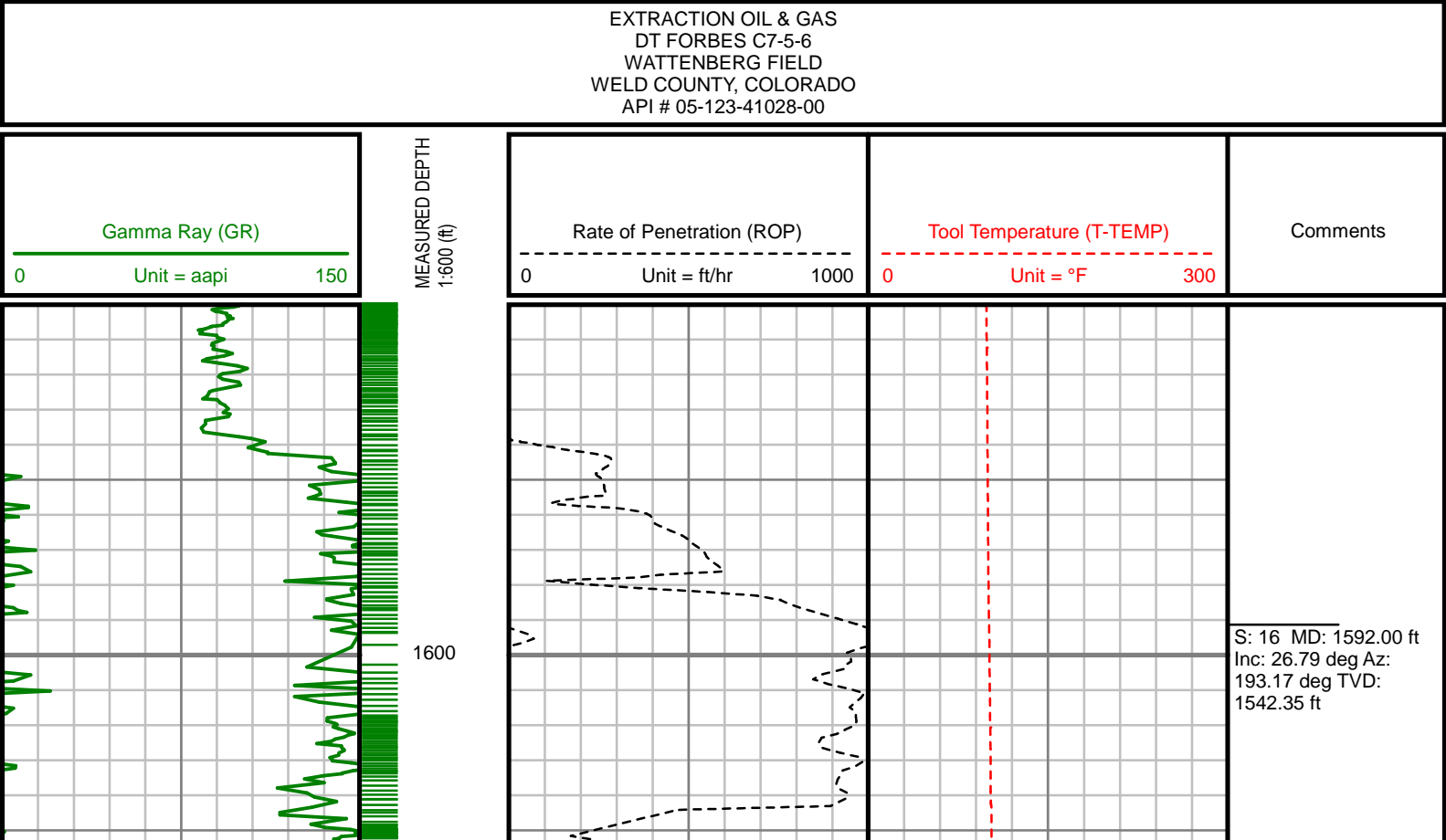
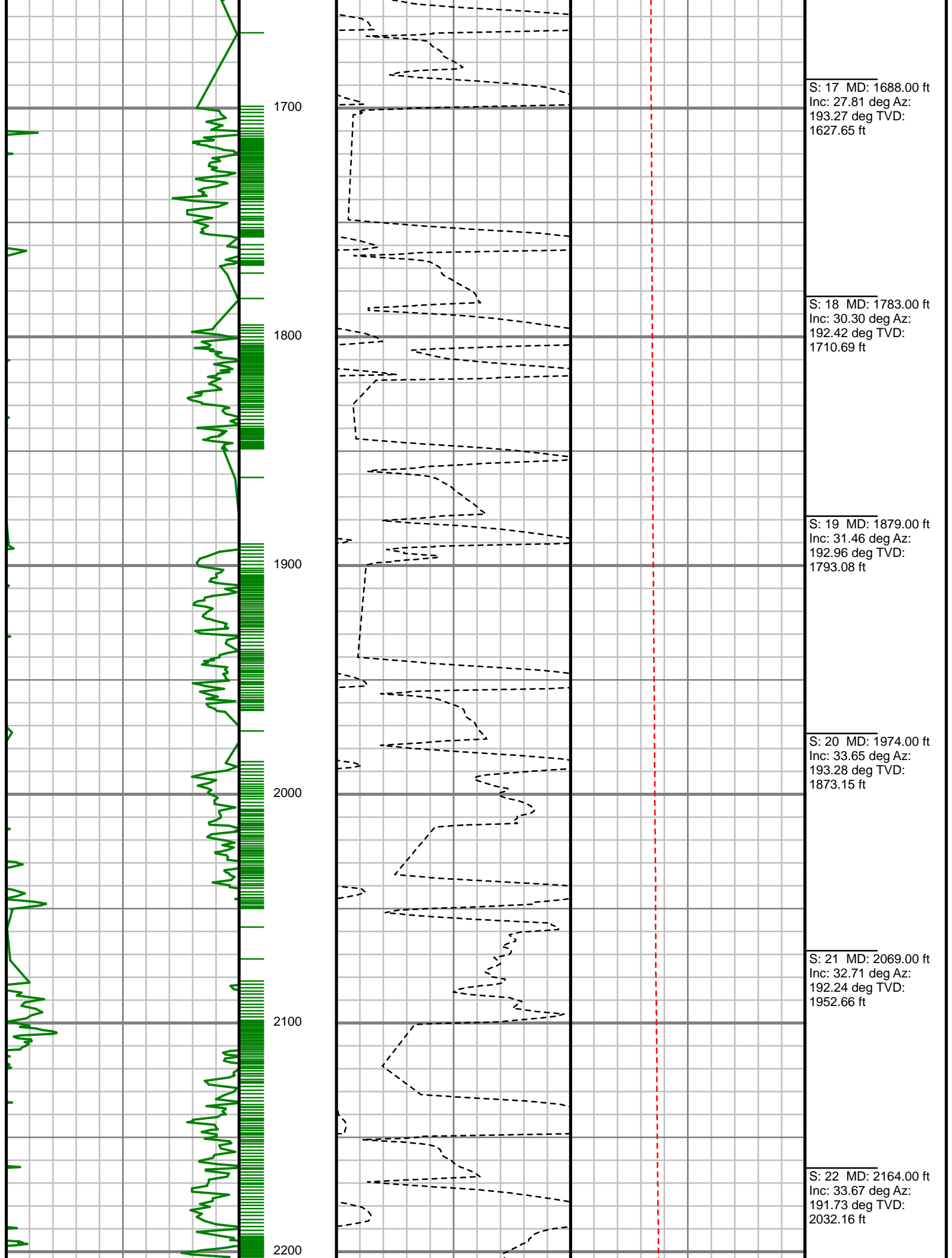


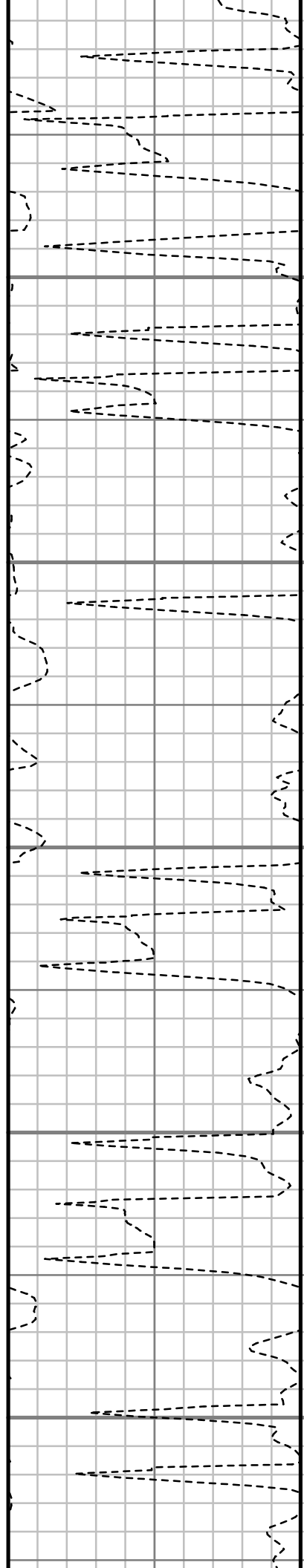
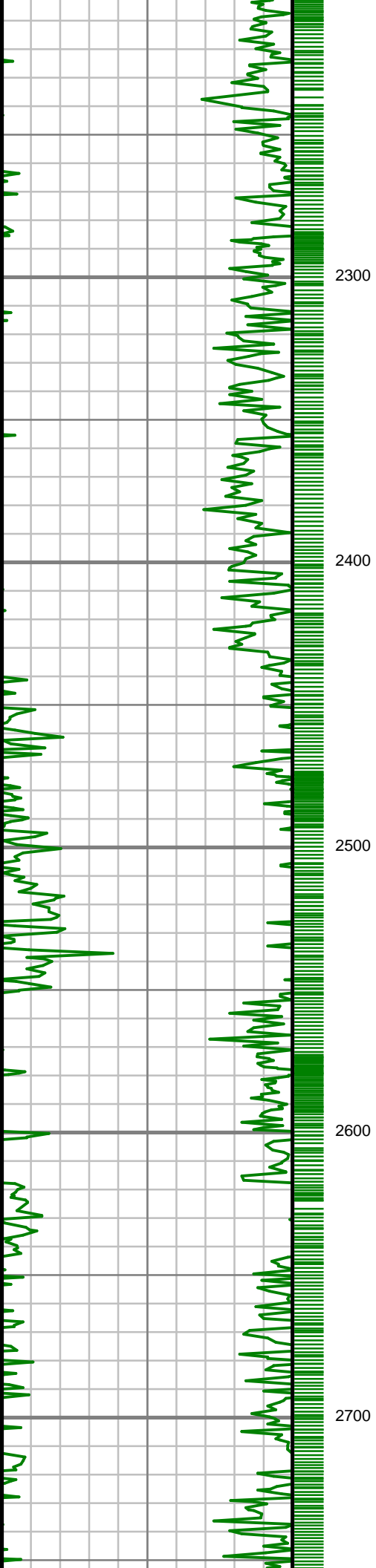


Remarks
EXTRACTION OIL AND GAS PRODUCTION AFE# 14-813
SCIENTIFIC DRILLING INTERNATIONAL JOB# 321026
ALL REFERENCES IN THE DEPTH TRACK ARE AT BIT DEPTH.
ALL DATA IS MEMORY DATA UNLESS STATED OTHERWISE.
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO GAMMA RAY CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO 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 = 128-413 / CONT = 826 / MWD EYE = 0111 / GAMMA RAY = 1062
BIT TO SENSOR OFFSETS: SURVEY = 58.03 / GAMMA RAY = 49.34
RUN #2 : MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 128-154 / CONT = 412 / MWD EYE = 0009 / GAMMA RAY = 1375
BIT TO SENSOR OFFSETS: SURVEY = 58.01 / GAMMA RAY = 49.32
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.







S: 23 MD: 2259.00 ft  
Inc: 34.95 deg Az:  
191.77 deg TVD:  
2110.63 ft

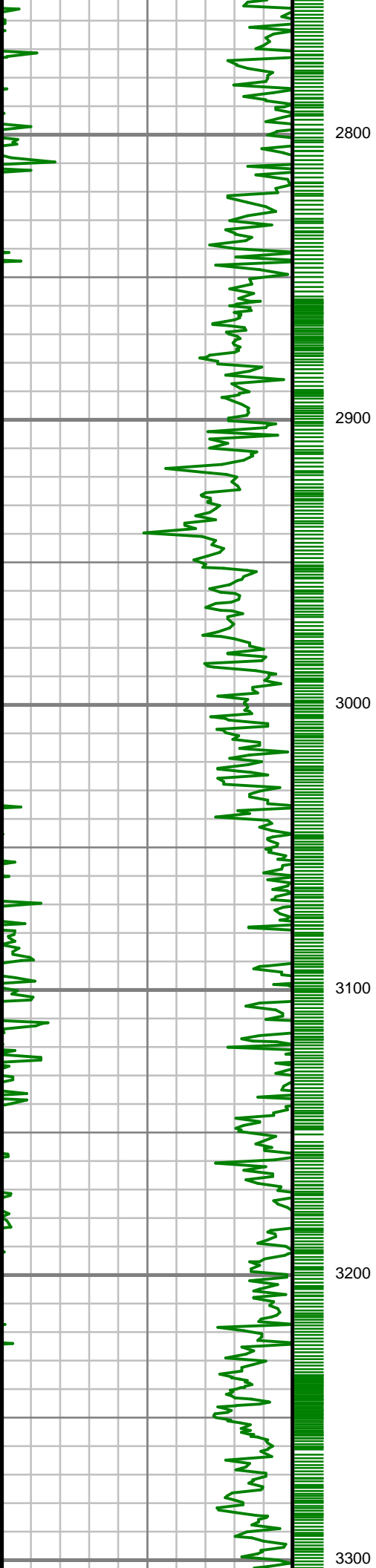
S: 24 MD: 2354.00 ft  
Inc: 34.53 deg Az:  
195.69 deg TVD:  
2188.71 ft

