



GAMMA RAY

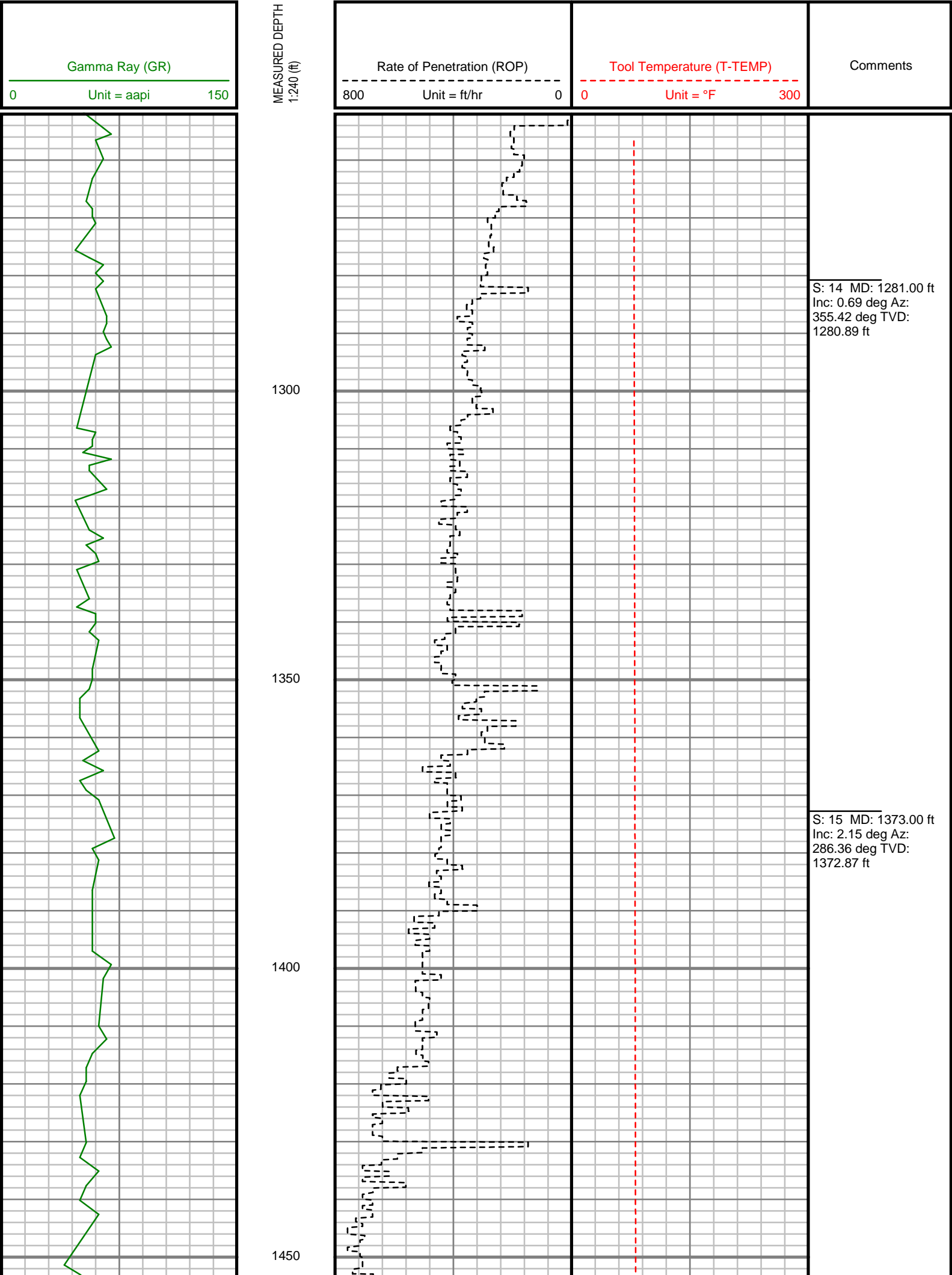
5" = 100' FEET MD

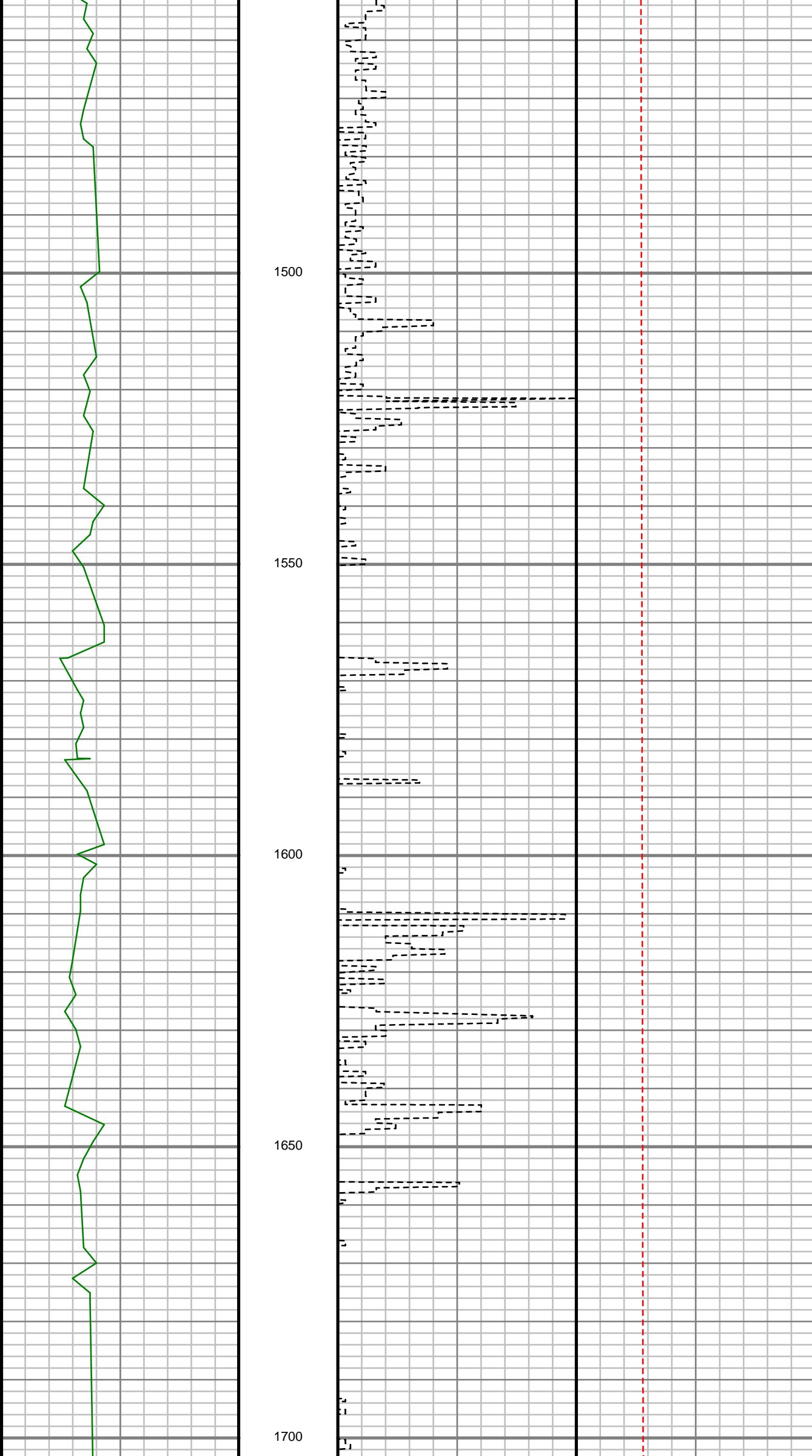
COMPANY : ANADARKO PETROLEUM CORP. WELL : NRC 1C-8HZ FIELD : WATTENBURG COUNTY : WELD STATE : COLORADO COUNTRY : USA UWI : 05-123-39091												COMPANY : ANADARKO PETROLEUM CORP. WELL : NRC 1C-8HZ FIELD : WATTENBURG COUNTY : WELD STATE : COLORADO COUNTRY : USA UWI : 05-123-39091											
WELL LOCATION LAT:40°3'33.293"N LONG:104°54'29.398"W N:1264982.21 ft E:3165659.14 ft SEC:8 TWP:1N RANGE:67W												OTHER SERVICES											
DEPTH REF. : RKB REF. HEIGHT : 25.000 ft GROUND LEVEL : 5074.000 ft												DIRECTIONAL ROP											
BOREHOLE RECORD												DEVIATION RECORD											
HOLE SIZE	in	FROM	ft	TO	ft	INCLINATION	deg	FROM	ft	TO	ft												
12.25		0		1252		0-10		0		7179													
8.75		1252		8129		10-90		7179		8129													
6.125		8129		XXXX		90-		8129		XXXXX													
CASING RECORD																							
CASING SIZE	in	FROM	ft	TO	ft																		
9.625		0		1252																			
7		0		XXXXX																			
DRILLING CO. : H&P RIG : 311 LMD UNIT NO. : C-46 SPUD DATE : LMD START DATE : 4/20/2014 LMD END DATE :												DISTRICT : CASPER DEPTH : 1252 ft TOTAL DEPTH :											

Run Data						
RUN NUMBER	1	2	3	4		
START DATE	4/20/2014	4/22/2014	4/23/2014	4/25/2014		
START TIME	2230	930	1330	1600		
END DATE	4/22/2014	4/23/2014	4/25/2014			
END TIME	930	1330	1600			
DEPTH IN (ft)	1335	6572	7908	8129		
DEPTH OUT (ft)	6572	7908	8129			
LOG TOP (ft)	1281	6518	7840	8079		
LOG BOTTOM (ft)	6518	7840	8079			
HOLE SIZE (in)	8.75	8.75	8.75	6.125		
MUD DATA @ (ft)	6572	7840	8129			
MUD TYPE	WATER-BASED	WATER-BASED	WATER-BASED	WATER-BASED		
DENSITY (lb / gal)	8.8	9	10.05			
VISCOSITY (s / qt)	31	38	48			
pH	8.6	9.2	9.3			
FLUID LOSS (cm3 / 30)	-	-	-	-		
SALINITY (ppm)	1500	2100	1600			
Rm (ohmm @ deg F)	-	-	-	-		
Rmf (ohmm @ deg F)	-	-	-	-		
MAX TEMP (deg F)	147	165	158			
Rm @ MAX TEMP (ohmm)	-	-	-	-		
LWD ENGINEER #1	M. SHARKER	M. SHARKER	M.SHARKER	M. SHARKER		
LWD ENGINEER #2	B. GREER	B. GREER	B. GREER	B. GREER		
LWD ENGINEER #3	-	-	-	-		
LOG WITNESS #1	J. STUART	J. STUART	J. STUART	J. STUART		
LOG WITNESS #2	-	-	-	-		

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.

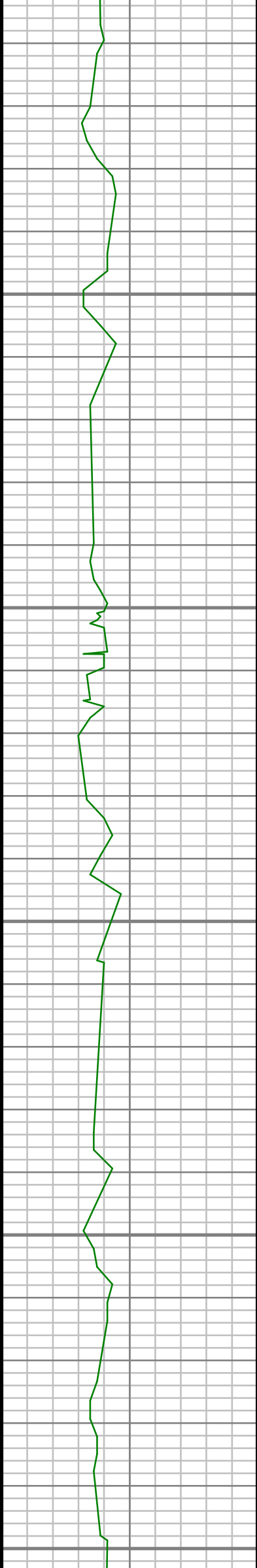
ANADARKO PETROLEUM CORP.
NRC 1C-8HZ
WATTENBERG FIELD
WELD COUNTY, COLORADO
05-123-39091





S: 16 MD: 1573.00 ft
Inc: 2.37 deg Az:
291.20 deg TVD:
1572.71 ft

S: 17 MD: 1664.00 ft
Inc: 1.78 deg Az:
282.21 deg TVD:
1663.65 ft



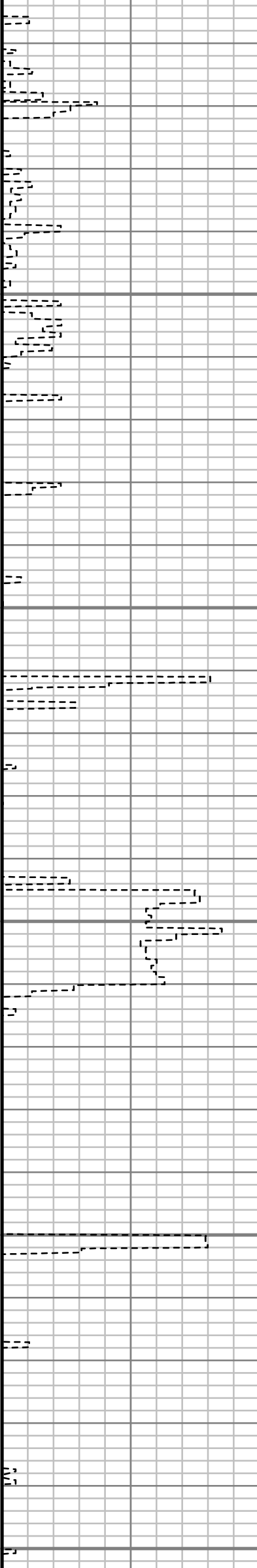
1750

1800

1850

1900

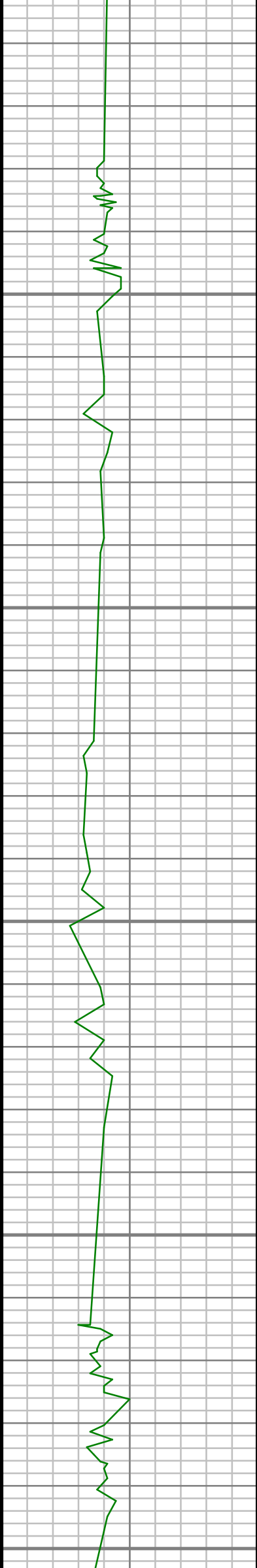
1950



S: 18 MD: 1755.00 ft
Inc: 1.57 deg Az:
262.86 deg TVD:
1754.61 ft

S: 19 MD: 1846.00 ft
Inc: 1.93 deg Az:
248.70 deg TVD:
1845.57 ft

S: 20 MD: 1937.00 ft
Inc: 2.12 deg Az:
209.93 deg TVD:
1936.52 ft



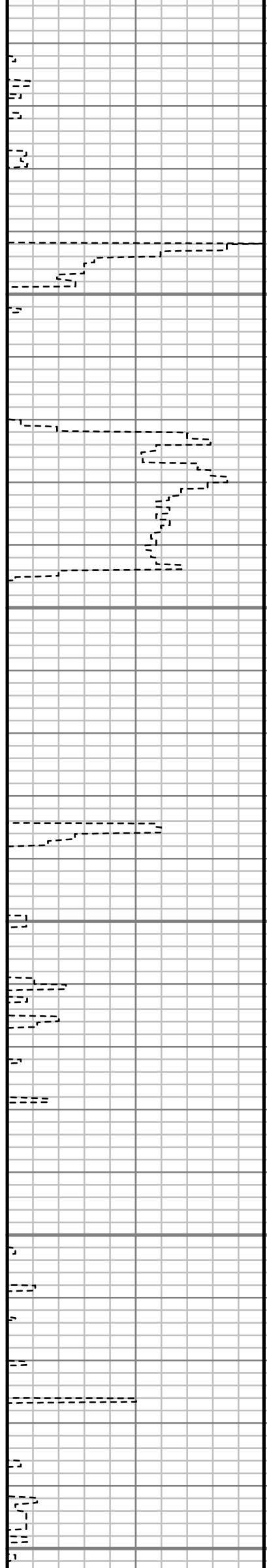
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2050

2100

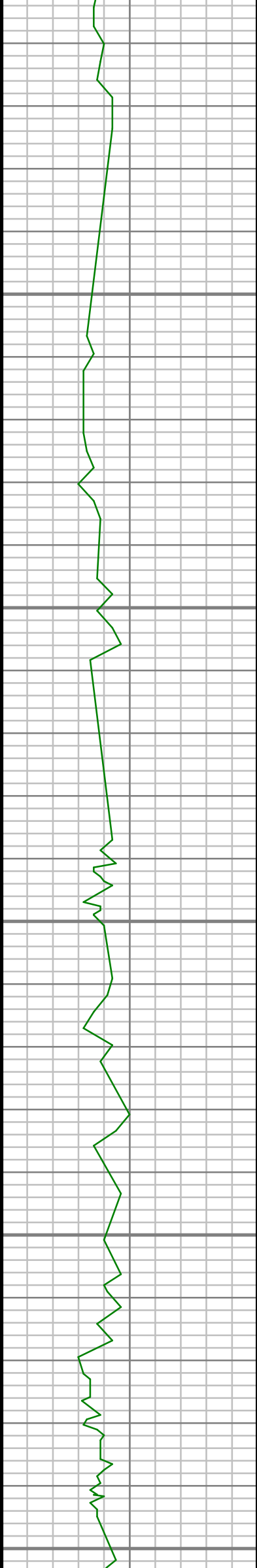
2150

2200



S: 21 MD: 2029.00 ft
Inc: 2.70 deg Az:
182.70 deg TVD:
2028.44 ft

S: 22 MD: 2120.00 ft
Inc: 4.07 deg Az:
180.36 deg TVD:
2119.28 ft



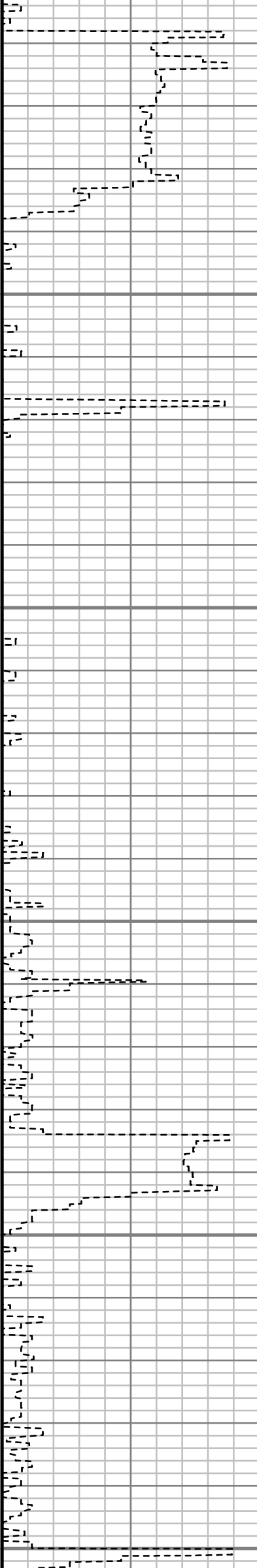
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2300

2350

2400

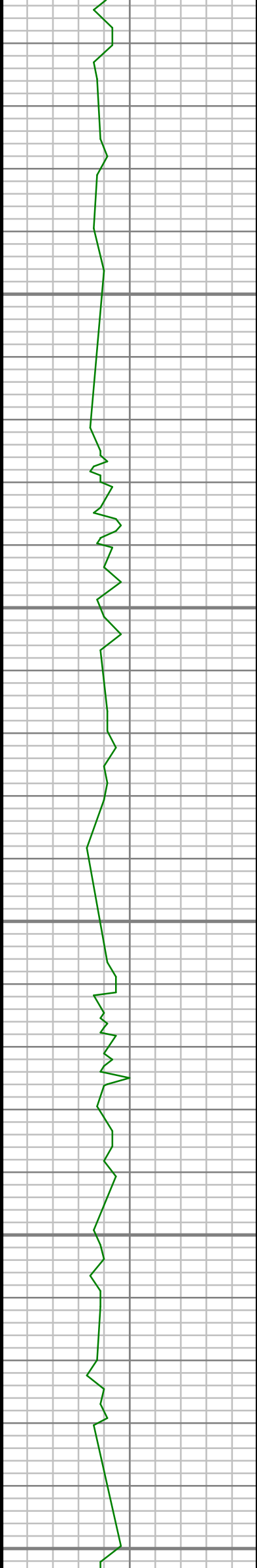
2450



S: 23 MD: 2211.00 ft
Inc: 5.36 deg Az:
165.15 deg TVD:
2209.97 ft

S: 24 MD: 2303.00 ft
Inc: 7.51 deg Az:
147.33 deg TVD:
2301.40 ft

S: 25 MD: 2394.00 ft
Inc: 7.28 deg Az:
143.38 deg TVD:
2391.64 ft



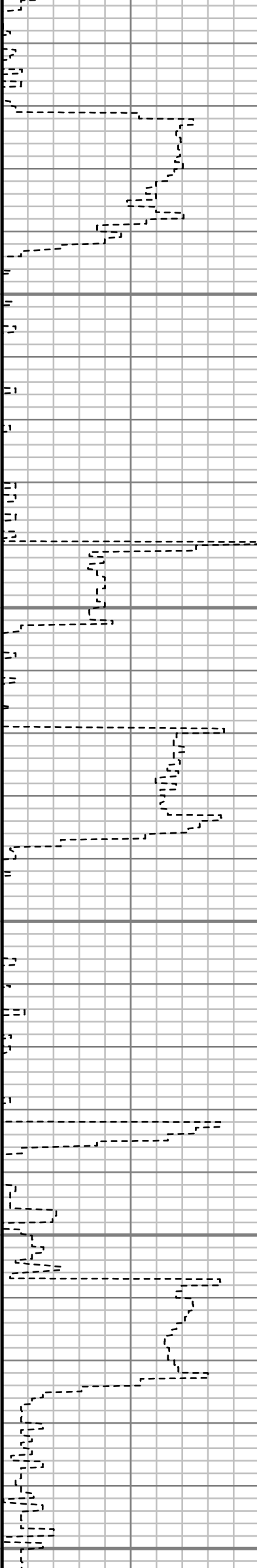
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2550

