

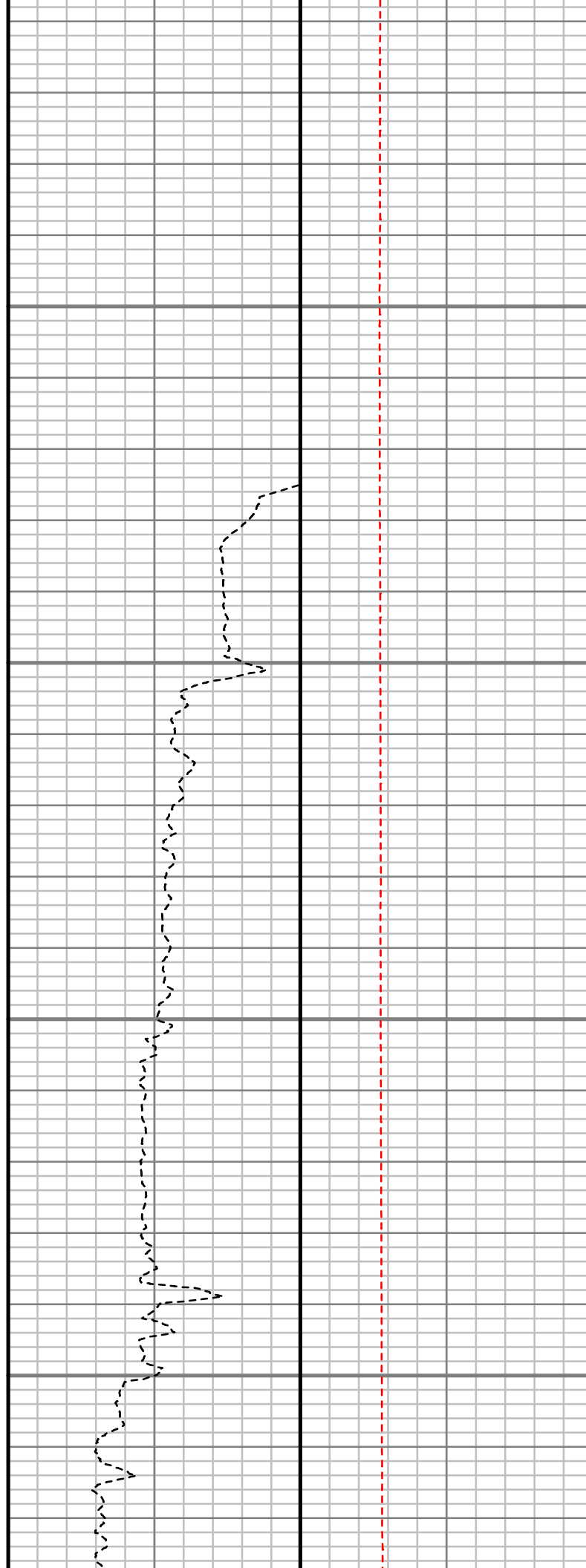
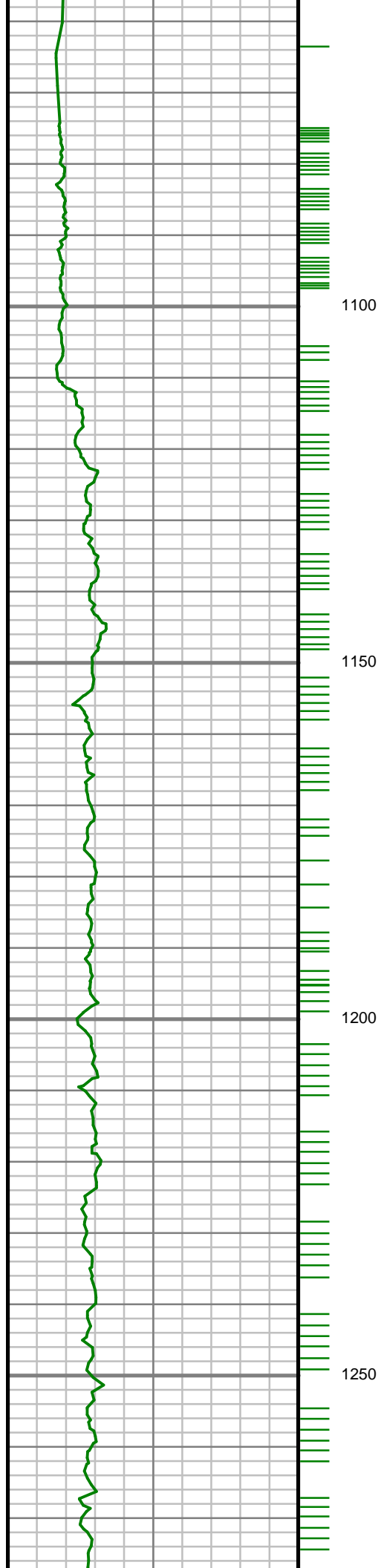
5" = 100' FEET TWD

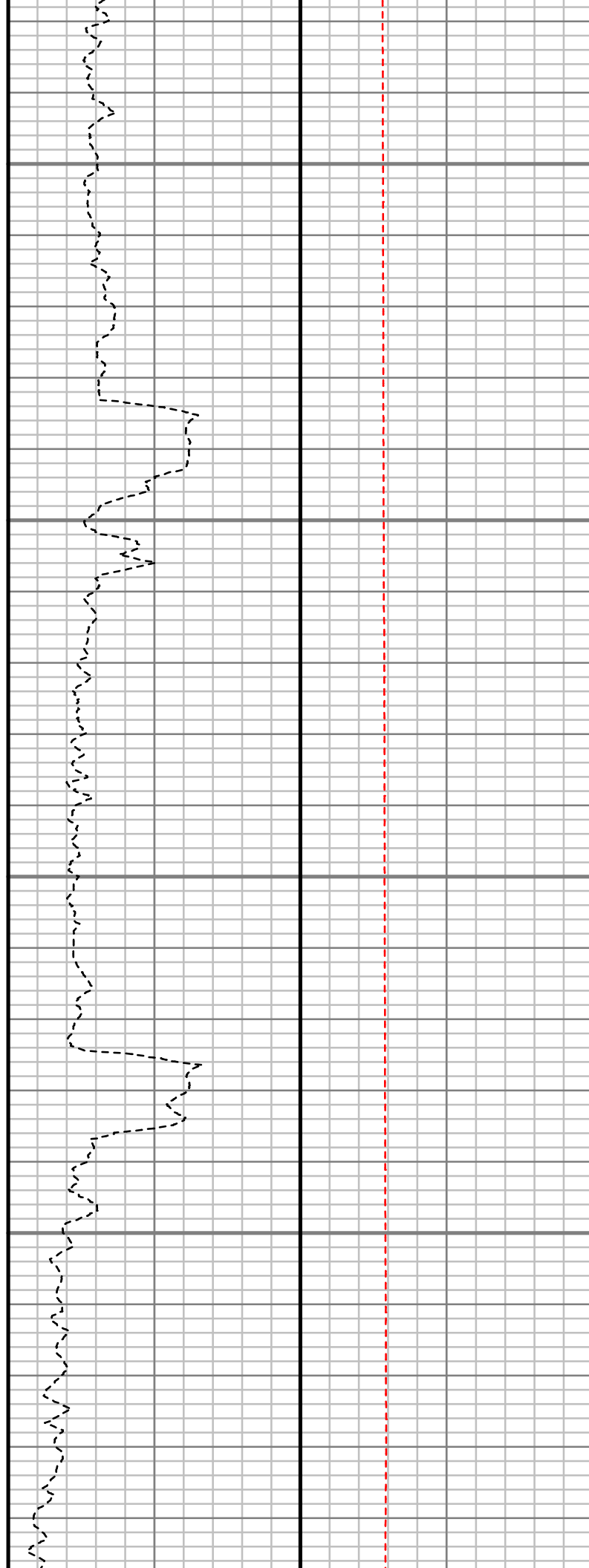
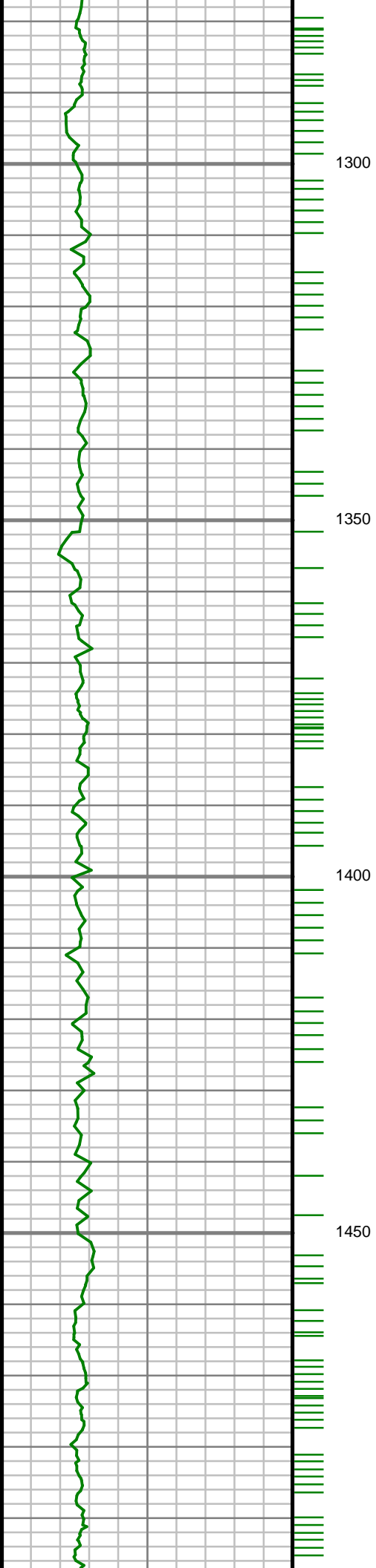
COMPANY : ANADARKO PETROLEUM CORP. WELL : PARAGON 9N-31HZ FIELD : WATTENBERG COUNTY : WELD STATE : COLORADO COUNTRY : U.S.A. UWI : 05-123-38539										COMPANY : ANADARKO PETROLEUM CORP. WELL : PARAGON 9N-31HZ FIELD : WATTENBERG COUNTY : WELD STATE : COLORADO COUNTRY : U.S.A. UWI : 05-123-38539									
WELL LOCATION LAT:40°4'27.890"N LONG:104°41'53.952"W N:1270968.13 ft E:3224345.41 ft SEC:6 TWP:1N RANGE:65W										OTHER SERVICES DIRECTIONAL ROP									
DEPTH REF. : RKB REF. HEIGHT : 25.000 ft GROUND LEVEL : 4975.000 ft										RKB to Ground Level G.L. to MEAN SEA LEVEL									
BOREHOLE RECORD						DEVIATION RECORD													
HOLE SIZE in	FROM ft	TO ft	INCLINATION deg			FROM ft	TO ft												
12.25	0	1121	0 - 13			0	6550												
8.75	1121	7562	13 - 90			6550	7562												
6.125	7562	14227	90 - 92			7562	14227												
CASING RECORD																			
CASING SIZE in	FROM ft	TO ft																	
9.625	0	1121																	
7	0	7562																	
DRILLING CO.: H&P RIG: 311																			
LMD UNIT NO.: C-46 SPUD DATE: 11/28/2013 LMD START DATE: 01/13/2014 LMD END DATE: 01/21/2014								DISTRICT: CASPER		DEPTH: 1068 ft									
										DEPTH: 14227 ft									
TOTAL DEPTH: 14227 ft																			

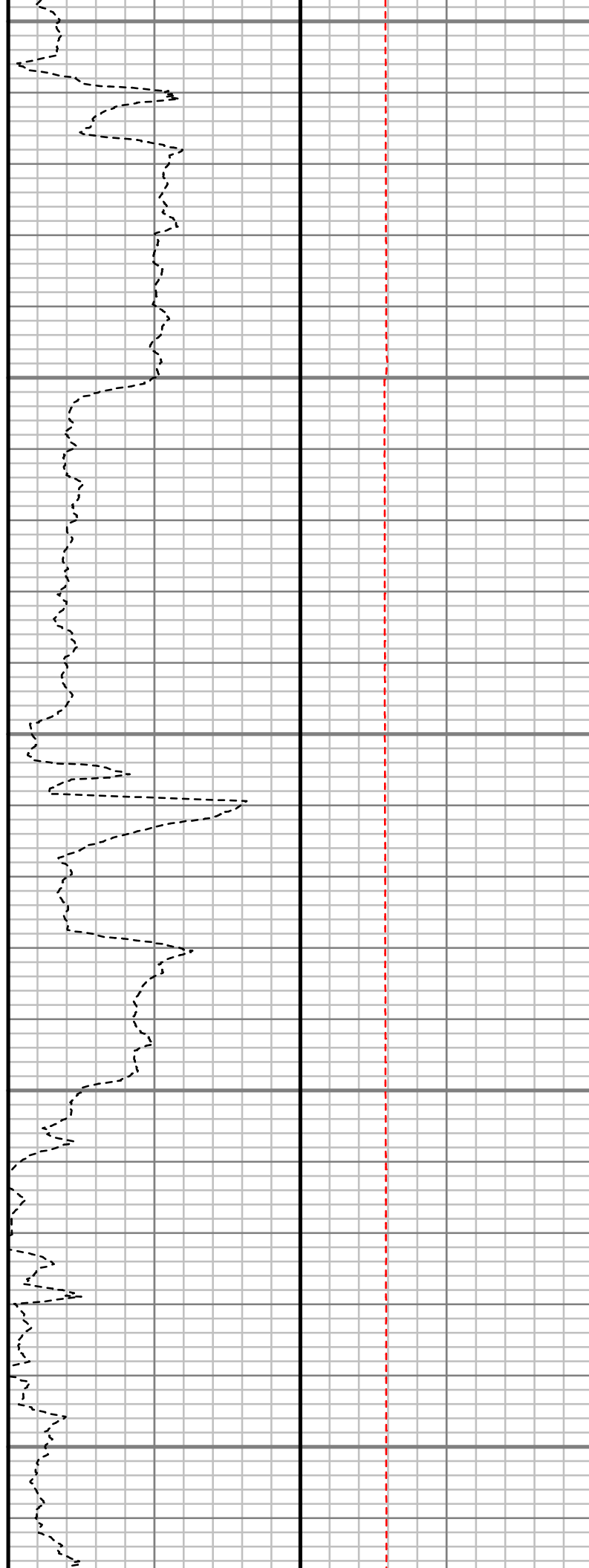
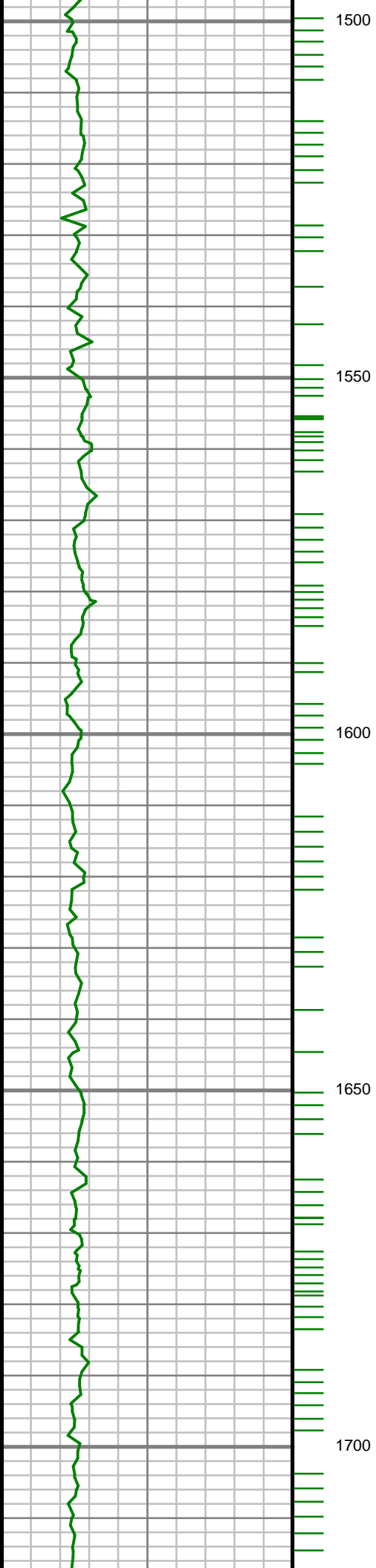
Remarks
ANADARKO PETROLEUM CORP. PRODUCTION AFE# 2088985
SCIENTIFIC DRILLING INTERNATIONAL JOB# 103481
ALL REFERENCES IN THE DEPTH TRACK ARE AT BIT DEPTH.
ALL DATA IS MEMORY DATA UNLESS STATED OTHERWISE.
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO GAMMA RAY CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED 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 = 128-028 / CONT = 603 / MWD EYE = 0902 / GAMMA RAY = 1076
BIT TO SENSOR OFFSETS: SURVEY = 61.77 FT. / GAMMA RAY = 52.52 FT.
RUN #2: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 78-266 / CONT = 114 / MWD EYE = 0932 / GAMMA RAY = 1086
BIT TO SENSOR OFFSETS: SURVEY = 66.93 FT. / GAMMA RAY = 57.68 FT.
SURVEY WELL NOTES:
SURVEYS FROM 0.0 FT. TO 1112 FT. WERE ACQUIRED BY MS GYRO MWD.
SURVEYS FROM 1121 FT. TO 14158 FT. WERE ACQUIRED BY SCIENTIFIC DRILLING INTERNATIONAL MWD.
MNEMONICS LIST:
GR = GAMMA RAY
ROP = RATE OF PENETRATION
T-TEMP = TOOL TEMPERATURE

