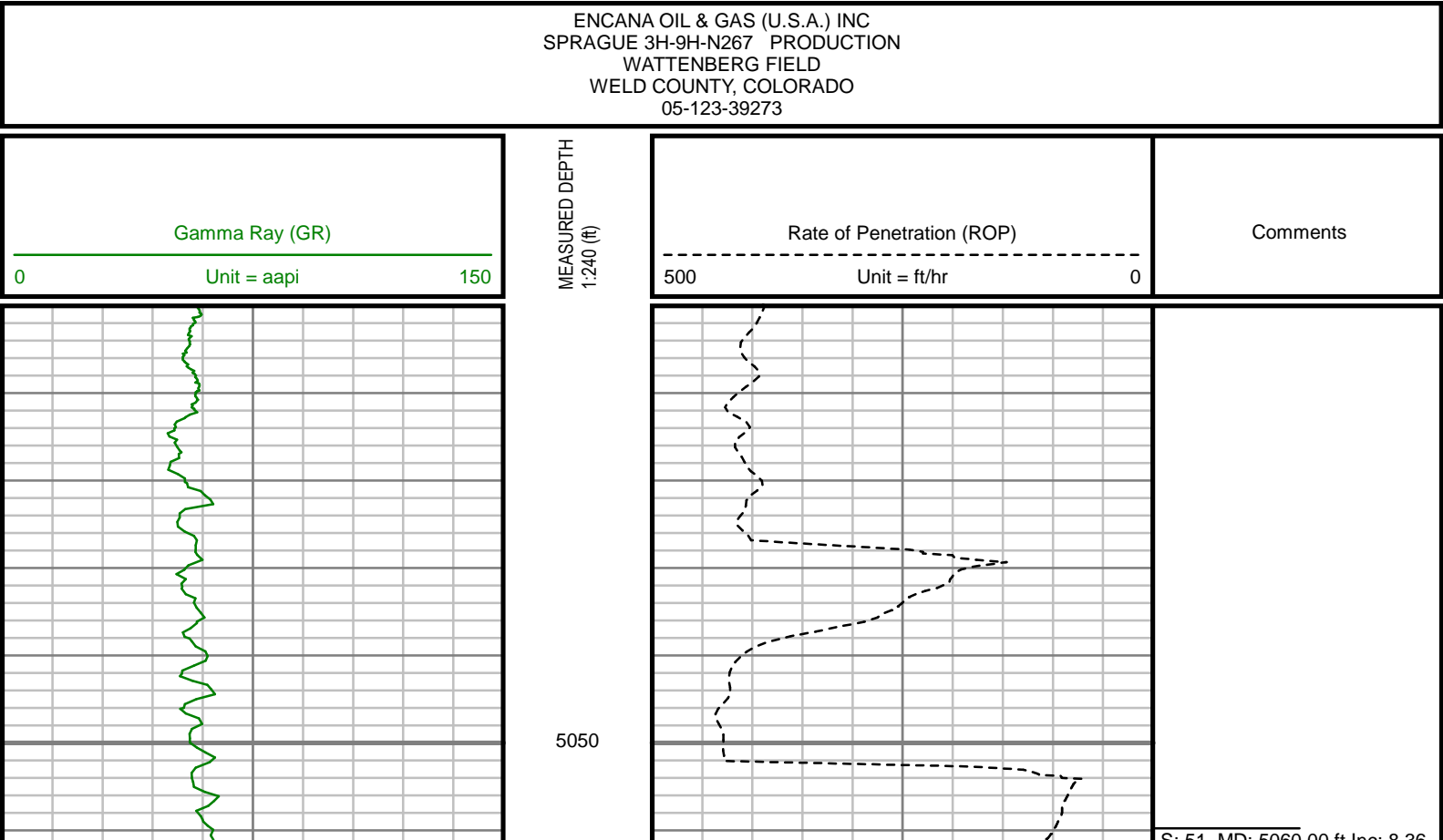
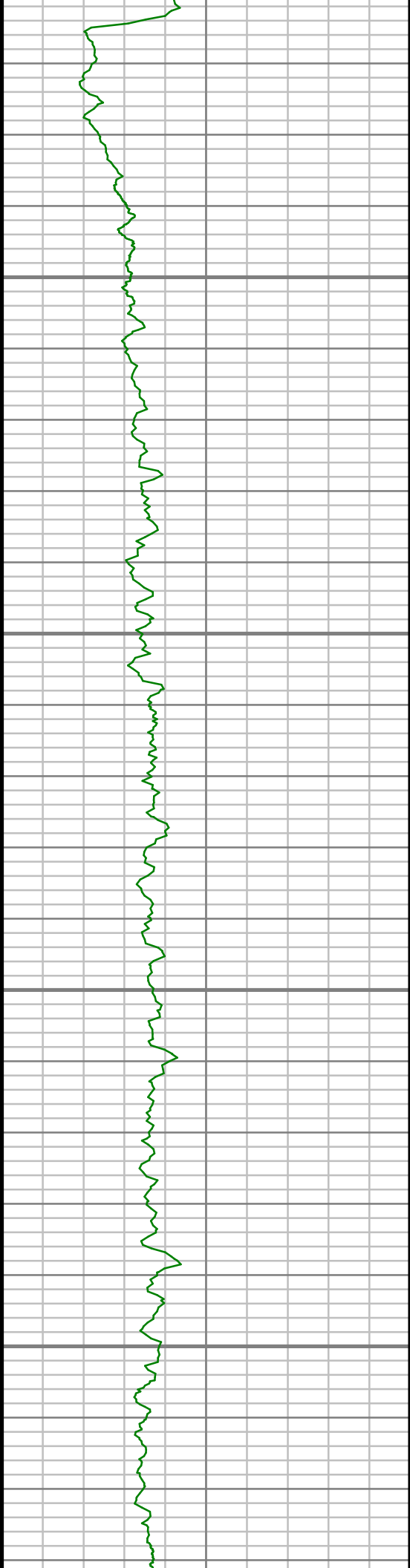


Remarks
ENCANA OIL & GAS (U.S.A.) INC PRODUCTION AFE# 14180729
SCIENTIFIC DRILLING INTERNATIONAL JOB# 270272
ALL REFERENCES IN THE DEPTH TRACK ARE AT BIT DEPTH.
ALL DATA IS MEMORY DATA UNLESS STATED OTHERWISE.
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO GAMMA RAY CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO RATE OF PENETRATION CURVE
RUN #1: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 128-255 / CONT = 517 / MWD EYE = 0661 / GAMMA RAY = 1133
BIT TO SENSOR OFFSETS: SURVEY = 61.19 FT. / GAMMA RAY = 57.13 FT.
RUN #2: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 78-242 / CONT = 300 / MWD EYE = 1072 / GAMMA RAY = 1343
BIT TO SENSOR OFFSETS: SURVEY = 61.56 FT. / GAMMA RAY = 57.50 FT.
RUN #3: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 78-297 / CONT = 517 / MWD EYE = 0882 / GAMMA RAY = 1133
BIT TO SENSOR OFFSETS: SURVEY = 61.56 FT. / GAMMA RAY = 57.50 FT.
MNEMONICS LIST:
GR = GAMMA RAY
ROP = RATE OF PENETRATION

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.



