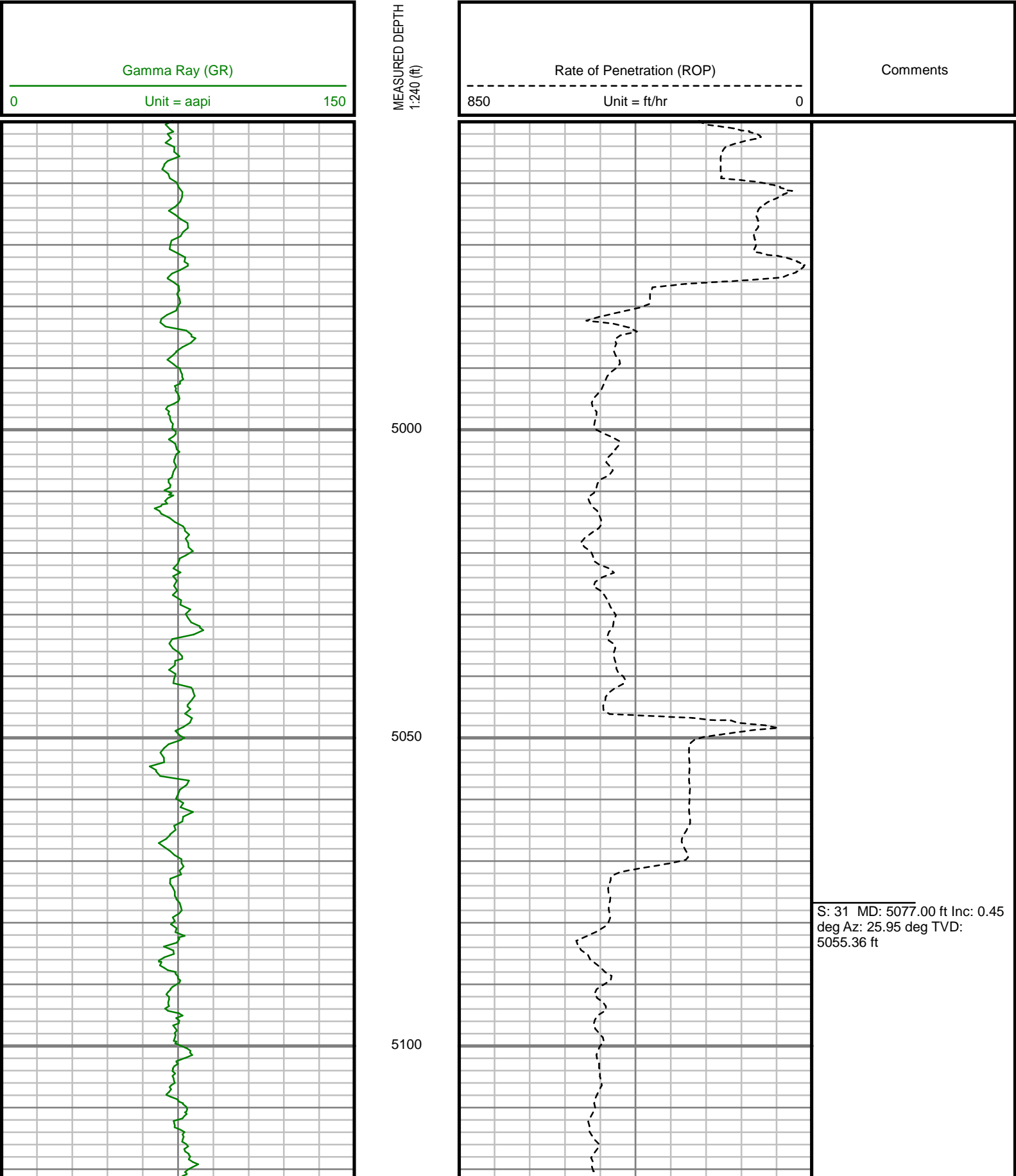






All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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 & GAS (USA) INC  
NEWNAM 2H-32H-C264  
WATTENBURG FIELD  
WELD COUNTY, COLORADO  
05-123-39772



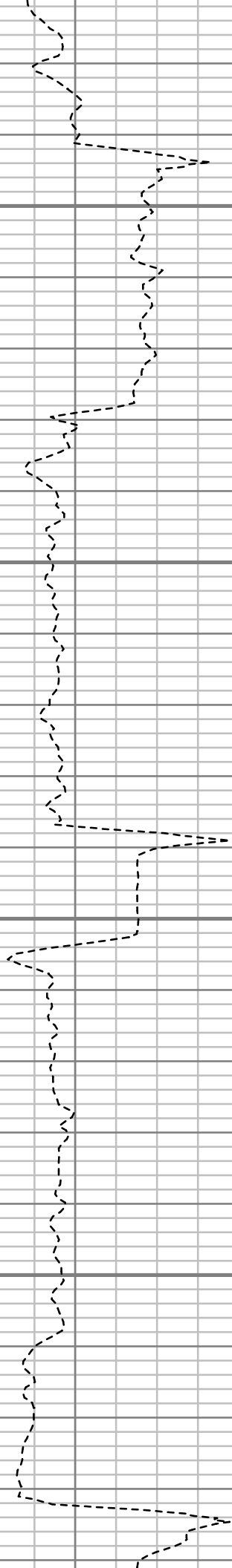


5150

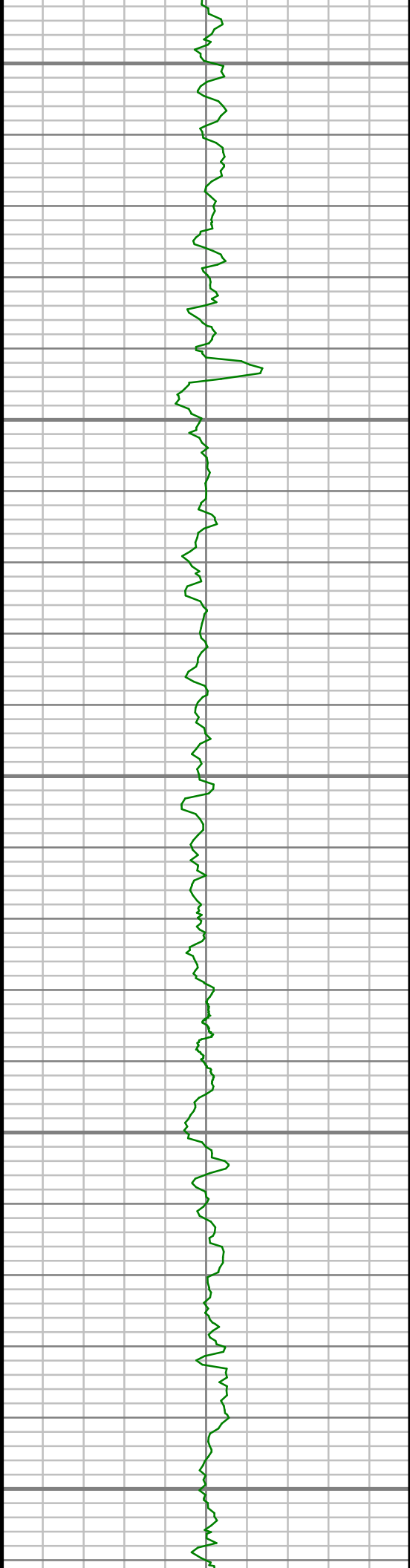
5200

5250

5300



S: 32 MD: 5267.00 ft Inc: 1.29  
deg Az: 321.41 deg TVD:  
5245.34 ft



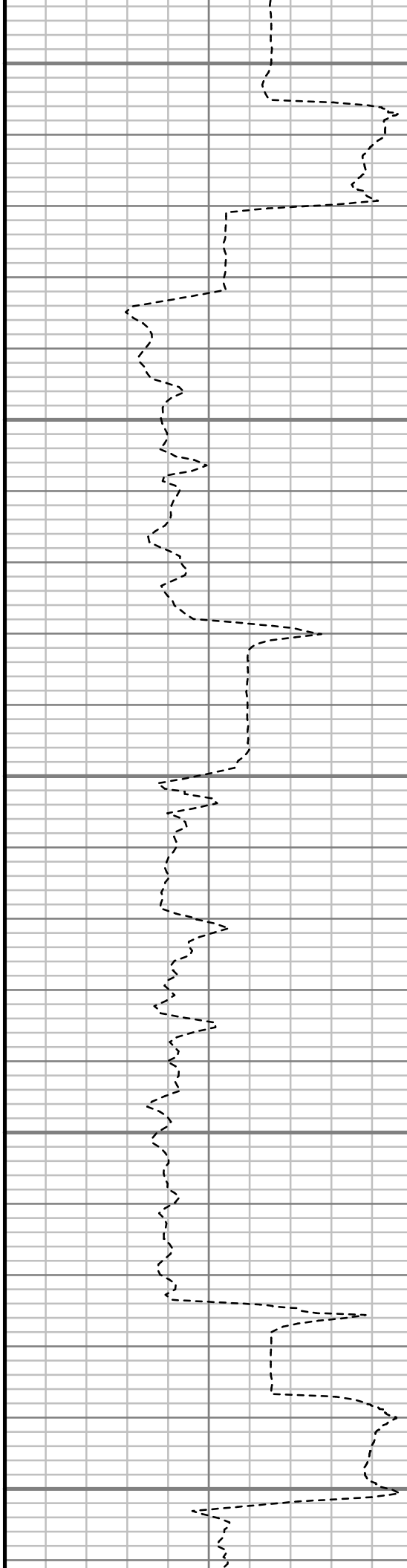
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5400

