

5" = 100' FEET MD

COMPANY : ENCANA OIL & GAS (U.S.A.) INC WELL : 4A-20H-0264 FIELD : WATTENBERG COUNTY : WELD STATE : COLORADO COUNTRY : U.S.A. UWI : 05-123-39738				COMPANY : ENCANA OIL & GAS (U.S.A.) INC WELL : 4A-20H-0264 FIELD : WATTENBERG COUNTY : WELD STATE : COLORADO COUNTRY : U.S.A. UWI : 05-123-39738			
DEPTH REF. : RKB REF. HEIGHT : 25.000 ft GROUND LEVEL : 4957.000 ft				WELL LOCATION LAT:40°7'3.51"N LONG:104°34'19.276"W N:1287061.51 ft E:3259529.96 ft SEC:20 TWP:2N RANGE:64W			
BOREHOLE RECORD HOLE SIZE in FROM ft TO ft 12.25 0 1097 8.75 1097 7440 6.125 7440 11746 88-92 7440 11746				OTHER SERVICES LAT:40°7'3.51"N LONG:104°34'19.276"W N:1287061.51 ft E:3259529.96 ft SEC:20 TWP:2N RANGE:64W DIRECTIONAL ROP			
DEVIATION RECORD INCLINATION deg FROM ft TO ft 0-13 0 1218 13-0 1218 5904 0-88 5904 7440 88-92 7440 11746				CASING RECORD CASING SIZE in FROM ft TO ft 16 0 118 9.625 0 1082 7 0 7422			
DRILLING CO. : H&P RIG : 278 LMD UNIT NO. : MWD-00046-DISTRICT : CASPER, CASPER SPUD DATE : 08/22/2014 LMD START DATE : 11/24/2014 LMD END DATE : 12/01/2014 DEPTH : 5000 ft DEPTH : 11746 ft TOTAL DEPTH : 11746 ft							

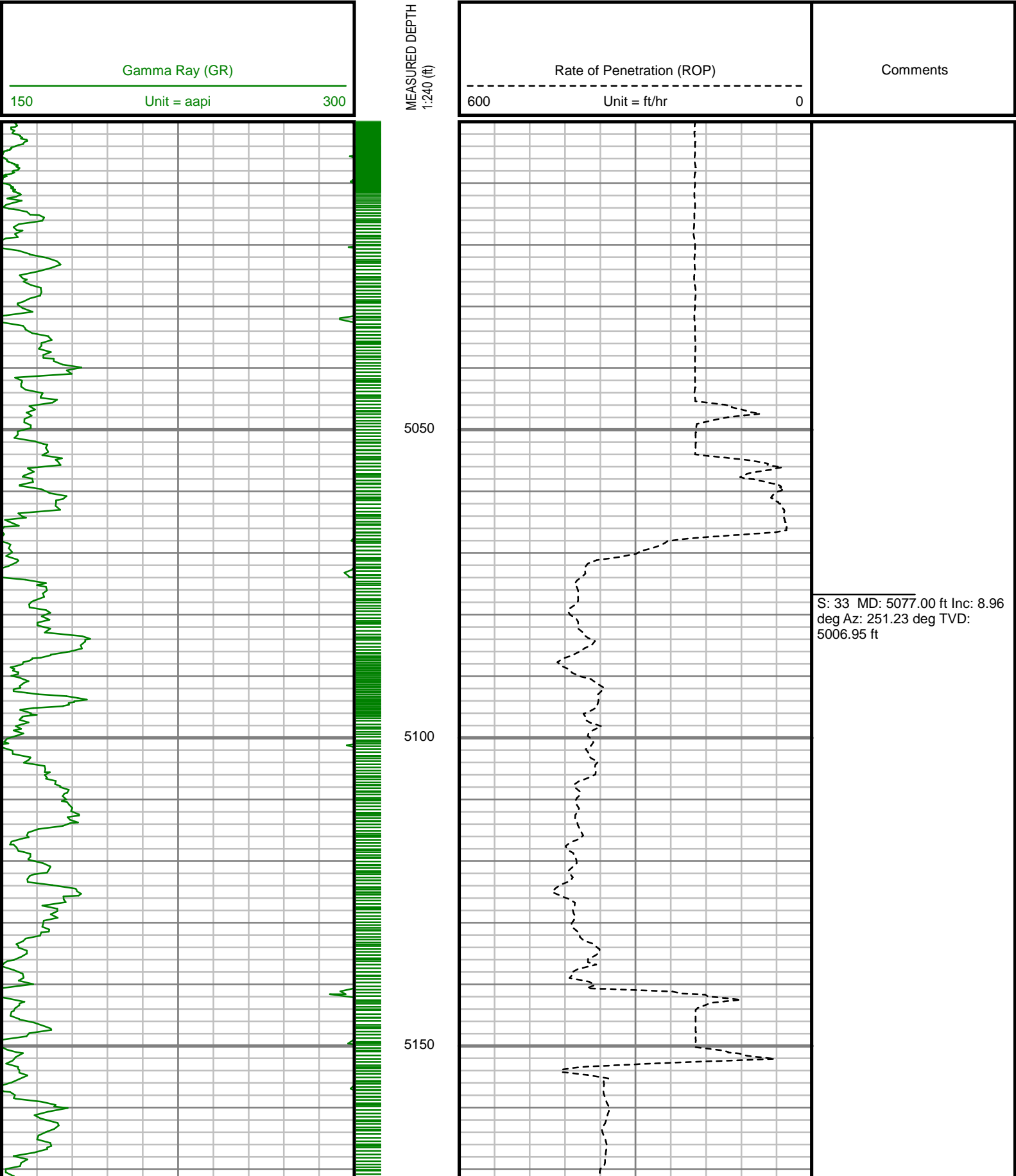
Run Data						
RUN NUMBER	1	2	3	4	5	
START DATE	08/24/2014	11/22/2014	11/24/2014	11/25/2014	11/27/2014	
START TIME	1830	0900	0100	0300	2030	
END DATE	08/25/2014	11/24/2014	11/25/2014	11/26/2014	12/01/2014	
END TIME	0130	0100	0030	0430	0730	
DEPTH IN (ft)	140	1097	6952	7232	7440	
DEPTH OUT (ft)	1097	6952	7232	7440	11746	
LOG TOP (ft)	-	5000	6898	7183	7387	
LOG BOTTOM (ft)	-	6898	7183	7387	11746	
HOLE SIZE (in)	12.25	8.75	8.75	8.75	6.125	
MUD DATA @ (ft)	1097	6755	7230	7300	9655	
MUD TYPE	WATER-BASED	WATER-BASED	WATER-BASED	WATER-BASED	WATER-BASED	
DENSITY (lb / gal)	8.5	10.6	10.55	10.7	11	
VISCOSITY (s / qt)	26	41	35	38	41	
pH	-	8.05	8.05	8.1	8.6	
FLUID LOSS (cm3 / 30)	-	-	-	-	-	
SALINITY (ppm)	-	-	-	-	-	
Rm (ohmm @ deg F)	-	-	-	-	-	
Rmf (ohmm @ deg F)	-	-	-	-	-	
MAX TEMP (deg F)	101	169	180	167	226	
Rm @ MAX TEMP (ohmm)	-	-	-	-	-	
LWD ENGINEER #1	S. WAXLER	S. WAXLER	S. WAXLER	S. WAXLER	S. WAXLER	
LWD ENGINEER #2	T. LE	T. LE	T. LE	T. LE	C. WILSON	
LWD ENGINEER #3	-	-	-	-	-	
LOG WITNESS #1	-	M. ALMUBARAK	M. ALMUBARAK	M. ALMUBARAK	M. ALMUBARAK	
LOG WITNESS #2	-	C. PESICKA	C. PESICKA	C. PESICKA	C. PESICKA	

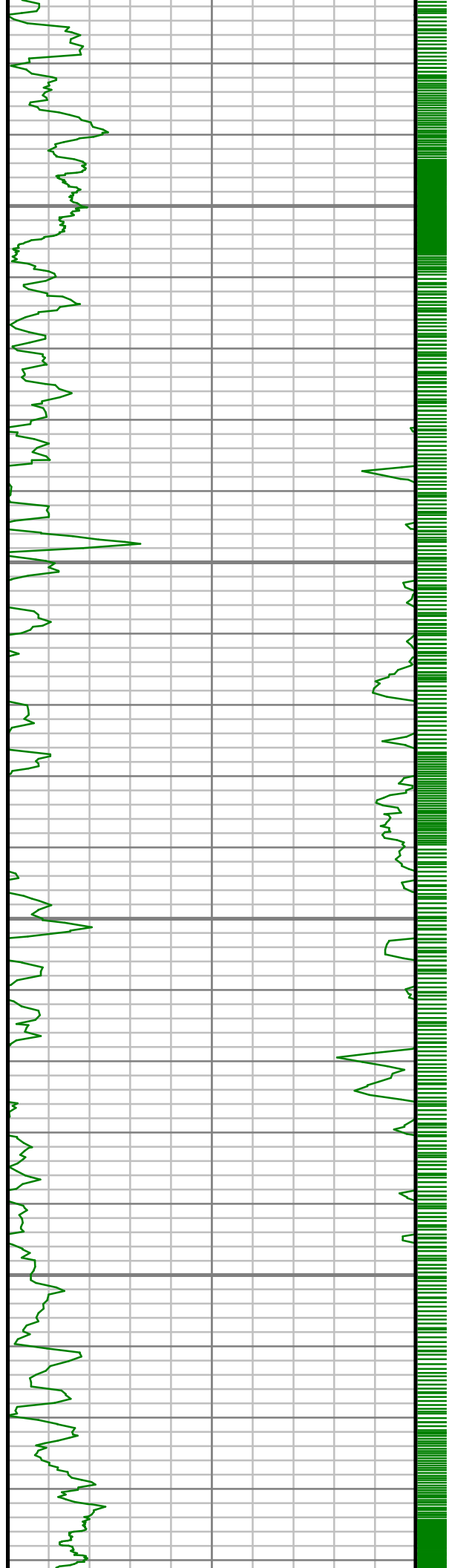
Remarks
ENCANA OIL & GAS (U.S.A.) INC PRODUCTION AFE# 14179862
SCIENTIFIC DRILLING INTERNATIONAL JOB# 186411, 225292
ALL REFERENCES IN THE DEPTH TRACK ARE AT BIT DEPTH.
ALL DATA IS MEMORY DATA UNLESS STATED OTHERWISE.
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO GAMMA RAY CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO RATE OF PENETRATION CURVE
RUN #1: GYRO / MWD / DIRECTIONAL RUN
SENSORS S/N: EM5 = 890 / MWD EYE = 809 / GYRO = 034
BIT TO SENSOR OFFSETS: SURVEY = 54.92 FT. / GYRO = 44.64 FT.
RUN #2: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 128-333 / CONT = 126 / MWD EYE = 1065 / GAMMA RAY = 1271
BIT TO SENSOR OFFSETS: SURVEY = 62.99 FT. / GAMMA RAY = 54.39 FT.
RUN #3: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 128-333 / CONT = 126 / MWD EYE = 1065 / GAMMA RAY = 1271
BIT TO SENSOR OFFSETS: SURVEY = 58.01 FT. / GAMMA RAY = 49.36 FT.
RUN #4: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 128-277 / CONT = 858 / MWD EYE = 0522 / GAMMA RAY = 1076
BIT TO SENSOR OFFSETS: SURVEY = 61.41 FT. / GAMMA RAY = 52.76 FT.

[illegible]

All interpretations are opinions based on inferences from measurements and 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
DALE 4A-20H-O264
WATTENBERG FIELD
WELD COUNTY, COLORADO
05-123-39738



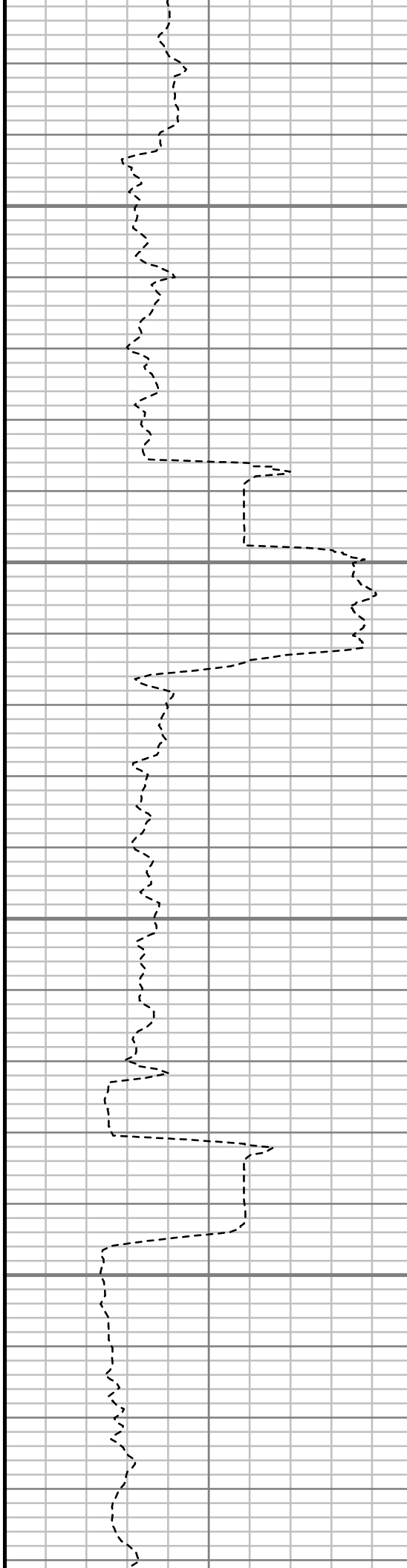


5200

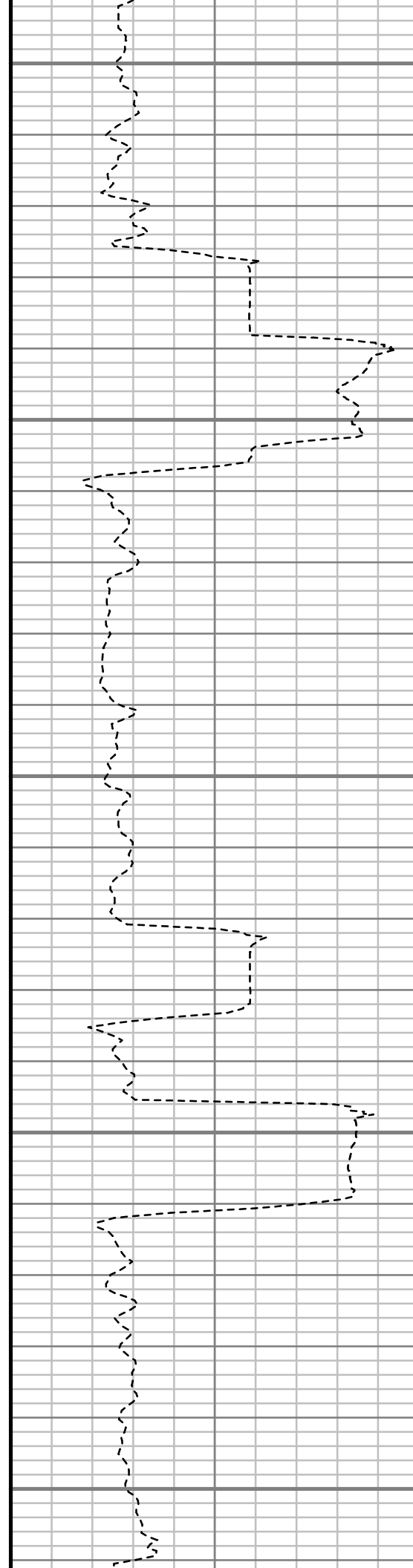
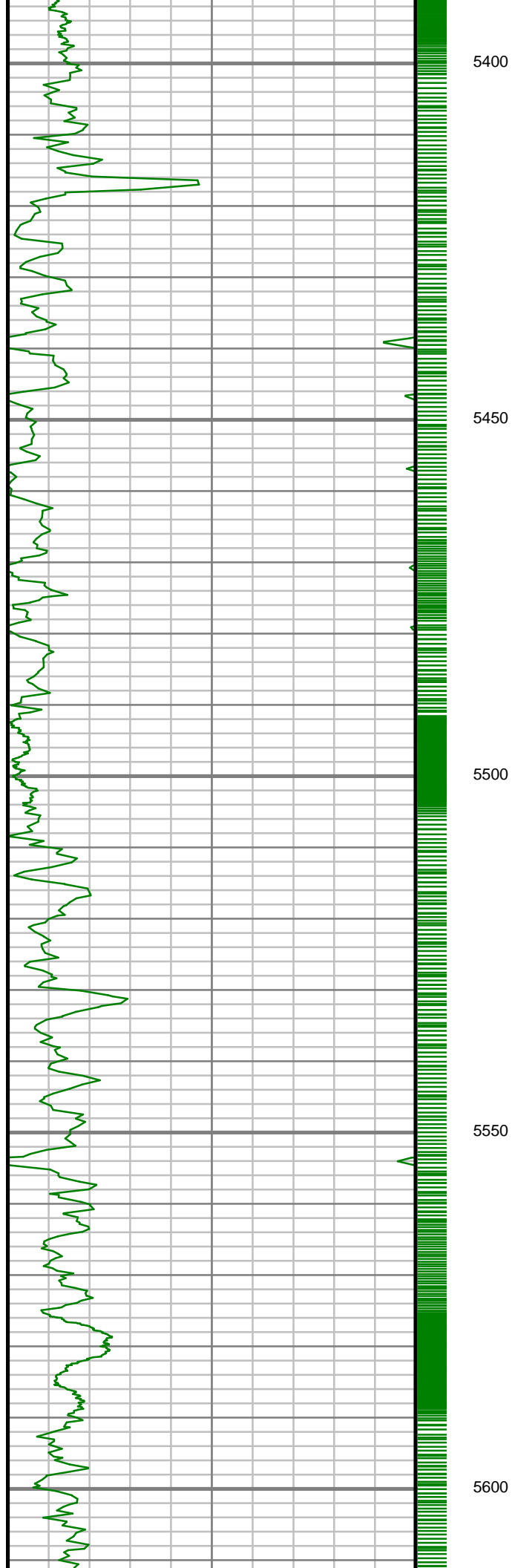
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5300