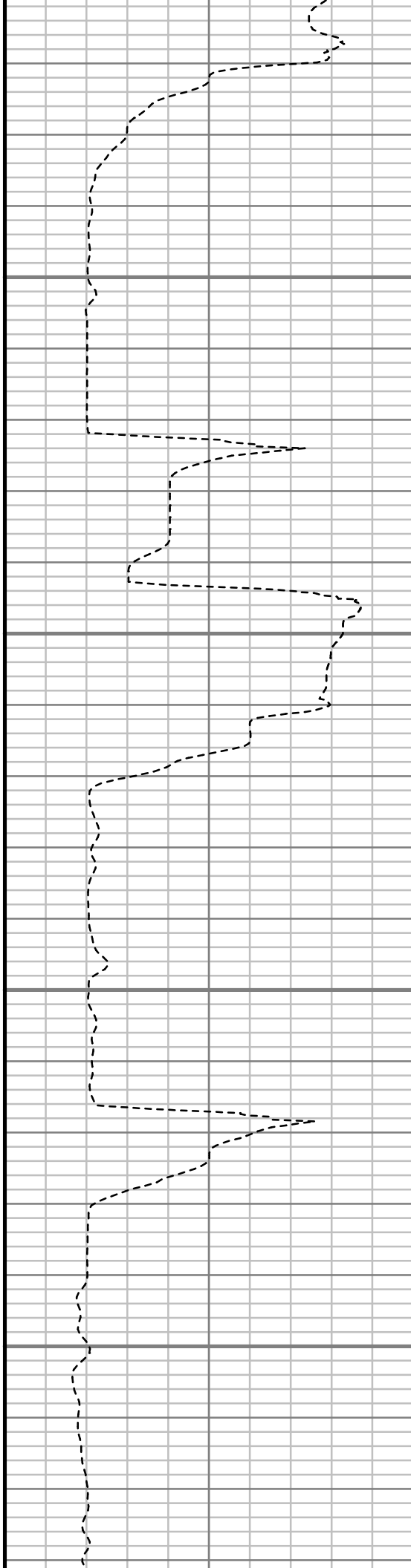


5100

5150

5200

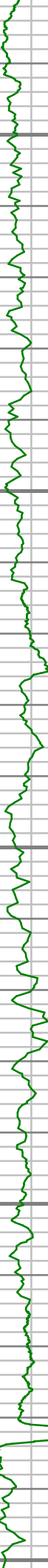
5250



S: 51 MD: 5060.00 ft Inc: 8.56
deg Az: 117.68 deg TVD:
4988.83 ft

S: 52 MD: 5154.00 ft Inc: 10.35
deg Az: 111.47 deg TVD:
5081.58 ft

S: 53 MD: 5249.00 ft Inc: 9.54
deg Az: 109.95 deg TVD:
5175.15 ft



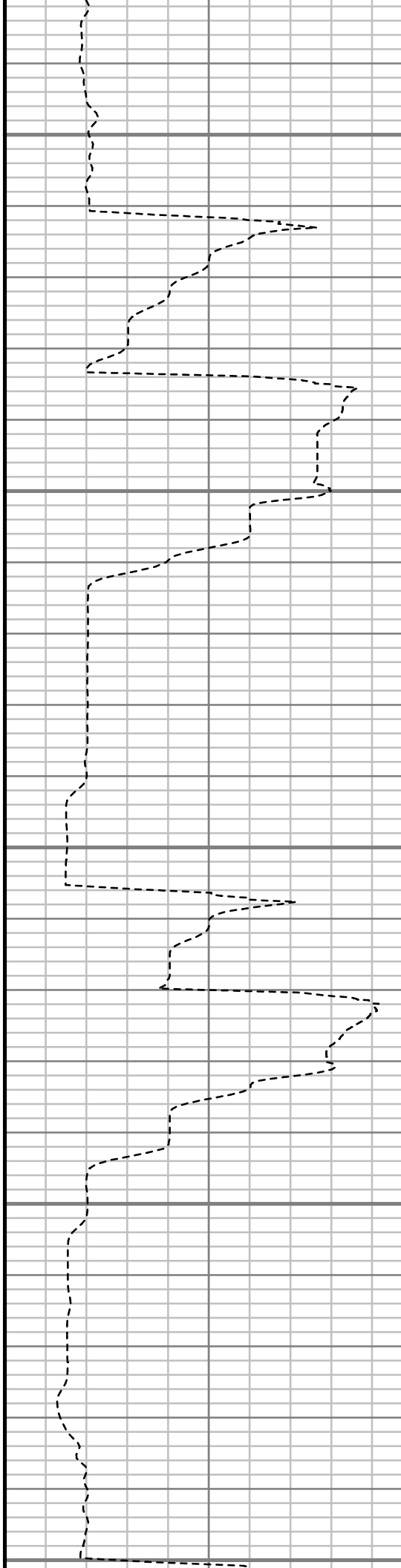
5300

5350

5400

5450

5500



S: 54 MD: 5344.00 ft Inc: 8.84
deg Az: 116.81 deg TVD:
5268.93 ft

S: 55 MD: 5438.00 ft Inc: 7.91
deg Az: 126.66 deg TVD:
5361.93 ft

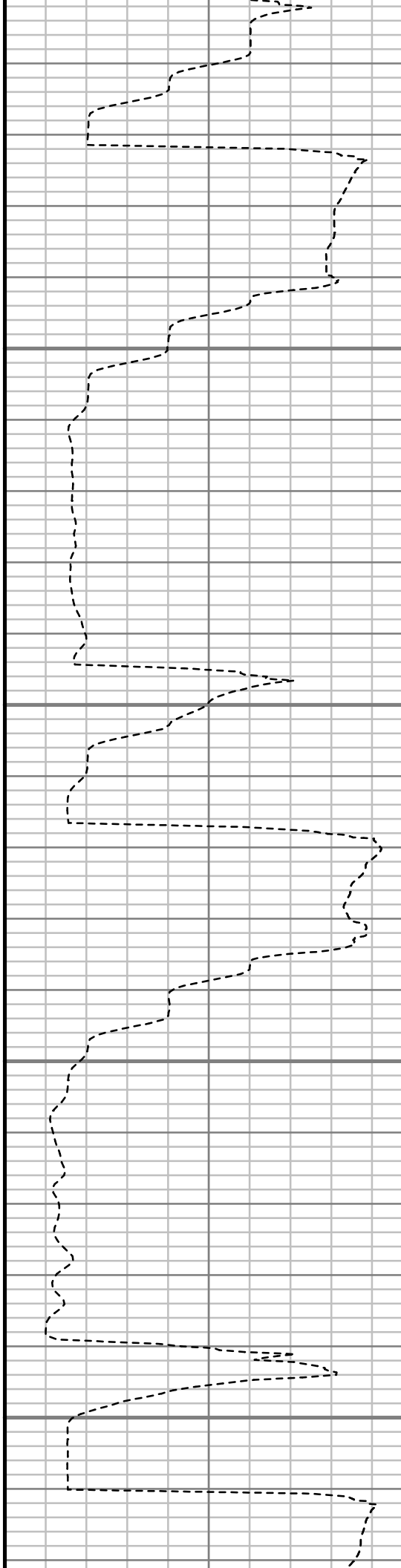


5550

5600

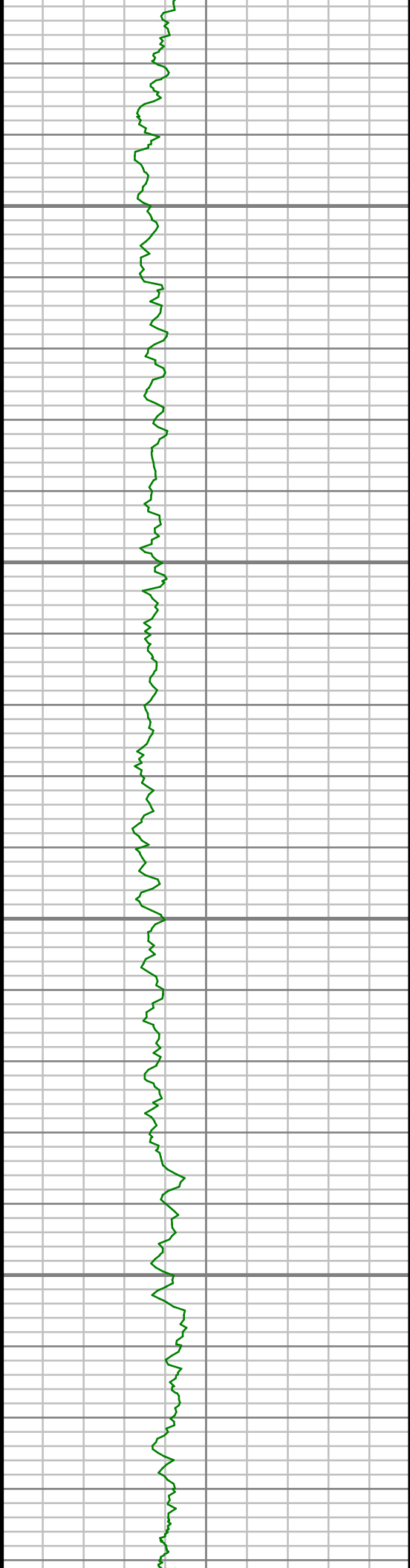
5650

5700



S: 56 MD: 5533.00 ft Inc: 8.44
deg Az: 126.78 deg TVD:
5455.97 ft

S: 57 MD: 5627.00 ft Inc: 8.78
deg Az: 127.66 deg TVD:
5548.91 ft

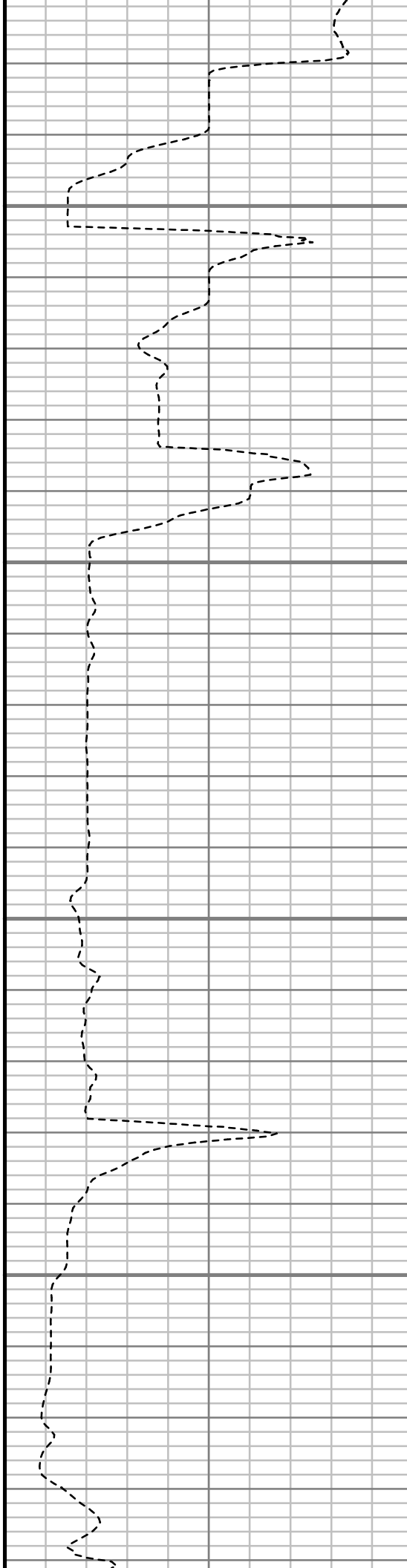


5750

5800

5850

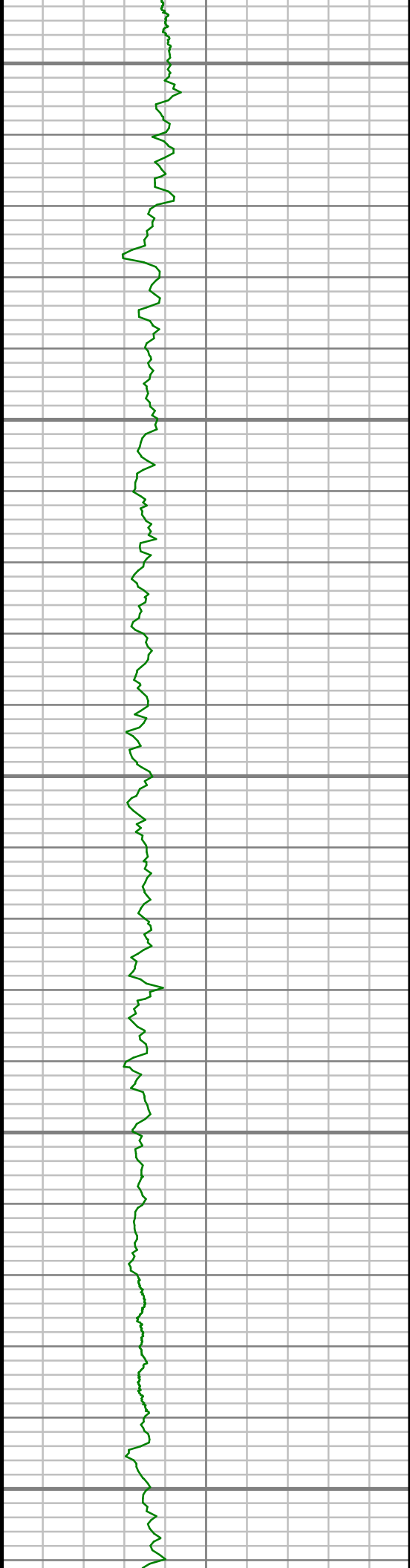
5900



S: 58 MD: 5722.00 ft Inc: 8.89
deg Az: 117.61 deg TVD:
5642.79 ft

S: 59 MD: 5816.00 ft Inc: 7.80
deg Az: 111.64 deg TVD:
5735.79 ft

S: 60 MD: 5912.00 ft Inc: 5.54
deg Az: 106.05 deg TVD:
5831.14 ft



5950

6000

6050

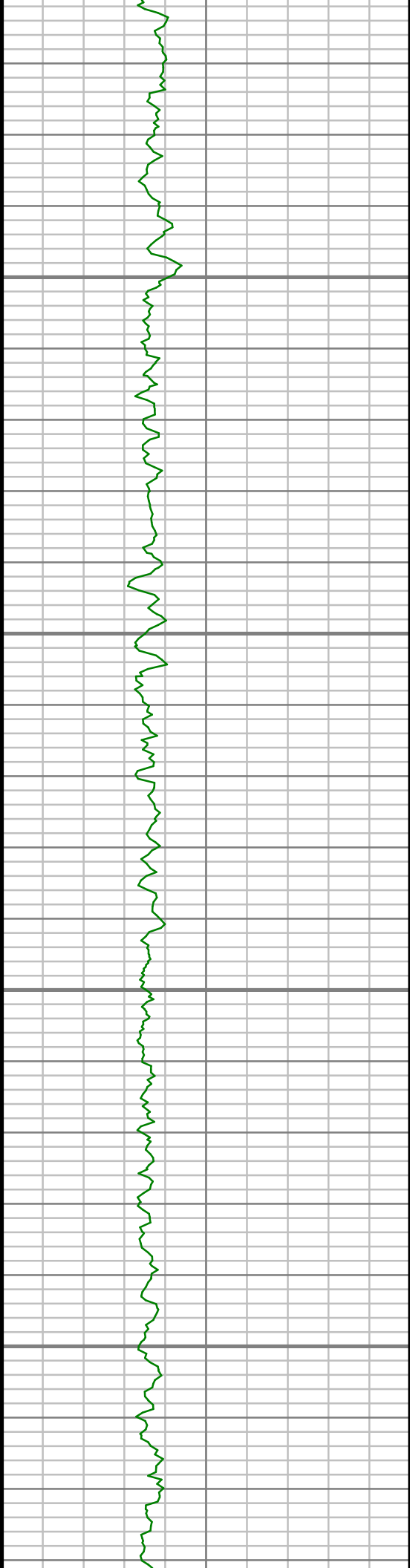
6100

6150



S: 61 MD: 6006.00 ft Inc: 4.46
deg Az: 106.50 deg TVD:
5924.78 ft

S: 62 MD: 6100.00 ft Inc: 3.42
deg Az: 100.45 deg TVD:
6018.56 ft

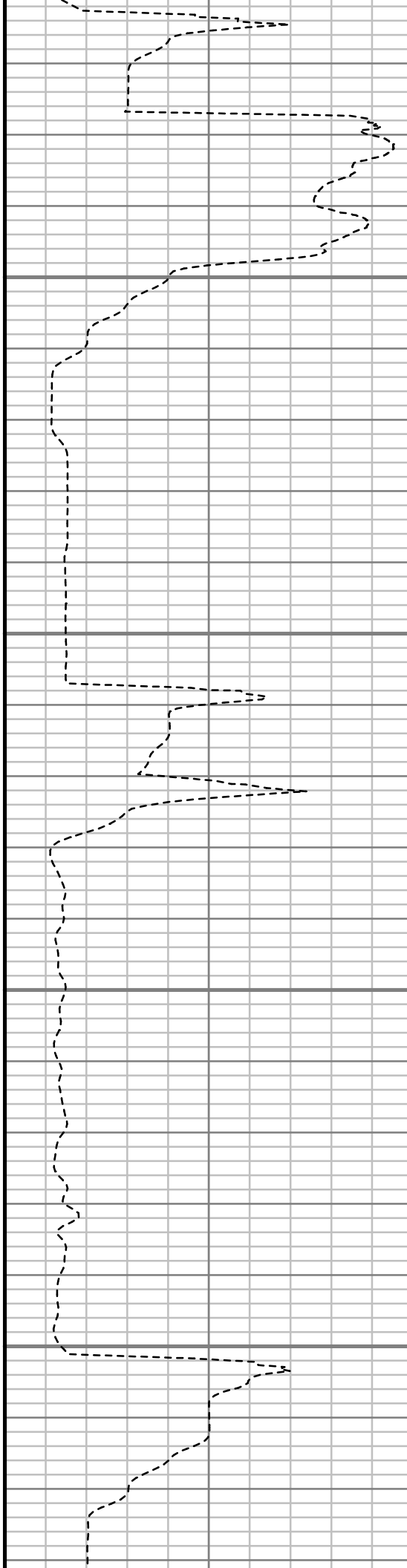


6200

6250

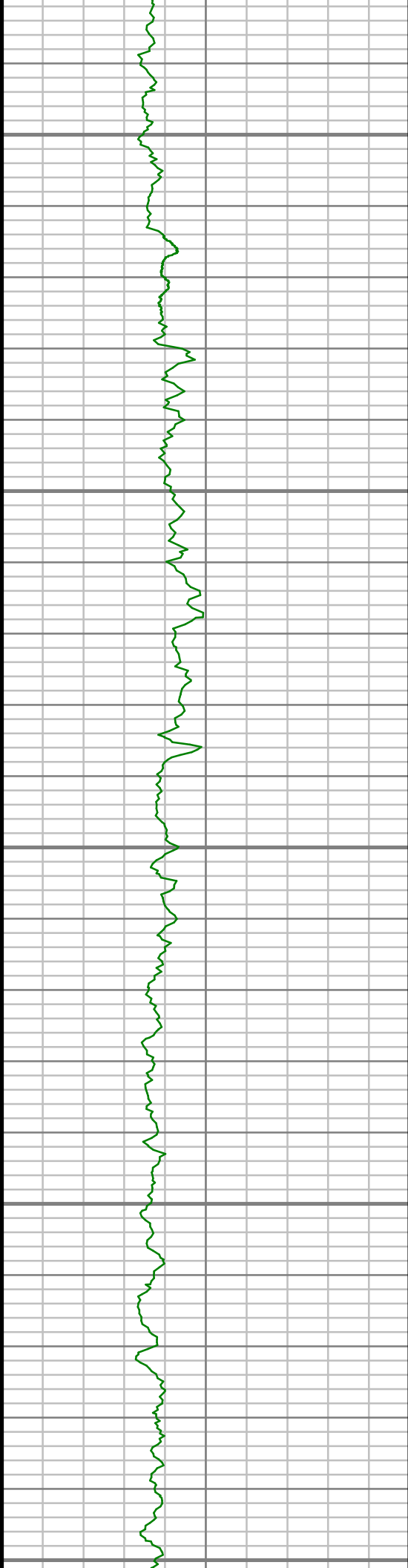
6300

6350



S: 63 MD: 6195.00 ft Inc: 3.33
deg Az: 125.05 deg TVD:
6113.40 ft

S: 64 MD: 6290.00 ft Inc: 2.66
deg Az: 123.13 deg TVD:
6208.27 ft



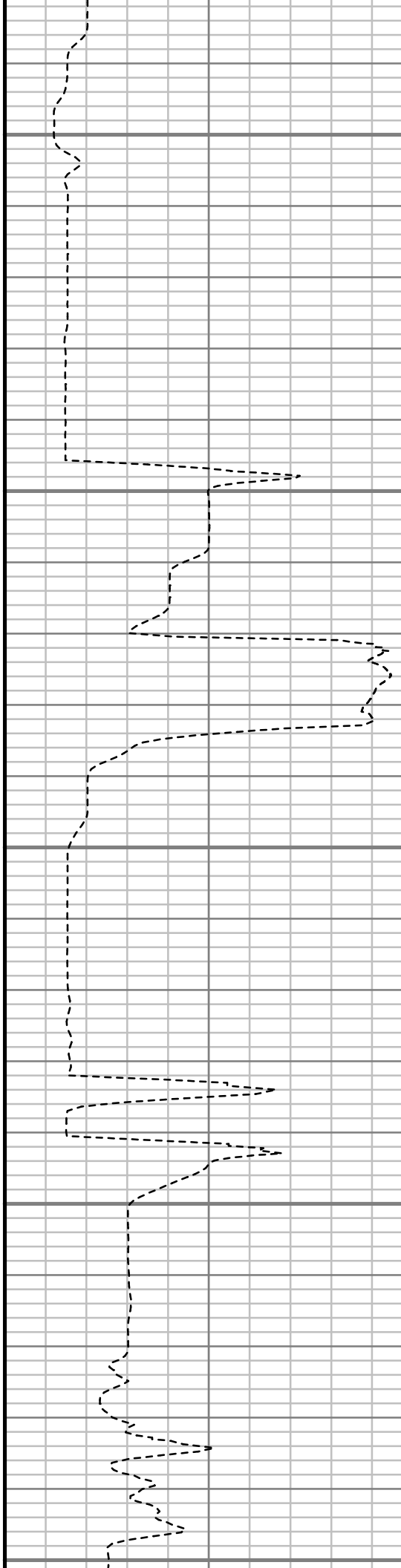
6400

6450

6500

6550

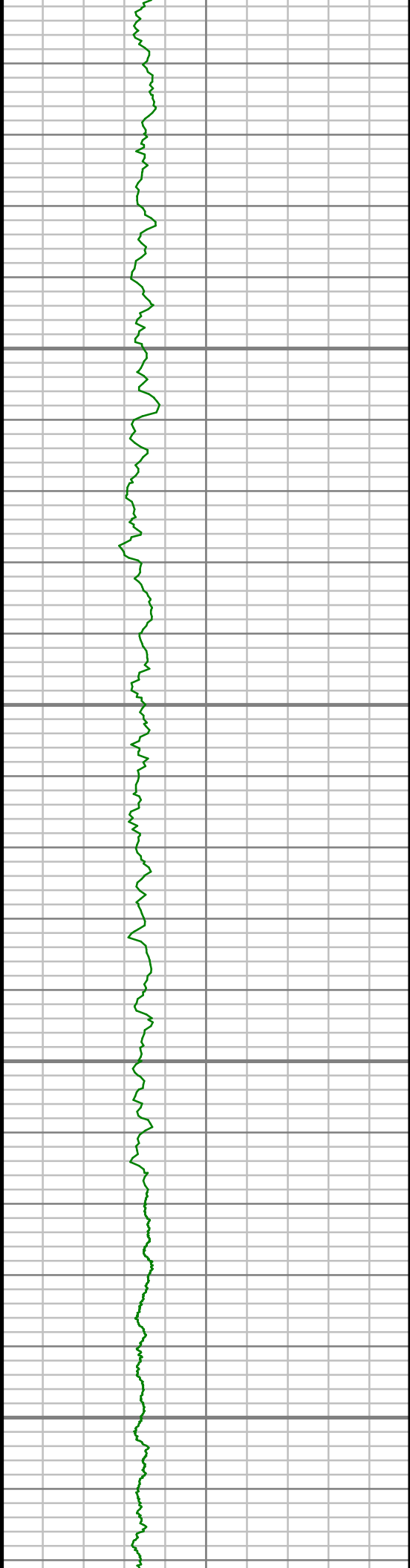
6600



S: 65 MD: 6384.00 ft Inc: 1.73
deg Az: 110.07 deg TVD:
6302.20 ft