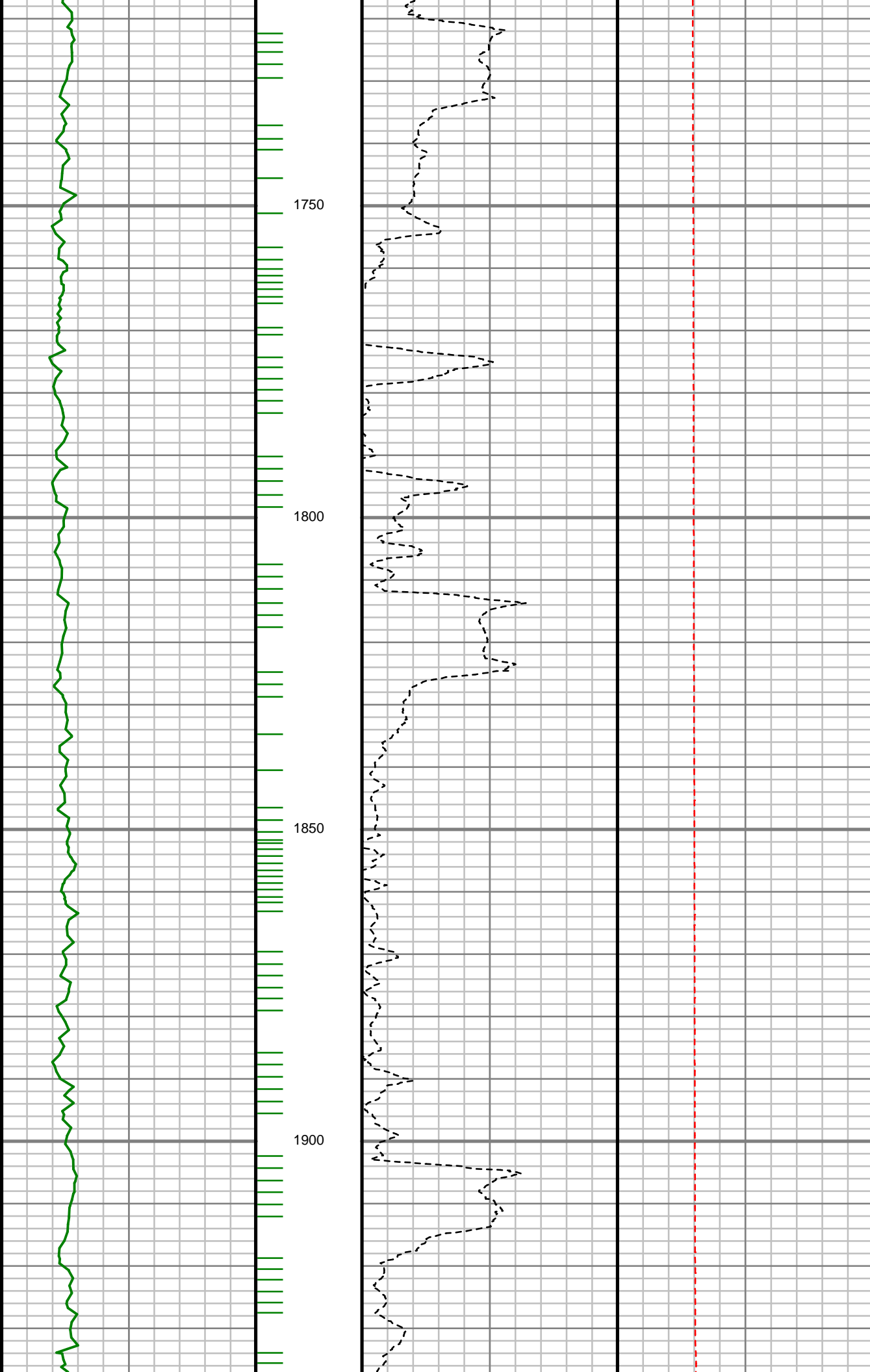
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

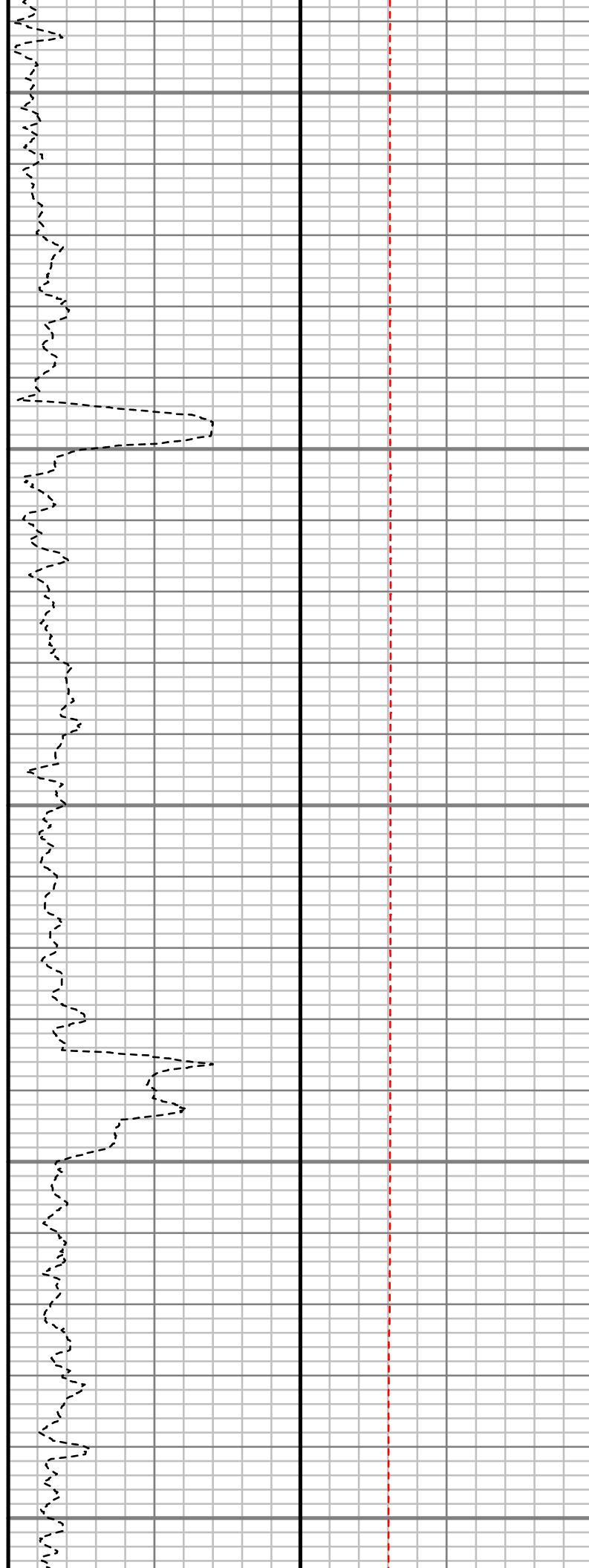
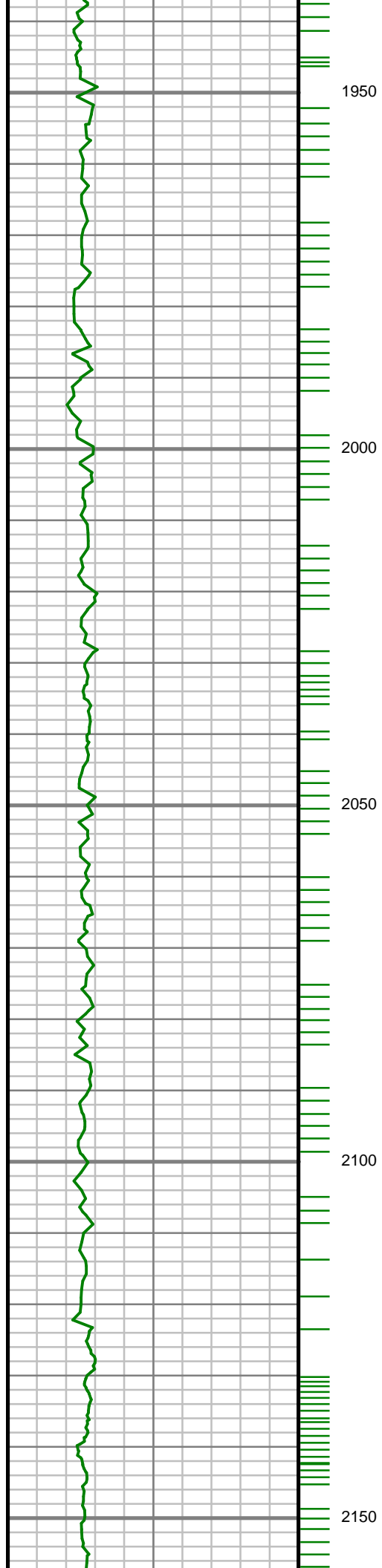
ANADARKO PETROLEUM CORP. PARAGON 9N-31HZ WATTENBERG FIELD WELD COUNTY, COLORADO 05-123-38539				
Gamma Ray (GR) 0 Unit = aapi 200		TRUE VERTICAL DEPTH 1:240 (ft) <		

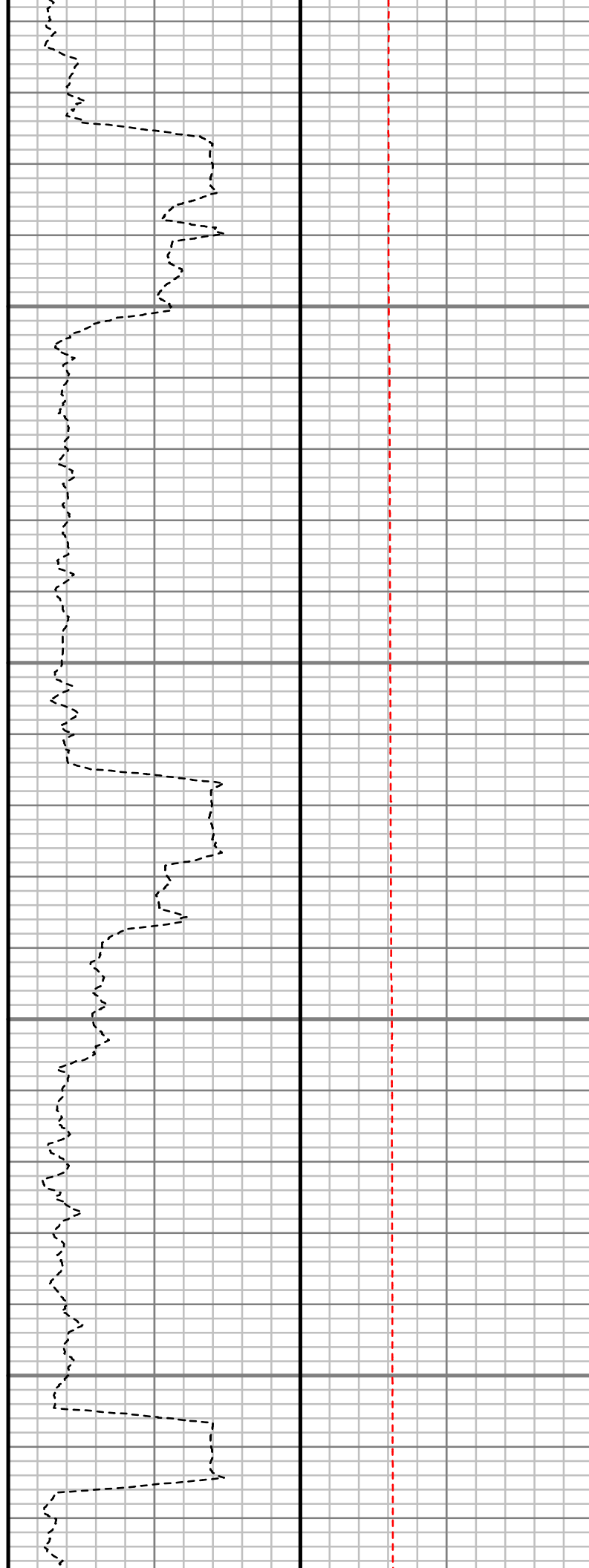
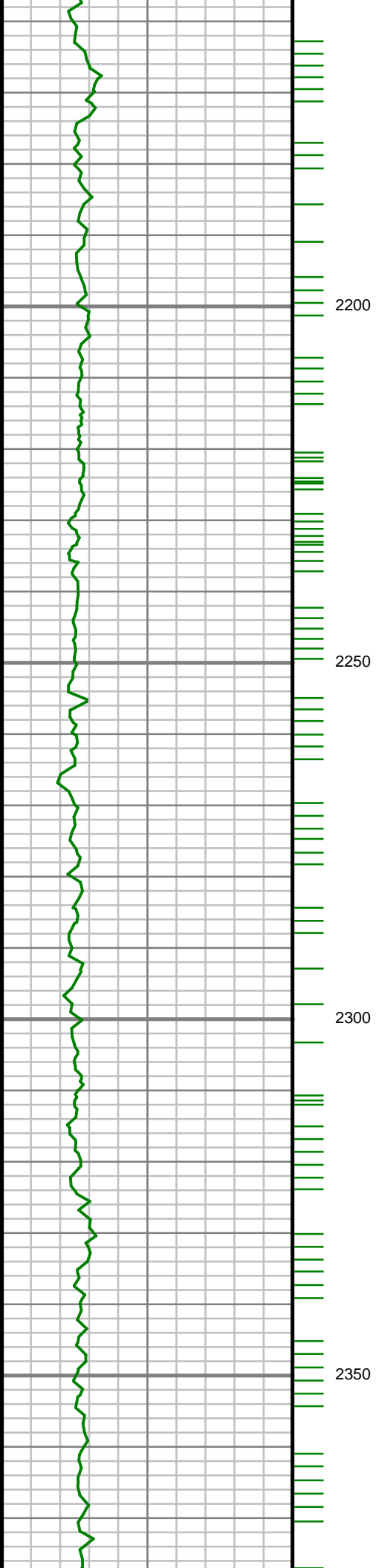


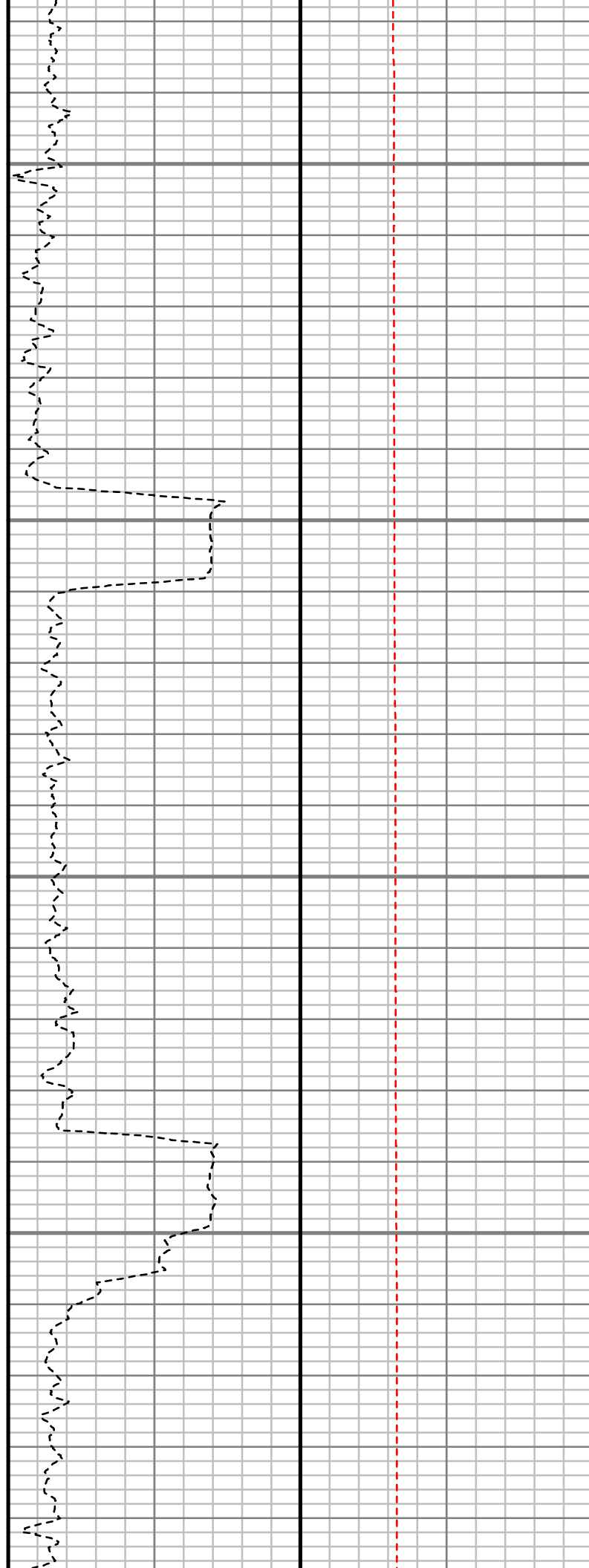
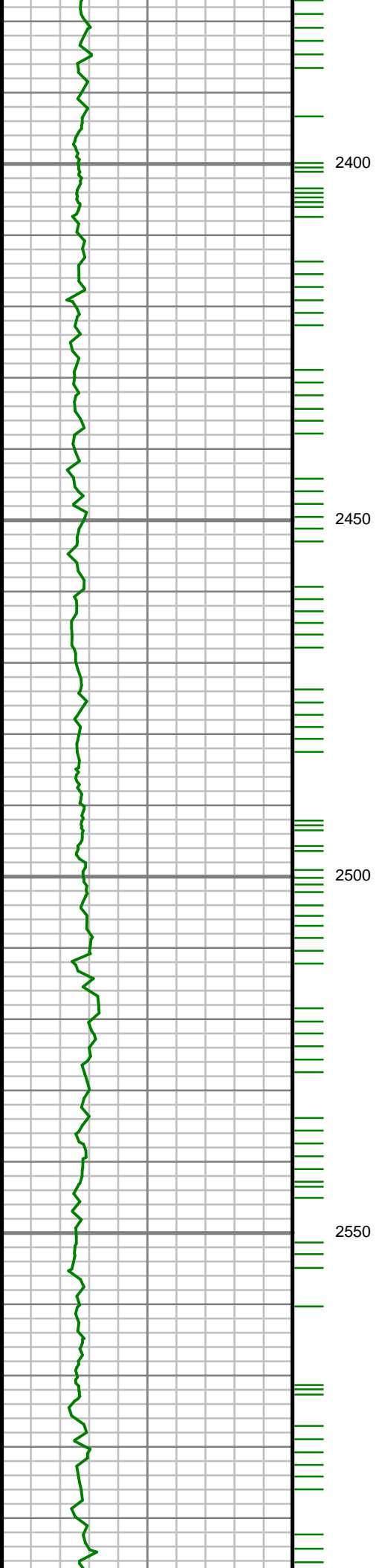


