


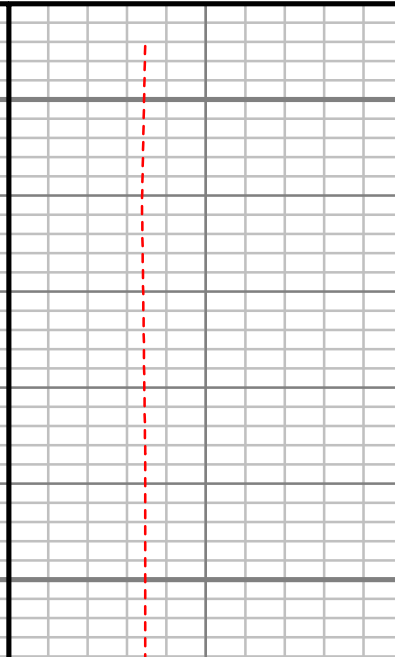
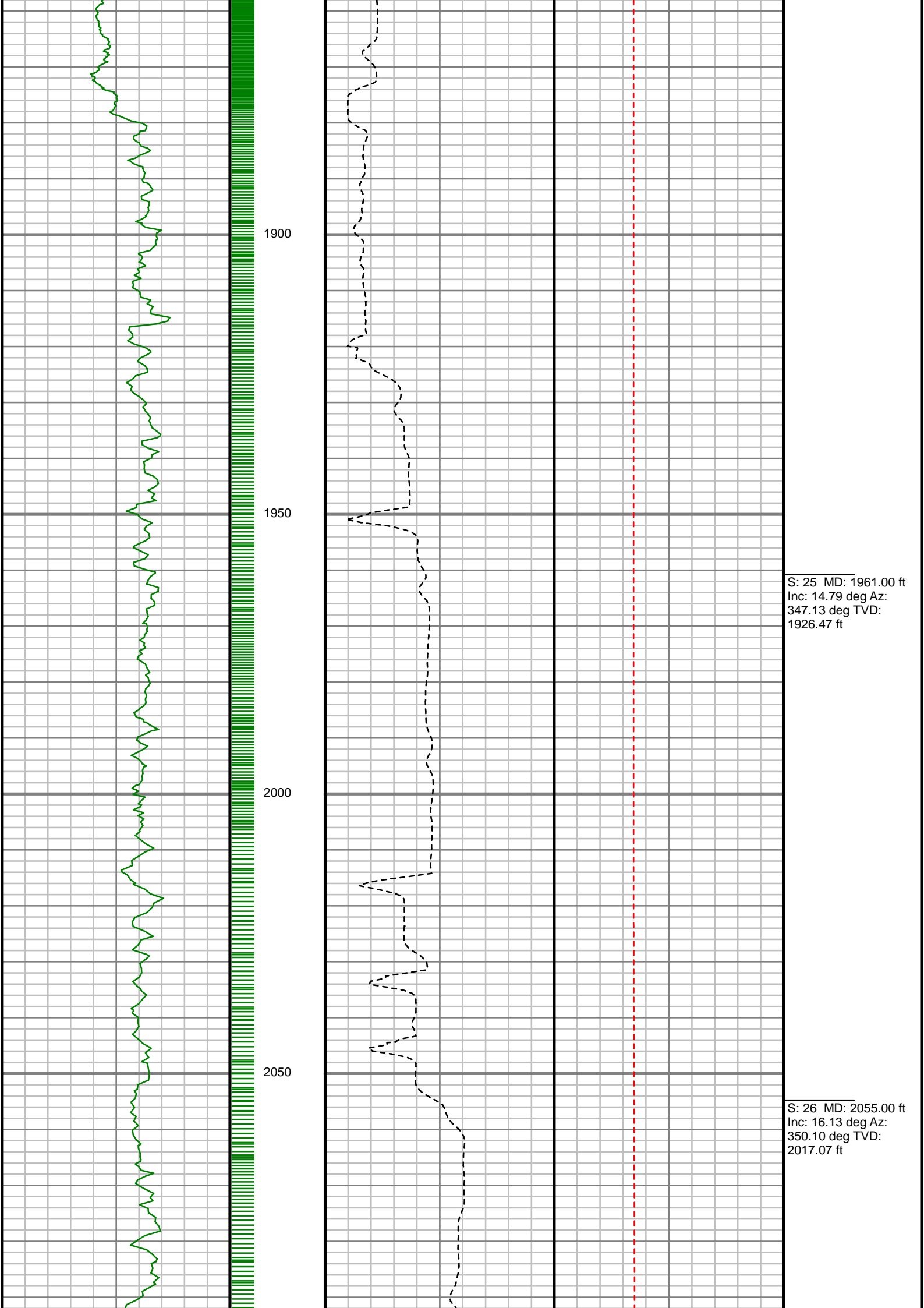


[illegible]

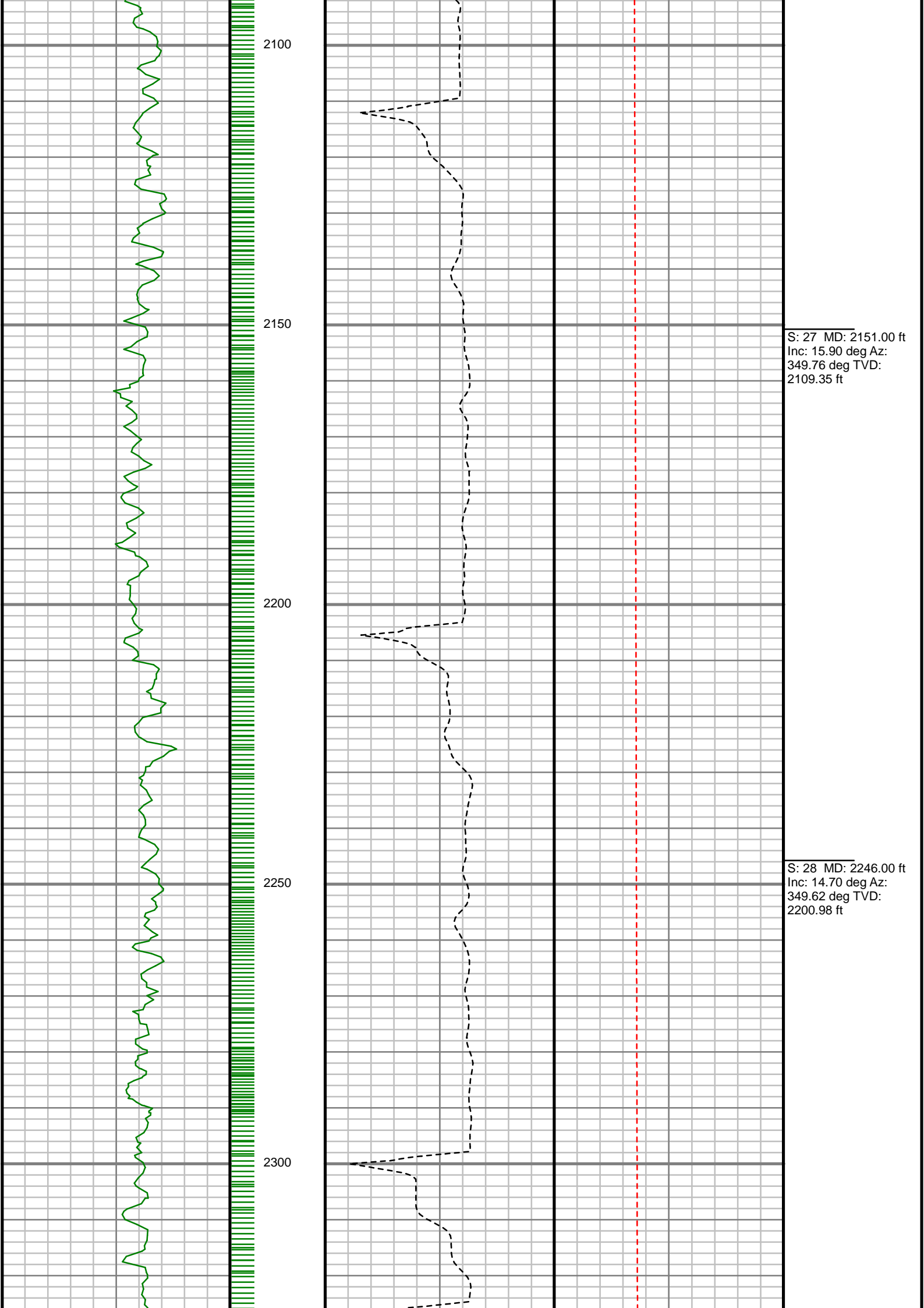
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

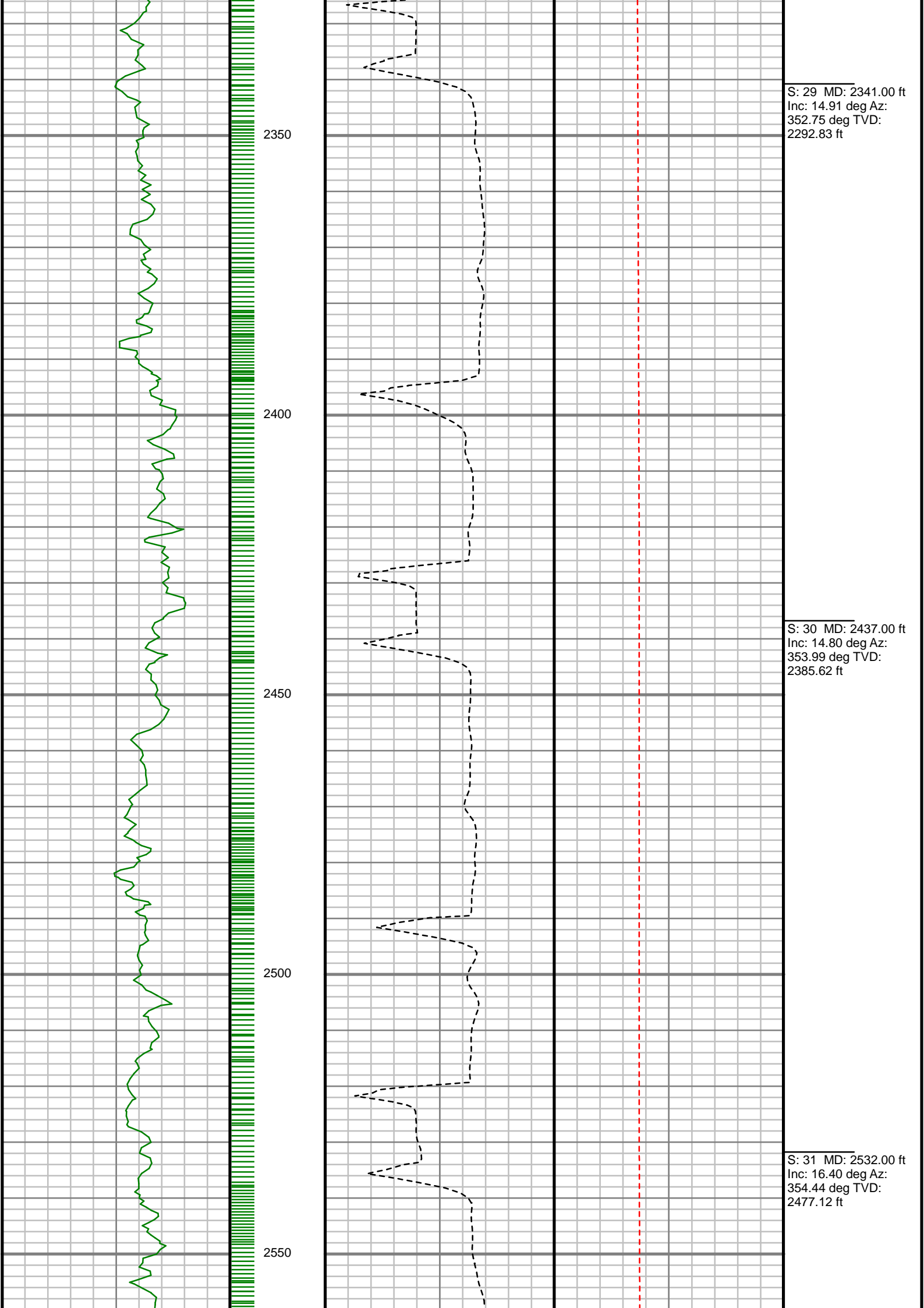
ANADARKO E&P ONSHORE LLC FEHRN 37C-32HZ WATTENBERG FIELD WELD COUNTY, COLORADO 05-123-41483							
Gamma Ray (GR) Unit = aapi		MEASURED DEPTH 1:240 (ft)	Rate of Penetration (ROP) Unit = ft/hr		Tool Temperature (T-TEMP) Unit = °F		Comments
0	200		0	1000	0	300	
							<p>S: 23 MD: 1809.00 ft Inc: 15.80 deg Az: 350.90 deg TVD: 1779.77 ft</p> <p>S: 24 MD: 1831.00 ft Inc: 15.40 deg Az: 350.30 deg TVD: 1800.96 ft</p>

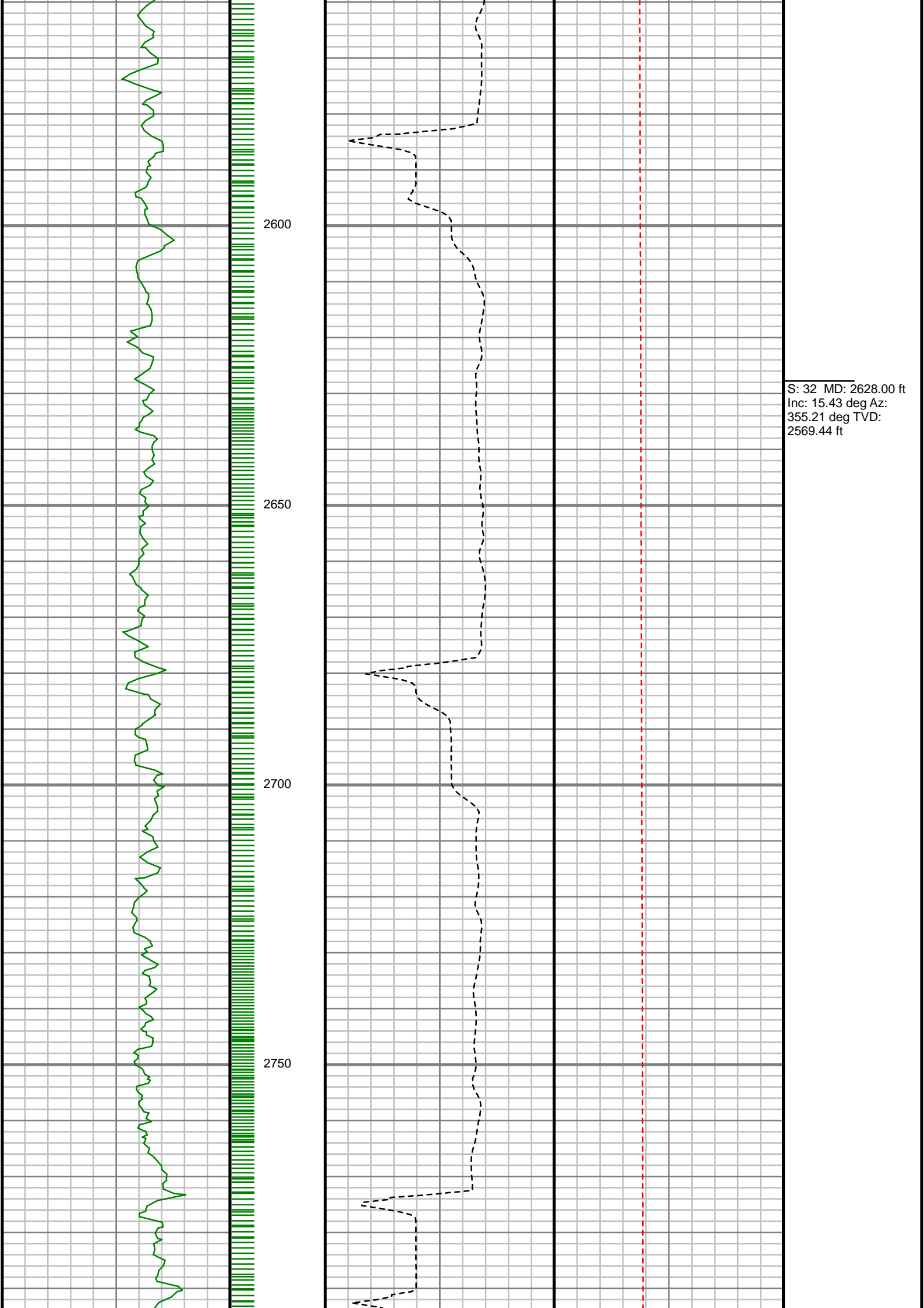


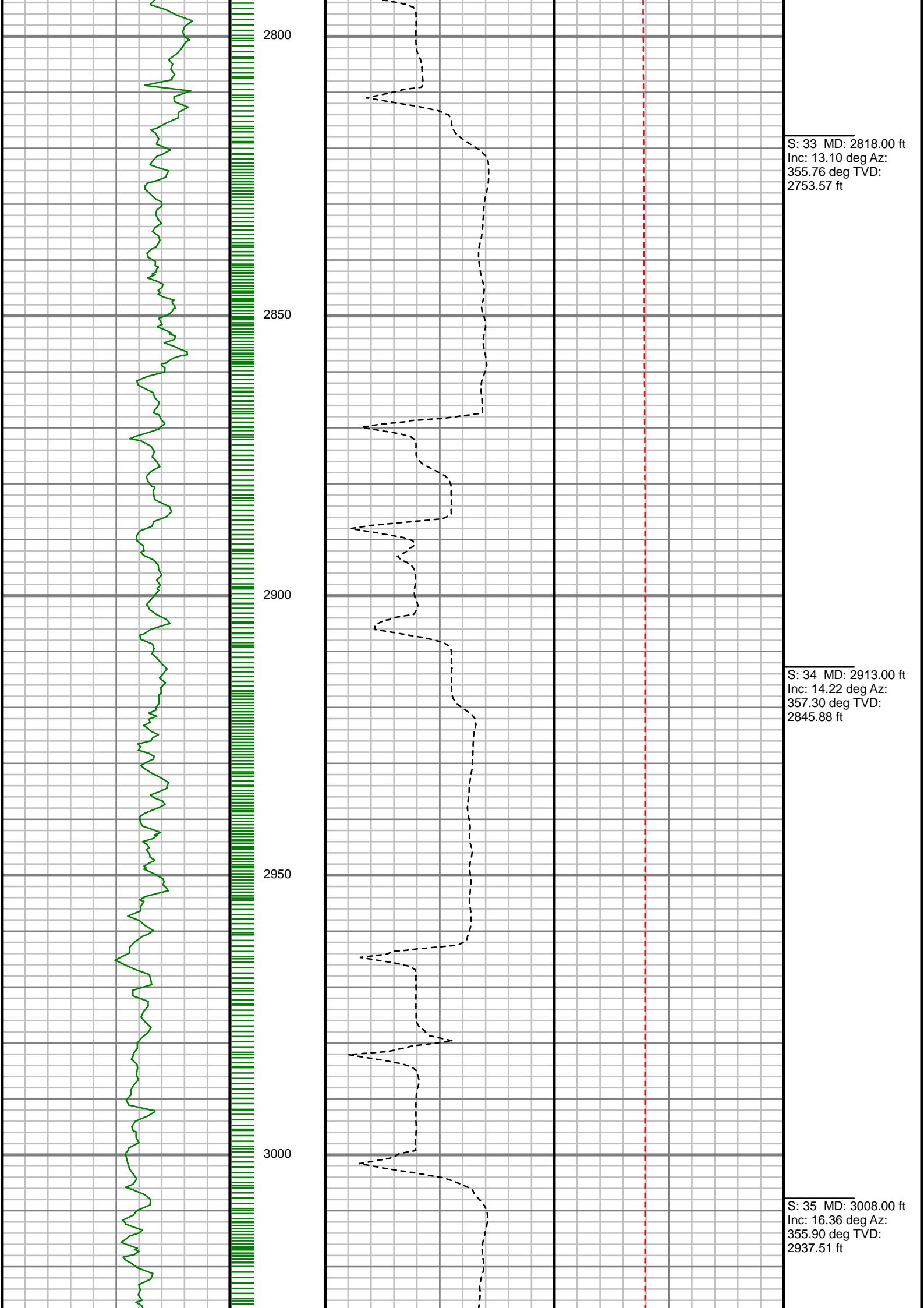
S: 25 MD: 1961.00 ft
Inc: 14.79 deg Az:
347.13 deg TVD:
1926.47 ft

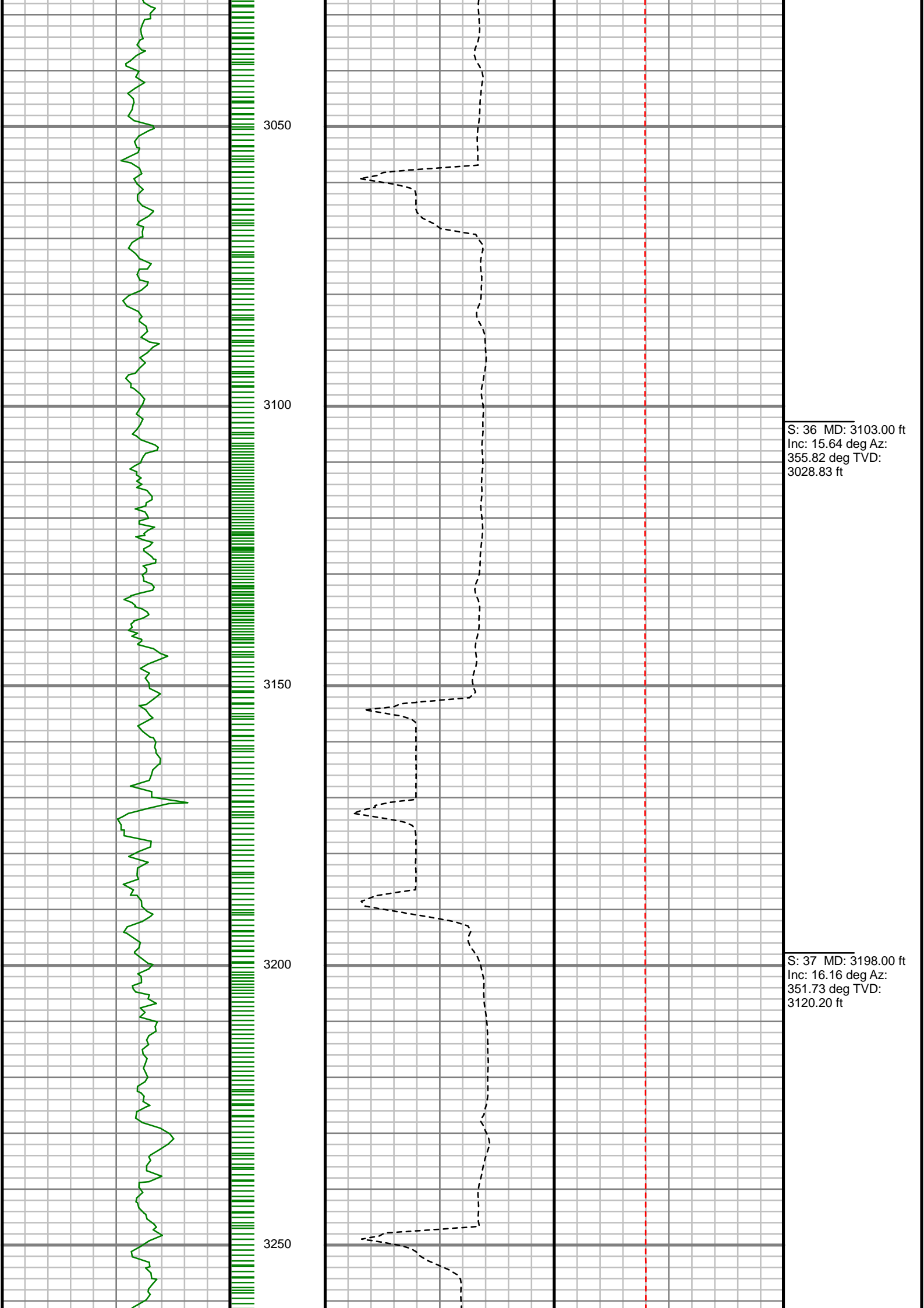
S: 26 MD: 2055.00 ft
Inc: 16.13 deg Az:
350.10 deg TVD:
2017.07 ft

