

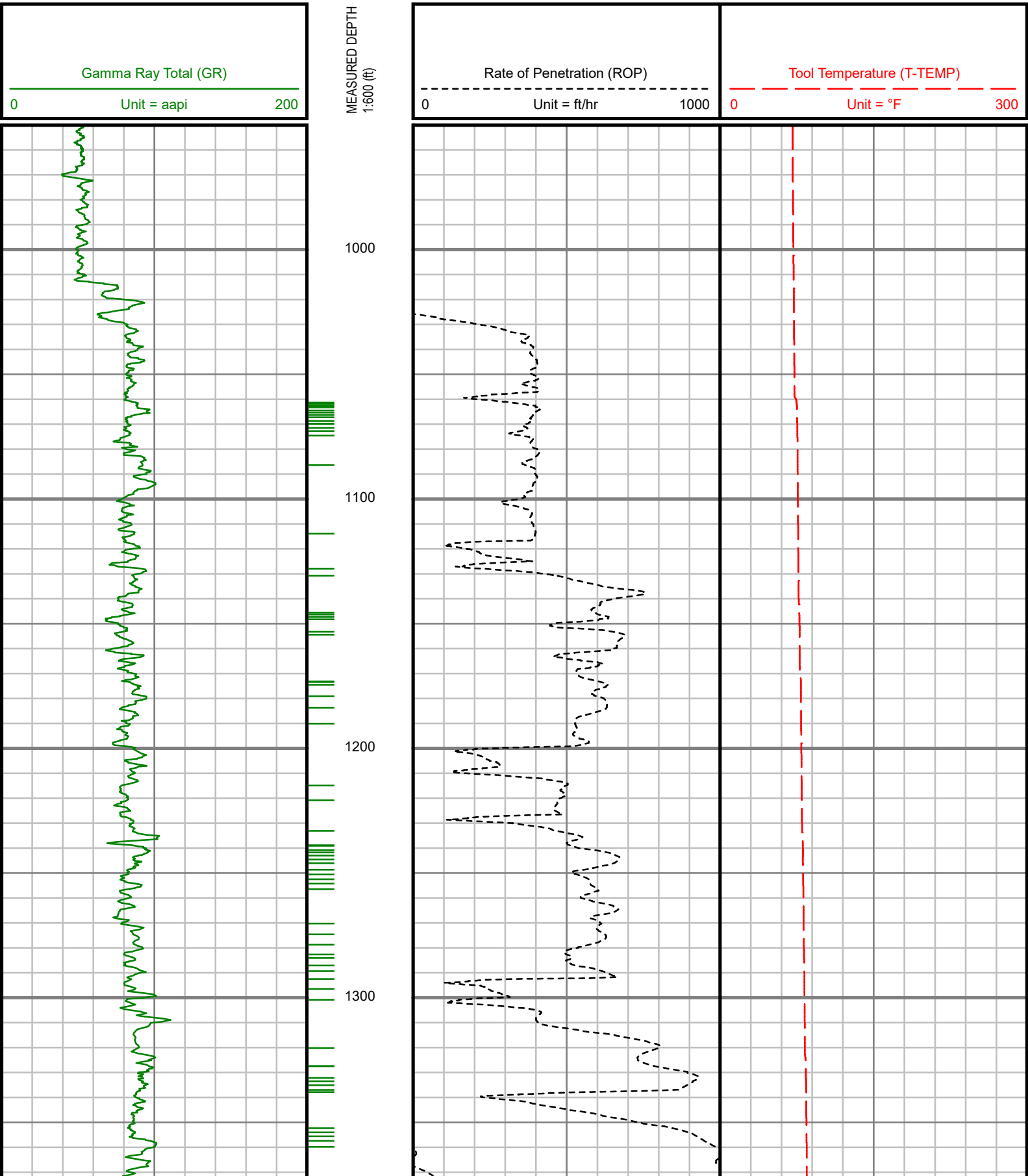
2" = 100' MD

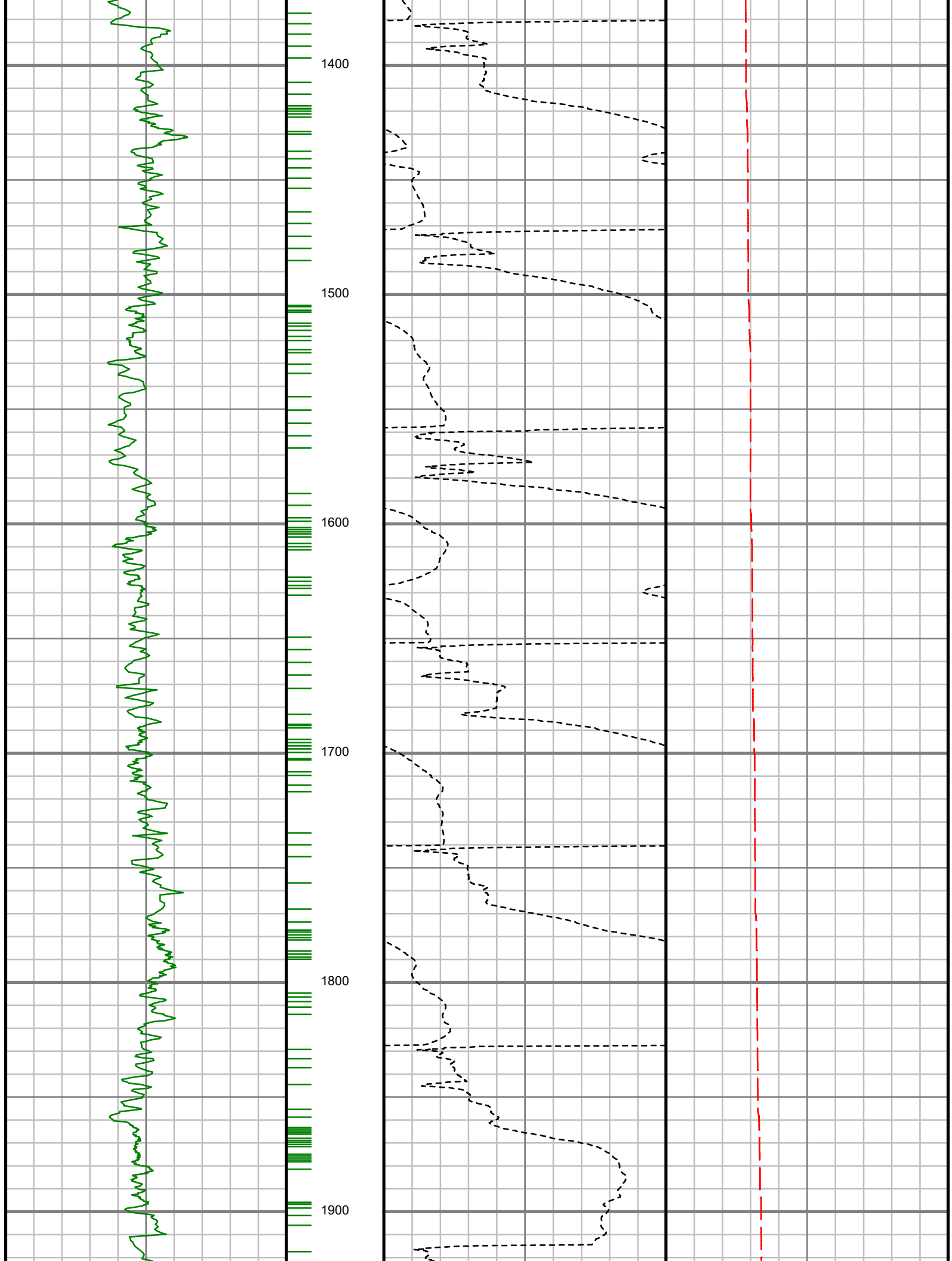
COMPANY : HIGHPOINT RESOURCES WELL : ANSCHUTZ EQUUS FARMS FED 05-61-34-5649B FIELD : WATTENBERG COUNTY : WELD STATE : COLORADO COUNTRY : U.S.A. UWI : 05-123-48183										COMPANY : HIGHPOINT RESOURCES WELL : ANSCHUTZ EQUUS FARMS FED 05-61-34-5649B FIELD : WATTENBERG COUNTY : WELD STATE : COLORADO COUNTRY : U.S.A. UWI : 05-123-48183									
DEPTH REF. : RKB REF. HEIGHT : 16.500 ft GROUND LEVEL : 4479.600 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									
13.5		0		960		0 - 4		0		959									
8.75		960		6305		4 - 20		959		1964									
6.125		6305		15967		20		1964		2704									
						20 - 0		2704		3928									
						0		3928		5340									
						0 - 90		5340		6309									
						88 - 92		6309		15967									
CASING RECORD																			
CASING SIZE in		FROM ft		TO ft															
9.625		0		960															
7		960		6294															
DRILLING CO.: CADE RIG: 24 LWD UNIT NO.: KIT MUD PUDISTRICT: CASPER SPUD DATE: 01/14/2019 LWD START DATE: 03/28/2019 LWD END DATE: 04/08/2019 TOTAL DEPTH: 15967 ft										DIRECTIONAL ROP DEPTH: 1026 ft DEPTH: 15967 ft									

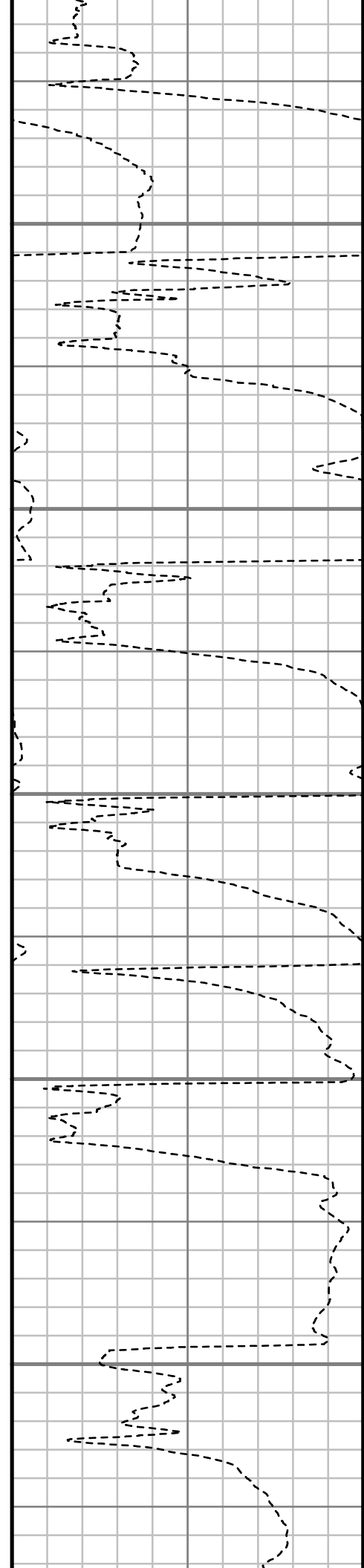
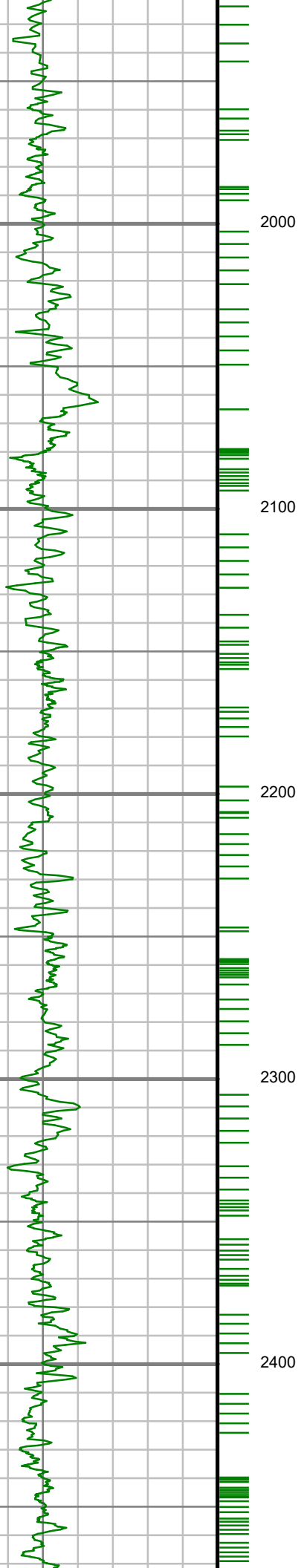
Run Data						
RUN NUMBER	1	2	3	4		
START DATE	03/28/2019	03/31/2019	04/02/2019	04/05/2019		
START TIME	19:25	11:30	12:30	10:00		
END DATE	03/30/2018	04/02/2019	04/05/2019	04/08/2019		
END TIME	16:30	12:30	10:00	08:45		
DEPTH IN (ft)	1026	6305	11420	15045		
DEPTH OUT (ft)	6305	11420	15045	15967		
LOG TOP (ft)	1026	6305	11420	15045		
LOG BOTTOM (ft)	6305	11420	15045	15967		
HOLE SIZE (in)	8.75	6.125	6.125	6.125		
MUD DATA @ (ft)	6302	6302	15045	15522		
MUD TYPE	WATER-BASED	WATER-BASED	WATER-BASED	WATER-BASED		
DENSITY (lb / gal)	9.8	9.8	9	8.9		
VISCOSITY (s / qt)	58	58	30	31		
pH	9	9	9.2	9.3		
FLUID LOSS (cm3 / 30)	-	-	-	-		
SALINITY (mg/L)	650	650	650	700		
Rm (ohmm @ deg F)	-	-	-	-		
Rmf (ohmm @ deg F)	-	-	-	-		
MAX TEMP (deg F)	173.38	218	230	227		
Rm @ MAX TEMP (ohmm)	-	-	-	-		
LWD ENGINEER #1	M. BAILY	M. BAILY	M. BAILY	M. BAILY		
LWD ENGINEER #2	P. FLAVIUS	G. SAKOU	G. SAKOU	A. FARQUHAR		
LWD ENGINEER #3	-	-	M. POTTER	-		
LOG WTINNESS #1	A. ROWE	A. ROWE	A. ROWE	A. ROWE		
LOG WTINNESS #2	-	-	-	-		

