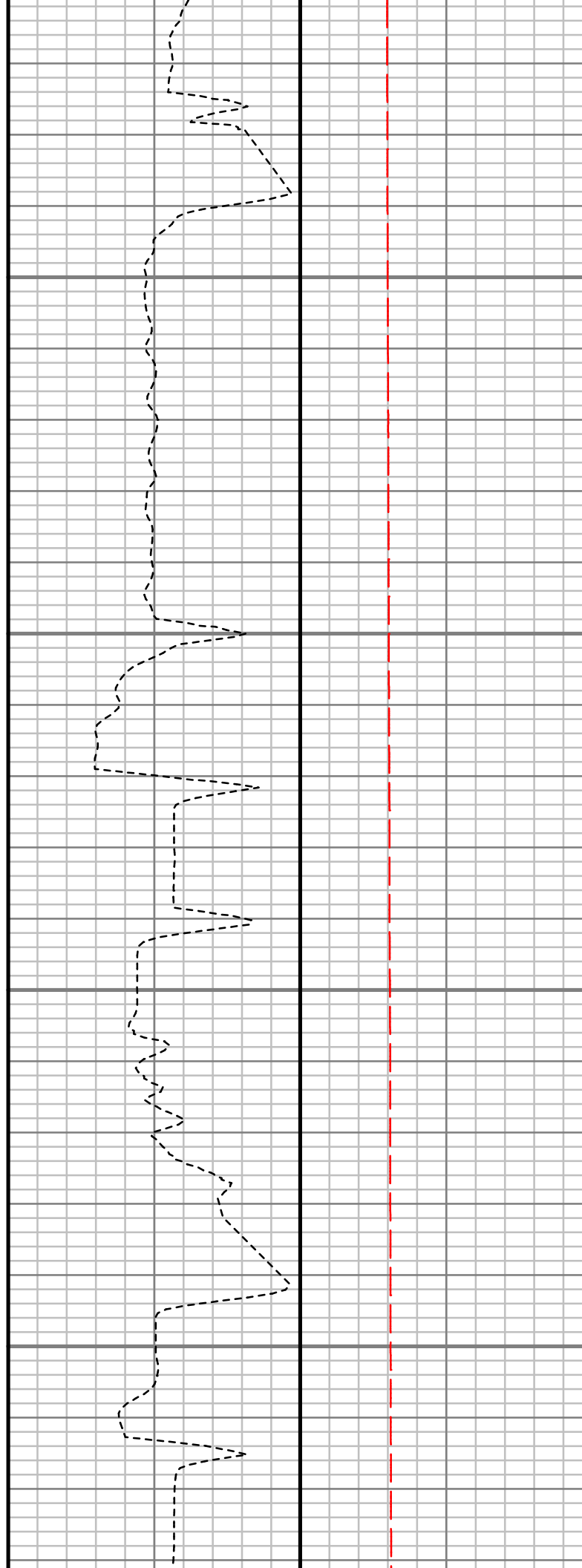
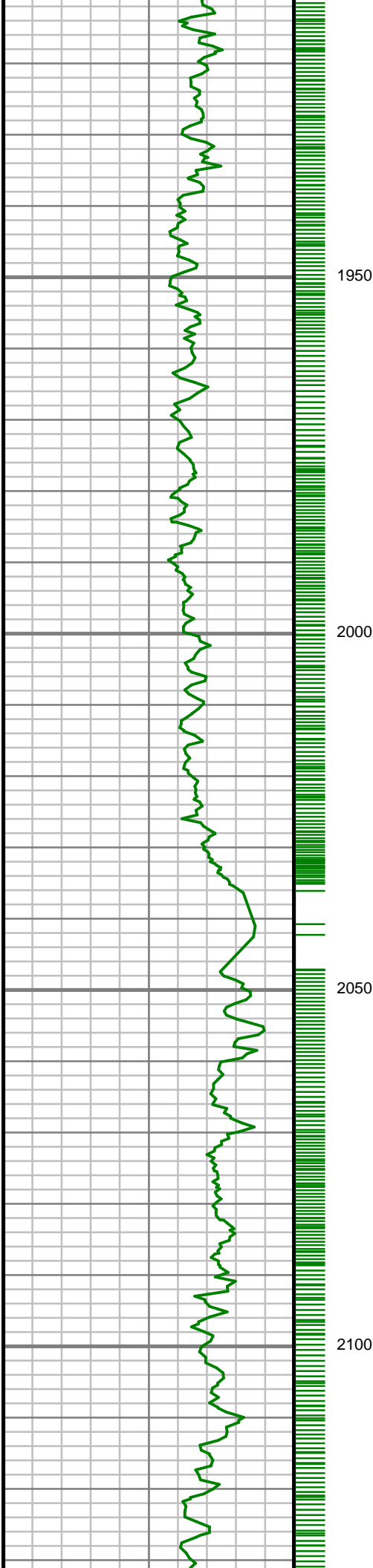


[illegible]

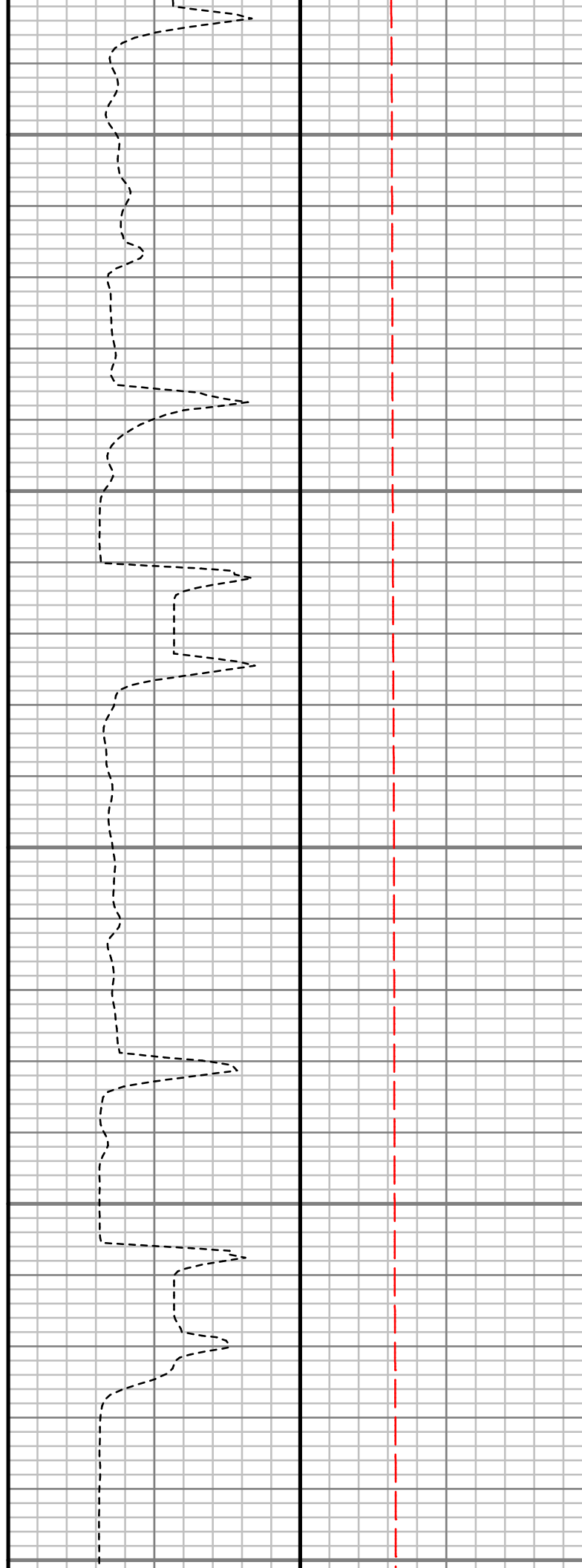
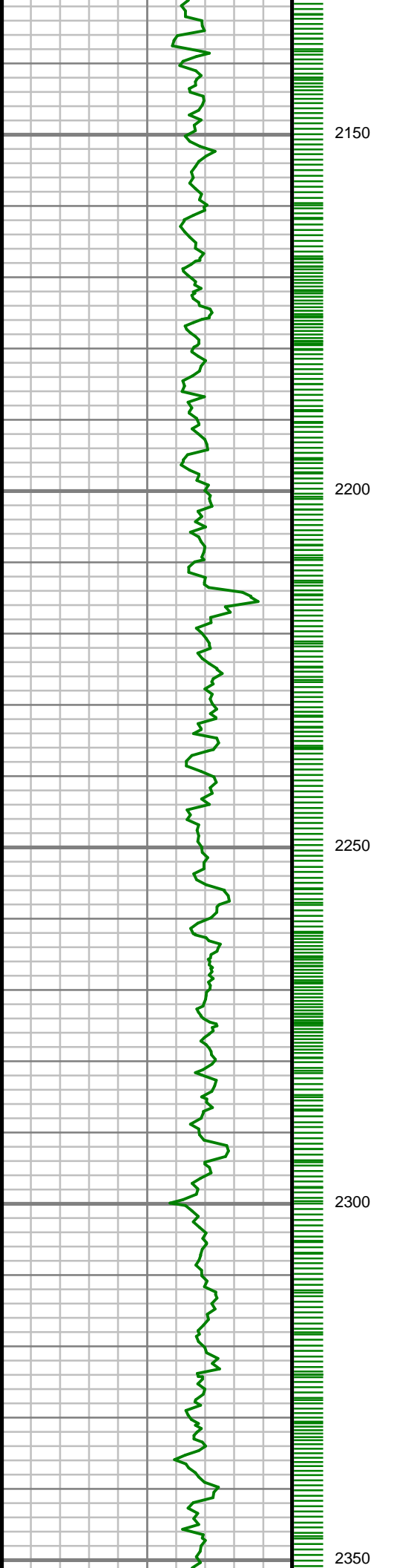
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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 PETROLEUM CORPORATION WHISTON 39C-33HZ WATTENBERG FIELD WELD COUNTY, COLORADO API # 05123440290000			
Gamma Ray (GR) 0 Unit = aapi 150	MEASURED DEPTH 1:240 (ft)	Rate of Penetration (ROP) 800 Unit = ft/hr 0	Tool Temperature (T-TEMP) 0 Unit = °F 300



S: 21 MD: 1947.00 ft
Inc: 14.00 deg Az:
120.23 deg TVD:
1928.31 ft

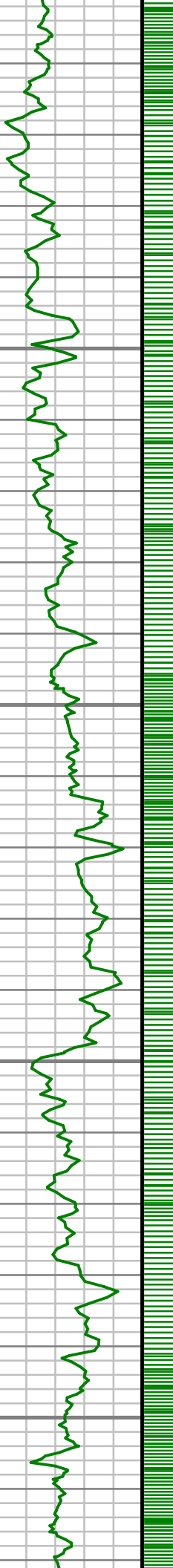
S: 22 MD: 2040.00 ft
Inc: 15.19 deg Az:
119.19 deg TVD:
2018.31 ft



S: 23 MD: 2135.00 ft
Inc: 17.34 deg Az:
118.97 deg TVD:
2109.50 ft

S: 24 MD: 2228.00 ft
Inc: 18.47 deg Az:
119.25 deg TVD:
2198.00 ft

S: 25 MD: 2323.00 ft
Inc: 18.59 deg Az:
118.62 deg TVD:
2288.07 ft

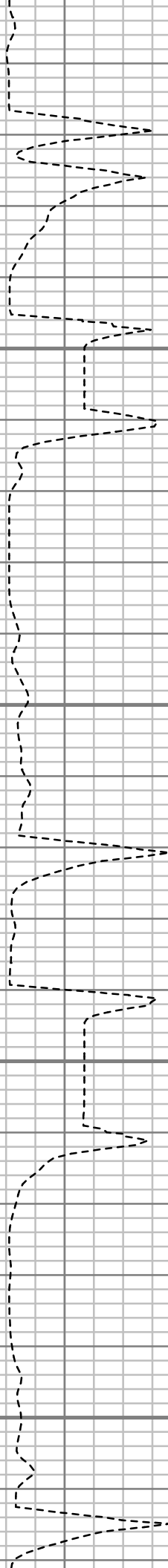


2400

2450

2500

2550



S: 26 MD: 2417.00 ft
Inc: 18.45 deg Az:
117.05 deg TVD:
2377.20 ft

S: 27 MD: 2512.00 ft
Inc: 19.45 deg Az:
119.22 deg TVD:
2467.06 ft

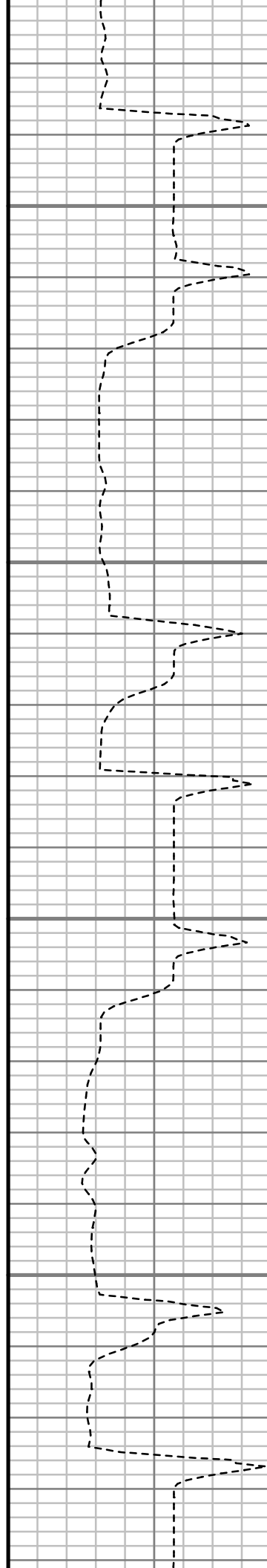


2600

2650

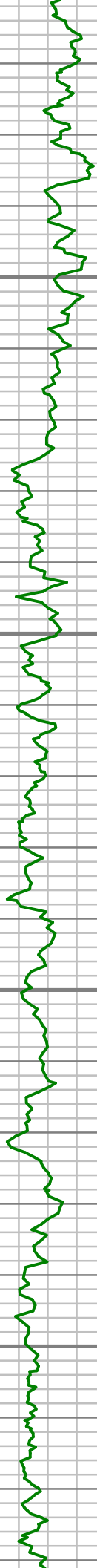
2700

2750



S: 28 MD: 2606.00 ft
Inc: 20.33 deg Az:
122.84 deg TVD:
2555.45 ft

S: 29 MD: 2701.00 ft
Inc: 22.68 deg Az:
126.81 deg TVD:
2643.84 ft

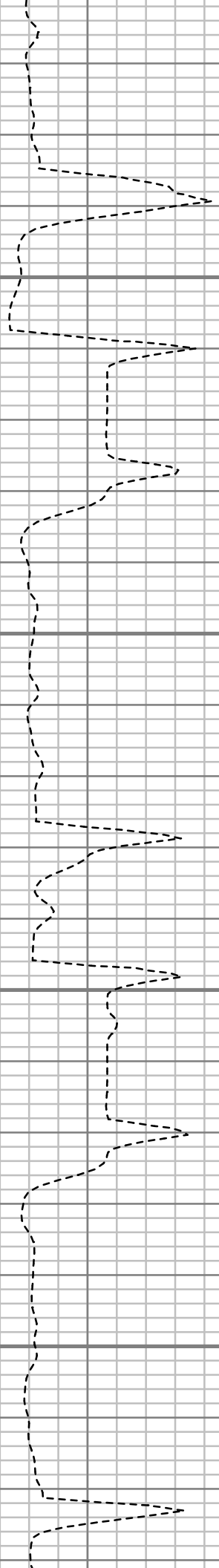


3050

3100

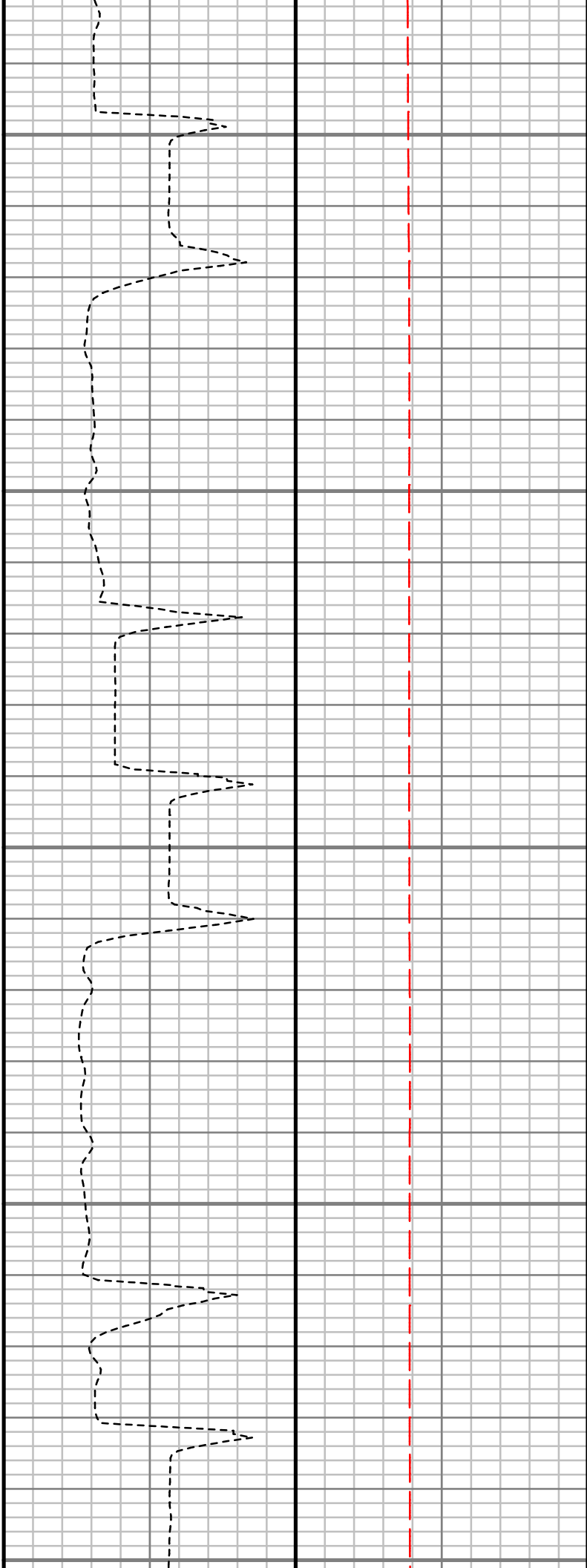
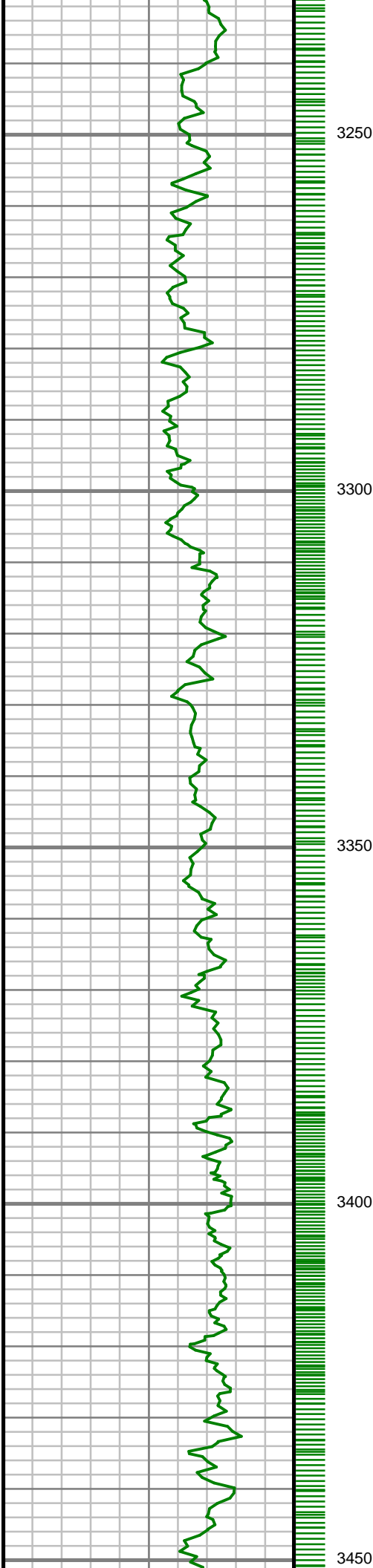
3150

3200



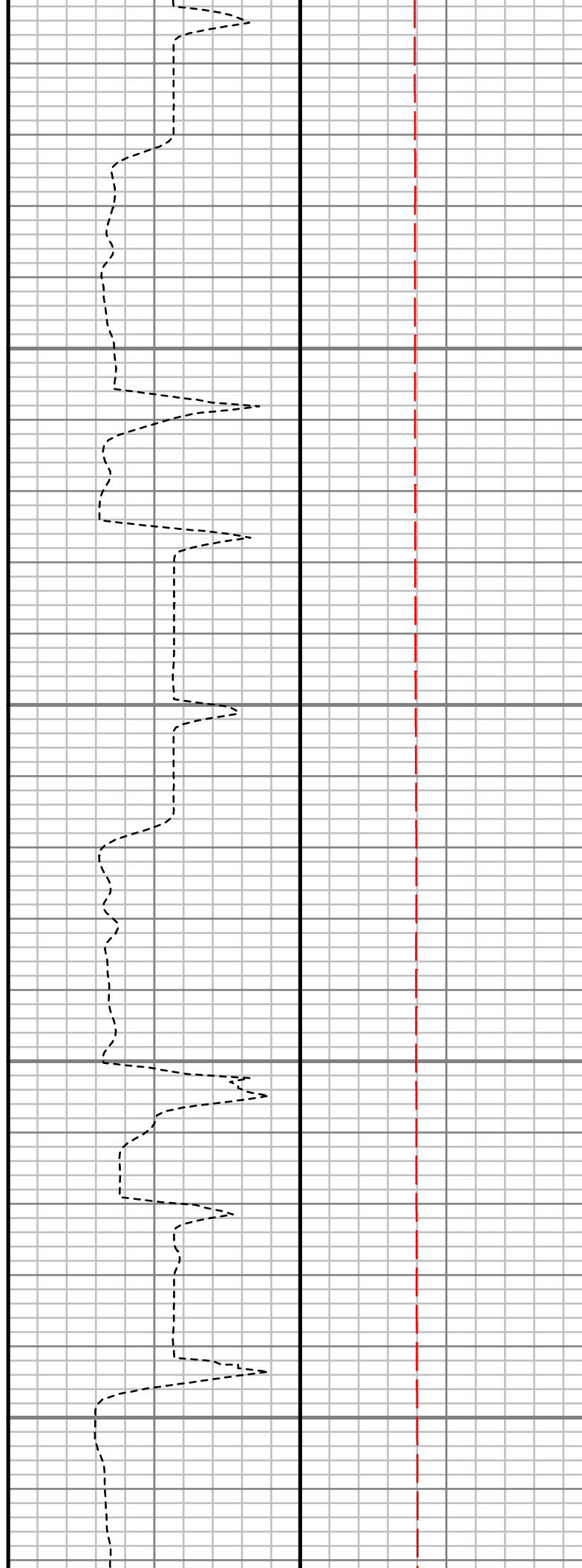
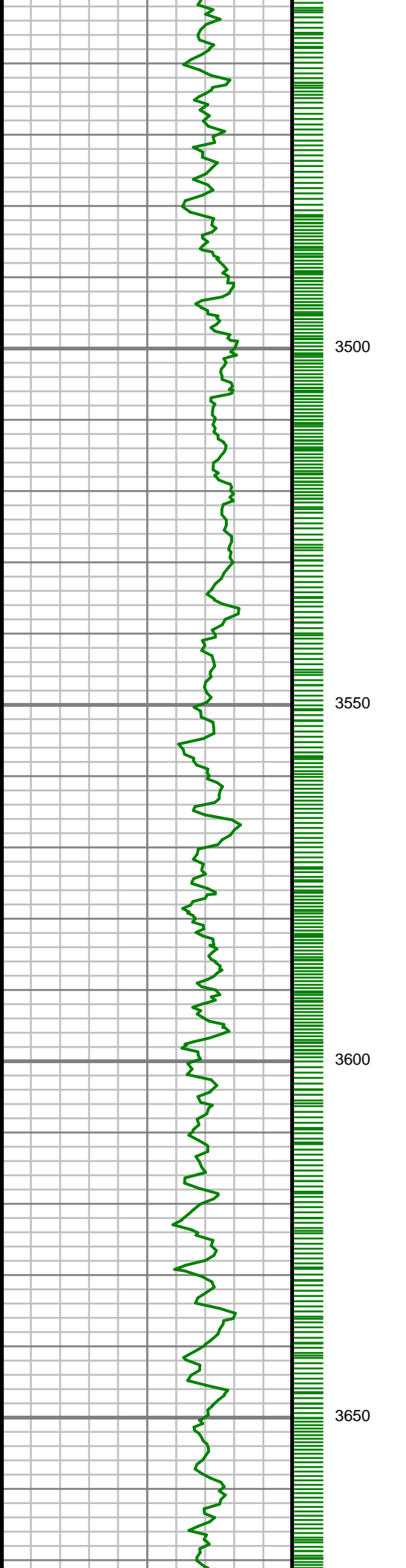
S: 33 MD: 3077.00 ft
Inc: 25.86 deg Az:
127.32 deg TVD:
2984.49 ft

