

5" = 100' FEET MD

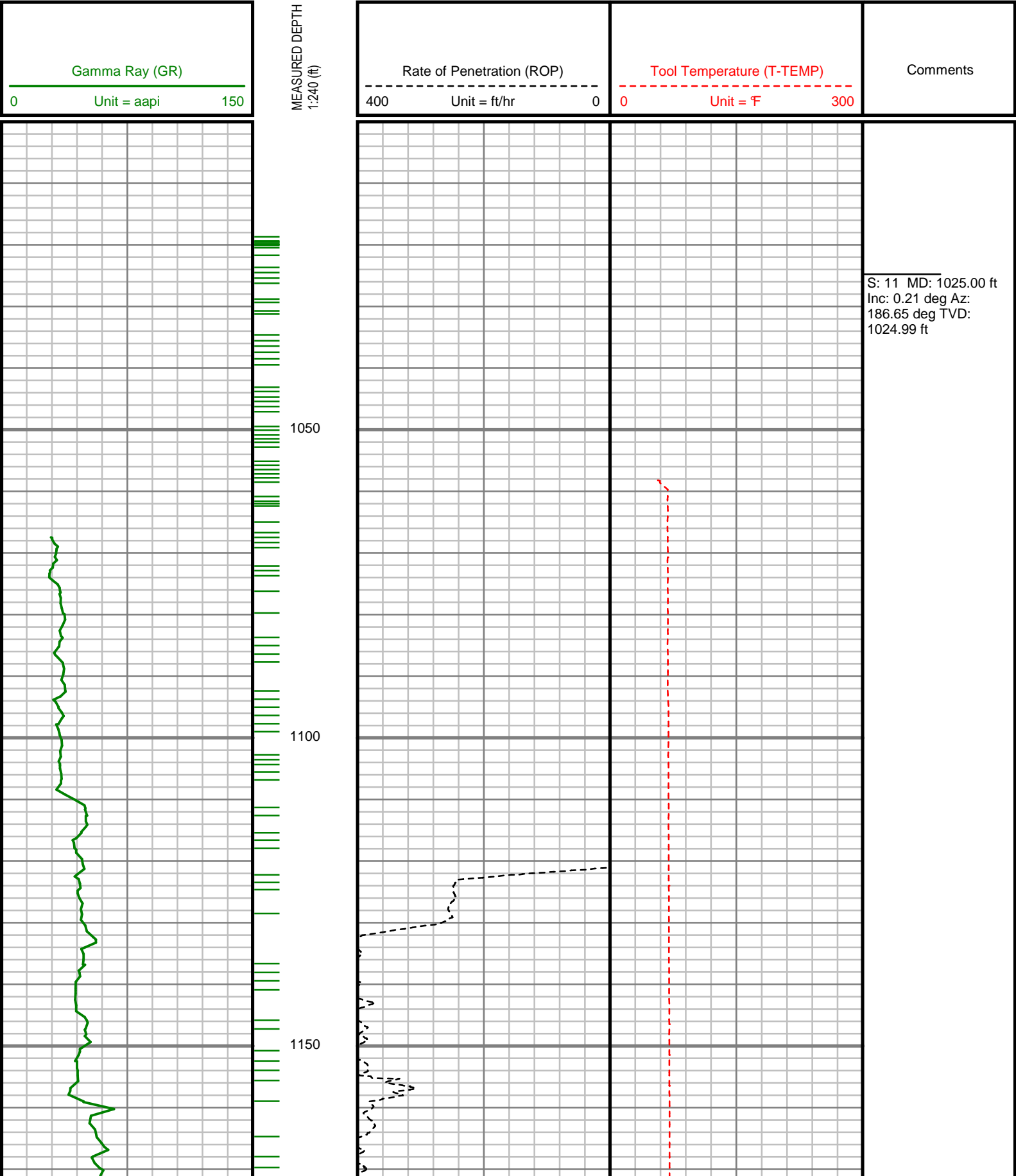
COMPANY : ANADARKO PETROLEUM CORP. WELL : PARAGON 40C-31HZ FIELD : WATTENBERG COUNTY : WELD STATE : COLORADO COUNTRY : U.S.A. UWI : 05-123-3854										COMPANY : ANADARKO PETROLEUM CORP. WELL : PARAGON 40C-31HZ FIELD : WATTENBERG COUNTY : WELD STATE : COLORADO COUNTRY : U.S.A. UWI : 05-123-3854																			
DEPTH REF. : RKB REF. HEIGHT : 25.000 ft GROUND LEVEL : 4975.000 ft										WELL LOCATION LAT:40°41'27.890"N LONG:104°41'53.567"W N:1270968.39 ft E:3224375.35 ft SEC:6 TWP:1N RANGE:65W										OTHER SERVICES DIRECTIONAL ROP									
BOREHOLE RECORD										DEVIATION RECORD																			
HOLE SIZE in		FROM ft		TO ft		INCLINATION deg		FROM ft		TO ft																			
12.25		0		1112		0-14		0		6741																			
8.75		1112		7815		14-90		6741		7815																			
6.125		7815		14409		90-93		7815		14409																			
CASING RECORD																													
CASING SIZE in		FROM ft		TO ft																									
9.625		0		1112																									
7		0		7815																									
DRILLING CO. : H&P RIG: 311																													
LMD UNIT NO. : C-46 SPUD DATE: 11/28/2013												DISTRICT : CASPER																	
LMD START DATE: 01/02/2014												DEPTH : 1008 ft																	
LMD END DATE: 01/11/2014												DEPTH : 14409 ft																	
TOTAL DEPTH : 14409 ft																													

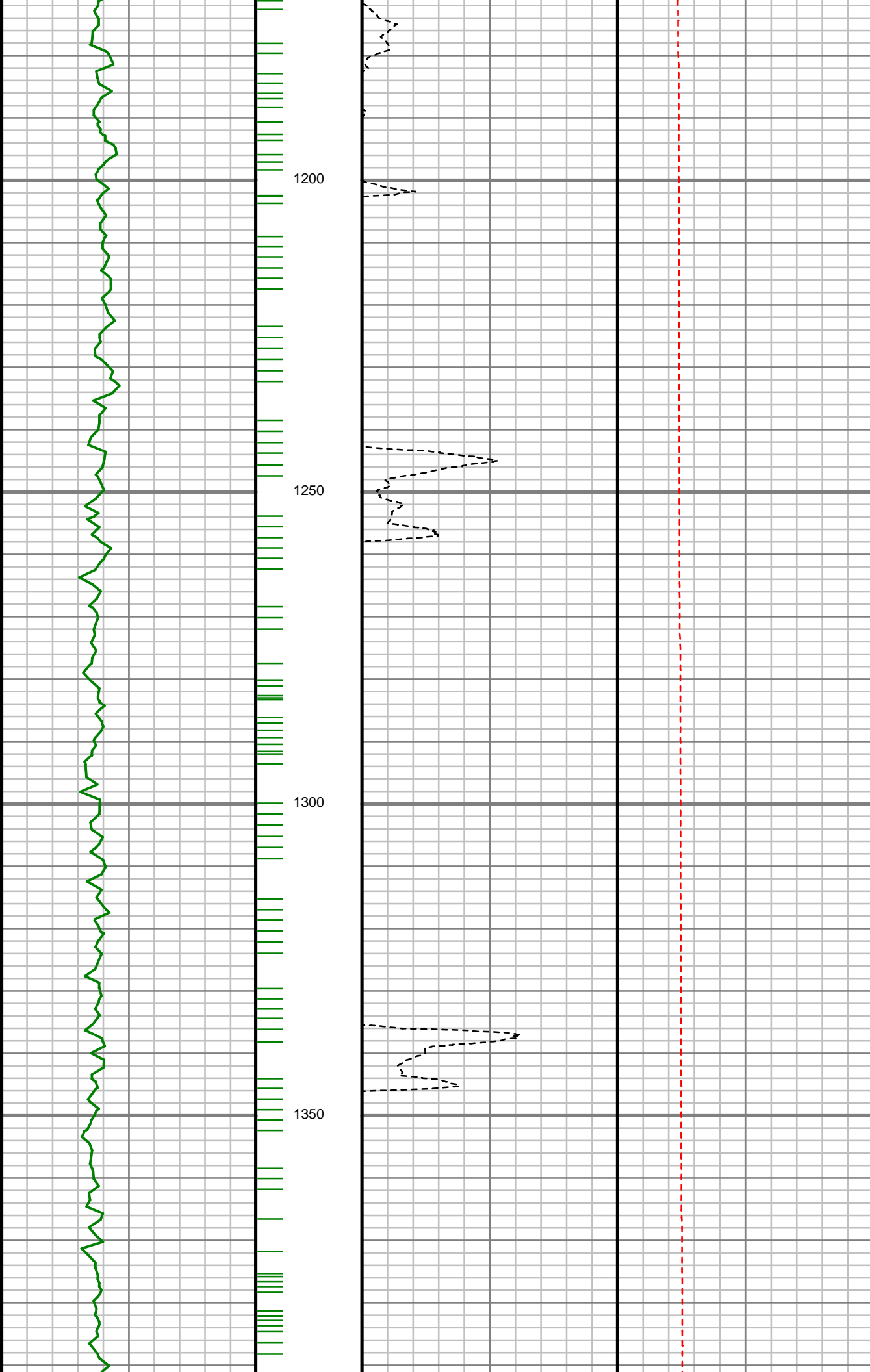
Run Data						
RUN NUMBER	1	2	3			
START DATE	01/02/2014	01/05/2014	01/08/2014			
START TIME	0500	0900	1030			
END DATE	01/04/2014	01/08/2014	01/11/2014			
END TIME	1630	1030	2200			
DEPTH IN (ft)	1112	7815	12442			
DEPTH OUT (ft)	7815	12442	14409			
LOG TOP (ft)	1008	7762	12384			
LOG BOTTOM (ft)	7762	12384	14341			
HOLE SIZE (in)	8.75	6.125	6.125			
MUD DATA @ (ft)	1112	7815	12442			
MUD TYPE	WATER-BASED	WATER-BASED	WATER-BASED			
DENSITY (lb / gal)	9.1	10.2	9.80			
VISCOSITY (s / qt)	34	49	41			
pH	9.8	8.9	9.0			
FLUID LOSS (cm3 / 30)	7.8	6.4	5.4			
SALINITY (ppm)	1100	1800	2100			
Rm (ohmm @ deg F)	-	-	-			
Rmf (ohmm @ deg F)	-	-	-			
MAX TEMP (deg F)	173	233	241			
Rm @ MAX TEMP (ohmm)	-	-	-			
LWD ENGINEER #1	M. SHARKER	M. SHARKER	M. SHARKER			
LWD ENGINEER #2	B. GREER	B. GREER	B. GREER			
LWD ENGINEER #3	-	-	-			
LOG WTINNESS #1	J. STUART	J. STUART	J. STUART			
LOG WTINNESS #2	-	-	-			



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.

ANADARKO PETROLEUM CORP.  
PARAGON 40C-31HZ  
WATTENBERG FIELD  
WELD COUNTY, COLORADO  
05-123-38540

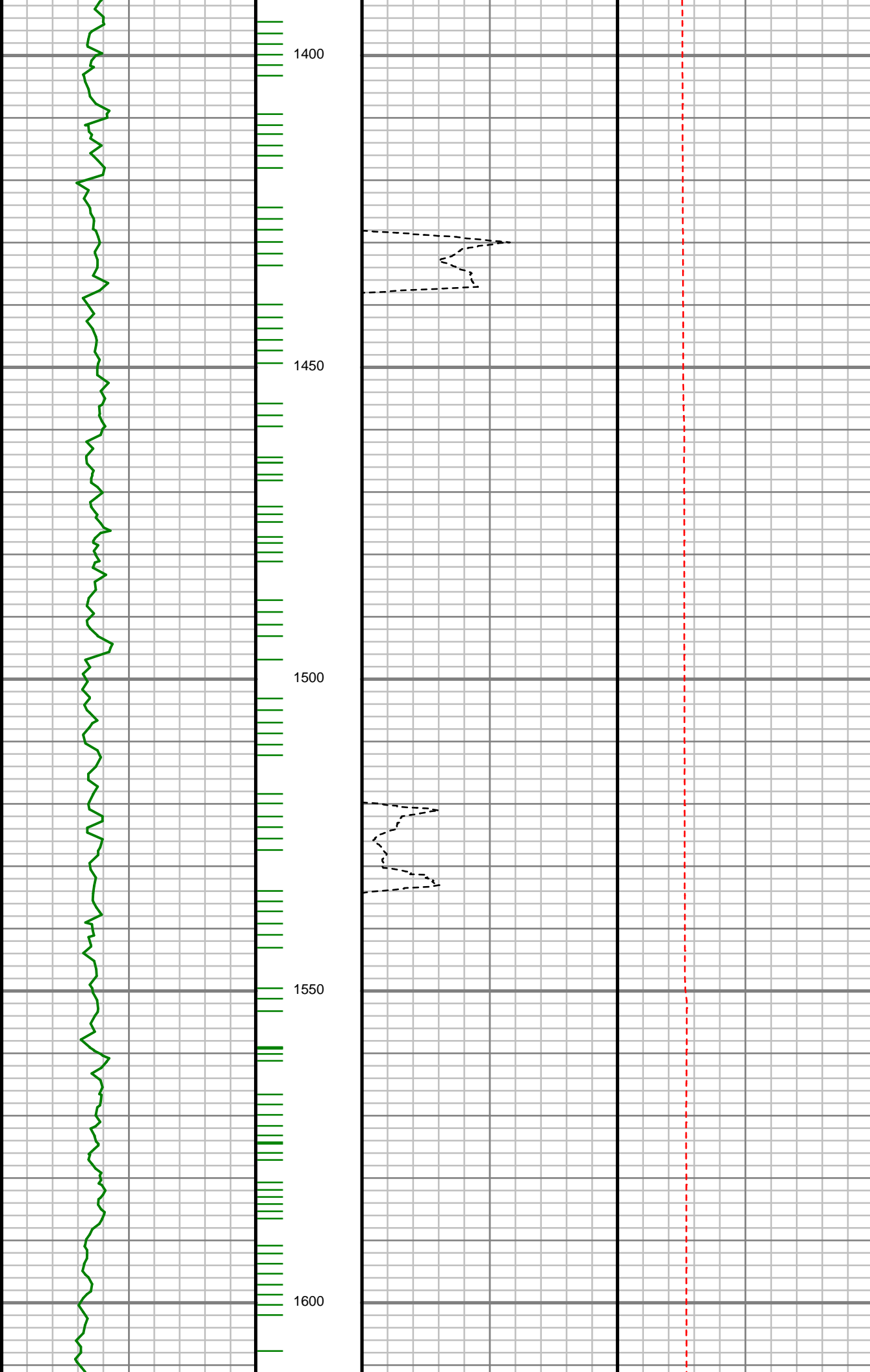




S: 12 MD: 1178.00 ft  
Inc: 0.29 deg Az: 35.38  
deg TVD: 1177.99 ft

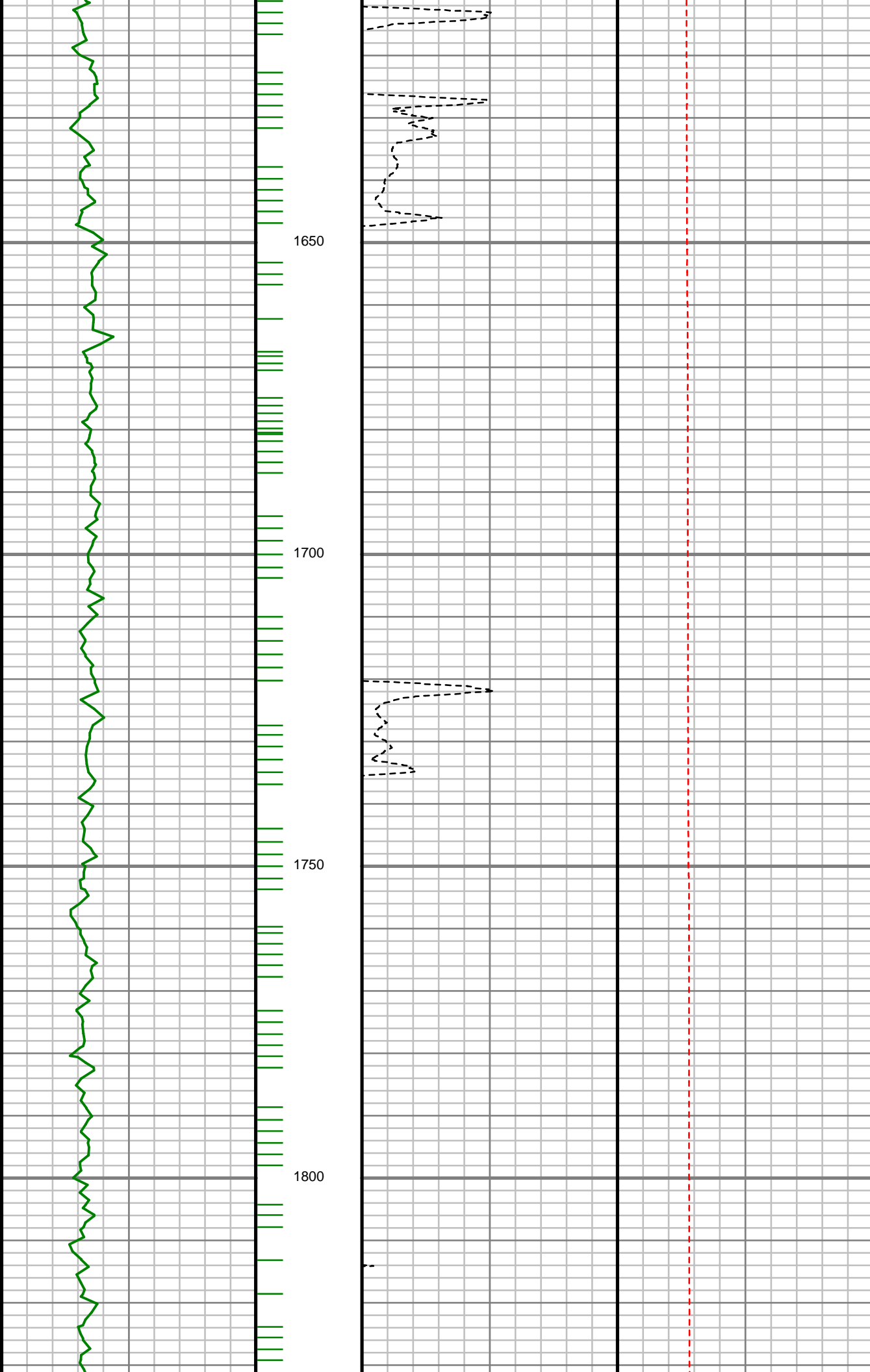
S: 13 MD: 1270.00 ft  
Inc: 2.27 deg Az:  
219.27 deg TVD:  
1269.97 ft

S: 14 MD: 1362.00 ft  
Inc: 4.48 deg Az:  
208.78 deg TVD:  
1361.80 ft



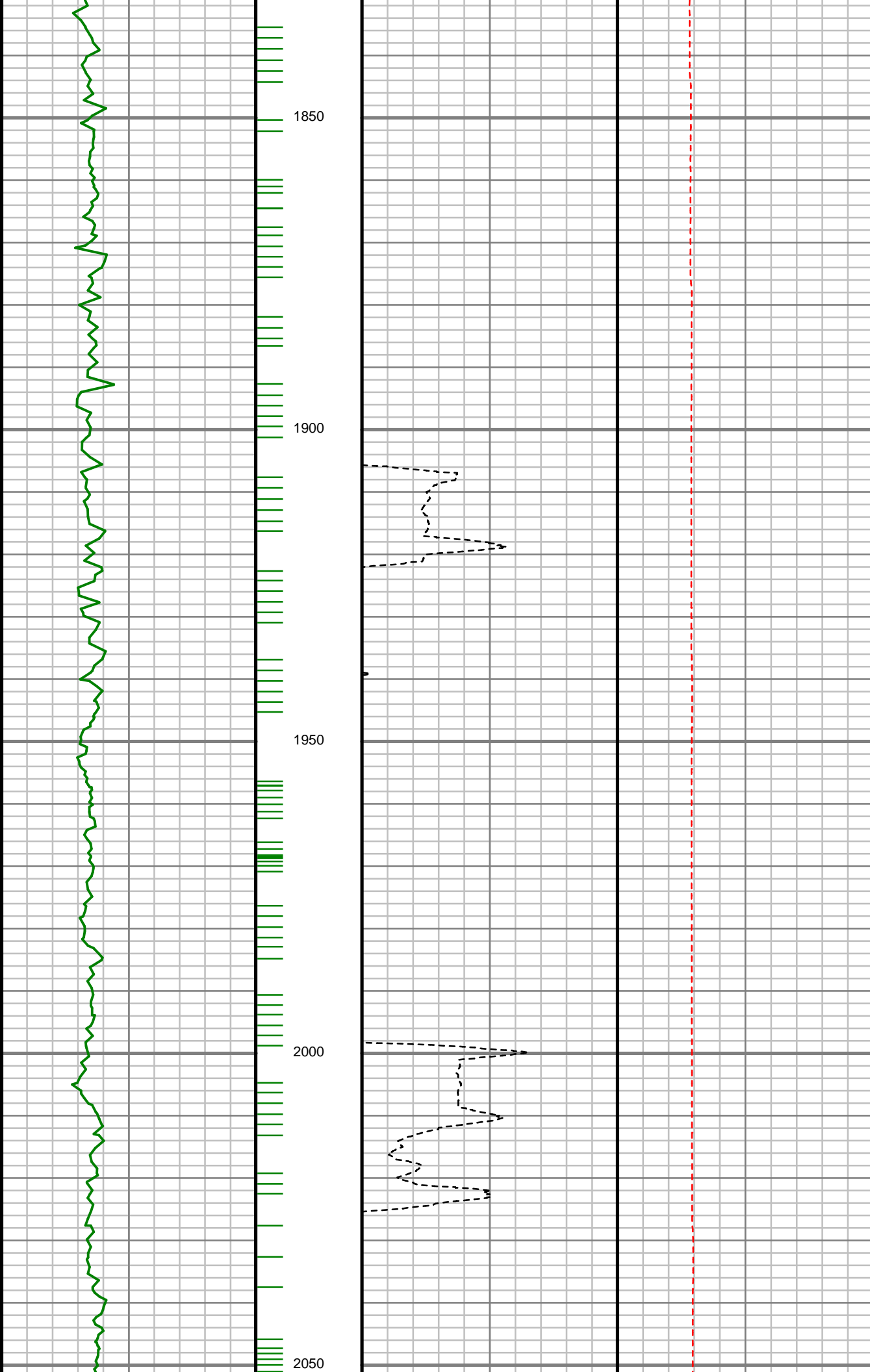
S: 15 MD: 1453.00 ft  
Inc: 6.01 deg Az:  
207.25 deg TVD:  
1452.42 ft

S: 16 MD: 1544.00 ft  
Inc: 7.96 deg Az:  
193.13 deg TVD:  
1542.74 ft



S: 17 MD: 1657.00 ft  
Inc: 10.45 deg Az:  
177.13 deg TVD:  
1654.30 ft

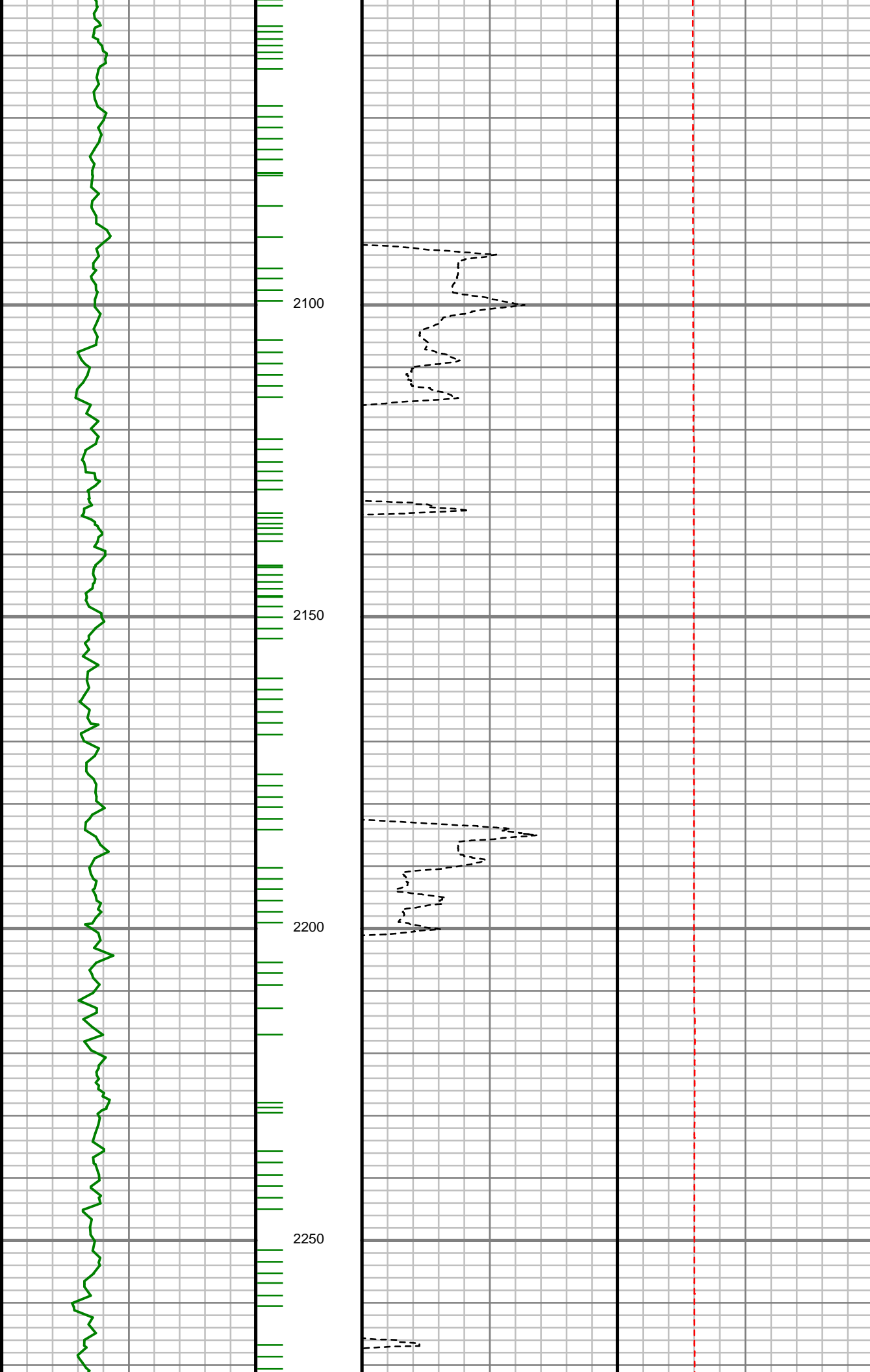
S: 18 MD: 1749.00 ft  
Inc: 12.86 deg Az:  
162.08 deg TVD:  
1744.41 ft



S: 19 MD: 1840.00 ft  
Inc: 13.38 deg Az:  
157.70 deg TVD:  
1833.04 ft

S: 20 MD: 1932.00 ft  
Inc: 13.42 deg Az:  
153.27 deg TVD:  
1922.54 ft

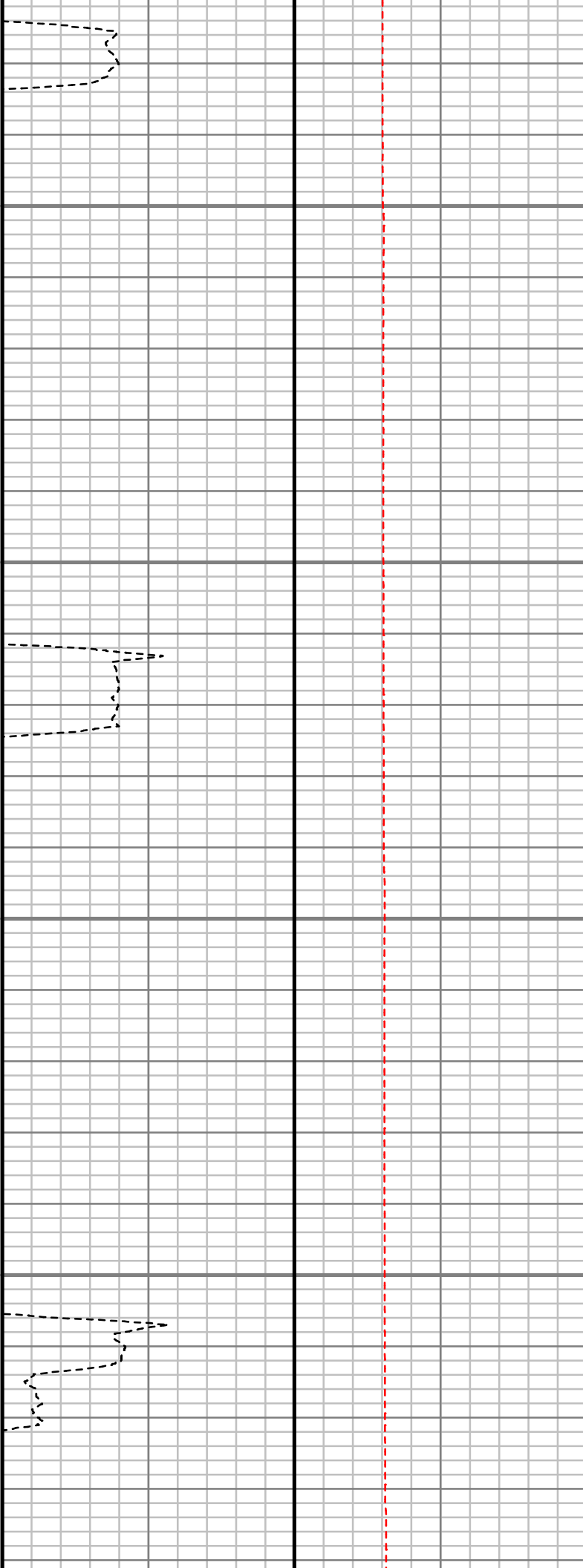
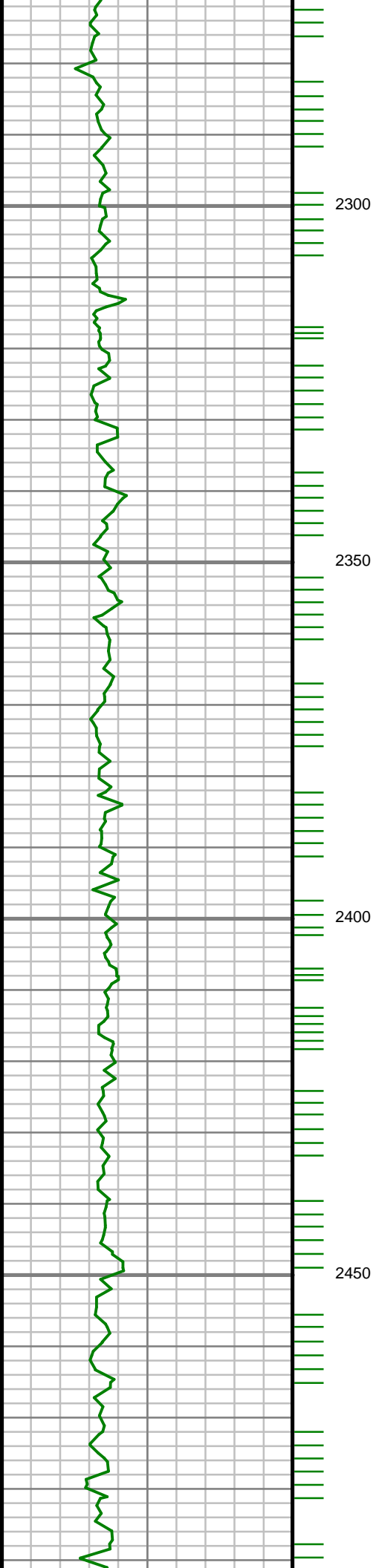
S: 21 MD: 2023.00 ft  
Inc: 12.87 deg Az:  
157.31 deg TVD:  
2011.15 ft



S: 22 MD: 2115.00 ft  
Inc: 11.69 deg Az:  
166.36 deg TVD:  
2101.05 ft

S: 23 MD: 2206.00 ft  
Inc: 12.76 deg Az:  
170.38 deg TVD:  
2189.99 ft

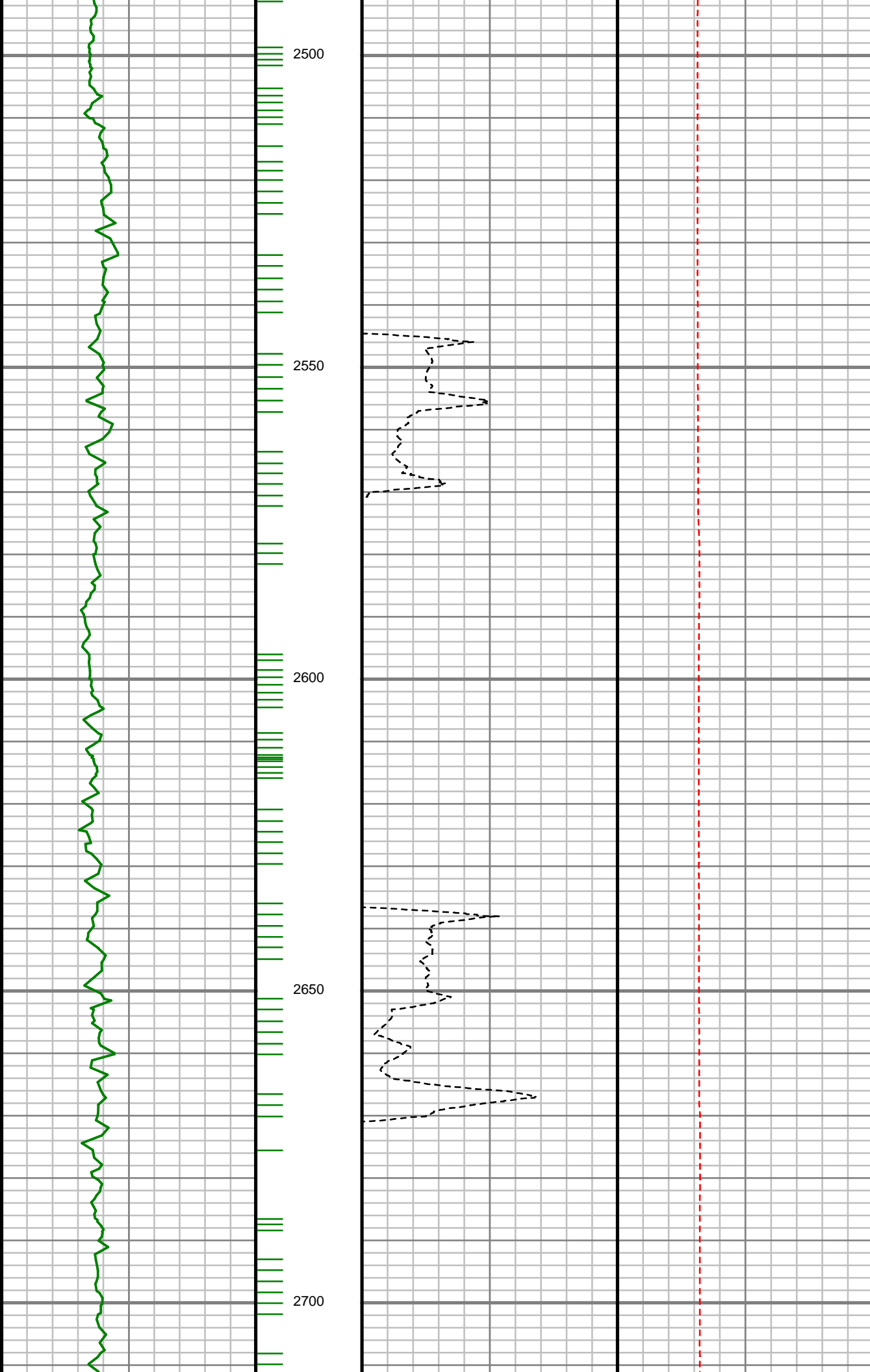




S: 24 MD: 2297.00 ft  
Inc: 12.58 deg Az:  
170.52 deg TVD:  
2278.78 ft

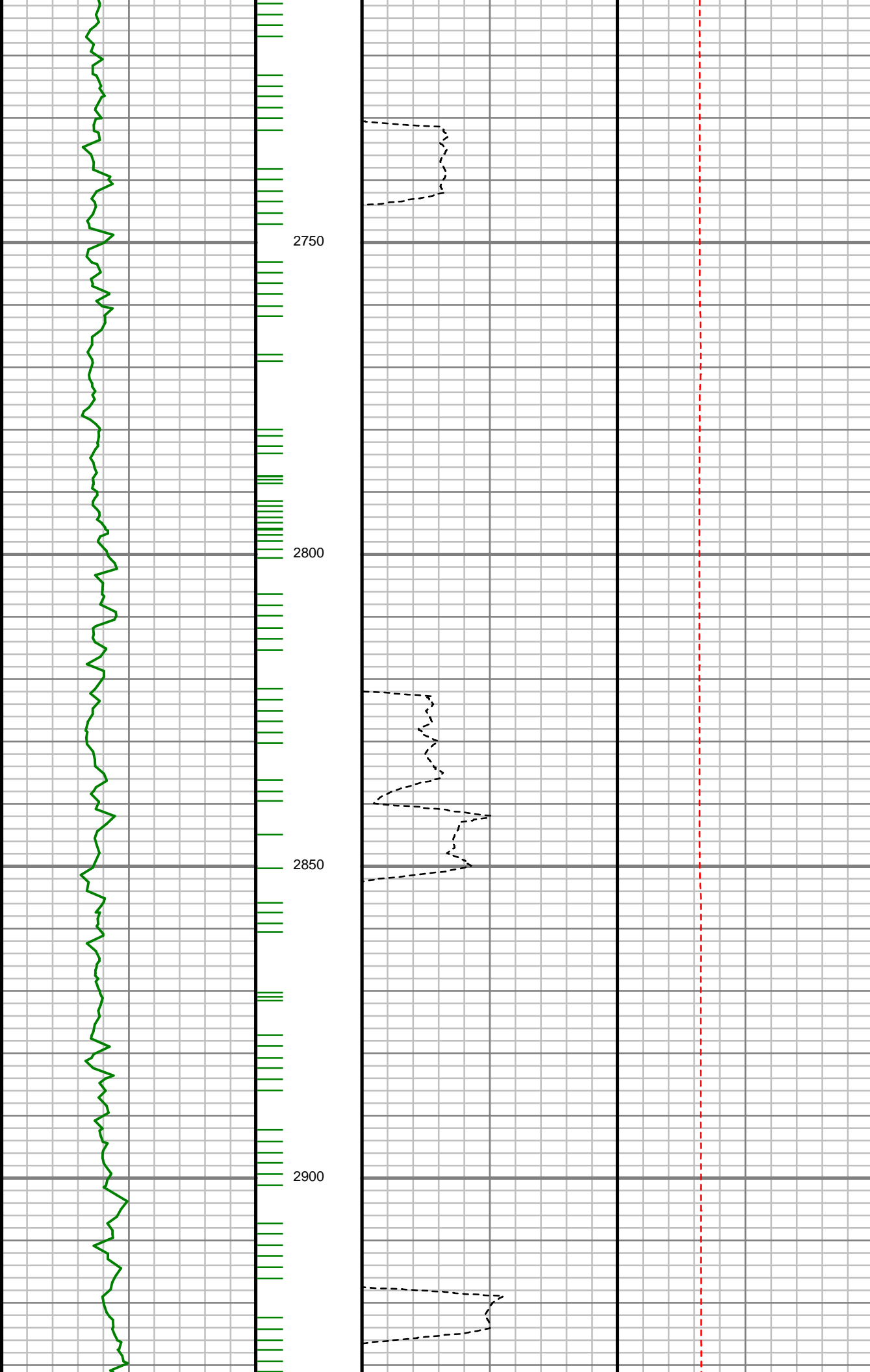
S: 25 MD: 2389.00 ft  
Inc: 11.67 deg Az:  
171.27 deg TVD:  
2368.72 ft

