Supplementary material for the paper under the title:

A useful synthetic equivalent of the acetone enolate

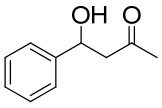
Veselin Maslak, Zorana Tokic-Vujosevic, Zorana Ferjancic and Radomir N. Saicic*

Faculty of Chemistry, University of Belgrade, Studentski trg 16, P. O. B. 51, 11158 Belgrade, Serbia

E-mail: rsaicic@chem.bg.ac.rs

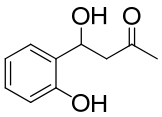
This supplementary material contains characterisation data for all compounds described in the article. The order of appearance of compounds in this material corresponds to the order of appearance in the article. At the end of the Supplementary information are the scanned spectra of all compounds.

1) 4-Hydroxy-4-phenylbutan-2-one[1]



Viscous, colorless oil that soldifies in the fridge. IR_{ATR}: 3418, 3031, 2901, 1710, 1415, 1361, 1061, 755, 701 cm^{-1}; ^{1}H NMR (200 MHz, $CDCl_3$) δ 7.35-7.23 (m, 5H), 5.13 (dd, *J* = 8.4, 4.0 Hz, 1H), 3.75 (br s, 1H), 2.89 (dd, *J* = 17.4, 8.6 Hz, 1H), 2.76 (dd, *J* = 17.4, 4.0 Hz, 1H), 2.16 (s, 3H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 209.1, 142.7, 129.9, 128.4, 128.3, 127.6, 125.5, 69.7, 51.9, 30.6 ppm.

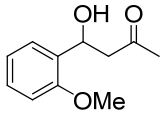
2) 4-Hydroxy-4-(2-hydroxyphenyl)butan-2-one[2]



Colorless oil. IR_{ATR}: 3298, 2989, 1701, 1610, 1586, 1486, 1414, 1210, 1109, 1087, 752 cm^{-1}; ^{1}H NMR (200 MHz, $CDCl_3$) δ 8.23 (s, 1H), 7.3 3-7.13 (m, 3H), 7.00-6.93 (m, 2H), 6.88-6.74 (m, 3H), 5.31-5.27 (m, 1H), 4.89 (s, 1H), 4.78 (br m, 1H), 4.40 (d, *J* = 2.4 Hz, 1H), 3.56 (d, *J* = 6.2

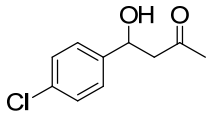
Hz, 1H), 3.08 (dd, *J* = 18.0, 9.6 Hz, 1H), 2.84 (dd, *J* = 18.0, 3.2 Hz, 1H), 2.44 (dd, *J* = 14.6, 2.2 Hz, 1H), 2.20 (s, 3H), 2.06 (dd, *J* = 14.6, 4.0 Hz, 1H), 1.65 (s, 3H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 210.2, 155.5, 130.1, 130.0, 129.1, 126.6, 125.7, 123.1, 121.2, 120.0, 117.6, 117.4, 97.5, 95.7, 70.9, 64.4, 49.6, 38.1, 30.6, 28.7 ppm.

3) 4-Hydroxy-4-(2-methoxyphenyl)butan-2-one[3]



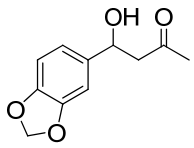
Colorless oil. IR_{ATR}: 3416, 2937, 2838, 1703, 1600, 1490, 1237, 1024, 754 cm^{-1}; ^{1}H NMR (200 MHz, $CDCl_3$) δ 7.43 (d, *J* = 7.6 Hz, 1H), 7.24 (dt, *J* = 7.8, 1.6 Hz, 1H), 6.95 (t, *J* = 7.8 Hz, 1H), 6.84 (d, *J* = 8.4 Hz, 1H), 5.40 (dd, *J* = 8.4, 3.4 Hz, 1H), 3.81 (s, 3H), 3.58 (br s, 1H), 2.91 (dd, *J* = 17.4, 3.4 Hz, 1H), 2.76 (dd, *J* = 17.4, 8.4 Hz, 1H), 2.17 (s, 3H) ppm; ^{1}C NMR (50 MHz, $CDCl_3$) δ 209.4, 155.6, 130.8, 128.2, 126.2, 120.6, 110.0, 65.3, 55.4, 50.3, 30.4 ppm; HRMS (ESI) calcd. for $C_{11}H_{14}NaO_3$ $[M+Na]^+$: 217.0835; found: 217.0835.

4) 4-(4-Chlorophenyl)-4-hydroxybutan-2-one[3,4]



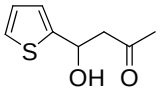
White, crystalline compound, mp 40 °C. IR_{ATR}: 3427, 2912, 1704, 1484, 1359, 1160, 1075 cm^{-1}; ^{1}H NMR (200 MHz, $CDCl_3$) δ 7.35-7.17 (m, 4H), 5.16-5.08 (m, 1H), 3.41 (d, *J* = 2.8 Hz, 1H), 2.92-2.74 (m, 2H), 2.19 (s, 3H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 208.9, 141.2, 133.0, 128.7 (2C), 127.0 (2C), 69.1, 51.8, 30.7 ppm; HRMS (ESI) calcd. for $C_{11}H_{12}ClO_4$ $[M+HCOO]^+$: 243.0430; found 243.0439. Anal. calcd. for $C_{10}H_{11}ClO_2$: C 60.45; H 5.58; found: C 59.95; H 5.75.

5) 4-(Benzo[*d*][1,3]dioxol-5-yl)-4-hydroxybutan-2-one[5]



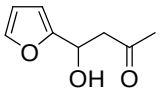
White, crystalline compound, mp 55 °C. IR_{ATR}: 3407, 2896, 1705, 1486, 1441, 1359, 1236, 1034, 927, 809 cm^{-1}; ^1H NMR (200 MHz, $CDCl_3$) δ 6.85 (br s, 1H), 6.81-6.72 (m, 2H), 5.93 (s, 2H), 5.04 (dd, *J* = 8.6, 4.0 Hz, 1H), 3.42 (br s, 1H), 2.86 (dd, *J* = 17.6, 8.6 Hz, 1H), 2.73 (dd, *J* = 17.6, 4.0 Hz, 1H), 2.17 (s, 3H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 209.0, 147.7, 146.9, 136.8, 118.9, 108.1, 106.2, 100.9, 69.5, 51.9, 30.6 ppm; HRMS (ESI) calcd. for $C_{11}H_{12}NaO_4$ $[M+Na]^+$: 231.0628; found: 231.0633.

6) 4-Hydroxy-4-(thiophen-2-yl)butan-2-one[6]



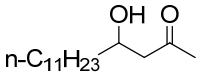
Colorless oil. IR_{ATR}: 3406, 3104, 2903, 1704, 1535, 1359, 1238, 1162, 1063 cm^{-1}; ^1H NMR NMR (200 MHz, $CDCl_3$) δ 7.22 (dd, *J* = 3.4, 2.8 Hz, 1H), 6.93 (d, *J* = 3.4 Hz, 2H), 5.38-5.33 (m, 1H), 3.79 (d, *J* = 2.8 Hz, 1H), 3.07-2.83 (m, 2H), 2.17 (s, 3H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 208.4, 146.6, 126.5, 124.5, 123.4, 65.8, 51.6, 30.5 ppm; HRMS (ESI) calcd. for $C_8H_{10}NaO_2S$ $[M+Na]^+$: 193.0294; found: 193.0296.

7) 4-(Furan-2-yl)-4-hydroxybutan-2-one[6]



Colorless oil. IR_{ATR}: 3407, 2910, 1706, 1504, 1362, 1146, 1062, 1008 cm^{-1}; ^1H NMR (200 MHz, $CDCl_3$) δ 7.36 (d, *J* = 1.6 Hz, 1H), 6.34-6.24 (m, 2H), 5.19 -5.11 (m, 1H), 3.53 (d, *J* =3.8 Hz, 1H), 3.06 (dd, *J* = 17.2, 8.4 Hz, 1H), 3.53 (dd, *J* = 17.2, 4.0 Hz, 1H), 2.21 (s, 3H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 208.3, 154.9, 142.0, 110.2, 106.1, 63.5, 48.0, 30.5 ppm; HRMS (ESI) calcd. for $C_8H_{10}NaO_3$ $[M+Na]^+$: 177.0522; found: 177.0521.

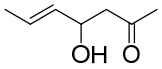
8) 4-Hydroxypentadecan-2-one[7]



White, crystalline compound, mp 51-52 °C; IR_{ATR}: 3322, 3222, 2957, 2914, 2847, 1707, 1465, 1376, 1170, 1081 cm^{-1}; ^1H NMR (200 MHz, $CDCl_3$) δ 4.05 (br m, 1H), 2.97 (br s, 1H), 2.62 (dd, *J* = 17.7, 3.7 Hz, 1H), 2.52 (dd, *J* = 17.7, 8.6 Hz, 1H), 2.18 (s, 3H), 1.44-1.15 (m, 20H), 0.88 (t, *J* = 6.2 Hz, 3H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 210.1, 67.5, 49.9, 36.3, 31.8, 30.7, 29.6, 29.5

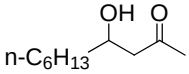
(3C), 29.2, 25.4, 24.7, 22.6, 14.0 ppm; Anal. calcd. for $C_{15}H_{30}O_2$: C 74.32; H 12.47; found: C 73.92; H 12.83.

9) (*E*)-4-Hydroxyhept-5-en-2-one[8]



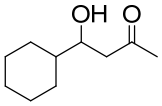
Colorless oil. IR_{ATR}: 3393, 2921, 1708, 1416, 1359, 1164, 1052, 967 cm^{-1}; ^1H NMR (200 MHz, $CDCl_3$) δ 5.81-5.64 (m, 1H), 5.54-5.43 (m, 1H), 4.50-4.40 (m, 1H), 3.02 (m, 1H), 2.65 (d, *J* = 6.2 Hz, 2H), 2.19 (s, 3H), 1.69 (d, *J* = 6.2 Hz, 3H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 209.2, 131.9, 127.1, 68.4, 49.9, 30.7, 17.6 ppm.

10) 4-Hydroxydecan-2-one[9]



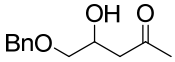
Colorless oil. IR_{ATR}: 3413, 2926, 2855, 1708, 1416, 1359, 1236, 1163, 1062 cm^{-1}; ^1H NMR (200 MHz, $CDCl_3$) δ 4.02 (br m, 1H), 3.06 (d, *J* = 2.8 Hz, 1H), 2.64 (dd, *J* = 17.4, 3.4 Hz, 1H), 2.52 (dd, *J* = 17.4, 8.4 Hz, 1H), 2.19 (s, 3H), 1.53-1.15 (m, 10H), 0.88 (t, *J* = 6.8 Hz, 3H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 210.1, 67.5, 49.9, 36.3, 31.7, 30.7, 29.1, 25.3, 22.5, 14.0 ppm; HRMS (ESI) calcd. for $C_{10}H_{20}NaO_2$ $[M+Na]^+$: 195.1356; found: 195.1360.

11) 4-Cyclohexyl-4-hydroxybutan-2-one[10]



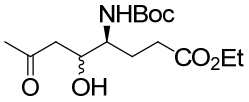
Colorless oil. IR_{ATR}: 3446, 2926, 2852, 1710, 1450, 1360, 1165, 1063 cm^{-1}; ^1H NMR (200 MHz, $CDCl_3$) δ 3.85-3.76 (m, 1H), 3.26 (br s, 1H), 2.66-2.45 (m, 2H), 2.19 (s, 3H), 1.87-1.55 (m, 4H), 1.40-0.85 (m, 7H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 210.1, 71.4, 47.0, 42.9, 30.5, 28.6, 28.0, 26.2, 25.9, 25.8 ppm. HRMS (ESI) calcd. for $C_{10}H_{18}NaO_2$ $[M+Na]^+$: 193.1199; found: 193.1204; calcd. for $C_{10}H_{19}O_2$ $[M+H]^+$: 171.1380; found: 171.1386.

12) 5-Benzyloxy-4-hydroxypentan-2-one



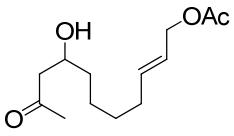
Colorless oil. IR_{ATR}: 3435, 2906, 2863, 1712, 1454, 1362, 1167, 1099, 740 cm^{-1}; ^1H NMR (200 MHz, $CDCl_3$) δ 7.36-7.26 (m, 5H), 4.55 (s, 2H), 4.26 (t, *J* = 5.7 Hz, 1H), 3.52-3.39 (m, 2H), 3.09 (br s, 1H), 2.67 -2.63 (m, 2H), 2.17(s, 3H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 208.7, 137.2, 128.4 (2C), 127.8 (2C), 127.7, 73.3, 73.2, 66.7, 46.6, 30.7 ppm.

13) (*S*)-Ethyl 4-(*tert*-butoxycarbonylamino)-5-hydroxy-7-oxooctanoate



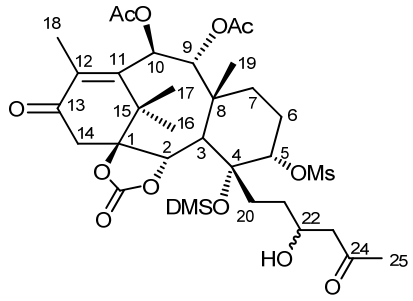
Colorless oil. Diastereoisomeric ratio: 1.4/1, as determined by integration of signals at 2.20 and 2.18 ppm in ^1H NMR spectrum). IR_{ATR}: 3371, 2978, 1704, 1513, 1365, 1247, 1162, 1092, 1025; ^1H NMR (200 MHz, $CDCl_3$) δ 4.85 (1H, d, *J*=9.6 Hz, N***H***), 4.14 (2H, q, *J*=7.2 Hz; $CO_2C\boldsymbol{H_2}$), 4.05-3.97 (1H, m, C***H***OH), 3.55-3.50 (1H, m, C***H***NH), 3.45 (1H, bs, O***H***), 2.67-2.63 (2H, m, $C\boldsymbol{H_2}CO$), 2.40 (2H, t, *J*=7.4 Hz; $C\boldsymbol{H_2}CO_2Et$, minor isomer), 2.39 (2H, t, *J*=7.4 Hz; $C\boldsymbol{H_2}CO_2Et$, major isomer), 2.20 (3H, s, $COC\boldsymbol{H_3}$, minor isomer), 2.18 (3H, s, $COC\boldsymbol{H_3}$, major isomer), 2.02-1.68 (2H, m, $C\boldsymbol{H_2}CHN$), 1.44 (9H, s, $C(C\boldsymbol{H_3})_3$), 1.25 (3H, t, *J*=7.4 Hz, $OCH_2C\boldsymbol{H_3}$) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 210.1 (***C***=O, major isomer), 209.61 (***C***=O, minor isomer), 173.6 (***C***O_2Et,), 156.1 (***C***=O, Boc), 79.4 (***C***), 70.4 (***C***HOH, minor isomer), 68.7 (***C***HOH, major isomer), 60.5 (O***C***H_2CH_3), 53.8 (***C***HN, minor isomer), 53.4 (***C***HN, major isomer), 47.0 (***C***H_2CO, major isomer), 46.5 (***C***H_2CO, minor isomer), 30.9 (***C***H_2CO_2Et), 30.7 (CO***C***H_3), 28.3 (3x***C***H_3, Boc), 27.7 (***C***H_2CHN, major isomer), 24.7 (***C***H_2CHN, minor isomer), 14.1 ($OCH_2\boldsymbol{C}H_3$) ppm; HRMS (EI) calcd for $C_{15}H_{27}NNaO_6$ $[M+Na]^+$: 340.1731; found: 340.1723.

14) (*E*)-8-Hydroxy-10-oxoundec-2-enyl acetate



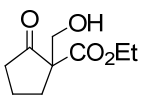
Colorless oil. IR_{ATR}: 3463, 2932, 2858, 1739, 1714, 1432, 1364, 1236, 1025 cm^{-1}; ^1H NMR (200 MHz, $CDCl_3$) δ 5.84-5.70 (m, 1H), 5.63-5.49 (m, 1H), 4.50 (d, *J* = 6.2 Hz, 2H), 4.07-3.99 (m, 1H), 3.06 (br s, 1H), 2.70-2.46 (m, 2H), 2.18 (s, 3H), 2.08-2.06 (m, 5H), 1.54-1.27 (m, 6H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 210.0, 170.9, 136.2, 123.9, 67.3, 65.2, 49.9, 36.1, 32.6, 30.7, 28.7, 24.9, 20.9 ppm. HRMS (EI) calcd for $C_{13}H_{22}NNaO_4$ $[M+Na]^+$: 265.1410; found: 265.1402.

