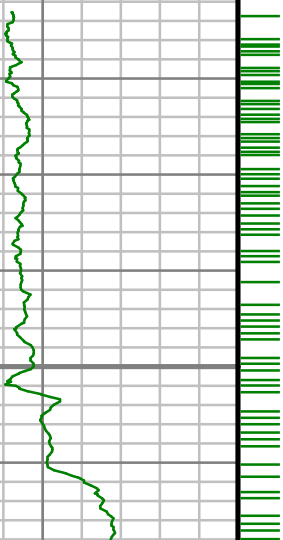
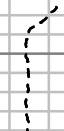

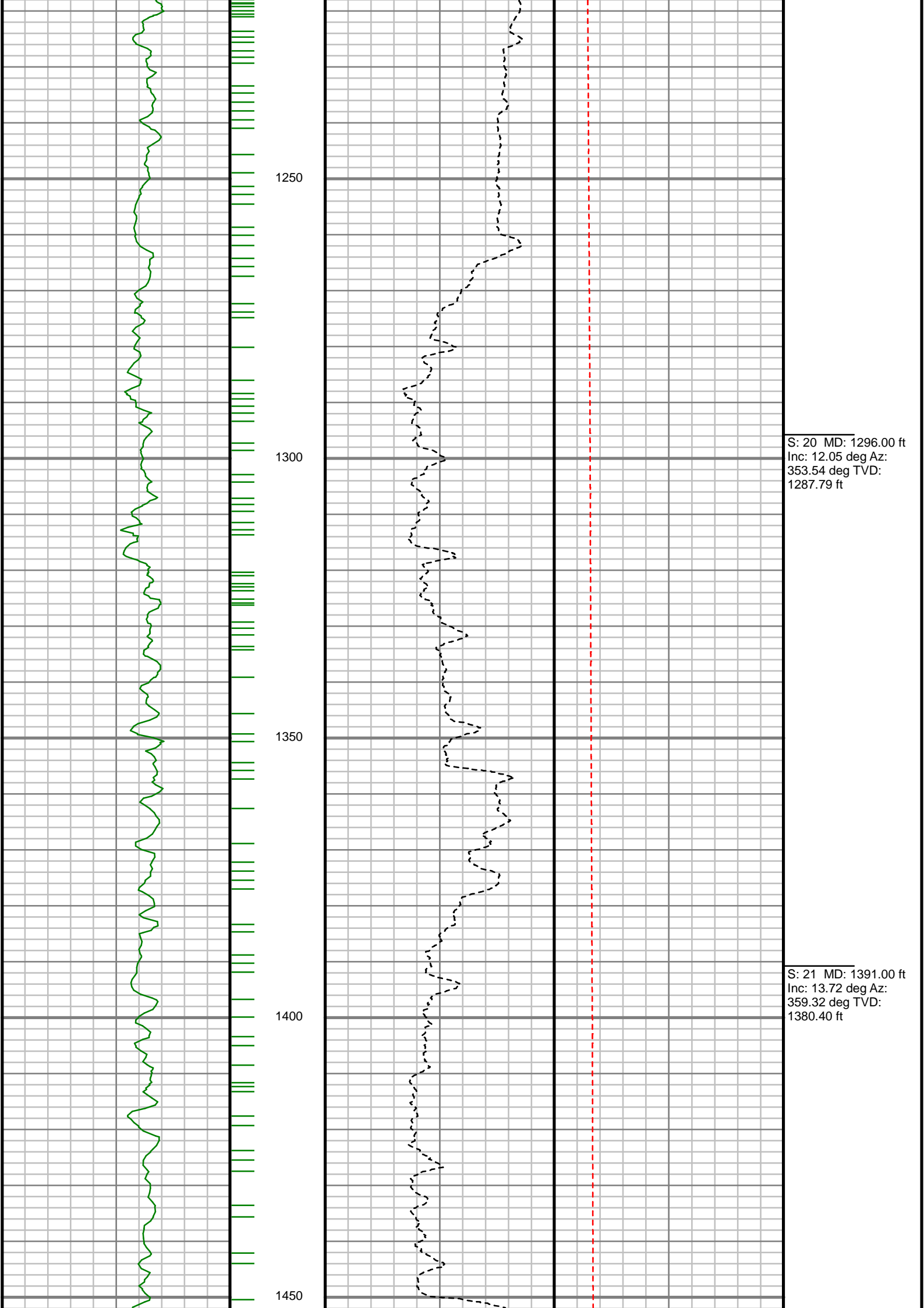
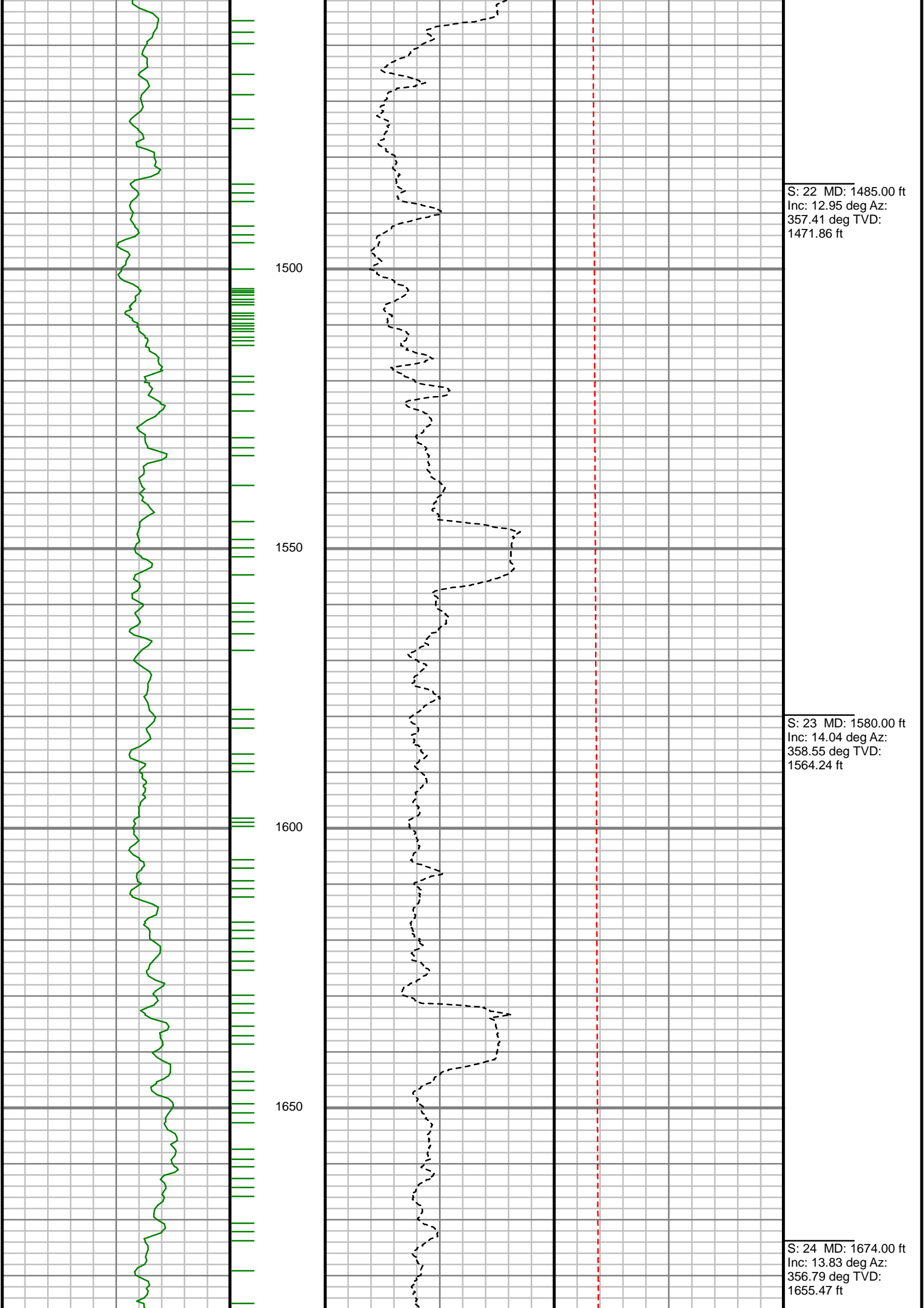


[illegible]

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 CHEESE 37N-28HZ WATTENBERG FIELD WELD COUNTY, COLORADO 05-123-40945							
Gamma Ray (GR) Unit = aapi		MEASURED DEPTH 1:240 (ft)	Rate of Penetration (ROP) Unit = ft/hr		Tool Temperature (T-TEMP) Unit = °F		Comments
0	150		800	0	50	300	
		1200					S: 19 MD: 1161.00 ft Inc: 11.60 deg Az: 353.00 deg TVD: 1155.66 ft

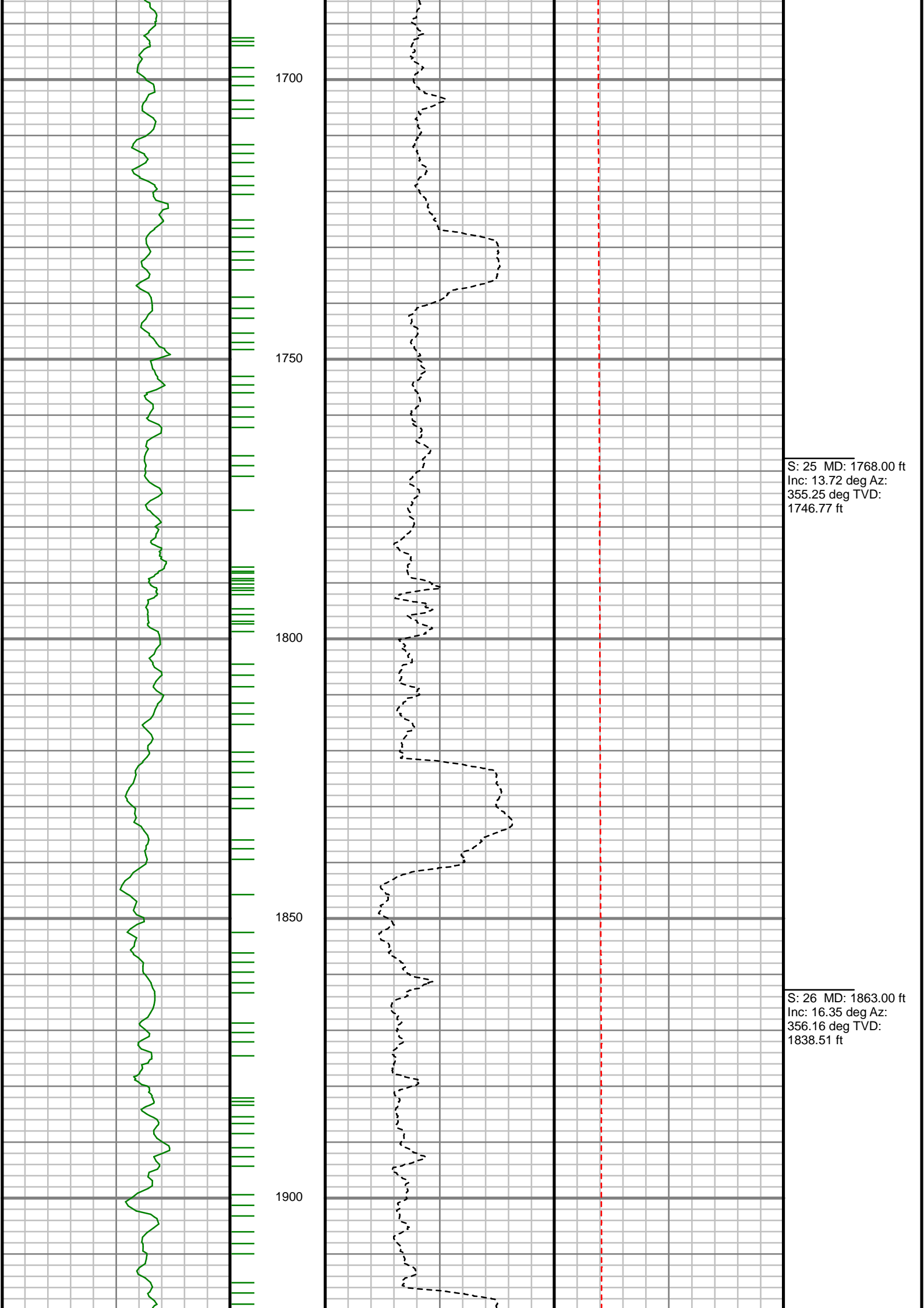


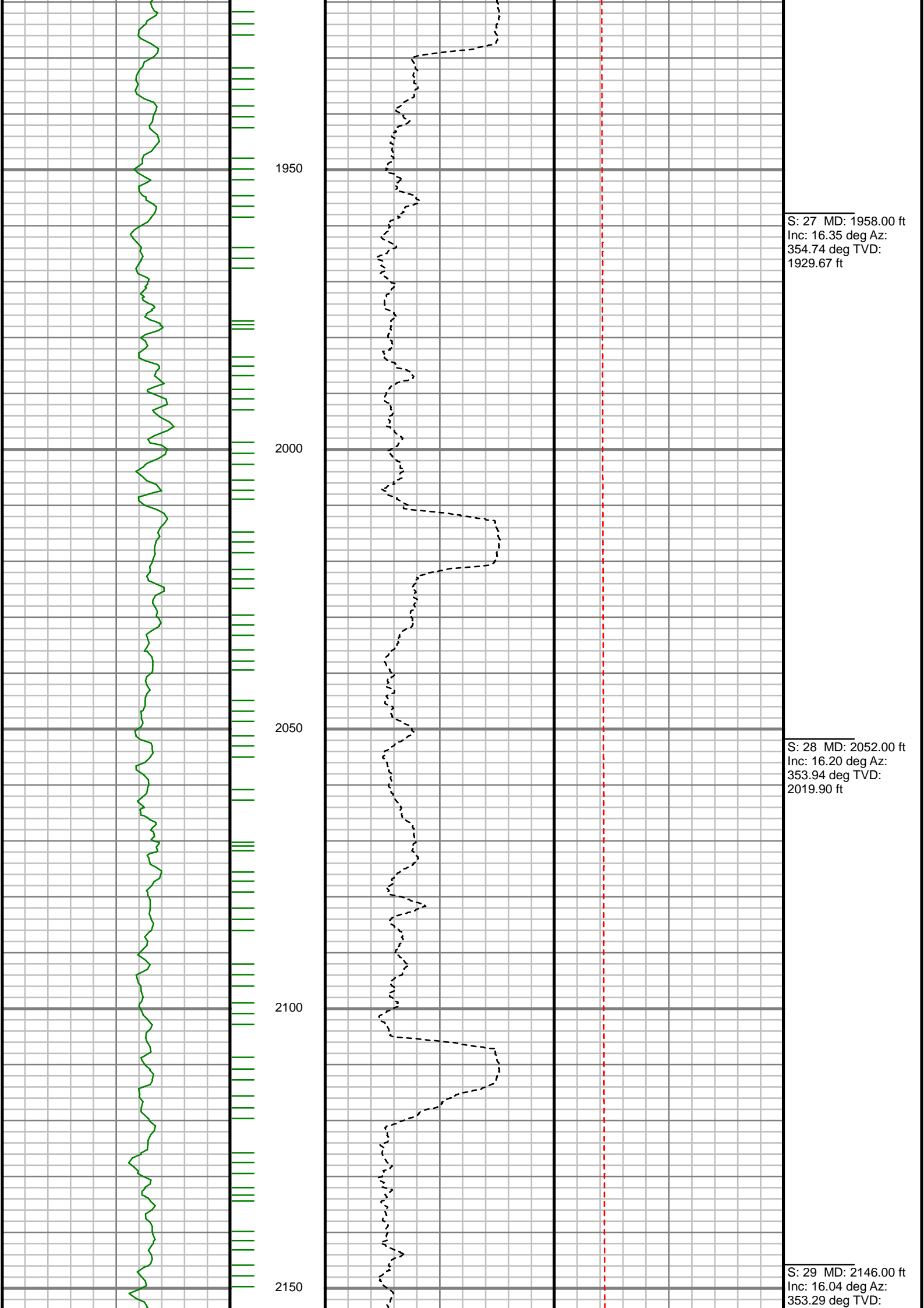


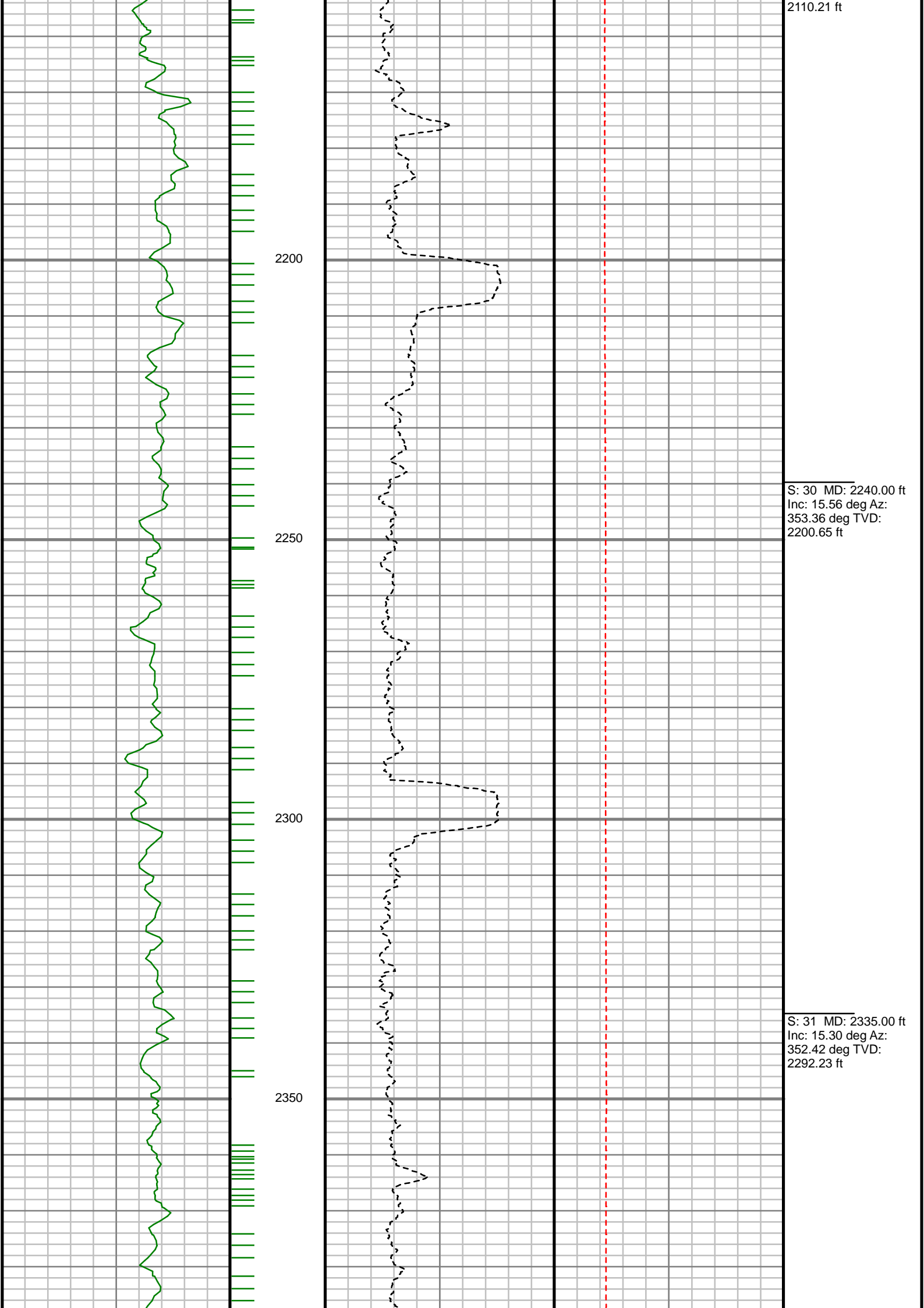
S: 22 MD: 1485.00 ft
Inc: 12.95 deg Az:
357.41 deg TVD:
1471.86 ft

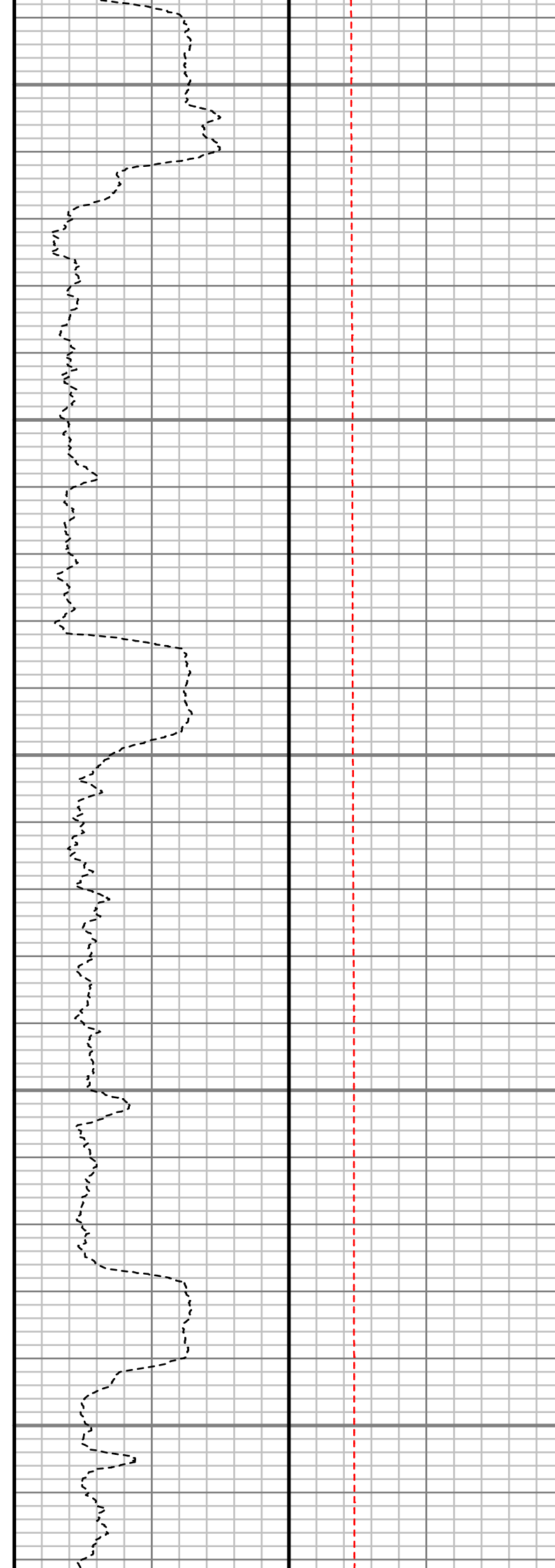
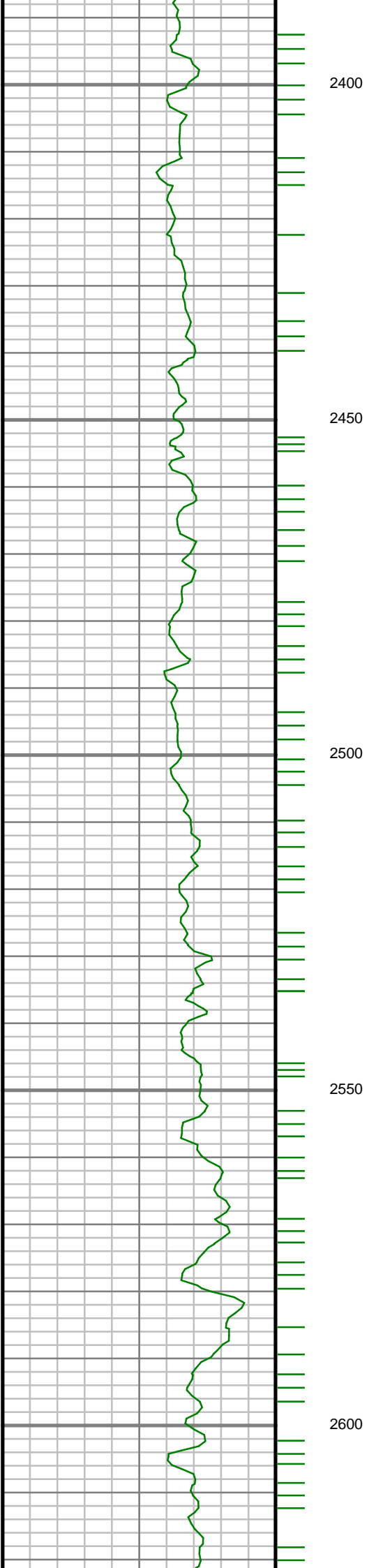
S: 23 MD: 1580.00 ft
Inc: 14.04 deg Az:
358.55 deg TVD:
1564.24 ft

