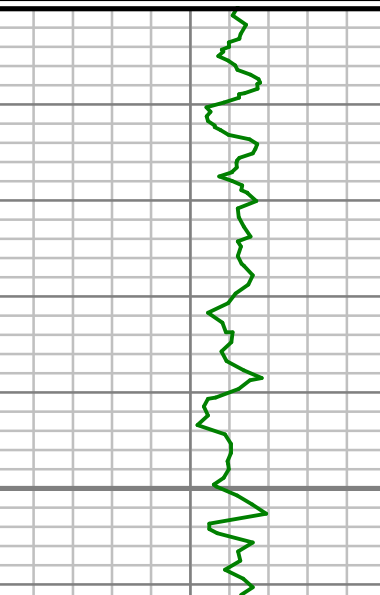

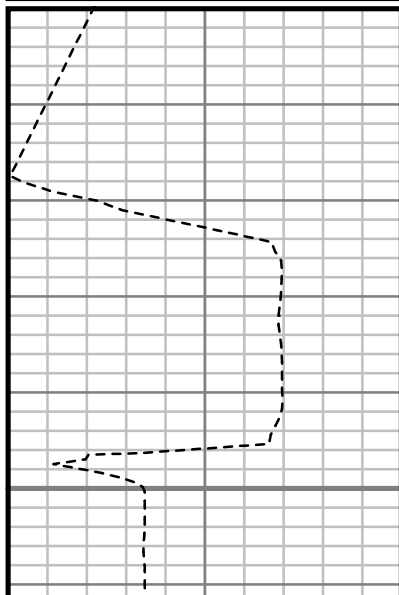
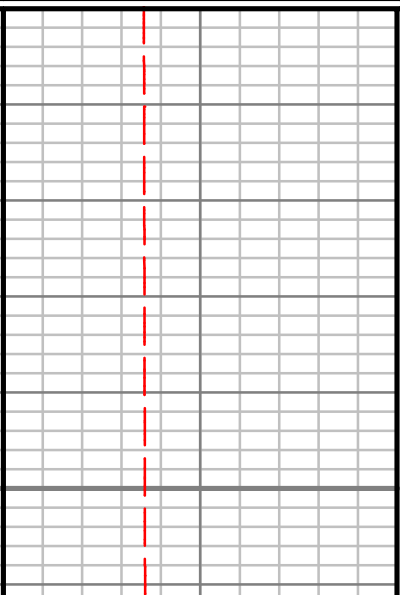
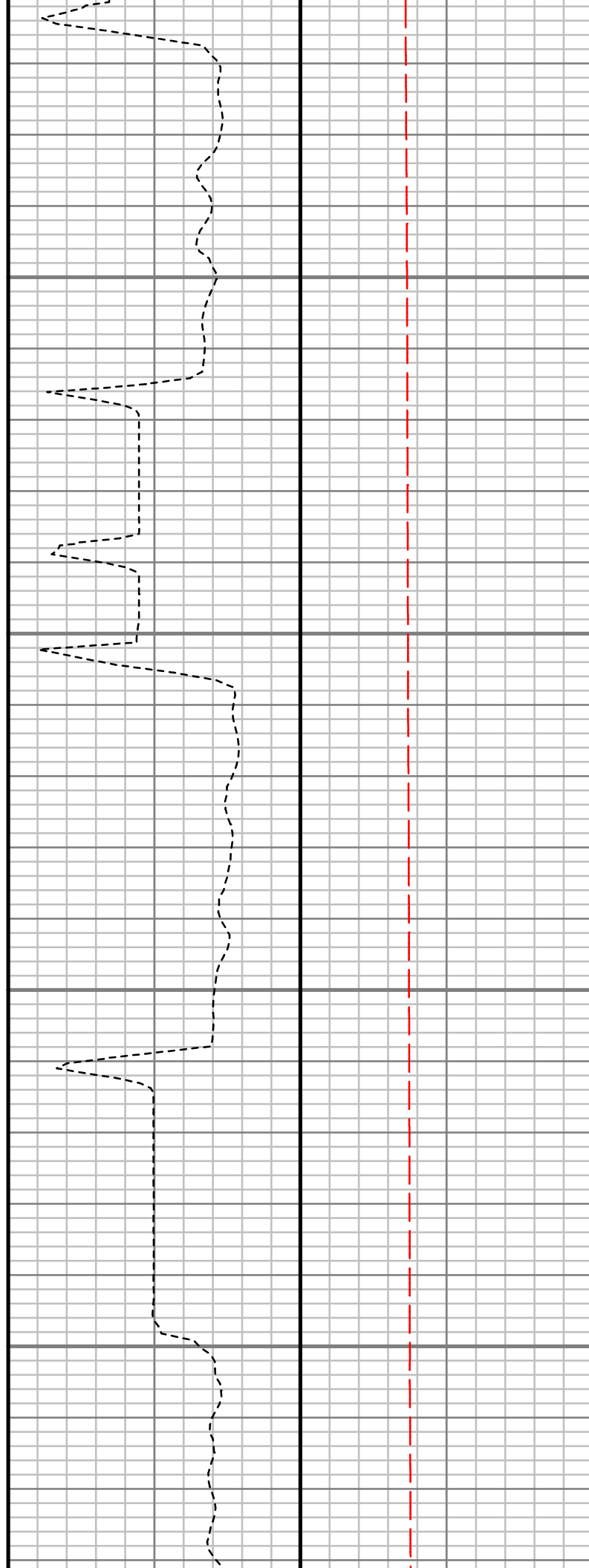
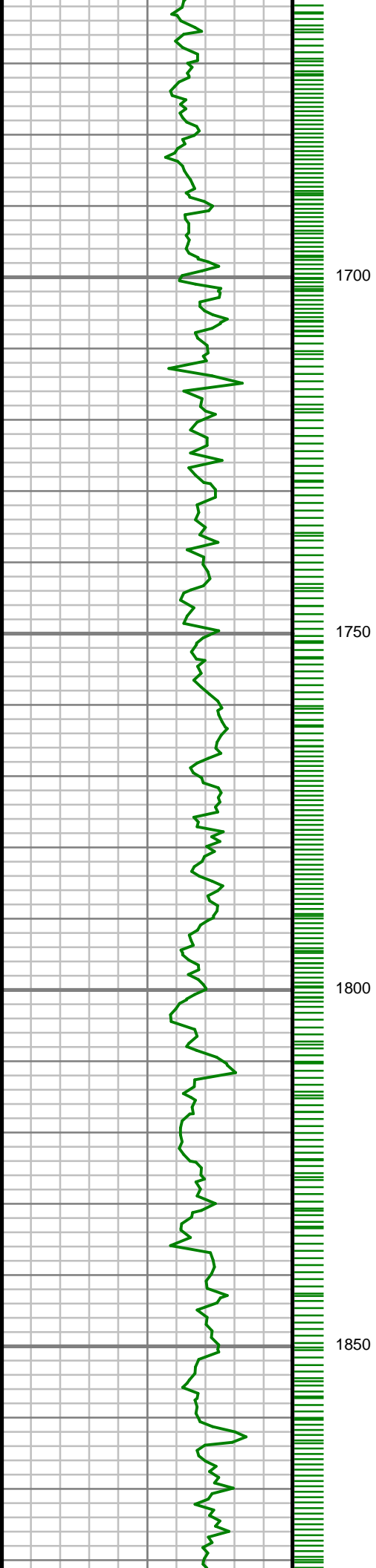


[illegible]

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.

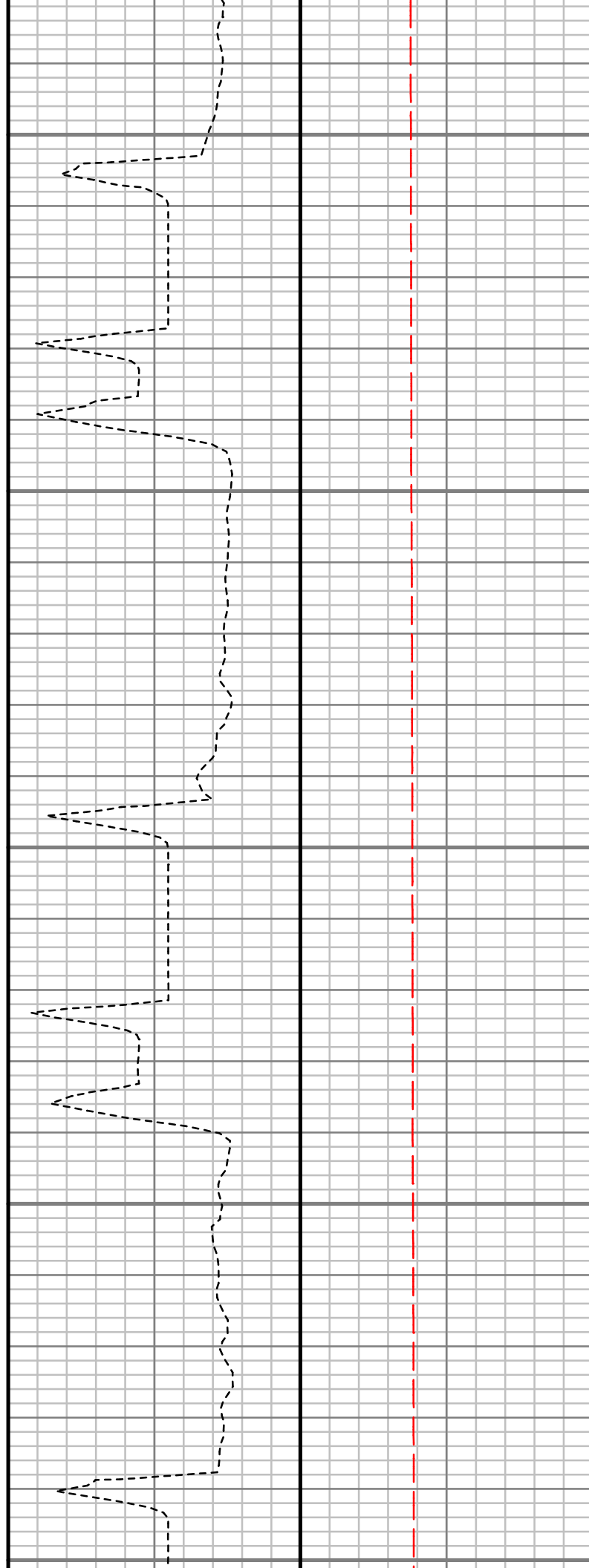
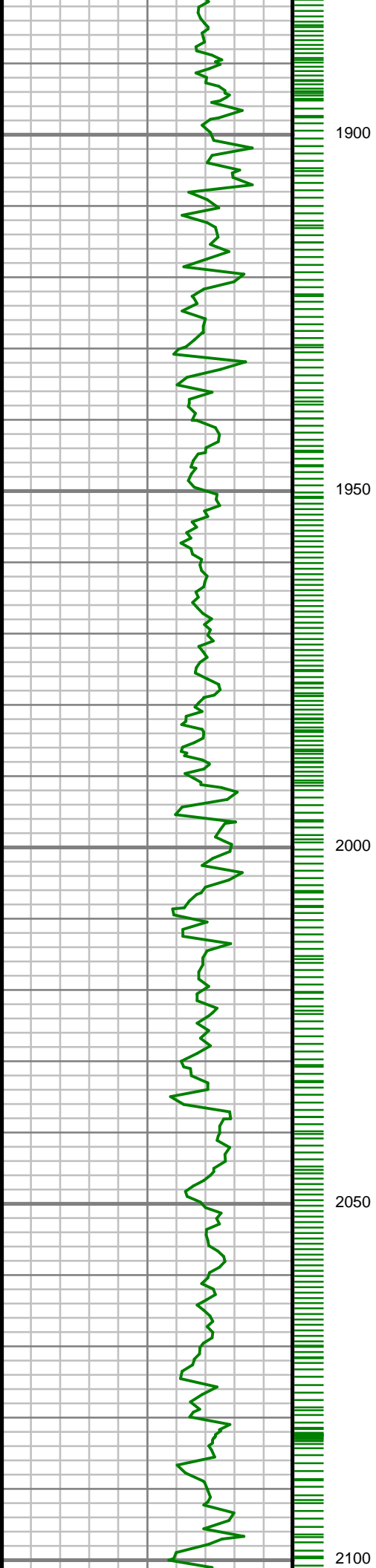
ANADARKO E&P ONSHORE LLC. LAND 15N-32HZ WATTENBERG WELD COUNT, COLORADO 05123423030000				
Gamma Ray (GR) 0 Unit = aapi 150	MEASURED DEPTH 1-240 (ft)	Rate of Penetration (ROP) 0 Unit = ft/hr 1000	Tool Temperature (T-TEMP) 0 Unit = °F 300	Comments
				



S: 16 MD: 1663.00 ft
Inc: 13.74 deg Az:
351.40 deg TVD:
1655.82 ft

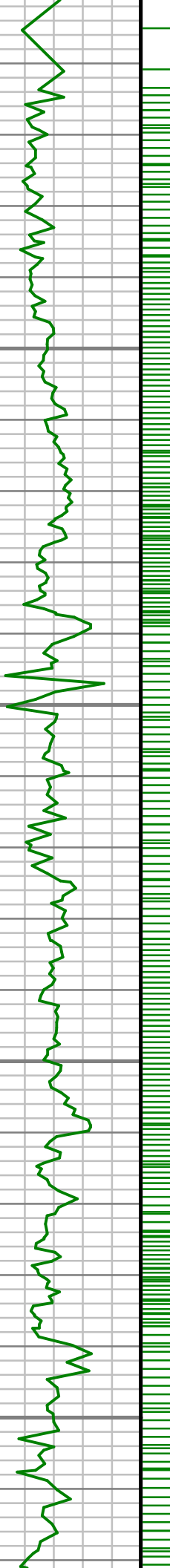
S: 17 MD: 1757.00 ft
Inc: 16.11 deg Az:
345.39 deg TVD:
1746.65 ft

S: 18 MD: 1850.00 ft
Inc: 15.82 deg Az:
340.94 deg TVD:
1836.07 ft



S: 19 MD: 1944.00 ft
Inc: 15.30 deg Az:
343.06 deg TVD:
1926.62 ft

S: 20 MD: 2038.00 ft
Inc: 16.14 deg Az:
346.54 deg TVD:
2017.11 ft

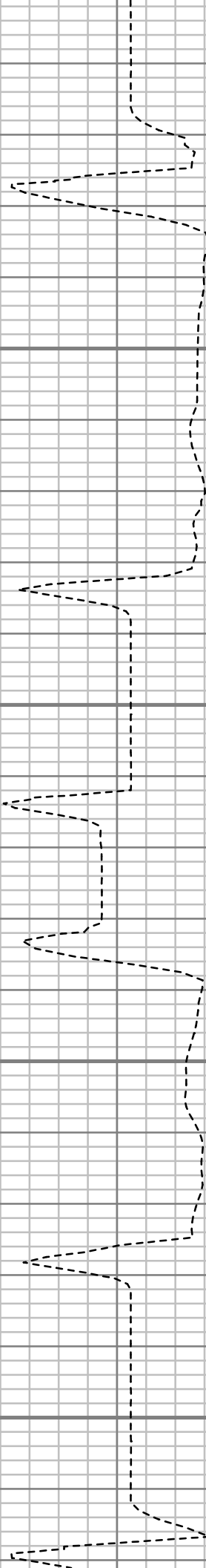


2150

2200

2250

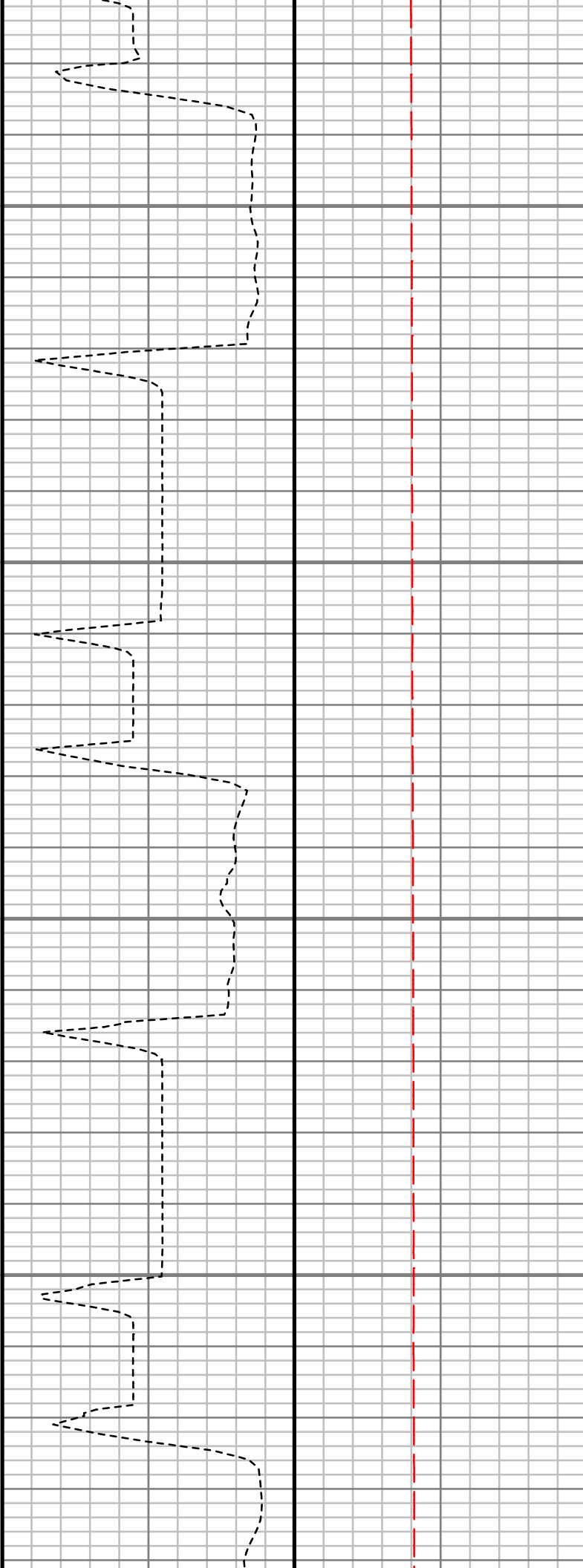
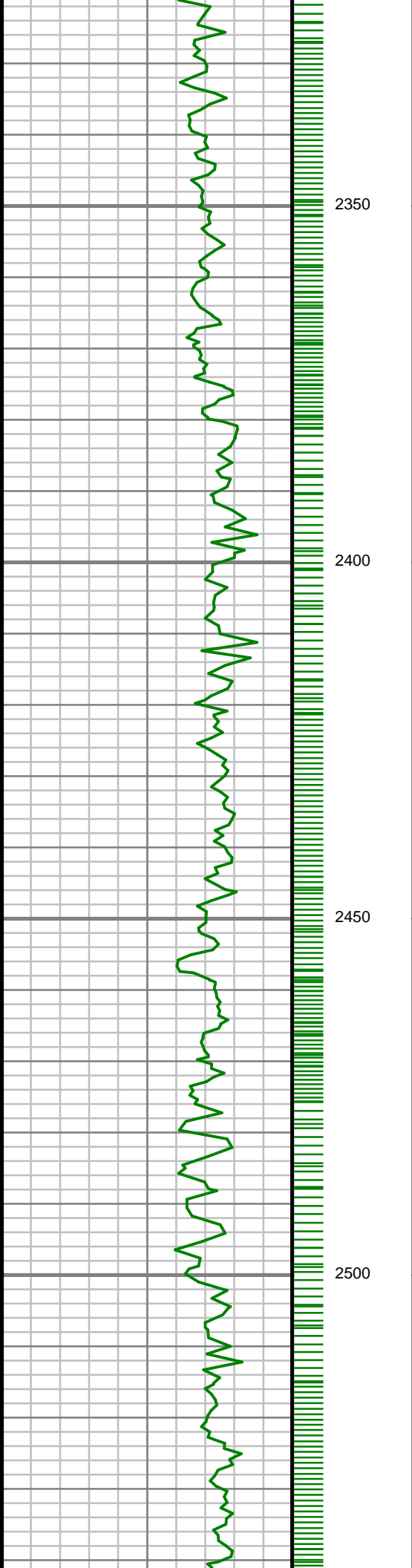
2300



S: 21 MD: 2131.00 ft
Inc: 14.23 deg Az:
341.76 deg TVD:
2106.86 ft

S: 22 MD: 2226.00 ft
Inc: 15.26 deg Az:
346.55 deg TVD:
2198.74 ft

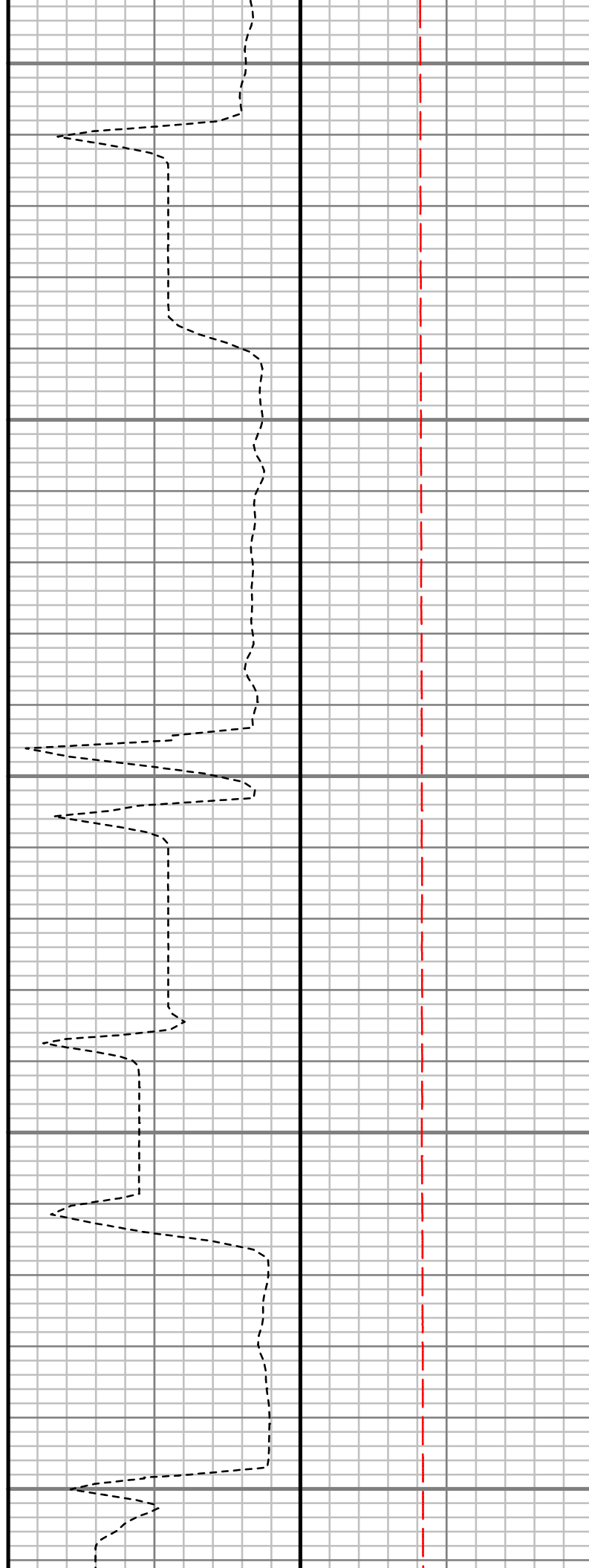
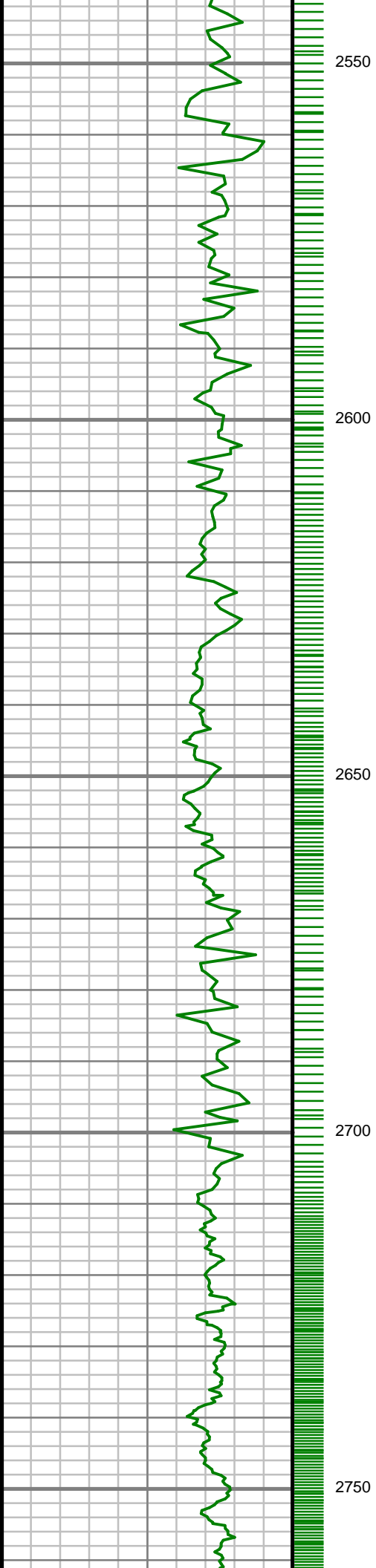
S: 23 MD: 2320.00 ft



S: 23 MD: 2320.00 ft
Inc: 15.04 deg Az:
348.38 deg TVD:
2289.47 ft

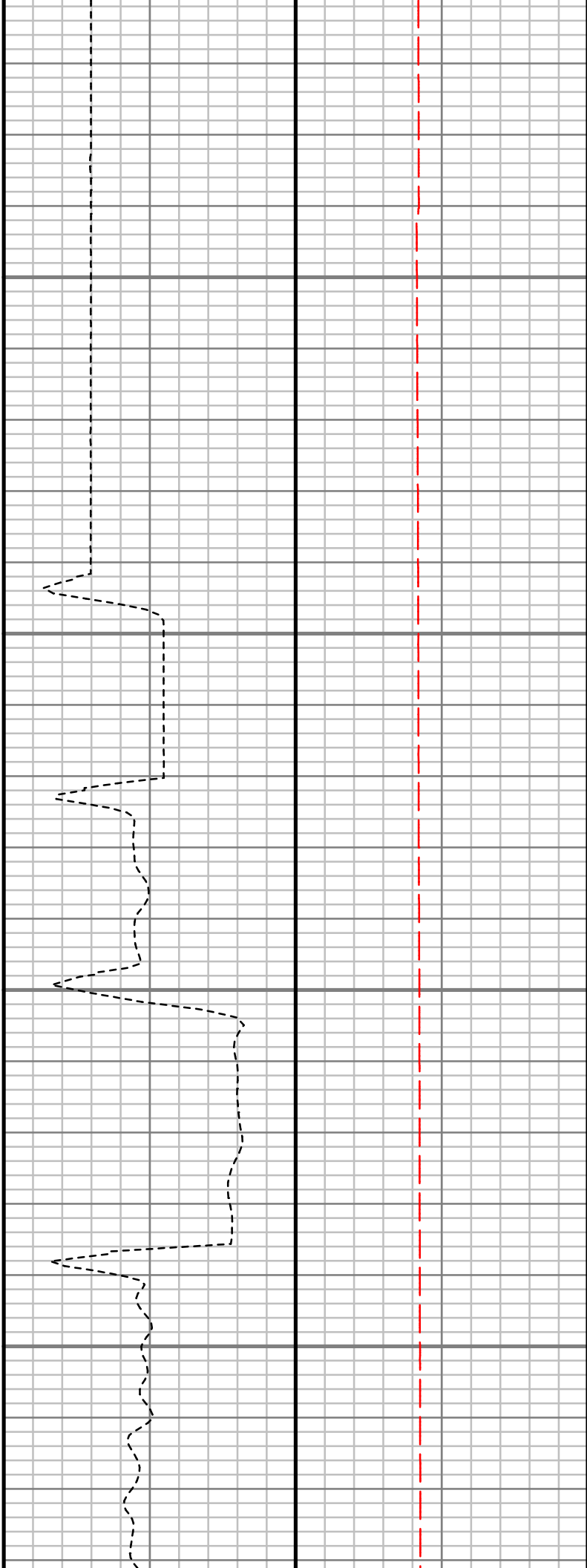
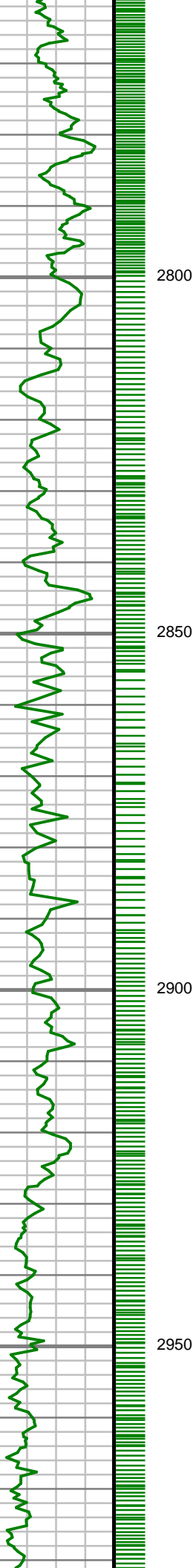
S: 24 MD: 2414.00 ft
Inc: 15.37 deg Az:
347.47 deg TVD:
2380.18 ft

