



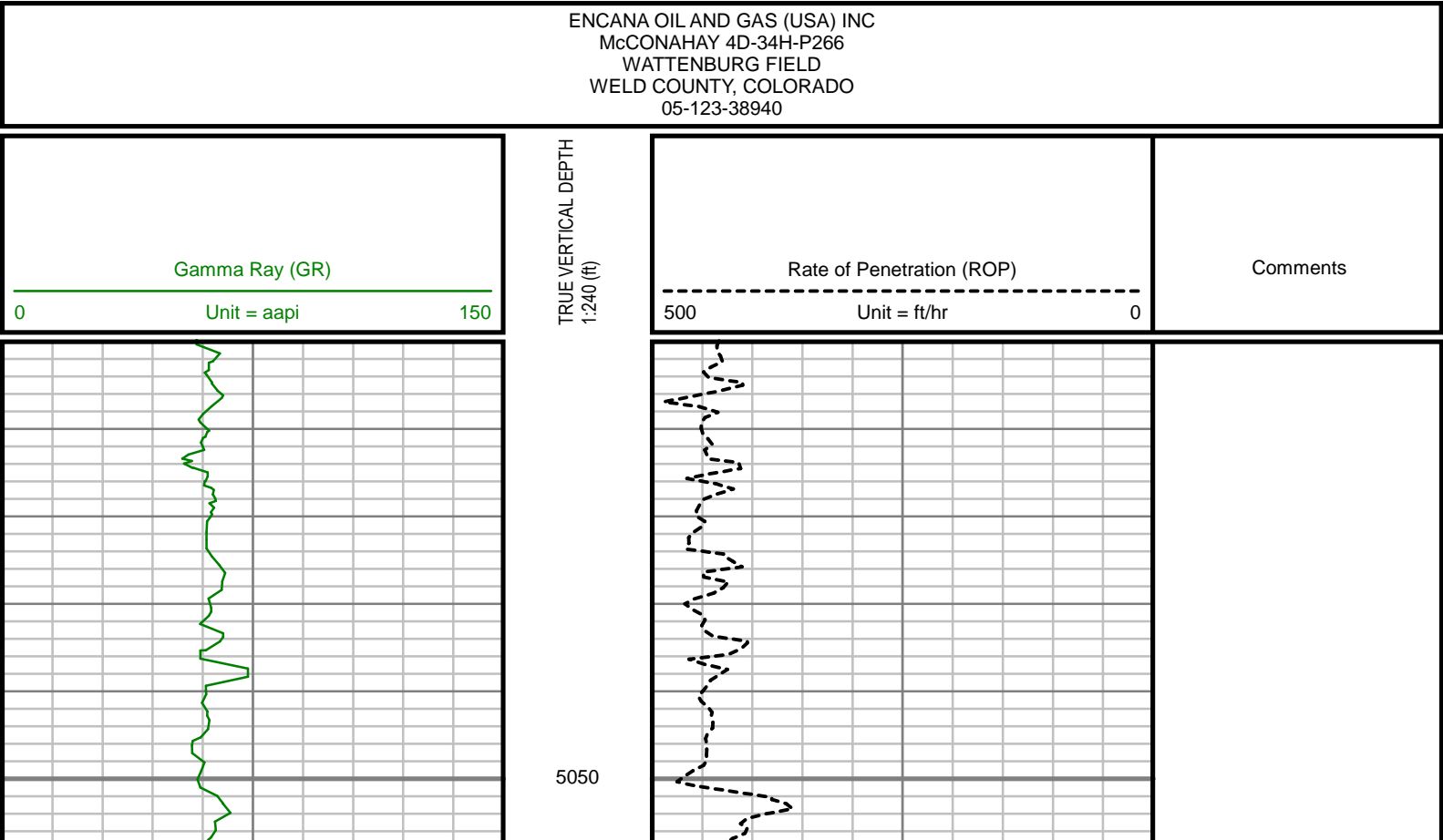
GAMMA RAY

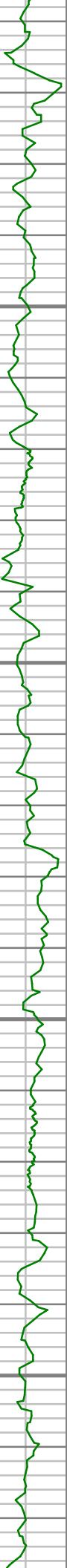
5" = 100' FEET TVD

COMPANY : ENCANA OIL AND GAS (USA) INC									
WELL : MCCONAHAY 4D-34H-P266									
FIELD : WATTENBERG									
COUNTY : WELD									
STATE : COLORADO									
COUNTRY : U.S.A.									
UWI : 05-123-38940									
OTHER SERVICES									
WELL LOCATION									
LAT:40°5'21.228"N LONG:104°45'22.248"W									
N:1276223.96 ft E:3208108.75 ft									
SEC:34 TWP:2N RANGE:66W									
DIRECTIONAL									
DEPTH REF. : RKB									
REF. HEIGHT : 13.000 ft									
RKB to Ground Level									
GROUND LEVEL : 5077.000 ft									
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	96	1135	0 - 13	0	1135				
8.75	1135	7920	13 - 85	1135	7920				
6.125	7920	11946	85 - 91	7920	11946				
CASING RECORD									
CASING SIZE in	FROM ft	TO ft							
9.625	0	1122							
7	0	7907							
DRILLING CO. : ENSIGN									
RTG: 124									
LMD UNIT NO. : C - 70 DISTRICT: CASPER									
SPUD DATE: 02/23/2014 DEPTH: 5000 ft									
LMD START DATE: 02/26/2014 DEPTH: 11946 ft									
LMD END DATE: 03/05/2014 TOTAL DEPTH: 11946 ft									

Remarks
ENCANA OIL AND GAS (USA) INC PRODUCTION AFE# 13178861
SCIENTIFIC DRILLING INTERNATIONAL JOB# 119586
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
RUN #1: MWD / DIRECTIONAL RUN
SENSORS S/N: CONT = 814 / MWD EYE = 0380
BIT TO SENSOR OFFSET: SURVEY = 57.88 FT.
RUN #2: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 128-278 / CONT = 831 / MWD EYE = 0582 / GAMMA RAY = 1136
BIT TO SENSOR OFFSETS: SURVEY = 62.94 FT. / GAMMA RAY = 49.69 FT.
RUN #3: MWD / GAMMA RAY LOGGING RUN
SENSORS S/N: PULSER = 78-196 / CONT = 786 / MWD EYE = 0380 / GAMMA RAY = 1021
BIT TO SENSOR OFFSETS: SURVEY = 66.82 FT. / GAMMA RAY = 53.57 FT.
MNEMONICS LIST:
GR = GAMMA RAY
ROP = RATE OF PENETRATION

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.



