

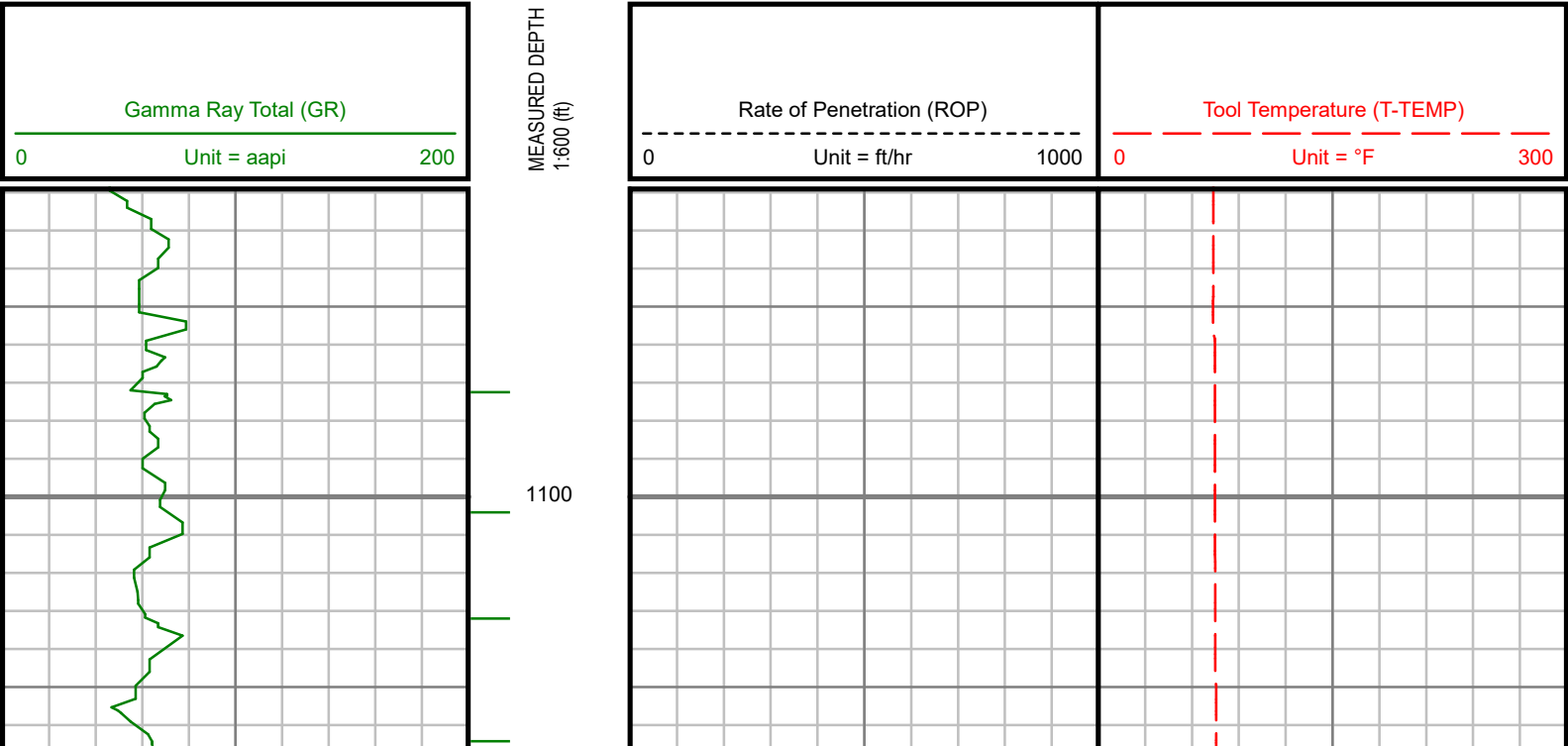
2" = 100' MD

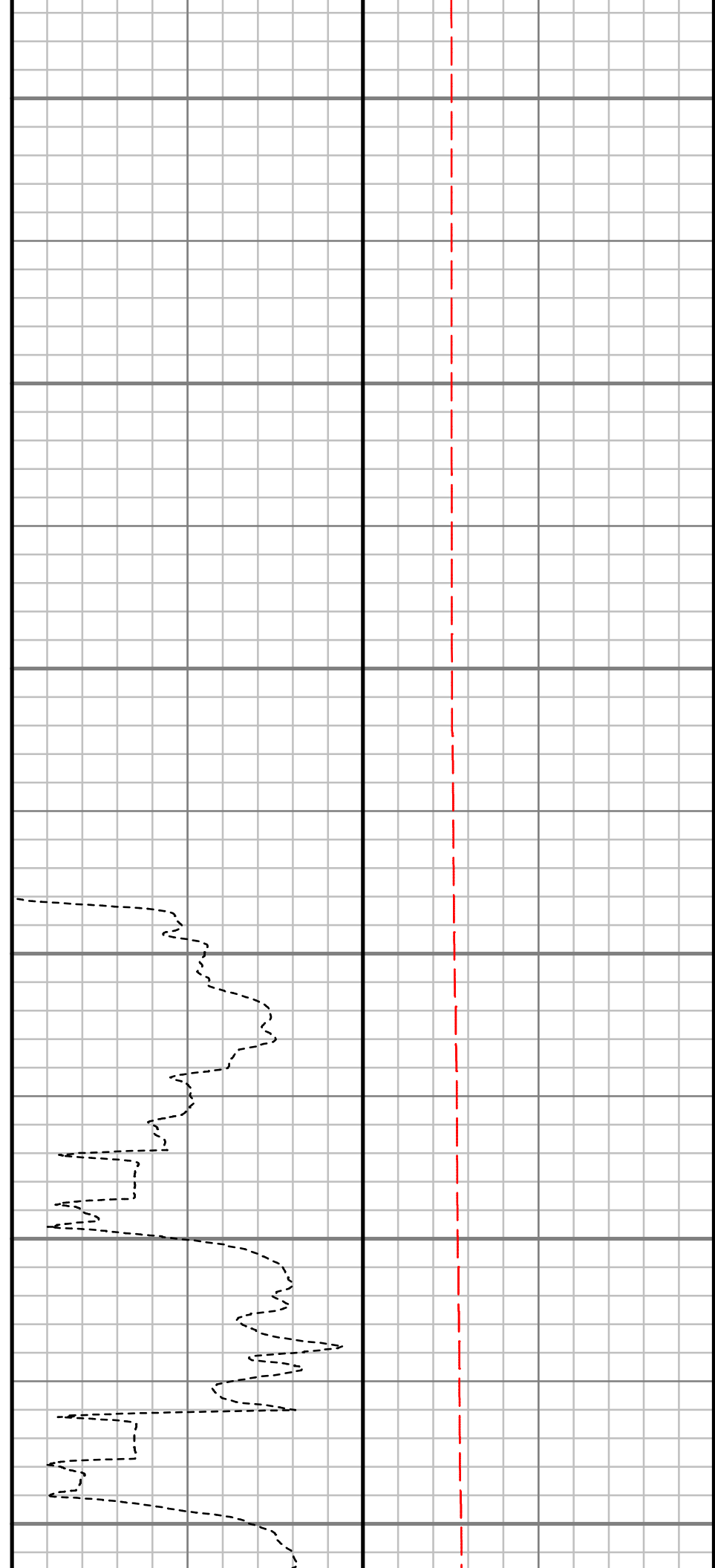
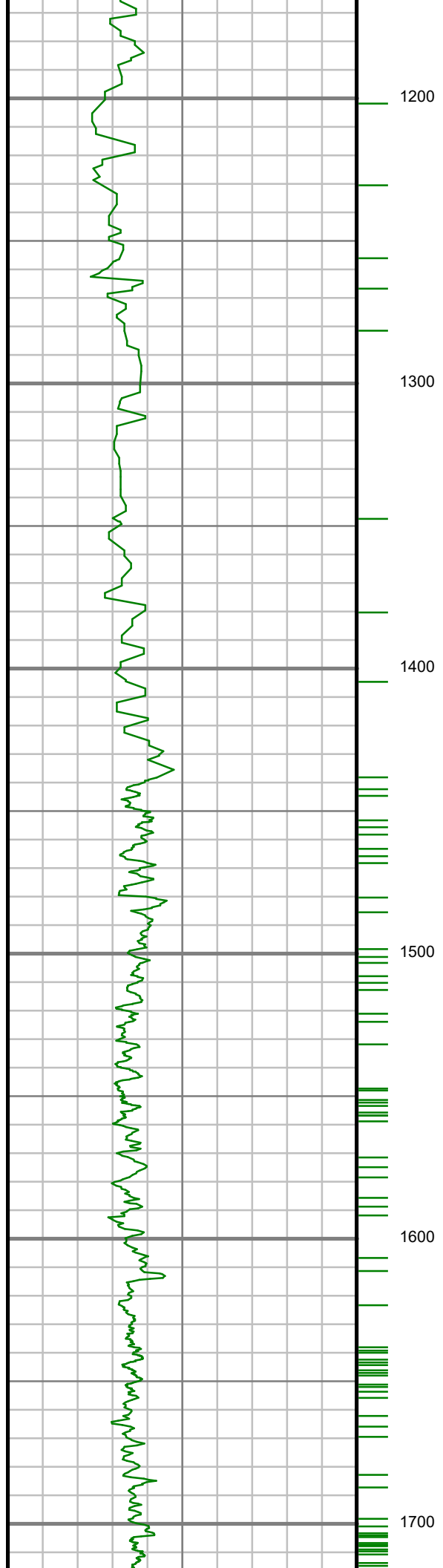
COMPANY : HIGHPOINT RESOURCES									
WELL : ANSCHUTZ EQUUS FARMS FED 05-61-34-5764B									
FIELD : WATTENBERG									
COUNTY : WELD									
STATE : COLORADO									
COUNTRY : U.S.A.									
UWI : 05-123-48186									
WELL LOCATION									
LAT:40°21'17.020"N LONG:104°11'11.220"W									
N:1374779.27 ft E:3366068.19 ft									
SEC:34									
TWP:5N									
RANGE:61W									
OTHER SERVICES									
NAD83									
DIRECTIONAL									
ROP									
DEPTH REF. : RKB									
REF. HEIGHT : 16.500 ft									
RKB to Ground Level									
GROUND LEVEL : 4479.600 ft									
G.L. to MEAN SEA LEVEL									
BOREHOLE RECORD									
DEVIATION RECORD									
HOLE SIZE in									
FROM ft									
TO ft									
INCLINATION deg									
FROM ft									
TO ft									
9.625									
0									
1019.95									
0 - 5									
0									
1146									
6.5									
1019.95									
6429									
5 - 22									
1146									
2145									
2145									
3738									
6.125									
6429									
16069									
22									
2145									
3738									
4867									
22 - 0									
3738									
4867									
0									
4867									
5434									
0 - 90									
5434									
6373									
6373									
16069									
CASING RECORD									
CASING SIZE in									
FROM ft									
TO ft									
9.625									
0									
1019.95									
6.5									
1019.95									
6429									
DRILLING CO.: CADE									
RIG: 24									
LMD UNIT NO.: KIT PRT PFDISTRICD: CASPER									
SPUD DATE: 01/12/2019									
LMD START DATE: 04/10/2019									
LMD END DATE: 04/17/2019									
DEPTH: 1019 ft									
DEPTH: 16069 ft									
TOTAL DEPTH: 16069 ft									

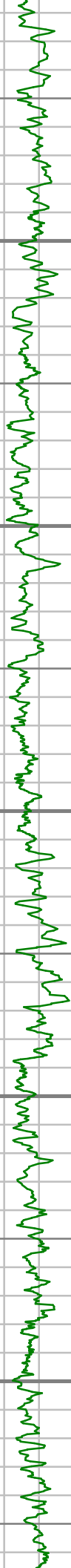
Remarks
HIGHPOINT RESOURCES AFE# 20408D
SCIENTIFIC DRILLING INTERNATIONAL JOB# OP.017844
ALL REFERENCES IN THE DEPTH TRACK ARE AT BIT DEPTH.
ALL DATA IS MEMORY DATA UNLESS STATED OTHERWISE.
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO GAMMA RAY TOTAL CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO RATE OF PENETRATION CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO TOOL TEMPERATURE CURVE
RUN #1: MWD / GAMMA RAY / PRT LOGGING RUN
SENSORS S/N: PULSER = 128-197 / CONT = 151 / MWD EYE = 1491 / GAMMA RAY = 1484 / PRT = 345
BIT TO SENSOR OFFSETS: SURVEY = 54.03 FT. / GAMMA RAY = 37.44 FT. / PRT = 43.18 FT.
RUN #2: MWD / GAMMA RAY / PRT LOGGING RUN
SENSORS S/N: PULSER = 128-121 / CONT = 303 / MWD EYE = 1806 / GAMMA RAY = 1291 / PRT = 368
BIT TO SENSOR OFFSETS: SURVEY = 54.03 FT. / GAMMA RAY = 37.44 FT. / PRT = 43.18 FT.
RUN #3: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 78-277 / CONT = 151 / MWD EYE = 1156 / GAMMA RAY = 1484
BIT TO SENSOR OFFSETS: SURVEY = 53.9 FT. / GAMMA RAY = 49.9 FT.
MNEMONICS LIST:
GR = GAMMA RAY TOTAL
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.