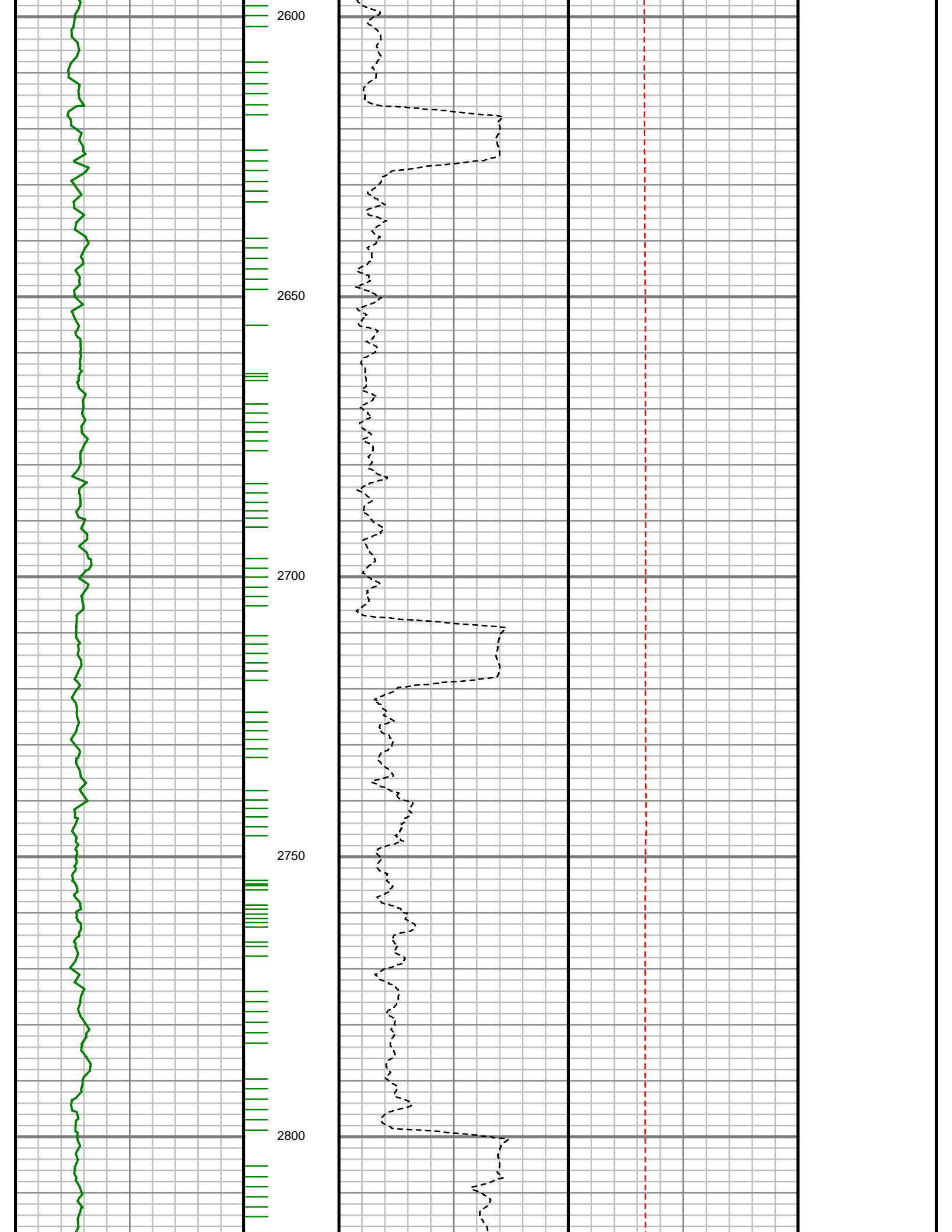


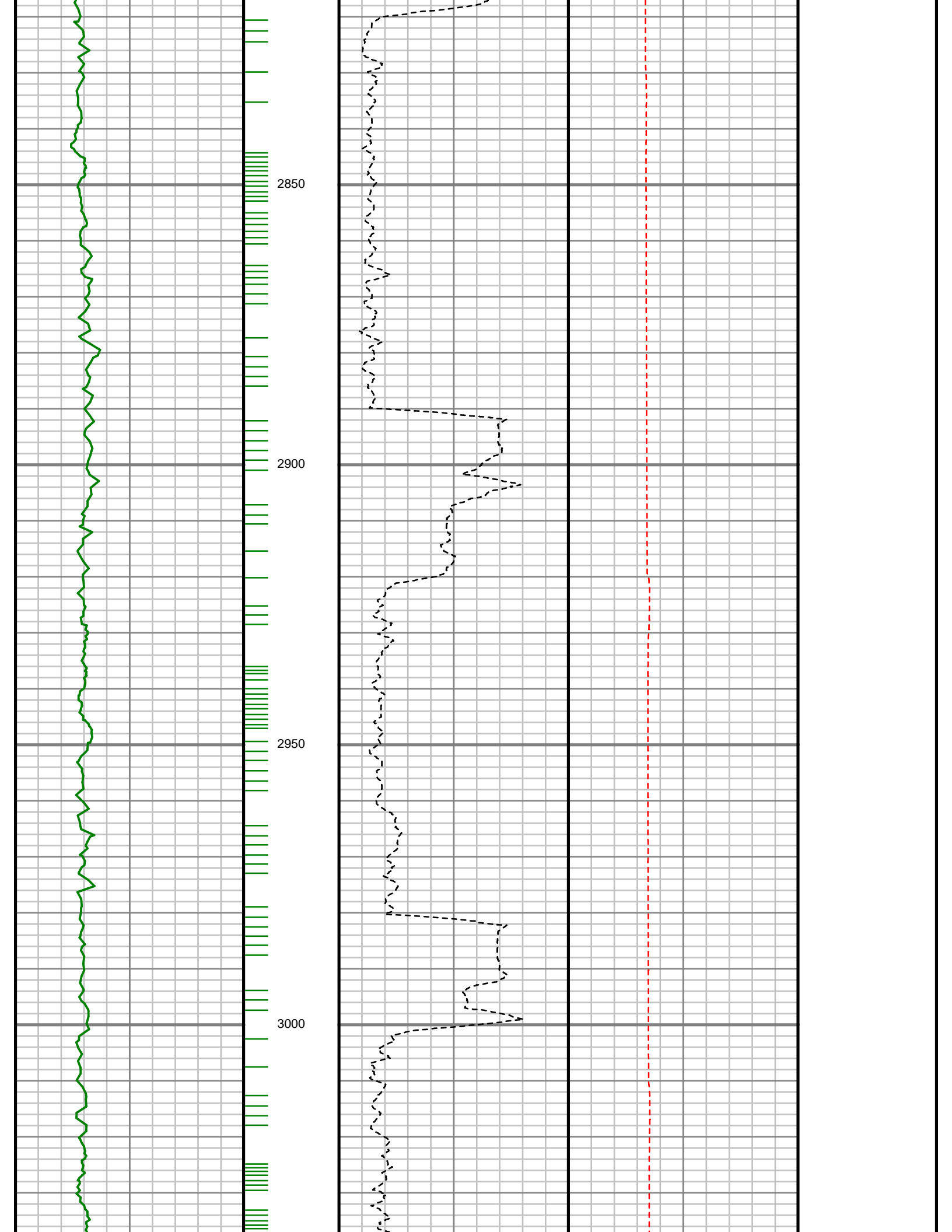


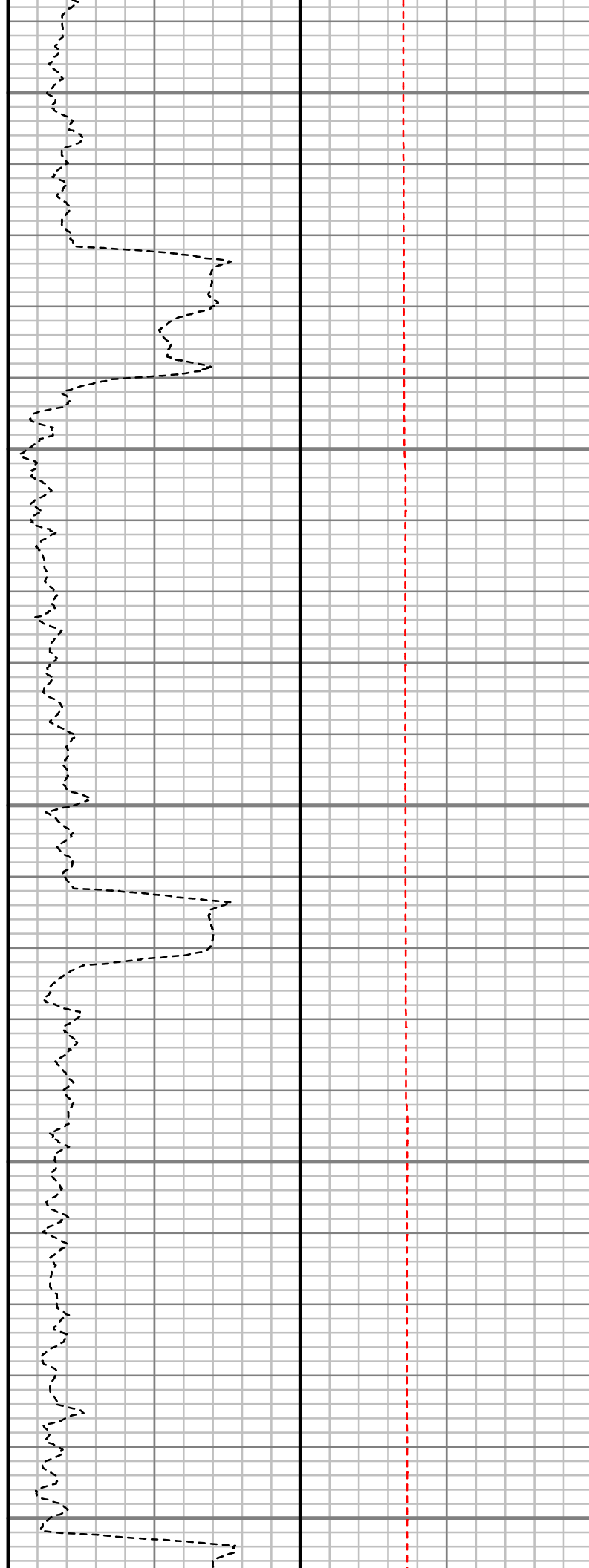
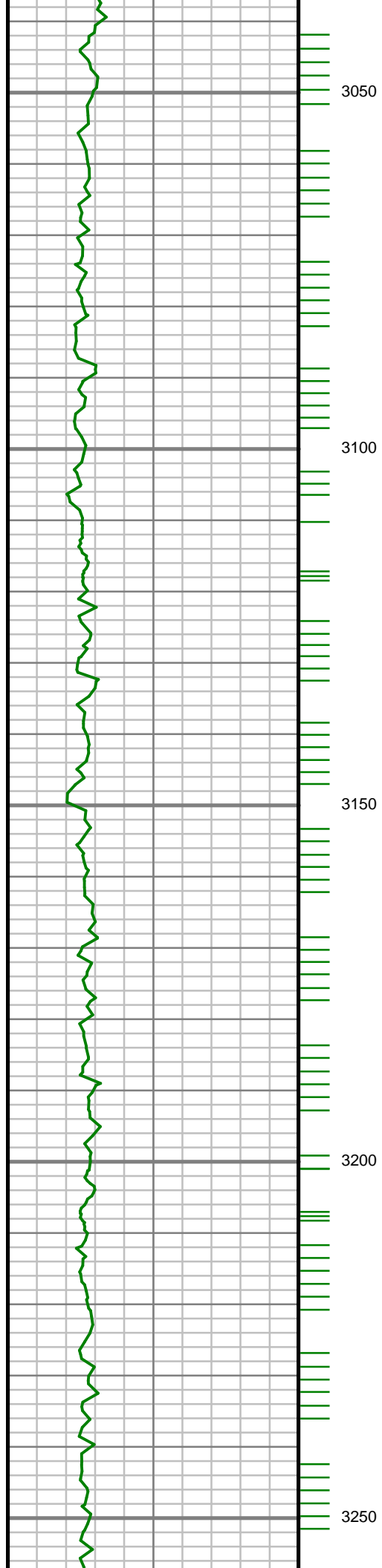


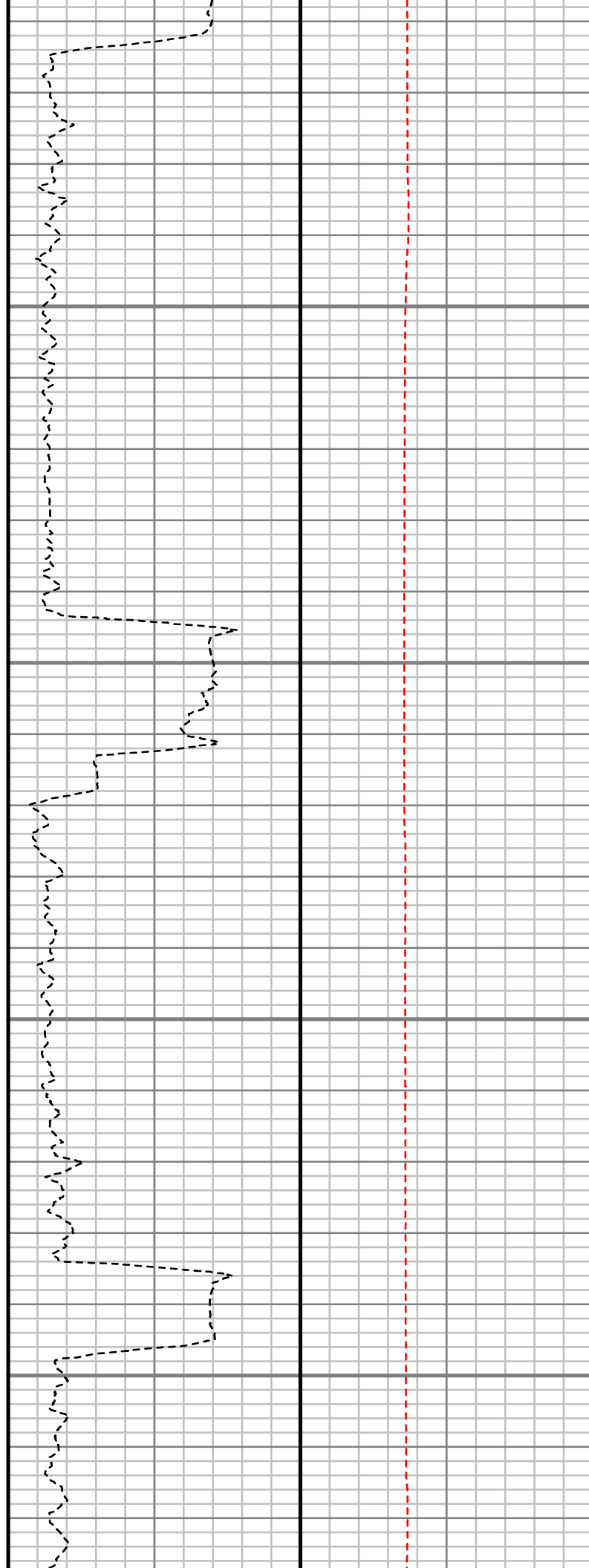
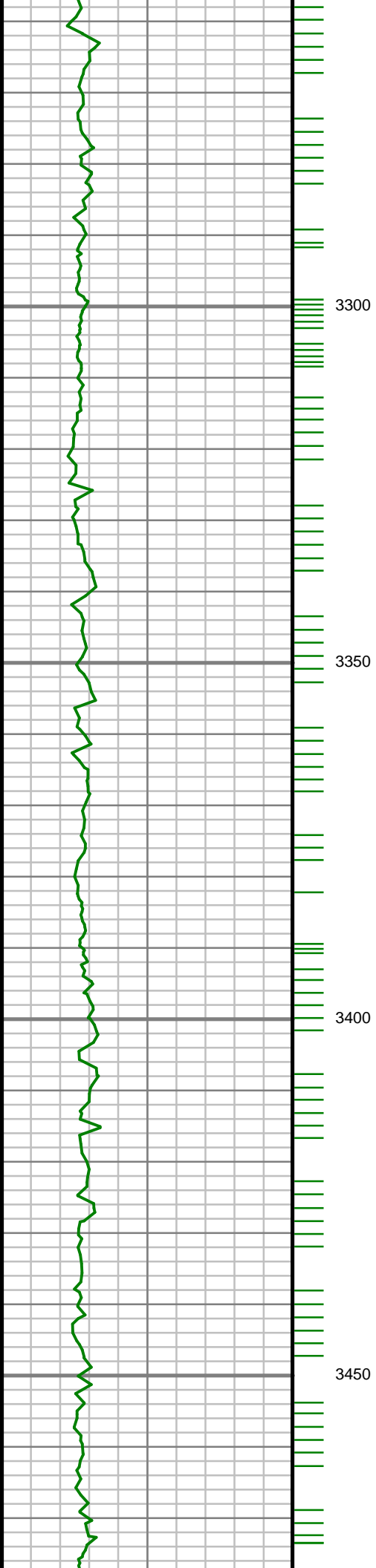