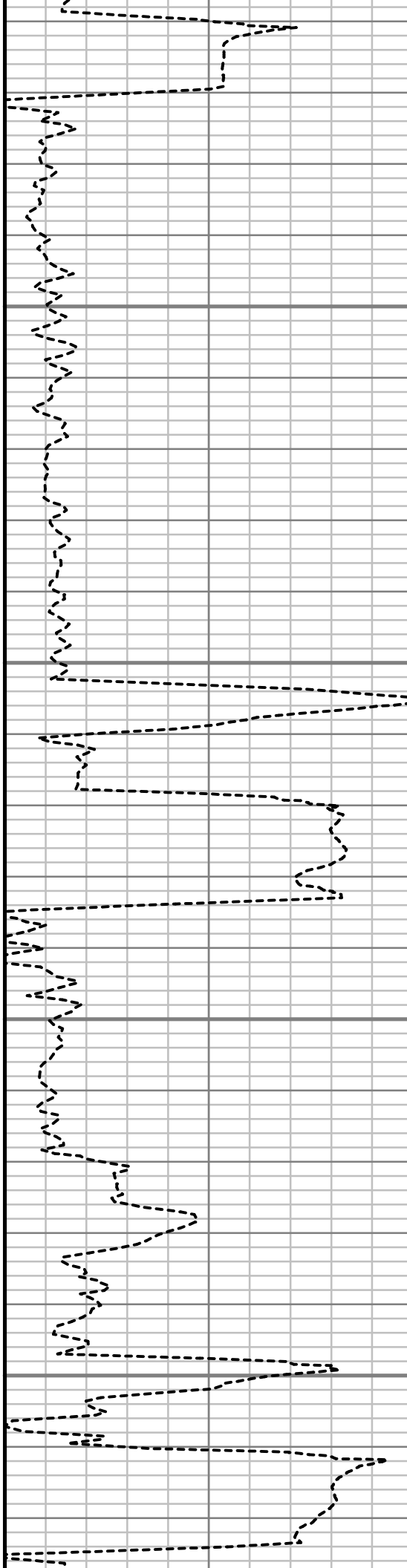


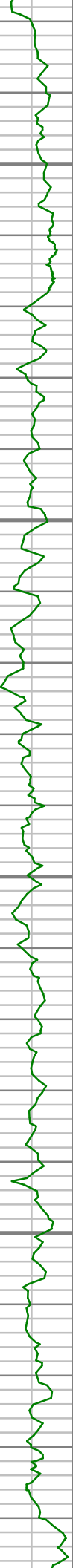
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5150

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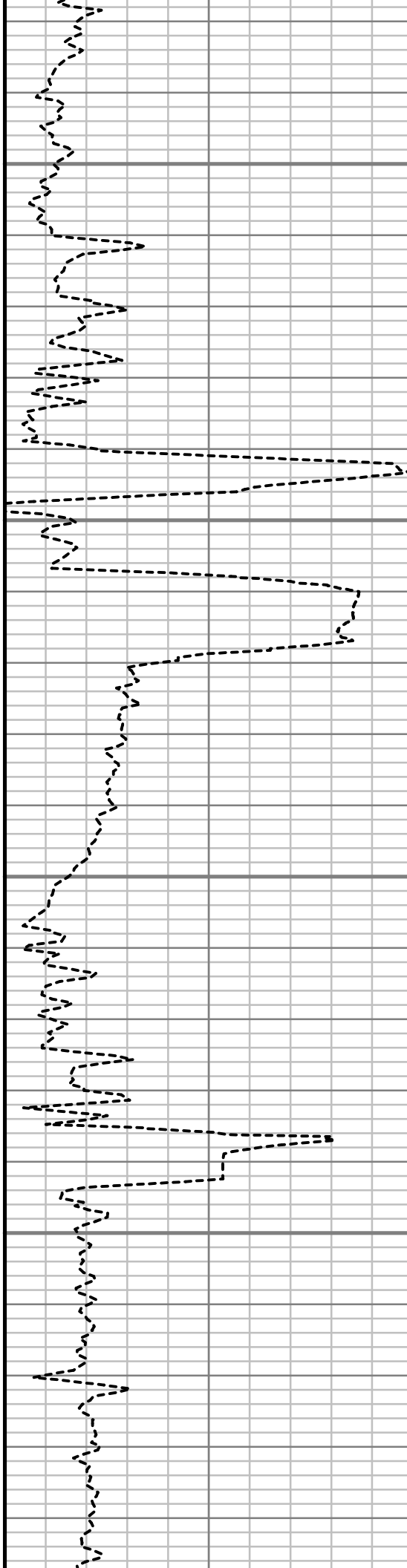