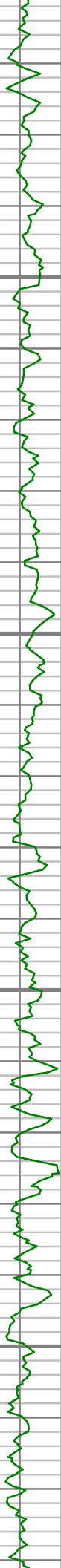
5450

5500

5550



S: 33 MD: 5457.00 ft Inc: 1.92  
deg Az: 62.90 deg TVD:  
5435.29 ft



5600

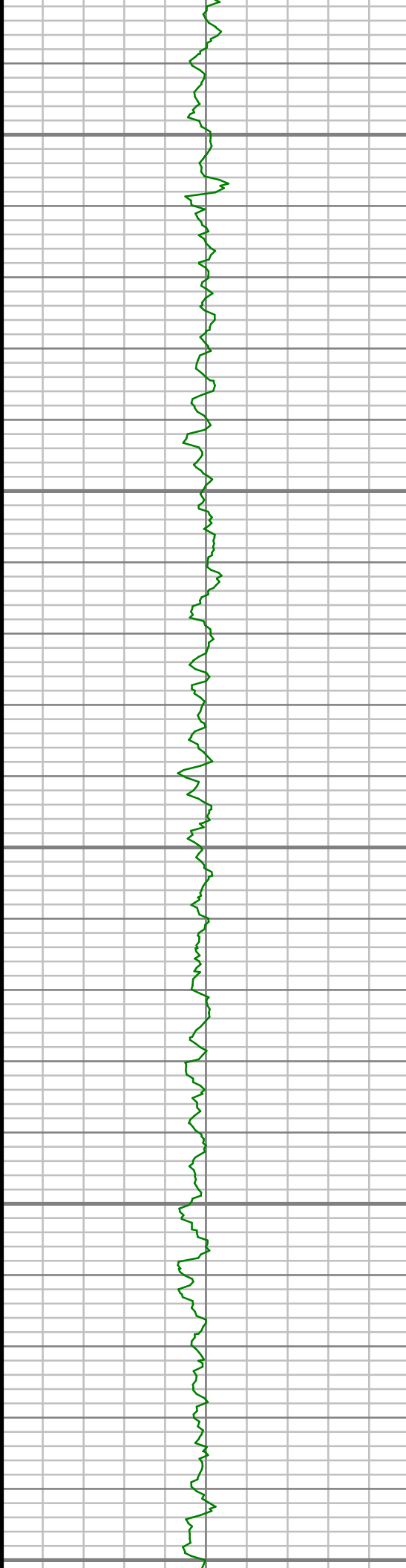
5650

5700

5750



S: 34 MD: 5647.00 ft Inc: 0.58  
deg Az: 310.19 deg TVD:  
5625.26 ft



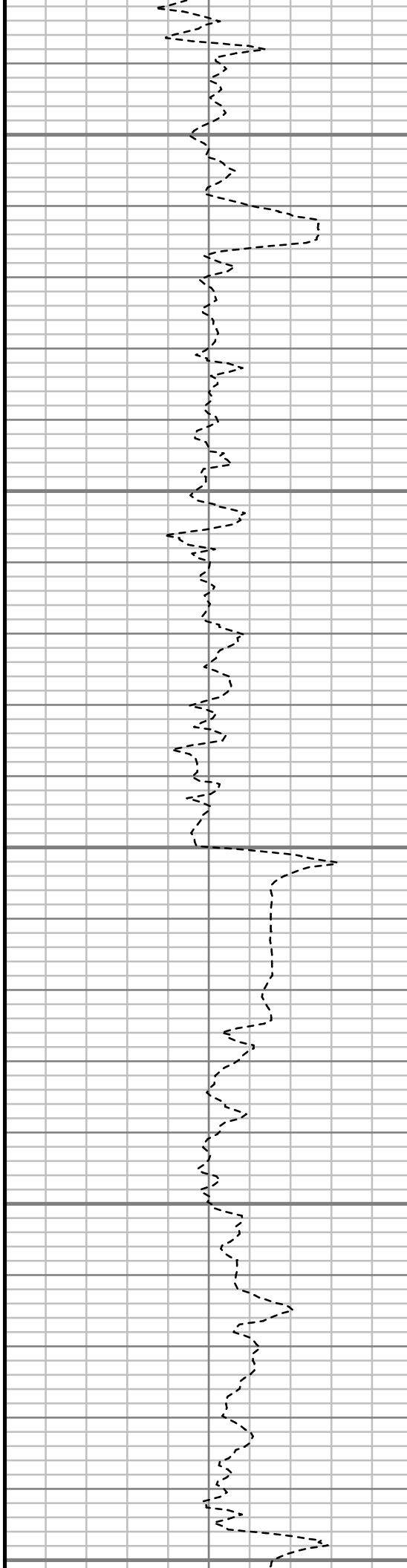
5800

5850

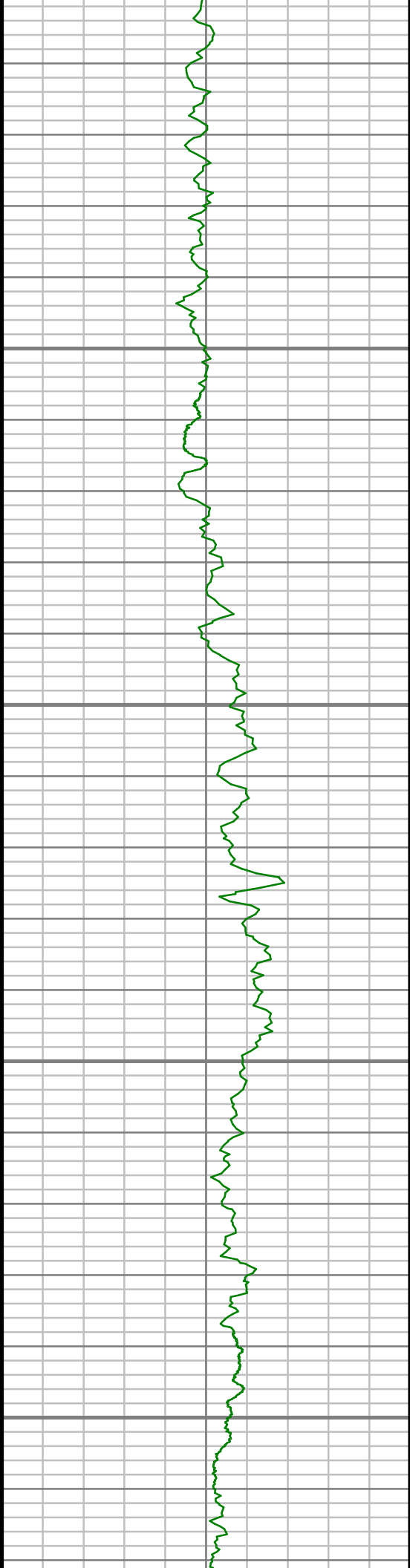
5900

5950

6000



S: 35 MD: 5837.00 ft Inc: 0.41  
deg Az: 73.91 deg TVD:  
5815.25 ft

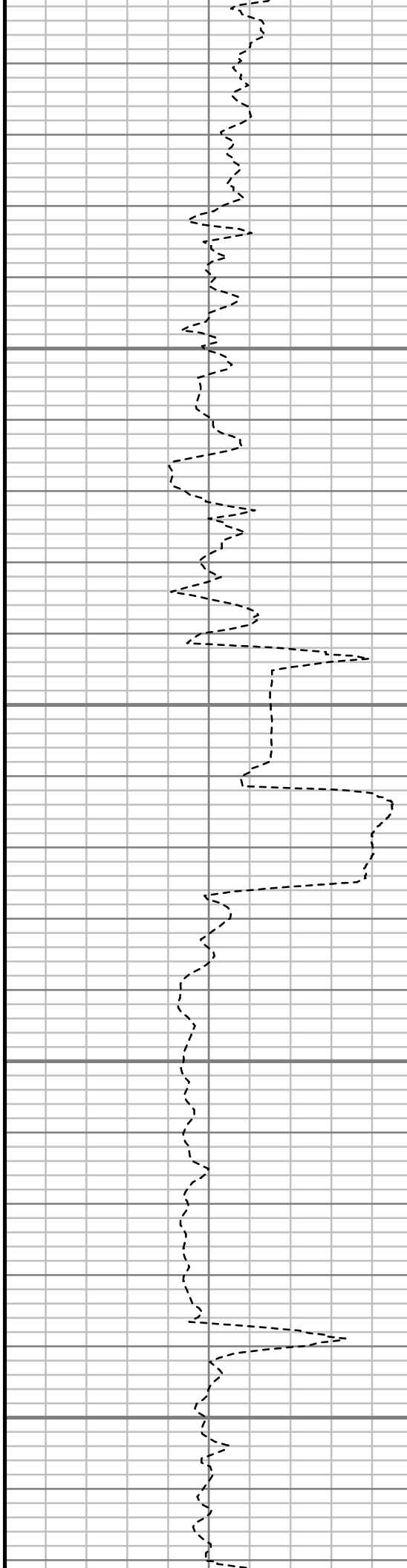


6050

6100

6150

6200

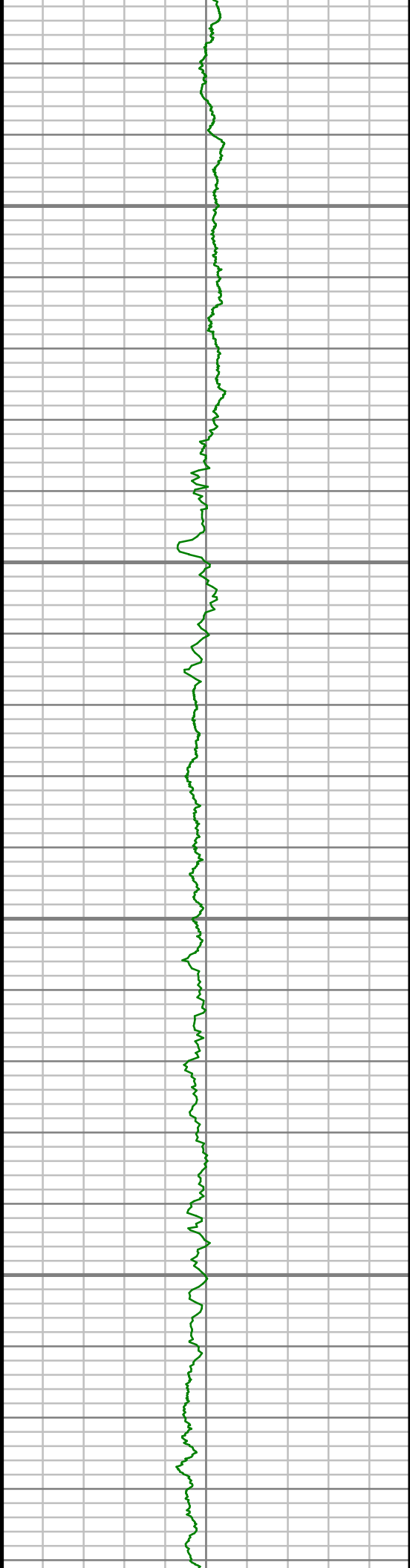


S: 36 MD: 6027.00 ft Inc: 1.21  
deg Az: 77.23 deg TVD:  
6005.23 ft

S: 37 MD: 6181.00 ft Inc: 1.56  
deg Az: 199.71 deg TVD:  
6159.21 ft

S: 38 MD: 6218.00 ft Inc: 1.40  
deg Az: 199.71 deg TVD:  
6159.21 ft



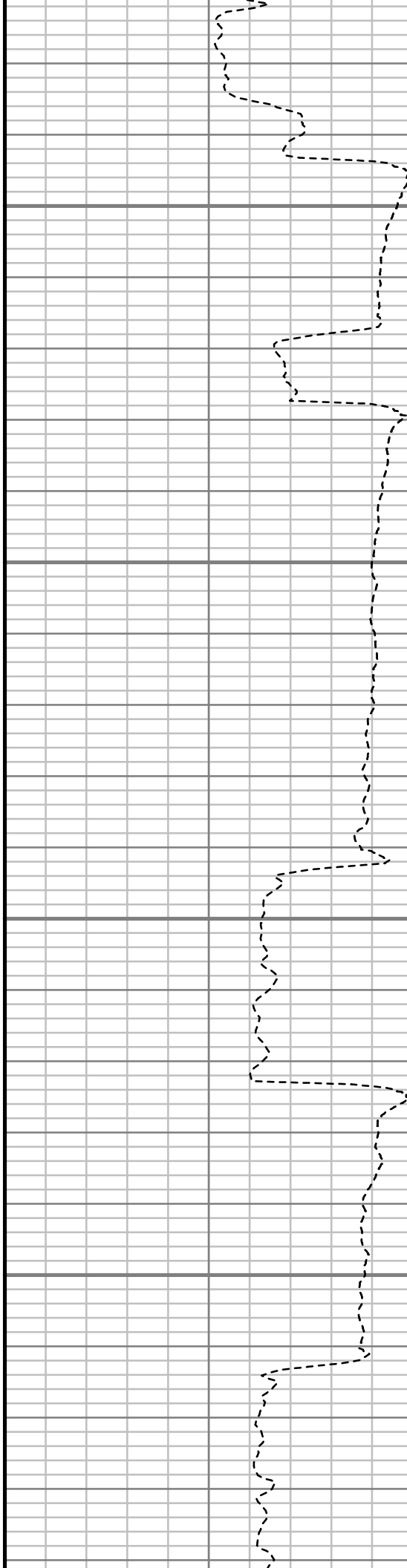


6250

6300

6350

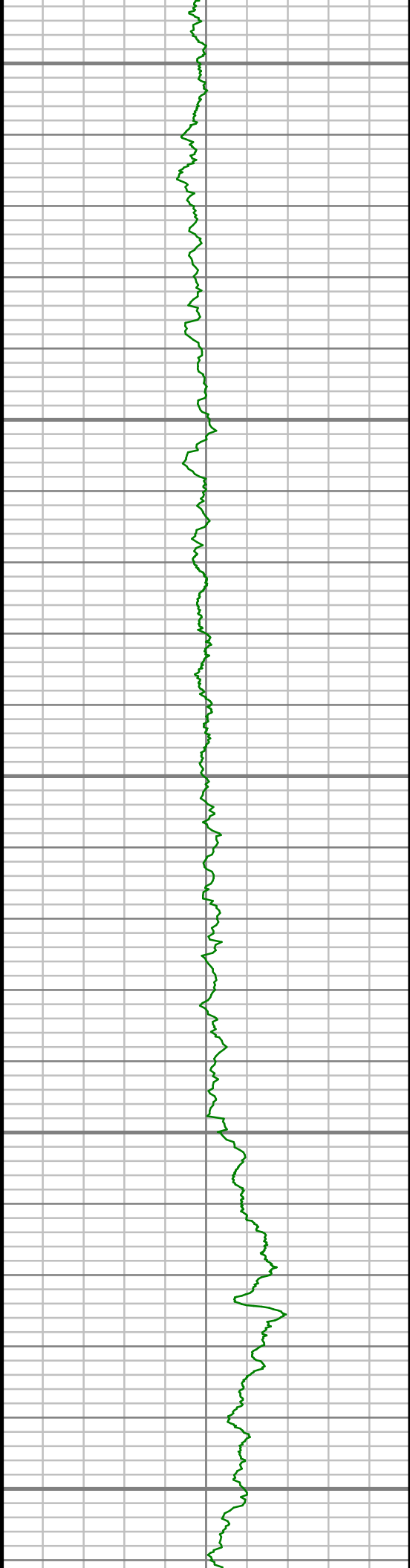
6400



deg Az: 207.59 deg TVD:  
6196.20 ft

S: 39 MD: 6312.00 ft Inc: 10.58  
deg Az: 185.67 deg TVD:  
6289.59 ft

S: 40 MD: 6408.00 ft Inc: 20.50  
deg Az: 182.29 deg TVD:  
6381.97 ft



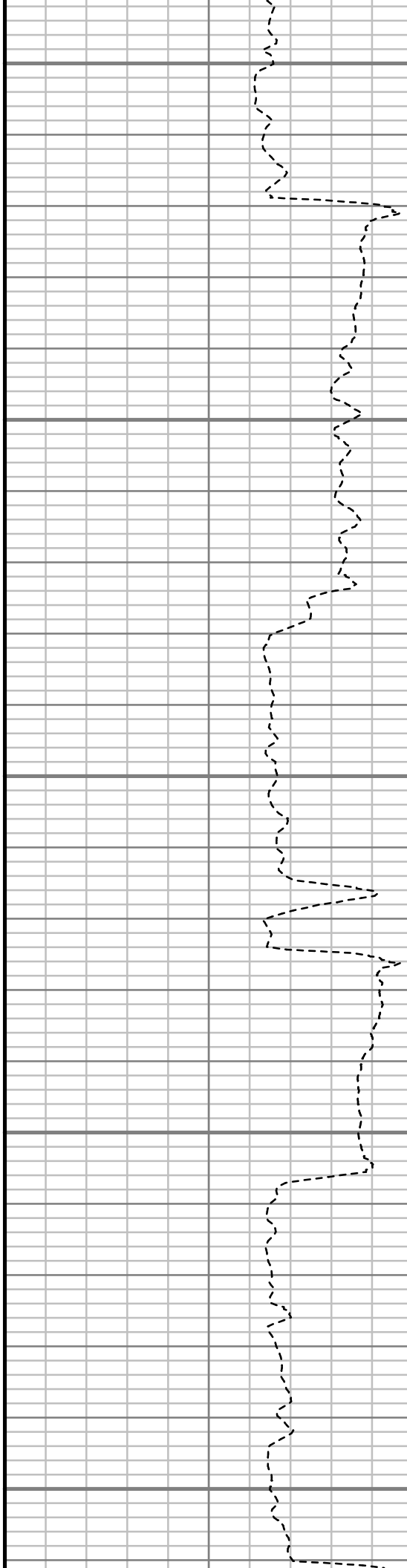
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6500