2600

2650

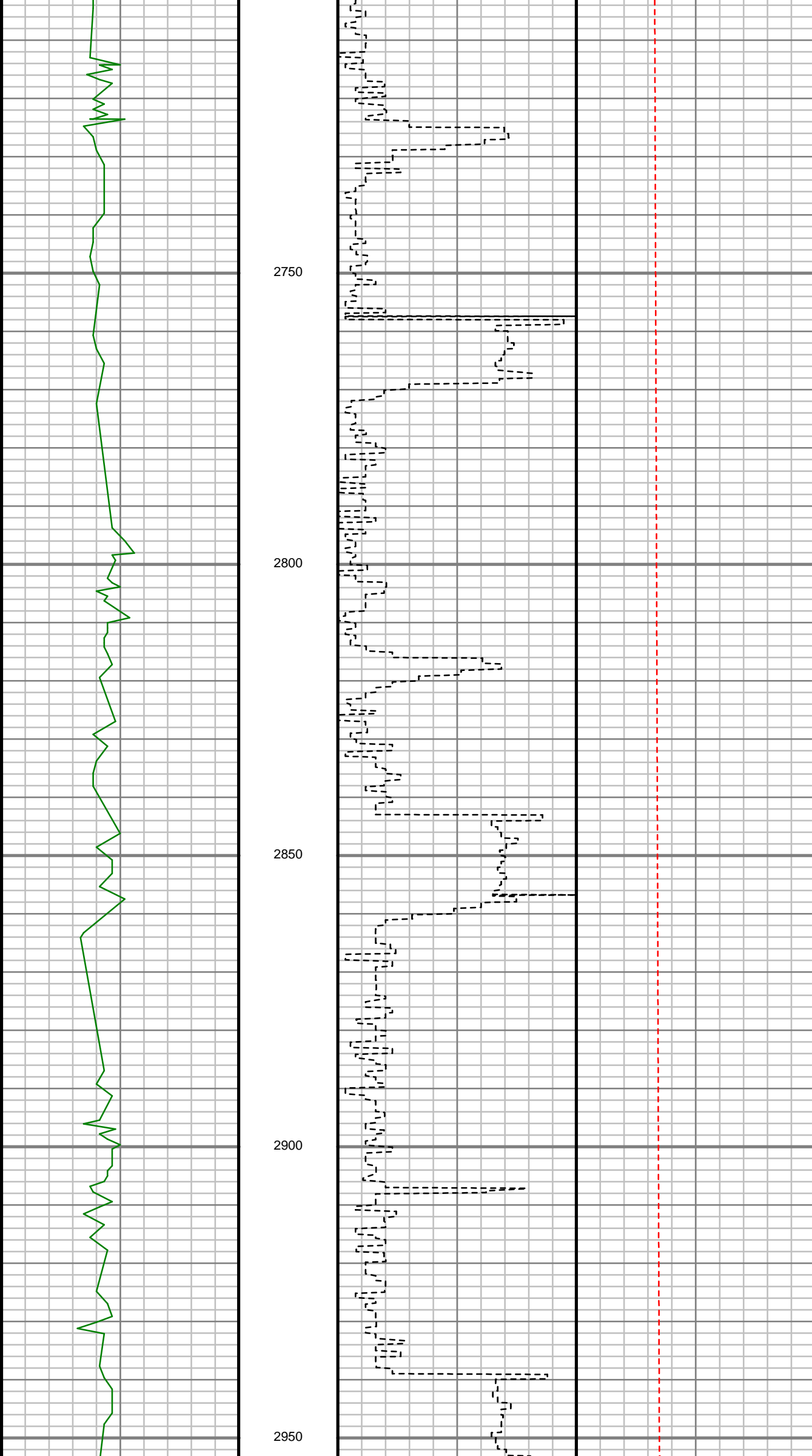
2700



S: 26 MD: 2485.00 ft
Inc: 9.32 deg Az:
154.16 deg TVD:
2481.69 ft

S: 27 MD: 2577.00 ft
Inc: 10.15 deg Az:
158.86 deg TVD:
2572.37 ft

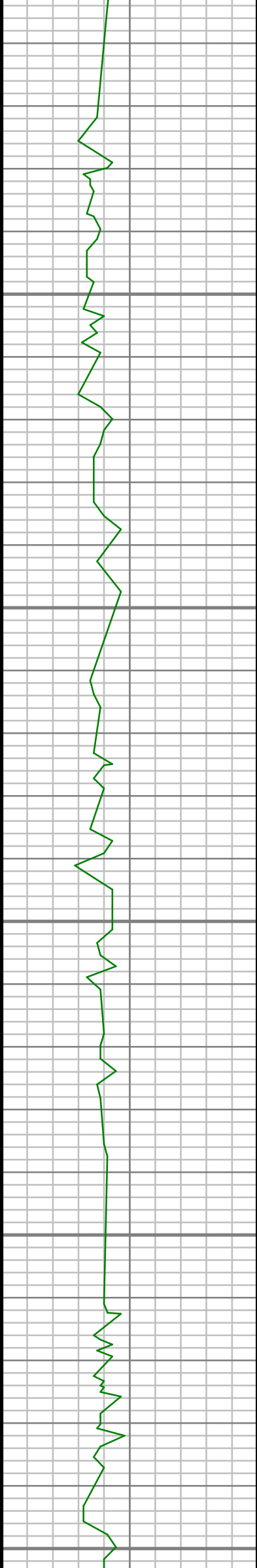
S: 28 MD: 2669.00 ft
Inc: 11.41 deg Az:
160.49 deg TVD:
2662.74 ft



S: 29 MD: 2760.00 ft
Inc: 11.18 deg Az:
156.96 deg TVD:
2751.98 ft

S: 30 MD: 2852.00 ft
Inc: 12.04 deg Az:
150.66 deg TVD:
2842.10 ft

S: 31 MD: 2944.00 ft
Inc: 13.12 deg Az:
155.15 deg TVD:
2931 89 ft



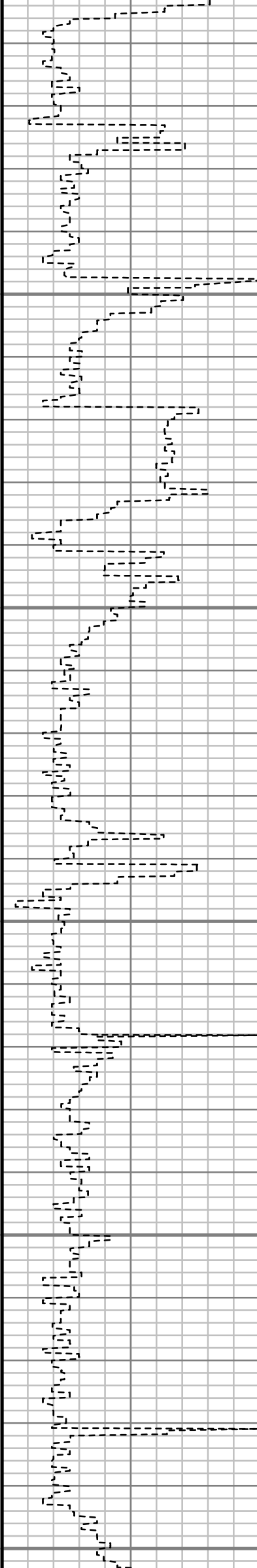
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3050

3100

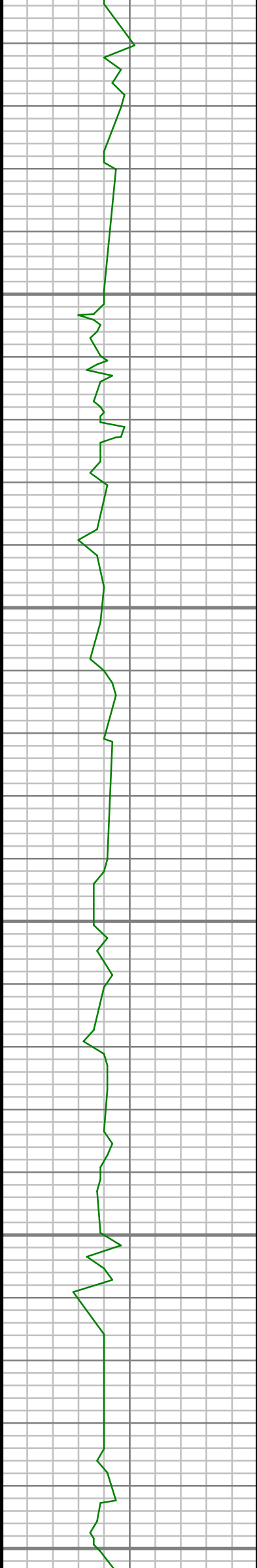
3150

3200



S: 32 MD: 3035.00 ft
Inc: 14.08 deg Az:
152.77 deg TVD:
3020.34 ft

S: 33 MD: 3127.00 ft
Inc: 12.76 deg Az:
150.71 deg TVD:
3109.82 ft



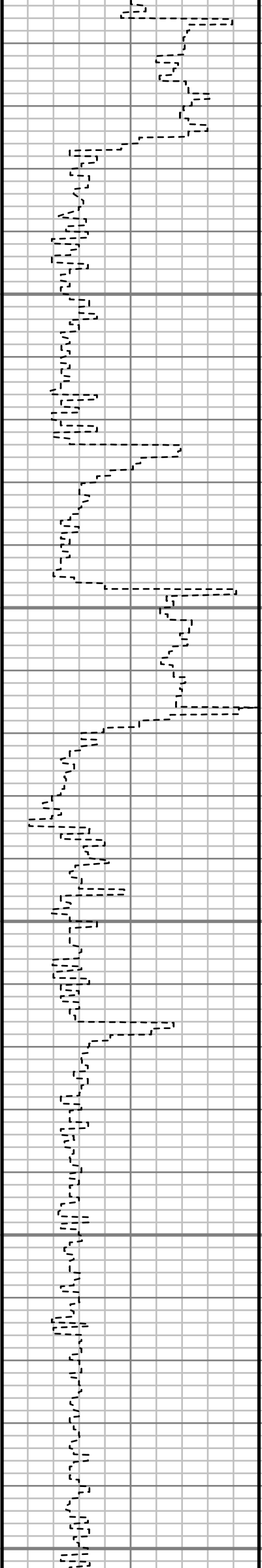
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3300

3350

3400

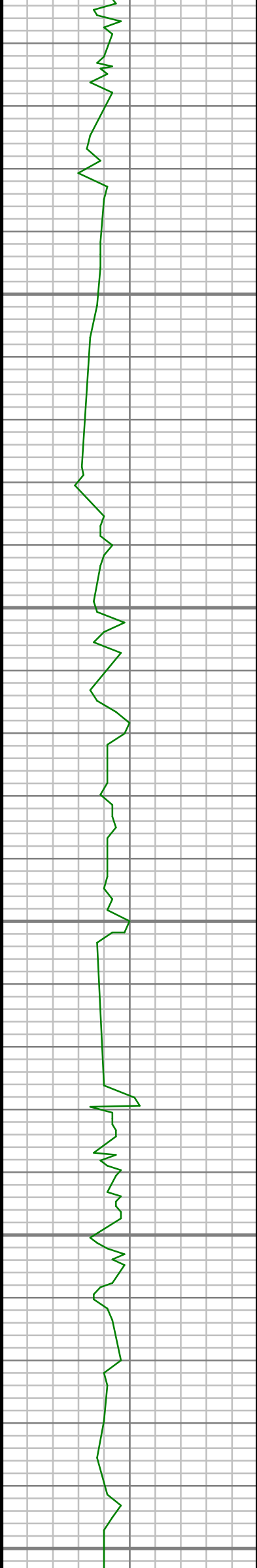
3450



S: 34 MD: 3218.00 ft
Inc: 12.72 deg Az:
150.80 deg TVD:
3198.58 ft

S: 35 MD: 3310.00 ft
Inc: 13.92 deg Az:
157.95 deg TVD:
3288.11 ft

S: 36 MD: 3404.00 ft
Inc: 12.43 deg Az:
161.06 deg TVD:
3379.64 ft



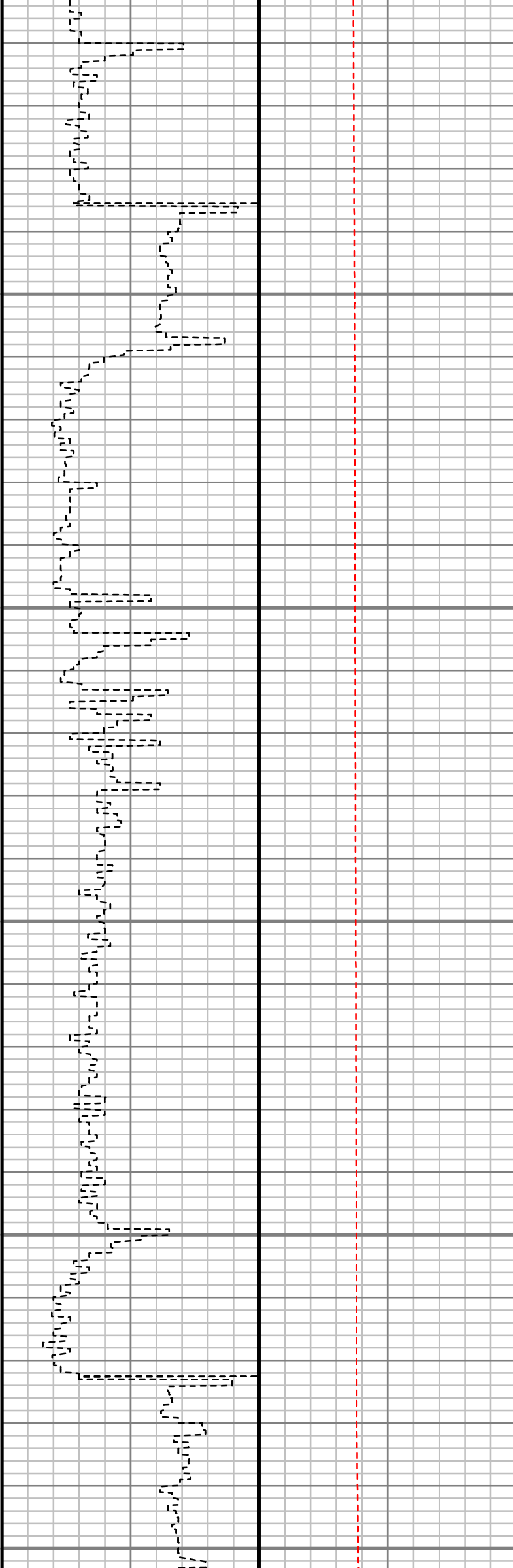
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3550

3600

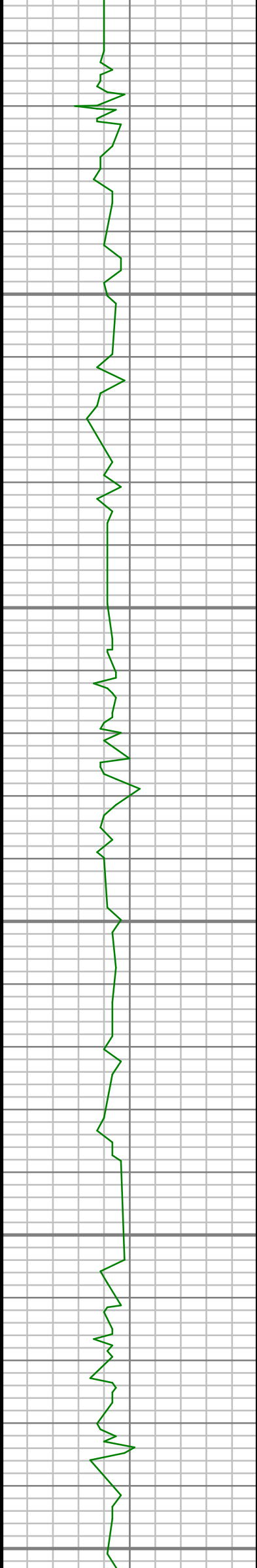
3650

3700



S: 37 MD: 3499.00 ft
Inc: 13.30 deg Az:
158.59 deg TVD:
3472.25 ft

S: 38 MD: 3687.00 ft
Inc: 11.58 deg Az:
156.78 deg TVD:
3655.83 ft



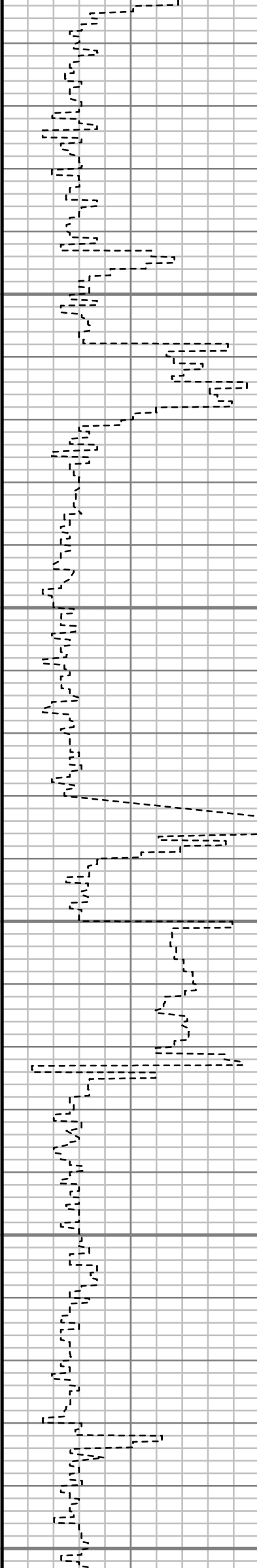
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3800

3850

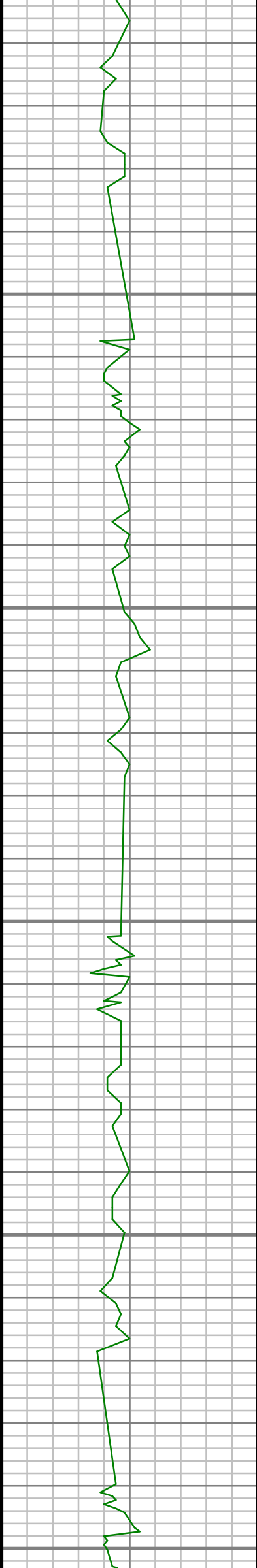
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3950



S: 39 MD: 3782.00 ft
Inc: 11.52 deg Az:
153.87 deg TVD:
3748.91 ft

S: 40 MD: 3876.00 ft
Inc: 11.59 deg Az:
155.20 deg TVD:
3841.01 ft



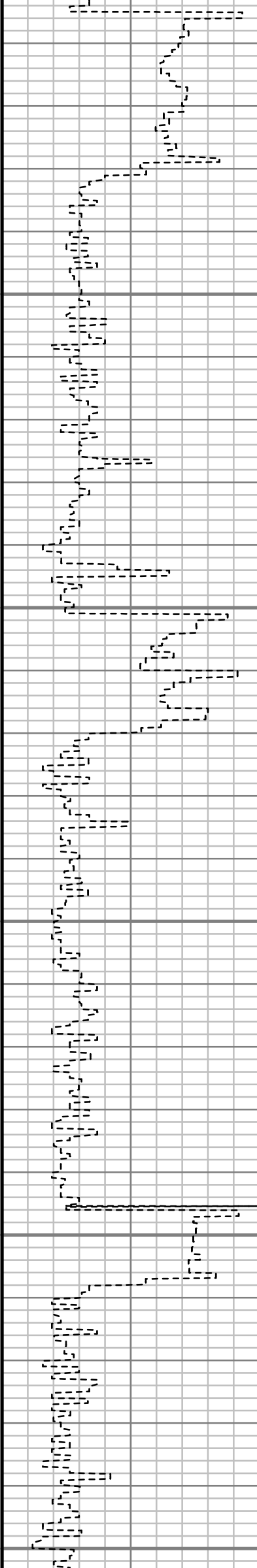
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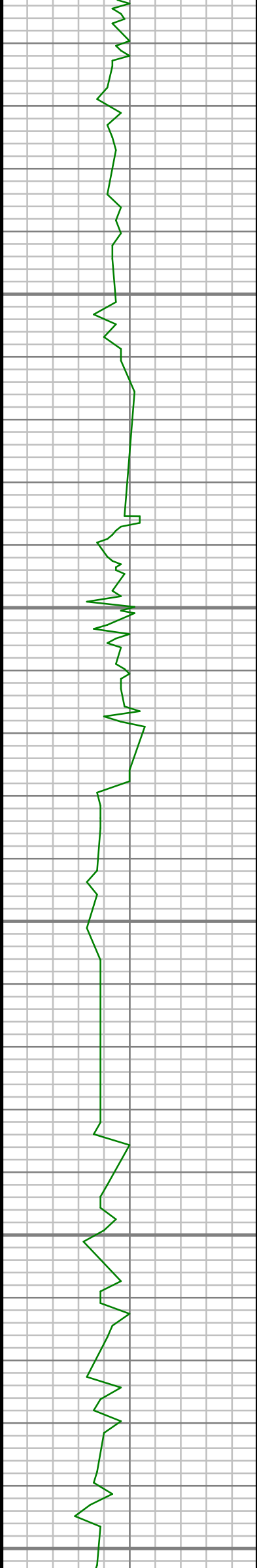
4100