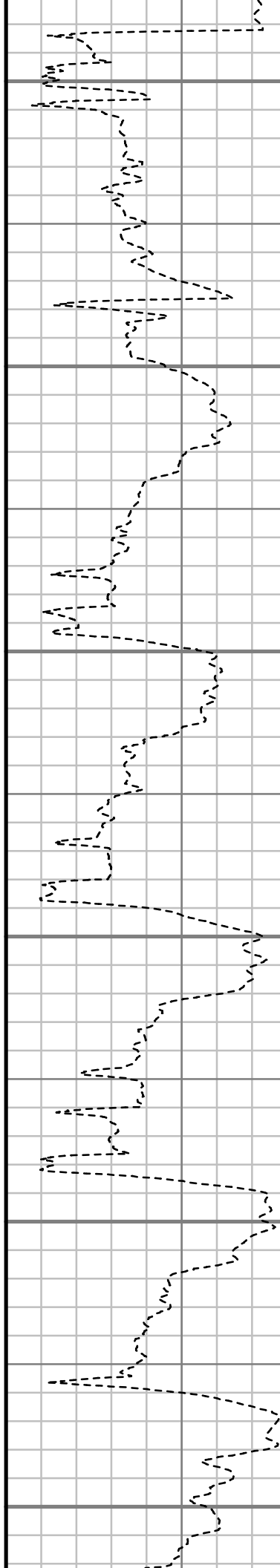
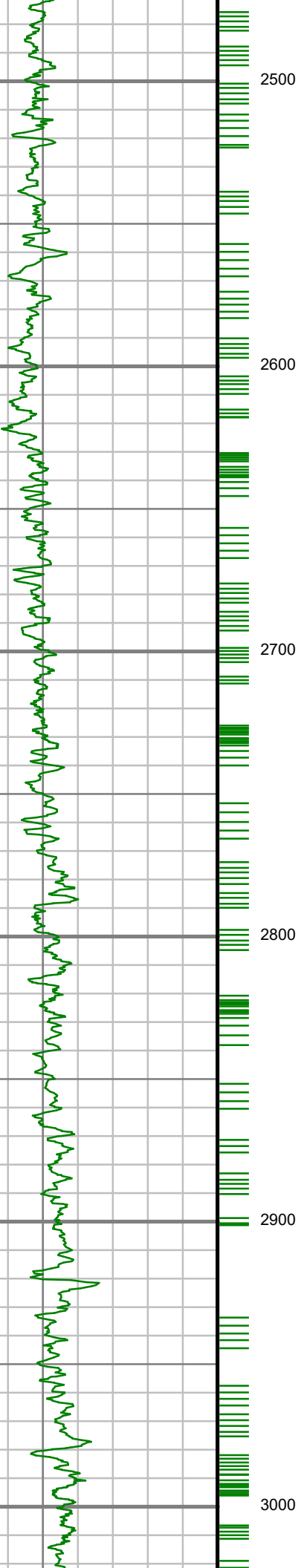
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

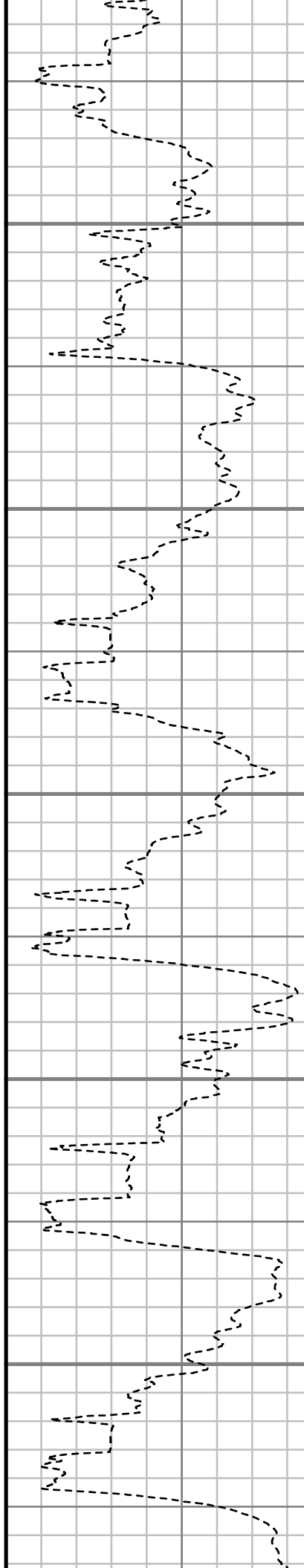
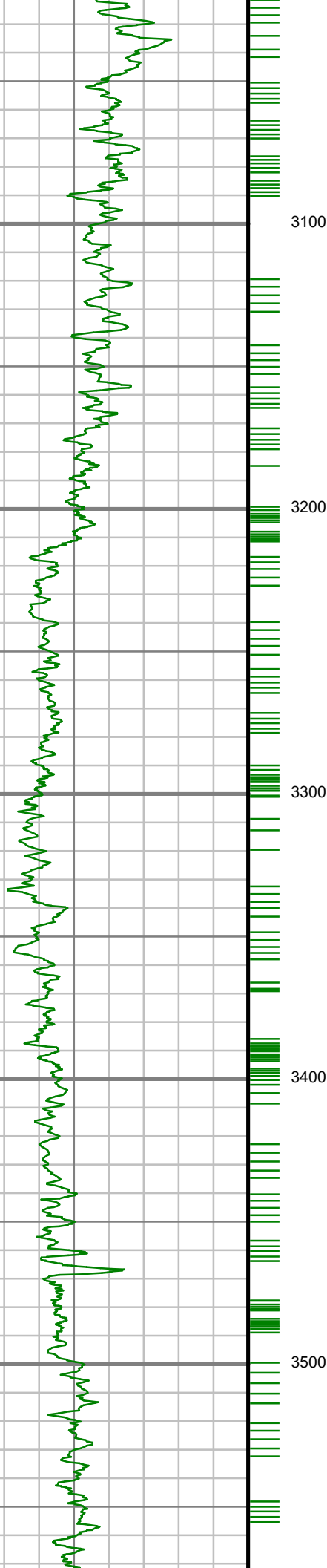
HIGHPOINT RESOURCES
ANSCHUTZ EQUUS FARMS FED 05-61-34-5649B
WATENBERG FIELD
WELD COUNTY, COLORADO
API # 05-123-48183

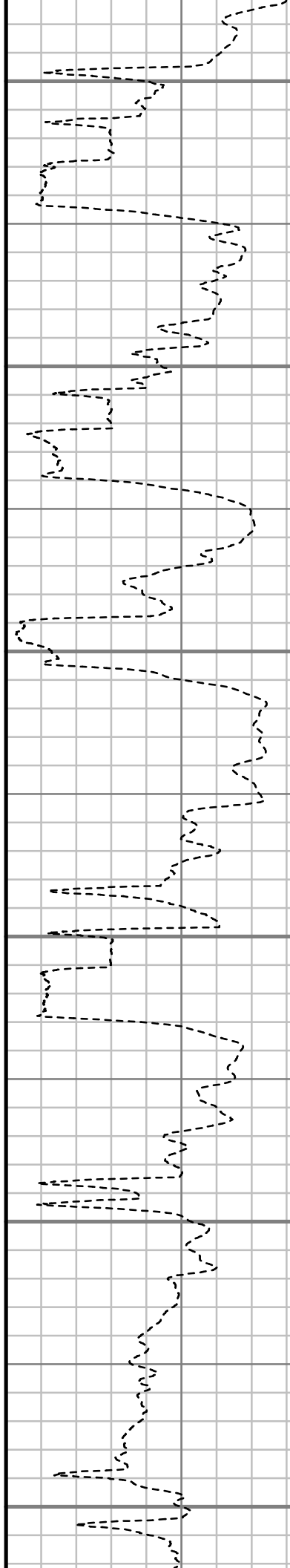
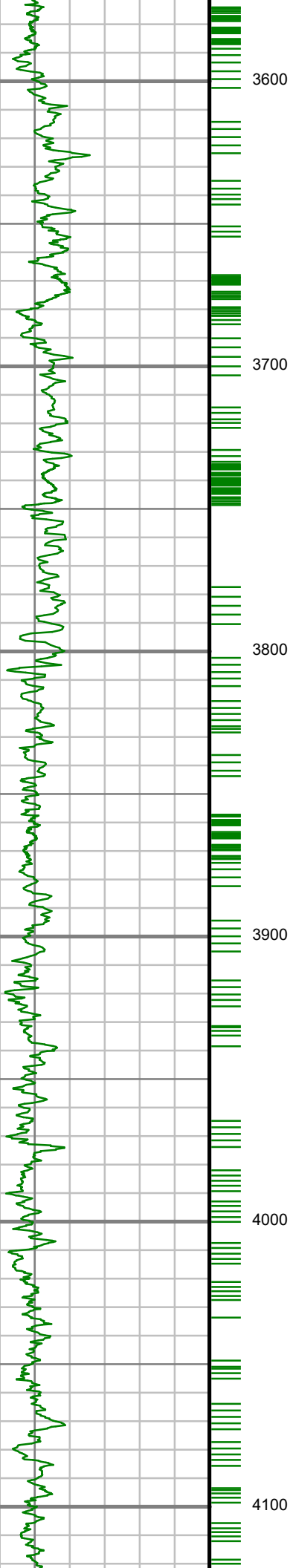


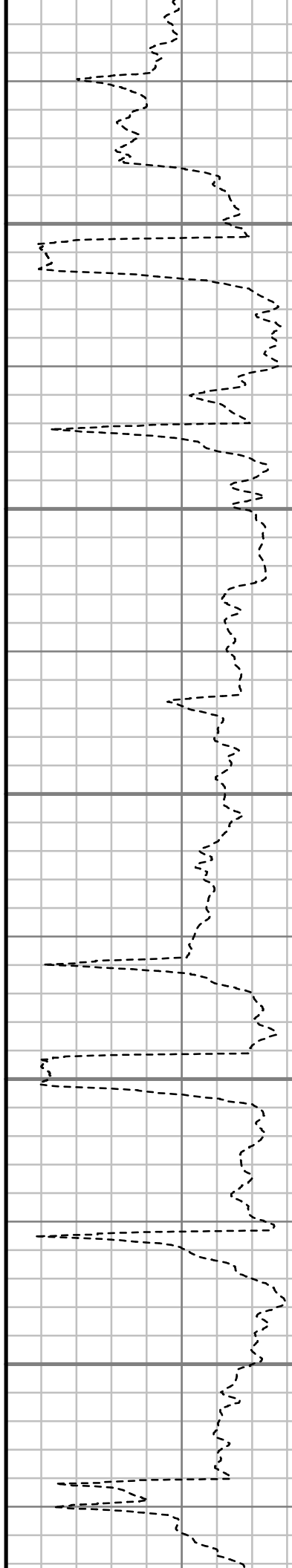
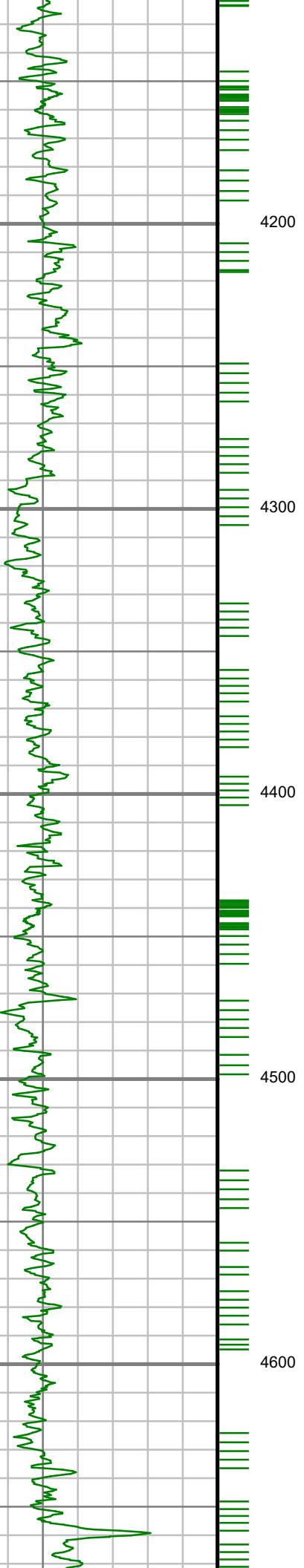


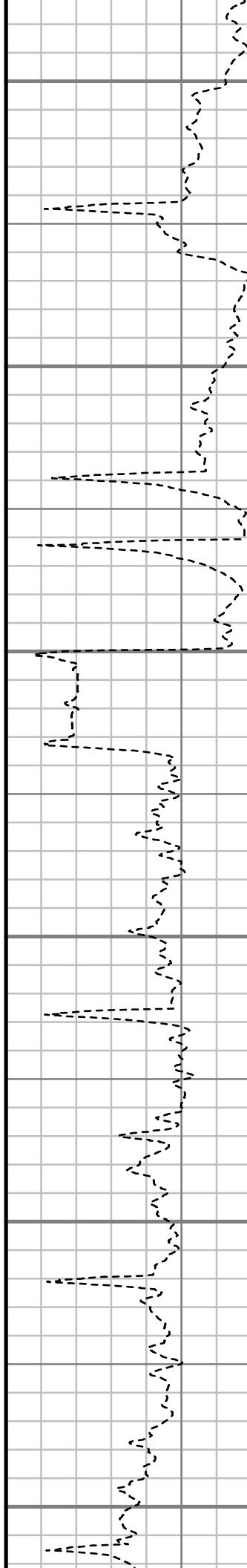
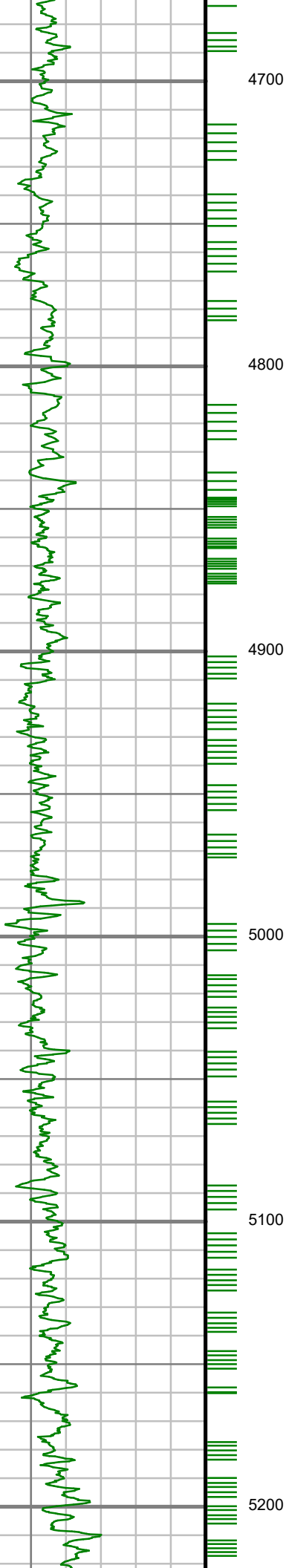


