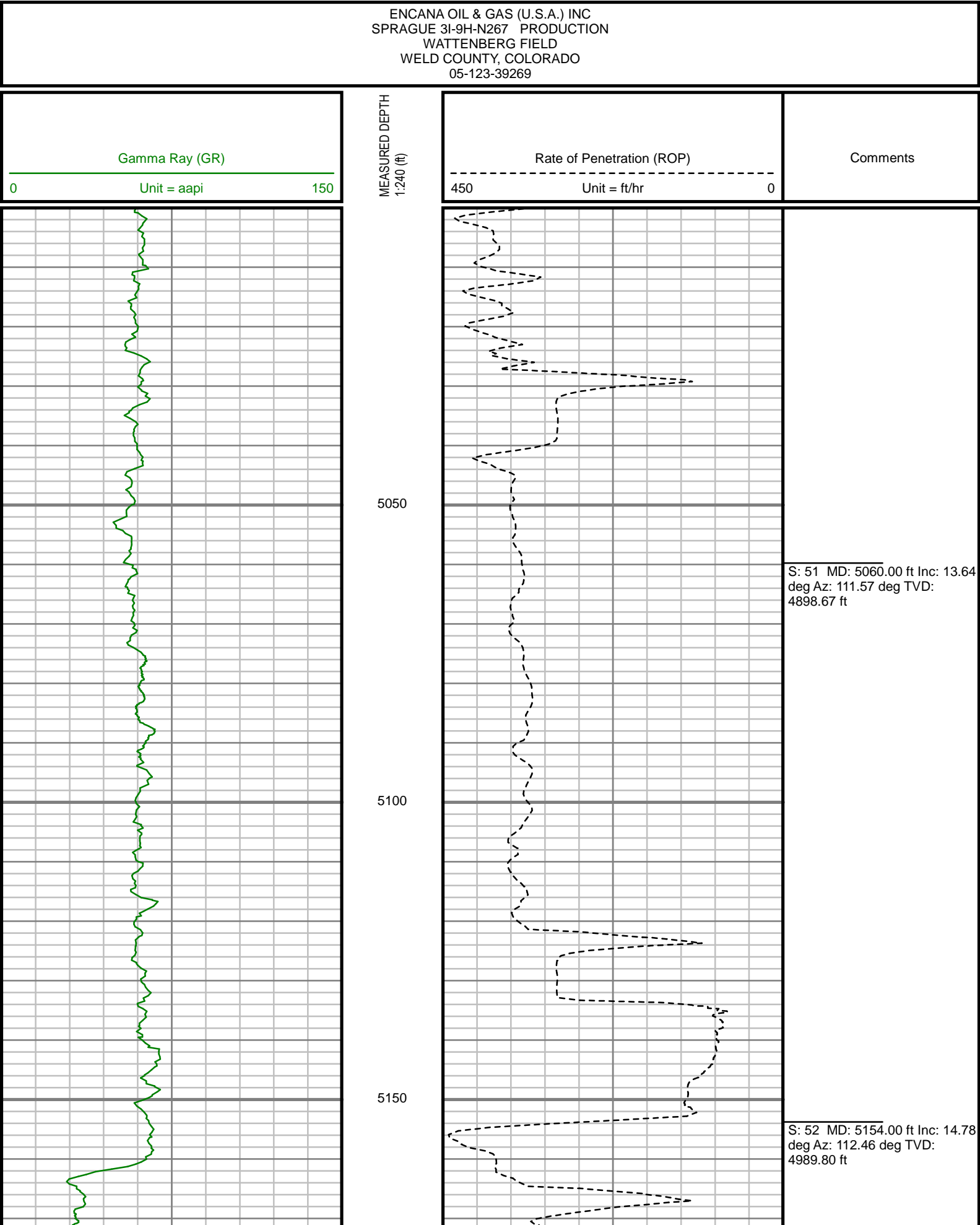


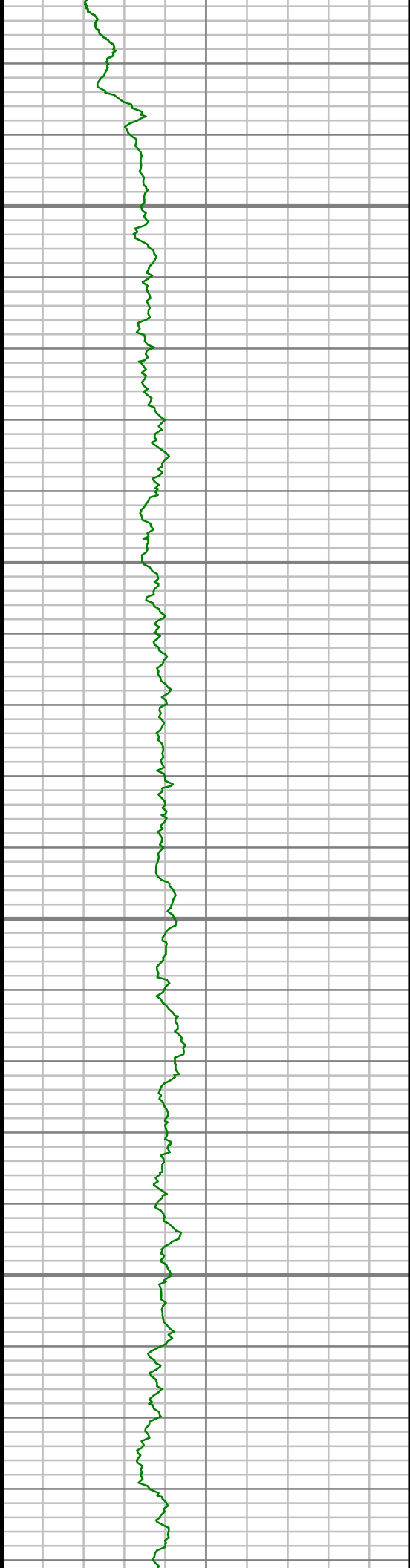


Remarks
ENCANA OIL & GAS (U.S.A.) INC PRODUCTION AFE# 14180735
SCIENTIFIC DRILLING INTERNATIONAL JOB# 273250
ALL REFERENCES IN THE DEPTH TRACK ARE AT BIT DEPTH.
ALL DATA IS MEMORY DATA UNLESS STATED OTHERWISE.
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO GAMMA RAY CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO RATE OF PENETRATION CURVE
RUN # 1: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 128-212 / CONT = 300 / MWD EYE = 1072 / GAMMA RAY = 1343
BIT TO SENSOR OFFSETS: SURVEY = 63.01 FT. / GAMMA RAY = 58.95 FT.
RUN # 2: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 78-081 / CONT = 517 / MWD EYE = 0882 / GAMMA RAY = 1133
BIT TO SENSOR OFFSETS: SURVEY = 61.69 FT. / GAMMA RAY = 57.63 FT.
RUN # 3: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 78-285 / CONT = 300 / MWD EYE = 1072 / GAMMA RAY = 1343
BIT TO SENSOR OFFSETS: SURVEY = 61.43 FT. / GAMMA RAY = 57.37 FT.
RUN # 4: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 78-081 / CONT = 517 / MWD EYE = 0882 / GAMMA RAY = 1133
BIT TO SENSOR OFFSETS: SURVEY = 61.63 FT. / GAMMA RAY = 57.57 FT.

[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.