6550

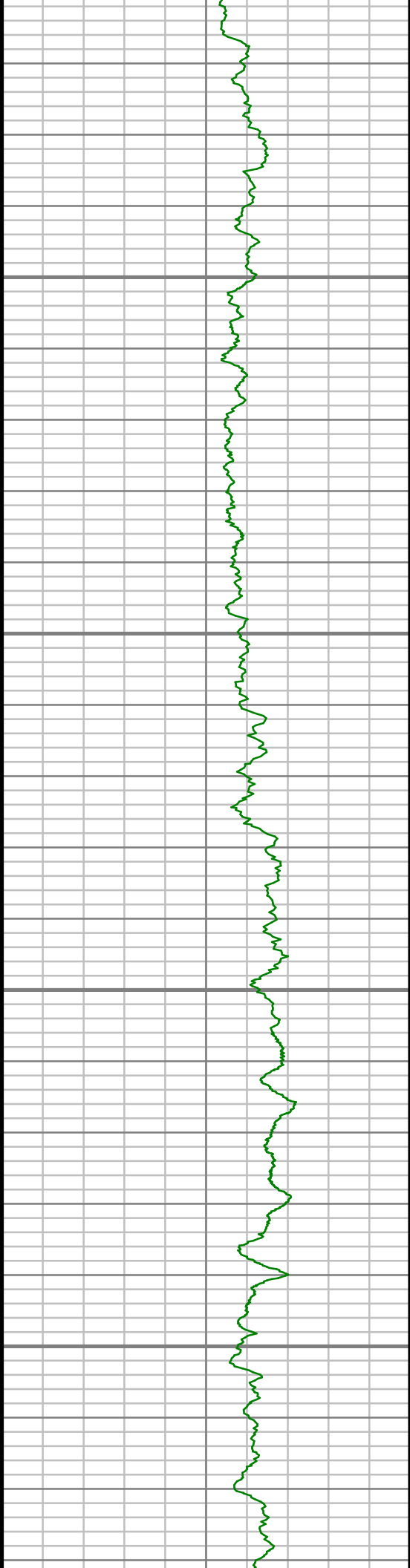
6600

6650



S: 41 MD: 6503.00 ft Inc: 26.27  
deg Az: 182.69 deg TVD:  
6469.13 ft

S: 42 MD: 6597.00 ft Inc: 31.12  
deg Az: 181.97 deg TVD:  
6551.56 ft

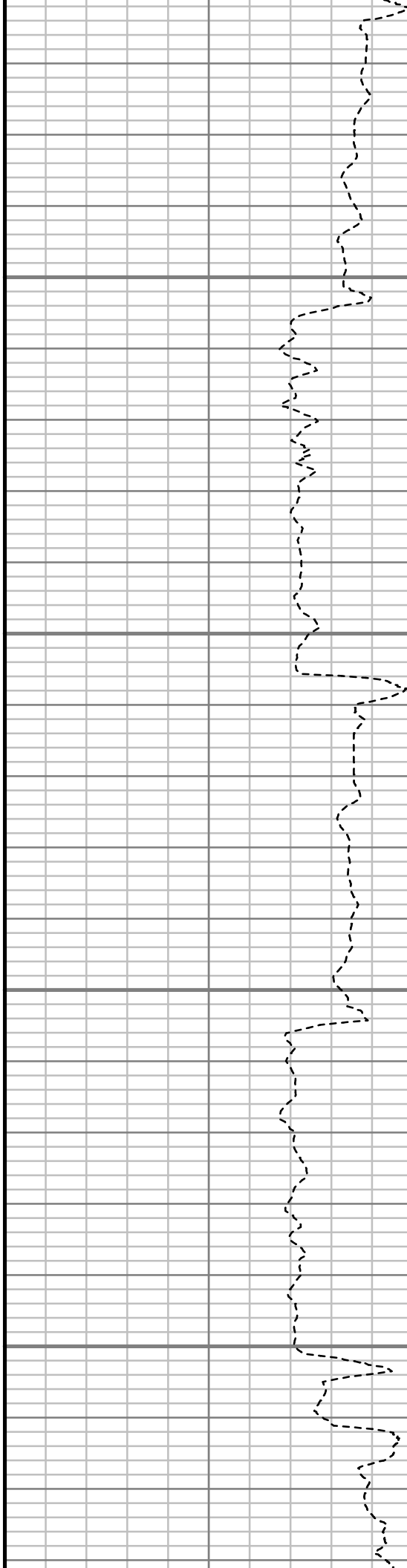


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6750

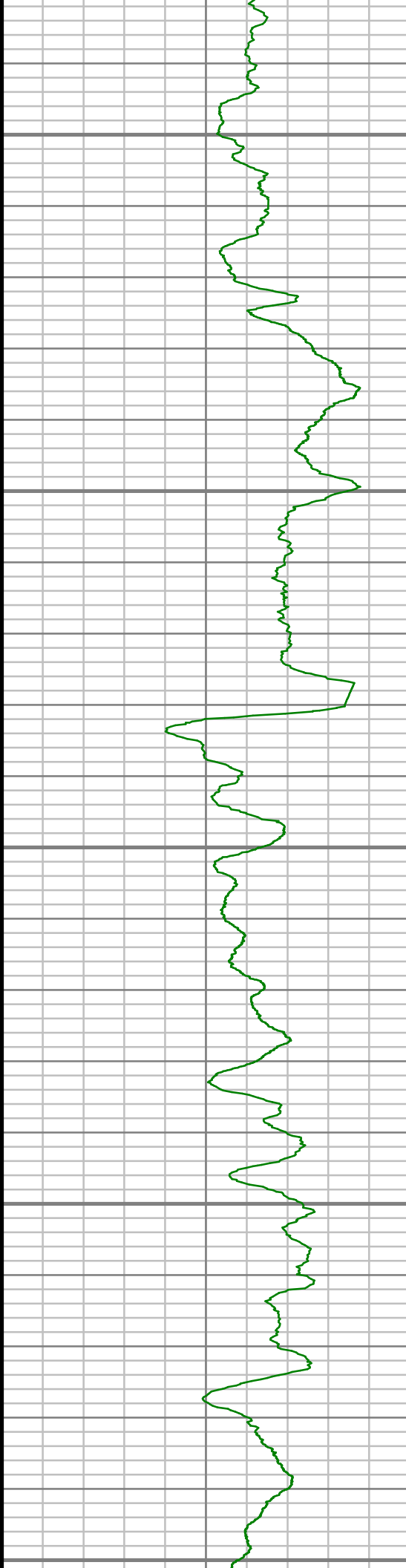
6800

6850



S: 43 MD: 6693.00 ft Inc: 36.93  
deg Az: 178.54 deg TVD:  
6631.10 ft

S: 44 MD: 6788.00 ft Inc: 44.73  
deg Az: 179.15 deg TVD:  
6702.92 ft



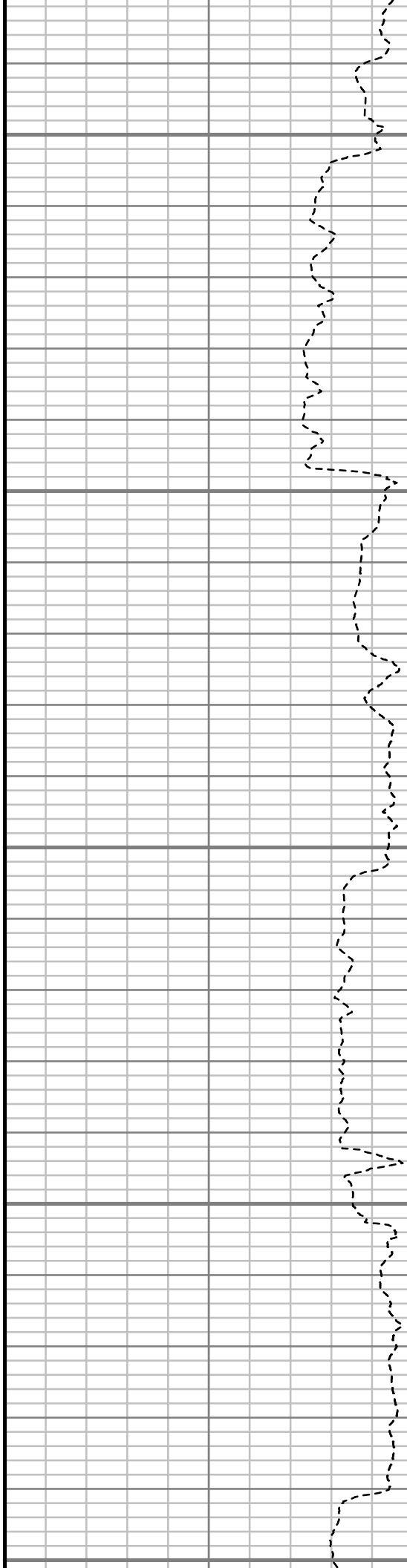
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6950

7000

7050

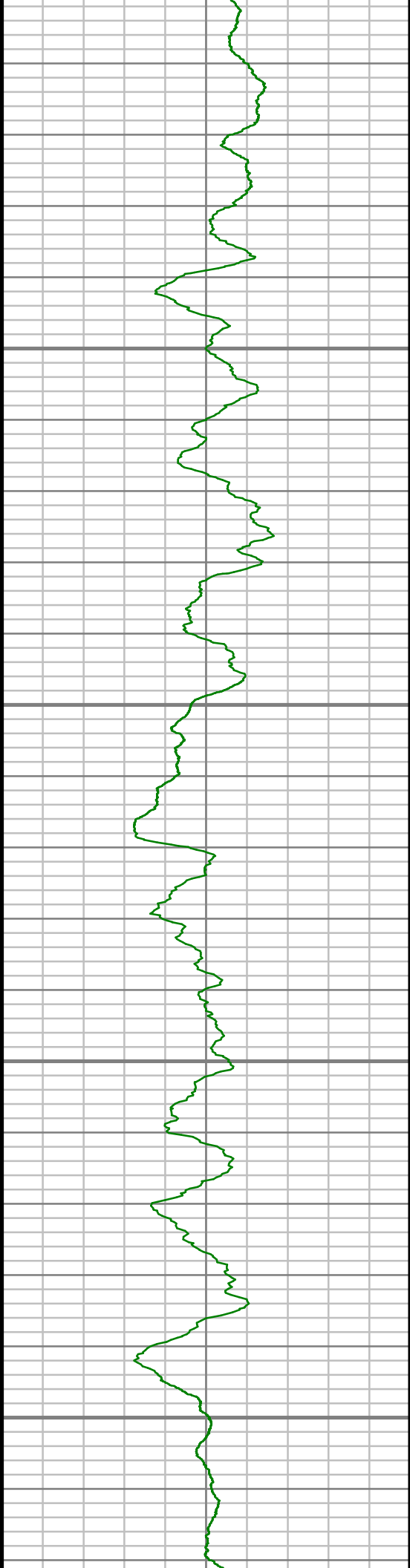
7100



S: 45 MD: 6883.00 ft Inc: 49.84  
deg Az: 179.31 deg TVD:  
6767.35 ft

S: 46 MD: 6978.00 ft Inc: 59.03  
deg Az: 180.00 deg TVD:  
6822.54 ft

S: 47 MD: 7074.00 ft Inc: 66.81  
deg Az: 180.06 deg TVD:  
6866.21 ft

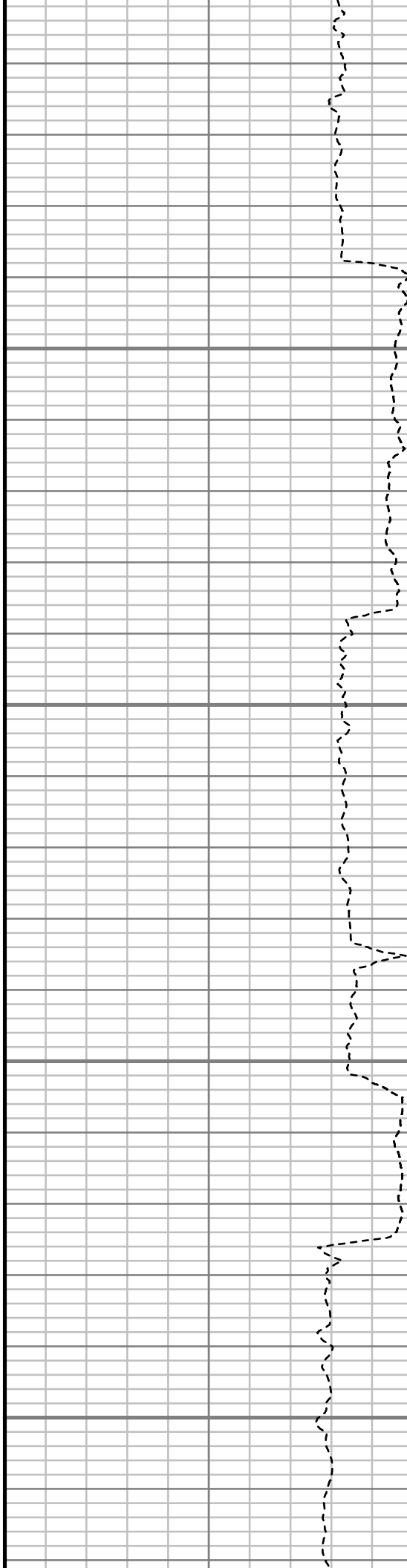


7150

7200

7250

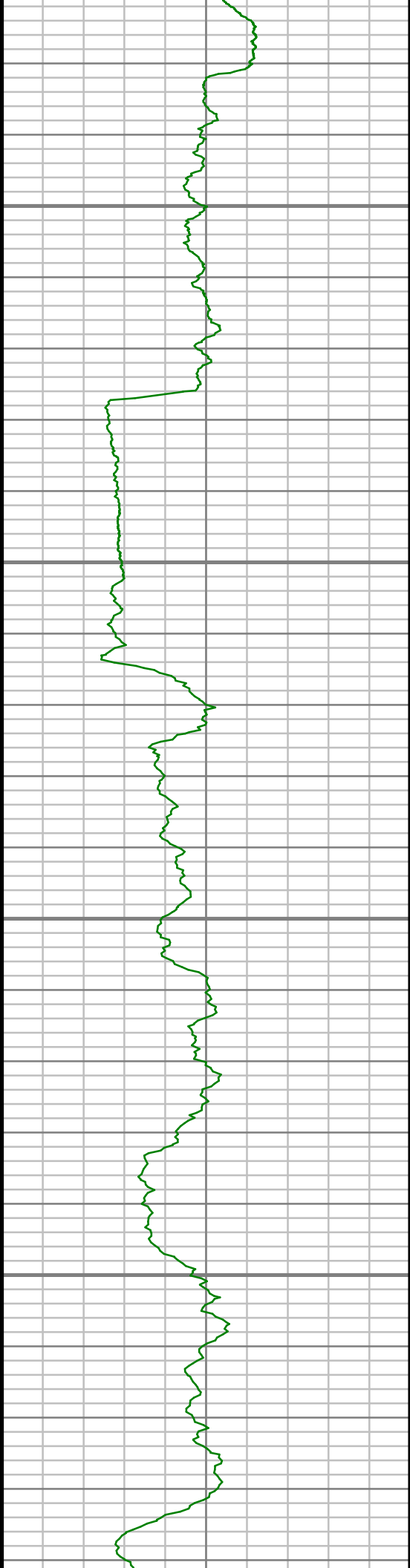
7300



S: 48 MD: 7169.00 ft Inc: 75.55  
deg Az: 180.11 deg TVD:  
6896.83 ft

S: 49 MD: 7264.00 ft Inc: 81.15  
deg Az: 179.32 deg TVD:  
6916.00 ft

S: 50 MD: 7286.00 ft Inc: 82.11  
deg Az: 179.53 deg TVD:  
6919.21 ft

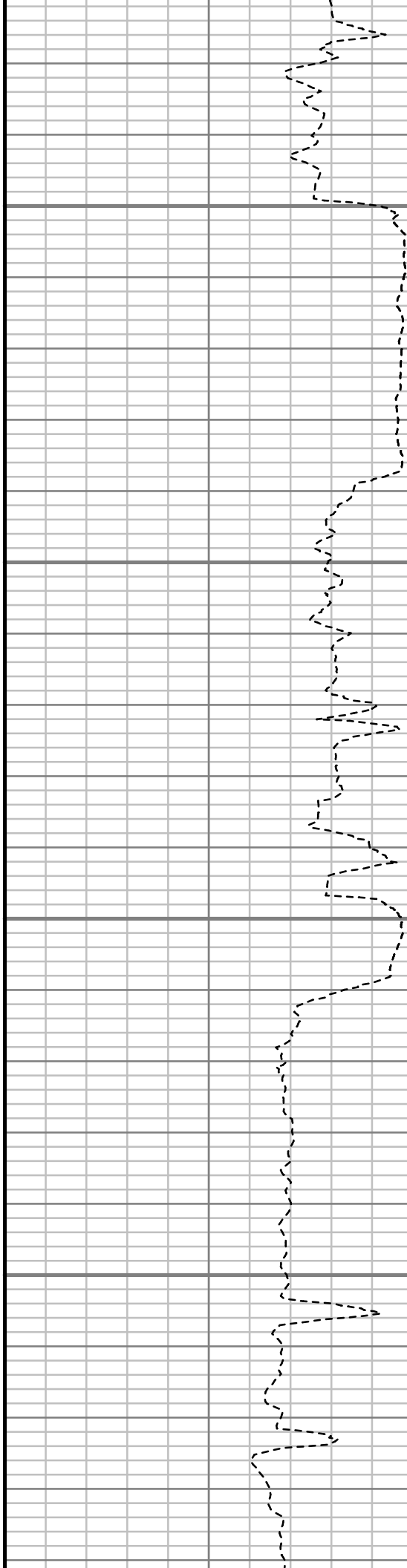


7350

7400

7450

7500

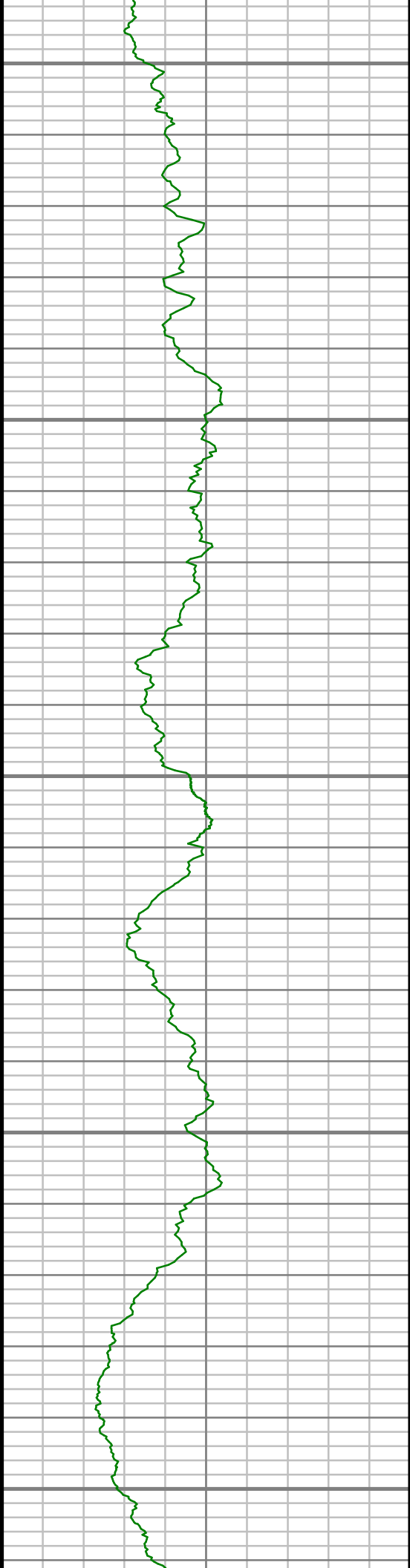


S: 51 MD: 7355.00 ft Inc: 86.11  
deg Az: 180.41 deg TVD:  
6926.29 ft

S: 52 MD: 7368.00 ft Inc: 87.62  
deg Az: 180.61 deg TVD:  
6927.00 ft

S: 53 MD: 7459.00 ft Inc: 89.03  
deg Az: 179.77 deg TVD:  
6929.67 ft

S: 54 MD: 7536.00 ft Inc: 89.03  
deg Az: 179.93 deg TVD:



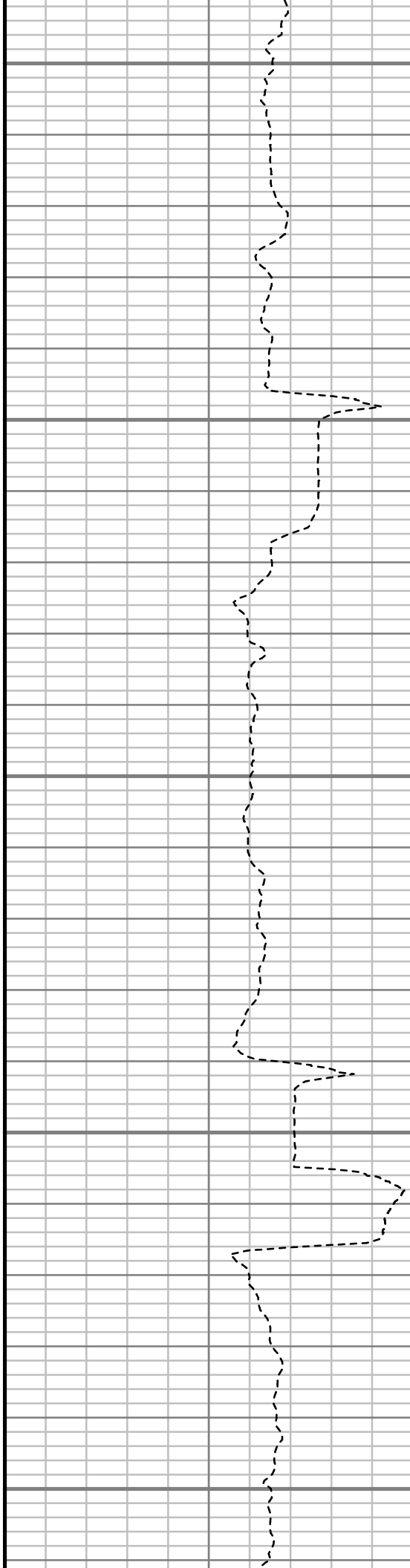
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7600