S: 25 MD: 2448.00 ft  
Inc: 32.62 deg Az:  
194.55 deg TVD:  
2267.03 ft

S: 26 MD: 2543.00 ft  
Inc: 32.73 deg Az:  
194.71 deg TVD:  
2346.99 ft

S: 27 MD: 2637.00 ft  
Inc: 33.75 deg Az:  
193.66 deg TVD:  
2425.61 ft

S: 28 MD: 2732.00 ft  
Inc: 33.65 deg Az:  
194.45 deg TVD:  
2501.81 ft



2800

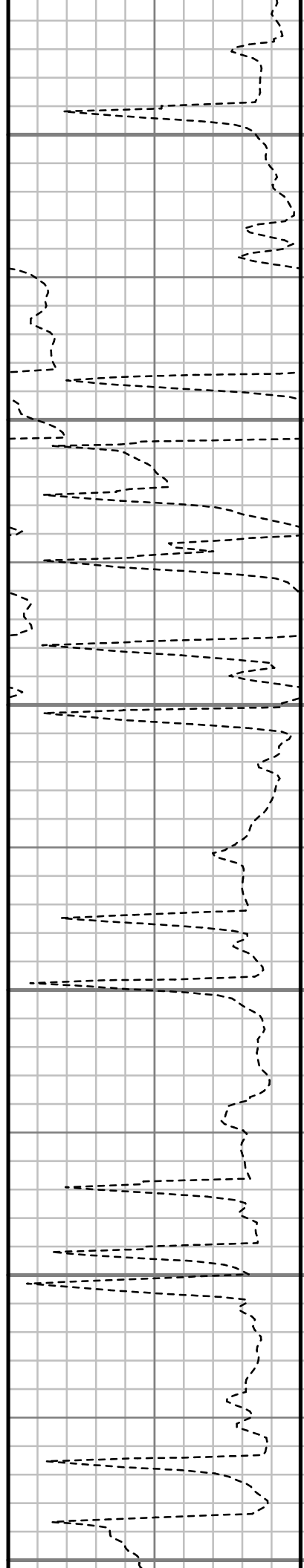
2900

3000

3100

3200

3300



S: 29 MD: 2826.00 ft  
Inc: 32.40 deg Az:  
195.77 deg TVD:  
2583.45 ft

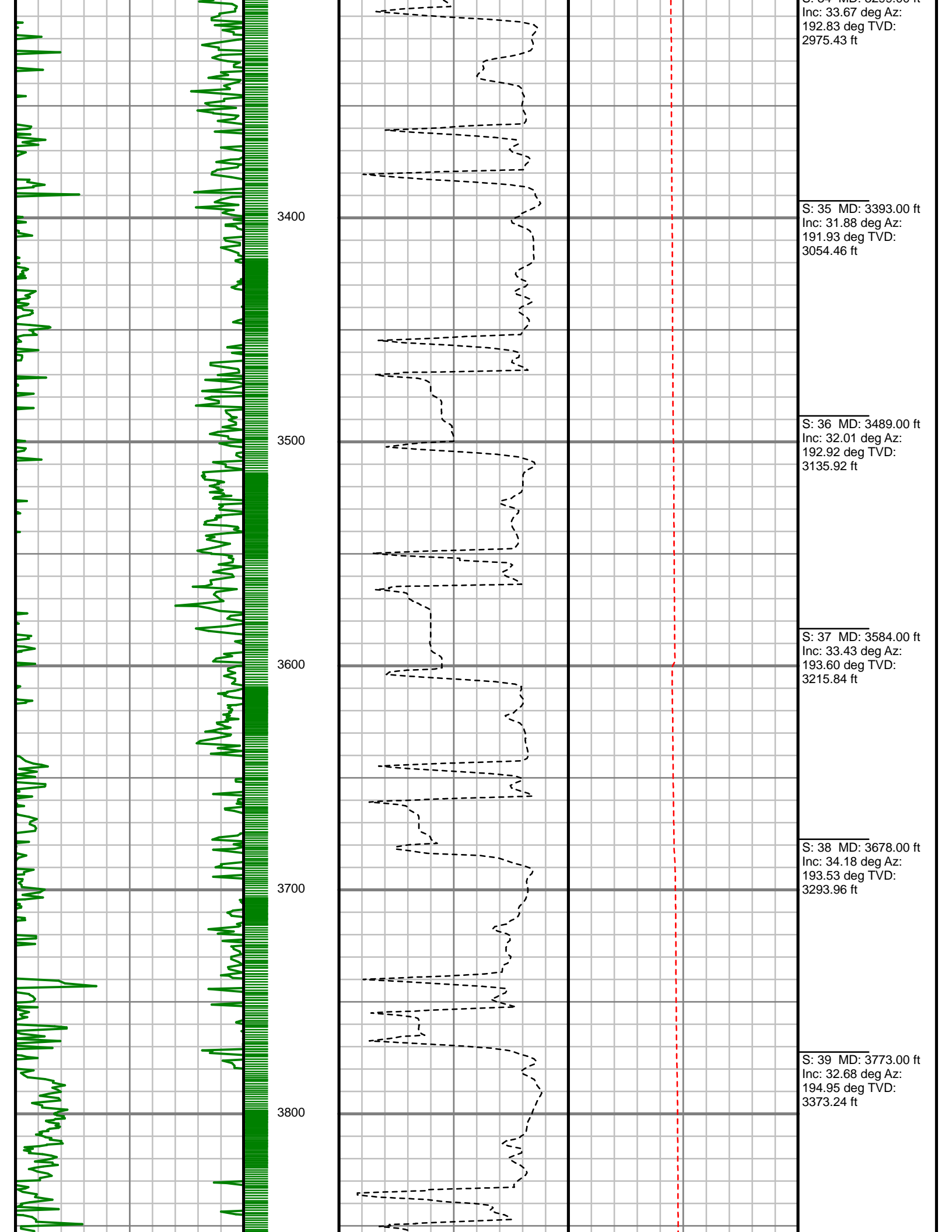
S: 30 MD: 2921.00 ft  
Inc: 34.45 deg Az:  
194.44 deg TVD:  
2662.74 ft

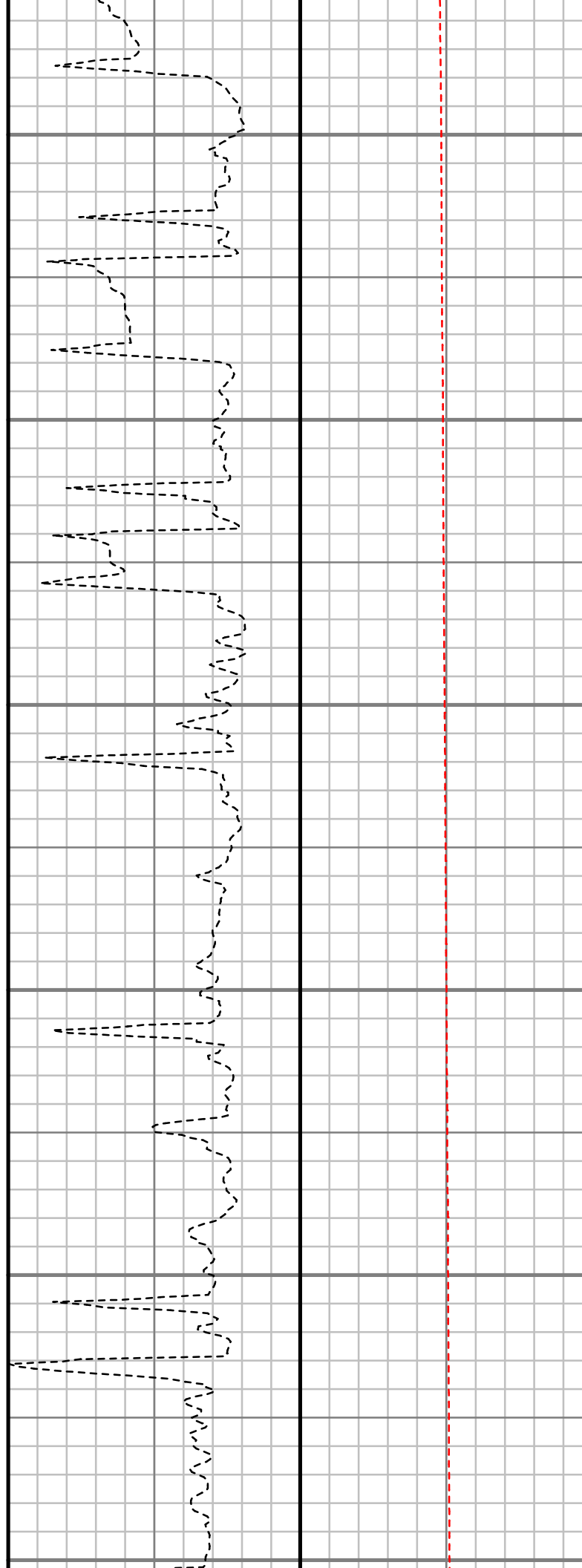
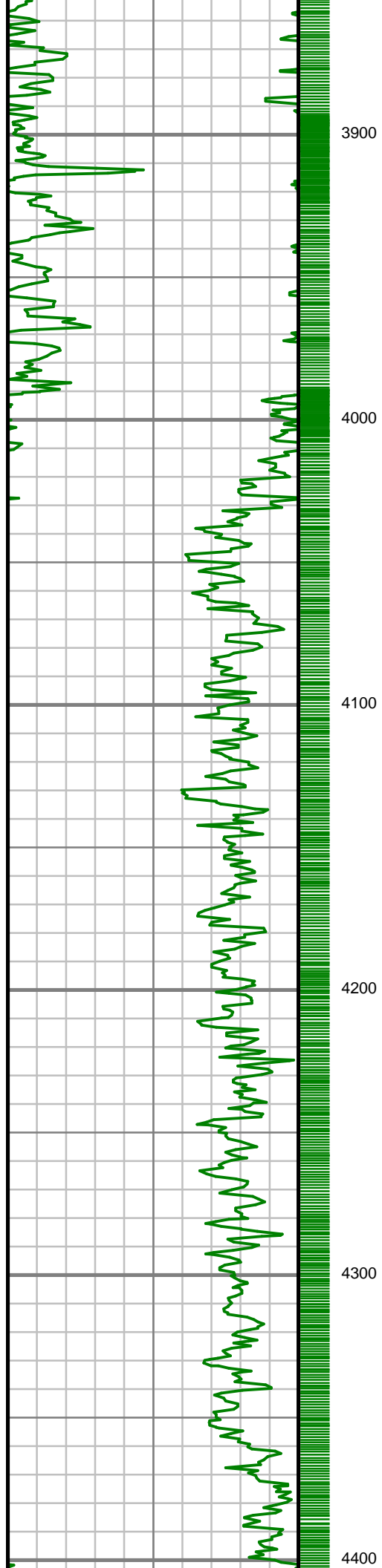
S: 31 MD: 3016.00 ft  
Inc: 35.33 deg Az:  
194.28 deg TVD:  
2740.66 ft

S: 32 MD: 3110.00 ft  
Inc: 34.45 deg Az:  
194.74 deg TVD:  
2817.76 ft

S: 33 MD: 3205.00 ft  
Inc: 32.87 deg Az:  
196.91 deg TVD:  
2896.83 ft

S: 34 MD: 3299.00 ft





S: 40 MD: 3868.00 ft  
Inc: 31.68 deg Az:  
193.55 deg TVD:  
3453.65 ft

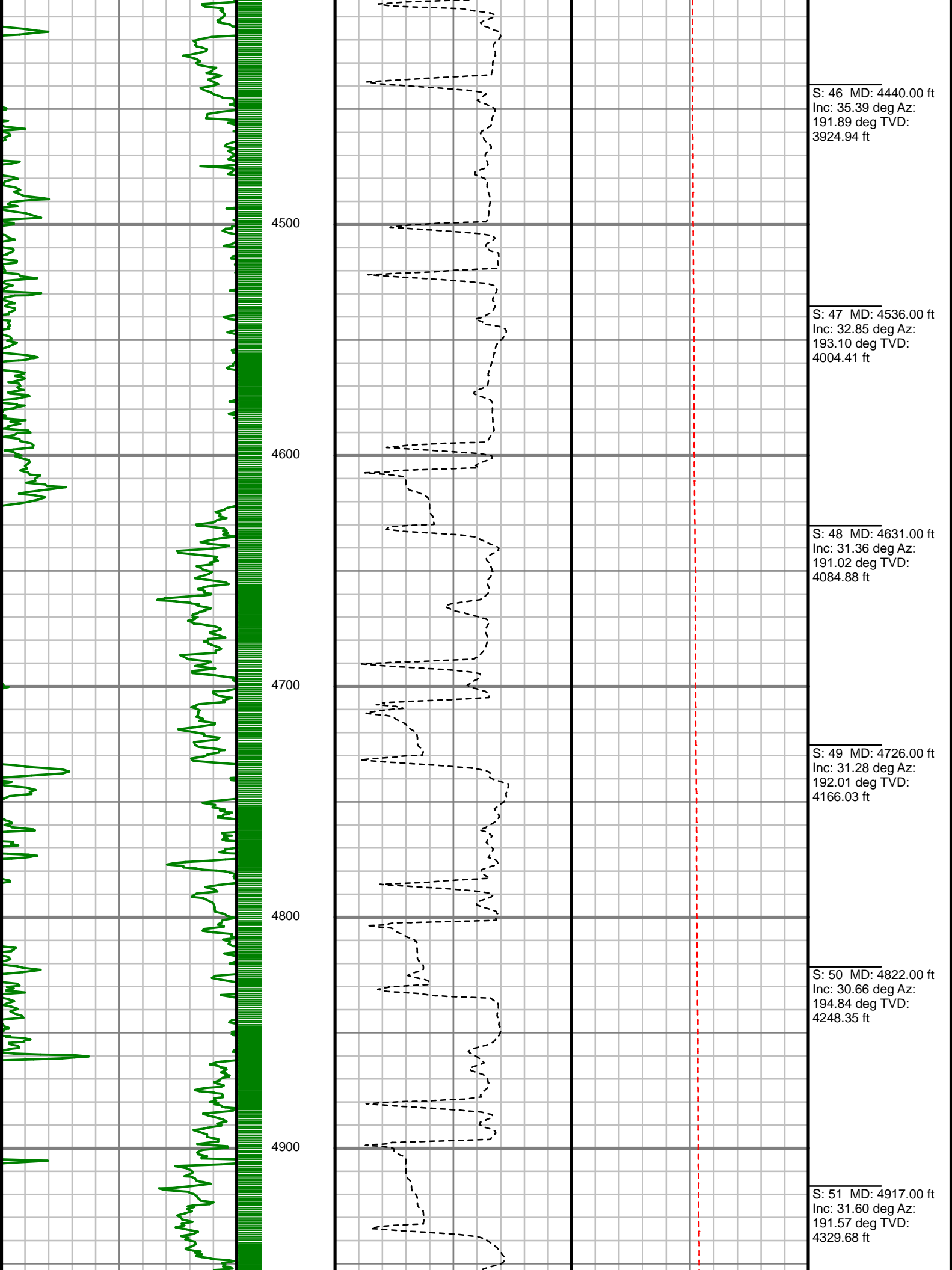
S: 41 MD: 3964.00 ft  
Inc: 31.72 deg Az:  
194.07 deg TVD:  
3535.33 ft