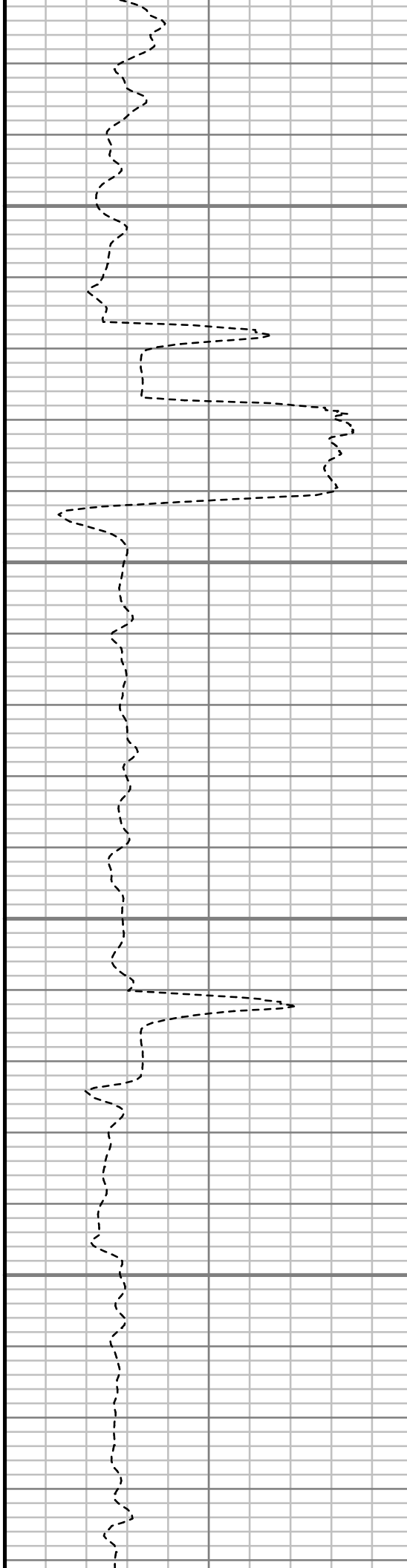


5200

5250

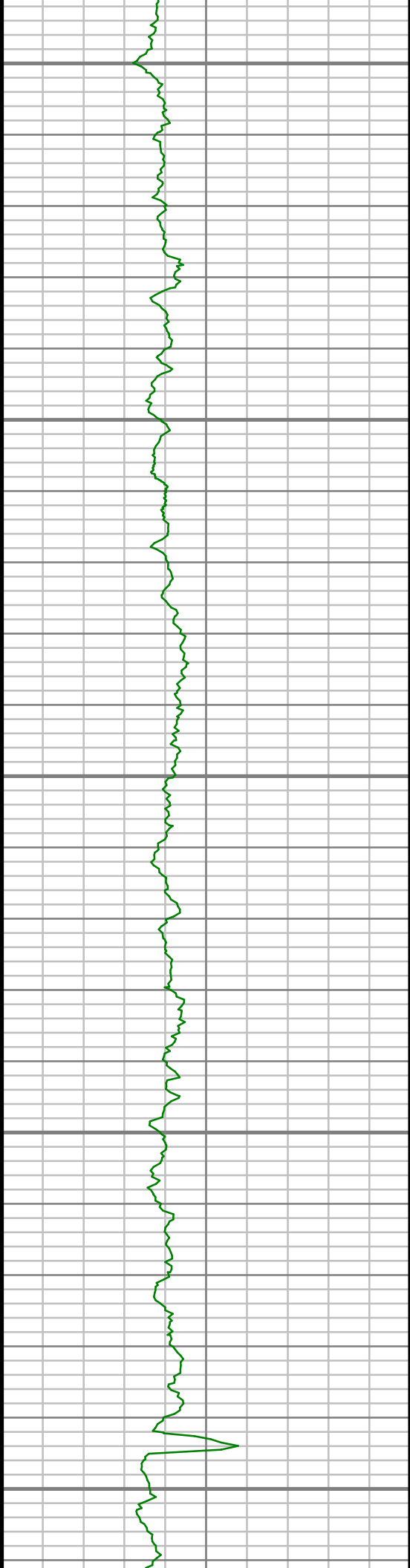
5300

5350



S: 53 MD: 5249.00 ft Inc: 17.04  
deg Az: 113.51 deg TVD:  
5081.15 ft

S: 54 MD: 5343.00 ft Inc: 15.98  
deg Az: 113.79 deg TVD:  
5171.27 ft



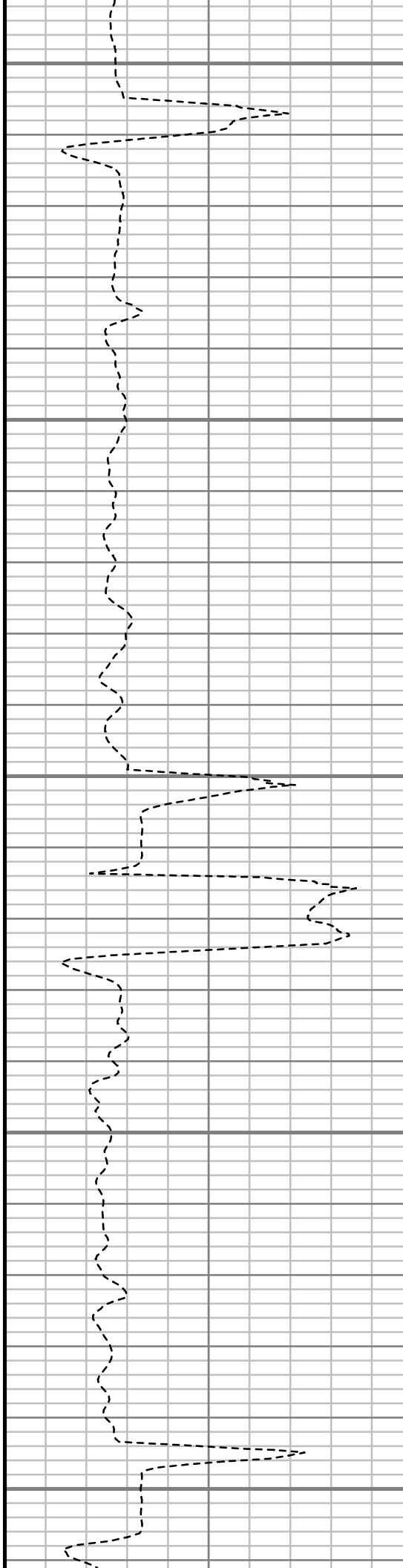
5400

5450

5500

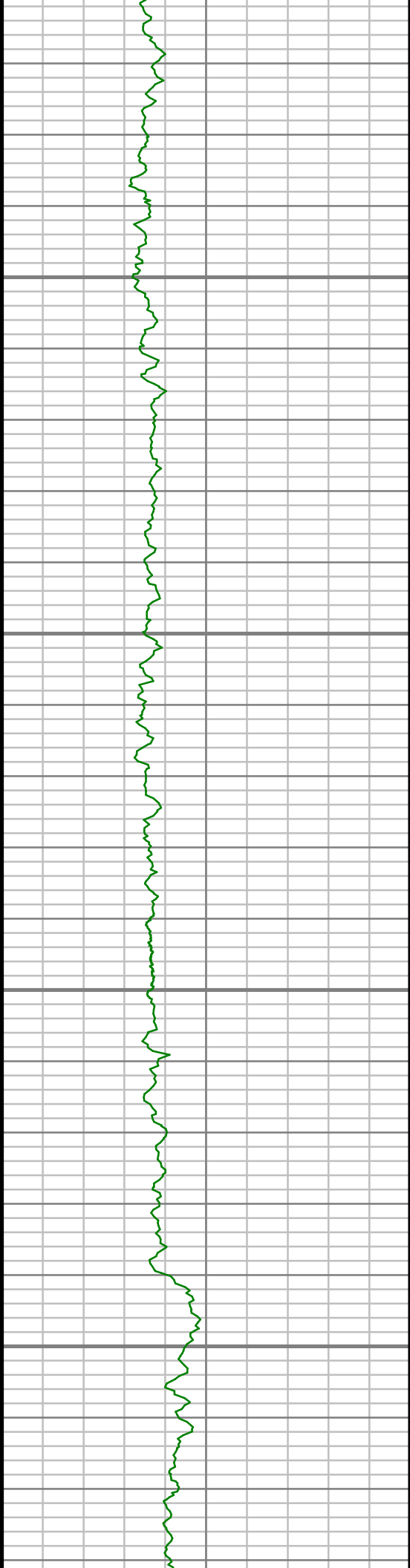
5550

5600



S: 55 MD: 5438.00 ft Inc: 14.65  
deg Az: 112.13 deg TVD:  
5262.90 ft

S: 56 MD: 5533.00 ft Inc: 12.14  
deg Az: 109.65 deg TVD:  
5355.31 ft

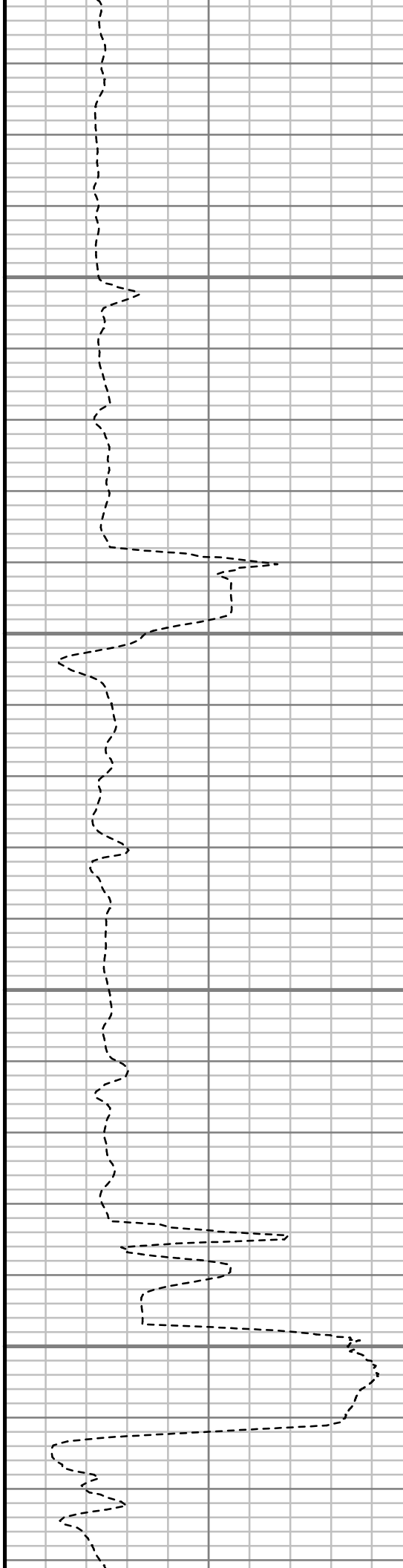


5650

5700

5750

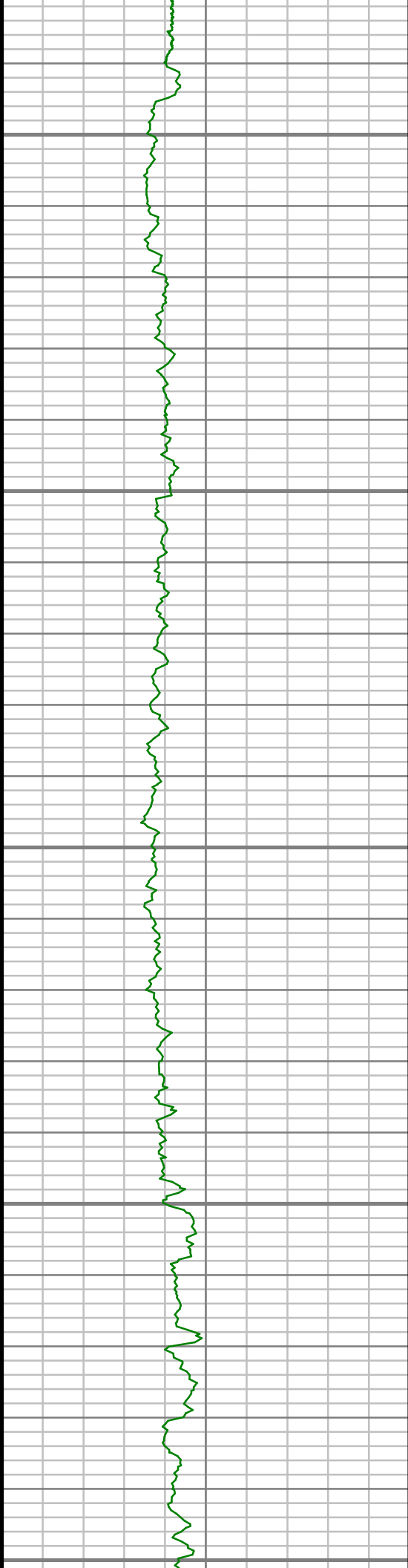
5800



S: 57 MD: 5627.00 ft Inc: 10.53  
deg Az: 107.14 deg TVD:  
5447.47 ft

S: 58 MD: 5722.00 ft Inc: 9.23  
deg Az: 103.85 deg TVD:  
5541.06 ft

S: 59 MD: 5816.00 ft Inc: 7.98  
deg Az: 109.56 deg TVD:  
5634.00 ft



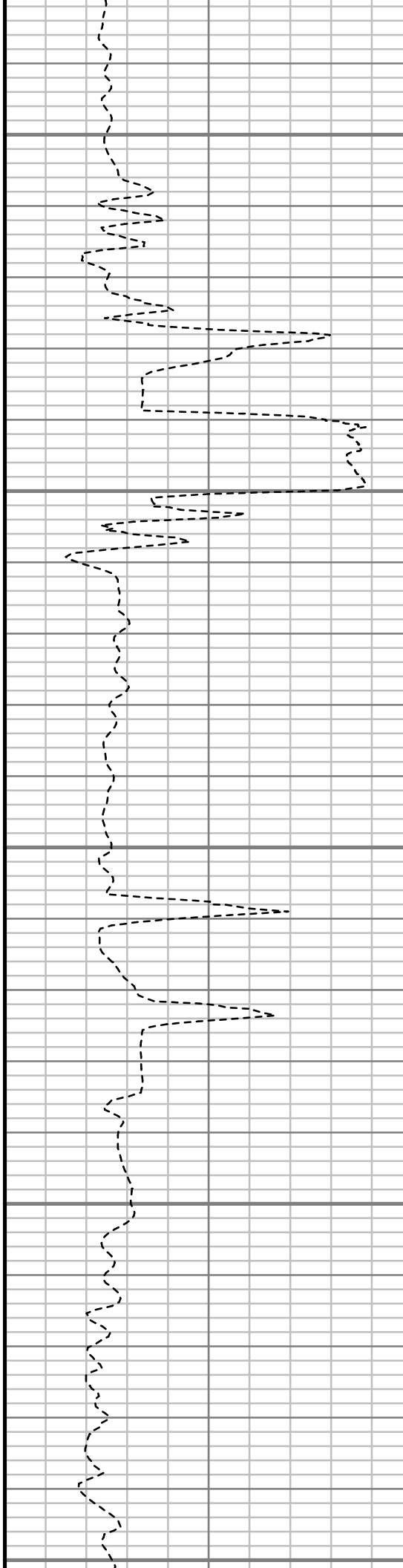
5850

5900

5950

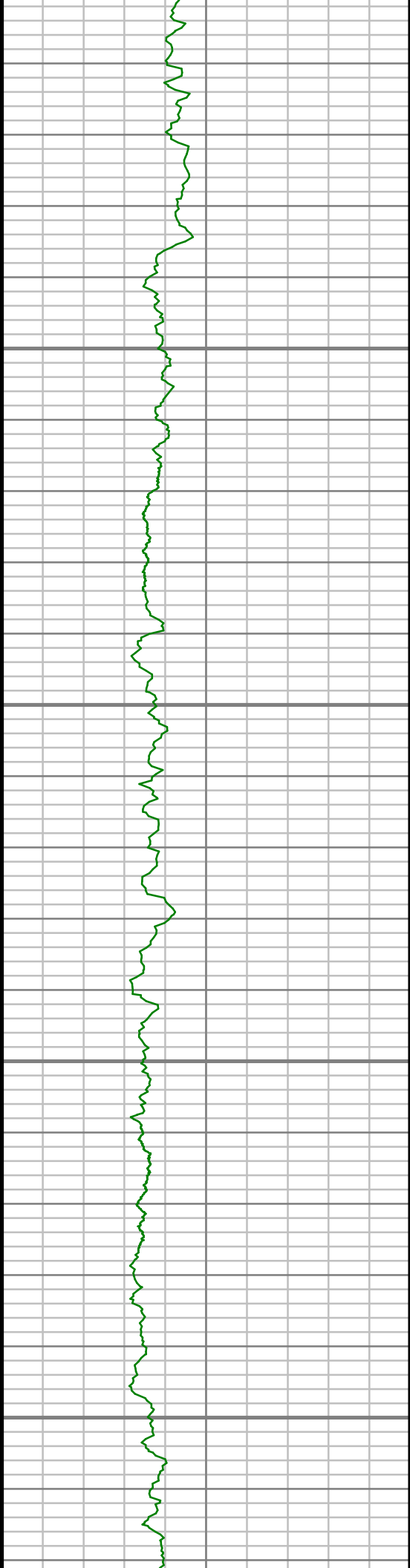
6000

6050



S: 60 MD: 5911.00 ft Inc: 6.73  
deg Az: 118.59 deg TVD:  
5728.22 ft

S: 61 MD: 6006.00 ft Inc: 5.33  
deg Az: 118.65 deg TVD:  
5822.69 ft

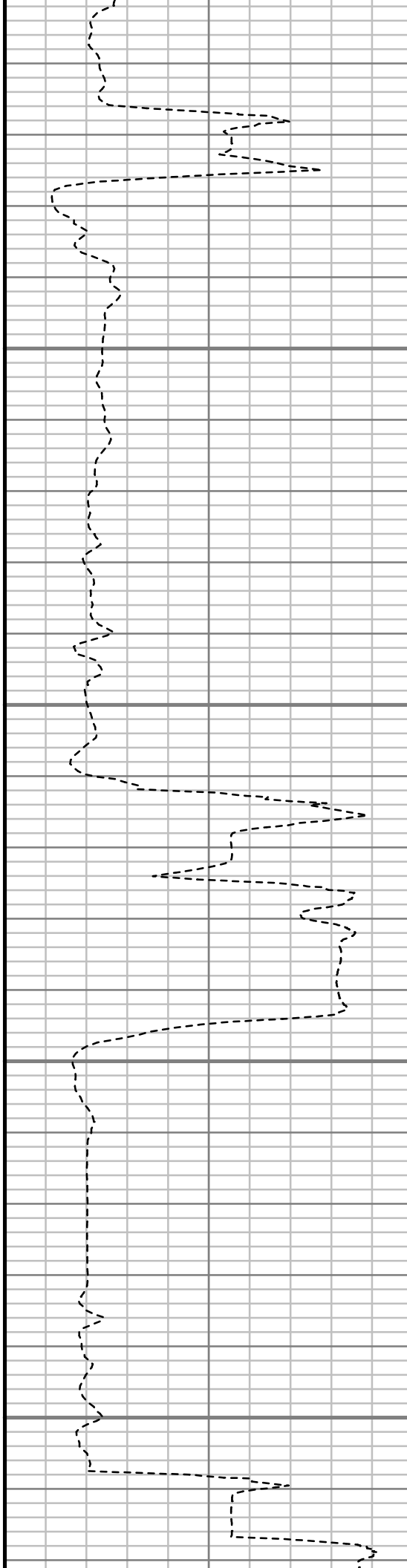


6100

6150

6200

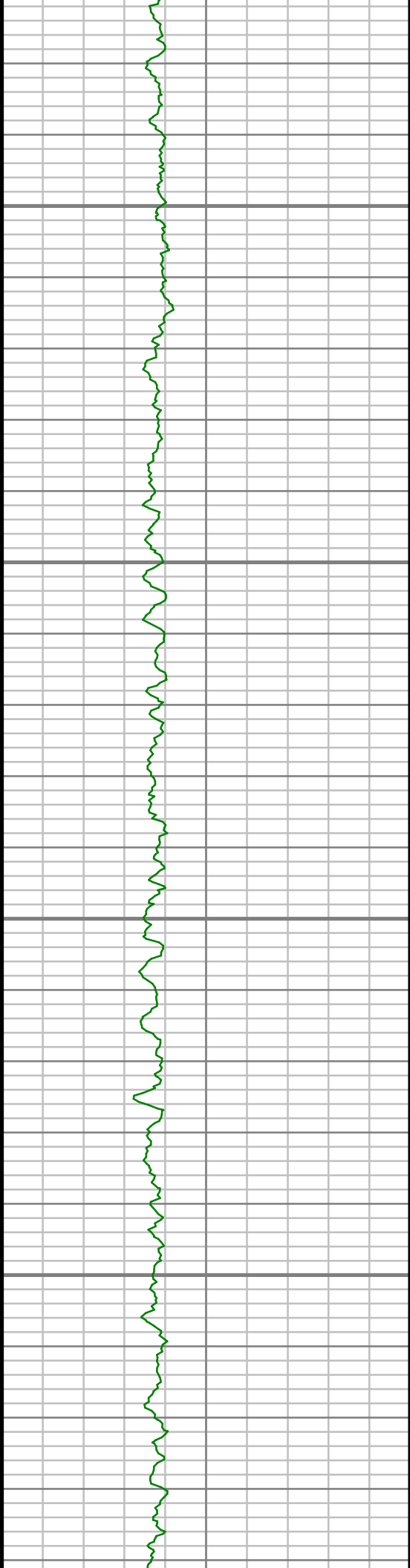
6250



S: 62 MD: 6100.00 ft Inc: 4.75  
deg Az: 105.64 deg TVD:  
5916.33 ft

S: 63 MD: 6195.00 ft Inc: 2.87  
deg Az: 102.66 deg TVD:  
6011.12 ft



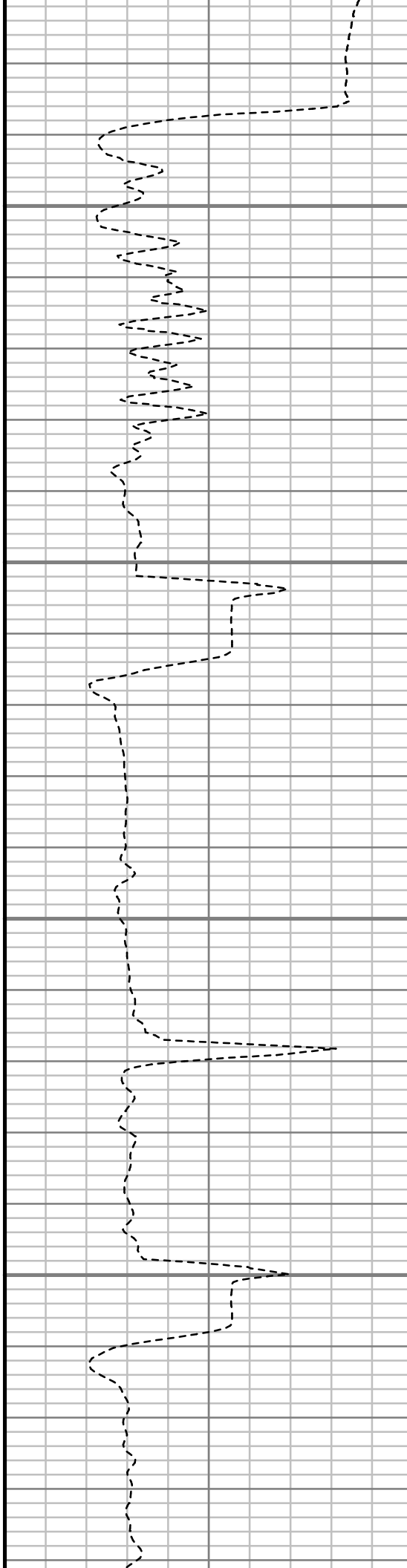


6300

6350

6400

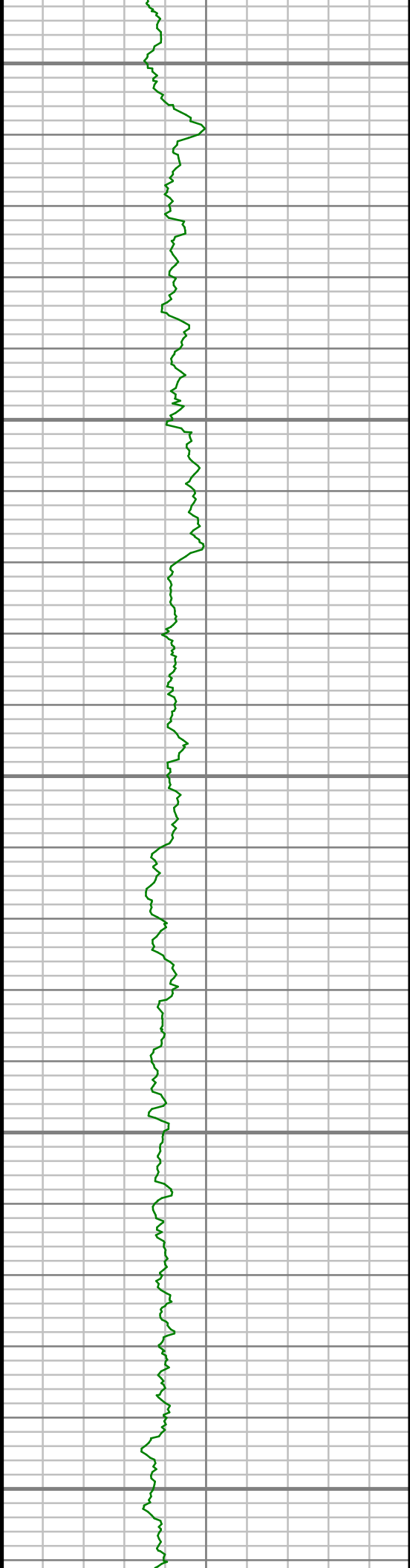
6450



S: 64 MD: 6289.00 ft Inc: 0.23  
deg Az: 254.54 deg TVD:  
6105.08 ft

S: 65 MD: 6384.00 ft Inc: 0.40  
deg Az: 349.56 deg TVD:  
6200.08 ft

S: 66 MD: 6478.00 ft Inc: 0.48  
deg Az: 357.05 deg TVD:  
6294.08 ft



6500

6550

6600

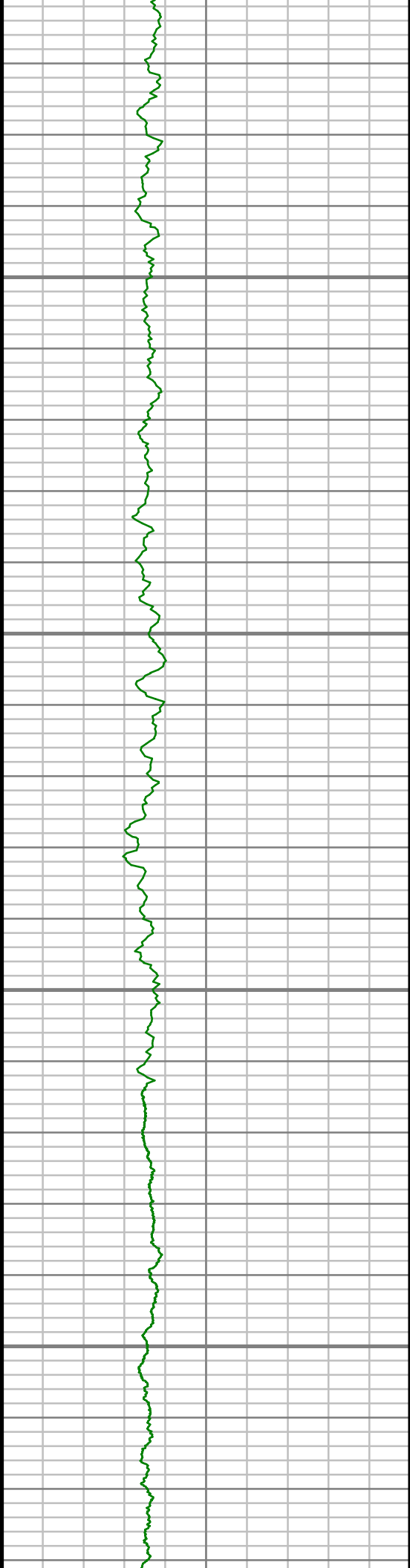
6650

6700



S: 67 MD: 6573.00 ft Inc: 0.59  
deg Az: 358.61 deg TVD:  
6389.07 ft

S: 68 MD: 6667.00 ft Inc: 0.86  
deg Az: 316.65 deg TVD:  
6483.07 ft

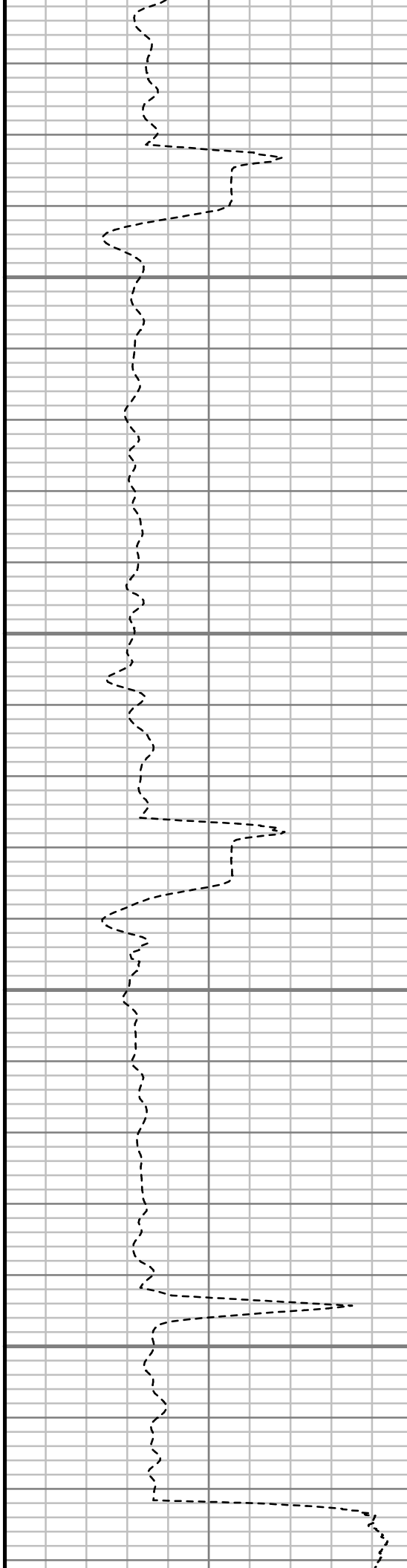


6750

6800

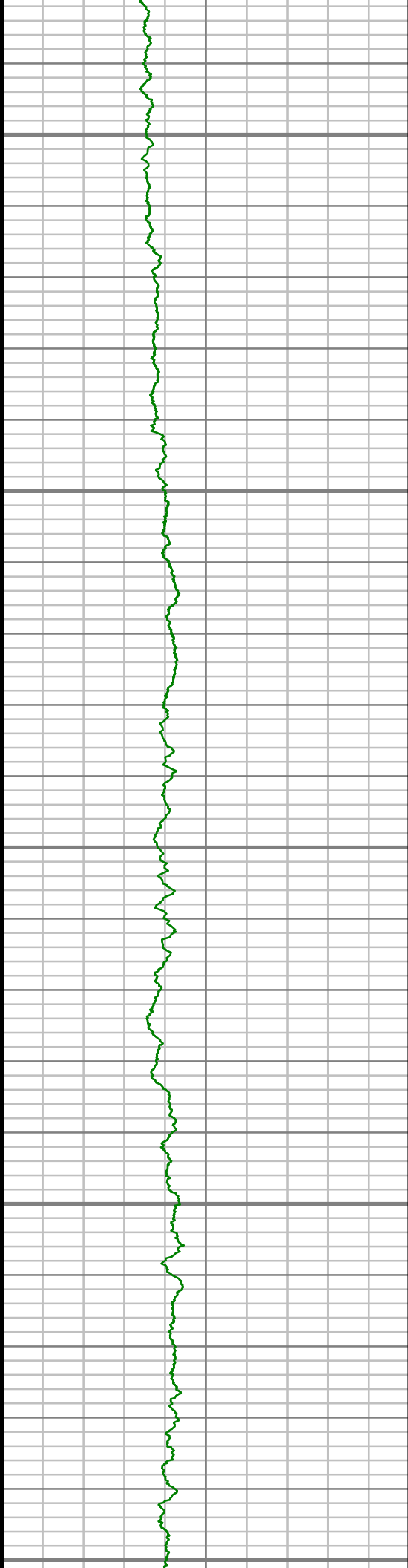
6850

6900



S: 69 MD: 6761.00 ft Inc: 0.63  
deg Az: 329.15 deg TVD:  
6577.06 ft

S: 70 MD: 6856.00 ft Inc: 0.90  
deg Az: 310.51 deg TVD:  
6672.05 ft



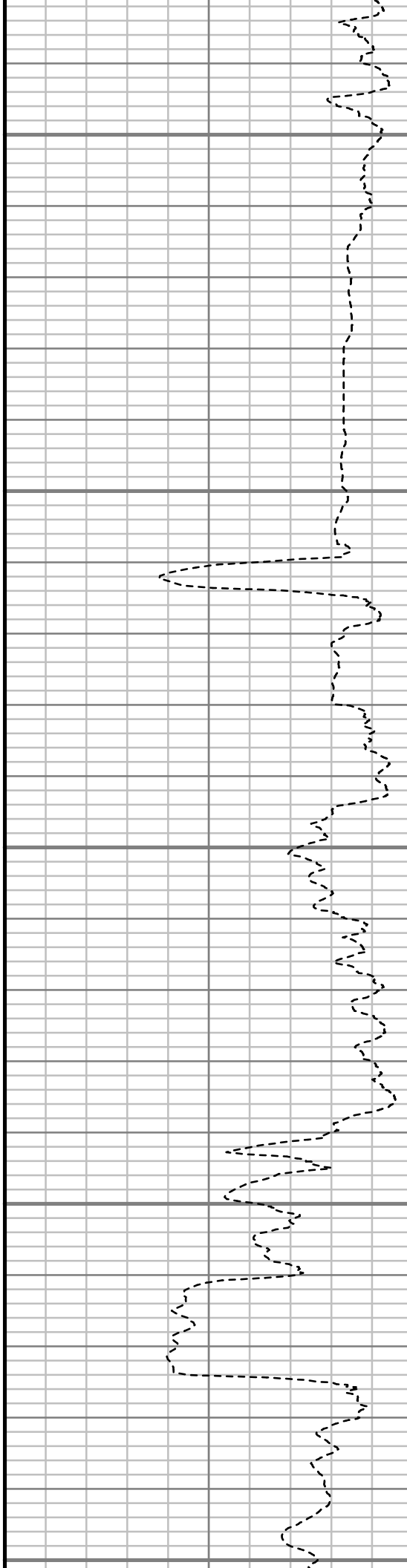
6950

7000

7050

7100

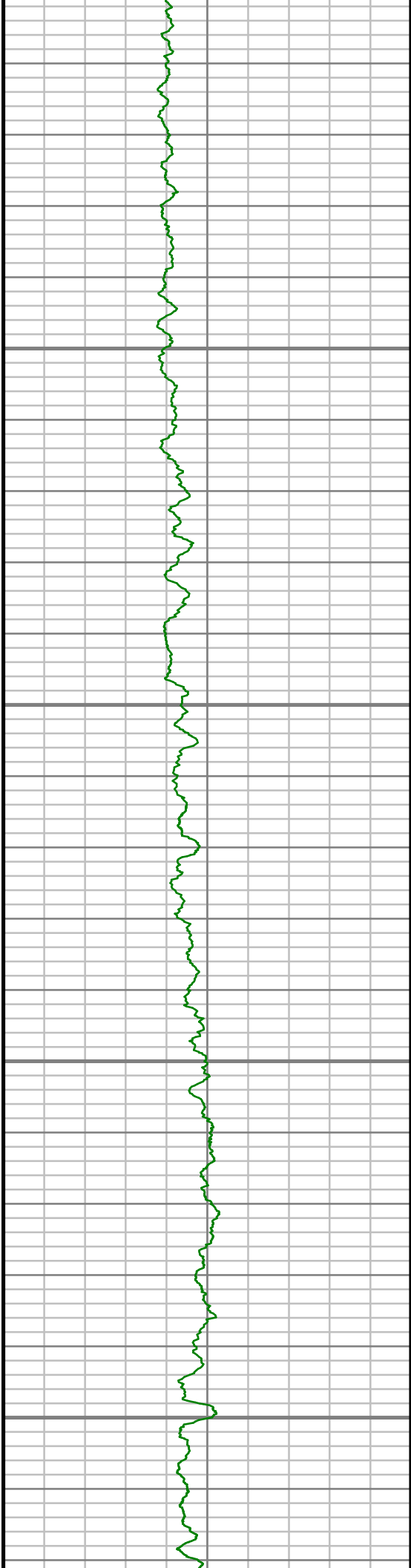
7150



S: 71 MD: 6950.00 ft Inc: 2.53  
deg Az: 342.92 deg TVD:  
6766.01 ft

S: 72 MD: 7045.00 ft Inc: 13.39  
deg Az: 8.54 deg TVD: 6859.97  
ft

S: 73 MD: 7139.00 ft Inc: 17.74  
deg Az: 3.69 deg TVD: 6950.50  
ft

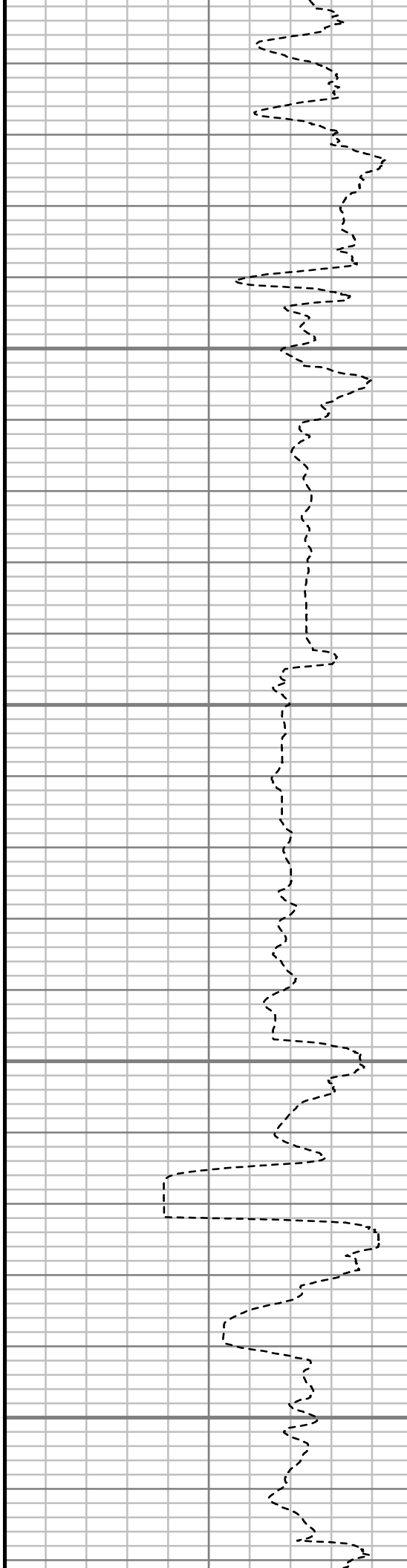


7200

7250

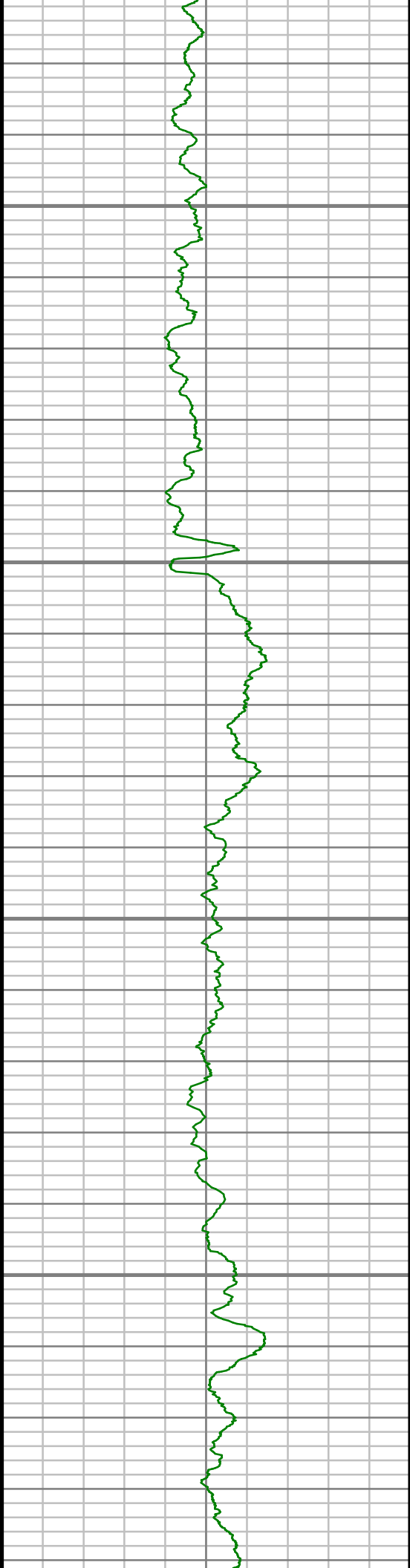
7300

7350



S: 74 MD: 7233.00 ft Inc: 26.54  
deg Az: 355.20 deg TVD:  
7037.51 ft

S: 75 MD: 7328.00 ft Inc: 37.29  
deg Az: 358.62 deg TVD:  
7118.03 ft

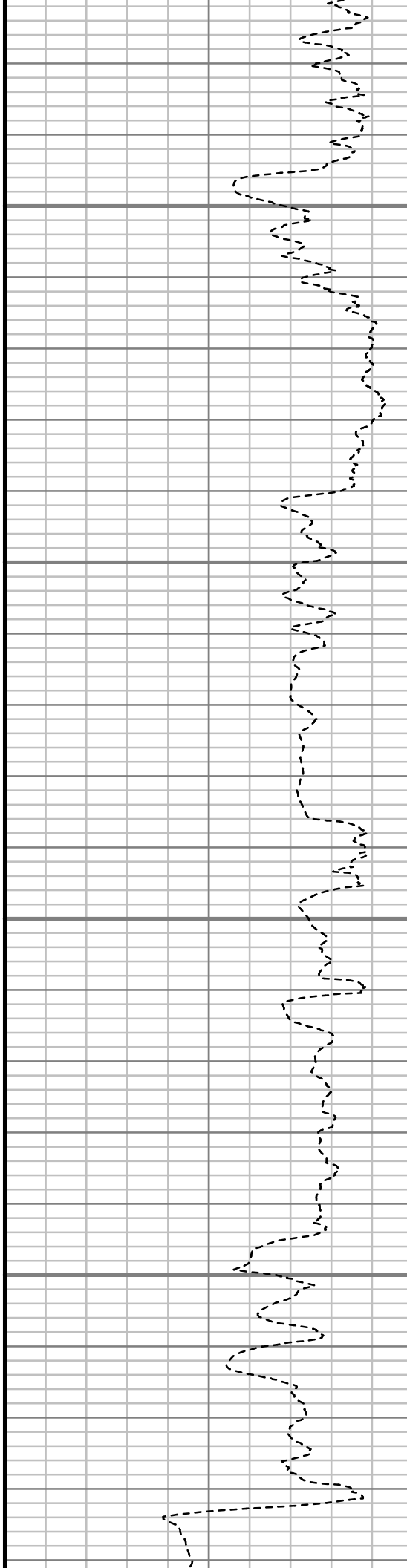


7400

7450

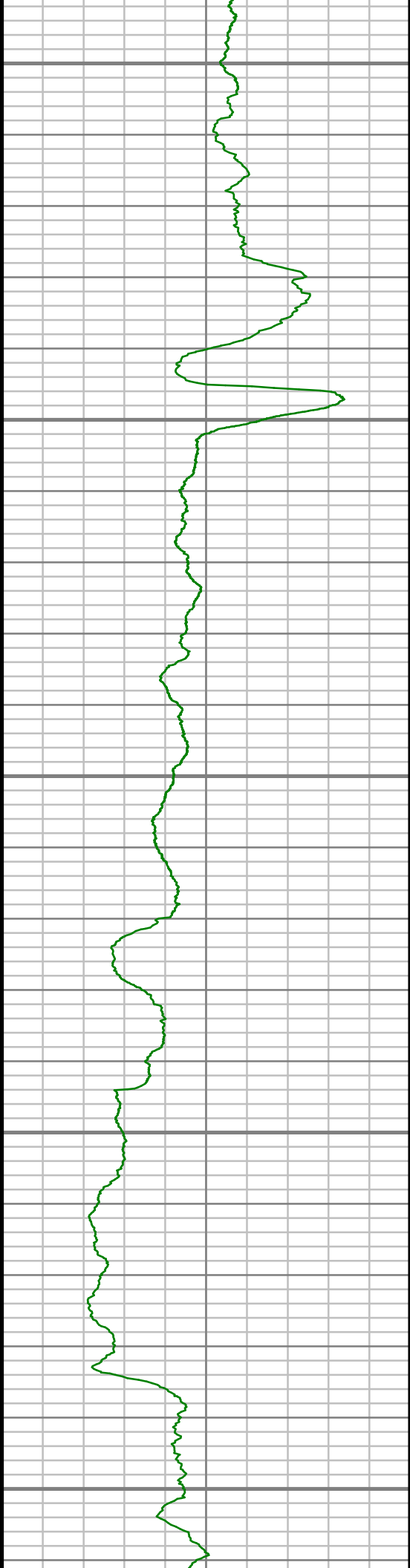
7500

7550



S: 76 MD: 7423.00 ft Inc: 44.65  
deg Az: 0.27 deg TVD: 7189.72  
ft

S: 77 MD: 7517.00 ft Inc: 57.09  
deg Az: 354.99 deg TVD:  