4150

4200



S: 41 MD: 4065.00 ft
Inc: 12.02 deg Az:
152.74 deg TVD:
4026.01 ft



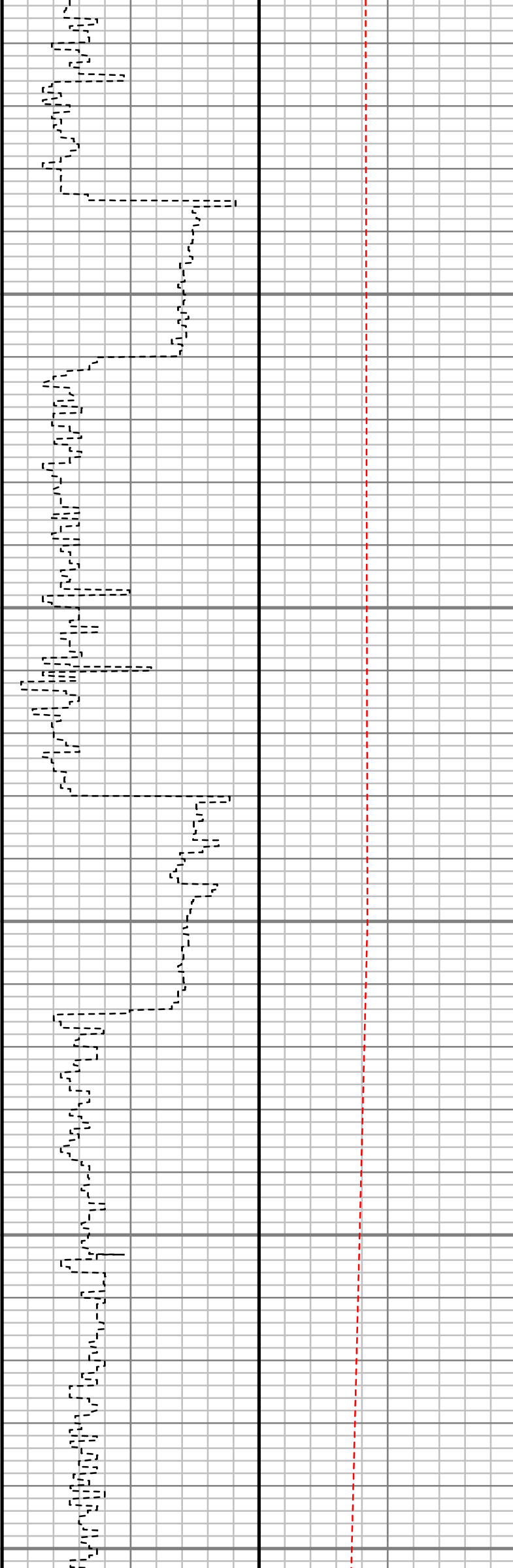
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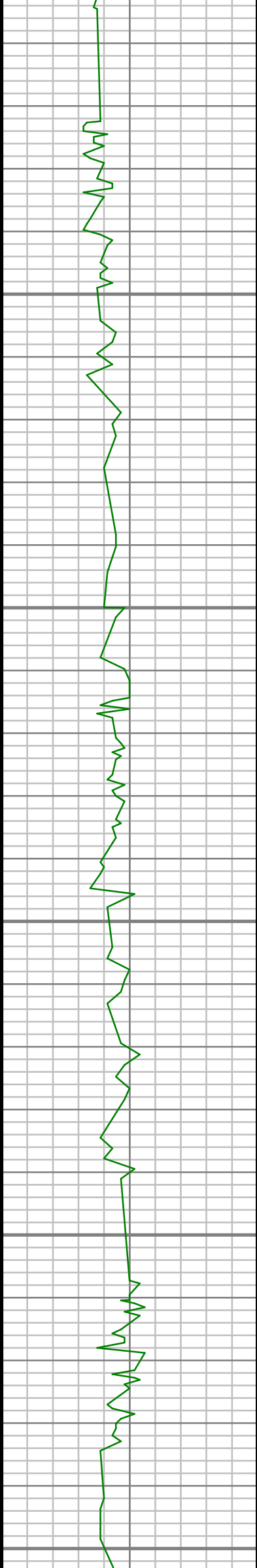
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4450



S: 42 MD: 4254.00 ft
Inc: 10.63 deg Az:
160.49 deg TVD:
4211.34 ft

S: 43 MD: 4348.00 ft
Inc: 12.48 deg Az:
164.71 deg TVD:
4303.43 ft



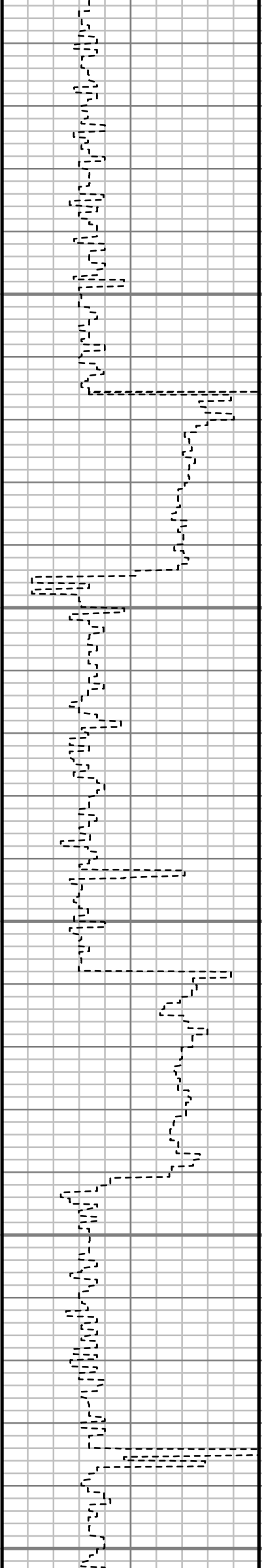
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4600

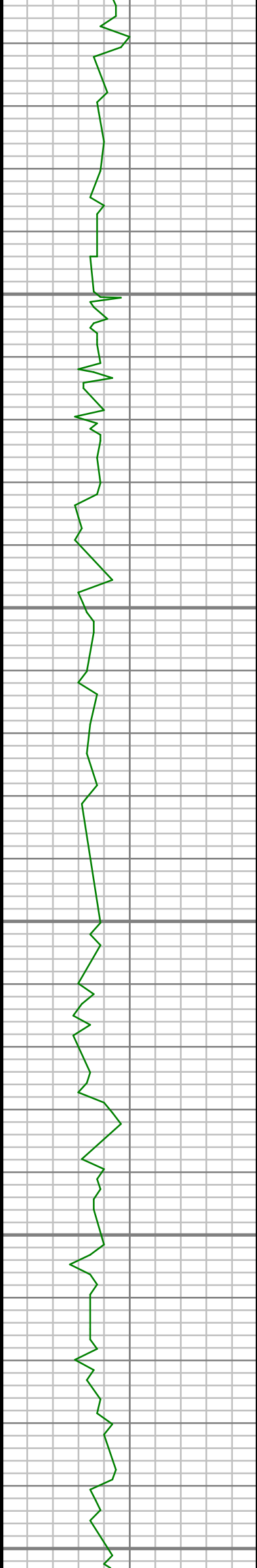
4650

4700



S: 44 MD: 4536.00 ft
Inc: 10.47 deg Az:
159.57 deg TVD:
4487.66 ft

S: 45 MD: 4631.00 ft
Inc: 12.43 deg Az:
158.00 deg TVD:
4580.77 ft



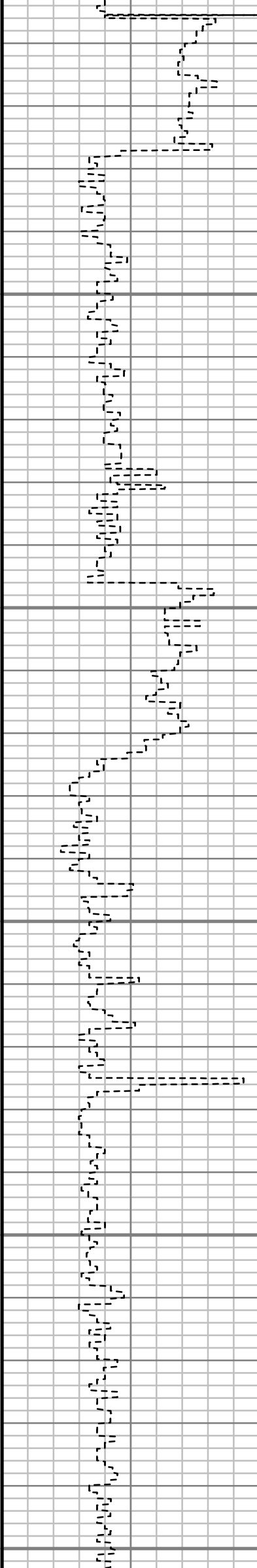
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4800

4850

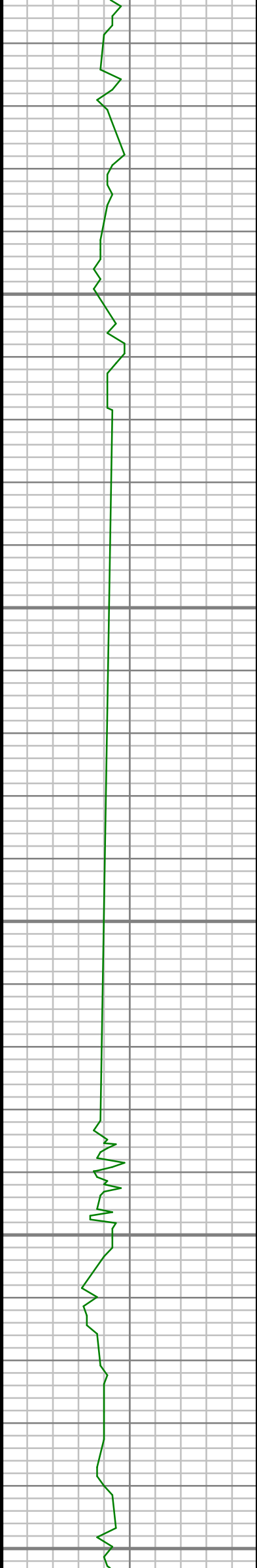
4900

4950



S: 46 MD: 4725.00 ft
Inc: 12.20 deg Az:
152.76 deg TVD:
4672.61 ft

S: 47 MD: 4914.00 ft
Inc: 15.08 deg Az:
151.51 deg TVD:
4856.26 ft



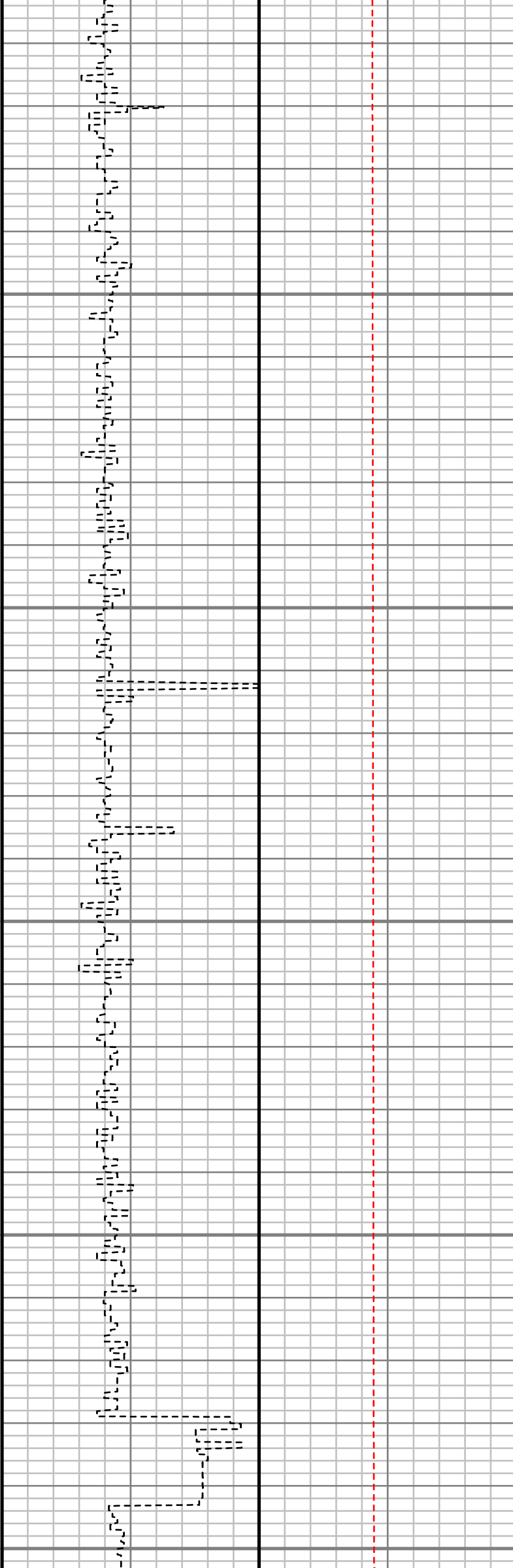
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5050

5100

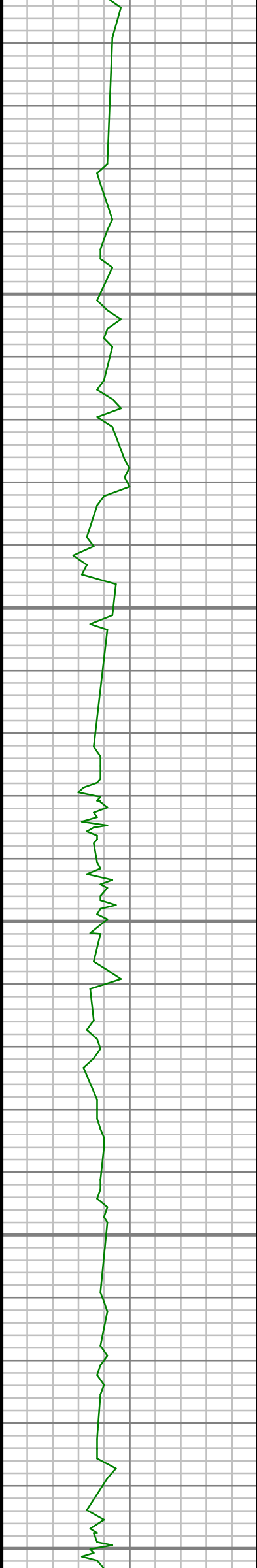
5150

5200



S: 48 MD: 5103.00 ft
Inc: 11.68 deg Az:
150.89 deg TVD:
5040.10 ft

S: 49 MD: 5197.00 ft
Inc: 12.26 deg Az:
155.54 deg TVD:



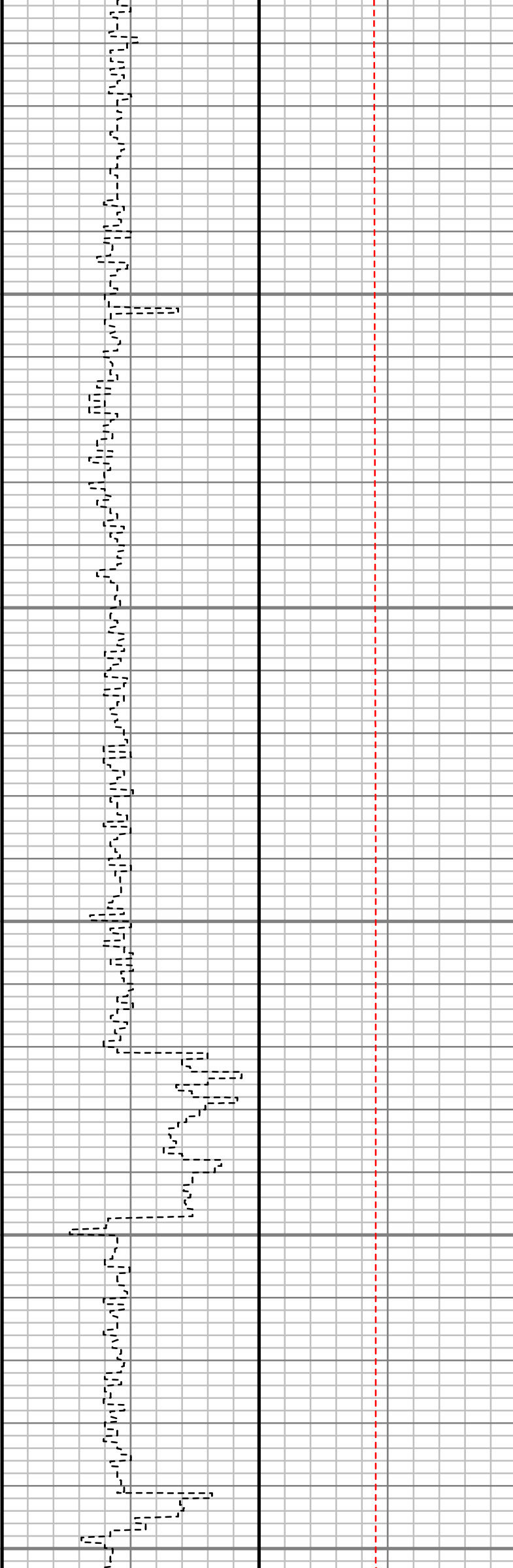
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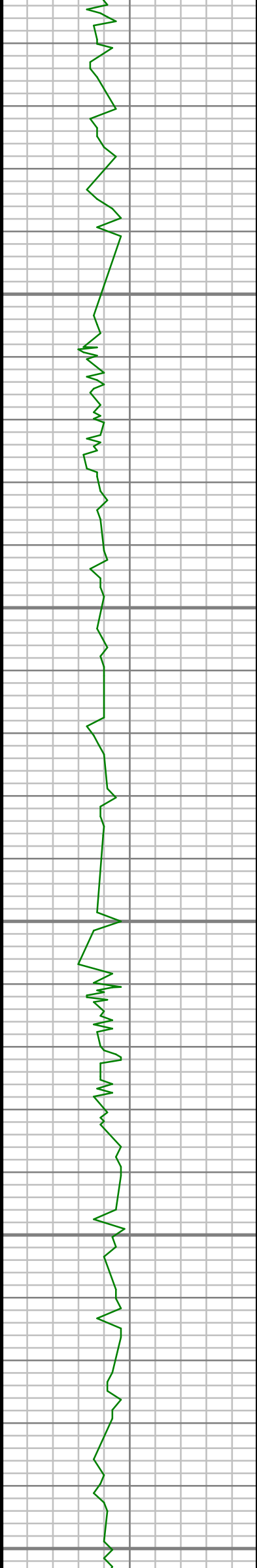
5400

5450



153.94 deg TVD:
5132.06 ft

S: 50 MD: 5292.00 ft
Inc: 10.16 deg Az:
154.38 deg TVD:
5225.24 ft



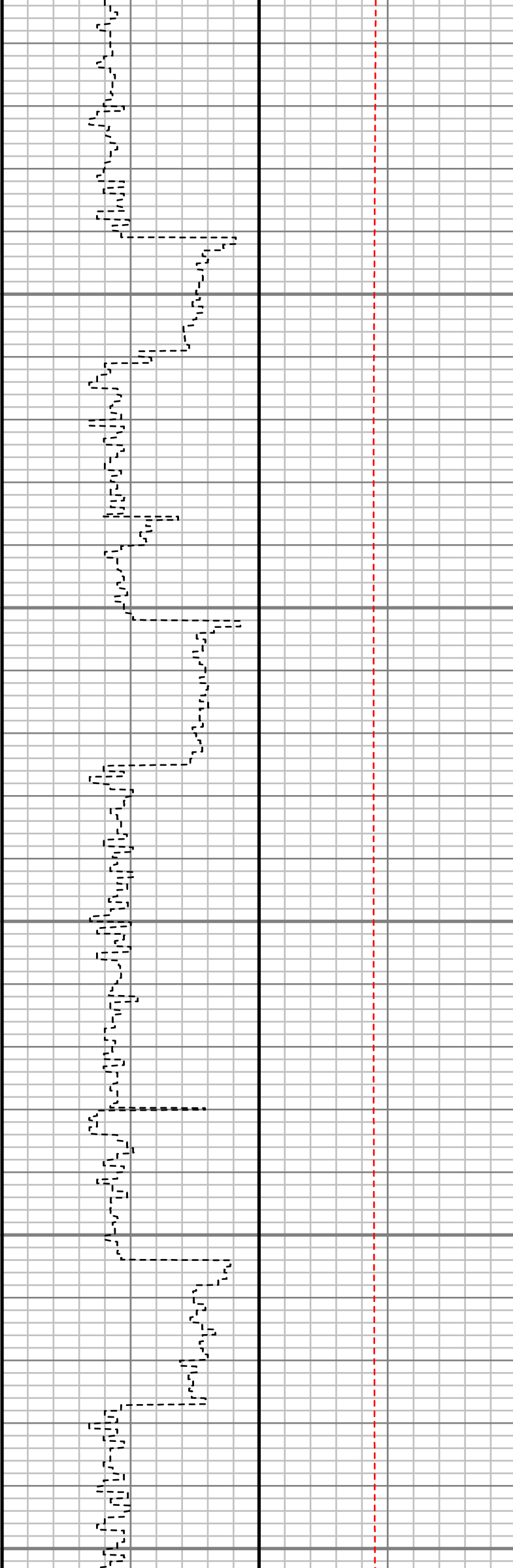
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5550

5600

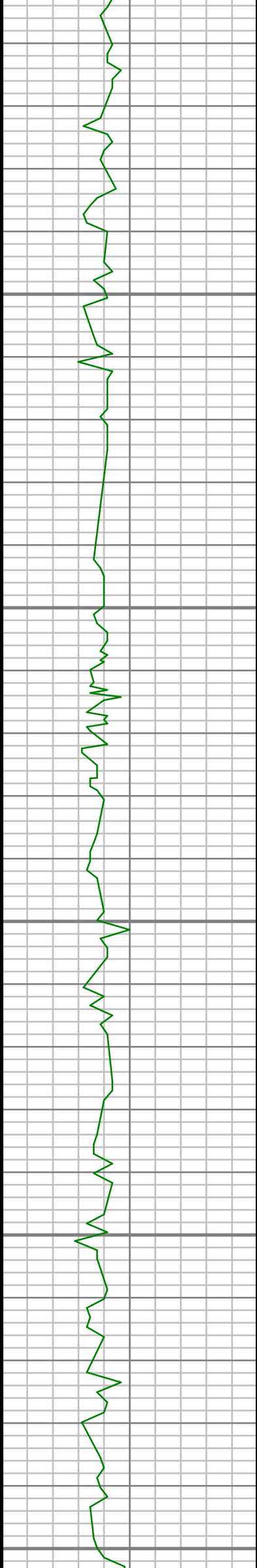
5650

5700



S: 51 MD: 5480.00 ft
Inc: 10.79 deg Az:
154.82 deg TVD:
5410.11 ft

S: 52 MD: 5668.00 ft
Inc: 13.95 deg Az:
163.99 deg TVD:
5593.74 ft



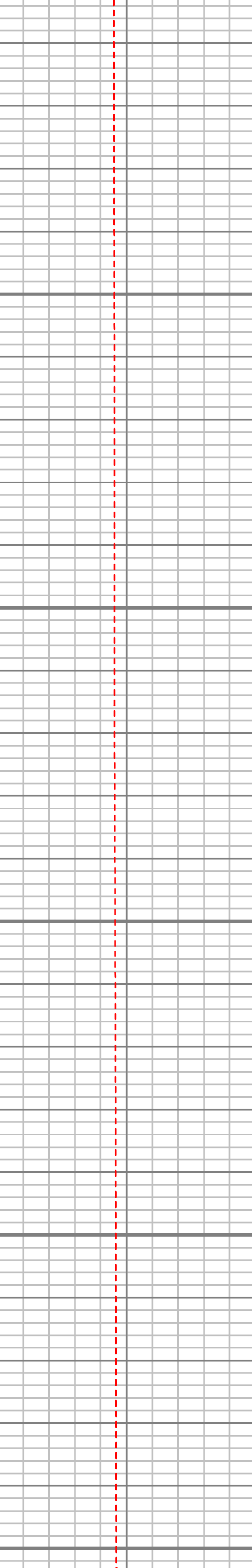
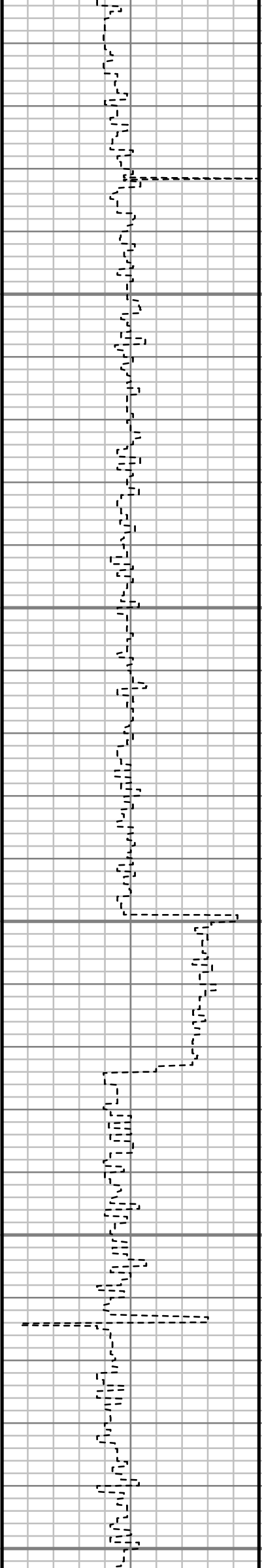
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5800