S: 34 MD: 3170.00 ft
Inc: 27.89 deg Az:
128.31 deg TVD:
3067.44 ft



S: 35 MD: 3265.00 ft
Inc: 28.30 deg Az:
127.85 deg TVD:
3151.25 ft

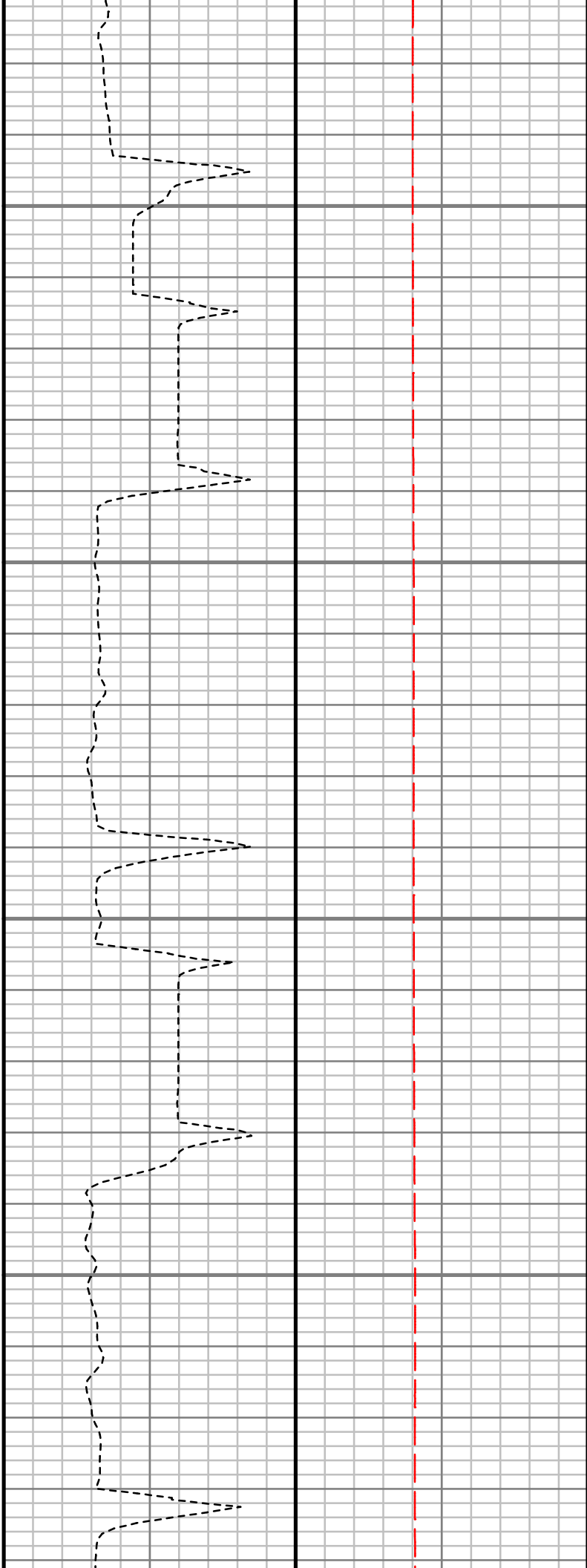
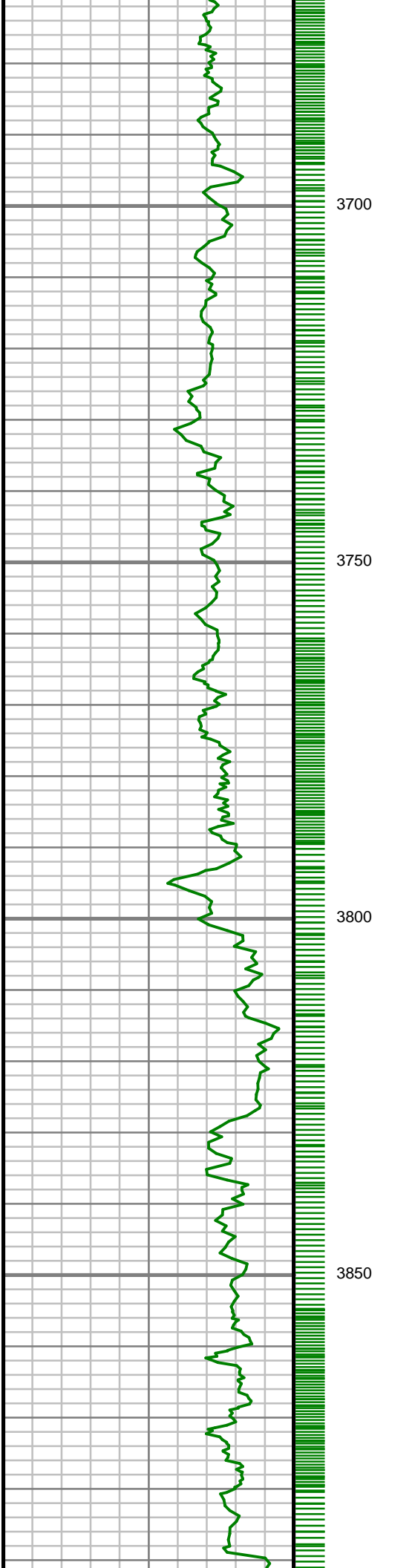
S: 36 MD: 3359.00 ft
Inc: 28.14 deg Az:
127.88 deg TVD:
3234.07 ft



S: 37	MD: 3453.00 ft
Inc: 27.39 deg	Az: 127.73 deg
TVD: 3317.25 ft	

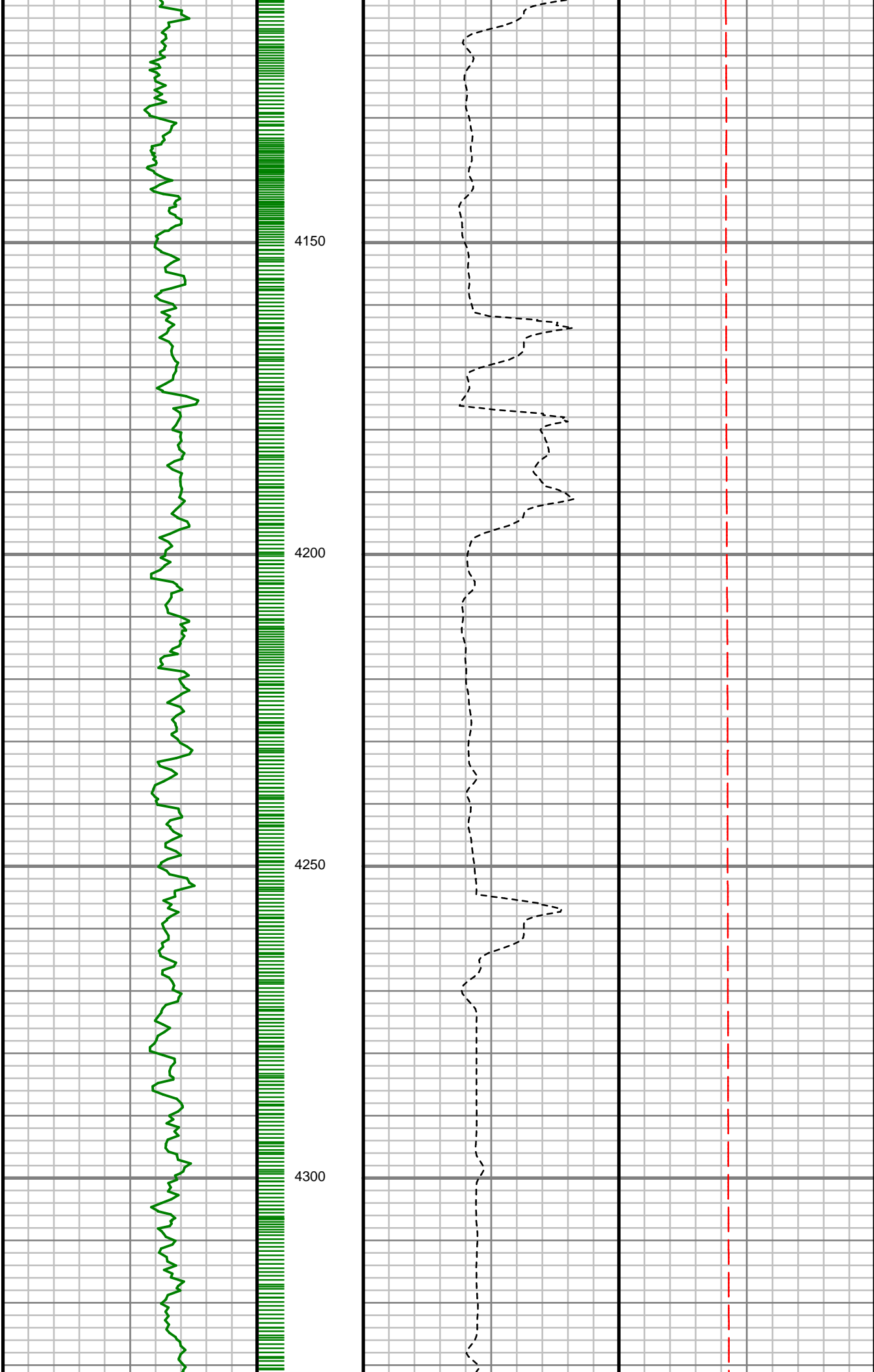
S: 38	MD: 3548.00 ft
Inc: 28.47 deg	Az: 129.33 deg
TVD: 3401.19 ft	

S: 39	MD: 3642.00 ft
Inc: 28.21 deg	Az: 128.69 deg
TVD: 3483.92 ft	



S: 40 MD: 3736.00 ft
Inc: 27.83 deg Az:
127.02 deg TVD:
3566.90 ft

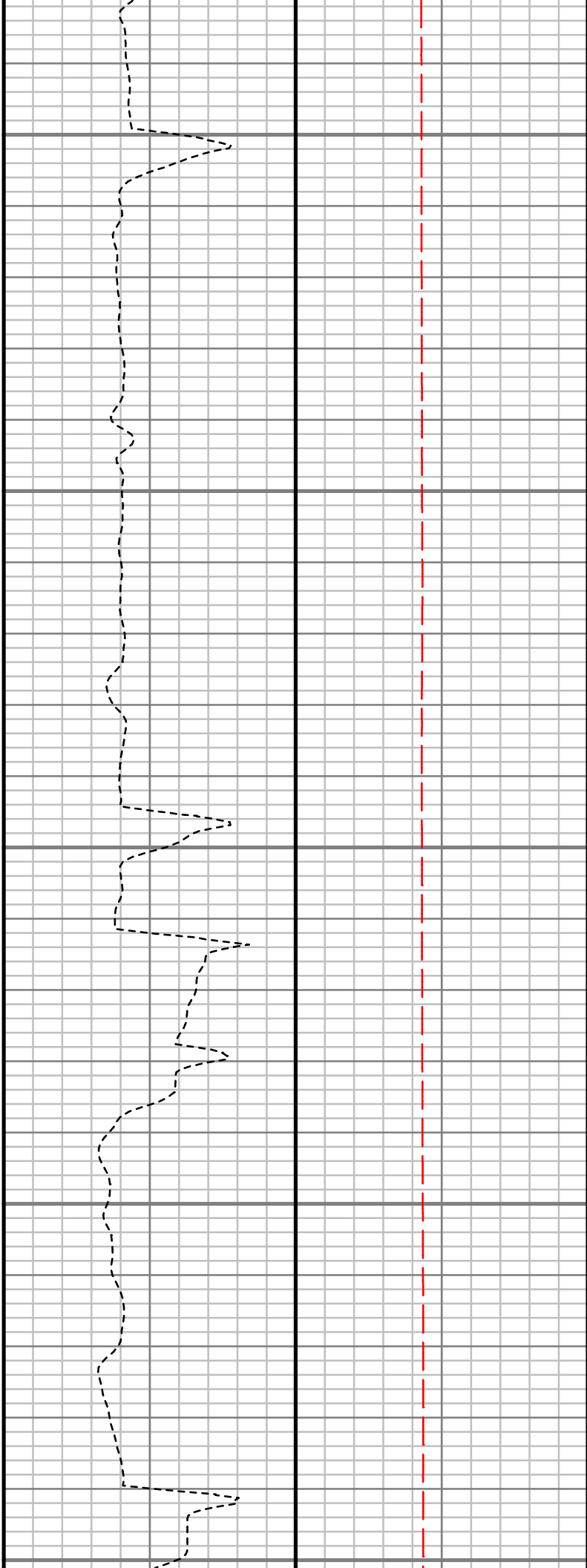
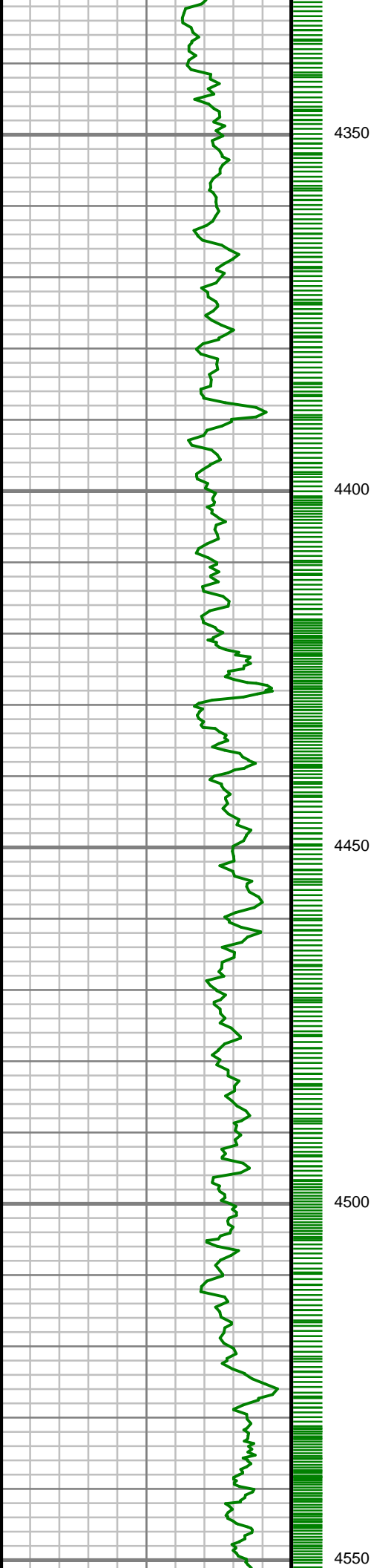
S: 41 MD: 3829.00 ft
Inc: 27.83 deg Az:
126.98 deg TVD:
3649.15 ft



S: 44 MD: 4111.00 ft
Inc: 28.75 deg Az:
127.11 deg TVD:
3897.89 ft

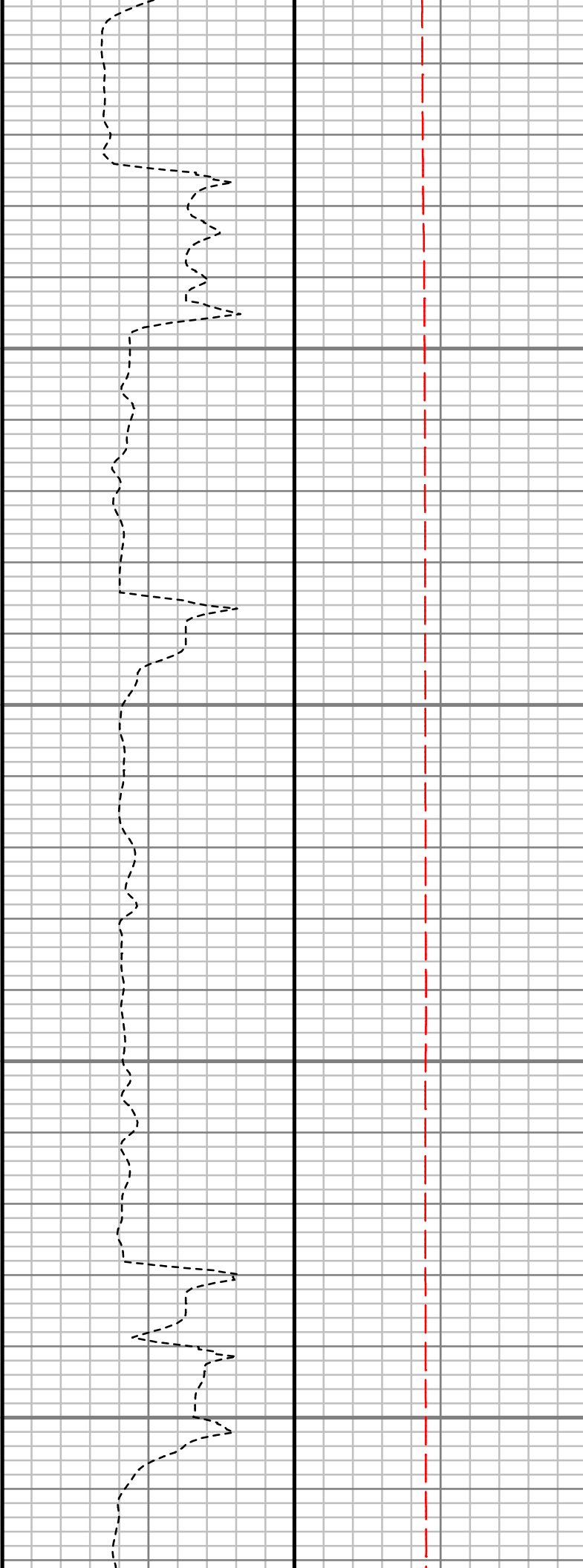
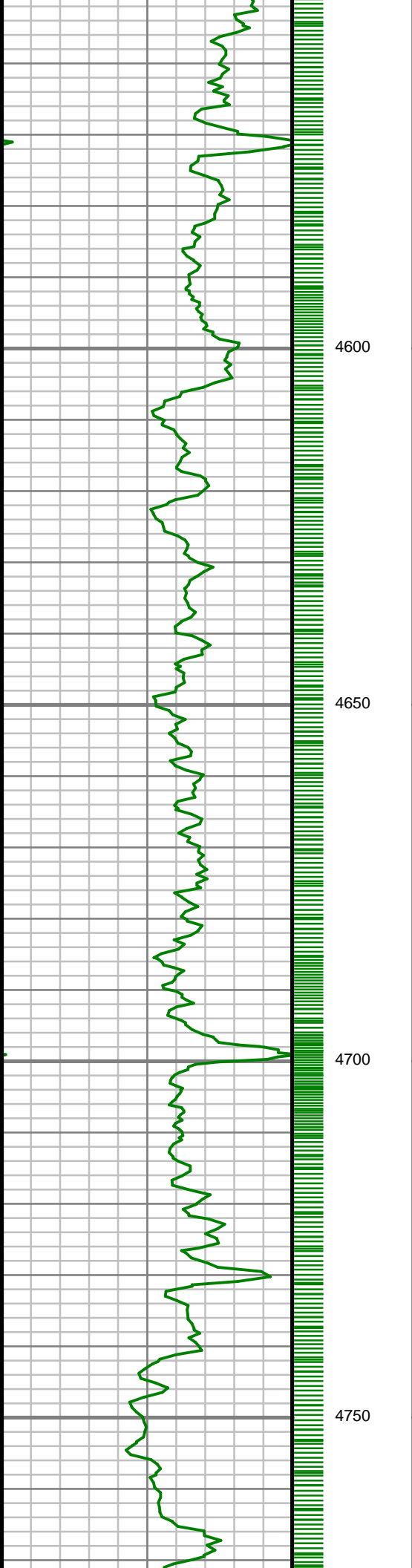
S: 45 MD: 4204.00 ft
Inc: 29.25 deg Az:
129.76 deg TVD:
3979.23 ft

S: 46 MD: 4298.00 ft
Inc: 27.78 deg Az:
130.14 deg TVD:
4061.82 ft



S: 47 MD: 4393.00 ft
Inc: 25.43 deg Az:
130.44 deg TVD:
4146.76 ft

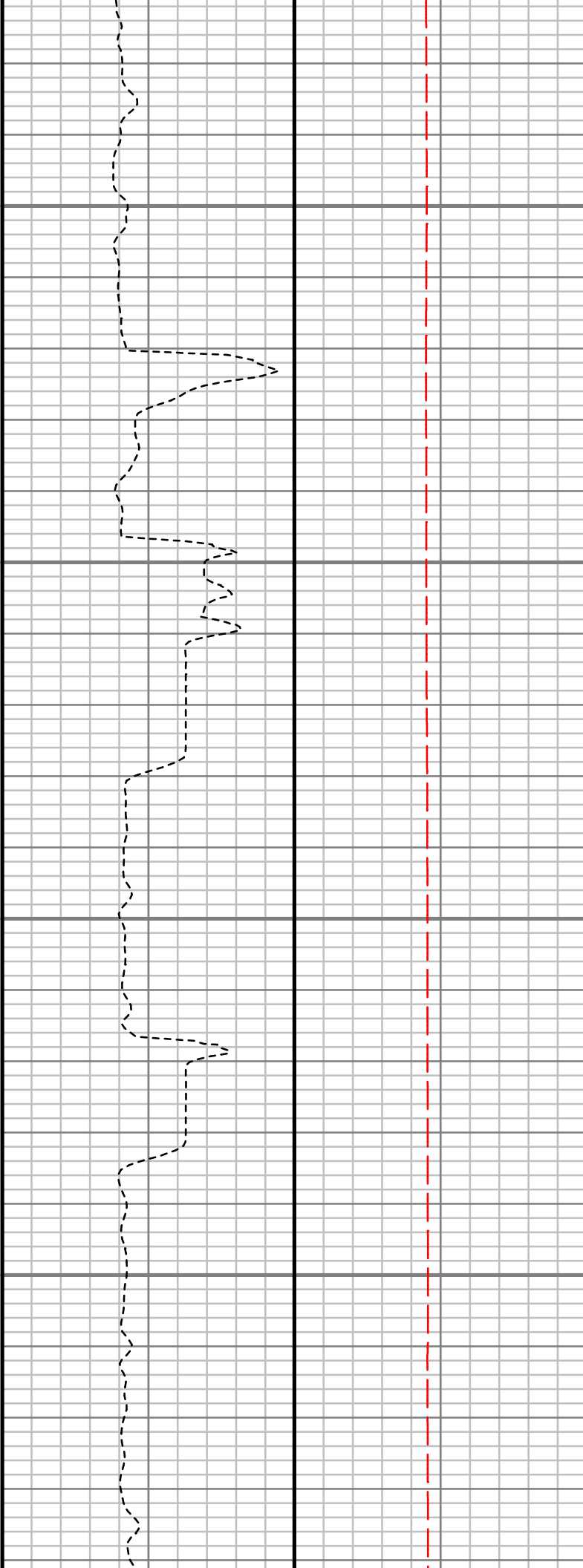
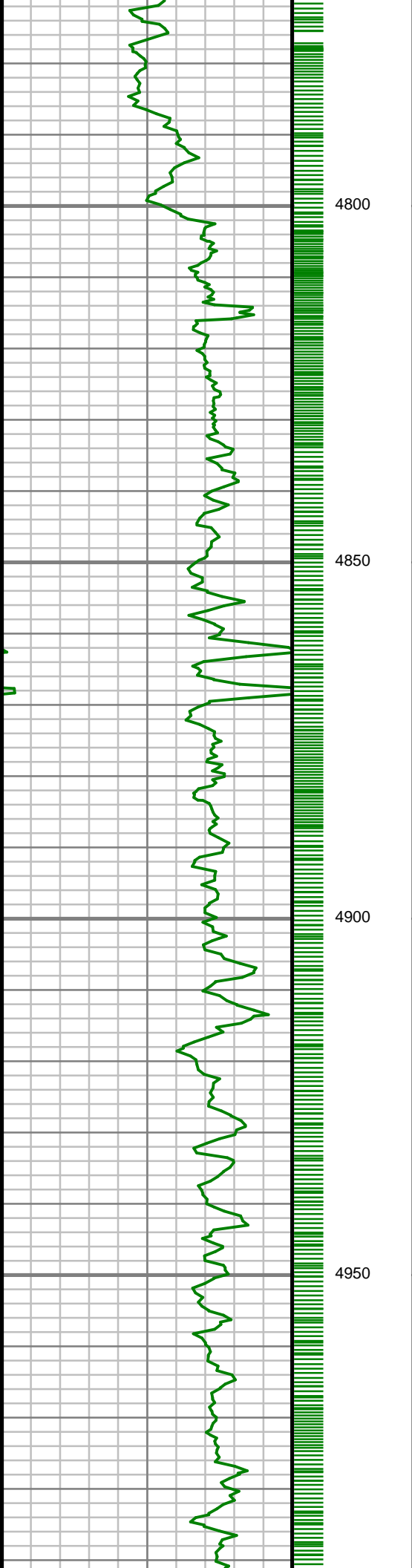
S: 48 MD: 4487.00 ft
Inc: 24.63 deg Az:
130.55 deg TVD:
4231.93 ft



S: 49 MD: 4582.00 ft
Inc: 21.98 deg Az:
128.97 deg TVD:
4319.17 ft

S: 50 MD: 4675.00 ft
Inc: 20.13 deg Az:
130.26 deg TVD:
4405.96 ft

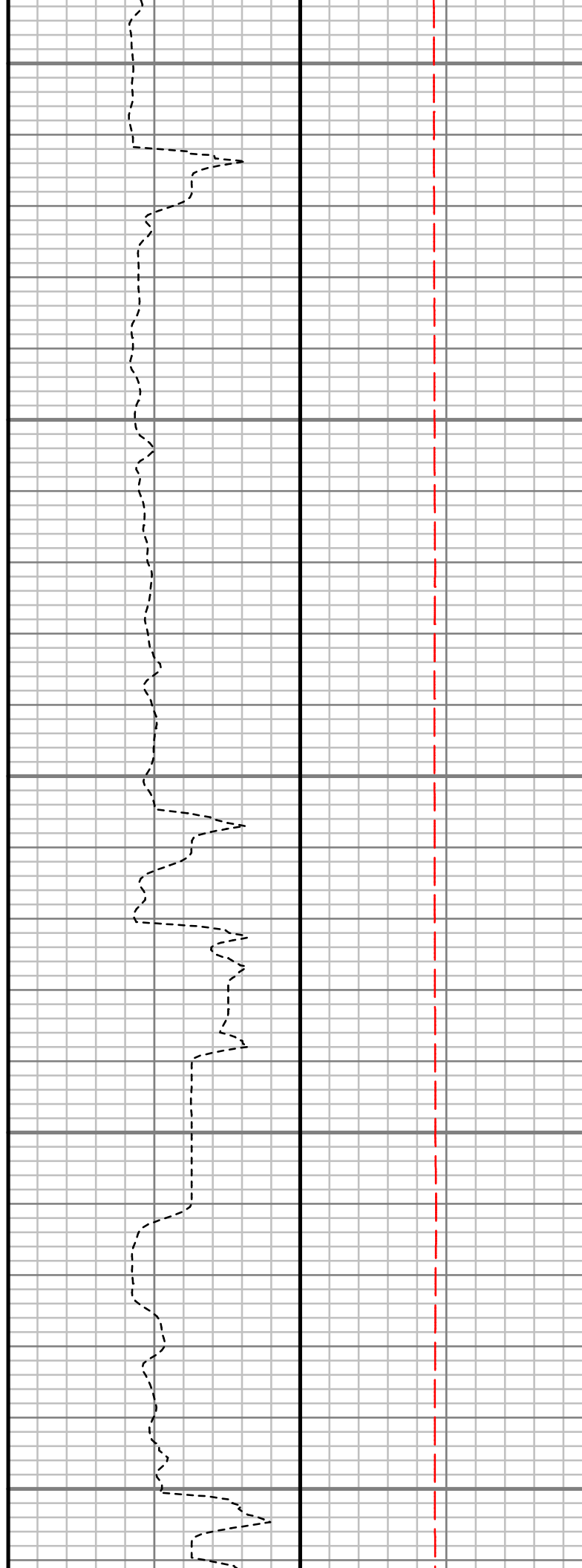
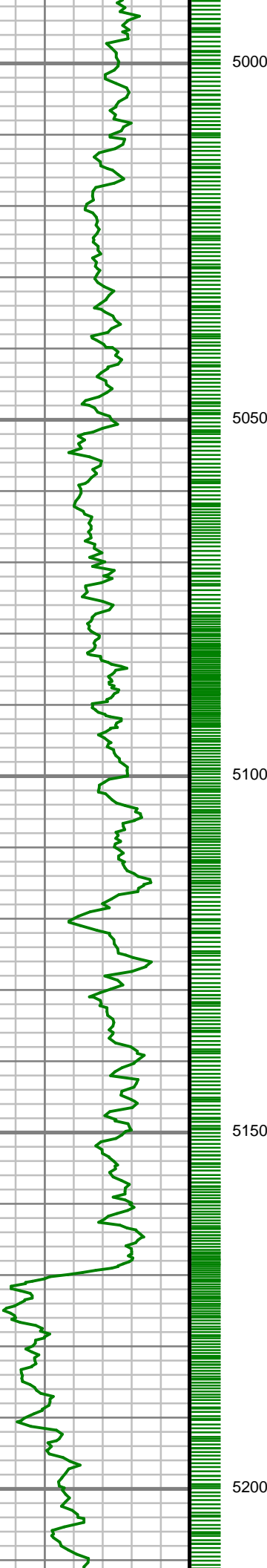
S: 51 MD: 4769.00 ft