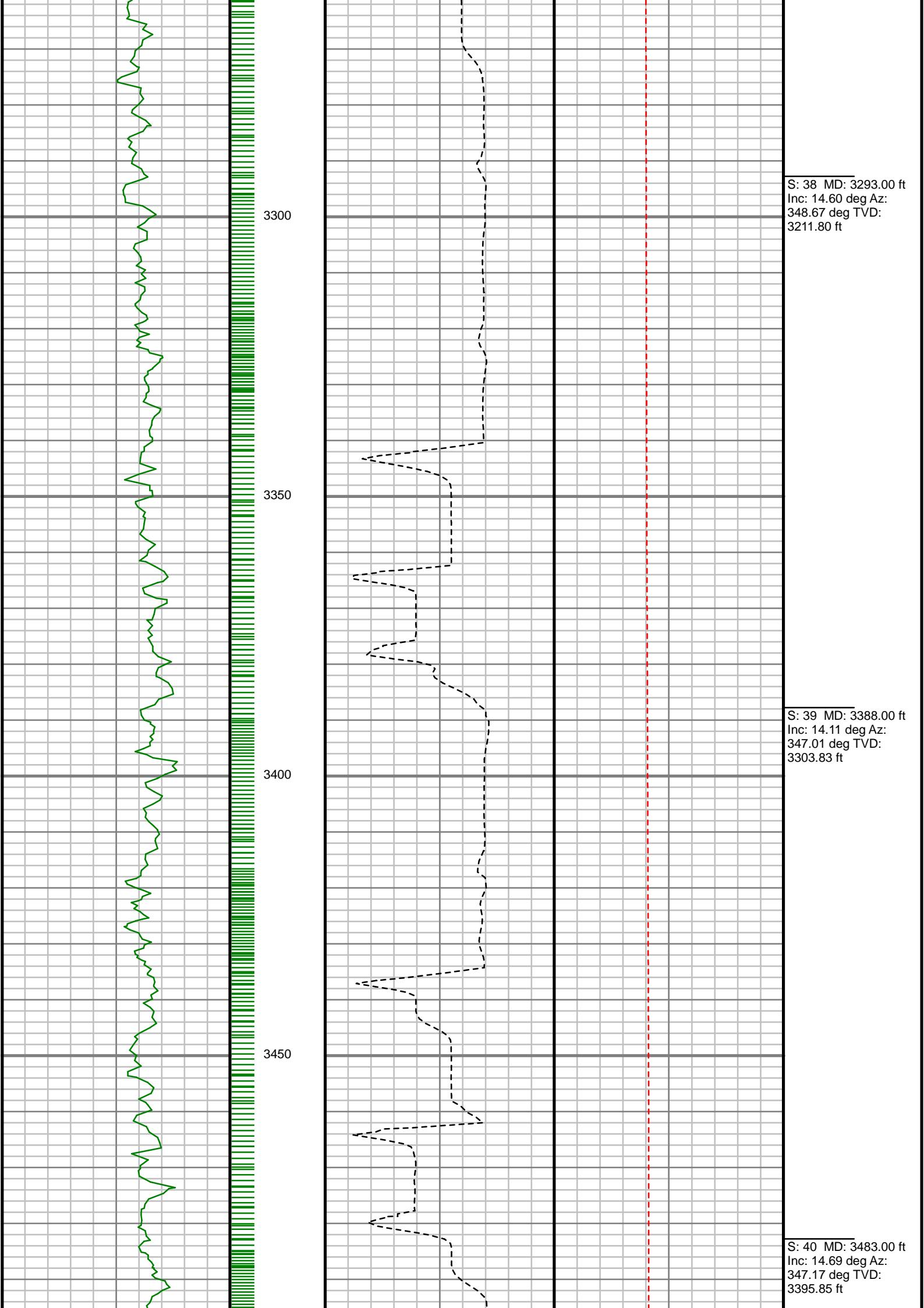


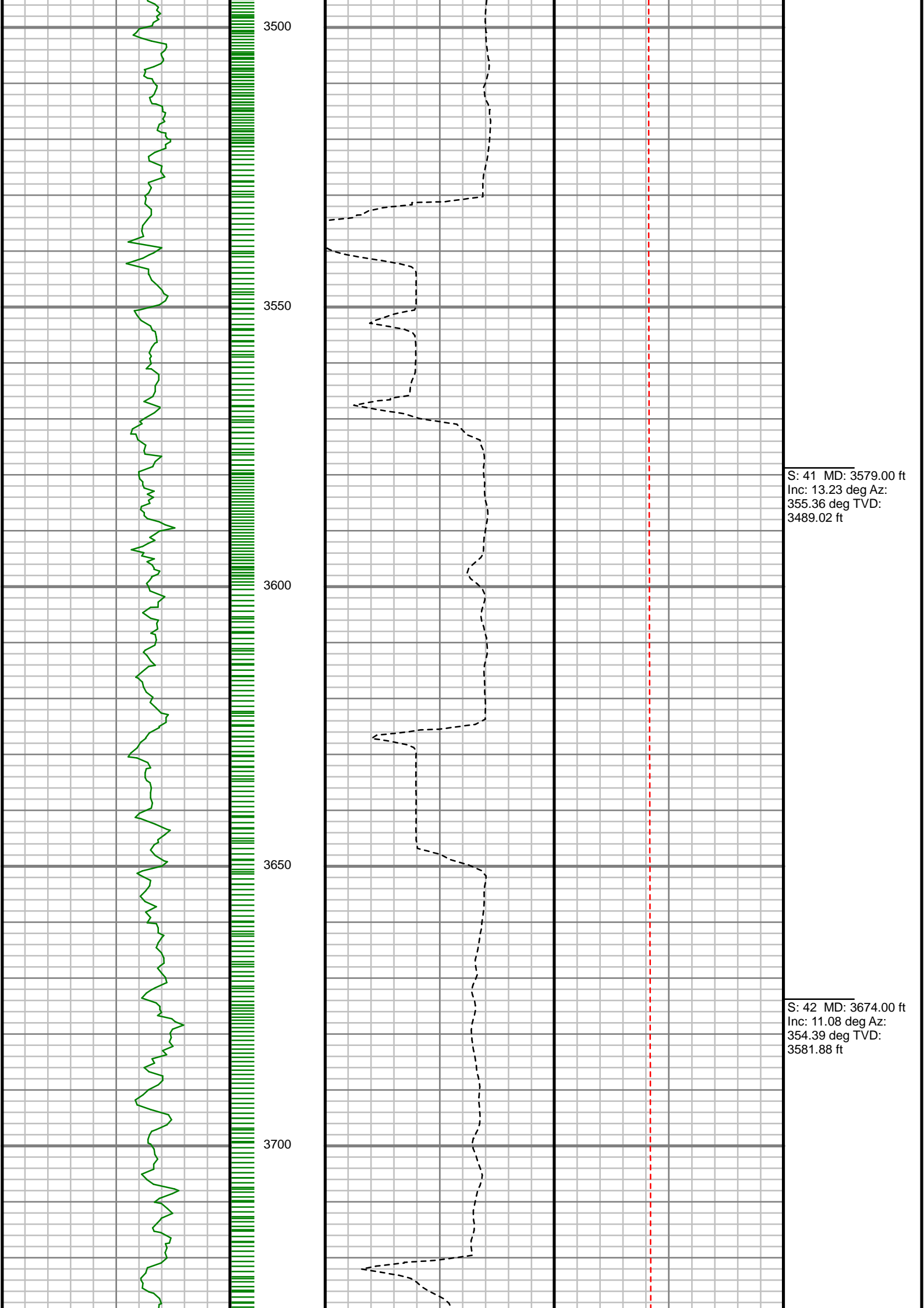


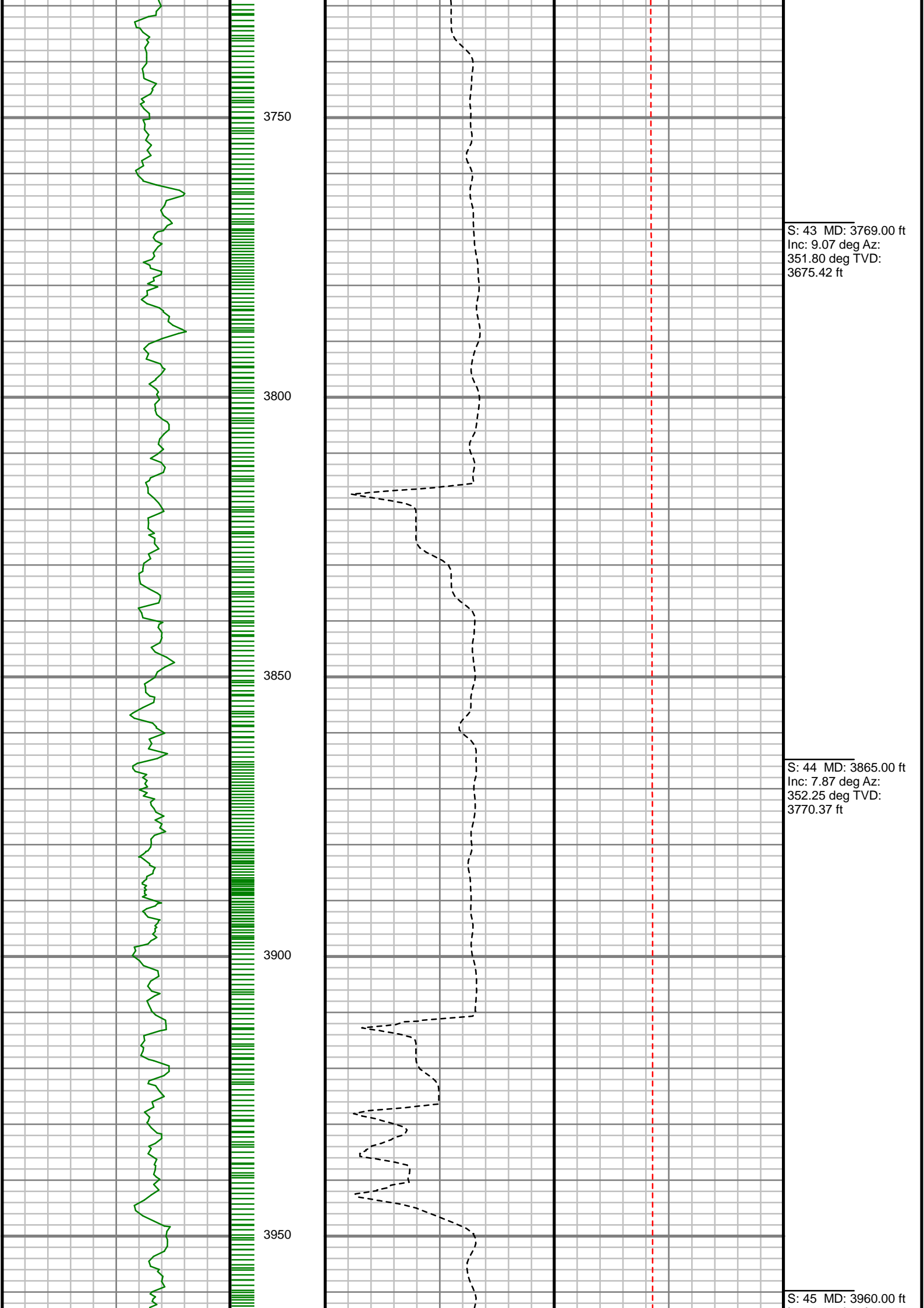


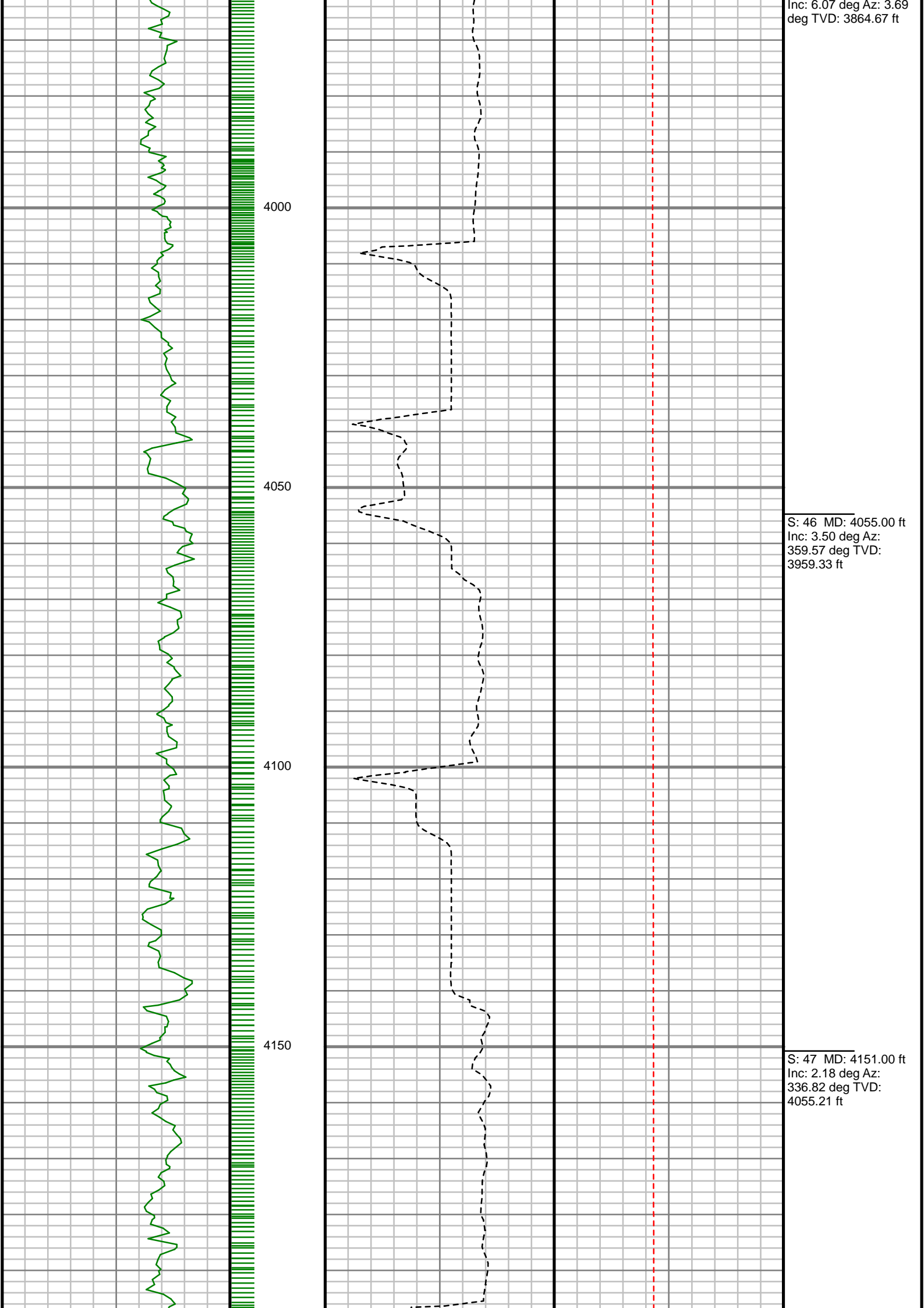


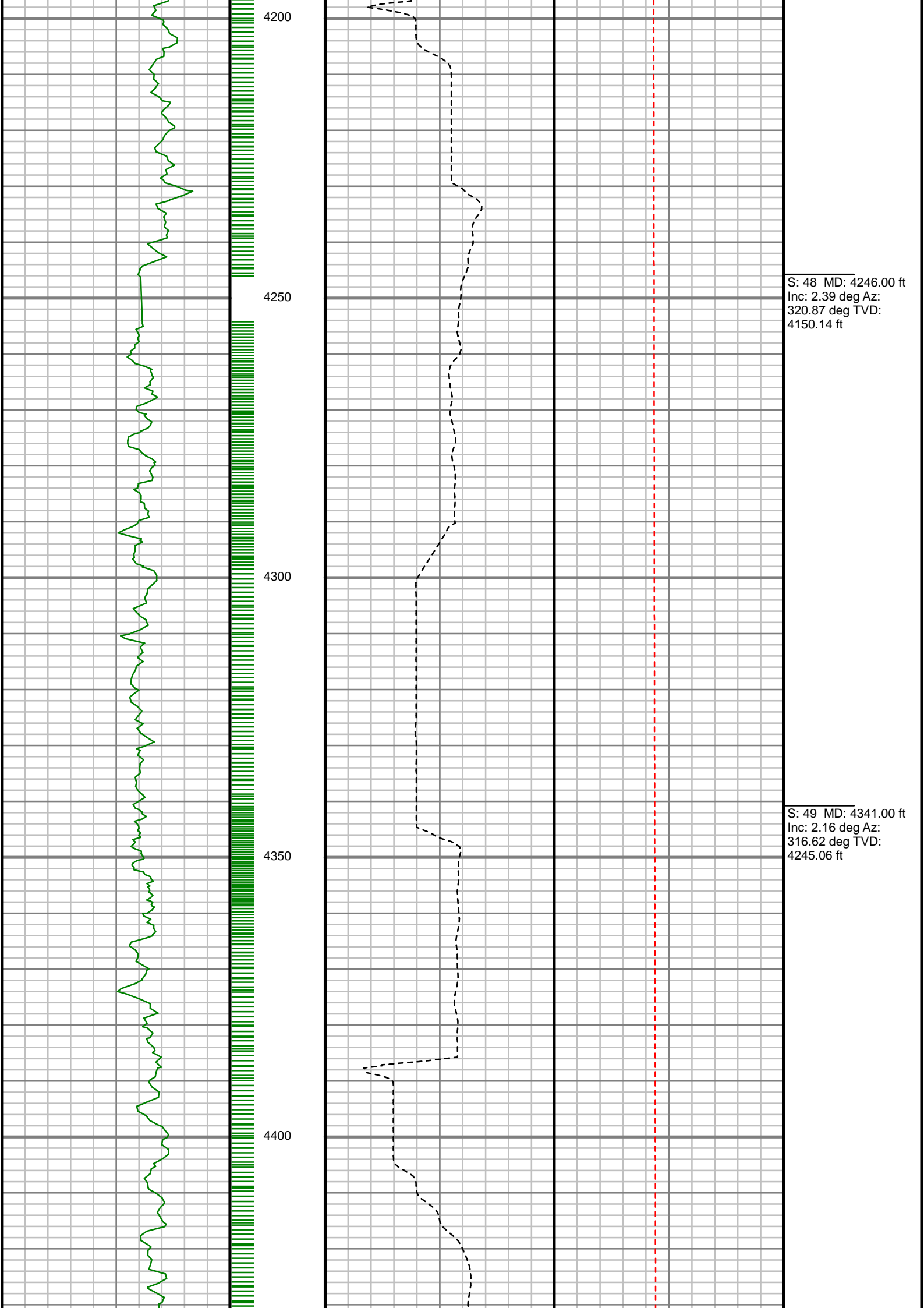


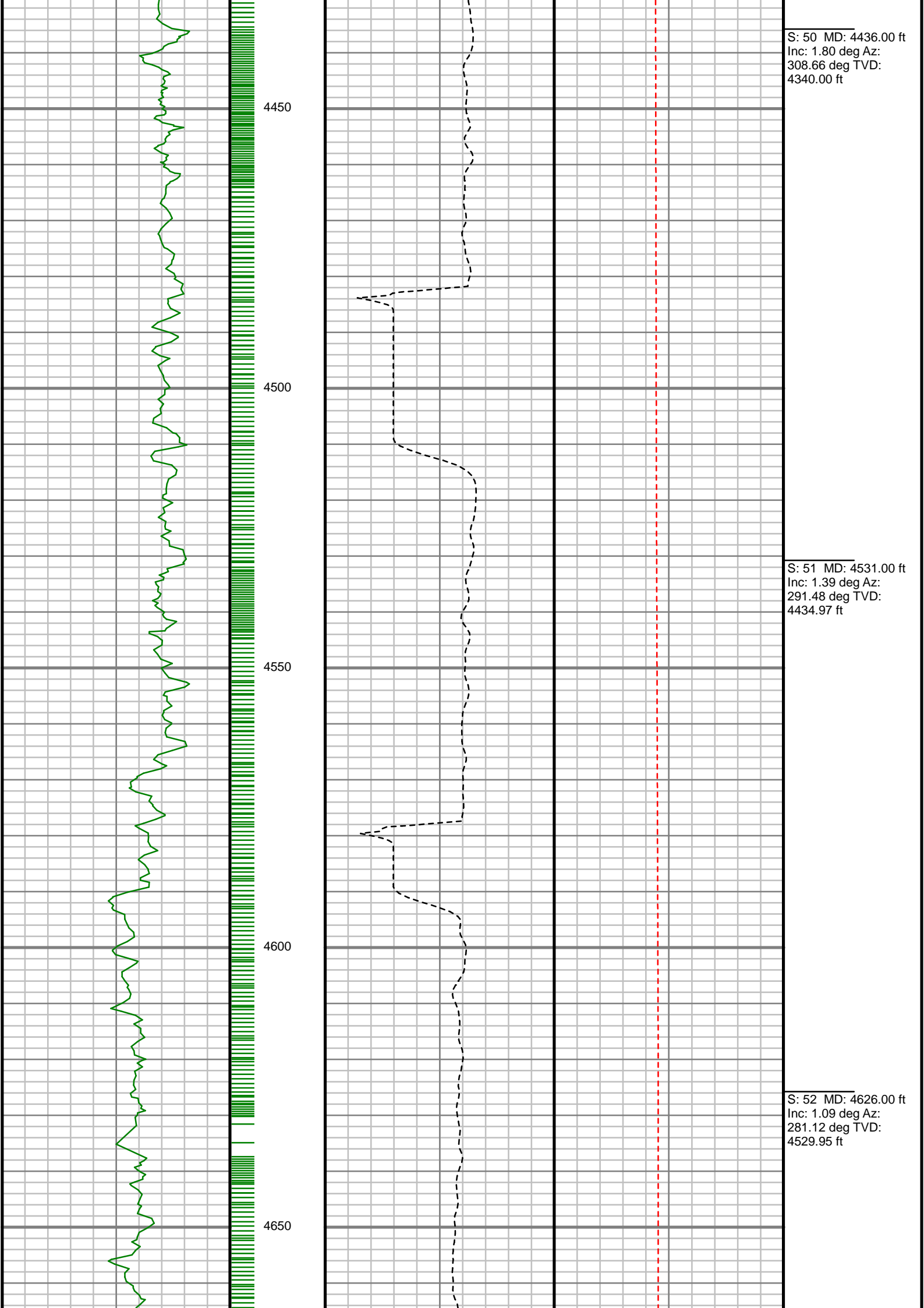


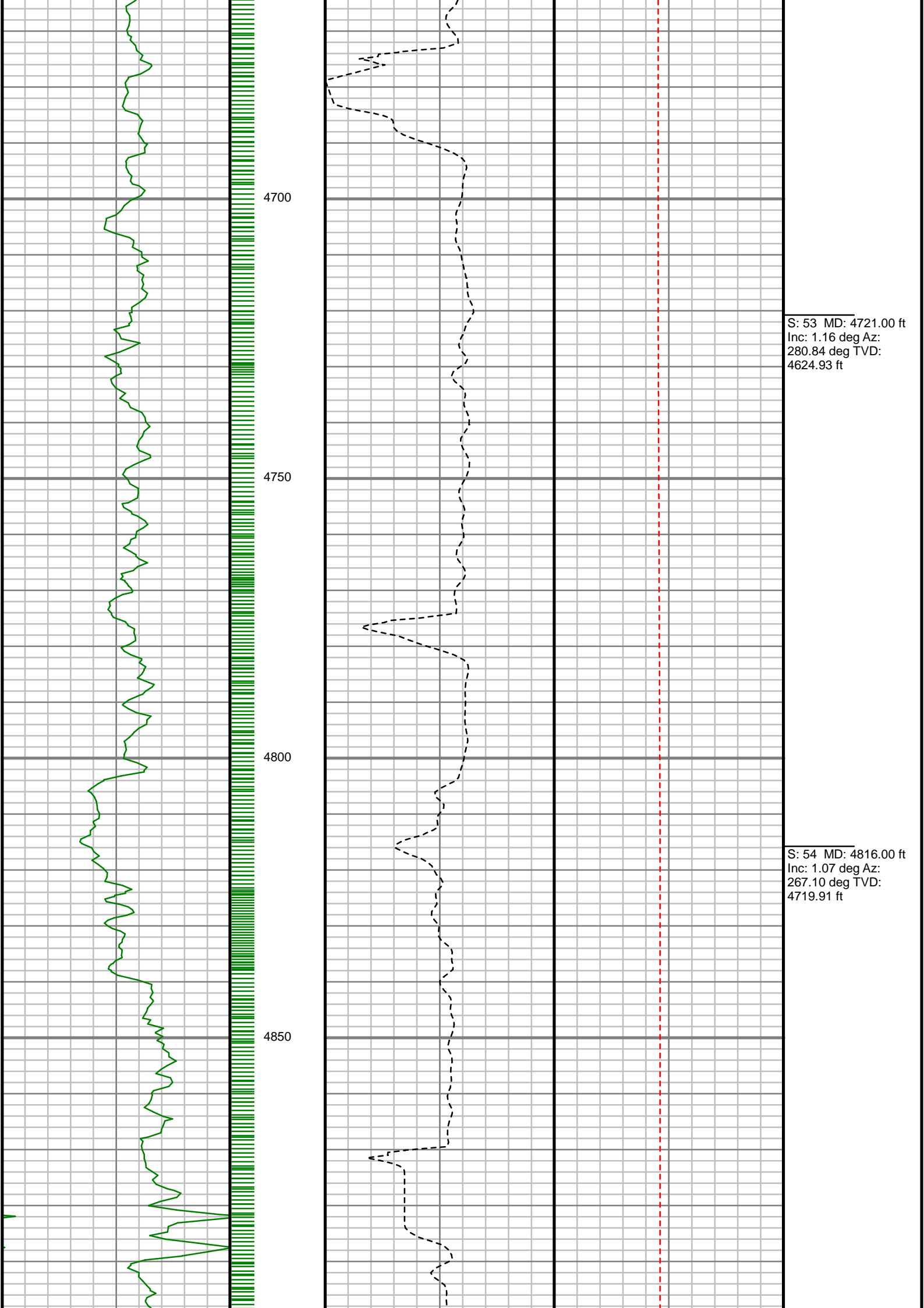


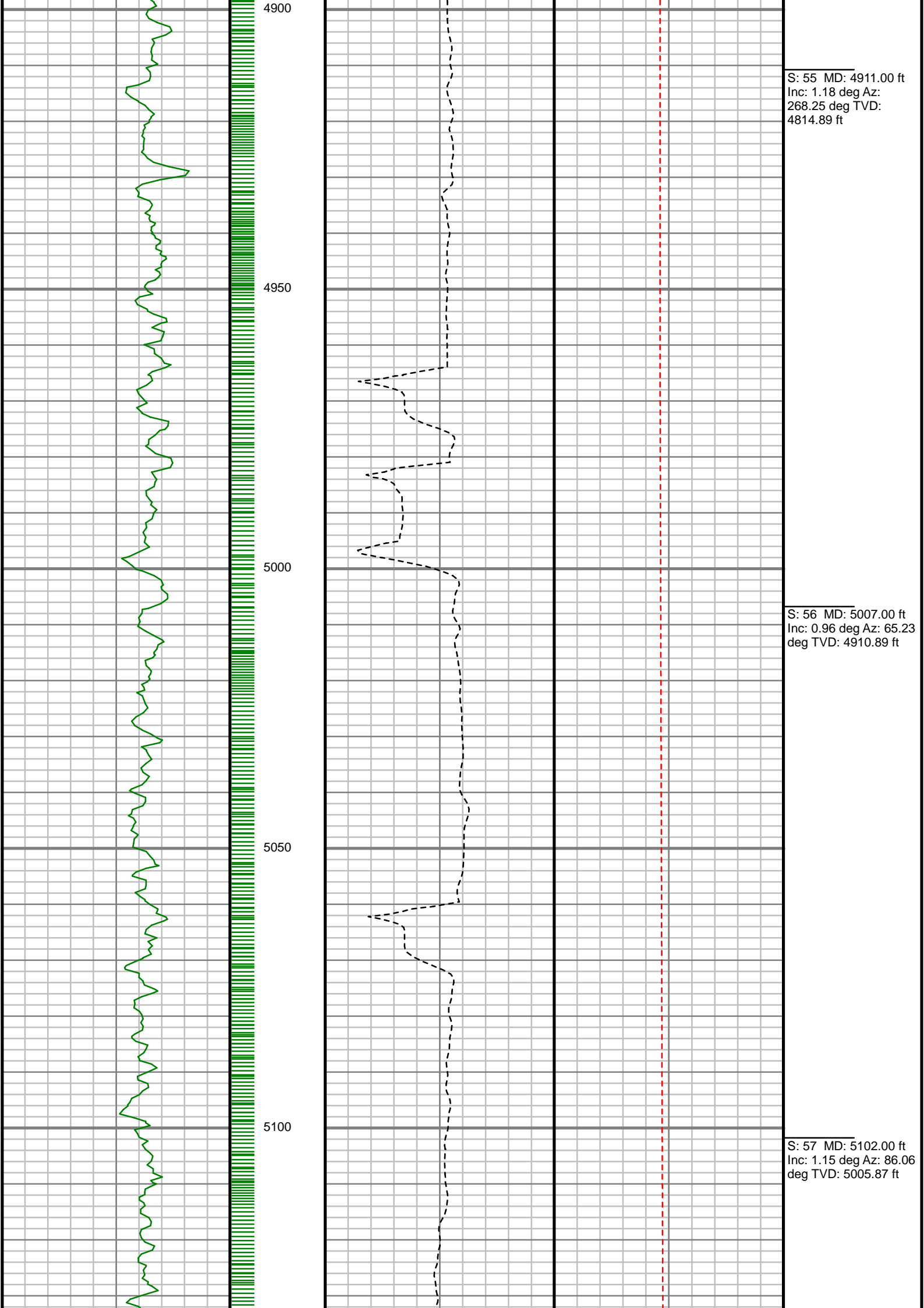




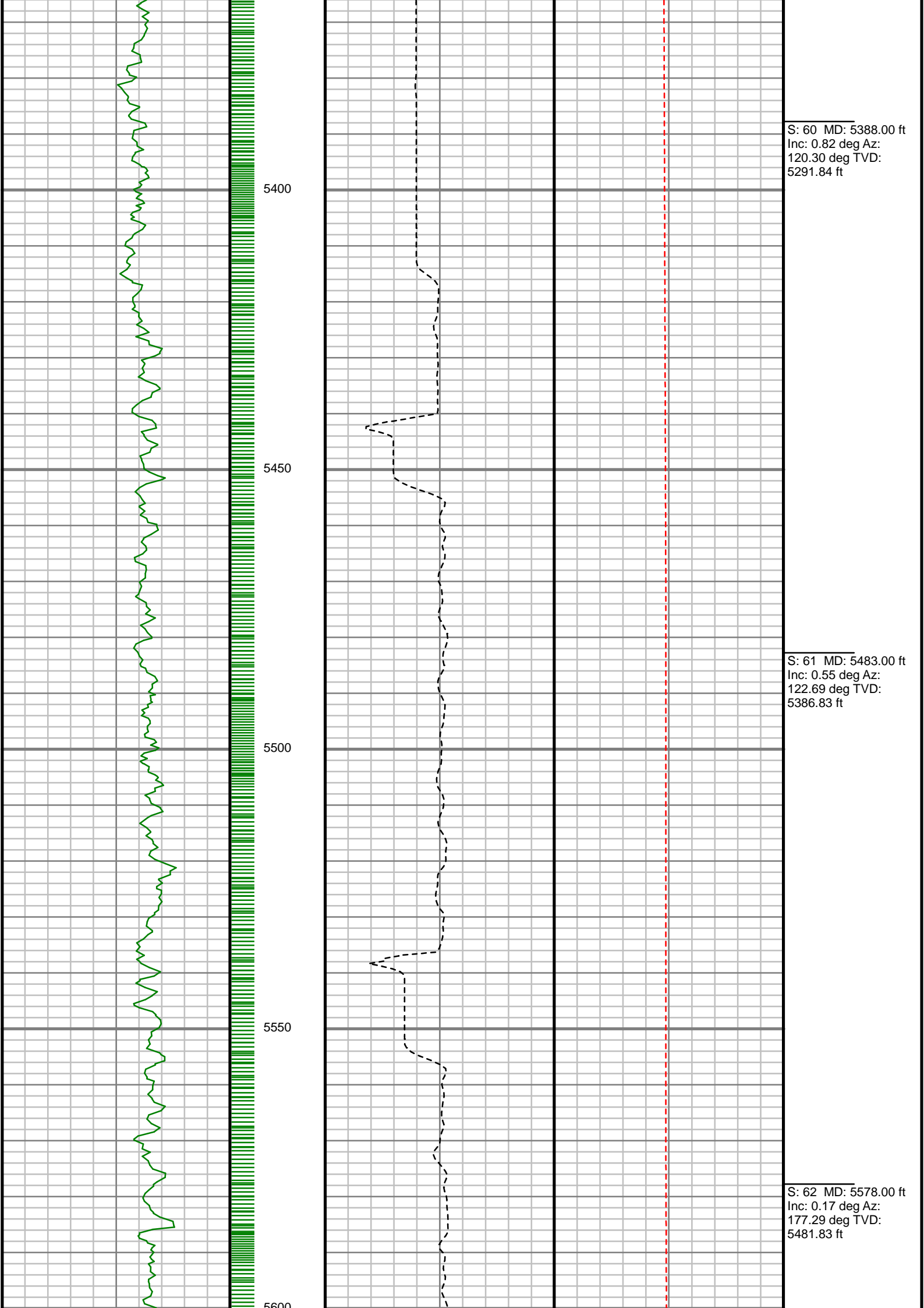


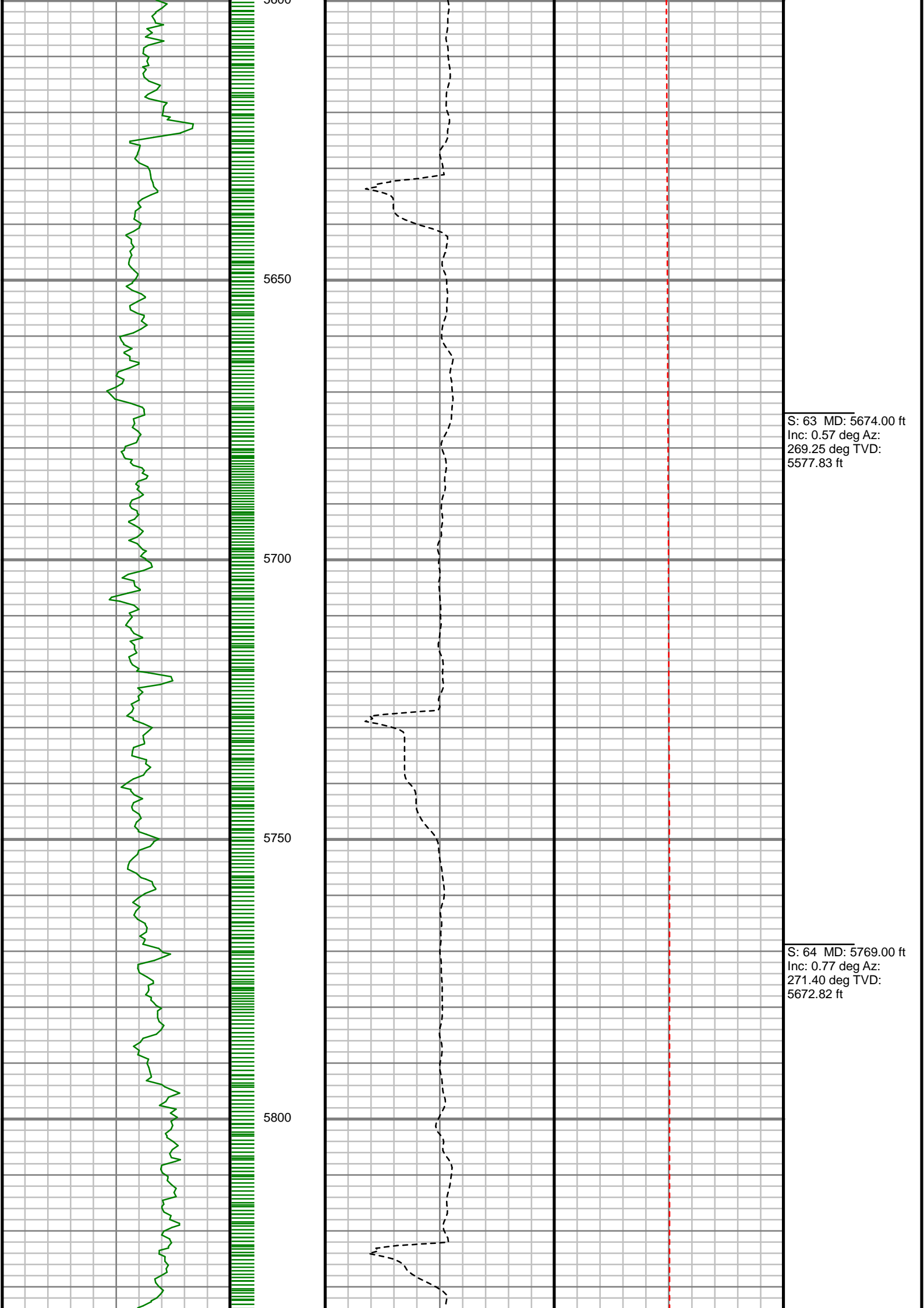