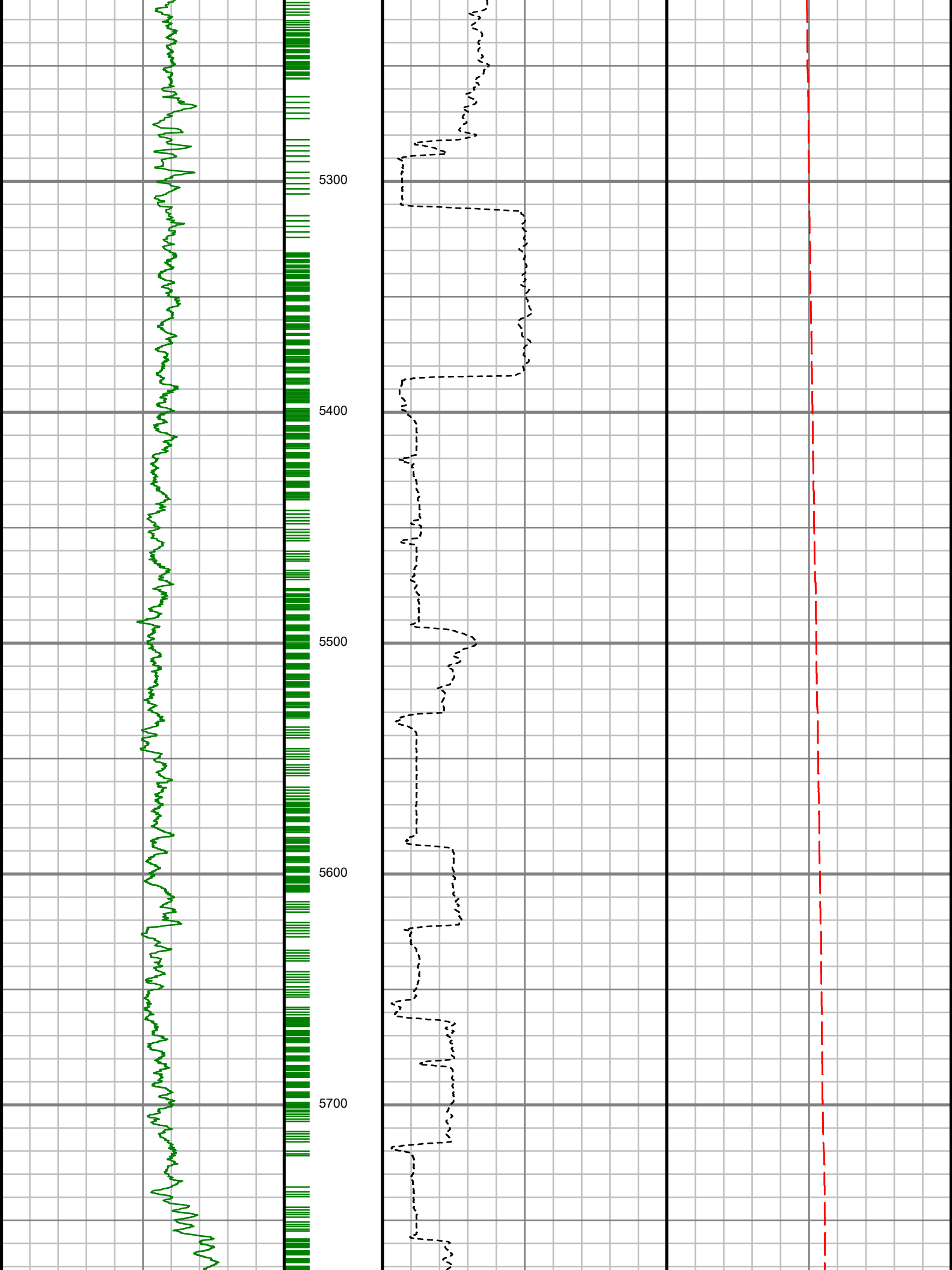


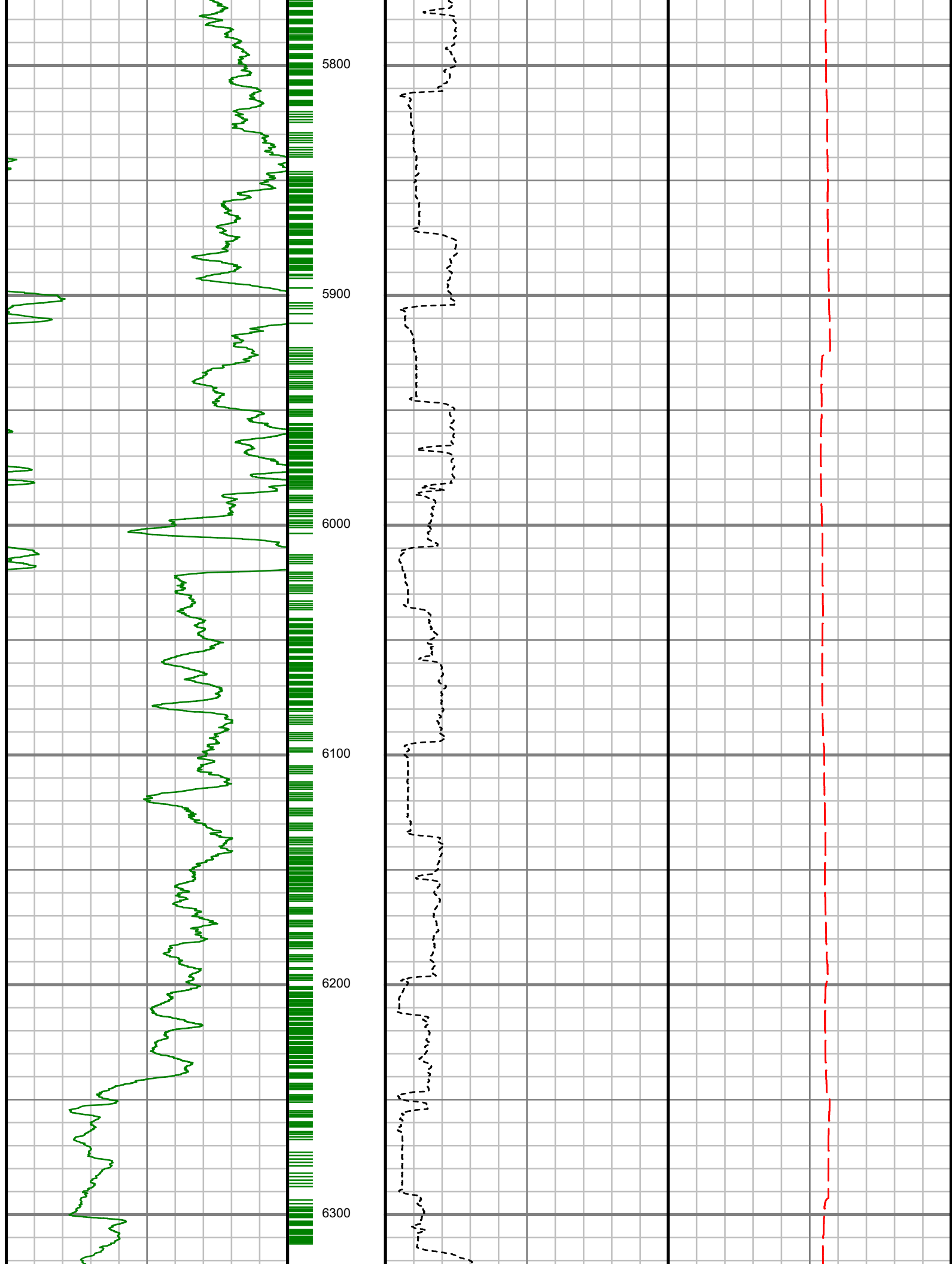


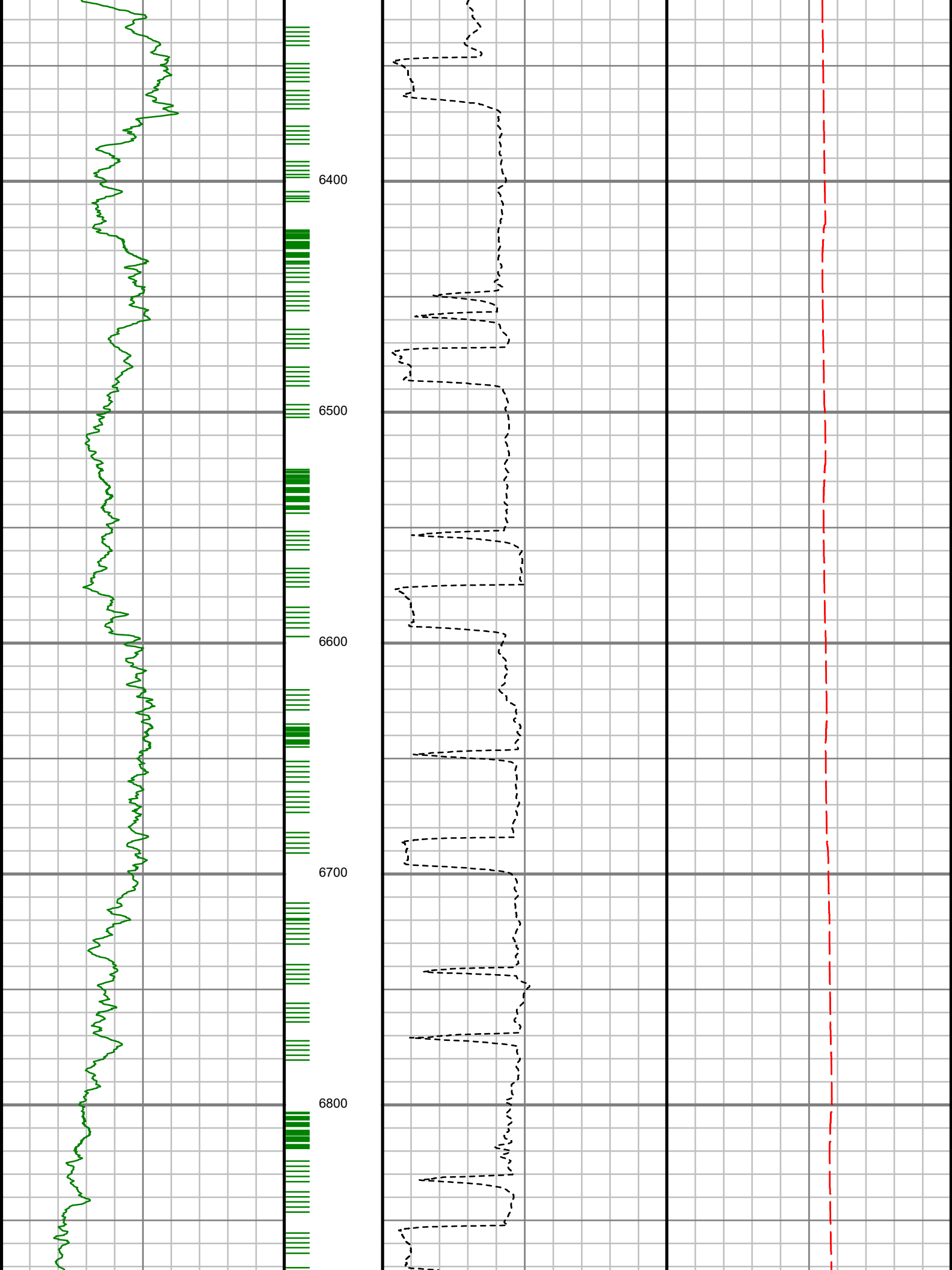


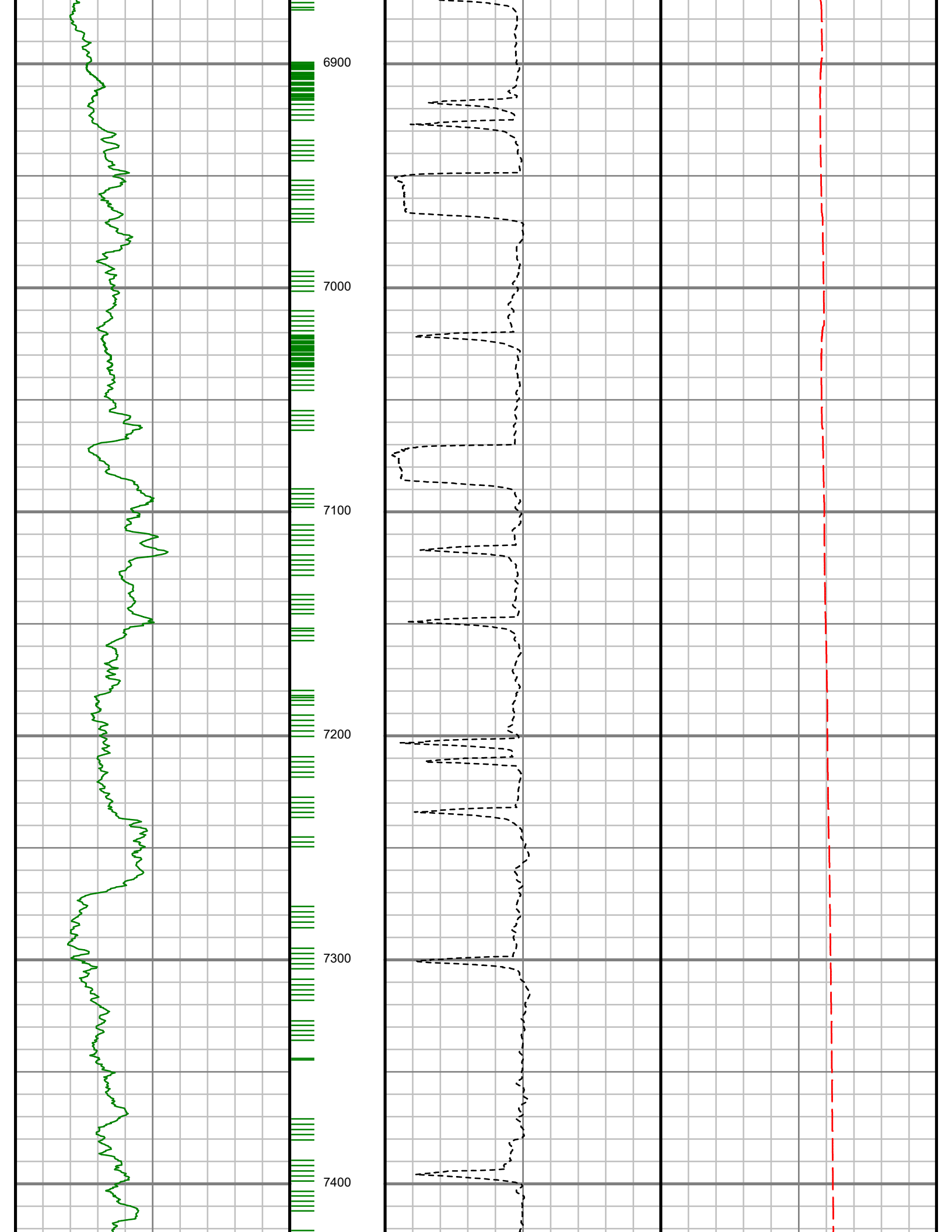


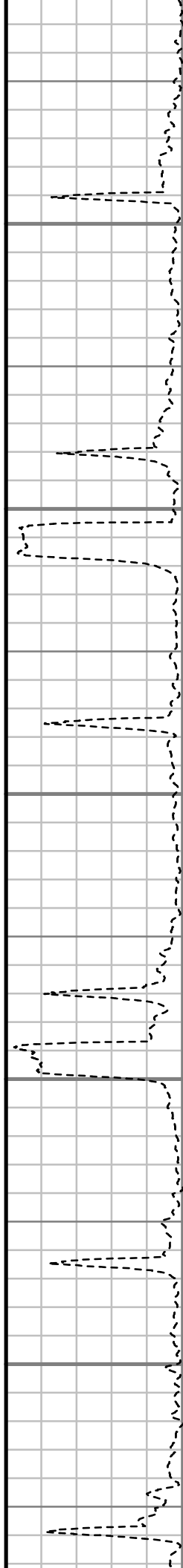
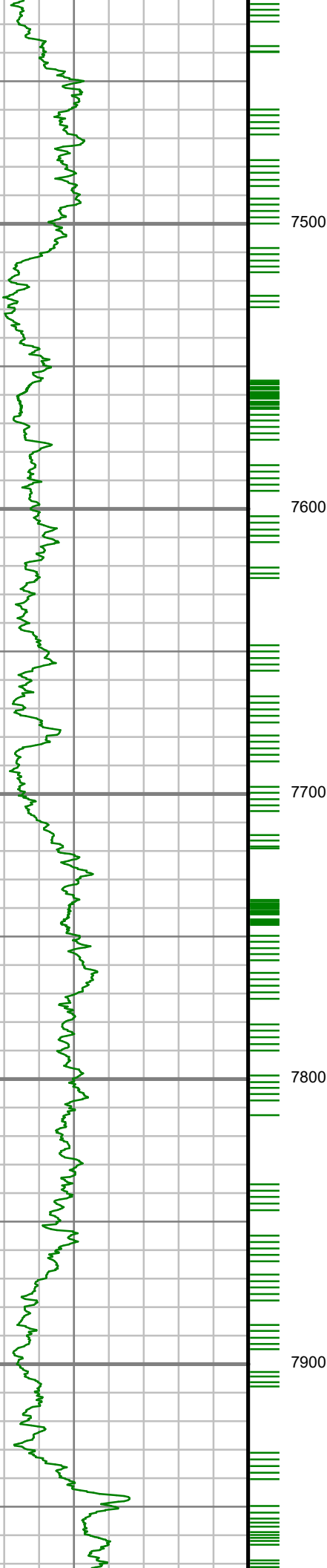