S: 25 MD: 2507.00 ft
Inc: 16.31 deg Az:
347.61 deg TVD:
2469.65 ft



S: 26 MD: 2603.00 ft
Inc: 15.49 deg Az:
347.58 deg TVD:
2561.98 ft

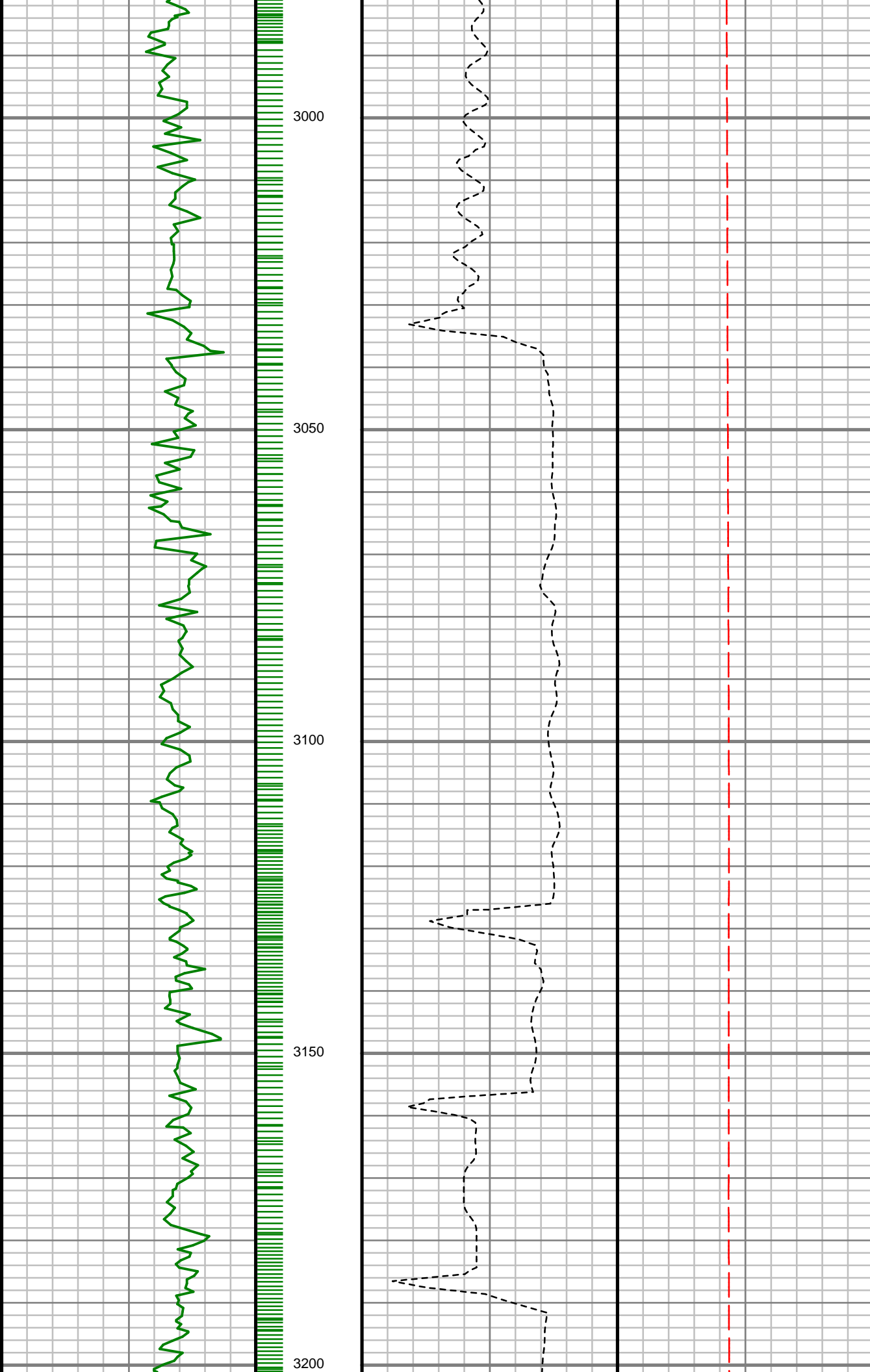
S: 27 MD: 2697.00 ft
Inc: 15.36 deg Az:
346.81 deg TVD:
2652.59 ft



S: 28 MD: 2791.00 ft
Inc: 15.39 deg Az:
346.83 deg TVD:
2743.23 ft

S: 29 MD: 2885.00 ft
Inc: 17.06 deg Az:
347.82 deg TVD:
2833.48 ft

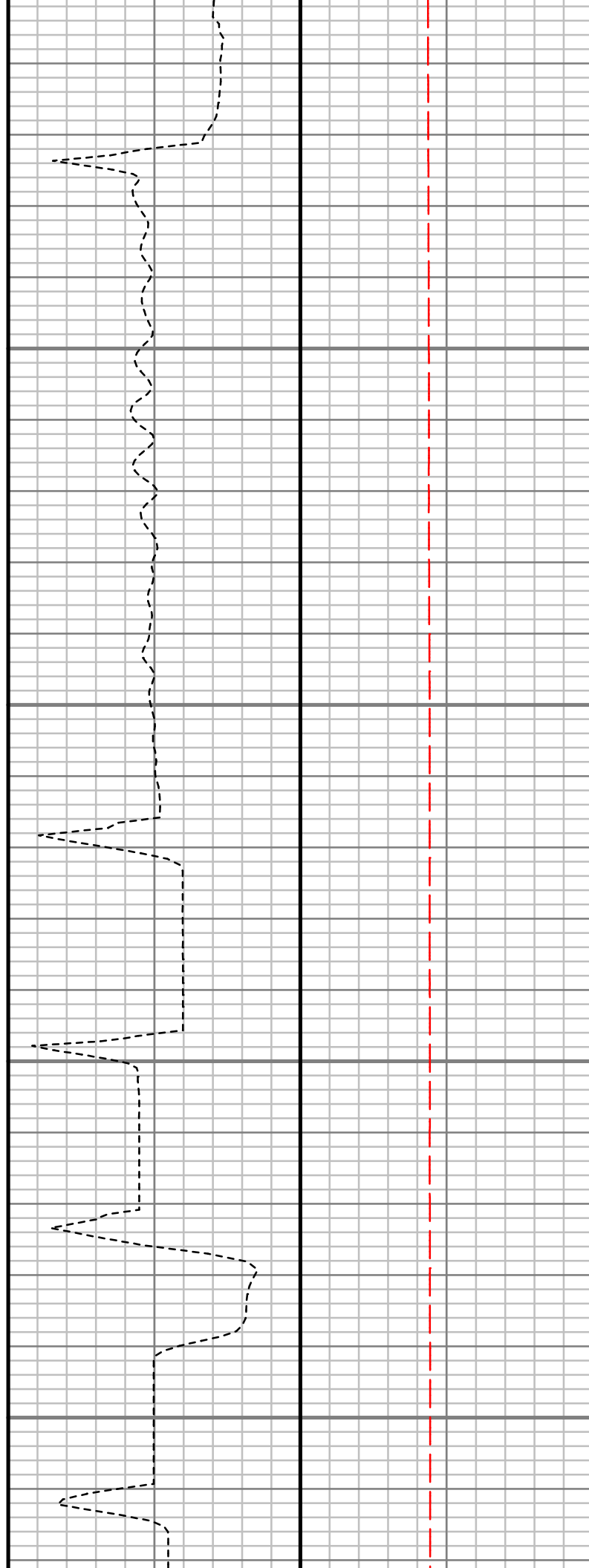
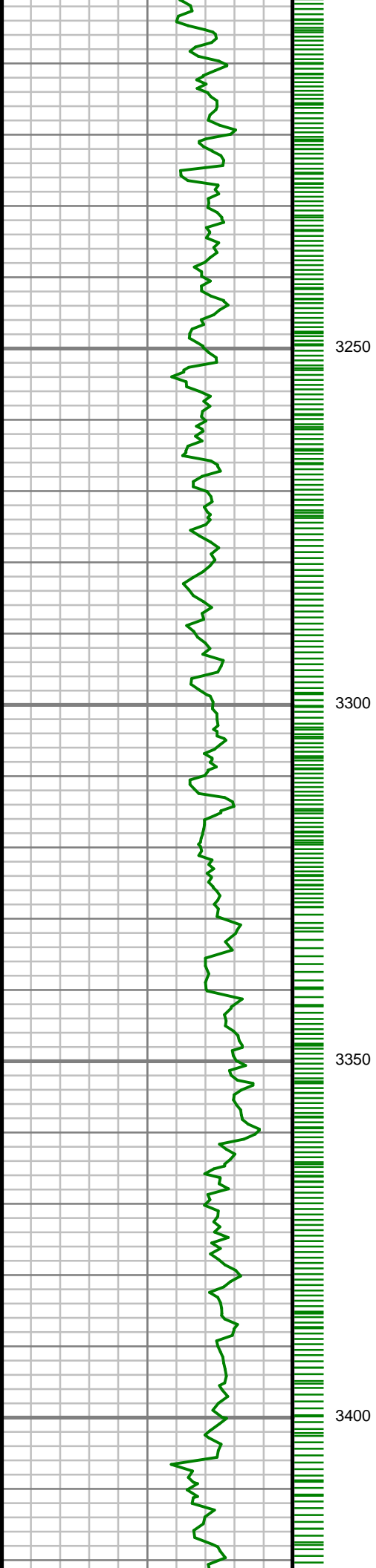
S: 30 MD: 2979.00 ft



Inc: 16.71 deg Az:
347.74 deg TVD:
2923.43 ft

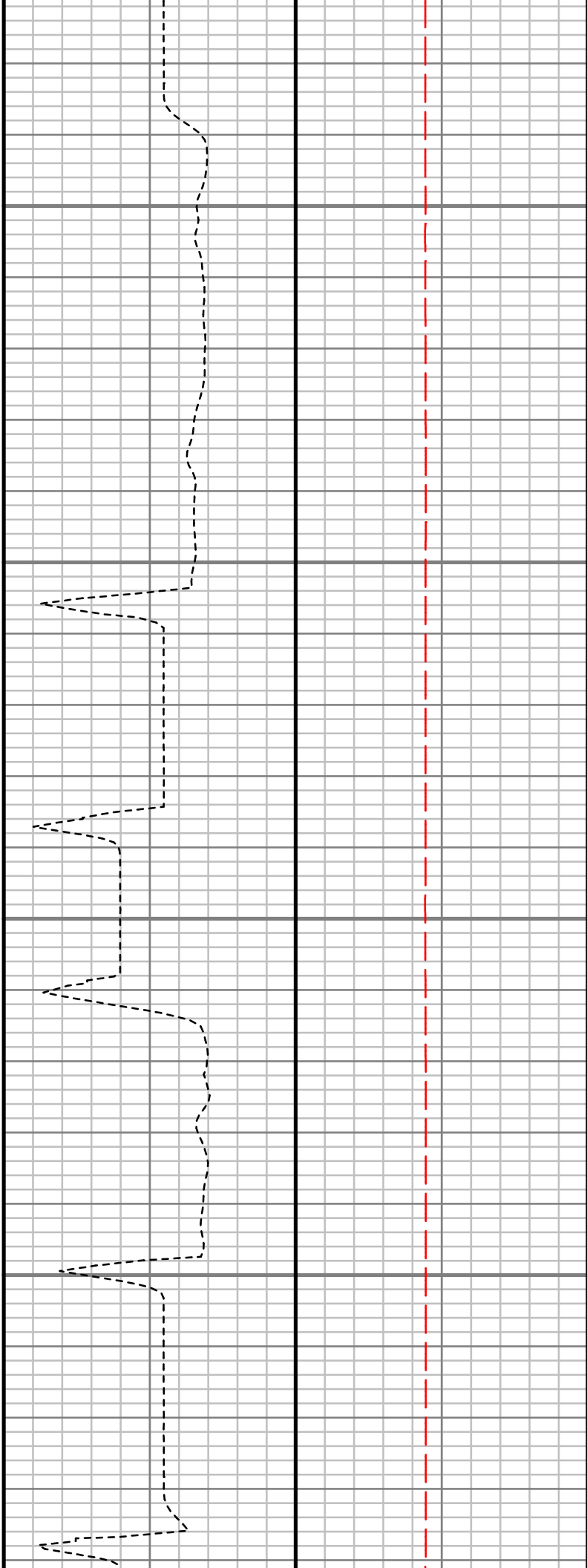
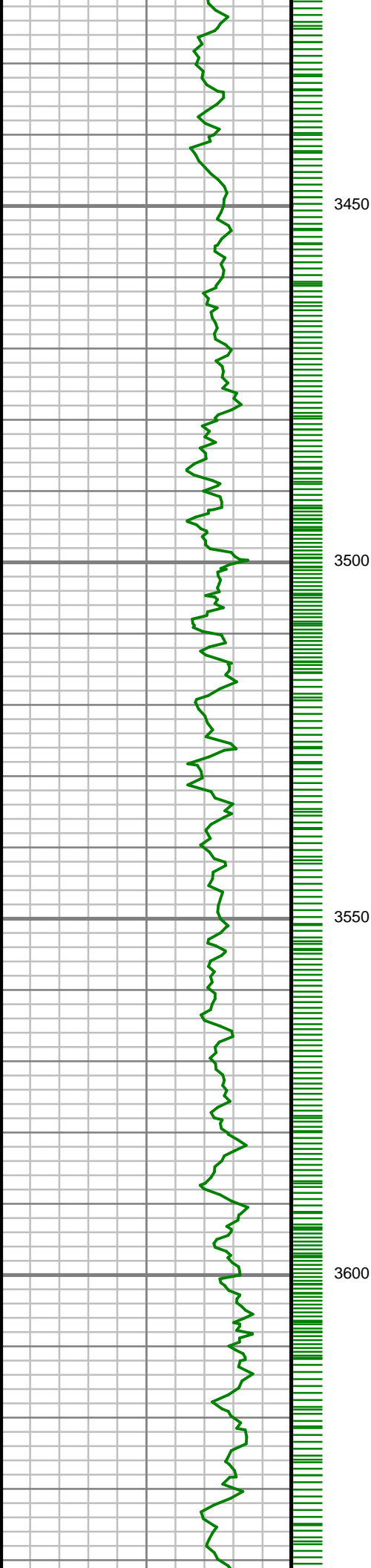
S: 31 MD: 3075.00 ft
Inc: 14.87 deg Az:
345.78 deg TVD:
3015.80 ft

S: 32 MD: 3170.00 ft
Inc: 15.57 deg Az:
342.74 deg TVD:
3107.47 ft



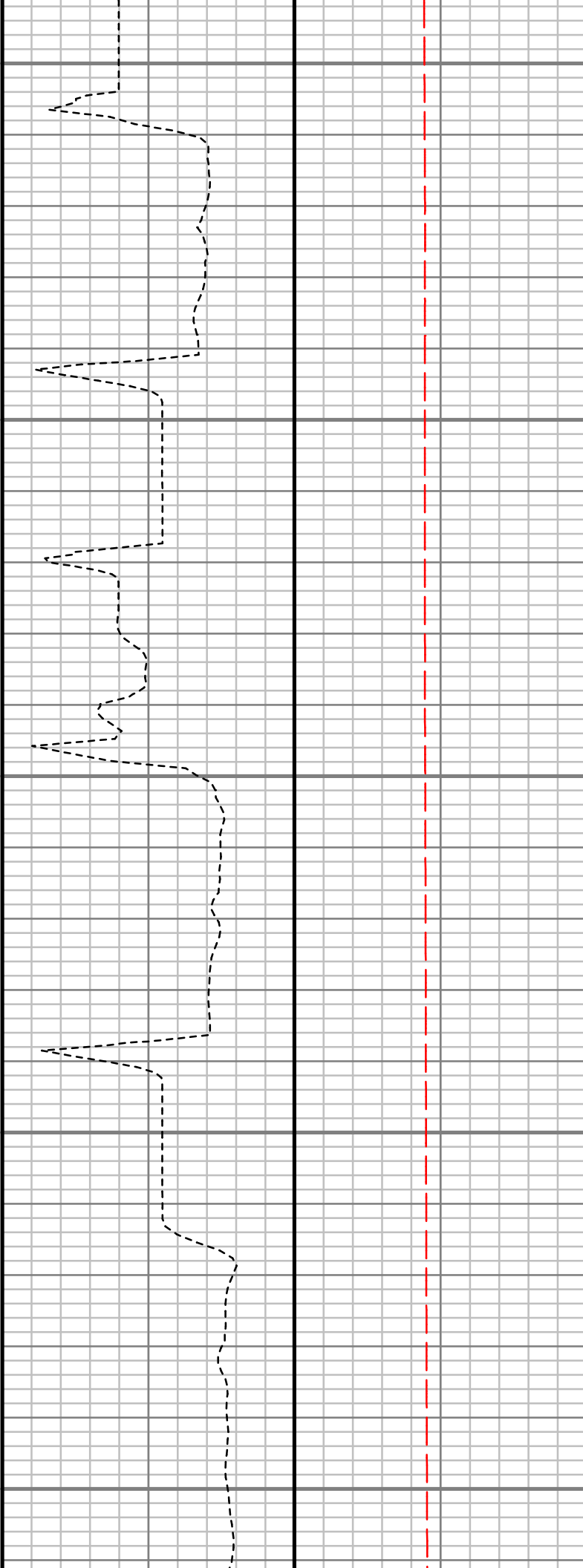
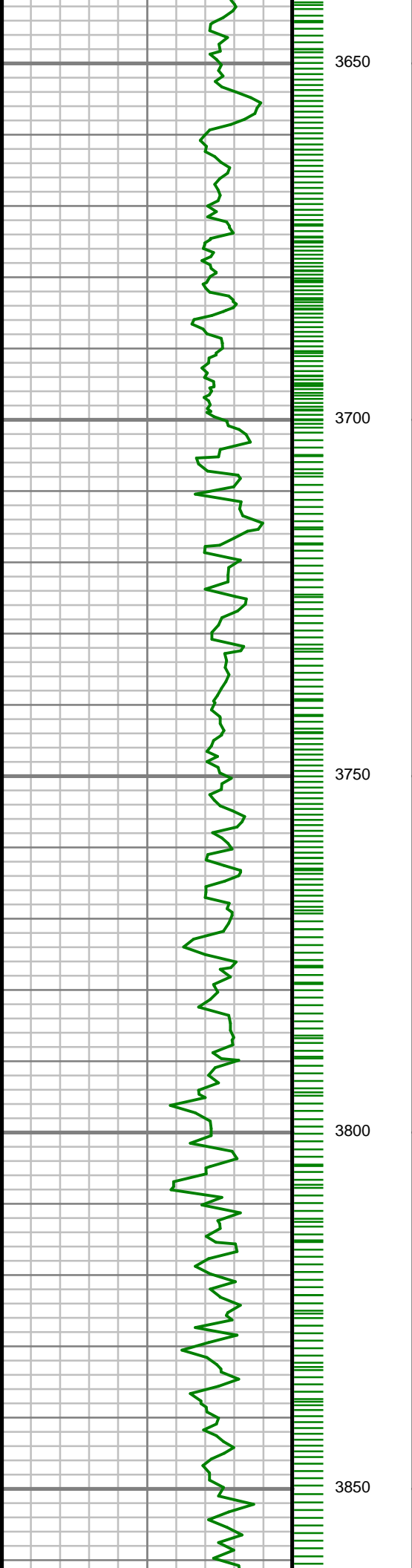
S: 33 MD: 3265.00 ft
Inc: 15.61 deg Az:
344.47 deg TVD:
3198.98 ft

S: 34 MD: 3358.00 ft
Inc: 16.38 deg Az:
343.22 deg TVD:
3288.38 ft



S: 35 MD: 3452.00 ft
Inc: 15.38 deg Az:
345.71 deg TVD:
3378.79 ft

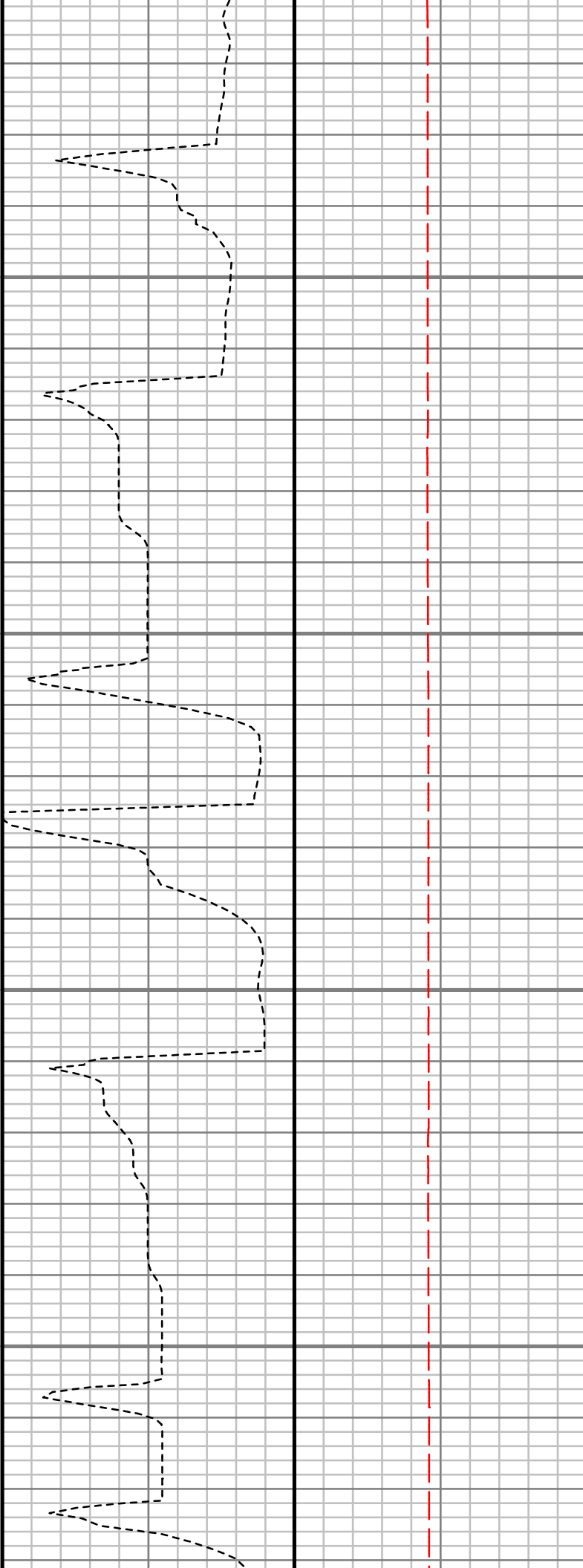
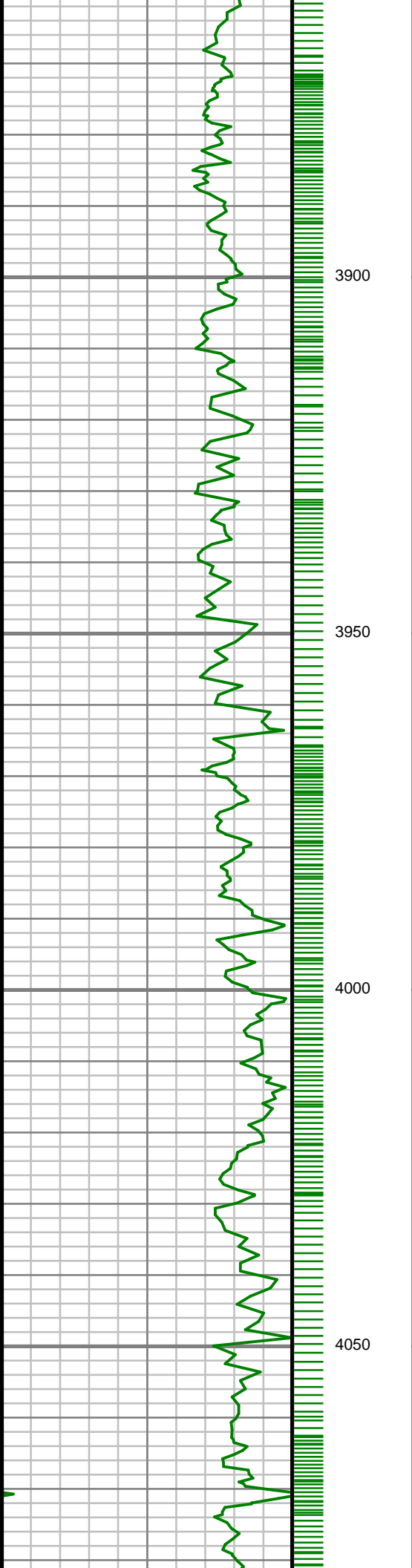
S: 36 MD: 3547.00 ft
Inc: 14.71 deg Az:
341.68 deg TVD:
3470.54 ft



S: 37 MD: 3641.00 ft
Inc: 14.31 deg Az:
340.97 deg TVD:
3561.54 ft

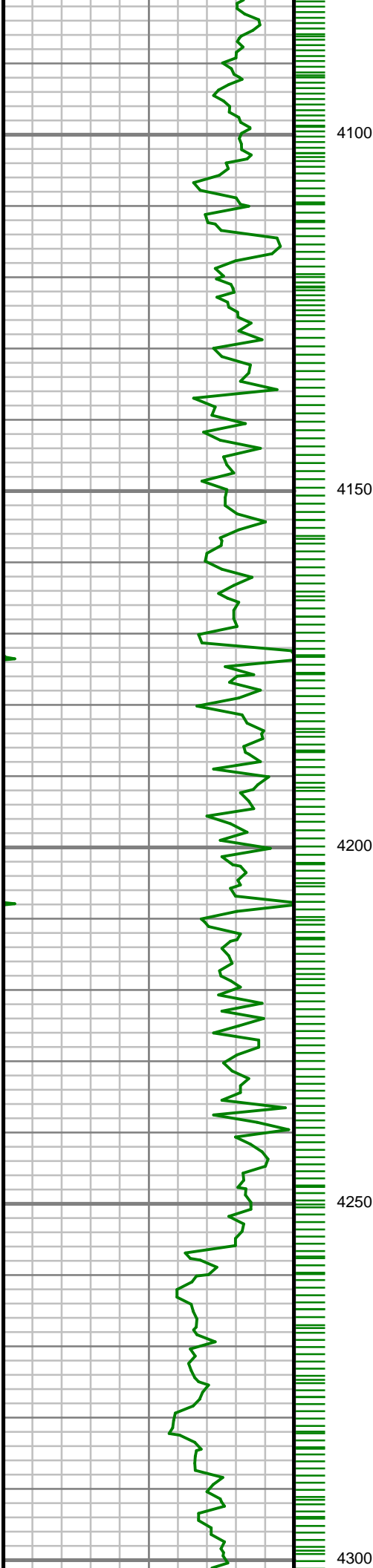
S: 38 MD: 3736.00 ft
Inc: 15.13 deg Az:
338.59 deg TVD:
3653.42 ft