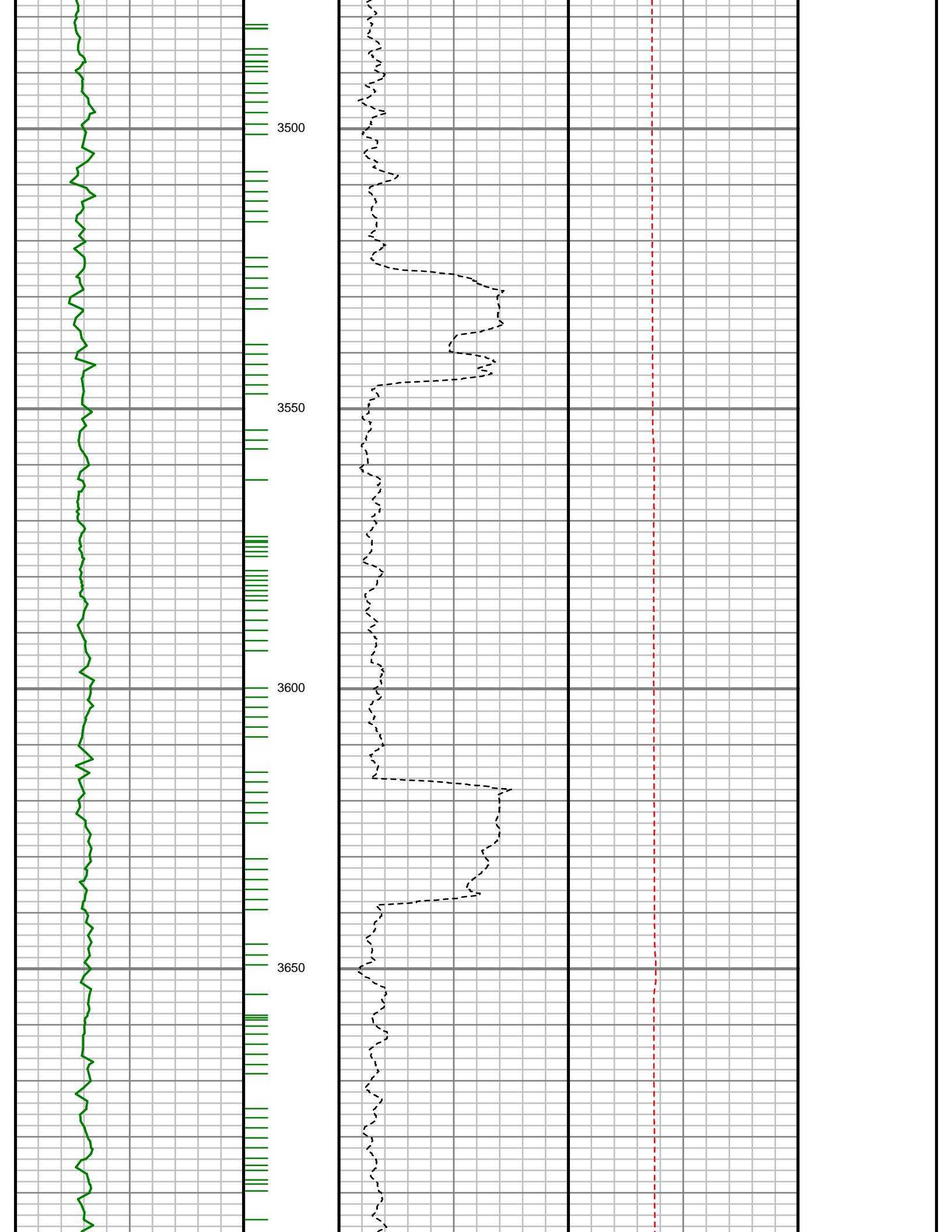


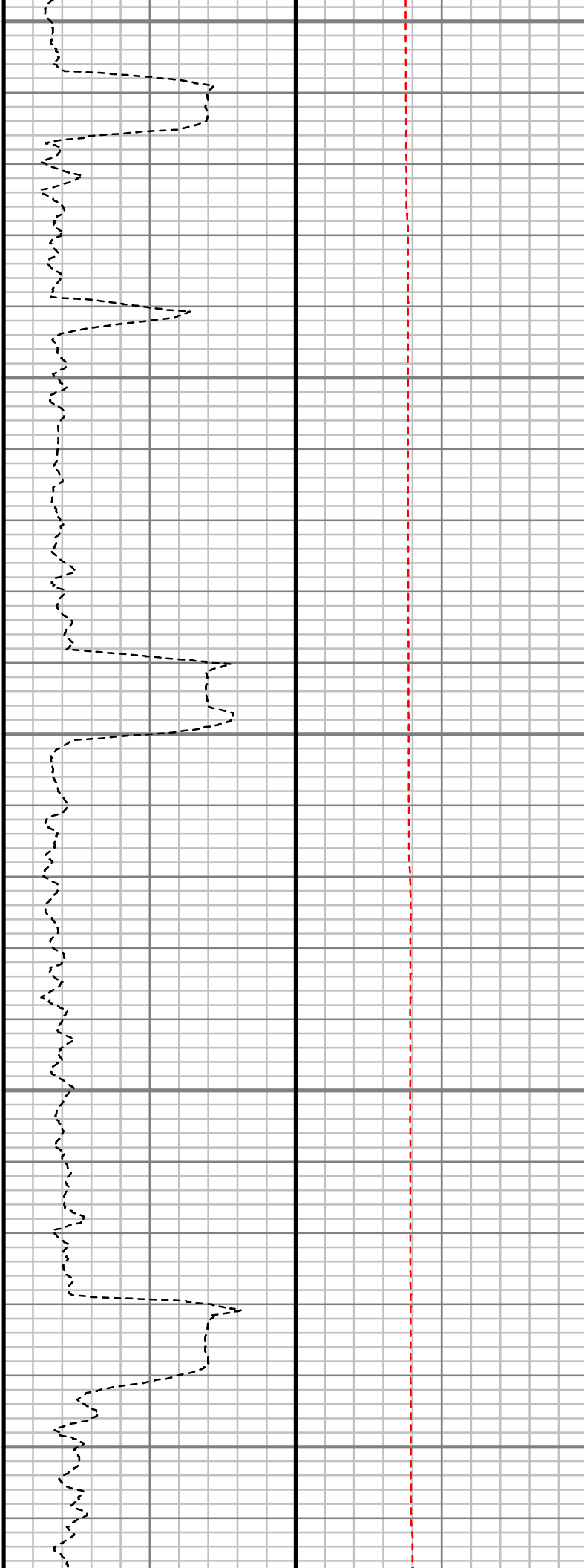
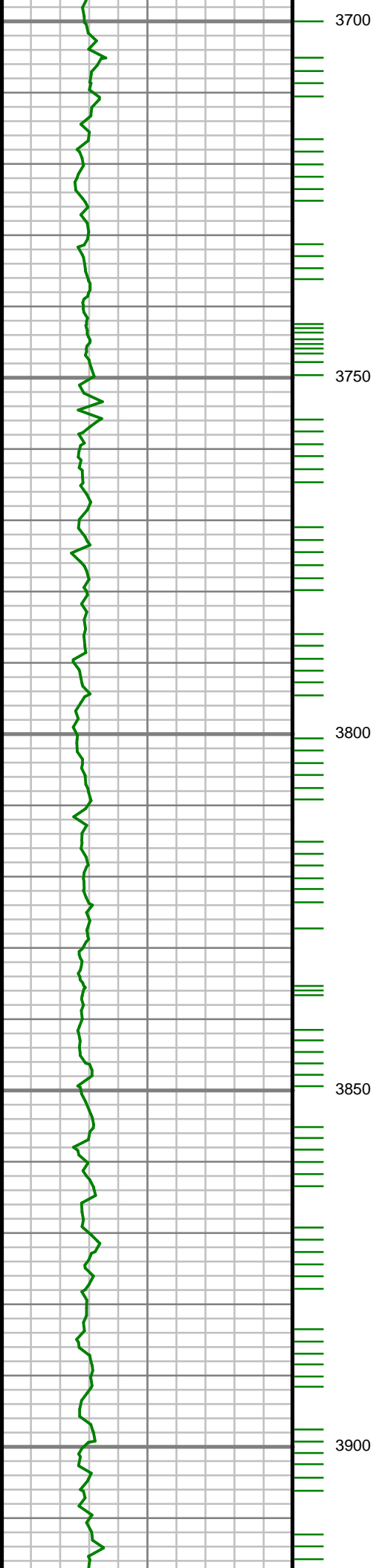


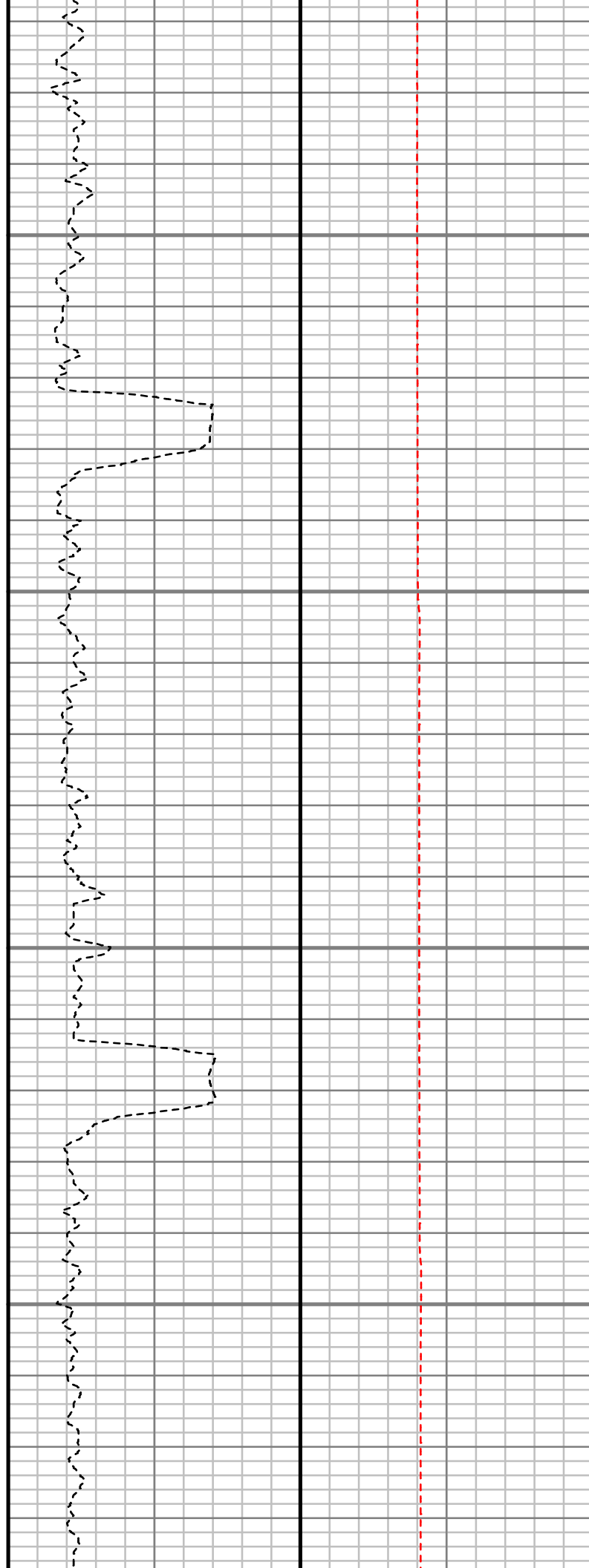
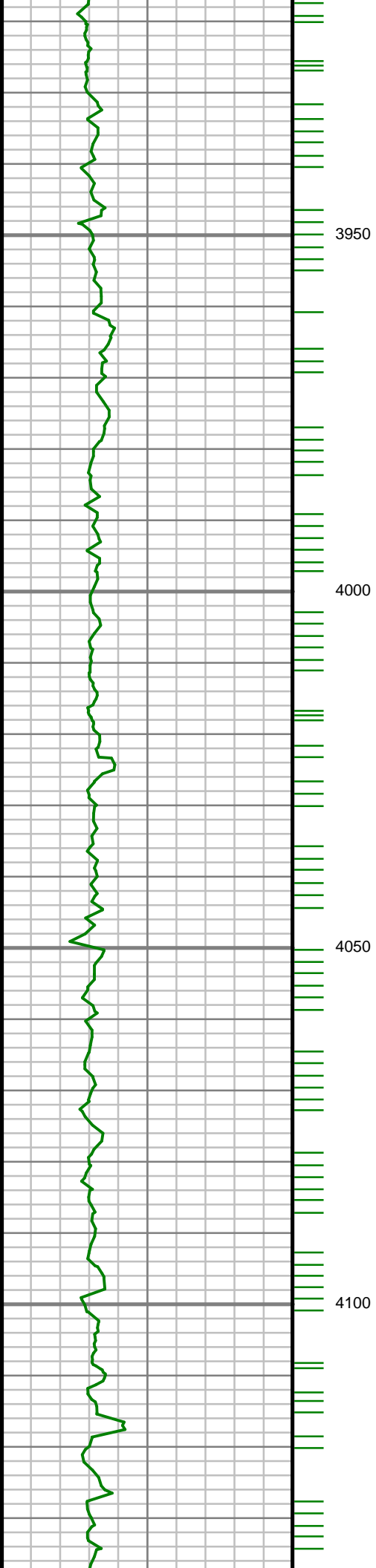


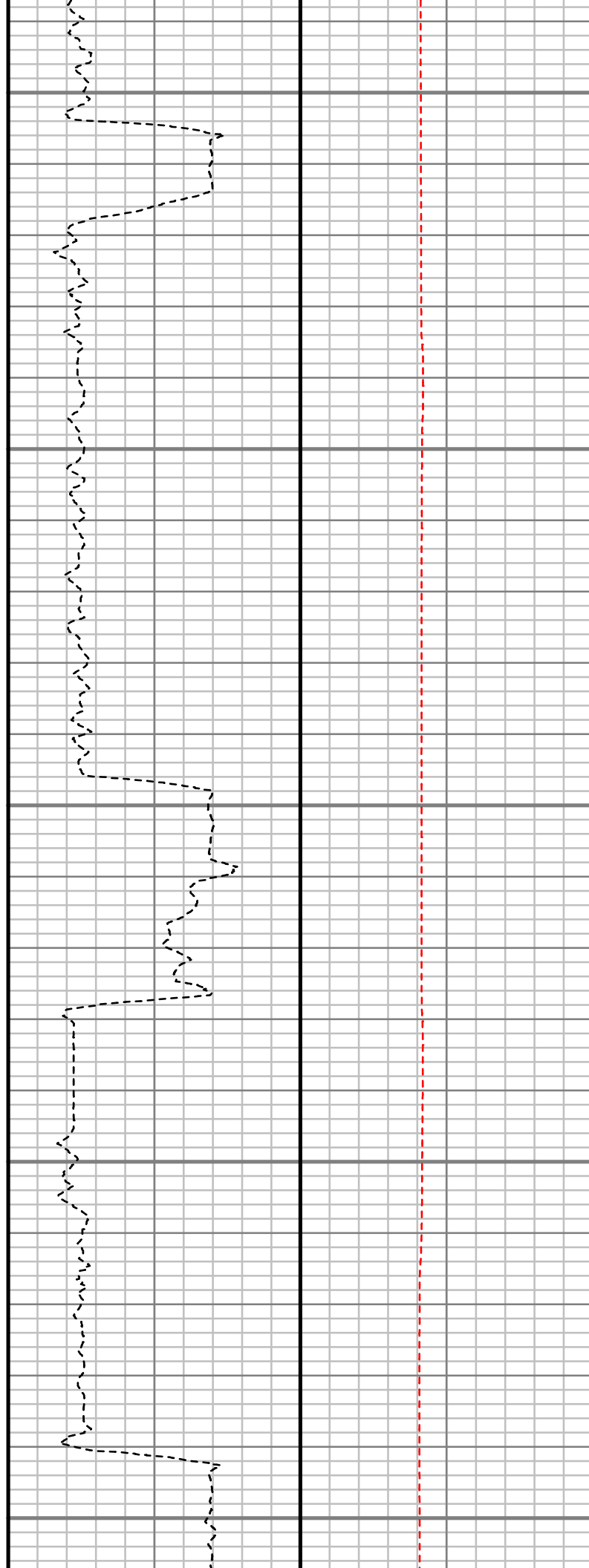
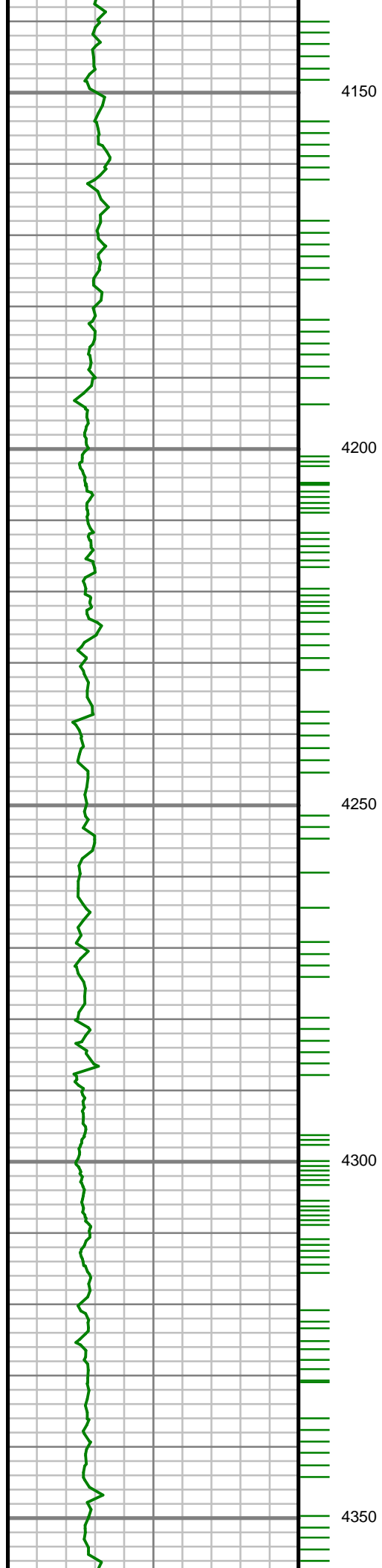


