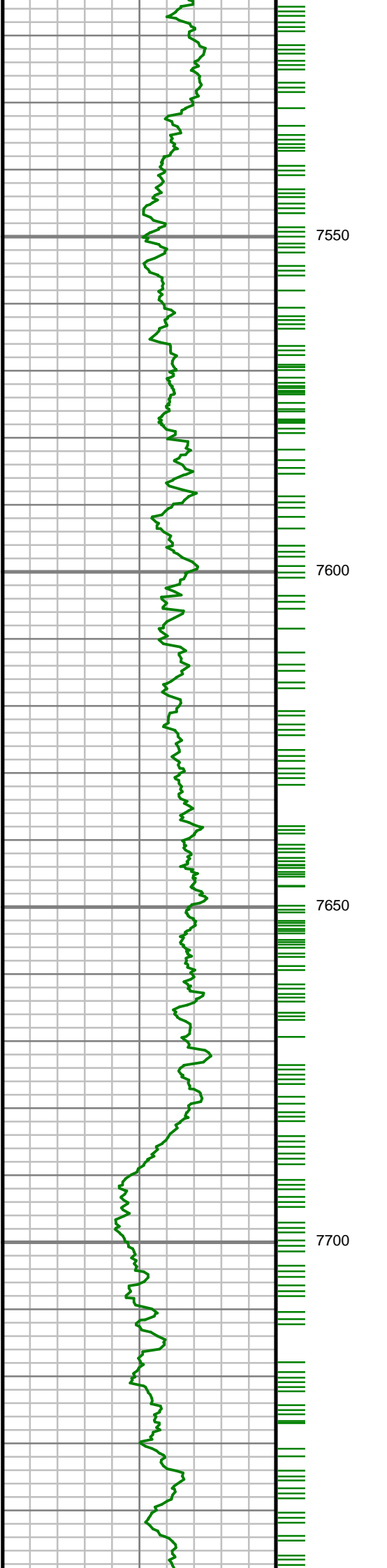
S: 84 MD: 7149.00 ft
Inc: 47.85 deg Az:
358.30 deg TVD:
6928.43 ft

S: 85 MD: 7244.00 ft
Inc: 55.34 deg Az:
357.38 deg TVD:
6987.40 ft



S: 86 MD: 7338.00 ft
Inc: 63.49 deg Az:
357.94 deg TVD:
7035.18 ft

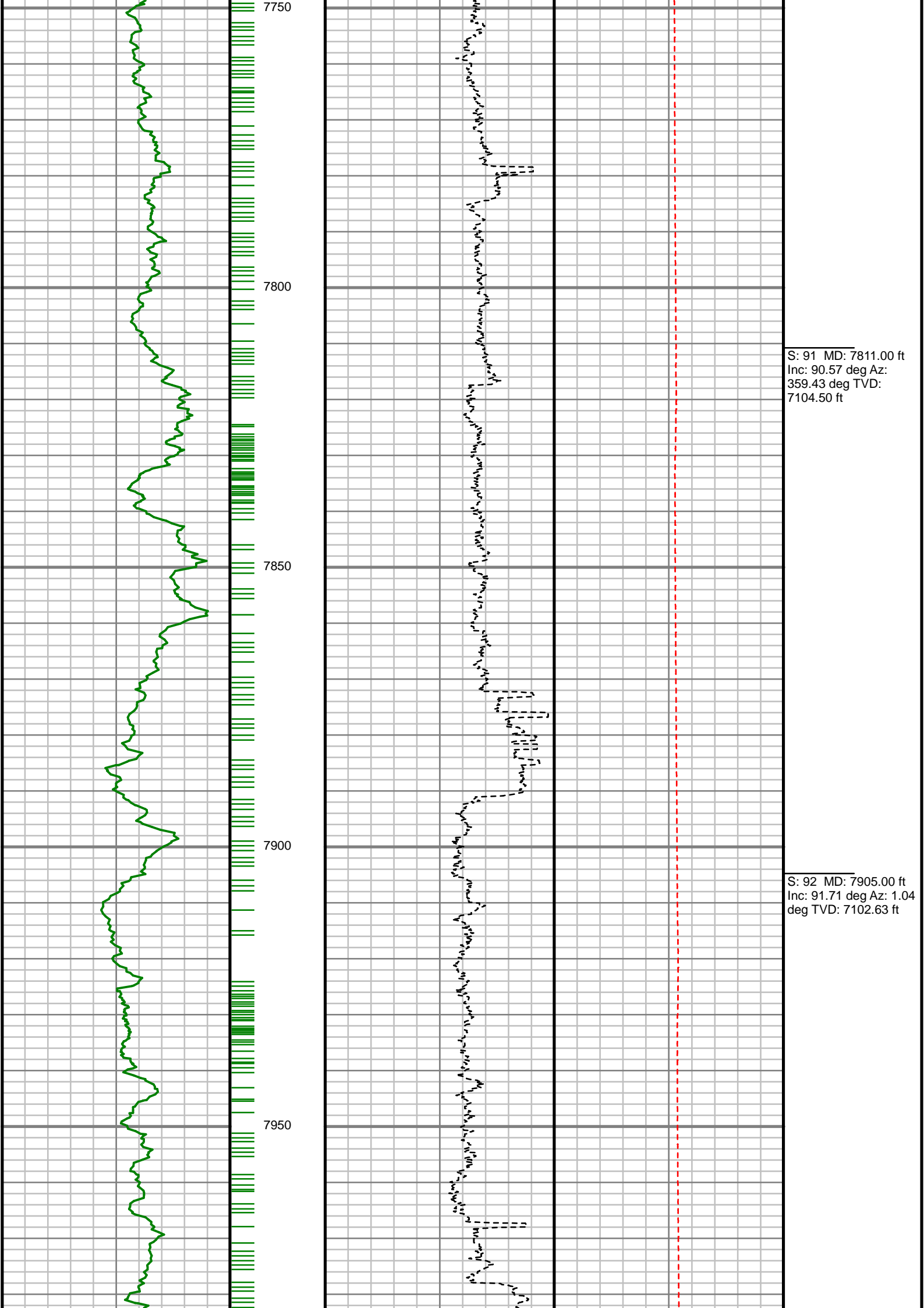
S: 87 MD: 7433.00 ft
Inc: 72.00 deg Az: 0.47
deg TVD: 7071.13 ft