HIGHPOINT RESOURCES
ANSCHUTZ EQUUS FARMS FED 05-61-34-5764B
WATTENBERG FIELD
WELD COUNTY, COLORADO
API # 05-123-48186







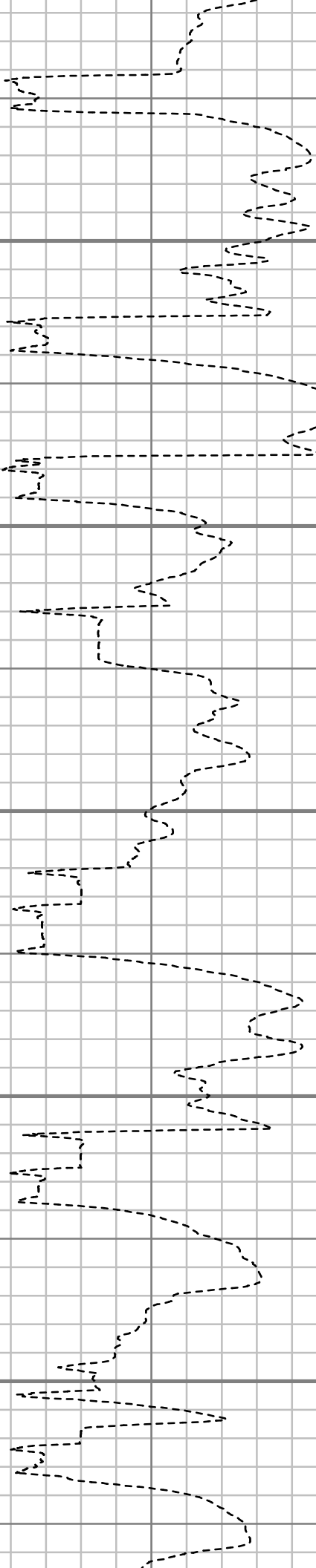
1800

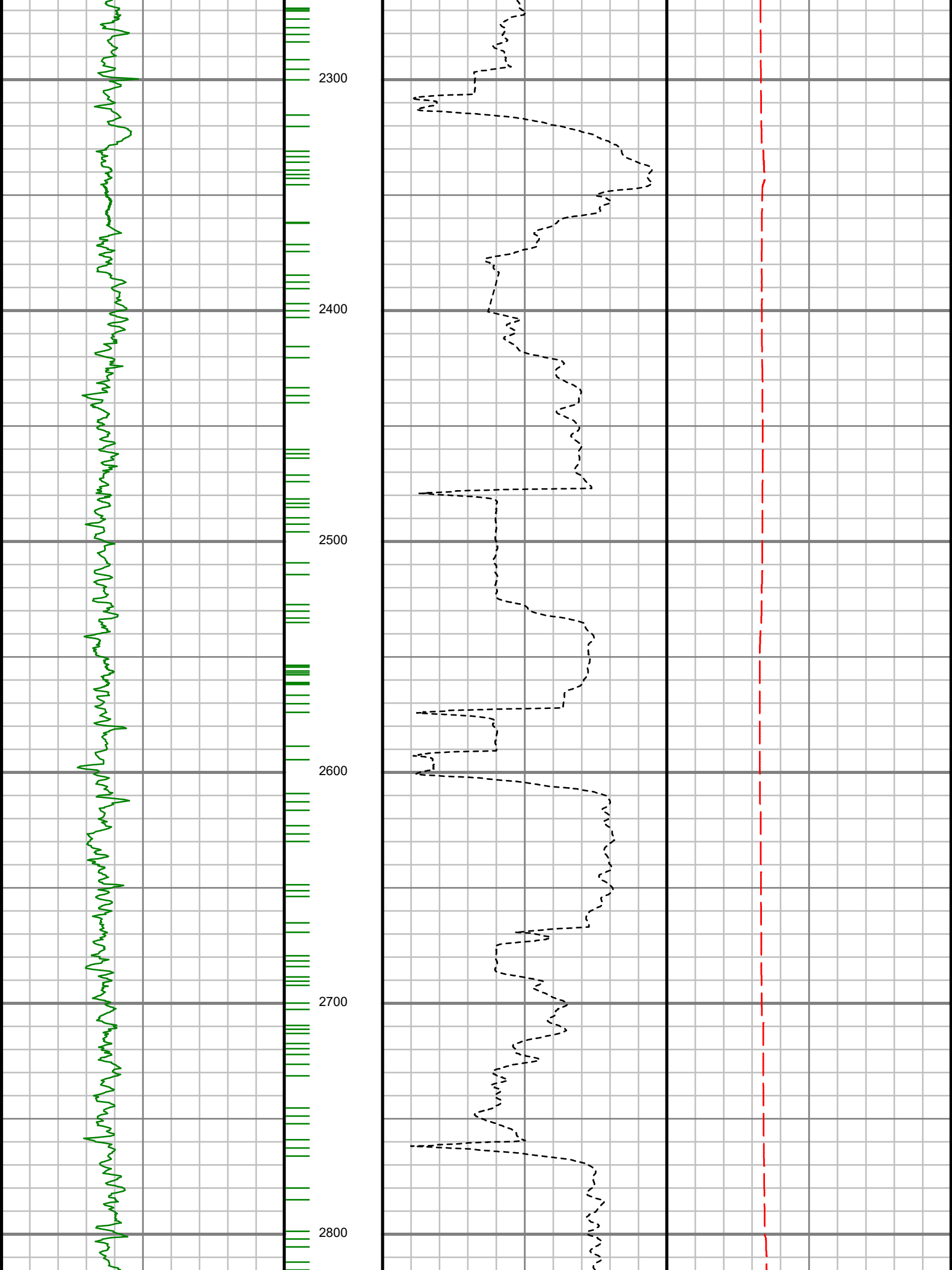
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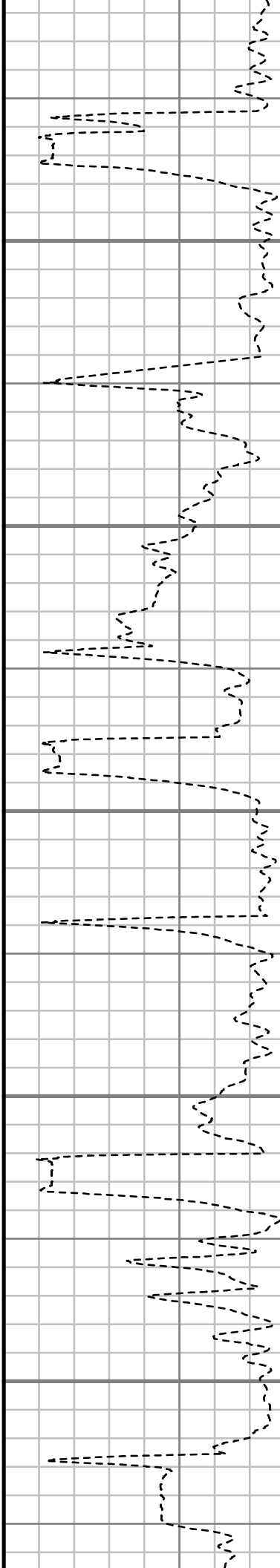
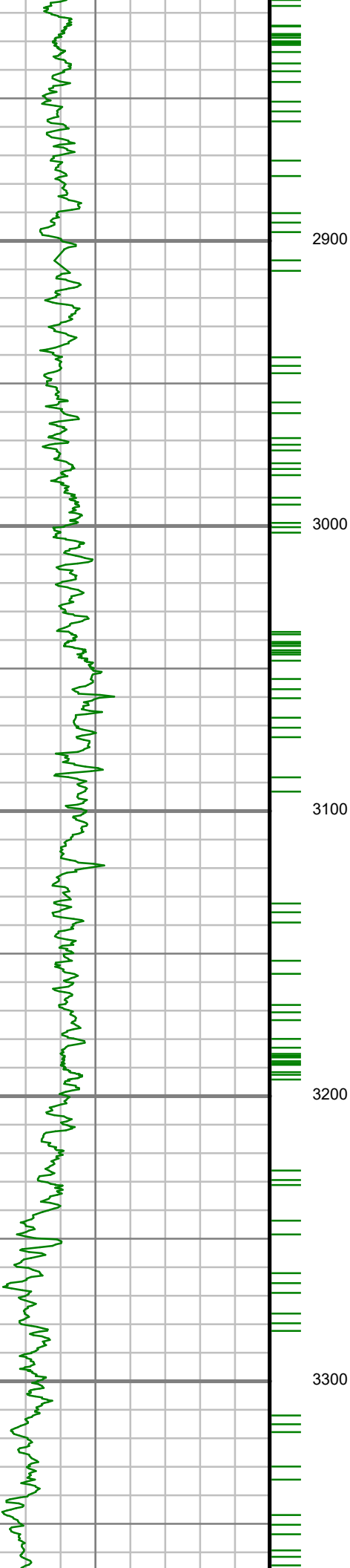
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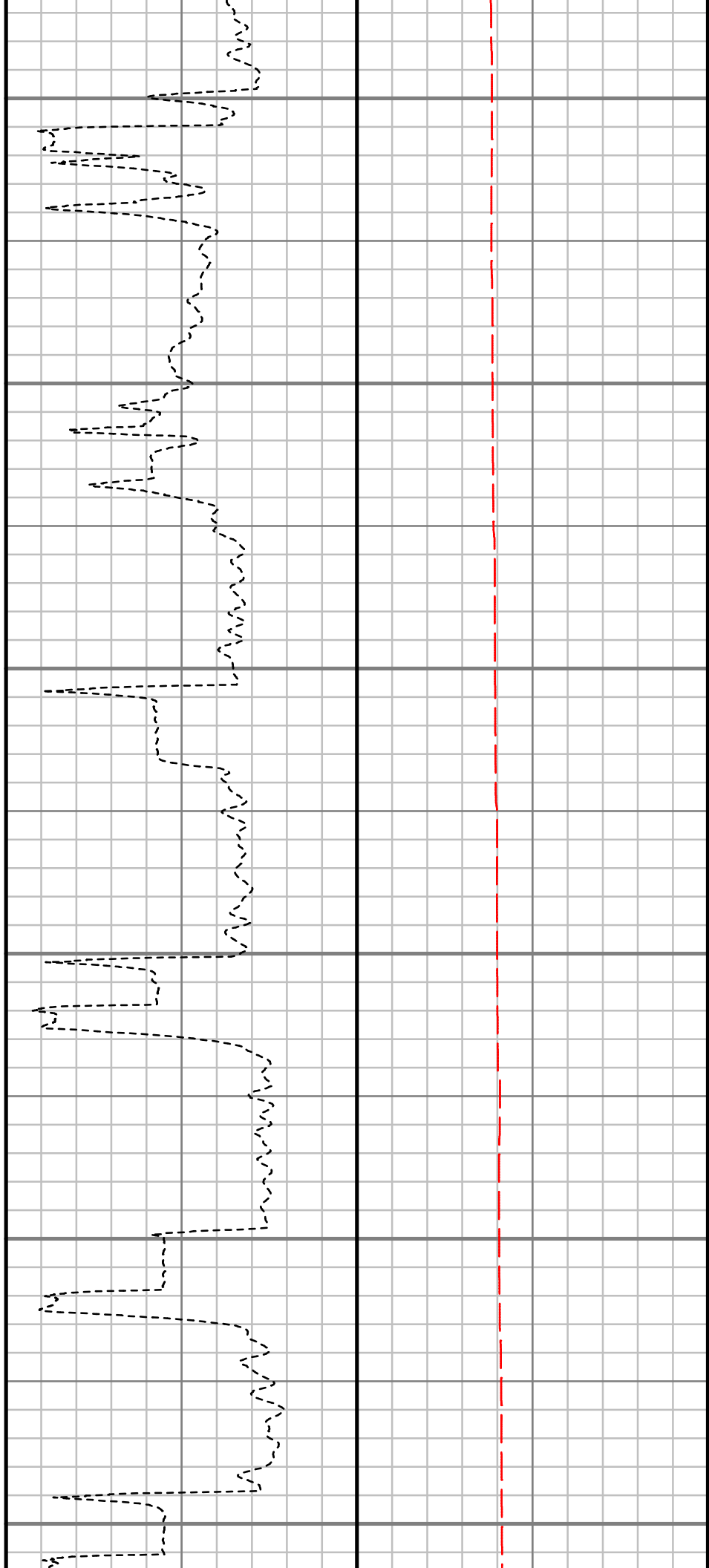
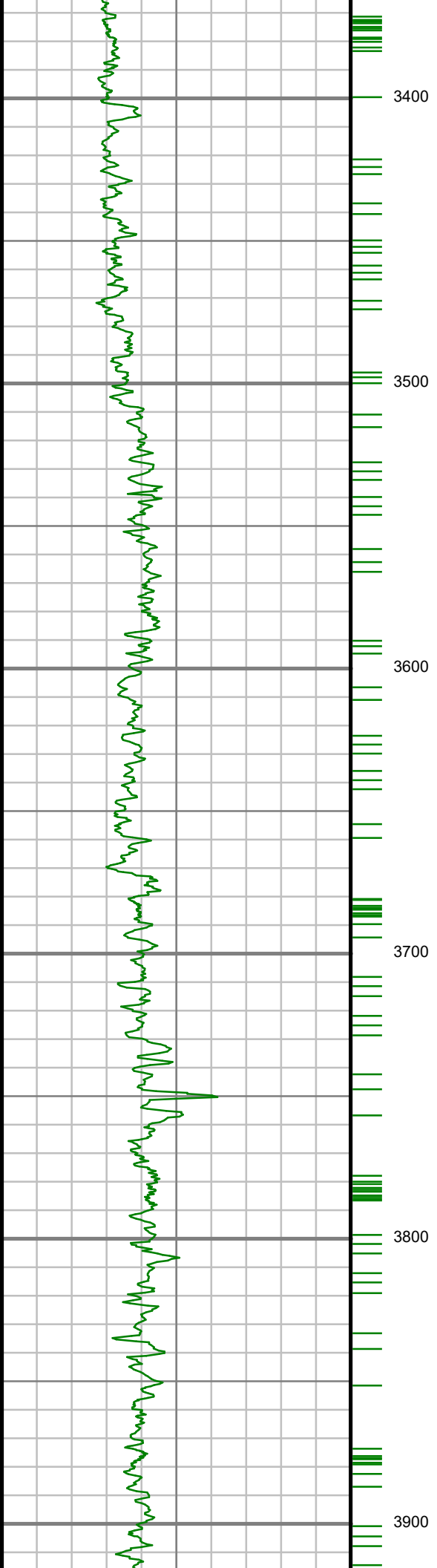
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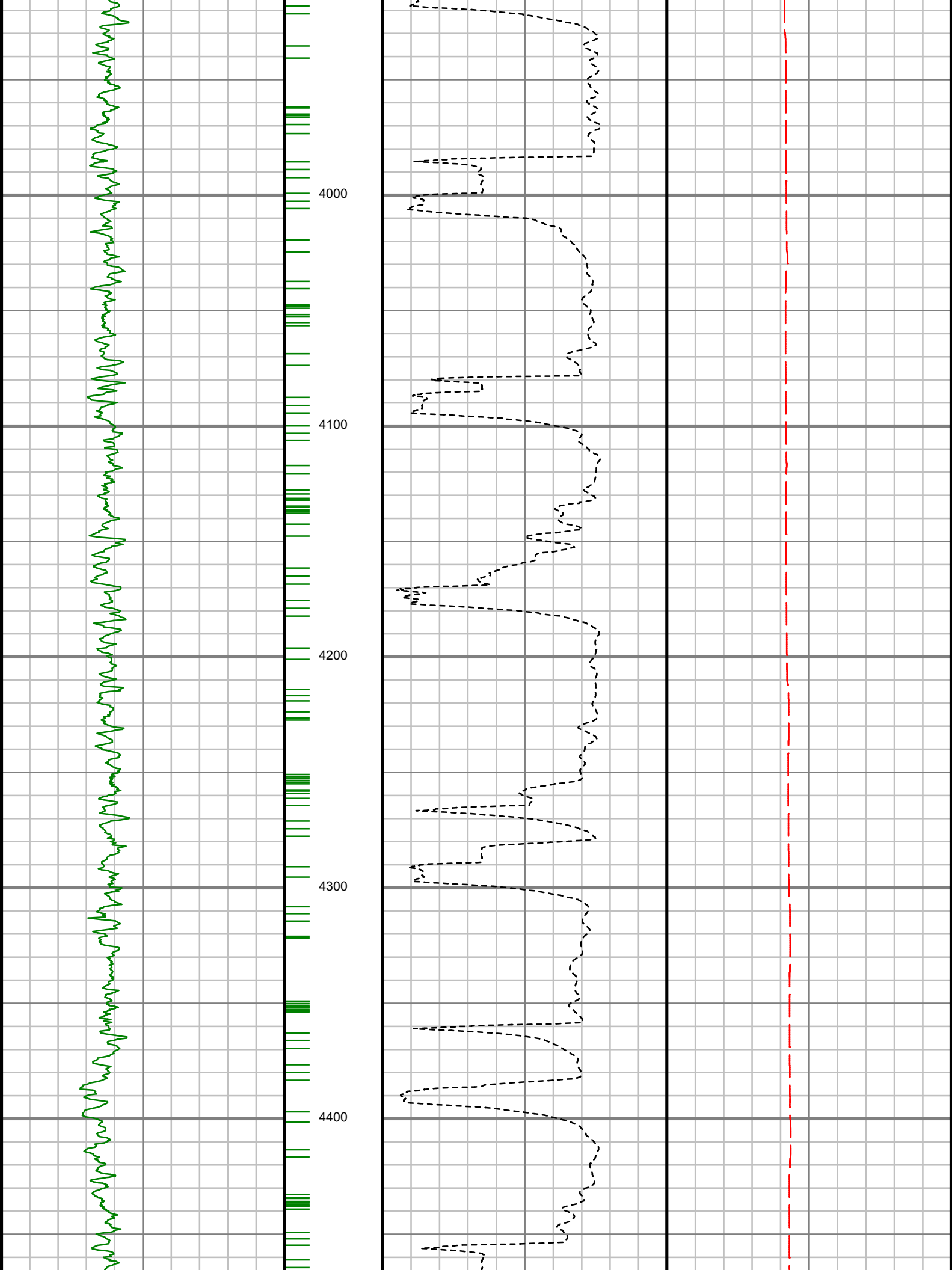
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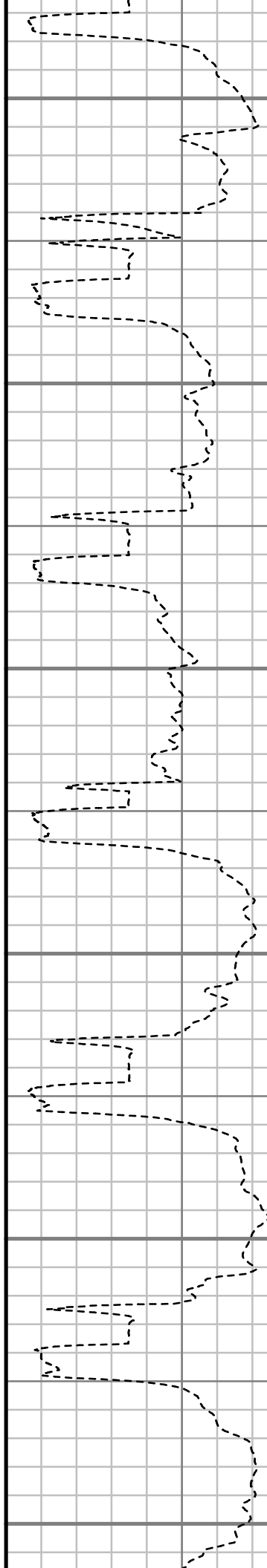
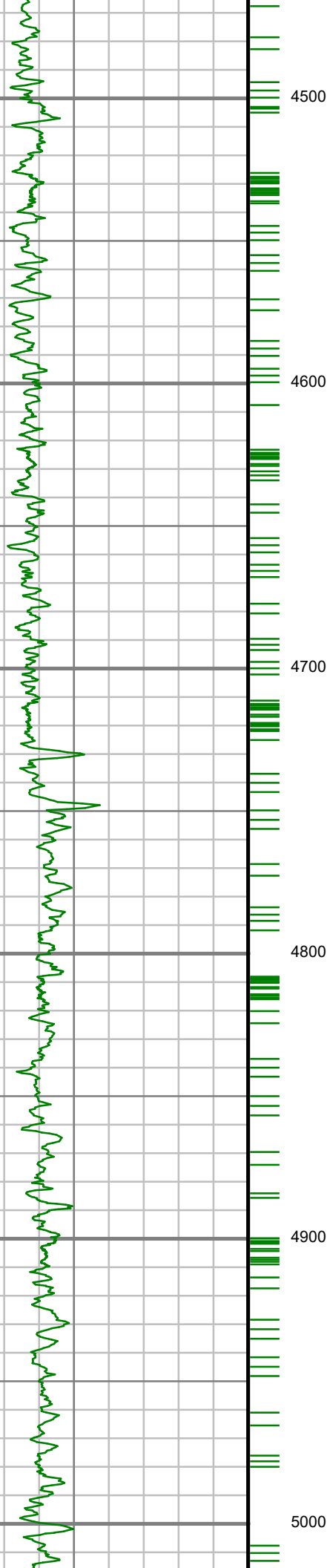


