Supporting Information

Gold-Catalyzed Efficient Preparation of Linear α-Iodoenone from Propargylic acetates

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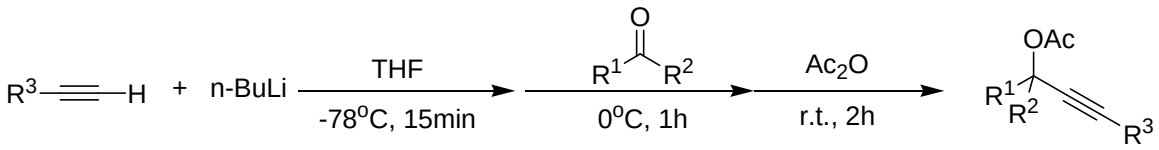
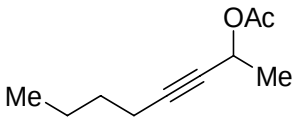
General. Ethyl acetate (ACS grade), hexanes (ACS grade) and diethyl ether (ACS grade) were purchased from Fisher Scientific and used without further purification. Anhydrous Acetone (HPLC grade) was purchased from Acros Organics. Anhydrous tetrahydrofuran in Pure-Pac™ from Aldrich was used directly without further purification. N-bromosuccinimide was purchased from Acros Organics. N-Iodosuccinimide was purchased from Alfa Aesar. Commercially available reagents were used without further purification. Reactions were monitored by thin layer chromatography(TLC) using silicycle precoated silica gel plates. Flash column chromatography was performed over silicycle silica gel (230-400 mesh). ^{1}H NMR and ^{13}C NMR spectra were recorded on a Varian 500 MHz Unity plus spectrometer and a Varian 400 MHz spectrometer using residue solvent peaks as internal standards. Infrared spectra were recorded with a Perkin Elmer FT-IR spectrum 2000 spectrometer and are reported in reciprocal centimeter (cm^{-1}). Mass spectra were recorded with Waters micromass ZQ detector using electron spray method.

General procedure A: Preparation of propargylic acetates

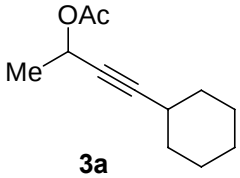


To a solution of alkyne (11 mmol) in anhydrous THF (42 mL) at –78^{o}C under N_2 was added *n*-BuLi (2.5 M solution in hexanes, 4.2 mL, 10.5 mmol). The reaction was stirred at the same temperature for 15 min before the addition of ketone/aldehyde (10 mmol). The resulting mixture was allowed to warm to 0 °C gradually and stirred for an additional hour. Upon the addition of acetate anhydrous (2.4 mL, 25 mmol), the reaction mixture was warmed to room temperature and stirred for 2 h before quenched with aqueous $NaHCO_3$. The mixture was extracted with Et_2O (3 x 30 mL), and the combined organic phases were washed with water and brine, dried with anhydrous $MgSO_4$, and filtered. The filtrate was concentrated, and the residue was purified through silica gel flash column chromatography (hexanes/ethyl acetate = 20/1) to yield the desired acetate.



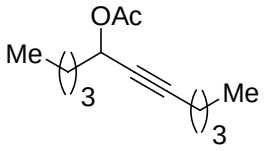
1

Compound **1** was prepared in 86% yield according to the general procedure A. ^{1}H NMR (400MHz, $CDCl_3$) δ 5.44 (qt, 1H, *J* = 6.8, 2.0 Hz), 2.20 (td, 2H, *J* = 7.0, 2.0 Hz), 2.06 (s, 3H), 1.53 - 1.34 (m, 7H), 0.91 (t, 3H, *J* = 7.2 Hz); ^{13}C NMR (100 MHz, $CDCl_3$) δ 170.0, 85.6, 78.6, 60.9, 30.6, 21.9, 21.8, 21.2, 18.4, 13.6; IR (neat): 2989, 2960, 2937, 2874, 2249, 1744, 1467, 1453, 1371; MS (ES^+) Calculated for $[C_{10}H_{16}NaO_2]^+$: 191.1; Found: 191.0.



3a

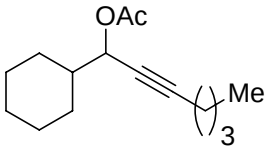
Compound **3a** was prepared in 83% yield according to the general procedure A. ^{1}H NMR (500MHz, $CDCl_3$) δ 5.47 (qt, 1H, *J* = 6.5, 2.0 Hz), 2.40 – 2.36 (m, 1H), 2.07 (s, 3H), 1.79 - 1.67 (m, 4H), 1.50 – 1.39 (m, 7H), 1.32 - 1.27 (m, 2H); ^{13}C NMR (125 MHz, $CDCl_3$) δ 170.0,89.5, 78.5, 60.9, 32.4, 28.9, 25.8, 24.8, 21.9, 21.2; IR (neat):2988, 2933, 2856, 2244, 1741, 1592, 1450, 1317, 1340, 1309, 1224, 1170, 1592, 1450; MS (ES^+) Calculated for $[C_{12}H_{18}NaO_2]^+$: 217.3; Found: 217.2.



3b

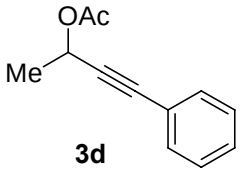
Compound **3b** was prepared in 80% yield according to the general procedure A. ^{1}H NMR (500MHz, $CDCl_3$) δ 5.35 (t, 1H, *J* = 6.5 Hz), 2.21 (td, 2H, *J* = 7.0, 1.7 Hz), 2.07 (s, 3H), 1.77 - 1.69 (m, 2H), 1.49 (Quintet, 2H, *J* = 7.2 Hz), 1.43 - 1.31 (m, 6H), 0.93 – 0.89 (m, 6H),; ^{13}C NMR (125 MHz, $CDCl_3$) δ 170.1, 86.1, 77.6, 64.6, 34.8, 30.6, 27.2, 22.2, 21.9, 21.2, 18.4, 13.9, 13.6; IR (neat):2959, 2935, 2871, 2864, 2242, 1743, 1468,

1433, 1371, 1351, 1234, 1161, 1108, 1019, 959; MS (ES^+) Calculated for $[C_{13}H_{22}NaO_2]^+$: 233.3; Found: 233.3.



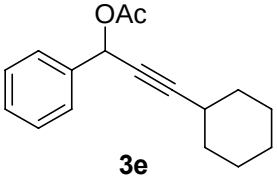
3c

Compound **3c** was prepared in 84% yield according to the general procedure A. ^1H NMR (500MHz, $CDCl_3$) δ 5.20 (d, 1H, *J* = 6.0 Hz), 2.21 (t, 2H, *J* = 7.0 Hz), 2.07 (s, 3H), 1.84 - 1.58 (m, 5H), 1.49 (Quintet, 2H, *J* = 7.2 Hz), 1.39 (Sextet, 2H, *J* = 7.2 Hz), 1.27 – 1.03 (m, 6H), 0.90 (t, 3H, *J* = 7.2 Hz); ^{13}C NMR (125 MHz, $CDCl_3$) δ 170.2, 86.8, 76.4, 68.8, 42.0, 30.6, 28.6, 28.0, 26.2, 25.8, 25.7, 21.9, 21.1, 18.4, 13.6; IR (neat):2960, 2931, 2856, 2239, 1742, 1593, 1452, 1432, 1370, 1231, 1119, 1018, 977; MS (ES^+) Calculated for $[C_{15}H_{24}NaO_2]^+$: 259.4; Found: 259.2.



3d

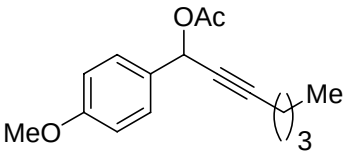
Compound **3d** was prepared in 86% yield according to the general procedure A. ^1H NMR (400 MHz, $CDCl_3$) δ 7.45–7.43 (m, 2H), 7.33–7.27 (m, 3H), 5.67 (q, 1H, *J* = 6.6 Hz), 2.11 (s, 3H), 1.58 (d, 3H, *J* = 6.6 Hz); ^{13}C NMR (100 MHz, $CDCl_3$) δ 169.9, 131.8, 128.6, 128.2, 122.2, 87.4, 84.5, 60.8, 21.5, 21.1; IR (neat): 3058, 2990, 2939, 2247, 1743, 1599, 1491, 1444, 1372; MS (ES^+) Calculated for $[C_{12}H_{12}NaO_2]^+$: 211.1; Found: 210.9.



3e

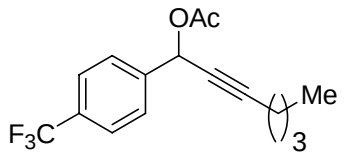
Compound **3e** was prepared in 94% yield according to the general procedure A. ^1H NMR (400 MHz, $CDCl_3$) δ 7.55–7.51 (m, 2H), 7.39–7.31 (m, 3H), 6.49 (d, 1H, *J* = 2.0

Hz), 2.49–2.44 (m, 1H), 2.09 (s, 3H), 1.82–1.79 (m, 2H), 1.73–1.66 (m, 2H), 1.54–1.43 (m, 3H), 1.36–1.26 (m, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 169.9, 137.8, 128.7, 128.5, 127.7, 92.3, 76.6, 66.0, 32.37, 32.35, 29.1, 25.8, 24.8, 21.2; IR (neat): 3090, 3066, 3035, 2932, 2855, 2236, 1742, 1604, 1588, 1495, 1450, 1369; MS (ES^+) Calculated for $[C_{17}H_{20}NaO_2]^+$: 279.1; Found: 279.1.



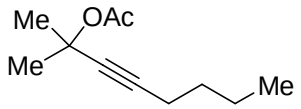
3f

Compound **3f** was prepared in 87% yield according to the general procedure A. ^{1}H NMR (500MHz, $CDCl_3$) δ 7.46 (d, 2H, *J* = 8.5 Hz), 6.89 (d, 2H, *J* = 8.5 Hz), 6.42 (s, 1H), 3.81 (s, 3H), 2.27 (t, 2H, *J* = 7.0 Hz), 2.07 (s, 3H), 1.52 (Quintet, 2H, *J* = 7.2 Hz), 1.41 (Sextet, 2H, *J* = 7.2 Hz), 0.91 (t, 3H, *J* = 7.2 Hz); ^{13}C NMR (125 MHz, $CDCl_3$) δ 170.0, 159.9, 129.9, 129.3, 113.8, 88.1, 76.8, 65.8, 55.3, 30.5, 21.9, 21.2, 18.5, 13.6; IR (neat): 3072, 3037, 3003, 2959, 2935, 2873, 2838, 2292, 2234, 1741, 1611, 1587, 1514, 1465, 1443, 1428, 1369, 1343, 1305, 1279, 1251, 1229, 1175, 1144, 1110, 1034, 1015, 952, 909, 832; MS (ES^+) Calculated for $[C_{16}H_{20}NaO_3]^+$: 283.3; Found: 283.2.



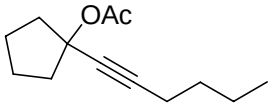
3g

Compound **3g**was prepared in 85% yield according to the general procedure A. ^{1}H NMR (400MHz, $CDCl_3$) δ 7.63 (s, 1H), 6.48 (t, 1H, *J* = 2.0 Hz), 2.27 (td, 2H, *J* = 7.2, 2.4 Hz), 2.11 (s, 3H), 1.52 (Quintet, 2H, *J* = 7,2Hz), 1.40 (Sextet, 2H, *J* = 7.2 Hz), 0.91 (t, 3H, *J* = 7.2 Hz); ^{13}C NMR (100 MHz, $CDCl_3$) δ 169.7, 141.5, 130.8 (q, J_{C-F} = 32 Hz), 127.9, 125,6 (q, J_{C-F} = 3.7 Hz), 123.9 (q, J_{C-F} = 270.0 Hz), 89.2, 76.0, 65.3, 30.4, 21.9, 21.0, 18.5, 13.5; IR (neat):3067, 2962, 2935, 2876, 2295, 2236, 1928, 1746, 1622, 1590, 1468, 1422, 1371, 1327, 1227, 1168, 1129, 1109, 1068, 1018, 959, 922, 850, 836; MS (ES^+) Calculated for $[C_{16}H_{17}NaO_2]^+$: 321.3; Found: 321.2.



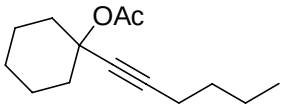
5a

Compound **5a** was prepared in 74% yield according to the general procedure C. ^{1}H NMR (500MHz, $CDCl_3$) δ 2.20 (t, 2H, *J* = 7.0), 2.01 (s, 3H), 1.64 (s, 6H), 1.48 (p, 2H, *J* = 7.6 Hz), 1.39 (sextet, 2H, *J* = 7.6 Hz), 0.90 (t, 3H, *J* = 7.6); ^{13}C NMR (125 MHz, $CDCl_3$) δ 169.4, 84.6, 81.3, 72.6, 30.6, 29.3, 22.1, 21.9, 18.4, 13.6; IR (neat): 2987, 2960, 2936, 2875, 2245, 1747, 1586, 1468, 1434, 1368, 1329, 1266, 1245, 1196, 1016, 953, 822; MS (ES^+) Calculated for $[C_{11}H_{18}NaO_2]^+$: 205.1; Found: 205.1.



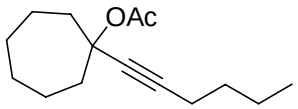
5b

Compound **5b** was prepared in 70% yield according to the general procedure C. ^{1}H NMR (400 MHz, $CDCl_3$) δ 2.22–2.15 (m, 4H), 2.12–2.04 (m, 2H), 2.02 (s, 3H), 1.74–1.70 (m, 4H), 1.50–1.44 (m, 2H), 1.43–1.35 (m, 2H), 0.90 (t, 3H, *J* = 7.6 Hz); ^{13}C NMR (100 MHz, $CDCl_3$) δ 169.7, 85.3, 81.0, 80.5, 40.5, 30.7, 23.2, 21.9, 18.5, 13.6; IR (neat): 2960, 2933, 2875, 2246, 1746, 1593, 1453, 1435, 1367, 1334, 1241, 1124, 1016, 970; MS (ES^+) Calculated for $[C_{13}H_{20}NaO_2]^+$: 231.1; Found: 231.1.



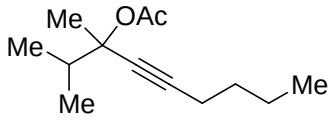
5c

Compound **5c** was prepared in 84% yield according to the general procedure C. ^{1}H NMR (400 MHz, $CDCl_3$) δ 2.254 (t, 2H, *J* = 7.2 Hz), 2.11–2.06 (m, 2H), 2.03 (s, 3H), 1.84–1.77 (m, 2H), 1.63–1.29 (m, 10H), 0.91 (t, 3H, *J* = 7.2 Hz); ^{13}C NMR (100 MHz, $CDCl_3$) δ 169.3, 86.8, 80.0, 76.1, 37.4, 30.8, 25.3, 22.7, 22.1, 21.9, 18.5, 13.6; IR (neat): 2936, 2861, 2244, 1746, 1600, 1447, 1431, 1367, 1301, 1264, 1230, 1184, 1131, 1034, 1020, 965; MS (ES^+) Calculated for $[C_{14}H_{22}NaO_2]^+$: 245.2; Found: 245.1.



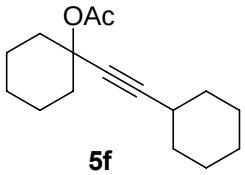
5d

Compound **5d** was prepared in 70% yield according to the general procedure C. ^{1}H NMR (400 MHz, $CDCl_3$) δ 2.24–2.17 (m, 4H), 2.06–2.04 (m, 2H), 2.01 (s, 3H), 1.57–1.37 (m, 12H), 0.90 (t, 3H, *J* = 7.2 Hz); ^{13}C NMR (100 MHz, $CDCl_3$) δ 169.4, 86.0, 81, 2, 79.5, 40.5, 30.7, 28.2, 22.2, 21.9, 18.5, 13.6; IR (neat): 2936, 2861, 2244, 1746, 1600, 1447, 1431, 1367, 1301, 1264, 1230, 1184, 1131, 1034, 1020, 965; MS (ES^+) Calculated for $[C_{15}H_{24}NaO_2]^+$: 257.2; Found: 259.2.



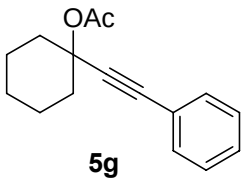
5e

Compound **5e** was prepared in 80% yield according to the general procedure C. ^{1}H NMR (400 MHz, $CDCl_3$) δ 2.23 (t, 2H, *J* = 7.2 Hz), 2.16 (heptet, 1H, *J* = 6.6 Hz), 2.01 (s, 3H), 1.61 (s, 3H), 1.53–1.43 (m, 2H), 1.42–1.37 (m, 2H), 1.01 (d, 3H, *J* = 6.6 Hz), 0.97 (d, 3H, *J* = 6.6 Hz), 0.90 (t, 3H, *J* = 7.2 Hz); ^{13}C NMR (100 MHz, $CDCl_3$) δ 169.4, 86.2, 79.6, 79.2, 37.4, 30.8, 23.5, 22.1, 21.9, 18.4, 17.5, 17.2, 13.6; IR (neat): 2965, 2936, 2876, 2244, 1746, 1559, 1458, 1436, 1371, 1336, 1243, 1129, 1060, 1014, 942; MS (ES^+) Calculated for $[C_{13}H_{22}NaO_2]^+$: 233.2; Found: 233.2.



5f

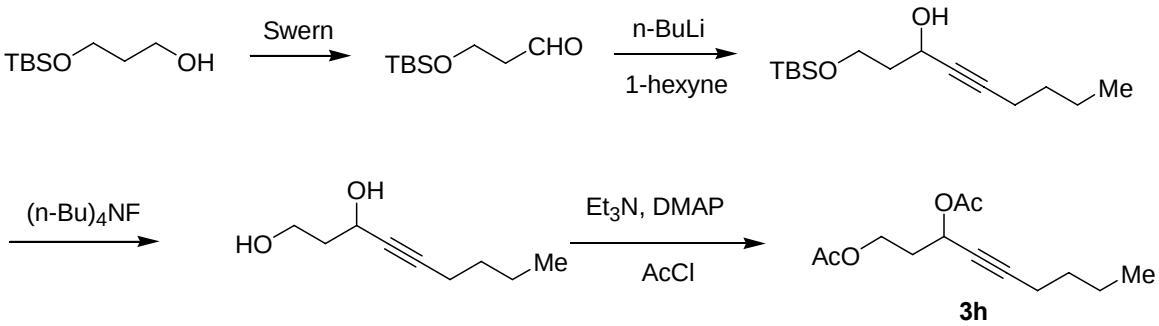
Compound **5f** was prepared in 91% yield according to the general procedure A. ^{1}H NMR (400 MHz, $CDCl_3$) δ 2.47–2.43 (m, 1H), 2.13–2.08 (m, 2H), 2.02 (s, 3H), 1.82–1.24 (m, 18H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 169.2, 91.0, 80.2, 76.2, 37.5, 32.6, 28.9, 26.0, 25.3, 24.6, 22.9, 22.2; IR (neat): 2933, 2857, 2663, 2237, 1746, 1615, 1447, 1367, 1229, 1184, 1022; MS (ES^+) Calculated for $[C_{16}H_{24}NaO_2]^+$: 271.2; Found: 271.1.



5g

Compound **5g** was prepared in 88% yield according to the general procedure A. ^{1}H NMR (500 MHz, $CDCl_3$) δ 7.46 -7.44 (m, 2H), 7.29 -7.28 (m, 3H), 2.24 -2.19 (m, 2H), 2.07 (s, 3H), 1.93 -1.88 (m, 2H), 1.70 -1.65 (m, 4H), 1.59 – 1.53 (m, 1H), 1.39 -1.33 (m, 1H); ^{13}C NMR (125 MHz, $CDCl_3$) δ 169.2, 131.8, 128.2, 128.1, 122.8, 89.1, 86.2, 75.9, 37.1, 25.2, 22.7, 22.0; IR (neat):3082, 3057, 3035, 3023, 2937, 2861, 2667, 2229, 2203, 1743, 1675, 1599, 1573, 1491, 1444, 1367, 1346,1312, 1264, 1229, 1163, 1138, 1071, 1041, 1022, 959; MS (ES^+) Calculated for $[C_{16}H_{18}NaO_2]^+$: 265.3; Found: 265.2.

Preparation propargylic acetate 3h



3h

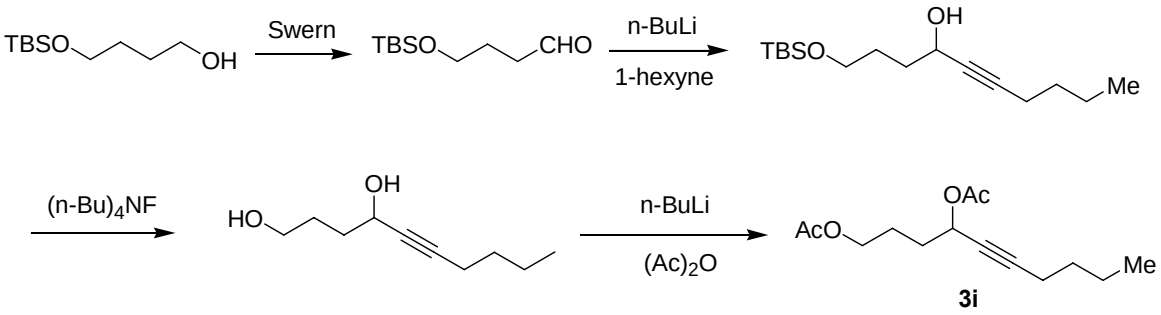
A solution oxalyl chloride (1.9 g, 10 mmol) in DCM (110 mL) was cooled in a dry ice-acetone bath under nitrogen. To the solution was added dropwise anhydrous DMSO (1.6 mL, 22 mmol). After the addition, the reaction was kept at -78^{o}C for half an hour. A solution of mono-TBS protected propane-1,3-diol (1.9 g, 10 mmol) in DCM (20 mL) was added dropwise, and the reaction mixture was stirred at -78^{o}C for 1 hour. The reaction was quenched by addition of Et_3N (6.9 mL, 50 mmol). The reaction was allowed to warm to room temperature. The organic layer was successively washed with saturated NH_4Cl (100 mL) and brine (100 mL). the resulting organic layer was dried upon anhydrous $MgSO_4$, filtered, concentrated in vacuo to give the crude aldehyde (2.3 g) which could be used in the next step without further purification.

A solution of 1-hexyne (1.30 g, 15.8 mmol) in THF (50 ml) was cooled to -78^{o}C in a dry ice-acetone bath under nitrogen, and n-BuLi (1.6M in Hexane, 9.17 mL, 14.64

mmol) was added dropwise in 15 mins. After the addition, a solution of the crude aldehyde (2.3 g, 12.2 mmol) in THF (10 mL) was added dropwise, the resulting reaction mixture was allowed to warm to room temperature gradually. The reaction was quenched by addition of saturated NH_4Cl (30 mL). The aqueous layer was extracted with Et_2O (3 x 50 mL). The combined organic layer was washed with brine (100 mL), dried with $MgSO_4$, filtered, and concentrated to give an oil. The desired alcohol was purified by bulb-to-bulb distillation as a clear liquid (1.4 g, 50% yield two steps)

To a solution of the above alcohol (270 mg, 1 mmol) in THF (5 mL) was added TBAF (1M in THF, 1 mL). The resulting mixture was stirred at room temperature for 2 hours. The reaction was cooled down in an ice-water bath, and Et_3N (0.3 mL, 3 mmol) and DMAP (cat) were added followed by dropwise addition of CH_3COCl (0.18 mL, 2.5 mmol). The resulting mixture was allowed to rise to room temperature and stir for 4 hours. The reaction was quenched by addition of water (20 mL). The organic layer was extracted with Et_2O (3 x 15 mL). The combined organic layer was washed with brine (50 mL), dried upon $MgSO_4$, filtered, and concentrated to give an oily residue, which was purified by flash-column to give diacetate **3h** (160 mg, 67% yield). ^{1}H NMR (400 MHz, $CDCl_3$) δ 5.47 (tt, 1H, *J* = 6.8, 2.0 Hz), 4.25–4.15 (m, 2H), 2.20 (td, 2H, *J* = 6.8, 2.0 Hz), 2.13–2.03 (m, 8H), 1.51–1.45 (m, 2H), 1.41–1.36 (m, 2H), 0.90 (t, 3H, *J* = 6.8 Hz); ^{13}C NMR (125 MHz, $CDCl_3$) δ 170.9, 170.0, 87.0, 76.5, 61.5, 60.4, 34.1, 30.4, 21.9, 21.0, 20.9, 18.3, 13.5; IR (neat): 2960, 2936, 2874, 2247, 1744, 1592, 1459, 1432, 1370, 1232, 1159, 1045, 960; MS (ES$^+$) Calculated for $[C_{13}H_{20}NaO_4]^+$: 263.1; Found: 263.2.

Preparation propargylic acetate 3i



A solution oxalyl chloride (0.4 g, 2 mmol) in DCM (20 mL) was cooled to -78^{o}C in a dry ice-acetone bath under nitrogen. To the solution was added dropwise anhydrous DMSO (0.32 mL, 4.4 mmol). After addition, the reaction was kept at -78^{o}C for half an

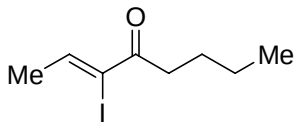
hour. A solution of mono-TBS protected butane-1,4-diol (0.38 g, 2 mmol) in DCM (4 mL) was added dropwise, and the resulting mixture was stirred at -78^{o}C for 1 hour. The reaction was quenched by the addition of Et_3N (1.38 mL, 10 mmol). The reaction was allowed to warm to room temperature. The organic layer was successively washed with saturated NH_4Cl (20 mL) and brine (20 mL). The resulting organic layer was dried with anhydrous $MgSO_4$, filtered, and concentrated in *vacuo* to give the crude aldehyde, which was used in the next step without further purification.

A solution of 1-hexyne (0.13 g, 0.16 mmol) in THF (10 ml) was cooled to -78^{o}C in a dry ice-acetone bath under nitrogen, and n-BuLi (1.6M in Hexane, 1 mL, 1.6 mmol) was added dropwise. The resulting mixture was stirred for 15 mins, and a solution of aldehyde (0.23 g, 1.2 mmol) in THF (10 mL) was added dropwise. Upon the addition, the reaction mixture was allowed to warm to room temperature and stired for 15 min. The reaction was quenched by the addition of saturated NH_4Cl (10 mL). The aqueous layer was extracted with Et_2O (3 x 20 mL). The combined organic layer was washed with brine (50 mL), dried upon $MgSO_4$, filtered, and concentrated to give an oily residue, which was purified by flash-column to give the desired alcohol (0.2 g, 35% yield, two steps)

To a solution of the alcohol (90 mg, 0.3 mmol) in THF (5 mL) was added the TBAF (1M in THF, 0.3 mL, 0.3 mmol). The resulting mixture was stirred at room temperature for 2 hours. The reaction cooled down to -78^{o}C in a dry ice-acetone bath under nitrogen, and n-BuLi (1.6M in Hexane, 0.37 mL, 0.6 mmol) was added dropwise. Upon the addition, the reaction mixture was stirred for 15 min, and a solution of acetic anhydrdie (0.12 g, 0.6 mmol) in THF (2 mL) was added dropwise. The reaction was allowed to warm to room temperature and kept stirring for half an hour. The reaction was quenched by addition of saturated NH_4Cl (10 mL). The aqueous layer was extracted with Et_2O (3 x 10 mL). The combined organic layer was washed with brine (50 mL), dried upon $MgSO_4$, filtered, and concentrated to give an oily residue, which was purified by flash-column to give diacetate **3i** (60 mg, 83% yield two steps). ^{1}H NMR (400 MHz, $CDCl_3$) δ 5.40–5.38 (m, 1H), 4.10 (t, 2H, *J* = 4.8 Hz), 2.21 (t, 2H, *J* = 6.8 Hz), 2.08 (s, 3H), 2.06 (s, 3H), 1.83–1.74 (m, 4H), 1.48 (sextet, 2H, *J* = 8 Hz), 1.39 (sextet, 2H, *J* = 8 Hz), 0.91 (t, 3H, *J* = 7.6 Hz); ^{13}C NMR (100 MHz, $CDCl_3$) δ 171.1, 170.0, 86.7, 64.0, 63.9, 31.7, 30.5, 24.3, 21.9, 21.1, 21.0, 18.4, 13.6; IR (neat): 3308, 2960, 2935, 2337, 1741, 1592, 1430, 1370, 1232, 1023; MS (ES^{+}) Calculated for $[C_{14}H_{22}NaO_4]^{+}$: 277.1; Found: 277.2.

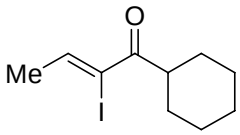
General procedure B: Preparation of *α*-iodoenone 4 and 6

To a solution of propargylic acetate **3** or **5** (0.2 mmol) in anhydrous acetone (4 mL) cooled in ice-water bath were added H_2O (0.005ml, 1.39 eq) and $Au(PPh_3)NTf_2$ (0.05 M in acetone, 0.08 mL). The solution was treated with NIS (0.24 mmol, 1.2 eq). The reaction was stirred for two hours before quenched with NEt_3 (1 drop) and aqueous $Na_2S_2O_3$ (5 mL). The mixture was extracted with Et_2O (3 x 8 mL). The combined organic phases were washed with H_2O (10 mL) and brine (10 mL), dried with anhydrous $MgSO_4$, and filtered. The filtrate was concentrated, and the residue was purified through silica gel flash column chromatography (hexanes/ethyl acetate = 50/1) to yield the desired *α*-iodo-*α, β*-unsaturated ketones **4** or **6**



2

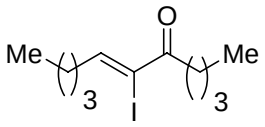
Compound **2** was prepared as a mixture of geometrical isomers (*Z/E* = 45/1) in 89% yield according to the general procedure B. ^{1}H NMR (400 MHz, $CDCl_3$) (major isomer) δ 7.11 (q, 1H, *J* = 6.8 Hz), 2.81 (t, 2H, *J* = 7.6 Hz), 2.07 (d, 3H, *J* = 6.8 Hz), 1.63 (Quintet, 2H, *J* = 7.6 Hz), 1.34 (Sextet, 2H, *J* = 7.6 Hz), 0.92 (t, 3H, *J* = 7.6 Hz); ^{13}C NMR (125 MHz, $CDCl_3$) (major isomer) δ 194.9, 146.8, 114.3, 37.5, 30.3, 27.1, 23.9, 22.3, 13.8; IR (neat): 2958, 2932, 2871, 1702, 1683, 1611, 1464, 1413, 1373, 1288, 1262, 1238, 1288, 1262, 1238, 1171, 1113, 1072; MS (ES^+) Calculated for $[C_8H_{13}NaIO]^+$: 275.0; Found: 275.0.



4a

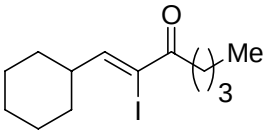
Compound **4a** was isolated as a mixture of geometrical isomers (*Z/E* = 12/1) in 82% yield according to the general procedure B. ^{1}H NMR (500 MHz, $CDCl_3$) (major isomer) δ 7.08 (q, 1H, *J* = 7.0 Hz), 3.14 (q, 1H, J = 7.0 Hz), 2.08 (d, 3H, J = 7.0 Hz), 1.80-1.78 (m, 4H), 1.48 – 1.22 (m, 6H); ^{13}C NMR (125 MHz, $CDCl_3$) (major isomer) δ 198.2, 146.1, 113.9, 45.4, 29.9, 25.8, 25.7, 24.0; IR (neat): 3019, 2932, 2855, 2664, 1678, 1611, 1463,

1450, 1372, 1287, 1264, 1241, 1188, 1163, 1131, 1109, 1081, 1071, 1030, 974, 895, 884, 824; MS (ES^+) Calculated for $[C_{10}H_{15}NaIO]^+$: 301.0; Found: 300.9.



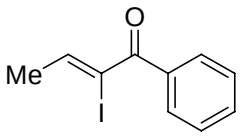
4b

Compound **4b** was prepared as a mixture of geometrical isomers (*Z/E* = 10/1) in 94% yield according to the general procedure B. Compound **4b** (major isomer): ^{1}H NMR (400 MHz, $CDCl_3$) δ 6.99 (t, 1H, *J* = 6.8 Hz), 2.82 (t, 2H, *J* = 7.2 Hz), 2.42 (q, 2H, *J* = 7.6 Hz), 1.67–1.50 (m, 4H), 1.45–1.30 (m, 4H), 0.97–0.89 (m, 6H); ^{13}C NMR (125 MHz, $CDCl_3$) δ 195.0, 151.2, 112.4, 37.7, 37.6, 29.7, 27.1, 22.4, 22.3, 13.8, 13.8; IR (neat): 3351, 2958, 2930, 2872, 2735, 1683, 1604, 1465, 1413, 1379, 1291, 1236, 1167, 1123, 1088, 934; MS (ES^+) Calculated for $[C_{11}H_{19}INaO]^+$: 317.0; Found: 317.0.



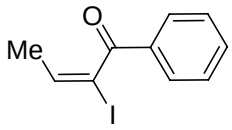
4c

Compound **4c** was prepared as a mixture of geometrical isomers (*Z/E* = 19/1) in 91% yield according to the general procedure B with exceptions that 10 mol % of $AgNTf_2$ was added together with $Au(PPh_3)NTf_2$ and a column basified with Et_3N was used for purification. Compound **4c** (major isomer): ^{1}H NMR (500 MHz, $CDCl_3$) δ 6.74 (d, 1H, *J* = 9 Hz), 2.80 (t, 2H, *J* = 15 Hz), 2.60–2.52 (m, 1H), 1.82-1.68 (m, 5H), 1.60 (quintet, 2H, *J* = 7.5 Hz), 1.41–1.31 (m, 4H), 1.27–1.20 (m, 3H), 1.92 (t, 3H, *J* = 7.5 Hz); ^{13}C NMR (125 MHz, $CDCl_3$) δ 195.3, 155.7, 109.9, 46.8, 37.6, 30.7, 27.2, 25.7, 25.2, 22.3, 13.8; IR (neat): 3351, 2928, 2852, 2662, 2351, 1683, 1601, 1448, 1278, 1224, 1169, 1128, 1089, 968; MS (ES^+) Calculated for $[C_{13}H_{21}INaO]^+$: 343.1; Found: 343.0.



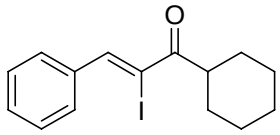
***Z*-4d**

Compound **4d** was prepared in 75% yield in a 1.2:1 Z/E ratio of separable isomers according to the general procedure B. Compound ***Z*-4d**: ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.69 (d, 2H, *J* = 8 Hz), 7.55 (t, 2H, *J* = 8 Hz), 7.44 (t, 2H, *J* = 8 Hz), 6.73 (q, 1H, *J* = 8 Hz), 2.09 (d, 3H, *J* = 8 Hz); ^{13}C NMR (125 MHz, $CDCl_3$) δ 191.9, 149.7, 135.8, 132.4, 129.6, 128.4, 110.5, 23.6; IR (neat): 3297, 3059, 2924, 2851, 2356, 1993, 1658, 1606, 1577, 1446, 1371, 1314, 1260, 1179, 1120, 1060,1025, 965 MS (ES^+) Calculated for $[C_{10}H_9INaO]^+$: 295.0; Found: 295.0.



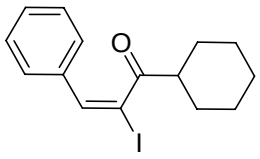
***E*-4d**

Compound ***E*-4d**: ^{1}H NMR (400 MHz, $CDCl_3$) δ δ 7.98 (d, 2H, *J* = 8 Hz), 7.61 (t, 2H, *J* = 8 Hz), 7.49 (t, 2H, *J* = 8 Hz), 6.67 (q, 1H, *J* = 8 Hz), 1.67 (d, 3H, *J* = 8 Hz); ^{13}C NMR (125 MHz, $CDCl_3$) δ 192.7, 140.8, 134.0, 133.6, 129.9, 128.9, 90.4, 18.7; IR (neat): 3053, 2916, 2850, 2347, 1666, 1596, 1448, 1329, 1227, 1174, 1115, 1012; MS (ES^+) Calculated for $[C_{10}H_9INaO]^+$: 295.0; Found: 295.0.



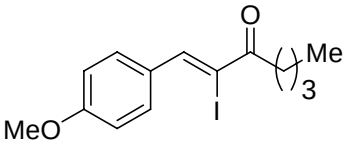
***Z*-4e**

Compound **4e** was prepared in 97% yield in a 1:2 Z/E ratio of separable isomers according to the general procedure B. Compound ***Z*-4e**: ^{1}H NMR (500 MHz, $CDCl_3$) δ 7.96 (s, 1H), 7.75–7.70 (m, 2H), 7.46–7.43 (m, 3H), 3.33 (tt, 1H, *J* = 11.5, 3 Hz,), 1.92–1.83 (m, 4H), 1.74–1.72 (m, 1H), 1.54–1.46 (m, 2H), 1.42–1.23 (m, 3H); ^{13}C NMR (125 MHz, $CDCl_3$) δ 199.5, 145.6, 135.9, 130.0, 129.5, 128.3, 107.2, 45.6, 30.0, 25.8; IR (neat): 3334, 3057, 3023, 2930, 2853, 2662, 1674, 1591, 1491, 1445, 1366, 1262, 1186, 1150, 1112, 1013, 925; MS (ES^+) Calculated for $[C_{15}H_{17}INaO]^+$: 363.0; Found: 362.9.



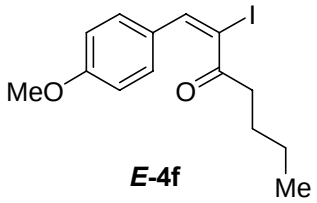
***E*-4e**

Compound ***E*-4e**: ^{1}H NMR (500 MHz, $CDCl_3$) δ 7.46 (s, 1H), 7.32–7.31 (m, 3H), 7.19–7.17 (m, 2H), 2.47 (tt, 1H, *J* = 11, 3.5 Hz,), 1.82 (d, 2H, *J* = 11.5 Hz), 1.68–1.54 (m, 2H), 1.58–1.54 (m, 1H), 1.39–1.32 (m, 2H), 1.16–1.02 (m, 3H); ^{13}C NMR (125 MHz, $CDCl_3$) δ 206.3, 143.0, 136.7, 129.0, 129.6, 128.1, 96.3, 49.5, 29.5, 25.6, 25.6; IR (neat): 3352, 3057, 3024, 2930, 2853, 2662, 1687, 1598, 1572, 1494, 1448, 1366, 1312, 1289, 1236, 1141, 1071, 1007, 926, 814; MS (ES^+) Calculated for $[C_{15}H_{17}INaO]^+$: 363.0; Found: 362.9.



***Z*-4f**

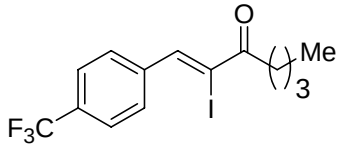
Compound **4f** was prepared in 84% yield in a 1.05:1 Z/E ratio of separable isomers according to the general procedure B. Compound ***Z*-4f**: ^{1}H NMR (400 MHz, $CDCl_3$) δ 8.02 (s, 1H), 7.90 (d, 2H, *J* = 8.8 Hz), 6.98 (d, 2H, *J* = 8.8 Hz), 3.87 (s, 3H), 2.97 (t, 2H, *J* = 8 Hz), 1.70 (quintet, 2H, *J* = 7.2 Hz), 1.39 (sextet, 2H, *J* = 7.6 Hz), 0.95 (t, 3H, *J* = 7.2 Hz); ^{13}C NMR (125 MHz, $CDCl_3$) δ 195.9, 161.4, 146.1, 132.0, 127.6, 113.8, 104.6, 55.4, 37.8, 27.4, 22.4, 13.9; IR (neat): 3003, 2957, 2932, 2871, 2838, 1674, 1604, 1587, 1568, 1509, 1463, 1255, 1148,1029, 826; MS (ES^+) Calculated for $[C_{14}H_{17}INaO_2]^+$: 367.0; Found: 366.9.



***E*-4f**

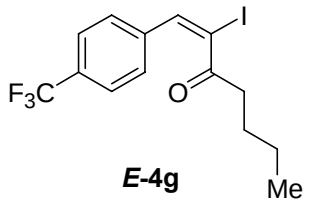
. Compound ***E*-4f**: ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.36 (s, 1H), 7.13 (d, 2H, *J* = 8.8 Hz), 6.84 (d, 2H, *J* = 8.8 Hz), 3.81 (s, 3H), 2.54 (t, 2H, *J* = 7.6 Hz), 1.56 (quintet, 2H, *J* = 7.2 Hz), 1.24 (sextet, 2H, *J* = 7.6 Hz), 0.83 (t, 3H, *J* = 7.2 Hz); ^{13}C NMR (125 MHz, $CDCl_3$) δ

203.9, 160.2, 142.6, 129.7, 129.2, 114.0, 94.7, 55.3, 40.2, 26.4, 22.1, 13.7; IR (neat): 3271, 2957, 2930, 2870, 1685, 1604, 1509, 1456, 1293, 1255, 1178, 1122, 1032; MS (ES^+) Calculated for $[C14H17INaO2]^+$: 267.0; Found: 267.0.



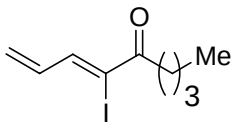
***Z*-4g**

Compound **4g** was prepared in 96% yield in a 5:1 Z/E ratio of separable isomers according to the general procedure B. Compound ***Z*-4g**: ^1H NMR (400 MHz, $CDCl_3$) δ 8.00 (s, 1H), 7.81 (d, 2H, J = 8.4 Hz), 7.70 (d, 2H, J = 8.4 Hz), 2.99 (t, 2H, J = 7.2 Hz), 1.71 (Quintet, 2H, J = 7.2 Hz), 1.40 (Sextet, 2H, J = 7.2 Hz), 0.96 (t, 3H, J = 7.2 Hz); ^{13}C NMR (125 MHz, $CDCl_3$) δ 196.2, 144.8, 139.8, 131.6 (q, J_{C-F} = 32.4 Hz), 129.8, 125,6 (q, J_{C-F} = 3.72 Hz), 124.0 (q, J_{C-F} = 270.8 Hz), 110.2, 38.4, 27.3, 22.5, 14.1; IR (neat): 3070, 2960, 2934, 2874, 1681, 1598, 1466, 1412, 1324, 1168, 1128, 1068, 1017, 885, 827; MS (ES^+) Calculated for $[C_{14}H_{14}NaF_3IO]^+$: 405.0; Found: 404.9.



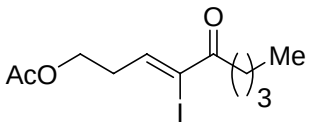
***E*-4g**

Compound ***E*-4g**: ^1H NMR (400 MHz, $CDCl_3$) δ 7.58 (d, 2H, J = 8.4 Hz), 7.38 (s, 1H), 7.31 (d, 2H, J = 8.4 Hz), 2.55 (t, 2H, J = 7.2 Hz), 1.56 (Quintet, 2H, J = 7.2 Hz), 1.24 (Sextet, 2H, J = 7.2 Hz), 0.83 (t, 3H, J = 7.2 Hz); ^{13}C NMR (125 MHz, $CDCl_3$) δ 203.0, 140.7, 139.5, 130.7 (q, J_{C-F} = 32.4 Hz), 128.2, 125,7 (q, J_{C-F} = 3.75 Hz), 123.8 (q, J_{C-F} = 270.6 Hz), 99.68, 40.0, 26.0, 22.0, 13.7; IR (neat): 3070, 2960, 2923, 2870, 1699, 1597, 1459, 1421, 1324, 1168, 1126, 1068, 1017, 874, 830; MS (ES^+) Calculated for $[C_{14}H_{14}NaF_3IO]^+$: 405.0; Found: 404.9.



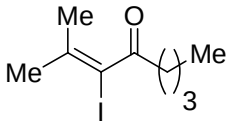
4h

Compound **4h** was prepared in 80% yield according to the general procedure B. ^{1}H NMR (500 MHz, $CDCl_3$) δ 7.37 (d, 1H, *J* = 10 Hz), 6.78 (td, 1H, *J* = 16.5, 10 Hz), 5.88 (d, 1H, *J* = 17 Hz), 5.76 (d, 1H, *J* = 10 Hz), 2.87 (t, 2H, *J* = 7.5 Hz), 1.65 (Quintet, 2H, *J* = 7.5 Hz), 1.36 (sextet, 2H, *J* = 7.5 Hz), 0.93 (t, 3H, *J* = 7.5 Hz); ^{13}C NMR (125 MHz, $CDCl_3$) δ 195.4, 146.2, 139.3, 128.9, 110.6, 37.7, 27.1 22.3, 13.9; IR (neat): 3274, 2958, 2331, 1682, 1597, 1456, 1597, 1457, 1261, 1123, 1042. MS (ES^+) Calculated for $[C_9H_{13}INaO]^+$: 286.9; Found: 286.6.



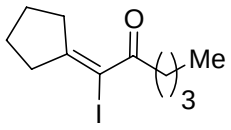
4i

Compound **4i** was prepared in 83% yield according to the general procedure B. ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.00 (t, 1H, *J* = 6.8 Hz), 4.13 (t, 2H, *J* = 6.4 Hz), 2.82 (t, 2H, *J* = 7.2 Hz), 2.50 (q, 2H, *J* = 7.2 Hz), 2.07 (s, 3H), 1.90 (quintet, 2H, *J* = 7.2 Hz), 1.63 (quintet, 2H, *J* = 7.6 Hz), 1.35 (sextet, 2H, *J* = 7.6 Hz), 0.93 (t, 3H, *J* = 6.8 Hz); ^{13}C NMR (125 MHz, $CDCl_3$) δ 194.9, 171.0, 149.8, 113.0, 63.5, 37.7, 34.6, 27.1, 26.7, 22.3, 21.0, 13.8; IR (neat): 3271, 2958, 2872, 1738, 1683, 1604, 1456, 1366, 1241, 1159, 1118, 1044; MS (ES^+) Calculated for $[C_{12}H_{19}INaO_3]^+$: 361.0; Found: 360.9.