7650

7700

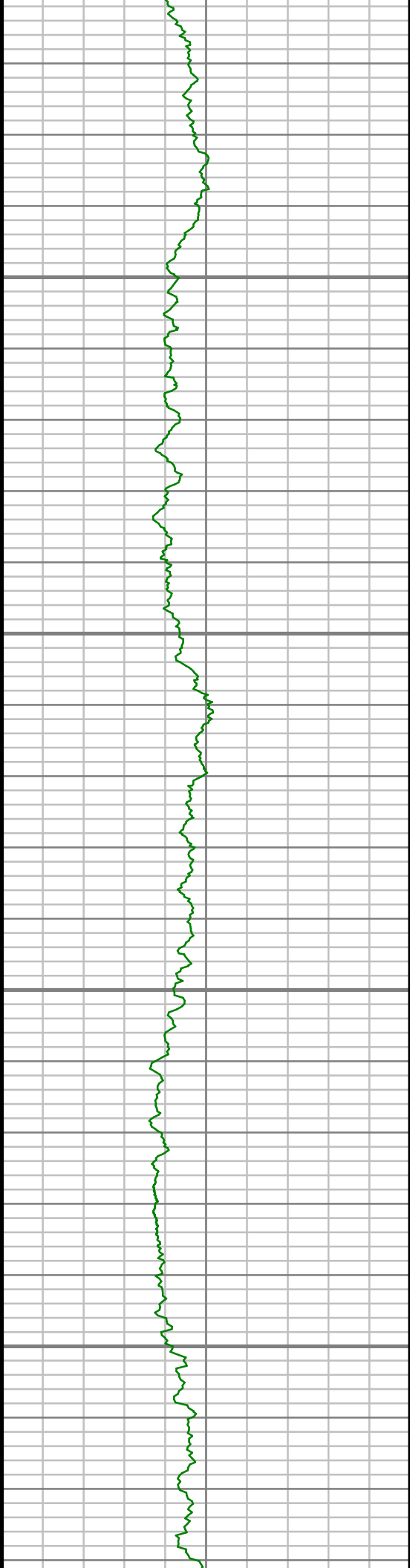
7750



6930.97 ft

S: 55 MD: 7629.00 ft Inc: 88.73  
deg Az: 179.90 deg TVD:  
6932.80 ft

S: 56 MD: 7722.00 ft Inc: 90.00  
deg Az: 180.38 deg TVD:  
6933.83 ft

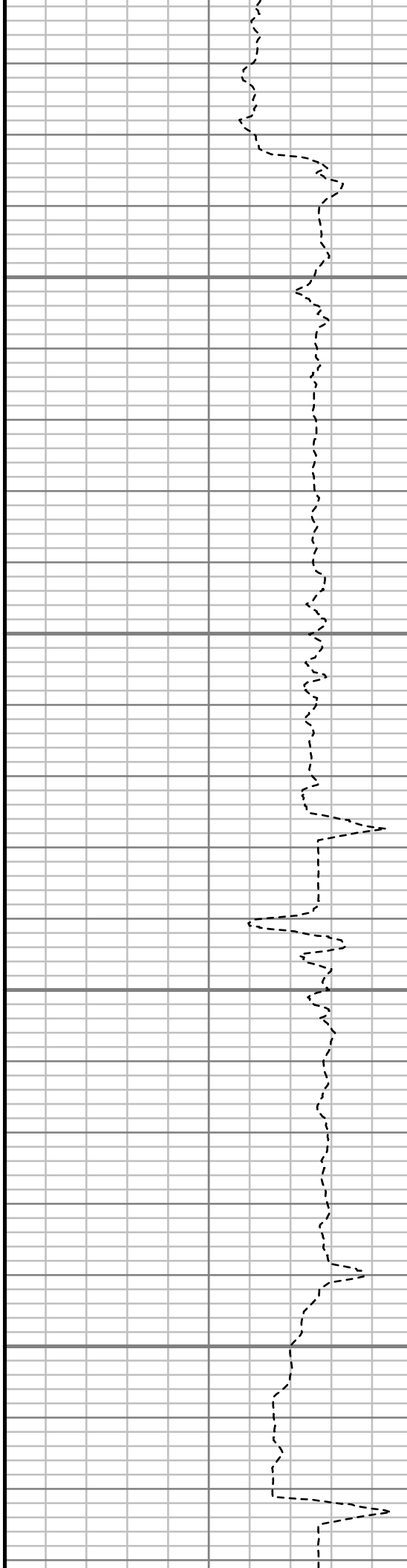


7800

7850

7900

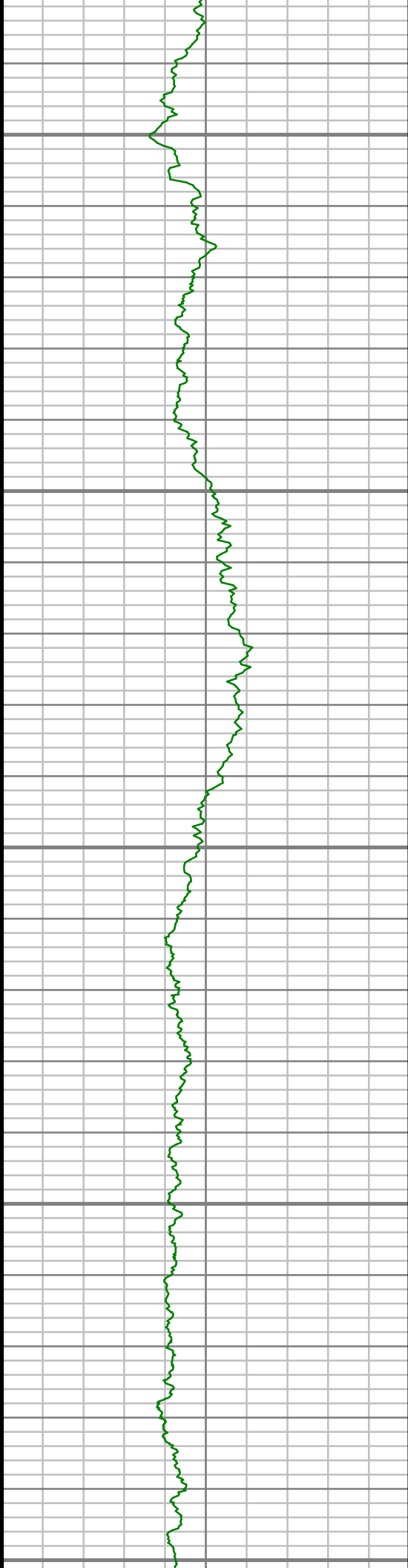
7950



S: 57 MD: 7815.00 ft Inc: 90.34  
deg Az: 180.44 deg TVD:  
6933.56 ft

S: 58 MD: 7910.00 ft Inc: 91.07  
deg Az: 180.01 deg TVD:  
6932.39 ft





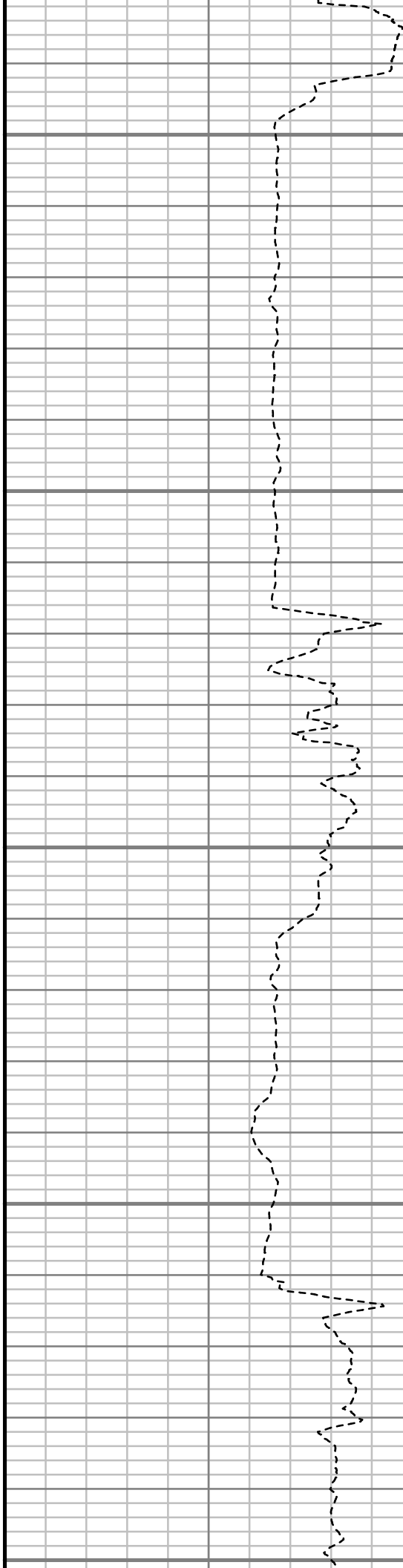
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8050