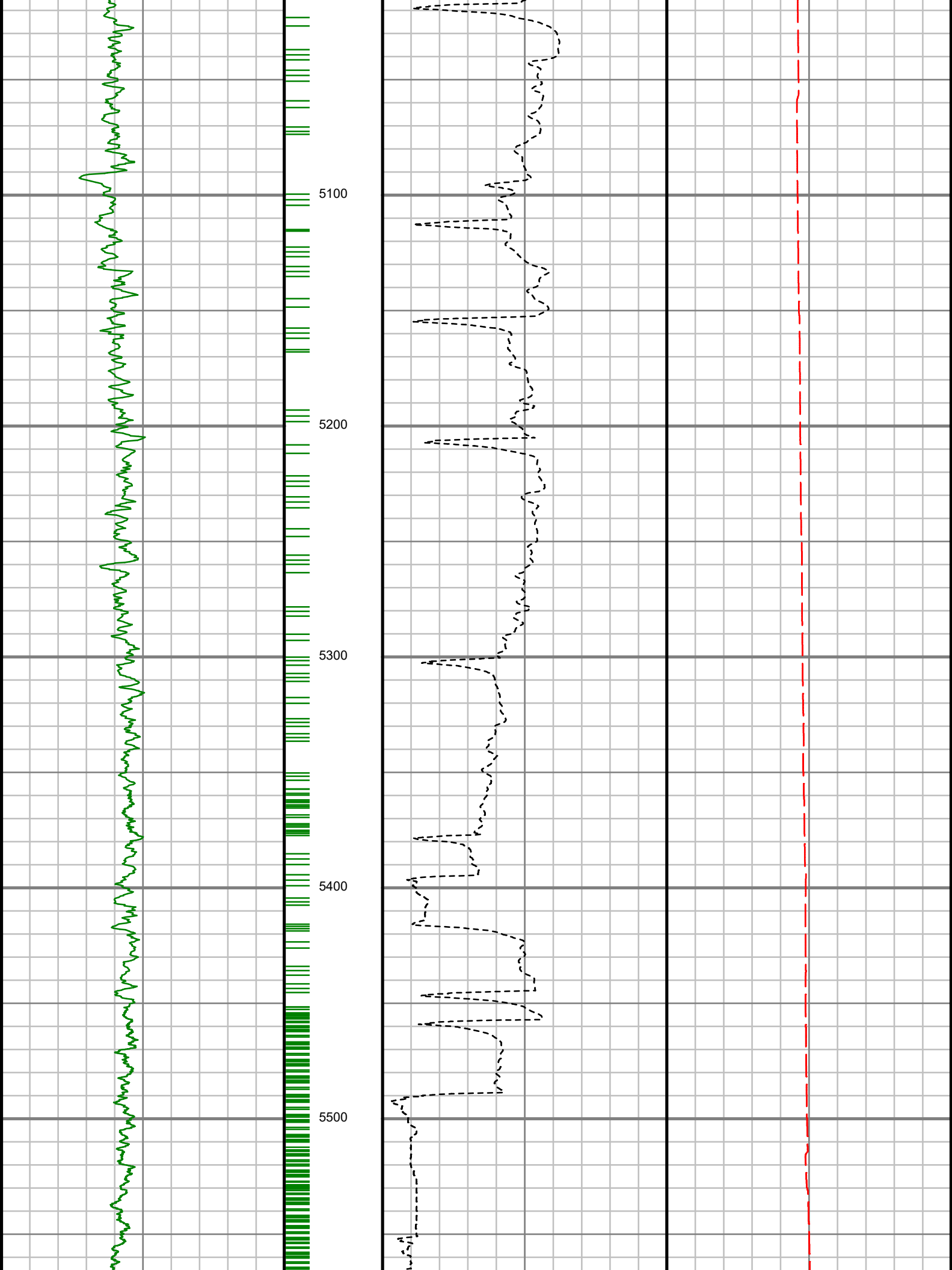


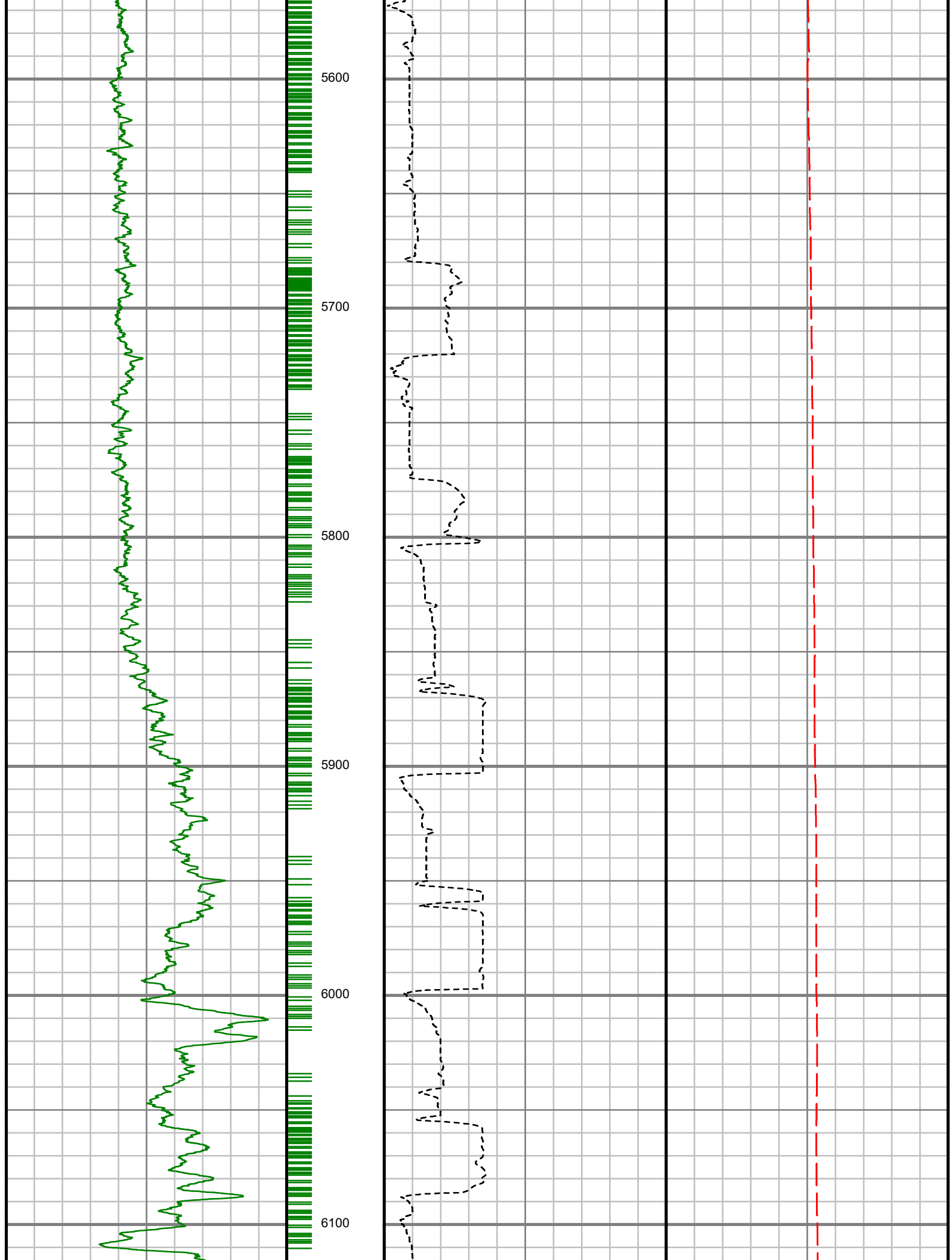


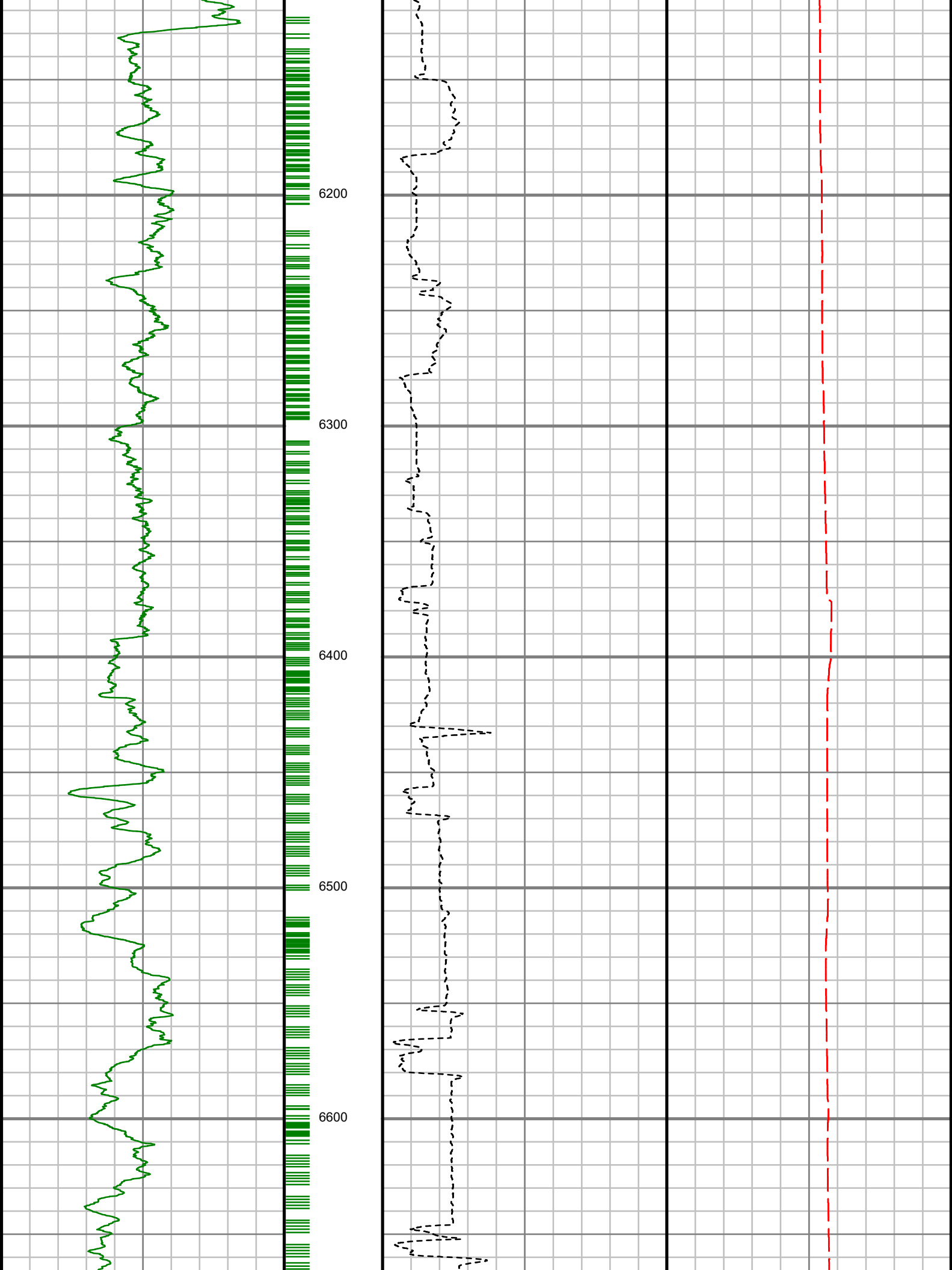


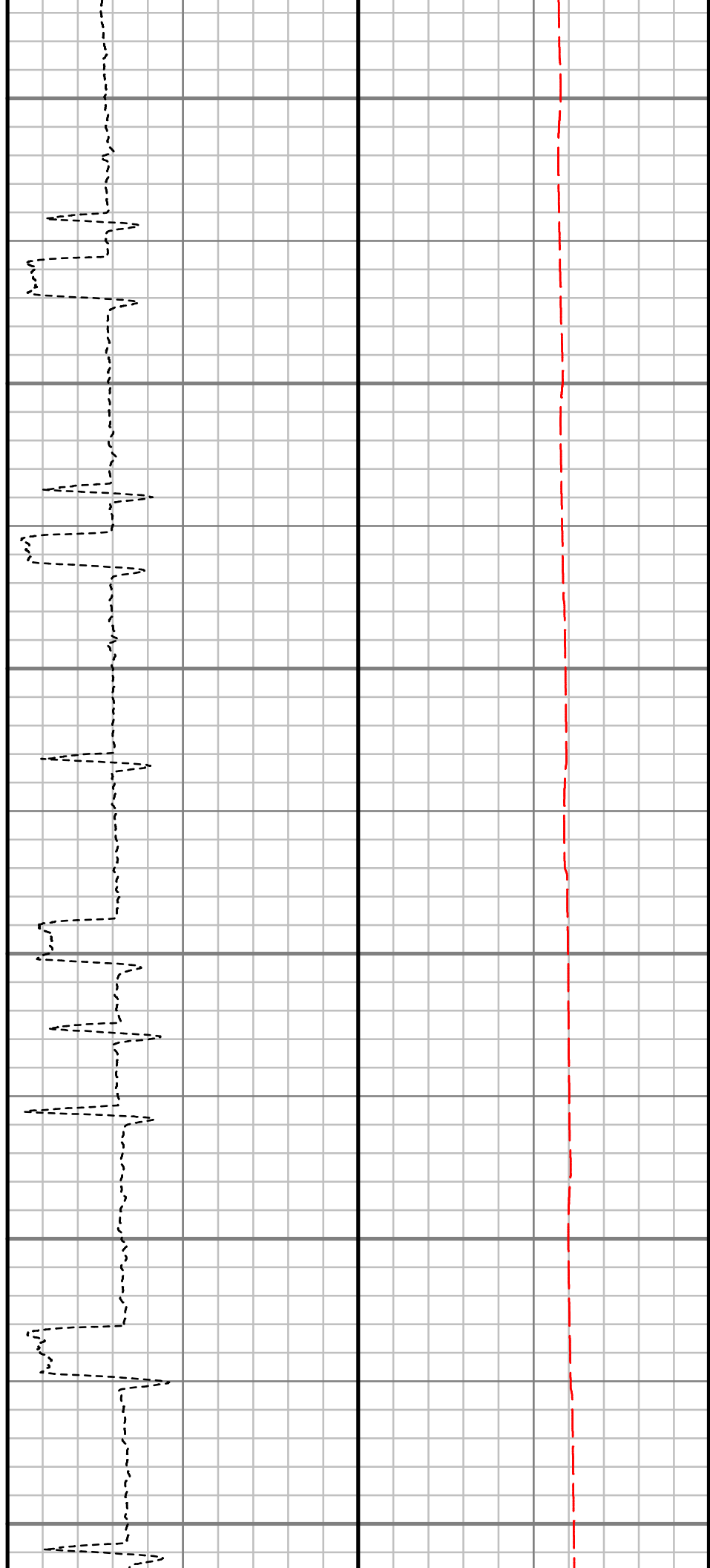
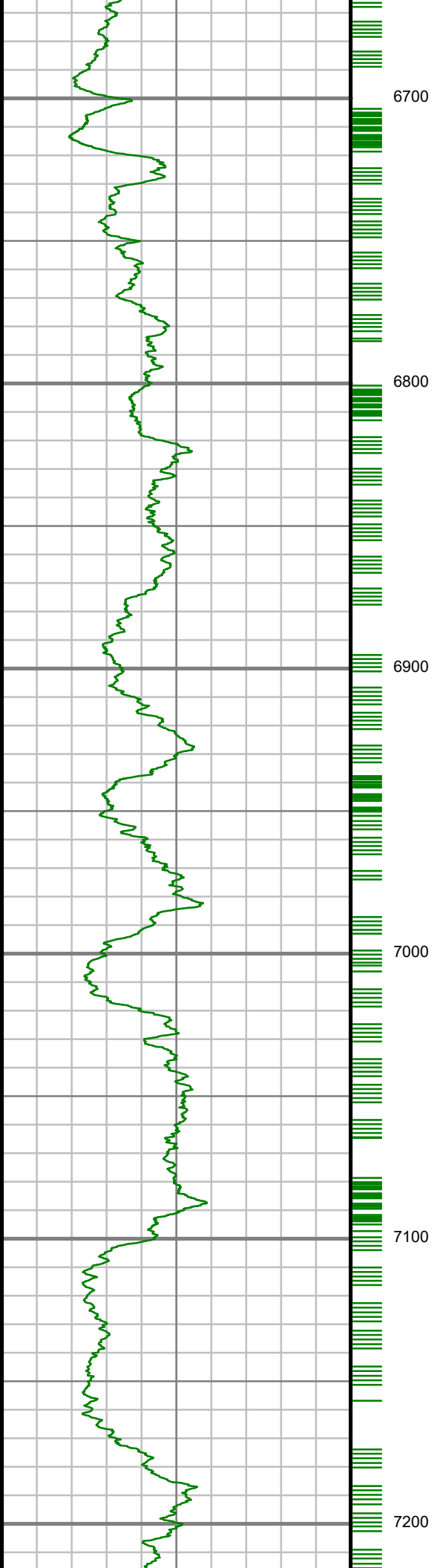