15) 9,10-Diacetyl-5-mesyl-4,20-dihydro-4α-dimethylsilyloxy-20-(2-hydroxy-4-oxo-pentyl)-taxicin I-1,2-carbonate



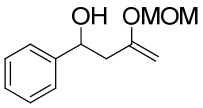
Diastereoisomeric ratio: 1.5/1. Spectral data for the major isomer: IR_{ATR}: 3434, 2926, 1808, 1747, 1684, 1339, 1235, 1173, 1032 cm^{-1}; ^1H NMR (500 MHz, $CDCl_3$) δ 6.01 (1H, d, *J*=10.0 Hz, H-10), 5.61 (1H, d, *J*=10.0 Hz, H-9), 4.86-4.84 (1H, m, H-5), 4.83-4.81 (1H, m, Si-H), 4.81 (1H, d, *J*=4.5 Hz, H-2), 3.93-3.88 (1H, m, H-22), 3.73 (1H, d, *J*=19.0 Hz, H-14), 3.13 (1H, d, *J*=2.5 Hz, OH), 3.02 (3H, s, Ms), 2.80 (1H, d, *J*=19.0 Hz, H-14), 2.71 (1H, d, *J*=4.5 Hz, H-3), 2.65 (1H, dd, J_1=2.5 Hz, J_2=18.0 Hz, H-23), 2.57 (1H, dd, J_1=9.0 Hz, J_2=18.0 Hz, H-23), 2.39-2.33 (1H, m, H-20), 2.28 (3H, s, H-18), 2.23-2.15 (2H, m, H-6 and H-20), 2.19 (3H, s, H-25), 2.09 (3H, s, Ac), 2.05 (3H, s, Ac), 1.91-1.80 (1H, m, H-6), 1.73-1.71 (2H, m, 2xH-7), 1.67 (3H, s, H-16), 1.62-1.50 (1H, m, H-21), 1.50-1.44 (1H, m, H-21), 1.33 (3H, s, H-17), 1.11 (3H, s, H-19), 0.31 (3H, d, *J*=2.5 Hz, Si-Me), 0.28 (3H, d, *J*=3.0 Hz, Si-Me) ppm; ^{13}C NMR (125 MHz, $CDCl_3$) δ 209.6 (C, C-24), 196.8 (C, C-13), 170.2 (C, Ac), 169.25 (C, Ac), 152.6 (C, CO), 150.4 (C, C-11), 142.7 (C, C-12), 88.6 (C, C-1), 81.0 (CH, C-5), 79.8 (CH, C-2), 75.72 (CH, C-9), 73.0 (CH, C-10), 67.2 (CH, C-22), 50.1 (CH_2, C-23), 45.4 (CH, C-3), 44.6 (C, C-8), 41.3 (C, C-15), 41.1 (CH_2, C-14), 39.9 (CH_3, Ms), 33.0 (CH_3, C-17), 32.5 (CH_2, C-20), 31.0 (CH_2, C-21), 30.7 (CH_3, C-25), 25.1 (CH_2, C-7), 24.7 (CH_2, C-6), 20.8 (CH_3, Ac), 20.7 (CH_3, Ac), 20.1 (CH_3, C-16), 19.6 (CH_3, C-19), 13.6 (CH_3, C-18), 1.1 (CH_3, Si-Me), 0.8 (CH_3, Si-Me) ppm; HRMS (EI) calcd. for $C_{33}H_{50}NaO_{14}SSi$ $[M+Na]^+$ 753.2583; found 753.2577.

16) 2-Hydroxymethyl-2-carbethoxycyclopentanone[11]



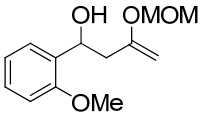
Colorless oil. IR_{ATR}: 3448, 2962, 2925, 1746, 1717, 1229, 1156, 1151, 1027 cm^{-1}; ^1H NMR (200 MHz, $CDCl_3$) δ 4.18 (q, *J* = 6.7 Hz, 2H), 3.95-3.78 (m, 2H), 3.03 (br s, 1H), 2.57-1.95 (m, 6H), 1.25 (t, *J* = 6.7 Hz, 3H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 214.9, 171.1, 89.9, 63.4, 61.6, 61.4, 38.3, 30.7, 19.5, 13.8 ppm.

17) 3-(Methoxymethoxy)-1-phenylbut-3-en-1-ol



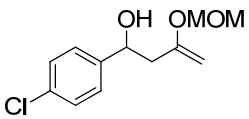
Colorless oil. IR_{ATR}: 3436, 2907, 2827, 1637, 1452, 1275, 1152, 1032, 1006 cm^{-1}; ^1H NMR (200 MHz, $CDCl_3$) δ 7.37-7.23 (m, 5H), 4.97(s, 2H), 4.96-4.89 (m, 1H), 4.23 (d, *J* = 2.0 Hz, 1H), 4.10 (d, J = 2.0 Hz, 1H), 3.42 (s, 3H), 2.65 (s, 1H), 2.51-2.40 (m, 2H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 157.4, 143.6, 128.3 (2C), 127.4, 125.7 (2C), 93.6, 87.3, 71.9, 56.2, 45.3 ppm.

18) 3-(Methoxymethoxy)-1-(2-methoxyphenyl)but-3-en-1-ol



Colorless oil. IR_{ATR}: 3345, 2936, 2834, 1634, 1490, 1237, 1194, 1024, 753 cm^{-1}; ^1H NMR (200 MHz, $CDCl_3$) δ 7.38 (dd, *J* = 7.8, 1.6 Hz, 1H), 7.23 (dt, *J* = 7.8, 1.6 Hz, 1H) 6.98-6.84 (m, 2H), 5.15 (dt, *J* = 9.0, 8.4 Hz, 1H), 4.96 (s, 2H), 4.20 (d, *J* = 1.6 Hz, 1H), 4.07 (d, *J* = 1.6 Hz, 1H), 3.84 (s, 3H), 3.42 (s, 3H), 2.94 (d, *J* = 5.4 Hz, 1H), 2.64 (dd, *J* = 14.0, 4.6 Hz, 1H), 2.47 (dd, *J* = 14.0, 8.4 Hz, 1H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 158.1, 156.3, 131.5, 128.2, 126.7, 120.6, 110.3, 93.5, 86.8, 68.3, 56.1, 55.2, 43.0 ppm; Anal. Calcd. for $C_{13}H_{18}O_4$: C 65.53; H 7.61; found: C 65.16; H 7.36.

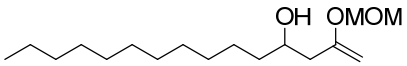
19) 1-(4-Chlorophenyl)-3-(methoxymethoxy)but-3-en-1-ol



Colorless oil. IR_{ATR}: 3415, 2954, 2904, 1636, 1490, 1150, 1090, 1008, 822 cm^{-1}; ^1H NMR (200 MHz, $CDCl_3$) δ 7.30 (s, 4H), 4.96 (s, 2H), 4.93-4.85 (m, 1H), 4.24 (d, *J* = 2.2 Hz, 1H), 4.08 (d, *J* = 2.2 Hz, 1H), 3.42 (s, 3H), 2.74 (d, *J* = 2.8 Hz, 1H), 2.53-2.36 (m, 2H) ppm; ^{13}C NMR (50

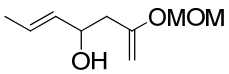
MHz, $CDCl_3$) δ 157.0, 142.1, 133.0, 128.4 (2C), 127.1 (2C), 93.6, 87.6, 71.2, 56.3, 45.3 ppm; HRMS (ESI) calcd. for $C_{12}H_{15}ClNaO_3$ $[M+Na]^+$: 265.0602; found: 265.0604. Anal. calcd. for $C_{12}H_{15}ClO_3$: C 59.39; H 6.23; found: C 58.91; H 6.45.

20) 2-(Methoxymethoxy)pentadec-1-en-4-ol



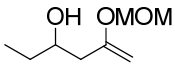
Colorless oil. IR_{ATR}: 3436, 2928, 2855, 1634, 1467, 1300, 1157, 1025 cm^{-1}; ^1H NMR (200 MHz, $CDCl_3$) δ 4.07 (s, 2H), 4.22 (d, *J* = 1.6 Hz, 1H), 4.08 (d, *J* = 1.6 Hz, 1H), 3.87 (br m, 1H), 3.43 (s, 3H), 2.35 (dd, *J* = 14.0, 3.4 Hz, 1H), 2.15 (dd, *J* = 14.0, 8.4 Hz, 1H), 2.14-2.10 (m, 1H), 1.58-1.14 (m, 20H), 0.88 (t, *J* = 6.5 Hz, 3H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 158.1, 93.5, 86.8, 69.6, 56.2, 43.0, 36.8, 31.9, 29.6 (4C), 29.5, 29.3, 25.6, 22.6, 14.0 ppm; Anal. calcd. for $C_{17}H_{34}O_3$: C 71.28; H 11.96; found: C 70.95; H 11.85.

21) (*E*)-2-(Methoxymethoxy)hepta-1,5-dien-4-ol



Colorless oil. IR_{ATR}: 3407, 2916, 1633, 1445, 1151, 1093, 1019, 965 cm^{-1}; ^1H NMR (200 MHz, $CDCl_3$) δ 5.81-5.64 (m, 1H), 5.56-5.44 (m, 1H), 4.96 (s, 2H), 4.33-4.22 (m, 2H), 4.08 (d, *J* = 1.6 Hz, 1H), 3.42 (s, 3H), 2.40-2.21 (m, 3H), 1.70 (d, *J* = 6.2 Hz, 3H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 157.4, 132.9, 126.7, 93.4, 87.0, 70.3, 56.2, 43.2, 17.6 ppm; Anal. calcd. for $C_9H_{16}O_3$: C 62.77; H 9.36; found: C 62.25, H 9.73.

22) 5-(Methoxymethoxy)hex-5-en-3-ol[12]



Colorless oil. IR_{ATR}: 3413, 2922, 2852, 1632, 1464, 1153, 1095, 1013 cm^{-1}; ^1H NMR (200 MHz, $CDCl_3$) δ 4.97 (s, 2H), 4.23 (d, *J* = 1.8 Hz, 1H), 4.09 (d, *J* = 1.8 Hz, 1H), 3.79-3.70 (br m, 1H), 3.43 (s, 3H), 2.35 (dd, *J* = 14.0, 3.4 Hz, 1H), 2.21-2.10 (m, 2H), 1.53 (qu, J = 7.2, 7.0 Hz, 2H),

0.97 (t, J = 7.2 Hz, 3H) ppm; ^{13}C NMR (50 MHz, $CDCl_3$) δ 158.1, 93.5, 86.8, 70.9, 56.3, 42.5, 29.5, 9.9 ppm; Anal. calcd. for $C_8H_{16}O_3$: C 59.97; H 10.07; found: C 59.50; H 9.91.

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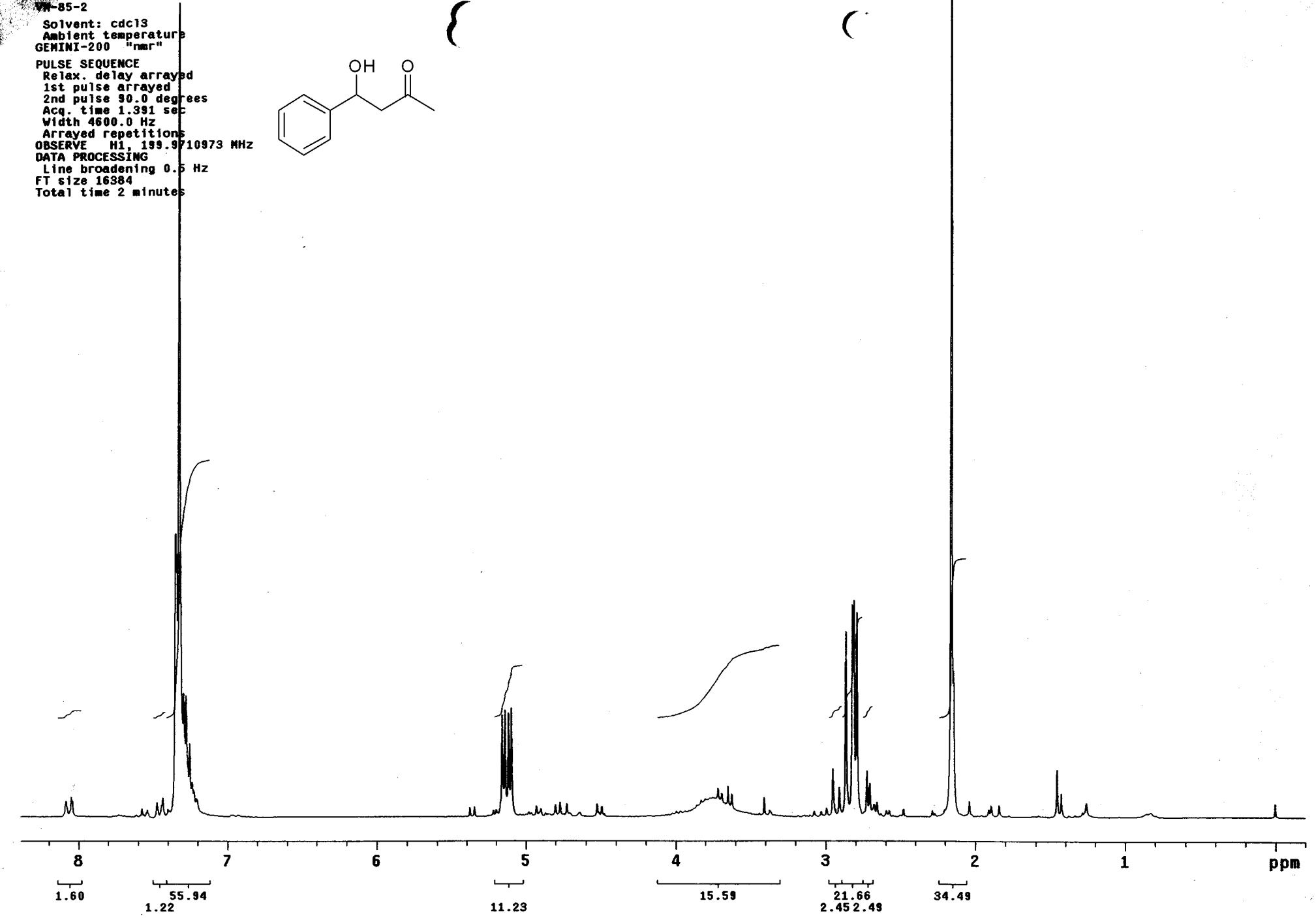
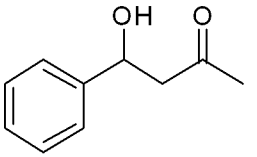
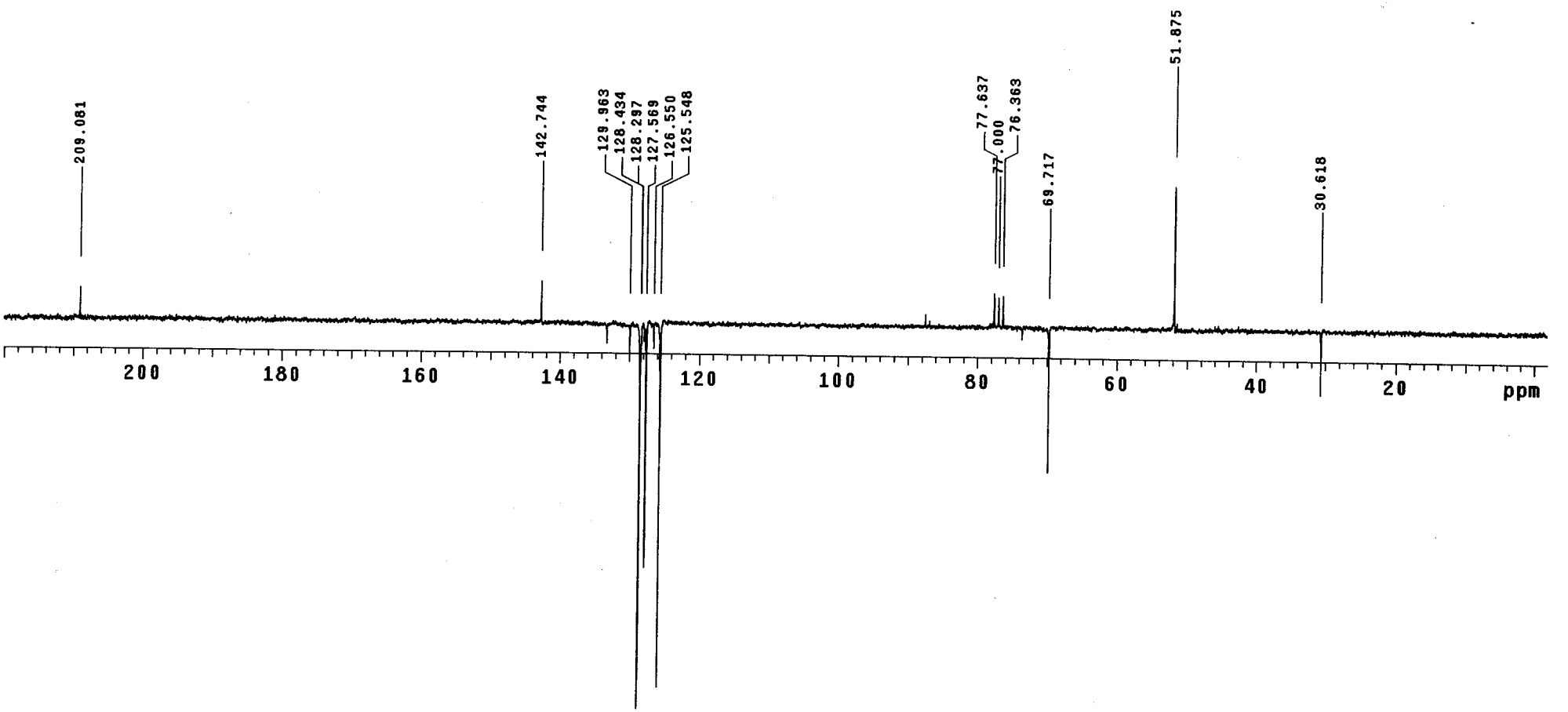
Scanned spectra