7248.95 ft



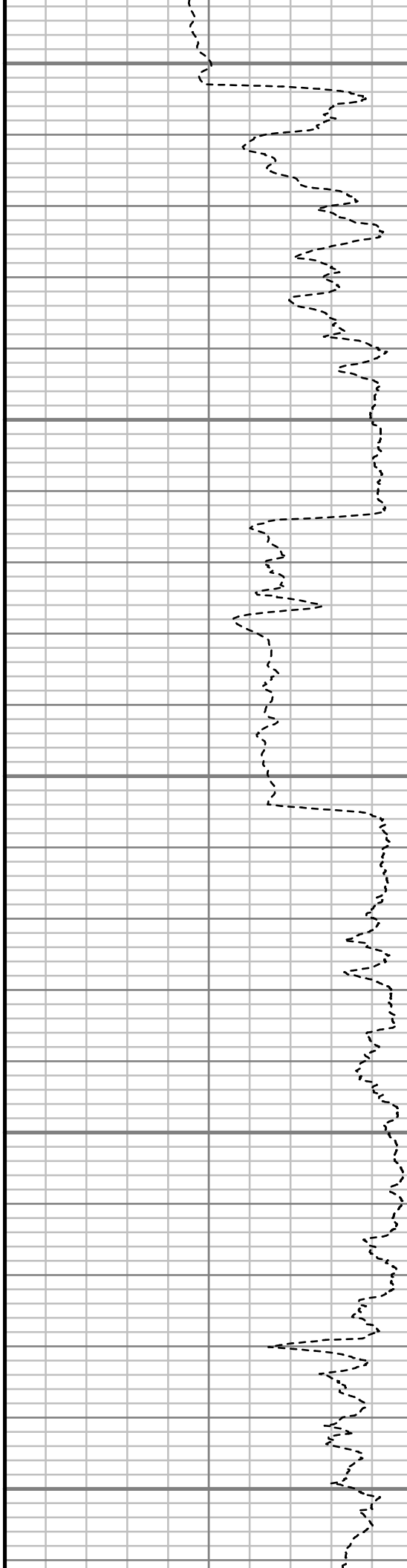
7600

7650

7700

7750

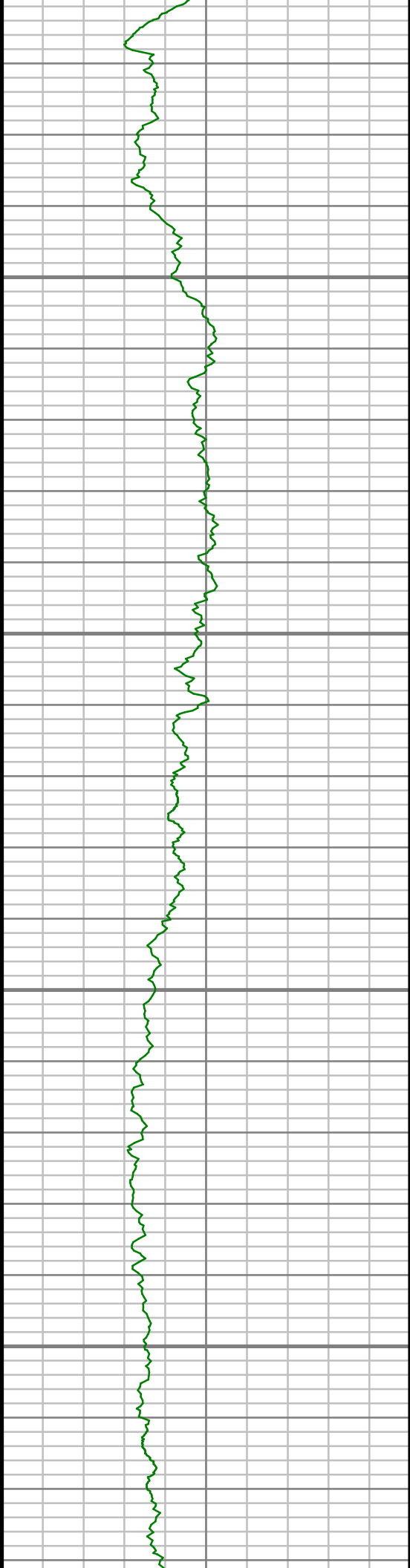
7800



S: 78 MD: 7612.00 ft Inc: 69.34  
deg Az: 354.66 deg TVD:  
7291.68 ft

S: 79 MD: 7706.00 ft Inc: 73.60  
deg Az: 358.58 deg TVD:  
7321.55 ft

S: 80 MD: 7737.00 ft Inc: 75.37  
deg Az: 359.37 deg TVD:  
7329.84 ft

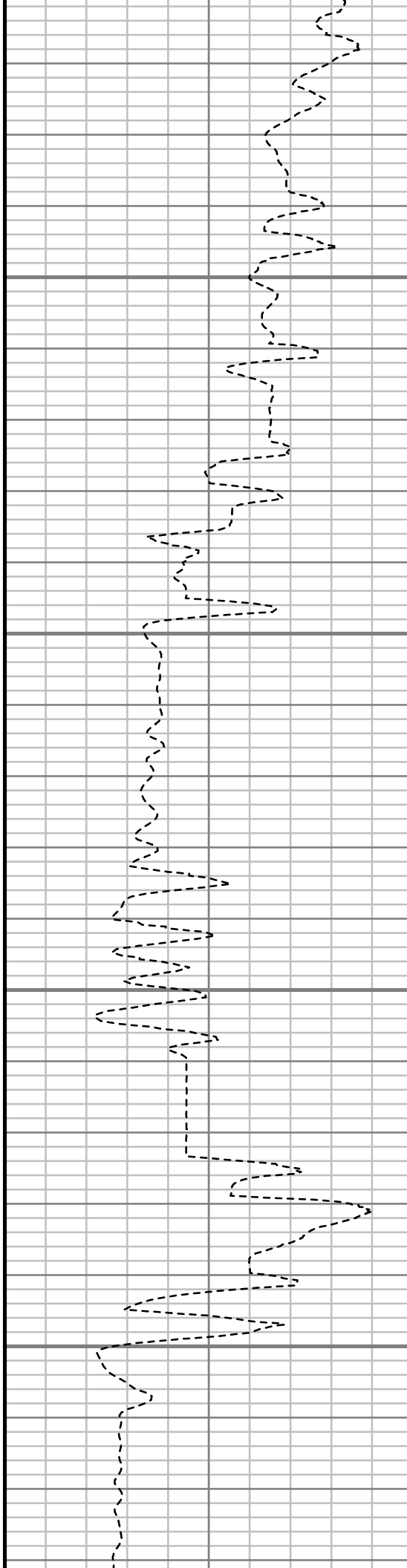


7850

7900

7950

8000

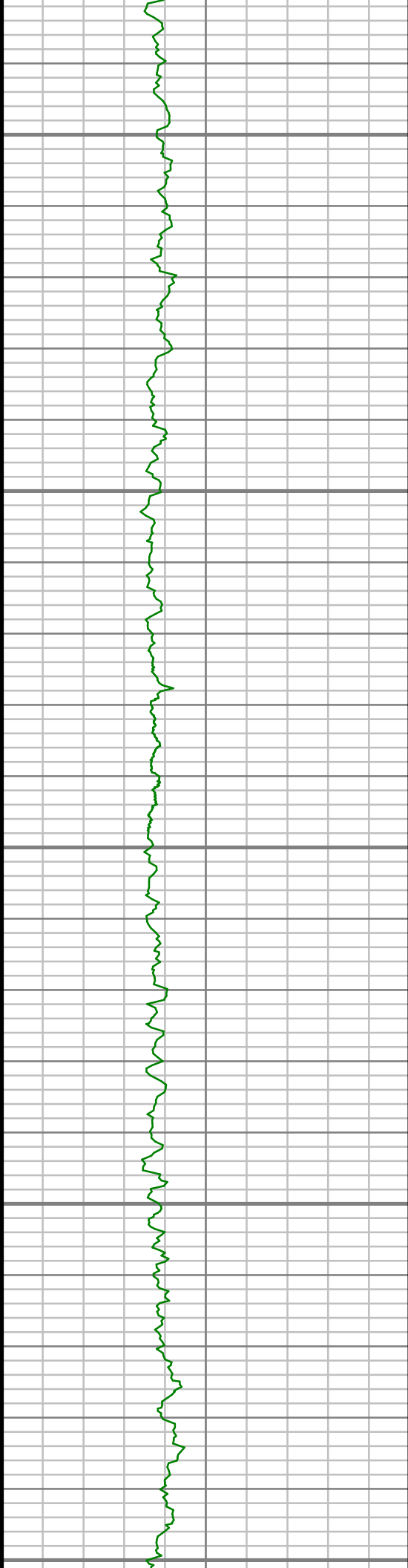


S: 81 MD: 7817.00 ft Inc: 82.97  
deg Az: 0.48 deg TVD: 7344.86  
ft

S: 82 MD: 7911.00 ft Inc: 91.04  
deg Az: 0.63 deg TVD: 7349.77  
ft

S: 83 MD: 8006.00 ft Inc: 90.81  
deg Az: 0.13 deg TVD: 7348.24  
ft





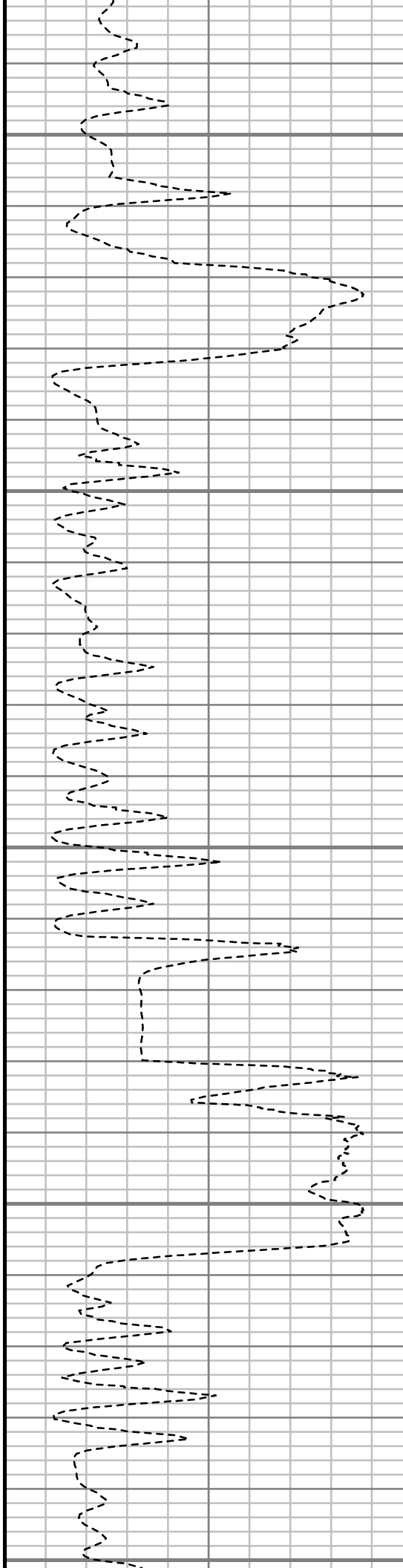
8050

8100

8150

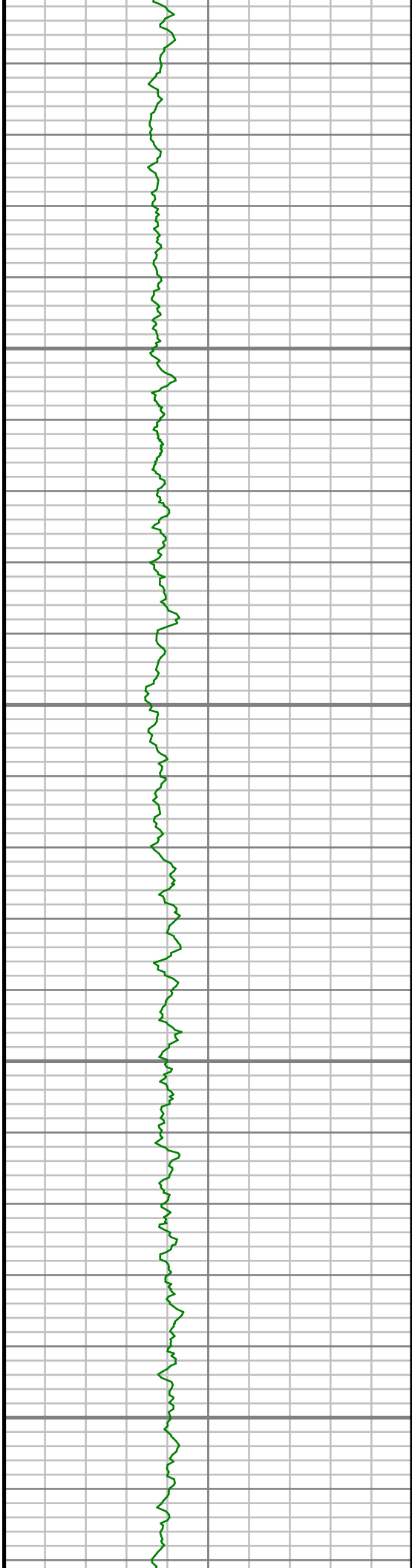
8200

8250



S: 84 MD: 8100.00 ft Inc: 90.47  
deg Az: 0.87 deg TVD: 7347.19  
ft

S: 85 MD: 8195.00 ft Inc: 89.83  
deg Az: 0.10 deg TVD: 7346.94  
ft

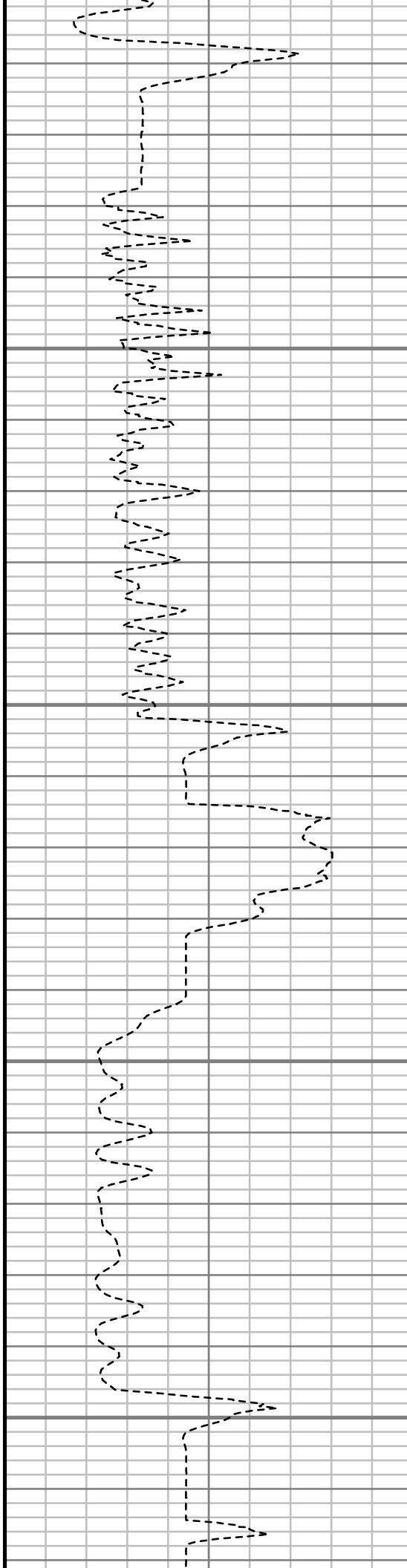


8300

8350

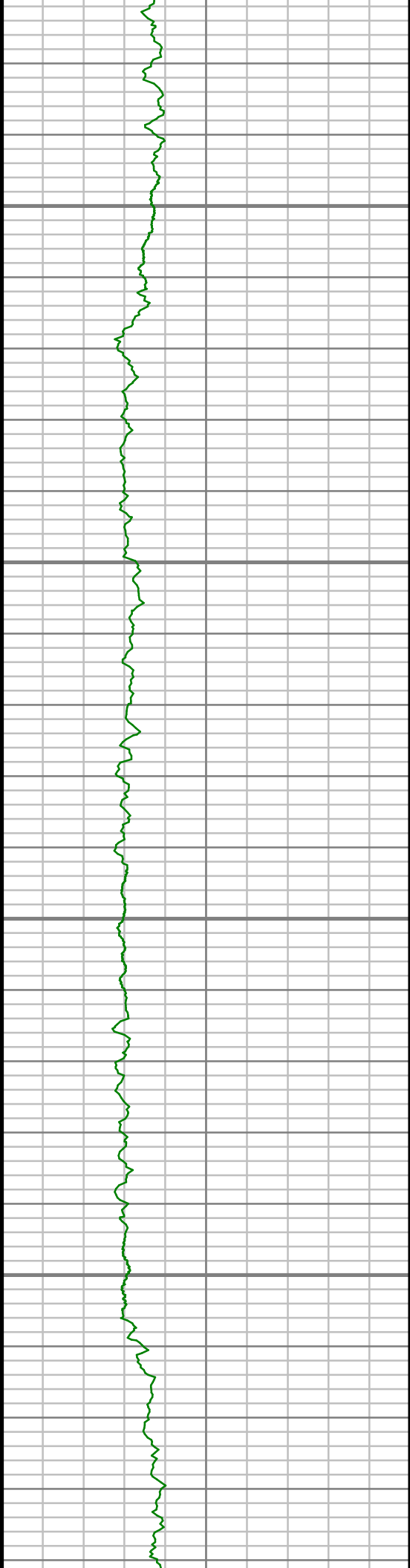
8400

8450



S: 86 MD: 8289.00 ft Inc: 90.27  
deg Az: 1.03 deg TVD: 7346.86  
ft

S: 87 MD: 8383.00 ft Inc: 89.40  
deg Az: 359.85 deg TVD:  
7347.13 ft

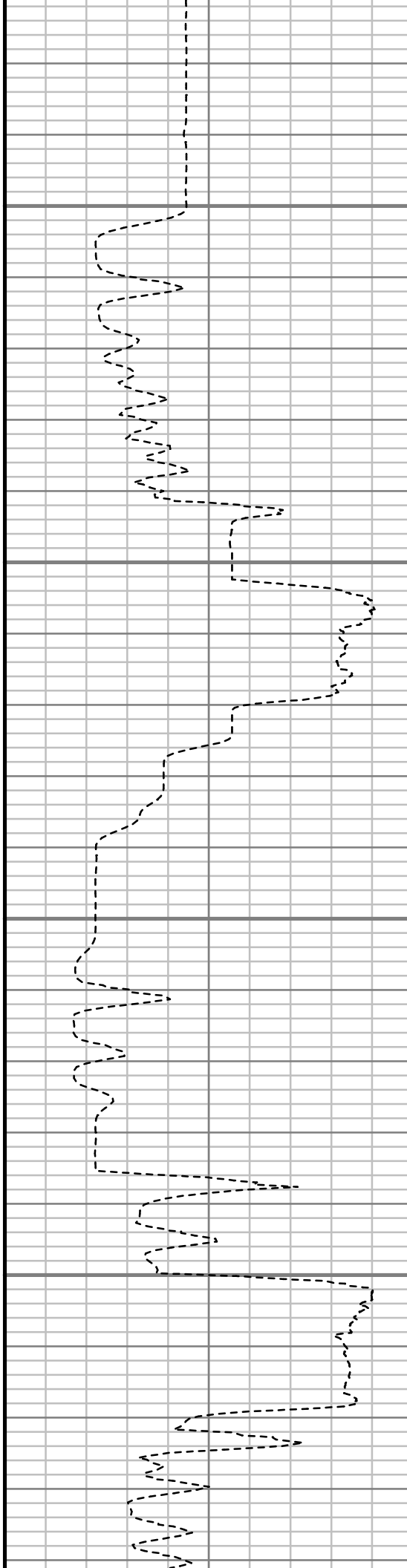


8500

8550

8600

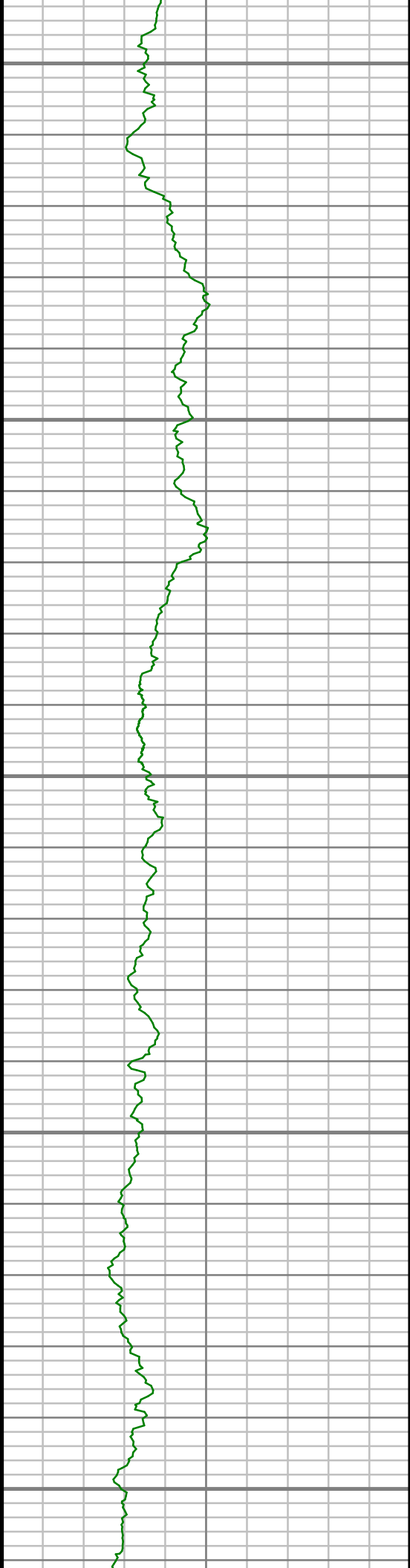
8650



S: 88 MD: 8478.00 ft Inc: 90.54  
deg Az: 359.53 deg TVD:  
7347.19 ft

S: 89 MD: 8573.00 ft Inc: 89.70  
deg Az: 359.48 deg TVD:  
7346.99 ft

S: 90 MD: 8667.00 ft Inc: 88.29  
deg Az: 359.82 deg TVD:  
7348.65 ft



8700

8750

8800

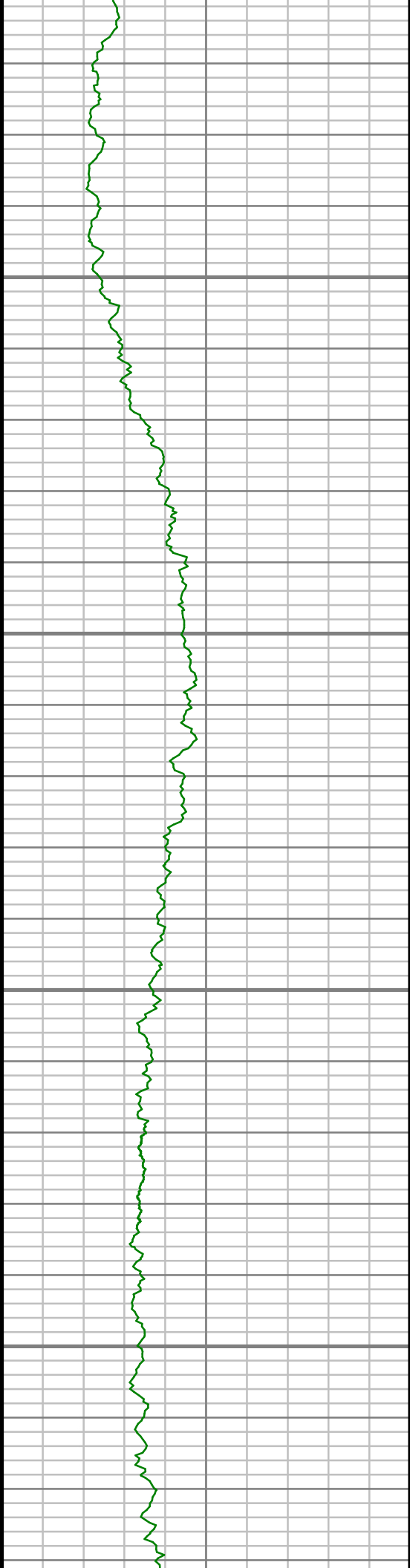
8850

8900



S: 91 MD: 8762.00 ft Inc: 87.21  
deg Az: 359.49 deg TVD:  
7352.37 ft

S: 92 MD: 8856.00 ft Inc: 88.29  
deg Az: 358.75 deg TVD:  
7356.07 ft

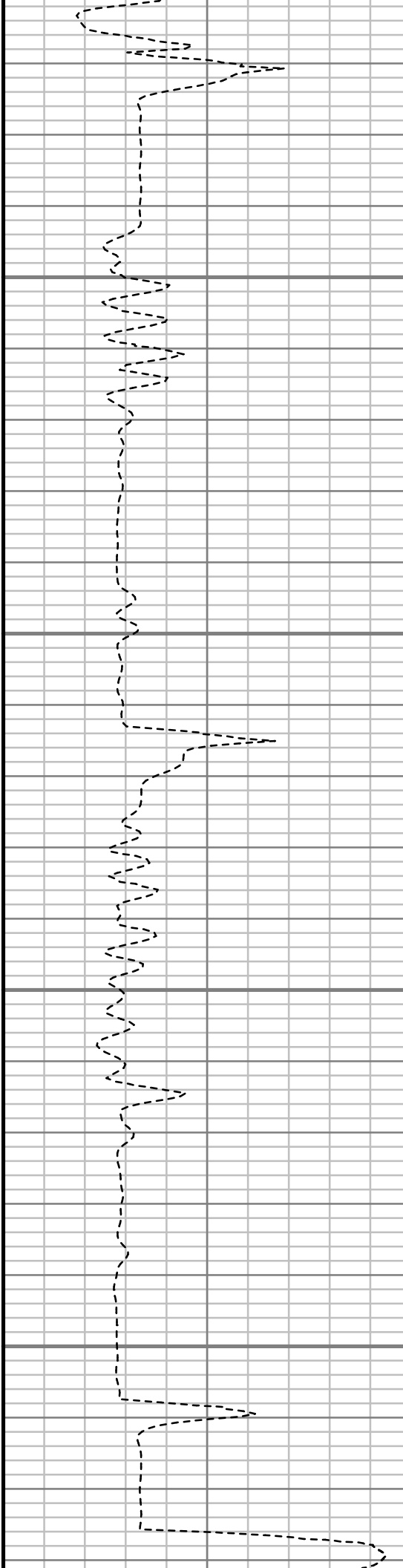


8950

9000

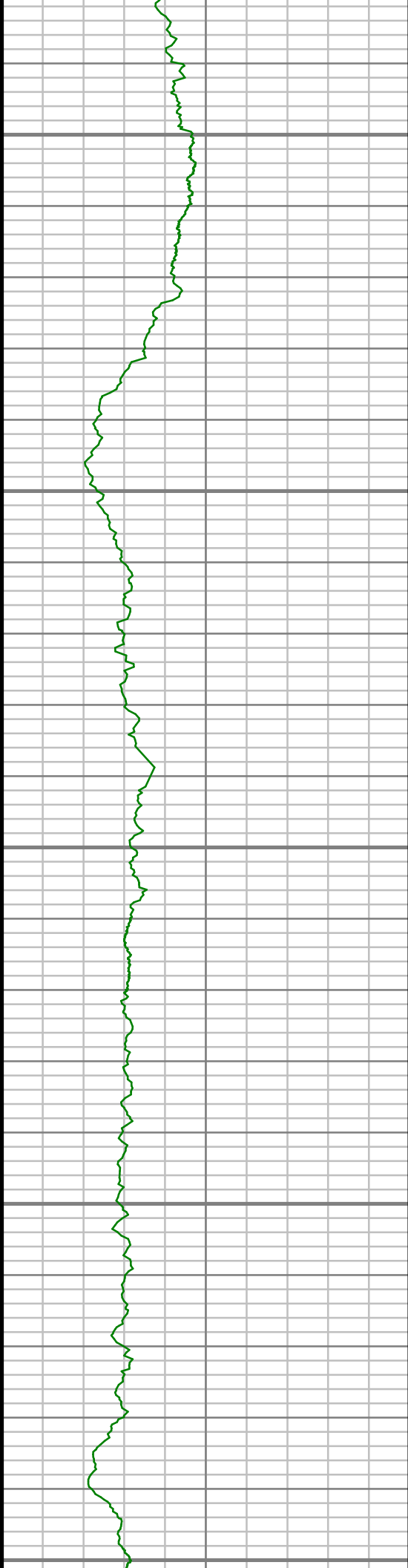
9050

9100



S: 93 MD: 8951.00 ft Inc: 89.13  
deg Az: 357.77 deg TVD:  
7358.21 ft

S: 94 MD: 9045.00 ft Inc: 89.70  
deg Az: 356.95 deg TVD:  
7359.18 ft



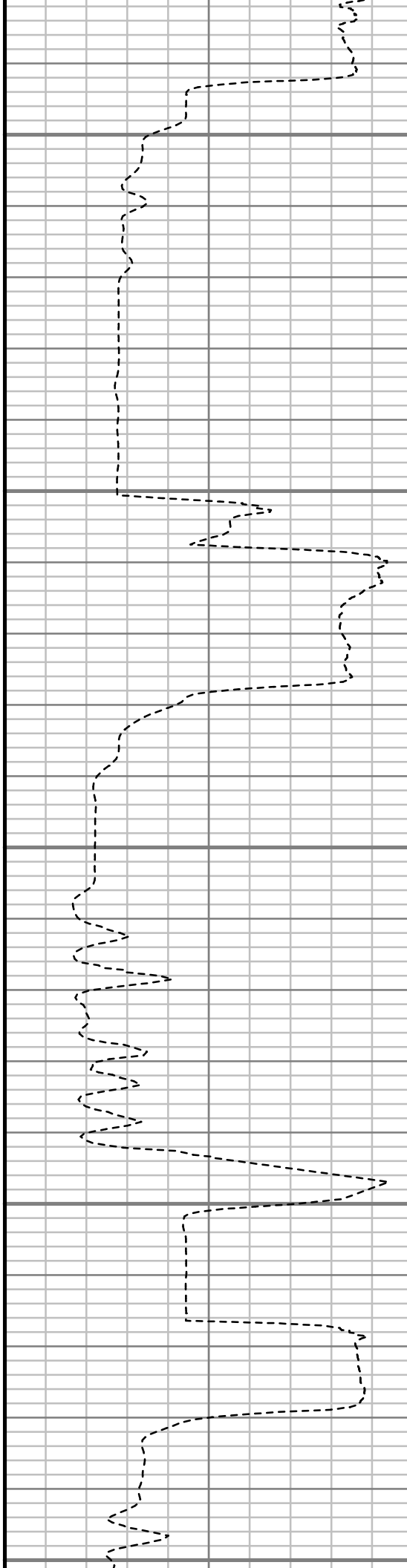
9150

9200

9250

9300

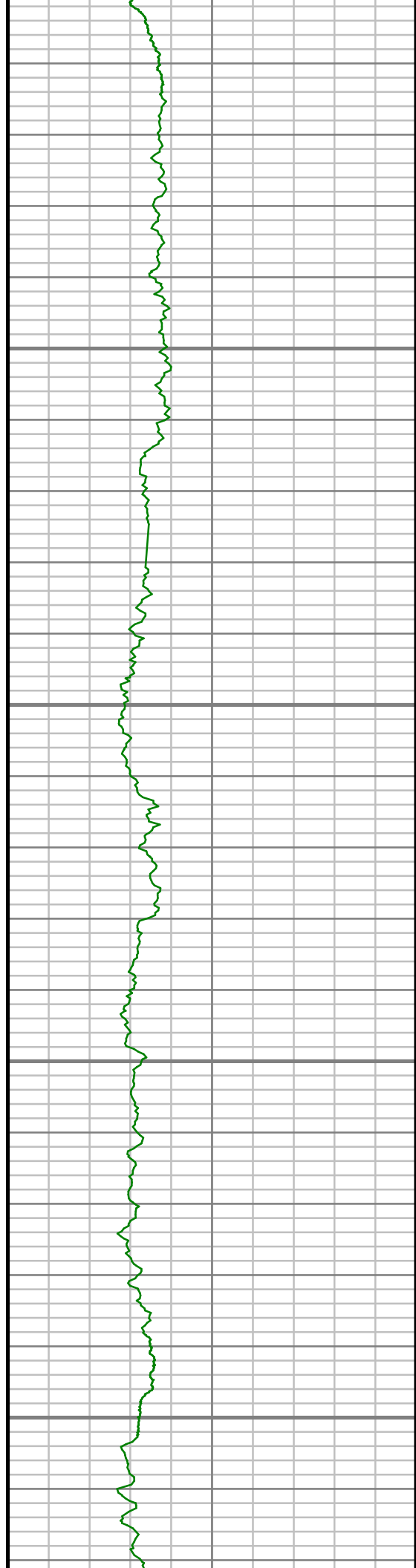
9350



S: 95 MD: 9140.00 ft Inc: 90.98  
deg Az: 358.25 deg TVD:  
7358.62 ft

S: 96 MD: 9234.00 ft Inc: 90.37  
deg Az: 359.22 deg TVD:  
7357.52 ft

S: 97 MD: 9329.00 ft Inc: 90.30  
deg Az: 359.54 deg TVD:  
7356.96 ft

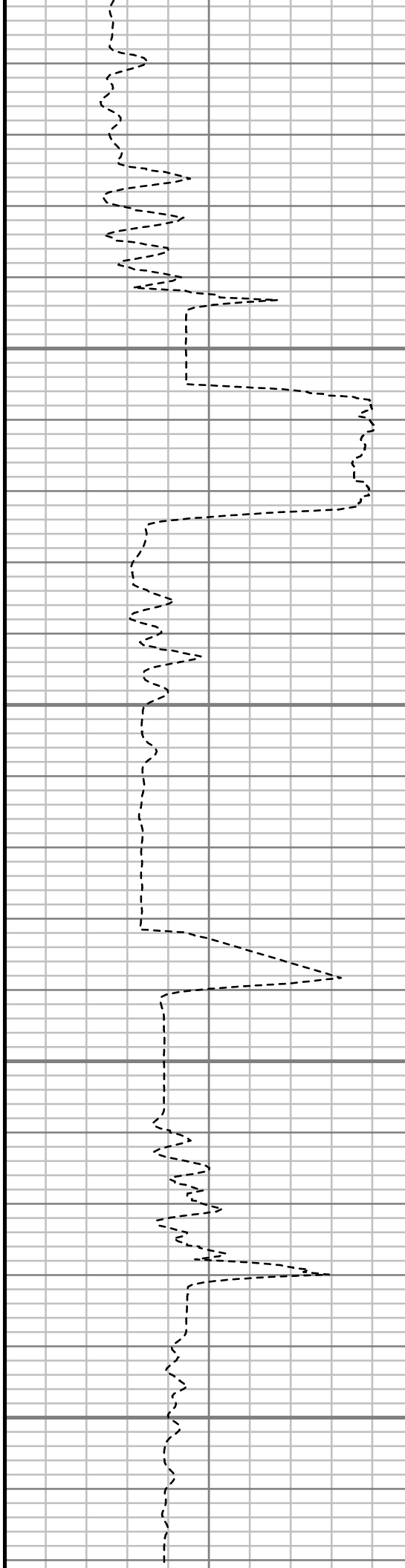


9400

9450

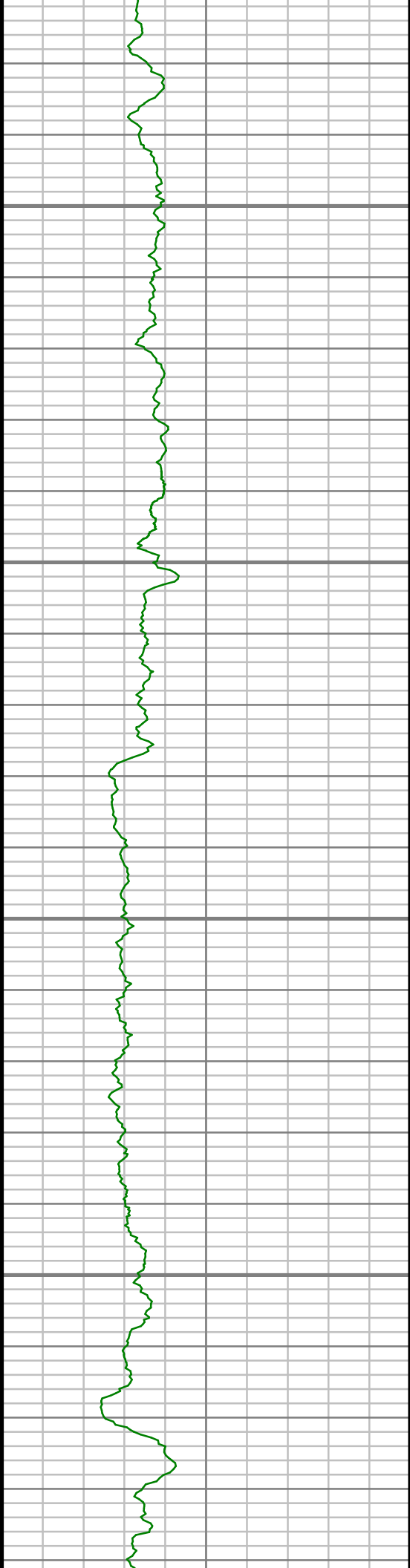
9500

9550



S: 98 MD: 9423.00 ft Inc: 89.02  
deg Az: 358.83 deg TVD:  
7357.51 ft

S: 99 MD: 9518.00 ft Inc: 90.27  
deg Az: 359.50 deg TVD:  
7358.10 ft

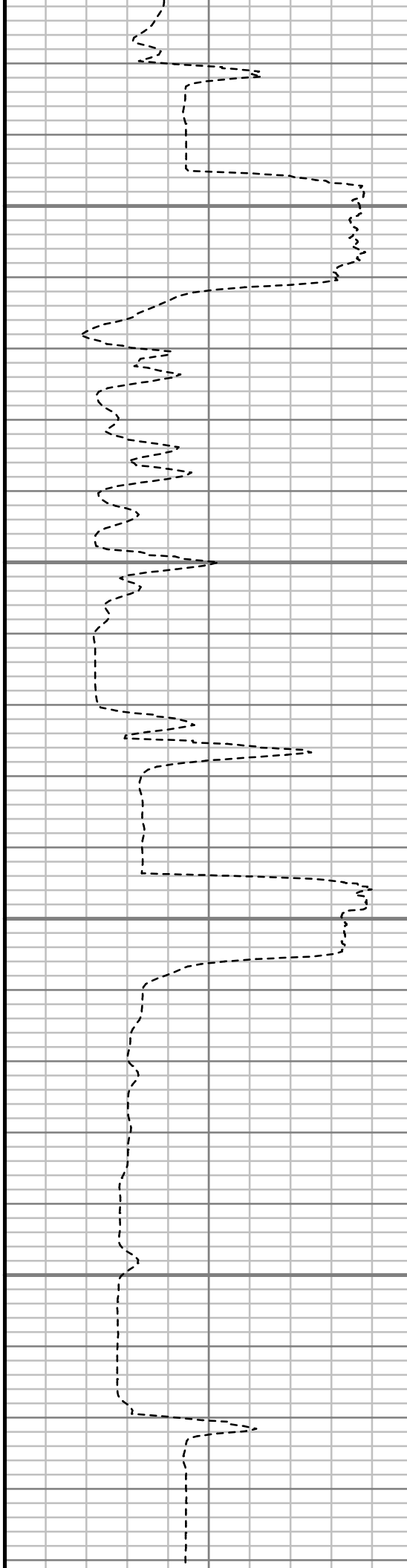


9600

9650

9700

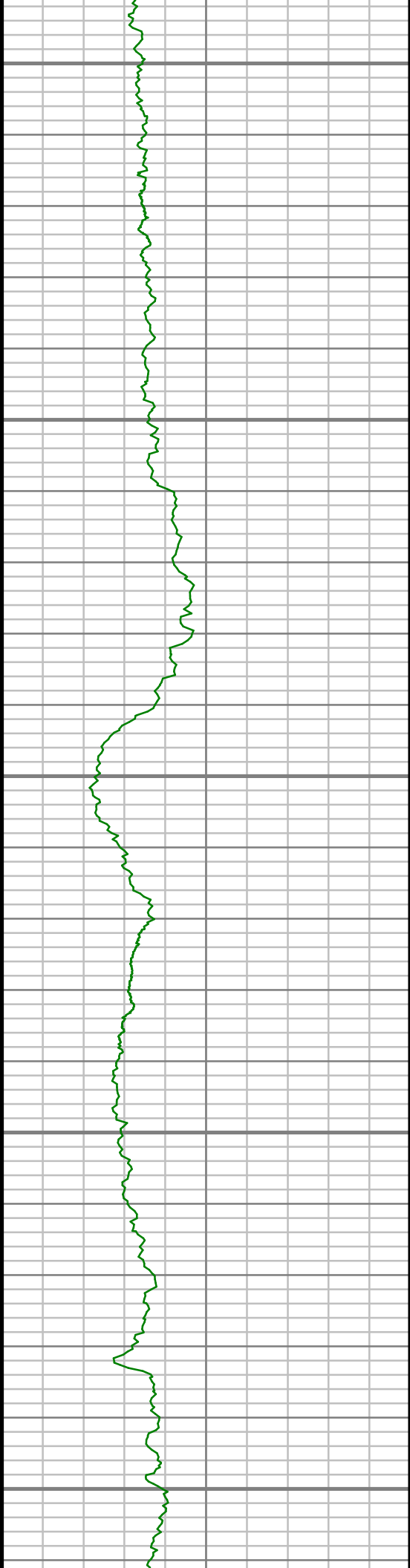
9750



S: 100 MD: 9612.00 ft Inc:  
90.10 deg Az: 359.54 deg TVD:  
7357.79 ft

S: 101 MD: 9707.00 ft Inc:  
88.22 deg Az: 358.57 deg TVD:  
7359.19 ft





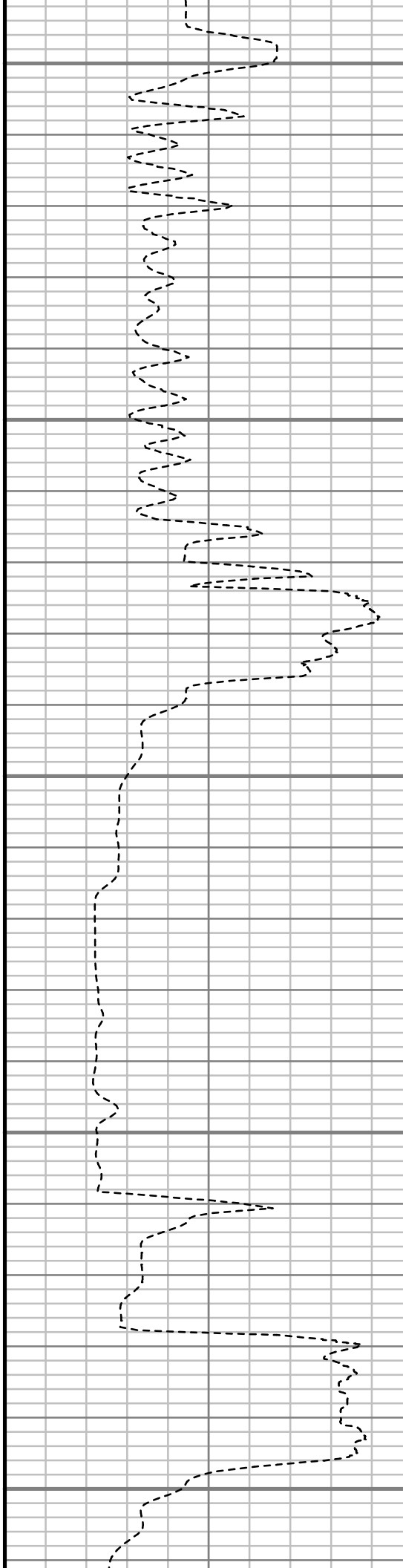
9800

9850

9900

9950

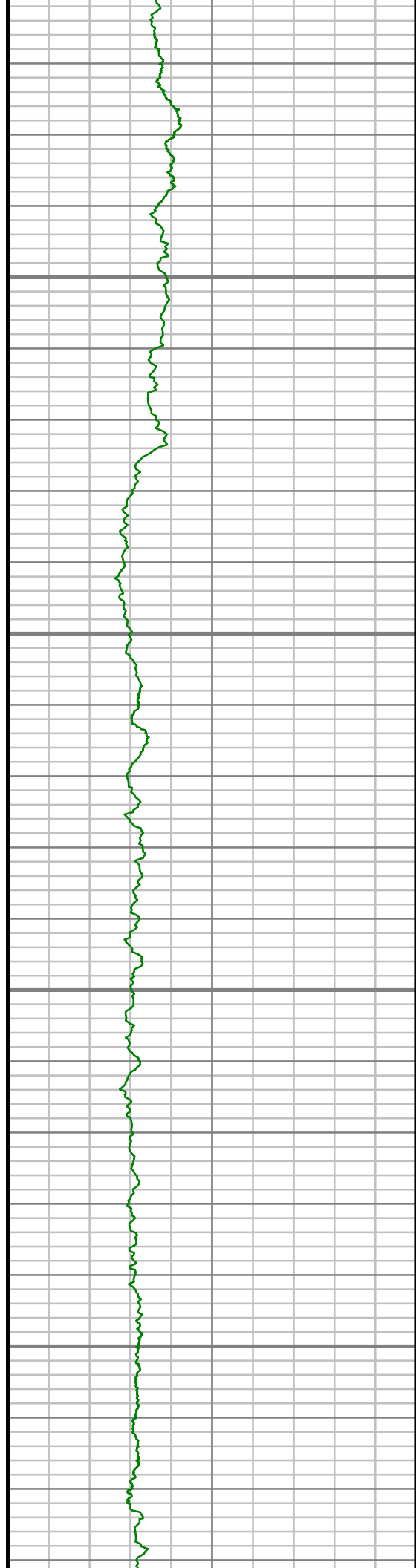
10000