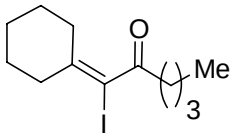
6a

Compound **6a** was prepared in 96% yield according to the general procedure B. ^{1}H NMR (400 MHz, $CDCl_3$) δ 2.81 (t, 2H, *J* = 7.2 Hz), 2.03 (s, 3H), 1,96 (s, 3H), 1.61 (Quintet, 2H, *J* = 7.2 Hz), 1.35 (Sextet, 2H, *J* = 7.2 Hz), 0.93 (t, 3H, *J* = 7.2 Hz); ^{13}C NMR (125 MHz, $CDCl_3$) δ 202.3, 144.3, 95.5, 40.5, 30.3, 26.4, 22.3, 21.9, 13.8; IR (neat): 2958, 2932, 2873, 1688, 1601, 1464, 1441, 1406, 1380, 1368, 1258, 1238, 1155, 1105, 1044, 910, 842; MS (ES^+) Calculated for $[C_9H_{15}NaIO]^+$: 289.0; Found: 289.0.



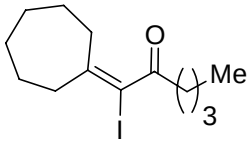
6b

Compound **6b** was prepared in 87% yield according to the general procedure B. ^{1}H NMR (400 MHz, $CDCl_3$) δ 2.85 (t, 2H, *J* = 7.2 Hz), 2.70 (tt, 2H, *J* = 7.2, 1.2 Hz), 2.47 (tt, 2H, *J* = 7.2, 1.2 Hz), 1.89 (Quintet, 2H, *J* = 7.2 Hz), 1.72 (Quintet, 2H, *J* = 7.2 Hz), 1.58 (Quintet, 2H, *J* = 7.2 Hz), 1.34 (Sextet, 2H, *J* = 7.2 Hz), 0.92 (t, 3H, *J* = 7.2 Hz); ^{13}C NMR (125 MHz, $CDCl_3$) δ 198.9, 166.4, 92.3, 44.4, 41.8, 36.1, 28.7, 26.9, 24.9, 22.3, 13.9; IR (neat): 2959, 2936, 2872, 1674, 1573, 1466, 1452, 1413, 1379, 1306, 1289, 1264, 1172, 1158, 1137, 1088, 911; MS (ES^+) Calculated for $[C_{11}H_{17}NaIO]^+$: 315.0; Found: 315.0.



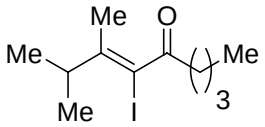
6c

Compound **6c** was prepared in 91% yield according to the general procedure B. ^{1}H NMR (400 MHz, $CDCl_3$) δ 2.79 (t, 2H, *J* = 7.2 Hz), 2.41 (t, 2H, *J* = 5.6 Hz), 2.33 (t, 2H, *J* = 5.6 Hz), 1.66 – 1.50 (m, 8H), 1.35 (Sextet, 2H, *J* = 7.2 Hz), 0.93 (t, 3H, *J* = 7.2 Hz); ^{13}C NMR (125 MHz, $CDCl_3$) δ 202.5, 149.2, 92.4, 40.3, 39.6, 32.9, 28.0, 27.4, 26.3, 25.9, 22.3, 13.8; IR (neat): 2957, 2932, 2857, 1694, 1606, 1464, 1448, 1404, 1350, 1260, 1221, 1145, 1077, 1069, 984, 854; MS (ES^+) Calculated for $[C_{12}H_{19}NaIO]^+$: 329.0; Found: 329.0.



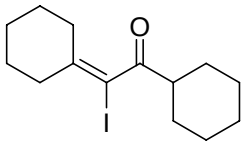
6d

Compound **6d** was prepared in 99% yield according to the general procedure B. ^{1}H NMR (400 MHz, $CDCl_3$) δ 2.80 (t, 2H, *J* = 7.2 Hz), 2.47 – 2.42 (m, 4H), 1.69 – 1.49 (m, 10H), 1.35 (Sextet, 2H, *J* = 7.2 Hz), 0.93 (t, 3H, *J* = 7.2 Hz); ^{13}C NMR (125 MHz, $CDCl_3$) δ 202.4, 151.4, 96.1, 41.5, 40.4, 33.5, 29.2, 28.5, 28.0, 26.4, 26.1, 22.3, 13.8; IR (neat): 2956, 2927, 2857, 1688, 1599, 1464, 1457, 1404, 1351, 1266, 1160, 1132, 1081, 957, 909; MS (ES^+) Calculated for $[C_{13}H_{21}NaIO]^+$: 343.0; Found: 343.0.



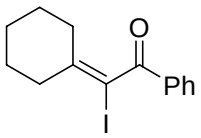
6e

Compound **6e** was isolated as a mixture of geometrical isomers (*Z/E* = 1/2.31) in 88% yield according to the general procedure B. ^{1}H NMR (500 MHz, $CDCl_3$) (major isomer) δ 2.83 (Quintet, 1H, *J* = 7.0 Hz), 2.79 (t, 2H, *J* = 7.5 Hz), 1.88 (s, 3H), 1.61 (Quintet, 2H, *J* = 7.5 Hz), 1.35 (Quintet, 2H, *J* = 7.5 Hz), 1.02 (d, 6H, *J* = 7.0 Hz), 0.93 (t, 3H, *J* = 7.5 Hz); ^{1}H NMR (500 MHz, $CDCl_3$) (minor isomer) δ 2.94 (Quintet, 1H, *J* = 7.0 Hz), 2.78 (t, 2H, *J* = 7.5 Hz), 1.77 (s, 3H), 1.61 (Quintet, 2H, *J* = 7.5 Hz), 1.35 (Quintet, 2H, *J* = 7.5 Hz), 1.02 (d, 6H, *J* = 7.0 Hz), 0.93 (t, 3H, *J* = 7.5 Hz) ^{13}C NMR (125 MHz, $CDCl_3$) (major isomer) δ 202.5, 150.6, 95.9, 40.3, 39.8, 33.5, 26.3, 22.3, 21.0, 19.7, 13.8; ^{13}C NMR (125 MHz, $CDCl_3$) (minor isomer) δ 202.7, 149.5, 93.9, 40.3, 39.8, 33.5, 26.3, 22.3, 21.6, 14.6, 13.8; IR (neat): 2962, 2932, 2872, 1695, 1620, 1615, 1464, 1404, 1385, 1363, 1342, 1225, 1151, 1101, 1062, 983, 900; MS (ES^+) Calculated for $[C_{11}H_{19}NaIO]^+$: 317.1; Found: 317.0.



6f

Compound **6f** was prepared in 96% yield according to the general procedure B. ^{1}H NMR (500 MHz, $CDCl_3$) δ 3.03 (tt, 1H, *J* = 11, 3.0 Hz), 2.42 (t, 2H, *J* = 7.5 Hz), 2.30 (t, 2H, *J* = 6 Hz), 1.92 (d, 2H, *J* = 12.5 Hz), 1.80–1.77 (m, 2H), 1.69–1.50 (m, 7H), 1.41–1.10 (m, 5H); ^{13}C NMR (125 MHz, $CDCl_3$) δ 204.9, 149.4, 91.8, 47.5, 39.6, 33.4, 28.8, 28.0, 27.4, 25.9, 25.8, 25.7; IR (neat): 3351, 2930, 2853, 2609, 1684, 1616, 1448, 1350, 1309, 1219, 1149, 1084, 982; MS (ES^+) Calculated for $[C_{14}H_{21}INaO]^+$: 355.0; Found: 355.0.



6g

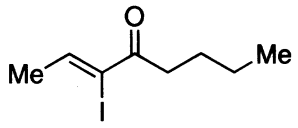
Compound **6g** was prepared in 83% yield according to the general procedure B. ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.98 (d, 2H, *J* = 8 Hz), 7.50 (t, 1H, *J* = 7.6 Hz), 7.48 (t, 2H, *J* = 7.6 Hz), 2.55 (t, 2H, *J* = 6 Hz), 2.22 (t, 2H, *J* = 6 Hz), 1.75–1.69 (m, 2H), 1.60–1.54 (m, 2H), 1.47–1.42 (m, 2H); ^{13}C NMR (125 MHz, $CDCl_3$) δ 193.1, 149.6, 134.0, 133.7, 130.0, 128.7, 87.7, 38.9, 33.2, 27.5, 27.4, 25.8; IR (neat): 3308, 3061, 2932, 2854, 2668, 2201, 1966, 1908, 1817, 1777, 1664, 1632, 1596, 1579, 1448, 1311, 1221, 1173, 1022, 982, 824; MS (ES^+) Calculated for $[C_{14}H_{15}INaO]^+$: 349.0; Found: 349.0.

Automation directory: /home/walkup/vnmrsys/data/auto_2007.01.04_12
File : exp
Sample id : tmpstudy

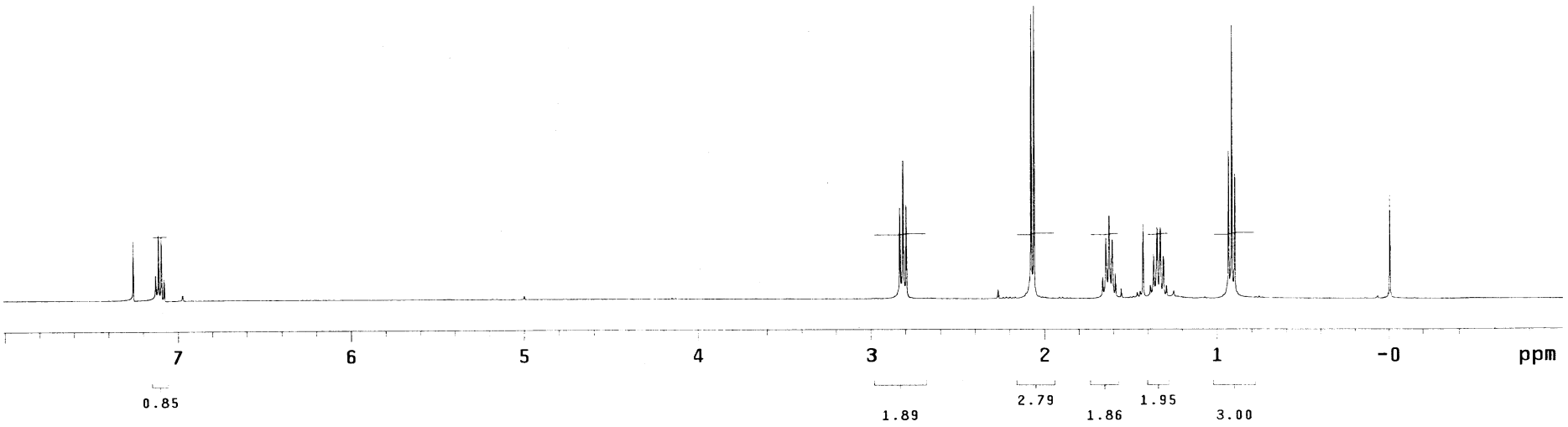
Pulse Sequence: s2pul

Solvent: cdcl3
Temp. 25.0 C / 298.1 K
Operator: walkup
VNMRS-400 "NMR400"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 2.049 sec
Width 6410.3 Hz
8 repetitions
OBSERVE H1, 399.7793055 MHz
DATA PROCESSING
Line broadening 0.2 Hz
FT size 65536
Total time 0 min, 30 sec



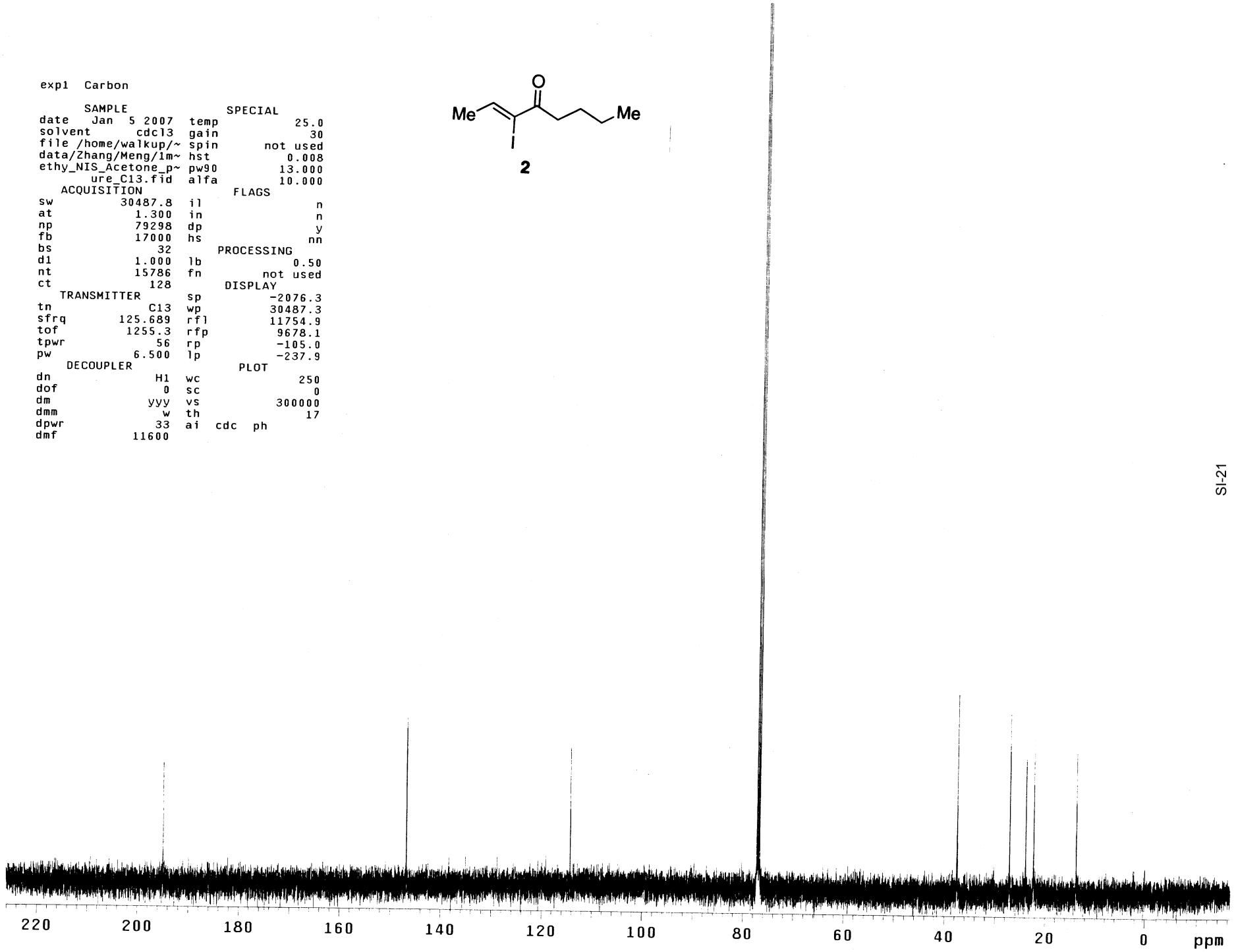
2



exp1 Carbon

SAMPLE		SPECIAL	
date	Jan 5 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
data/Zhang/Meng/1m~		hst	0.008
ethy_NIS_Acetone_p~		pw90	13.000
ure_C13.fid		alfa	10.000
ACQUISITION		**FLAGS**	
sw	30487.8	il	n
at	1.300	in	n
np	79298	dp	y
fb	17000	hs	nn
bs	32	**PROCESSING**	
d1	1.000	lb	0.50
nt	15786	fn	not used
ct	128	**DISPLAY**	
TRANSMITTER		sp	-2076.3
tn	C13	wp	30487.3
sfrq	125.689	rfl	11754.9
tof	1255.3	rfp	9678.1
tpwr	56	rp	-105.0
pw	6.500	lp	-237.9
DECOUPLER		**PLOT**	
dn	H1	wc	250
dof	0	sc	0
dm	yyy	vs	300000
dmm	w	th	17
dpwr	33	ai cdc ph	
dmf	11600		

2

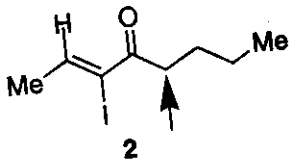


Automation directory: /home/walkup/vnmrsys/data/auto_2007.04.10_60
File : /home/walkup/data/Zhang/Meng/neozy_1me_NIS_2.fid
Sample id : tmpstudy

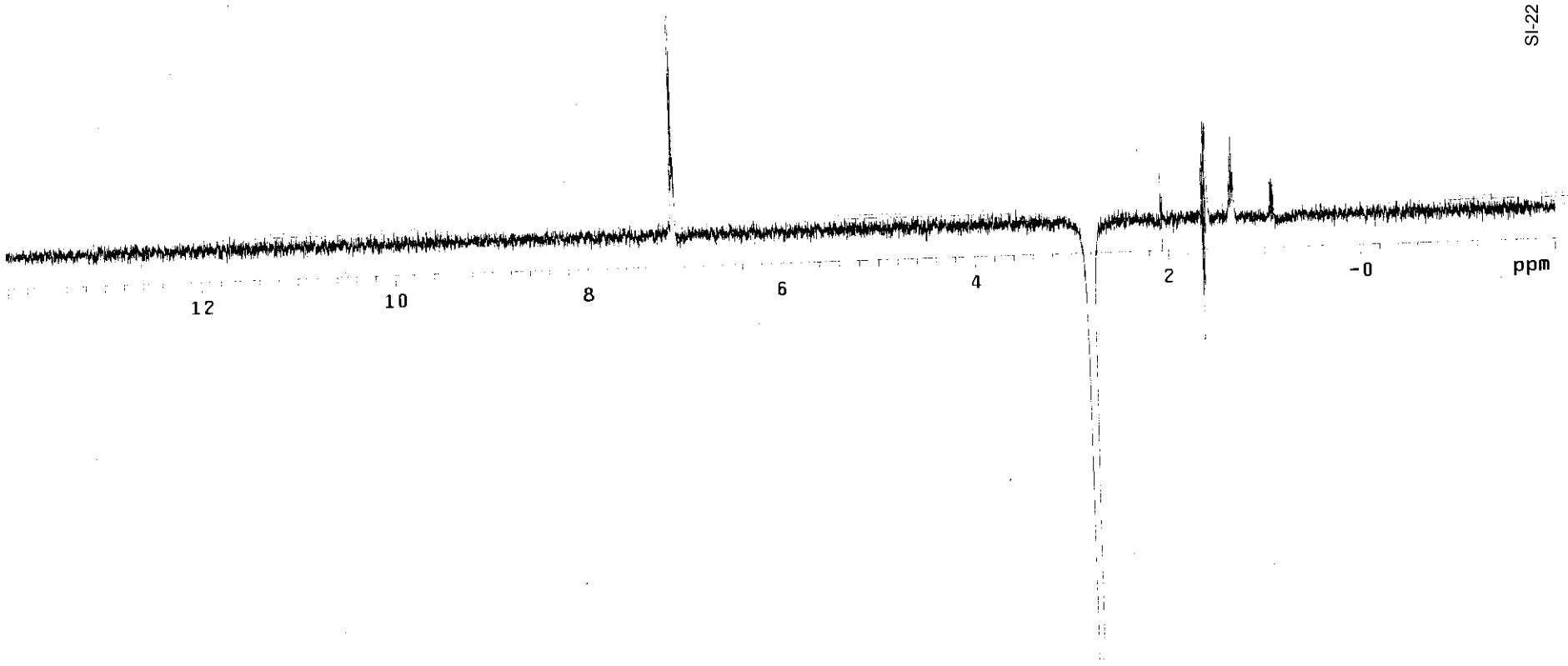
Pulse Sequence: NOESY1D

Solvent: cdcl3
Temp. 25.0 C / 298.1 K
Operator: walkup
File: neozy_1me_NIS_2
VNMRS-500 "nmr500"

Relax. delay 1.000 sec
Pulse 90.0 degrees
Mixing 0.500 sec
Acq. time 1.998 sec
Width 8012.8 Hz
96 repetitions
OBSERVE H1, 499.8058870 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 32768
Total time 10 hr, 36 min, 14 sec



2

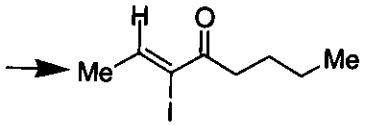


Automation directory: /home/walkup/vnmrsys/data/auto_2007.04.10_60
File : /home/walkup/data/Zhang/Meng/neozy_1me_NIS_3.fid
Sample id : tmpstudy

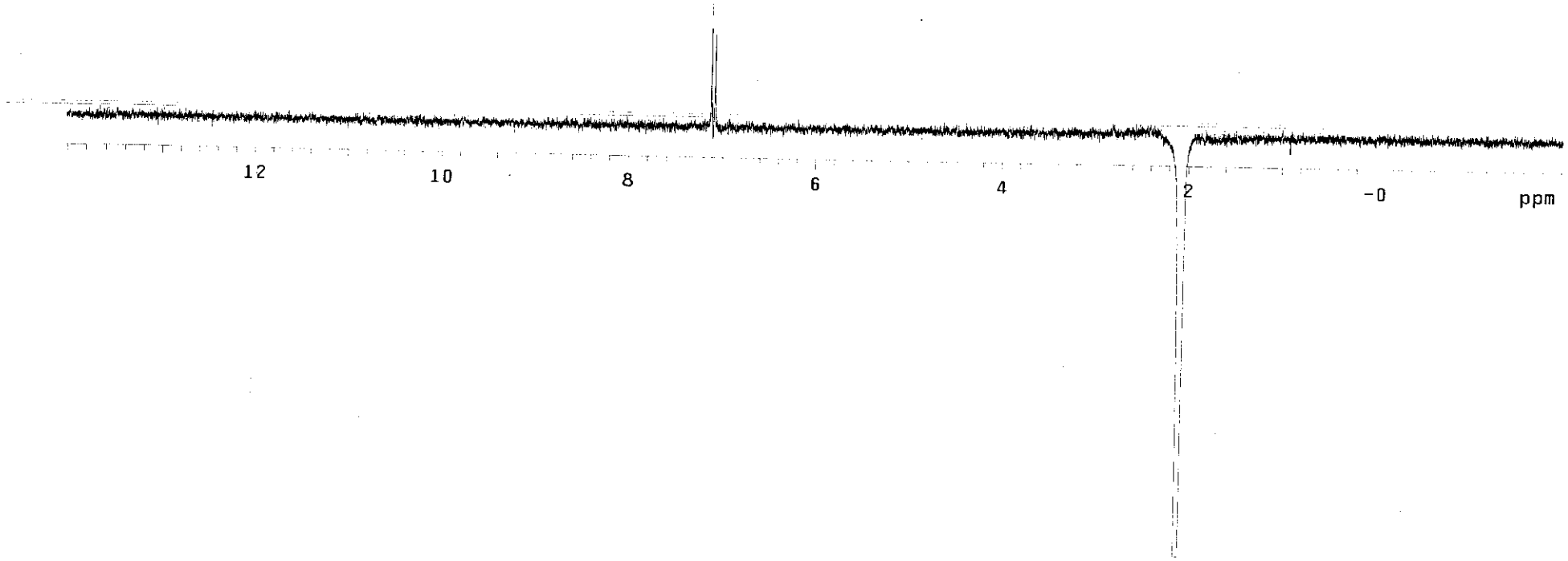
Pulse Sequence: NOESY1D

Solvent: cdcl3
Temp. 25.0 C / 298.1 K
Operator: walkup
File: neozy_1me_NIS_3
VNMRS-500 "nmr500"

Relax. delay 1.000 sec
Pulse 90.0 degrees
Mixing 0.500 sec
Acq. time 1.998 sec
Width 8012.8 Hz
136 repetitions
OBSERVE H1, 499.8058870 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 32768
Total time 10 hr, 50 min, 9 sec



2

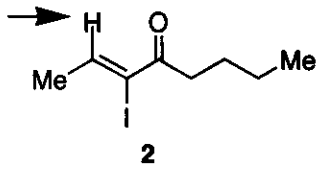


Automation directory: /home/walkup/vnmrsys/data/auto_2007.04.10_60
File : /home/walkup/data/Zhang/Meng/neozy_1me_NIS_3.fid
Sample id : tmpstudy

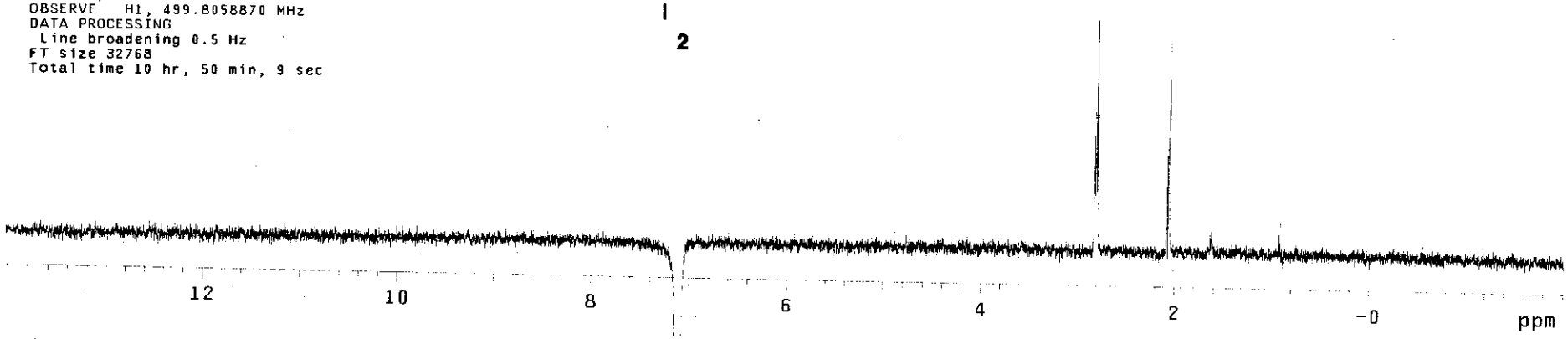
Pulse Sequence: NOESY1D

Solvent: cdcl3
Temp. 25.0 C / 298.1 K
Operator: walkup
File: neozy_1me_NIS_3
VNMRS-500 "nmr500"

Relax. delay 1.000 sec
Pulse 90.0 degrees
Mixing 0.500 sec
Acq. time 1.998 sec
Width 8012.8 Hz
136 repetitions
OBSERVE H1, 499.8058870 MHz
DATA PROCESSING
Line broadening 0.5 Hz
FT size 32768
Total time 10 hr, 50 min, 9 sec

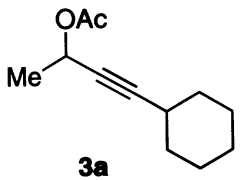


2

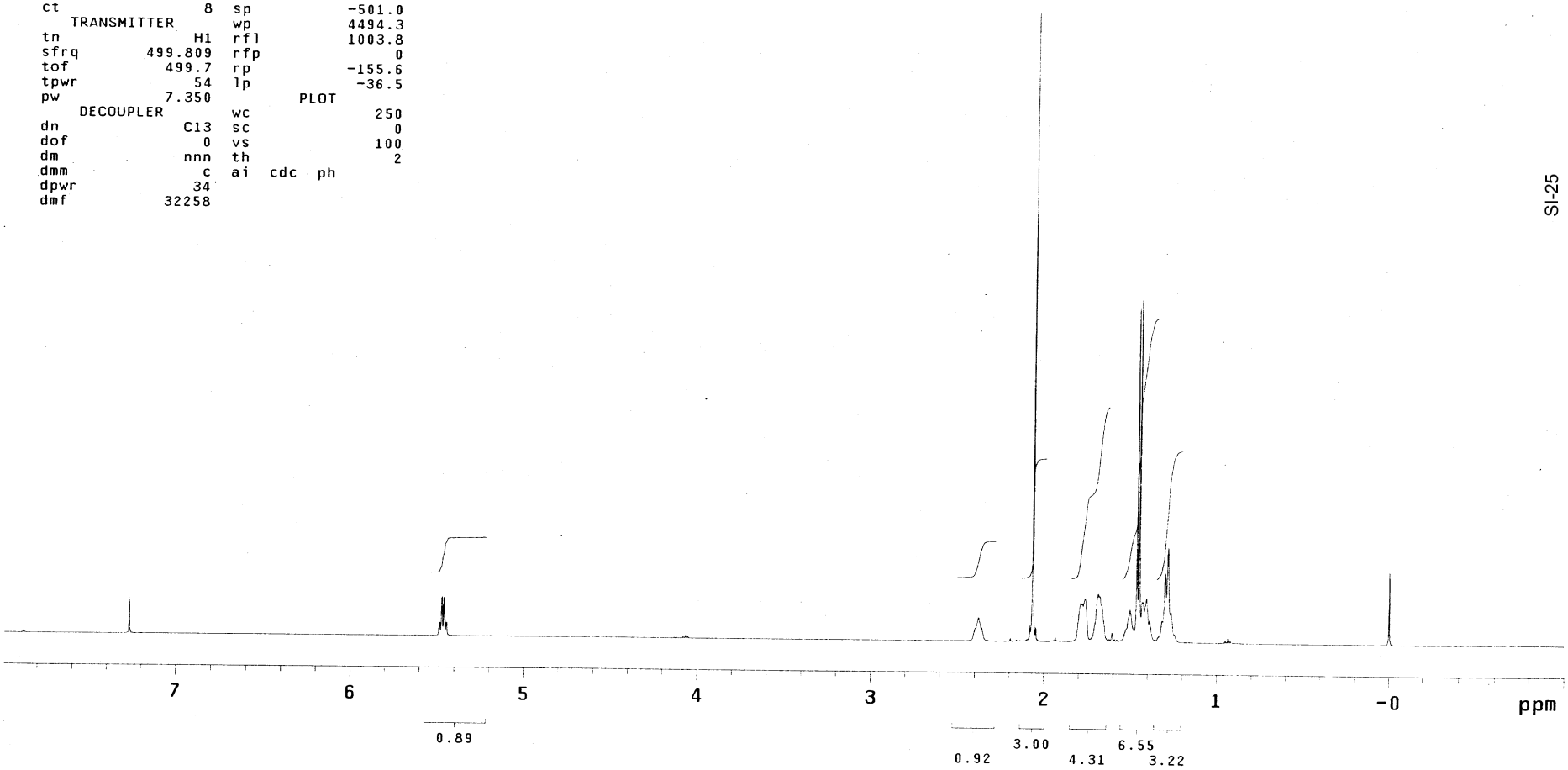


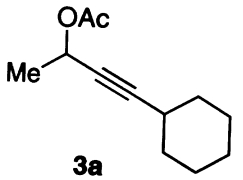
exp1 Proton

SAMPLE		SPECIAL	
date	Feb 16 2007	temp	25.0
solvent	cdcl3	gain	not used
file	/home/walkup/~	spin	not used
data/Zhang/Meng/1M~		hst	0.008
e_C6_acetate_SM_H1~		pw90	14.700
	.fid	alfa	6.600
ACQUISITION		**FLAGS**	
sw	8012.8	il	n
at	2.049	in	n
np	32830	dp	y
fb	4000	hs	nn
bs	32	**PROCESSING**	
ss	2	lb	0.20
d1	1.000	fn	65536
nt	8	**DISPLAY**	
ct	8	sp	-501.0
TRANSMITTER		wp	4494.3
tn	H1	rfl	1003.8
sfrq	499.809	rfp	0
tof	499.7	rp	-155.6
tpwr	54	lp	-36.5
pw	7.350	**PLOT**	
DECOUPLER		wc	250
dn	C13	sc	0
dof	0	vs	100
dm	nnn	th	2
dmm	c	ai	cdc ph
dpwr	34		
dmf	32258		



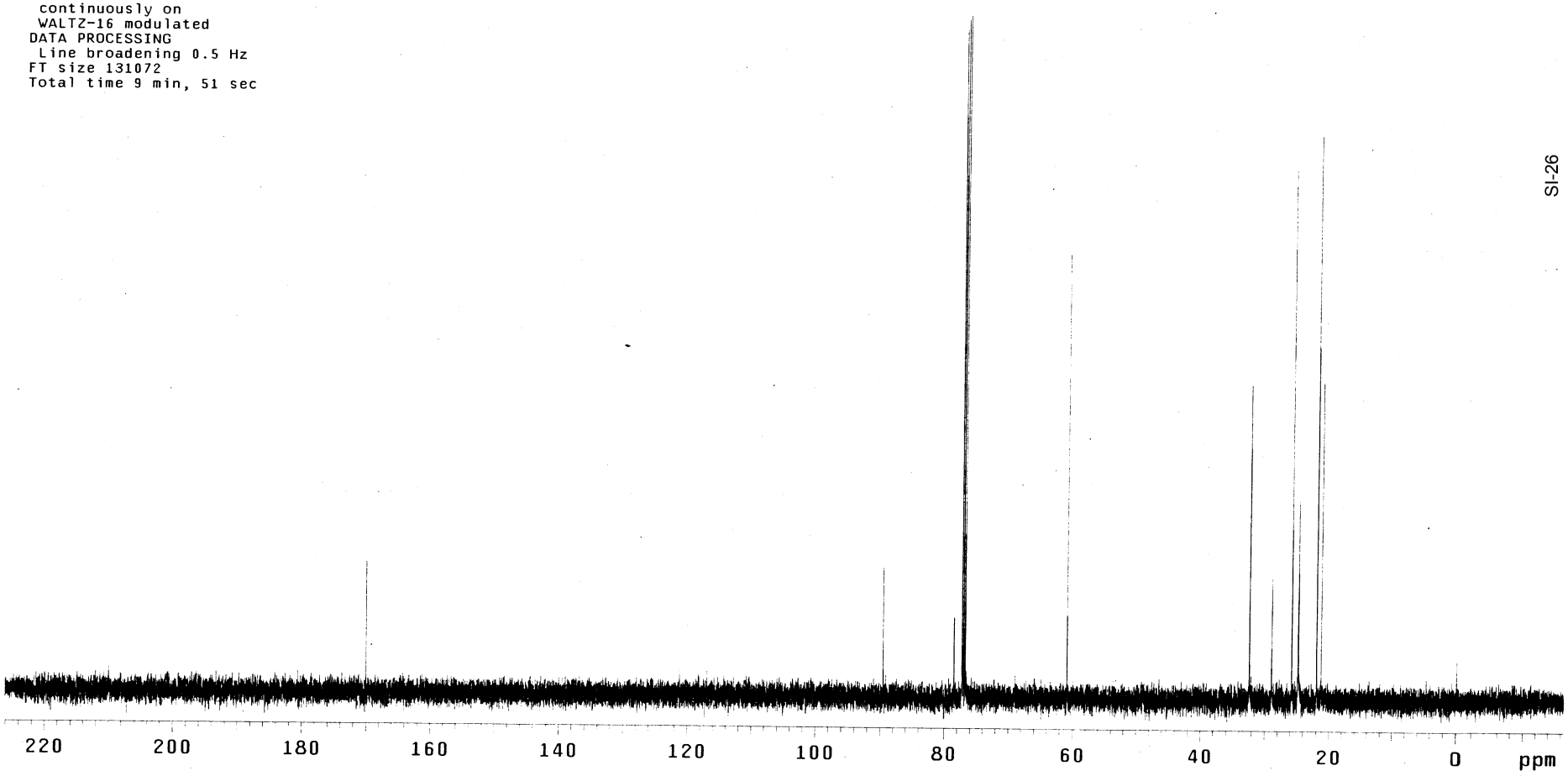
3a

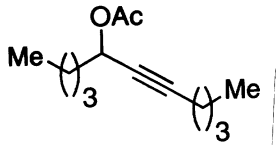




3a

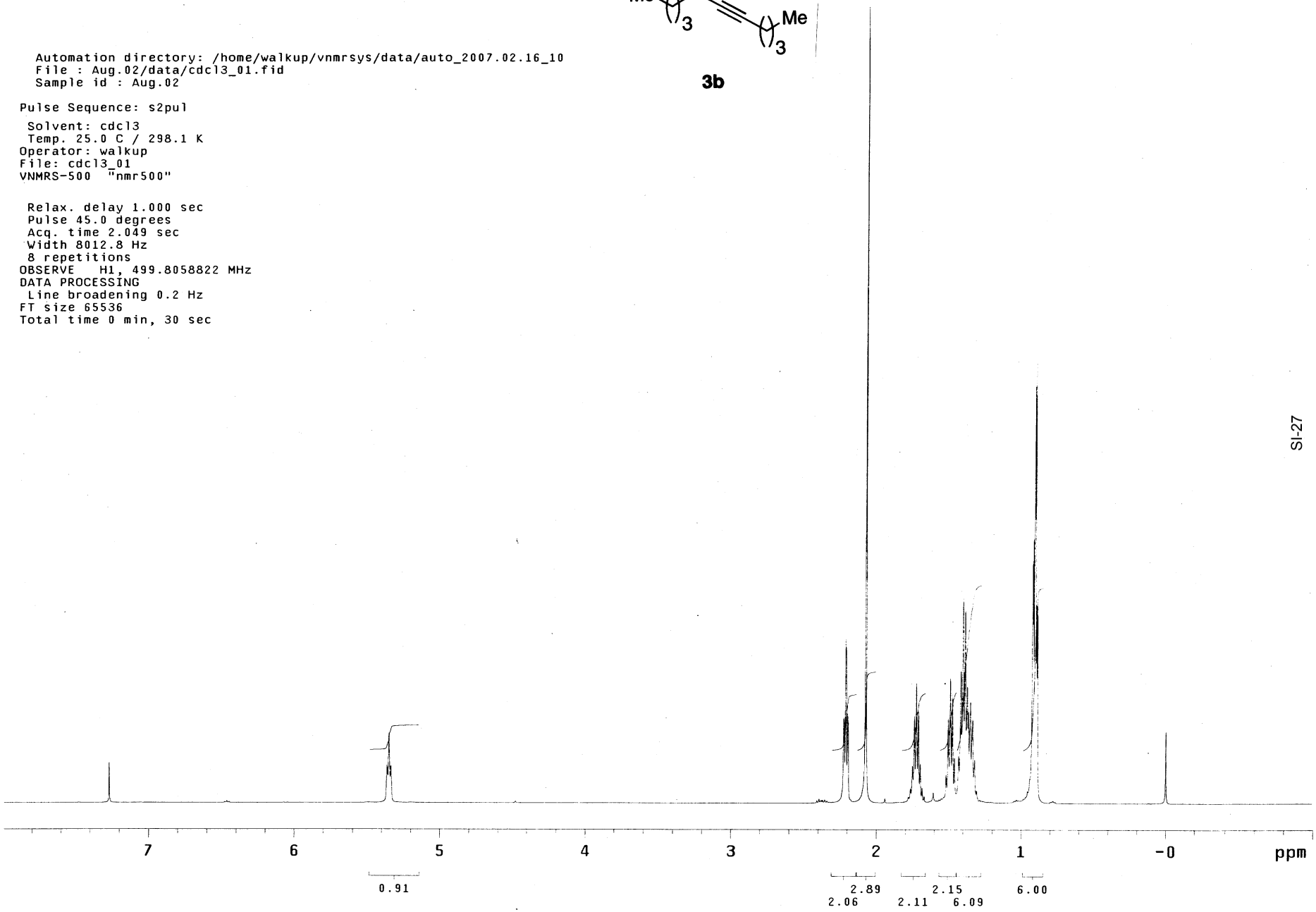
```
  Automation directory: /home/walkup/vnmrsys/data/auto_2007.02.16_10
  File : Aug.04/data/cdcl3_01.fid
  Sample id : Aug.04

Pulse Sequence: s2pul
 Solvent: cdcl3
 Temp. 25.0 C / 298.1 K
Operator: walkup
File: cdcl3_01
VNMRS-500  "nmr500"

 Relax. delay 1.000 sec
 Pulse 45.0 degrees
 Acq. time 1.300 sec
 Width 30487.8 Hz
 64 repetitions
OBSERVE  C13, 125.6762906 MHz
DECOUPLE  H1, 499.8083861 MHz
 Power 39 dB
 continuously on
 WALTZ-16 modulated
DATA PROCESSING
 Line broadening 0.5 Hz
FT size 131072
Total time 9 min, 51 sec
```

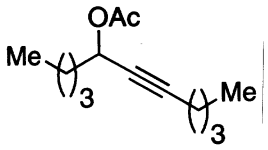




3b

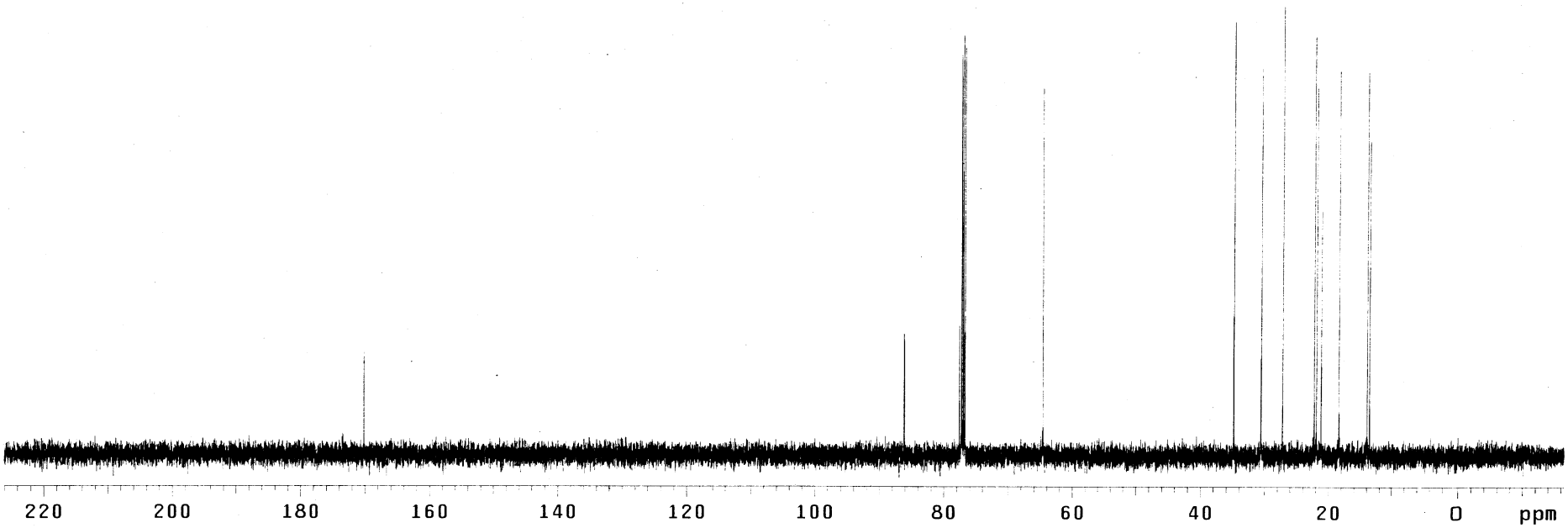
```
Automation directory: /home/walkup/vnmrsys/data/auto_2007.02.16_10
File : Aug.02/data/cdcl3_01.fid
Sample id : Aug.02

Pulse Sequence: s2pul
 Solvent: cdcl3
 Temp. 25.0 C / 298.1 K
Operator: walkup
File: cdcl3_01
VNMRS-500  "nmr500"

 Relax. delay 1.000 sec
 Pulse 45.0 degrees
 Acq. time 2.049 sec
 Width 8012.8 Hz
 8 repetitions
OBSERVE   H1, 499.8058822 MHz
DATA PROCESSING
 Line broadening 0.2 Hz
FT size 65536
Total time 0 min, 30 sec
```





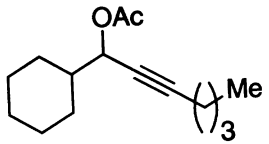
3b

```
  Automation directory: /home/walkup/vnmrsys/data/auto_2007.02.16_10
  File : Aug.03/data/cdcl3_01.fid
  Sample id : Aug.03

Pulse Sequence: s2pul
 Solvent: cdcl3
 Temp. 25.0 C / 298.1 K
Operator: walkup
File: cdcl3_01
VNMRS-500  "nmr500"

 Relax. delay 1.000 sec
 Pulse 45.0 degrees
 Acq. time 1.300 sec
 Width 30487.8 Hz
 64 repetitions
OBSERVE  C13, 125.6762906 MHz
DECOUPLE  H1, 499.8083861 MHz
 Power 39 dB
 continuously on
 WALTZ-16 modulated
DATA PROCESSING
 Line broadening 0.5 Hz
FT size 131072
Total time 9 min, 51 sec
```

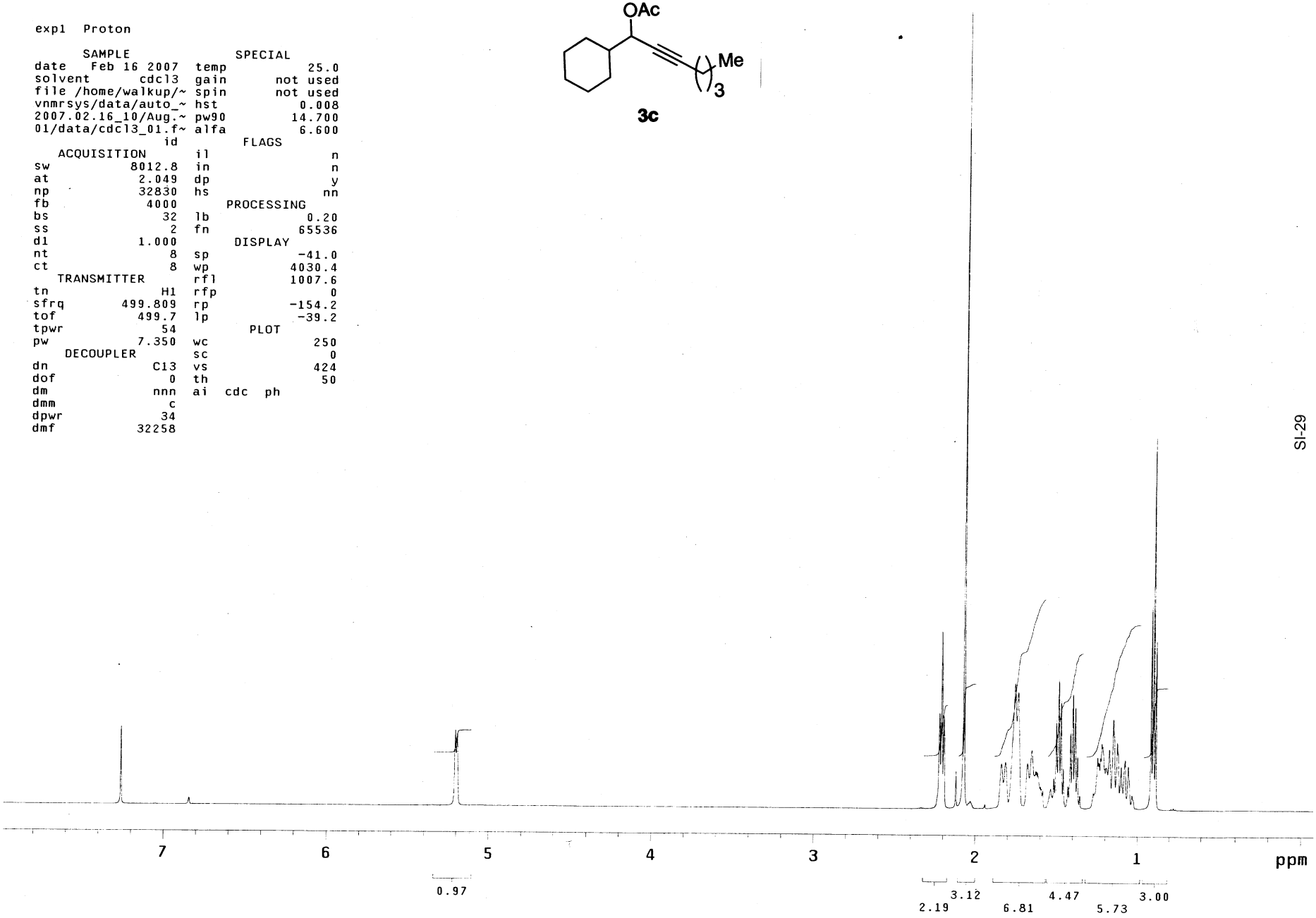



exp1 Proton

SAMPLE		SPECIAL	
date	Feb 16 2007	temp	25.0
solvent	cdcl3	gain	not used
file	/home/walkup/~	spin	not used
vnmrsys/data/auto_~		hst	0.008
2007.02.16_10/Aug.~		pw90	14.700
01/data/cdcl3_01.f~		alfa	6.600
id		FLAGS	
ACQUISITION		il	n
sw	8012.8	in	n
at	2.049	dp	y
np	32830	hs	nn
fb	4000	PROCESSING	
bs	32	lb	0.20
ss	2	fn	65536
d1	1.000	DISPLAY	
nt	8	sp	-41.0
ct	8	wp	4030.4
TRANSMITTER		rfl	1007.6
tn	H1	rfp	0
sfrq	499.809	rp	-154.2
tof	499.7	lp	-39.2
tpwr	54	PLOT	
pw	7.350	wc	250
DECOUPLER		sc	0
dn	C13	vs	424
dof	0	th	50
dm	nnn	ai	cdc ph
dmm	c		
dpwr	34		
dmf	32258		