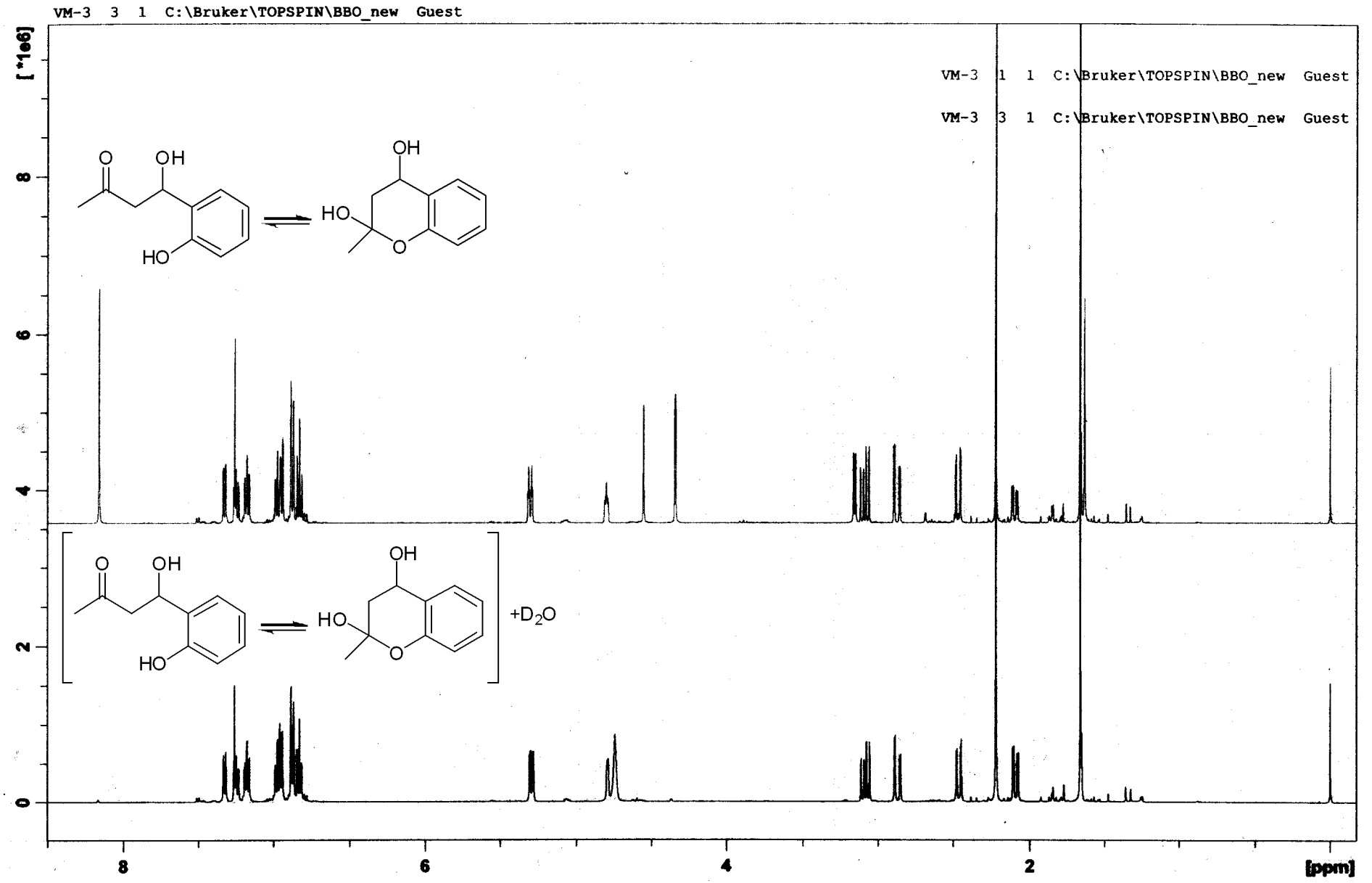

VM-85-2
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 90.0 degrees
Acq. time 1.391 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710973 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 16384
Total time 2 minutes
OH
O
8
7
6
5
4
3
2
1
ppm
1.60
55.94
1.22
11.23
15.59
21.66
2.45
2.49
34.49

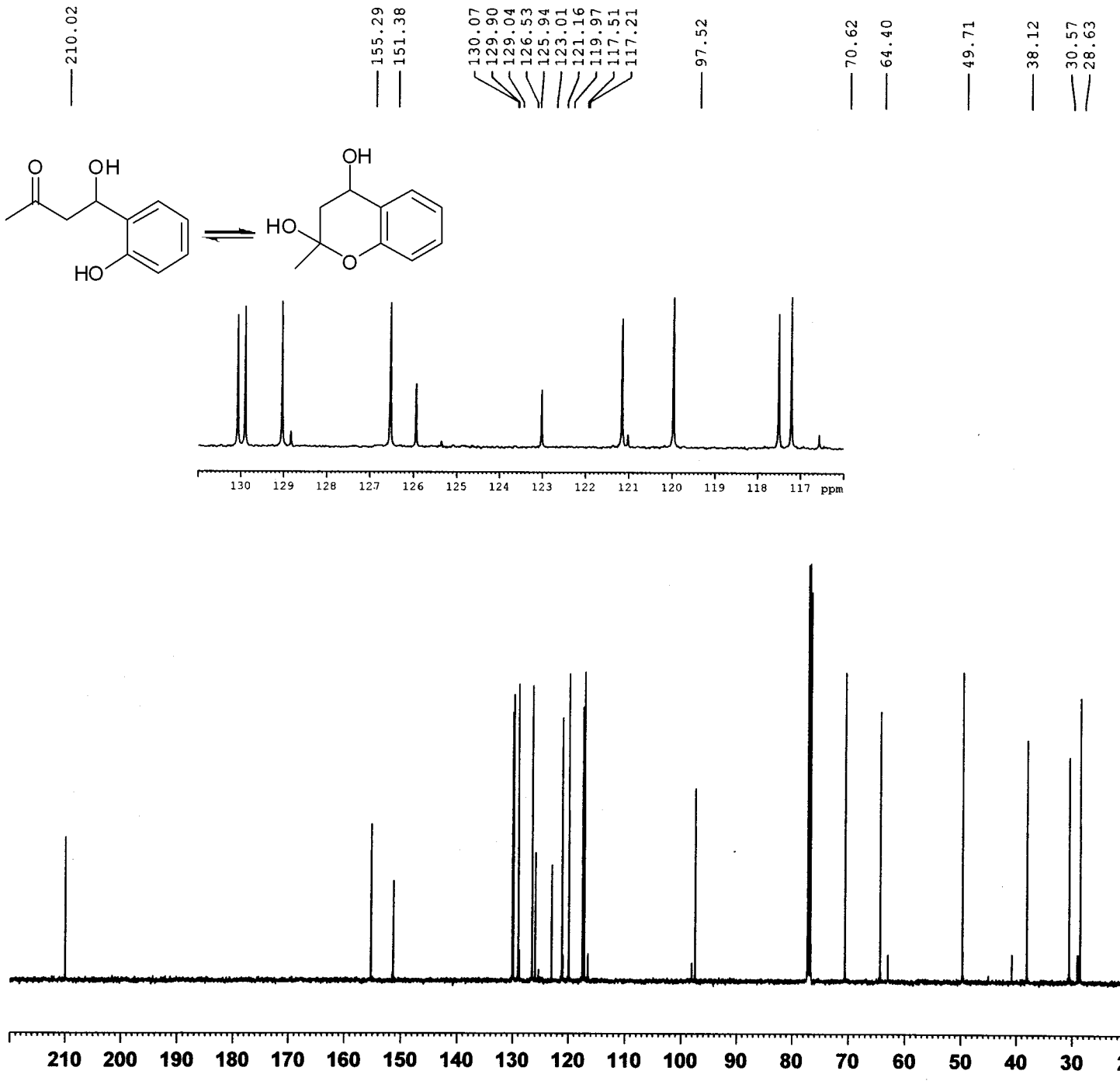
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"

PULSE SEQUENCE: apt
Relax. delay arrayed
1st pulse arrayed
2nd pulse 122.7 degrees
Acq. time 2.000 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827840 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
on during acquisition
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 65536
Total time 65 minutes






VM-3 3 1 C:\Bruker\TOPSPIN\BBO_new Guest
[*1e6]
VM-3 1 1 C:\Bruker\TOPSPIN\BBO_new Guest
VM-3 3 1 C:\Bruker\TOPSPIN\BBO_new Guest
O
OH
HO
OH
HO
O
+D2O
8
6
4
2
[ppm]



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PROCNO	1
Date_	20090716
Time	11.27
INSTRUM	spect
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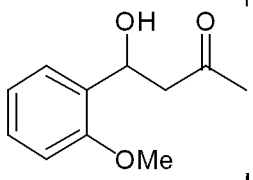
PULPROG	zgpg30
TD	32768
SOLVENT	CDCl3
NS	258
DS	4
SWH	29761.904 Hz
FIDRES	0.908261 Hz
AQ	0.5505524 sec
RG	724
DW	16.800 usec
DE	6.50 usec
TE	298.0 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	11.50 usec
PL1	3.00 dB
PL1W	32.22848892 W
SFO1	125.8043140 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 usec
PL2	1.20 dB
PL12	18.40 dB
PL13	18.40 dB
PL2W	20.76952171 W
PL12W	0.39575511 W
PL13W	0.39575511 W
SFO2	500.2620010 MHz
SI	32768
SF	125.7904911 MHz
WDW	EM
SSB	0
LB	1.50 Hz
GB	0
PC	1.40

VM-99-1

Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"

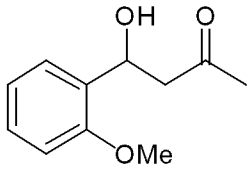
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 36.0 degrees
Acq. time 1.391 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710945 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 16384
Total time 1 minute

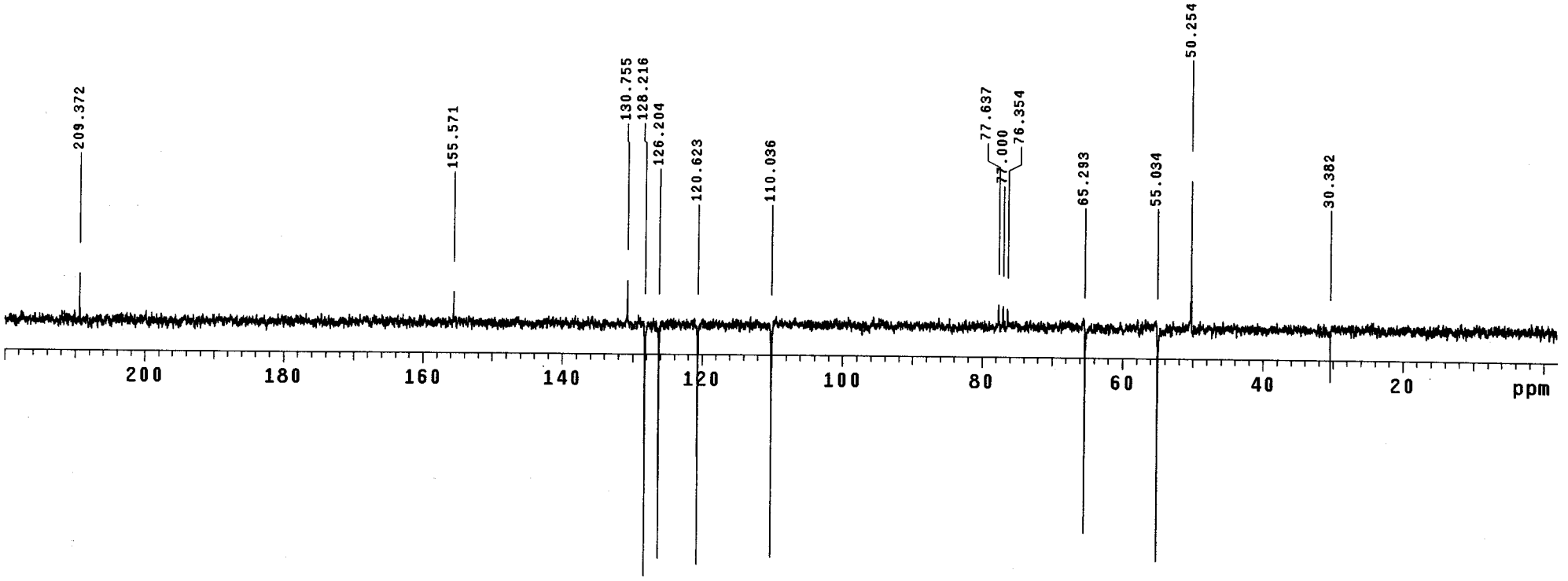


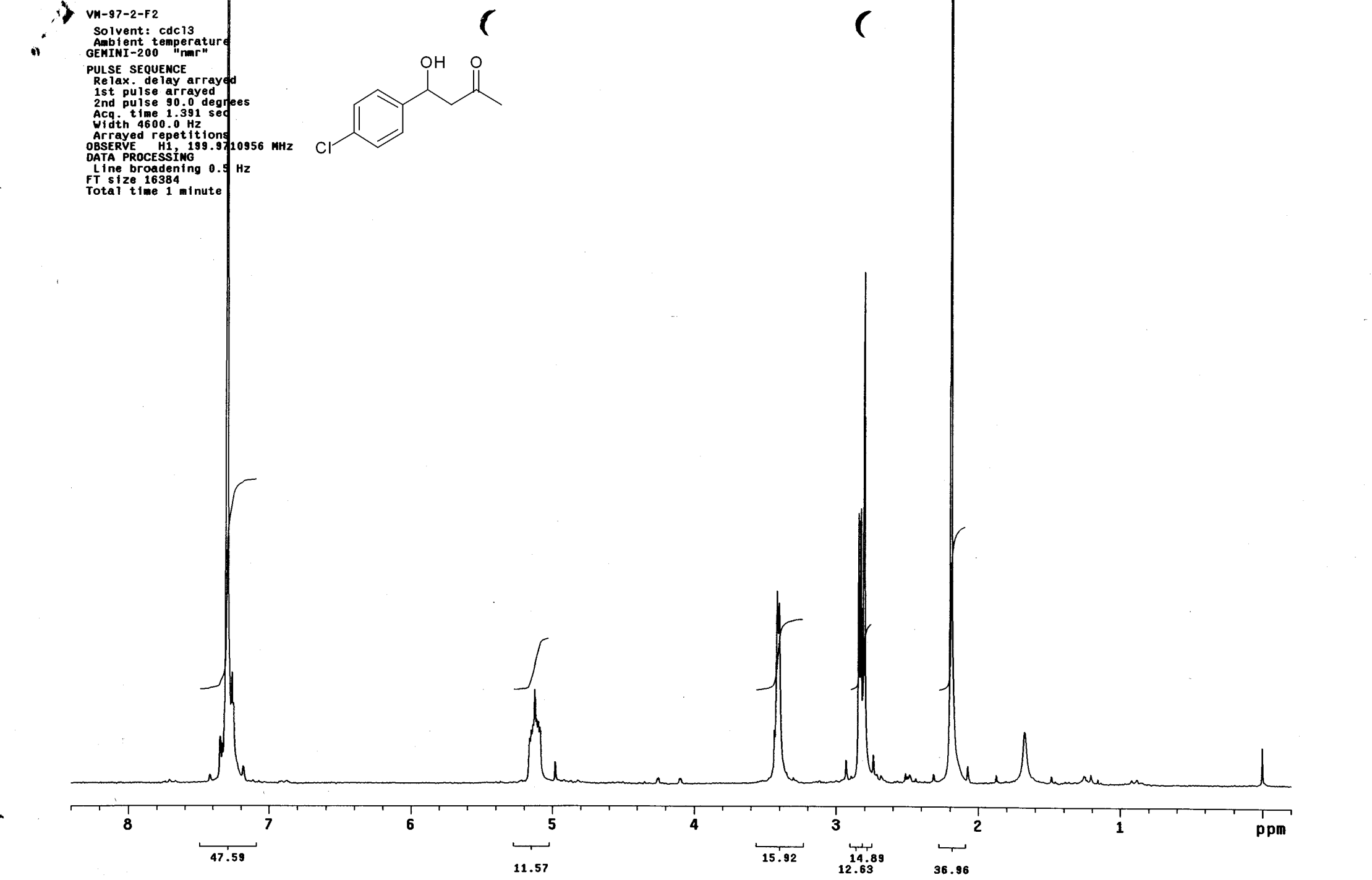
VM-99-1

Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"

PULSE SEQUENCE: apt
Relax. delay arrayed
1st pulse arrayed
2nd pulse 122.7 degrees
Acq. time 2.000 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827867 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
on during acquisition
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 65536
Total time 5 minutes