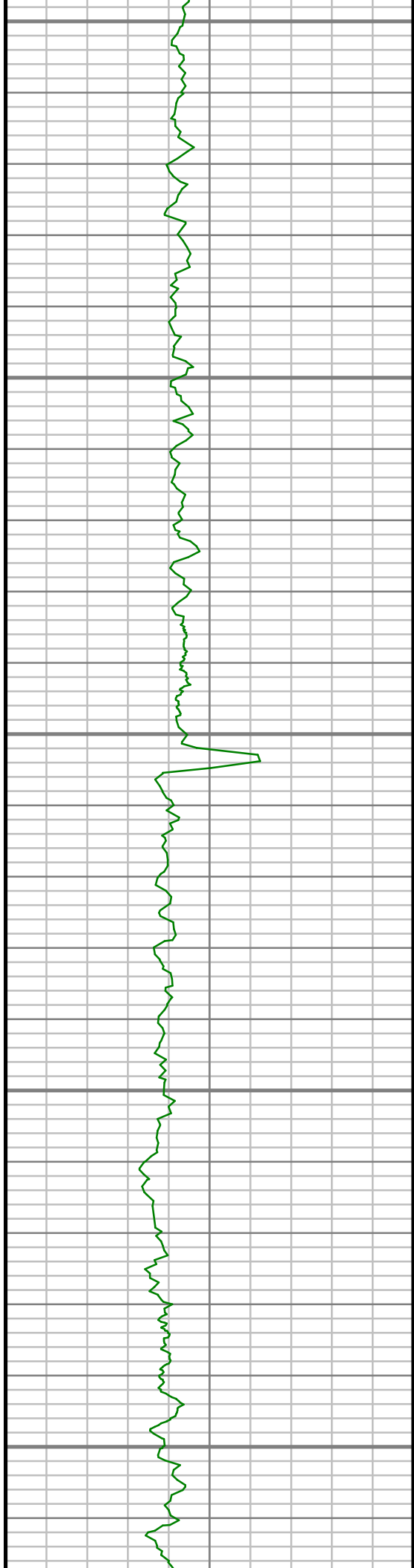
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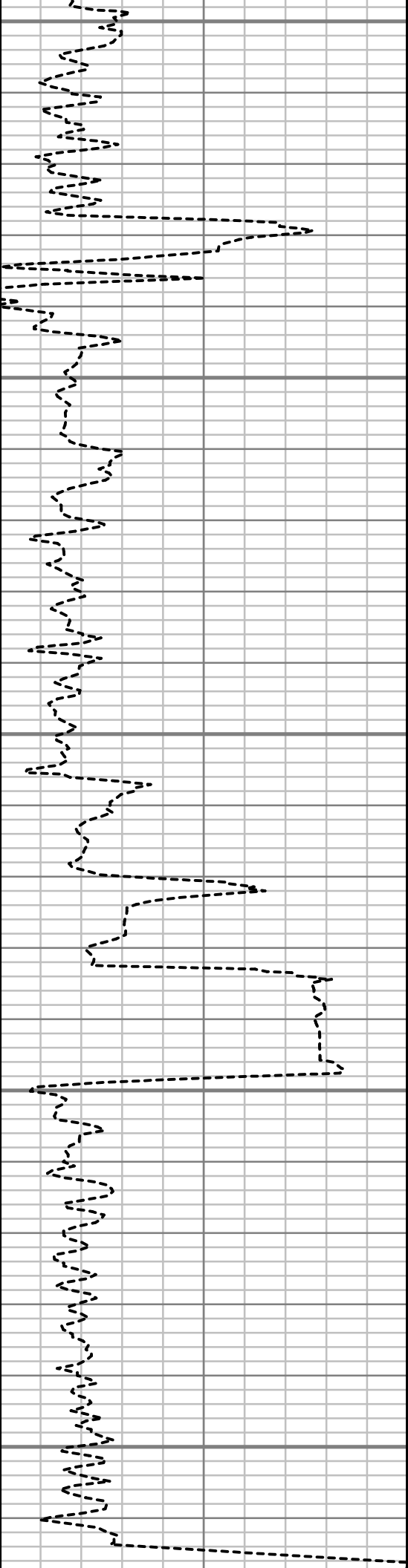
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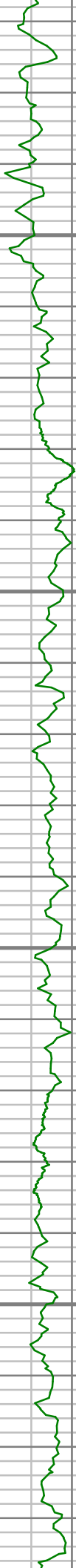
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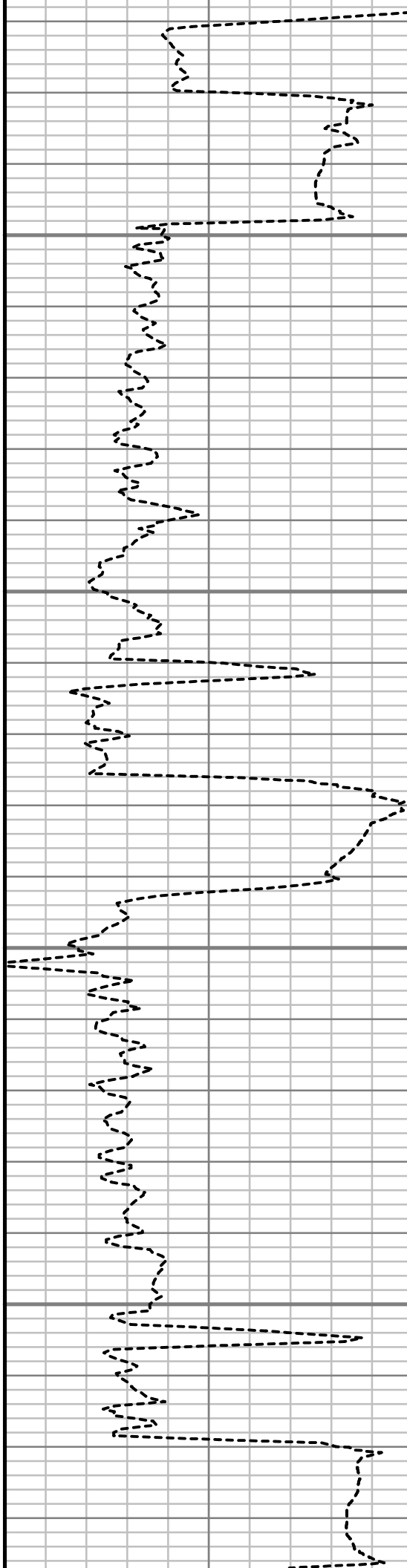


