



5" = 100' FEET MD

COMPANY : ANADARKO E&P ONSHORE LLC
WELL : SUNFLOWER 8N-17HZ
FIELD : WATTENBERG
COUNTY : WELD
STATE : COLORADO
COUNTRY : U.S.A.
UWI : 05-123-42070

COMPANY : ANADARKO E&P ONSHORE LLC

WELL : SUNFLOWER 8N-17HZ

FIELD : WATTENBERG

COUNTY : WELD

STATE : COLORADO

COUNTRY : U.S.A.

UWI : 05-123-42070

WELL LOCATION

LAT:40.1536950°N LONG:104.6829260°W

N:14582858.86 ft E:1729014.21 ft

SEC:08

TWP: 2N

RANGE:65W

OTHER SERVICES

DIRECTIONAL

ROP

DEPTH REF. : RKB

REF. HEIGHT : 20.000 ft

RKB to Ground Level

GROUND LEVEL : 4901.000 ft

G.L. to MEAN SEA LEVEL

BOREHOLE RECORD

DEVIATION RECORD

HOLE SIZE in	FROM ft	TO ft	INCLINATION deg	FROM ft	TO ft
8.5	1875	12665	0 - 12	0	2806
			12 - 0	2806	6488
			0 - 86	6488	7457
			86 - 92	7457	12665

CASING RECORD

CASING SIZE in	FROM ft	TO ft			
9.625	0	1862			
			DRILLING CO. : PRECISION		
			RIG : 461		
			LWD UNIT NO. : MWD-00282-CDISTRICT : CASPER		
			SPUD DATE : 10/29/2015		
			LWD START DATE : 10/29/2015	DEPTH : 1830 ft	
			LWD END DATE : 11/01/2015	DEPTH : 12665 ft	
			TOTAL DEPTH : 12665 ft		

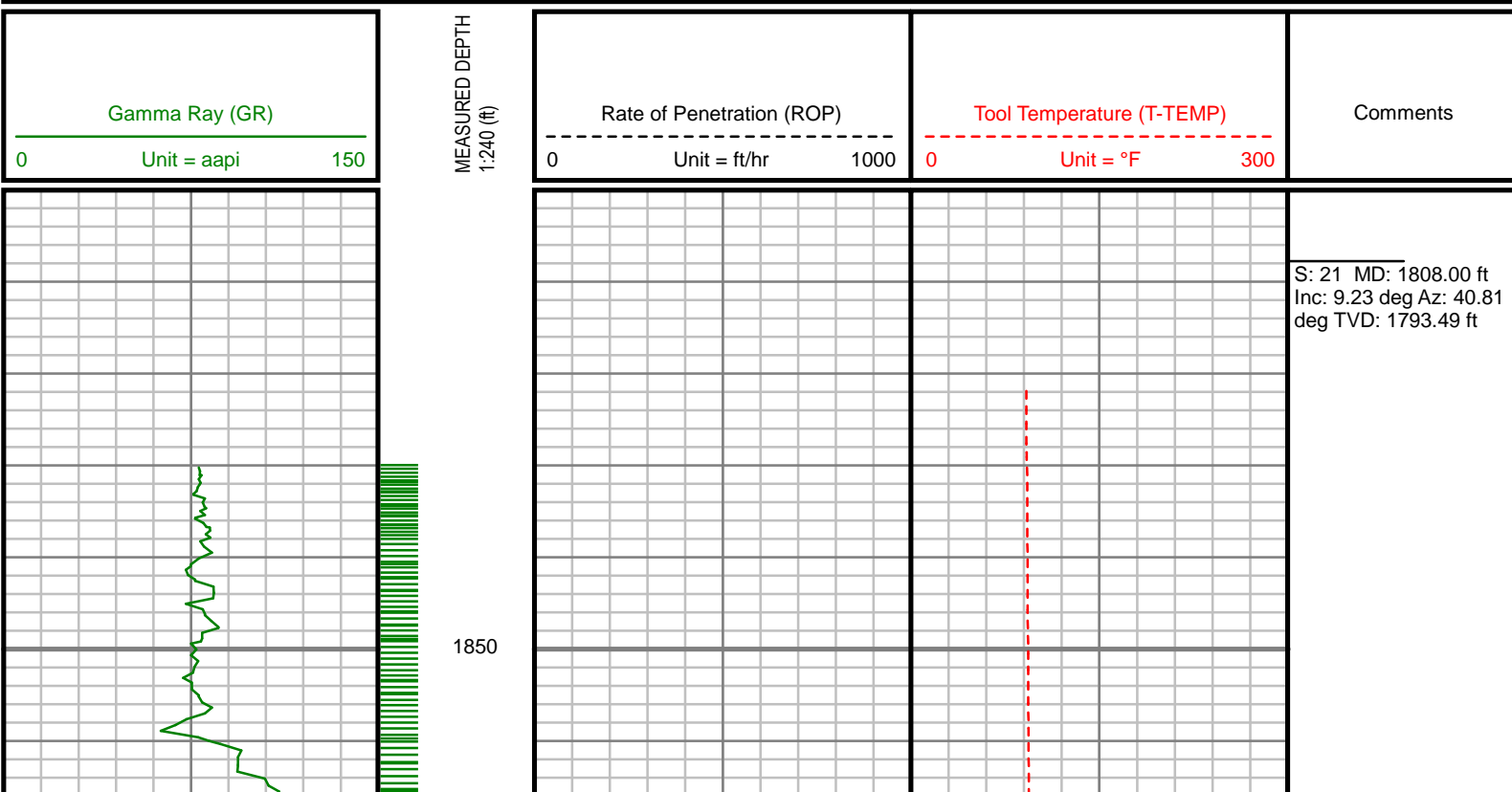
Run Data

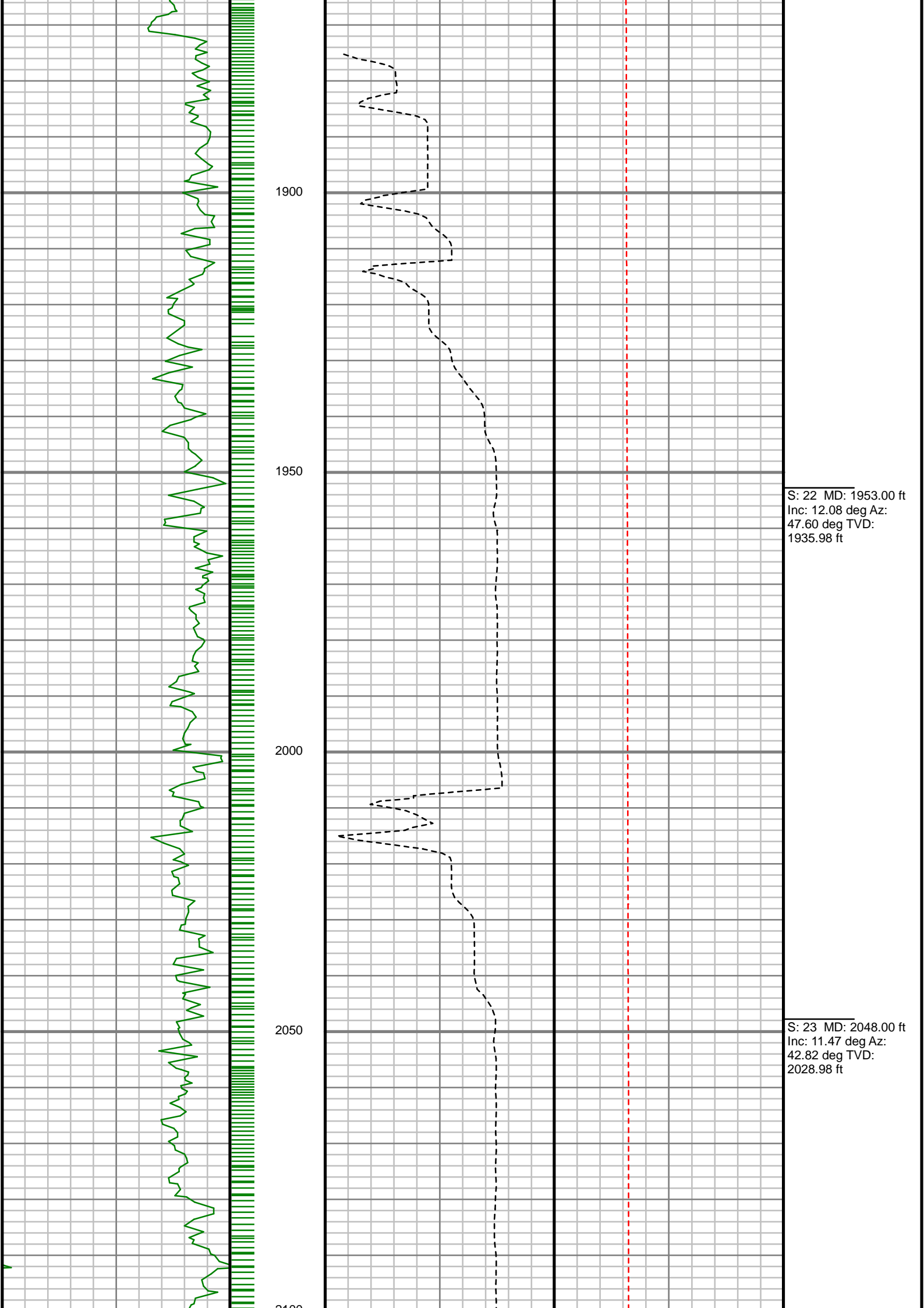
Run Data						
RUN NUMBER	1	2				
START DATE	10/29/2015	10/29/2015				
START TIME	0700	1600				
END DATE	10/29/2015	11/01/2015				
END TIME	1600	0300				
DEPTH IN (ft)	1875	2480				
DEPTH OUT (ft)	2480	12665				
LOG TOP (ft)	1830	2435				
LOG BOTTOM (ft)	2435	12665				
HOLE SIZE (in)	8.5	8.5				
MUD DATA @ (ft)	1862	9224				
MUD TYPE	OIL-BASED	OIL-BASED				
DENSITY (lb / gal)	9.3	9.3				
VISCOSITY (s / qt)	83	61				
pH	-	-				
FLUID LOSS (cm ³ / 30)	4.7	3.5				
SALINITY (ppm)	-	-				
Rm (ohmm @ deg F)	-	-				
Rmf (ohmm @ deg F)	-	-				
MAX TEMP (deg F)	103	230				
Rm @ MAX TEMP (ohmm)	-	-				
LWD ENGINEER #1	B. GREER	B. GREER				
LWD ENGINEER #2	S. WAXLER	S. WAXLER				
LWD ENGINEER #3	-	-				
LOG WITNESS #1	I. HARRIS	I. HARRIS				
LOG WITNESS #2	-	-				

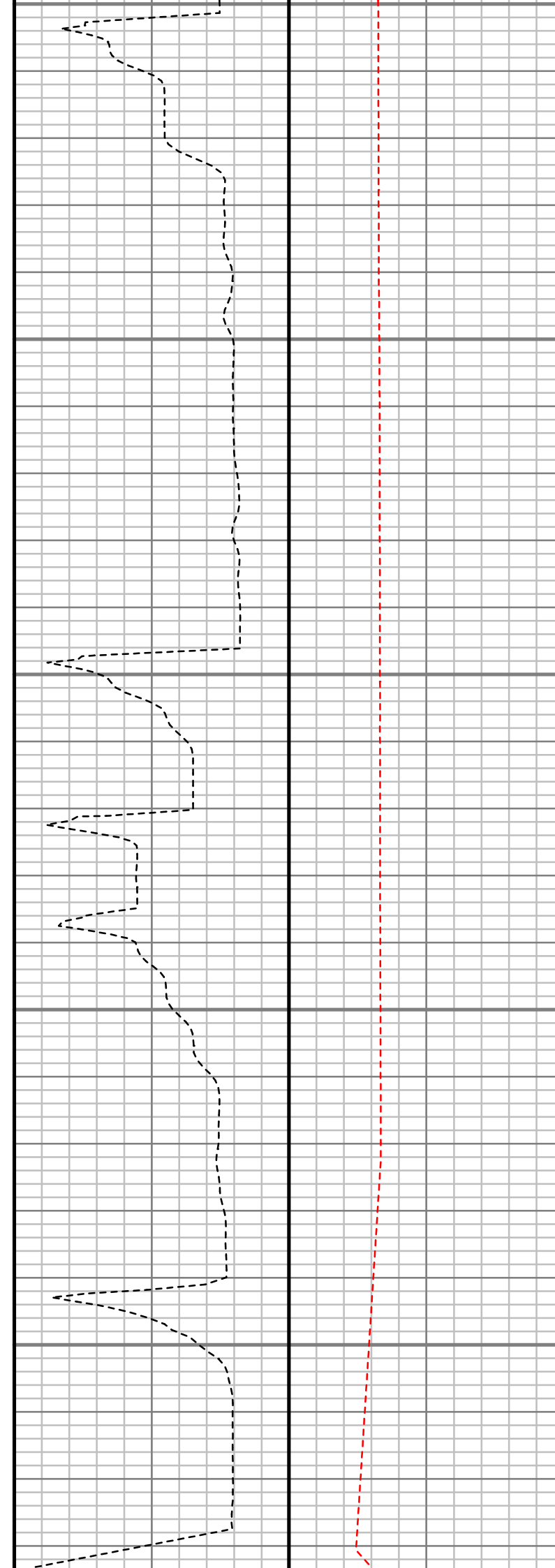
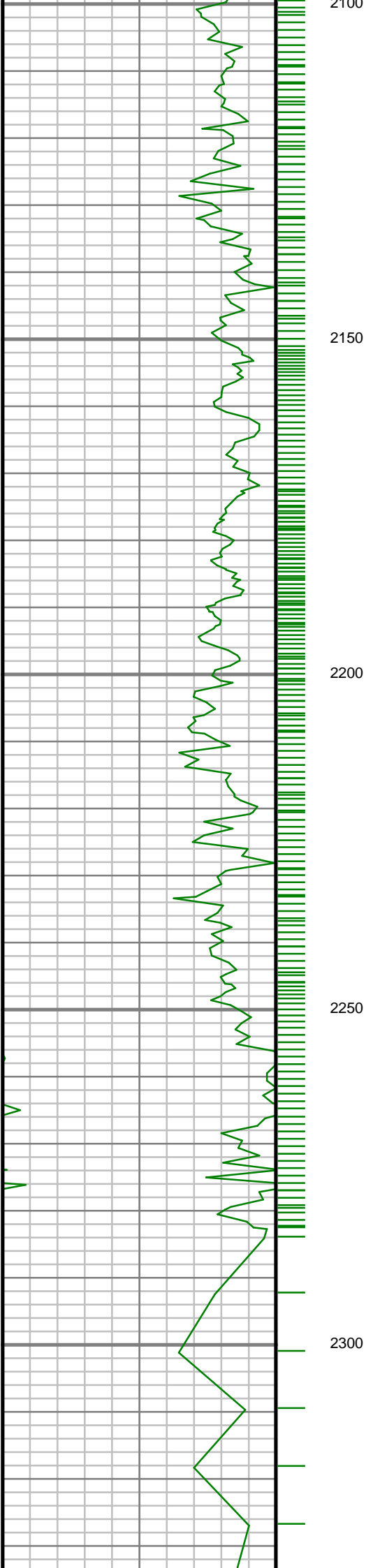
Remarks
ANADARKO E&P ONSHORE LLC PRODUCTION AFE# 2113377
SCIENTIFIC DRILLING INTERNATIONAL JOB# 322487
ALL REFERENCES IN THE DEPTH TRACK ARE AT BIT DEPTH.
ALL DATA IS MEMORY DATA UNLESS STATED OTHERWISE.
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO GAMMA RAY CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO RATE OF PENETRATION CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO TOOL TEMPERATURE CURVE
RUN # 1: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 128-380 / CONT = 773 / MWD EYE = 0597 / GAMMA RAY = 1053
BIT TO SENSOR OFFSETS: SURVEY = 53.82 FT. / GAMMA RAY = 45.17 FT.
RUN # 2: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 128-291 / CONT = 919 / MWD EYE = 0970 / GAMMA RAY = 1141
BIT TO SENSOR OFFSETS: SURVEY = 53.82 FT. / GAMMA RAY = 45.17 FT.
MNEMONICS LIST:
GR = GAMMA RAY
ROP = RATE OF PENETRATION
T-TEMP = TOOL TEMPERATURE

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 E&P ONSHORE LLC SUNFLOWER 8N-17HZ WATTENBERG FIELD WELD COUNTY, COLORADO 05-123-42070
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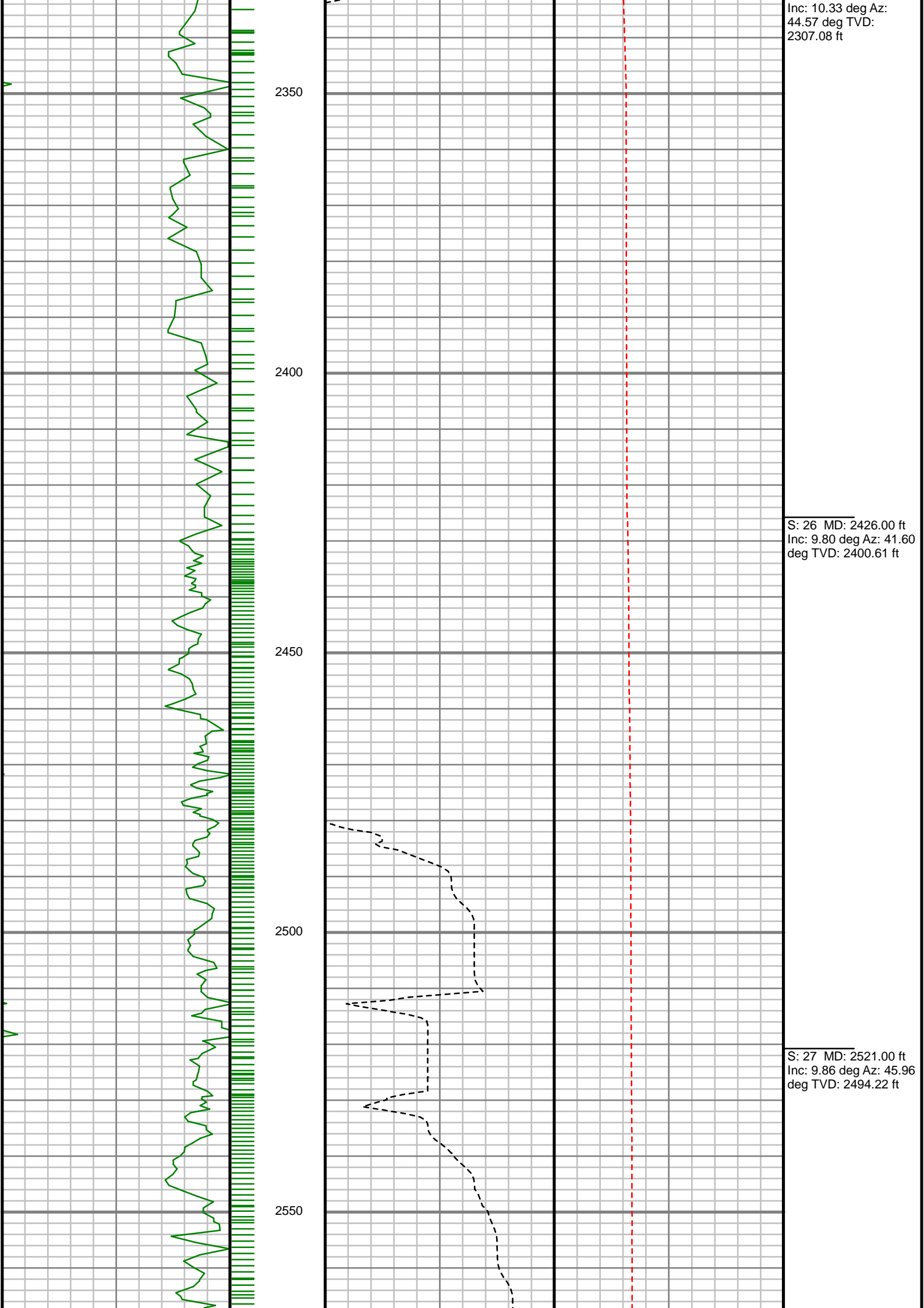


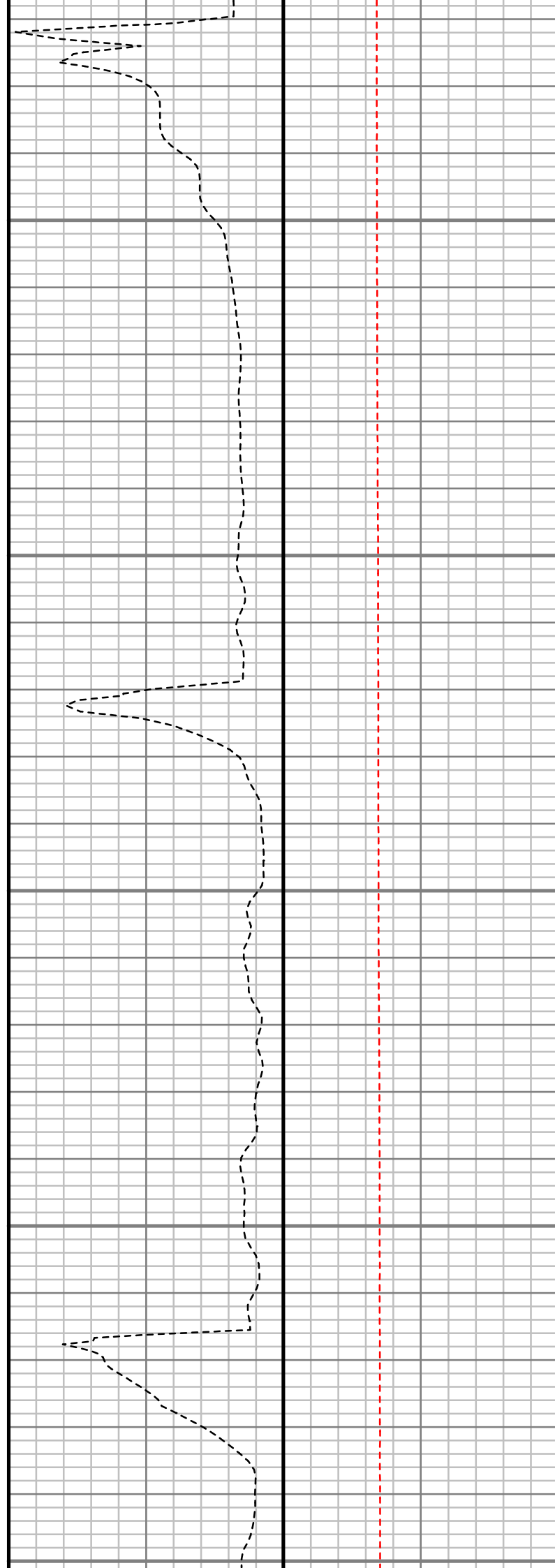
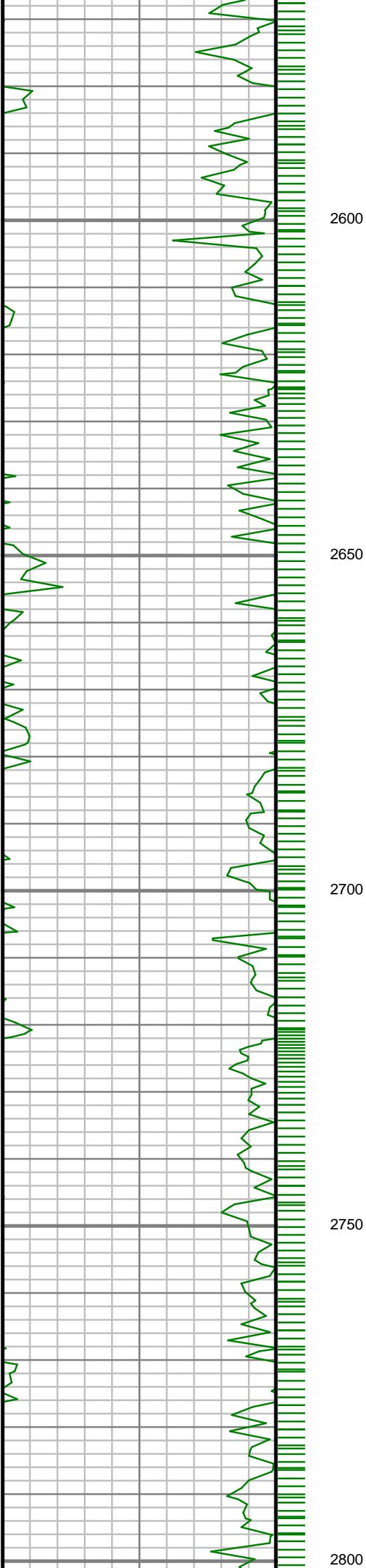