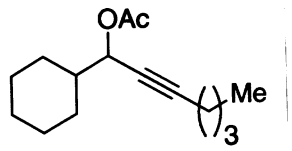


3c

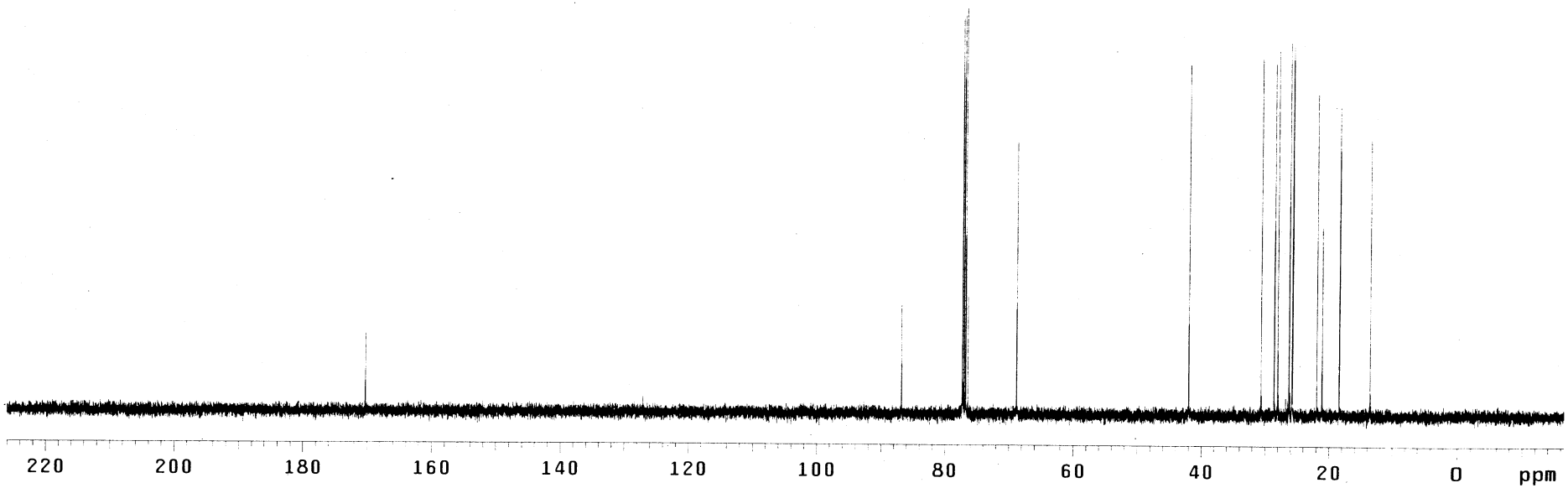


exp1 Carbon

SAMPLE		SPECIAL	
date	Feb 16 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
vnmrsys/data/auto_~		hst	0.008
2007.02.16_10/Aug.~		pw90	15.300
02/data/cdcl3_01.f~		alfa	10.000
id		FLAGS	
ACQUISITION		il	n
sw	30487.8	in	n
at	1.300	dp	y
np	79298	hs	nn
fb	17000	PROCESSING	
bs	32	lb	0.50
d1	1.000	fn	not used
nt	500	DISPLAY	
ct	64	sp	-2077.7
TRANSMITTER		wp	30487.3
tn	C13	rfl	11756.2
sfrq	125.689	rfp	9678.1
tof	1255.3	rp	150.8
tpwr	49	lp	-253.5
pw	7.650	PLOT	
DECOUPLER		wc	250
dn	H1	sc	0
dof	0	vs	24229
dm	yyy	th	6
dmm	w	ai cdc ph	
dpwr	39		
dmf	12200		



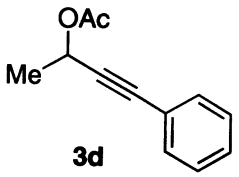
3c



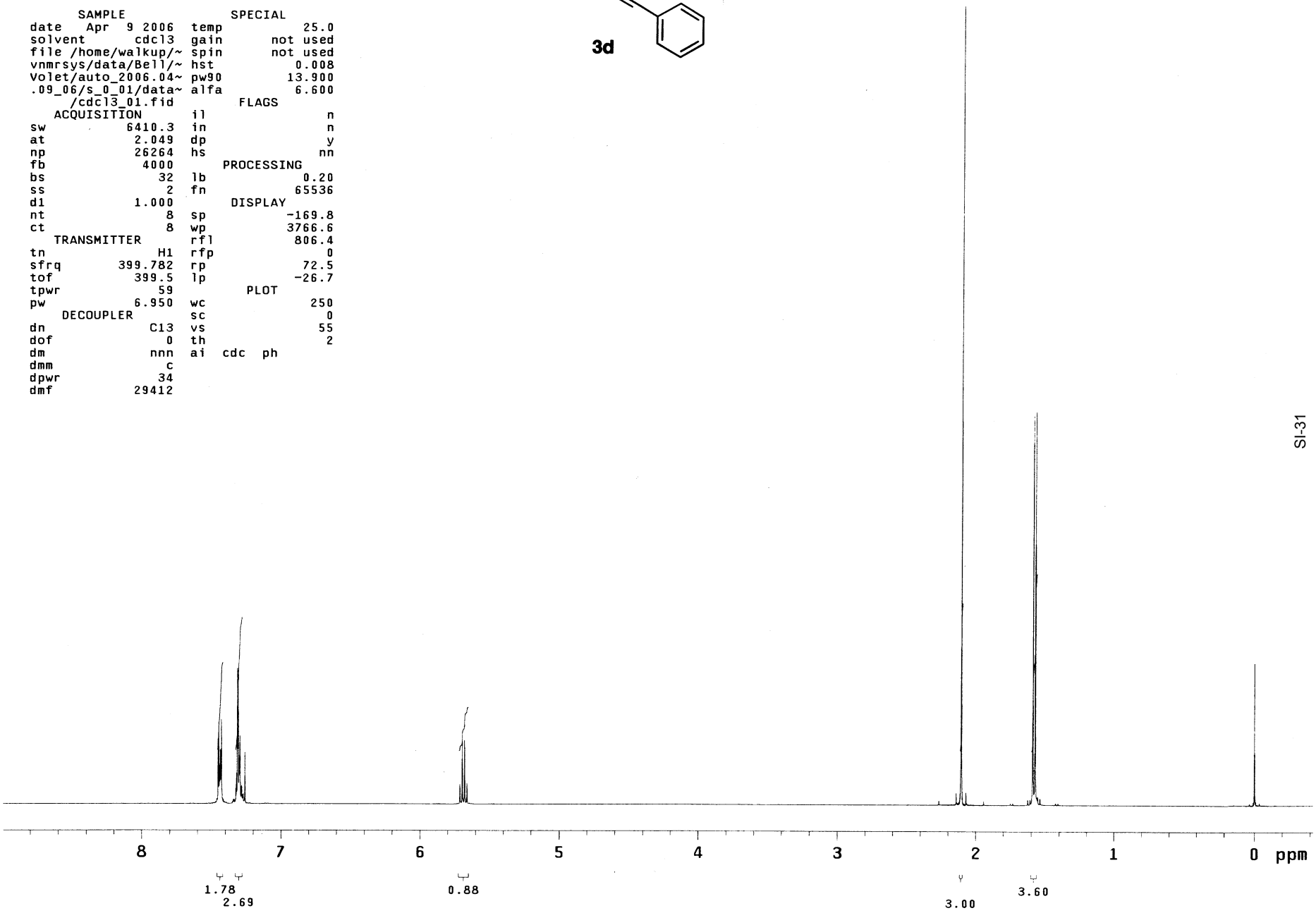
STANDARD 1H OBSERVE - profile

exp2 Proton

SAMPLE		SPECIAL	
date	Apr 9 2006	temp	25.0
solvent	cdcl3	gain	not used
file	/home/walkup/~	spin	not used
vnmrsys/data/Bell/~		hst	0.008
Volet/auto_2006.04~		pw90	13.900
.09_06/s_0_01/data~		alfa	6.600
/cdcl3_01.fid		FLAGS	
ACQUISITION		il	n
sw	6410.3	in	n
at	2.049	dp	y
np	26264	hs	nn
fb	4000	PROCESSING	
bs	32	lb	0.20
ss	2	fn	65536
d1	1.000	DISPLAY	
nt	8	sp	-169.8
ct	8	wp	3766.6
TRANSMITTER		rfl	806.4
tn	H1	rfp	0
sfrq	399.782	rp	72.5
tof	399.5	lp	-26.7
tpwr	59	PLOT	
pw	6.950	wc	250
DECOUPLER		sc	0
dn	C13	vs	55
dof	0	th	2
dm	nnn	ai	cdc ph
dmm	c		
dpwr	34		
dmf	29412		



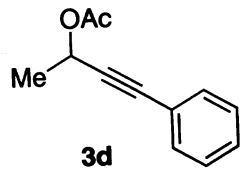
3d



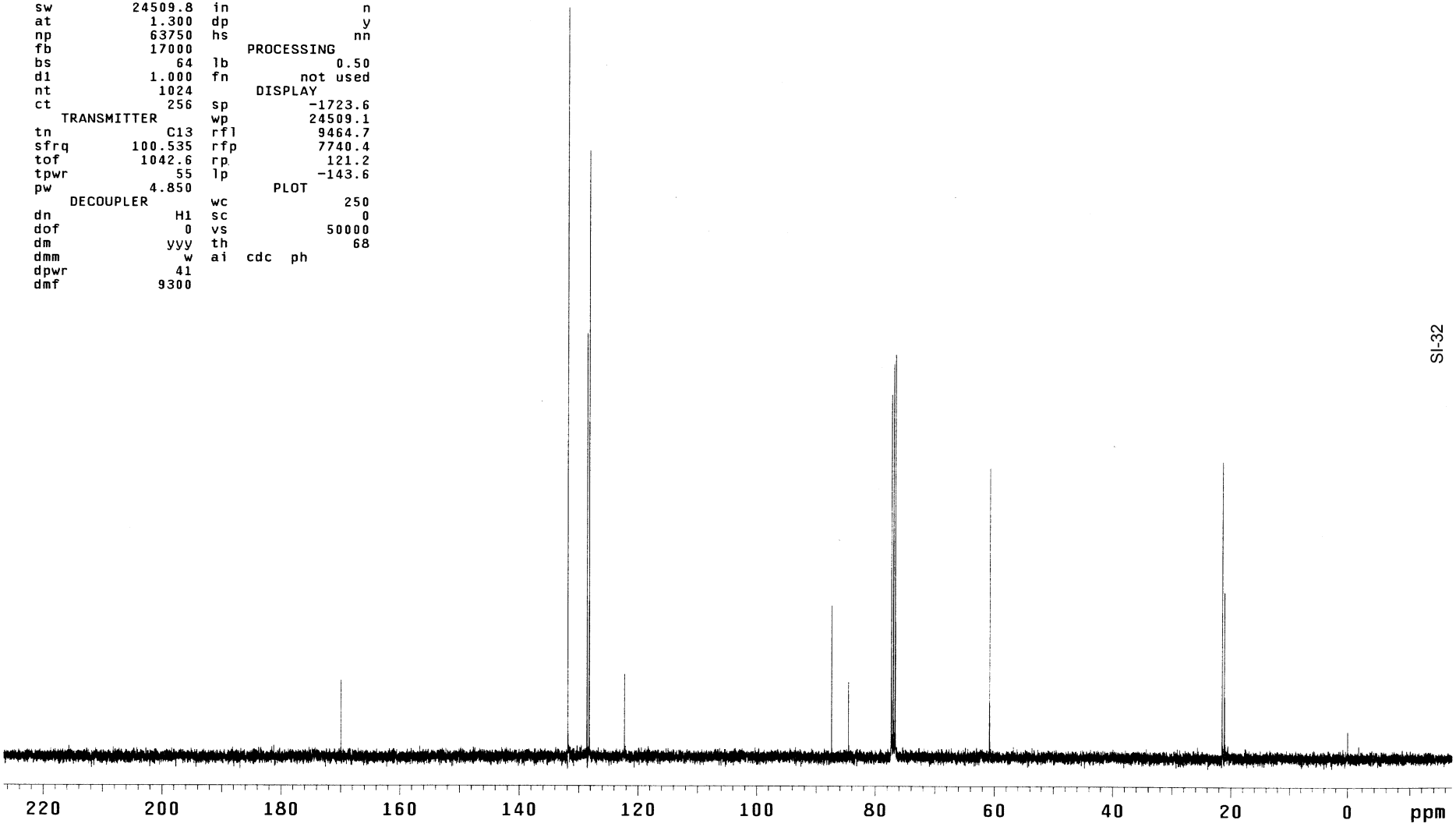
STANDARD 1H OBSERVE - profile

exp2 Carbon

SAMPLE		SPECIAL	
date	Apr 9 2006	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
vnmrsys/data/Bell/~		hst	0.008
Volet/auto_2006.04~		pw90	9.700
.09_06/s_0_02/data~		alfa	10.000
/cdcl3_01.fid		FLAGS	
ACQUISITION		il	n
sw	24509.8	in	n
at	1.300	dp	y
np	63750	hs	nn
fb	17000	PROCESSING	
bs	64	lb	0.50
d1	1.000	fn	not used
nt	1024	DISPLAY	
ct	256	sp	-1723.6
TRANSMITTER		wp	24509.1
tn	C13	rfl	9464.7
sfrq	100.535	rfp	7740.4
tof	1042.6	rp	121.2
tpwr	55	lp	-143.6
pw	4.850	PLOT	
DECOUPLER		wc	250
dn	H1	sc	0
dof	0	vs	50000
dm	yyy	th	68
dmm	w	ai	cdc ph
dpwr	41		
dmf	9300		



3d

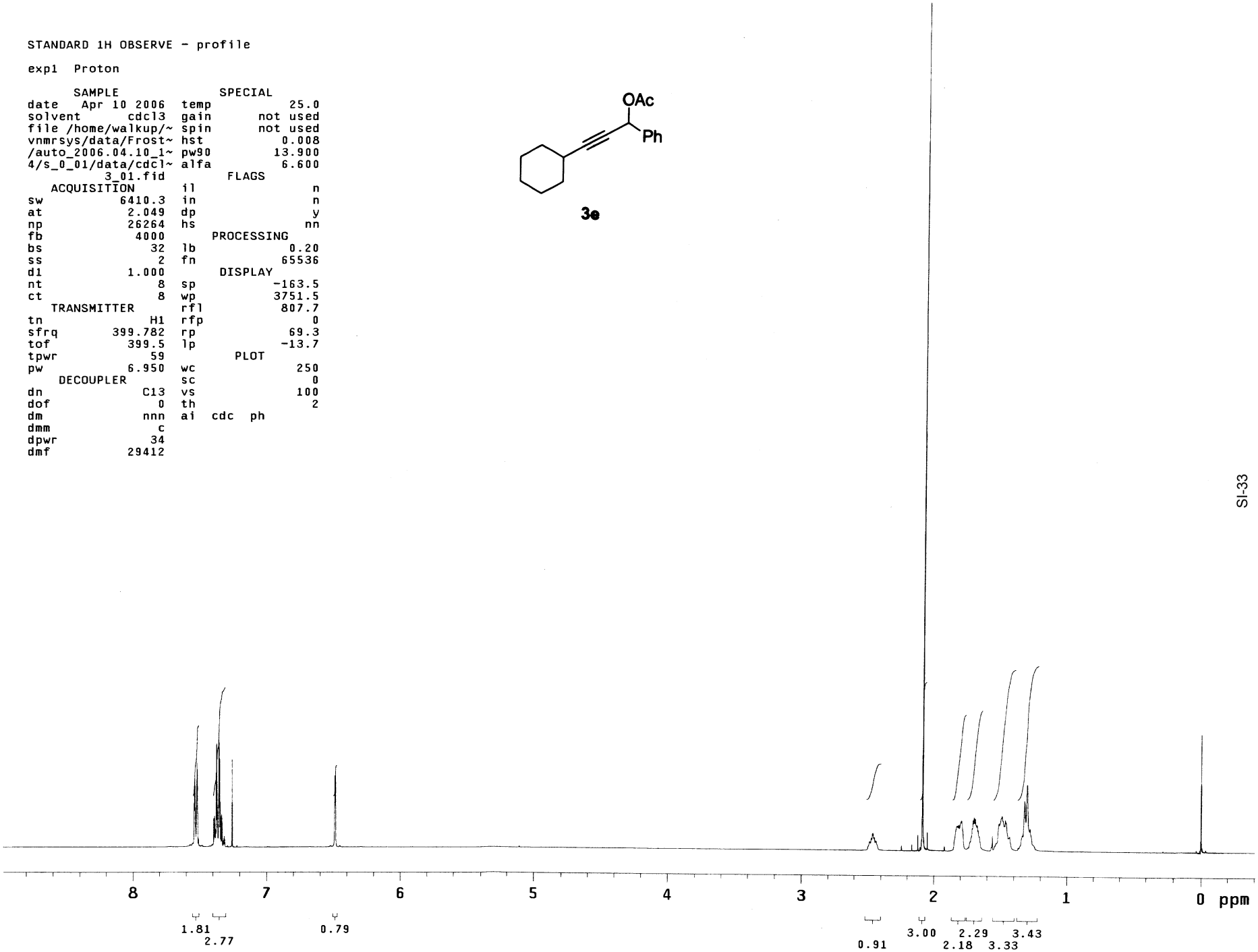


STANDARD 1H OBSERVE - profile

exp1 Proton

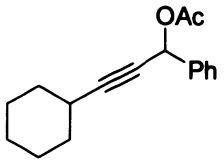
SAMPLE		SPECIAL	
date	Apr 10 2006	temp	25.0
solvent	cdcl3	gain	not used
file	/home/walkup/~	spin	not used
vnmrsys/data/Frost~		hst	0.008
/auto_2006.04.10_1~		pw90	13.900
4/s_0_01/data/cdcl~		alfa	6.600
3_01.fid		FLAGS	
ACQUISITION		il	n
sw	6410.3	in	n
at	2.049	dp	y
np	26264	hs	nn
fb	4000	PROCESSING	
bs	32	lb	0.20
ss	2	fn	65536
d1	1.000	DISPLAY	
nt	8	sp	-163.5
ct	8	wp	3751.5
TRANSMITTER		rfl	807.7
tn	H1	rfp	0
sfrq	399.782	rp	69.3
tof	399.5	lp	-13.7
tpwr	59	PLOT	
pw	6.950	wc	250
DECOUPLER		sc	0
dn	C13	vs	100
dof	0	th	2
dm	nnn	ai	cdc ph
dmm	c		
dpwr	34		
dmf	29412		

3e

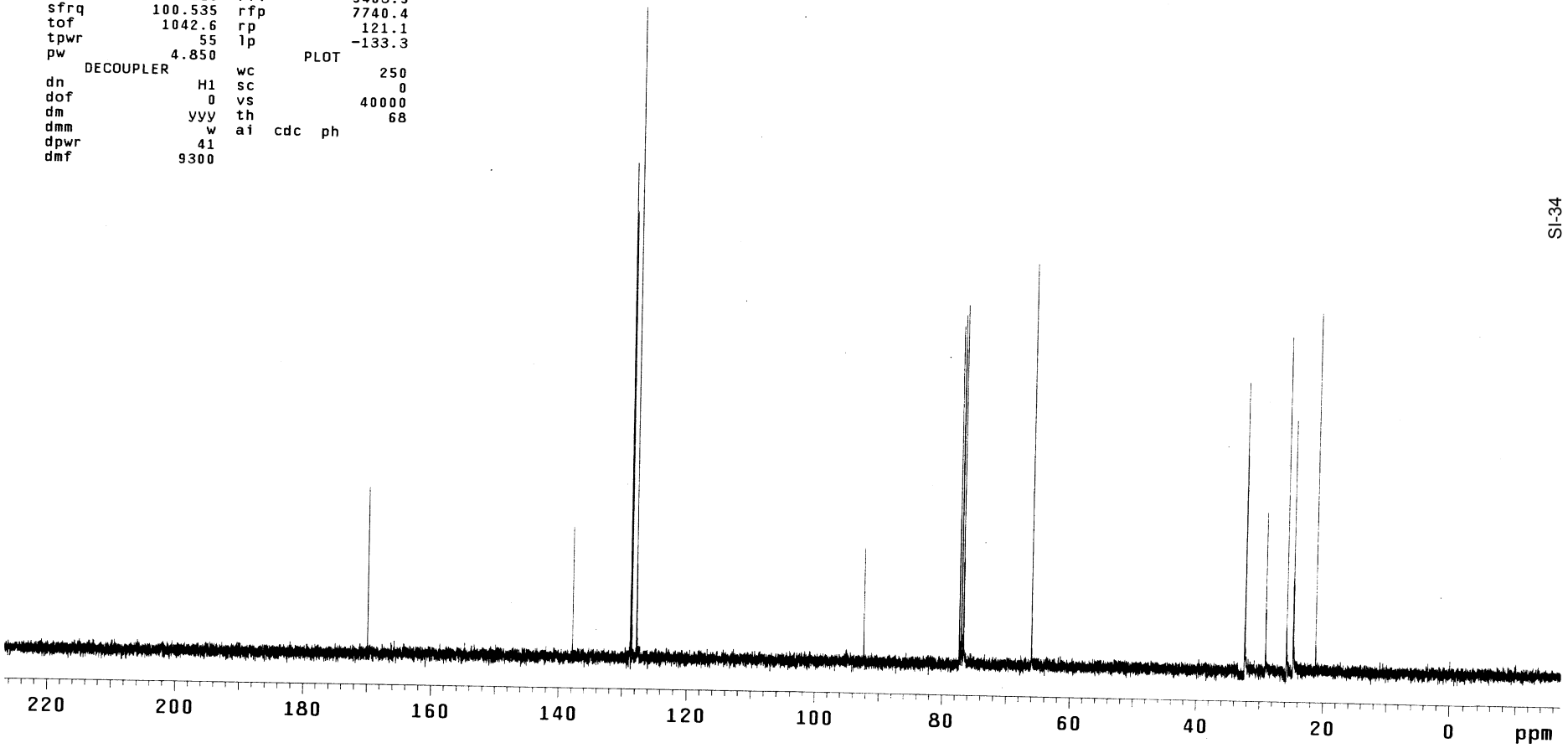


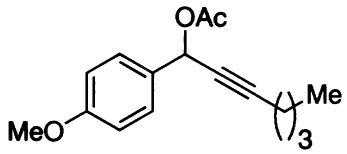
exp1 Carbon

SAMPLE		SPECIAL	
date	Apr 10 2006	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
vnmrsys/data/Frost~		hst	0.008
/auto_2006.04.10_1~		pw90	9.700
4/s_0_01/data/cdcl~		alfa	10.000
3_02.fid		FLAGS	
ACQUISITION		il	n
sw	24509.8	in	n
at	1.300	dp	y
np	63750	hs	nn
fb	17000	PROCESSING	
bs	64	lb	0.50
d1	1.000	fn	not used
nt	1024	DISPLAY	
ct	448	sp	-1722.8
TRANSMITTER		wp	24509.1
tn	C13	rfl	9463.9
sfrq	100.535	rfp	7740.4
tof	1042.6	rp	121.1
tpwr	55	lp	-133.3
pw	4.850	PLOT	
DECOUPLER		wc	250
dn	H1	sc	0
dof	0	vs	40000
dm	yyy	th	68
dmm	w	ai	cdc ph
dpwr	41		
dmf	9300		



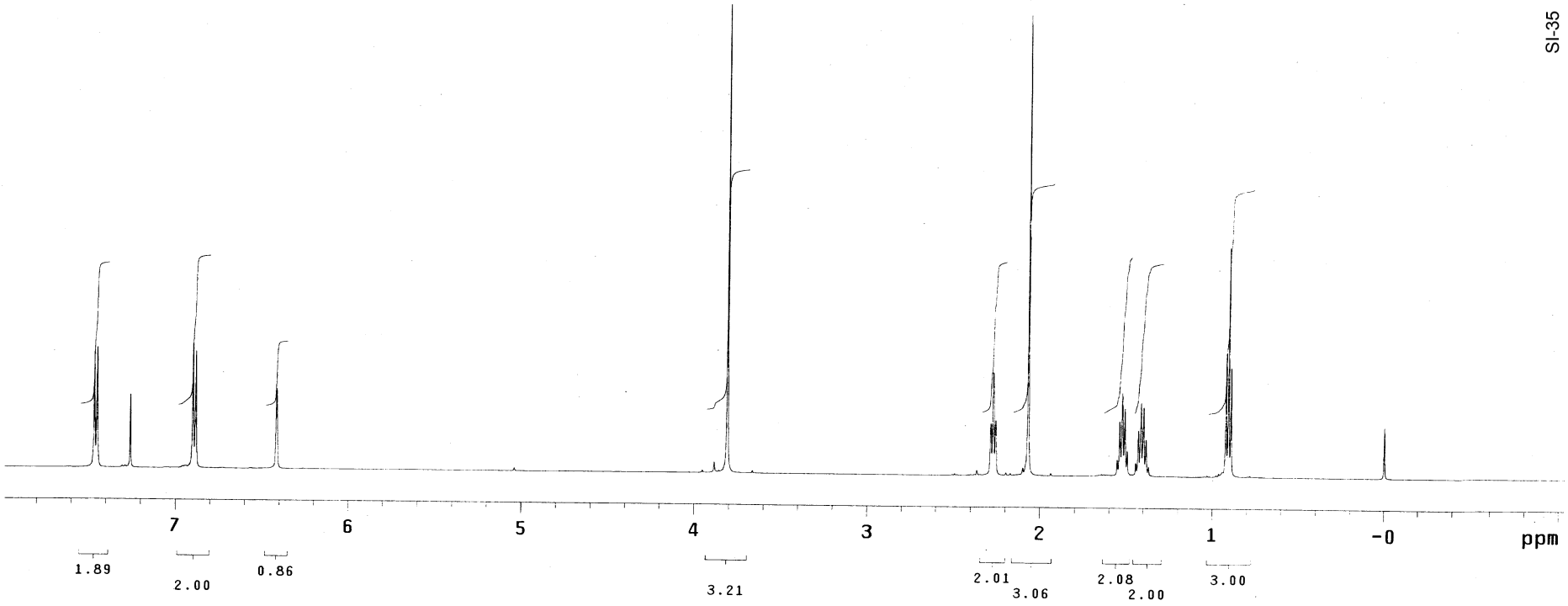
3e

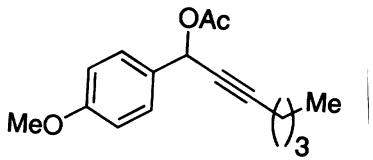




3f

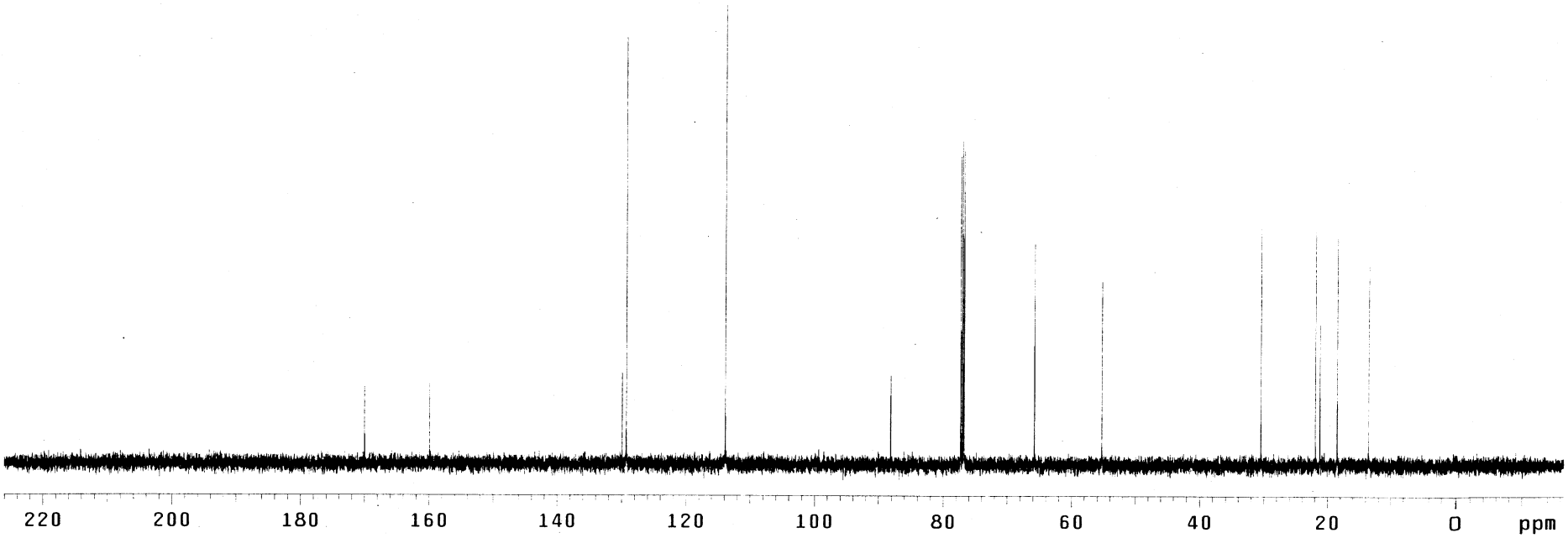
```
Automation directory: /home/walkup/vnmrsys/data/auto_2007.02.16_10
File : Aug.06/data/cdcl3_01.fid
Sample id : Aug.06

Pulse Sequence: s2pul
 Solvent: cdcl3
 Temp. 25.0 C / 298.1 K
Operator: walkup
File: cdcl3_01
VNMRS-500  "nmr500"

 Relax. delay 1.000 sec
 Pulse 45.0 degrees
 Acq. time 2.049 sec
 Width 8012.8 Hz
 8 repetitions
OBSERVE   H1, 499.8058864 MHz
DATA PROCESSING
 Line broadening 0.2 Hz
FT size 65536
Total time 0 min, 30 sec
```





3f

```
  Automation directory: /home/walkup/vnmrsys/data/auto_2007.02.16_10
  File : Aug.07/data/cdcl3_01.fid
  Sample id : Aug.07

Pulse Sequence: s2pul
 Solvent: cdcl3
 Temp. 25.0 C / 298.1 K
Operator: walkup
File: cdcl3_01
VNMRS-500  "nmr500"

 Relax. delay 1.000 sec
 Pulse 45.0 degrees
 Acq. time 1.300 sec
 Width 30487.8 Hz
 64 repetitions
OBSERVE  C13, 125.6762919 MHz
DECOUPLE  H1, 499.8083861 MHz
 Power 39 dB
 continuously on
 WALTZ-16 modulated
DATA PROCESSING
 Line broadening 0.5 Hz
FT size 131072
Total time 9 min, 51 sec
```

exp3 Proton

SAMPLE	
date	Feb 16 2007
solvent	cdcl3
file	/home/walkup/~
data/Zhang/Meng/CF~	
3-acetate-H1.fid	

ACQUISITION	
sw	6410.3
at	2.049
np	26264
fb	4000
bs	32
ss	2
d1	1.000
nt	8
ct	8

TRANSMITTER	
tn	H1
sfrq	399.782
tof	399.5
tpwr	59
pw	6.950

DECOUPLER	
dn	C13
dof	0
dm	nnn
dmm	c
dpwr	34
dmf	29412

SPECIAL	
temp	25.0
gain	not used
spin	not used
hst	0.008
pw90	13.900
alfa	6.600

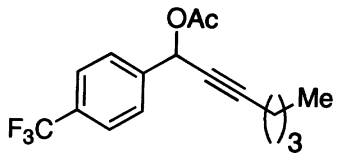
FLAGS	
il	n
in	n
dp	y
hs	nn

PROCESSING	
lb	0.20
fn	65536

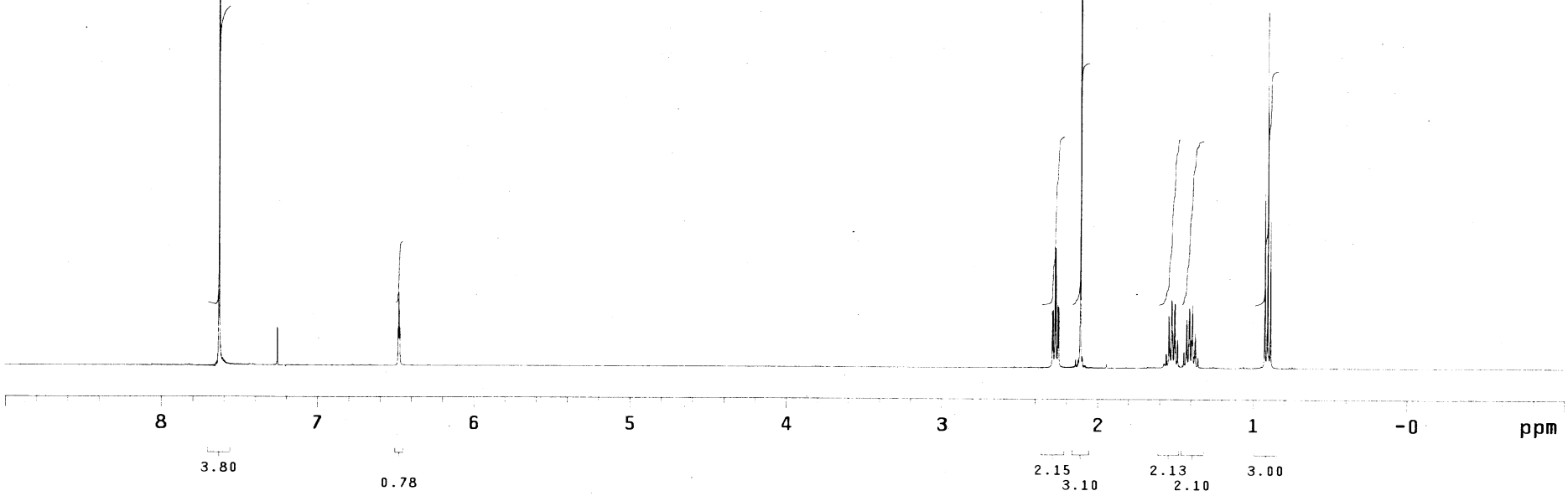
DISPLAY	
sp	-400.1
wp	4000.7
rfl	3707.9
rfp	2902.4
rp	-157.7
lp	-34.0

PLOT	
wc	250
sc	0
vs	54
th	44

ai cdc ph

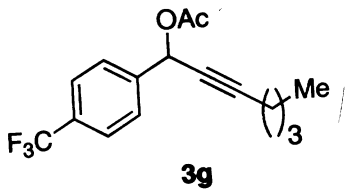


3g

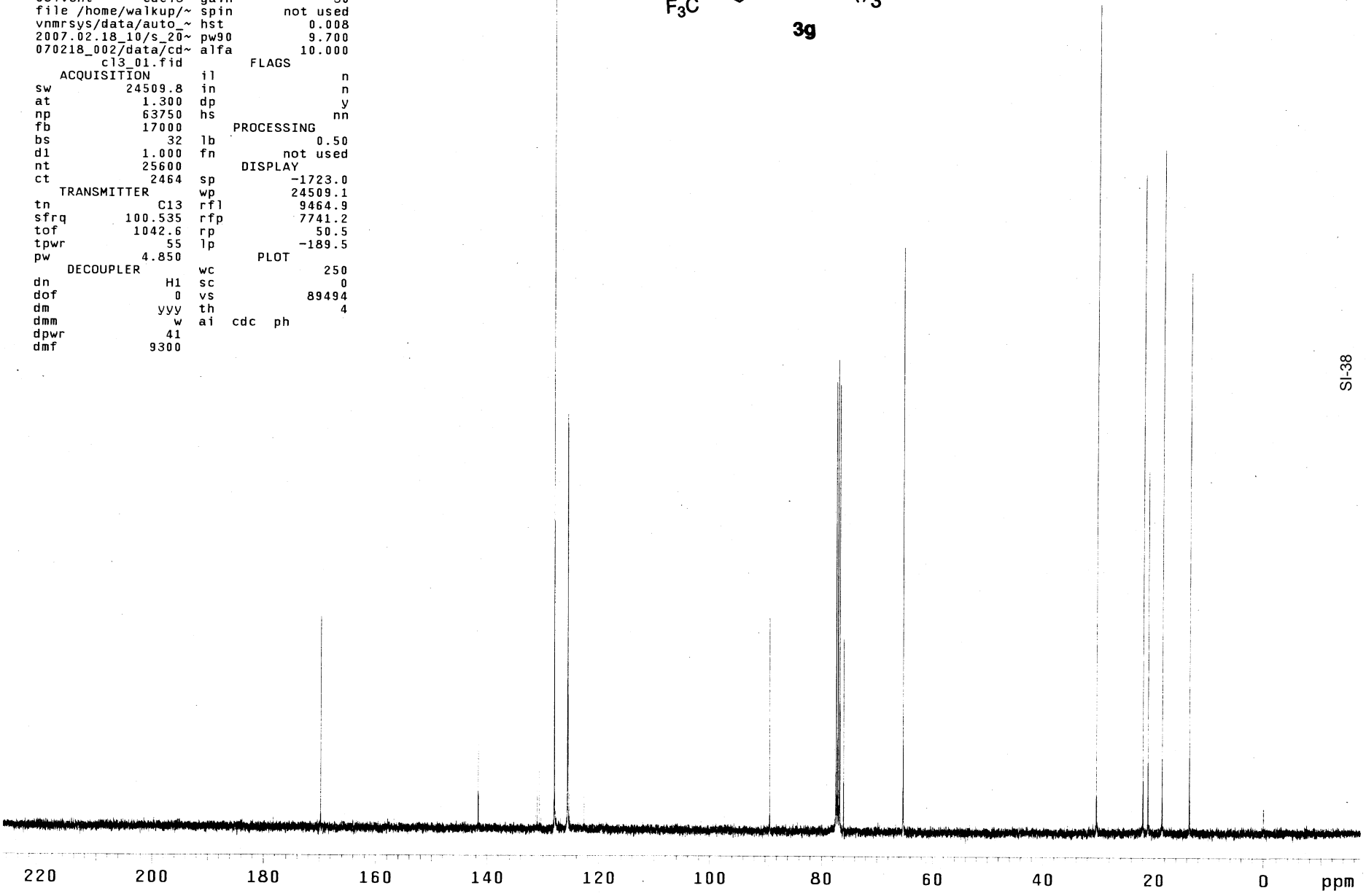


exp3 Carbon

SAMPLE		SPECIAL	
date	Feb 18 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
vnmrsys/data/auto_~		hst	0.008
2007.02.18_10/s_20~		pw90	9.700
070218_002/data/cd~		alfa	10.000
cl3_01.fid		FLAGS	
ACQUISITION		il	n
sw	24509.8	in	n
at	1.300	dp	y
np	63750	hs	nn
fb	17000	PROCESSING	
bs	32	lb	0.50
d1	1.000	fn	not used
nt	25600	DISPLAY	
ct	2464	sp	-1723.0
TRANSMITTER		wp	24509.1
tn	C13	rfl	9464.9
sfrq	100.535	rfp	7741.2
tof	1042.6	rp	50.5
tpwr	55	lp	-189.5
pw	4.850	PLOT	
DECOUPLER		wc	250
dn	H1	sc	0
dof	0	vs	89494
dm	yyy	th	4
dmm	w	ai	cdc ph
dpwr	41		
dmf	9300		



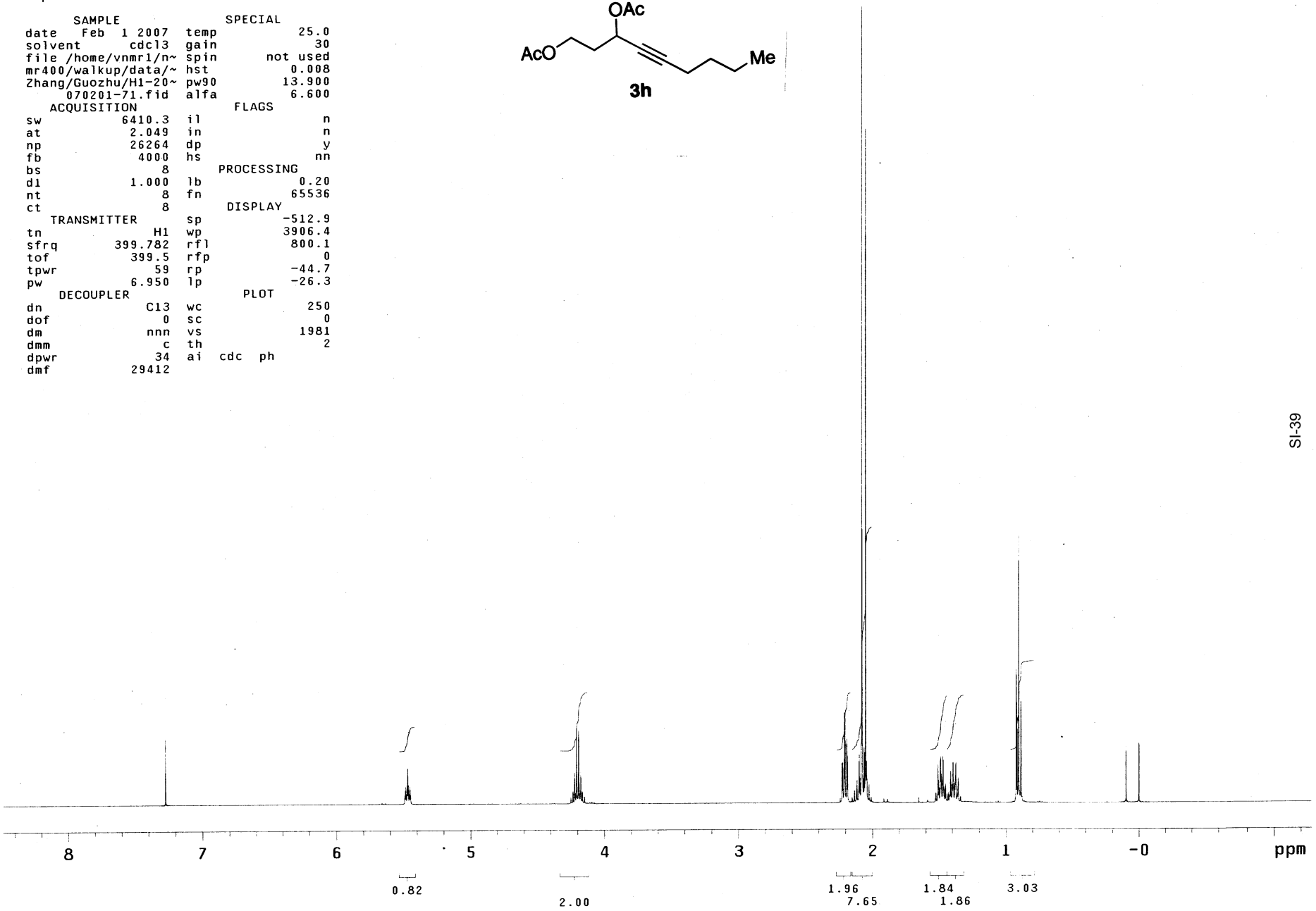
3g



exp1 Proton

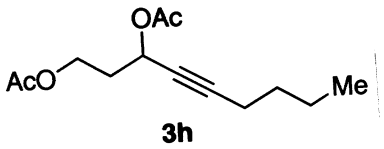
SAMPLE		SPECIAL	
date	Feb 1 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr400/walkup/data/~	hst	0.008
	Zhang/Guozhu/H1-20~	pw90	13.900
	070201-71.fid	alfa	6.600
ACQUISITION		FLAGS	
sw	6410.3	il	n
at	2.049	in	n
np	26264	dp	y
fb	4000	hs	nn
bs	8	PROCESSING	
d1	1.000	lb	0.20
nt	8	fn	65536
ct	8	DISPLAY	
TRANSMITTER		sp	-512.9
tn	H1	wp	3906.4
sfrq	399.782	rfl	800.1
tof	399.5	rfp	0
tpwr	59	rp	-44.7
pw	6.950	lp	-26.3
DECOUPLER		PLOT	
dn	C13	wc	250
dof	0	sc	0
dm	nnn	vs	1981
dmm	c	th	2
dpwr	34	ai cdc ph	
dmf	29412		