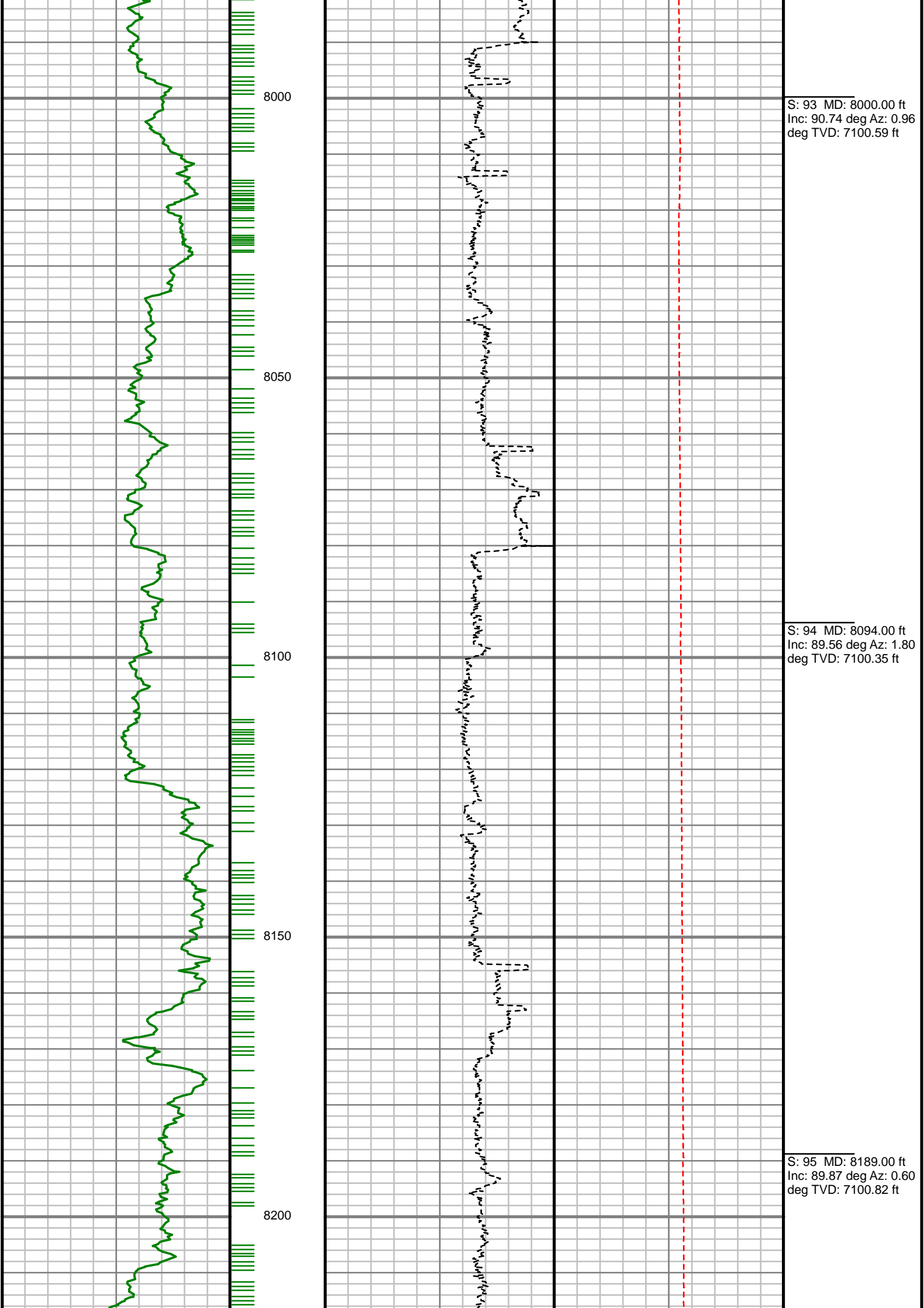


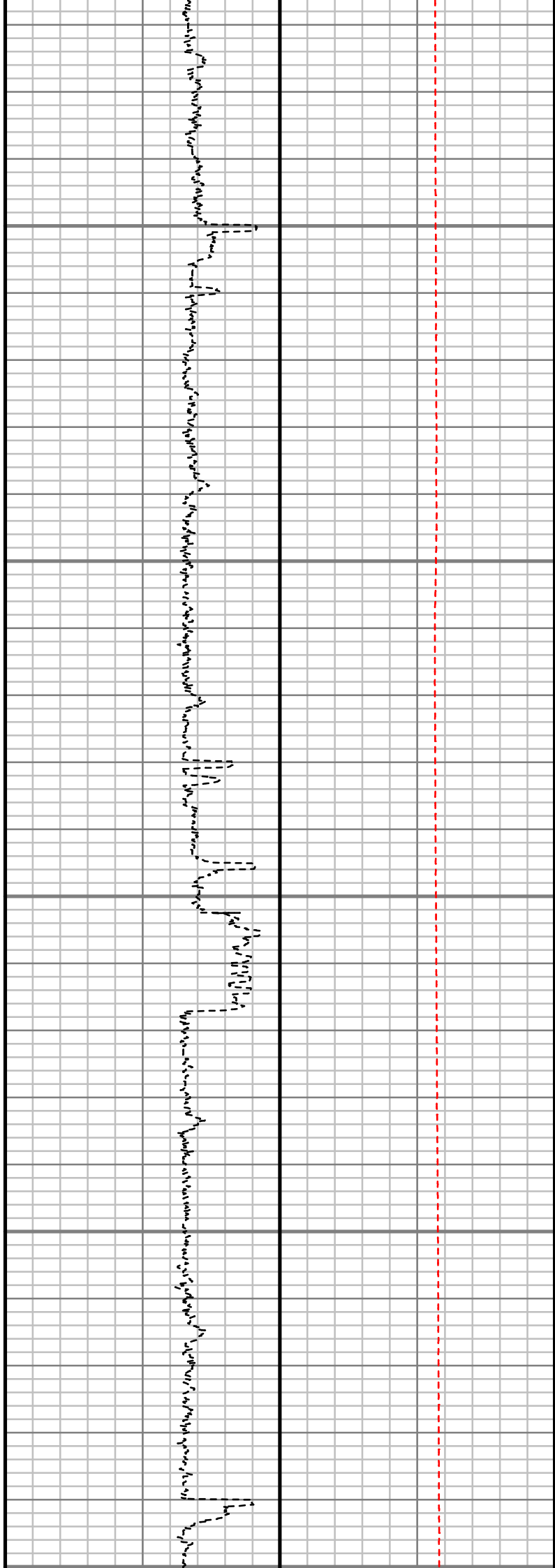
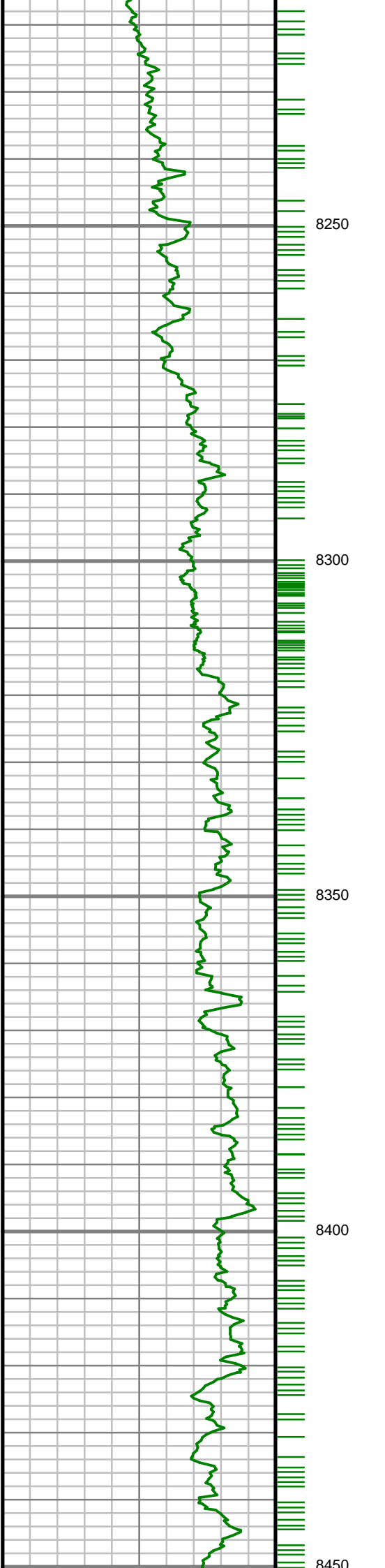
S: 88 MD: 7527.00 ft
Inc: 80.76 deg Az: 0.31
deg TVD: 7093.24 ft

S: 89 MD: 7622.00 ft
Inc: 87.78 deg Az:
358.59 deg TVD:
7102.71 ft

S: 90 MD: 7716.00 ft
Inc: 89.73 deg Az: 0.19
deg TVD: 7104.75 ft

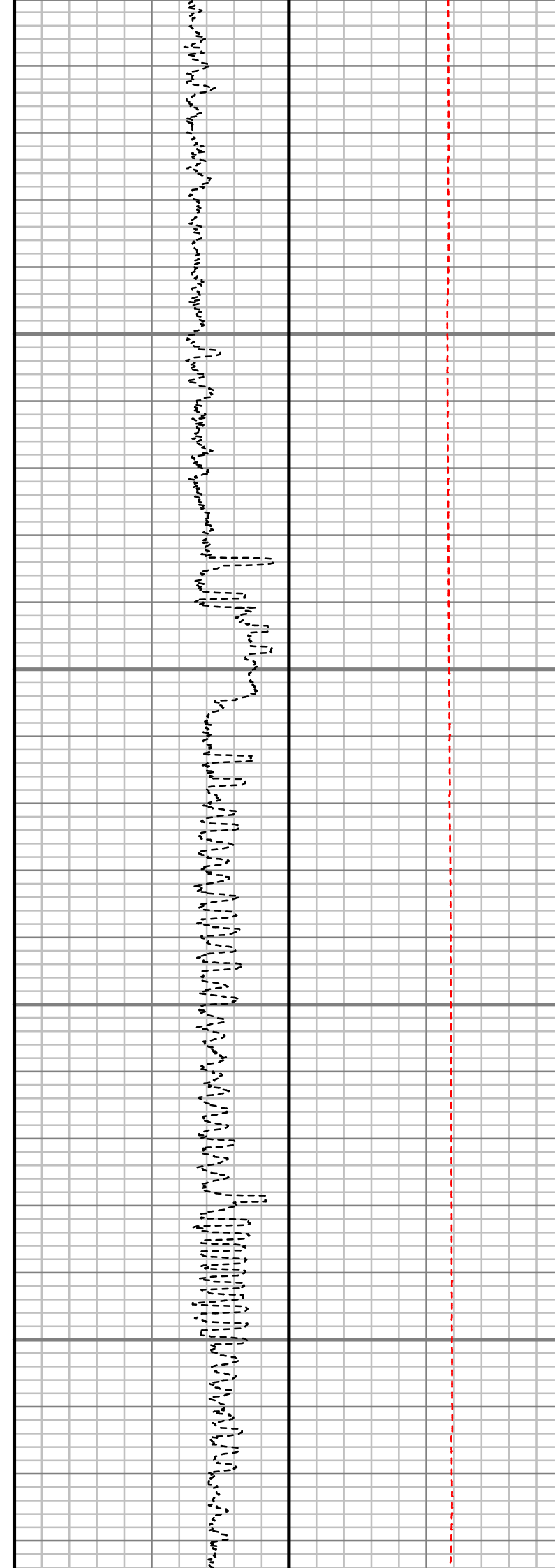
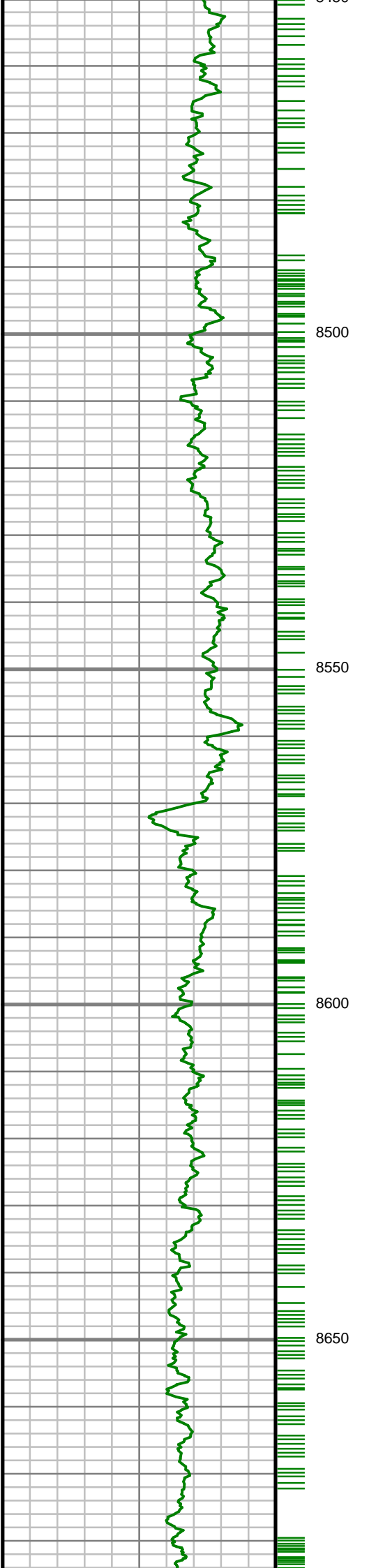