S: 24 MD: 1674.00 ft
Inc: 13.83 deg Az:
356.79 deg TVD:
1655.47 ft





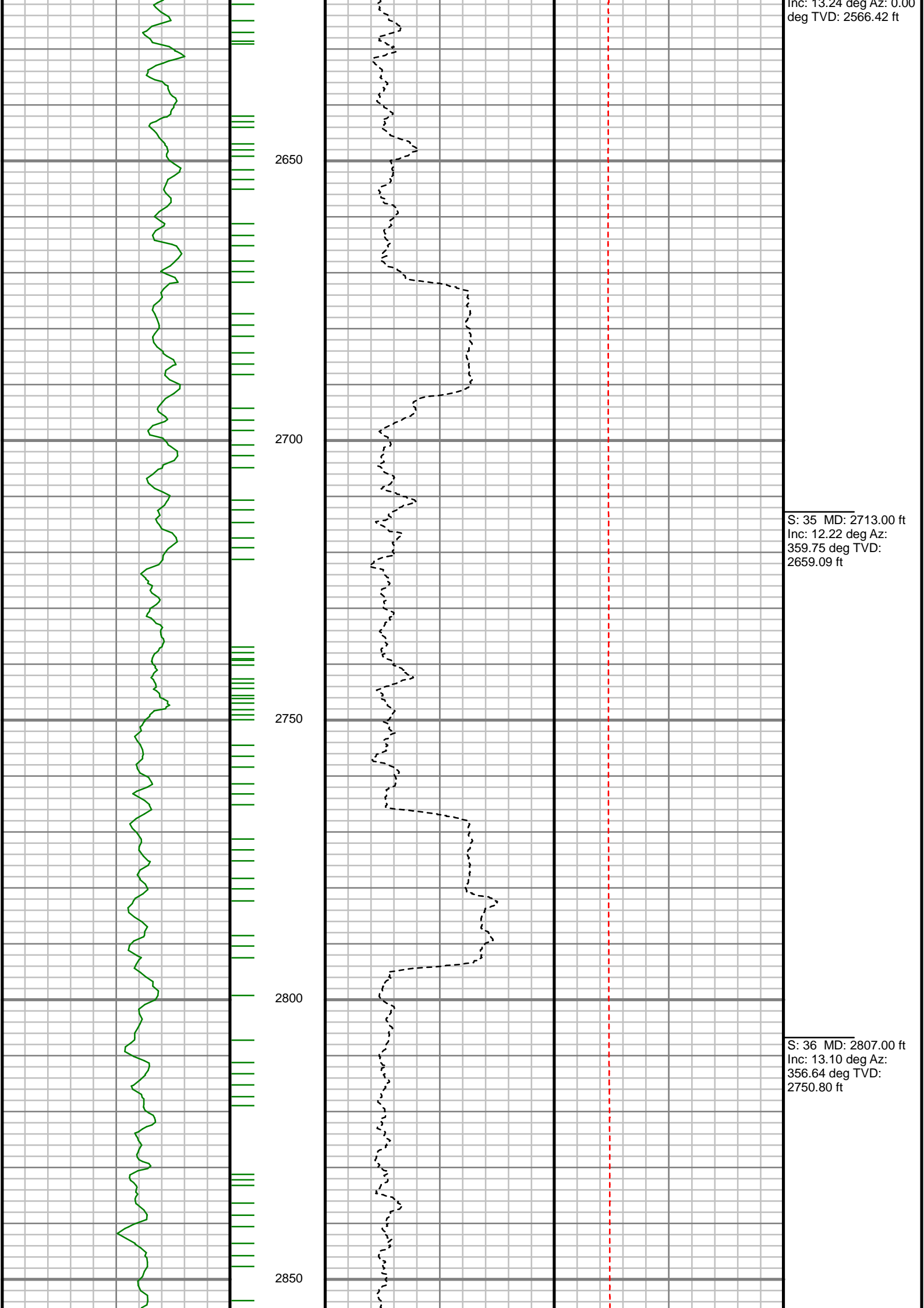




S: 32 MD: 2429.00 ft
Inc: 14.81 deg Az:
358.32 deg TVD:
2383.01 ft

S: 33 MD: 2524.00 ft
Inc: 13.89 deg Az:
358.93 deg TVD:
2475.05 ft

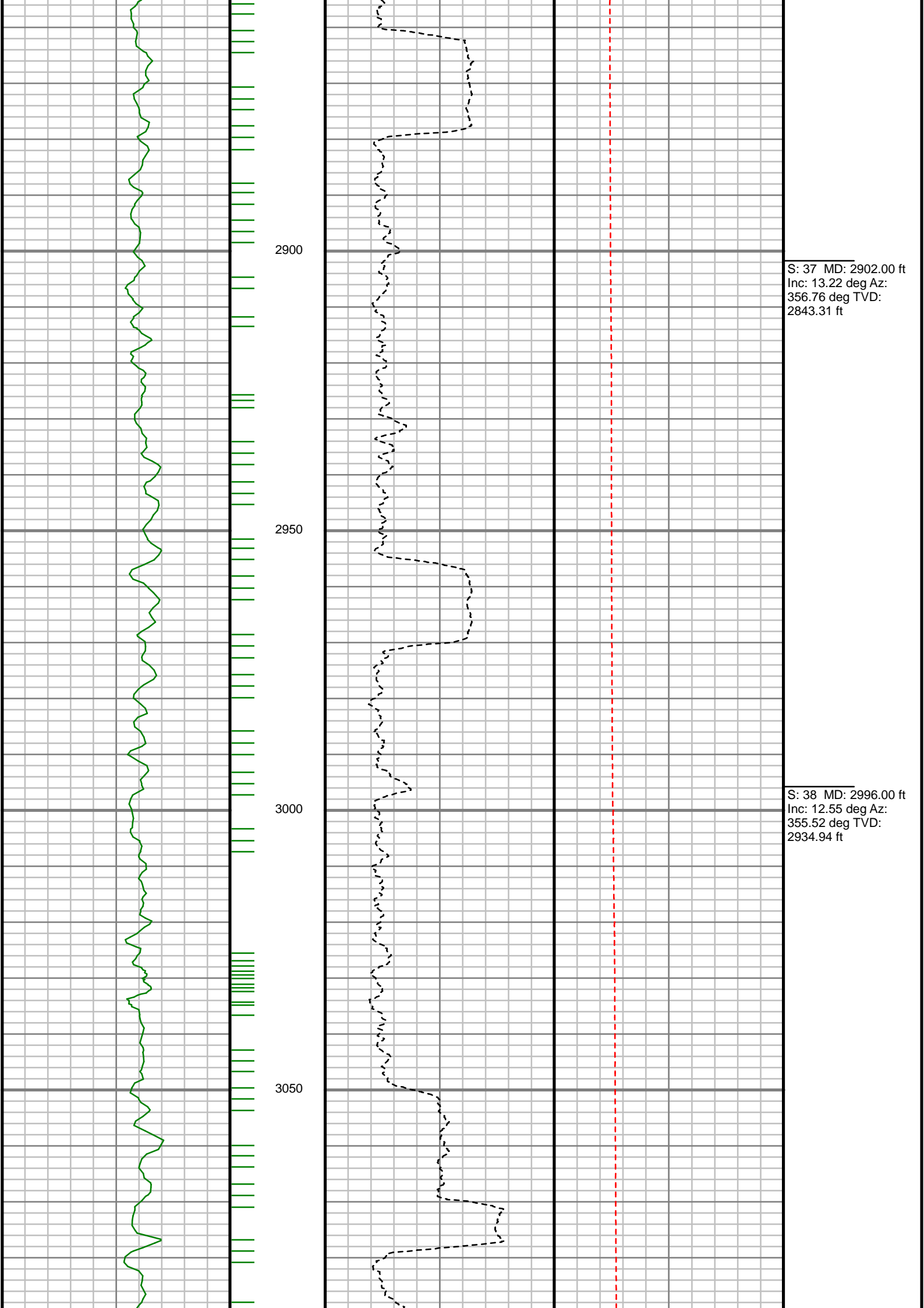
S: 34 MD: 2618.00 ft
Inc: 13.84 deg Az:
358.93 deg TVD:
2567.05 ft

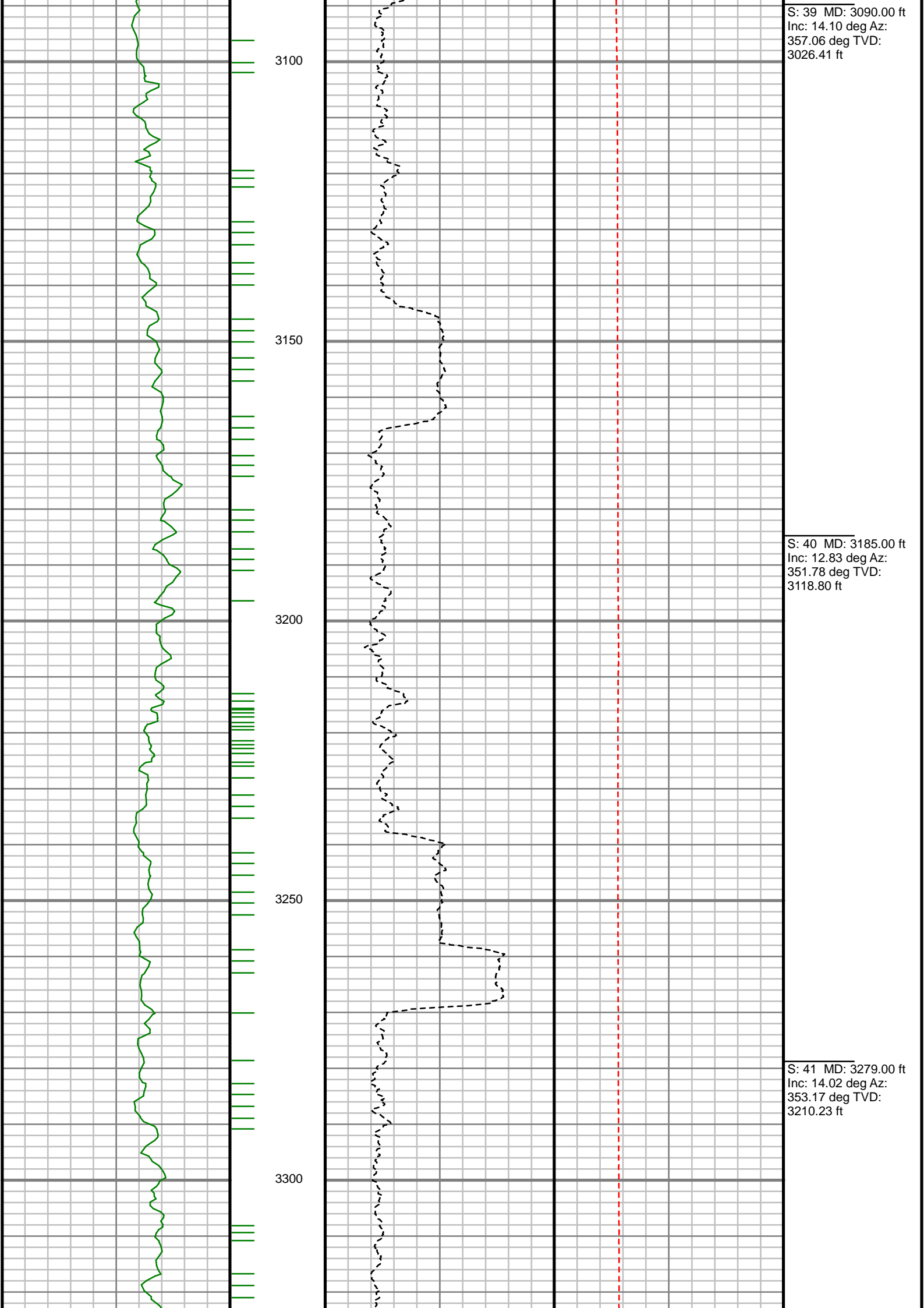


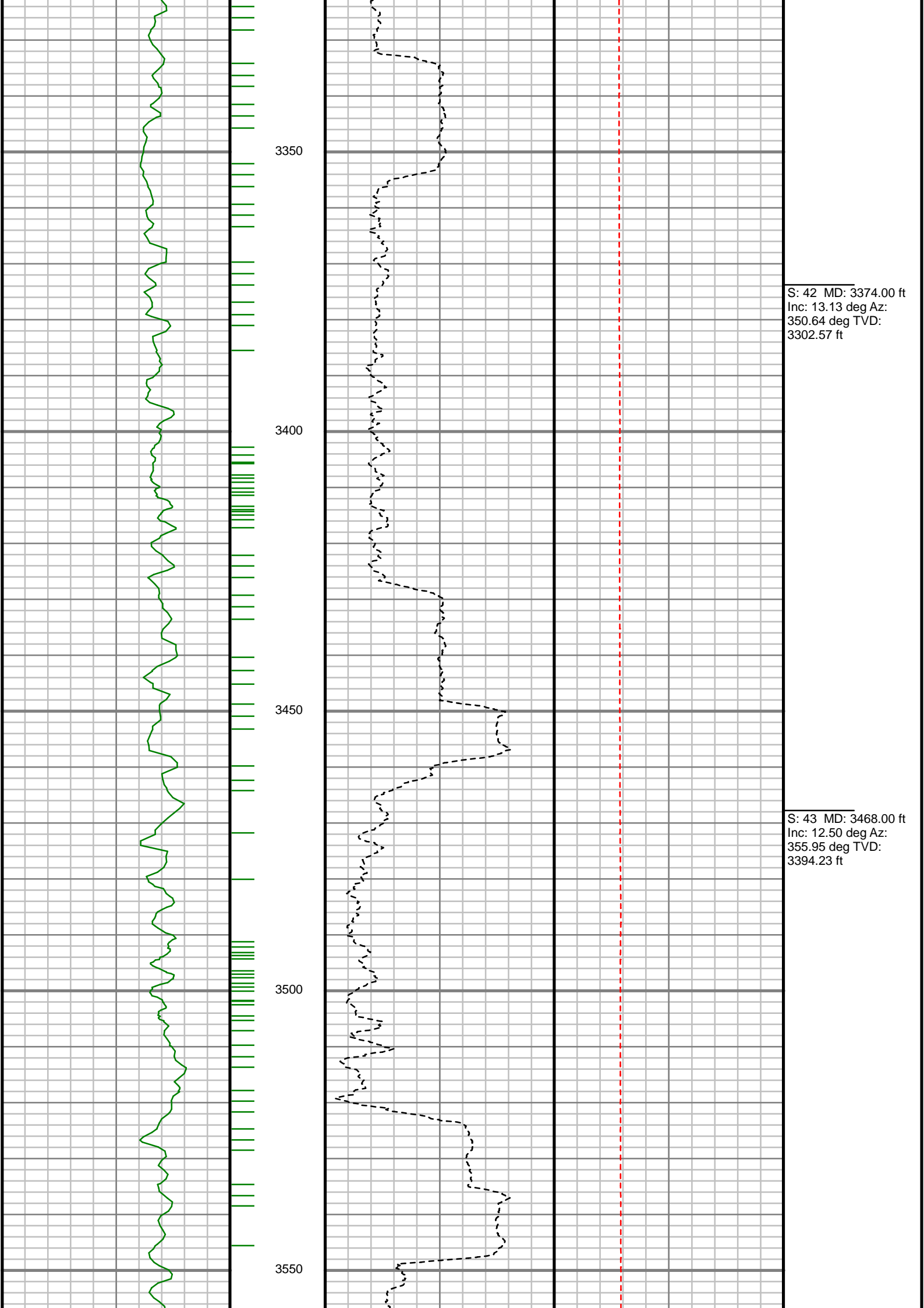
Inc: 13.24 deg Az: 0.00
deg TVD: 2566.42 ft

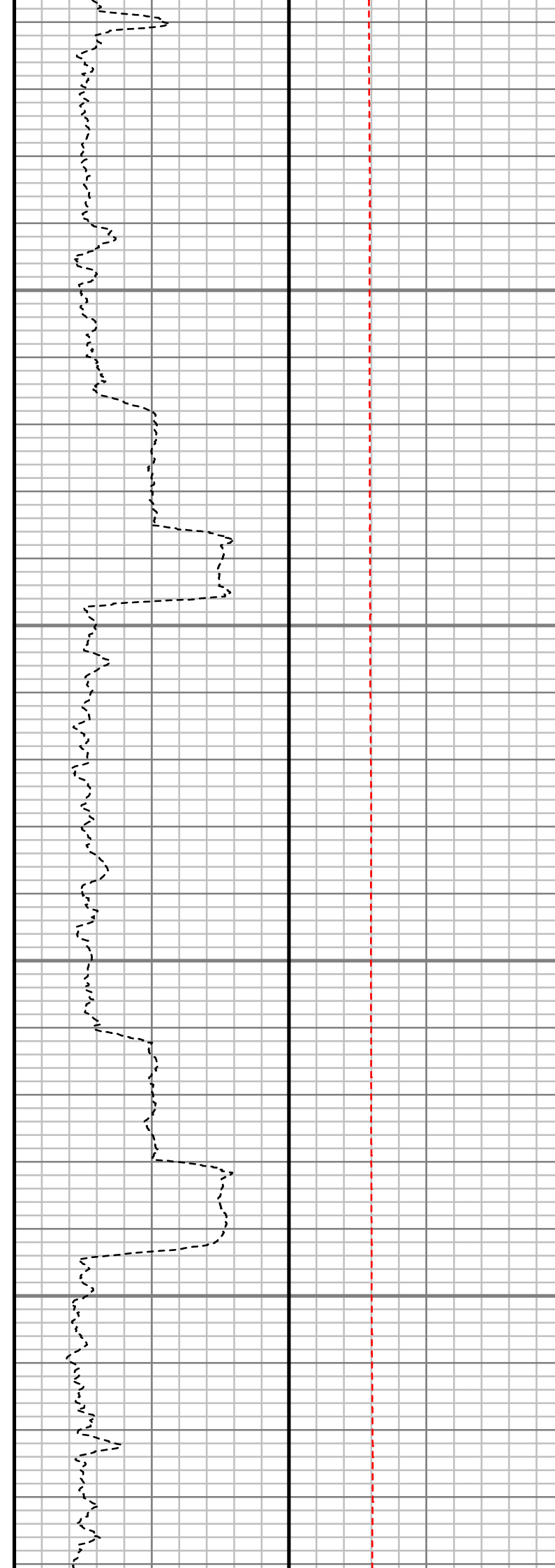
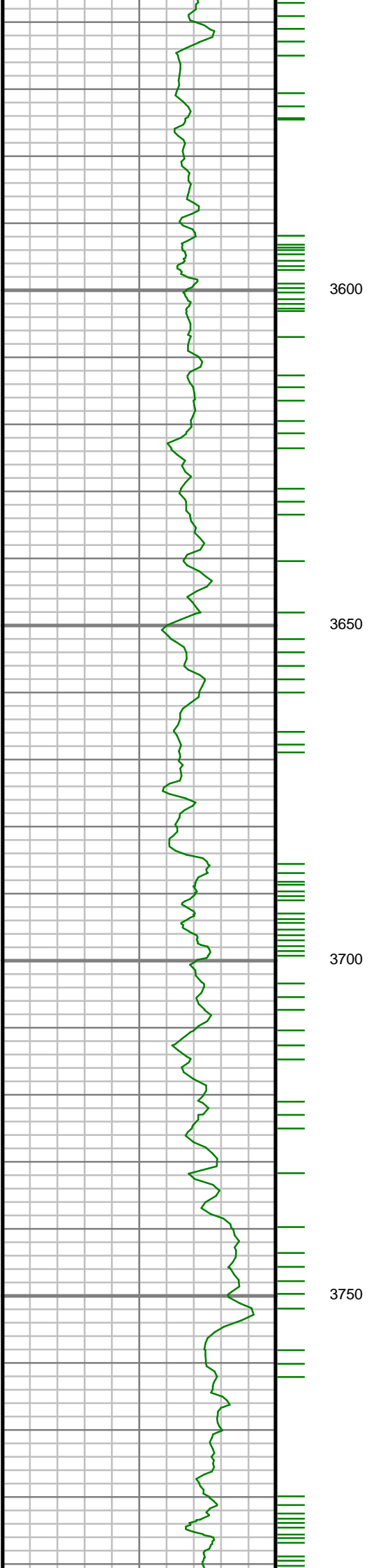
S: 35 MD: 2713.00 ft
Inc: 12.22 deg Az:
359.75 deg TVD:
2659.09 ft