8100

8150

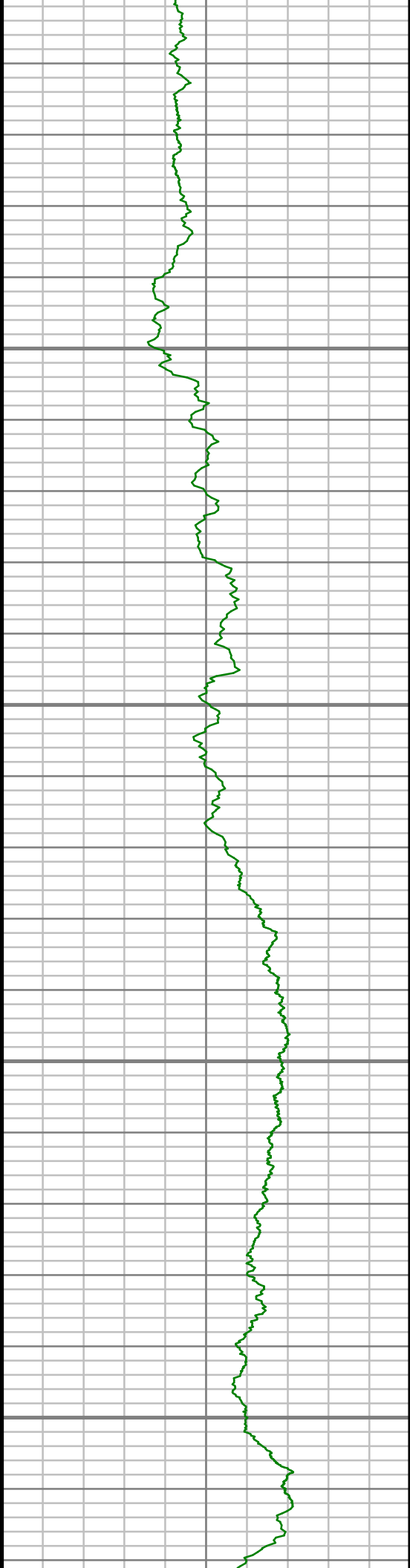
8200



S: 59 MD: 8005.00 ft Inc: 89.30  
deg Az: 179.51 deg TVD:  
6932.08 ft

S: 60 MD: 8100.00 ft Inc: 89.20  
deg Az: 178.82 deg TVD:  
6933.34 ft

S: 61 MD: 8195.00 ft Inc: 89.03  
deg Az: 179.12 deg TVD:  
6934.81 ft

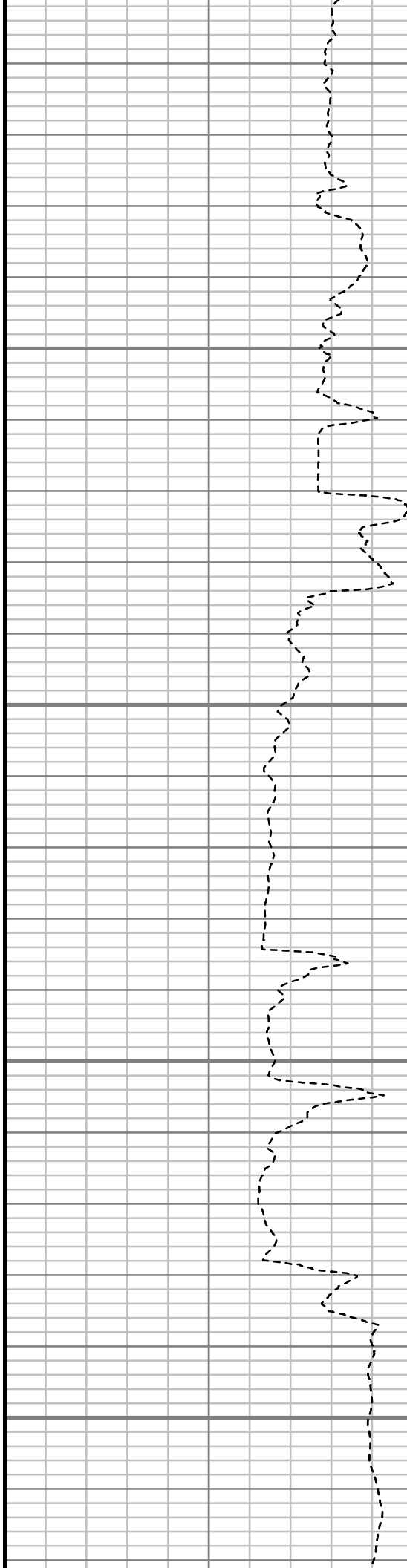


8250

8300

8350

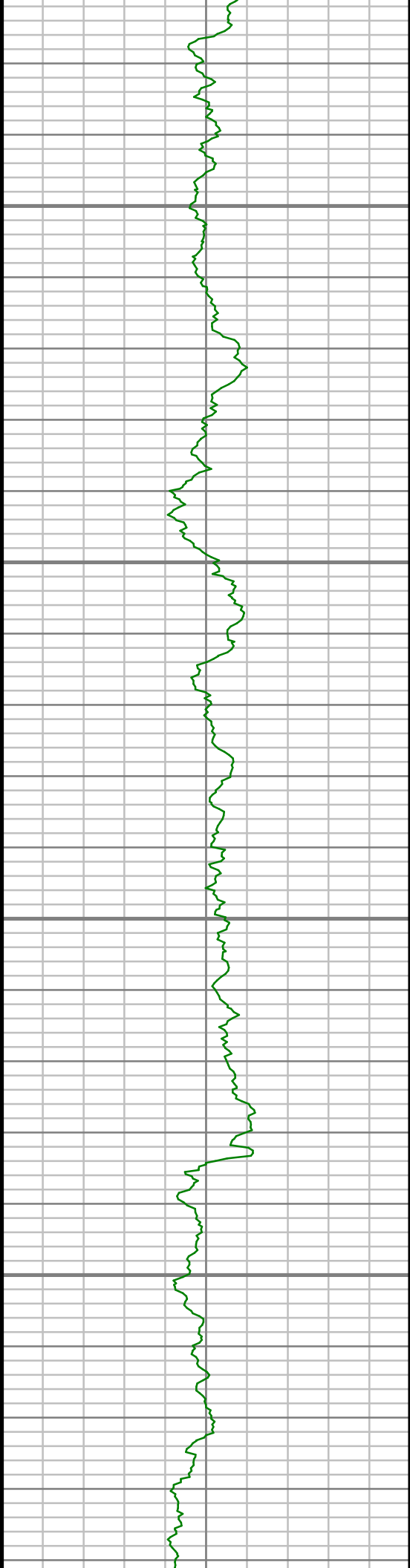
8400



6934.81 ft

S: 62 MD: 8290.00 ft Inc: 89.70  
deg Az: 179.71 deg TVD:  
6935.87 ft

S: 63 MD: 8385.00 ft Inc: 89.80  
deg Az: 179.57 deg TVD:  
6936.28 ft

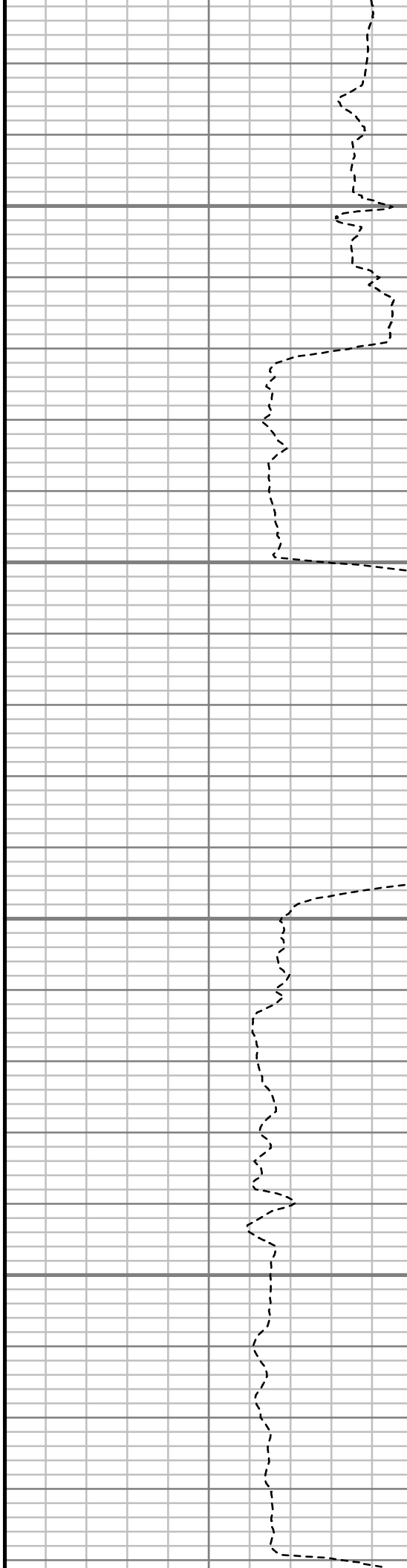


8450

8500

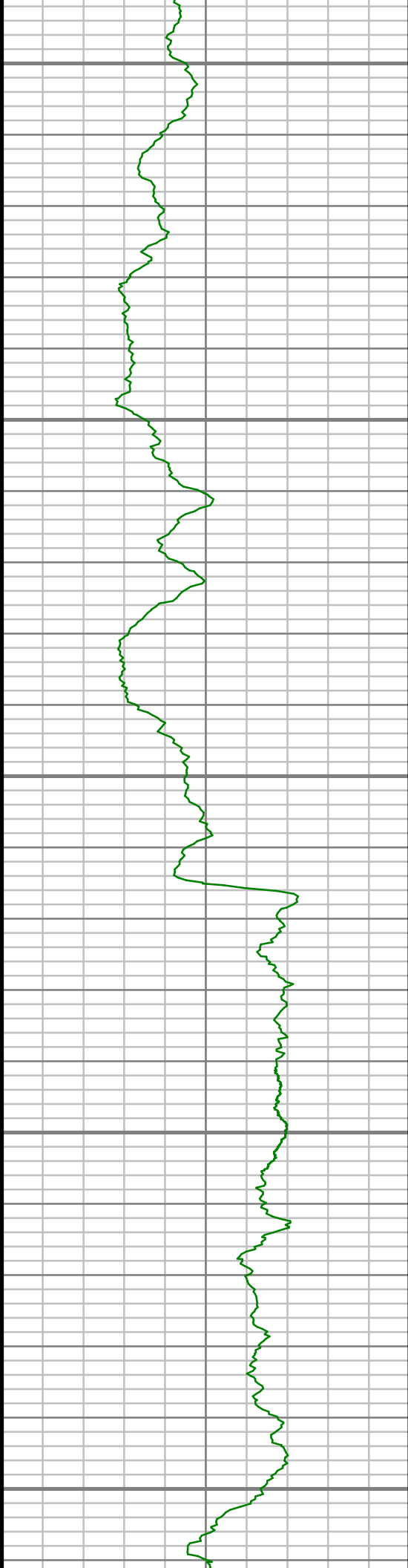
8550

8600



S: 64 MD: 8480.00 ft Inc: 90.74  
deg Az: 179.69 deg TVD:  
6935.84 ft

S: 65 MD: 8575.00 ft Inc: 90.87  
deg Az: 179.41 deg TVD:  
6934.50 ft



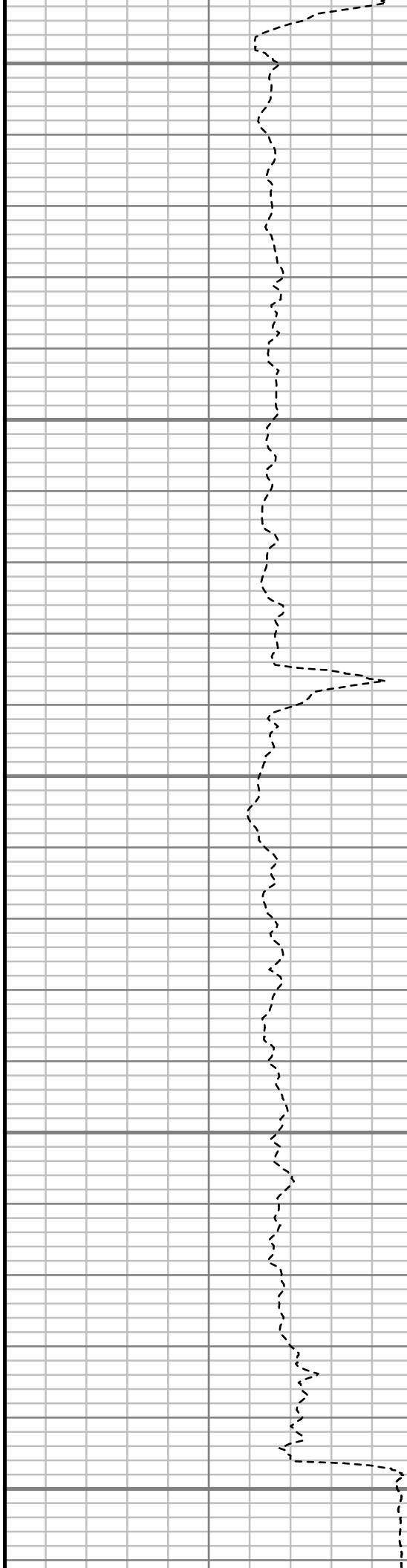
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8700

8750

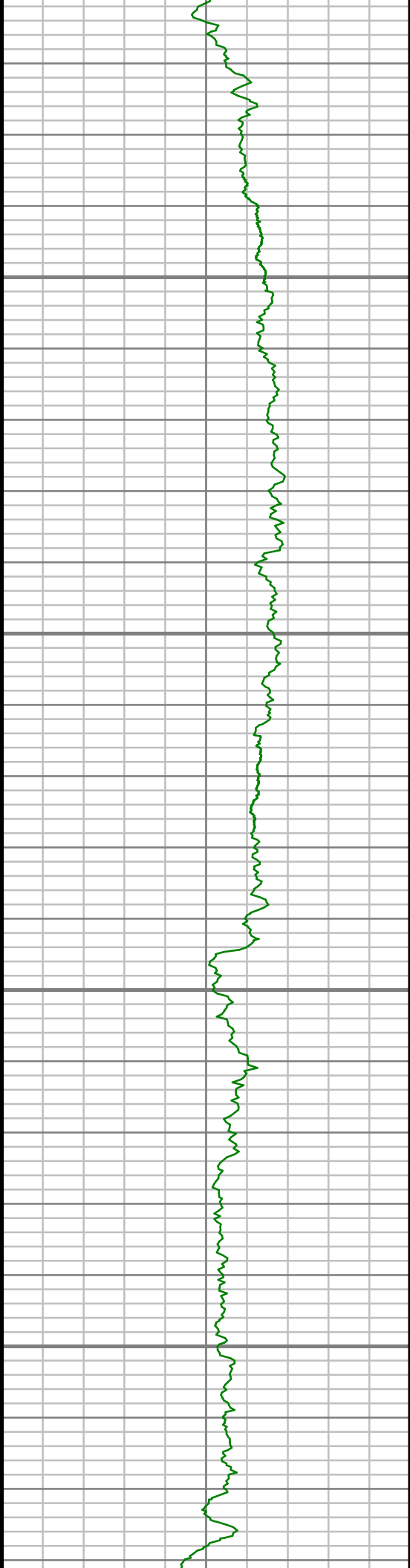
8800

8850



S: 66 MD: 8670.00 ft Inc: 90.97  
deg Az: 179.41 deg TVD:  
6932.97 ft

S: 67 MD: 8766.00 ft Inc: 90.34  
deg Az: 179.09 deg TVD:  
6931.88 ft

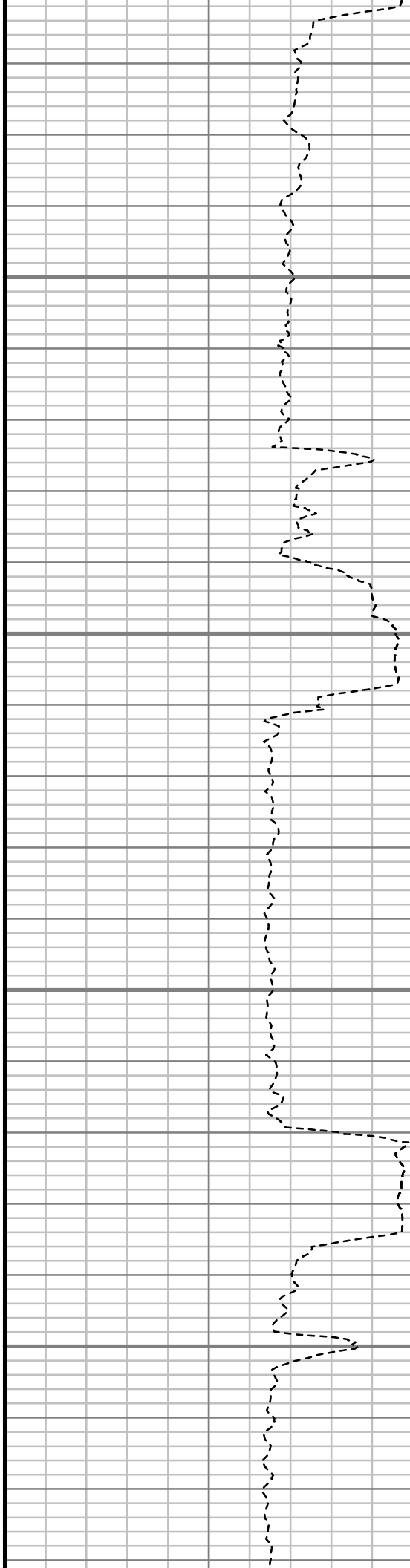


8900

8950

9000

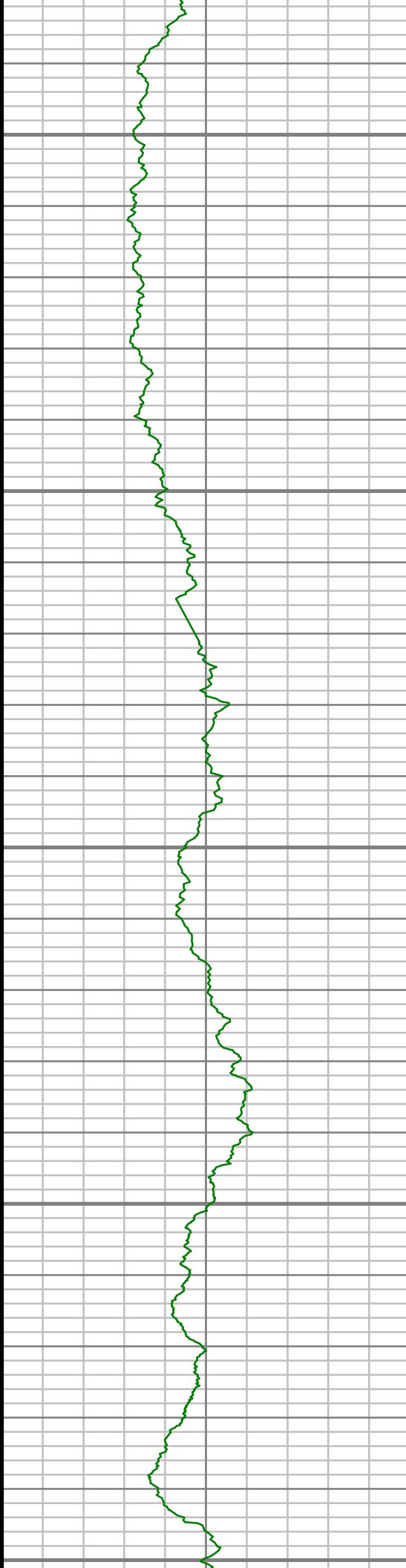
9050



S: 68 MD: 8861.00 ft Inc: 91.17  
deg Az: 180.44 deg TVD:  
6930.62 ft

S: 69 MD: 8956.00 ft Inc: 91.28  
deg Az: 181.83 deg TVD:  
6928.59 ft

S: 70 MD: 9051.00 ft Inc: 90.27  
deg Az: 181.71 deg TVD:  
6927.31 ft



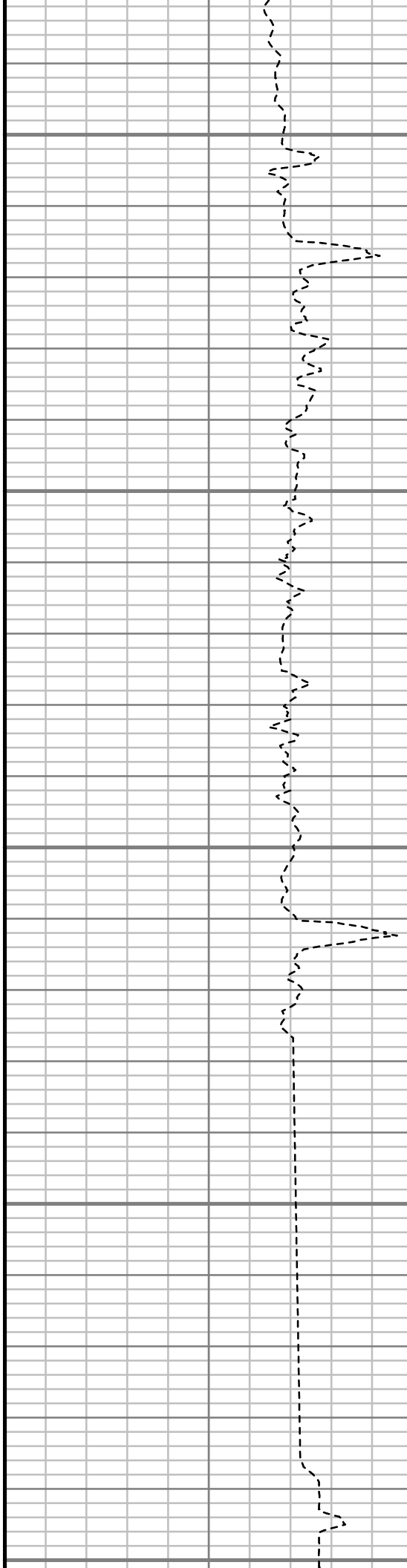
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9150