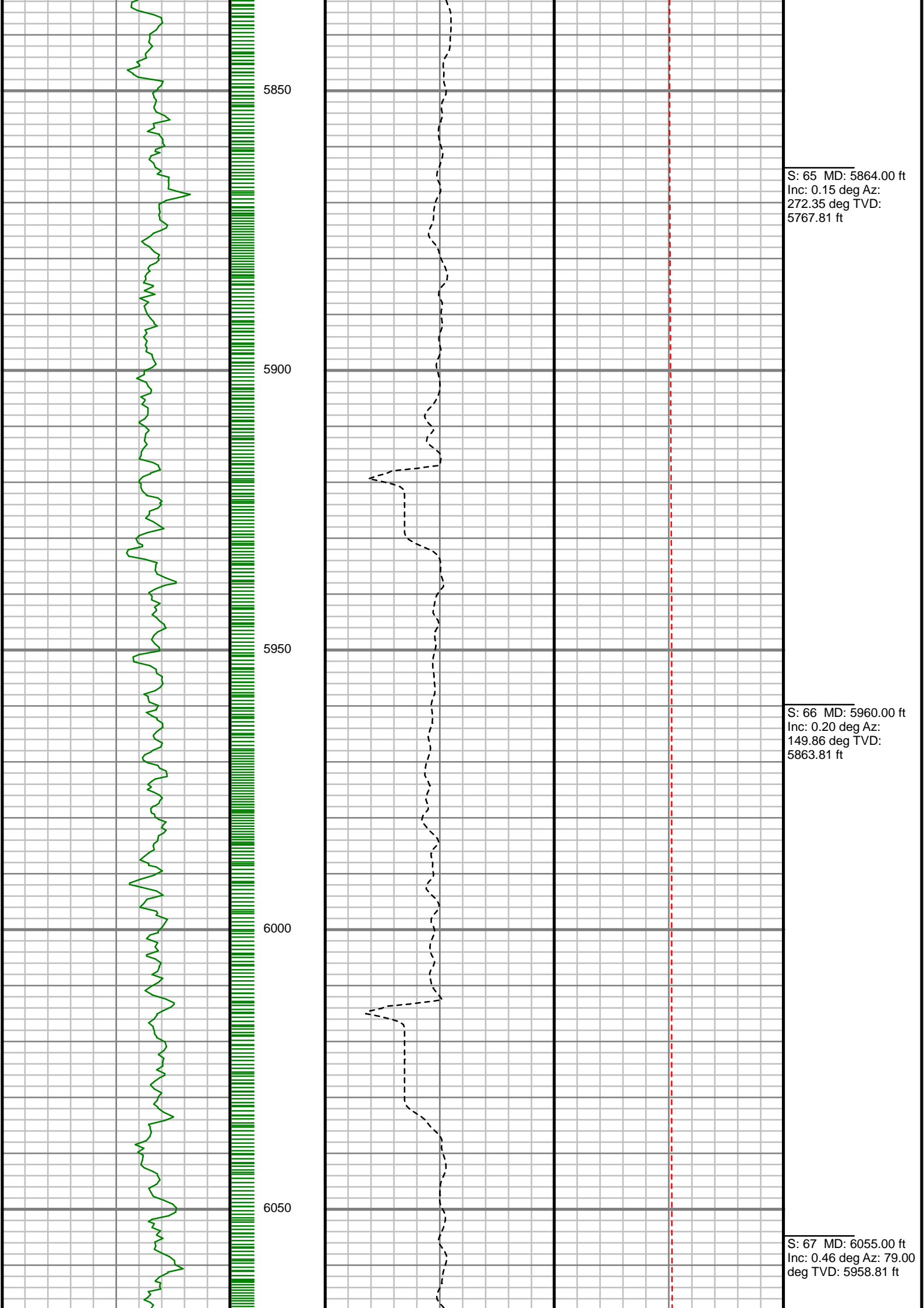




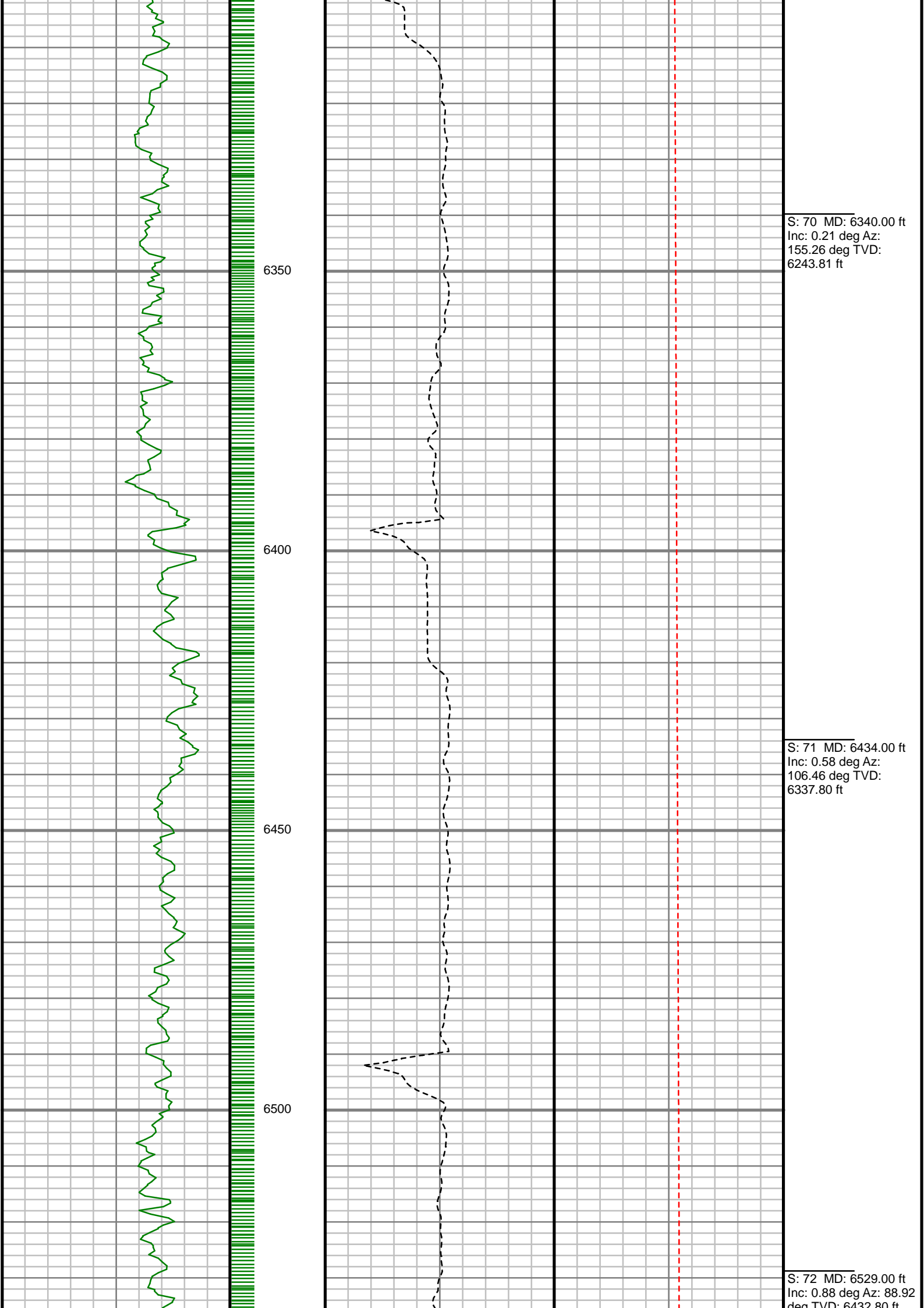


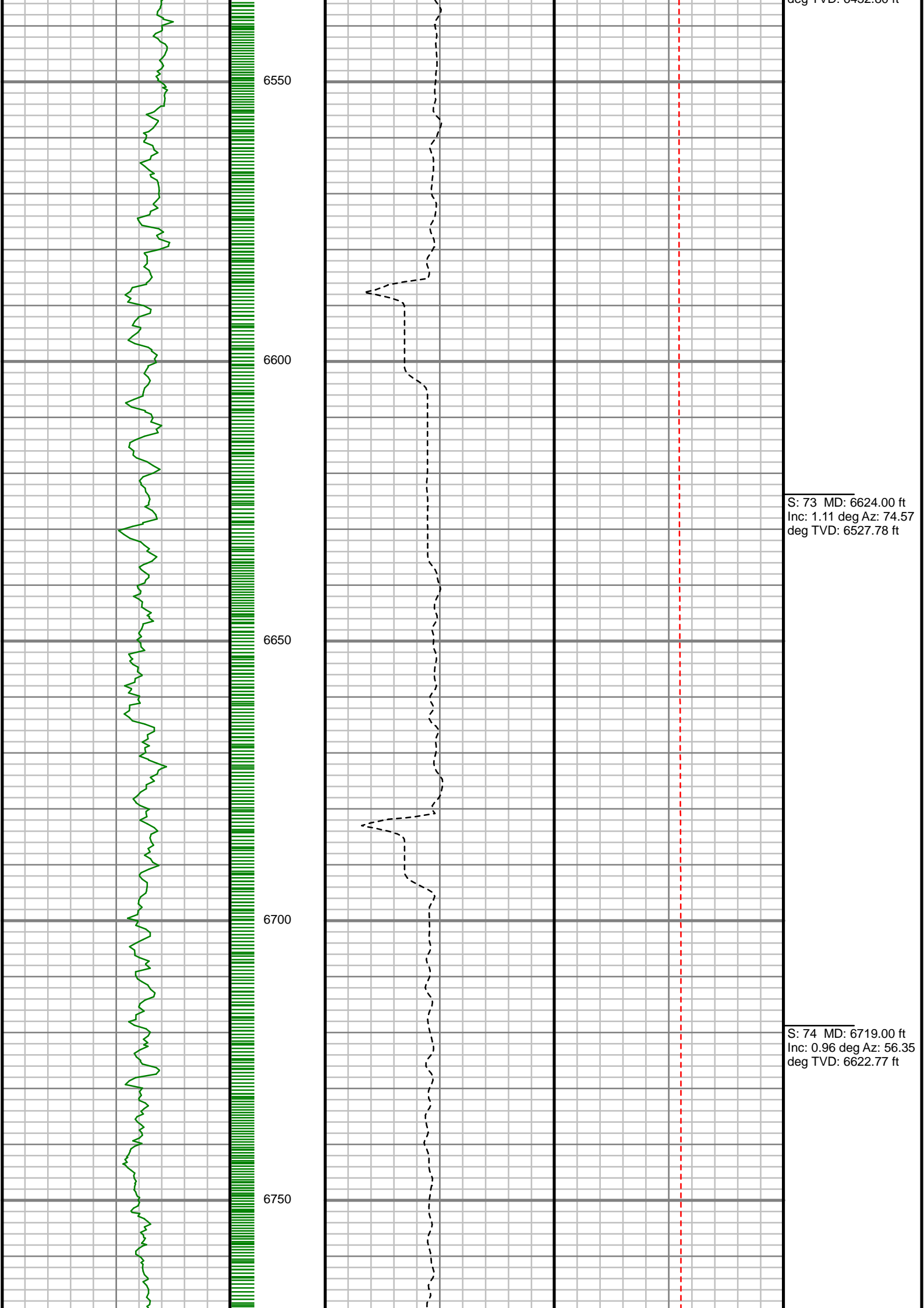


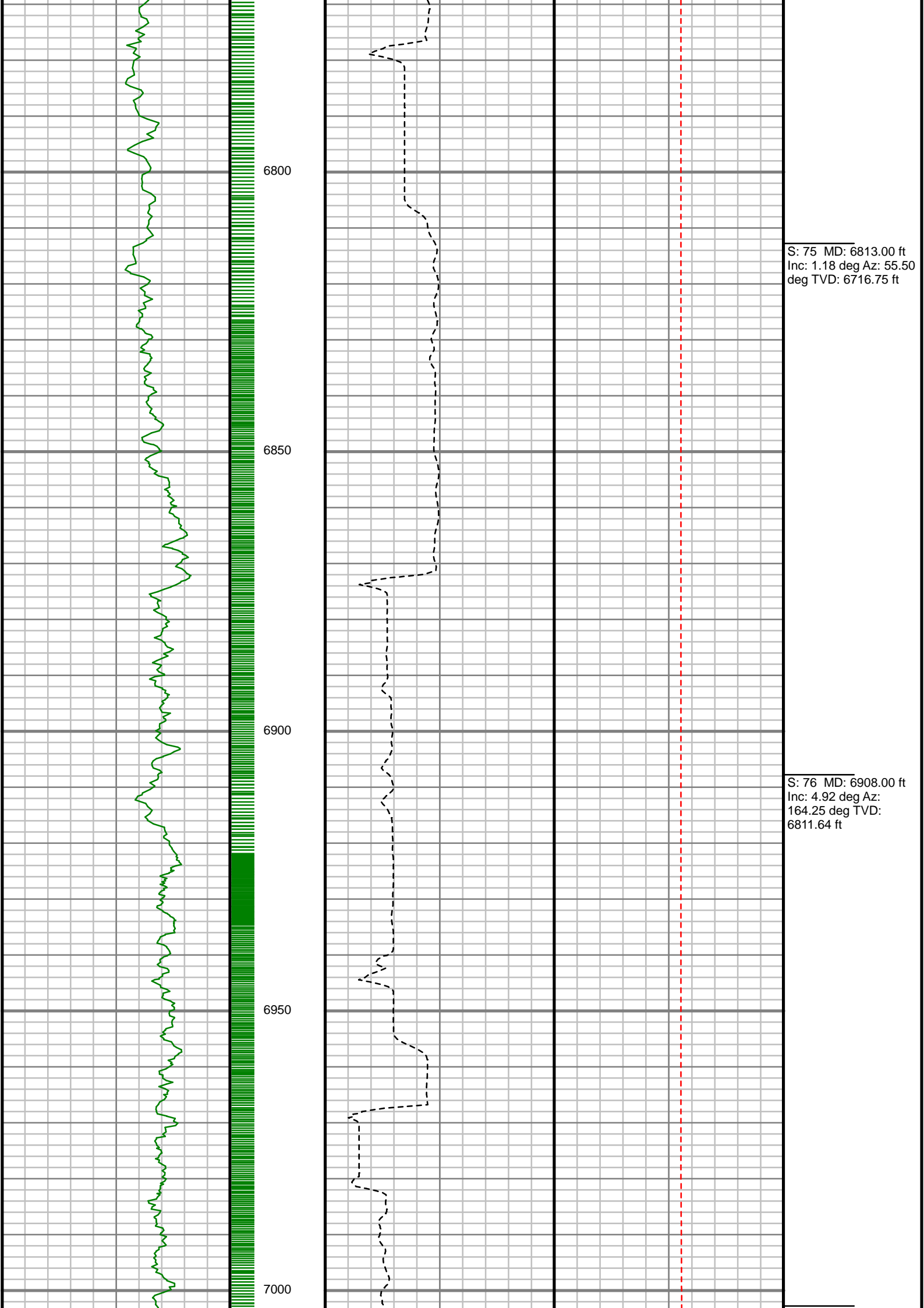


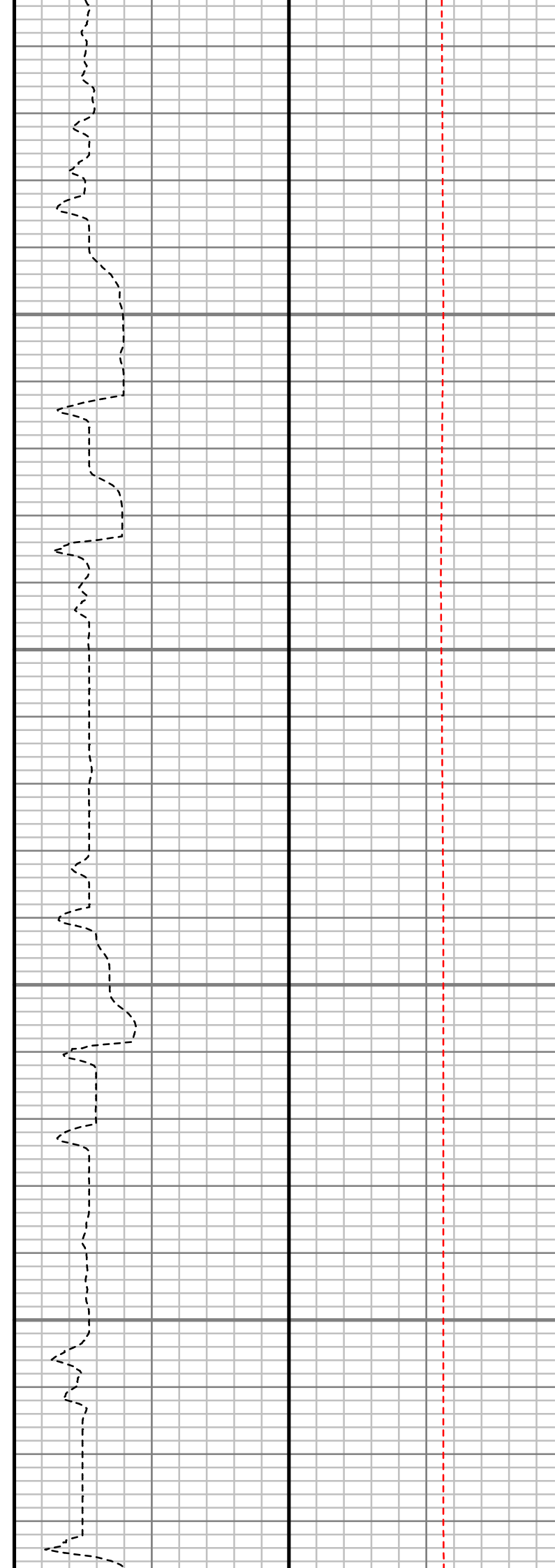
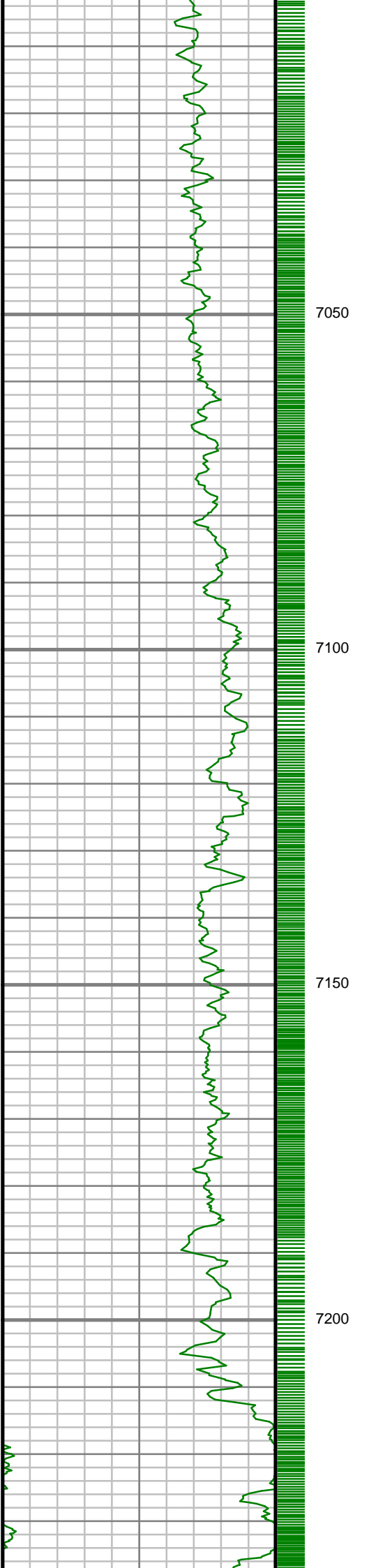








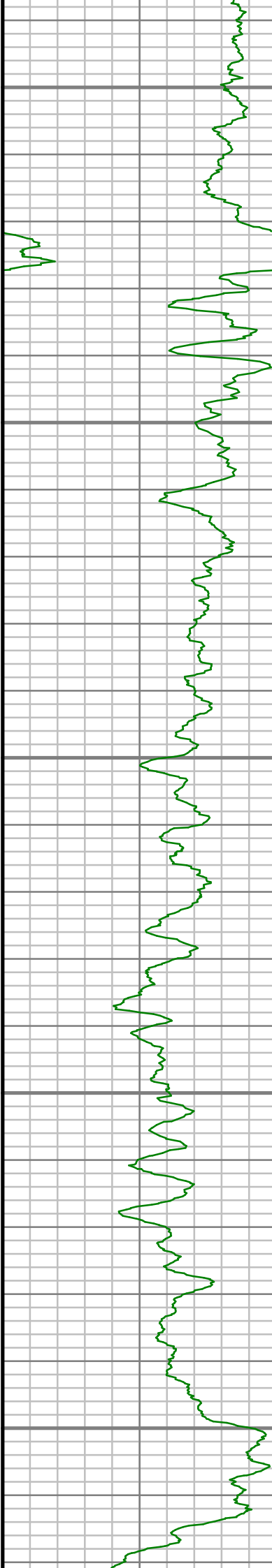




S: 77 MD: 7003.00 ft
Inc: 11.93 deg Az:
172.71 deg TVD:
6905.56 ft

S: 78 MD: 7098.00 ft
Inc: 14.92 deg Az:
171.92 deg TVD:
6997.95 ft

S: 79 MD: 7193.00 ft
Inc: 23.56 deg Az:
177.17 deg TVD:
7087.57 ft



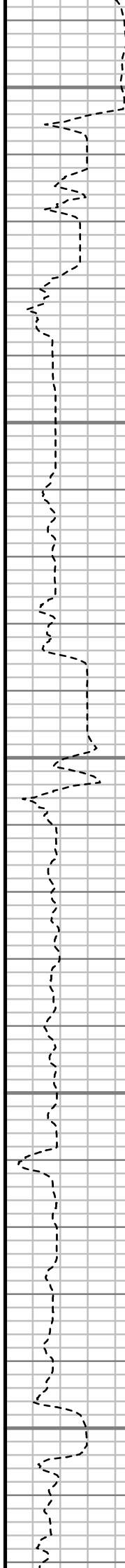
7250

7300

7350

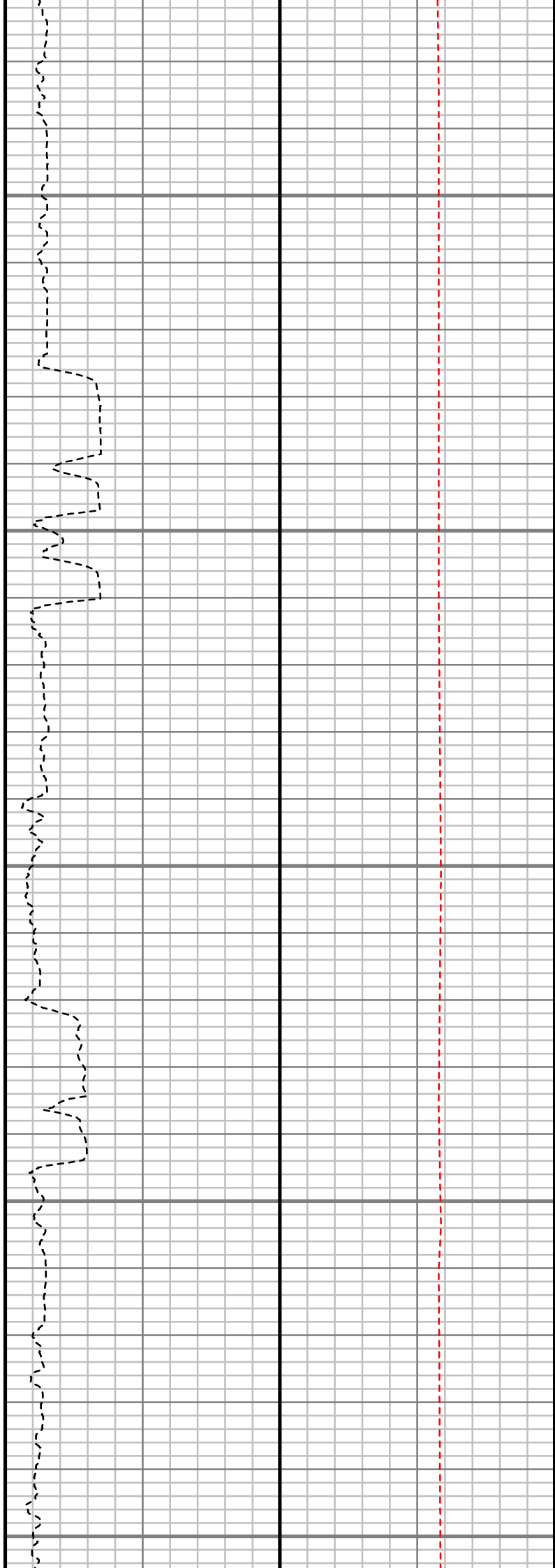
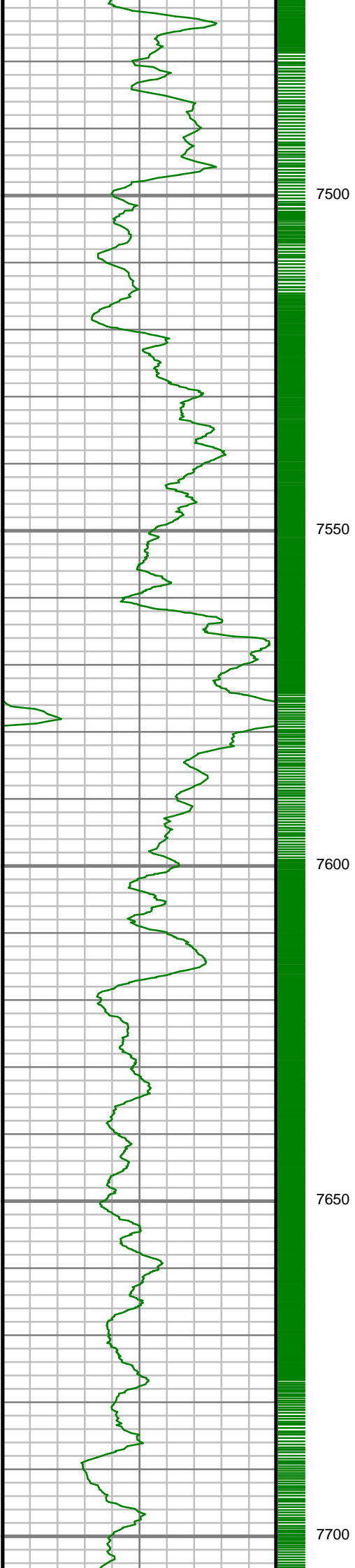
7400

7450



S: 80 MD: 7289.00 ft
Inc: 27.53 deg Az:
179.47 deg TVD:
7174.17 ft

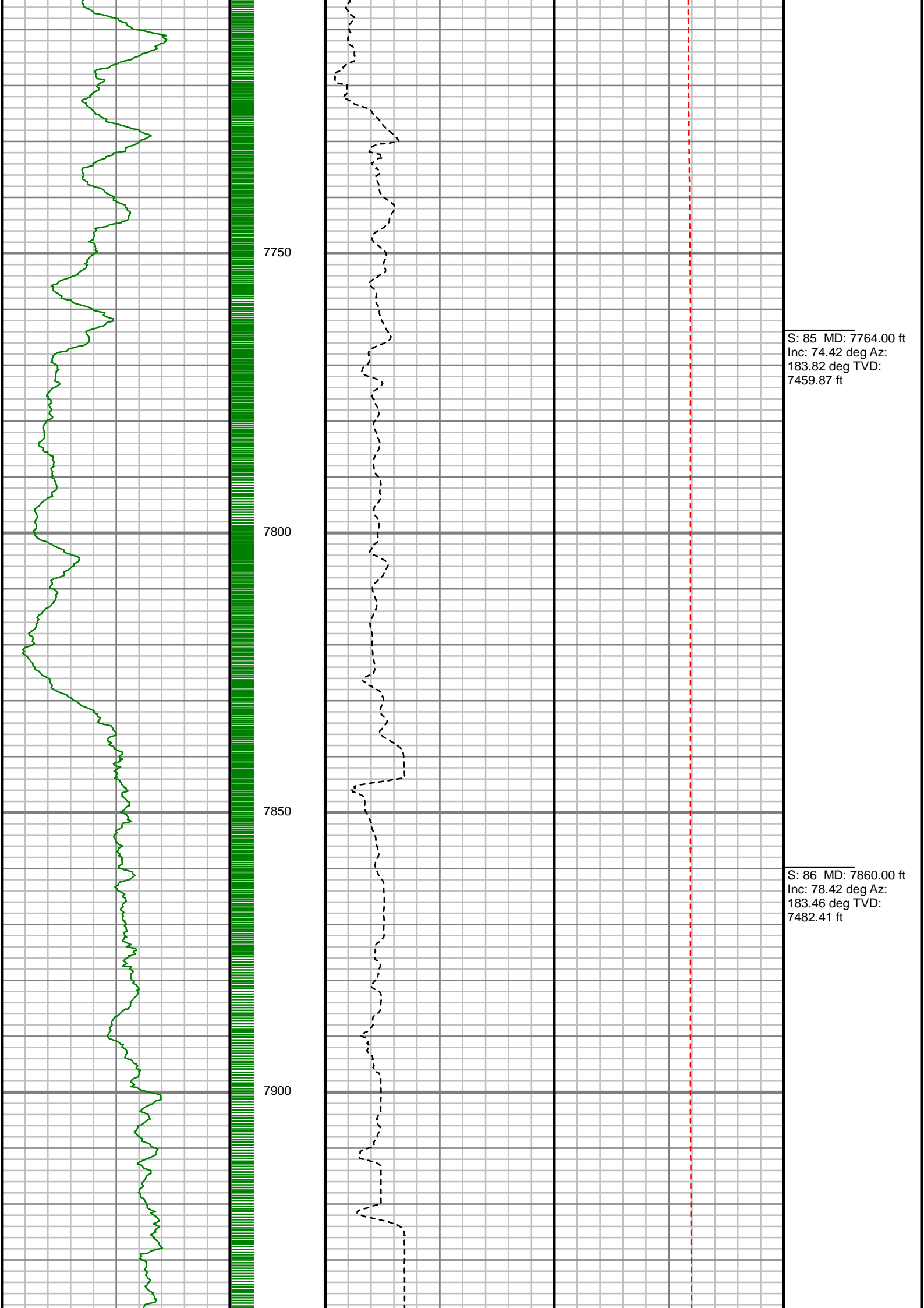
S: 81 MD: 7384.00 ft
Inc: 36.54 deg Az:
180.72 deg TVD:
7254.62 ft