5850

5900

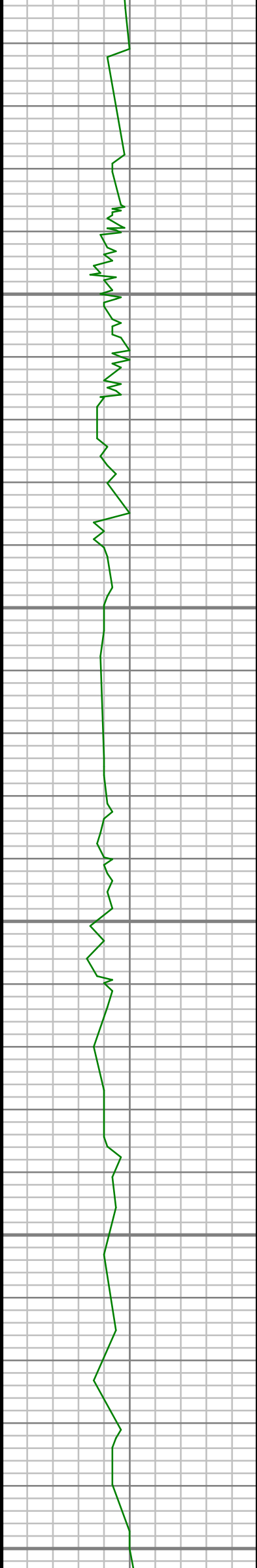
5950



S: 53 MD: 5763.00 ft
Inc: 12.85 deg Az:
162.54 deg TVD:
5686.15 ft

S: 54 MD: 5858.00 ft
Inc: 13.09 deg Az:
160.27 deg TVD:
5778.72 ft

S: 55 MD: 5953.00 ft



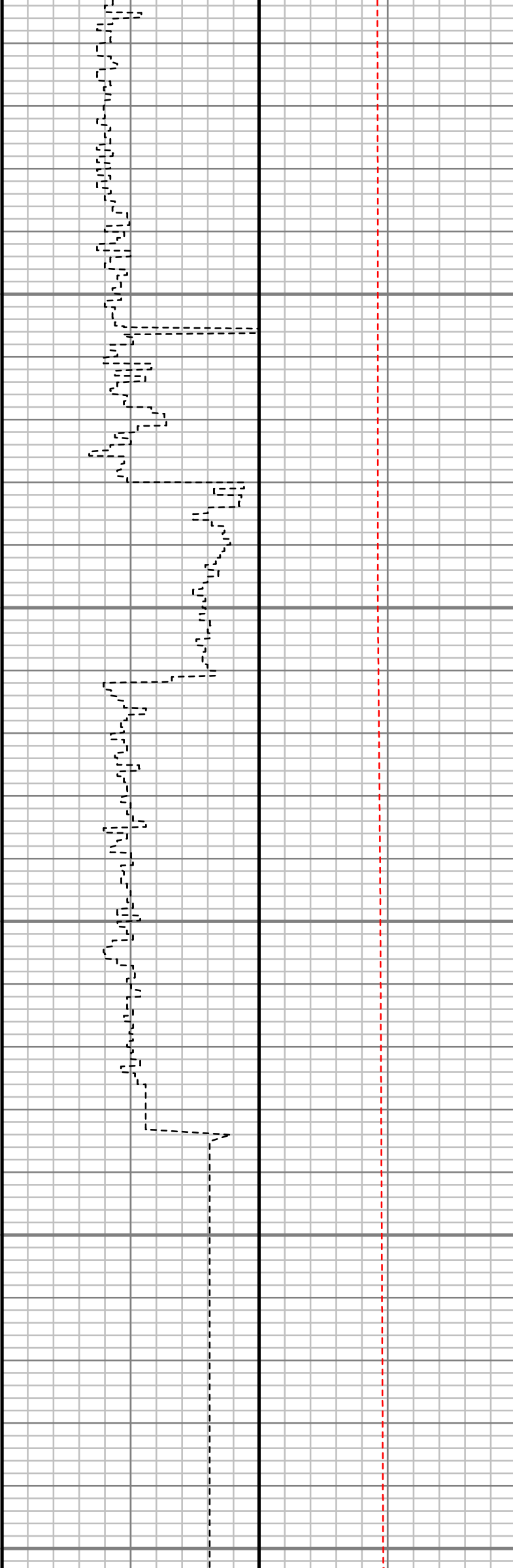
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6100

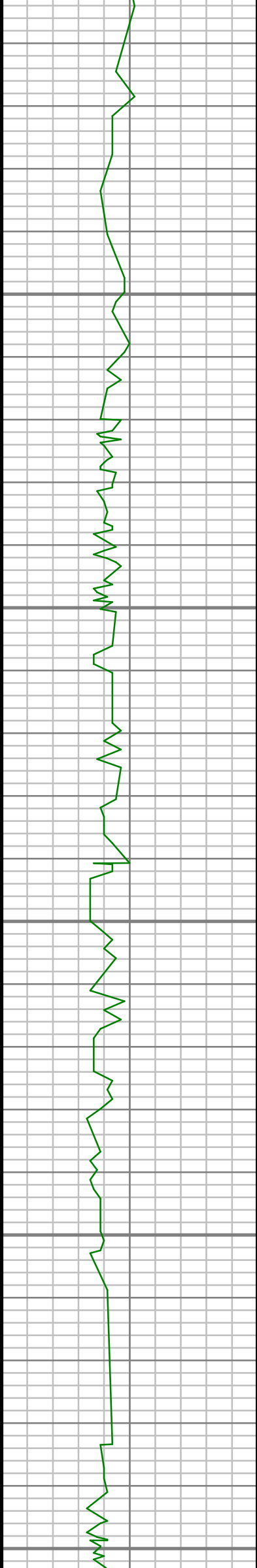
6150

6200



S: 55 MD: 5952.00 ft
Inc: 10.56 deg Az:
150.72 deg TVD:
5870.73 ft

S: 56 MD: 6141.00 ft
Inc: 12.49 deg Az:
151.91 deg TVD:
6055.91 ft



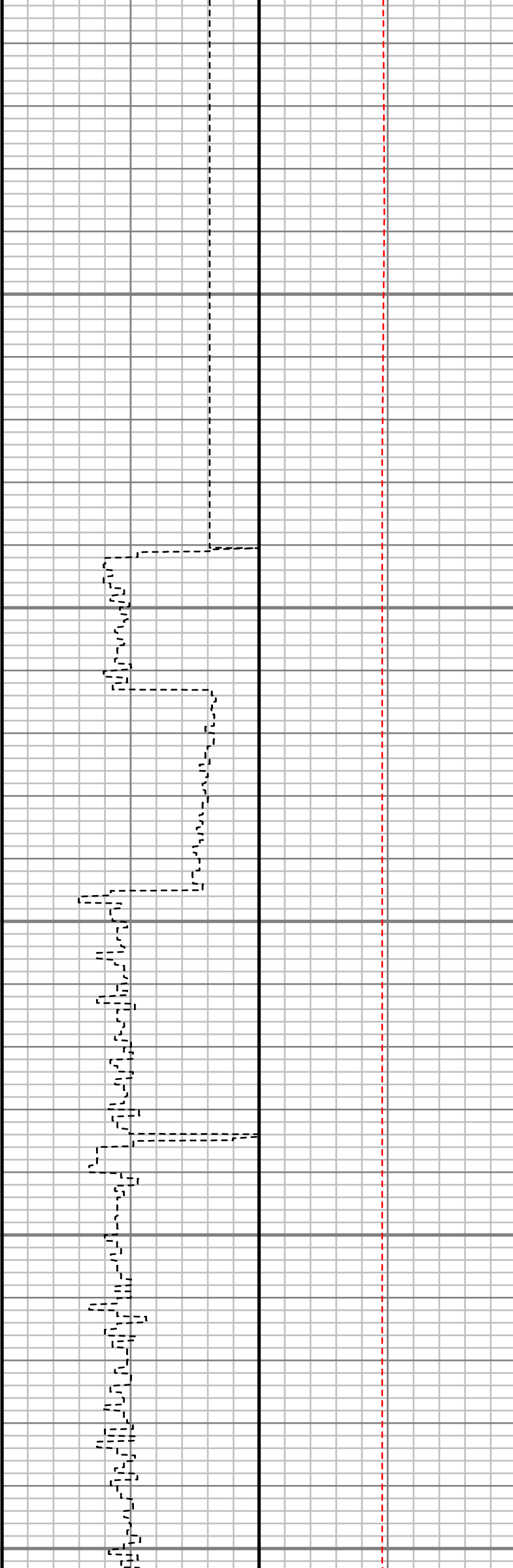
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6300

6350

6400

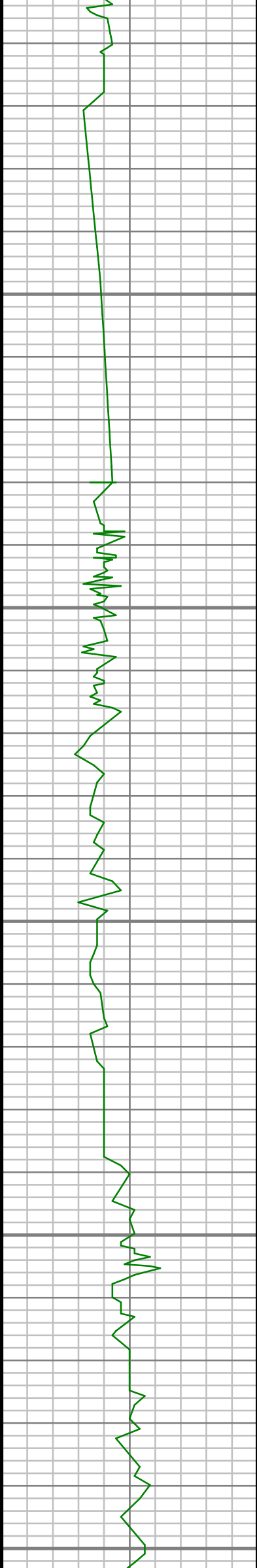
6450



S: 57 MD: 6235.00 ft
Inc: 10.30 deg Az:
152.30 deg TVD:
6148.05 ft

S: 58 MD: 6330.00 ft
Inc: 9.65 deg Az:
157.07 deg TVD:
6241.62 ft

S: 59 MD: 6424.00 ft
Inc: 7.28 deg Az:
154.57 deg TVD:
6334.59 ft



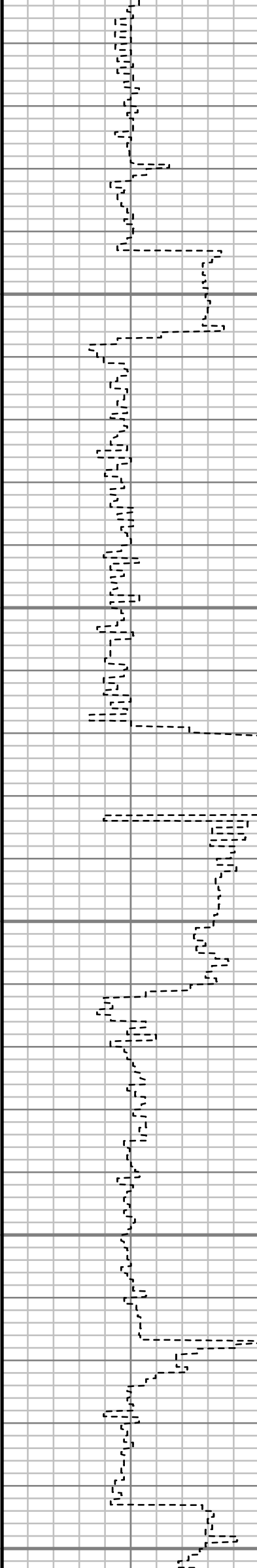
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6550

6600

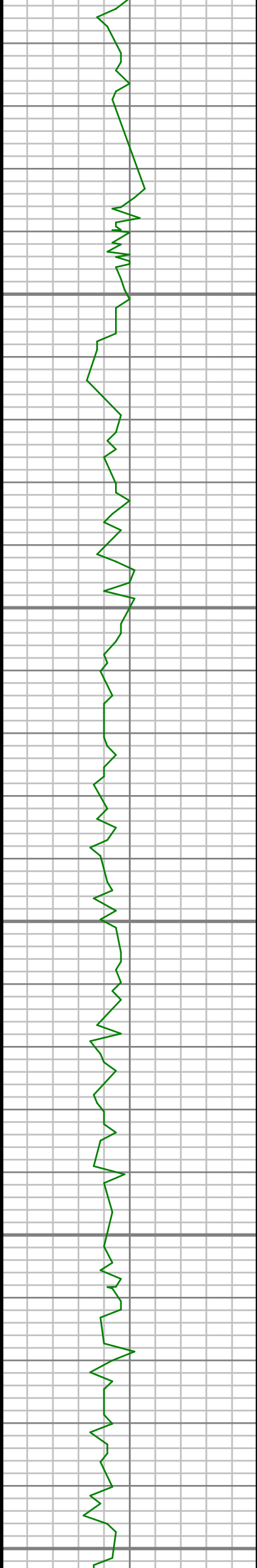
6650

6700



S: 60 MD: 6518.00 ft
Inc: 7.70 deg Az:
157.28 deg TVD:
6427.79 ft

S: 61 MD: 6613.00 ft
Inc: 8.32 deg Az:
162.47 deg TVD:
6521.86 ft



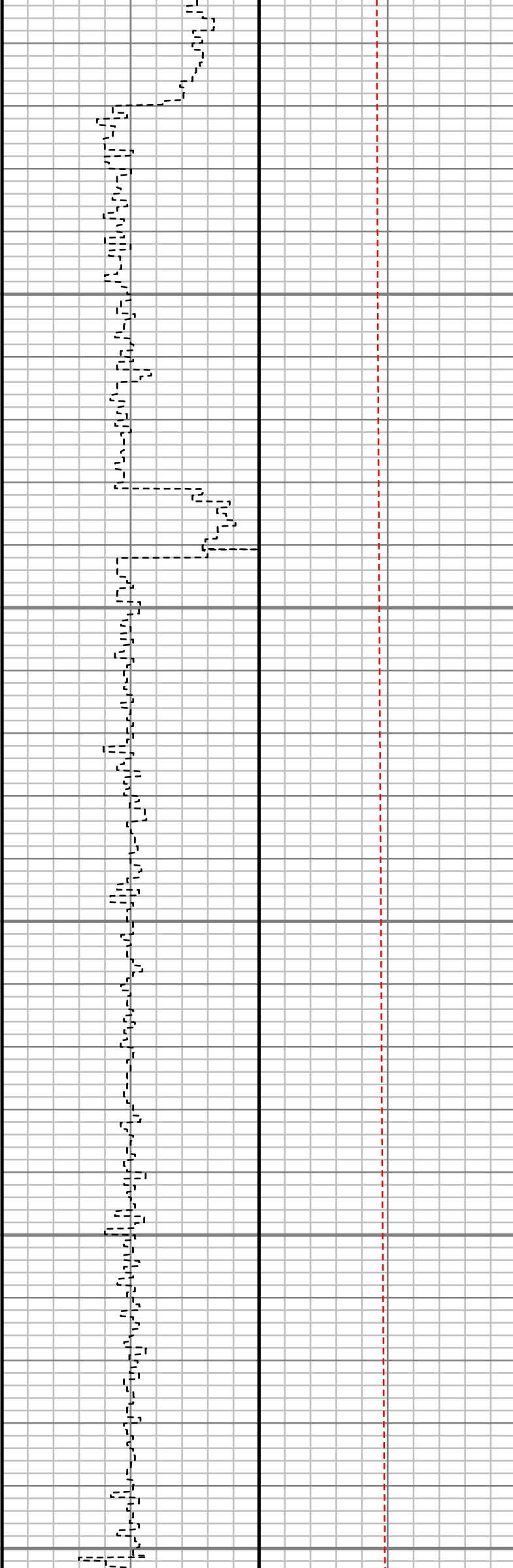
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6800

6850

6900

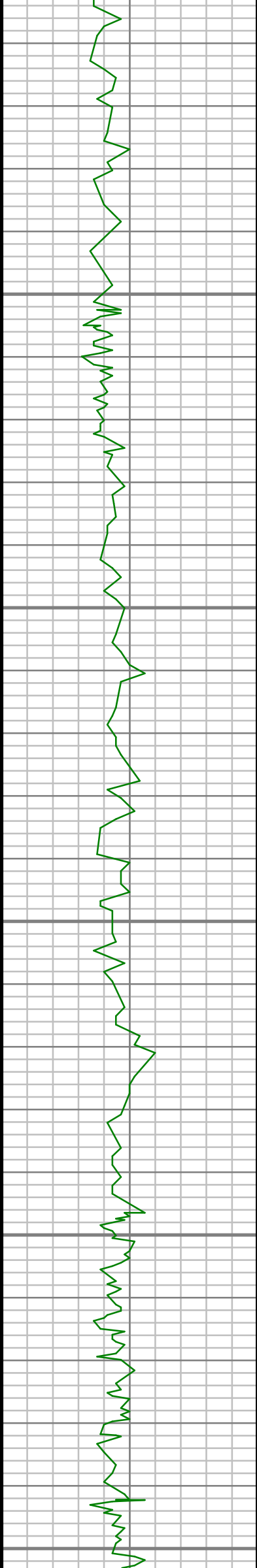
6950



S: 62 MD: 6707.00 ft
Inc: 7.40 deg Az:
152.24 deg TVD:
6614.98 ft

S: 63 MD: 6802.00 ft
Inc: 6.43 deg Az:
158.02 deg TVD:
6709.29 ft

S: 64 MD: 6896.00 ft
Inc: 4.32 deg Az:
162.85 deg TVD:
6802.87 ft



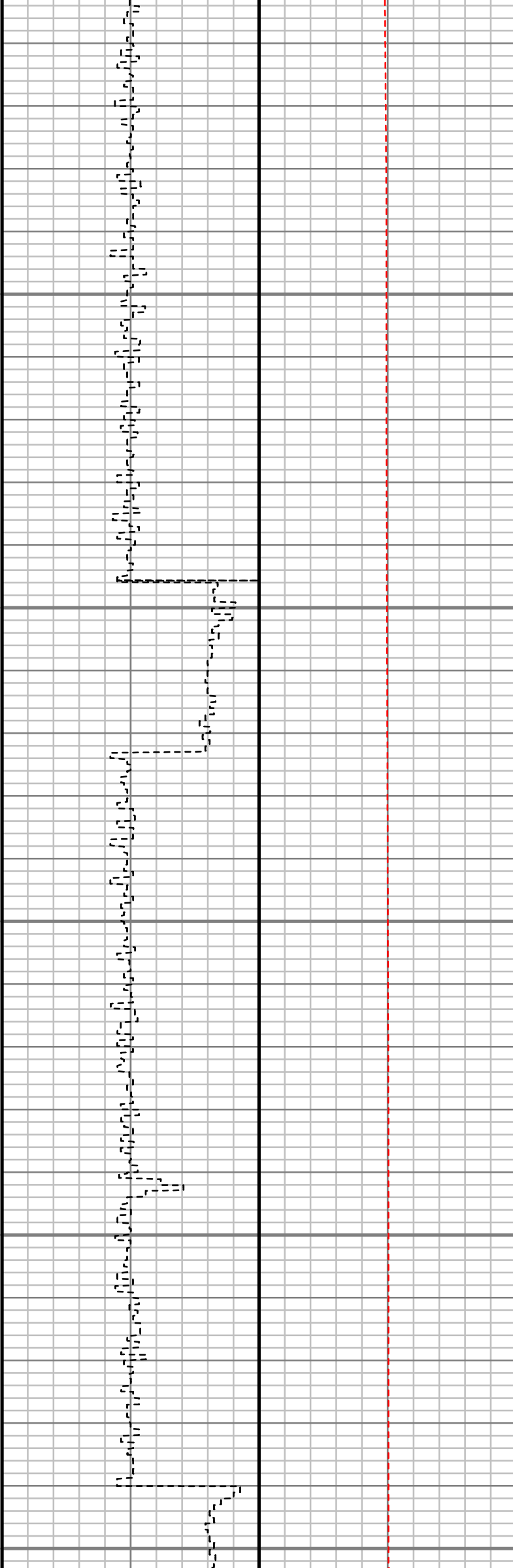
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7100

7150

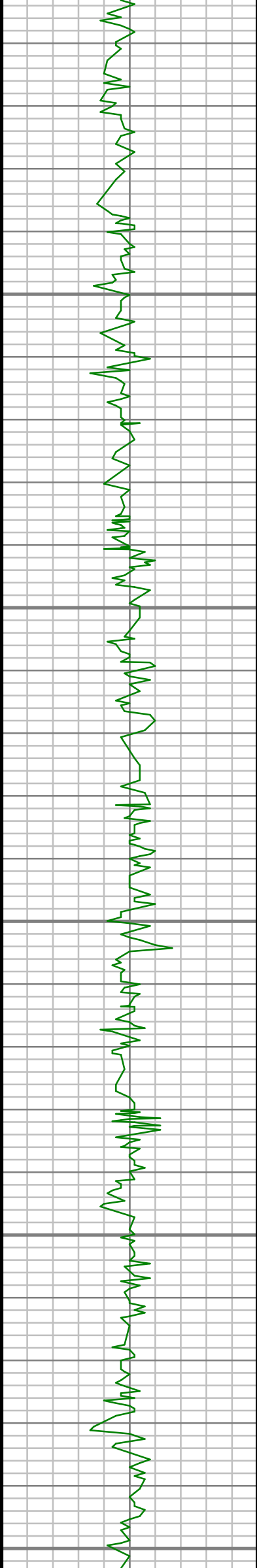
7200



S: 65 MD: 6991.00 ft
Inc: 2.98 deg Az:
158.55 deg TVD:
6897.68 ft

S: 66 MD: 7085.00 ft
Inc: 0.62 deg Az:
341.00 deg TVD:
6991.64 ft

S: 67 MD: 7179.00 ft
Inc: 0.64 deg Az:
329.09 deg TVD:
7085.64 ft



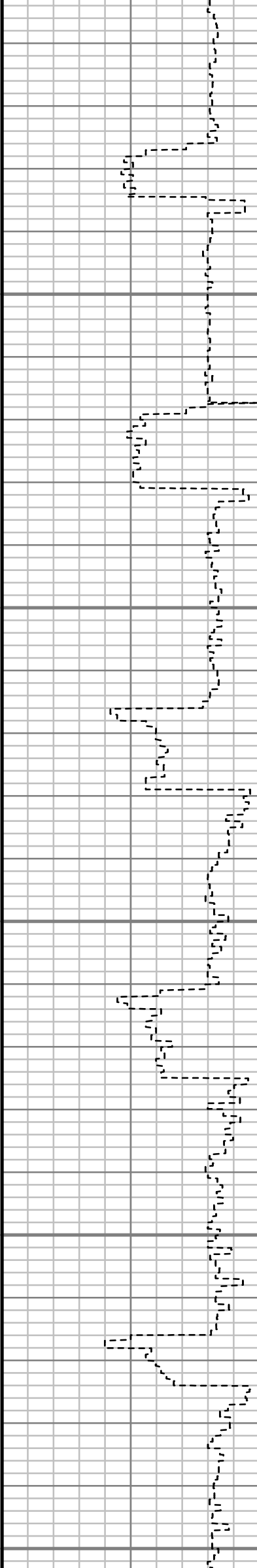
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7300