Inc: 19.36 deg Az:
131.40 deg TVD:
4494.43 ft

S: 52 MD: 4863.00 ft
Inc: 18.94 deg Az:
134.14 deg TVD:
4583.23 ft

S: 53 MD: 4958.00 ft
Inc: 17.23 deg Az:
135.74 deg TVD:
4673.53 ft



S: 54 MD: 5052.00 ft
Inc: 14.29 deg Az:
137.35 deg TVD:
4763.99 ft

S: 55 MD: 5146.00 ft
Inc: 13.88 deg Az:
137.83 deg TVD:
4855.16 ft

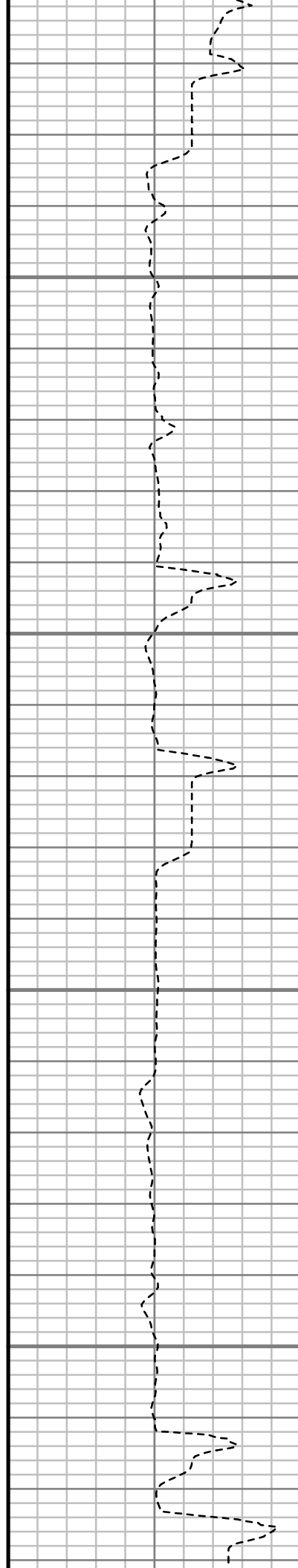


5250

5300

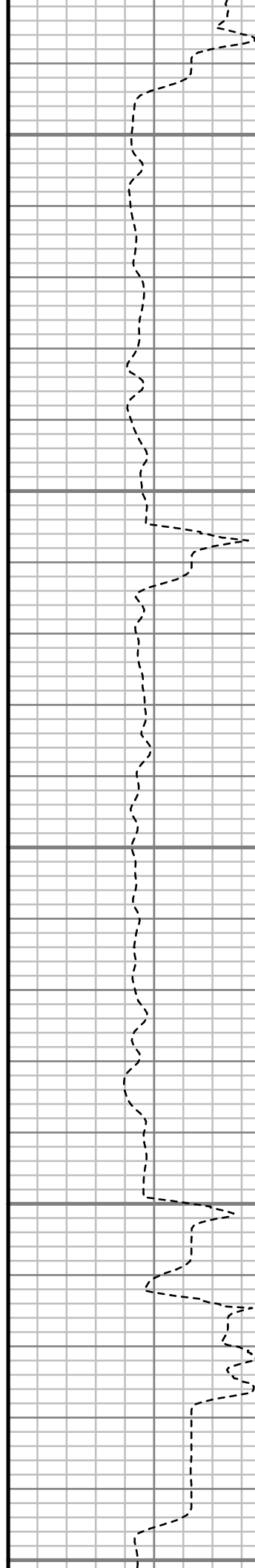
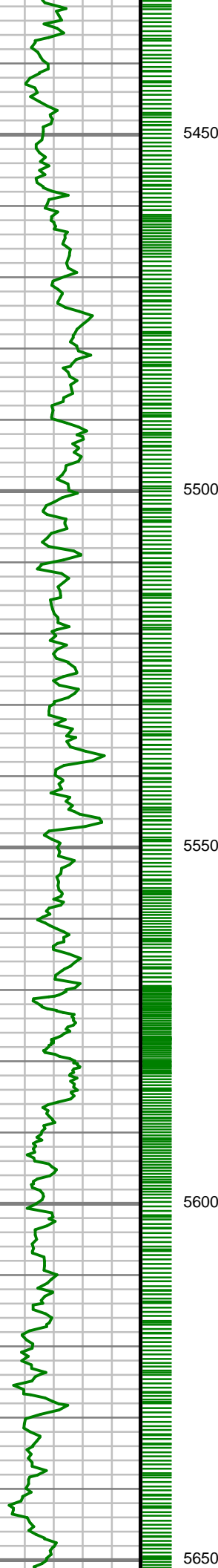
5350

5400



S: 56 MD: 5268.00 ft
Inc: 13.62 deg Az:
138.50 deg TVD:
4973.67 ft

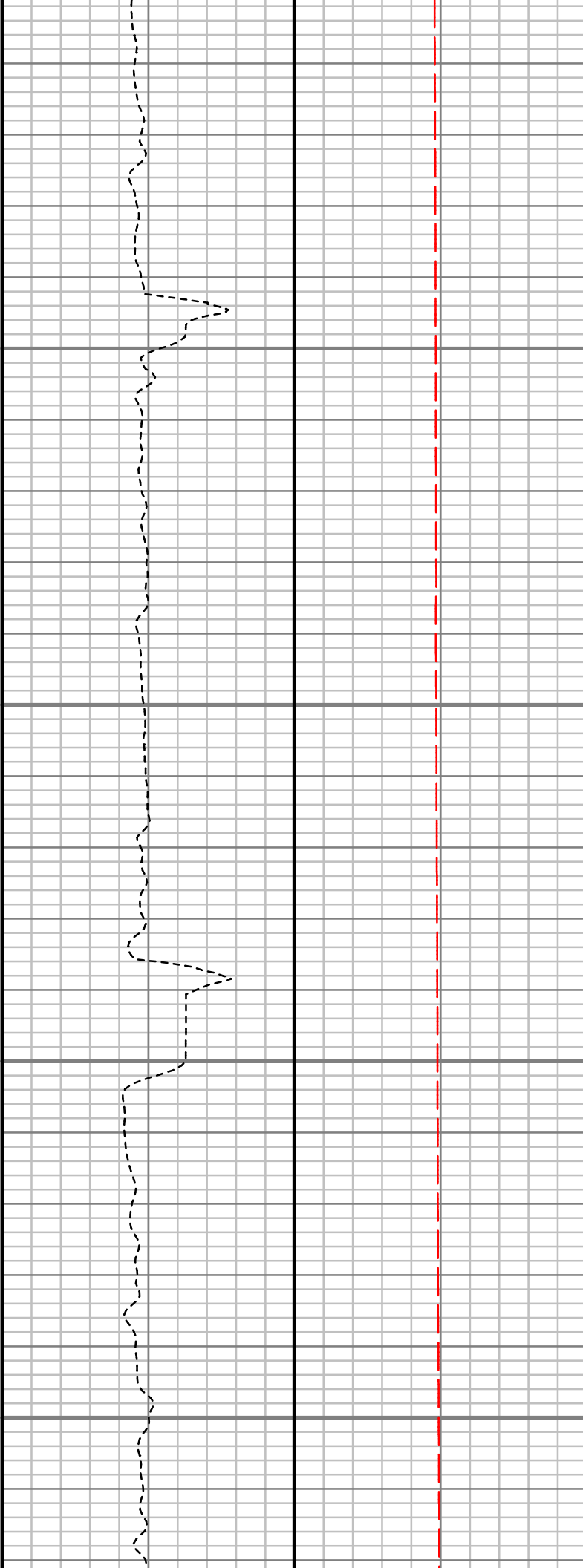
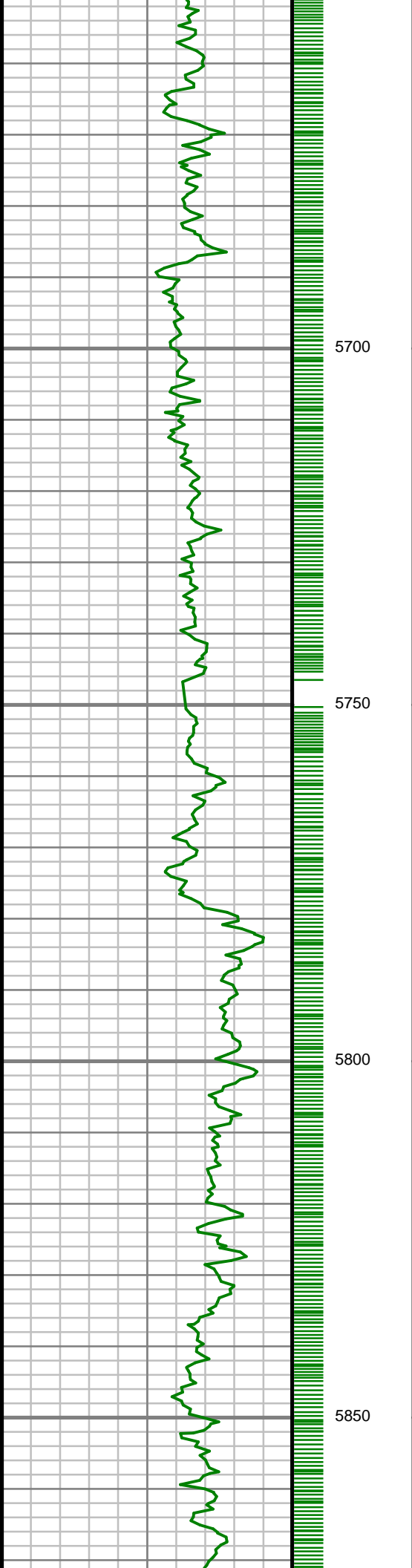
S: 57 MD: 5363.00 ft
Inc: 11.21 deg Az:
139.89 deg TVD:
5066.44 ft



S: 58 MD: 5458.00 ft
Inc: 10.11 deg Az:
138.45 deg TVD:
5159.80 ft

S: 59 MD: 5552.00 ft
Inc: 7.52 deg Az:
139.15 deg TVD:
5252.68 ft

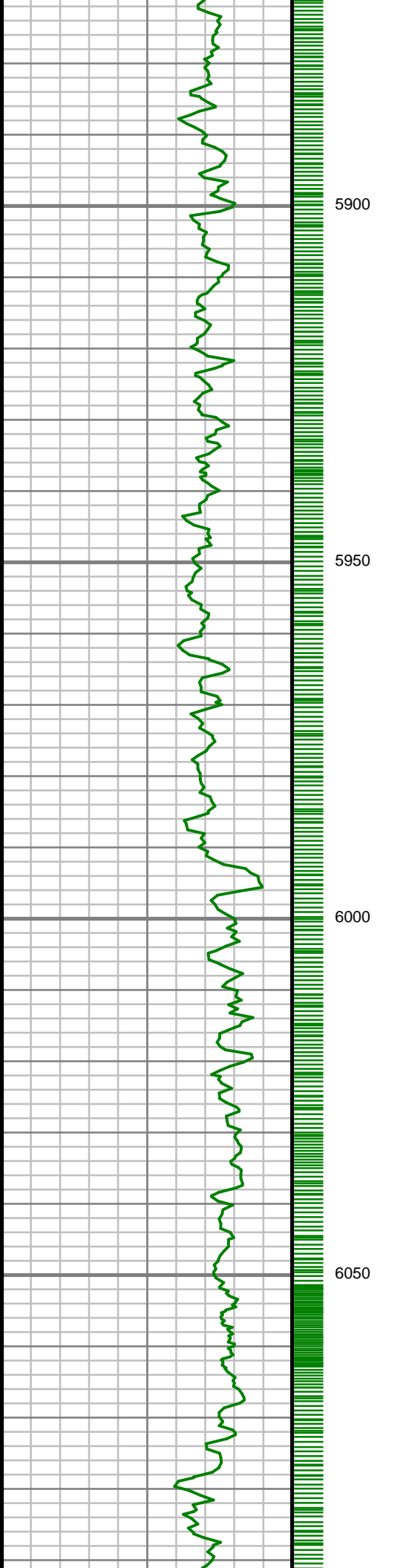
S: 60 MD: 5646.00 ft
Inc: 6.77 deg Az:



130.79 deg TVD:
5345.95 ft

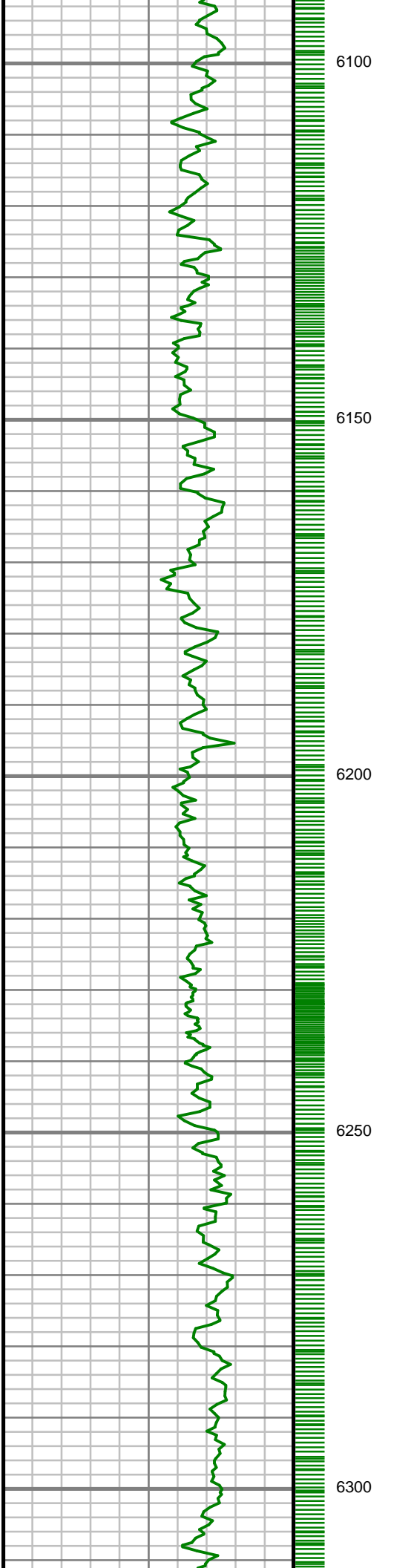
S: 61 MD: 5740.00 ft
Inc: 5.26 deg Az:
124.24 deg TVD:
5439.43 ft

S: 62 MD: 5832.00 ft
Inc: 3.94 deg Az:
118.22 deg TVD:
5531.14 ft



S: 63 MD: 5928.00 ft
Inc: 3.38 deg Az:
108.46 deg TVD:
5626.94 ft

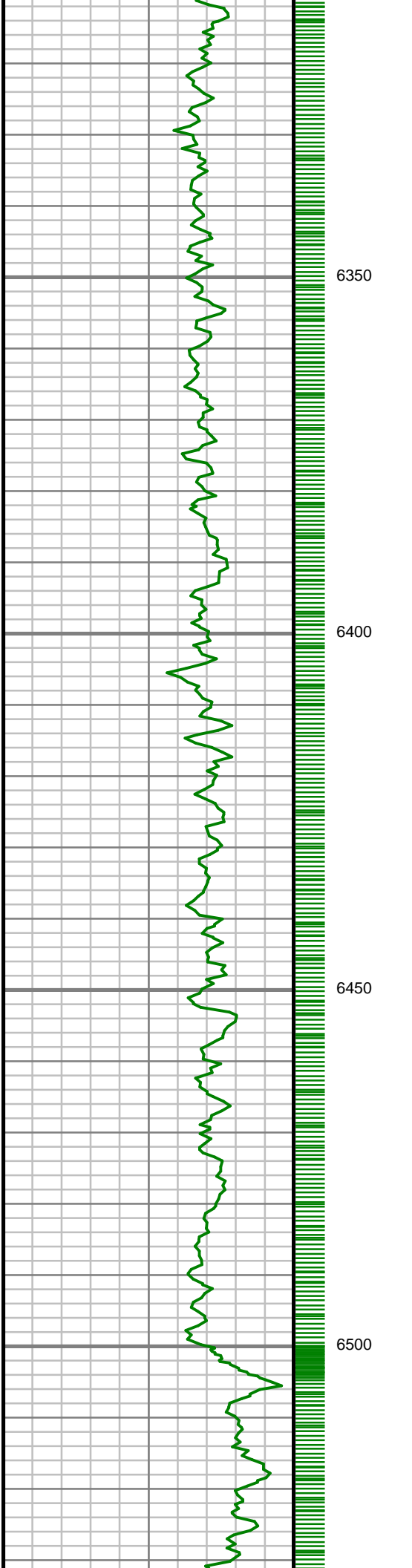
S: 64 MD: 6021.00 ft
Inc: 2.87 deg Az:
105.37 deg TVD:
5719.80 ft



S: 65 MD: 6115.00 ft
Inc: 1.42 deg Az: 78.28
deg TVD: 5813.74 ft

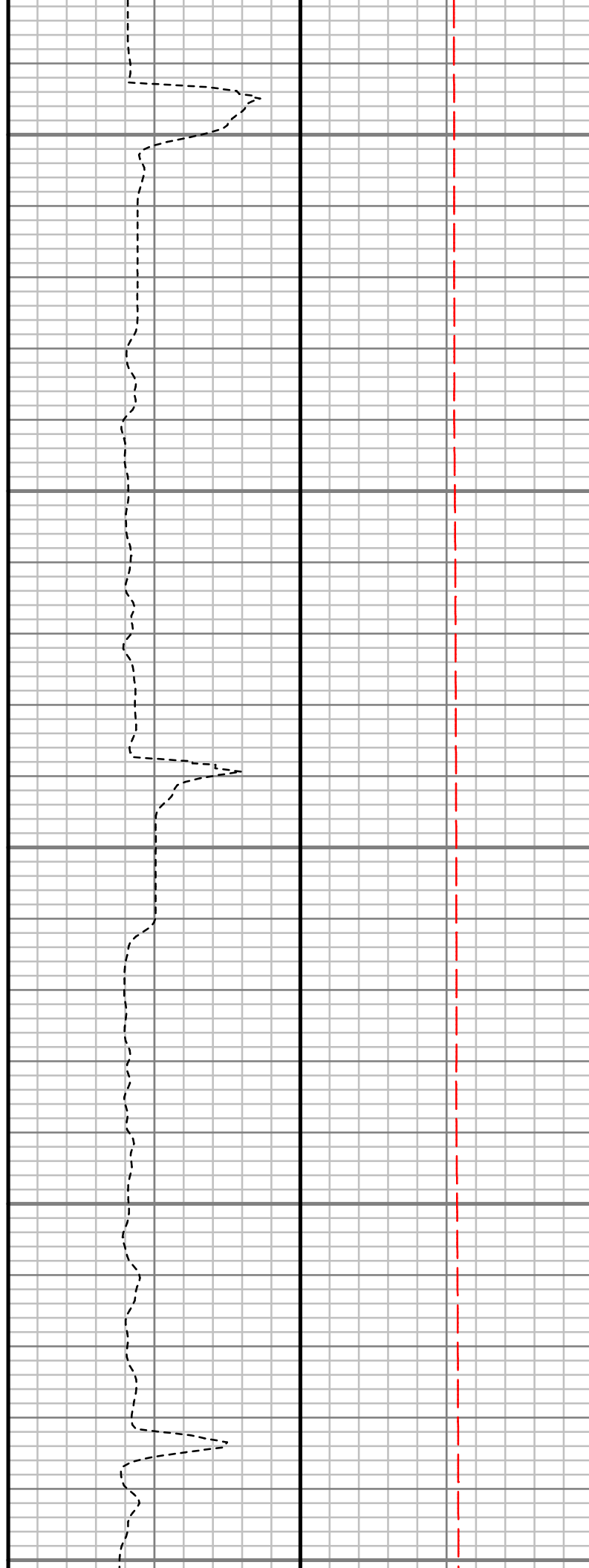
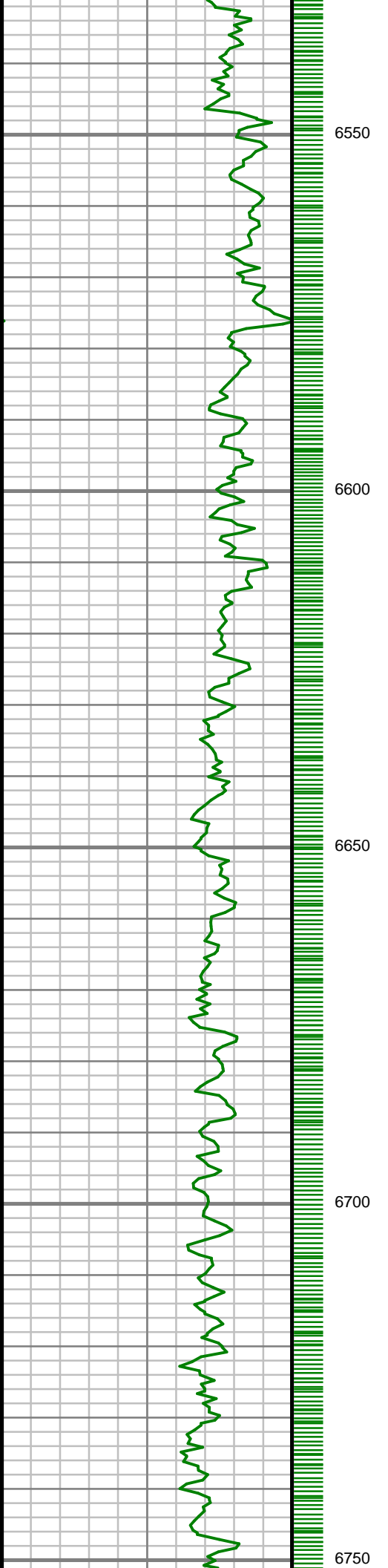
S: 66 MD: 6210.00 ft
Inc: 1.17 deg Az: 96.26
deg TVD: 5908.71 ft

S: 67 MD: 6303.00 ft
Inc: 0.93 deg Az: 1.98
deg TVD: 6001.70 ft



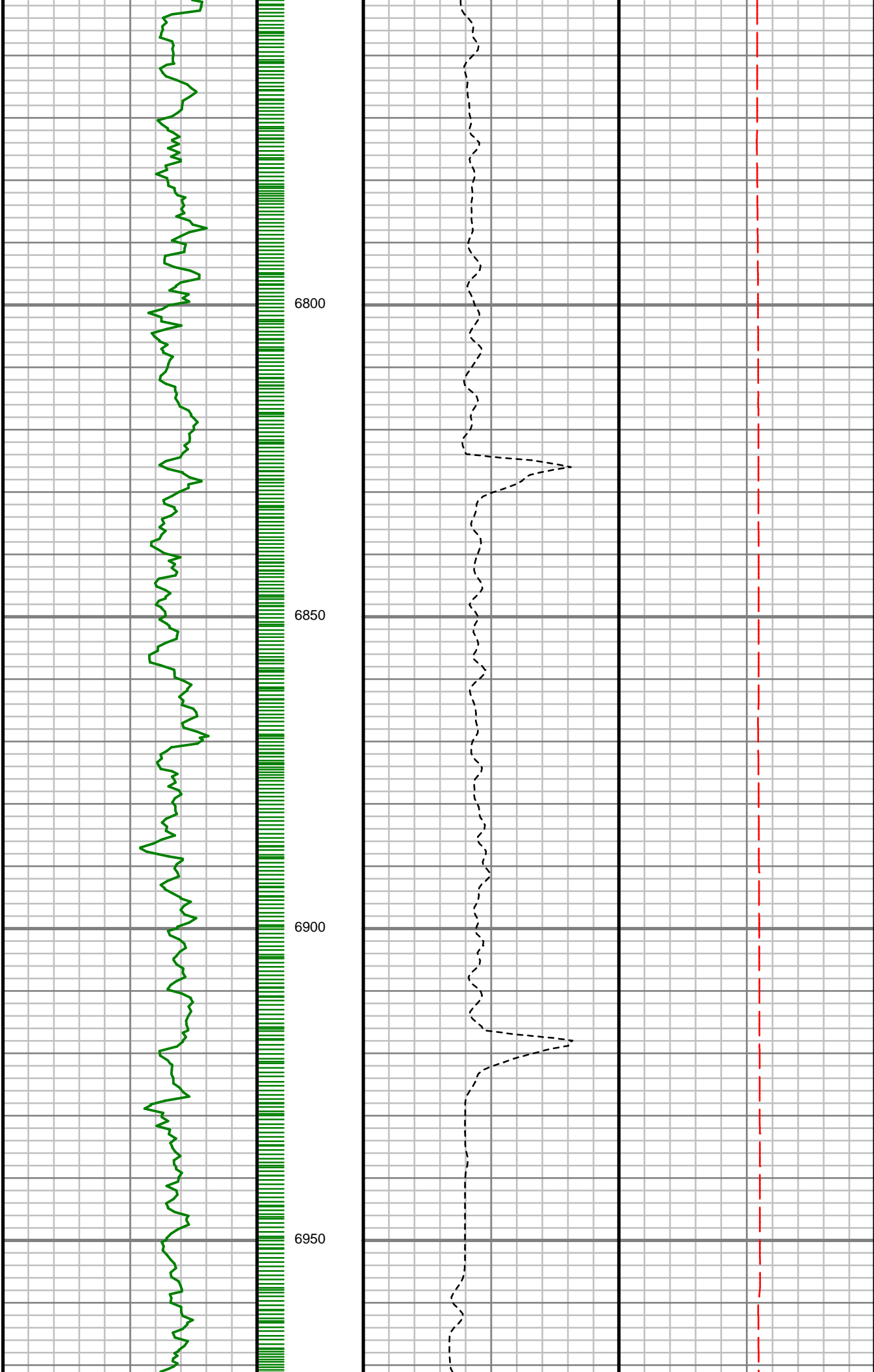
S: 68 MD: 6398.00 ft
Inc: 0.71 deg Az:
354.86 deg TVD:
6096.69 ft