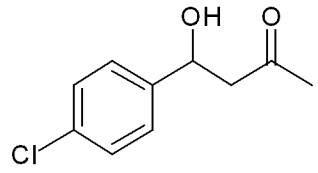


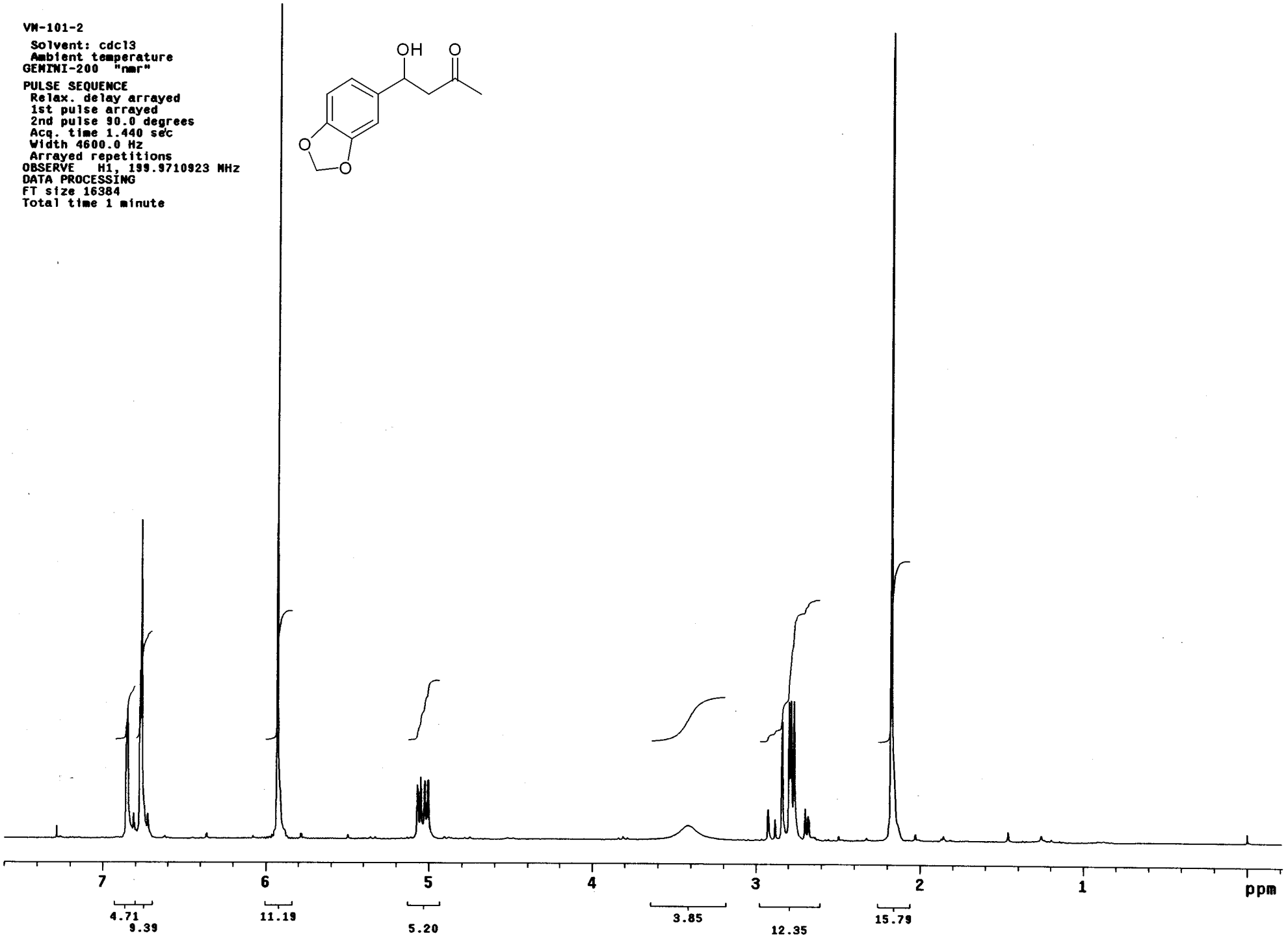

VM-97-2-F2
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 90.0 degrees
Acq. time 1.391 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710956 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 16384
Total time 1 minute
OH
O
Cl
8
7
6
5
4
3
2
1
ppm
47.59
11.57
15.92
14.89
12.63
36.96

VM-97-3

Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"

PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 73.6 degrees
Acq. time 1.067 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827791 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 32768
Total time 33 minutes

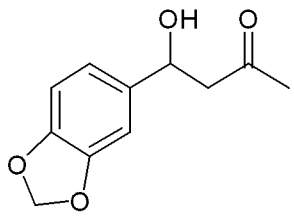


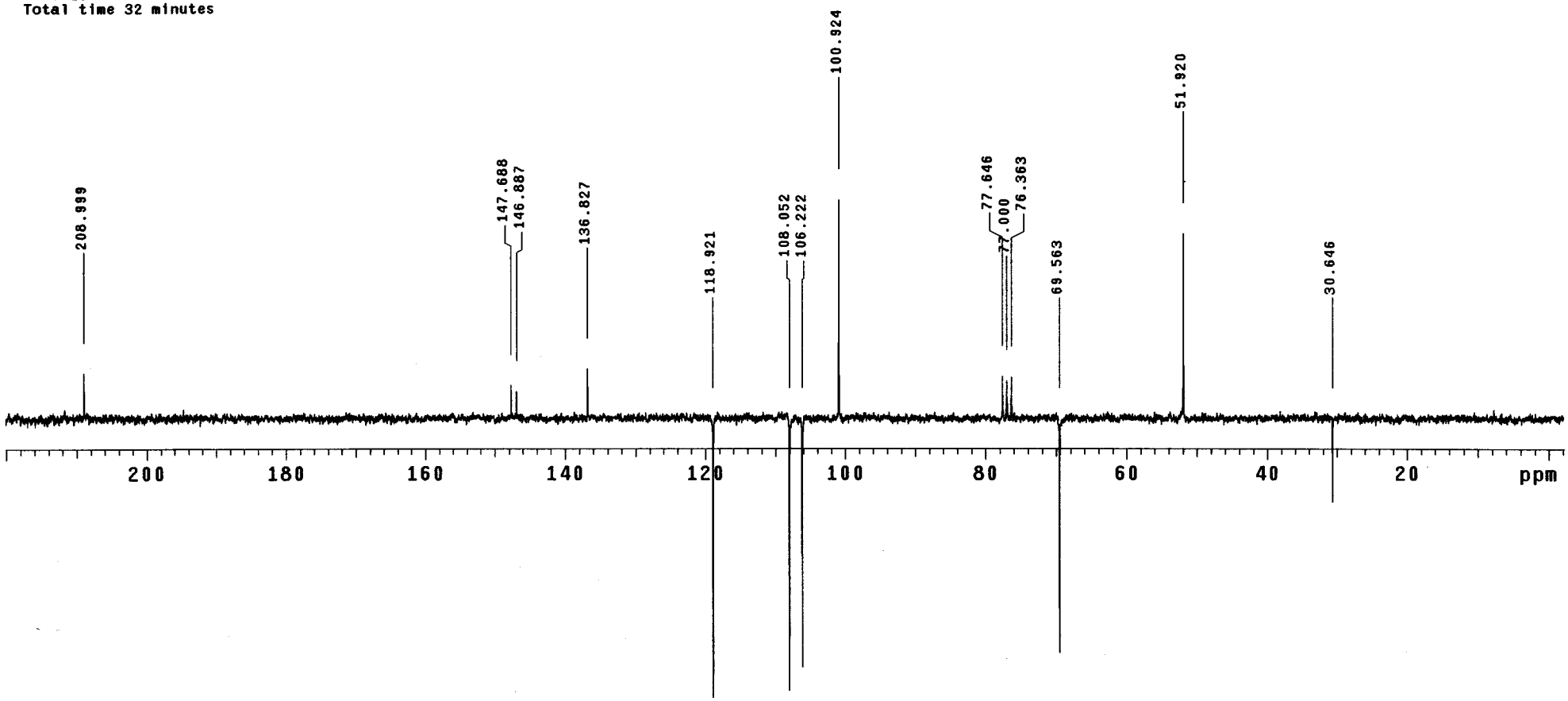

VM-101-2
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 90.0 degrees
Acq. time 1.440 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710923 MHz
DATA PROCESSING
FT size 16384
Total time 1 minute
OH
O
O
O
7
6
5
4
3
2
1
ppm
4.71
9.39
11.19
5.20
3.85
12.35
15.79

VM-101-2

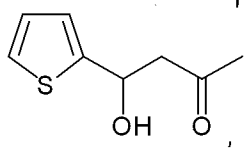
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"

PULSE SEQUENCE: apt
Relax. delay arrayed
1st pulse arrayed
2nd pulse 122.7 degrees
Acq. time 2.000 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827826 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
on during acquisition
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 65536
Total time 32 minutes





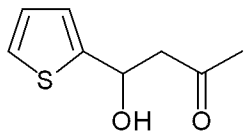
VM-100-2
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay 1 arrayed
1st pulse arrayed
2nd pulse 90.0 degrees
Acq. time 1.391 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710928 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 16384
Total time 1 minute



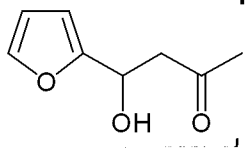
VM-8

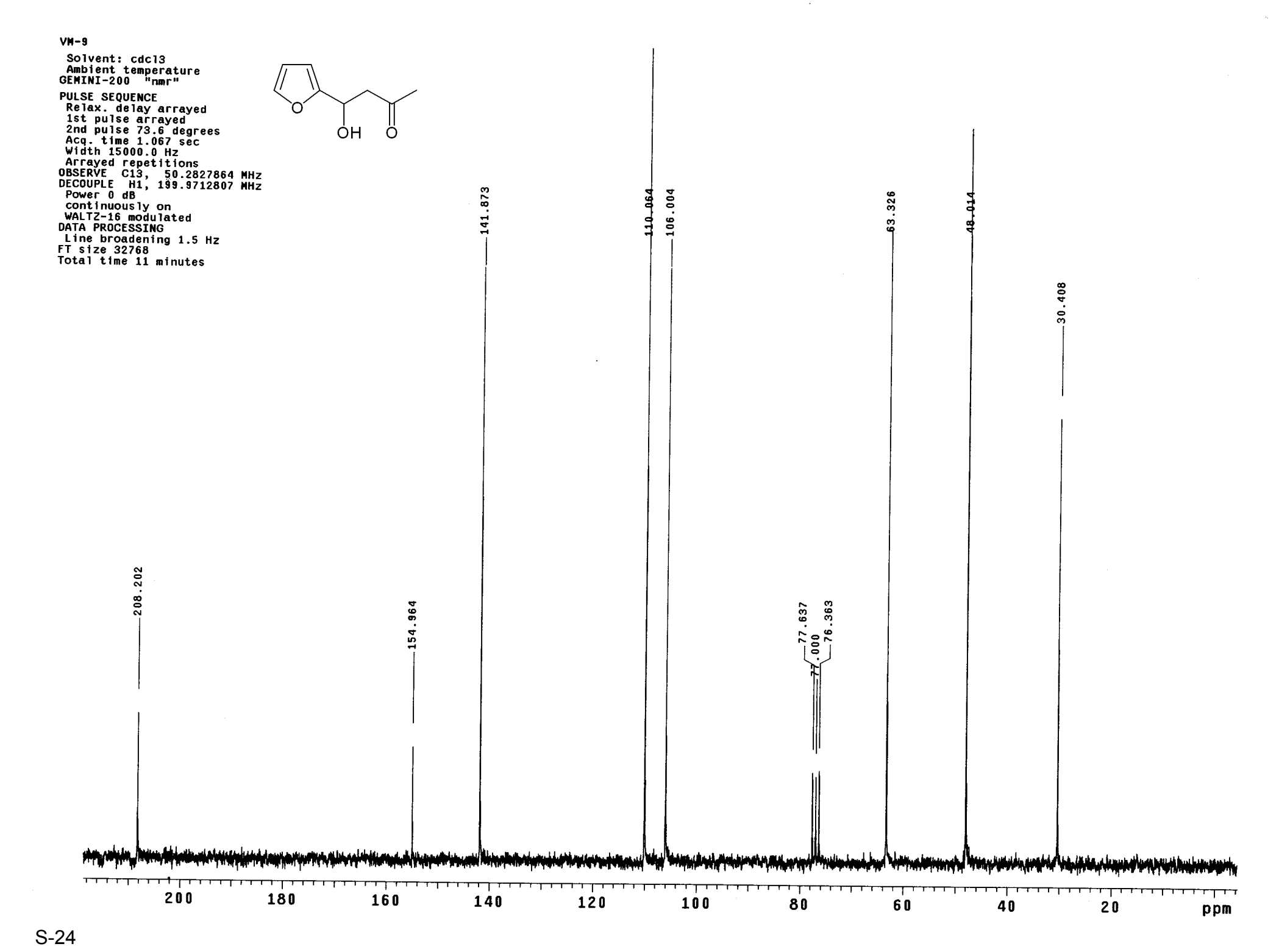
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"

PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 73.6 degrees
Acq. time 1.067 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827828 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 32768
Total time 9 minutes

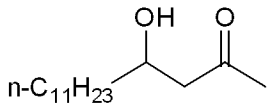


VM-101-1
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 54.0 degrees
Acq. time 1.391 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710900 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 16384
Total time 1 minute




VM-9
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 73.6 degrees
Acq. time 1.067 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827864 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 32768
Total time 11 minutes
OH
O
O
208.202
154.964
141.873
110.064
106.004
77.637
77.000
76.363
63.326
48.014
30.408
200
180
160
140
120
100
80
60
40
20
ppm

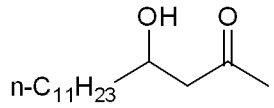
VM-94-2 II
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 90.0 degrees
Acq. time 1.391 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710951 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 16384
Total time 5 minutes

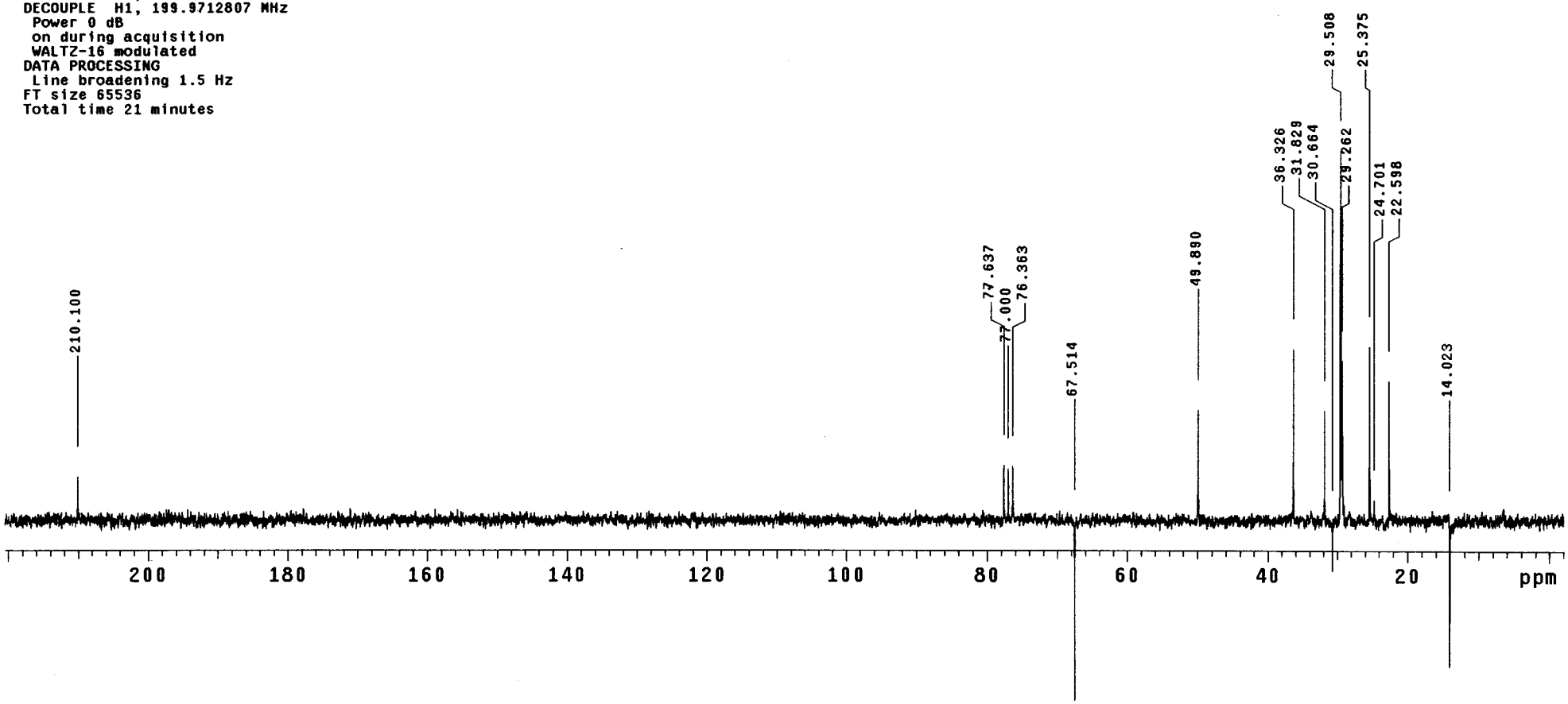


VM-94-2

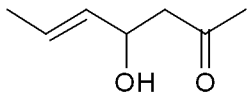
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"

PULSE SEQUENCE: apt
Relax. delay arrayed
1st pulse arrayed
2nd pulse 122.7 degrees
Acq. time 2.000 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827794 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
on during acquisition
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 65536
Total time 21 minutes





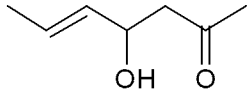
VM-96-3
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 90.0 degrees
Acq. time 1.391 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710895 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 16384
Total time 1 minute