S: 24 MD: 2236.00 ft
Inc: 10.28 deg Az:
49.25 deg TVD:
2213.61 ft

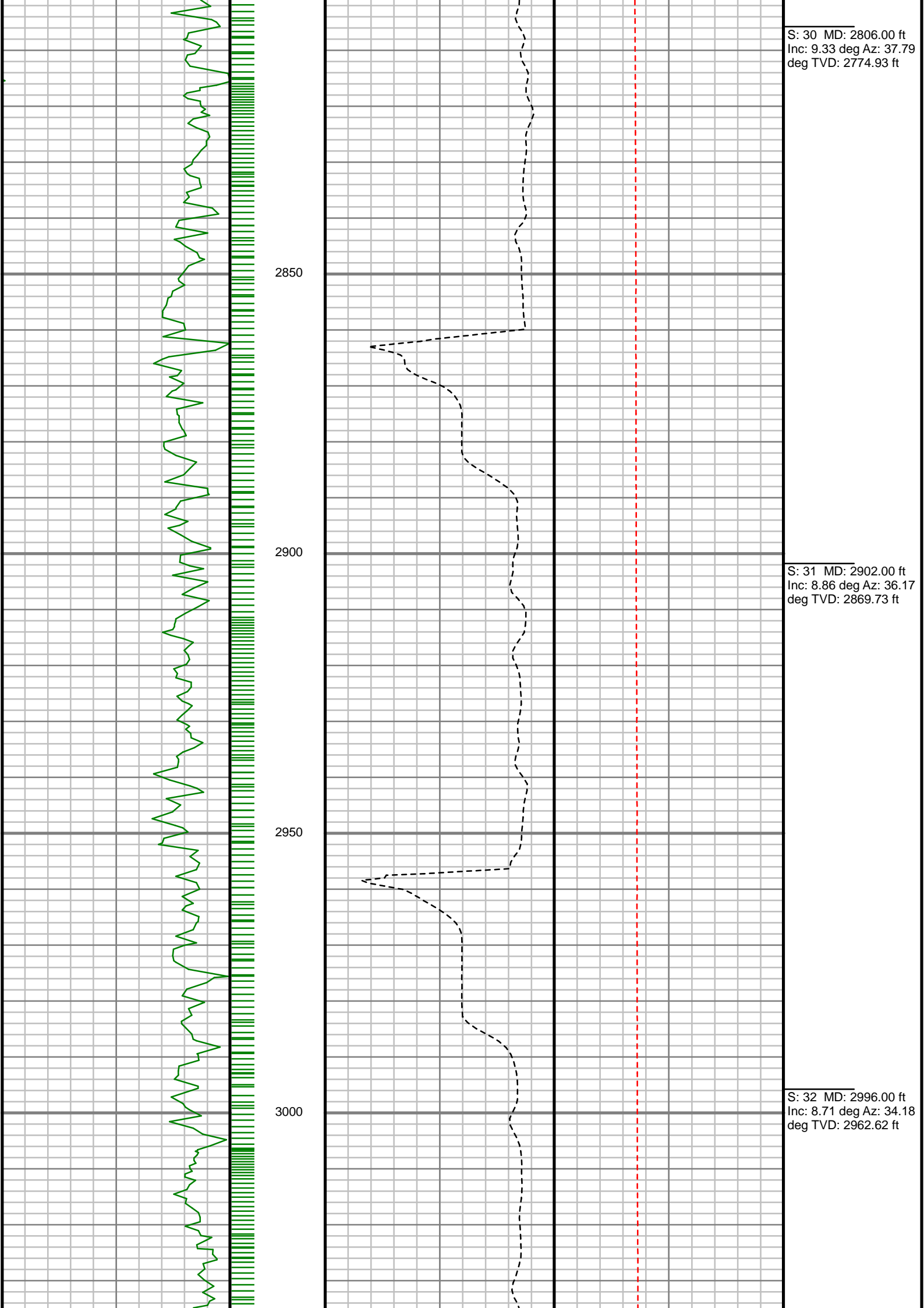
S: 25 MD: 2331.00 ft

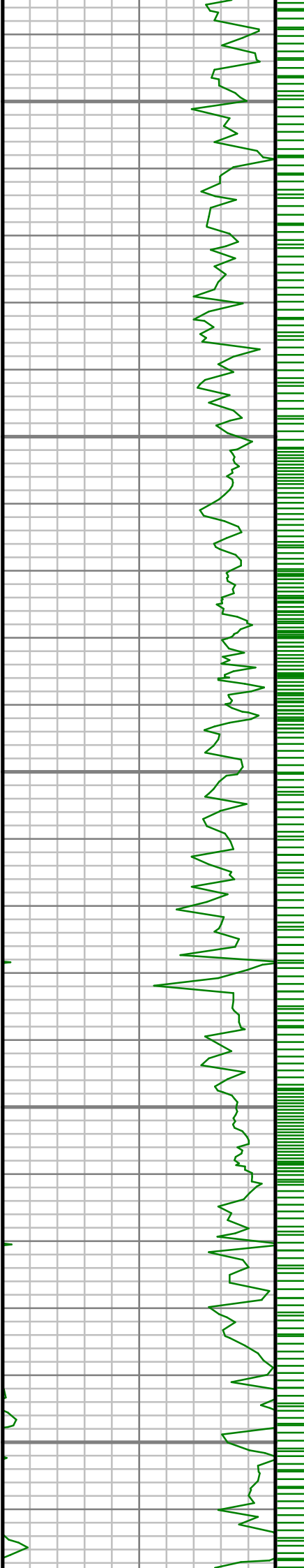




S: 28 MD: 2616.00 ft
Inc: 10.52 deg Az: 45.93 deg TVD: 2587.72 ft

S: 29 MD: 2712.00 ft
Inc: 9.73 deg Az: 41.96 deg TVD: 2682.23 ft





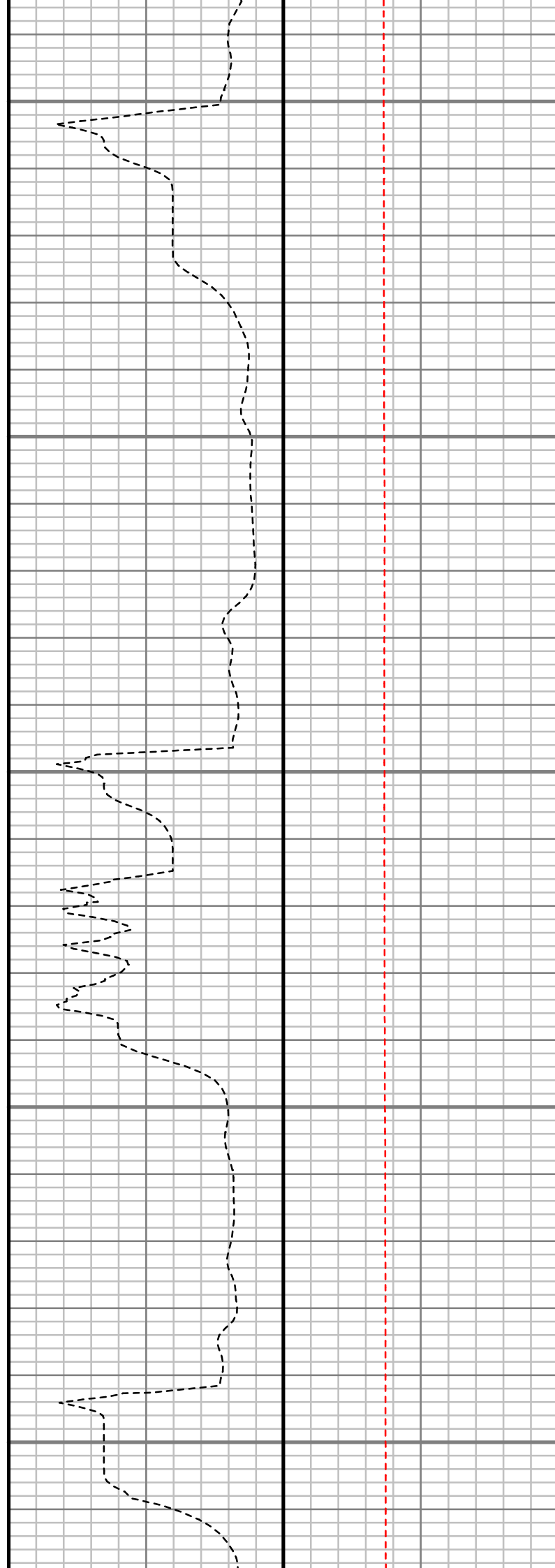
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3100

3150

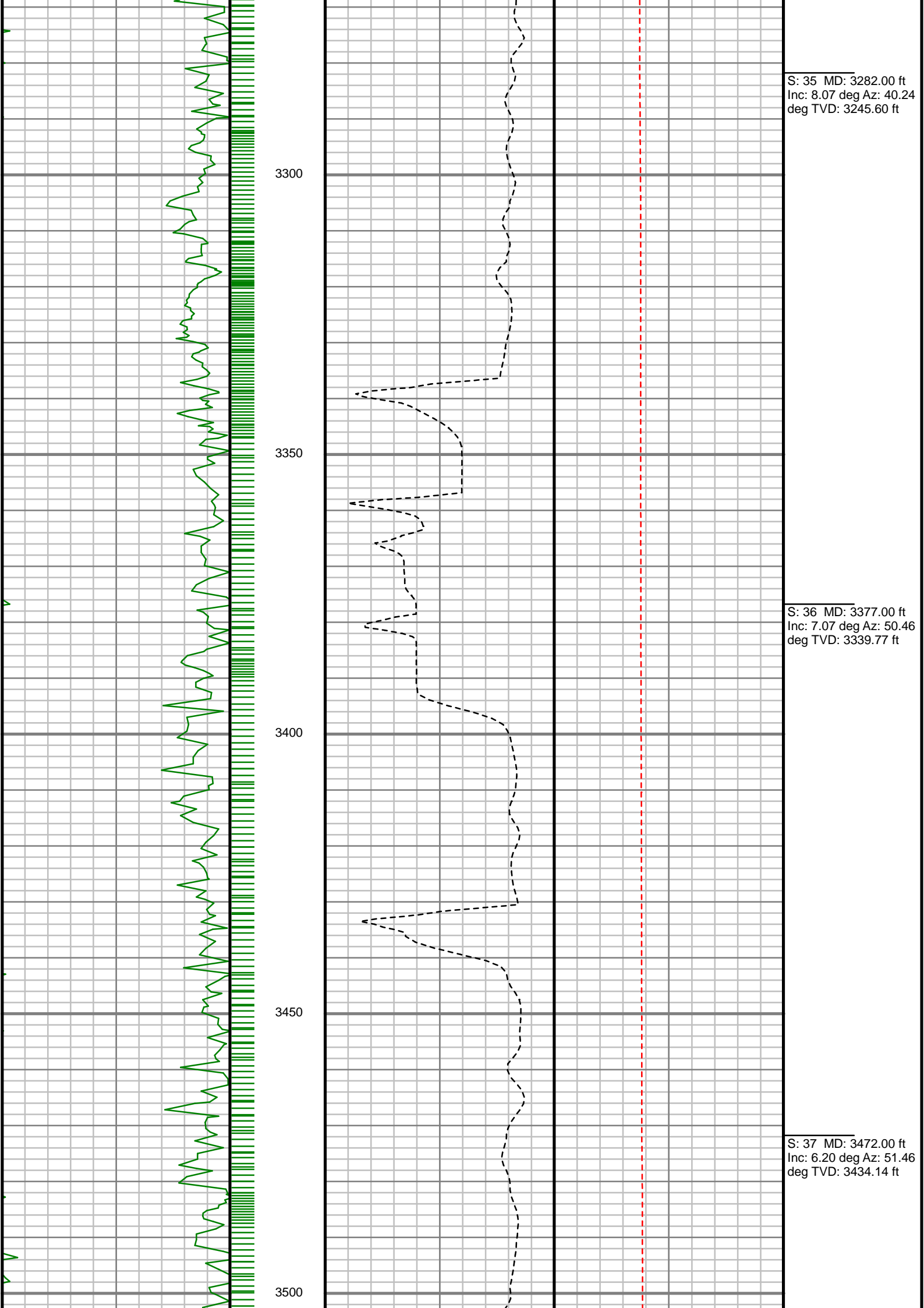
3200

3250



S: 33 MD: 3092.00 ft
Inc: 8.44 deg Az: 31.22
deg TVD: 3057.55 ft

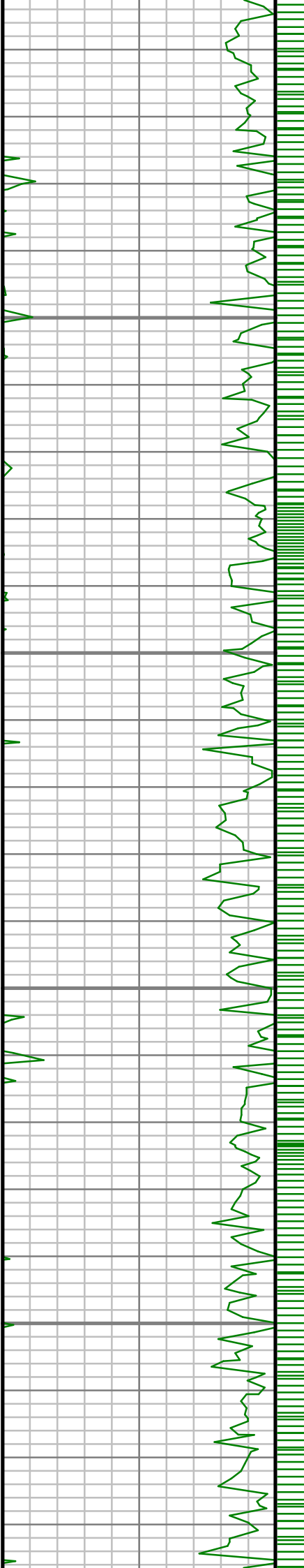
S: 34 MD: 3187.00 ft
Inc: 8.21 deg Az: 42.50
deg TVD: 3151.56 ft



S: 35 MD: 3282.00 ft
Inc: 8.07 deg Az: 40.24
deg TVD: 3245.60 ft

S: 36 MD: 3377.00 ft
Inc: 7.07 deg Az: 50.46
deg TVD: 3339.77 ft

S: 37 MD: 3472.00 ft
Inc: 6.20 deg Az: 51.46
deg TVD: 3434.14 ft

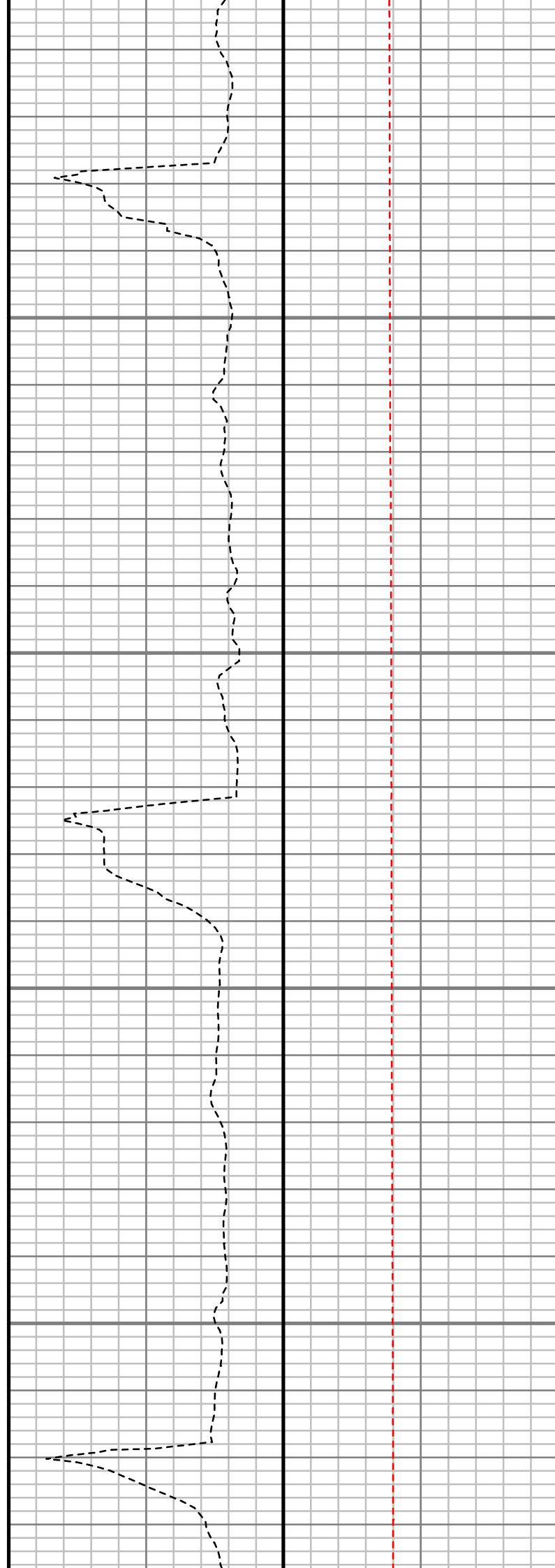


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3600

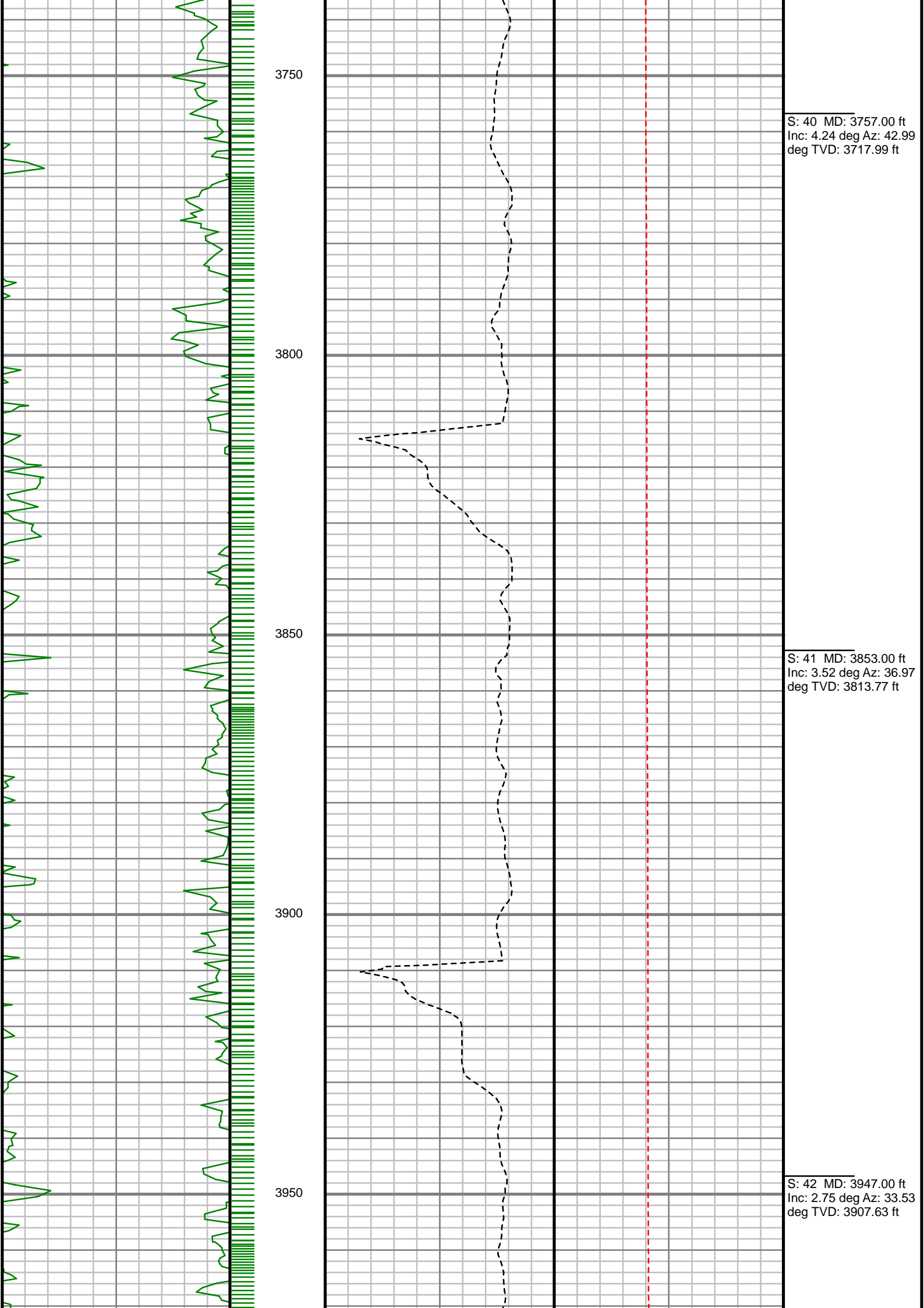
3650

3700



S: 38 MD: 3567.00 ft
Inc: 5.28 deg Az: 49.97
deg TVD: 3528.66 ft

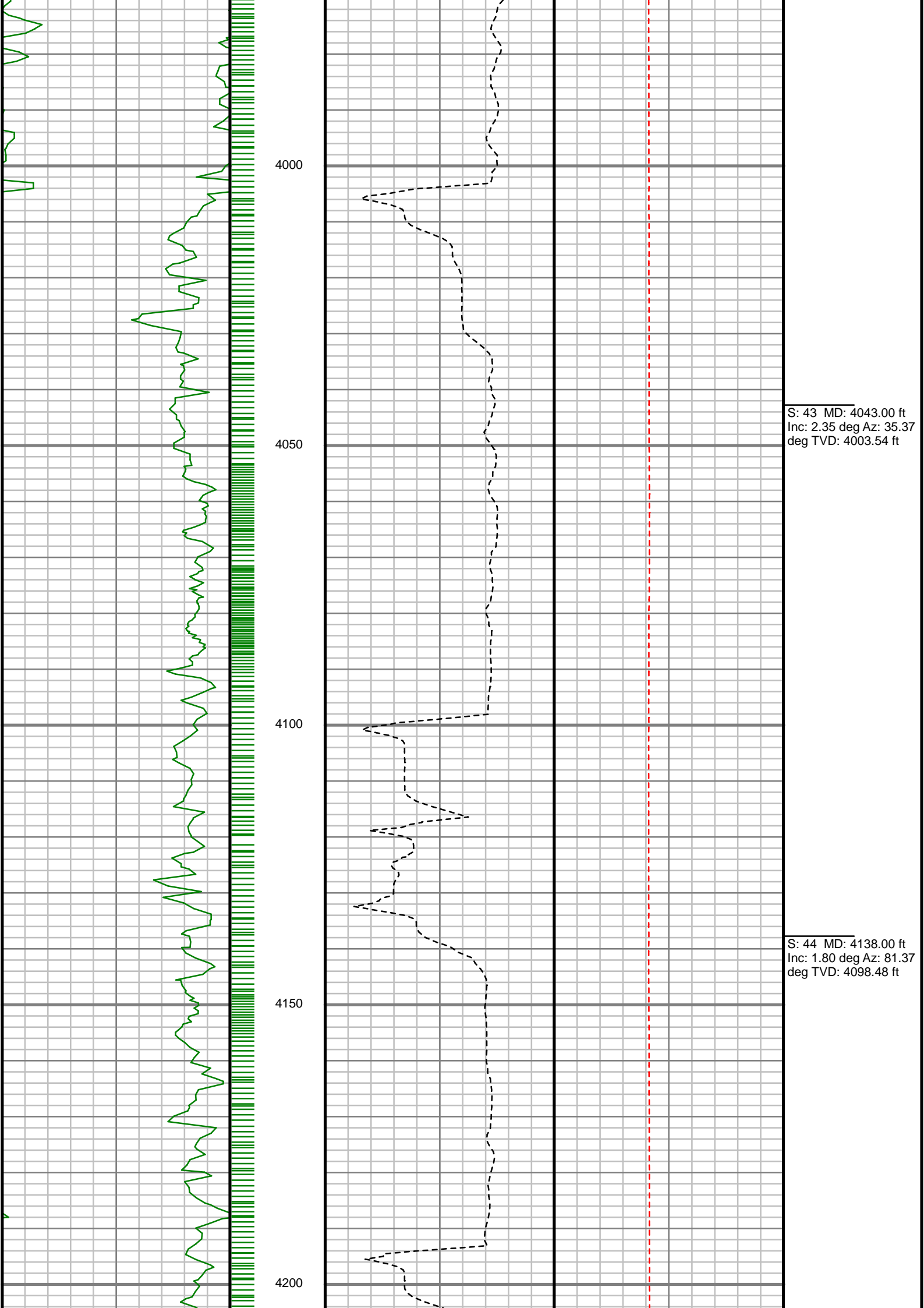
S: 39 MD: 3662.00 ft
Inc: 4.82 deg Az: 48.47
deg TVD: 3623.29 ft