S: 66 MD: 6478.00 ft Inc: 1.74
deg Az: 124.63 deg TVD:
6396.15 ft

S: 67 MD: 6573.00 ft Inc: 1.78
deg Az: 124.77 deg TVD:
6491.11 ft

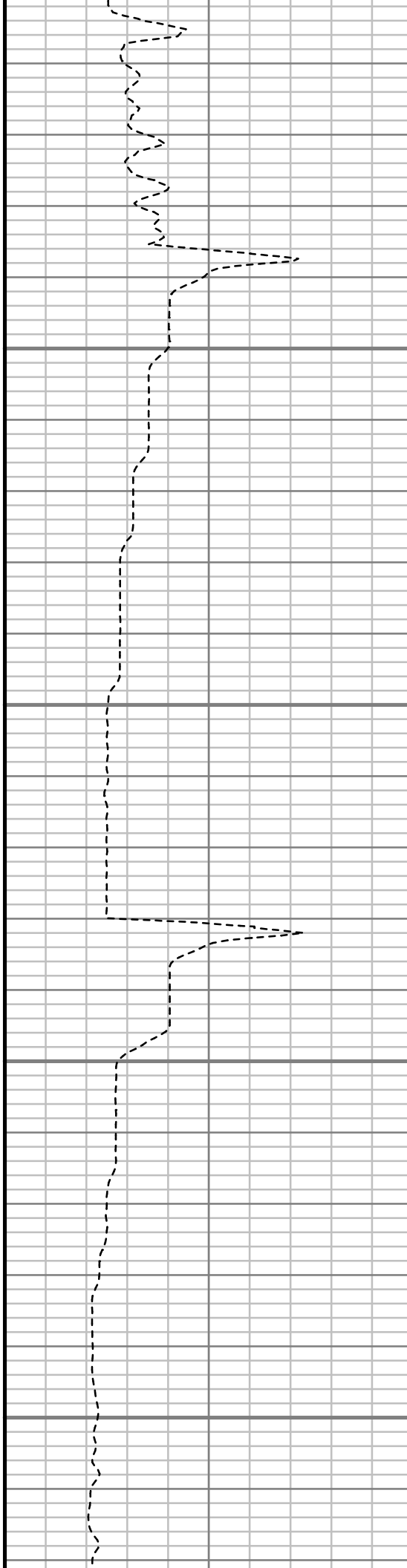


6650

6700

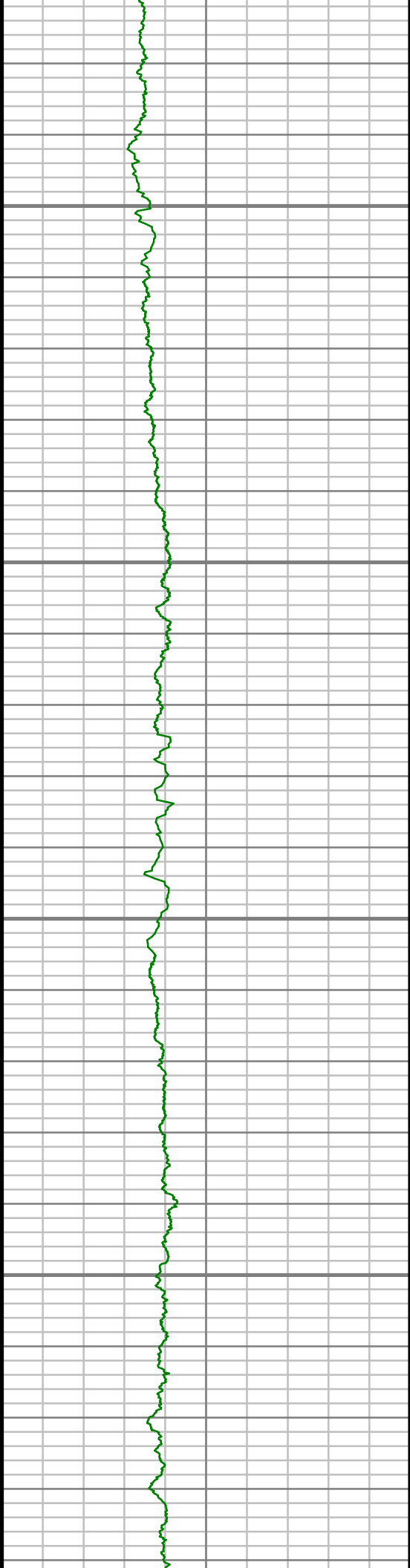
6750

6800



S: 68 MD: 6667.00 ft Inc: 1.64
deg Az: 127.02 deg TVD:
6585.07 ft

S: 69 MD: 6761.00 ft Inc: 1.39
deg Az: 121.82 deg TVD:
6679.03 ft

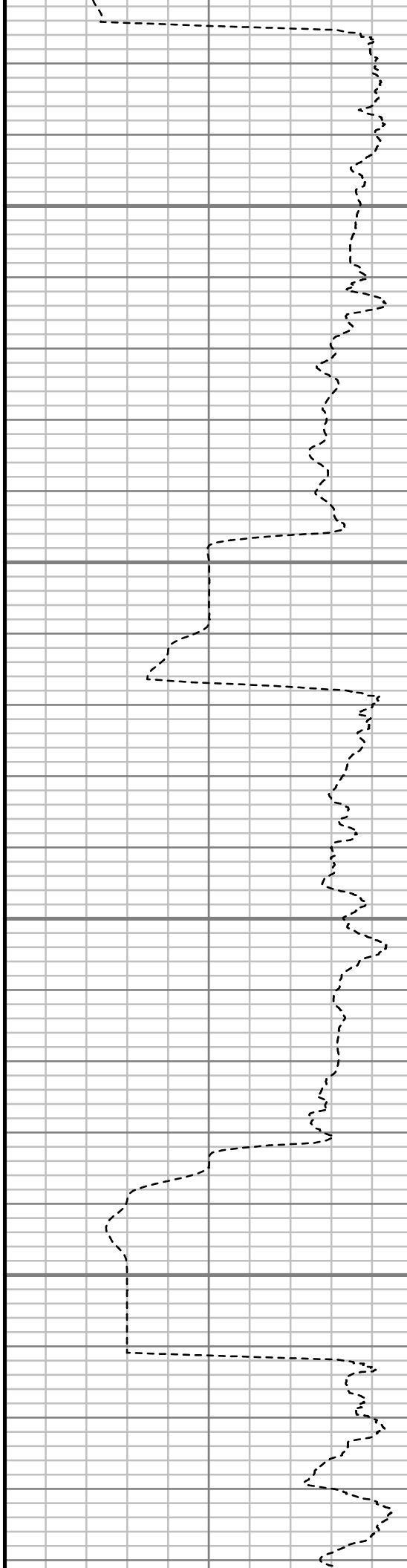


6850

6900

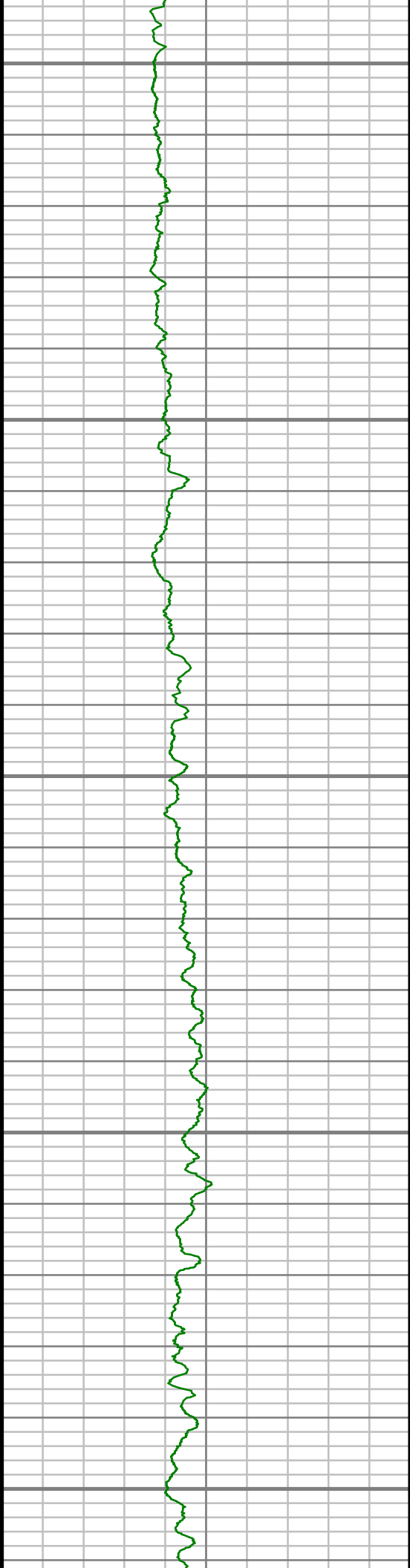
6950

7000



S: 70 MD: 6856.00 ft Inc: 3.58
deg Az: 87.10 deg TVD:
6773.94 ft

S: 71 MD: 6950.00 ft Inc: 9.67
deg Az: 91.45 deg TVD:
6867.27 ft



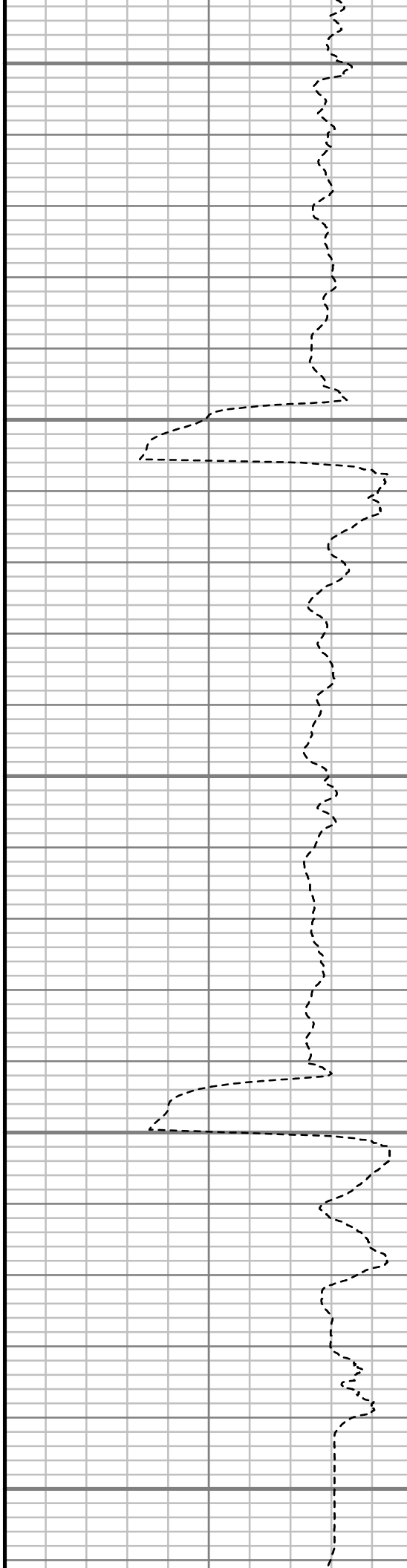
7050

7100

7150

7200

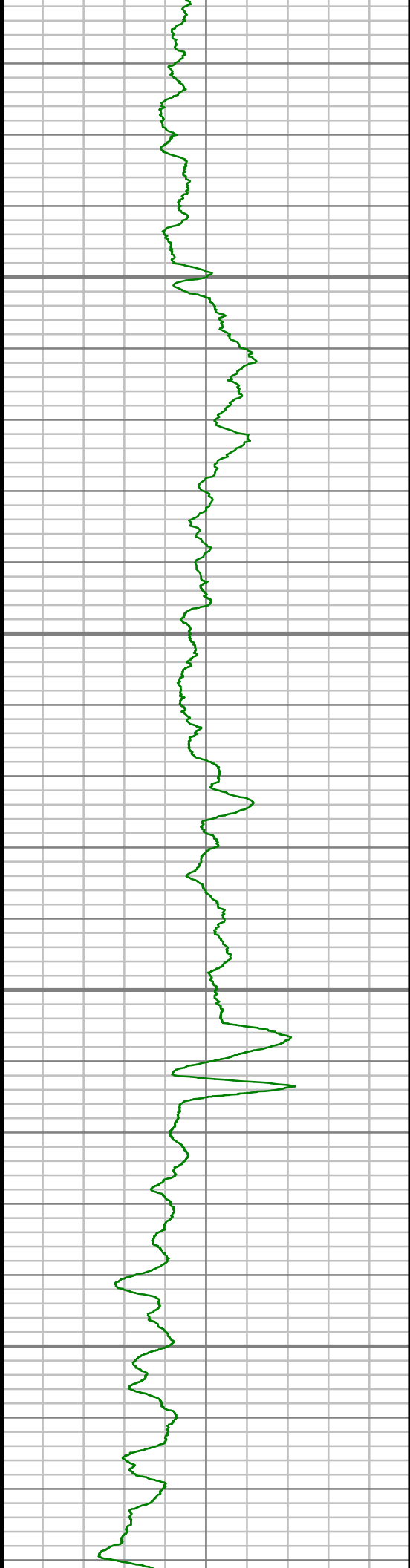
7250



S: 72 MD: 7045.00 ft Inc: 12.51
deg Az: 77.00 deg TVD:
6960.51 ft

S: 73 MD: 7139.00 ft Inc: 19.34
deg Az: 54.51 deg TVD:
7050.93 ft

S: 74 MD: 7234.00 ft Inc: 24.34
deg Az: 36.41 deg TVD:
7139.18 ft

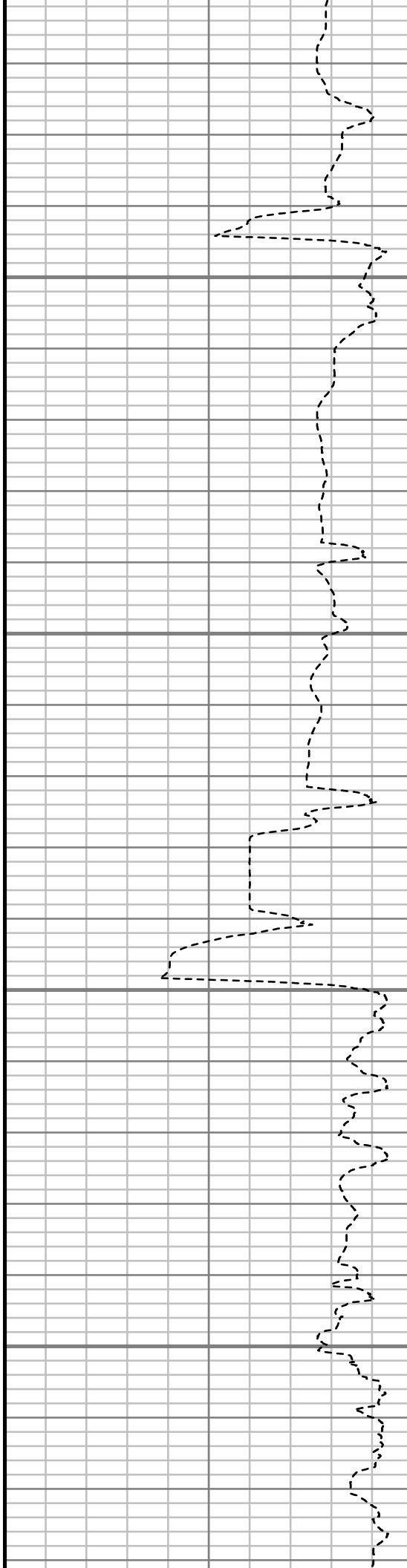


7300

7350

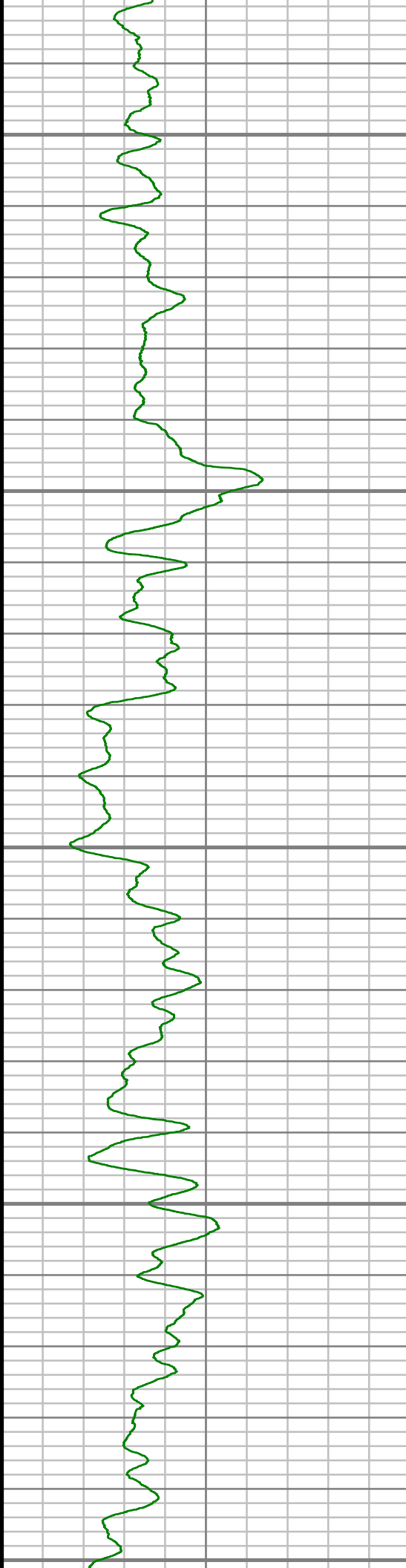
7400

7450



S: 75 MD: 7328.00 ft Inc: 30.78
deg Az: 23.21 deg TVD:
7222.55 ft

S: 76 MD: 7423.00 ft Inc: 35.92
deg Az: 13.84 deg TVD:
7301.93 ft



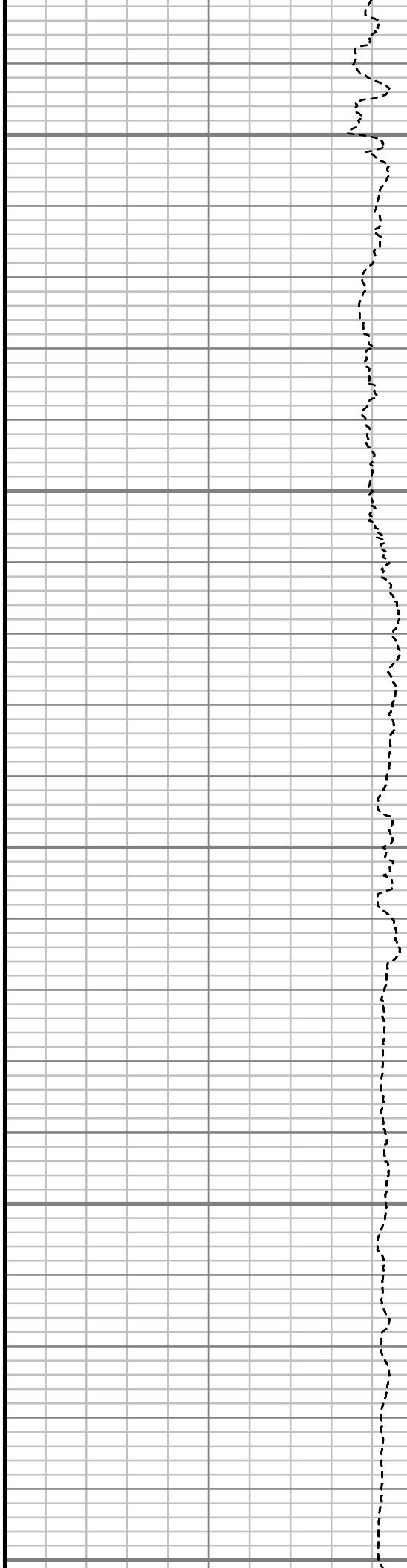
7500

7550

7600

7650

7700

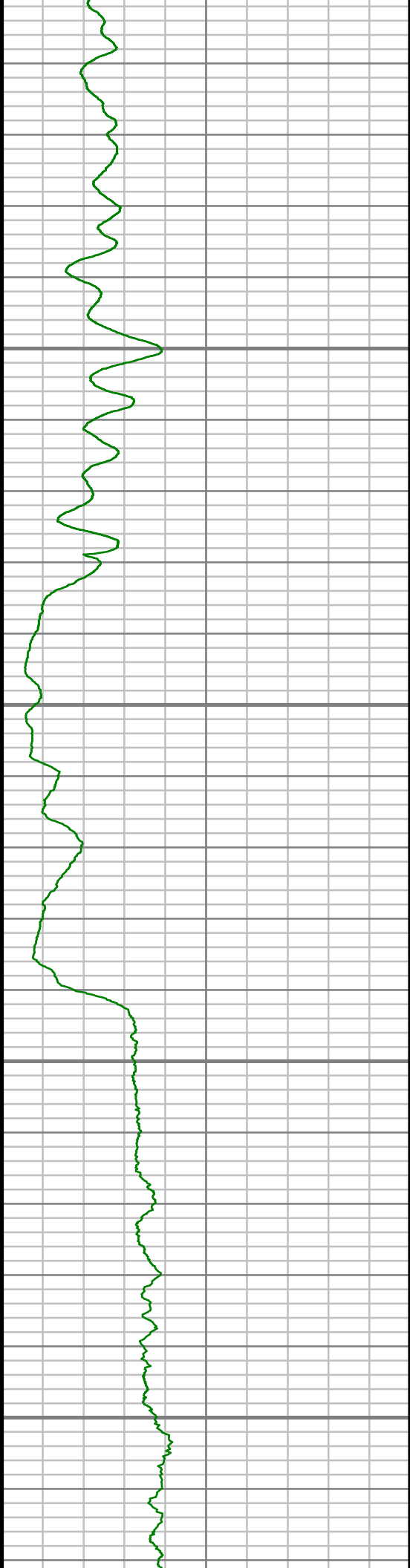


S: 77 MD: 7517.00 ft Inc: 42.52
deg Az: 12.05 deg TVD:
7374.72 ft

S: 78 MD: 7612.00 ft Inc: 50.04
deg Az: 7.55 deg TVD: 7440.35
ft

S: 79 MD: 7658.00 ft Inc: 54.19
deg Az: 4.63 deg TVD: 7468.60
ft

S: 80 MD: 7691.00 ft Inc: 57.21
deg Az: 3.90 deg TVD: 7487.19
ft



7750

7800

7850

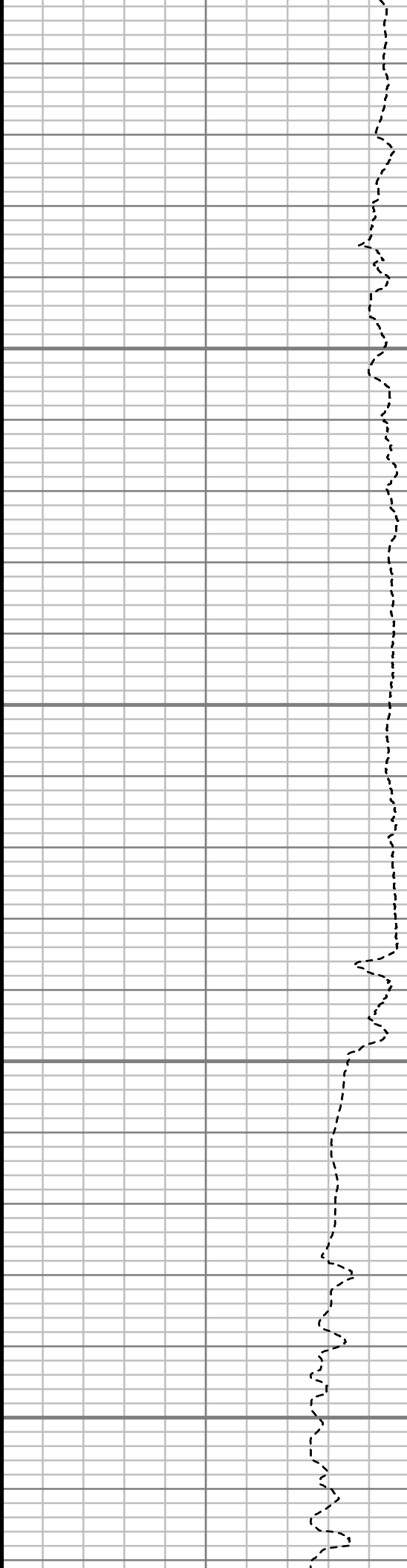
7900

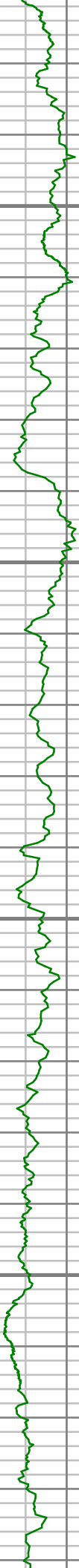
S: 81 MD: 7706.00 ft Inc: 58.54
deg Az: 3.30 deg TVD: 7495.17
ft