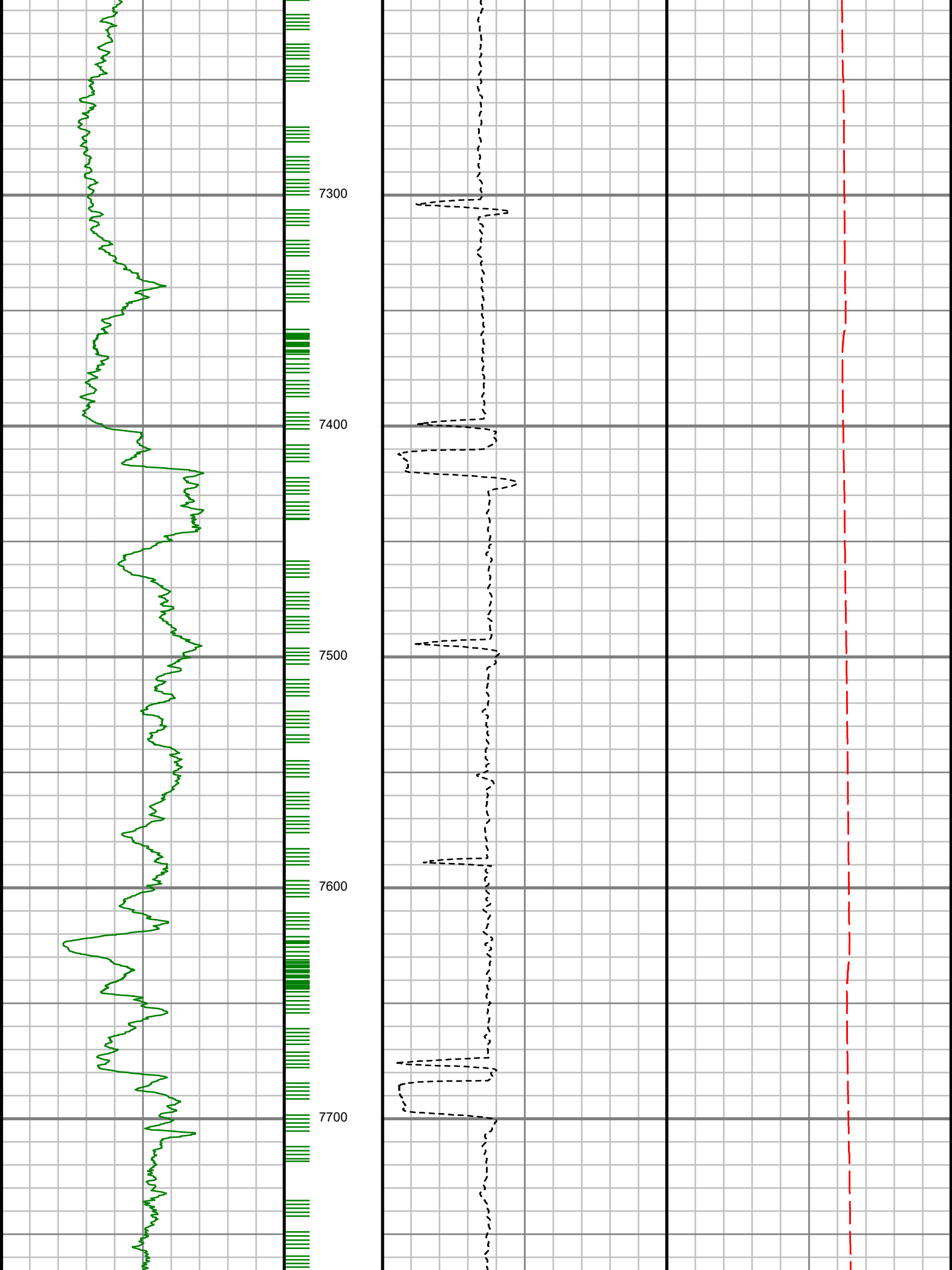


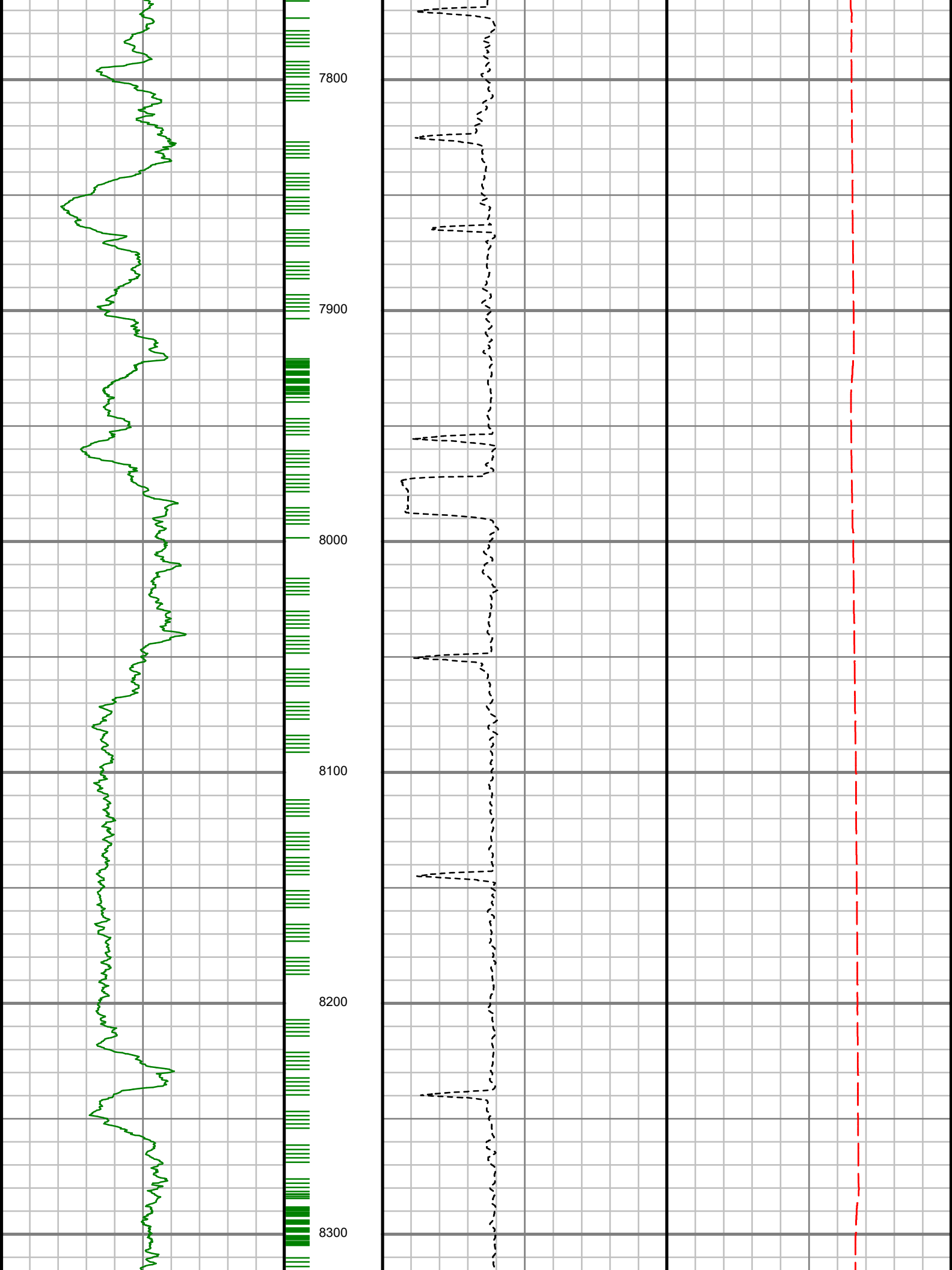


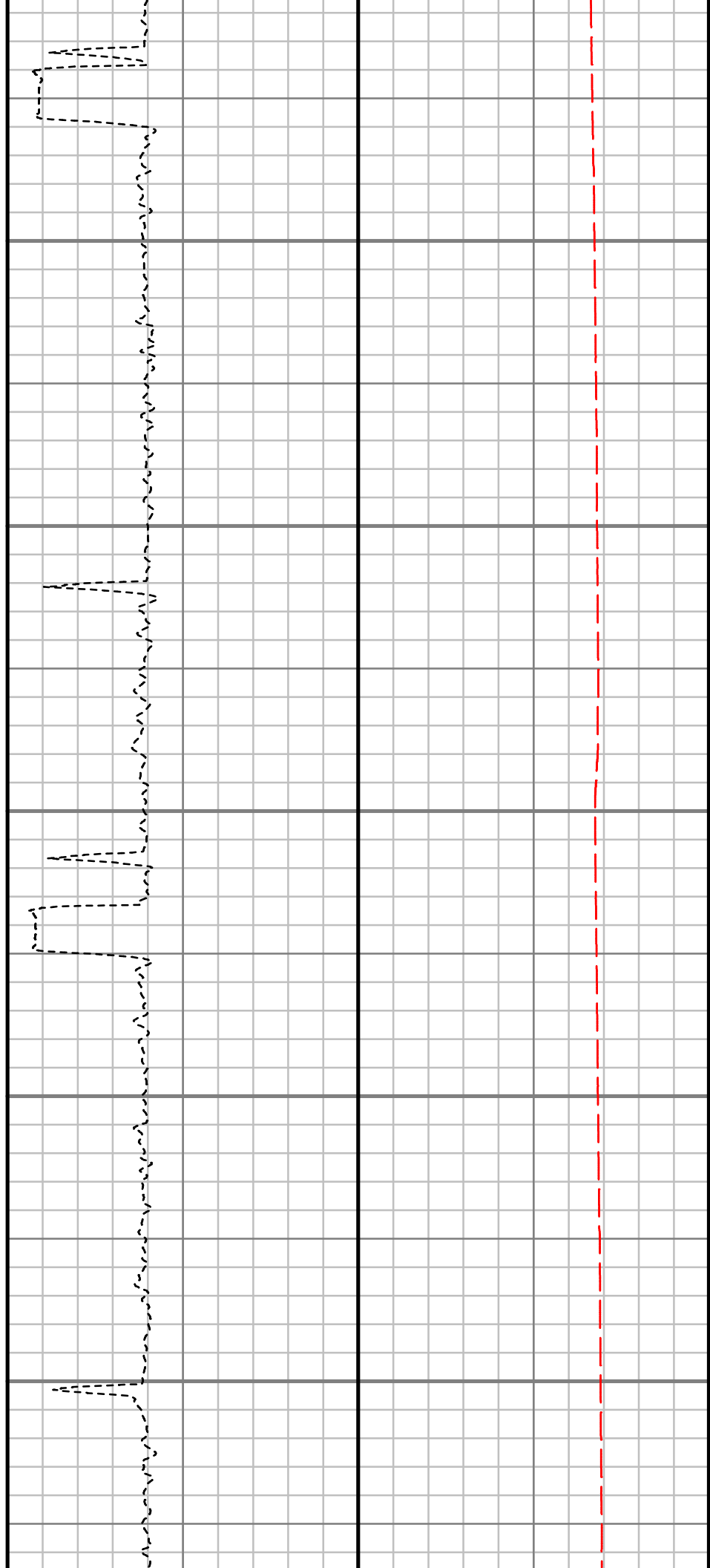
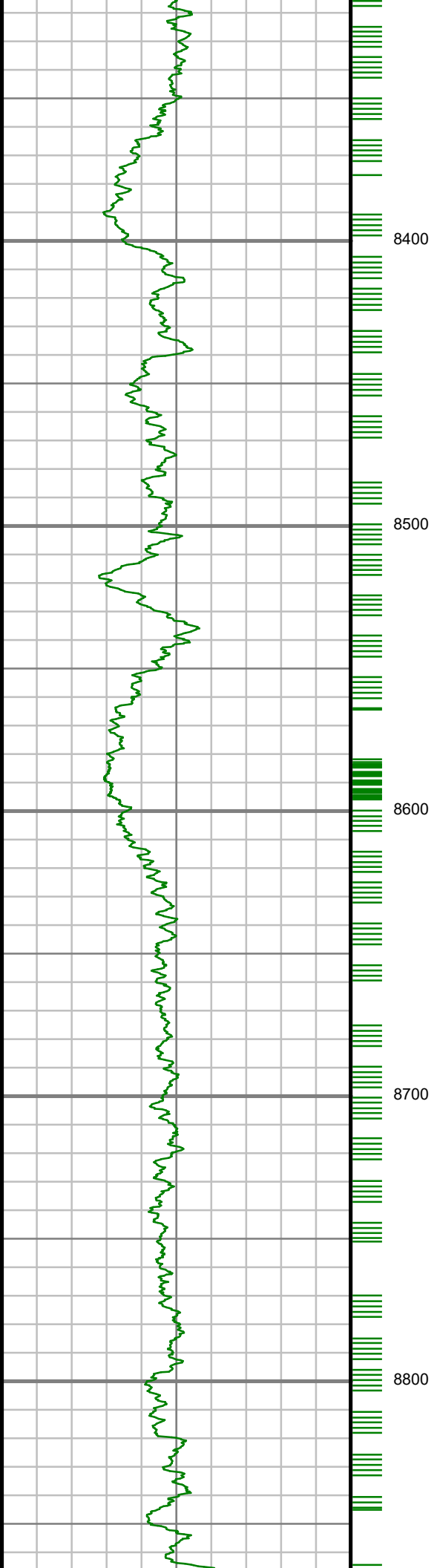