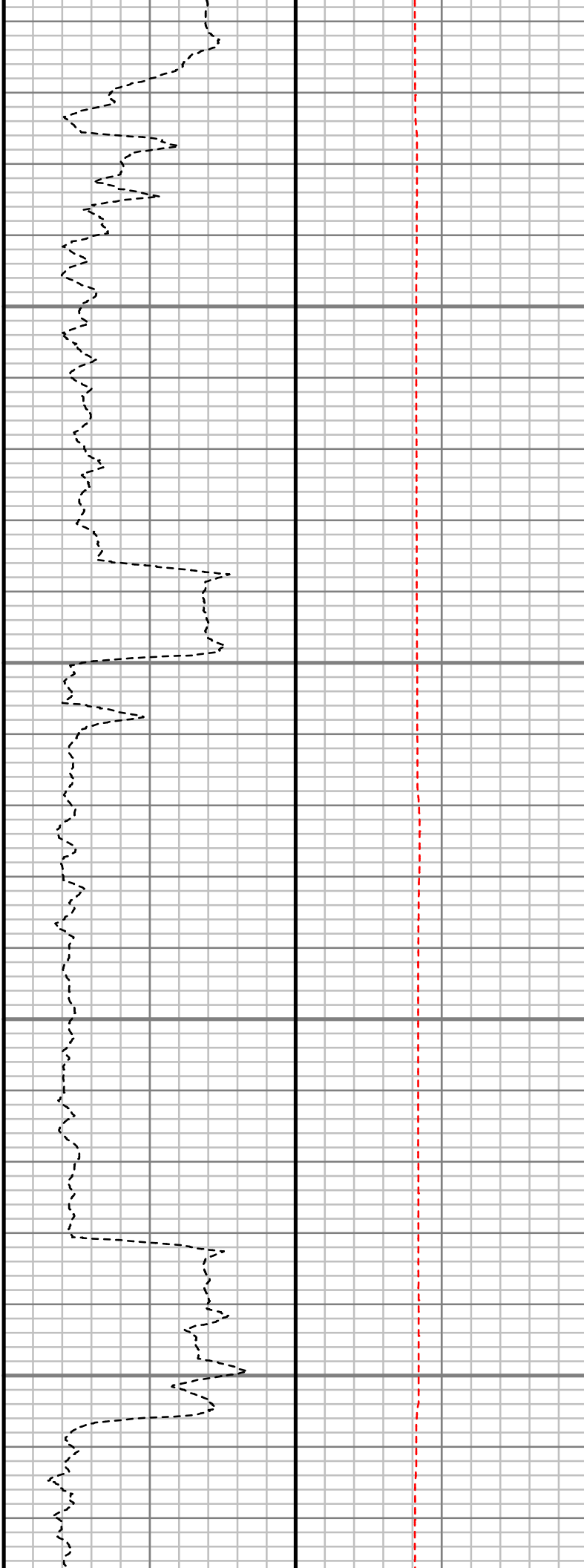
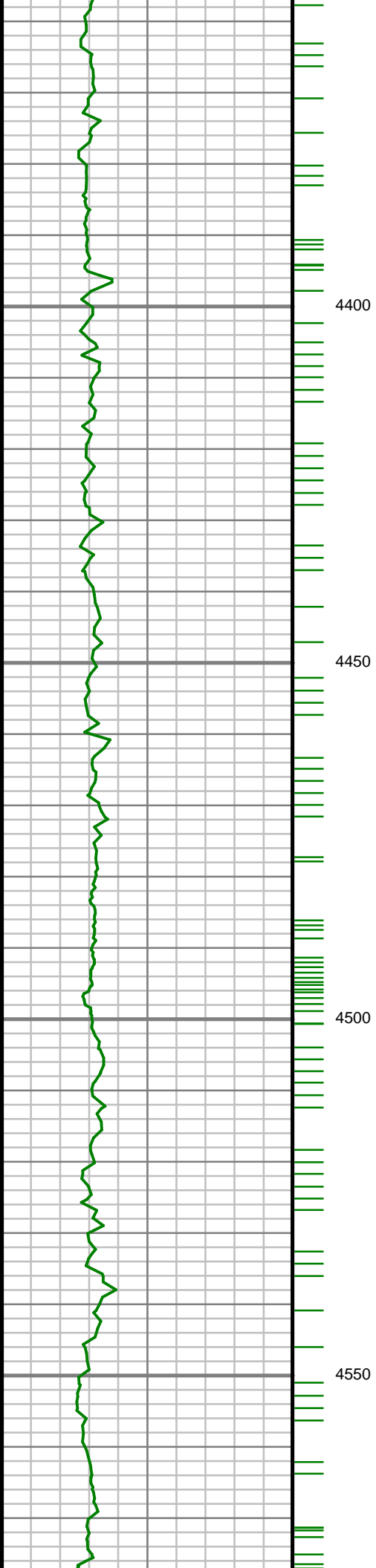


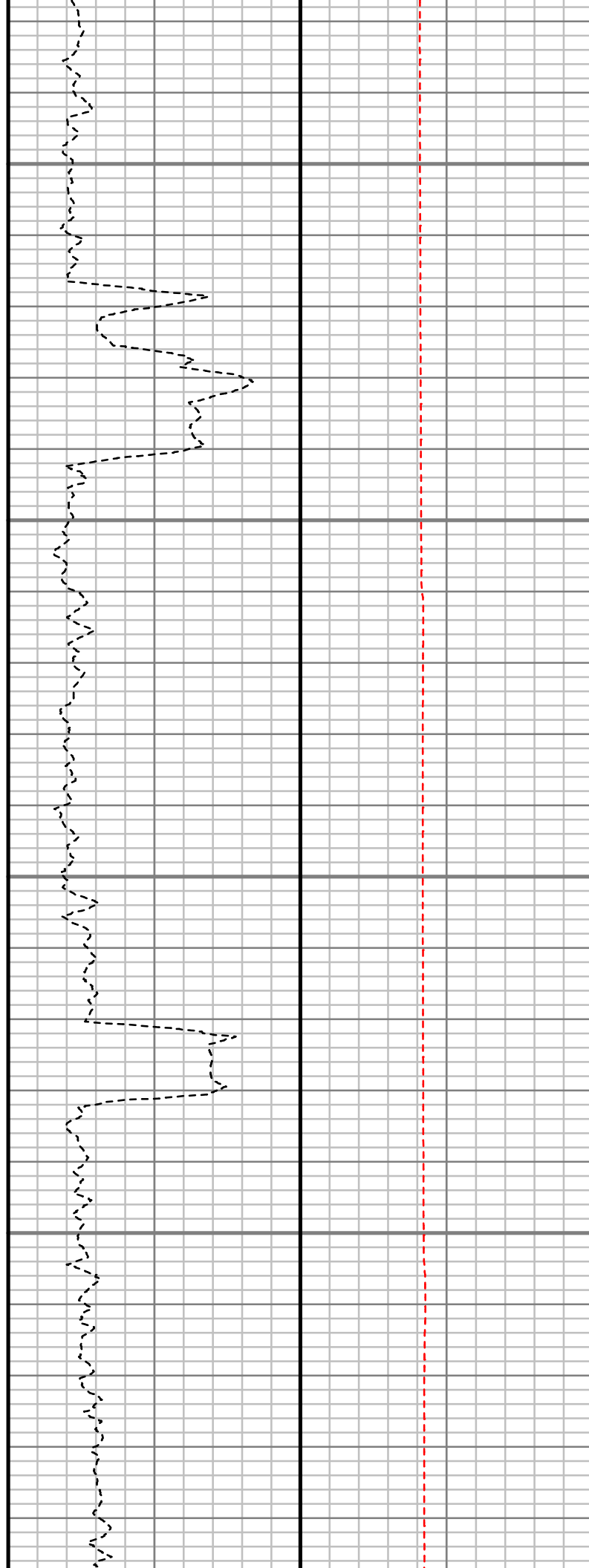
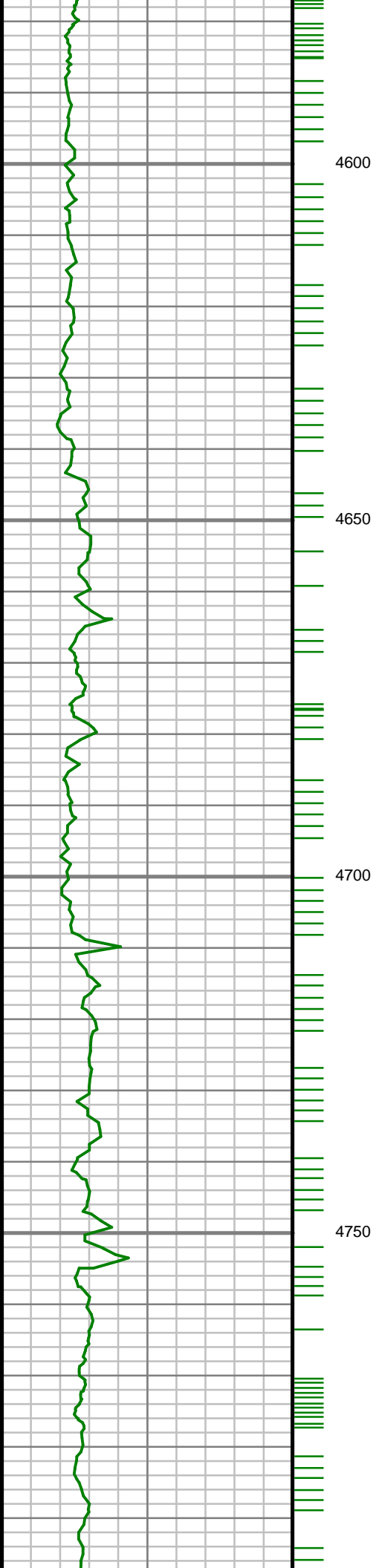


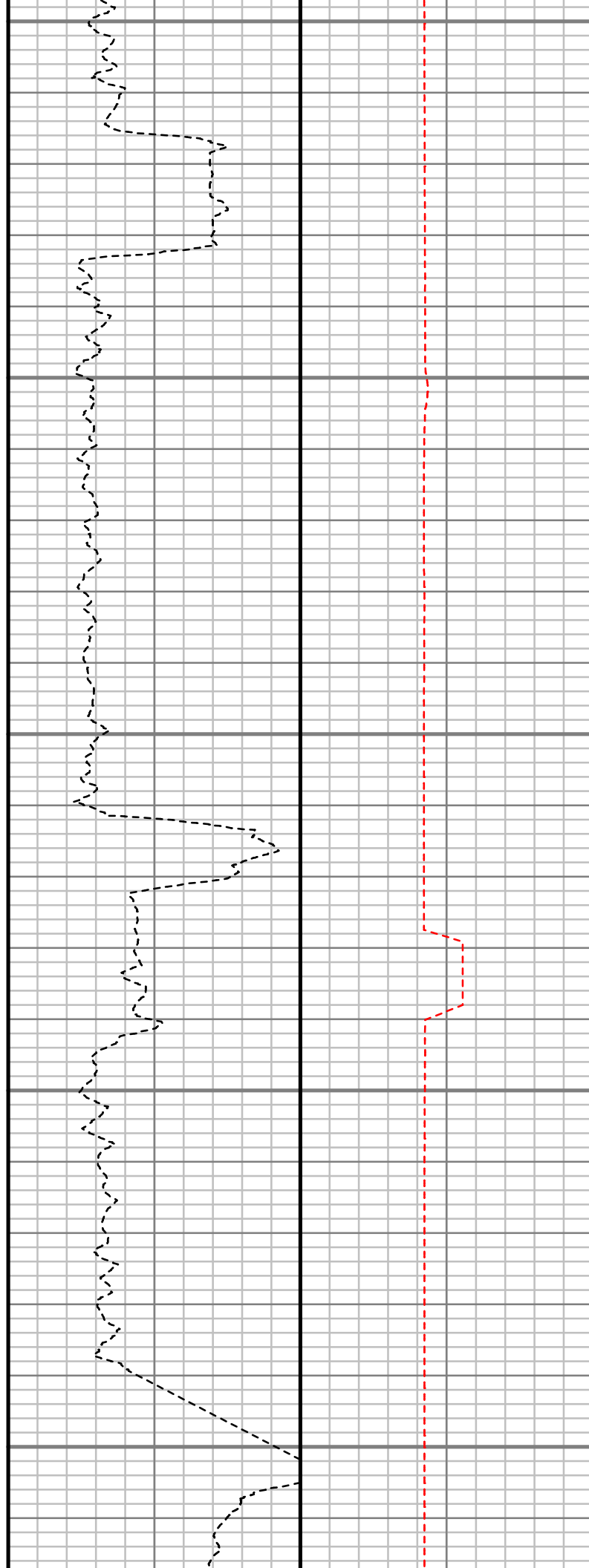
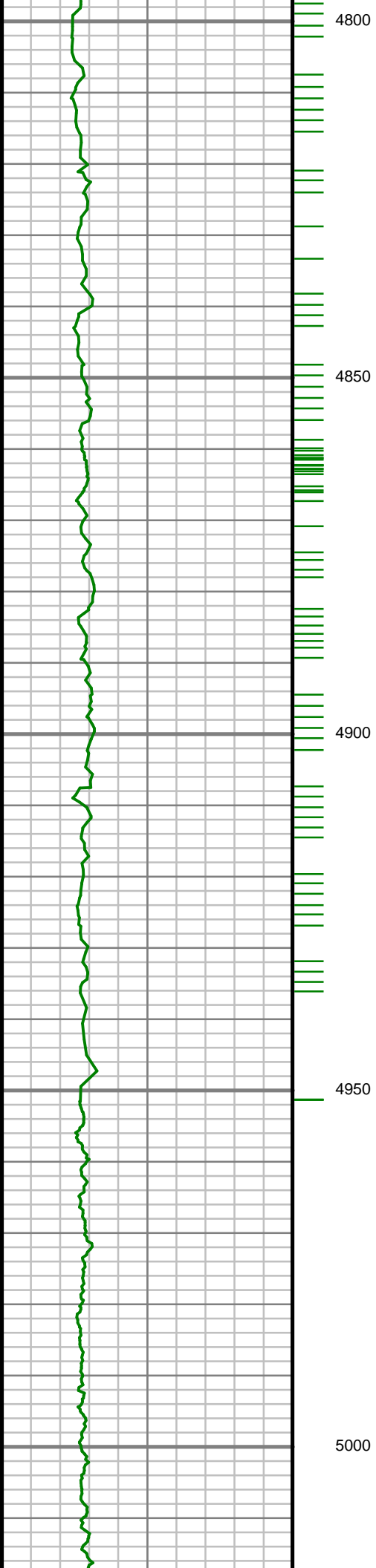