3h

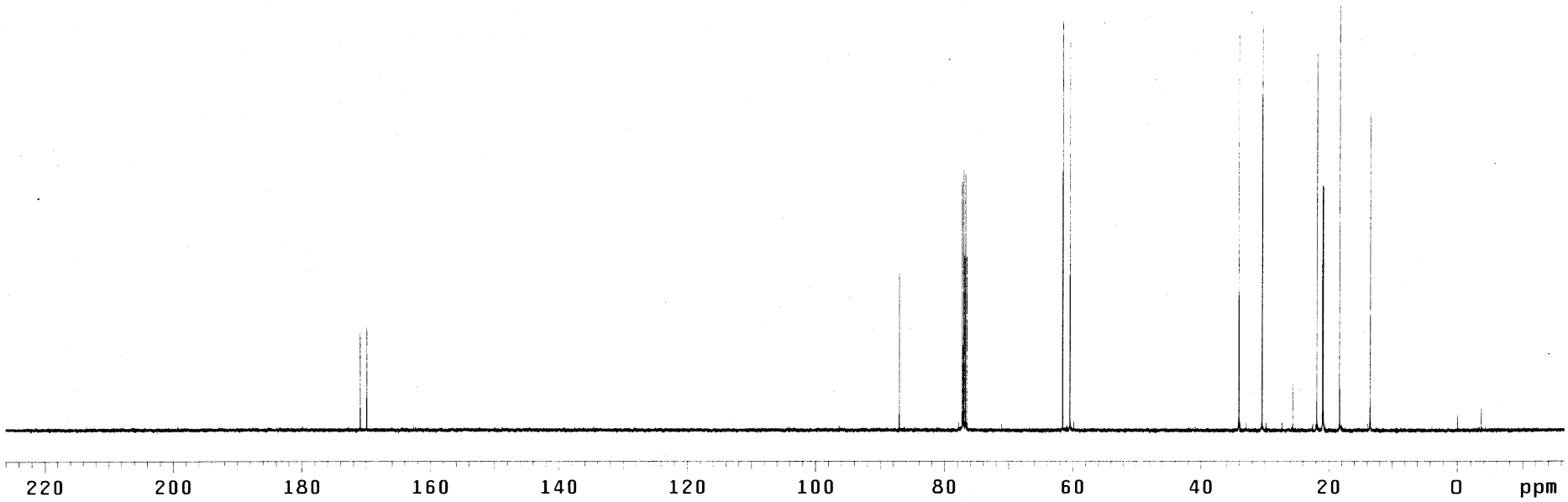


exp1 Carbon

SAMPLE		SPECIAL	
date	Feb 5 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr500/walkup/data/~	hst	0.008
	Zhang/Guozhu/C13-2~	pw90	15.300
	0070205-71-2.fid	alfa	10.000
ACQUISITION		FLAGS	
sw	30487.8	il	n
at	1.300	in	n
np	79298	dp	y
fb	17000	hs	nn
bs	12	PROCESSING	
d1	1.000	lb	0.50
nt	12000	fn	not used
ct	912	DISPLAY	
TRANSMITTER		sp	-2080.1
tn	C13	wp	30487.3
sfrq	125.689	rfl	11757.6
tof	1255.3	rfp	9677.1
tpwr	49	rp	-33.4
pw	7.650	lp	-255.6
DECOUPLER		PLOT	
dn	H1	wc	250
dof	0	sc	0
dm	yyy	vs	14325
dmm	w	th	9
dpwr	39	ai	cdc ph
dmf	12200		

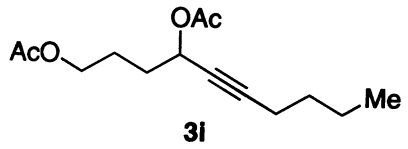


3h

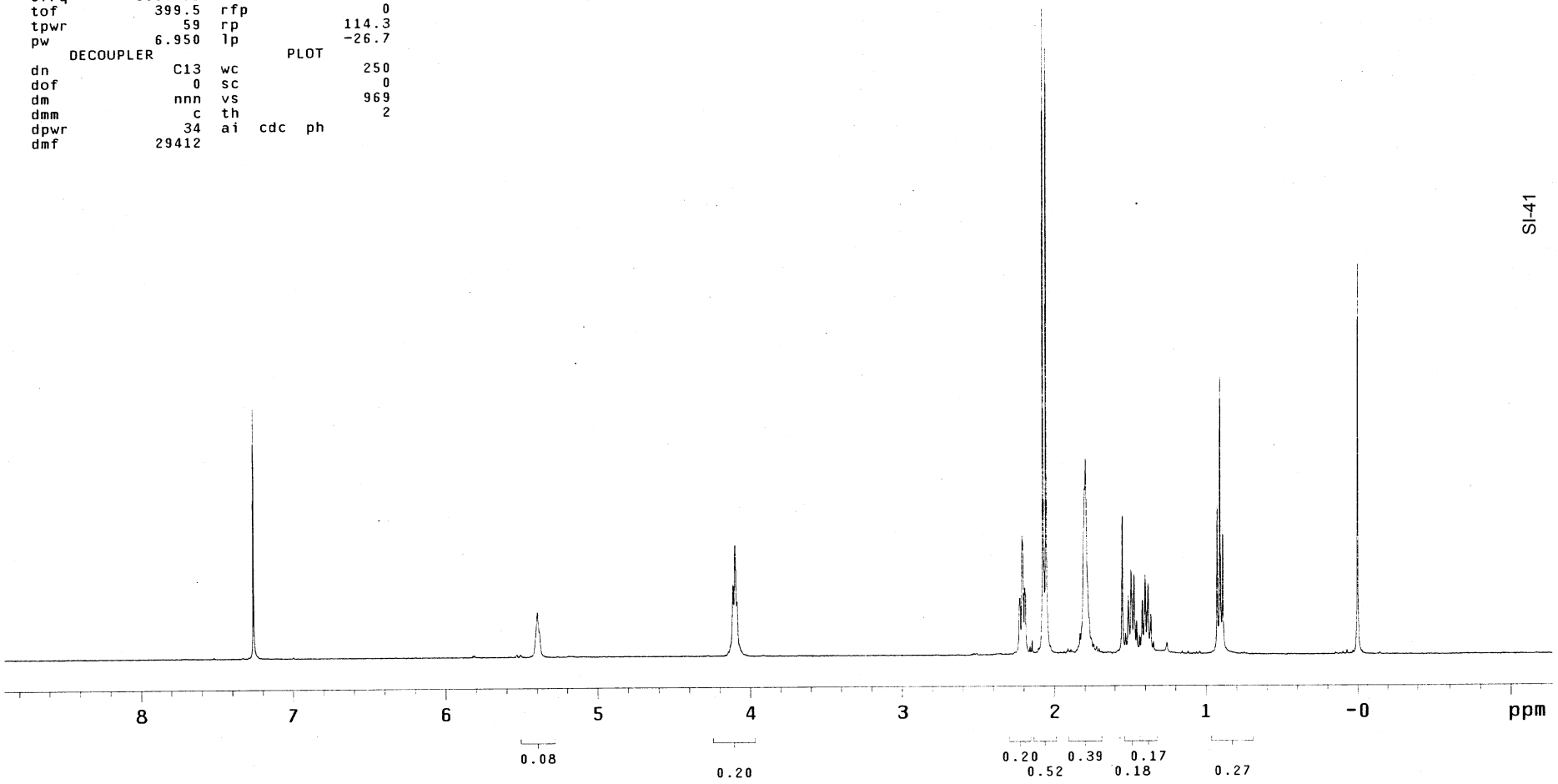


exp1 Proton

SAMPLE		SPECIAL	
date	Feb 10 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr400/walkup/data/~	hst	0.008
	Zhang/Guozhu/H1-20~	pw90	13.900
	070210-83.fid	alfa	6.600
ACQUISITION		**FLAGS**	
sw	6410.3	il	n
at	2.049	in	n
np	26264	dp	y
fb	4000	hs	nn
bs	8	**PROCESSING**	
d1	1.000	lb	0.20
nt	8	fn	65536
ct	8	**DISPLAY**	
TRANSMITTER		sp	-510.4
tn	H1	wp	4068.0
sfrq	399.782	rfl	803.2
tof	399.5	rfp	0
tpwr	59	rp	114.3
pw	6.950	lp	-26.7
DECOUPLER		**PLOT**	
dn	C13	wc	250
dof	0	sc	0
dm	nnn	vs	969
dmm	c	th	2
dpwr	34	ai	cdc ph
dmf	29412		



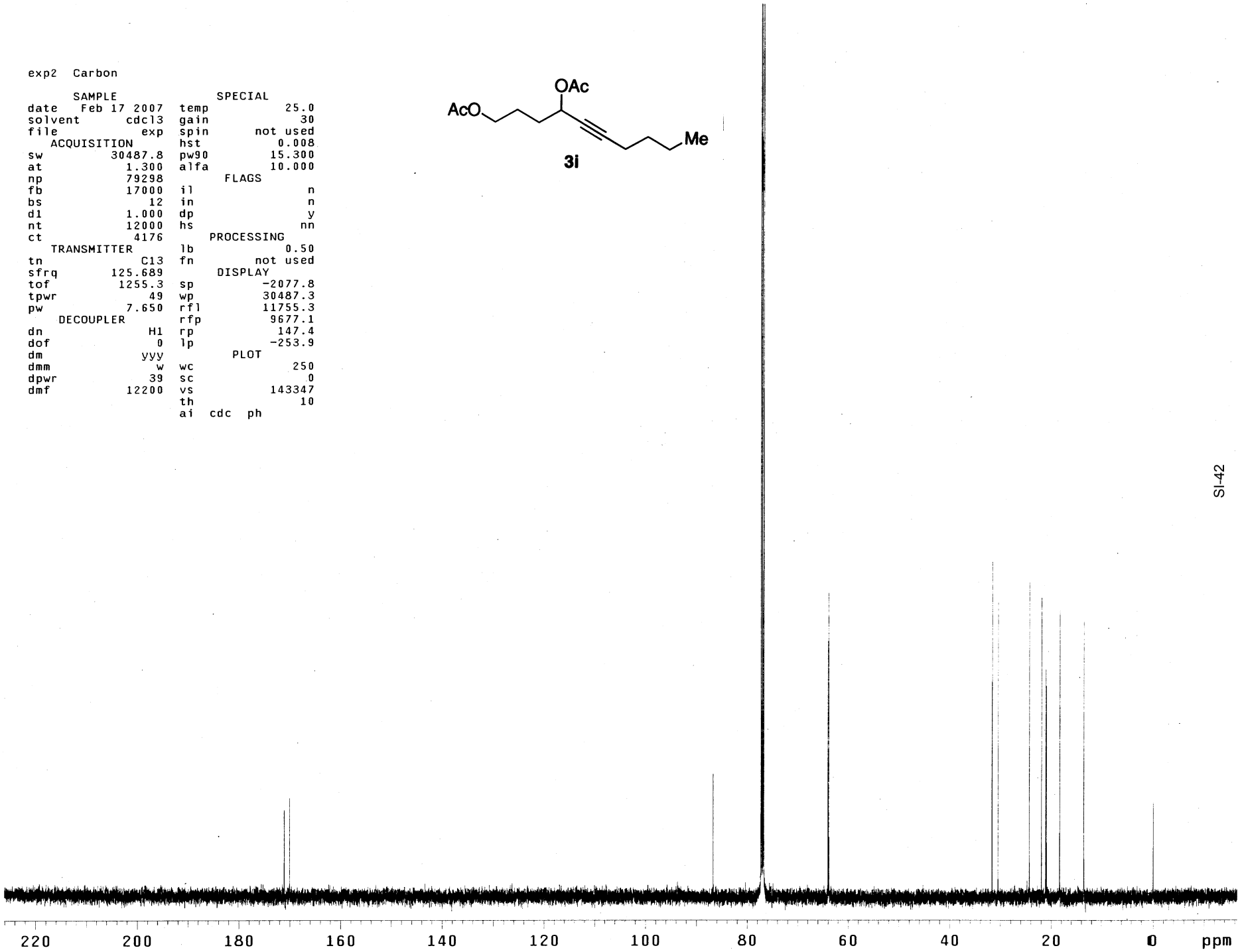
3i



exp2 Carbon

SAMPLE		SPECIAL	
date	Feb 17 2007	temp	25.0
solvent	cdcl3	gain	30
file	exp	spin	not used
ACQUISITION		hst	0.008
sw	30487.8	pw90	15.300
at	1.300	alfa	10.000
np	79298	FLAGS	
fb	17000	il	n
bs	12	in	n
d1	1.000	dp	y
nt	12000	hs	nn
ct	4176	PROCESSING	
TRANSMITTER		lb	0.50
tn	C13	fn	not used
sfrq	125.689	DISPLAY	
tof	1255.3	sp	-2077.8
tpwr	49	wp	30487.3
pw	7.650	rfl	11755.3
DECOUPLER		rfp	9677.1
dn	H1	rp	147.4
dof	0	lp	-253.9
dm	yyy	PLOT	
dmm	w	wc	250
dpwr	39	sc	0
dmf	12200	vs	143347
		th	10
		ai cdc ph	

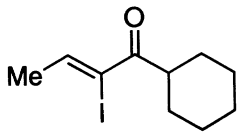
3i



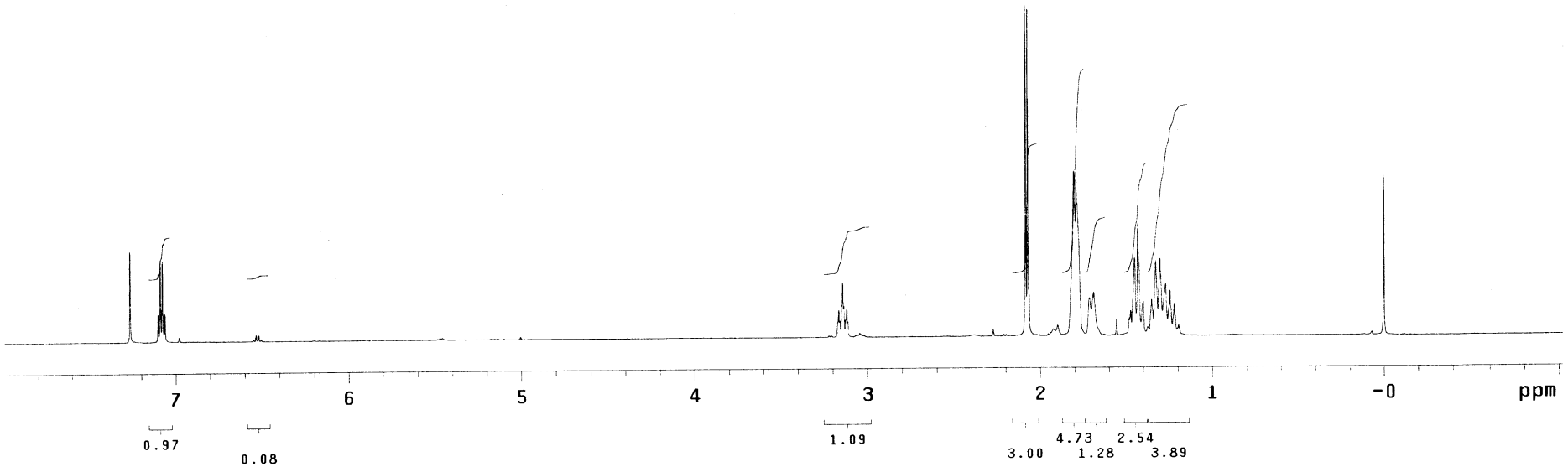
STANDARD 1H OBSERVE - profile

exp1 Proton

SAMPLE		SPECIAL	
date	Jan 10 2007	temp	25.0
solvent	cdcl3	gain	not used
file	/home/walkup/~	spin	not used
data	/Zhang/Meng/1m~	hst	0.008
ethy_C6ring_NIS_Ac~		pw90	14.700
etone_pure_C13.fid		alfa	6.600
ACQUISITION		**FLAGS**	
sw	8012.8	il	n
at	2.049	in	n
np	32830	dp	y
fb	4000	hs	nn
bs	32	**PROCESSING**	
ss	2	lb	0.20
d1	1.000	fn	65536
nt	8	**DISPLAY**	
ct	8	sp	-512.0
TRANSMITTER		wp	4505.3
tn	H1	rfl	1006.5
sfrq	499.809	rfp	0
tof	499.7	rp	-160.4
tpwr	54	lp	-38.5
pw	7.350	**PLOT**	
DECOUPLER		wc	250
dn	C13	sc	0
dof	0	vs	150
dm	nnn	th	2
dmm	c	ai	cdc ph
dpwr	34		
dmf	32258		



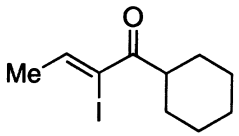
4a



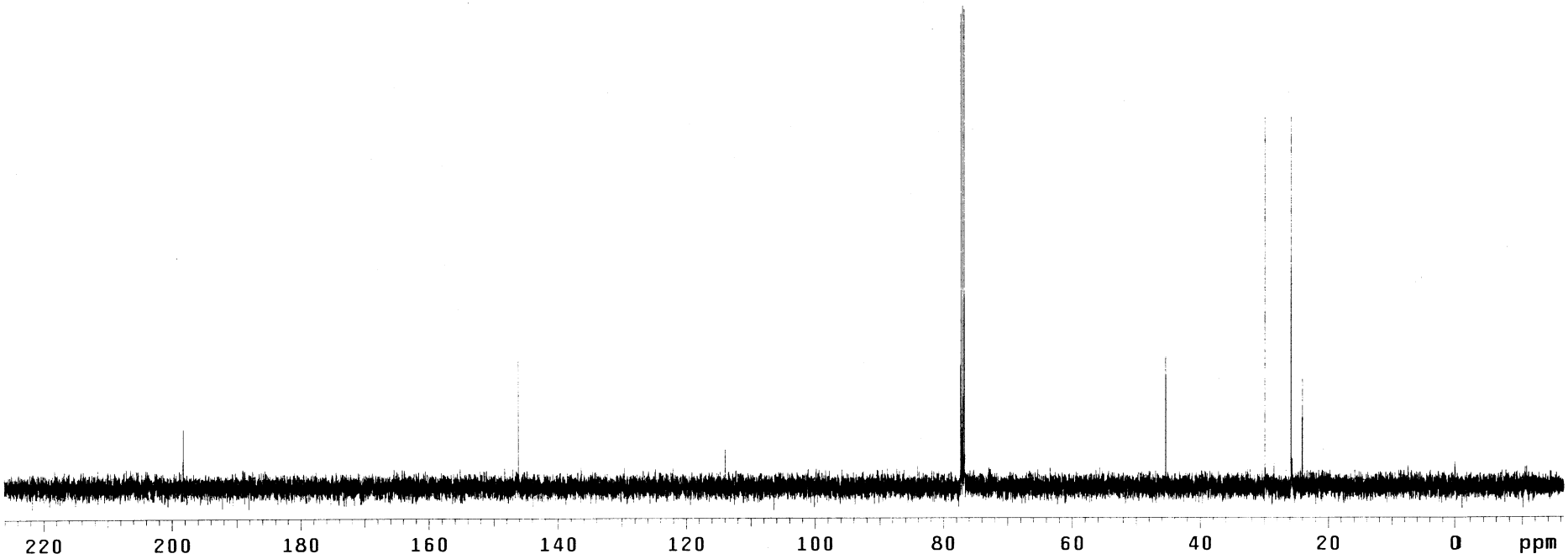
STANDARD 1H OBSERVE - profile

exp1 Carbon

SAMPLE		SPECIAL	
date	Jan 10 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
vnmrsys/data/auto_~		hst	0.008
2007.01.10_04/Aug.~		pw90	15.300
05/data/cdcl3_01.f~		alfa	10.000
id		FLAGS	
ACQUISITION		il	n
sw	30487.8	in	n
at	1.300	dp	y
np	79298	hs	nn
fb	17000	PROCESSING	
bs	64	lb	0.50
d1	1.000	fn	not used
nt	256	DISPLAY	
ct	64	sp	-2075.4
TRANSMITTER		wp	30487.3
tn	C13	rfl	11754.0
sfrq	125.689	rfp	9678.1
tof	1255.3	rp	-138.3
tpwr	49	lp	-228.6
pw	7.650	PLOT	
DECOUPLER		wc	250
dn	H1	sc	0
dof	0	vs	20000
dm	yyy	th	6
dmm	w	ai cdc ph	
dpwr	39		
dmf	12200		

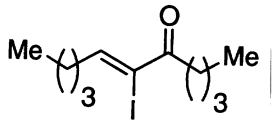


4a

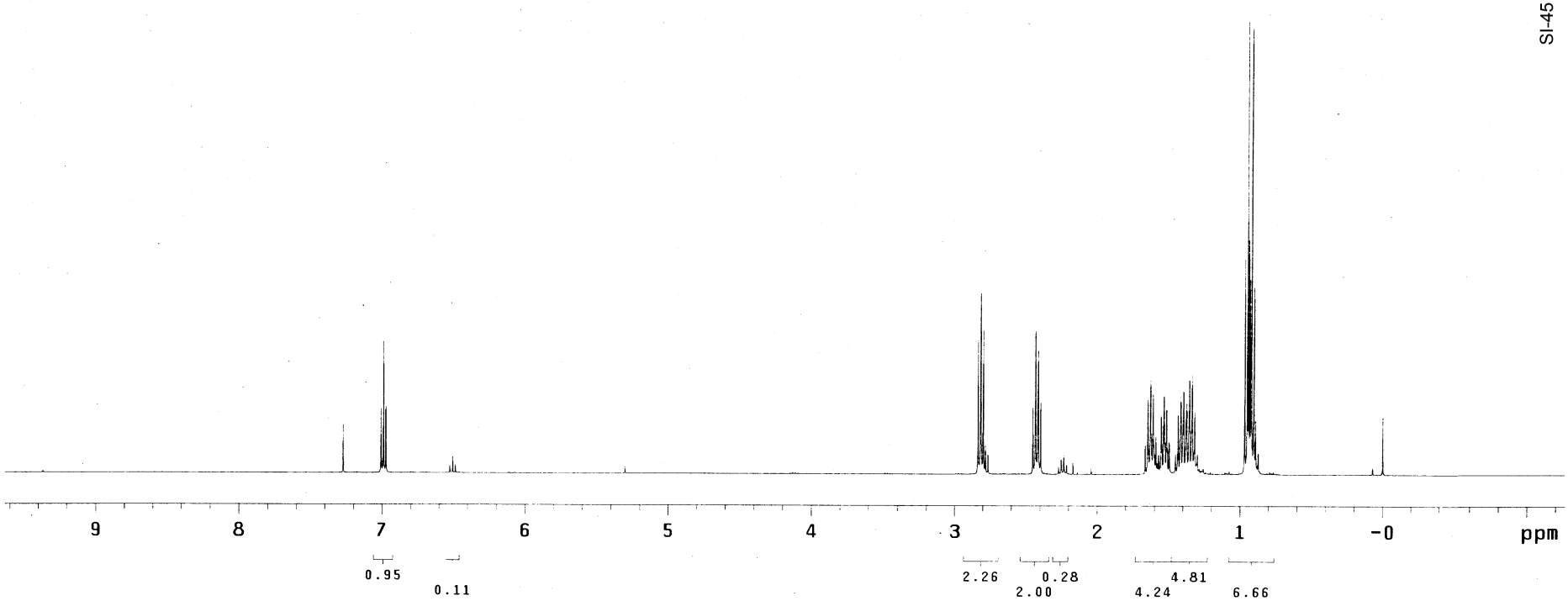


exp1 Proton

SAMPLE		SPECIAL	
date	Jan 18 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr400/walkup/data/~	hst	0.008
	Zhang/Guozhu/H1-20~	pw90	13.900
	070118-57.fid	alfa	6.600
ACQUISITION		**FLAGS**	
sw	6410.3	il	n
at	2.049	in	n
np	26264	dp	y
fb	4000	hs	nn
bs	8	**PROCESSING**	
d1	1.000	lb	0.20
nt	8	fn	65536
ct	8	**DISPLAY**	
TRANSMITTER		sp	-508.8
tn	H1	wp	4360.7
sfrq	399.782	rfl	801.7
tof	399.5	rfp	0
tpwr	59	rp	141.3
pw	6.950	lp	-26.1
DECOUPLER		**PLOT**	
dn	C13	wc	250
dof	0	sc	0
dm	nnn	vs	2431
dmm	c	th	3
dpwr	34	ai cdc ph	
dmf	29412		

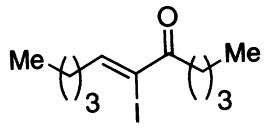


4b

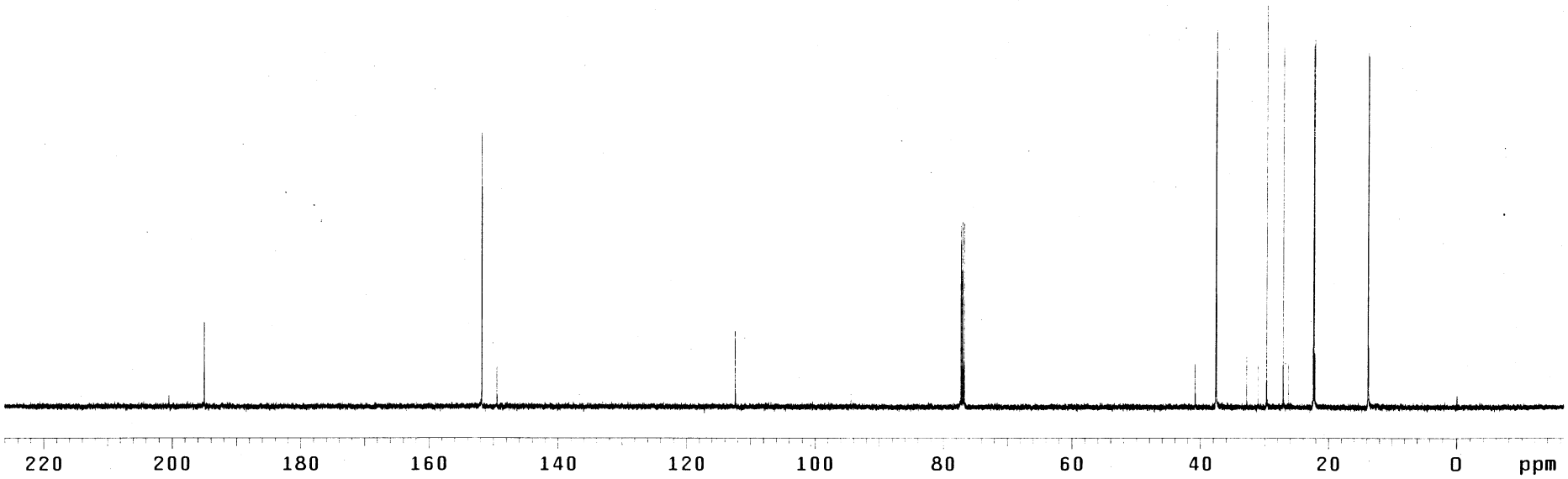


exp1 Carbon

SAMPLE		SPECIAL	
date	Jan 18 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr500/walkup/data/~	hst	0.008
	Zhang/Guozhu/C13-2~	pw90	15.300
	0070118-59.fid	alfa	10.000
ACQUISITION		FLAGS	
sw	30487.8	il	n
at	1.300	in	n
np	79298	dp	y
fb	17000	hs	nn
bs	64	PROCESSING	
d1	1.000	lb	0.50
nt	1280	fn	not used
ct	576	DISPLAY	
TRANSMITTER		sp	-2078.7
tn	C13	wp	30487.3
sfrq	125.689	rfl	11756.2
tof	1255.3	rfp	9677.1
tpwr	49	rp	-109.7
pw	7.650	lp	-236.1
DECOUPLER		PLOT	
dn	H1	wc	250
dof	0	sc	0
dm	yyy	vs	17864
dmm	w	th	9
dpwr	39	ai	cdc ph
dmf	12200		

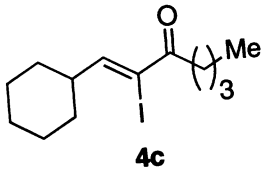


4b

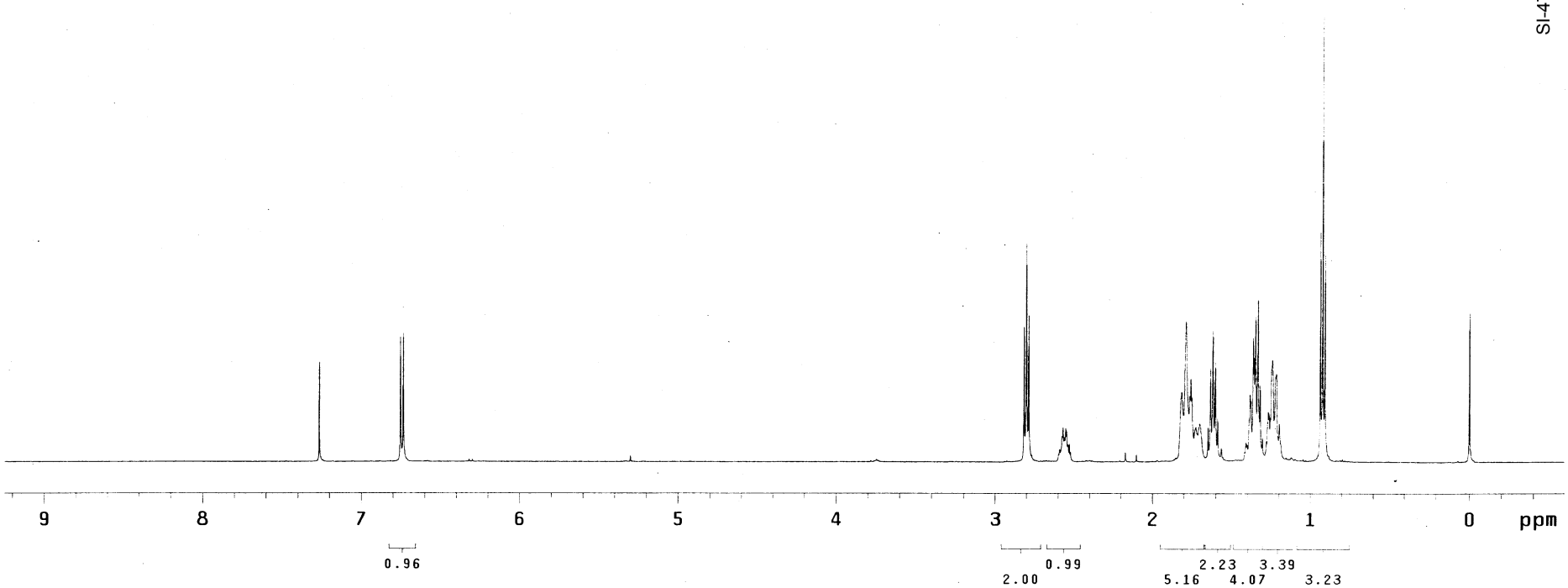


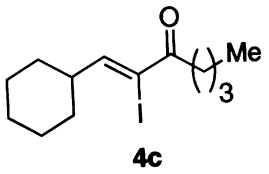
exp1 Proton

SAMPLE		SPECIAL	
date	Jan 25 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr500/walkup/data/~	hst	0.008
	Zhang/Guozhu/H1-20~	pw90	14.700
	070125-65.fid	alfa	6.600
ACQUISITION		**FLAGS**	
sw	8012.8	il	n
at	2.049	in	n
np	32830	dp	y
fb	4000	hs	nn
bs	8	**PROCESSING**	
d1	1.000	lb	0.20
nt	8	fn	65536
ct	8	**DISPLAY**	
TRANSMITTER		sp	-298.1
tn	H1	wp	4921.0
sfrq	499.809	rfl	1004.8
tof	499.7	rfp	0
tpwr	54	rp	57.5
pw	7.350	lp	-36.3
DECOUPLER		**PLOT**	
dn	C13	wc	250
dof	0	sc	0
dm	nnn	vs	321
dmm	c	th	2
dpwr	34	ai cdc ph	
dmf	32258		



4c

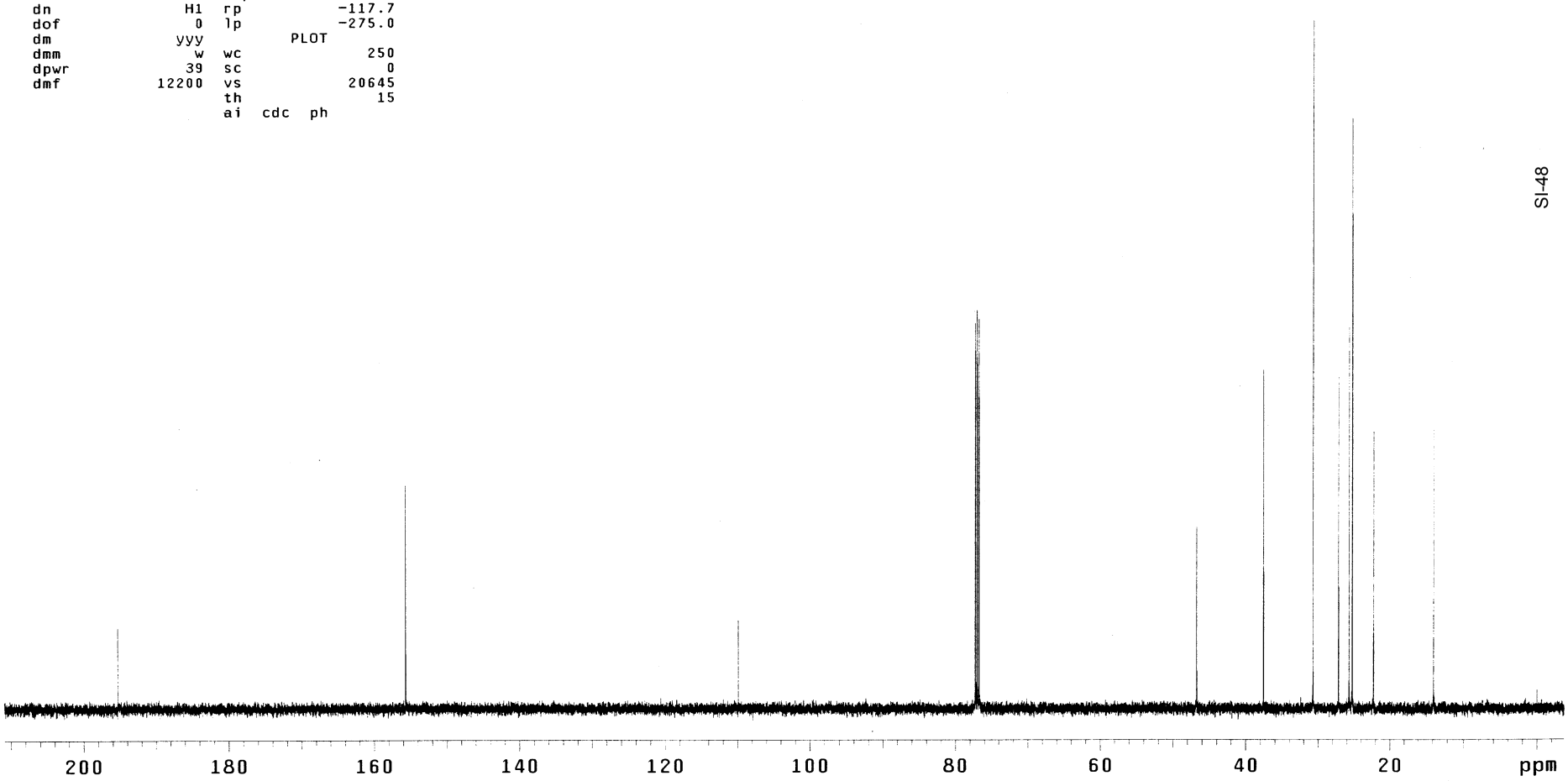




4c

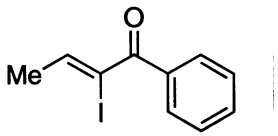
exp1 Carbon

SAMPLE		SPECIAL	
date	Jan 25 2007	temp	25.0
solvent	cdcl3	gain	30
file	exp	spin	not used
ACQUISITION		hst	0.008
sw	30487.8	pw90	15.300
at	1.300	alfa	10.000
np	79298	FLAGS	
fb	17000	il	n
bs	4	in	n
d1	1.000	dp	y
nt	12000	hs	nn
ct	244	PROCESSING	
TRANSMITTER		lb	0.50
tn	C13	fn	not used
sfrq	125.689	DISPLAY	
tof	1255.3	sp	-469.6
tpwr	49	wp	26975.5
pw	7.650	rfl	11754.9
DECOUPLER		rfp	9677.1
dn	H1	rp	-117.7
dof	0	lp	-275.0
dm	yyy	PLOT	
dmm	w	wc	250
dpwr	39	sc	0
dmf	12200	vs	20645
		th	15
		ai	cdc ph

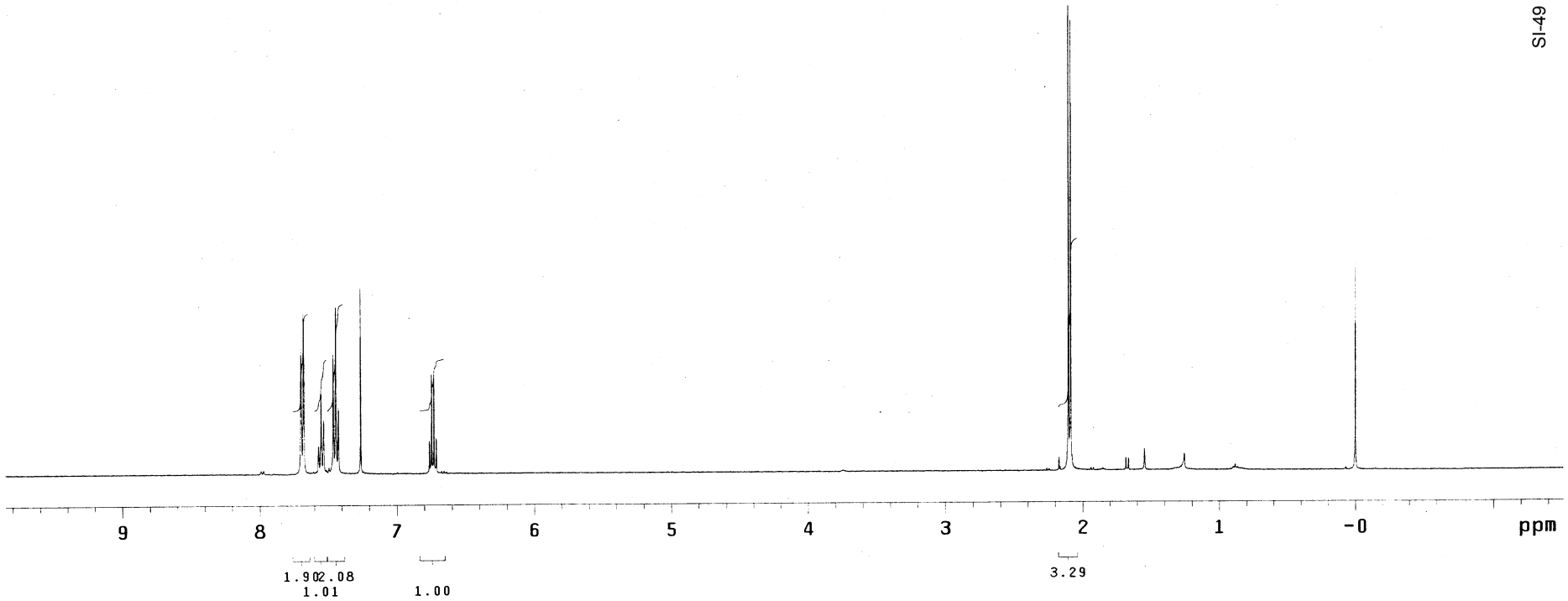


exp1 Proton

SAMPLE		SPECIAL	
date	Jan 22 2007	temp	25.0
solvent	cdcl3	gain	20
file	/home/vnmr1/n~	spin	not used
	mr400/walkup/data/~	hst	0.008
	Zhang/Guozhu/H1-20~	pw90	13.900
	070122-63.fid	alfa	6.600
ACQUISITION		**FLAGS**	
sw	6410.3	il	n
at	2.049	in	n
np	26264	dp	y
fb	4000	hs	nn
bs	32	**PROCESSING**	
d1	1.000	lb	0.20
nt	8	fn	65536
ct	8	**DISPLAY**	
TRANSMITTER		sp	-603.3
tn	H1	wp	4542.4
sfrq	399.782	rfl	805.4
tof	399.5	rfp	0
tpwr	59	rp	132.6
pw	6.950	lp	-27.4
DECOUPLER		**PLOT**	
dn	C13	wc	250
dof	0	sc	0
dm	nnn	vs	46503
dmm	c	th	3
dpwr	34	ai	cdc ph
dmf	29412		

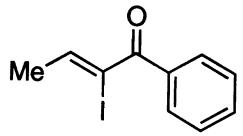


Z-4d

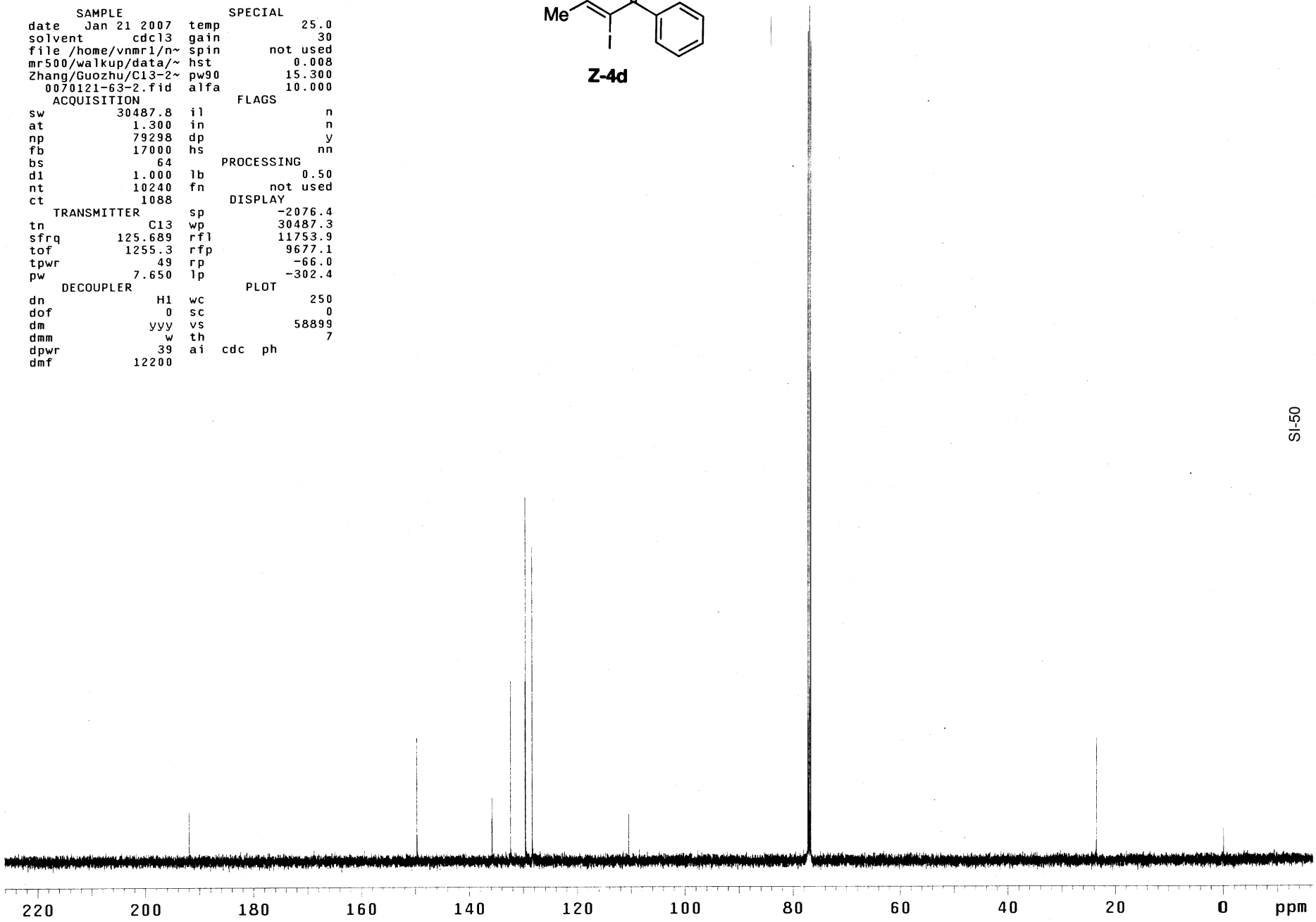


exp1 Carbon

SAMPLE		SPECIAL	
date	Jan 21 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr500/walkup/data/~	hst	0.008
	Zhang/Guozhu/C13-2~	pw90	15.300
	0070121-63-2.fid	alfa	10.000
ACQUISITION		FLAGS	
sw	30487.8	il	n
at	1.300	in	n
np	79298	dp	y
fb	17000	hs	nn
bs	64	PROCESSING	
d1	1.000	lb	0.50
nt	10240	fn	not used
ct	1088	DISPLAY	
TRANSMITTER		sp	-2076.4
tn	C13	wp	30487.3
sfrq	125.689	rfl	11753.9
tof	1255.3	rfp	9677.1
tpwr	49	rp	-66.0
pw	7.650	lp	-302.4
DECOUPLER		PLOT	
dn	H1	wc	250
dof	0	sc	0
dm	yyy	vs	58899
dmm	w	th	7
dpwr	39	ai cdc ph	
dmf	12200		