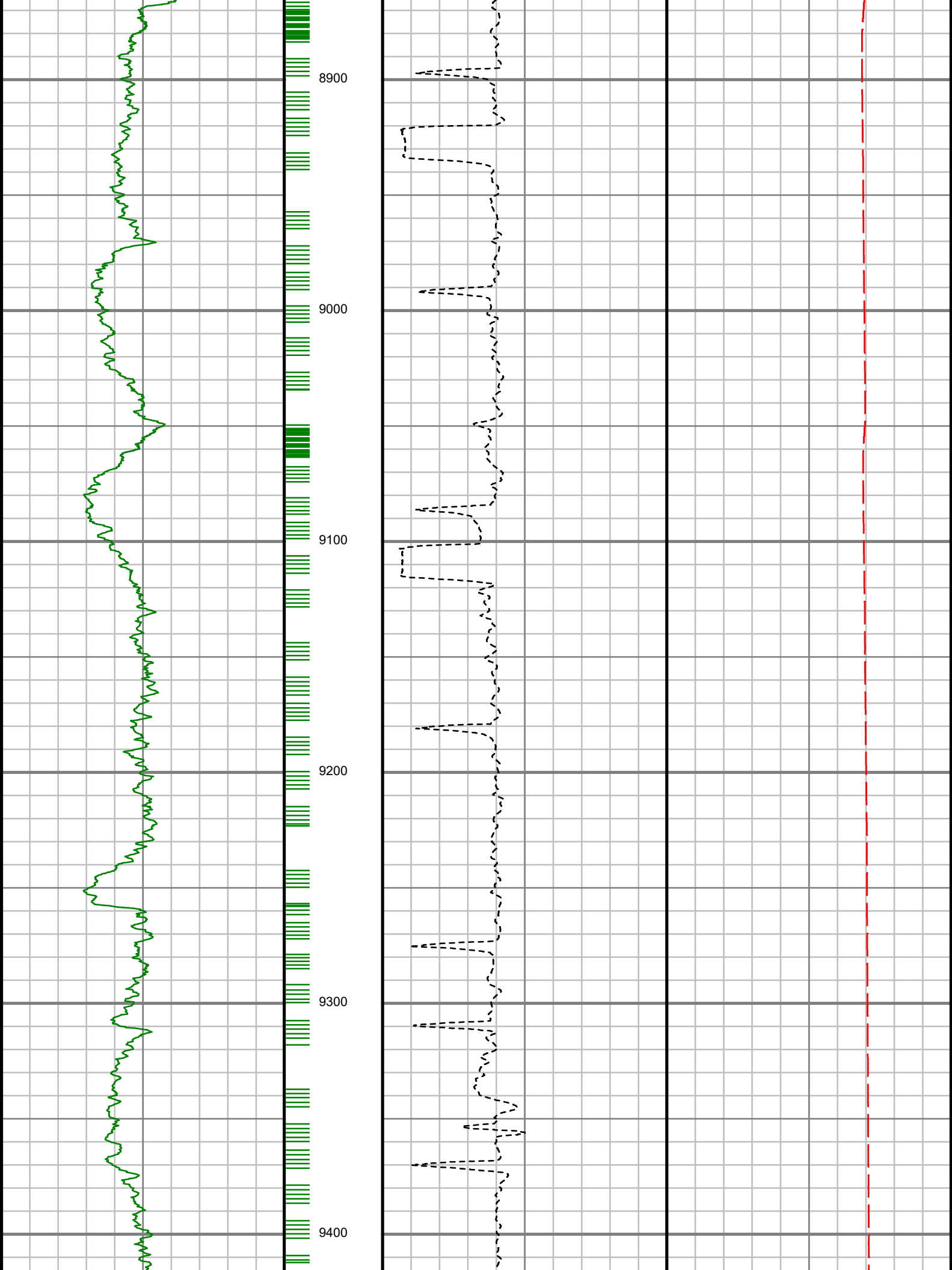


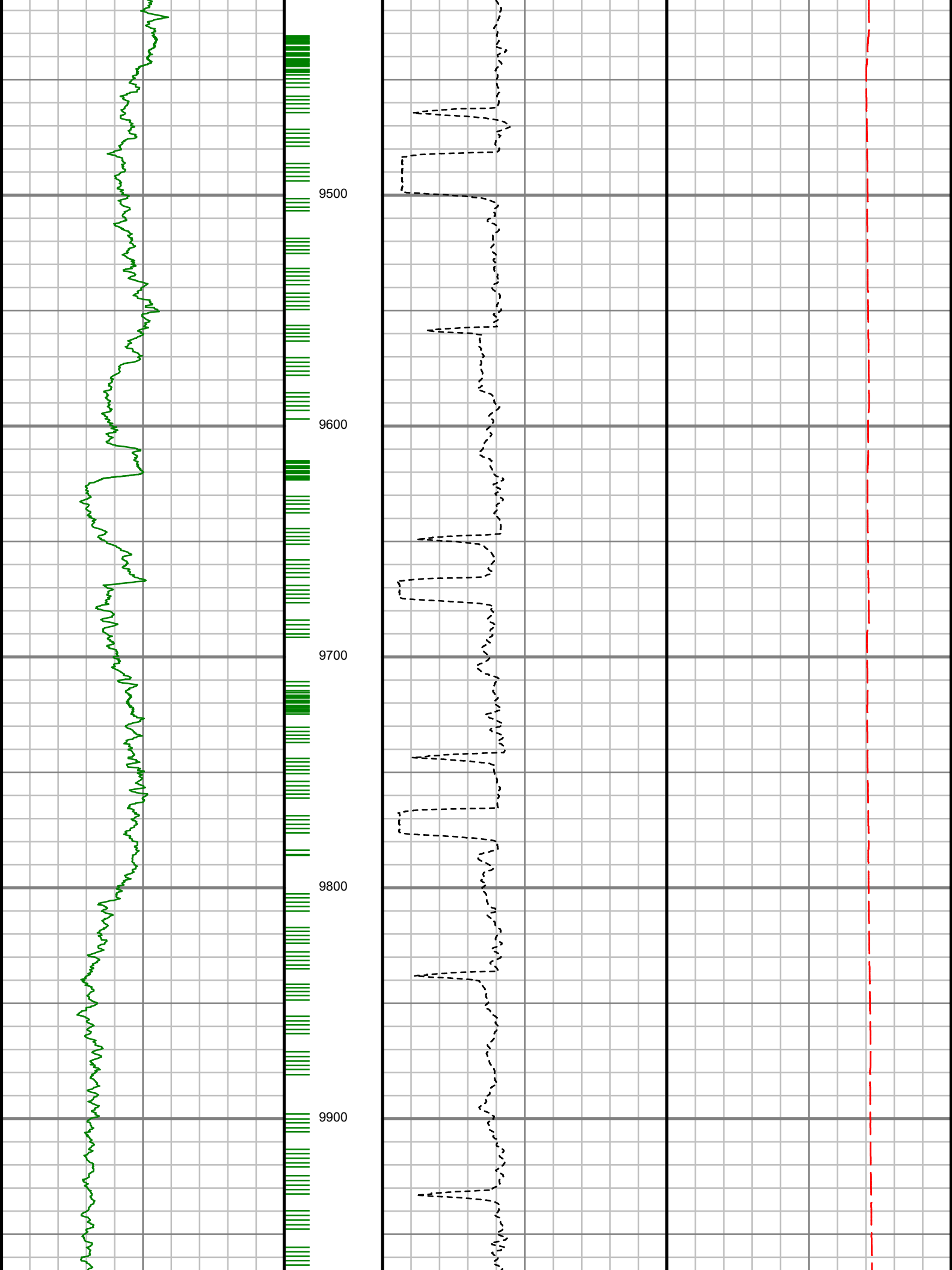


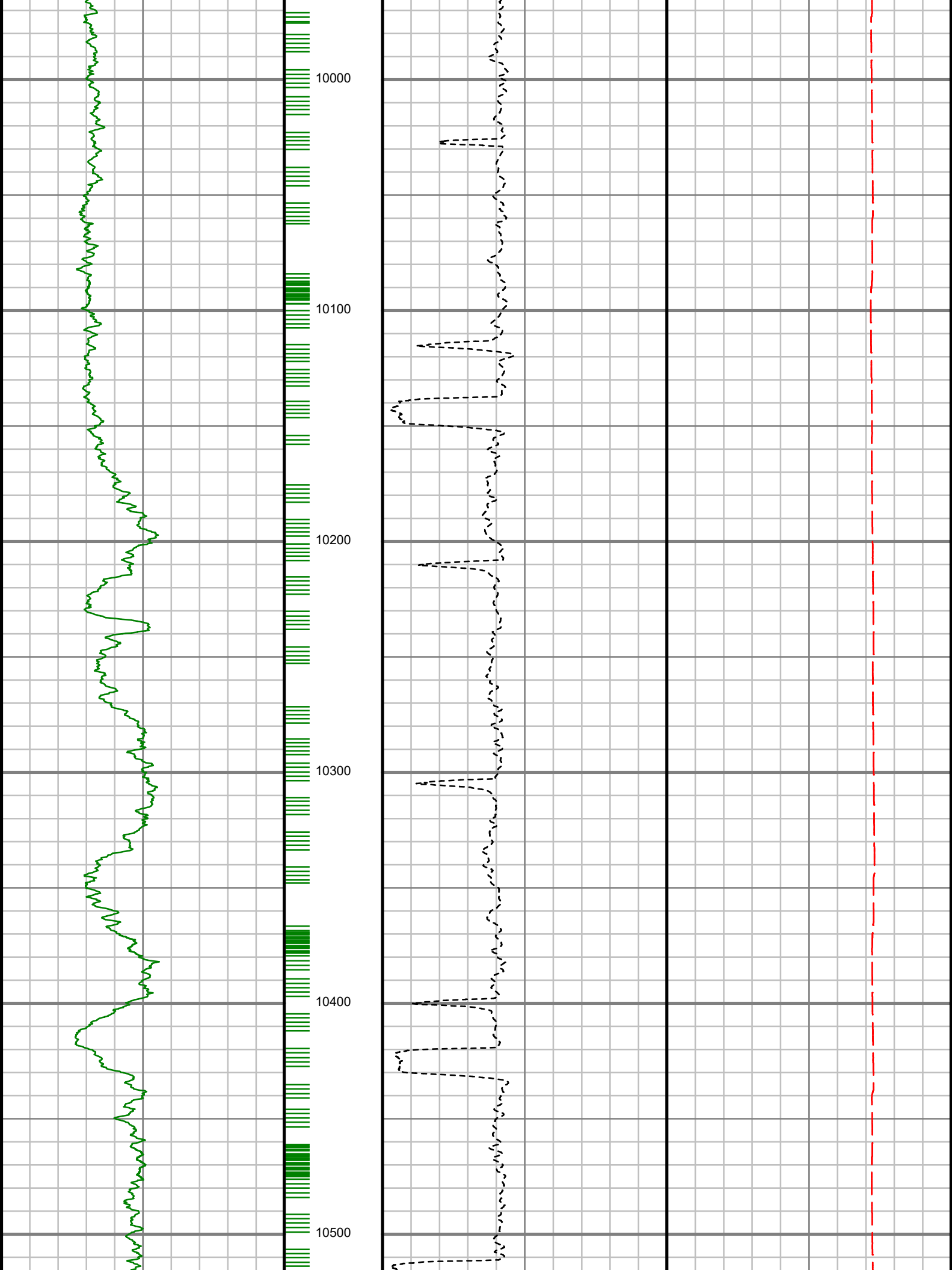


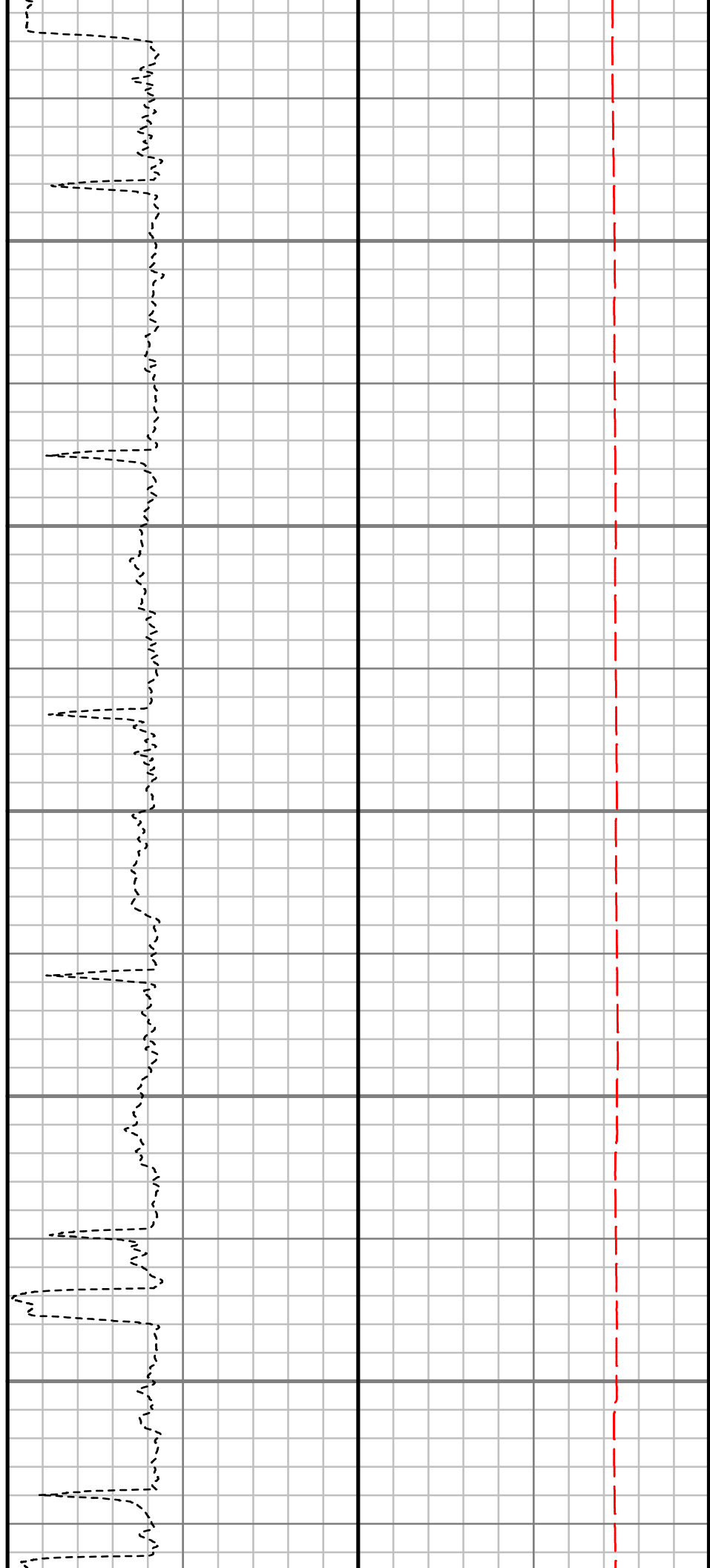
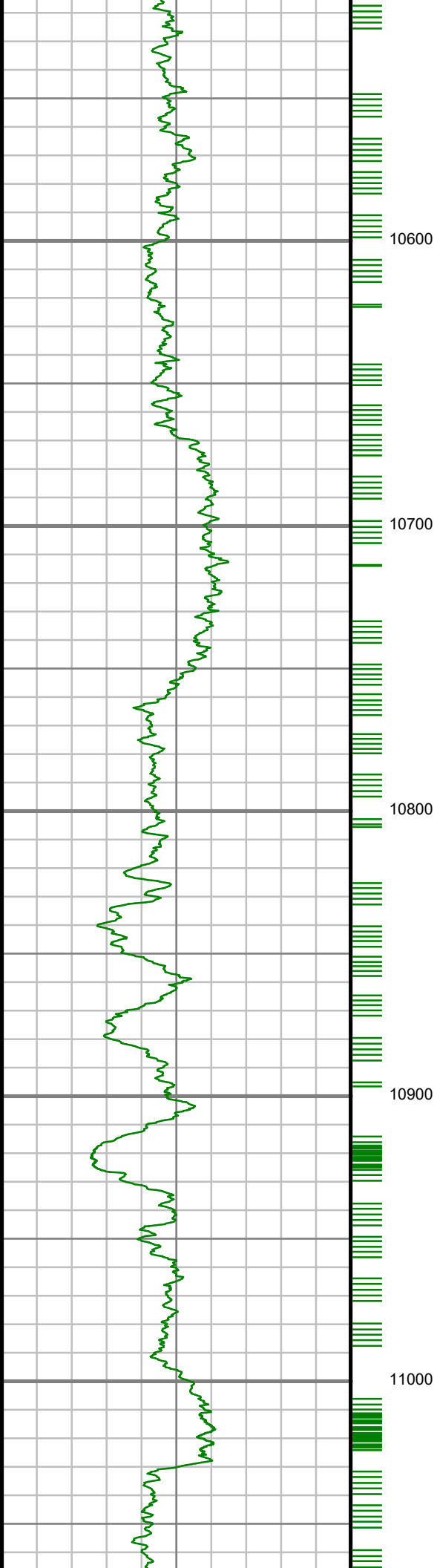


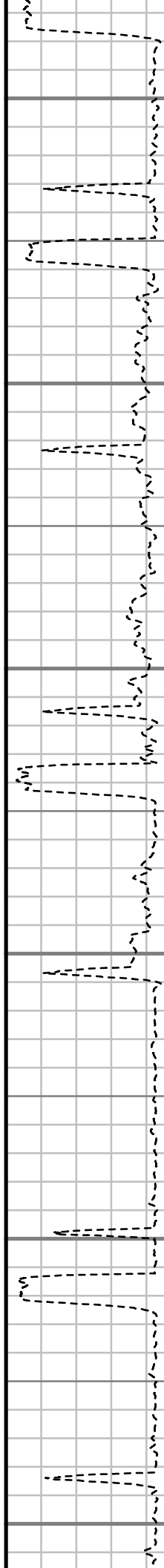
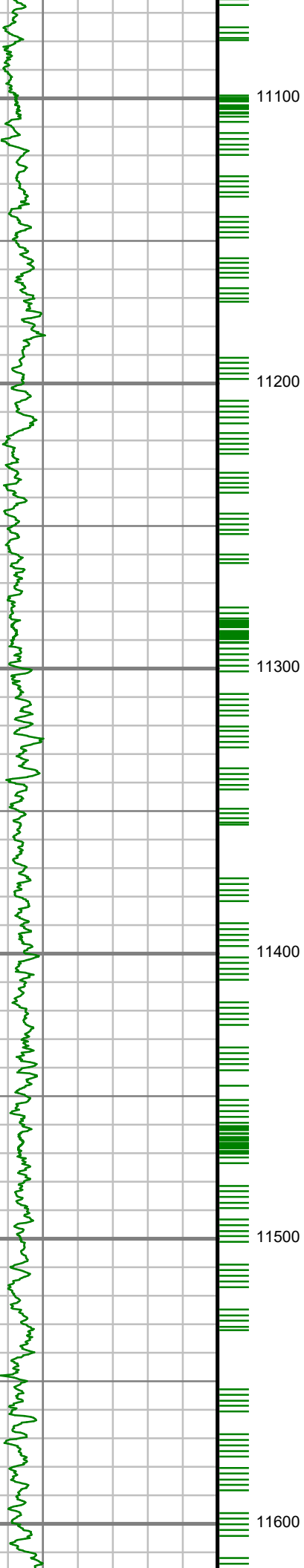


