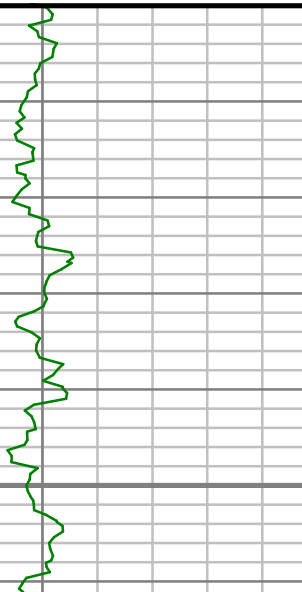
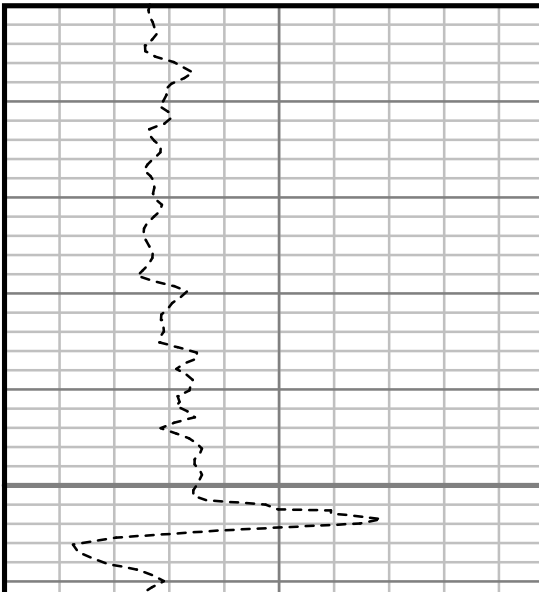
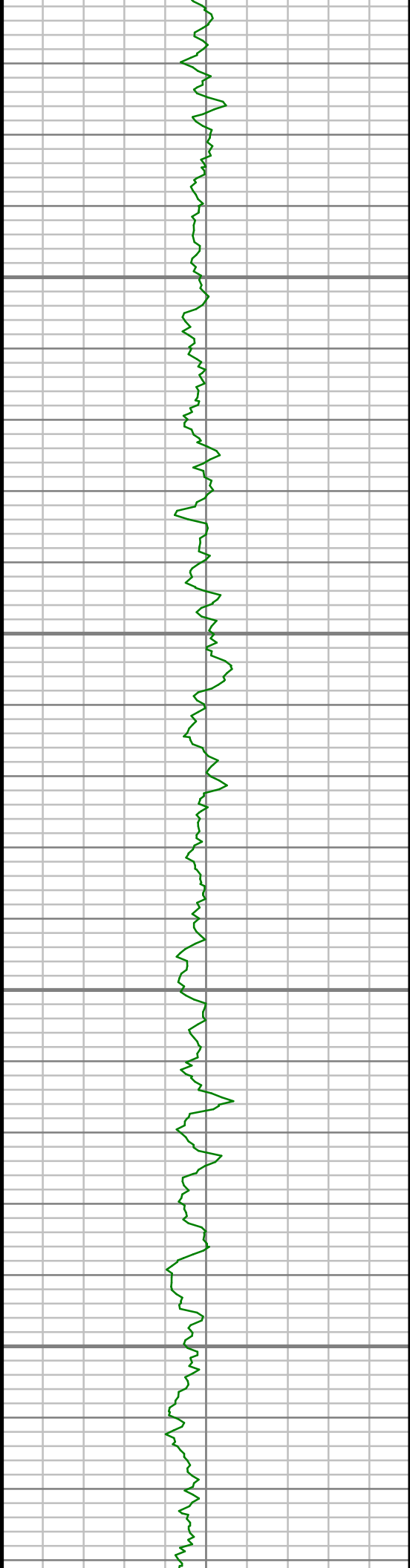


Remarks
ENCANA OIL AND GAS (U.S.A.) INC PRODUCTION AFE# 14182693
SCIENTIFIC DRILLING INTERNATIONAL JOB# 251348
ALL REFERENCES IN THE DEPTH TRACK ARE AT BIT DEPTH.
ALL DATA IS MEMORY DATA UNLESS STATED OTHERWISE.
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO GAMMA RAY CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO RATE OF PENETRATION CURVE
RUN #1: MWD / DIRECTIONAL RUN
SENSORS S/N: PULSER = 128-020 / CONT = 227 / MWD EYE = 0646
BIT TO SENSOR OFFSET: SURVEY = 61.41 FT.
RUN #2: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 128-157 / CONT = 844 / MWD EYE = 0661 / GAMMA RAY = 1403
BIT TO SENSOR OFFSETS: SURVEY = 61.14 FT. / GAMMA RAY = 57.08 FT.
RUN #3: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 78-139 / CONT = 227 / MWD EYE = 0646 / GAMMA RAY = 1053
BIT TO SENSOR OFFSETS: SURVEY = 60.81 FT. / GAMMA RAY = 56.18 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.

ENCANA OIL AND GAS (U.S.A.) INC NEWNAM 2K-32H-C264 WATTENBERG FIELD WELD COUNTY, COLORADO 05-123-40228				
Gamma Ray (GR)		Rate of Penetration (ROP)		Comments
0	Unit = aapi	600	Unit = ft/hr	
				



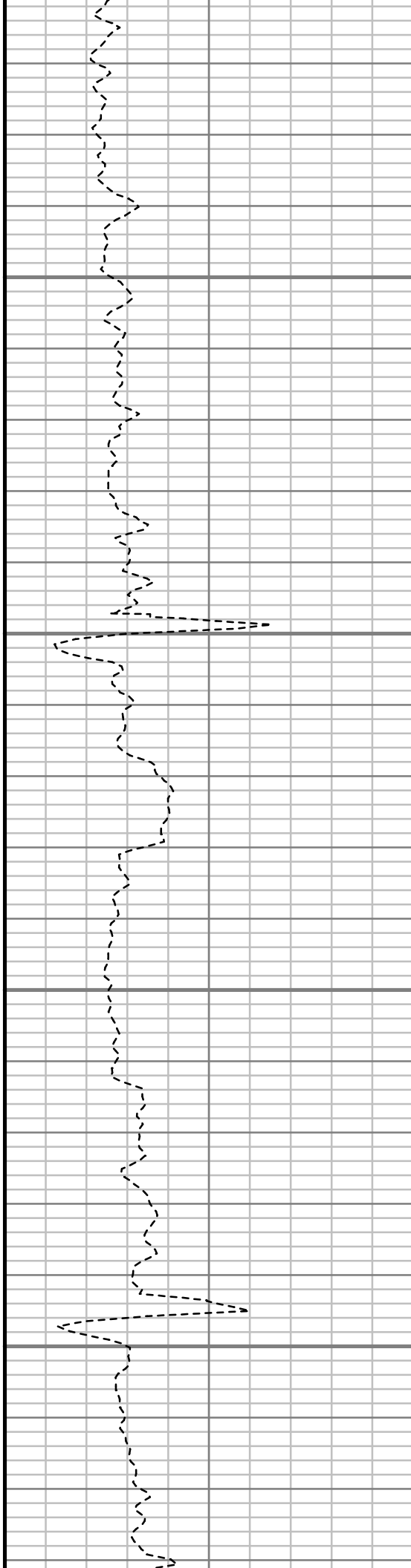
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5150

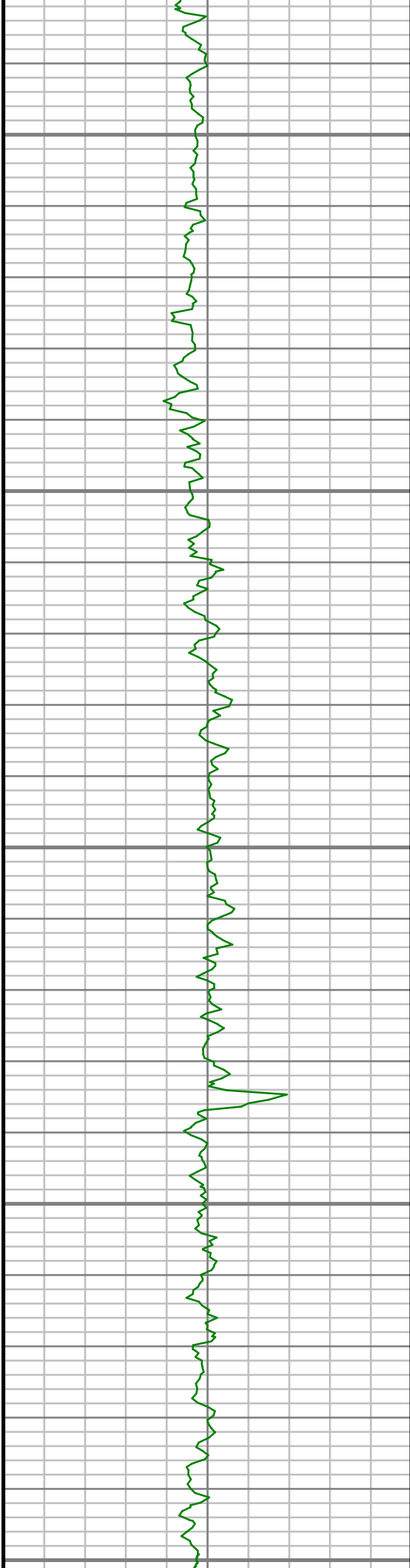
5200

5250

S: 32 MD: 5078.00 ft Inc: 0.98
deg Az: 302.87 deg TVD:
5026.96 ft



S: 33 MD: 5268.00 ft Inc: 1.54
deg Az: 314.23 deg TVD:
5216.92 ft



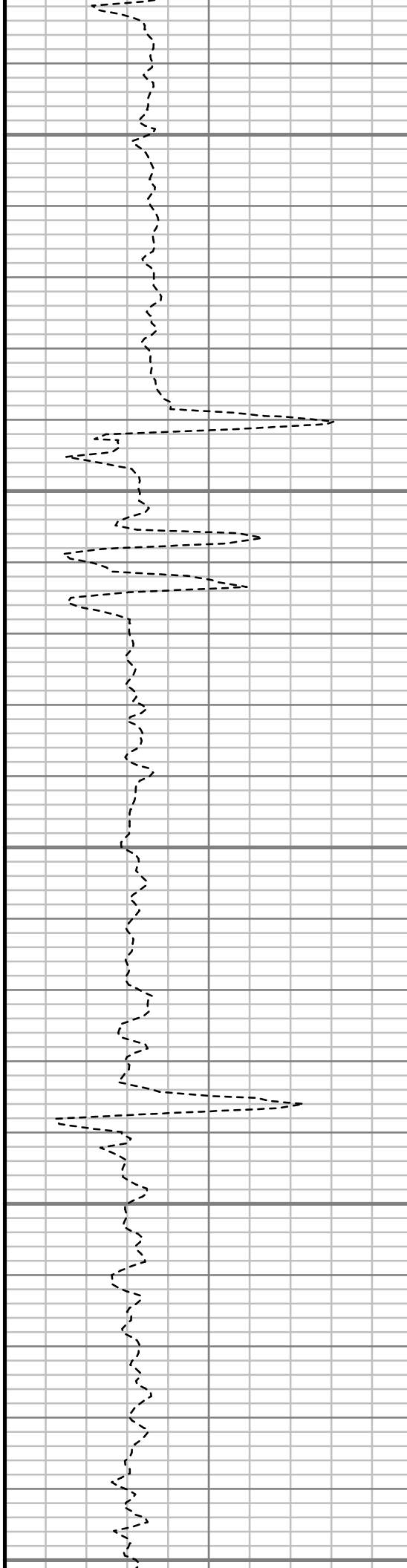
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5350

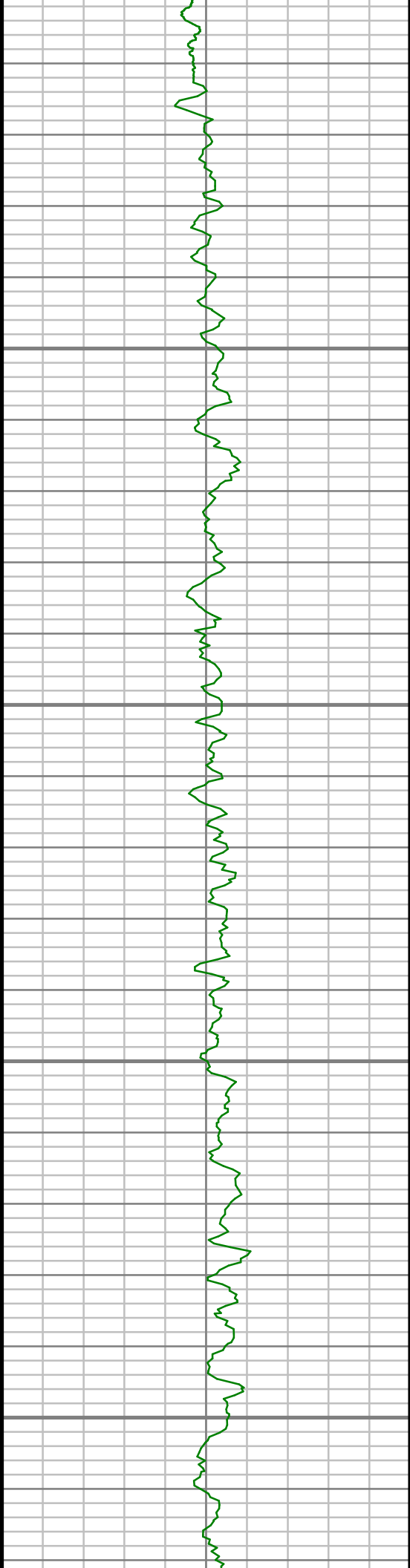
5400

5450

5500



S: 34 MD: 5458.00 ft Inc: 1.99
deg Az: 351.47 deg TVD:
5406.83 ft

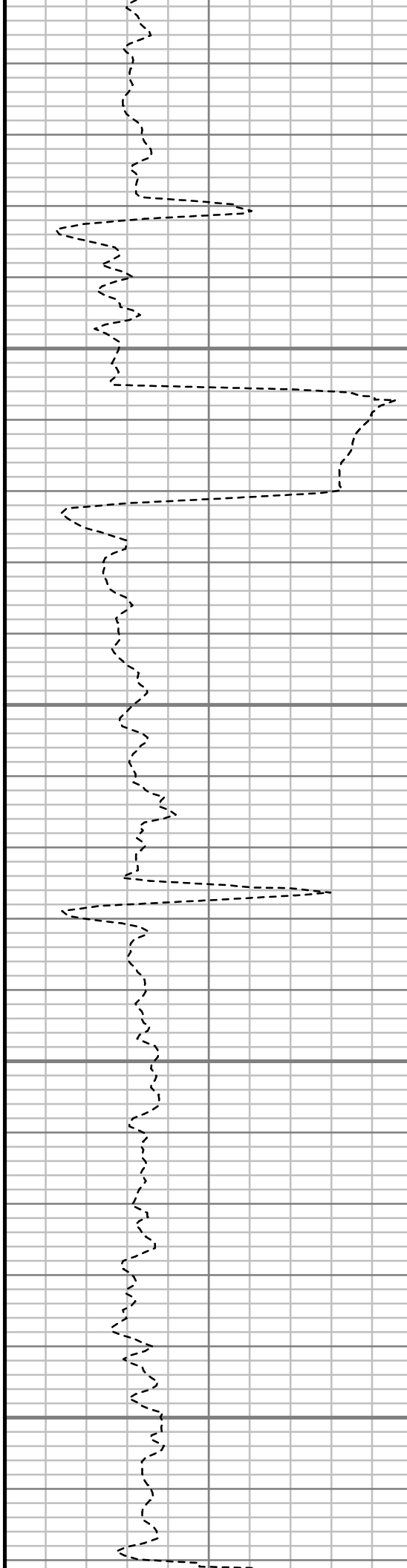


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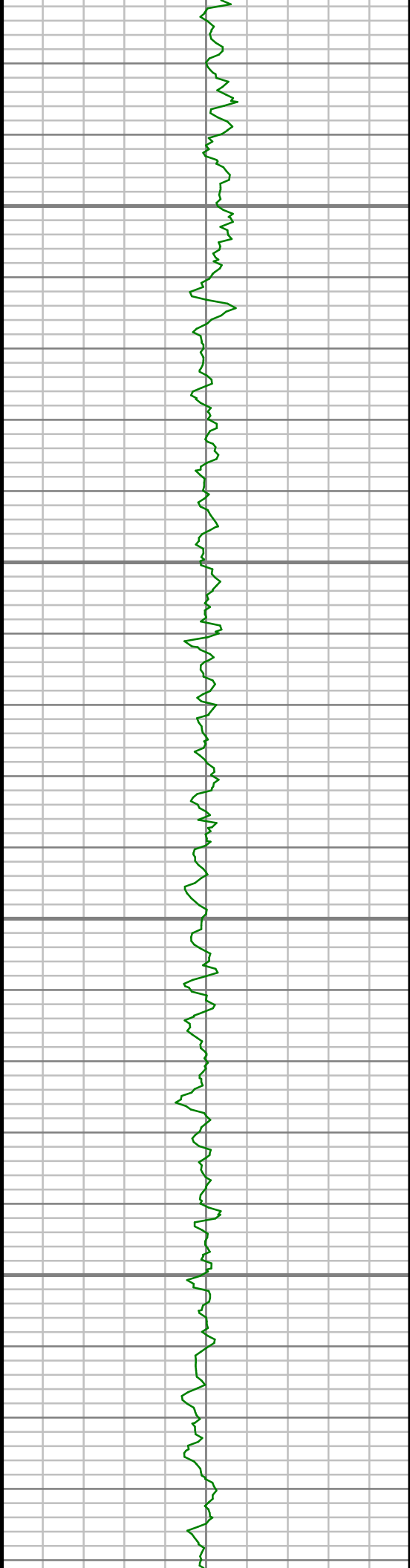
5600