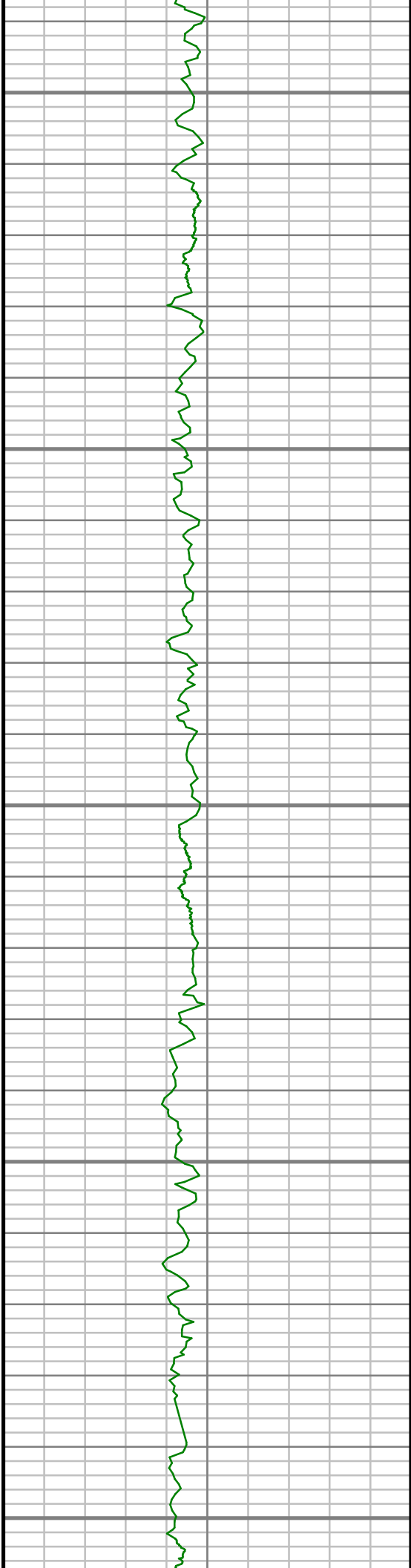
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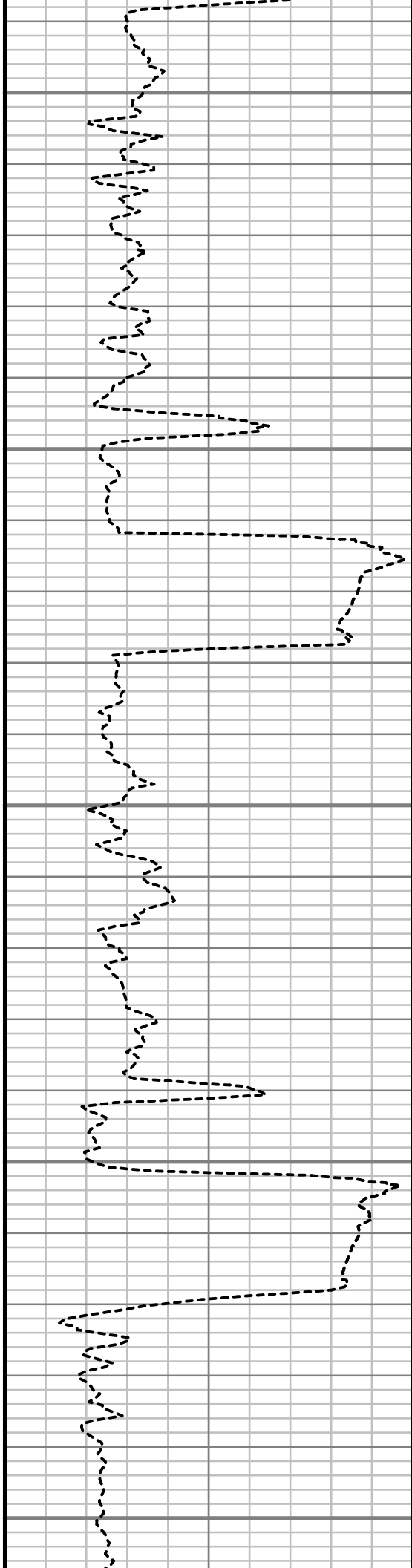
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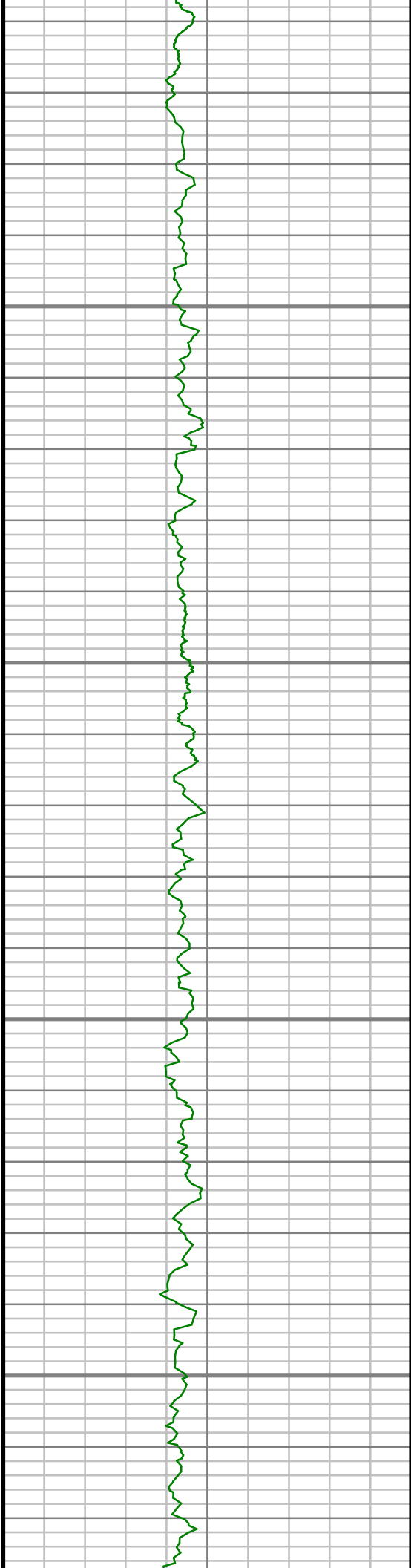
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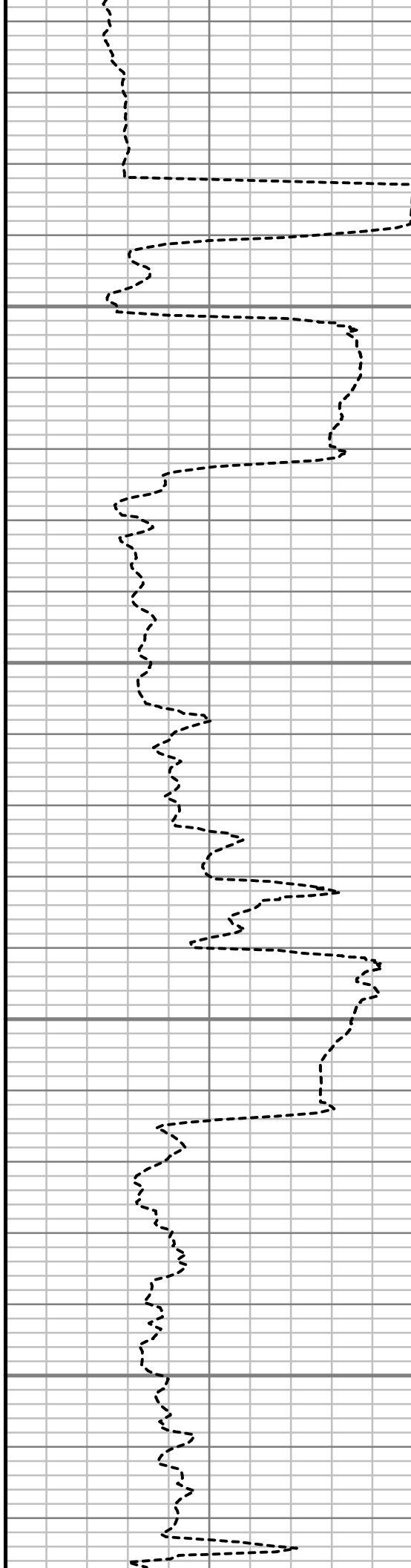


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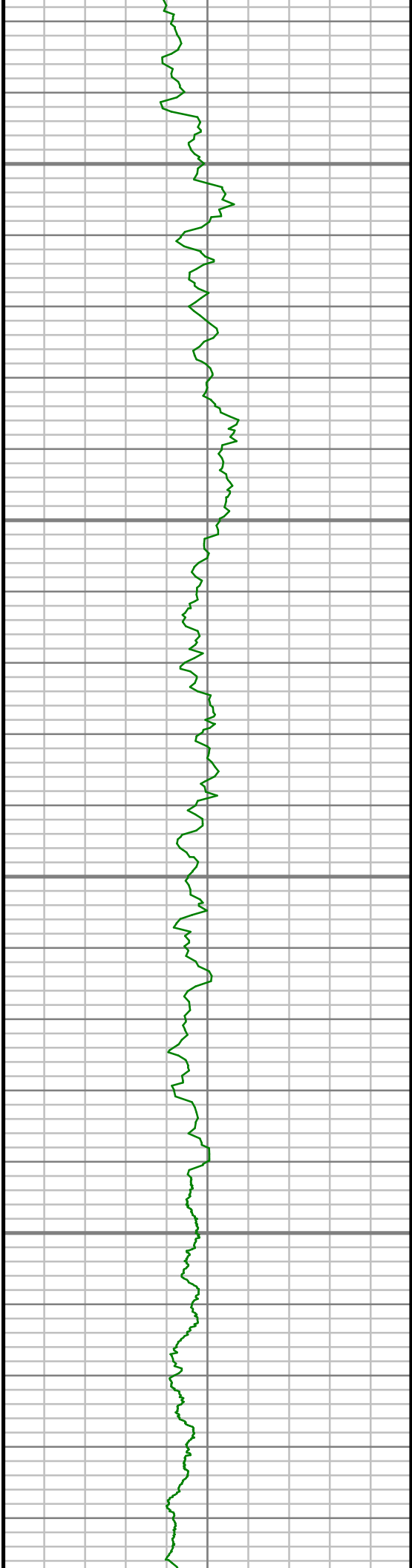
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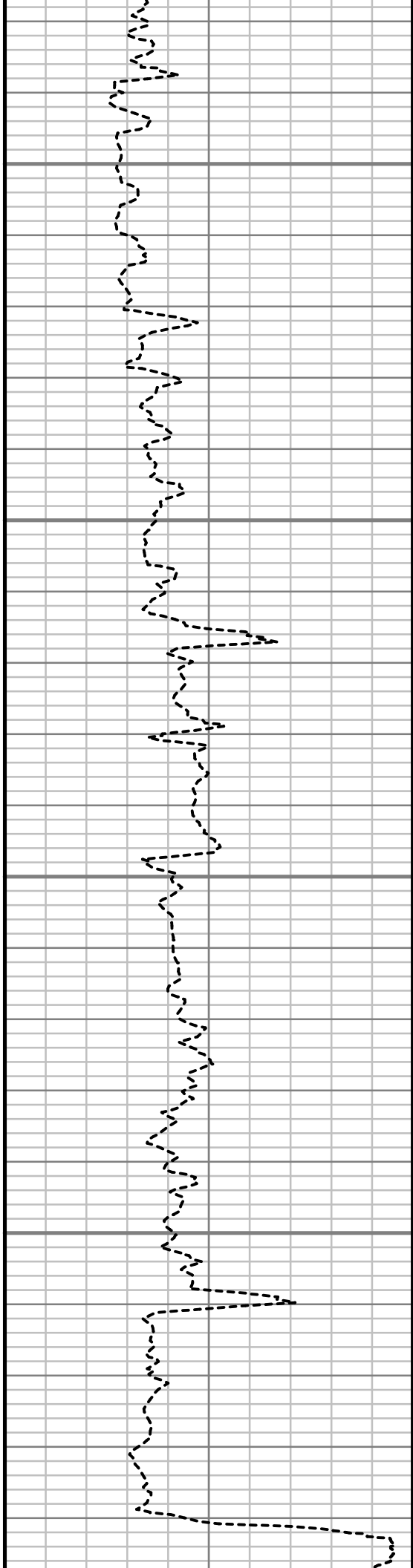