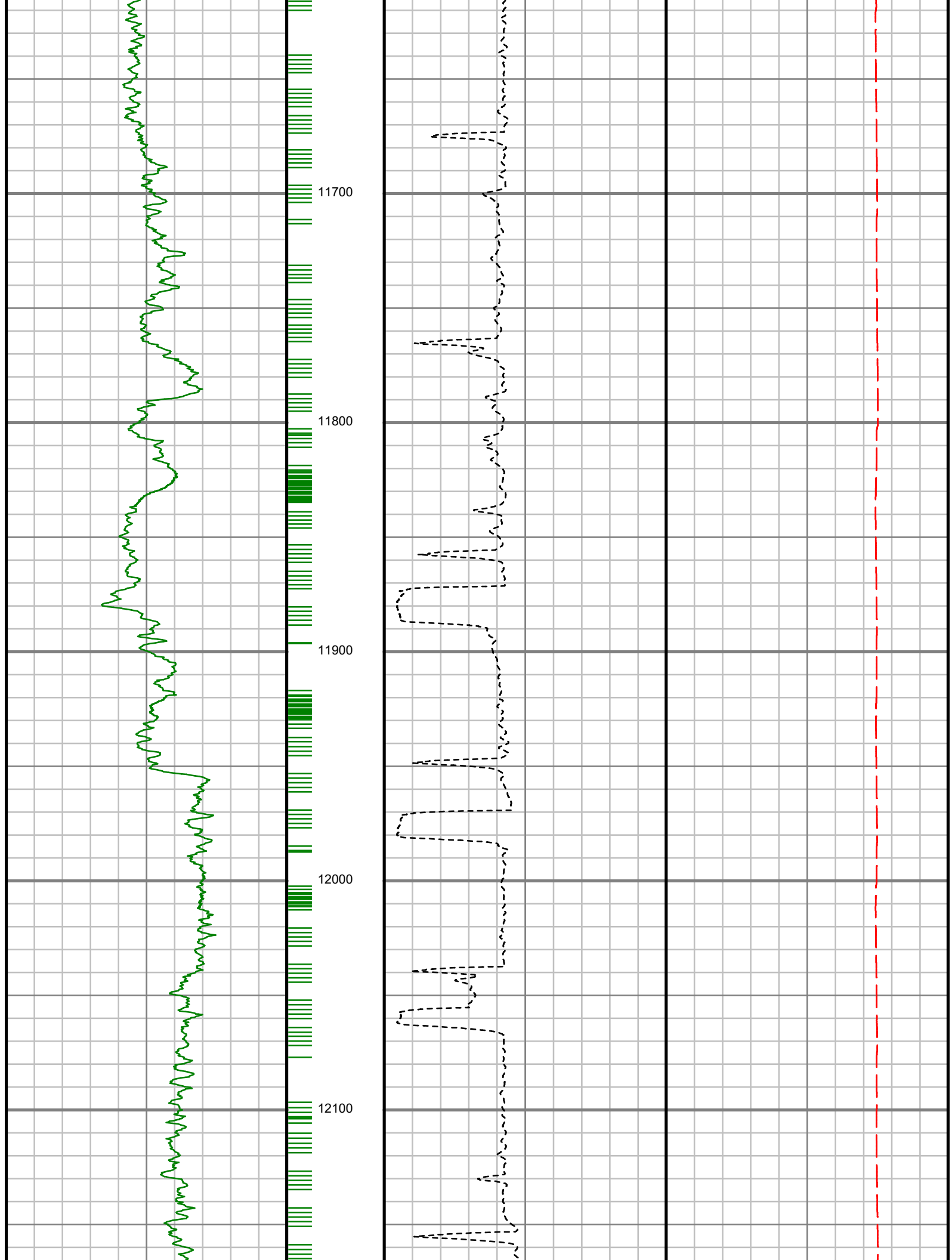


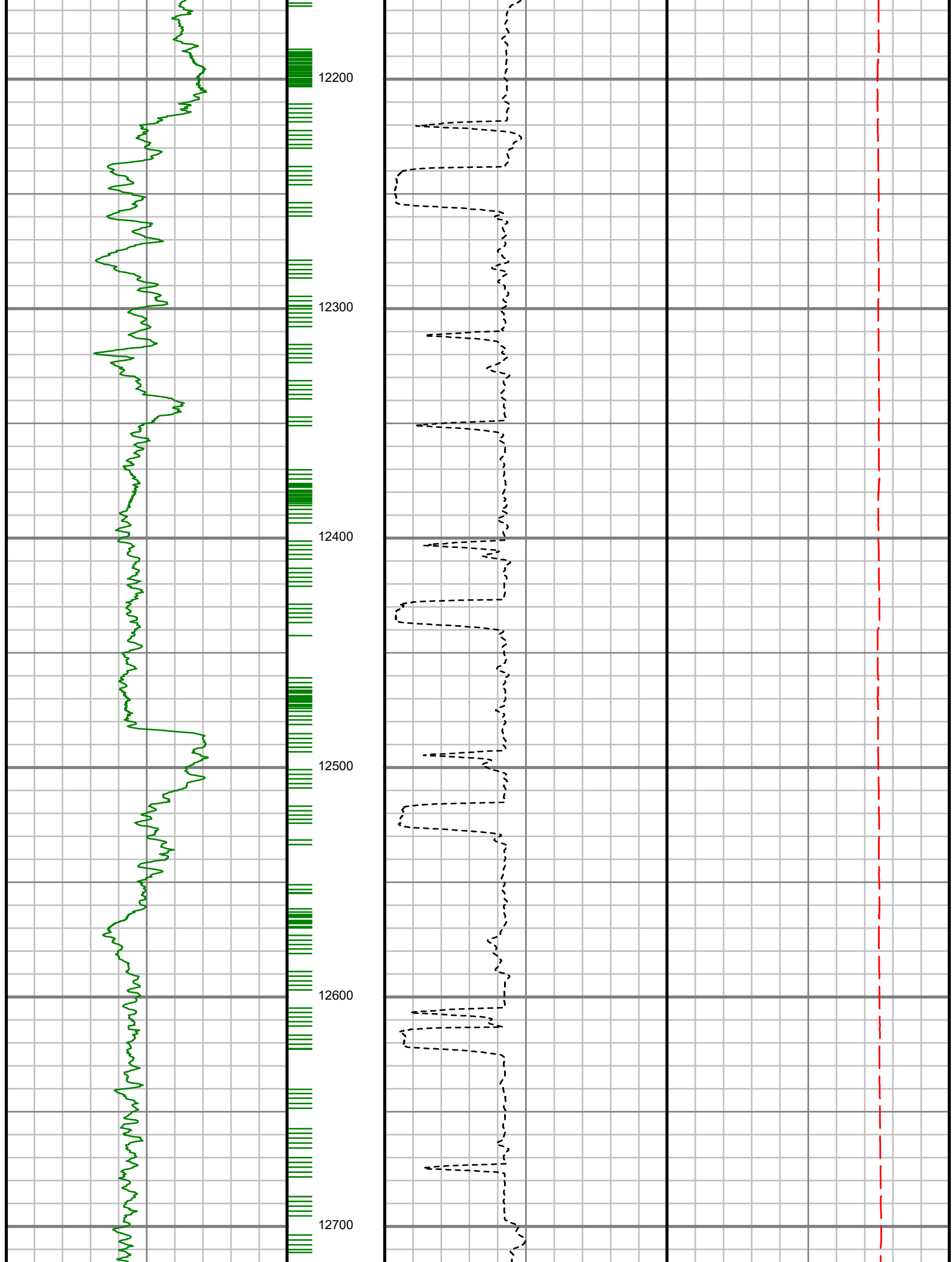


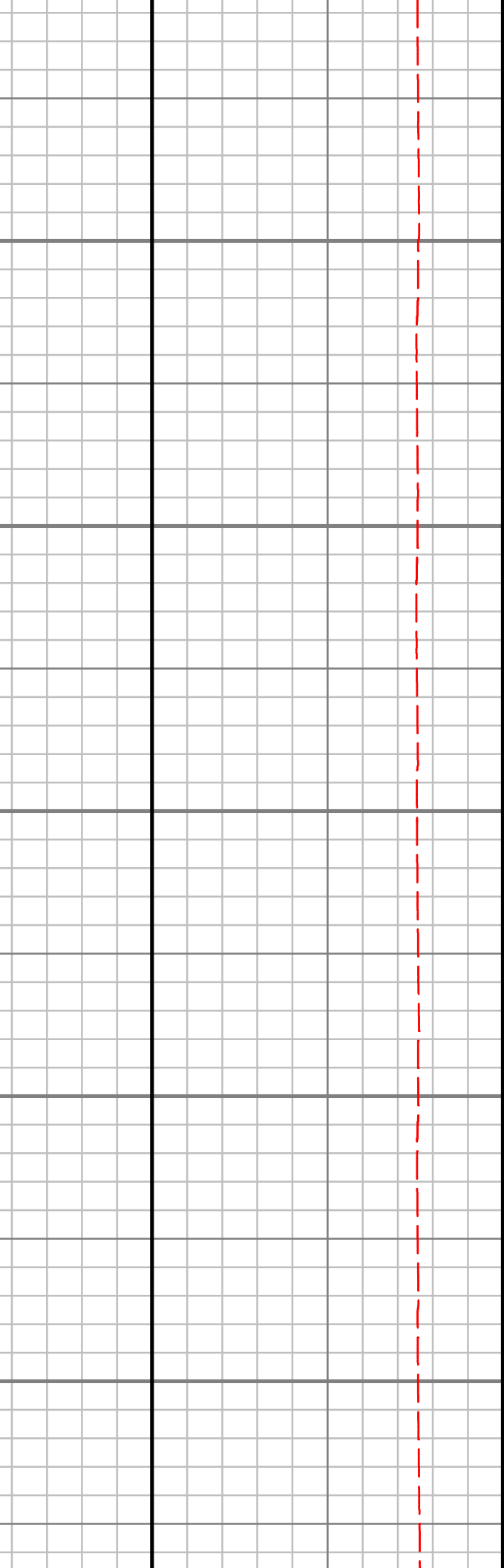
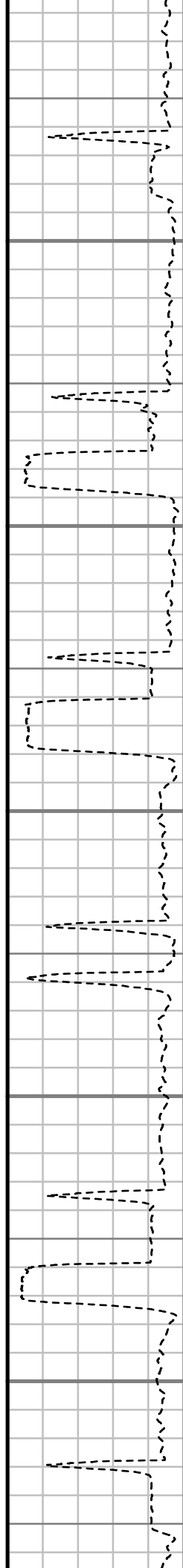
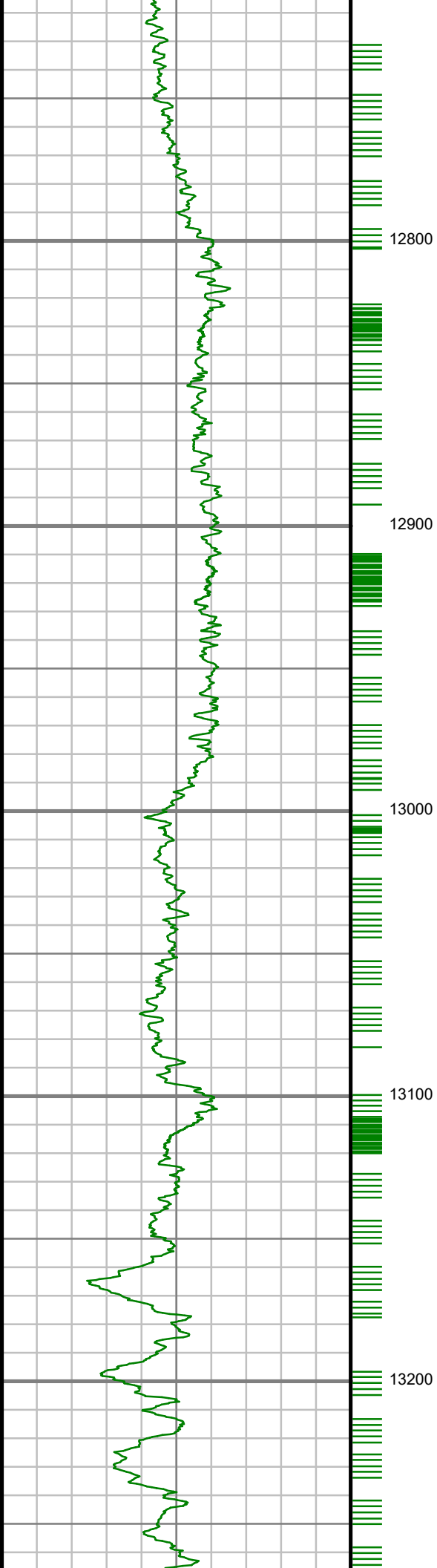