7350

7400

7450



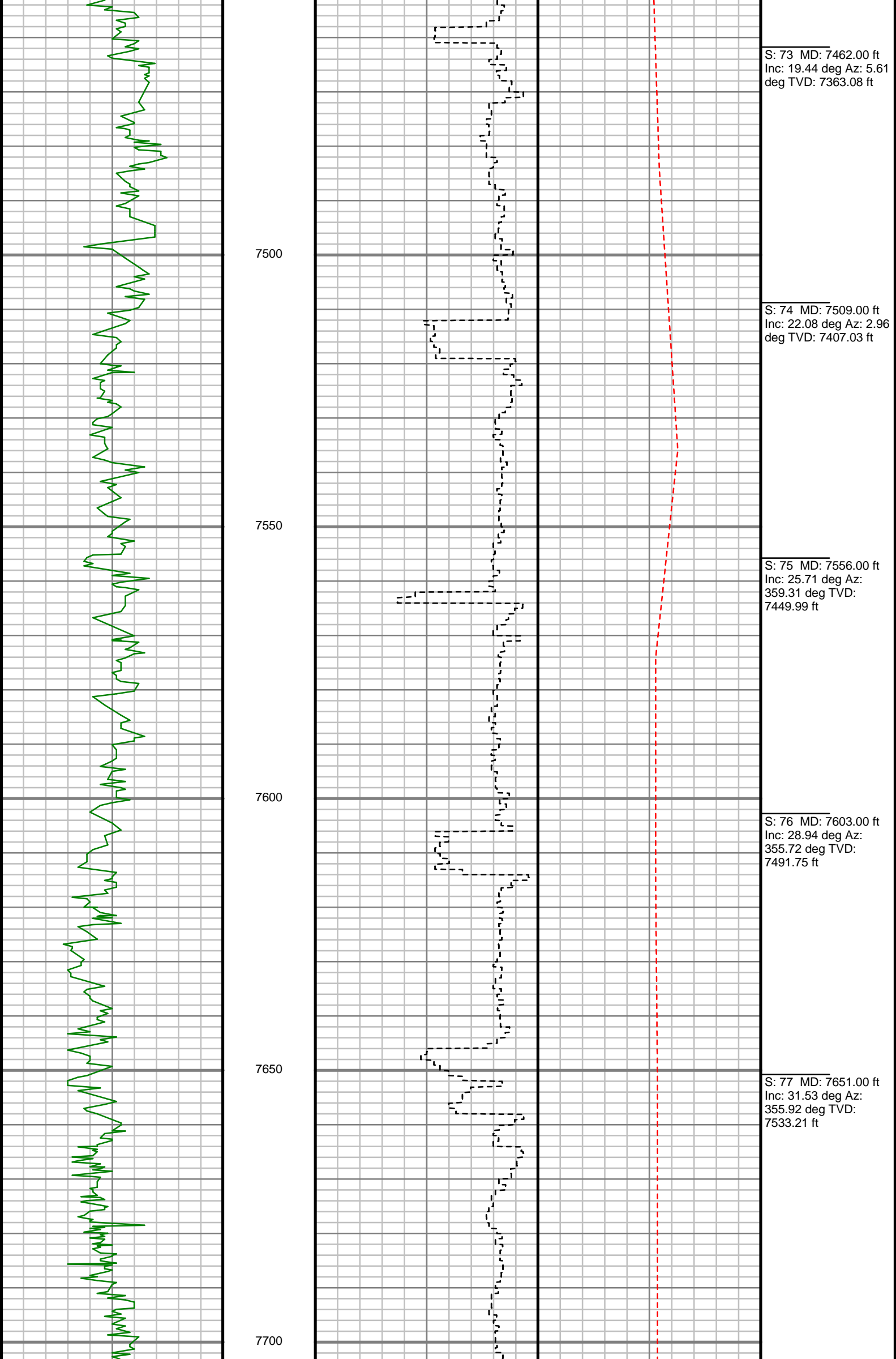
S: 68 MD: 7226.00 ft
Inc: 3.56 deg Az: 14.68
deg TVD: 7132.60 ft

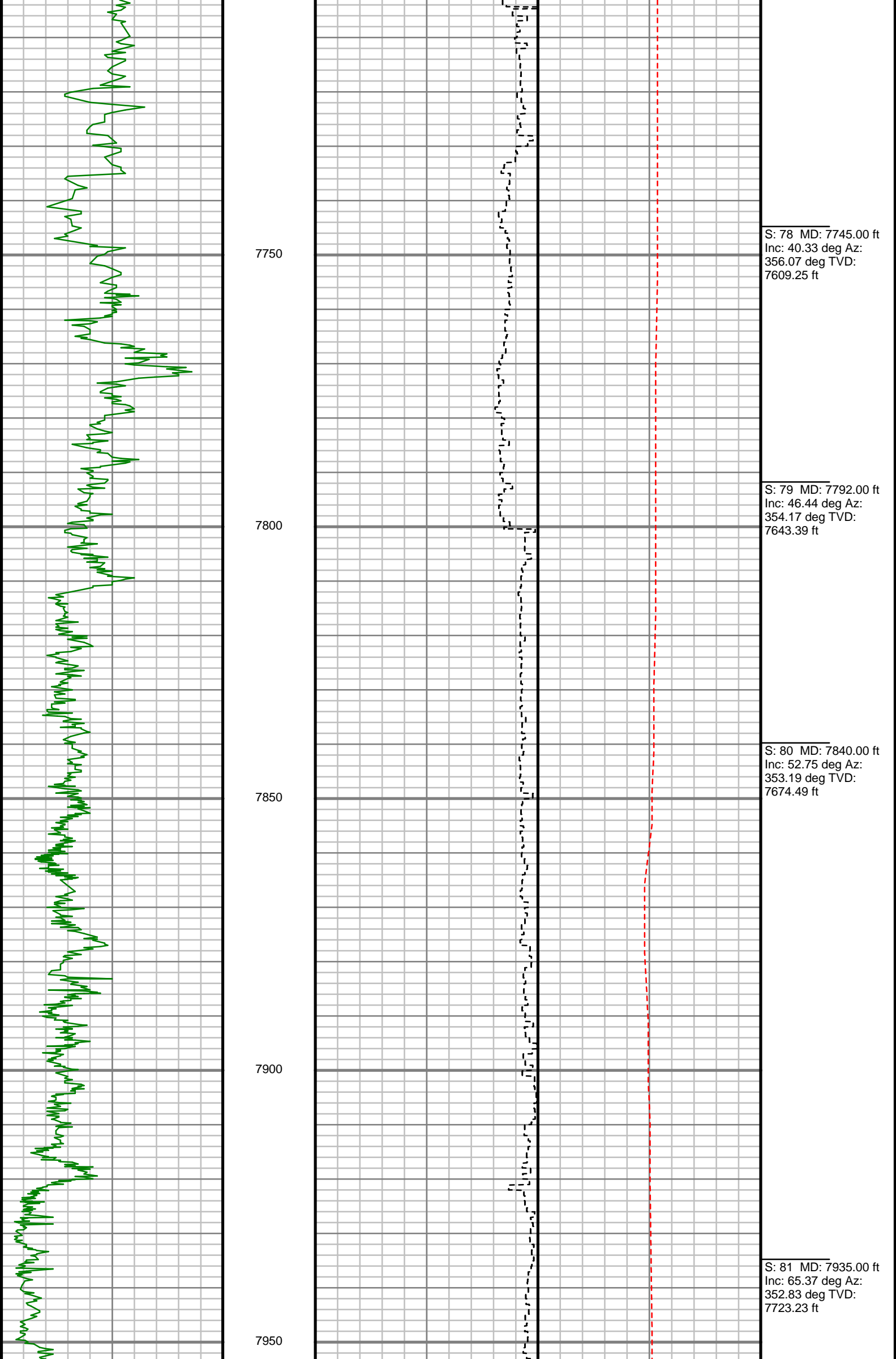
S: 69 MD: 7273.00 ft
Inc: 7.93 deg Az: 13.28
deg TVD: 7179.35 ft

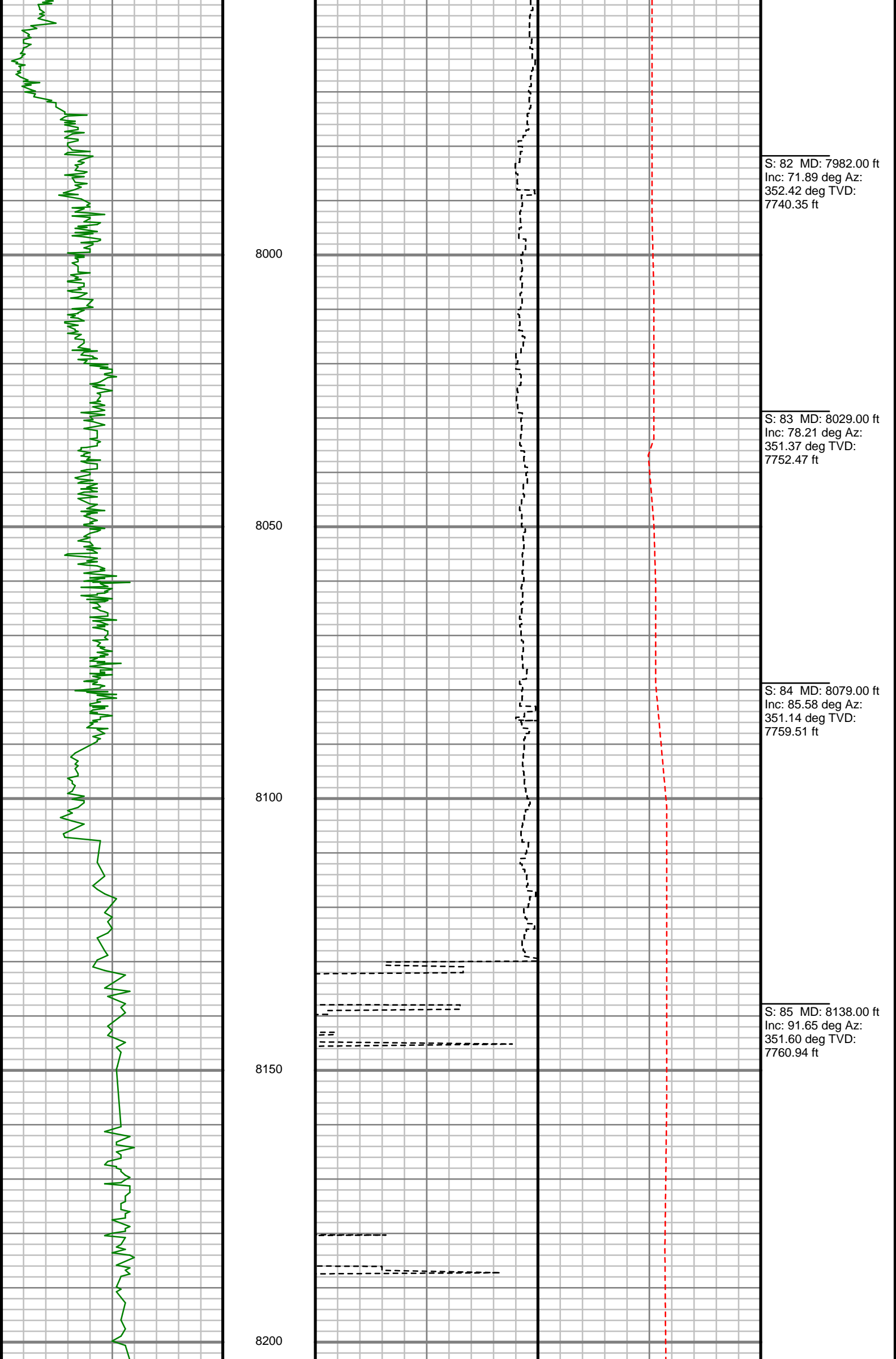
S: 70 MD: 7320.00 ft
Inc: 10.05 deg Az: 2.68
deg TVD: 7225.78 ft

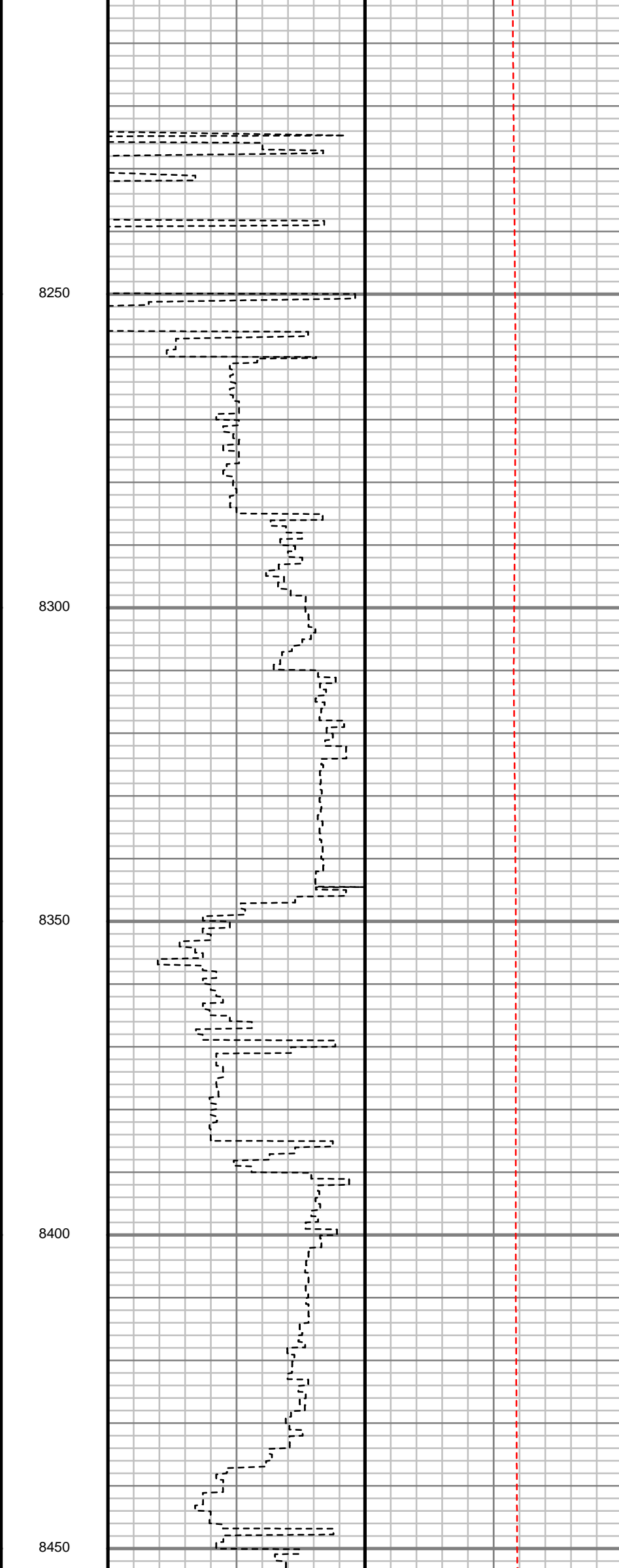
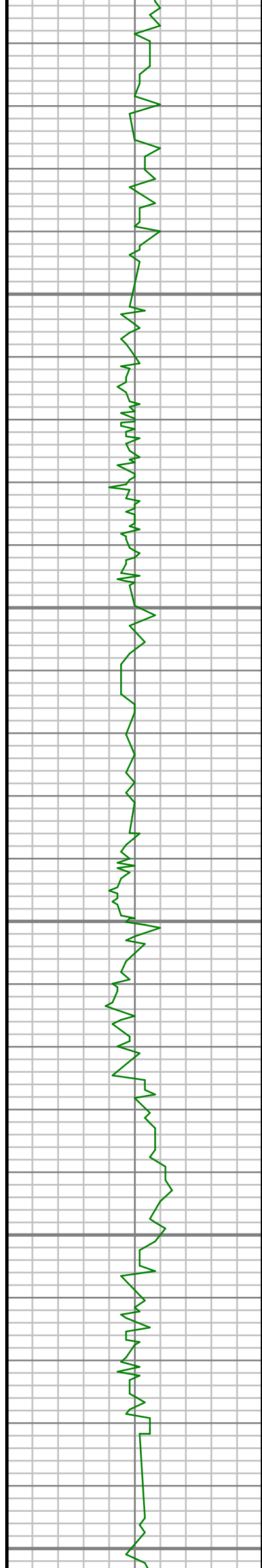
S: 71 MD: 7368.00 ft
Inc: 12.96 deg Az: 4.36
deg TVD: 7272.81 ft