S: 26 MD: 2481.00 ft  
Inc: 11.19 deg Az:  
168.25 deg TVD:  
2458.90 ft



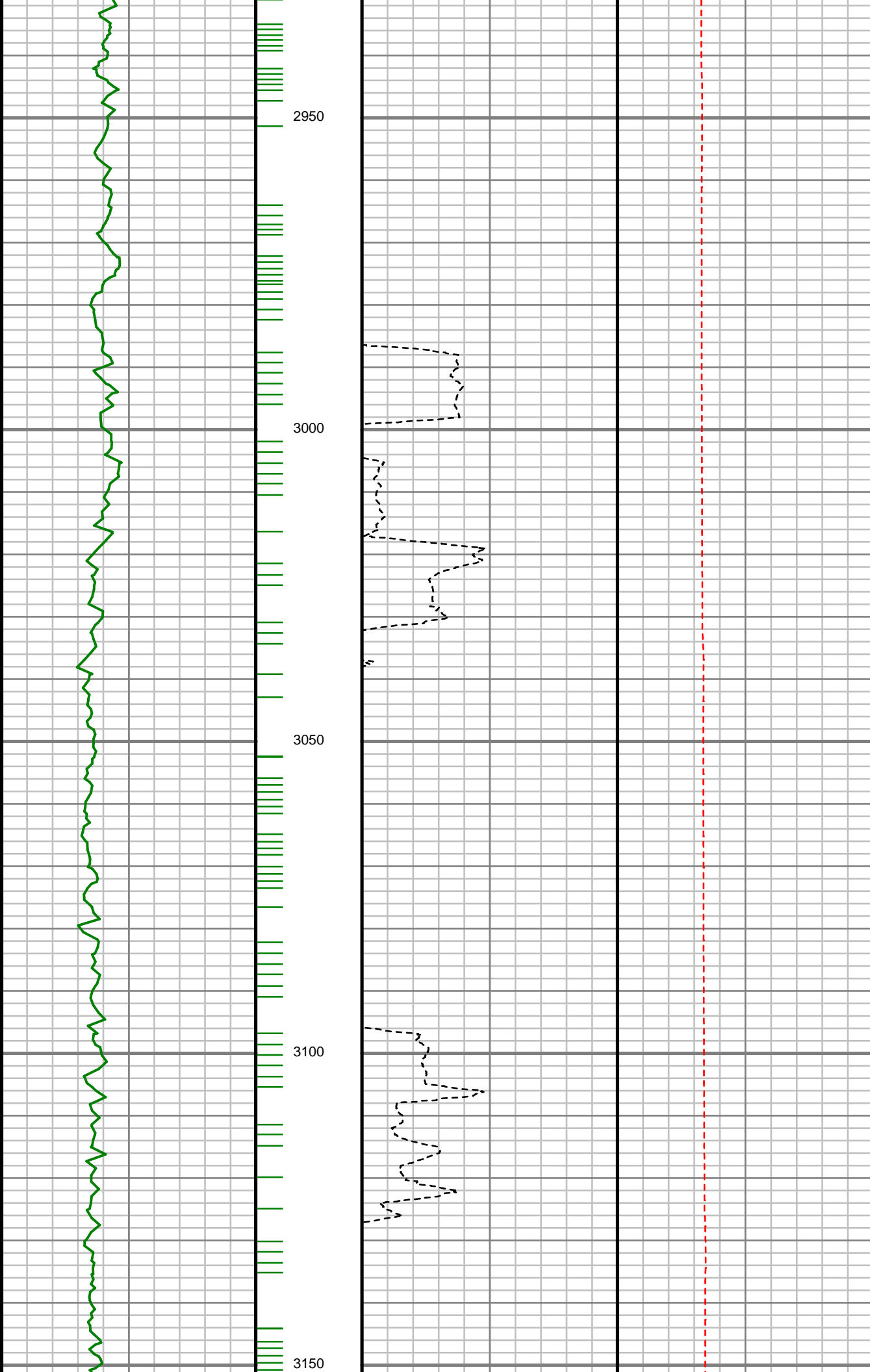
S: 27 MD: 2573.00 ft  
Inc: 11.50 deg Az:  
174.68 deg TVD:  
2549.10 ft

S: 28 MD: 2664.00 ft  
Inc: 13.65 deg Az:  
172.24 deg TVD:  
2637.92 ft



S: 29 MD: 2756.00 ft  
Inc: 13.12 deg Az:  
175.14 deg TVD:  
2727.42 ft

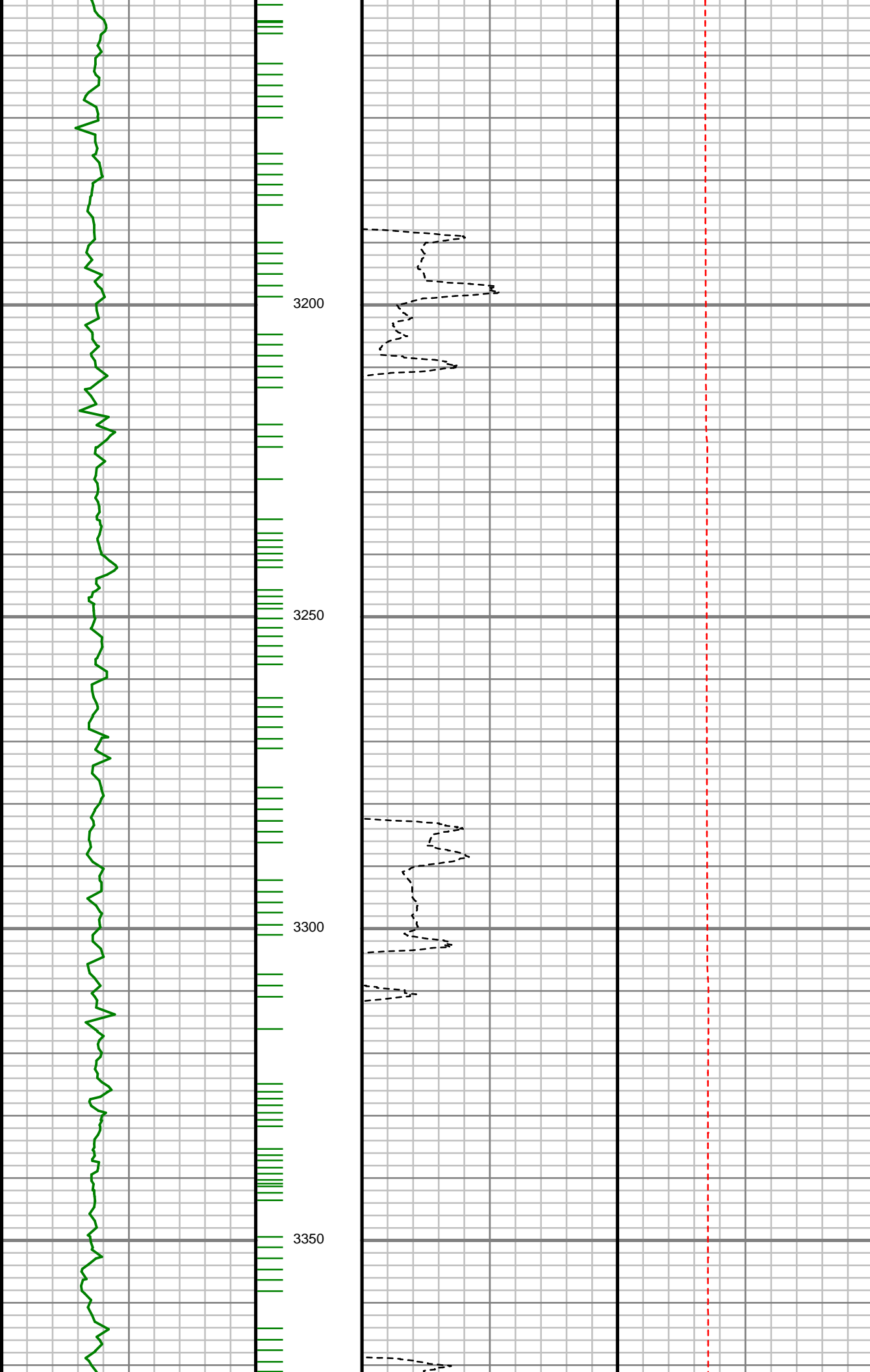
S: 30 MD: 2848.00 ft  
Inc: 12.36 deg Az:  
168.09 deg TVD:  
2817.16 ft



S: 31 MD: 2939.00 ft  
Inc: 11.66 deg Az:  
163.42 deg TVD:  
2906.17 ft

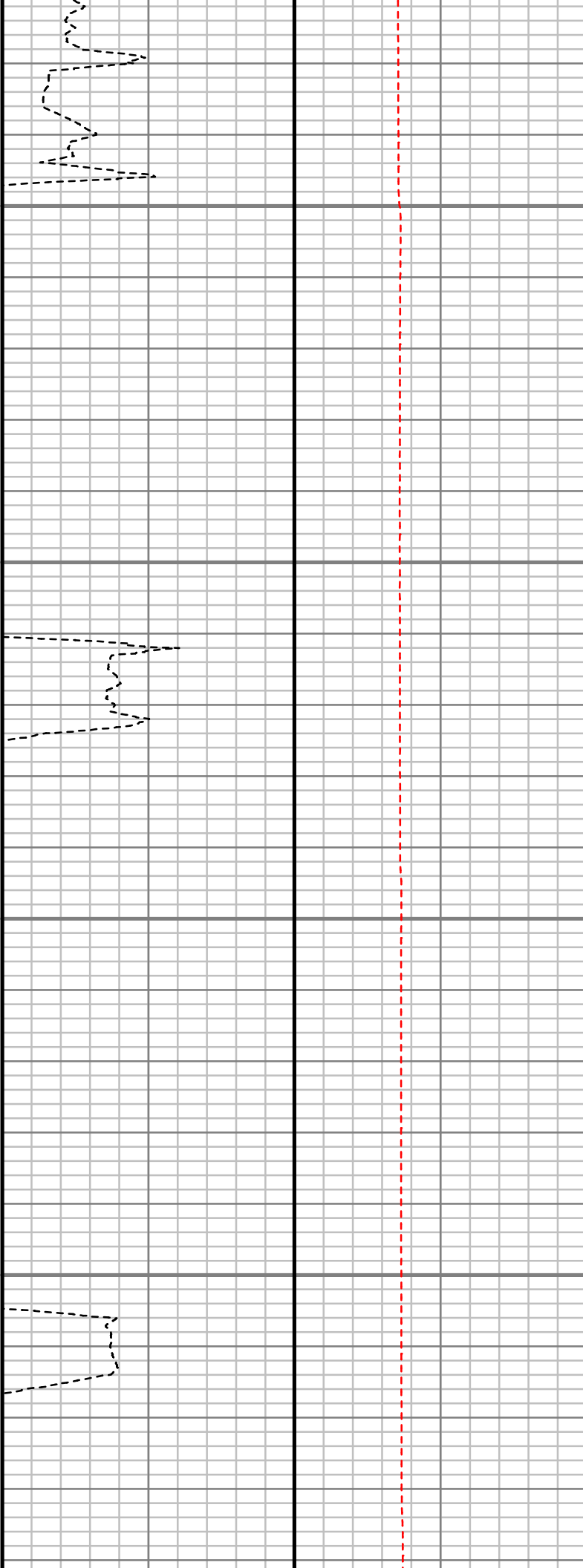
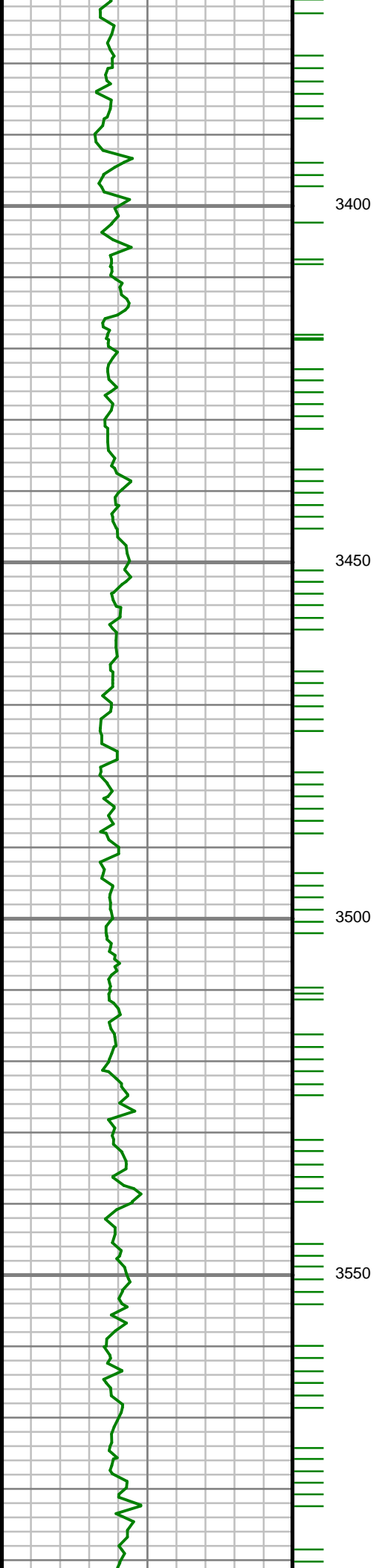
S: 32 MD: 3031.00 ft  
Inc: 10.21 deg Az:  
172.79 deg TVD:  
2996.50 ft

S: 33 MD: 3122.00 ft  
Inc: 6.93 deg Az:  
177.09 deg TVD:  
3086.48 ft



S: 34 MD: 3214.00 ft  
Inc: 5.46 deg Az:  
152.74 deg TVD:  
3177.95 ft

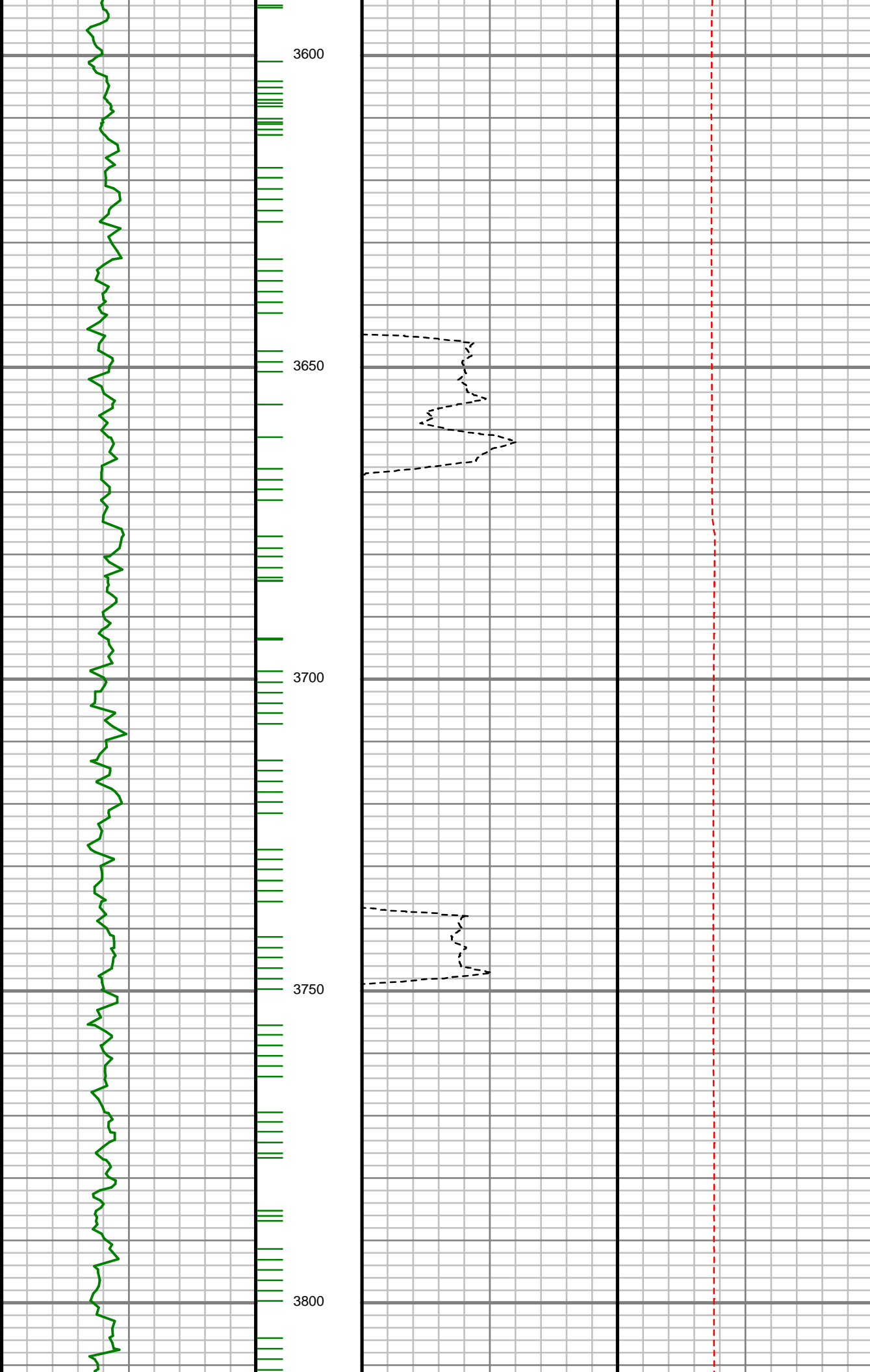
S: 35 MD: 3306.00 ft  
Inc: 3.25 deg Az:  
132.46 deg TVD:  
3269.69 ft



S: 36 MD: 3397.00 ft  
Inc: 0.29 deg Az: 64.00  
deg TVD: 3360.64 ft

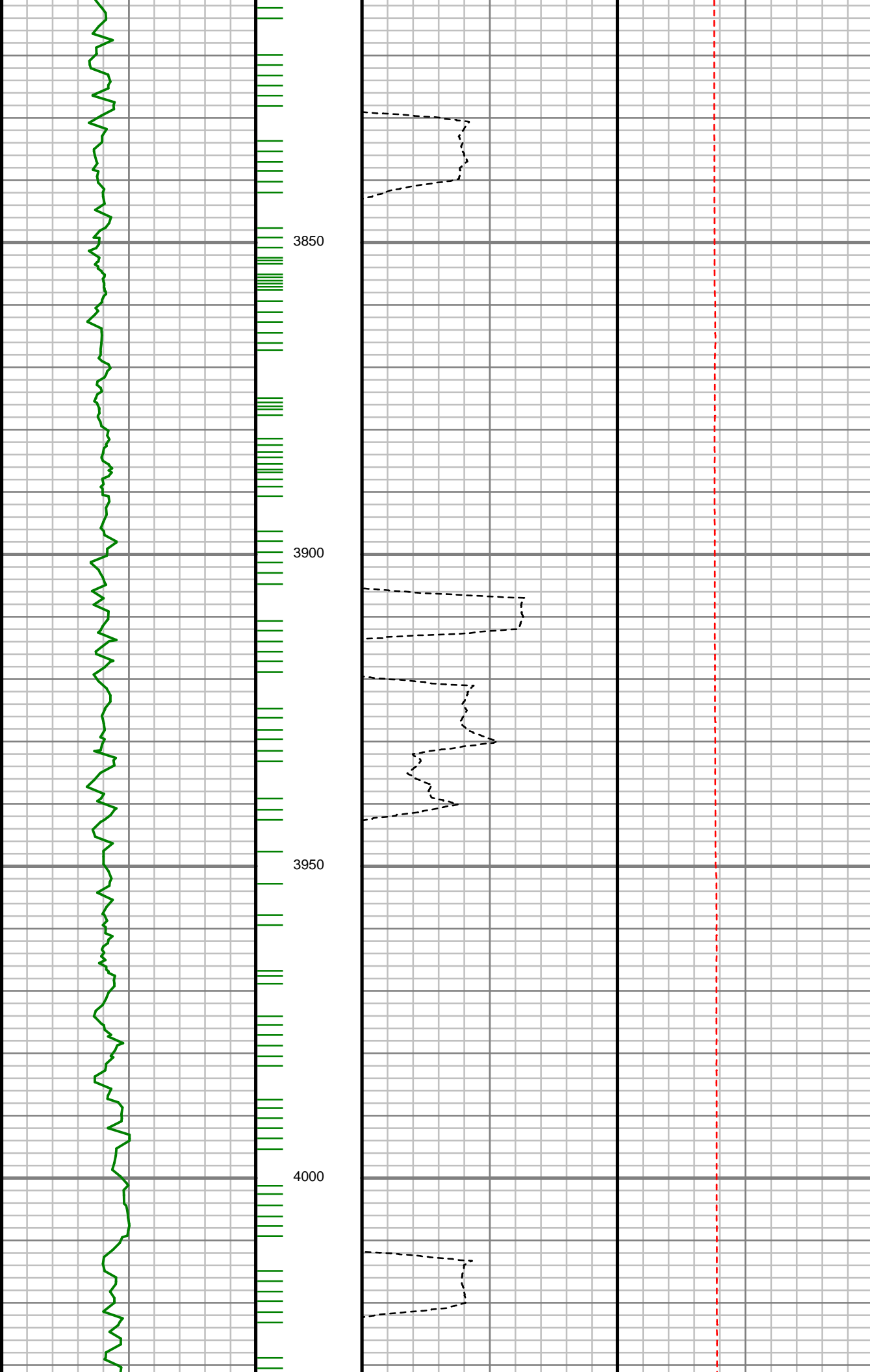
S: 37 MD: 3489.00 ft  
Inc: 0.99 deg Az:  
350.90 deg TVD:  
3452.63 ft

S: 38 MD: 3580.00 ft  
Inc: 1.29 deg Az:  
344.98 deg TVD:  
3543.61 ft



S: 39 MD: 3672.00 ft  
Inc: 0.57 deg Az:  
351.52 deg TVD:  
3635.60 ft

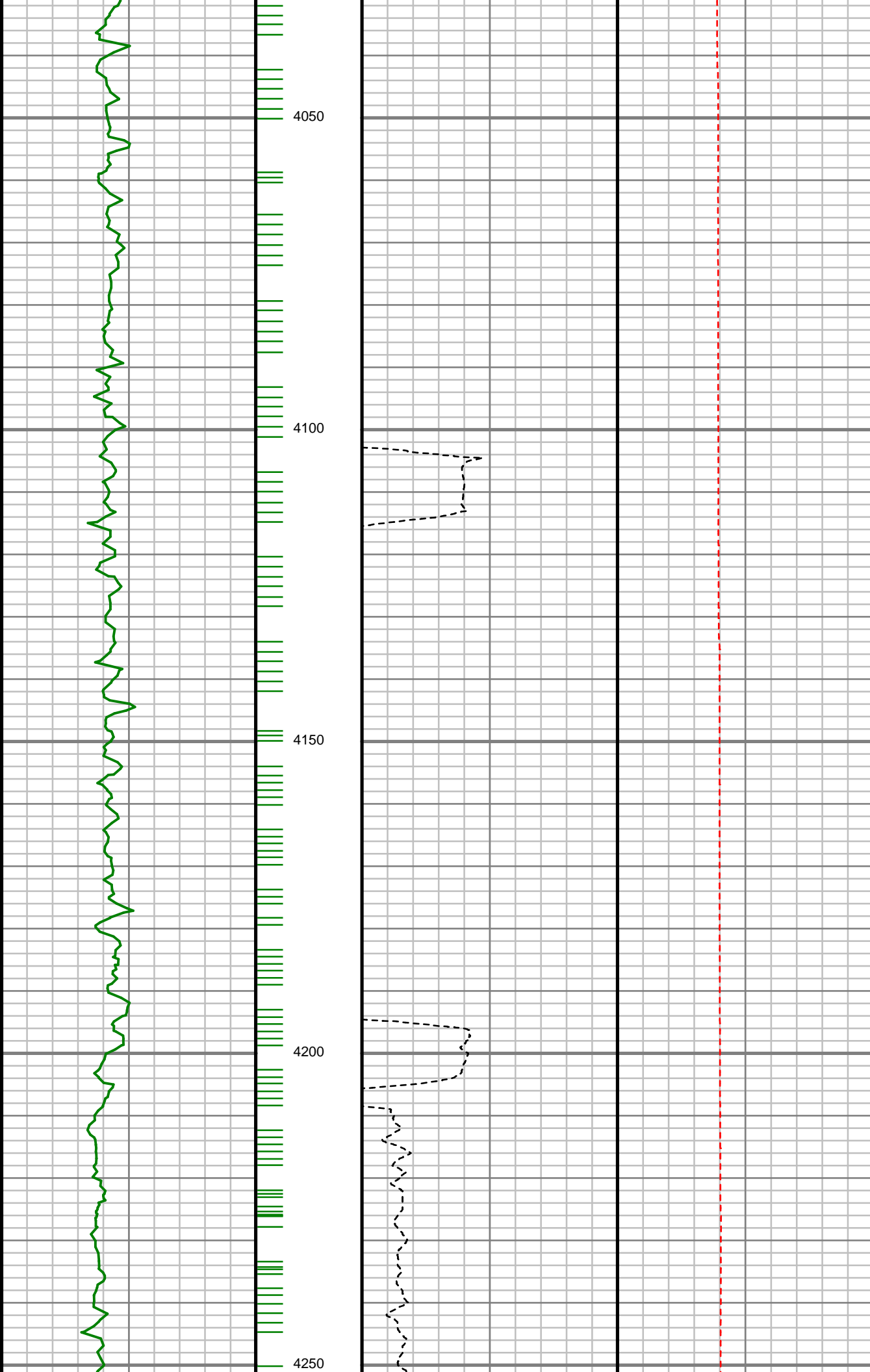
S: 40 MD: 3763.00 ft  
Inc: 0.44 deg Az:  
354.94 deg TVD:  
3726.60 ft



S: 41 MD: 3855.00 ft  
Inc: 0.61 deg Az:  
353.19 deg TVD:  
3818.59 ft

S: 42 MD: 3947.00 ft  
Inc: 1.07 deg Az:  
202.37 deg TVD:  
3910.59 ft

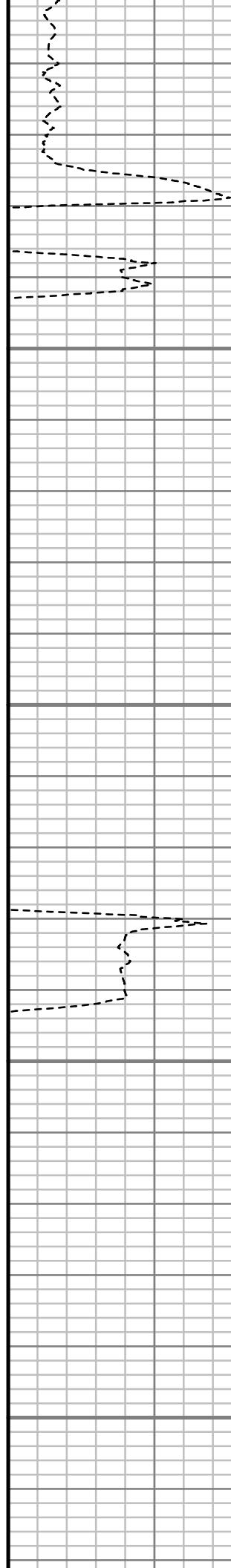
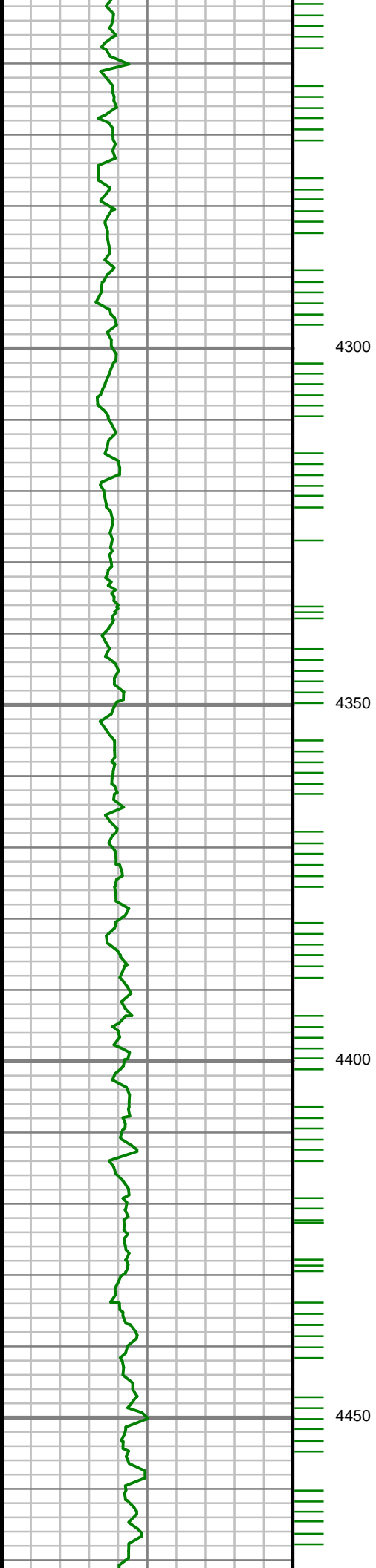




S: 43 MD: 4038.00 ft  
Inc: 1.12 deg Az:  
185.34 deg TVD:  
4001.57 ft

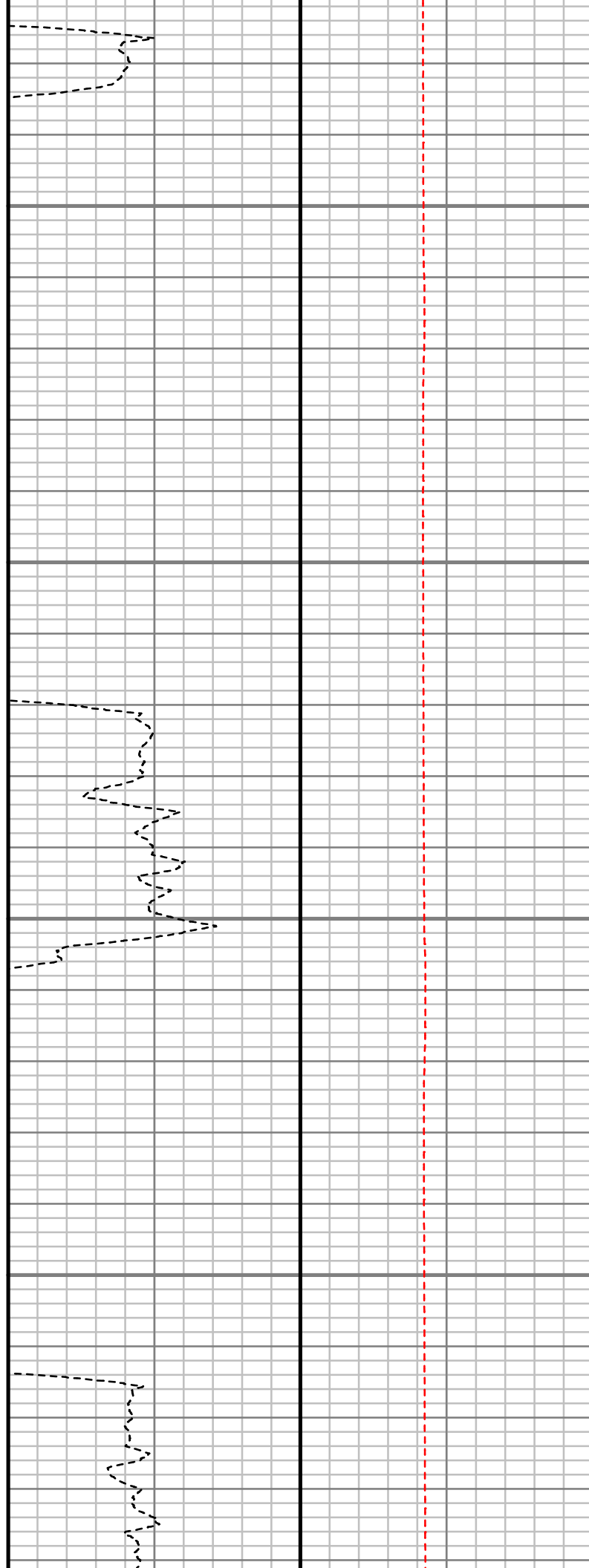
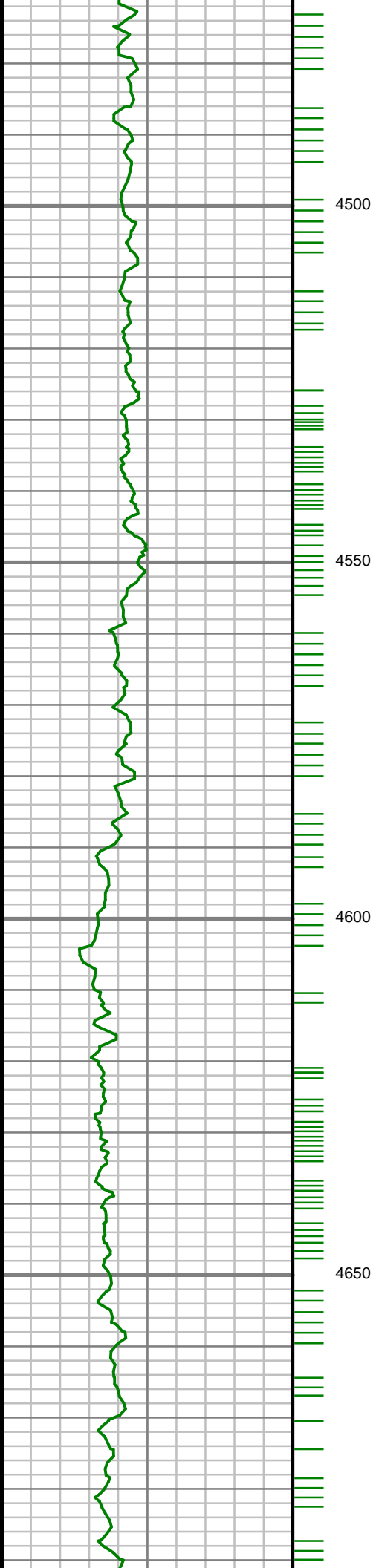
S: 44 MD: 4130.00 ft  
Inc: 1.06 deg Az:  
173.74 deg TVD:  
4093.56 ft