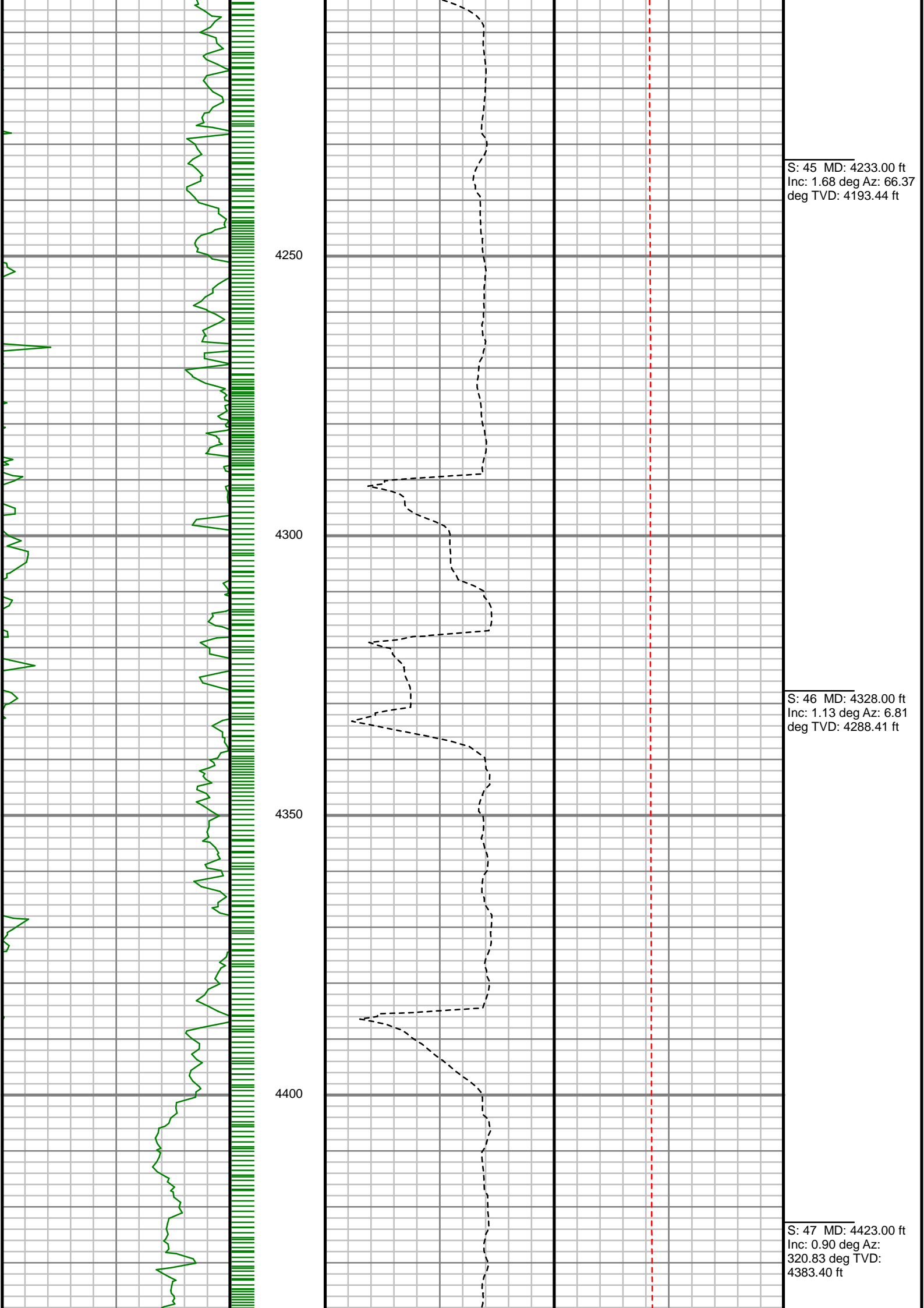


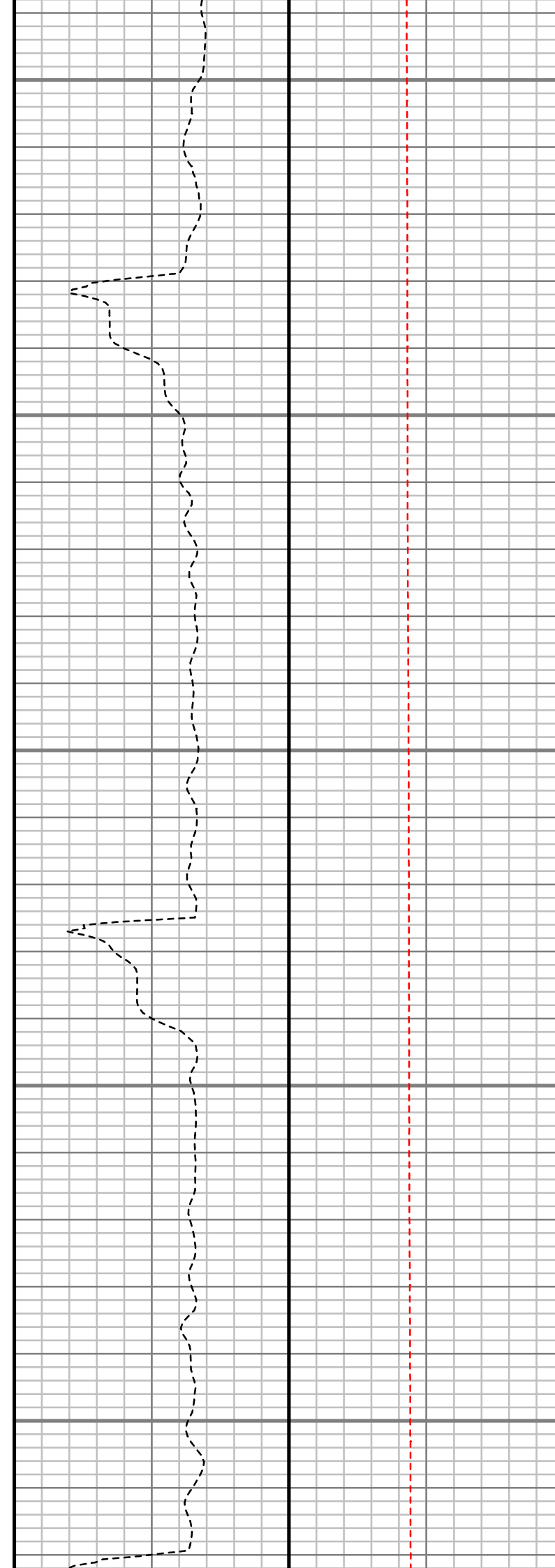
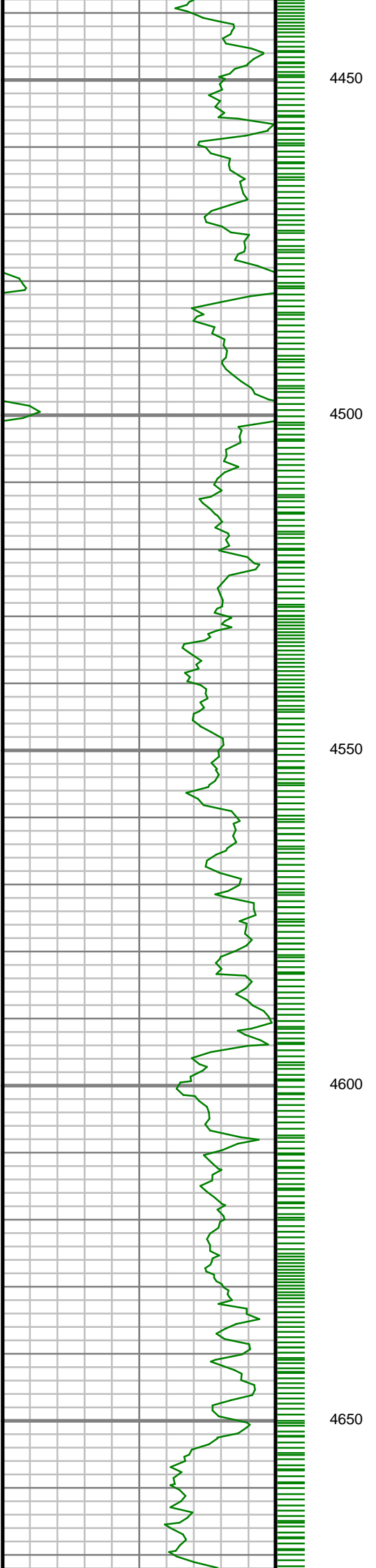
S: 40 MD: 3757.00 ft
Inc: 4.24 deg Az: 42.99
deg TVD: 3717.99 ft

S: 41 MD: 3853.00 ft
Inc: 3.52 deg Az: 36.97
deg TVD: 3813.77 ft

S: 42 MD: 3947.00 ft
Inc: 2.75 deg Az: 33.53
deg TVD: 3907.63 ft

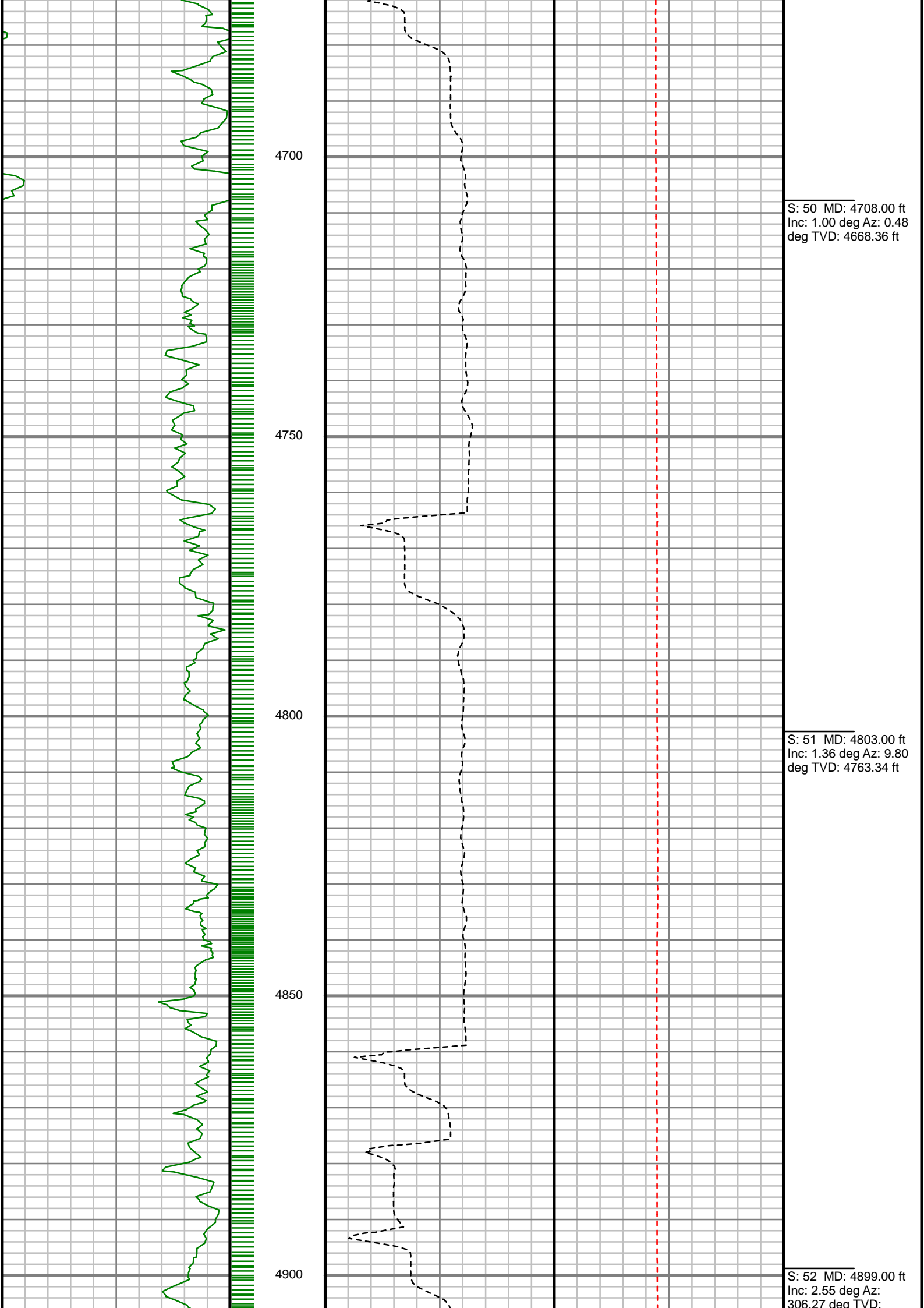


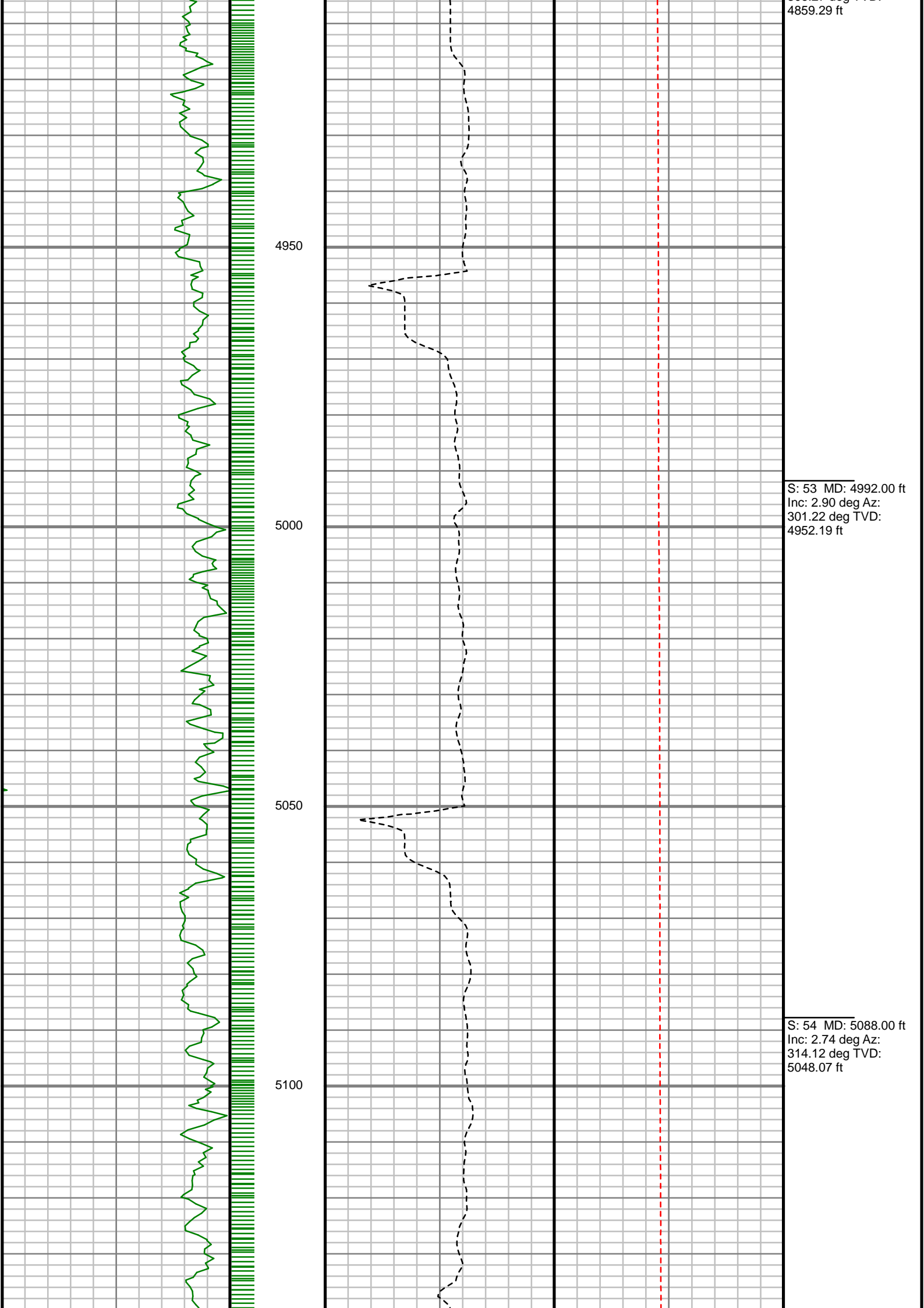


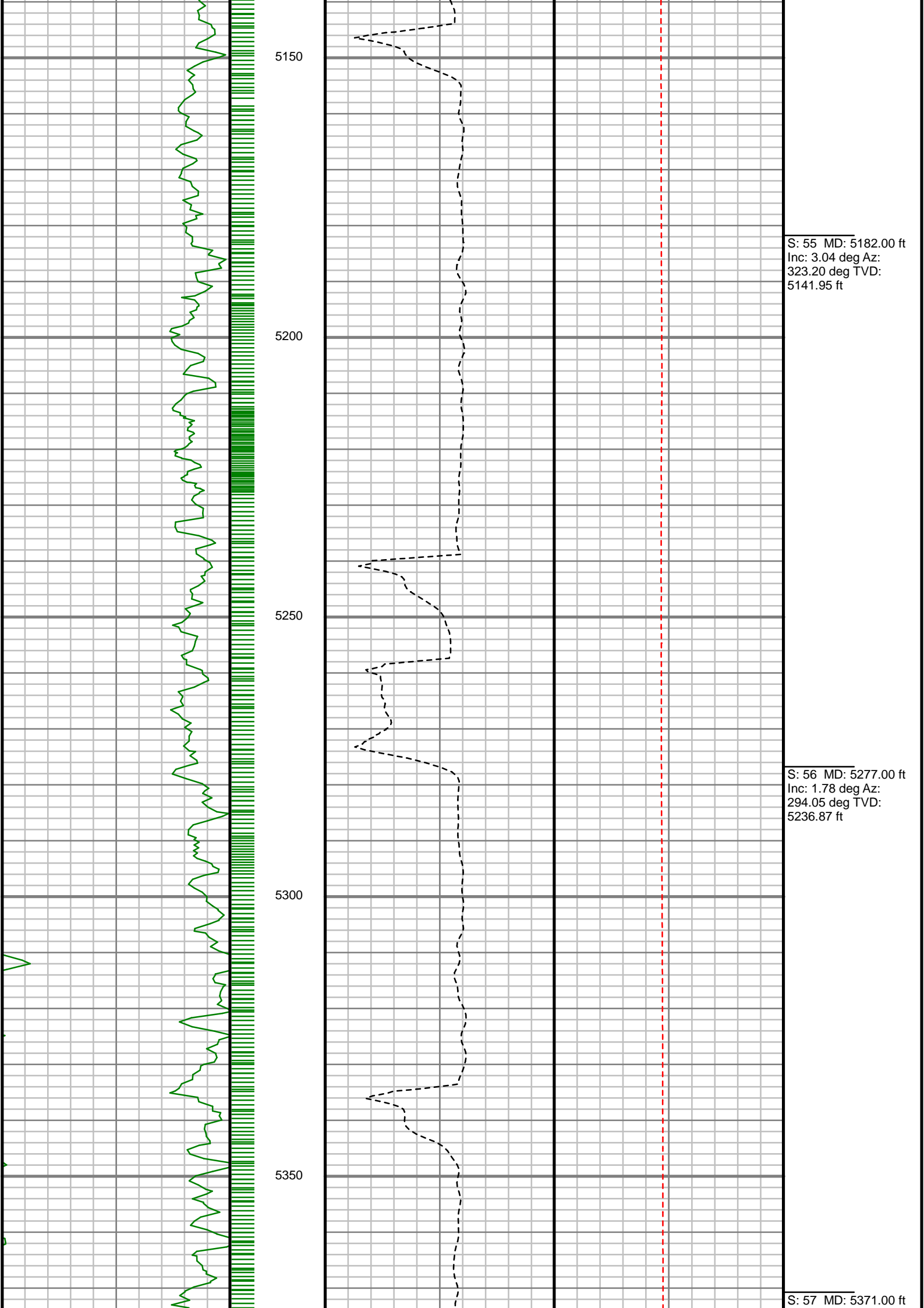


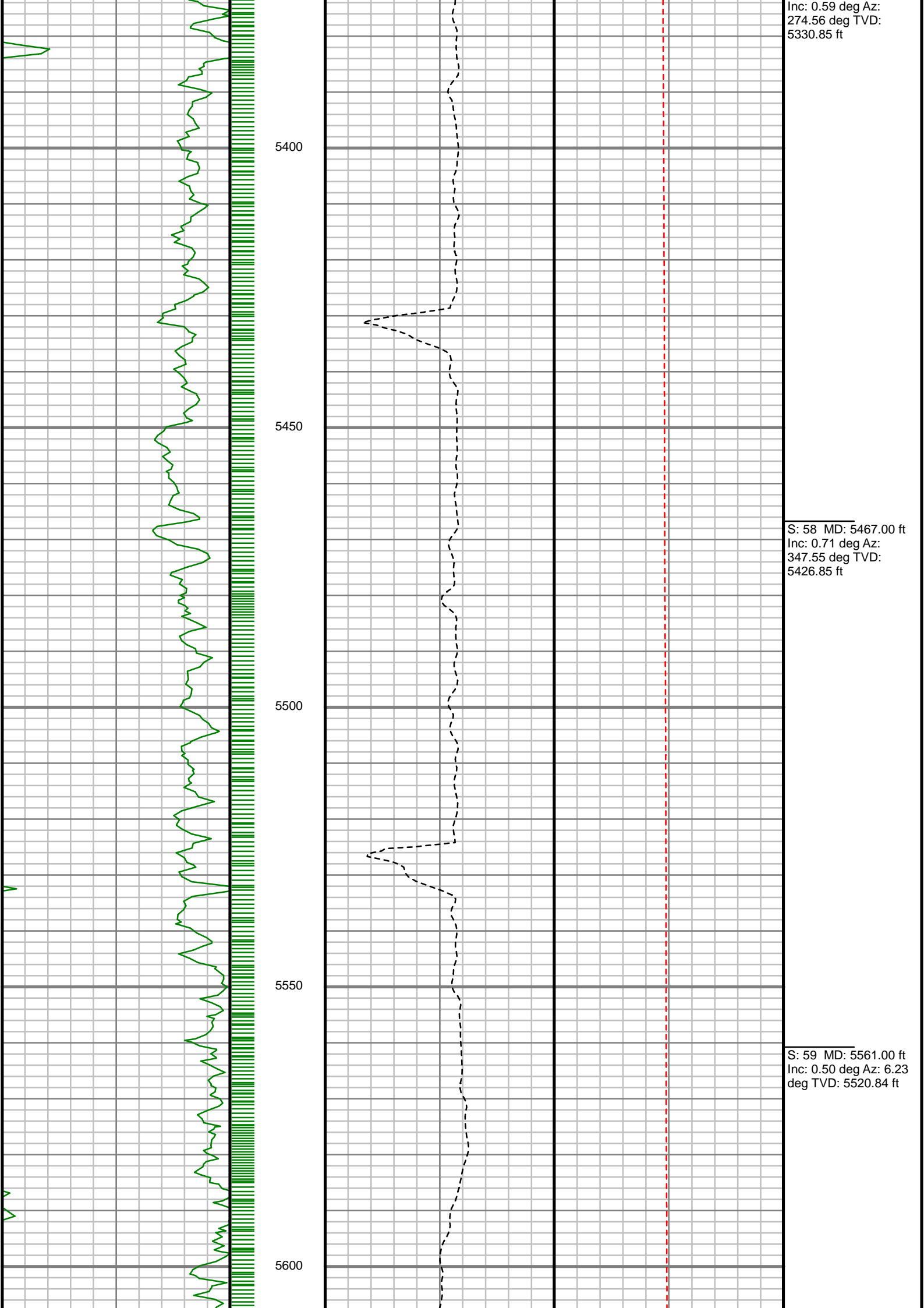
S: 48 MD: 4518.00 ft
Inc: 0.78 deg Az: 338.31 deg TVD: 4478.39 ft

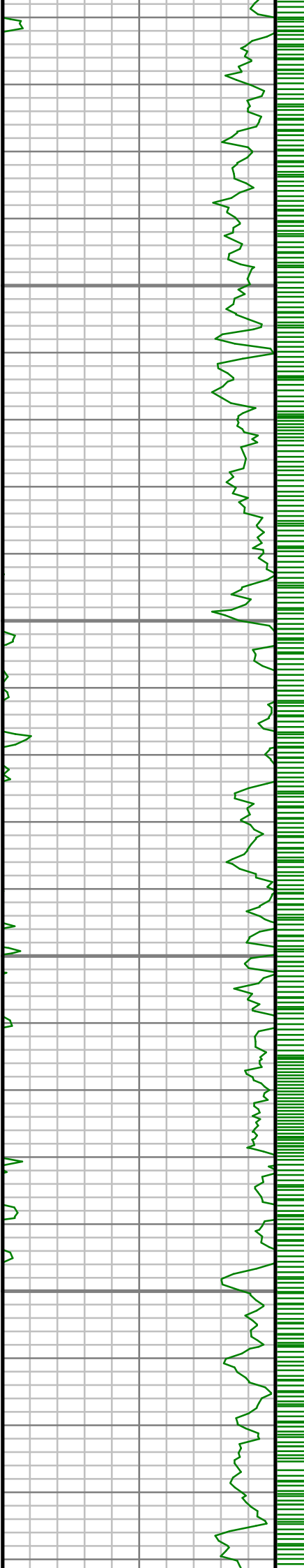
S: 49 MD: 4613.00 ft
Inc: 0.97 deg Az: 6.53 deg TVD: 4573.38 ft