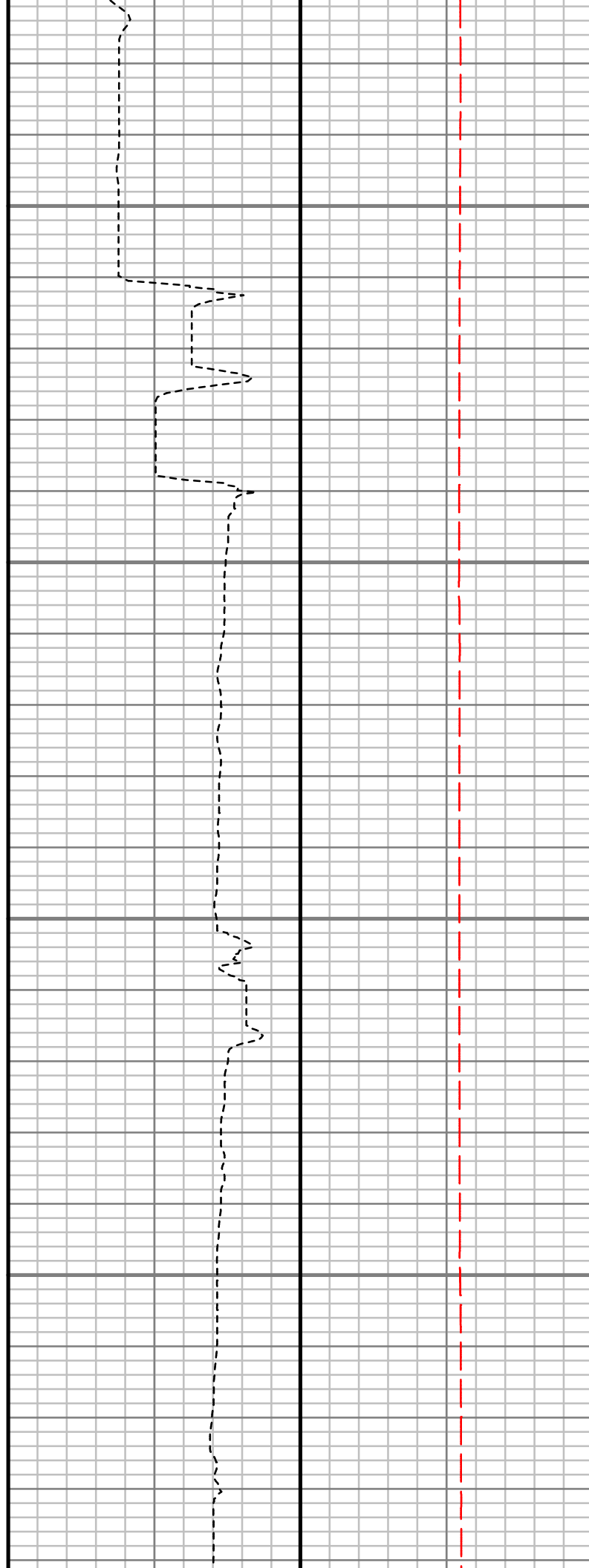
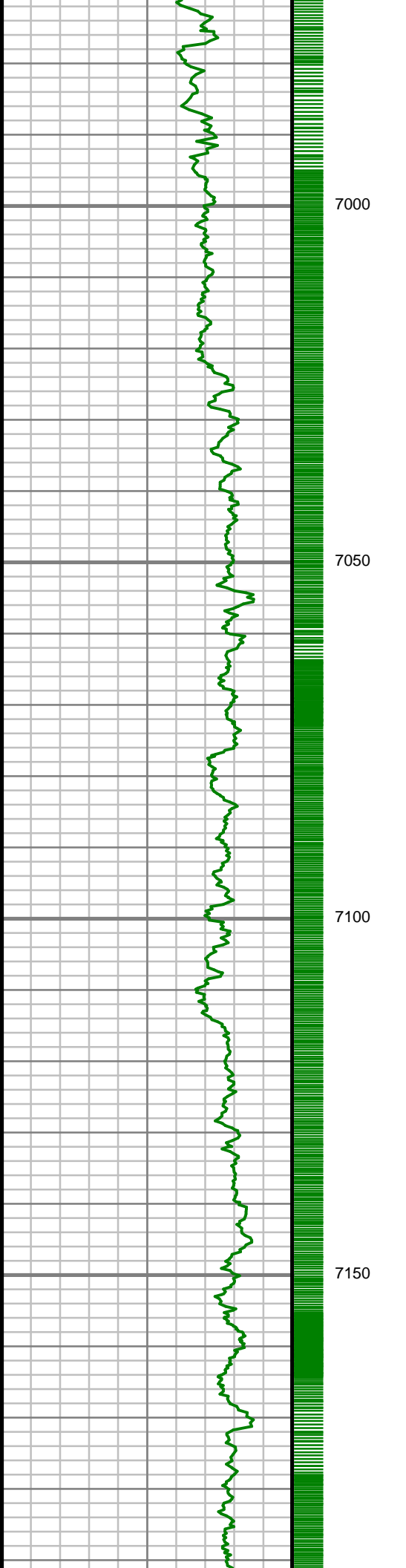
S: 69 MD: 6492.00 ft
Inc: 0.85 deg Az:
343.95 deg TVD:
6190.69 ft



S: 70 MD: 6586.00 ft
Inc: 0.93 deg Az:
338.46 deg TVD:
6284.67 ft

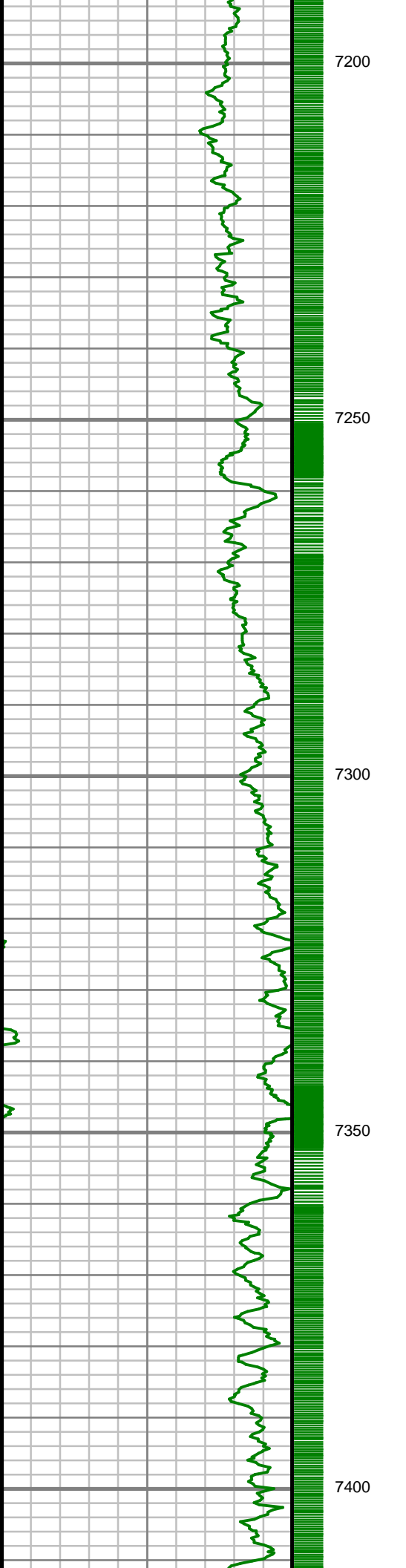
S: 71 MD: 6680.00 ft
Inc: 1.05 deg Az:
316.24 deg TVD:
6378.66 ft





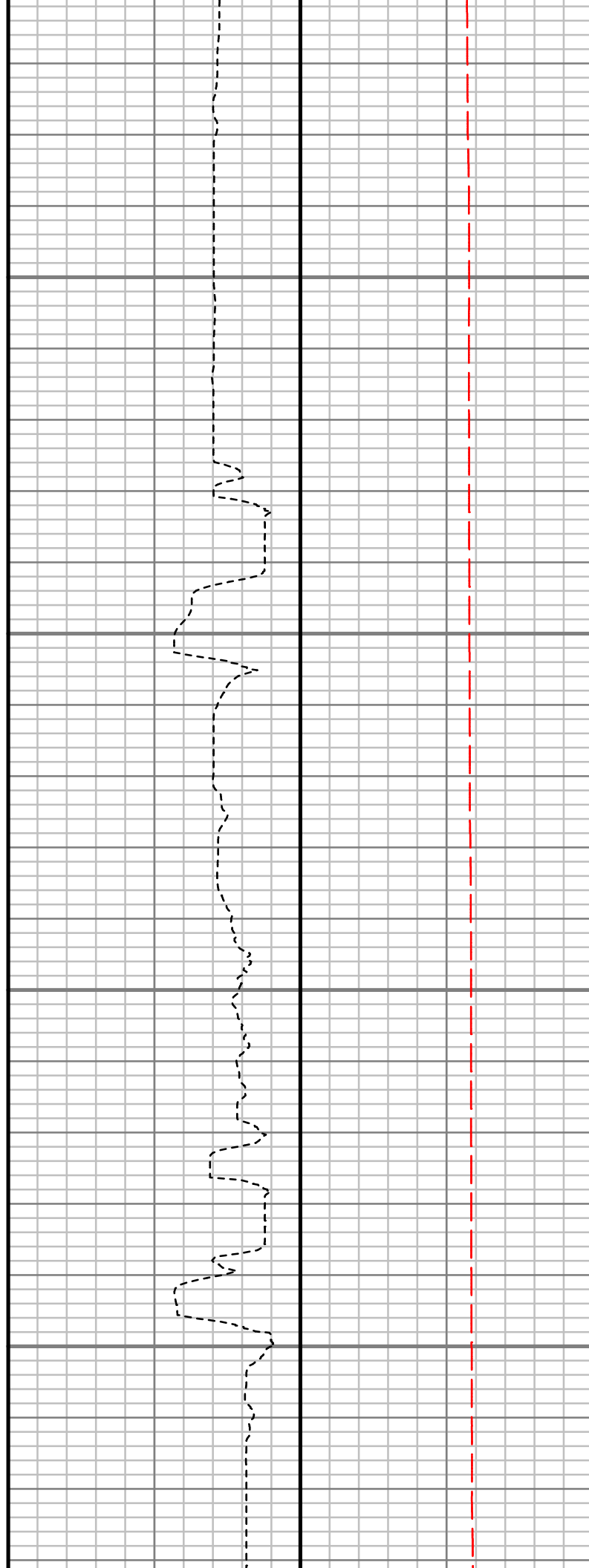
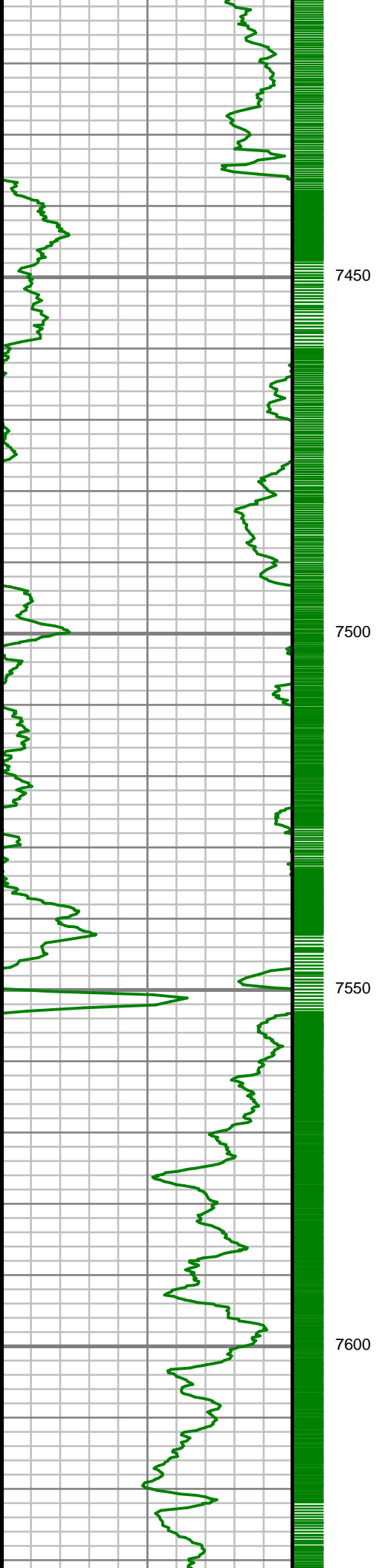
S: 75 MD: 7052.00 ft
Inc: 2.97 deg Az:
350.00 deg TVD:
6750.58 ft

S: 76 MD: 7147.00 ft
Inc: 12.45 deg Az: 0.27
deg TVD: 6844.62 ft



S: 77 MD: 7241.00 ft
Inc: 18.95 deg Az: 2.80
deg TVD: 6935.06 ft

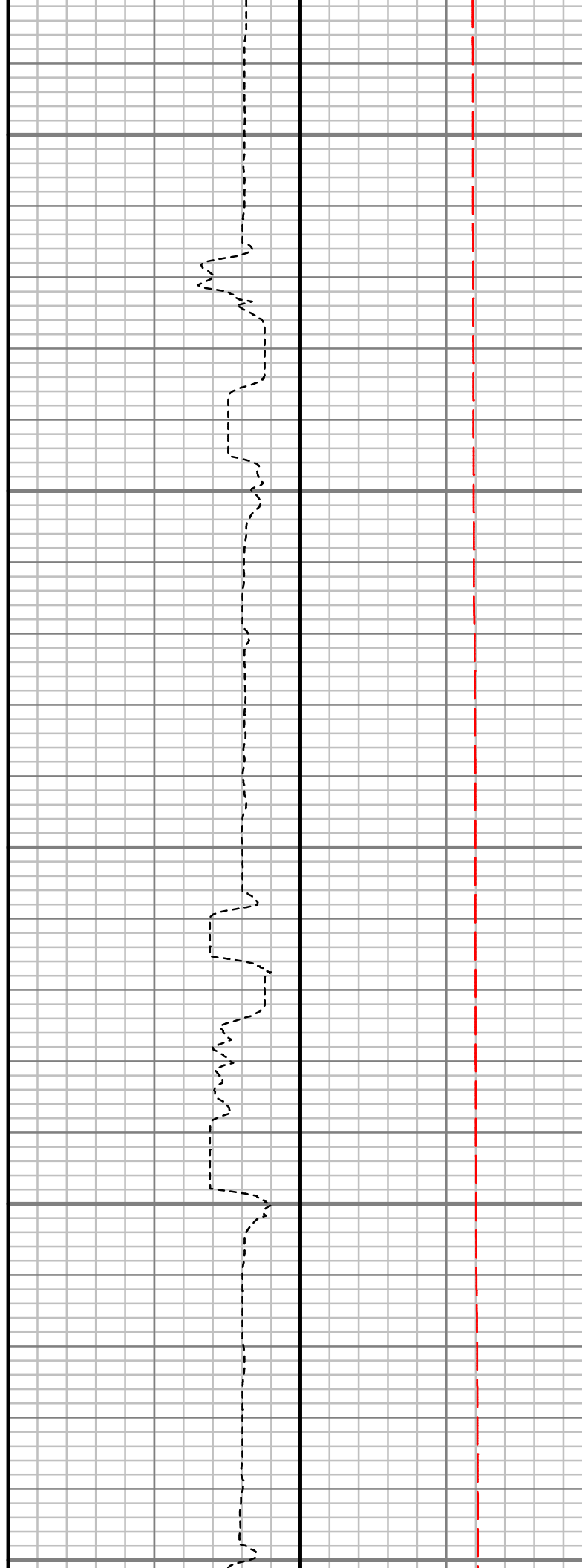
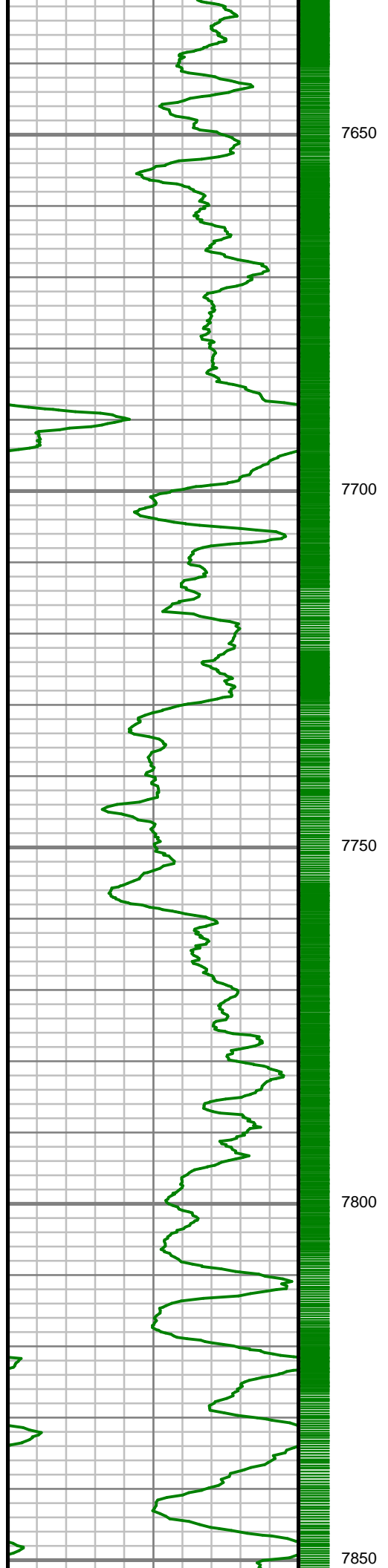
S: 78 MD: 7336.00 ft
Inc: 25.55 deg Az:
359.26 deg TVD:
7022.95 ft



S: 79 MD: 7430.00 ft
Inc: 32.83 deg Az:
359.47 deg TVD:
7104.95 ft

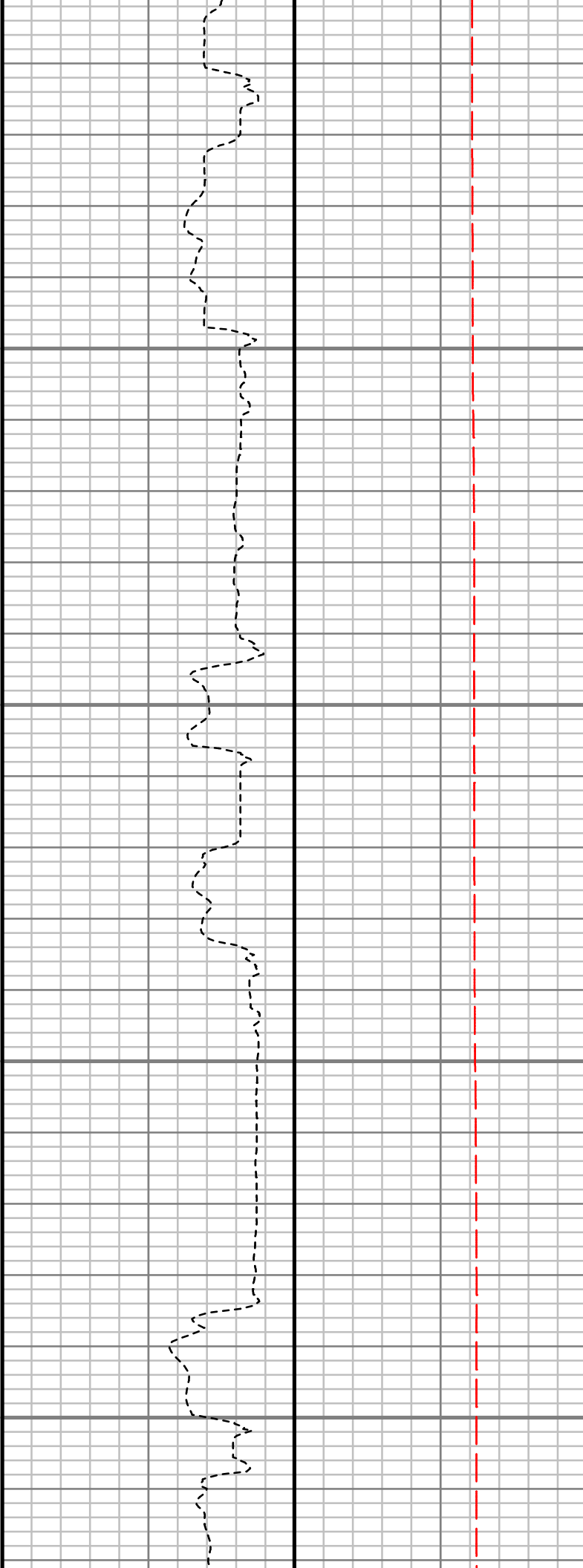
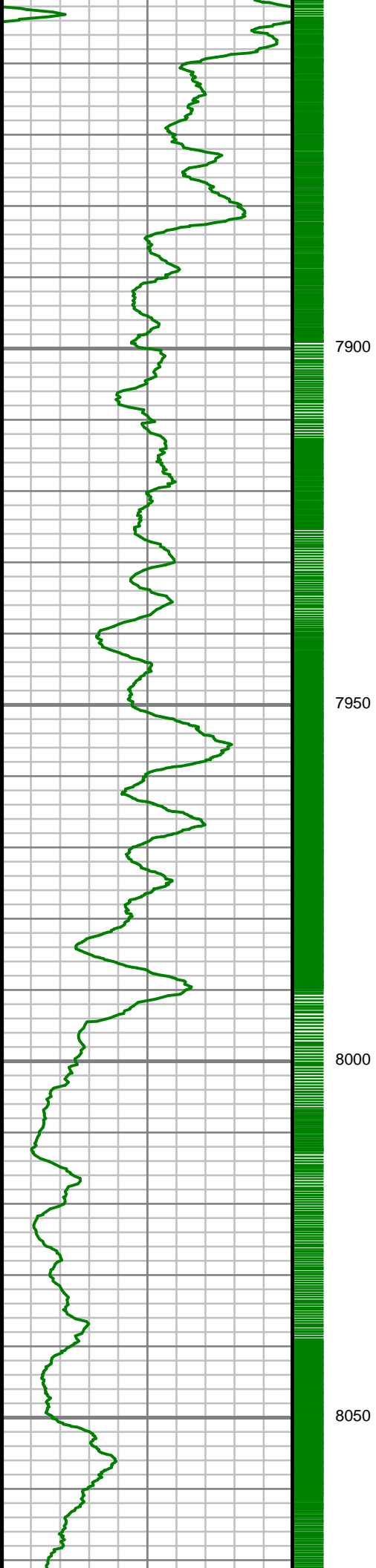
S: 80 MD: 7525.00 ft
Inc: 39.34 deg Az:
357.87 deg TVD:
7181.69 ft

S: 81 MD: 7620.00 ft
Inc: 45.98 deg Az:
355.14 deg TVD:
7251.52 ft



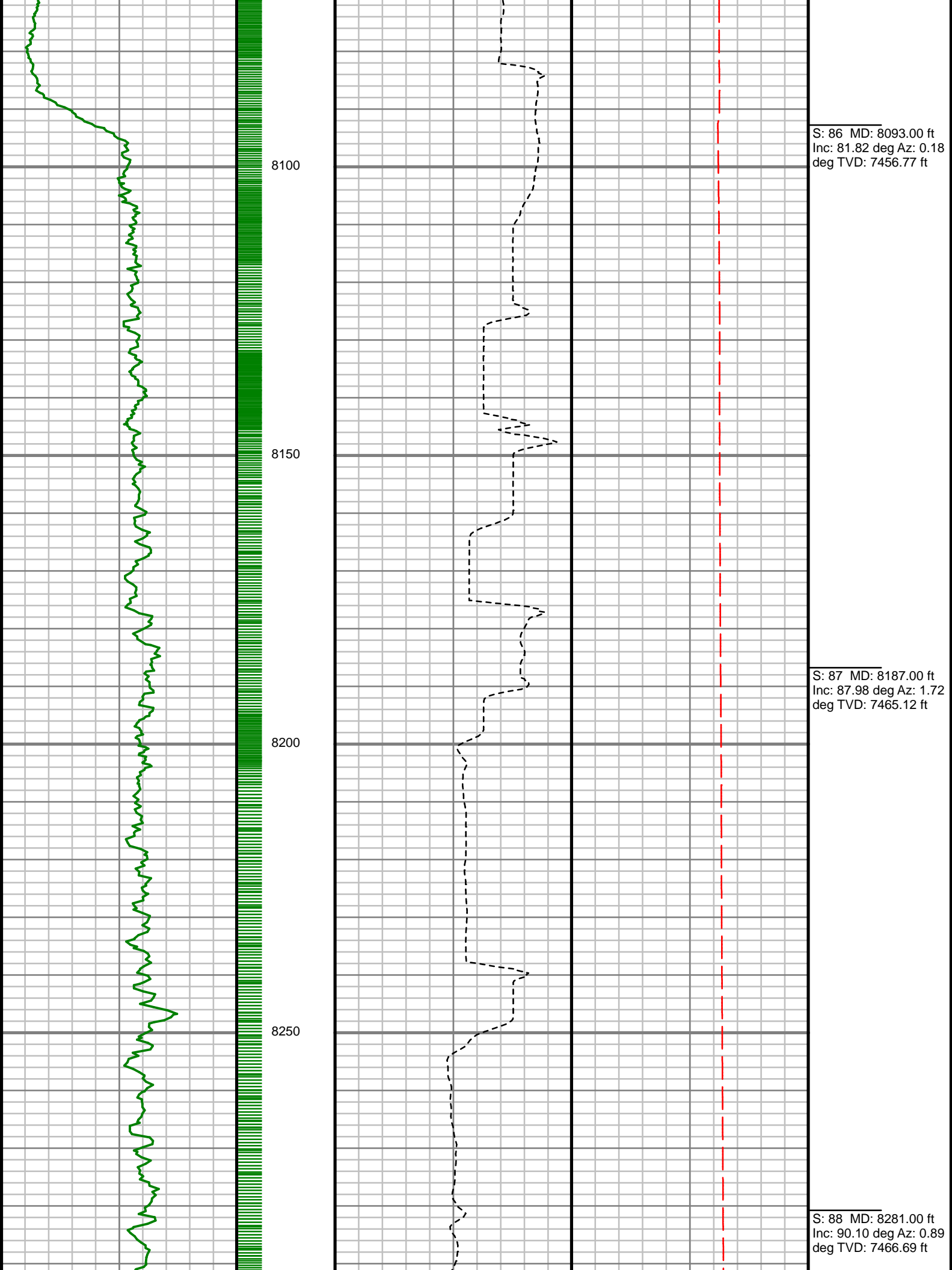
S: 82 MD: 7715.00 ft
Inc: 53.61 deg Az:
357.25 deg TVD:
7312.80 ft