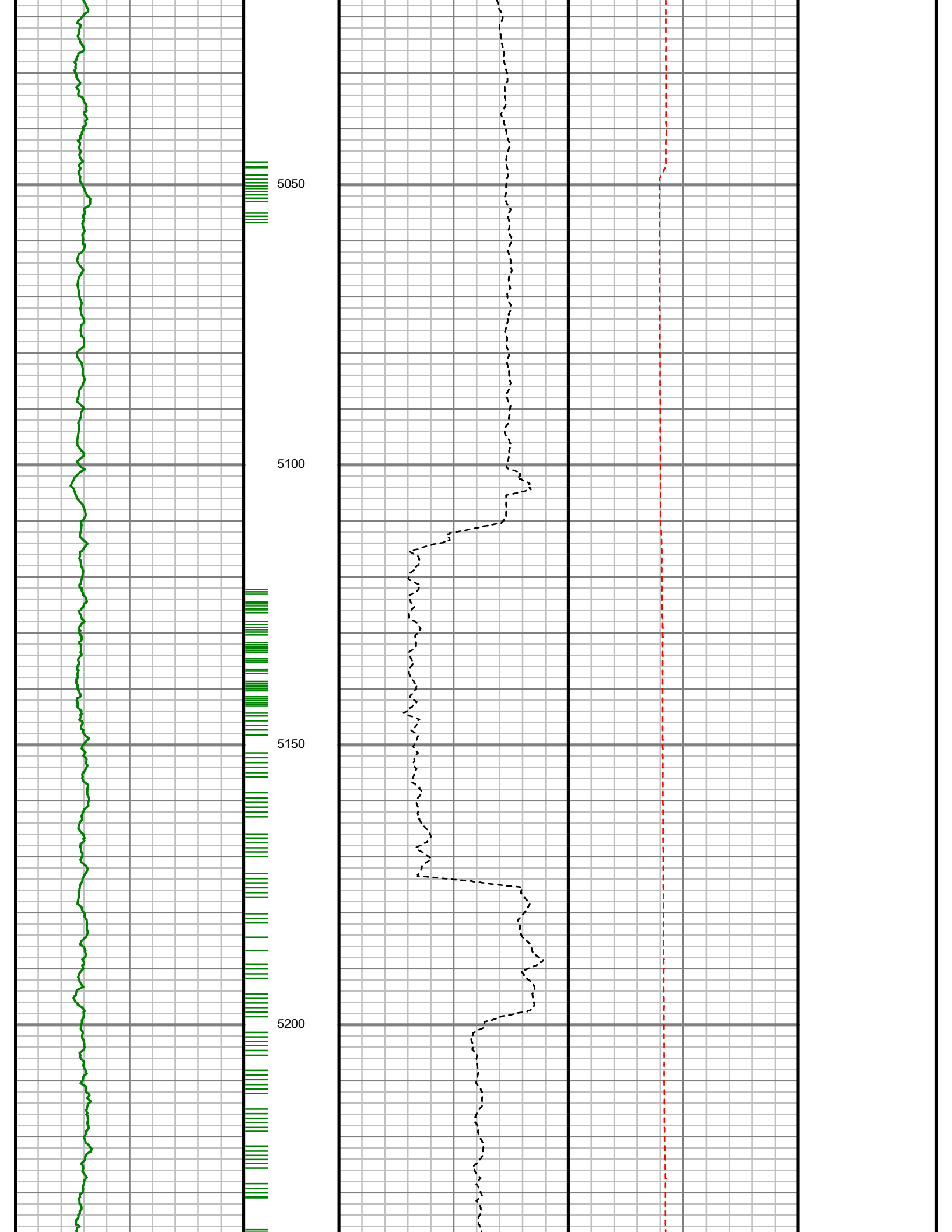


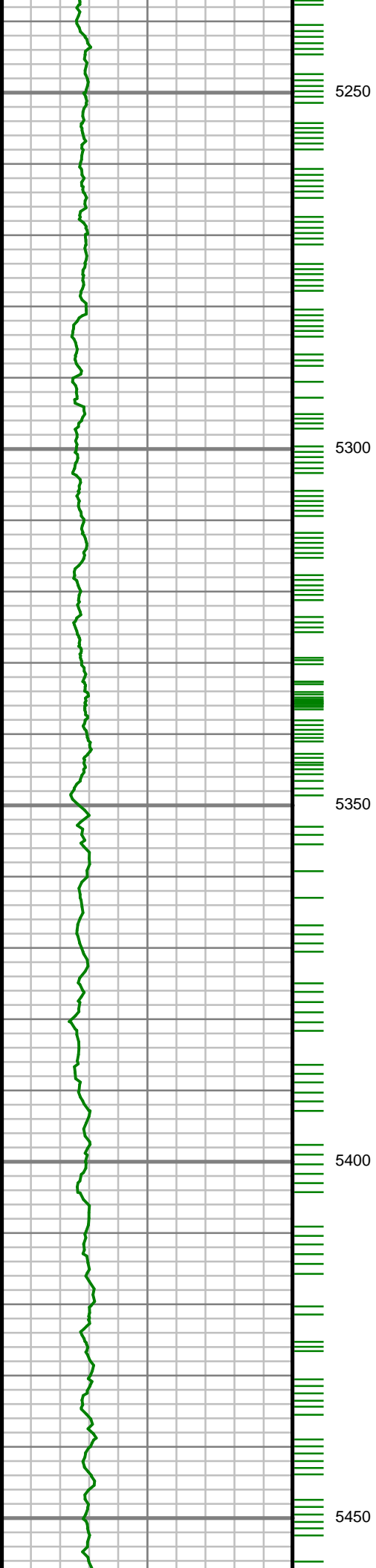


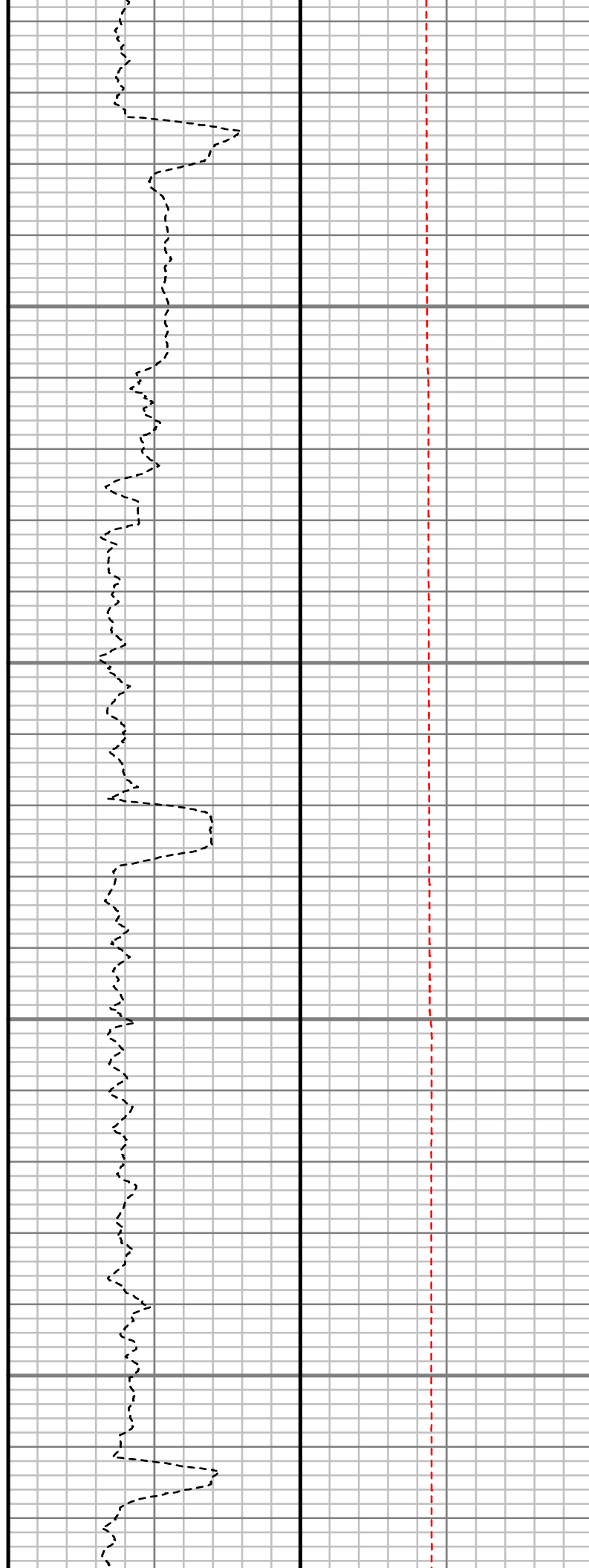
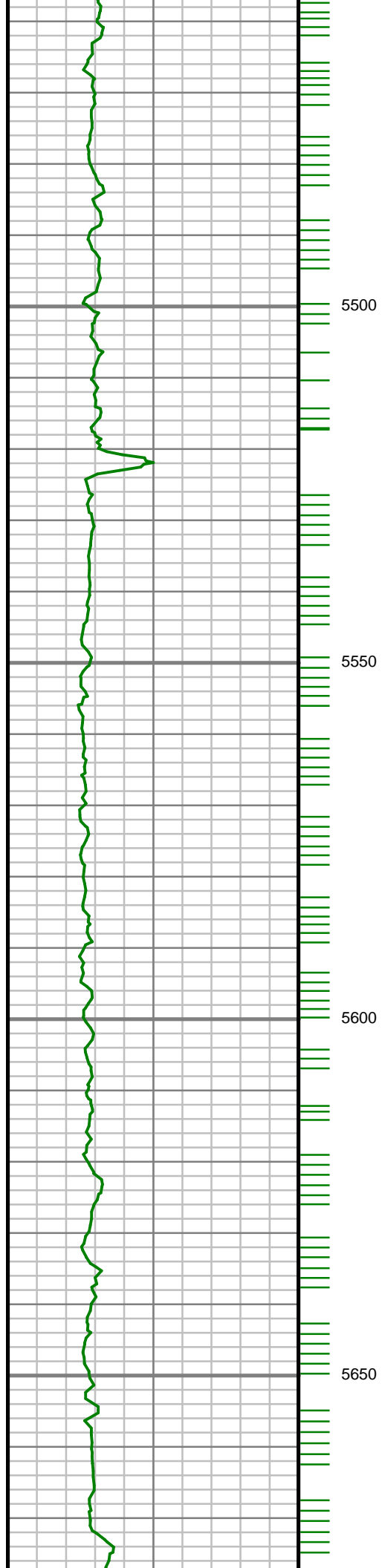


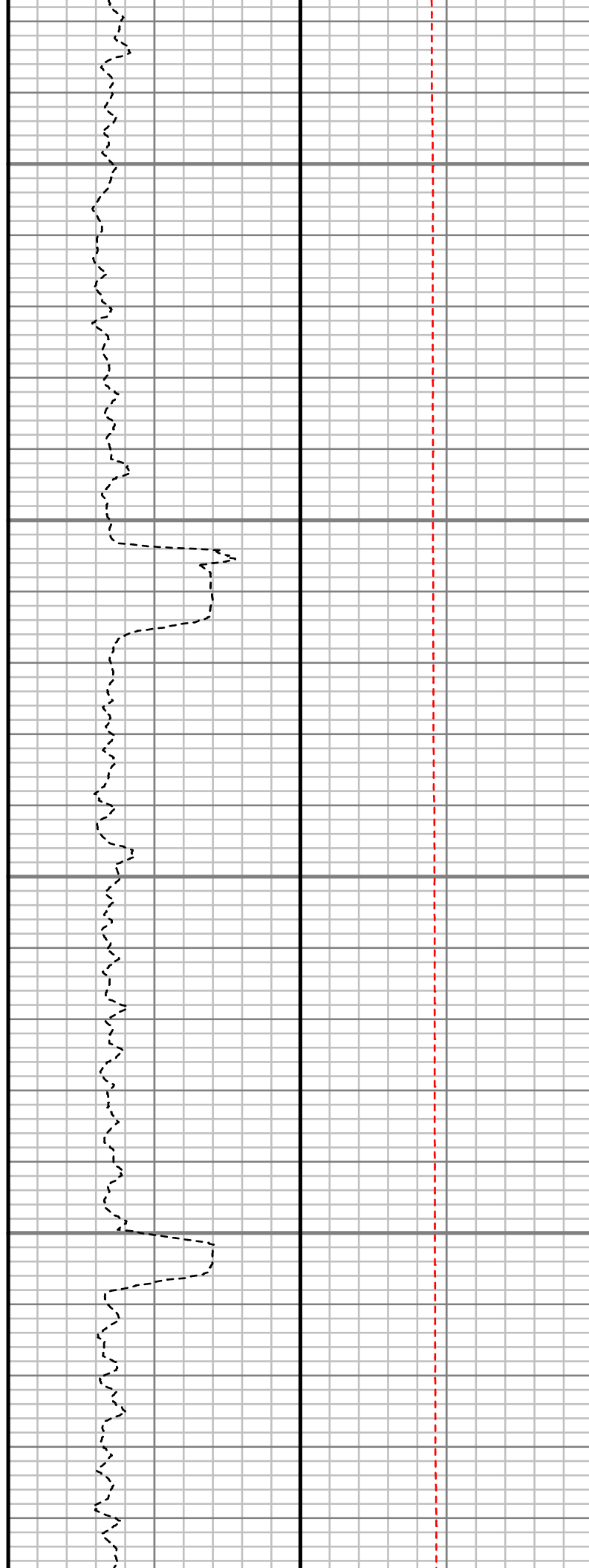
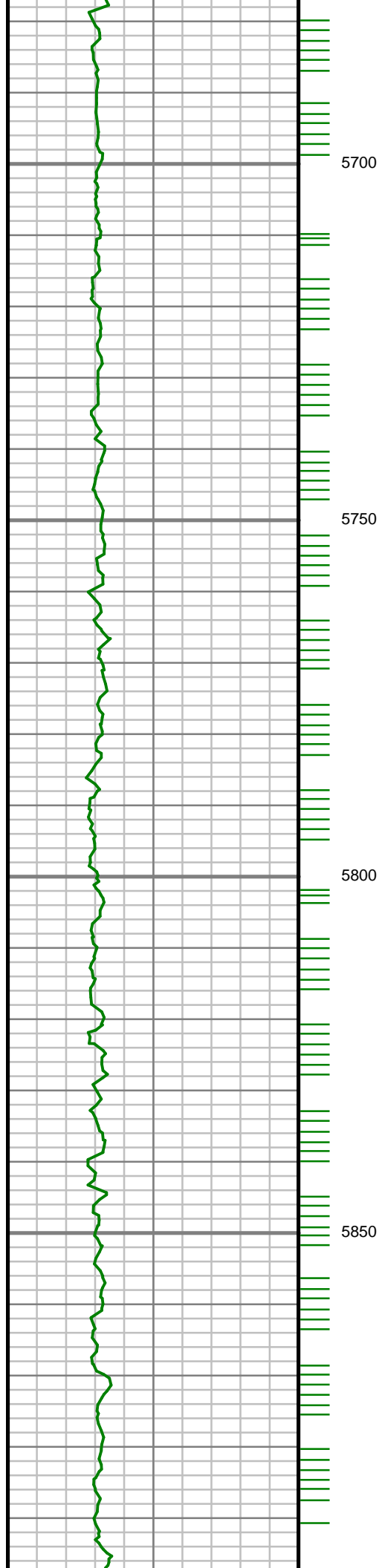


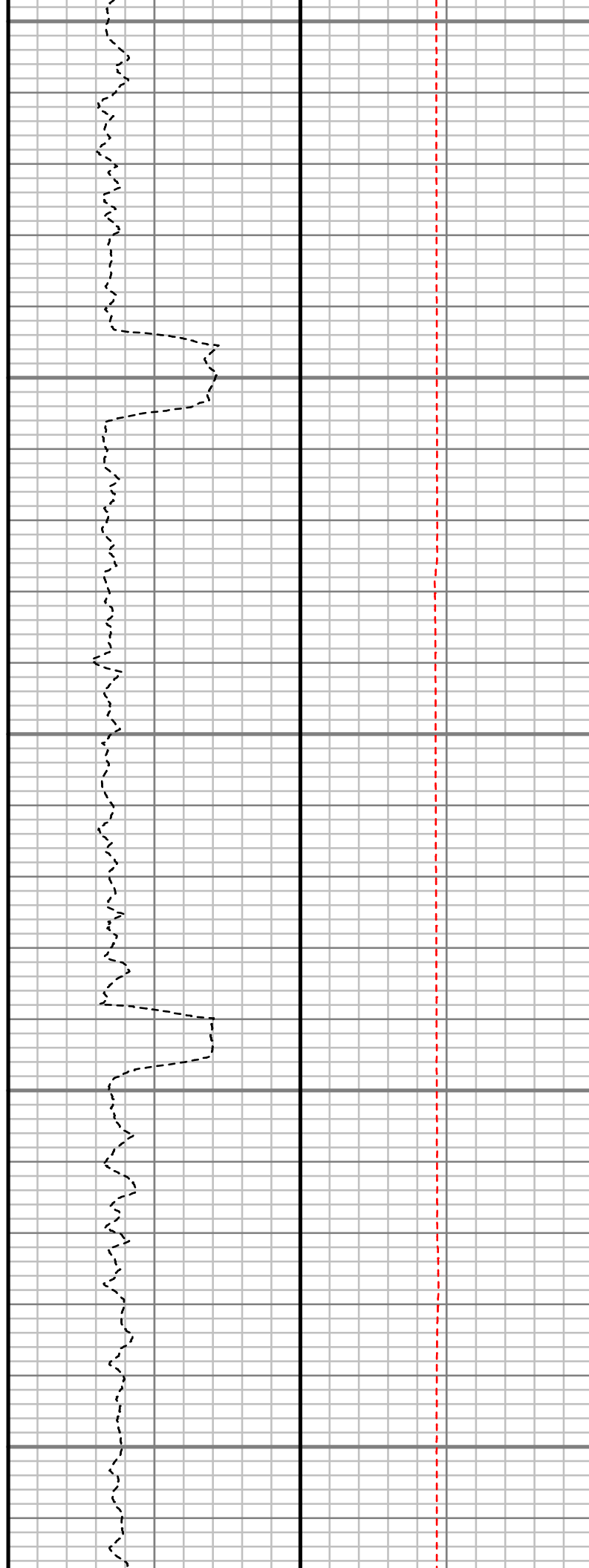
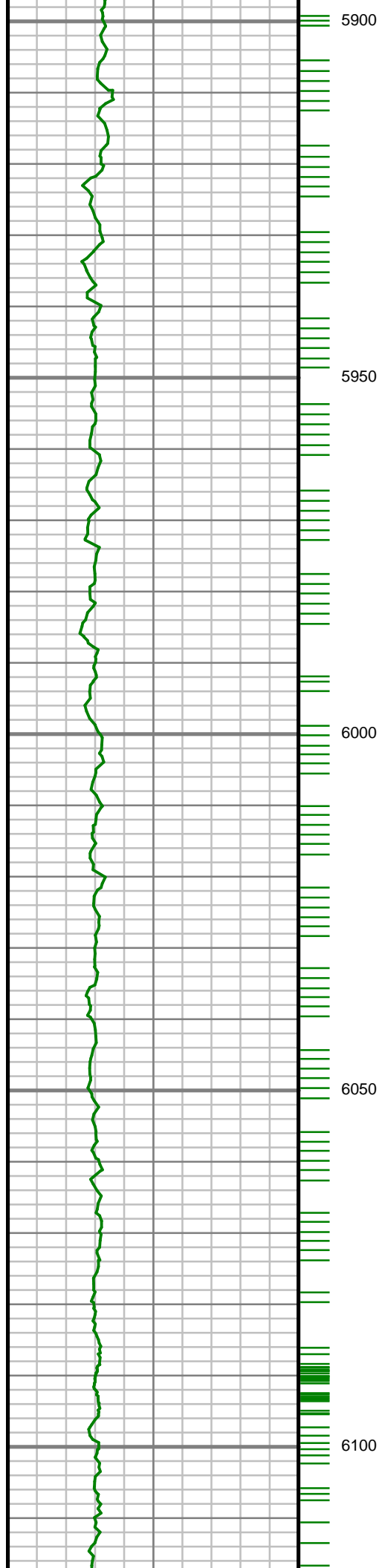


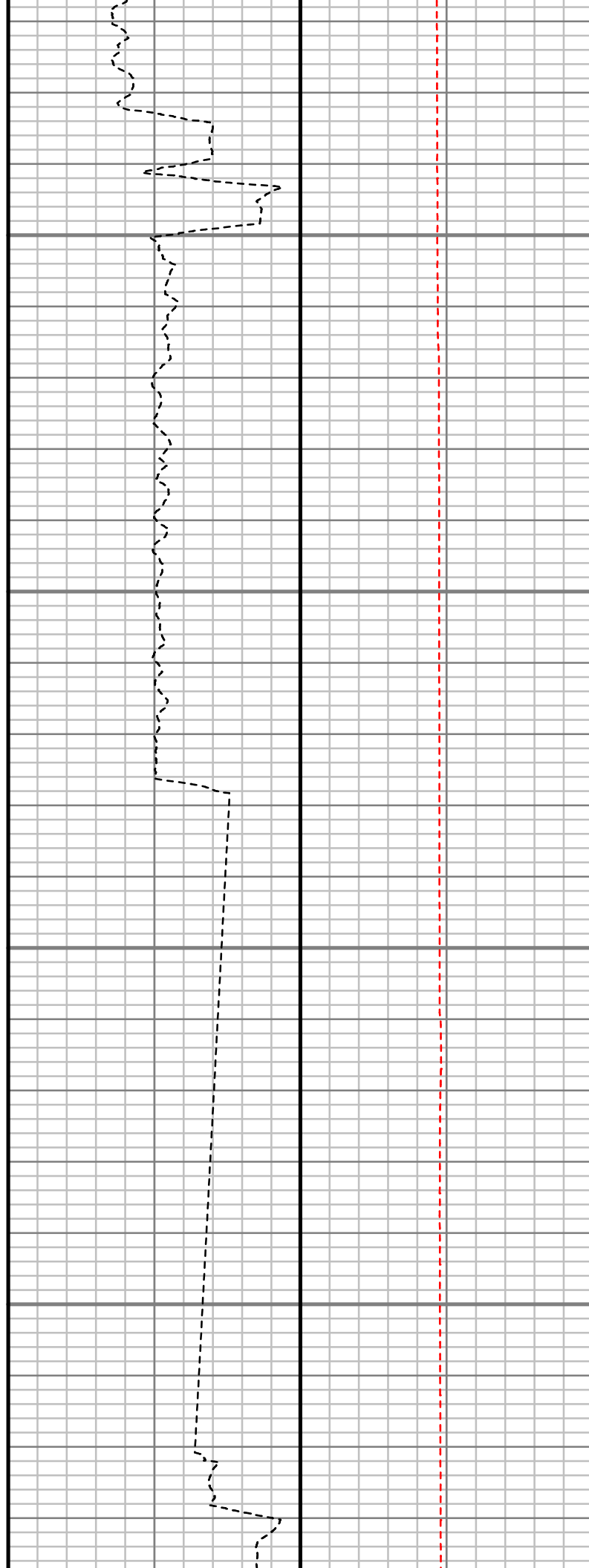
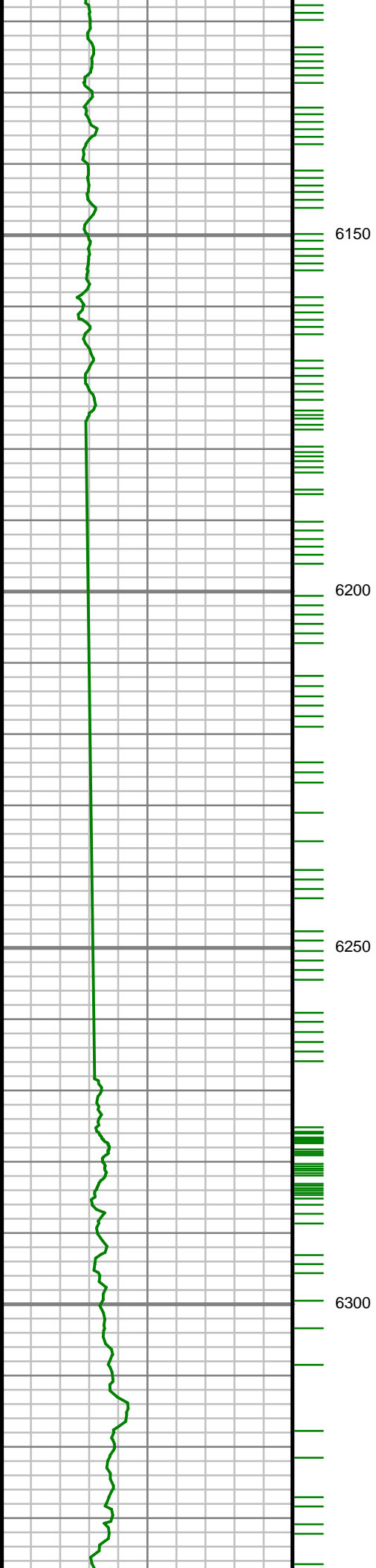