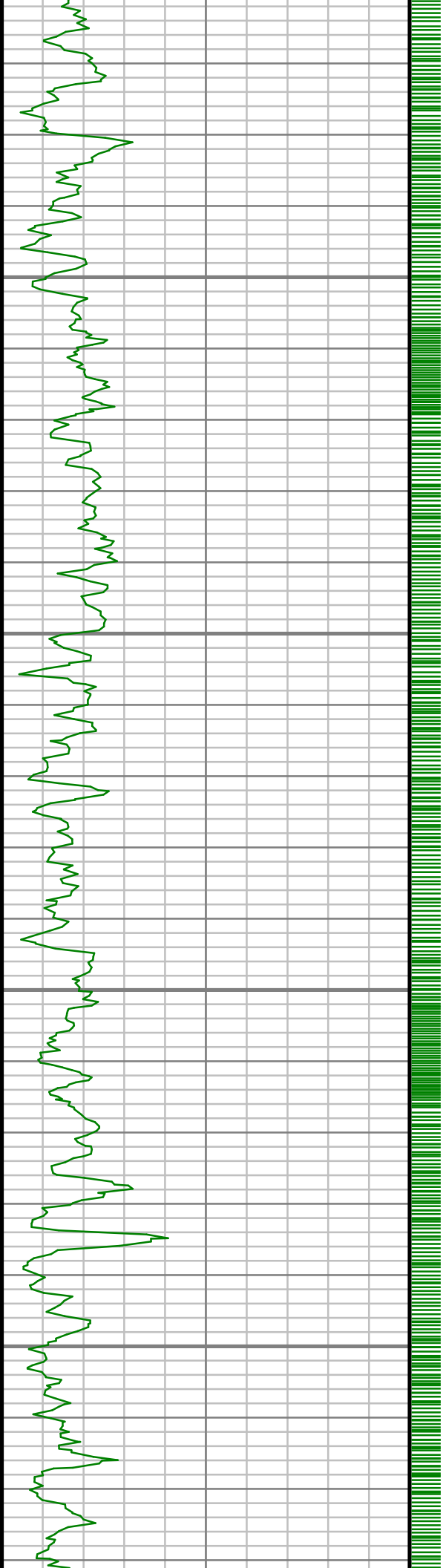
5350



S: 34 MD: 5268.00 ft Inc: 7.89
deg Az: 258.41 deg TVD:
5195.89 ft



S: 35 MD: 5458.00 ft Inc: 5.65
deg Az: 243.84 deg TVD:
5384.56 ft

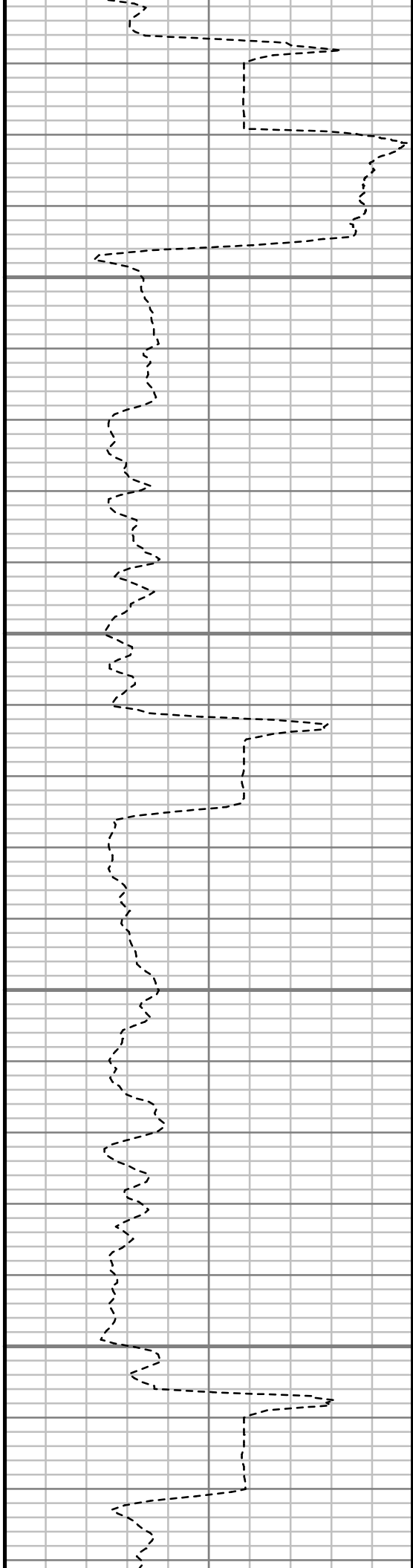


5650

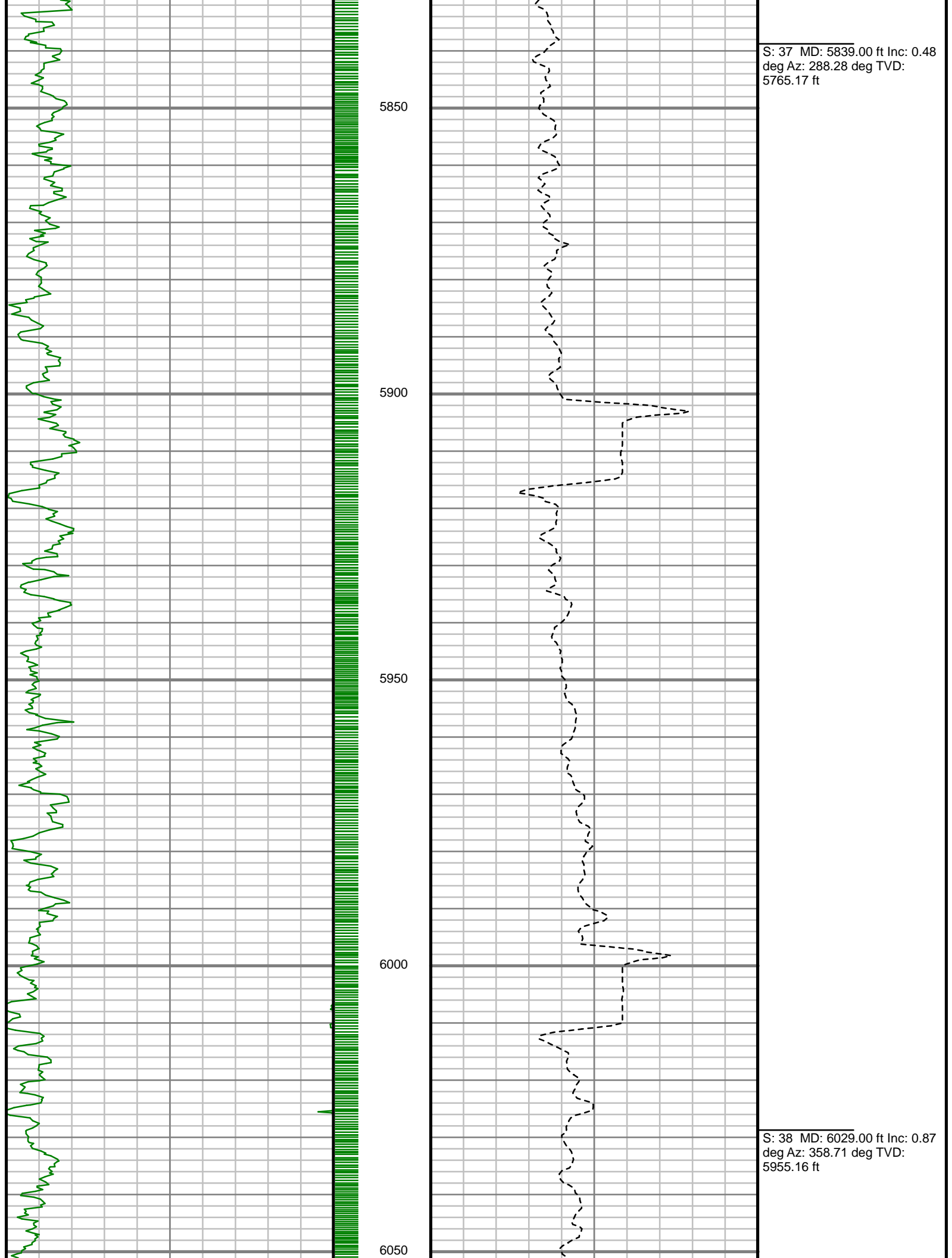
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5750

5800

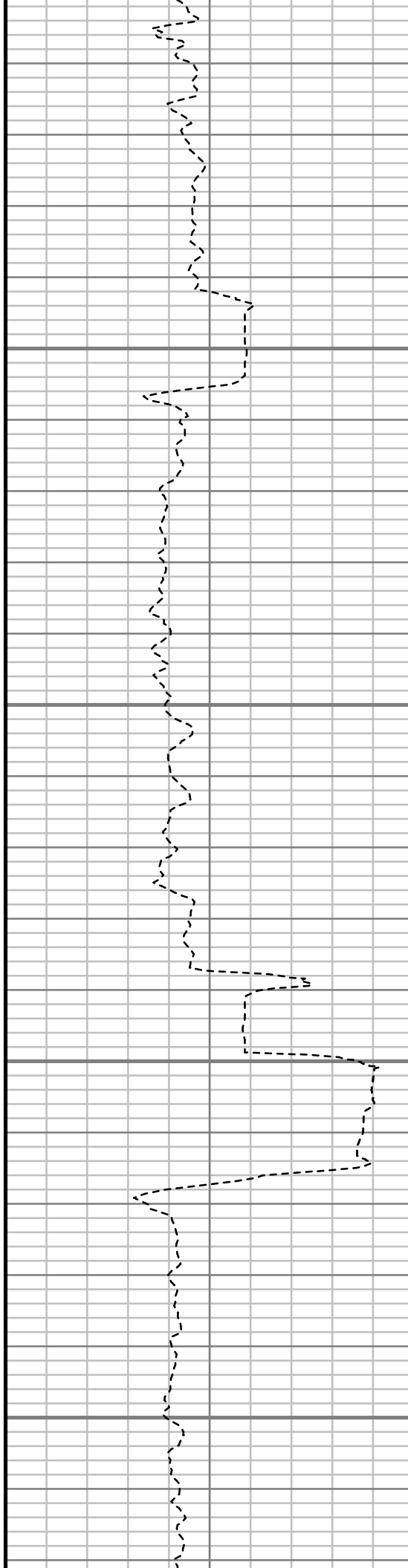
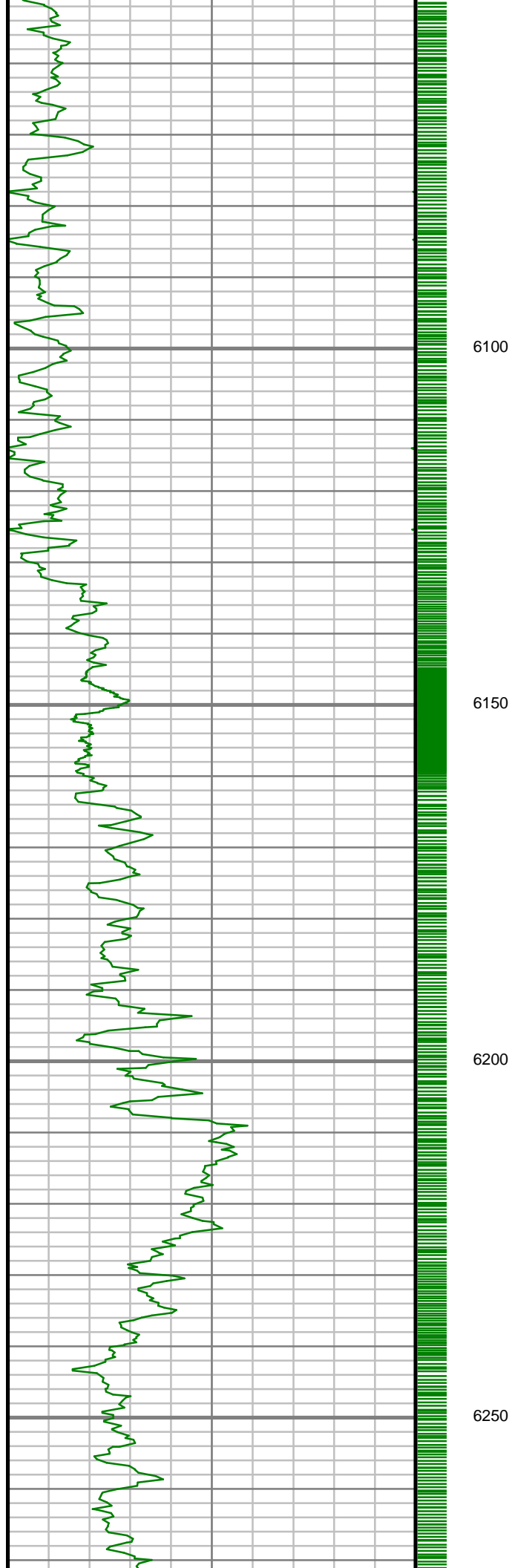