S: 39 MD: 3830.00 ft
Inc: 12.89 deg Az:
337.29 deg TVD:
3744.62 ft



S: 40 MD: 3925.00 ft
Inc: 11.40 deg Az:
333.85 deg TVD:
3837.49 ft

S: 41 MD: 4020.00 ft
Inc: 14.06 deg Az:
339.15 deg TVD:
3930.15 ft



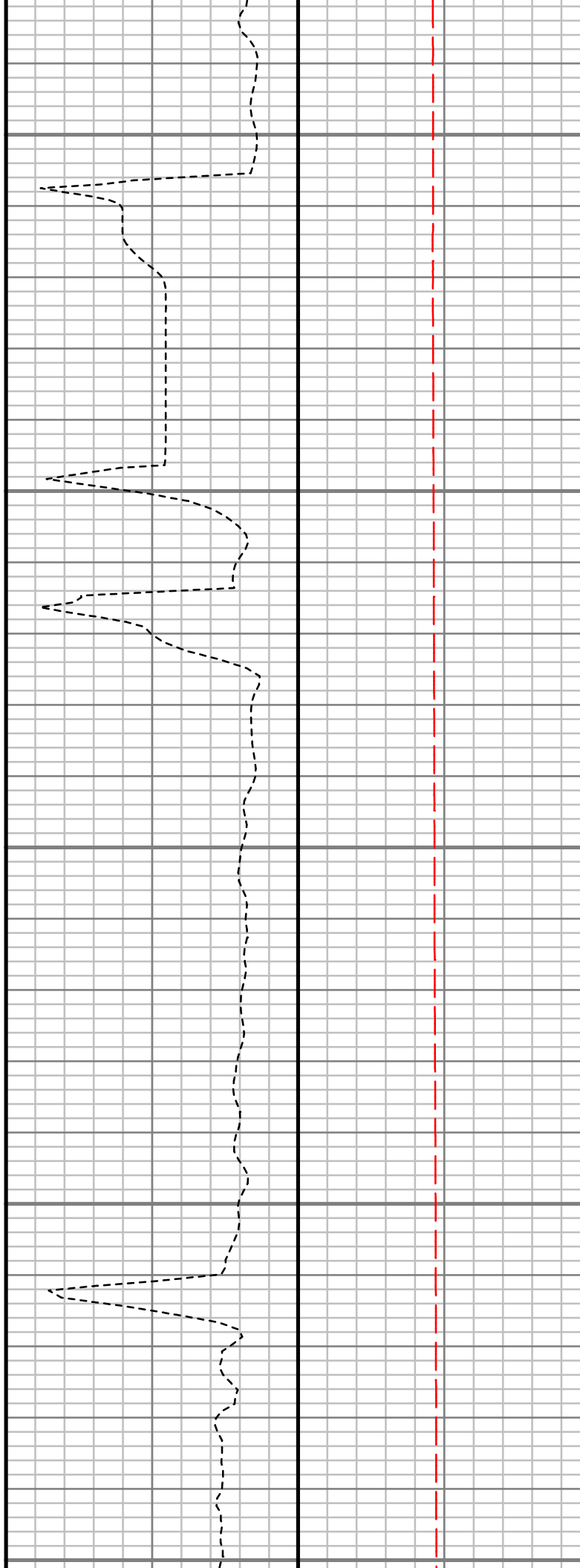
4100

4150

4200

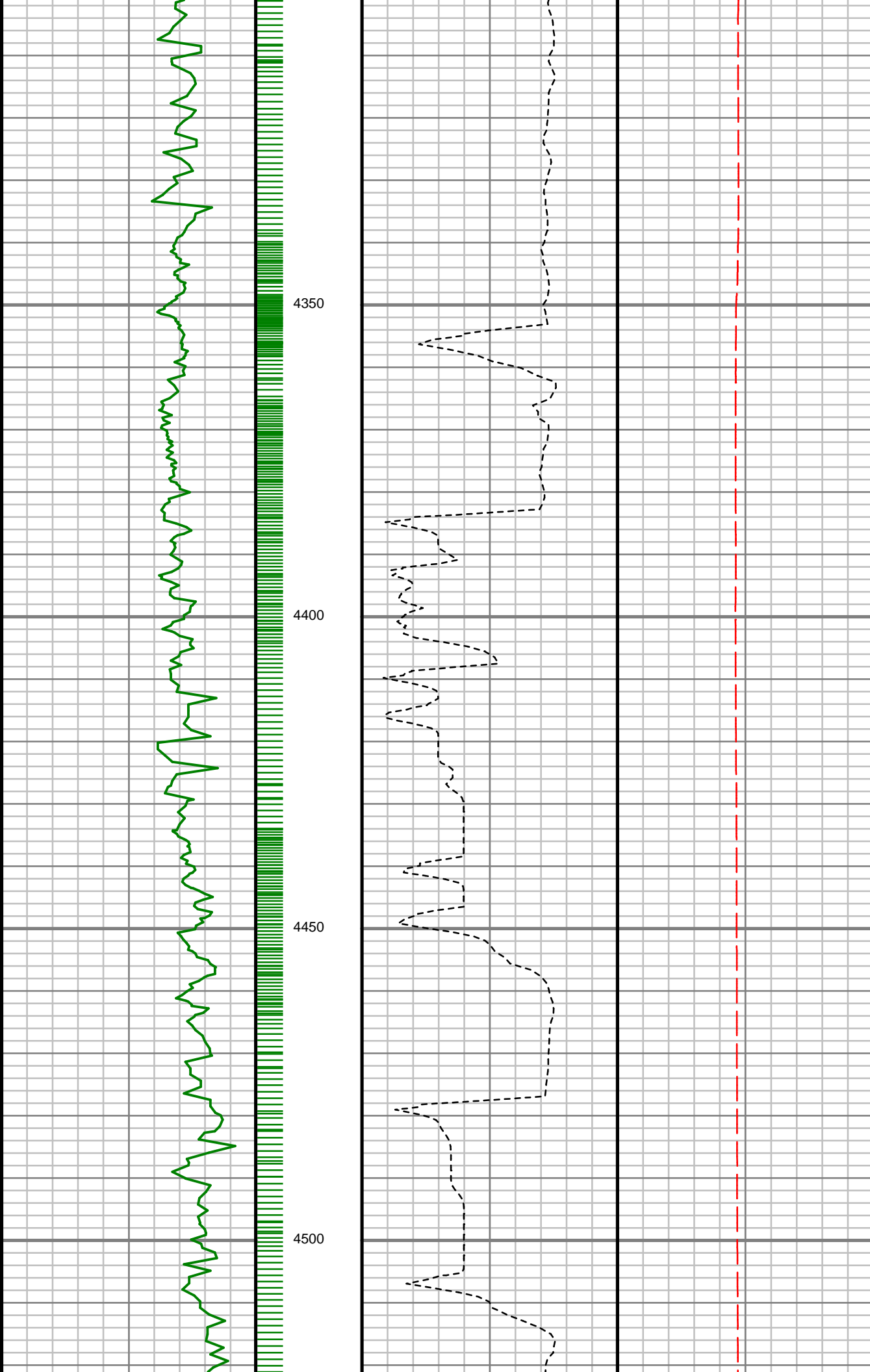
4250

4300



S: 42 MD: 4113.00 ft
Inc: 16.29 deg Az:
346.14 deg TVD:
4019.91 ft

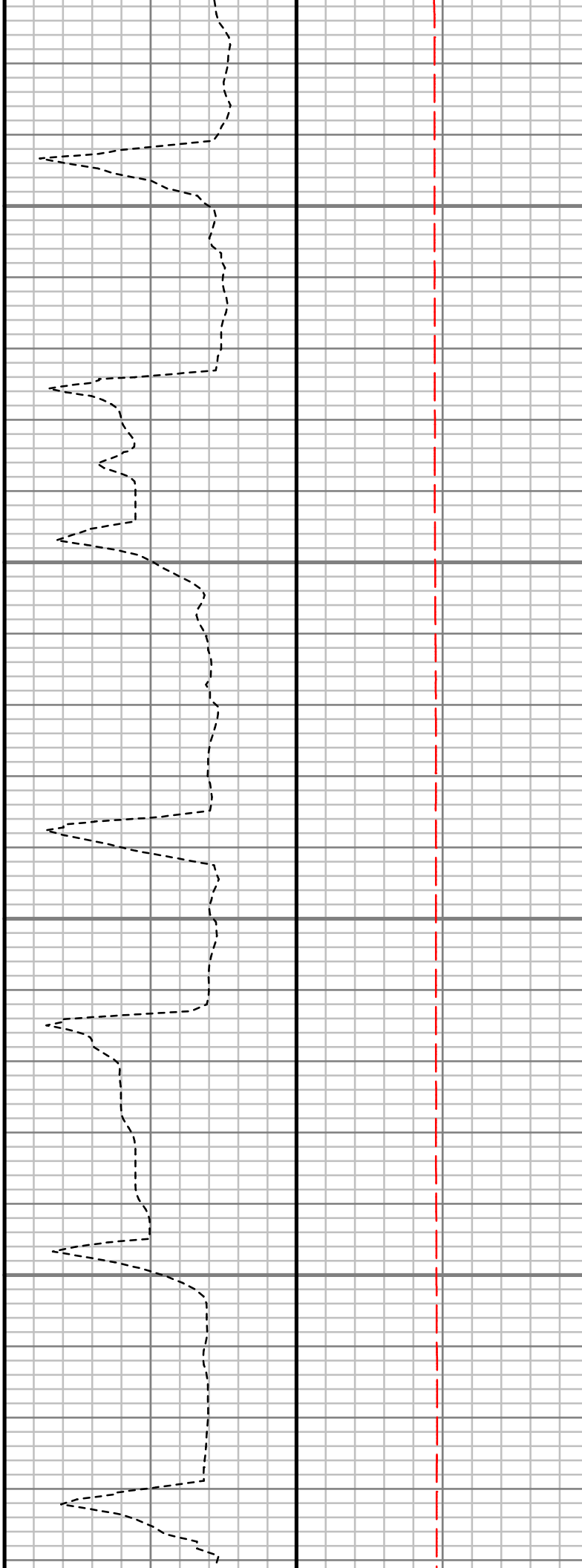
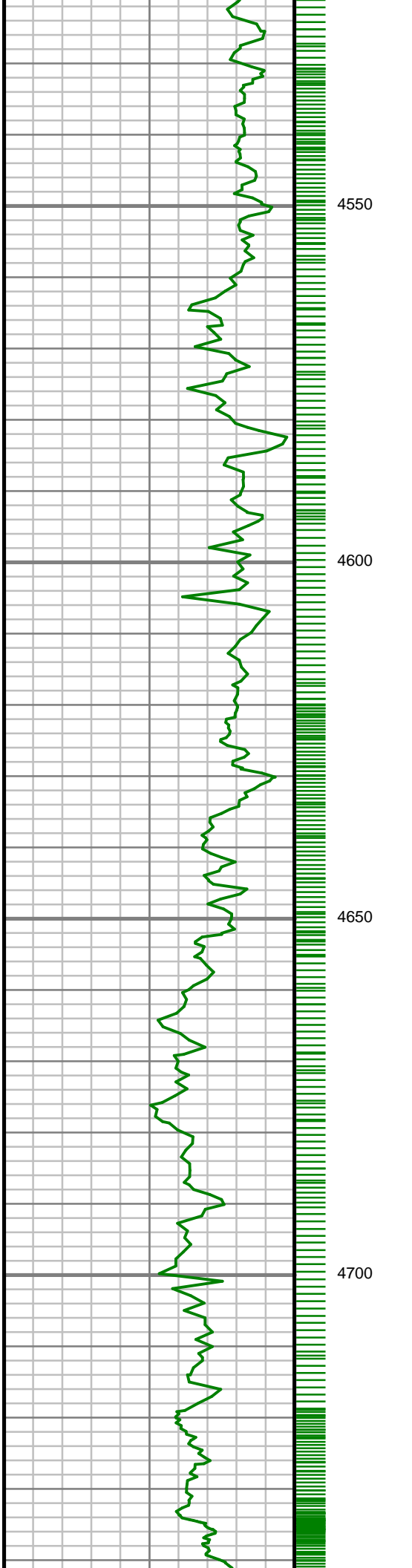
S: 43 MD: 4208.00 ft
Inc: 16.55 deg Az:
346.17 deg TVD:
4111.04 ft



S: 44 MD: 4302.00 ft
Inc: 13.77 deg Az:
345.96 deg TVD:
4201.76 ft

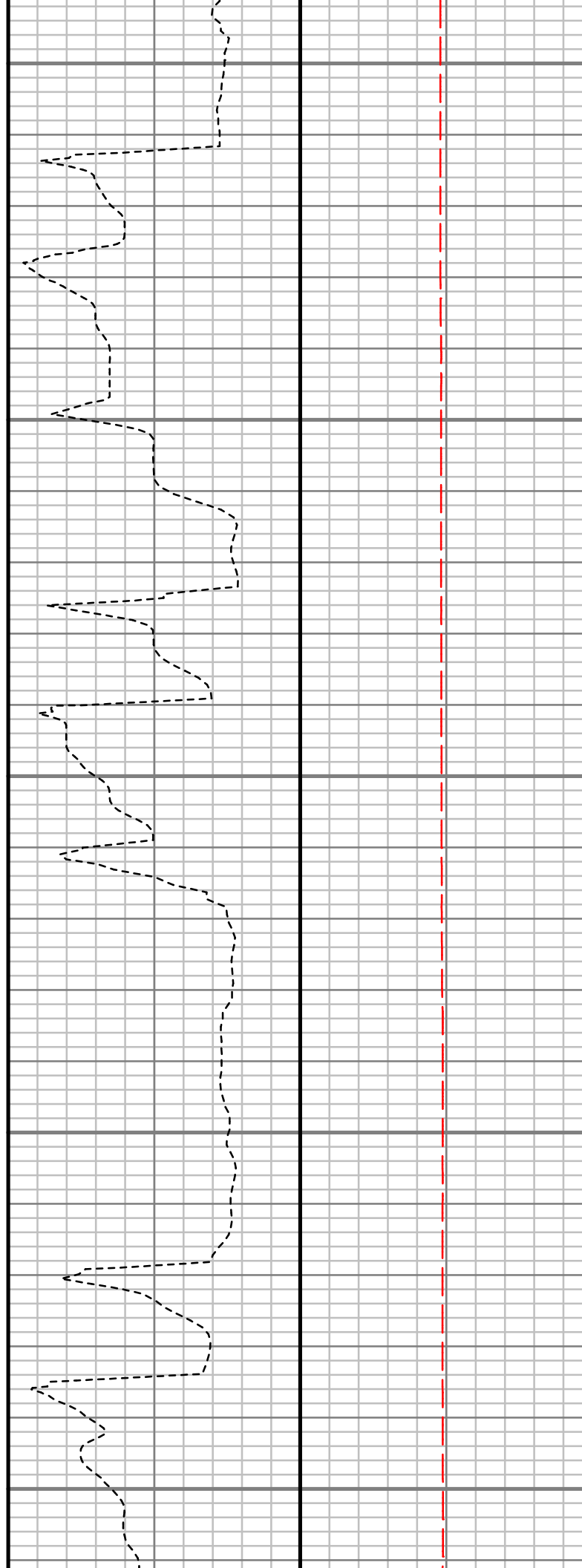
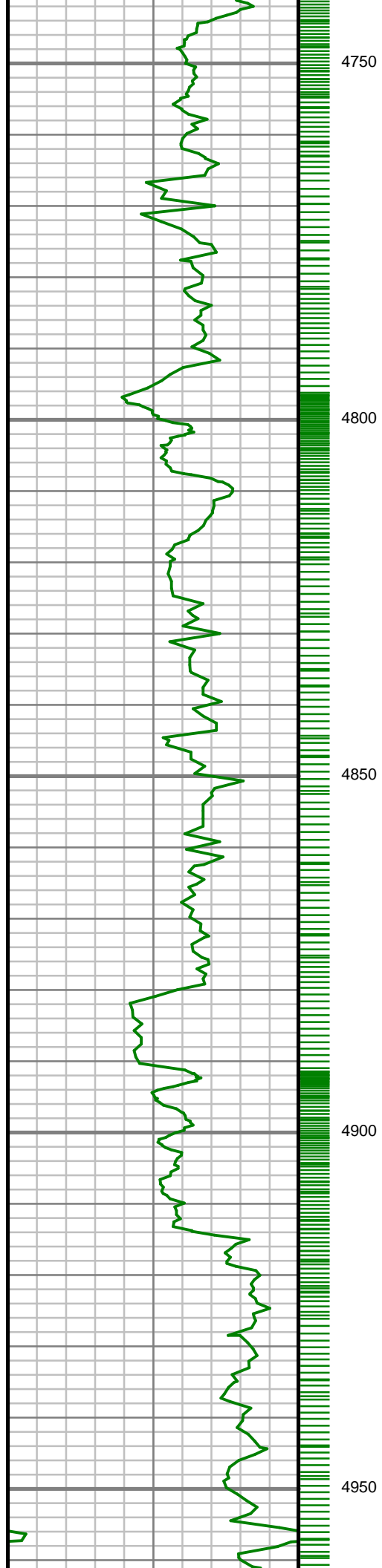
S: 45 MD: 4395.00 ft
Inc: 12.40 deg Az:
340.56 deg TVD:
4292.34 ft

S: 46 MD: 4489.00 ft
Inc: 15.25 deg Az:
340.19 deg TVD:
4383.61 ft



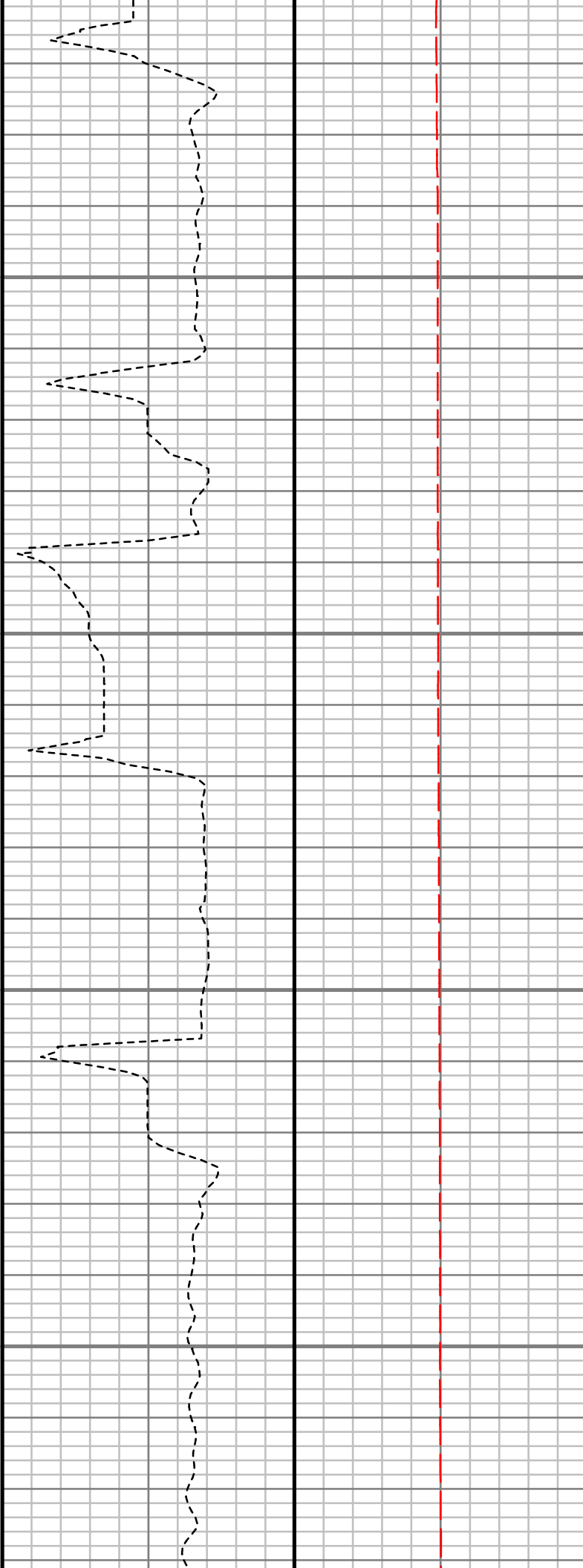
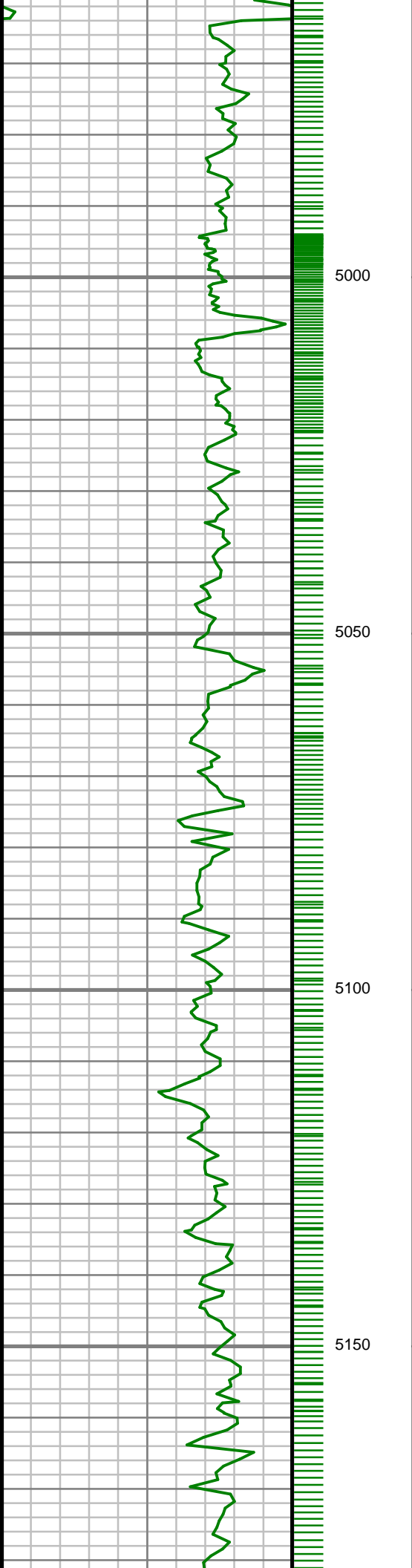
S: 47 MD: 4584.00 ft
Inc: 13.28 deg Az:
341.18 deg TVD:
4475.67 ft

S: 48 MD: 4679.00 ft
Inc: 14.00 deg Az:
348.13 deg TVD:
4568.00 ft



S: 49 MD: 4773.00 ft
Inc: 13.28 deg Az:
347.24 deg TVD:
4659.35 ft

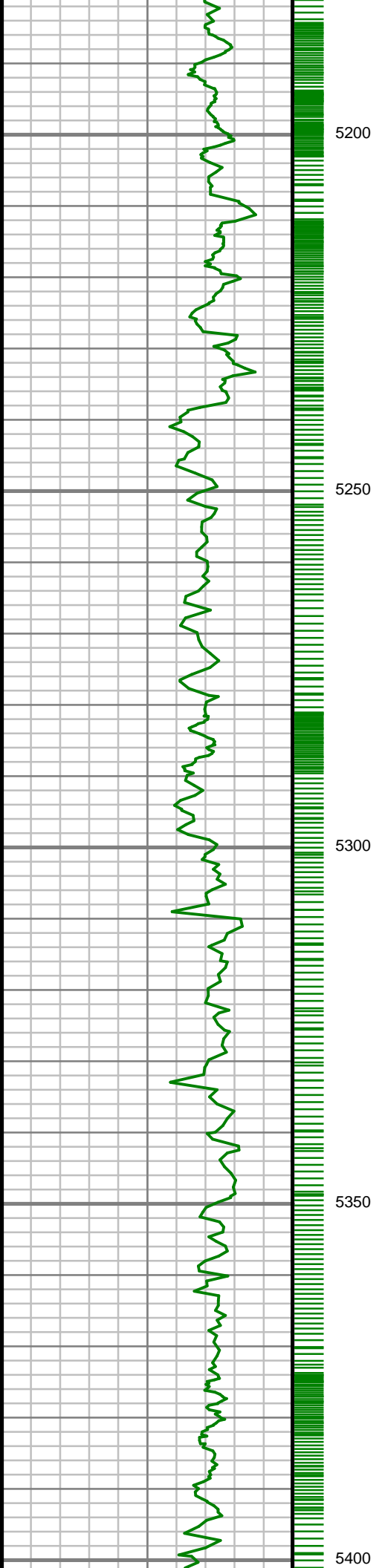
S: 50 MD: 4867.00 ft
Inc: 16.46 deg Az:
348.50 deg TVD:
4750.19 ft



S: 51 MD: 4961.00 ft
Inc: 16.56 deg Az:
346.42 deg TVD:
4840.31 ft

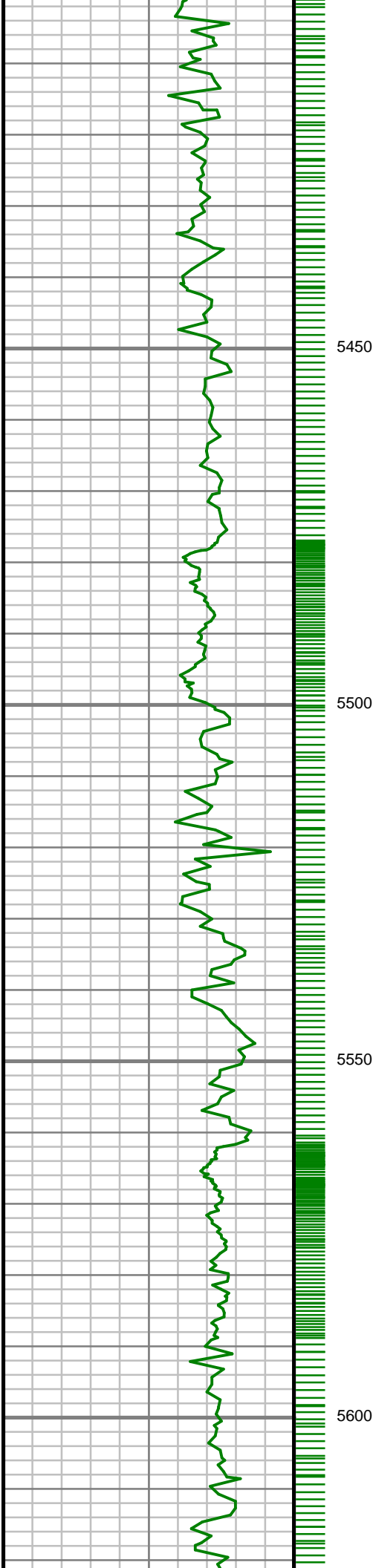
S: 52 MD: 5056.00 ft
Inc: 19.39 deg Az:
348.45 deg TVD:
4930.67 ft

S: 53 MD: 5150.00 ft
Inc: 17.31 deg Az:
349.03 deg TVD:
5019.88 ft



S: 54 MD: 5244.00 ft
Inc: 14.30 deg Az:
344.60 deg TVD:
5110.32 ft

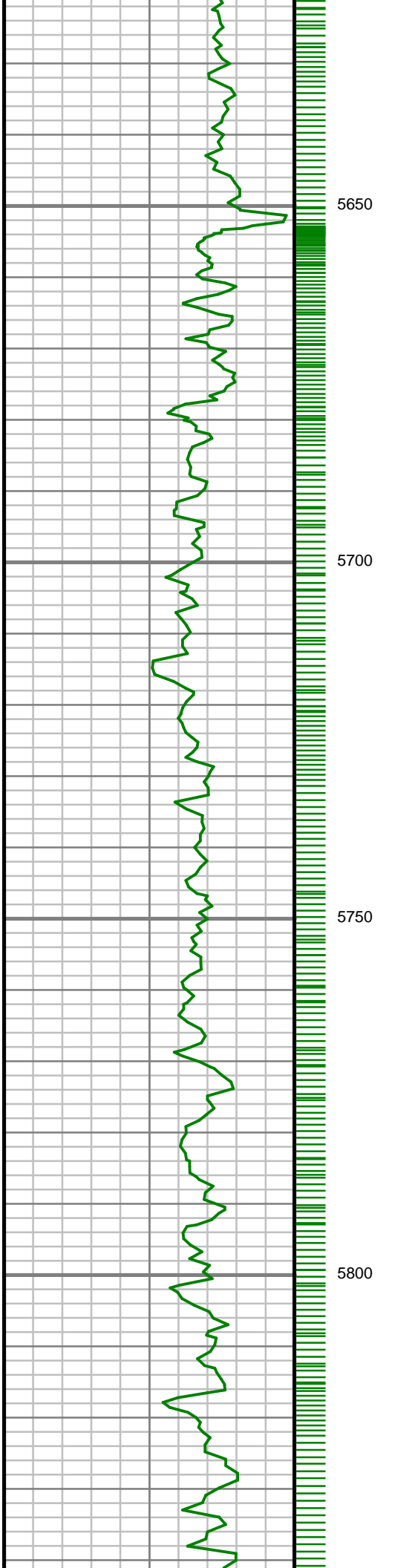
S: 55 MD: 5339.00 ft
Inc: 17.30 deg Az:
344.74 deg TVD:
5201.72 ft