S: 42 MD: 4059.00 ft  
Inc: 34.52 deg Az:  
193.54 deg TVD:  
3614.89 ft

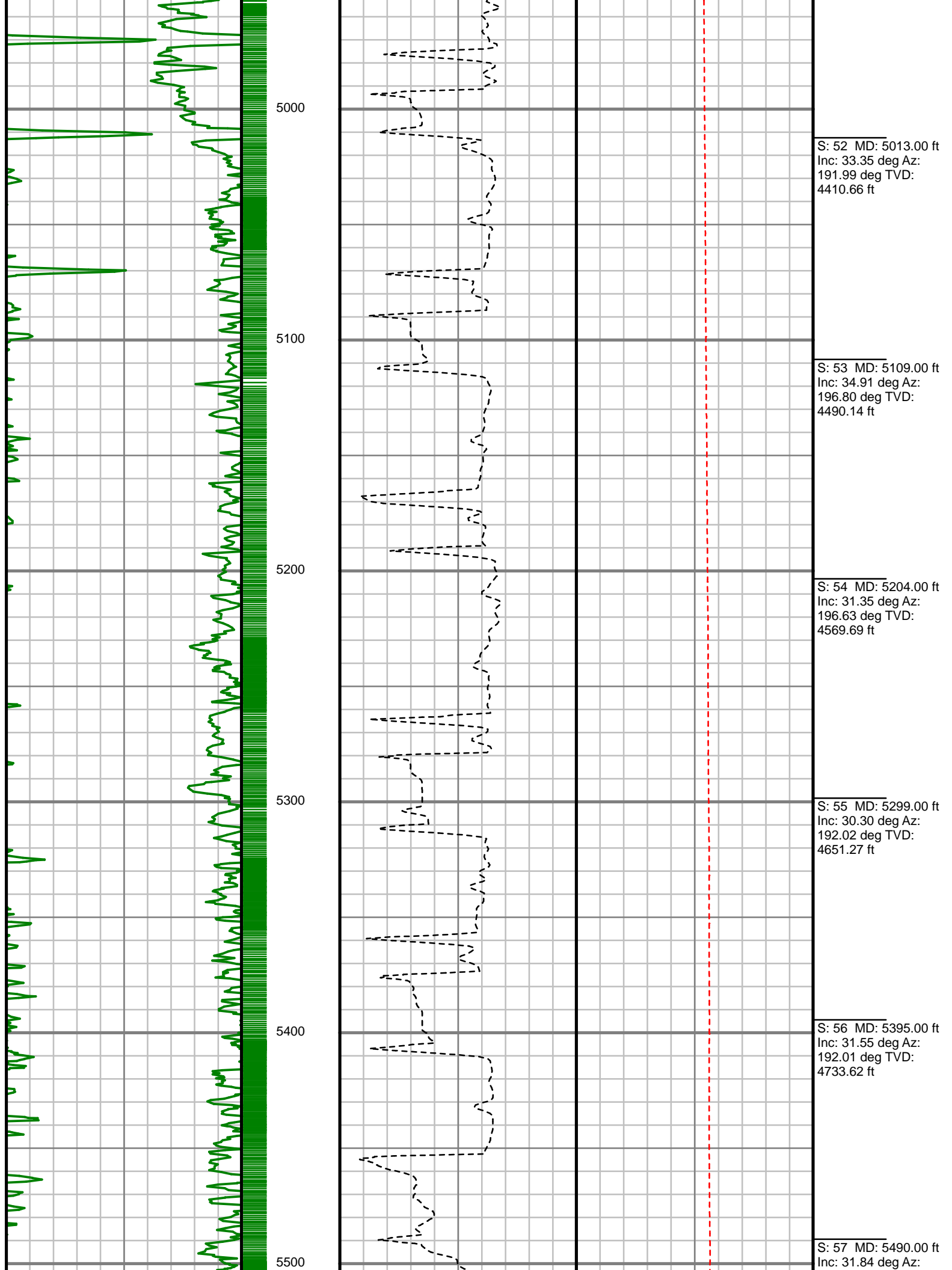
S: 43 MD: 4155.00 ft  
Inc: 35.52 deg Az:  
195.82 deg TVD:  
3693.51 ft

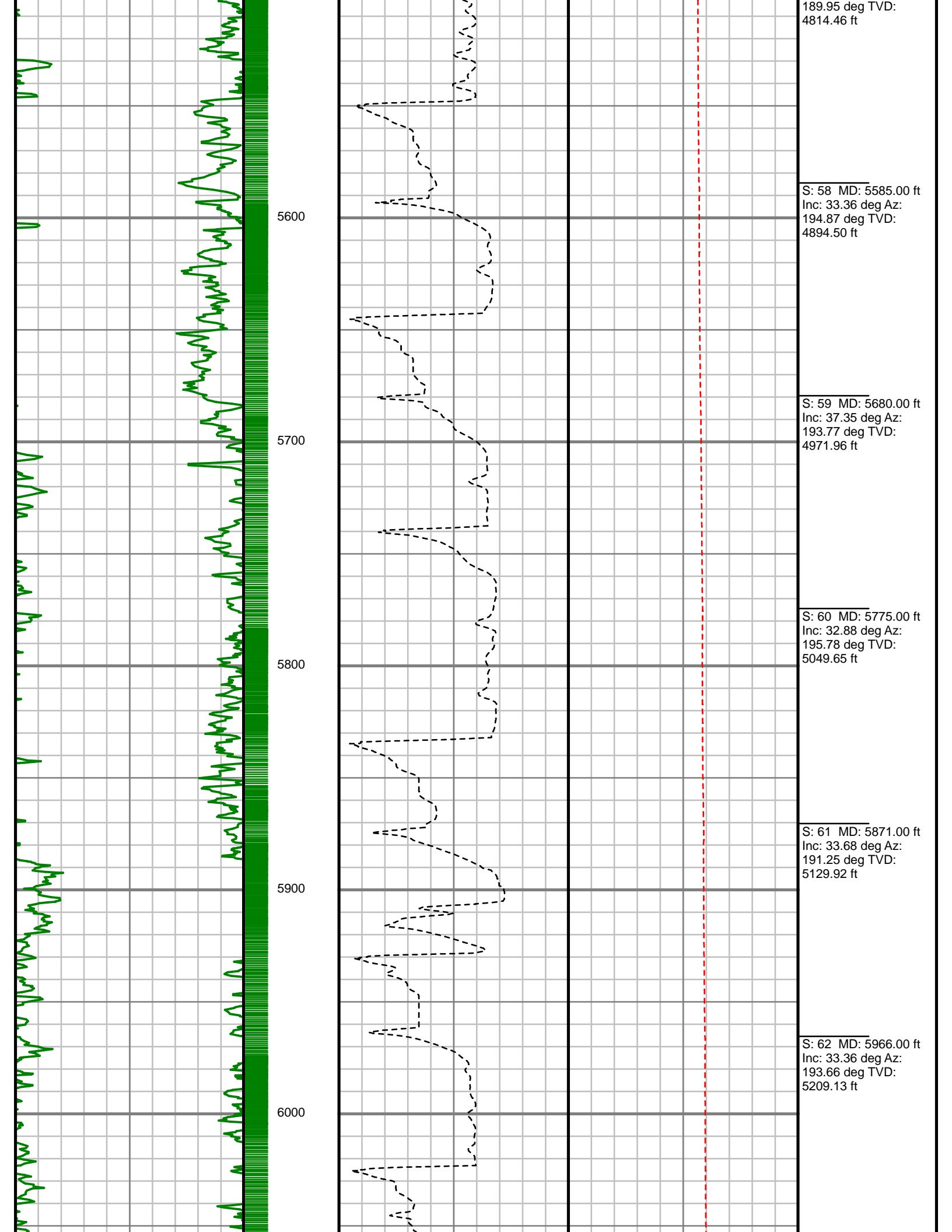
S: 44 MD: 4250.00 ft  
Inc: 35.56 deg Az:  
194.68 deg TVD:  
3770.81 ft

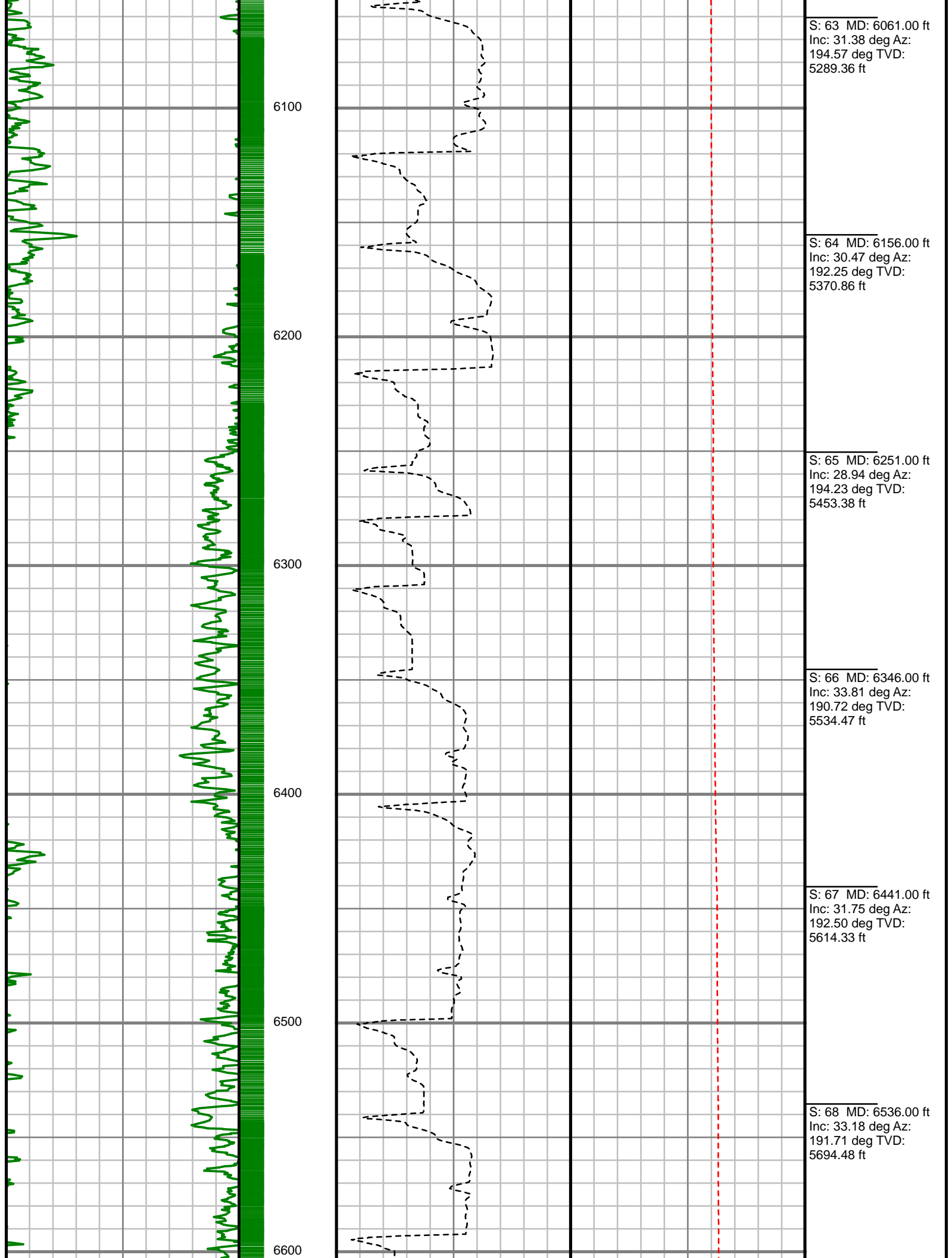
S: 45 MD: 4345.00 ft  
Inc: 36.10 deg Az:  
194.53 deg TVD:  
3847.83 ft