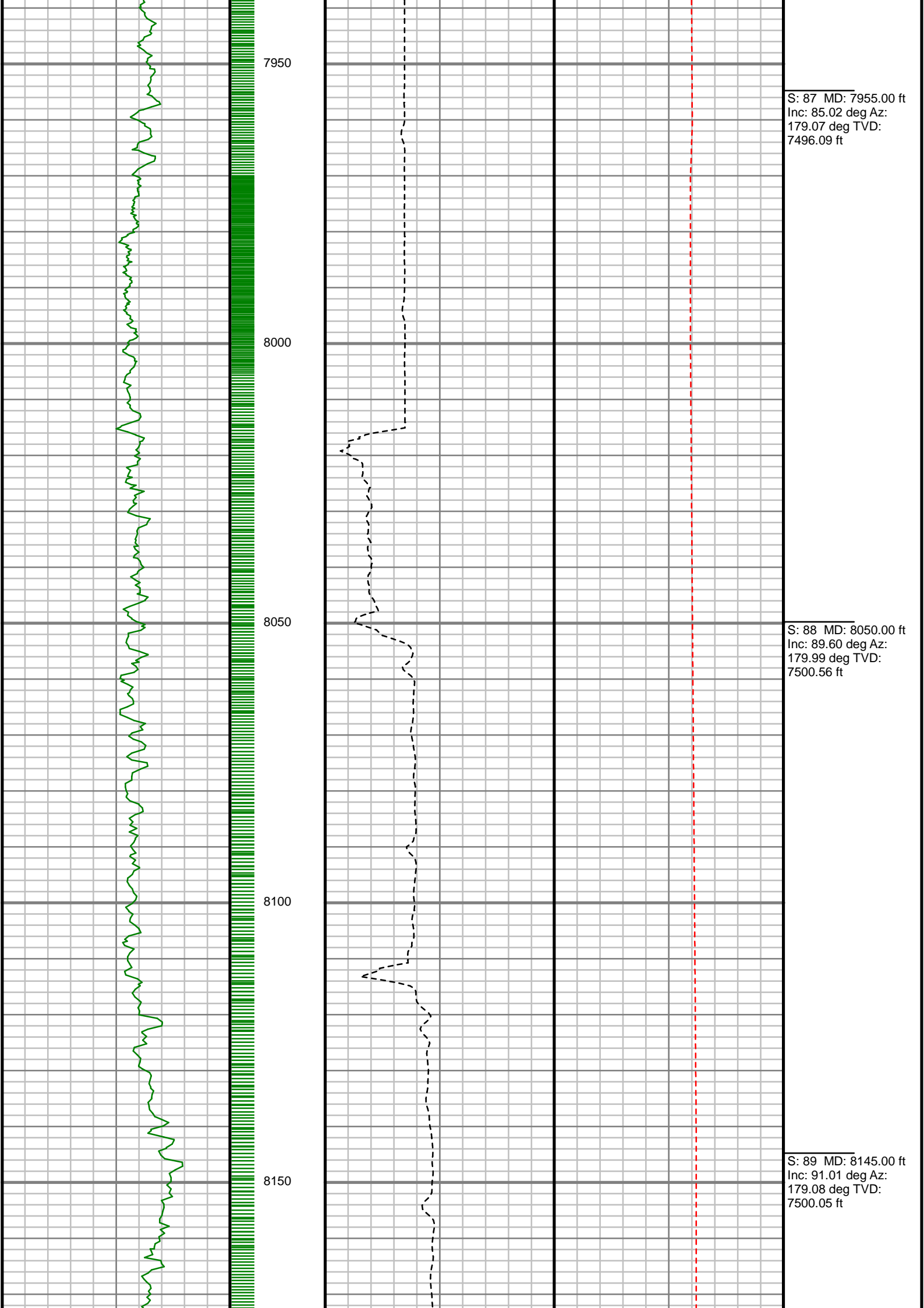


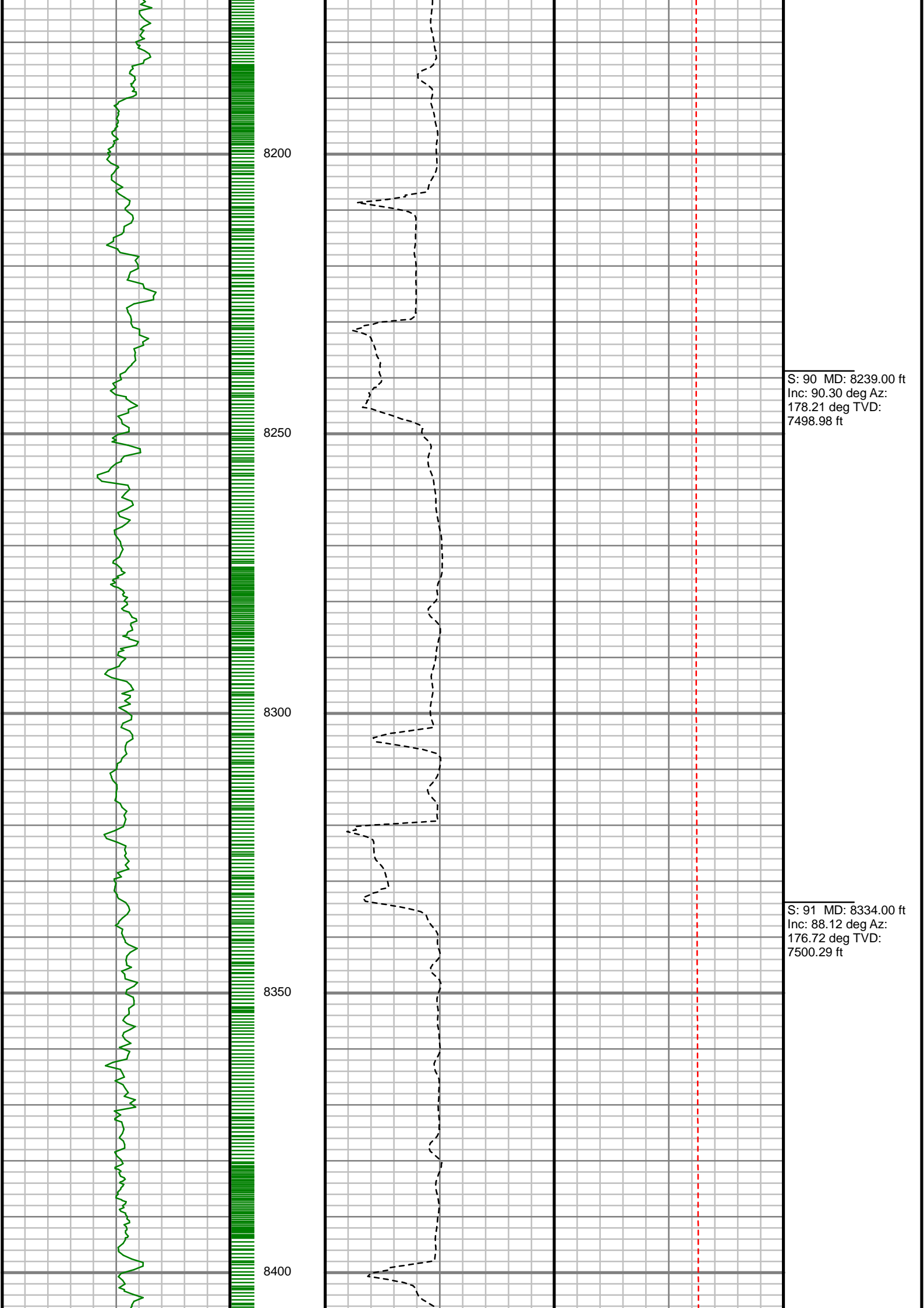
S: 82 MD: 7479.00 ft
Inc: 47.76 deg Az:
184.78 deg TVD:
7324.95 ft

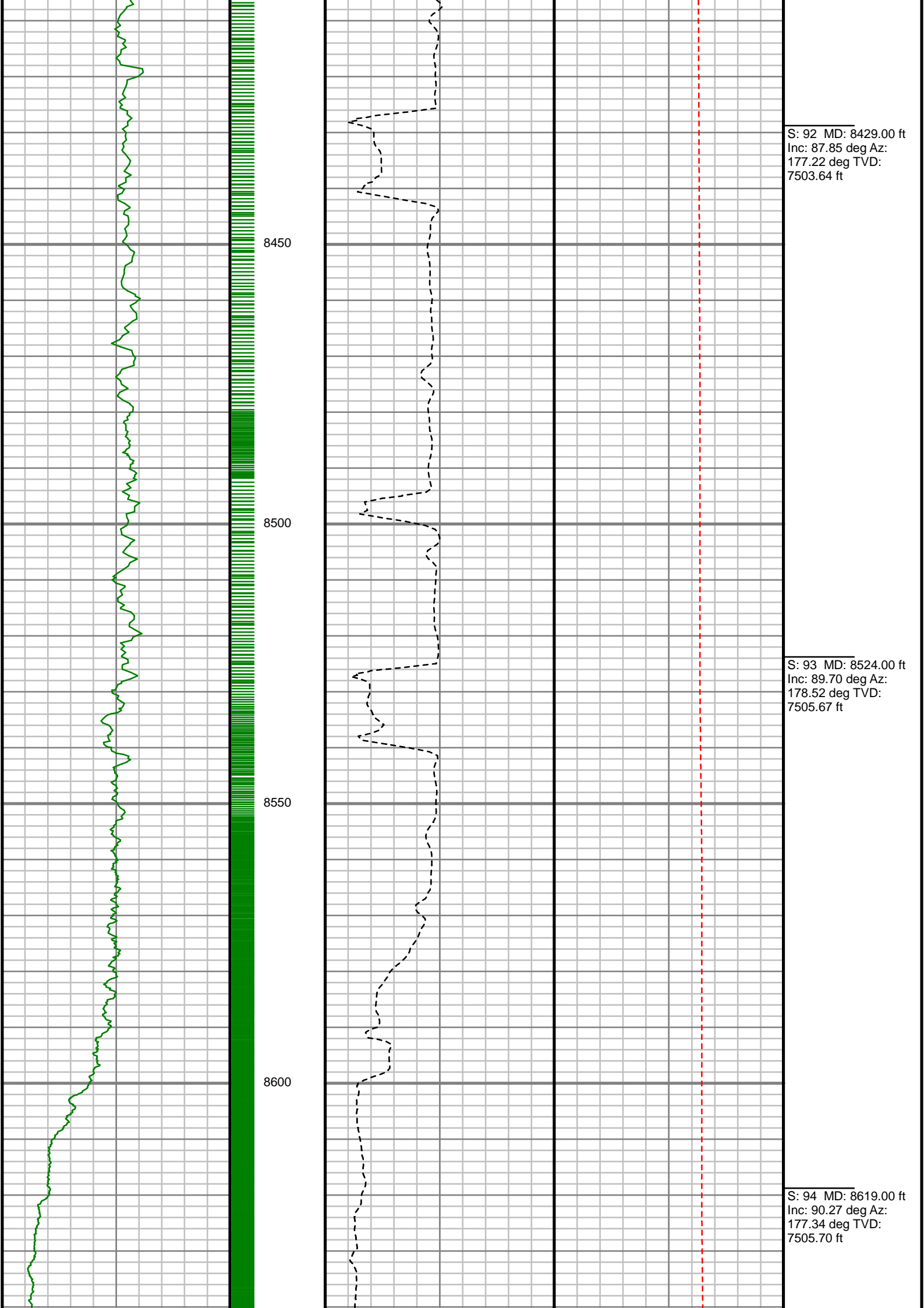
S: 83 MD: 7574.00 ft
Inc: 56.23 deg Az:
183.81 deg TVD:
7383.39 ft

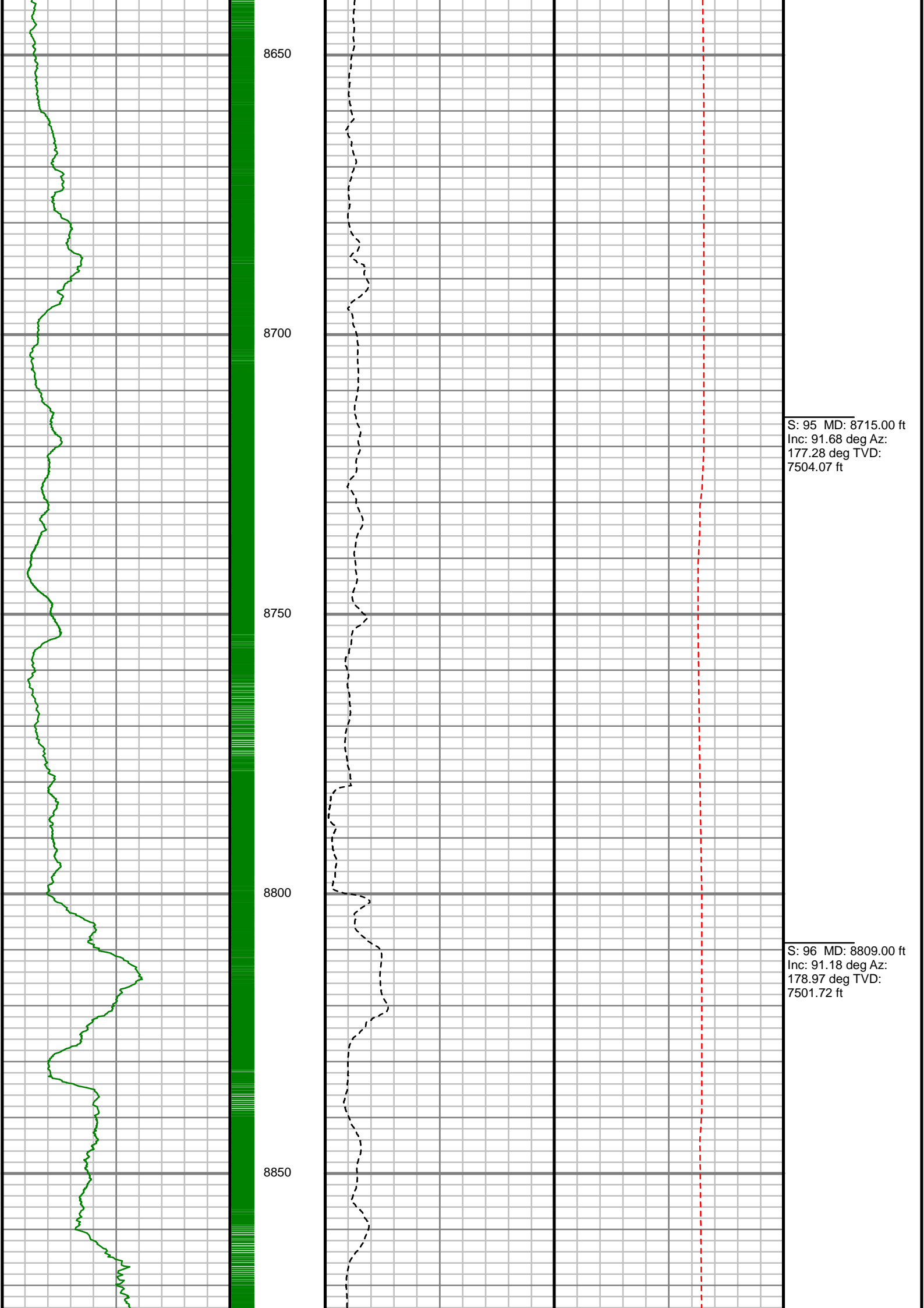
S: 84 MD: 7669.00 ft
Inc: 66.99 deg Az:
182.80 deg TVD:
7428.50 ft





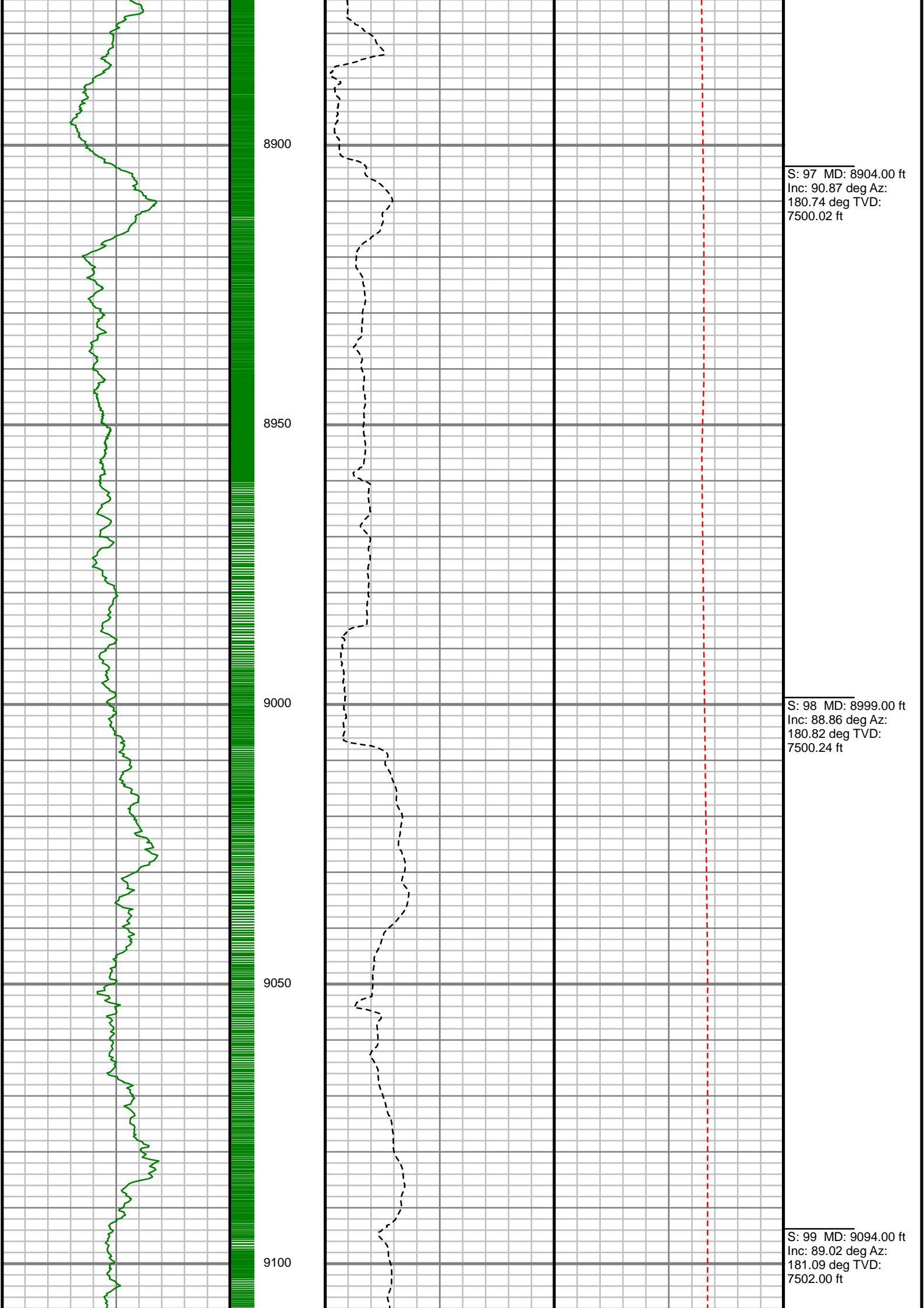


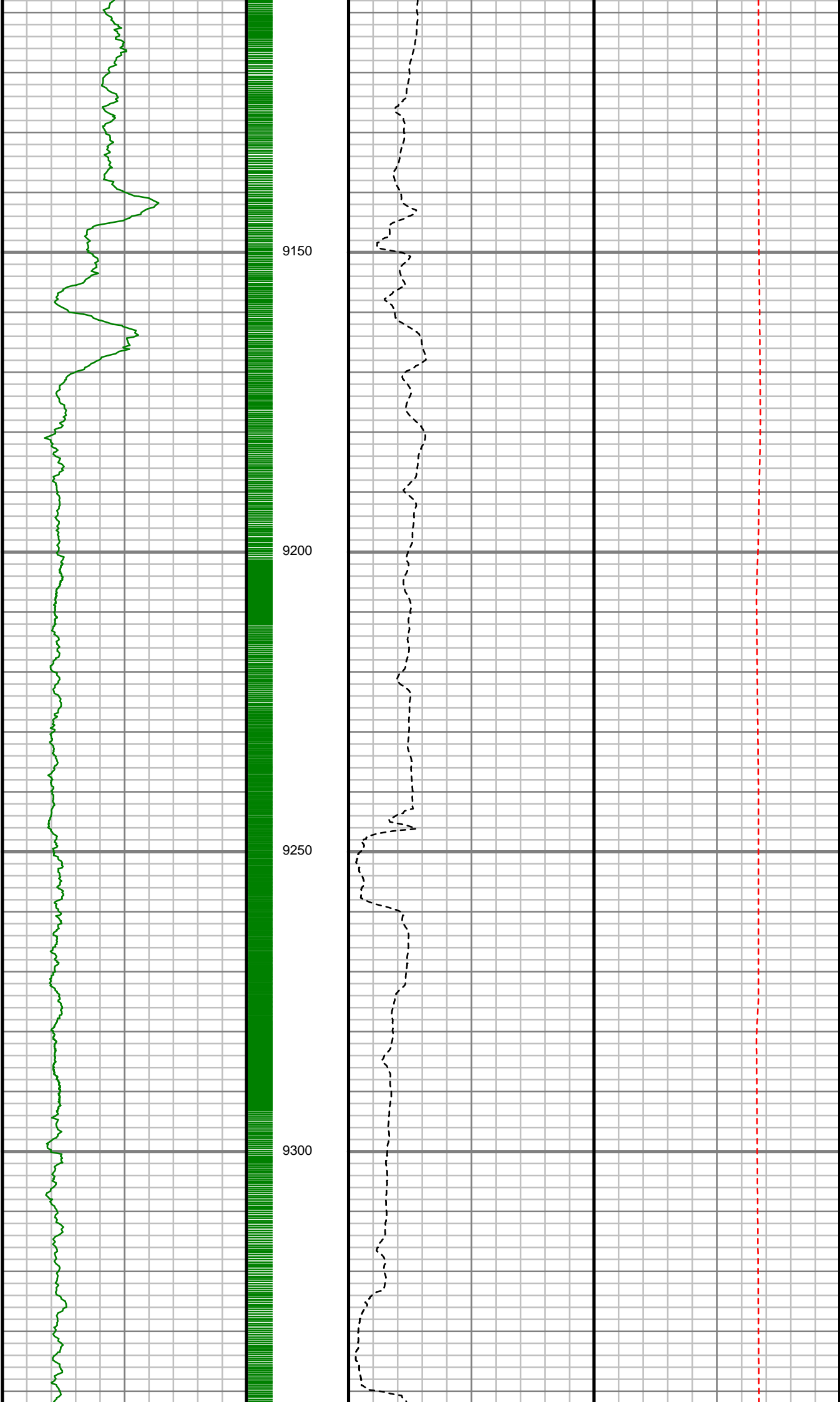




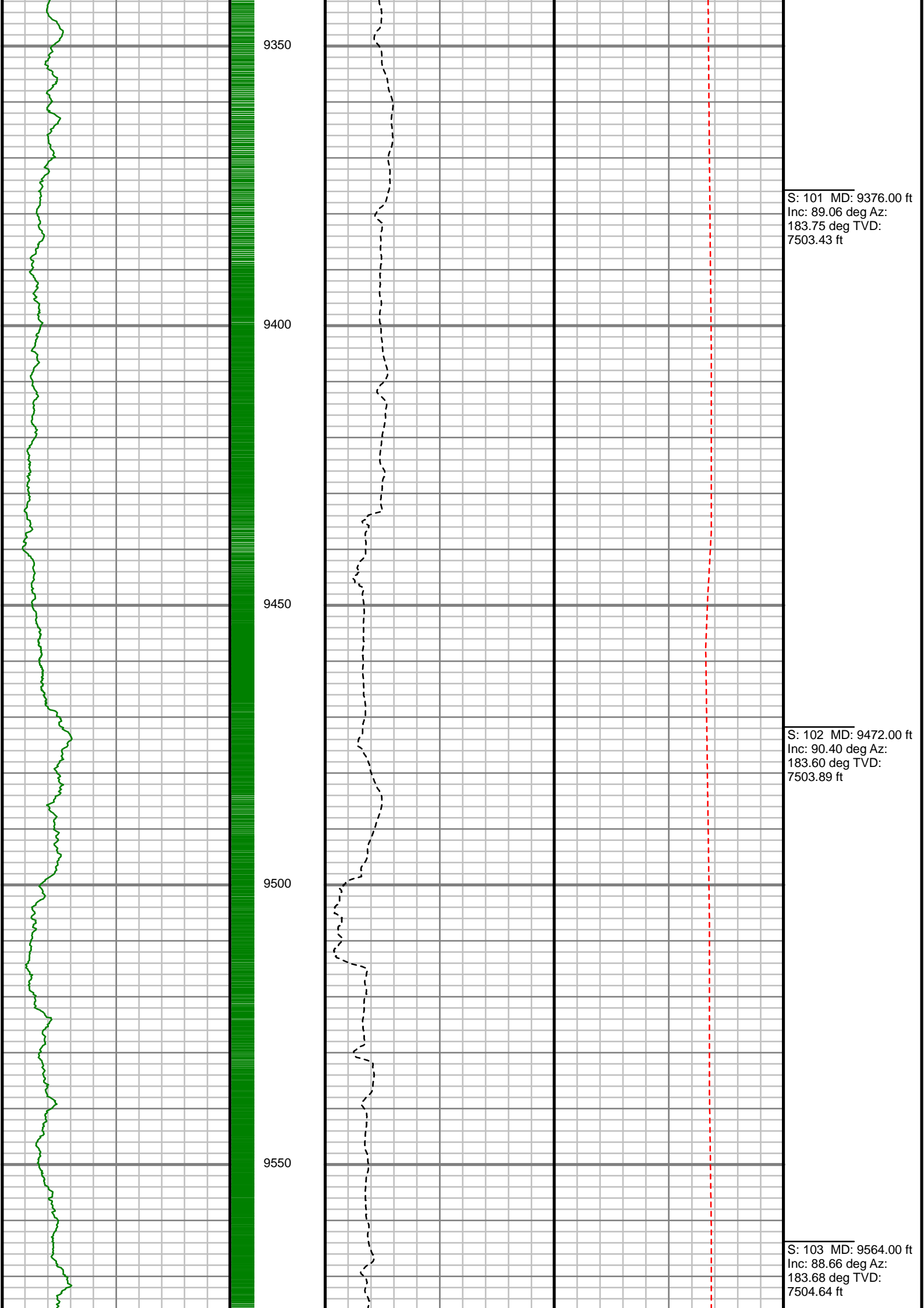
S: 95 MD: 8715.00 ft
Inc: 91.68 deg Az:
177.28 deg TVD:
7504.07 ft