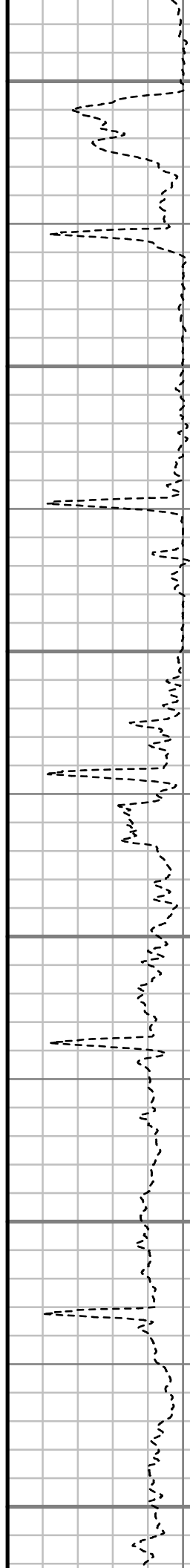
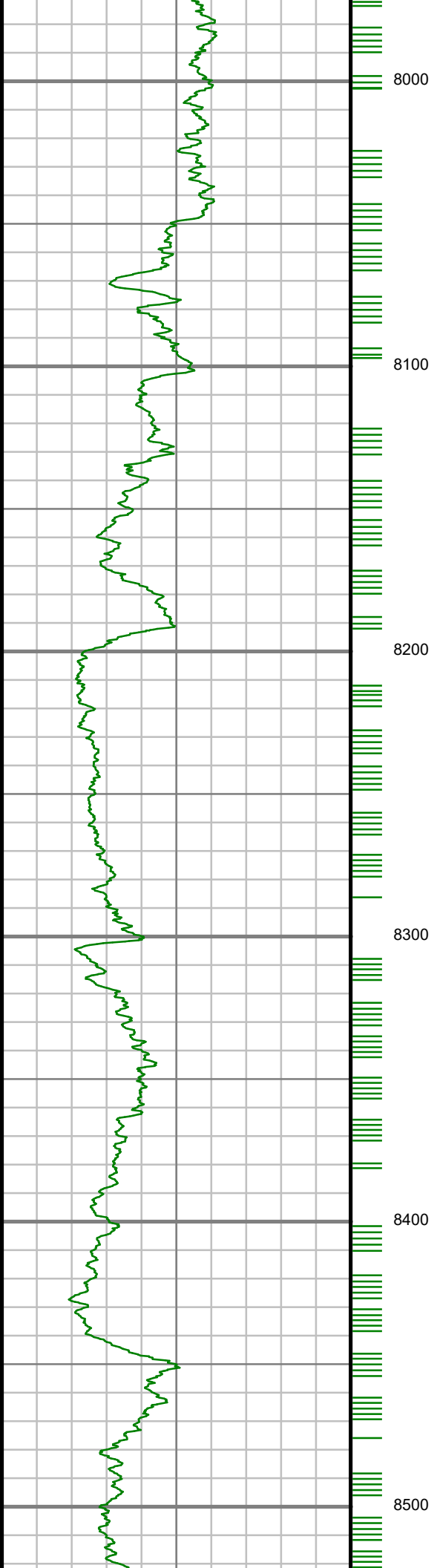


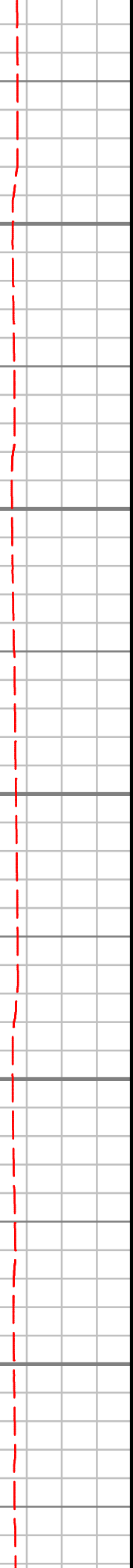
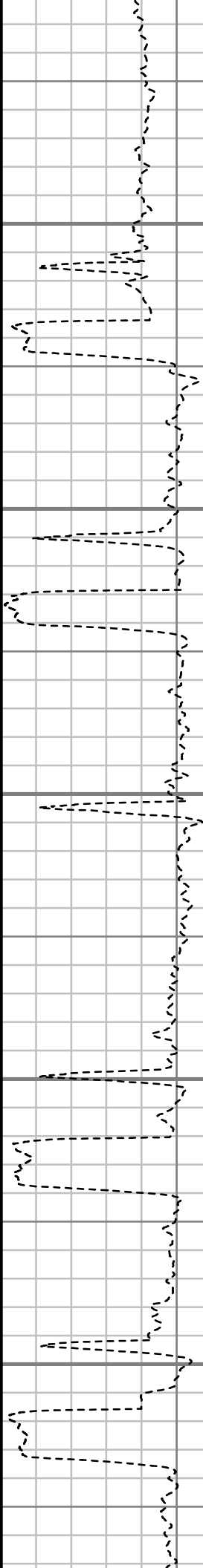
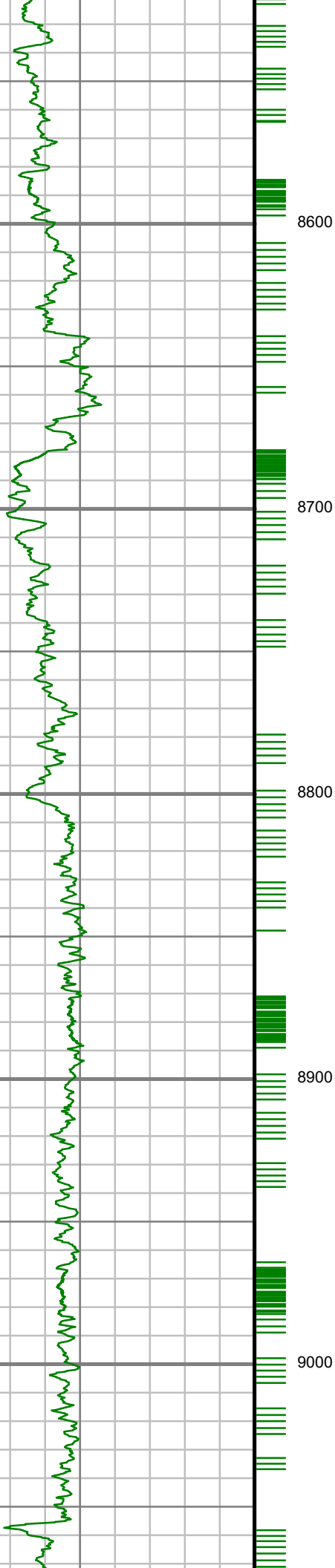