S: 36 MD: 5648.00 ft Inc: 1.15
deg Az: 219.77 deg TVD:
5574.19 ft

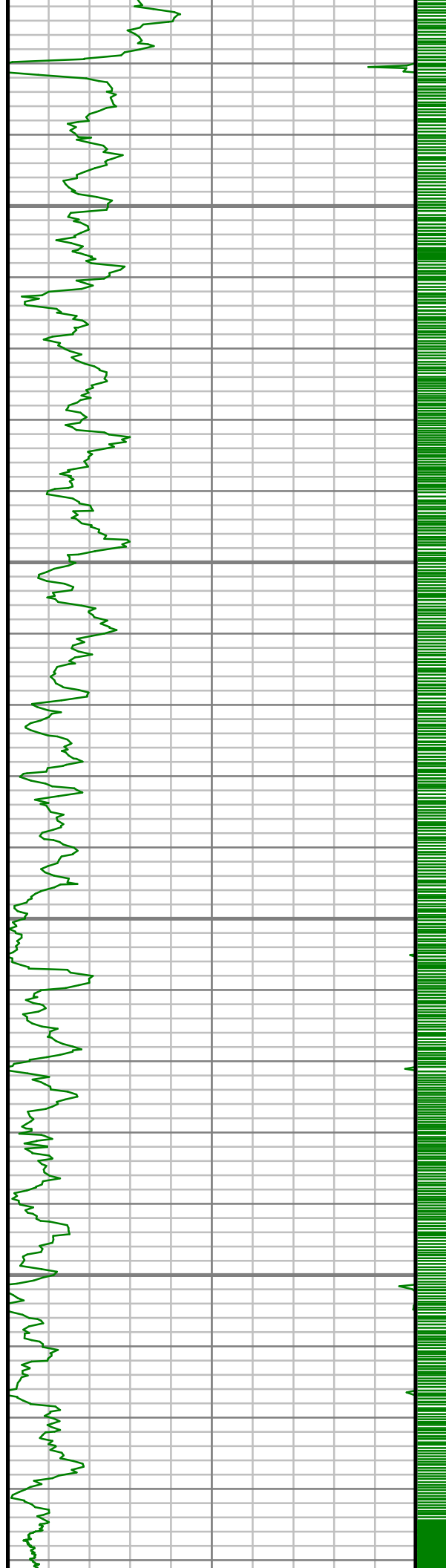


S: 37 MD: 5839.00 ft Inc: 0.48
deg Az: 288.28 deg TVD:
5765.17 ft

S: 38 MD: 6029.00 ft Inc: 0.87
deg Az: 358.71 deg TVD:
5955.16 ft



S: 39 MD: 6220.00 ft Inc: 1.08
deg Az: 118.26 deg TVD:
6146.14 ft

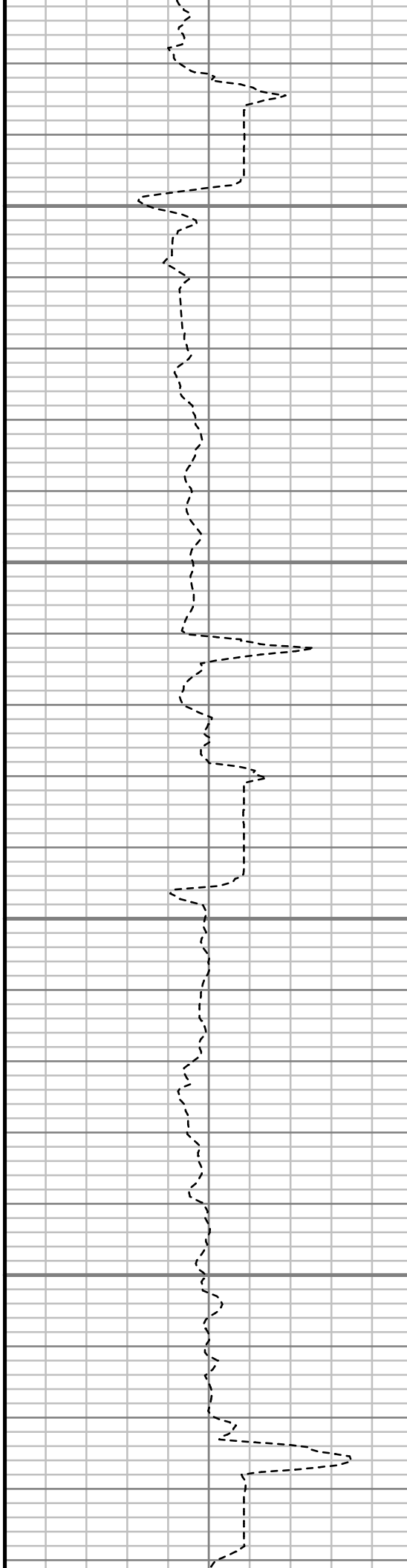


6300

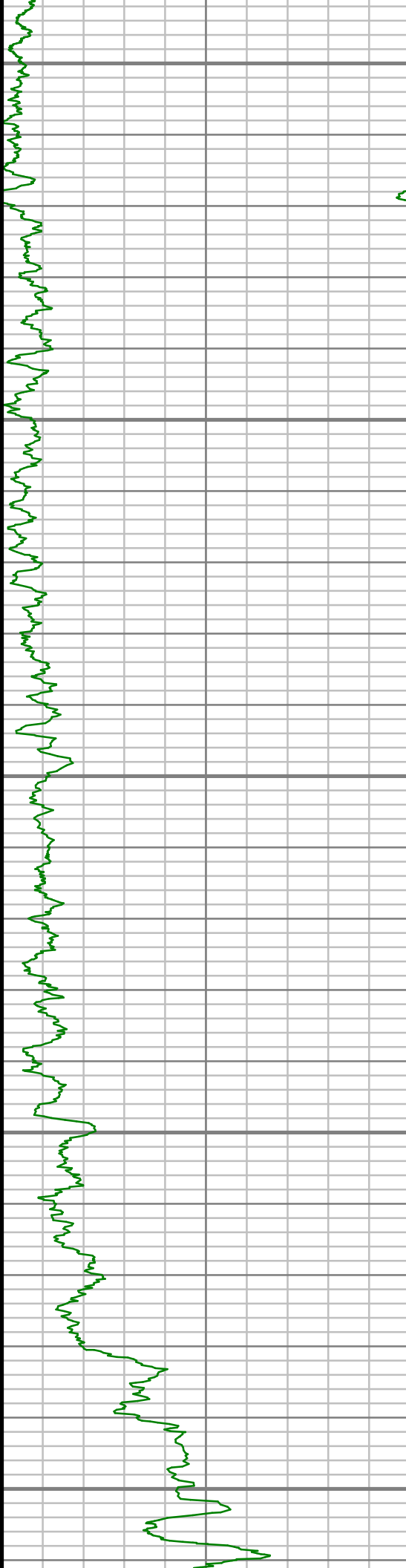
6350

6400

6450



S: 40 MD: 6411.00 ft Inc: 0.20
deg Az: 64.06 deg TVD:
6337.13 ft



6500

6550

6600

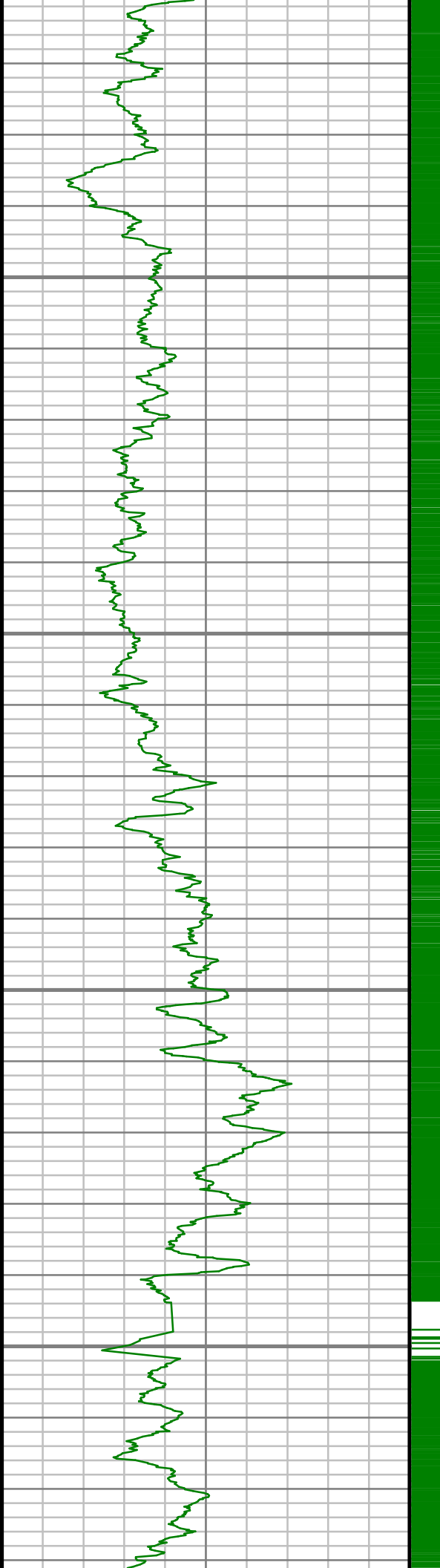
6650

6700

S: 41 MD: 6506.00 ft Inc: 0.34
deg Az: 13.74 deg TVD:
6432.13 ft

S: 42 MD: 6601.00 ft Inc: 4.86
deg Az: 354.73 deg TVD:
6527.01 ft

S: 43 MD: 6697.00 ft Inc: 9.86
deg Az: 356.10 deg TVD:
6622.19 ft

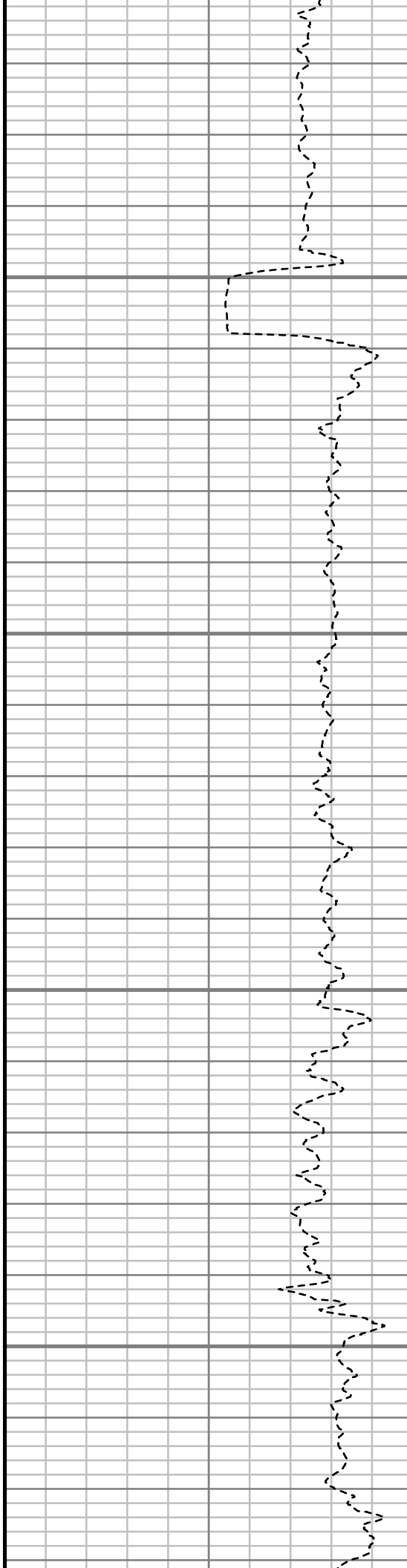


6750

6800

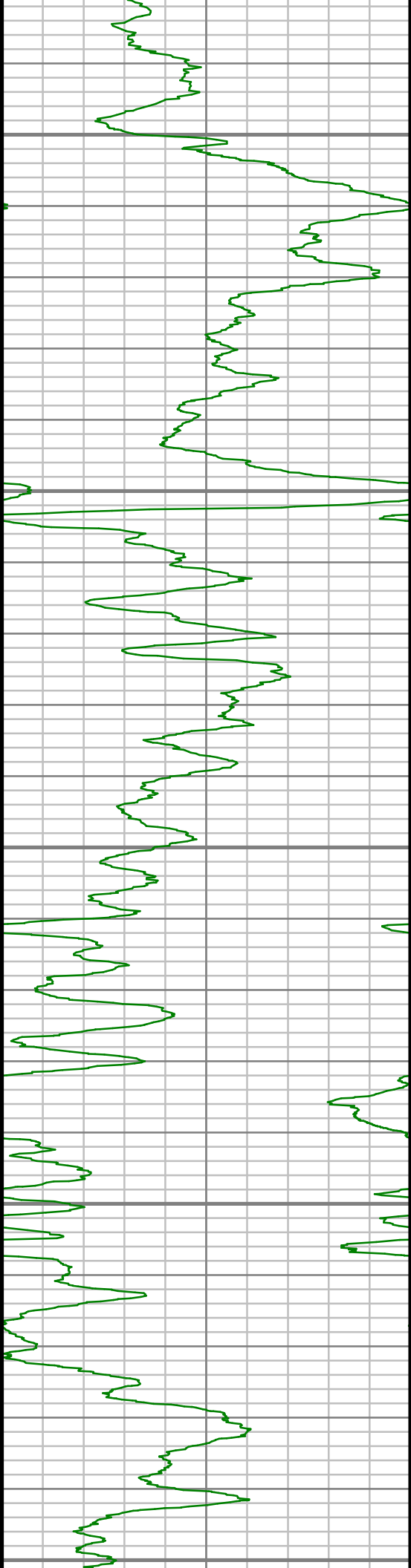
6850

6900



S: 44 MD: 6792.00 ft Inc: 16.45
deg Az: 355.57 deg TVD:
6714.65 ft

S: 45 MD: 6887.00 ft Inc: 23.63
deg Az: 357.68 deg TVD:
6803.84 ft



6950

7000

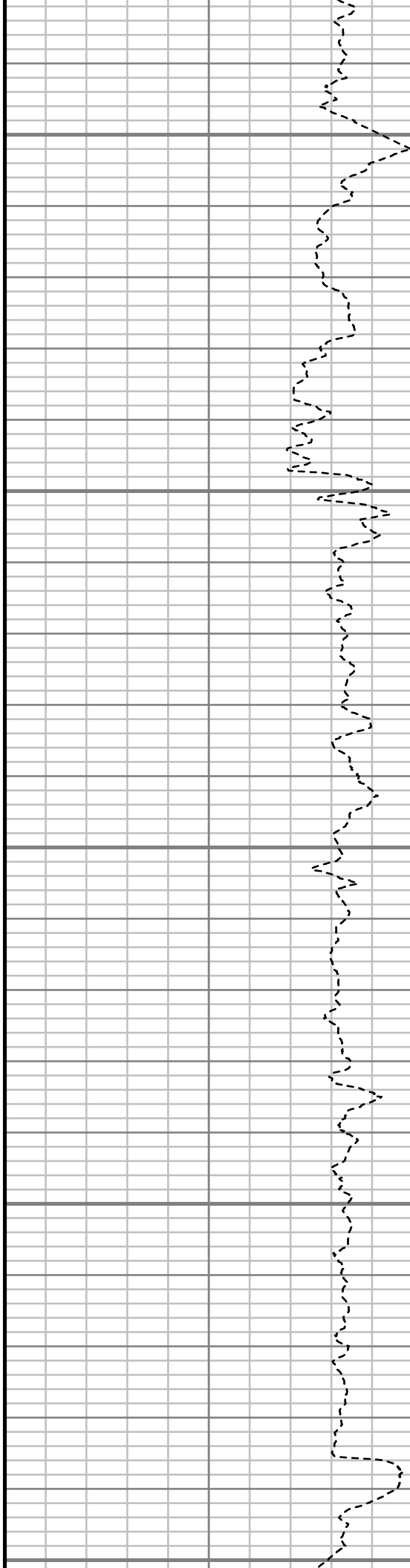
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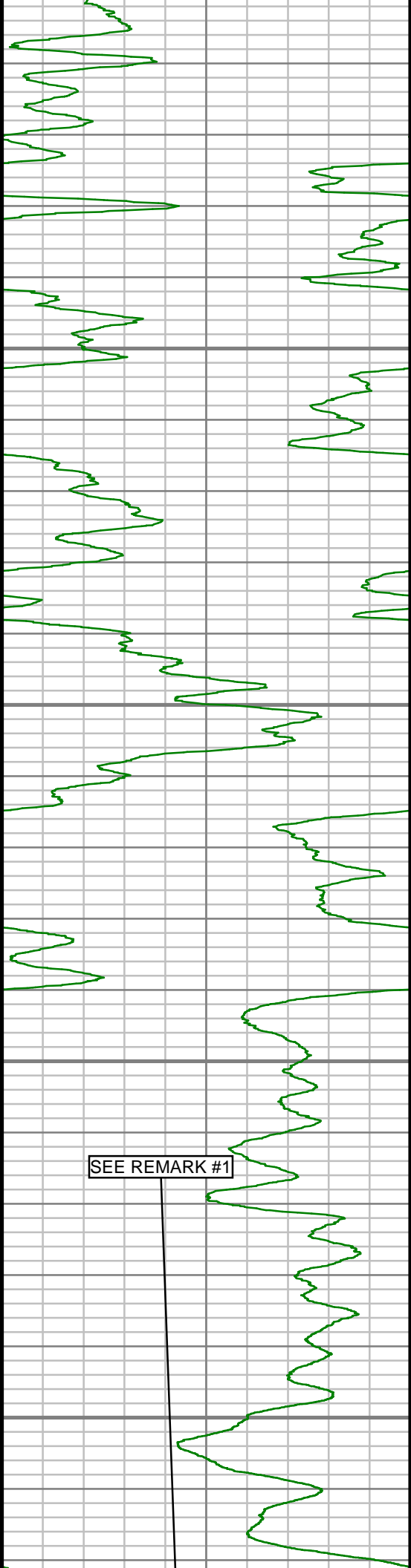
7100

7150

S: 46 MD: 6982.00 ft Inc: 29.76
deg Az: 359.87 deg TVD:
6888.67 ft

S: 47 MD: 7077.00 ft Inc: 33.91
deg Az: 1.56 deg TVD: 6969.37
ft





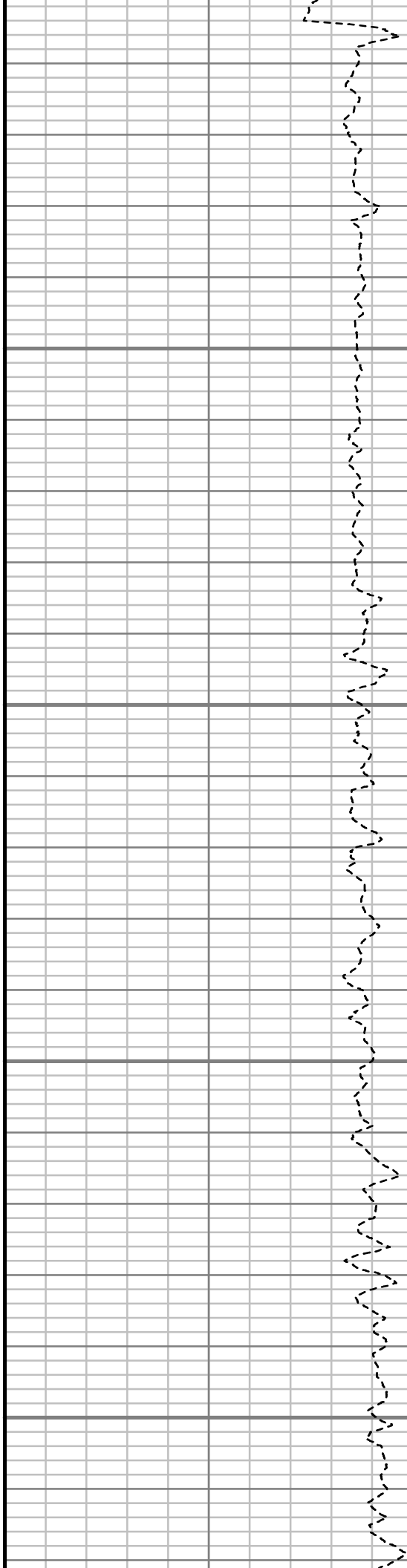
SEE REMARK #1

7200

7250

7300

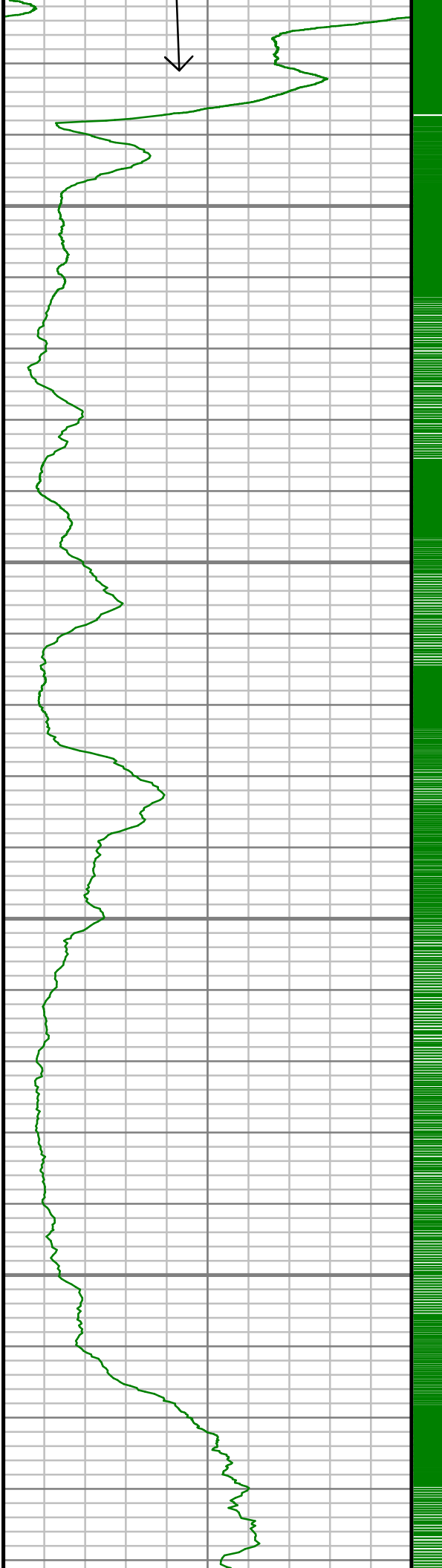
7350



S: 48 MD: 7172.00 ft Inc: 41.30
deg Az: 2.67 deg TVD: 7044.58
ft

S: 49 MD: 7267.00 ft Inc: 53.46
deg Az: 1.08 deg TVD: 7108.80
ft

S: 50 MD: 7362.00 ft Inc: 72.57
deg Az: 358.69 deg TVD:
7151.71 ft



7400

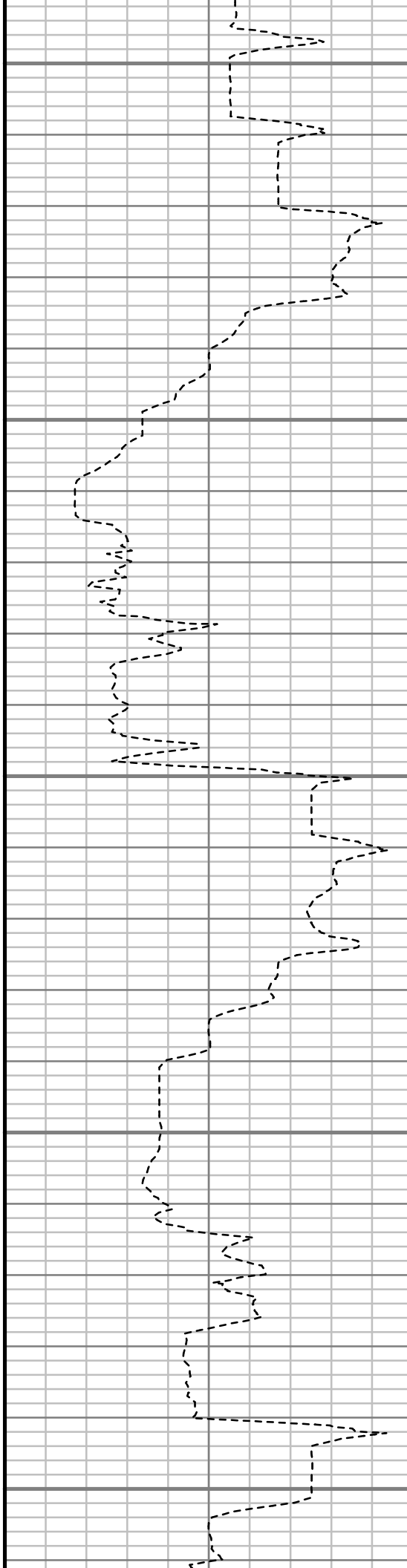
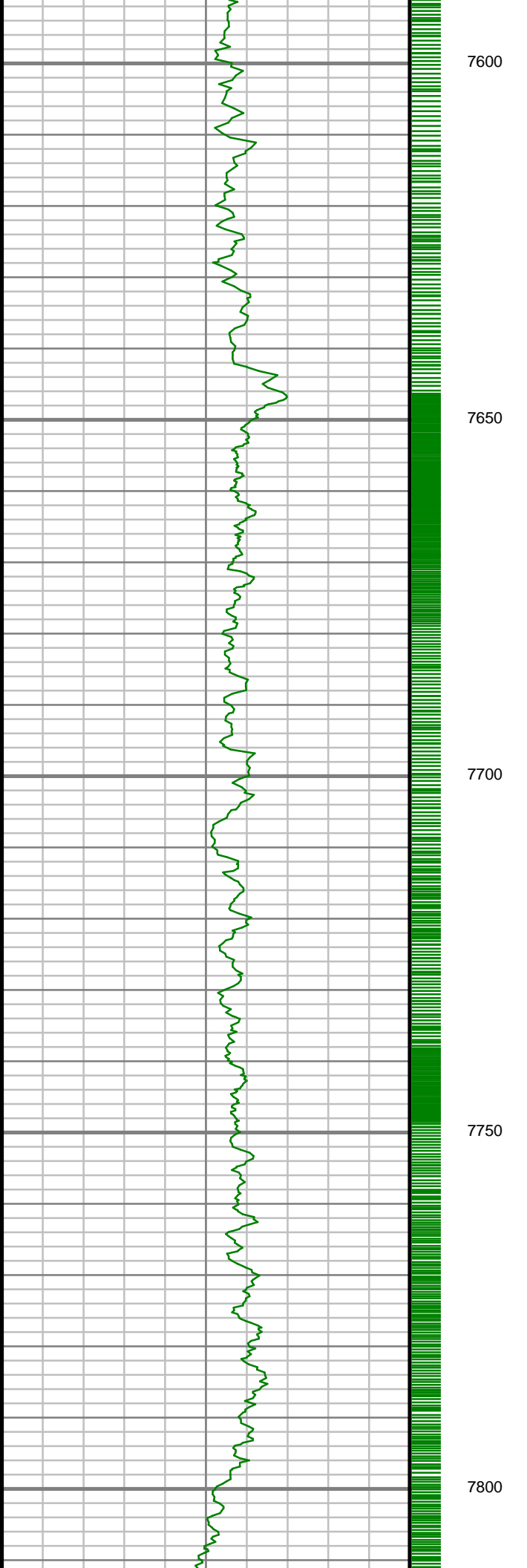
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7500