9200

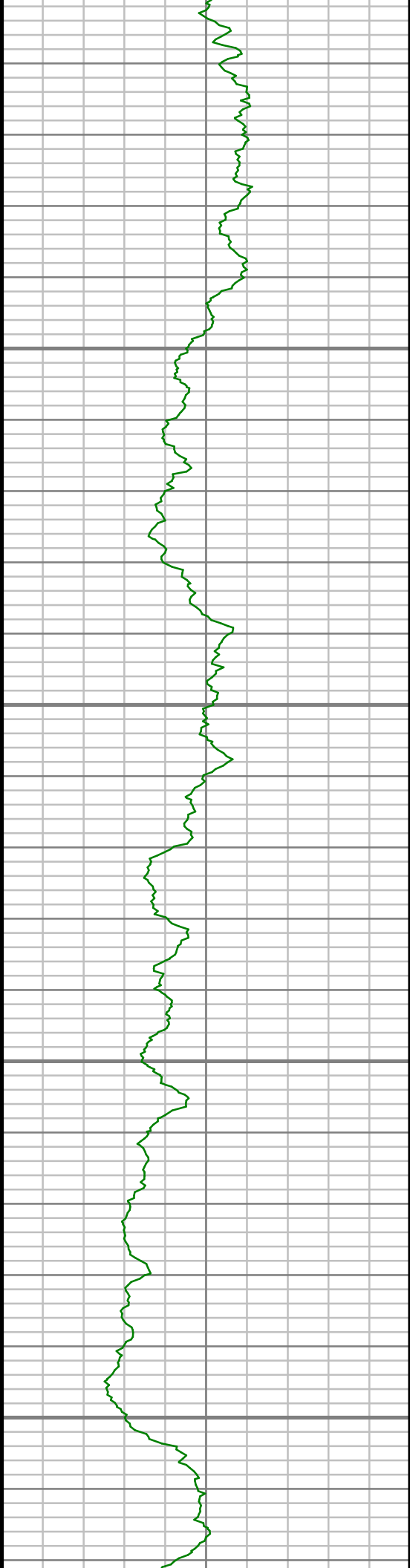
9250

9300



S: 71 MD: 9164.00 ft Inc: 90.07  
deg Az: 180.75 deg TVD:  
6926.98 ft

S: 72 MD: 9242.00 ft Inc: 89.90  
deg Az: 180.75 deg TVD:  
6927.01 ft

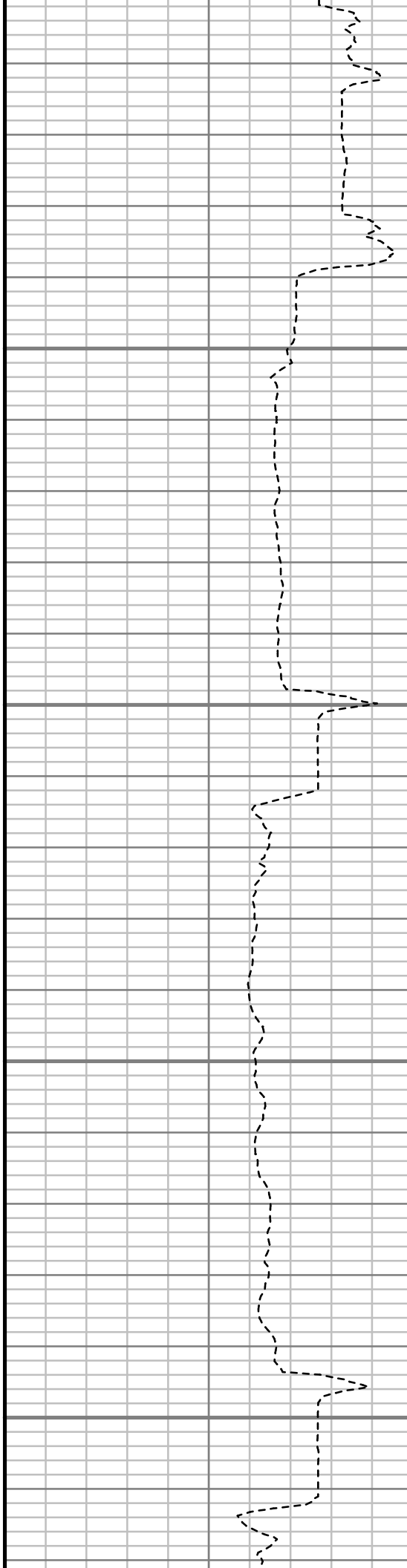


9350

9400

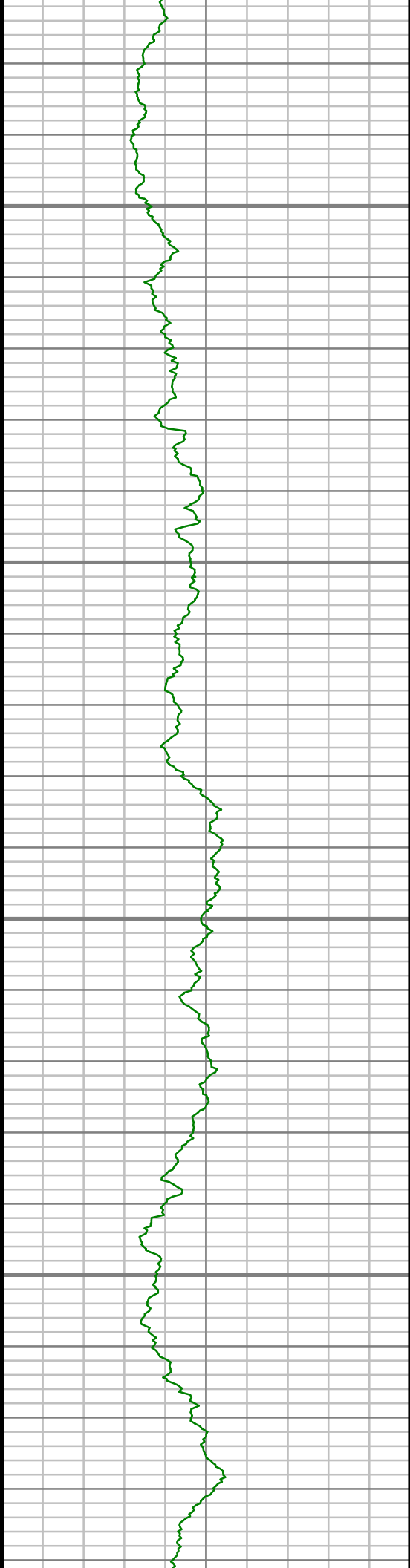
9450

9500



S: 73 MD: 9337.00 ft Inc: 89.70  
deg Az: 180.64 deg TVD:  
6927.34 ft

S: 74 MD: 9433.00 ft Inc: 89.40  
deg Az: 180.48 deg TVD:  
6928.10 ft

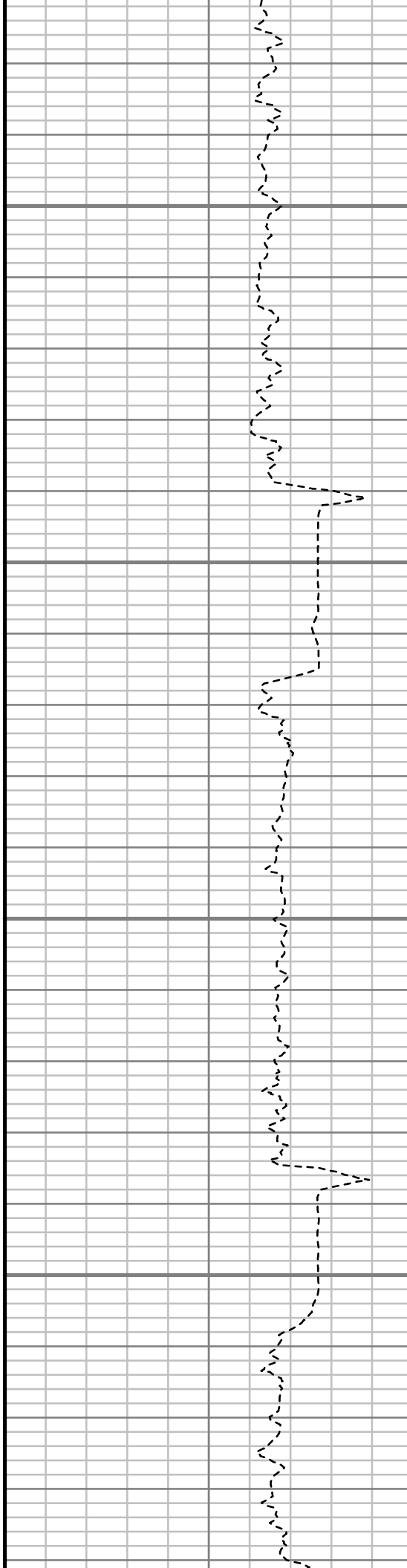


9550

9600

9650

9700

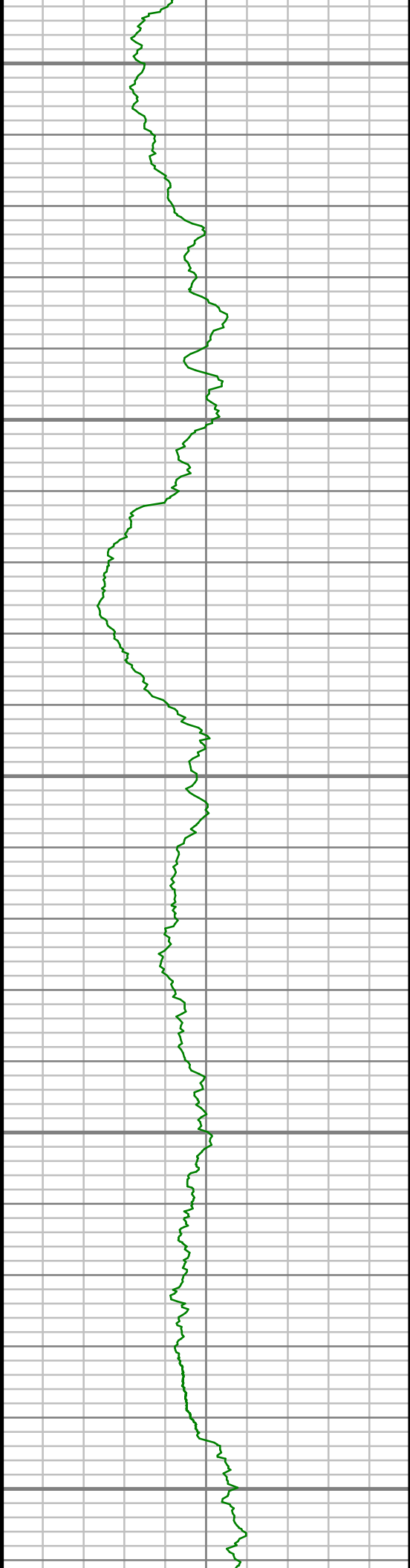


S: 75 MD: 9528.00 ft Inc: 89.40  
deg Az: 180.57 deg TVD:  
6929.10 ft

S: 76 MD: 9623.00 ft Inc: 89.33  
deg Az: 180.27 deg TVD:  
6930.16 ft

S: 77 MD: 9718.00 ft Inc: 89.03  
deg Az: 179.44 deg TVD:  
6931.52 ft





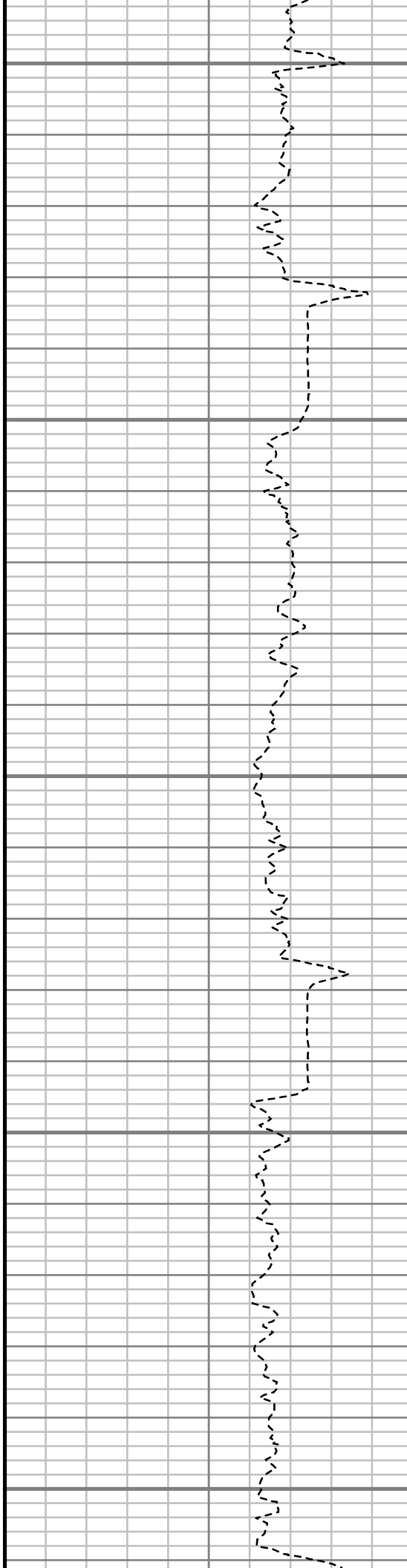
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9800