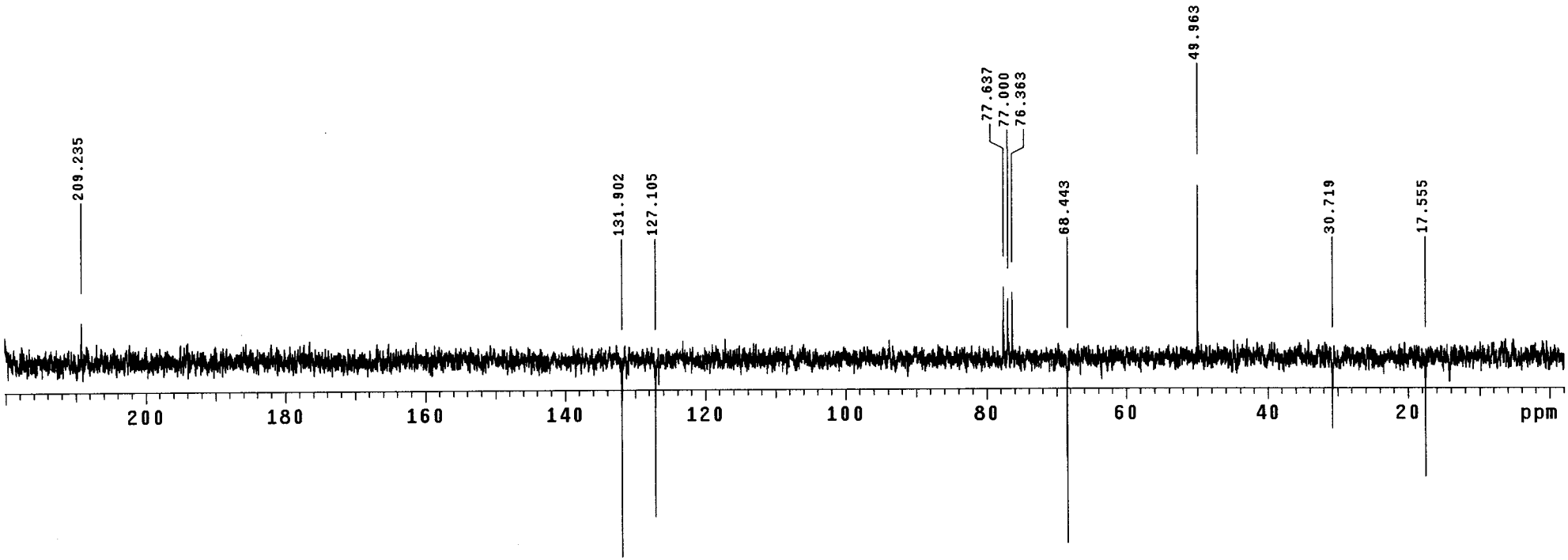


VM-96-3

Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"

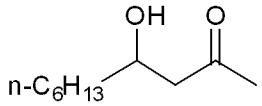
PULSE SEQUENCE: apt
Relax. delay arrayed
1st pulse arrayed
2nd pulse 122.7 degrees
Acq. time 2.000 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827803 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
on during acquisition
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 65536
Total time 13 minutes



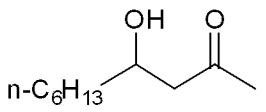


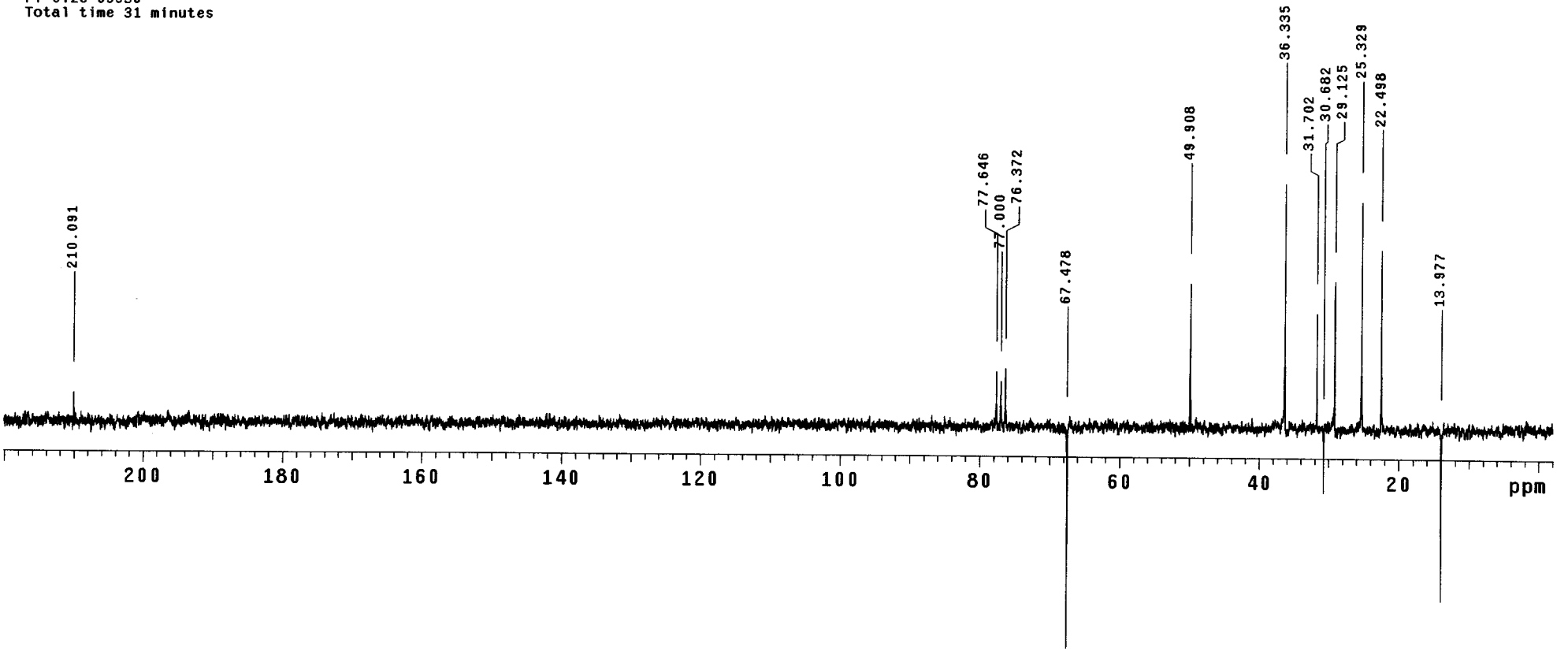
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"

PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 54.0 degrees
Acq. time 1.391 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710906 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 16384
Total time 1 minute



VM-102-1
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE: apt
Relax. delay arrayed
1st pulse arrayed
2nd pulse 122.7 degrees
Acq. time 2.000 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827794 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
on during acquisition
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 65536
Total time 31 minutes

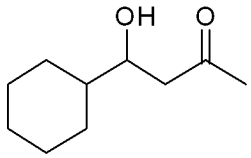




VM-125-2

Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"

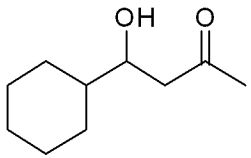
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 36.0 degrees
Acq. time 1.388 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710754 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 16384
Total time 1 minute

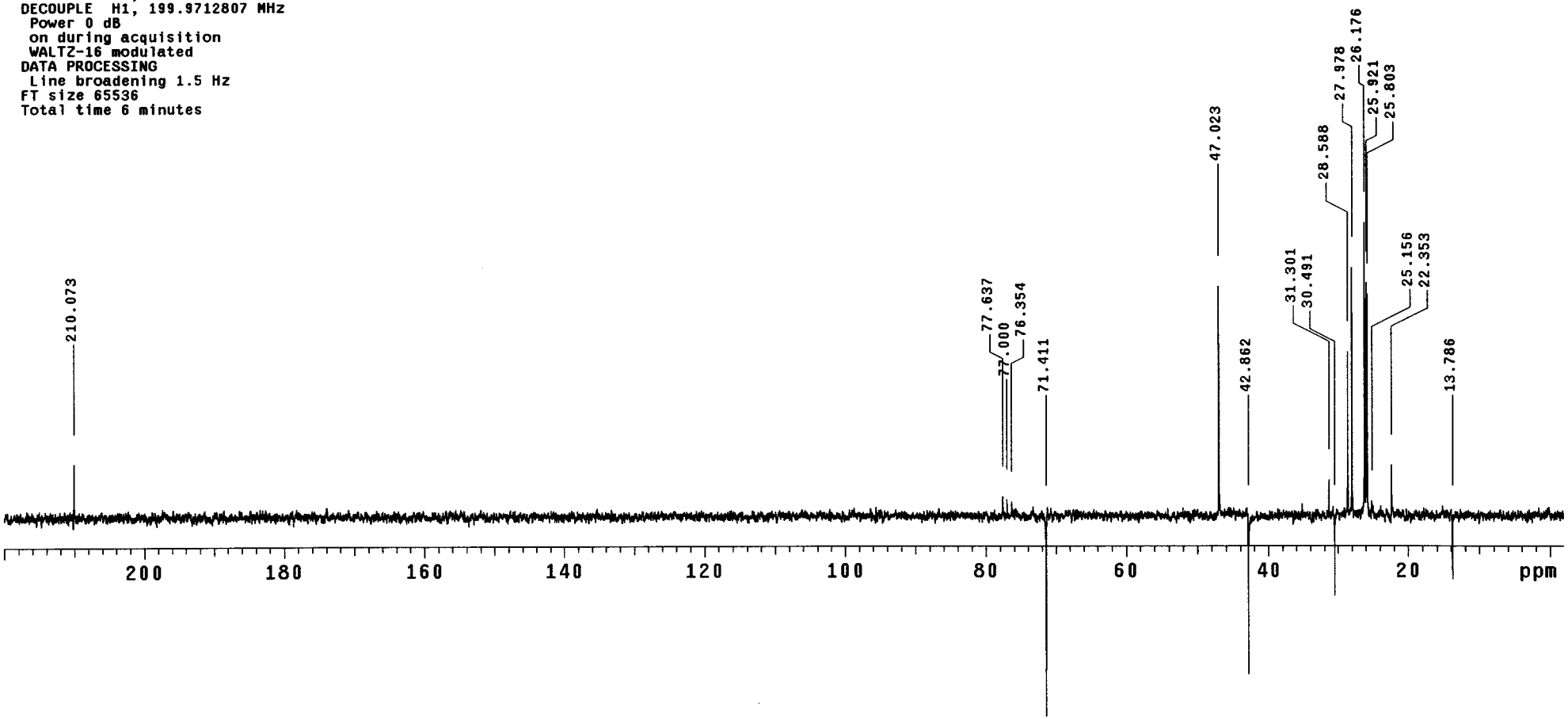


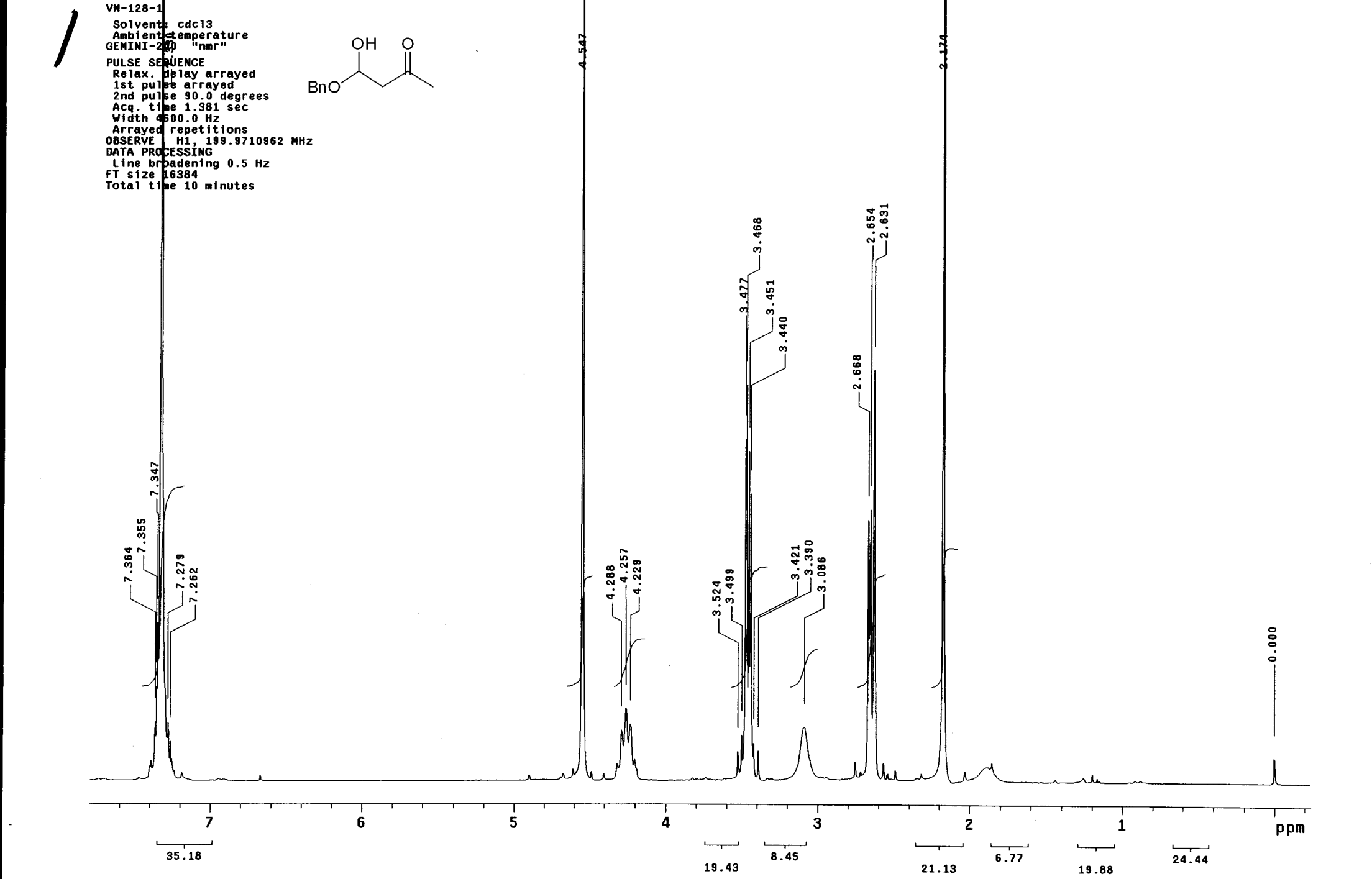
VM-125-2

Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"

PULSE SEQUENCE: apt
Relax. delay arrayed
1st pulse arrayed
2nd pulse 122.7 degrees
Acq. time 2.000 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827849 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
on during acquisition
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 65536
Total time 6 minutes



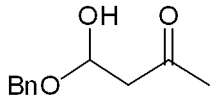



VM-128-1
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 90.0 degrees
Acq. time 1.381 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710962 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 16384
Total time 10 minutes
OH
O
BnO
4.547
2.174
3.468
3.472
3.451
3.440
2.654
2.631
2.668
7.364
7.355
7.347
7.279
7.262
4.288
4.257
4.229
3.524
3.499
3.421
3.390
3.086
0.000
7
6
5
4
3
2
1
ppm
35.18
19.43
8.45
21.13
6.77
19.88
24.44

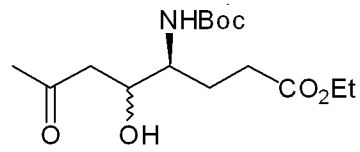
VM-128-1

Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"

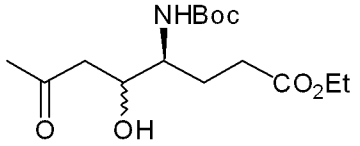
PULSE SEQUENCE: apt
Relax. delay arrayed
1st pulse arrayed
2nd pulse 122.7 degrees
Acq. time 2.000 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827812 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
on during acquisition
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 65536
Total time 26 minutes

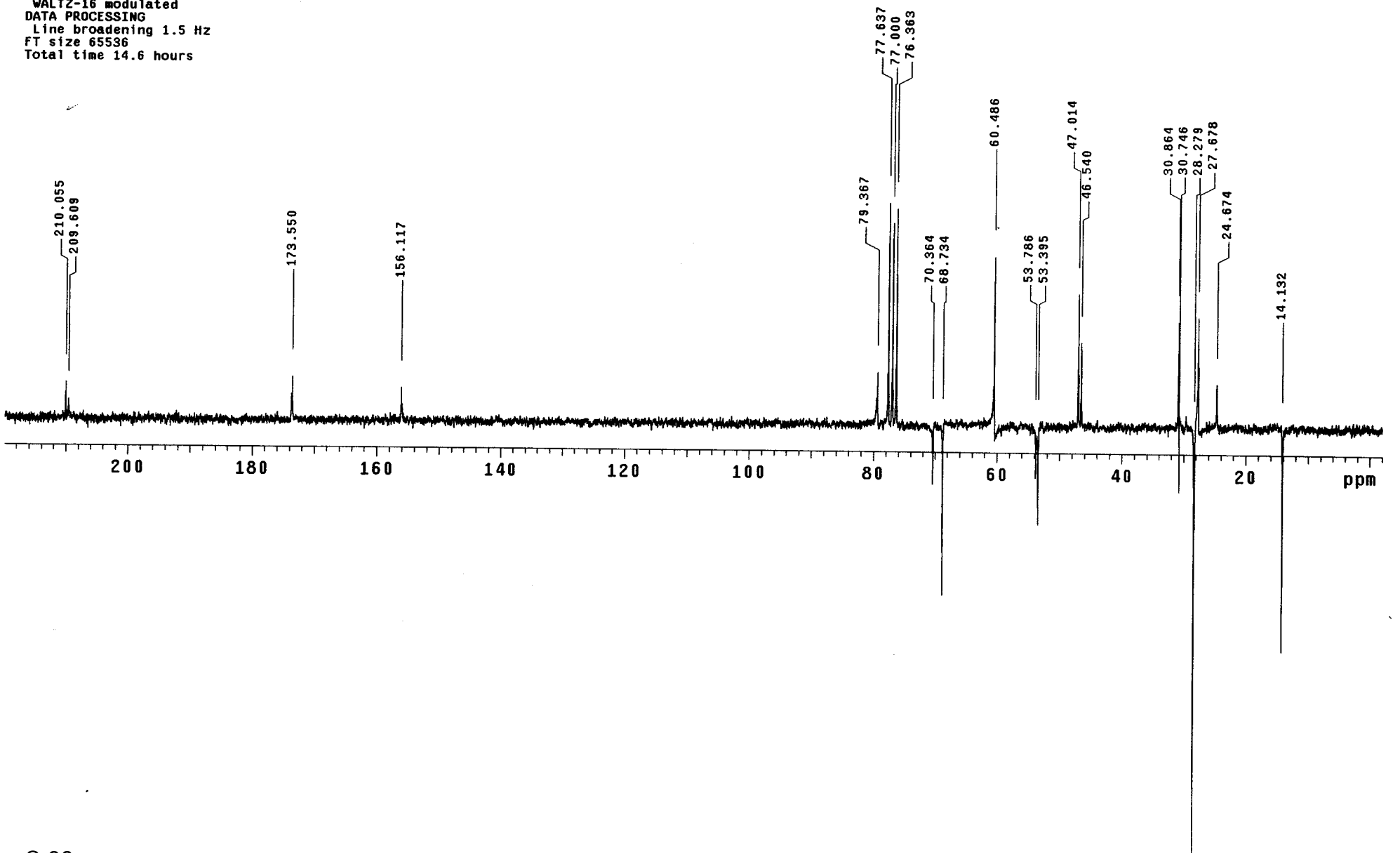


FZ-940
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 90.0 degrees
Acq. time 1.391 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710928 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 16384
Total time 1 minute