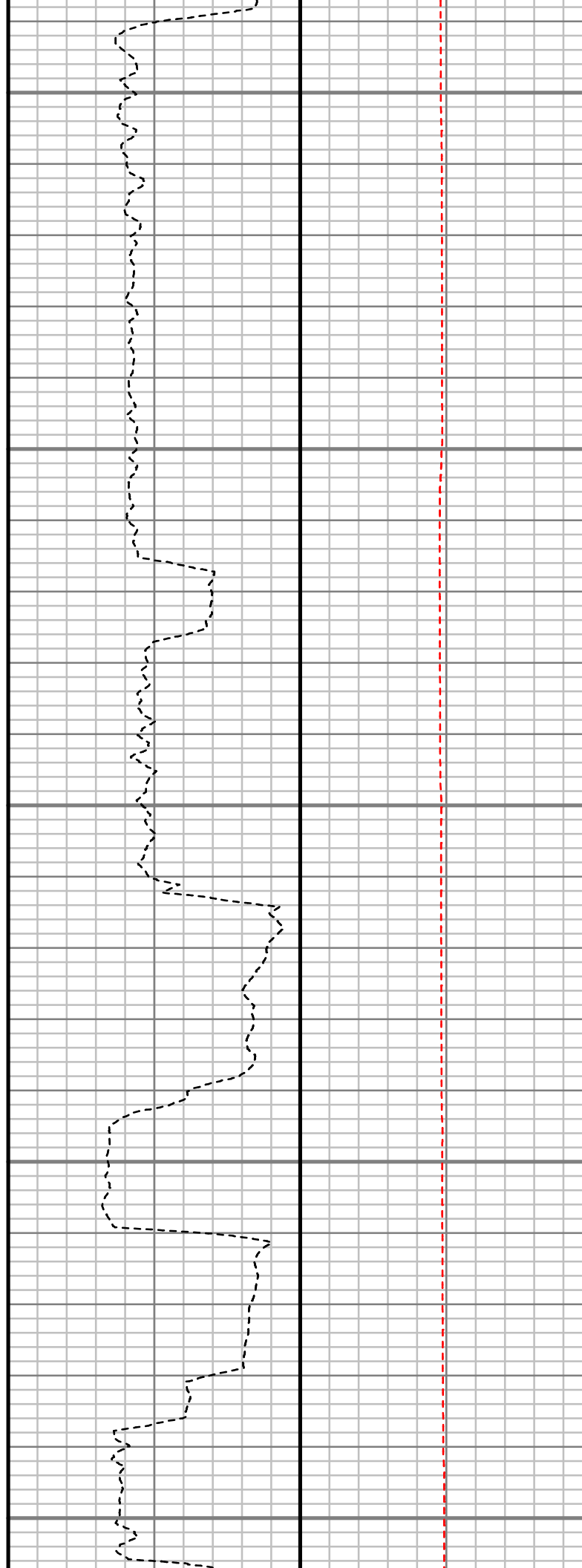
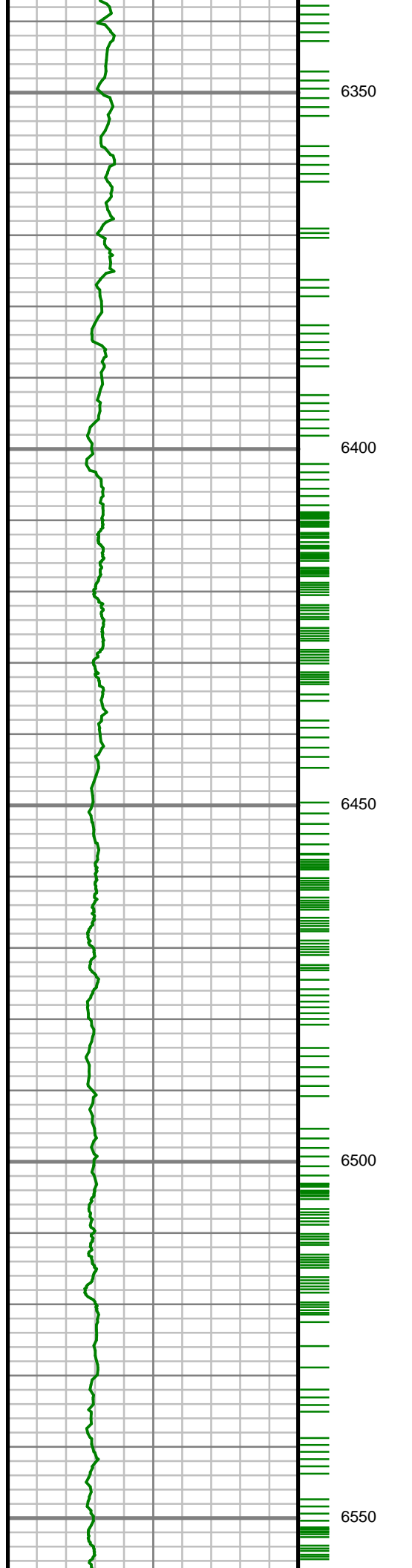


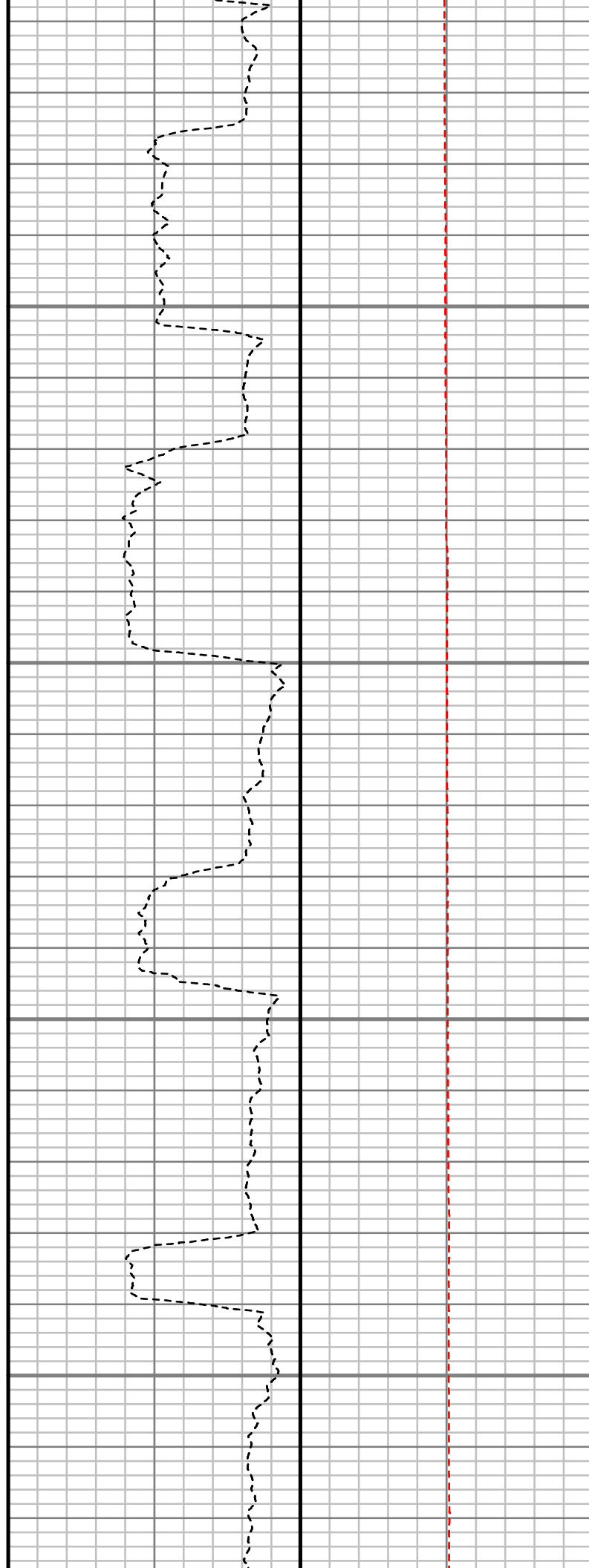
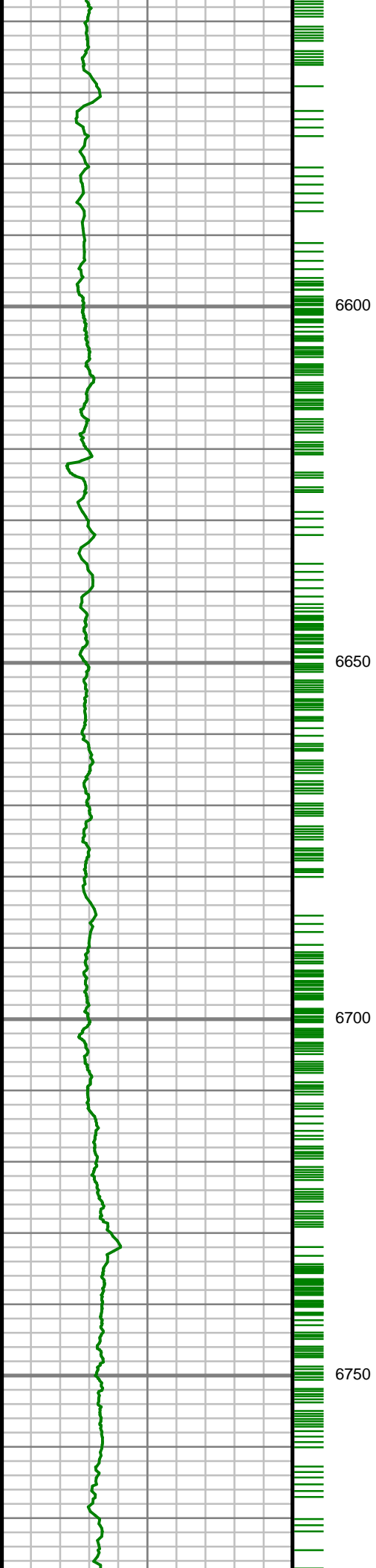


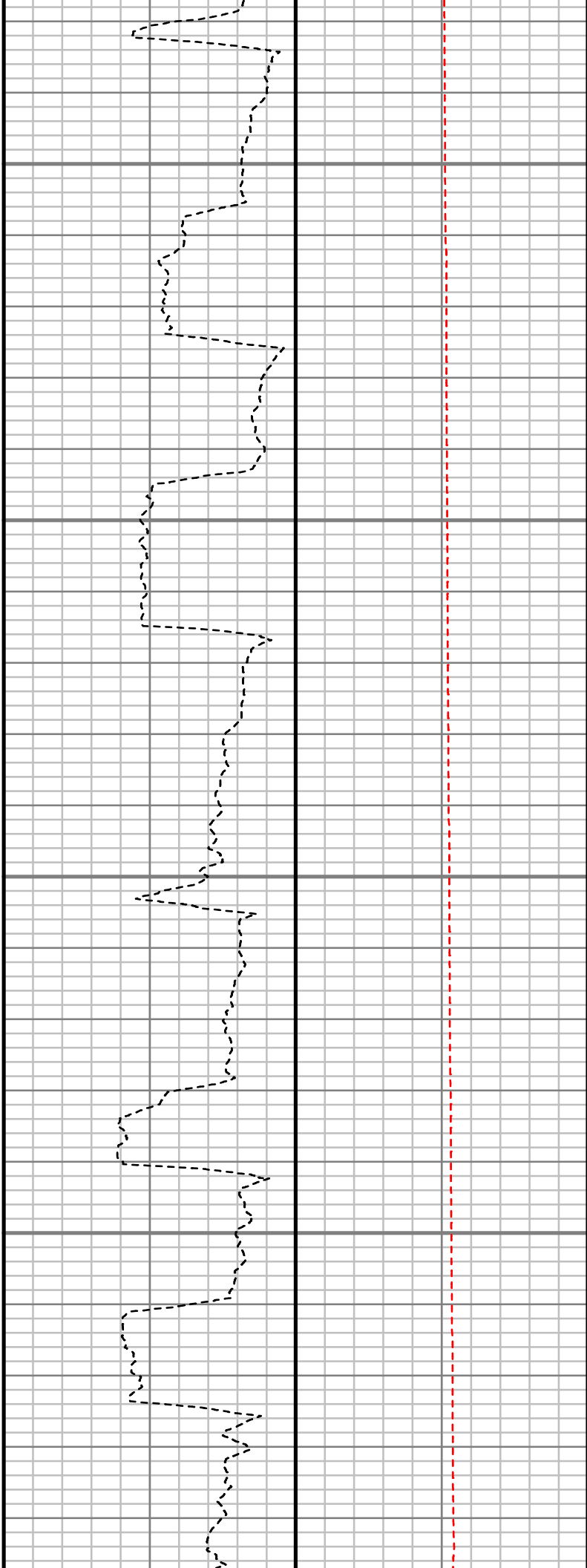
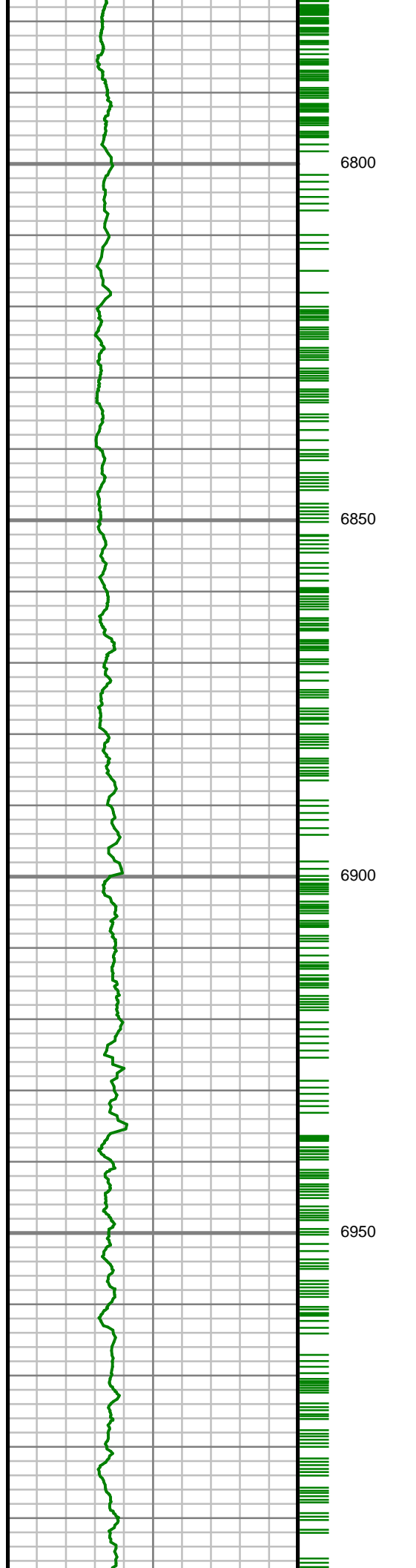