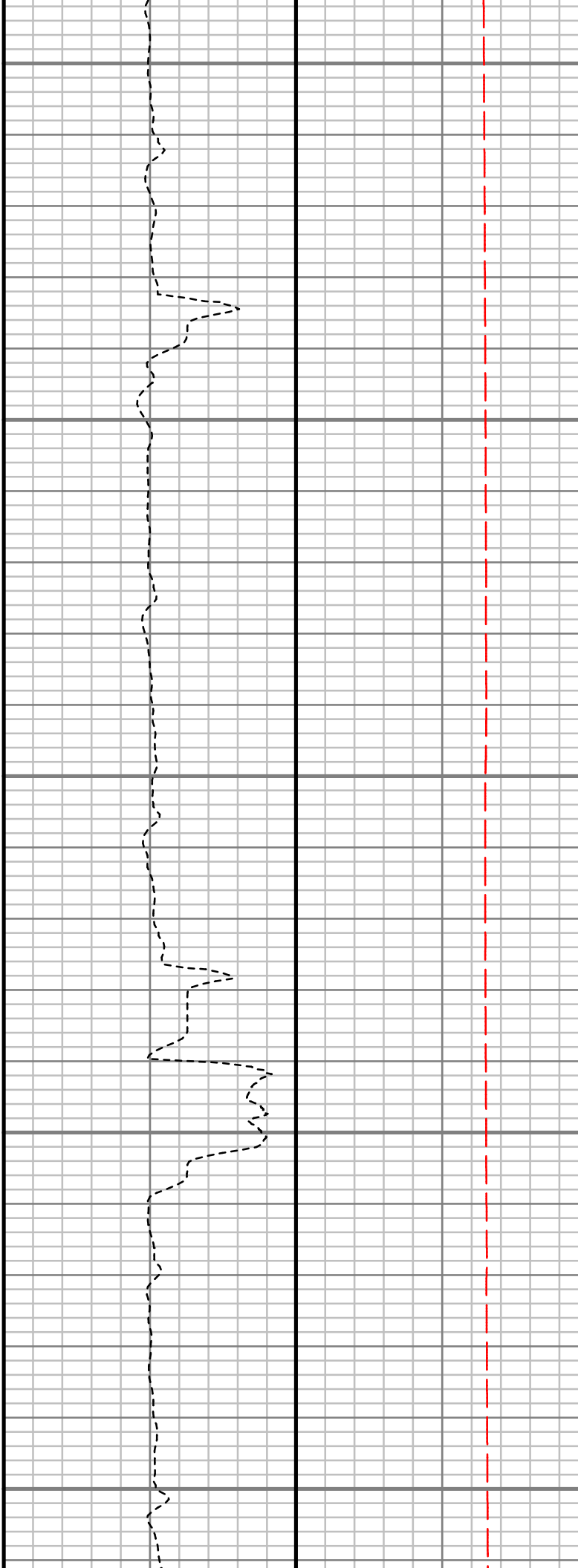
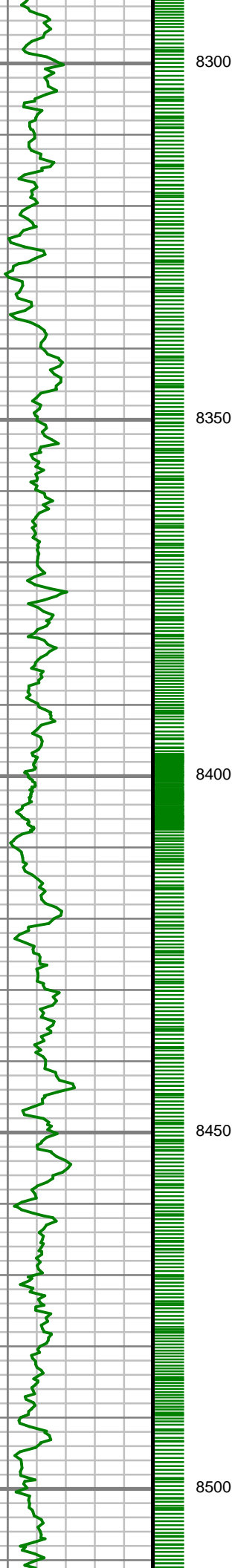
S: 83 MD: 7809.00 ft
Inc: 60.54 deg Az:
358.96 deg TVD:
7363.87 ft



S: 84 MD: 7905.00 ft
Inc: 66.70 deg Az:
359.00 deg TVD:
7406.51 ft

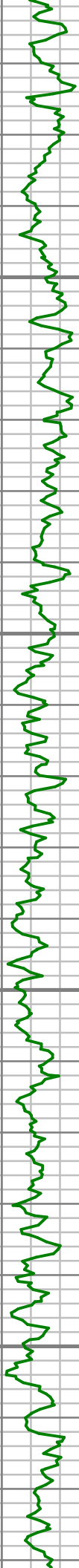
S: 85 MD: 7998.00 ft
Inc: 74.55 deg Az:
358.56 deg TVD:
7437.33 ft





S: 89 MD: 8376.00 ft
Inc: 90.90 deg Az: 1.46
deg TVD: 7465.86 ft

S: 90 MD: 8469.00 ft
Inc: 90.07 deg Az: 0.90
deg TVD: 7465.07 ft

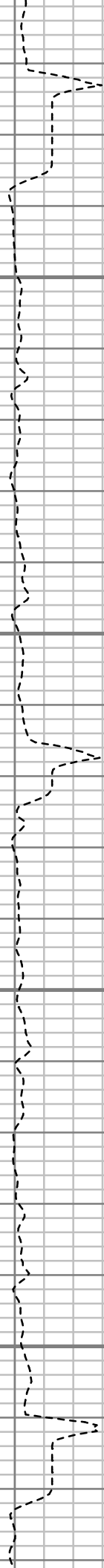


8550

8600

8650

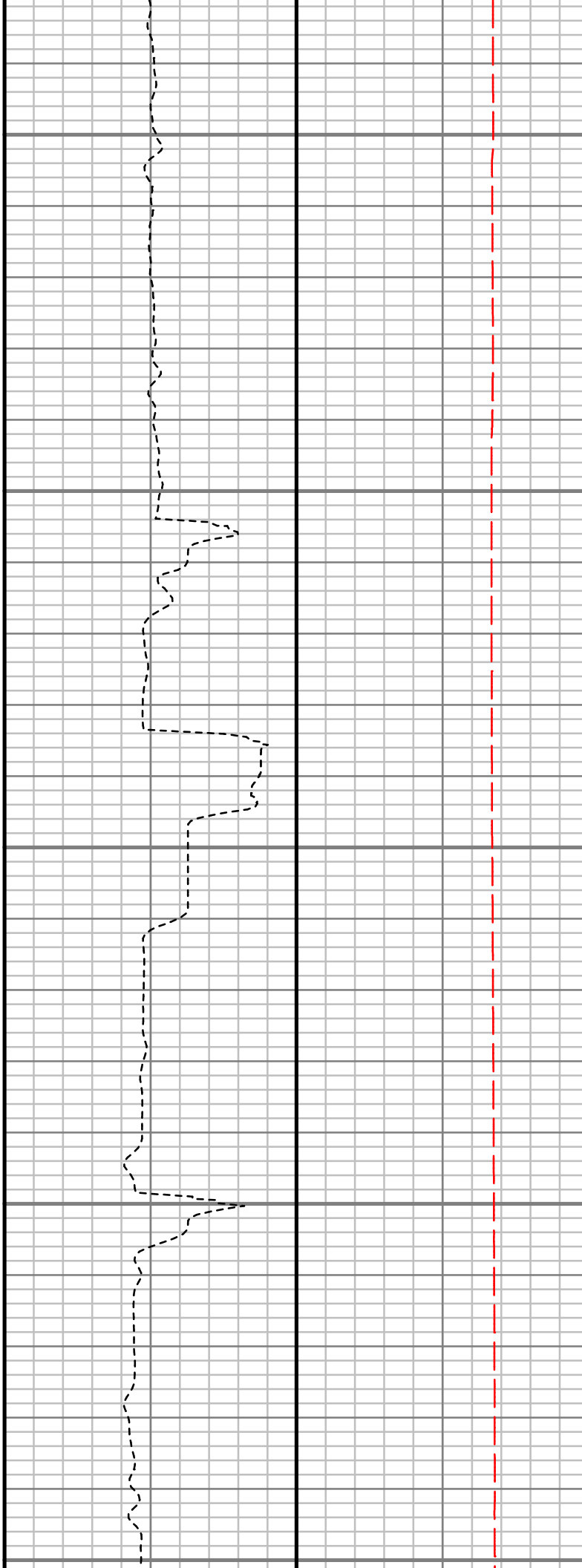
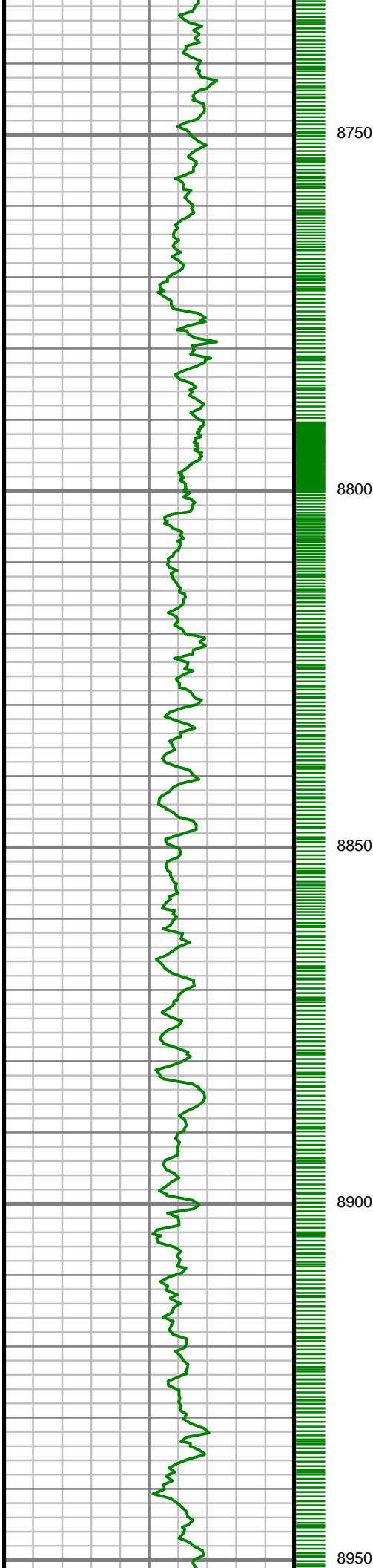
8700



S: 91 MD: 8564.00 ft
Inc: 90.13 deg Az: 0.38
deg TVD: 7464.90 ft

S: 92 MD: 8657.00 ft
Inc: 90.84 deg Az: 0.35
deg TVD: 7464.11 ft





S: 93 MD: 8752.00 ft
Inc: 91.41 deg Az:
359.91 deg TVD:
7462.25 ft

S: 94 MD: 8845.00 ft
Inc: 91.08 deg Az:
359.97 deg TVD:
7460.23 ft

S: 95 MD: 8940.00 ft
Inc: 91.78 deg Az:
359.73 deg TVD:
7457.87 ft

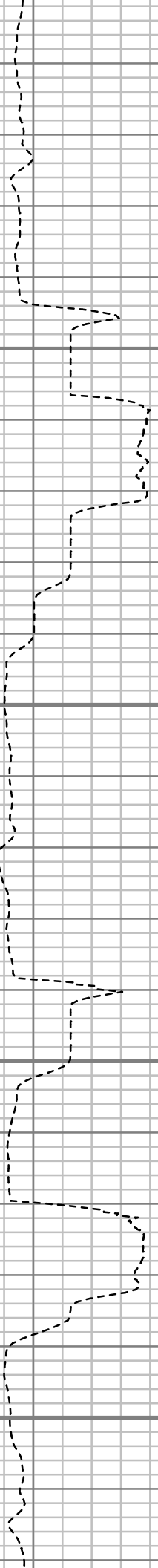


9000

9050

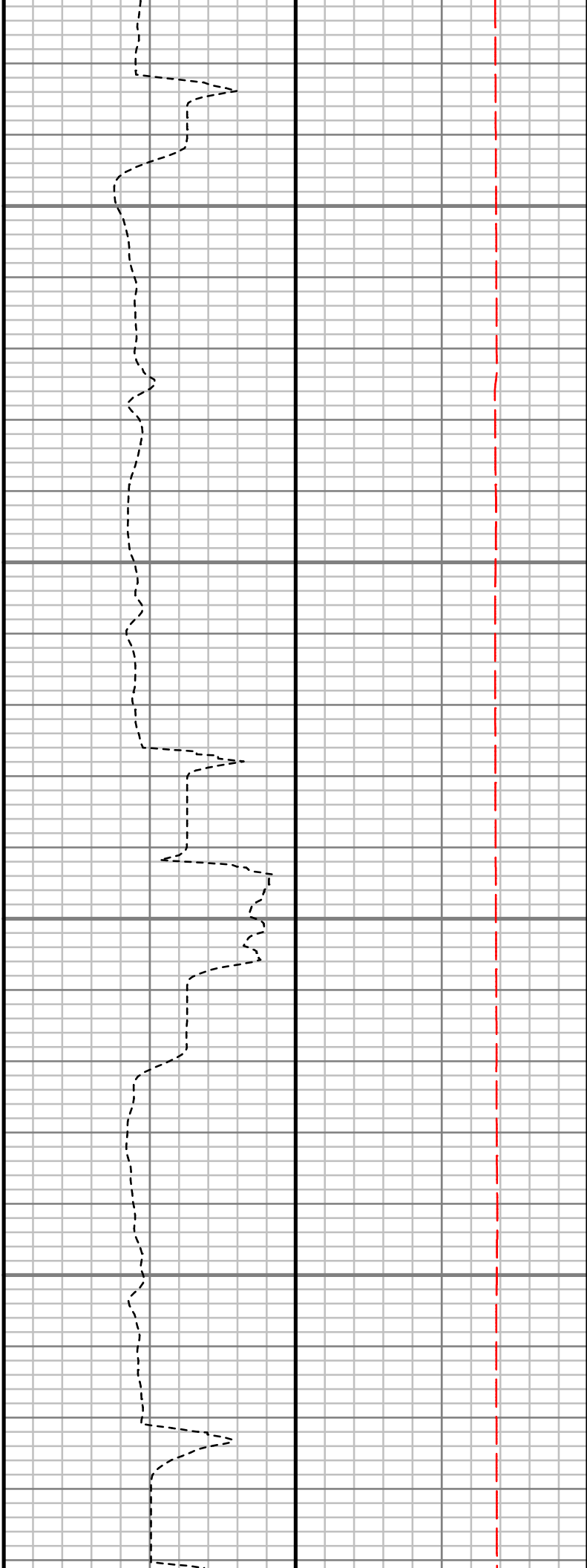
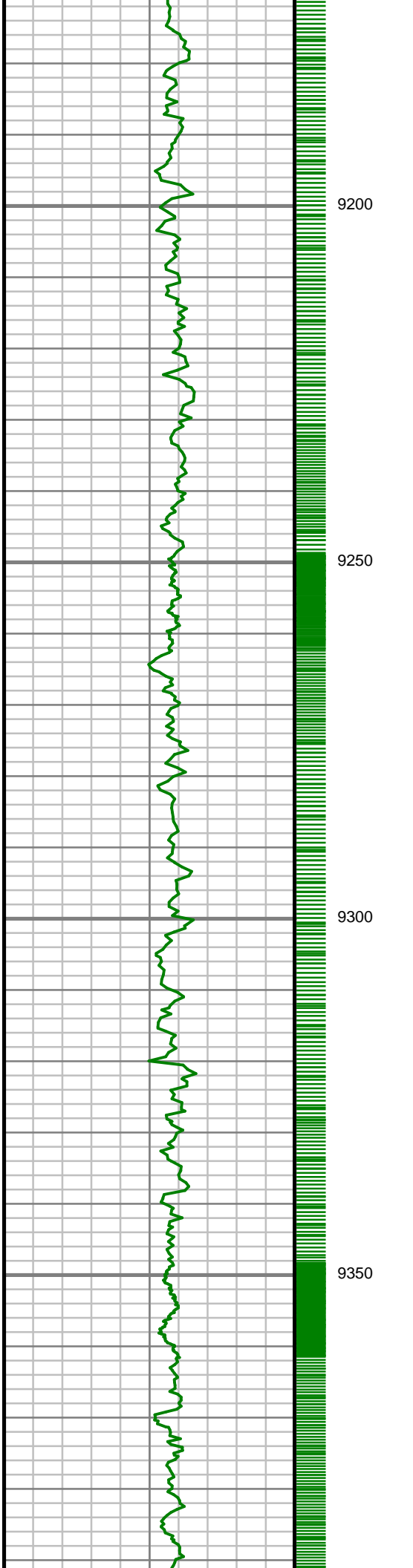
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9150



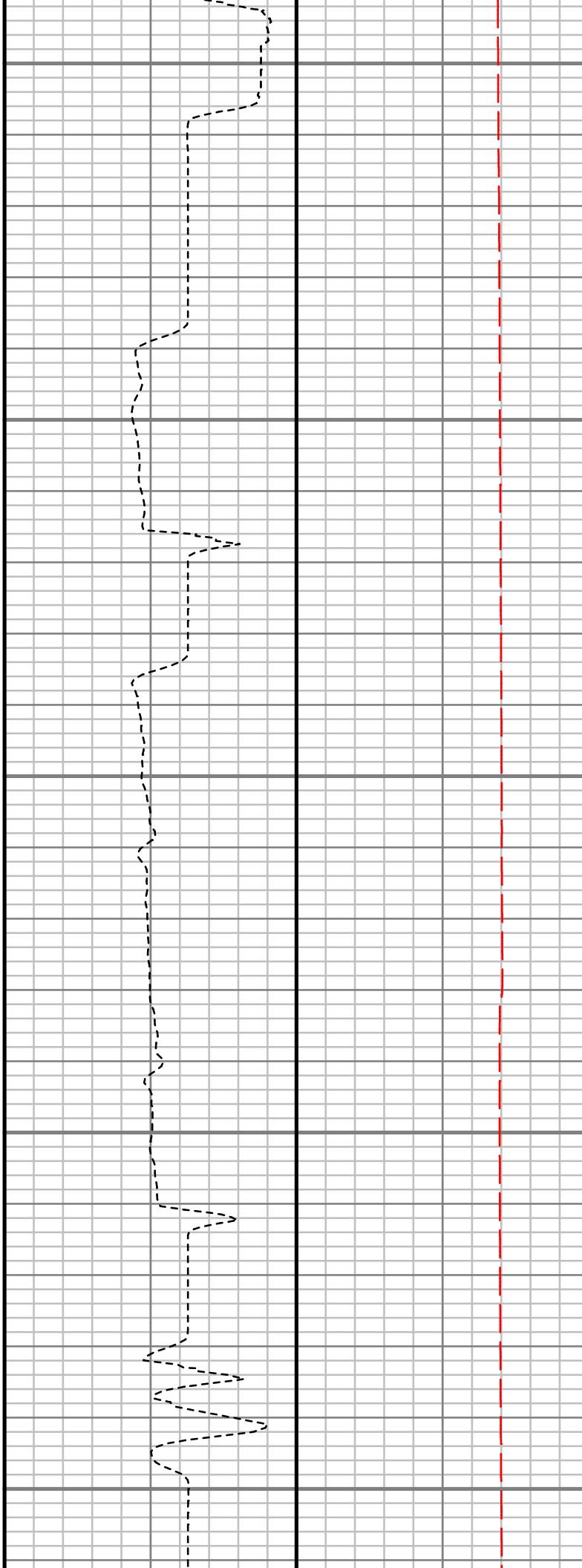
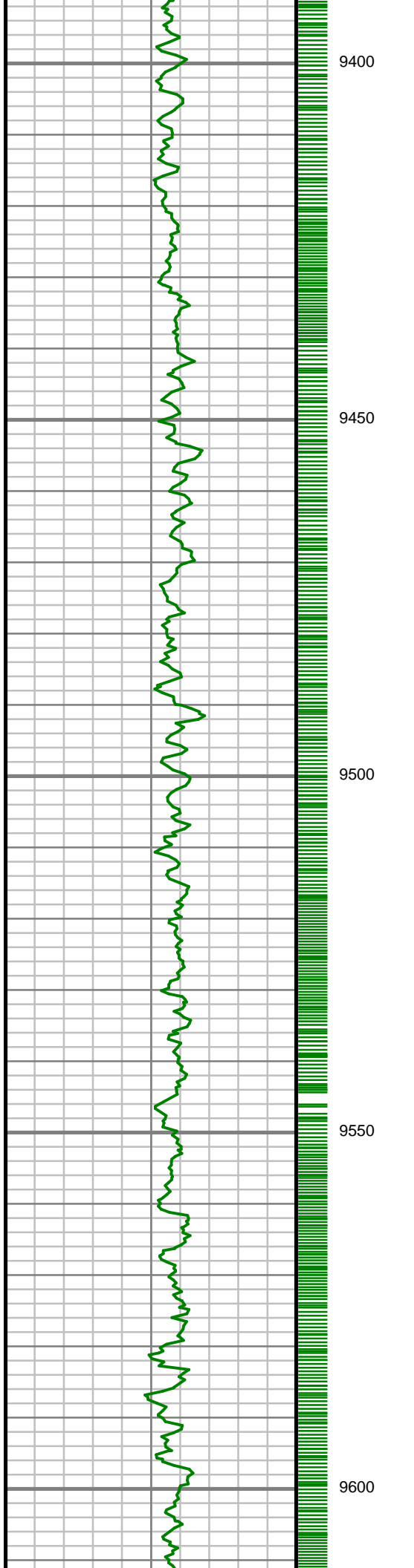
S: 96 MD: 9034.00 ft
Inc: 90.81 deg Az: 0.16
deg TVD: 7455.75 ft

S: 97 MD: 9128.00 ft
Inc: 90.64 deg Az: 0.12
deg TVD: 7454.56 ft



S: 98 MD: 9222.00 ft
Inc: 91.07 deg Az:
359.13 deg TVD:
7453.16 ft

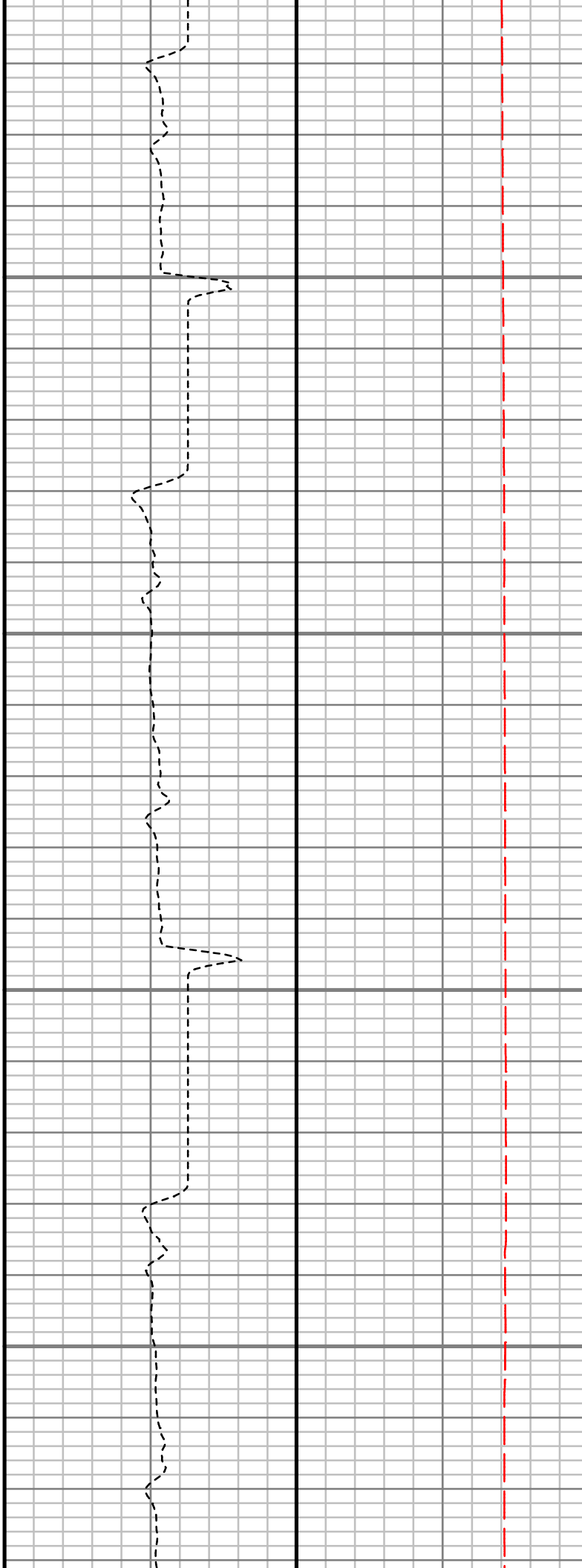
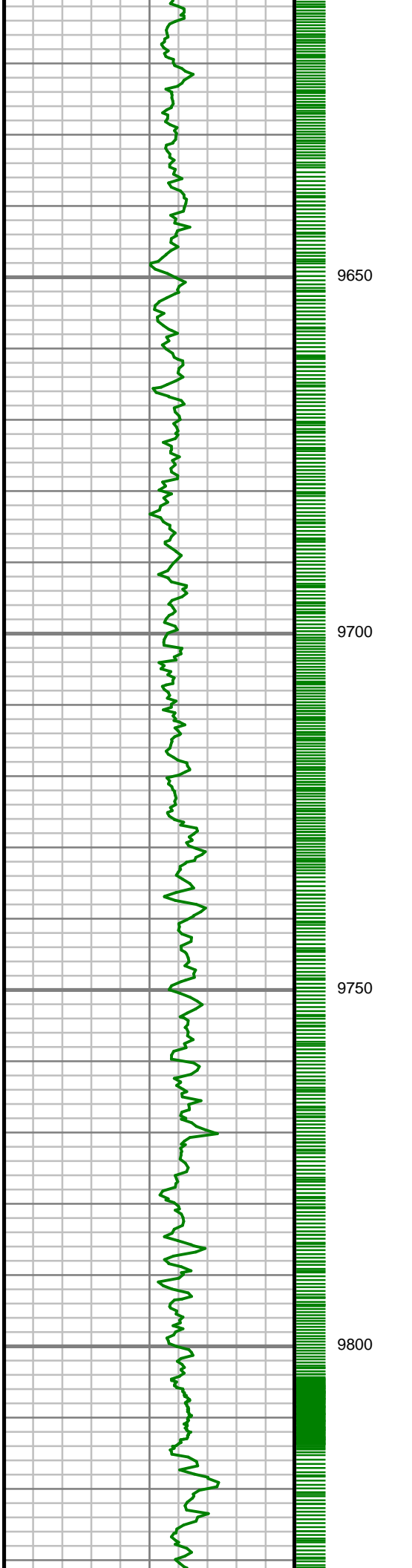
S: 99 MD: 9316.00 ft
Inc: 90.81 deg Az:
359.66 deg TVD:
7451.62 ft