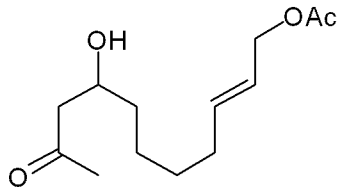


FZ-940
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE: apt
Relax. delay arrayed
1st pulse arrayed
2nd pulse 122.7 degrees
Acq. time 2.000 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827789 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
on during acquisition
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 65536
Total time 14.6 hours

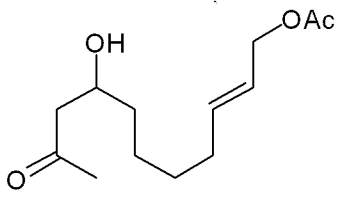


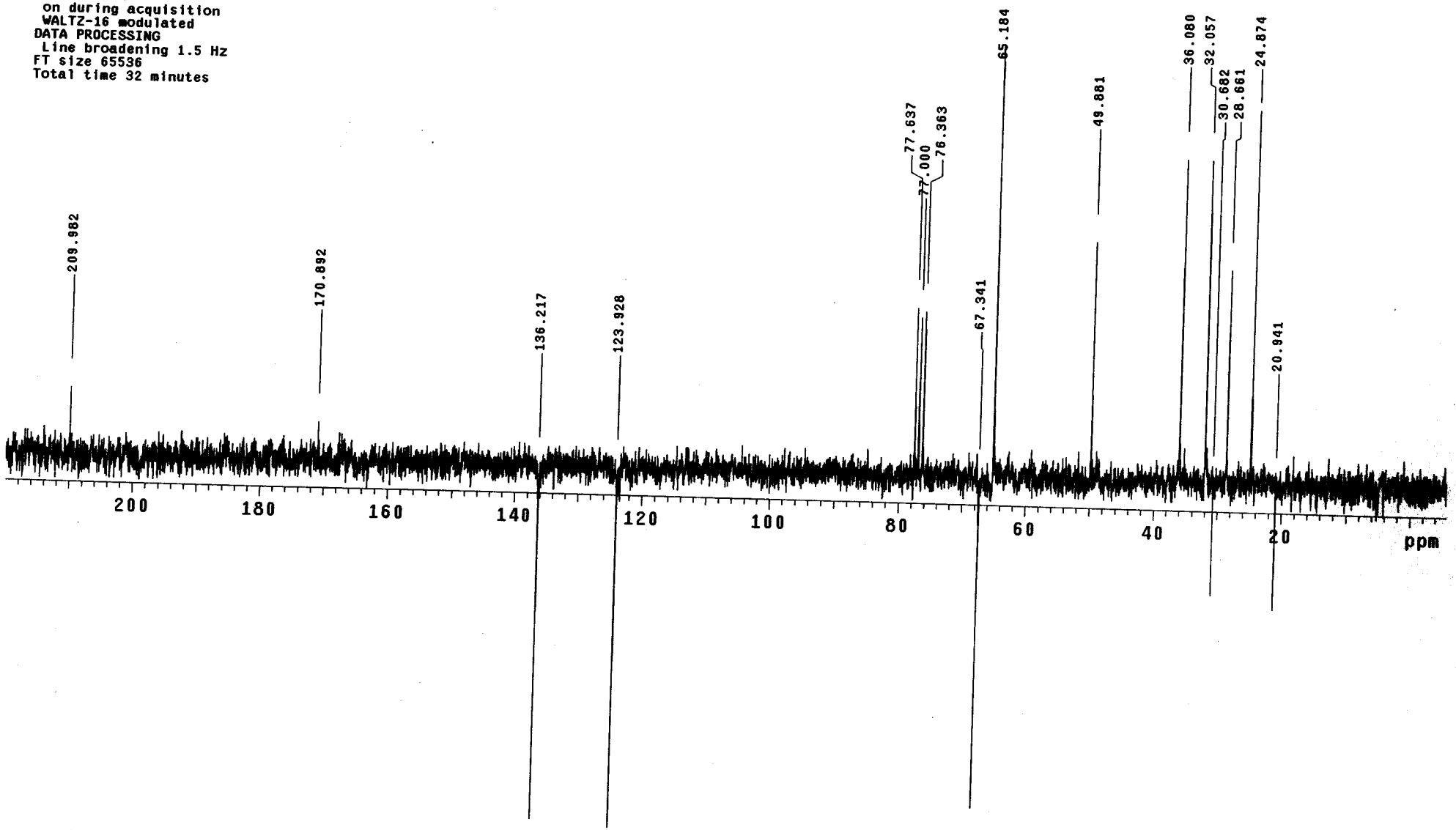


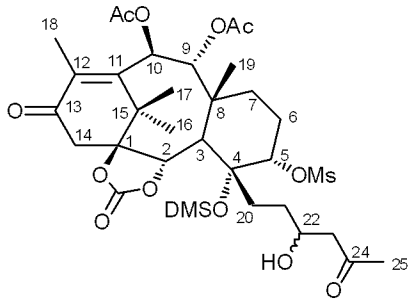
VM-131-1
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 90.0 degrees
Acq. time 1.379 sec
Width 2807.6 Hz
Arrayed repetitions
OBSERVE H1, 199.9710912 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 8192
Total time 4 minutes



Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE: apt
Relax. delay arrayed
1st pulse arrayed
2nd pulse 122.7 degrees
Acq. time 2.000 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827794 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
on during acquisition
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 65536
Total time 32 minutes

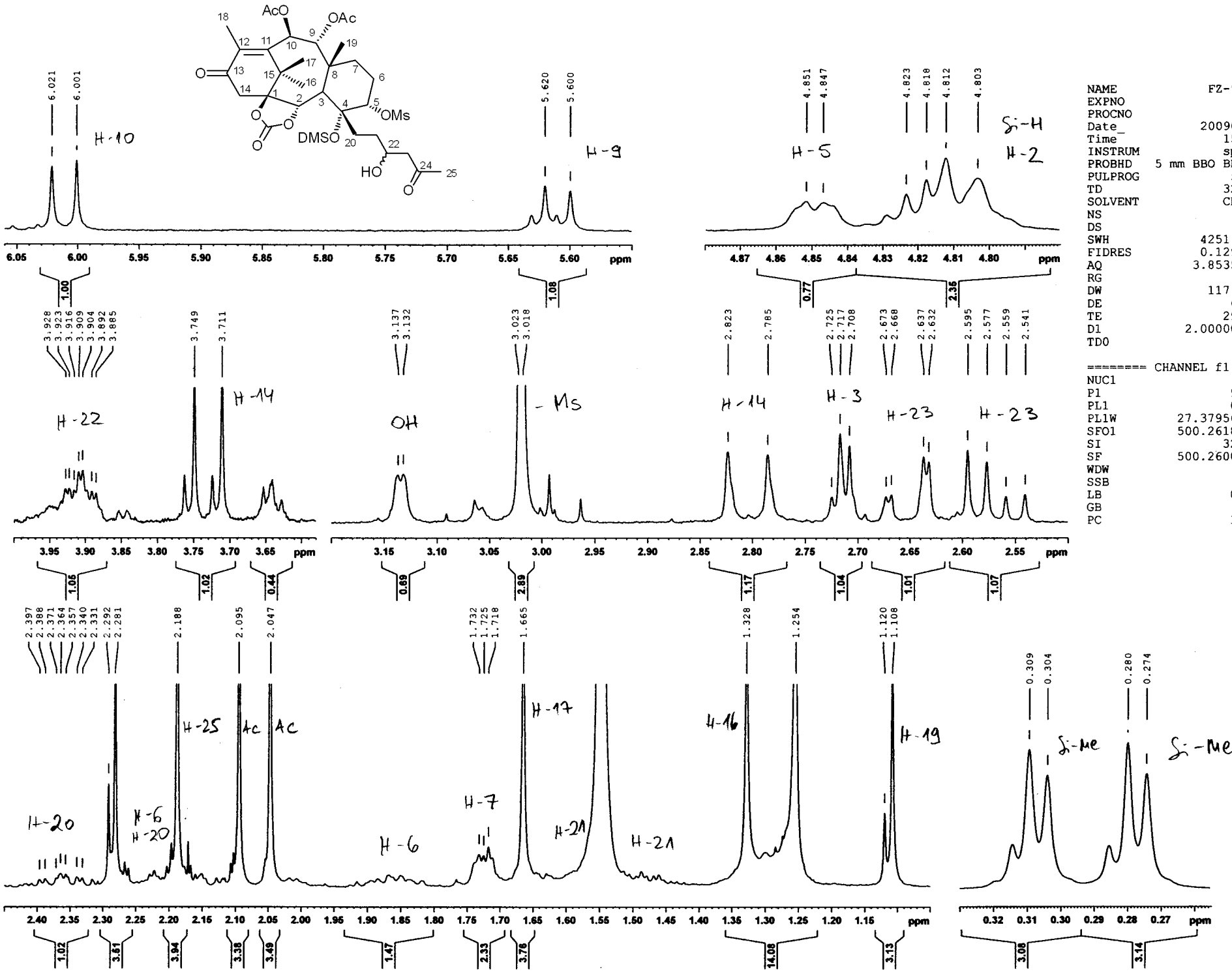




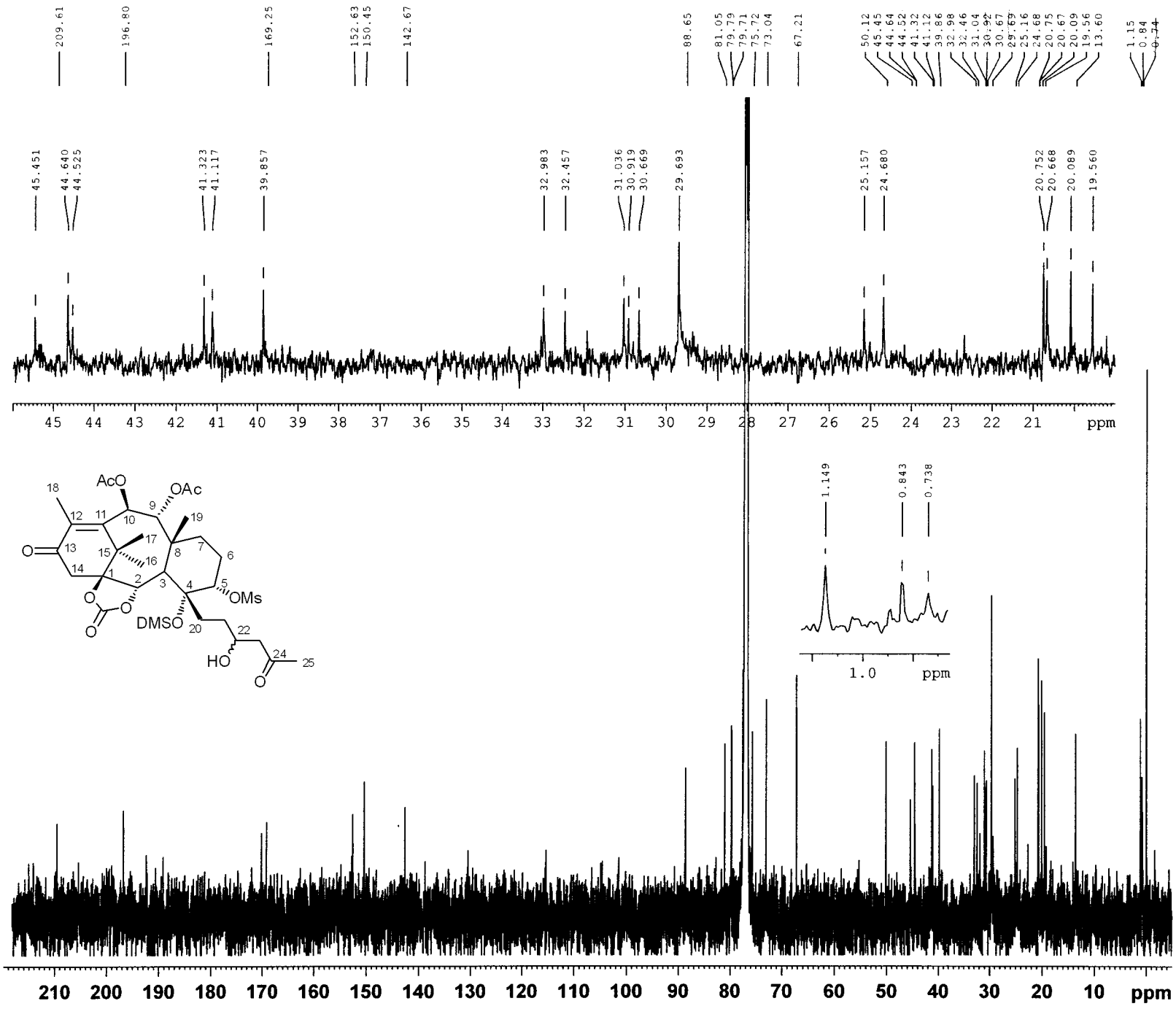


NAME	FZ-956B
EXPNO	1
PROCNO	1
Date_	20090713
Time	15.48
INSTRUM	spect
PROBHD	5 mm BBO BB-1H
PULPROG	zg30
TD	32768
SOLVENT	CDCl3
NS	256
DS	0
SWH	4251.701 Hz
FIDRES	0.129752 Hz
AQ	3.8535669 sec
RG	406
DW	117.600 usec
DE	6.50 usec
TE	298.0 K
D1	2.00000000 sec
TD0	1

======== CHANNEL f1 ========	
NUC1	1H
P1	9.35 usec
PL1	0.00 dB
PL1W	27.37956238 W
SFO1	500.2618925 MHz
SI	32768
SF	500.2600143 MHz
WDW	EM
SSB	0
LB	0.20 Hz
GB	0
PC	1.00

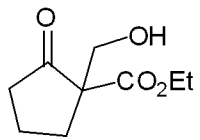


NAME	FZ-956B
EXPNO	1
PROCNO	1
Date_	20090713
Time_	15.48
INSTRUM	spect
PROBHD	5 mm BBO BB-1H
PULPROG	zg30
TD	32768
SOLVENT	CDCl3
NS	256
DS	0
SWH	4251.701 Hz
FIDRES	0.129752 Hz
AQ	3.8535669 sec
RG	406
DW	117.600 usec
DE	6.50 usec
TE	298.0 K
D1	2.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	9.35 usec
PL1	0.00 dB
PL1W	27.37956238 W
SFO1	500.2618925 MHz
SI	32768
SF	500.2600143 MHz
WDW	EM
SSB	0
LB	0.20 Hz
GB	0
PC	1.00