S: 82 MD: 7772.00 ft Inc: 65.31
deg Az: 2.97 deg TVD: 7526.21
ft

S: 83 MD: 7872.00 ft Inc: 78.98
deg Az: 1.76 deg TVD: 7556.79
ft

S: 84 MD: 7911.00 ft Inc: 85.20
deg Az: 1.82 deg TVD: 7562.16
ft



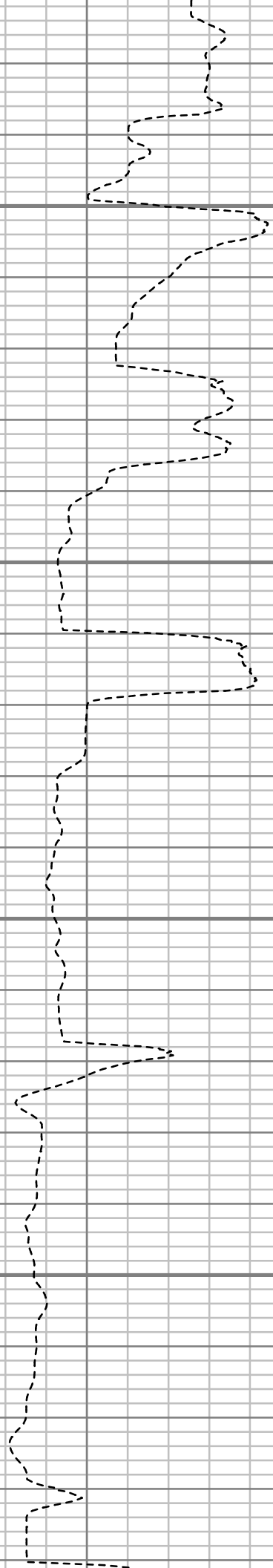


7950

8000

8050

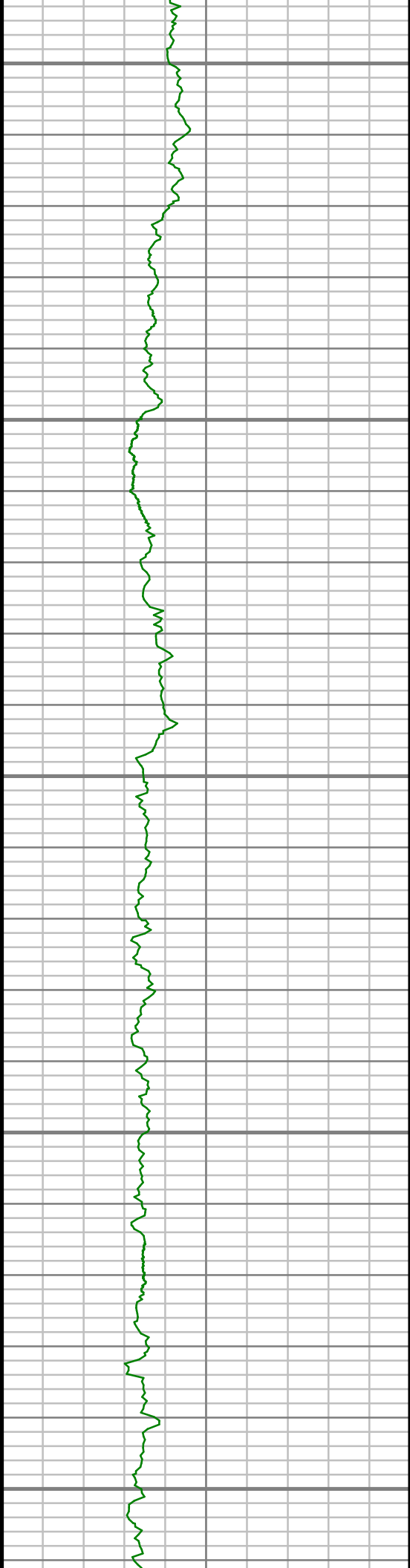
8100



S: 85 MD: 7942.00 ft Inc: 88.29
deg Az: 0.90 deg TVD: 7563.92
ft

S: 86 MD: 8005.00 ft Inc: 91.17
deg Az: 0.02 deg TVD: 7564.22
ft

S: 87 MD: 8100.00 ft Inc: 91.72
deg Az: 359.49 deg TVD:
7561.82 ft



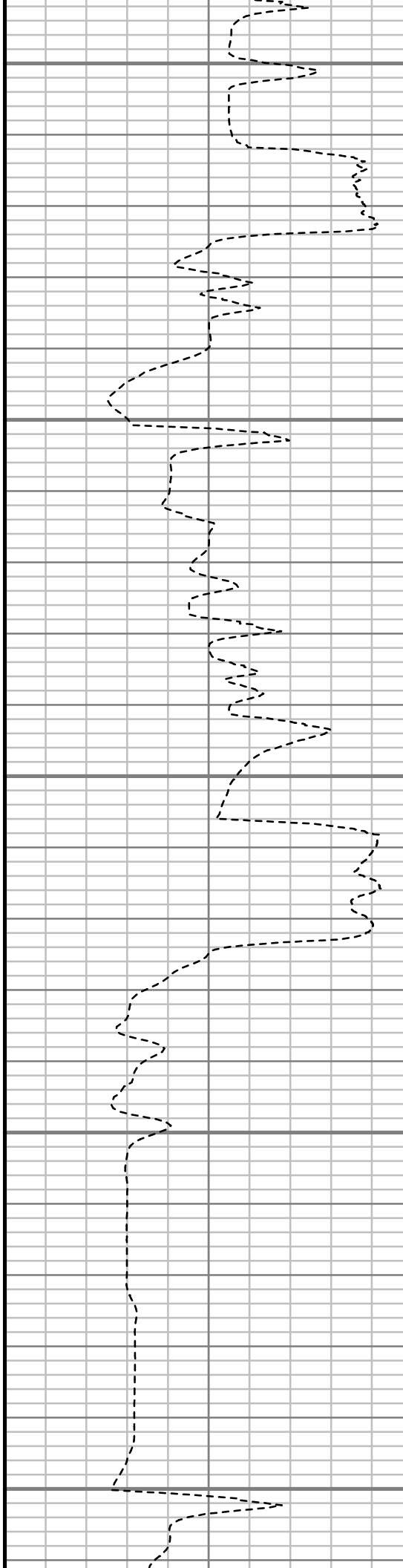
8150

8200

8250

8300

8350



S: 88 MD: 8194.00 ft Inc: 91.81
deg Az: 357.93 deg TVD:
7558.93 ft

S: 89 MD: 8288.00 ft Inc: 89.83
deg Az: 357.86 deg TVD:
7557.58 ft



8400

8450

8500

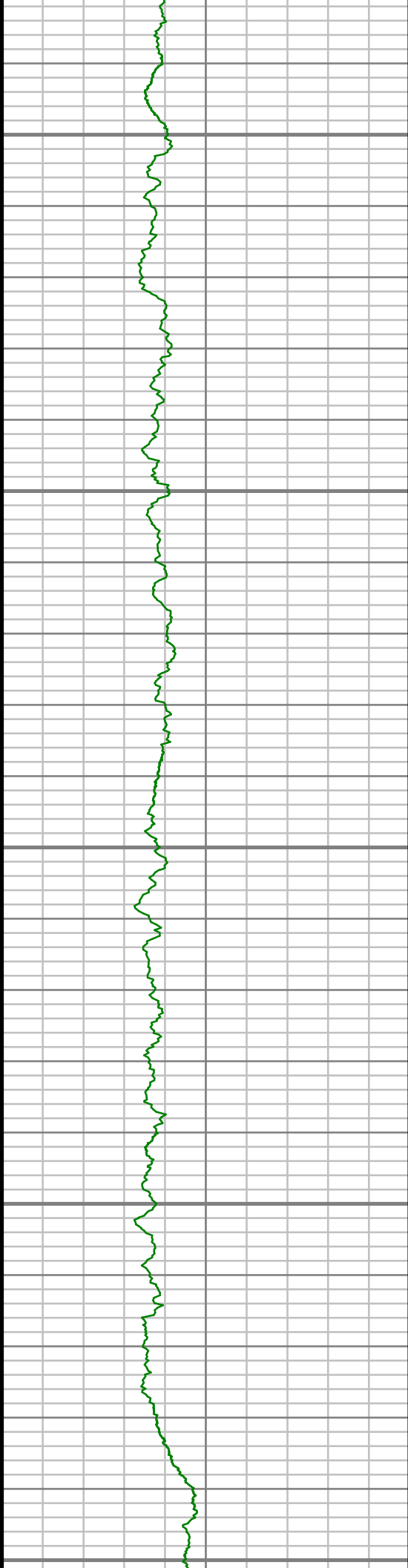
8550



S: 90 MD: 8383.00 ft Inc: 89.66
deg Az: 358.26 deg TVD: 7558.00 ft

S: 91 MD: 8477.00 ft Inc: 89.87
deg Az: 0.12 deg TVD: 7558.38 ft

S: 92 MD: 8572.00 ft Inc: 88.96
deg Az: 1.95 deg TVD: 7559.36 ft



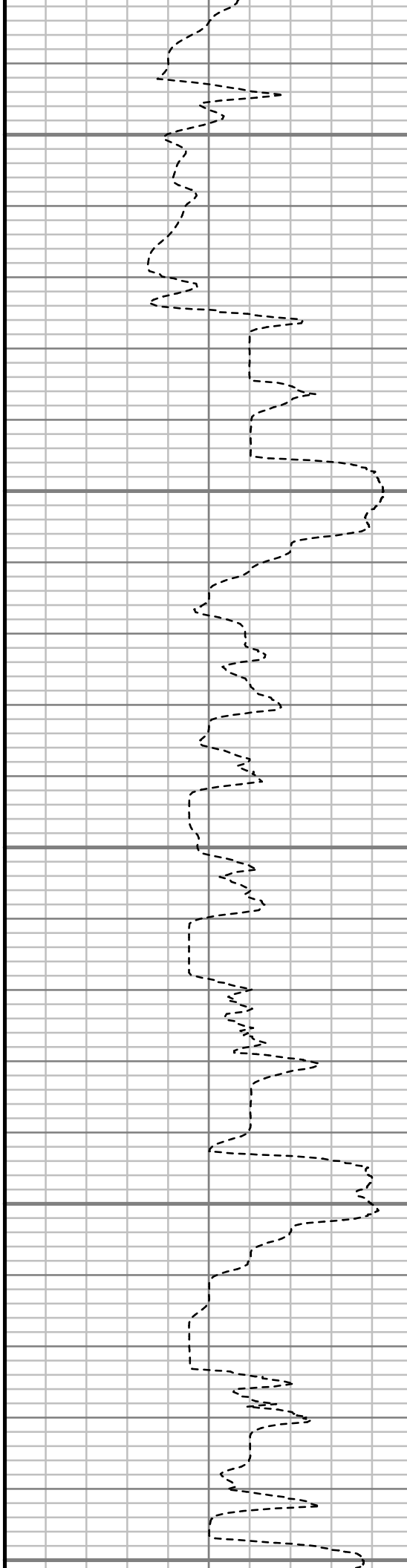
8600

8650

8700

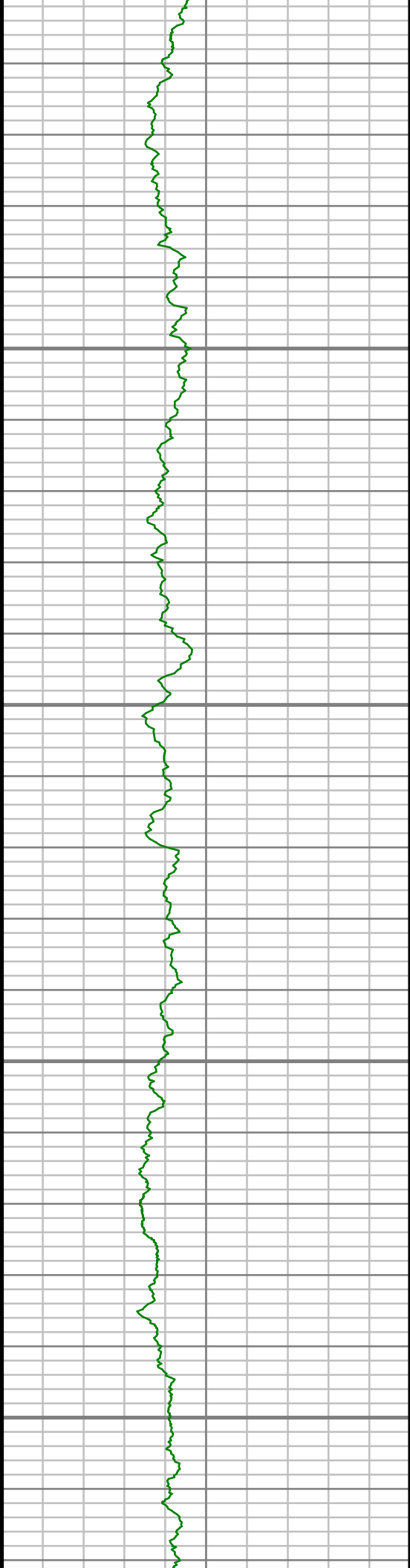
8750

8800



S: 93 MD: 8667.00 ft Inc: 90.24
deg Az: 2.49 deg TVD: 7560.03
ft

S: 94 MD: 8761.00 ft Inc: 89.66
deg Az: 3.51 deg TVD: 7560.11
ft

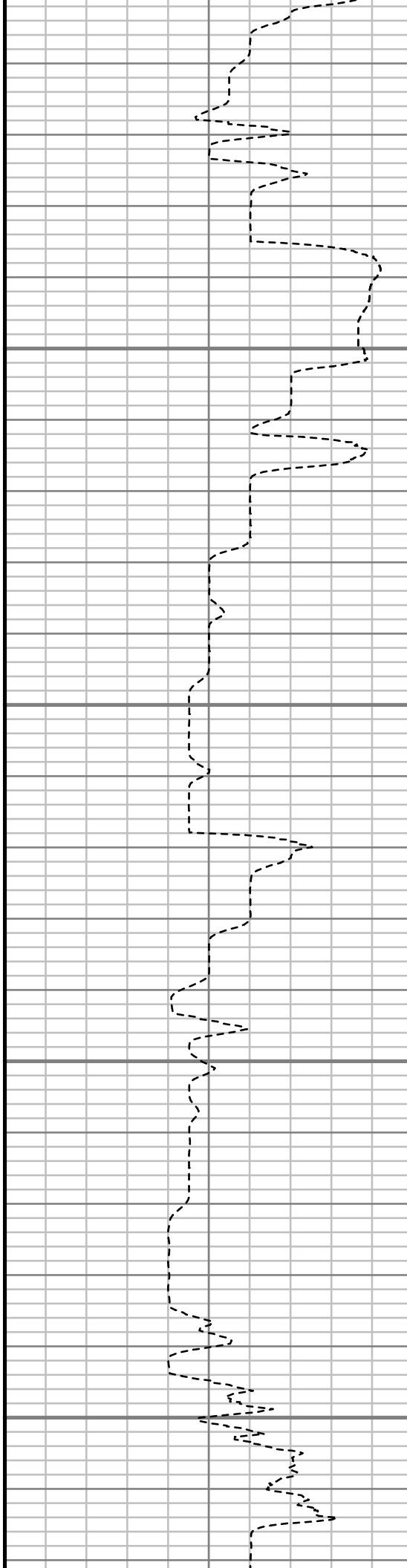


8850

8900

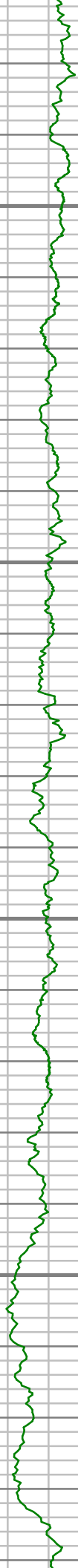
8950

9000



S: 95 MD: 8856.00 ft Inc: 90.00
deg Az: 0.67 deg TVD: 7560.39
ft