S: 102 MD: 9801.00 ft Inc:  
88.69 deg Az: 357.60 deg TVD:  
7361.72 ft

S: 103 MD: 9896.00 ft Inc:  
90.91 deg Az: 357.62 deg TVD:  
7362.05 ft

S: 104 MD: 9990.00 ft Inc:  
91.31 deg Az: 358.39 deg TVD:  
7360.24 ft

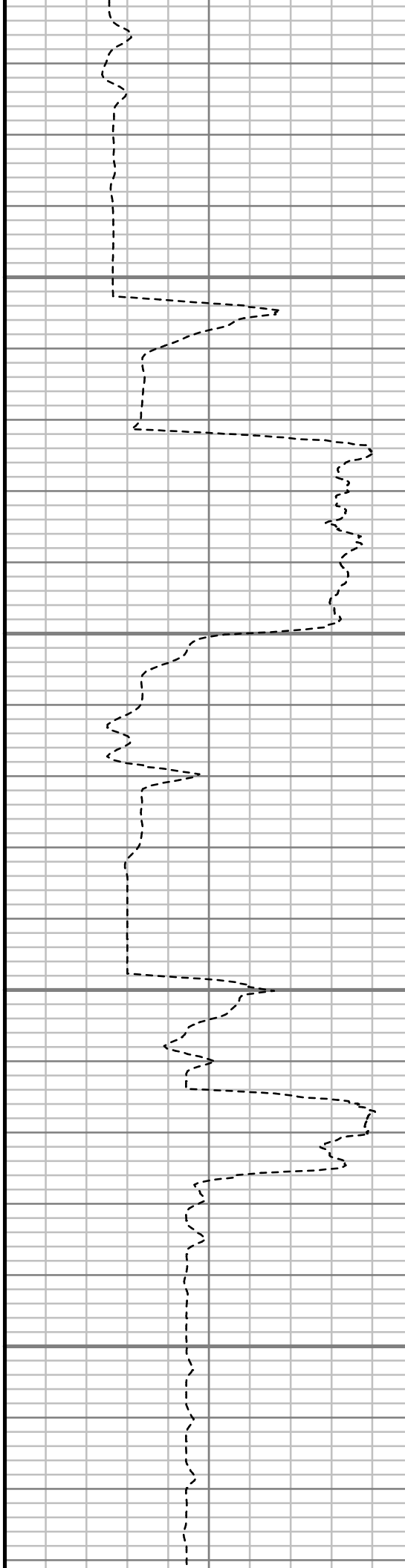


10050

10100

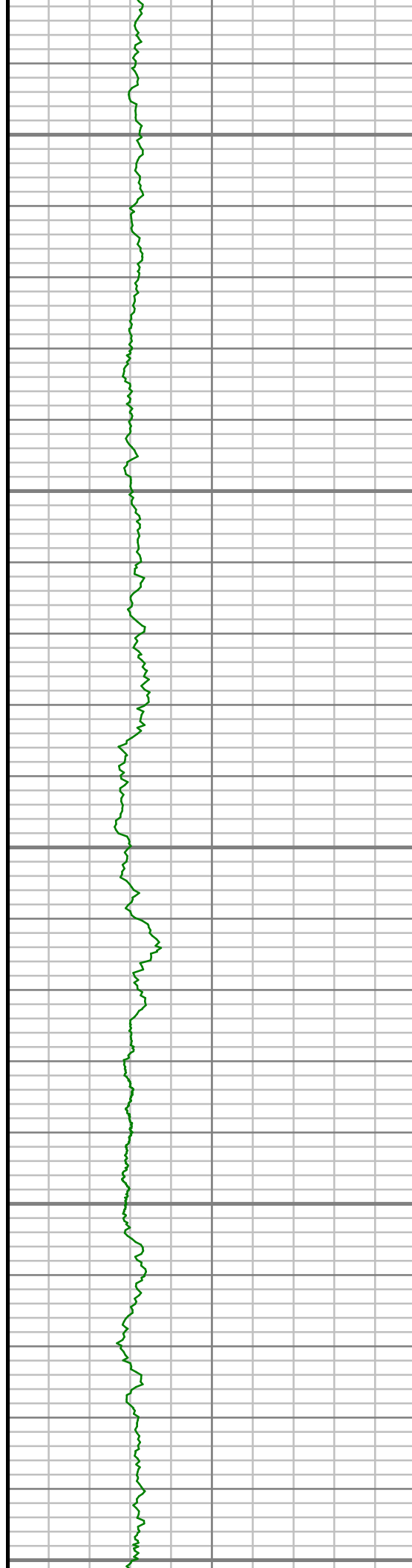
10150

10200



S: 105 MD: 10085.00 ft Inc:  
90.84 deg Az: 359.01 deg TVD:  
7358.45 ft

S: 106 MD: 10179.00 ft Inc:  
90.47 deg Az: 359.73 deg TVD:  
7357.38 ft



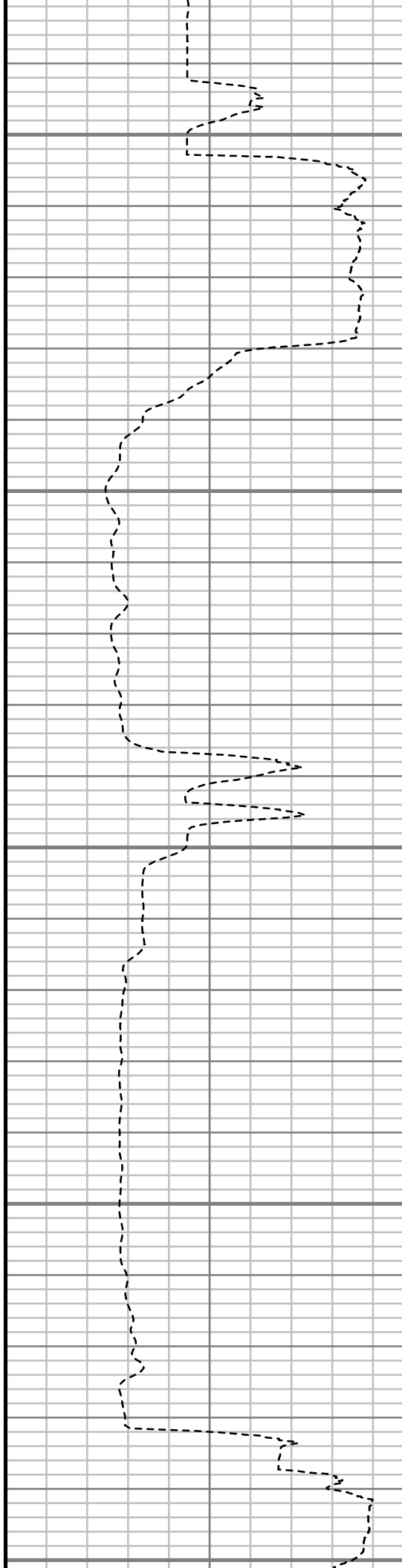
10250

10300

10350

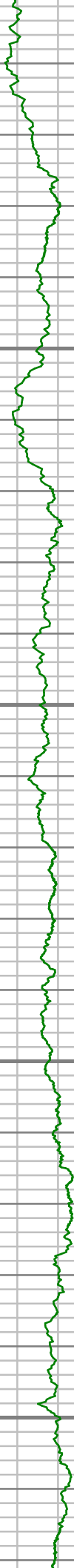
10400

10450



S: 107 MD: 10274.00 ft Inc:  
89.53 deg Az: 0.98 deg TVD:  
7357.38 ft

S: 108 MD: 10369.00 ft Inc:  
90.30 deg Az: 1.24 deg TVD:  
7357.52 ft

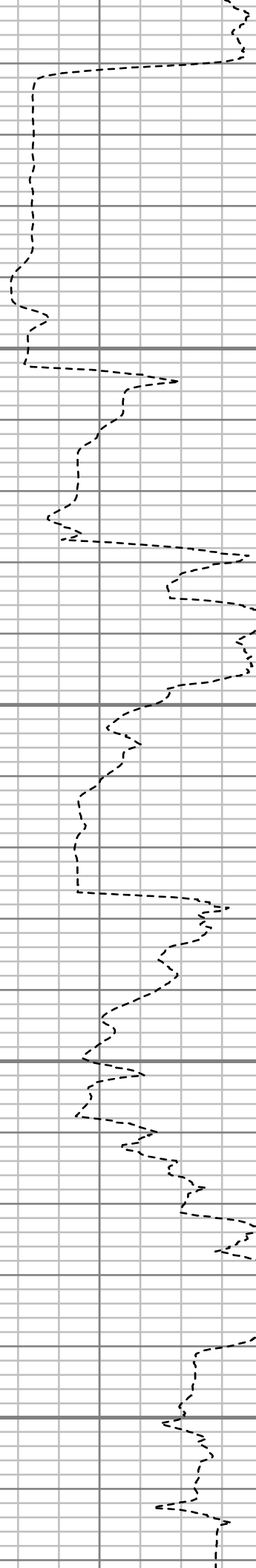


10500

10550

10600

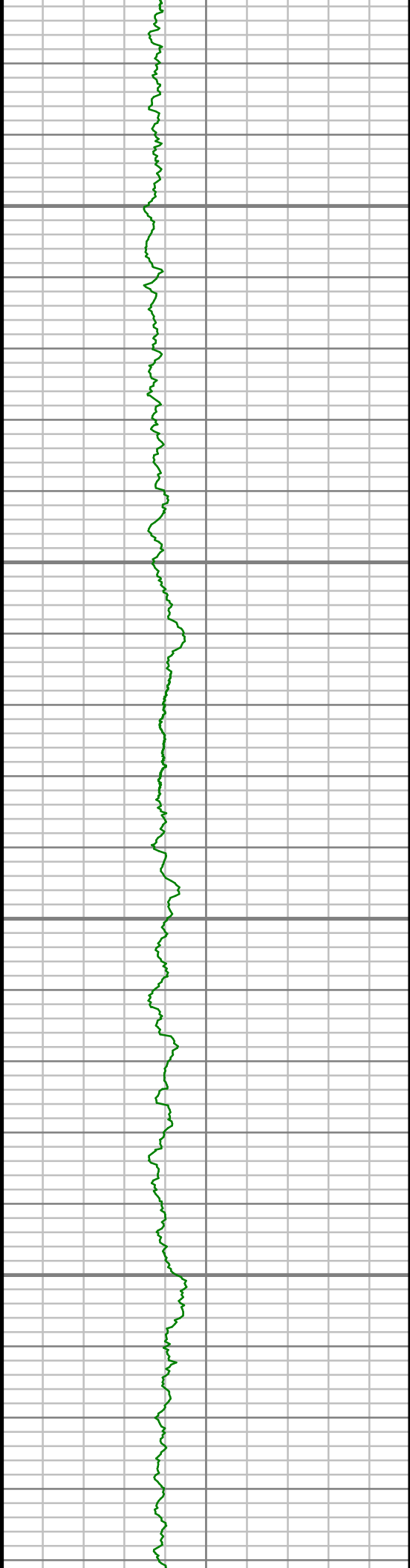
10650



S: 109 MD: 10464.00 ft Inc:  
89.26 deg Az: 1.47 deg TVD:  
7357.88 ft

S: 110 MD: 10558.00 ft Inc:  
88.69 deg Az: 0.88 deg TVD:  
7359.56 ft

S: 111 MD: 10653.00 ft Inc:  
88.72 deg Az: 359.36 deg TVD:  
7361.71 ft

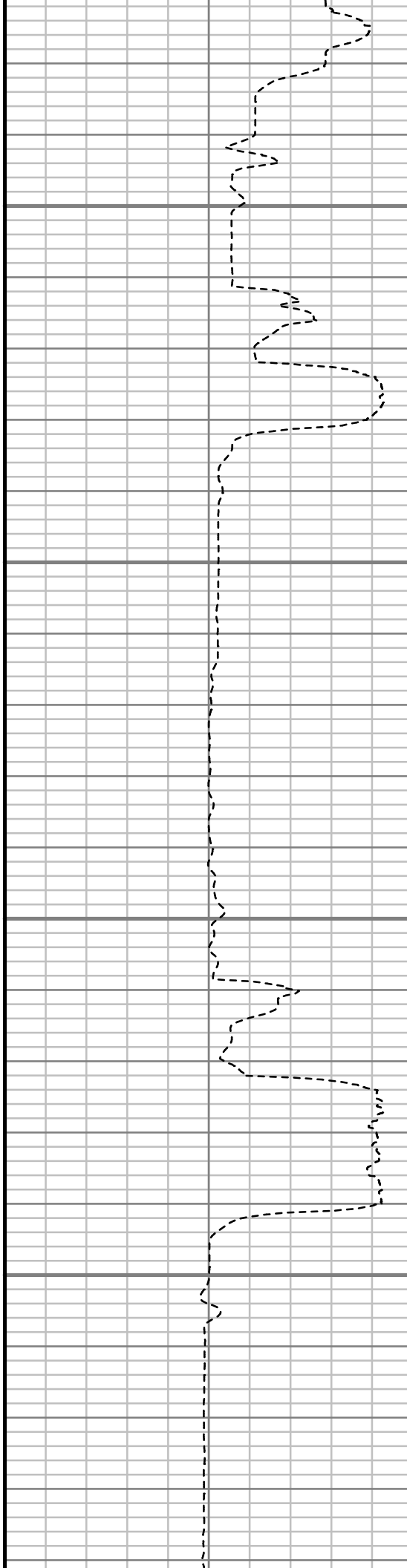


10700

10750

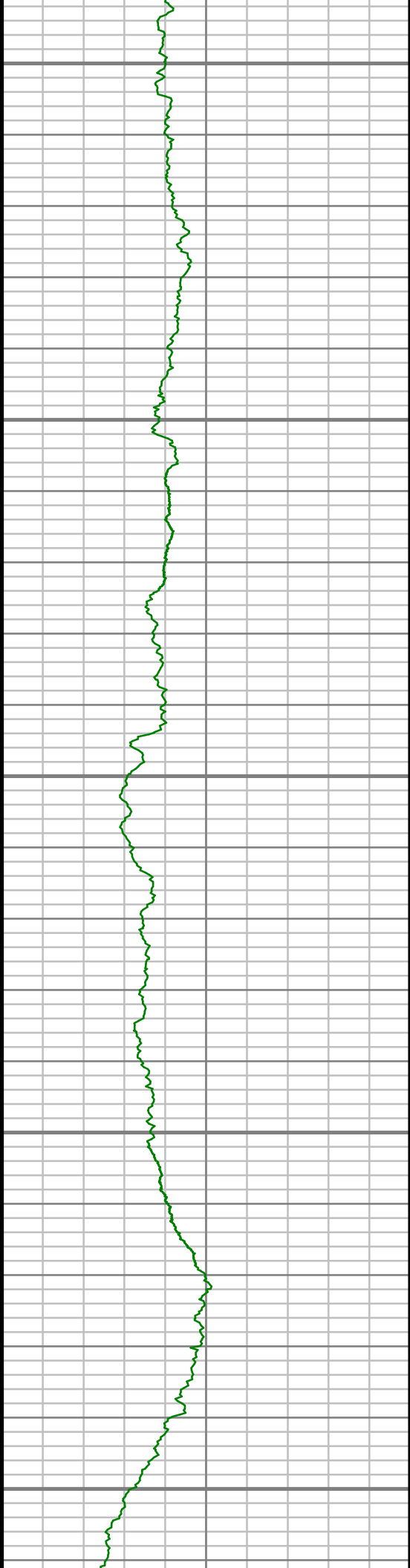
10800

10850



S: 112 MD: 10748.00 ft Inc:  
91.11 deg Az: 0.07 deg TVD:  
7361.85 ft

S: 113 MD: 10843.00 ft Inc:  
90.34 deg Az: 0.07 deg TVD:  
7360.65 ft



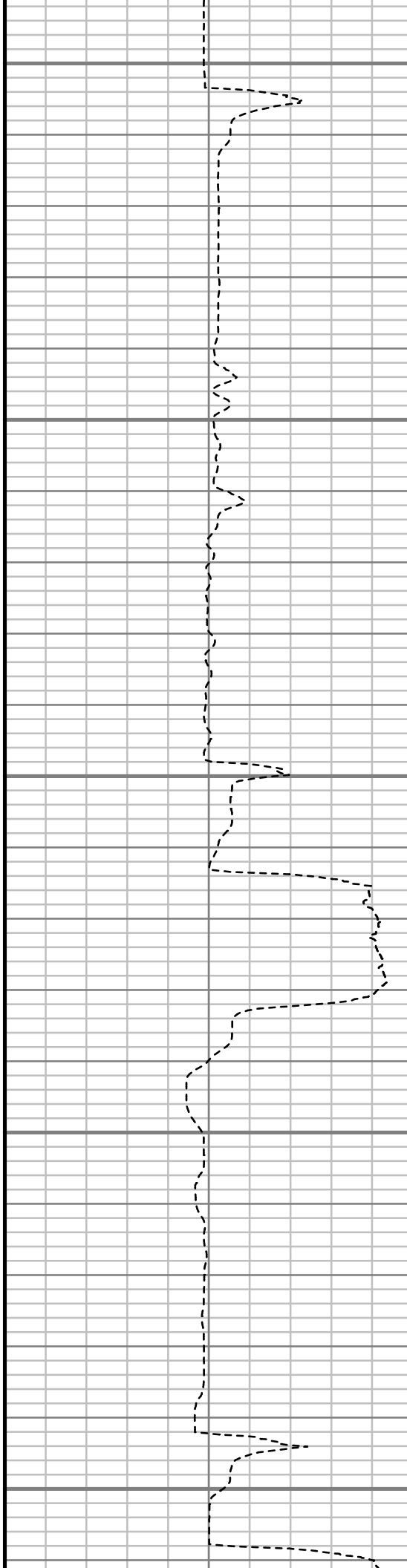
10900

10950

11000

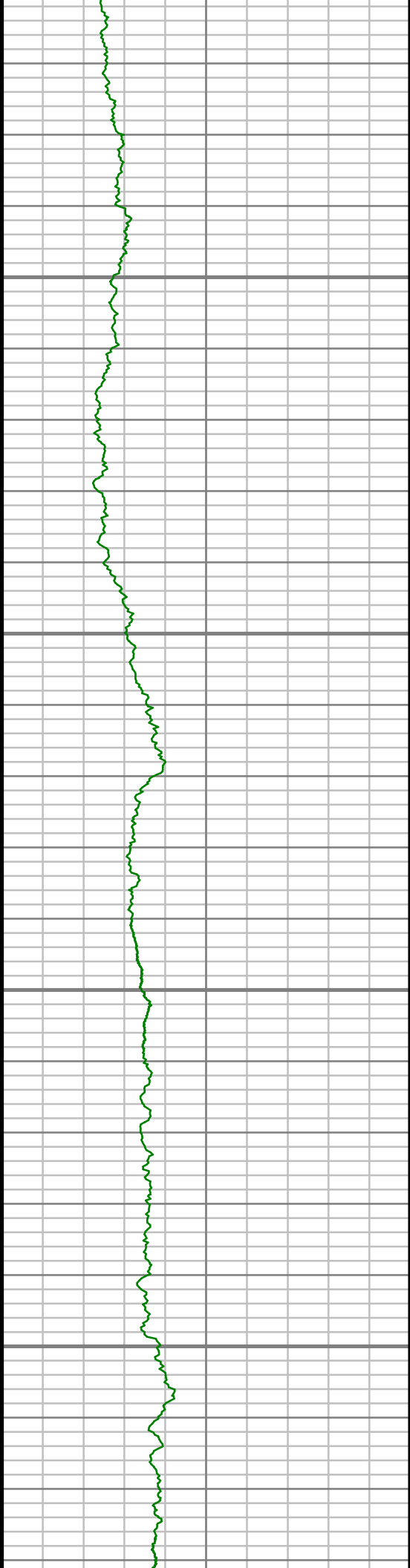
11050

11100



S: 114 MD: 10937.00 ft Inc:  
91.64 deg Az: 359.60 deg TVD:  
7359.02 ft

S: 115 MD: 11031.00 ft Inc:  
91.24 deg Az: 359.67 deg TVD:  
7356.66 ft

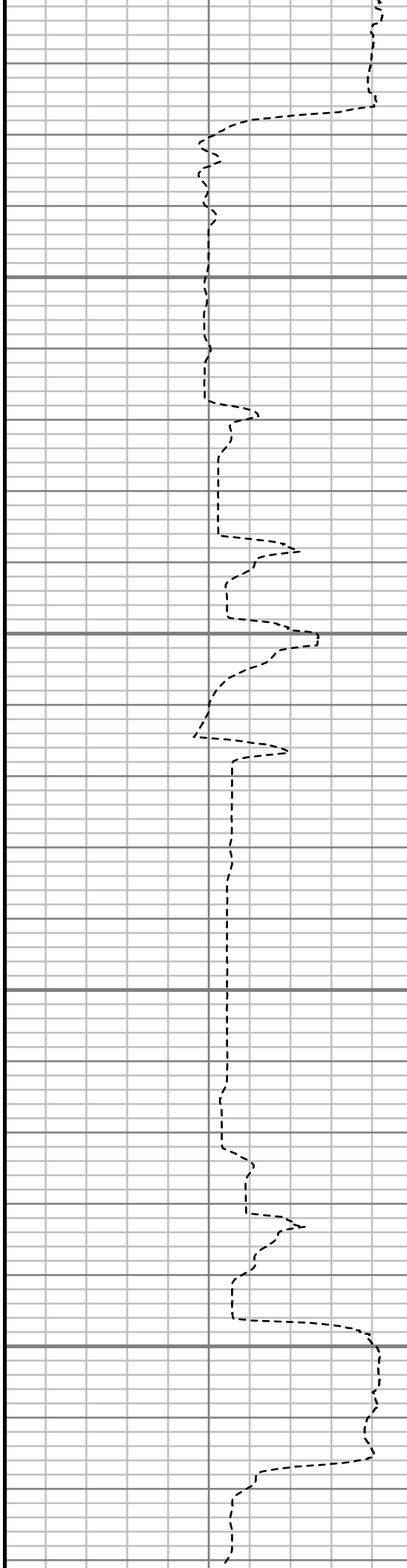


11150

11200

11250

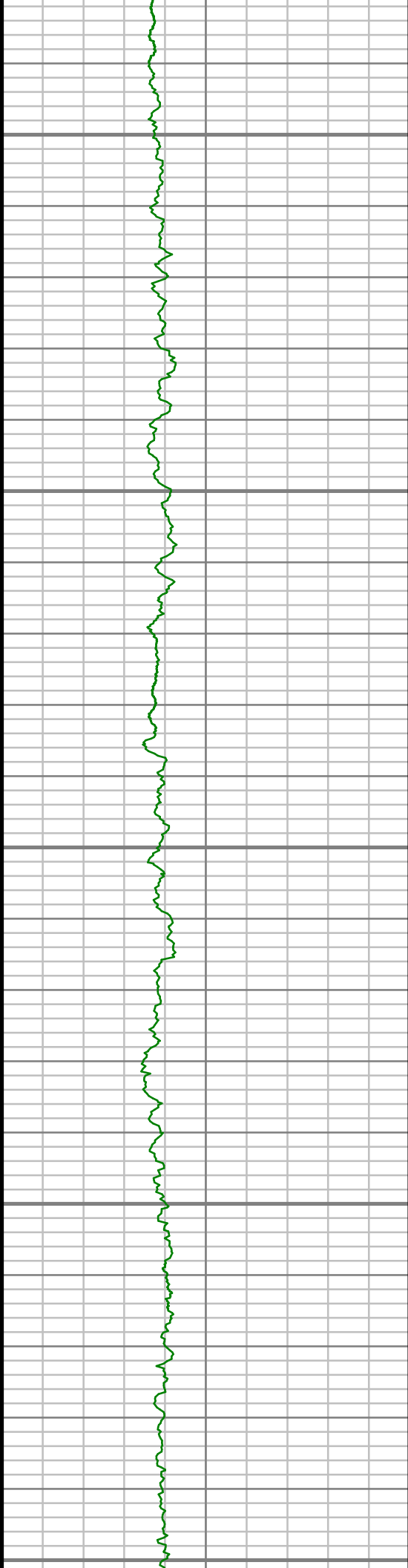
11300



S: 116 MD: 11126.00 ft Inc:  
89.97 deg Az: 358.92 deg TVD:  
7355.66 ft

S: 117 MD: 11220.00 ft Inc:  
91.38 deg Az: 358.23 deg TVD:  
7354.55 ft

S: 118 MD: 11315.00 ft Inc:  
90.70 deg Az: 358.29 deg TVD:  
7352.83 ft



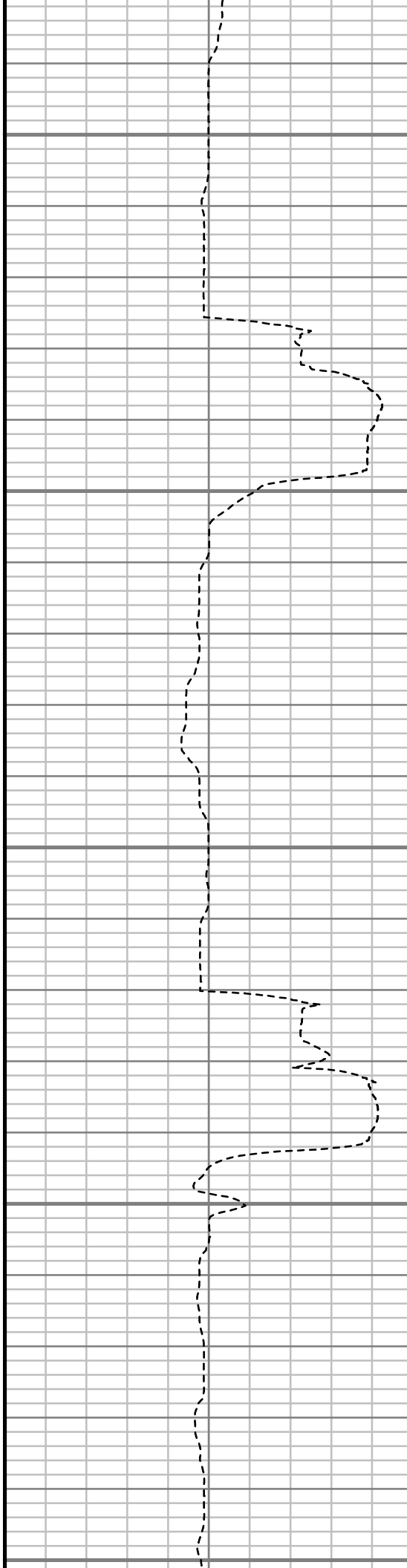
11350

11400

11450

11500

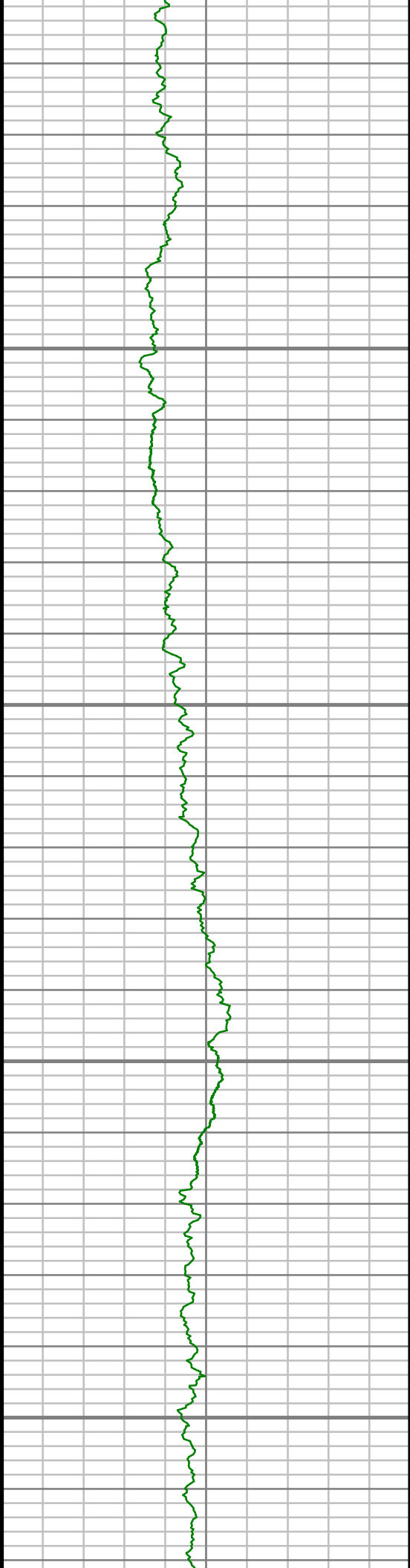
11550



S: 119 MD: 11409.00 ft Inc:  
88.69 deg Az: 357.88 deg TVD:  
7353.32 ft

S: 120 MD: 11503.00 ft Inc:  
89.23 deg Az: 358.73 deg TVD:  
7355.03 ft



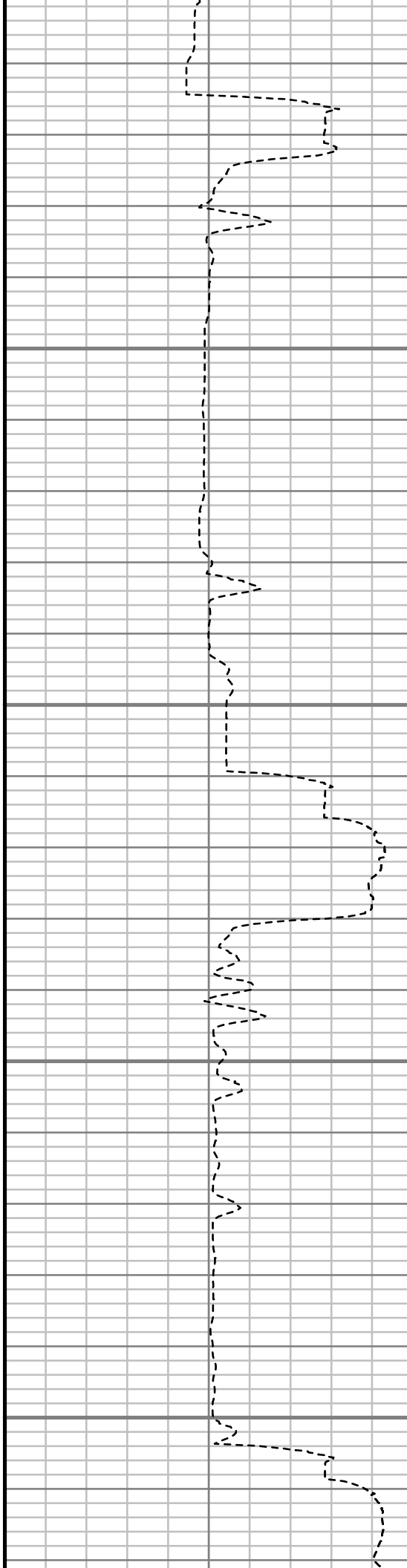


11600

11650

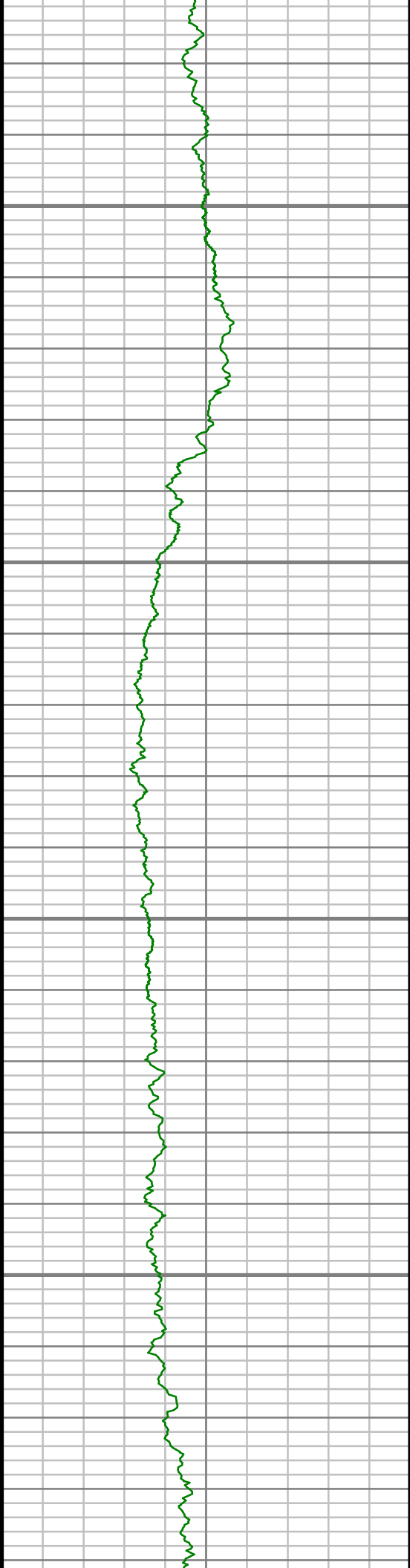
11700

11750



S: 121 MD: 11598.00 ft Inc:  
90.30 deg Az: 357.77 deg TVD:  
7355.42 ft

S: 122 MD: 11693.00 ft Inc:  
90.20 deg Az: 358.26 deg TVD:  
7355.00 ft

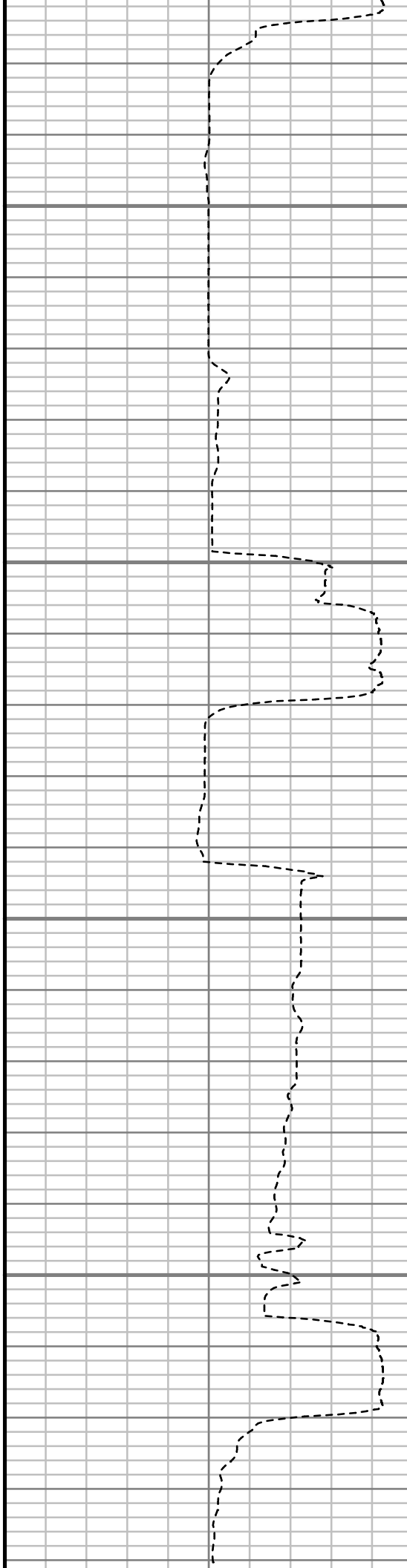


11800

11850

11900

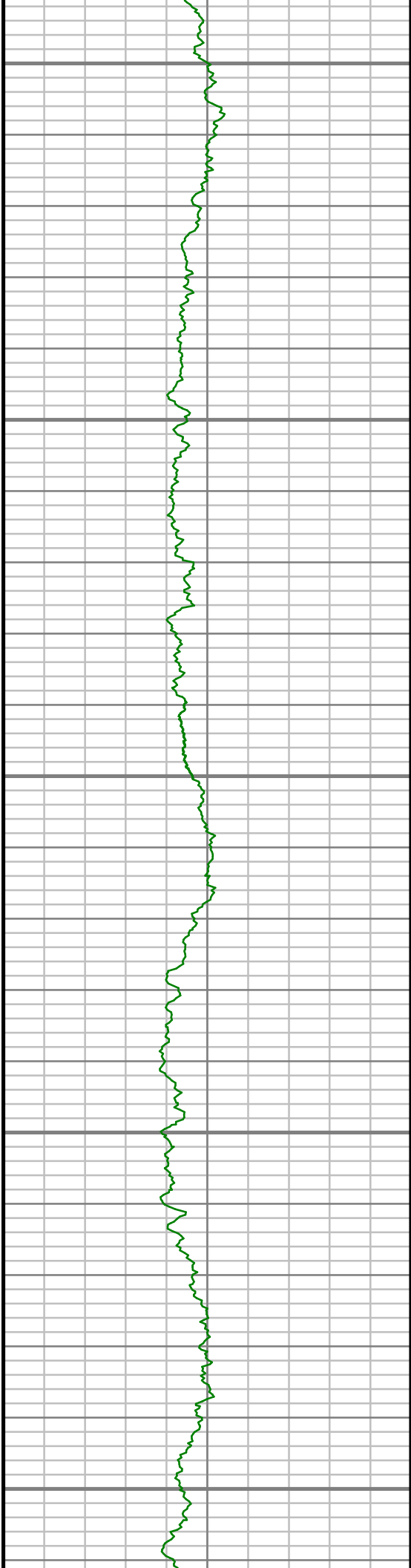
11950



S: 123 MD: 11787.00 ft Inc:  
90.47 deg Az: 359.51 deg TVD:  
7354.45 ft

S: 124 MD: 11881.00 ft Inc:  
89.80 deg Az: 358.72 deg TVD:  
7354.23 ft

S: 125 MD: 11975.00 ft Inc:  
89.13 deg Az: 0.59 deg TVD:  
7355.11 ft



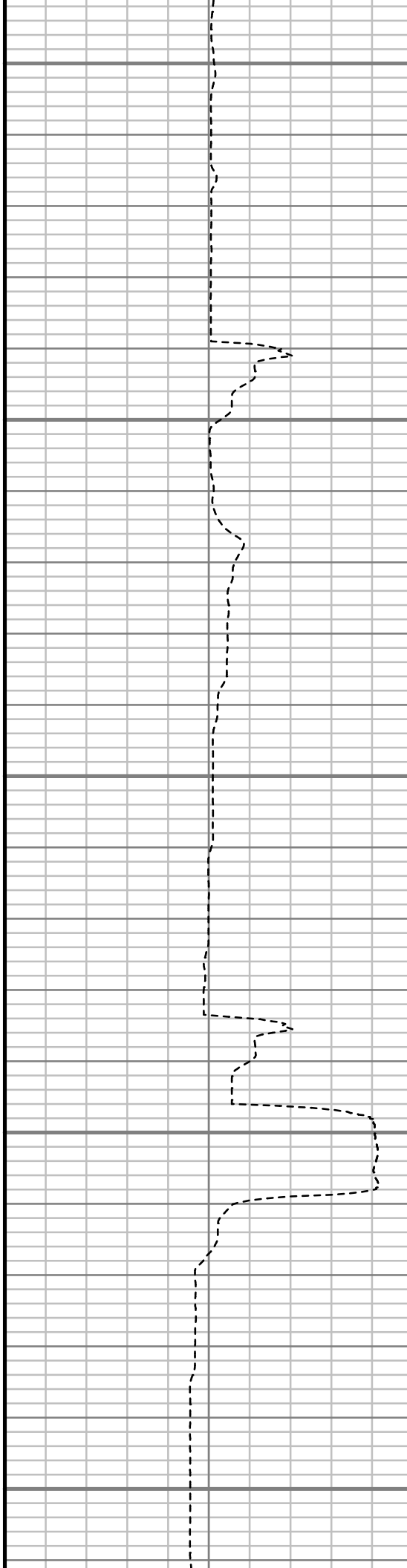
12000

12050

12100

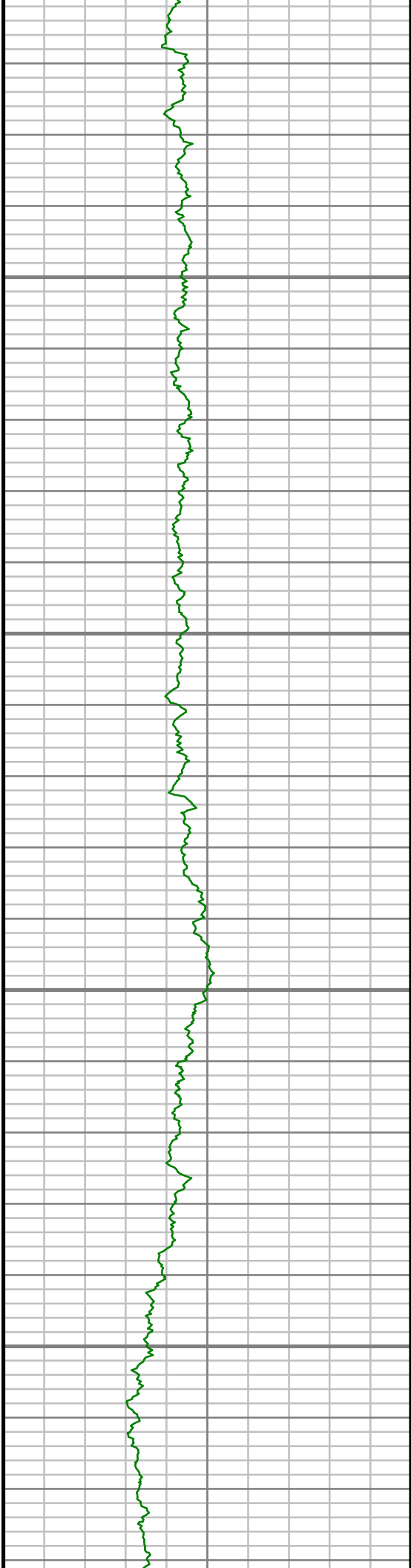
12150

12200



S: 126 MD: 12070.00 ft Inc:  