S: 56 MD: 5431.00 ft
Inc: 17.54 deg Az:
342.90 deg TVD:
5289.50 ft

S: 57 MD: 5525.00 ft
Inc: 16.28 deg Az:
344.79 deg TVD:
5379.44 ft

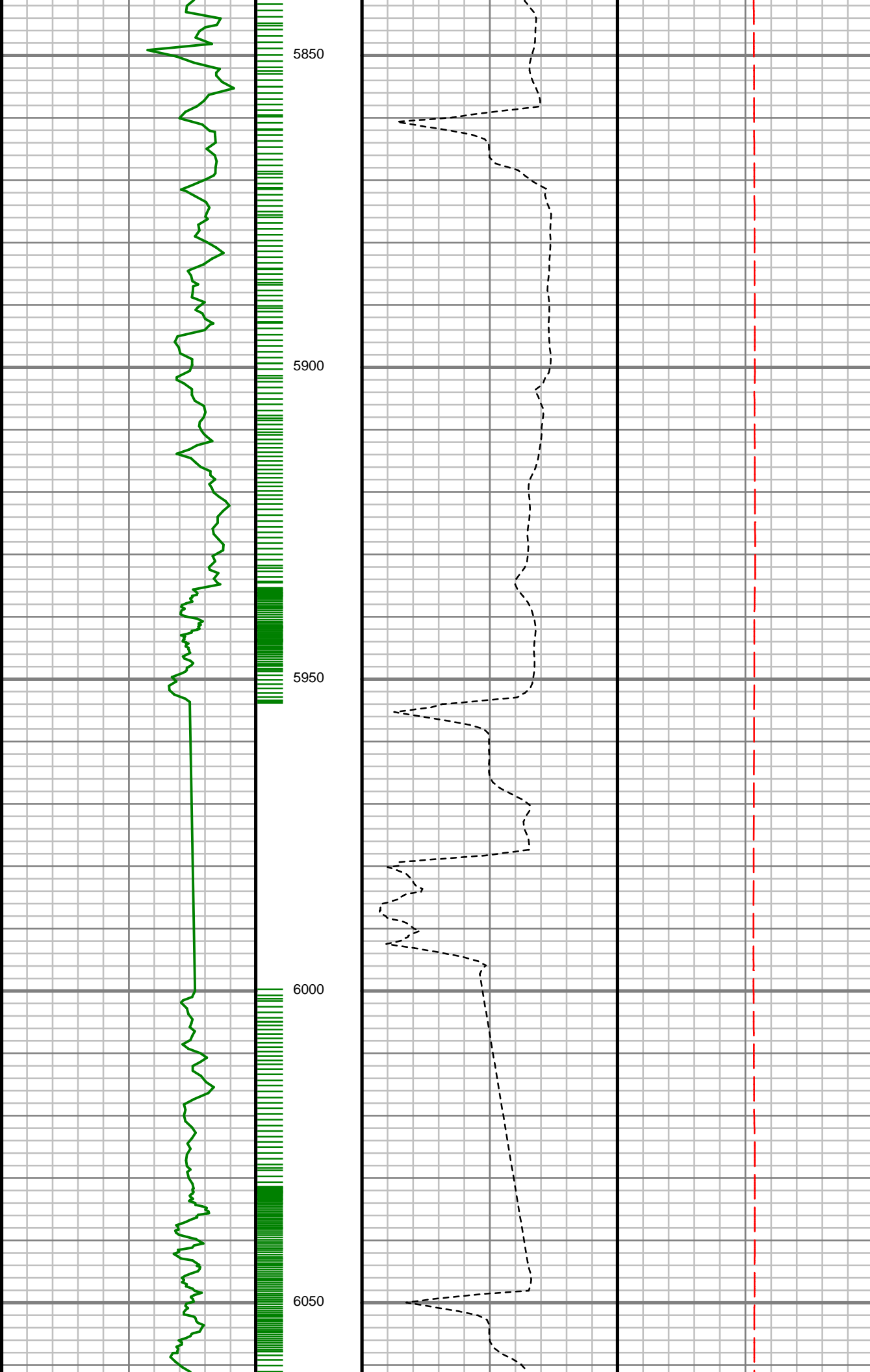
S: 58 MD: 5618.00 ft



Inc: 15.45 deg Az:
350.56 deg TVD:
5468.90 ft

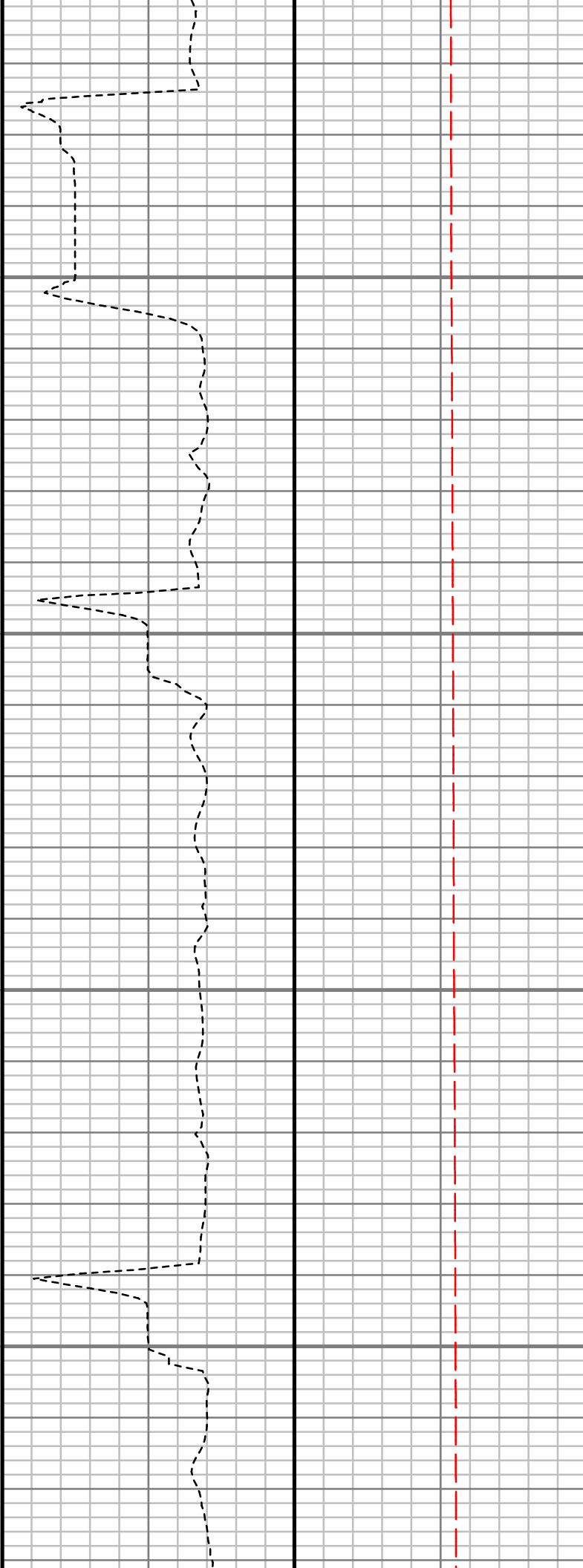
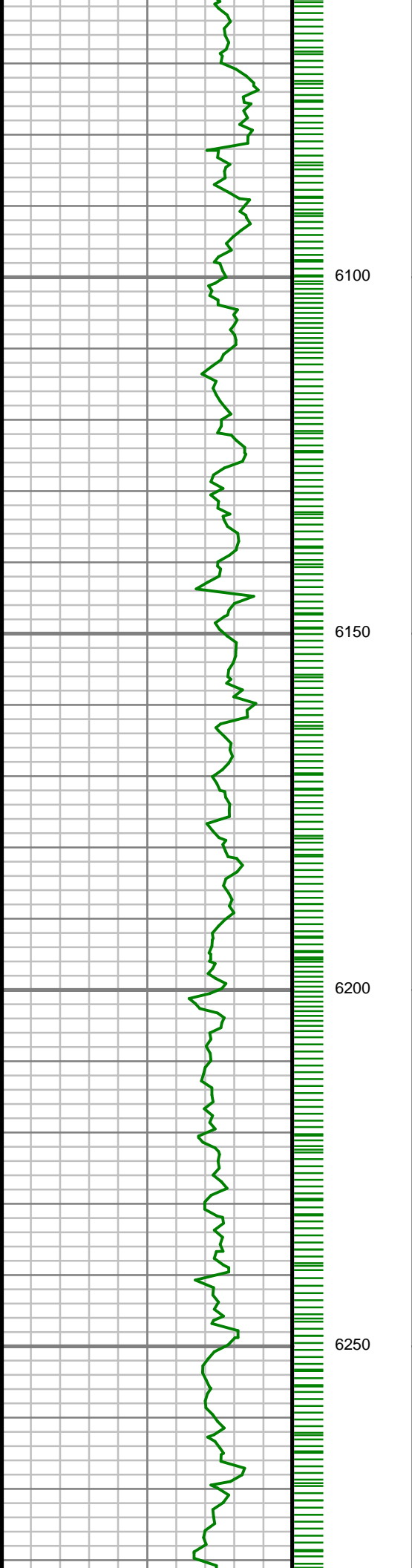
S: 59 MD: 5711.00 ft
Inc: 16.97 deg Az:
351.76 deg TVD:
5558.20 ft

S: 60 MD: 5805.00 ft
Inc: 15.05 deg Az:
351.15 deg TVD:
5648.55 ft



S: 61 MD: 5900.00 ft
Inc: 10.59 deg Az:
347.13 deg TVD:
5741.16 ft

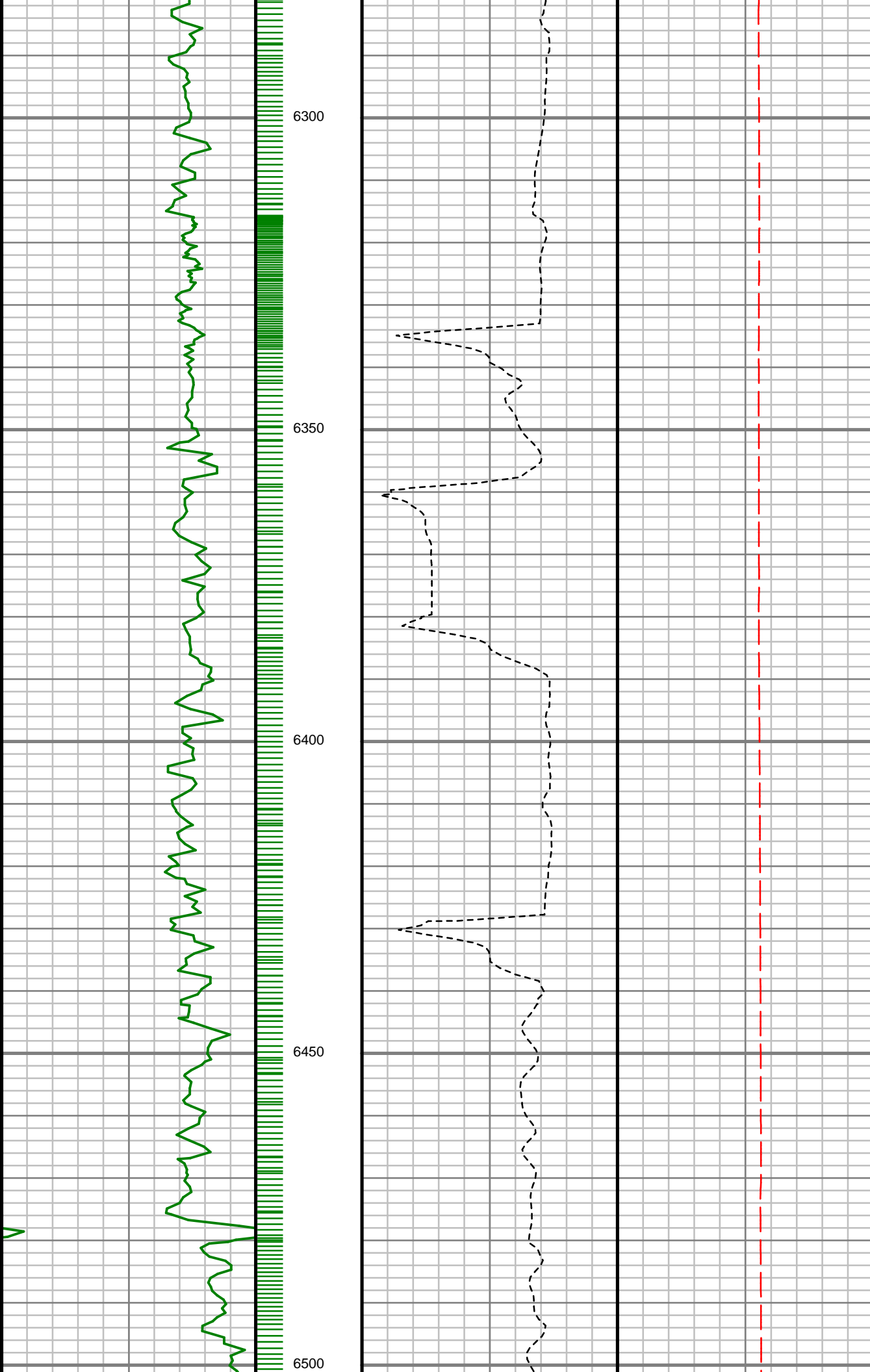
S: 62 MD: 5994.00 ft
Inc: 8.50 deg Az:
344.46 deg TVD:
5833.86 ft



S: 63 MD: 6090.00 ft
Inc: 8.87 deg Az:
354.20 deg TVD:
5928.76 ft

S: 64 MD: 6185.00 ft
Inc: 7.04 deg Az:
350.77 deg TVD:
6022.84 ft

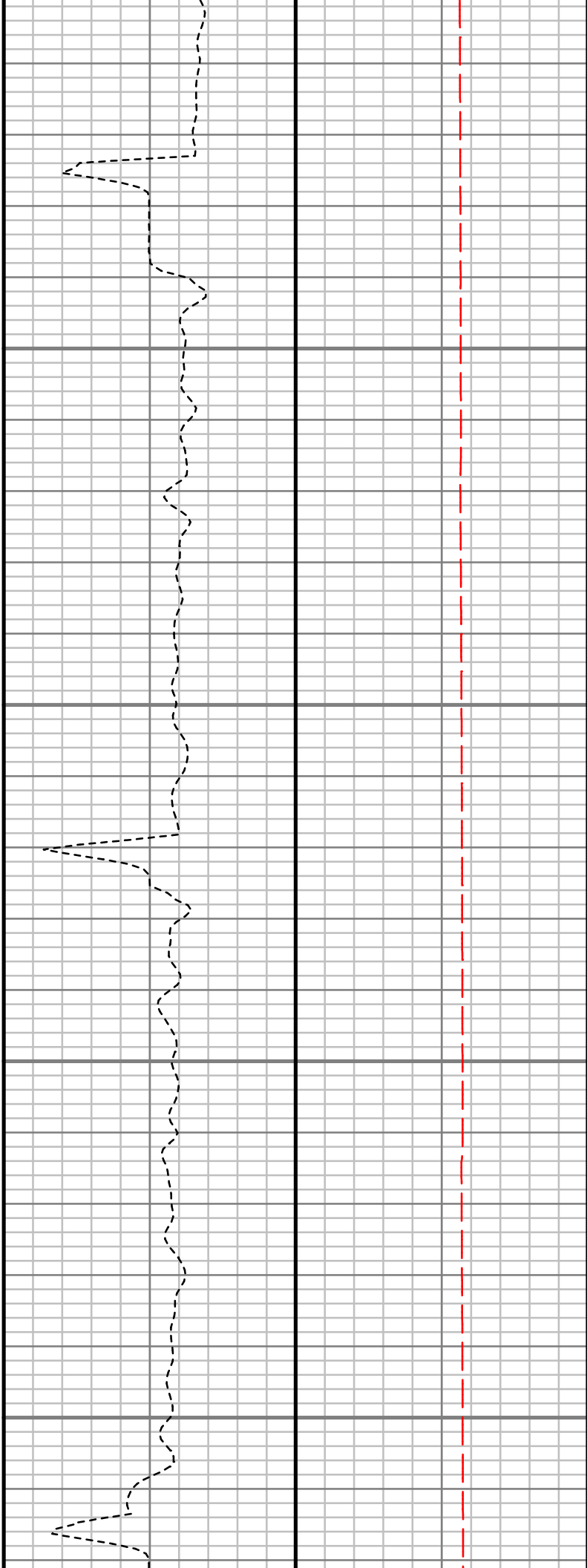
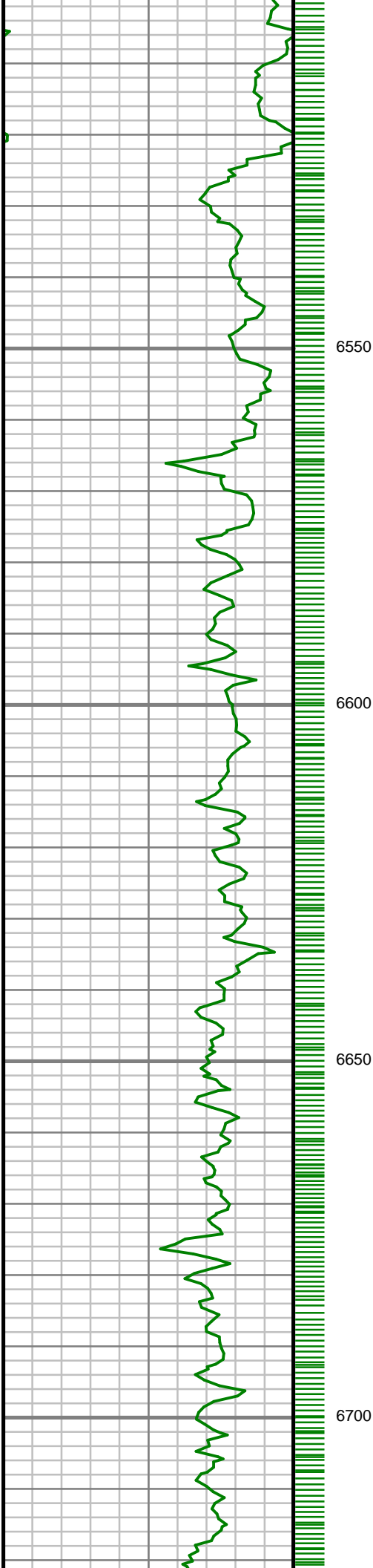
S: 65 MD: 6279.00 ft



Inc: 4.13 deg Az:
350.37 deg TVD:
6116.39 ft

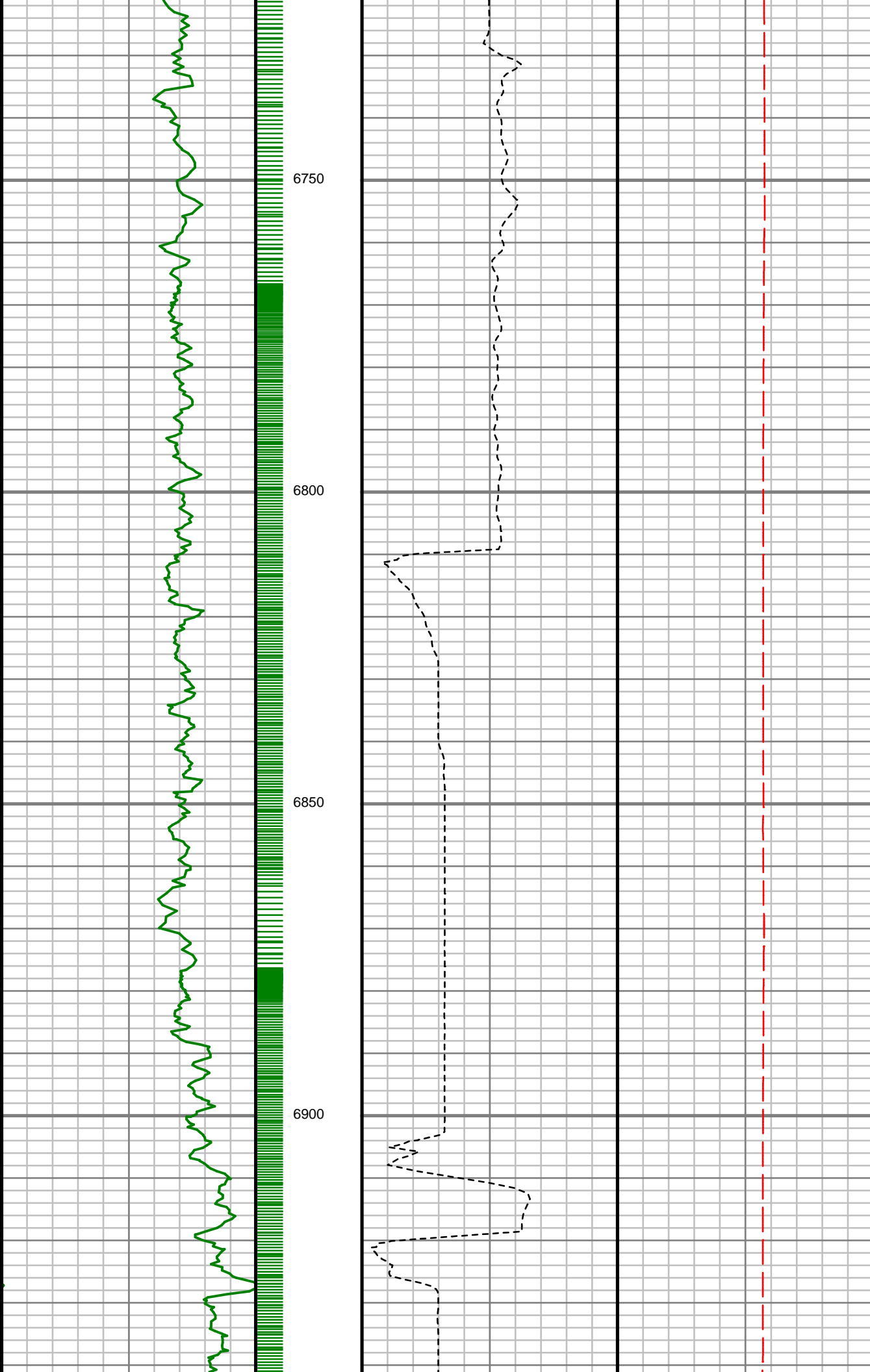
S: 66 MD: 6373.00 ft
Inc: 5.29 deg Az:
351.21 deg TVD:
6210.07 ft

S: 67 MD: 6467.00 ft
Inc: 4.01 deg Az:
348.25 deg TVD:
6303.76 ft



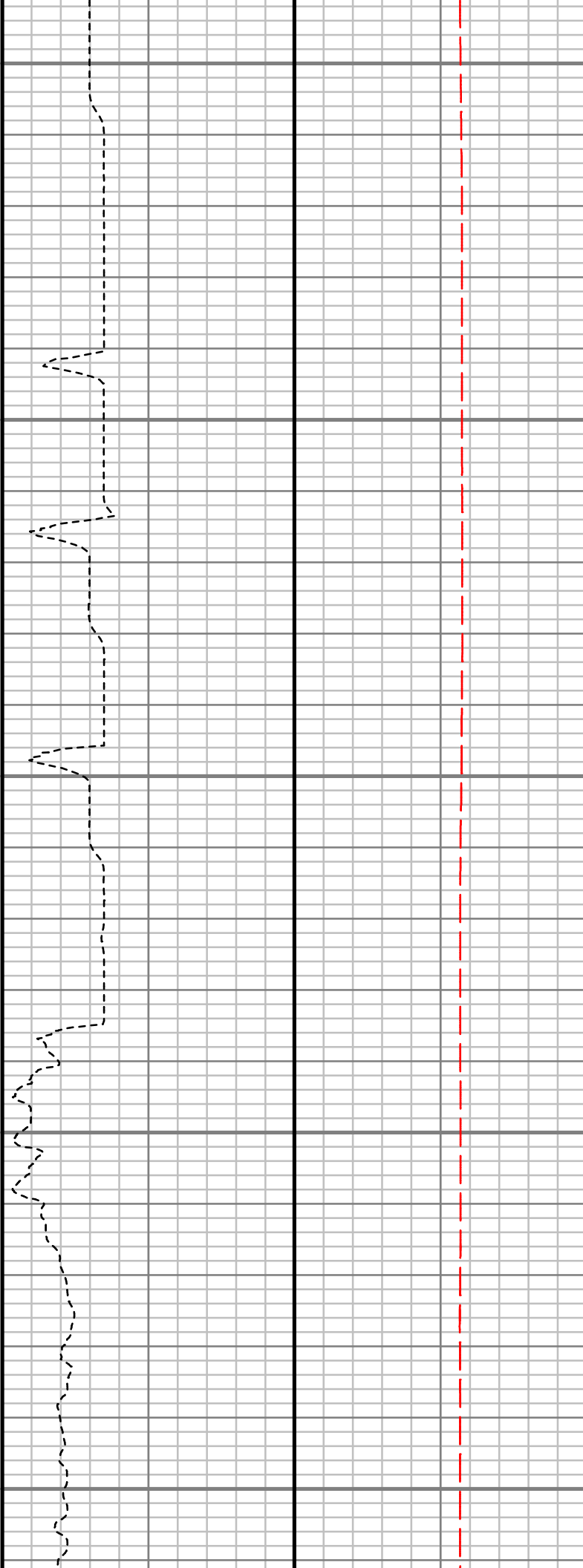
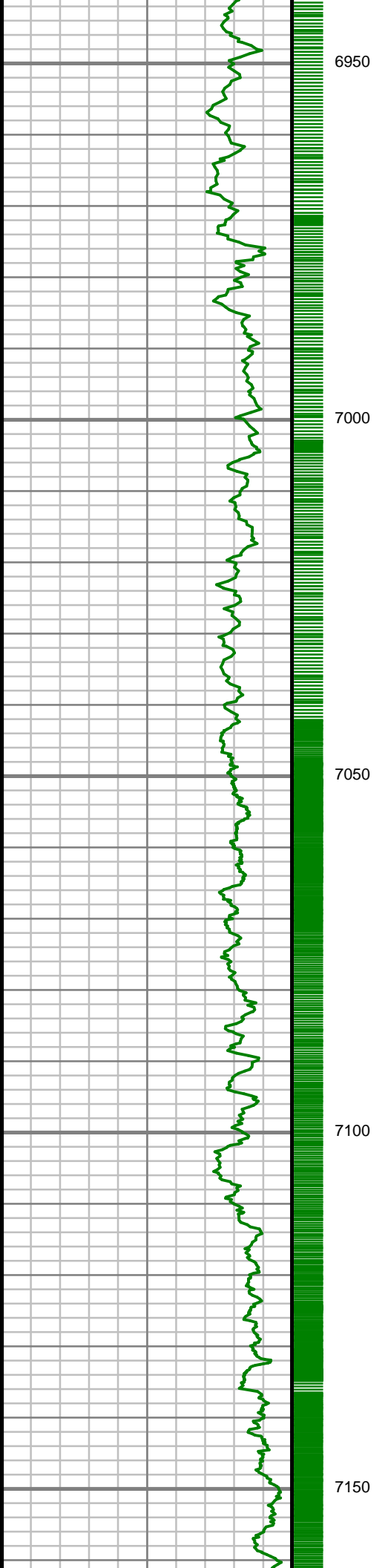
S: 68 MD: 6562.00 ft
Inc: 2.75 deg Az:
346.54 deg TVD:
6398.59 ft