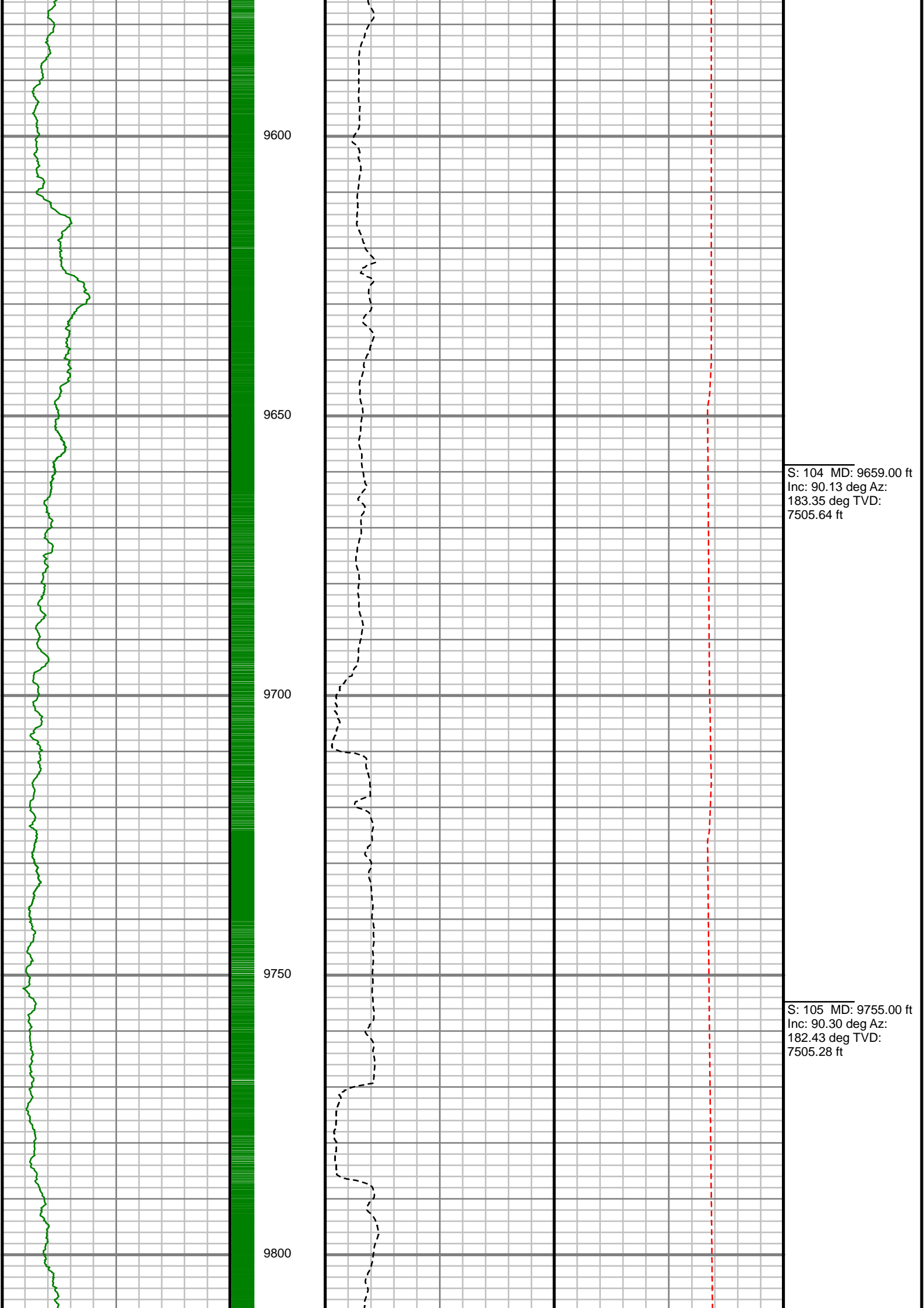
S: 96 MD: 8809.00 ft
Inc: 91.18 deg Az:
178.97 deg TVD:
7501.72 ft

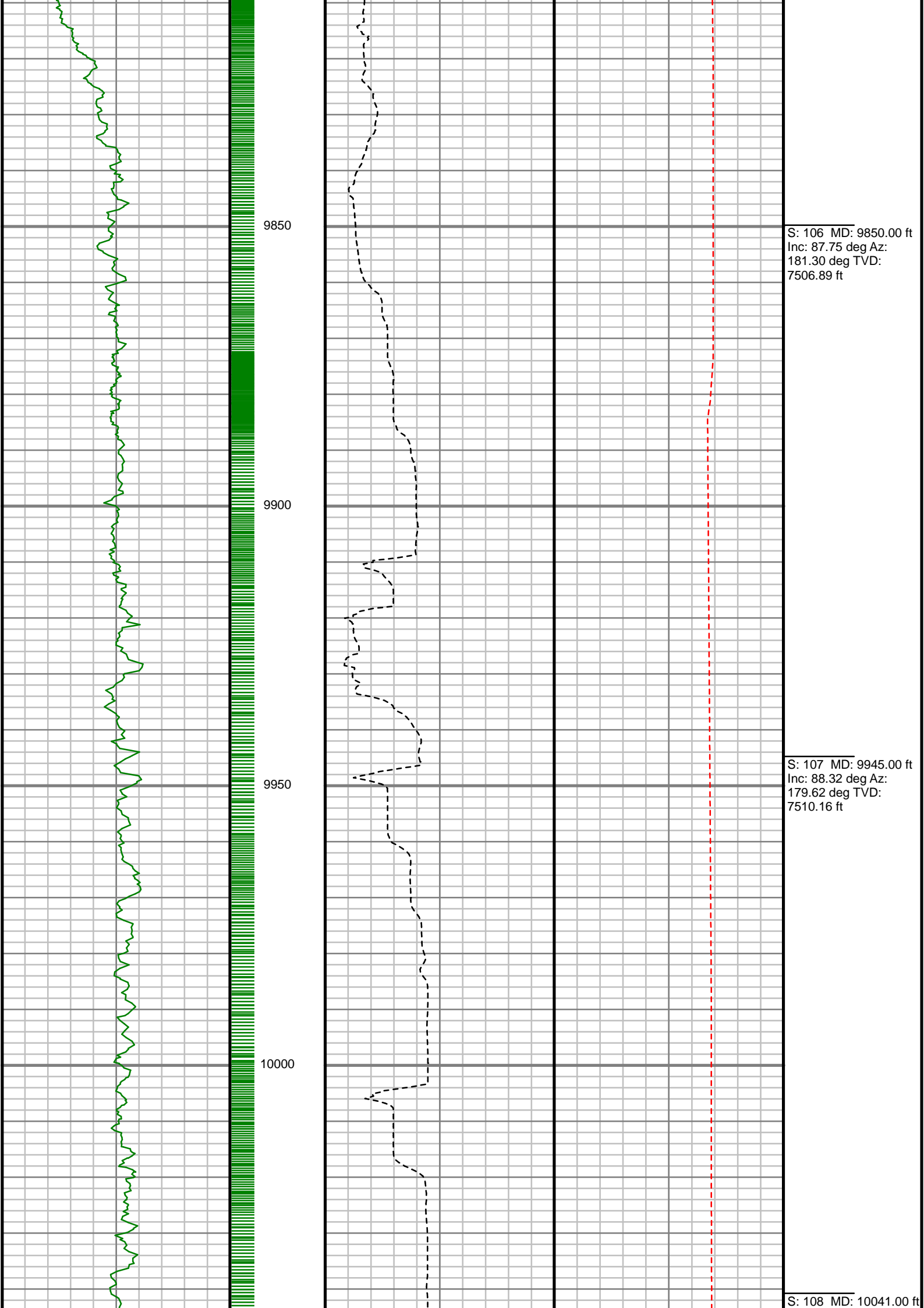


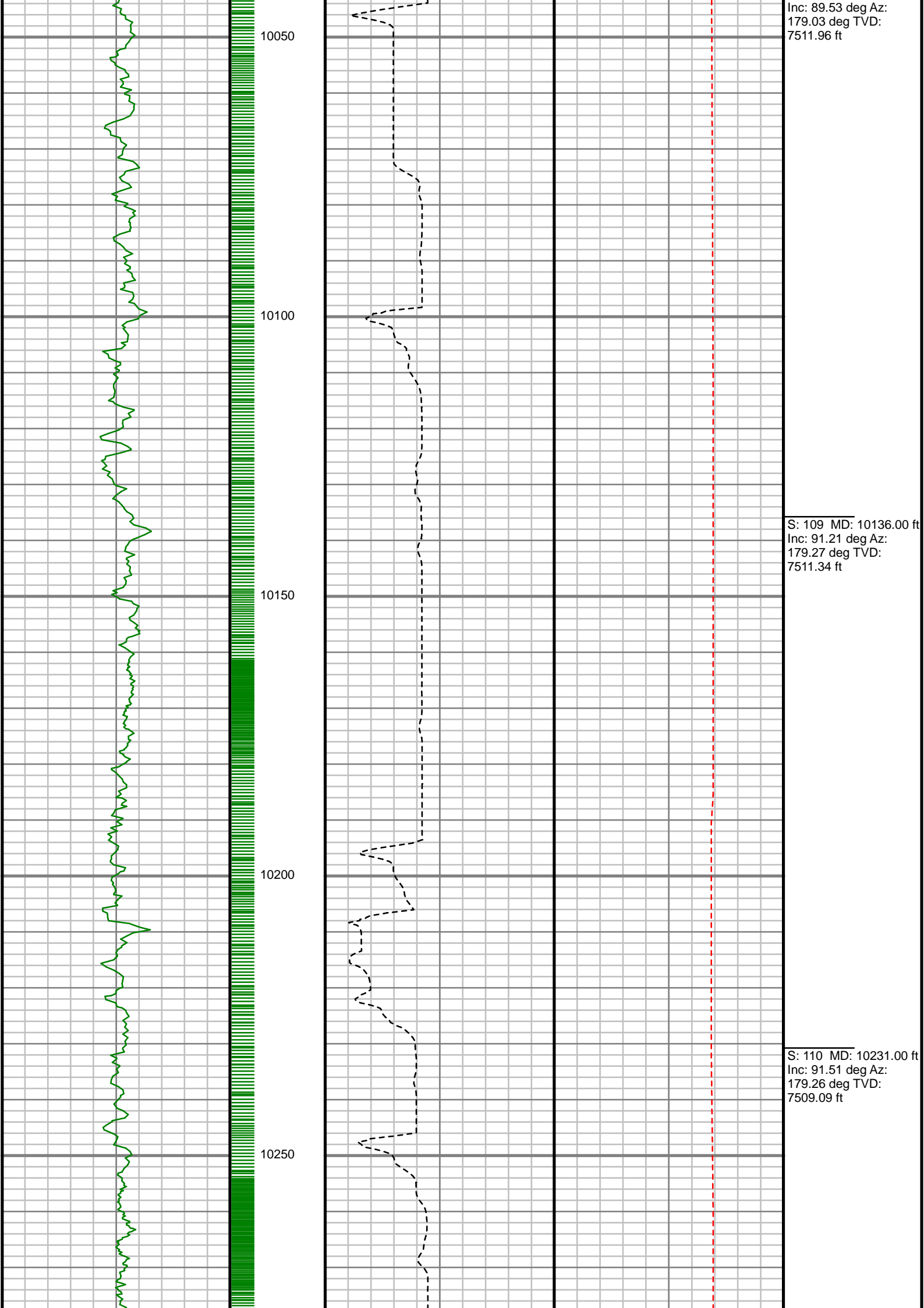


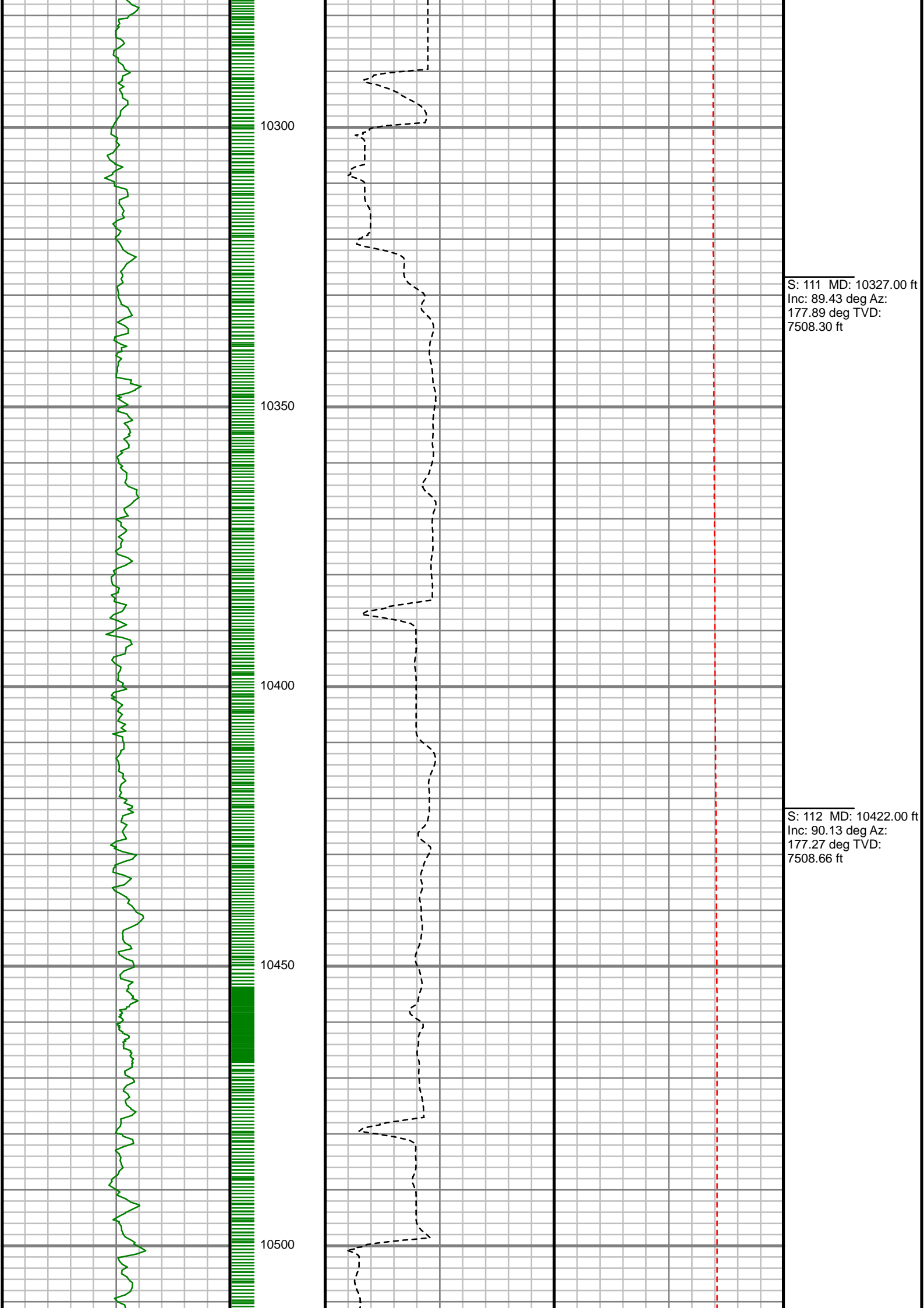
S: 100 MD: 9188.00 ft
Inc: 90.37 deg Az:
180.37 deg TVD:
7502.50 ft