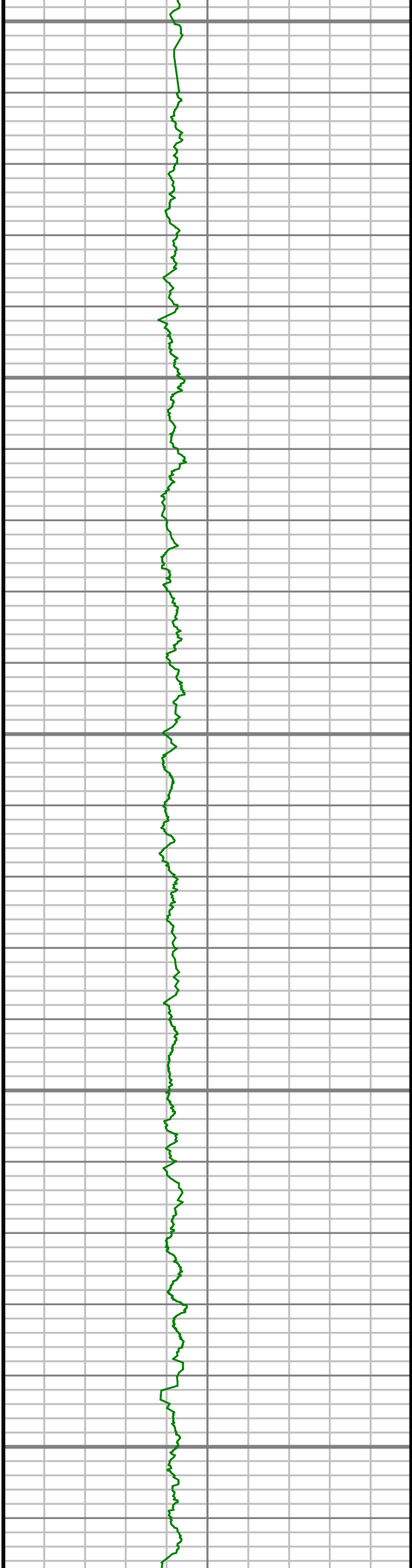
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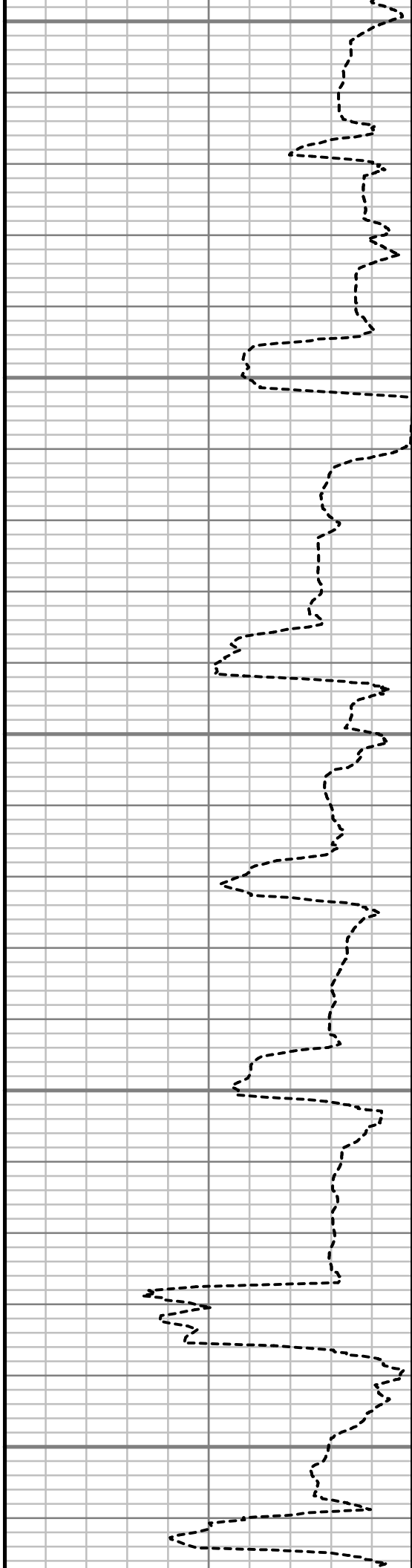
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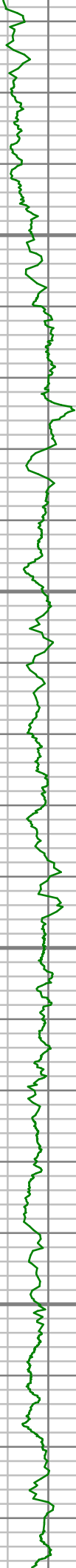
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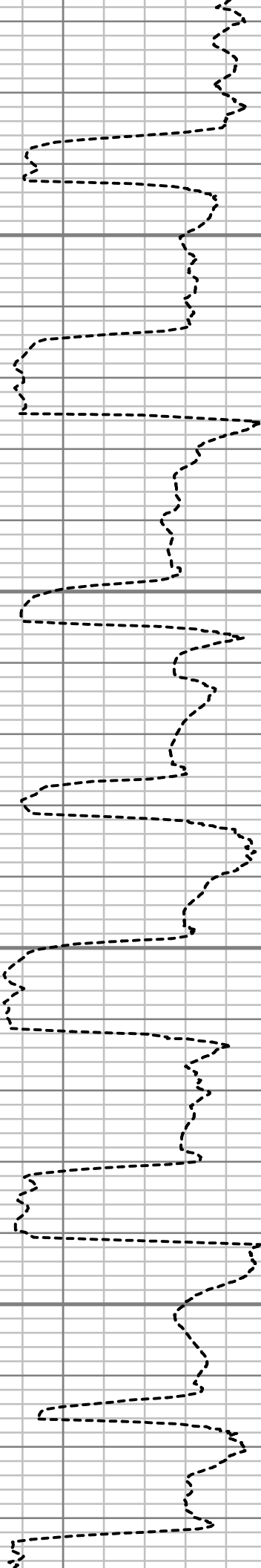