89.23 deg Az: 0.20 deg TVD:  
7356.48 ft

S: 127 MD: 12164.00 ft Inc:  
90.67 deg Az: 0.27 deg TVD:  
7356.56 ft

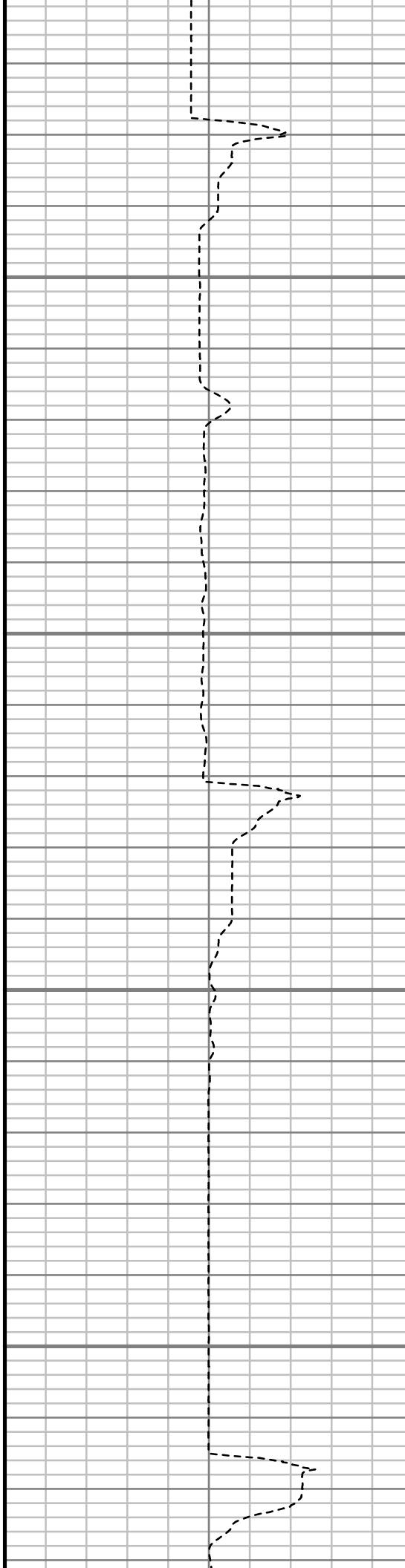


12250

12300

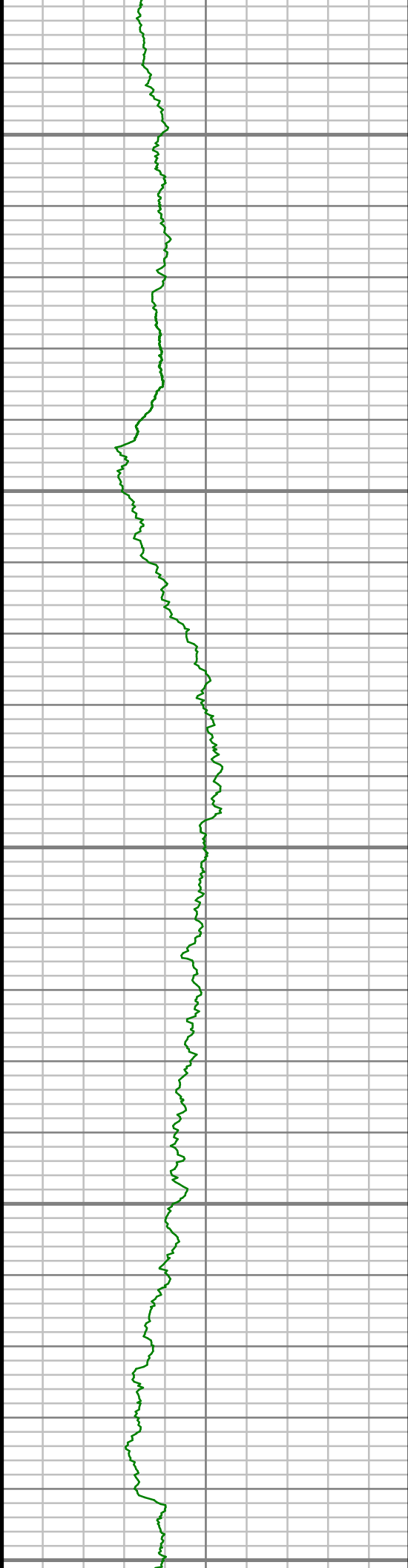
12350

12400



S: 128 MD: 12259.00 ft Inc:  
90.44 deg Az: 0.29 deg TVD:  
7355.64 ft

S: 129 MD: 12353.00 ft Inc:  
90.81 deg Az: 359.85 deg TVD:  
7354.62 ft



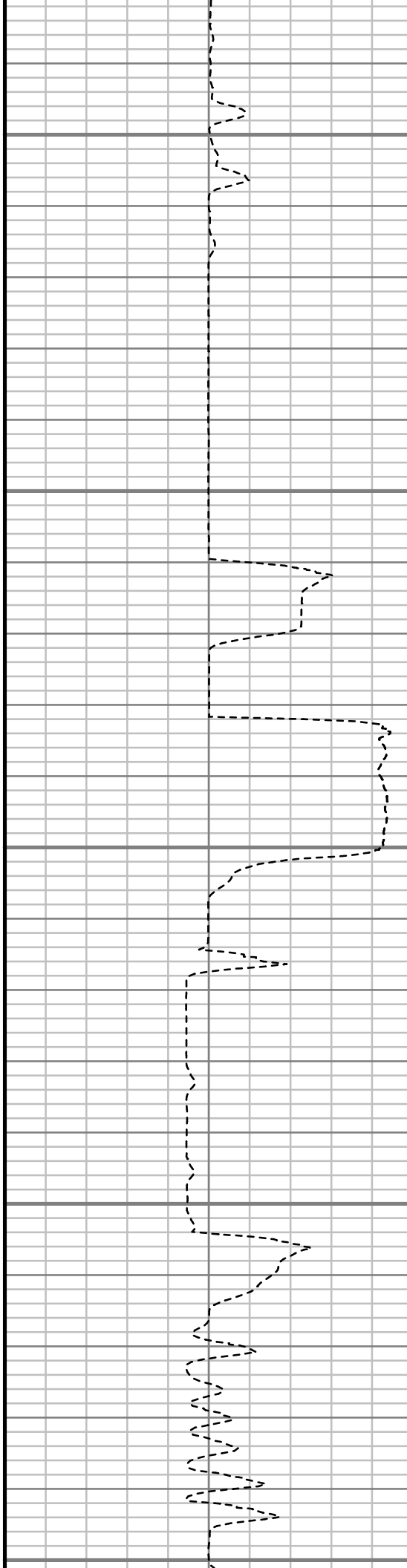
12450

12500

12550

12600

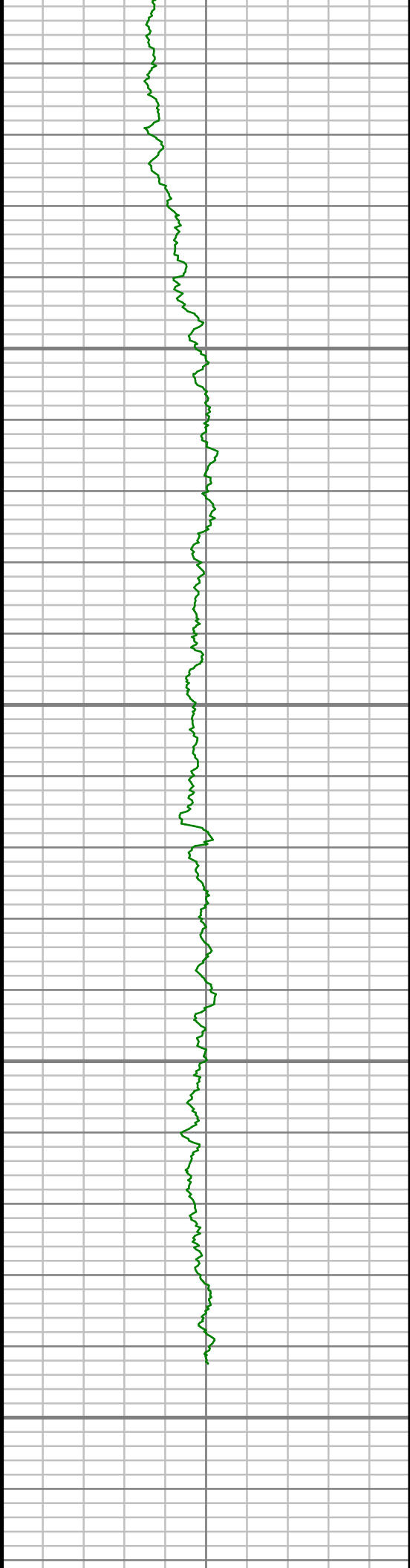
12650



S: 130 MD: 12448.00 ft Inc:  
91.51 deg Az: 359.40 deg TVD:  
7352.70 ft

S: 131 MD: 12542.00 ft Inc:  
90.24 deg Az: 359.06 deg TVD:  
7351.27 ft

S: 132 MD: 12637.00 ft Inc:  
89.87 deg Az: 358.80 deg TVD:  
7351.19 ft



12700

12750

12800

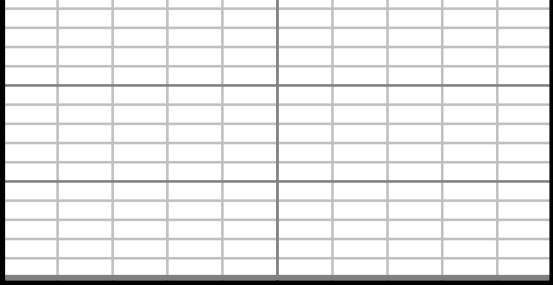
12850



S: 133 MD: 12732.00 ft Inc:  
90.57 deg Az: 358.12 deg TVD:  
7350.82 ft

S: 134 MD: 12826.00 ft Inc:  
90.47 deg Az: 358.51 deg TVD:  
7349.97 ft

S: 135 MD: 12836.00 ft Inc:  
90.37 deg Az: 358.53 deg TVD:  
7349.90 ft

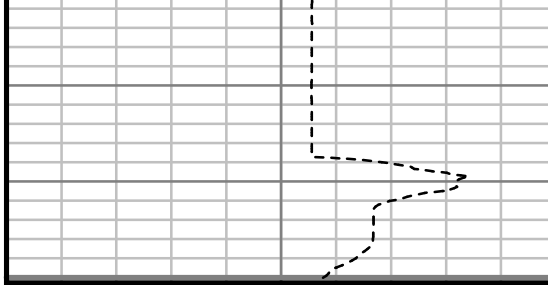


Gamma Ray (GR)

0 Unit = aapi 150

12900

MEASURED DEPTH  
1:240 (ft)



Rate of Penetration (ROP)

450 Unit = ft/hr 0

Comments



## MWD Survey Report

Well Location	SPRAGUE
Well Name	SPRAGUE 3I-9H-N267 PRODUCTION
Survey Date	4/17/2015
Latitude	40°8'49.236"N
Longitude	104°53'54.024"W
Btotal	52457 nT
Dip	66.68 deg
Magnetic Declination	8.51 deg
North Reference	True North
Grid Correction	None
Depth Reference	RKB (28.50 ft)
Calculation Method	Minimum Curvature
Section (VS) Ref	0.00N (ft), 0.00E (ft), 0.00Azim (deg)
Operator(s)	J. GREGORY, J. PARISEE, M. SMITH

### Well Notes

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	"/100ft
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid
347.00	1.96	111.14	346.93	-2.14	-2.14	5.54	111.14	5.93	0.56
441.00	3.93	111.21	440.80	-3.89	-3.89	10.04	111.16	10.76	2.10
534.00	6.39	110.04	533.42	-6.81	-6.81	17.87	110.87	19.13	2.65
628.00	7.92	118.72	626.69	-11.72	-11.72	28.47	112.37	30.78	1.99
721.00	8.88	125.15	718.69	-18.93	-18.93	39.96	115.35	44.21	1.44
819.00	10.73	125.52	815.26	-28.58	-28.58	53.57	118.09	60.72	1.89
908.00	13.54	124.68	902.26	-39.33	-39.33	68.88	119.73	79.32	3.17
1002.00	14.09	118.79	993.54	-51.10	-51.10	87.96	120.15	101.73	1.61
1096.00	16.03	119.19	1084.31	-62.94	-62.94	109.32	119.93	126.15	2.07
1189.00	16.09	115.22	1173.68	-74.69	-74.69	132.19	119.47	151.83	1.18
1283.00	16.20	116.13	1263.98	-86.02	-86.02	155.74	118.91	177.92	0.30
1376.00	16.31	113.33	1353.26	-96.91	-96.91	179.39	118.38	203.89	0.85
1470.00	16.82	111.36	1443.36	-107.09	-107.09	204.18	117.68	230.56	0.80
1563.00	16.23	110.30	1532.51	-116.50	-116.50	228.90	116.97	256.84	0.71
1657.00	15.45	107.51	1622.94	-124.83	-124.83	253.17	116.25	282.27	1.16
1750.00	15.60	107.88	1712.55	-132.39	-132.39	276.88	115.56	306.90	0.19
1844.00	16.28	109.74	1802.94	-140.72	-140.72	301.31	115.03	332.55	0.91
1937.00	15.87	108.27	1892.30	-149.11	-149.11	325.65	114.60	358.16	0.62



MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
2032.00	16.89	108.41	1983.45	-157.54	-157.54	351.08	114.17	384.80	1.08
2126.00	16.12	105.83	2073.57	-165.41	-165.41	376.59	113.71	411.32	1.13
2221.00	16.12	105.64	2164.84	-172.57	-172.57	401.98	113.23	437.45	0.06
2316.00	16.01	108.75	2256.13	-180.34	-180.34	427.09	112.89	463.60	0.91
2410.00	16.43	108.96	2346.39	-188.82	-188.82	451.94	112.68	489.80	0.45
2505.00	15.76	110.75	2437.66	-197.76	-197.76	476.70	112.53	516.10	0.88
2601.00	14.90	113.50	2530.25	-207.30	-207.30	500.22	112.51	541.47	1.17
2695.00	14.60	116.11	2621.15	-217.33	-217.33	521.94	112.61	565.38	0.78
2789.00	14.76	111.87	2712.09	-227.01	-227.01	543.69	112.66	589.18	1.16
2884.00	16.36	110.00	2803.60	-236.09	-236.09	567.49	112.59	614.64	1.77
2979.00	18.02	111.53	2894.36	-246.06	-246.06	593.74	112.51	642.70	1.81
3073.00	16.82	108.72	2984.05	-255.76	-255.76	620.14	112.41	670.81	1.56
3168.00	16.91	108.24	3074.96	-264.50	-264.50	646.28	112.26	698.31	0.18
3262.00	16.82	110.04	3164.92	-273.44	-273.44	672.04	112.14	725.54	0.56
3357.00	15.66	108.70	3256.12	-282.26	-282.26	697.10	112.04	752.08	1.28
3451.00	14.87	108.89	3346.81	-290.23	-290.23	720.54	111.94	776.79	0.84
3547.00	13.87	109.47	3439.80	-298.05	-298.05	743.04	111.86	800.59	1.05
3641.00	13.78	111.33	3531.08	-305.88	-305.88	764.09	111.82	823.04	0.48

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
3737.00	13.68	110.43	3624.34	-314.00	-314.00	785.38	111.79	845.82	0.25
3831.00	14.37	111.55	3715.53	-322.17	-322.17	806.64	111.77	868.59	0.79
3926.00	15.69	110.12	3807.28	-330.92	-330.92	829.66	111.74	893.22	1.44
4020.00	16.77	112.69	3897.54	-340.52	-340.52	854.11	111.74	919.49	1.38
4115.00	15.24	113.37	3988.85	-350.76	-350.76	878.22	111.77	945.68	1.62
4209.00	15.65	111.46	4079.46	-360.30	-360.30	901.36	111.79	970.71	0.69
4304.00	16.48	111.48	4170.75	-369.92	-369.92	925.82	111.78	996.99	0.88
4398.00	15.60	110.84	4261.09	-379.30	-379.30	950.04	111.76	1022.96	0.95
4493.00	15.30	112.90	4352.65	-388.72	-388.72	973.53	111.77	1048.27	0.66
4587.00	14.24	109.26	4443.54	-397.36	-397.36	995.87	111.75	1072.22	1.50
4682.00	15.11	110.13	4535.45	-405.48	-405.48	1018.53	111.71	1096.28	0.94
4776.00	17.25	114.77	4625.72	-415.54	-415.54	1042.70	111.73	1122.45	2.66
4871.00	17.13	113.69	4716.48	-427.06	-427.06	1068.30	111.79	1150.49	0.36
4965.00	15.41	112.18	4806.71	-437.33	-437.33	1092.53	111.82	1176.82	1.88
5060.00	13.64	111.57	4898.67	-446.22	-446.22	1114.64	111.82	1200.64	1.87
5154.00	14.78	112.46	4989.80	-454.87	-454.87	1136.03	111.82	1223.71	1.24
5249.00	17.04	113.51	5081.15	-465.05	-465.05	1160.00	111.85	1249.75	2.39
5343.00	15.98	113.79	5171.27	-475.77	-475.77	1184.47	111.88	1276.45	1.12

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
5438.00	14.65	112.13	5262.90	-485.57	-485.57	1207.57	111.91	1301.53	1.48
5533.00	12.14	109.65	5355.31	-493.45	-493.45	1228.10	111.89	1323.53	2.71
5627.00	10.53	107.14	5447.47	-499.31	-499.31	1245.62	111.84	1341.97	1.79