S: 69 MD: 6658.00 ft
Inc: 1.68 deg Az:
322.43 deg TVD:
6494.52 ft



S: 70 MD: 6753.00 ft
Inc: 0.62 deg Az:
297.98 deg TVD:
6589.50 ft

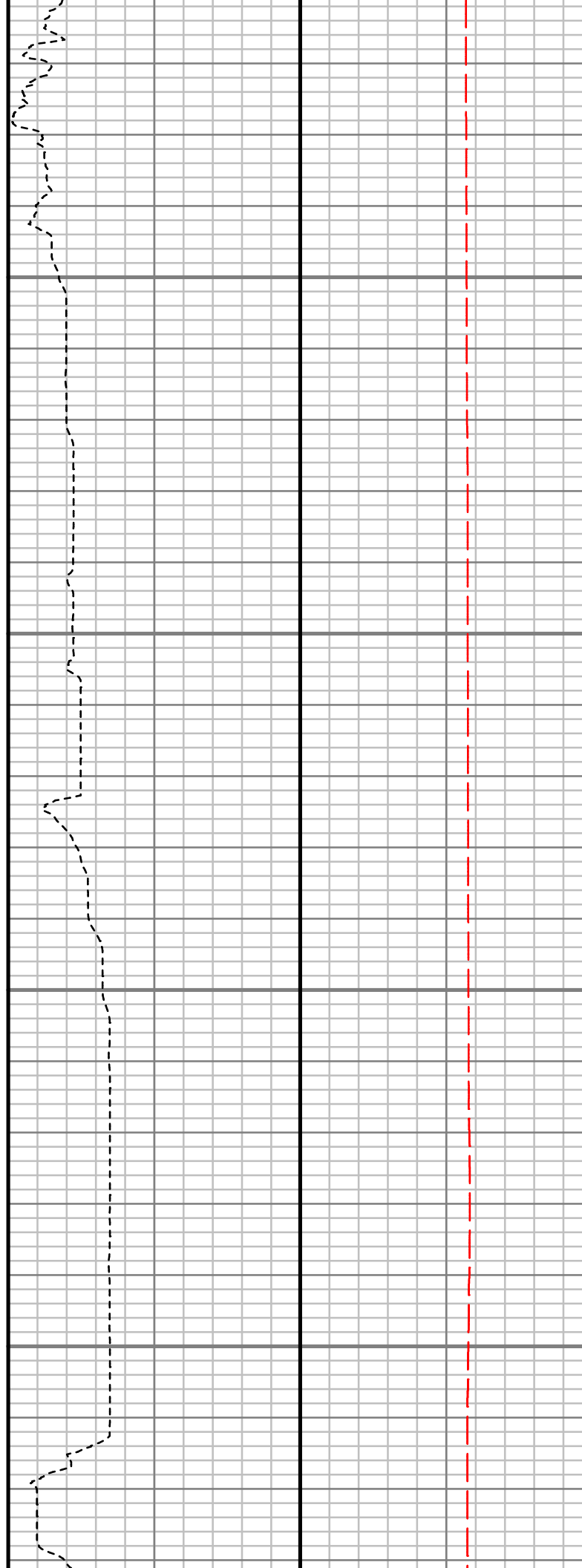
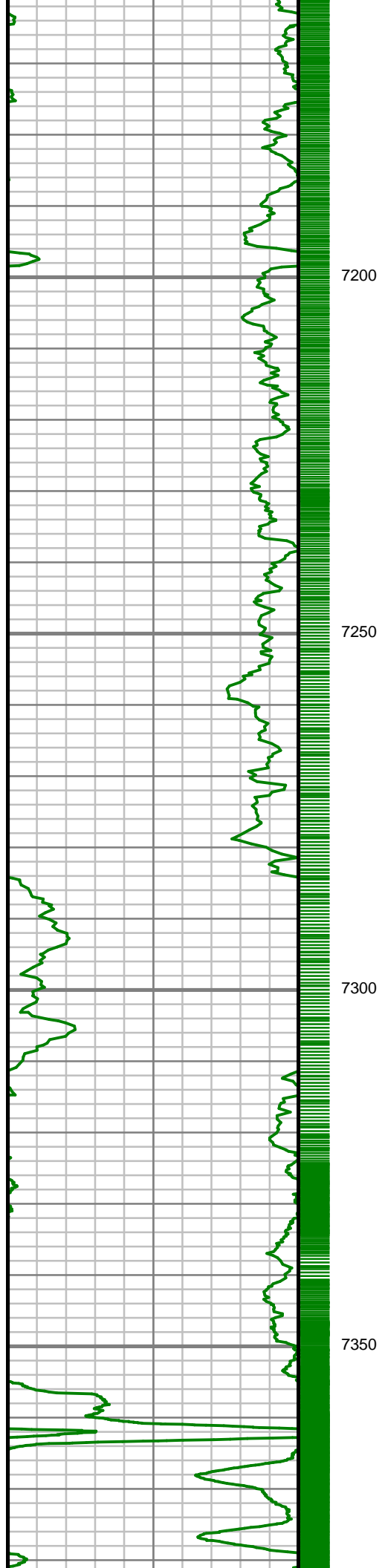
S: 71 MD: 6846.00 ft
Inc: 7.15 deg Az:
173.69 deg TVD:
6682.27 ft



S: 72 MD: 6941.00 ft
Inc: 13.43 deg Az:
174.94 deg TVD:
6775.70 ft

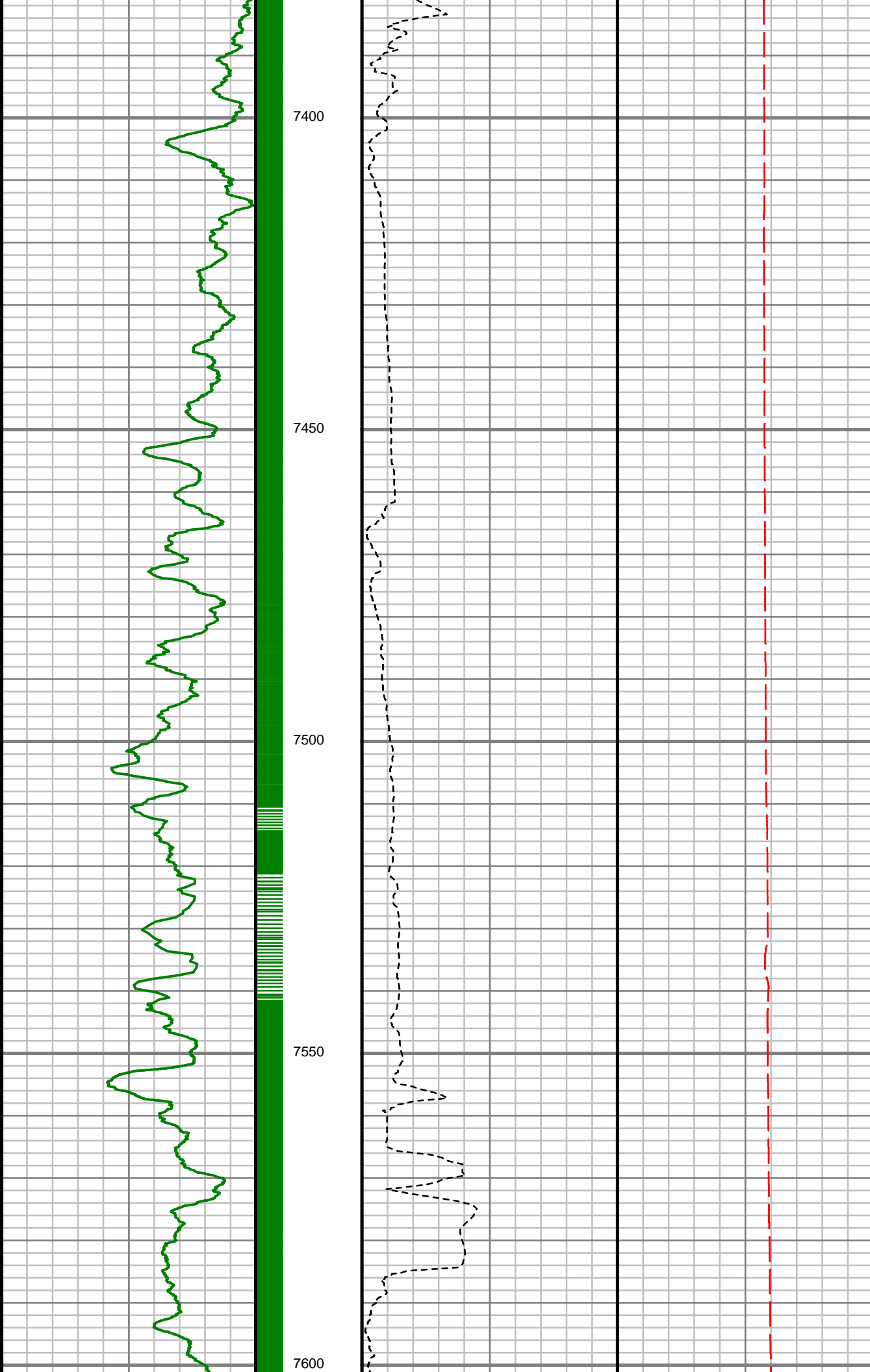
S: 73 MD: 7034.00 ft
Inc: 17.98 deg Az:
180.15 deg TVD:
6865.21 ft

S: 74 MD: 7128.00 ft
Inc: 21.54 deg Az:
188.14 deg TVD:
6953.67 ft



S: 75 MD: 7222.00 ft
Inc: 28.35 deg Az: 180.13 deg TVD: 7038.88 ft

S: 76 MD: 7316.00 ft
Inc: 39.34 deg Az: 174.02 deg TVD: 7116.85 ft



7400

7450

7500

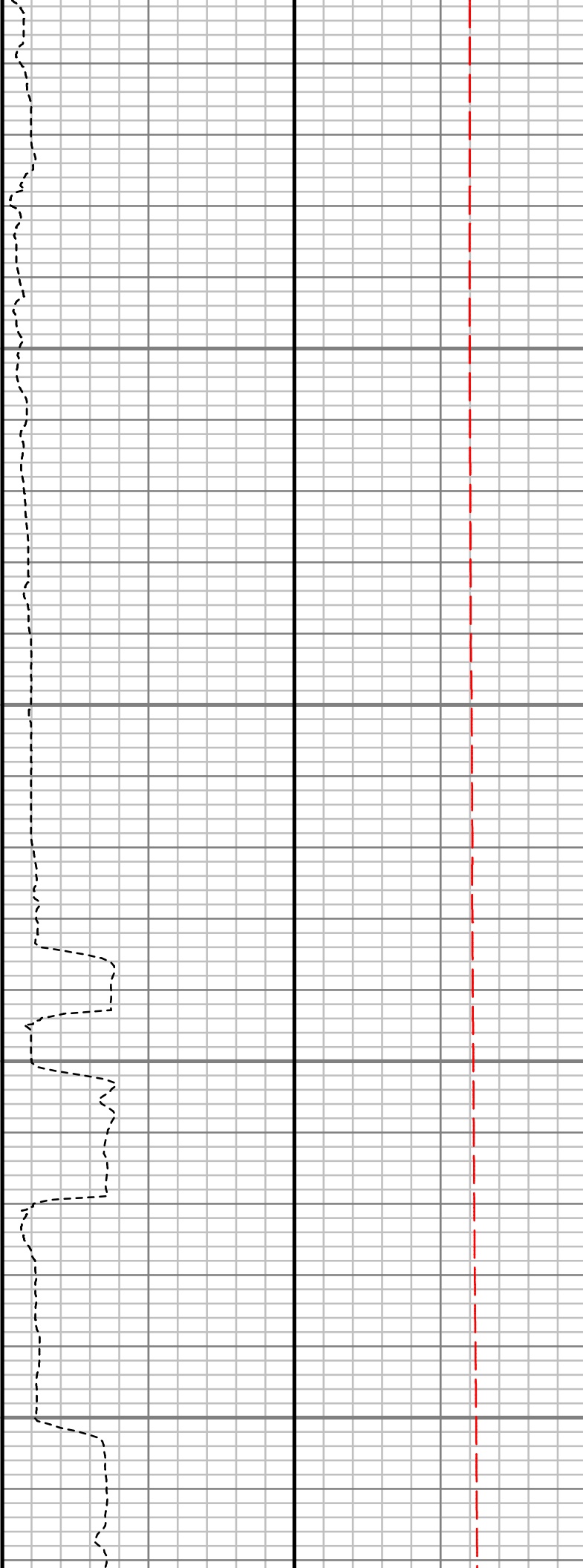
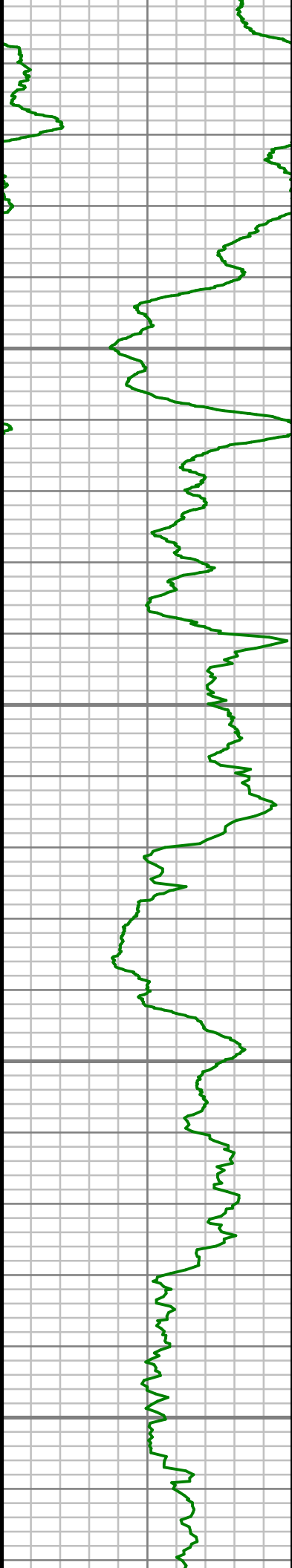
7550

7600

S: 77 MD: 7411.00 ft
Inc: 46.25 deg Az:
174.49 deg TVD:
7186.52 ft

S: 78 MD: 7506.00 ft
Inc: 59.02 deg Az:
179.01 deg TVD:
7244.07 ft

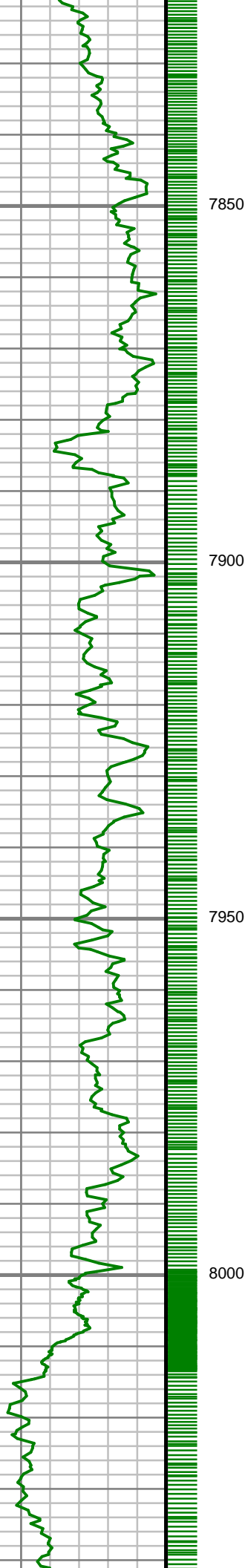
S: 79 MD: 7600.00 ft



S: 79 MD: 7600.00 ft
Inc: 66.05 deg Az:
181.26 deg TVD:
7287.40 ft

S: 80 MD: 7693.00 ft
Inc: 78.11 deg Az:
179.42 deg TVD:
7315.96 ft

S: 81 MD: 7785.00 ft
Inc: 87.69 deg Az:
179.42 deg TVD:
7327.32 ft

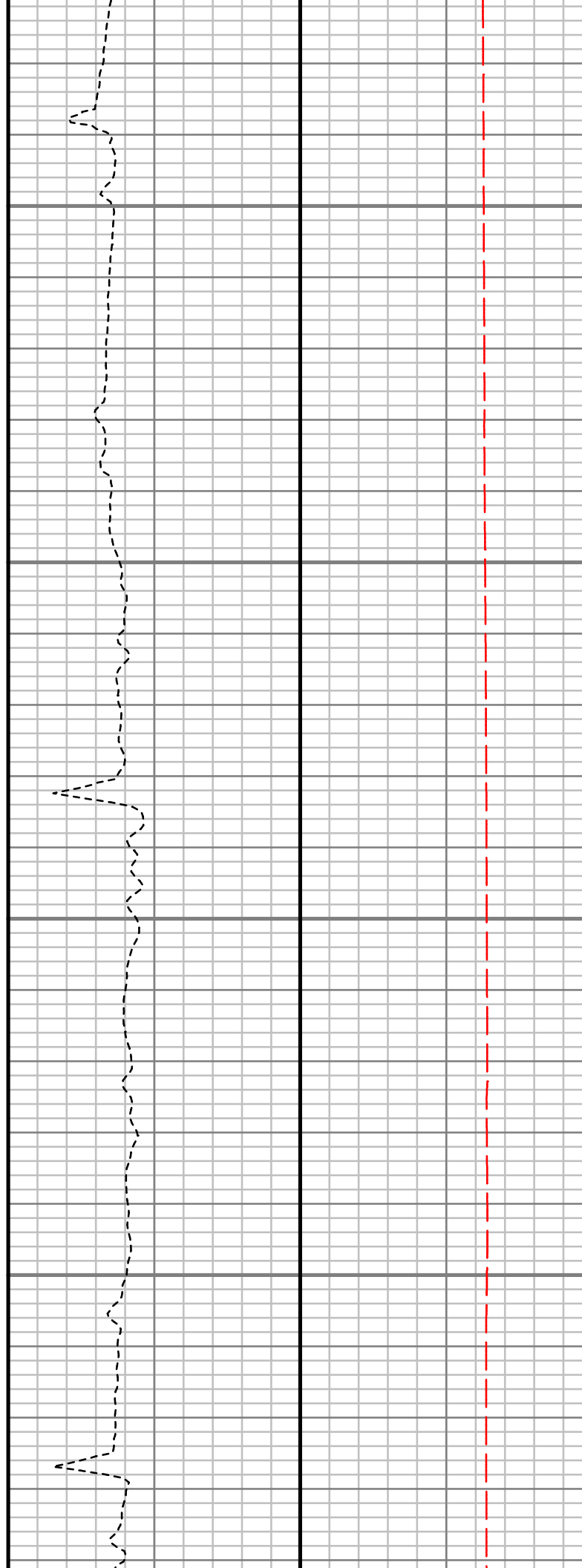


7850

7900

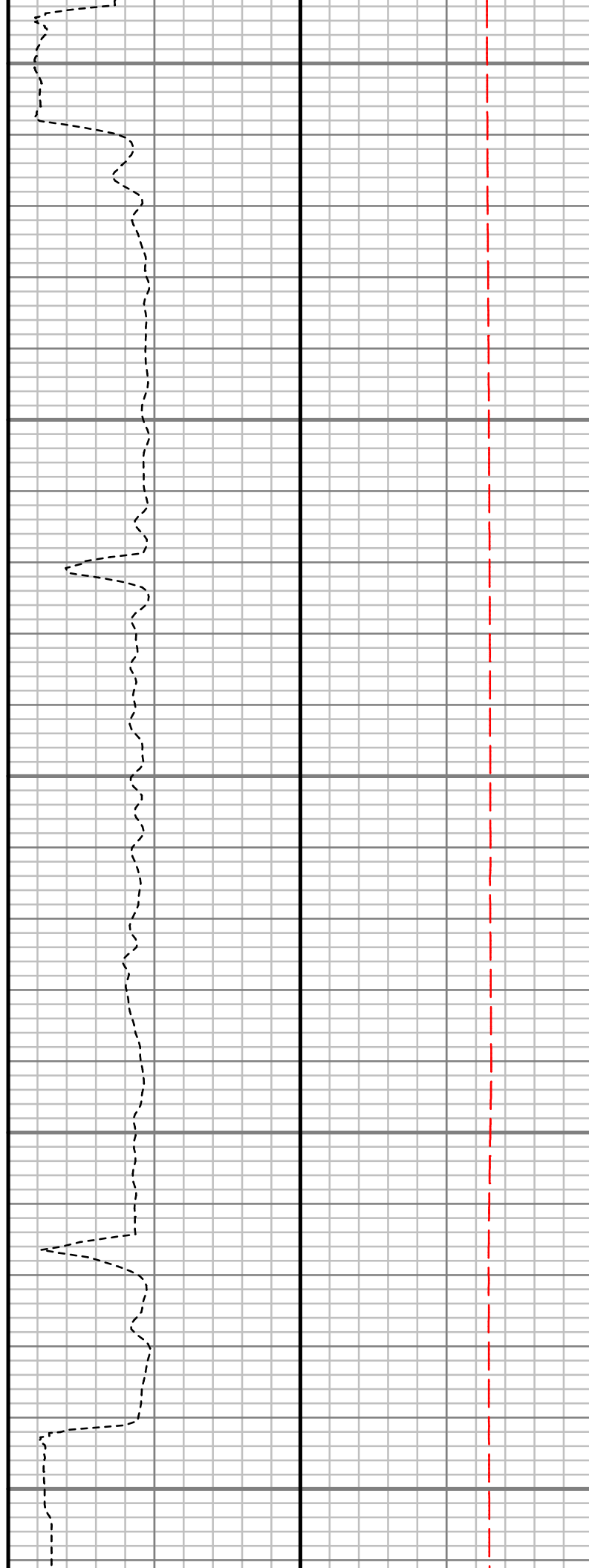
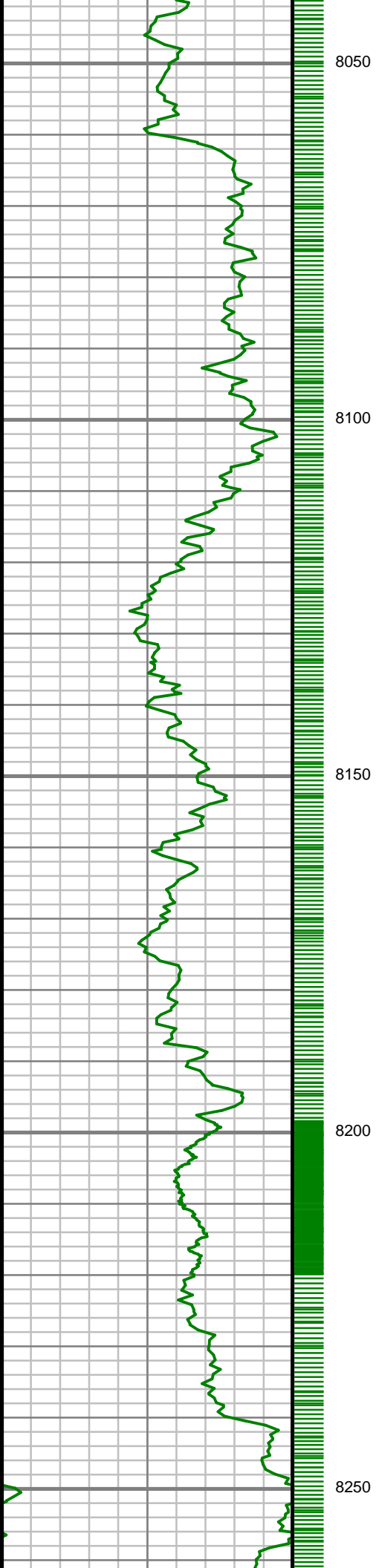
7950

8000



S: 82 MD: 7878.00 ft
Inc: 90.47 deg Az:
179.64 deg TVD:
7328.82 ft

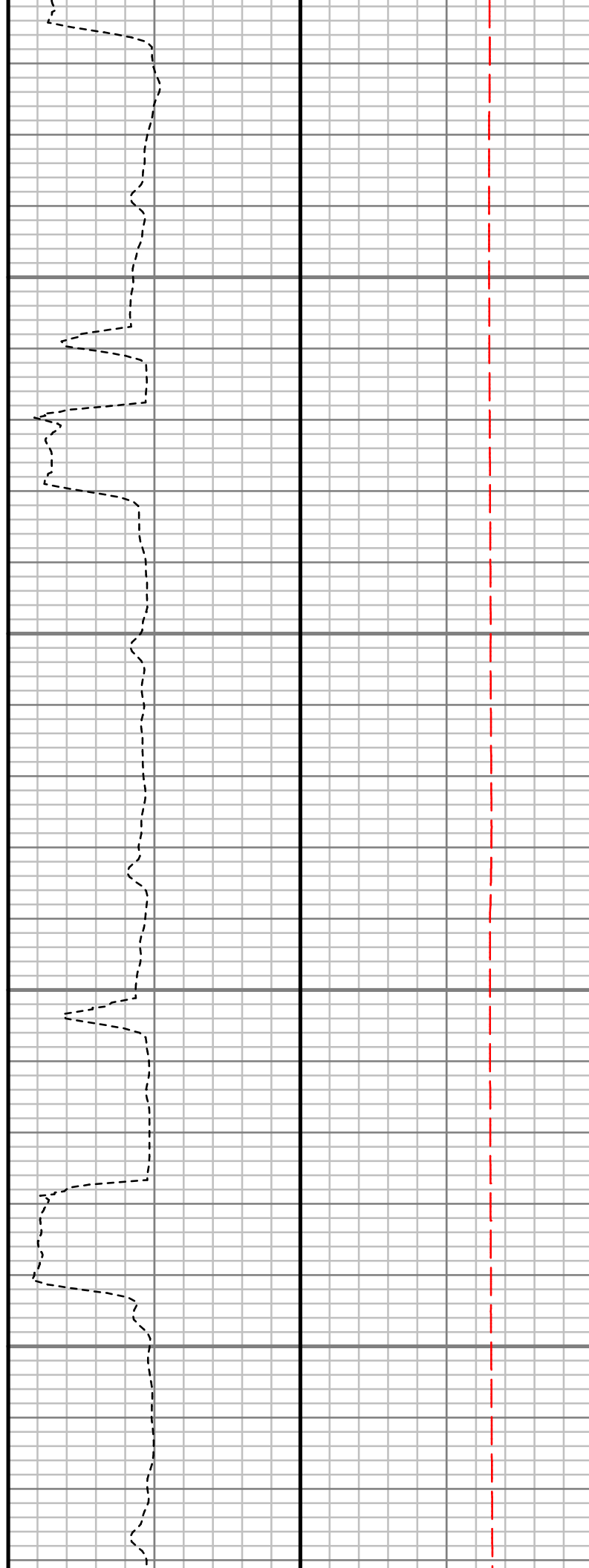
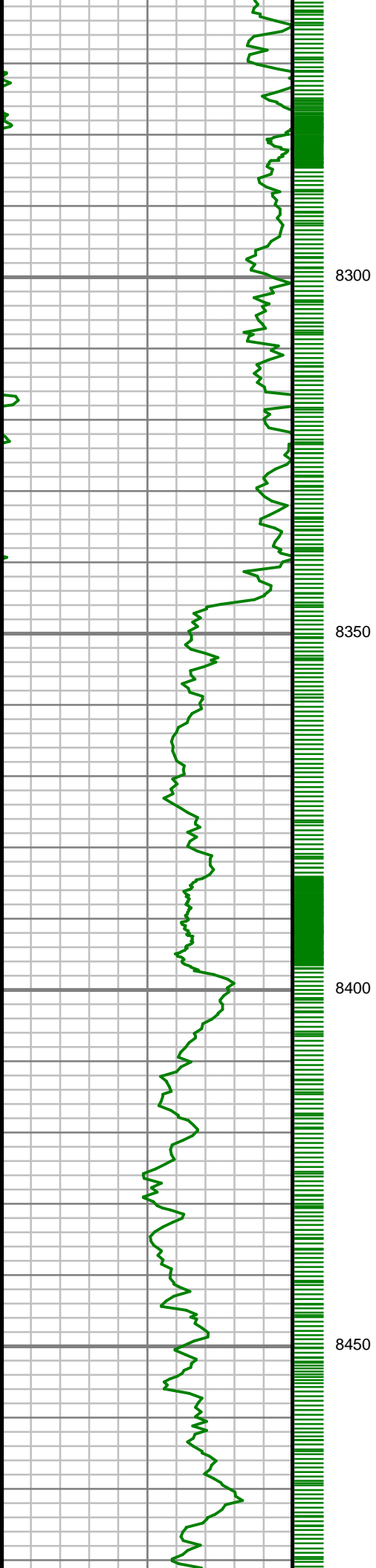
S: 83 MD: 7973.00 ft
Inc: 91.21 deg Az:
178.43 deg TVD:
7327.43 ft



S: 84 MD: 8067.00 ft
Inc: 89.97 deg Az:
179.56 deg TVD:
7326.46 ft

S: 85 MD: 8162.00 ft
Inc: 91.07 deg Az:
179.17 deg TVD:
7325.60 ft

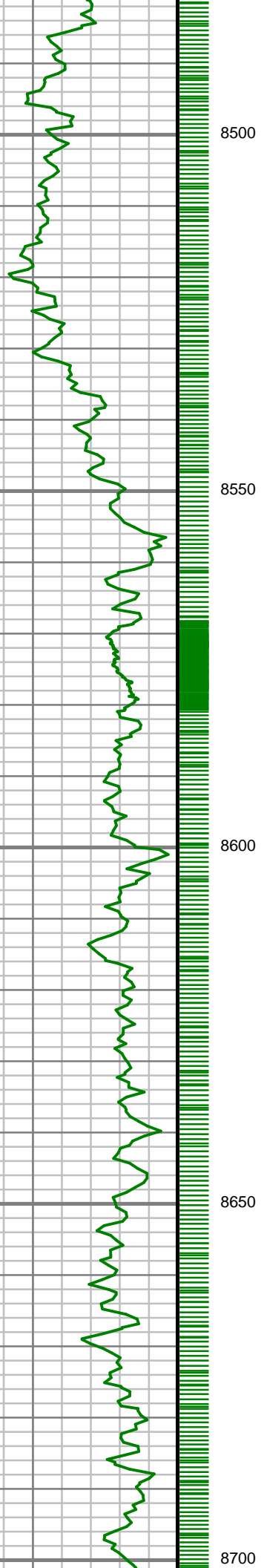
S: 86 MD: 8255.00 ft
Inc: 90.94 deg Az:
181.44 deg TVD:



181.44 deg TVD:
7323.97 ft

S: 87 MD: 8349.00 ft
Inc: 87.11 deg Az:
179.28 deg TVD:
7325.56 ft

S: 88 MD: 8442.00 ft
Inc: 87.55 deg Az:
181.02 deg TVD:
7329.89 ft



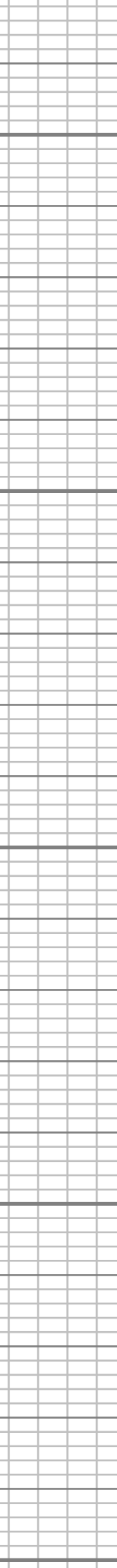
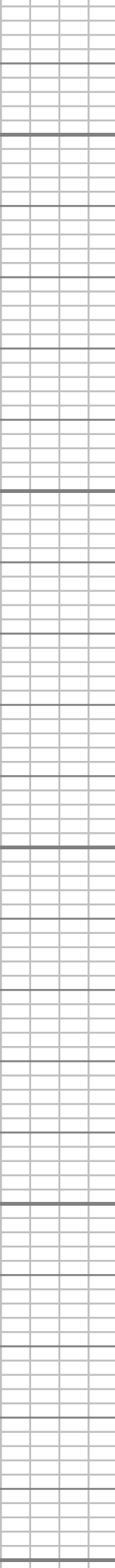
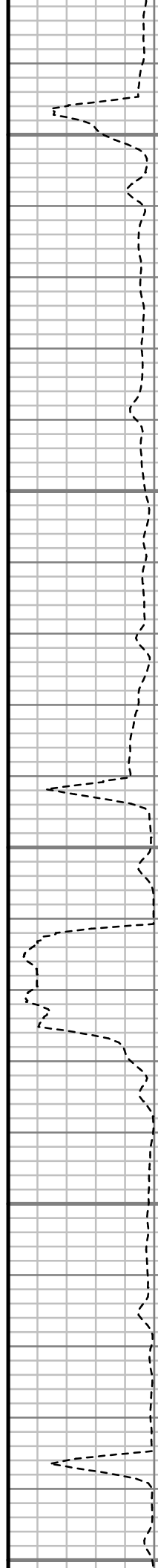
8500

8550

8600

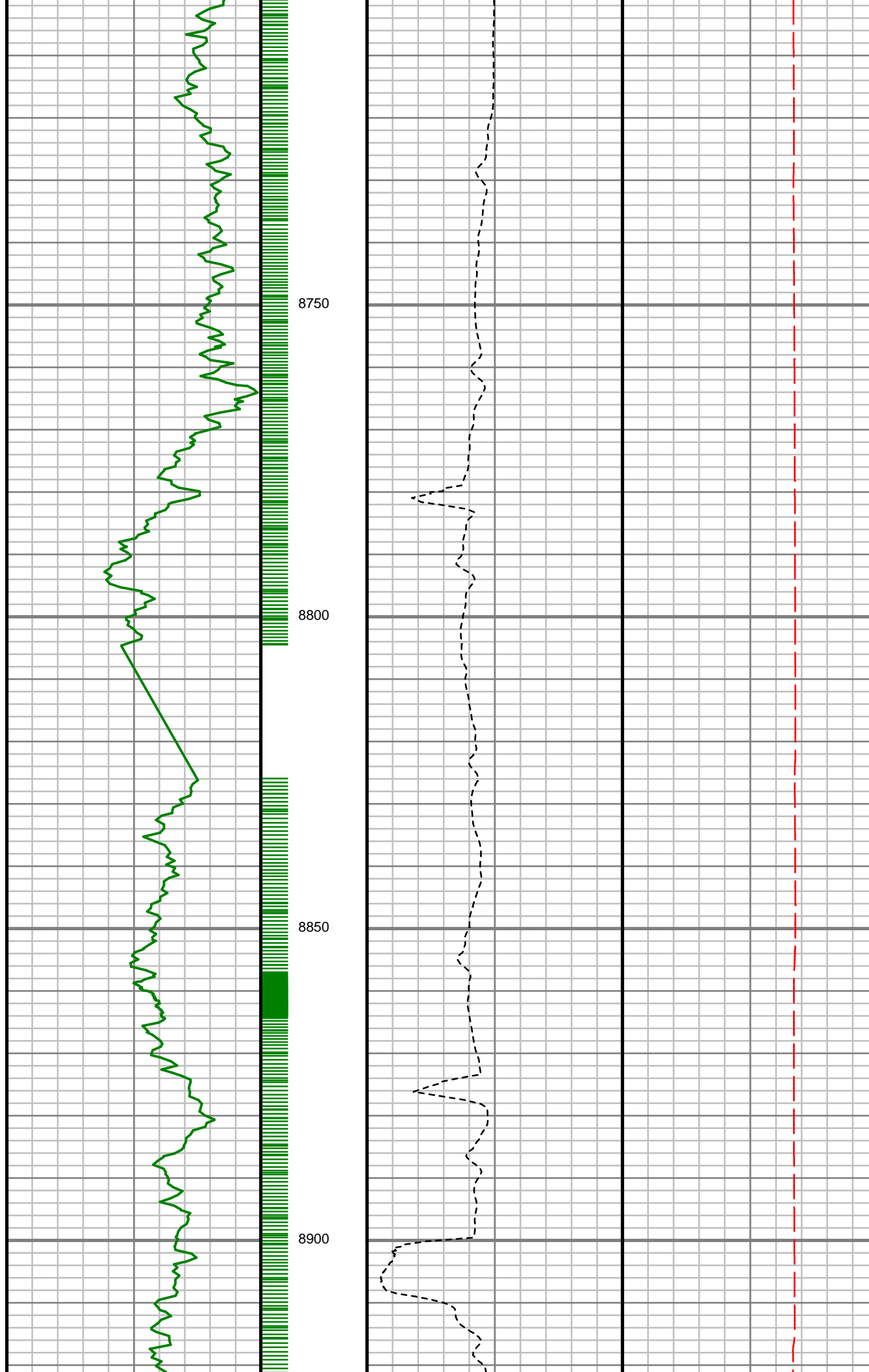
8650

8700



S: 89 MD: 8536.00 ft
Inc: 87.72 deg Az:
181.03 deg TVD:
7333.77 ft

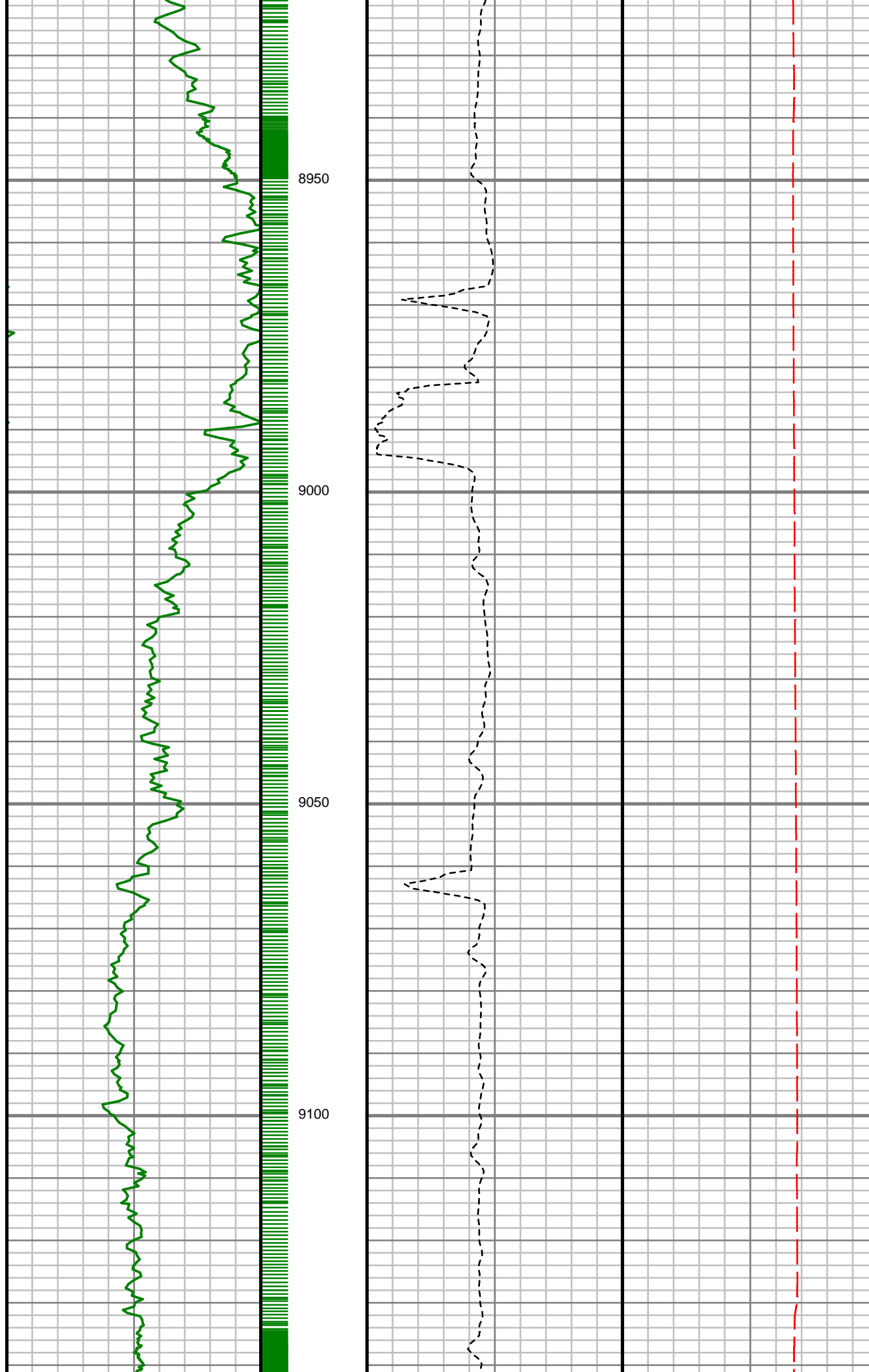
S: 90 MD: 8630.00 ft
Inc: 89.70 deg Az:
181.78 deg TVD:
7335.89 ft



S: 91 MD: 8725.00 ft
Inc: 90.80 deg Az:
181.70 deg TVD:
7335.48 ft

S: 92 MD: 8819.00 ft
Inc: 91.24 deg Az:
182.02 deg TVD:
7333.80 ft

S: 93 MD: 8913.00 ft
Inc: 91.01 deg Az:
181.39 deg TVD:



8950

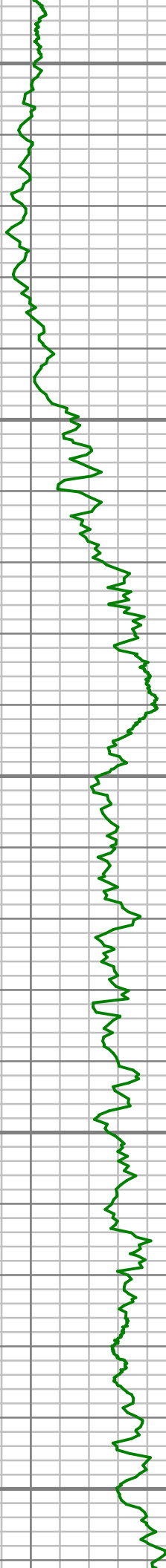
9000

9050

9100

S: 94 MD: 9007.00 ft
Inc: 90.07 deg Az:
180.52 deg TVD:
7331.07 ft

S: 95 MD: 9101.00 ft
Inc: 90.70 deg Az:
180.39 deg TVD:
7330.44 ft



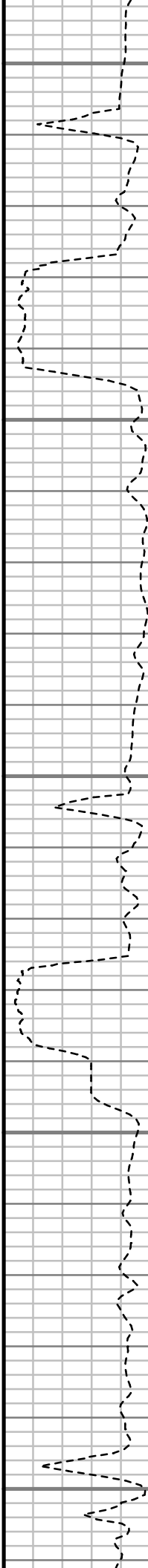
9150

9200

9250

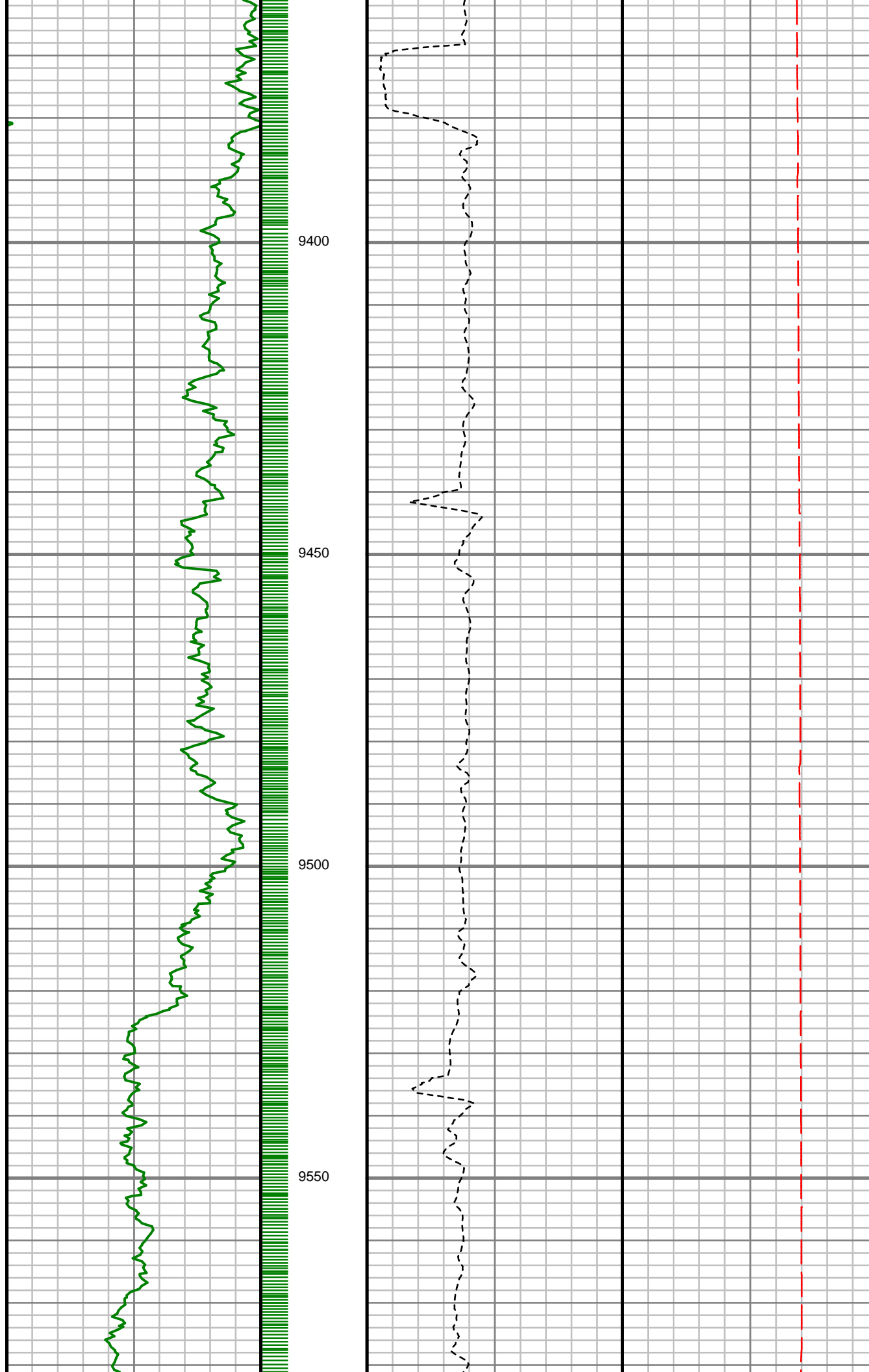
9300

9350



S: 96 MD: 9196.00 ft
Inc: 91.38 deg Az:
181.39 deg TVD:
7328.71 ft

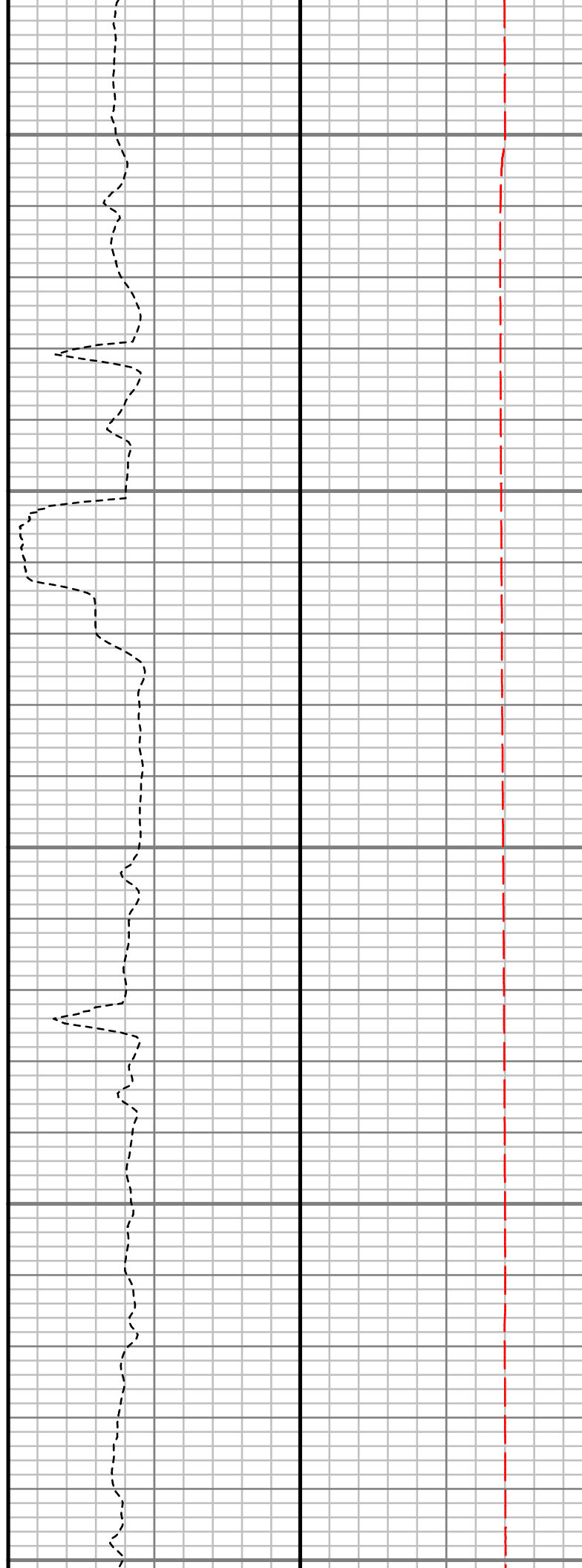
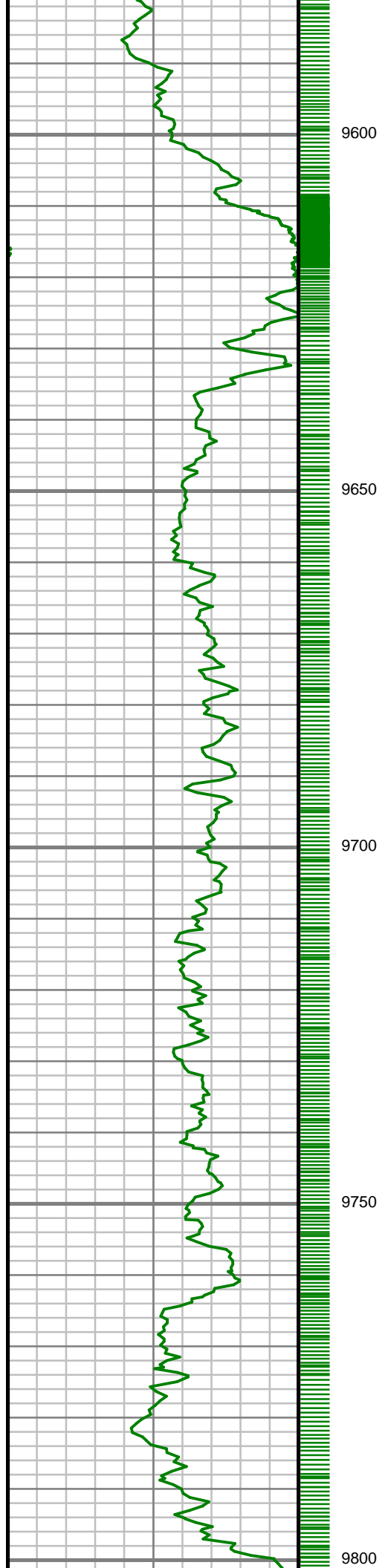
S: 97 MD: 9289.00 ft
Inc: 90.44 deg Az:
182.46 deg TVD:
7327.24 ft



S: 98 MD: 9384.00 ft
Inc: 88.86 deg Az:
182.24 deg TVD:
7327.83 ft

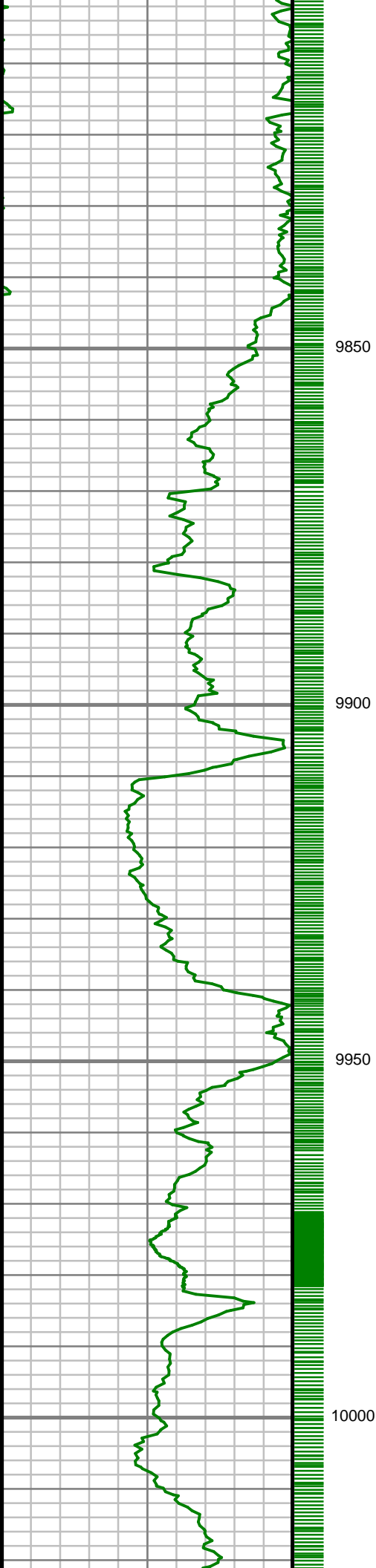
S: 99 MD: 9477.00 ft
Inc: 88.83 deg Az:
182.21 deg TVD:
7329.71 ft

S: 100 MD: 9572.00 ft
Inc: 88.36 deg Az:
182.86 deg TVD:
7332.04 ft



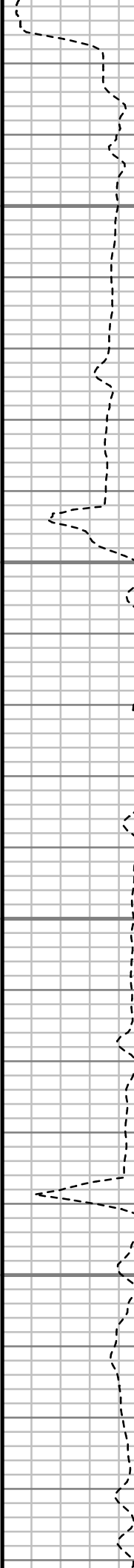
S: 101 MD: 9666.00 ft
Inc: 88.96 deg Az:
182.20 deg TVD:
7334.25 ft

S: 102 MD: 9759.00 ft
Inc: 89.36 deg Az:
182.05 deg TVD:
7335.61 ft



S: 103 MD: 9853.00 ft
Inc: 88.99 deg Az:
182.13 deg TVD:
7336.96 ft

S: 104 MD: 9948.00 ft
Inc: 88.49 deg Az:
181.80 deg TVD:
7339.05 ft



10050

10100

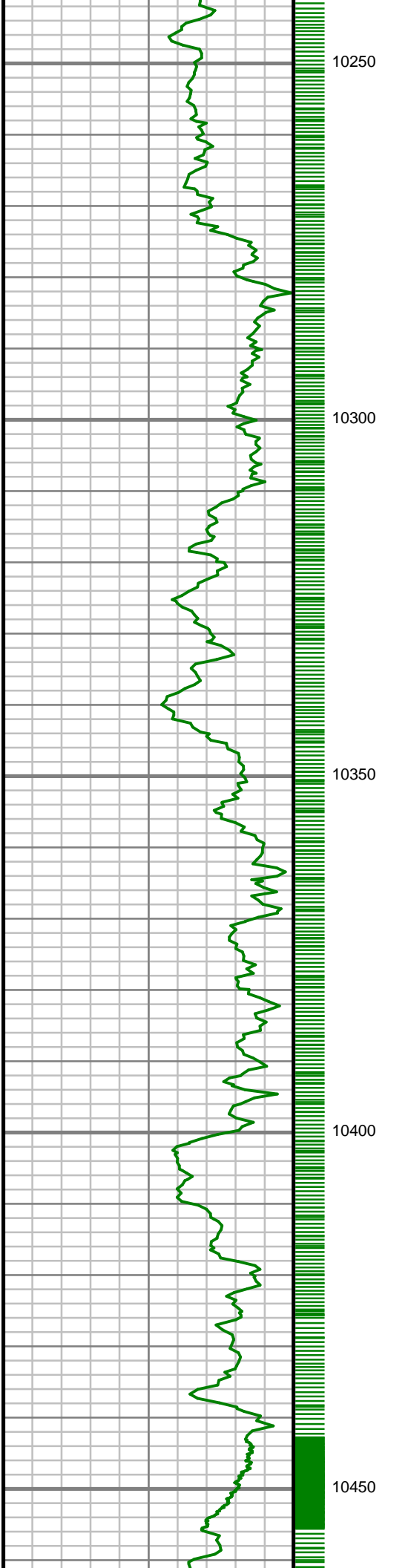
10150

10200

S: 105 MD: 10042.00 ft
Inc: 89.43 deg Az:
180.07 deg TVD:
7340.75 ft

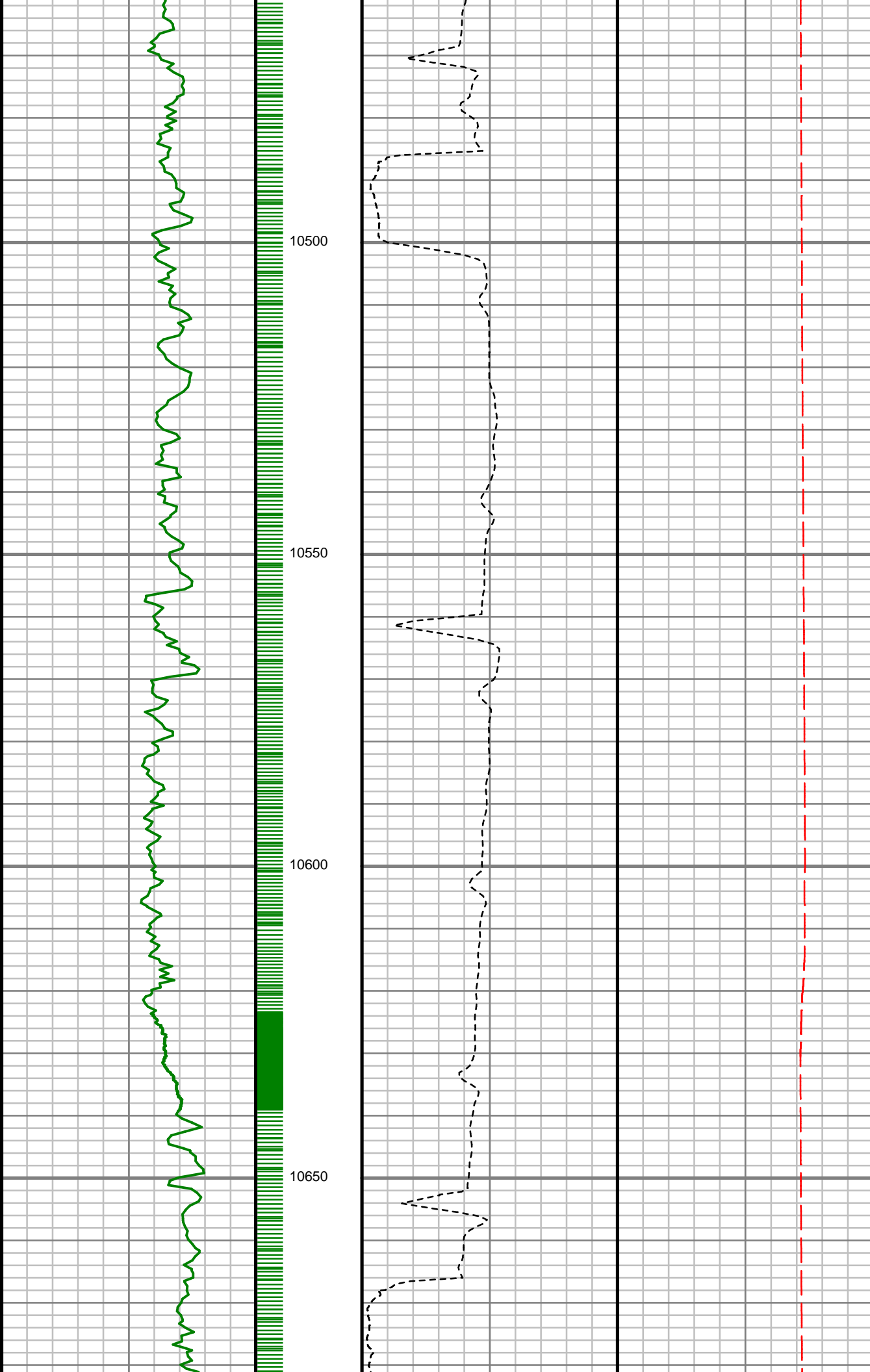
S: 106 MD: 10135.00 ft
Inc: 90.50 deg Az:
180.48 deg TVD:
7340.81 ft