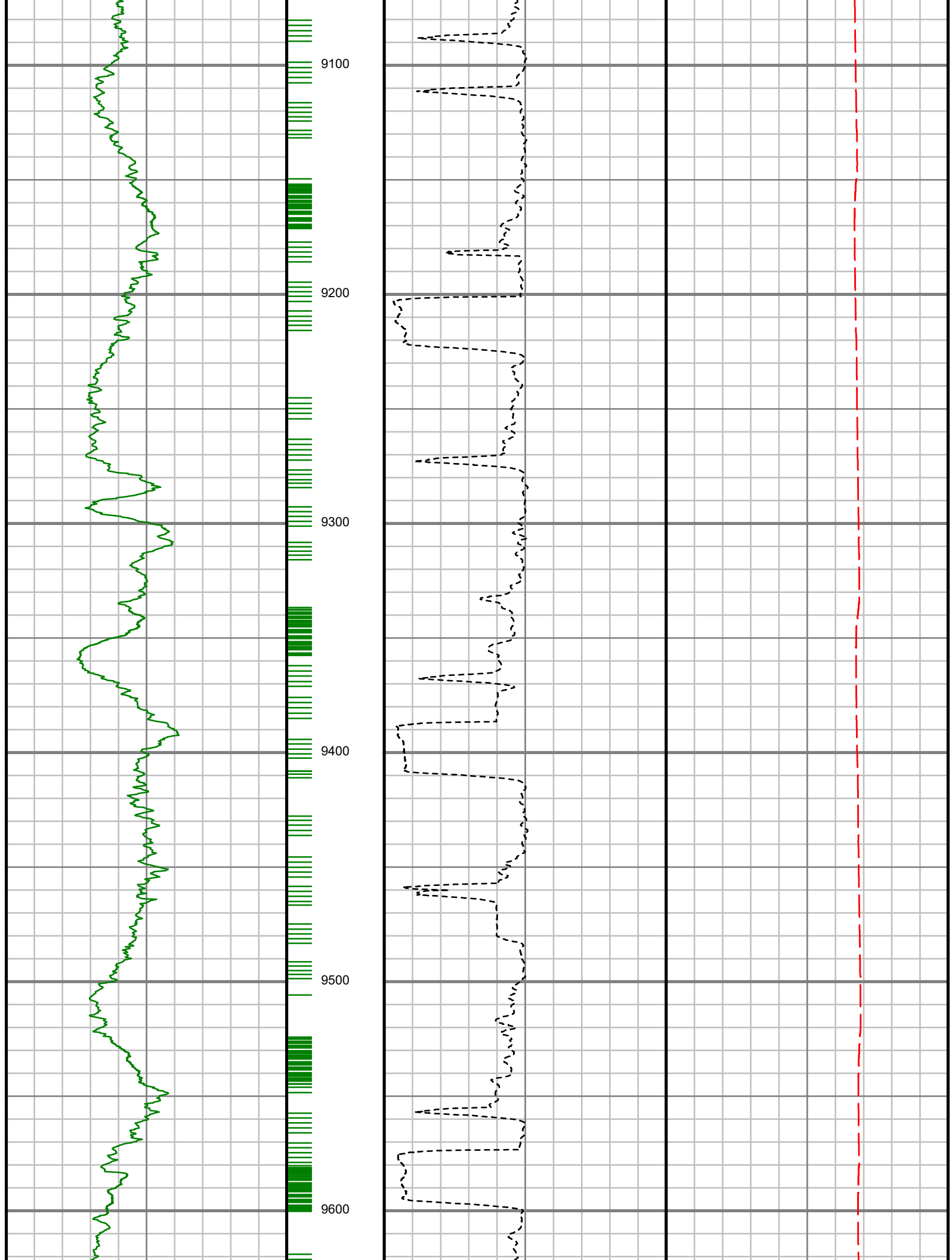


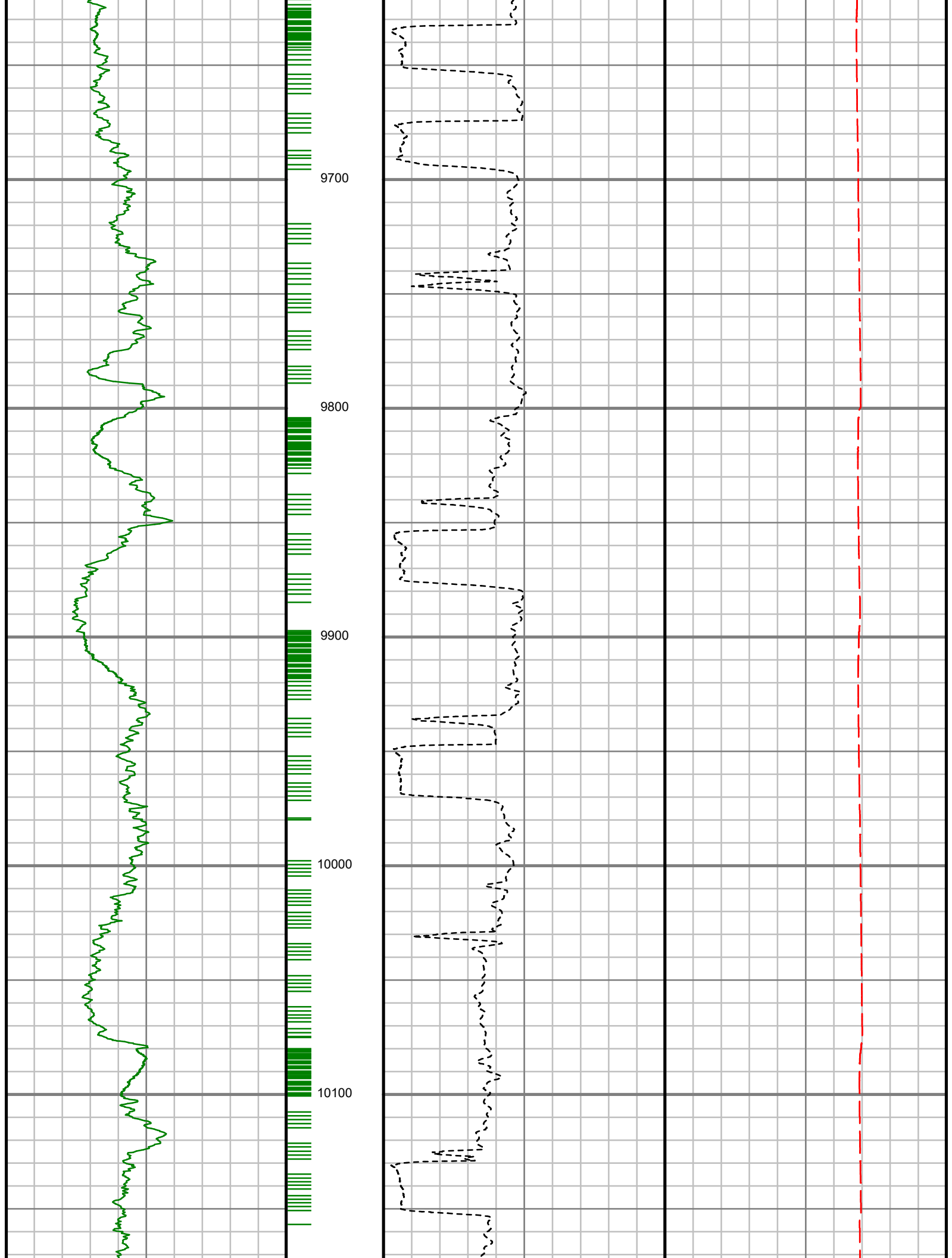


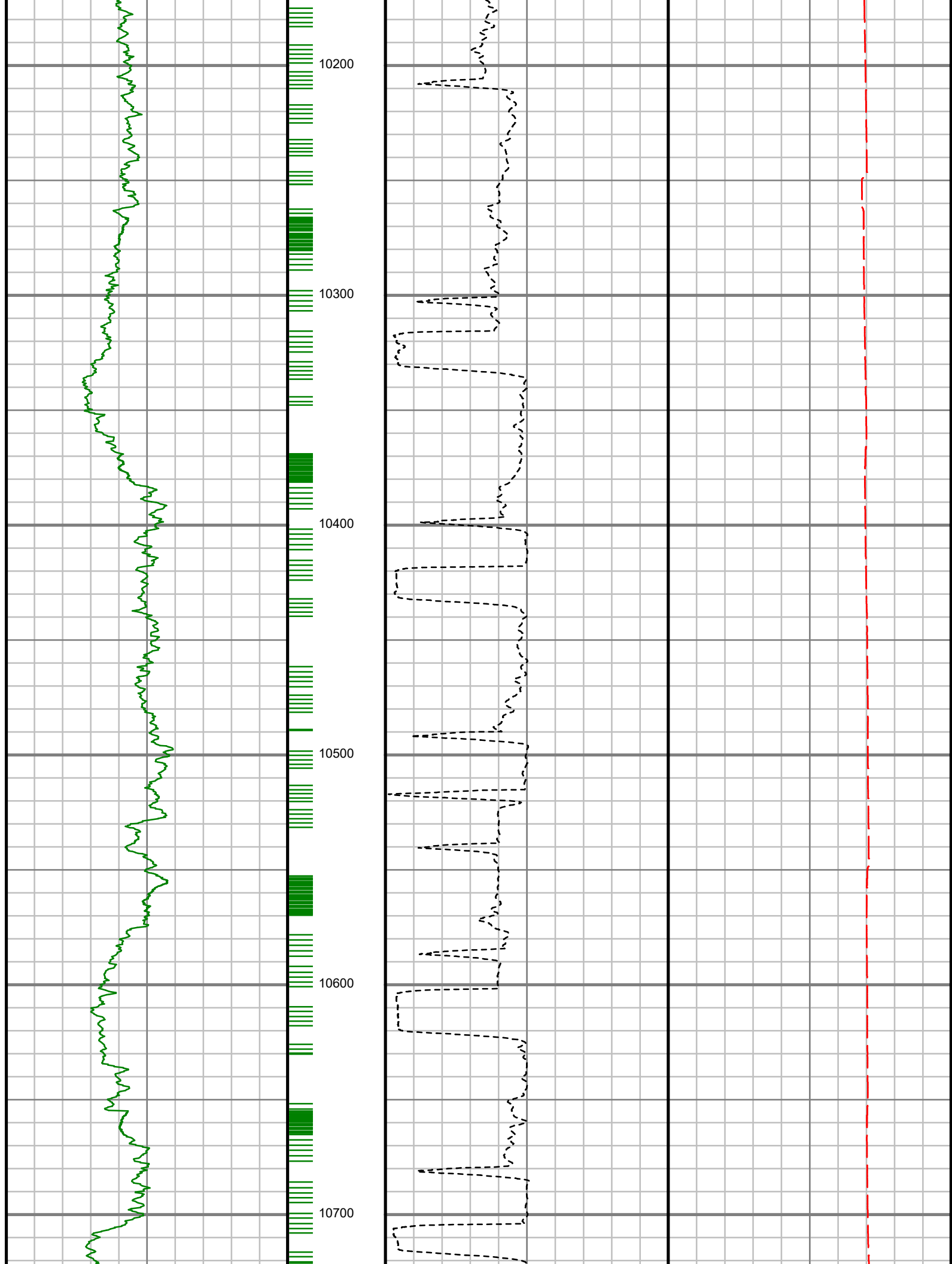


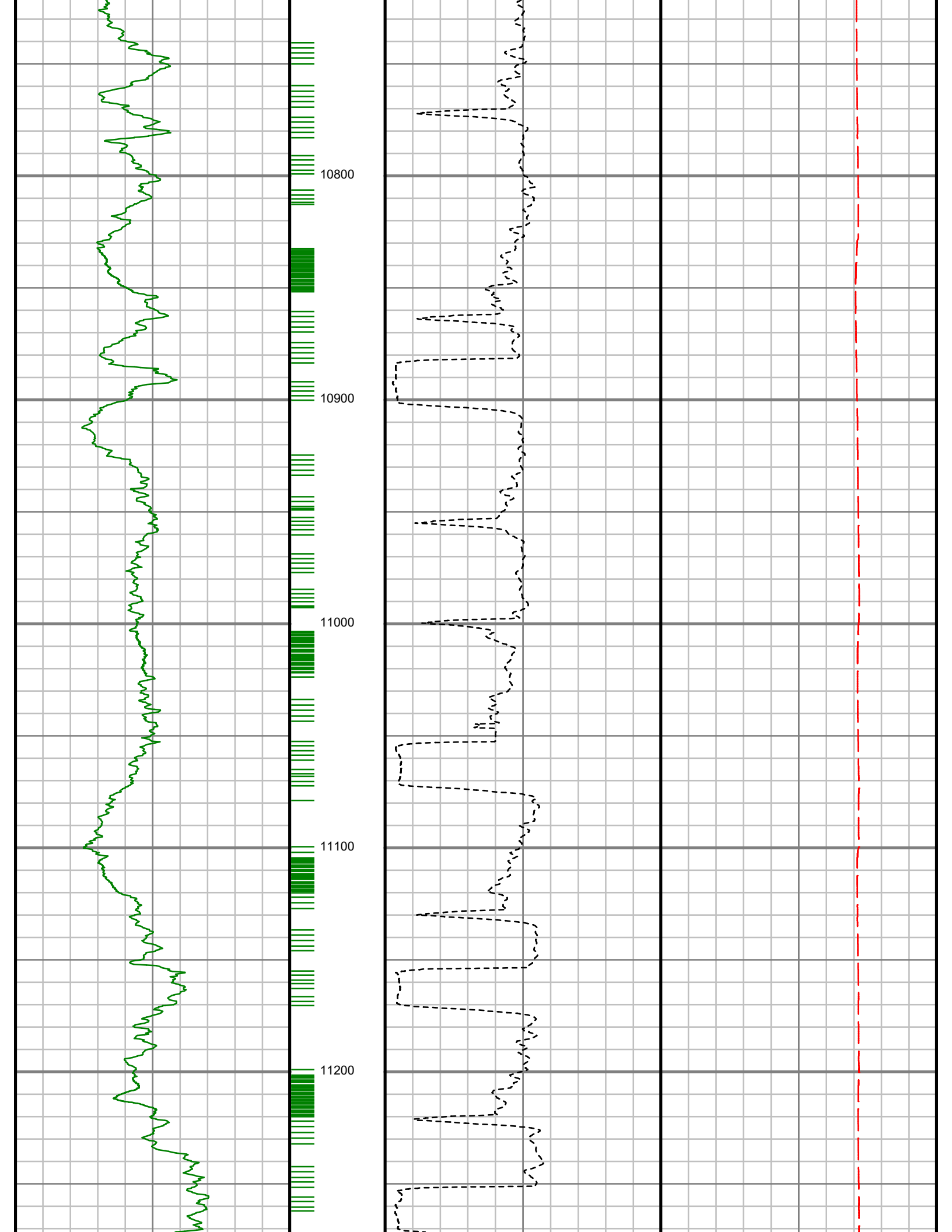


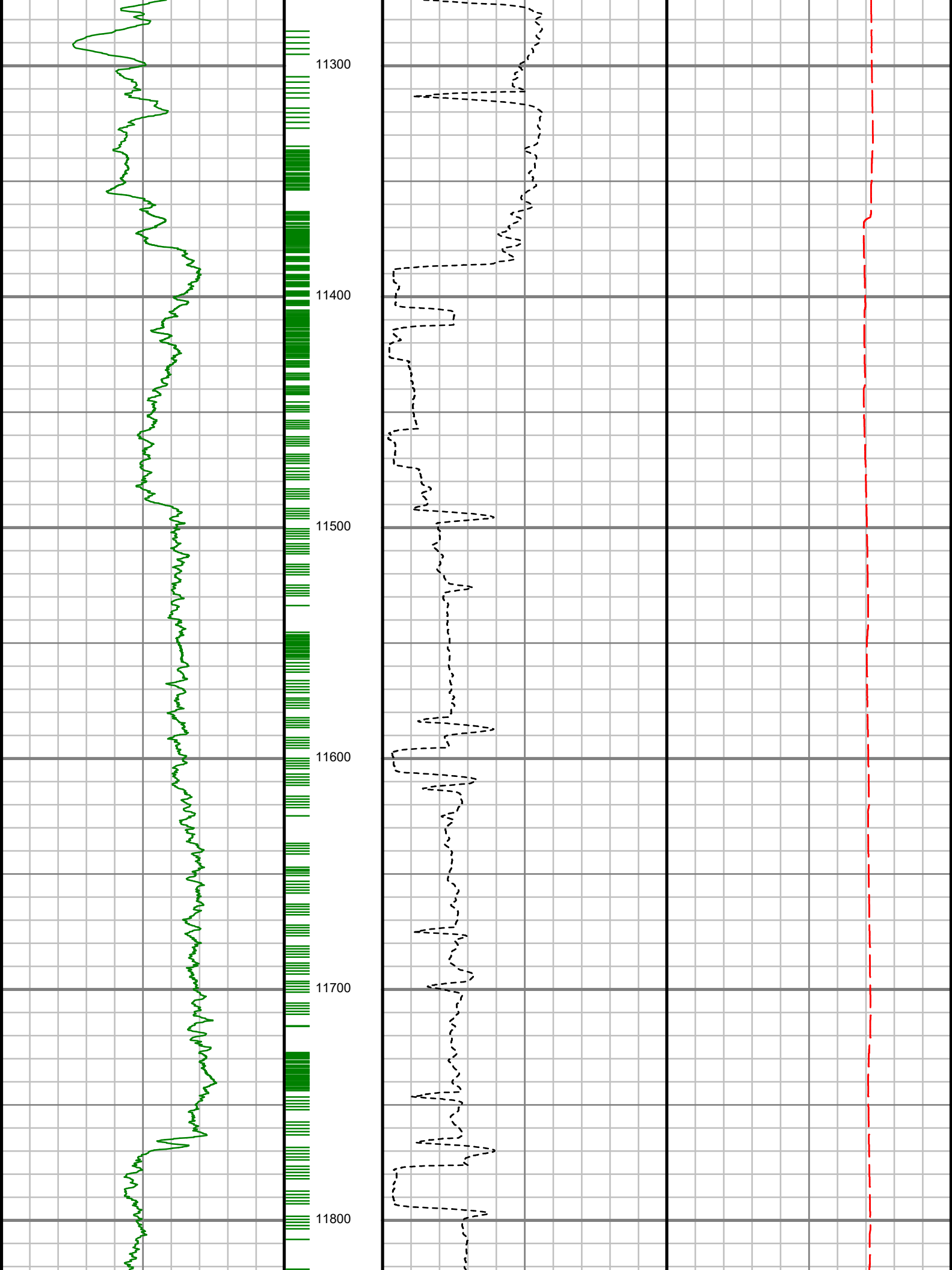


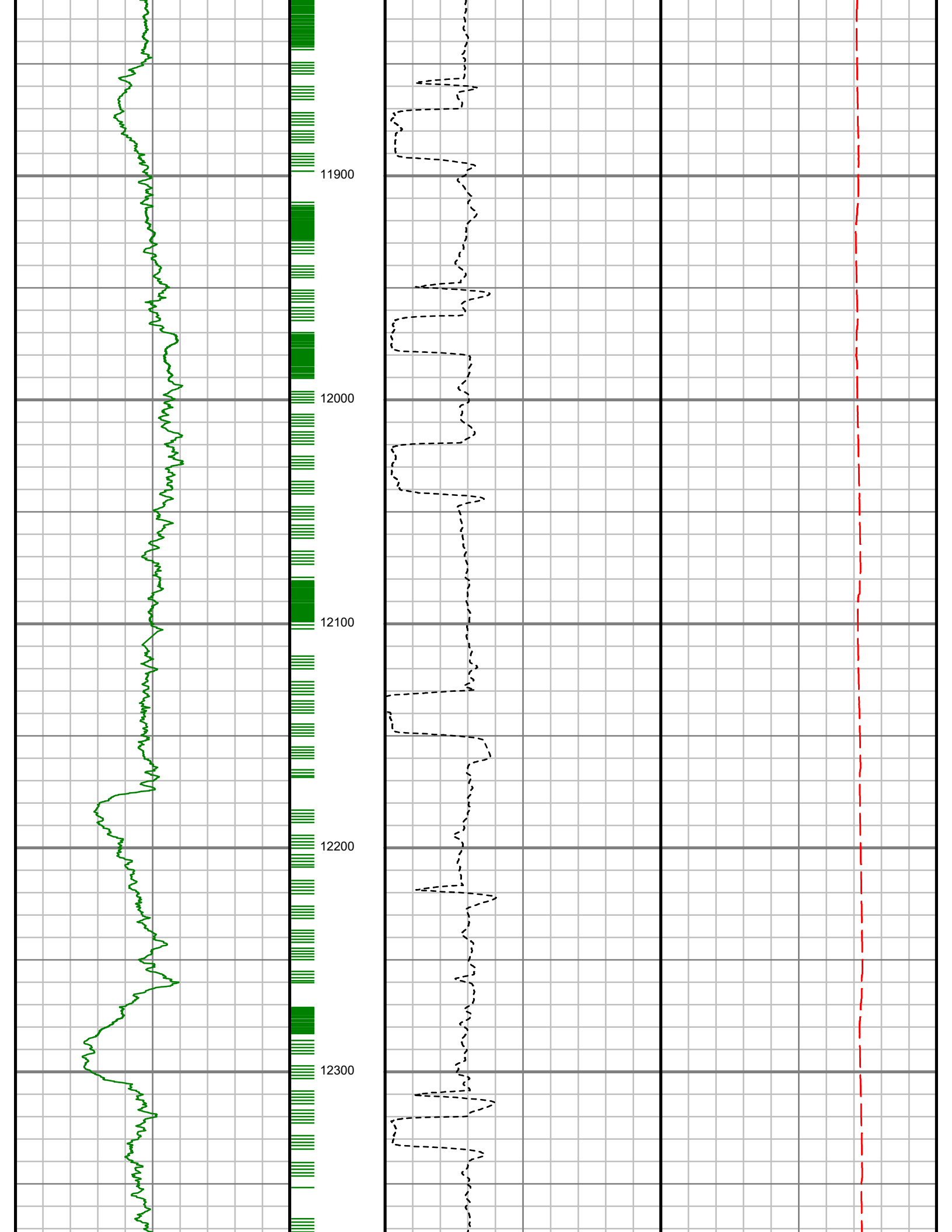


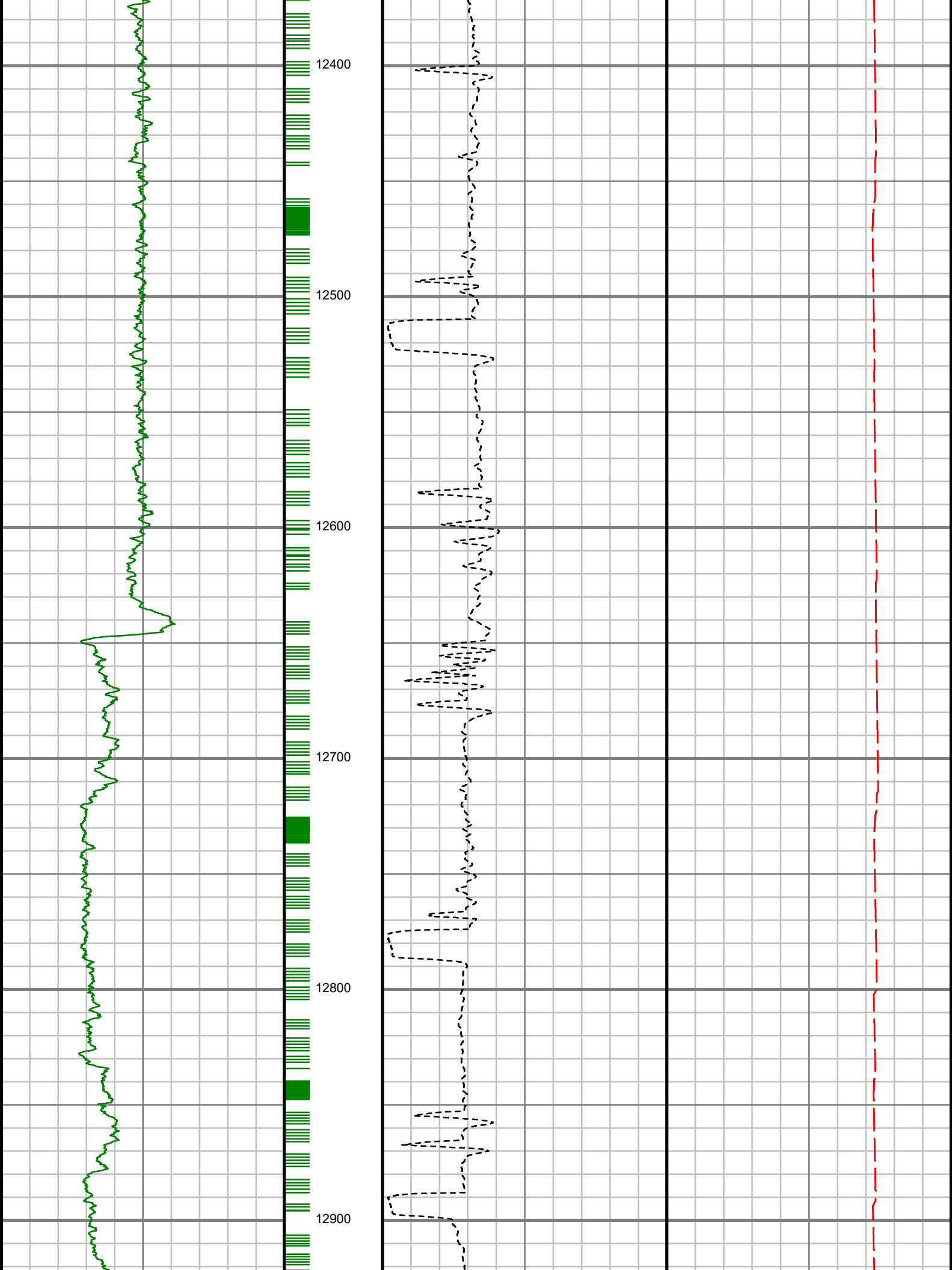


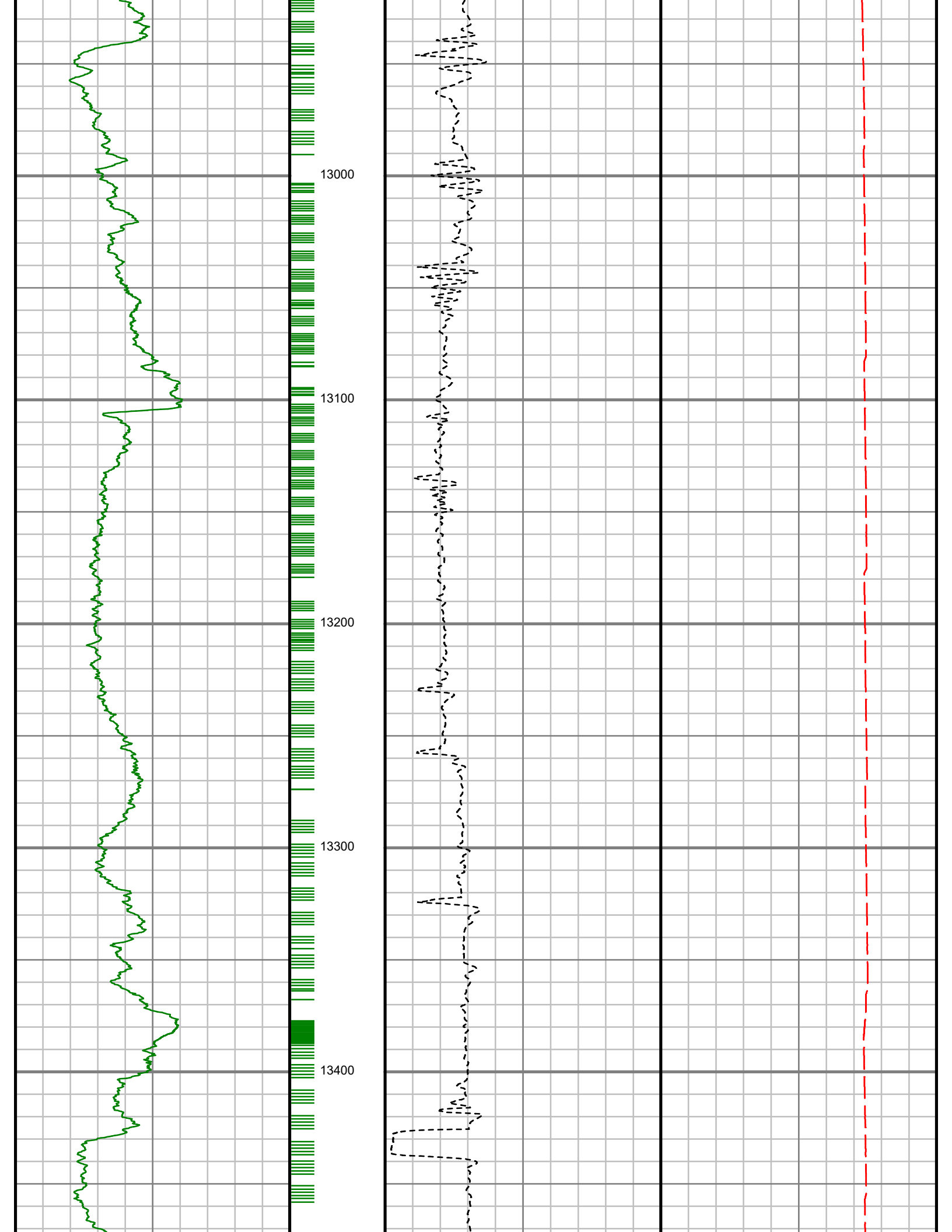


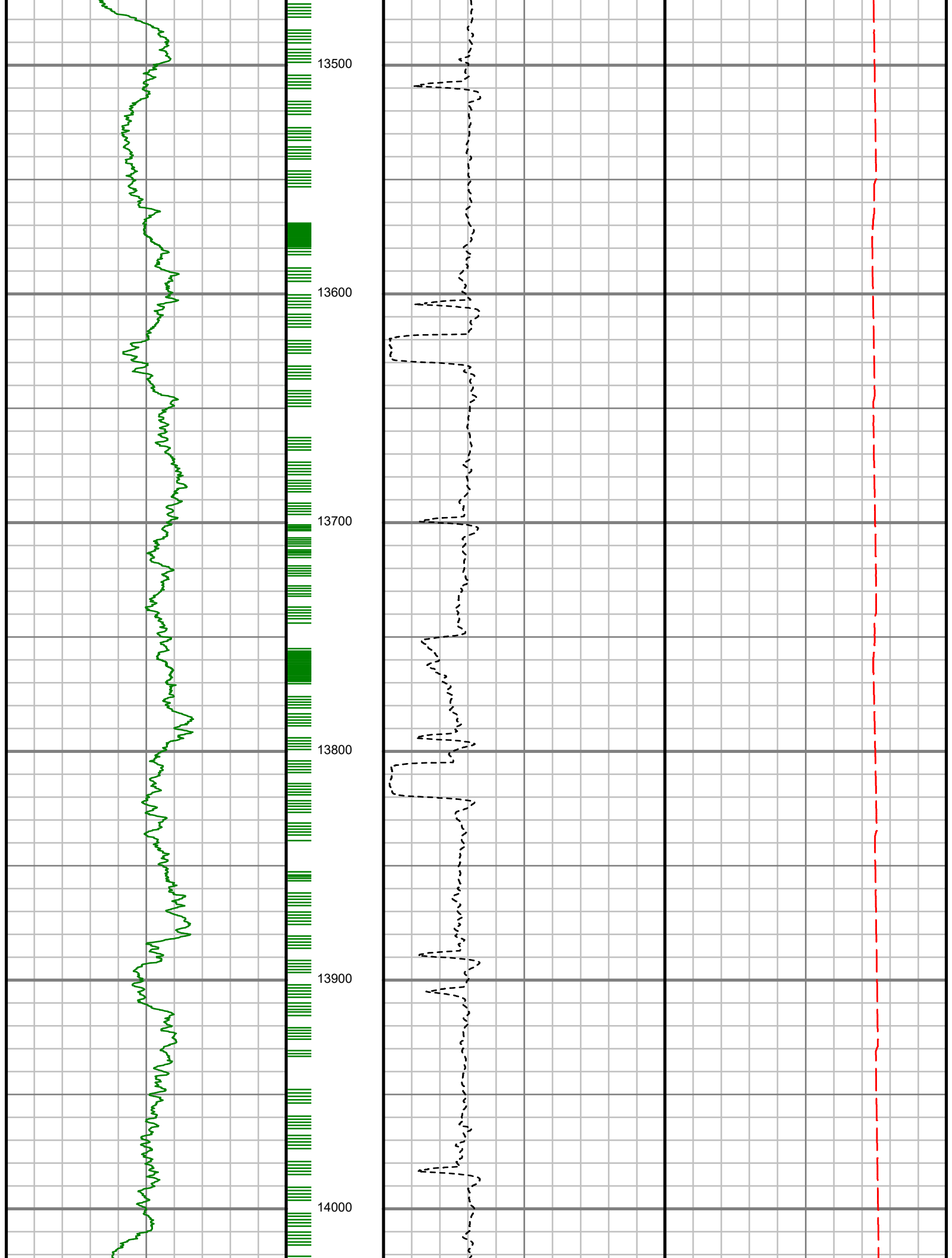


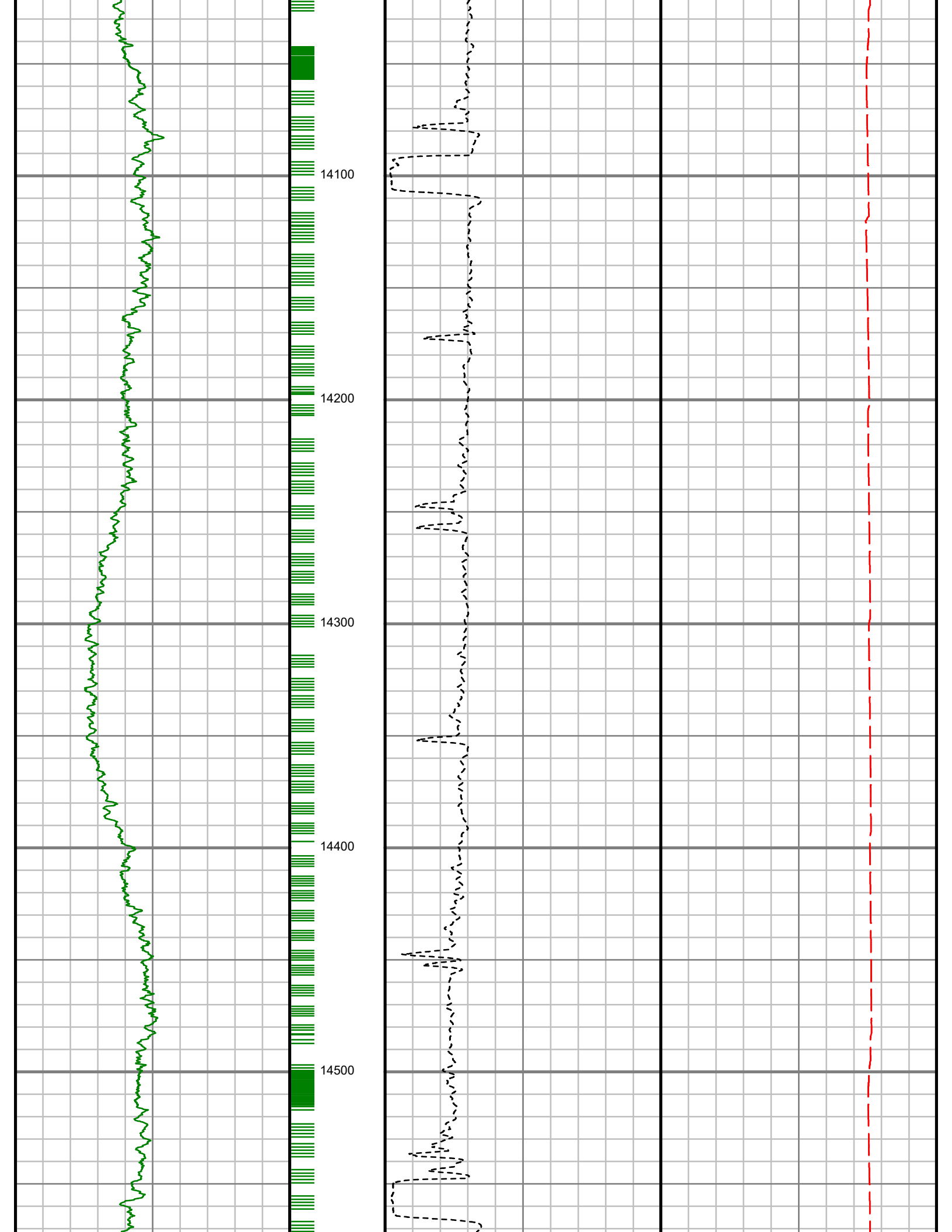