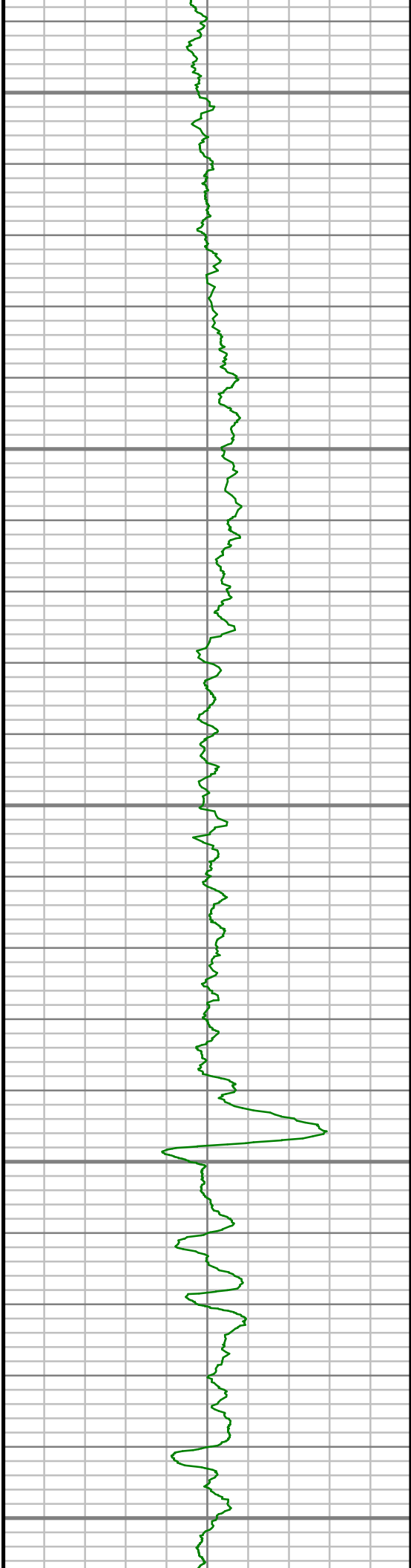
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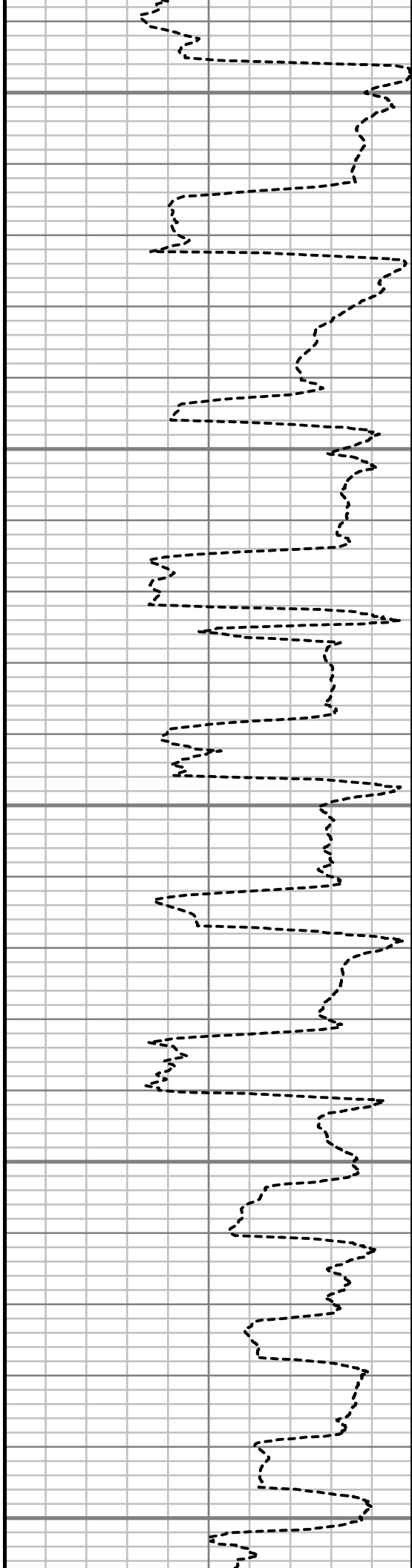
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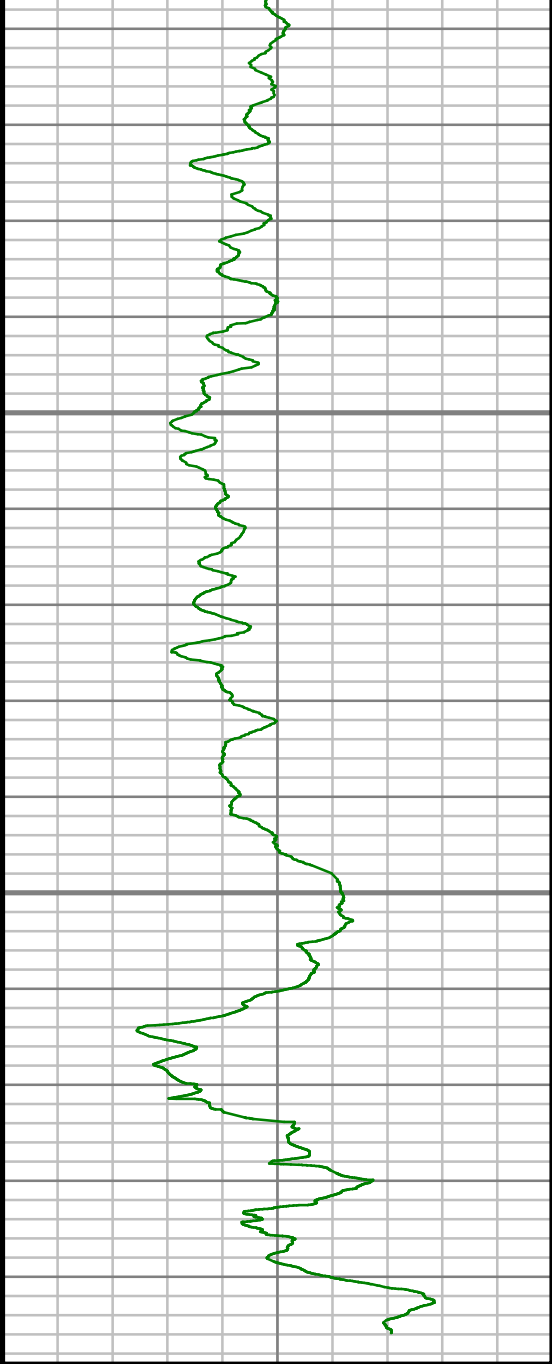
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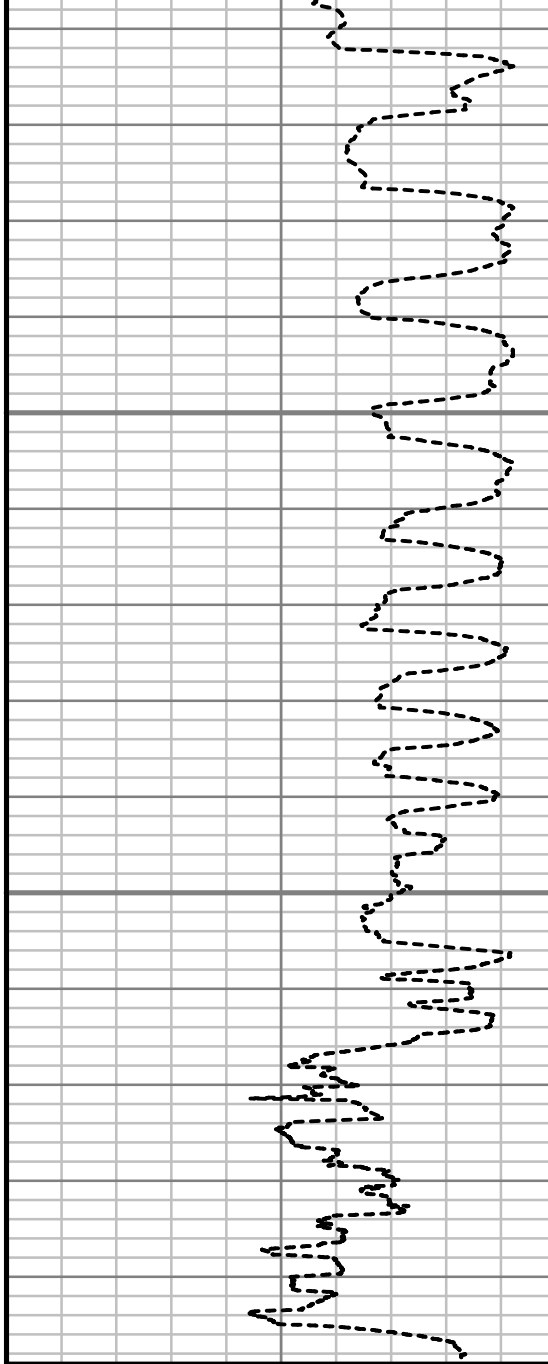
Gamma Ray (GR)