S: 107 MD: 10229.00 ft
Inc: 90.97 deg Az:
180.36 deg TVD:
7339.60 ft



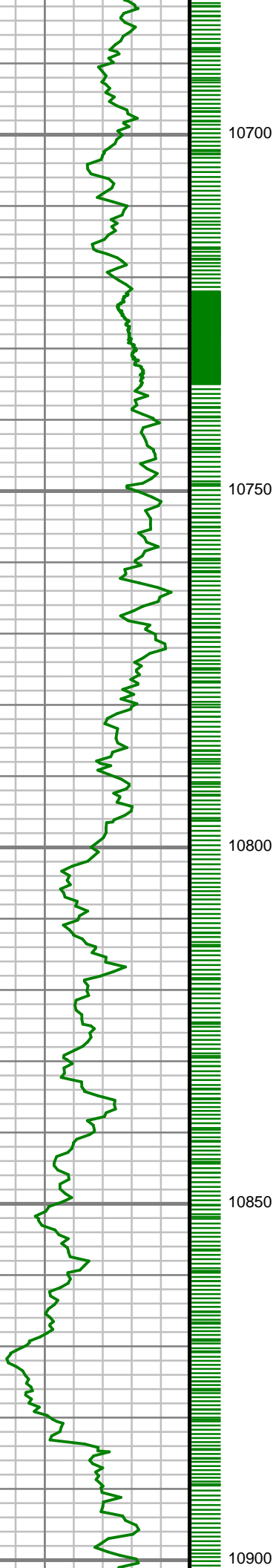
S: 108 MD: 10322.00 ft
Inc: 90.57 deg Az:
180.41 deg TVD:
7338.35 ft

S: 109 MD: 10416.00 ft
Inc: 88.76 deg Az:
180.83 deg TVD:
7338.90 ft



S: 110 MD: 10510.00 ft
Inc: 90.00 deg Az:
181.23 deg TVD:
7339.91 ft

S: 111 MD: 10602.00 ft
Inc: 92.15 deg Az:
181.27 deg TVD:
7338.19 ft



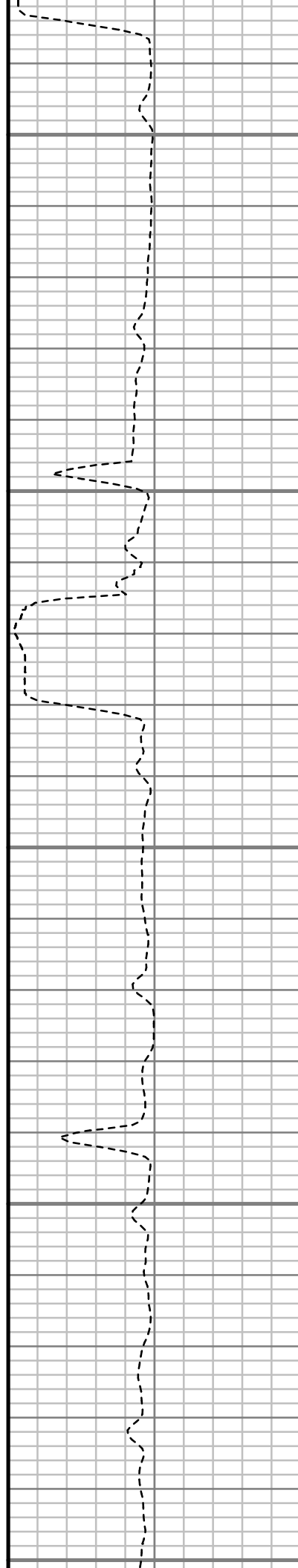
10700

10750

10800

10850

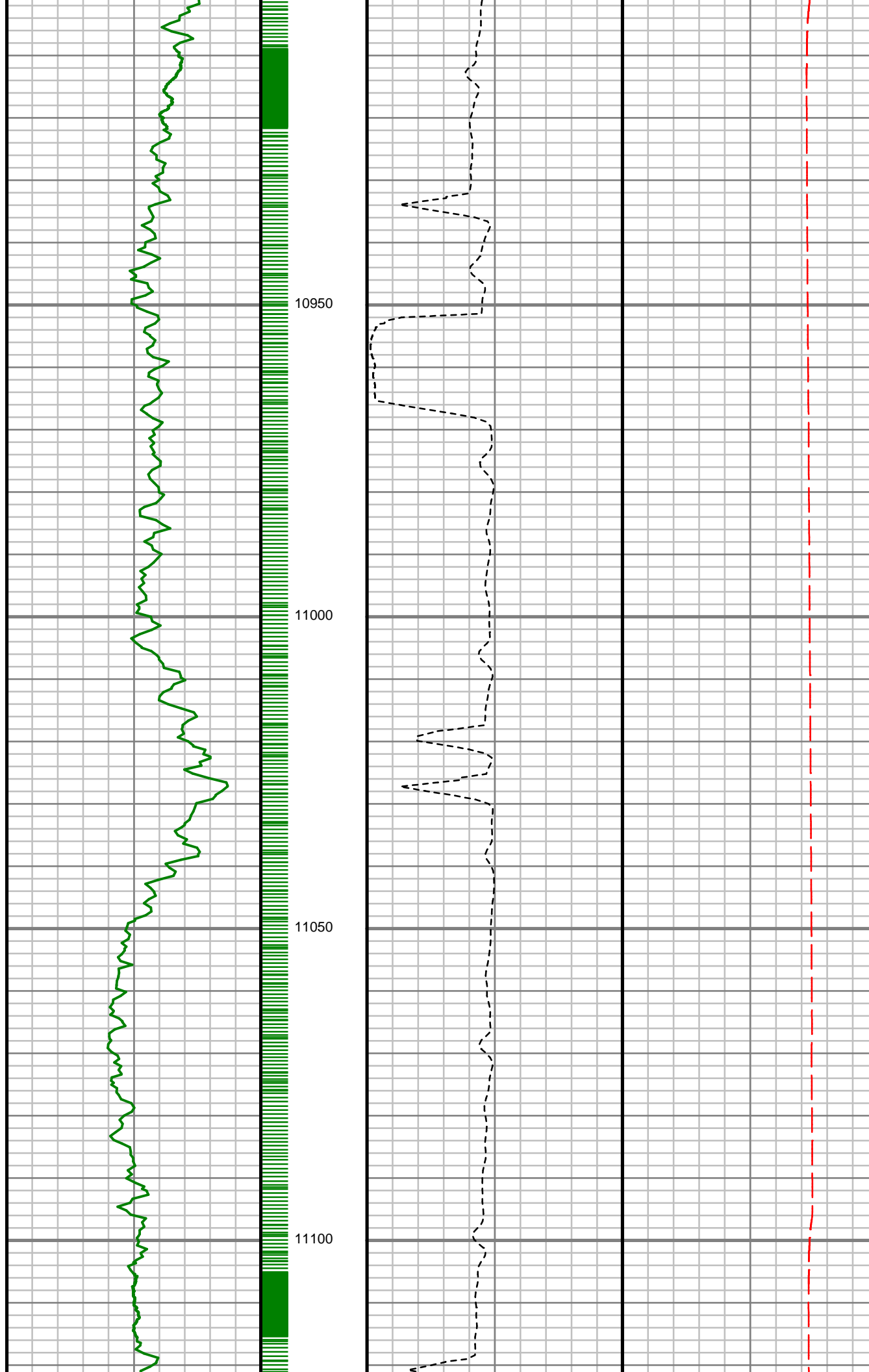
10900



S: 112 MD: 10695.00 ft
Inc: 91.24 deg Az:
181.35 deg TVD:
7335.44 ft

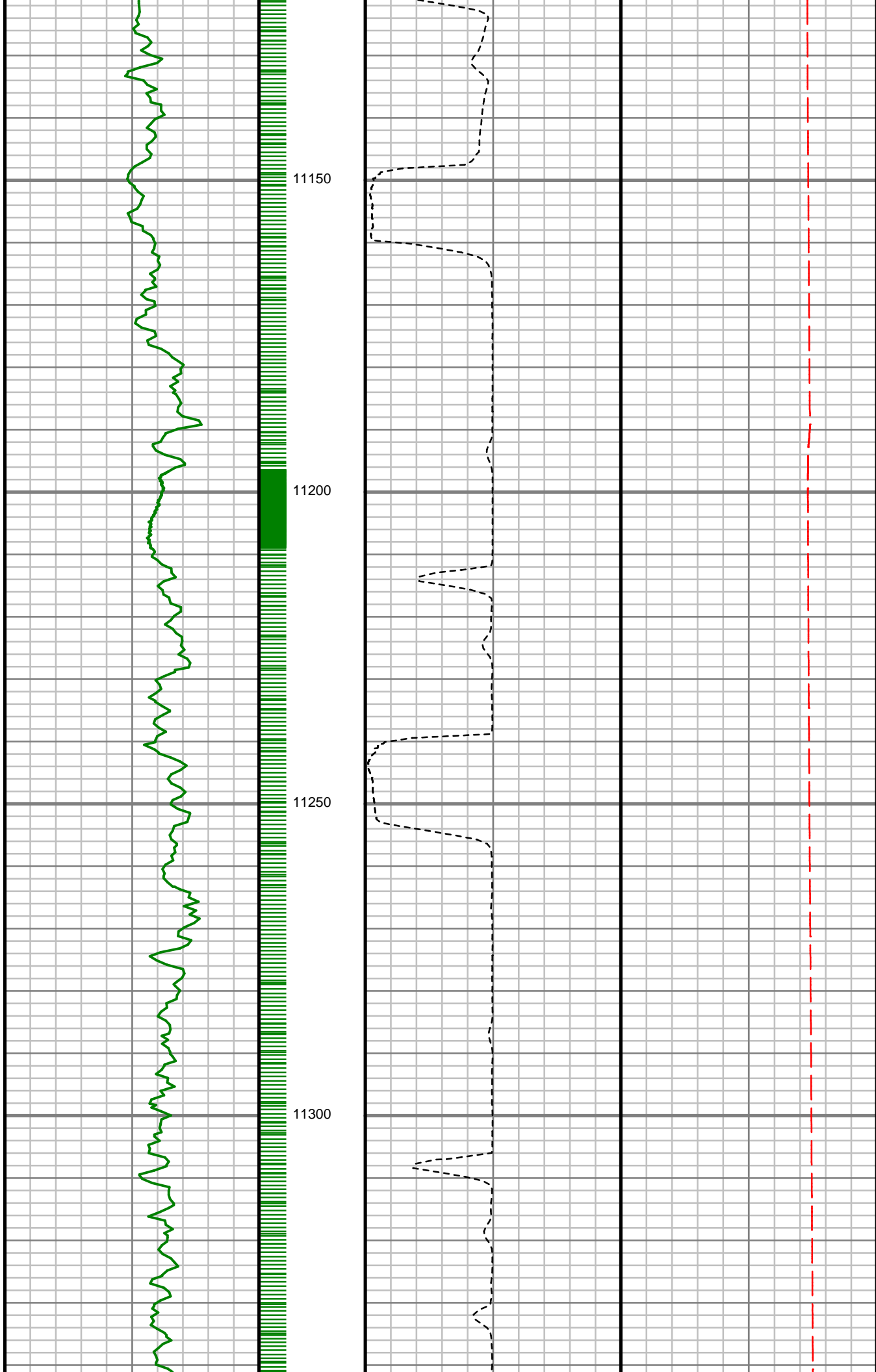
S: 113 MD: 10789.00 ft
Inc: 89.29 deg Az:
180.67 deg TVD:
7335.00 ft

S: 114 MD: 10882.00 ft
Inc: 88.72 deg Az:
180.53 deg TVD:
7336.60 ft



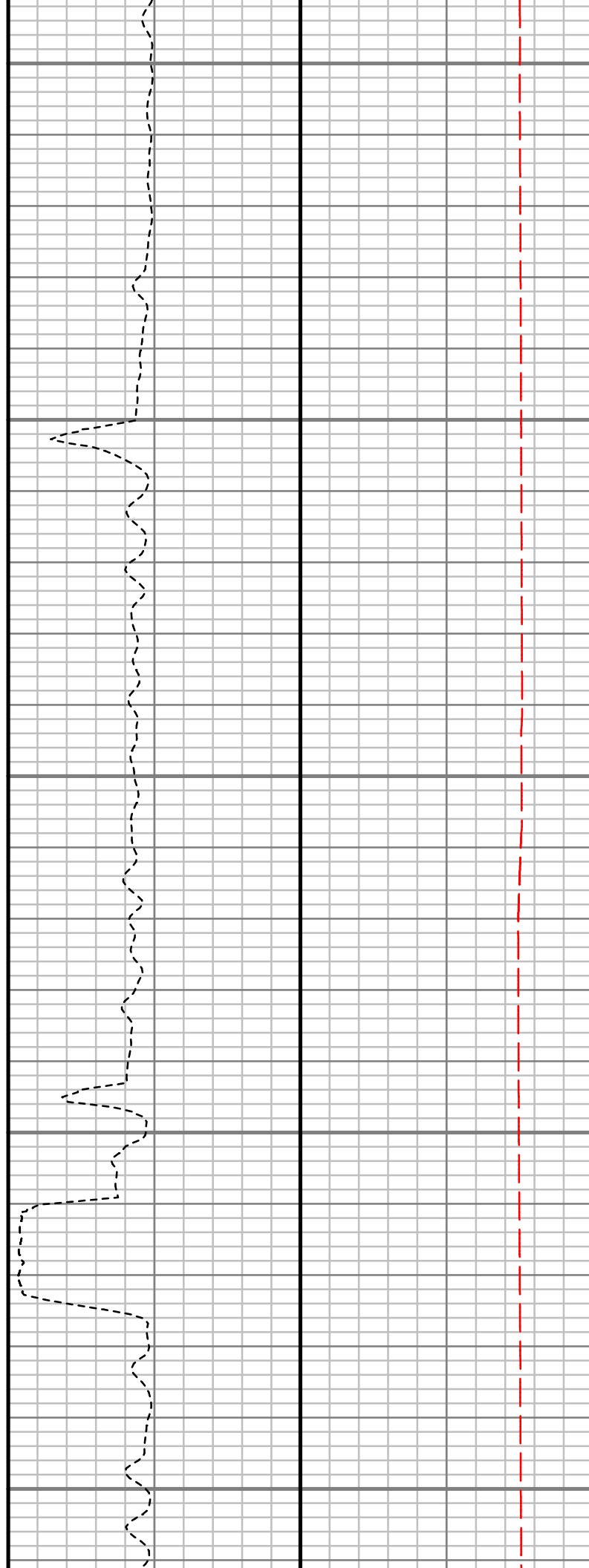
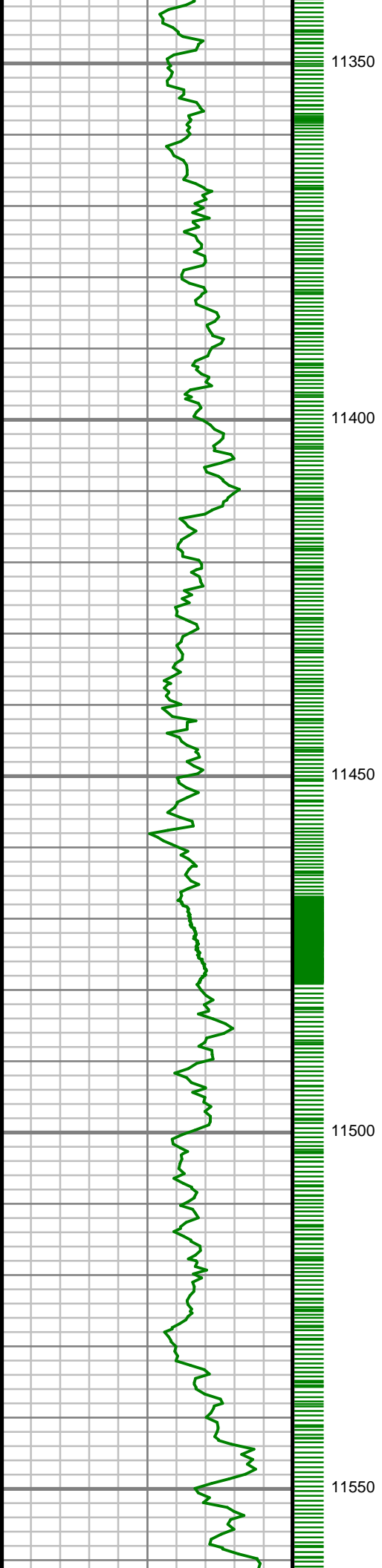
S: 115 MD: 10975.00 ft
Inc: 90.00 deg Az:
181.43 deg TVD:
7337.64 ft

S: 116 MD: 11068.00 ft
Inc: 91.31 deg Az:
182.23 deg TVD:
7336.57 ft



S: 117 MD: 11161.00 ft
Inc: 91.44 deg Az:
181.30 deg TVD:
7334.34 ft

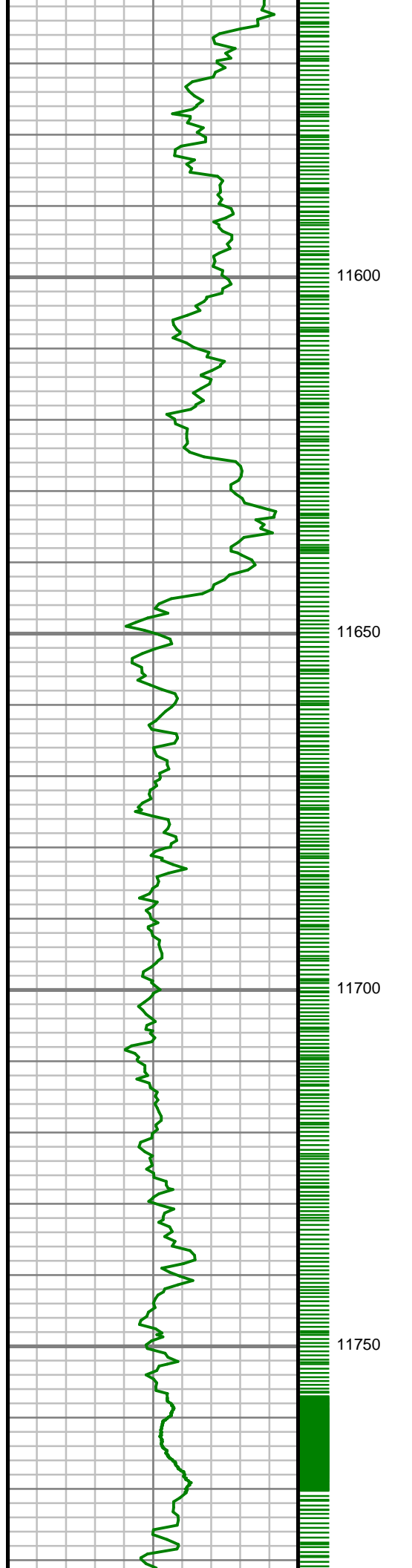
S: 118 MD: 11255.00 ft
Inc: 90.13 deg Az:
180.45 deg TVD:
7333.04 ft



S: 119 MD: 11349.00 ft
Inc: 90.30 deg Az:
180.50 deg TVD:
7332.69 ft

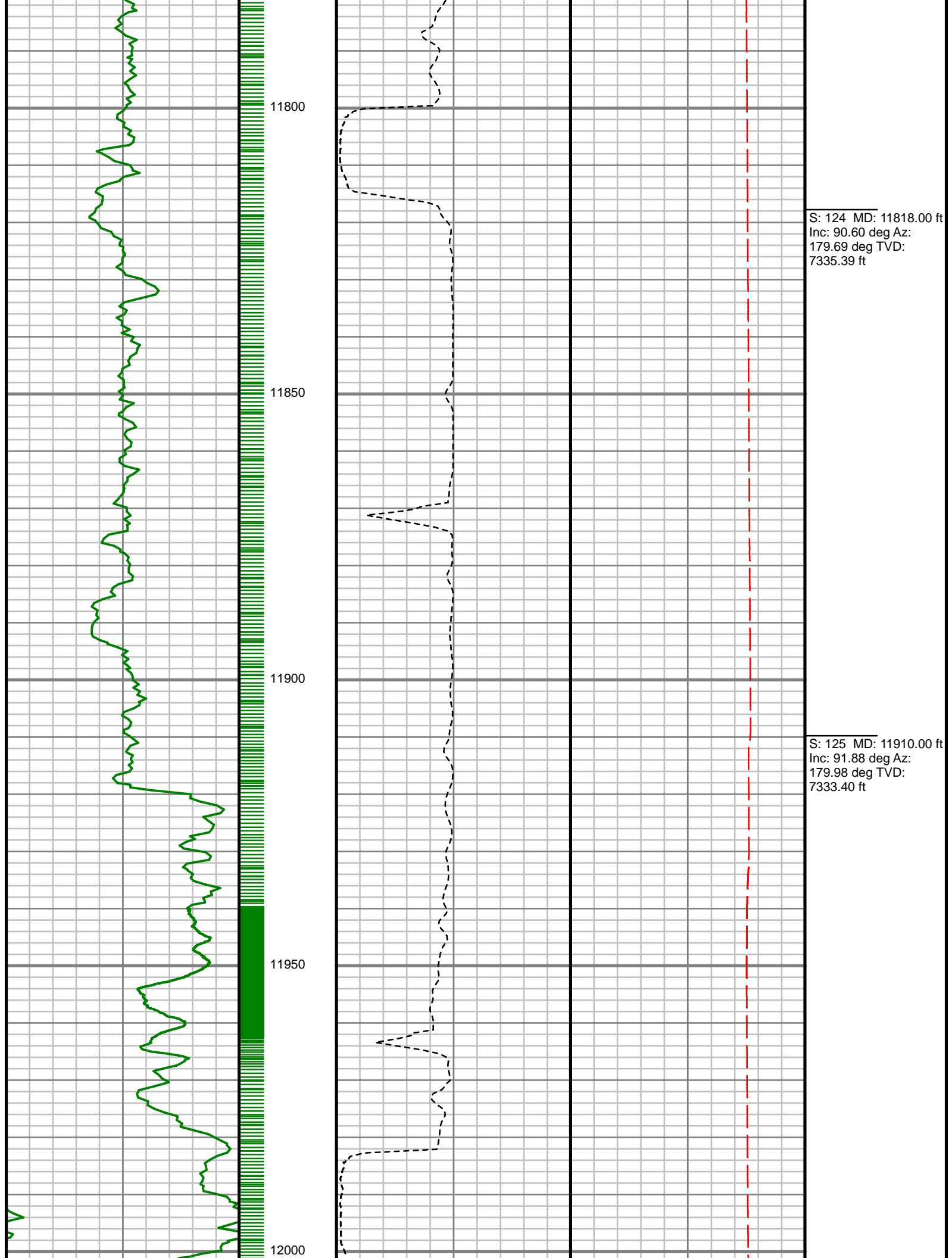
S: 120 MD: 11442.00 ft
Inc: 88.62 deg Az:
178.64 deg TVD:
7333.56 ft

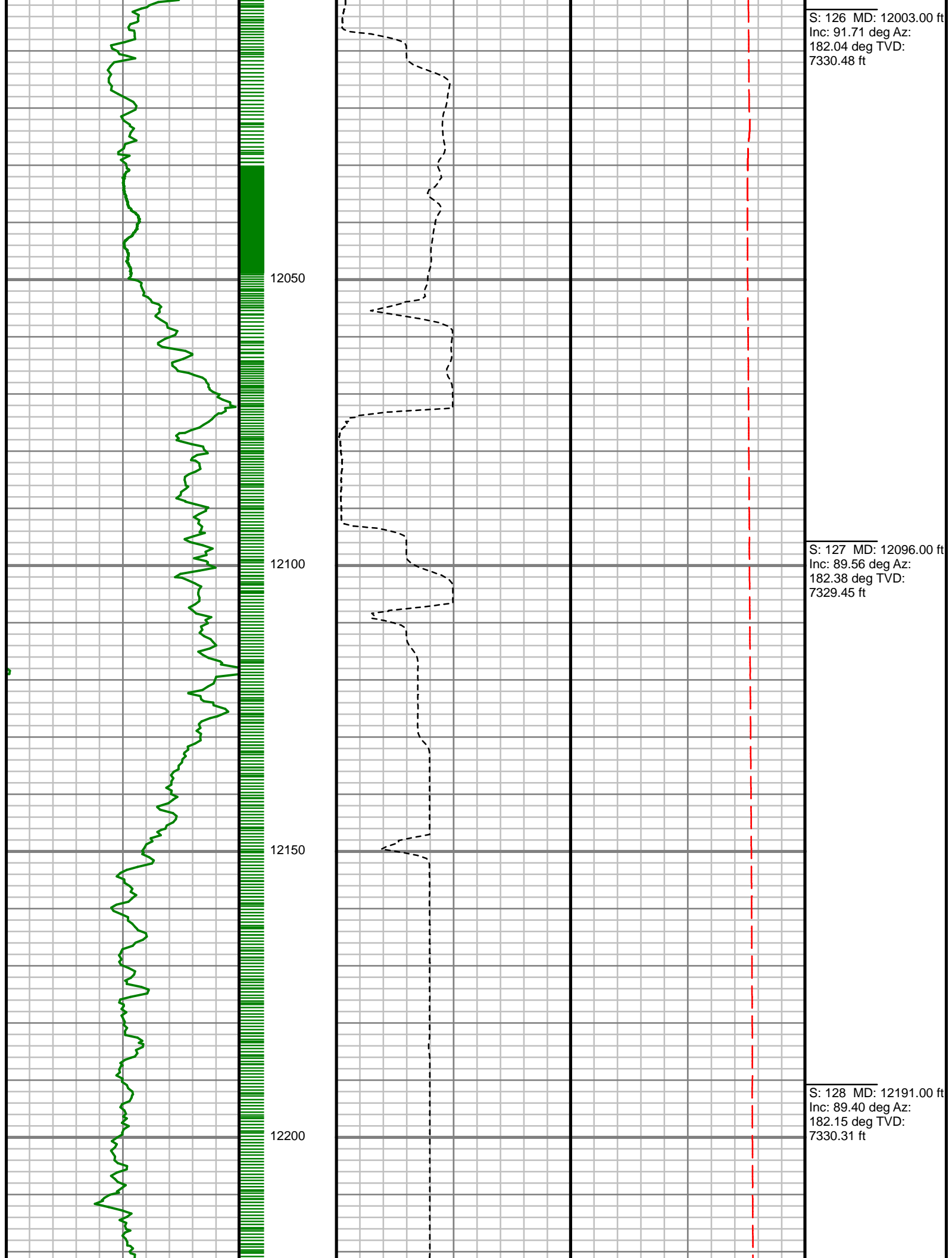
S: 121 MD: 11535.00 ft
Inc: 89.06 deg Az:
178.71 deg TVD:
7335.44 ft