5722.00	9.23	103.85	5541.06	-503.69	-503.69	1261.32	111.77	1358.17	1.49
5816.00	7.98	109.56	5634.00	-507.68	-507.68	1274.78	111.71	1372.15	1.61
5911.00	6.73	118.59	5728.22	-512.55	-512.55	1285.88	111.73	1384.27	1.78
6006.00	5.33	118.65	5822.69	-517.33	-517.33	1294.65	111.78	1394.18	1.47
6100.00	4.75	105.64	5916.33	-520.47	-520.47	1302.23	111.79	1402.39	1.36
6195.00	2.87	102.66	6011.12	-522.06	-522.06	1308.34	111.75	1408.65	1.99
6289.00	0.23	254.54	6105.08	-522.62	-522.62	1310.46	111.74	1410.83	3.27
6384.00	0.40	349.56	6200.08	-522.34	-522.34	1310.22	111.74	1410.50	0.50
6478.00	0.48	357.05	6294.08	-521.62	-521.62	1310.14	111.71	1410.16	0.10
6573.00	0.59	358.61	6389.07	-520.74	-520.74	1310.11	111.68	1409.80	0.11
6667.00	0.86	316.65	6483.07	-519.75	-519.75	1309.61	111.65	1408.98	0.61
6761.00	0.63	329.15	6577.06	-518.79	-518.79	1308.87	111.62	1407.93	0.29
6856.00	0.90	310.51	6672.05	-517.86	-517.86	1308.03	111.60	1406.81	0.38
6950.00	2.53	342.92	6766.01	-515.40	-515.40	1306.86	111.52	1404.82	1.95
7045.00	13.39	8.54	6859.97	-502.48	-502.48	1307.88	111.02	1401.08	11.75

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
7139.00	17.74	3.69	6950.50	-477.41	-477.41	1310.42	110.02	1394.67	4.83
7233.00	26.54	355.20	7037.51	-442.11	-442.11	1309.58	108.65	1382.19	9.93
7328.00	37.29	358.62	7118.03	-392.04	-392.04	1307.10	106.70	1364.63	11.47
7423.00	44.65	0.27	7189.72	-329.80	-329.80	1306.56	104.17	1347.55	7.83
7517.00	57.09	354.99	7248.95	-257.15	-257.15	1303.26	101.16	1328.38	13.93
7612.00	69.34	354.66	7291.68	-172.85	-172.85	1295.61	97.60	1307.08	12.90
7706.00	73.60	358.58	7321.55	-83.92	-83.92	1290.39	93.72	1293.11	6.01
7737.00	75.37	359.37	7329.84	-54.05	-54.05	1289.85	92.40	1290.98	6.23
7817.00	82.97	0.48	7344.86	24.46	24.46	1289.76	88.91	1289.99	9.59
7911.00	91.04	0.63	7349.77	118.25	118.25	1290.66	84.77	1296.06	8.59
8006.00	90.81	0.13	7348.24	213.24	213.24	1291.28	80.62	1308.77	0.58
8100.00	90.47	0.87	7347.19	307.23	307.23	1292.10	76.62	1328.12	0.87
8195.00	89.83	0.10	7346.94	402.22	402.22	1292.90	72.72	1354.02	1.05
8289.00	90.27	1.03	7346.86	496.22	496.22	1293.82	69.02	1385.71	1.10
8383.00	89.40	359.85	7347.13	590.21	590.21	1294.54	65.49	1422.74	1.56
8478.00	90.54	359.53	7347.19	685.21	685.21	1294.02	62.10	1464.24	1.25
8573.00	89.70	359.48	7346.99	780.20	780.20	1293.21	58.90	1510.33	0.88
8667.00	88.29	359.82	7348.65	874.19	874.19	1292.63	55.93	1560.48	1.54

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
8762.00	87.21	359.49	7352.37	969.11	969.11	1292.06	53.13	1615.11	1.18
8856.00	88.29	358.75	7356.07	1063.02	1063.02	1290.61	50.52	1672.03	1.39
8951.00	89.13	357.77	7358.21	1157.95	1157.95	1287.72	48.04	1731.79	1.35
9045.00	89.70	356.95	7359.18	1251.85	1251.85	1283.39	45.71	1792.82	1.07
9140.00	90.98	358.25	7358.62	1346.76	1346.76	1279.40	43.53	1857.59	1.92
9234.00	90.37	359.22	7357.52	1440.73	1440.73	1277.33	41.56	1925.43	1.22
9329.00	90.30	359.54	7356.96	1535.72	1535.72	1276.31	39.73	1996.85	0.34