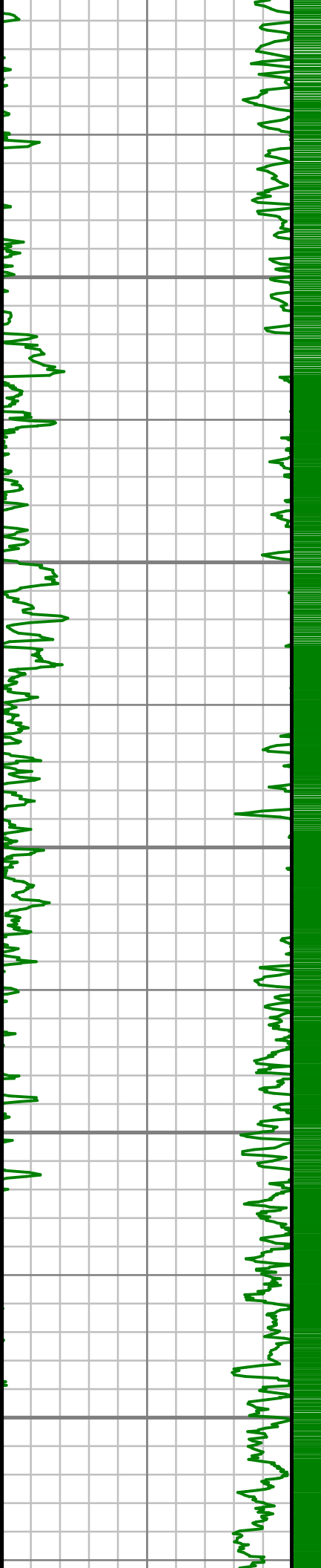












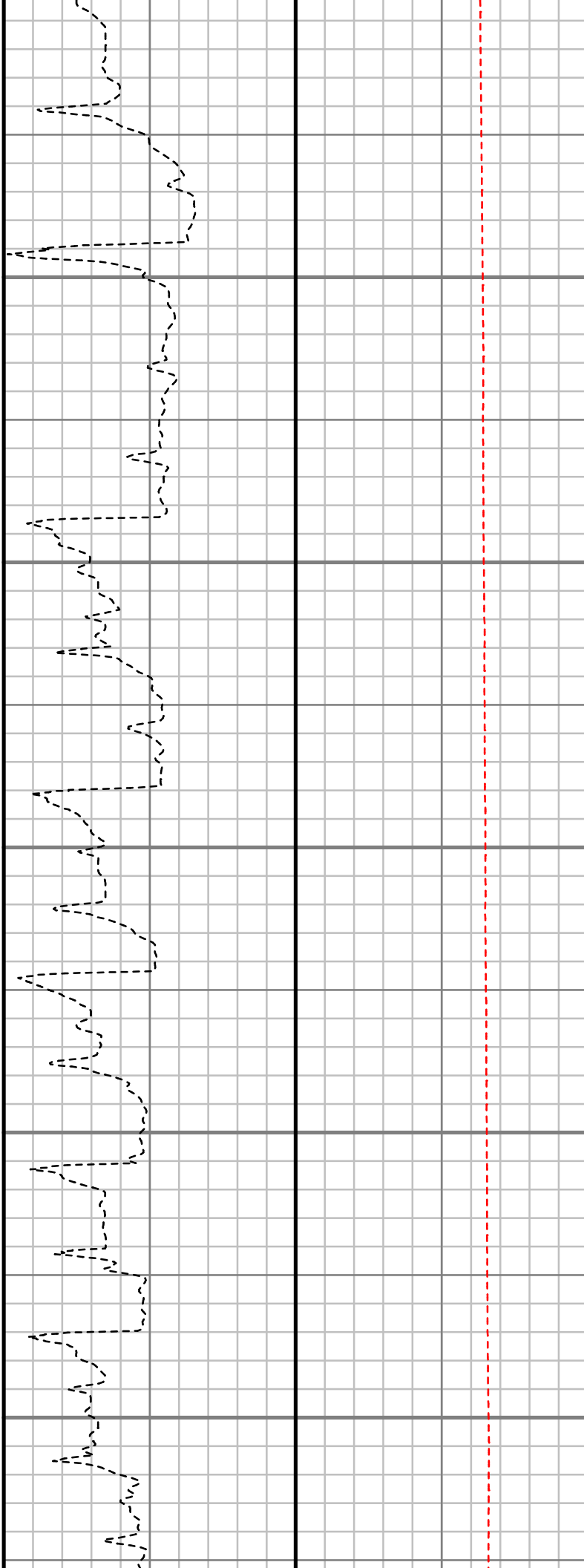
6700

6800

6900

7000

7100



S: 69 MD: 6631.00 ft  
Inc: 34.83 deg Az:  
197.15 deg TVD:  
5773.25 ft

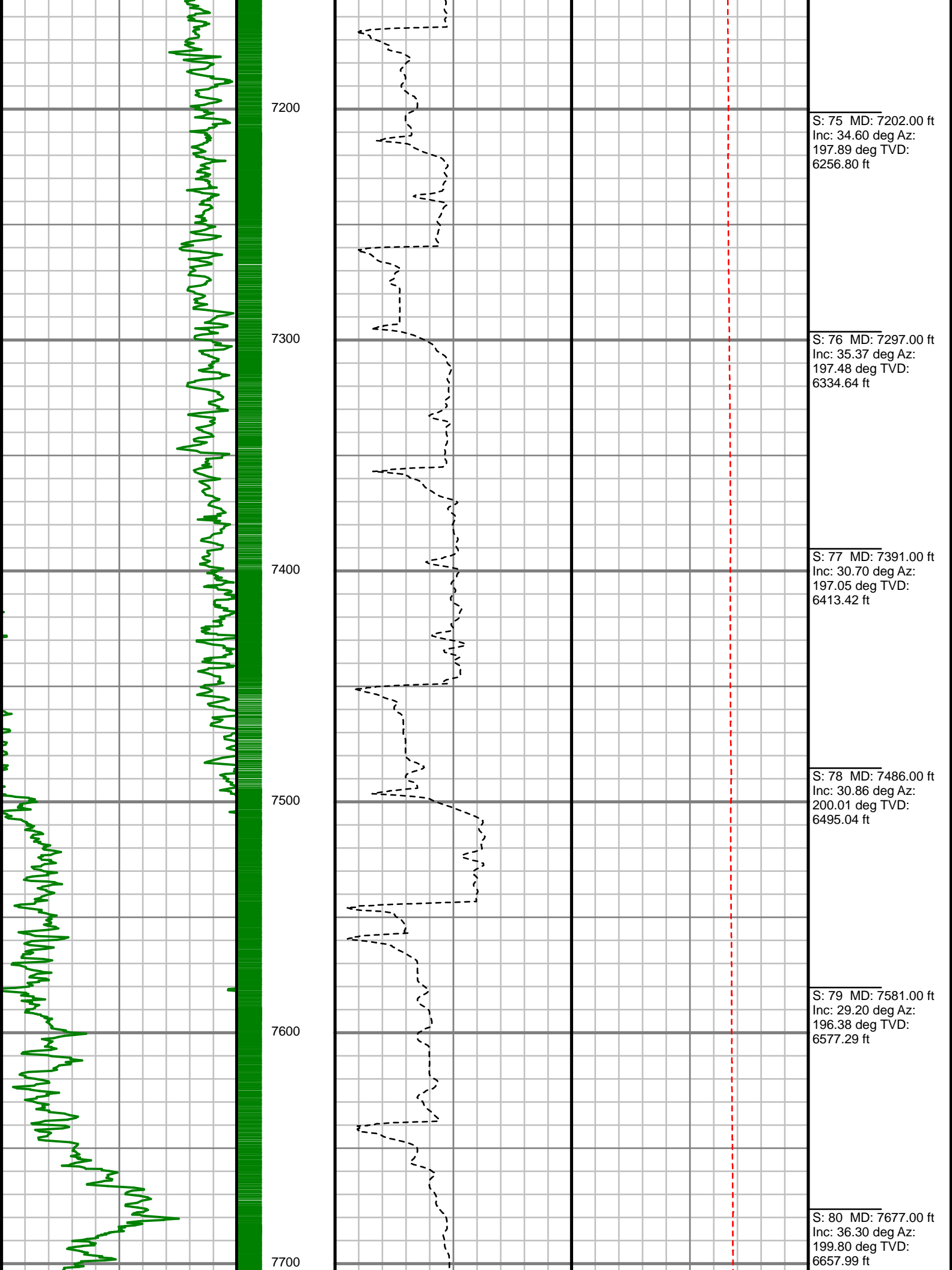
S: 70 MD: 6726.00 ft  
Inc: 30.12 deg Az:  
193.18 deg TVD:  
5853.39 ft

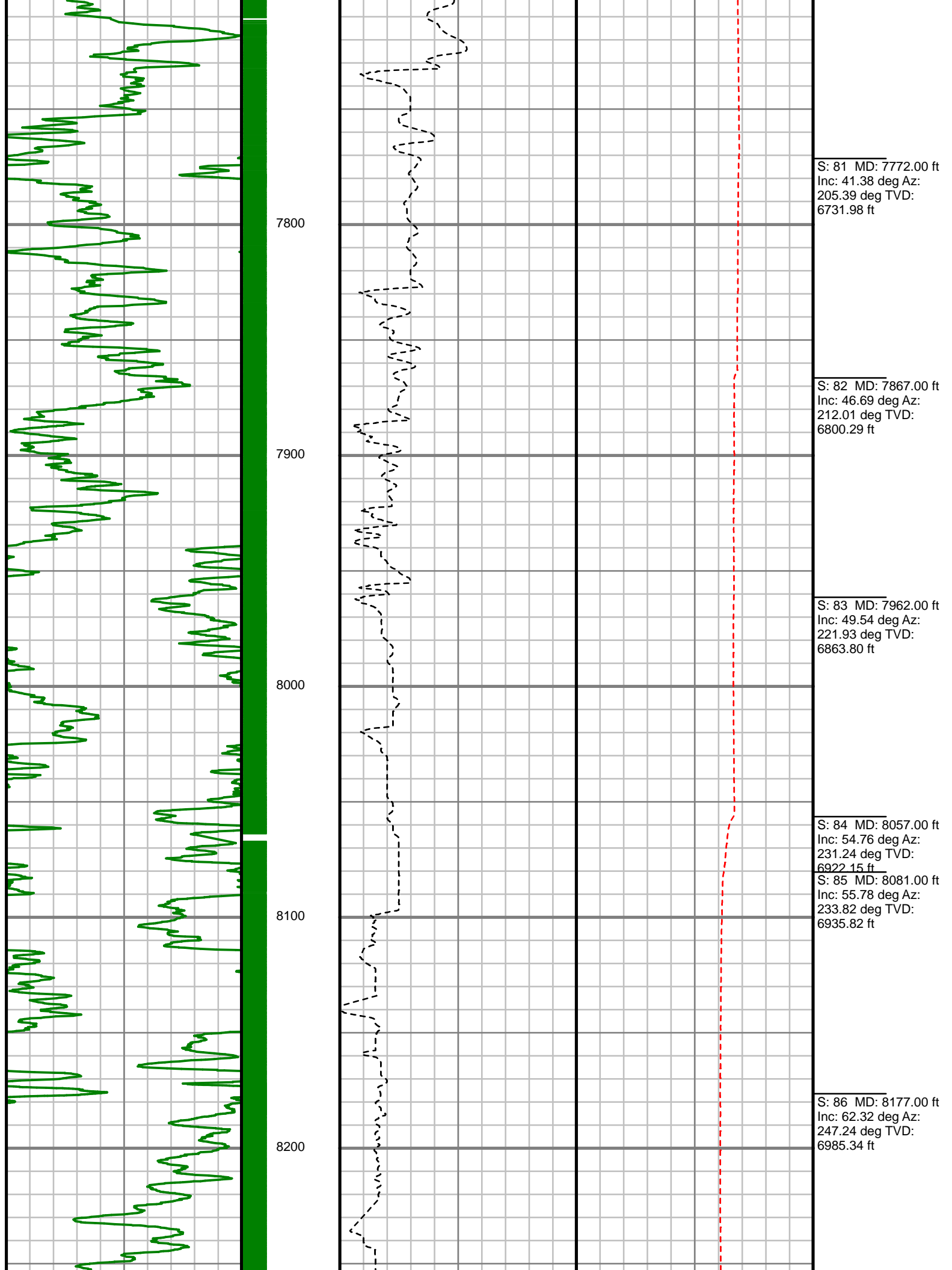
S: 71 MD: 6822.00 ft  
Inc: 29.84 deg Az:  
195.32 deg TVD:  
5936.55 ft

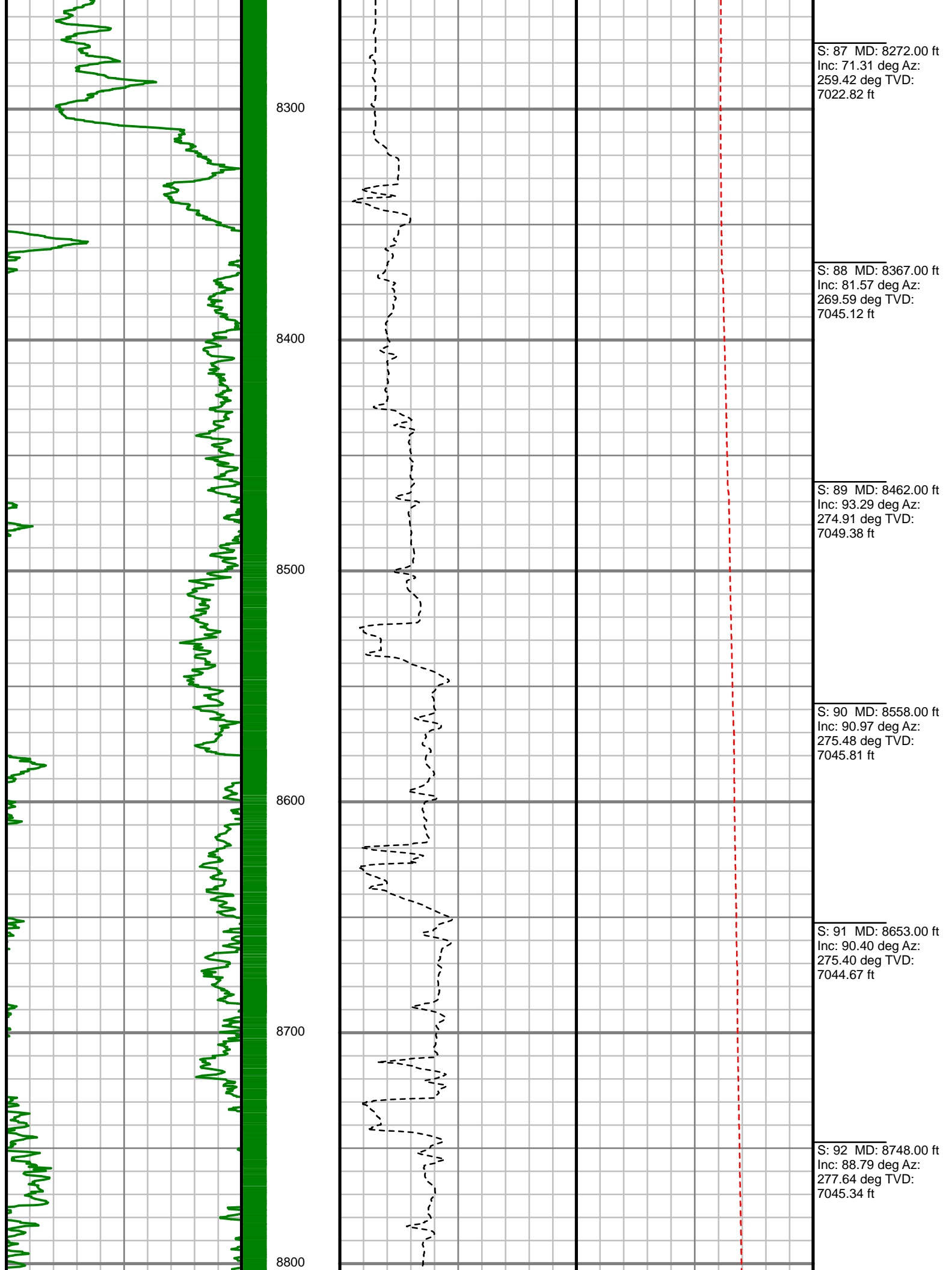
S: 72 MD: 6917.00 ft  
Inc: 31.57 deg Az:  
195.84 deg TVD:  
6018.22 ft

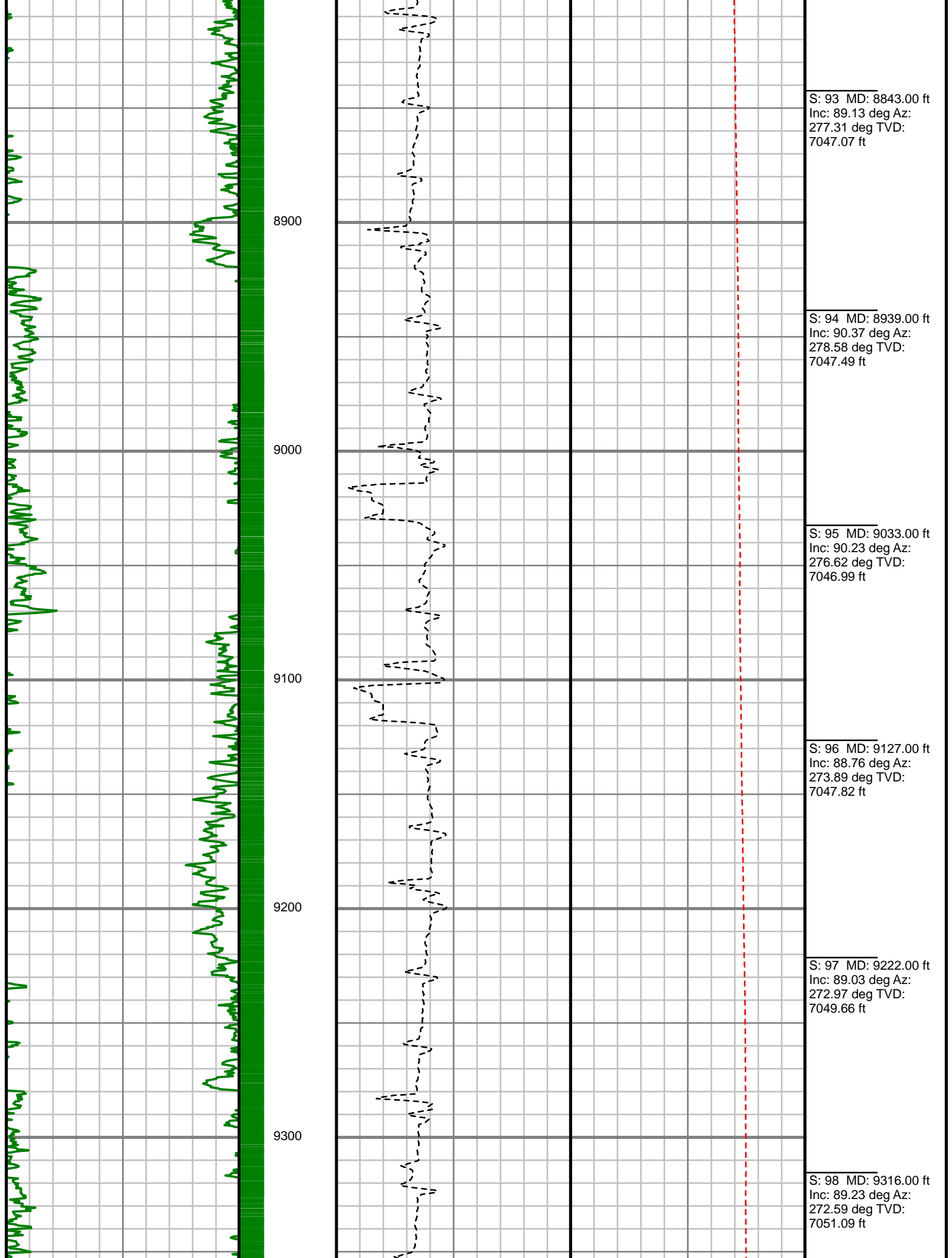
S: 73 MD: 7012.00 ft  
Inc: 32.82 deg Az:  
192.93 deg TVD:  
6098.62 ft