7550

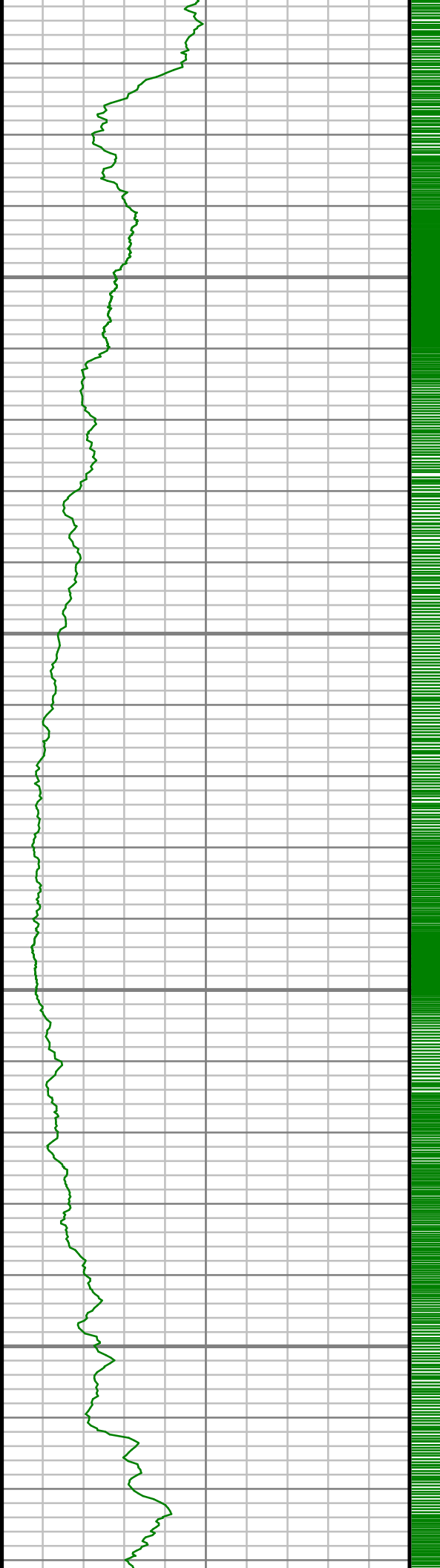
S: 51 MD: 7455.00 ft Inc: 86.37
deg Az: 1.73 deg TVD: 7168.67
ft

S: 52 MD: 7547.00 ft Inc: 90.40
deg Az: 1.89 deg TVD: 7171.26
ft



S: 53 MD: 7638.00 ft Inc: 90.94
deg Az: 1.13 deg TVD: 7170.20
ft

S: 54 MD: 7729.00 ft Inc: 92.32
deg Az: 0.78 deg TVD: 7167.61
ft

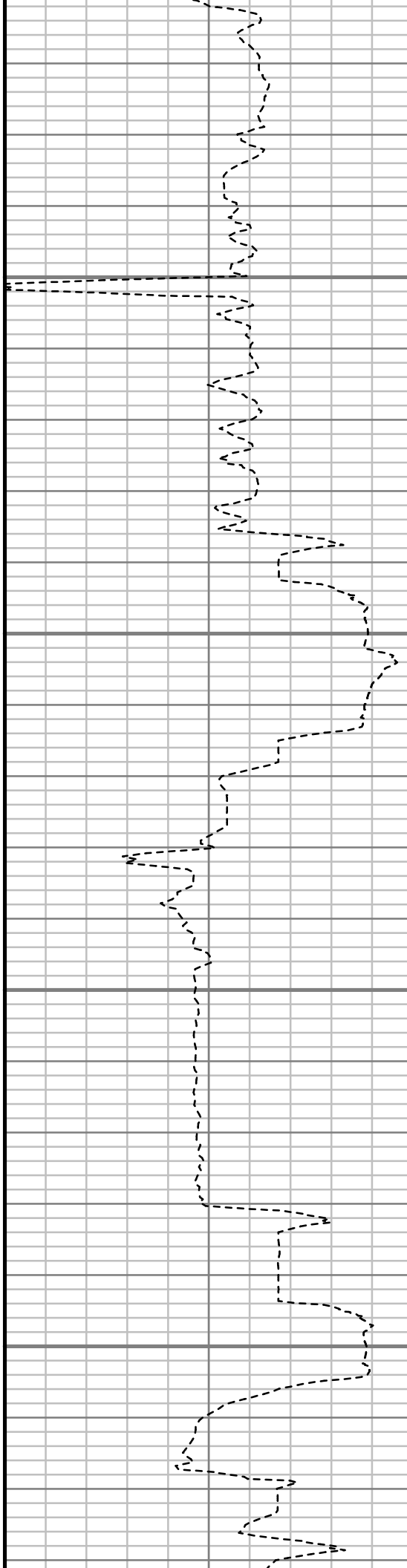


7850

7900

7950

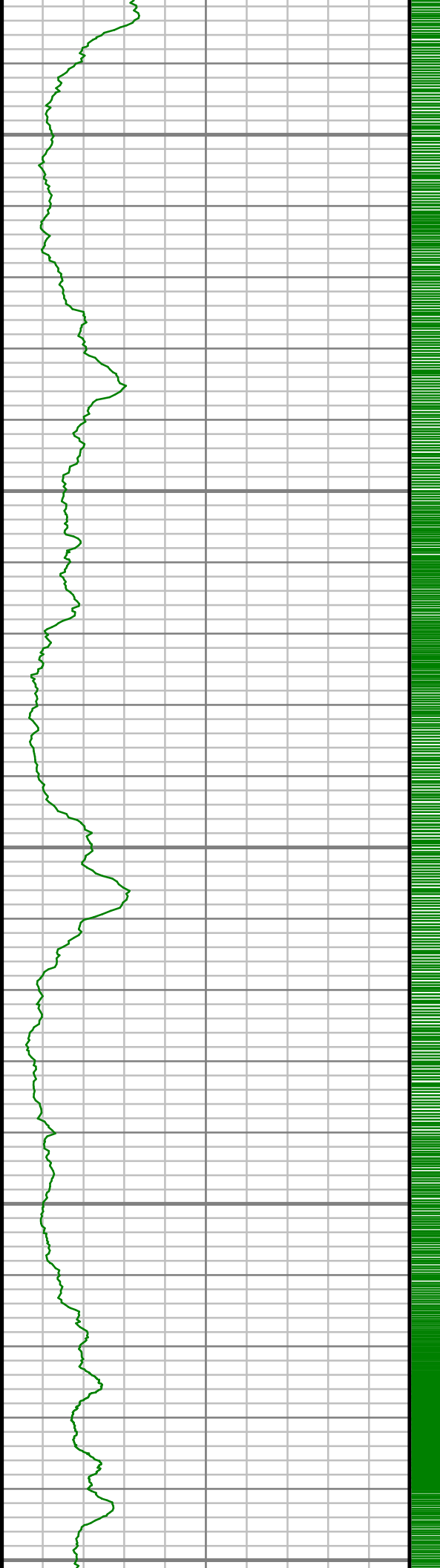
8000



S: 55 MD: 7825.00 ft Inc: 90.94
deg Az: 0.01 deg TVD: 7164.88
ft

S: 56 MD: 7920.00 ft Inc: 92.82
deg Az: 359.64 deg TVD:
7161.76 ft

S: 57 MD: 8015.00 ft Inc: 93.74
deg Az: 0.10 deg TVD: 7156.33
ft



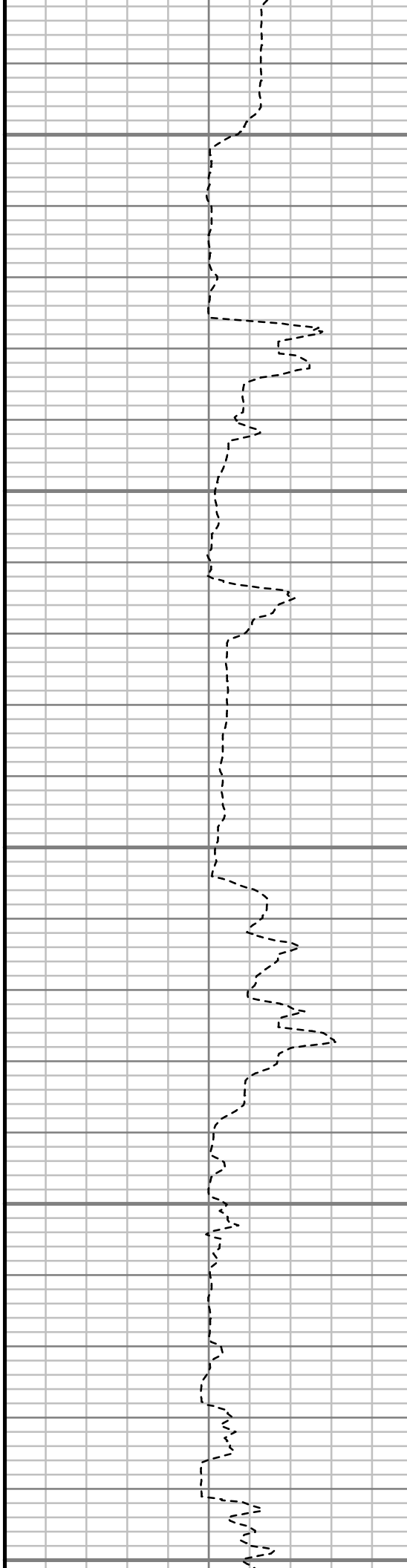
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8100