S: 72 MD: 7415.00 ft
Inc: 15.96 deg Az: 4.96
deg TVD: 7318.31 ft





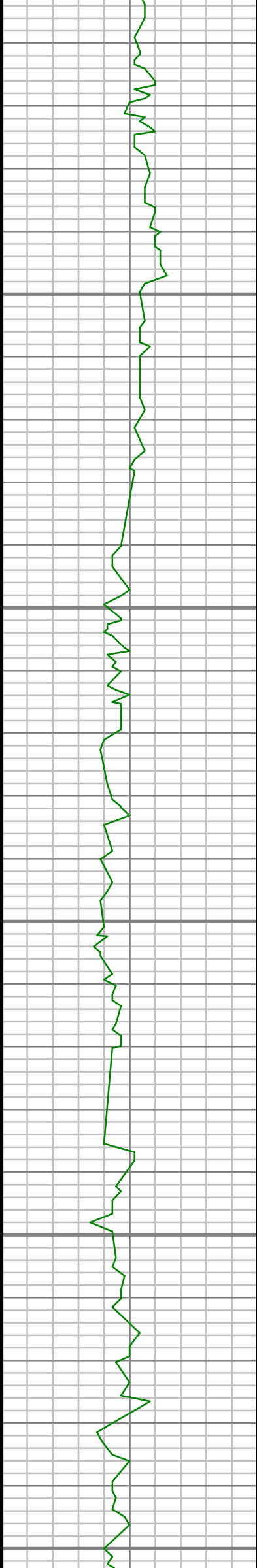




S: 86 MD: 8232.00 ft
Inc: 91.89 deg Az:
352.37 deg TVD:
7758.05 ft

S: 87 MD: 8326.00 ft
Inc: 92.12 deg Az:
354.22 deg TVD:
7754.76 ft

S: 88 MD: 8421.00 ft
Inc: 90.61 deg Az:
356.92 deg TVD:
7752.50 ft



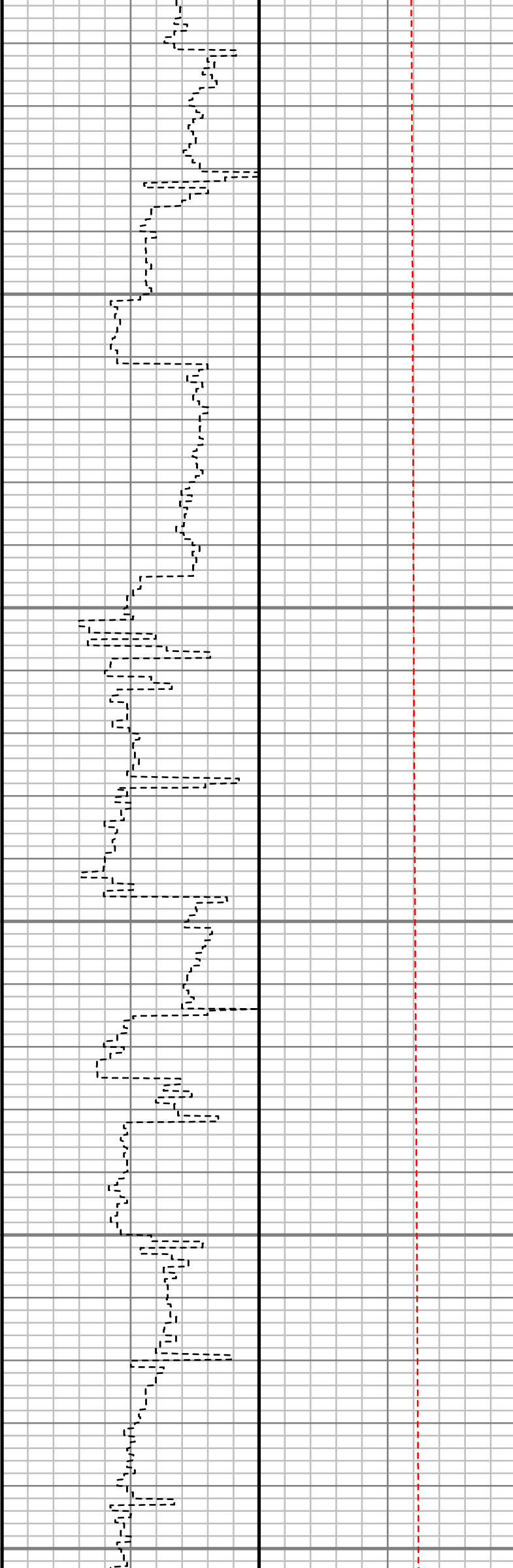
8500

8550

8600

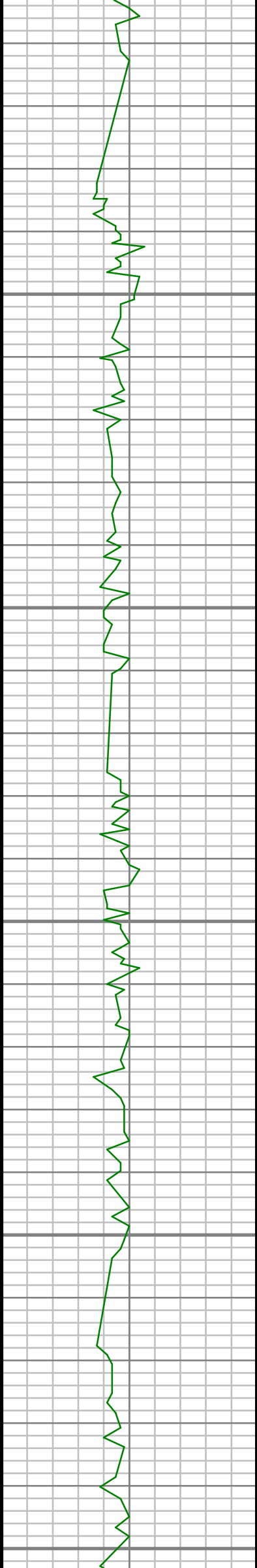
8650

8700



S: 89 MD: 8515.00 ft
Inc: 91.24 deg Az: 0.50
deg TVD: 7750.98 ft

S: 90 MD: 8609.00 ft
Inc: 89.63 deg Az: 1.44
deg TVD: 7750.27 ft



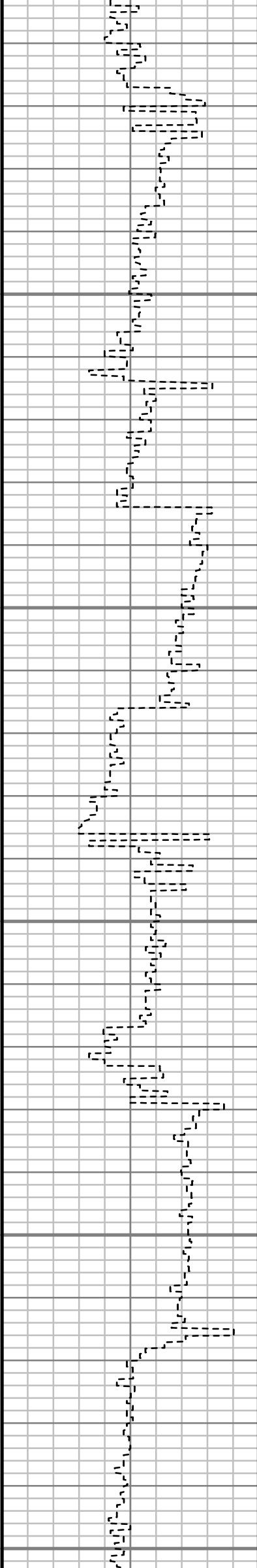
8750

8800

8850

8900

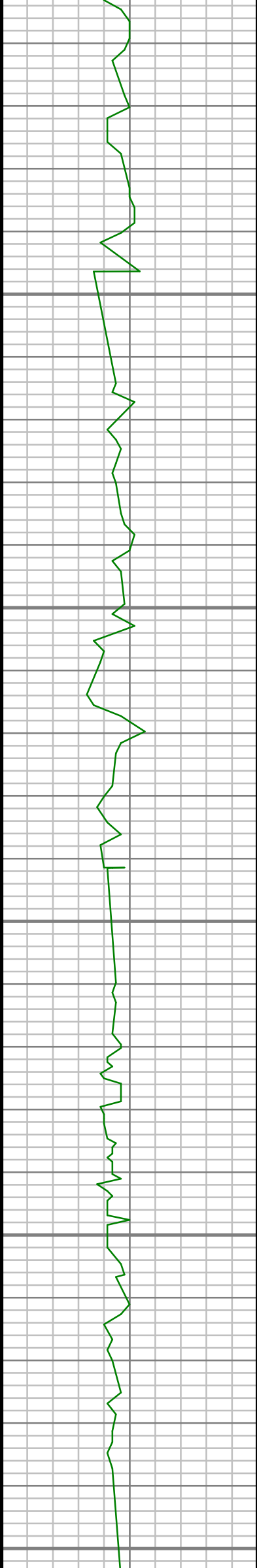
8950



S: 91 MD: 8703.00 ft
Inc: 89.56 deg Az: 1.31
deg TVD: 7750.93 ft

S: 92 MD: 8798.00 ft
Inc: 89.53 deg Az: 3.15
deg TVD: 7751.68 ft

S: 93 MD: 8892.00 ft
Inc: 89.33 deg Az: 4.94
deg TVD: 7752.62 ft



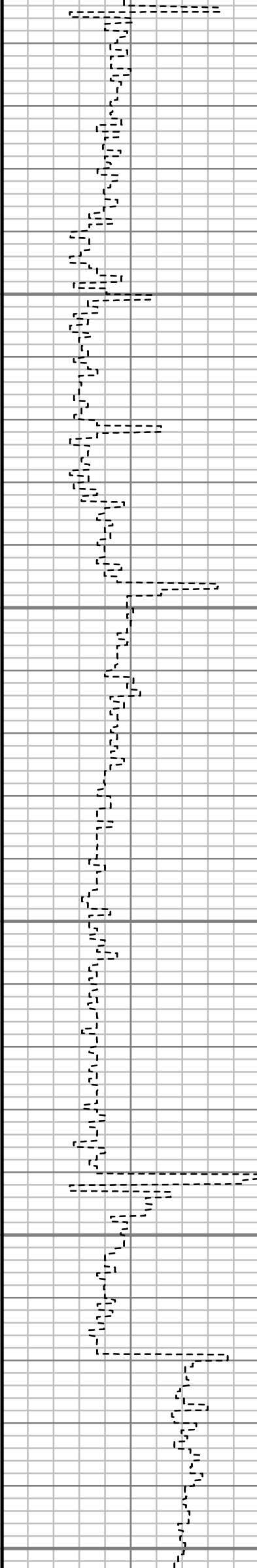
9000

9050

9100

9150

9200



S: 94 MD: 8986.00 ft
Inc: 89.33 deg Az: 4.96
deg TVD: 7753.72 ft

S: 95 MD: 9080.00 ft
Inc: 89.83 deg Az: 3.46
deg TVD: 7754.41 ft

S: 96 MD: 9175.00 ft
Inc: 90.64 deg Az: 3.77
deg TVD: 7754.02 ft



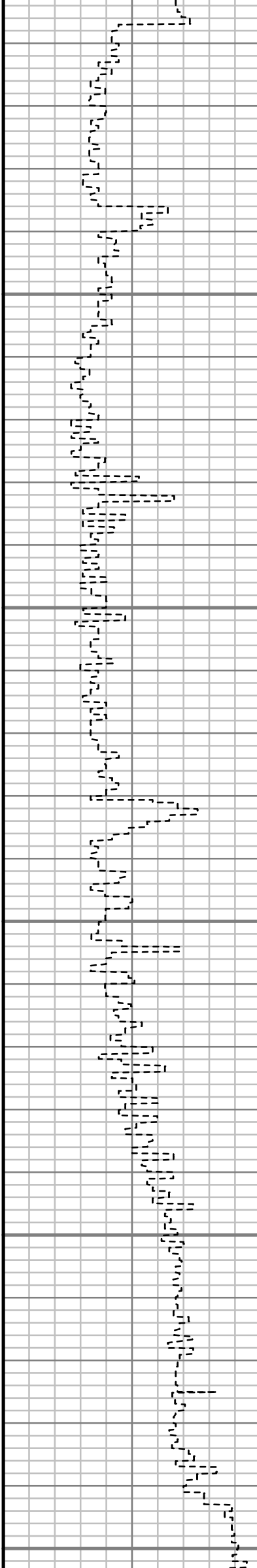
9250

9300

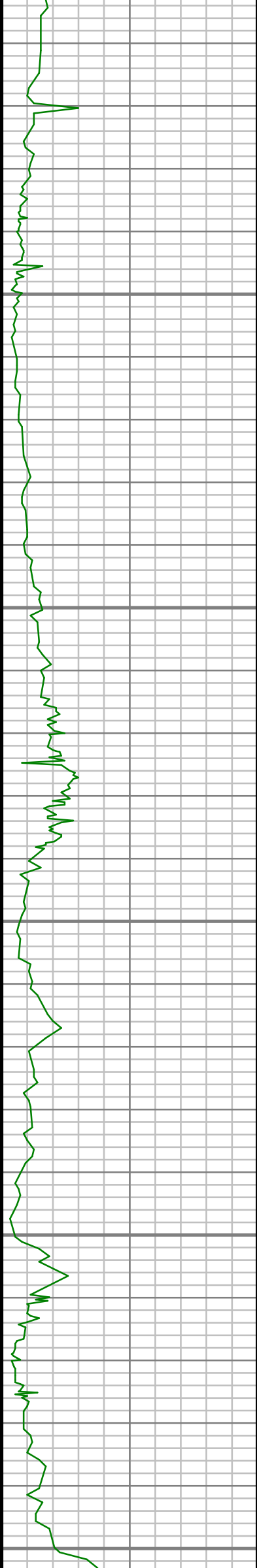
9350

9400

9450



S: 97 MD: 9269.00 ft
Inc: 90.20 deg Az: 5.00
deg TVD: 7753.33 ft



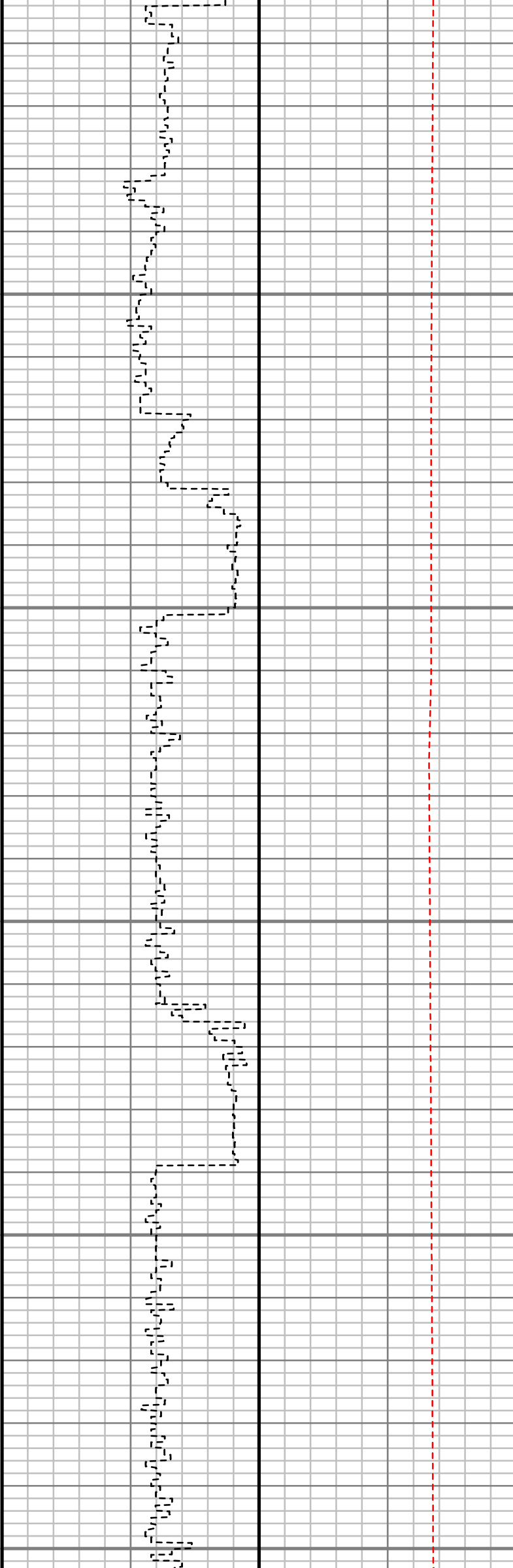
9500

9550

9600

9650

9700



S: 98 MD: 9458.00 ft
Inc: 89.50 deg Az: 2.43
deg TVD: 7753.82 ft

S: 99 MD: 9646.00 ft
Inc: 91.78 deg Az: 3.64
deg TVD: 7751.72 ft



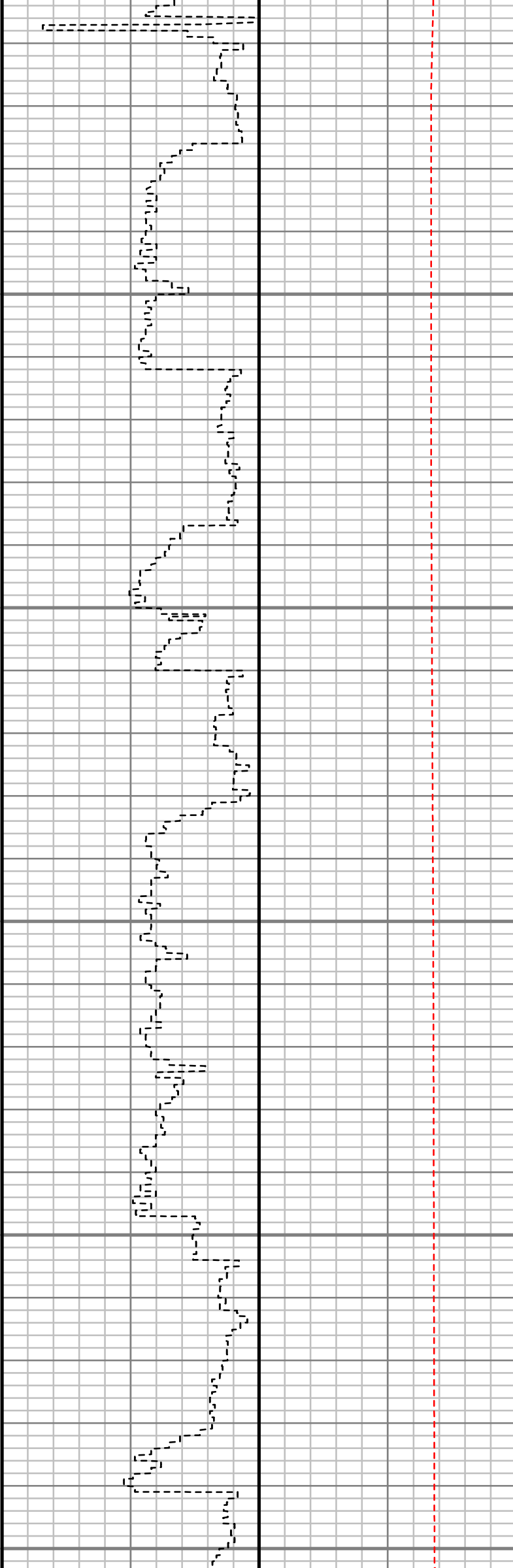
9750

9800

9850

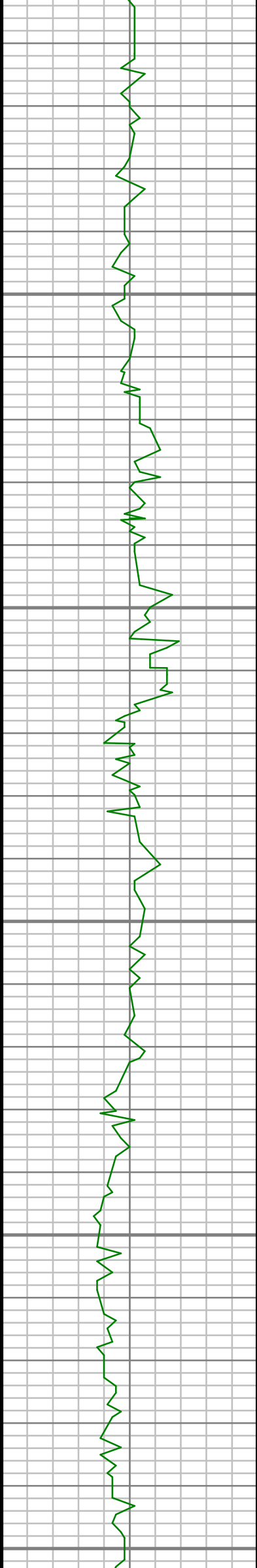
9900

9950



S: 100 MD: 9740.00 ft
Inc: 92.56 deg Az: 3.22
deg TVD: 7748.17 ft

S: 101 MD: 9929.00 ft
Inc: 90.07 deg Az: 3.23
deg TVD: 7743.84 ft



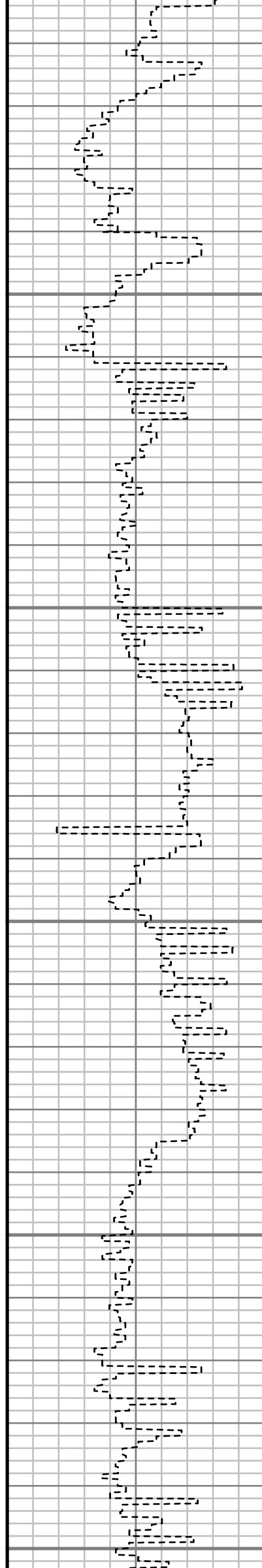
10000

10050

10100

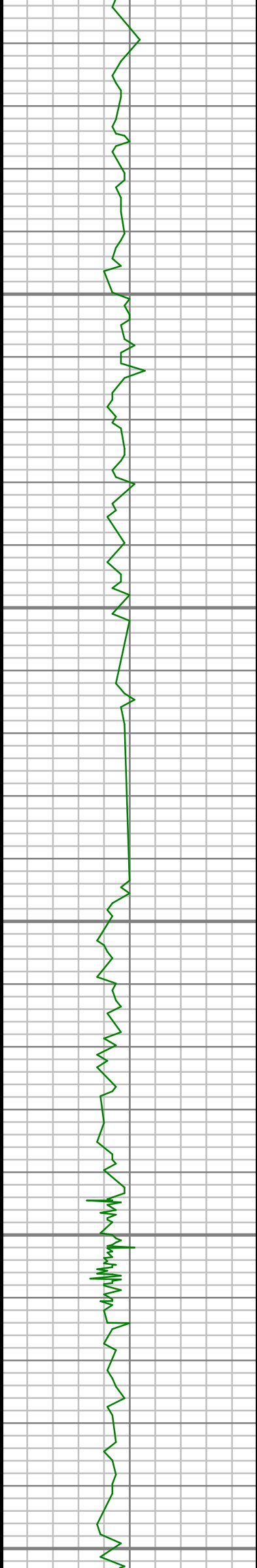
10150

10200



S: 102 MD: 10023.00 ft
Inc: 88.89 deg Az: 2.84
deg TVD: 7744.70 ft

S: 103 MD: 10118.00 ft
Inc: 88.79 deg Az: 2.49
deg TVD: 7746.62 ft



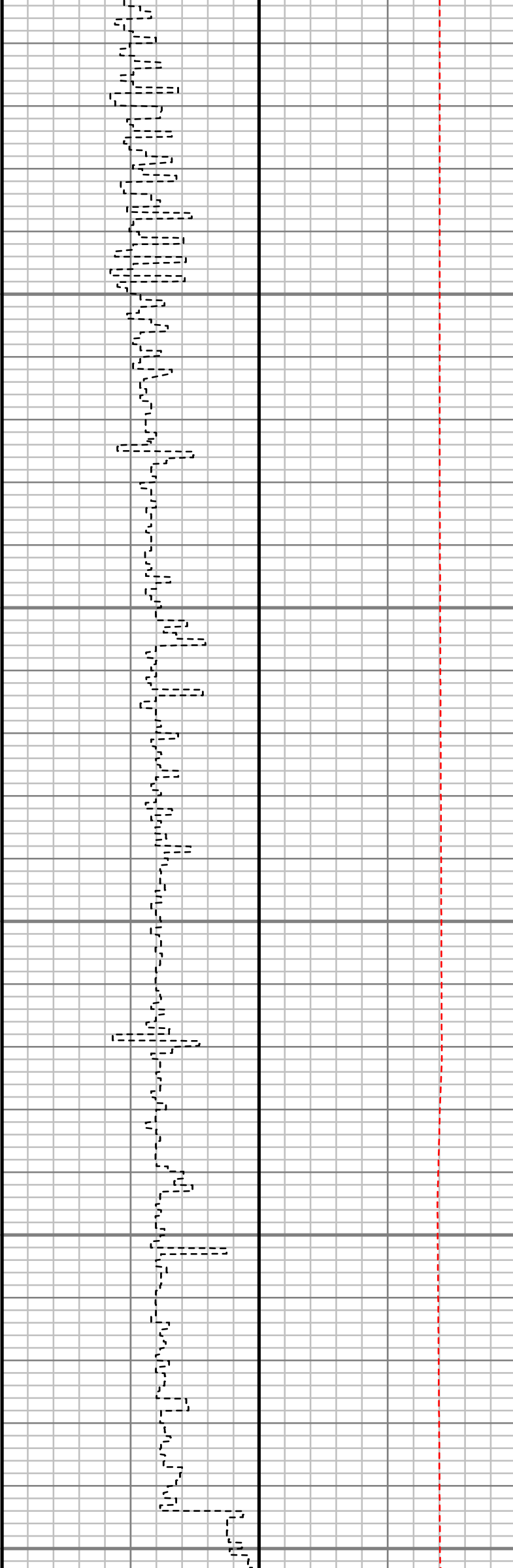
10250

10300

10350

10400

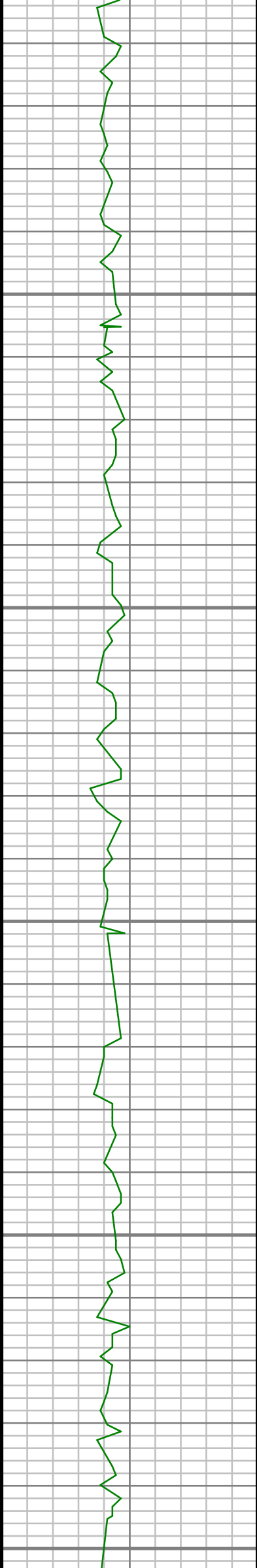
10450



S: 104 MD: 10212.00 ft
Inc: 88.93 deg Az: 1.68
deg TVD: 7748.49 ft

S: 105 MD: 10306.00 ft
Inc: 89.56 deg Az: 1.27
deg TVD: 7749.73 ft

S: 106 MD: 10401.00 ft
Inc: 90.61 deg Az: 1.38
deg TVD: 7749.59 ft



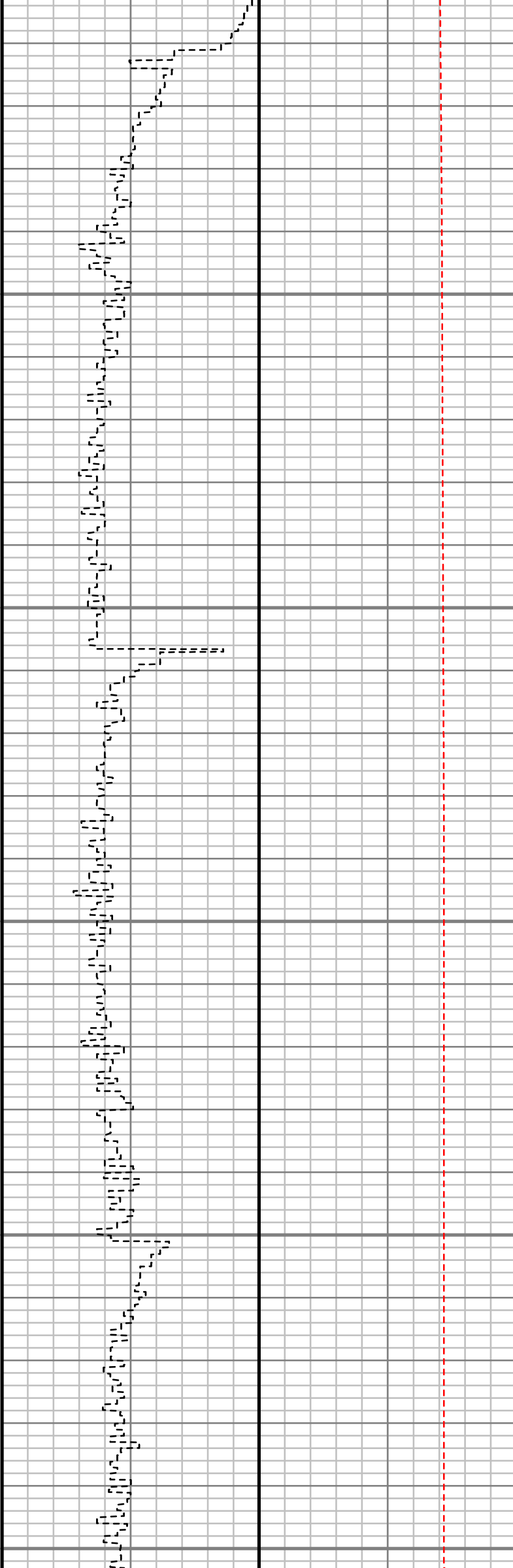
10500

10550

10600

10650

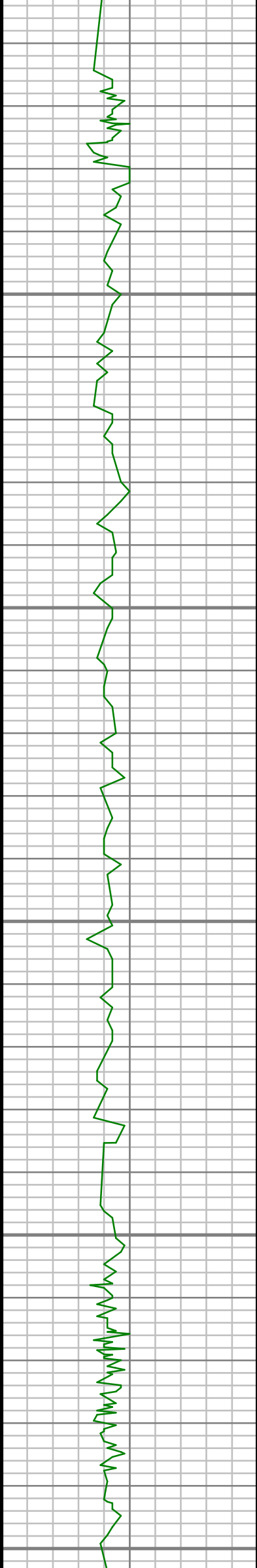
10700



S: 107 MD: 10495.00 ft
Inc: 89.36 deg Az: 0.63
deg TVD: 7749.62 ft

S: 108 MD: 10590.00 ft
Inc: 88.93 deg Az:
359.58 deg TVD:
7751.04 ft

S: 109 MD: 10684.00 ft
Inc: 90.30 deg Az:
359.96 deg TVD:
7751.67 ft



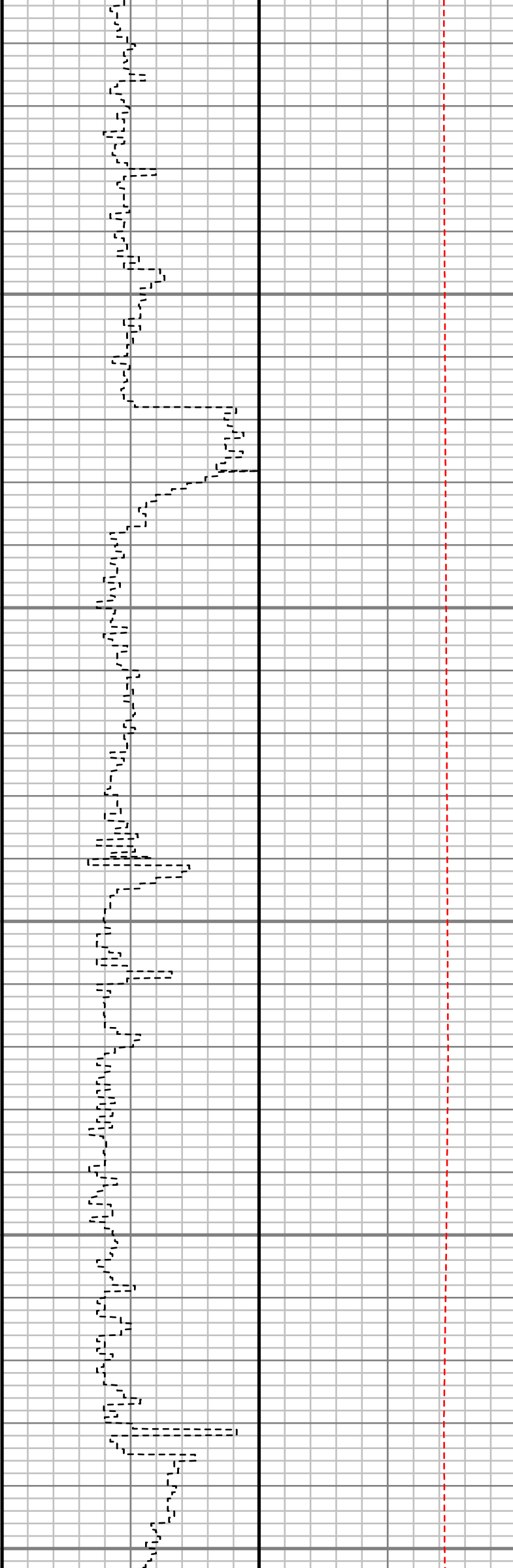
10750

10800

10850

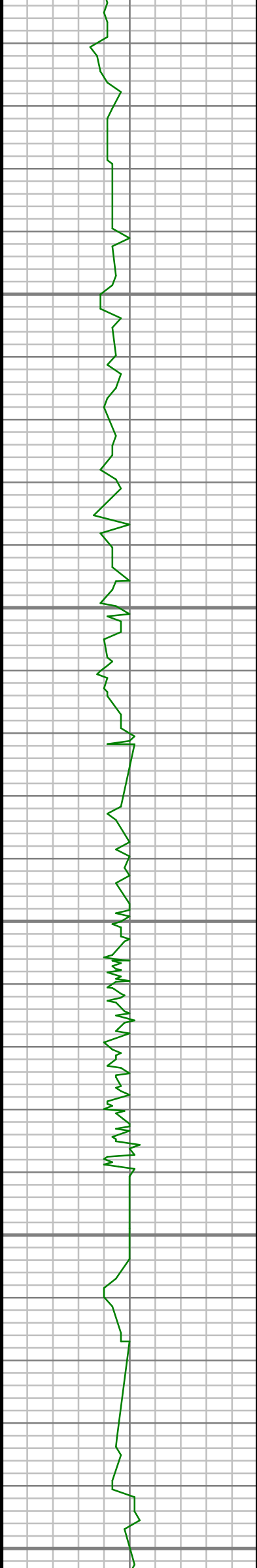
10900

10950



S: 110 MD: 10778.00 ft
Inc: 89.63 deg Az:
359.33 deg TVD:
7751.73 ft

S: 111 MD: 10873.00 ft
Inc: 89.36 deg Az:
358.30 deg TVD:
7752.56 ft



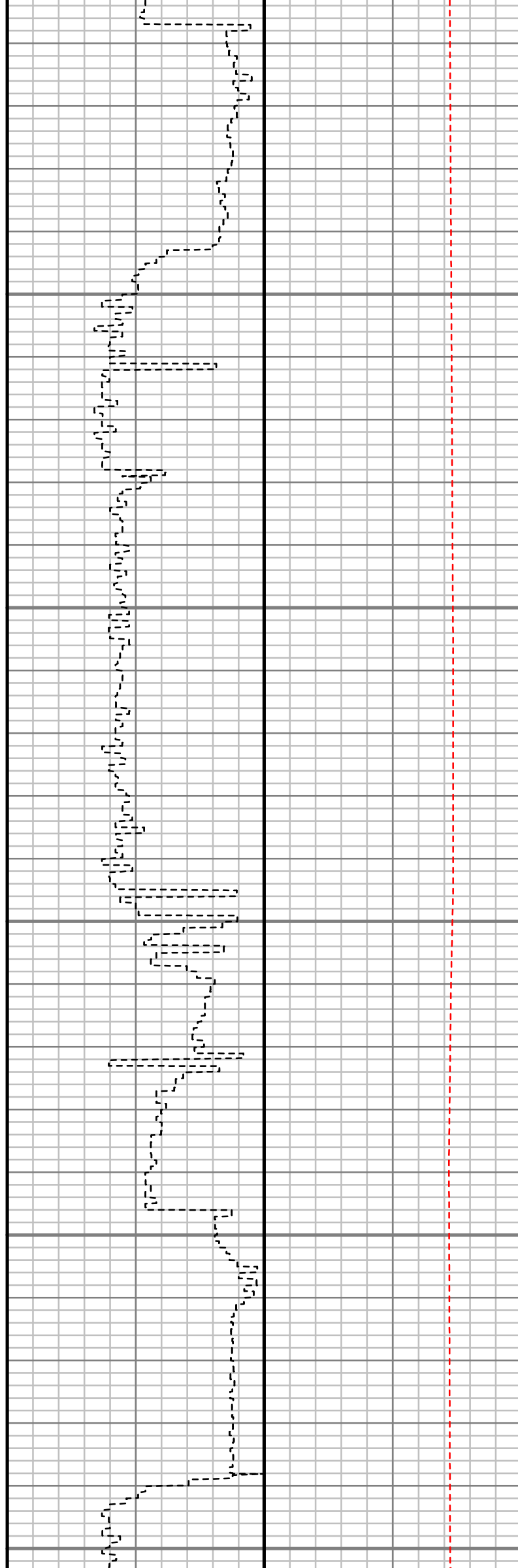
11000

11050

11100

11150

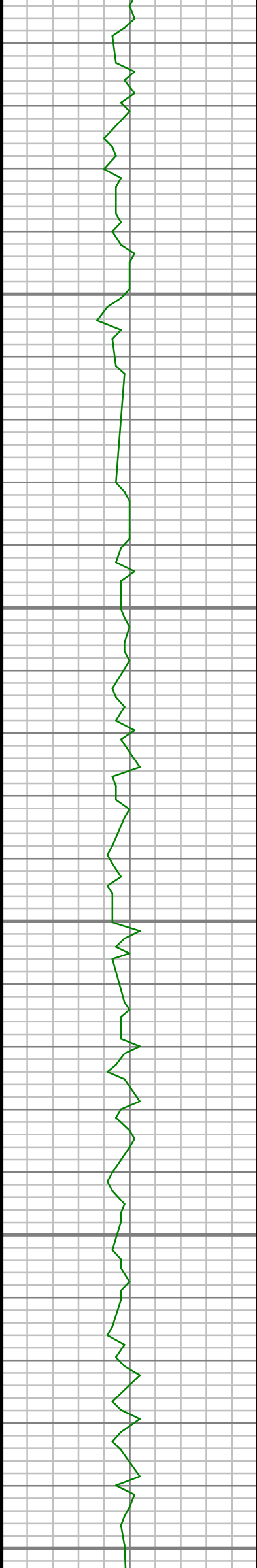
11200



S: 112 MD: 10967.00 ft
Inc: 89.80 deg Az:
358.84 deg TVD:
7753.25 ft

S: 113 MD: 11061.00 ft
Inc: 89.29 deg Az:
358.48 deg TVD:
7754.00 ft

S: 114 MD: 11156.00 ft
Inc: 89.80 deg Az:
358.91 deg TVD:
7754.75 ft



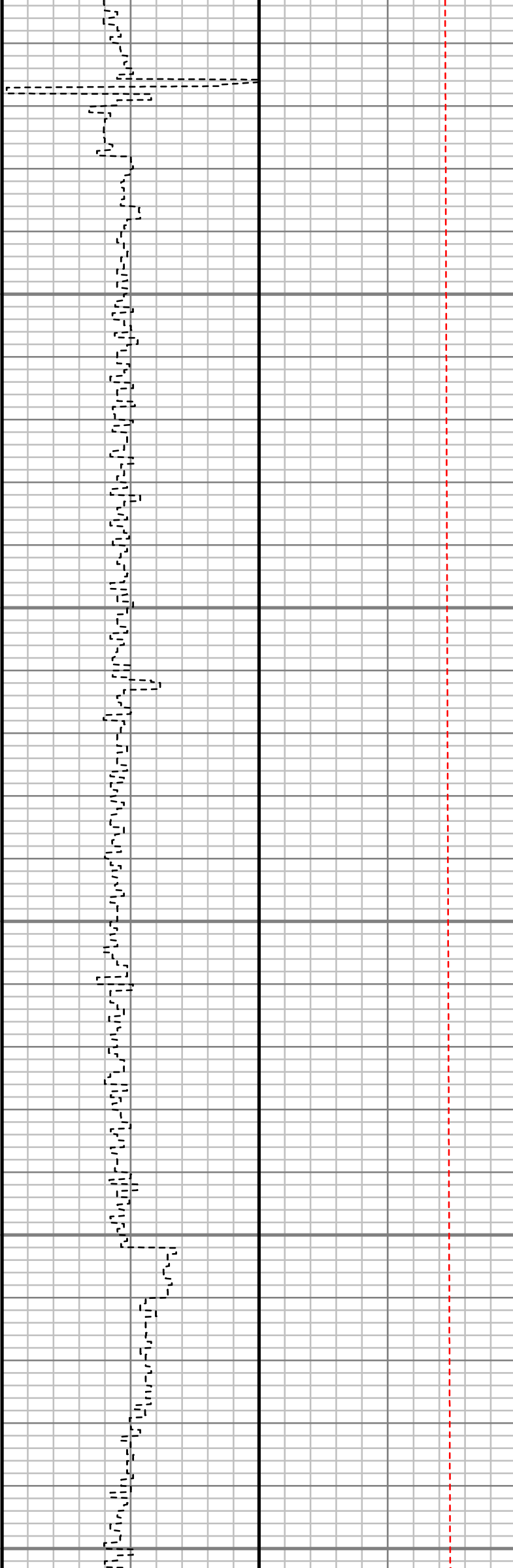
11250

11300

11350

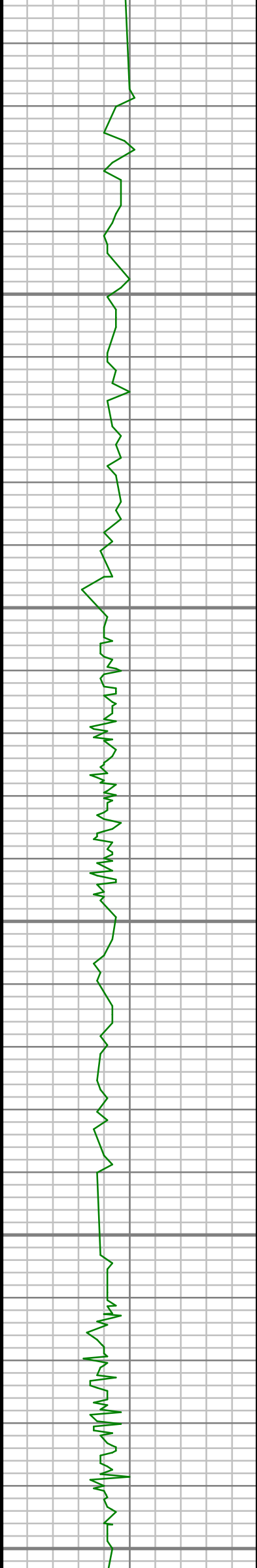
11400

11450



S: 115 MD: 11250.00 ft
Inc: 90.20 deg Az:
359.91 deg TVD:
7754.75 ft

S: 116 MD: 11438.00 ft
Inc: 91.11 deg Az:
359.12 deg TVD:
7752.60 ft



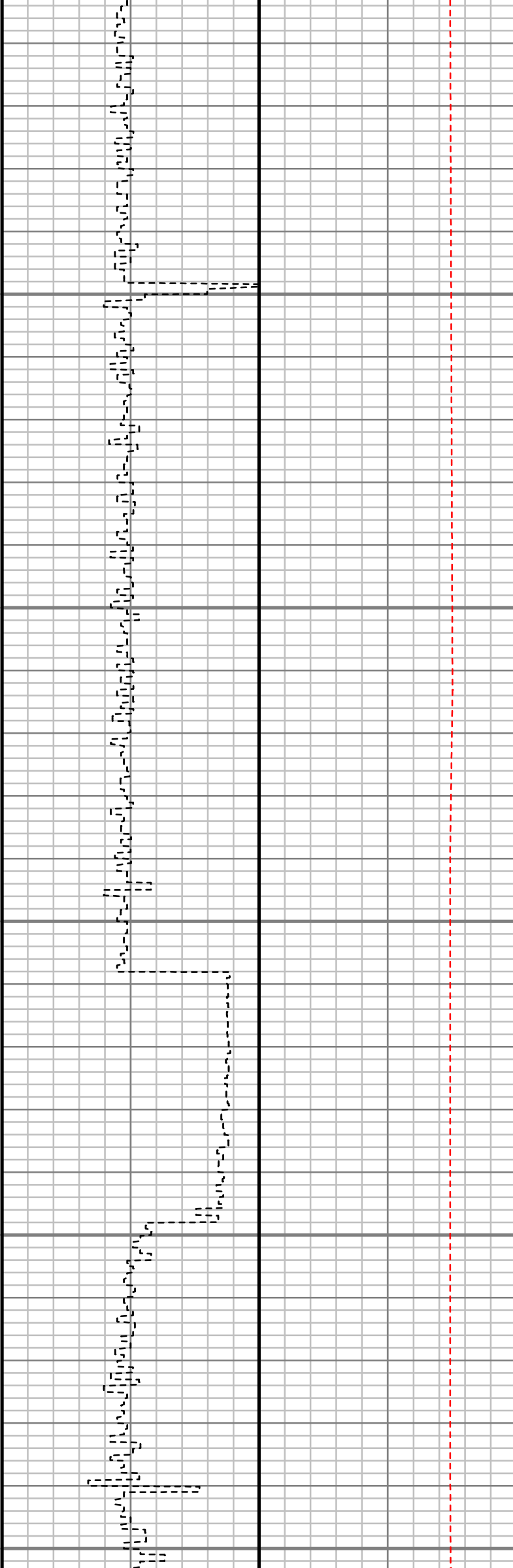
11500

11550

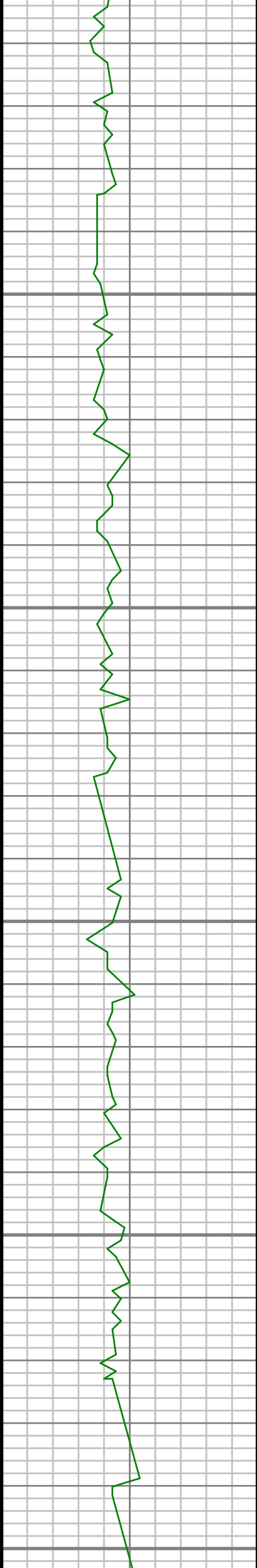
11600

11650

11700



S: 117 MD: 11627.00 ft
Inc: 90.98 deg Az:
359.92 deg TVD:
7749.17 ft



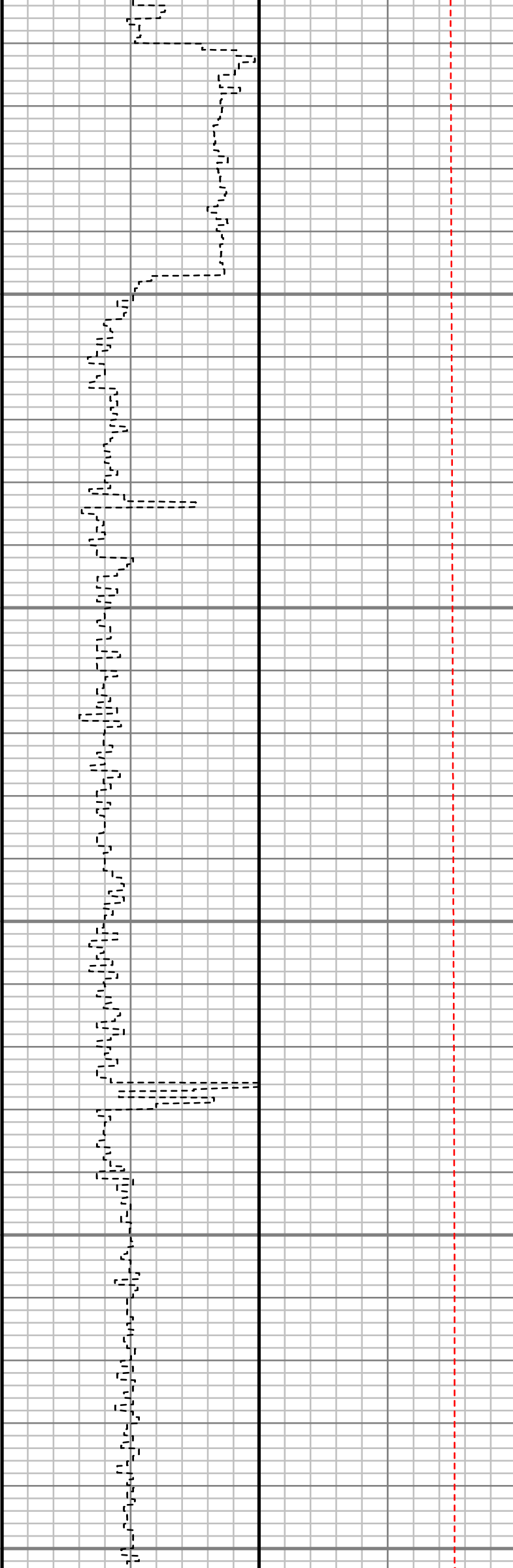
11750

11800

11850

11900

11950



S: 118 MD: 11722.00 ft
Inc: 89.30 deg Az: 0.18
deg TVD: 7748.94 ft

S: 119 MD: 11816.00 ft