S: 96 MD: 8283.00 ft
Inc: 90.91 deg Az: 359.58 deg TVD: 7100.19 ft

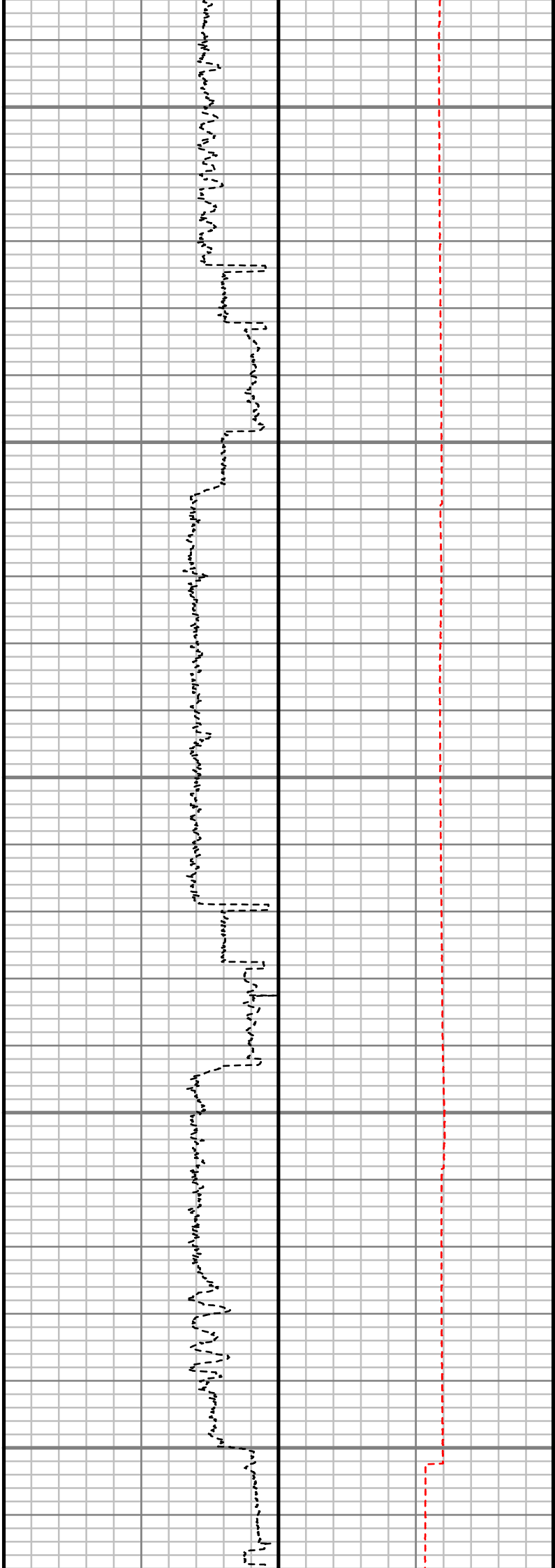
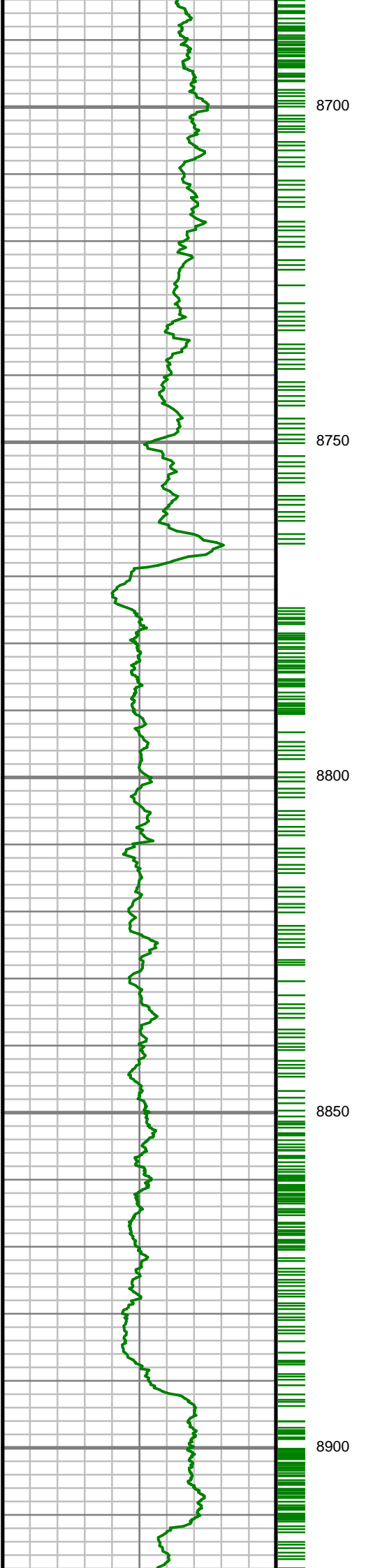
S: 97 MD: 8378.00 ft
Inc: 89.63 deg Az: 0.65 deg TVD: 7099.74 ft



S: 98 MD: 8472.00 ft
Inc: 90.47 deg Az: 0.03
deg TVD: 7099.66 ft

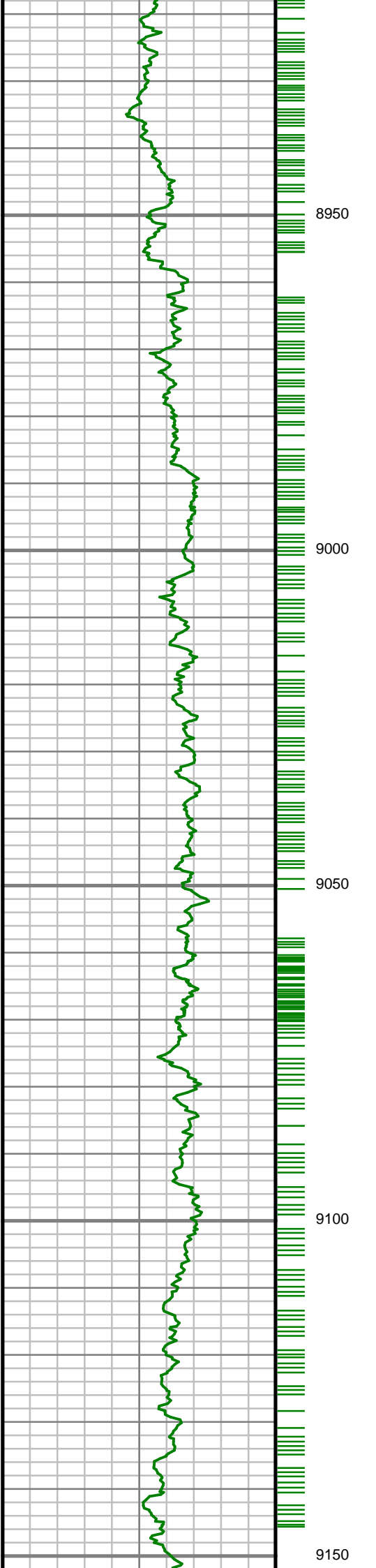
S: 99 MD: 8567.00 ft
Inc: 89.40 deg Az: 1.03
deg TVD: 7099.77 ft