S: 74 MD: 7107.00 ft  
Inc: 33.57 deg Az:  
196.89 deg TVD:  
6178.13 ft

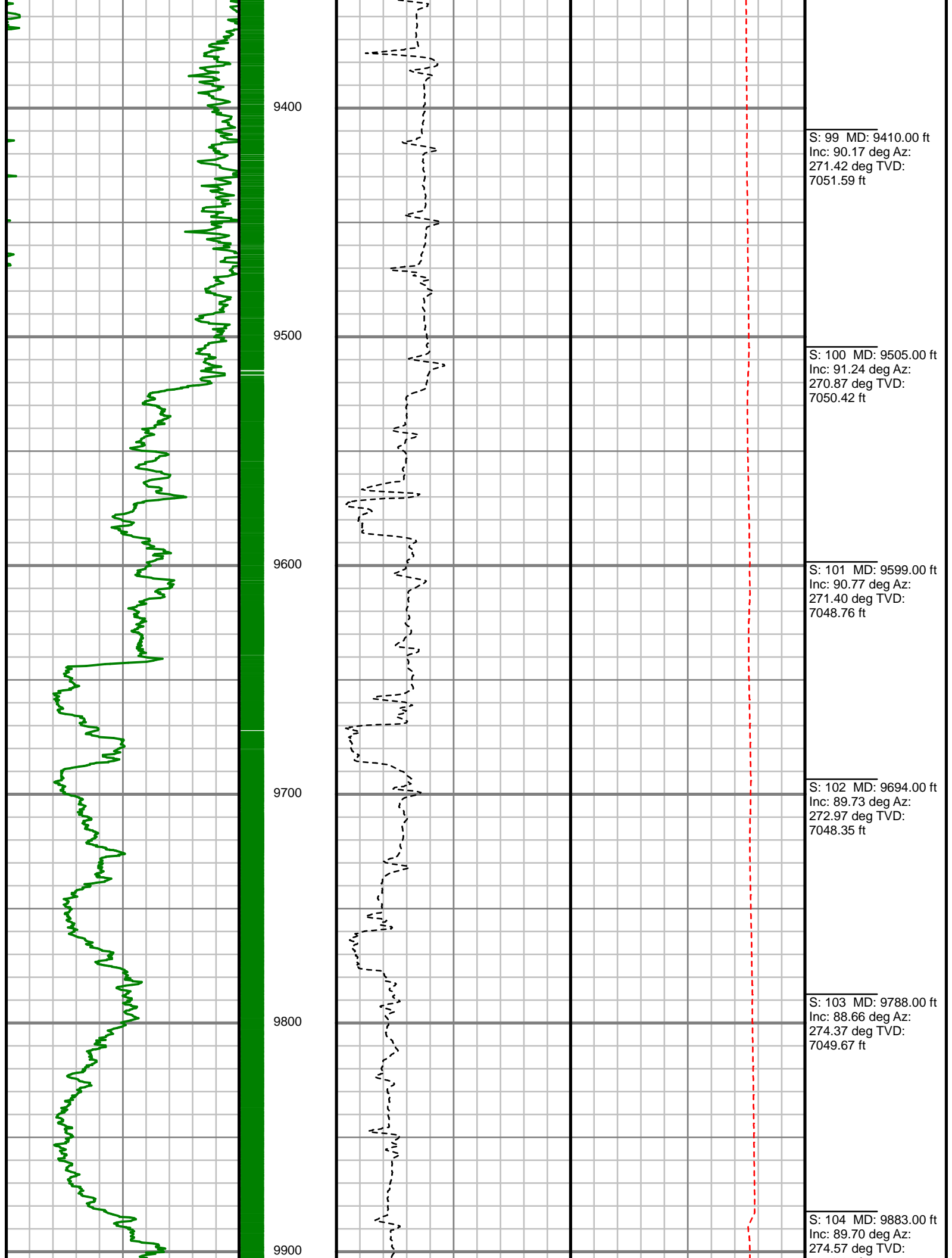


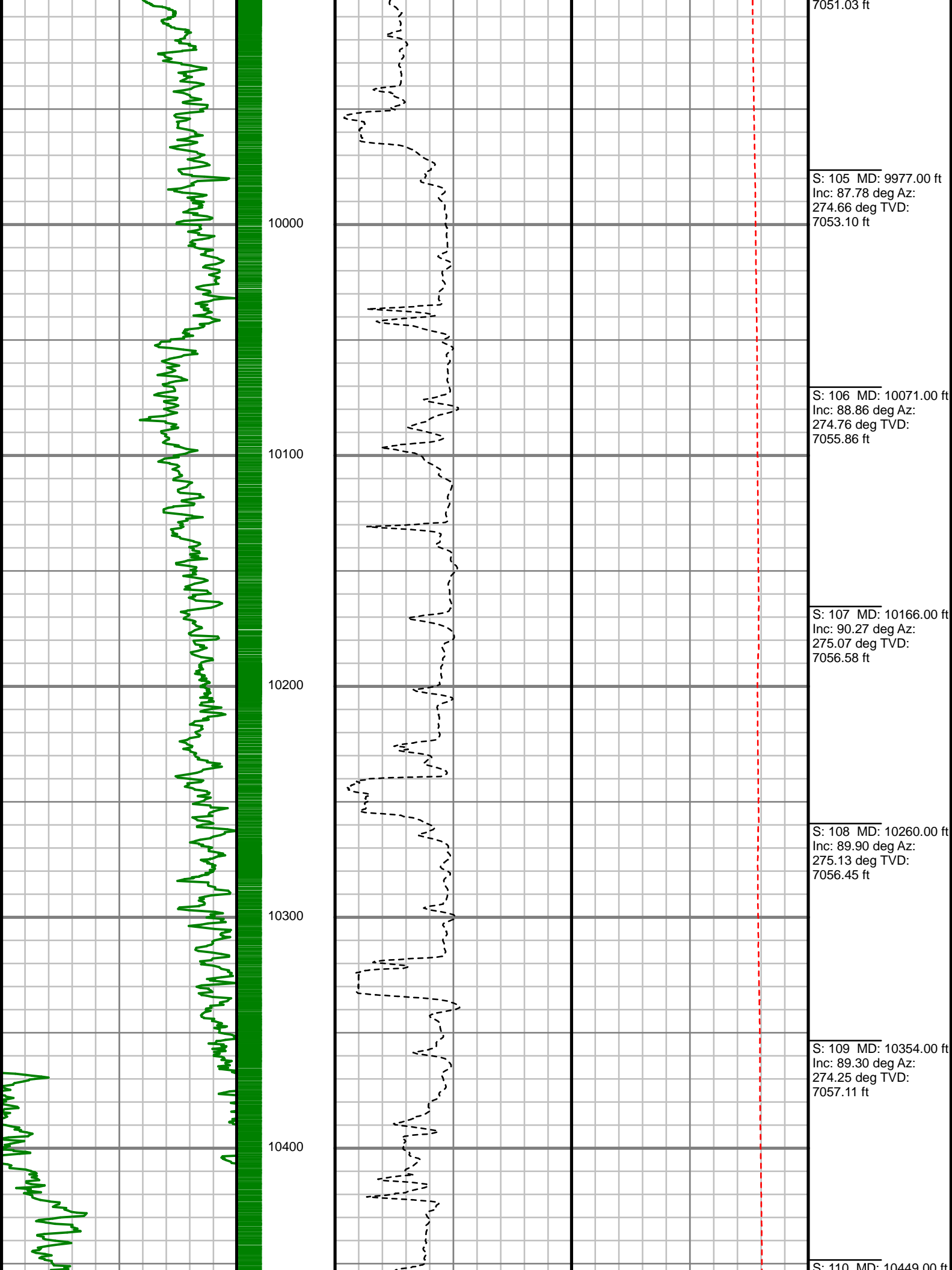


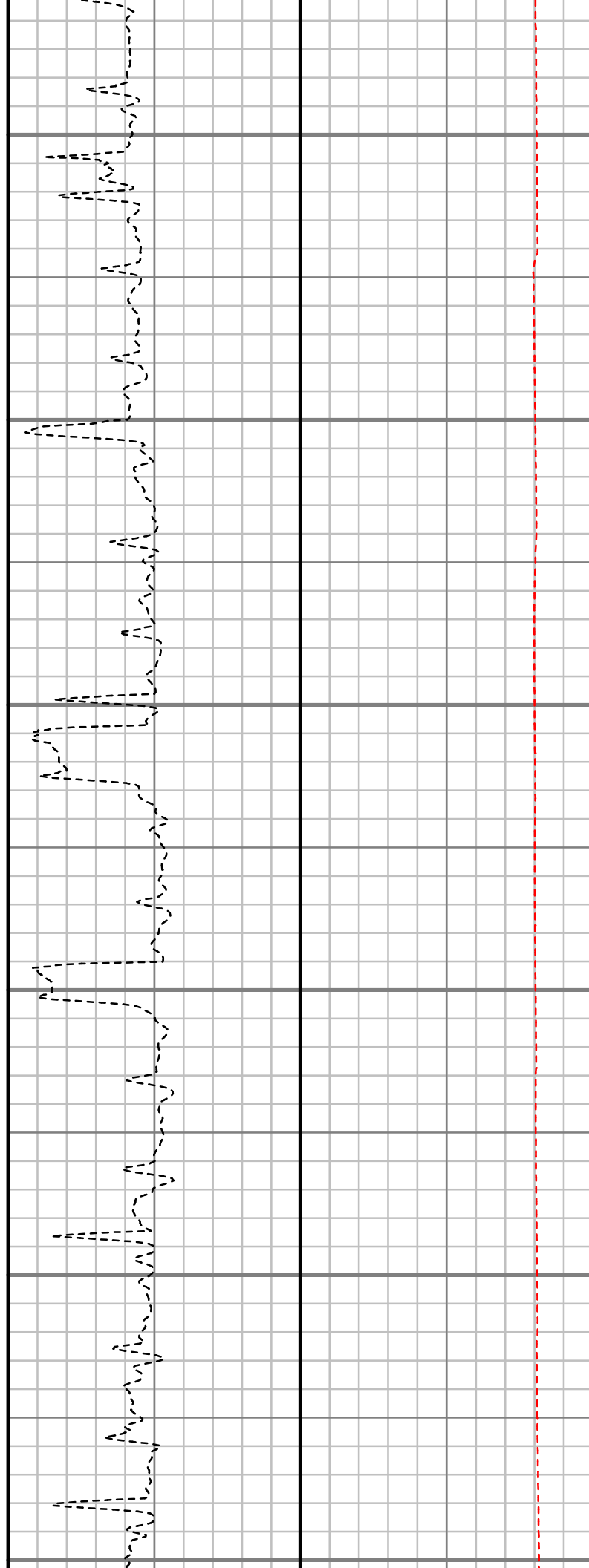
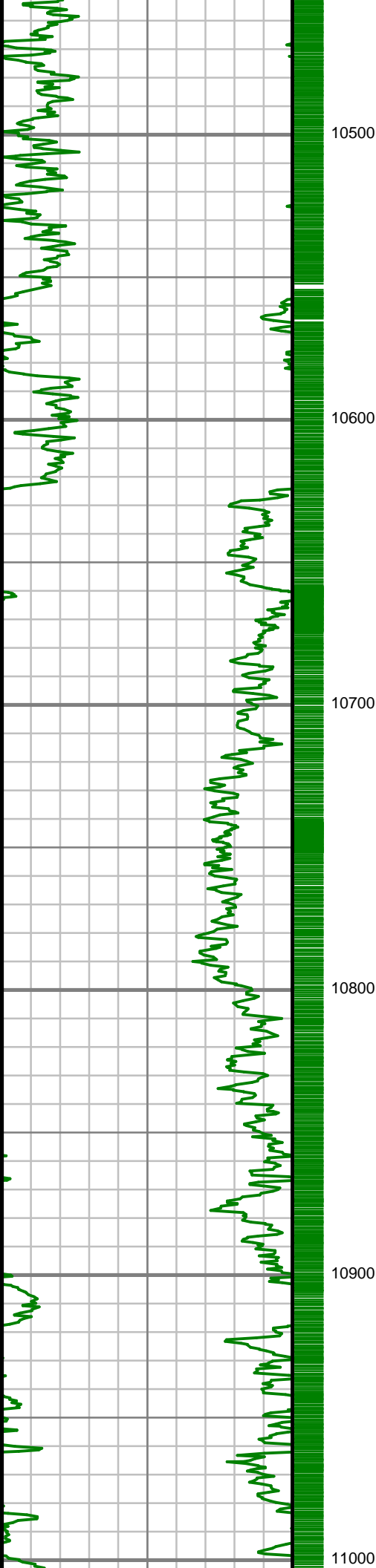




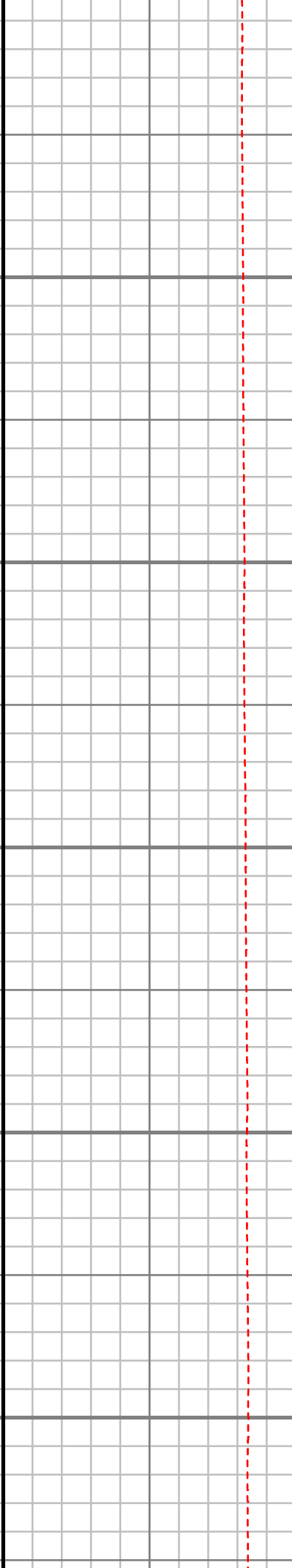
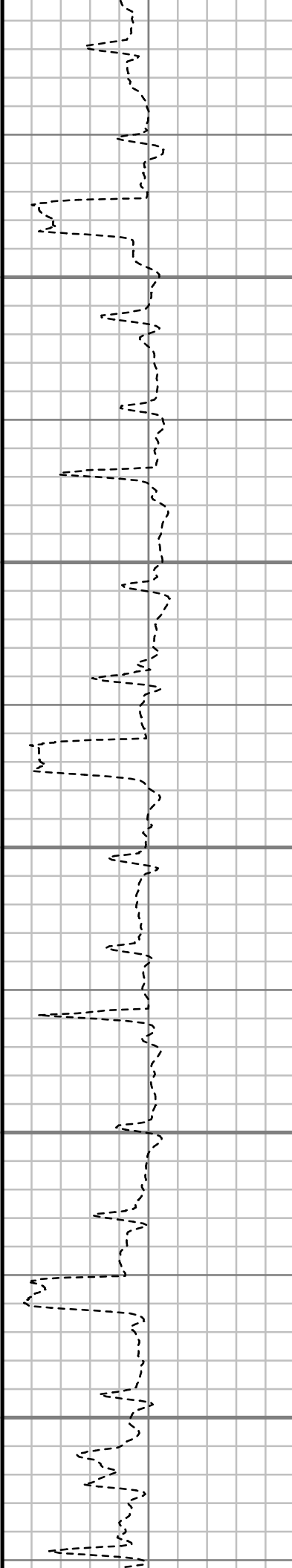
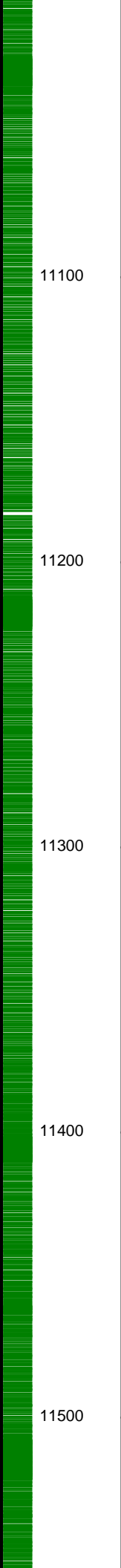
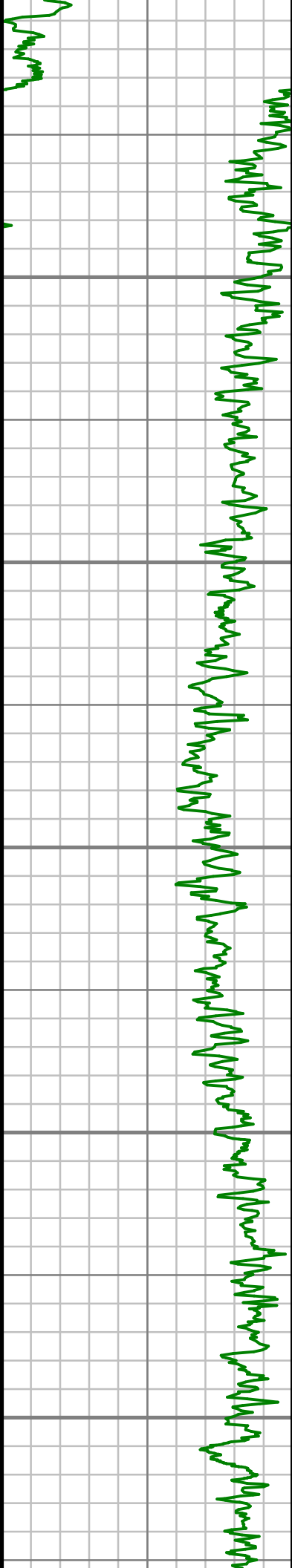