9850

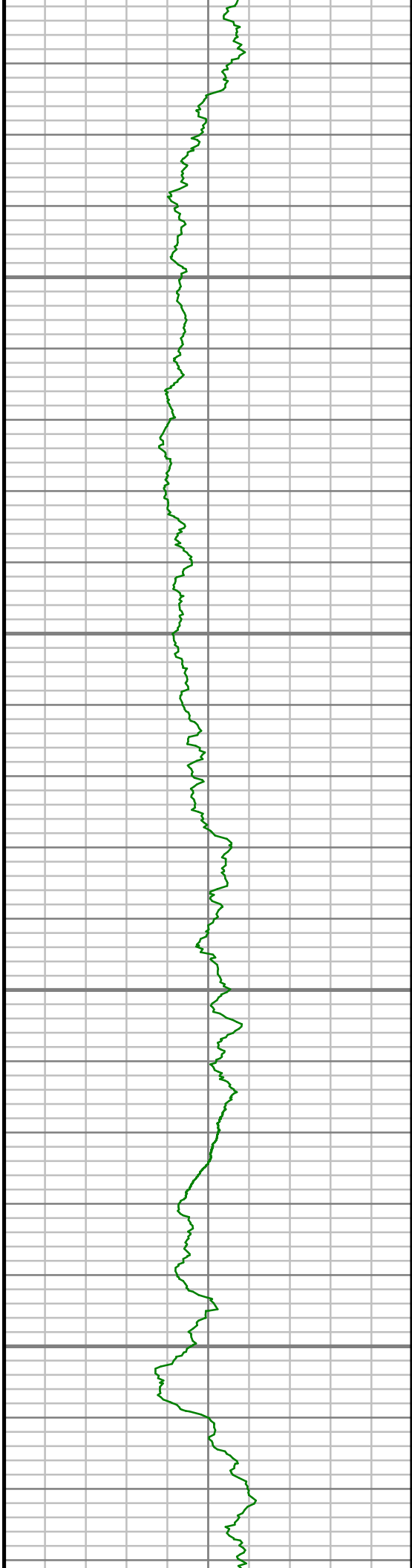
9900

9950



S: 78 MD: 9814.00 ft Inc: 88.99  
deg Az: 179.70 deg TVD:  
6933.18 ft

S: 79 MD: 9908.00 ft Inc: 88.73  
deg Az: 178.69 deg TVD:  
6935.04 ft

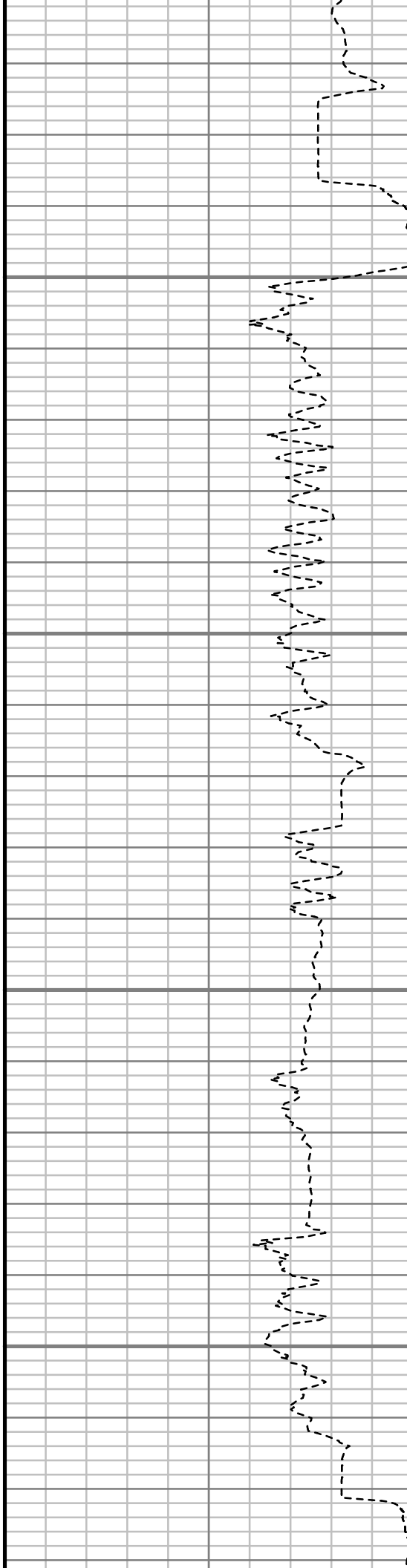


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10050

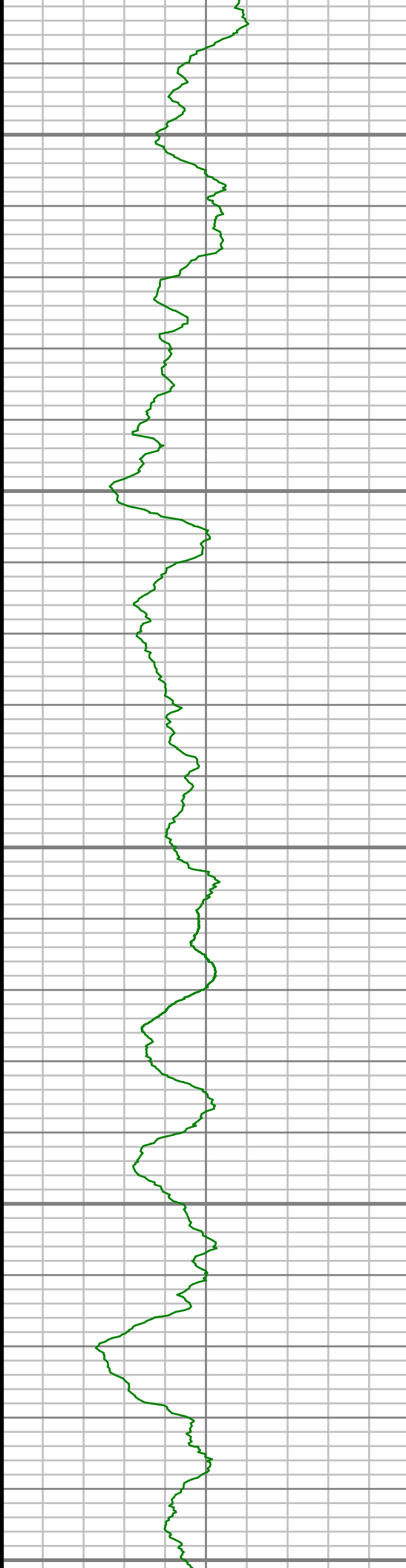
10100

10150



S: 80 MD: 10004.00 ft Inc:  
89.09 deg Az: 179.74 deg TVD:  
6936.87 ft

S: 81 MD: 10099.00 ft Inc:  
88.73 deg Az: 178.62 deg TVD:  
6938.68 ft



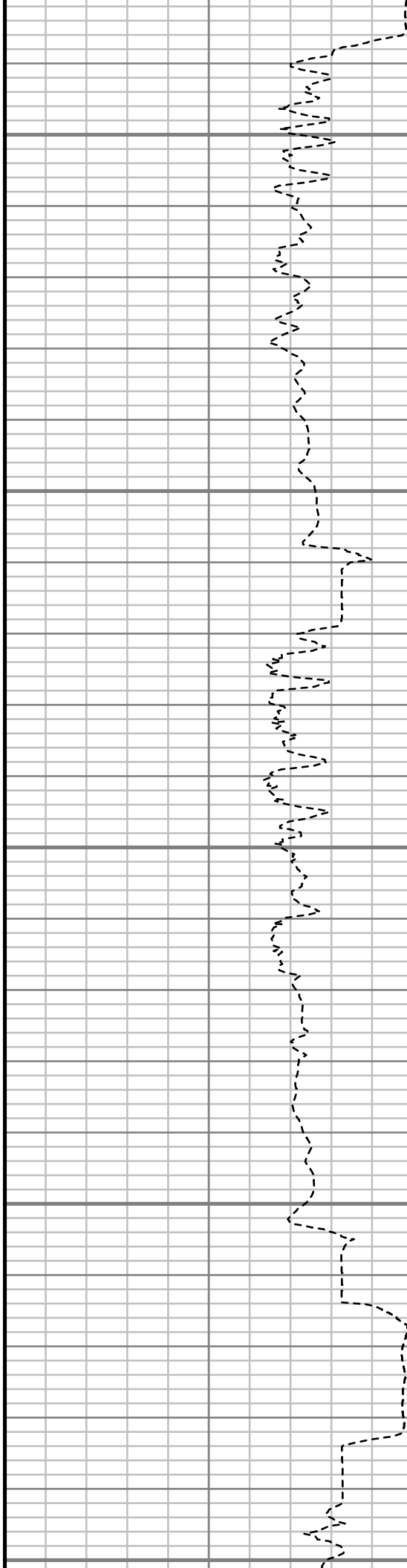
10200

10250

10300

10350

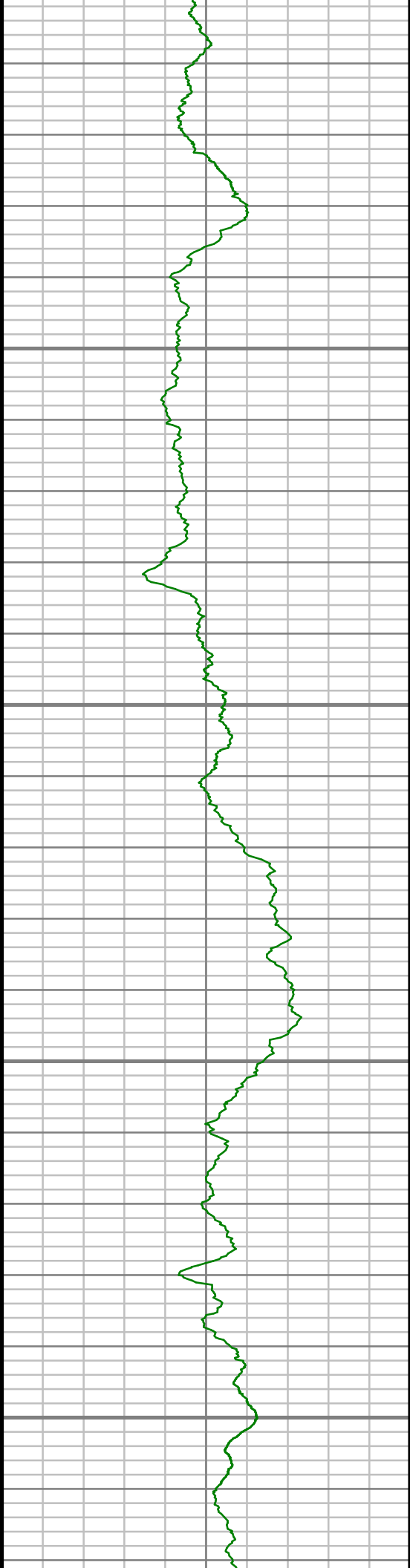
10400



S: 82 MD: 10194.00 ft Inc:  
88.73 deg Az: 180.63 deg TVD:  
6940.79 ft

S: 83 MD: 10290.00 ft Inc:  
87.82 deg Az: 180.17 deg TVD:  
6943.68 ft

S: 84 MD: 10385.00 ft Inc:  
89.26 deg Az: 181.05 deg TVD:  
6946.10 ft

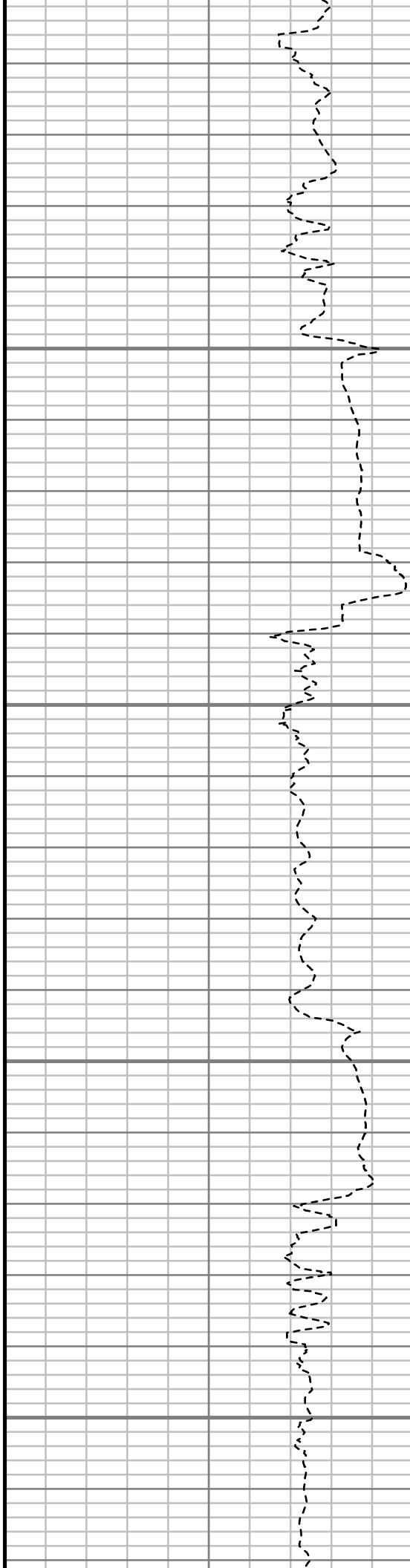


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10500

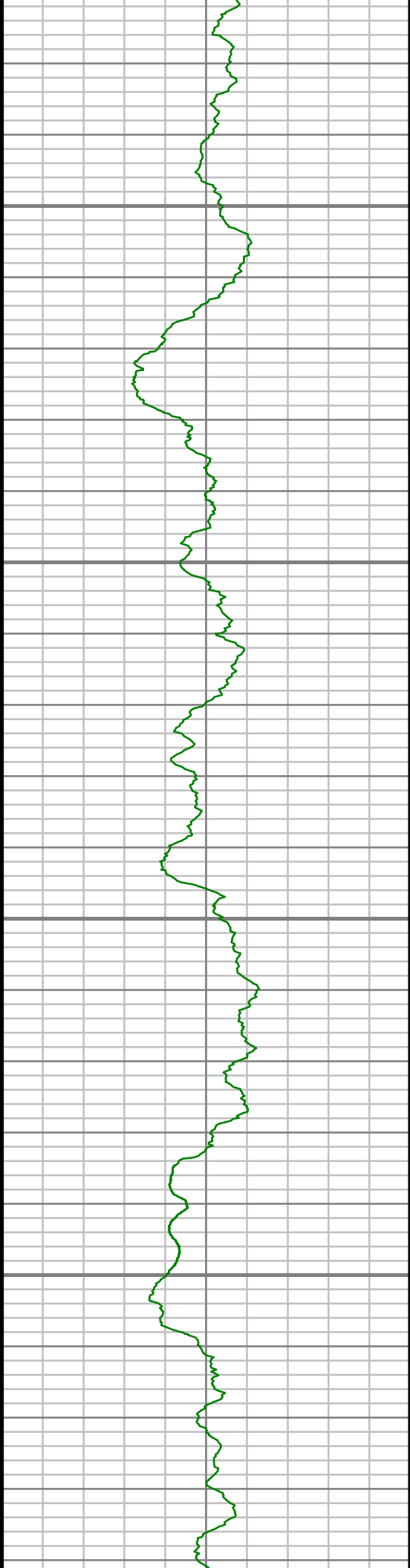
10550

10600



S: 85 MD: 10480.00 ft Inc:  
89.53 deg Az: 181.84 deg TVD:  
6947.10 ft

S: 86 MD: 10575.00 ft Inc:  
88.76 deg Az: 182.45 deg TVD:  
6948.52 ft

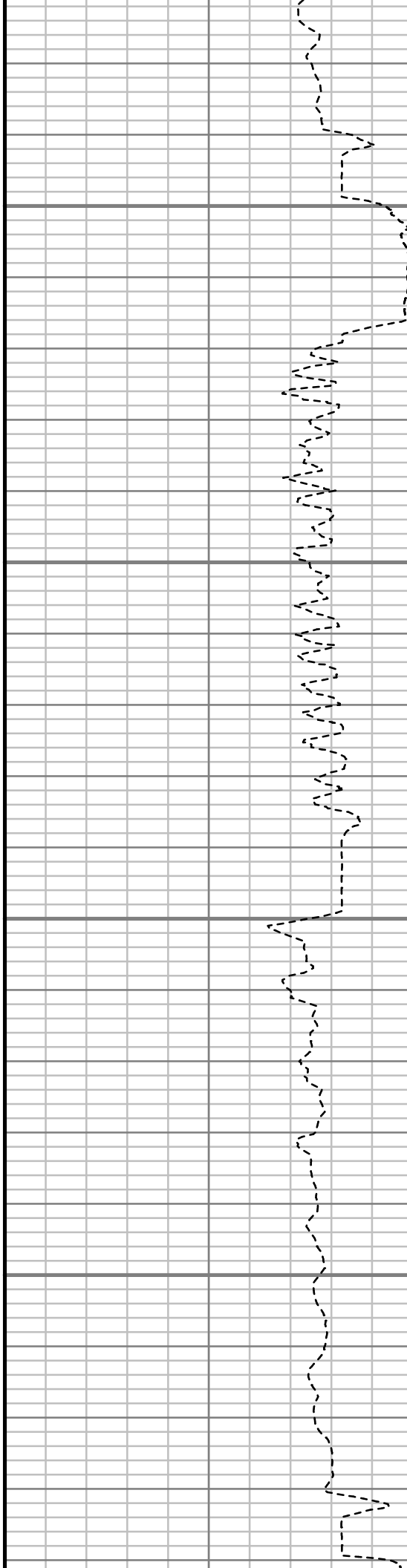


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10700

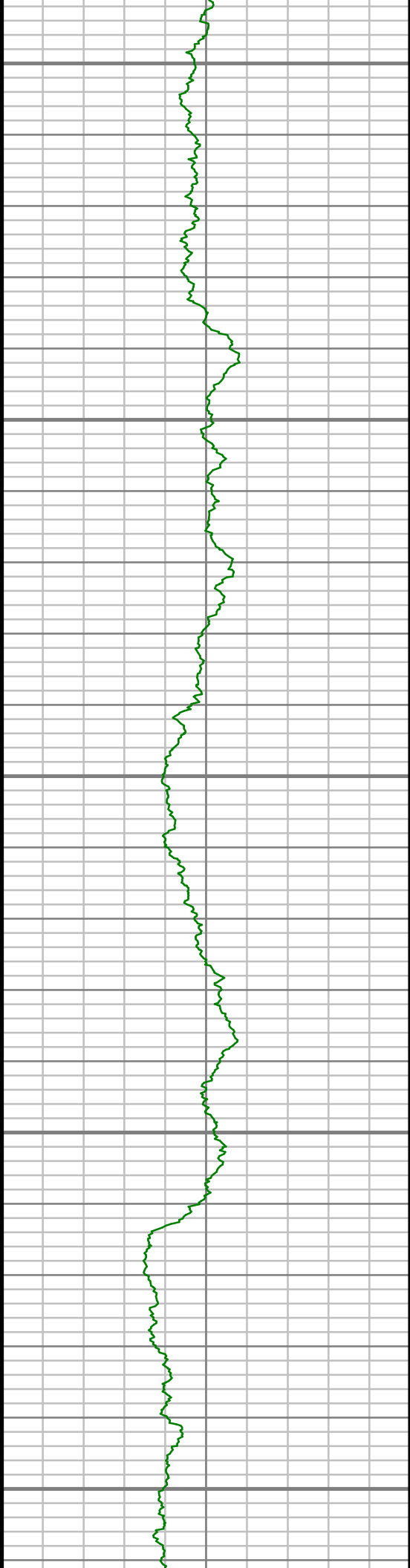
10750

10800



S: 87 MD: 10671.00 ft Inc:  
89.63 deg Az: 181.54 deg TVD:  
6949.87 ft

S: 88 MD: 10766.00 ft Inc:  
88.99 deg Az: 181.96 deg TVD:  
6951.01 ft



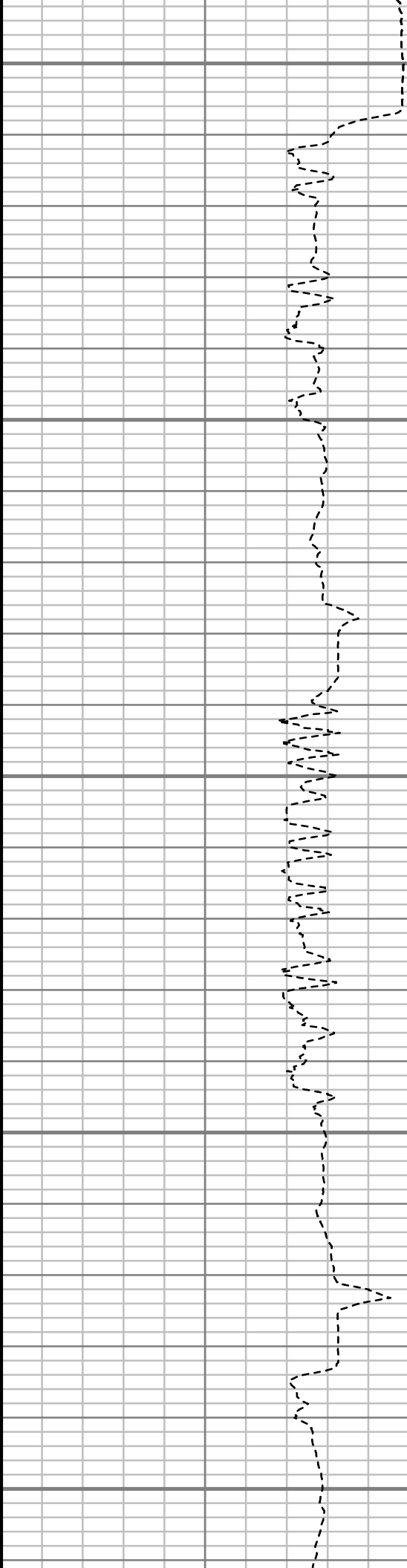
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10900