S: 100 MD: 8661.00 ft
Inc: 90.60 deg Az: 0.91
deg TVD: 7099.77 ft



S: 101 MD: 8756.00 ft
Inc: 90.44 deg Az: 1.66
deg TVD: 7098.91 ft

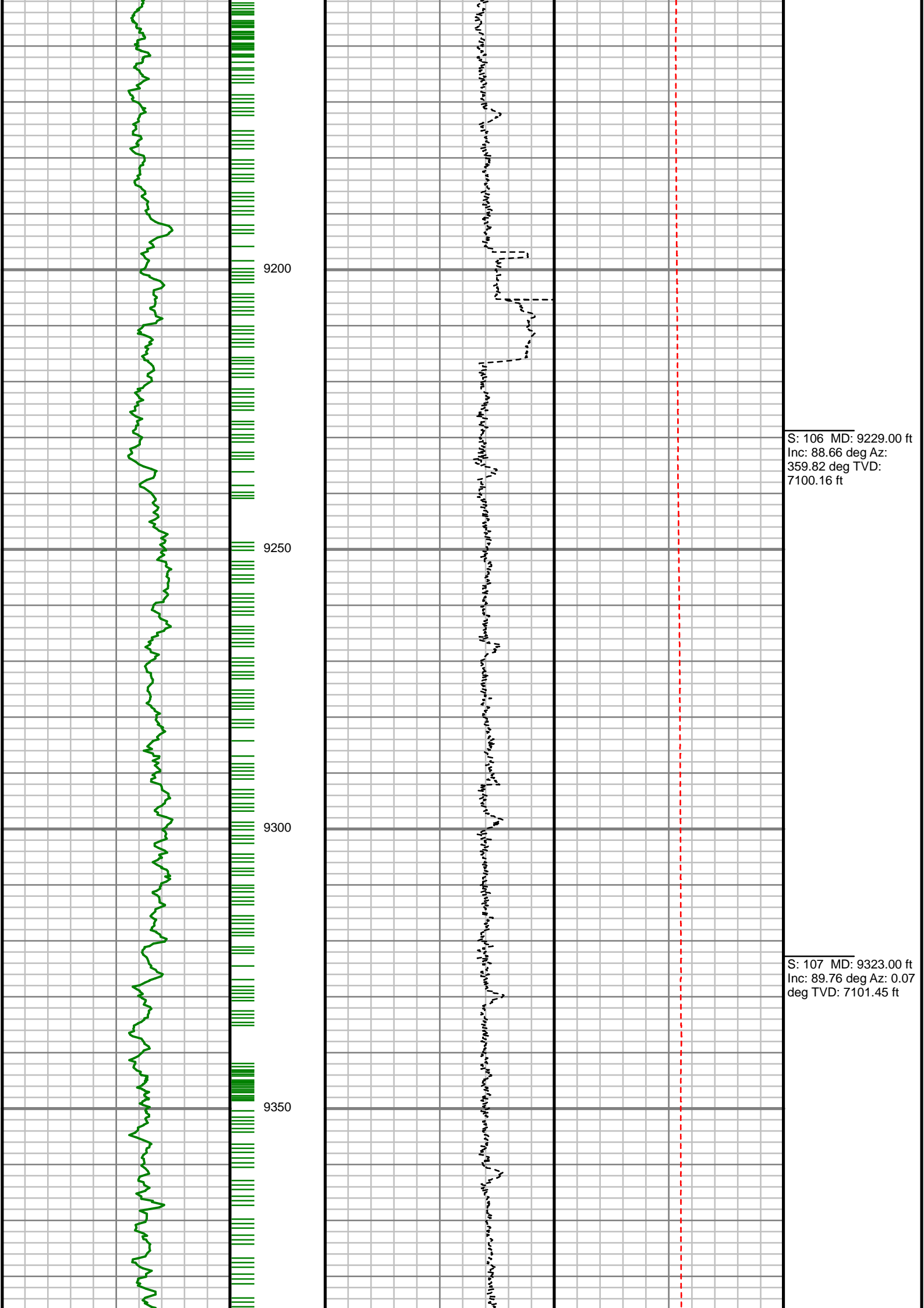
S: 102 MD: 8851.00 ft
Inc: 88.76 deg Az: 1.84
deg TVD: 7099.57 ft