S: 110 MD: 10443.00 ft Inc: 90.00 deg Az: 274.72 deg TVD: 7057.69 ft
S: 111 MD: 10543.00 ft Inc: 90.70 deg Az: 274.90 deg TVD: 7057.11 ft
S: 112 MD: 10638.00 ft Inc: 91.80 deg Az: 275.50 deg TVD: 7055.04 ft
S: 113 MD: 10732.00 ft Inc: 91.24 deg Az: 273.63 deg TVD: 7052.54 ft
S: 114 MD: 10827.00 ft Inc: 88.46 deg Az: 273.13 deg TVD: 7052.79 ft
S: 115 MD: 10921.00 ft Inc: 89.76 deg Az: 273.81 deg TVD: 7054.24 ft



S: 116 MD: 11015.00 ft  
Inc: 91.01 deg Az:  
275.25 deg TVD:  
7053.61 ft

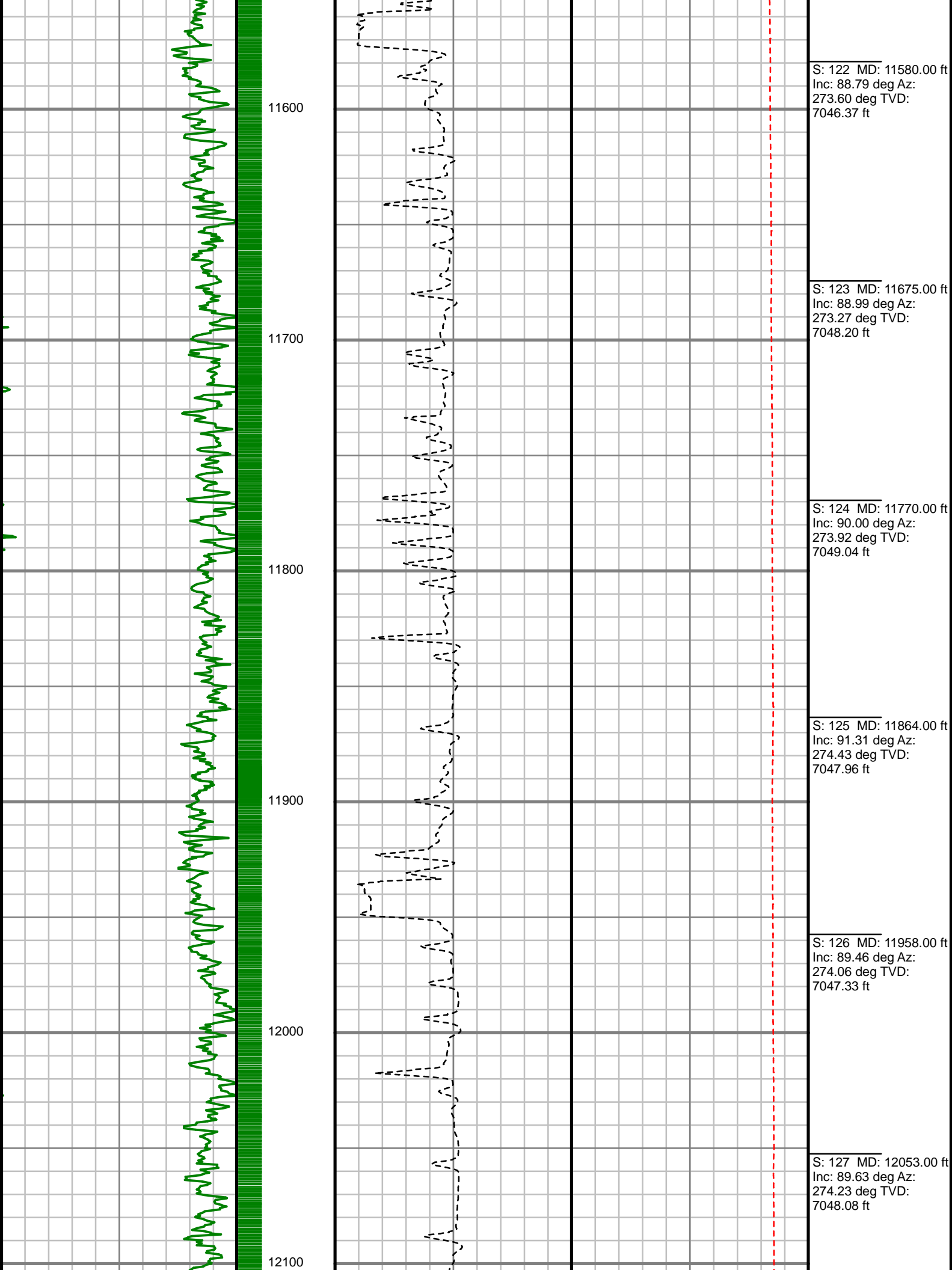
S: 117 MD: 11110.00 ft  
Inc: 90.54 deg Az:  
273.91 deg TVD:  
7052.33 ft

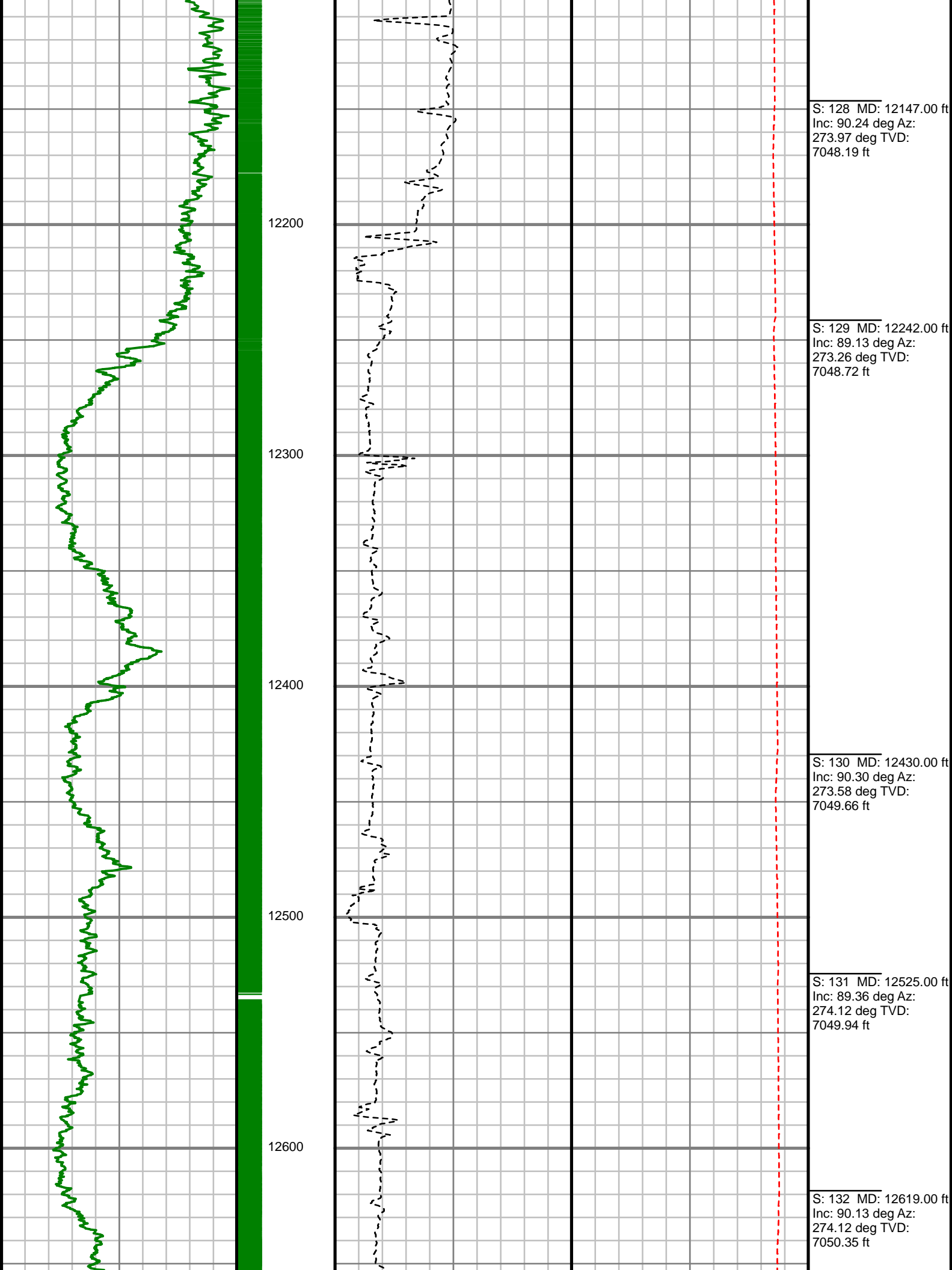
S: 118 MD: 11204.00 ft  
Inc: 91.11 deg Az:  
274.58 deg TVD:  
7050.98 ft

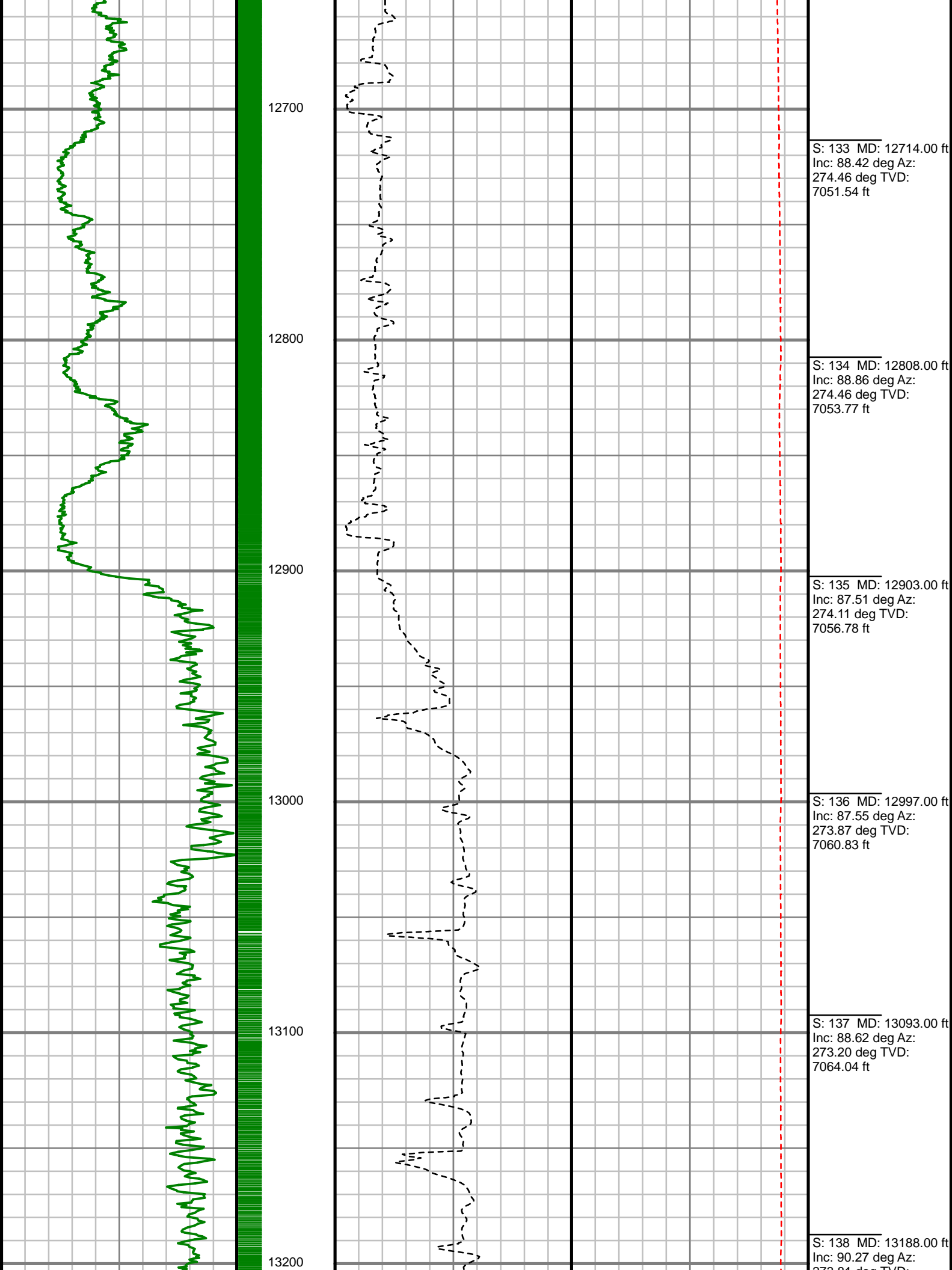
S: 119 MD: 11298.00 ft  
Inc: 90.27 deg Az:  
274.64 deg TVD:  
7049.85 ft