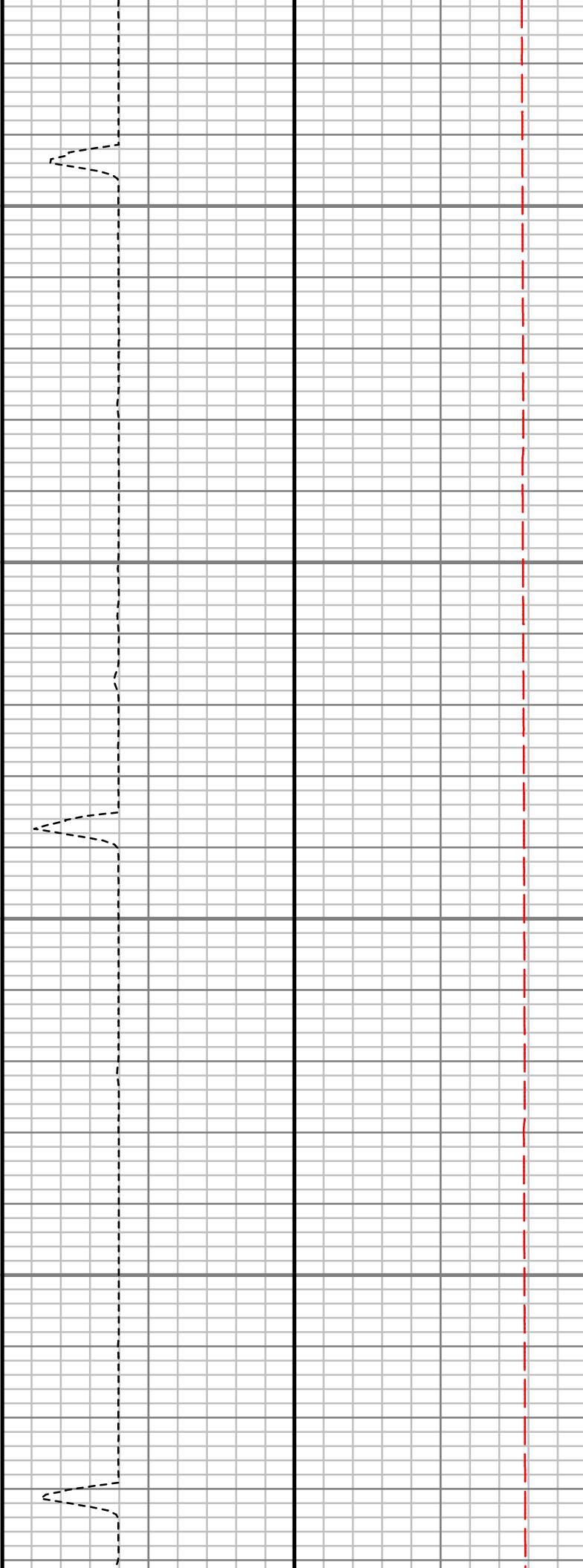
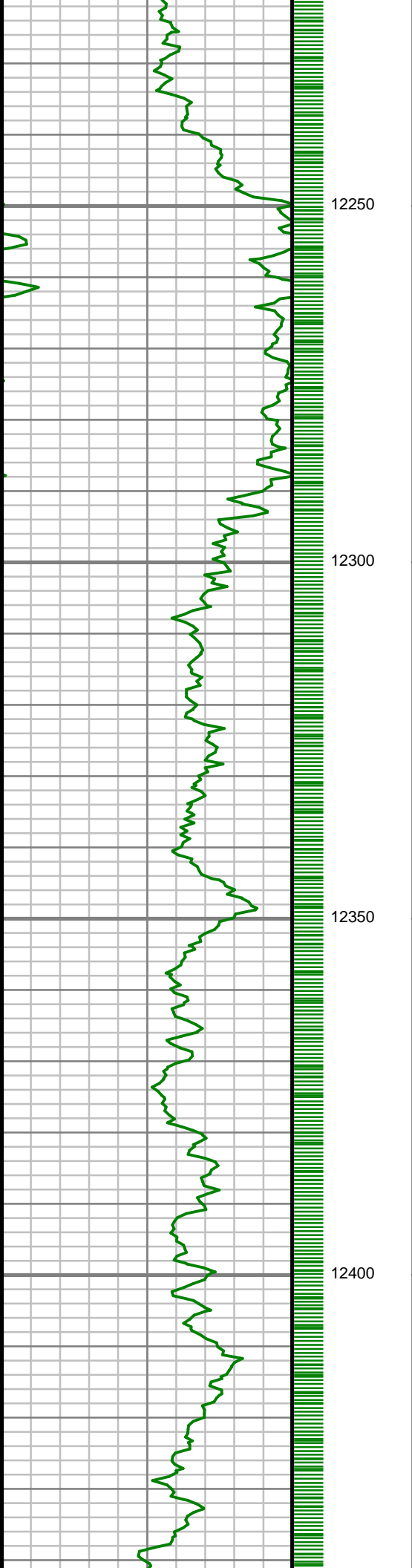


S: 122 MD: 11630.00 ft
Inc: 89.90 deg Az:
178.67 deg TVD:
7336.30 ft

S: 123 MD: 11724.00 ft
Inc: 90.30 deg Az:
178.23 deg TVD:
7336.14 ft

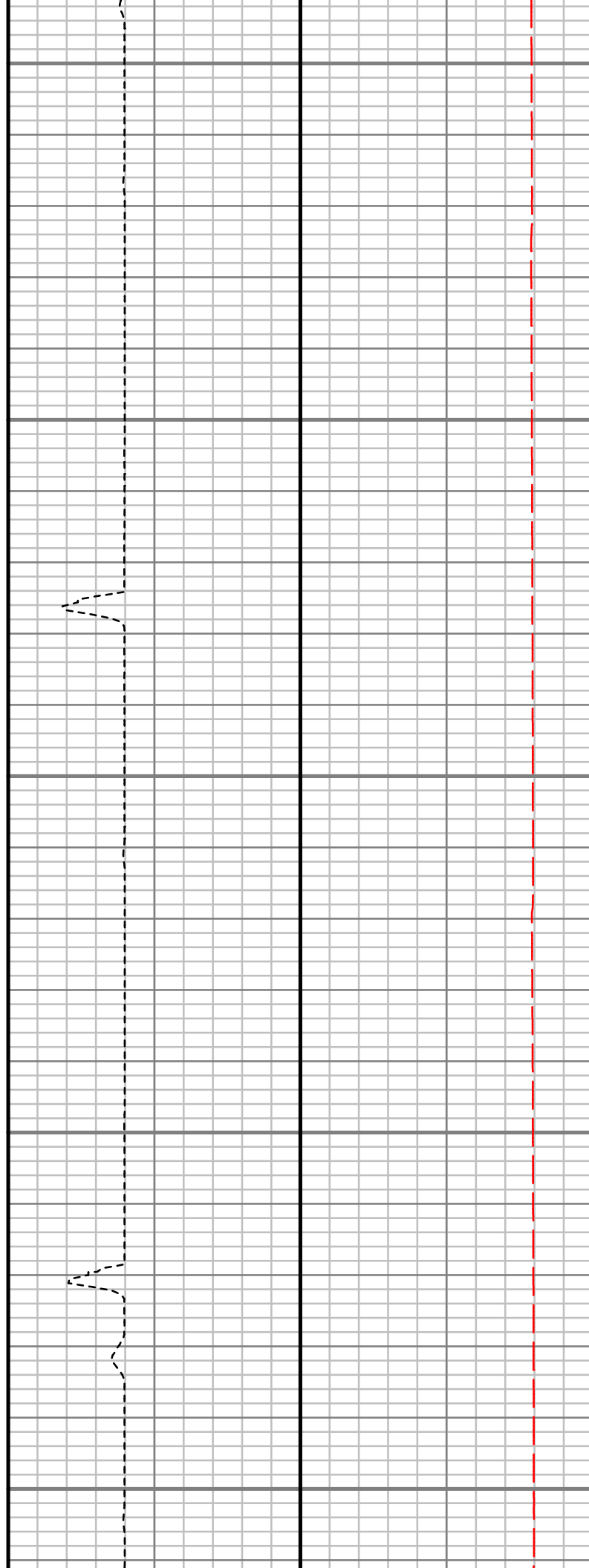
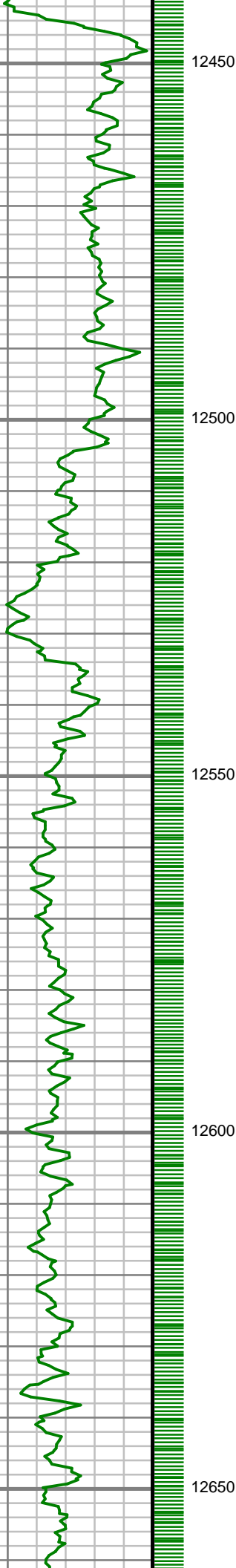






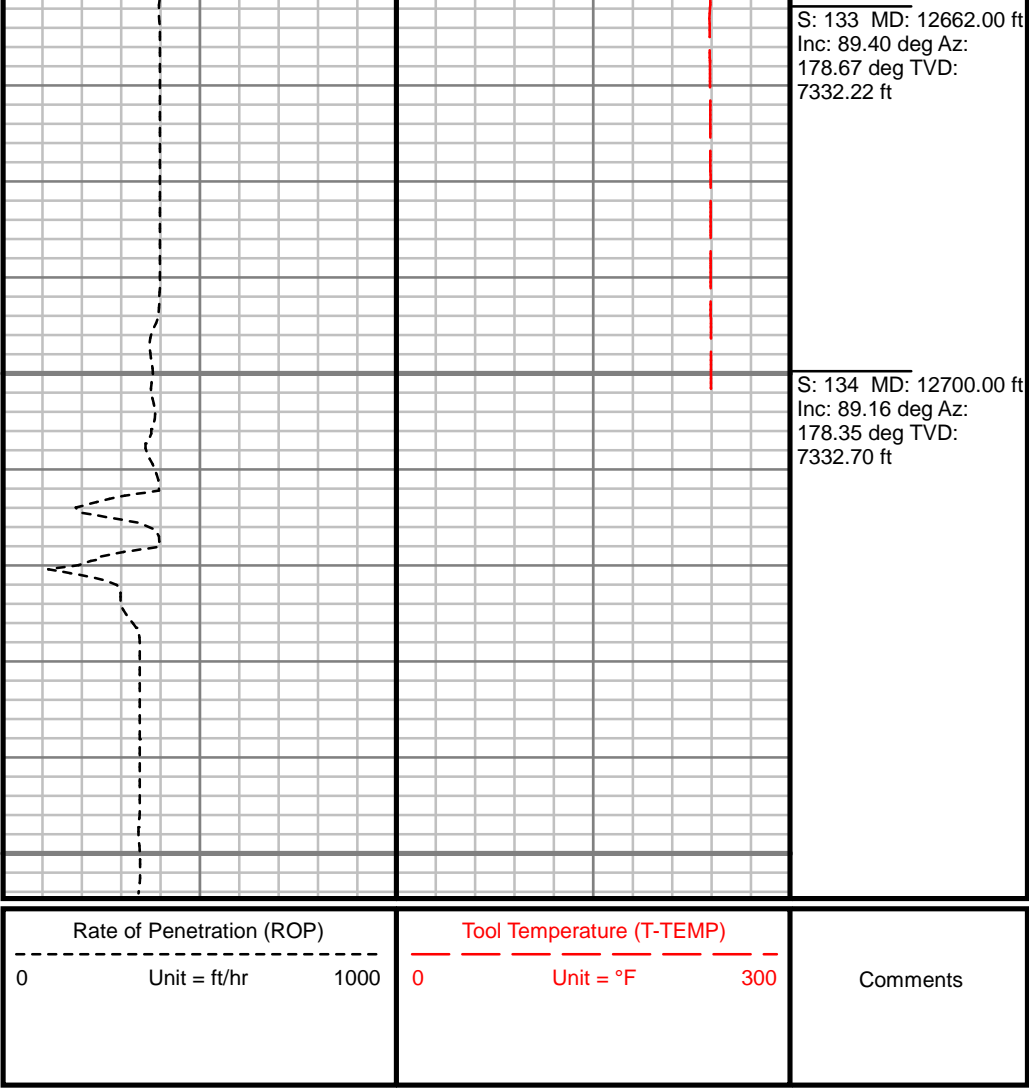
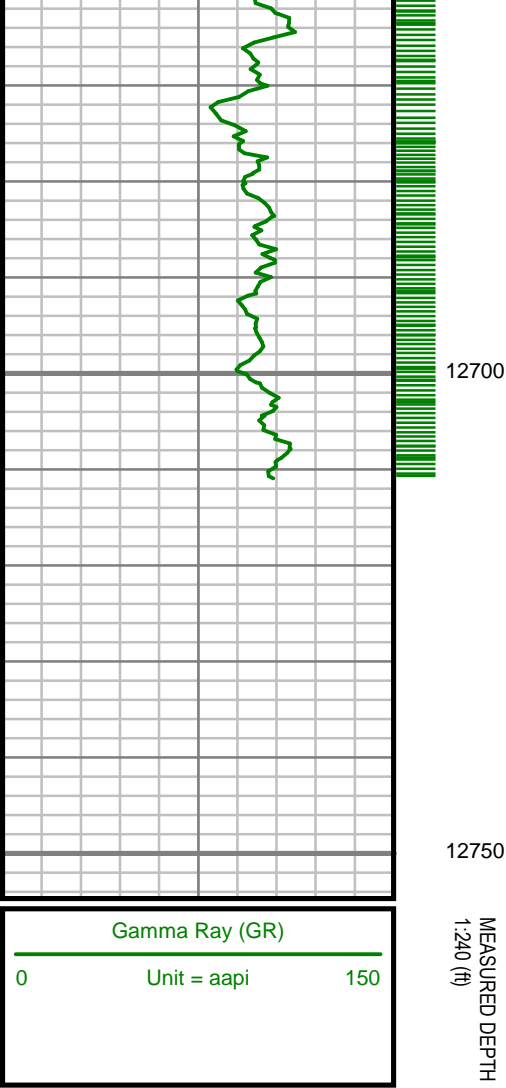
S: 129 MD: 12284.00 ft
Inc: 89.43 deg Az:
181.83 deg TVD:
7331.26 ft

S: 130 MD: 12377.00 ft
Inc: 89.83 deg Az:
181.44 deg TVD:
7331.86 ft



S: 131 MD: 12472.00 ft
Inc: 90.03 deg Az:
181.48 deg TVD:
7331.97 ft

S: 132 MD: 12567.00 ft
Inc: 90.13 deg Az:
181.01 deg TVD:
7331.83 ft



SURVEY REPORT

LAND 15N-32HZ

LAND 15N-32HZ

CUSTOMER ANADARKO E&P ONSHORE LLC
PROJECT LAND
FIELD WATTENBERG

WELL INFORMATION

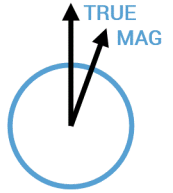
Lat/Long 40° 5' 57.394" N, 104° 47' 52.008" W
Northing 14,562,948.46 ft
Easting 1,696,966.49 ft
UWI 05123423030000

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 180.90°
Calculation Method Minimum Curvature



GEOMAGNETIC REFERENCE INFORMATION

Local Gravity: 999.045 mG [computed]

MD	MODEL	DATE	DECLINATION	MAG TO TRUE
0-1512 ft	ANADARKO MAGVAR	20 Jul 2016	8.30°	add 8.3°
1512-3923 ft	ANADARKO MAGVAR	20 Jul 2016	8.32°	add 8.32°
3923-5991 ft	ANADARKO MAGVAR	20 Jul 2016	8.33°	add 8.33°

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
210.00	0.51	39.57	210.00	-0.73	0.72	0.59	0.24
303.00	0.33	52.36	302.99	-1.22	1.20	1.07	0.21
397.00	0.53	74.49	396.99	-1.51	1.48	1.70	0.27
490.00	0.37	72.85	489.99	-1.72	1.68	2.40	0.17
583.00	0.85	91.49	582.98	-1.81	1.76	3.38	0.55
677.00	0.66	97.88	676.98	-1.74	1.66	4.62	0.22
770.00	0.17	119.31	769.97	-1.60	1.52	5.28	0.55
864.00	1.48	305.22	863.96	-2.22	2.15	4.41	1.75
957.00	2.95	314.25	956.89	-4.54	4.51	1.71	1.62
1050.00	3.51	329.60	1049.75	-8.61	8.64	-1.44	1.11
1144.00	4.94	335.54	1143.49	-14.73	14.81	-4.57	1.59
1239.00	6.56	344.64	1238.01	-23.65	23.77	-7.71	1.95
1334.00	7.64	345.12	1332.28	-34.94	35.11	-10.77	1.14
1429.00	8.87	347.45	1426.29	-48.14	48.37	-13.98	1.34
1508.00	10.16	345.84	1504.20	-60.79	61.07	-17.01	1.66
1663.00	13.74	351.40	1655.82	-92.16	92.53	-23.10	2.43
1757.00	16.11	345.39	1746.65	-115.75	116.20	-28.07	3.01
1850.00	15.82	340.94	1836.07	-140.10	140.67	-35.46	1.35
1944.00	15.30	343.06	1926.62	-163.95	164.65	-43.26	0.82

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
2038.00	16.14	346.54	2017.11	-188.41	189.22	-49.91	1.34
2131.00	14.23	341.76	2106.86	-211.73	212.65	-56.50	2.46
2226.00	15.26	346.55	2198.74	-234.87	235.89	-63.06	1.68
2320.00	15.04	348.38	2289.47	-258.76	259.86	-68.39	0.56
2414.00	15.37	347.47	2380.18	-282.78	283.97	-73.55	0.43
2507.00	16.31	347.61	2469.65	-307.47	308.75	-79.02	1.01
2603.00	15.49	347.58	2561.98	-333.06	334.43	-84.67	0.85
2697.00	15.36	346.81	2652.59	-357.35	358.81	-90.21	0.26
2791.00	15.39	346.83	2743.23	-381.52	383.08	-95.90	0.04
2885.00	17.06	347.82	2833.48	-407.06	408.70	-101.65	1.80
2979.00	16.71	347.74	2923.43	-433.65	435.39	-107.43	0.37
3075.00	14.87	345.78	3015.80	-458.98	460.82	-113.39	2.00
3170.00	15.57	342.74	3107.47	-482.86	484.81	-120.16	1.12
3265.00	15.61	344.47	3198.98	-507.23	509.30	-127.37	0.49
3358.00	16.38	343.22	3288.38	-531.73	533.90	-134.50	0.91
3452.00	15.38	345.71	3378.79	-556.38	558.67	-141.41	1.29
3547.00	14.71	341.68	3470.54	-579.93	582.33	-148.31	1.31
3641.00	14.31	340.97	3561.54	-602.12	604.64	-155.85	0.46
3736.00	15.13	338.59	3653.42	-624.63	627.28	-164.20	1.07
3830.00	12.89	337.29	3744.62	-645.58	648.38	-172.73	2.41

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
3925.00	11.40	333.85	3837.49	-663.66	666.58	-180.96	1.74
4020.00	14.06	339.15	3930.15	-682.74	685.80	-189.21	3.05
4113.00	16.29	346.14	4019.91	-705.85	709.02	-196.35	3.10
4208.00	16.55	346.17	4111.04	-731.82	735.09	-202.78	0.28
4302.00	13.77	345.96	4201.76	-755.58	758.95	-208.70	2.96
4395.00	12.40	340.56	4292.34	-775.63	779.10	-214.70	1.97
4489.00	15.25	340.19	4383.61	-796.67	800.26	-222.26	3.04
4584.00	13.28	341.18	4475.67	-818.64	822.35	-230.01	2.09
4679.00	14.00	348.13	4568.00	-840.12	843.93	-235.90	1.88
4773.00	13.28	347.24	4659.35	-861.71	865.59	-240.62	0.80
4867.00	16.46	348.50	4750.19	-885.21	889.18	-245.66	3.40
4961.00	16.56	346.42	4840.31	-911.19	915.25	-251.46	0.64
5056.00	19.39	348.45	4930.67	-939.70	943.87	-257.80	3.05
5150.00	17.31	349.03	5019.88	-968.63	972.89	-263.58	2.22
5244.00	14.30	344.60	5110.32	-993.47	997.82	-269.33	3.45
5339.00	17.30	344.74	5201.72	-1018.30	1022.76	-276.16	3.15
5431.00	17.54	342.90	5289.50	-1044.62	1049.21	-283.84	0.66
5525.00	16.28	344.79	5379.44	-1070.76	1075.47	-291.46	1.46
5618.00	15.45	350.56	5468.90	-1095.47	1100.27	-296.91	1.92
5711.00	16.97	351.76	5558.20	-1121.05	1125.92	-300.89	1.68

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
5805.00	15.05	351.15	5648.55	-1146.62	1151.55	-304.73	2.06
5900.00	10.59	347.13	5741.16	-1167.26	1172.26	-308.58	4.78
5994.00	8.50	344.46	5833.86	-1182.32	1187.37	-312.36	2.27
6090.00	8.87	354.20	5928.76	-1196.47	1201.56	-315.01	1.58
6185.00	7.04	350.77	6022.84	-1209.47	1214.59	-316.68	1.99
6279.00	4.13	350.37	6116.39	-1218.46	1223.61	-318.17	3.10
6373.00	5.29	351.21	6210.07	-1226.06	1231.22	-319.40	1.24
6467.00	4.01	348.25	6303.76	-1233.53	1238.72	-320.73	1.38
6562.00	2.75	346.54	6398.59	-1238.98	1244.19	-321.93	1.32
6658.00	1.68	322.43	6494.52	-1242.31	1247.55	-323.33	1.46
6753.00	0.62	297.98	6589.50	-1243.64	1248.89	-324.63	1.20
6846.00	7.15	173.69	6682.27	-1238.12	1243.36	-324.44	8.08
6941.00	13.43	174.94	6775.70	-1221.26	1226.49	-322.82	6.61
7034.00	17.98	180.15	6865.21	-1196.16	1201.36	-321.90	5.12
7128.00	21.54	188.14	6953.67	-1164.51	1169.75	-324.38	4.75
7222.00	28.35	180.13	7038.88	-1125.02	1130.29	-326.88	8.07
7316.00	39.34	174.02	7116.85	-1072.95	1078.17	-323.82	12.22
7411.00	46.25	174.49	7186.52	-1008.88	1013.99	-317.38	7.29
7506.00	59.02	179.01	7244.07	-933.74	938.78	-313.37	13.96
7600.00	66.05	181.26	7287.40	-850.40	855.43	-313.62	7.77

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
7693.00	78.11	179.42	7315.96	-762.09	767.11	-314.10	13.11
7785.00	87.69	179.42	7327.32	-670.93	675.93	-313.18	10.40
7878.00	90.47	179.64	7328.82	-577.98	582.95	-312.42	3.00
7973.00	91.21	178.43	7327.43	-483.04	487.98	-310.82	1.49
8067.00	89.97	179.56	7326.46	-389.10	394.00	-309.18	1.78
8162.00	91.07	179.17	7325.60	-294.14	299.01	-308.12	1.24
8255.00	90.94	181.44	7323.97	-201.16	206.04	-308.61	2.45
8349.00	87.11	179.28	7325.56	-107.20	112.08	-309.21	4.67
8442.00	87.55	181.02	7329.89	-14.32	19.18	-309.45	1.92
8536.00	87.72	181.03	7333.77	79.60	-74.72	-311.13	0.18
8630.00	89.70	181.78	7335.89	173.57	-168.67	-313.44	2.25
8725.00	90.80	181.70	7335.48	268.56	-263.62	-316.33	1.17
8819.00	91.24	182.02	7333.80	362.53	-357.56	-319.39	0.57
8913.00	91.01	181.39	7331.95	456.50	-451.50	-322.18	0.72
9007.00	90.07	180.52	7331.07	550.49	-545.48	-323.74	1.36
9101.00	90.70	180.39	7330.44	644.49	-639.47	-324.49	0.69
9196.00	91.38	181.39	7328.71	739.47	-734.44	-325.97	1.27
9289.00	90.44	182.46	7327.24	832.44	-827.38	-329.10	1.53
9384.00	88.86	182.24	7327.83	927.41	-922.29	-333.00	1.68
9477.00	88.83	182.21	7329.71	1020.36	-1015.20	-336.61	0.05

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
9572.00	88.36	182.86	7332.04	1115.30	-1110.08	-340.81	0.84
9666.00	88.96	182.20	7334.25	1209.23	-1203.96	-344.96	0.95
9759.00	89.36	182.05	7335.61	1302.20	-1296.89	-348.41	0.46
9853.00	88.99	182.13	7336.96	1396.17	-1390.81	-351.84	0.40
9948.00	88.49	181.80	7339.05	1491.13	-1485.73	-355.10	0.63
10042.00	89.43	180.07	7340.75	1585.11	-1579.70	-356.63	2.10
10135.00	90.50	180.48	7340.81	1678.10	-1672.70	-357.08	1.24
10229.00	90.97	180.36	7339.60	1772.09	-1766.69	-357.77	0.52
10322.00	90.57	180.41	7338.35	1865.08	-1859.68	-358.38	0.43
10416.00	88.76	180.83	7338.90	1959.07	-1953.67	-359.39	1.98
10510.00	90.00	181.23	7339.91	2053.06	-2047.64	-361.08	1.39
10602.00	92.15	181.27	7338.19	2145.04	-2139.60	-363.09	2.34
10695.00	91.24	181.35	7335.44	2238.00	-2232.53	-365.21	0.98
10789.00	89.29	180.67	7335.00	2331.99	-2326.51	-366.87	2.20
10882.00	88.72	180.53	7336.60	2424.97	-2419.49	-367.84	0.63
10975.00	90.00	181.43	7337.64	2517.97	-2512.47	-369.43	1.68
11068.00	91.31	182.23	7336.57	2610.94	-2605.42	-372.40	1.65
11161.00	91.44	181.30	7334.34	2703.91	-2698.34	-375.26	1.01
11255.00	90.13	180.45	7333.04	2797.89	-2792.32	-376.69	1.66
11349.00	90.30	180.50	7332.69	2891.89	-2886.32	-377.48	0.19

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
11442.00	88.62	178.64	7333.56	2984.85	-2979.30	-376.78	2.69
11535.00	89.06	178.71	7335.44	3077.76	-3072.26	-374.63	0.48
11630.00	89.90	178.67	7336.30	3172.69	-3167.23	-372.46	0.88
11724.00	90.30	178.23	7336.14	3266.60	-3261.19	-369.92	0.64
11818.00	90.60	179.69	7335.39	3360.54	-3355.17	-368.21	1.59
11910.00	91.88	179.98	7333.40	3452.50	-3447.15	-367.95	1.43
12003.00	91.71	182.04	7330.48	3545.45	-3540.08	-369.58	2.21
12096.00	89.56	182.38	7329.45	3638.42	-3633.00	-373.17	2.34
12191.00	89.40	182.15	7330.31	3733.39	-3727.93	-376.93	0.30
12284.00	89.43	181.83	7331.26	3826.36	-3820.86	-380.16	0.35
12377.00	89.83	181.44	7331.86	3919.35	-3913.82	-382.82	0.60
12472.00	90.03	181.48	7331.97	4014.35	-4008.79	-385.23	0.22
12567.00	90.13	181.01	7331.83	4109.35	-4103.77	-387.29	0.51
12662.00	89.40	178.67	7332.22	4204.32	-4198.76	-387.03	2.58
12700.00	89.16	178.35	7332.70	4242.29	-4236.75	-386.04	1.05

5" = 100' FEET MD