5650

5700



S: 35 MD: 5648.00 ft Inc: 0.14
deg Az: 89.60 deg TVD:
5596.79 ft

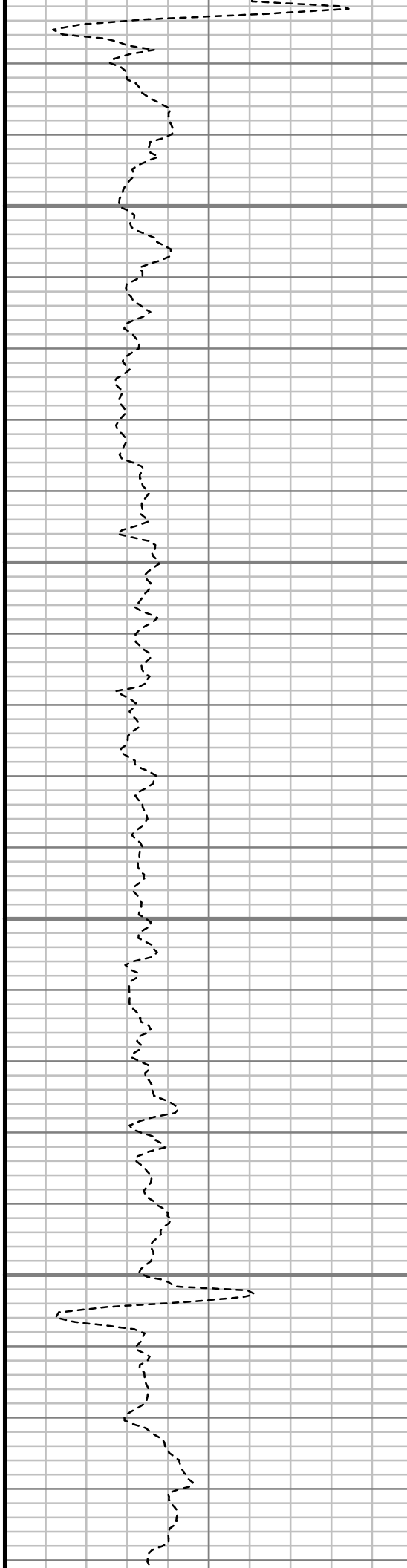


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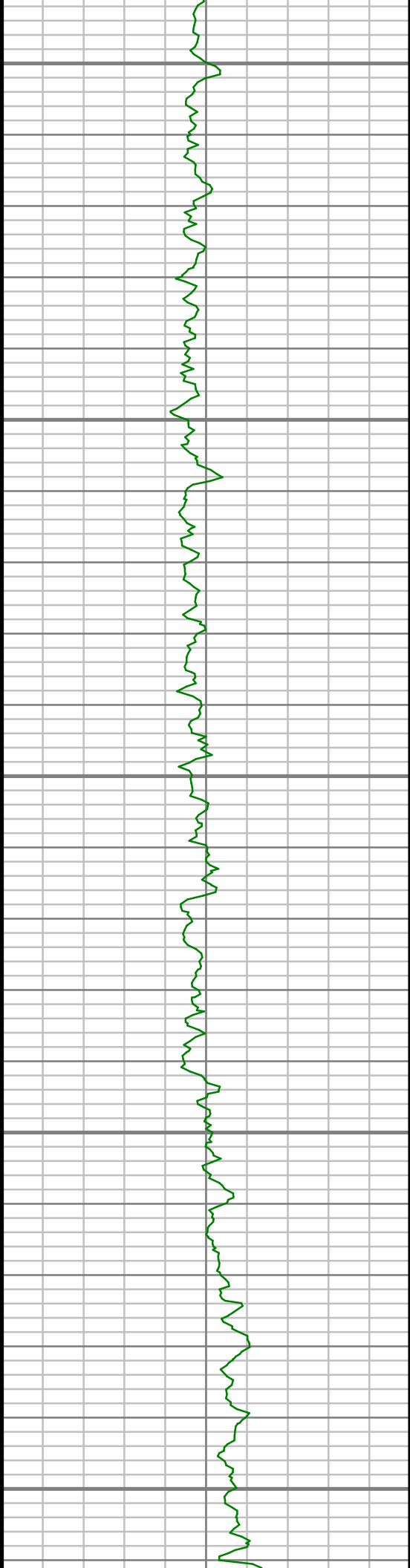
5800

5850

5900



S: 36 MD: 5838.00 ft Inc: 0.13
deg Az: 270.13 deg TVD:
5786.79 ft



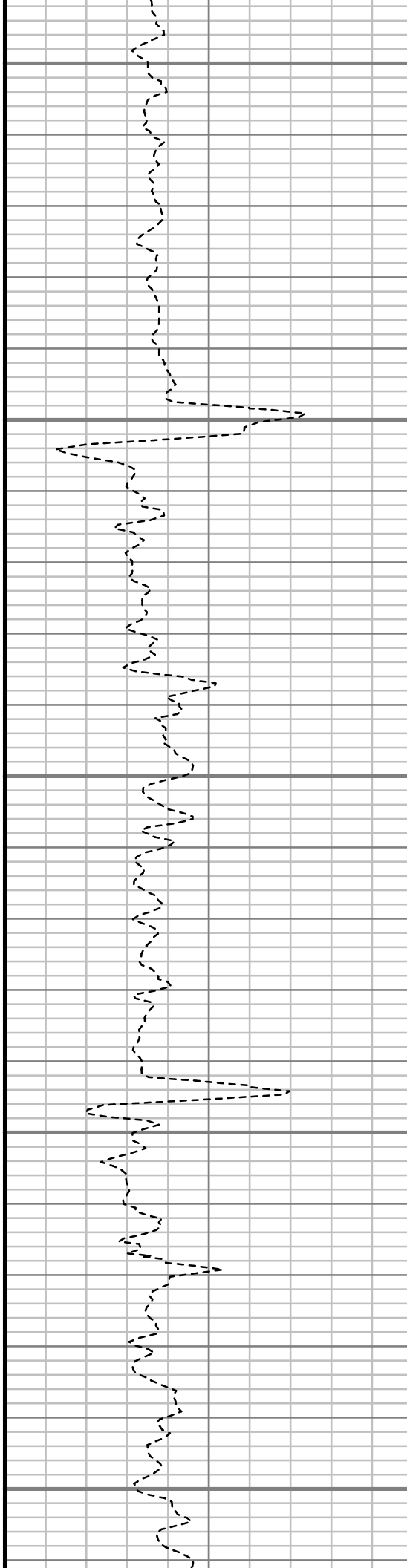
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6000

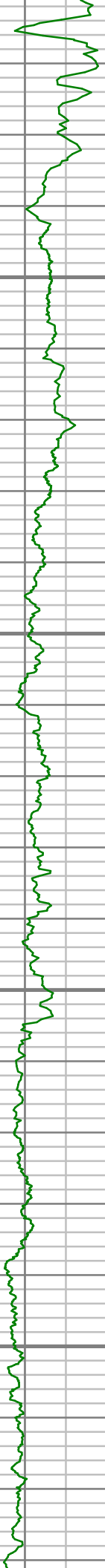
6050

6100

6150



S: 37 MD: 6028.00 ft Inc: 0.41
deg Az: 271.12 deg TVD:
5976.79 ft

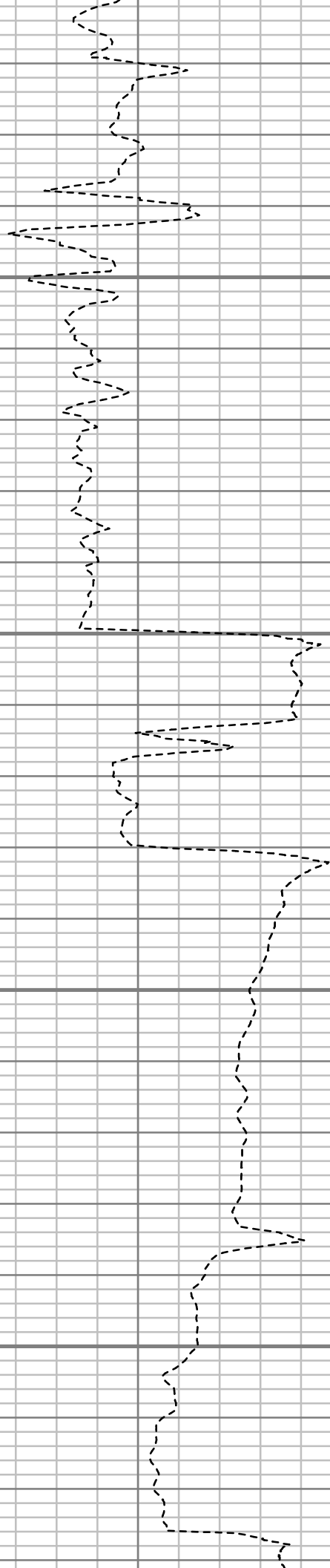


6200

6250

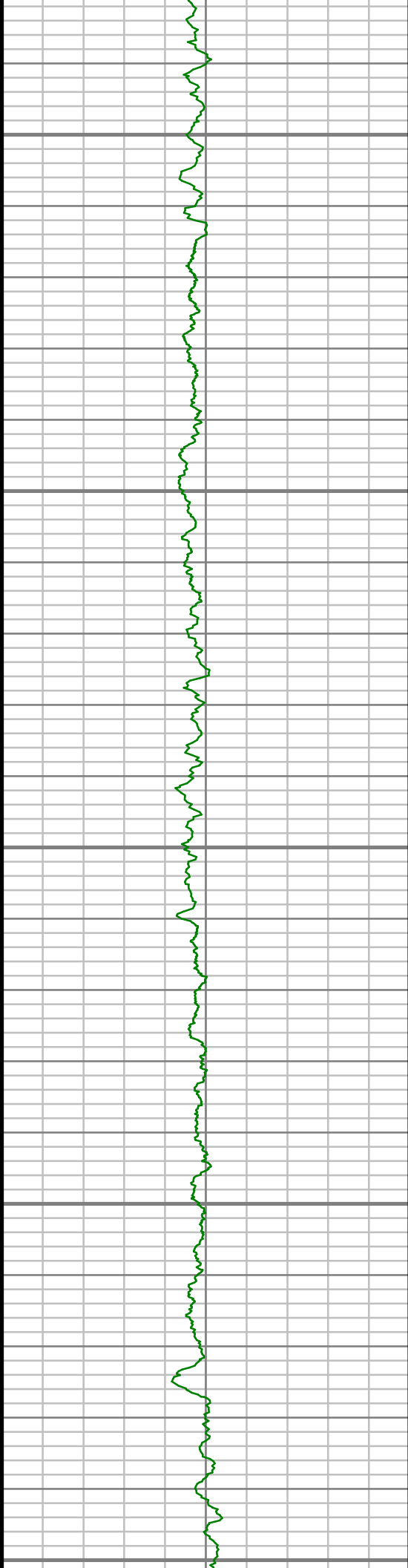
6300

6350



S: 38 MD: 6218.00 ft Inc: 0.48
deg Az: 132.36 deg TVD:
6166.79 ft

S: 39 MD: 6313.00 ft Inc: 9.42
deg Az: 164.10 deg TVD:
6261.34 ft



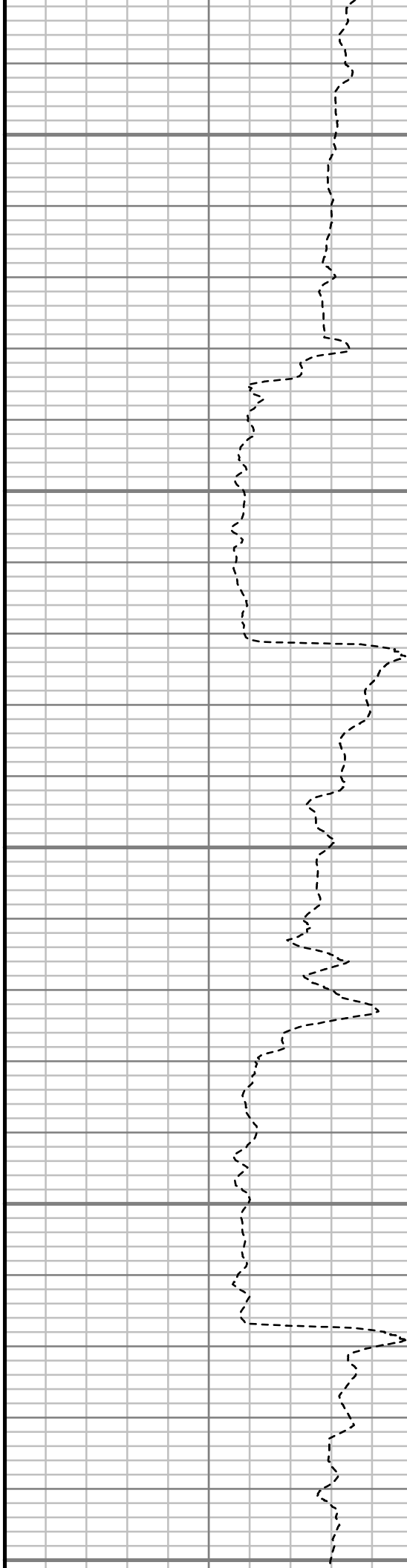
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6450