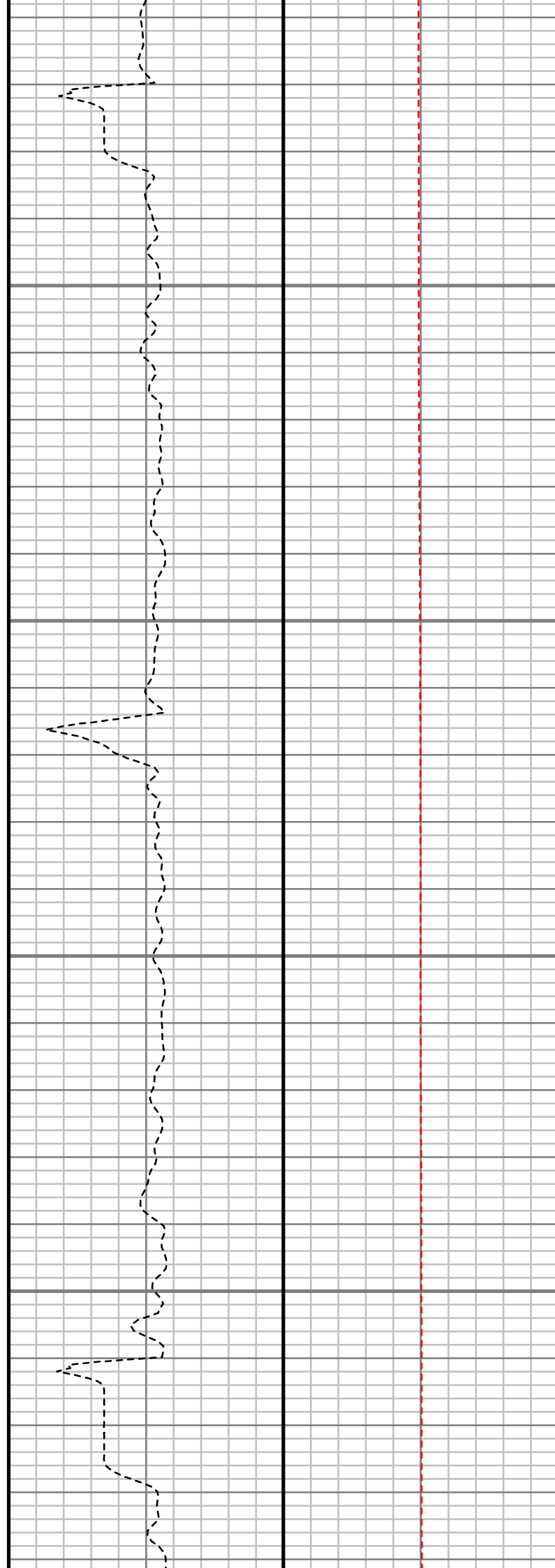


5650

5700

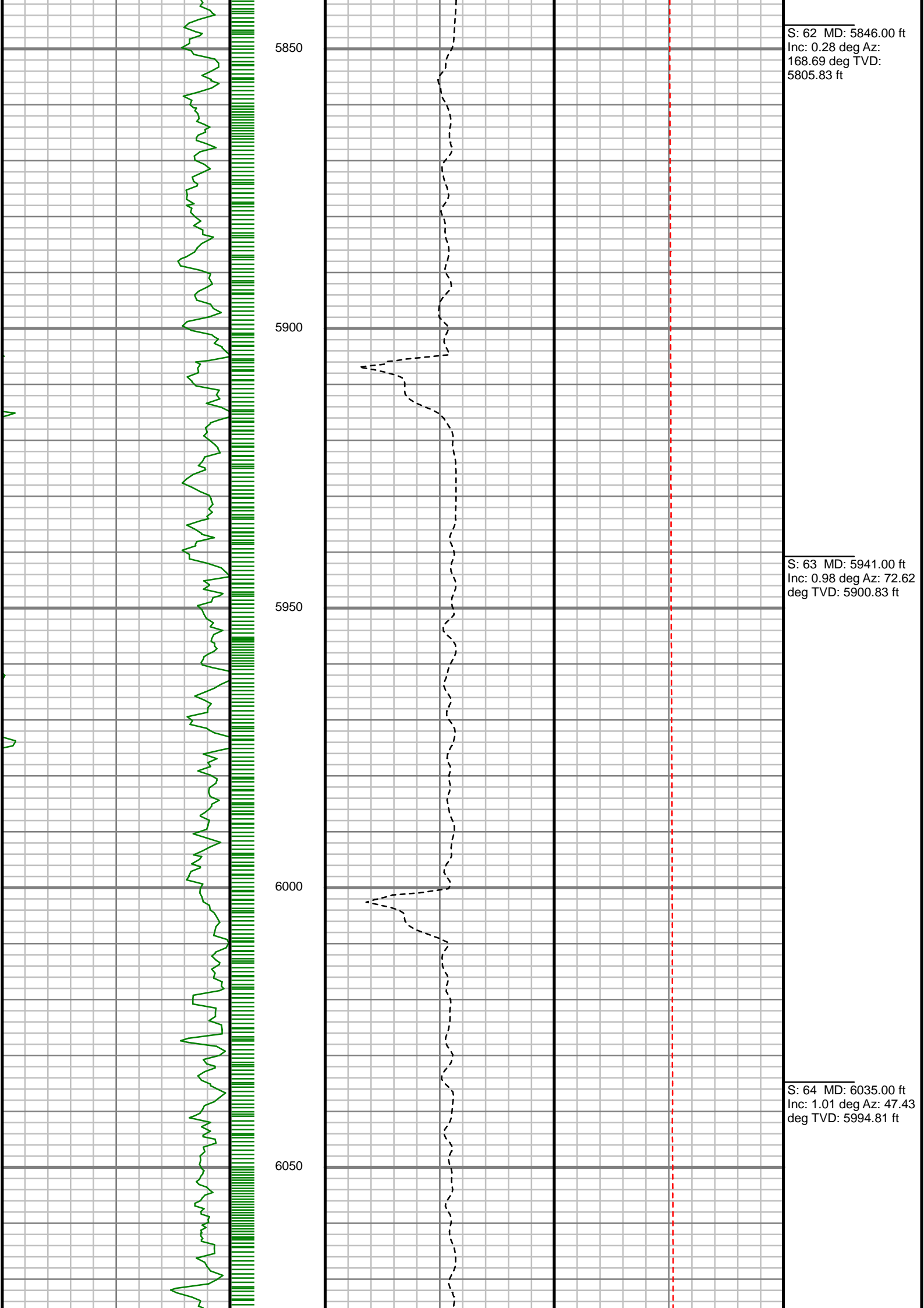
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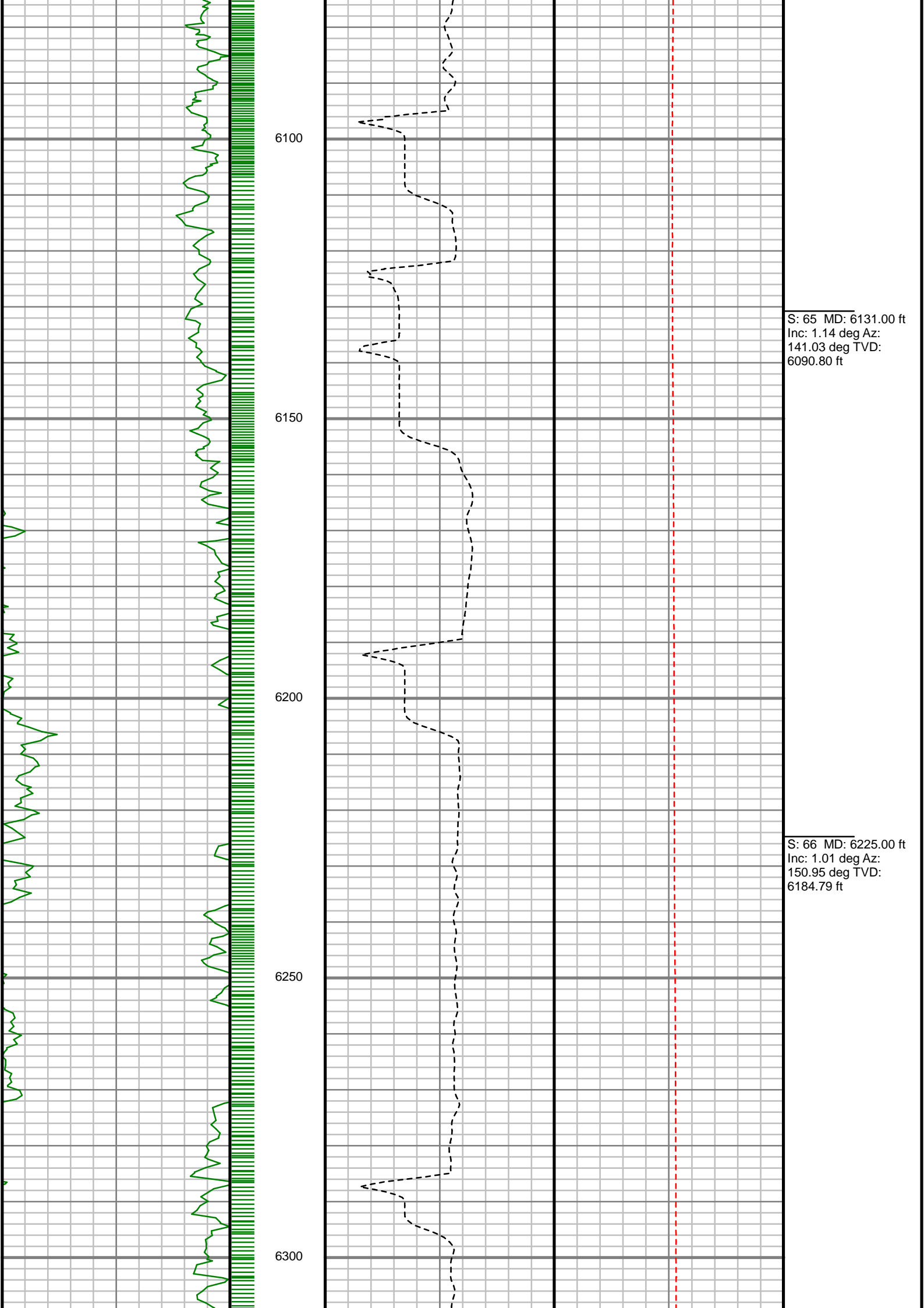
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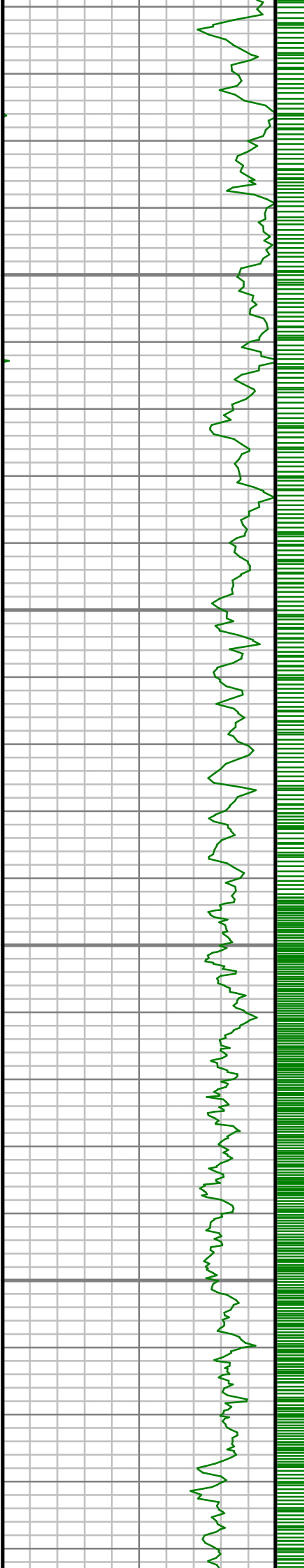


S: 60 MD: 5656.00 ft
Inc: 0.34 deg Az: 90.30
deg TVD: 5615.84 ft

S: 61 MD: 5751.00 ft
Inc: 0.63 deg Az:
140.76 deg TVD:
5710.83 ft





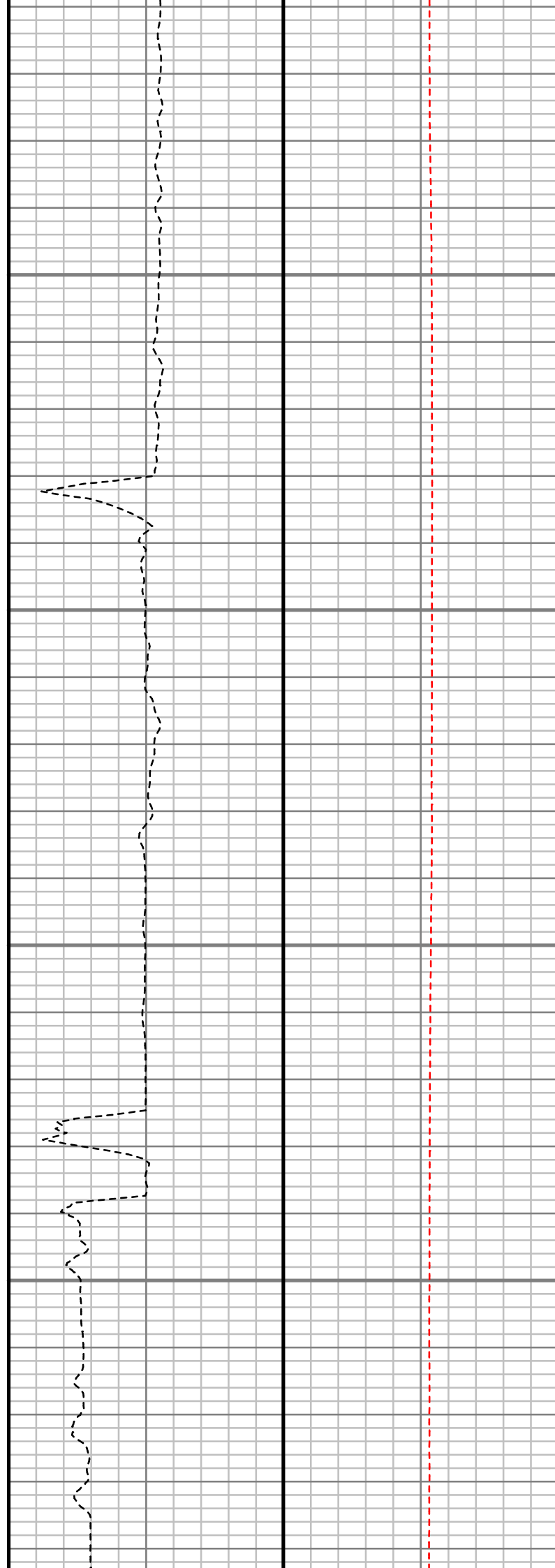


6350

6400

6450

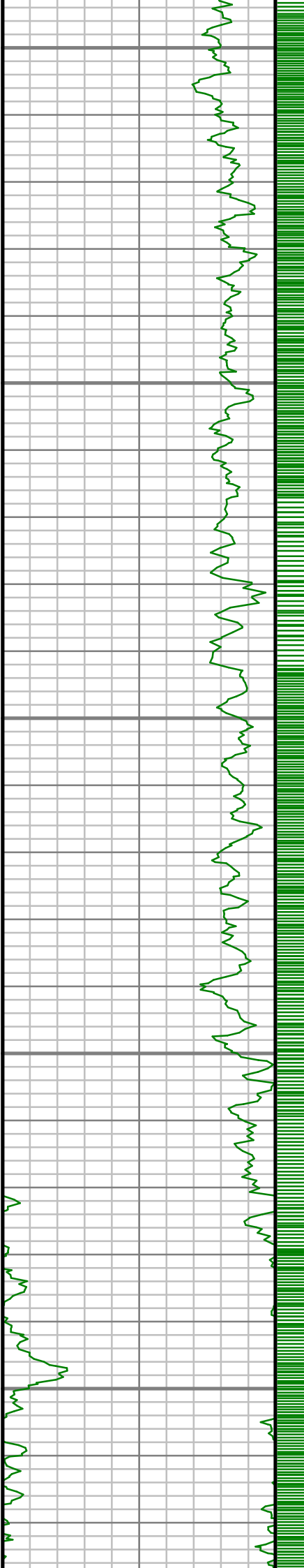
6500



S: 67 MD: 6320.00 ft
Inc: 0.71 deg Az:
131.86 deg TVD:
6279.78 ft

S: 68 MD: 6415.00 ft
Inc: 0.61 deg Az:
160.41 deg TVD:
6374.77 ft

S: 69 MD: 6510.00 ft
Inc: 3.54 deg Az:
187.12 deg TVD:
6469.70 ft



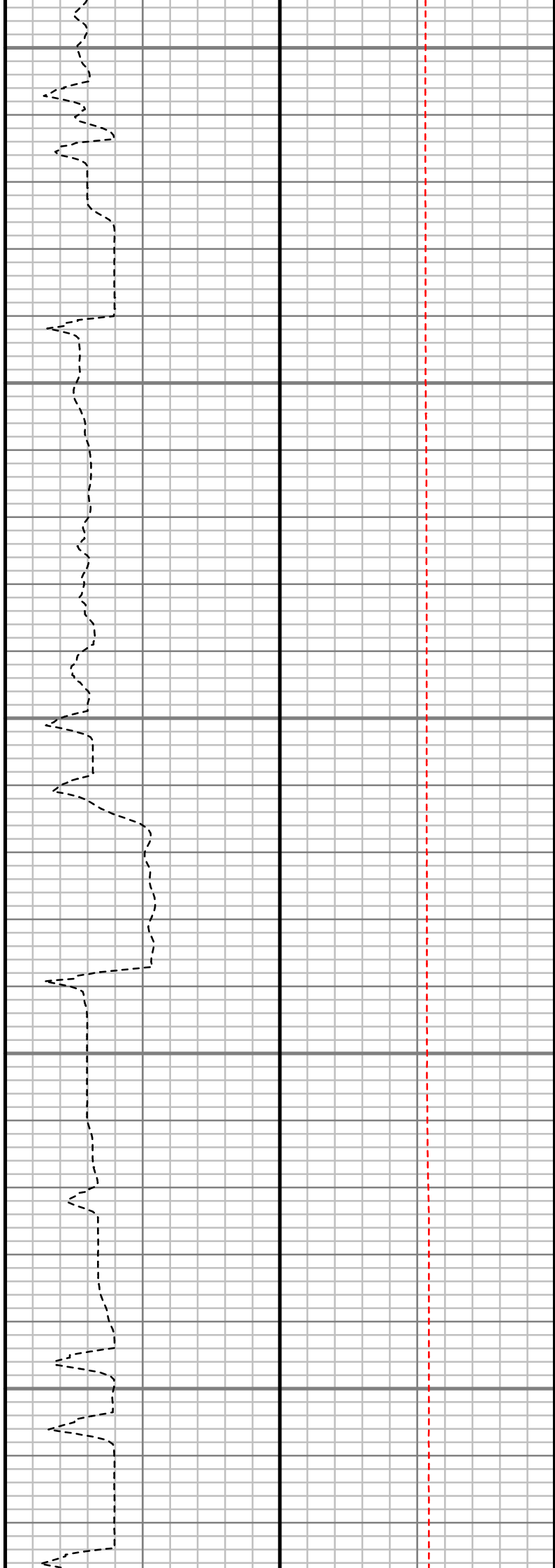
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6600

6650

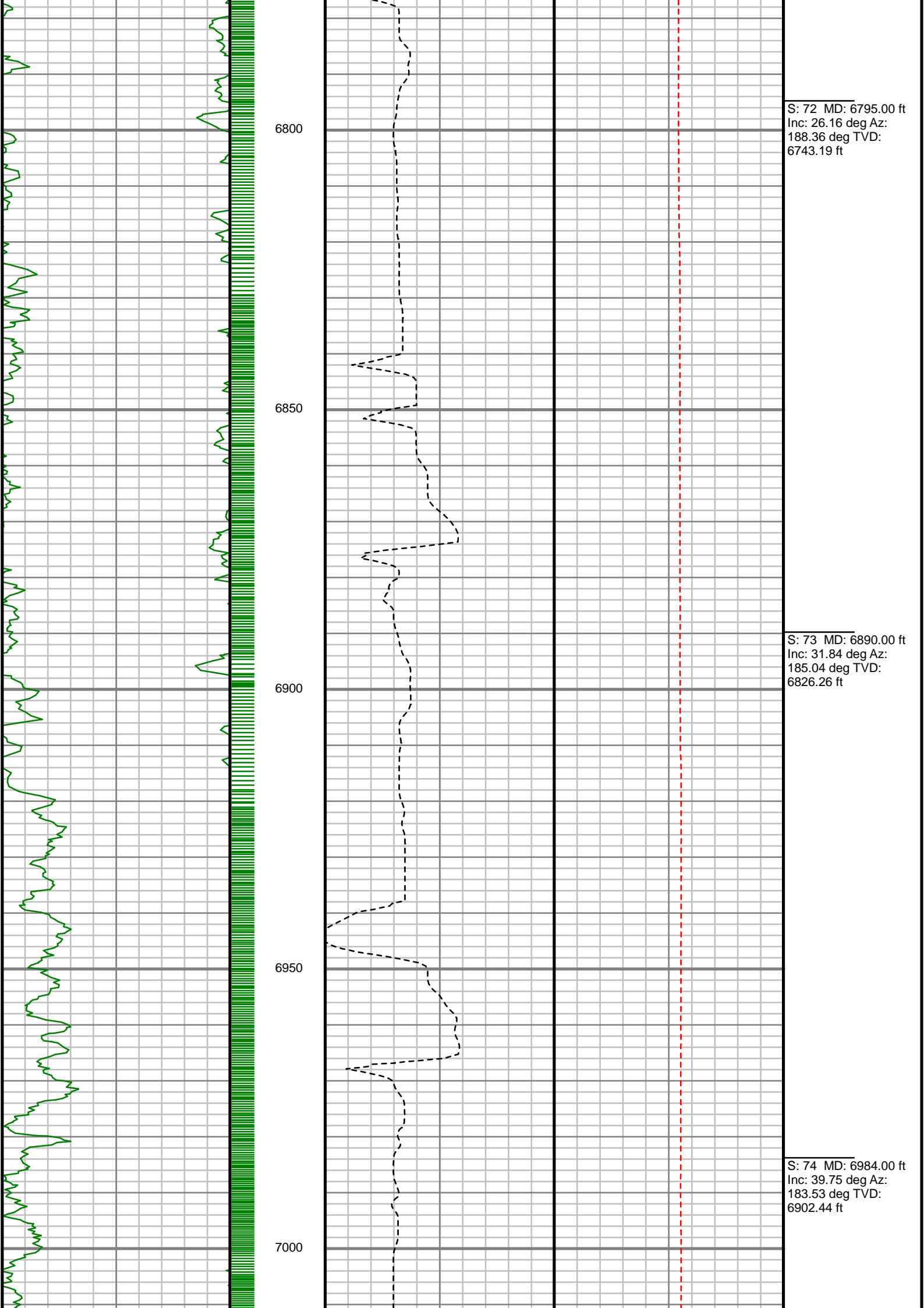
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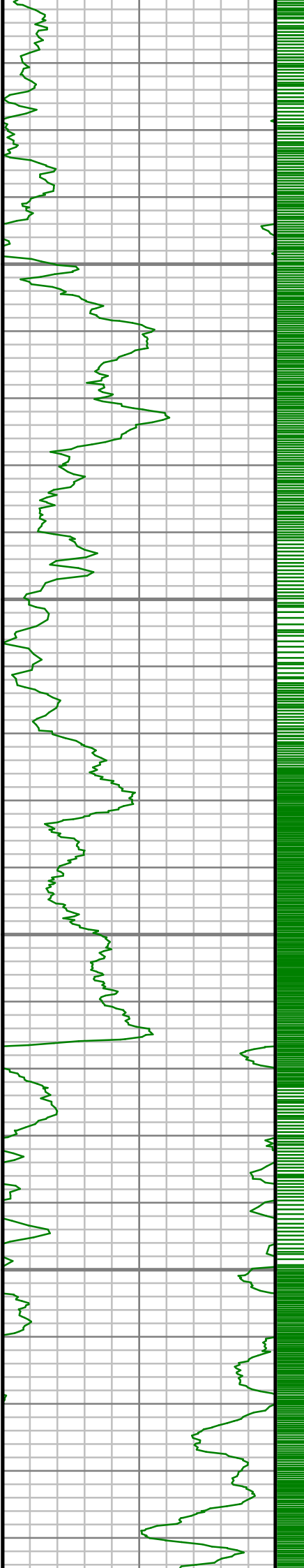
6750