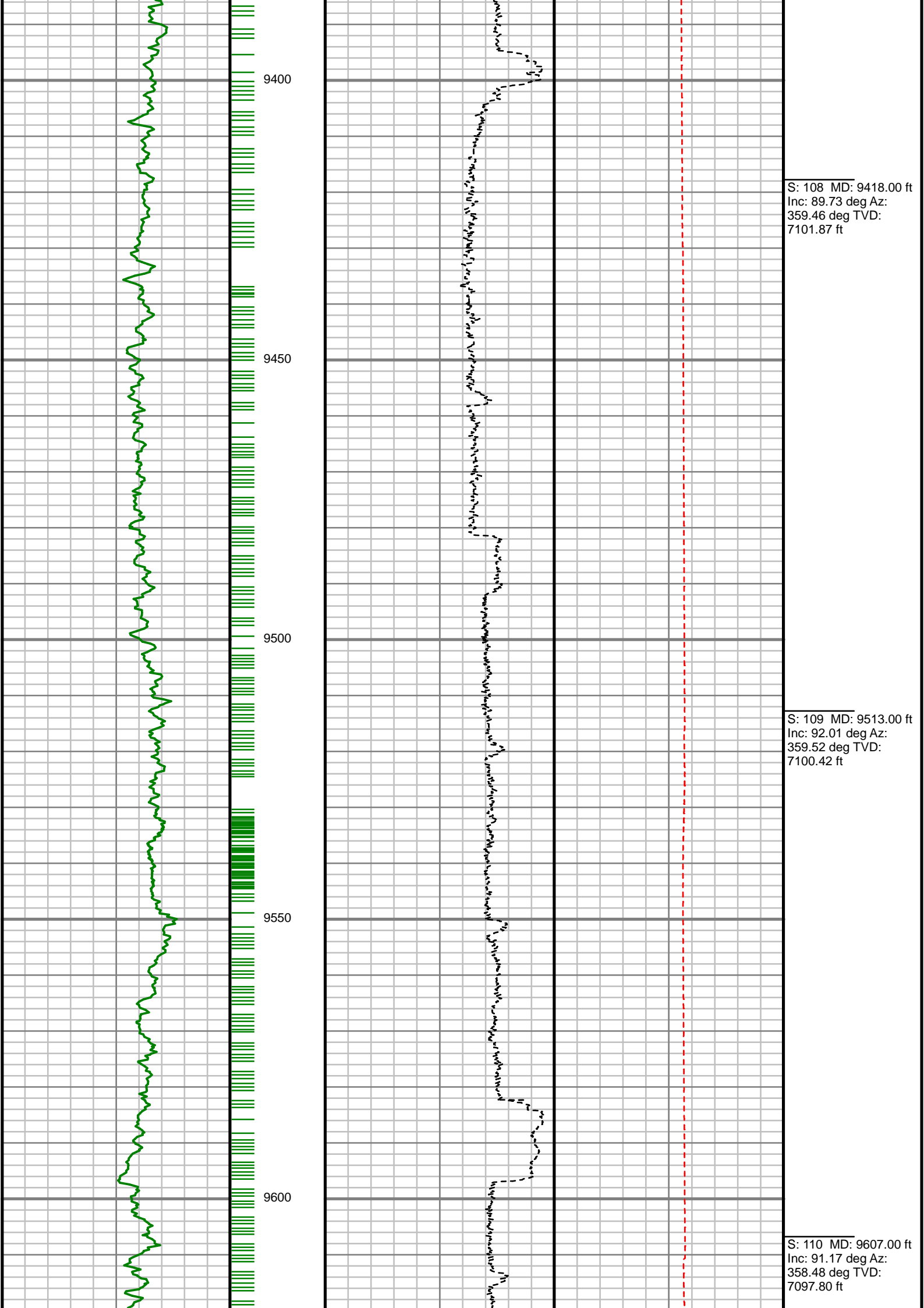


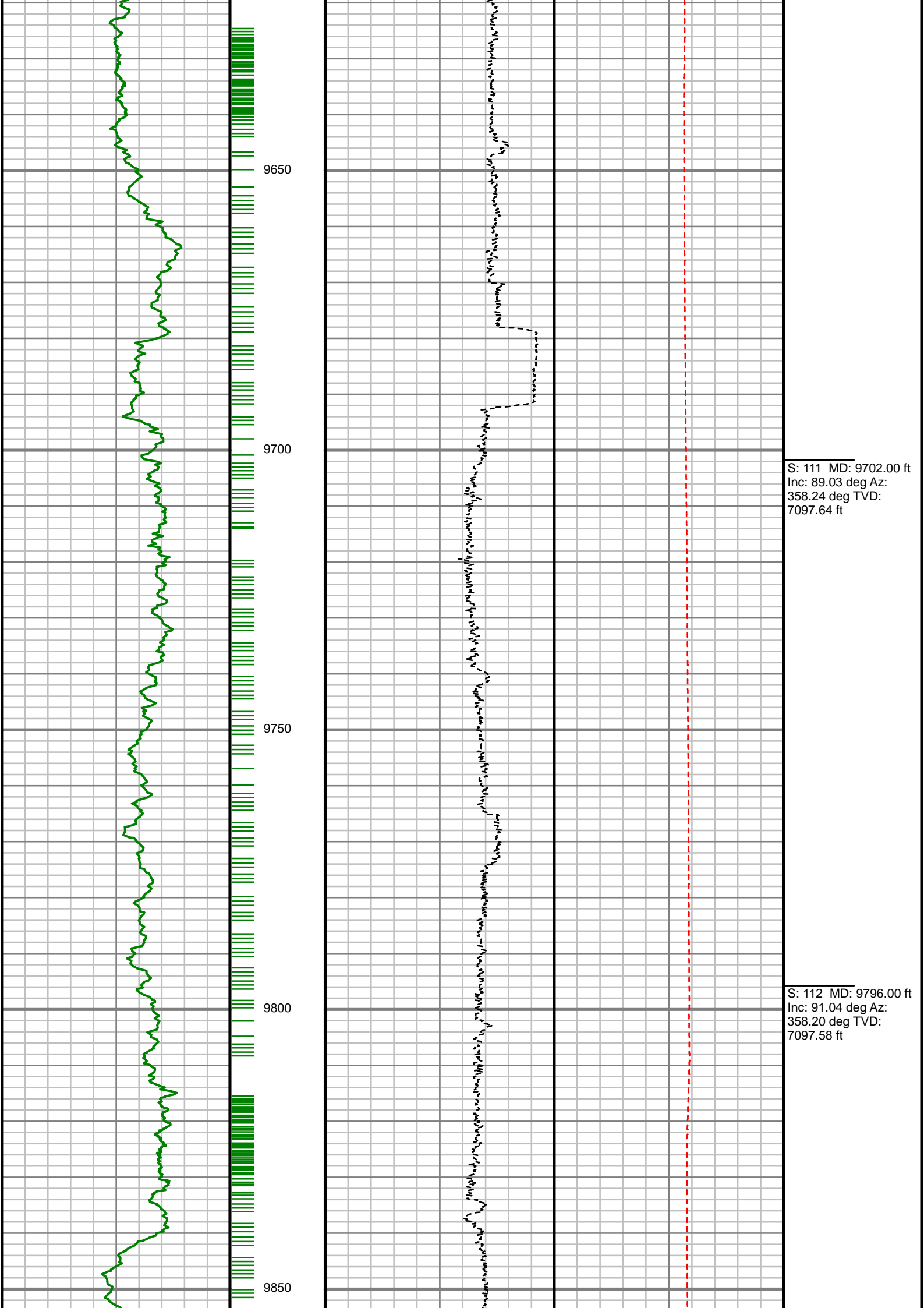
S: 103 MD: 8945.00 ft
Inc: 89.26 deg Az: 1.66
deg TVD: 7101.20 ft

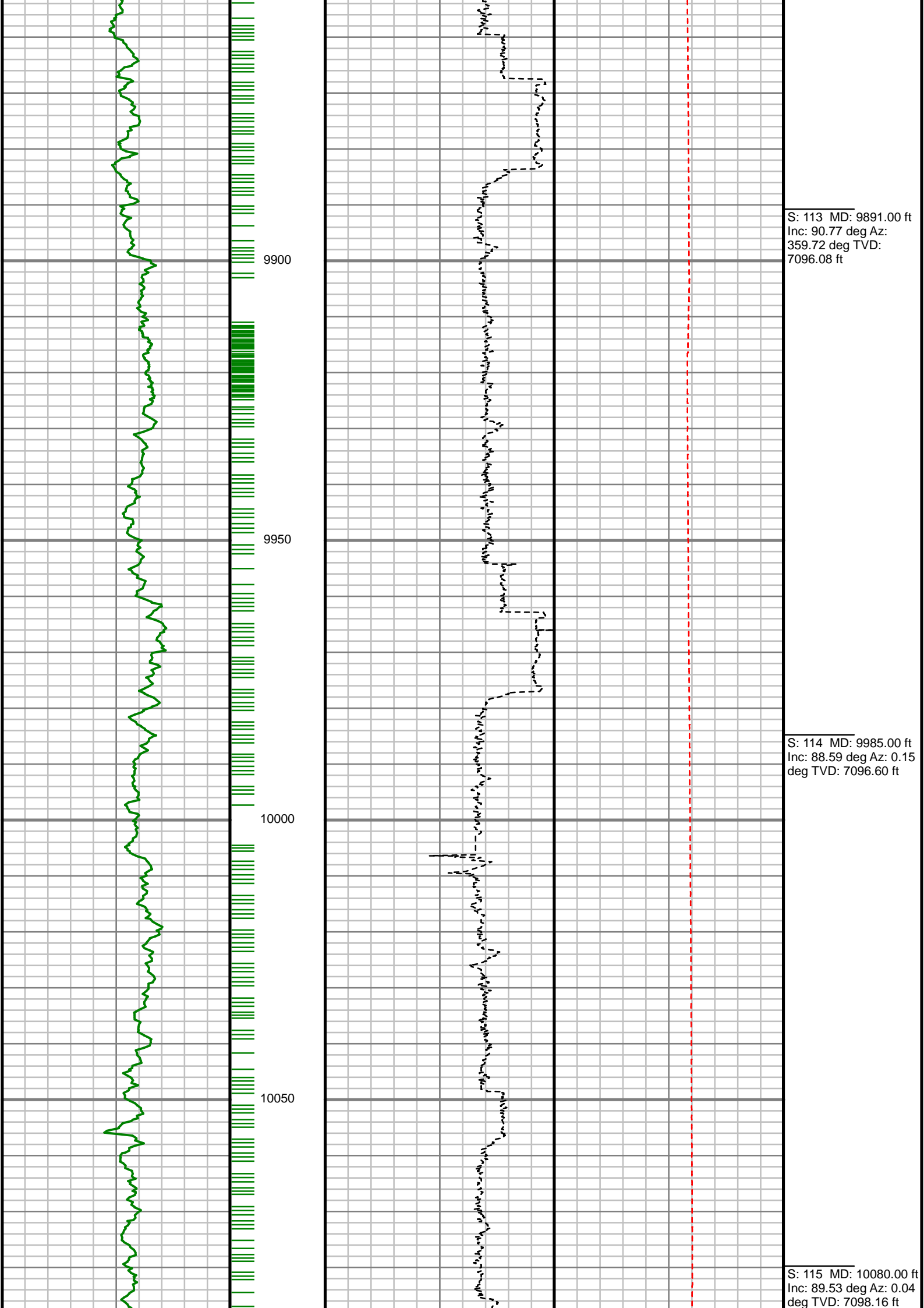
S: 104 MD: 9040.00 ft
Inc: 91.21 deg Az: 1.67
deg TVD: 7100.81 ft

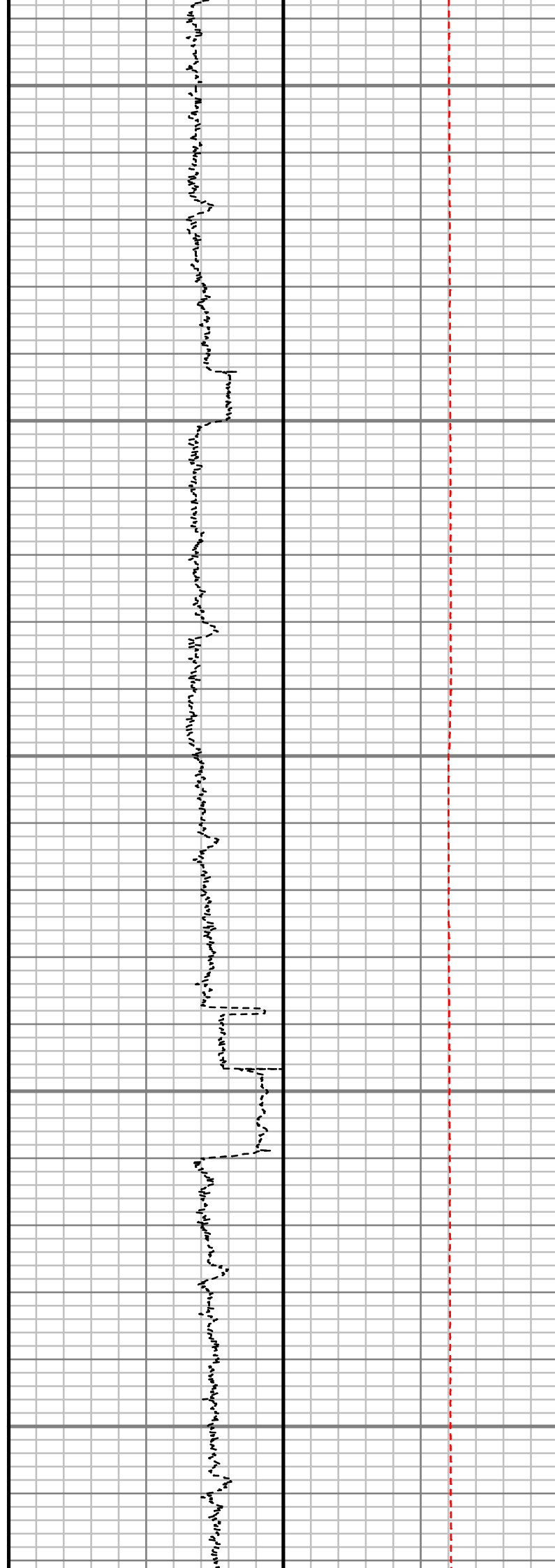
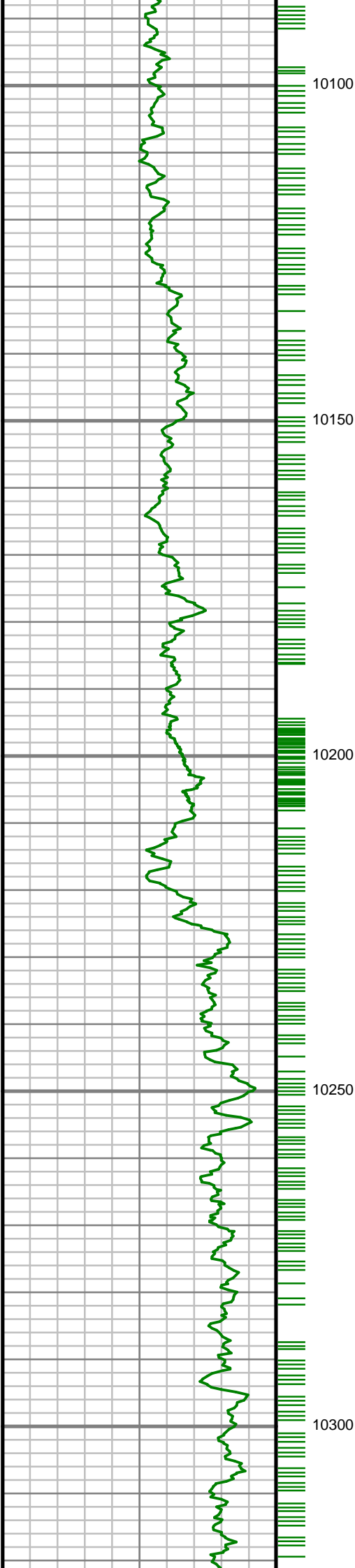
S: 105 MD: 9134.00 ft
Inc: 90.47 deg Az: 1.15
deg TVD: 7099.43 ft