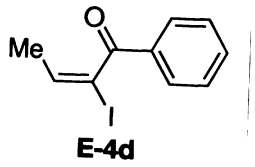


Z-4d

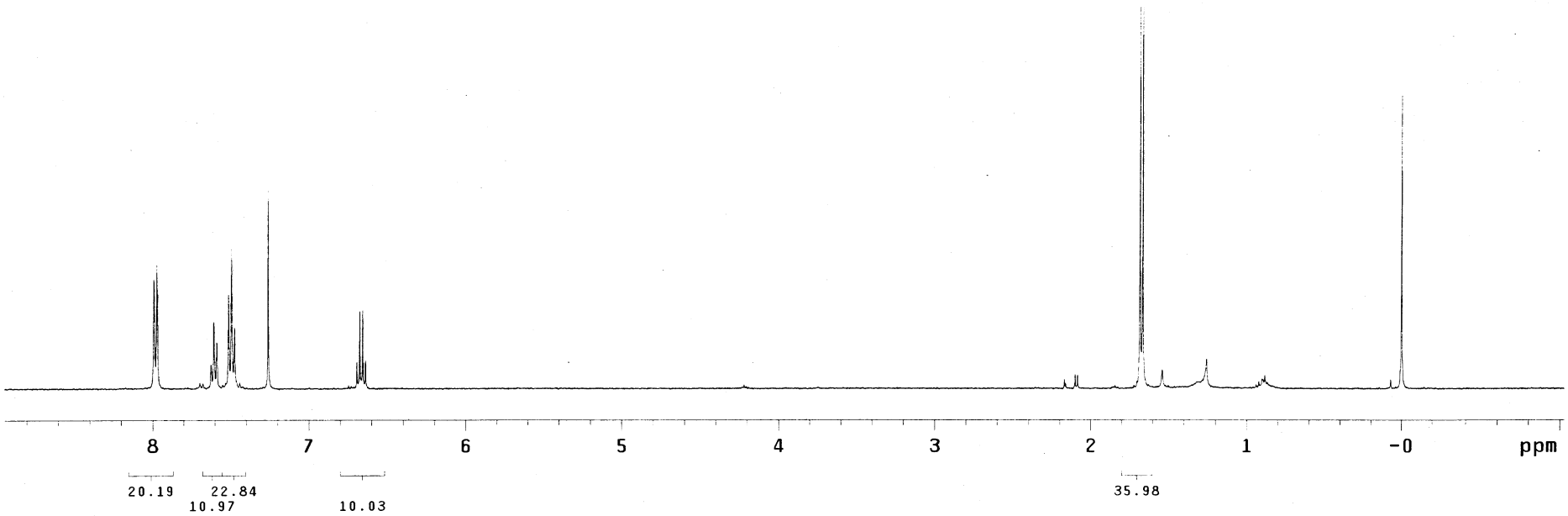


exp1 Proton

SAMPLE		SPECIAL	
date	Jan 22 2007	temp	25.0
solvent	cdcl3	gain	20
file	/home/vnmr1/n~	spin	not used
	mr400/walkup/data/~	hst	0.008
	Zhang/Guozhu/H1-20~	pw90	13.900
	070122-62.fid	alfa	6.600
ACQUISITION		FLAGS	
sw	6410.3	il	n
at	2.049	in	n
np	26264	dp	y
fb	4000	hs	nn
bs	32	PROCESSING	
d1	1.000	lb	0.20
nt	8	fn	65536
ct	8	DISPLAY	
TRANSMITTER		sp	-412.2
tn	H1	wp	3987.2
sfrq	399.782	rfl	806.0
tof	399.5	rfp	0
tpwr	59	rp	133.7
pw	6.950	lp	-24.3
DECOUPLER		PLOT	
dn	C13	wc	250
dof	0	sc	0
dm	nnn	vs	72251
dmm	c	th	2
dpwr	34	ai	cdc ph
dmf	29412		



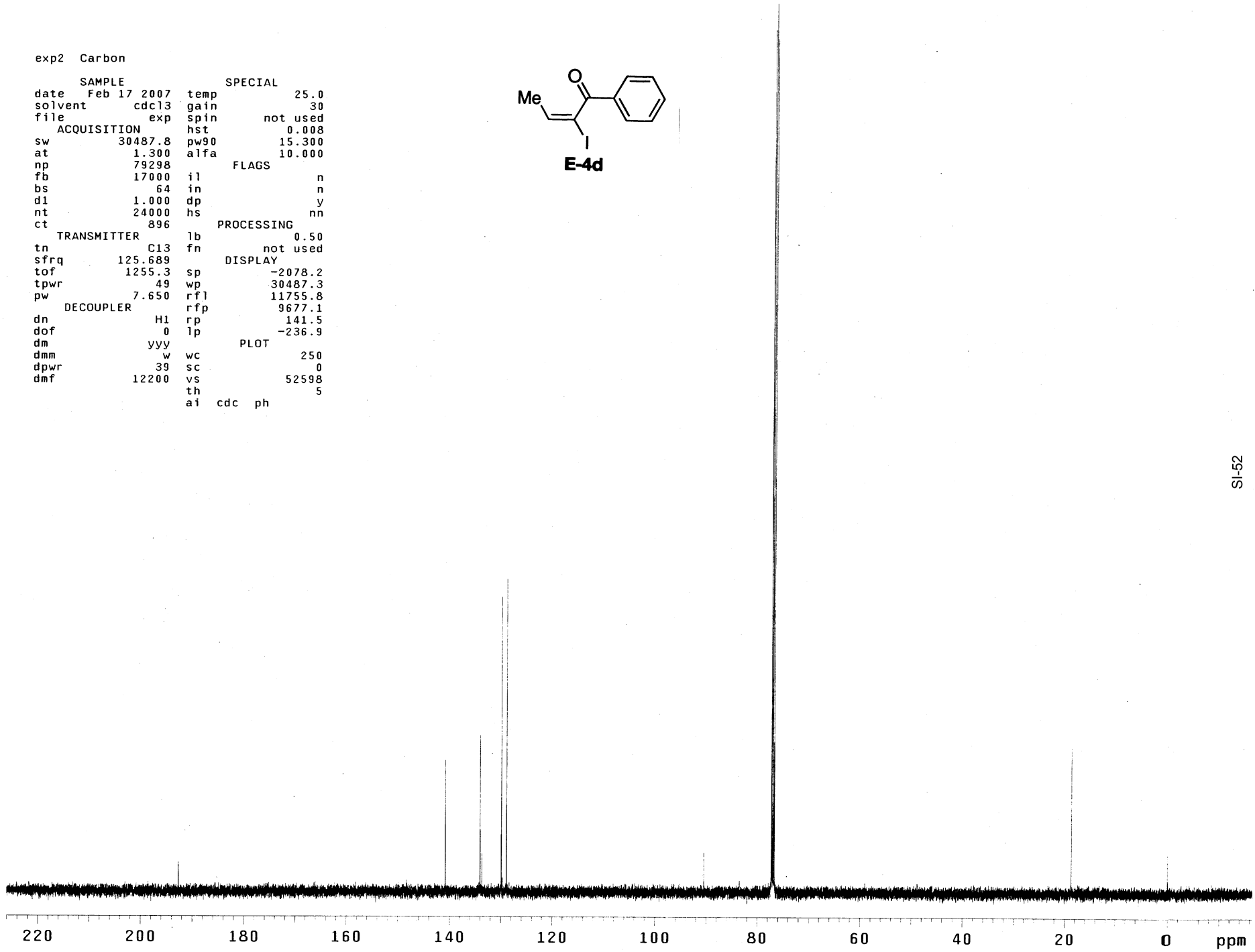
E-4d



exp2 Carbon

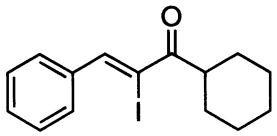
SAMPLE		SPECIAL	
date	Feb 17 2007	temp	25.0
solvent	cdcl3	gain	30
file	exp	spin	not used
ACQUISITION		hst	0.008
sw	30487.8	pw90	15.300
at	1.300	alfa	10.000
np	79298	FLAGS	
fb	17000	il	n
bs	64	in	n
d1	1.000	dp	y
nt	24000	hs	nn
ct	896	PROCESSING	
TRANSMITTER		lb	0.50
tn	C13	fn	not used
sfrq	125.689	DISPLAY	
tof	1255.3	sp	-2078.2
tpwr	49	wp	30487.3
pw	7.650	rfl	11755.8
DECOUPLER		rfp	9677.1
dn	H1	rp	141.5
dof	0	lp	-236.9
dm	yyy	PLOT	
dmm	w	wc	250
dpwr	39	sc	0
dmf	12200	vs	52598
		th	5
		ai cdc ph	

E-4d

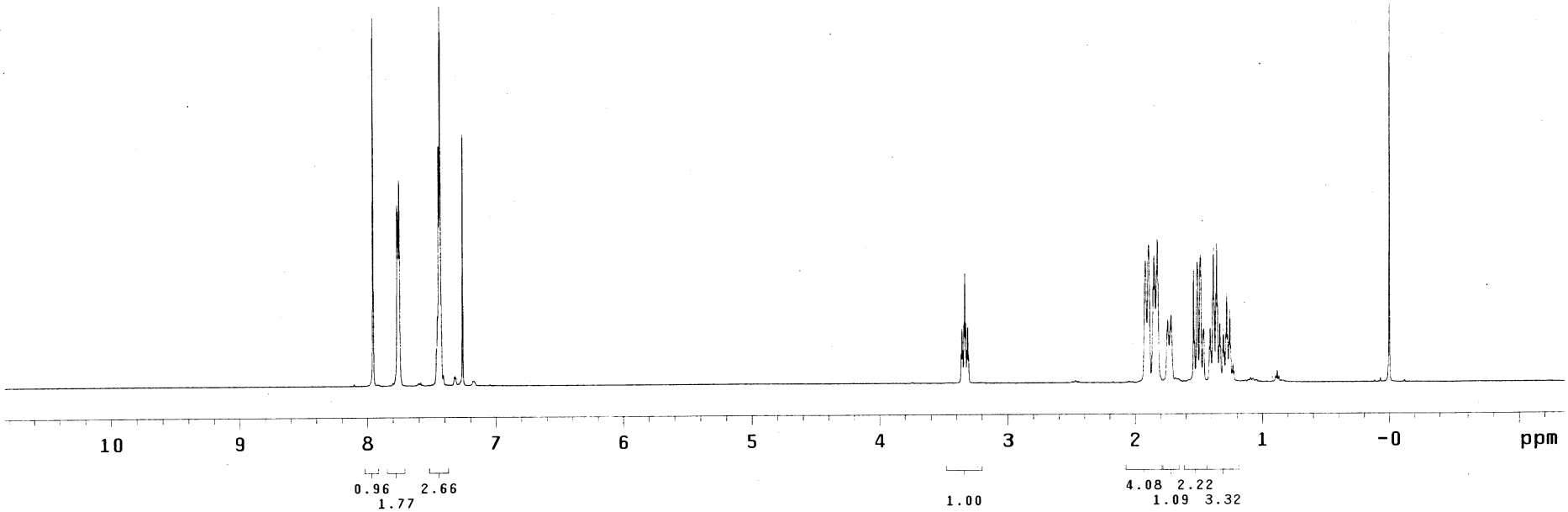


exp1 Proton

SAMPLE		SPECIAL	
date	Jan 28 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr500/walkup/data/~	hst	0.008
	Zhang/Guozhu/H1-20~	pw90	14.700
	070128-68-lower.fi~	alfa	6.600
	d	FLAGS	
ACQUISITION		il	n
sw	8012.8	in	n
at	2.049	dp	y
np	32830	hs	nn
fb	4000	PROCESSING	
bs	8	lb	0.20
d1	1.000	fn	65536
nt	8	DISPLAY	
ct	8	sp	-678.8
TRANSMITTER		wp	6094.5
tn	H1	rfl	1007.0
sfrq	499.809	rfp	0
tof	499.7	rp	-68.7
tpwr	54	lp	-33.5
pw	7.350	PLOT	
DECOUPLER		wc	250
dn	C13	sc	0
dof	0	vs	421
dm	nnn	th	2
dmm	c	ai cdc ph	
dpwr	34		
dmf	32258		

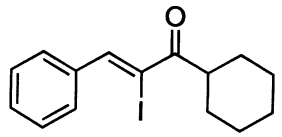


Z-4e

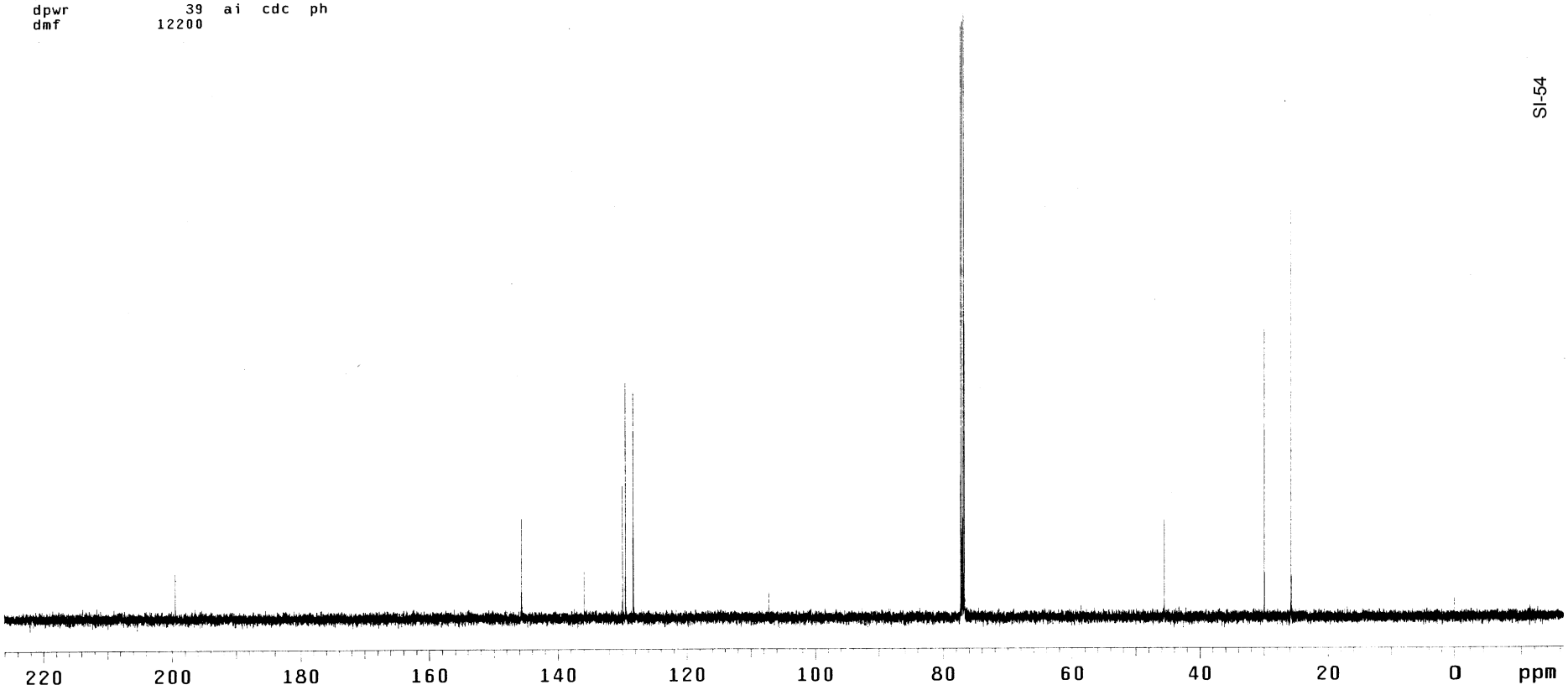


exp1 Carbon

SAMPLE		SPECIAL	
date	Jan 28 2007	temp	25.0
solvent	cdcl3	gain	30
file	/mnt/nmr500/w~	spin	not used
alkup/data/Zhang/G~		hst	0.008
uozhu/C13-20070128~		pw90	15.300
-68-lower.fid		alfa	10.000
ACQUISITION		**FLAGS**	
sw	30487.8	il	n
at	1.300	in	n
np	79298	dp	y
fb	17000	hs	nn
bs	16	**PROCESSING**	
d1	1.000	lb	0.50
nt	12000	fn	not used
ct	384	**DISPLAY**	
TRANSMITTER		sp	-2076.8
tn	C13	wp	30487.3
sfrq	125.689	rfl	11754.4
tof	1255.3	rfp	9677.1
tpwr	49	rp	-0.5
pw	7.650	lp	-282.3
DECOUPLER		**PLOT**	
dn	H1	wc	250
dof	0	sc	0
dm	yyy	vs	30039
dmm	w	th	3
dpwr	39	ai	cdc ph
dmf	12200		

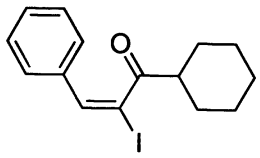


Z-4e

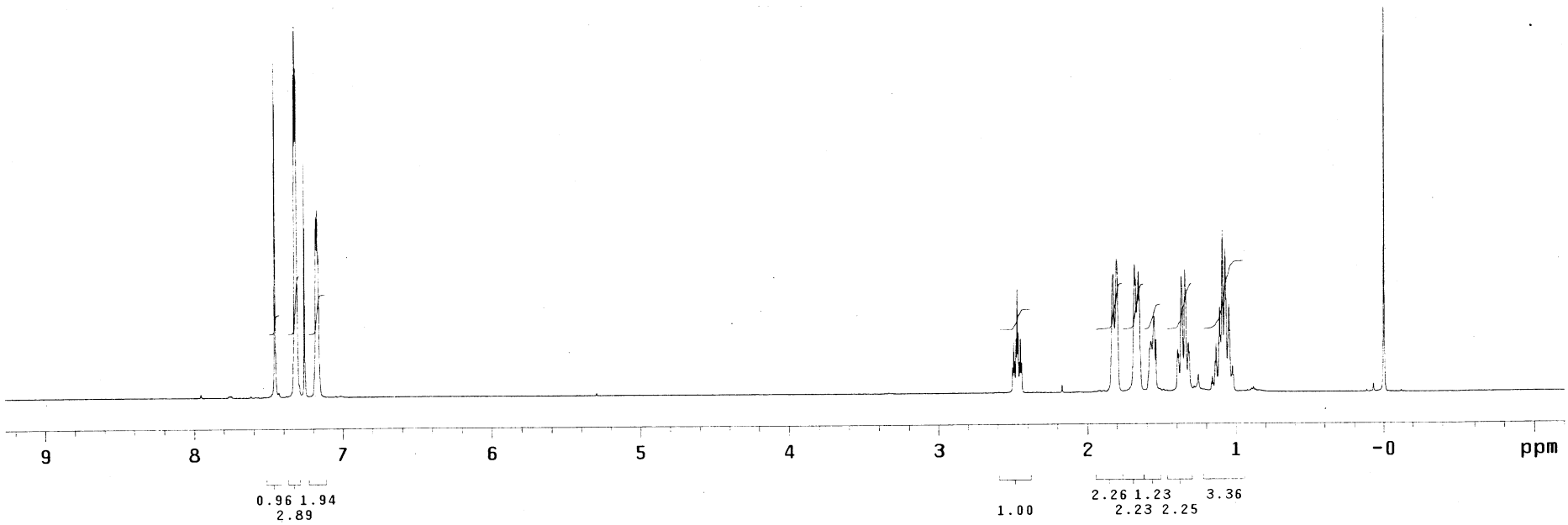


exp1 Proton

SAMPLE		SPECIAL	
date	Jan 28 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr500/walkup/data/~	hst	0.008
	Zhang/Guozhu/H1-20~	pw90	14.700
	070128-68.fid	alfa	6.600
ACQUISITION		**FLAGS**	
sw	8012.8	il	n
at	2.049	in	n
np	32830	dp	y
fb	4000	hs	nn
bs	8	**PROCESSING**	
d1	1.000	lb	0.20
nt	8	fn	65536
ct	8	**DISPLAY**	
TRANSMITTER		sp	-603.0
tn	H1	wp	5236.4
sfrq	499.809	rfl	1007.0
tof	499.7	rfp	0
tpwr	54	rp	-74.1
pw	7.350	lp	-35.4
DECOUPLER		**PLOT**	
dn	C13	wc	250
dof	0	sc	0
dm	nnn	vs	370
dmm	c	th	2
dpwr	34	ai	cdc ph
dmf	32258		



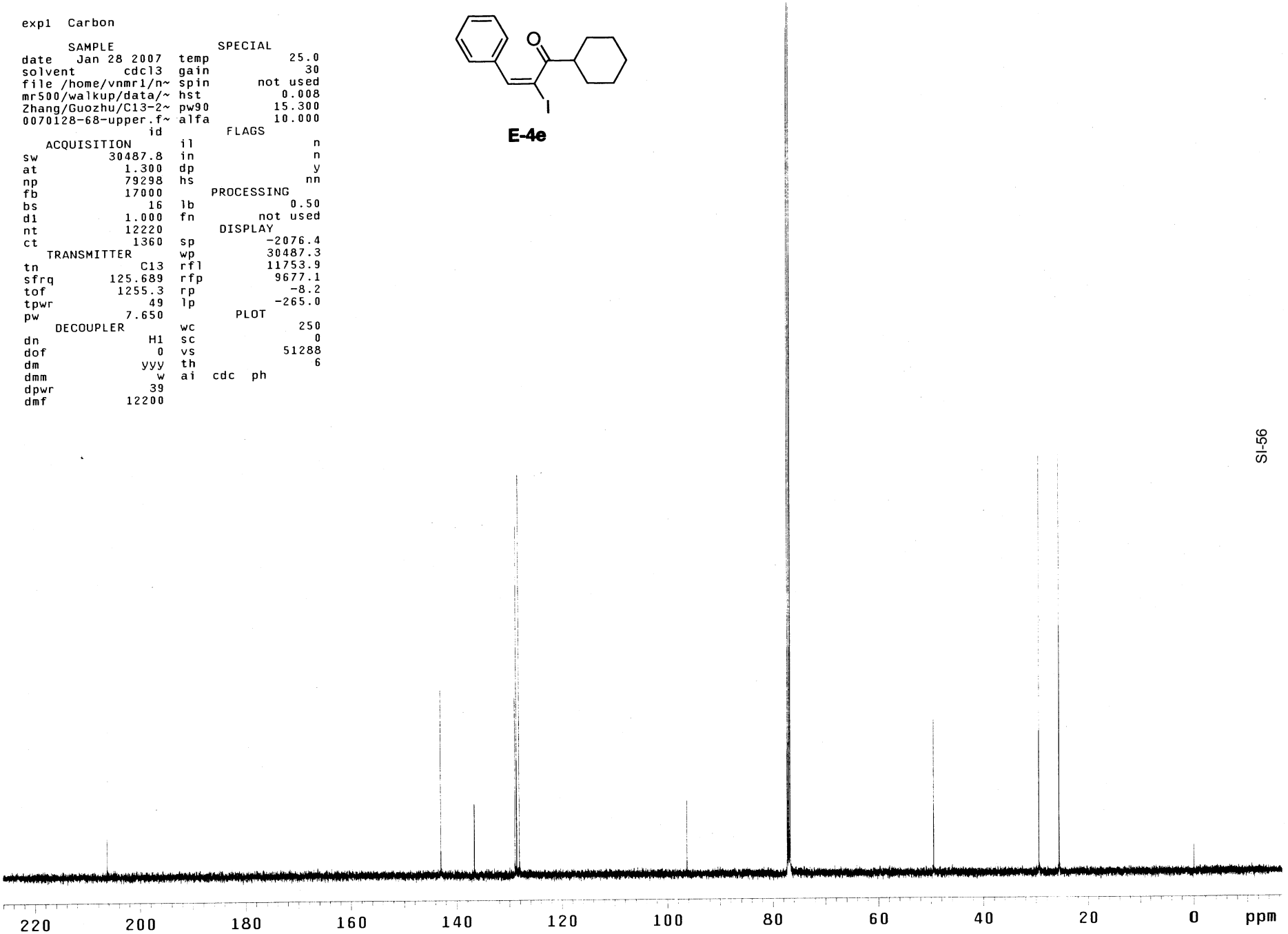
E-4e



exp1 Carbon

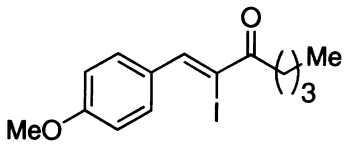
SAMPLE		SPECIAL	
date	Jan 28 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr500/walkup/data/~	hst	0.008
	Zhang/Guozhu/C13-2~	pw90	15.300
	0070128-68-upper.f~	alfa	10.000
id		FLAGS	
ACQUISITION		il	n
sw	30487.8	in	n
at	1.300	dp	y
np	79298	hs	nn
fb	17000	PROCESSING	
bs	16	lb	0.50
d1	1.000	fn	not used
nt	12220	DISPLAY	
ct	1360	sp	-2076.4
TRANSMITTER		wp	30487.3
tn	C13	rfl	11753.9
sfrq	125.689	rfp	9677.1
tof	1255.3	rp	-8.2
tpwr	49	lp	-265.0
pw	7.650	PLOT	
DECOUPLER		wc	250
dn	H1	sc	0
dof	0	vs	51288
dm	yyy	th	6
dmm	w	ai	cdc ph
dpwr	39		
dmf	12200		

E-4e

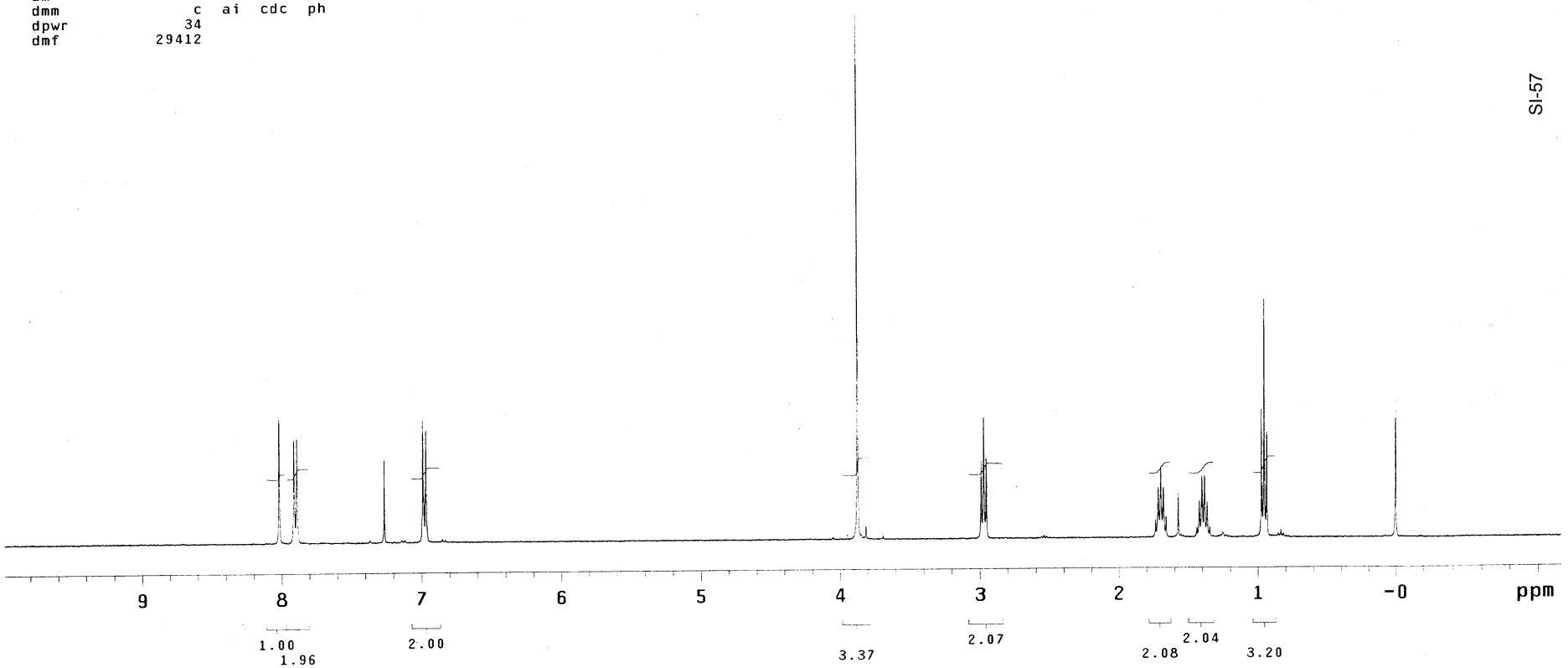


exp1 Proton

SAMPLE		SPECIAL	
date	Feb 8 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr400/walkup/data/~	hst	0.008
	Zhang/Guozhu/H1-20~	pw90	13.900
	070208-81_lower-2.~	alfa	6.600
	fid	FLAGS	
ACQUISITION		il	n
sw	6410.3	in	n
at	2.049	dp	y
np	26264	hs	nn
fb	4000	PROCESSING	
bs	8	lb	0.20
d1	1.000	fn	65536
nt	24	DISPLAY	
ct	24	sp	-465.6
TRANSMITTER		wp	4457.5
tn	H1	rfl	804.8
sfrq	399.782	rfp	0
tof	399.5	rp	4.2
tpwr	59	lp	-29.3
pw	6.950	PLOT	
DECOUPLER		wc	250
dn	C13	sc	0
dof	0	vs	17371
dm	nnn	th	2
dmm	c	ai cdc ph	
dpwr	34		
dmf	29412		

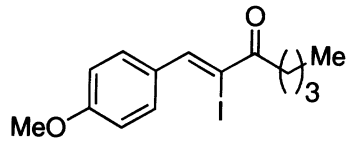


Z-4f

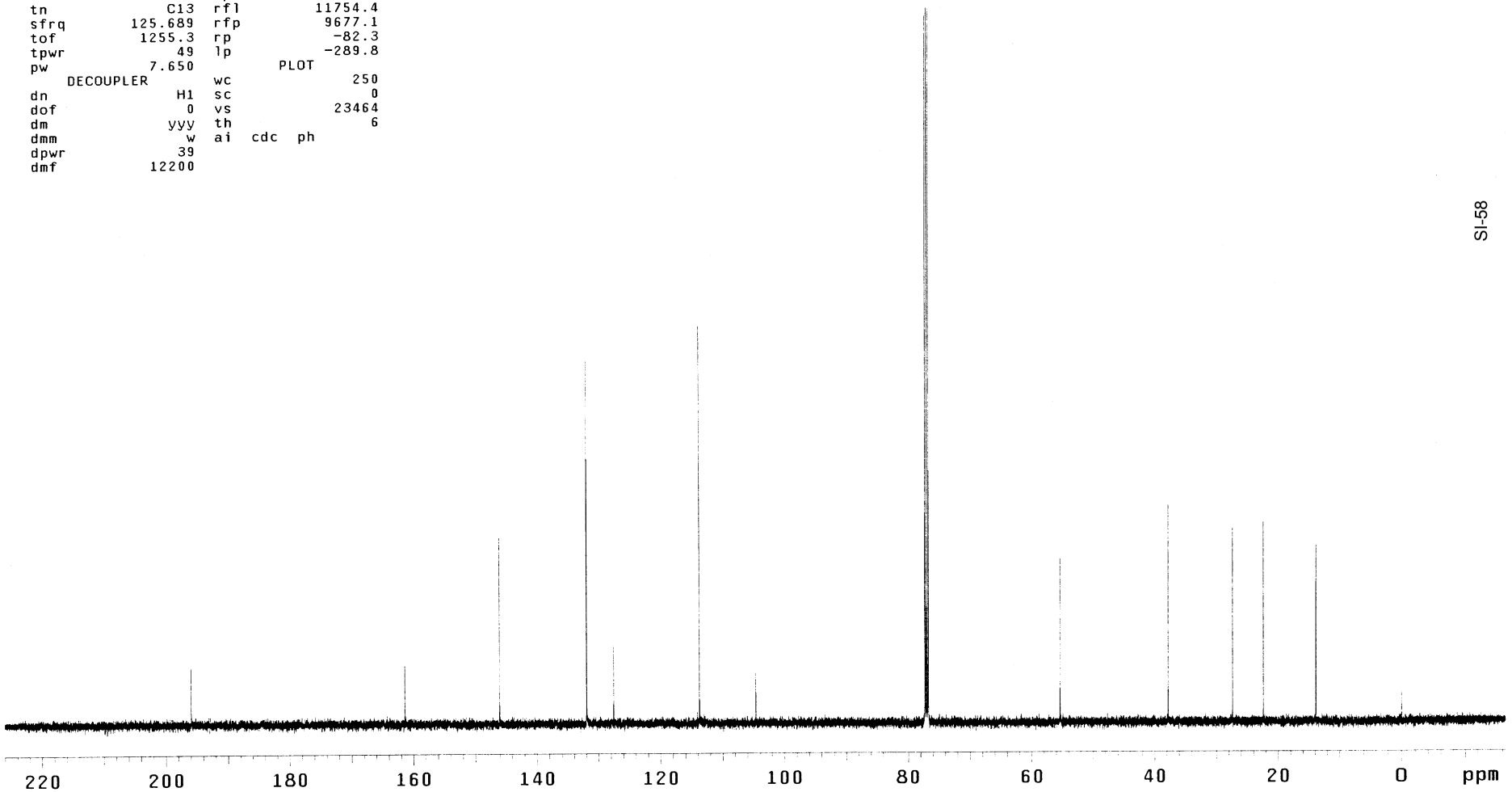


exp1 Carbon

SAMPLE		SPECIAL	
date	Feb 13 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
	nmr500/walkup/data~	hst	0.008
	/Zhang/Guozhu/C13-~	pw90	15.300
	20070213-81-lower.~	alfa	10.000
	fid	FLAGS	
ACQUISITION		il	n
sw	30487.8	in	n
at	1.300	dp	y
np	79298	hs	nn
fb	17000	PROCESSING	
bs	12	lb	0.50
d1	1.000	fn	not used
nt	12000	DISPLAY	
ct	924	sp	-2076.8
TRANSMITTER		wp	30487.3
tn	C13	rfl	11754.4
sfrq	125.689	rfp	9677.1
tof	1255.3	rp	-82.3
tpwr	49	lp	-289.8
pw	7.650	PLOT	
DECOUPLER		wc	250
dn	H1	sc	0
dof	0	vs	23464
dm	yyy	th	6
dmm	w	ai cdc ph	
dpwr	39		
dmf	12200		

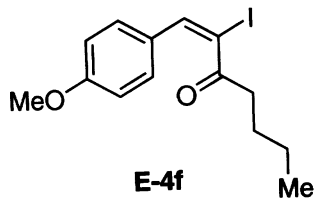


Z-4f

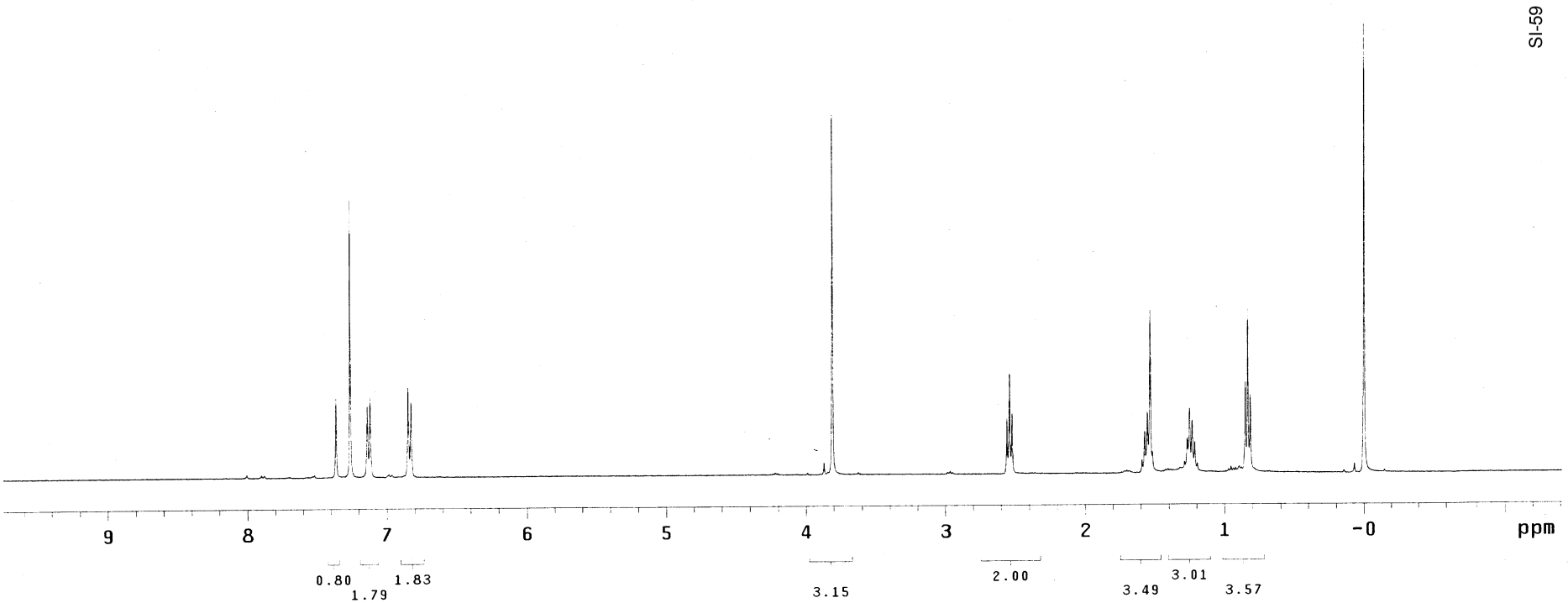


exp1 Proton

SAMPLE		SPECIAL	
date	Feb 12 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr400/walkup/data/~	hst	0.008
	Zhang/Guozhu/H1-20~	pw90	13.900
	070212-81-upper.fi~	alfa	6.600
	d	FLAGS	
ACQUISITION		il	n
sw	6410.3	in	n
at	2.049	dp	y
np	26264	hs	nn
fb	4000	PROCESSING	
bs	8	lb	0.20
d1	1.000	fn	65536
nt	24	DISPLAY	
ct	24	sp	-564.0
TRANSMITTER		wp	4461.6
tn	H1	rfl	806.4
sfrq	399.782	rfp	0
tof	399.5	rp	25.2
tpwr	59	lp	-19.7
pw	6.950	PLOT	
DECOUPLER		wc	250
dn	C13	sc	0
dof	0	vs	1771
dm	nnn	th	2
dmm	c	ai	cdc ph
dpwr	34		
dmf	29412		



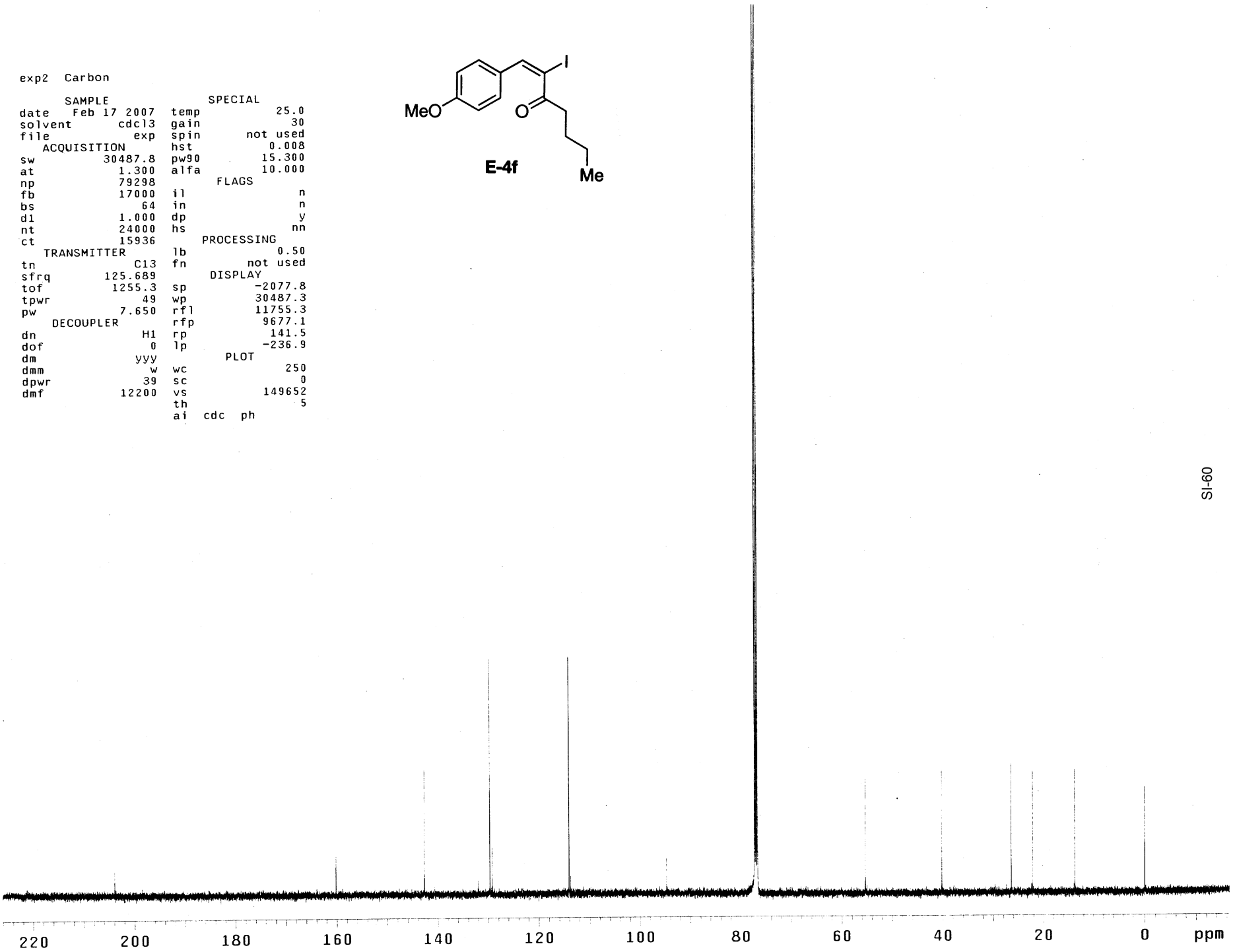
E-4f



exp2 Carbon

SAMPLE		SPECIAL	
date	Feb 17 2007	temp	25.0
solvent	cdcl3	gain	30
file	exp	spin	not used
ACQUISITION		hst	0.008
sw	30487.8	pw90	15.300
at	1.300	alfa	10.000
np	79298	FLAGS	
fb	17000	il	n
bs	64	in	n
d1	1.000	dp	y
nt	24000	hs	nn
ct	15936	PROCESSING	
TRANSMITTER		lb	0.50
tn	C13	fn	not used
sfrq	125.689	DISPLAY	
tof	1255.3	sp	-2077.8
tpwr	49	wp	30487.3
pw	7.650	rfl	11755.3
DECOUPLER		rfp	9677.1
dn	H1	rp	141.5
dof	0	lp	-236.9
dm	yyy	PLOT	
dmm	w	wc	250
dpwr	39	sc	0
dmf	12200	vs	149652
		th	5
		ai	cdc ph

E-4f



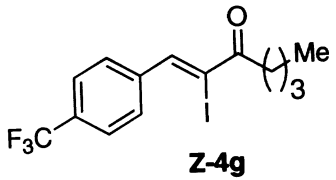
STANDARD 1H OBSERVE - profile

Automation directory: /home/walkup/vnmrsys/data/auto_2007.02.09_19
File : s_20070209_003/data/cdcl3_01.fid
Sample id : s_20070209_003

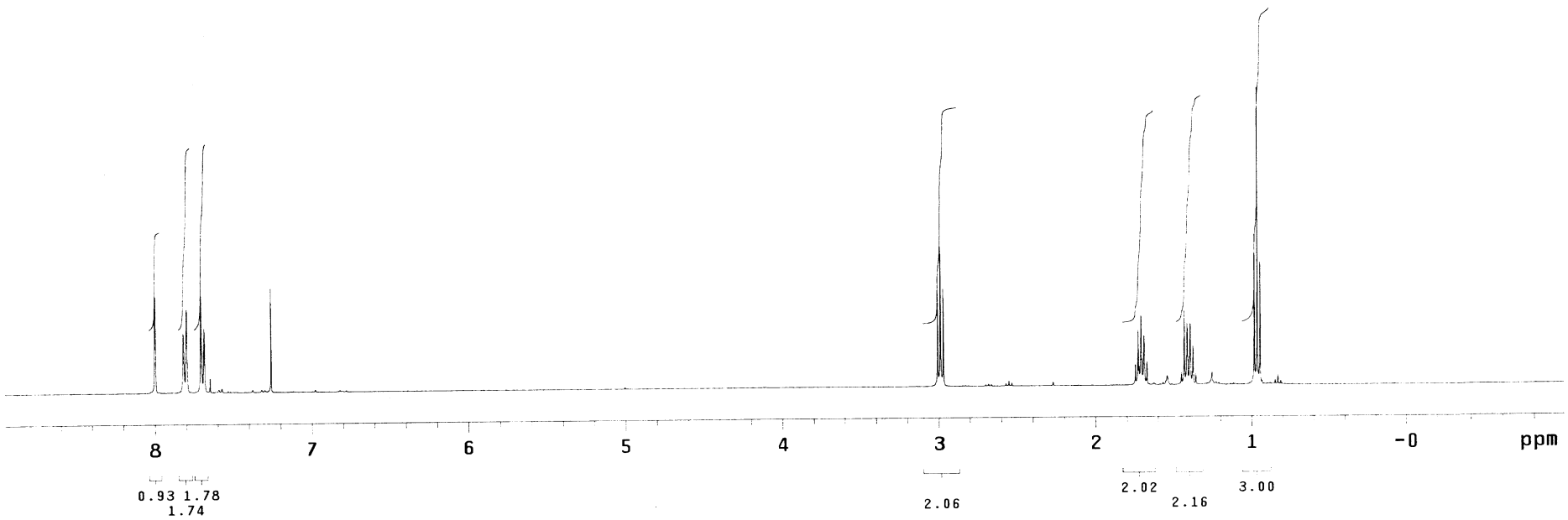
Pulse Sequence: s2pul

Solvent: cdcl3
Temp. 25.0 C / 298.1 K
Operator: walkup
File: cdcl3_01
VNMRS-400 "NMR400"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 2.049 sec
Width 6410.3 Hz
8 repetitions
OBSERVE H1, 399.7793051 MHz
DATA PROCESSING
Line broadening 0.2 Hz
FT size 65536
Total time 0 min, 30 sec