S: 36 MD: 2807.00 ft
Inc: 13.10 deg Az:
356.64 deg TVD:
2750.80 ft





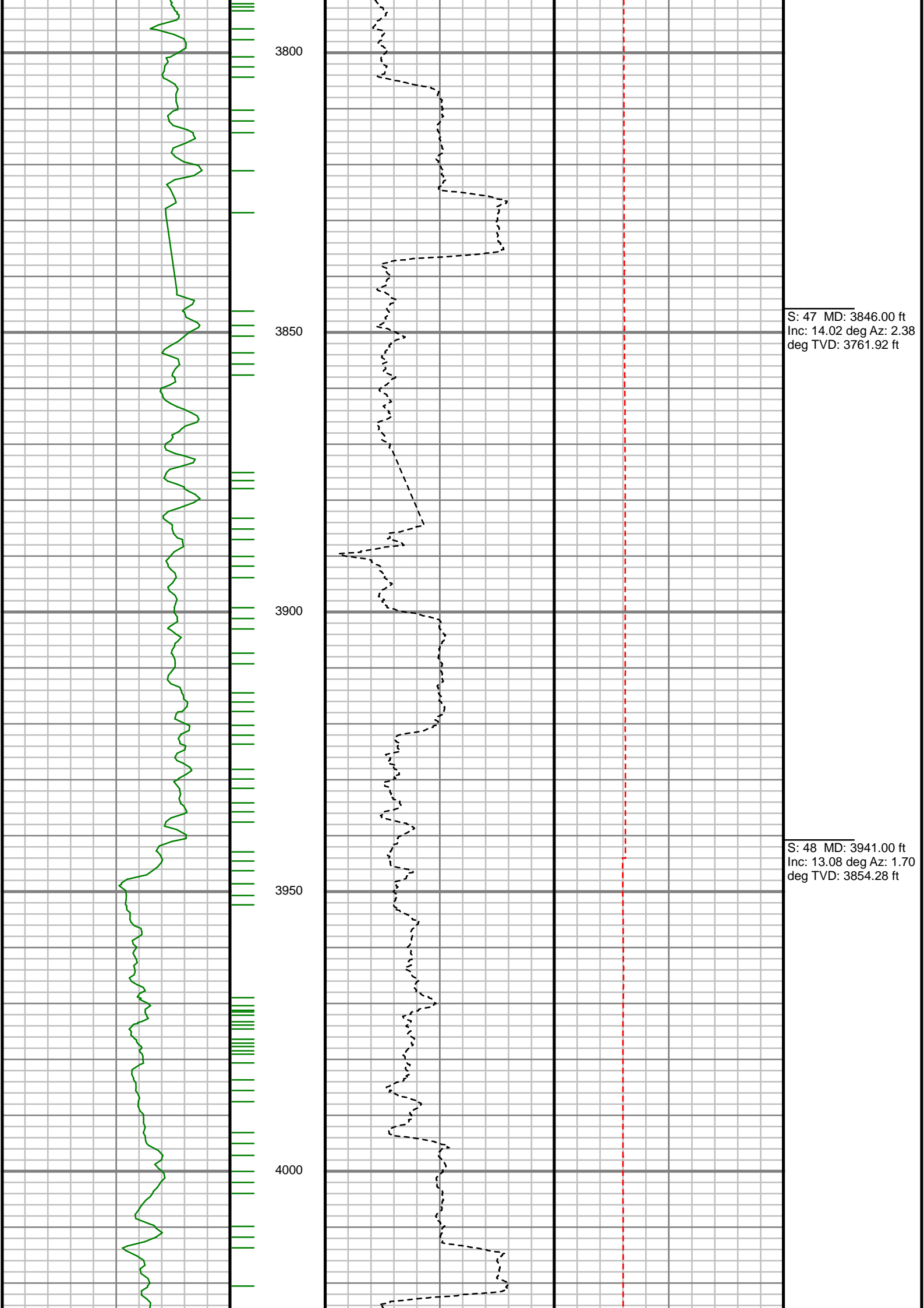


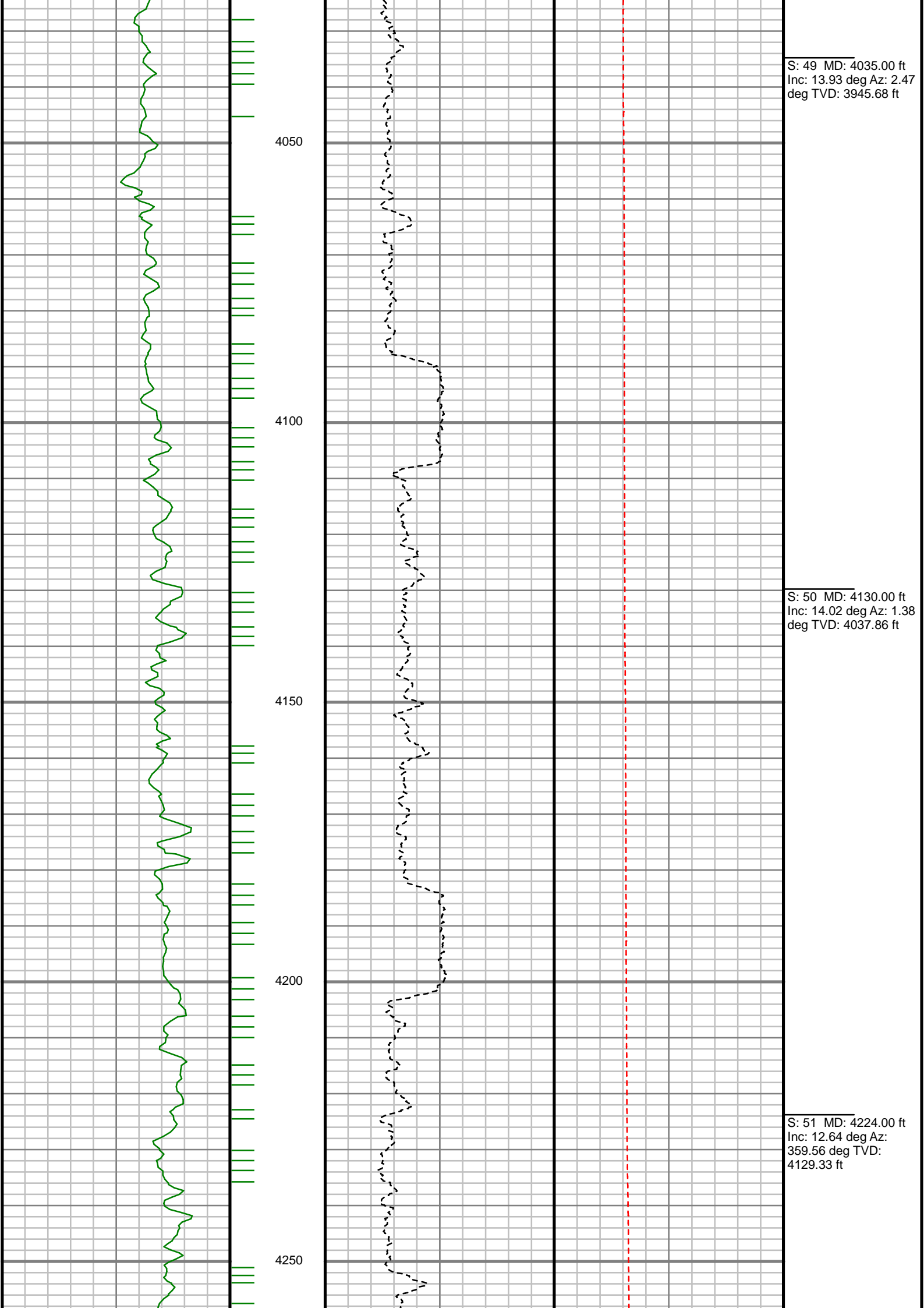


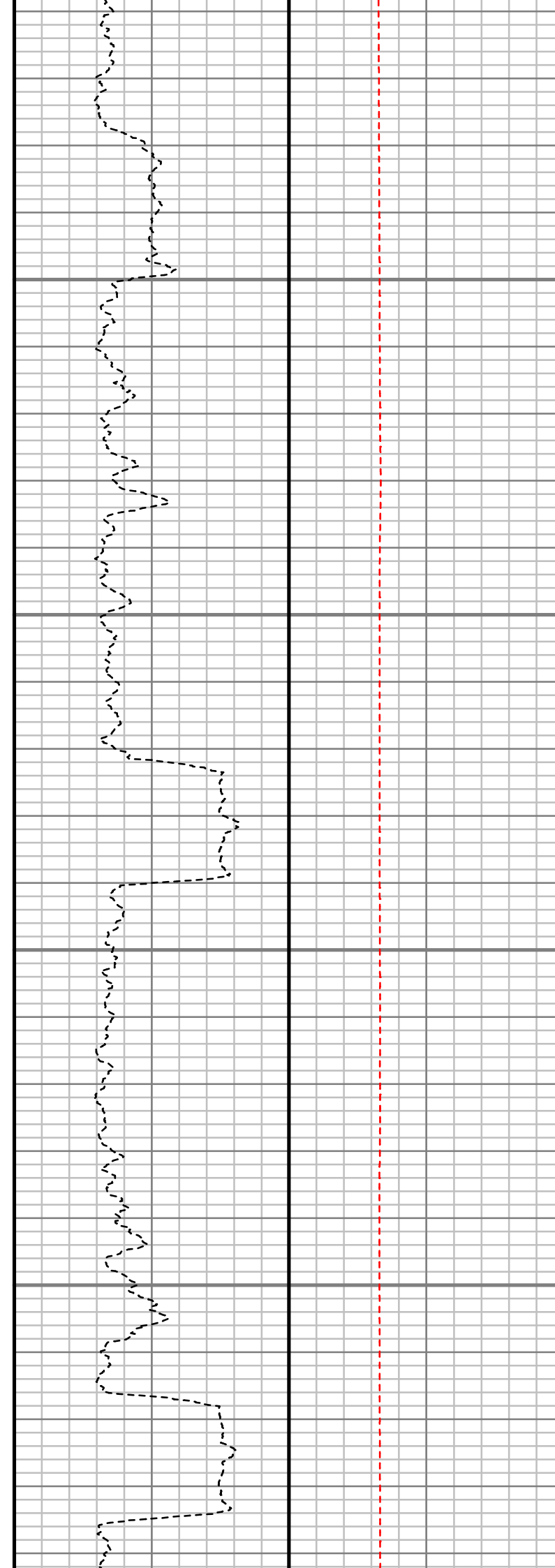
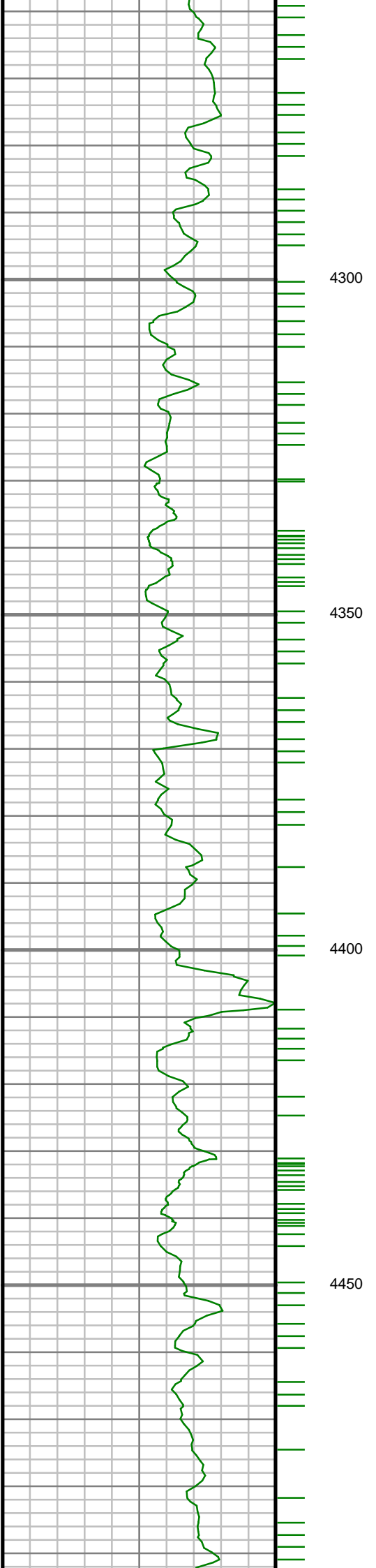
S: 44 MD: 3563.00 ft
Inc: 13.00 deg Az:
359.66 deg TVD:
3486.89 ft

S: 45 MD: 3657.00 ft
Inc: 14.06 deg Az:
355.25 deg TVD:
3578.29 ft

S: 46 MD: 3752.00 ft
Inc: 13.34 deg Az:
355.97 deg TVD:
3670.58 ft

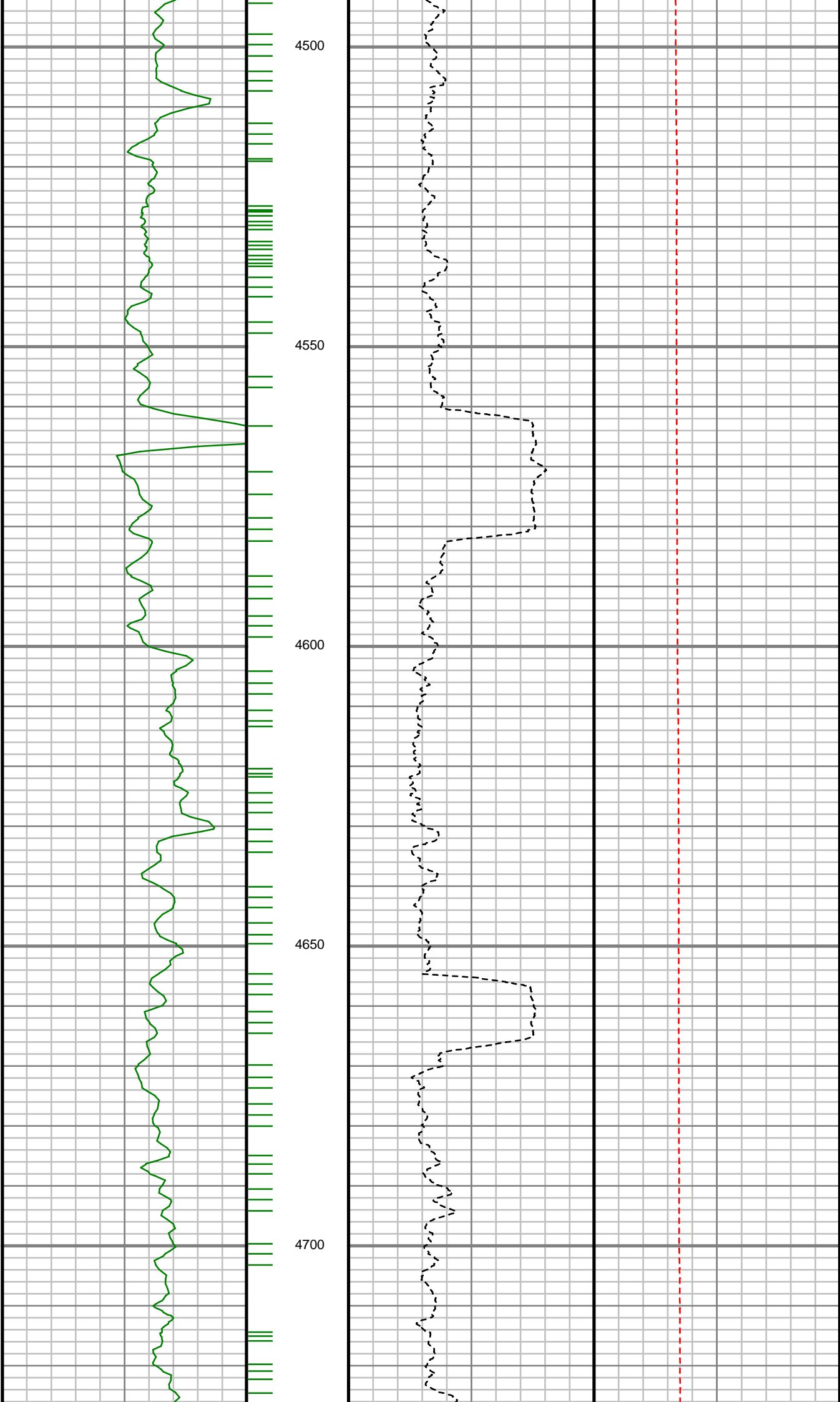






S: 52 MD: 4318.00 ft
Inc: 11.73 deg Az:
358.93 deg TVD:
4221.21 ft

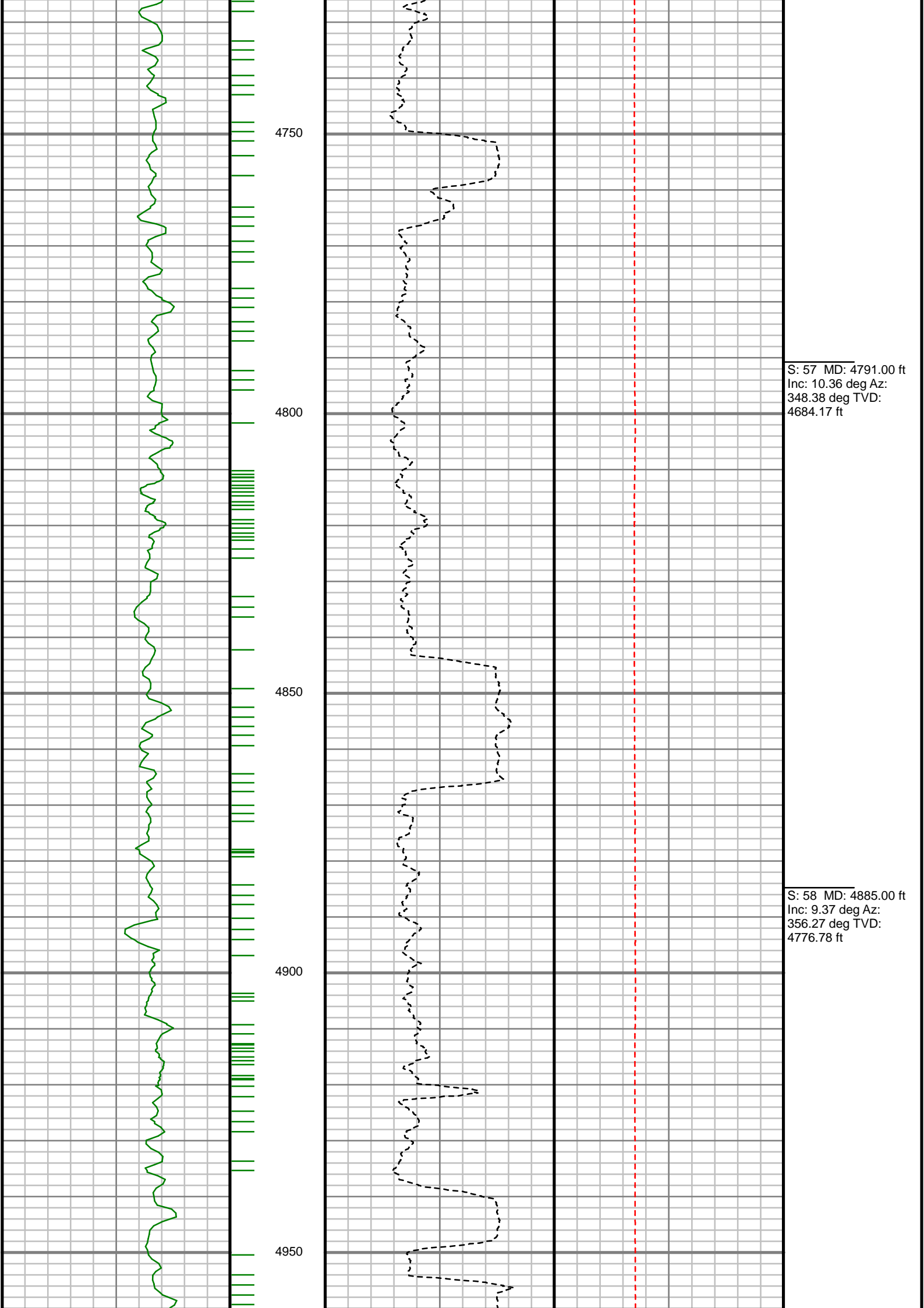
S: 53 MD: 4413.00 ft
Inc: 11.96 deg Az:
354.72 deg TVD:
4314.19 ft

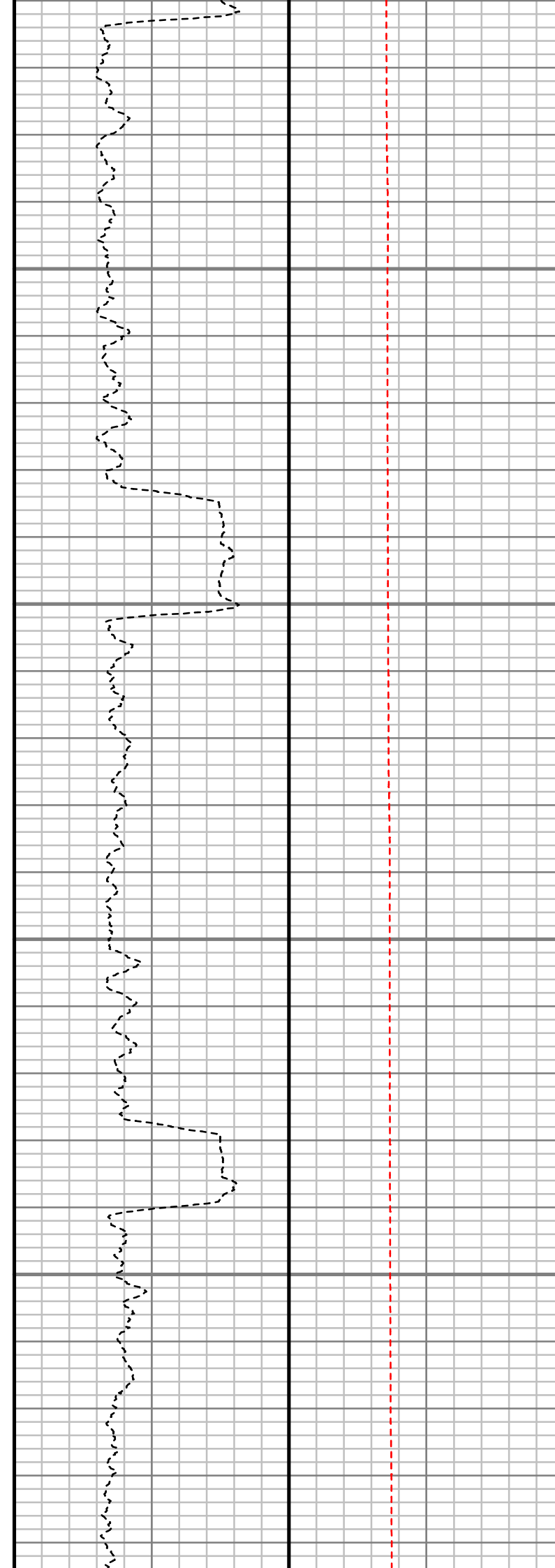
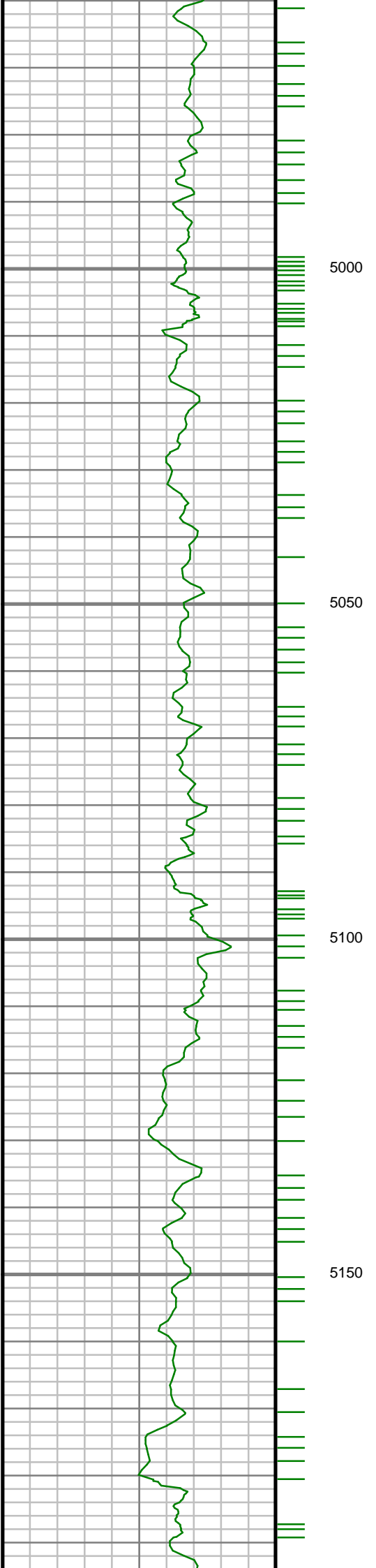


S: 54 MD: 4507.00 ft
Inc: 11.70 deg Az:
356.60 deg TVD:
4406.19 ft

S: 55 MD: 4602.00 ft
Inc: 12.38 deg Az:
355.60 deg TVD:
4499.10 ft

S: 56 MD: 4696.00 ft
Inc: 12.03 deg Az:
354.51 deg TVD:
4590.98 ft

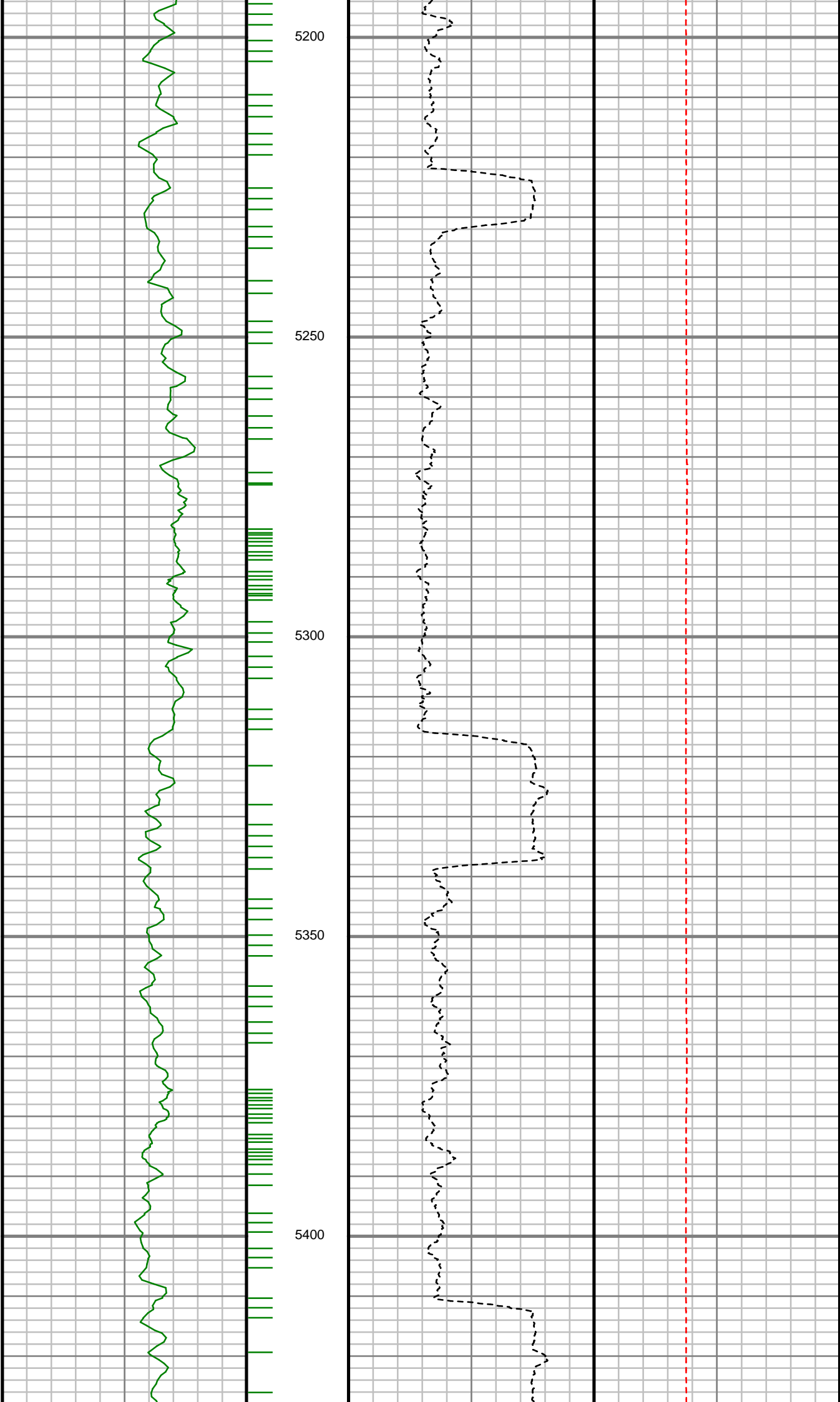




S: 59 MD: 4979.00 ft
Inc: 8.35 deg Az:
355.14 deg TVD:
4869.66 ft

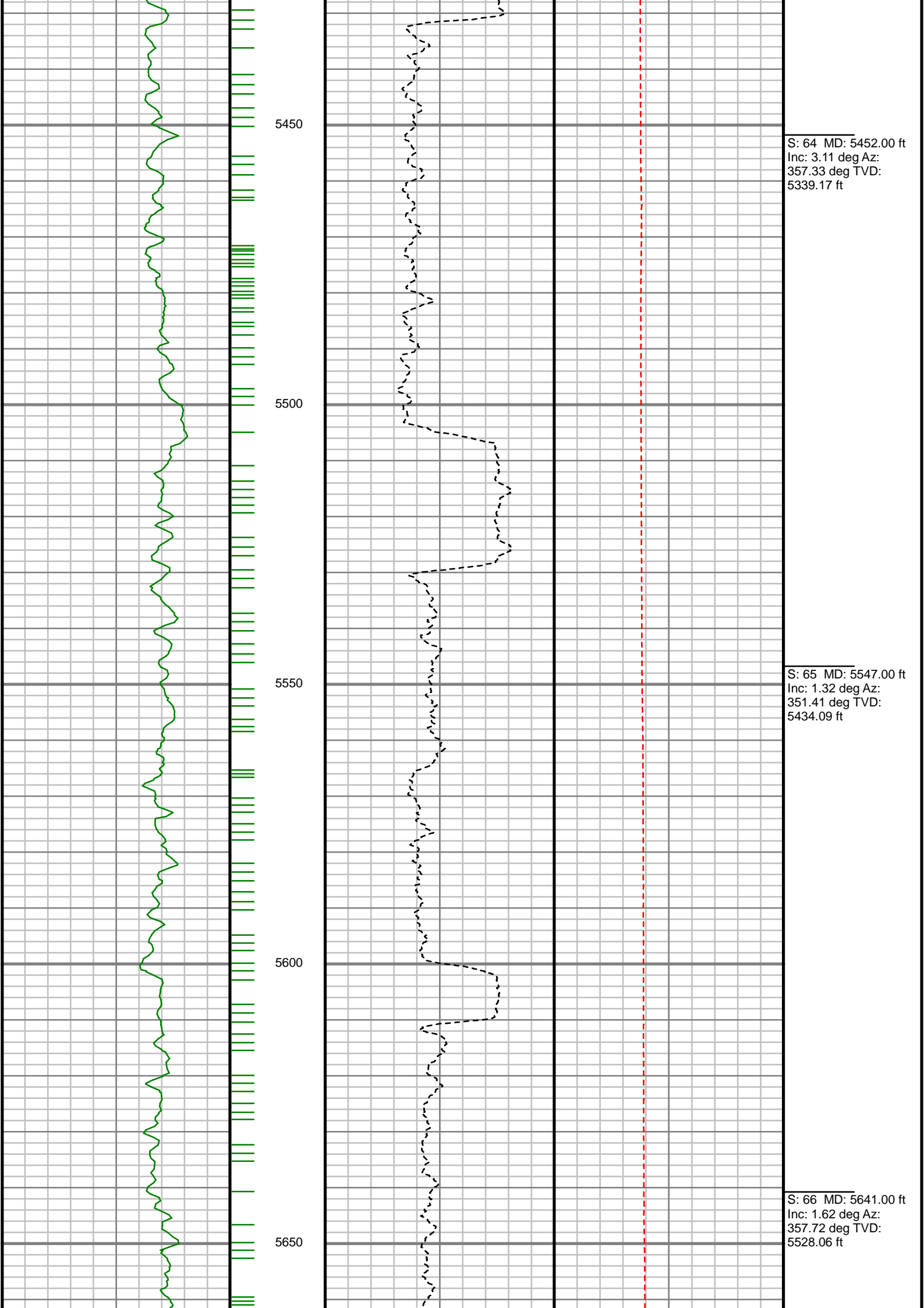
S: 60 MD: 5074.00 ft
Inc: 7.99 deg Az:
354.05 deg TVD:
4963.69 ft