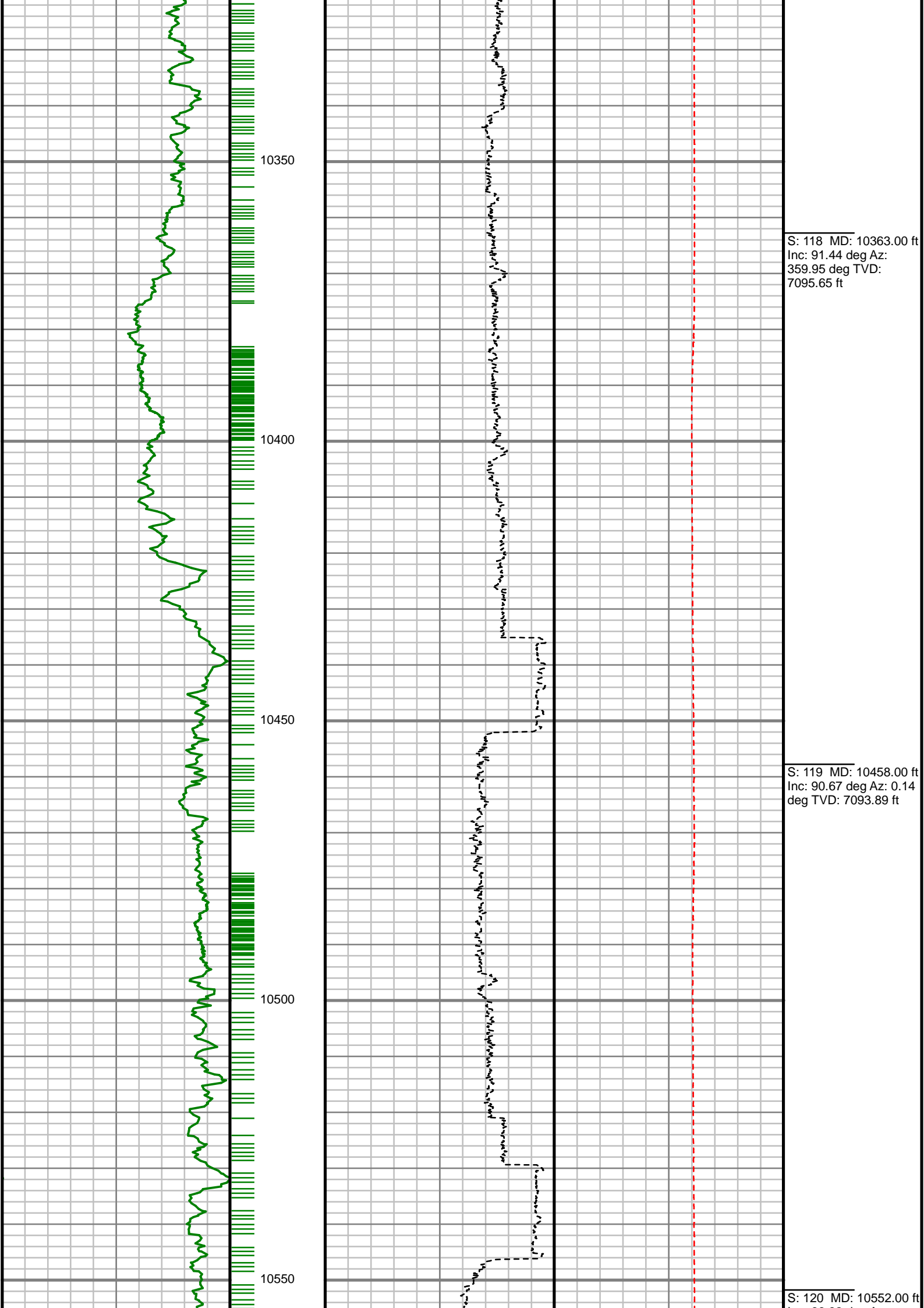






S: 116 MD: 10174.00 ft
Inc: 91.14 deg Az: 0.16
deg TVD: 7097.61 ft

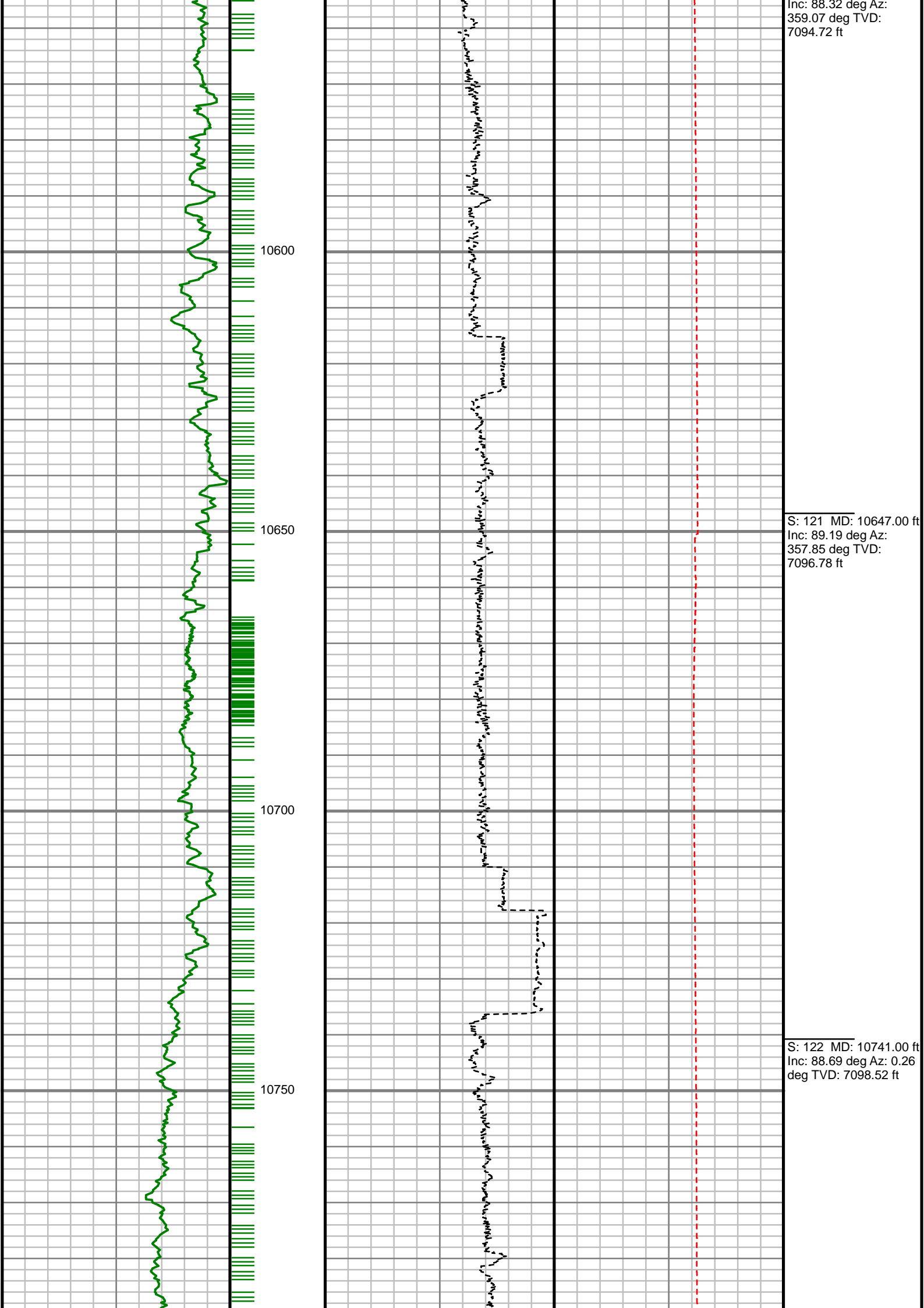
S: 117 MD: 10269.00 ft
Inc: 89.90 deg Az: 0.12
deg TVD: 7096.75 ft