S: 70 MD: 6604.00 ft
Inc: 11.68 deg Az:
192.91 deg TVD:
6562.79 ft

S: 71 MD: 6699.00 ft
Inc: 18.52 deg Az:
193.71 deg TVD:
6654.46 ft





7050

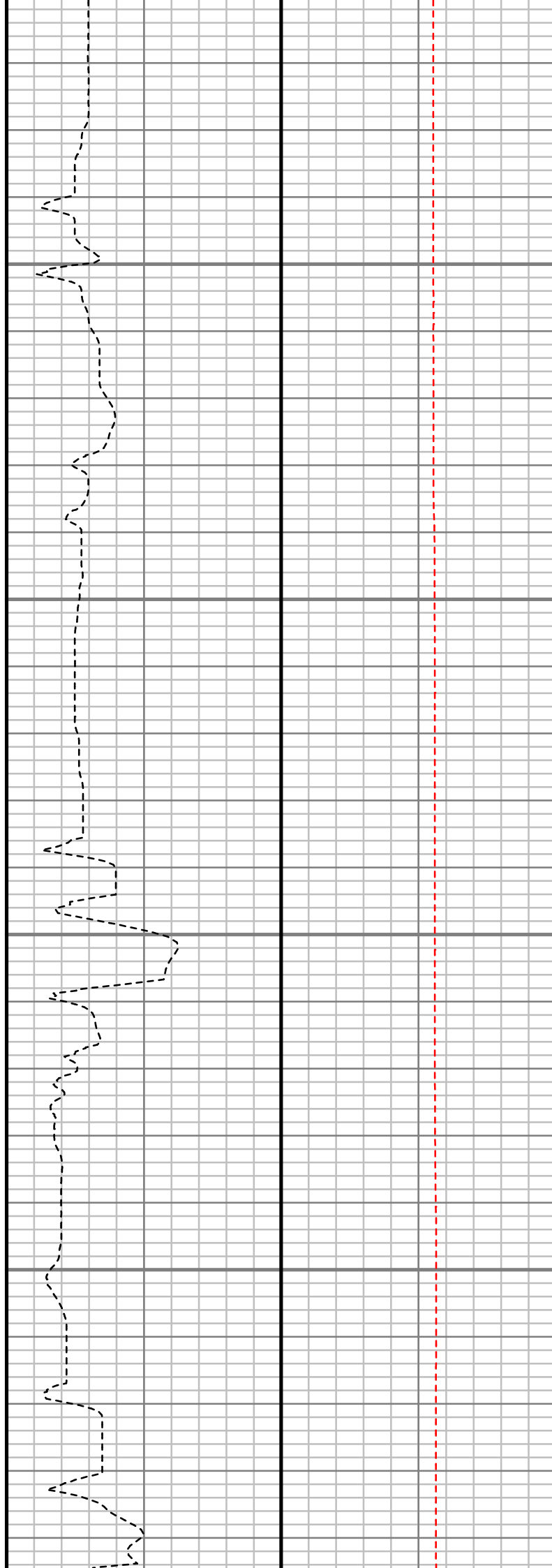
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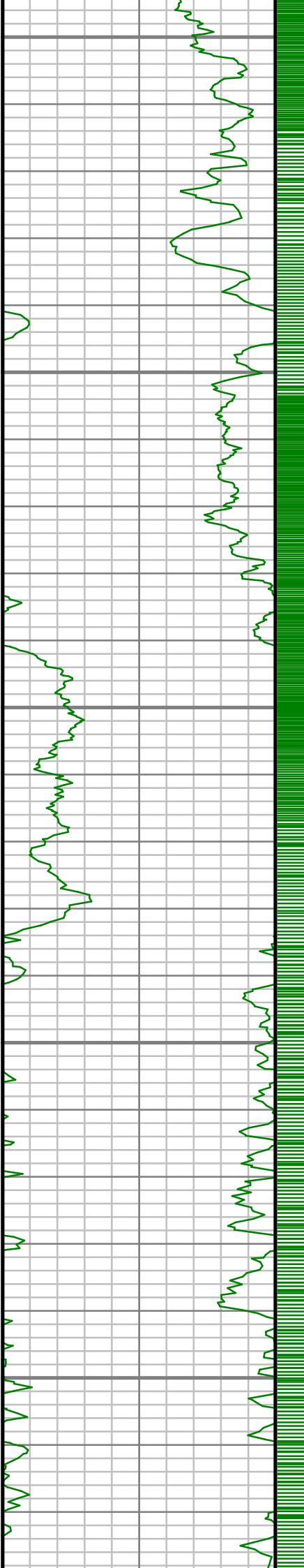
7150

7200

S: 75 MD: 7079.00 ft
Inc: 50.09 deg Az:
180.91 deg TVD:
6969.63 ft

S: 76 MD: 7174.00 ft
Inc: 59.08 deg Az:
180.38 deg TVD:
7024.62 ft





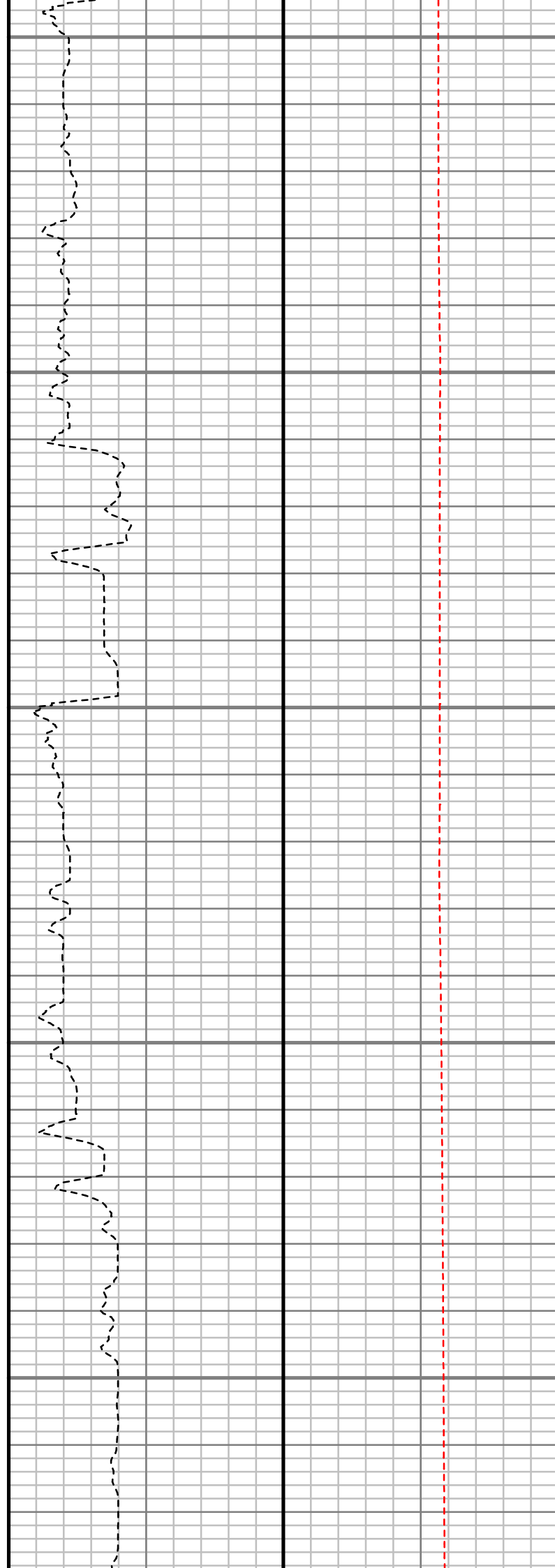
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7300

7350

7400

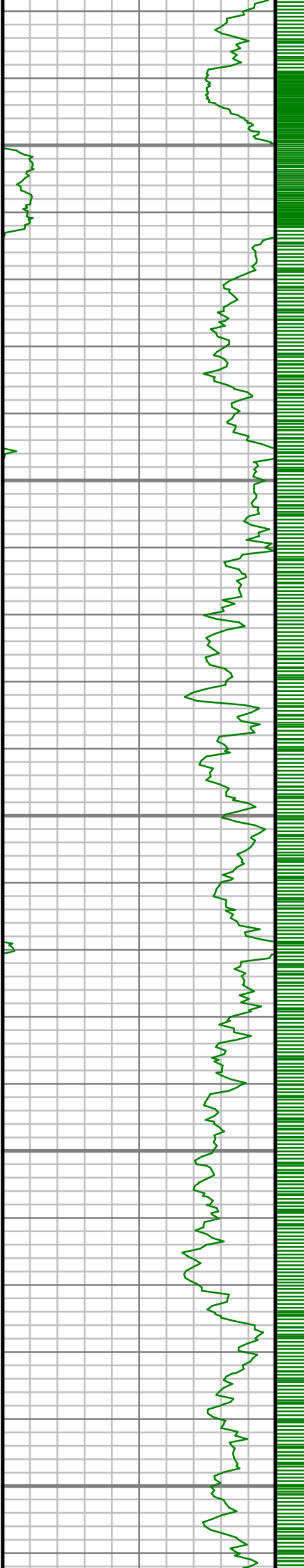
7450



S: 77 MD: 7269.00 ft
Inc: 69.53 deg Az:
181.74 deg TVD:
7065.76 ft

S: 78 MD: 7362.00 ft
Inc: 78.47 deg Az:
179.70 deg TVD:
7091.38 ft

S: 79 MD: 7457.00 ft
Inc: 85.41 deg Az:
181.72 deg TVD:
7104.70 ft



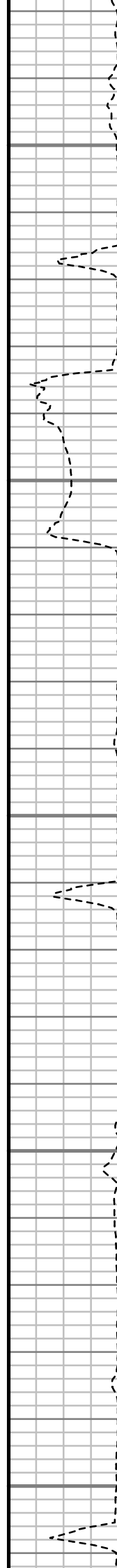
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7550

7600

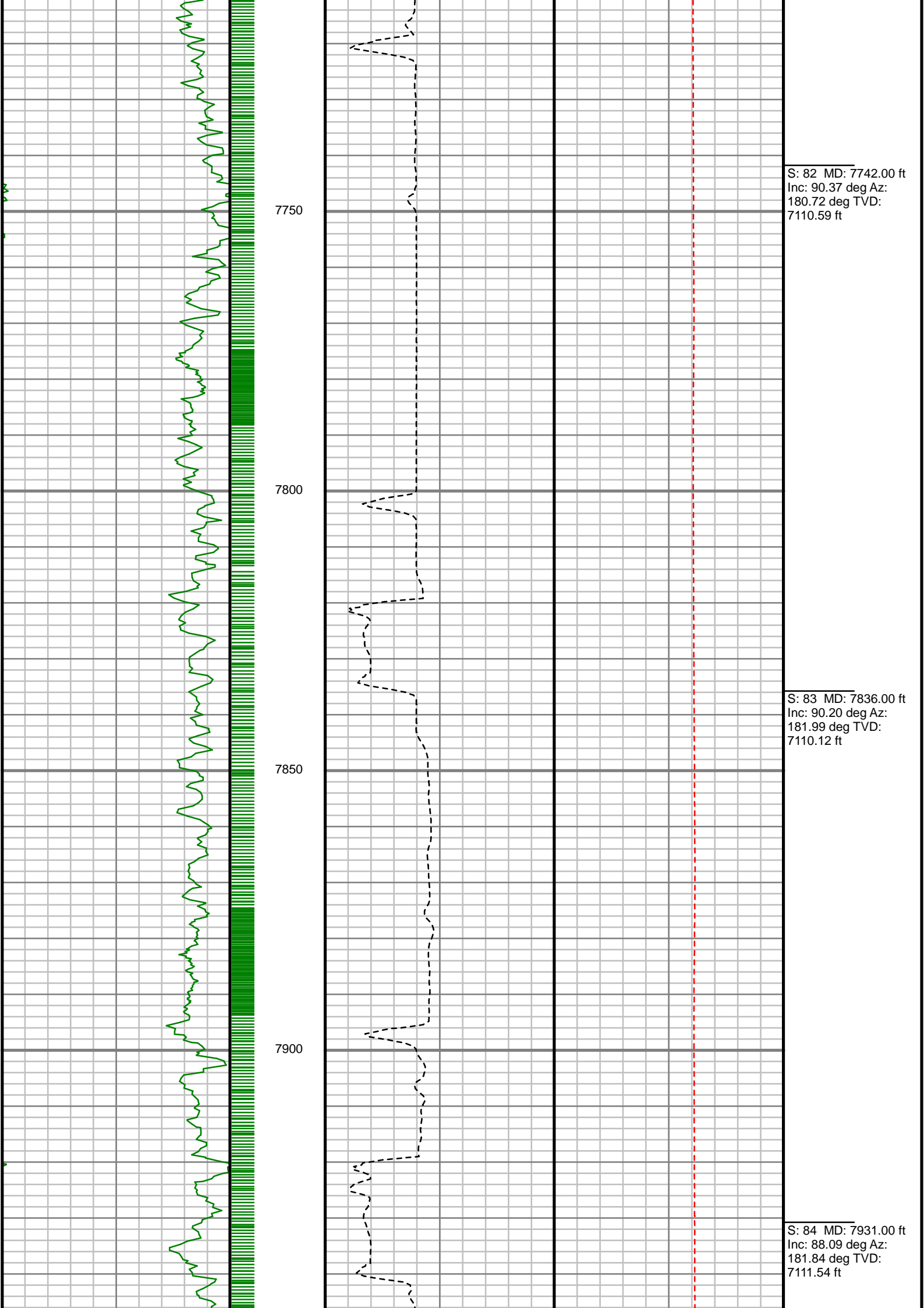
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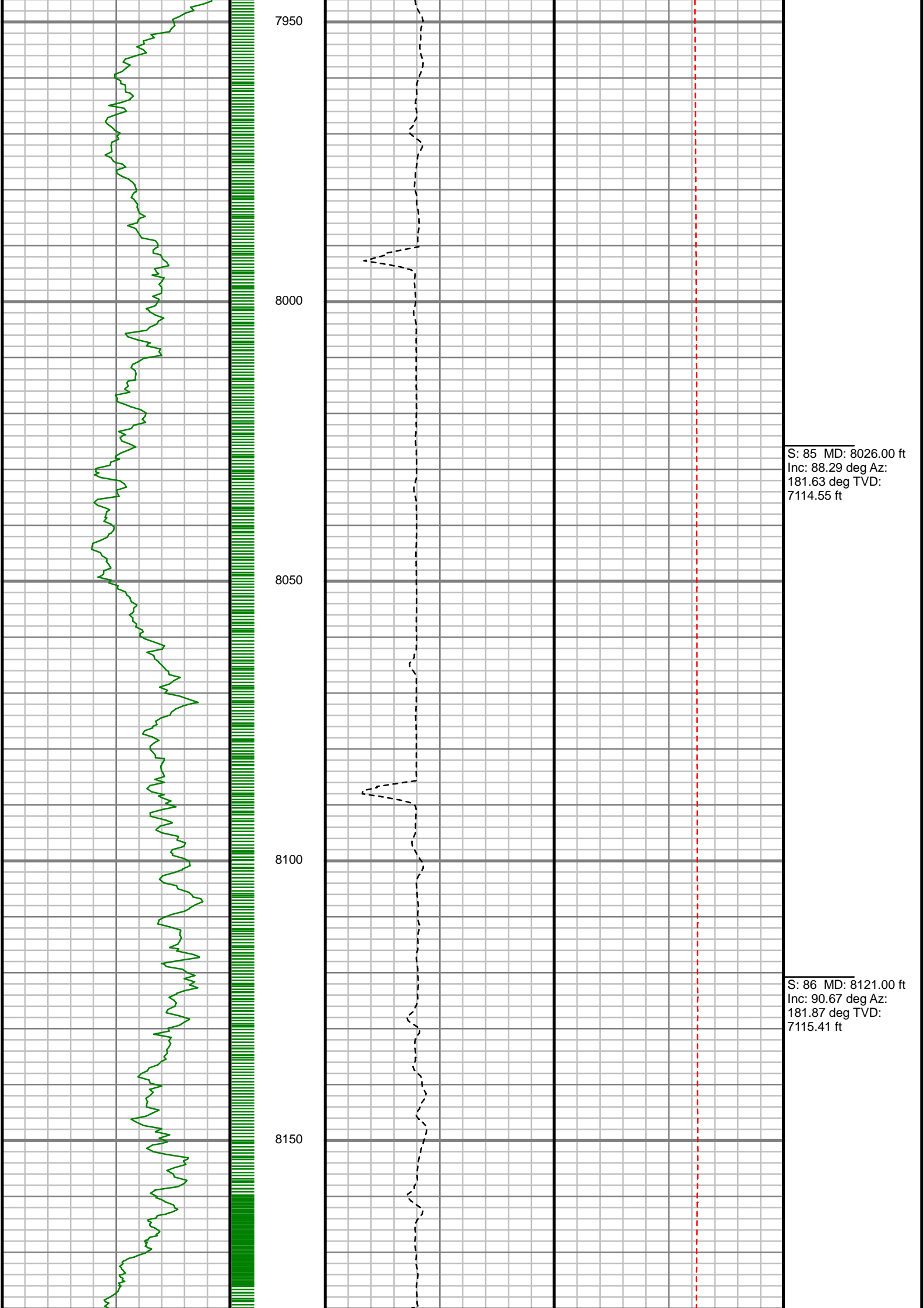
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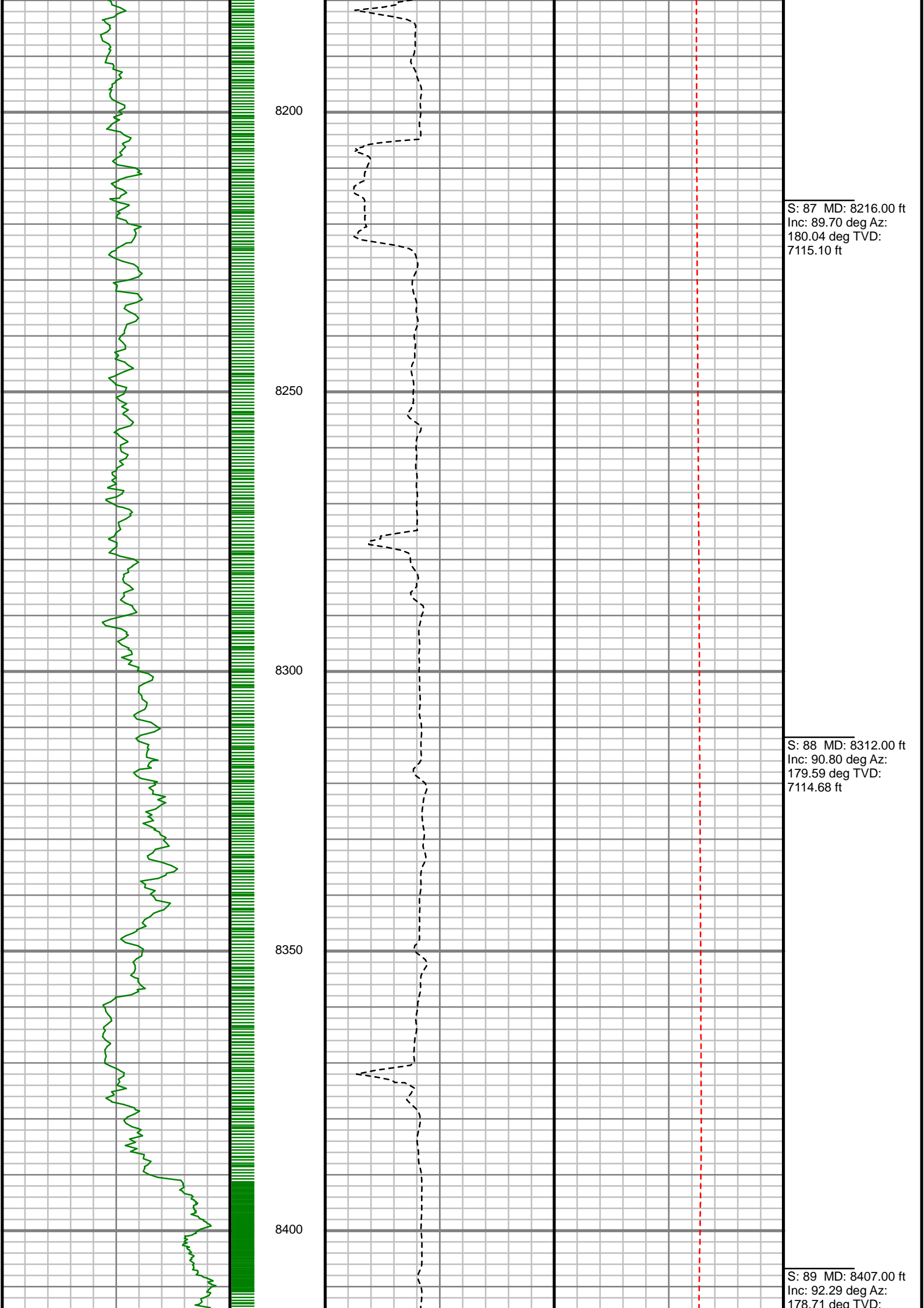


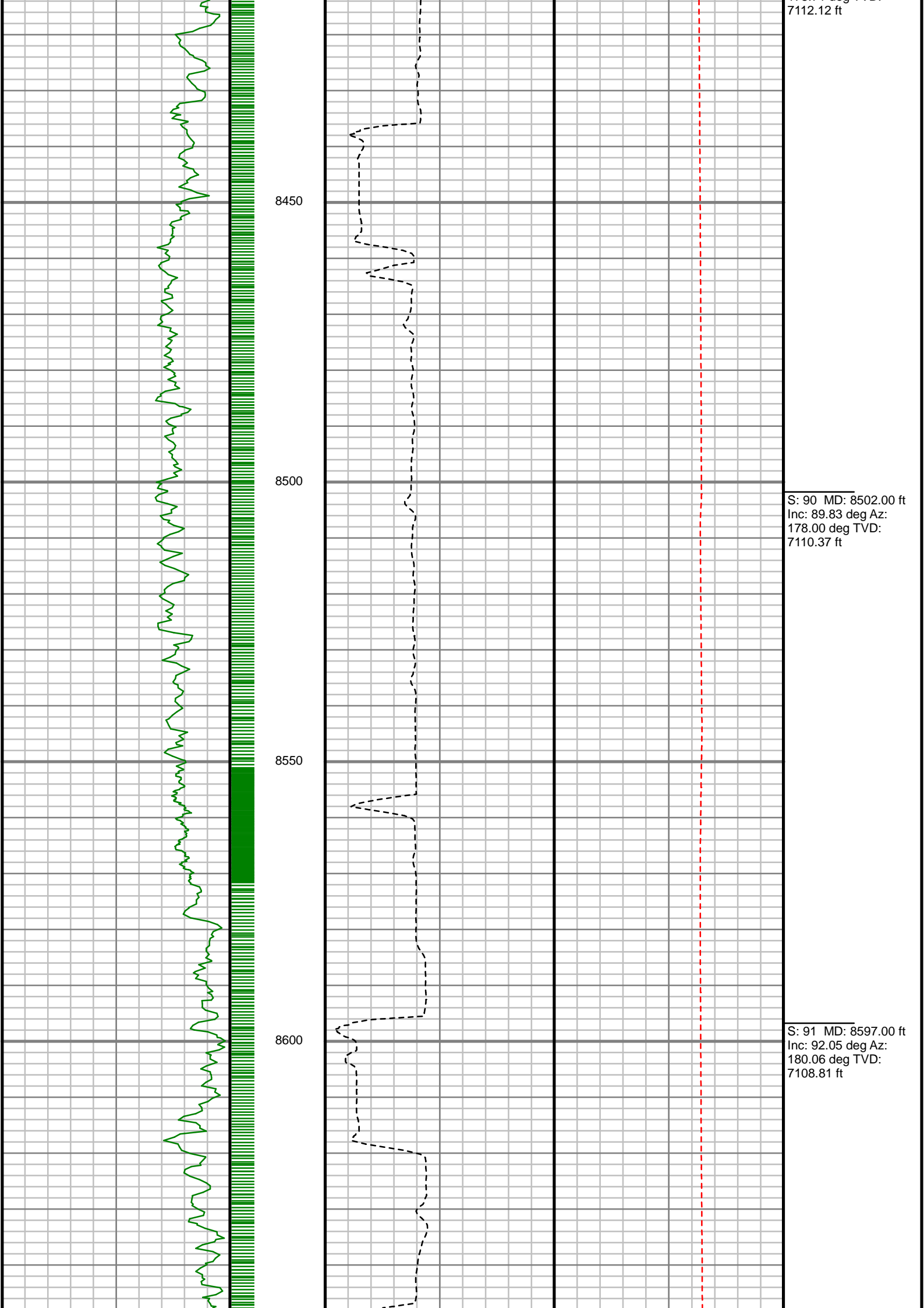
S: 80 MD: 7552.00 ft
Inc: 88.76 deg Az:
181.49 deg TVD:
7109.53 ft

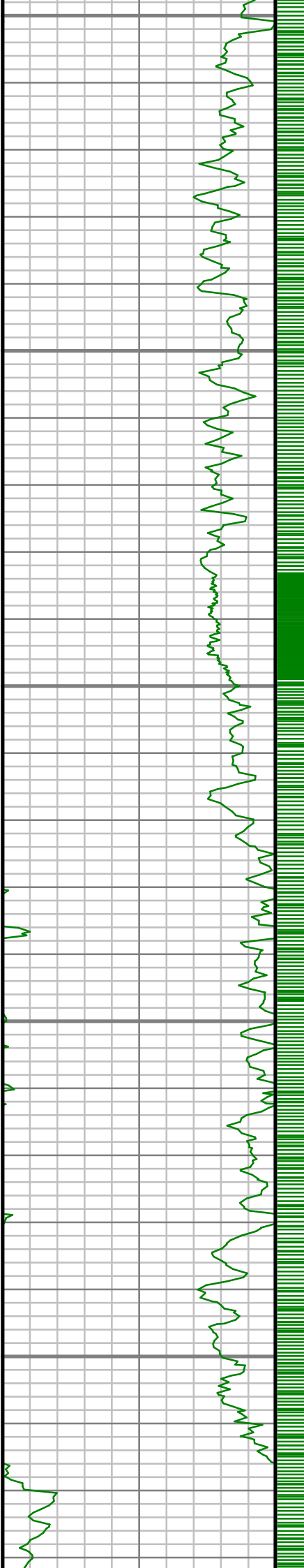
S: 81 MD: 7647.00 ft
Inc: 89.80 deg Az:
180.94 deg TVD:
7110.73 ft