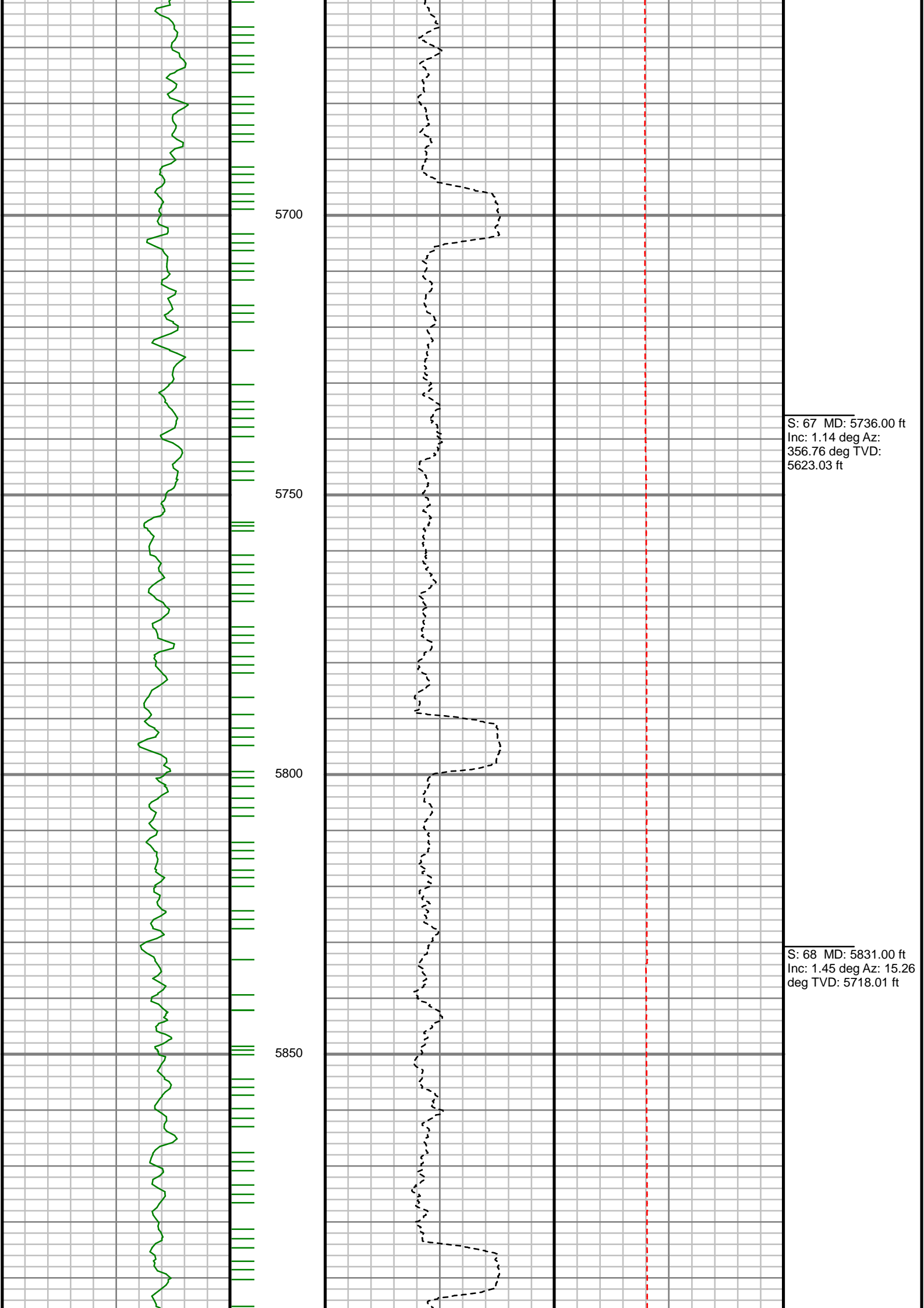
S: 61 MD: 5168.00 ft
Inc: 7.70 deg Az:
354.02 deg TVD:
5056.81 ft



S: 62 MD: 5263.00 ft
Inc: 7.24 deg Az:
352.88 deg TVD:
5151.01 ft

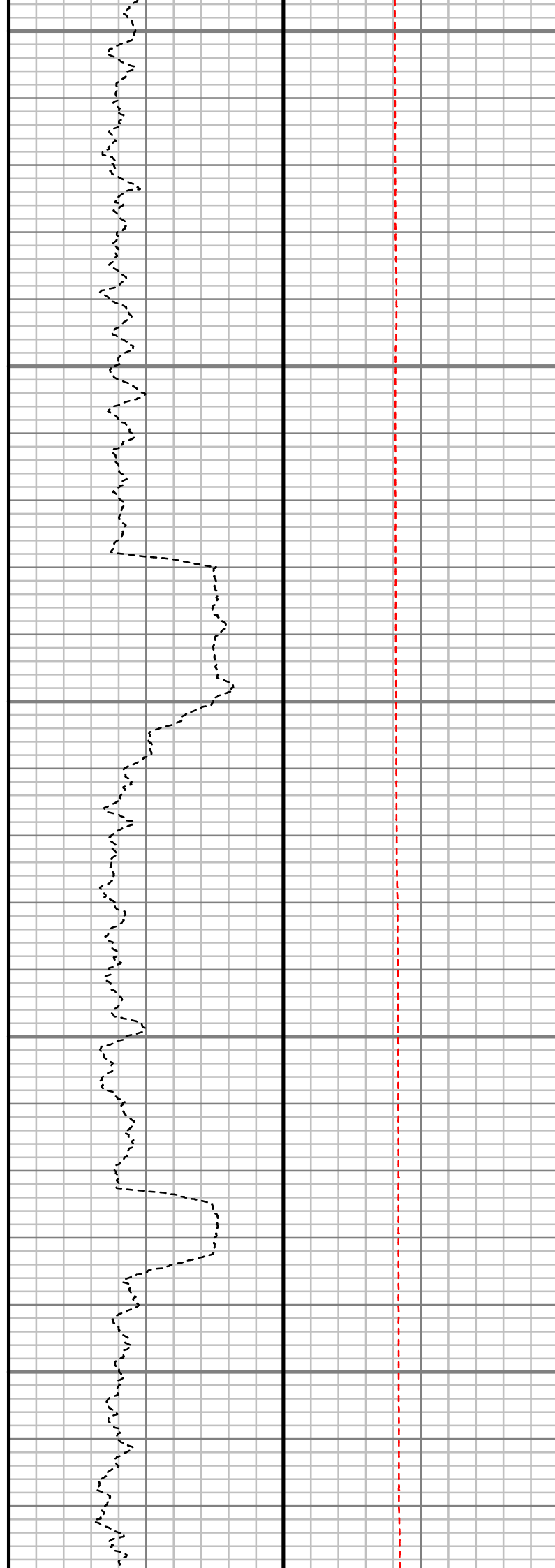
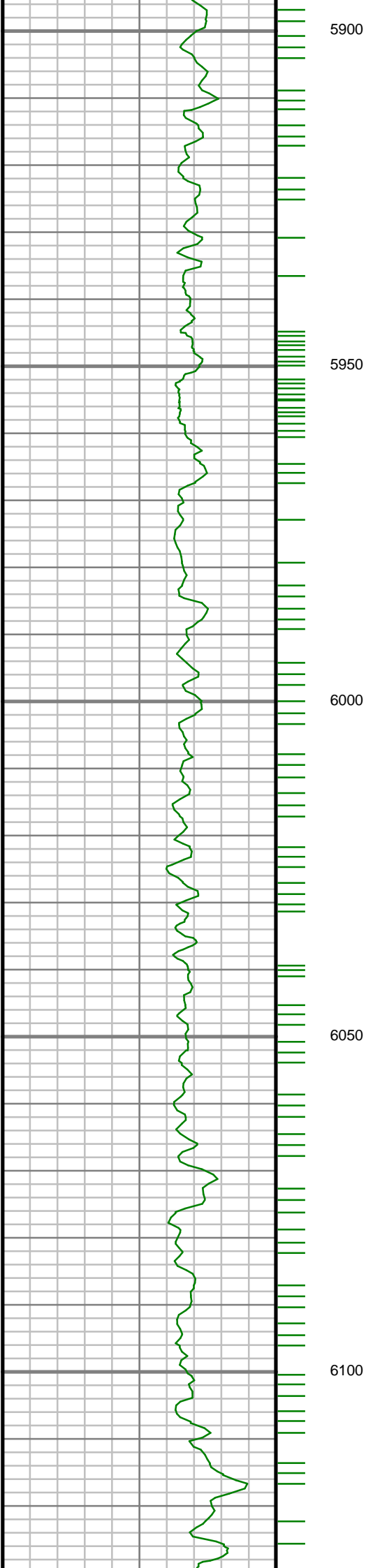
S: 63 MD: 5357.00 ft
Inc: 5.39 deg Az:
356.74 deg TVD:
5244.43 ft





S: 67 MD: 5736.00 ft
Inc: 1.14 deg Az:
356.76 deg TVD:
5623.03 ft

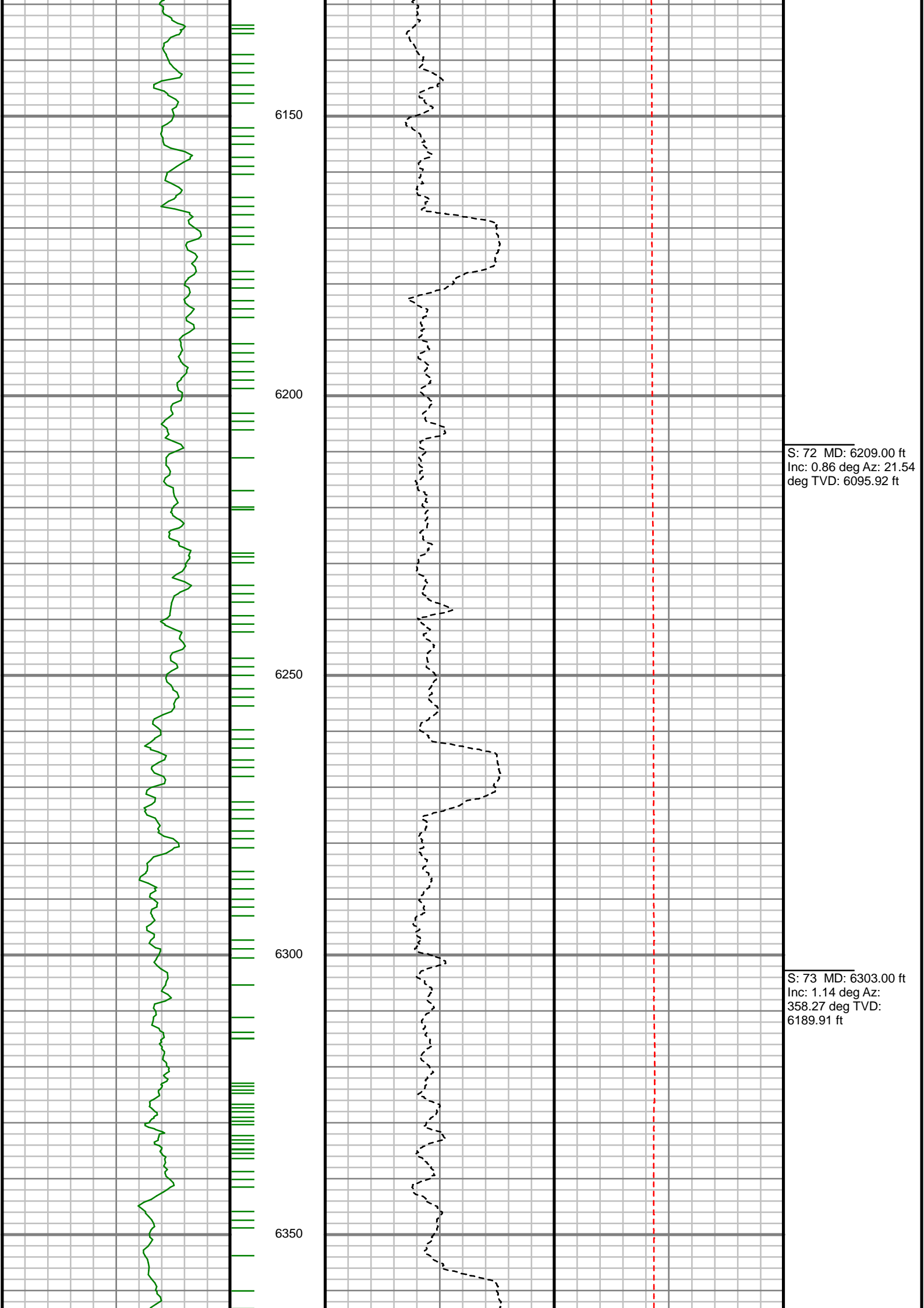
S: 68 MD: 5831.00 ft
Inc: 1.45 deg Az: 15.26
deg TVD: 5718.01 ft

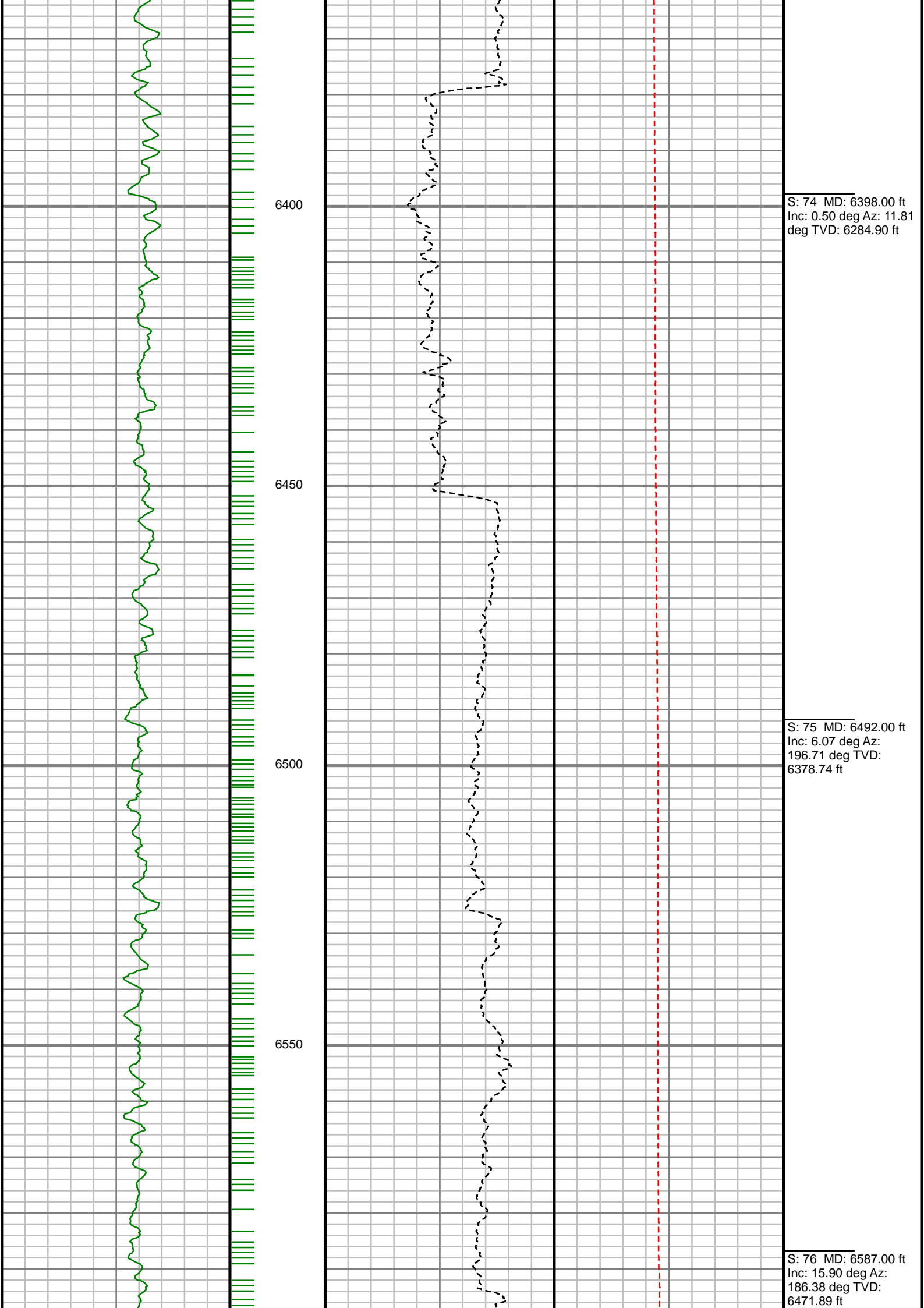


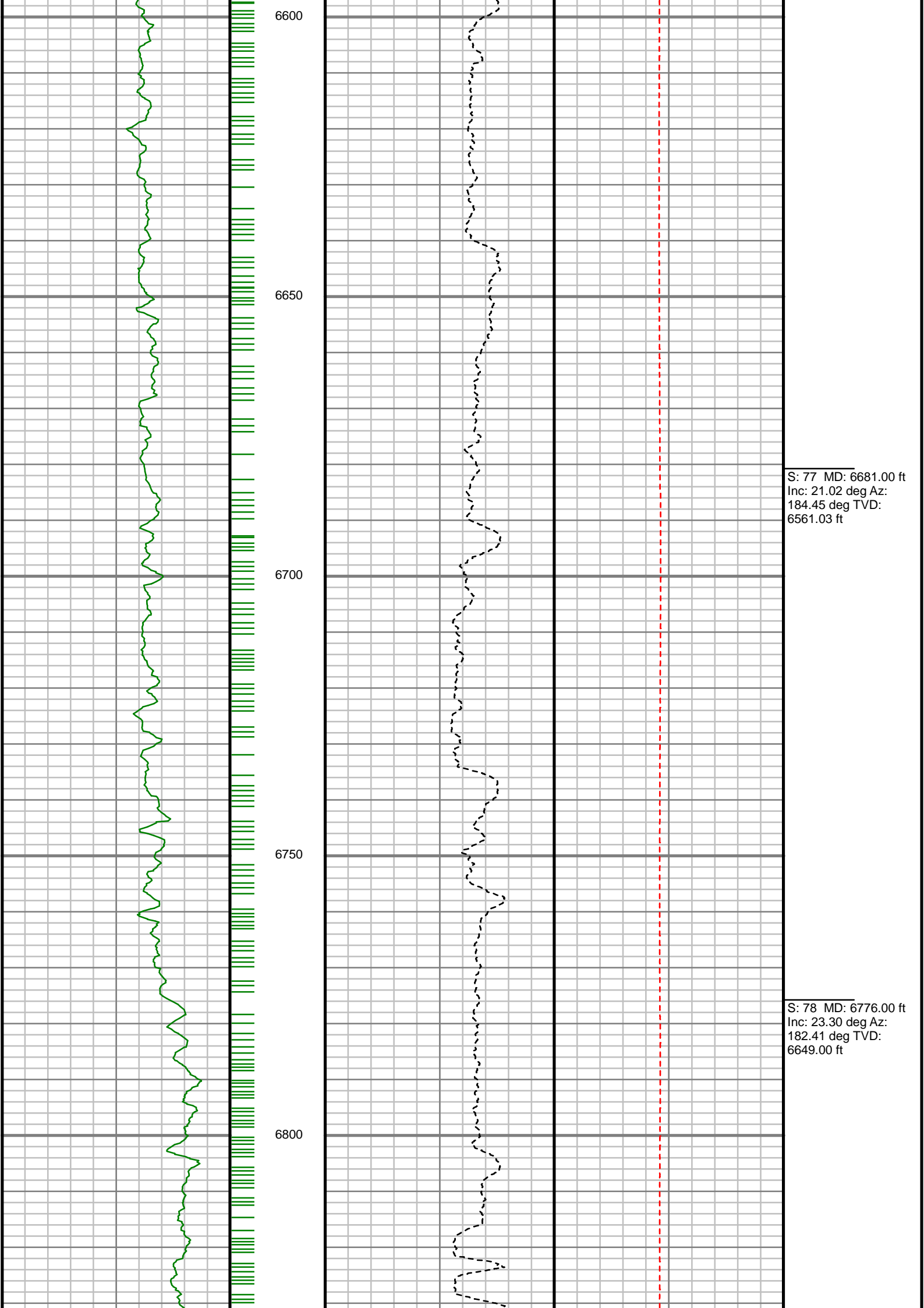
S: 69 MD: 5925.00 ft
Inc: 1.71 deg Az: 12.20
deg TVD: 5811.97 ft

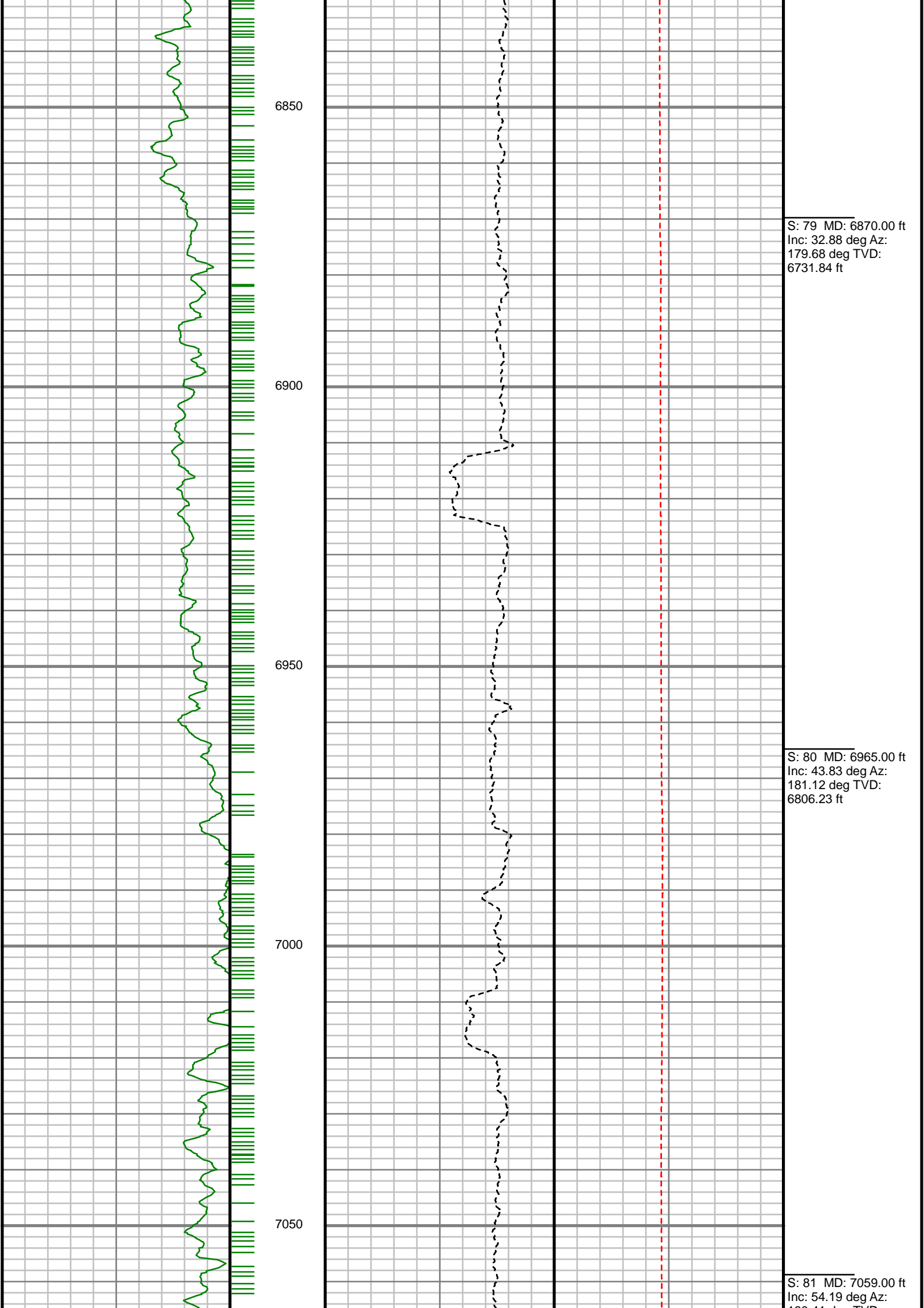
S: 70 MD: 6020.00 ft
Inc: 0.69 deg Az: 51.15
deg TVD: 5906.95 ft