0 Unit = aapi 150

7300

7350

TRUE VERTICAL DEPTH  
1:240 (ft)



Rate of Penetration (ROP)

500 Unit = ft/hr 0

Comments

# Survey Report

<b>Customer Name:</b>	ENCANA OIL AND GAS (USA) INC						
<b>Site Name:</b>	McCONAHAY						
<b>Well Name:</b>	McCONAHAY 4D-34H-P266						
<b>Survey:</b>	McCONAHAY 4D-34H-P266						
<b>Survey Date:</b>	2/23/2014						
<b>Magnetic Declination:</b>	8.47 deg						
<b>North Reference:</b>	True North						
<b>Calculation Method:</b>	Minimum Curvature						
<b>Section (VS) Ref:</b>	0.00N (ft), 0.00E (ft), 270.00Azim (deg)						
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
268.00	2.30	5.88	267.93	-0.55	5.35	0.55	0.86
546.00	6.07	33.33	545.16	-9.20	23.18	9.20	1.50
639.00	7.36	31.39	637.52	-15.00	32.37	15.00	1.41
732.00	9.01	37.05	729.57	-22.49	43.26	22.49	1.97
918.00	11.60	36.17	912.56	-42.30	69.99	42.30	1.40
1011.00	12.53	33.43	1003.50	-53.38	85.95	53.38	1.17
1075.00	11.99	29.66	1066.04	-60.49	97.52	60.49	1.51
1186.00	10.73	28.00	1174.87	-71.05	116.67	71.05	1.17

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
1372.00	8.69	29.70	1358.19	-86.15	144.17	86.15	1.11
1558.00	10.30	34.50	1541.64	-102.53	170.08	102.53	0.96
1744.00	14.08	49.32	1723.46	-129.11	198.55	129.11	2.63
1930.00	14.44	45.84	1903.73	-162.91	229.45	162.91	0.50
2121.00	11.99	38.58	2089.67	-192.37	261.55	192.37	1.55
2311.00	9.42	34.44	2276.35	-213.48	289.81	213.48	1.41
2502.00	8.80	35.55	2464.94	-230.82	314.60	230.82	0.34
2693.00	8.67	37.93	2653.73	-248.16	337.84	248.16	0.20
2883.00	9.65	44.59	2841.31	-268.15	360.47	268.15	0.76
3074.00	9.60	38.96	3029.62	-289.41	384.26	289.41	0.49
3264.00	10.50	36.62	3216.70	-309.70	410.48	309.70	0.52
3455.00	9.14	30.72	3404.90	-327.83	437.49	327.83	0.88
3645.00	8.18	34.04	3592.74	-343.11	461.67	343.11	0.57
3836.00	10.43	33.12	3781.21	-360.17	487.42	360.17	1.18
4026.00	9.36	31.32	3968.38	-377.59	515.02	377.59	0.59
4217.00	10.88	40.13	4156.42	-397.28	542.06	397.28	1.13
4407.00	13.06	39.41	4342.28	-422.46	572.36	422.46	1.15
4598.00	9.28	33.93	4529.63	-444.77	601.83	444.77	2.05
4788.00	10.41	32.54	4716.83	-462.55	629.01	462.55	0.61
4979.00	12.10	34.70	4904.15	-483.23	660.01	483.23	0.92

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
5169.00	10.04	28.25	5090.61	-502.42	690.99	502.42	1.26
5360.00	11.06	32.95	5278.38	-520.26	721.03	520.26	0.70
5550.00	10.08	44.64	5465.18	-541.86	748.15	541.86	1.24
5741.00	8.92	37.21	5653.56	-562.56	771.84	562.56	0.88
5931.00	8.55	35.59	5841.36	-579.69	795.06	579.69	0.23
6122.00	9.24	31.06	6030.06	-595.86	819.74	595.86	0.51
6312.00	9.84	35.82	6217.44	-613.23	845.97	613.23	0.52
6503.00	9.83	37.83	6405.64	-632.77	872.07	632.77	0.18
6661.00	6.81	36.99	6561.96	-646.68	890.20	646.68	1.91
6693.00	6.26	31.53	6593.75	-648.73	893.21	648.73	2.58
6725.00	5.22	12.40	6625.59	-649.96	896.12	649.96	6.77
6757.00	6.17	344.14	6657.44	-649.80	899.19	649.80	9.14
6789.00	8.44	333.55	6689.18	-648.28	902.95	648.28	8.21
6820.00	10.03	321.57	6719.78	-645.59	907.10	645.59	8.03
6852.00	11.45	310.88	6751.22	-641.46	911.36	641.46	7.63
6884.00	12.72	300.74	6782.51	-636.03	915.24	636.03	7.71
6916.00	14.17	294.65	6813.64	-629.44	918.68	629.44	6.35
6947.00	15.60	288.71	6843.60	-622.04	921.60	622.04	6.74
6979.00	18.34	286.58	6874.20	-613.13	924.41	613.13	8.78