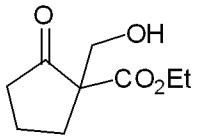


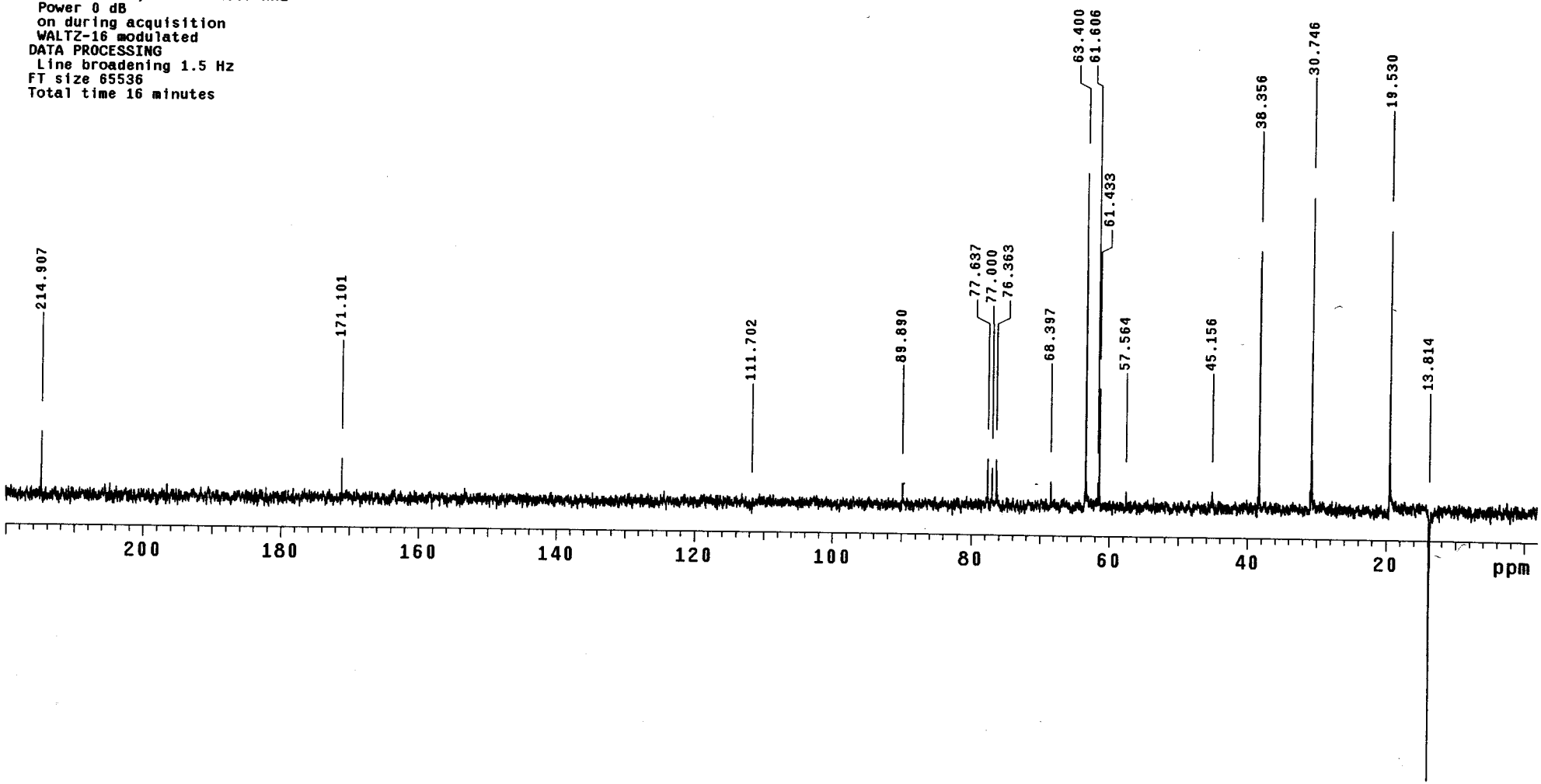
NAME	FZ-956B
EXPNO	6
PROCNO	1
Date_	20090714
Time_	14.49
INSTRUM	spect
PROBHD	5 mm BBO BB-1H
PULPROG	zgpg30
TD	32768
SOLVENT	CDCl3
NS	28101
DS	4
SWH	29761.904 Hz
FIDRES	0.908261 Hz
AQ	0.5505524 sec
RG	812
DW	16.800 usec
DE	6.50 usec
TE	298.0 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
========	CHANNEL f1 ========
NUC1	13C
P1	11.50 usec
PL1	3.00 dB
PL1W	32.22848892 W
SFO1	125.8030560 MHz
========	CHANNEL f2 ========
CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 usec
PL2	1.20 dB
PL12	18.40 dB
PL13	18.40 dB
PL2W	20.76952171 W
PL12W	0.39575511 W
PL13W	0.39575511 W
SFO2	500.2618925 MHz
SI	32768
SF	125.7904787 MHz
WDW	EM
SSB	0
LB	1.50 Hz
GB	0
PC	1.40

VM-90-3
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 90.0 degrees
Acq. time 1.391 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710827 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 16384
Total time 1 minute

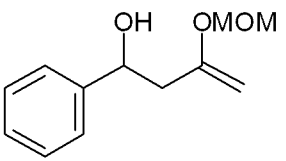


VM-90-3
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE: apt
Relax. delay arrayed
1st pulse arrayed
2nd pulse 122.7 degrees
Acq. time 2.000 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827830 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
on during acquisition
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 65536
Total time 16 minutes





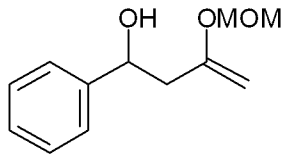
VM-85-1
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 90.0 degrees
Acq. time 1.391 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710990 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 16384
Total time 1 minute

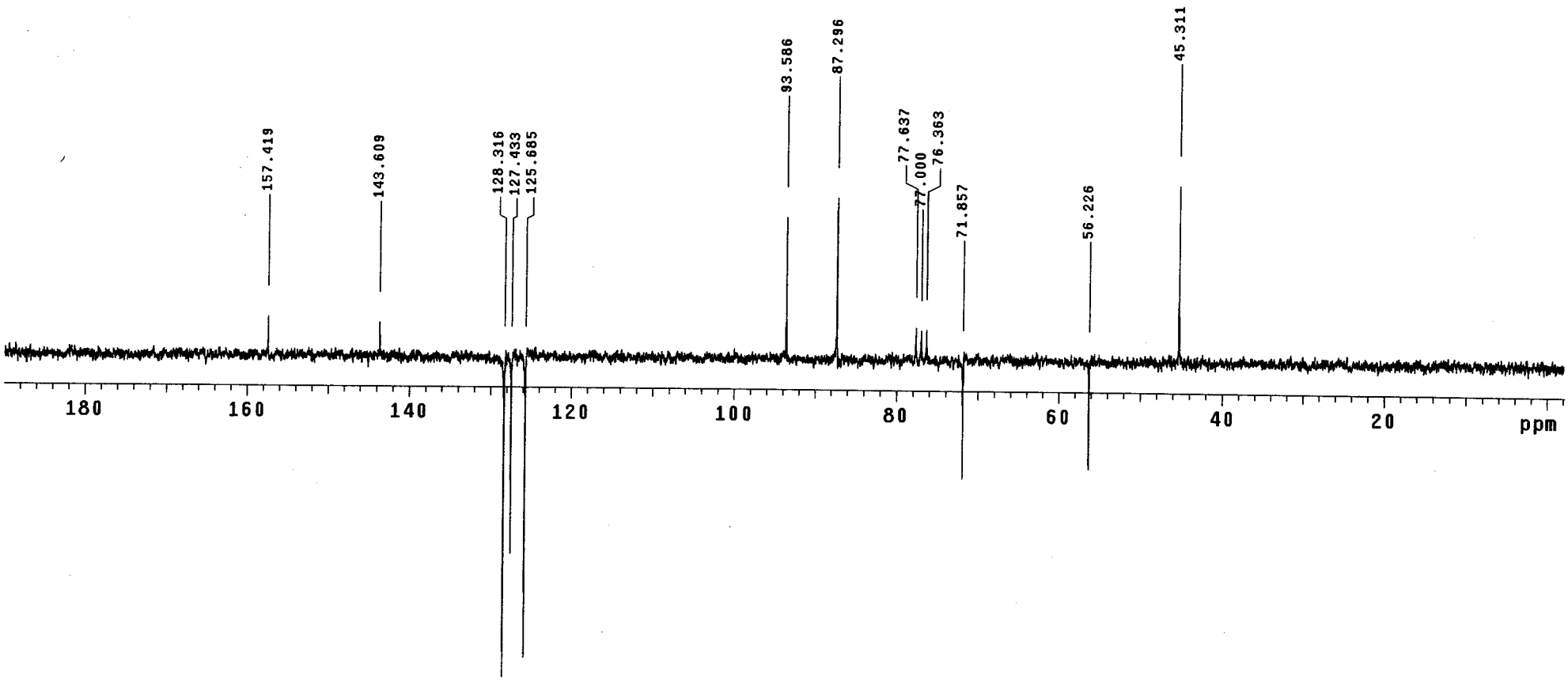


VM-85-1

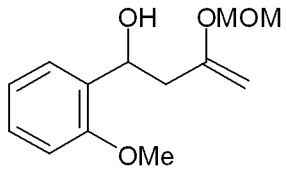
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"

PULSE SEQUENCE: apt
Relax. delay arrayed
1st pulse arrayed
2nd pulse 122.7 degrees
Acq. time 2.000 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827817 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
on during acquisition
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 65536
Total time 12 minutes





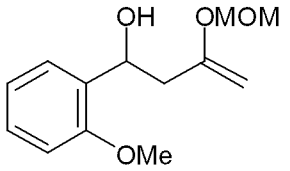
VM-108-2
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 90.0 degrees
Acq. time 1.391 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710985 MHz
DATA PROCESSING
FT size 16384
Total time 1 minute

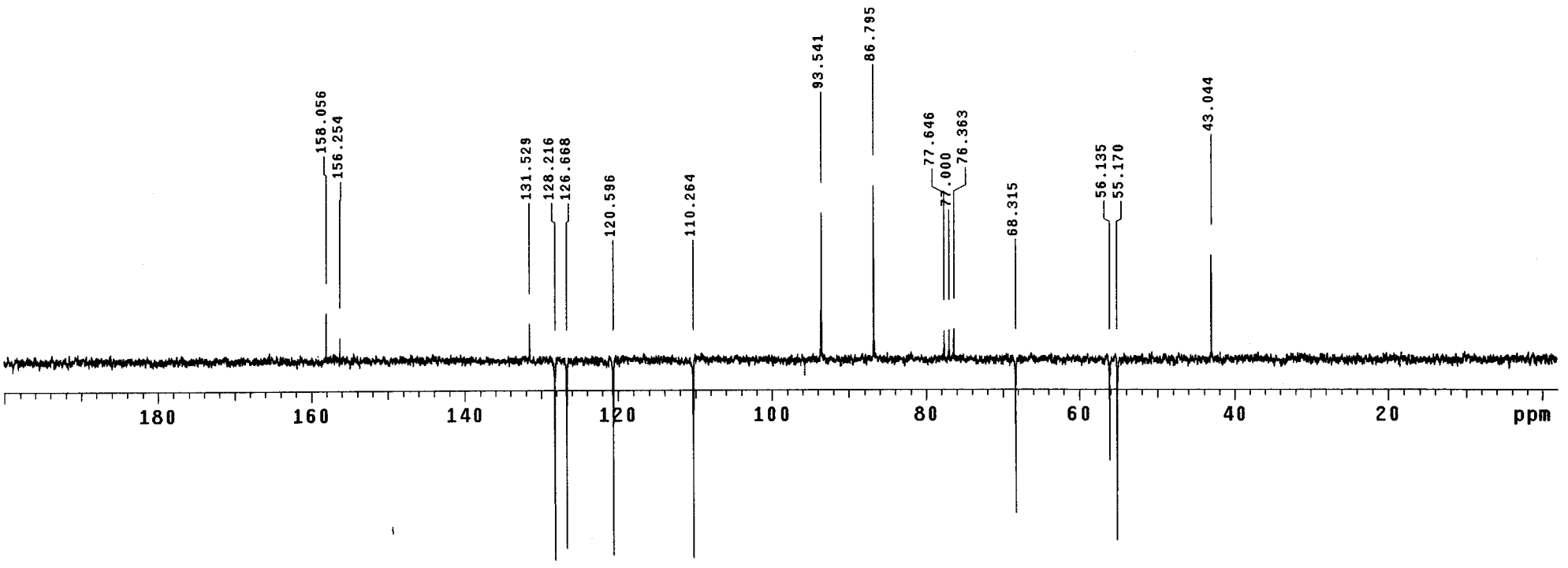


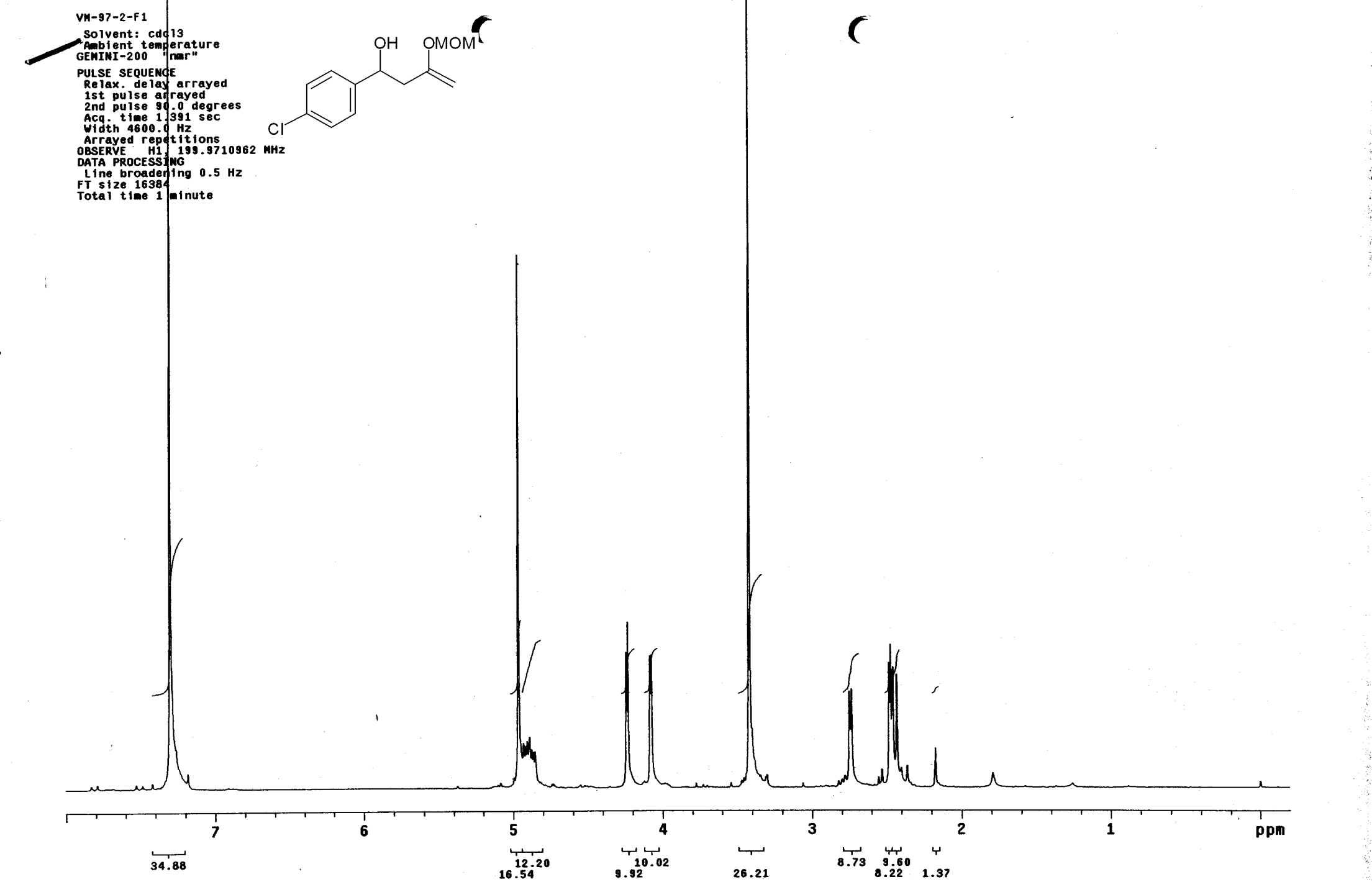
VM-108-2

Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"

PULSE SEQUENCE: apt
Relax. delay arrayed
1st pulse arrayed
2nd pulse 122.7 degrees
Acq. time 2.000 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827821 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
on during acquisition
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 65536
Total time 15 minutes



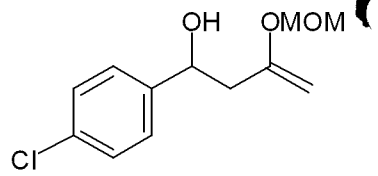


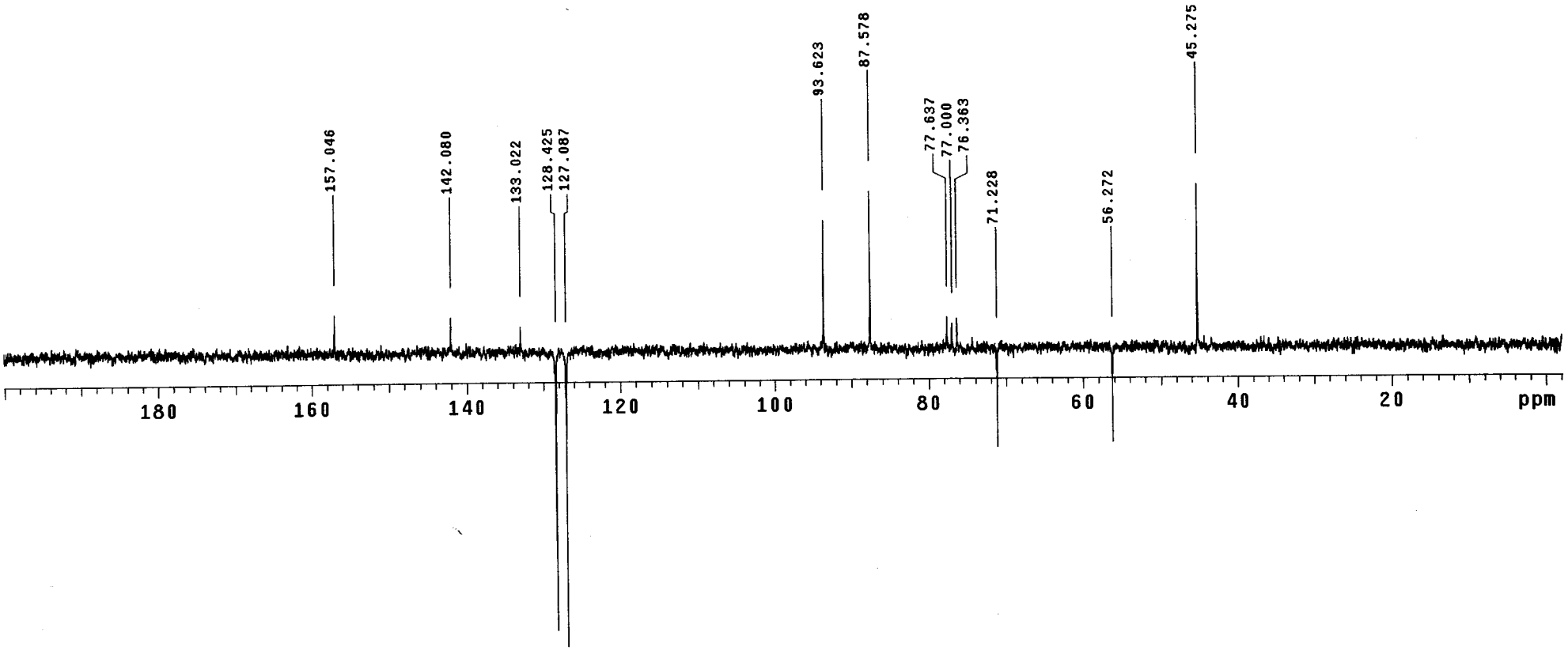

VM-97-2-F1
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 90.0 degrees
Acq. time 1.391 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710962 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 16384
Total time 1 minute
OH
OMOM
Cl
7
6
5
4
3
2
1
ppm
34.88
12.20
16.54
10.02
9.92
26.21
8.73
9.60
8.22
1.37