S: 100 MD: 9410.00 ft
Inc: 90.30 deg Az: 0.57
deg TVD: 7450.71 ft

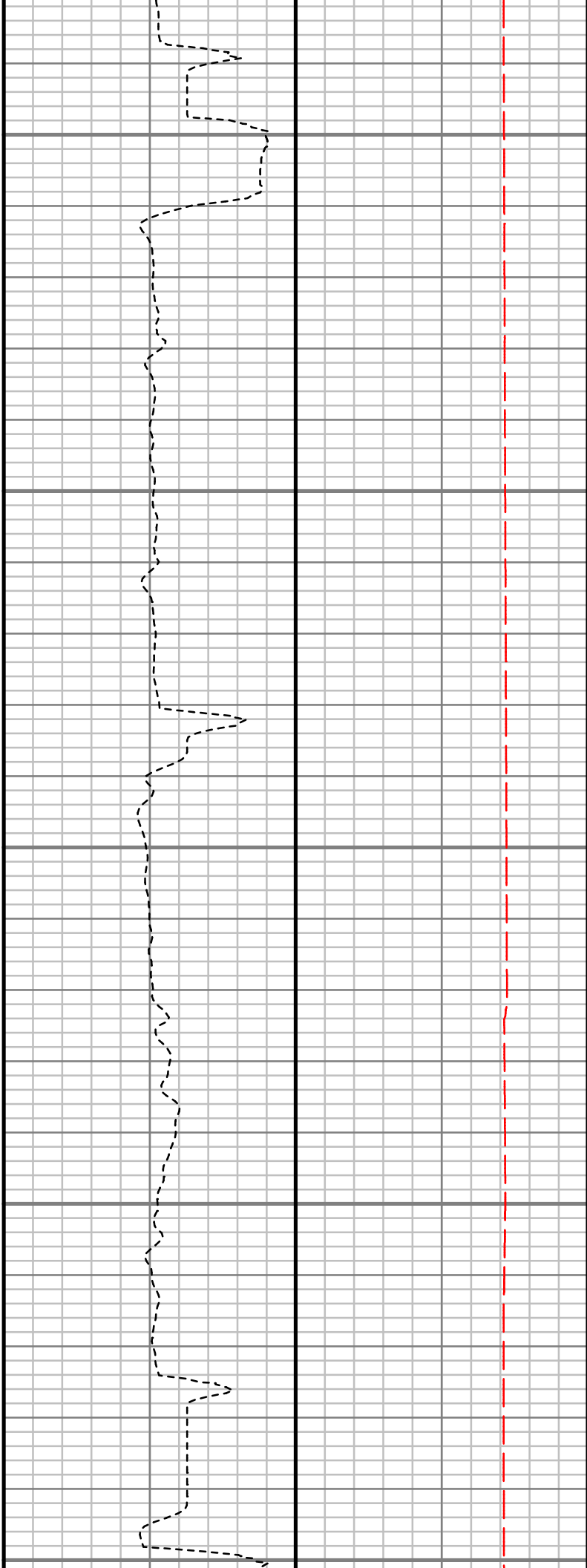
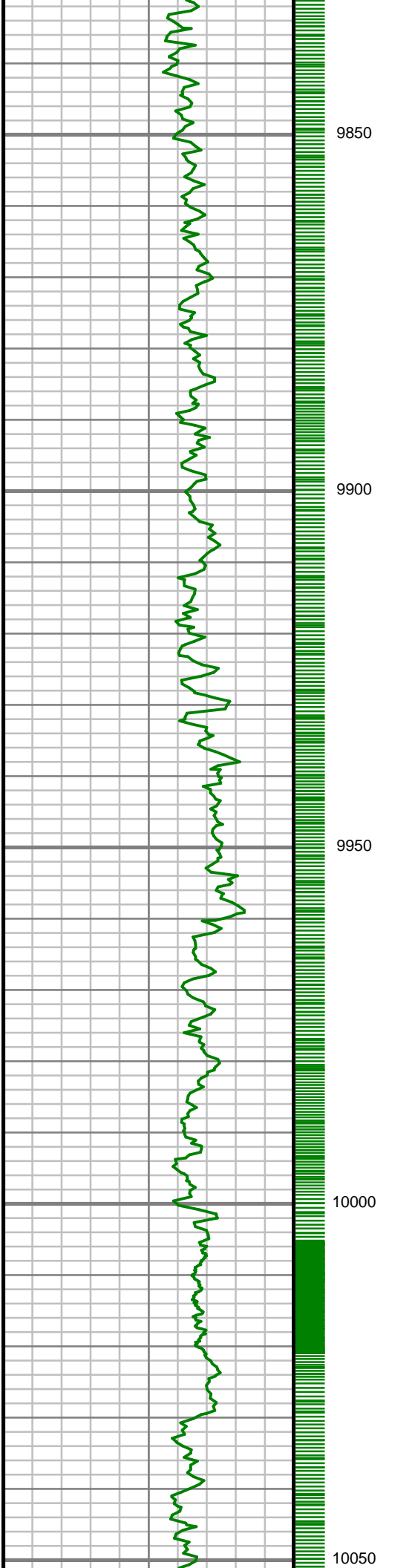
S: 101 MD: 9505.00 ft
Inc: 91.08 deg Az: 0.97
deg TVD: 7449.57 ft

S: 102 MD: 9599.00 ft
Inc: 89.60 deg Az: 1.91
deg TVD: 7449.01 ft



S: 103 MD: 9693.00 ft
Inc: 89.36 deg Az: 2.12
deg TVD: 7449.87 ft

S: 104 MD: 9786.00 ft
Inc: 89.77 deg Az: 2.50
deg TVD: 7450.58 ft



S: 105 MD: 9879.00 ft
Inc: 90.07 deg Az: 1.35
deg TVD: 7450.71 ft

S: 106 MD: 9973.00 ft
Inc: 91.24 deg Az: 1.77
deg TVD: 7449.64 ft

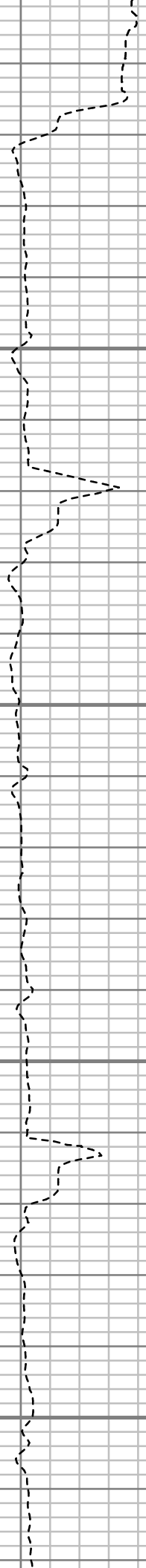


10100

10150

10200

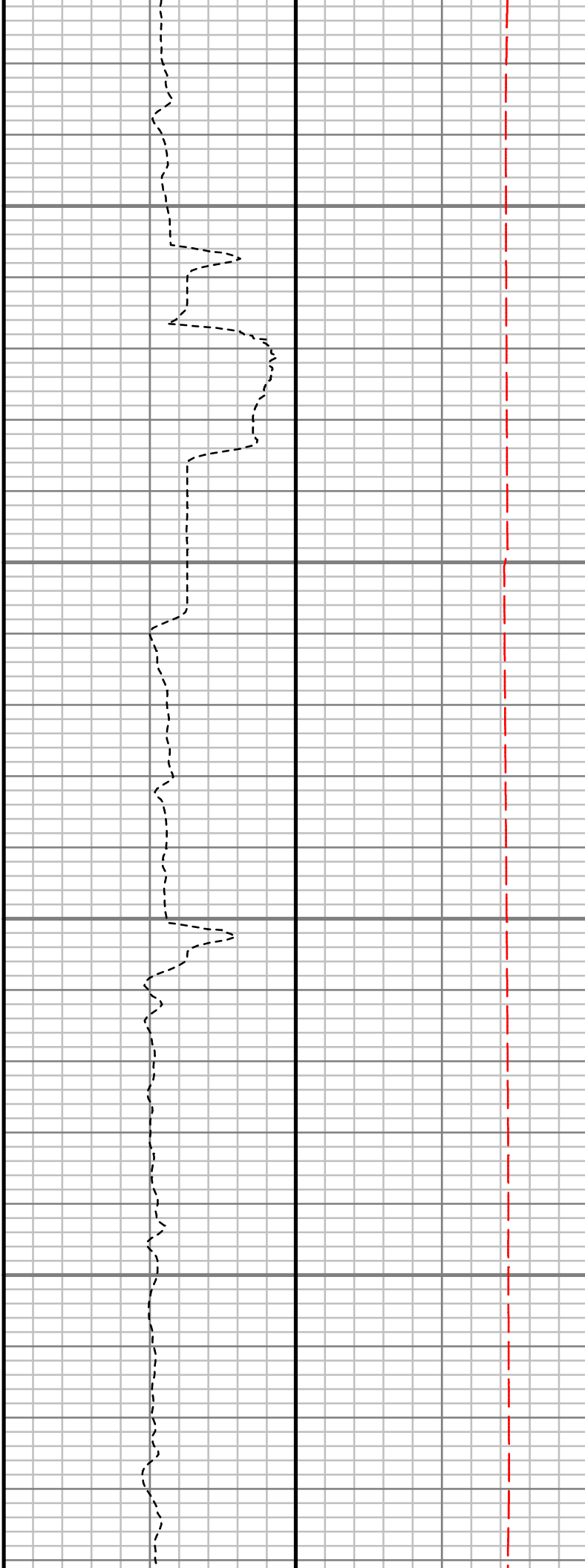
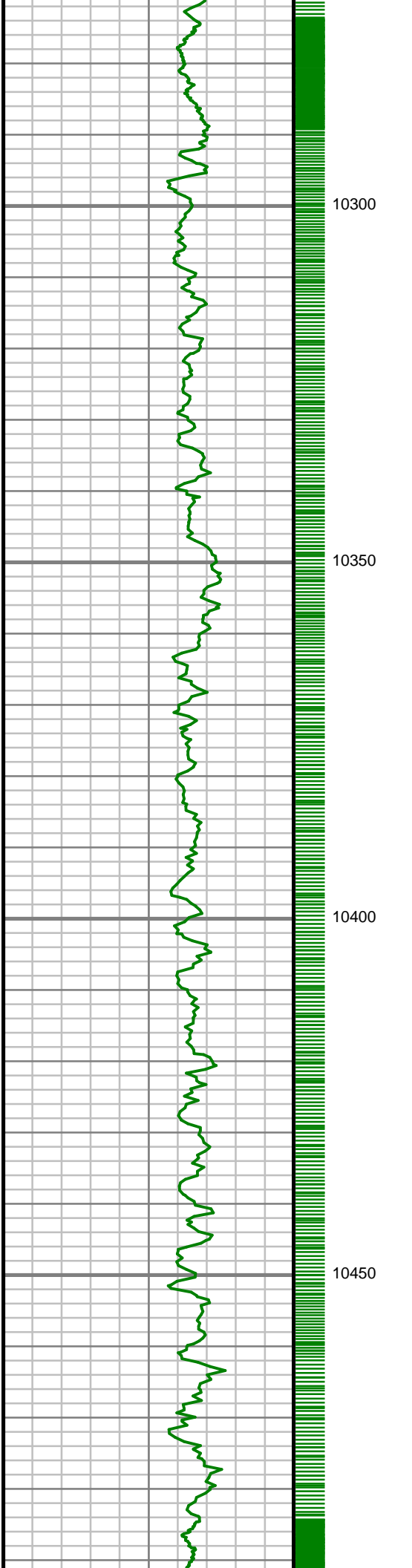
10250



S: 107 MD: 10066.00 ft
Inc: 90.30 deg Az: 0.58
deg TVD: 7448.39 ft

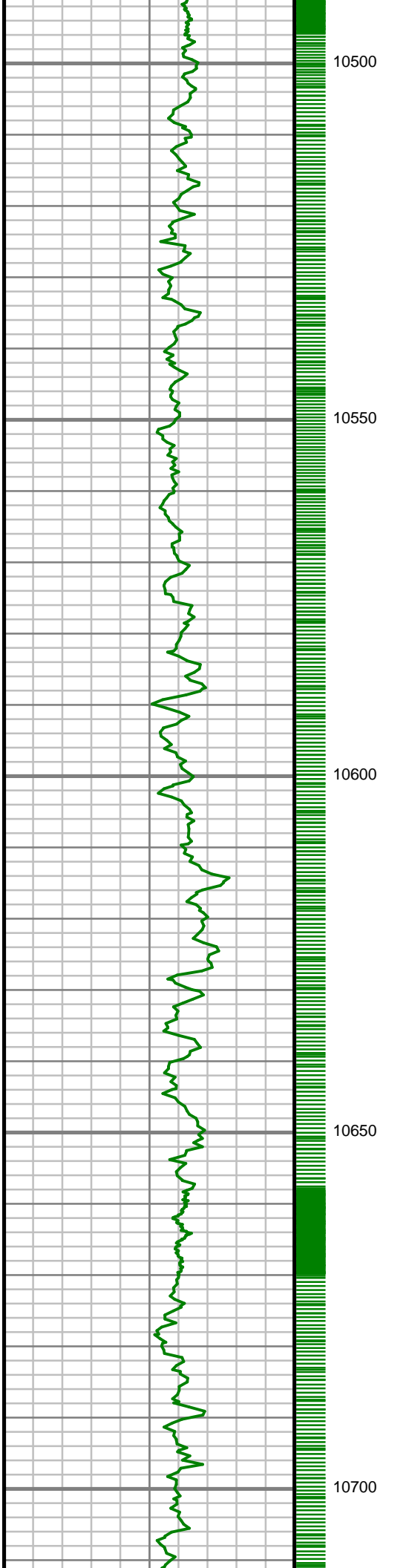
S: 108 MD: 10159.00 ft
Inc: 90.54 deg Az:
359.90 deg TVD:
7447.71 ft

S: 109 MD: 10254.00 ft
Inc: 91.41 deg Az:
359.74 deg TVD:
7446.09 ft



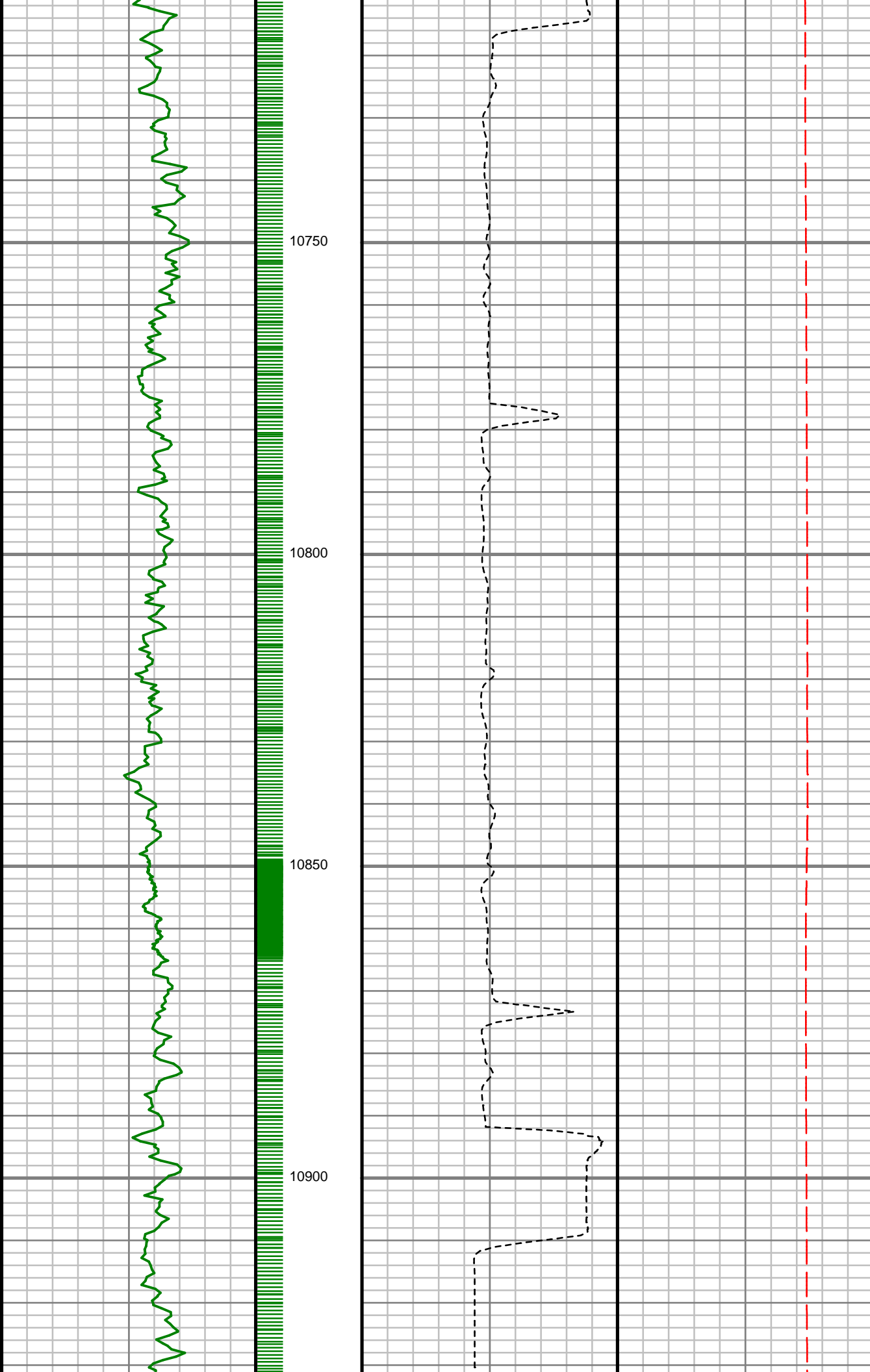
S: 110 MD: 10348.00 ft
Inc: 90.10 deg Az:
359.43 deg TVD:
7444.85 ft

S: 111 MD: 10443.00 ft
Inc: 90.54 deg Az:
359.77 deg TVD:
7444.33 ft



S: 112 MD: 10537.00 ft
Inc: 90.44 deg Az: 0.36
deg TVD: 7443.53 ft

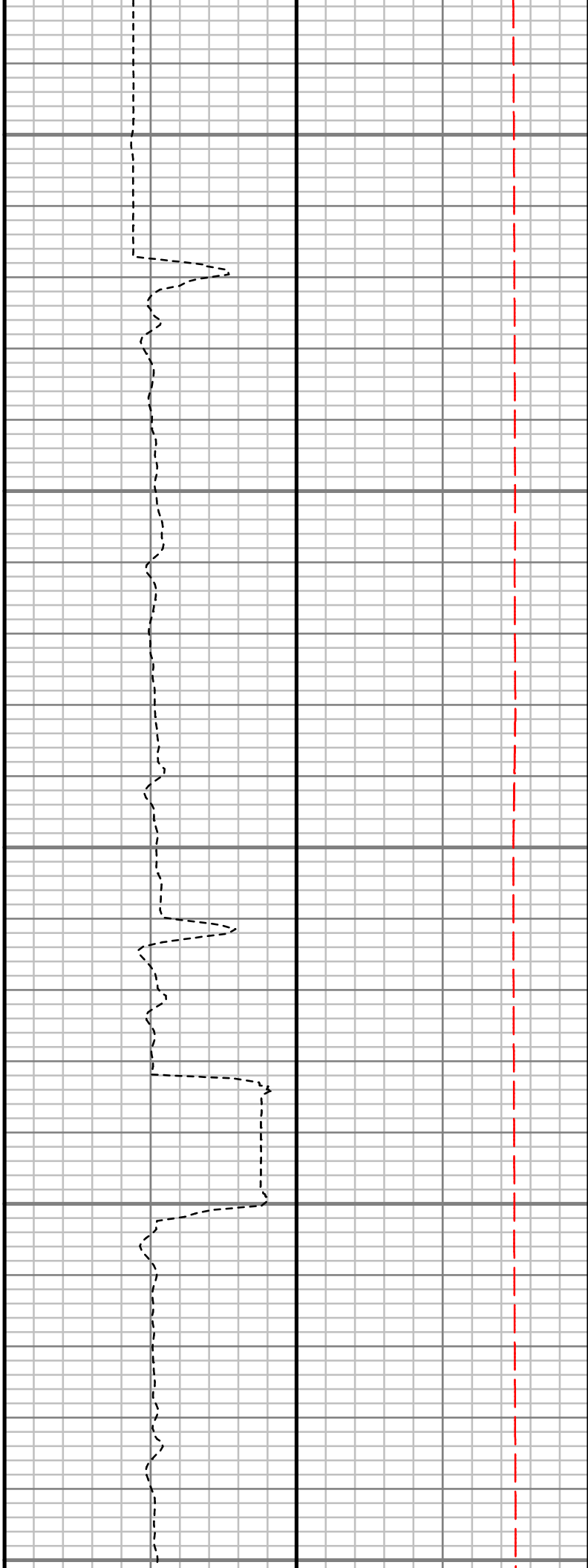
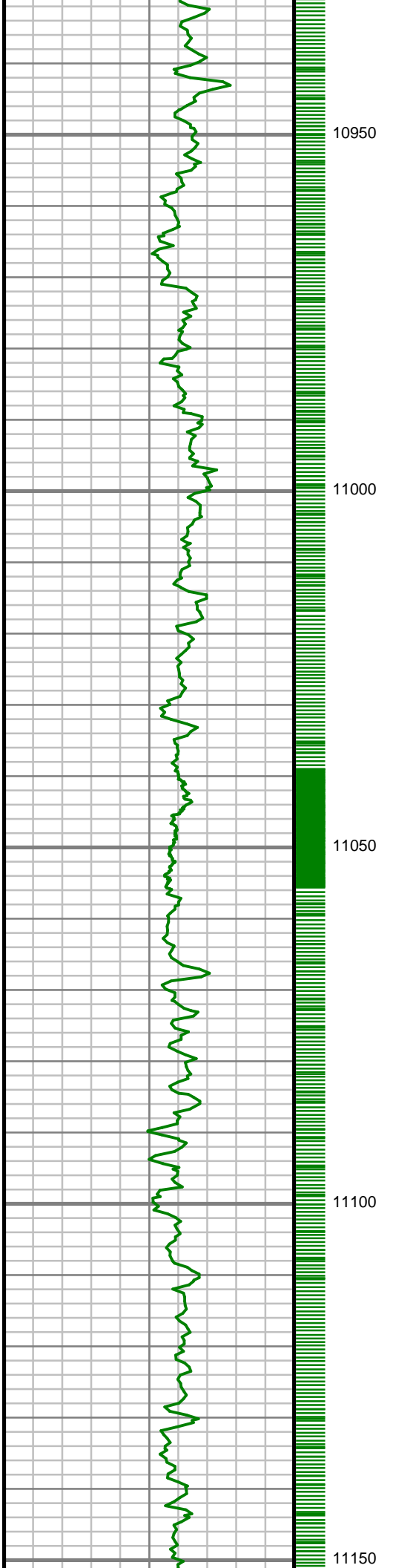
S: 113 MD: 10631.00 ft
Inc: 90.70 deg Az: 0.72
deg TVD: 7442.59 ft



S: 114 MD: 10725.00 ft
Inc: 90.33 deg Az: 0.14
deg TVD: 7441.74 ft

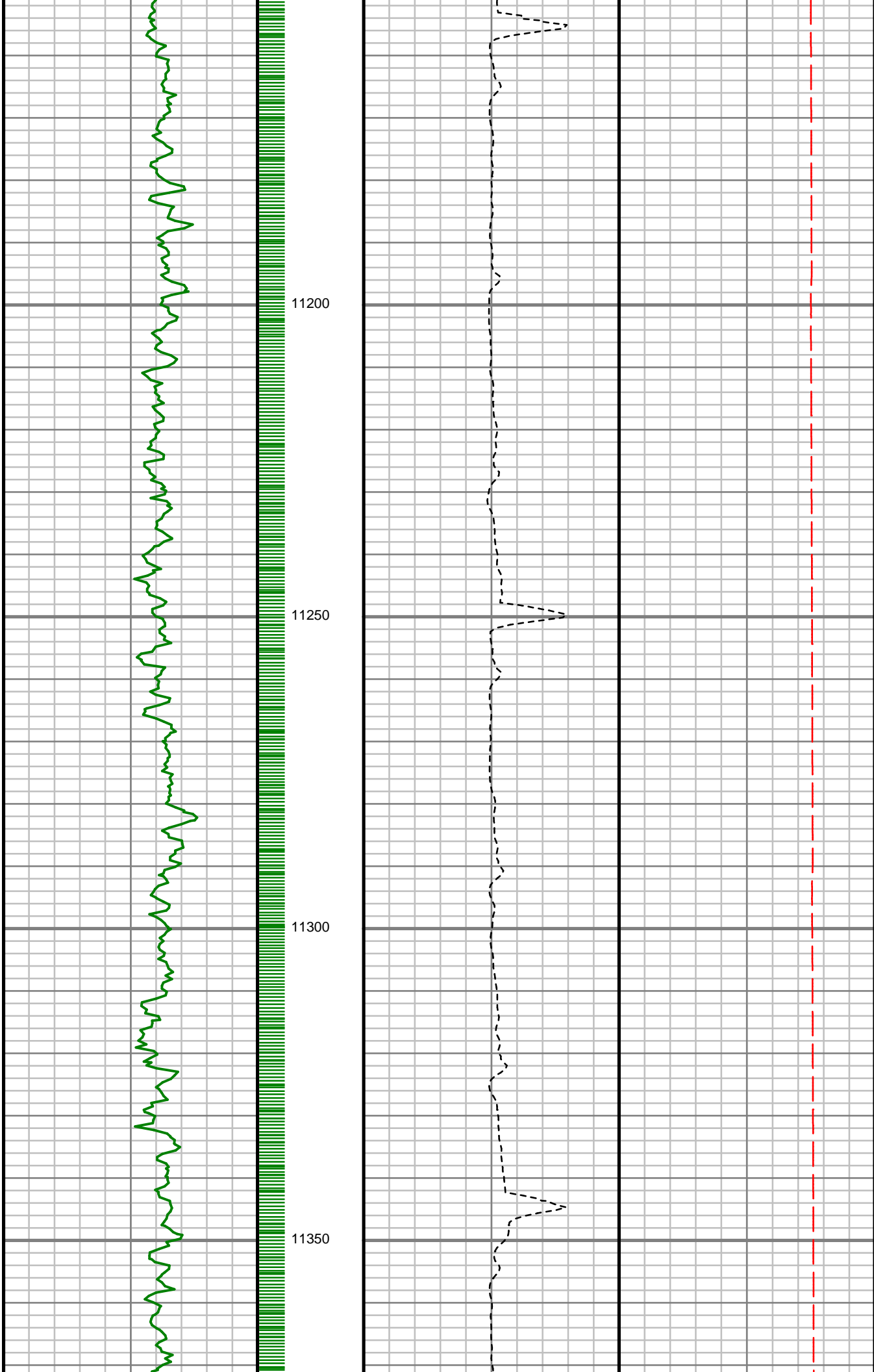
S: 115 MD: 10820.00 ft
Inc: 91.14 deg Az: 0.46
deg TVD: 7440.52 ft