S: 96 MD: 8950.00 ft Inc: 90.87
deg Az: 1.36 deg TVD: 7559.67
ft

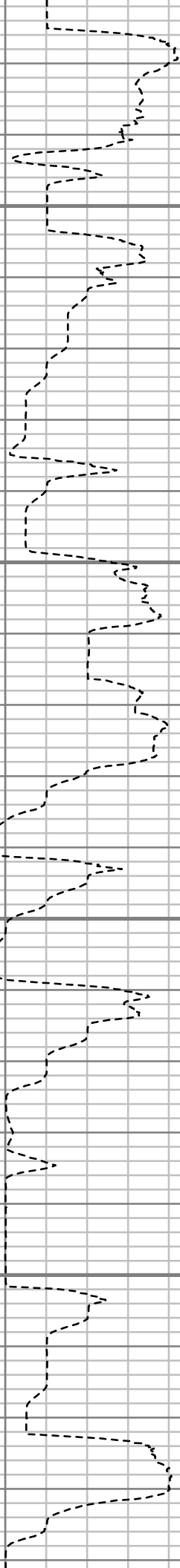


9050

9100

9150

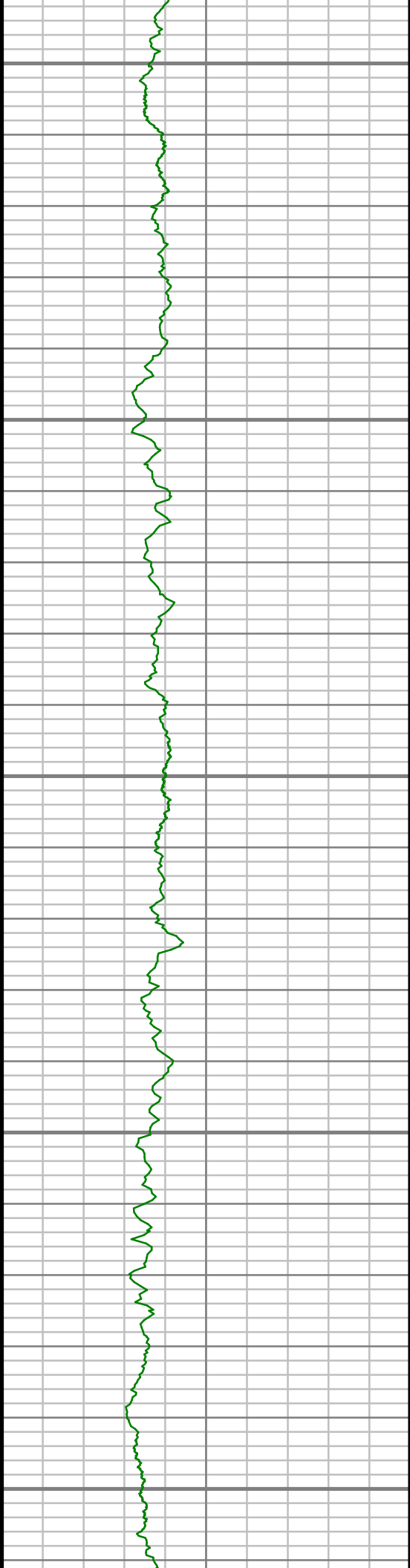
9200



S: 97 MD: 9045.00 ft Inc: 90.64
deg Az: 359.41 deg TVD:
7558.42 ft

S: 98 MD: 9139.00 ft Inc: 90.10
deg Az: 356.75 deg TVD:
7557.81 ft

S: 99 MD: 9234.00 ft Inc: 90.24
deg Az: 355.67 deg TVD:
7557.53 ft



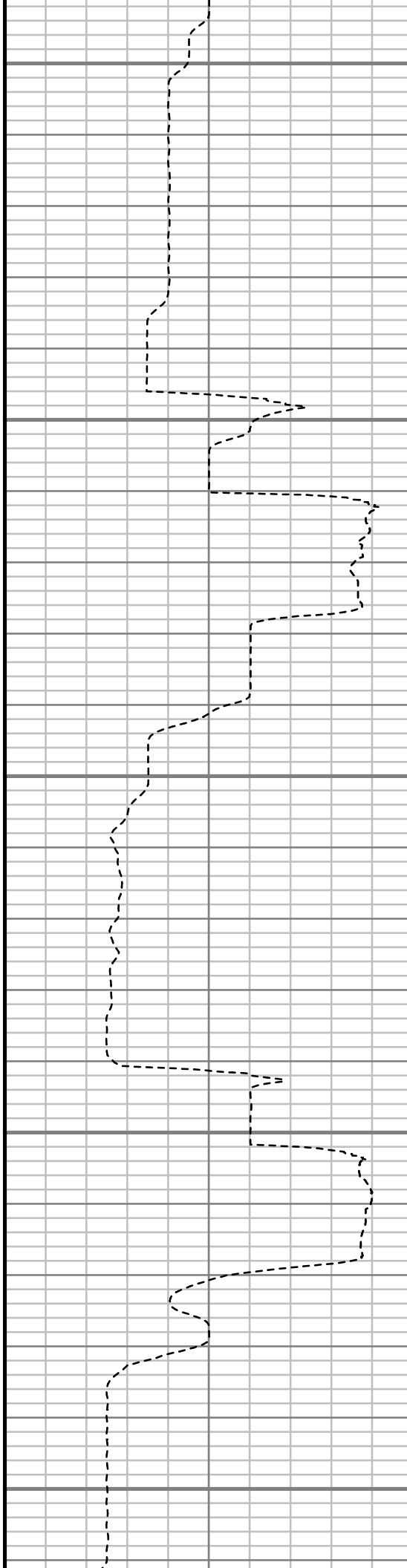
9250

9300

9350

9400

9450



S: 100 MD: 9328.00 ft Inc:
90.84 deg Az: 356.59 deg TVD:
7556.65 ft

S: 101 MD: 9423.00 ft Inc:
90.64 deg Az: 358.09 deg TVD:
7555.43 ft

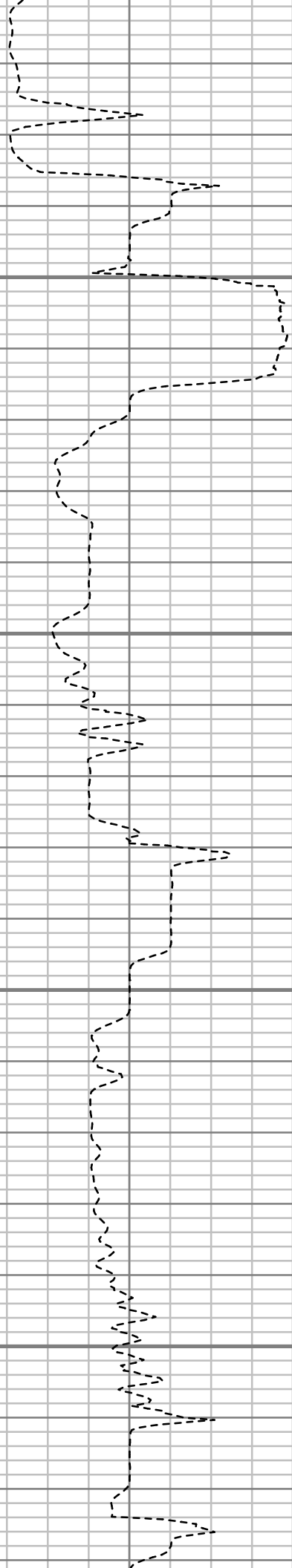


9500

9550

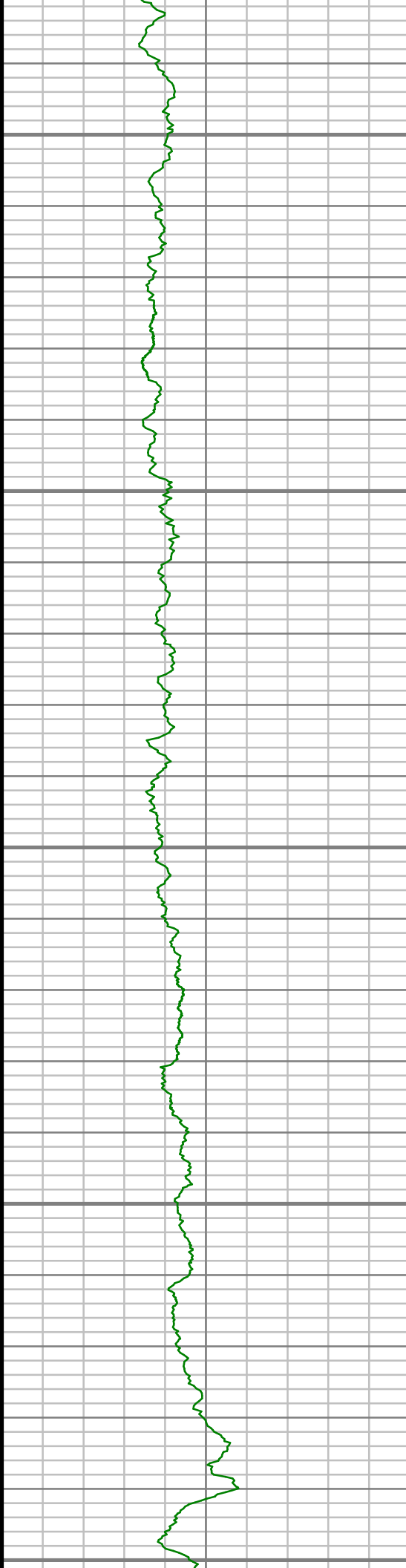
9600

9650



S: 102 MD: 9517.00 ft Inc:
89.50 deg Az: 358.42 deg TVD:
7555.32 ft

S: 103 MD: 9612.00 ft Inc:
90.07 deg Az: 357.74 deg TVD:
7555.68 ft



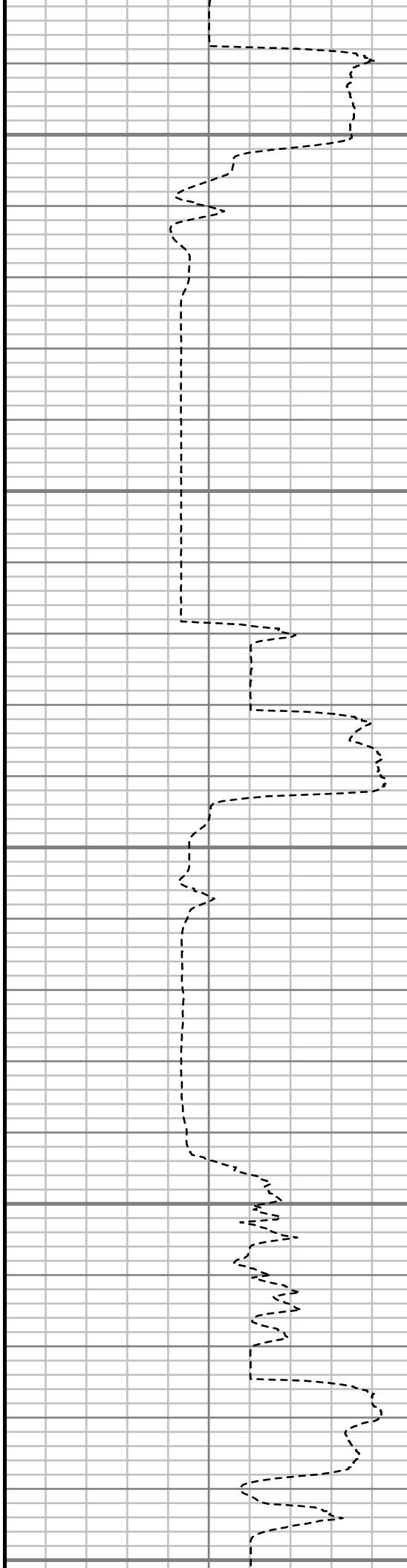
9700

9750

9800

9850

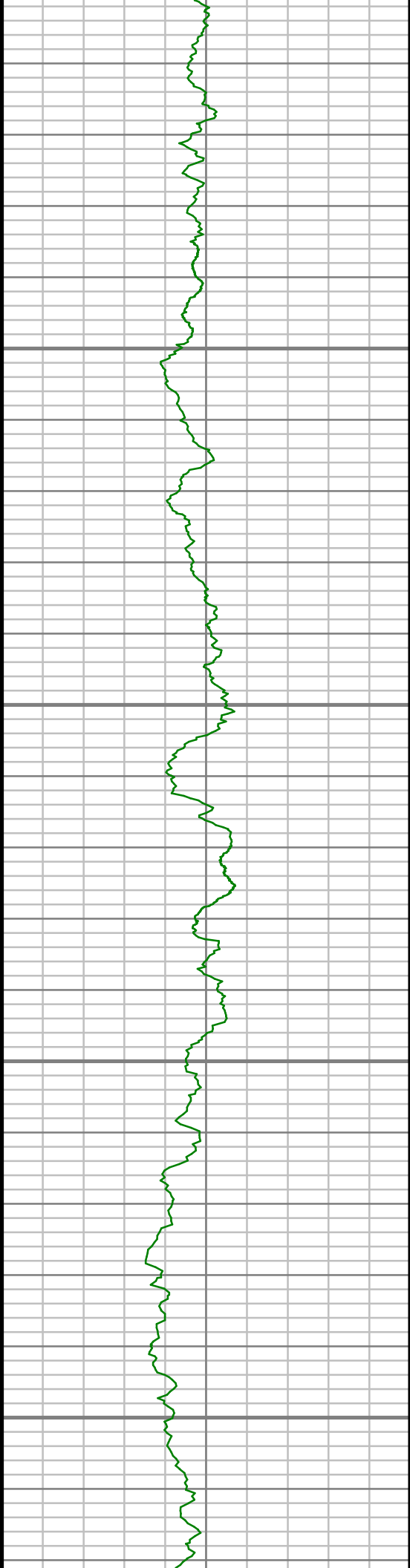
9900



S: 104 MD: 9706.00 ft Inc:
88.99 deg Az: 357.63 deg TVD:
7556.45 ft

S: 105 MD: 9801.00 ft Inc:
88.79 deg Az: 358.67 deg TVD:
7558.29 ft

S: 106 MD: 9895.00 ft Inc:
89.97 deg Az: 358.47 deg TVD:
7559.21 ft

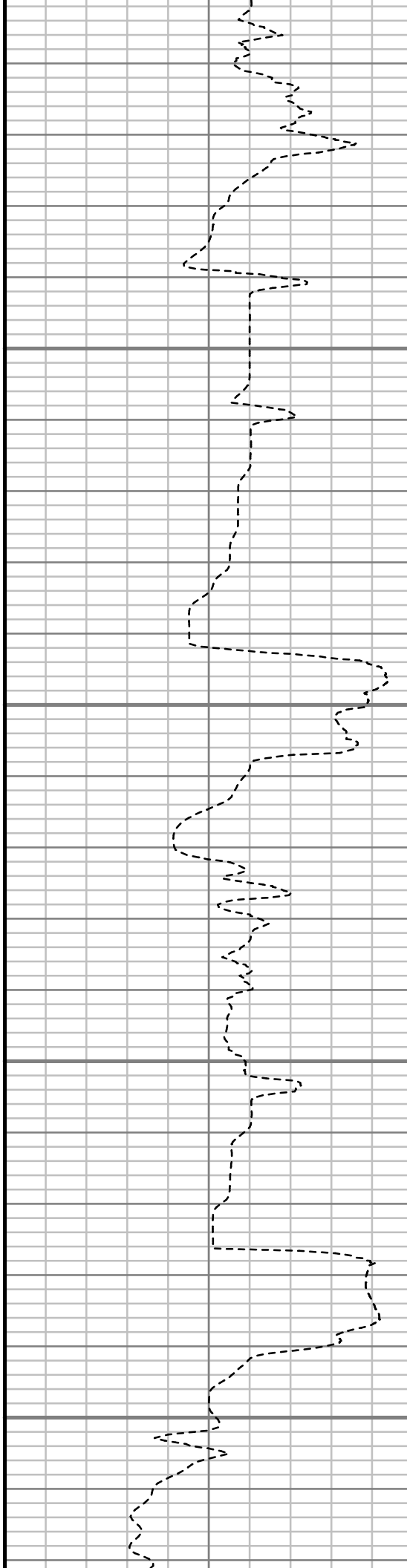


9950

10000

10050

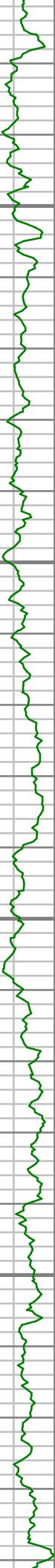
10100



7559.51 ft

S: 107 MD: 9990.00 ft Inc:
90.27 deg Az: 356.75 deg TVD:
7559.11 ft

S: 108 MD: 10084.00 ft Inc:
89.97 deg Az: 359.53 deg TVD:
7558.92 ft