S: 45 MD: 4222.00 ft  
Inc: 0.71 deg Az:  
153.95 deg TVD:  
4185.54 ft



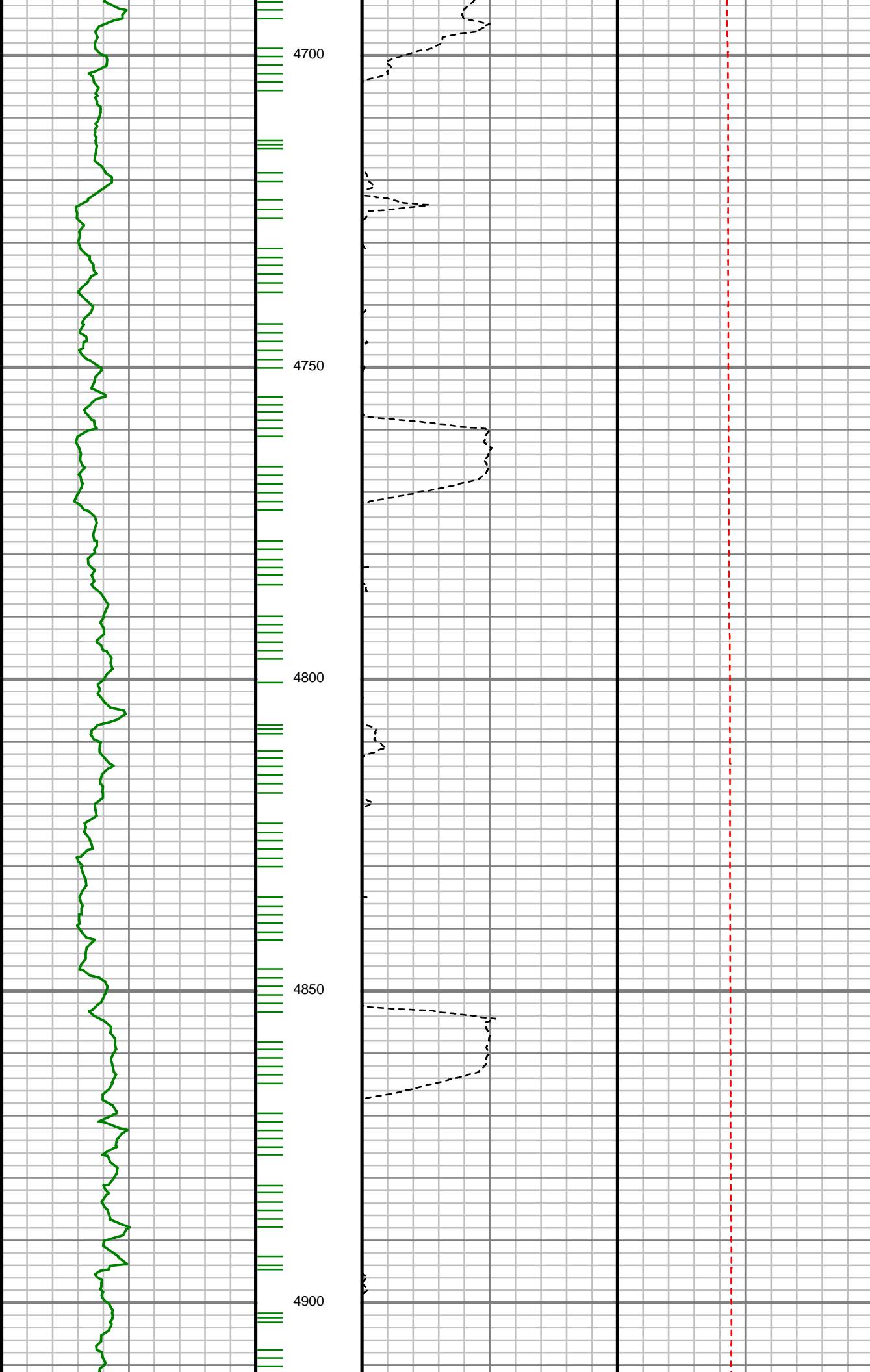
S: 46 MD: 4316.00 ft  
Inc: 1.09 deg Az:  
140.69 deg TVD:  
4279.53 ft

S: 47 MD: 4410.00 ft  
Inc: 1.00 deg Az:  
144.98 deg TVD:  
4373.52 ft



S: 48 MD: 4505.00 ft  
Inc: 1.44 deg Az:  
118.31 deg TVD:  
4468.50 ft

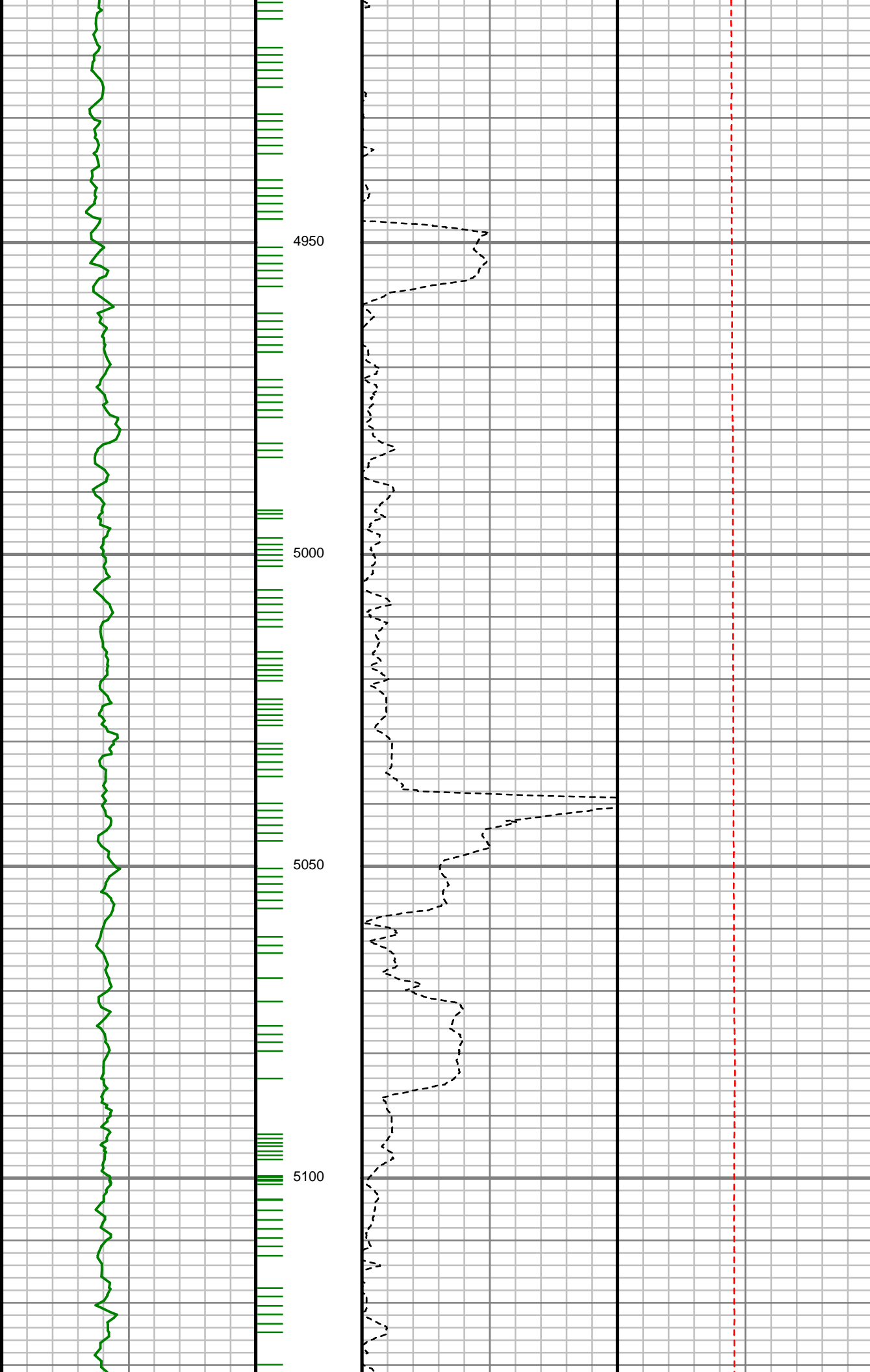
S: 49 MD: 4599.00 ft  
Inc: 0.93 deg Az:  
137.88 deg TVD:  
4562.48 ft



S: 50 MD: 4694.00 ft  
Inc: 0.95 deg Az:  
242.59 deg TVD:  
4657.47 ft

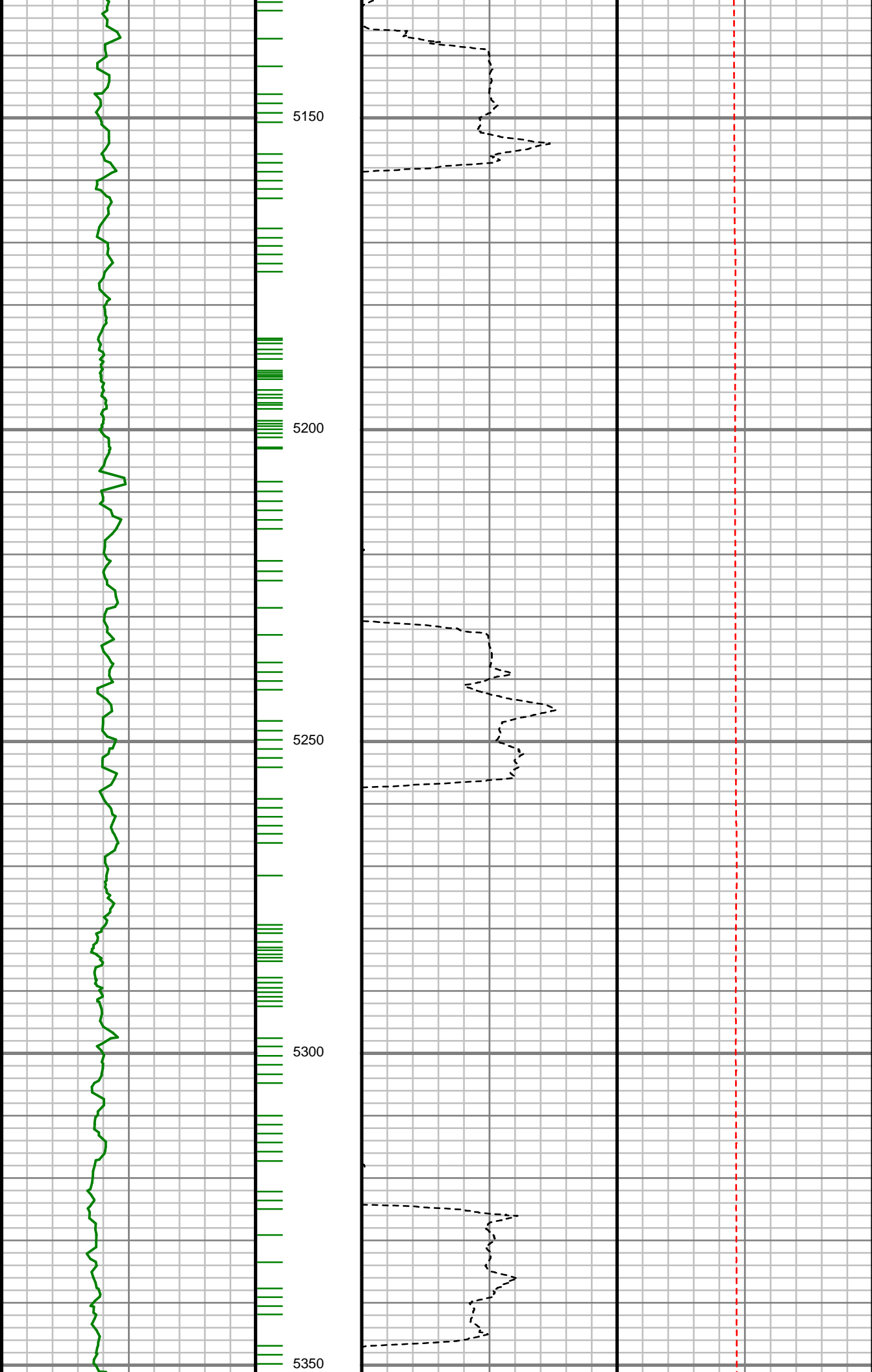
S: 51 MD: 4788.00 ft  
Inc: 1.04 deg Az:  
272.31 deg TVD:  
4751.46 ft

S: 52 MD: 4882.00 ft  
Inc: 0.82 deg Az:  
287.83 deg TVD:  
4845.44 ft



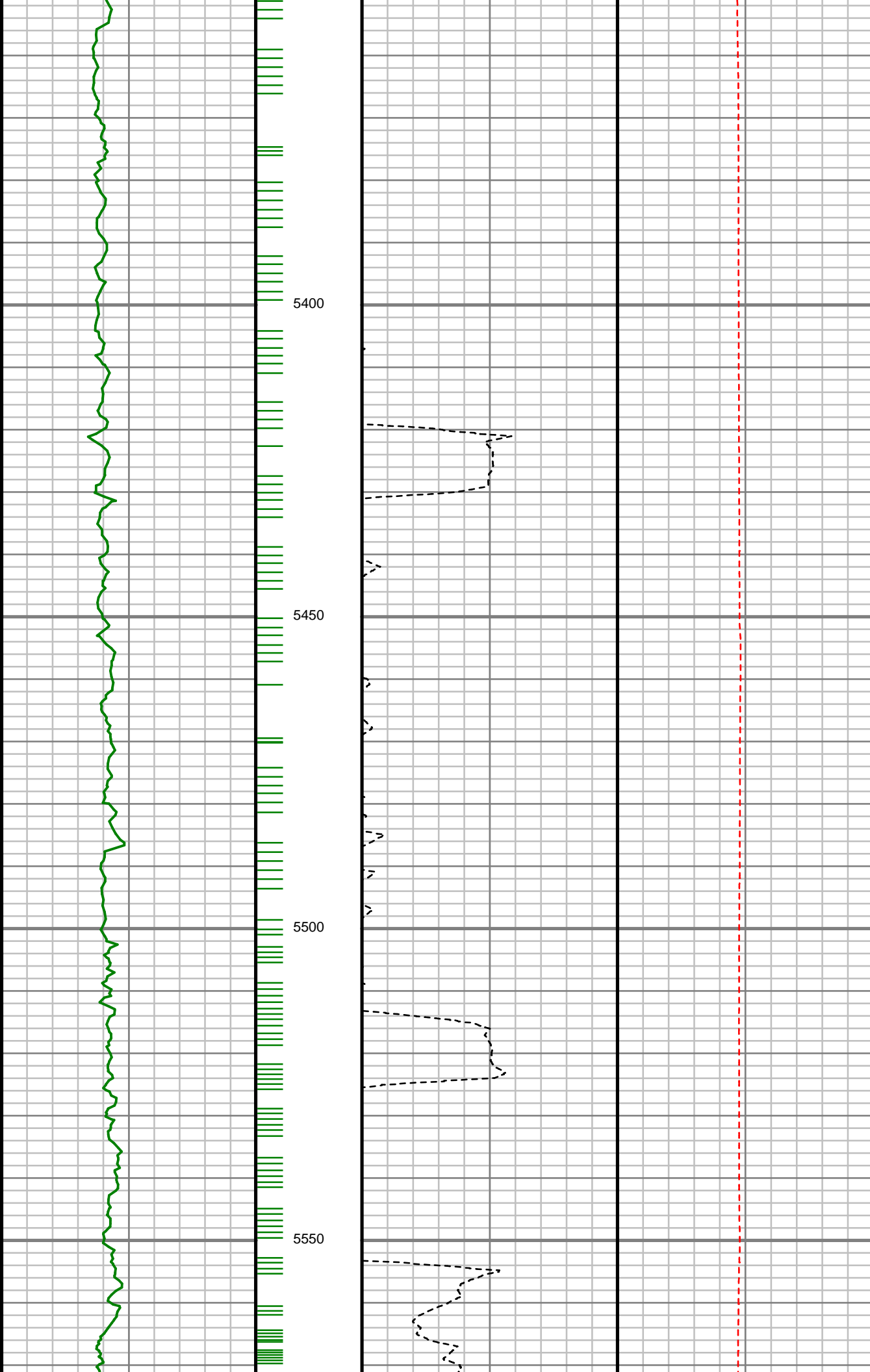
S: 53 MD: 4977.00 ft  
Inc: 0.65 deg Az:  
314.33 deg TVD:  
4940.44 ft

S: 54 MD: 5071.00 ft  
Inc: 1.26 deg Az:  
339.69 deg TVD:  
5034.42 ft



S: 55 MD: 5165.00 ft  
Inc: 1.98 deg Az:  
330.96 deg TVD:  
5128.38 ft

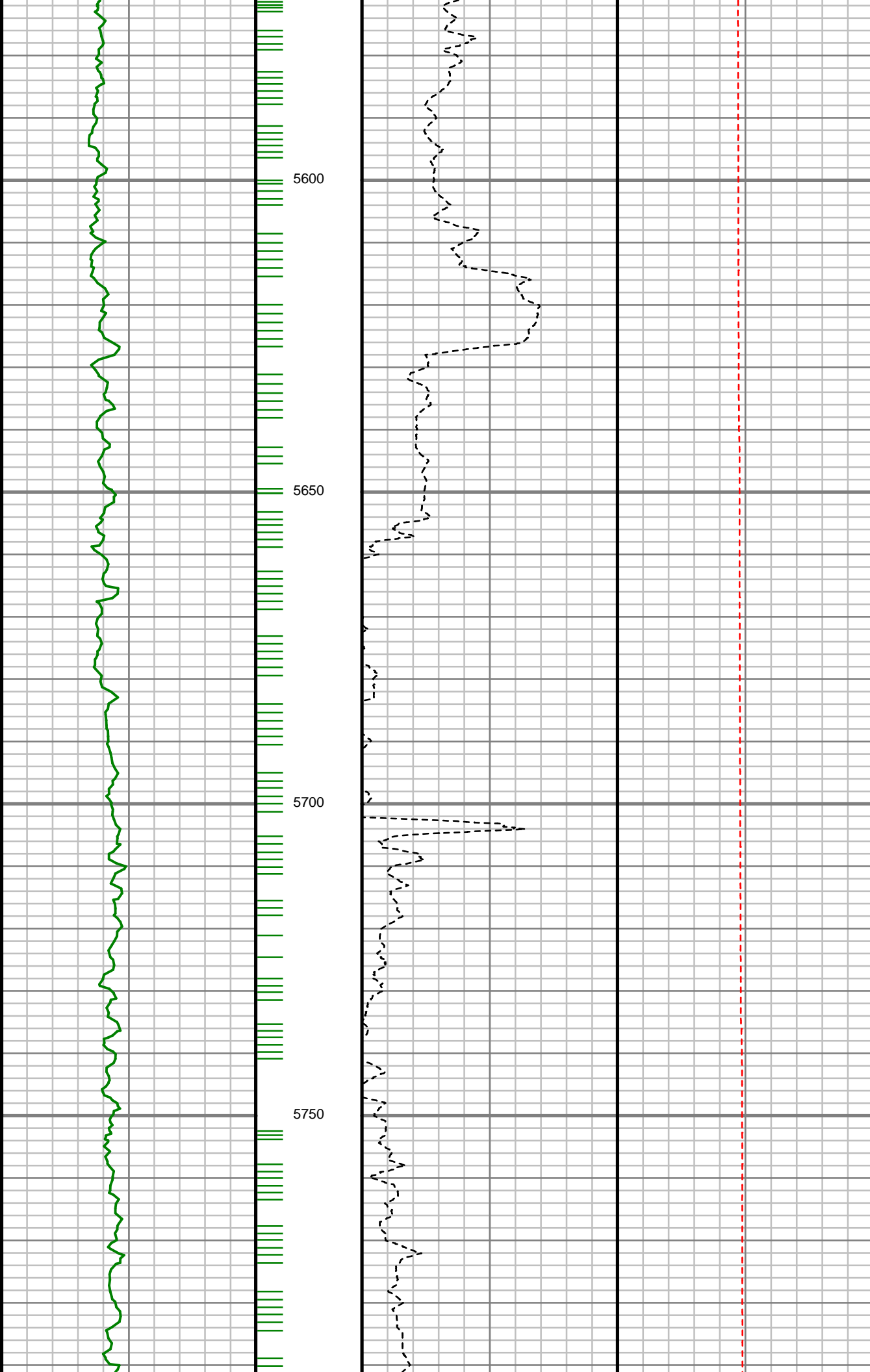
S: 56 MD: 5260.00 ft  
Inc: 0.81 deg Az:  
326.90 deg TVD:  
5223.35 ft



S: 57 MD: 5354.00 ft  
Inc: 0.96 deg Az:  
249.21 deg TVD:  
5317.35 ft

S: 58 MD: 5449.00 ft  
Inc: 1.35 deg Az:  
230.65 deg TVD:  
5412.33 ft

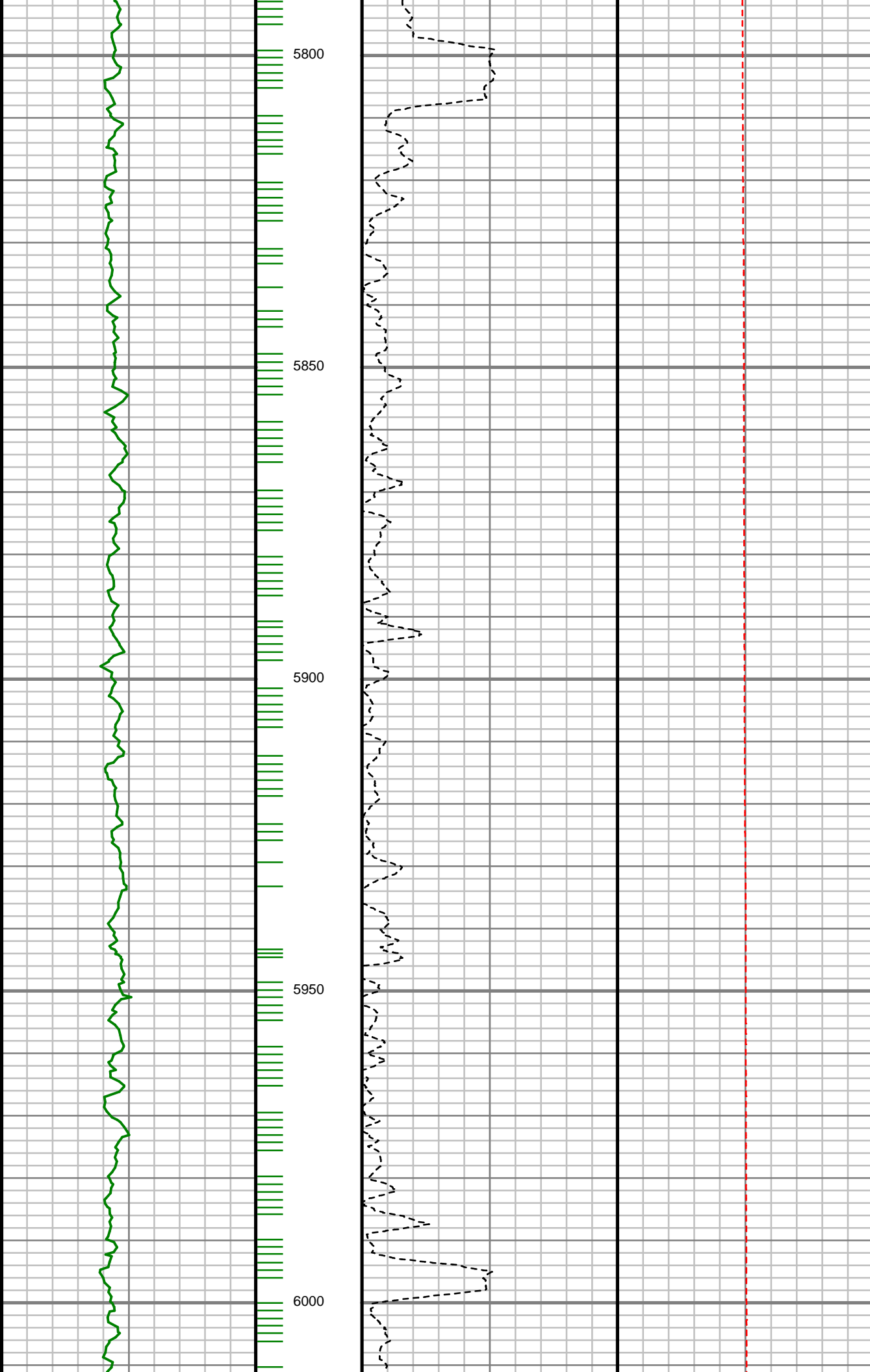
S: 59 MD: 5543.00 ft  
Inc: 1.70 deg Az:  
218.70 deg TVD:  
5506.29 ft



S: 60 MD: 5638.00 ft  
Inc: 0.70 deg Az:  
249.81 deg TVD:  
5601.27 ft

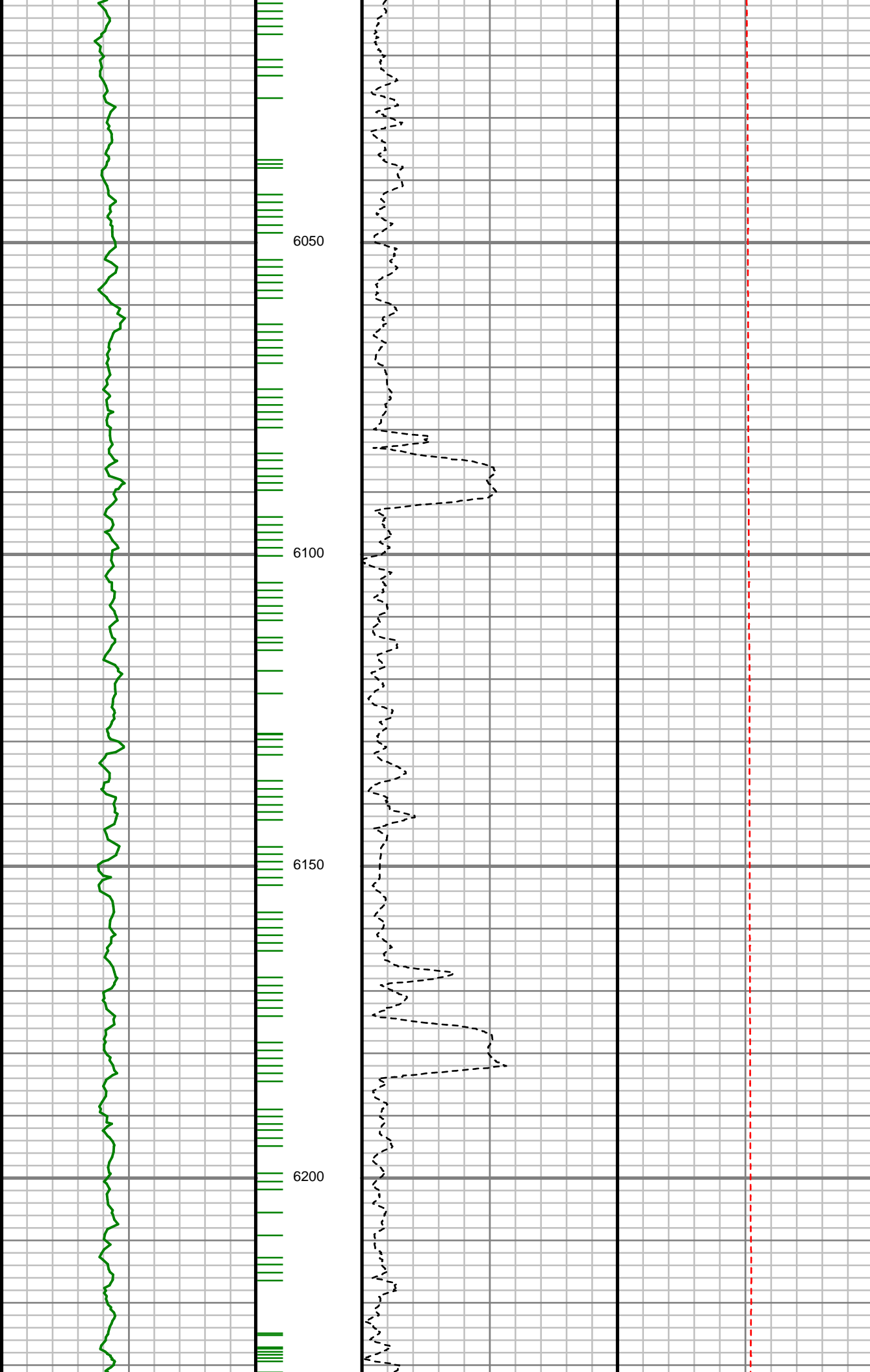
S: 61 MD: 5732.00 ft  
Inc: 0.56 deg Az:  
220.02 deg TVD:  
5695.27 ft





S: 62 MD: 5826.00 ft  
Inc: 0.59 deg Az:  
181.26 deg TVD:  
5789.26 ft

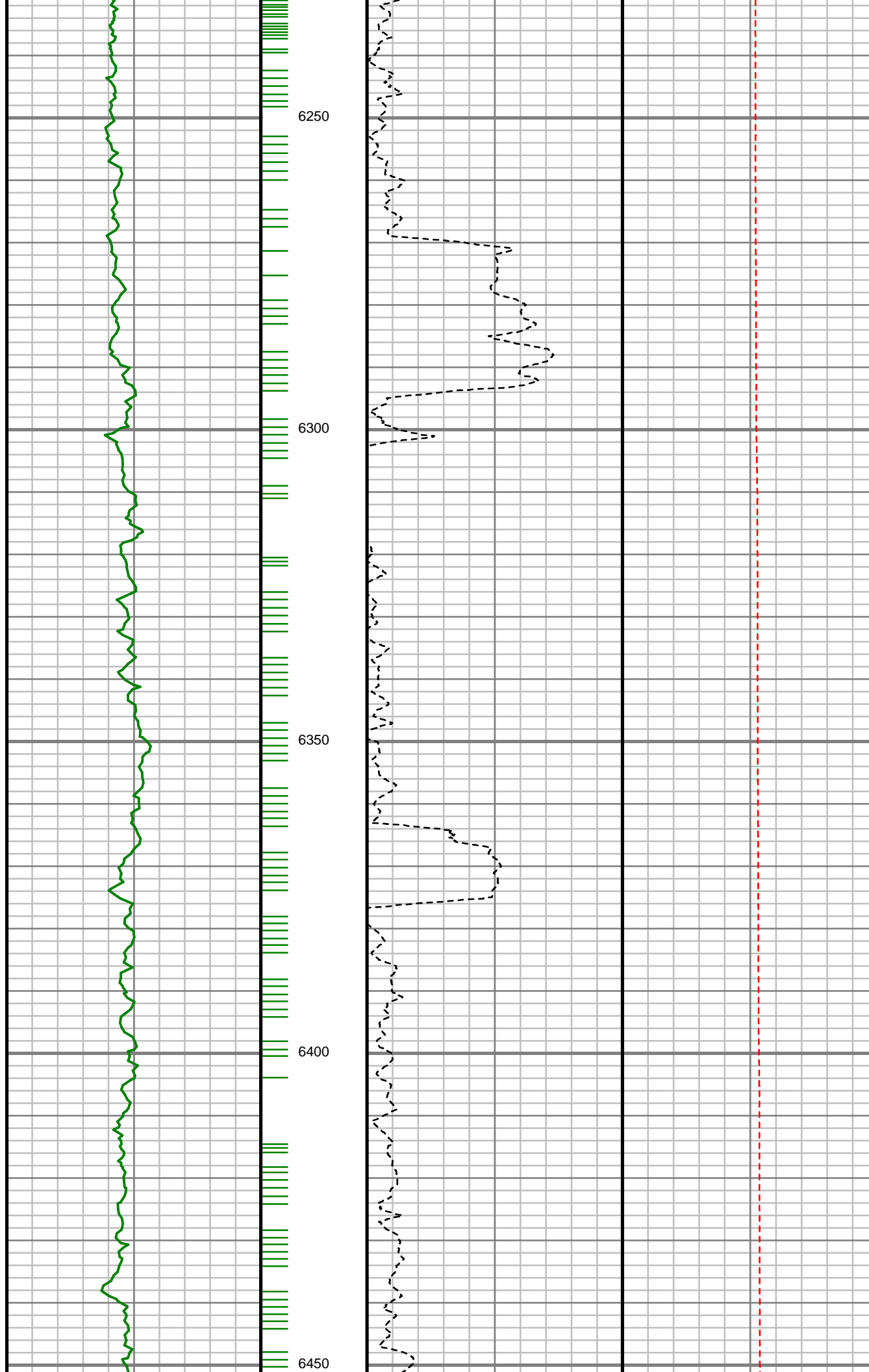
S: 63 MD: 5921.00 ft  
Inc: 0.51 deg Az:  
136.85 deg TVD:  
5884.26 ft



S: 64 MD: 6015.00 ft  
Inc: 0.92 deg Az:  
138.17 deg TVD:  
5978.25 ft

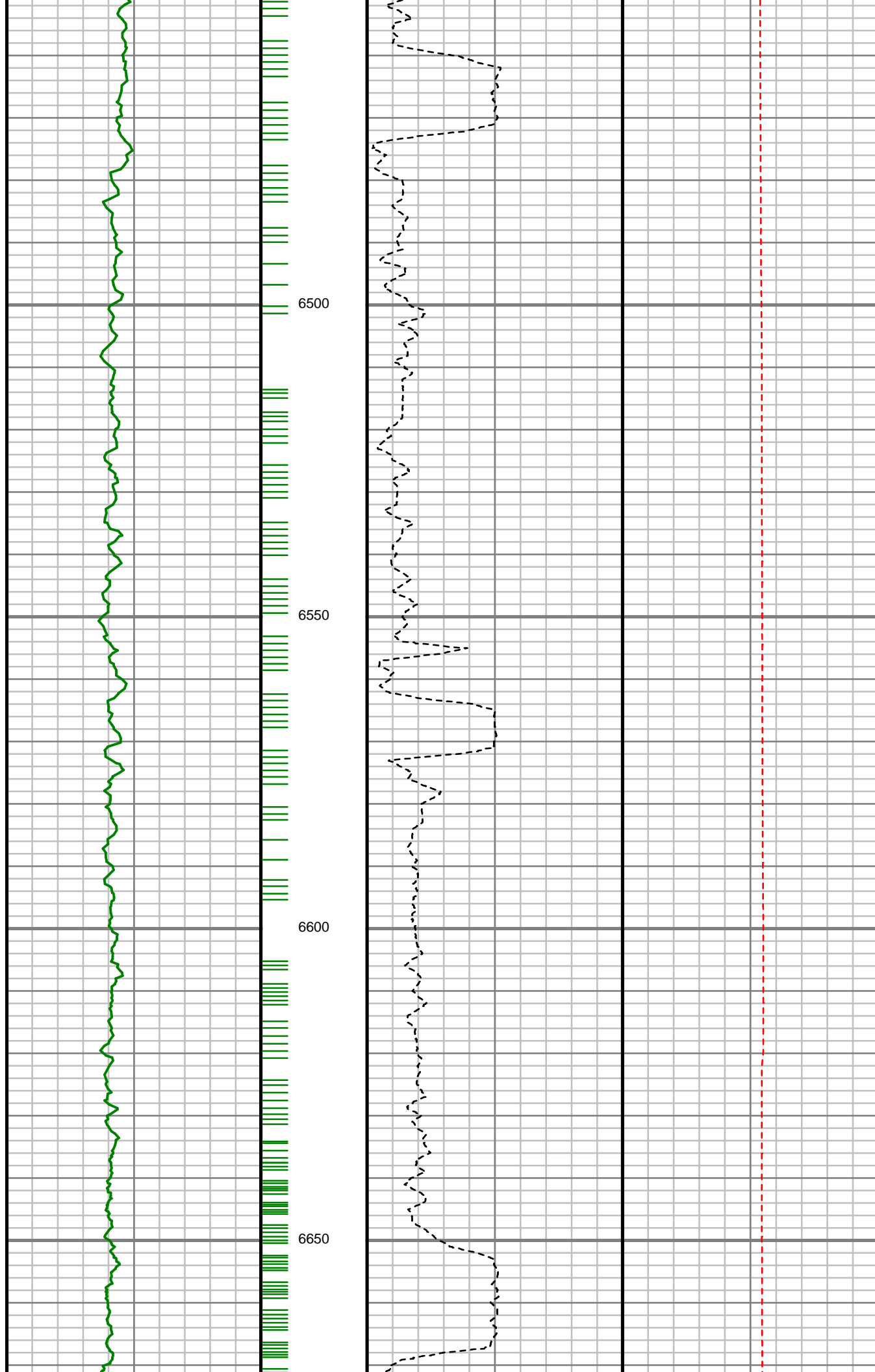
S: 65 MD: 6110.00 ft  
Inc: 1.35 deg Az:  
118.12 deg TVD:  
6073.23 ft