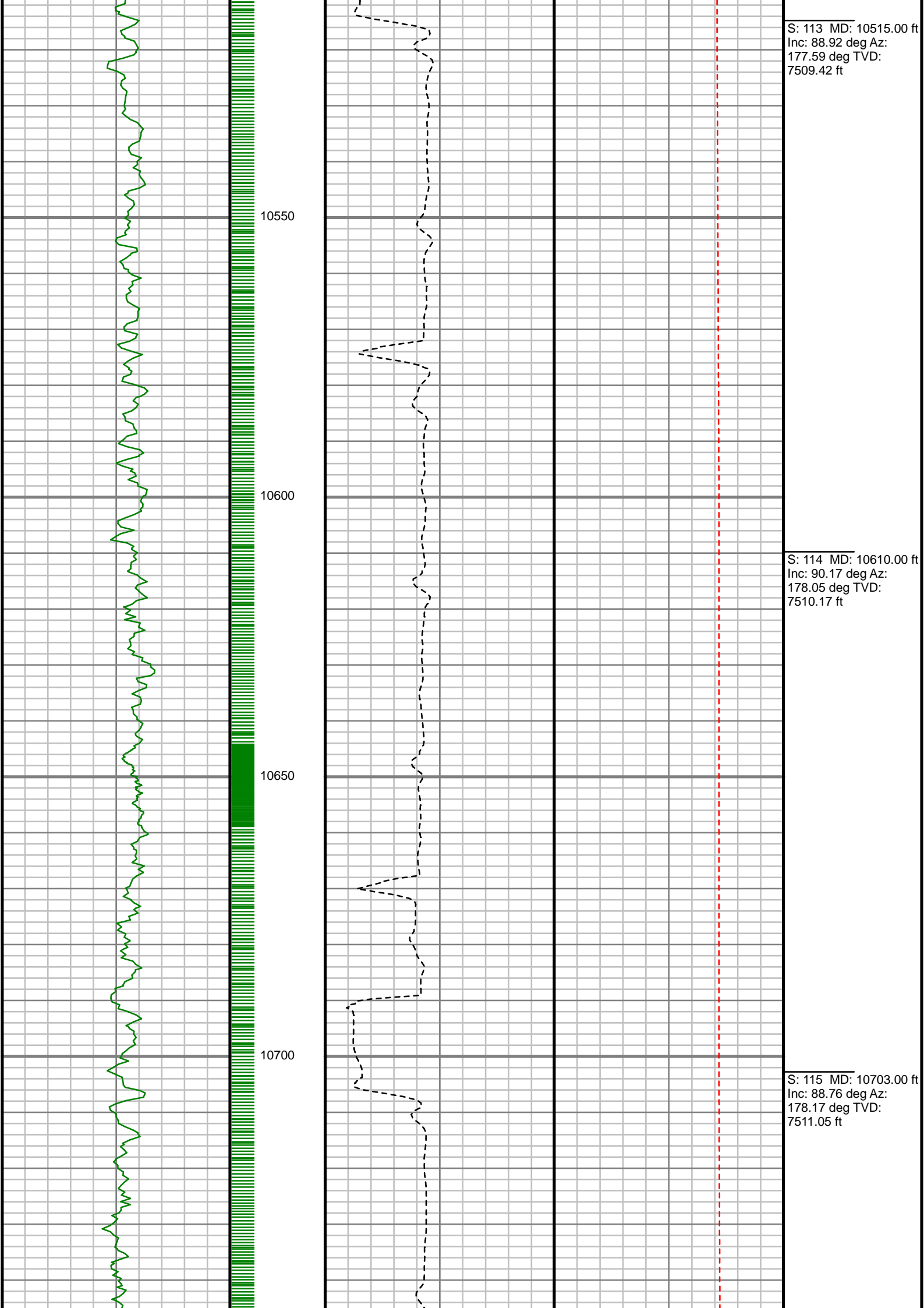


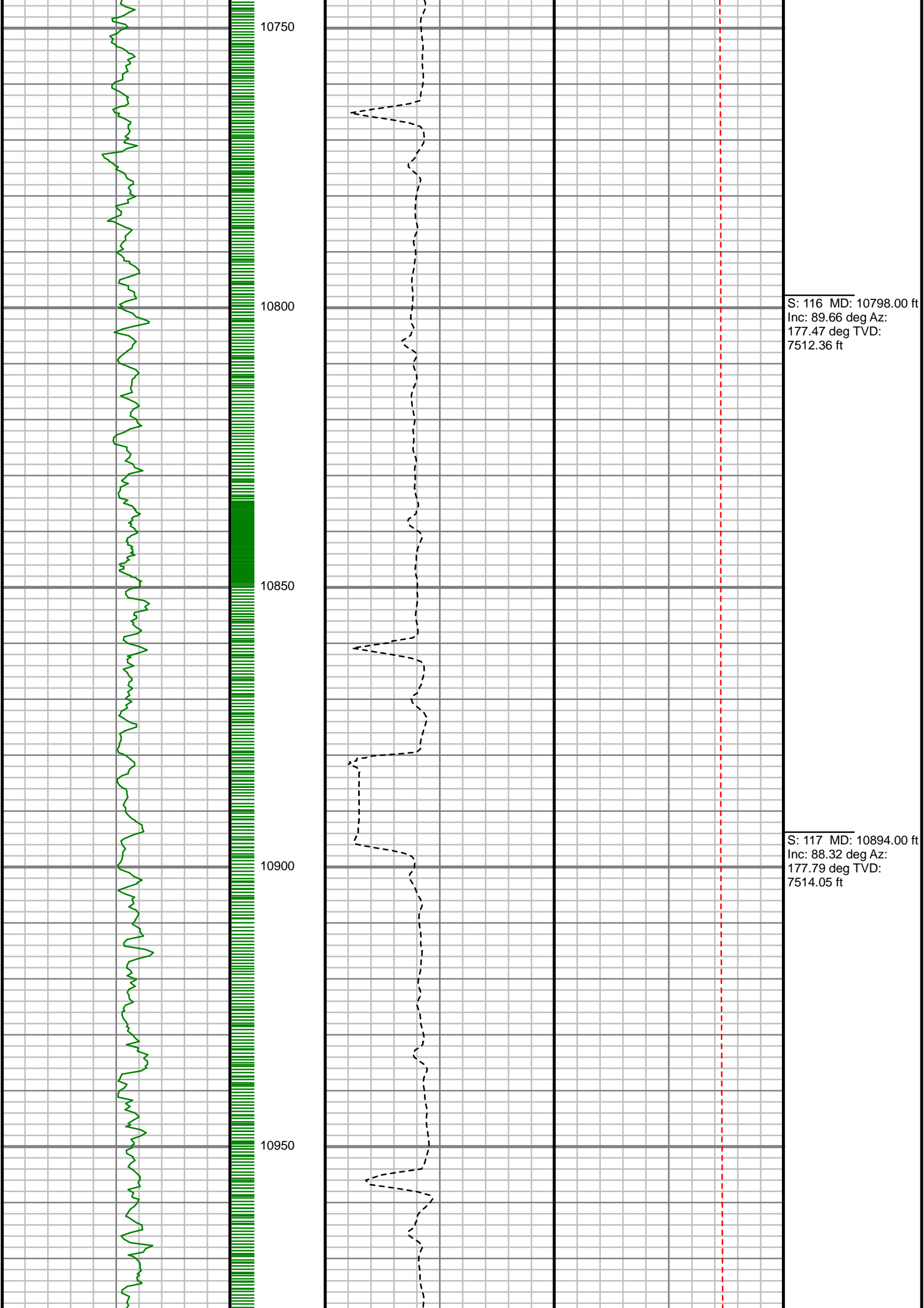


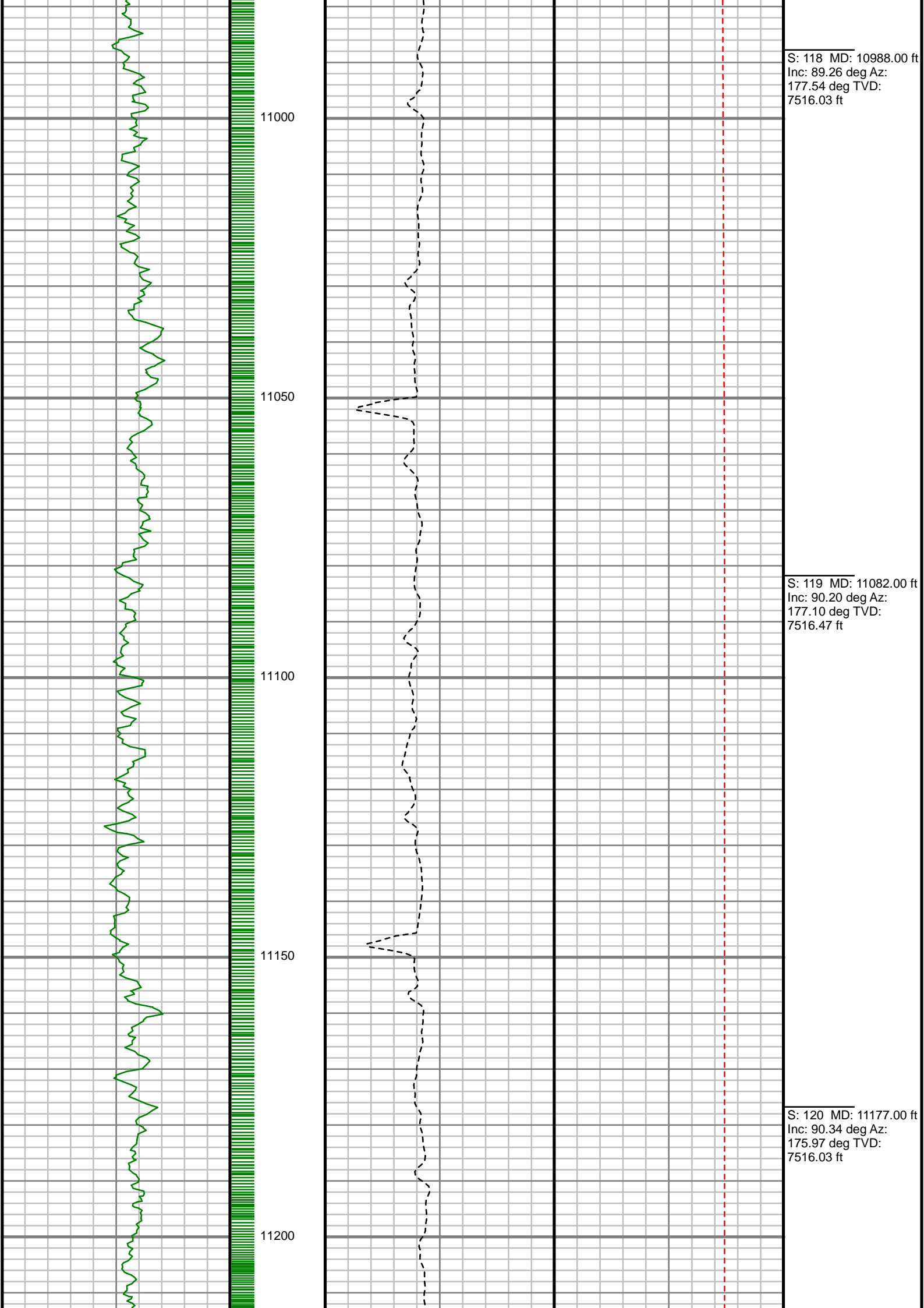


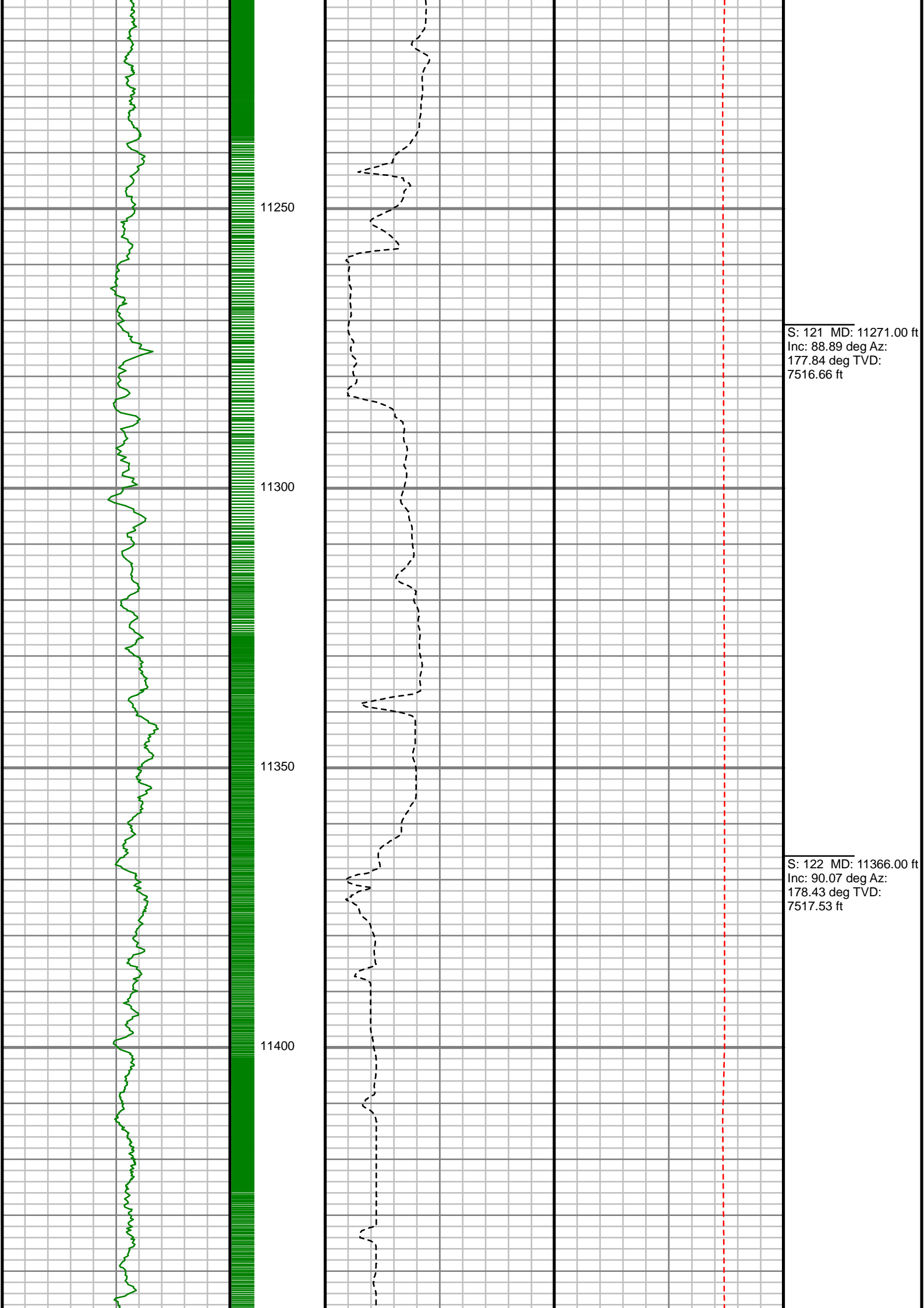






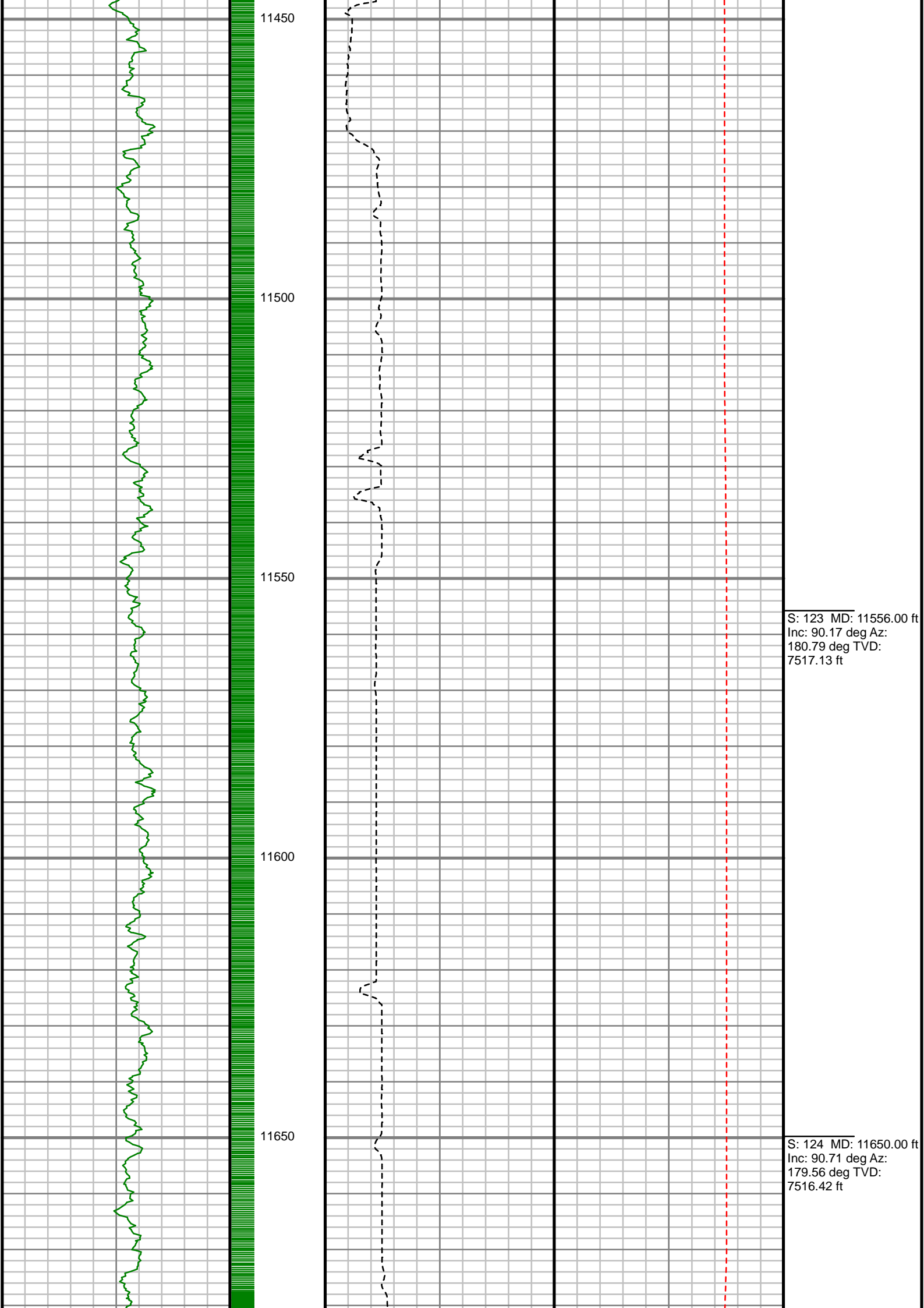


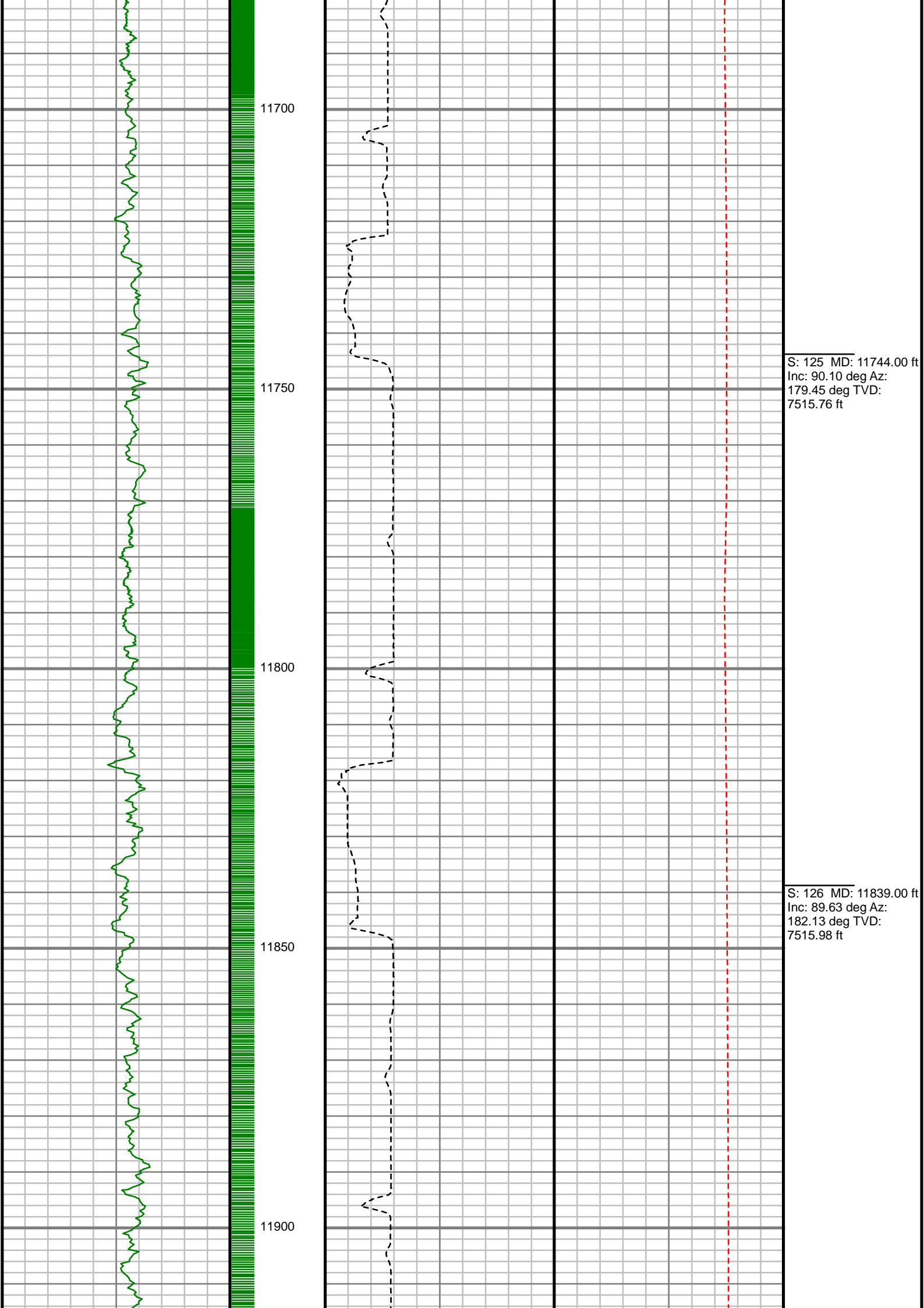


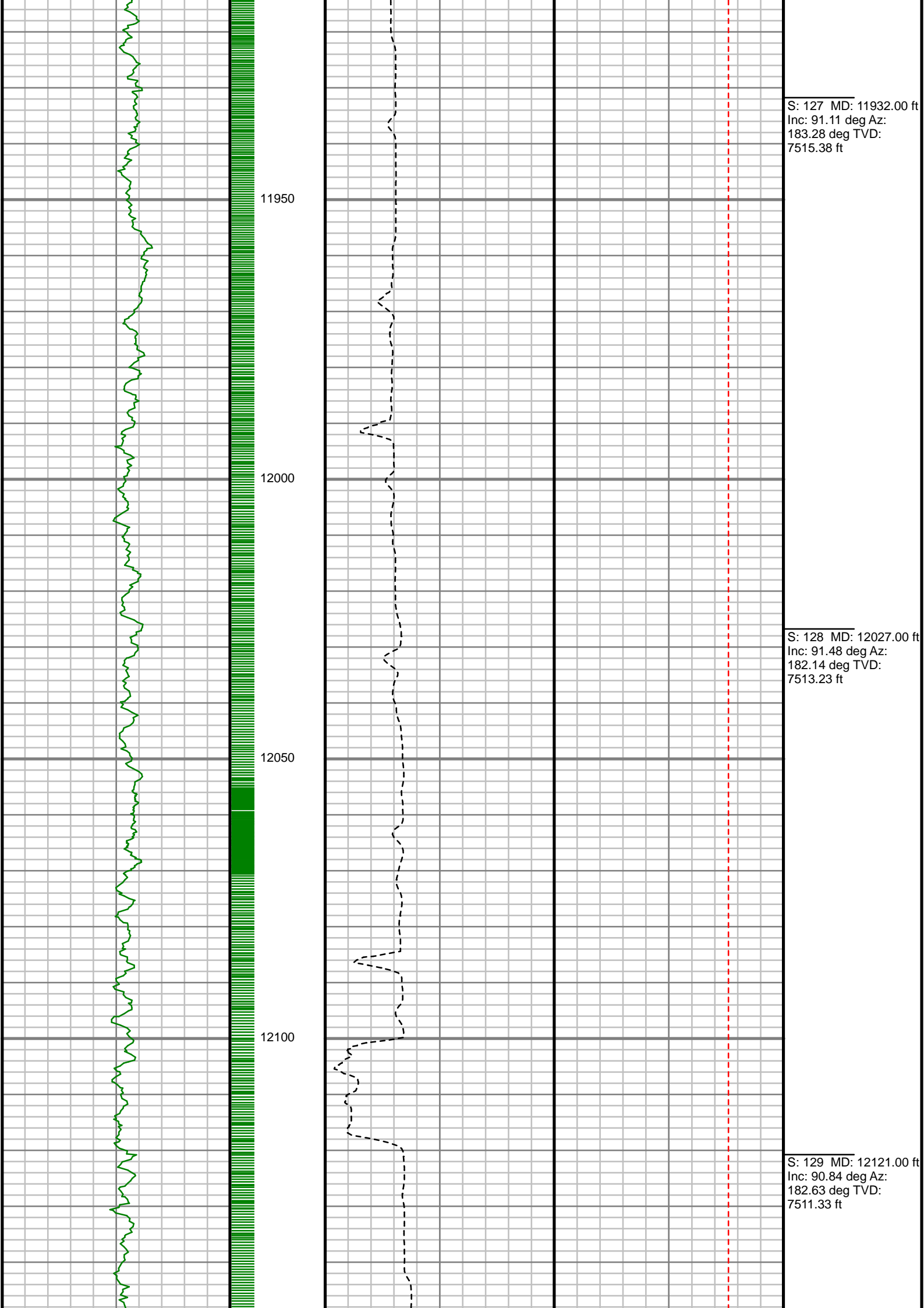


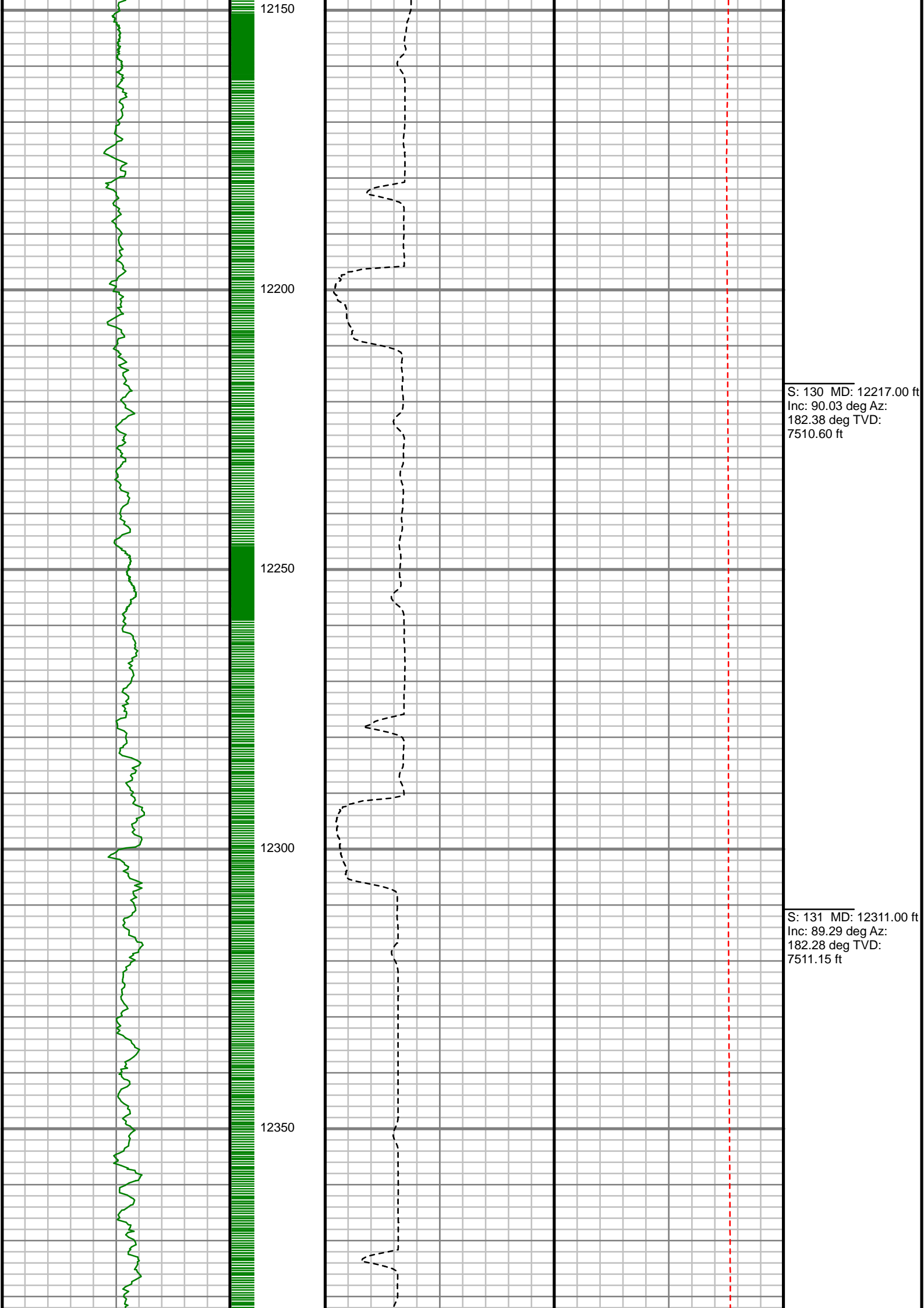
S: 121 MD: 11271.00 ft
Inc: 88.89 deg Az:
177.84 deg TVD:
7516.66 ft

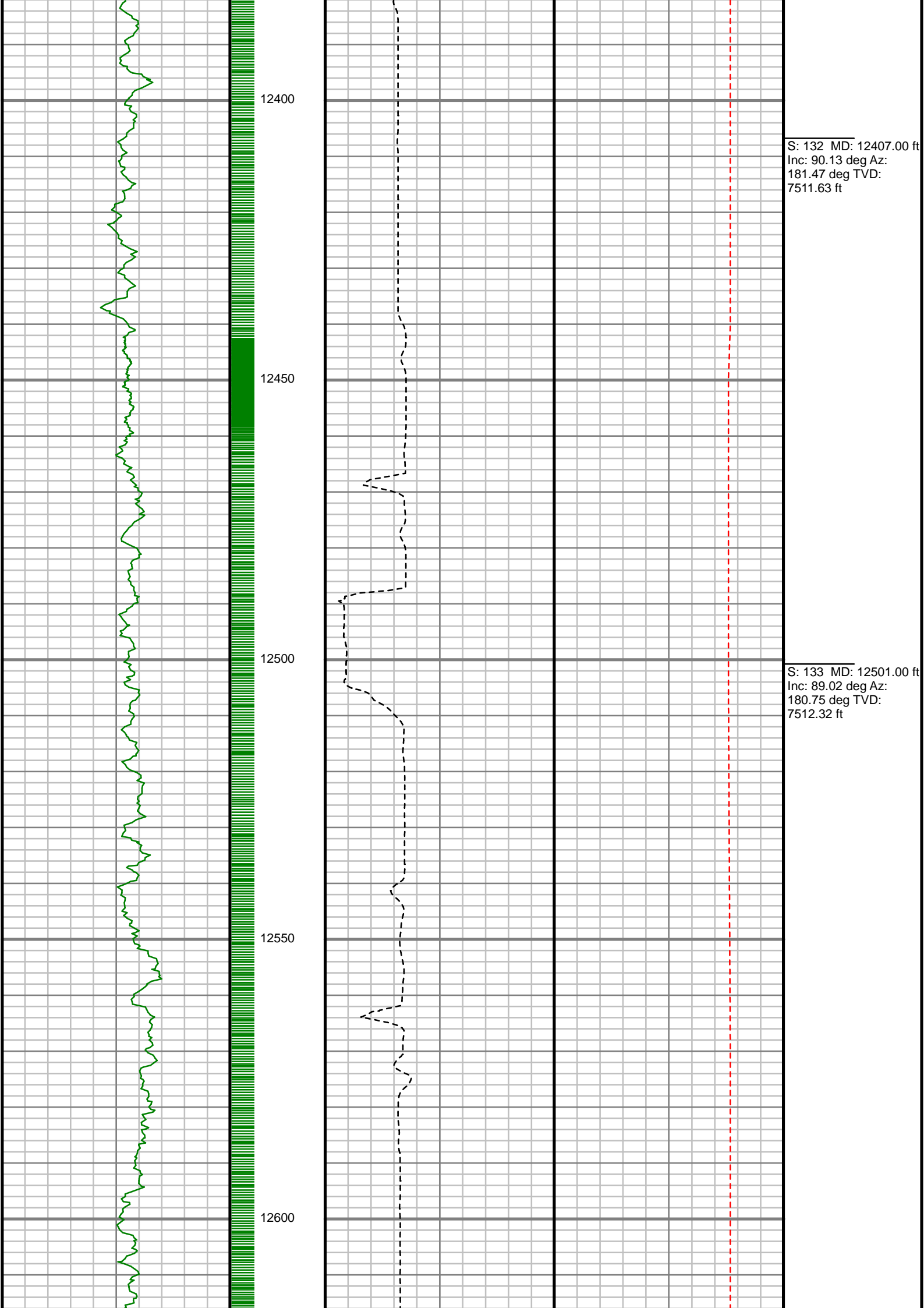
S: 122 MD: 11366.00 ft
Inc: 90.07 deg Az:
178.43 deg TVD:
7517.53 ft