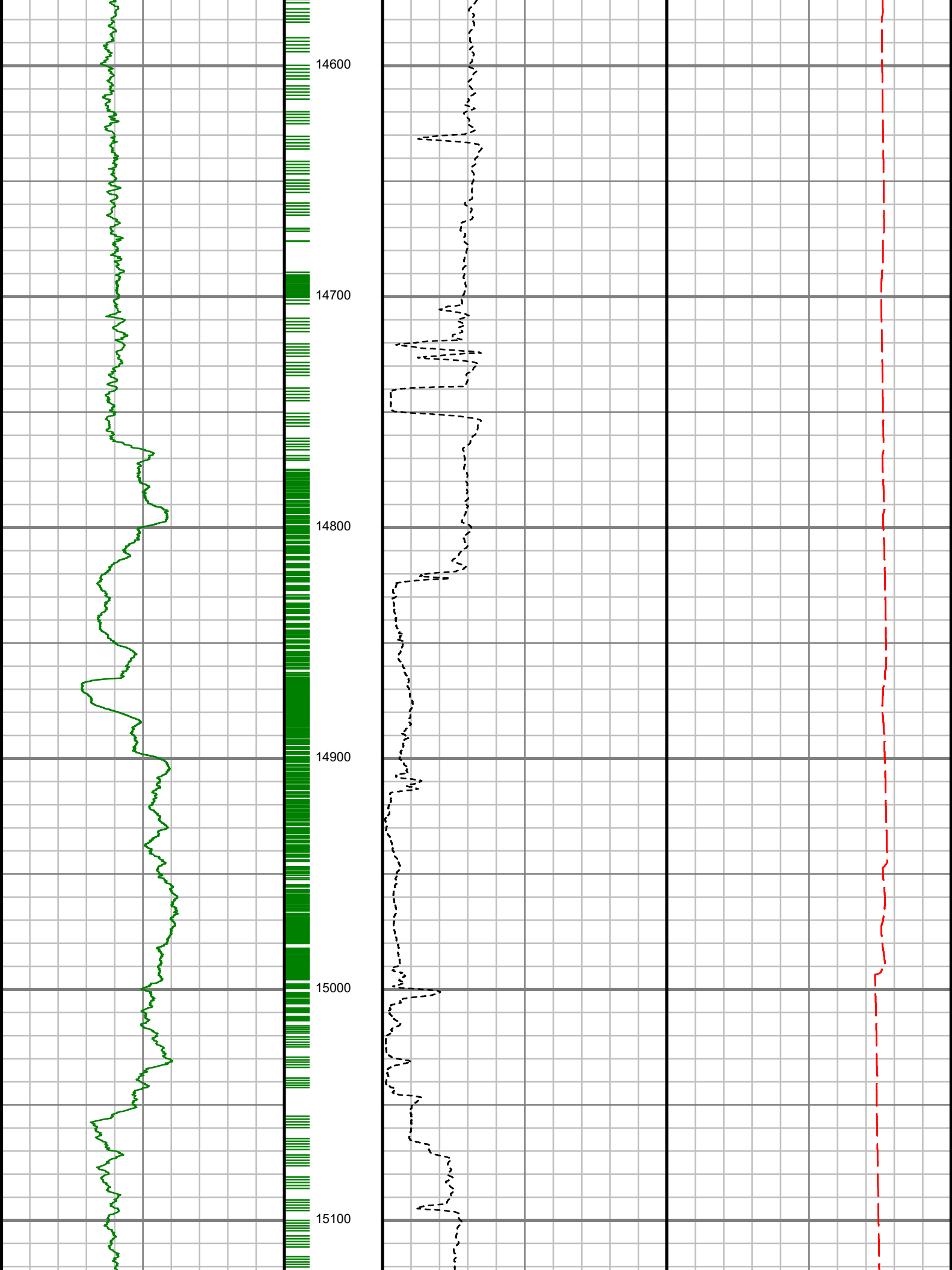


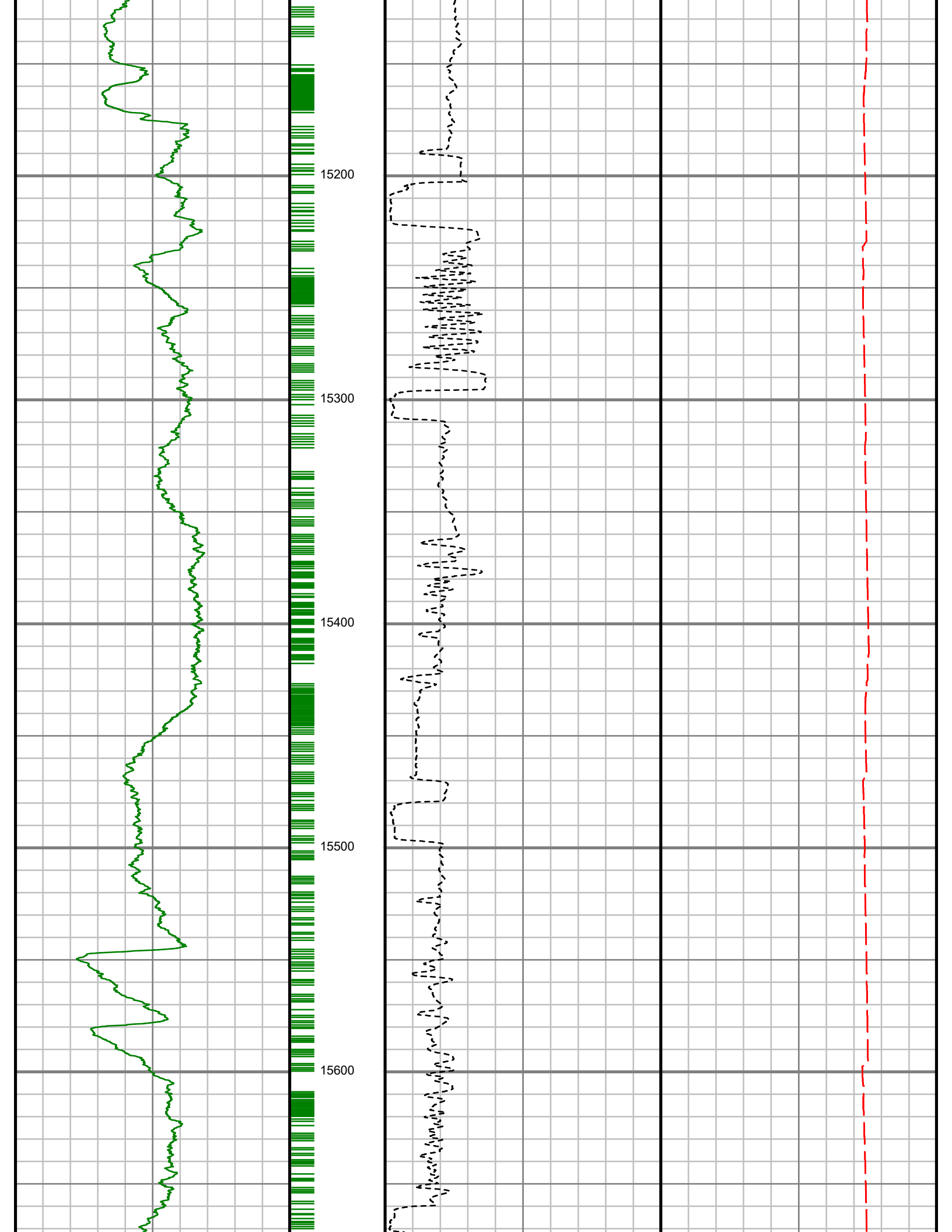


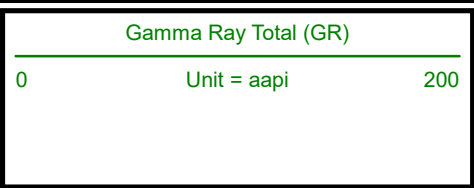
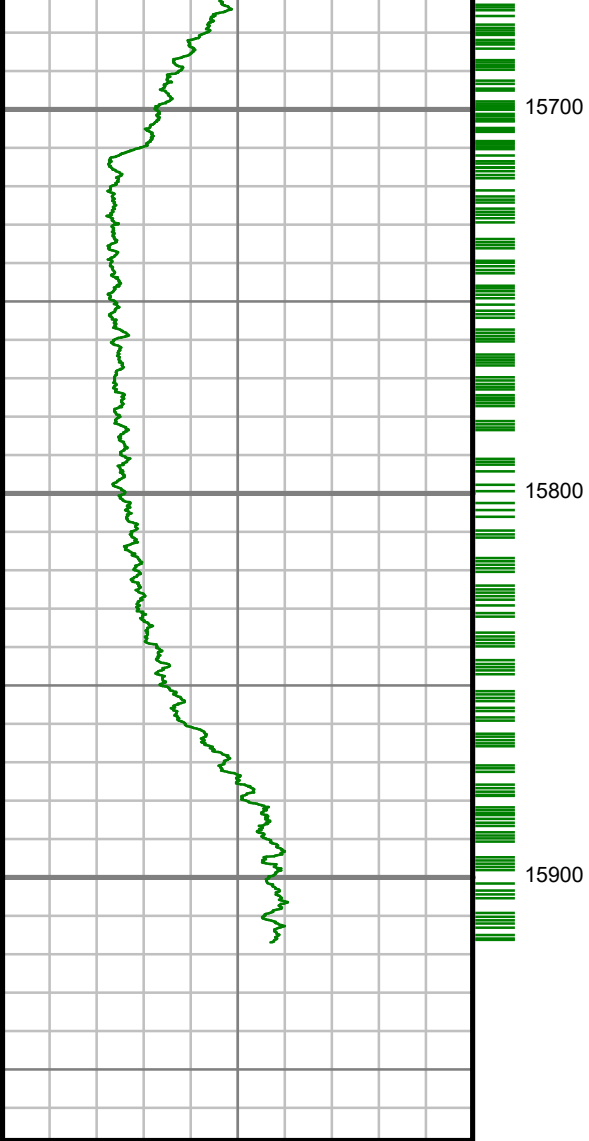




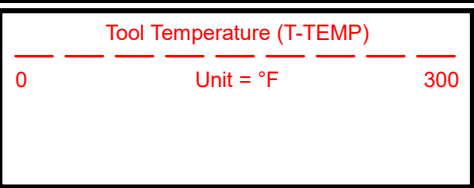
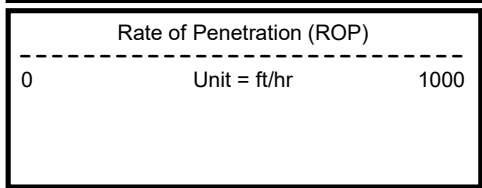
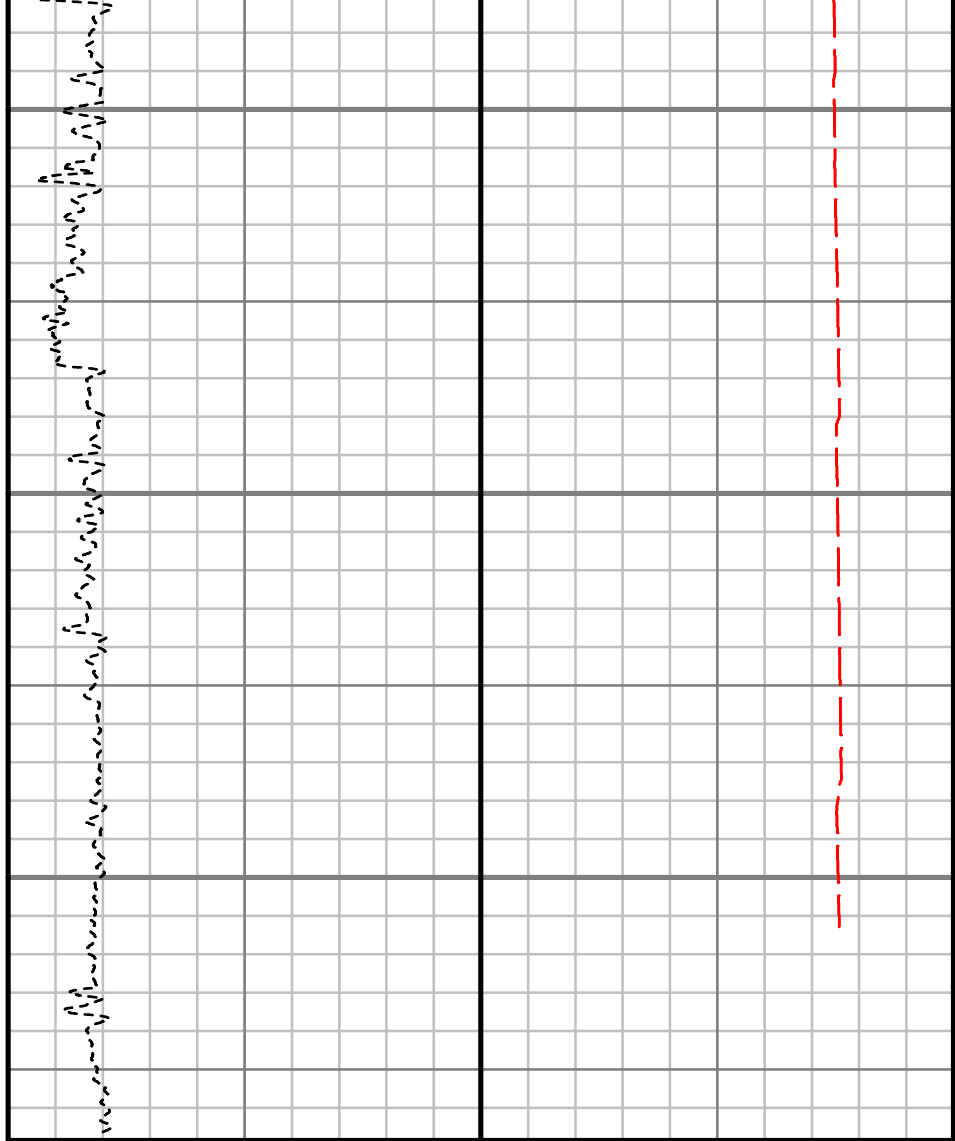








MEASURED DEPTH
1:600 (ft)



SURVEY REPORT

ANSCHUTZ EQUUS FARMS FED 05-61-34-5649B

COMPUTED SURVEYS

CUSTOMER HIGHPOINT RESOURCES
PROJECT ANSCHUTZ EQUUS FARMS FED
05-61-34-5649B
FIELD WATTENBERG

WELL INFORMATION

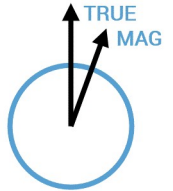
Lat/Long 40° 21' 17.03" N, 104° 11' 11.4" W
Northing 1,374,780.09 ft
Easting 3,366,054.24 ft
UWI 05-123-48183

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 269.75°
Calculation Method Minimum Curvature



GEOMAGNETIC REFERENCE INFORMATION

Local Gravity: 999.110 mG [computed]