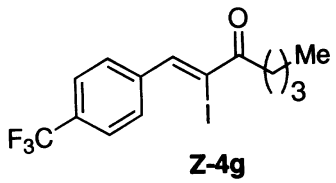
Z-4g



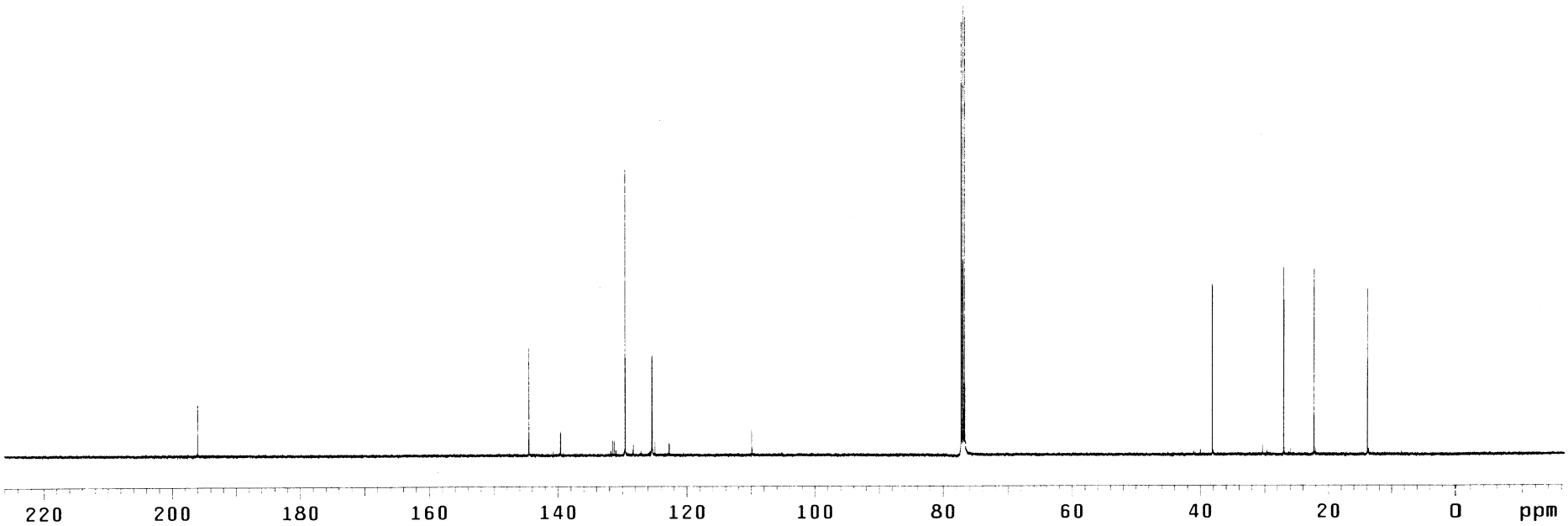
STANDARD 1H OBSERVE - profile

exp2 Carbon

SAMPLE		SPECIAL	
date	Feb 10 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
vnmrsys/data/auto_~		hst	0.008
2007.02.10_04/Aug.~		pw90	15.300
04/data/cdcl3_01.f~		alfa	10.000
id		FLAGS	
ACQUISITION		il	n
sw	30487.8	in	n
at	1.300	dp	y
np	79298	hs	nn
fb	17000	PROCESSING	
bs	32	lb	0.50
d1	1.000	fn	not used
nt	12800	DISPLAY	
ct	288	sp	-2078.2
TRANSMITTER		wp	30487.3
tn	C13	rfl	11755.8
sfrq	125.689	rfp	9677.1
tof	1255.3	rp	-37.6
tpwr	49	lp	-251.6
pw	7.650	PLOT	
DECOUPLER		wc	250
dn	H1	sc	0
dof	0	vs	30326
dm	yyy	th	3
dmm	w	ai	cdc ph
dpwr	39		
dmf	12200		

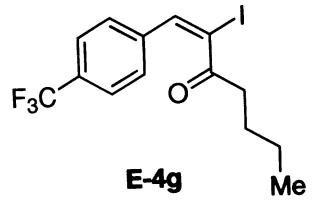


Z-4g

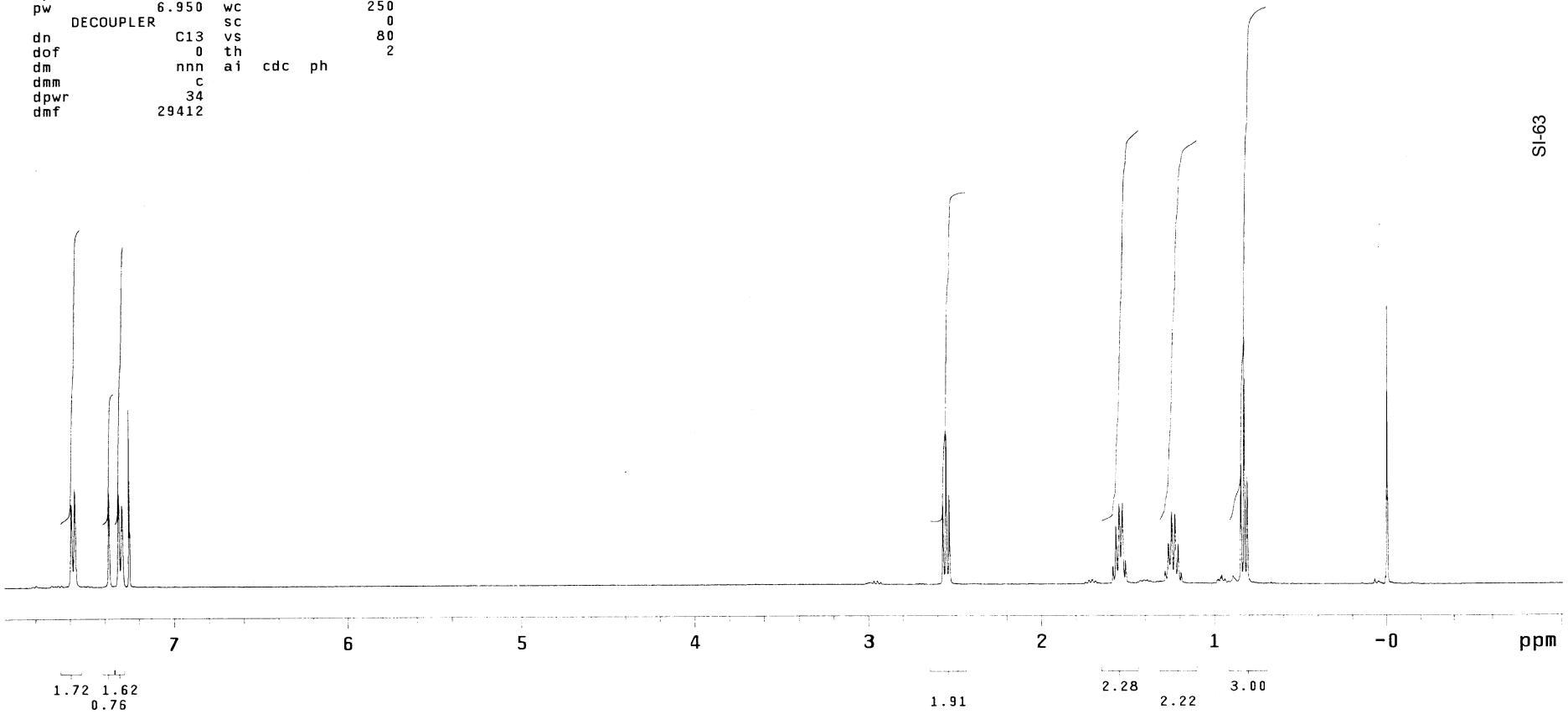


exp1 Proton

SAMPLE		SPECIAL	
date	Feb 12 2007	temp	25.0
solvent	cdcl3	gain	not used
file	/home/walkup/~	spin	not used
	vnmrsys/data/auto_~	hst	0.008
	2007.02.12_22/s_20~	pw90	13.900
	070212_001/data/cd~	alfa	6.600
	cl3_02.fid	FLAGS	
ACQUISITION		il	n
sw	6410.3	in	n
at	2.049	dp	y
np	26264	hs	nn
fb	4000	PROCESSING	
bs	32	lb	0.20
ss	2	fn	65536
d1	1.000	DISPLAY	
nt	8	sp	-404.6
ct	8	wp	3595.0
TRANSMITTER		rfl	805.8
tn	H1	rfp	0
sfrq	399.782	rp	119.0
tof	399.5	lp	-23.8
tpwr	59	PLOT	
pw	6.950	wc	250
DECOUPLER		sc	0
dn	C13	vs	80
dof	0	th	2
dm	nnn	ai cdc ph	
dmm	c		
dpwr	34		
dmf	29412		



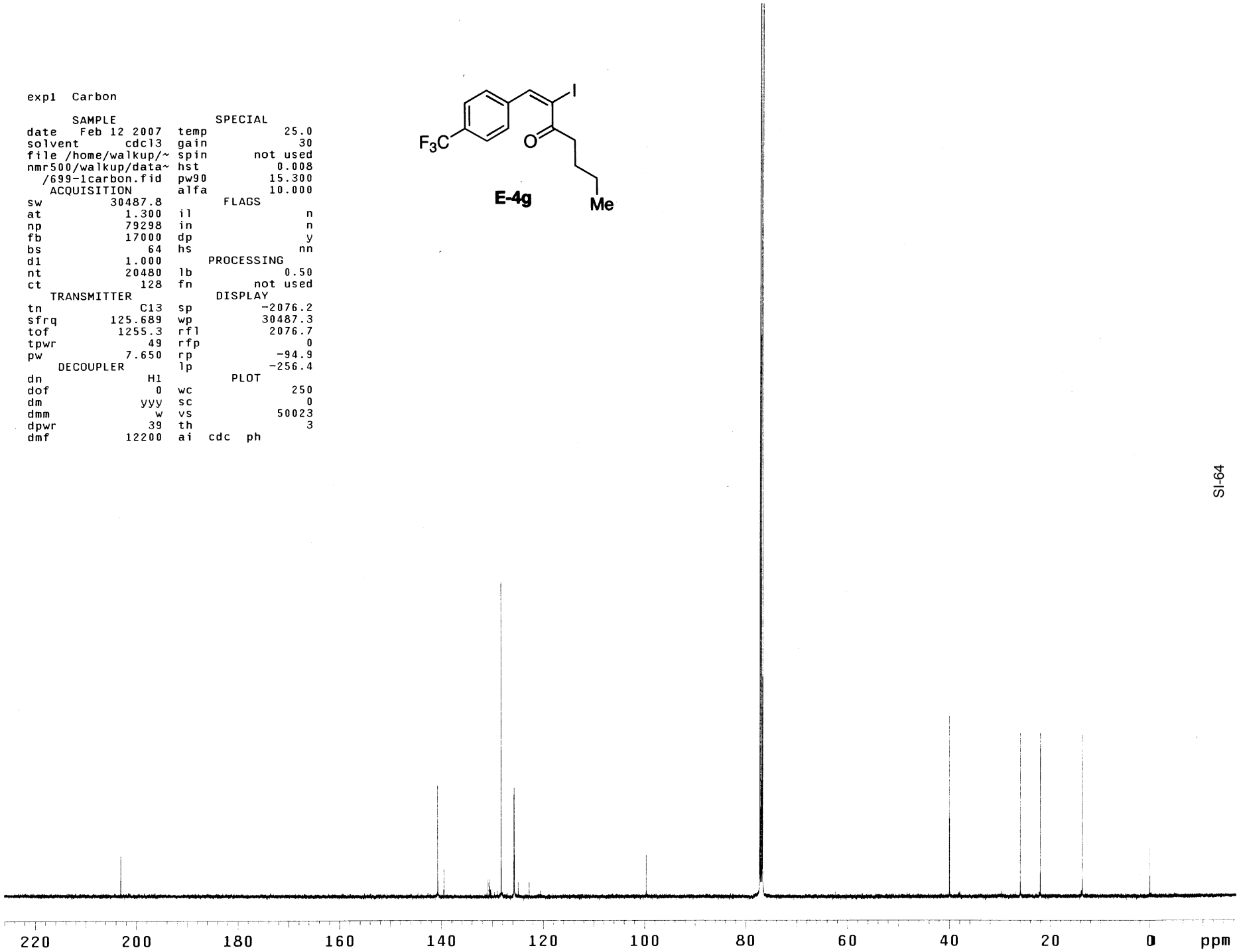
E-4g



exp1 Carbon

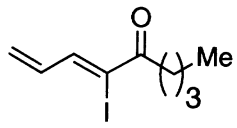
SAMPLE		SPECIAL	
date	Feb 12 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
nmr500/walkup/data~		hst	0.008
/699-1carbon.fid		pw90	15.300
ACQUISITION		alfa	10.000
sw	30487.8	FLAGS	
at	1.300	il	n
np	79298	in	n
fb	17000	dp	y
bs	64	hs	nn
d1	1.000	PROCESSING	
nt	20480	lb	0.50
ct	128	fn	not used
TRANSMITTER		DISPLAY	
tn	C13	sp	-2076.2
sfrq	125.689	wp	30487.3
tof	1255.3	rfl	2076.7
tpwr	49	rfp	0
pw	7.650	rp	-94.9
DECOUPLER		lp	-256.4
dn	H1	PLOT	
dof	0	wc	250
dm	yyy	sc	0
dmm	w	vs	50023
dpwr	39	th	3
dmf	12200	ai cdc ph	

E-4g

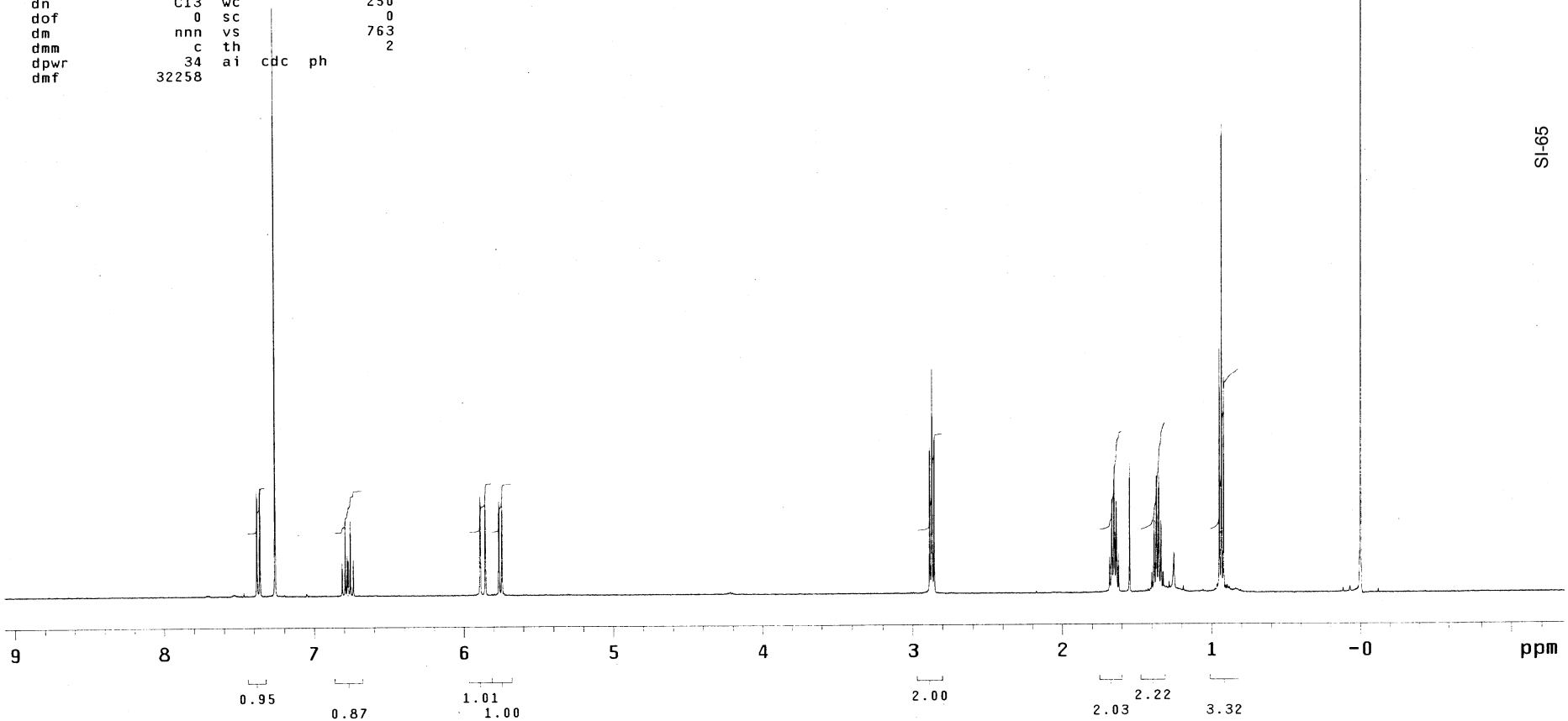


exp1 Proton

SAMPLE		SPECIAL	
date	Feb 4 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr500/walkup/data/~	hst	0.008
	Zhang/Guozhu/H1-20~	pw90	14.700
	070204-74.fid	alfa	6.600
ACQUISITION		**FLAGS**	
sw	8012.8	il	n
at	2.049	in	n
np	32830	dp	y
fb	4000	hs	nn
bs	8	**PROCESSING**	
d1	1.000	lb	0.20
nt	8	fn	65536
ct	8	**DISPLAY**	
TRANSMITTER		sp	-677.8
tn	H1	wp	5211.2
sfrq	499.809	rfl	1006.0
tof	499.7	rfp	0
tpwr	54	rp	-37.4
pw	7.350	lp	-40.1
DECOUPLER		**PLOT**	
dn	C13	wc	250
dof	0	sc	0
dm	nnn	vs	763
dmm	c	th	2
dpwr	34	ai cdc ph	
dmf	32258		



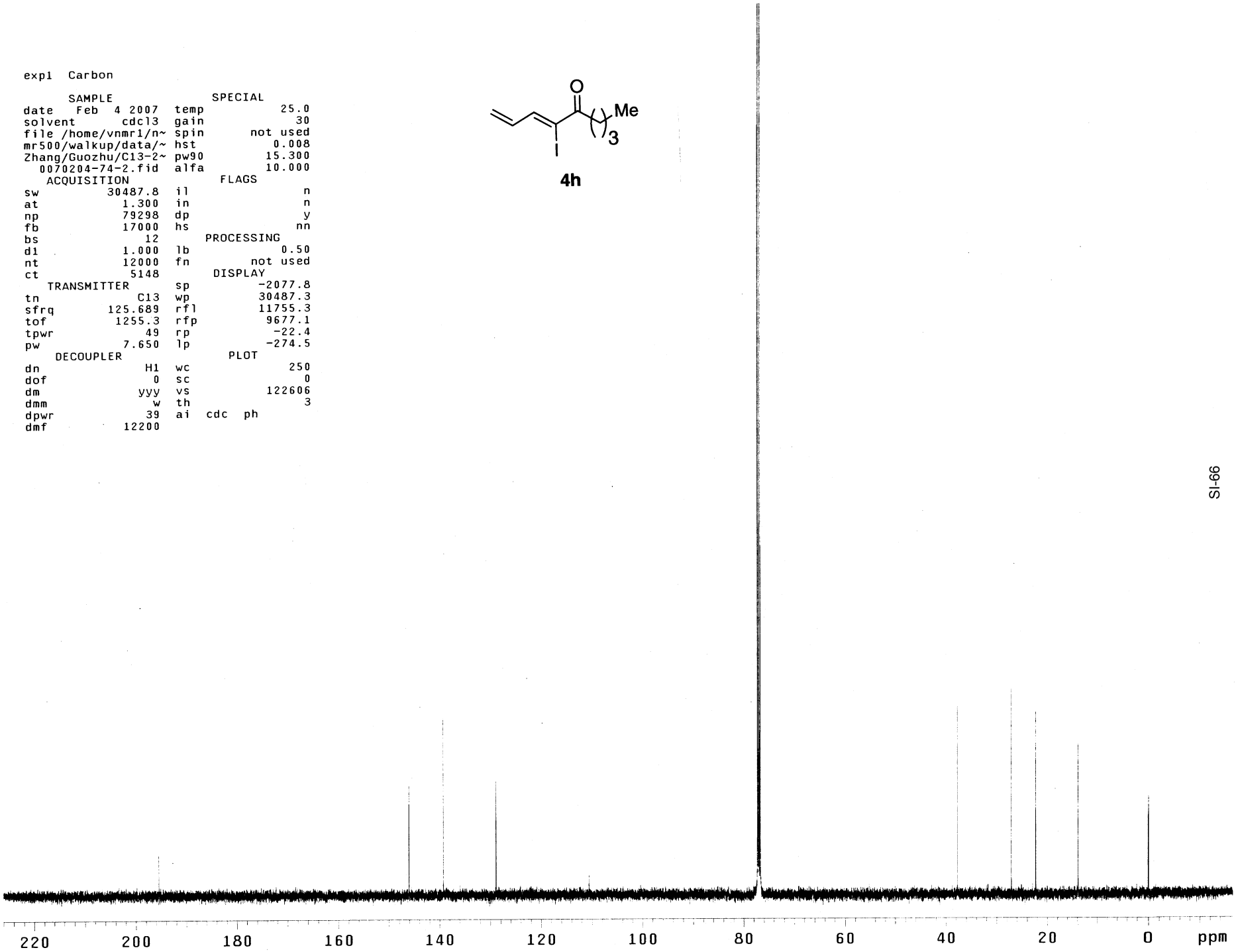
4h



exp1 Carbon

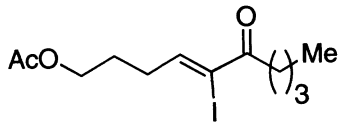
SAMPLE		SPECIAL	
date	Feb 4 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr500/walkup/data/~	hst	0.008
	Zhang/Guozhu/C13-2~	pw90	15.300
	0070204-74-2.fid	alfa	10.000
ACQUISITION		**FLAGS**	
sw	30487.8	il	n
at	1.300	in	n
np	79298	dp	y
fb	17000	hs	nn
bs	12	**PROCESSING**	
d1	1.000	lb	0.50
nt	12000	fn	not used
ct	5148	**DISPLAY**	
TRANSMITTER		sp	-2077.8
tn	C13	wp	30487.3
sfrq	125.689	rfl	11755.3
tof	1255.3	rfp	9677.1
tpwr	49	rp	-22.4
pw	7.650	lp	-274.5
DECOUPLER		**PLOT**	
dn	H1	wc	250
dof	0	sc	0
dm	yyy	vs	122606
dmm	w	th	3
dpwr	39	ai	cdc ph
dmf	12200		

4h

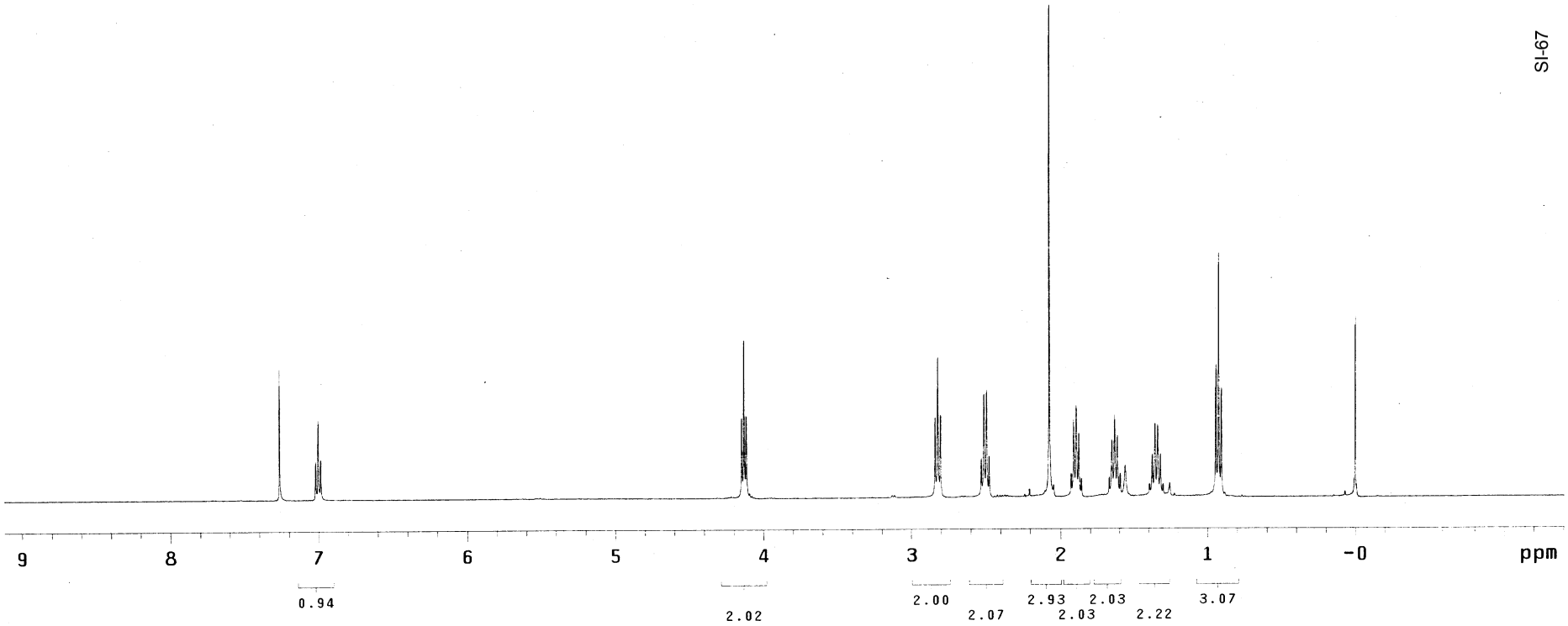


exp1 Proton

SAMPLE		SPECIAL	
date	Feb 12 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr400/walkup/data/~	hst	0.008
	Zhang/Guozhu/H1-20~	pw90	13.900
	070212-84.fid	alfa	6.600
ACQUISITION		**FLAGS**	
sw	6410.3	il	n
at	2.049	in	n
np	26264	dp	y
fb	4000	hs	nn
bs	8	**PROCESSING**	
d1	1.000	lb	0.20
nt	8	fn	65536
ct	8	**DISPLAY**	
TRANSMITTER		sp	-562.8
tn	H1	wp	4209.3
sfrq	399.782	rfl	805.2
tof	399.5	rfp	0
tpwr	59	rp	126.1
pw	6.950	lp	-44.8
DECOUPLER		**PLOT**	
dn	C13	wc	250
dof	0	sc	0
dm	nnn	vs	543
dmm	c	th	2
dpwr	34	ai	cdc ph
dmf	29412		

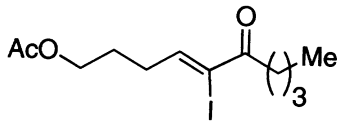


4i

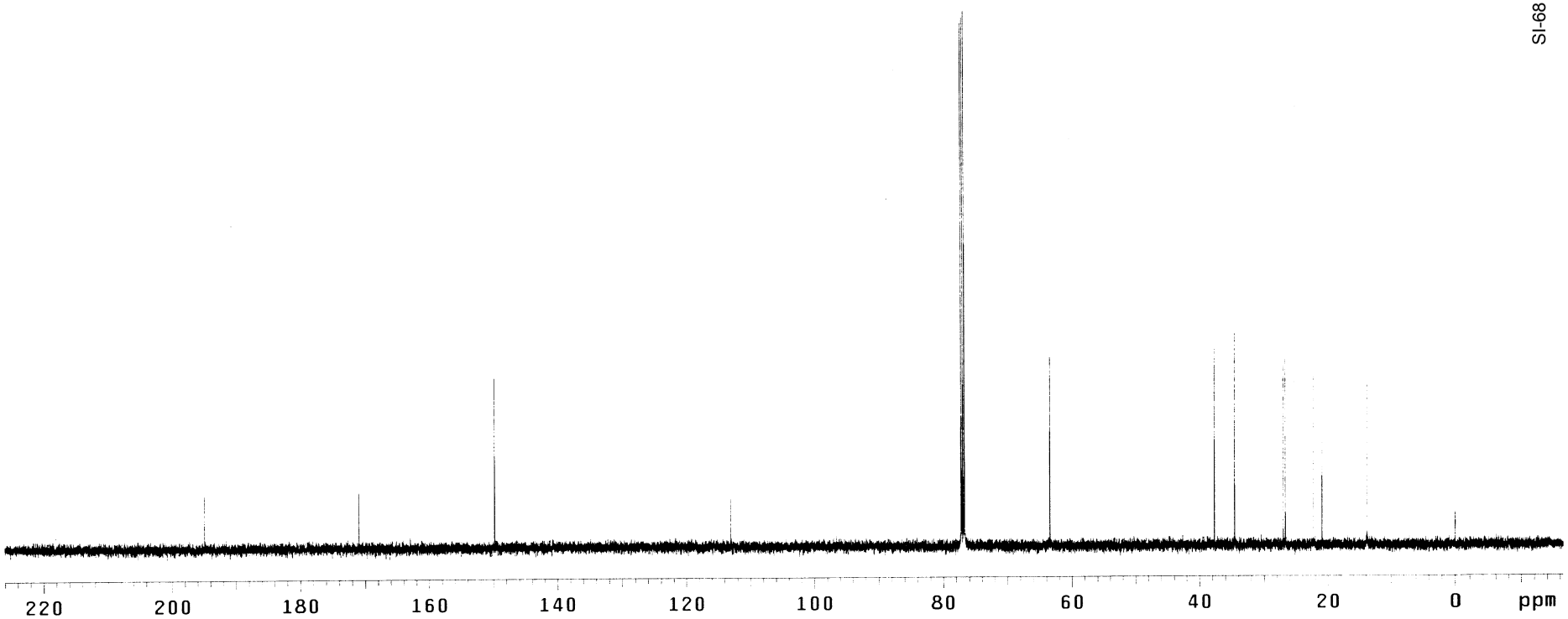


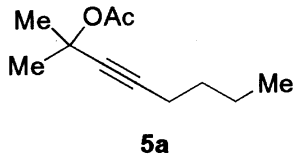
exp1 Carbon

SAMPLE		SPECIAL	
date	Feb 12 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
	nmr500/walkup/data~	hst	0.008
	/Zhang/Guozhu/C13-~	pw90	15.300
	20070212-84.fid	alfa	10.000
ACQUISITION		FLAGS	
sw	30487.8	il	n
at	1.300	in	n
np	79298	dp	y
fb	17000	hs	nn
bs	12	PROCESSING	
d1	1.000	lb	0.50
nt	12000	fn	not used
ct	960	DISPLAY	
TRANSMITTER		sp	-2076.5
tn	C13	wp	30487.3
sfrq	125.689	rfl	11754.1
tof	1255.3	rfp	9677.1
tpwr	49	rp	-26.1
pw	7.650	lp	-280.5
DECOUPLER		PLOT	
dn	H1	wc	250
dof	0	sc	0
dm	yyy	vs	40671
dmm	w	th	6
dpwr	39	ai cdc ph	
dmf	12200		



4i

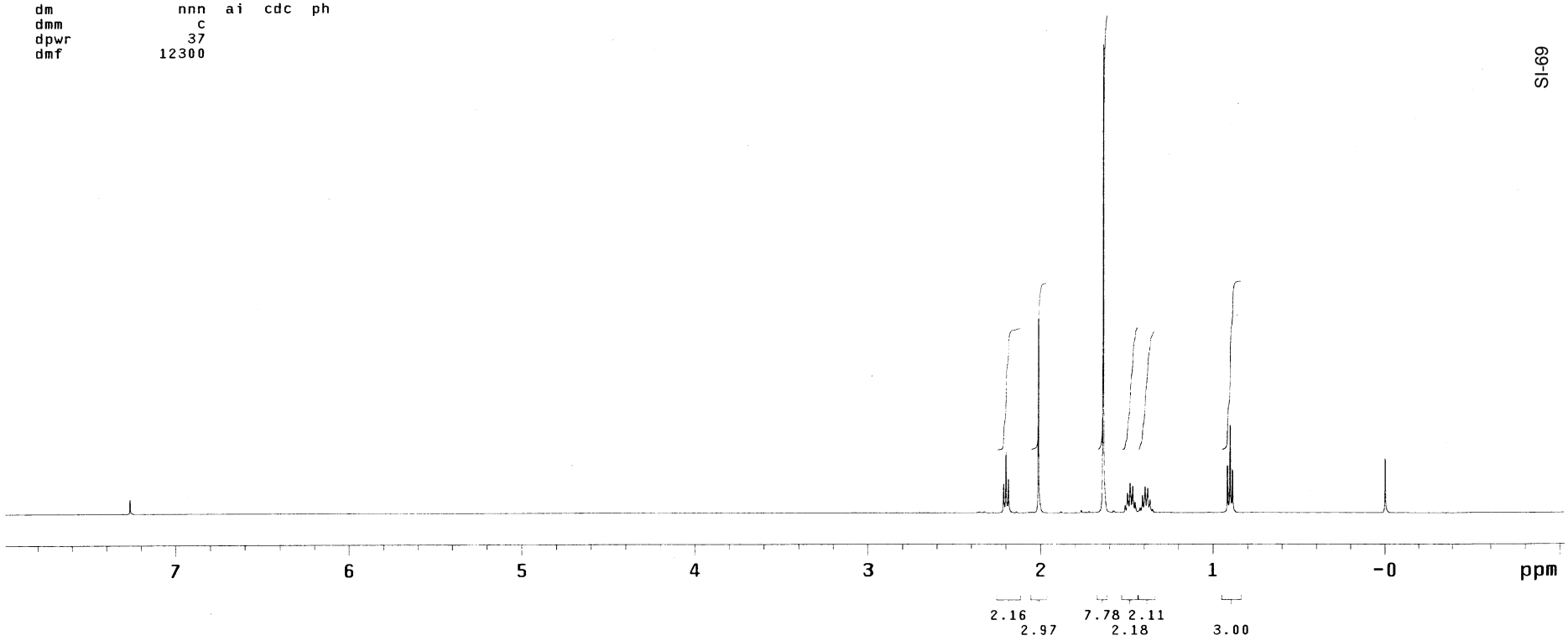


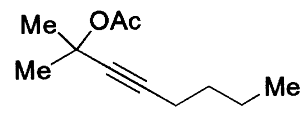


5a

exp1 Proton

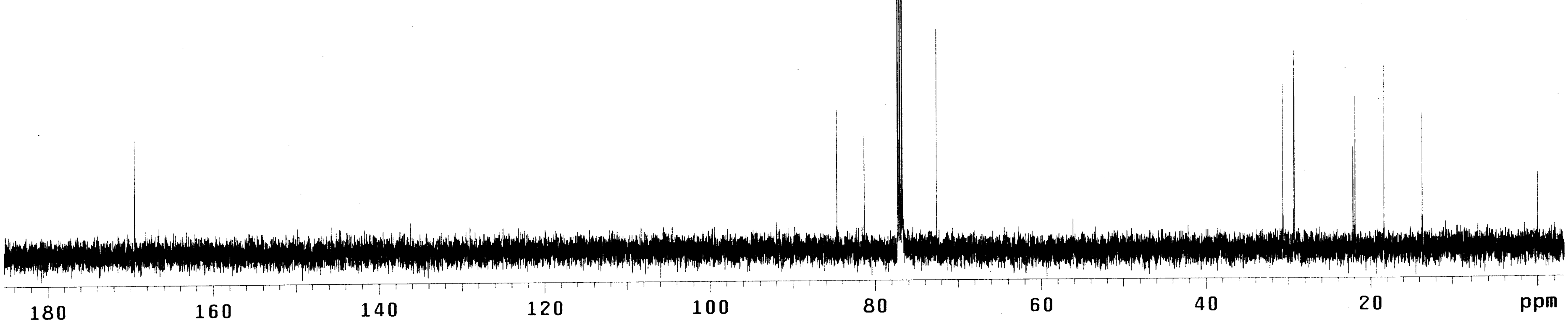
SAMPLE		SPECIAL	
date	Sep 23 2006	temp	6.0
solvent	cdcl3	gain	not used
file	/home/walkup/~	spin	not used
	vnmrsys/data/auto_~	hst	0.008
	2006.09.23_05/Aug.~	pw90	19.800
	01/data/cdcl3_01.f~	alfa	6.600
id		FLAGS	
ACQUISITION		il	n
sw	8012.8	in	n
at	2.049	dp	y
np	32830	hs	nn
fb	4000	PROCESSING	
bs	32	lb	0.20
ss	2	fn	65536
d1	1.000	DISPLAY	
nt	8	sp	-514.5
ct	8	wp	4506.5
TRANSMITTER		rfl	1000.9
tn	H1	rfp	0
sfrq	499.809	rp	12.1
tof	499.7	lp	-41.4
tpwr	54	PLOT	
pw	9.900	wc	250
DECOUPLER		sc	0
dn	C13	vs	40
dof	0	th	2
dm	nnn	ai cdc ph	
dmm	c		
dpwr	37		
dmf	12300		





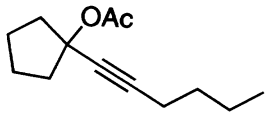
5a

```
exp1  Carbon

      SAMPLE                  SPECIAL
date   Sep 23 2006   temp             6.0
solvent       cdcl3  gain              30
file /home/walkup/~  spin        not used
vnmrsys/data/auto_~  hst            0.008
2006.09.23_05/Aug.~  pw90          13.500
02/data/cdcl3_01.f~  alfa          10.000
                 id           FLAGS
   ACQUISITION       il                 n
sw          30487.8  in                 n
at            1.300  dp                 y
np            79298  hs                nn
fb            17000         PROCESSING
bs               64  lb              0.50
d1            1.000  fn          not used
nt             3200          DISPLAY
ct             3200  sp            -405.8
   TRANSMITTER       wp           23692.5
tn              C13  rfl          11755.3
sfrq        125.689  rfp           9677.1
tof          1255.3  rp              17.0
tpwr             46  lp            -325.6
pw            6.750            PLOT
   DECOUPLER         wc               250
dn               H1  sc                 0
dof               0  vs            192980
dm              yyy  th                 7
dmm               w  ai   cdc   ph
dpwr             36
dmf            7200
```

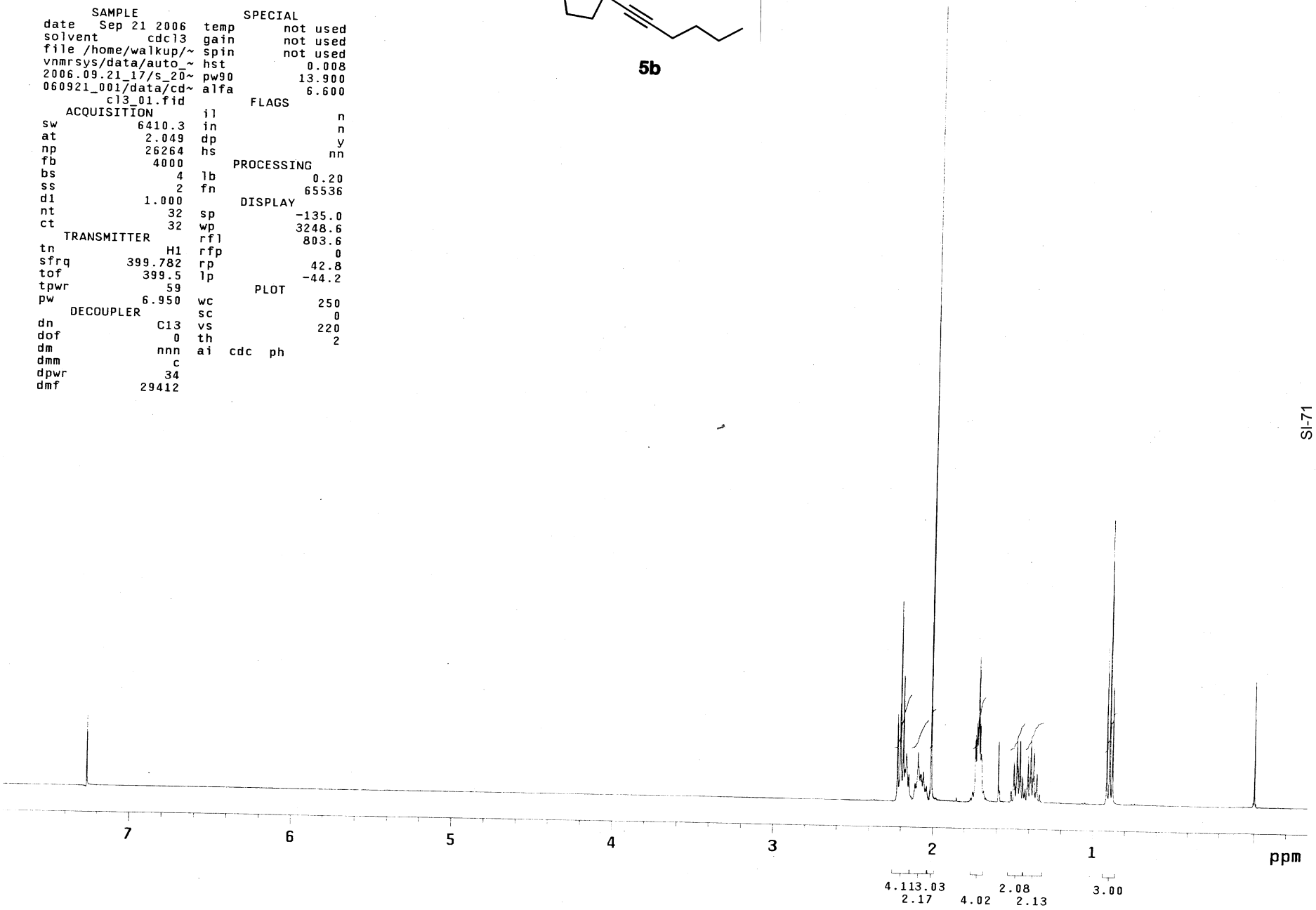


exp1 Proton

SAMPLE		SPECIAL	
date	Sep 21 2006	temp	not used
solvent	cdcl3	gain	not used
file	/home/walkup/~	spin	not used
	vnmrsys/data/auto_~	hst	0.008
	2006.09.21_17/s_20~	pw90	13.900
	060921_001/data/cd~	alfa	6.600
	cl3_01.fid	FLAGS	
ACQUISITION		il	n
sw	6410.3	in	n
at	2.049	dp	y
np	26264	hs	nn
fb	4000	PROCESSING	
bs	4	lb	0.20
ss	2	fn	65536
d1	1.000	DISPLAY	
nt	32	sp	-135.0
ct	32	wp	3248.6
TRANSMITTER		rfl	803.6
tn	H1	rfp	0
sfrq	399.782	rp	42.8
tof	399.5	lp	-44.2
tpwr	59	PLOT	
pw	6.950	wc	250
DECOUPLER		sc	0
dn	C13	vs	220
dof	0	th	2
dm	nnn	ai cdc ph	
dmm	c		
dpwr	34		
dmf	29412		

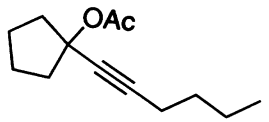


5b

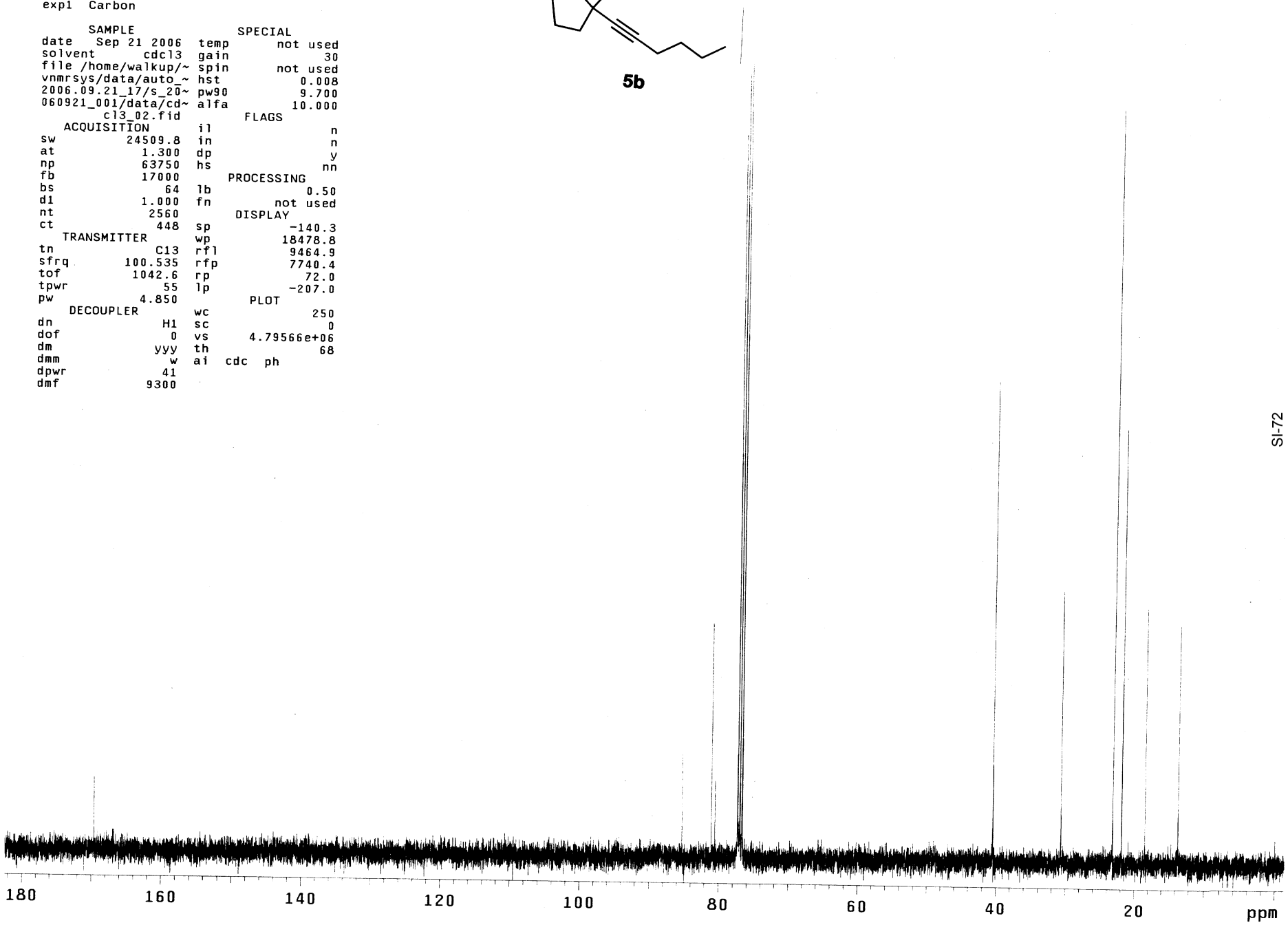


exp1 Carbon

SAMPLE		SPECIAL	
date	Sep 21 2006	temp	not used
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
	vnmrsys/data/auto_~	hst	0.008
	2006.09.21_17/s_20~	pw90	9.700
	060921_001/data/cd~	alfa	10.000
	cl3_02.fid	FLAGS	
ACQUISITION		il	n
sw	24509.8	in	n
at	1.300	dp	y
np	63750	hs	nn
fb	17000	PROCESSING	
bs	64	lb	0.50
d1	1.000	fn	not used
nt	2560	DISPLAY	
ct	448	sp	-140.3
TRANSMITTER		wp	18478.8
tn	C13	rfl	9464.9
sfrq	100.535	rfp	7740.4
tof	1042.6	rp	72.0
tpwr	55	lp	-207.0
pw	4.850	PLOT	
DECOUPLER		wc	250
dn	H1	sc	0
dof	0	vs	4.79566e+06
dm	yyy	th	68
dmm	w	ai	cdc ph
dpwr	41		
dmf	9300		