8150

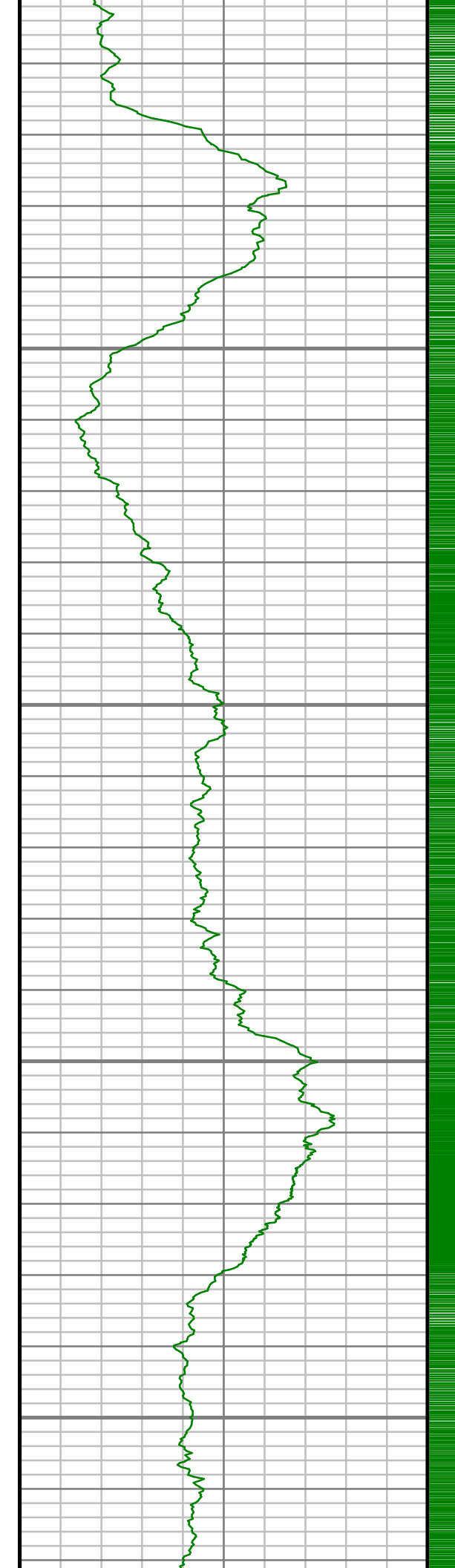
8200

8250



S: 58 MD: 8110.00 ft Inc: 93.76
deg Az: 359.10 deg TVD:
7150.12 ft

S: 59 MD: 8205.00 ft Inc: 94.57
deg Az: 358.56 deg TVD:
7143.22 ft

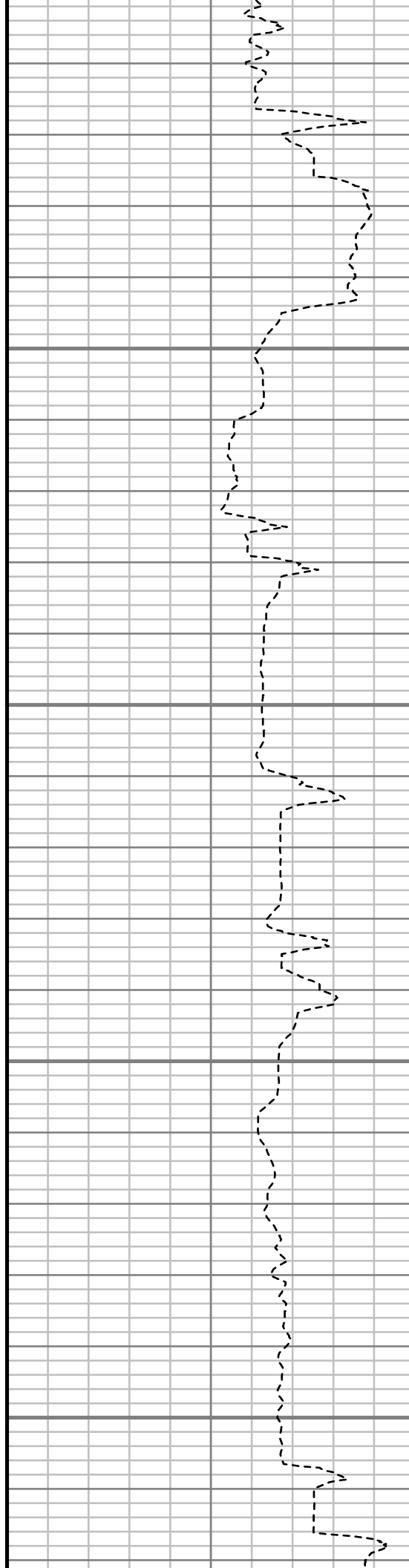


8300

8350

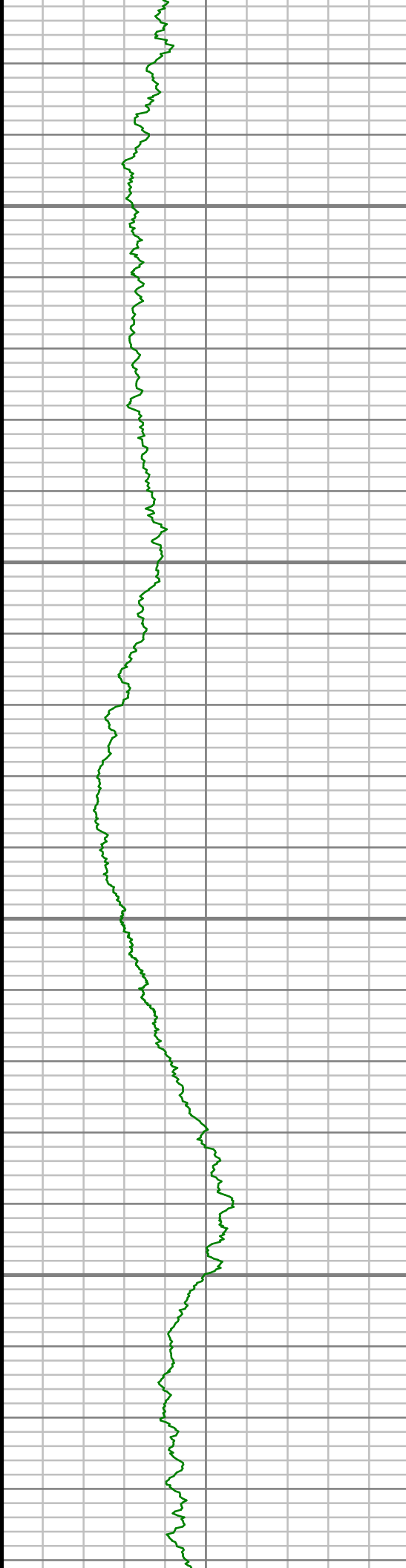
8400

8450



S: 60 MD: 8301.00 ft Inc: 92.89
deg Az: 359.26 deg TVD:
7136.98 ft

S: 61 MD: 8396.00 ft Inc: 93.76
deg Az: 358.84 deg TVD:
7131.47 ft

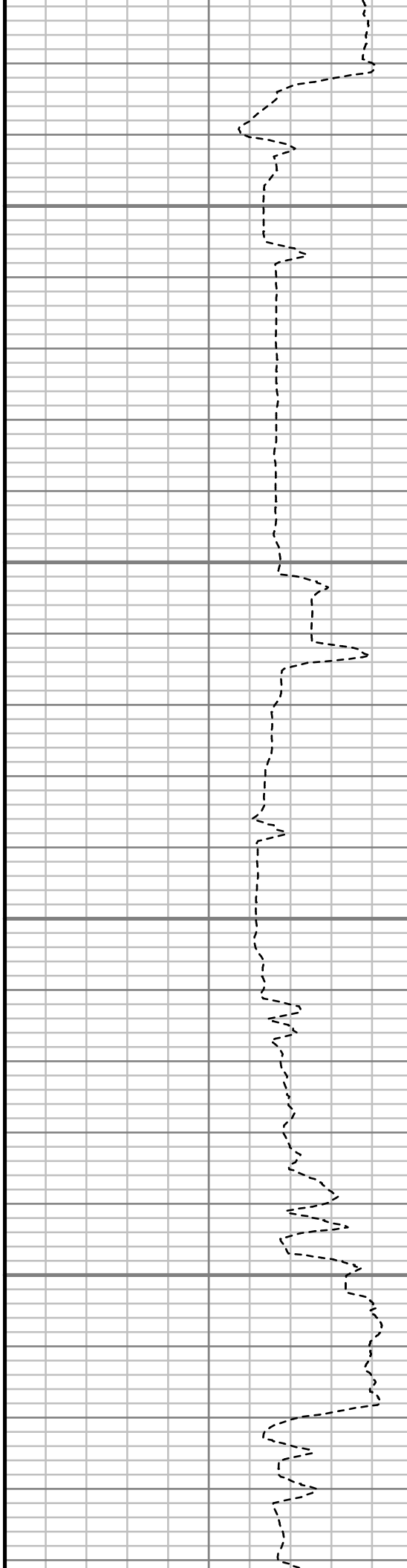


8500

8550

8600

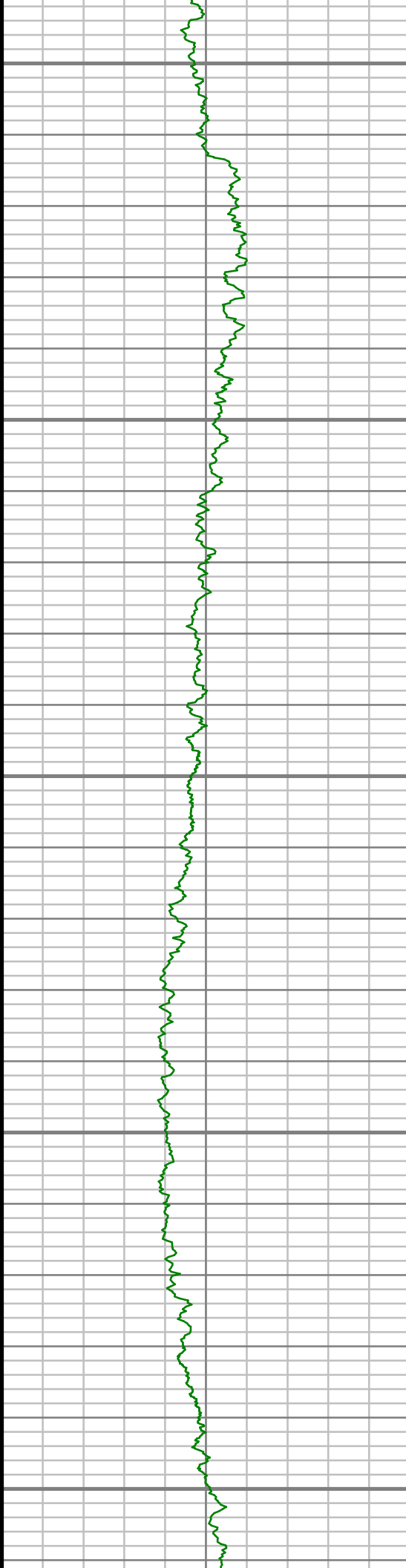
8650



S: 62 MD: 8491.00 ft Inc: 92.89
deg Az: 359.30 deg TVD:
7125.96 ft

S: 63 MD: 8586.00 ft Inc: 93.09
deg Az: 358.81 deg TVD:
7121.00 ft

S: 64 MD: 8681.00 ft Inc: 93.23
deg Az: 0.05 deg TVD: 7115.77
ft



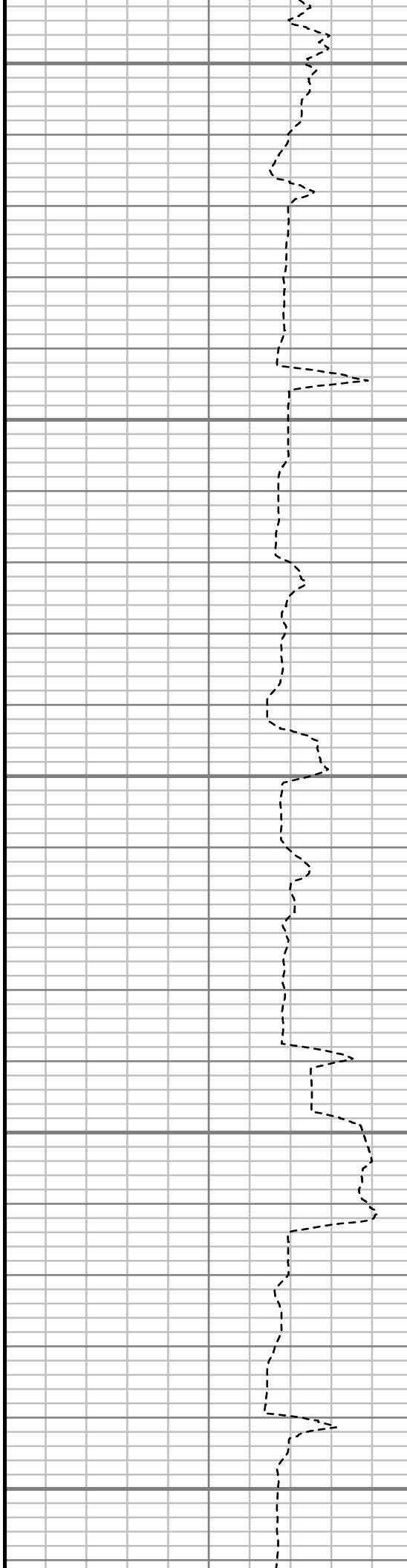
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8750

8800

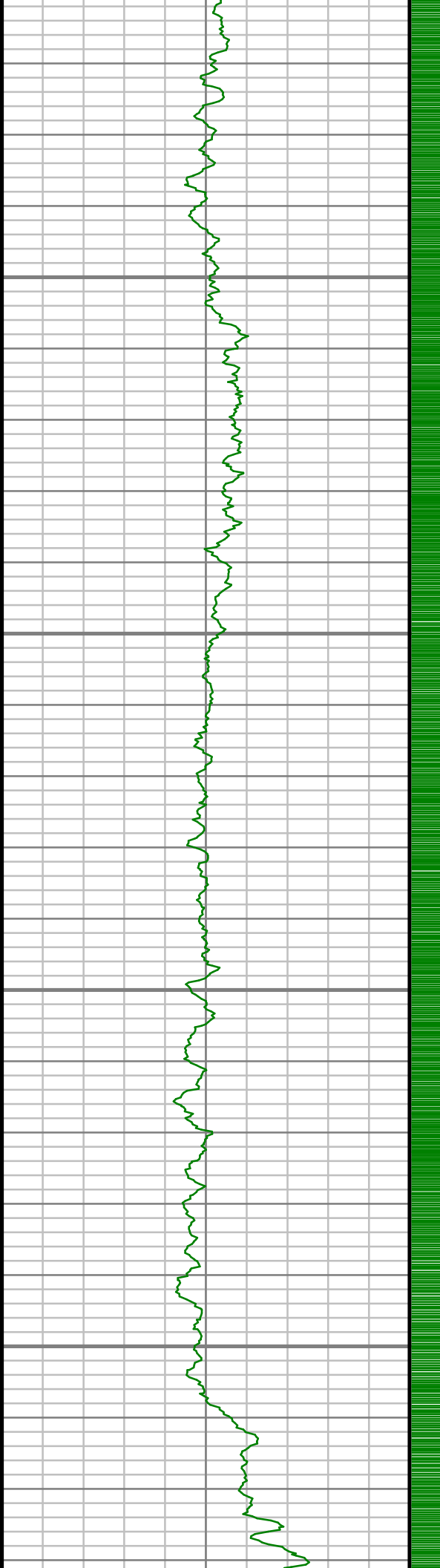
8850

8900



S: 65 MD: 8776.00 ft Inc: 92.65
deg Az: 359.59 deg TVD:
7110.89 ft

S: 66 MD: 8871.00 ft Inc: 93.15
deg Az: 0.48 deg TVD: 7106.08
ft

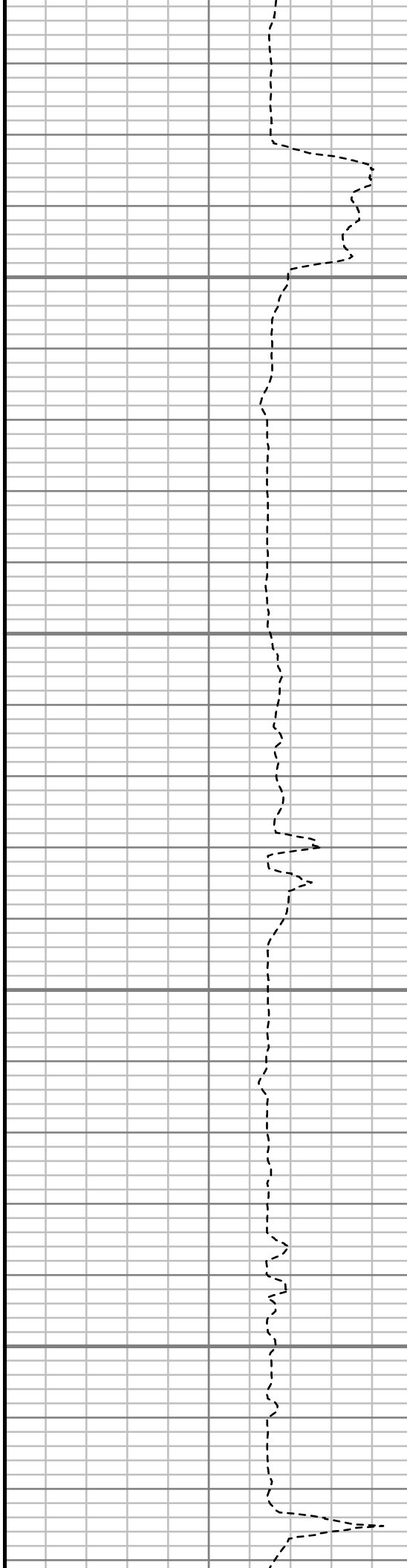


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9000

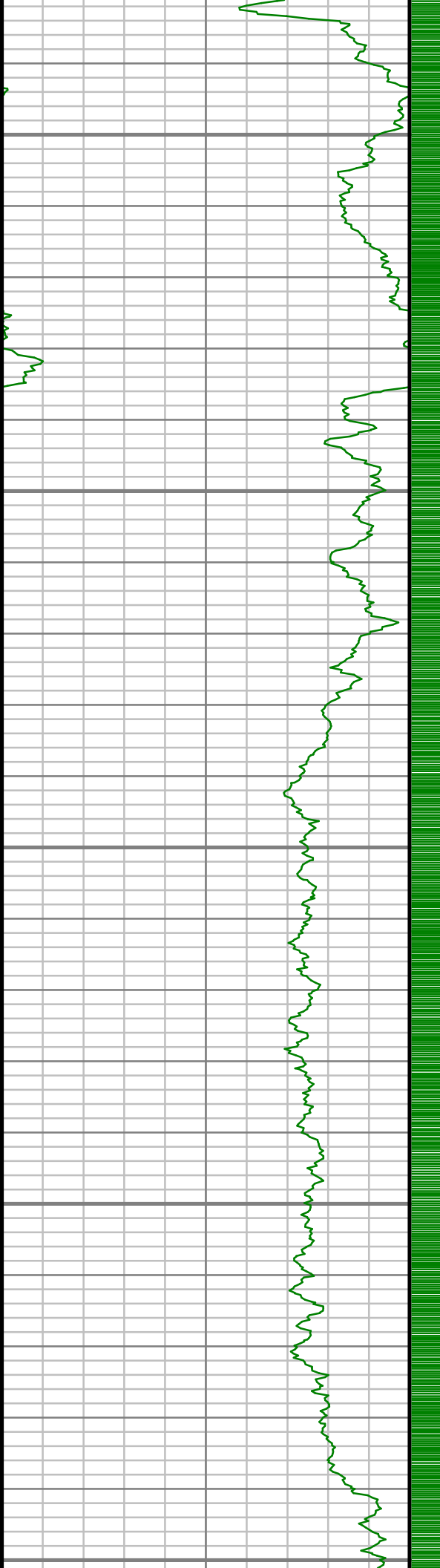
9050

9100



S: 67 MD: 8966.00 ft Inc: 93.80
deg Az: 1.59 deg TVD: 7100.32
ft

S: 68 MD: 9061.00 ft Inc: 93.50
deg Az: 1.17 deg TVD: 7094.27
ft



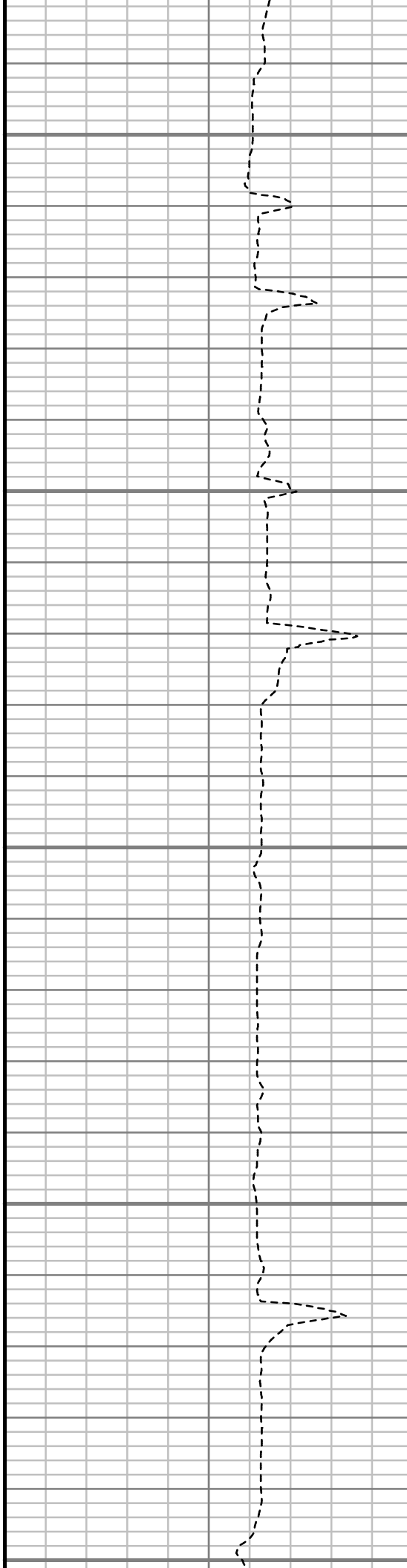
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9200

9250

9300

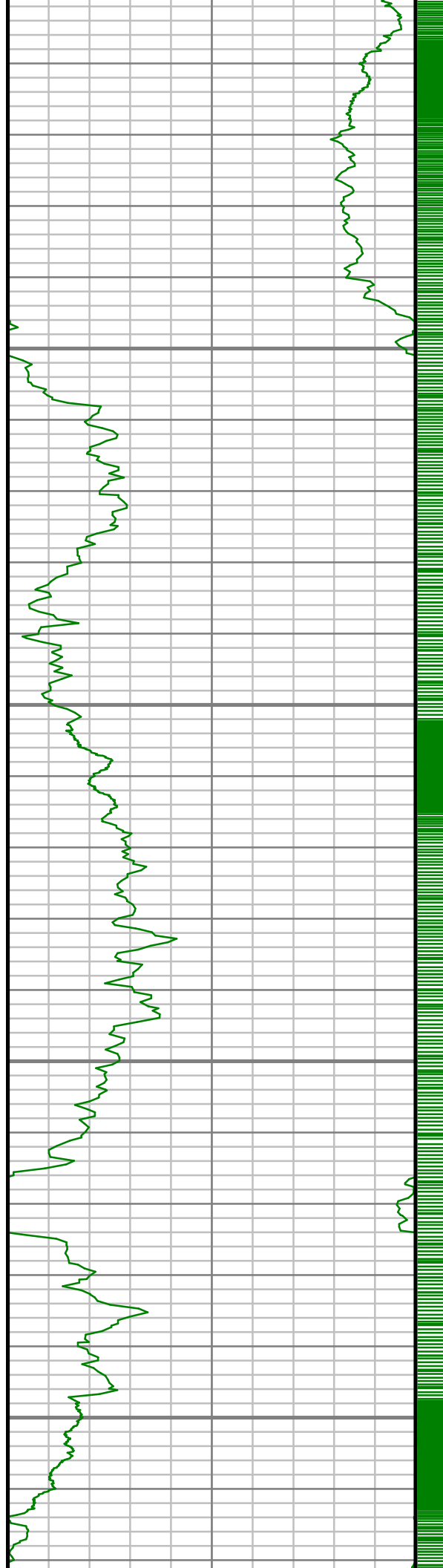
9350



S: 69 MD: 9155.00 ft Inc: 93.73
deg Az: 0.70 deg TVD: 7088.35
ft

S: 70 MD: 9250.00 ft Inc: 93.63
deg Az: 0.75 deg TVD: 7082.26
ft

S: 71 MD: 9345.00 ft Inc: 94.27
deg Az: 0.92 deg TVD: 7075.71
ft



9400

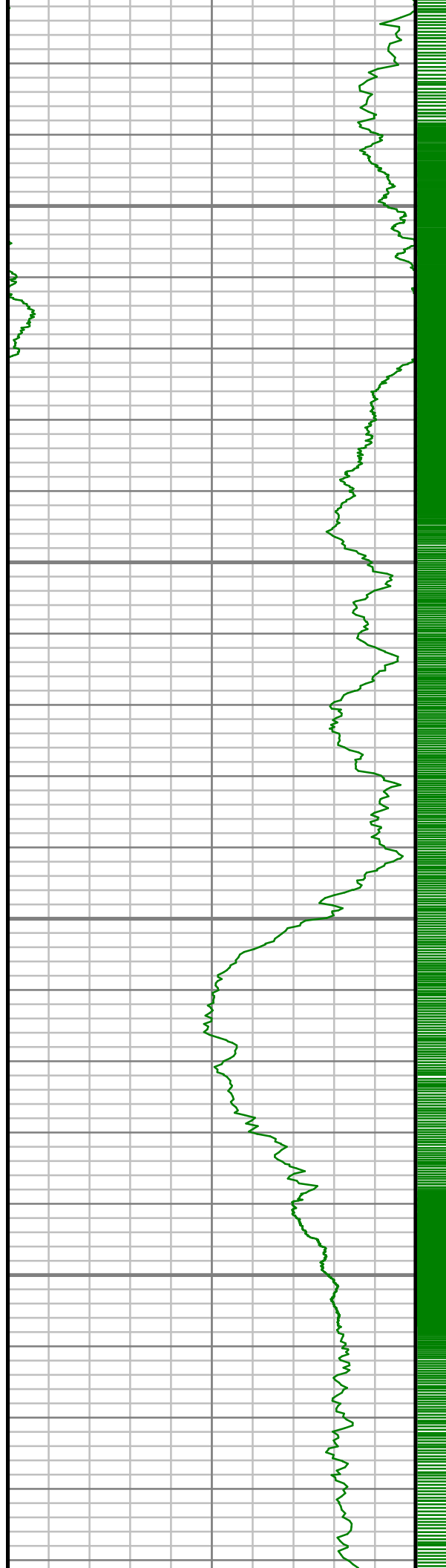
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9500