6500

6550

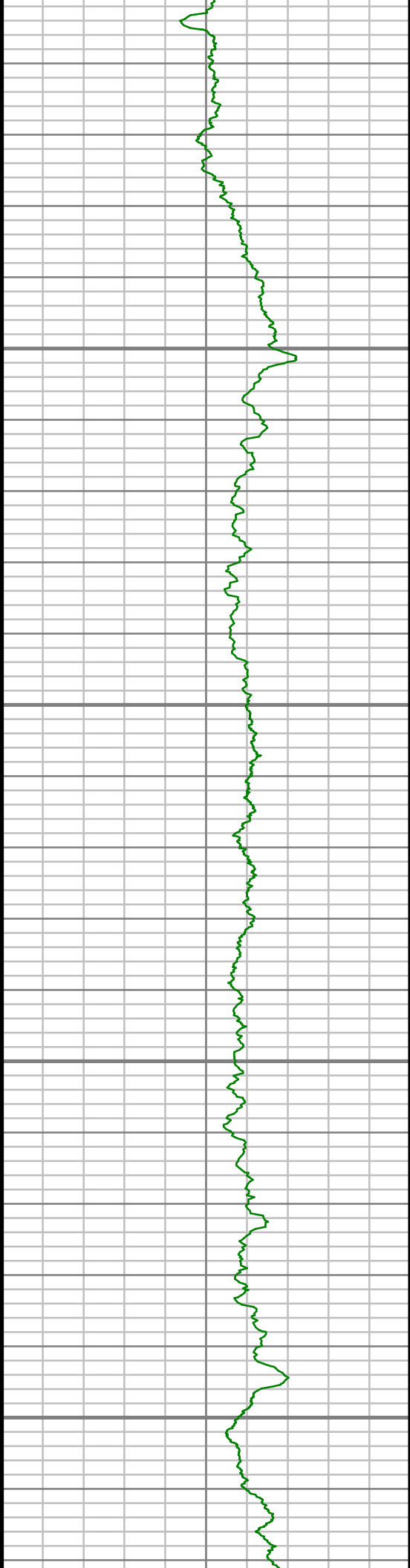
6600



S: 40 MD: 6408.00 ft Inc: 17.61
deg Az: 163.59 deg TVD:
6353.63 ft

S: 41 MD: 6503.00 ft Inc: 24.34
deg Az: 167.99 deg TVD:
6442.29 ft

S: 42 MD: 6598.00 ft Inc: 29.70
deg Az: 172.49 deg TVD:
6537.75 ft

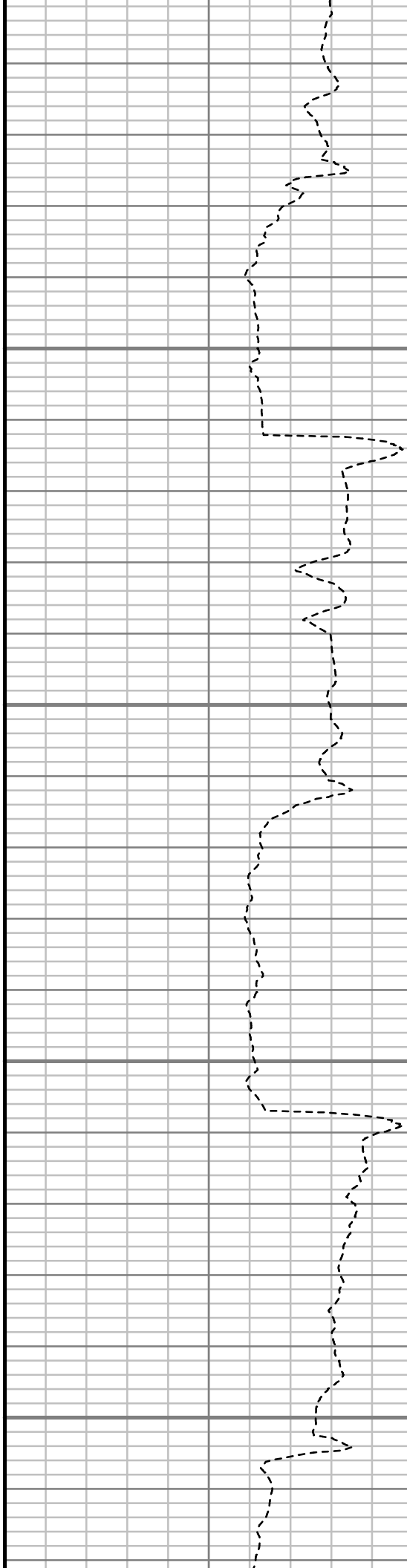


6650

6700

6750

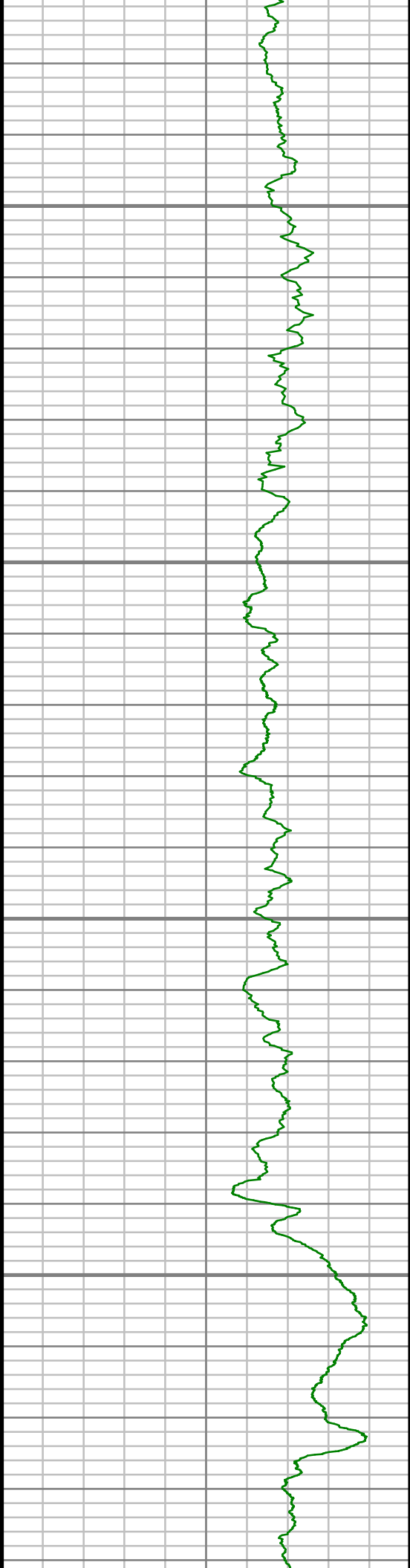
6800



deg Az: 176.59 deg TVD:
6526.93 ft

S: 43 MD: 6693.00 ft Inc: 36.75
deg Az: 179.80 deg TVD:
6606.36 ft

S: 44 MD: 6789.00 ft Inc: 44.57
deg Az: 180.96 deg TVD:
6679.12 ft

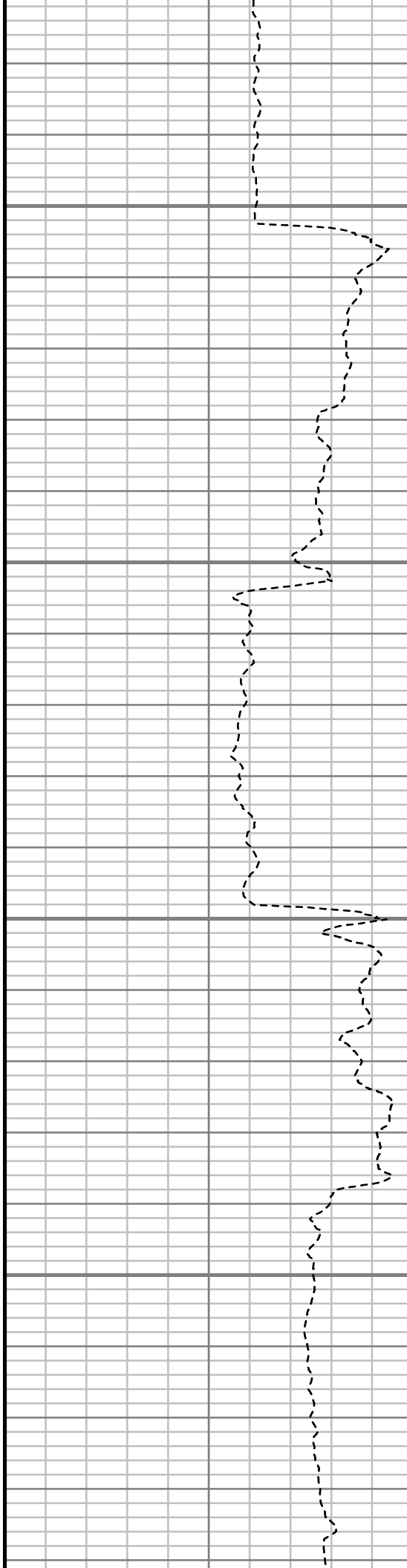


6850

6900

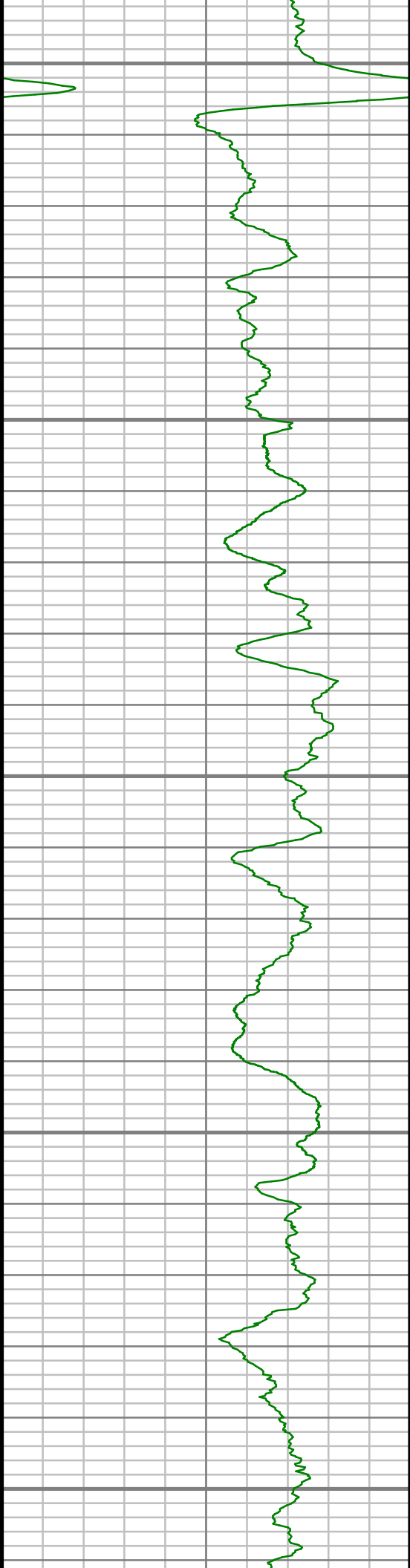
6950

7000



S: 45 MD: 6884.00 ft Inc: 52.69
deg Az: 183.26 deg TVD:
6741.86 ft

S: 46 MD: 6979.00 ft Inc: 58.80
deg Az: 181.07 deg TVD:
6795.31 ft



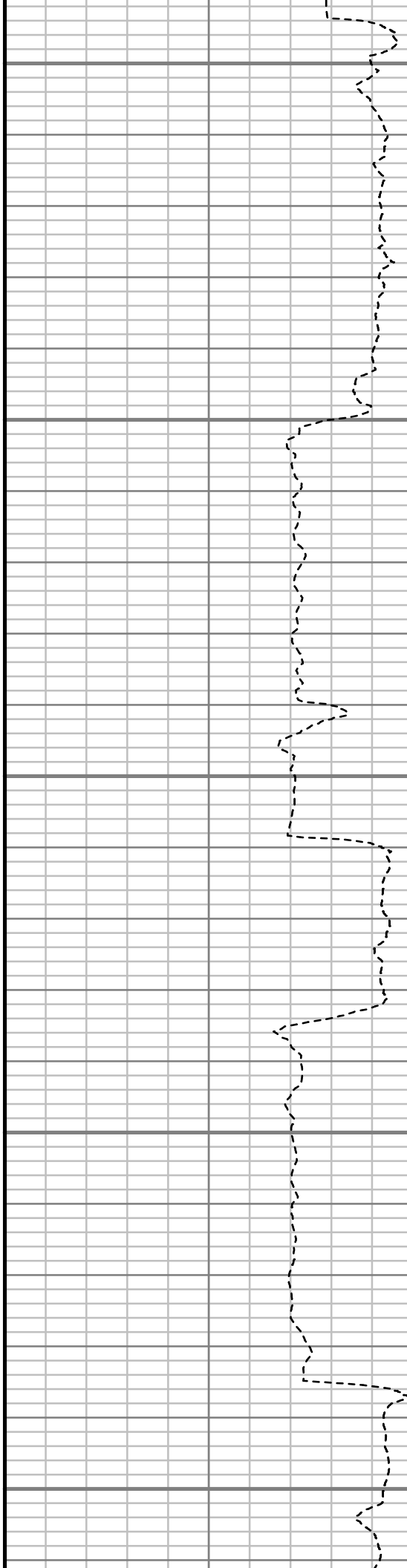
7050

7100

7150

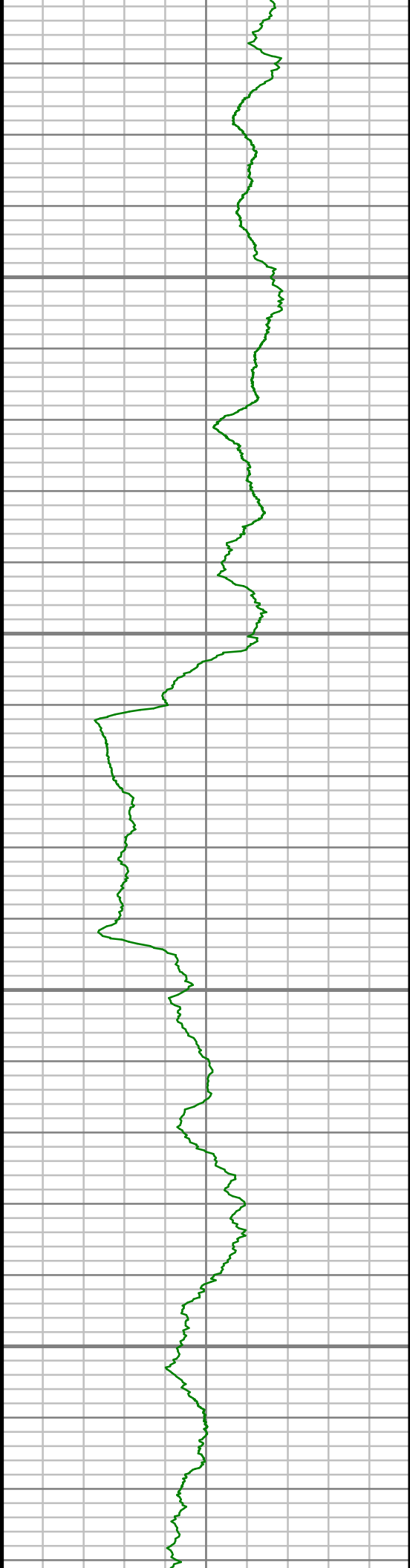
7200

7250



S: 47 MD: 7075.00 ft Inc: 67.08
deg Az: 181.17 deg TVD:
6838.95 ft

S: 48 MD: 7170.00 ft Inc: 73.44
deg Az: 181.77 deg TVD:
6871.02 ft

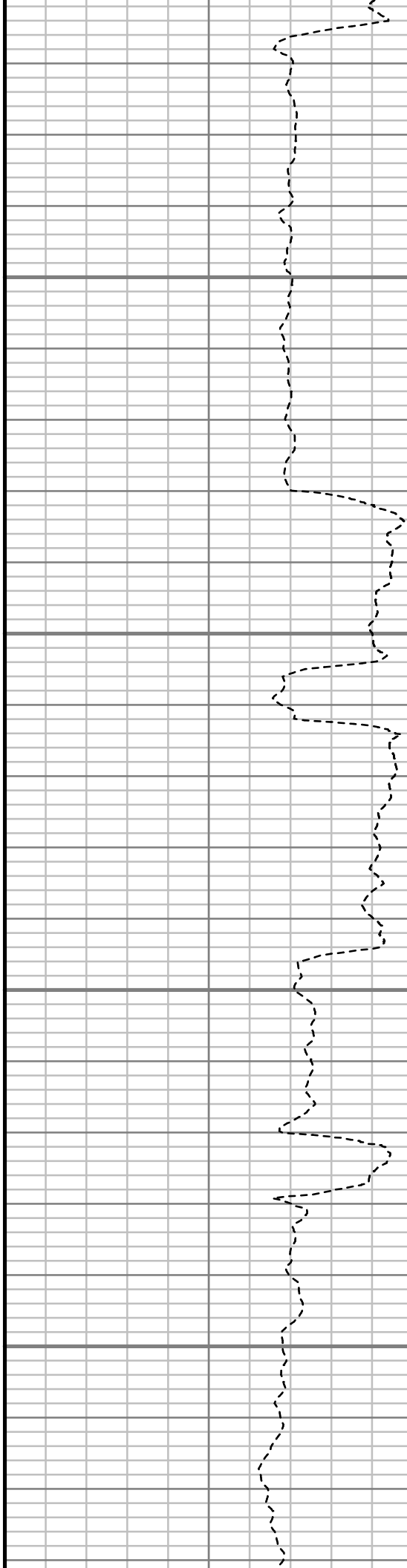


7300

7350

7400

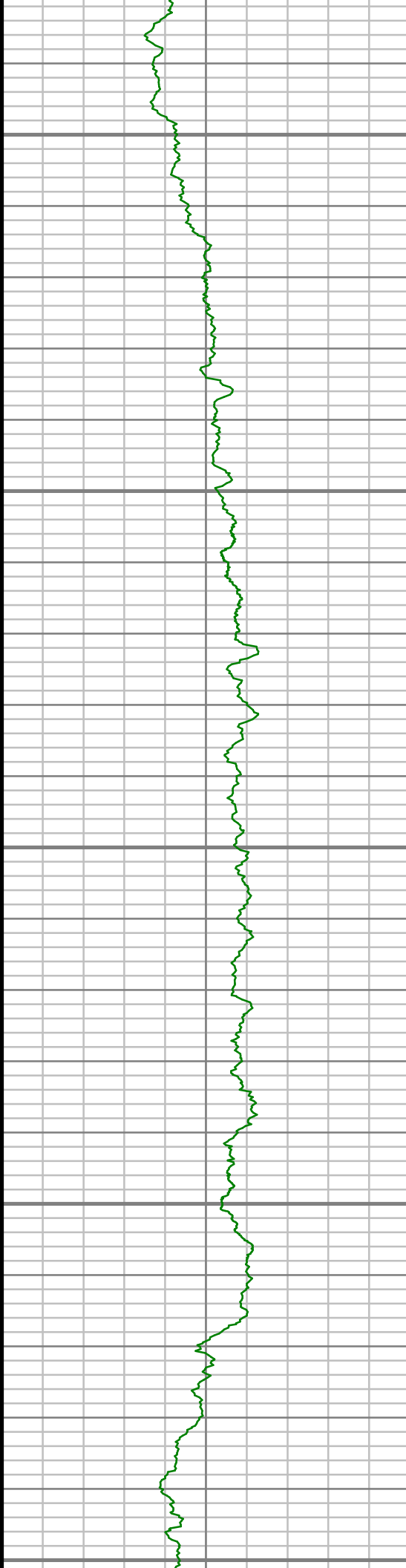