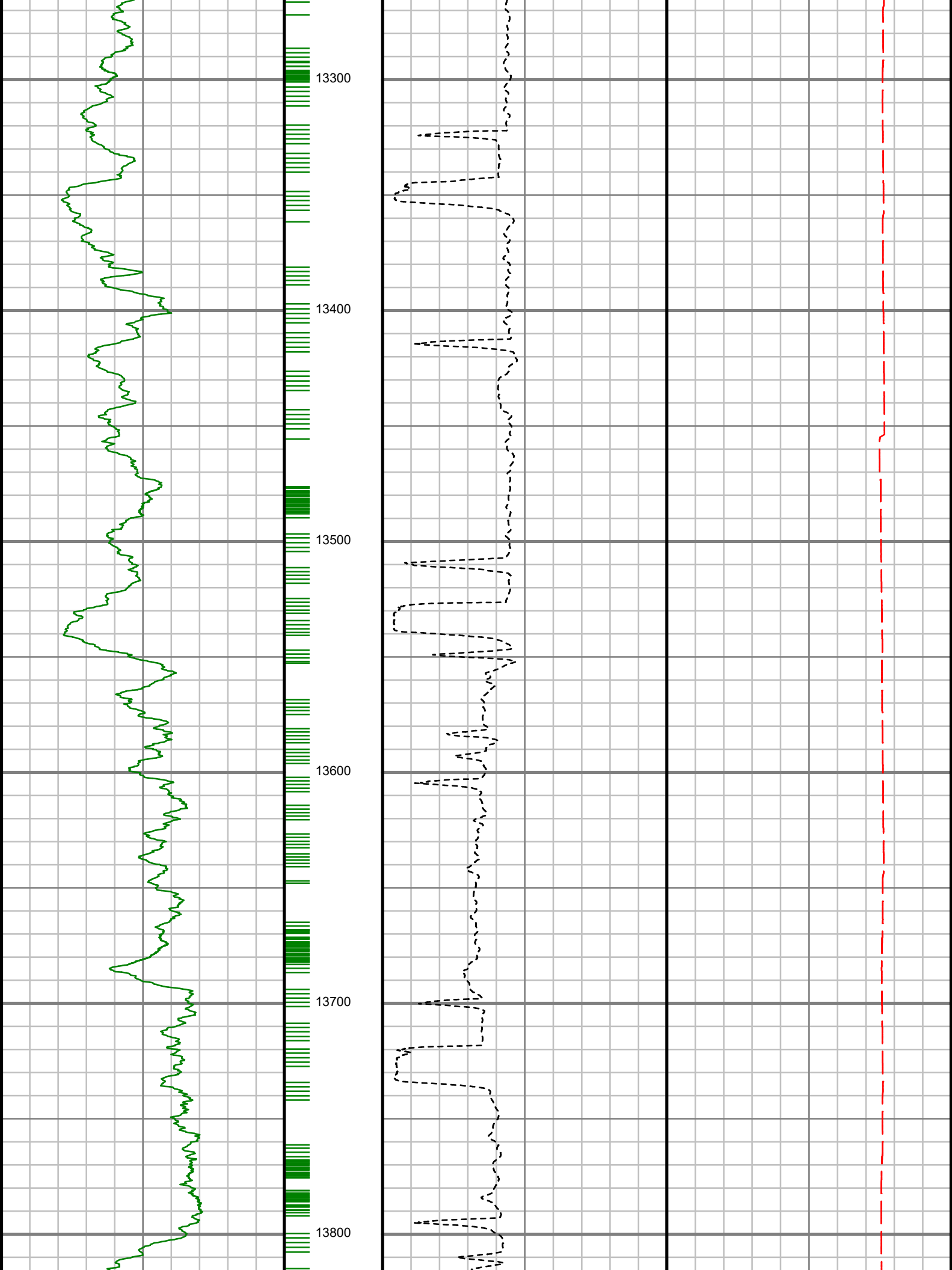


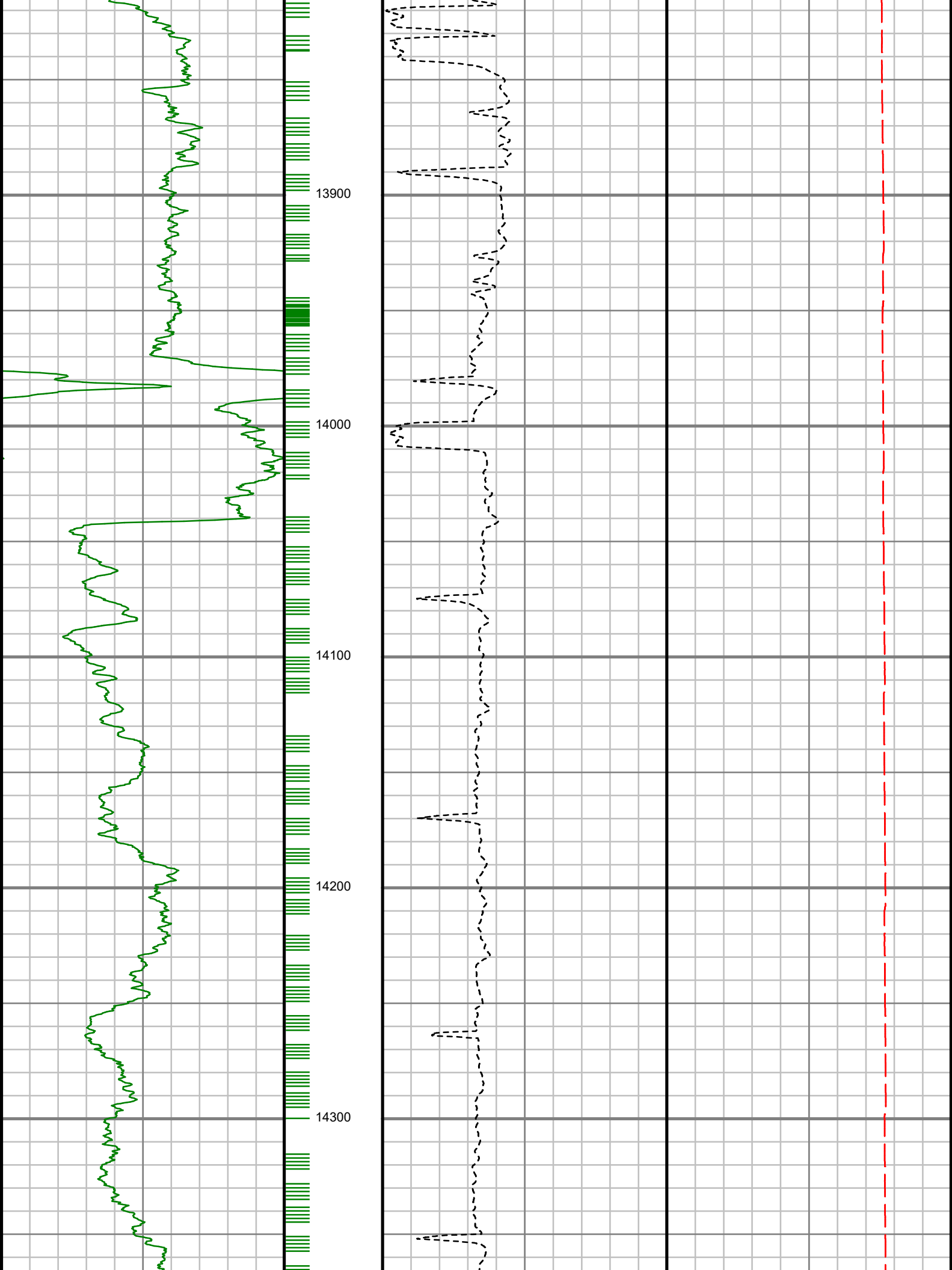


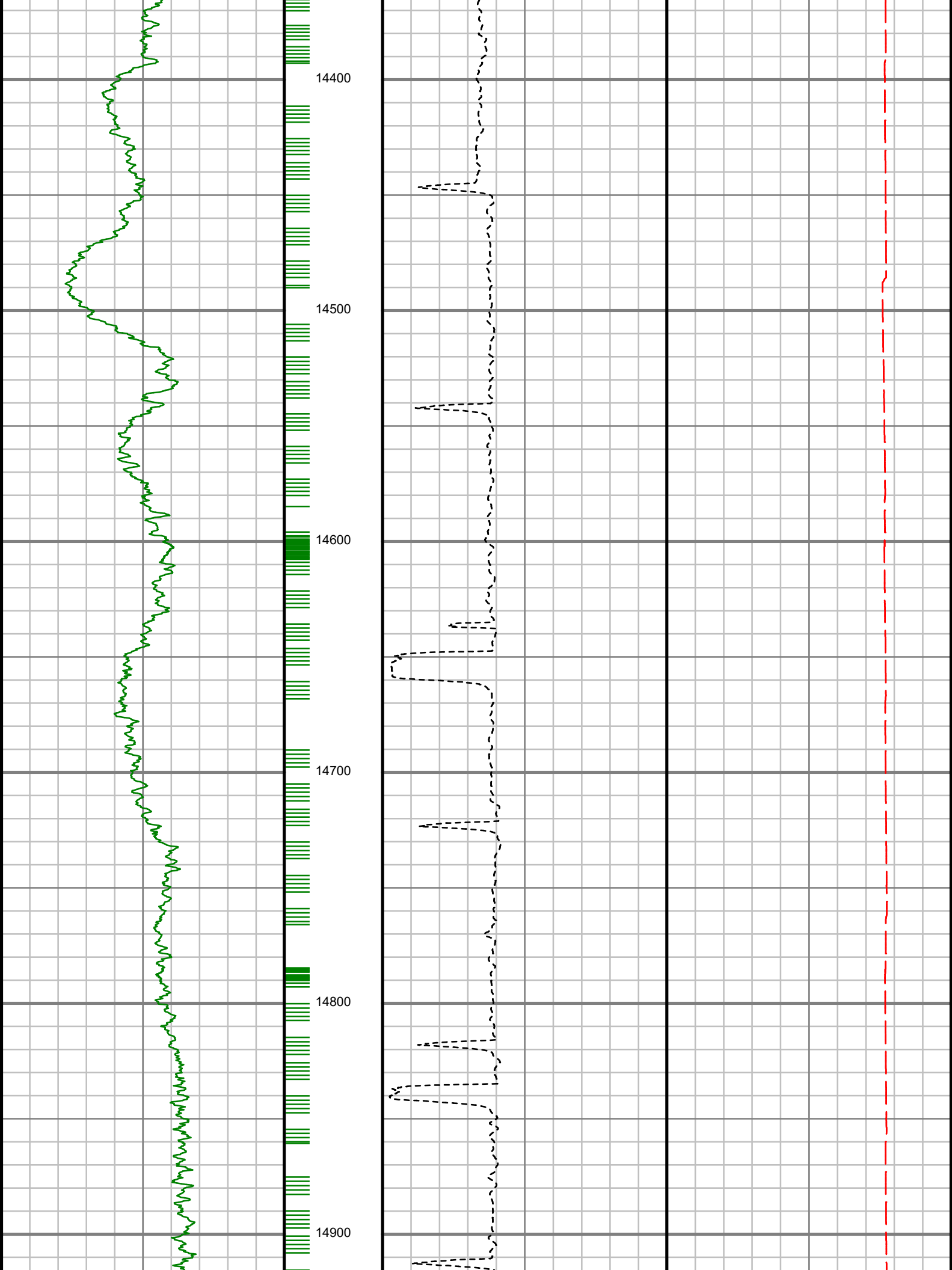


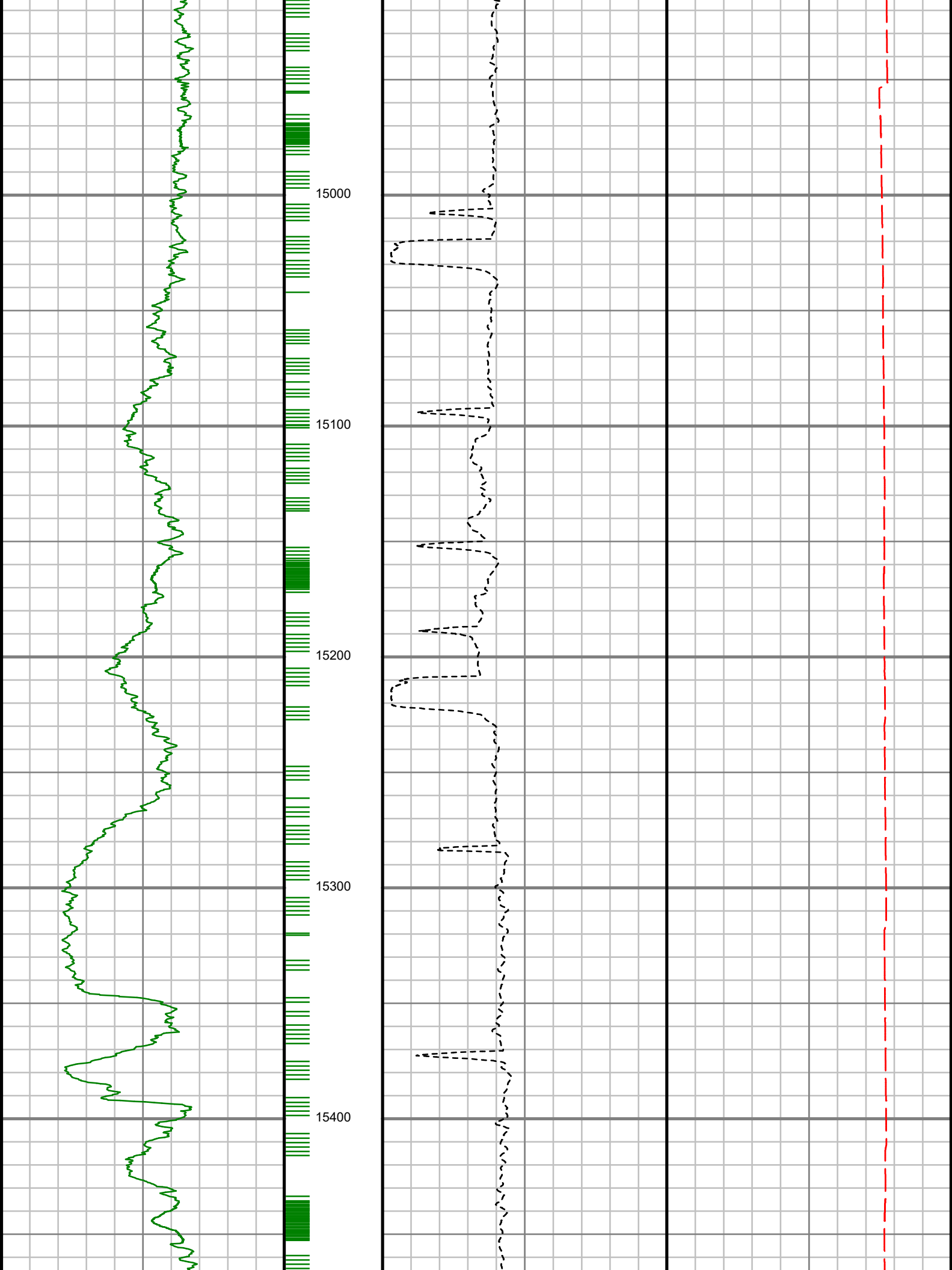


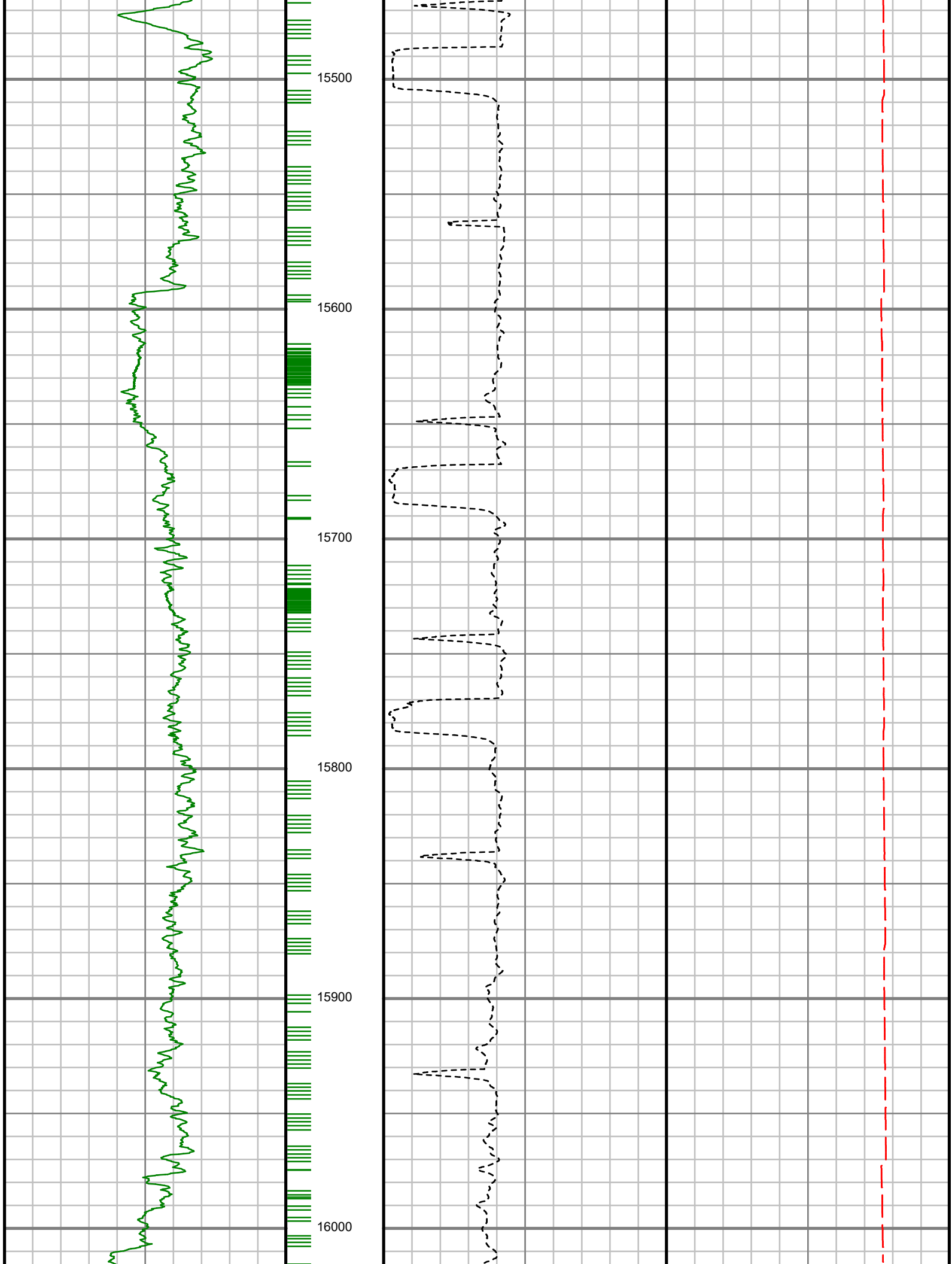


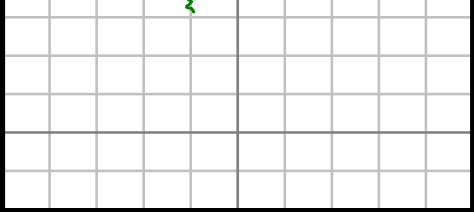




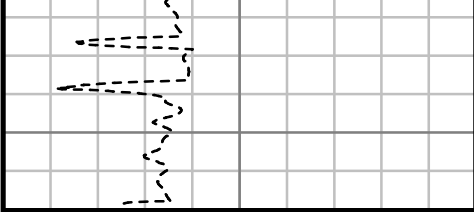




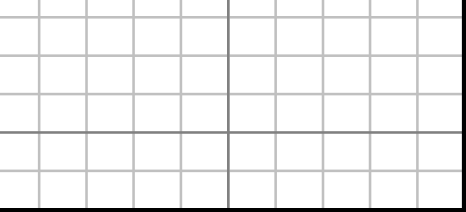




Gamma Ray Total (GR)									
Unit = aapi									
0									200



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



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

MEASURED DEPTH
1:600 (ft)