9550

S: 72 MD: 9439.00 ft Inc: 93.36
deg Az: 0.03 deg TVD: 7069.46
ft

S: 73 MD: 9533.00 ft Inc: 92.99
deg Az: 359.76 deg TVD:
7064.26 ft

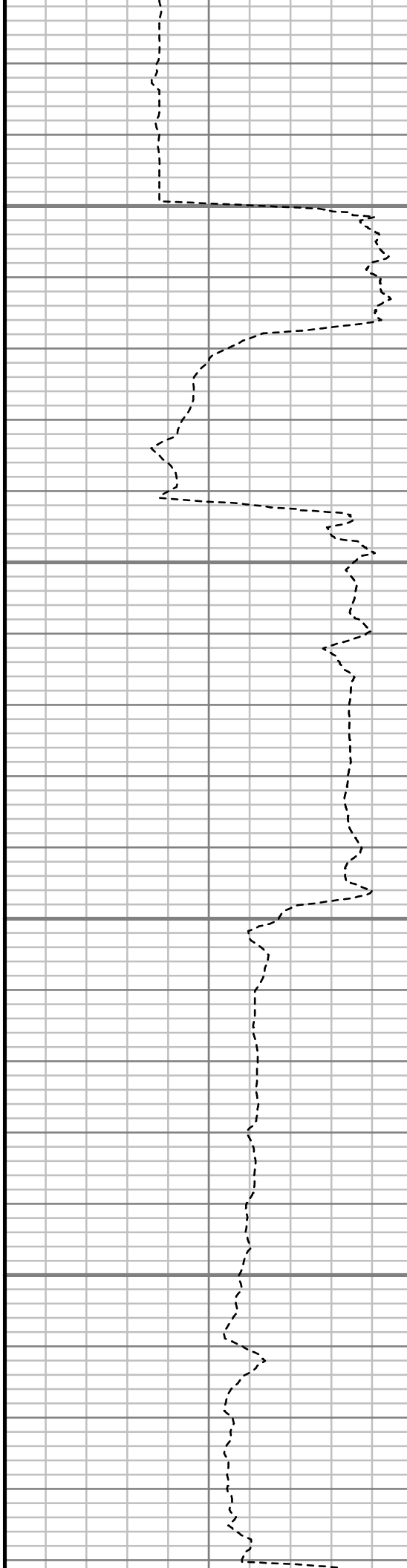


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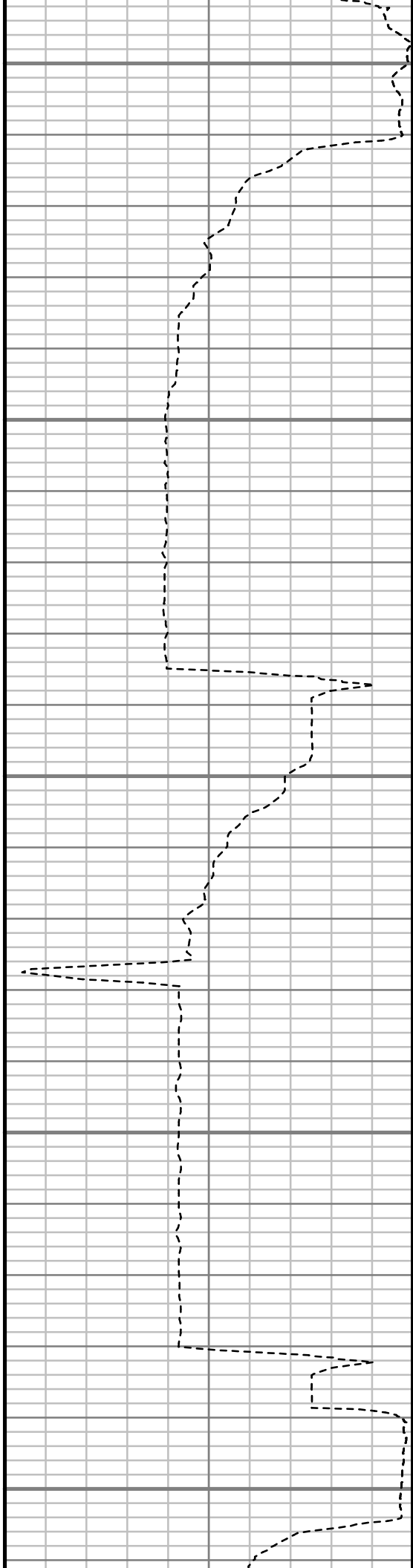
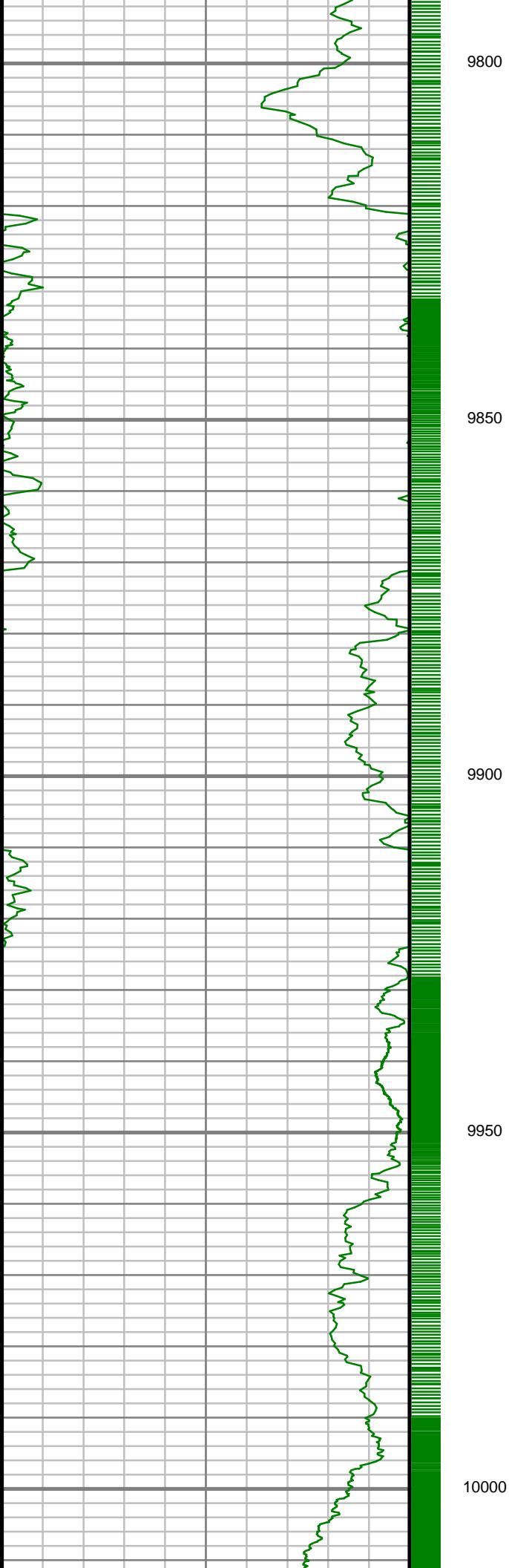
9700

9750



S: 74 MD: 9628.00 ft Inc: 92.79
deg Az: 0.52 deg TVD: 7059.47
ft

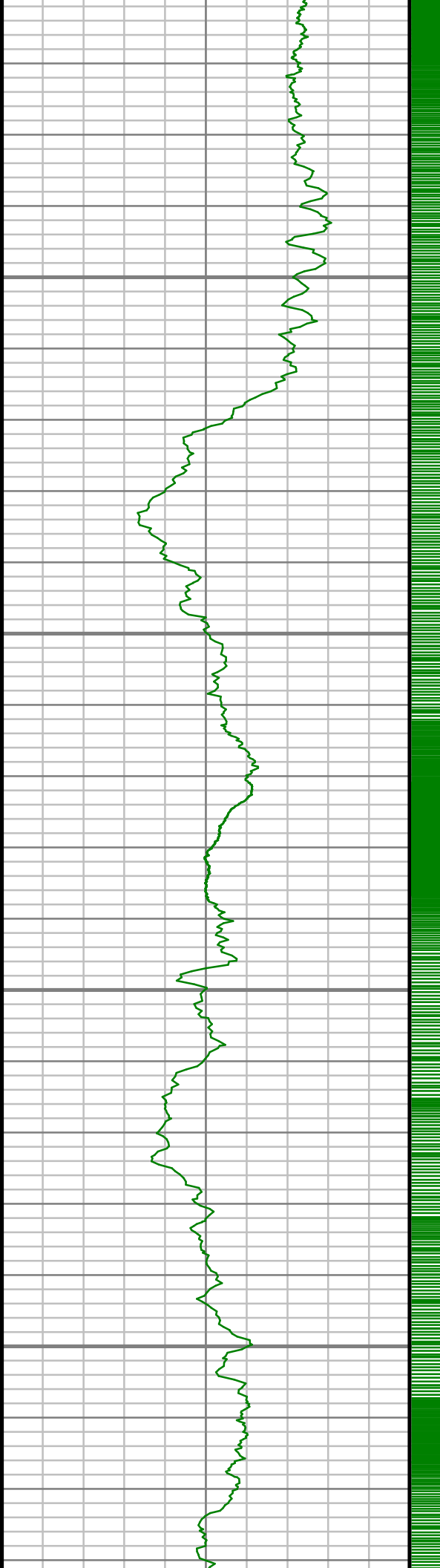
S: 75 MD: 9723.00 ft Inc: 93.30
deg Az: 0.02 deg TVD: 7054.43
ft



S: 76 MD: 9818.00 ft Inc: 91.88
deg Az: 0.73 deg TVD: 7050.14
ft

S: 77 MD: 9913.00 ft Inc: 92.45
deg Az: 0.45 deg TVD: 7046.56
ft

S: 78 MD: 10008.00 ft Inc:
deg Az: 0.07 deg TVD:

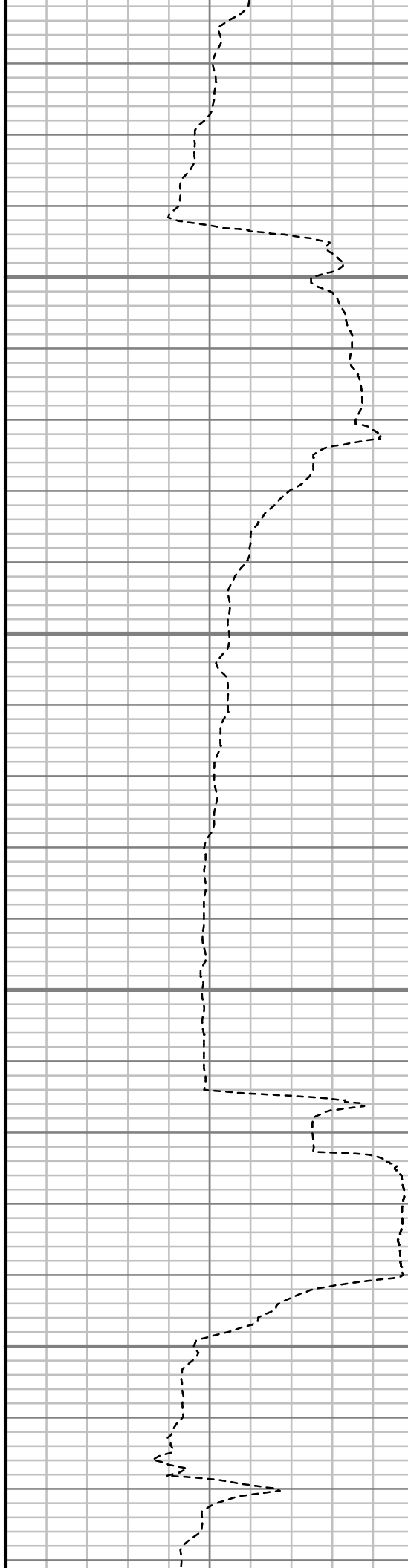


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10100

10150

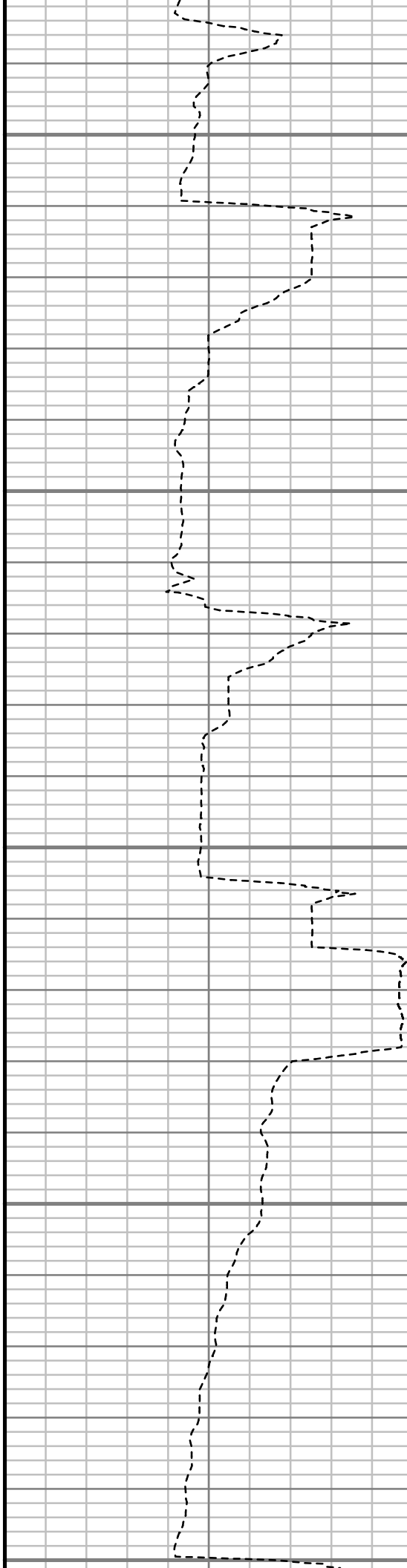
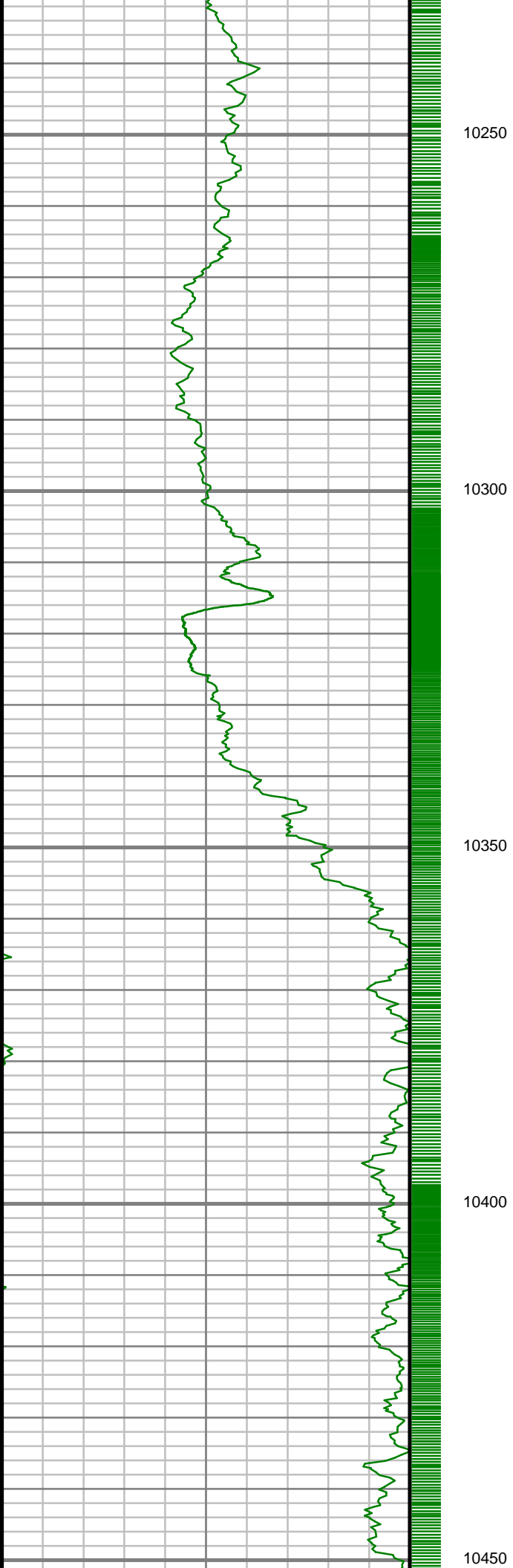
10200



91.28 deg Az: 0.97 deg TVD:
7043.47 ft

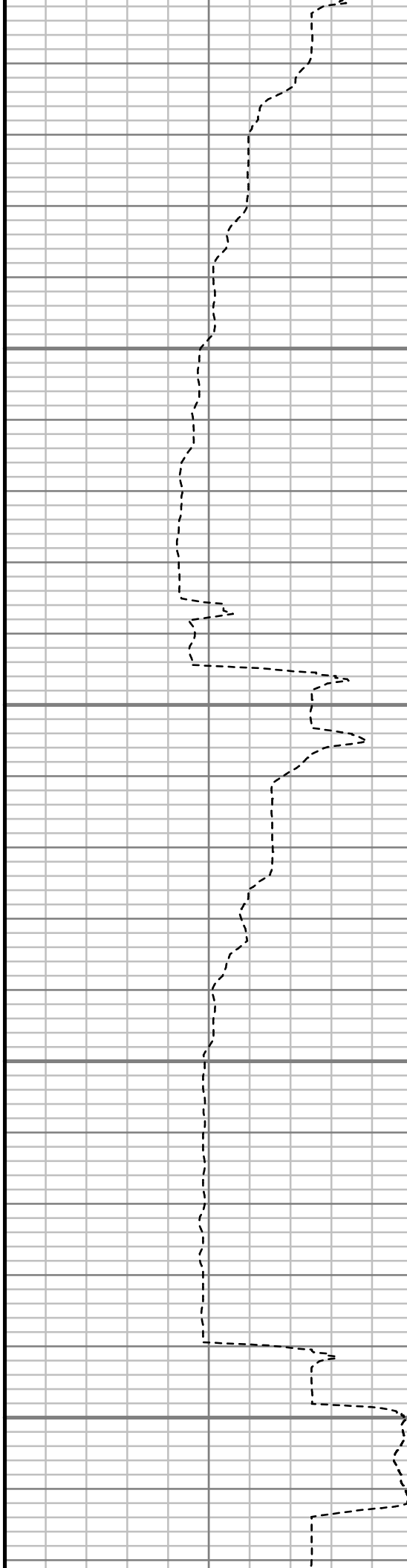
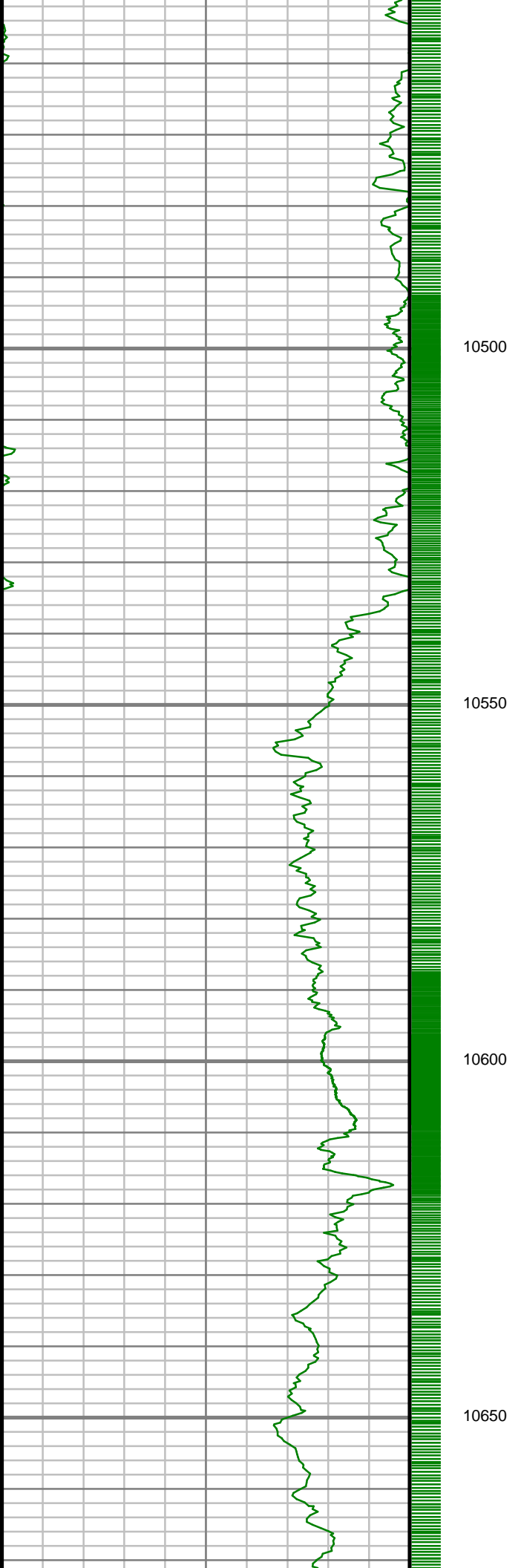
S: 79 MD: 10103.00 ft Inc:
91.95 deg Az: 0.70 deg TVD:
7040.79 ft