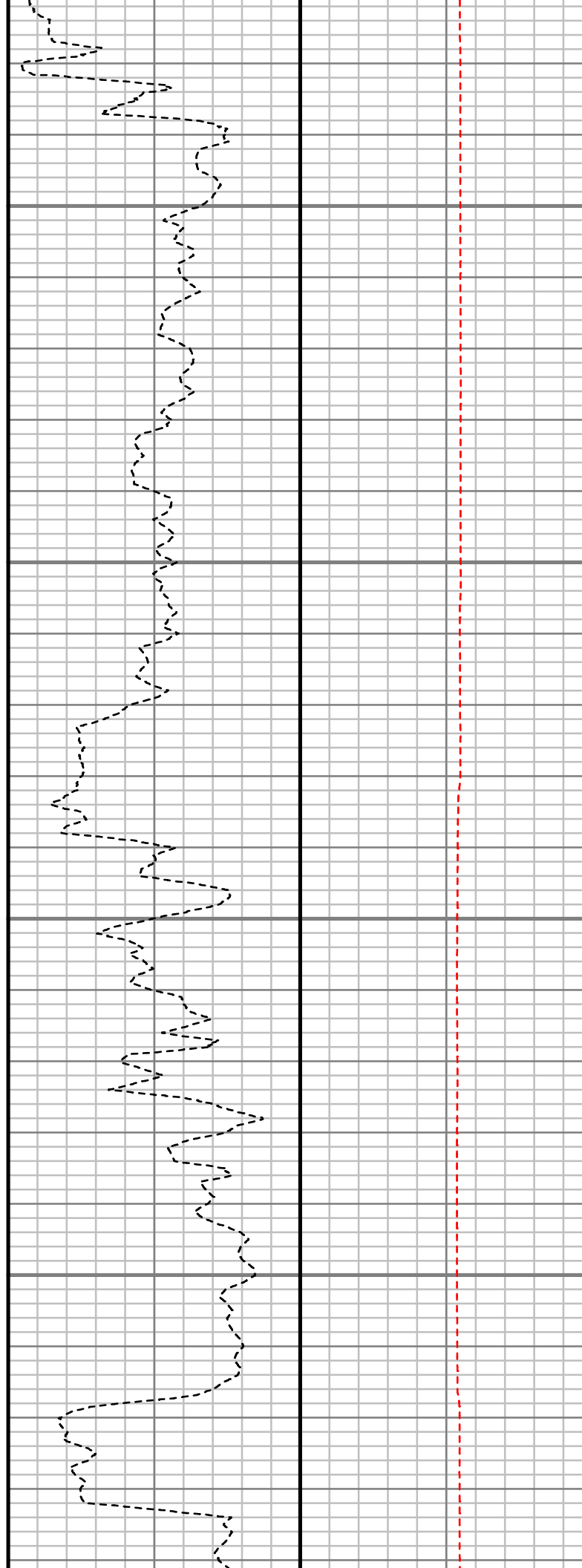
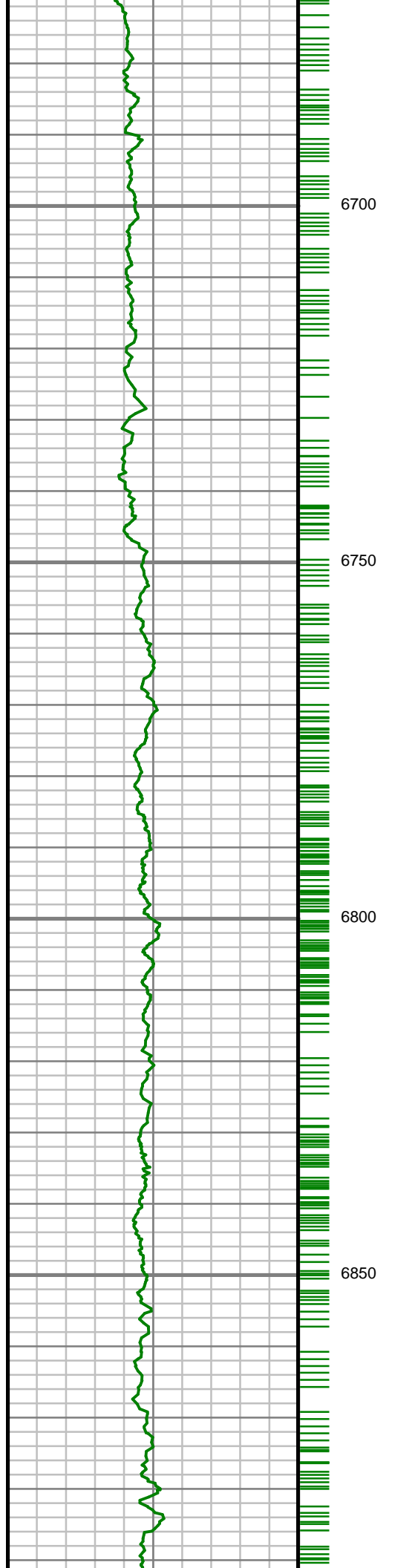
S: 66 MD: 6204.00 ft  
Inc: 1.76 deg Az:  
105.56 deg TVD:  
6167.20 ft



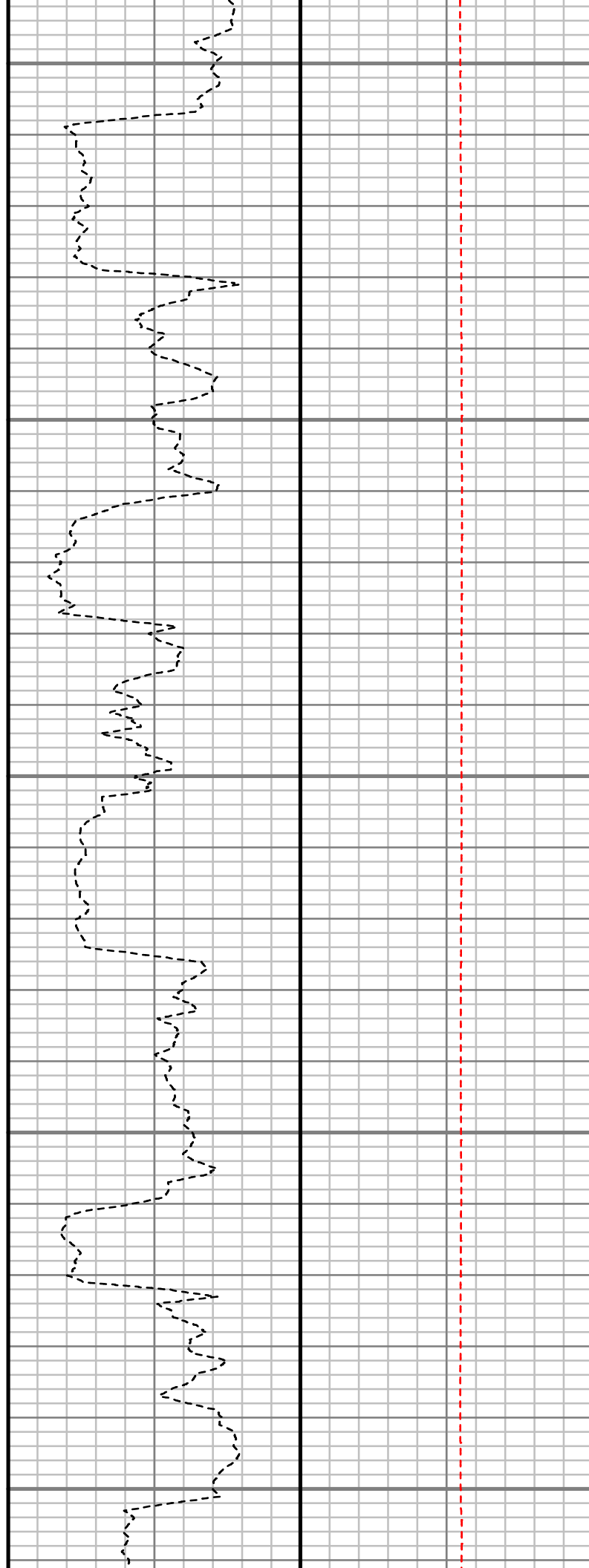
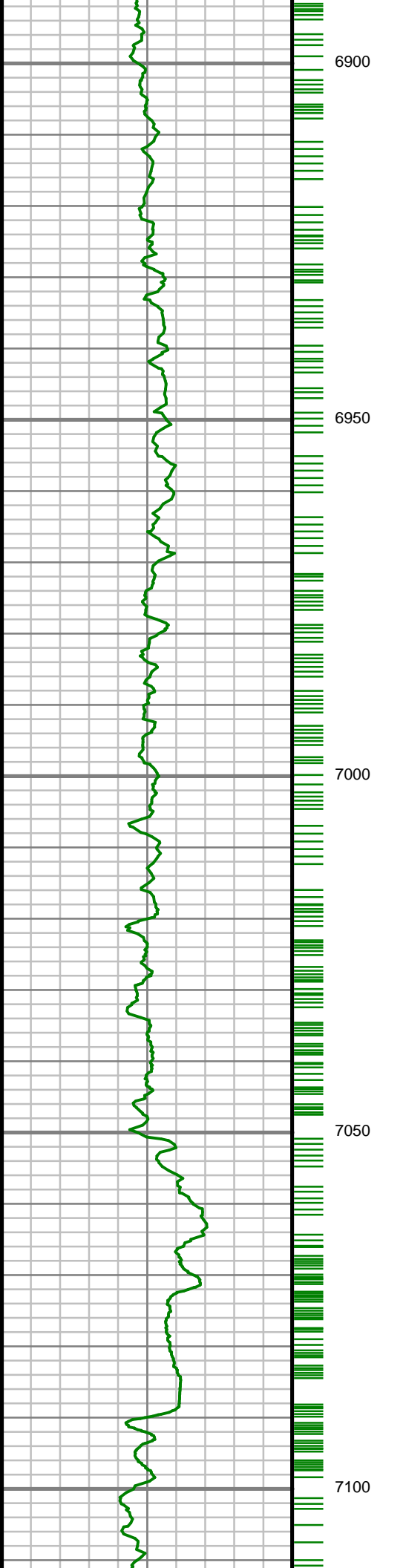
S: 67 MD: 6298.00 ft  
Inc: 1.56 deg Az: 29.88  
deg TVD: 6261.17 ft

S: 68 MD: 6393.00 ft  
Inc: 1.69 deg Az: 23.83  
deg TVD: 6356.13 ft





S: 71	MD: 6677.00 ft
Inc: 1.28 deg	Az: 347.78 deg
TVD: 6640.04 ft	
S: 72	MD: 6724.00 ft
Inc: 5.88 deg	Az: 359.64 deg
TVD: 6686.93 ft	
S: 73	MD: 6771.00 ft
Inc: 11.11 deg	Az: 8.40 deg
TVD: 6733.40 ft	
S: 74	MD: 6818.00 ft
Inc: 12.12 deg	Az: 14.39 deg
TVD: 6779.44 ft	
S: 75	MD: 6865.00 ft
Inc: 15.82 deg	Az: 5.41 deg
TVD: 6825.05 ft	



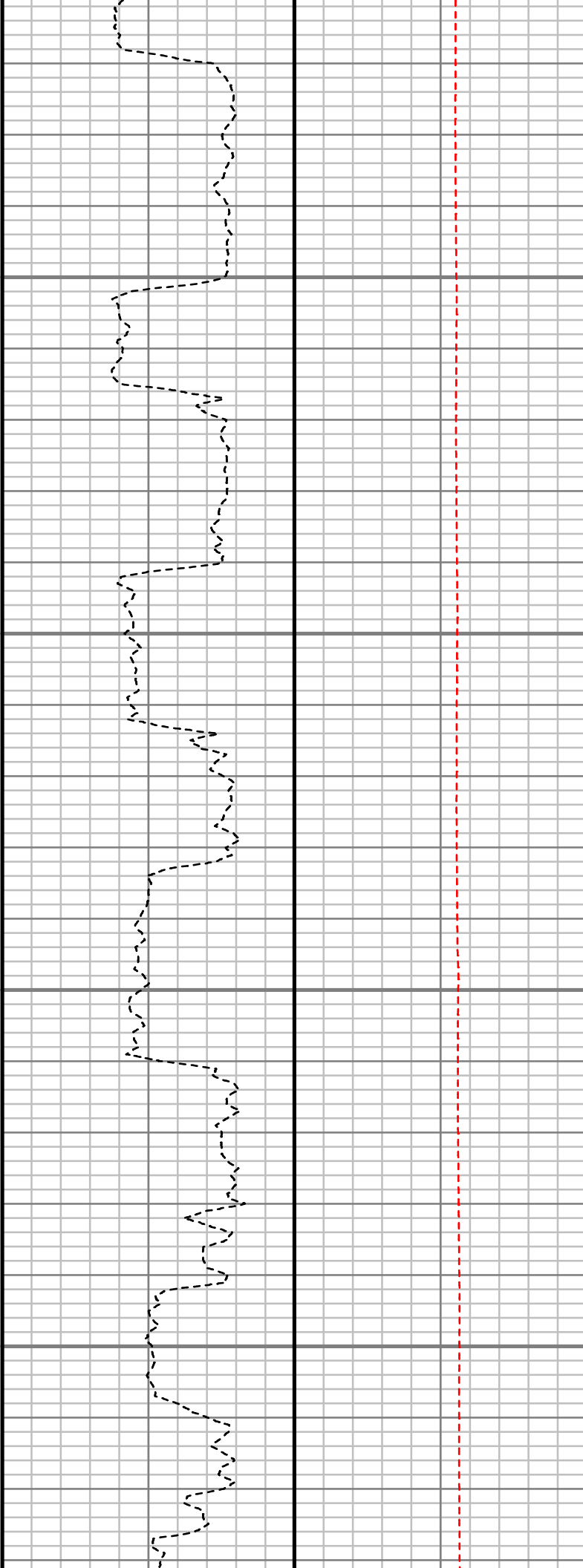
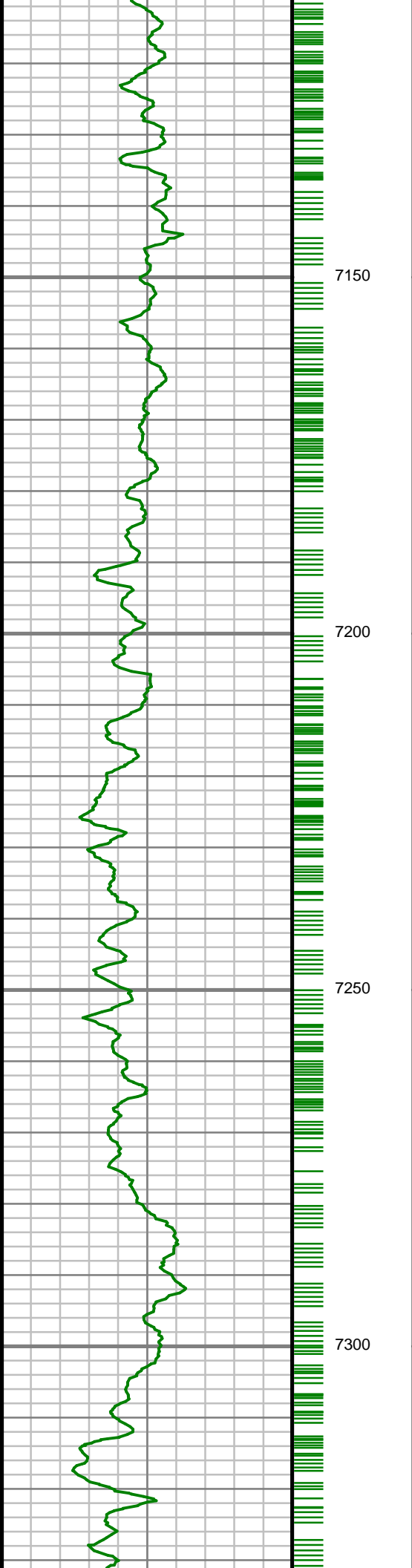
S: 76 MD: 6912.00 ft  
Inc: 20.73 deg Az: 3.11  
deg TVD: 6869.66 ft

S: 77 MD: 6960.00 ft  
Inc: 23.01 deg Az: 2.77  
deg TVD: 6914.21 ft

S: 78 MD: 7007.00 ft  
Inc: 25.08 deg Az:  
359.91 deg TVD:  
6957.13 ft

S: 79 MD: 7054.00 ft  
Inc: 27.53 deg Az:  
356.83 deg TVD:  
6999.26 ft

S: 80 MD: 7101.00 ft  
Inc: 31.68 deg Az:  
354.06 deg TVD:  
7040.11 ft

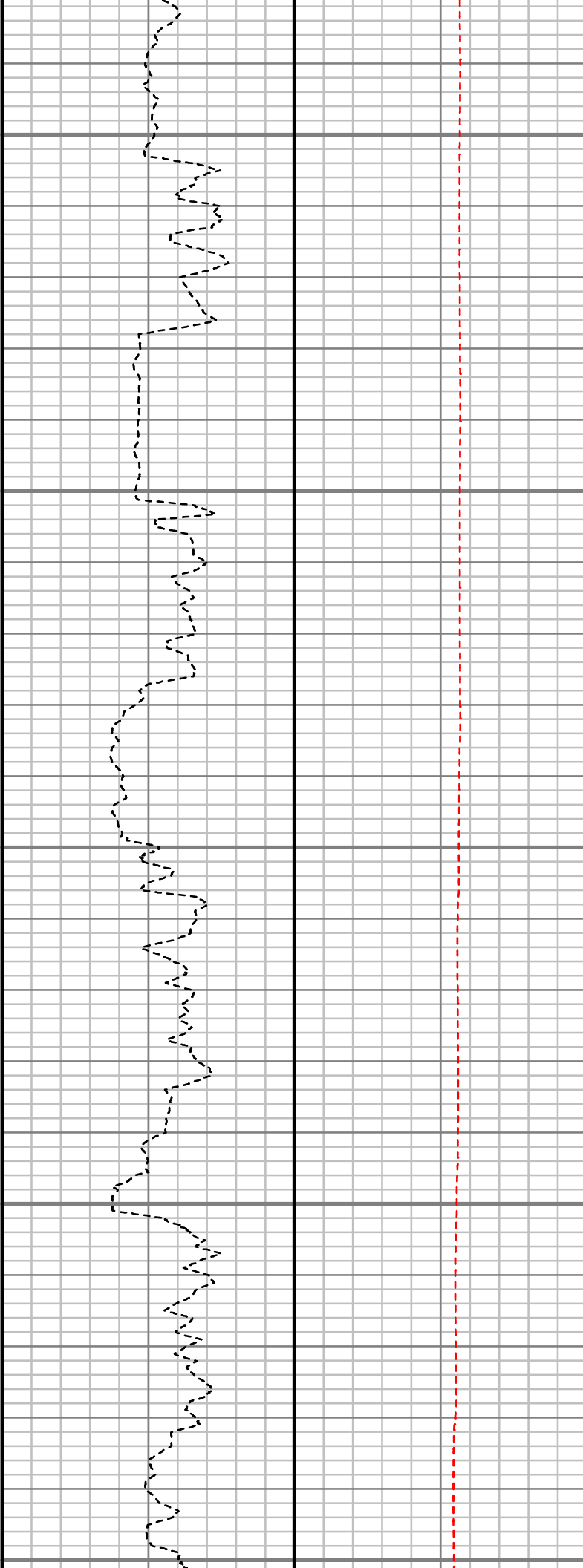
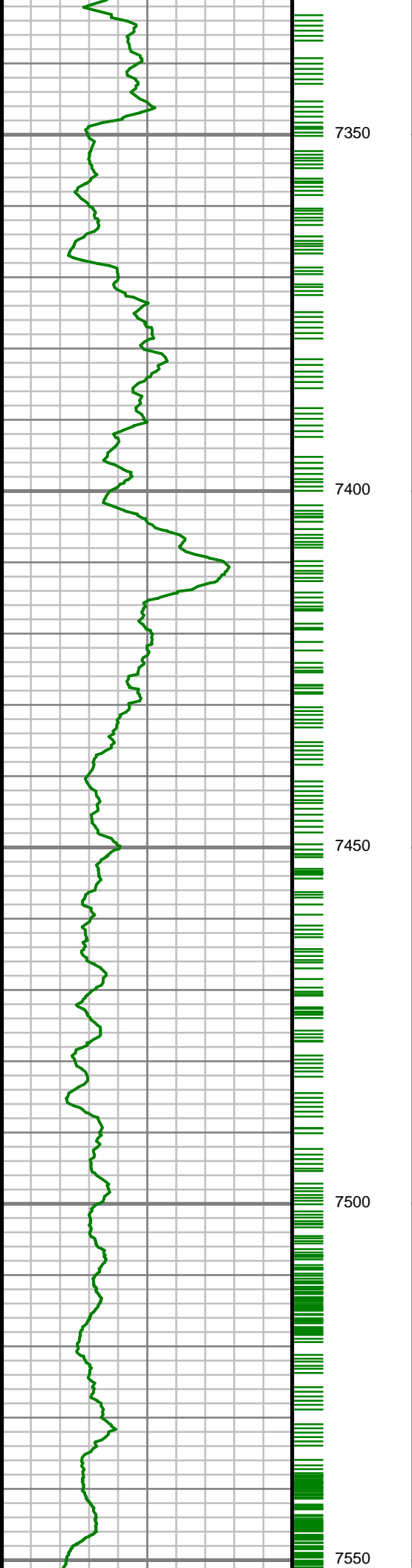


S: 81 MD: 7148.00 ft  
Inc: 37.48 deg Az:  
356.95 deg TVD:  
7078.80 ft

S: 82 MD: 7195.00 ft  
Inc: 41.27 deg Az: 0.06  
deg TVD: 7115.13 ft

S: 83 MD: 7242.00 ft  
Inc: 44.89 deg Az:  
359.84 deg TVD:  
7149.45 ft

S: 84 MD: 7289.00 ft  
Inc: 48.90 deg Az:  
359.75 deg TVD:  
7181.56 ft



S: 85 MD: 7337.00 ft  
Inc: 51.85 deg Az:  
359.45 deg TVD:  
7212.17 ft

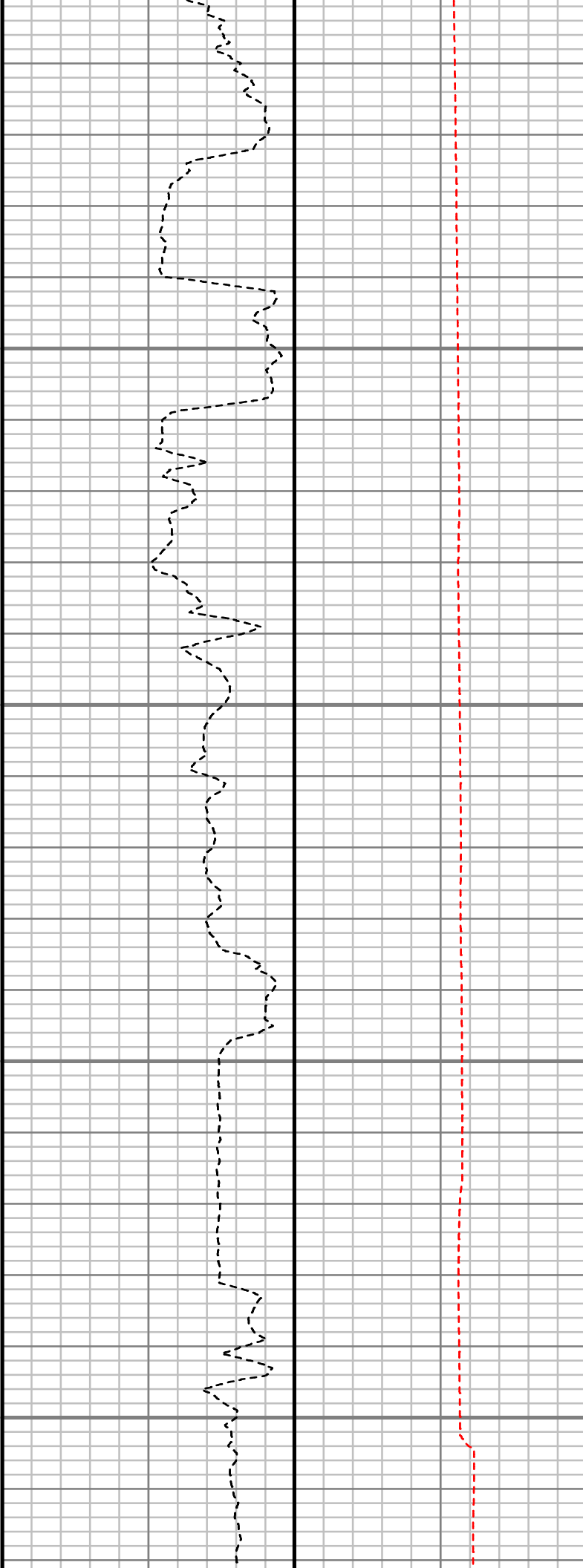
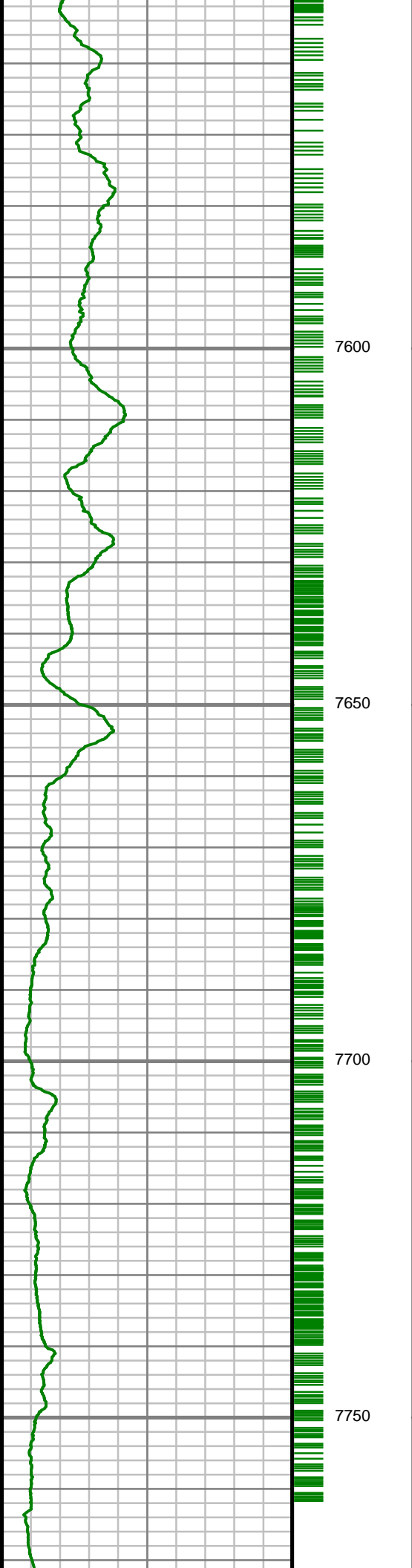
S: 86 MD: 7384.00 ft  
Inc: 54.78 deg Az:  
359.07 deg TVD:  
7240.25 ft

S: 87 MD: 7431.00 ft  
Inc: 58.66 deg Az:  
359.31 deg TVD:  
7266.03 ft

S: 88 MD: 7478.00 ft  
Inc: 64.15 deg Az: 2.00  
deg TVD: 7288.52 ft

S: 89 MD: 7526.00 ft  
Inc: 69.91 deg Az: 3.54  
deg TVD: 7307.25 ft





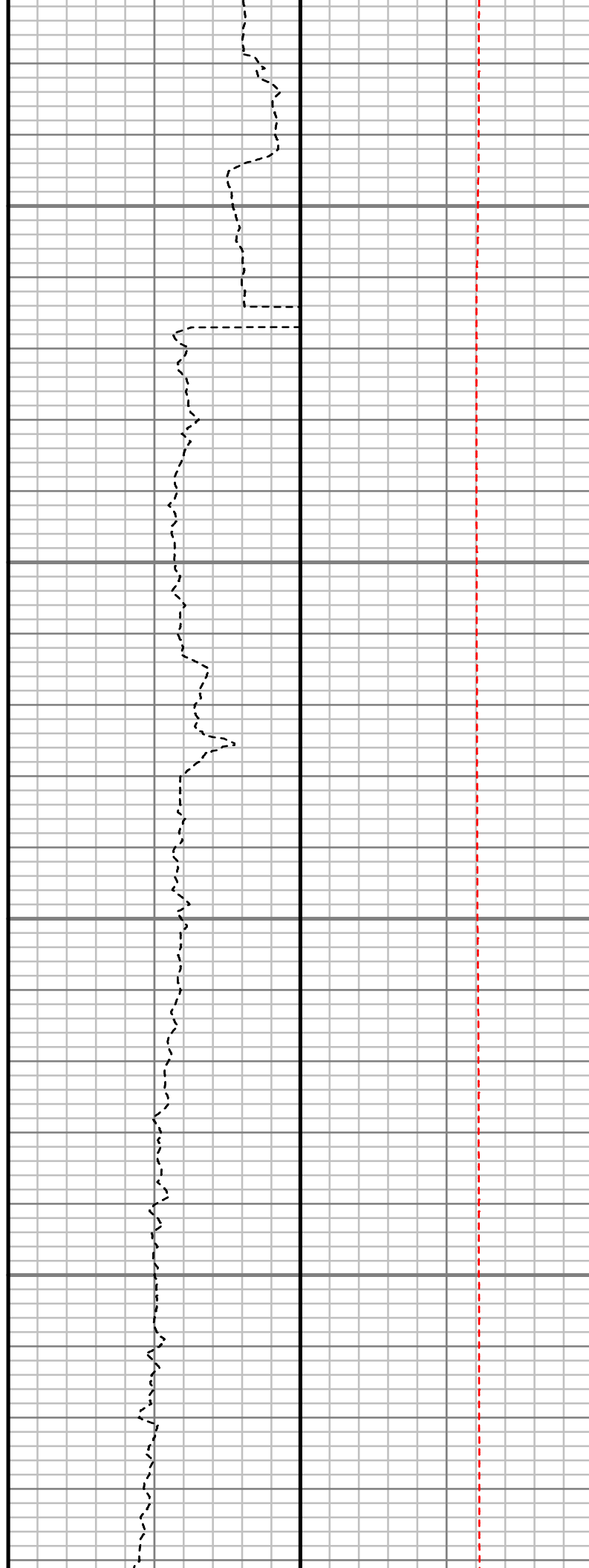
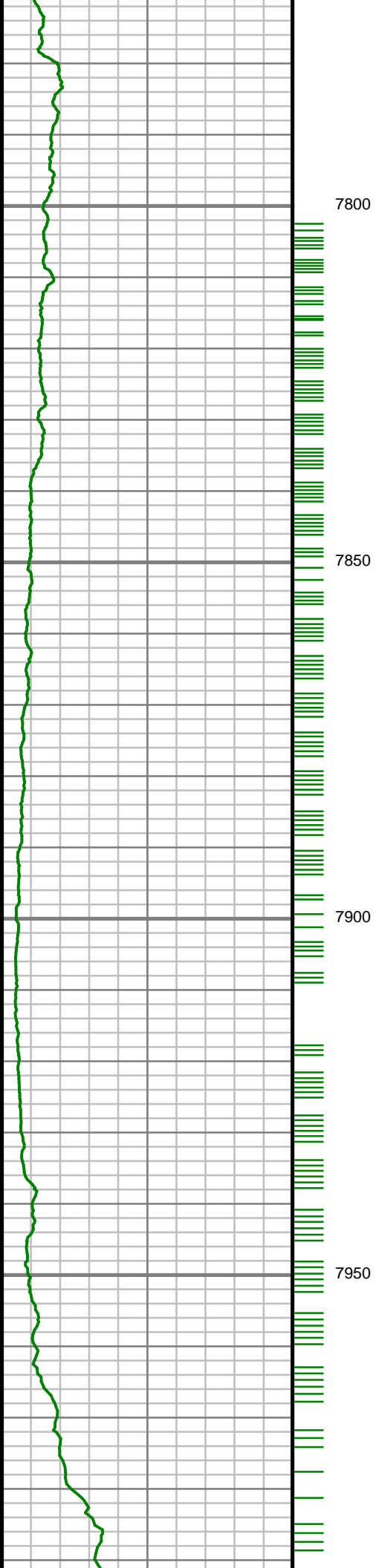
S: 90 MD: 7573.00 ft  
Inc: 74.97 deg Az: 3.92  
deg TVD: 7321.43 ft

S: 91 MD: 7620.00 ft  
Inc: 78.52 deg Az: 2.56  
deg TVD: 7332.20 ft

S: 92 MD: 7667.00 ft  
Inc: 80.23 deg Az: 2.17  
deg TVD: 7340.87 ft

S: 93 MD: 7714.00 ft  
Inc: 82.87 deg Az: 1.81  
deg TVD: 7347.78 ft

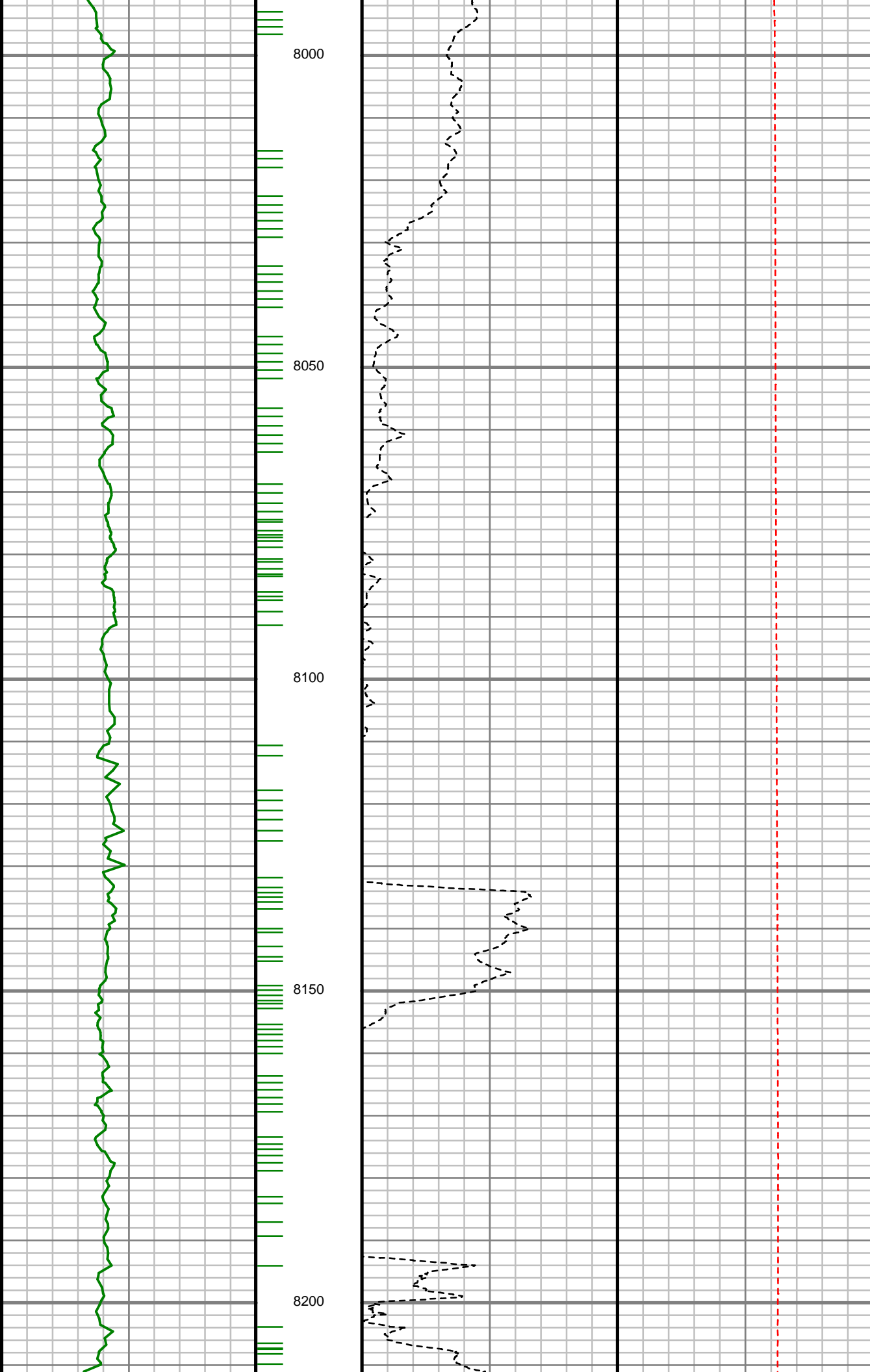
S: 94 MD: 7751.00 ft  
Inc: 84.79 deg Az: 2.04  
deg TVD: 7351.75 ft