S: 116 MD: 10914.00 ft
Inc: 90.37 deg Az:
359.84 deg TVD:
7439.28 ft



S: 117 MD: 11009.00 ft
Inc: 91.34 deg Az:
359.14 deg TVD:
7437.86 ft

S: 118 MD: 11103.00 ft
Inc: 89.73 deg Az:
358.80 deg TVD:
7436.97 ft



S: 119 MD: 11197.00 ft
Inc: 89.56 deg Az:
359.15 deg TVD:
7437.55 ft

S: 120 MD: 11292.00 ft
Inc: 90.47 deg Az:
359.34 deg TVD:
7437.52 ft

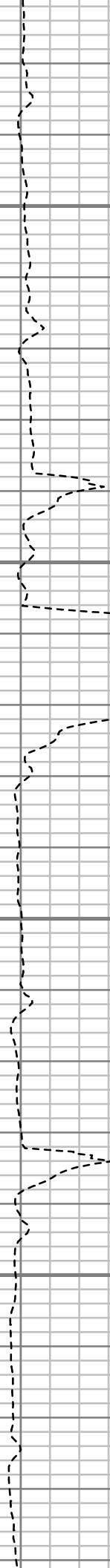


11400

11450

11500

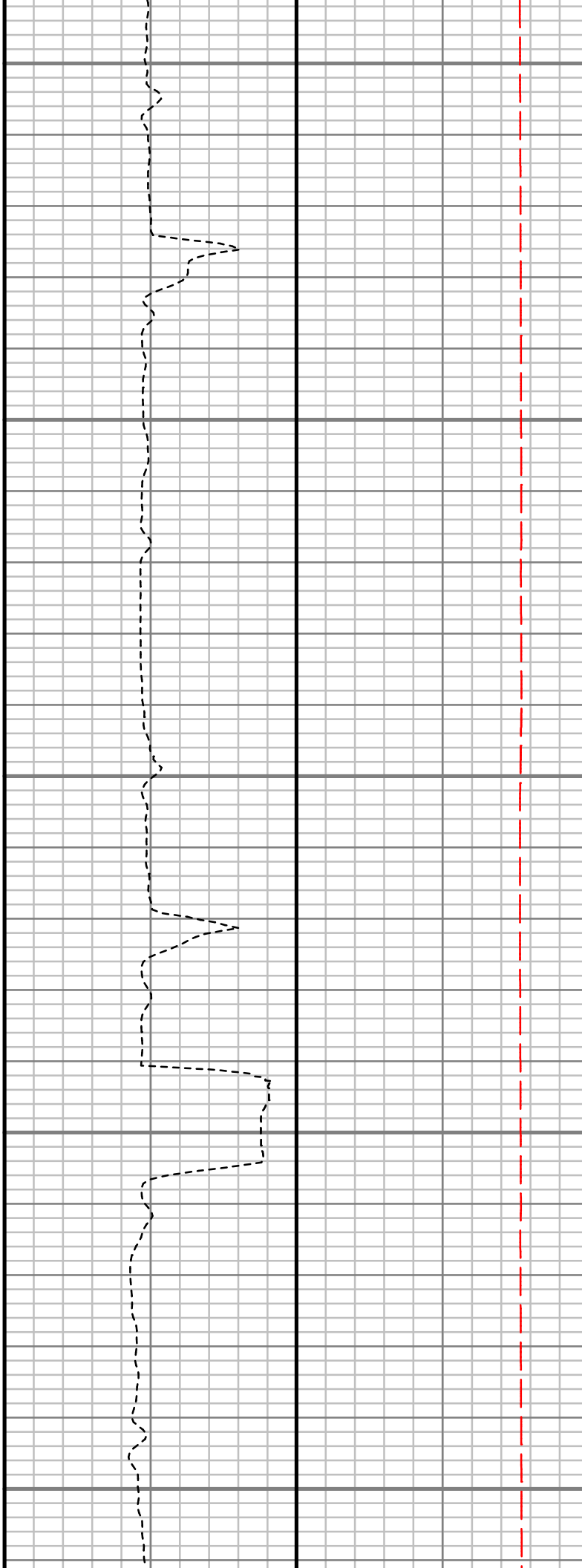
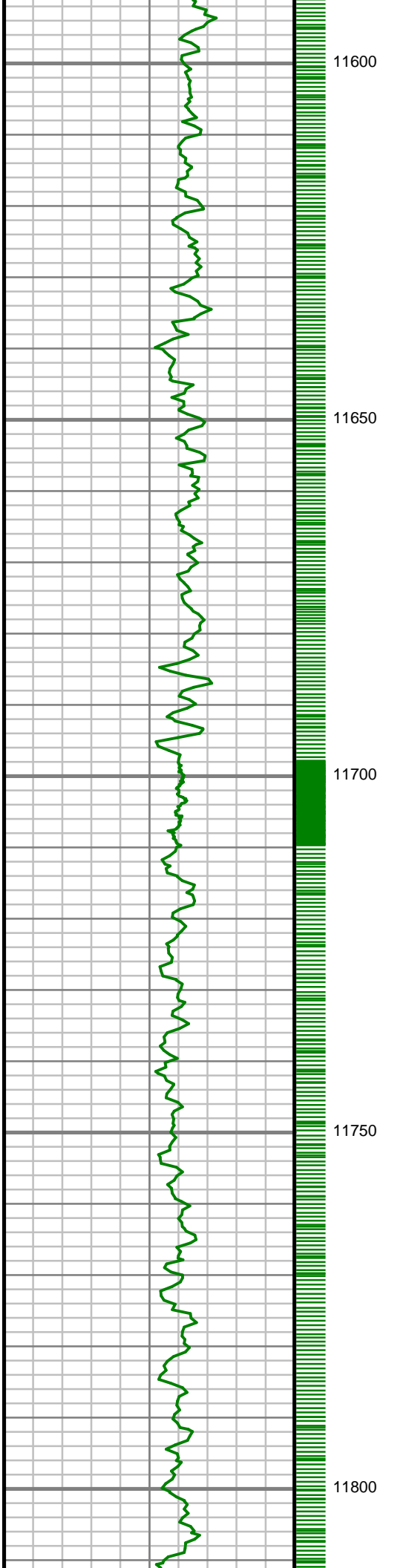
11550



S: 121 MD: 11386.00 ft
Inc: 91.34 deg Az:
359.54 deg TVD:
7436.04 ft

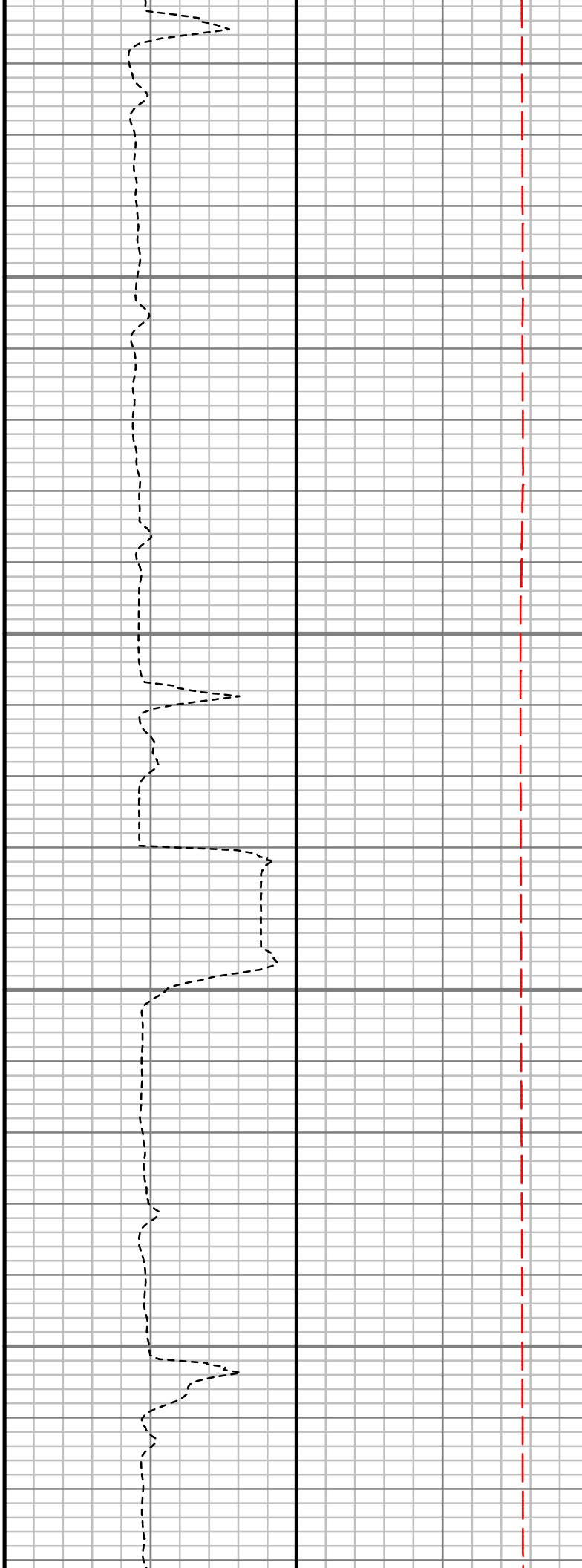
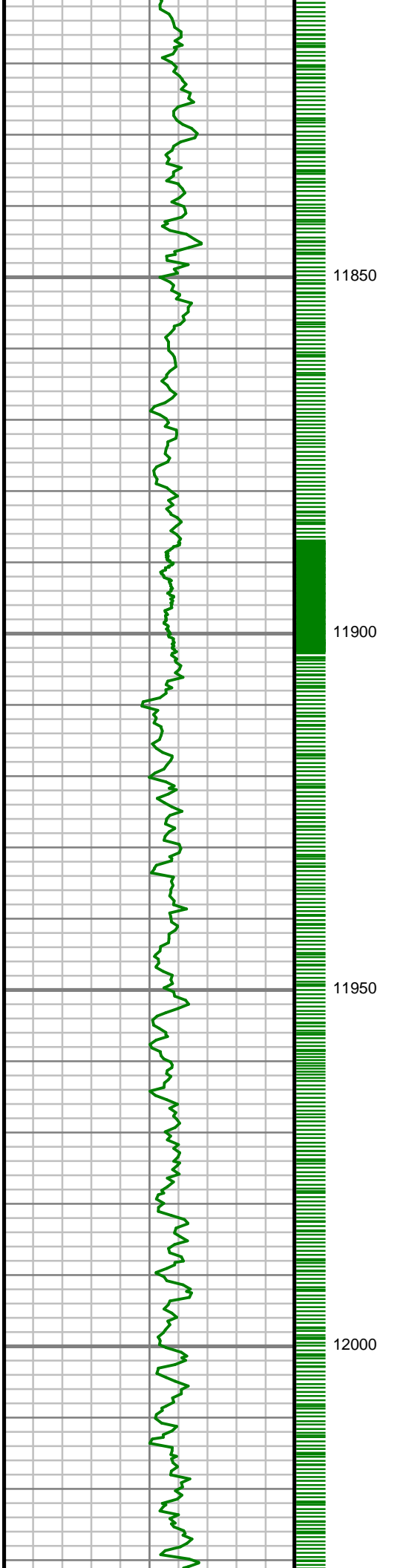
S: 122 MD: 11480.00 ft
Inc: 89.80 deg Az:
359.41 deg TVD:
7435.10 ft

S: 123 MD: 11574.00 ft
Inc: 90.40 deg Az:
359.55 deg TVD:
7434.94 ft



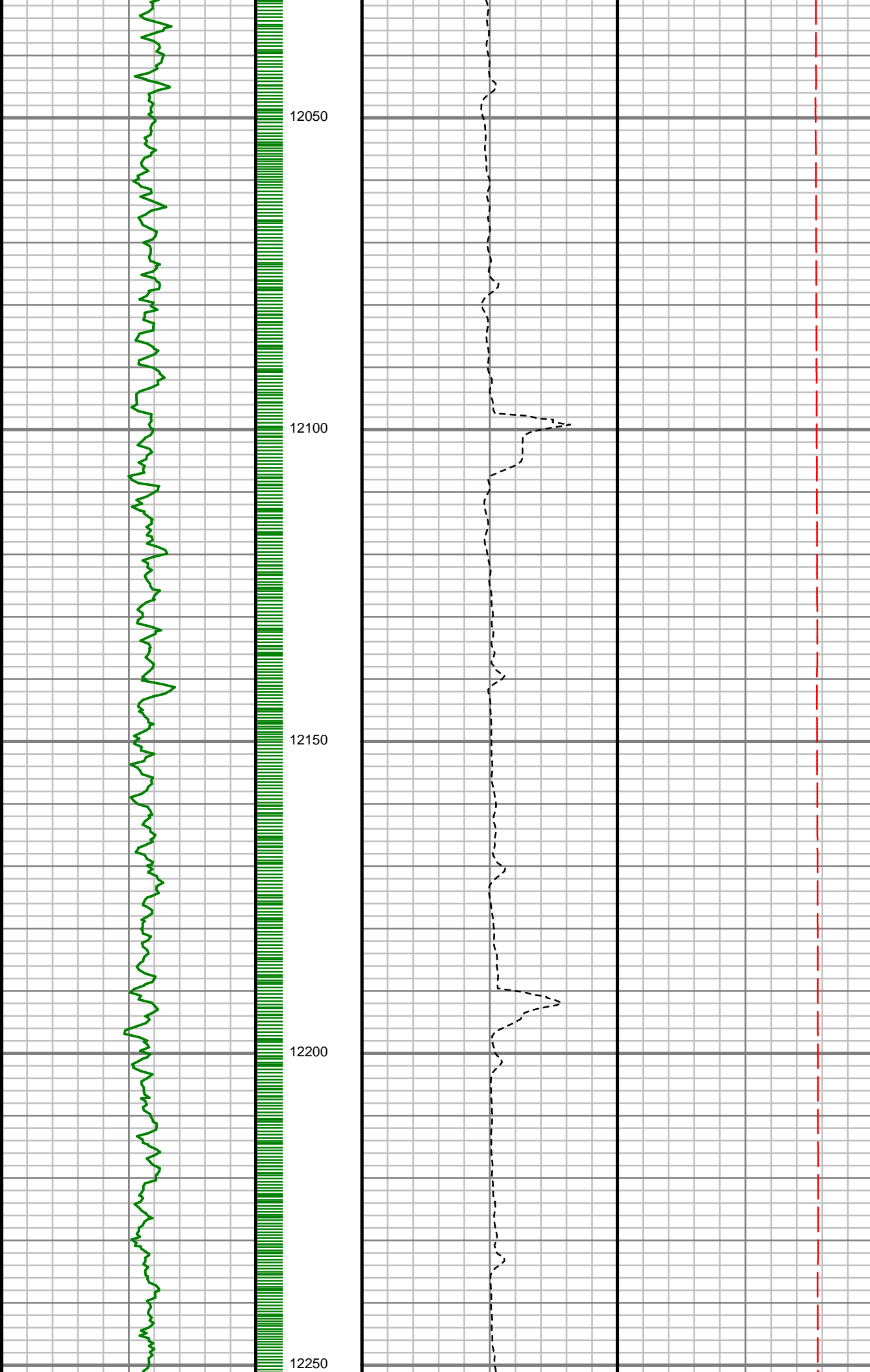
S: 124 MD: 11668.00 ft
Inc: 91.45 deg Az: 0.22
deg TVD: 7433.42 ft

S: 125 MD: 11761.00 ft
Inc: 90.81 deg Az:
359.51 deg TVD:
7431.59 ft



S: 126 MD: 11855.00 ft
Inc: 91.65 deg Az:
359.06 deg TVD:
7429.58 ft

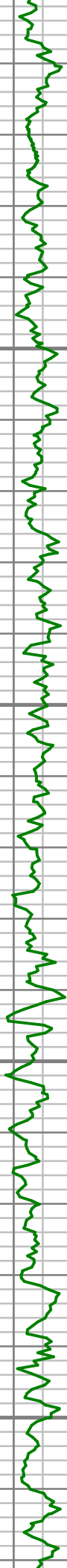
S: 127 MD: 11950.00 ft
Inc: 90.60 deg Az:
359.21 deg TVD:
7427.71 ft



S: 128 MD: 12045.00 ft
Inc: 90.54 deg Az:
359.01 deg TVD:
7426.77 ft

S: 129 MD: 12139.00 ft
Inc: 90.70 deg Az:
359.00 deg TVD:
7425.75 ft

S: 130 MD: 12234.00 ft
Inc: 90.90 deg Az:
359.32 deg TVD:
7424.42 ft

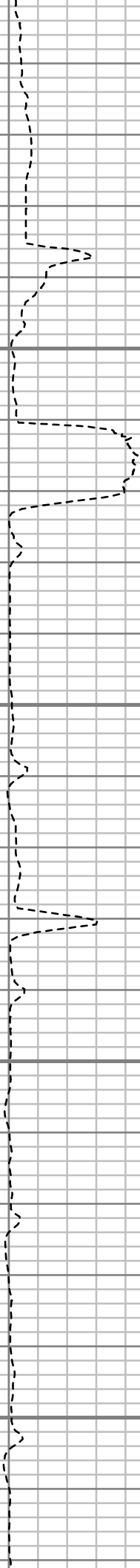


12300

12350

12400

12450



S: 131 MD: 12328.00 ft
Inc: 89.70 deg Az: 359.88 deg TVD: 7423.92 ft

S: 132 MD: 12421.00 ft
Inc: 89.76 deg Az: 0.02 deg TVD: 7424.36 ft

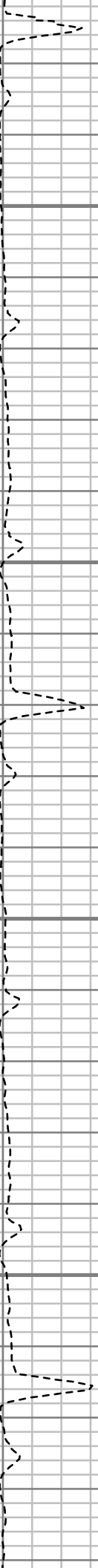


12500

12550

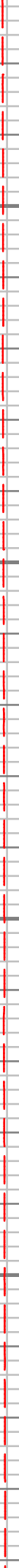
12600

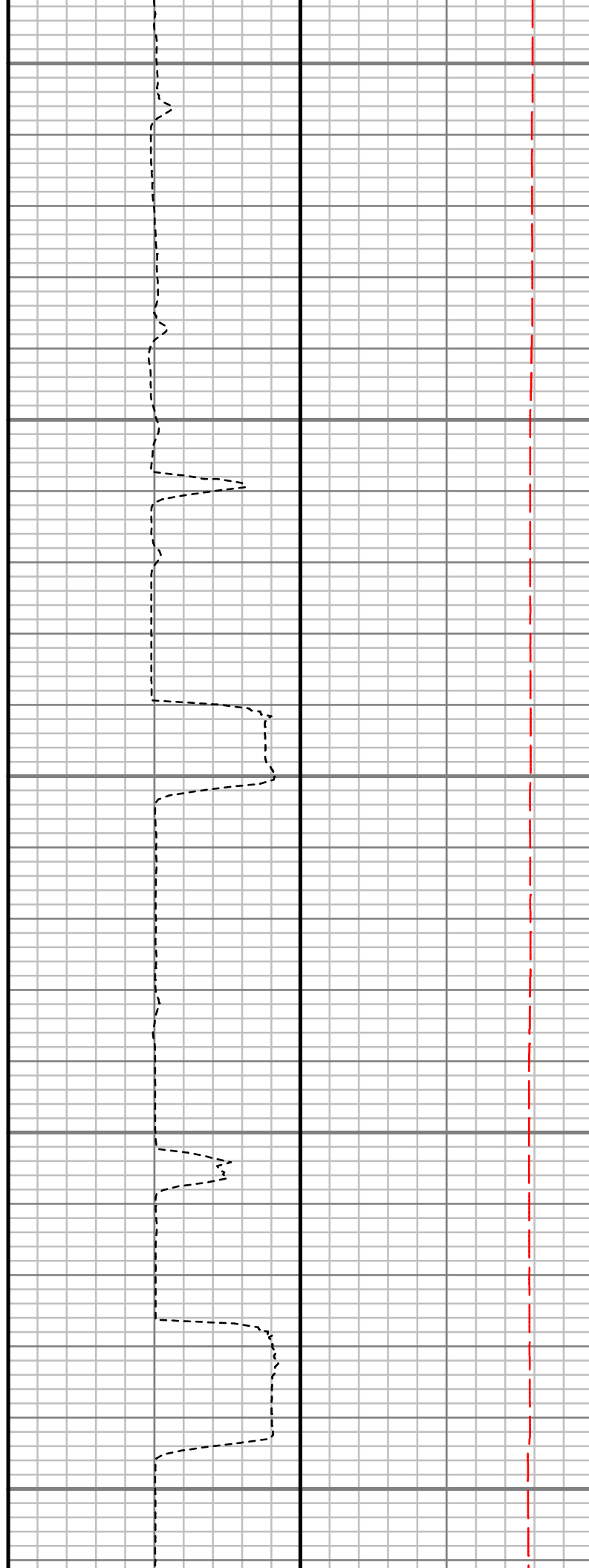
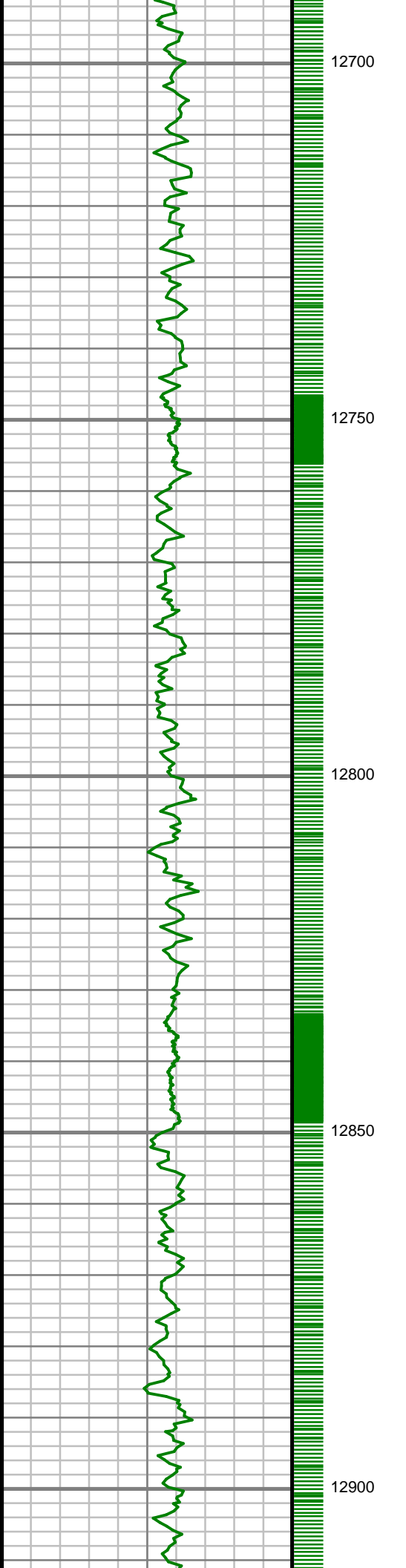
12650



S: 133 MD: 12516.00 ft
Inc: 89.97 deg Az: 0.52
deg TVD: 7424.58 ft

S: 134 MD: 12611.00 ft
Inc: 89.83 deg Az: 0.66
deg TVD: 7424.75 ft

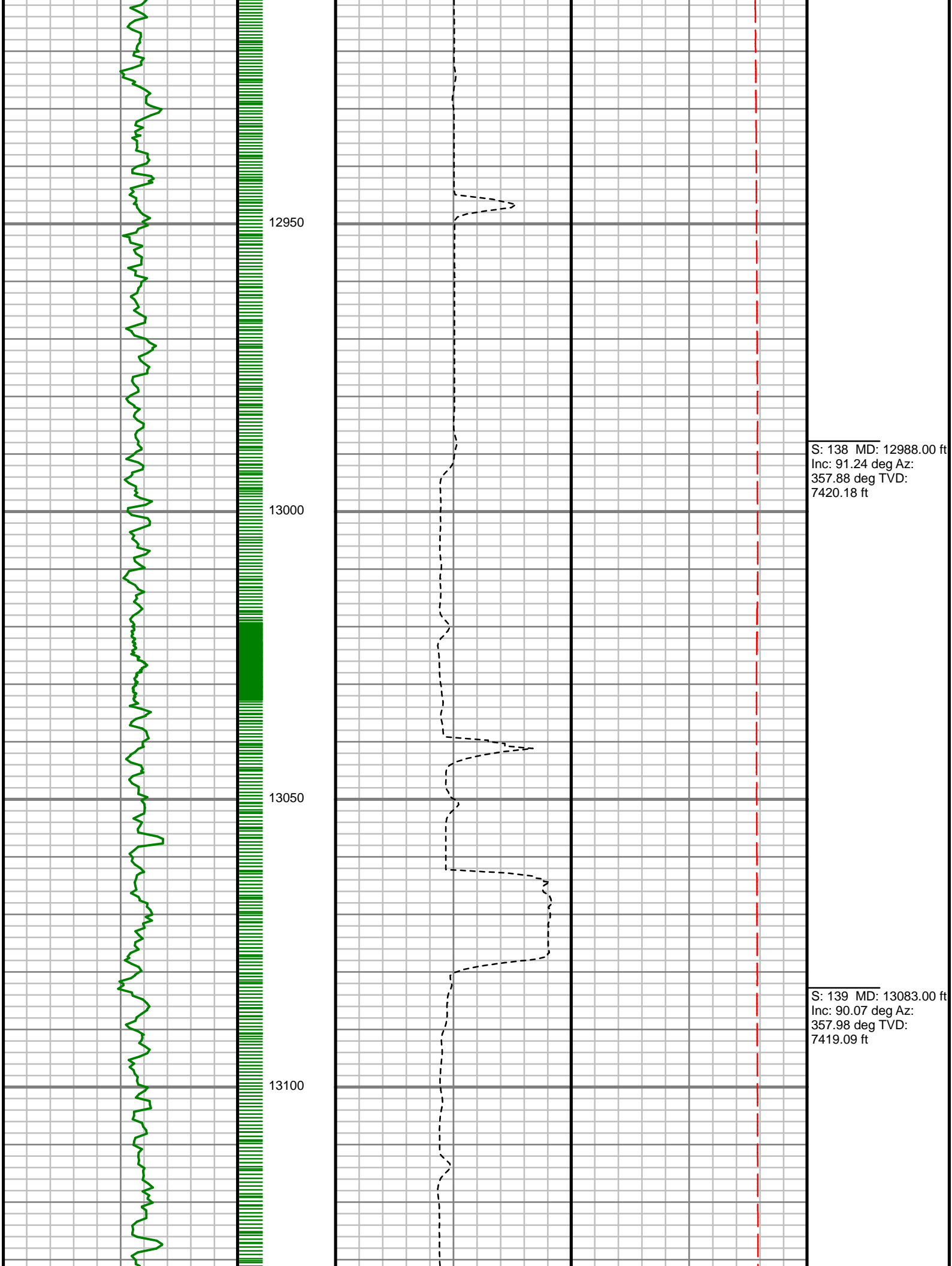


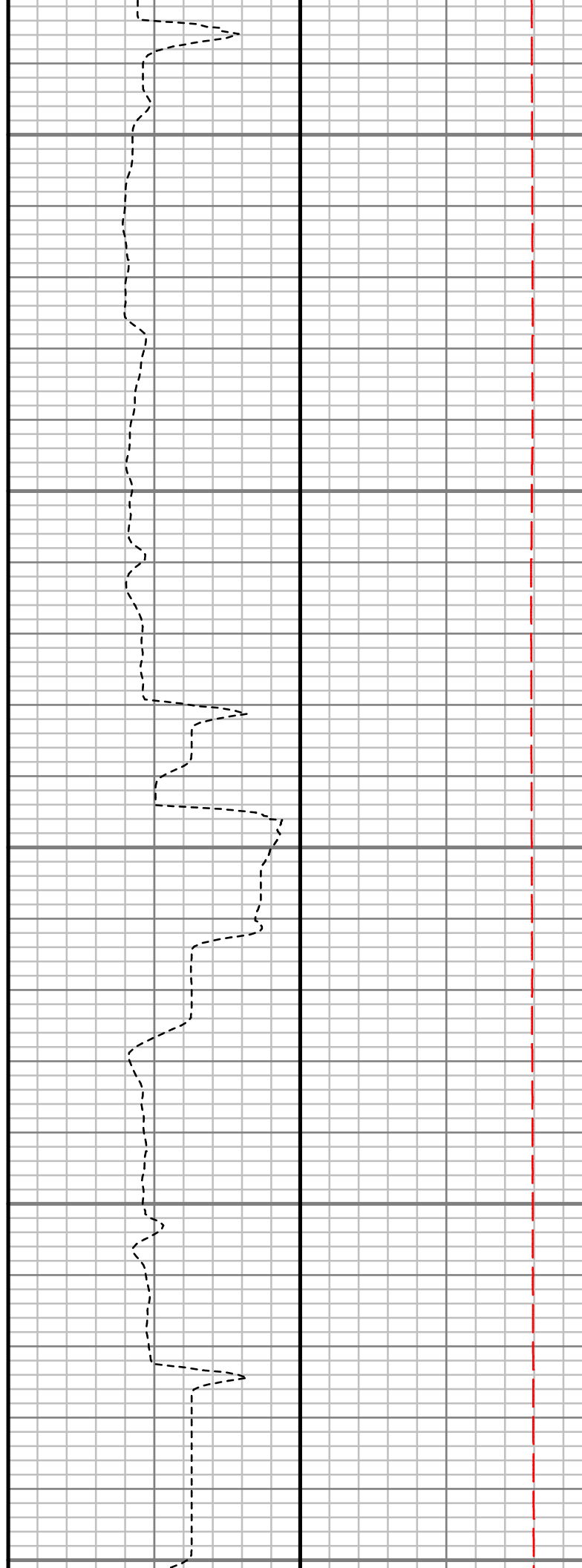
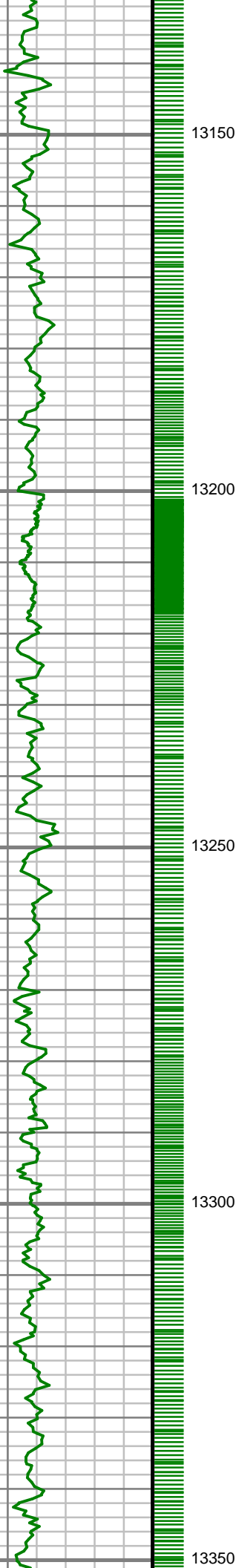