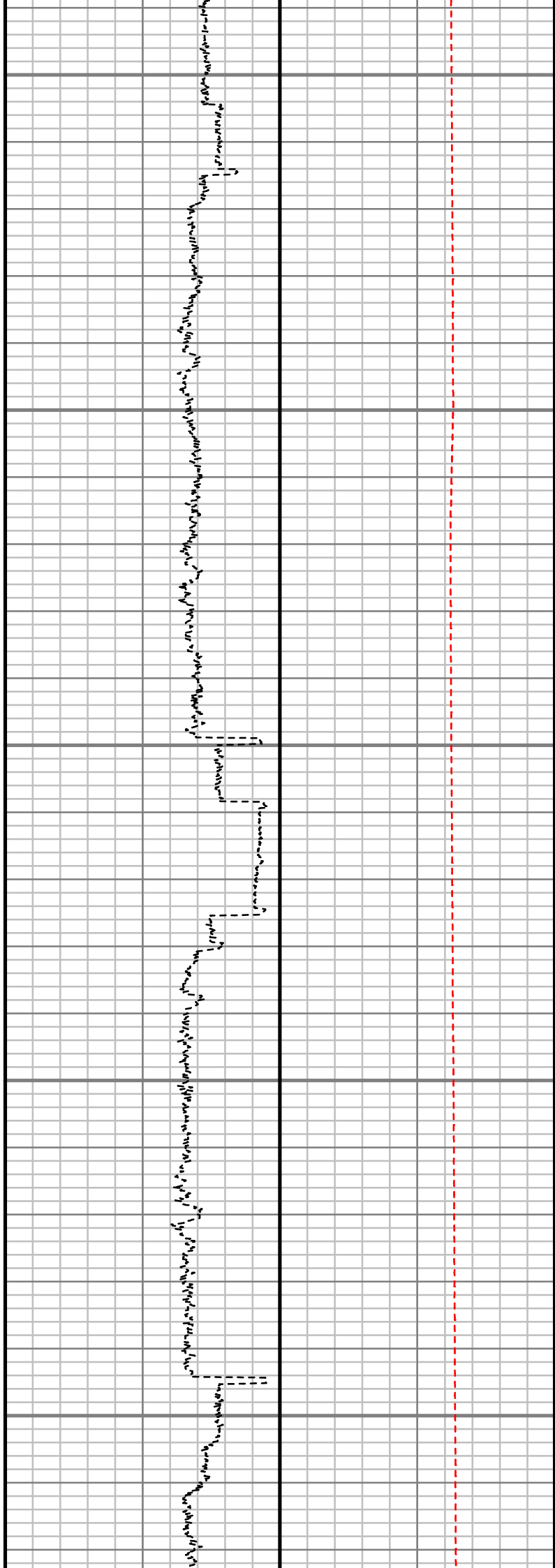
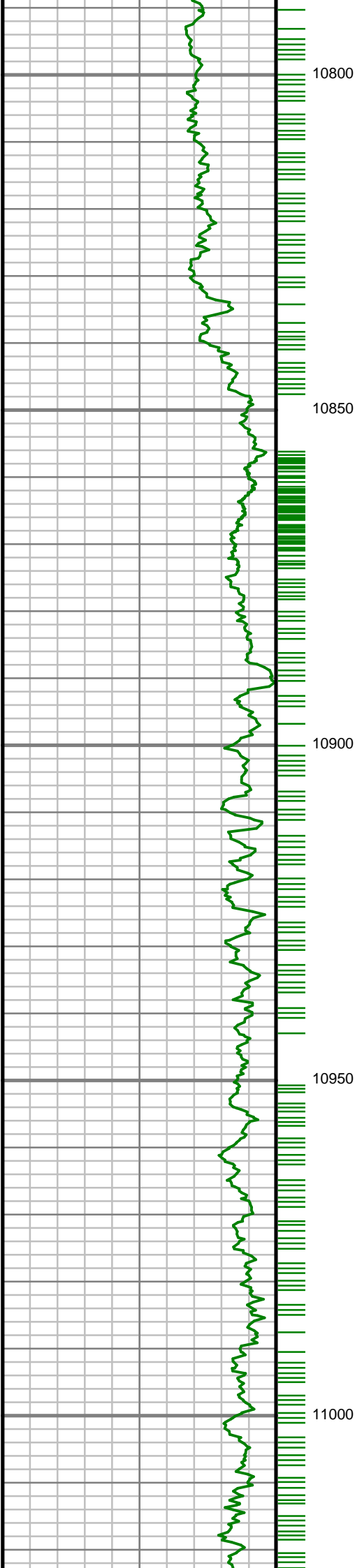


S: 118 MD: 10363.00 ft
Inc: 91.44 deg Az:
359.95 deg TVD:
7095.65 ft

S: 119 MD: 10458.00 ft
Inc: 90.67 deg Az: 0.14
deg TVD: 7093.89 ft

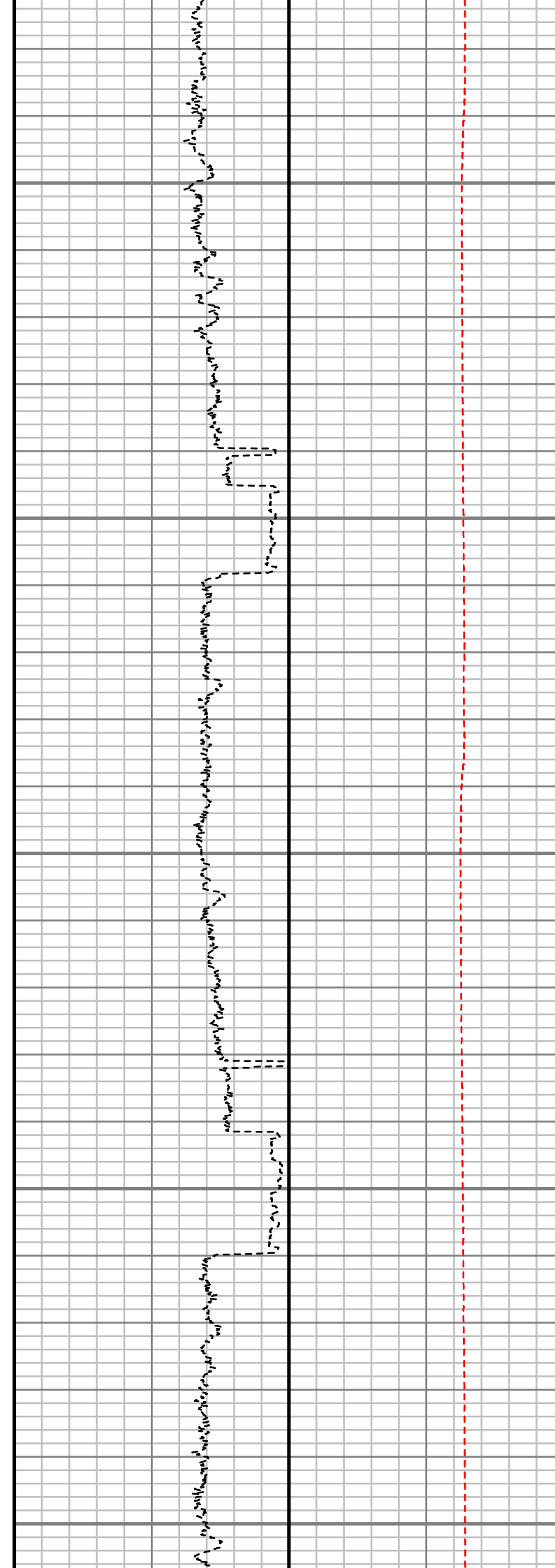
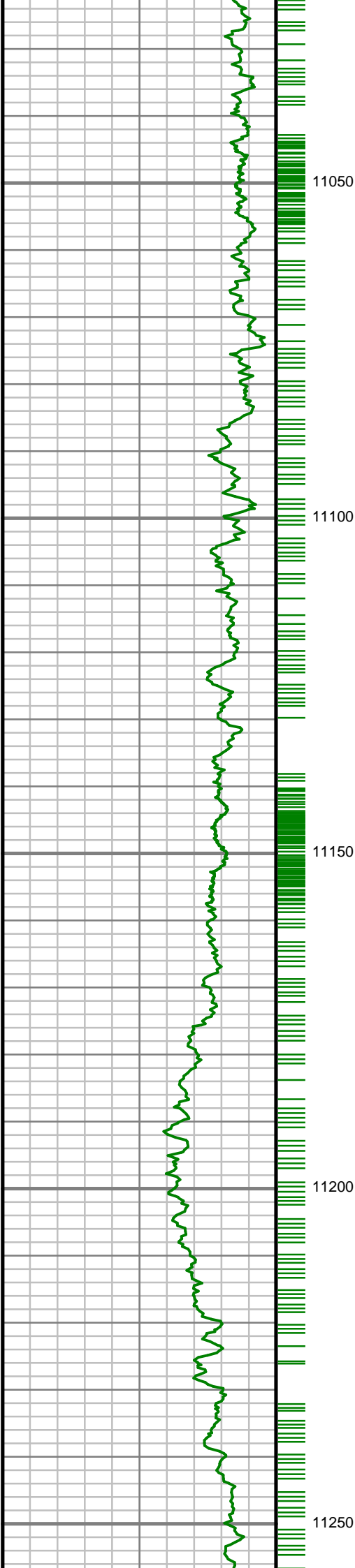
S: 120 MD: 10552.00 ft