S: 95 MD: 7805.00 ft  
Inc: 87.95 deg Az:  
359.78 deg TVD:  
7355.17 ft

S: 96 MD: 7897.00 ft  
Inc: 88.42 deg Az: 0.21  
deg TVD: 7358.08 ft

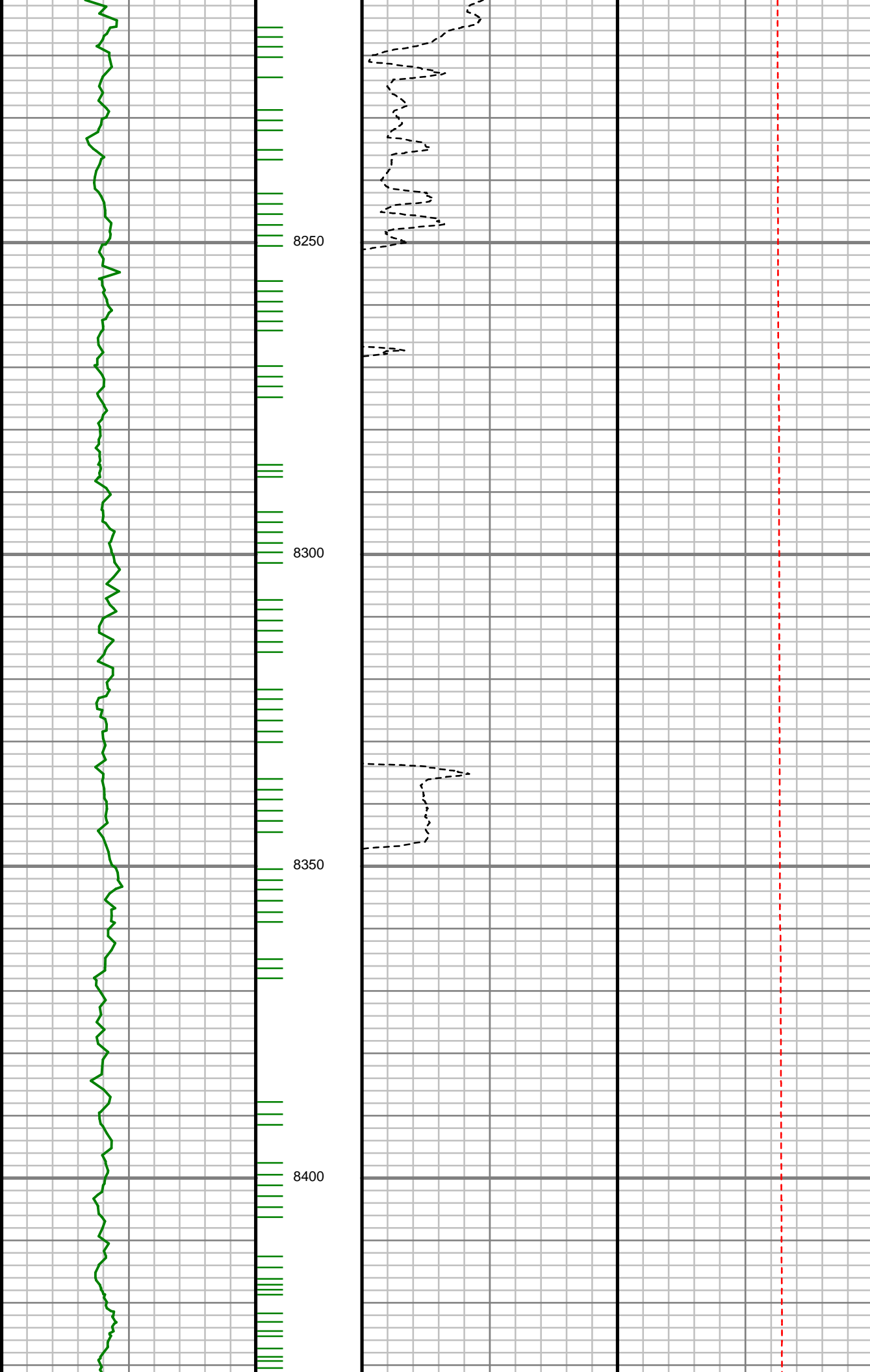
S: 97 MD: 7988.00 ft



Inc: 88.59 deg Az:  
359.52 deg TVD:  
7360.45 ft

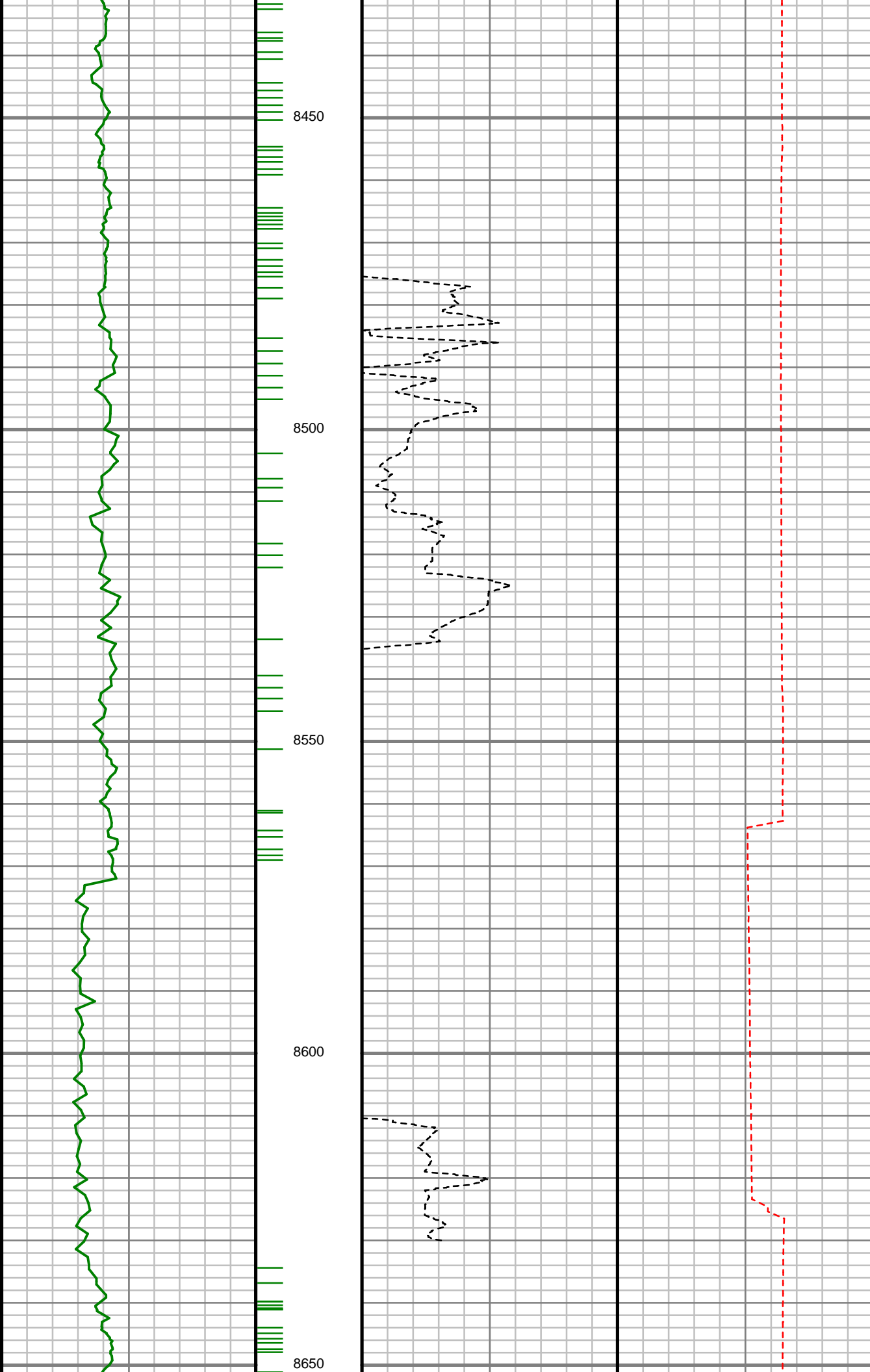
S: 98 MD: 8080.00 ft  
Inc: 88.86 deg Az:  
359.13 deg TVD:  
7362.50 ft

S: 99 MD: 8171.00 ft  
Inc: 89.23 deg Az:  
359.11 deg TVD:  
7364.02 ft



S: 100 MD: 8263.00 ft  
Inc: 89.36 deg Az:  
359.08 deg TVD:  
7365.15 ft

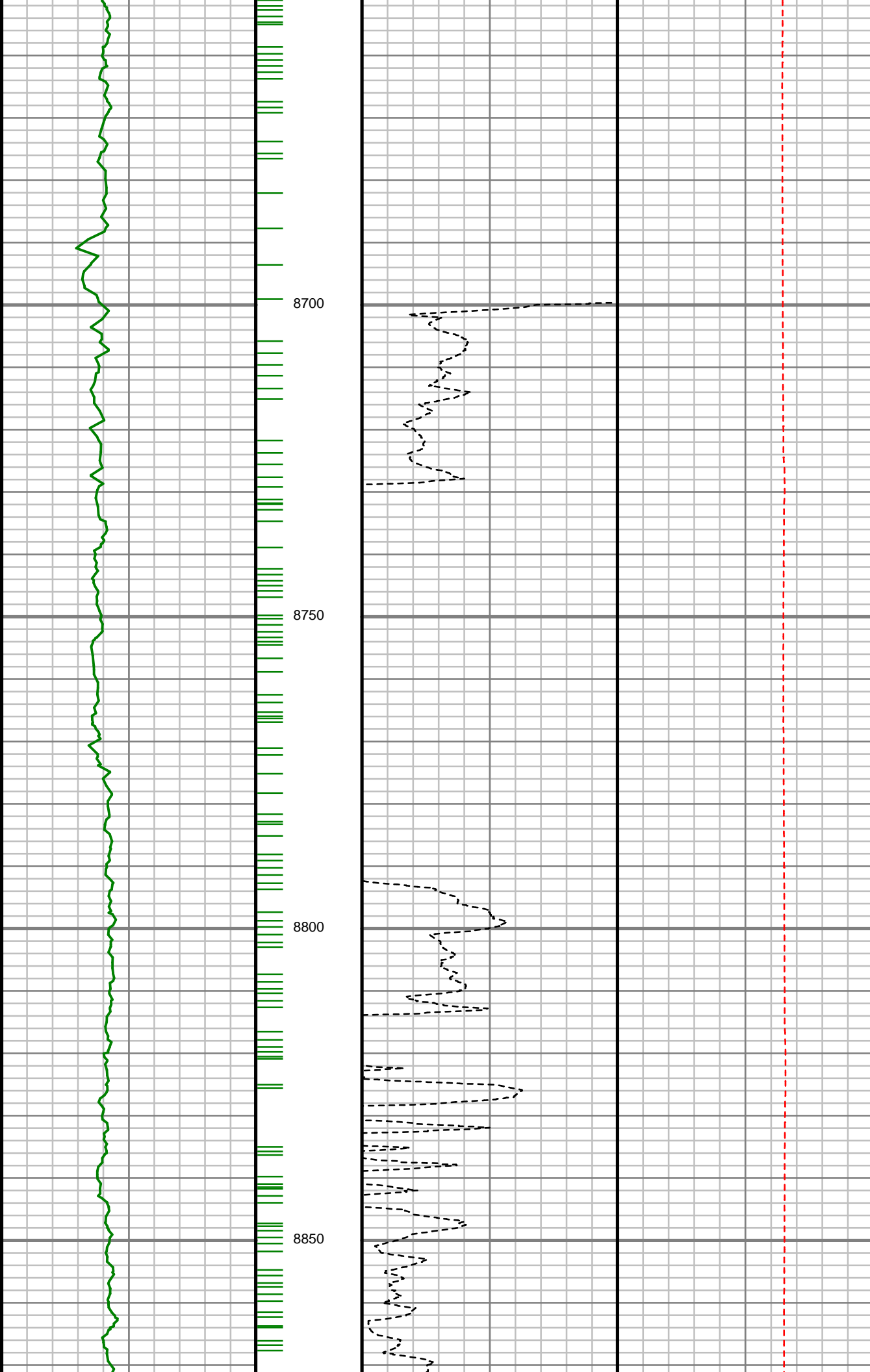
S: 101 MD: 8355.00 ft  
Inc: 89.77 deg Az:  
359.05 deg TVD:  
7365.85 ft



S: 102 MD: 8447.00 ft  
Inc: 90.74 deg Az:  
358.50 deg TVD:  
7365.45 ft

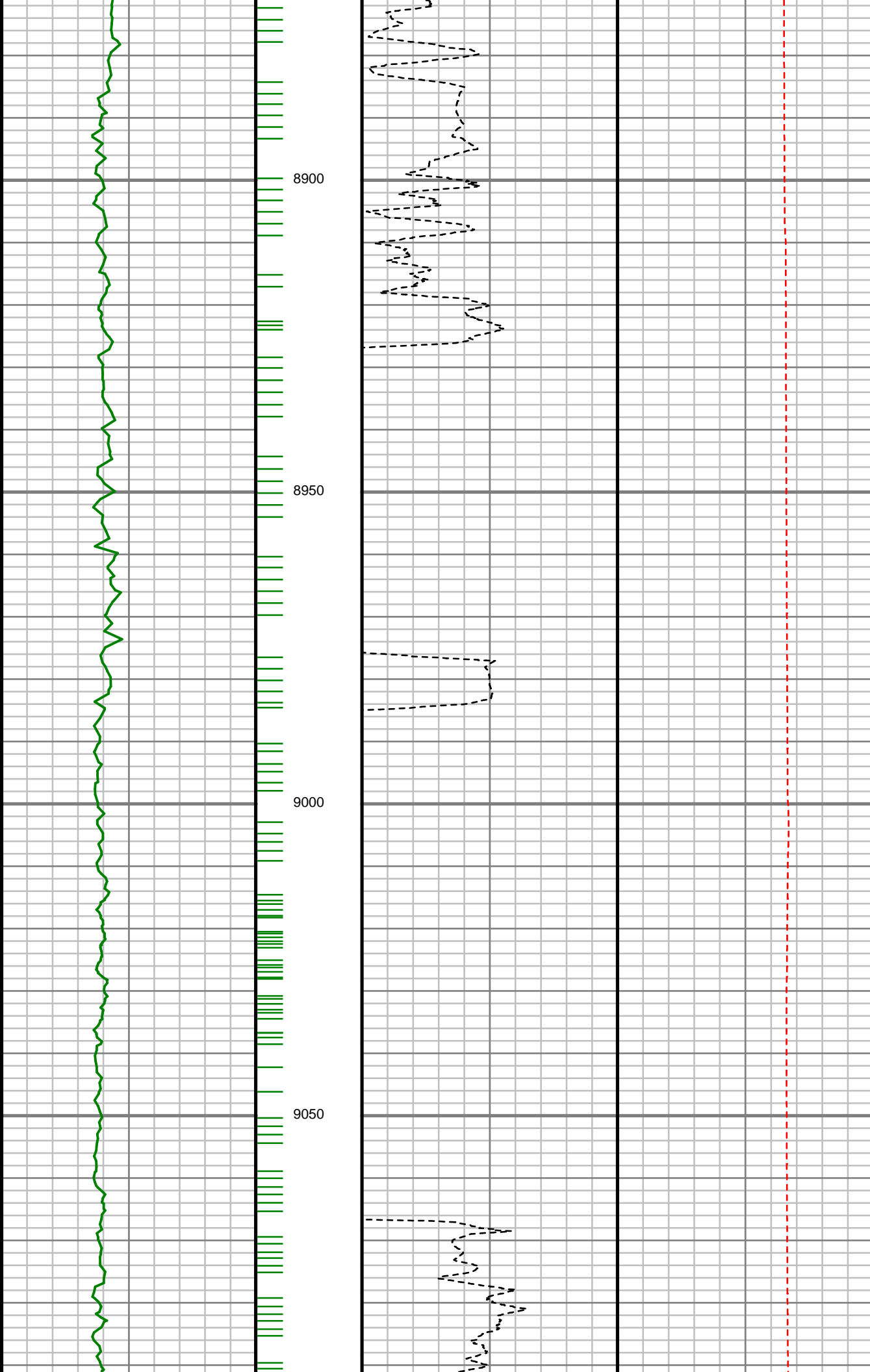
S: 103 MD: 8538.00 ft  
Inc: 90.77 deg Az:  
357.14 deg TVD:  
7364.25 ft

S: 104 MD: 8630.00 ft  
Inc: 90.67 deg Az:  
358.03 deg TVD:  
7363.09 ft



S: 105 MD: 8721.00 ft  
Inc: 89.26 deg Az:  
358.06 deg TVD:  
7363.14 ft

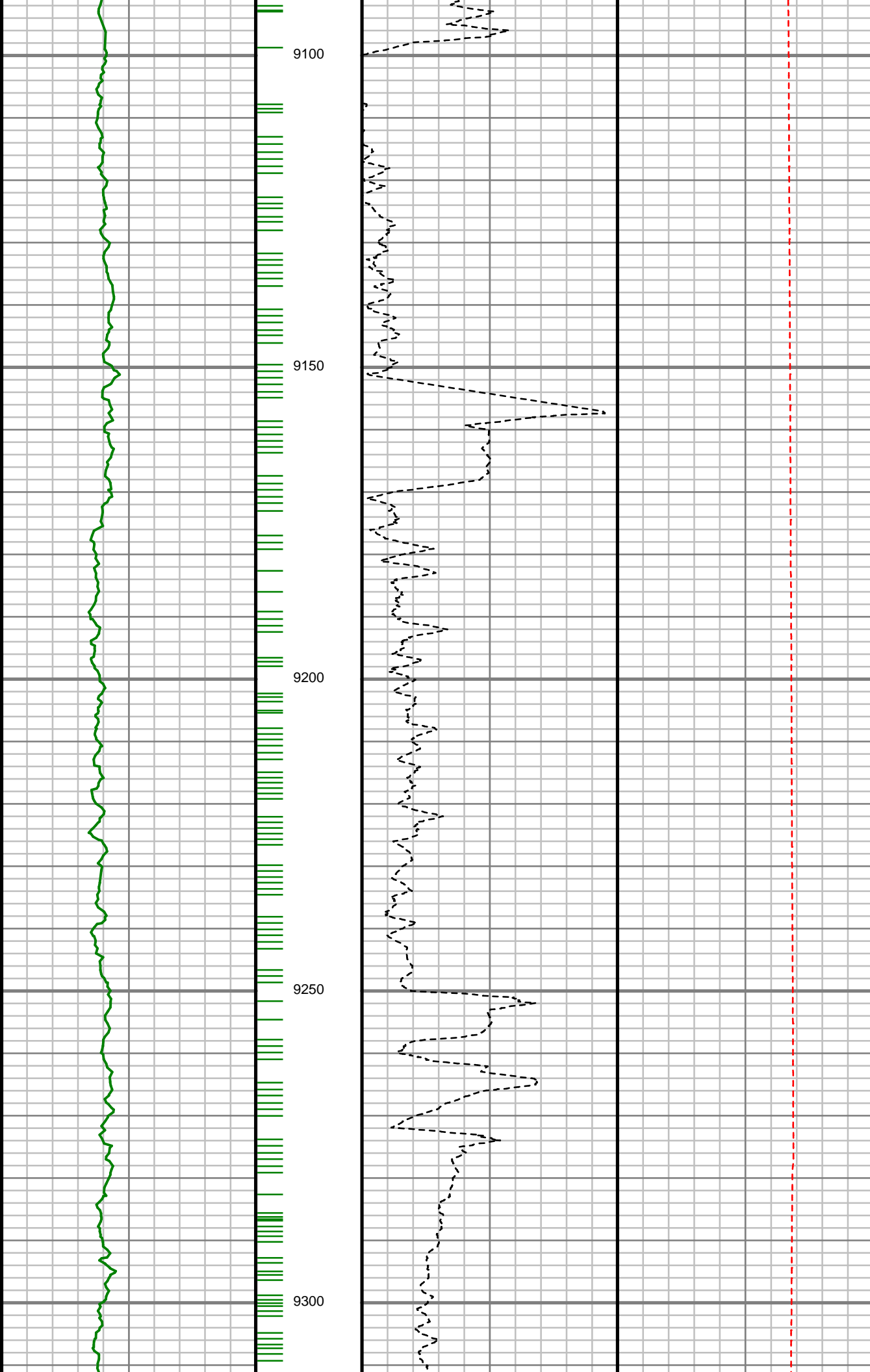
S: 106 MD: 8813.00 ft  
Inc: 88.93 deg Az:  
358.97 deg TVD:  
7364.60 ft



S: 107 MD: 8904.00 ft  
Inc: 89.66 deg Az: 0.10  
deg TVD: 7365.72 ft

S: 108 MD: 8996.00 ft  
Inc: 91.31 deg Az:  
359.76 deg TVD:  
7364.93 ft

S: 109 MD: 9088.00 ft

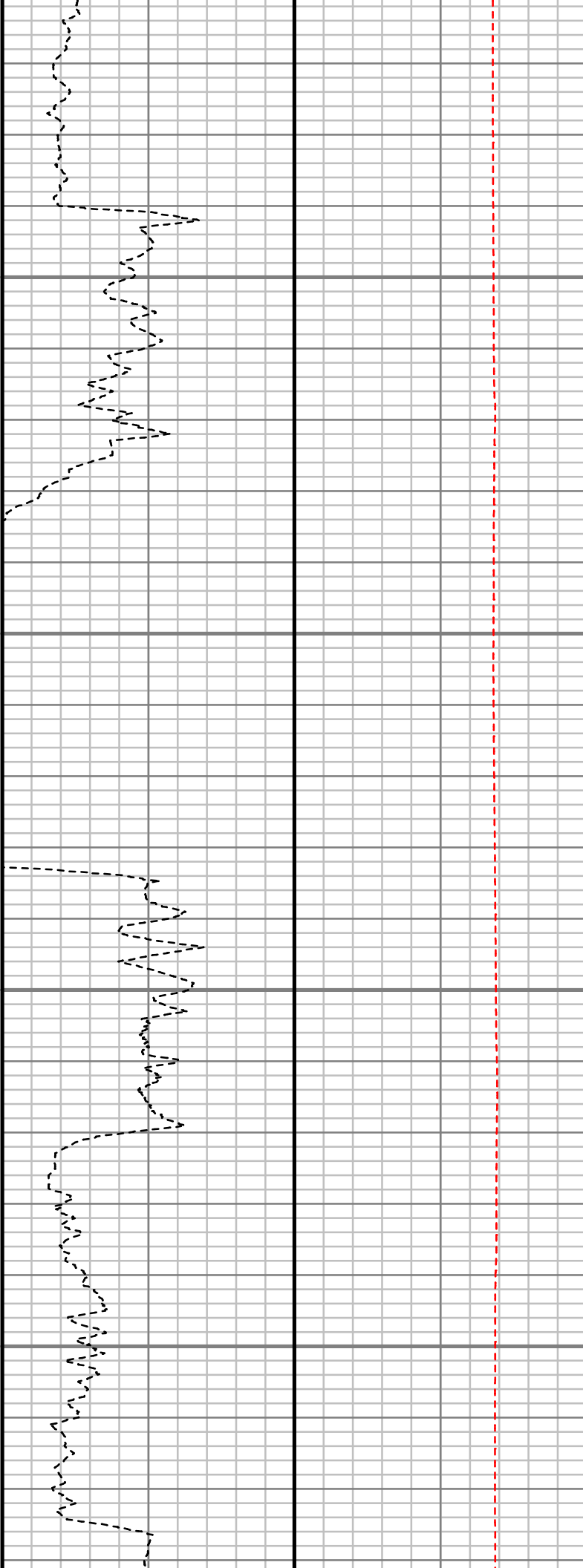
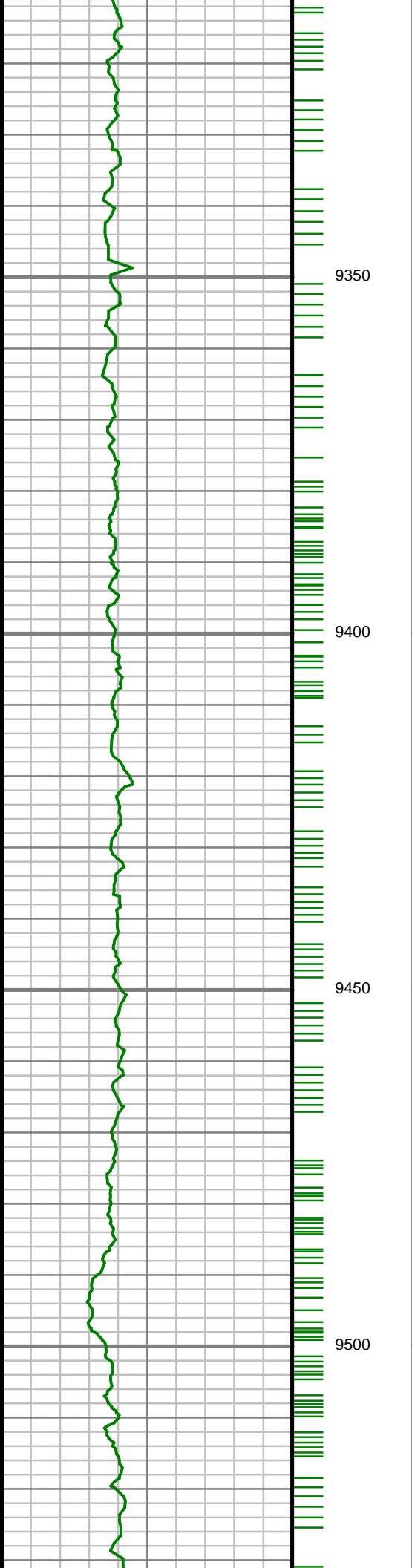


Inc: 90.44 deg Az: 0.63  
deg TVD: 7363.53 ft

S: 110 MD: 9179.00 ft  
Inc: 90.07 deg Az:  
359.24 deg TVD:  
7363.13 ft

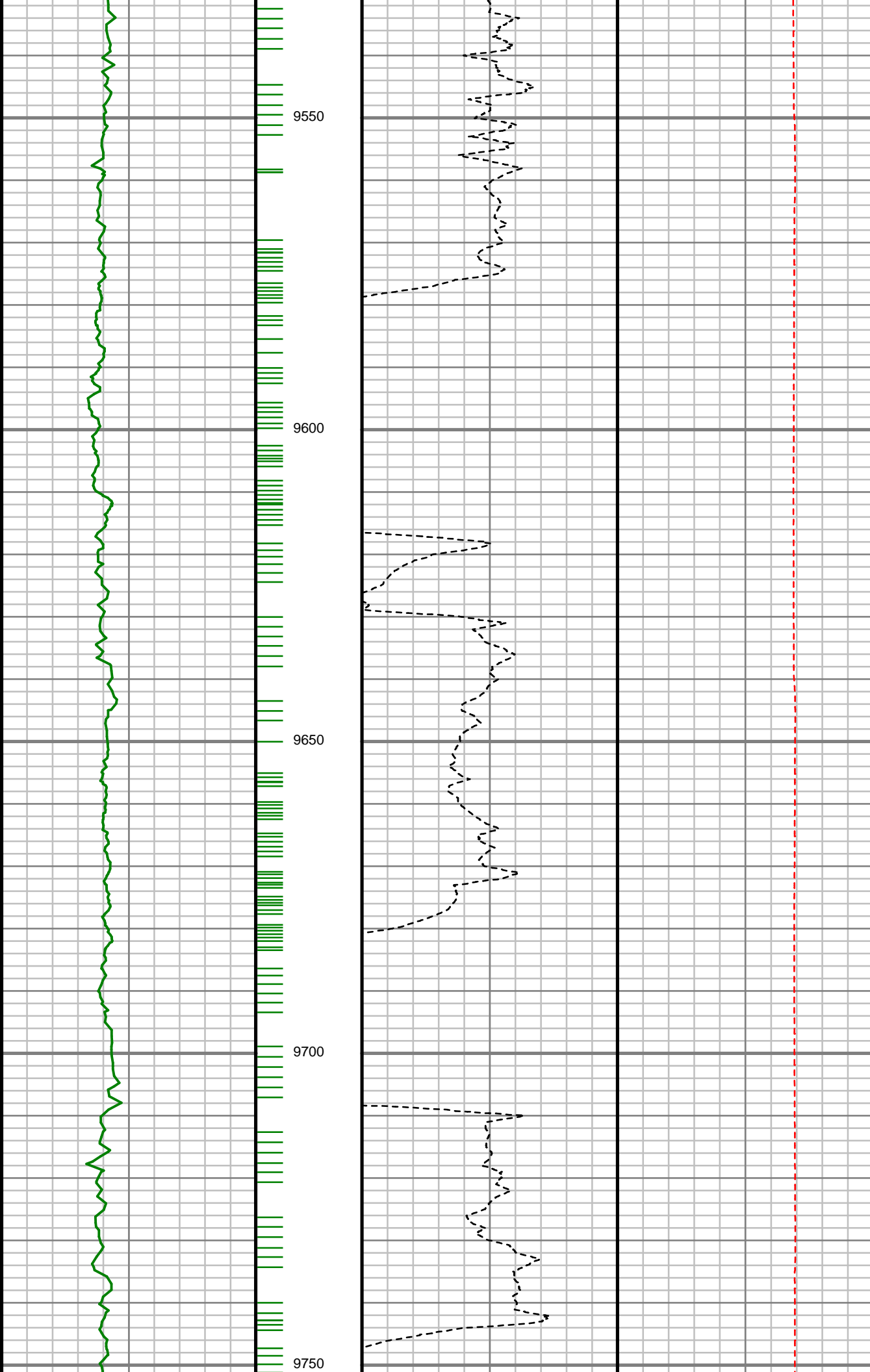
S: 111 MD: 9271.00 ft  
Inc: 88.96 deg Az:  
358.90 deg TVD:  
7363.91 ft





S: 112 MD: 9362.00 ft  
Inc: 90.07 deg Az:  
358.18 deg TVD:  
7364.68 ft

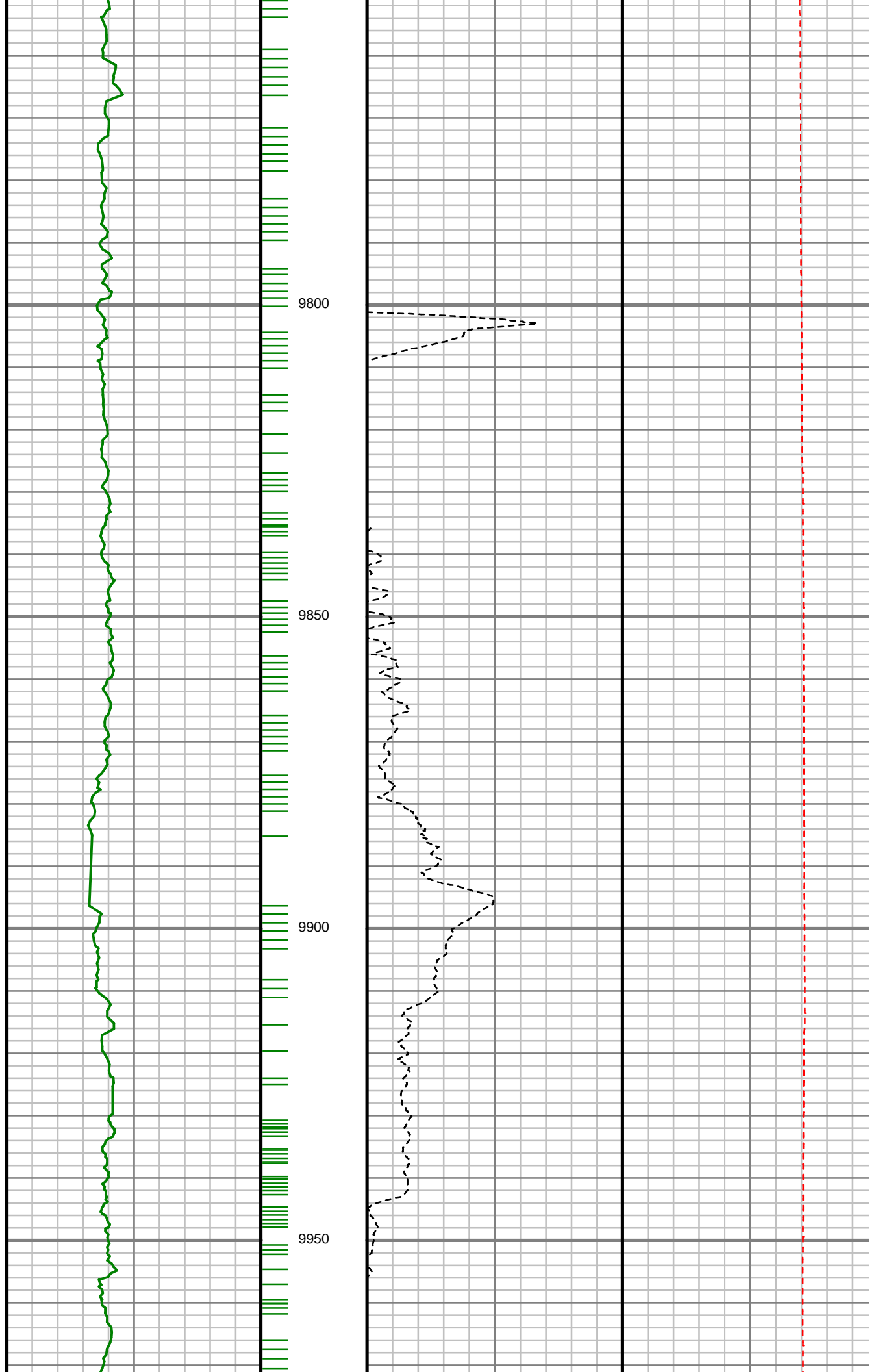
S: 113 MD: 9454.00 ft  
Inc: 90.64 deg Az:  
358.11 deg TVD:  
7364.12 ft