S: 71 MD: 6114.00 ft
Inc: 1.14 deg Az: 20.73
deg TVD: 6000.94 ft





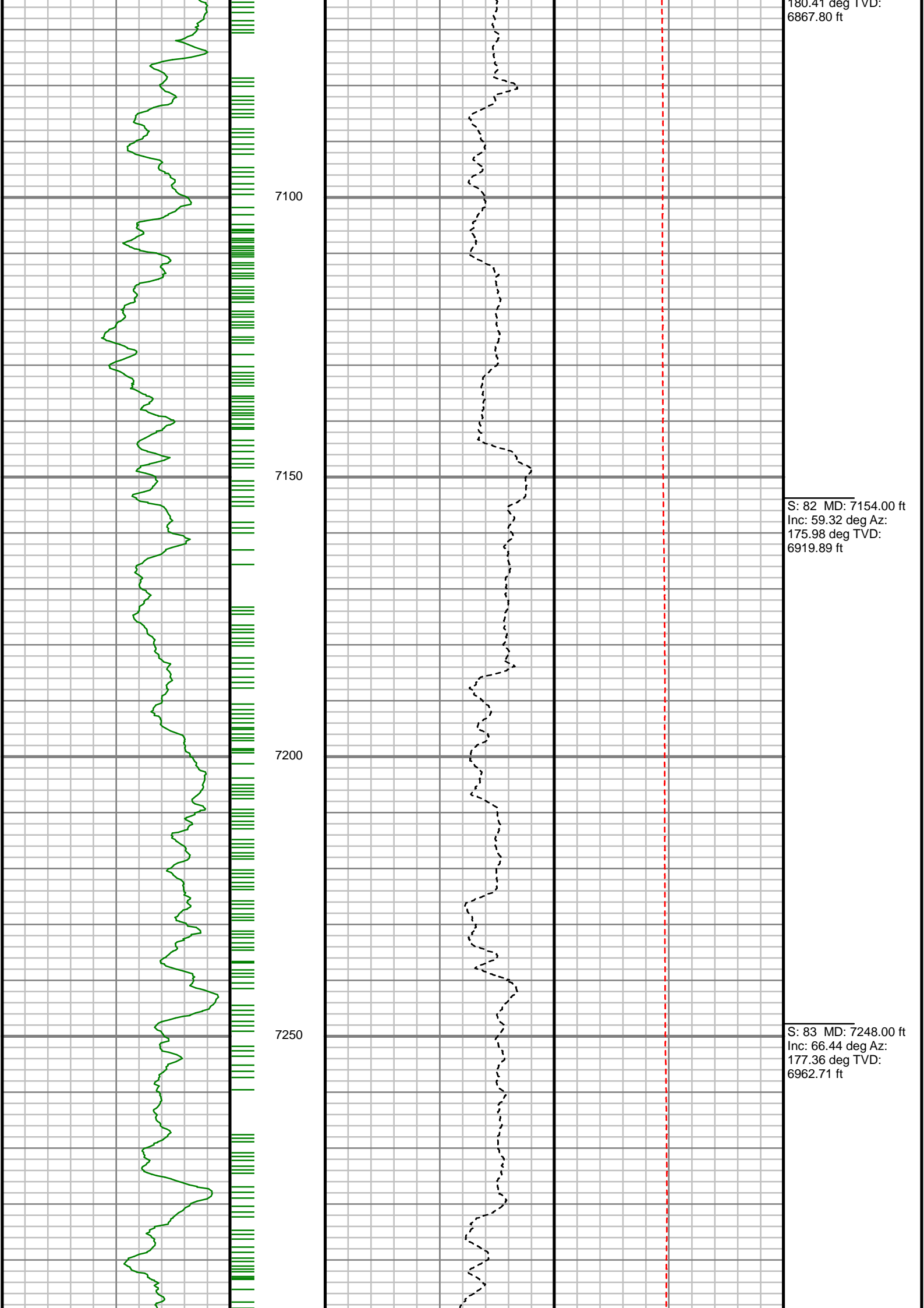


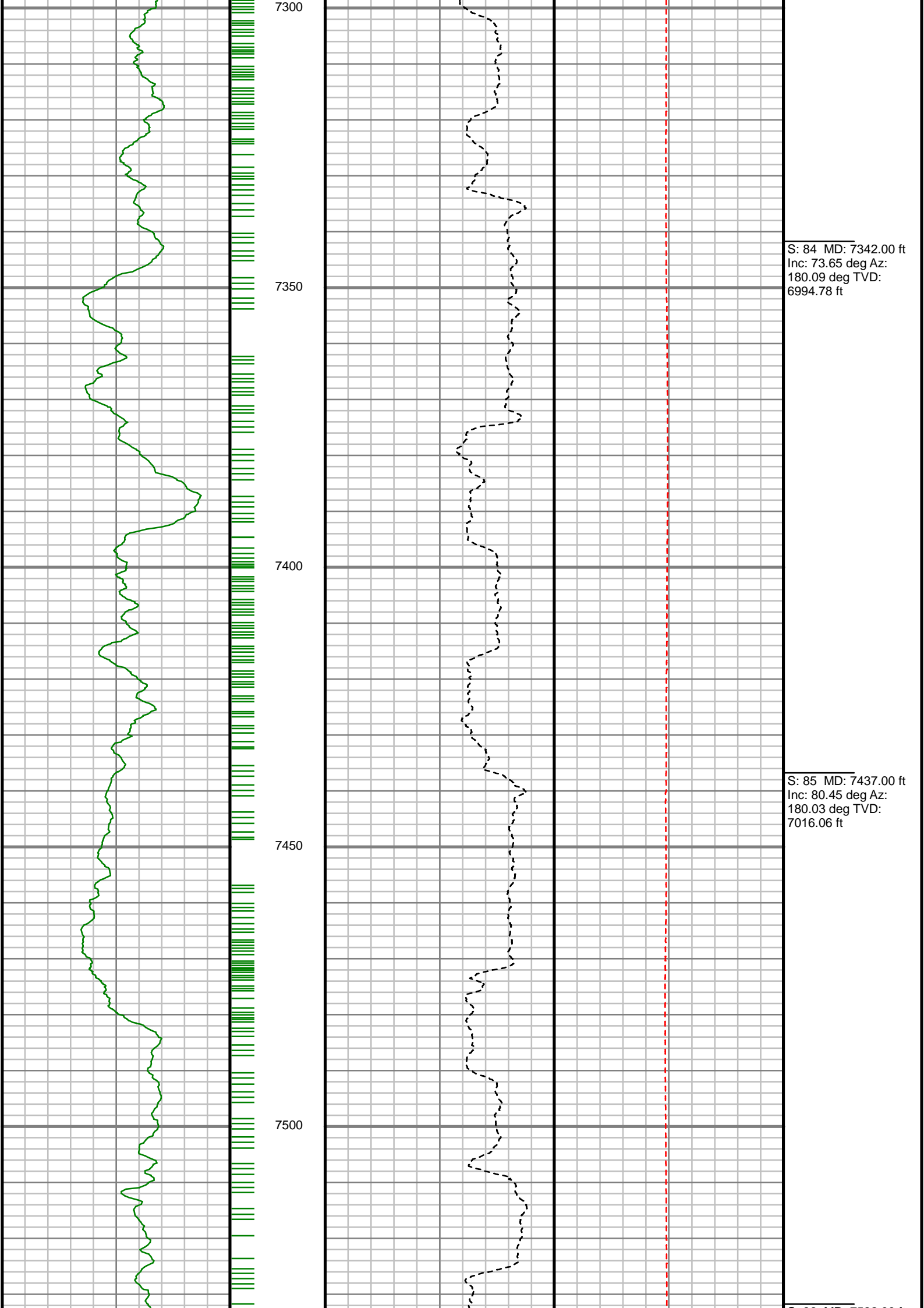


S: 79 MD: 6870.00 ft
Inc: 32.88 deg Az:
179.68 deg TVD:
6731.84 ft

S: 80 MD: 6965.00 ft
Inc: 43.83 deg Az:
181.12 deg TVD:
6806.23 ft

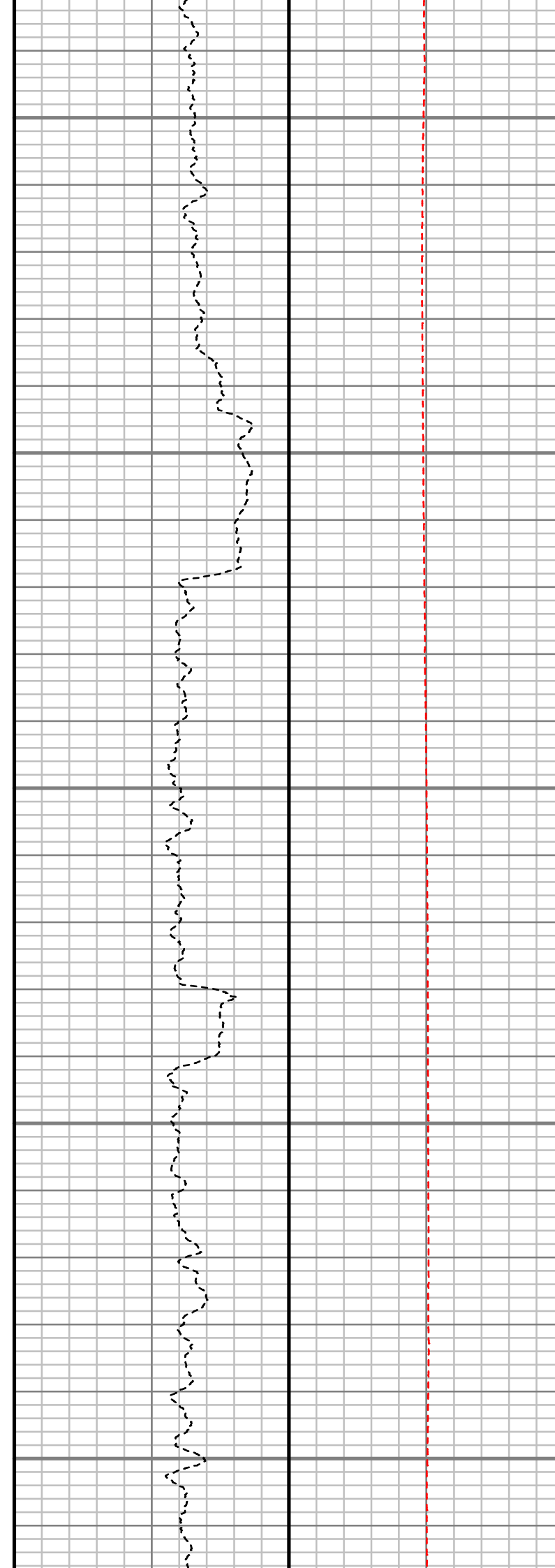
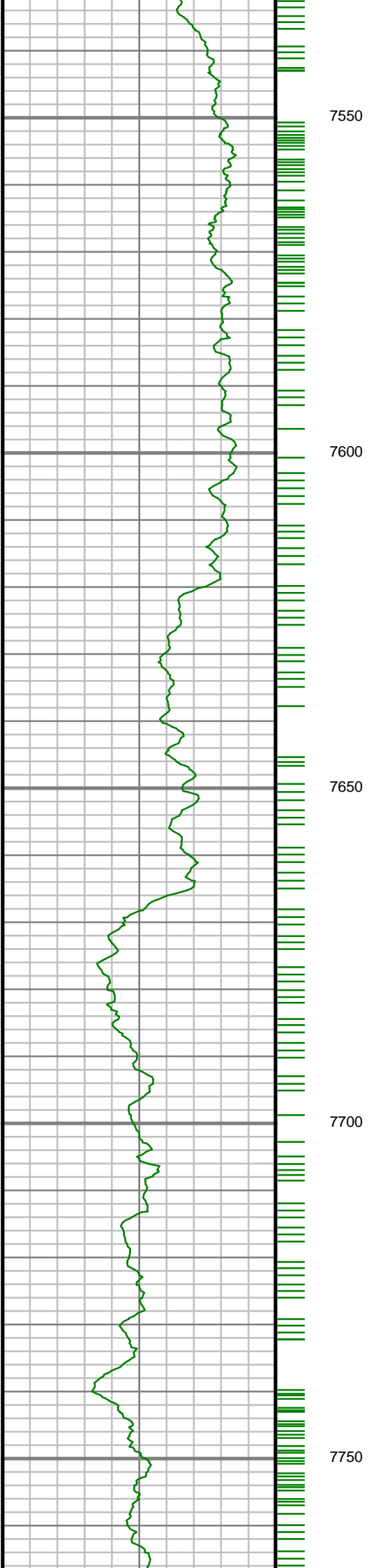
S: 81 MD: 7059.00 ft
Inc: 54.19 deg Az:
182.14 deg TVD:
6881.14 ft





S: 84 MD: 7342.00 ft
Inc: 73.65 deg Az:
180.09 deg TVD:
6994.78 ft

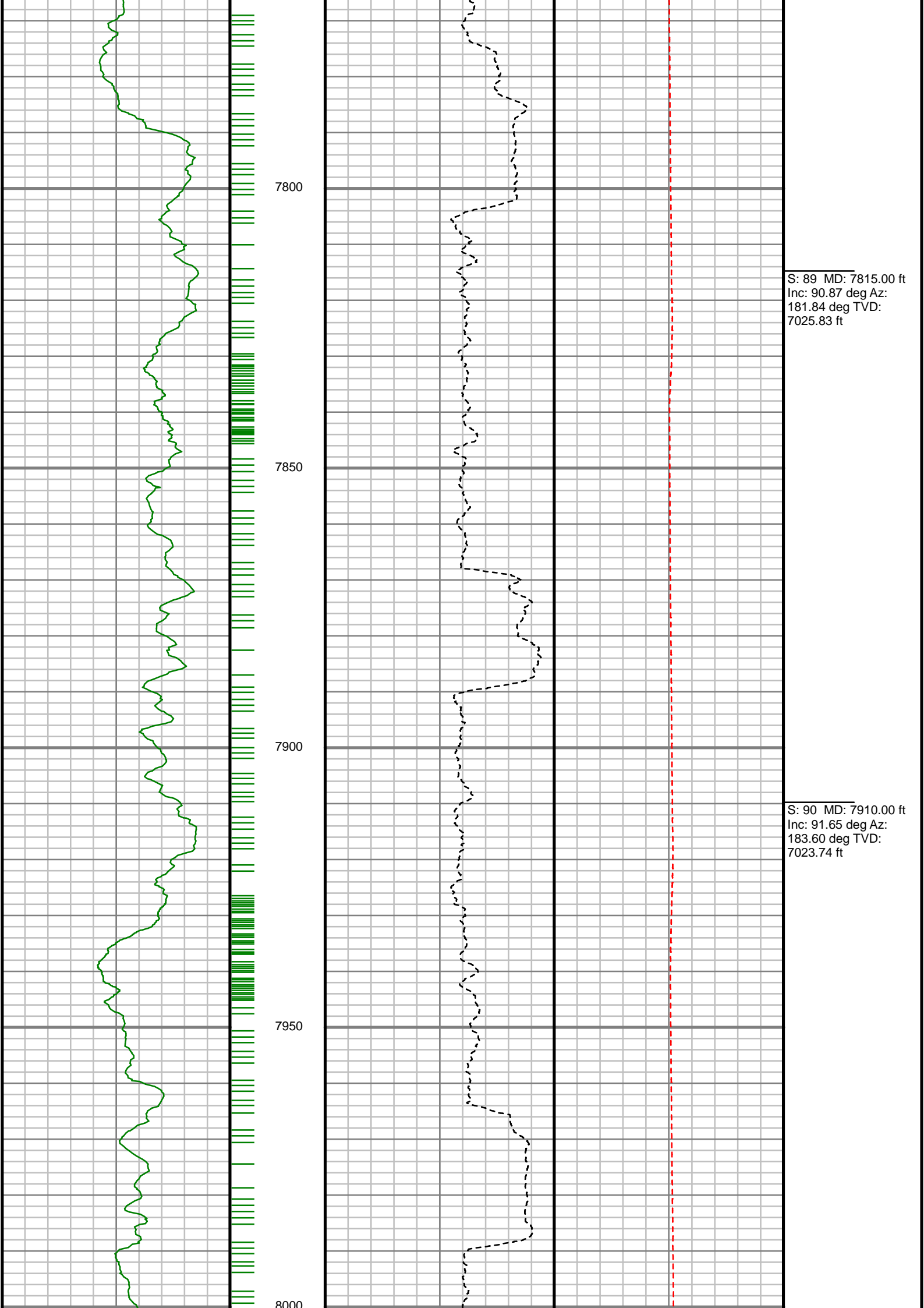
S: 85 MD: 7437.00 ft
Inc: 80.45 deg Az:
180.03 deg TVD:
7016.06 ft

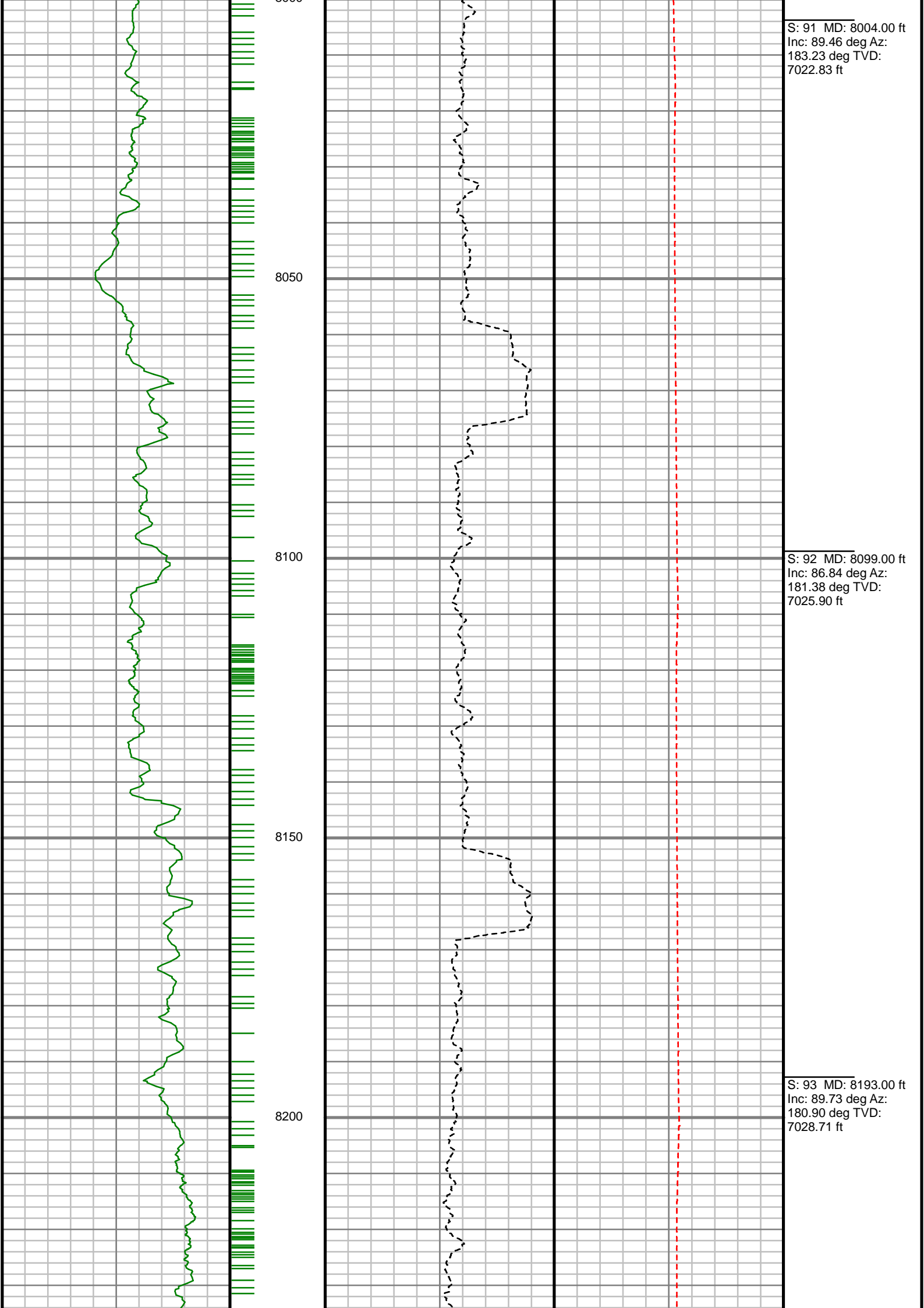


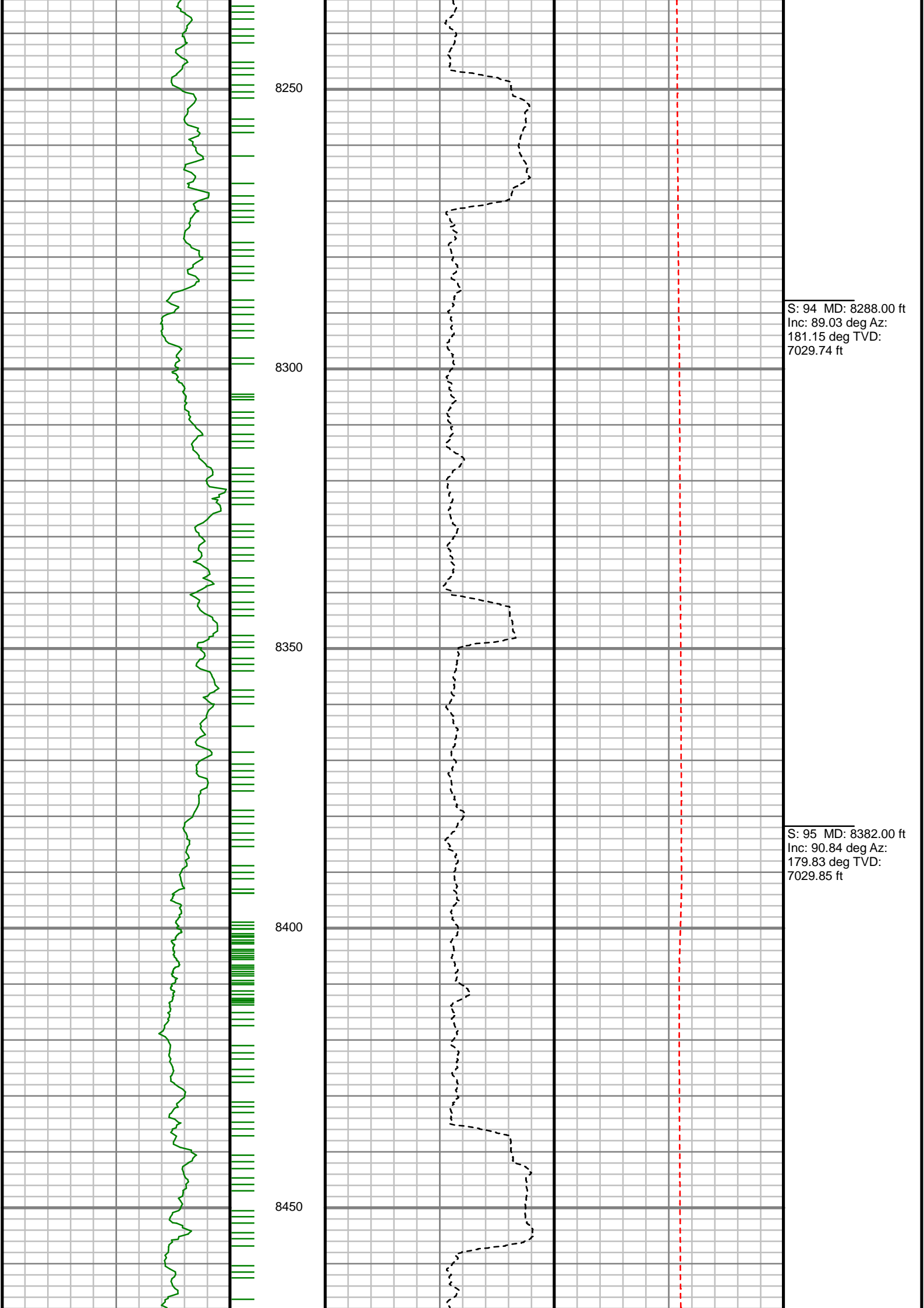
S: 86 MD: 7532.00 ft
Inc: 85.90 deg Az:
182.24 deg TVD:
7027.35 ft

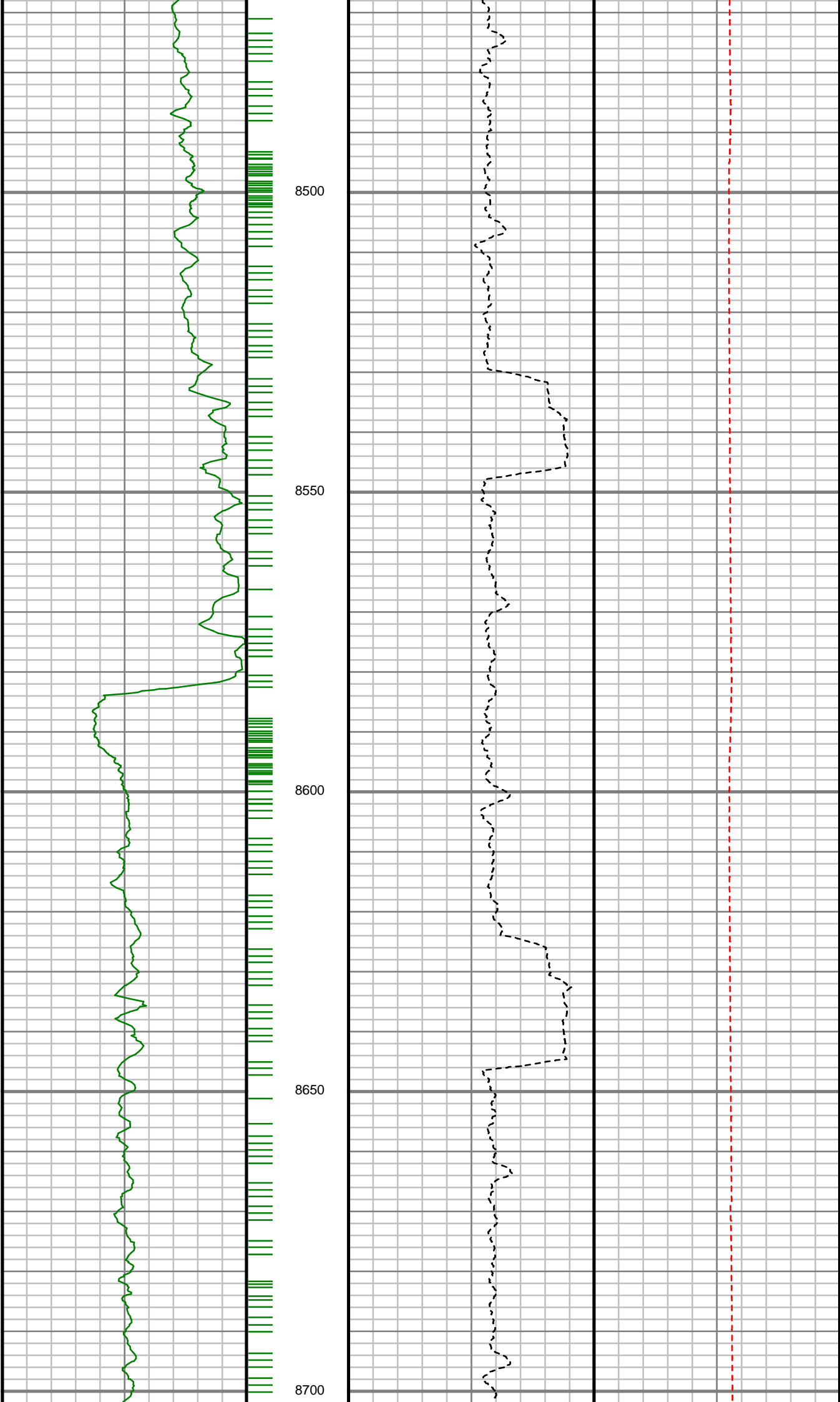
S: 87 MD: 7626.00 ft
Inc: 90.34 deg Az:
182.22 deg TVD:
7030.43 ft

S: 88 MD: 7721.00 ft
Inc: 92.18 deg Az:
180.38 deg TVD:
7028.34 ft





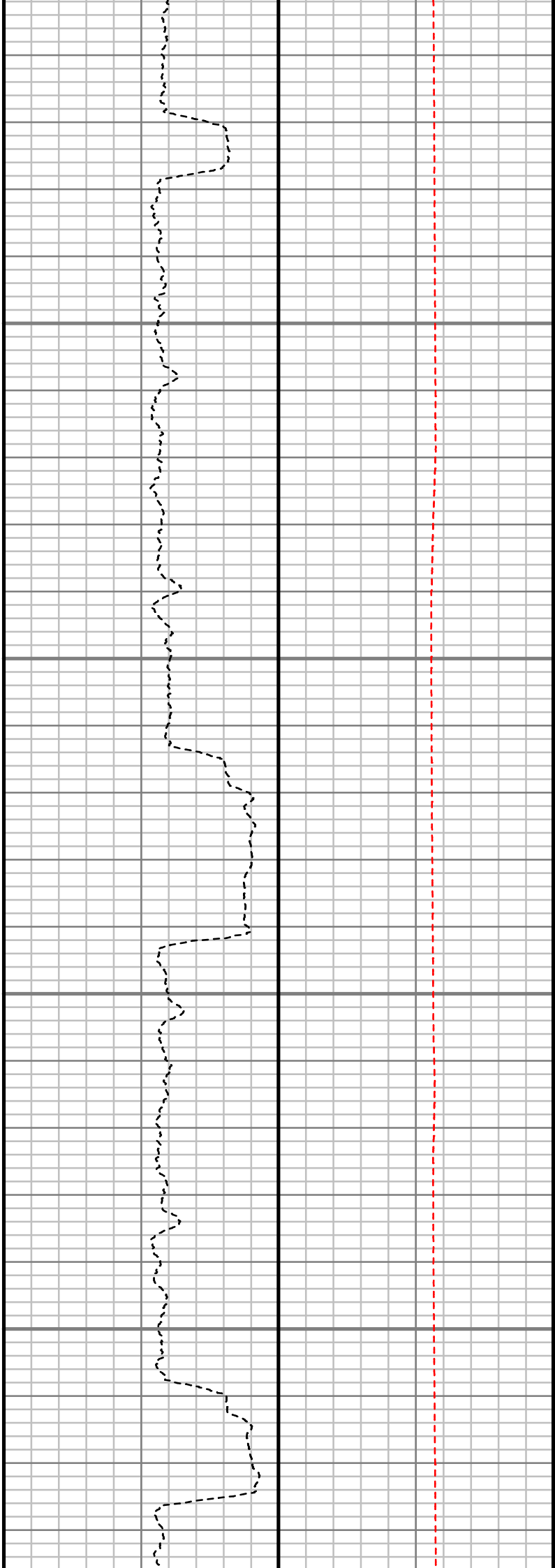
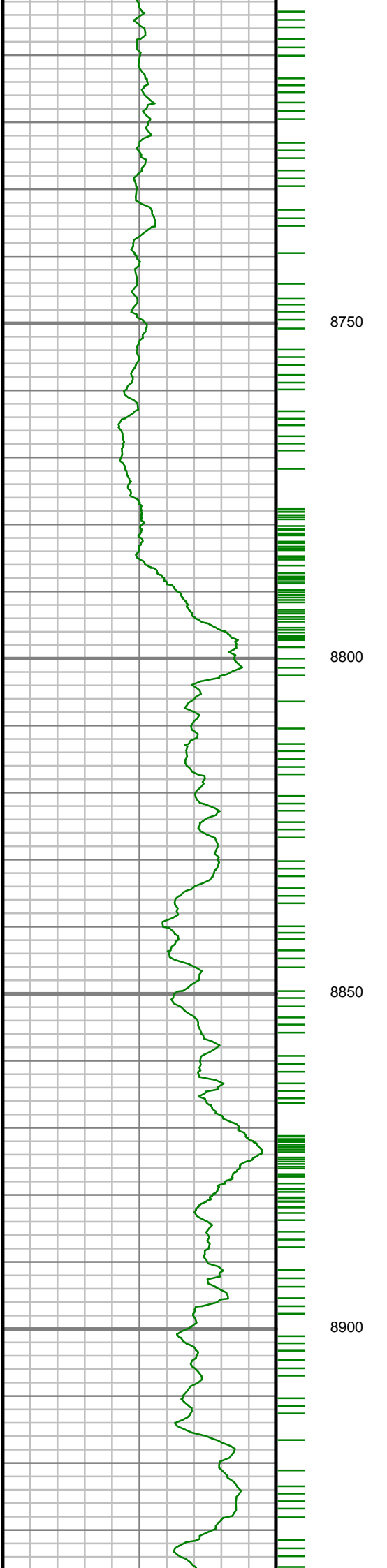