10950

11000

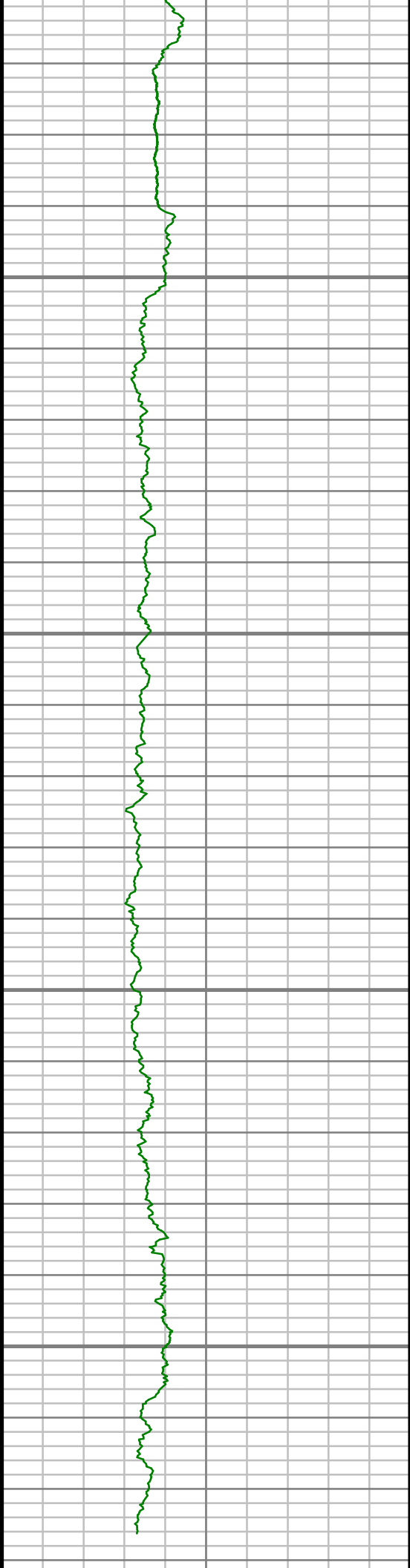
11050



S: 89 MD: 10861.00 ft Inc:  
90.64 deg Az: 180.97 deg TVD:  
6951.31 ft

S: 90 MD: 10957.00 ft Inc:  
91.27 deg Az: 180.59 deg TVD:  
6949.71 ft

S: 91 MD: 11052.00 ft Inc:  
91.61 deg Az: 180.73 deg TVD:  
6947.32 ft

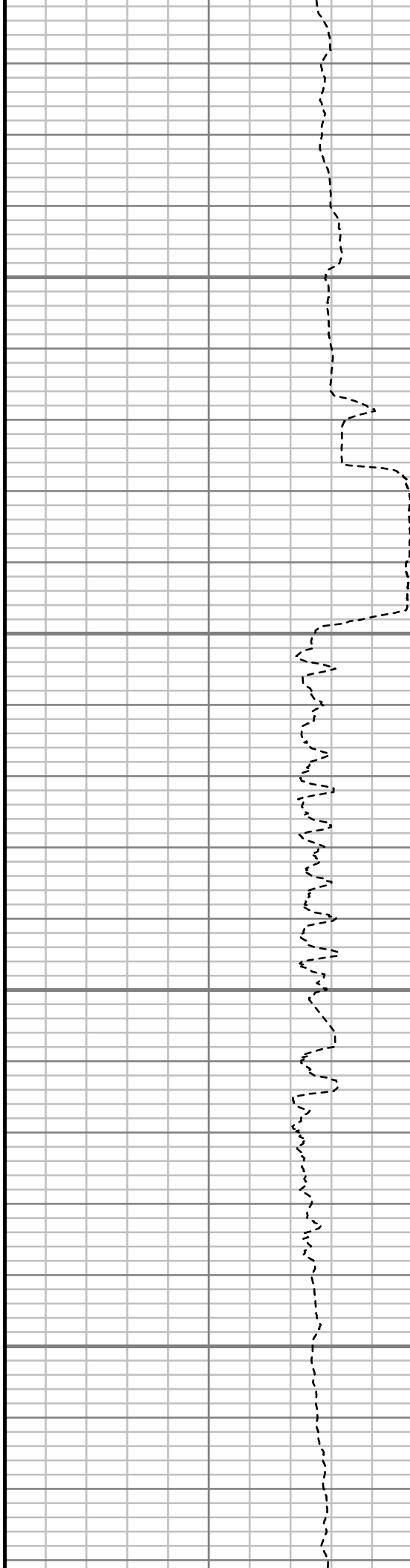


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11150

11200

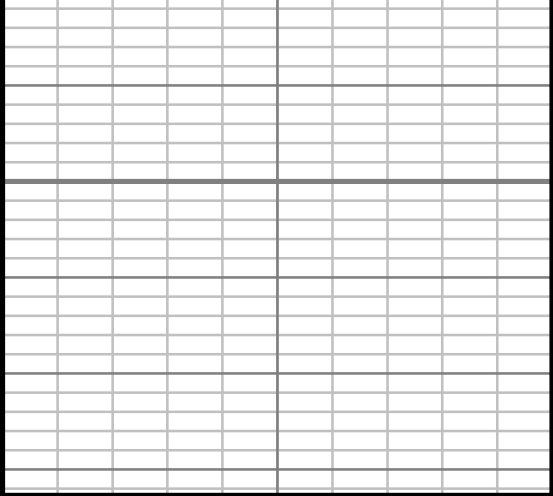
11250



S: 92 MD: 11147.00 ft Inc:  
89.16 deg Az: 179.32 deg TVD:  
6946.69 ft

S: 93 MD: 11242.00 ft Inc:  
89.43 deg Az: 179.56 deg TVD:  
6947.85 ft

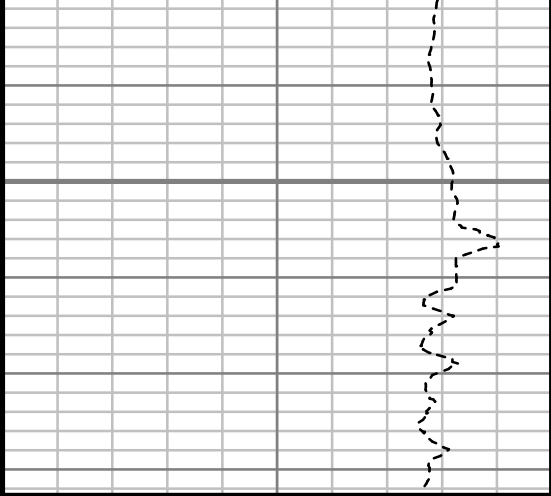
S: 94 MD: 11269.00 ft Inc:  
89.73 deg Az: 179.58 deg TVD:  
6948.05 ft



Gamma Ray (GR)		
0	Unit = aapi	150

11300

MEASURED DEPTH  
1-240 (ft)



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

Comments
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## MWD Survey Report

<b>Well Location</b>	NEWNAM
<b>Well Name</b>	NEWNAM 2H-32H-C264
<b>Survey Date</b>	12/29/2014
<b>Latitude</b>	40°6'5.278"N
<b>Longitude</b>	104°34'42.449"W
<b>Btotal</b>	52505 nT
<b>Dip</b>	66.71 deg
<b>Magnetic Declination</b>	8.37 deg
<b>North Reference</b>	True North
<b>Grid Correction</b>	None
<b>Depth Reference</b>	RKB (13.00 ft)
<b>Calculation Method</b>	Minimum Curvature
<b>Section (VS) Ref</b>	0.00N (ft), 0.00E (ft), 180.00Azim (deg)
<b>Operator(s)</b>	J. QUIMBY, M. SMITH, T. MORGAN, T. WHEELER

### Well Notes

SURVEYS FROM 100 FT. - 900 FT. ACQUIRED BY VAUGHN ENERGY SERVICES GYRO.

SURVEYS FROM 1178 FT. - 11269 FT. ACQUIRED BY SCIENTIFIC DRILLINING INTERNATIONAL MWD.

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	0.11	133.18	100.00	0.07	-0.07	0.07	133.18	0.10	0.11
200.00	0.36	227.65	200.00	0.34	-0.34	-0.09	194.24	0.35	0.38
300.00	1.44	336.92	299.99	-0.61	0.61	-0.81	306.79	1.01	1.60
400.00	3.21	344.22	399.90	-4.46	4.46	-2.07	335.15	4.92	1.79
500.00	4.76	348.23	499.66	-11.22	11.22	-3.67	341.86	11.80	1.57
600.00	6.13	352.37	599.21	-20.57	20.57	-5.23	345.74	21.22	1.43
700.00	10.31	357.39	698.16	-34.80	34.80	-6.35	349.66	35.38	4.23
800.00	10.95	358.31	796.44	-53.24	53.24	-7.03	352.47	53.70	0.67
900.00	10.59	351.71	894.68	-71.83	71.83	-8.64	353.14	72.35	1.29
1178.00	9.98	350.83	1168.21	-120.89	120.89	-16.16	352.38	121.96	0.23
1271.00	10.98	346.75	1259.66	-137.47	137.47	-19.48	351.94	138.84	1.34
1457.00	10.52	346.09	1442.40	-171.18	171.18	-27.62	350.83	173.40	0.26
1648.00	10.13	337.51	1630.32	-203.62	203.62	-38.24	349.36	207.18	0.83
1838.00	7.74	328.71	1818.01	-230.01	230.01	-51.28	347.43	235.65	1.45
2029.00	4.64	331.21	2007.87	-247.78	247.78	-61.68	346.02	255.34	1.63
2219.00	0.13	143.06	2197.67	-254.34	254.34	-65.25	345.61	262.58	2.51
2410.00	0.27	49.37	2388.67	-254.45	254.45	-64.78	345.72	262.57	0.16
2601.00	0.30	99.71	2579.67	-254.66	254.66	-63.94	345.91	262.56	0.13

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
2791.00	0.57	92.01	2769.66	-254.54	254.54	-62.49	346.21	262.10	0.15
2982.00	0.44	158.55	2960.65	-253.83	253.83	-61.27	346.43	261.12	0.30
3172.00	0.28	64.82	3150.65	-253.35	253.35	-60.58	346.55	260.50	0.28
3363.00	0.31	29.39	3341.65	-254.00	254.00	-59.89	346.73	260.97	0.10
3553.00	0.27	232.54	3531.65	-254.18	254.18	-60.00	346.72	261.16	0.30
3743.00	0.57	37.00	3721.65	-254.66	254.66	-59.79	346.79	261.59	0.44
3934.00	1.77	181.78	3912.62	-252.47	252.47	-59.30	346.78	259.34	1.18
4124.00	1.19	183.63	4102.56	-247.58	247.58	-59.52	346.48	254.63	0.31
4315.00	1.22	277.01	4293.53	-245.86	245.86	-61.67	345.92	253.47	0.92
4505.00	1.52	289.05	4483.47	-246.92	246.92	-66.06	345.02	255.61	0.21
4696.00	1.60	290.18	4674.40	-248.67	248.67	-70.95	344.08	258.59	0.05
4886.00	1.24	173.86	4864.37	-247.53	247.53	-73.22	343.52	258.13	1.28
5077.00	0.45	25.95	5055.36	-246.14	246.14	-72.67	343.55	256.65	0.86
5267.00	1.29	321.41	5245.34	-248.48	248.48	-73.67	343.49	259.17	0.61
5457.00	1.92	62.90	5435.29	-251.60	251.60	-72.16	344.00	261.74	1.32
5647.00	0.58	310.19	5625.26	-253.67	253.67	-70.06	344.56	263.17	1.16
5837.00	0.41	73.91	5815.25	-254.48	254.48	-70.13	344.59	263.97	0.46
6027.00	1.21	77.23	6005.23	-255.12	255.12	-67.51	345.18	263.90	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
6181.00	1.56	199.71	6159.21	-253.50	253.50	-66.64	345.27	262.12	1.58
6218.00	1.40	207.59	6196.20	-252.63	252.63	-67.01	345.14	261.37	0.70
6312.00	10.58	185.67	6289.59	-243.01	243.01	-68.40	344.28	252.45	9.89
6408.00	20.50	182.29	6381.97	-217.38	217.38	-69.95	342.16	228.35	10.37
6503.00	26.27	182.69	6469.13	-179.73	179.73	-71.60	338.28	193.46	6.08
6597.00	31.12	181.97	6551.56	-134.64	134.64	-73.41	331.40	153.36	5.18
6693.00	36.93	178.54	6631.10	-80.97	80.97	-73.53	317.75	109.38	6.37
6788.00	44.73	179.15	6702.92	-18.91	18.91	-72.31	284.66	74.74	8.23
6883.00	49.84	179.31	6767.35	50.86	-50.86	-71.38	234.53	87.64	5.38
6978.00	59.03	180.00	6822.54	128.05	-128.05	-70.94	208.99	146.39	9.70
7074.00	66.81	180.06	6866.21	213.46	-213.46	-70.98	198.39	224.95	8.10
7169.00	75.55	180.11	6896.83	303.29	-303.29	-71.11	193.20	311.52	9.20
7264.00	81.15	179.32	6916.00	396.30	-396.30	-70.64	190.11	402.55	5.96
7286.00	82.11	179.53	6919.21	418.06	-418.06	-70.43	189.56	423.95	4.44
7355.00	86.11	180.41	6926.29	486.68	-486.68	-70.39	188.23	491.75	5.94
7368.00	87.62	180.61	6927.00	499.66	-499.66	-70.50	188.03	504.61	11.68
7459.00	89.03	179.77	6929.67	590.62	-590.62	-70.81	186.84	594.85	1.80
7536.00	89.03	179.93	6930.97	667.61	-667.61	-70.61	186.04	671.33	0.21

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
7629.00	88.73	179.90	6932.80	760.59	-760.59	-70.47	185.29	763.85	0.33
7722.00	90.00	180.38	6933.83	853.58	-853.58	-70.70	184.73	856.51	1.47
7815.00	90.34	180.44	6933.56	946.58	-946.58	-71.37	184.31	949.27	0.37
7910.00	91.07	180.01	6932.39	1041.57	-1041.57	-71.74	183.94	1044.04	0.90
8005.00	89.30	179.51	6932.08	1136.57	-1136.57	-71.34	183.59	1138.80	1.94
8100.00	89.20	178.82	6933.34	1231.55	-1231.55	-69.95	183.25	1233.53	0.74
8195.00	89.03	179.12	6934.81	1326.52	-1326.52	-68.24	182.94	1328.27	0.37
8290.00	89.70	179.71	6935.87	1421.51	-1421.51	-67.28	182.71	1423.10	0.94
8385.00	89.80	179.57	6936.28	1516.50	-1516.50	-66.69	182.52	1517.97	0.18
8480.00	90.74	179.69	6935.84	1611.50	-1611.50	-66.08	182.35	1612.85	1.00
8575.00	90.87	179.41	6934.50	1706.49	-1706.49	-65.33	182.19	1707.74	0.33
8670.00	90.97	179.41	6932.97	1801.47	-1801.47	-64.35	182.05	1802.62	0.10
8766.00	90.34	179.09	6931.88	1897.46	-1897.46	-63.09	181.90	1898.50	0.74
8861.00	91.17	180.44	6930.62	1992.44	-1992.44	-62.69	181.80	1993.43	1.67
8956.00	91.28	181.83	6928.59	2087.40	-2087.40	-64.57	181.77	2088.40	1.48
9051.00	90.27	181.71	6927.31	2182.35	-2182.35	-67.51	181.77	2183.39	1.07
9164.00	90.07	180.75	6926.98	2295.32	-2295.32	-69.94	181.75	2296.38	0.86
9242.00	89.90	180.75	6927.01	2373.31	-2373.31	-70.96	181.71	2374.37	0.21

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
9337.00	89.70	180.64	6927.34	2468.30	-2468.30	-72.12	181.67	2469.36	0.24
9433.00	89.40	180.48	6928.10	2564.30	-2564.30	-73.06	181.63	2565.34	0.35
9528.00	89.40	180.57	6929.10	2659.29	-2659.29	-73.93	181.59	2660.31	0.09
9623.00	89.33	180.27	6930.16	2754.28	-2754.28	-74.63	181.55	2755.29	0.33
9718.00	89.03	179.44	6931.52	2849.27	-2849.27	-74.38	181.50	2850.24	0.93
9814.00	88.99	179.70	6933.18	2945.25	-2945.25	-73.66	181.43	2946.17	0.27
9908.00	88.73	178.69	6935.04	3039.22	-3039.22	-72.33	181.36	3040.08	1.11
10004.00	89.09	179.74	6936.87	3135.19	-3135.19	-71.02	181.30	3136.00	1.16
10099.00	88.73	178.62	6938.68	3230.16	-3230.16	-69.65	181.24	3230.91	1.24
10194.00	88.73	180.63	6940.79	3325.13	-3325.13	-69.03	181.19	3325.85	2.12
10290.00	87.82	180.17	6943.68	3421.09	-3421.09	-69.70	181.17	3421.80	1.06
10385.00	89.26	181.05	6946.10	3516.05	-3516.05	-70.71	181.15	3516.76	1.78
10480.00	89.53	181.84	6947.10	3611.01	-3611.01	-73.09	181.16	3611.75	0.88
10575.00	88.76	182.45	6948.52	3705.93	-3705.93	-76.65	181.18	3706.72	1.04
10671.00	89.63	181.54	6949.87	3801.86	-3801.86	-80.00	181.21	3802.70	1.32
10766.00	88.99	181.96	6951.01	3896.81	-3896.81	-82.90	181.22	3897.69	0.80
10861.00	90.64	180.97	6951.31	3991.77	-3991.77	-85.33	181.22	3992.69	2.02
10957.00	91.27	180.59	6949.71	4087.75	-4087.75	-86.63	181.21	4088.67	0.77

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Closure Distance	DLS
ft	deg	deg	ft	ft	ft	ft	deg	ft	°/100ft
11052.00	91.61	180.73	6947.32	4182.72	-4182.72	-87.72	181.20	4183.64	0.38
11147.00	89.16	179.32	6946.69	4277.70	-4277.70	-87.77	181.18	4278.60	2.97
11242.00	89.43	179.56	6947.85	4372.69	-4372.69	-86.84	181.14	4373.55	0.37
11269.00	89.73	179.58	6948.05	4399.69	-4399.69	-86.63	181.13	4400.54	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

5" = 100' FEET MD