Inc: 88.49 deg Az: 0.25
deg TVD: 7750.76 ft



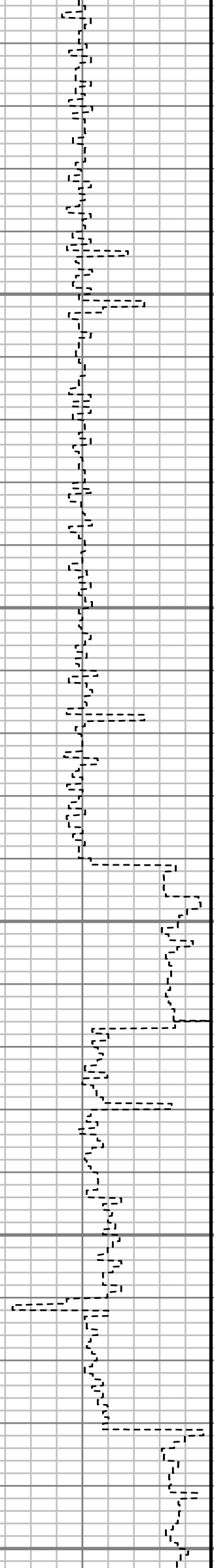
12000

12050

12100

12150

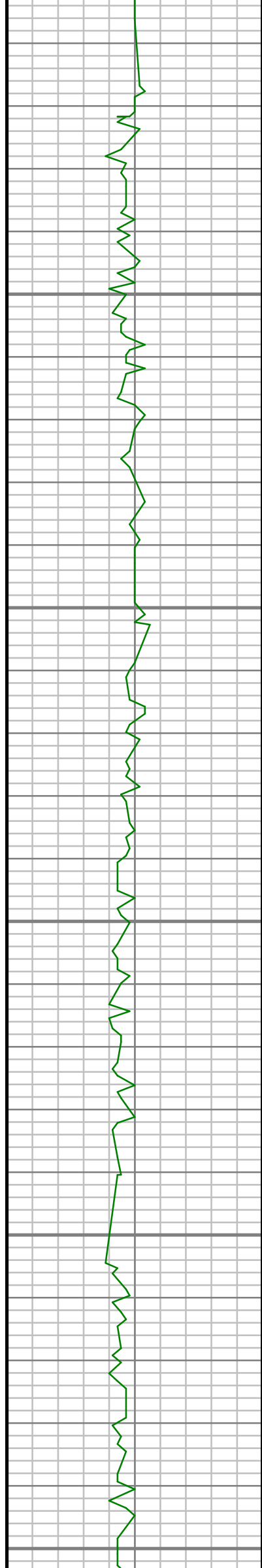
12200



S: 120 MD: 12005.00 ft
Inc: 88.86 deg Az:
359.52 deg TVD:
7755.13 ft

S: 121 MD: 12099.00 ft
Inc: 89.43 deg Az:
359.31 deg TVD:
7756.54 ft

S: 122 MD: 12194.00 ft
Inc: 90.13 deg Az: 0.70
deg TVD: 7756.90 ft



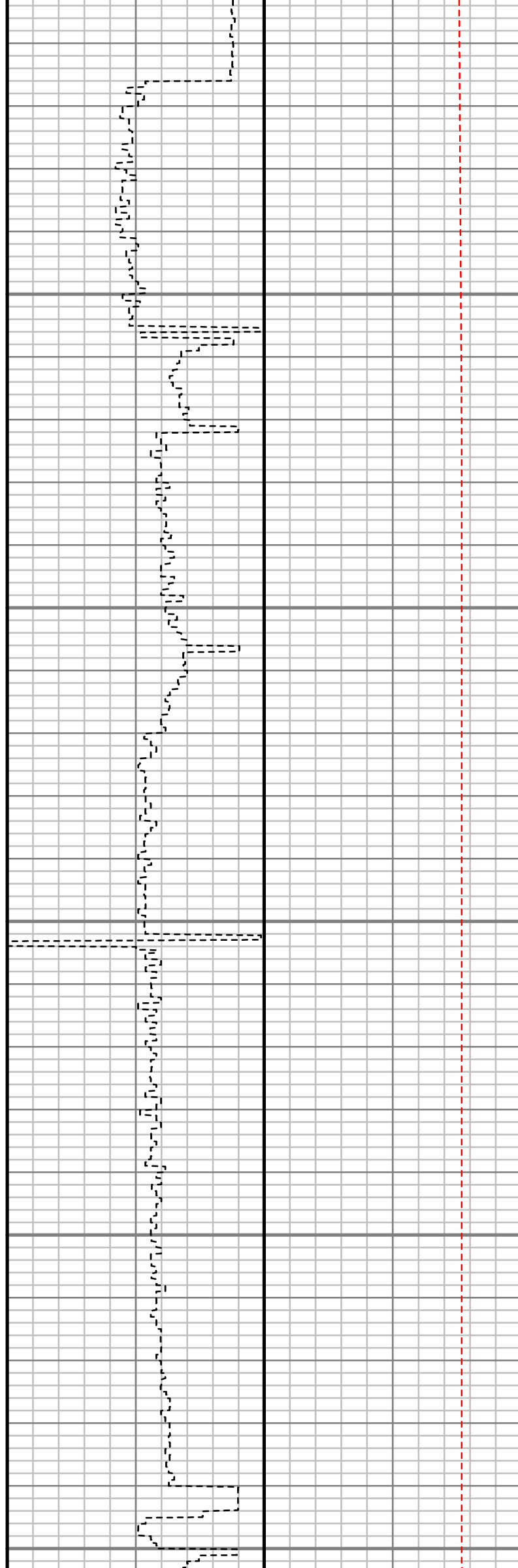
12250

12300

12350

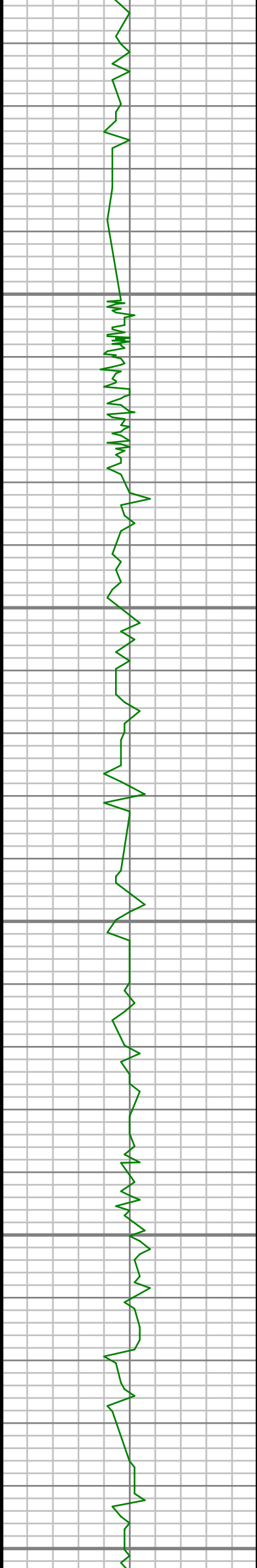
12400

12450



S: 123 MD: 12288.00 ft
Inc: 90.57 deg Az: 0.85
deg TVD: 7756.32 ft

S: 124 MD: 12383.00 ft
Inc: 90.20 deg Az:
359.29 deg TVD:
7755.68 ft



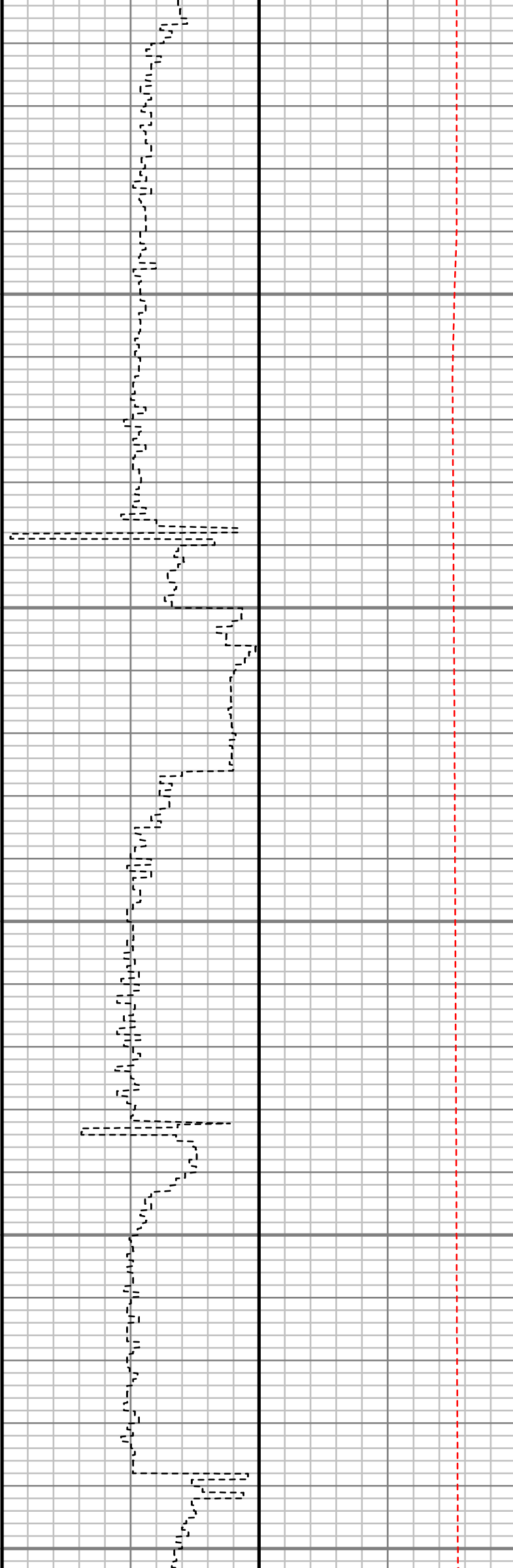
12500

12550

12600

12650

12700



S: 125 MD: 12477.00 ft
Inc: 89.77 deg Az:
358.13 deg TVD:
7755.71 ft

S: 126 MD: 12571.00 ft
Inc: 90.37 deg Az:
357.98 deg TVD:
7755.60 ft

S: 127 MD: 12665.00 ft
Inc: 90.37 deg Az:
357.22 deg TVD:
7754.99 ft



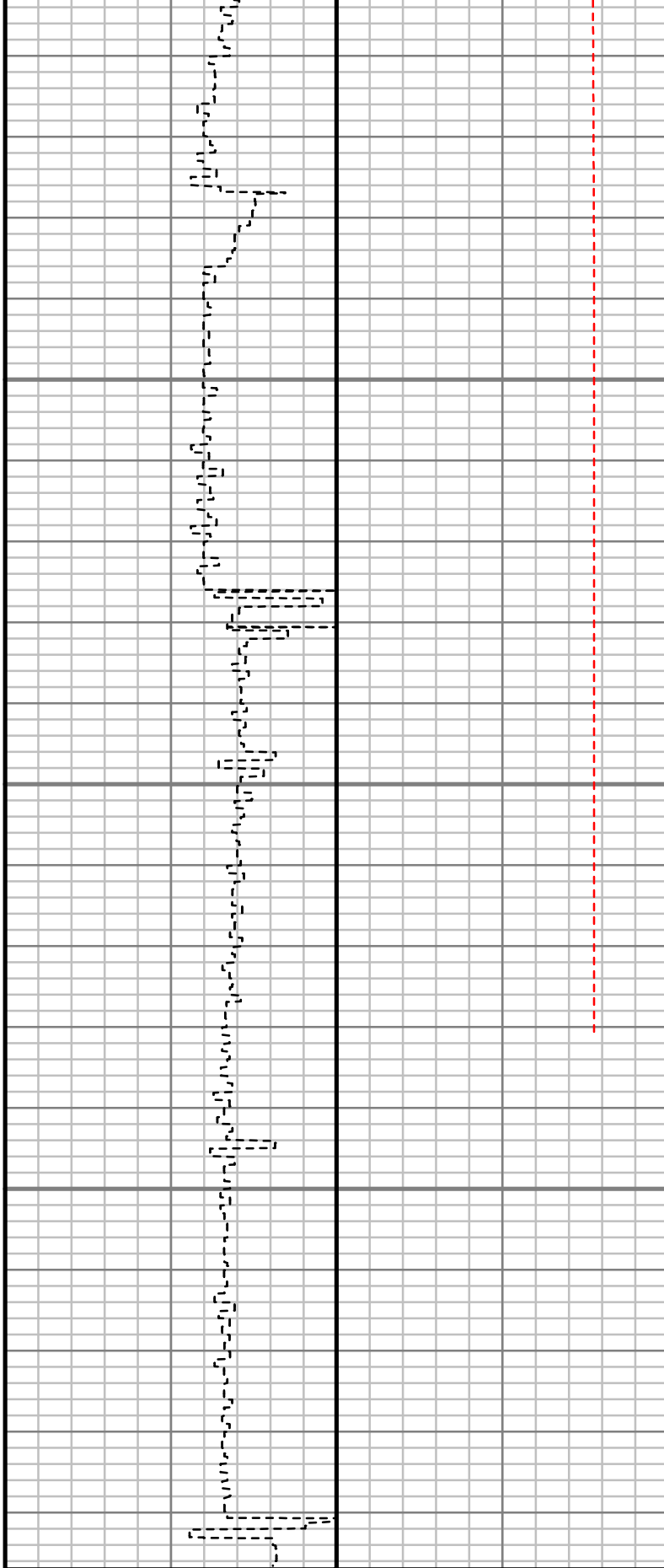
Gamma Ray (GR)		
0	Unit = aapi	150

MEASURED DEPTH
1:240 (ft)

12750

12800

12850



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

Tool Temperature (T-TEMP)		
0	Unit = °F	300

S: 128 MD: 12736.00 ft
Inc: 90.17 deg Az:
357.11 deg TVD:
7754.66 ft

Comments

Customer Name:	ANADARKO PETROLEUM CORP.
Site Name:	NRC 16-8HZ PAD
Well Name:	NRC 1C-8HZ
Survey:	NRC 1C-8HZ
Survey Date:	4/20/2014
Magnetic Declination:	8.51 deg
North Reference:	True North
Calculation Method:	Minimum Curvature
Section (VS) Ref:	0.00N (ft), 0.00E (ft), 0.00Azim (deg)

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS
ft	deg	deg	ft	ft	ft	ft	°/100ft
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid
25.00	0.00	0.00	25.00	0.00	0.00	0.00	0.00
125.00	0.39	319.27	125.00	0.26	0.26	-0.22	0.39
225.00	0.83	52.19	225.00	0.96	0.96	0.13	0.93
325.00	0.09	338.34	324.99	1.48	1.48	0.67	0.81
425.00	1.05	36.01	424.99	2.29	2.29	1.18	1.00
525.00	0.76	104.28	524.98	2.87	2.87	2.36	1.04
625.00	0.67	35.91	624.97	3.18	3.18	3.35	0.81
725.00	1.03	109.11	724.96	3.36	3.36	4.54	1.05

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS
ft	deg	deg	ft	ft	ft	ft	°/100ft
825.00	1.43	61.71	824.94	3.66	3.66	6.49	1.05
925.00	0.63	27.04	924.92	4.74	4.74	7.84	0.98
1025.00	0.50	121.42	1024.92	5.00	5.00	8.46	0.83
1125.00	1.15	93.06	1124.91	4.72	4.72	9.83	0.75
1166.00	1.00	80.31	1165.90	4.76	4.76	10.60	0.69
1281.00	0.69	355.42	1280.89	5.62	5.62	11.53	1.01
1373.00	2.15	286.36	1372.87	6.66	6.66	9.83	2.19
1573.00	2.37	291.20	1572.71	9.21	9.21	2.37	0.14
1664.00	1.78	282.21	1663.65	10.19	10.19	-0.76	0.74
1755.00	1.57	262.86	1754.61	10.33	10.33	-3.37	0.66
1846.00	1.93	248.70	1845.57	9.62	9.62	-6.03	0.62
1937.00	2.12	209.93	1936.52	7.60	7.60	-8.30	1.49
2029.00	2.70	182.70	2028.44	3.96	3.96	-9.25	1.38
2120.00	4.07	180.36	2119.28	-1.41	-1.41	-9.38	1.51
2211.00	5.36	165.15	2209.97	-8.75	-8.75	-8.31	1.96
2303.00	7.51	147.33	2301.40	-17.96	-17.96	-3.96	3.17
2394.00	7.28	143.38	2391.64	-27.59	-27.59	2.69	0.61
2485.00	9.32	154.16	2481.69	-38.85	-38.85	9.34	2.81
2577.00	10.15	158.86	2572.37	-53.11	-53.11	15.51	1.25
2669.00	11.41	160.49	2662.74	-69.26	-69.26	21.47	1.41

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS
ft	deg	deg	ft	ft	ft	ft	°/100ft
2760.00	11.18	156.96	2751.98	-85.86	-85.86	27.93	0.80
2852.00	12.04	150.66	2842.10	-102.43	-102.43	36.12	1.67
2944.00	13.12	155.15	2931.89	-120.27	-120.27	45.22	1.58
3035.00	14.08	152.77	3020.34	-139.49	-139.49	54.62	1.22
3127.00	12.76	150.71	3109.82	-158.30	-158.30	64.71	1.53
3218.00	12.72	150.80	3198.58	-175.82	-175.82	74.52	0.04
3310.00	13.92	157.95	3288.11	-194.92	-194.92	83.62	2.21
3404.00	12.43	161.06	3379.64	-214.97	-214.97	91.15	1.75
3499.00	13.30	158.59	3472.25	-234.81	-234.81	98.45	1.08
3687.00	11.58	156.78	3655.83	-272.28	-272.28	113.78	0.94
3782.00	11.52	153.87	3748.91	-289.56	-289.56	121.72	0.62
3876.00	11.59	155.20	3841.01	-306.56	-306.56	129.82	0.29
4065.00	12.02	152.74	4026.01	-341.29	-341.29	146.80	0.35