9423.00	89.02	358.83	7357.51	1629.71	1629.71	1274.97	38.04	2069.18	1.55
9518.00	90.27	359.50	7358.10	1724.69	1724.69	1273.59	36.44	2143.97	1.49
9612.00	90.10	359.54	7357.79	1818.69	1818.69	1272.81	34.99	2219.84	0.18
9707.00	88.22	358.57	7359.19	1913.66	1913.66	1271.25	33.60	2297.43	2.23
9801.00	88.69	357.60	7361.72	2007.57	2007.57	1268.11	32.28	2374.54	1.14
9896.00	90.91	357.62	7362.05	2102.48	2102.48	1264.15	31.02	2453.27	2.34
9990.00	91.31	358.39	7360.24	2196.41	2196.41	1260.88	29.86	2532.59	0.92
10085.00	90.84	359.01	7358.45	2291.37	2291.37	1258.72	28.78	2614.33	0.82
10179.00	90.47	359.73	7357.38	2385.35	2385.35	1257.69	27.80	2696.61	0.86
10274.00	89.53	0.98	7357.38	2480.35	2480.35	1258.27	26.90	2781.25	1.65
10369.00	90.30	1.24	7357.52	2575.33	2575.33	1260.11	26.07	2867.09	0.86

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
10464.00	89.26	1.47	7357.88	2670.30	2670.30	1262.36	25.30	2953.65	1.12
10558.00	88.69	0.88	7359.56	2764.26	2764.26	1264.29	24.58	3039.67	0.88
10653.00	88.72	359.36	7361.71	2859.24	2859.24	1264.50	23.86	3126.37	1.60
10748.00	91.11	0.07	7361.85	2954.23	2954.23	1264.03	23.16	3213.29	2.62
10843.00	90.34	0.07	7360.65	3049.22	3049.22	1264.15	22.52	3300.88	0.81
10937.00	91.64	359.60	7359.02	3143.20	3143.20	1263.88	21.90	3387.79	1.48
11031.00	91.24	359.67	7356.66	3237.17	3237.17	1263.27	21.32	3474.93	0.44
11126.00	89.97	358.92	7355.66	3332.16	3332.16	1262.10	20.74	3563.17	1.56
11220.00	91.38	358.23	7354.55	3426.12	3426.12	1259.77	20.19	3650.38	1.67
11315.00	90.70	358.29	7352.83	3521.06	3521.06	1256.88	19.64	3738.66	0.71
11409.00	88.69	357.88	7353.32	3615.00	3615.00	1253.74	19.13	3826.24	2.18
11503.00	89.23	358.73	7355.03	3708.94	3708.94	1250.96	18.64	3914.22	1.07
11598.00	90.30	357.77	7355.42	3803.89	3803.89	1248.06	18.16	4003.41	1.51
11693.00	90.20	358.26	7355.00	3898.84	3898.84	1244.78	17.71	4092.72	0.53
11787.00	90.47	359.51	7354.45	3992.81	3992.81	1242.95	17.29	4181.81	1.36
11881.00	89.80	358.72	7354.23	4086.80	4086.80	1241.50	16.90	4271.22	1.11
11975.00	89.13	0.59	7355.11	4180.79	4180.79	1240.94	16.53	4361.07	2.12
12070.00	89.23	0.20	7356.48	4275.78	4275.78	1241.60	16.19	4452.40	0.42

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
12164.00	90.67	0.27	7356.56	4369.78	4369.78	1241.99	15.87	4542.85	1.54
12259.00	90.44	0.29	7355.64	4464.77	4464.77	1242.46	15.55	4634.42	0.25
12353.00	90.81	359.85	7354.62	4558.76	4558.76	1242.57	15.25	4725.07	0.62
12448.00	91.51	359.40	7352.70	4653.74	4653.74	1241.94	14.94	4816.61	0.88
12542.00	90.24	359.06	7351.27	4747.72	4747.72	1240.68	14.65	4907.15	1.40
12637.00	89.87	358.80	7351.19	4842.70	4842.70	1238.90	14.35	4998.67	0.47
12732.00	90.57	358.12	7350.82	4937.67	4937.67	1236.35	14.06	5090.10	1.03
12826.00	90.47	358.51	7349.97	5031.62	5031.62	1233.58	13.78	5180.63	0.42
12836.00	90.37	358.53	7349.90	5041.62	5041.62	1233.32	13.75	5190.28	1.03

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

5" = 100' FEET MD