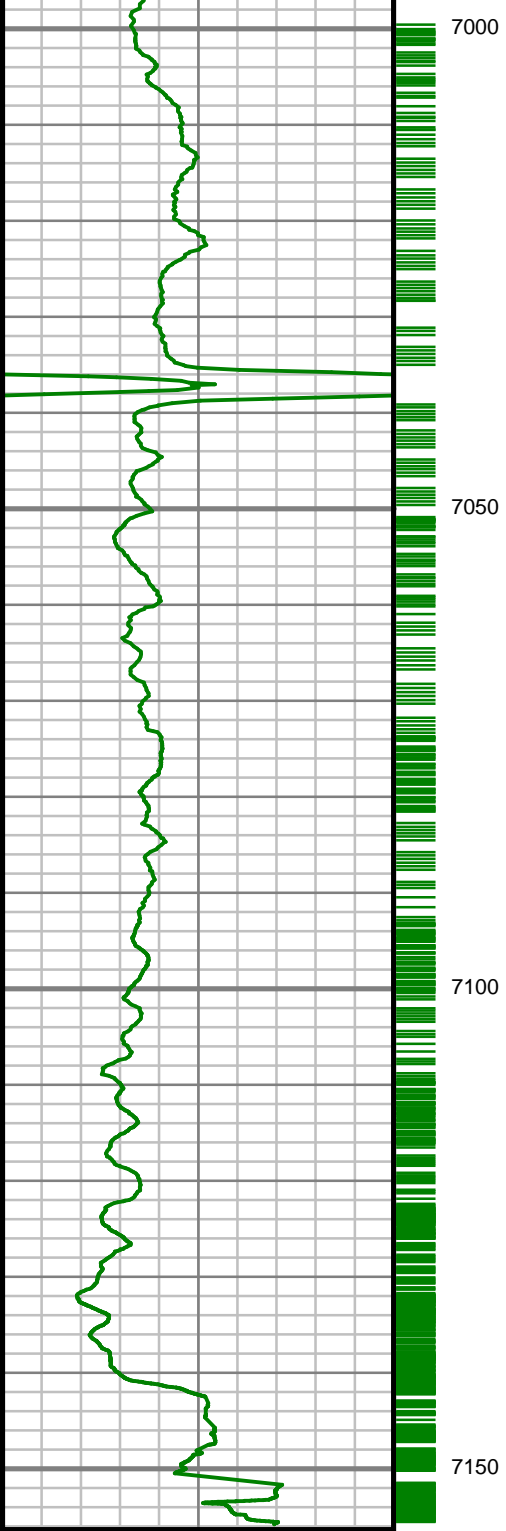






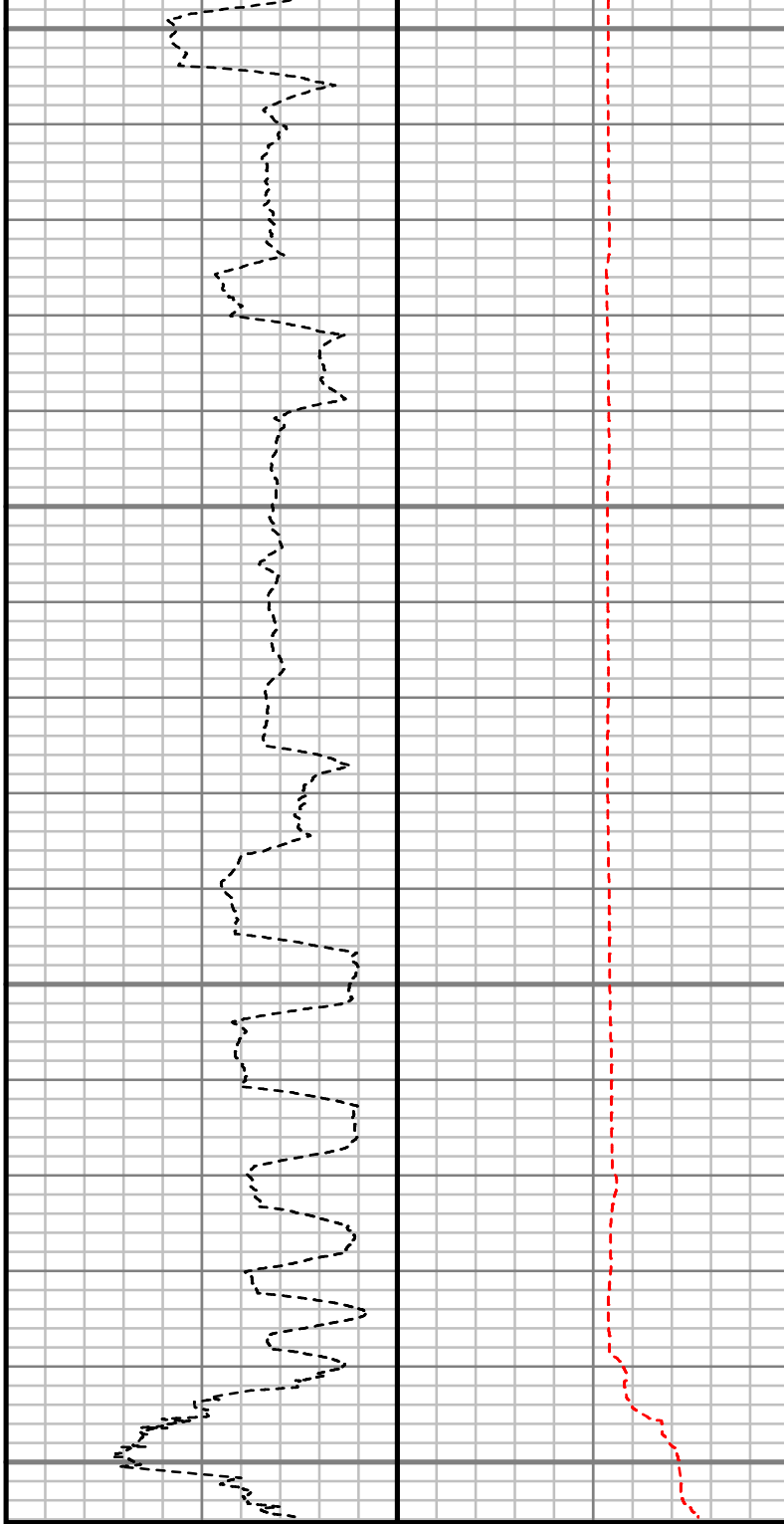






Gamma Ray (GR)		
0	Unit = aapi	200

TRUE VERTICAL DEPTH
1,240 (ft)



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

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

Comments

Survey Report

Customer Name:	ANADARKO PETROLEUM CORP.						
Site Name:	PARAGON 16-6HZ						
Well Name:	PARAGON 9N-31HZ						
Survey:	PARAGON 9N-31HZ						
Survey Date:	1/14/2014						
Magnetic Declination:	8.24 deg						
North Reference:	True North						
Calculation Method:	Minimum Curvature						
Section (VS) Ref:	0.00N (ft), 0.00E (ft), 0.00Azim (deg)						
MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid
25.00	0.00	0.00	25.00	0.00	0.00	0.00	0.00
125.00	0.10	244.78	125.00	-0.04	-0.04	-0.08	0.10
225.00	0.02	88.11	225.00	-0.07	-0.07	-0.14	0.12
325.00	0.20	86.55	325.00	-0.06	-0.06	0.05	0.18
425.00	0.39	87.89	425.00	-0.04	-0.04	0.57	0.19
525.00	0.38	69.66	525.00	0.09	0.09	1.22	0.12
625.00	0.48	87.79	624.99	0.22	0.22	1.95	0.17
725.00	0.55	59.70	724.99	0.48	0.48	2.78	0.26

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
825.00	0.65	41.69	824.98	1.14	1.14	3.57	0.21
925.00	0.59	8.92	924.98	2.08	2.08	4.03	0.35
1025.00	0.31	351.79	1024.98	2.85	2.85	4.07	0.31
1037.00	0.25	343.95	1036.98	2.91	2.91	4.06	0.59
1269.00	1.35	53.85	1268.95	5.01	5.01	6.13	0.56
1360.00	1.06	175.59	1359.94	4.80	4.80	7.06	2.32
1452.00	2.42	224.58	1451.90	2.57	2.57	5.76	2.07
1565.00	3.89	229.72	1564.73	-1.61	-1.61	1.16	1.32
1657.00	6.69	231.60	1656.33	-6.95	-6.95	-5.42	3.04
1749.00	8.25	215.17	1747.55	-15.68	-15.68	-13.42	2.86
1841.00	10.78	218.67	1838.28	-27.80	-27.80	-22.60	2.82
1932.00	11.46	210.06	1927.58	-42.27	-42.27	-32.45	1.97
2023.00	11.65	210.70	2016.73	-58.00	-58.00	-41.67	0.24
2115.00	11.87	208.34	2106.80	-74.31	-74.31	-50.90	0.58
2206.00	12.71	211.18	2195.72	-91.11	-91.11	-60.53	1.14
2298.00	12.92	219.32	2285.43	-107.73	-107.73	-72.28	1.97
2389.00	12.78	221.99	2374.15	-123.08	-123.08	-85.46	0.67
2481.00	11.57	219.40	2464.08	-137.77	-137.77	-98.13	1.45
2573.00	11.87	216.21	2554.17	-152.54	-152.54	-109.57	0.78
2665.00	11.54	217.01	2644.25	-167.52	-167.52	-120.70	0.40

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
2756.00	10.40	216.84	2733.59	-181.36	-181.36	-131.10	1.26
2848.00	10.75	218.57	2824.03	-194.72	-194.72	-141.43	0.51
2939.00	10.40	210.04	2913.49	-208.46	-208.46	-150.83	1.76
3031.00	10.74	209.38	3003.93	-223.12	-223.12	-159.19	0.39
3122.00	12.02	211.86	3093.14	-238.55	-238.55	-168.35	1.51
3214.00	11.52	212.18	3183.20	-254.47	-254.47	-178.31	0.55
3306.00	10.31	215.48	3273.53	-268.95	-268.95	-187.98	1.48
3397.00	10.32	215.36	3363.06	-282.23	-282.23	-197.43	0.03
3489.00	8.99	212.24	3453.76	-295.03	-295.03	-206.03	1.55
3580.00	8.28	206.16	3543.73	-306.92	-306.92	-212.71	1.27
3672.00	8.21	212.54	3634.78	-318.40	-318.40	-219.16	1.00
3764.00	8.25	210.97	3725.84	-329.60	-329.60	-226.09	0.25
3856.00	7.29	211.33	3816.99	-340.24	-340.24	-232.52	1.04
3947.00	5.96	208.29	3907.38	-349.33	-349.33	-237.76	1.51
4039.00	4.06	201.27	3999.03	-356.57	-356.57	-241.20	2.17
4130.00	3.75	196.64	4089.82	-362.42	-362.42	-243.22	0.49
4222.00	3.36	189.21	4181.64	-367.95	-367.95	-244.51	0.65
4316.00	1.31	212.70	4275.56	-371.58	-371.58	-245.54	2.36
4411.00	0.81	267.60	4370.54	-372.52	-372.52	-246.80	1.13

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
4505.00	0.81	297.26	4464.53	-372.24	-372.24	-248.05	0.44
4599.00	0.24	350.75	4558.53	-371.75	-371.75	-248.67	0.74
4694.00	1.72	292.57	4653.52	-371.01	-371.01	-250.02	1.70
4788.00	2.00	307.23	4747.47	-369.47	-369.47	-252.63	0.58
4883.00	1.25	299.34	4842.43	-367.96	-367.96	-254.86	0.83
4977.00	0.54	263.20	4936.42	-367.52	-367.52	-256.19	0.93
5071.00	0.14	299.74	5030.41	-367.51	-367.51	-256.73	0.47
5165.00	0.26	58.32	5124.41	-367.34	-367.34	-256.65	0.37
5260.00	0.47	114.42	5219.41	-367.39	-367.39	-256.11	0.41
5354.00	0.47	67.84	5313.41	-367.40	-367.40	-255.40	0.40
5448.00	0.68	221.06	5407.41	-367.68	-367.68	-255.41	1.19
5543.00	0.95	237.92	5502.40	-368.52	-368.52	-256.44	0.38
5637.00	1.25	248.09	5596.38	-369.32	-369.32	-258.06	0.38
5731.00	1.04	269.32	5690.36	-369.71	-369.71	-259.86	0.50
5826.00	1.25	259.11	5785.34	-369.92	-369.92	-261.73	0.31
5920.00	1.29	282.55	5879.32	-369.88	-369.88	-263.78	0.55
6014.00	1.06	314.80	5973.30	-369.04	-369.04	-265.43	0.74
6108.00	1.45	335.09	6067.28	-367.35	-367.35	-266.54	0.63
6203.00	1.36	44.87	6162.26	-365.46	-365.46	-266.26	1.70
6297.00	2.13	9.21	6256.22	-362.94	-362.94	-265.19	1.38

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
6392.00	1.21	54.79	6351.18	-360.62	-360.62	-264.08	1.63
6439.00	0.98	60.43	6398.17	-360.13	-360.13	-263.33	0.55
6486.00	0.92	39.74	6445.16	-359.64	-359.64	-262.74	0.73
6533.00	4.21	357.46	6492.11	-357.63	-357.63	-262.57	7.63
6580.00	7.35	352.94	6538.87	-352.92	-352.92	-263.02	6.73
6627.00	9.57	356.18	6585.35	-346.04	-346.04	-263.65	4.83
6675.00	11.05	355.71	6632.58	-337.47	-337.47	-264.26	3.10
6722.00	15.01	354.46	6678.36	-326.91	-326.91	-265.18	8.44
6769.00	19.46	357.14	6723.24	-313.03	-313.03	-266.16	9.62
6816.00	24.15	355.60	6766.86	-295.61	-295.61	-267.29	10.04
6863.00	28.28	353.33	6809.02	-274.96	-274.96	-269.32	9.06
6910.00	30.35	355.80	6850.00	-252.05	-252.05	-271.49	5.10
6958.00	35.01	2.45	6890.40	-226.18	-226.18	-271.78	12.25
7005.00	40.15	5.08	6927.64	-197.60	-197.60	-269.86	11.46
7052.00	45.22	5.67	6962.18	-165.88	-165.88	-266.87	10.81
7099.00	50.79	3.70	6993.61	-131.08	-131.08	-264.05	12.26
7146.00	56.74	2.73	7021.38	-93.25	-93.25	-261.93	12.77
7193.00	61.07	1.38	7045.65	-53.04	-53.04	-260.50	9.53
7241.00	62.42	1.02	7068.37	-10.77	-10.77	-259.62	2.89

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
7288.00	66.35	359.83	7088.69	31.60	31.60	-259.31	8.65
7335.00	70.54	359.92	7105.95	75.30	75.30	-259.41	8.91
7382.00	75.08	0.61	7119.84	120.19	120.19	-259.20	9.77
7429.00	79.44	0.98	7130.20	166.02	166.02	-258.56	9.31
7476.00	83.14	0.68	7137.32	212.46	212.46	-257.88	7.89
7498.00	85.81	0.98	7139.44	234.36	234.36	-257.57	12.20
7603.00	91.11	0.08	7142.26	339.28	339.28	-256.60	5.12
7695.00	90.57	0.14	7140.91	431.27	431.27	-256.43	0.59
7787.00	90.40	0.38	7140.13	523.26	523.26	-256.01	0.32
7878.00	90.23	0.91	7139.62	614.25	614.25	-254.98	0.62
7970.00	89.23	0.02	7140.06	706.25	706.25	-254.23	1.46
8061.00	88.72	359.32	7141.68	797.23	797.23	-254.75	0.95
8153.00	89.46	358.53	7143.14	889.20	889.20	-256.47	1.18
8245.00	90.10	358.74	7143.49	981.17	981.17	-258.66	0.73
8336.00	89.70	358.95	7143.65	1072.16	1072.16	-260.50	0.50
8428.00	90.17	0.62	7143.76	1164.15	1164.15	-260.85	1.89
8519.00	90.44	0.96	7143.28	1255.14	1255.14	-259.59	0.47
8611.00	89.60	359.02	7143.25	1347.14	1347.14	-259.61	2.29
8702.00	89.16	358.90	7144.24	1438.12	1438.12	-261.26	0.50
8794.00	90.60	0.62	7144.43	1530.11	1530.11	-261.65	2.44

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
8886.00	92.05	1.61	7142.29	1622.06	1622.06	-259.86	1.90
8978.00	91.78	1.52	7139.22	1713.98	1713.98	-257.35	0.31
9069.00	91.34	1.40	7136.74	1804.91	1804.91	-255.04	0.50
9161.00	90.37	1.27	7135.36	1896.88	1896.88	-252.90	1.07
9252.00	89.73	0.79	7135.28	1987.86	1987.86	-251.26	0.88
9344.00	88.89	1.99	7136.39	2079.83	2079.83	-249.04	1.59
9439.00	89.83	2.77	7137.45	2174.74	2174.74	-245.10	1.29
9533.00	90.40	1.01	7137.26	2268.68	2268.68	-242.00	1.96
9627.00	88.56	359.82	7138.11	2362.67	2362.67	-241.31	2.34
9722.00	87.61	359.41	7141.29	2457.61	2457.61	-241.95	1.08
9816.00	87.68	359.22	7145.15	2551.53	2551.53	-243.07	0.21
9911.00	89.63	359.58	7147.38	2646.49	2646.49	-244.06	2.09
10005.00	90.67	358.99	7147.13	2740.48	2740.48	-245.23	1.27
10099.00	89.76	357.49	7146.77	2834.43	2834.43	-248.11	1.86
10194.00	89.93	358.56	7147.02	2929.37	2929.37	-251.38	1.14
10288.00	90.54	358.20	7146.63	3023.34	3023.34	-254.03	0.75
10383.00	90.13	359.41	7146.08	3118.31	3118.31	-256.02	1.34
10477.00	89.80	358.62	7146.13	3212.30	3212.30	-257.64	0.91
10571.00	89.63	358.29	7146.60	3306.26	3306.26	-260.18	0.39

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
10665.00	89.73	359.95	7147.12	3400.24	3400.24	-261.62	1.77
10760.00	89.16	1.20	7148.04	3495.23	3495.23	-260.67	1.45
10854.00	88.86	0.34	7149.67	3589.21	3589.21	-259.41	0.97
10948.00	90.24	0.52	7150.41	3683.20	3683.20	-258.71	1.48
11043.00	89.90	0.23	7150.30	3778.20	3778.20	-258.09	0.47
11137.00	89.93	0.10	7150.44	3872.20	3872.20	-257.82	0.14
11231.00	91.41	359.59	7149.34	3966.19	3966.19	-258.08	1.66
11325.00	90.87	358.14	7147.46	4060.15	4060.15	-259.95	1.64
11420.00	89.33	359.87	7147.29	4155.13	4155.13	-261.59	2.45
11514.00	89.53	359.22	7148.23	4249.12	4249.12	-262.33	0.72
11608.00	88.79	358.35	7149.61	4343.09	4343.09	-264.32	1.22
11702.00	88.76	359.15	7151.62	4437.04	4437.04	-266.36	0.85
11797.00	88.52	359.55	7153.88	4532.01	4532.01	-267.44	0.49
11891.00	91.38	359.59	7153.96	4626.00	4626.00	-268.15	3.04
11986.00	89.66	359.71	7153.10	4720.99	4720.99	-268.72	1.81
12080.00	90.40	0.07	7153.04	4814.99	4814.99	-268.91	0.87
12174.00	93.26	359.96	7150.04	4908.93	4908.93	-268.89	3.04
12269.00	91.78	359.76	7145.86	5003.83	5003.83	-269.12	1.57
12363.00	90.60	358.51	7143.91	5097.80	5097.80	-270.55	1.82
12458.00	89.16	358.59	7144.10	5192.77	5192.77	-272.95	1.52

MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS
ft	deg	deg	ft	ft	ft	ft	7100ft
12552.00	89.43	359.20	7145.26	5286.74	5286.74	-274.76	0.71
12647.00	89.09	1.12	7146.49	5381.73	5381.73	-274.49	2.05
12741.00	90.10	0.65	7147.15	5475.71	5475.71	-273.04	1.19
12835.00	92.45	359.89	7145.06	5569.68	5569.68	-272.59	2.63
12930.00	91.55	359.98	7141.74	5664.62	5664.62	-272.70	0.96
13024.00	88.92	0.57	7141.36	5758.61	5758.61	-272.25	2.86
13119.00	90.07	0.55	7142.19	5853.60	5853.60	-271.33	1.20
13213.00	89.63	1.70	7142.44	5947.58	5947.58	-269.48	1.30
13307.00	88.55	0.44	7143.93	6041.55	6041.55	-267.73	1.76
13401.00	88.99	359.56	7145.94	6135.53	6135.53	-267.73	1.05
13496.00	88.39	358.75	7148.11	6230.49	6230.49	-269.13	1.06
13590.00	87.95	359.94	7151.12	6324.44	6324.44	-270.20	1.35
13622.00	88.15	359.85	7152.21	6356.42	6356.42	-270.26	0.70
13653.00	88.19	359.98	7153.20	6387.40	6387.40	-270.31	0.43
13685.00	88.86	1.25	7154.02	6419.39	6419.39	-269.96	4.50
13716.00	89.19	1.29	7154.55	6450.38	6450.38	-269.28	1.09
13747.00	88.69	0.35	7155.12	6481.37	6481.37	-268.83	3.44
13779.00	89.50	0.40	7155.63	6513.36	6513.36	-268.63	2.52
13873.00	91.14	0.22	7155.10	6607.36	6607.36	-268.12	1.76

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
13967.00	91.61	359.29	7152.85	6701.33	6701.33	-268.52	1.11
14062.00	90.44	359.26	7151.15	6796.30	6796.30	-269.72	1.24
14158.00	90.50	359.29	7150.36	6892.29	6892.29	-270.93	0.08

5" = 100' FEET TVD