7450



S: 49 MD: 7265.00 ft Inc: 79.56
deg Az: 180.86 deg TVD:
6893.18 ft

S: 50 MD: 7355.00 ft Inc: 85.16
deg Az: 180.11 deg TVD:
6905.14 ft

S: 51 MD: 7440.00 ft Inc: 90.30
deg Az: 179.43 deg TVD:
6908.50 ft



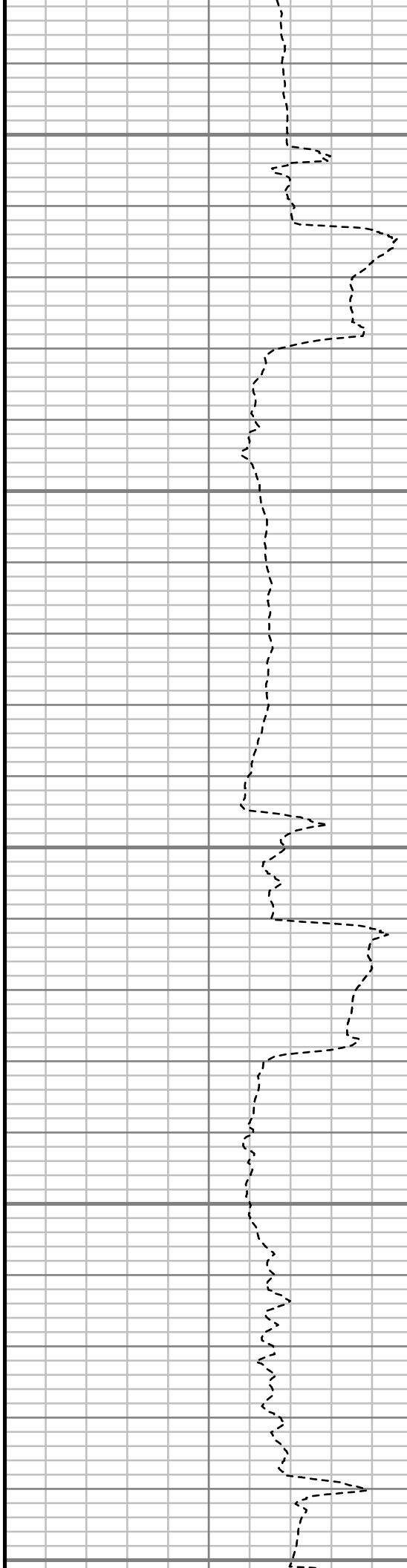
7500

7550

7600

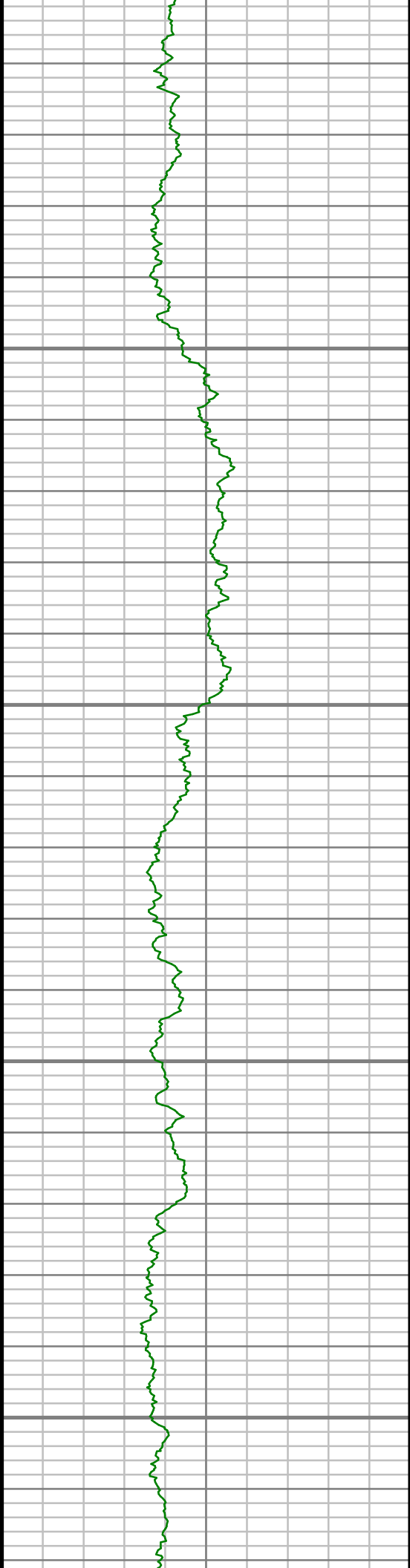
7650

7700



S: 52 MD: 7533.00 ft Inc: 90.03
deg Az: 179.73 deg TVD:
6908.23 ft

S: 53 MD: 7626.00 ft Inc: 88.86
deg Az: 180.76 deg TVD:
6909.13 ft

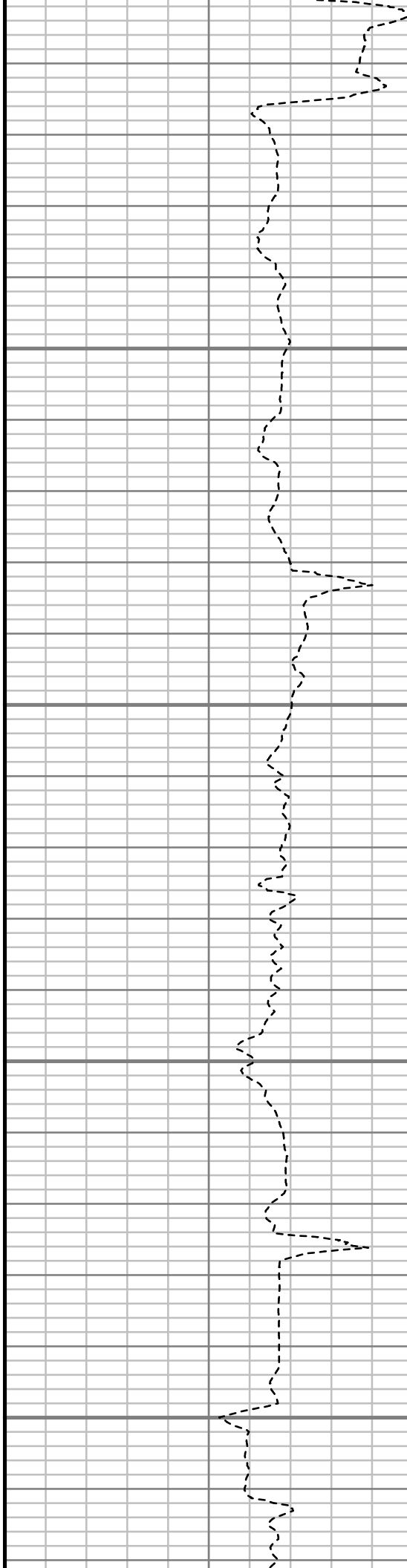


7750

7800

7850

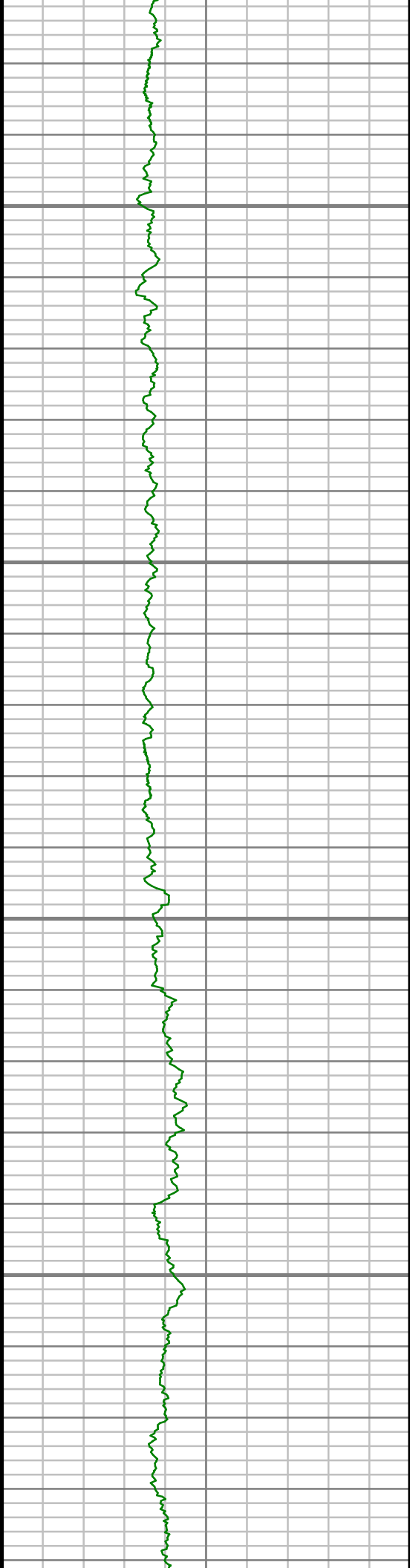
7900



S: 54 MD: 7719.00 ft Inc: 88.99
deg Az: 182.11 deg TVD:
6910.87 ft

S: 55 MD: 7812.00 ft Inc: 89.03
deg Az: 182.10 deg TVD:
6912.48 ft

S: 56 MD: 7907.00 ft Inc: 89.73
deg Az: 181.37 deg TVD:
6913.51 ft

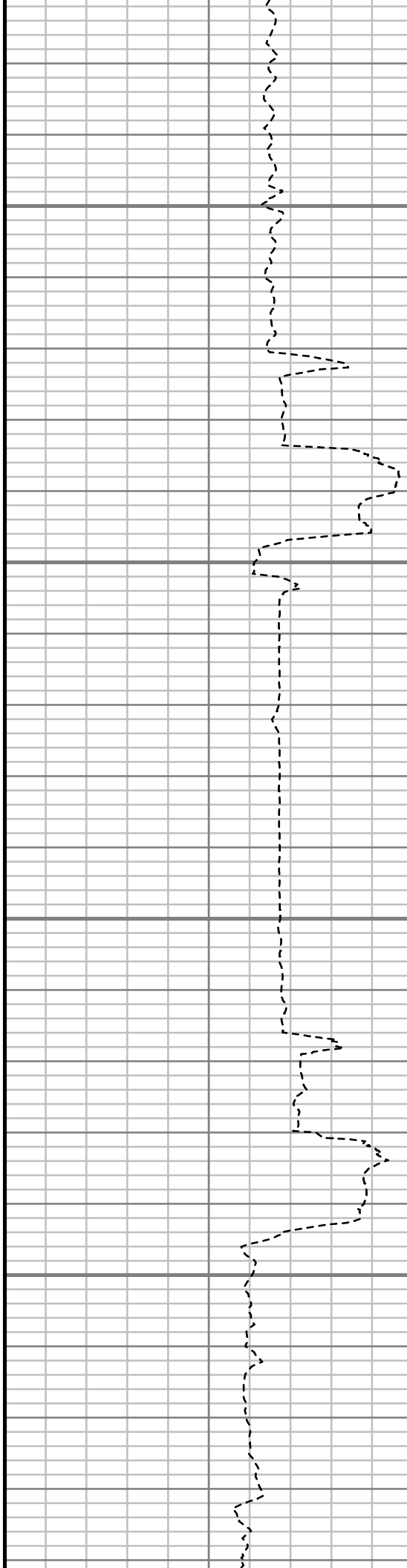


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8000

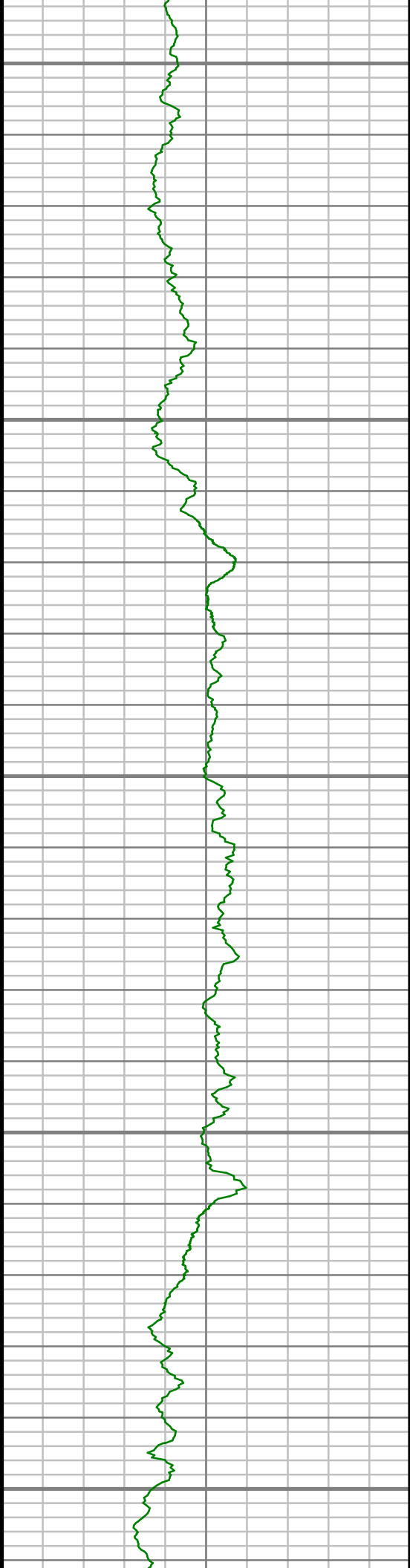
8050

8100



S: 57 MD: 8002.00 ft Inc: 89.87
deg Az: 182.76 deg TVD:
6913.84 ft

S: 58 MD: 8097.00 ft Inc: 89.23
deg Az: 181.45 deg TVD:
6914.59 ft



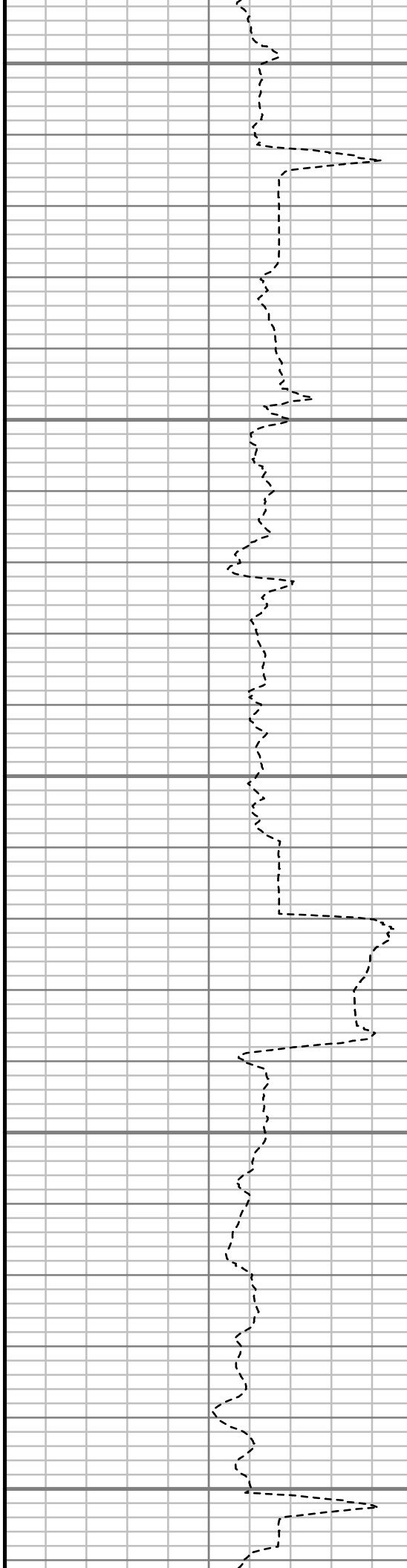