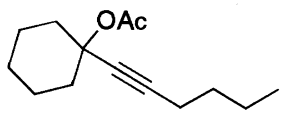


5b

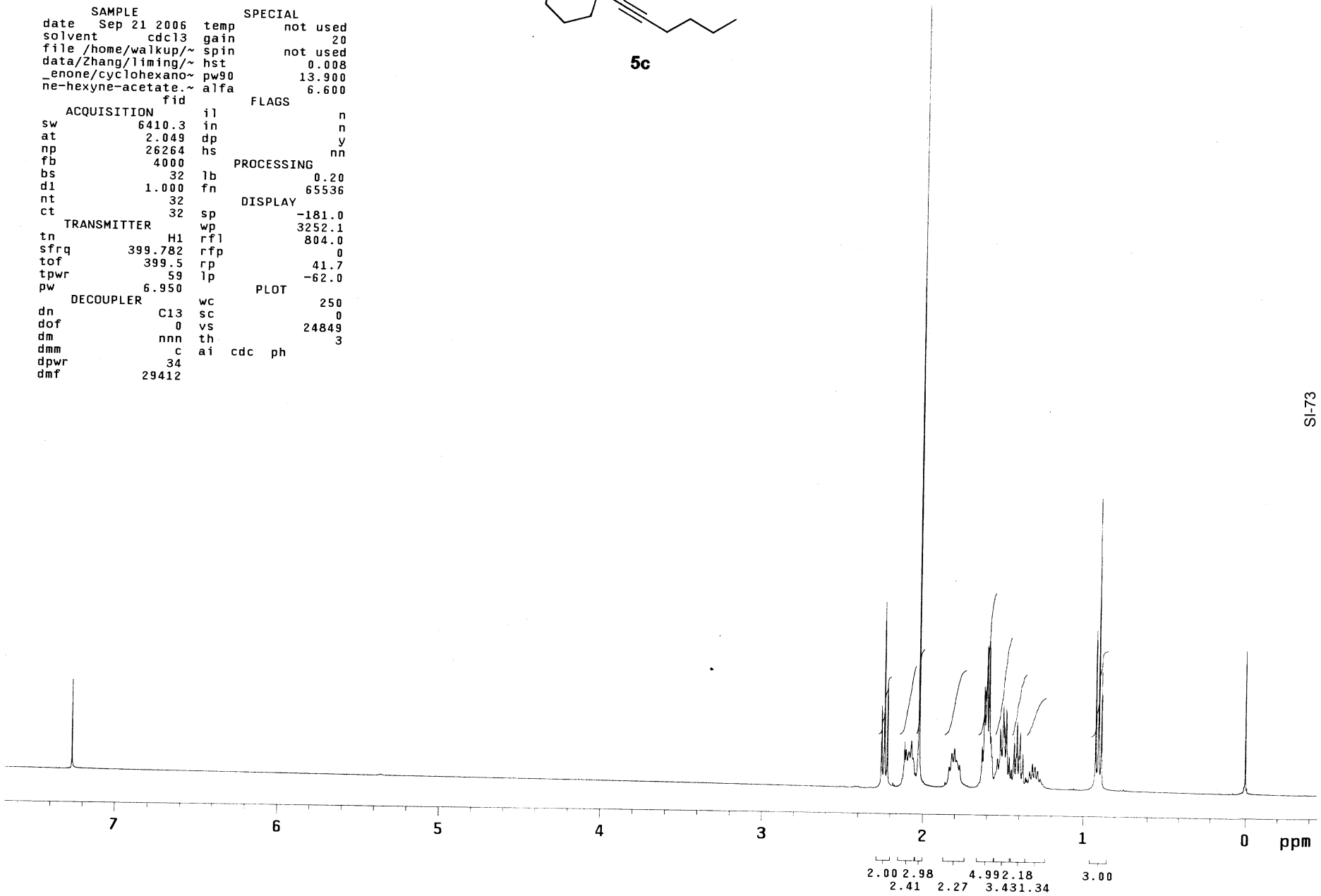


exp1 Proton

SAMPLE		SPECIAL	
date	Sep 21 2006	temp	not used
solvent	cdcl3	gain	20
file	/home/walkup/~	spin	not used
data/Zhang/liming/~		hst	0.008
_enone/cyclohexano~		pw90	13.900
ne-hexyne-acetate.~		alfa	6.600
	fid	FLAGS	
ACQUISITION		il	n
sw	6410.3	in	n
at	2.049	dp	y
np	26264	hs	nn
fb	4000	PROCESSING	
bs	32	lb	0.20
d1	1.000	fn	65536
nt	32	DISPLAY	
ct	32	sp	-181.0
TRANSMITTER		wp	3252.1
tn	H1	rfl	804.0
sfrq	399.782	rfp	0
tof	399.5	rp	41.7
tpwr	59	lp	-62.0
pw	6.950	PLOT	
DECOUPLER		wc	250
dn	C13	sc	0
dof	0	vs	24849
dm	nnn	th	3
dmm	c	ai cdc ph	
dpwr	34		
dmf	29412		



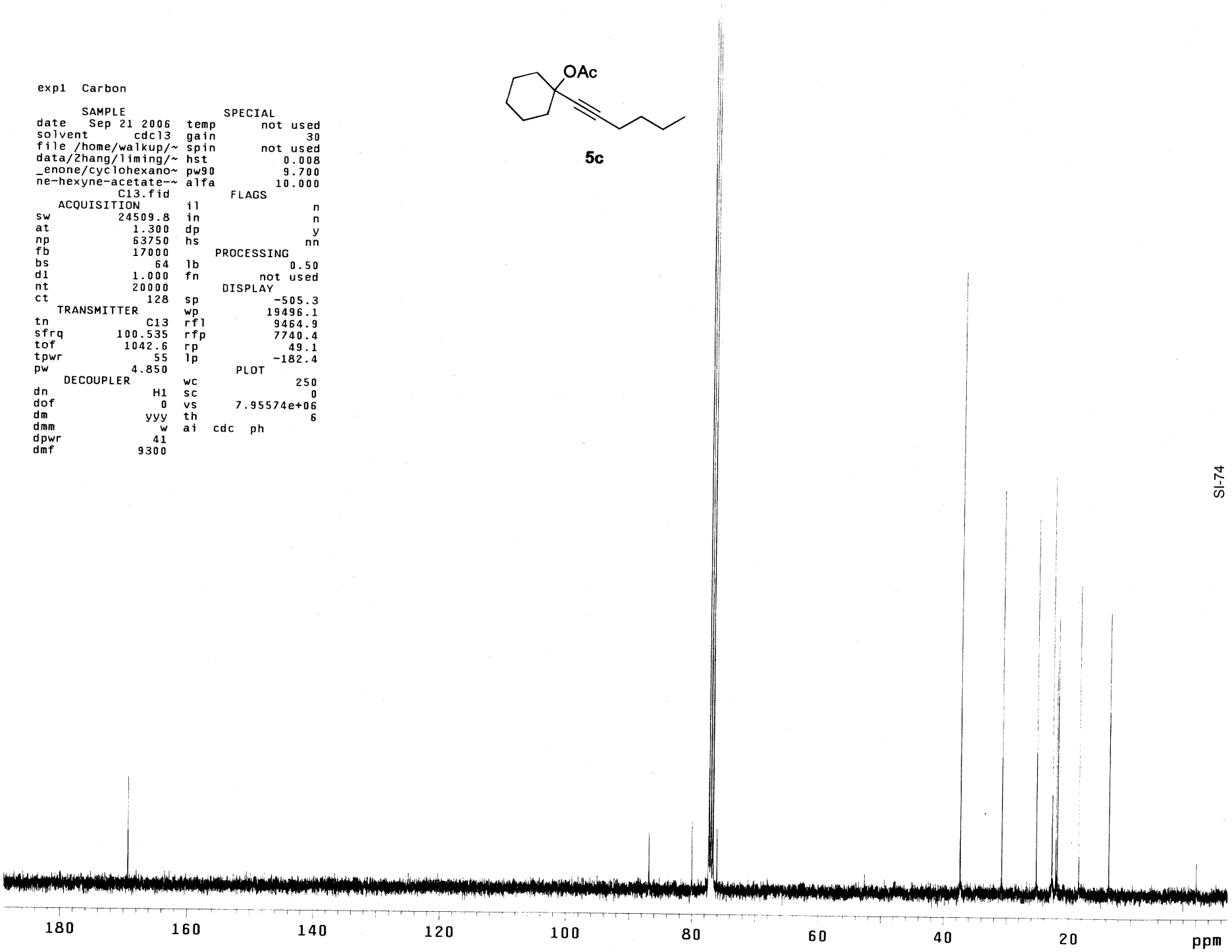
5c



exp1 Carbon

SAMPLE		SPECIAL	
date	Sep 21 2006	temp	not used
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
data/Zhang/liming/~		hst	0.008
_enone/cyclohexano~		pw90	9.700
ne-hexyne-acetate-~		alfa	10.000
C13.fid		FLAGS	
ACQUISITION		il	n
sw	24509.8	in	n
at	1.300	dp	y
np	63750	hs	nn
fb	17000	PROCESSING	
bs	64	lb	0.50
d1	1.000	fn	not used
nt	20000	DISPLAY	
ct	128	sp	-505.3
TRANSMITTER		wp	19496.1
tn	C13	rfl	9464.9
sfrq	100.535	rfp	7740.4
tof	1042.6	rp	49.1
tpwr	55	lp	-182.4
pw	4.850	PLOT	
DECOUPLER		wc	250
dn	H1	sc	0
dof	0	vs	7.95574e+06
dm	yyy	th	6
dmm	w	ai	cdc ph
dpwr	41		
dmf	9300		

5c

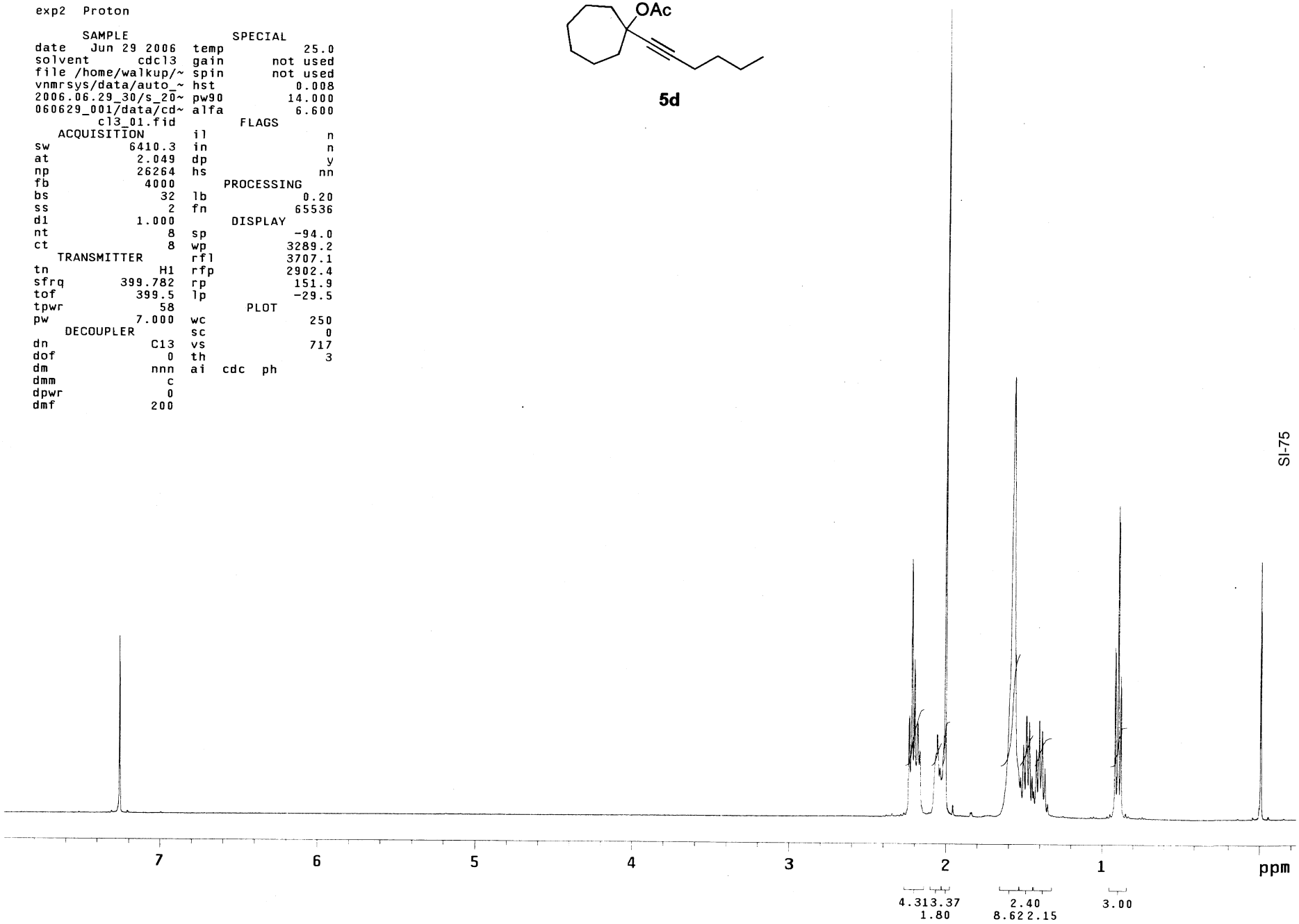


STANDARD 1H OBSERVE - profile

exp2 Proton

SAMPLE		SPECIAL	
date	Jun 29 2006	temp	25.0
solvent	cdcl3	gain	not used
file	/home/walkup/~	spin	not used
vnmrsys/data/auto_~		hst	0.008
2006.06.29_30/s_20~		pw90	14.000
060629_001/data/cd~		alfa	6.600
cl3_01.fid		FLAGS	
ACQUISITION		il	n
sw	6410.3	in	n
at	2.049	dp	y
np	26264	hs	nn
fb	4000	PROCESSING	
bs	32	lb	0.20
ss	2	fn	65536
d1	1.000	DISPLAY	
nt	8	sp	-94.0
ct	8	wp	3289.2
TRANSMITTER		rfl	3707.1
tn	H1	rfp	2902.4
sfrq	399.782	rp	151.9
tof	399.5	lp	-29.5
tpwr	58	PLOT	
pw	7.000	wc	250
DECOUPLER		sc	0
dn	C13	vs	717
dof	0	th	3
dm	nnn	ai cdc ph	
dmm	c		
dpwr	0		
dmf	200		

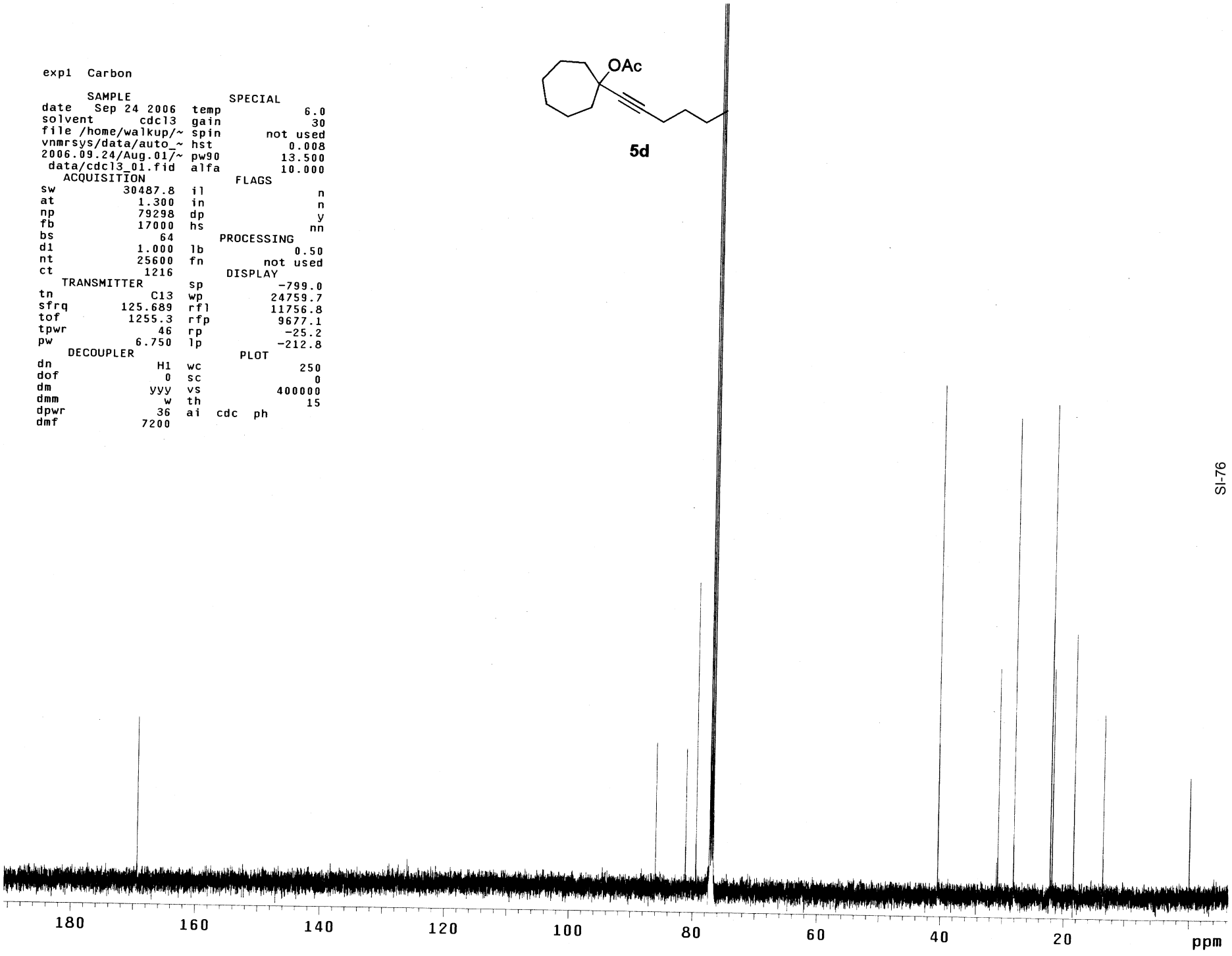
5d



exp1 Carbon

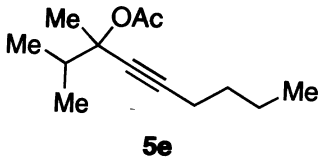
SAMPLE		SPECIAL	
date	Sep 24 2006	temp	6.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
	vnmrsys/data/auto_~	hst	0.008
	2006.09.24/Aug.01/~	pw90	13.500
	data/cdcl3_01.fid	alfa	10.000
ACQUISITION		**FLAGS**	
sw	30487.8	il	n
at	1.300	in	n
np	79298	dp	y
fb	17000	hs	nn
bs	64	**PROCESSING**	
d1	1.000	lb	0.50
nt	25600	fn	not used
ct	1216	**DISPLAY**	
TRANSMITTER		sp	-799.0
tn	C13	wp	24759.7
sfrq	125.689	rfl	11756.8
tof	1255.3	rfp	9677.1
tpwr	46	rp	-25.2
pw	6.750	lp	-212.8
DECOUPLER		**PLOT**	
dn	H1	wc	250
dof	0	sc	0
dm	yyy	vs	400000
dmm	w	th	15
dpwr	36	ai	cdc ph
dmf	7200		

5d

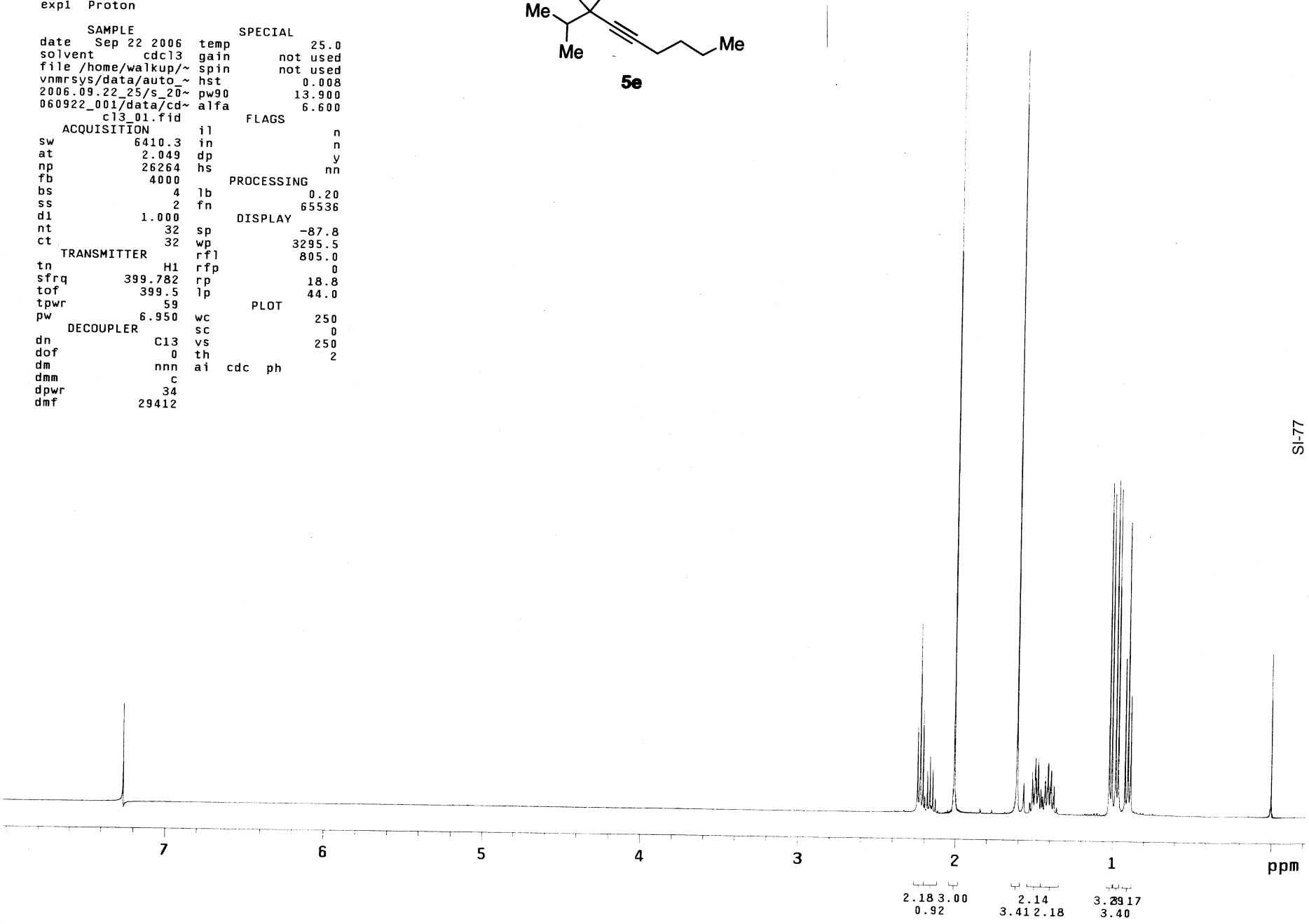


exp1 Proton

SAMPLE		SPECIAL	
date	Sep 22 2006	temp	25.0
solvent	cdcl3	gain	not used
file	/home/walkup/~	spin	not used
	vnmrsys/data/auto_~	hst	0.008
	2006.09.22_25/s_20~	pw90	13.900
	060922_001/data/cd~	alfa	6.600
	cl3_01.fid	FLAGS	
ACQUISITION		il	n
sw	6410.3	in	n
at	2.049	dp	y
np	26264	hs	nn
fb	4000	PROCESSING	
bs	4	lb	0.20
ss	2	fn	65536
d1	1.000	DISPLAY	
nt	32	sp	-87.8
ct	32	wp	3295.5
TRANSMITTER		rfl	805.0
tn	H1	rfp	0
sfrq	399.782	rp	18.8
tof	399.5	lp	44.0
tpwr	59	PLOT	
pw	6.950	wc	250
DECOUPLER		sc	0
dn	C13	vs	250
dof	0	th	2
dm	nnn	ai cdc ph	
dmm	c		
dpwr	34		
dmf	29412		

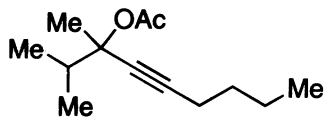


5e

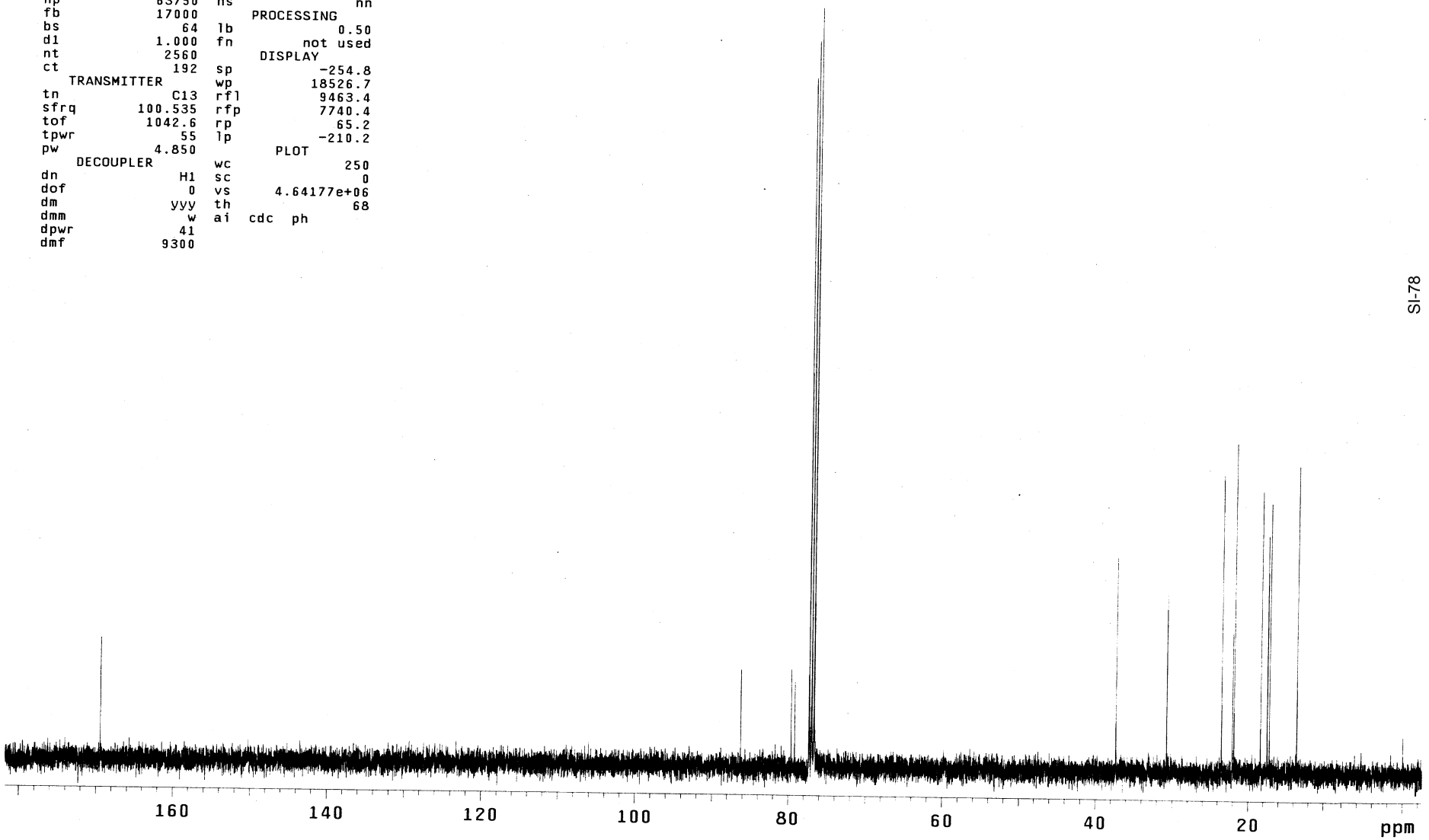


exp1 Carbon

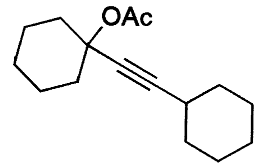
SAMPLE		SPECIAL	
date	Sep 22 2006	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
	vnmrsys/data/auto_~	hst	0.008
	2006.09.22_25/s_20~	pw90	9.700
	060922_001/data/cd~	alfa	10.000
	cl3_02.fid	FLAGS	
ACQUISITION		il	n
sw	24509.8	in	n
at	1.300	dp	y
np	63750	hs	nn
fb	17000	PROCESSING	
bs	64	lb	0.50
d1	1.000	fn	not used
nt	2560	DISPLAY	
ct	192	sp	-254.8
TRANSMITTER		wp	18526.7
tn	C13	rfl	9463.4
sfrq	100.535	rfp	7740.4
tof	1042.6	rp	65.2
tpwr	55	lp	-210.2
pw	4.850	PLOT	
DECOUPLER		wc	250
dn	H1	sc	0
dof	0	vs	4.64177e+06
dm	yyy	th	68
dmm	w	ai	cdc ph
dpwr	41		
dmf	9300		



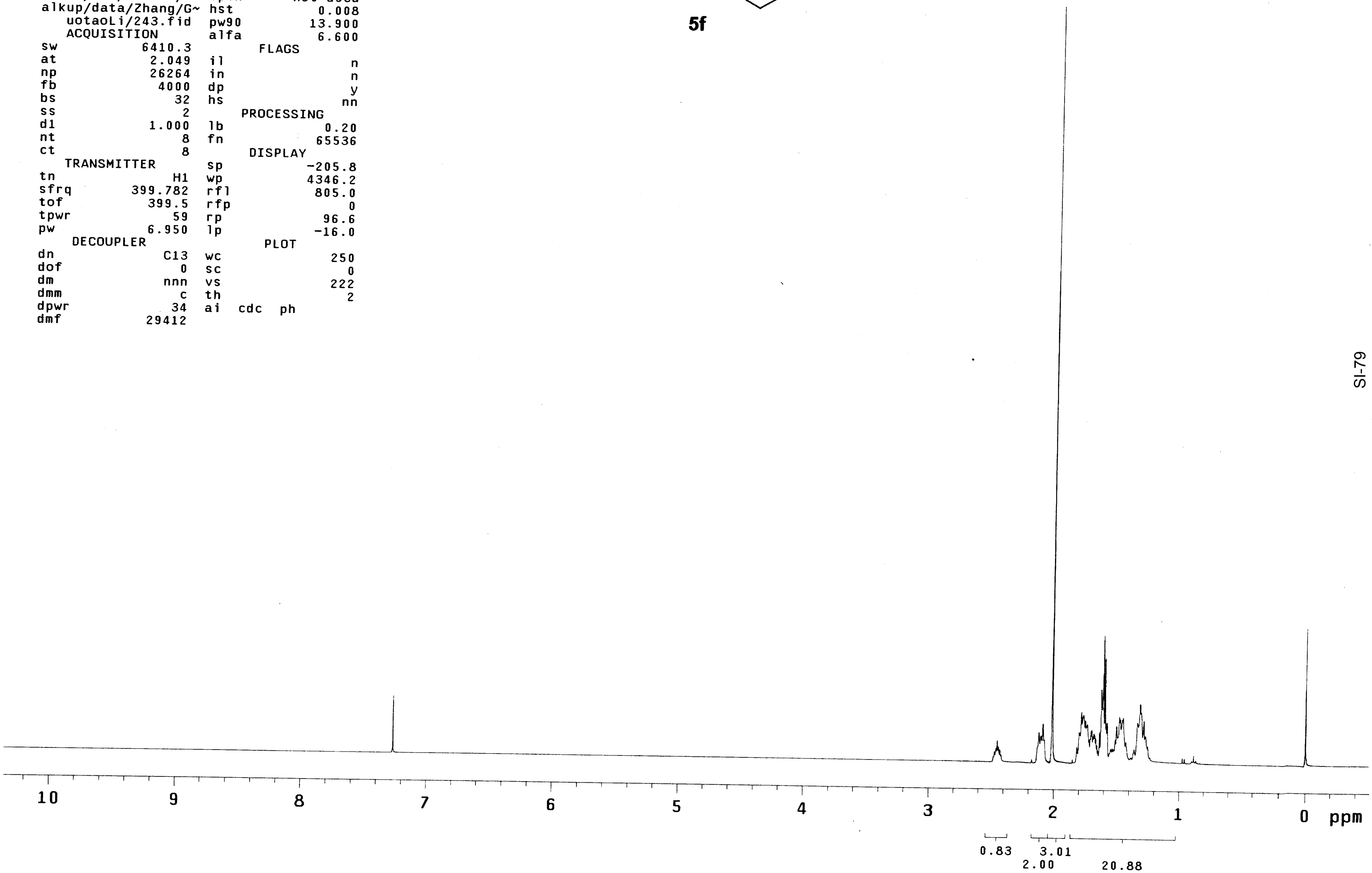
5e

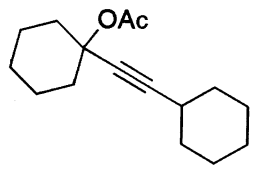


```
exp1  Proton

      SAMPLE                  SPECIAL
date   Sep 30 2006   temp           25.0
solvent       cdcl3   gain       not used
file /mnt/nmr400/w~   spin       not used
alkup/data/Zhang/G~   hst           0.008
   uotaoLi/243.fid    pw90         13.900
   ACQUISITION        alfa          6.600
sw           6410.3          FLAGS
at            2.049   il                n
np            26264   in                n
fb             4000   dp                y
bs               32   hs               nn
ss                2        PROCESSING
d1            1.000   lb             0.20
nt                8   fn            65536
ct                8         DISPLAY
   TRANSMITTER        sp           -205.8
tn               H1   wp           4346.2
sfrq        399.782   rfl           805.0
tof           399.5   rfp               0
tpwr             59   rp             96.6
pw            6.950   lp            -16.0
   DECOUPLER                PLOT
dn              C13   wc              250
dof               0   sc                0
dm              nnn   vs              222
dmm               c   th                2
dpwr             34   ai   cdc   ph
dmf           29412
```



5f

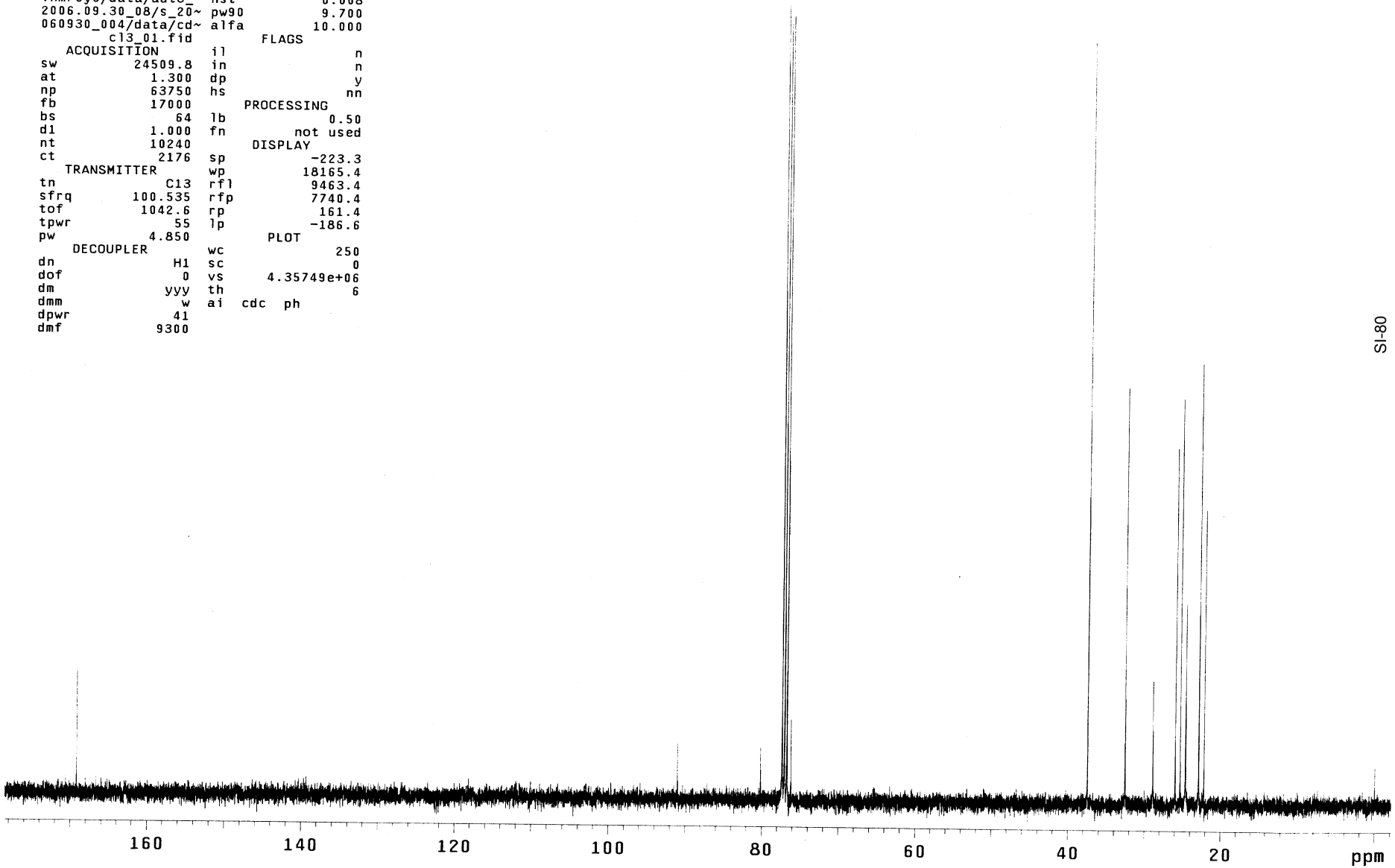




5f

exp1 Carbon

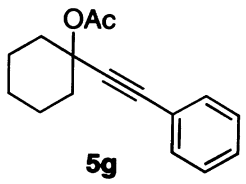
SAMPLE		SPECIAL	
date	Sep 30 2006	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
	vnmrsys/data/auto_~	hst	0.008
	2006.09.30_08/s_20~	pw90	9.700
	060930_004/data/cd~	alfa	10.000
	cl3_01.fid	FLAGS	
ACQUISITION		il	n
sw	24509.8	in	n
at	1.300	dp	y
np	63750	hs	nn
fb	17000	PROCESSING	
bs	64	lb	0.50
d1	1.000	fn	not used
nt	10240	DISPLAY	
ct	2176	sp	-223.3
TRANSMITTER		wp	18165.4
tn	C13	rfl	9463.4
sfrq	100.535	rfp	7740.4
tof	1042.6	rp	161.4
tpwr	55	lp	-186.6
pw	4.850	PLOT	
DECOUPLER		wc	250
dn	H1	sc	0
dof	0	vs	4.35749e+06
dm	yyy	th	6
dmm	w	ai	cdc ph
dpwr	41		
dmf	9300		



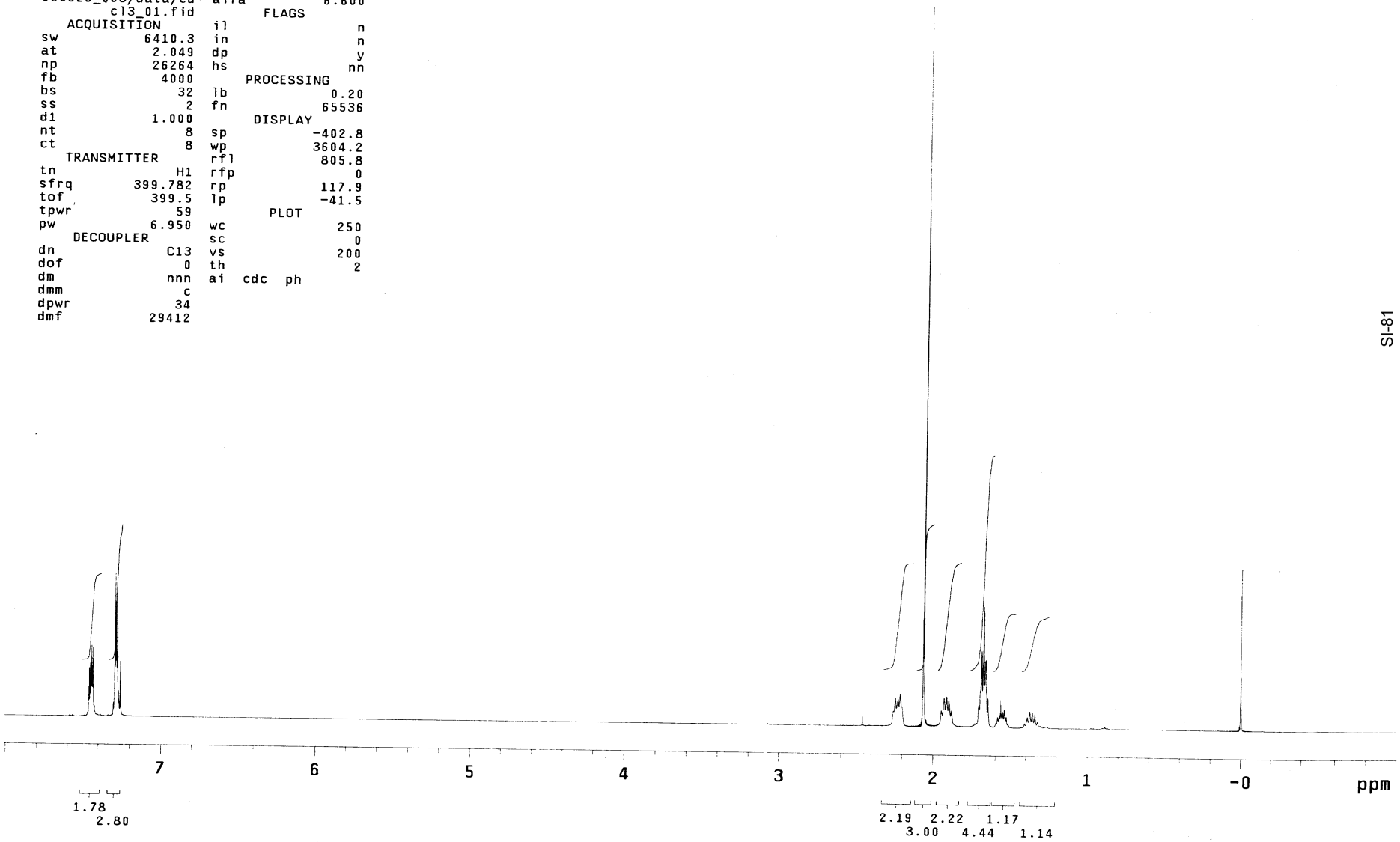
STANDARD 1H OBSERVE - profile
STANDARD 1H OBSERVE - profile
STANDARD 1H OBSERVE - profile
STANDARD 1H OBSERVE - profile

exp1 Proton

SAMPLE		SPECIAL	
date	Sep 26 2006	temp	25.0
solvent	cdcl3	gain	not used
file	/home/walkup/~	spin	not used
vnmrsys/data/auto_~		hst	0.008
2006.09.26_33/s_20~		pw90	13.900
060926_003/data/cd~		alfa	6.600
c13_01.fid		FLAGS	
ACQUISITION		il	n
sw	6410.3	in	n
at	2.049	dp	y
np	26264	hs	nn
fb	4000	PROCESSING	
bs	32	lb	0.20
ss	2	fn	65536
d1	1.000	DISPLAY	
nt	8	sp	-402.8
ct	8	wp	3604.2
TRANSMITTER		rfl	805.8
tn	H1	rfp	0
sfrq	399.782	rp	117.9
tof	399.5	lp	-41.5
tpwr	59	PLOT	
pw	6.950	wc	250
DECOUPLER		sc	0
dn	C13	vs	200
dof	0	th	2
dm	nnn	ai cdc ph	
dmm	c		
dpwr	34		
dmf	29412		