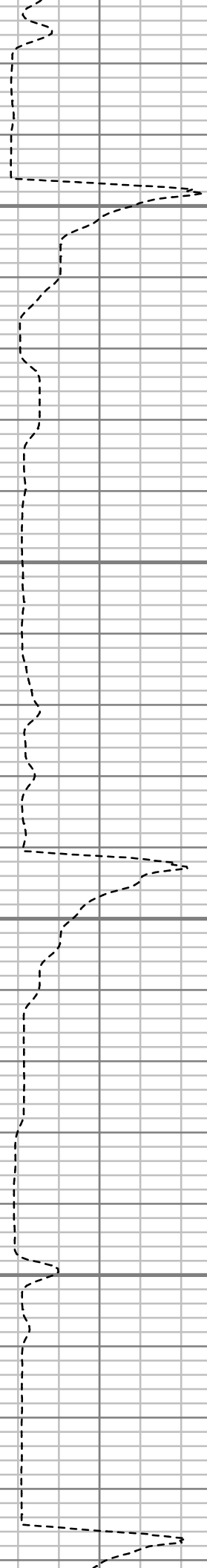


10150

10200

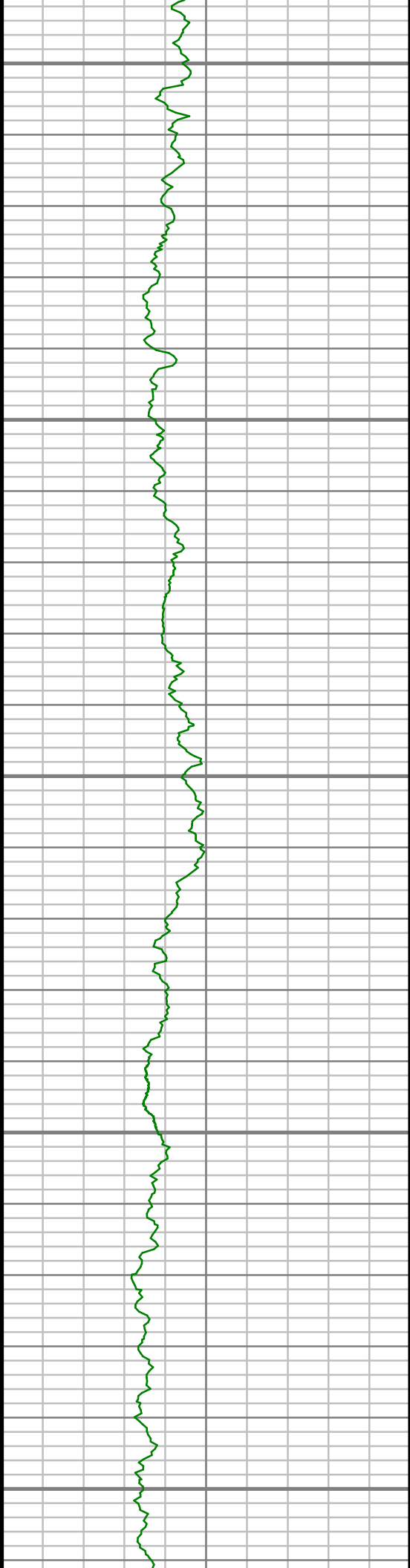
10250

10300



S: 109 MD: 10179.00 ft Inc:
90.30 deg Az: 0.34 deg TVD:
7558.70 ft

S: 110 MD: 10273.00 ft Inc:
90.87 deg Az: 359.98 deg TVD:
7557.73 ft



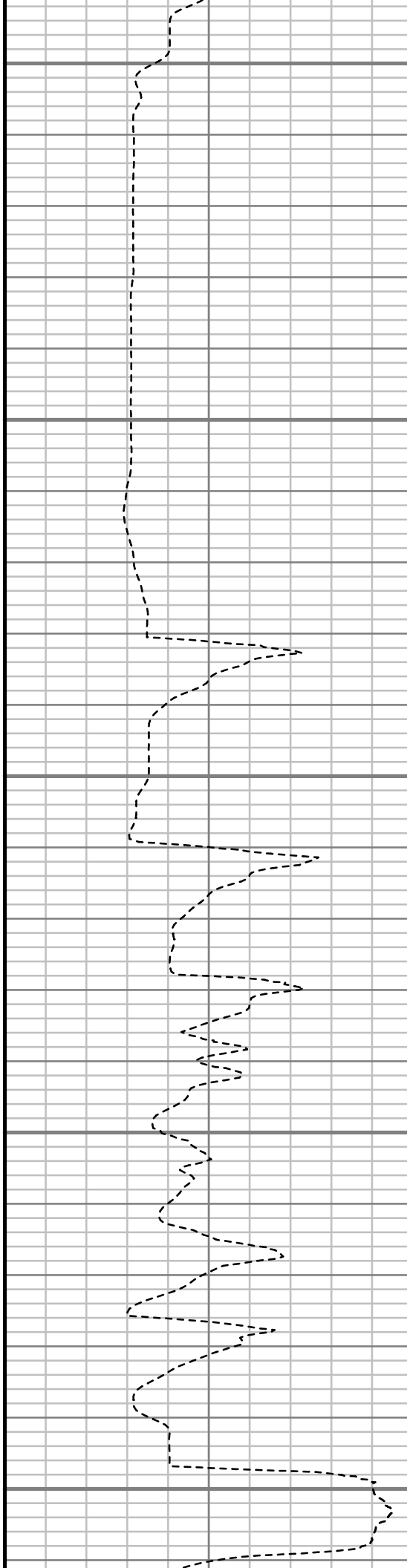
10350

10400

10450

10500

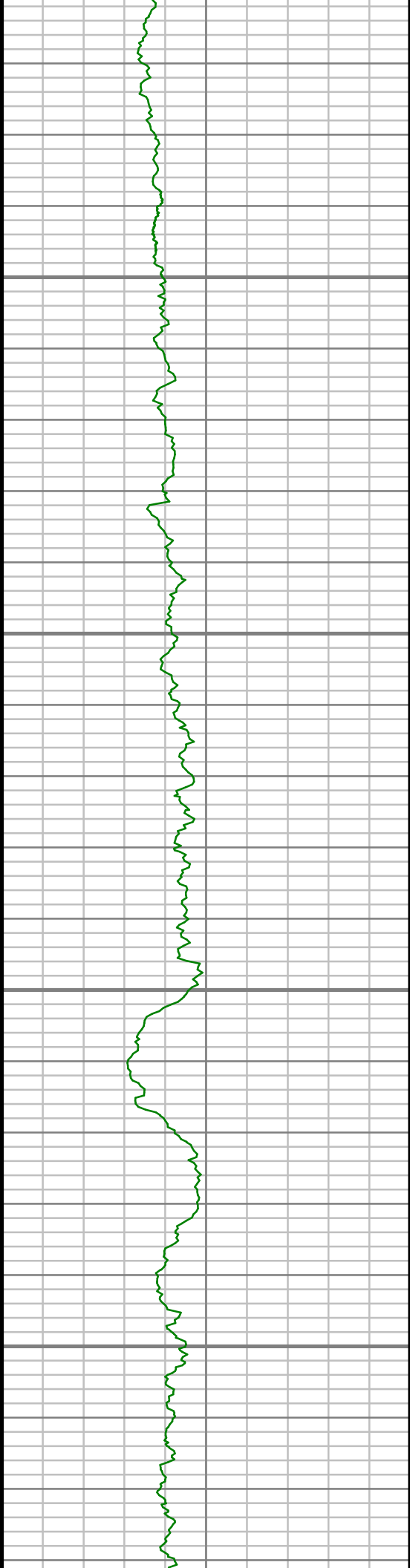
10550



S: 111 MD: 10368.00 ft Inc:
90.84 deg Az: 359.30 deg TVD:
7556.31 ft

S: 112 MD: 10463.00 ft Inc:
91.48 deg Az: 358.84 deg TVD:
7554.39 ft

S: 113 MD: 10558.00 ft Inc:
90.84 deg Az: 359.30 deg TVD:
7556.31 ft

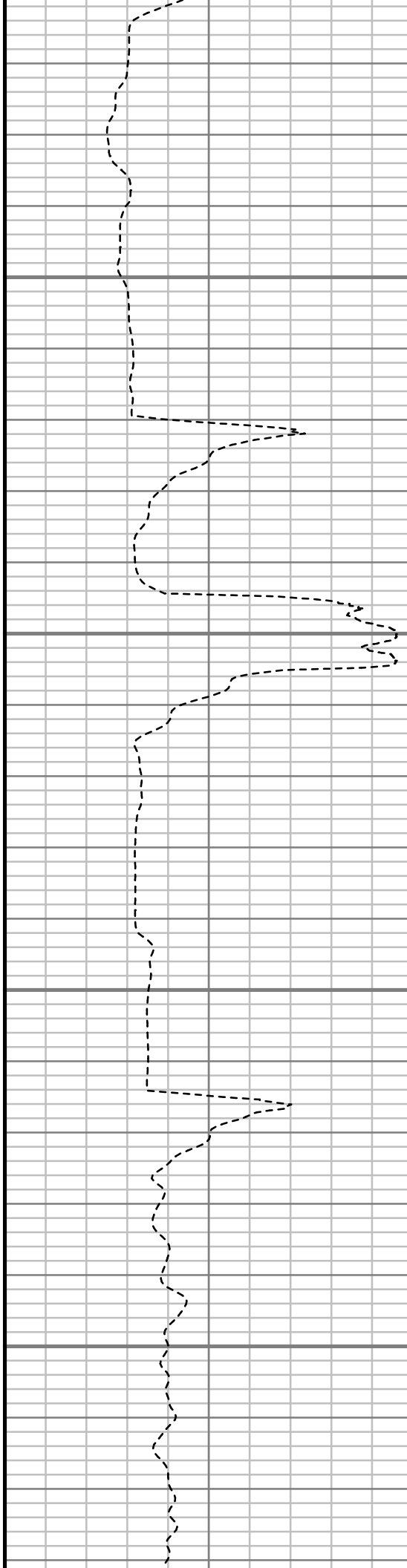


10600

10650

10700

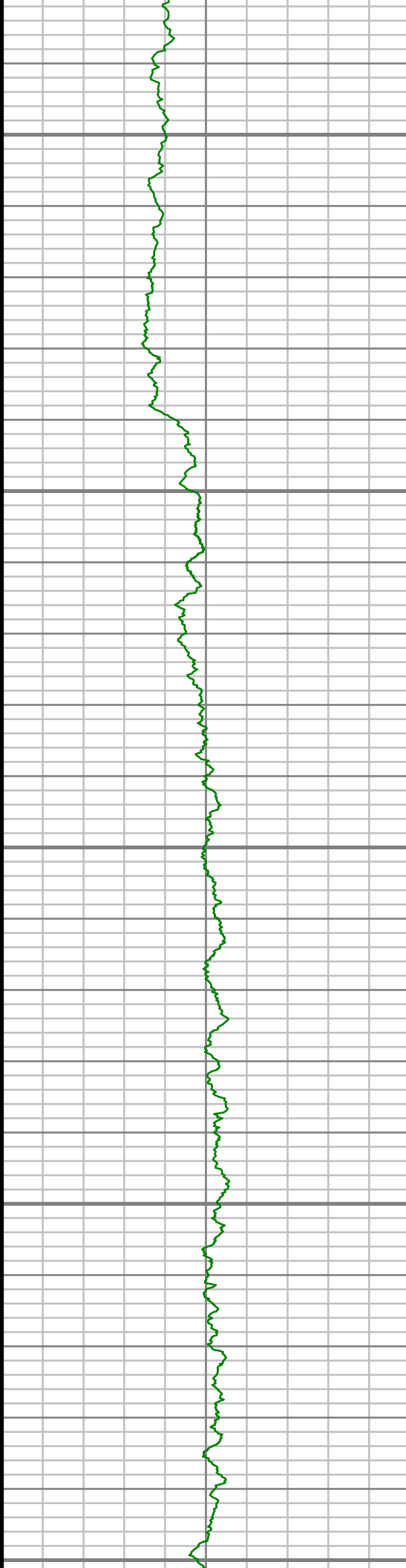
10750



89.83 deg Az: 357.67 deg IVD:
7553.31 ft

S: 114 MD: 10652.00 ft Inc:
89.97 deg Az: 358.55 deg TVD:
7553.47 ft

S: 115 MD: 10747.00 ft Inc:
90.27 deg Az: 358.62 deg TVD:
7553.28 ft



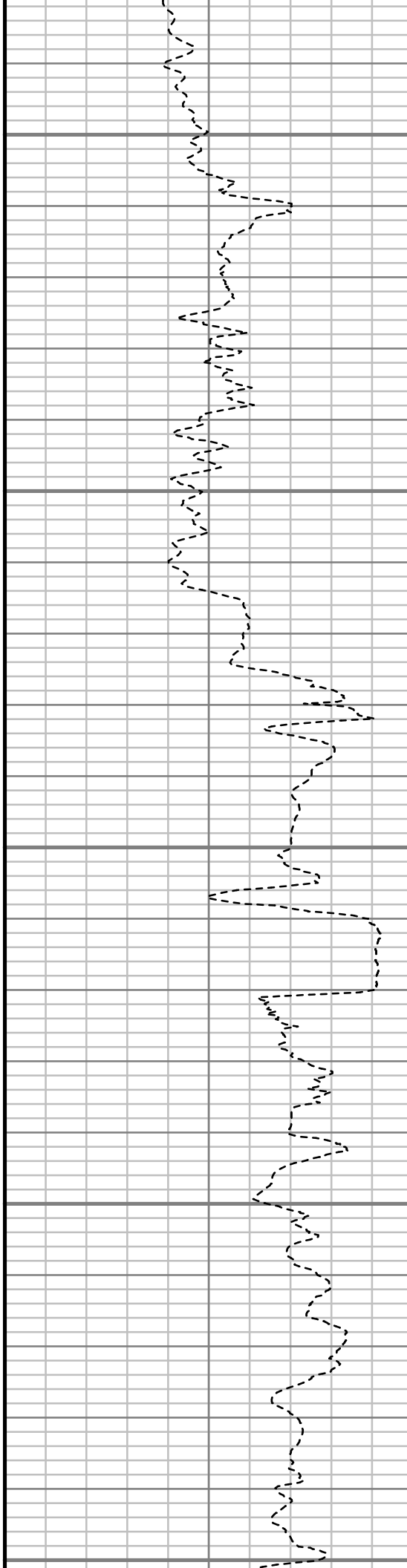
10800

10850

10900

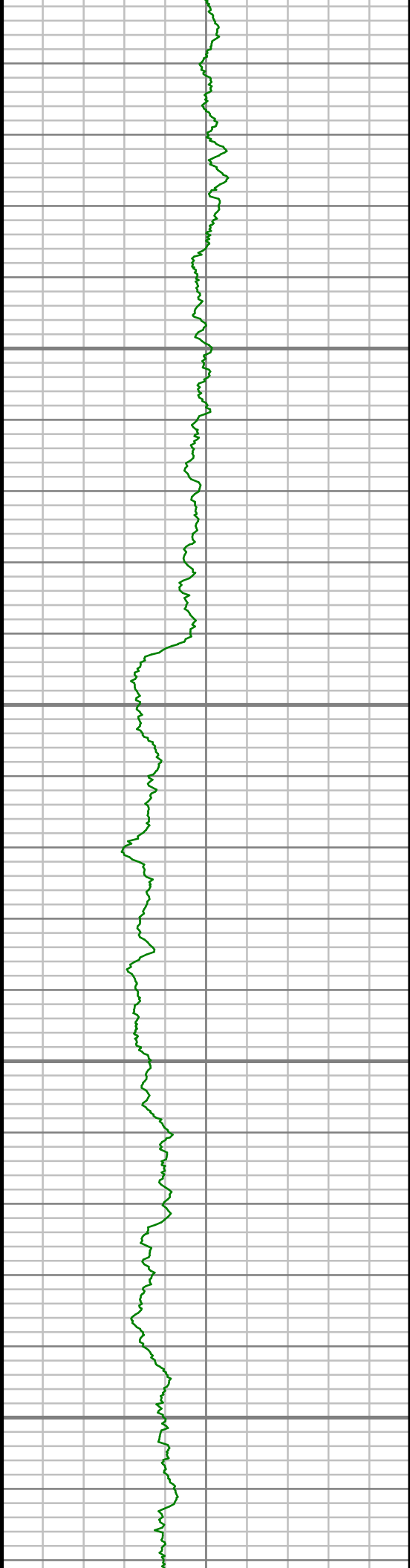
10950

11000



S: 116 MD: 10842.00 ft Inc:
91.51 deg Az: 359.84 deg TVD:
7551.80 ft

S: 117 MD: 10936.00 ft Inc:
90.13 deg Az: 359.17 deg TVD:
7550.45 ft

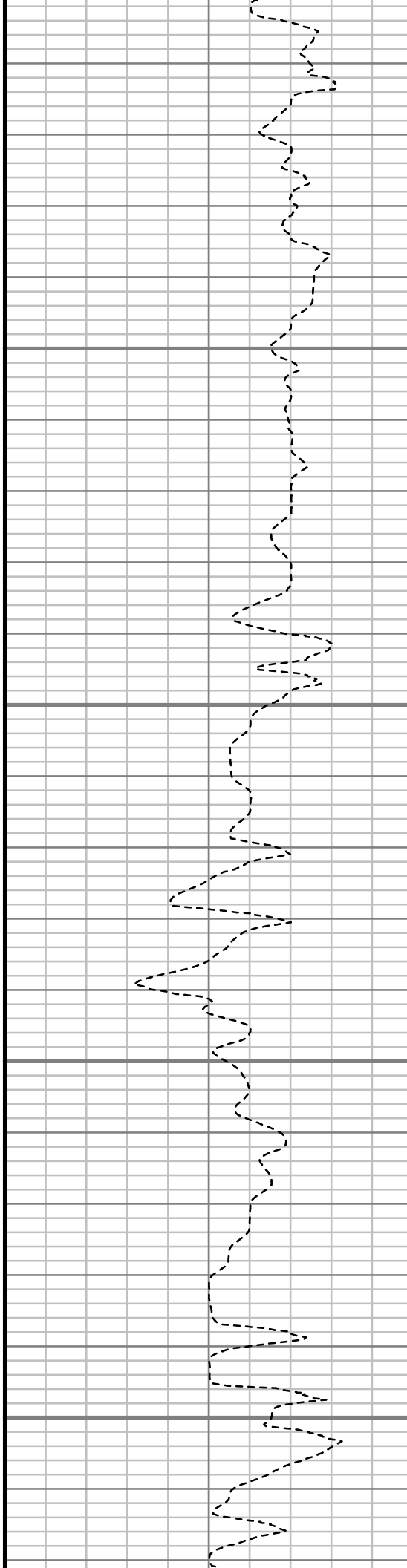


11050

11100

11150

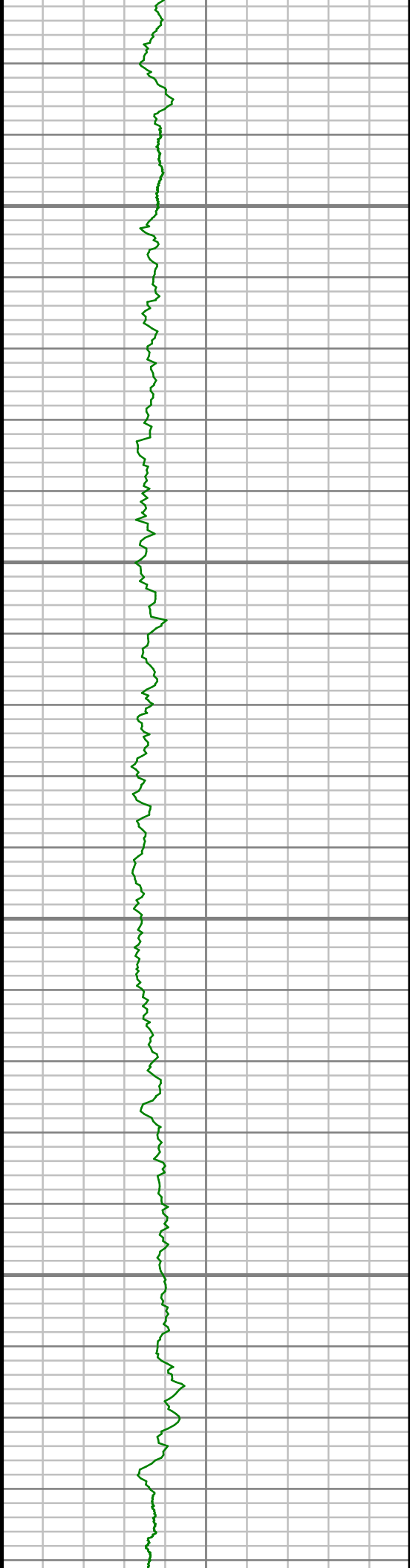
11200



S: 118 MD: 11030.00 ft Inc:
90.23 deg Az: 358.70 deg TVD:
7550.15 ft

S: 119 MD: 11125.00 ft Inc:
91.04 deg Az: 359.03 deg TVD:
7549.09 ft

S: 120 MD: 11219.00 ft Inc:



11250

11300

11350

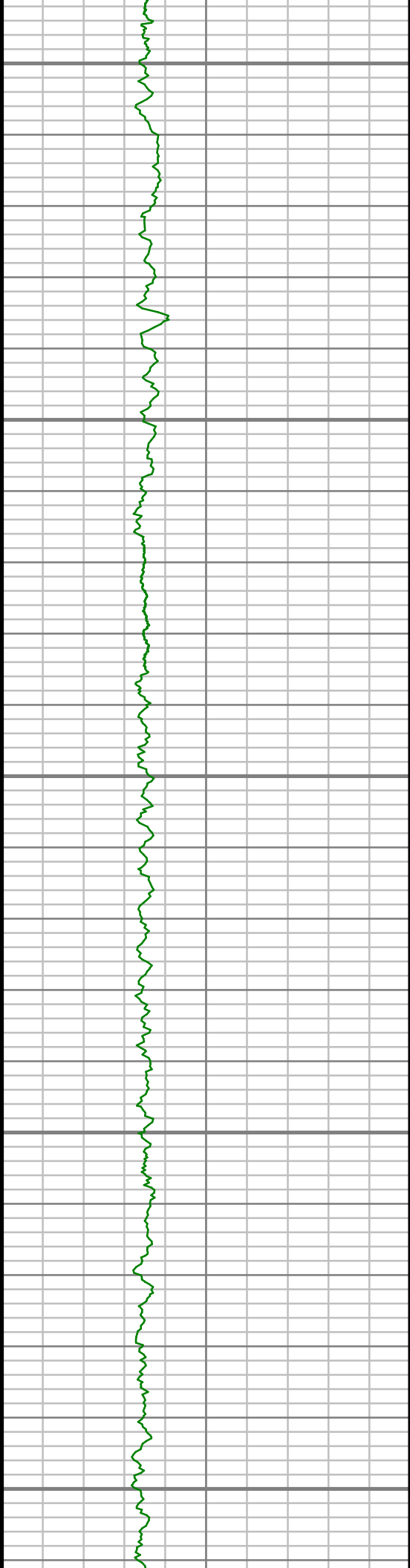
11400



91.58 deg Az: 358.56 deg TVD:
7546.94 ft

S: 121 MD: 11314.00 ft Inc:
90.50 deg Az: 358.11 deg TVD:
7545.22 ft

S: 122 MD: 11408.00 ft Inc:
90.84 deg Az: 357.33 deg TVD:
7544.12 ft



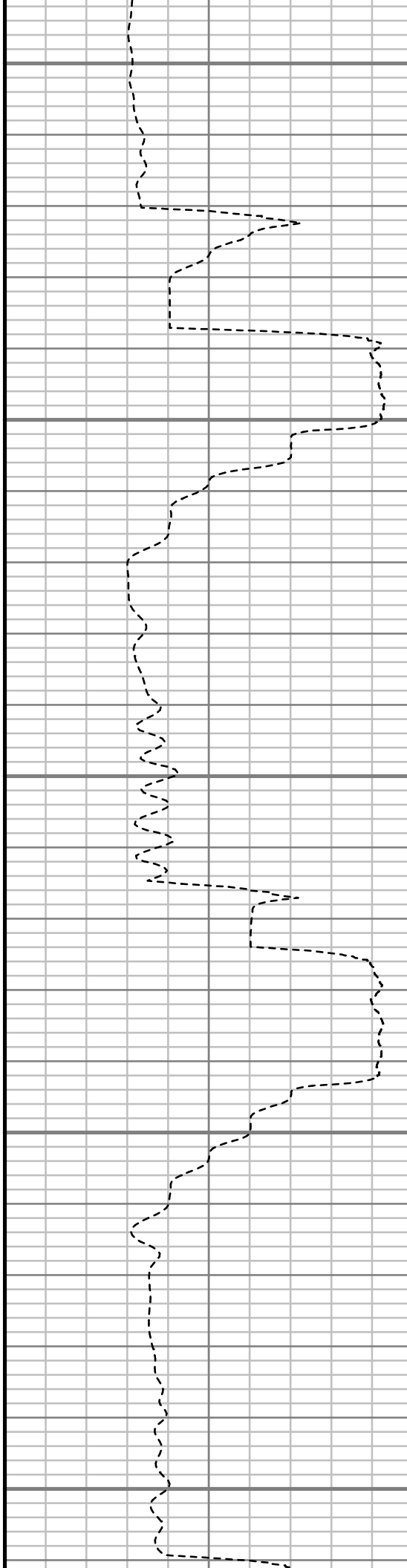
11450

11500

11550

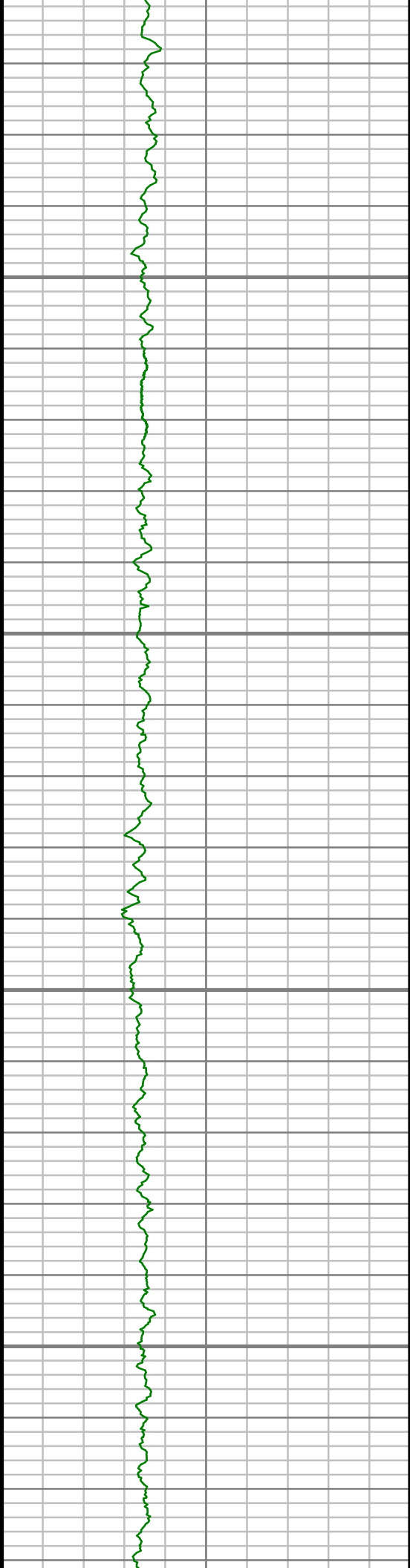
11600

11650



S: 123 MD: 11502.00 ft Inc:
91.65 deg Az: 358.51 deg TVD:
7542.08 ft

S: 124 MD: 11597.00 ft Inc:
89.66 deg Az: 359.65 deg TVD:
7541.00 ft



11700

11750

11800

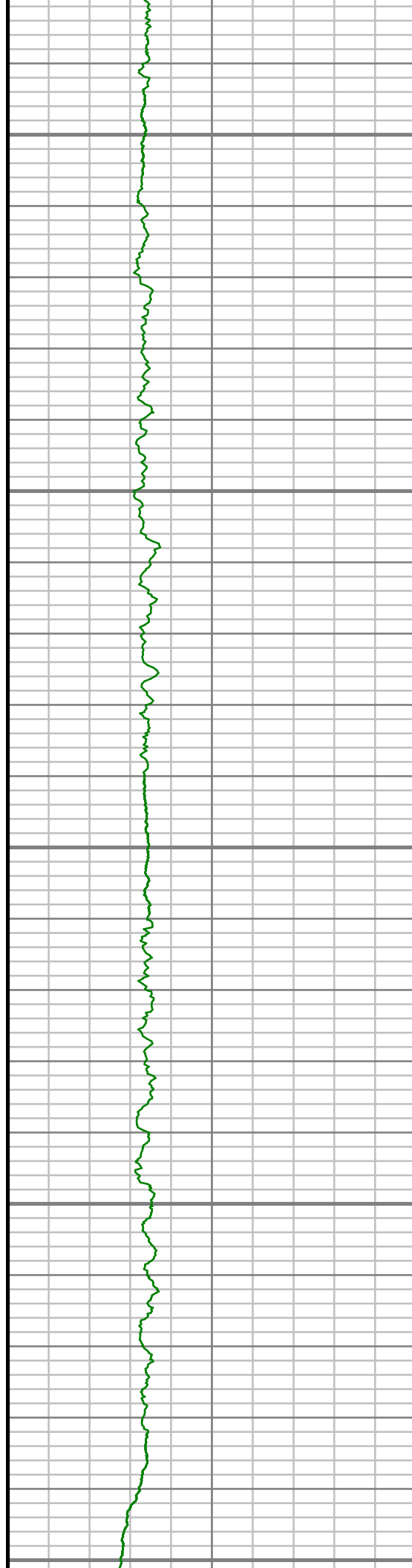
11850



S: 125 MD: 11692.00 ft Inc:
90.03 deg Az: 358.78 deg TVD:
7541.25 ft

S: 126 MD: 11786.00 ft Inc:
90.91 deg Az: 359.81 deg TVD:
7540.47 ft

S: 127 MD: 11880.00 ft Inc:



11900

11950

12000

12050

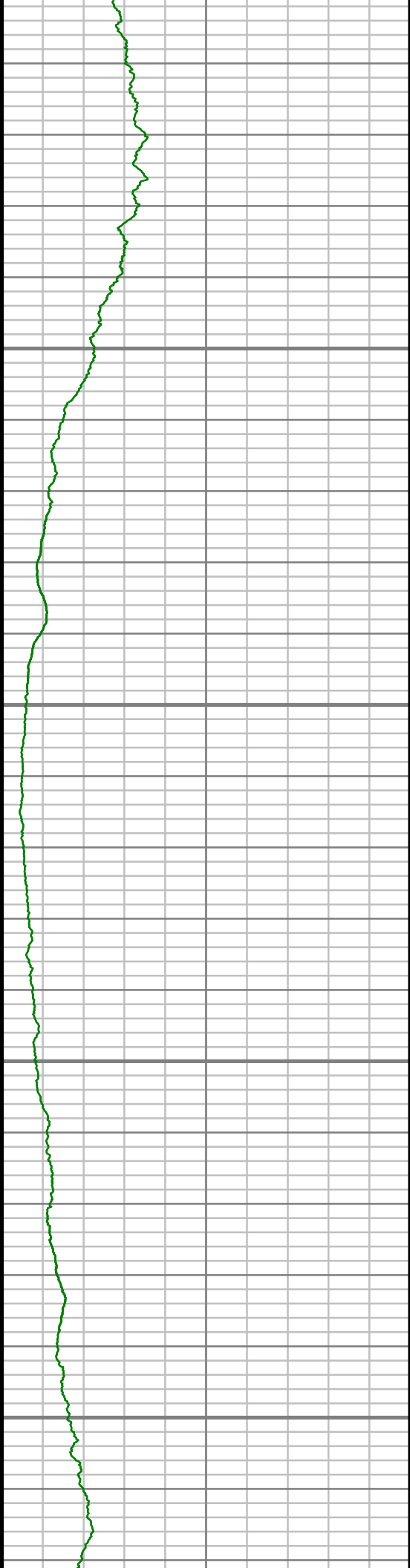
12100



S: 127 MD: 11860.00 ft Inc:
90.54 deg Az: 358.26 deg TVD:
7539.29 ft

S: 128 MD: 11975.00 ft Inc:
89.36 deg Az: 355.08 deg TVD:
7539.37 ft

S: 129 MD: 12069.00 ft Inc:
91.58 deg Az: 354.50 deg TVD:
7538.60 ft

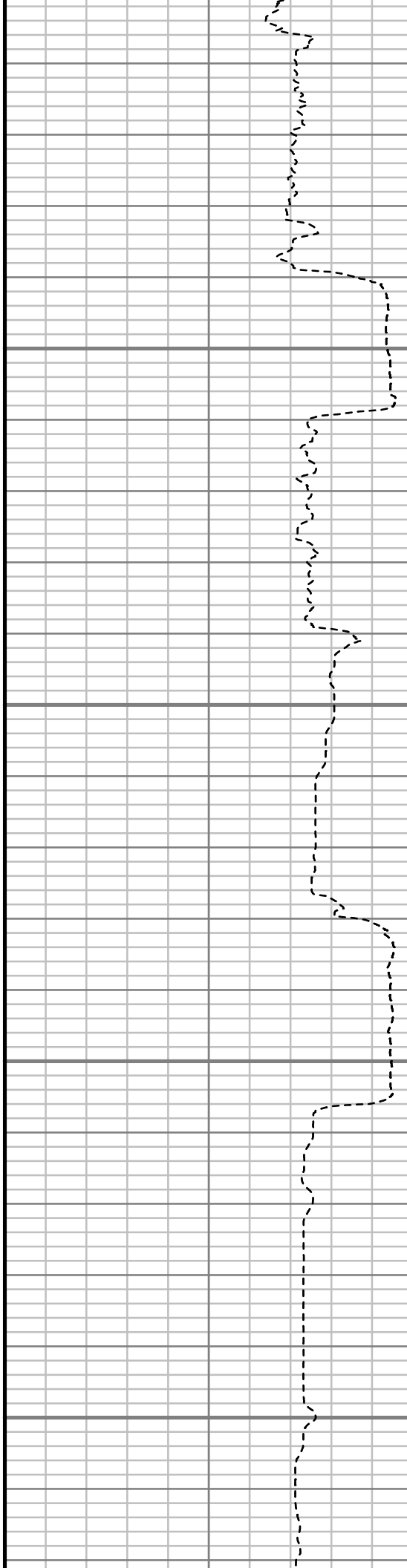


12150

12200

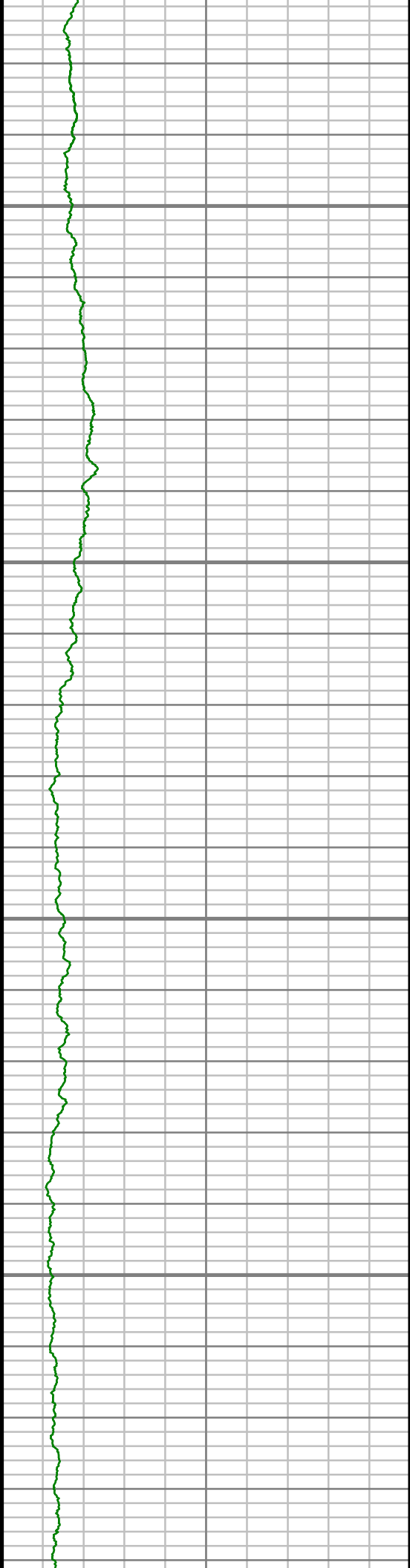
12250

12300



S: 130 MD: 12164.00 ft Inc:
92.02 deg Az: 355.76 deg TVD:
7535.63 ft

S: 131 MD: 12259.00 ft Inc:
91.71 deg Az: 358.41 deg TVD:
7532.54 ft



12350

12400

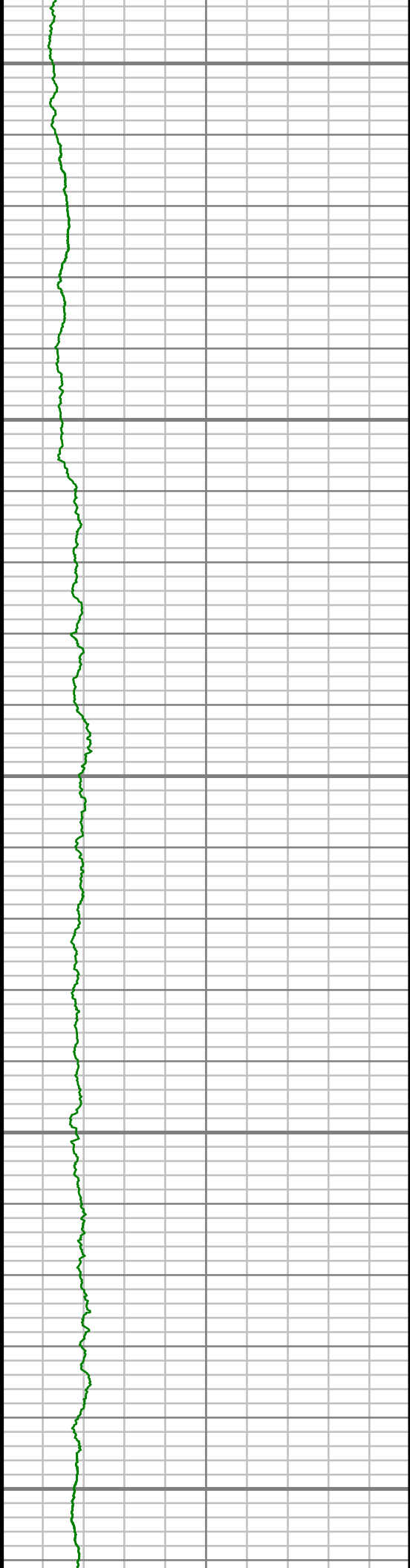
12450

12500



S: 132 MD: 12353.00 ft Inc:
89.03 deg Az: 358.75 deg TVD:
7531.93 ft

S: 133 MD: 12448.00 ft Inc:
89.06 deg Az: 359.73 deg TVD:
7533.52 ft



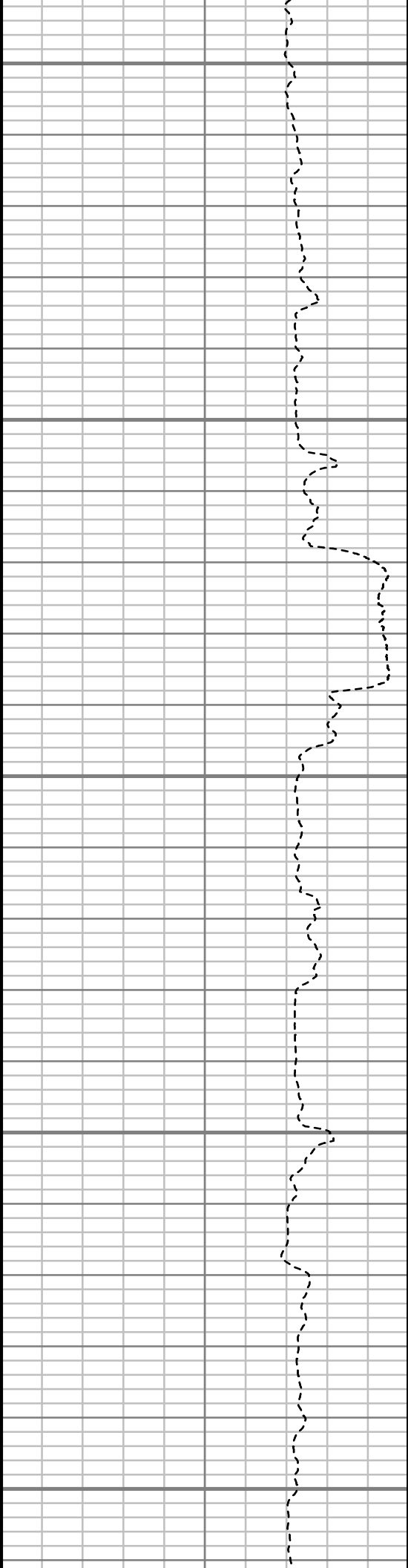
12550

12600

12650

12700

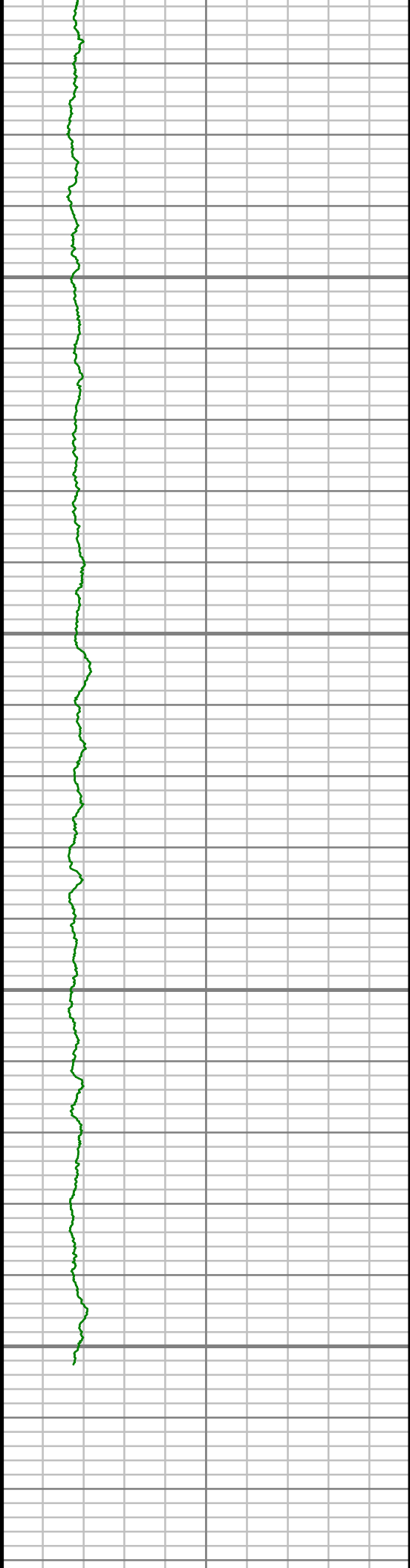
12750



S: 134 MD: 12542.00 ft Inc:
90.47 deg Az: 359.69 deg TVD:
7533.90 ft

S: 135 MD: 12637.00 ft Inc:
90.47 deg Az: 0.39 deg TVD:
7533.12 ft

S: 136 MD: 12731.00 ft Inc:
89.60 deg Az: 357.19 deg TVD:
7533.07 ft

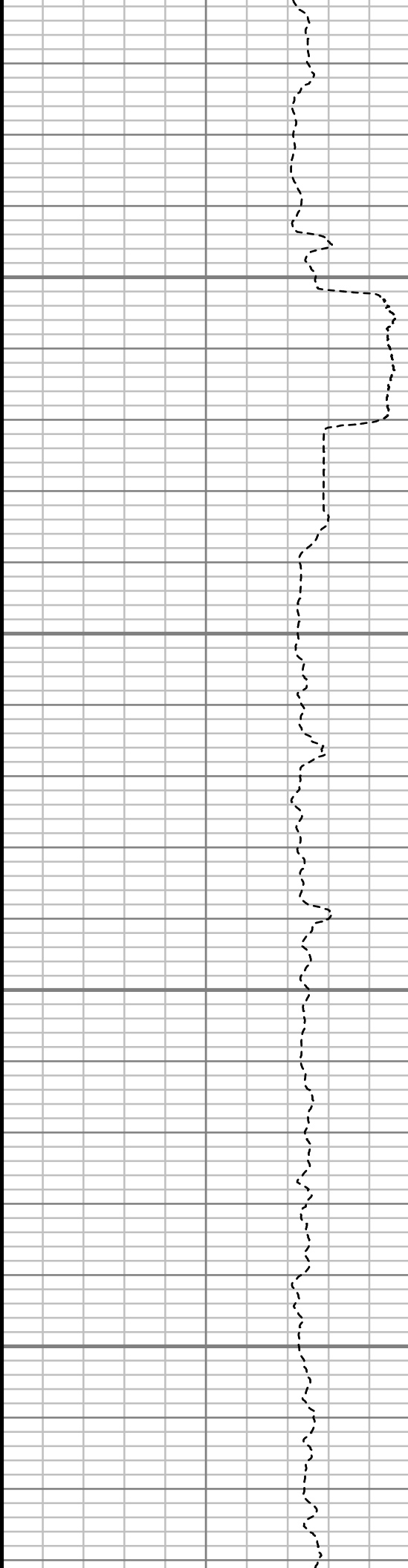


12800

12850

12900

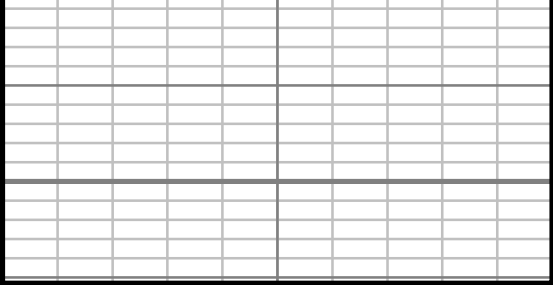
12950



S: 137 MD: 12826.00 ft Inc:
90.27 deg Az: 358.94 deg TVD:
7533.18 ft

S: 138 MD: 12920.00 ft Inc:
90.54 deg Az: 357.12 deg TVD:
7532.52 ft

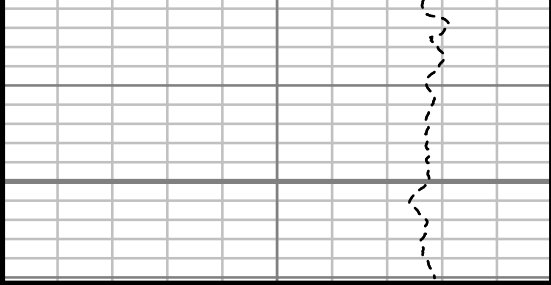
S: 139 MD: 12946.00 ft Inc:
89.93 deg Az: 356.58 deg TVD:
7532.41 ft



Gamma Ray (GR)		
0	Unit = aapi	150

13000

MEASURED DEPTH
1,240 (ft)



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



Comments



Well Location	SPRAGUE
Well Name	SPRAGUE 3H-9H-N267 PRODUCTION
Survey Date	4/8/2015
Latitude	40°8'49.272"N
Longitude	104°53'54.168"W
Btotal	52468 nT
Dip	66.69 deg
Magnetic Declination	8.52 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
316.00	0.36	77.15	316.00	0.22	0.22	0.97	77.15	0.99	0.11
410.00	2.06	123.54	409.97	-0.65	-0.65	2.66	103.65	2.74	1.95
503.00	4.19	135.52	502.83	-4.00	-4.00	6.44	121.82	7.58	2.38
597.00	6.76	135.24	596.40	-10.37	-10.37	12.74	129.16	16.43	2.73
690.00	8.96	135.16	688.52	-19.40	-19.40	21.70	131.79	29.11	2.37
802.00	9.19	126.17	799.12	-30.86	-30.86	35.07	131.34	46.72	1.28
903.00	9.13	115.33	898.84	-39.05	-39.05	48.83	128.65	62.52	1.71
996.00	10.03	123.48	990.54	-46.68	-46.68	62.25	126.86	77.81	1.75
1090.00	9.48	123.83	1083.19	-55.50	-55.50	75.51	126.32	93.72	0.59
1183.00	8.94	125.75	1174.99	-63.99	-63.99	87.74	126.10	108.60	0.66
1276.00	10.47	122.36	1266.65	-72.74	-72.74	100.75	125.83	124.26	1.75
1370.00	10.60	122.71	1359.07	-81.98	-81.98	115.23	125.43	141.42	0.15
1464.00	10.24	119.88	1451.52	-90.81	-90.81	129.75	124.99	158.37	0.67
1558.00	9.05	114.67	1544.19	-98.06	-98.06	143.71	124.31	173.98	1.57
1654.00	10.09	114.44	1638.85	-104.69	-104.69	158.23	123.49	189.72	1.09
1748.00	9.82	116.04	1731.44	-111.62	-111.62	172.93	122.84	205.82	0.41
1843.00	10.54	117.85	1824.94	-119.24	-119.24	187.89	122.40	222.54	0.83
1937.00	10.45	117.99	1917.37	-127.26	-127.26	203.03	122.08	239.61	0.10

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	11.11	120.04	2010.69	-135.89	-135.89	218.57	121.87	257.36	0.80
2126.00	10.58	124.70	2103.01	-145.34	-145.34	233.51	121.90	275.04	1.09
2221.00	11.13	119.98	2196.31	-154.89	-154.89	248.62	121.92	292.92	1.10
2316.00	11.07	119.60	2289.54	-163.97	-163.97	264.49	121.80	311.19	0.10
2410.00	10.27	117.59	2381.91	-172.31	-172.31	279.76	121.63	328.57	0.94
2505.00	10.02	115.45	2475.43	-179.78	-179.78	294.73	121.38	345.23	0.48
2601.00	9.97	119.26	2569.97	-187.43	-187.43	309.52	121.20	361.84	0.69
2695.00	10.61	132.13	2662.47	-197.21	-197.21	323.03	121.40	378.48	2.53
2789.00	11.02	131.09	2754.80	-208.92	-208.92	336.22	121.86	395.85	0.48
2885.00	12.00	127.65	2848.87	-221.05	-221.05	351.04	122.20	414.84	1.25
2979.00	11.70	126.33	2940.87	-232.66	-232.66	366.45	122.41	434.07	0.43
3073.00	10.25	122.07	3033.15	-242.75	-242.75	381.22	122.49	451.94	1.76
3168.00	10.62	122.93	3126.58	-251.99	-251.99	395.73	122.49	469.15	0.42
3262.00	10.29	125.82	3219.02	-261.61	-261.61	409.80	122.55	486.18	0.66
3357.00	11.03	124.65	3312.38	-271.74	-271.74	424.15	122.65	503.73	0.81
3451.00	9.38	123.73	3404.89	-281.11	-281.11	437.92	122.70	520.38	1.76
3547.00	9.67	125.43	3499.57	-290.13	-290.13	451.00	122.75	536.26	0.42
3641.00	8.78	126.19	3592.35	-298.94	-298.94	463.22	122.84	551.30	0.96

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	9.24	121.29	3687.17	-307.27	-307.27	475.71	122.86	566.32	0.93
3831.00	10.20	120.35	3779.82	-315.39	-315.39	489.35	122.80	582.18	1.04
3926.00	8.88	122.54	3873.50	-323.59	-323.59	502.79	122.76	597.92	1.44
4020.00	9.71	124.90	3966.27	-332.03	-332.03	515.41	122.79	613.09	0.97
4115.00	10.73	118.71	4059.76	-340.86	-340.86	529.73	122.76	629.92	1.58
4210.00	11.34	117.27	4153.00	-349.39	-349.39	545.79	122.63	648.04	0.71
4304.00	11.08	120.34	4245.21	-358.18	-358.18	561.80	122.52	666.27	0.69
4398.00	9.26	117.44	4337.73	-366.23	-366.23	576.31	122.44	682.83	2.00
4493.00	9.22	120.14	4431.50	-373.58	-373.58	589.68	122.36	698.05	0.46
4587.00	10.96	120.85	4524.04	-381.94	-381.94	603.86	122.31	714.51	1.86
4682.00	11.26	119.60	4617.26	-391.16	-391.16	619.68	122.26	732.81	0.40
4776.00	11.64	121.04	4709.39	-400.58	-400.58	635.78	122.21	751.45	0.51
4871.00	11.33	119.39	4802.49	-410.09	-410.09	652.12	122.16	770.35	0.48
4965.00	9.35	121.89	4894.96	-418.66	-418.66	666.64	122.13	787.20	2.16
5060.00	8.36	117.68	4988.83	-425.94	-425.94	679.31	122.09	801.80	1.24
5154.00	10.35	111.47	5081.58	-432.20	-432.20	693.22	121.94	816.92	2.37
5249.00	9.54	109.95	5175.15	-438.02	-438.02	708.56	121.72	833.02	0.90
5344.00	8.84	116.81	5268.93	-443.99	-443.99	722.47	121.57	848.00	1.37

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	7.91	126.66	5361.93	-451.11	-451.11	734.11	121.57	861.64	1.81
5533.00	8.44	126.78	5455.97	-459.19	-459.19	744.94	121.65	875.09	0.55
5627.00	8.78	127.66	5548.91	-467.70	-467.70	756.14	121.74	889.10	0.39
5722.00	8.89	117.61	5642.79	-475.54	-475.54	768.39	121.75	903.63	1.62
5816.00	7.80	111.64	5735.79	-481.25	-481.25	780.75	121.65	917.15	1.48
5912.00	5.54	106.05	5831.14	-484.94	-484.94	791.25	121.50	928.03	2.44
6006.00	4.46	106.50	5924.78	-487.23	-487.23	799.12	121.37	935.94	1.15
6100.00	3.42	100.45	6018.56	-488.77	-488.77	805.38	121.25	942.09	1.19
6195.00	3.33	125.05	6113.40	-490.87	-490.87	810.42	121.20	947.49	1.51
6290.00	2.66	123.13	6208.27	-493.66	-493.66	814.52	121.22	952.44	0.71
6384.00	1.73	110.07	6302.20	-495.34	-495.34	817.68	121.21	956.01	1.11
6478.00	1.74	124.63	6396.15	-496.63	-496.63	820.18	121.20	958.83	0.47
6573.00	1.78	124.77	6491.11	-498.29	-498.29	822.58	121.21	961.74	0.05
6667.00	1.64	127.02	6585.07	-499.94	-499.94	824.86	121.22	964.53	0.17
6761.00	1.39	121.82	6679.03	-501.35	-501.35	826.90	121.23	967.01	0.30
6856.00	3.58	87.10	6773.94	-501.80	-501.80	830.84	121.13	970.62	2.70
6950.00	9.67	91.45	6867.27	-501.85	-501.85	841.68	120.81	979.94	6.49
7045.00	12.51	77.00	6960.51	-499.74	-499.74	859.69	120.17	994.39	4.17

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	19.34	54.51	7050.93	-488.39	-488.39	882.34	118.97	1008.48	9.67
7234.00	24.34	36.41	7139.18	-463.46	-463.46	906.81	117.07	1018.38	8.77
7328.00	30.78	23.21	7222.55	-425.69	-425.69	927.82	114.65	1020.82	9.41
7423.00	35.92	13.84	7301.93	-376.23	-376.23	944.09	111.73	1016.30	7.65
7517.00	42.52	12.05	7374.72	-318.32	-318.32	957.33	108.39	1008.87	7.11
7612.00	50.04	7.55	7440.35	-250.72	-250.72	968.84	104.51	1000.75	8.62
7658.00	54.19	4.63	7468.60	-214.64	-214.64	972.66	102.44	996.06	10.33
7691.00	57.21	3.90	7487.19	-187.45	-187.45	974.68	100.89	992.55	9.30
7706.00	58.54	3.30	7495.17	-174.78	-174.78	975.48	100.16	991.02	9.55
7772.00	65.31	2.97	7526.21	-116.66	-116.66	978.66	96.80	985.59	10.26
7872.00	78.98	1.76	7556.79	-21.78	-21.78	982.54	91.27	982.78	13.72
7911.00	85.20	1.82	7562.16	16.81	16.81	983.75	89.02	983.89	15.94
7942.00	88.29	0.90	7563.92	47.74	47.74	984.48	87.22	985.64	10.39
8005.00	91.17	0.02	7564.22	110.73	110.73	984.99	83.59	991.19	4.80
8100.00	91.72	359.49	7561.82	205.70	205.70	984.58	78.20	1005.84	0.80
8194.00	91.81	357.93	7558.93	299.63	299.63	982.46	73.04	1027.14	1.66
8288.00	89.83	357.86	7557.58	393.55	393.55	979.01	68.10	1055.15	2.11
8383.00	89.66	358.26	7558.00	488.50	488.50	975.79	63.41	1091.24	0.45

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
8477.00	89.87	0.12	7558.38	582.48	582.48	974.46	59.13	1135.28	2.00
8572.00	88.96	1.95	7559.36	677.46	677.46	976.18	55.24	1188.23	2.15
8667.00	90.24	2.49	7560.03	772.38	772.38	979.86	51.75	1247.68	1.46
8761.00	89.66	3.51	7560.11	866.25	866.25	984.77	48.66	1311.55	1.25
8856.00	90.00	0.67	7560.39	961.18	961.18	988.24	45.80	1378.58	3.01
8950.00	90.87	1.36	7559.67	1055.16	1055.16	989.90	43.17	1446.81	1.18
9045.00	90.64	359.41	7558.42	1150.14	1150.14	990.54	40.74	1517.89	2.06
9139.00	90.10	356.75	7557.81	1244.08	1244.08	987.39	38.44	1588.29	2.89
9234.00	90.24	355.67	7557.53	1338.87	1338.87	981.11	36.23	1659.87	1.15
9328.00	90.84	356.59	7556.65	1432.65	1432.65	974.76	34.23	1732.82	1.17
9423.00	90.64	358.09	7555.43	1527.54	1527.54	970.35	32.43	1809.68	1.59
9517.00	89.50	358.42	7555.32	1621.49	1621.49	967.48	30.82	1888.19	1.27
9612.00	90.07	357.74	7555.68	1716.44	1716.44	964.29	29.33	1968.76	0.93
9706.00	88.99	357.63	7556.45	1810.36	1810.36	960.49	27.95	2049.37	1.15
9801.00	88.79	358.67	7558.29	1905.29	1905.29	957.42	26.68	2132.31	1.11
9895.00	89.97	358.47	7559.31	1999.25	1999.25	955.06	25.53	2215.66	1.27
9990.00	90.27	356.75	7559.11	2094.16	2094.16	951.10	24.43	2300.02	1.84
10084.00	89.97	359.53	7558.92	2188.10	2188.10	948.04	23.43	2384.66	2.98

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
10179.00	90.30	0.34	7558.70	2283.10	2283.10	947.93	22.55	2472.07	0.93
10273.00	90.87	359.98	7557.73	2377.10	2377.10	948.20	21.75	2559.23	0.72
10368.00	90.84	359.30	7556.31	2472.08	2472.08	947.61	20.97	2647.48	0.71
10463.00	91.48	358.84	7554.39	2567.05	2567.05	946.07	20.23	2735.84	0.83
10558.00	89.83	357.67	7553.31	2662.00	2662.00	943.19	19.51	2824.15	2.13
10652.00	89.97	358.55	7553.47	2755.94	2755.94	940.09	18.84	2911.87	0.94
10747.00	90.27	358.62	7553.28	2850.92	2850.92	937.74	18.21	3001.18	0.33
10842.00	91.51	359.84	7551.80	2945.89	2945.89	936.46	17.63	3091.16	1.83
10936.00	90.13	359.17	7550.45	3039.88	3039.88	935.65	17.11	3180.61	1.63
11030.00	90.23	358.70	7550.15	3133.86	3133.86	933.90	16.59	3270.05	0.51
11125.00	91.04	359.03	7549.09	3228.83	3228.83	932.02	16.10	3360.66	0.92
11219.00	91.58	358.56	7546.94	3322.79	3322.79	930.04	15.64	3450.49	0.76
11314.00	90.50	358.11	7545.22	3417.73	3417.73	927.28	15.18	3541.29	1.22
11408.00	90.84	357.33	7544.12	3511.65	3511.65	923.54	14.73	3631.06	0.91
11502.00	91.65	358.51	7542.08	3605.56	3605.56	920.13	14.32	3721.12	1.52
11597.00	89.66	359.65	7541.00	3700.54	3700.54	918.61	13.94	3812.85	2.41
11692.00	90.03	358.78	7541.25	3795.53	3795.53	917.31	13.59	3904.80	1.00
11786.00	90.91	359.81	7540.47	3889.51	3889.51	916.16	13.25	3995.96	1.43

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	"/100ft
11880.00	90.54	358.26	7539.29	3983.49	3983.49	914.59	12.93	4087.13	1.69
11975.00	89.36	355.08	7539.37	4078.32	4078.32	909.07	12.57	4178.40	3.58
12069.00	91.58	354.50	7538.60	4171.92	4171.92	900.53	12.18	4268.00	2.43
12164.00	92.02	355.76	7535.63	4266.53	4266.53	892.48	11.81	4358.87	1.40
12259.00	91.71	358.41	7532.54	4361.35	4361.35	887.65	11.50	4450.76	2.80
12353.00	89.03	358.75	7531.93	4455.31	4455.31	885.32	11.24	4542.42	2.88
12448.00	89.06	359.73	7533.52	4550.28	4550.28	884.05	10.99	4635.37	1.03
12542.00	90.47	359.69	7533.90	4644.28	4644.28	883.57	10.77	4727.58	1.50
12637.00	90.47	0.39	7533.12	4739.27	4739.27	883.64	10.56	4820.95	0.74
12731.00	89.60	357.19	7533.07	4833.24	4833.24	881.66	10.34	4913.00	3.53
12826.00	90.27	358.94	7533.18	4928.18	4928.18	878.45	10.11	5005.86	1.97
12920.00	90.54	357.12	7532.52	5022.12	5022.12	875.22	9.89	5097.81	1.96
12946.00	89.93	356.58	7532.41	5048.08	5048.08	873.79	9.82	5123.15	3.11

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