8150

8200

8250

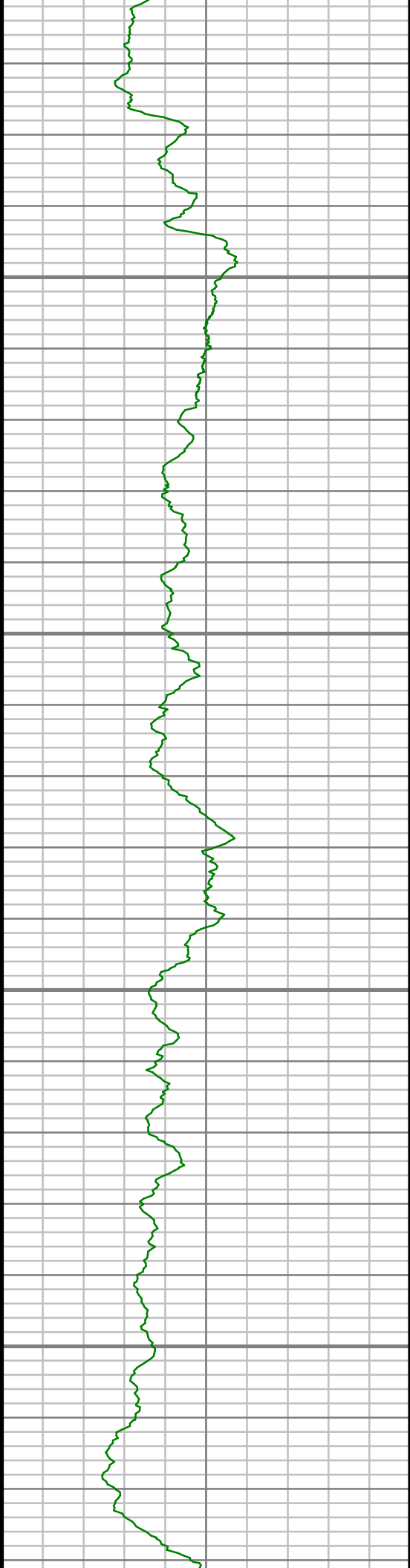
8300

8350



S: 59 MD: 8192.00 ft Inc: 90.87
deg Az: 182.15 deg TVD:
6914.51 ft

S: 60 MD: 8288.00 ft Inc: 90.03
deg Az: 181.27 deg TVD:
6913.75 ft

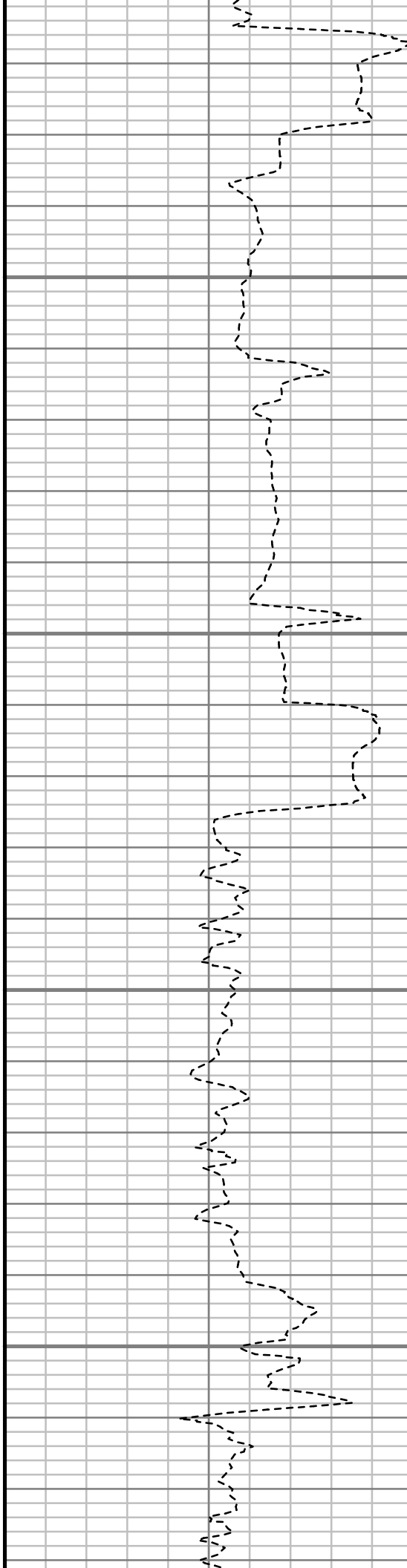


8400

8450

8500

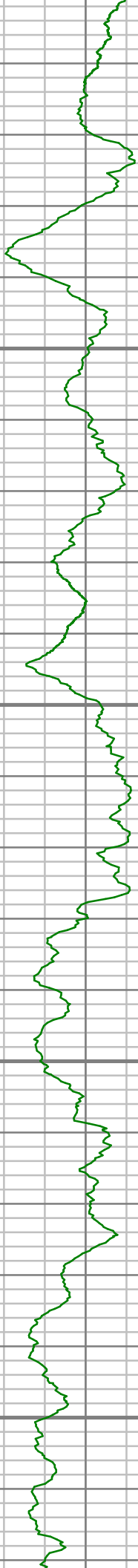
8550



S: 61 MD: 8382.00 ft Inc: 89.53
deg Az: 180.44 deg TVD:
6914.11 ft

S: 62 MD: 8477.00 ft Inc: 88.79
deg Az: 179.39 deg TVD:
6915.50 ft

S: 63 MD: 8572.00 ft Inc: 88.49
deg Az: 179.10 deg TVD:
6917.76 ft

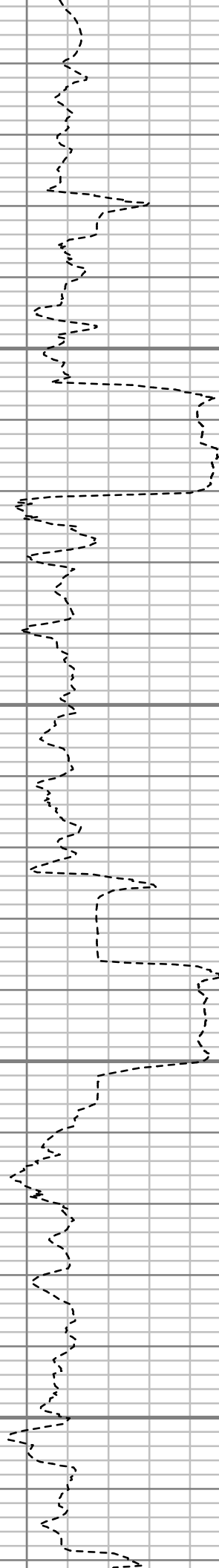


8850

8900

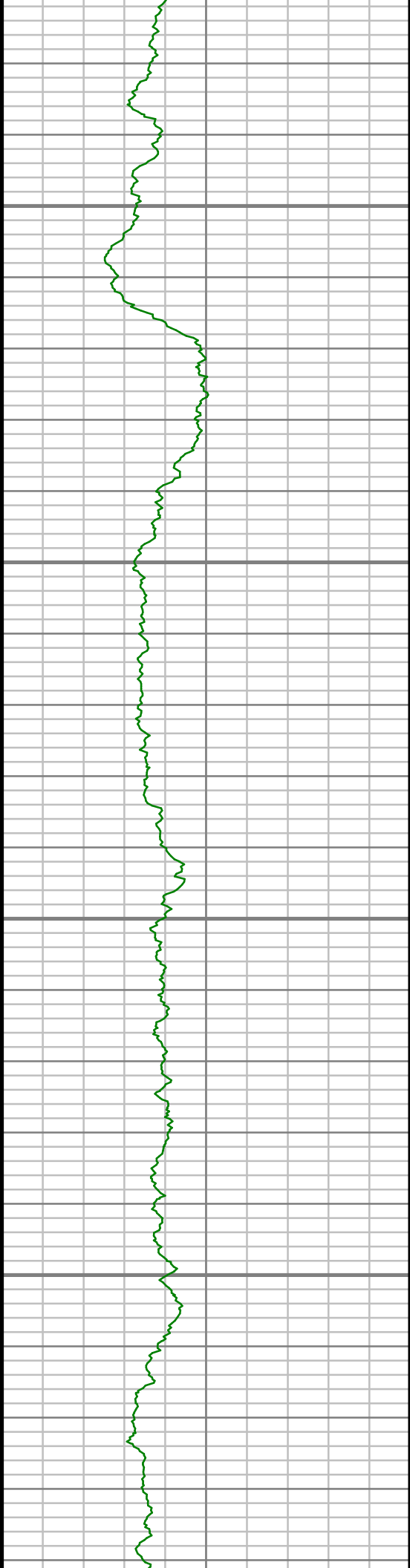
8950

9000



S: 66 MD: 8858.00 ft Inc: 88.22
deg Az: 180.43 deg TVD:
6927.43 ft

S: 67 MD: 8954.00 ft Inc: 89.43
deg Az: 180.49 deg TVD:
6929.39 ft

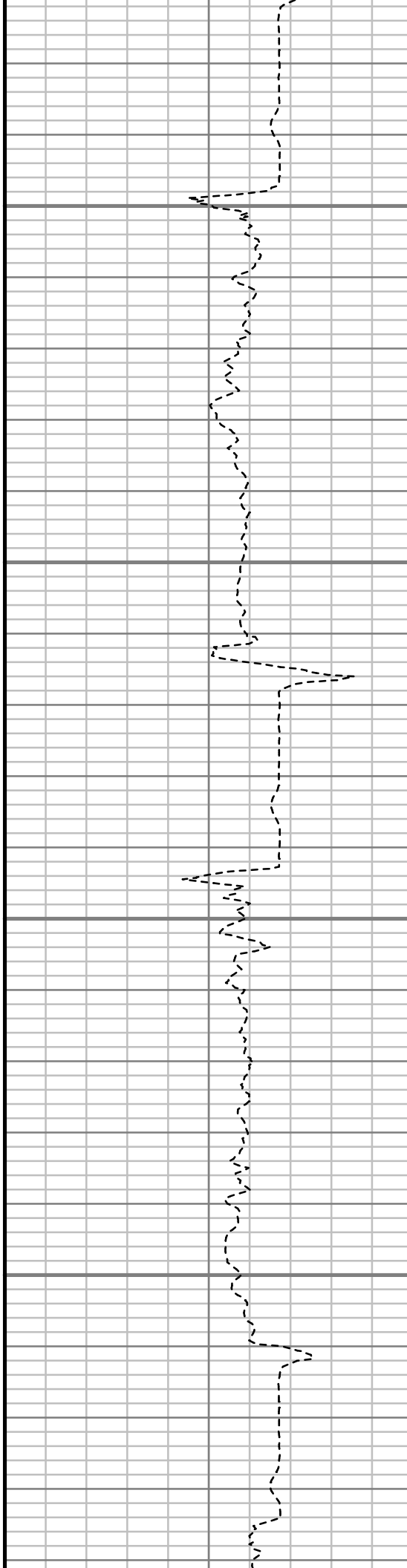


9050

9100

9150

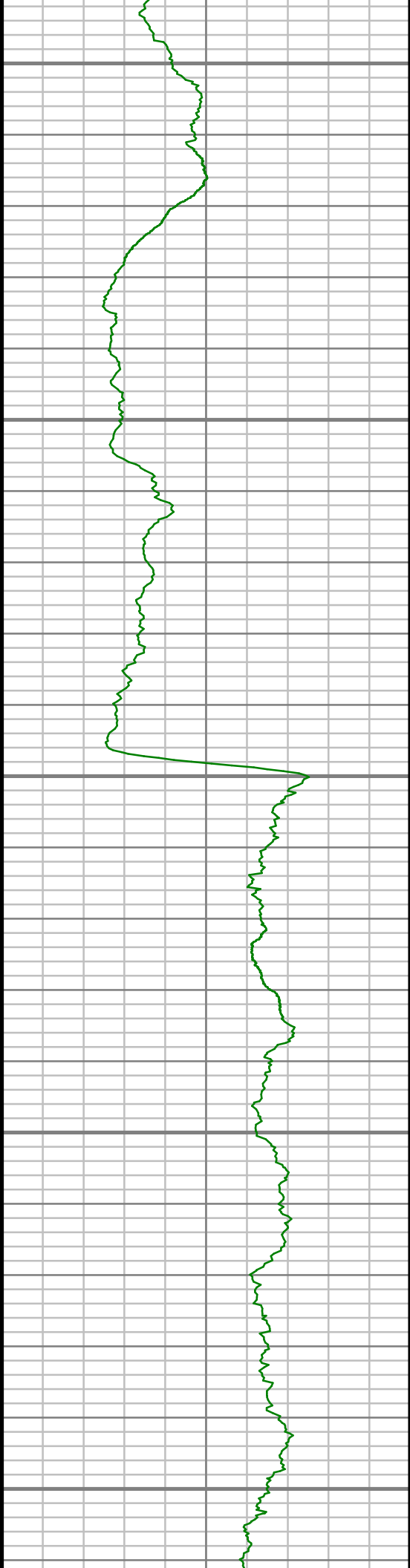
9200



S: 68 MD: 9049.00 ft Inc: 89.43
deg Az: 179.97 deg TVD:
6930.34 ft

S: 69 MD: 9144.00 ft Inc: 89.53
deg Az: 180.07 deg TVD:
6931.21 ft

S: 70 MD: 9239.00 ft Inc: 91.58



9250

9300

9350

9400

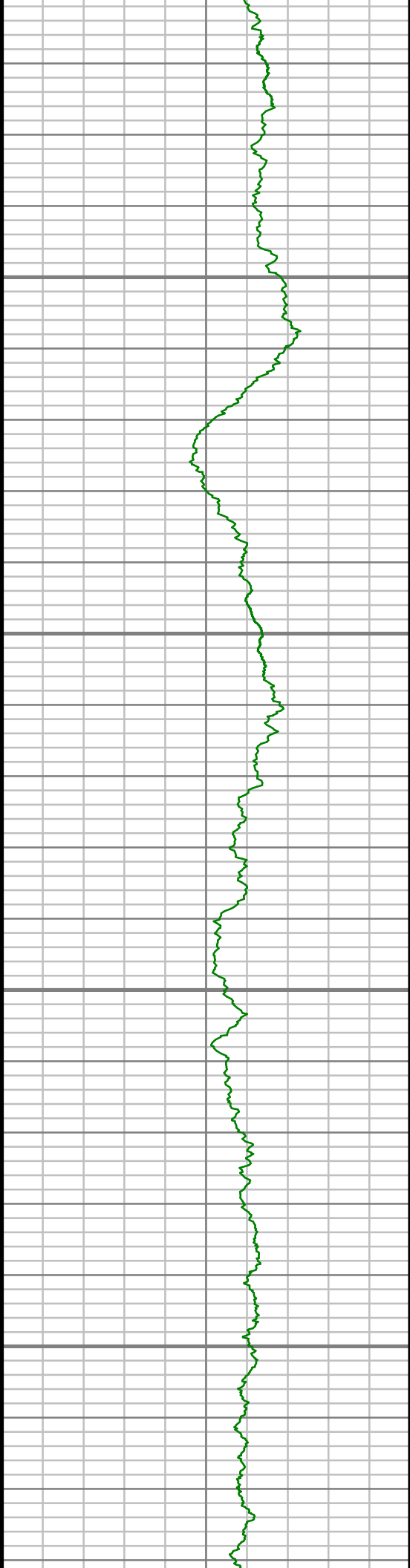
9450