VM-97-2-F1

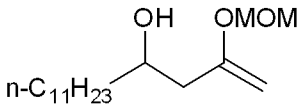
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"

PULSE SEQUENCE: apt
Relax. delay arrayed
1st pulse arrayed
2nd pulse 122.7 degrees
Acq. time 2.000 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827808 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
on during acquisition
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 65536
Total time 13 minutes

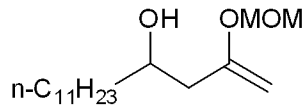


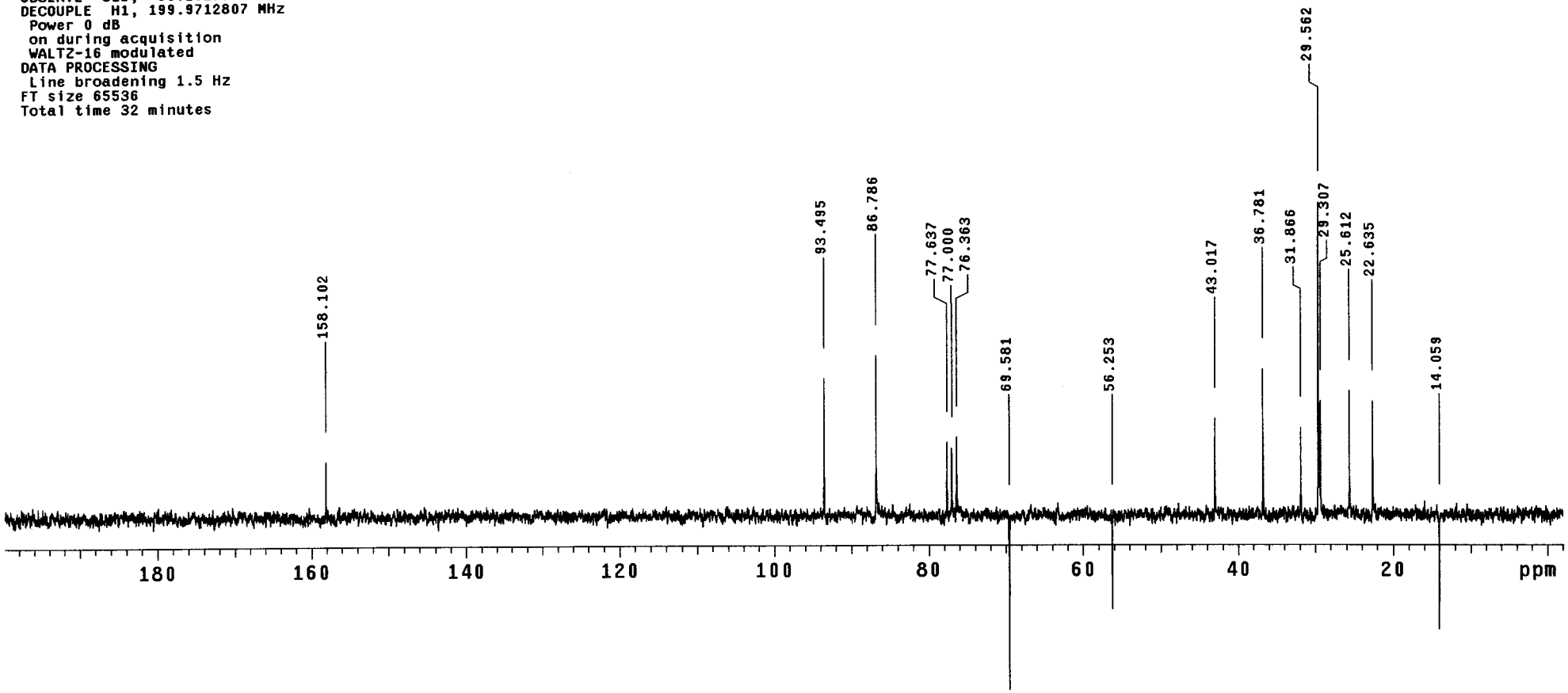


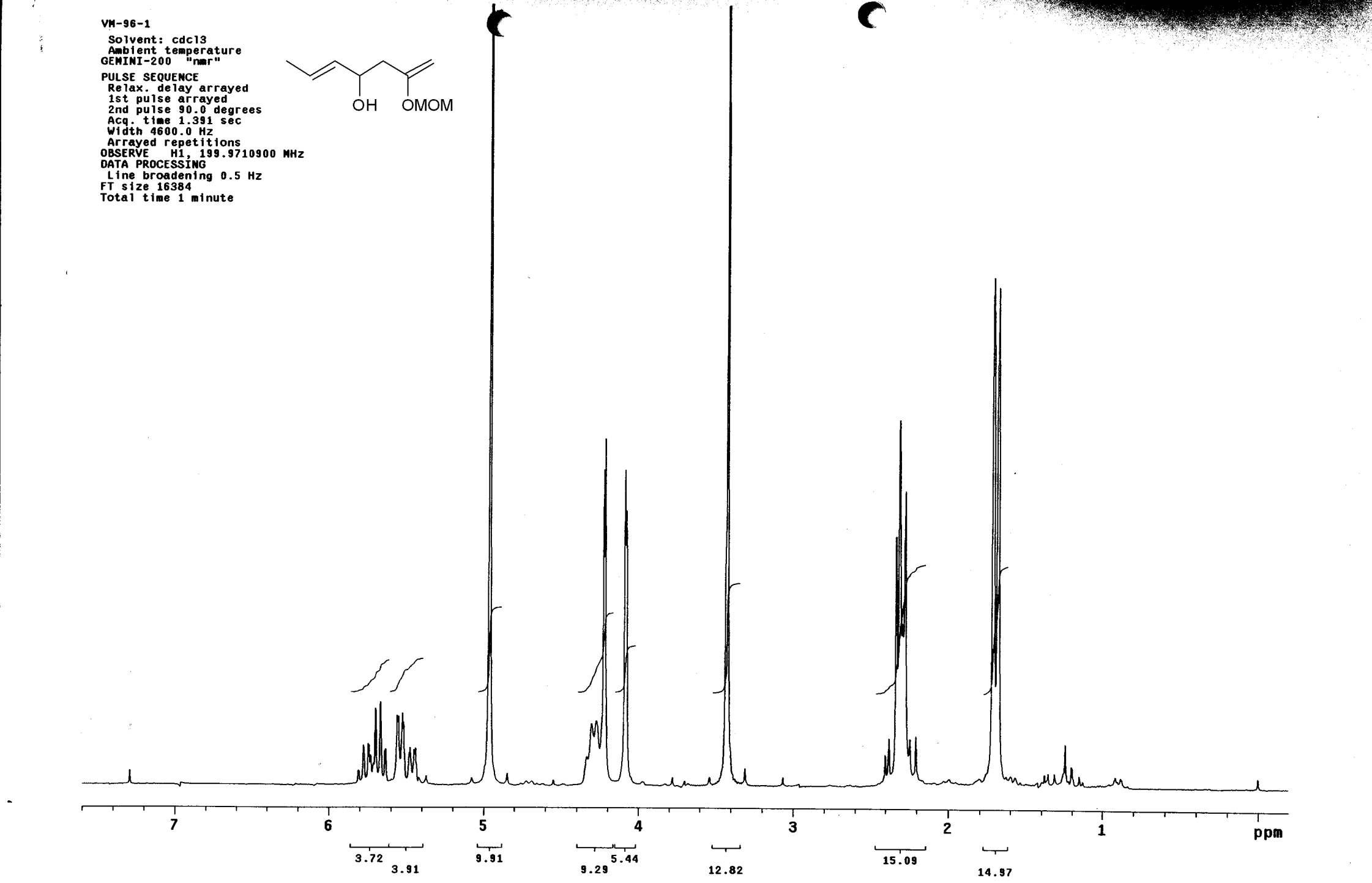
VM-94-2 I
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 90.0 degrees
Acq. time 1.391 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710940 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 16384
Total time 1 minute



VM-94-2 I
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE: apt
Relax. delay arrayed
1st pulse arrayed
2nd pulse 122.7 degrees
Acq. time 2.000 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827785 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
on during acquisition
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 65536
Total time 32 minutes



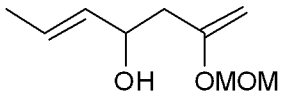


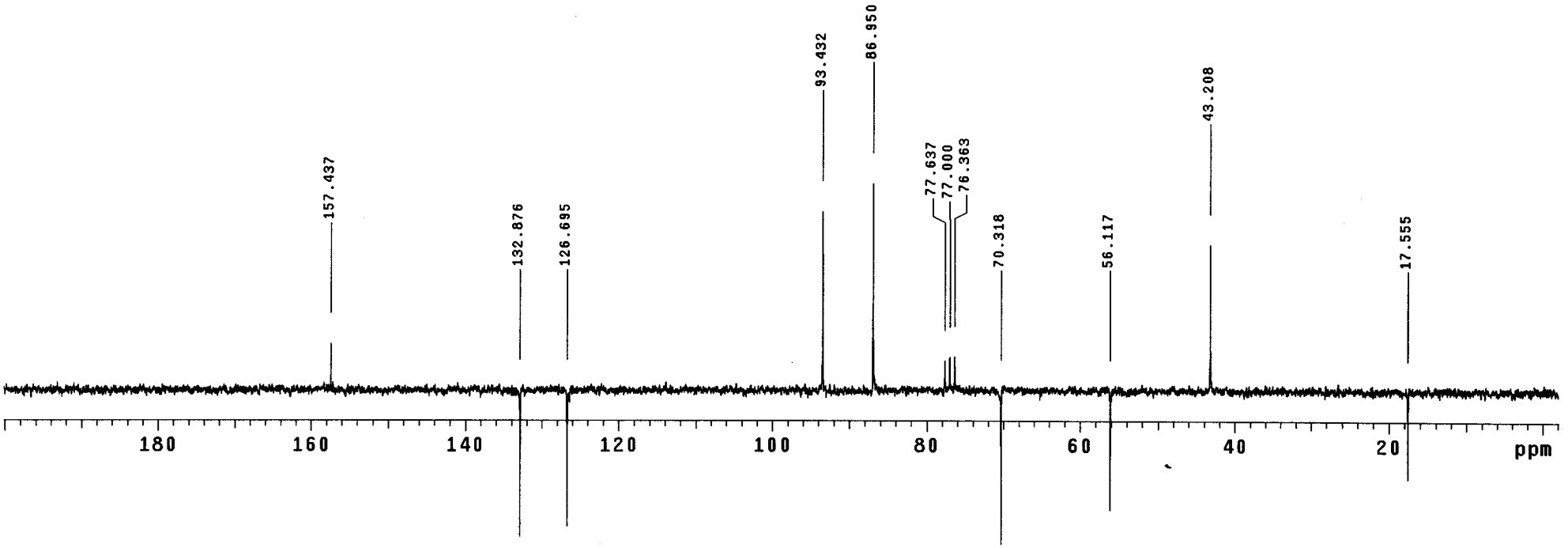

VM-96-1
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 90.0 degrees
Acq. time 1.391 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710900 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 16384
Total time 1 minute
OH
OMOM
7
6
5
4
3
2
1
ppm
3.72
3.91
9.91
9.29
5.44
12.82
15.09
14.97

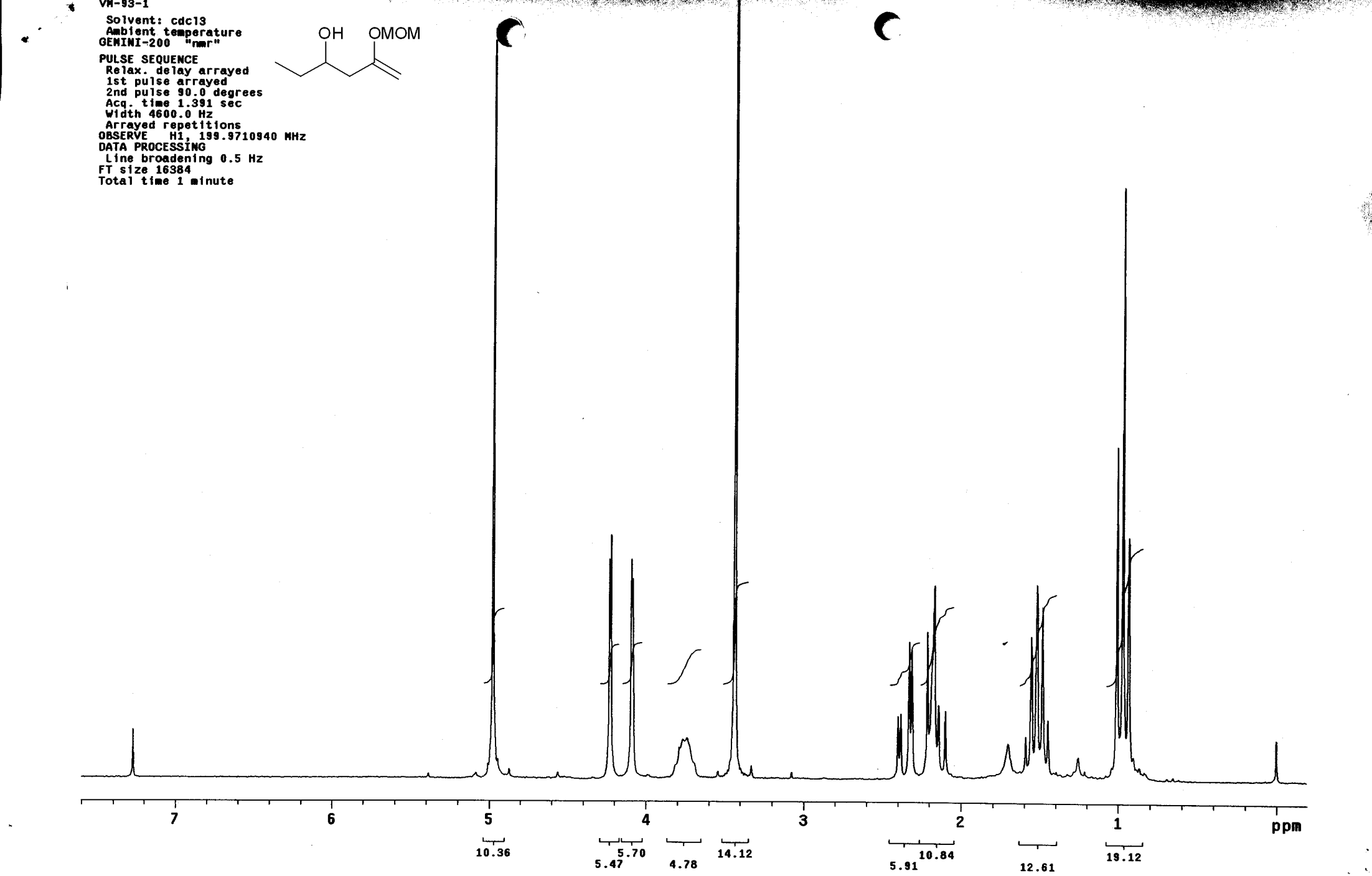
VM-96-1

Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"

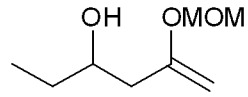
PULSE SEQUENCE: apt
Relax. delay arrayed
1st pulse arrayed
2nd pulse 122.7 degrees
Acq. time 2.000 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827808 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
on during acquisition
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 65536
Total time 20 minutes






VH-93-1
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"
PULSE SEQUENCE
Relax. delay arrayed
1st pulse arrayed
2nd pulse 90.0 degrees
Acq. time 1.391 sec
Width 4600.0 Hz
Arrayed repetitions
OBSERVE H1, 199.9710940 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 16384
Total time 1 minute
OH
OMOM
7
6
5
4
3
2
1
ppm
10.36
5.47
5.70
4.78
14.12
5.91
10.84
12.61
19.12

VM-93-1
Solvent: cdcl3
Ambient temperature
GEMINI-200 "nmr"



PULSE SEQUENCE: apt
Relax. delay arrayed
1st pulse arrayed
2nd pulse 122.7 degrees
Acq. time 2.000 sec
Width 15000.0 Hz
Arrayed repetitions
OBSERVE C13, 50.2827785 MHz
DECOUPLE H1, 199.9712807 MHz
Power 0 dB
on during acquisition
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.5 Hz
FT size 65536
Total time 16 minutes