8650

8700

8750

8800

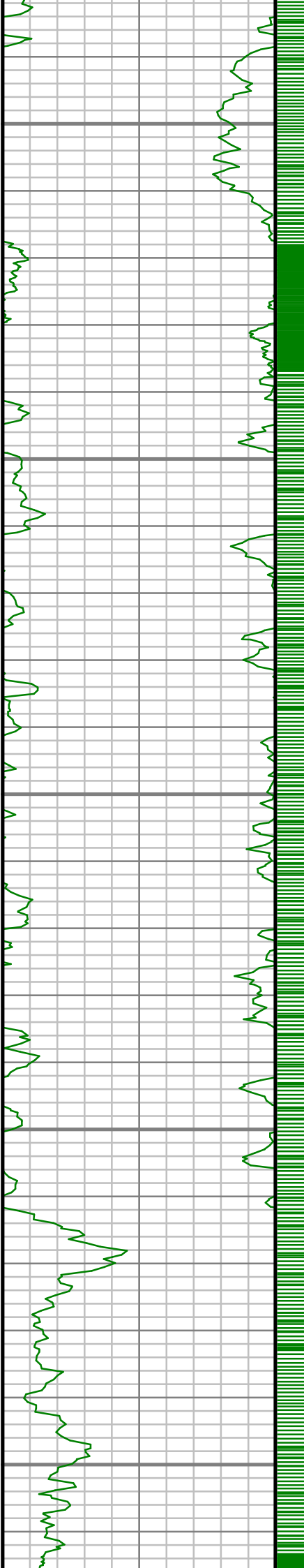
8850



S: 92 MD: 8691.00 ft
Inc: 90.87 deg Az:
179.66 deg TVD:
7106.41 ft

S: 93 MD: 8786.00 ft
Inc: 91.41 deg Az:
181.57 deg TVD:
7104.52 ft

S: 94 MD: 8881.00 ft



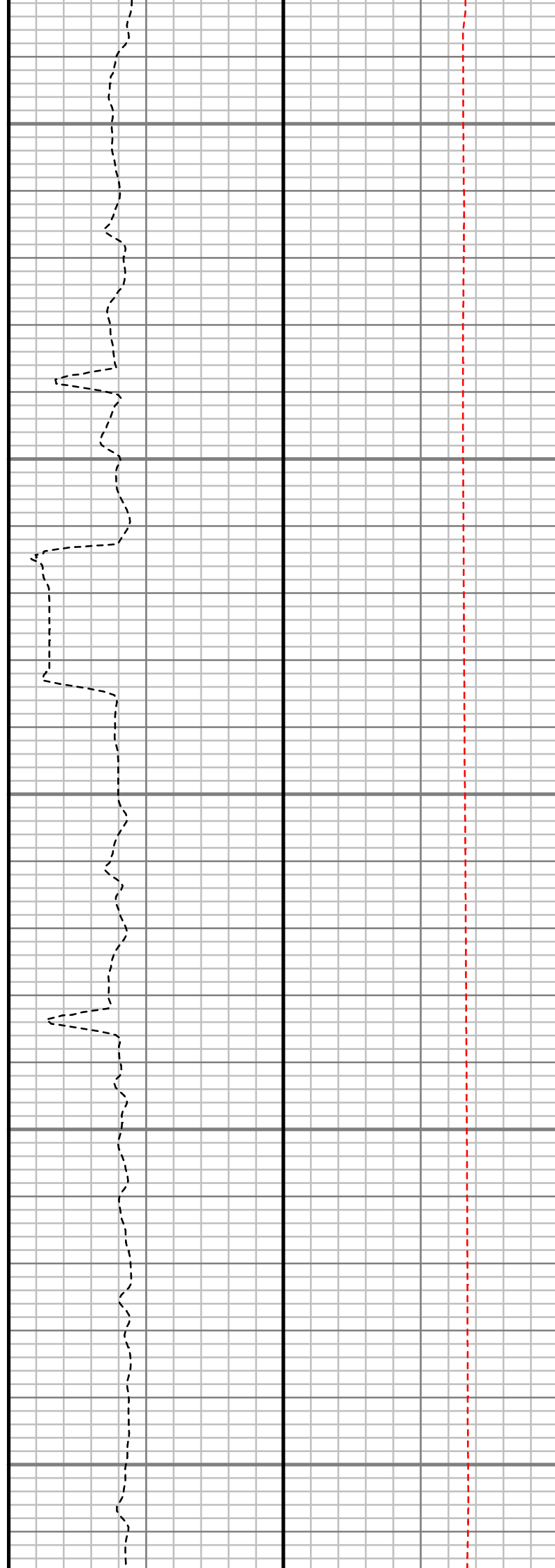
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8950

9000

9050

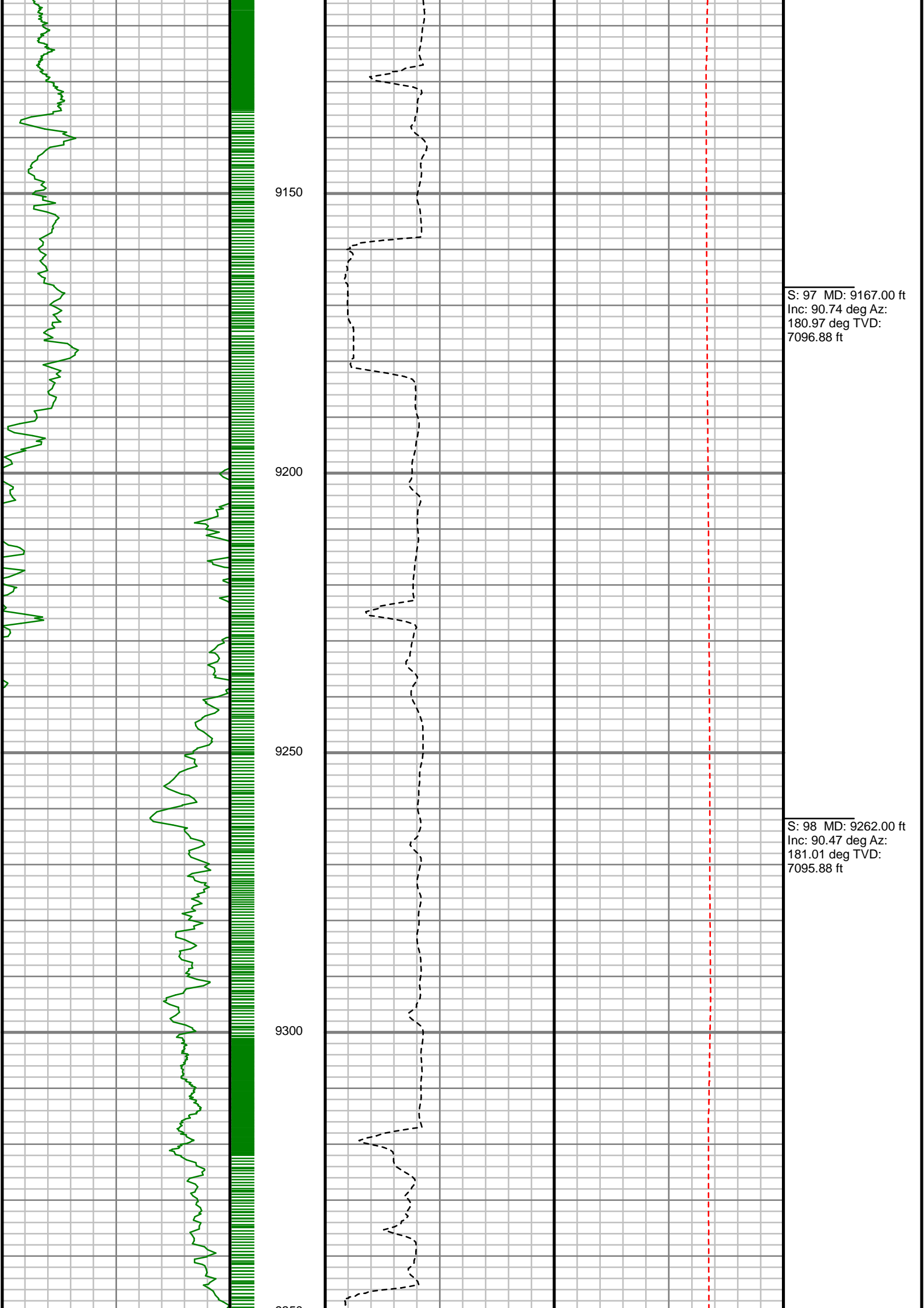
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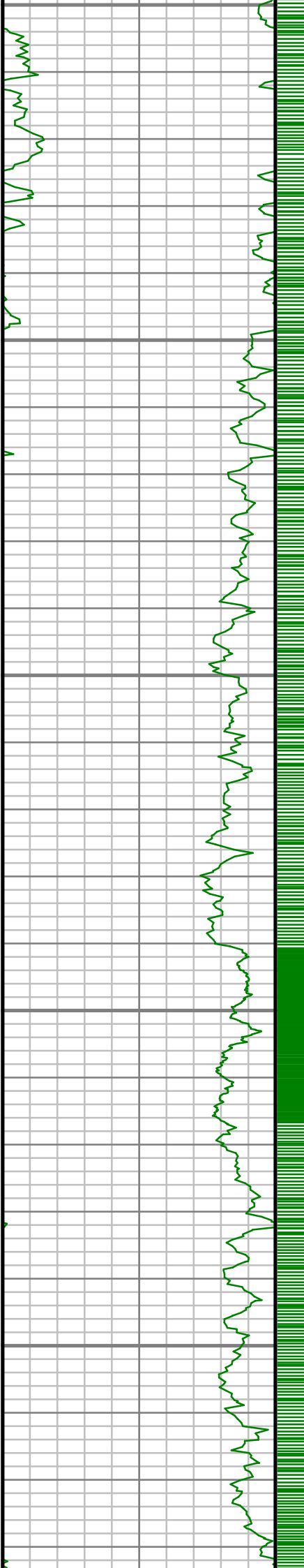


S: 94 MD: 8881.00 ft
Inc: 91.84 deg Az:
181.53 deg TVD:
7101.82 ft

S: 95 MD: 8976.00 ft
Inc: 90.37 deg Az:
181.64 deg TVD:
7099.99 ft

S: 96 MD: 9071.00 ft
Inc: 91.31 deg Az:
180.73 deg TVD:
7098.60 ft





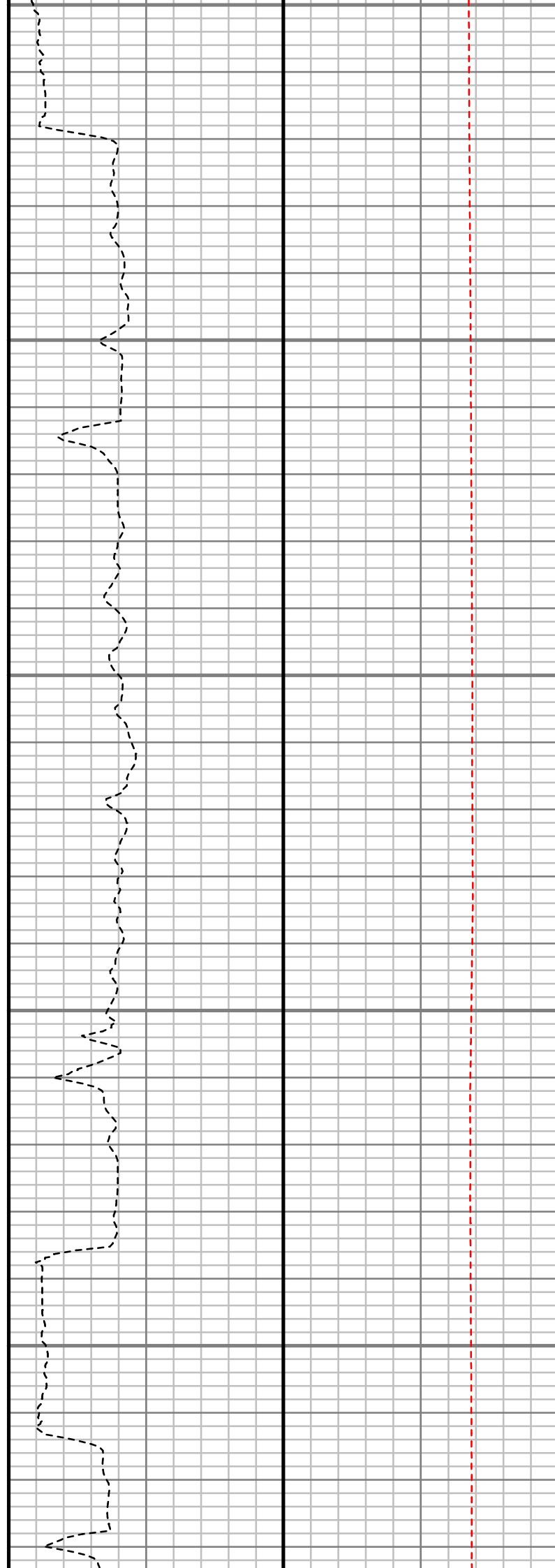
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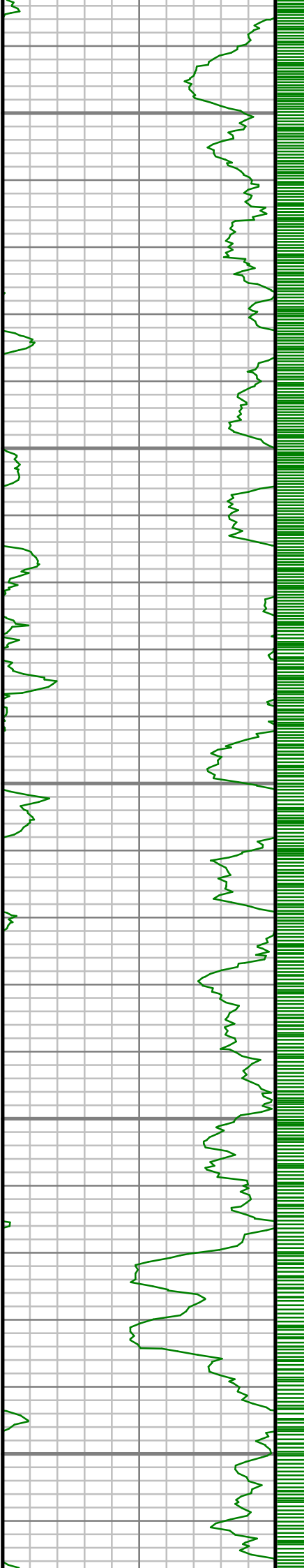
9550



S: 99 MD: 9356.00 ft
Inc: 89.36 deg Az:
180.55 deg TVD:
7096.02 ft

S: 100 MD: 9451.00 ft
Inc: 90.03 deg Az:
181.09 deg TVD:
7096.52 ft

S: 101 MD: 9546.00 ft
Inc: 88.99 deg Az:
182.59 deg TVD:
7097.33 ft



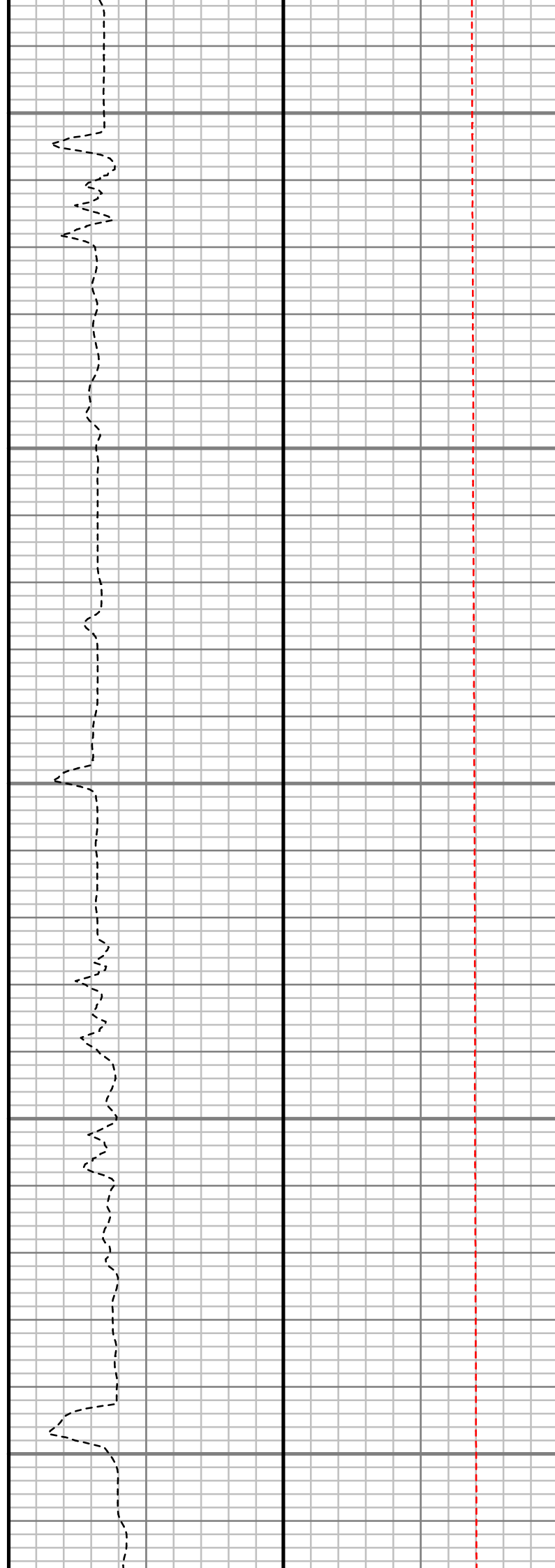
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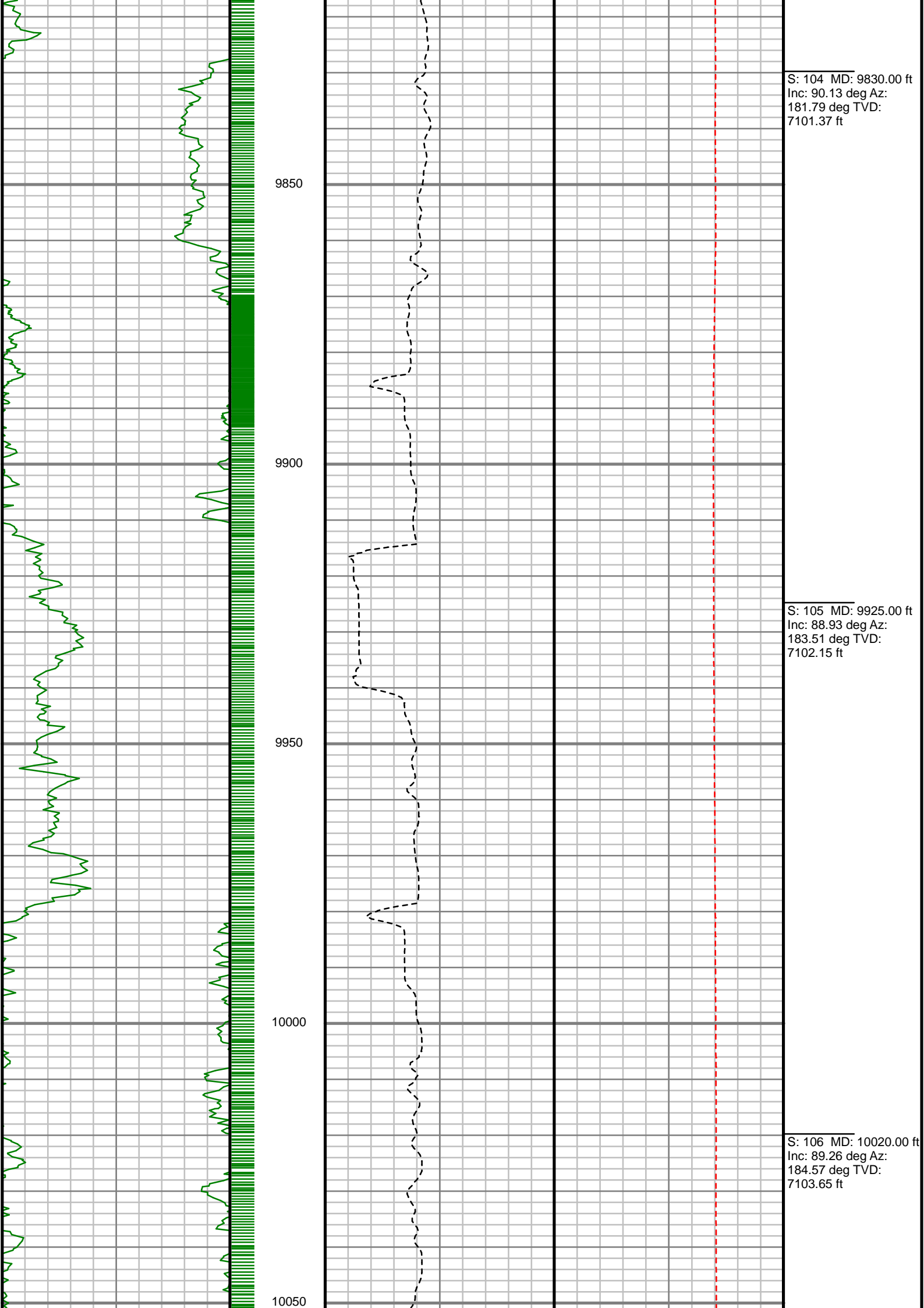
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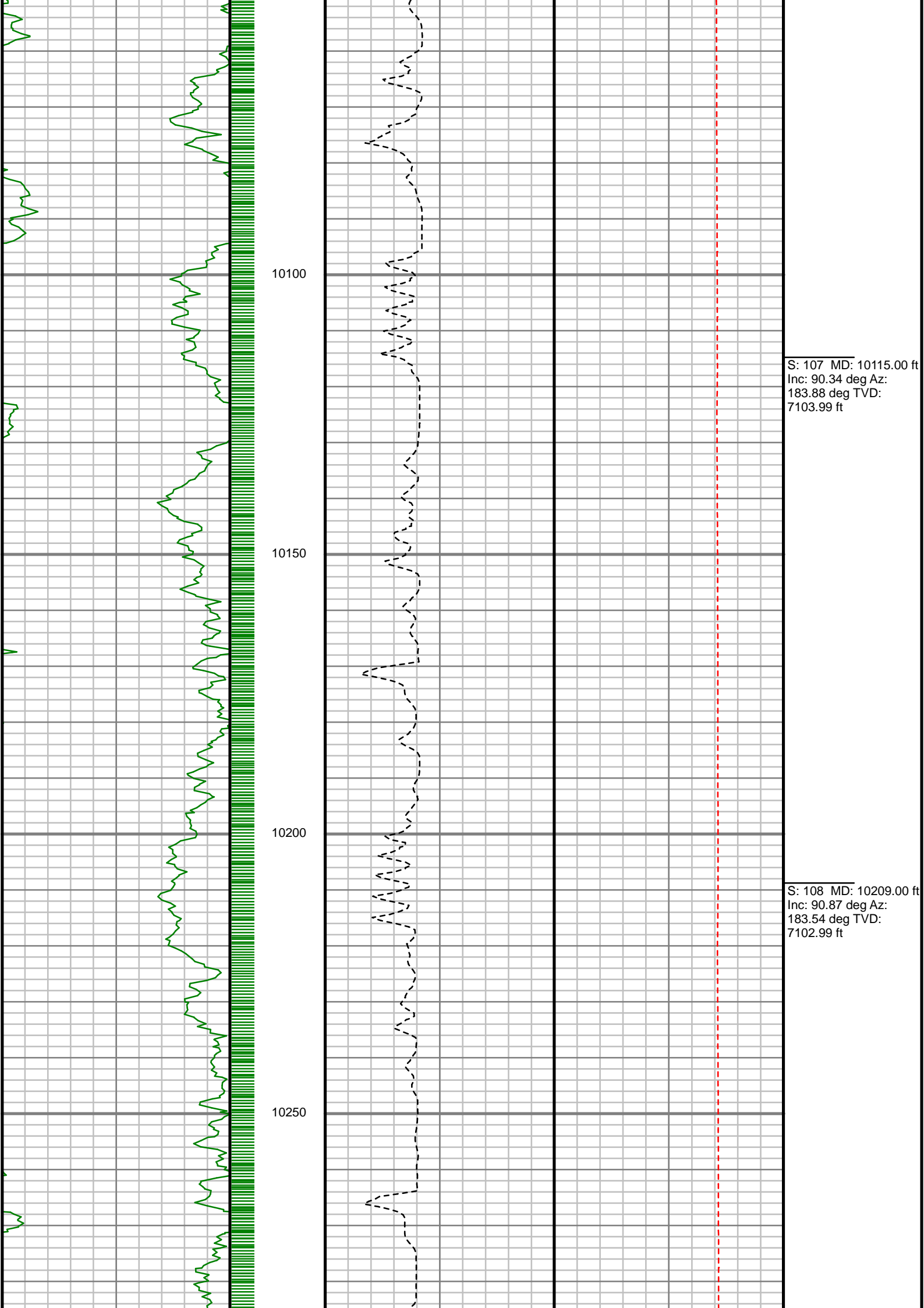
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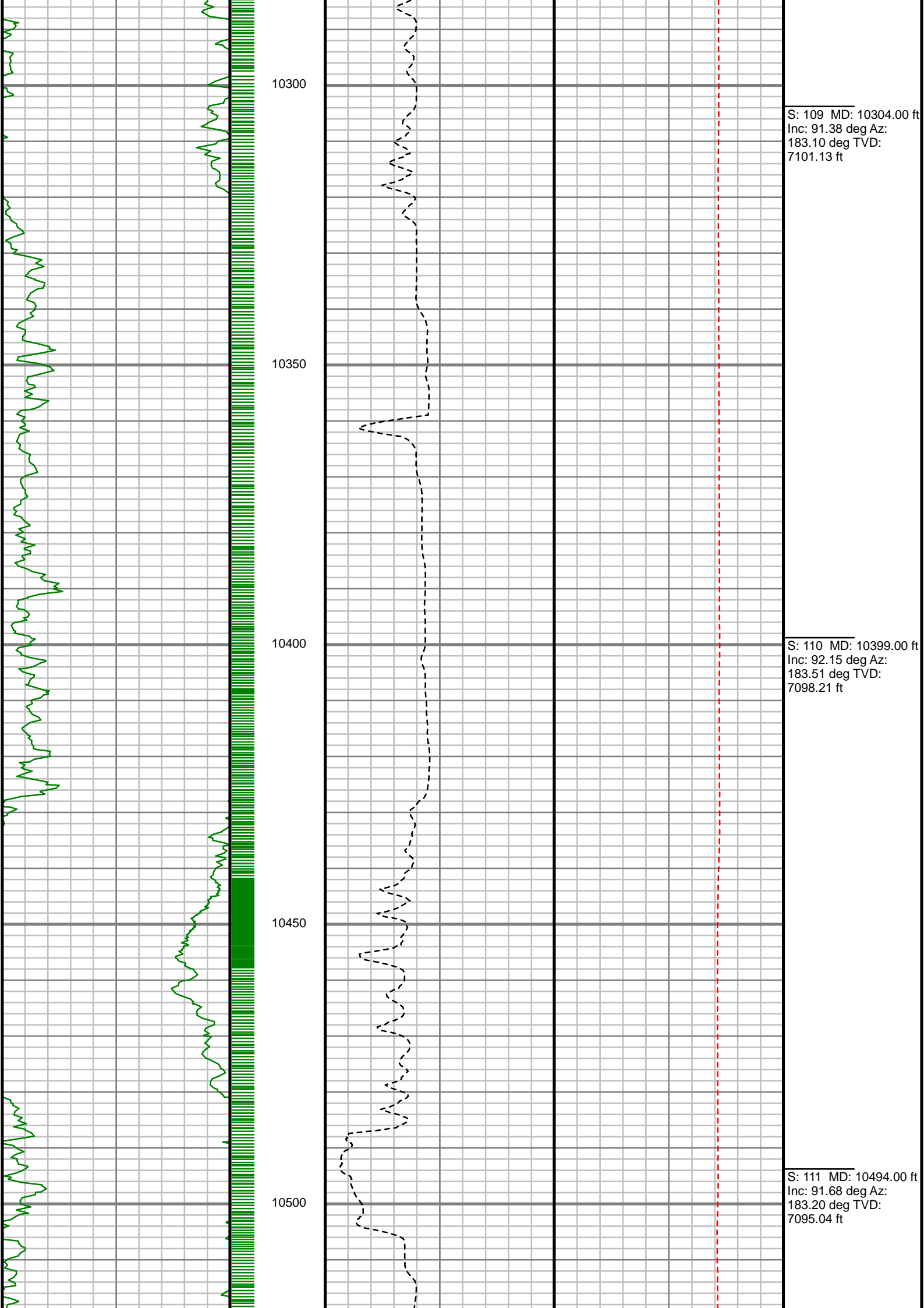