deg Az: 180.16 deg TVD:
6930.29 ft

S: 71 MD: 9335.00 ft Inc: 90.71
deg Az: 180.62 deg TVD:
6928.38 ft

S: 72 MD: 9430.00 ft Inc: 89.83
deg Az: 178.41 deg TVD:
6927.93 ft

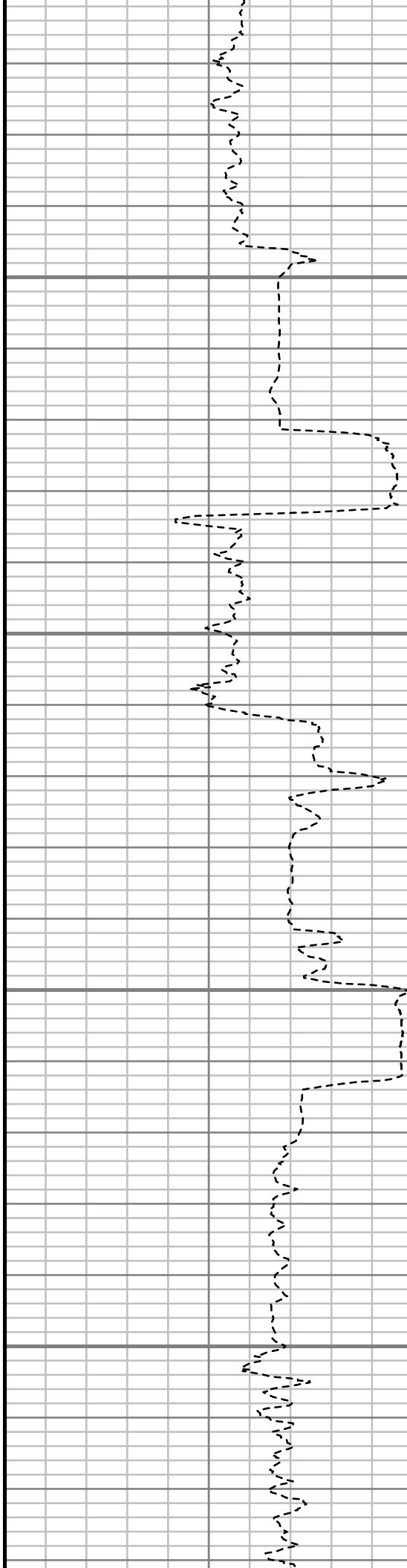


9500

9550

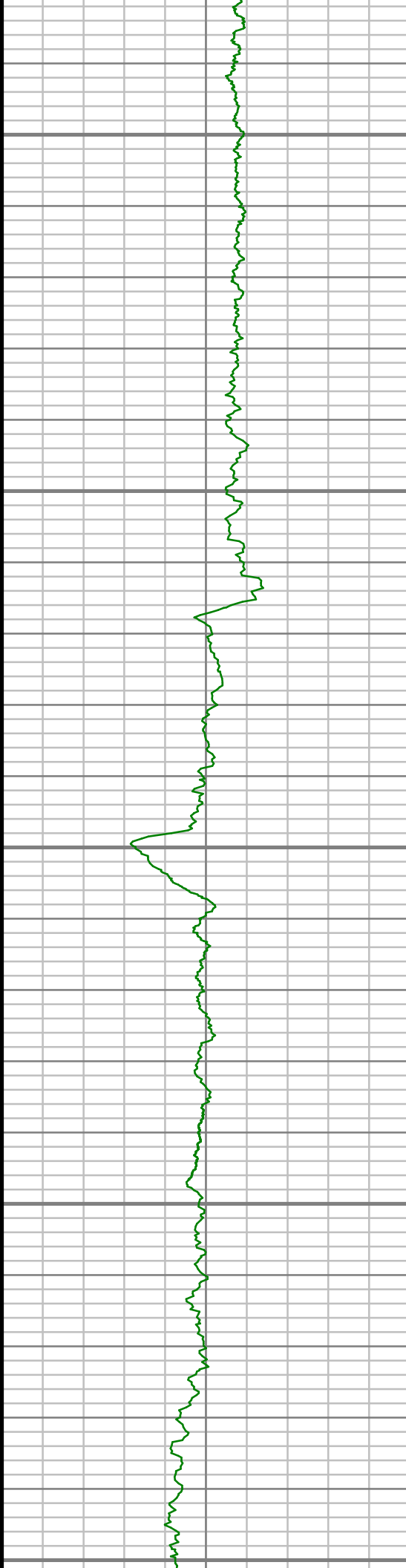
9600

9650



S: 73 MD: 9525.00 ft Inc: 88.22
deg Az: 179.18 deg TVD:
6929.54 ft

S: 74 MD: 9621.00 ft Inc: 89.19
deg Az: 180.28 deg TVD:
6931.71 ft



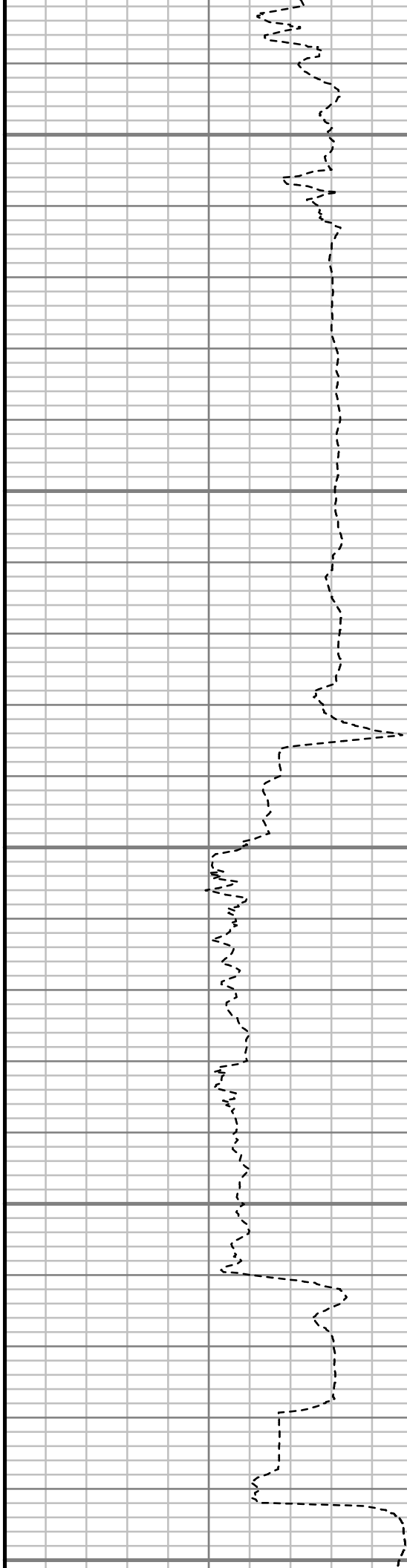
9700

9750

9800

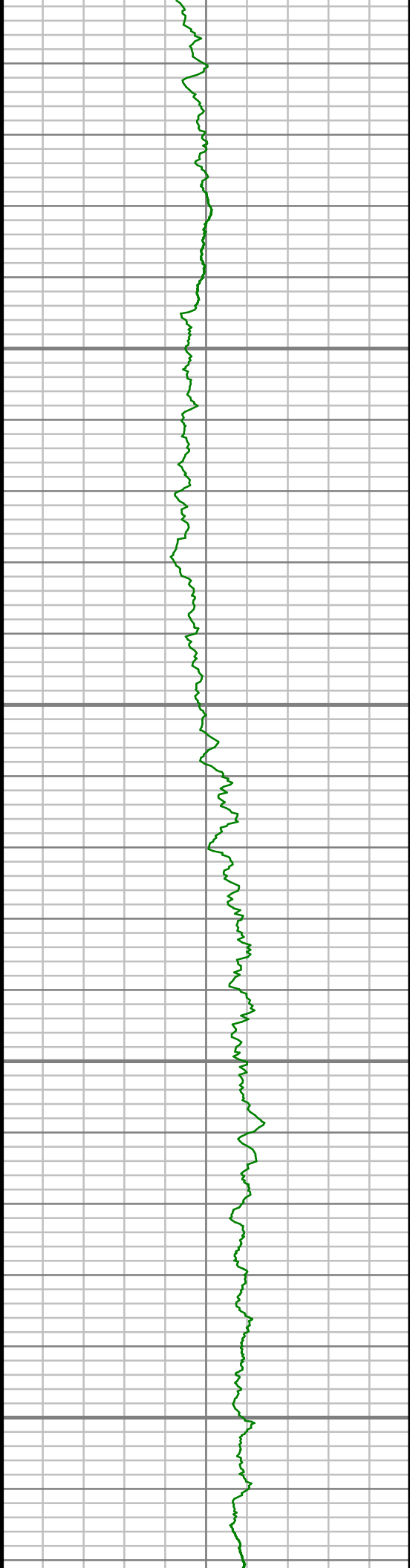
9850

9900



S: 75 MD: 9716.00 ft Inc: 89.33
deg Az: 179.71 deg TVD:
6932.94 ft

S: 76 MD: 9811.00 ft Inc: 89.39
deg Az: 178.44 deg TVD:
6934.00 ft

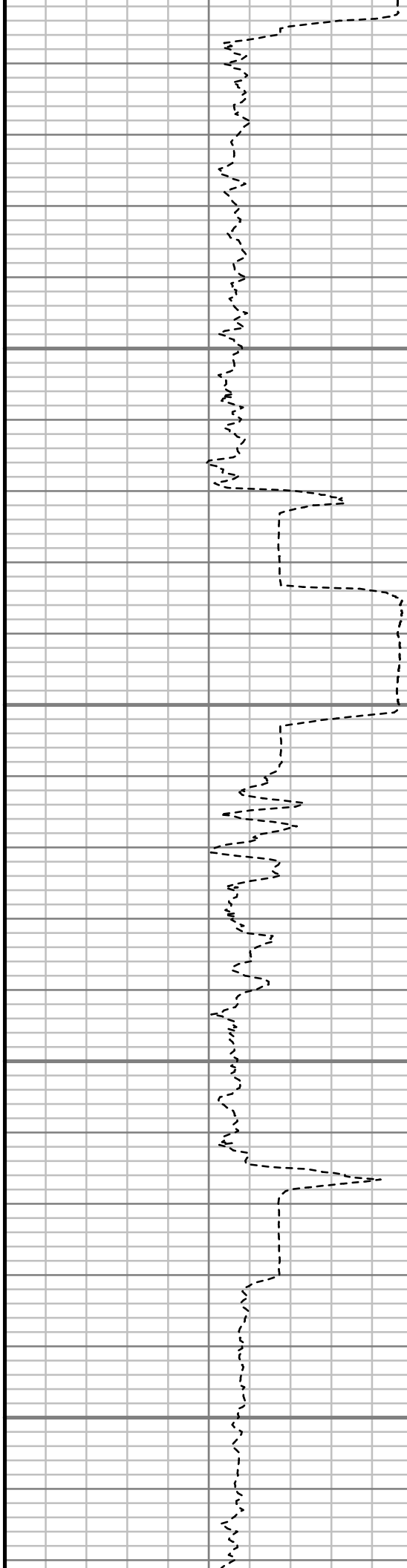


9950

10000

10050

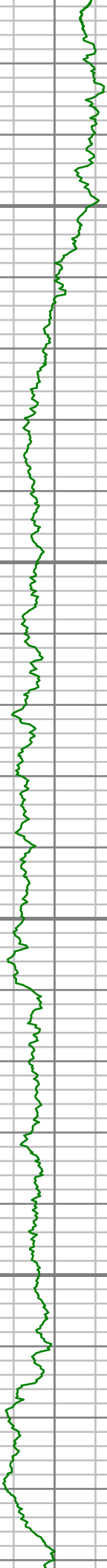
10100



S: 77 MD: 9906.00 ft Inc: 89.70
deg Az: 178.47 deg TVD:
6934.75 ft

S: 78 MD: 10001.00 ft Inc:
89.56 deg Az: 180.74 deg TVD:
6935.36 ft

S: 79 MD: 10096.00 ft Inc:
88.62 deg Az: 179.88 deg TVD:
6936.87 ft



10150

10200

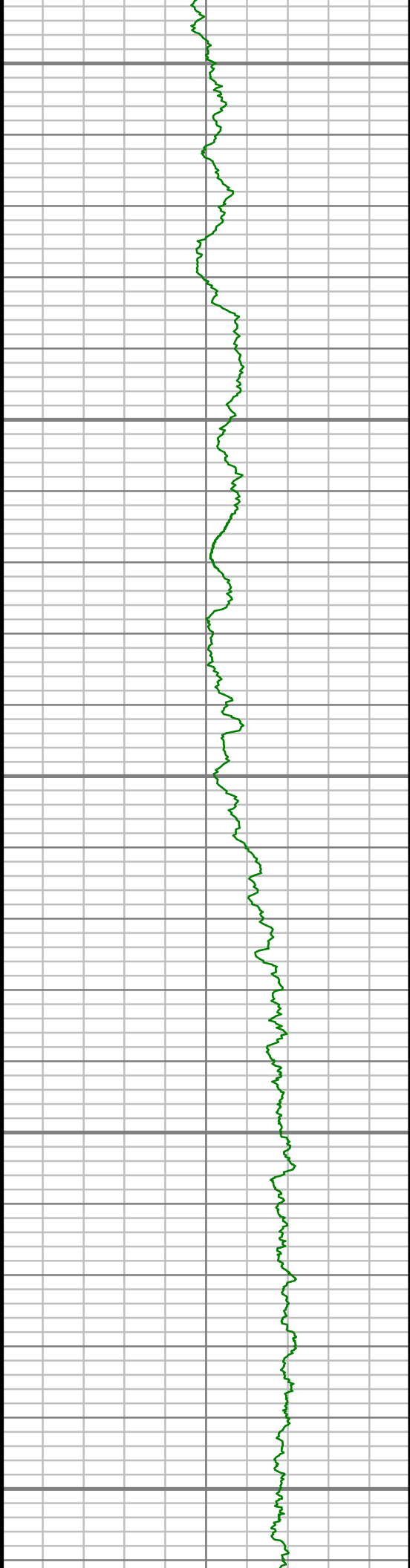
10250

10300



S: 80 MD: 10192.00 ft Inc:
89.26 deg Az: 181.24 deg TVD:
6938.65 ft