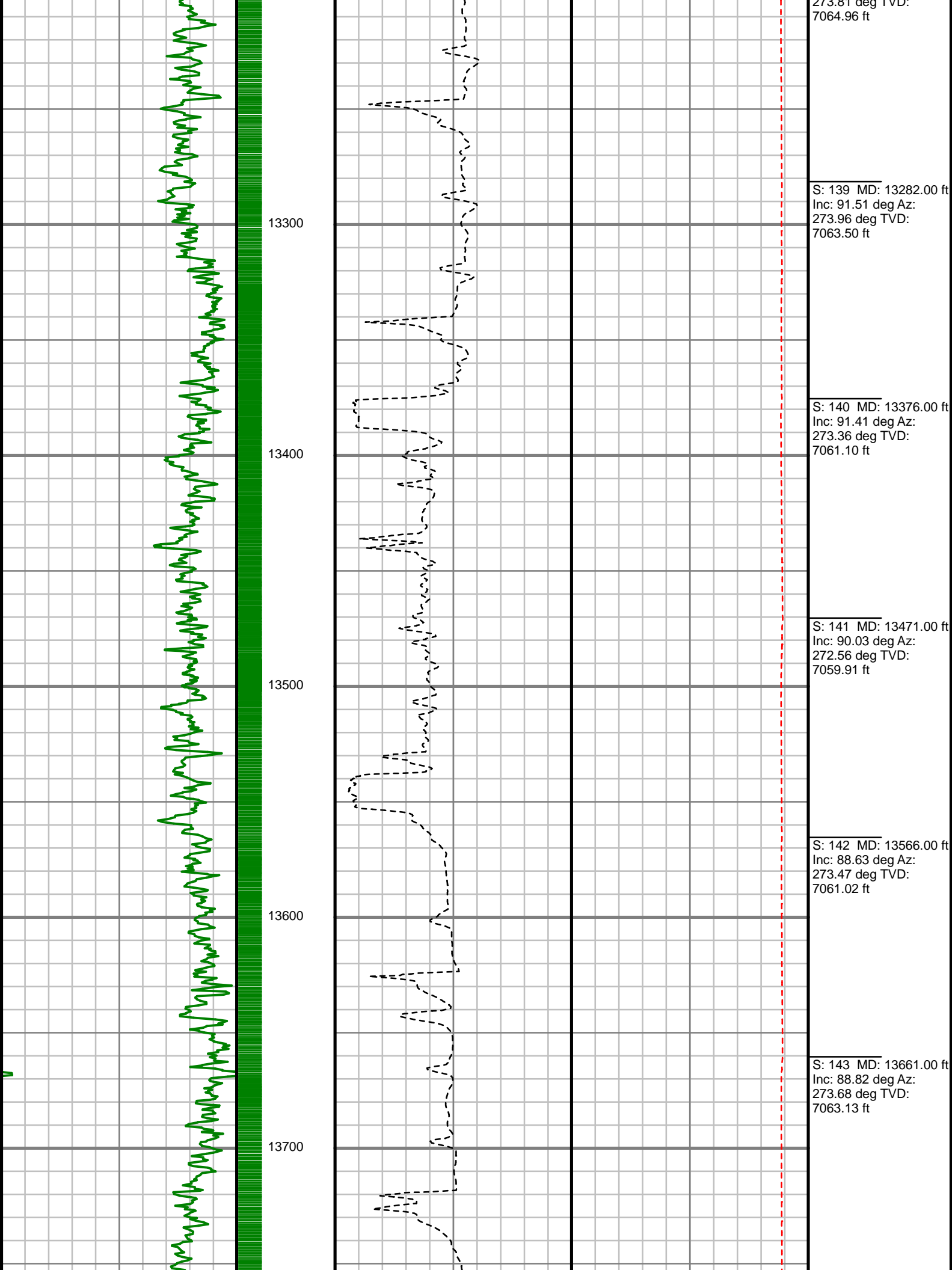
S: 120 MD: 11393.00 ft  
Inc: 91.48 deg Az:  
275.34 deg TVD:  
7048.40 ft

S: 121 MD: 11487.00 ft  
Inc: 91.11 deg Az:  
274.09 deg TVD:  
7046.28 ft

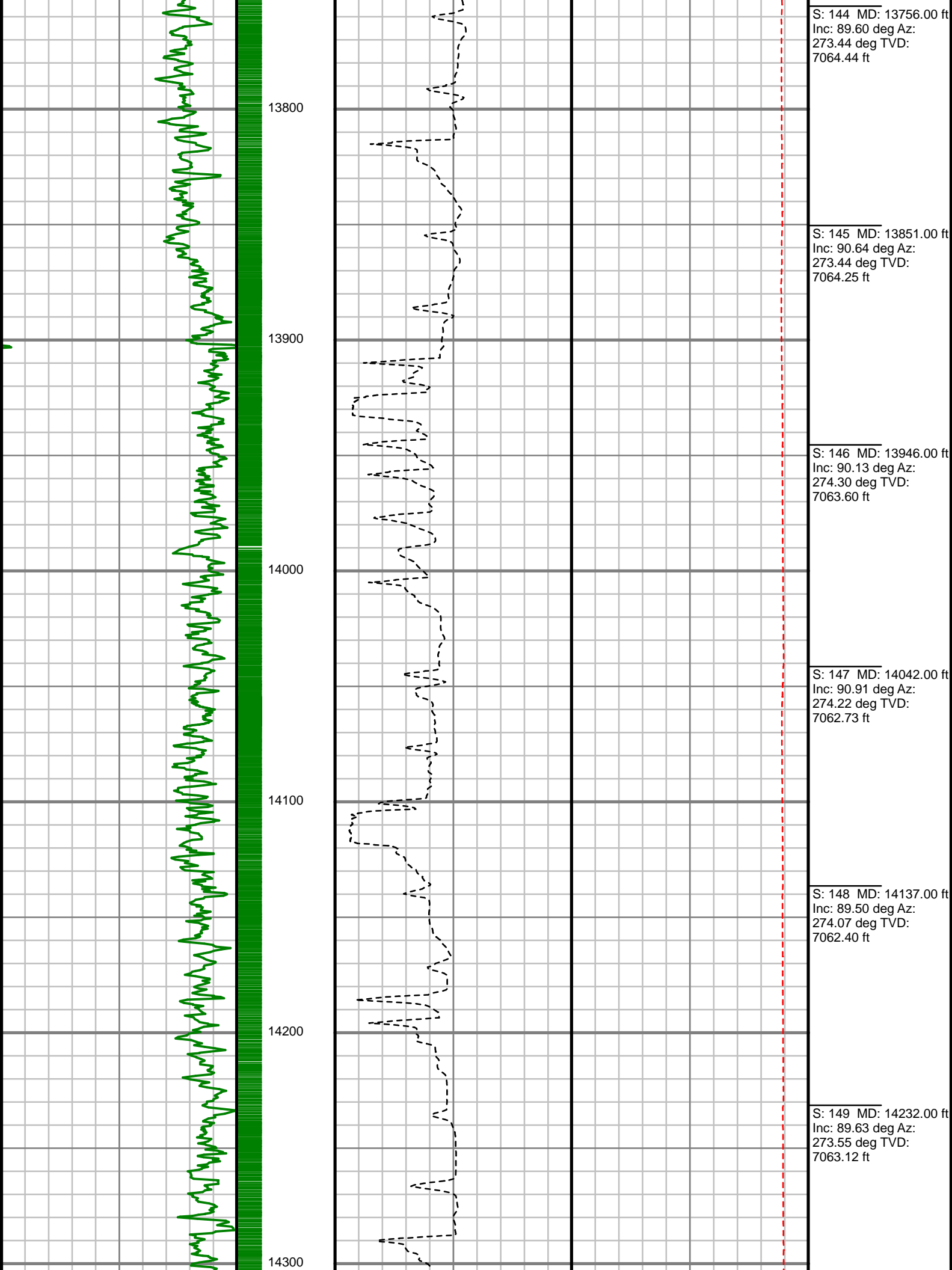


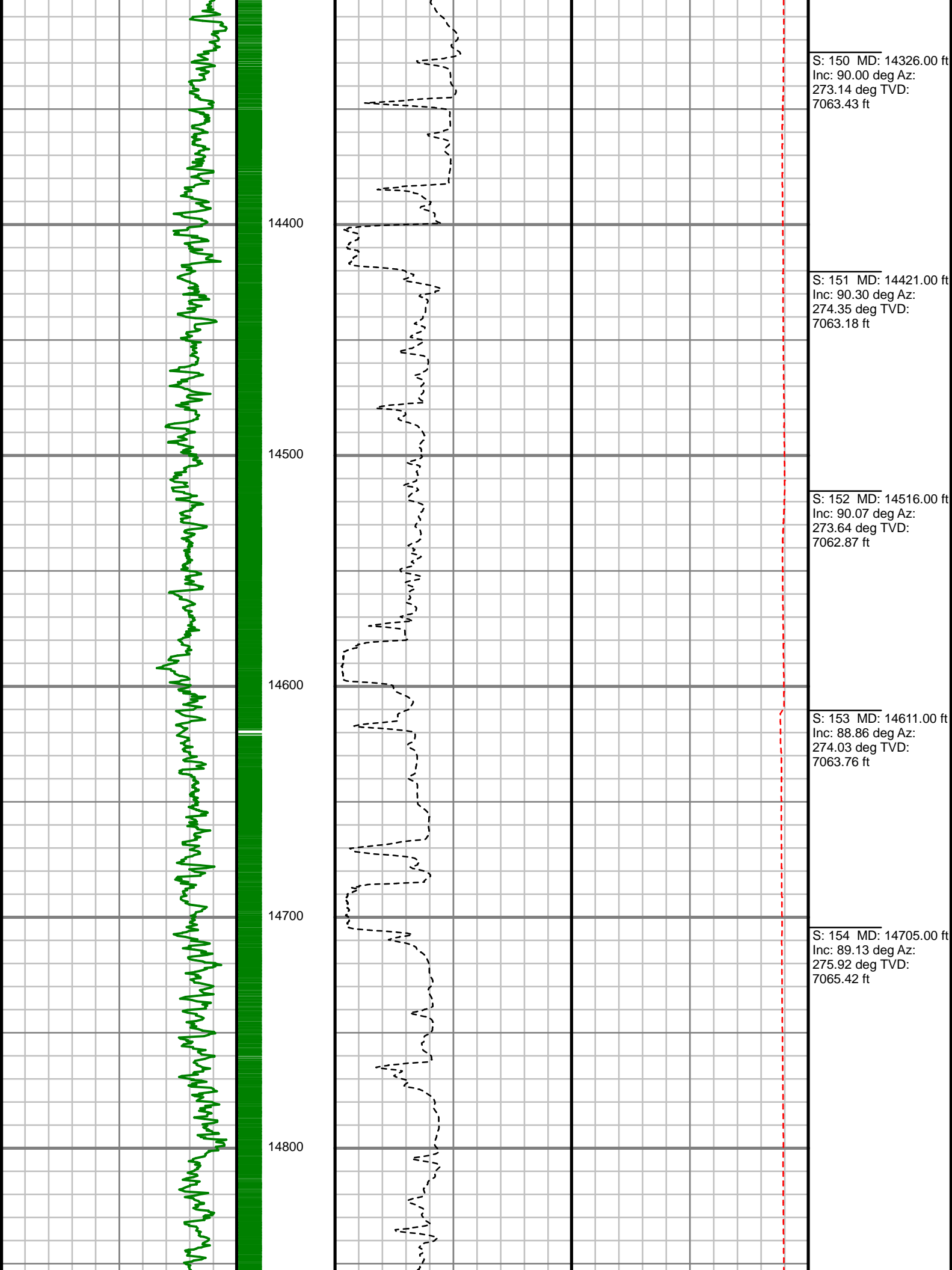


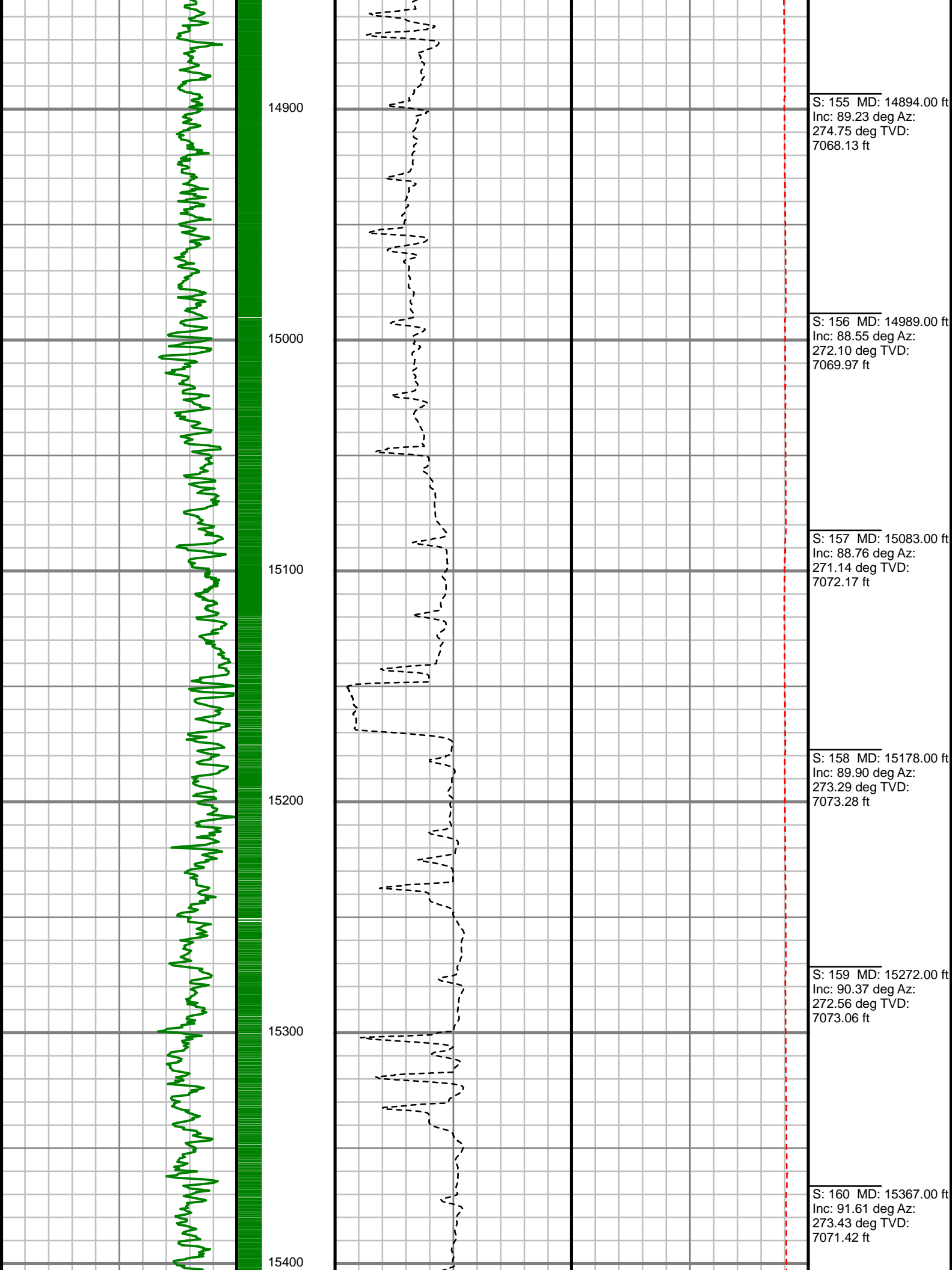


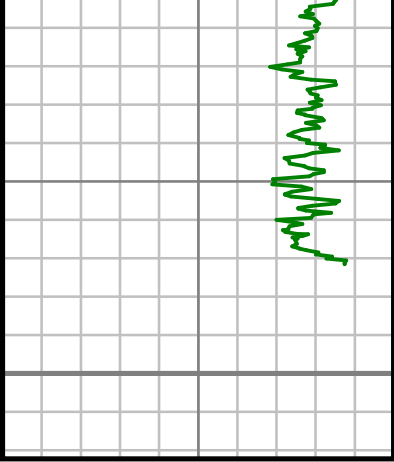








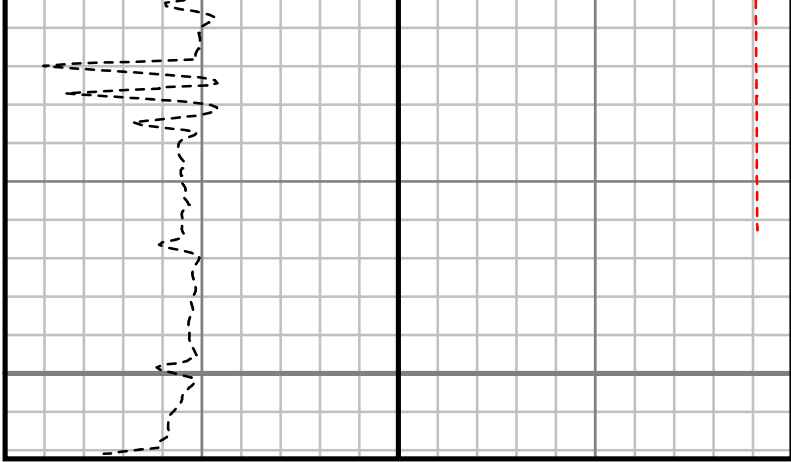




Gamma Ray (GR)		
0	Unit = aapi	150

15500

MEASURED DEPTH  
1:600 (ft)