S: 114 MD: 9546.00 ft  
Inc: 87.95 deg Az:  
357.51 deg TVD:  
7365.25 ft

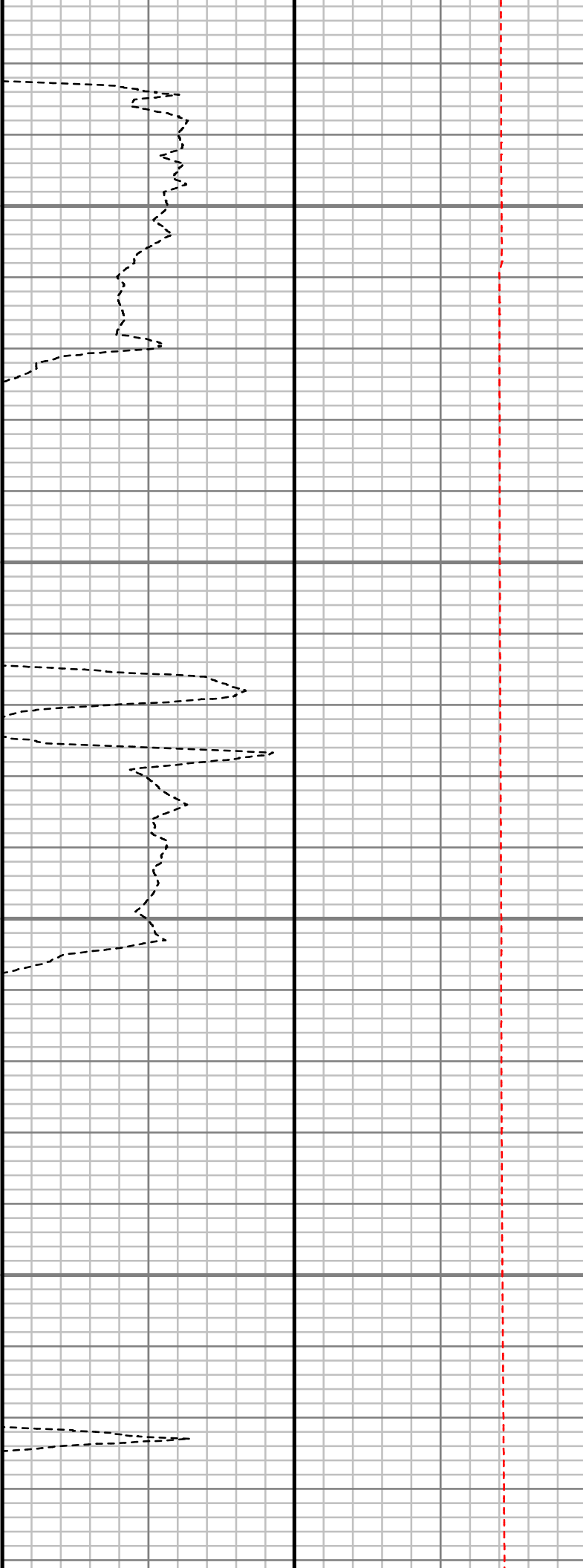
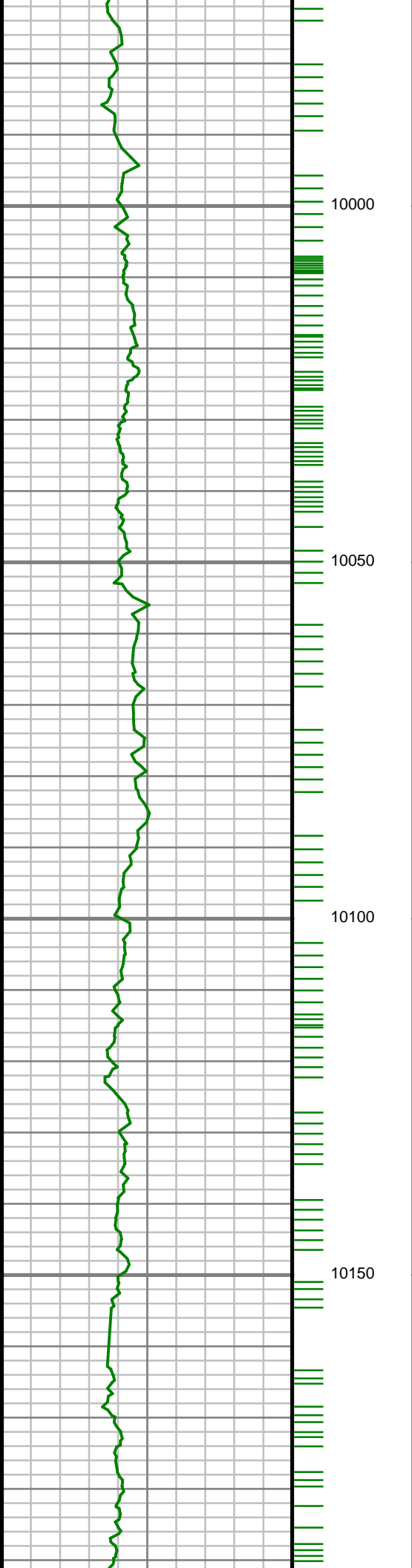
S: 115 MD: 9637.00 ft  
Inc: 87.82 deg Az:  
359.22 deg TVD:  
7368.61 ft

S: 116 MD: 9729.00 ft  
Inc: 91.04 deg Az: 1.65  
deg TVD: 7369.53 ft



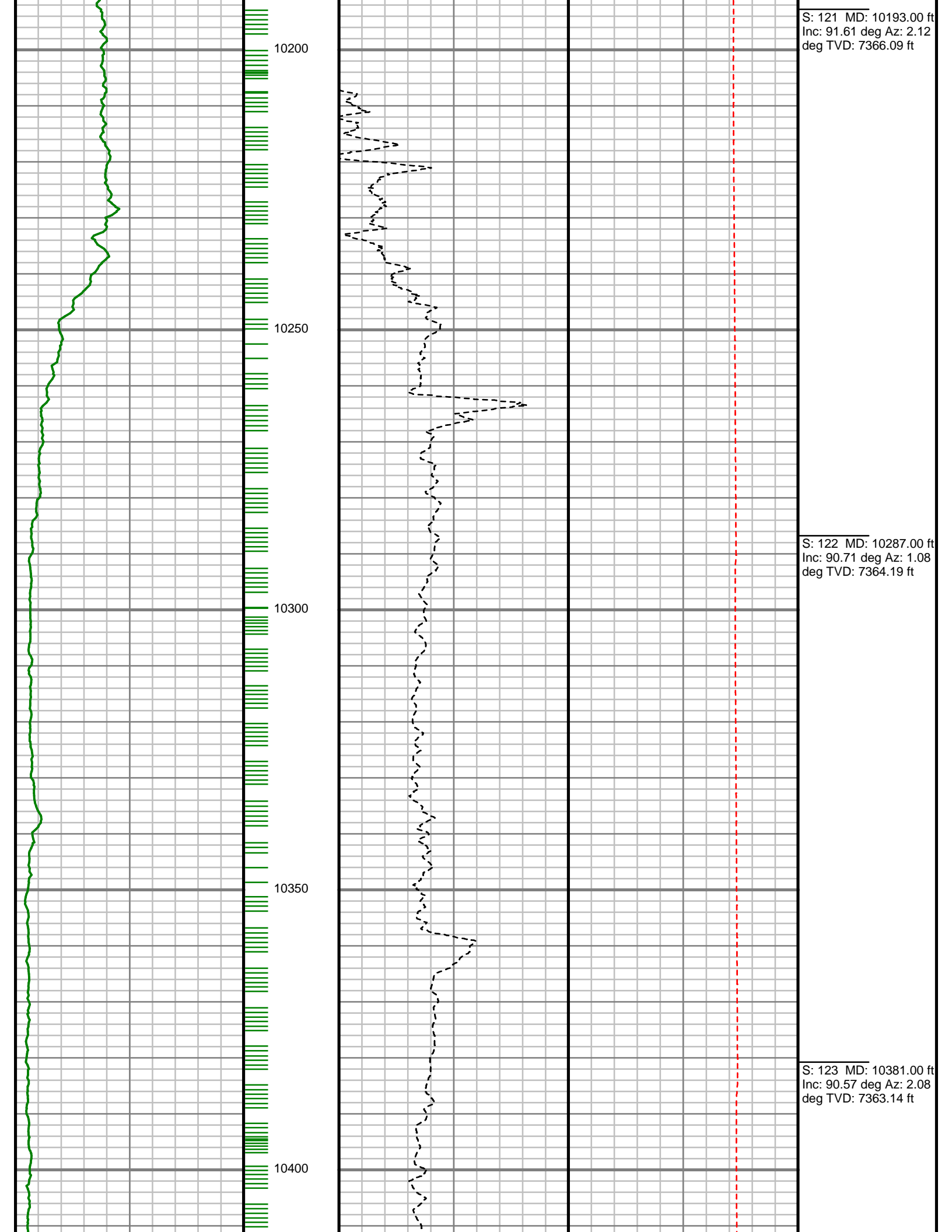
S: 117 MD: 9821.00 ft  
Inc: 91.18 deg Az: 1.79  
deg TVD: 7367.75 ft

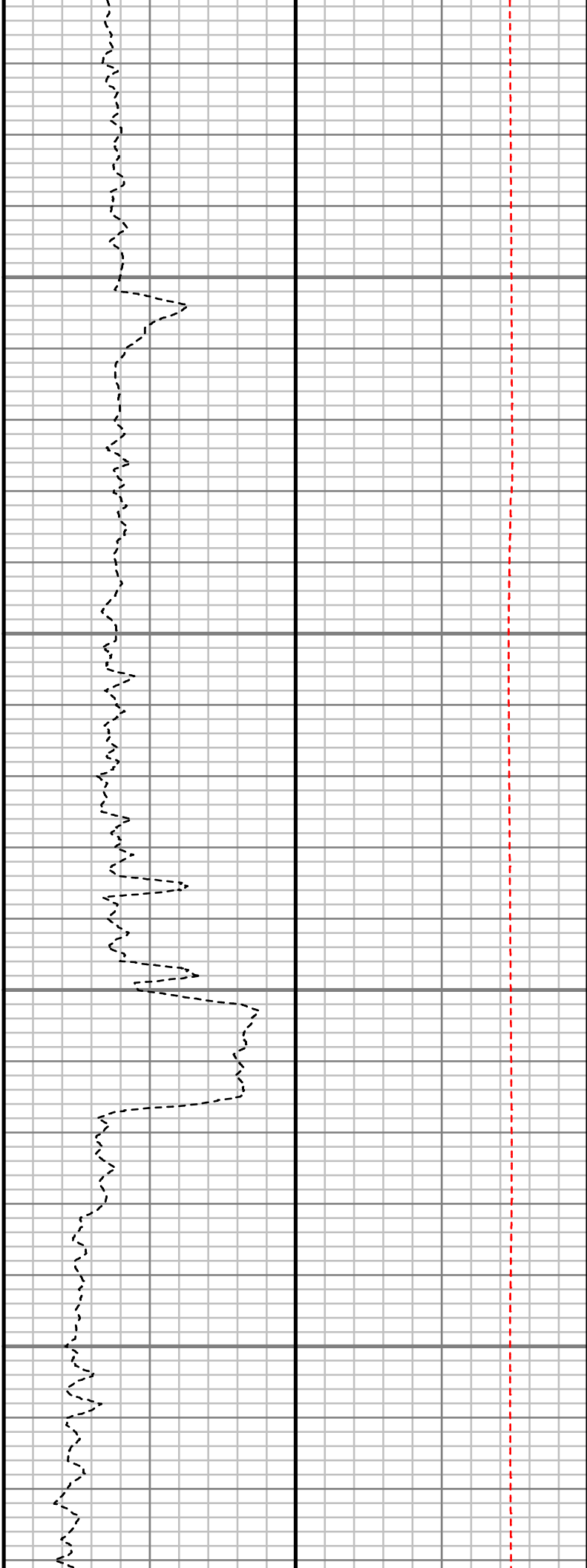
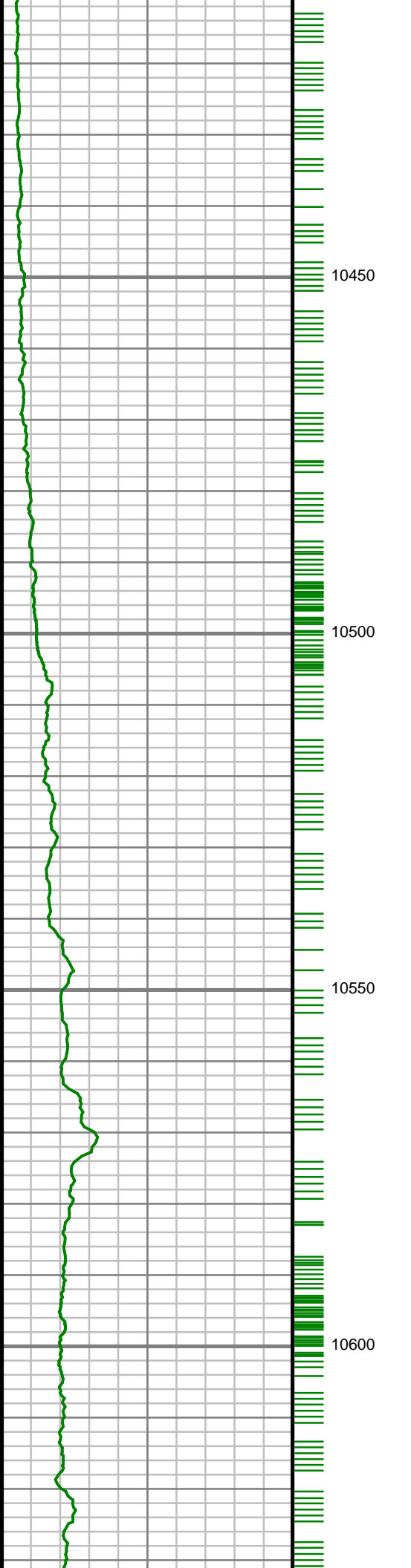
S: 118 MD: 9912.00 ft  
Inc: 88.39 deg Az:  
358.99 deg TVD:  
7368.09 ft



S: 119 MD: 10004.00 ft  
Inc: 89.26 deg Az: 0.41  
deg TVD: 7369.98 ft

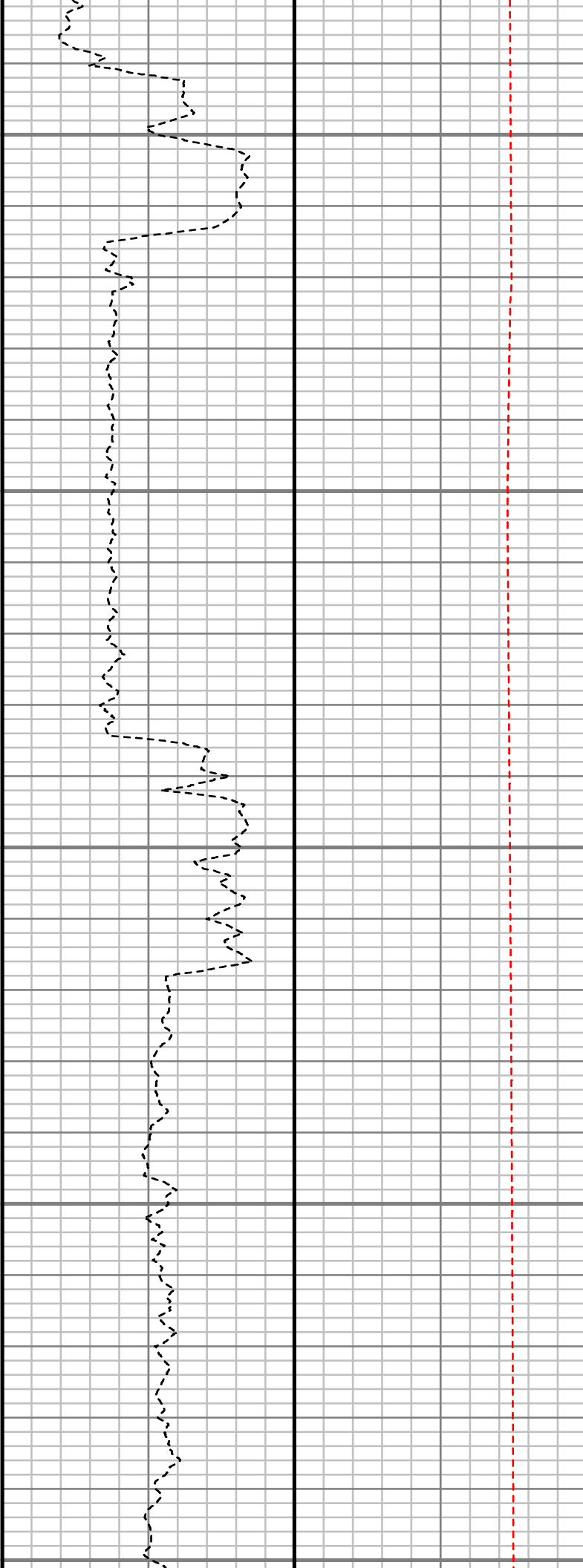
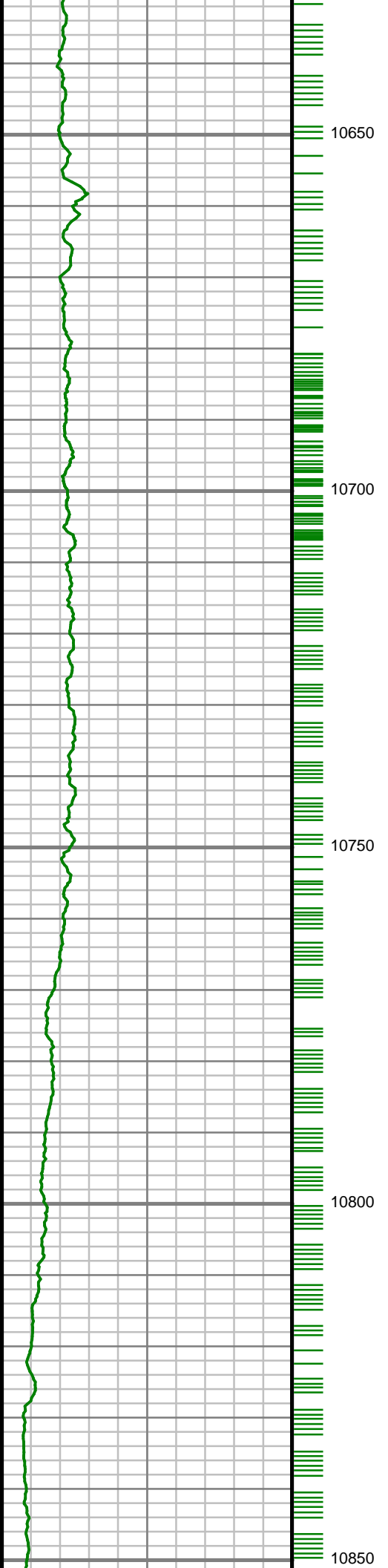
S: 120 MD: 10098.00 ft  
Inc: 91.92 deg Az: 2.74  
deg TVD: 7369.01 ft





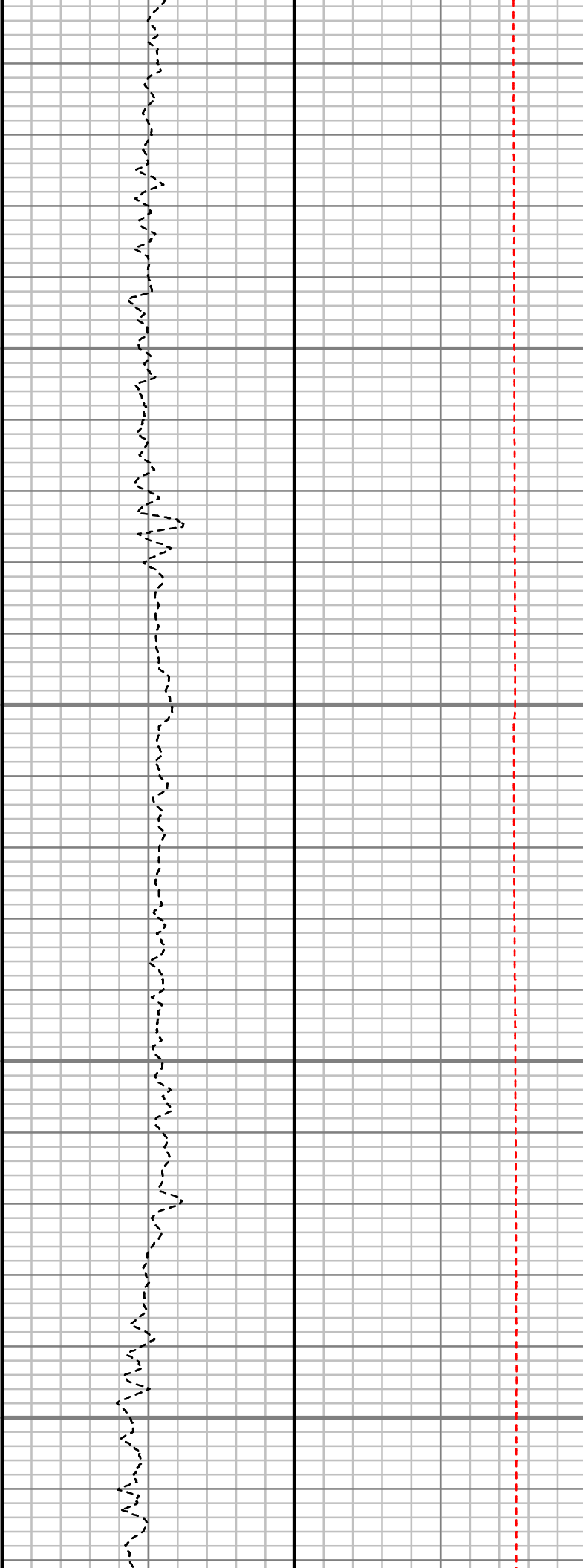
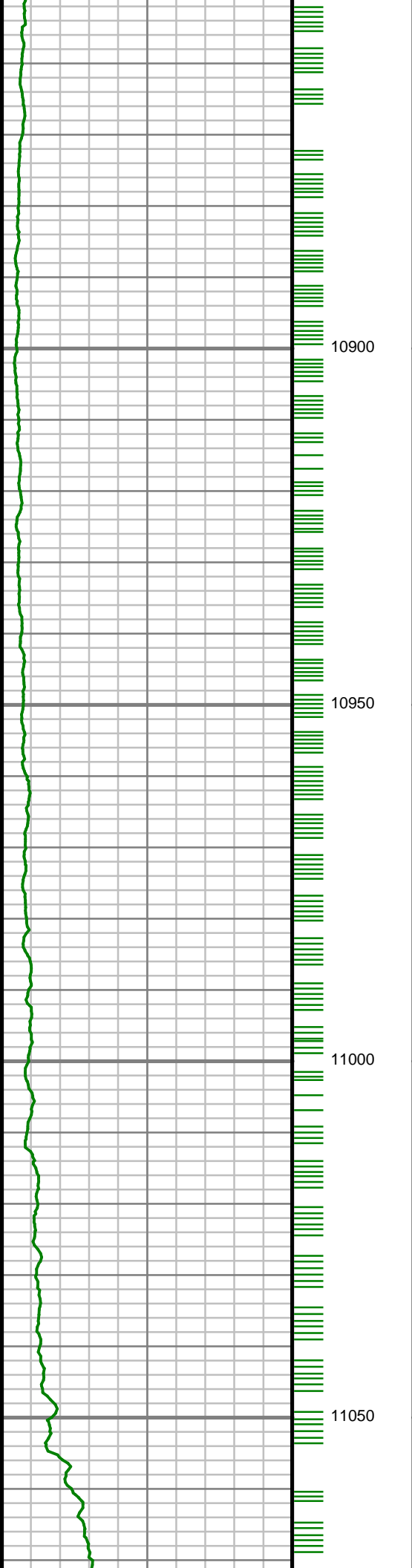
S: 124 MD: 10476.00 ft  
Inc: 91.51 deg Az: 2.17  
deg TVD: 7361.41 ft

S: 125 MD: 10570.00 ft  
Inc: 90.17 deg Az: 1.78  
deg TVD: 7360.04 ft



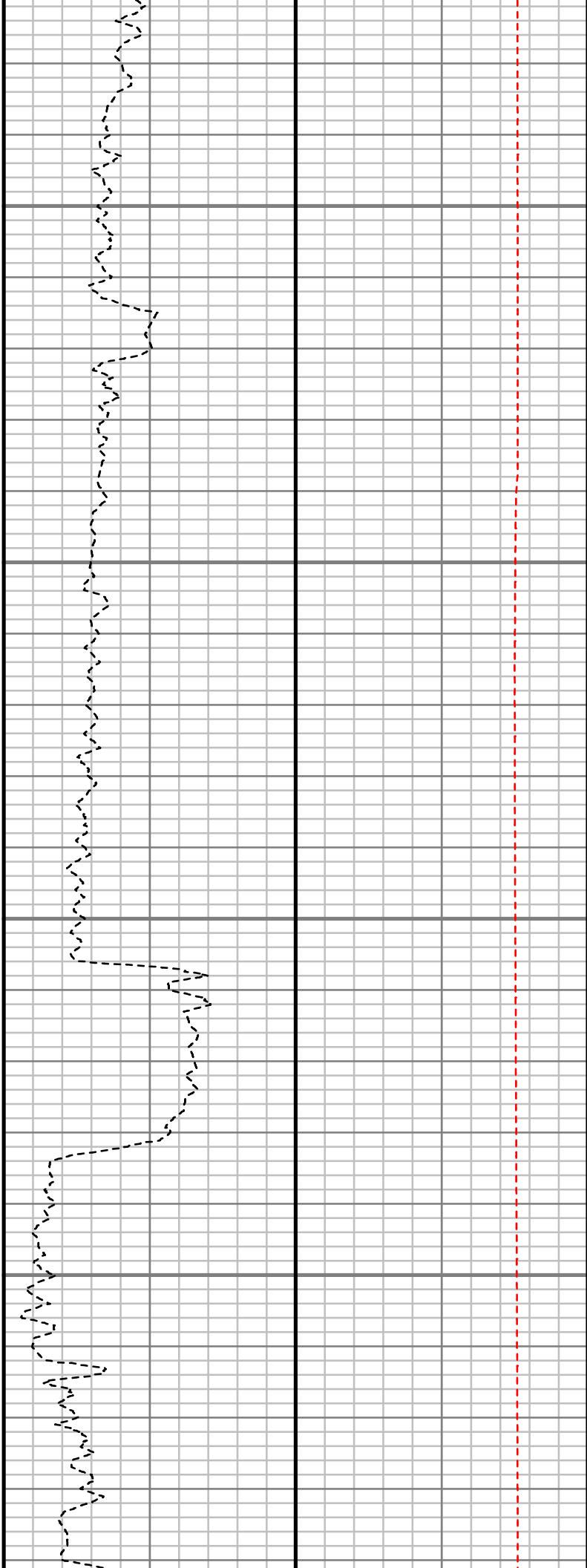
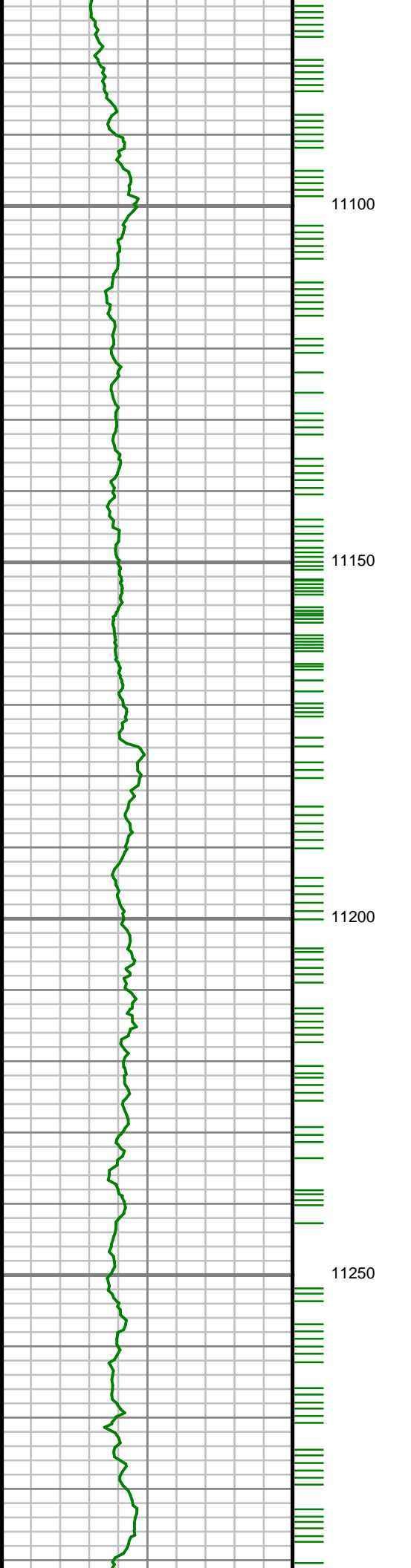
S: 126 MD: 10664.00 ft  
Inc: 91.27 deg Az: 3.34  
deg TVD: 7358.85 ft

S: 127 MD: 10758.00 ft  
Inc: 88.59 deg Az: 0.97  
deg TVD: 7358.97 ft



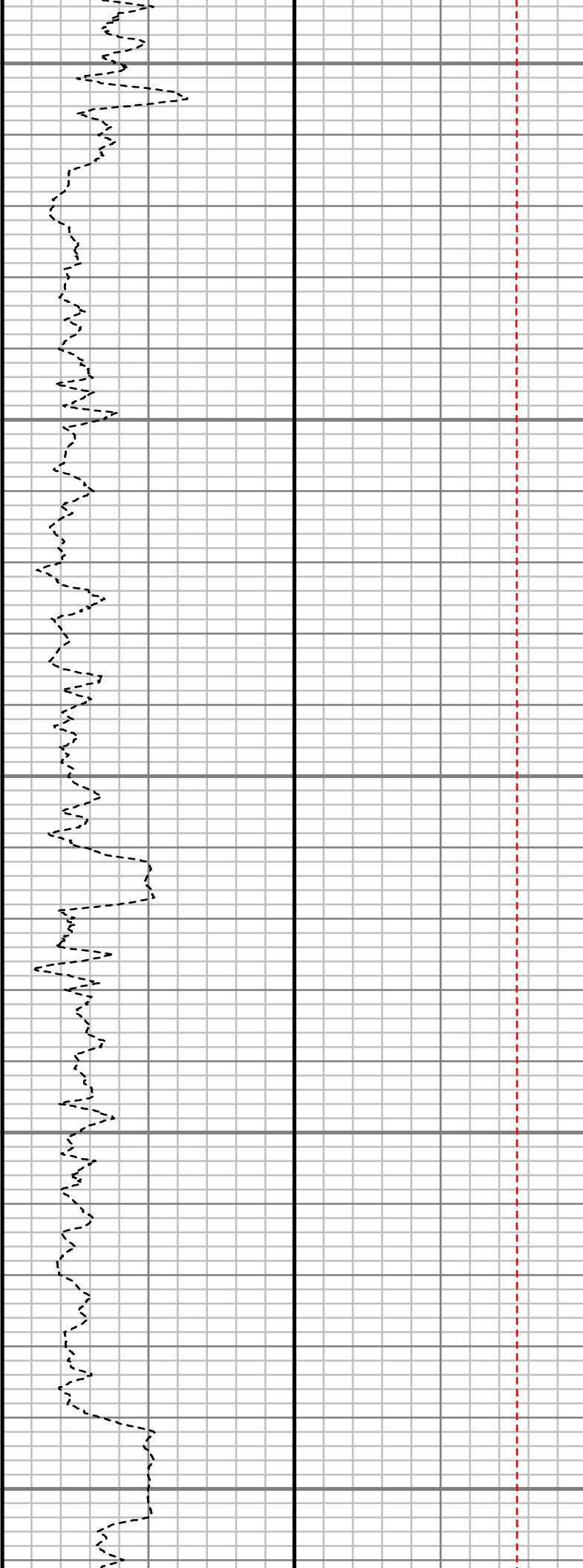
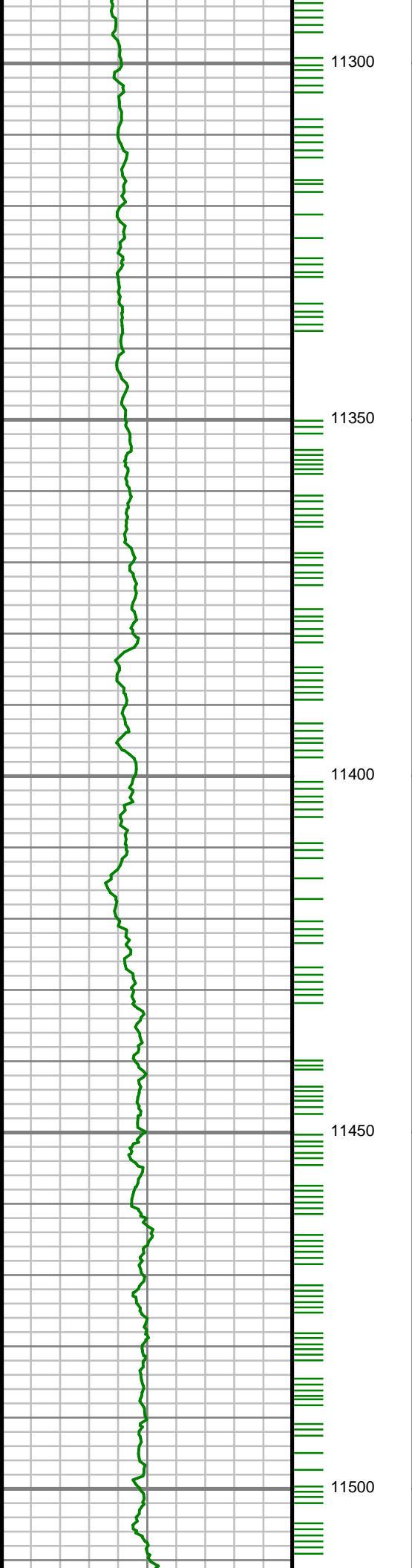
S: 128 MD: 10853.00 ft Inc: 88.72 deg Az: 0.79 deg TVD: 7361.19 ft
S: 129 MD: 10947.00 ft Inc: 88.99 deg Az: 1.07 deg TVD: 7363.06 ft
S: 130 MD: 11041.00 ft Inc: 89.33 deg Az: 0.87 deg TVD: 7364.44 ft





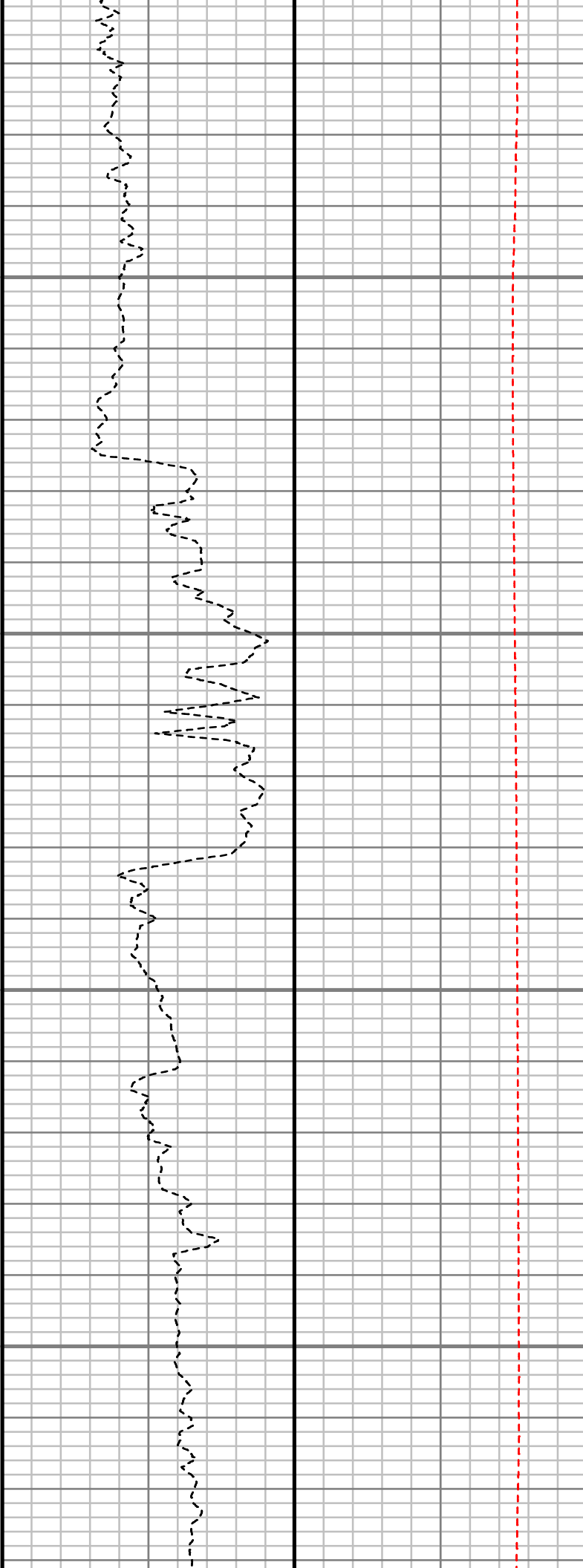
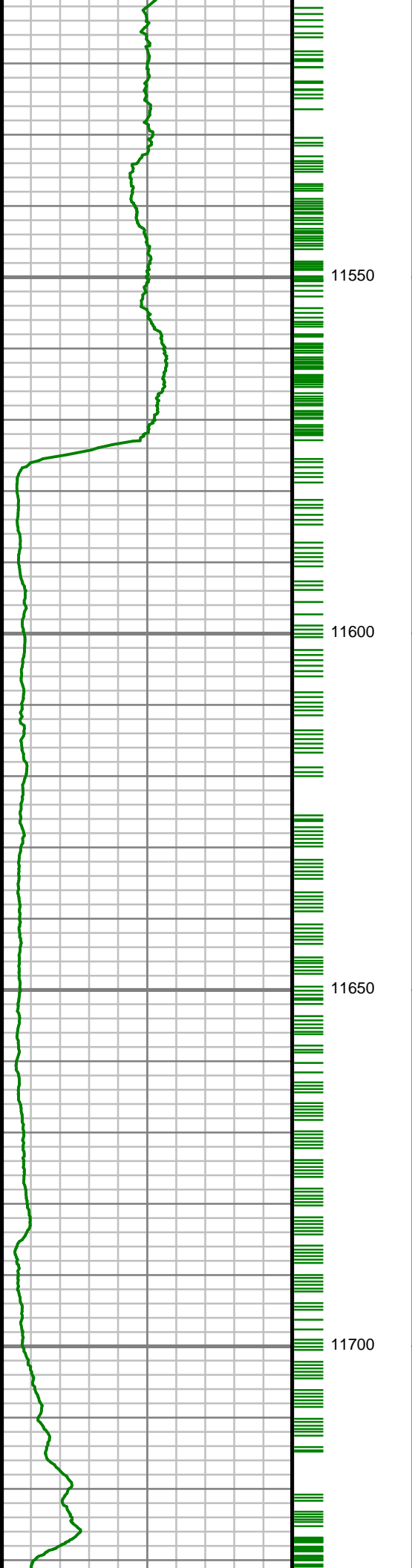
S: 131 MD: 11136.00 ft  
Inc: 87.52 deg Az:  
359.53 deg TVD:  
7367.05 ft