SURVEY REPORT

ANSCHUTZ EQUUS FARMS FED 05-61-34-5764B

COMPUTED SURVEYS

CUSTOMER HIGHPOINT RESOURCES
PROJECT ANSCHUTZ EQUUS FARMS FED
05-61-34-5764B
FIELD WATTENBERG

WELL INFORMATION

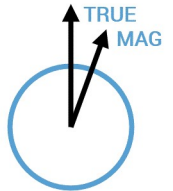
Lat/Long 40° 21' 17.02" N, 104° 11' 11.22" W
Northing 1,374,779.27 ft
Easting 3,366,068.19 ft
UWI 05-123-48186

MAP INFORMATION

North Reference True North
Grid Correction
System US State Plane 1983
Datum North American Datum 1983 (GRS 1980)
Map Zone Colorado North: 0501

VERTICAL SECTION REFERENCE

+N/-S 0 ft
+E/-W 0 ft
Proposal Direction 269.77°
Calculation Method Minimum Curvature



GEOMAGNETIC REFERENCE INFORMATION

Local Gravity: 999.110 mG [computed]

MD	MODEL	DATE	DECLINATION	MAG TO TRUE
970-16013 ft	HDGM2018	06 Apr 2019	8.10°	add 8.1°

WELL NOTES

OPERATORS

A. FARQUHAR, M. BAILY

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
969.50	5.36	162.38	967.75	-19.52	-41.27	19.69	Invalid
1056.00	7.22	172.77	1053.73	-21.39	-50.51	21.60	2.51
1146.00	9.70	170.93	1142.74	-23.25	-63.61	23.50	2.78
1238.00	12.07	170.46	1233.08	-25.99	-80.76	26.32	2.57
1328.00	12.63	165.97	1321.00	-29.86	-99.58	30.27	1.24
1419.00	14.04	160.17	1409.55	-35.94	-119.62	36.42	2.14
1509.00	15.16	157.57	1496.64	-44.05	-140.77	44.62	1.43
1600.00	15.87	160.03	1584.33	-52.75	-163.46	53.41	1.07
1691.00	18.29	154.64	1671.31	-63.01	-188.06	63.78	3.17
1781.00	17.86	150.31	1756.87	-75.80	-212.81	76.66	1.57
1872.00	19.00	154.20	1843.21	-89.05	-238.27	90.02	1.84
1963.00	19.63	155.54	1929.09	-101.72	-265.52	102.79	0.84
2054.00	20.60	159.53	2014.54	-113.53	-294.43	114.72	1.85
2145.00	21.94	159.95	2099.34	-124.83	-325.39	126.15	1.49
2236.00	21.83	161.29	2183.78	-135.96	-357.39	137.41	0.56
2327.00	22.94	162.29	2267.93	-146.65	-390.31	148.23	1.29
2421.00	22.77	162.62	2354.55	-157.51	-425.12	159.23	0.23
2515.00	22.26	160.40	2441.38	-168.78	-459.26	170.64	1.05
2609.00	22.37	166.47	2528.35	-178.80	-493.43	180.80	2.45
2703.00	21.72	163.05	2615.49	-187.91	-527.46	190.05	1.53

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS %/100ft
2798.00	20.53	162.52	2704.10	-197.91	-560.16	200.18	1.27
2892.00	22.13	161.45	2791.66	-208.36	-592.68	210.77	1.75
2986.00	21.14	158.91	2879.03	-219.97	-625.28	222.50	1.45
3080.00	20.30	161.37	2966.95	-231.15	-656.55	233.81	1.29
3175.00	20.24	160.23	3056.07	-241.85	-687.63	244.64	0.42
3269.00	22.04	164.50	3143.75	-251.93	-719.93	254.85	2.52
3362.00	22.85	162.28	3229.70	-261.96	-753.94	265.01	1.26
3457.00	23.74	164.59	3316.96	-272.51	-789.95	275.71	1.34
3551.00	23.14	162.96	3403.21	-282.80	-825.84	286.15	0.94
3645.00	22.88	162.14	3489.73	-293.68	-860.90	297.16	0.44
3738.00	21.10	160.68	3575.96	-304.63	-893.91	308.25	2.00
3832.00	19.46	162.12	3664.13	-314.91	-924.79	318.66	1.82
3927.00	18.52	162.53	3753.95	-324.18	-954.24	328.05	1.01
4020.00	17.52	159.25	3842.40	-333.46	-981.41	337.44	1.53
4114.00	15.14	158.57	3932.60	-342.86	-1006.07	346.94	2.54
4208.00	14.77	159.18	4023.41	-351.51	-1028.70	355.68	0.43
4302.00	12.75	153.95	4114.71	-360.25	-1049.22	364.50	2.52
4396.00	11.61	156.66	4206.60	-368.48	-1067.23	372.80	1.36
4490.00	10.77	160.97	4298.81	-375.02	-1084.22	379.41	1.26
4585.00	8.93	166.50	4392.41	-379.57	-1099.78	384.03	2.18

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS %/100ft
4679.00	7.61	163.20	4485.43	-383.02	-1112.83	387.53	1.49
4773.00	5.21	165.84	4578.84	-385.82	-1122.93	390.37	2.57
4867.00	3.69	171.87	4672.55	-387.27	-1130.07	391.85	1.69
4961.00	1.89	133.98	4766.44	-388.79	-1134.14	393.39	2.65
5055.00	1.74	138.27	4860.39	-390.84	-1136.27	395.45	0.21
5149.00	1.37	127.36	4954.36	-392.68	-1138.02	397.29	0.50
5244.00	1.81	124.88	5049.32	-394.80	-1139.56	399.42	0.47
5339.00	1.58	120.67	5144.28	-397.16	-1141.09	401.78	0.28
5434.00	1.75	288.50	5239.27	-396.90	-1141.30	401.53	3.49
5528.00	7.98	275.21	5332.88	-389.04	-1140.25	393.66	6.68
5622.00	20.58	278.78	5423.80	-366.14	-1137.12	370.75	13.43
5716.00	26.69	276.33	5509.88	-328.82	-1132.27	333.41	6.58
5811.00	35.03	270.53	5591.38	-280.26	-1129.66	284.84	9.31
5904.00	43.45	271.50	5663.34	-221.50	-1128.57	226.07	9.08
5998.00	50.23	268.07	5727.61	-152.99	-1128.94	157.57	7.68
6092.00	60.22	265.51	5781.16	-76.00	-1133.36	80.59	10.86
6186.00	70.48	268.84	5820.32	9.22	-1137.46	-4.62	11.37
6281.00	78.96	268.12	5845.34	100.76	-1139.91	-96.14	8.96
6373.00	89.66	267.75	5854.44	192.12	-1143.21	-187.50	11.64
6495.00	88.19	267.83	5856.73	314.02	-1147.91	-309.38	1.21

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
6588.00	88.56	269.72	5859.37	406.97	-1149.90	-402.32	2.07
6682.00	88.25	270.38	5861.99	500.93	-1149.83	-496.28	0.78
6776.00	89.36	271.40	5863.94	594.89	-1148.36	-590.24	1.61
6869.00	89.83	271.94	5864.60	687.84	-1145.65	-683.20	0.77
6932.00	89.30	271.30	5865.07	750.80	-1143.86	-746.17	1.33
6963.00	88.93	271.34	5865.56	781.78	-1143.15	-777.16	1.20
7057.00	89.53	269.56	5866.82	875.77	-1142.41	-871.15	1.99
7150.00	91.65	269.34	5865.87	968.75	-1143.30	-964.13	2.29
7243.00	91.34	269.20	5863.45	1061.72	-1144.49	-1057.09	0.36
7337.00	91.78	268.95	5860.89	1155.68	-1146.00	-1151.05	0.54
7430.00	90.10	268.84	5859.37	1248.65	-1147.80	-1244.01	1.81
7525.00	88.86	269.34	5860.23	1343.64	-1149.31	-1338.99	1.41
7618.00	87.82	268.78	5862.93	1436.59	-1150.83	-1431.94	1.27
7712.00	88.99	269.95	5865.55	1530.55	-1151.87	-1525.90	1.76
7805.00	89.23	270.63	5866.99	1623.53	-1151.40	-1618.88	0.77
7900.00	88.15	269.88	5869.16	1718.50	-1150.98	-1713.85	1.37
7994.00	90.03	270.30	5870.65	1812.48	-1150.83	-1807.84	2.05
8088.00	89.93	269.86	5870.67	1906.48	-1150.70	-1901.84	0.48
8182.00	89.40	269.77	5871.22	2000.48	-1151.01	-1995.84	0.58
8275.00	88.62	268.61	5872.83	2093.46	-1152.32	-2088.81	1.49

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
8369.00	89.66	269.16	5874.24	2187.44	-1154.14	-2182.78	1.25
8463.00	90.24	268.75	5874.32	2281.43	-1155.86	-2276.76	0.75
8557.00	90.10	267.92	5874.04	2375.40	-1158.59	-2370.72	0.89
8651.00	90.34	270.47	5873.69	2469.38	-1159.91	-2464.71	2.72
8746.00	89.70	270.01	5873.66	2564.38	-1159.51	-2559.70	0.83
8839.00	88.56	269.34	5875.07	2657.36	-1160.04	-2652.69	1.42
8934.00	89.97	269.27	5876.30	2752.35	-1161.19	-2747.67	1.48
9028.00	89.33	268.57	5876.87	2846.34	-1162.96	-2841.65	1.01
9122.00	89.97	270.82	5877.45	2940.33	-1163.46	-2935.64	2.49
9216.00	89.87	269.64	5877.59	3034.33	-1163.08	-3029.64	1.26
9310.00	89.66	269.60	5877.98	3128.32	-1163.71	-3123.64	0.22
9404.00	90.17	267.37	5878.11	3222.29	-1166.19	-3217.60	2.42
9498.00	90.37	269.74	5877.67	3316.27	-1168.56	-3311.56	2.53
9591.00	90.84	270.06	5876.69	3409.26	-1168.72	-3404.56	0.61
9685.00	90.84	272.14	5875.31	3503.22	-1166.92	-3498.52	2.21
9779.00	89.16	271.49	5875.31	3597.16	-1163.95	-3592.47	1.91
9872.00	89.19	271.34	5876.65	3690.11	-1161.65	-3685.43	0.17
9964.00	89.36	271.44	5877.81	3782.06	-1159.42	-3777.40	0.21
10057.00	90.60	272.30	5877.83	3875.00	-1156.39	-3870.35	1.62
10150.00	88.46	270.54	5878.59	3967.95	-1154.08	-3963.31	2.98

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
10243.00	88.35	270.05	5881.18	4060.91	-1153.61	-4056.27	0.54
10336.00	87.68	269.77	5884.39	4153.85	-1153.76	-4149.21	0.78
10430.00	88.32	270.23	5887.67	4247.79	-1153.76	-4243.15	0.84
10524.00	89.80	270.68	5889.22	4341.77	-1153.01	-4337.14	1.64
10618.00	89.83	270.15	5889.52	4435.76	-1152.33	-4431.13	0.56
10709.00	89.73	269.76	5889.86	4526.76	-1152.40	-4522.13	0.44
10800.00	89.60	270.00	5890.40	4617.76	-1152.59	-4613.13	0.30
10891.00	88.42	268.83	5891.97	4708.74	-1153.52	-4704.11	1.82
10981.00	88.79	268.52	5894.16	4798.70	-1155.60	-4794.06	0.54
11072.00	89.67	269.91	5895.39	4889.68	-1156.85	-4885.04	1.81
11164.00	90.47	268.95	5895.28	4981.68	-1157.77	-4977.03	1.36
11254.00	90.27	268.16	5894.70	5071.66	-1160.03	-5067.00	0.90
11345.00	90.07	269.46	5894.43	5162.64	-1161.92	-5157.98	1.44
11436.00	89.56	269.81	5894.72	5253.64	-1162.50	-5248.98	0.68
11527.00	89.50	270.07	5895.47	5344.64	-1162.59	-5339.97	0.29
11618.00	89.70	270.11	5896.11	5435.63	-1162.45	-5430.97	0.23
11708.00	89.77	270.10	5896.53	5525.63	-1162.28	-5520.97	0.08
11800.00	88.43	269.70	5897.98	5617.62	-1162.45	-5612.96	1.52
11890.00	89.19	269.33	5899.85	5707.59	-1163.21	-5702.93	0.95
11981.00	89.43	268.89	5900.95	5798.58	-1164.62	-5793.91	0.56

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
12071.00	89.80	269.22	5901.55	5888.57	-1166.11	-5883.90	0.55
12162.00	88.79	268.33	5902.67	5979.55	-1168.06	-5974.87	1.48
12253.00	90.81	270.60	5902.99	6070.54	-1168.91	-6065.85	3.34
12343.00	89.66	270.56	5902.63	6160.53	-1168.01	-6155.85	1.27
12434.00	89.40	270.59	5903.37	6251.51	-1167.10	-6246.84	0.30
12525.00	91.27	270.56	5902.84	6342.50	-1166.19	-6337.83	2.06
12616.00	90.50	269.17	5901.43	6433.49	-1166.41	-6428.82	1.74
12707.00	90.34	269.00	5900.76	6524.48	-1167.86	-6519.80	0.26
12799.00	89.56	268.20	5900.84	6616.46	-1170.11	-6611.77	1.21
12889.00	87.41	267.37	5903.22	6706.36	-1173.59	-6701.67	2.56
12983.00	88.89	269.95	5906.25	6800.29	-1175.79	-6795.58	3.16
13076.00	88.96	269.38	5907.99	6893.27	-1176.34	-6888.56	0.61
13170.00	90.10	269.21	5908.76	6987.26	-1177.50	-6982.55	1.23
13264.00	91.17	269.70	5907.72	7081.25	-1178.39	-7076.54	1.26
13359.00	90.47	269.72	5906.35	7176.24	-1178.87	-7171.53	0.74
13453.00	91.58	269.33	5904.67	7270.23	-1179.64	-7265.51	1.25
13547.00	90.57	269.95	5902.91	7364.21	-1180.23	-7359.49	1.26
13641.00	91.81	269.13	5900.96	7458.18	-1180.99	-7453.46	1.58
13735.00	89.63	268.85	5899.77	7552.16	-1182.65	-7547.44	2.34
13829.00	88.73	270.14	5901.12	7646.15	-1183.47	-7641.42	1.68

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
13922.00	88.45	269.76	5903.41	7739.12	-1183.55	-7734.39	0.50
14015.00	88.96	270.45	5905.51	7832.09	-1183.38	-7827.37	0.92
14108.00	89.46	271.62	5906.79	7925.06	-1181.69	-7920.34	1.37
14201.00	89.53	271.09	5907.60	8018.02	-1179.49	-8013.31	0.57
14294.00	89.70	271.03	5908.23	8110.99	-1177.77	-8106.29	0.19
14387.00	89.93	270.86	5908.53	8203.97	-1176.24	-8199.28	0.31
14480.00	90.17	270.42	5908.45	8296.96	-1175.21	-8292.27	0.54
14572.00	90.74	270.54	5907.72	8388.95	-1174.44	-8384.27	0.63
14665.00	89.33	269.95	5907.66	8481.95	-1174.05	-8477.26	1.64
14757.00	89.76	269.94	5908.39	8573.94	-1174.14	-8569.26	0.47
14850.00	89.43	269.94	5909.04	8666.94	-1174.24	-8662.26	0.36
14942.00	89.60	270.08	5909.83	8758.94	-1174.22	-8754.25	0.24
15035.00	88.46	270.99	5911.40	8851.91	-1173.35	-8847.23	1.57
15128.00	87.95	270.58	5914.32	8944.85	-1172.07	-8940.18	0.70
15221.00	89.03	271.06	5916.76	9037.80	-1170.74	-9033.14	1.27
15313.00	88.93	271.59	5918.40	9129.75	-1168.61	-9125.10	0.59
15407.00	88.02	271.31	5920.90	9223.68	-1166.23	-9219.03	1.01
15499.00	89.03	269.87	5923.27	9315.63	-1165.29	-9310.99	1.91
15592.00	88.59	269.88	5925.20	9408.61	-1165.49	-9403.97	0.47
15685.00	89.87	271.06	5926.45	9501.59	-1164.73	-9496.96	1.87

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
15779.00	89.93	269.95	5926.62	9595.59	-1163.90	-9590.95	1.19
15873.00	89.83	268.68	5926.81	9689.58	-1165.02	-9684.94	1.36
15966.00	90.50	268.71	5926.54	9782.56	-1167.15	-9777.92	0.72
16013.00	90.67	268.52	5926.06	9829.55	-1168.28	-9824.90	0.53



Scientific Drilling

GAMMA RAY

2" = 100' MD