MD	MODEL	DATE	DECLINATION	MAG TO TRUE
960-15911 ft	HDGM2018	27 Mar 2019	8.1°	add 8.1°

WELL NOTES

OPERATORS

A. FARQUHAR, G. SAKOU, M. BAILY, M. POTTER, P. FLAVIUS

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
959.50	4.79	147.44	957.68	-27.90	-34.05	28.05	Invalid
1057.00	4.77	146.04	1054.84	-32.33	-40.84	32.51	0.12
1147.00	7.10	149.36	1144.35	-37.22	-48.73	37.43	2.61
1239.00	8.77	152.45	1235.47	-43.31	-59.84	43.57	1.87
1329.00	9.06	152.28	1324.38	-49.73	-72.19	50.04	0.33
1420.00	10.70	144.96	1414.03	-57.85	-85.45	58.22	2.26
1510.00	11.75	139.05	1502.31	-68.60	-99.22	69.03	1.73
1601.00	13.15	139.20	1591.17	-81.37	-114.05	81.87	1.54
1692.00	14.84	140.68	1679.47	-95.45	-130.91	96.02	1.89
1782.00	16.09	142.90	1766.21	-110.20	-149.77	110.85	1.54
1873.00	17.98	149.13	1853.22	-124.92	-171.89	125.66	2.88
1964.00	20.47	151.28	1939.13	-139.66	-197.91	140.52	2.85
2055.00	19.21	150.79	2024.73	-154.50	-224.94	155.47	1.40
2146.00	21.16	148.34	2110.14	-170.32	-251.99	171.40	2.33
2237.00	20.31	147.99	2195.24	-187.19	-279.36	188.40	0.95
2328.00	21.74	147.09	2280.18	-204.60	-306.90	205.92	1.61
2422.00	21.31	144.65	2367.63	-223.82	-335.45	225.27	1.06
2516.00	21.47	146.79	2455.16	-243.00	-363.77	244.57	0.85
2610.00	21.19	146.33	2542.72	-261.71	-392.30	263.41	0.34
2704.00	20.28	152.36	2630.64	-278.57	-420.88	280.38	2.47

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
2799.00	18.58	150.89	2720.22	-293.45	-448.69	295.39	1.87
2893.00	16.91	147.38	2809.75	-308.00	-473.29	310.04	2.11
2987.00	15.24	147.67	2900.07	-321.88	-495.25	324.02	1.77
3081.00	13.43	144.41	2991.14	-334.76	-514.57	336.98	2.11
3176.00	13.39	138.37	3083.56	-348.41	-531.76	350.71	1.47
3270.00	12.94	145.58	3175.09	-361.52	-548.58	363.89	1.81
3363.00	12.05	146.13	3265.89	-372.75	-565.23	375.19	0.97
3458.00	10.67	152.39	3359.03	-382.28	-581.26	384.79	1.95
3552.00	9.50	156.21	3451.58	-389.38	-596.07	391.95	1.43
3646.00	7.27	158.67	3544.57	-394.61	-608.71	397.24	2.41
3739.00	4.73	149.59	3637.05	-398.66	-617.50	401.32	2.91
3833.00	2.58	138.37	3730.86	-402.00	-622.42	404.69	2.40
3928.00	1.43	40.86	3825.82	-404.19	-623.12	406.88	3.27
4021.00	1.59	29.57	3918.79	-405.59	-621.12	408.27	0.36
4115.00	2.16	18.10	4012.74	-406.79	-618.31	409.46	0.72
4209.00	0.86	0.75	4106.70	-407.36	-615.92	410.02	1.45
4303.00	1.31	354.61	4200.68	-407.28	-614.14	409.93	0.50
4397.00	1.83	22.31	4294.65	-407.76	-611.68	410.40	0.96
4491.00	1.02	76.19	4388.62	-409.14	-610.10	411.78	1.57
4586.00	0.61	93.89	4483.61	-410.47	-609.93	413.10	0.50

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
4680.00	0.52	113.43	4577.61	-411.36	-610.13	414.00	0.22
4774.00	0.68	73.85	4671.60	-412.29	-610.15	414.92	0.46
4868.00	1.07	87.70	4765.59	-413.70	-609.96	416.34	0.48
4962.00	0.93	74.18	4859.58	-415.32	-609.72	417.95	0.29
5056.00	1.26	31.27	4953.56	-416.60	-608.62	419.23	0.92
5150.00	1.10	26.93	5047.54	-417.56	-606.93	420.18	0.19
5245.00	1.03	39.09	5142.53	-418.52	-605.45	421.13	0.25
5340.00	3.02	284.12	5237.48	-416.64	-604.17	419.25	3.77
5435.00	12.11	275.13	5331.56	-404.27	-602.66	406.87	9.63
5529.00	21.82	282.63	5421.37	-377.35	-597.95	379.93	10.56
5623.00	31.36	278.08	5505.34	-336.02	-590.67	338.57	10.37
5717.00	36.39	275.18	5583.37	-284.02	-584.71	286.54	5.62
5812.00	43.04	269.78	5656.42	-223.46	-582.29	225.97	7.89
5905.00	56.23	269.34	5716.52	-152.76	-582.86	155.27	14.19
5999.00	63.49	267.25	5763.69	-71.55	-585.33	74.07	7.96
6093.00	70.08	266.92	5800.71	14.70	-589.72	-12.16	7.02
6187.00	78.22	265.81	5826.37	104.89	-595.47	-102.32	8.73
6245.00	80.50	265.25	5837.08	161.73	-599.92	-159.15	4.05
6309.00	85.86	267.10	5844.67	225.13	-604.16	-222.53	8.86
6402.00	86.54	271.01	5850.83	317.90	-605.69	-315.29	4.26

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS %/100ft
6496.00	87.55	269.79	5855.68	411.77	-605.03	-409.16	1.68
6589.00	90.50	270.58	5857.26	504.74	-604.73	-502.14	3.29
6683.00	90.07	271.65	5856.80	598.71	-602.91	-596.12	1.23
6777.00	88.12	272.10	5858.28	692.63	-599.84	-690.05	2.13
6870.00	88.59	270.54	5860.96	785.55	-597.69	-782.98	1.74
6964.00	89.70	268.32	5862.36	879.53	-598.62	-876.96	2.64
7016.00	88.76	268.35	5863.06	931.51	-600.13	-928.93	1.81
7058.00	88.89	268.52	5863.92	973.49	-601.28	-970.91	0.53
7093.00	90.87	268.47	5864.00	1008.48	-602.20	-1005.89	5.66
7151.00	91.51	268.76	5862.79	1066.46	-603.60	-1063.86	1.21
7245.00	91.81	268.28	5860.06	1160.40	-606.02	-1157.79	0.60
7338.00	91.61	268.72	5857.28	1253.33	-608.46	-1250.72	0.52
7431.00	91.27	269.00	5854.94	1346.29	-610.30	-1343.67	0.47
7526.00	91.34	269.66	5852.77	1441.26	-611.42	-1438.64	0.70
7619.00	89.33	268.72	5852.22	1534.25	-612.74	-1531.62	2.39
7713.00	88.29	268.88	5854.18	1628.22	-614.70	-1625.58	1.12
7806.00	89.50	268.54	5855.98	1721.18	-616.80	-1718.54	1.35
7901.00	88.89	268.25	5857.32	1816.14	-619.46	-1813.49	0.70
7995.00	89.29	268.71	5858.81	1910.11	-621.96	-1907.45	0.64
8089.00	88.79	269.36	5860.38	2004.09	-623.54	-2001.42	0.88

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS %/100ft
8183.00	89.50	269.26	5861.78	2098.07	-624.67	-2095.40	0.76
8276.00	89.60	269.37	5862.52	2191.07	-625.77	-2188.39	0.16
8370.00	89.09	269.02	5863.59	2285.06	-627.09	-2282.38	0.65
8464.00	88.59	268.90	5865.49	2379.03	-628.80	-2376.34	0.55
8558.00	87.82	268.51	5868.44	2472.97	-630.92	-2470.27	0.92
8652.00	88.19	269.36	5871.71	2566.90	-632.67	-2564.19	0.99
8747.00	89.26	269.99	5873.83	2661.87	-633.20	-2659.17	1.31
8840.00	87.72	267.93	5876.28	2754.82	-634.89	-2752.11	2.77
8935.00	89.66	267.99	5878.45	2849.75	-638.27	-2847.02	2.05
9029.00	91.48	268.29	5877.51	2943.70	-641.32	-2940.96	1.96
9123.00	90.03	266.40	5876.27	3037.60	-645.67	-3034.85	2.53
9217.00	90.47	268.04	5875.86	3131.51	-650.23	-3128.73	1.80
9311.00	91.85	268.04	5873.95	3225.44	-653.45	-3222.66	1.47
9405.00	91.85	270.26	5870.91	3319.38	-654.84	-3316.59	2.37
9499.00	90.54	267.42	5868.96	3413.34	-656.75	-3410.54	3.33
9592.00	90.94	270.48	5867.76	3506.31	-658.45	-3503.51	3.32
9686.00	87.65	273.52	5868.91	3600.21	-655.17	-3597.42	4.77
9780.00	86.62	273.78	5873.61	3693.87	-649.19	-3691.11	1.13
9873.00	88.16	272.45	5877.85	3786.61	-644.15	-3783.87	2.19
9965.00	90.50	271.92	5878.92	3878.52	-640.65	-3875.79	2.61

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS %/100ft
10058.00	89.33	270.32	5879.06	3971.48	-638.83	-3968.77	2.14
10151.00	90.87	272.81	5878.90	4064.43	-636.29	-4061.72	3.15
10244.00	90.20	273.46	5878.02	4157.26	-631.20	-4154.58	1.01
10337.00	92.35	272.49	5875.96	4250.08	-626.37	-4247.42	2.53
10431.00	90.64	270.47	5873.51	4344.00	-623.94	-4341.35	2.82
10484.00	90.74	270.27	5872.87	4396.99	-623.59	-4394.35	0.42
10525.00	92.45	271.88	5871.73	4437.96	-622.82	-4435.32	5.72
10619.00	89.76	270.69	5869.92	4531.90	-620.72	-4529.27	3.12
10710.00	88.59	269.69	5871.22	4622.89	-620.42	-4620.26	1.69
10801.00	86.64	269.39	5875.01	4713.80	-621.15	-4711.17	2.17
10892.00	87.68	268.70	5879.52	4804.68	-622.66	-4802.04	1.37
10982.00	87.61	268.90	5883.21	4894.60	-624.54	-4891.95	0.24
11073.00	89.50	265.95	5885.51	4985.48	-628.62	-4982.81	3.85
11165.00	88.86	266.61	5886.83	5077.30	-634.59	-5074.61	1.00
11255.00	87.05	268.59	5890.04	5167.17	-638.36	-5164.46	2.98
11346.00	85.01	269.07	5896.34	5257.93	-640.22	-5255.22	2.30
11403.00	86.04	270.45	5900.79	5314.76	-640.45	-5312.05	3.03
11436.00	87.99	267.52	5902.51	5347.70	-641.04	-5344.99	10.67
11528.00	91.14	266.87	5903.20	5439.60	-645.54	-5436.87	3.50
11618.00	90.77	268.14	5901.70	5529.51	-649.46	-5526.77	1.46

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS %/100ft
11709.00	90.94	266.50	5900.35	5620.42	-653.72	-5617.65	1.81
11800.00	90.94	267.56	5898.86	5711.30	-658.43	-5708.52	1.17
11891.00	89.23	269.23	5898.72	5802.27	-660.99	-5799.47	2.63
11981.00	90.84	272.64	5898.67	5892.23	-659.52	-5889.45	4.19
12072.00	92.18	275.98	5896.27	5982.90	-652.69	-5980.14	3.96
12163.00	90.57	272.77	5894.09	6073.56	-645.76	-6070.84	3.94
12253.00	90.30	273.28	5893.40	6163.41	-641.01	-6160.71	0.64
12344.00	89.50	270.03	5893.56	6254.35	-638.37	-6251.66	3.68
12434.00	88.96	269.62	5894.77	6344.34	-638.65	-6341.65	0.76
12526.00	89.90	271.73	5895.69	6436.32	-637.57	-6433.63	2.51
12617.00	90.27	272.35	5895.56	6527.25	-634.33	-6524.57	0.80
12708.00	90.64	273.05	5894.84	6618.12	-630.04	-6615.47	0.87
12799.00	89.87	270.31	5894.44	6709.06	-627.37	-6706.42	3.13
12889.00	88.46	269.37	5895.76	6799.05	-627.62	-6796.41	1.88
12983.00	88.69	269.60	5898.09	6893.02	-628.47	-6890.37	0.34
13077.00	88.99	269.46	5899.99	6987.00	-629.24	-6984.35	0.35
13171.00	89.20	269.27	5901.47	7080.98	-630.28	-7078.33	0.29
13265.00	89.93	270.30	5902.19	7174.98	-630.63	-7172.33	1.35
13359.00	90.37	268.86	5901.94	7268.98	-631.31	-7266.32	1.60
13453.00	89.10	268.88	5902.38	7362.96	-633.17	-7360.30	1.35

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
13547.00	90.10	268.89	5903.04	7456.95	-635.00	-7454.28	1.07
13641.00	89.06	269.56	5903.73	7550.94	-636.26	-7548.27	1.31
13735.00	90.10	268.61	5904.41	7644.93	-637.76	-7642.25	1.50
13829.00	88.66	269.76	5905.43	7738.91	-639.09	-7736.23	1.96
13922.00	88.93	268.61	5907.39	7831.89	-640.41	-7829.20	1.27
14015.00	90.23	270.11	5908.07	7924.88	-641.44	-7922.19	2.14
14108.00	88.42	269.24	5909.16	8017.87	-641.97	-8015.17	2.16
14201.00	89.26	268.41	5911.03	8110.83	-643.87	-8108.13	1.27
14294.00	89.16	267.84	5912.31	8203.79	-646.90	-8201.07	0.63
14387.00	88.63	268.27	5914.11	8296.73	-650.06	-8294.00	0.74
14480.00	88.83	267.54	5916.18	8389.66	-653.46	-8386.92	0.81
14572.00	89.46	271.11	5917.55	8481.63	-654.54	-8478.89	3.94
14665.00	90.20	270.29	5917.82	8574.61	-653.40	-8571.88	1.19
14757.00	87.65	271.19	5919.54	8666.58	-652.21	-8663.84	2.94
14850.00	87.59	270.54	5923.41	8759.48	-650.81	-8756.75	0.71
14943.00	89.43	269.50	5925.83	8852.44	-650.78	-8849.72	2.27
15035.00	89.30	270.34	5926.85	8944.43	-650.90	-8941.71	0.92
15129.00	88.66	270.57	5928.52	9038.41	-650.16	-9035.69	0.72
15221.00	89.29	268.91	5930.17	9130.39	-650.58	-9127.67	1.93
15314.00	89.50	268.52	5931.15	9223.37	-652.67	-9220.64	0.47

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
15407.00	88.83	267.22	5932.51	9316.31	-656.12	-9313.57	1.57
15500.00	90.20	267.48	5933.30	9409.22	-660.42	-9406.46	1.51
15592.00	90.20	267.13	5932.98	9501.14	-664.74	-9498.36	0.38
15685.00	90.90	268.33	5932.08	9594.07	-668.43	-9591.28	1.50
15779.00	91.11	269.23	5930.43	9688.04	-670.43	-9685.24	0.98
15873.00	91.51	270.03	5928.29	9782.02	-671.04	-9779.21	0.95
15911.00	91.17	270.05	5927.40	9820.01	-671.01	-9817.20	0.89

2" = 100' MD