S: 80 MD: 10198.00 ft Inc:
90.70 deg Az: 1.97 deg TVD:
7038.60 ft



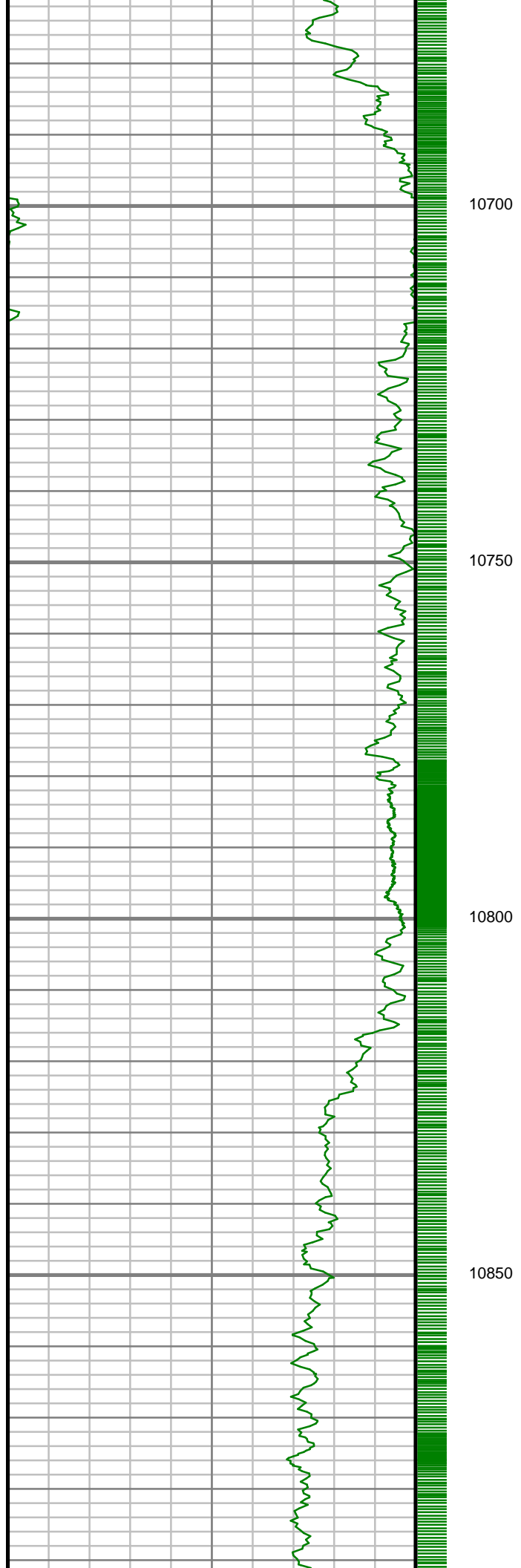
S: 81 MD: 10294.00 ft Inc:
91.04 deg Az: 1.71 deg TVD:
7037.13 ft

S: 82 MD: 10389.00 ft Inc:
89.93 deg Az: 1.76 deg TVD:
7036.33 ft



S: 83 MD: 10484.00 ft Inc:
90.07 deg Az: 1.50 deg TVD:
7036.33 ft

S: 84 MD: 10579.00 ft Inc:
91.18 deg Az: 1.36 deg TVD:
7035.30 ft

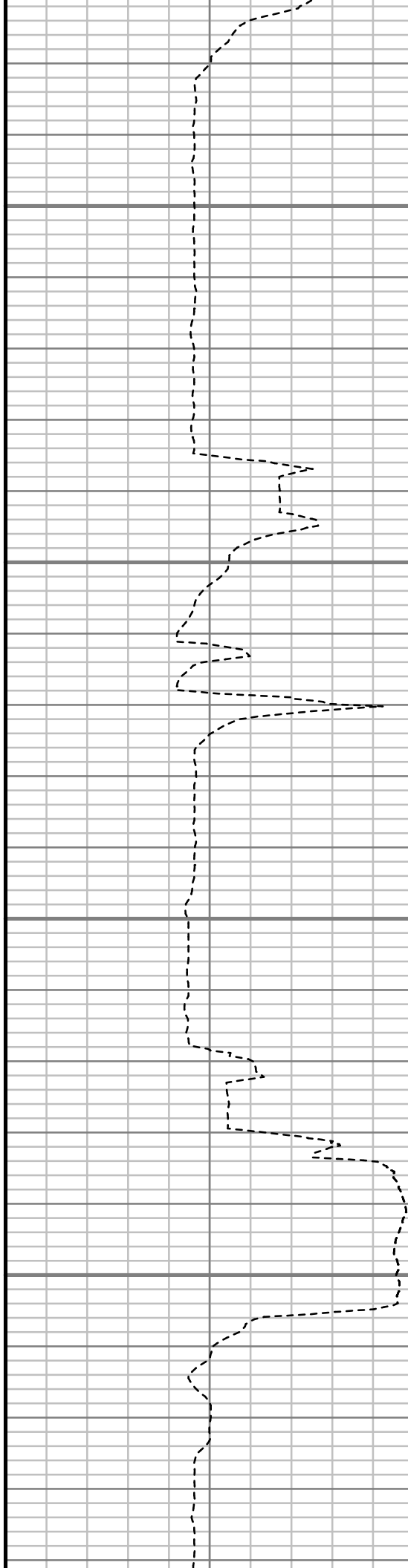


10700

10750

10800

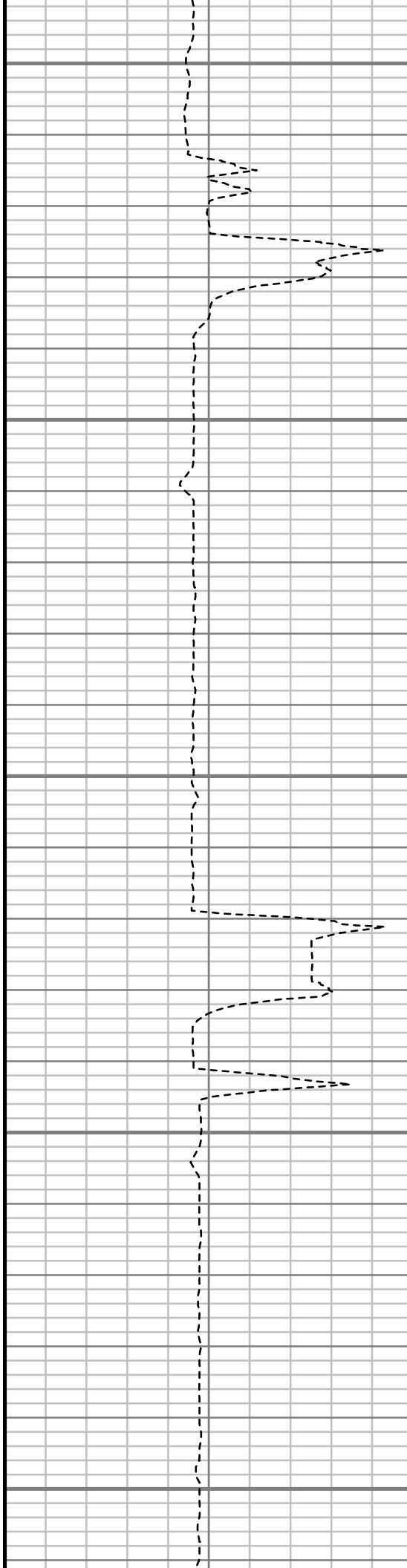
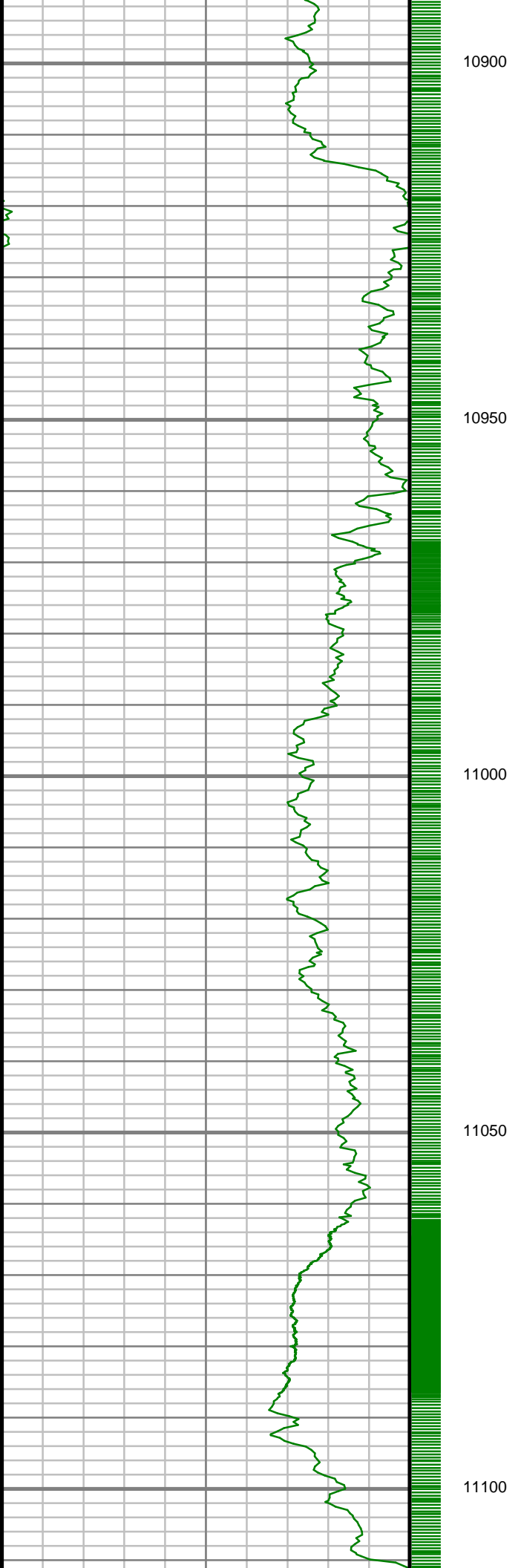
10850



S: 85 MD: 10674.00 ft Inc:
90.20 deg Az: 1.51 deg TVD:
7034.16 ft

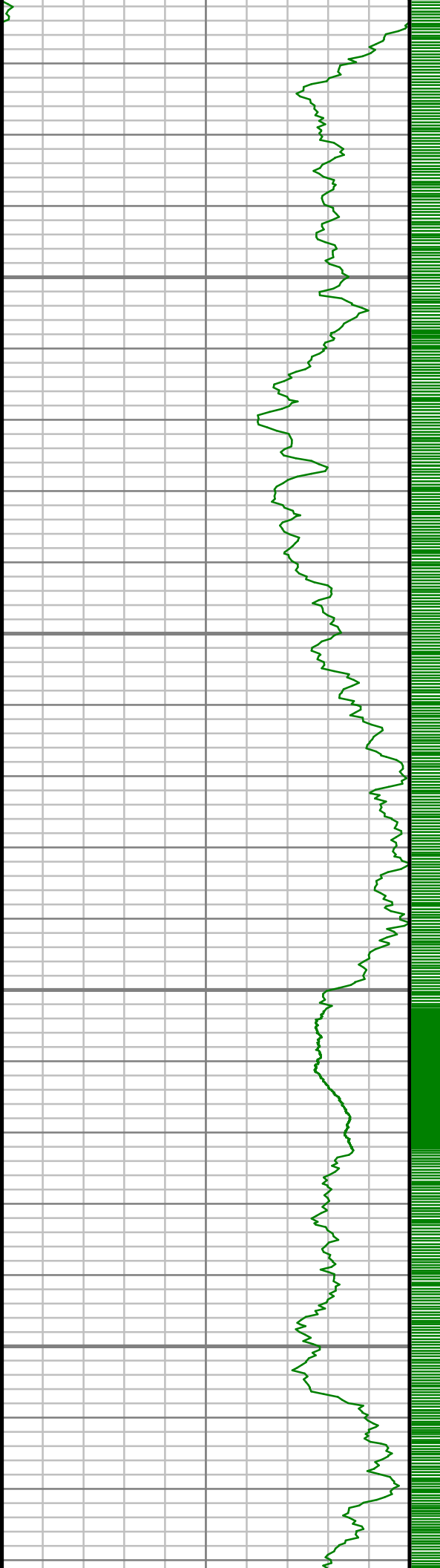
S: 86 MD: 10769.00 ft Inc:
91.28 deg Az: 0.27 deg TVD:
7032.93 ft