S: 132 MD: 11230.00 ft  
Inc: 89.26 deg Az:  
359.75 deg TVD:  
7369.70 ft

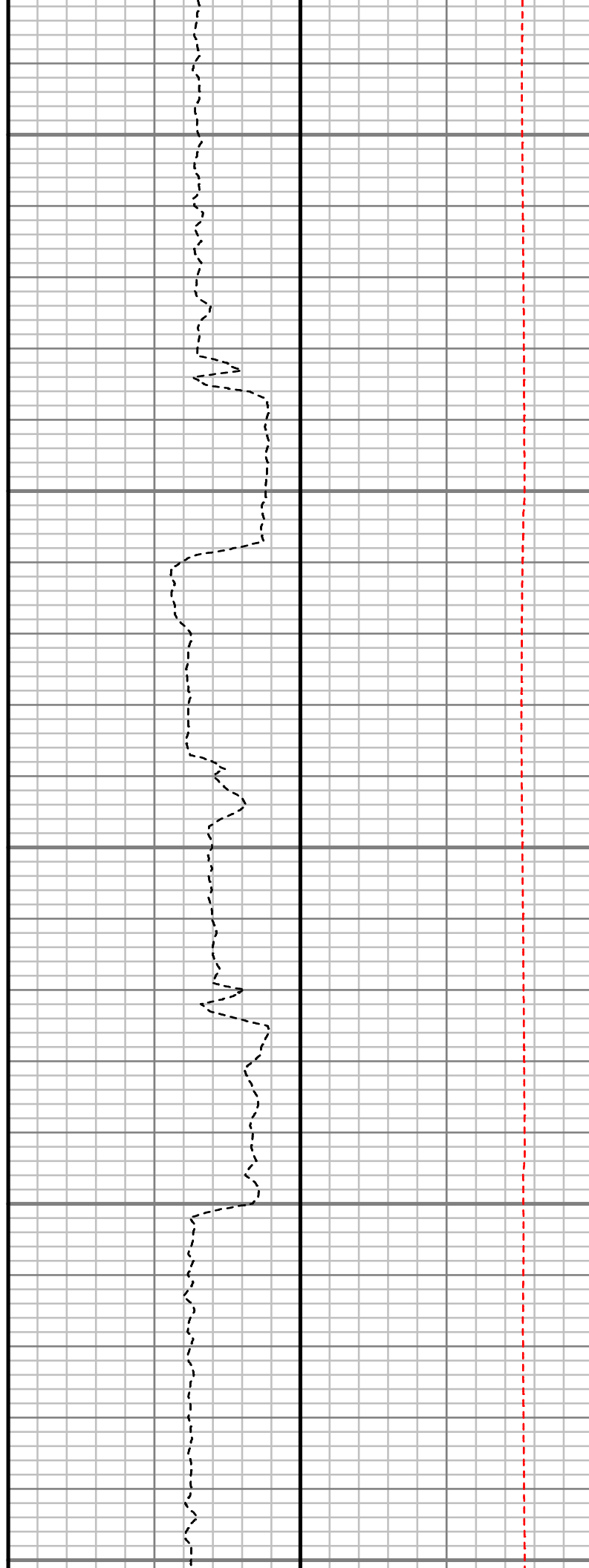
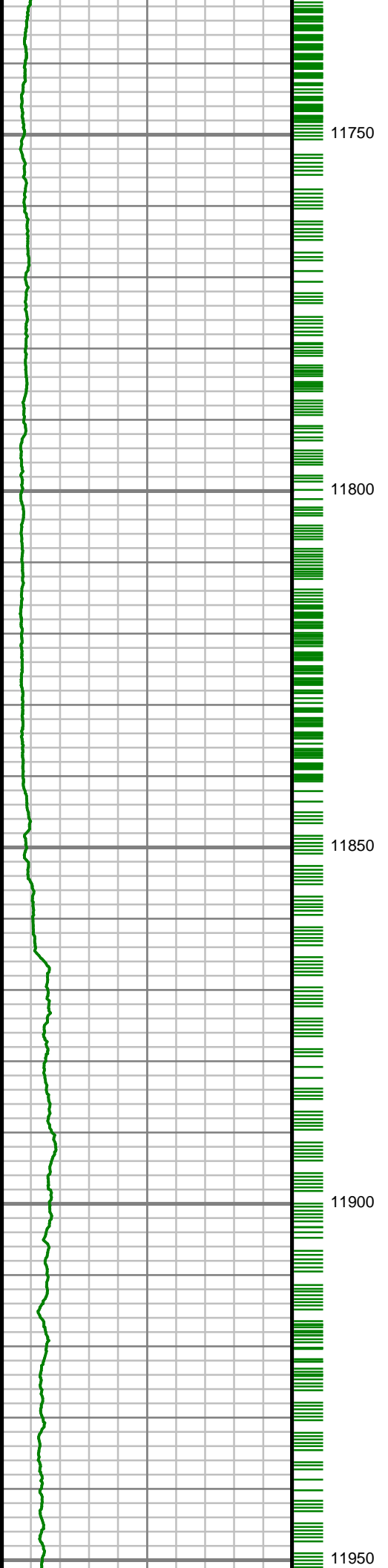


S: 133 MD: 11324.00 ft  
Inc: 89.87 deg Az:  
359.28 deg TVD:  
7370.41 ft

S: 134 MD: 11419.00 ft  
Inc: 90.27 deg Az:  
359.18 deg TVD:  
7370.30 ft

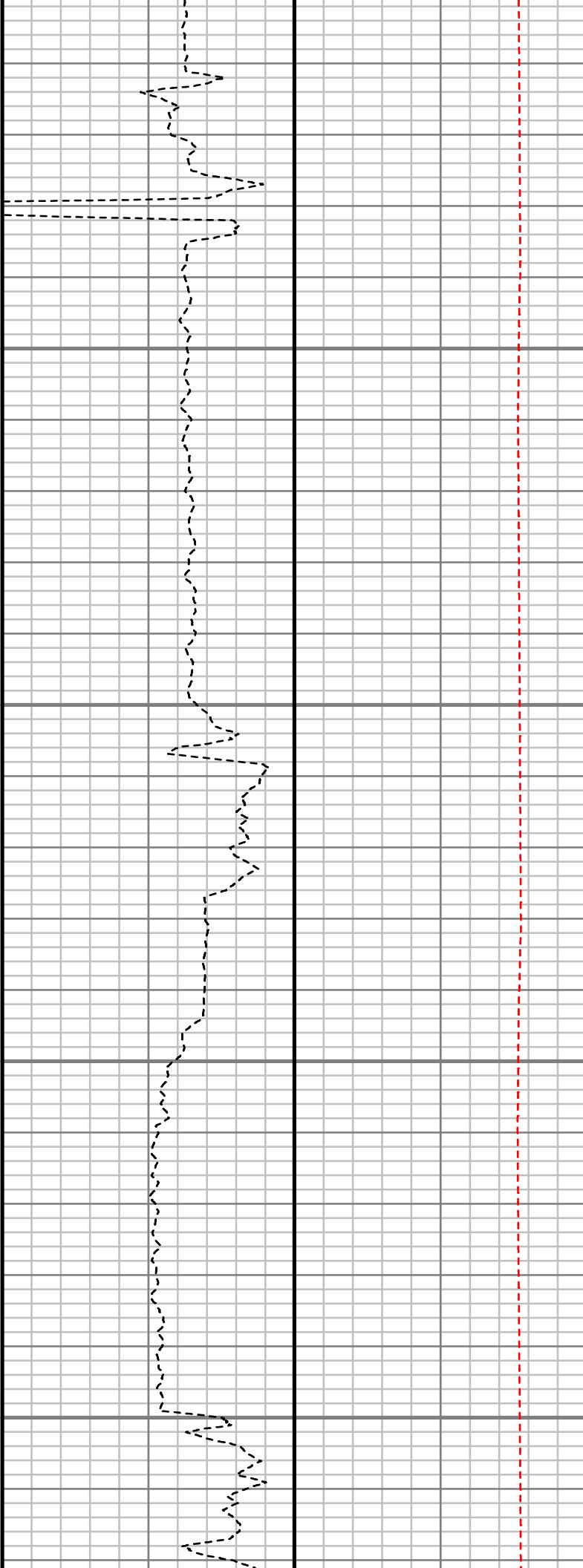
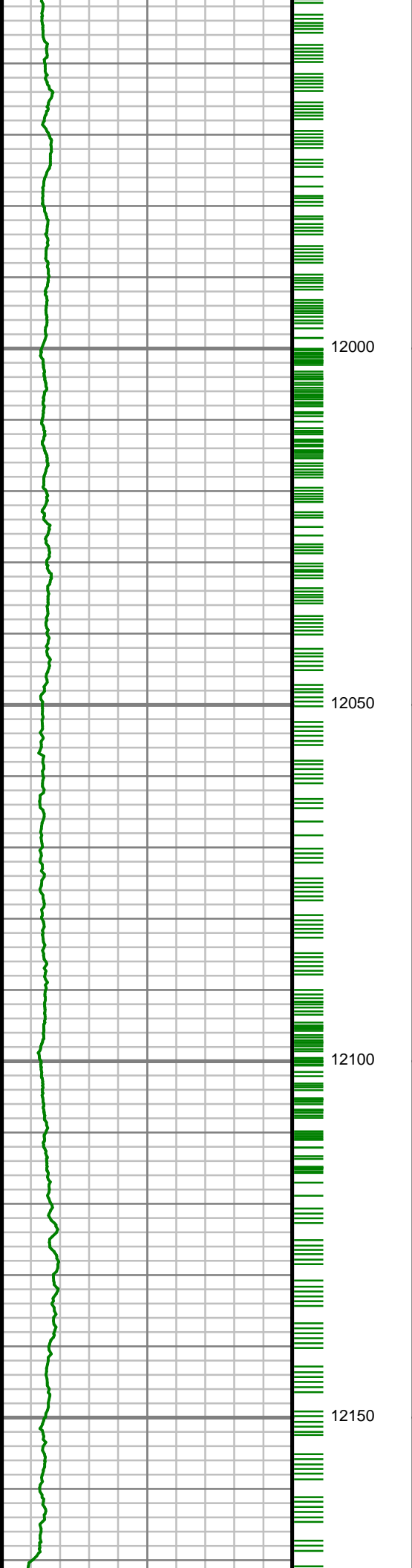


S: 135 MD: 11513.00 ft Inc: 90.20 deg Az: 357.59 deg TVD: 7369.92 ft
S: 136 MD: 11607.00 ft Inc: 90.03 deg Az: 358.11 deg TVD: 7369.72 ft
S: 137 MD: 11701.00 ft Inc: 91.11 deg Az: 359.39 deg TVD: 7368.79 ft



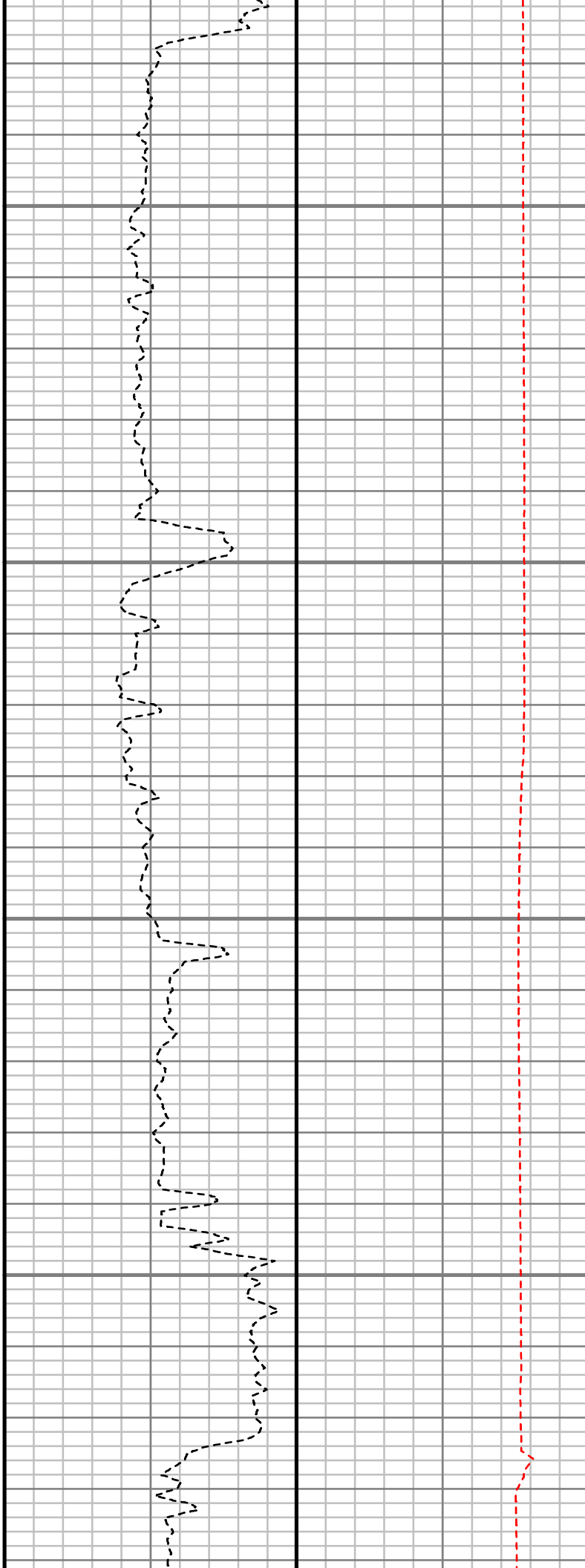
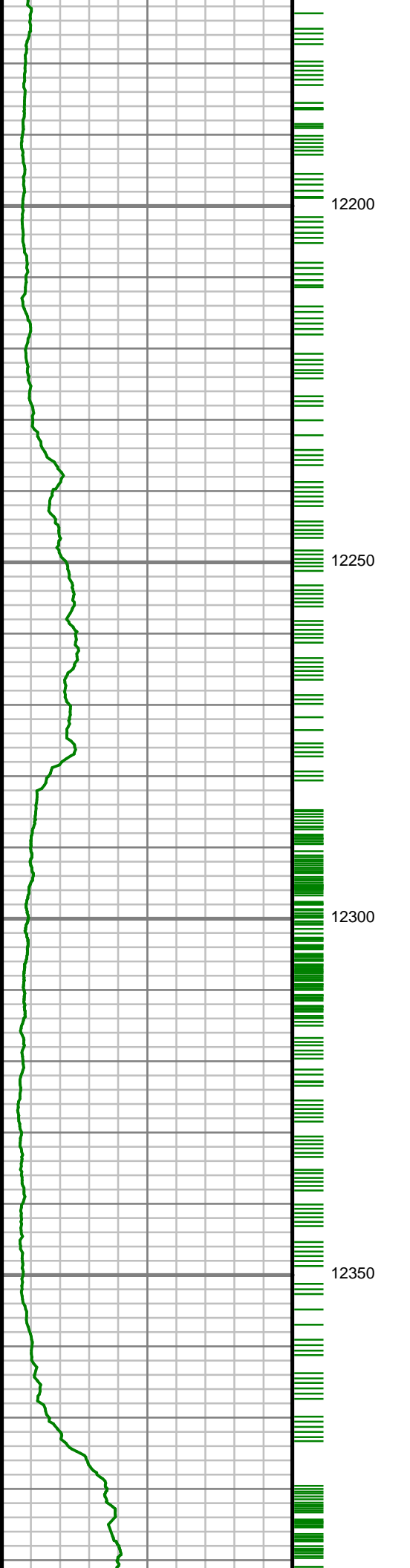
S: 138 MD: 11796.00 ft  
Inc: 90.94 deg Az: 0.87  
deg TVD: 7367.09 ft

S: 139 MD: 11890.00 ft  
Inc: 89.97 deg Az: 2.36  
deg TVD: 7366.34 ft



S: 140 MD: 11984.00 ft  
Inc: 89.66 deg Az: 2.14  
deg TVD: 7366.65 ft

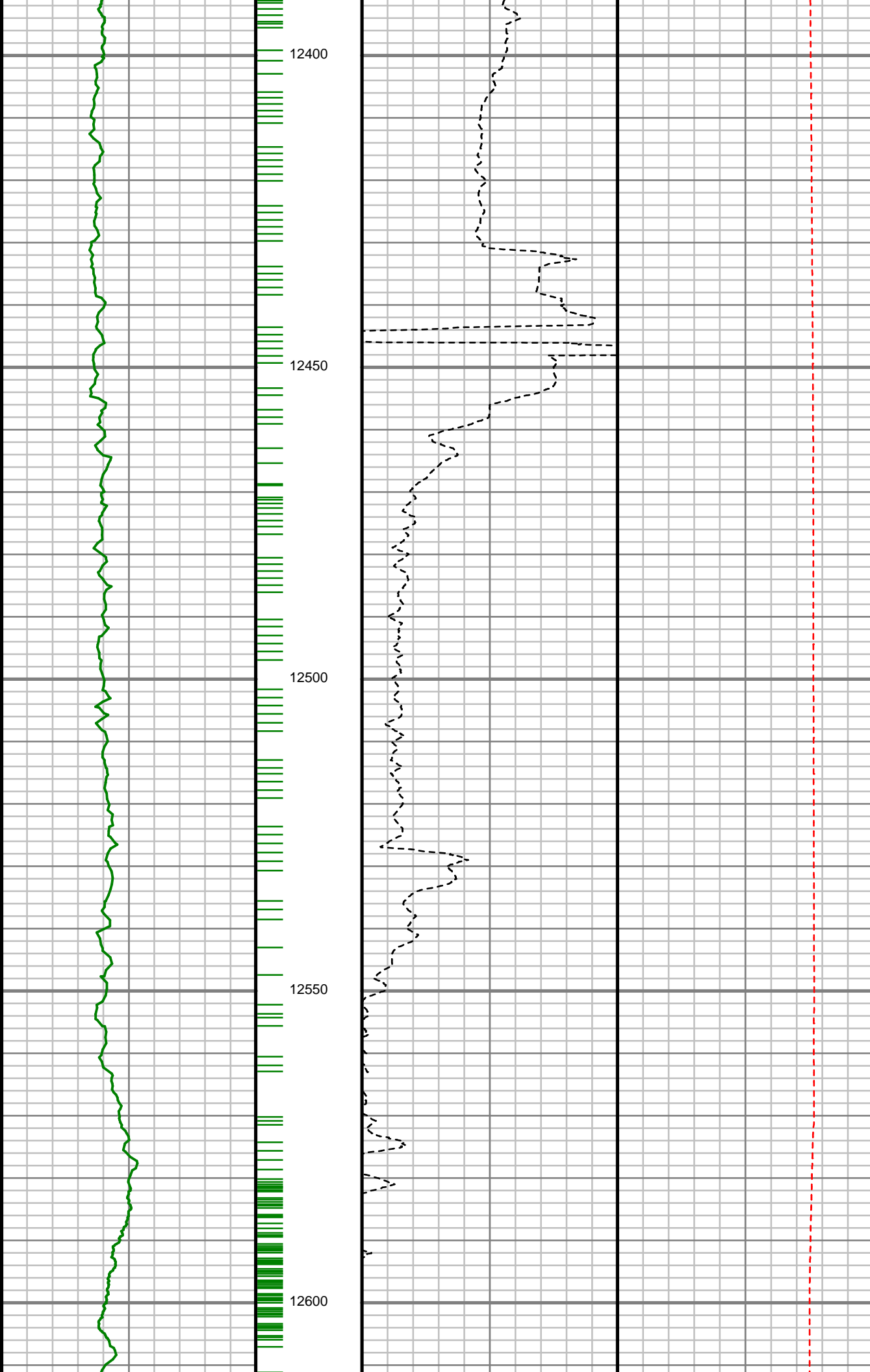
S: 141 MD: 12079.00 ft  
Inc: 89.90 deg Az: 1.88  
deg TVD: 7367.01 ft



S: 142 MD: 12173.00 ft  
Inc: 88.49 deg Az: 1.10  
deg TVD: 7368.33 ft

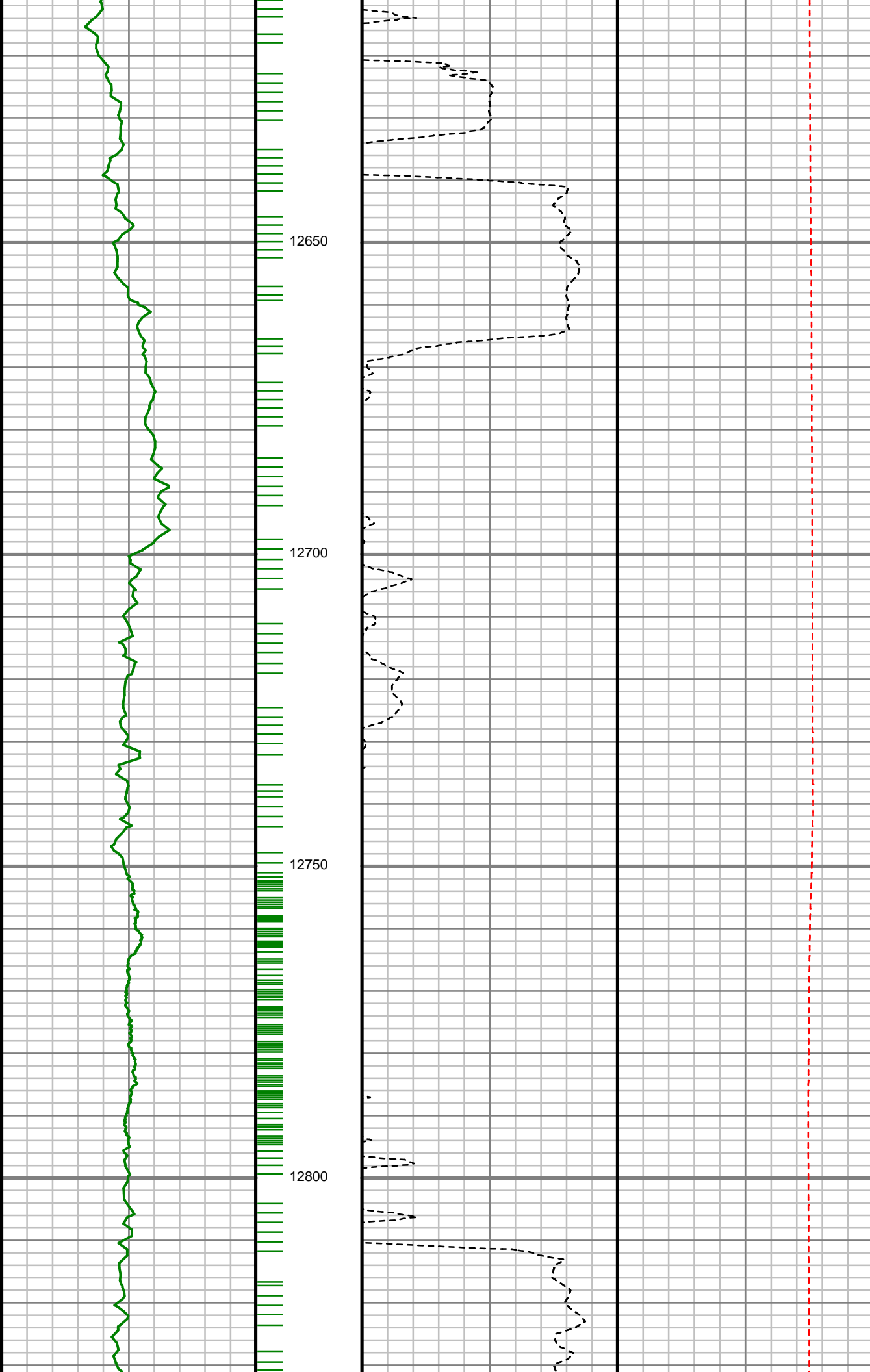
S: 143 MD: 12267.00 ft  
Inc: 90.64 deg Az: 2.29  
deg TVD: 7369.05 ft

S: 144 MD: 12362.00 ft  
Inc: 89.30 deg Az: 2.11  
deg TVD: 7369.10 ft



S: 145 MD: 12457.00 ft  
Inc: 88.99 deg Az: 1.05  
deg TVD: 7370.52 ft

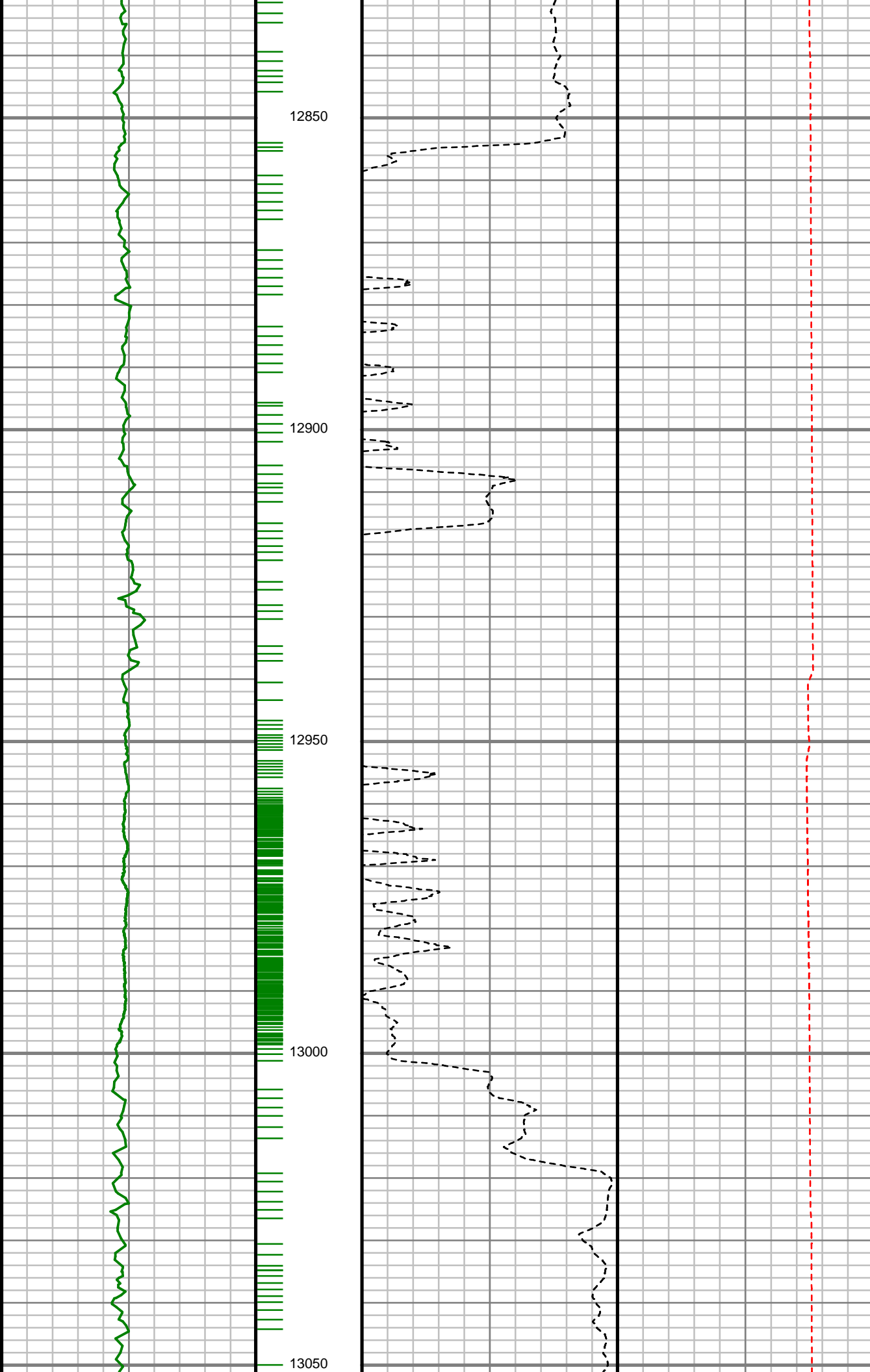
S: 146 MD: 12552.00 ft  
Inc: 88.56 deg Az: 1.10  
deg TVD: 7372.55 ft



S: 147 MD: 12646.00 ft  
Inc: 89.13 deg Az: 1.51  
deg TVD: 7374.45 ft

S: 148 MD: 12741.00 ft  
Inc: 88.79 deg Az: 0.86  
deg TVD: 7376.18 ft

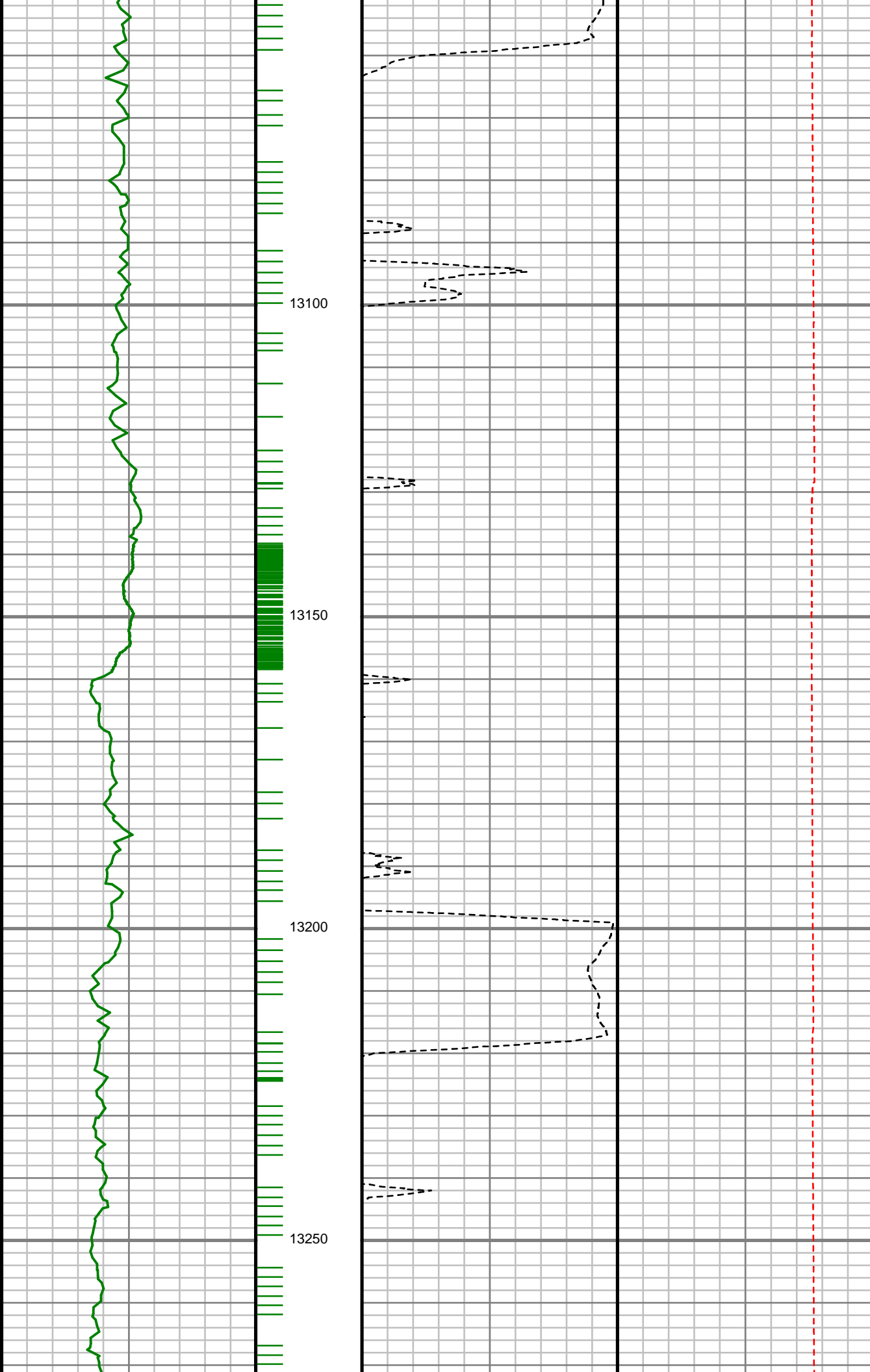




S: 149 MD: 12835.00 ft  
Inc: 90.34 deg Az: 0.38  
deg TVD: 7376.90 ft

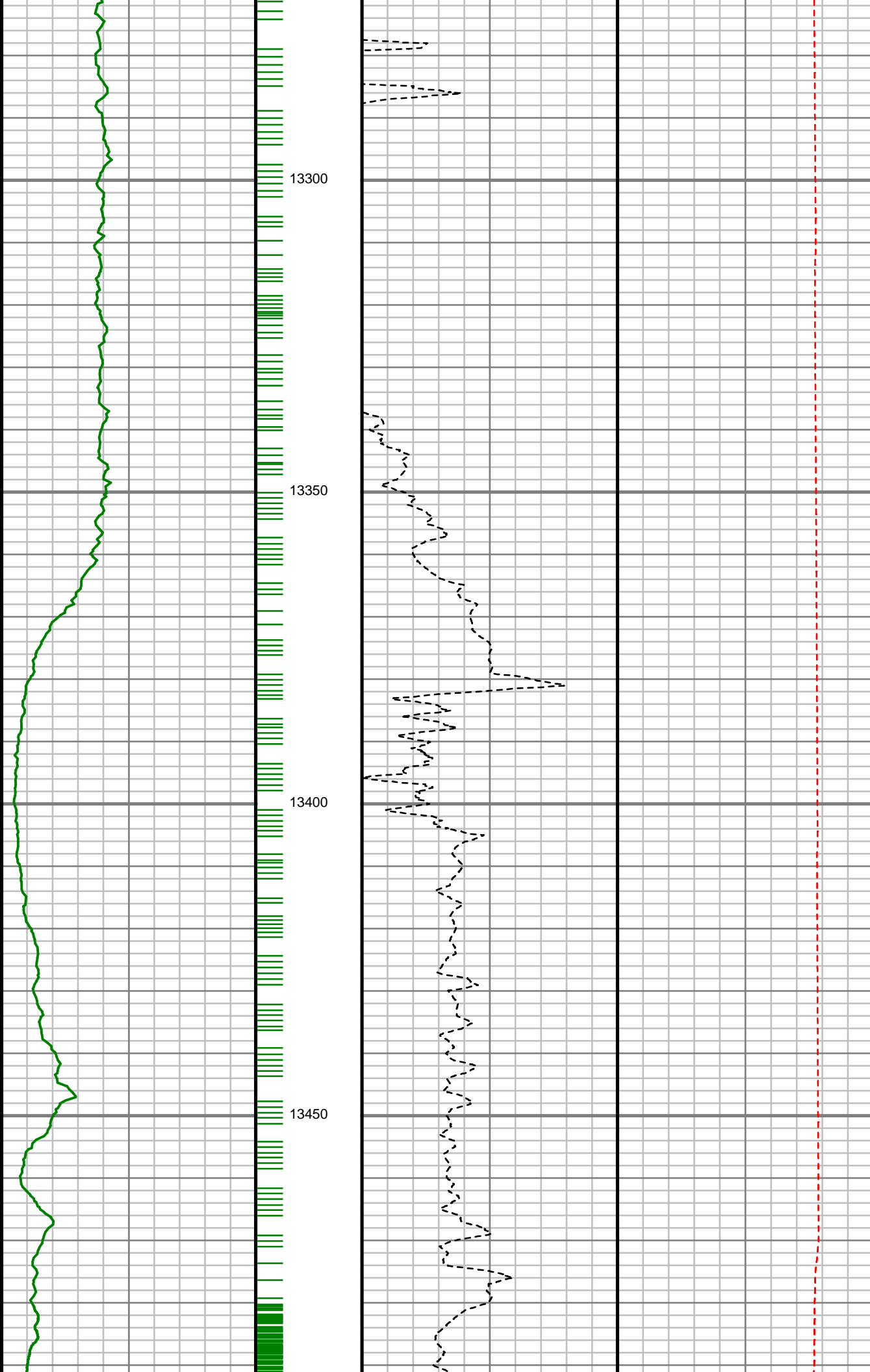
S: 150 MD: 12929.00 ft  
Inc: 89.97 deg Az: 0.21  
deg TVD: 7376.65 ft