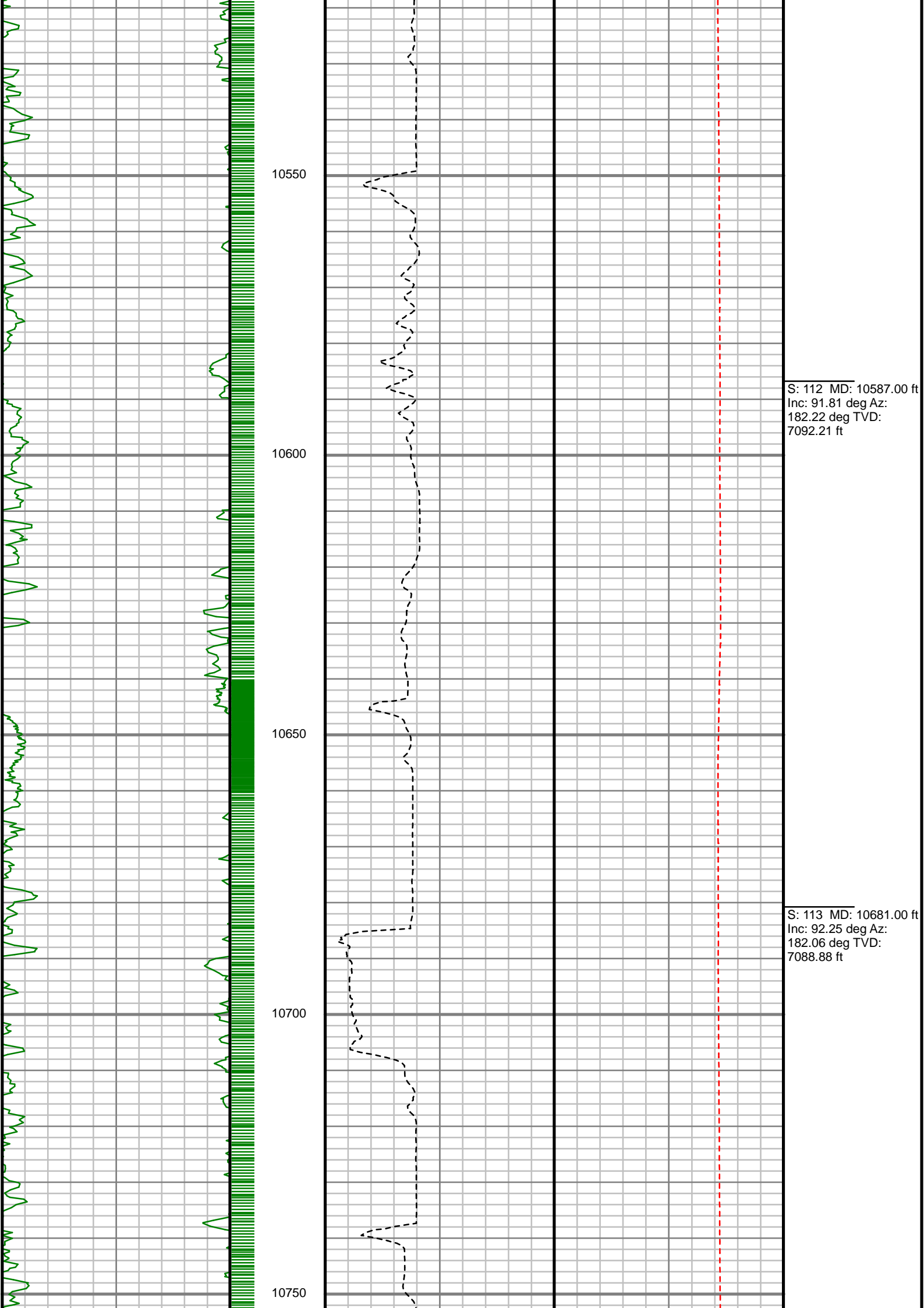
S: 102 MD: 9640.00 ft
Inc: 88.52 deg Az:
183.55 deg TVD:
7099.37 ft

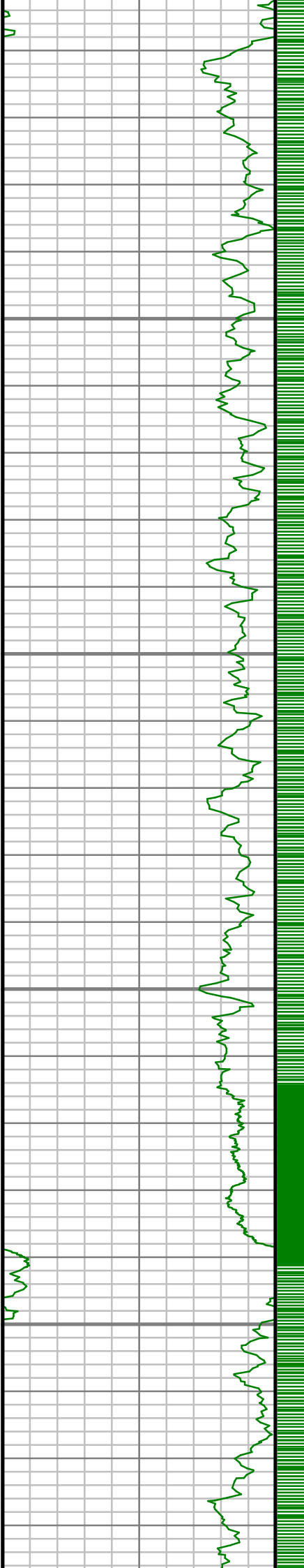
S: 103 MD: 9735.00 ft
Inc: 89.46 deg Az:
182.98 deg TVD:
7101.04 ft







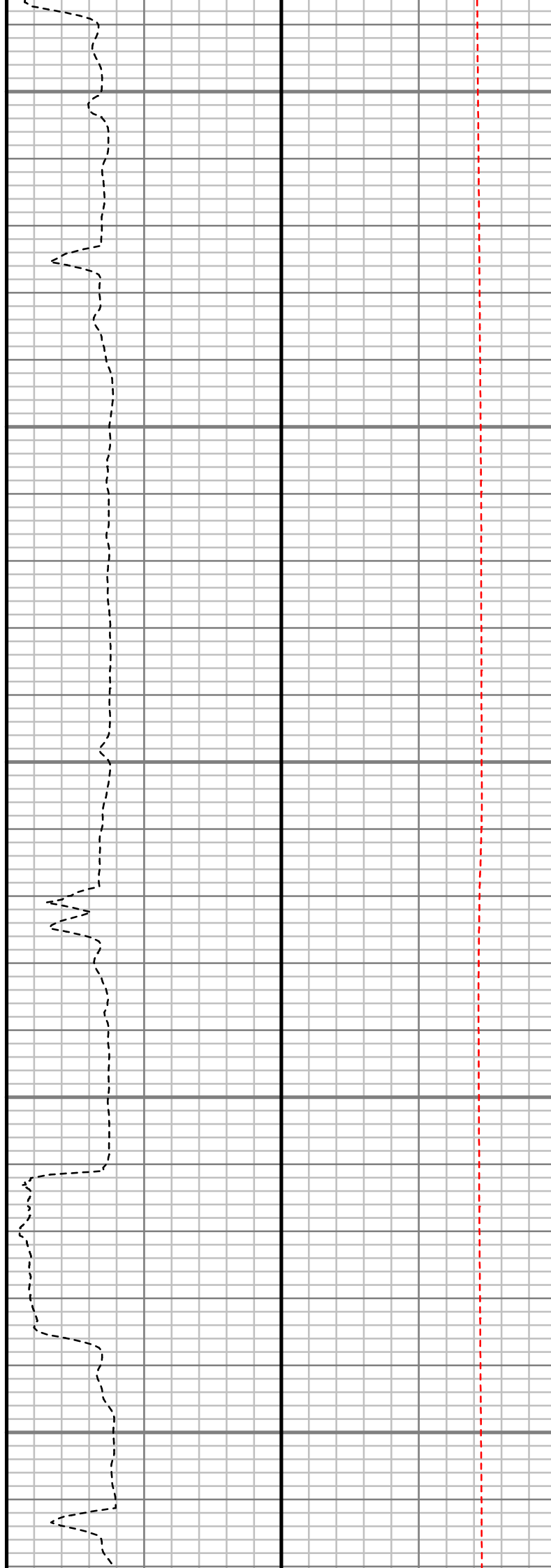
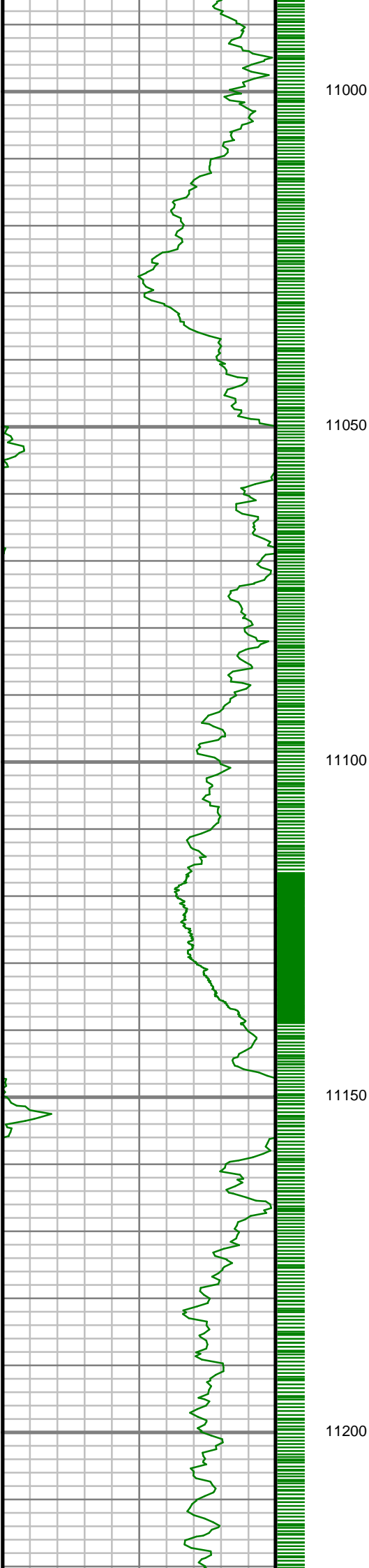




S: 114 MD: 10776.00 ft
Inc: 91.21 deg Az:
182.07 deg TVD:
7086.01 ft

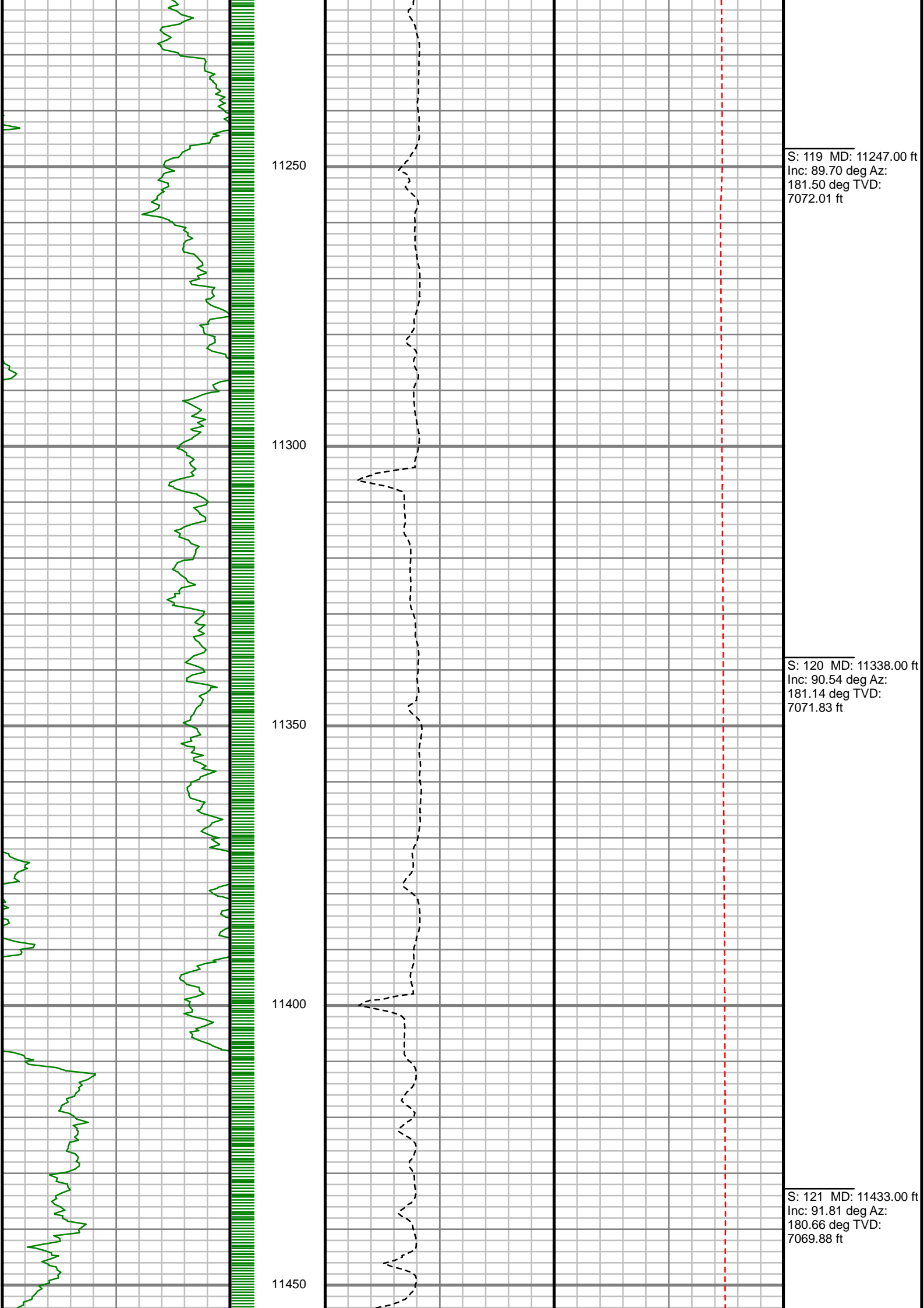
S: 115 MD: 10871.00 ft
Inc: 92.48 deg Az:
182.15 deg TVD:
7082.95 ft

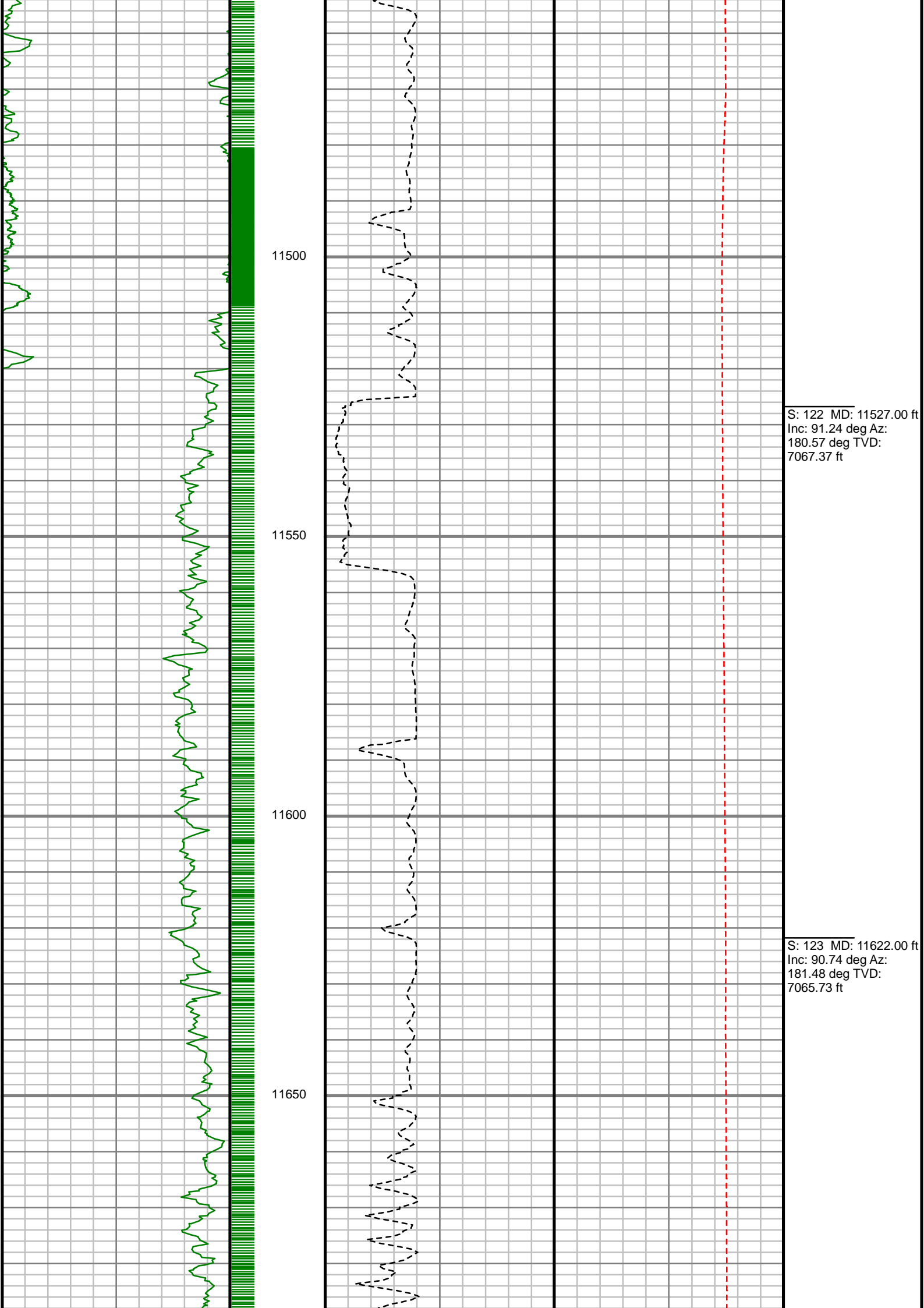
S: 116 MD: 10966.00 ft
Inc: 92.28 deg Az:
181.98 deg TVD:
7079.00 ft

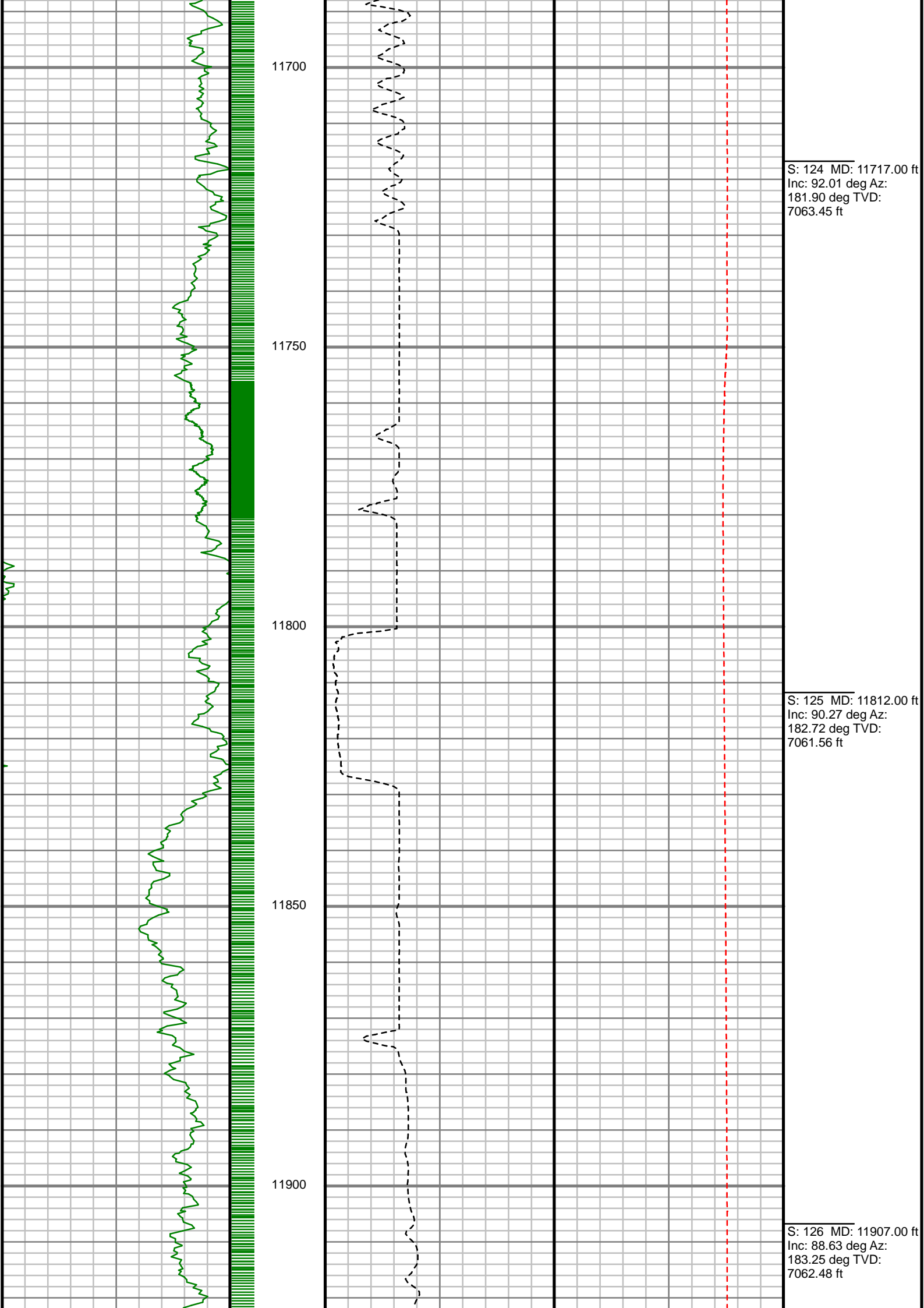


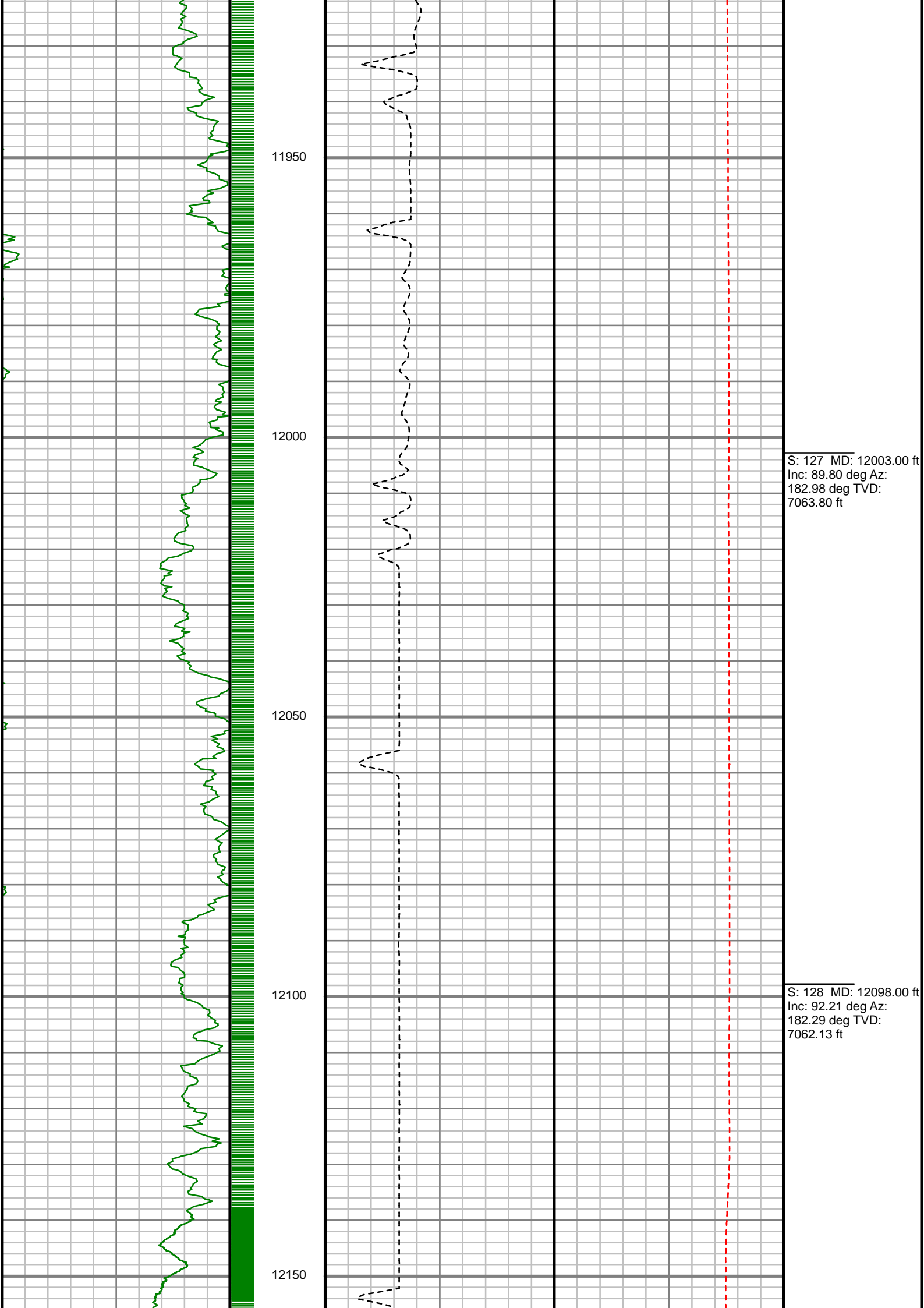
S: 117 MD: 11061.00 ft
Inc: 91.07 deg Az:
181.77 deg TVD:
7076.22 ft