S: 87 MD: 10865.00 ft Inc:
89.80 deg Az: 0.05 deg TVD:
7032.03 ft



S: 88 MD: 10960.00 ft Inc:
90.30 deg Az: 359.82 deg TVD:
7031.95 ft

S: 89 MD: 11055.00 ft Inc:
91.07 deg Az: 359.49 deg TVD:
7030.81 ft



11150

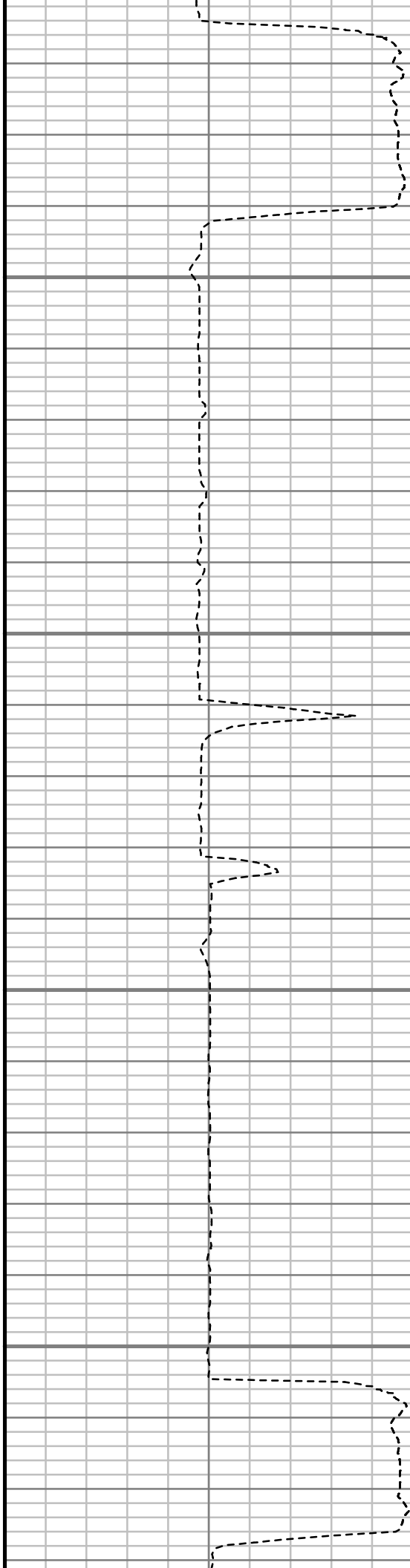
11200

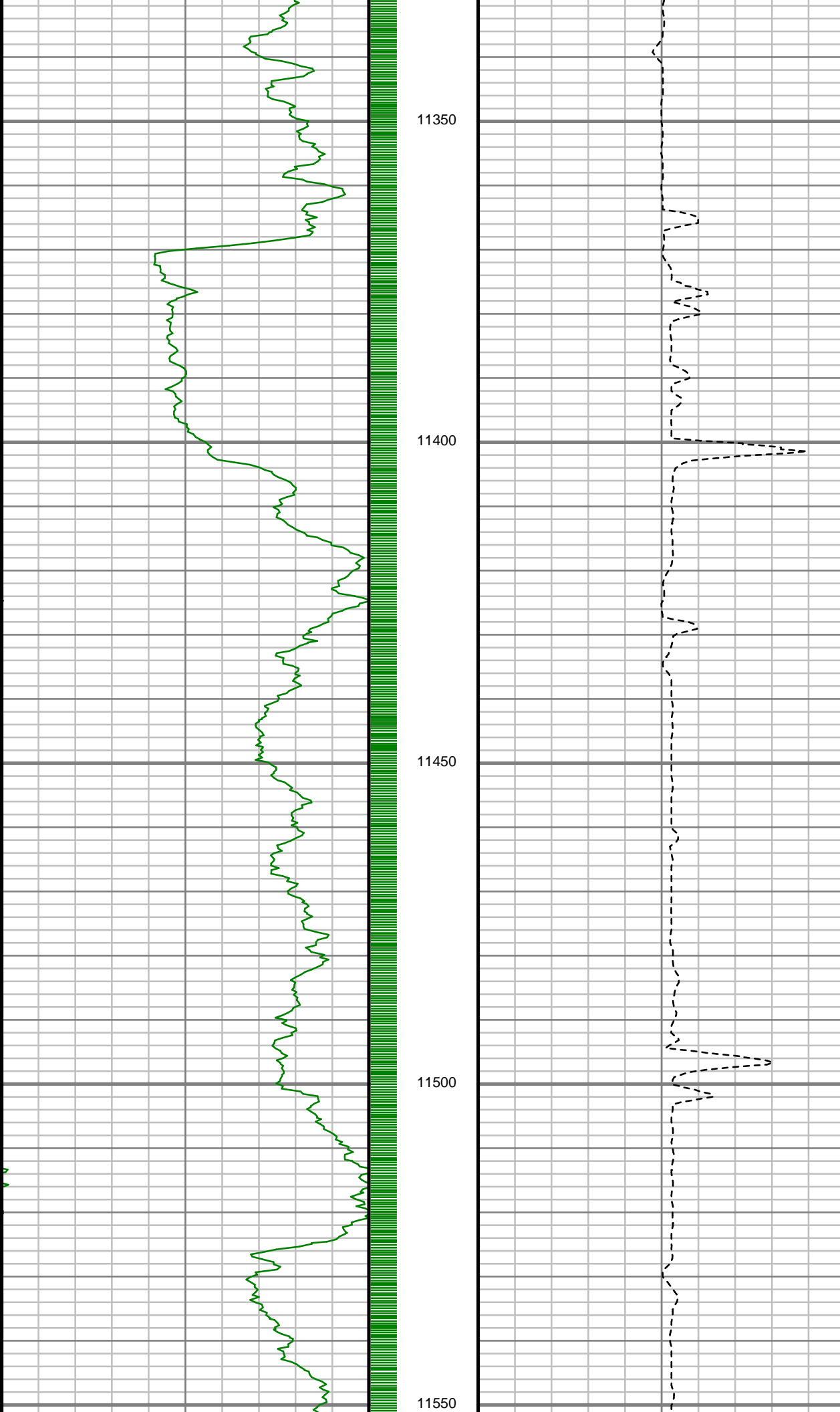
11250

11300

S: 90 MD: 11150.00 ft Inc:
90.03 deg Az: 0.19 deg TVD:
7029.89 ft

S: 91 MD: 11246.00 ft Inc:
90.97 deg Az: 0.40 deg TVD:
7029.04 ft

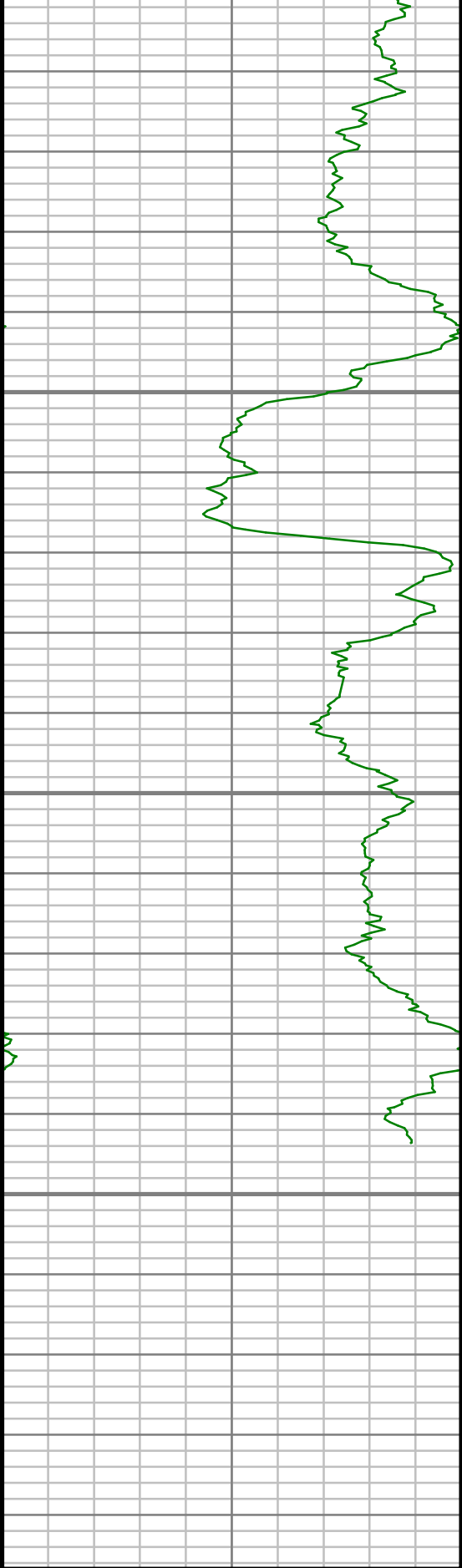




S: 92 MD: 11341.00 ft Inc:
88.52 deg Az: 359.37 deg TVD:
7029.46 ft

S: 93 MD: 11436.00 ft Inc:
89.13 deg Az: 0.01 deg TVD:
7031.41 ft

S: 94 MD: 11531.00 ft Inc:
89.40 deg Az: 0.15 deg TVD:
7032.64 ft



Gamma Ray (GR)

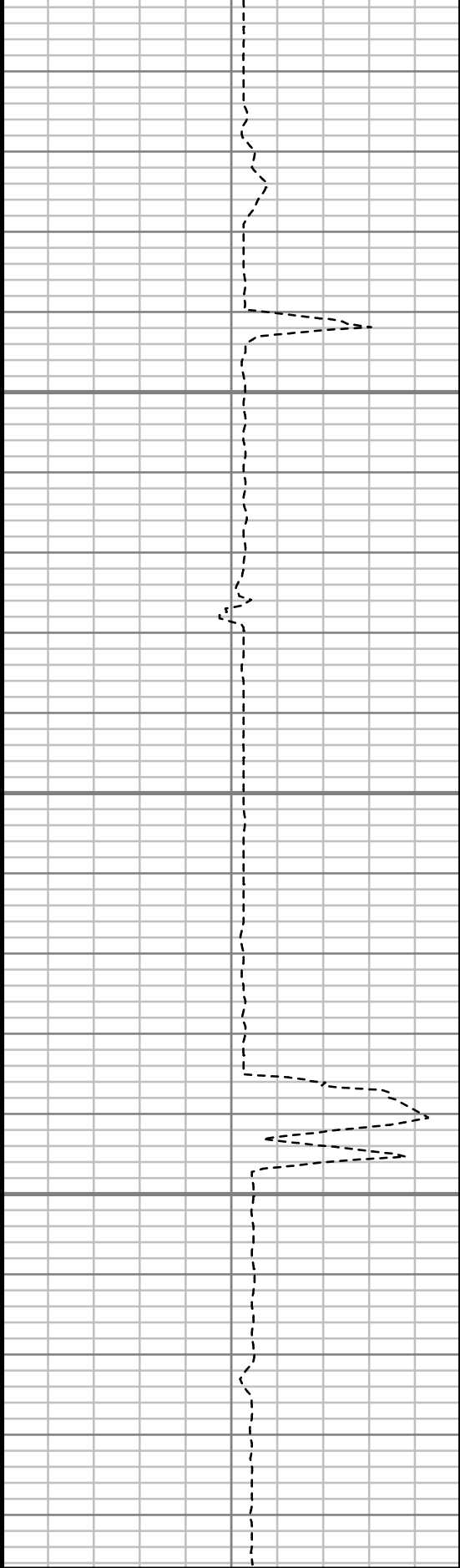
0 Unit = aapi 150

11600

11650

11700

MEASURED DEPTH
1:240 (ft)



Rate of Penetration (ROP)

600 Unit = ft/hr 0

S: 95 MD: 11627.00 ft Inc:
89.09 deg Az: 359.87 deg TVD:
7033.90 ft

S: 96 MD: 11683.00 ft Inc:
88.93 deg Az: 359.78 deg TVD:
7034.87 ft

Comments



MWD Survey Report

Well Location	DALE PAD
Well Name	4A-20H-O264
Survey Date	8/24/2014
Latitude	40°7'3.511"N
Longitude	104°34'19.276"W
Btotal	52529 nT
Dip	66.73 deg
Magnetic Declination	8.37 deg
North Reference	True North
Grid Correction	None
Depth Reference	RKB (25.00 ft)
Calculation Method	Minimum Curvature
Section (VS) Ref	0.00N (ft), 0.00E (ft), 349.83Azim (deg)
Operator(s)	C. WILSON, S. WAXLER, T. LE

Well Notes

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Distance	Closure Direction	DLS
ft	deg	deg	ft	ft	ft	ft	ft	deg	"/100ft
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid
153.00	0.97	267.71	152.99	0.18	-0.05	-1.29	1.29	267.71	0.63
232.00	2.29	261.74	231.96	0.32	-0.30	-3.52	3.53	265.05	1.68
323.00	2.46	263.06	322.88	0.49	-0.80	-7.26	7.30	263.69	0.20
415.00	3.70	259.01	414.75	0.56	-1.61	-12.13	12.24	262.46	1.36
507.00	5.54	246.97	506.45	-0.47	-3.91	-19.13	19.52	258.45	2.26
598.00	7.30	249.52	596.87	-2.48	-7.65	-28.59	29.60	255.02	1.96
690.00	9.06	249.43	687.93	-4.84	-12.24	-40.85	42.65	253.32	1.91
781.00	9.77	249.70	777.71	-7.49	-17.44	-54.80	57.51	252.35	0.77
873.00	9.68	248.03	868.38	-10.44	-23.04	-69.29	73.02	251.61	0.32
964.00	9.68	248.91	958.09	-13.46	-28.65	-83.52	88.30	251.06	0.16
1050.00	9.41	248.29	1042.90	-16.23	-33.86	-96.80	102.55	250.72	0.33
1153.00	8.57	248.32	1144.63	-19.45	-39.81	-111.76	118.63	250.39	0.82
1337.00	10.57	249.49	1326.06	-25.21	-50.79	-140.30	149.21	250.10	1.09
1520.00	10.07	250.89	1506.10	-30.71	-61.90	-171.13	181.99	250.11	0.31
1703.00	9.88	249.66	1686.34	-35.97	-72.59	-200.97	213.67	250.14	0.16
1886.00	9.48	246.63	1866.73	-42.18	-84.03	-229.52	244.42	249.89	0.35
2069.00	10.77	255.94	2046.89	-46.79	-94.16	-259.94	276.47	250.09	1.13
2251.00	10.21	251.10	2225.85	-50.39	-103.52	-291.70	309.52	250.46	0.57

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Distance	Closure Direction	DLS
ft	deg	deg	ft	ft	ft	ft	ft	deg	°/100ft
2434.00	9.28	250.43	2406.21	-55.26	-113.72	-320.95	340.50	250.49	0.51
2618.00	11.34	251.27	2587.23	-60.38	-124.50	-352.06	373.43	250.53	1.12
2801.00	9.35	252.24	2767.25	-65.02	-134.81	-383.26	406.28	250.62	1.09
2991.00	9.34	250.39	2954.73	-69.58	-144.69	-412.48	437.12	250.67	0.16
3180.00	9.34	253.06	3141.22	-73.90	-154.30	-441.60	467.78	250.74	0.23
3370.00	9.48	250.15	3328.67	-78.35	-164.11	-471.06	498.83	250.79	0.26
3559.00	8.82	251.08	3515.26	-83.17	-174.09	-499.41	528.89	250.78	0.36
3749.00	9.46	248.12	3702.85	-88.56	-184.63	-527.67	559.04	250.72	0.42
3939.00	7.94	243.67	3890.66	-95.38	-196.27	-553.92	587.66	250.49	0.87
4128.00	10.09	247.77	4077.32	-102.47	-208.32	-580.94	617.16	250.27	1.19
4316.00	11.93	250.93	4261.85	-108.92	-220.90	-614.55	653.05	250.23	1.03
4506.00	12.07	244.64	4447.71	-117.16	-235.82	-651.06	692.45	250.09	0.69
4697.00	13.34	247.25	4634.03	-127.19	-252.90	-689.43	734.35	249.86	0.73
4887.00	10.87	246.21	4819.79	-136.19	-268.61	-726.04	774.14	249.70	1.31
5077.00	8.96	251.23	5006.95	-142.62	-280.60	-756.46	806.82	249.65	1.10
5268.00	7.89	258.41	5195.89	-145.17	-288.02	-783.38	834.65	249.81	0.79
5458.00	5.65	243.84	5384.56	-148.08	-294.77	-804.55	856.85	249.88	1.47
5648.00	1.15	219.77	5574.19	-151.88	-300.36	-814.17	867.81	249.75	2.44

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Distance	Closure Direction	DLS
ft	deg	deg	ft	ft	ft	ft	ft	deg	°/100ft
5839.00	0.48	288.28	5765.17	-152.73	-301.57	-816.16	870.09	249.72	0.56
6029.00	0.87	358.71	5955.16	-150.92	-299.88	-816.95	870.25	249.84	0.44
6220.00	1.08	118.26	6146.14	-150.61	-299.28	-815.39	868.58	249.84	0.89
6411.00	0.20	64.06	6337.13	-151.64	-299.99	-813.51	867.06	249.76	0.51
6506.00	0.34	13.74	6432.13	-151.34	-299.65	-813.30	866.74	249.77	0.27
6601.00	4.86	354.73	6527.01	-147.08	-295.37	-813.60	865.56	250.05	4.78
6697.00	9.86	356.10	6622.19	-134.85	-283.12	-814.53	862.33	250.83	5.21
6792.00	16.45	355.57	6714.65	-113.36	-261.58	-816.12	857.02	252.23	6.93
6887.00	23.63	357.68	6803.84	-81.08	-229.10	-817.94	849.42	254.35	7.60
6982.00	29.76	359.87	6888.67	-38.96	-186.46	-818.76	839.73	257.17	6.53
7077.00	33.91	1.56	6969.37	10.22	-136.37	-818.10	829.38	260.54	4.47
7172.00	41.30	2.67	7044.58	66.81	-78.49	-815.91	819.68	264.50	7.81
7267.00	53.46	1.08	7108.80	135.06	-8.76	-813.72	813.77	269.38	12.86
7362.00	72.57	358.69	7151.71	218.04	75.50	-814.04	817.54	275.30	20.25
7455.00	86.37	1.73	7168.67	307.74	166.70	-813.65	830.55	281.58	15.17
7547.00	90.40	1.89	7171.26	397.68	258.59	-810.74	850.98	287.69	4.39
7638.00	90.94	1.13	7170.20	486.79	349.56	-808.34	880.68	293.39	1.02
7729.00	92.32	0.78	7167.61	576.04	440.50	-806.83	919.24	298.63	1.57

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Distance	Closure Direction	DLS
ft	deg	deg	ft	ft	ft	ft	ft	deg	°/100ft
7825.00	90.94	0.01	7164.88	670.37	536.46	-806.16	968.34	303.64	1.64
7920.00	92.82	359.64	7161.76	763.88	631.40	-806.45	1024.22	308.06	2.01
8015.00	93.74	0.10	7156.33	857.27	726.25	-806.66	1085.42	312.00	1.08
8110.00	93.76	359.10	7150.12	950.69	821.04	-807.32	1151.46	315.48	1.06
8205.00	94.57	358.56	7143.22	1044.27	915.77	-809.25	1222.09	318.53	1.02
8301.00	92.89	359.26	7136.98	1138.86	1011.54	-811.06	1296.55	321.28	1.90
8396.00	93.76	358.84	7131.47	1232.47	1106.37	-812.64	1372.75	323.70	1.02
8491.00	92.89	359.30	7125.96	1326.08	1201.20	-814.18	1451.12	325.87	1.04
8586.00	93.09	358.81	7121.00	1419.73	1296.05	-815.74	1531.40	327.81	0.56
8681.00	93.23	0.05	7115.77	1513.25	1390.90	-816.68	1612.94	329.58	1.31
8776.00	92.65	359.59	7110.89	1606.69	1485.78	-816.98	1695.58	331.19	0.77
8871.00	93.15	0.48	7106.08	1700.06	1580.65	-816.93	1779.28	332.67	1.08
8966.00	93.80	1.59	7100.32	1793.08	1675.46	-815.22	1863.26	334.05	1.35
9061.00	93.50	1.17	7094.27	1885.97	1770.24	-812.94	1947.98	335.33	0.54
9155.00	93.73	0.70	7088.35	1978.02	1864.04	-811.41	2032.99	336.48	0.56
9250.00	93.63	0.75	7082.26	2071.12	1958.84	-810.21	2119.78	337.53	0.12
9345.00	94.27	0.92	7075.71	2164.15	2053.60	-808.83	2207.14	338.50	0.70
9439.00	93.36	0.03	7069.46	2256.33	2147.39	-808.05	2294.39	339.38	1.36

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Distance	Closure Direction	DLS
ft	deg	deg	ft	ft	ft	ft	ft	deg	°/100ft
9533.00	92.99	359.76	7064.26	2348.74	2241.24	-808.22	2382.52	340.17	0.49
9628.00	92.79	0.52	7059.47	2442.08	2336.12	-807.99	2471.91	340.92	0.82
9723.00	93.30	0.02	7054.43	2535.38	2430.99	-807.55	2561.61	341.62	0.74
9818.00	91.88	0.73	7050.14	2628.68	2525.88	-806.92	2651.64	342.28	1.67
9913.00	92.45	0.45	7046.56	2721.94	2620.81	-805.94	2741.93	342.91	0.67
10008.00	91.28	0.97	7043.47	2815.18	2715.75	-804.77	2832.48	343.49	1.35
10103.00	91.95	0.70	7040.79	2908.40	2810.70	-803.39	2923.27	344.05	0.76
10198.00	90.70	1.97	7038.60	3001.46	2905.65	-801.17	3014.08	344.58	1.87
10294.00	91.04	1.71	7037.13	3095.34	3001.59	-798.08	3105.88	345.11	0.44
10389.00	89.93	1.76	7036.33	3188.30	3096.54	-795.21	3197.02	345.60	1.17
10484.00	90.07	1.50	7036.33	3281.29	3191.50	-792.50	3288.42	346.05	0.30
10579.00	91.18	1.36	7035.30	3374.34	3286.46	-790.13	3380.11	346.48	1.18
10674.00	90.20	1.51	7034.16	3467.39	3381.43	-787.75	3471.97	346.89	1.04
10769.00	91.28	0.27	7032.93	3560.61	3476.40	-786.27	3564.21	347.26	1.73
10865.00	89.80	0.05	7032.03	3655.05	3572.40	-786.00	3657.84	347.59	1.56
10960.00	90.30	359.82	7031.95	3748.58	3667.40	-786.11	3750.70	347.90	0.58
11055.00	91.07	359.49	7030.81	3842.18	3762.39	-786.68	3843.75	348.19	0.88
11150.00	90.03	0.19	7029.89	3935.72	3857.38	-786.94	3936.83	348.47	1.32

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Distance	Closure Direction	DLS
ft	deg	deg	ft	ft	ft	ft	ft	deg	"/100ft
11246.00	90.97	0.40	7029.04	4030.12	3953.37	-786.45	4030.84	348.75	1.00
11341.00	88.52	359.37	7029.46	4123.65	4048.36	-786.64	4124.08	349.00	2.80
11436.00	89.13	0.01	7031.41	4217.23	4143.34	-787.15	4217.45	349.24	0.93
11531.00	89.40	0.15	7032.64	4310.70	4238.33	-787.02	4310.78	349.48	0.32
11627.00	89.09	359.87	7033.90	4405.18	4334.32	-787.00	4405.19	349.71	0.43
11683.00	88.93	359.78	7034.87	4460.33	4390.32	-787.17	4460.33	349.84	0.34

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

5" = 100' FEET MD