Rate of Penetration (ROP)		
0	Unit = ft/hr	1000

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

S: 161 MD: 15462.00 ft  
Inc: 93.05 deg Az:  
273.51 deg TVD:  
7067.56 ft

Comments
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## MWD Survey Report

Well Location	DT FORBES
Well Name	DT FORBES C7-5-6
Survey Date	10/23/2015
Latitude	40°26'6.000"N
Longitude	104°41'1.464"W
Btotal	52615 nT
Dip	66.99 deg
Magnetic Declination	8.49 deg
North Reference	True North
Grid Correction	None
Depth Reference	RKB (24.50 ft)
Calculation Method	Minimum Curvature
Section (VS) Ref	0.00N (ft), 0.00E (ft), 248.98Azim (deg)
Operator(s)	J. GREGORY, M. SMITH

### Well Notes

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid
142.00	0.30	129.40	142.00	-0.18	-0.24	0.29	0.21
237.00	1.00	221.90	236.99	0.43	-1.01	-0.07	1.11
333.00	3.30	173.50	332.93	1.87	-4.38	-0.32	2.85
428.00	3.50	168.10	427.76	3.02	-9.93	0.59	0.40
523.00	5.10	178.50	522.49	4.89	-16.99	1.30	1.87
618.00	5.90	195.90	617.06	9.23	-25.91	0.07	1.94
713.00	7.60	184.80	711.40	14.90	-36.87	-1.80	2.25
809.00	12.80	192.10	805.85	23.48	-53.60	-4.56	5.57
904.00	13.20	201.80	898.43	36.61	-73.97	-10.79	2.33
999.00	15.80	200.50	990.40	52.55	-96.16	-19.35	2.76
1095.00	17.20	199.30	1082.44	70.40	-121.80	-28.62	1.50
1190.00	19.80	195.00	1172.53	88.96	-150.60	-37.43	3.09
1285.00	21.40	196.10	1261.45	108.88	-182.80	-46.40	1.73
1380.00	21.80	196.10	1349.78	129.99	-216.40	-56.10	0.42
1474.00	24.80	192.90	1436.11	151.53	-252.39	-65.34	3.46
1592.00	26.79	193.17	1542.35	180.28	-302.41	-76.93	1.69
1688.00	27.81	193.27	1627.65	205.06	-345.27	-87.00	1.07
1783.00	30.30	192.42	1710.69	230.75	-390.26	-97.24	2.65
1879.00	31.46	192.96	1793.08	258.09	-438.32	-108.06	1.24

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
1974.00	33.65	193.28	1873.15	286.79	-488.10	-119.67	2.32
2069.00	32.71	192.24	1952.66	315.70	-538.80	-131.16	1.16
2164.00	33.67	191.73	2032.16	344.02	-589.68	-141.96	1.05
2259.00	34.95	191.77	2110.63	373.00	-642.10	-152.86	1.34
2354.00	34.53	195.69	2188.71	403.83	-694.66	-165.69	2.39
2448.00	32.62	194.55	2267.03	434.49	-744.83	-179.26	2.14
2543.00	32.73	194.71	2346.99	464.39	-794.46	-192.21	0.15
2637.00	33.75	193.66	2425.61	494.09	-844.42	-204.83	1.24
2732.00	33.65	194.45	2504.64	524.38	-895.55	-217.63	0.47
2826.00	32.40	195.77	2583.45	554.58	-945.02	-230.97	1.53
2921.00	34.45	194.44	2662.74	585.41	-995.54	-244.59	2.29
3016.00	35.33	194.28	2740.66	616.88	-1048.18	-258.07	0.93
3110.00	34.45	194.74	2817.76	648.12	-1100.24	-271.54	0.98
3205.00	32.87	196.91	2896.83	679.67	-1150.90	-285.88	2.09
3299.00	33.67	192.83	2975.43	709.88	-1200.72	-299.09	2.53
3393.00	31.88	191.93	3054.46	737.90	-1250.42	-310.01	1.98
3489.00	32.01	192.92	3135.92	765.90	-1300.03	-320.94	0.56
3584.00	33.43	193.60	3215.84	794.82	-1350.01	-332.73	1.54
3678.00	34.18	193.53	3293.96	824.51	-1400.84	-345.00	0.80
3773.00	32.68	194.95	3373.24	854.71	-1451.56	-357.85	1.78

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
3868.00	31.68	193.55	3453.65	883.92	-1500.59	-370.31	1.31
3964.00	31.72	194.07	3535.33	912.73	-1549.57	-382.35	0.29
4059.00	34.52	193.54	3614.89	942.37	-1599.98	-394.73	2.97
4155.00	35.52	195.82	3693.51	974.52	-1653.26	-408.71	1.71
4250.00	35.56	194.68	3770.81	1007.19	-1706.54	-423.23	0.70
4345.00	36.10	194.53	3847.83	1039.58	-1760.35	-437.25	0.58
4440.00	35.39	191.89	3924.94	1070.80	-1814.37	-449.94	1.79
4536.00	32.85	193.10	4004.41	1100.51	-1866.94	-461.57	2.74
4631.00	31.36	191.02	4084.88	1128.08	-1916.30	-472.13	1.95
4726.00	31.28	192.01	4166.03	1154.64	-1964.70	-481.99	0.55
4822.00	30.66	194.84	4248.35	1182.57	-2012.74	-493.45	1.65
4917.00	31.60	191.57	4329.68	1210.16	-2060.54	-504.64	2.04
5013.00	33.35	191.99	4410.66	1238.09	-2110.99	-515.17	1.84
5109.00	34.91	196.80	4490.14	1269.32	-2163.11	-528.60	3.25
5204.00	31.35	196.63	4569.69	1301.09	-2212.83	-543.53	3.75
5299.00	30.30	192.02	4651.27	1329.26	-2259.96	-555.60	2.72
5395.00	31.55	192.01	4733.62	1356.15	-2308.22	-565.87	1.30
5490.00	31.84	189.95	4814.46	1382.60	-2357.21	-575.37	1.18
5585.00	33.36	194.87	4894.50	1410.81	-2407.15	-586.40	3.22
5680.00	37.35	193.77	4971.96	1442.58	-2460.41	-599.97	4.25

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
5775.00	32.88	195.78	5049.65	1474.49	-2513.25	-613.85	4.86
5871.00	33.68	191.25	5129.92	1504.32	-2564.44	-626.14	2.72
5966.00	33.36	193.66	5209.13	1533.25	-2615.66	-637.45	1.44
6061.00	31.38	194.57	5289.36	1562.51	-2664.98	-649.84	2.15
6156.00	30.47	192.25	5370.86	1590.12	-2712.46	-661.17	1.58
6251.00	28.94	194.23	5453.38	1616.60	-2758.28	-671.94	1.91
6346.00	33.81	190.72	5534.47	1643.79	-2806.56	-682.51	5.48
6441.00	31.75	192.50	5614.33	1671.50	-2856.95	-692.84	2.40
6536.00	33.18	191.71	5694.48	1699.36	-2906.81	-703.52	1.57
6631.00	34.83	197.15	5773.25	1730.19	-2958.20	-716.80	3.64
6726.00	30.12	193.18	5853.39	1760.37	-3007.36	-730.24	5.44
6822.00	29.84	195.32	5936.55	1788.06	-3053.85	-742.04	1.15
6917.00	31.57	195.84	6018.22	1816.99	-3100.58	-755.07	1.84
7012.00	32.82	192.93	6098.62	1846.29	-3149.60	-767.63	2.09
7107.00	33.57	196.89	6178.13	1876.80	-3199.83	-781.02	2.41
7202.00	34.60	197.89	6256.80	1909.88	-3250.63	-796.93	1.23
7297.00	35.37	197.48	6334.64	1943.94	-3302.53	-813.48	0.85
7391.00	30.70	197.05	6413.42	1975.69	-3351.45	-828.69	4.98
7486.00	30.86	200.01	6495.04	2006.64	-3397.53	-844.14	1.61
7581.00	29.20	196.38	6577.29	2036.71	-3442.66	-859.01	2.59

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
7677.00	36.30	199.80	6657.99	2069.56	-3491.94	-875.26	7.64
7772.00	41.38	205.39	6731.98	2110.72	-3546.82	-898.28	6.49
7867.00	46.69	212.01	6800.29	2161.14	-3604.56	-930.10	7.39
7962.00	49.54	221.93	6863.80	2221.04	-3660.85	-972.64	8.32
8057.00	54.76	231.24	6922.15	2290.32	-3712.13	-1027.15	9.48
8081.00	55.78	233.82	6935.82	2309.23	-3724.12	-1042.81	9.81
8177.00	62.32	247.24	6985.34	2390.39	-3764.17	-1114.36	13.77
8272.00	71.31	259.42	7022.82	2477.14	-3788.84	-1197.81	15.11
8367.00	81.57	269.59	7045.12	2565.82	-3797.48	-1289.50	14.98
8462.00	93.29	274.91	7049.38	2652.82	-3793.75	-1384.13	13.54
8558.00	90.97	275.48	7045.81	2738.88	-3785.07	-1479.67	2.48
8653.00	90.40	275.40	7044.67	2823.93	-3776.07	-1574.23	0.60
8748.00	88.79	277.64	7045.34	2908.15	-3765.28	-1668.61	2.90
8843.00	89.13	277.31	7047.07	2991.63	-3752.93	-1762.78	0.50
8939.00	90.37	278.58	7047.49	3075.62	-3739.66	-1857.86	1.85
9033.00	90.23	276.62	7046.99	3158.13	-3727.23	-1951.03	2.09
9127.00	88.76	273.89	7047.82	3242.40	-3718.62	-2044.62	3.30
9222.00	89.03	272.97	7049.66	3328.87	-3712.94	-2139.43	1.01
9316.00	89.23	272.59	7051.09	3414.86	-3708.38	-2233.31	0.45
9410.00	90.17	271.42	7051.59	3501.37	-3705.09	-2327.24	1.60

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
9505.00	91.24	270.87	7050.42	3589.34	-3703.19	-2422.22	1.27
9599.00	90.77	271.40	7048.76	3676.39	-3701.32	-2516.18	0.76
9694.00	89.73	272.97	7048.35	3763.69	-3697.70	-2611.11	1.98
9788.00	88.66	274.37	7049.67	3849.09	-3691.68	-2704.90	1.88
9883.00	89.70	274.57	7051.03	3934.83	-3684.28	-2799.60	1.12
9977.00	87.78	274.66	7053.10	4019.55	-3676.71	-2893.27	2.04
10071.00	88.86	274.76	7055.86	4104.19	-3668.99	-2986.91	1.15
10166.00	90.27	275.07	7056.58	4189.62	-3660.85	-3081.55	1.52
10260.00	89.90	275.13	7056.45	4274.02	-3652.49	-3175.18	0.40
10354.00	89.30	274.25	7057.11	4358.71	-3644.81	-3268.86	1.14
10449.00	90.00	274.72	7057.69	4444.45	-3637.38	-3363.57	0.89
10543.00	90.70	274.90	7057.11	4529.05	-3629.49	-3457.24	0.77
10638.00	91.80	275.50	7055.04	4614.25	-3620.88	-3551.82	1.32
10732.00	91.24	273.63	7052.54	4699.00	-3613.40	-3645.48	2.08
10827.00	88.46	273.13	7052.79	4785.51	-3607.80	-3740.31	2.98
10921.00	89.76	273.81	7054.24	4871.04	-3602.11	-3834.12	1.56
11015.00	91.01	275.25	7053.61	4955.84	-3594.69	-3927.82	2.03
11110.00	90.54	273.91	7052.33	5041.50	-3587.10	-4022.51	1.49
11204.00	91.11	274.58	7050.98	5126.50	-3580.15	-4116.24	0.94
11298.00	90.27	274.64	7049.85	5211.25	-3572.59	-4209.93	0.90

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
11393.00	91.48	275.34	7048.40	5296.61	-3564.32	-4304.55	1.47
11487.00	91.11	274.09	7046.28	5381.26	-3556.60	-4398.21	1.39
11580.00	88.79	273.60	7046.37	5465.64	-3550.36	-4490.99	2.55
11675.00	88.99	273.27	7048.20	5552.10	-3544.67	-4585.81	0.40
11770.00	90.00	273.92	7049.04	5638.46	-3538.71	-4680.61	1.26
11864.00	91.31	274.43	7047.96	5723.51	-3531.87	-4774.36	1.49
11958.00	89.46	274.06	7047.33	5808.51	-3524.92	-4868.09	2.00
12053.00	89.63	274.23	7048.08	5894.49	-3518.05	-4962.84	0.26
12147.00	90.24	273.97	7048.19	5979.60	-3511.33	-5056.60	0.70
12242.00	89.13	273.26	7048.72	6065.96	-3505.35	-5151.41	1.39
12430.00	90.30	273.58	7049.66	6237.11	-3494.14	-5339.07	0.65
12525.00	89.36	274.12	7049.94	6323.30	-3487.76	-5433.85	1.14
12619.00	90.13	274.12	7050.35	6408.39	-3481.01	-5527.61	0.82
12714.00	88.42	274.46	7051.54	6494.26	-3473.90	-5622.33	1.84
12808.00	88.86	274.46	7053.77	6579.09	-3466.59	-5716.02	0.46
12903.00	87.51	274.11	7056.78	6664.93	-3459.50	-5810.70	1.46
12997.00	87.55	273.87	7060.83	6750.04	-3452.97	-5904.39	0.26
13093.00	88.62	273.20	7064.04	6837.31	-3447.06	-6000.15	1.32
13188.00	90.27	273.81	7064.96	6923.73	-3441.25	-6094.96	1.85
13282.00	91.51	273.96	7063.50	7008.98	-3434.88	-6188.73	1.33



MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
13376.00	91.41	273.36	7061.10	7094.36	-3428.88	-6282.51	0.65
13471.00	90.03	272.56	7059.91	7181.15	-3423.97	-6377.37	1.67
13566.00	88.63	273.47	7061.02	7267.91	-3418.98	-6472.23	1.76
13661.00	88.82	273.68	7063.13	7354.27	-3413.05	-6567.02	0.30
13756.00	89.60	273.44	7064.44	7440.65	-3407.16	-6661.83	0.85
13851.00	90.64	273.44	7064.25	7527.12	-3401.46	-6756.66	1.10
13946.00	90.13	274.30	7063.60	7613.29	-3395.05	-6851.44	1.06
14042.00	90.91	274.22	7062.73	7700.09	-3387.91	-6947.17	0.81
14137.00	89.50	274.07	7062.40	7786.07	-3381.04	-7041.92	1.49
14232.00	89.63	273.55	7063.12	7872.29	-3374.74	-7136.70	0.57
14326.00	90.00	273.14	7063.43	7957.92	-3369.26	-7230.54	0.59
14421.00	90.30	274.35	7063.18	8044.18	-3363.06	-7325.34	1.32
14516.00	90.07	273.64	7062.87	8130.27	-3356.44	-7420.11	0.79
14611.00	88.86	274.03	7063.76	8216.47	-3350.09	-7514.89	1.34
14705.00	89.13	275.92	7065.42	8300.94	-3341.94	-7608.52	2.04
14894.00	89.23	274.75	7068.13	8470.27	-3324.36	-7796.67	0.62
14989.00	88.55	272.10	7069.97	8556.73	-3318.69	-7891.48	2.88
15083.00	88.76	271.14	7072.17	8643.47	-3316.03	-7985.41	1.04
15178.00	89.90	273.29	7073.28	8730.75	-3312.36	-8080.33	2.56
15272.00	90.37	272.56	7073.06	8816.66	-3307.56	-8174.20	0.93

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
15367.00	91.61	273.43	7071.42	8903.42	-3302.60	-8269.06	1.60
15462.00	93.05	273.51	7067.56	8989.80	-3296.85	-8363.80	1.51

2" = 100' FEET MD