S: 135 MD: 12706.00 ft
Inc: 90.20 deg Az: 1.55
deg TVD: 7424.72 ft

S: 136 MD: 12800.00 ft
Inc: 91.54 deg Az: 0.10
deg TVD: 7423.29 ft

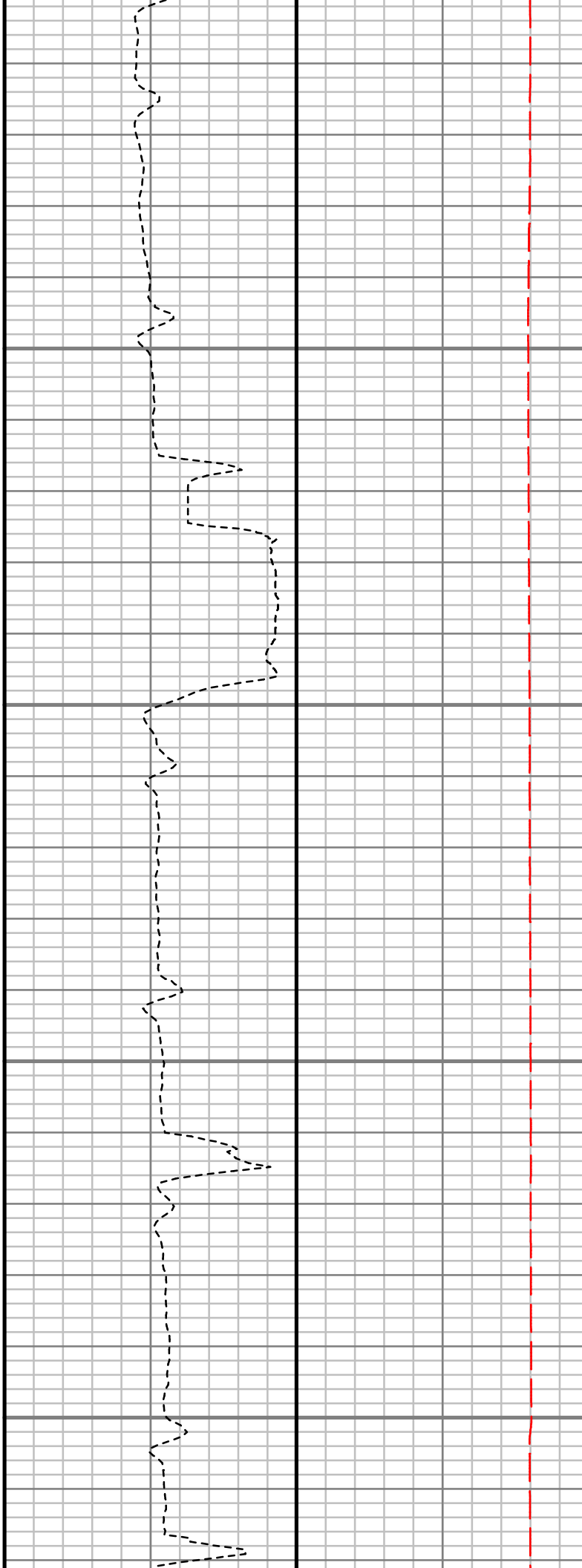
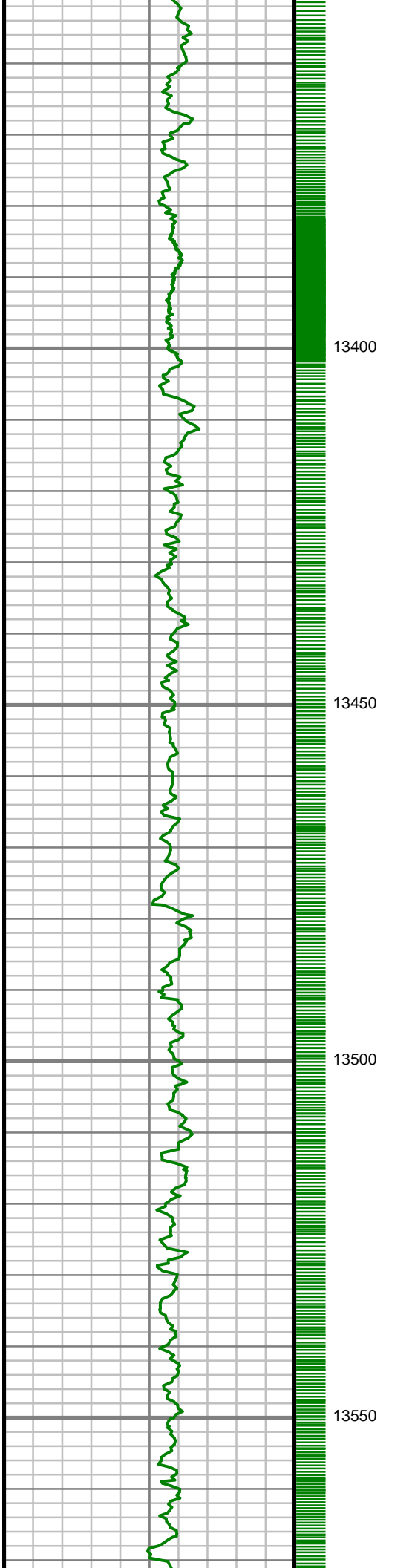
S: 137 MD: 12894.00 ft
Inc: 90.50 deg Az:
359.03 deg TVD:
7421.61 ft





S: 140 MD: 13177.00 ft
Inc: 90.60 deg Az:
357.11 deg TVD:
7418.54 ft

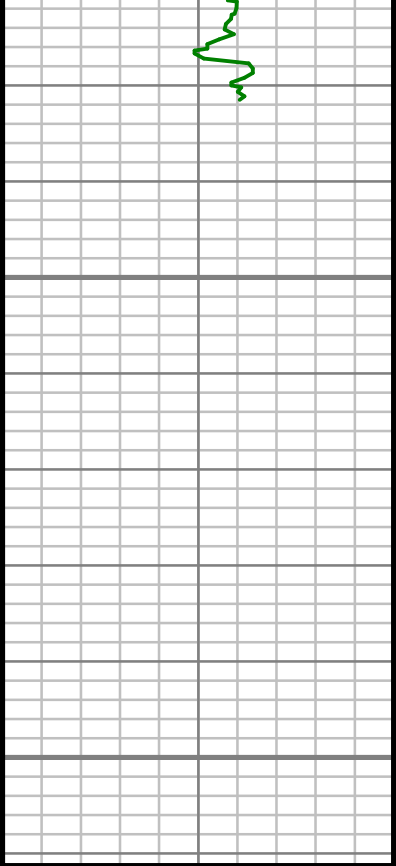
S: 141 MD: 13269.00 ft
Inc: 89.50 deg Az:
357.78 deg TVD:
7418.46 ft



S: 142 MD: 13363.00 ft
Inc: 89.97 deg Az:
357.20 deg TVD:
7418.90 ft

S: 143 MD: 13458.00 ft
Inc: 89.90 deg Az:
358.90 deg TVD:
7419.01 ft

S: 144 MD: 13553.00 ft
Inc: 90.84 deg Az:
359.40 deg TVD:
7418.40 ft

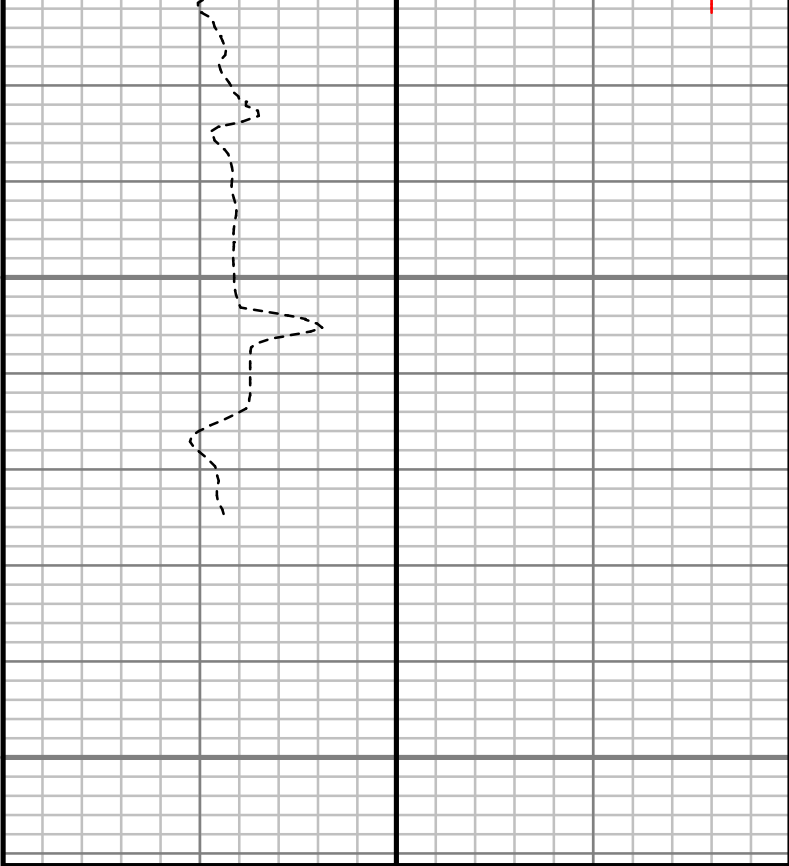


13600

13650

MEASURED DEPTH
1:240 (ft)

Gamma Ray (GR)		
0	Unit = aapi	150



Rate of Penetration (ROP)		
800	Unit = ft/hr	0

Tool Temperature (T-TEMP)		
0	Unit = °F	300

S: 145 MD: 13571.00 ft Inc: 91.11 deg Az: 359.17 deg TVD: 7418.10 ft

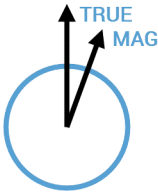
Comments

CUSTOMER ANADARKO PETROLEUM CORPORATION
PROJECT WHISTON
FIELD WATTENBERG

WELL INFORMATION
Lat/Long 40.167847° N, 104.89145° W
Northing 14,587,872.76 ft
Easting 1,670,741.63 ft
UWI 05123440290000

MAP INFORMATION
North Reference True North
Grid Correction System Universal Transverse Mercator (US Survey Feet)
Datum North American Datum 1983 (GRS 1980)
Map Zone Zone 13N (108 W to 102 W)

VERTICAL SECTION REFERENCE
+N/-S 0 ft
+E/-W 0 ft
Proposal Direction 0.02°
Calculation Method Minimum Curvature



GEOMAGNETIC REFERENCE INFORMATION Local Gravity: 999.052 mG [computed]

MD	MODEL	DATE	DECLINATION	MAG TO TRUE
0-4769 ft	ANADARKO MAGVAR	20 Mar 2017	8.37°	add 8.37°
4769-10065 ft	ANADARKO MAGVAR	20 Mar 2017	8.39°	add 8.39°
10065-13571 ft	ANADARKO MAGVAR	20 Mar 2017	8.36°	add 8.36°

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS
ft	deg	deg	ft	ft	ft	ft	°/100ft
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid
150.00	0.30	53.58	150.00	0.23	0.23	0.32	0.20
232.00	0.21	68.88	232.00	0.41	0.41	0.63	0.14
320.00	0.27	87.18	320.00	0.48	0.48	0.99	0.11
407.00	0.24	90.49	407.00	0.49	0.49	1.37	0.04
494.00	0.46	100.20	494.00	0.43	0.43	1.90	0.26
582.00	0.30	88.13	581.99	0.37	0.37	2.48	0.20
669.00	1.26	92.18	668.98	0.35	0.34	3.66	1.10
758.00	2.64	111.83	757.93	-0.45	-0.46	6.54	1.70
844.00	4.05	127.89	843.78	-3.05	-3.06	10.78	1.95
933.00	4.83	127.88	932.52	-7.28	-7.29	16.21	0.88
1019.00	6.29	131.20	1018.11	-12.61	-12.61	22.62	1.74
1108.00	7.68	136.21	1106.45	-20.11	-20.12	30.40	1.70
1195.00	8.86	133.39	1192.54	-28.91	-28.92	39.29	1.43
1282.00	9.76	130.10	1278.40	-38.25	-38.27	49.80	1.20
1370.00	10.83	127.17	1364.98	-48.05	-48.07	62.10	1.35
1459.00	10.87	128.41	1452.39	-58.31	-58.34	75.34	0.27
1546.00	11.47	126.82	1537.74	-68.59	-68.62	88.69	0.78
1635.00	12.63	128.13	1624.78	-79.89	-79.93	103.43	1.34
1721.00	12.90	127.70	1708.65	-91.56	-91.61	118.42	0.33

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
1808.00	13.65	128.94	1793.33	-103.95	-104.00	134.09	0.92
1947.00	14.00	120.23	1928.31	-122.72	-122.77	161.37	1.52
2040.00	15.19	119.19	2018.31	-134.32	-134.38	181.73	1.31
2135.00	17.34	118.97	2109.50	-147.23	-147.30	204.98	2.26
2228.00	18.47	119.25	2198.00	-161.13	-161.21	229.97	1.23
2323.00	18.59	118.62	2288.07	-175.73	-175.82	256.39	0.24
2417.00	18.45	117.05	2377.20	-189.66	-189.76	282.80	0.55
2512.00	19.45	119.22	2467.06	-204.21	-204.32	309.99	1.29
2606.00	20.33	122.84	2555.45	-220.70	-220.82	337.36	1.61
2701.00	22.68	126.81	2643.84	-240.62	-240.74	365.90	2.90
2795.00	24.10	128.72	2730.12	-263.47	-263.60	395.37	1.71
2889.00	25.53	129.17	2815.44	-288.25	-288.40	426.05	1.54
2982.00	26.19	129.01	2899.12	-313.82	-313.98	457.54	0.72
3077.00	25.86	127.32	2984.49	-339.56	-339.74	490.30	0.85
3170.00	27.89	128.31	3067.44	-365.34	-365.52	523.50	2.24
3265.00	28.30	127.85	3151.25	-392.92	-393.12	558.72	0.49
3359.00	28.14	127.88	3234.07	-420.19	-420.40	593.82	0.17
3453.00	27.39	127.73	3317.25	-447.02	-447.24	628.41	0.80
3548.00	28.47	129.33	3401.19	-474.73	-474.96	663.21	1.38
3642.00	28.21	128.69	3483.92	-502.80	-503.05	697.88	0.42

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
3736.00	27.83	127.02	3566.90	-529.89	-530.15	732.74	0.93
3829.00	27.83	126.98	3649.15	-556.01	-556.28	767.41	0.02
3923.00	27.71	125.60	3732.32	-581.91	-582.19	802.71	0.69
4017.00	28.32	126.07	3815.31	-607.75	-608.05	838.50	0.70
4111.00	28.75	127.11	3897.89	-634.51	-634.82	874.56	0.70
4204.00	29.25	129.76	3979.23	-662.53	-662.85	909.86	1.48
4298.00	27.78	130.14	4061.82	-691.33	-691.66	944.27	1.58
4393.00	25.43	130.44	4146.76	-718.82	-719.17	976.72	2.48
4487.00	24.63	130.55	4231.93	-744.64	-744.99	1006.96	0.85
4582.00	21.98	128.97	4319.17	-768.69	-769.05	1035.83	2.86
4675.00	20.13	130.26	4405.96	-789.97	-790.34	1061.58	2.05
4769.00	19.36	131.40	4494.43	-810.72	-811.10	1085.61	0.91
4863.00	18.94	134.14	4583.23	-831.65	-832.03	1108.24	1.05
4958.00	17.23	135.74	4673.53	-852.46	-852.85	1129.13	1.88
5052.00	14.29	137.35	4763.99	-870.96	-871.36	1146.71	3.16
5146.00	13.88	137.83	4855.16	-887.84	-888.25	1162.14	0.45
5268.00	13.62	138.50	4973.67	-909.44	-909.85	1181.49	0.25
5363.00	11.21	139.89	5066.44	-924.87	-925.29	1194.85	2.56
5458.00	10.11	138.45	5159.80	-938.17	-938.59	1206.32	1.19
5552.00	7.52	139.15	5252.68	-948.99	-949.42	1215.82	2.75

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
5646.00	6.77	130.79	5345.95	-957.26	-957.69	1224.04	1.37
5740.00	5.26	124.24	5439.43	-963.30	-963.73	1231.79	1.76
5832.00	3.94	118.22	5531.14	-967.16	-967.60	1238.06	1.53
5928.00	3.38	108.46	5626.94	-969.62	-970.05	1243.65	0.87
6021.00	2.87	105.37	5719.80	-971.10	-971.54	1248.49	0.58
6115.00	1.42	78.28	5813.74	-971.49	-971.92	1251.90	1.84
6210.00	1.17	96.26	5908.71	-971.35	-971.79	1254.02	0.50
6303.00	0.93	1.98	6001.70	-970.70	-971.14	1254.98	1.66
6398.00	0.71	354.86	6096.69	-969.35	-969.79	1254.96	0.26
6492.00	0.85	343.95	6190.69	-968.10	-968.54	1254.71	0.22
6586.00	0.93	338.46	6284.67	-966.72	-967.16	1254.24	0.13
6680.00	1.05	316.24	6378.66	-965.39	-965.83	1253.37	0.42
6772.00	0.91	335.82	6470.65	-964.12	-964.55	1252.49	0.39
6864.00	0.80	321.63	6562.64	-962.95	-963.38	1251.79	0.26
6958.00	0.56	327.77	6656.63	-962.05	-962.49	1251.14	0.27
7052.00	2.97	350.00	6750.58	-959.27	-959.70	1250.47	2.62
7147.00	12.45	0.27	6844.62	-946.57	-947.01	1250.09	10.04
7241.00	18.95	2.80	6935.06	-921.17	-921.61	1250.89	6.95
7336.00	25.55	359.26	7022.95	-885.24	-885.68	1251.38	7.09
7430.00	32.83	359.47	7104.95	-839.43	-839.86	1250.88	7.75

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
7525.00	39.34	357.87	7181.69	-783.53	-783.96	1249.52	6.92
7620.00	45.98	355.14	7251.52	-719.33	-719.76	1245.51	7.26
7715.00	53.61	357.25	7312.80	-646.99	-647.42	1240.77	8.20
7809.00	60.54	358.96	7363.87	-568.19	-568.62	1238.21	7.53
7905.00	66.70	359.00	7406.51	-482.24	-482.67	1236.68	6.42
7998.00	74.55	358.56	7437.33	-394.59	-395.03	1234.81	8.45
8093.00	81.82	0.18	7456.77	-301.68	-302.11	1233.80	7.83
8187.00	87.98	1.72	7465.12	-208.11	-208.54	1235.35	6.76
8281.00	90.10	0.89	7466.69	-114.15	-114.59	1237.50	2.42
8376.00	90.90	1.46	7465.86	-19.18	-19.61	1239.44	1.04
8469.00	90.07	0.90	7465.07	73.80	73.37	1241.36	1.08
8564.00	90.13	0.38	7464.90	168.79	168.36	1242.42	0.55
8657.00	90.84	0.35	7464.11	261.79	261.35	1243.02	0.76
8752.00	91.41	359.91	7462.25	356.77	356.33	1243.23	0.75
8845.00	91.08	359.97	7460.23	449.75	449.31	1243.13	0.36
8940.00	91.78	359.73	7457.87	544.72	544.28	1242.88	0.78
9034.00	90.81	0.16	7455.75	638.69	638.26	1242.79	1.13
9128.00	90.64	0.12	7454.56	732.68	732.25	1243.02	0.19
9222.00	91.07	359.13	7453.16	826.67	826.23	1242.41	1.14
9316.00	90.81	359.66	7451.62	920.65	920.22	1241.42	0.62

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
9410.00	90.30	0.57	7450.71	1014.64	1014.21	1241.60	1.11
9505.00	91.08	0.97	7449.57	1109.63	1109.19	1242.87	0.92
9599.00	89.60	1.91	7449.01	1203.59	1203.16	1245.23	1.87
9693.00	89.36	2.12	7449.87	1297.53	1297.10	1248.54	0.34
9786.00	89.77	2.50	7450.58	1390.45	1390.02	1252.30	0.59
9879.00	90.07	1.35	7450.71	1483.40	1482.96	1255.42	1.28
9973.00	91.24	1.77	7449.64	1577.36	1576.92	1257.98	1.33
10066.00	90.30	0.58	7448.39	1670.33	1669.89	1259.89	1.63
10159.00	90.54	359.90	7447.71	1763.33	1762.89	1260.28	0.78
10254.00	91.41	359.74	7446.09	1858.31	1857.87	1259.97	0.94
10348.00	90.10	359.43	7444.85	1952.30	1951.86	1259.29	1.43
10443.00	90.54	359.77	7444.33	2047.29	2046.85	1258.62	0.58
10537.00	90.44	0.36	7443.53	2141.29	2140.85	1258.73	0.64
10631.00	90.70	0.72	7442.59	2235.28	2234.84	1259.61	0.48
10725.00	90.33	0.14	7441.74	2329.27	2328.83	1260.31	0.73
10820.00	91.14	0.46	7440.52	2424.26	2423.82	1260.81	0.91
10914.00	90.37	359.84	7439.28	2518.25	2517.81	1261.06	1.05
11009.00	91.34	359.14	7437.86	2613.24	2612.80	1260.21	1.27
11103.00	89.73	358.80	7436.97	2707.21	2706.78	1258.52	1.75
11197.00	89.56	359.15	7437.55	2801.20	2800.76	1256.84	0.41

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
11292.00	90.47	359.34	7437.52	2896.19	2895.75	1255.58	0.97
11386.00	91.34	359.54	7436.04	2990.17	2989.73	1254.67	0.95
11480.00	89.80	359.41	7435.10	3084.16	3083.72	1253.81	1.65
11574.00	90.40	359.55	7434.94	3178.15	3177.72	1252.96	0.66
11668.00	91.45	0.22	7433.42	3272.14	3271.70	1252.77	1.32
11761.00	90.81	359.51	7431.59	3365.12	3364.68	1252.55	1.03
11855.00	91.65	359.06	7429.58	3459.09	3458.65	1251.38	1.01
11950.00	90.60	359.21	7427.71	3554.06	3553.62	1249.95	1.11
12045.00	90.54	359.01	7426.77	3649.04	3648.61	1248.48	0.22
12139.00	90.70	359.00	7425.75	3743.02	3742.59	1246.85	0.18
12234.00	90.90	359.32	7424.42	3838.00	3837.57	1245.45	0.40
12328.00	89.70	359.88	7423.92	3932.00	3931.56	1244.80	1.42
12421.00	89.76	0.02	7424.36	4024.99	4024.56	1244.72	0.16
12516.00	89.97	0.52	7424.58	4119.99	4119.56	1245.16	0.58
12611.00	89.83	0.66	7424.75	4214.99	4214.55	1246.14	0.20
12706.00	90.20	1.55	7424.72	4309.97	4309.53	1247.98	1.02
12800.00	91.54	0.10	7423.29	4403.94	4403.51	1249.33	2.10
12894.00	90.50	359.03	7421.61	4497.92	4497.49	1248.61	1.59
12988.00	91.24	357.88	7420.18	4591.88	4591.44	1246.08	1.45
13083.00	90.07	357.98	7419.09	4686.80	4686.37	1242.64	1.24

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
13177.00	90.60	357.11	7418.54	4780.71	4780.28	1238.61	1.09
13269.00	89.50	357.78	7418.46	4872.62	4872.19	1234.51	1.41
13363.00	89.97	357.20	7418.90	4966.53	4966.10	1230.39	0.79
13458.00	89.90	358.90	7419.01	5061.47	5061.04	1227.15	1.79
13553.00	90.84	359.40	7418.40	5156.45	5156.02	1225.73	1.12
13571.00	91.11	359.17	7418.10	5174.45	5174.02	1225.51	1.97

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft

5" = 100' MD