S: 81 MD: 10287.00 ft Inc:
88.86 deg Az: 180.75 deg TVD:
6940.21 ft



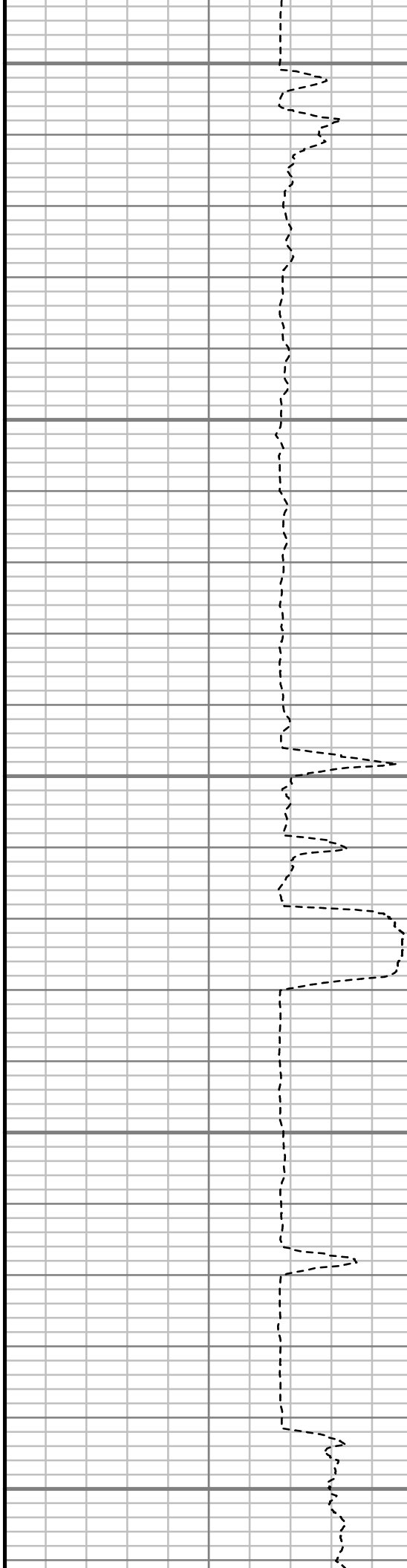
10350

10400

10450

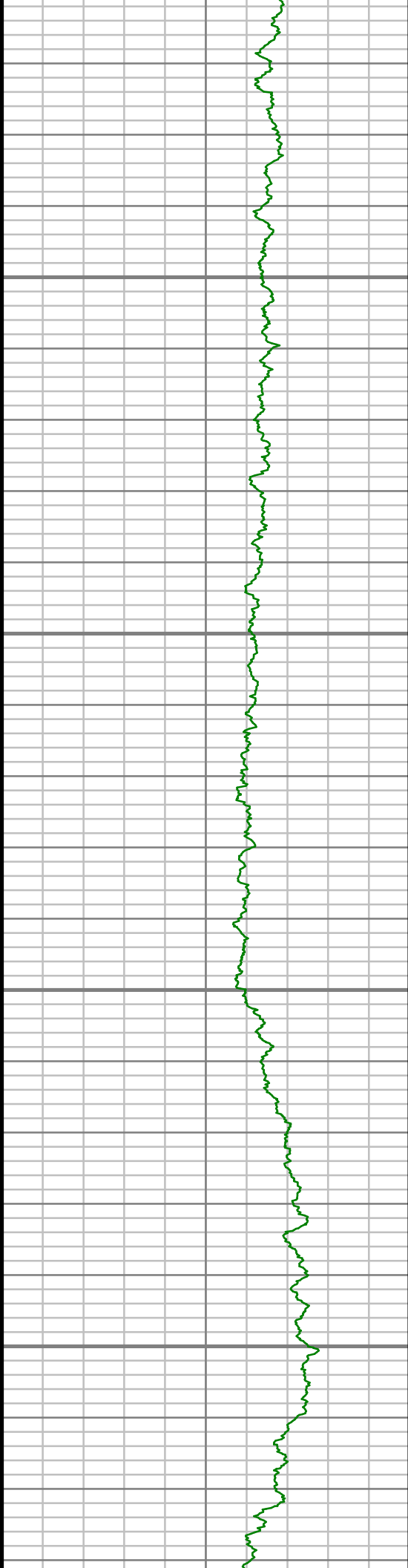
10500

10550



S: 82 MD: 10382.00 ft Inc:
88.82 deg Az: 179.68 deg TVD:
6942.13 ft

S: 83 MD: 10477.00 ft Inc:
89.66 deg Az: 180.52 deg TVD:
6943.39 ft

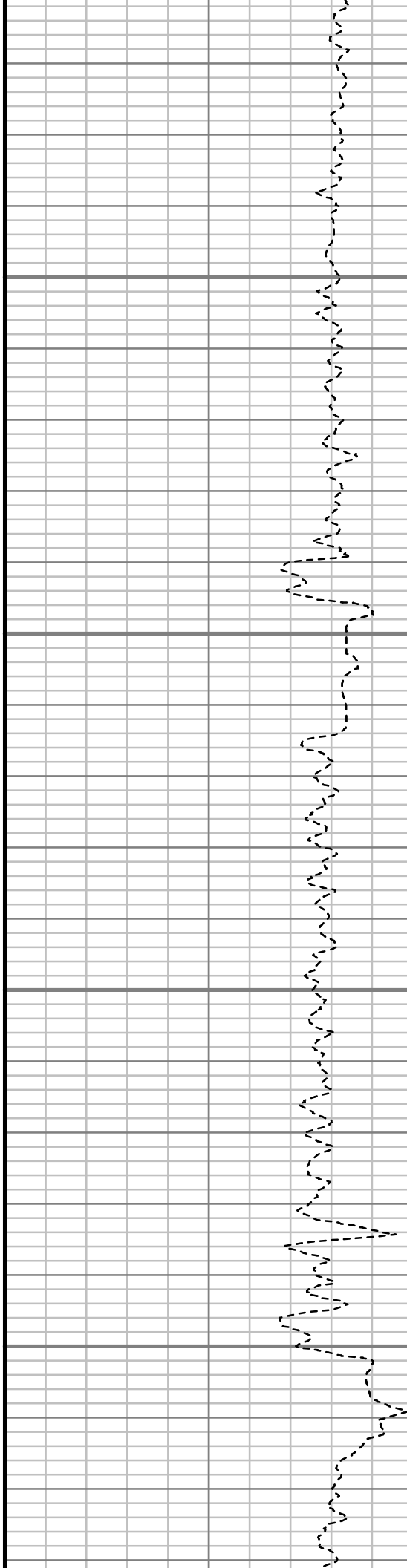


10600

10650

10700

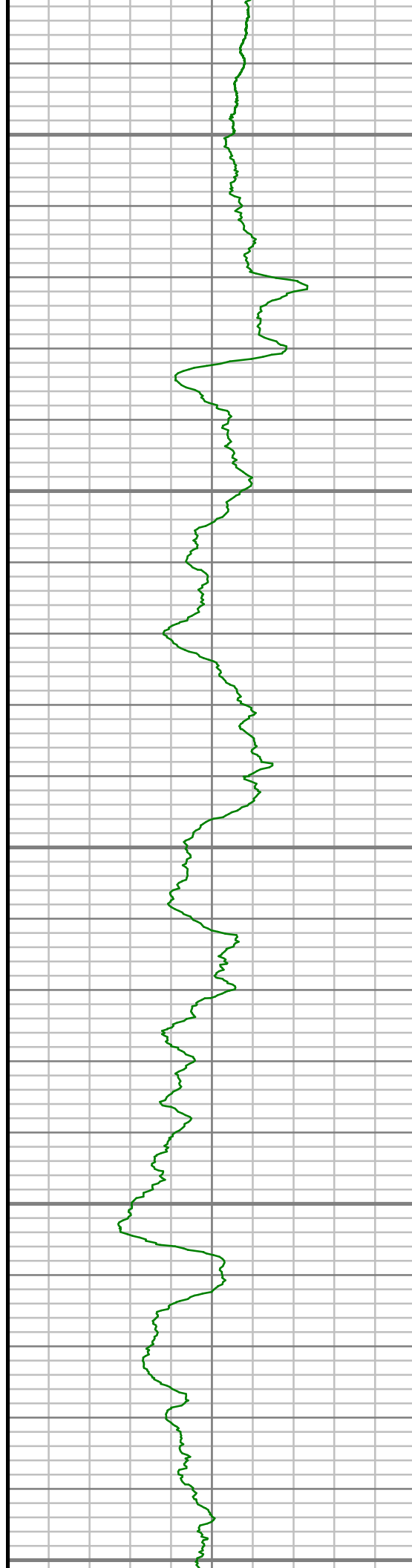
10750



S: 84 MD: 10573.00 ft Inc:
89.93 deg Az: 180.16 deg TVD:
6943.73 ft

S: 85 MD: 10668.00 ft Inc:
89.76 deg Az: 179.75 deg TVD:
6943.98 ft

S: 86 MD: 10763.00 ft Inc:
90.64 deg Az: 178.77 deg TVD:
6943.64 ft



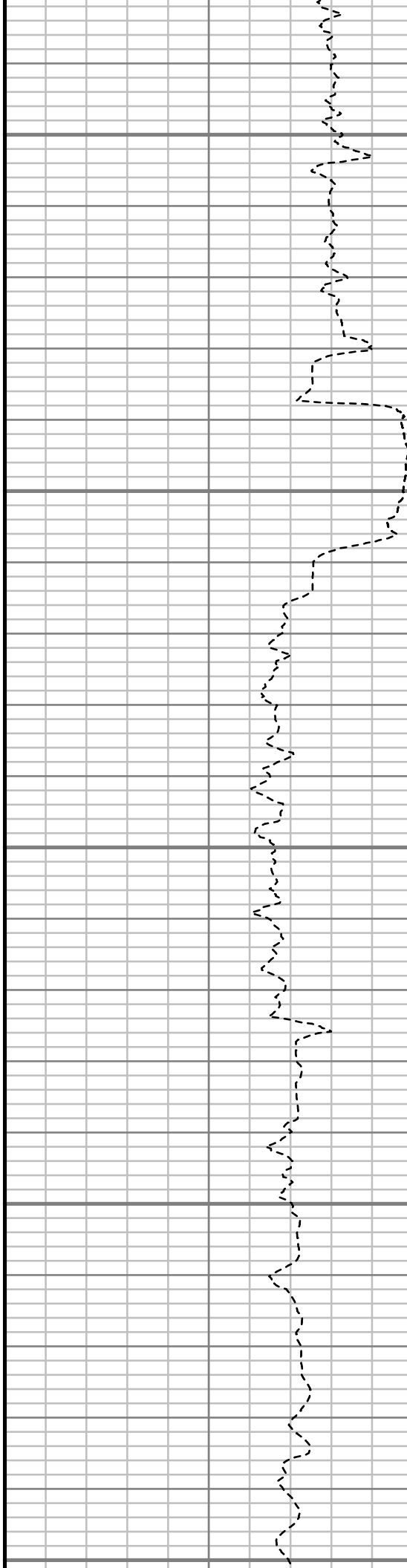
10800

10850

10900

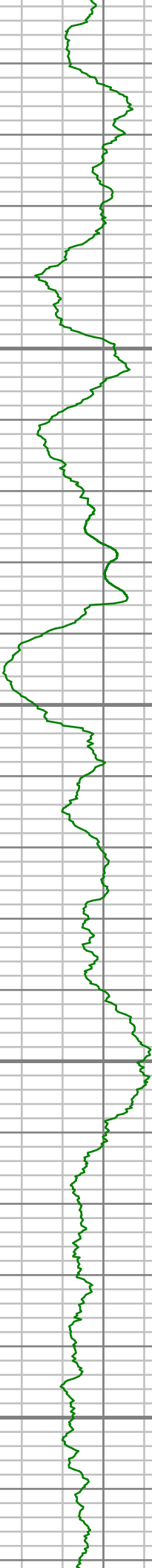
10950

11000



S: 87 MD: 10858.00 ft Inc:
88.62 deg Az: 179.16 deg TVD:
6944.25 ft

S: 88 MD: 10954.00 ft Inc:
87.72 deg Az: 179.89 deg TVD:
6947.32 ft



11050

11100

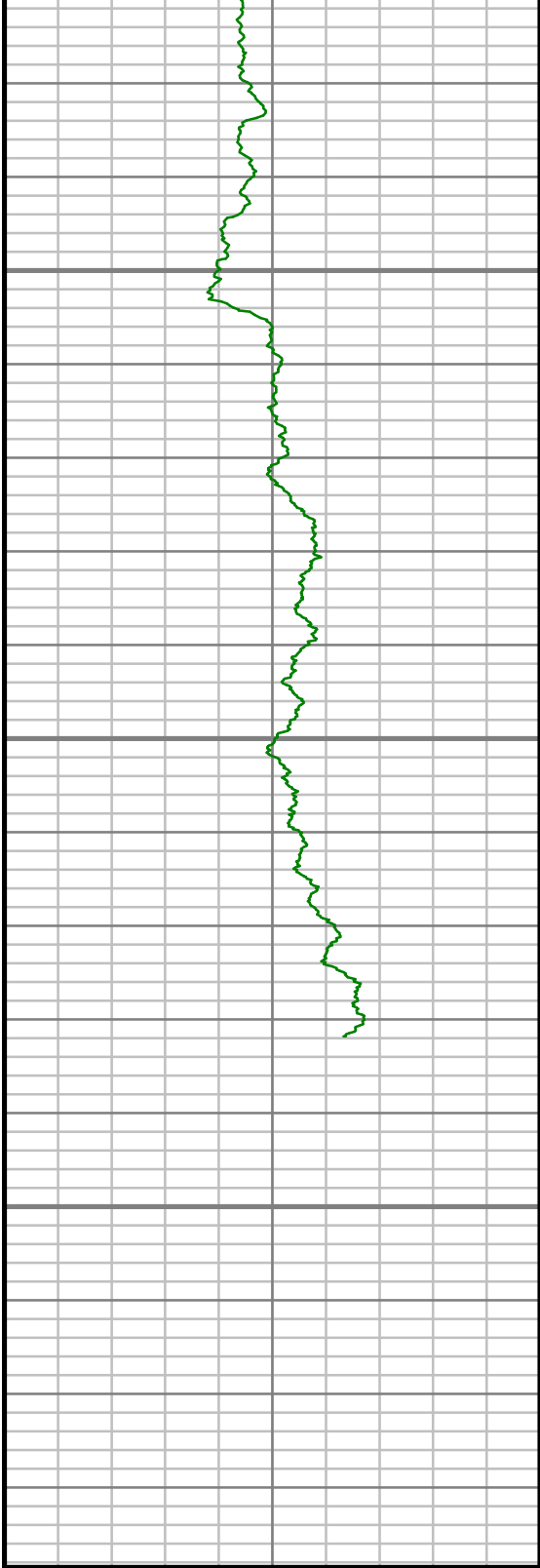
11150

11200



S: 89 MD: 11049.00 ft Inc:
87.01 deg Az: 179.88 deg TVD:
6951.69 ft

S: 90 MD: 11144.00 ft Inc:
87.81 deg Az: 180.42 deg TVD:
6955.97 ft



Gamma Ray (GR)