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
7011.00	21.31	287.49	6904.30	-602.76	927.60	602.76	9.33
7042.00	23.31	289.81	6932.98	-591.61	931.37	591.61	7.05
7074.00	25.32	289.49	6962.14	-579.20	935.80	579.20	6.28
7106.00	28.16	288.76	6990.71	-565.60	940.51	565.60	8.94
7138.00	30.72	286.30	7018.58	-550.60	945.24	550.60	8.83
7169.00	32.37	283.28	7045.00	-534.92	949.37	534.92	7.38
7201.00	35.01	281.25	7071.62	-517.58	953.13	517.58	8.96
7233.00	37.86	281.78	7097.36	-498.96	956.93	498.96	8.96
7265.00	40.07	282.11	7122.24	-479.27	961.09	479.27	6.92
7296.00	42.57	283.48	7145.53	-459.32	965.63	459.32	8.58
7328.00	45.75	283.68	7168.48	-437.65	970.86	437.65	9.96
7360.00	48.68	283.20	7190.21	-414.81	976.32	414.81	9.23
7392.00	52.30	282.96	7210.57	-390.77	981.91	390.77	11.32
7423.00	55.40	282.05	7228.85	-366.33	987.32	366.33	10.28
7455.00	58.09	280.79	7246.40	-340.10	992.62	340.10	9.04
7487.00	59.89	280.08	7262.88	-313.13	997.58	313.13	5.91
7518.00	61.97	278.94	7277.95	-286.41	1002.05	286.41	7.46
7550.00	65.24	277.48	7292.17	-258.04	1006.14	258.04	11.00
7582.00	68.60	276.56	7304.71	-228.83	1009.73	228.83	10.81
7614.00	71.61	275.99	7315.60	-198.92	1013.02	198.92	9.58

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
7645.00	74.01	275.69	7324.76	-169.46	1016.03	169.46	7.79
7677.00	76.28	275.75	7332.96	-138.69	1019.11	138.69	7.09
7709.00	78.58	275.78	7339.93	-107.62	1022.25	107.62	7.19
7740.00	79.77	275.82	7345.75	-77.32	1025.33	77.32	3.86
7772.00	80.65	275.97	7351.19	-45.96	1028.57	45.96	2.79
7804.00	82.18	276.09	7355.97	-14.49	1031.90	14.49	4.79
7836.00	84.04	275.31	7359.80	17.12	1035.05	-17.12	6.31
7855.00	85.09	275.65	7361.60	35.95	1036.86	-35.95	5.78
7950.00	88.39	274.96	7367.01	130.37	1045.62	-130.37	3.55
8045.00	89.63	274.59	7368.65	225.03	1053.52	-225.03	1.36
8140.00	89.70	274.03	7369.21	319.76	1060.66	-319.76	0.59
8236.00	88.62	273.62	7370.61	415.53	1067.06	-415.53	1.20
8331.00	89.50	273.72	7372.17	510.32	1073.14	-510.32	0.92
8426.00	90.57	273.47	7372.11	605.13	1079.10	-605.13	1.16
8522.00	90.20	272.87	7371.47	700.98	1084.41	-700.98	0.73
8617.00	89.43	272.12	7371.77	795.89	1088.54	-795.89	1.14
8712.00	90.27	271.58	7372.02	890.84	1091.61	-890.84	1.05
8807.00	89.90	271.07	7371.88	985.82	1093.80	-985.82	0.67
8902.00	89.73	271.61	7372.19	1080.79	1096.02	-1080.79	0.60

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
8998.00	90.00	270.34	7372.42	1176.77	1097.65	-1176.77	1.35
9093.00	89.73	270.97	7372.64	1271.77	1098.73	-1271.77	0.73
9188.00	90.03	269.15	7372.83	1366.76	1098.83	-1366.76	1.95
9283.00	89.33	268.15	7373.36	1461.73	1096.59	-1461.73	1.28
9378.00	91.44	270.15	7372.72	1556.71	1095.18	-1556.71	3.06
9474.00	91.21	271.68	7370.50	1652.67	1096.72	-1652.67	1.61
9569.00	89.76	271.57	7369.69	1747.62	1099.41	-1747.62	1.53
9664.00	89.36	270.72	7370.42	1842.60	1101.32	-1842.60	0.99
9760.00	89.33	271.42	7371.52	1938.58	1103.11	-1938.58	0.73
9855.00	90.20	271.65	7371.91	2033.54	1105.65	-2033.54	0.95
9950.00	89.50	272.05	7372.16	2128.49	1108.72	-2128.49	0.85
10045.00	88.49	271.46	7373.83	2223.43	1111.63	-2223.43	1.23
10141.00	88.96	270.79	7375.97	2319.39	1113.51	-2319.39	0.85
10236.00	88.59	271.15	7378.00	2414.35	1115.12	-2414.35	0.54
10331.00	90.47	274.05	7378.78	2509.24	1119.42	-2509.24	3.64
10426.00	90.47	273.41	7378.00	2604.03	1125.60	-2604.03	0.67
10522.00	90.87	272.68	7376.88	2699.89	1130.70	-2699.89	0.87
10617.00	89.90	272.18	7376.24	2794.80	1134.72	-2794.80	1.15
10712.00	89.33	273.04	7376.88	2889.70	1139.05	-2889.70	1.09
10807.00	89.50	274.09	7377.85	2984.51	1144.96	-2984.51	1.12



MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	DLS
ft	deg	deg	ft	ft	ft	ft	°/100ft
10903.00	89.63	276.38	7378.58	3080.10	1153.72	-3080.10	2.39
10998.00	89.66	274.73	7379.17	3174.65	1162.92	-3174.65	1.74
11093.00	89.53	270.86	7379.84	3269.51	1167.55	-3269.51	4.08
11188.00	89.26	270.64	7380.84	3364.50	1168.80	-3364.50	0.36
11284.00	89.97	272.15	7381.49	3460.46	1171.14	-3460.46	1.74
11379.00	89.73	271.49	7381.74	3555.41	1174.17	-3555.41	0.74
11474.00	89.16	269.02	7382.66	3650.40	1174.59	-3650.40	2.67
11569.00	89.03	268.81	7384.16	3745.37	1172.78	-3745.37	0.26
11664.00	88.18	267.81	7386.47	3840.30	1169.98	-3840.30	1.37
11760.00	87.85	266.85	7389.79	3936.14	1165.52	-3936.14	1.06
11855.00	87.14	265.86	7393.94	4030.85	1159.49	-4030.85	1.28
11877.00	87.11	266.02	7395.04	4052.77	1157.93	-4052.77	0.71

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

5" = 100' FEET TVD