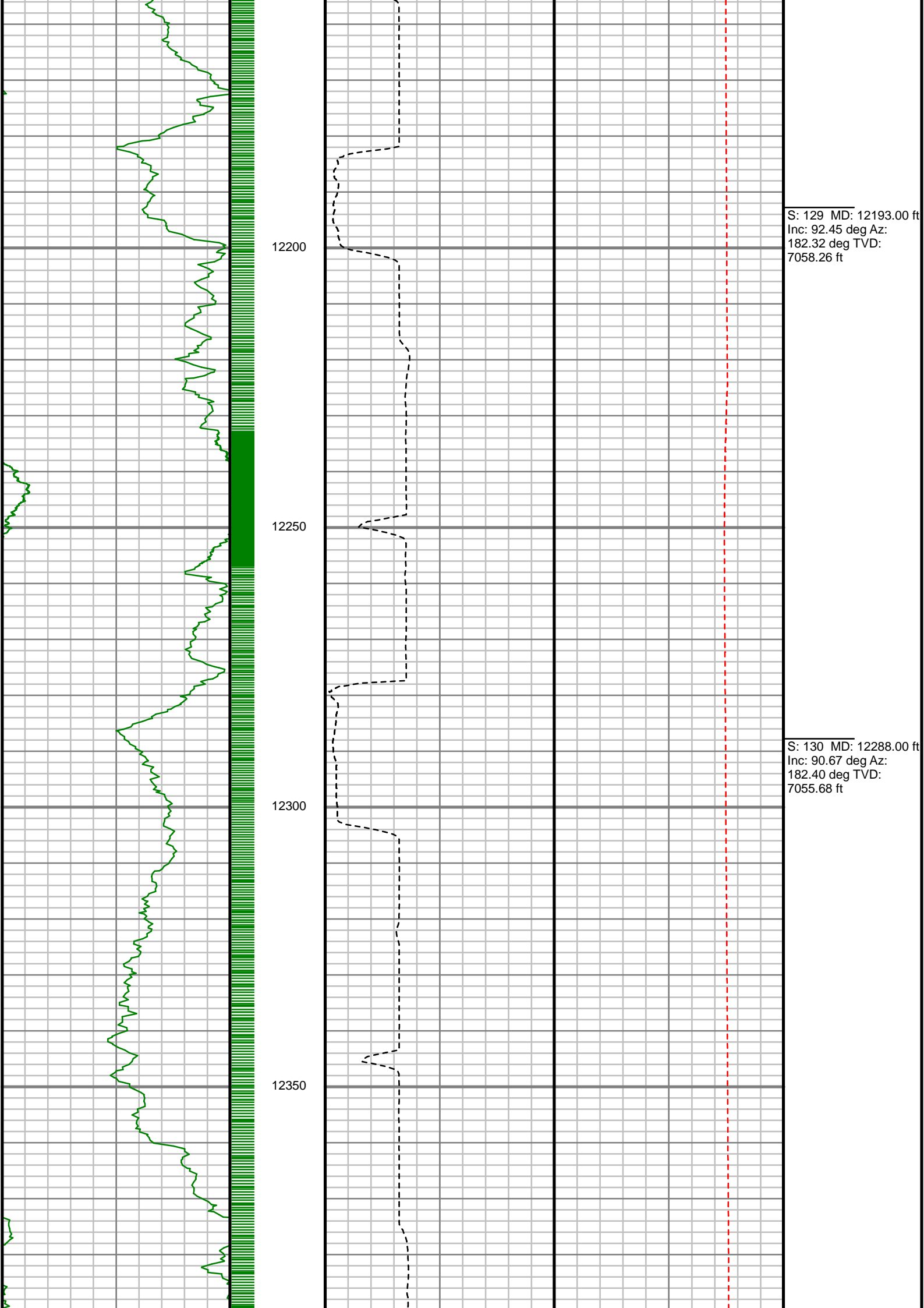
S: 118 MD: 11153.00 ft
Inc: 92.21 deg Az:
181.44 deg TVD:
7073.58 ft

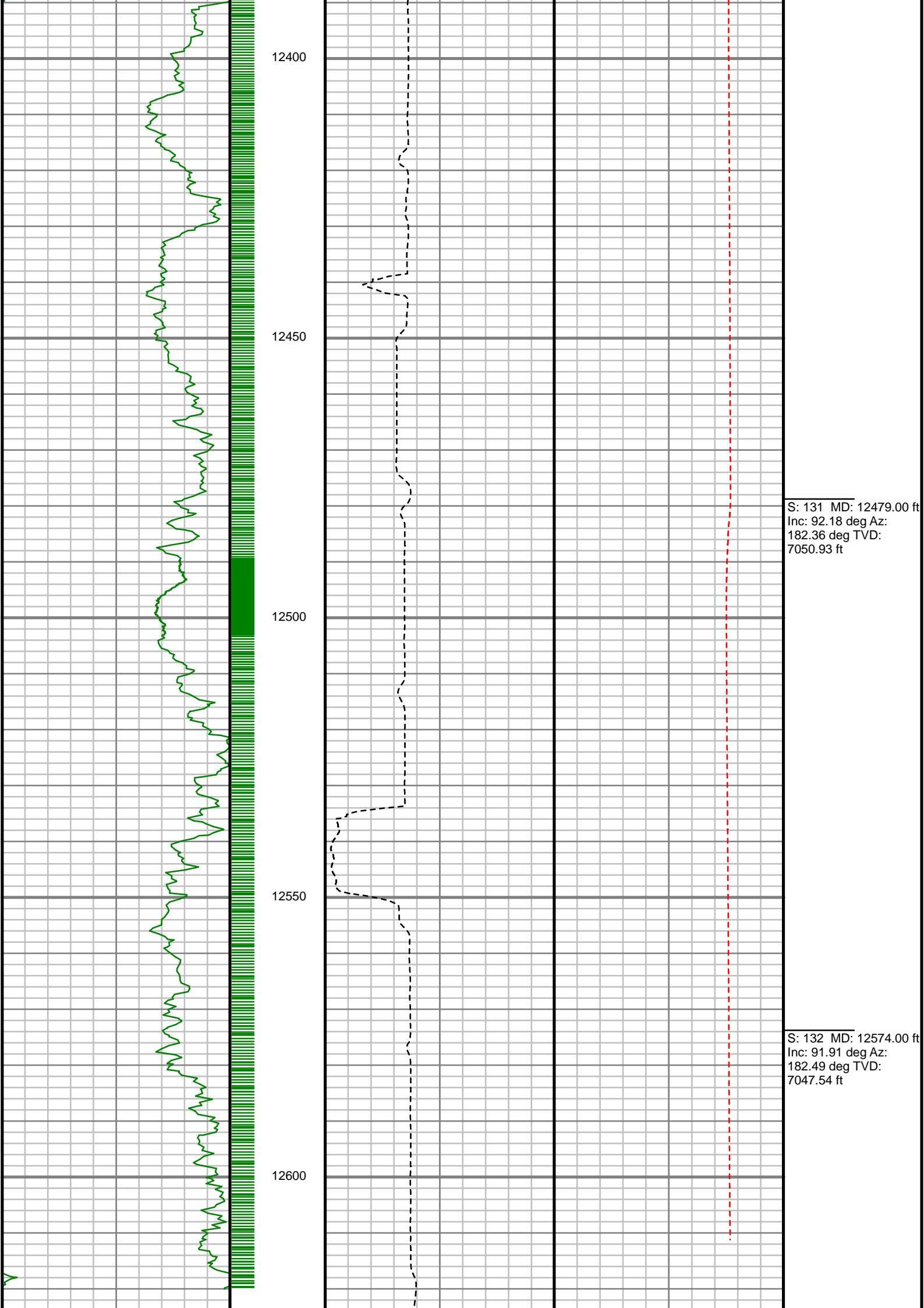


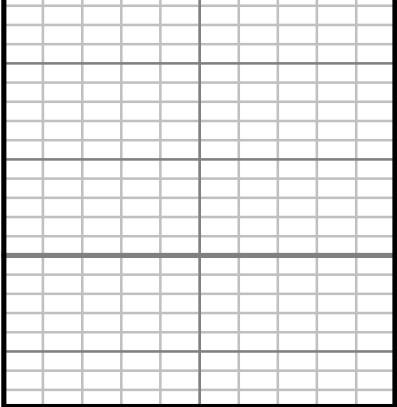








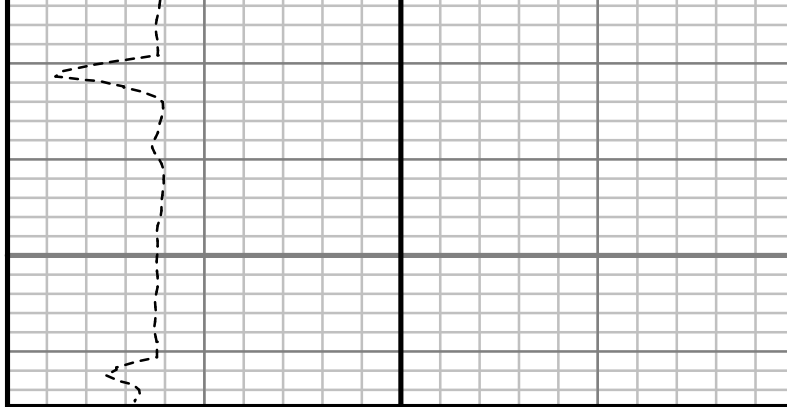




Gamma Ray (GR)		
0	Unit = aapi	150

12650

MEASURED DEPTH
1:240 (ft)



Rate of Penetration (ROP)		Tool Temperature (T-TEMP)	
0	Unit = ft/hr	0	Unit = °F
	1000		300

Comments

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid	Invalid
13.00	0.00	0.00	13.00	0.00	0.00	0.00	0.00	13.00
127.00	0.97	348.62	126.99	-0.94	0.95	-0.19	0.85	114.00
217.00	1.73	19.33	216.97	-2.98	2.97	0.11	1.14	90.00
307.00	2.69	35.99	306.90	-6.02	5.97	1.80	1.27	90.00
430.00	4.00	45.05	429.69	-11.52	11.33	6.53	1.15	123.00
520.00	5.34	45.45	519.39	-16.83	16.49	11.74	1.49	90.00
610.00	5.81	46.31	608.96	-23.10	22.57	18.02	0.53	90.00
700.00	6.79	46.59	698.42	-30.12	29.38	25.18	1.09	90.00
790.00	6.90	47.45	787.78	-37.66	36.69	33.02	0.17	90.00
880.00	7.50	46.38	877.07	-45.61	44.40	41.26	0.68	90.00
970.00	7.49	46.48	966.30	-53.96	52.49	49.76	0.02	90.00
1060.00	8.52	45.61	1055.42	-62.93	61.19	58.78	1.15	90.00
1150.00	8.46	45.18	1144.44	-72.54	70.52	68.24	0.10	90.00
1240.00	9.04	46.34	1233.39	-82.38	80.07	78.05	0.67	90.00
1330.00	9.56	43.32	1322.20	-93.00	90.39	88.30	0.79	90.00
1421.00	9.71	42.29	1411.92	-104.48	101.56	98.64	0.25	91.00
1511.00	9.76	41.82	1500.63	-116.08	112.86	108.84	0.10	90.00

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft
1601.00	9.70	41.85	1589.33	-127.71	124.19	118.98	0.07	90.00
1691.00	9.56	42.05	1678.06	-139.20	135.39	129.05	0.16	90.00
1781.00	9.34	41.84	1766.84	-150.49	146.38	138.93	0.25	90.00
1808.00	9.23	40.81	1793.49	-153.84	149.65	141.80	0.74	27.00
1953.00	12.08	47.60	1935.98	-173.44	168.69	160.61	2.14	145.00
2048.00	11.47	42.82	2028.98	-187.47	182.32	174.37	1.21	95.00
2236.00	10.28	49.25	2213.61	-212.89	206.98	199.79	0.90	188.00
2331.00	10.33	44.57	2307.08	-224.86	218.59	212.19	0.88	95.00
2426.00	9.80	41.60	2400.61	-237.31	230.70	223.54	0.78	95.00
2521.00	9.86	45.96	2494.22	-249.35	242.41	234.75	0.79	95.00
2616.00	10.52	45.93	2587.72	-261.39	254.10	246.83	0.69	95.00
2712.00	9.73	41.96	2682.23	-273.86	266.22	258.55	1.10	96.00
2806.00	9.33	37.79	2774.93	-286.08	278.14	268.53	0.85	94.00
2902.00	8.86	36.17	2869.73	-298.46	290.26	277.66	0.56	96.00
2996.00	8.71	34.18	2962.62	-310.43	301.99	285.92	0.36	94.00
3092.00	8.44	31.22	3057.55	-322.70	314.03	293.66	0.53	96.00
3187.00	8.21	42.50	3151.56	-333.91	324.99	301.86	1.73	95.00
3282.00	8.07	40.24	3245.60	-344.26	335.09	310.75	0.37	95.00

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft
3377.00	7.07	50.46	3339.77	-353.34	343.91	319.57	1.76	95.00
3472.00	6.20	51.46	3434.14	-360.51	350.82	328.10	0.93	95.00
3567.00	5.28	49.97	3528.66	-366.74	356.83	335.45	0.98	95.00
3662.00	4.82	48.47	3623.29	-372.39	362.29	341.79	0.51	95.00
3757.00	4.24	42.99	3717.99	-377.76	367.50	347.17	0.76	95.00
3853.00	3.52	36.97	3813.77	-382.83	372.45	351.36	0.86	96.00
3947.00	2.75	33.53	3907.63	-387.10	376.64	354.34	0.84	94.00
4043.00	2.35	35.37	4003.54	-390.70	380.16	356.75	0.43	96.00
4138.00	1.80	81.37	4098.48	-392.59	381.97	359.36	1.79	95.00
4233.00	1.68	66.37	4193.44	-393.45	382.76	362.11	0.50	95.00
4328.00	1.13	6.81	4288.41	-394.98	384.24	363.50	1.55	95.00
4423.00	0.90	320.83	4383.40	-396.48	385.76	363.14	0.86	95.00
4518.00	0.78	338.31	4478.39	-397.65	386.94	362.42	0.30	95.00
4613.00	0.97	6.53	4573.38	-399.04	388.34	362.27	0.49	95.00
4708.00	1.00	0.48	4668.36	-400.67	389.97	362.37	0.11	95.00
4803.00	1.36	9.80	4763.34	-402.61	391.91	362.57	0.43	95.00
4899.00	2.55	306.27	4859.29	-404.95	394.29	361.04	2.39	96.00
4992.00	2.90	301.22	4952.19	-407.29	396.74	357.35	0.45	93.00

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft
5088.00	2.74	314.12	5048.07	-410.03	399.60	353.63	0.68	96.00
5182.00	3.04	323.20	5141.95	-413.50	403.16	350.52	0.58	94.00
5277.00	1.78	294.05	5236.87	-416.04	405.78	347.66	1.81	95.00
5371.00	0.59	274.56	5330.85	-416.61	406.42	345.84	1.32	94.00
5467.00	0.71	347.55	5426.85	-417.22	407.04	345.22	0.81	96.00
5561.00	0.50	6.23	5520.84	-418.20	408.02	345.14	0.31	94.00
5656.00	0.34	90.30	5615.84	-418.62	408.43	345.46	0.60	95.00
5751.00	0.63	140.76	5710.83	-418.23	408.02	346.07	0.52	95.00
5846.00	0.28	168.69	5805.83	-417.61	407.39	346.45	0.43	95.00
5941.00	0.98	72.62	5900.83	-417.65	407.41	347.27	1.10	95.00
6035.00	1.01	47.43	5994.81	-418.49	408.20	348.64	0.46	94.00
6131.00	1.14	141.03	6090.80	-418.35	408.03	349.86	1.63	96.00
6225.00	1.01	150.95	6184.79	-416.93	406.59	350.85	0.24	94.00
6320.00	0.71	131.86	6279.78	-415.83	405.46	351.70	0.43	95.00
6415.00	0.61	160.41	6374.77	-414.99	404.60	352.30	0.36	95.00
6510.00	3.54	187.12	6469.70	-411.60	401.21	352.11	3.17	95.00
6604.00	11.68	192.91	6562.79	-399.35	389.03	349.62	8.68	94.00
6699.00	18.52	193.71	6654.46	-375.13	364.97	343.89	7.20	95.00

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft
6795.00	26.16	188.36	6743.19	-339.13	329.16	337.18	8.23	96.00
6890.00	31.84	185.04	6826.26	-293.28	283.44	331.93	6.21	95.00
6984.00	39.75	183.53	6902.44	-238.40	228.66	327.90	8.47	94.00
7079.00	50.09	180.91	6969.63	-171.42	161.72	325.45	11.06	95.00
7174.00	59.08	180.38	7024.62	-94.09	84.39	324.60	9.47	95.00
7269.00	69.53	181.74	7065.76	-8.62	-1.08	322.97	11.07	95.00
7362.00	78.47	179.70	7091.38	80.67	-90.37	321.88	9.84	93.00
7457.00	85.41	181.72	7104.70	174.65	-184.36	320.70	7.60	95.00
7552.00	88.76	181.49	7109.53	269.52	-279.19	318.05	3.54	95.00
7647.00	89.80	180.94	7110.73	364.50	-374.16	316.04	1.24	95.00
7742.00	90.37	180.72	7110.59	459.49	-469.15	314.66	0.64	95.00
7836.00	90.20	181.99	7110.12	553.49	-563.12	312.44	1.36	94.00
7931.00	88.09	181.84	7111.54	648.47	-658.05	309.26	2.23	95.00
8026.00	88.29	181.63	7114.55	743.42	-752.96	306.39	0.31	95.00
8121.00	90.67	181.87	7115.41	838.41	-847.90	303.49	2.52	95.00
8216.00	89.70	180.04	7115.10	933.40	-942.88	301.91	2.19	95.00
8312.00	90.80	179.59	7114.68	1029.34	-1038.88	302.22	1.24	96.00
8407.00	92.29	178.71	7112.12	1124.21	-1133.83	303.62	1.81	95.00

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft
8502.00	89.83	178.00	7110.37	1219.02	-1228.77	306.35	2.69	95.00
8597.00	92.05	180.06	7108.81	1313.89	-1323.73	307.96	3.19	95.00
8691.00	90.87	179.66	7106.41	1407.81	-1417.70	308.19	1.33	94.00
8786.00	91.41	181.57	7104.52	1502.77	-1512.67	307.17	2.09	95.00
8881.00	91.84	181.53	7101.82	1597.73	-1607.60	304.61	0.46	95.00
8976.00	90.37	181.64	7099.99	1692.71	-1702.54	301.98	1.56	95.00
9071.00	91.31	180.73	7098.60	1787.69	-1797.51	300.02	1.37	95.00
9167.00	90.74	180.97	7096.88	1883.67	-1893.48	298.59	0.64	96.00
9262.00	90.47	181.01	7095.88	1978.65	-1988.46	296.94	0.29	95.00
9356.00	89.36	180.55	7096.02	2072.64	-2082.45	295.66	1.28	94.00
9451.00	90.03	181.09	7096.52	2167.62	-2177.44	294.31	0.91	95.00
9546.00	88.99	182.59	7097.33	2262.62	-2272.38	291.26	1.93	95.00
9640.00	88.52	183.55	7099.37	2356.57	-2366.22	286.22	1.13	94.00
9735.00	89.46	182.98	7101.04	2451.52	-2461.05	280.81	1.15	95.00
9830.00	90.13	181.79	7101.37	2546.51	-2555.97	276.85	1.44	95.00
9925.00	88.93	183.51	7102.15	2641.49	-2650.86	272.46	2.21	95.00
10020.00	89.26	184.57	7103.65	2736.39	-2745.61	265.77	1.17	95.00
10115.00	90.34	183.88	7103.99	2831.30	-2840.35	258.76	1.34	95.00
10209.00	90.87	183.54	7102.99	2925.24	-2934.14	252.68	0.68	94.00

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	Course Length ft
10304.00	91.38	183.10	7101.13	3020.18	-3028.97	247.17	0.71	95.00
10399.00	92.15	183.51	7098.21	3115.10	-3123.76	241.70	0.92	95.00
10494.00	91.68	183.20	7095.04	3210.01	-3218.55	236.14	0.60	95.00
10587.00	91.81	182.22	7092.21	3302.95	-3311.40	231.75	1.06	93.00
10681.00	92.25	182.06	7088.88	3396.89	-3405.27	228.25	0.49	94.00
10776.00	91.21	182.07	7086.01	3491.84	-3500.17	224.83	1.09	95.00
10871.00	92.48	182.15	7082.95	3586.79	-3595.05	221.33	1.34	95.00
10966.00	92.28	181.98	7079.00	3681.70	-3689.91	217.91	0.27	95.00
11061.00	91.07	181.77	7076.22	3776.66	-3784.81	214.80	1.29	95.00
11153.00	92.21	181.44	7073.58	3868.62	-3876.74	212.22	1.29	92.00
11247.00	89.70	181.50	7072.01	3962.60	-3970.69	209.81	2.68	94.00
11338.00	90.54	181.14	7071.83	4053.60	-4061.66	207.71	1.00	91.00
11433.00	91.81	180.66	7069.88	4148.57	-4156.63	206.22	1.44	95.00
11527.00	91.24	180.57	7067.37	4242.51	-4250.59	205.21	0.62	94.00
11622.00	90.74	181.48	7065.73	4337.49	-4345.56	203.51	1.10	95.00
11717.00	92.01	181.90	7063.45	4432.46	-4440.49	200.71	1.41	95.00
11812.00	90.27	182.72	7061.56	4527.43	-4535.39	196.89	2.03	95.00
11907.00	88.63	183.25	7062.48	4622.40	-4630.25	191.94	1.82	95.00

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	Course Length ft
12003.00	89.80	182.98	7063.80	4718.36	-4726.10	186.72	1.25	96.00
12098.00	92.21	182.29	7062.13	4813.33	-4820.97	182.35	2.64	95.00
12193.00	92.45	182.32	7058.26	4908.25	-4915.82	178.53	0.25	95.00
12288.00	90.67	182.40	7055.68	5003.20	-5010.70	174.61	1.87	95.00
12479.00	92.18	182.36	7050.93	5194.12	-5201.47	166.67	0.79	191.00
12574.00	91.91	182.49	7047.54	5289.05	-5296.32	162.66	0.31	95.00

5" = 100' FEET MD