S: 96 MD: 8477.00 ft
Inc: 90.30 deg Az:
181.17 deg TVD:
7028.90 ft

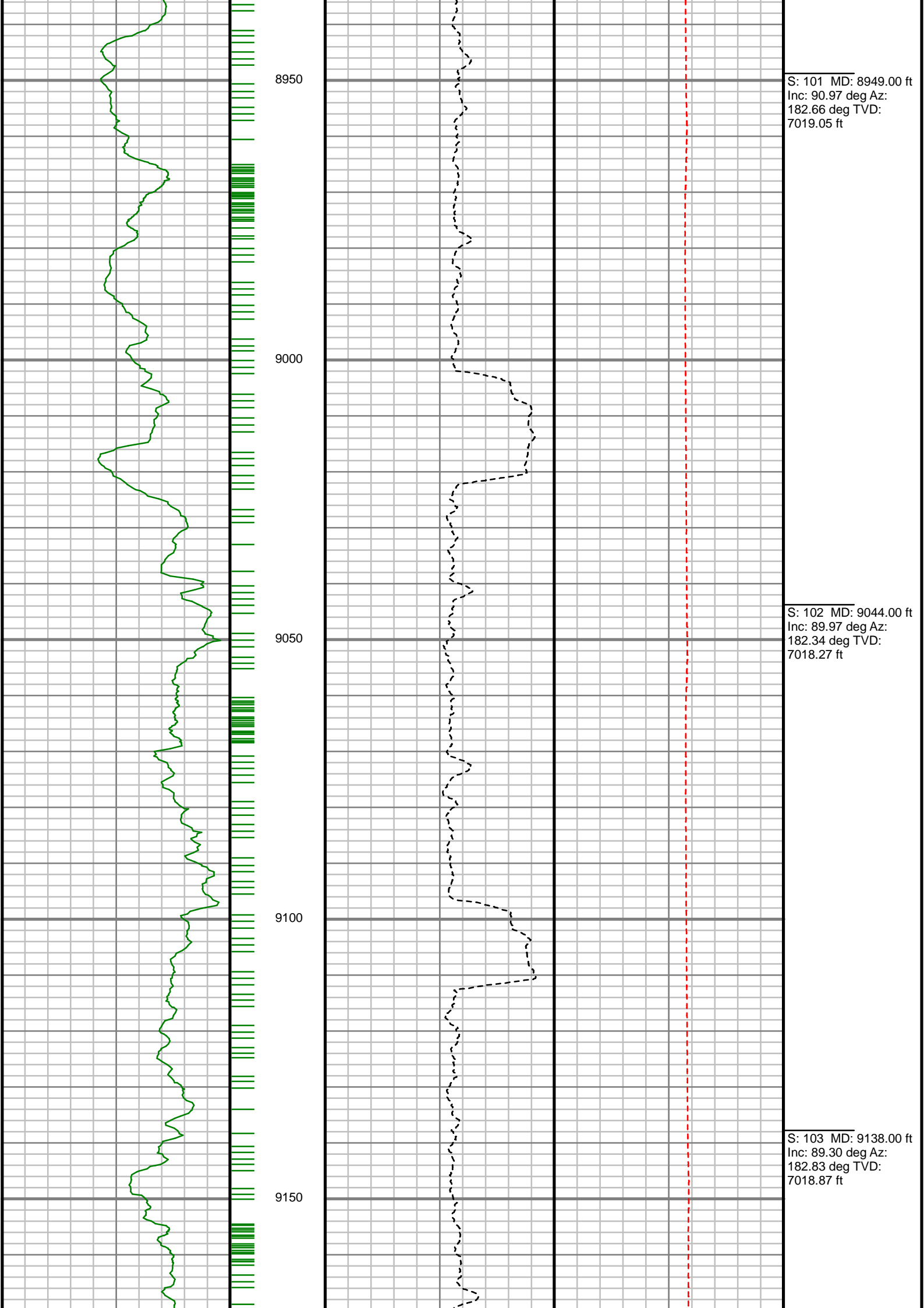
S: 97 MD: 8571.00 ft
Inc: 91.14 deg Az:
182.35 deg TVD:
7027.72 ft

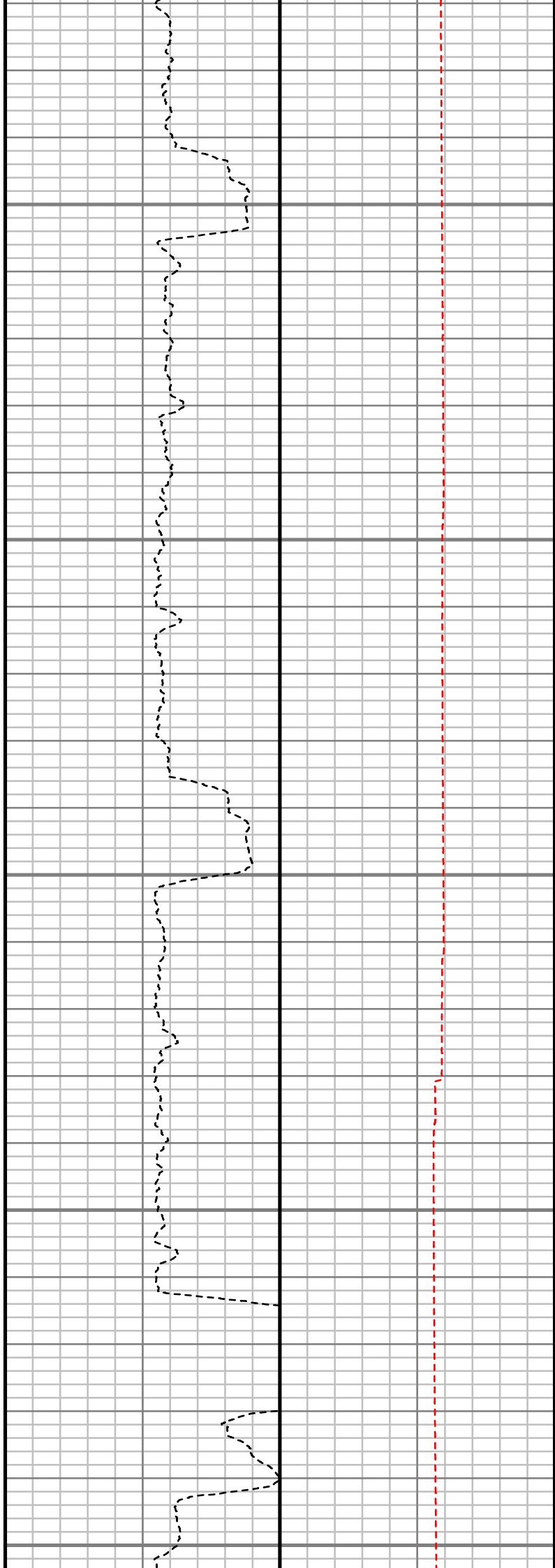
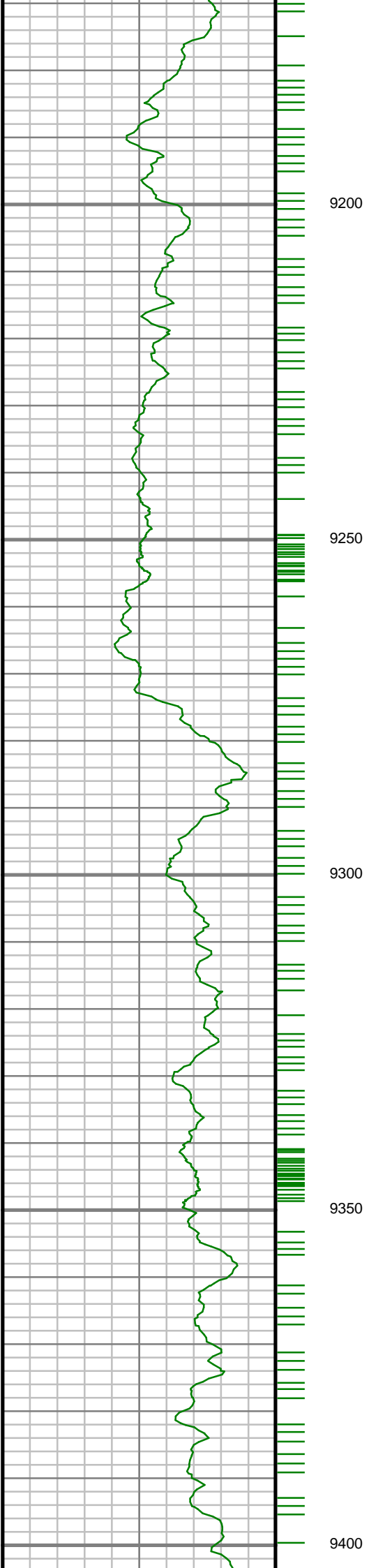
S: 98 MD: 8666.00 ft
Inc: 90.34 deg Az:
183.52 deg TVD:
7026.49 ft



S: 99 MD: 8760.00 ft
Inc: 93.12 deg Az:
183.32 deg TVD:
7023.65 ft

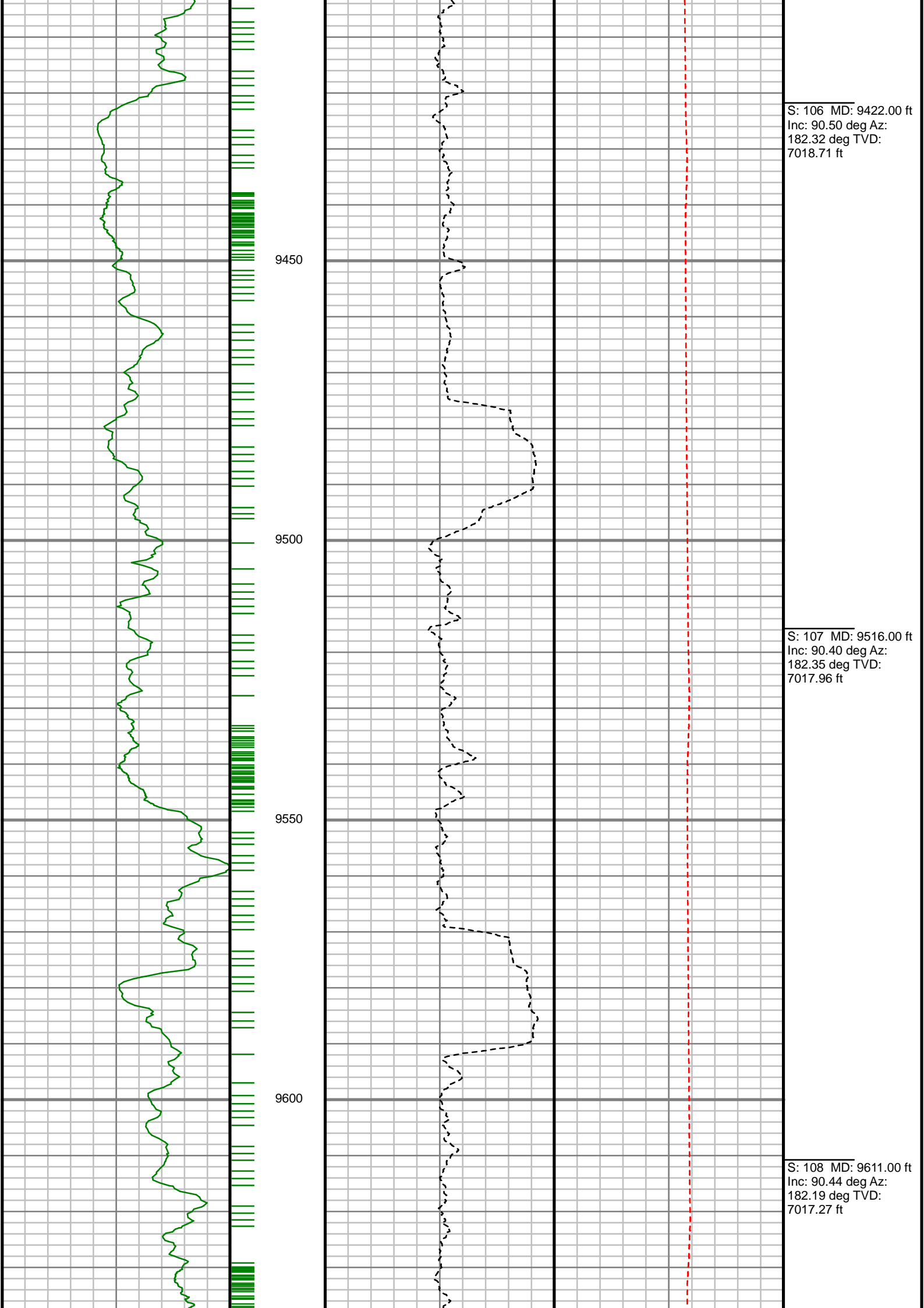
S: 100 MD: 8855.00 ft
Inc: 90.74 deg Az:
181.06 deg TVD:
7020.45 ft

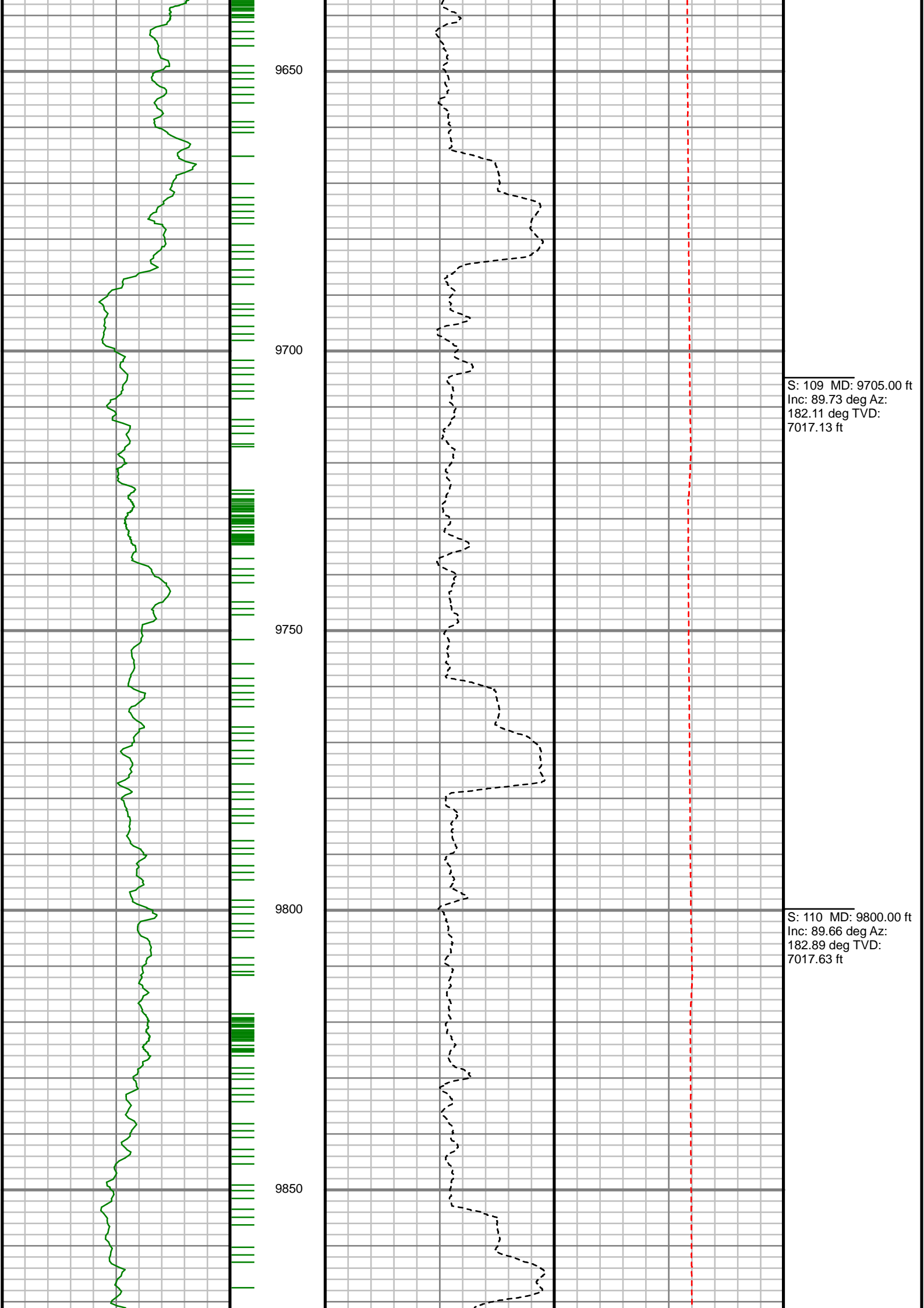


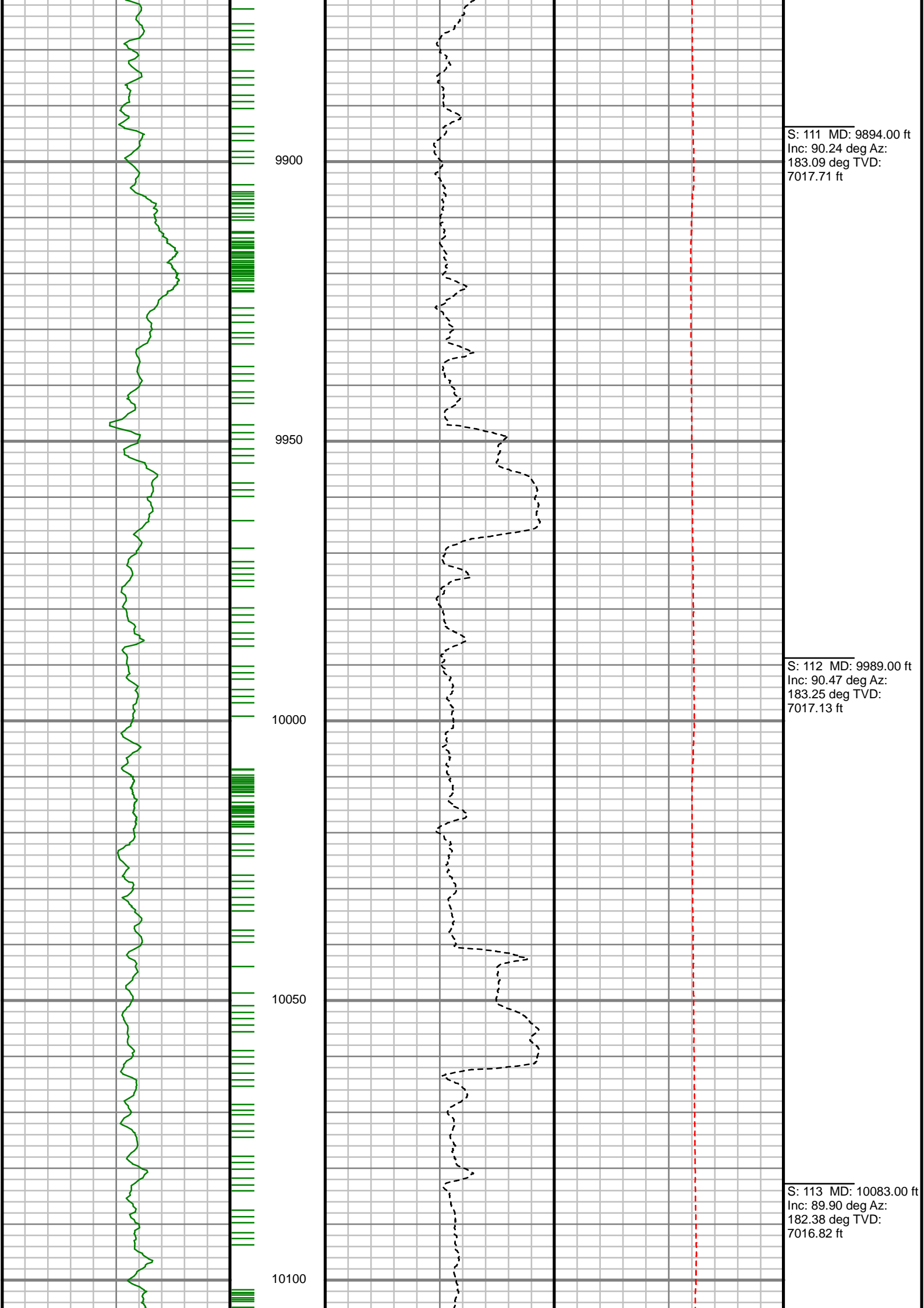


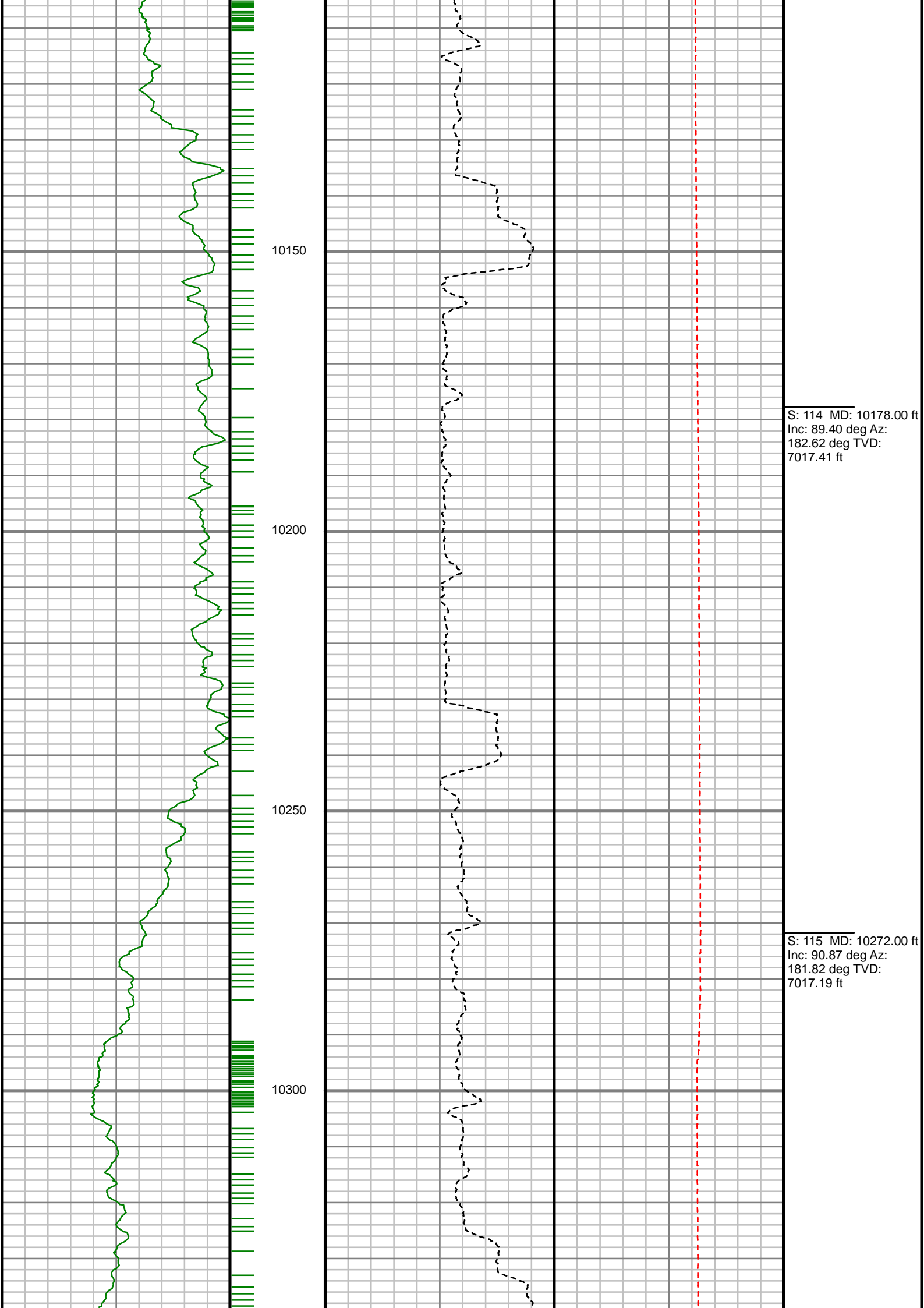
S: 104 MD: 9233.00 ft
Inc: 90.13 deg Az:
183.15 deg TVD:
7019.35 ft