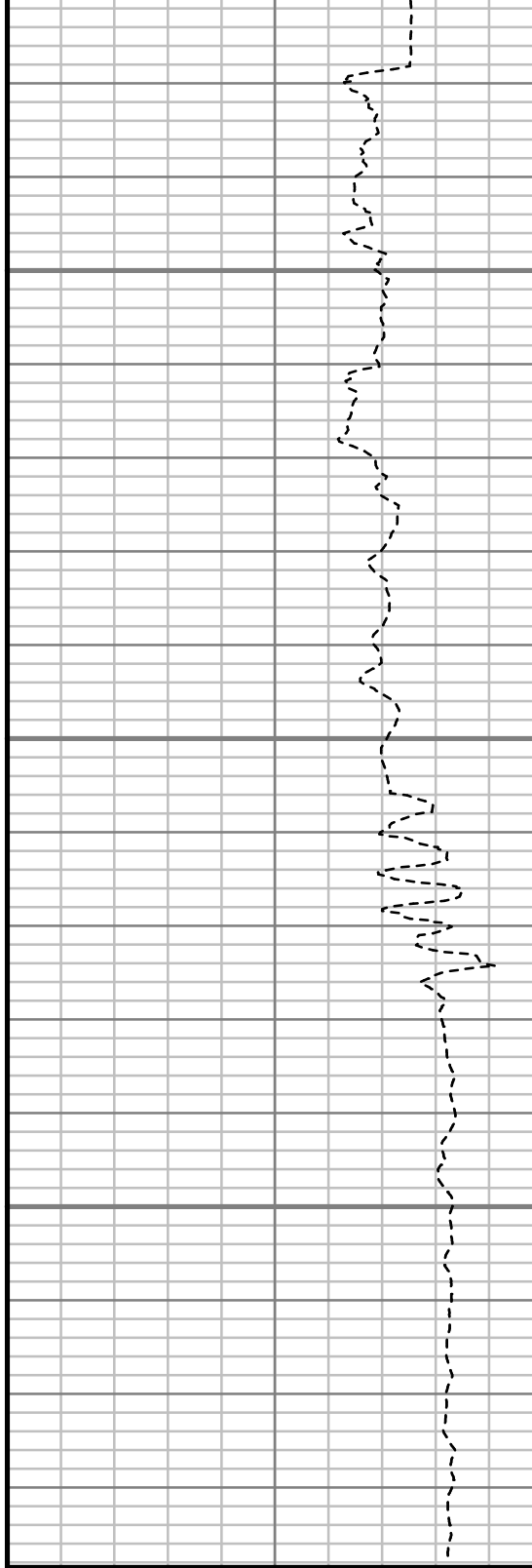
0 Unit = aapi 150

11250

11300

11350

MEASURED DEPTH
1,240 (ft)



Rate of Penetration (ROP)

600 Unit = ft/hr 0

S: 91 MD: 11240.00 ft Inc:
87.61 deg Az: 180.74 deg TVD:
6959.80 ft

S: 92 MD: 11325.00 ft Inc:
87.05 deg Az: 180.79 deg TVD:
6963.76 ft

Comments



MWD Survey Report

Well Location	NEWNAM
Well Name	NEWNAM 2K-32H-C264
Survey Date	1/31/2015
Latitude	40°6'5.274"N
Longitude	104°34'42.064"W
Btotal	52493 nT
Dip	66.71 deg
Magnetic Declination	8.36 deg
North Reference	True North
Grid Correction	None
Depth Reference	RKB (13.00 ft)
Calculation Method	Minimum Curvature
Section (VS) Ref	0.00N (ft), 0.00E (ft), 180.00Azim (deg)
Operator(s)	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
100.00	0.35	132.85	100.00	0.21	-0.21	0.22	132.85	0.31	0.35
200.00	0.85	73.01	199.99	0.20	-0.20	1.16	99.74	1.17	0.74
300.00	3.10	55.19	299.93	-1.56	1.56	4.09	69.09	4.38	2.31
400.00	4.92	66.64	399.68	-4.81	4.81	10.24	64.87	11.32	1.98
500.00	6.10	73.19	499.22	-8.04	8.04	19.27	67.34	20.88	1.34
600.00	7.83	79.15	598.48	-10.86	10.86	31.04	70.72	32.89	1.87
700.00	10.29	79.19	697.22	-13.82	13.82	46.51	73.45	48.52	2.46
800.00	10.76	75.17	795.54	-17.88	17.88	64.31	74.46	66.75	0.87
900.00	10.06	70.71	893.90	-23.16	23.16	81.58	74.15	84.80	1.07
1000.00	9.31	67.10	992.47	-29.19	29.19	97.27	73.29	101.56	0.96
1060.00	9.20	64.44	1051.69	-33.15	33.15	106.07	72.64	111.13	0.74
1272.00	10.64	64.00	1260.51	-49.05	49.05	138.96	70.56	147.36	0.68
1458.00	10.39	62.73	1443.39	-64.27	64.27	169.31	69.21	181.10	0.18
1649.00	10.71	61.45	1631.16	-80.64	80.64	200.21	68.06	215.84	0.20
1839.00	11.11	59.24	1817.73	-98.44	98.44	231.44	66.96	251.51	0.31
2030.00	10.49	62.67	2005.34	-115.84	115.84	262.70	66.21	287.11	0.47
2220.00	10.19	61.57	2192.26	-131.78	131.78	292.85	65.77	321.13	0.19
2411.00	8.27	74.71	2380.80	-143.45	143.45	320.97	65.92	351.56	1.49

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
2602.00	9.83	68.09	2569.42	-153.16	153.16	349.36	66.33	381.46	0.98
2792.00	9.03	71.02	2756.85	-164.06	164.06	378.51	66.57	412.53	0.49
2983.00	9.71	71.59	2945.30	-174.02	174.02	407.95	66.90	443.52	0.36
3173.00	11.12	66.48	3132.17	-186.39	186.39	439.95	67.04	477.80	0.89
3364.00	9.50	66.59	3320.08	-200.00	200.00	471.30	67.01	511.98	0.84
3554.00	9.51	58.21	3507.48	-214.50	214.50	499.03	66.74	543.18	0.73
3744.00	6.52	57.42	3695.61	-228.57	228.57	521.46	66.33	569.35	1.57
3935.00	6.20	76.71	3885.46	-236.77	236.77	540.62	66.35	590.20	1.12
4125.00	4.52	84.79	4074.62	-239.81	239.81	558.05	66.75	607.40	0.97
4316.00	3.16	74.00	4265.19	-241.95	241.95	570.61	67.02	619.79	0.80
4506.00	1.22	71.28	4455.04	-244.04	244.04	577.56	67.09	627.00	1.03
4697.00	1.41	24.92	4646.00	-246.82	246.82	580.47	66.96	630.77	0.55
4887.00	0.50	280.78	4835.98	-249.10	249.10	580.64	66.78	631.81	0.85
5078.00	0.98	302.87	5026.96	-250.14	250.14	578.45	66.61	630.21	0.28
5268.00	1.54	314.23	5216.92	-252.79	252.79	575.26	66.28	628.36	0.32
5458.00	1.99	351.47	5406.83	-257.83	257.83	572.95	65.77	628.29	0.63
5648.00	0.14	89.60	5596.79	-261.09	261.09	572.70	65.49	629.40	1.06
5838.00	0.13	270.13	5786.79	-261.09	261.09	572.71	65.49	629.42	0.15

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
6028.00	0.41	271.12	5976.79	-261.11	261.11	571.81	65.46	628.60	0.14
6218.00	0.48	132.36	6166.79	-260.59	260.59	571.72	65.50	628.30	0.44
6313.00	9.42	164.10	6261.34	-252.83	252.83	574.14	66.23	627.35	9.49
6408.00	17.61	163.59	6353.63	-231.54	231.54	580.34	68.25	624.83	8.62
6503.00	24.34	167.99	6442.29	-198.57	198.57	588.49	71.35	621.08	7.27
6598.00	29.70	176.59	6526.93	-155.88	155.88	593.97	75.29	614.08	6.97
6693.00	36.75	179.80	6606.36	-103.90	103.90	595.47	80.10	604.46	7.66
6789.00	44.57	180.96	6679.12	-41.40	41.40	595.00	86.02	596.44	8.18
6884.00	52.69	183.26	6741.86	29.77	-29.77	592.28	92.88	593.03	8.74
6979.00	58.80	181.07	6795.31	108.20	-108.20	589.37	100.40	599.22	6.71
7075.00	67.08	181.17	6838.95	193.60	-193.60	587.70	108.23	618.77	8.63
7170.00	73.44	181.77	6871.02	282.94	-282.94	585.40	115.80	650.19	6.71
7265.00	79.56	180.86	6893.18	375.24	-375.24	583.29	122.75	693.57	6.51
7355.00	85.16	180.11	6905.14	464.41	-464.41	582.54	128.56	745.00	6.28
7440.00	90.30	179.43	6908.50	549.31	-549.31	582.88	133.30	800.93	6.10
7533.00	90.03	179.73	6908.23	642.31	-642.31	583.56	137.74	867.82	0.43
7626.00	88.86	180.76	6909.13	735.30	-735.30	583.16	141.58	938.48	1.68
7719.00	88.99	182.11	6910.87	828.25	-828.25	580.84	144.96	1011.62	1.45

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
7812.00	89.03	182.10	6912.48	921.17	-921.17	577.42	147.92	1087.19	0.04
7907.00	89.73	181.37	6913.51	1016.12	-1016.12	574.54	150.52	1167.31	1.07
8002.00	89.87	182.76	6913.84	1111.06	-1111.06	571.12	152.80	1249.25	1.46
8097.00	89.23	181.45	6914.59	1205.99	-1205.99	567.64	154.79	1332.90	1.53
8192.00	90.87	182.15	6914.51	1300.94	-1300.94	564.66	156.54	1418.20	1.88
8288.00	90.03	181.27	6913.75	1396.89	-1396.89	561.80	158.09	1505.63	1.26
8382.00	89.53	180.44	6914.11	1490.88	-1490.88	560.39	159.40	1592.72	1.03
8477.00	88.79	179.39	6915.50	1585.87	-1585.87	560.53	160.53	1682.01	1.36
8572.00	88.49	179.10	6917.76	1680.83	-1680.83	561.78	161.52	1772.23	0.44
8668.00	87.55	178.62	6921.08	1776.75	-1776.75	563.69	162.40	1864.03	1.10
8763.00	88.29	179.87	6924.53	1871.68	-1871.68	564.94	163.20	1955.08	1.53
8858.00	88.22	180.43	6927.43	1966.64	-1966.64	564.69	163.98	2046.10	0.59
8954.00	89.43	180.49	6929.39	2062.61	-2062.61	563.92	164.71	2138.31	1.26
9049.00	89.43	179.97	6930.34	2157.61	-2157.61	563.54	165.36	2229.99	0.55
9144.00	89.53	180.07	6931.21	2252.60	-2252.60	563.51	165.96	2322.02	0.15
9239.00	91.58	180.16	6930.29	2347.59	-2347.59	563.32	166.51	2414.23	2.16
9335.00	90.71	180.62	6928.38	2443.57	-2443.57	562.67	167.03	2507.51	1.03
9430.00	89.83	178.41	6927.93	2538.56	-2538.56	563.48	167.49	2600.34	2.50

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
9525.00	88.22	179.18	6929.54	2633.52	-2633.52	565.47	167.88	2693.54	1.88
9621.00	89.19	180.28	6931.71	2729.49	-2729.49	565.92	168.29	2787.54	1.53
9716.00	89.33	179.71	6932.94	2824.48	-2824.48	565.92	168.67	2880.62	0.62
9811.00	89.39	178.44	6934.00	2919.46	-2919.46	567.45	169.00	2974.10	1.34
9906.00	89.70	178.47	6934.75	3014.43	-3014.43	570.01	169.29	3067.85	0.32
10001.00	89.56	180.74	6935.36	3109.41	-3109.41	570.67	169.60	3161.35	2.39
10096.00	88.62	179.88	6936.87	3204.40	-3204.40	570.15	169.91	3254.73	1.34
10192.00	89.26	181.24	6938.65	3300.38	-3300.38	569.21	170.21	3349.10	1.56
10287.00	88.86	180.75	6940.21	3395.35	-3395.35	567.56	170.51	3442.46	0.67
10382.00	88.82	179.68	6942.13	3490.33	-3490.33	567.20	170.77	3536.11	1.12
10477.00	89.66	180.52	6943.39	3585.32	-3585.32	567.03	171.01	3629.88	1.25
10573.00	89.93	180.16	6943.73	3681.31	-3681.31	566.46	171.25	3724.64	0.47
10668.00	89.76	179.75	6943.98	3776.31	-3776.31	566.54	171.47	3818.57	0.47
10763.00	90.64	178.77	6943.64	3871.30	-3871.30	567.76	171.66	3912.72	1.38
10858.00	88.62	179.16	6944.25	3966.28	-3966.28	569.48	171.83	4006.95	2.16
10954.00	87.72	179.89	6947.32	4062.23	-4062.23	570.27	172.01	4102.06	1.20
11049.00	87.01	179.88	6951.69	4157.12	-4157.12	570.46	172.19	4196.08	0.75
11144.00	87.81	180.42	6955.97	4252.03	-4252.03	570.21	172.36	4290.09	1.02

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
11240.00	87.61	180.74	6959.80	4347.95	-4347.95	569.23	172.54	4385.05	0.39
11325.00	87.05	180.79	6963.76	4432.85	-4432.85	568.10	172.70	4469.10	0.67

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