S: 123 MD: 10836.00 ft
Inc: 91.38 deg Az: 0.47
deg TVD: 7098.46 ft

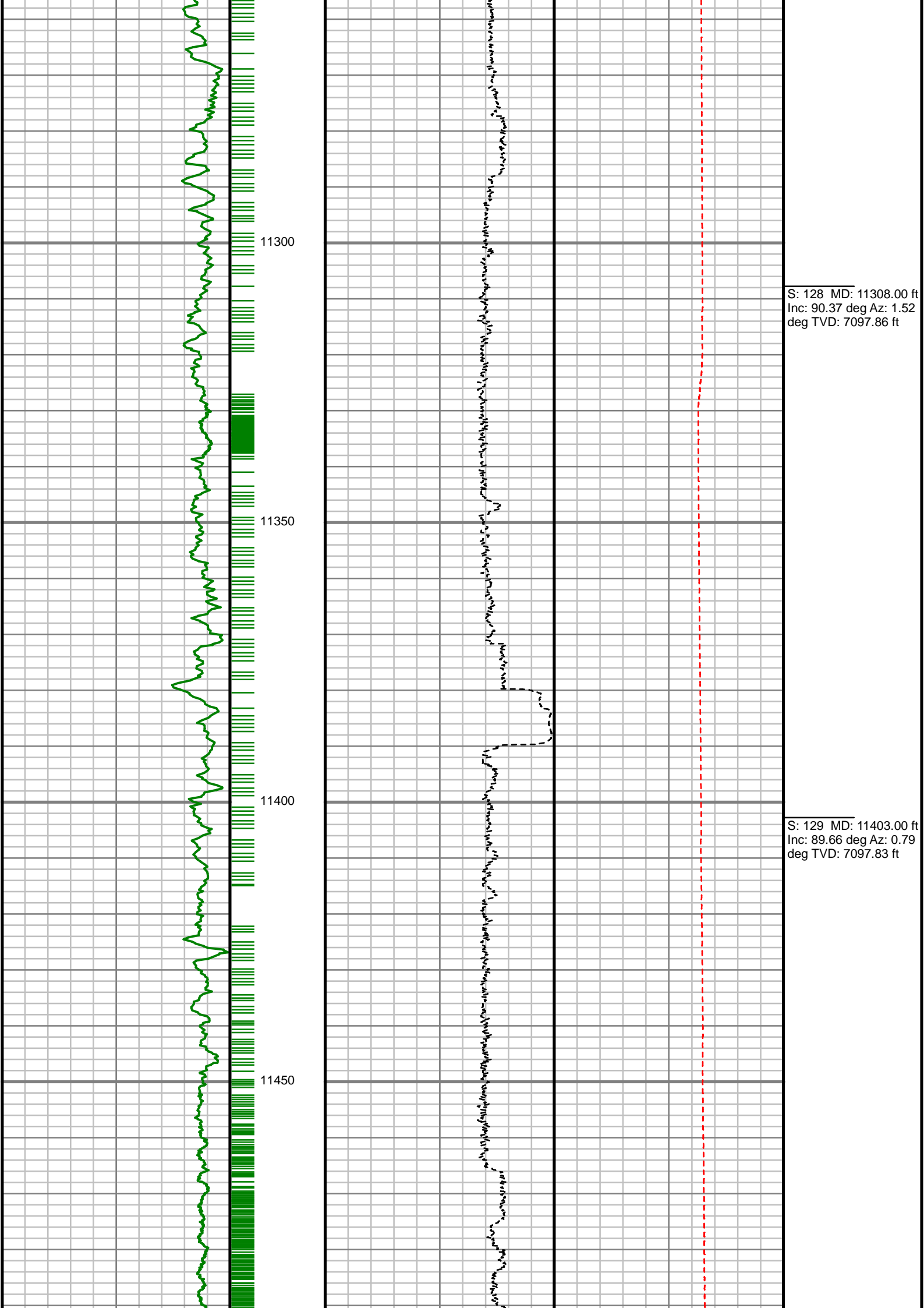
S: 124 MD: 10930.00 ft
Inc: 89.60 deg Az:
359.25 deg TVD:
7097.66 ft

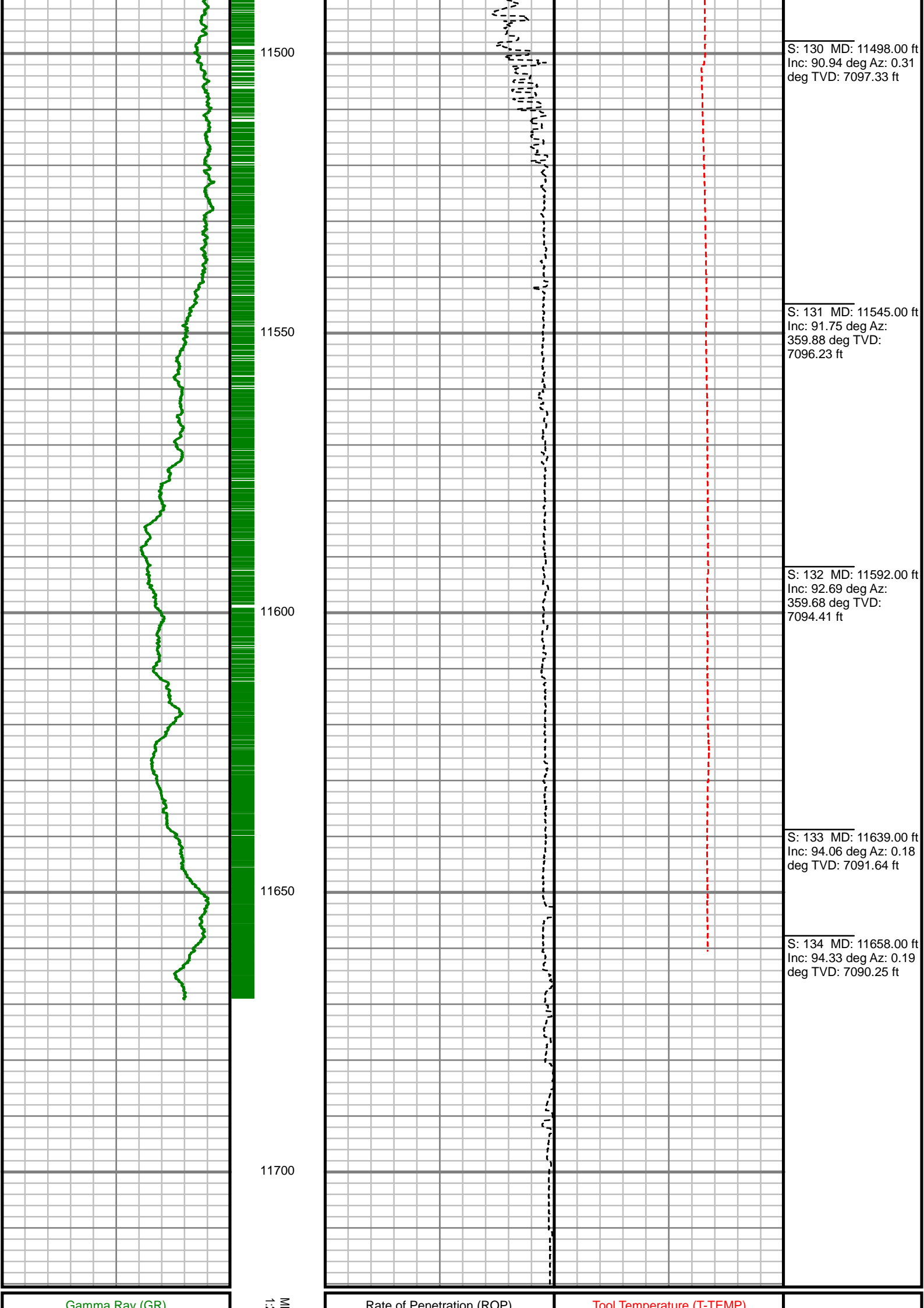


S: 125 MD: 11025.00 ft
Inc: 90.30 deg Az:
358.93 deg TVD:
7097.74 ft

S: 126 MD: 11119.00 ft
Inc: 90.50 deg Az: 0.40
deg TVD: 7097.08 ft

S: 127 MD: 11214.00 ft
Inc: 89.09 deg Az: 2.06
deg TVD: 7097.42 ft






Gamma Ray (GR)

MD

Rate of Penetration (ROP)

Tool Temperature (T-TEMP)

Gamma Ray (GR)	MEASURED DEPTH	Rate of Penetration (ROP)	Tool Temperature (T-TEMP)	
0 Unit = aapi 150	240 (ft)	1000 Unit = ft/hr 0	50 Unit = °F 300	Comments



Scientific Drilling

5" = 100' FEET MD

GAMMA RAY