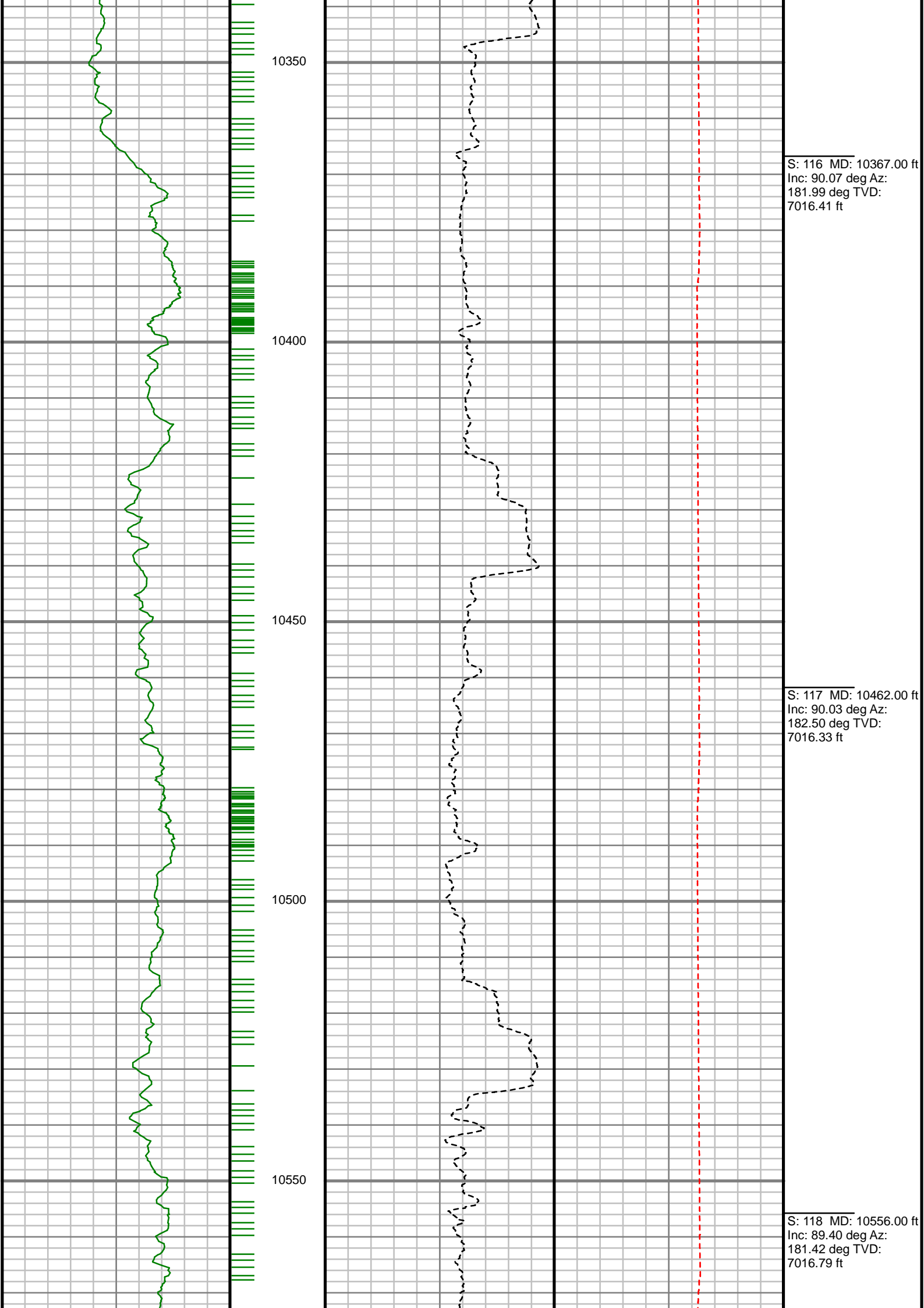
S: 105 MD: 9327.00 ft
Inc: 90.07 deg Az:
182.34 deg TVD:
7019.18 ft

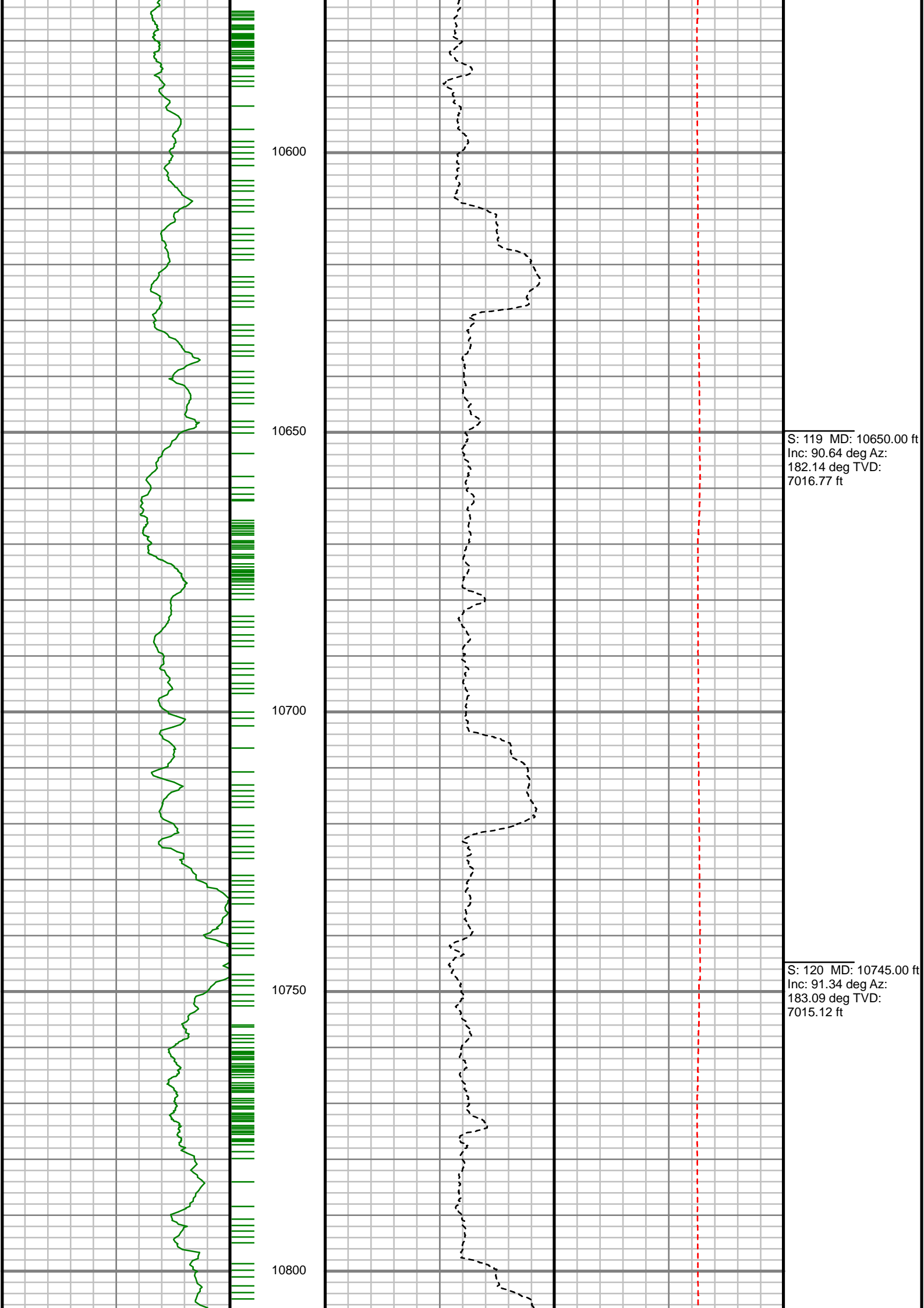


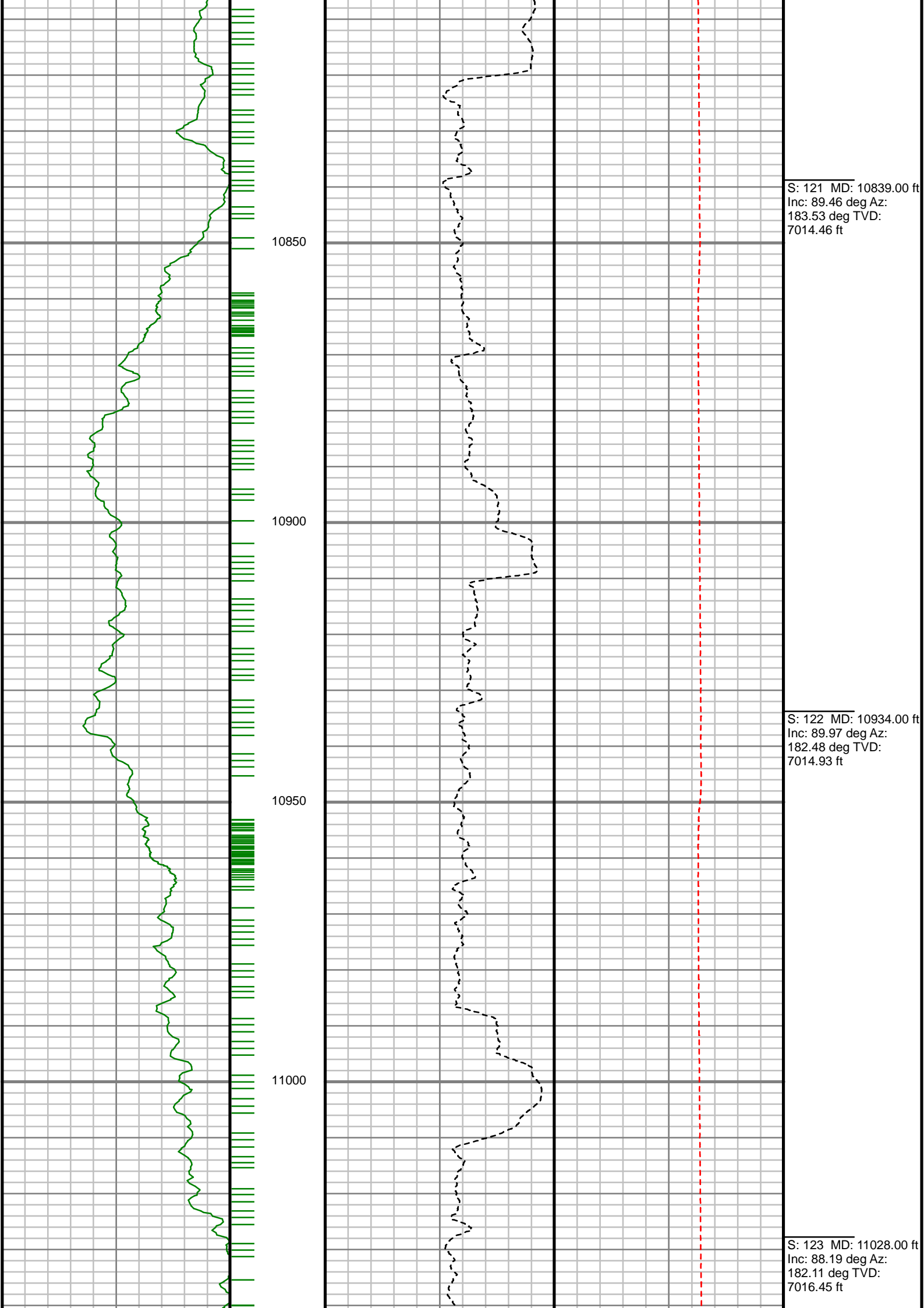


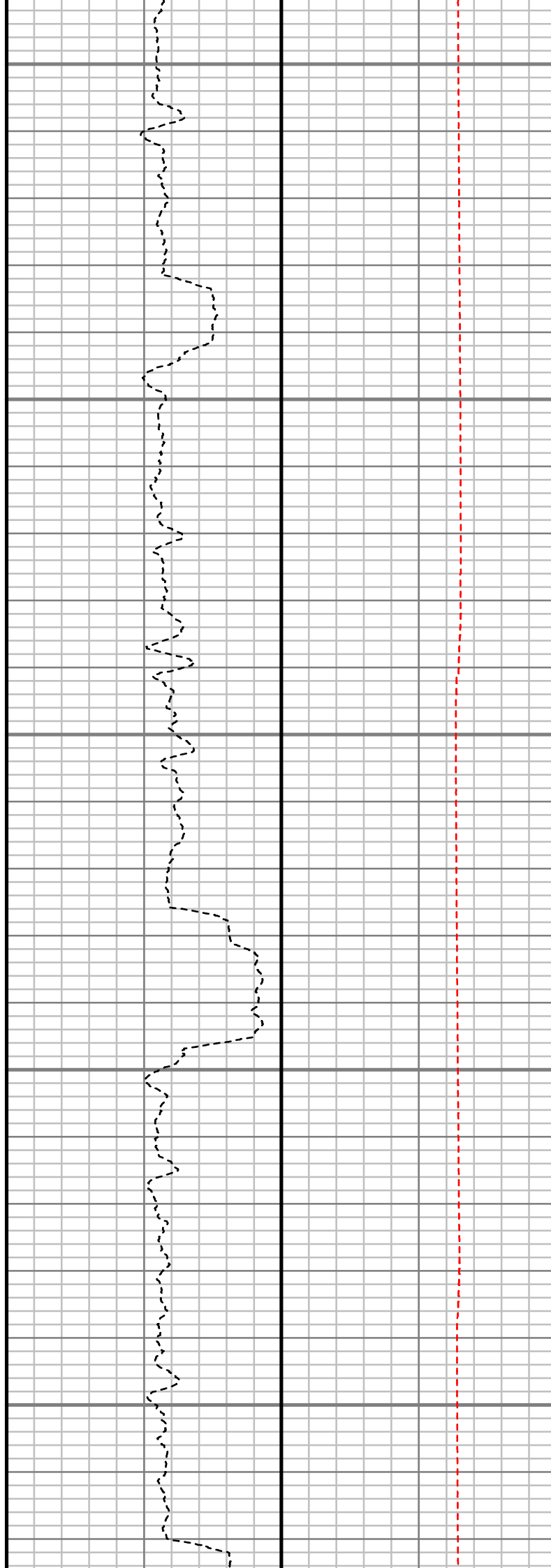
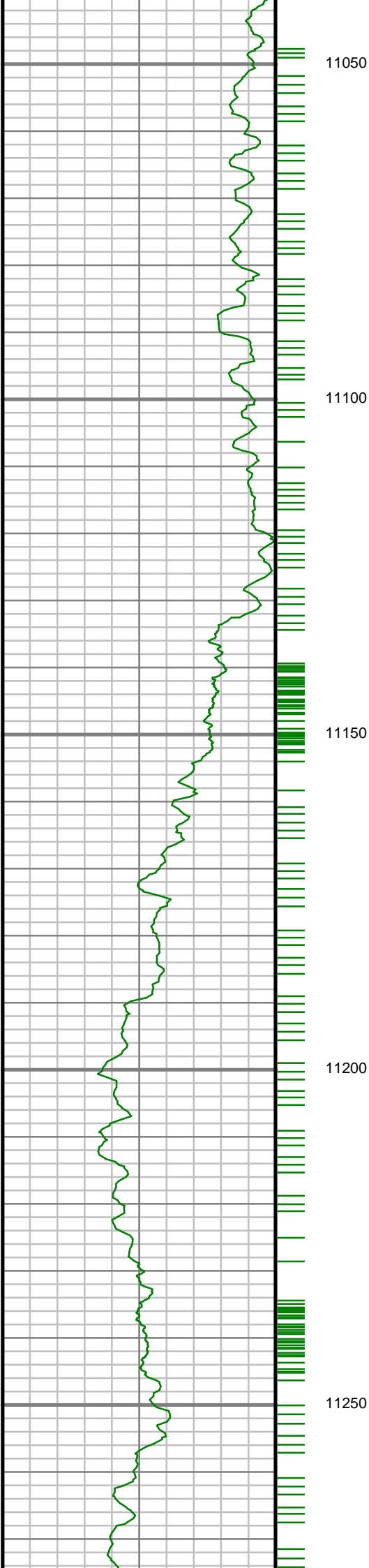