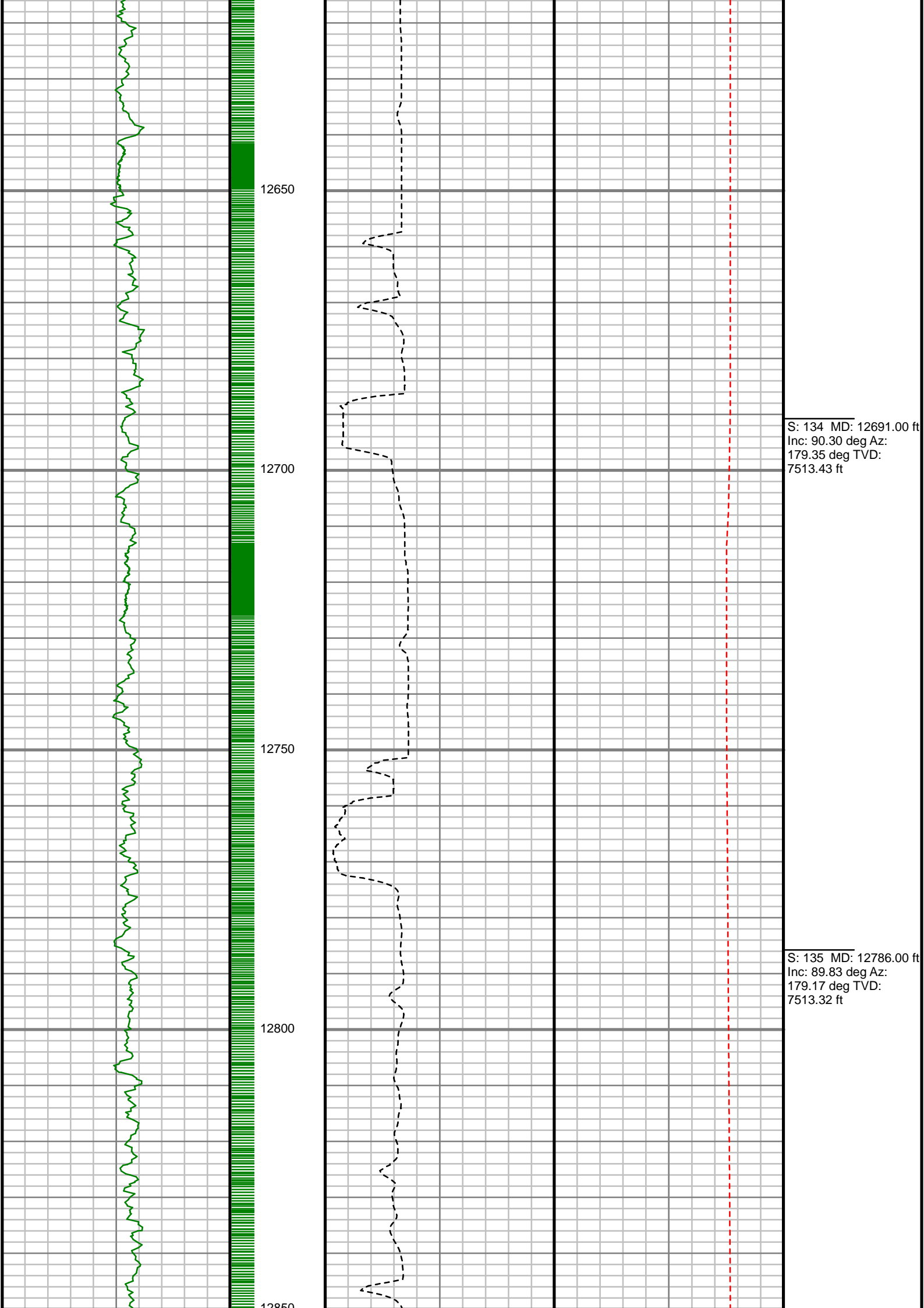


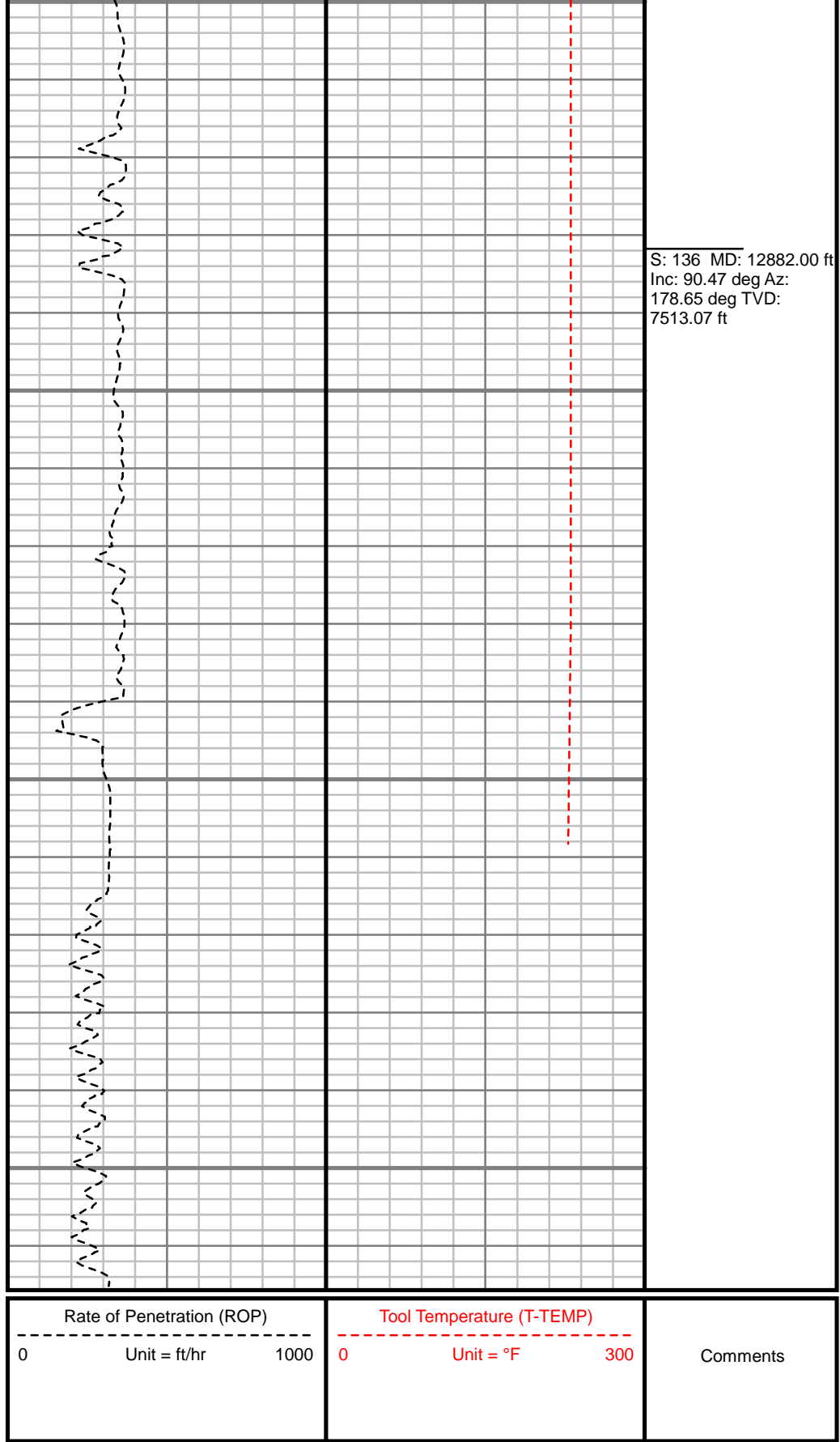
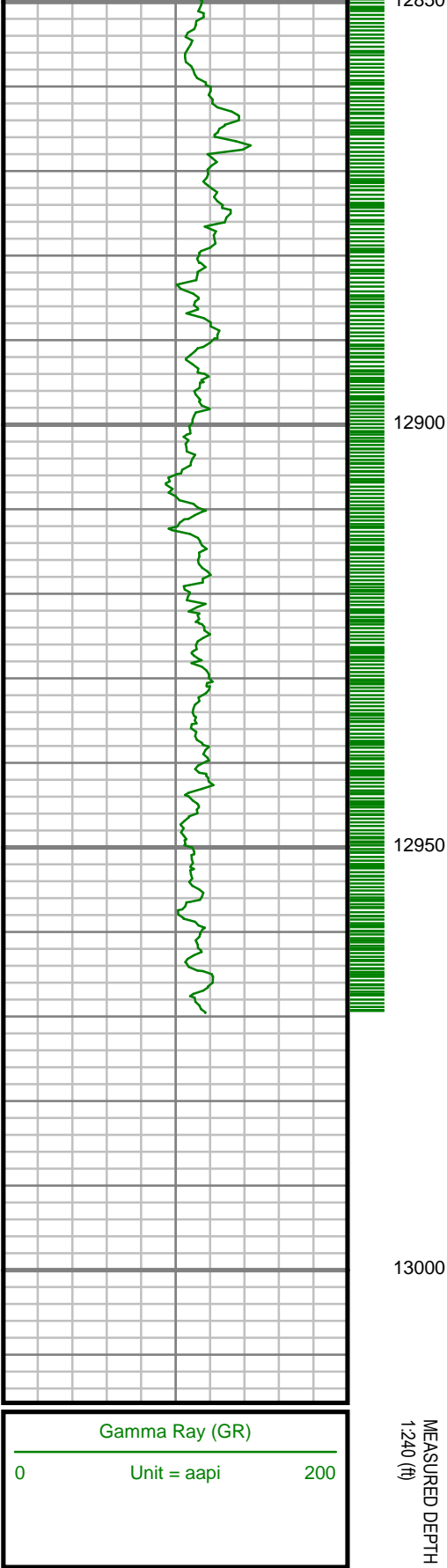












Well Location	FEHRN PAD
Well Name	FEHRN 37C-32HZ
Survey Date	8/7/2015
Latitude	40°6'3.715"N
Longitude	104°47'41.518"W
Btotal	52705, 52761 nT
Dip	66.73, 66.77 deg
Magnetic Declination	8.40 deg
North Reference	True North
Grid Correction	None
Depth Reference	RKB (20.00 ft)
Calculation Method	Minimum Curvature
Section (VS) Ref	0.00N (ft), 0.00E (ft), 181.10Azim (deg)
Operator(s)	C. COLLINS, H. ORAHOOD

Well Notes
SURVEYS FROM 0 FT. TO 1831 FT. WERE ACQUIRED BY CATHEDRAL MWD.
SURVEYS FROM 2017 FT. TO 12882 FT. WERE ACQUIRED BY SCIENTIFIC DRILLING INTERNATIONAL MWD.

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
125.00	0.60	6.50	125.00	-0.58	0.58	0.07	0.54	112.00
187.00	0.90	5.80	186.99	-1.39	1.39	0.15	0.48	62.00
249.00	1.10	9.00	248.98	-2.47	2.46	0.29	0.33	62.00
310.00	1.30	4.00	309.97	-3.74	3.73	0.43	0.37	61.00
373.00	2.50	1.50	372.93	-5.83	5.82	0.52	1.91	63.00
458.00	3.30	1.30	457.82	-10.13	10.12	0.62	0.94	85.00
543.00	3.80	350.70	542.66	-15.34	15.34	0.22	0.97	85.00
628.00	4.20	348.30	627.45	-21.15	21.17	-0.86	0.51	85.00
713.00	4.20	343.70	712.23	-27.15	27.20	-2.37	0.40	85.00
797.00	5.10	346.70	795.95	-33.71	33.79	-4.09	1.11	84.00
881.00	6.20	345.30	879.54	-41.69	41.81	-6.10	1.32	84.00
966.00	8.10	350.30	963.88	-51.99	52.16	-8.27	2.35	85.00
1051.00	9.70	351.80	1047.85	-64.94	65.15	-10.30	1.90	85.00
1135.00	11.50	354.10	1130.41	-80.23	80.48	-12.17	2.20	84.00
1219.00	13.90	355.50	1212.35	-98.59	98.87	-13.83	2.88	84.00
1304.00	15.10	356.40	1294.64	-119.78	120.10	-15.32	1.44	85.00
1387.00	15.90	357.60	1374.62	-141.91	142.25	-16.48	1.04	83.00

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	Course Length ft
1471.00	16.30	354.80	1455.33	-165.11	165.49	-18.03	1.04	84.00
1555.00	16.80	353.90	1535.85	-188.87	189.30	-20.39	0.67	84.00
1639.00	16.00	351.40	1616.43	-212.33	212.81	-23.41	1.27	84.00
1724.00	16.30	350.90	1698.08	-235.61	236.17	-27.05	0.39	85.00
1809.00	15.80	350.90	1779.77	-258.74	259.38	-30.76	0.59	85.00
1831.00	15.40	350.30	1800.96	-264.56	265.22	-31.73	1.96	22.00
1961.00	14.79	347.13	1926.47	-297.61	298.40	-38.33	0.79	130.00
2055.00	16.13	350.10	2017.07	-322.07	322.96	-43.25	1.66	94.00
2151.00	15.90	349.76	2109.35	-348.05	349.04	-47.88	0.26	96.00
2246.00	14.70	349.62	2200.98	-372.62	373.70	-52.36	1.26	95.00
2341.00	14.91	352.75	2292.83	-396.53	397.68	-56.08	0.87	95.00
2437.00	14.80	353.99	2385.62	-420.91	422.12	-58.92	0.35	96.00
2532.00	16.40	354.44	2477.12	-446.27	447.53	-61.49	1.69	95.00
2628.00	15.43	355.21	2569.44	-472.43	473.75	-63.87	1.04	96.00
2818.00	13.10	355.76	2753.57	-519.01	520.41	-67.57	1.23	190.00
2913.00	14.22	357.30	2845.88	-541.37	542.79	-68.92	1.24	95.00
3008.00	16.36	355.90	2937.51	-566.34	567.80	-70.42	2.29	95.00
3103.00	15.64	355.82	3028.83	-592.42	593.91	-72.31	0.77	95.00

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	Course Length ft
3198.00	16.16	351.73	3120.20	-618.21	619.77	-75.15	1.30	95.00
3293.00	14.60	348.67	3211.80	-642.95	644.59	-79.40	1.86	95.00
3388.00	14.11	347.01	3303.83	-665.87	667.62	-84.36	0.67	95.00
3483.00	14.69	347.17	3395.85	-688.79	690.64	-89.64	0.60	95.00
3579.00	13.23	355.36	3489.02	-711.54	713.46	-93.23	2.55	96.00
3674.00	11.08	354.39	3581.88	-731.42	733.38	-95.00	2.28	95.00
3769.00	9.07	351.80	3675.42	-747.88	749.88	-96.96	2.17	95.00
3865.00	7.87	352.25	3770.37	-761.83	763.87	-98.93	1.25	96.00
3960.00	6.07	369.69	3864.67	-773.28	775.33	-99.48	2.39	95.00
4055.00	3.50	359.57	3959.33	-781.19	783.24	-99.18	2.73	95.00
4151.00	2.18	336.82	4055.21	-785.78	787.84	-99.92	1.78	96.00
4246.00	2.39	320.87	4150.14	-788.94	791.04	-101.88	0.70	95.00
4341.00	2.16	316.62	4245.06	-791.73	793.88	-104.36	0.31	95.00
4436.00	1.80	308.66	4340.00	-793.91	796.11	-106.75	0.47	95.00
4531.00	1.39	291.48	4434.97	-795.22	797.46	-108.99	0.65	95.00
4626.00	1.09	281.12	4529.95	-795.78	798.06	-110.95	0.40	95.00
4721.00	1.16	280.84	4624.93	-796.10	798.41	-112.79	0.08	95.00
4816.00	1.07	267.10	4719.91	-796.20	798.55	-114.62	0.30	95.00

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft
4911.00	1.18	268.25	4814.89	-796.09	798.48	-116.49	0.11	95.00
5007.00	0.96	65.23	4910.89	-796.39	798.78	-116.74	2.19	96.00
5102.00	1.15	86.06	5005.87	-796.83	799.18	-115.07	0.45	95.00
5197.00	0.87	106.55	5100.85	-796.72	799.04	-113.43	0.48	95.00
5292.00	0.79	125.09	5195.84	-796.16	798.46	-112.20	0.29	95.00
5388.00	0.82	120.30	5291.84	-795.46	797.73	-111.07	0.08	96.00
5483.00	0.55	122.69	5386.83	-794.89	797.15	-110.10	0.29	95.00
5578.00	0.17	177.29	5481.83	-794.51	796.76	-109.71	0.49	95.00
5674.00	0.57	269.25	5577.83	-794.35	796.61	-110.18	0.63	96.00
5769.00	0.77	271.40	5672.82	-794.34	796.62	-111.30	0.21	95.00
5864.00	0.15	272.35	5767.81	-794.34	796.64	-112.06	0.66	95.00
5960.00	0.20	149.86	5863.81	-794.20	796.50	-112.10	0.32	96.00
6055.00	0.46	79.00	5958.81	-794.13	796.42	-111.65	0.46	95.00
6150.00	0.48	83.84	6053.81	-794.26	796.54	-110.88	0.05	95.00
6244.00	0.32	92.87	6147.81	-794.30	796.57	-110.23	0.18	94.00
6340.00	0.21	155.26	6243.81	-794.14	796.39	-109.89	0.30	96.00
6434.00	0.58	106.46	6337.80	-793.85	796.10	-109.36	0.50	94.00
6529.00	0.88	88.92	6432.80	-793.75	795.98	-108.17	0.39	95.00

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft
6624.00	1.11	74.57	6527.78	-794.04	796.24	-106.56	0.35	95.00
6719.00	0.96	56.35	6622.77	-794.76	796.92	-105.01	0.38	95.00
6813.00	1.18	55.50	6716.75	-795.77	797.90	-103.56	0.24	94.00
6908.00	4.92	164.25	6811.64	-792.44	794.53	-101.65	5.70	95.00
7003.00	11.93	172.71	6905.56	-778.81	780.86	-99.29	7.48	95.00
7098.00	14.92	171.92	6997.95	-757.01	759.00	-96.32	3.15	95.00
7193.00	23.56	177.17	7087.57	-725.94	727.87	-93.66	9.26	95.00
7289.00	27.53	179.47	7174.17	-684.60	686.51	-92.51	4.27	96.00
7384.00	36.54	180.72	7254.62	-634.27	636.17	-92.66	9.50	95.00
7479.00	47.76	184.78	7324.95	-570.68	572.63	-95.96	12.15	95.00
7574.00	56.23	183.81	7383.39	-496.01	498.05	-101.53	8.95	95.00
7669.00	66.99	182.80	7428.50	-412.62	414.74	-106.30	11.37	95.00
7764.00	74.42	183.82	7459.87	-323.09	325.29	-111.49	7.89	95.00
7860.00	78.42	183.46	7482.41	-229.89	232.18	-117.41	4.18	96.00
7955.00	85.02	179.07	7496.09	-135.95	138.27	-119.45	8.31	95.00
8050.00	89.60	179.99	7500.56	-41.12	43.41	-118.68	4.92	95.00
8145.00	91.01	179.08	7500.05	53.84	-51.58	-117.91	1.77	95.00
8239.00	90.30	178.21	7498.98	147.74	-145.55	-115.69	1.19	94.00

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft
8334.00	88.12	176.72	7500.29	242.54	-240.44	-111.49	2.78	95.00
8429.00	87.85	177.22	7503.64	337.23	-335.25	-106.48	0.60	95.00
8524.00	89.70	178.52	7505.67	432.05	-430.16	-102.95	2.38	95.00
8619.00	90.27	177.34	7505.70	526.90	-525.09	-99.51	1.38	95.00
8715.00	91.68	177.28	7504.07	622.68	-620.97	-95.00	1.47	96.00
8809.00	91.18	178.97	7501.72	716.52	-714.89	-91.92	1.87	94.00
8904.00	90.87	180.74	7500.02	811.48	-809.87	-91.68	1.89	95.00
8999.00	88.86	180.82	7500.24	906.47	-904.85	-92.97	2.13	95.00
9094.00	89.02	181.09	7502.00	1001.45	-999.82	-94.55	0.33	95.00
9188.00	90.37	180.37	7502.50	1095.45	-1093.81	-95.74	1.62	94.00
9376.00	89.06	183.75	7503.43	1283.39	-1281.66	-102.49	1.93	188.00
9472.00	90.40	183.60	7503.89	1379.29	-1377.46	-108.64	1.41	96.00
9564.00	88.66	183.68	7504.64	1471.19	-1469.26	-114.48	1.90	92.00
9659.00	90.13	183.35	7505.64	1566.10	-1564.08	-120.30	1.59	95.00
9755.00	90.30	182.43	7505.28	1662.05	-1659.95	-125.14	0.98	96.00
9850.00	87.75	181.30	7506.89	1757.02	-1754.88	-128.23	2.94	95.00
9945.00	88.32	179.62	7510.16	1851.95	-1849.82	-128.99	1.87	95.00
10041.00	89.53	179.03	7511.96	1947.89	-1945.79	-127.86	1.40	96.00

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS	Course Length
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft
10136.00	91.21	179.27	7511.34	2042.83	-2040.78	-126.45	1.79	95.00
10231.00	91.51	179.26	7509.09	2137.75	-2135.74	-125.22	0.32	95.00
10327.00	89.43	177.89	7508.30	2233.65	-2231.70	-122.83	2.60	96.00
10422.00	90.13	177.27	7508.66	2328.47	-2326.61	-118.82	0.99	95.00
10515.00	88.92	177.59	7509.42	2421.27	-2419.51	-114.65	1.35	93.00
10610.00	90.17	178.05	7510.17	2516.11	-2514.44	-111.03	1.40	95.00
10703.00	88.76	178.17	7511.05	2608.98	-2607.38	-107.97	1.52	93.00
10798.00	89.66	177.47	7512.36	2703.81	-2702.30	-104.36	1.21	95.00
10894.00	88.32	177.79	7514.05	2799.62	-2798.20	-100.38	1.44	96.00
10988.00	89.26	177.54	7516.03	2893.43	-2892.10	-96.55	1.03	94.00
11082.00	90.20	177.10	7516.47	2987.22	-2986.00	-92.16	1.10	94.00
11177.00	90.34	175.97	7516.03	3081.91	-3080.82	-86.42	1.20	95.00
11271.00	88.89	177.84	7516.66	3175.65	-3174.68	-81.35	2.52	94.00
11366.00	90.07	178.43	7517.53	3270.52	-3269.62	-78.26	1.38	95.00
11556.00	90.17	180.79	7517.13	3460.44	-3459.60	-76.96	1.24	190.00
11650.00	90.71	179.56	7516.42	3554.43	-3553.60	-77.25	1.43	94.00
11744.00	90.10	179.45	7515.76	3648.39	-3647.59	-76.43	0.65	94.00
11839.00	89.63	182.13	7515.98	3743.38	-3742.57	-77.74	2.87	95.00

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	Course Length ft
11932.00	91.11	183.28	7515.38	3836.33	-3835.46	-82.13	2.01	93.00
12027.00	91.48	182.14	7513.23	3931.27	-3930.33	-86.61	1.26	95.00
12121.00	90.84	182.63	7511.33	4025.23	-4024.23	-90.52	0.86	94.00
12217.00	90.03	182.38	7510.60	4121.19	-4120.14	-94.72	0.88	96.00
12311.00	89.29	182.28	7511.15	4215.17	-4214.06	-98.54	0.79	94.00
12407.00	90.13	181.47	7511.63	4311.16	-4310.00	-101.68	1.21	96.00
12501.00	89.02	180.75	7512.32	4405.15	-4403.98	-103.50	1.41	94.00
12691.00	90.30	179.35	7513.43	4595.11	-4593.97	-103.65	1.00	190.00
12786.00	89.83	179.17	7513.32	4690.06	-4688.96	-102.42	0.53	95.00
12882.00	90.47	178.65	7513.07	4785.99	-4784.94	-100.59	0.85	96.00

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	Course Length ft

5" = 100' FEET MD