S: 151 MD: 13024.00 ft  
Inc: 90.17 deg Az:  
359.97 deg TVD:  
7376.54 ft



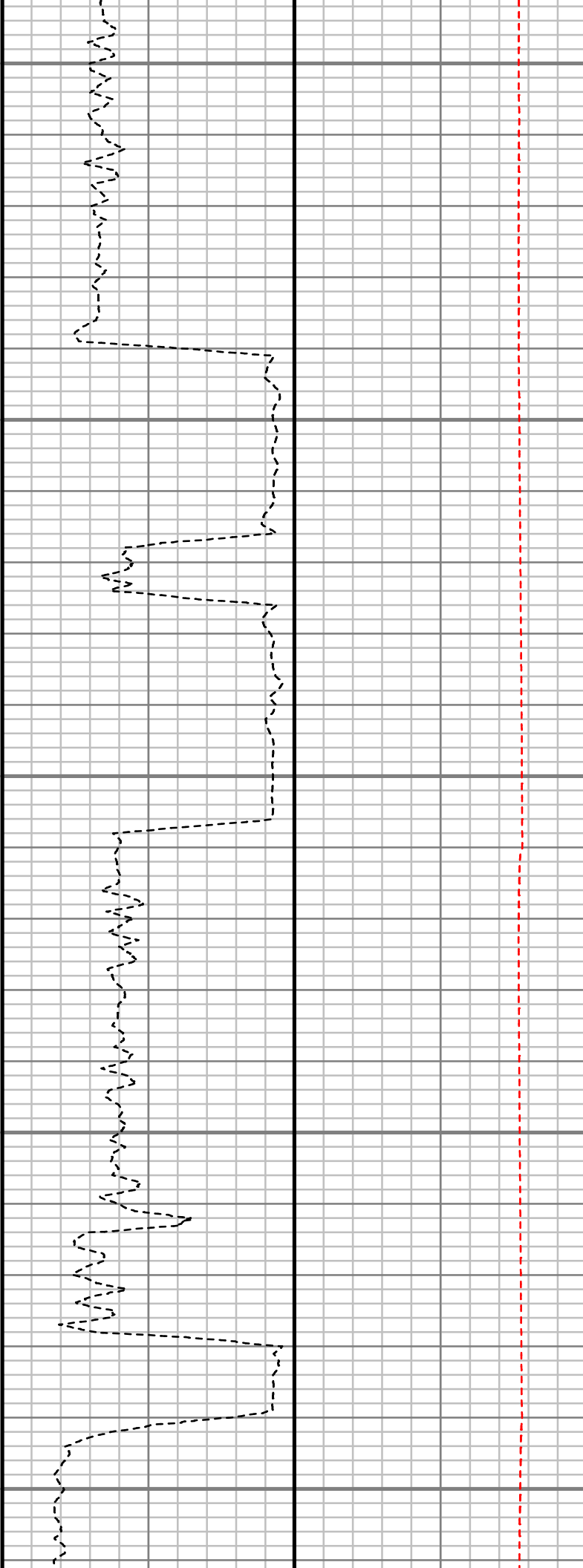
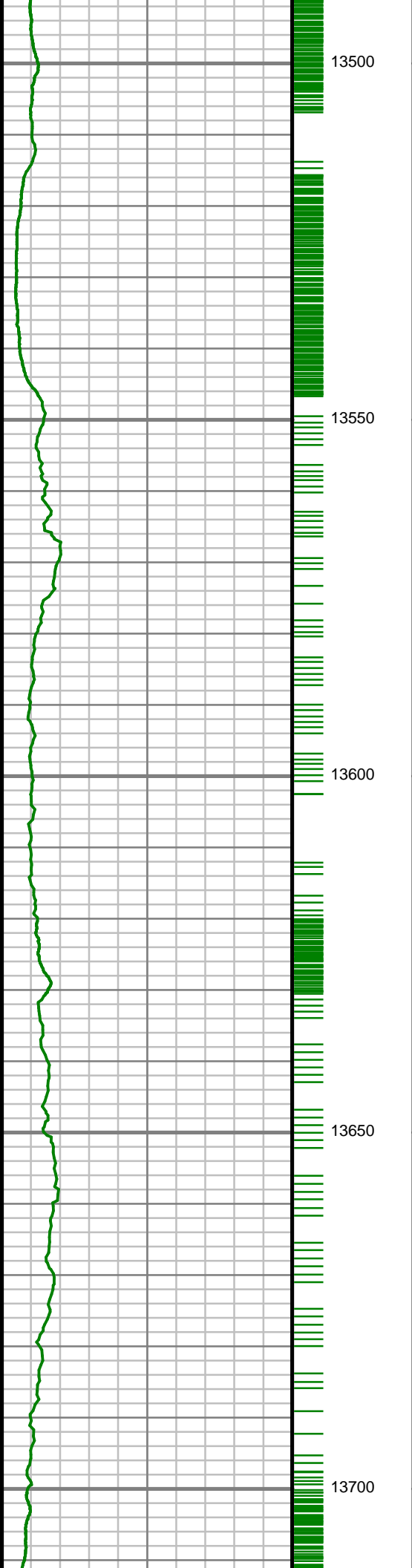
S: 152 MD: 13118.00 ft  
Inc: 90.94 deg Az: 0.66  
deg TVD: 7375.63 ft

S: 153 MD: 13212.00 ft  
Inc: 91.61 deg Az: 0.35  
deg TVD: 7373.54 ft



S: 154 MD: 13307.00 ft  
Inc: 91.75 deg Az: 0.43  
deg TVD: 7370.76 ft

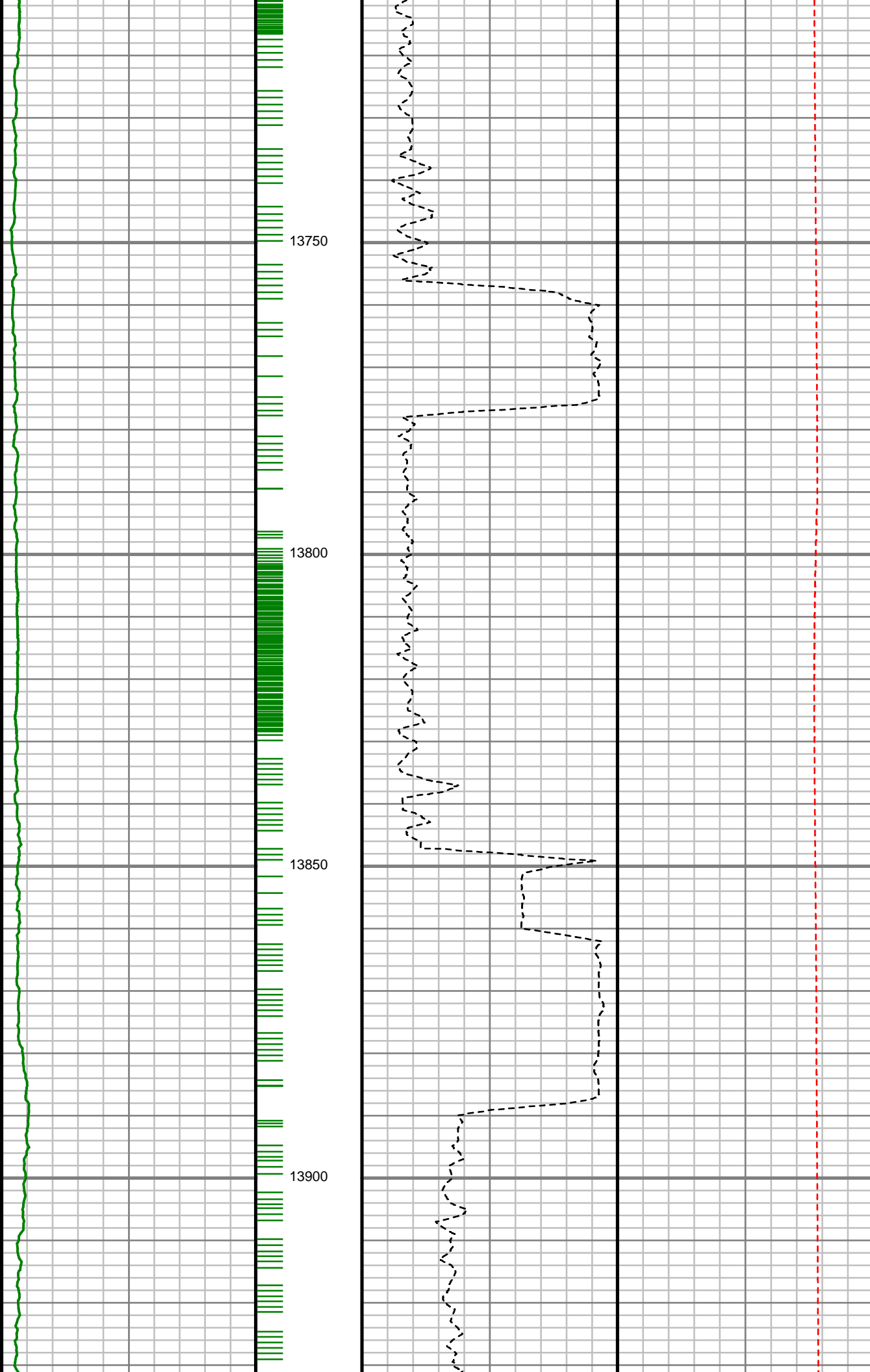
S: 155 MD: 13401.00 ft  
Inc: 91.48 deg Az: 359.84 deg  
TVD: 7368.11 ft



S: 156 MD: 13496.00 ft  
Inc: 92.45 deg Az:  
359.91 deg TVD:  
7364.86 ft

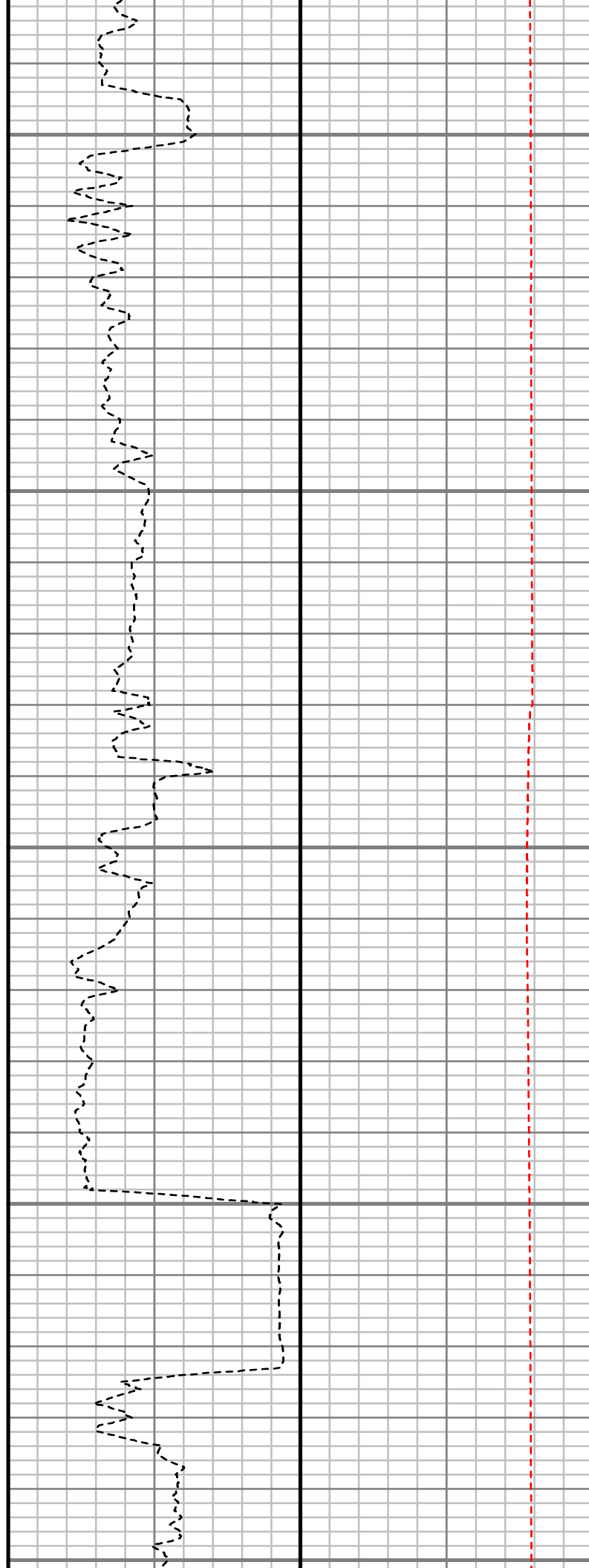
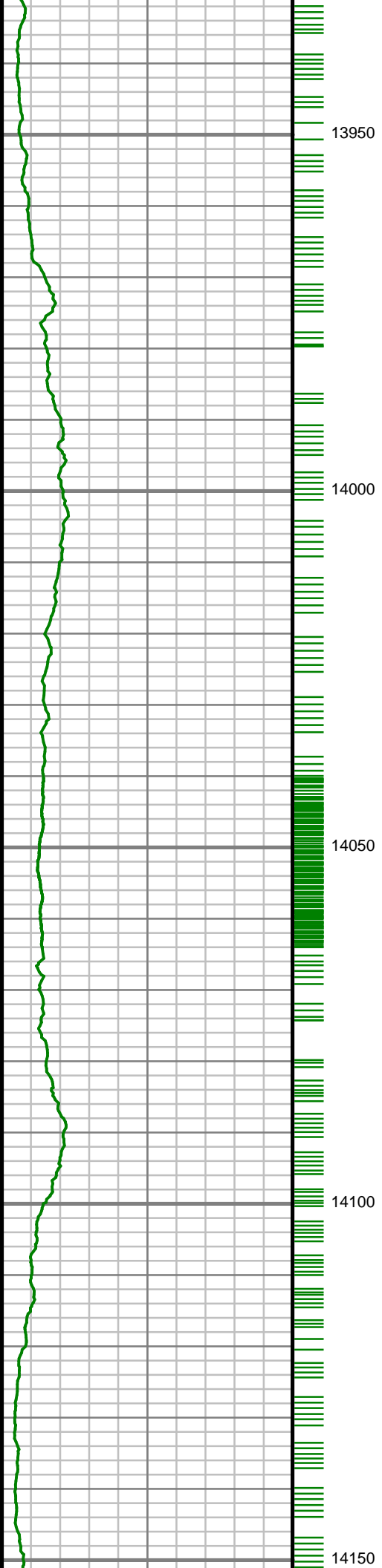
S: 157 MD: 13590.00 ft  
Inc: 88.96 deg Az:  
358.99 deg TVD:  
7363.70 ft

S: 158 MD: 13684.00 ft  
Inc: 89.87 deg Az:  
358.78 deg TVD:  
7364.66 ft



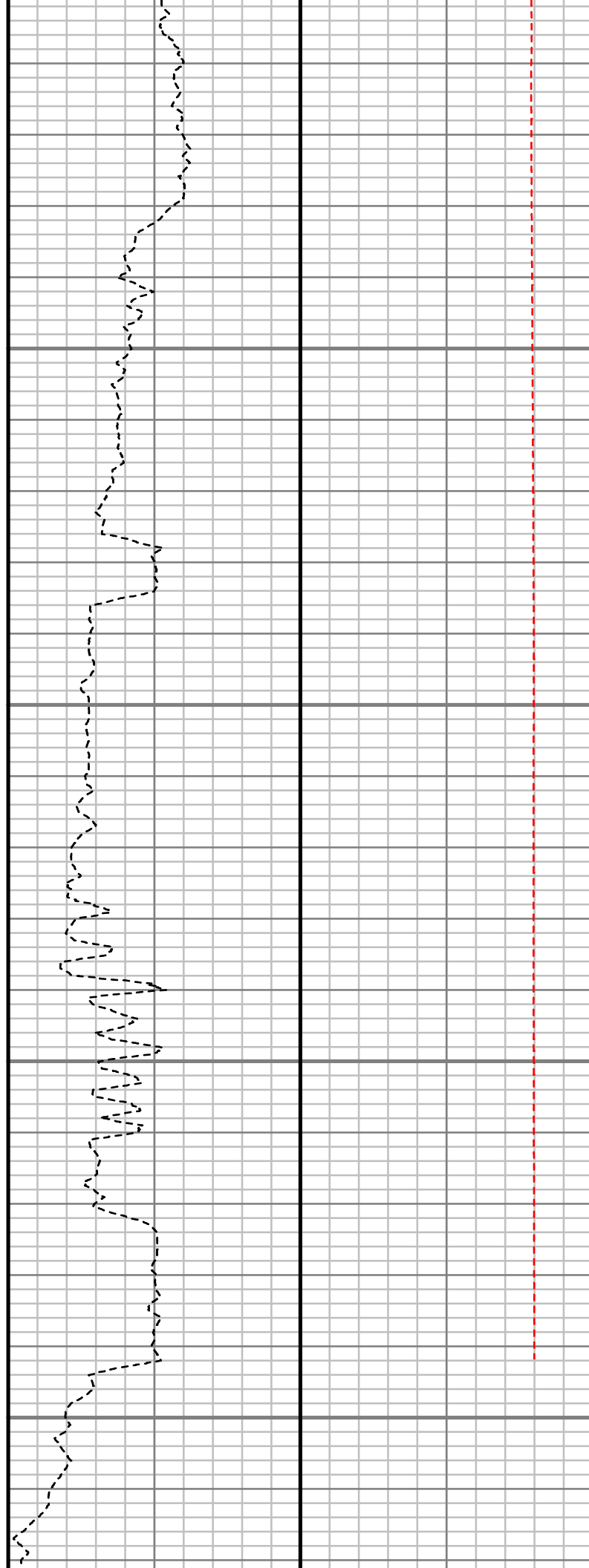
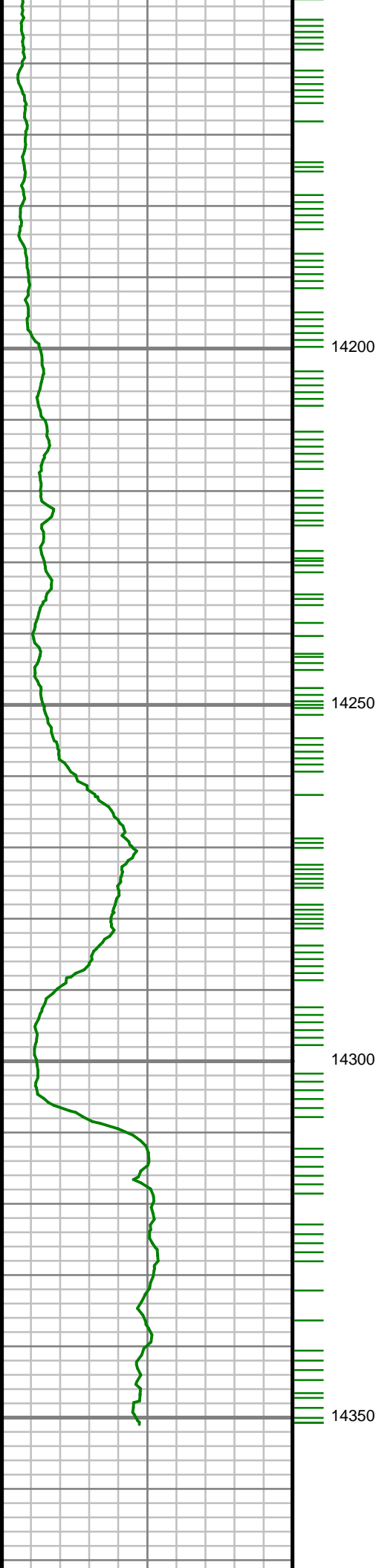
S: 159 MD: 13783.00 ft  
Inc: 89.63 deg Az:  
358.88 deg TVD:  
7365.10 ft

S: 160 MD: 13873.00 ft  
Inc: 88.66 deg Az:  
359.07 deg TVD:  
7366.44 ft



S: 161 MD: 13967.00 ft  
Inc: 89.02 deg Az:  
359.42 deg TVD:  
7368.34 ft

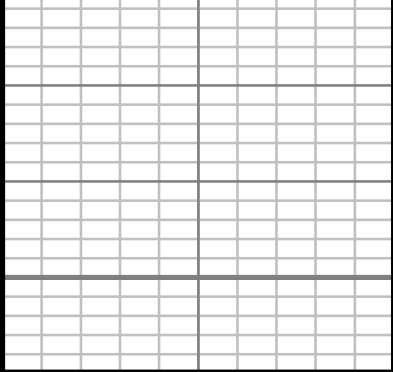
S: 162 MD: 14061.00 ft  
Inc: 88.15 deg Az:  
357.43 deg TVD:  
7370.66 ft



S: 163 MD: 14156.00 ft  
Inc: 88.92 deg Az:  
358.57 deg TVD:  
7373.08 ft

S: 164 MD: 14250.00 ft  
Inc: 89.63 deg Az:  
358.04 deg TVD:  
7374.27 ft

S: 165 MD: 14339.00 ft  
Inc: 89.87 deg Az:  
358.42 deg TVD:  
7374.66 ft



Gamma Ray (GR)		
0	Unit = aapi	150

14400

MEASURED DEPTH  
1:240 (ft)



Rate of Penetration (ROP)	Tool Temperature (T-TEMP)	Comments
400      Unit = ft/hr      0	0      Unit = °F      300	



# Survey Report

<b>Customer Name:</b>	ANADARKO PETROLEUM CORP.						
<b>Site Name:</b>	PARAGON 16-6HZ						
<b>Well Name:</b>	PARAGON 40C-31HZ						
<b>Survey:</b>	PARAGON 40C-31HZ						
<b>Survey Date:</b>	1/1/2014						
<b>Magnetic Declination:</b>	8.24 deg						
<b>North Reference:</b>	True North						
<b>Calculation Method:</b>	Minimum Curvature						
<b>Section (VS) Ref:</b>	0.00N (ft), 0.00E (ft), 0.00Azim (deg)						
<b>MD</b> ft	<b>Inc</b> deg	<b>Azim</b> deg	<b>TVD</b> ft	<b>VS</b> ft	<b>+N/-S</b> ft	<b>+E/-W</b> ft	<b>DLS</b> 7100ft
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid
25.00	0.00	0.00	25.00	0.00	0.00	0.00	0.00
125.00	0.54	207.73	125.00	-0.42	-0.42	-0.22	0.54
225.00	0.45	208.67	224.99	-1.18	-1.18	-0.63	0.09
325.00	0.49	224.89	324.99	-1.83	-1.83	-1.12	0.14
425.00	0.27	235.00	424.99	-2.26	-2.26	-1.61	0.23
525.00	0.06	199.48	524.99	-2.45	-2.45	-1.82	0.22
625.00	0.14	200.72	624.99	-2.61	-2.61	-1.88	0.08
725.00	0.12	59.57	724.99	-2.67	-2.67	-1.84	0.25

<b>MD</b> ft	<b>Inc</b> deg	<b>Azim</b> deg	<b>TVD</b> ft	<b>VS</b> ft	<b>+N/-S</b> ft	<b>+E/-W</b> ft	<b>DLS</b> 7100ft
825.00	0.11	20.15	824.99	-2.53	-2.53	-1.71	0.08
925.00	0.17	206.96	924.99	-2.57	-2.57	-1.75	0.28
1025.00	0.21	186.65	1024.99	-2.89	-2.89	-1.84	0.08
1178.00	0.29	35.38	1177.99	-2.85	-2.85	-1.65	0.32
1270.00	2.27	219.27	1269.97	-4.08	-4.08	-2.67	2.78
1362.00	4.48	208.78	1361.80	-8.63	-8.63	-5.55	2.48
1453.00	6.01	207.25	1452.42	-15.99	-15.99	-9.44	1.70
1544.00	7.96	193.13	1542.74	-26.36	-26.36	-13.06	2.84
1657.00	10.45	177.13	1654.30	-44.23	-44.23	-14.32	3.14
1749.00	12.86	162.08	1744.41	-62.31	-62.31	-10.75	4.19
1840.00	13.38	157.70	1833.04	-81.69	-81.69	-3.64	1.24
1932.00	13.42	153.27	1922.54	-101.08	-101.08	5.20	1.12
2023.00	12.87	157.31	2011.15	-119.86	-119.86	13.86	1.18
2115.00	11.69	166.36	2101.05	-138.38	-138.38	20.02	2.45
2206.00	12.76	170.38	2189.99	-157.25	-157.25	23.87	1.49
2297.00	12.58	170.52	2278.78	-176.93	-176.93	27.18	0.20
2389.00	11.67	171.27	2368.72	-196.00	-196.00	30.24	1.01
2481.00	11.19	168.25	2458.90	-213.94	-213.94	33.47	0.83
2573.00	11.50	174.68	2549.10	-231.82	-231.82	36.14	1.42
2664.00	13.65	172.24	2637.92	-251.50	-251.50	38.44	2.43

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
2756.00	13.12	175.14	2727.42	-272.66	-272.66	40.79	0.93
2848.00	12.36	168.09	2817.16	-292.70	-292.70	43.70	1.88
2939.00	11.66	163.42	2906.17	-311.04	-311.04	48.34	1.32
3031.00	10.21	172.79	2996.50	-328.03	-328.03	52.01	2.49
3122.00	6.93	177.09	3086.48	-341.52	-341.52	53.30	3.67
3214.00	5.46	152.74	3177.95	-350.95	-350.95	55.59	3.24
3306.00	3.25	132.46	3269.69	-356.60	-356.60	59.52	2.89
3397.00	0.29	64.00	3360.64	-358.24	-358.24	61.62	3.47
3489.00	0.99	350.90	3452.63	-357.35	-357.35	61.70	1.03
3580.00	1.29	344.98	3543.61	-355.59	-355.59	61.32	0.35
3672.00	0.57	351.52	3635.60	-354.14	-354.14	60.98	0.78
3763.00	0.44	354.94	3726.60	-353.34	-353.34	60.88	0.15
3855.00	0.61	353.19	3818.59	-352.51	-352.51	60.79	0.18
3947.00	1.07	202.37	3910.59	-352.82	-352.82	60.41	1.77
4038.00	1.12	185.34	4001.57	-354.49	-354.49	60.00	0.36
4130.00	1.06	173.74	4093.56	-356.23	-356.23	60.01	0.25
4222.00	0.71	153.95	4185.54	-357.59	-357.59	60.35	0.51
4316.00	1.09	140.69	4279.53	-358.80	-358.80	61.17	0.46
4410.00	1.00	144.98	4373.52	-360.17	-360.17	62.21	0.12

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
4505.00	1.44	118.31	4468.50	-361.42	-361.42	63.74	0.74
4599.00	0.93	137.88	4562.48	-362.54	-362.54	65.29	0.68
4694.00	0.95	242.59	4657.47	-363.48	-363.48	65.11	1.57
4788.00	1.04	272.31	4751.46	-363.81	-363.81	63.56	0.55
4882.00	0.82	287.83	4845.44	-363.57	-363.57	62.07	0.36
4977.00	0.65	314.33	4940.44	-362.98	-362.98	61.04	0.39
5071.00	1.26	339.69	5034.42	-361.64	-361.64	60.29	0.77
5165.00	1.98	330.96	5128.38	-359.25	-359.25	59.15	0.81
5260.00	0.81	326.90	5223.35	-357.25	-357.25	57.98	1.24
5354.00	0.96	249.21	5317.35	-356.97	-356.97	56.89	1.18
5449.00	1.35	230.65	5412.33	-357.97	-357.97	55.28	0.57
5543.00	1.70	218.70	5506.29	-359.76	-359.76	53.55	0.50
5638.00	0.70	249.81	5601.27	-361.06	-361.06	52.12	1.22
5732.00	0.56	220.02	5695.27	-361.60	-361.60	51.29	0.37
5826.00	0.59	181.26	5789.26	-362.43	-362.43	50.99	0.40
5921.00	0.51	136.85	5884.26	-363.23	-363.23	51.27	0.44
6015.00	0.92	138.17	5978.25	-364.10	-364.10	52.06	0.44
6110.00	1.35	118.12	6073.23	-365.19	-365.19	53.55	0.61
6204.00	1.76	105.56	6167.20	-366.10	-366.10	55.92	0.57
6298.00	1.56	29.88	6261.17	-365.38	-365.38	57.95	2.18

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
6393.00	1.69	23.83	6356.13	-362.97	-362.97	59.16	0.22
6488.00	1.67	19.72	6451.09	-360.39	-360.39	60.20	0.13
6582.00	1.24	13.35	6545.06	-358.11	-358.11	60.89	0.49
6677.00	1.28	347.78	6640.04	-356.07	-356.07	60.91	0.59
6724.00	5.88	359.64	6686.93	-353.15	-353.15	60.78	9.87
6771.00	11.11	8.40	6733.40	-346.25	-346.25	61.43	11.43
6818.00	12.12	14.39	6779.44	-336.99	-336.99	63.31	3.35
6865.00	15.82	5.41	6825.05	-325.82	-325.82	65.15	9.10
6912.00	20.73	3.11	6869.66	-311.13	-311.13	66.20	10.56
6960.00	23.01	2.77	6914.21	-293.27	-293.27	67.11	4.76
7007.00	25.08	359.91	6957.13	-274.14	-274.14	67.54	5.04
7054.00	27.53	356.83	6999.26	-253.32	-253.32	66.93	5.98
7101.00	31.68	354.06	7040.11	-230.19	-230.19	65.05	9.28
7148.00	37.48	356.95	7078.80	-203.61	-203.61	63.01	12.82
7195.00	41.27	0.06	7115.13	-173.82	-173.82	62.26	9.09
7242.00	44.89	359.84	7149.45	-141.72	-141.72	62.23	7.70
7289.00	48.90	359.75	7181.56	-107.42	-107.42	62.11	8.53
7337.00	51.85	359.45	7212.17	-70.45	-70.45	61.85	6.17
7384.00	54.78	359.07	7240.25	-32.77	-32.77	61.35	6.28

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
7431.00	58.66	359.31	7266.03	6.51	6.51	60.80	8.26
7478.00	64.15	2.00	7288.52	47.75	47.75	61.29	12.71
7526.00	69.91	3.54	7307.25	91.87	91.87	63.44	12.37
7573.00	74.97	3.92	7321.43	136.57	136.57	66.35	10.78
7620.00	78.52	2.56	7332.20	182.24	182.24	68.93	8.07
7667.00	80.23	2.17	7340.87	228.39	228.39	70.84	3.72
7714.00	82.87	1.81	7347.78	274.85	274.85	72.45	5.68
7751.00	84.79	2.04	7351.75	311.61	311.61	73.69	5.23
7805.00	87.95	359.78	7355.17	365.49	365.49	74.54	7.19
7897.00	88.42	0.21	7358.08	457.44	457.44	74.54	0.70
7988.00	88.59	359.52	7360.45	548.41	548.41	74.33	0.78
8080.00	88.86	359.13	7362.50	640.38	640.38	73.25	0.52
8171.00	89.23	359.11	7364.02	731.36	731.36	71.86	0.41
8263.00	89.36	359.08	7365.15	823.34	823.34	70.40	0.15
8355.00	89.77	359.05	7365.85	915.32	915.32	68.90	0.44
8447.00	90.74	358.50	7365.45	1007.30	1007.30	66.93	1.22
8538.00	90.77	357.14	7364.25	1098.22	1098.22	63.47	1.49
8630.00	90.67	358.03	7363.09	1190.14	1190.14	59.60	0.97
8721.00	89.26	358.06	7363.14	1281.08	1281.08	56.49	1.55
8813.00	88.93	358.97	7364.60	1373.04	1373.04	54.11	1.05

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
8904.00	89.66	0.10	7365.72	1464.02	1464.02	53.37	1.48
8996.00	91.31	359.76	7364.93	1556.02	1556.02	53.26	1.83
9088.00	90.44	0.63	7363.53	1648.00	1648.00	53.57	1.34
9179.00	90.07	359.24	7363.13	1739.00	1739.00	53.46	1.59
9271.00	88.96	358.90	7363.91	1830.98	1830.98	51.96	1.26
9362.00	90.07	358.18	7364.68	1921.95	1921.95	49.64	1.45
9454.00	90.64	358.11	7364.12	2013.90	2013.90	46.67	0.63
9546.00	87.95	357.51	7365.25	2105.82	2105.82	43.15	3.00
9637.00	87.82	359.22	7368.61	2196.71	2196.71	40.55	1.88
9729.00	91.04	1.65	7369.53	2288.69	2288.69	41.24	4.39
9821.00	91.18	1.79	7367.75	2380.63	2380.63	44.01	0.21
9912.00	88.39	358.99	7368.09	2471.61	2471.61	44.63	4.34
10004.00	89.26	0.41	7369.98	2563.58	2563.58	44.16	1.81
10098.00	91.92	2.74	7369.01	2657.53	2657.53	46.75	3.76
10193.00	91.61	2.12	7366.09	2752.40	2752.40	50.78	0.73
10287.00	90.71	1.08	7364.19	2846.34	2846.34	53.40	1.47
10381.00	90.57	2.08	7363.14	2940.30	2940.30	55.99	1.08
10476.00	91.51	2.17	7361.41	3035.21	3035.21	59.51	0.99
10570.00	90.17	1.78	7360.04	3129.15	3129.15	62.76	1.49

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
10664.00	91.27	3.34	7358.85	3223.04	3223.04	66.96	2.03
10758.00	88.59	0.97	7358.97	3316.96	3316.96	70.50	3.81
10853.00	88.72	0.79	7361.19	3411.92	3411.92	71.96	0.24
10947.00	88.99	1.07	7363.06	3505.89	3505.89	73.48	0.41
11041.00	89.33	0.87	7364.44	3599.87	3599.87	75.07	0.41
11136.00	87.52	359.53	7367.05	3694.82	3694.82	75.41	2.37
11230.00	89.26	359.75	7369.70	3788.78	3788.78	74.82	1.87
11324.00	89.87	359.28	7370.41	3882.77	3882.77	74.03	0.81
11419.00	90.27	359.18	7370.30	3977.76	3977.76	72.76	0.44
11513.00	90.20	357.59	7369.92	4071.72	4071.72	70.11	1.70
11607.00	90.03	358.11	7369.72	4165.66	4165.66	66.59	0.59
11701.00	91.11	359.39	7368.79	4259.63	4259.63	64.55	1.78
11796.00	90.94	0.87	7367.09	4354.61	4354.61	64.76	1.56
11890.00	89.97	2.36	7366.34	4448.56	4448.56	67.41	1.90
11984.00	89.66	2.14	7366.65	4542.49	4542.49	71.10	0.40
12079.00	89.90	1.88	7367.01	4637.43	4637.43	74.43	0.37
12173.00	88.49	1.10	7368.33	4731.39	4731.39	76.88	1.71
12267.00	90.64	2.29	7369.05	4825.34	4825.34	79.67	2.61
12362.00	89.30	2.11	7369.10	4920.26	4920.26	83.32	1.43
12457.00	88.99	1.05	7370.52	5015.22	5015.22	85.94	1.16

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
12552.00	88.56	1.10	7372.55	5110.18	5110.18	87.72	0.46
12646.00	89.13	1.51	7374.45	5204.13	5204.13	89.85	0.75
12741.00	88.79	0.86	7376.18	5299.10	5299.10	91.81	0.77
12835.00	90.34	0.38	7376.90	5393.09	5393.09	92.82	1.72
12929.00	89.97	0.21	7376.65	5487.08	5487.08	93.31	0.43
13024.00	90.17	359.97	7376.54	5582.08	5582.08	93.46	0.33
13118.00	90.94	0.66	7375.63	5676.08	5676.08	93.97	1.10
13212.00	91.61	0.35	7373.54	5770.05	5770.05	94.80	0.78
13307.00	91.75	0.43	7370.76	5865.01	5865.01	95.44	0.16
13401.00	91.48	359.84	7368.11	5958.97	5958.97	95.66	0.69
13496.00	92.45	359.91	7364.86	6053.91	6053.91	95.45	1.03
13590.00	88.96	358.99	7363.70	6147.88	6147.88	94.56	3.84
13684.00	89.87	358.78	7364.66	6241.86	6241.86	92.73	0.99
13783.00	89.63	358.88	7365.10	6340.84	6340.84	90.71	0.26
13873.00	88.66	359.07	7366.44	6430.81	6430.81	89.10	1.10
13967.00	89.02	359.42	7368.34	6524.78	6524.78	87.86	0.54
14061.00	88.15	357.43	7370.66	6618.72	6618.72	85.29	2.31
14156.00	88.92	358.57	7373.08	6713.62	6713.62	81.98	1.45
14250.00	89.63	358.04	7374.27	6807.58	6807.58	79.21	0.94

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
14339.00	89.87	358.42	7374.66	6896.53	6896.53	76.46	0.50

5" = 100' FEET MD