4254.00	10.63	160.49	4211.34	-375.21	-375.21	161.64	1.09
4348.00	12.48	164.71	4303.43	-393.19	-393.19	167.21	2.17
4536.00	10.47	159.57	4487.66	-428.80	-428.80	178.53	1.20
4631.00	12.43	158.00	4580.77	-446.37	-446.37	185.38	2.08
4725.00	12.20	152.76	4672.61	-464.58	-464.58	193.71	1.21
4914.00	15.08	151.51	4856.26	-503.96	-503.96	214.59	1.53

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS
ft	deg	deg	ft	ft	ft	ft	°/100ft
5103.00	11.68	150.89	5040.10	-542.30	-542.30	235.63	1.80
5197.00	12.26	155.54	5132.06	-559.70	-559.70	244.39	1.19
5292.00	10.16	154.38	5225.24	-576.43	-576.43	252.19	2.22
5480.00	10.79	154.82	5410.11	-607.31	-607.31	266.85	0.34
5668.00	13.95	163.99	5593.74	-645.04	-645.04	280.59	1.97
5763.00	12.85	162.54	5686.15	-666.12	-666.12	286.92	1.21
5858.00	13.09	160.27	5778.72	-686.33	-686.33	293.72	0.59
5952.00	10.56	150.72	5870.73	-703.87	-703.87	301.53	3.39
6141.00	12.49	151.91	6055.91	-737.00	-737.00	319.63	1.03
6235.00	10.30	152.30	6148.05	-753.41	-753.41	328.32	2.33
6330.00	9.65	157.07	6241.62	-768.26	-768.26	335.37	1.10
6424.00	7.28	154.57	6334.59	-780.90	-780.90	340.99	2.55
6518.00	7.70	157.28	6427.79	-792.08	-792.08	345.98	0.58
6613.00	8.32	162.47	6521.86	-804.50	-804.50	350.51	1.01
6707.00	7.40	152.24	6614.98	-816.35	-816.35	355.38	1.78
6802.00	6.43	158.02	6709.29	-826.69	-826.69	360.22	1.25
6896.00	4.32	162.85	6802.87	-834.96	-834.96	363.23	2.29
6991.00	2.98	158.55	6897.68	-840.68	-840.68	365.19	1.44
7085.00	0.62	341.00	6991.64	-842.47	-842.47	365.92	3.83
7179.00	0.64	329.09	7085.64	-841.54	-841.54	365.48	0.14

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS
ft	deg	deg	ft	ft	ft	ft	°/100ft
7226.00	3.56	14.68	7132.60	-839.90	-839.90	365.72	6.69
7273.00	7.93	13.28	7179.35	-835.33	-835.33	366.83	9.30
7320.00	10.05	2.68	7225.78	-828.08	-828.08	367.77	5.72
7368.00	12.96	4.36	7272.81	-818.52	-818.52	368.37	6.09
7415.00	15.96	4.96	7318.31	-806.82	-806.82	369.33	6.39
7462.00	19.44	5.61	7363.08	-792.60	-792.60	370.66	7.41
7509.00	22.08	2.96	7407.03	-775.99	-775.99	371.88	5.96
7556.00	25.71	359.31	7449.99	-756.96	-756.96	372.21	8.34
7603.00	28.94	355.72	7491.75	-735.42	-735.42	371.24	7.70
7651.00	31.53	355.92	7533.21	-711.32	-711.32	369.48	5.42
7745.00	40.33	356.07	7609.25	-656.34	-656.34	365.64	9.36
7792.00	46.44	354.17	7643.39	-624.20	-624.20	362.86	13.28
7840.00	52.75	353.19	7674.49	-587.89	-587.89	358.83	13.25
7935.00	65.37	352.83	7723.23	-507.18	-507.18	348.92	13.29
7982.00	71.89	352.42	7740.35	-463.79	-463.79	343.30	13.90
8029.00	78.21	351.37	7752.47	-418.86	-418.86	336.89	13.61
8079.00	85.58	351.14	7759.51	-369.97	-369.97	329.37	14.74
8138.00	91.65	351.60	7760.94	-311.68	-311.68	320.53	10.31
8232.00	91.89	352.37	7758.05	-218.65	-218.65	307.42	0.85

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS
ft	deg	deg	ft	ft	ft	ft	°/100ft
8326.00	92.12	354.22	7754.76	-125.35	-125.35	296.45	1.98
8421.00	90.61	356.92	7752.50	-30.68	-30.68	289.11	3.26
8515.00	91.24	0.50	7750.98	63.27	63.27	286.99	3.87
8609.00	89.63	1.44	7750.27	157.25	157.25	288.57	1.99
8703.00	89.56	1.31	7750.93	251.22	251.22	290.83	0.15
8798.00	89.53	3.15	7751.68	346.14	346.14	294.53	1.93
8892.00	89.33	4.94	7752.62	439.90	439.90	301.15	1.91
8986.00	89.33	4.96	7753.72	533.54	533.54	309.26	0.02
9080.00	89.83	3.46	7754.41	627.29	627.29	316.16	1.68
9175.00	90.64	3.77	7754.02	722.10	722.10	322.15	0.91
9269.00	90.20	5.00	7753.33	815.81	815.81	329.34	1.39
9458.00	89.50	2.43	7753.82	1004.40	1004.40	341.59	1.41
9646.00	91.78	3.64	7751.72	1192.11	1192.11	351.55	1.38
9740.00	92.56	3.22	7748.17	1285.87	1285.87	357.17	0.94
9929.00	90.07	3.23	7743.84	1474.51	1474.51	367.80	1.32
10023.00	88.89	2.84	7744.70	1568.37	1568.37	372.77	1.32
10118.00	88.79	2.49	7746.62	1663.25	1663.25	377.19	0.37
10212.00	88.93	1.68	7748.49	1757.17	1757.17	380.61	0.88
10306.00	89.56	1.27	7749.73	1851.13	1851.13	383.02	0.81
10401.00	90.61	1.38	7749.59	1946.10	1946.10	385.22	1.10

5" = 100' FEET MD