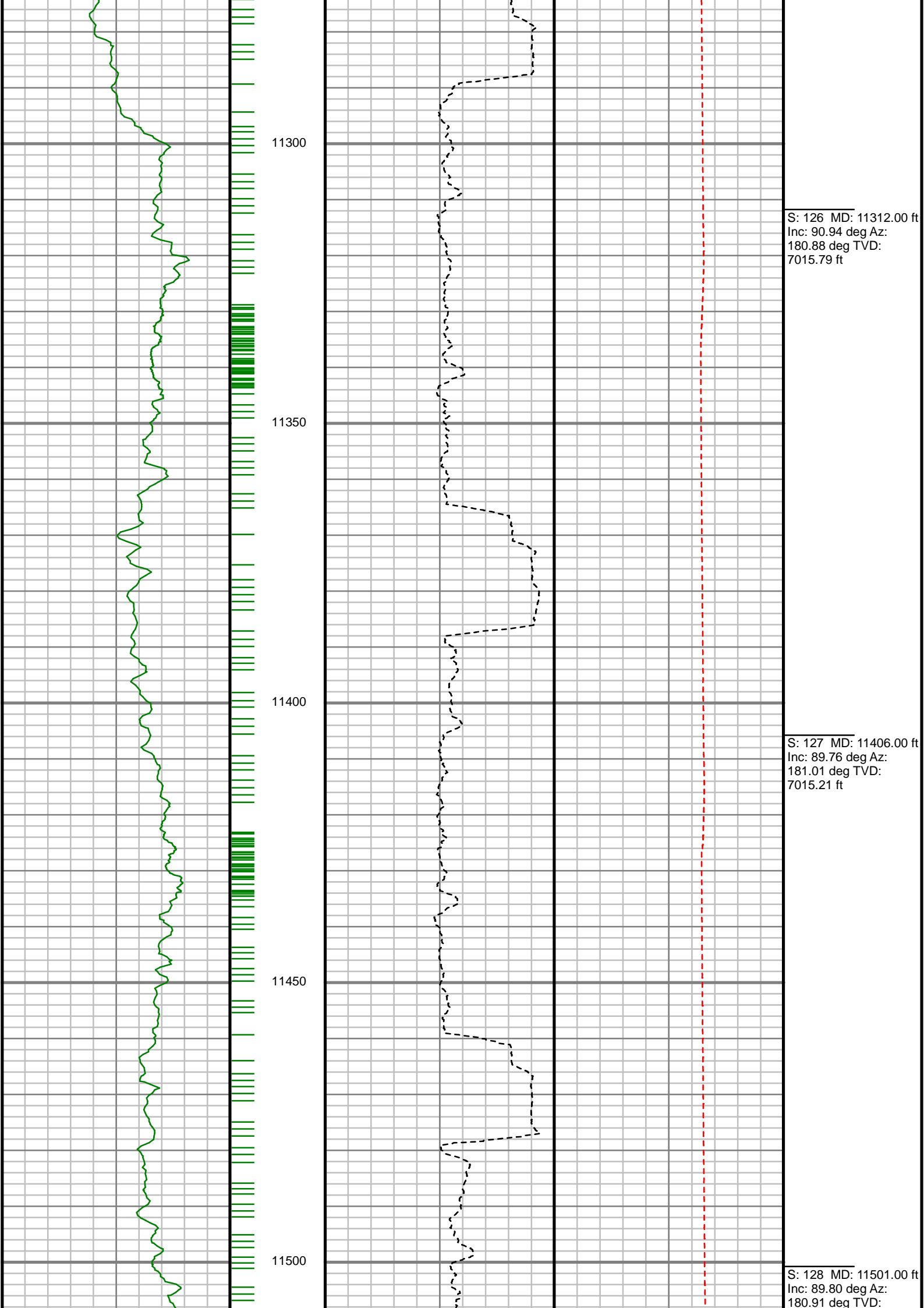


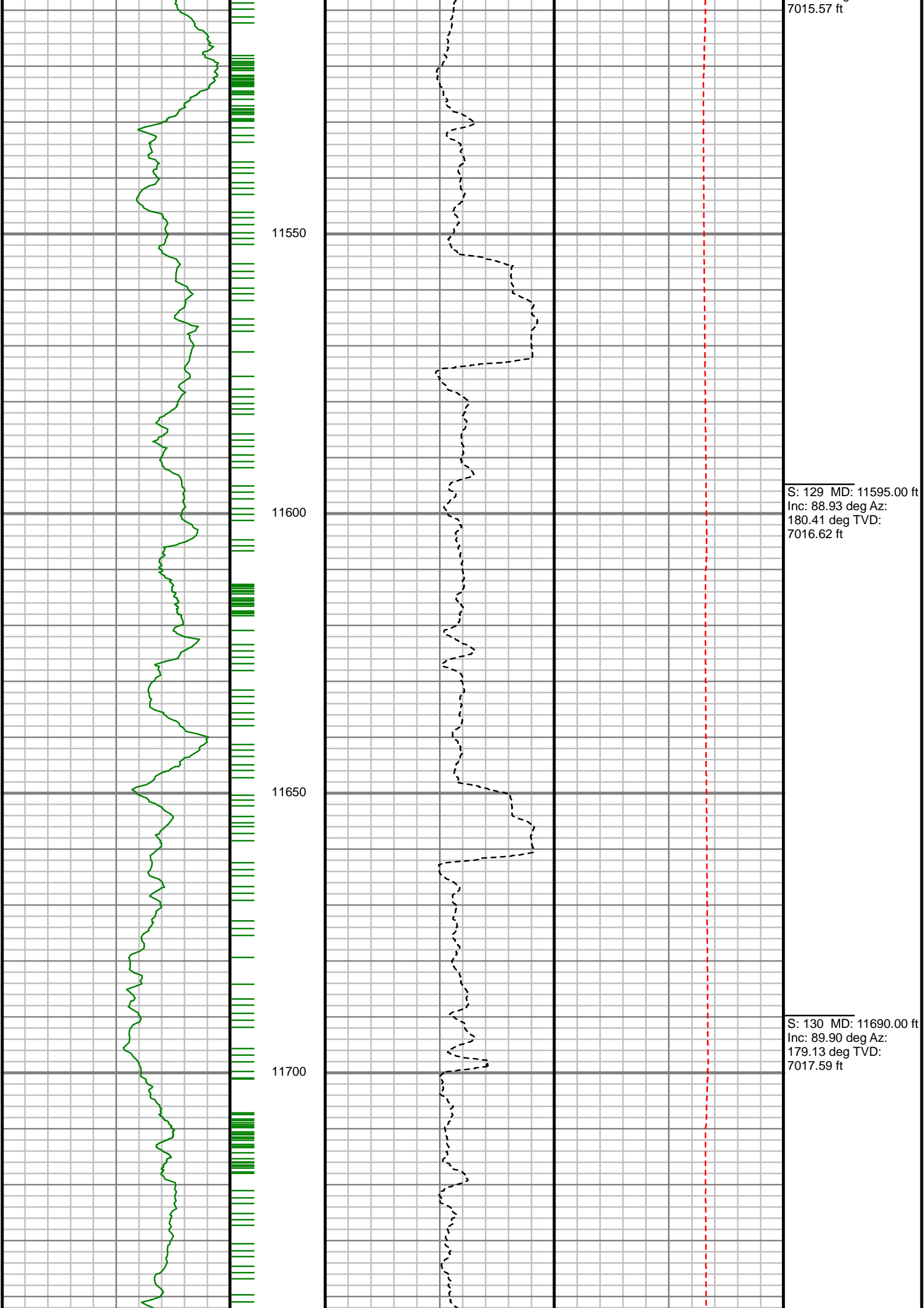


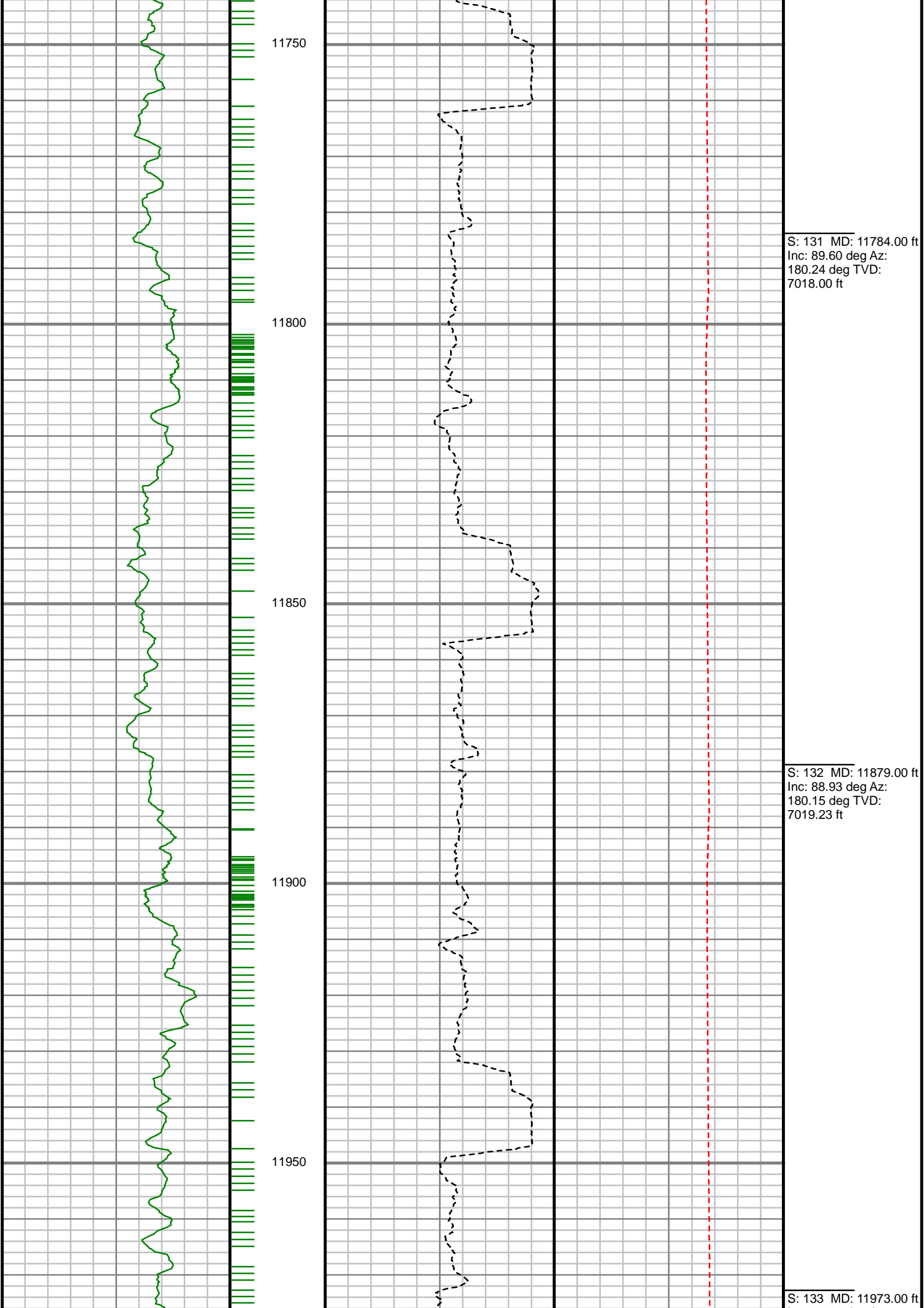


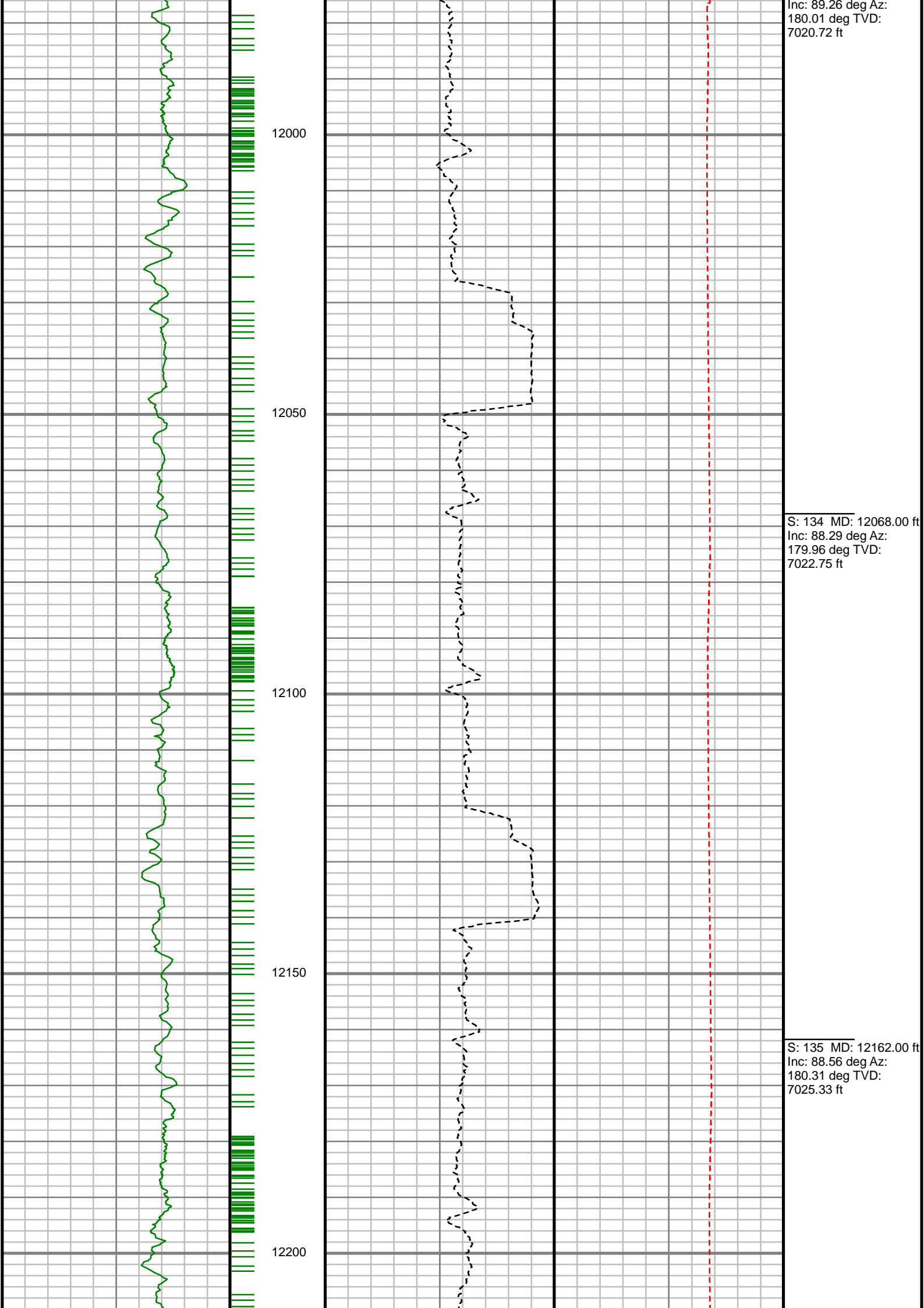
S: 124 MD: 11123.00 ft
Inc: 90.20 deg Az:
182.52 deg TVD:
7017.78 ft

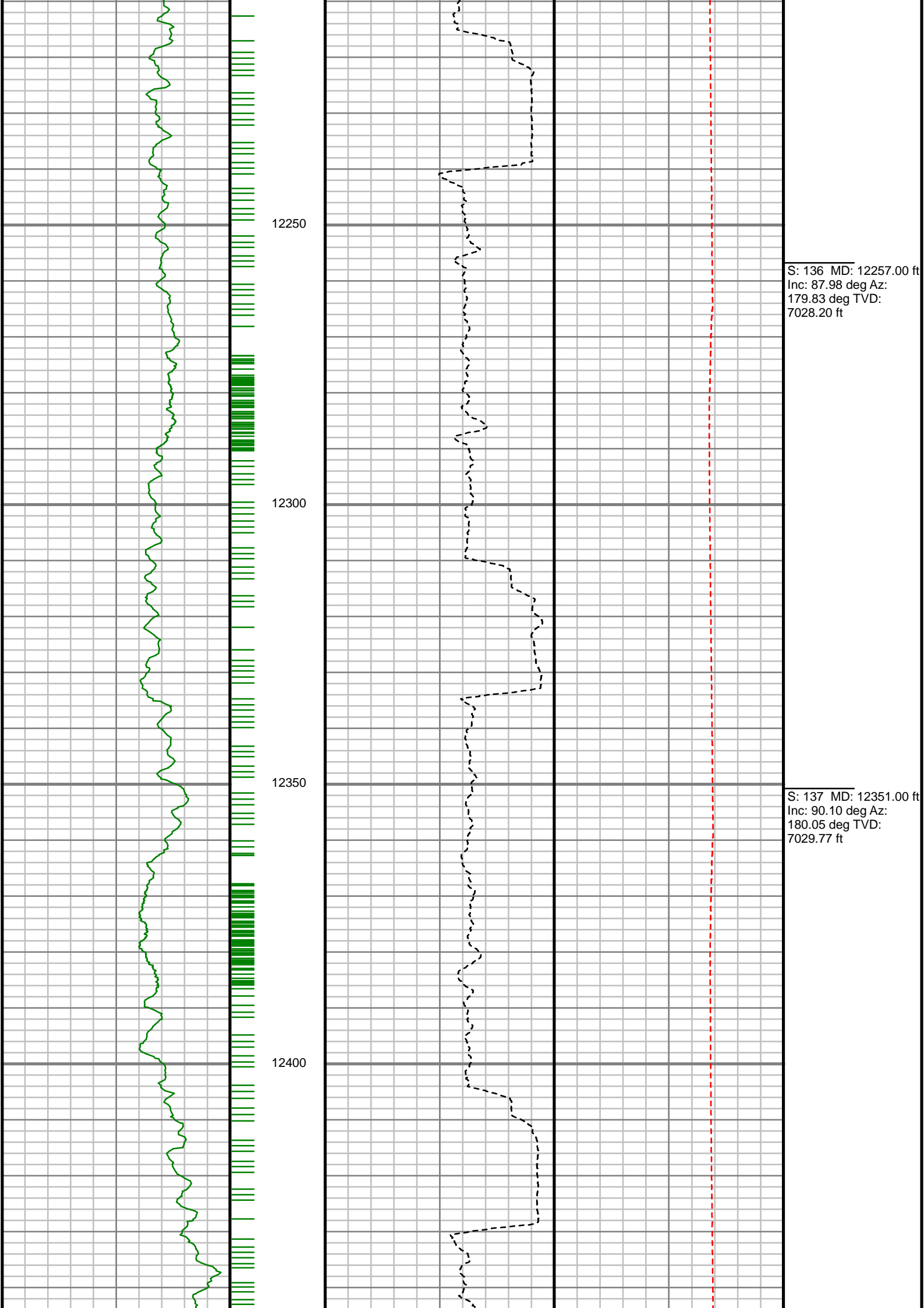
S: 125 MD: 11217.00 ft
Inc: 90.64 deg Az:
182.08 deg TVD:
7017.10 ft

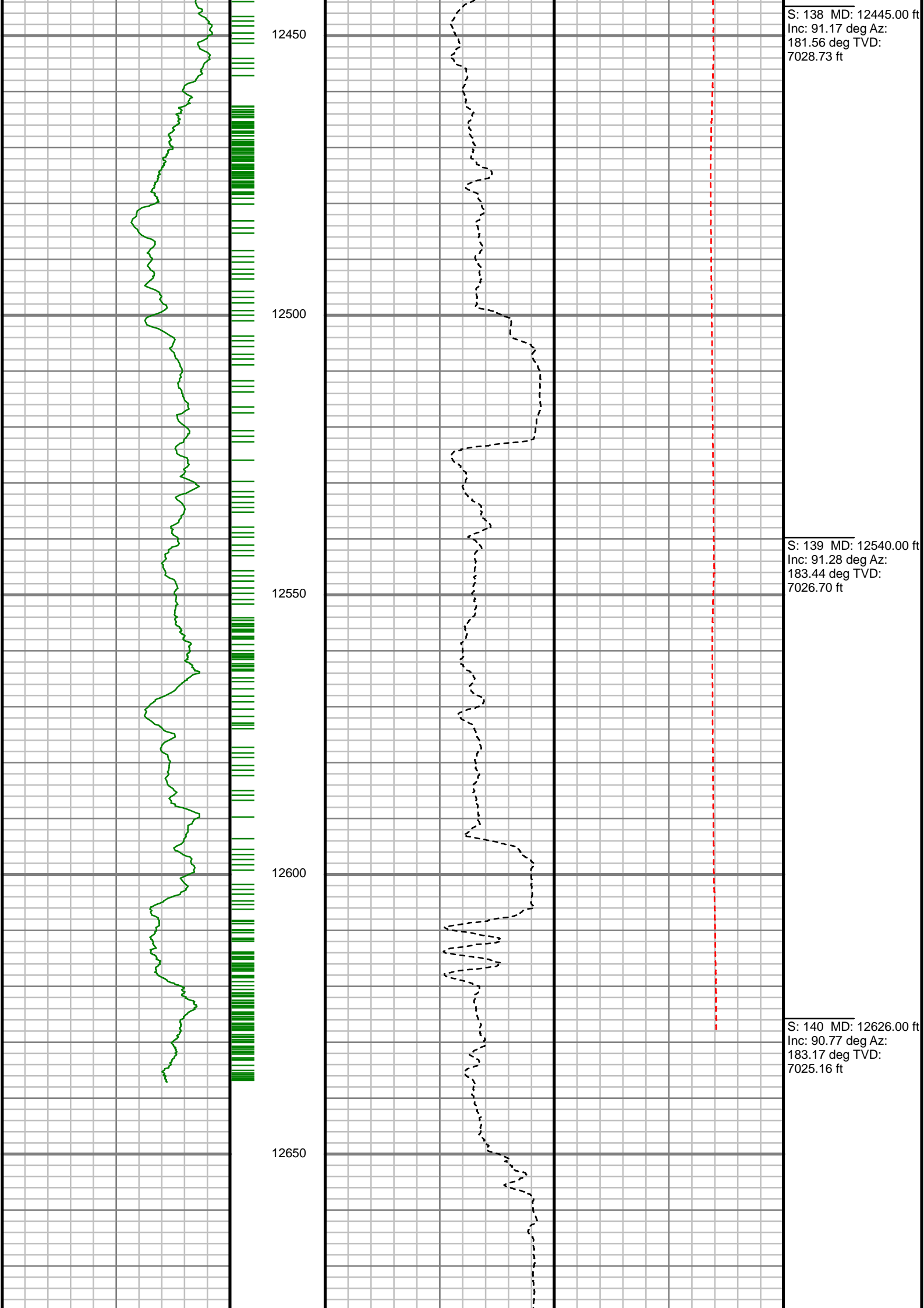












MEASURED DEPTH
1:240 (ft)



MWD Survey Report

Well Location	CHEESE PAD
Well Name	CHEESE 37N-28HZ
Survey Date	5/8/2015
Latitude	40°12'9.047"N
Longitude	104°39'44.420"W
Btotal	52526 nT
Dip	66.88 deg
Magnetic Declination	8.46 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), 181.76Azim (deg)
Operator(s)	M. SCHUSTER, S. WAXLER

Well Notes
SURVEYS FROM 0 FT. TO 1110 FT. WERE ACQUIRED BY CATHEDRAL MWD.
SURVEYS FROM 1161 FT. TO 12626 FT. WERE ACQUIRED BY SCIENTIFIC DRILLING INTERNATIONAL MWD.

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Build Rate	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	°/100ft	ft
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid	Invalid	Invalid
20.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00	20.00
103.00	0.10	143.30	103.00	0.06	-0.06	0.04	0.12	0.12	83.00
165.00	0.40	147.70	165.00	0.28	-0.28	0.19	0.48	0.48	62.00
225.00	0.50	115.10	225.00	0.56	-0.57	0.54	0.45	0.17	60.00
282.00	0.40	84.80	282.00	0.63	-0.66	0.96	0.45	-0.18	57.00
343.00	0.40	44.60	342.99	0.45	-0.49	1.33	0.45	0.00	61.00
407.00	1.20	347.50	406.99	-0.37	0.32	1.34	1.62	1.25	64.00
470.00	2.10	345.00	469.96	-2.11	2.08	0.90	1.43	1.43	63.00
534.00	2.80	348.40	533.90	-4.75	4.75	0.28	1.12	1.09	64.00
598.00	4.00	350.60	597.79	-8.46	8.48	-0.40	1.89	1.88	64.00
663.00	4.50	354.20	662.61	-13.22	13.25	-1.03	0.87	0.77	65.00
727.00	4.90	355.00	726.39	-18.42	18.48	-1.52	0.63	0.63	64.00
791.00	6.10	355.30	790.10	-24.51	24.59	-2.04	1.88	1.88	64.00
855.00	6.60	355.30	853.71	-31.55	31.64	-2.62	0.78	0.78	64.00
919.00	7.60	355.30	917.21	-39.41	39.53	-3.27	1.56	1.56	64.00
983.00	8.90	356.20	980.55	-48.54	48.68	-3.94	2.04	2.03	64.00
1047.00	10.00	355.20	1043.68	-58.99	59.16	-4.73	1.74	1.72	64.00
1110.00	10.90	353.90	1105.64	-70.32	70.54	-5.82	1.48	1.43	63.00

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	Build Rate °/100ft	Course Length ft
1161.00	11.60	353.00	1155.66	-80.17	80.42	-6.96	1.42	1.37	51.00
1296.00	12.05	353.54	1287.79	-107.53	107.89	-10.20	0.34	0.33	135.00
1391.00	13.72	359.32	1380.40	-128.60	129.02	-11.45	2.22	1.76	95.00
1485.00	12.95	357.41	1471.86	-150.25	150.69	-12.06	0.94	-0.82	94.00
1580.00	14.04	358.55	1564.24	-172.37	172.85	-12.83	1.17	1.14	95.00
1674.00	13.83	356.79	1655.47	-194.95	195.46	-13.75	0.50	-0.22	94.00
1768.00	13.72	355.25	1746.77	-217.22	217.79	-15.30	0.41	-0.12	94.00
1863.00	16.35	356.16	1838.51	-241.72	242.36	-17.13	2.78	2.77	95.00
1958.00	16.35	354.74	1929.67	-268.30	269.02	-19.25	0.42	0.00	95.00
2052.00	16.20	353.94	2019.90	-294.42	295.23	-21.85	0.28	-0.16	94.00
2146.00	16.04	353.29	2110.21	-320.26	321.17	-24.75	0.26	-0.17	94.00
2240.00	15.56	353.36	2200.65	-345.57	346.58	-27.73	0.51	-0.51	94.00
2335.00	15.30	352.42	2292.23	-370.54	371.66	-30.85	0.38	-0.27	95.00
2429.00	14.81	358.32	2383.01	-394.77	395.96	-32.84	1.71	-0.51	94.00
2524.00	13.89	358.93	2475.05	-418.28	419.50	-33.41	0.98	-0.97	95.00
2618.00	13.24	0.00	2566.42	-440.31	441.55	-33.62	0.74	-0.69	94.00
2713.00	12.22	359.75	2659.09	-461.23	462.48	-33.67	1.08	-1.07	95.00
2807.00	13.10	356.64	2750.80	-481.78	483.06	-34.33	1.18	0.93	94.00

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	Build Rate °/100ft	Course Length ft
2902.00	13.22	356.76	2843.31	-503.32	504.65	-35.58	0.13	0.12	95.00
2996.00	12.55	355.52	2934.94	-524.18	525.56	-36.98	0.77	-0.71	94.00
3090.00	14.10	357.06	3026.41	-545.74	547.18	-38.37	1.69	1.64	94.00
3185.00	12.83	351.78	3118.80	-567.67	569.18	-40.47	1.85	-1.33	95.00
3279.00	14.02	353.17	3210.23	-589.21	590.82	-43.32	1.31	1.26	94.00
3374.00	13.13	350.64	3302.57	-611.17	612.89	-46.44	1.13	-0.94	95.00
3468.00	12.50	355.95	3394.23	-631.77	633.57	-48.89	1.42	-0.67	94.00
3563.00	13.00	359.66	3486.89	-652.68	654.51	-49.68	1.01	0.52	95.00
3657.00	14.06	355.25	3578.29	-674.59	676.46	-50.69	1.58	1.13	94.00
3752.00	13.34	355.97	3670.58	-696.96	698.90	-52.42	0.78	-0.76	95.00
3846.00	14.02	2.38	3761.92	-719.13	721.09	-52.71	1.76	0.72	94.00
3941.00	13.08	1.70	3854.28	-741.39	743.33	-51.91	0.99	-0.98	95.00
4035.00	13.93	2.47	3945.68	-763.34	765.28	-51.11	0.92	0.90	94.00
4130.00	14.02	1.38	4037.86	-786.29	788.21	-50.34	0.29	0.09	95.00
4224.00	12.64	359.56	4129.33	-807.96	809.88	-50.15	1.53	-1.47	94.00
4318.00	11.73	358.93	4221.21	-827.78	829.72	-50.40	0.98	-0.97	94.00
4413.00	11.96	354.72	4314.19	-847.19	849.18	-51.49	0.94	0.24	95.00
4507.00	11.70	356.60	4406.19	-866.35	868.38	-52.95	0.50	-0.28	94.00

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	Build Rate °/100ft	Course Length ft
4602.00	12.38	355.60	4499.10	-886.07	888.15	-54.30	0.76	0.72	95.00
4696.00	12.03	354.51	4590.98	-905.81	907.96	-56.01	0.45	-0.37	94.00
4791.00	10.36	348.38	4684.17	-923.95	926.19	-58.68	2.16	-1.76	95.00
4885.00	9.37	356.27	4776.78	-939.79	942.11	-60.88	1.78	-1.05	94.00
4979.00	8.35	355.14	4869.66	-954.19	956.55	-61.96	1.11	-1.09	94.00
5074.00	7.99	354.05	4963.69	-967.59	969.98	-63.23	0.41	-0.38	95.00
5168.00	7.70	354.02	5056.81	-980.30	982.75	-64.56	0.31	-0.31	94.00
5263.00	7.24	352.88	5151.01	-992.52	995.01	-65.97	0.51	-0.49	95.00
5357.00	5.39	356.74	5244.43	-1002.77	1005.30	-66.95	2.01	-1.96	94.00
5452.00	3.11	357.33	5339.17	-1009.78	1012.33	-67.32	2.40	-2.40	95.00
5547.00	1.32	351.41	5434.09	-1013.43	1015.99	-67.61	1.90	-1.89	95.00
5641.00	1.62	357.72	5528.06	-1015.82	1018.39	-67.82	0.36	0.32	94.00
5736.00	1.14	356.76	5623.03	-1018.11	1020.67	-67.93	0.50	-0.50	95.00
5831.00	1.45	15.26	5718.01	-1020.22	1022.78	-67.67	0.55	0.33	95.00
5925.00	1.71	12.20	5811.97	-1022.76	1025.30	-67.06	0.29	0.27	94.00
6020.00	0.69	51.15	5906.95	-1024.52	1027.04	-66.31	1.32	-1.07	95.00
6114.00	1.14	20.73	6000.94	-1025.78	1028.27	-65.54	0.69	0.48	94.00
6209.00	0.86	21.54	6095.92	-1027.34	1029.82	-64.94	0.30	-0.30	95.00

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	Build Rate °/100ft	Course Length ft
6303.00	1.14	358.27	6189.91	-1028.93	1031.41	-64.71	0.52	0.30	94.00
6398.00	0.50	11.81	6284.90	-1030.28	1032.75	-64.66	0.70	-0.67	95.00
6492.00	6.07	196.71	6378.74	-1025.88	1028.39	-66.00	6.98	5.92	94.00
6587.00	15.90	186.38	6471.89	-1008.01	1010.61	-68.90	10.52	10.36	95.00
6681.00	21.02	184.45	6561.03	-978.32	980.98	-71.64	5.48	5.44	94.00
6776.00	23.30	182.41	6649.00	-942.51	945.22	-73.75	2.54	2.41	95.00
6870.00	32.88	179.68	6731.84	-898.32	901.03	-74.39	10.27	10.18	94.00
6965.00	43.83	181.12	6806.23	-839.48	842.17	-74.89	11.57	11.53	95.00
7059.00	54.19	180.41	6867.80	-768.63	771.32	-75.81	11.03	11.02	94.00
7154.00	59.32	175.98	6919.89	-689.40	691.97	-73.22	6.67	5.40	95.00
7248.00	66.44	177.36	6962.71	-606.12	608.51	-68.39	7.68	7.57	94.00
7342.00	73.65	180.09	6994.78	-517.96	520.24	-66.47	8.14	7.67	94.00
7437.00	80.45	180.03	7016.06	-425.47	427.71	-66.56	7.16	7.16	95.00
7532.00	85.90	182.24	7027.35	-331.19	333.45	-68.44	6.18	5.74	95.00
7626.00	90.34	182.22	7030.43	-237.26	239.59	-72.10	4.72	4.72	94.00
7721.00	92.18	180.38	7028.34	-142.30	144.65	-74.25	2.75	1.95	95.00
7815.00	90.87	181.84	7025.83	-48.34	50.70	-76.07	2.09	-1.39	94.00
7910.00	91.65	183.60	7023.74	46.62	-44.16	-80.58	2.02	0.81	95.00

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	Build Rate °/100ft	Course Length ft
8004.00	89.46	183.23	7022.83	140.57	-137.99	-86.18	2.36	-2.32	94.00
8099.00	86.84	181.38	7025.90	235.50	-232.85	-90.00	3.37	-2.76	95.00
8193.00	89.73	180.90	7028.71	329.44	-326.78	-91.87	3.12	3.07	94.00
8288.00	89.03	181.15	7029.74	424.43	-421.75	-93.58	0.79	-0.74	95.00
8382.00	90.84	179.83	7029.85	518.40	-515.74	-94.39	2.39	1.93	94.00
8477.00	90.30	181.17	7028.90	613.37	-610.73	-95.22	1.51	-0.57	95.00
8571.00	91.14	182.35	7027.72	707.36	-704.68	-98.11	1.55	0.89	94.00
8666.00	90.34	183.52	7026.49	802.33	-799.54	-102.98	1.50	-0.85	95.00
8760.00	93.12	183.32	7023.65	896.24	-893.33	-108.58	2.97	2.97	94.00
8855.00	90.74	181.06	7020.45	991.17	-988.19	-112.20	3.46	-2.51	95.00
8949.00	90.97	182.66	7019.05	1085.16	-1082.13	-115.25	1.73	0.25	94.00
9044.00	89.97	182.34	7018.27	1180.14	-1177.03	-119.39	1.12	-1.06	95.00
9138.00	89.30	182.83	7018.87	1274.13	-1270.93	-123.63	0.89	-0.71	94.00
9233.00	90.13	183.15	7019.35	1369.11	-1365.80	-128.58	0.95	0.88	95.00
9327.00	90.07	182.34	7019.18	1463.09	-1459.69	-133.09	0.86	-0.07	94.00
9422.00	90.50	182.32	7018.71	1558.09	-1554.61	-136.95	0.46	0.46	95.00
9516.00	90.40	182.35	7017.96	1652.08	-1648.53	-140.79	0.11	-0.11	94.00
9611.00	90.44	182.19	7017.27	1747.07	-1743.45	-144.55	0.17	0.04	95.00

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	Build Rate °/100ft	Course Length ft
9705.00	89.73	182.11	7017.13	1841.07	-1837.39	-148.07	0.76	-0.75	94.00
9800.00	89.66	182.89	7017.63	1936.06	-1932.29	-152.21	0.83	-0.07	95.00
9894.00	90.24	183.09	7017.71	2030.04	-2026.17	-157.11	0.64	0.61	94.00
9989.00	90.47	183.25	7017.13	2125.01	-2121.02	-162.36	0.30	0.25	95.00
10083.00	89.90	182.38	7016.82	2218.99	-2214.90	-166.98	1.10	-0.61	94.00
10178.00	89.40	182.62	7017.41	2313.98	-2309.81	-171.12	0.59	-0.53	95.00
10272.00	90.87	181.82	7017.19	2407.97	-2403.74	-174.76	1.79	1.57	94.00
10367.00	90.07	181.99	7016.41	2502.97	-2498.68	-177.92	0.87	-0.85	95.00
10462.00	90.03	182.50	7016.33	2597.96	-2593.61	-181.64	0.54	-0.04	95.00
10556.00	89.40	181.42	7016.79	2691.96	-2687.55	-184.85	1.33	-0.68	94.00
10650.00	90.64	182.14	7016.77	2785.96	-2781.50	-187.78	1.53	1.32	94.00
10745.00	91.34	183.09	7015.12	2880.93	-2876.39	-192.11	1.24	0.74	95.00
10839.00	89.46	183.53	7014.46	2974.89	-2970.22	-197.54	2.06	-2.00	94.00
10934.00	89.97	182.48	7014.93	3069.86	-3065.09	-202.53	1.23	0.53	95.00
11028.00	88.19	182.11	7016.45	3163.84	-3159.00	-206.29	1.93	-1.89	94.00
11123.00	90.20	182.52	7017.78	3258.82	-3253.91	-210.13	2.16	2.12	95.00
11217.00	90.64	182.08	7017.10	3352.82	-3347.83	-213.90	0.66	0.46	94.00
11312.00	90.94	180.88	7015.79	3447.81	-3442.78	-216.36	1.30	0.32	95.00

5" = 100' FEET MD