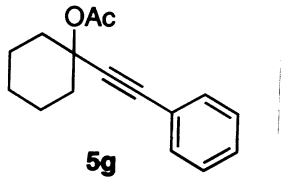
5g



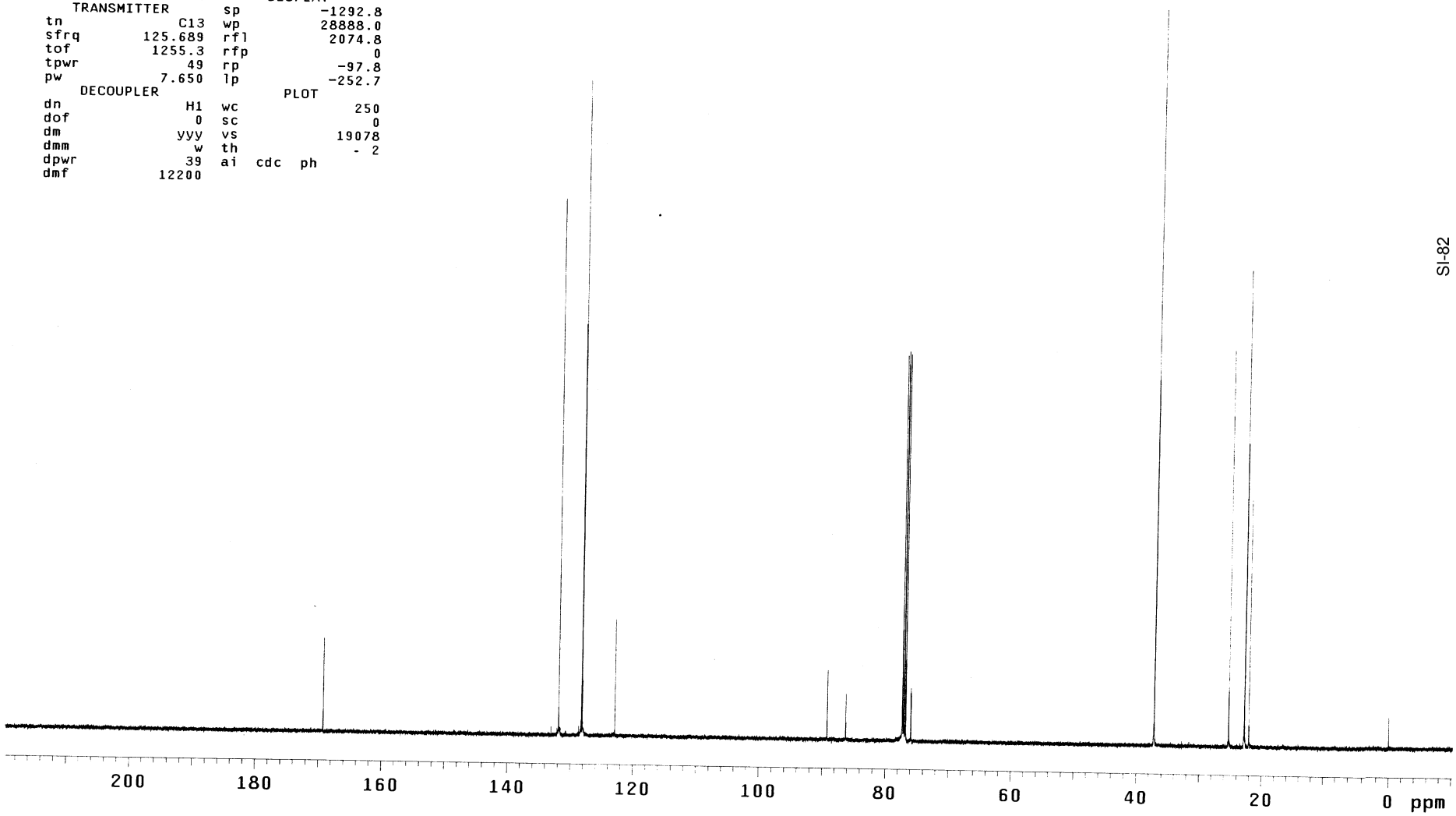
STANDARD 1H OBSERVE - profile

exp1 Carbon

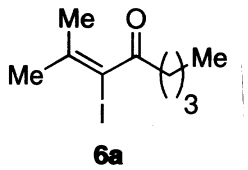
SAMPLE		SPECIAL	
date	Sep 28 2006	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
vnmrsys/data/auto_~		hst	0.008
2006.09.28/Aug.01/~		pw90	15.300
data/cdcl3_01.fid		alfa	10.000
ACQUISITION		**FLAGS**	
sw	30487.8	il	n
at	1.300	in	n
np	79298	dp	y
fb	17000	hs	nn
bs	64	**PROCESSING**	
d1	1.000	lb	0.50
nt	3300	fn	not used
ct	3264	**DISPLAY**	
TRANSMITTER		sp	-1292.8
tn	C13	wp	28888.0
sfrq	125.689	rfl	2074.8
tof	1255.3	rfp	0
tpwr	49	rp	-97.8
pw	7.650	lp	-252.7
DECOUPLER		**PLOT**	
dn	H1	wc	250
dof	0	sc	0
dm	yyy	vs	19078
dmm	w	th	- 2
dpwr	39	ai cdc ph	
dmf	12200		



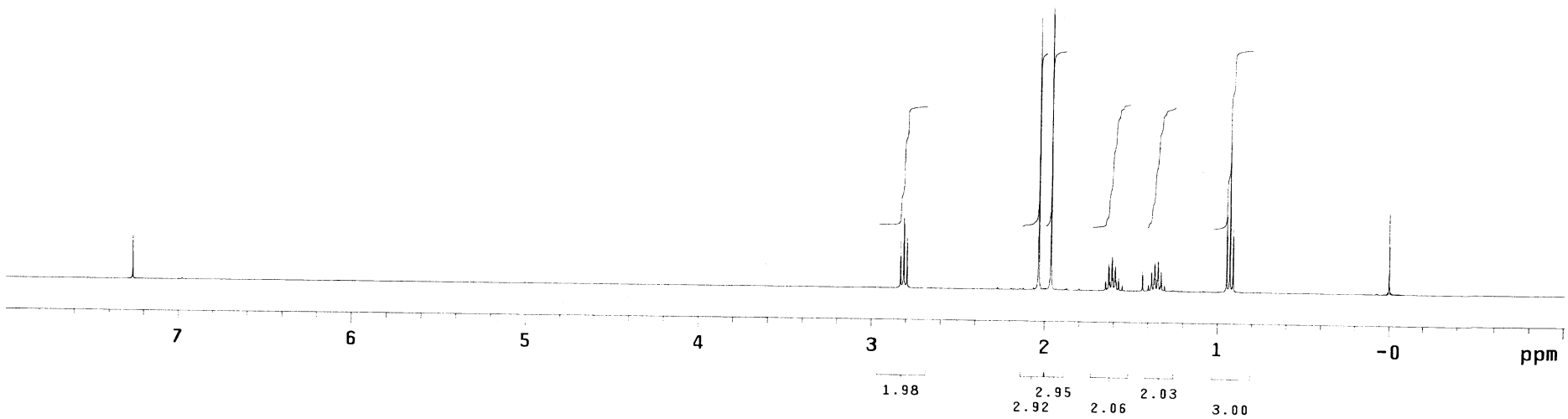
5g



```
STANDARD 1H OBSERVE - profile
STANDARD 1H OBSERVE - profile
STANDARD 1H OBSERVE - profile
STANDARD 1H OBSERVE - profile

exp2  Proton

      SAMPLE                SPECIAL
date   Jan  5 2007   temp          25.0
solvent      cdcl3   gain       not used
file /home/walkup/~  spin       not used
vnmrsys/data/auto_~  hst           0.008
2007.01.05_09/s_20~  pw90         13.900
070105_004/data/cd~  alfa          6.600
        cl3_01.fid         FLAGS
   ACQUISITION          il              n
sw           6410.3      in              n
at              2.049    dp              y
np            26264      hs             nn
fb             4000           PROCESSING
bs               32       lb           0.20
ss               2        fn          65536
d1           1.000            DISPLAY
nt               8        sp         -404.7
ct               8        wp         3601.5
   TRANSMITTER            rfl          805.0
tn              H1        rfp             0
sfrq       399.782         rp          -47.5
tof          399.5         lp          -36.0
tpwr            59              PLOT
pw           6.950         wc            250
    DECOUPLER              sc              0
dn             C13         vs            100
dof             0          th              3
dm            nnn          ai  cdc  ph
dmm             c
dpwr           34
dmf         29412
```



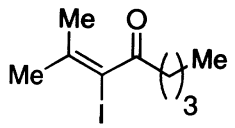
6a



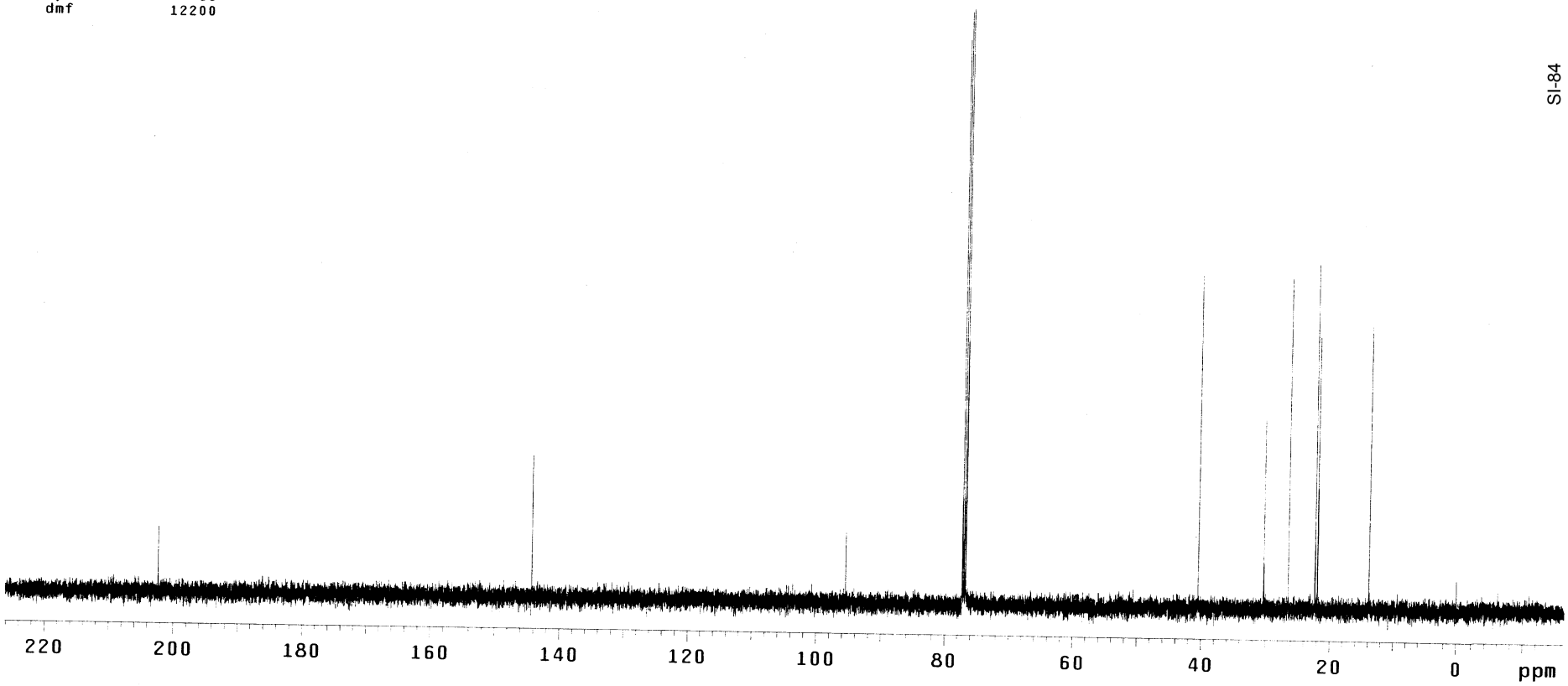
STANDARD 1H OBSERVE - profile

exp1 Carbon

SAMPLE		SPECIAL	
date	Jan 8 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
	vnmrsys/data/auto_~	hst	0.008
	2007.01.08_11/Aug.~	pw90	15.300
	01/data/cdcl3_01.f~	alfa	10.000
id		FLAGS	
ACQUISITION		il	n
sw	30487.8	in	n
at	1.300	dp	y
np	79298	hs	nn
fb	17000	PROCESSING	
bs	32	lb	0.50
d1	1.000	fn	not used
nt	2560	DISPLAY	
ct	224	sp	-2075.8
TRANSMITTER		wp	30487.3
tn	C13	rfl	11754.4
sfrq	125.689	rfp	9678.1
tof	1255.3	rp	154.2
tpwr	49	lp	-301.0
pw	7.650	PLOT	
DECOUPLER		wc	250
dn	H1	sc	0
dof	0	vs	20000
dm	yyy	th	8
dmm	w	ai cdc ph	
dpwr	39		
dmf	12200		



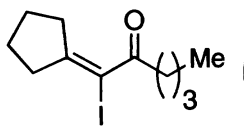
6a



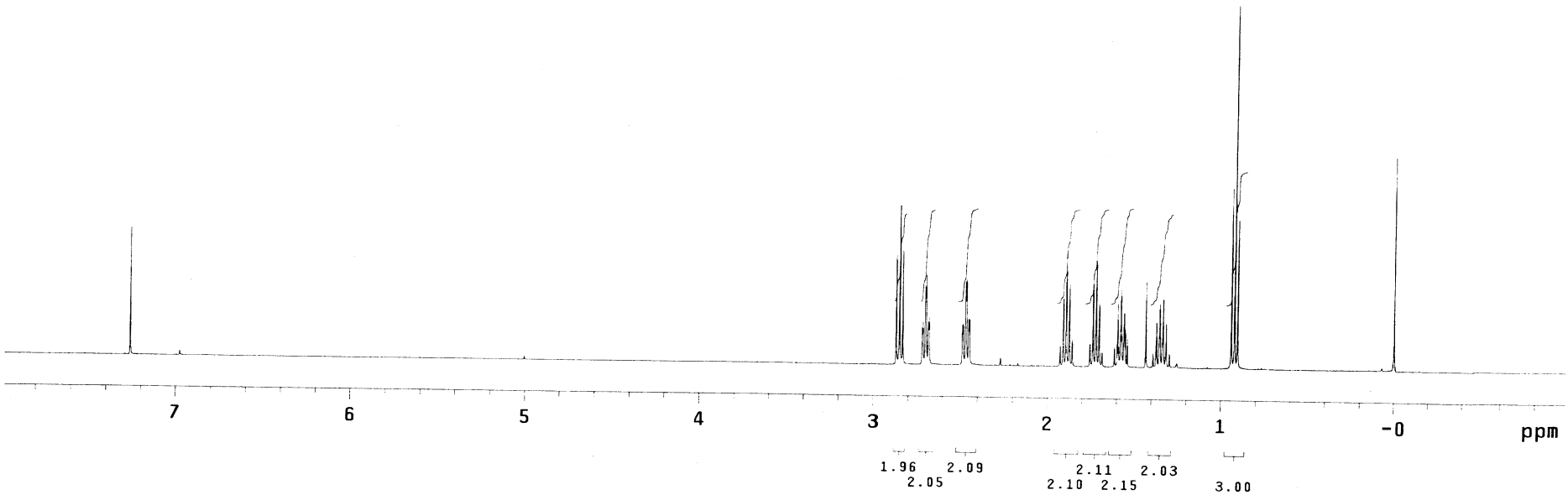
STANDARD 1H OBSERVE - profile

exp4 Proton

SAMPLE		SPECIAL	
date	Jan 9 2007	temp	25.0
solvent	cdcl3	gain	not used
file	/home/walkup/~	spin	not used
	vnmrsys/data/auto_~	hst	0.008
	2007.01.09/s_20070~	pw90	13.900
	109_001/data/cdcl3~	alfa	6.600
	_01.fid	FLAGS	
ACQUISITION		il	n
sw	6410.3	in	n
at	2.049	dp	y
np	26264	hs	nn
fb	4000	PROCESSING	
bs	32	lb	0.20
ss	2	fn	65536
d1	1.000	DISPLAY	
nt	8	sp	-393.2
ct	8	wp	3583.9
TRANSMITTER		rfl	805.4
tn	H1	rfp	0
sfrq	399.782	rp	-71.8
tof	399.5	lp	-44.4
tpwr	59	PLOT	
pw	6.950	wc	250
DECOUPLER		sc	0
dn	C13	vs	280
dof	0	th	3
dm	nnn	ai cdc ph	
dmm	c		
dpwr	34		
dmf	29412		



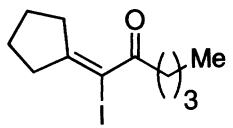
6b



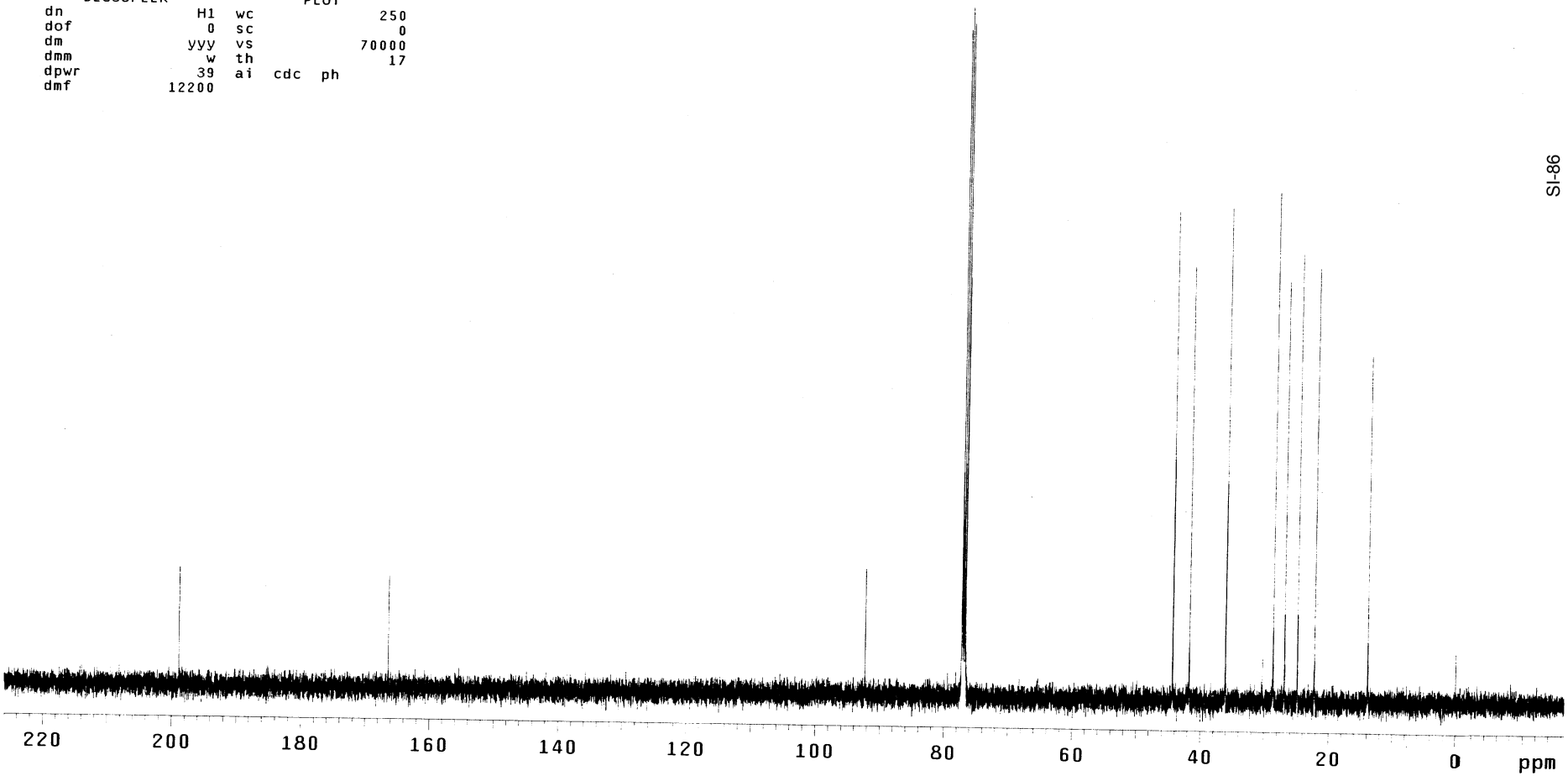
STANDARD 1H OBSERVE - profile

exp1 Carbon

SAMPLE		SPECIAL	
date	Jan 9 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
data/Zhang/Meng/C5~		hst	0.008
ring_NIS_Acetone_p~		pw90	15.300
ure_C13.fid		alfa	10.000
ACQUISITION		**FLAGS**	
sw	30487.8	il	n
at	1.300	in	n
np	79298	dp	y
fb	17000	hs	nn
bs	32	**PROCESSING**	
d1	1.000	lb	0.50
nt	2560	fn	not used
ct	704	**DISPLAY**	
TRANSMITTER		sp	-2075.4
tn	C13	wp	30487.3
sfrq	125.689	rfl	11753.9
tof	1255.3	rfp	9678.1
tpwr	49	rp	-114.2
pw	7.650	lp	-268.6
DECOUPLER		**PLOT**	
dn	H1	wc	250
dof	0	sc	0
dm	yyy	vs	70000
dmm	w	th	17
dpwr	39	ai cdc ph	
dmf	12200		



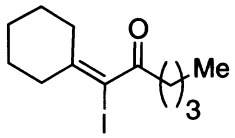
6b



STANDARD 1H OBSERVE - profile

exp2 Proton

SAMPLE		SPECIAL	
date	Jan 3 2007	temp	25.0
solvent	cdcl3	gain	not used
file	/home/walkup/~	spin	not used
	vnmrsys/data/auto_~	hst	0.008
	2007.01.03_11/s_20~	pw90	13.900
	070103_001/data/cd~	alfa	6.600
	cl3_01.fid	FLAGS	
ACQUISITION		il	n
sw	6410.3	in	n
at	2.049	dp	y
np	26264	hs	nn
fb	4000	PROCESSING	
bs	32	lb	0.20
ss	2	fn	65536
d1	1.000	DISPLAY	
nt	8	sp	-397.3
ct	8	wp	3594.0
TRANSMITTER		rfl	805.0
tn	H1	rfp	0
sfrq	399.782	rp	-39.4
tof	399.5	lp	-46.8
tpwr	59	PLOT	
pw	6.950	wc	250
DECOUPLER		sc	0
dn	C13	vs	300
dof	0	th	2
dm	nnn	ai cdc ph	
dmm	c		
dpwr	34		
dmf	29412		



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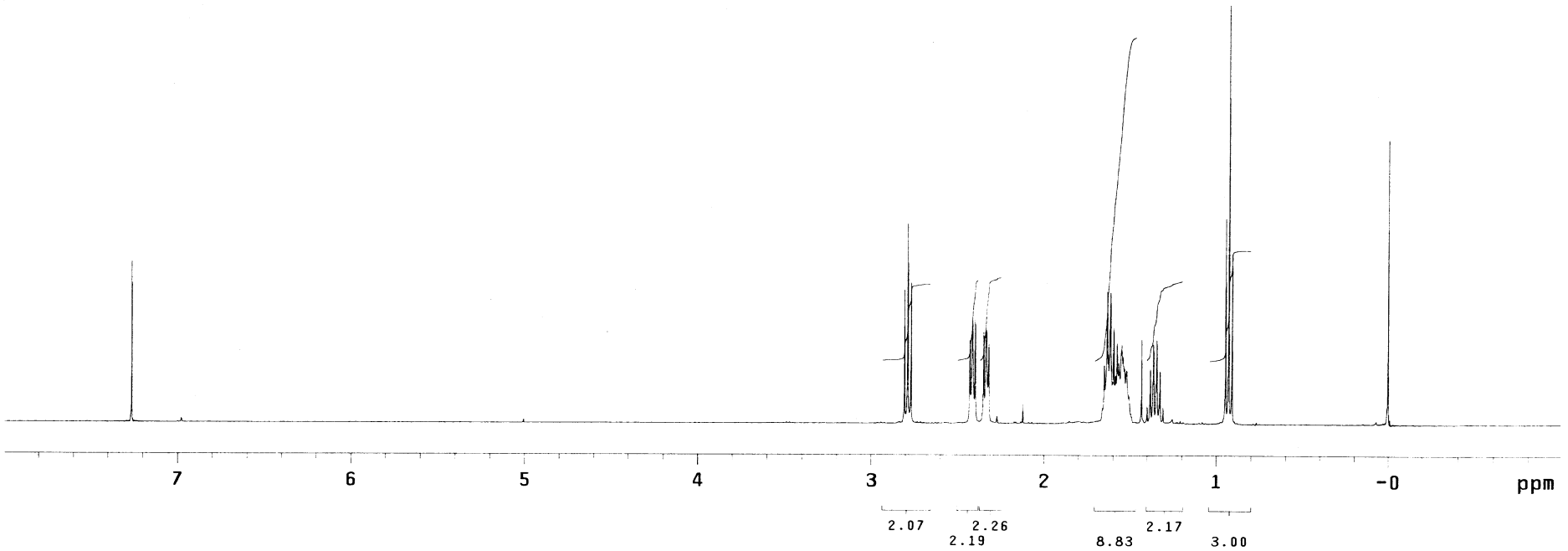
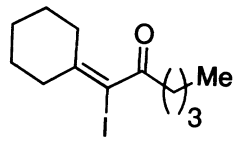


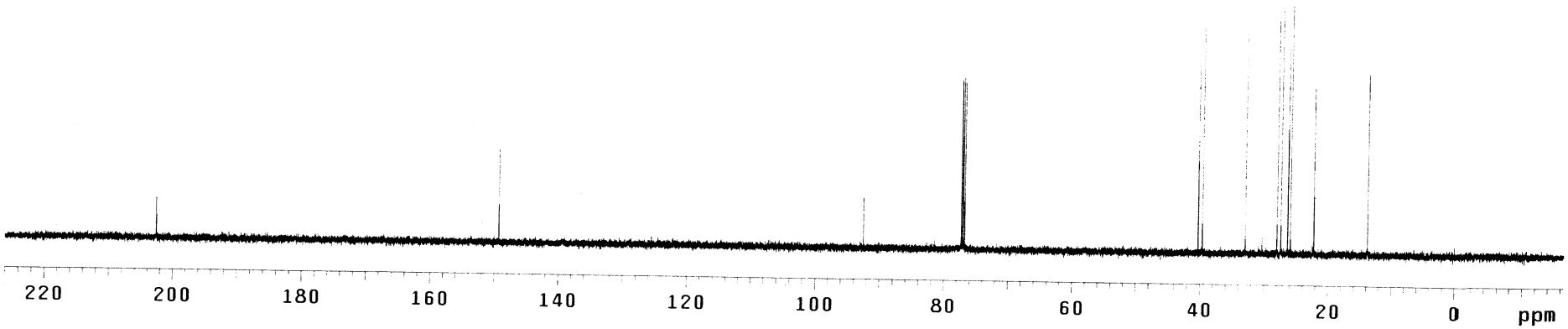
STANDARD 1H OBSERVE - profile

exp1 Carbon

SAMPLE		SPECIAL	
date	Jan 10 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
	vnmrsys/data/auto_~	hst	0.008
	2007.01.10_01/Aug.~	pw90	15.300
	03/data/cdcl3_01.f~	alfa	10.000
id		FLAGS	
ACQUISITION		il	n
sw	30487.8	in	n
at	1.300	dp	y
np	79298	hs	nn
fb	17000	PROCESSING	
bs	64	lb	0.50
d1	1.000	fn	not used
nt	256	DISPLAY	
ct	64	sp	-2077.7
TRANSMITTER		wp	30487.3
tn	C13	rfl	11756.2
sfrq	125.689	rfp	9678.1
tof	1255.3	rp	-124.6
tpwr	49	lp	-259.1
pw	7.650	PLOT	
DECOUPLER		wc	250
dn	H1	sc	0
dof	0	vs	7000
dm	yyy	th	7
dmm	w	ai cdc ph	
dpwr	39		
dmf	12200		



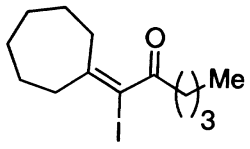
6c



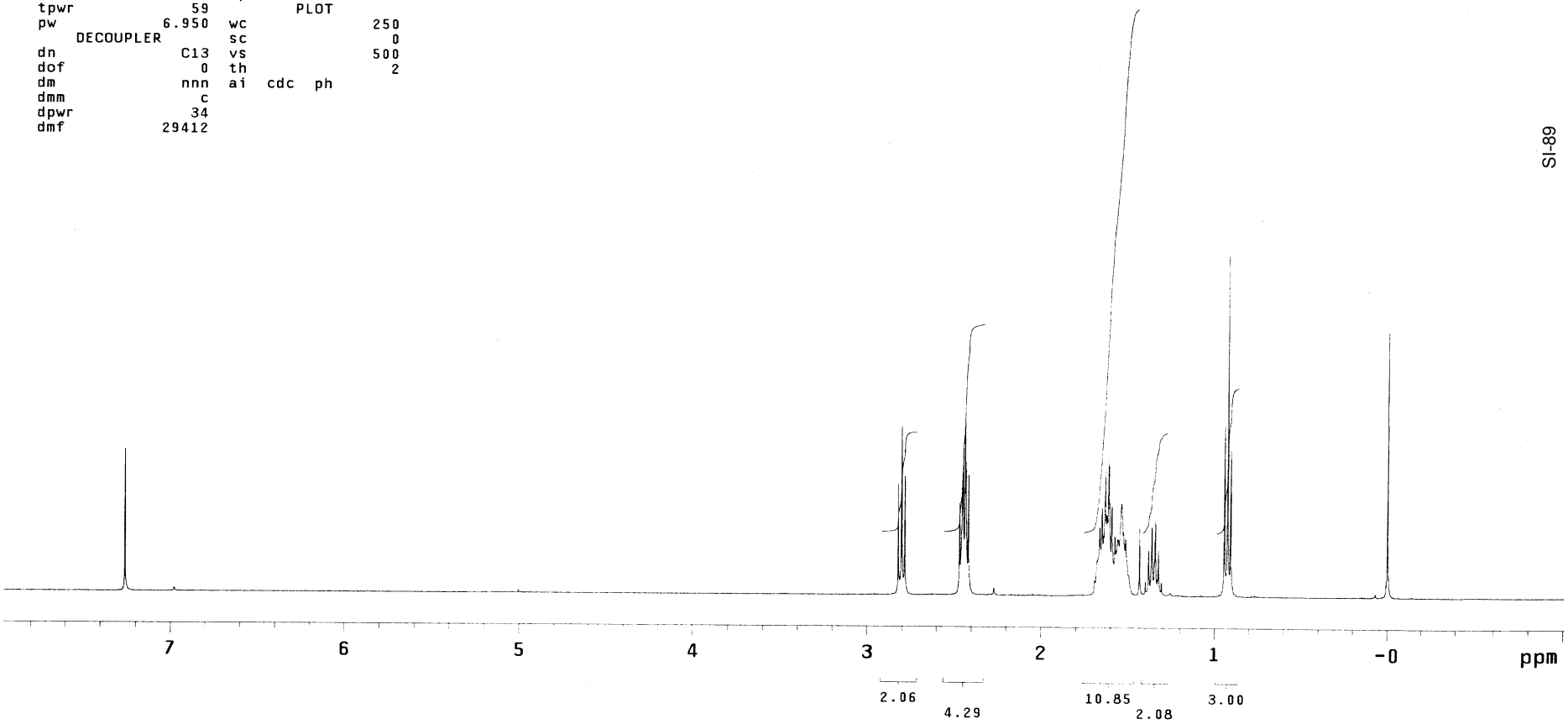
STANDARD 1H OBSERVE - profile
STANDARD 1H OBSERVE - profile
STANDARD 1H OBSERVE - profile

exp2 Proton

SAMPLE		SPECIAL	
date	Jan 5 2007	temp	25.0
solvent	cdcl3	gain	not used
file	/home/walkup/~	spin	not used
	vnmrsys/data/auto_~	hst	0.008
	2007.01.05_09/s_20~	pw90	13.900
	070105_003/data/cd~	alfa	6.600
	cl3_01.fid	FLAGS	
ACQUISITION		il	n
sw	6410.3	in	n
at	2.049	dp	y
np	26264	hs	nn
fb	4000	PROCESSING	
bs	32	lb	0.20
ss	2	fn	65536
d1	1.000	DISPLAY	
nt	8	sp	-405.5
ct	8	wp	3586.6
TRANSMITTER		rfl	805.8
tn	H1	rfp	0
sfrq	399.782	rp	-46.4
tof	399.5	lp	-33.1
tpwr	59	PLOT	
pw	6.950	wc	250
DECOUPLER		sc	0
dn	C13	vs	500
dof	0	th	2
dm	nnn	ai cdc ph	
dmm	c		
dpwr	34		
dmf	29412		



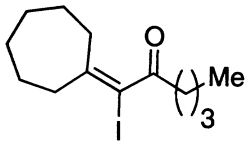
6d



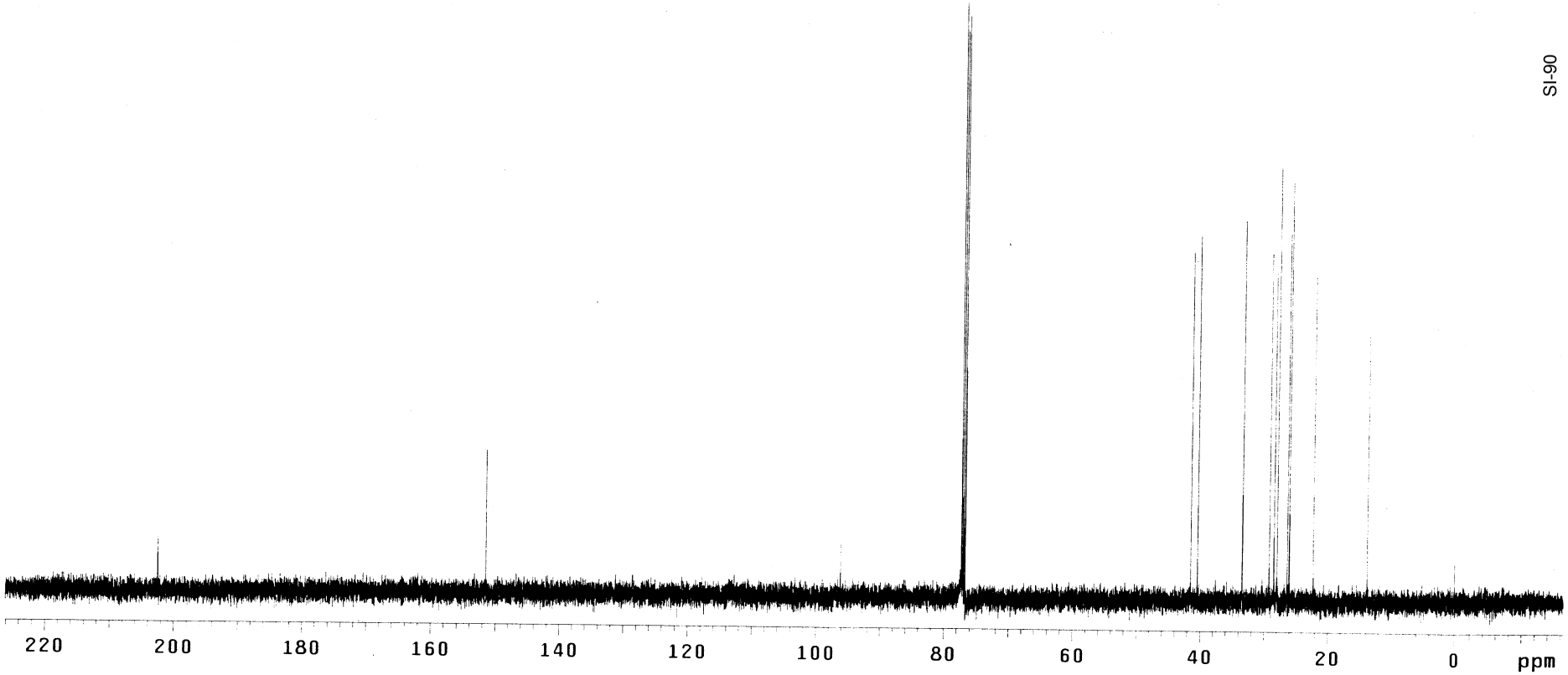
STANDARD 1H OBSERVE - profile

exp1 Carbon

SAMPLE		SPECIAL	
date	Jan 9 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
vnmrsys/data/auto_~		hst	0.008
2007.01.09/Aug.01/~		pw90	15.300
data/cdcl3_01.fid		alfa	10.000
ACQUISITION		**FLAGS**	
sw	30487.8	il	n
at	1.300	in	n
np	79298	dp	y
fb	17000	hs	nn
bs	64	**PROCESSING**	
d1	1.000	lb	0.50
nt	256	fn	not used
ct	256	**DISPLAY**	
TRANSMITTER		sp	-2075.8
tn	C13	wp	30487.3
sfrq	125.689	rfl	11754.4
tof	1255.3	rfp	9678.1
tpwr	49	rp	141.7
pw	7.650	lp	-232.2
DECOUPLER		**PLOT**	
dn	H1	wc	250
dof	0	sc	0
dm	yyy	vs	23000
dmm	w	th	7
dpwr	39	ai cdc ph	
dmf	12200		



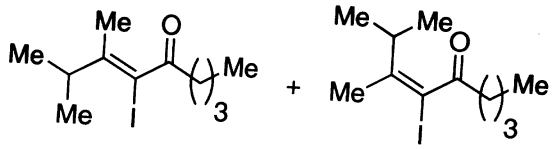
6d



STANDARD 1H OBSERVE - profile

exp1 Proton

SAMPLE		SPECIAL	
date	Jan 9 2007	temp	25.0
solvent	cdcl3	gain	not used
file	/home/walkup/~	spin	not used
vnmrsys/data/auto_~		hst	0.008
2007.01.09_04/Aug.~		pw90	14.700
01/data/cdcl3_01.f~		alfa	6.600
id		FLAGS	
ACQUISITION		il	n
sw	8012.8	in	n
at	2.049	dp	y
np	32830	hs	nn
fb	4000	PROCESSING	
bs	32	lb	0.20
ss	2	fn	65536
d1	1.000	DISPLAY	
nt	8	sp	-509.6
ct	8	wp	4499.4
TRANSMITTER		rfl	1007.5
tn	H1	rfp	0
sfrq	499.809	rp	-159.8
tof	499.7	lp	-32.4
tpwr	54	PLOT	
pw	7.350	wc	250
DECOUPLER		sc	0
dn	C13	vs	80
dof	0	th	2
dm	nnn	ai	cdc ph
dmm	c		
dpwr	34		
dmf	32258		



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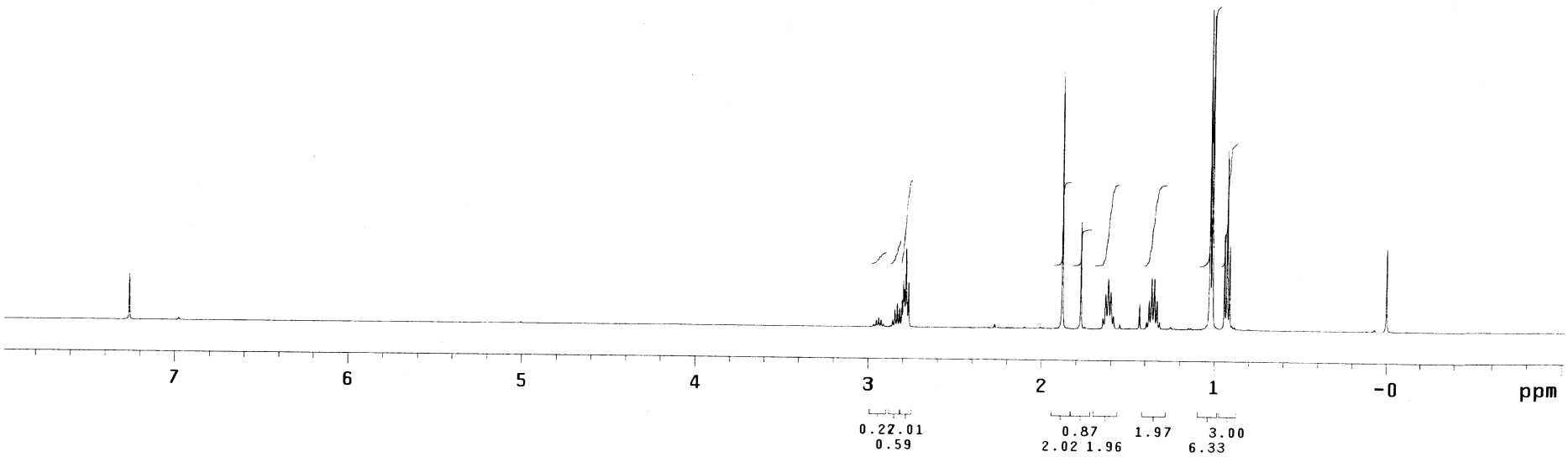
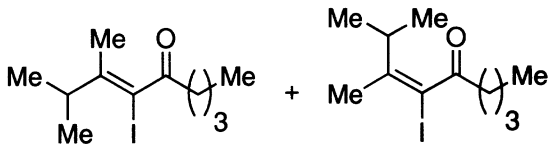


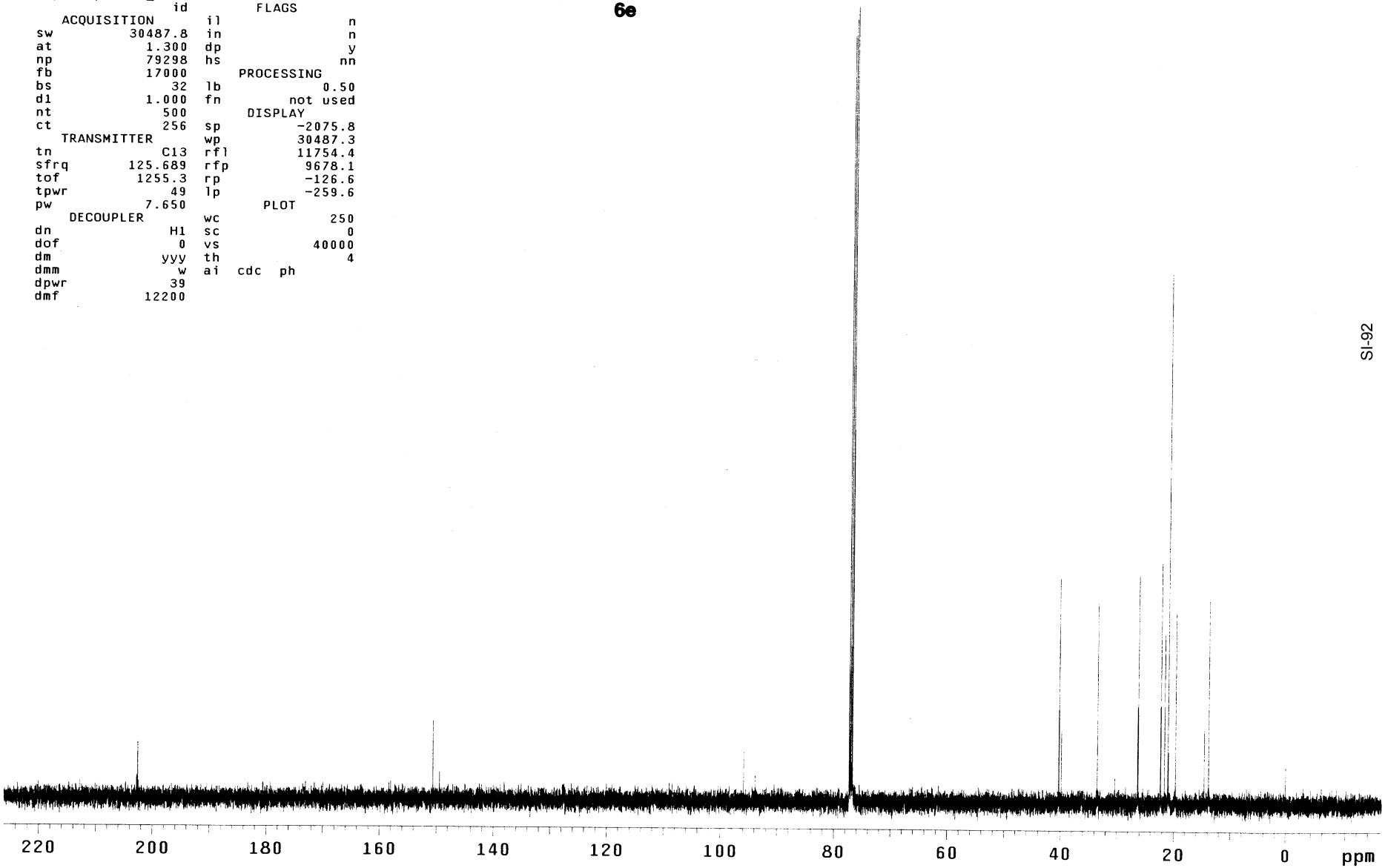
STANDARD 1H OBSERVE - profile
STANDARD 1H OBSERVE - profile

exp1 Carbon

SAMPLE		SPECIAL	
date	Jan 9 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/walkup/~	spin	not used
vnmrsys/data/auto_~		hst	0.008
2007.01.09_06/Aug.~		pw90	15.300
03/data/cdcl3_01.f~		alfa	10.000
id		FLAGS	
ACQUISITION		il	n
sw	30487.8	in	n
at	1.300	dp	y
np	79298	hs	nn
fb	17000	PROCESSING	
bs	32	lb	0.50
d1	1.000	fn	not used
nt	500	DISPLAY	
ct	256	sp	-2075.8
TRANSMITTER		wp	30487.3
tn	C13	rfl	11754.4
sfrq	125.689	rfp	9678.1
tof	1255.3	rp	-126.6
tpwr	49	lp	-259.6
pw	7.650	PLOT	
DECOUPLER		wc	250
dn	H1	sc	0
dof	0	vs	40000
dm	yyy	th	4
dmm	w	ai cdc ph	
dpwr	39		
dmf	12200		

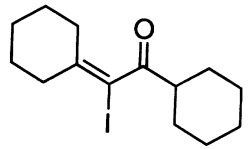


6e

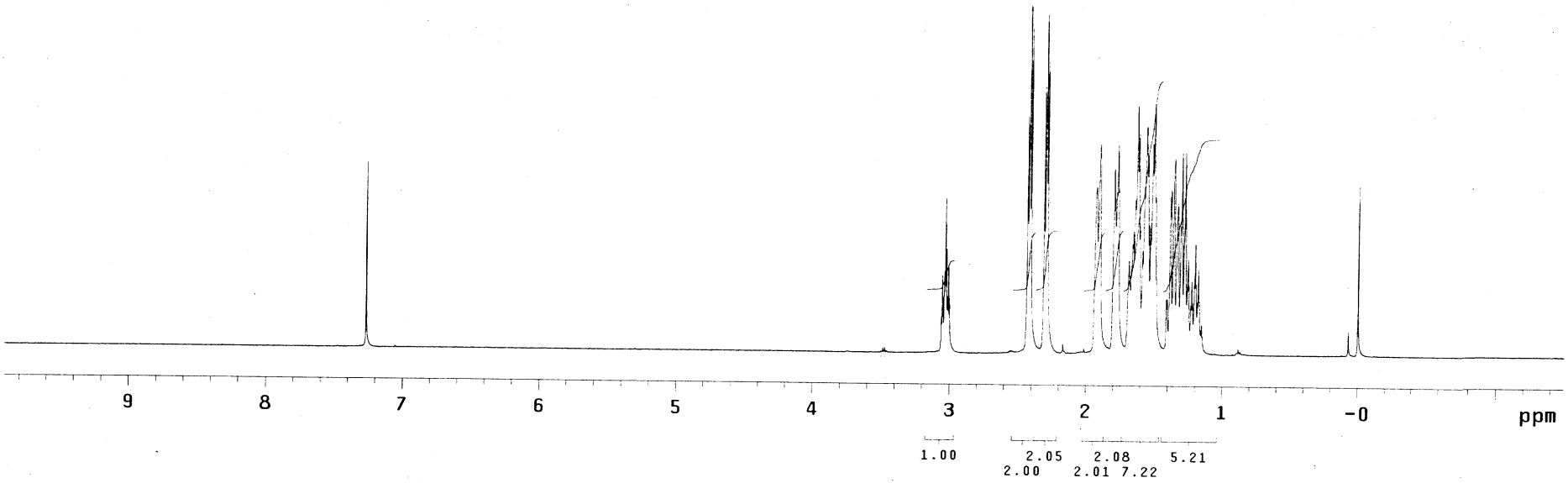


exp1 Proton

SAMPLE		SPECIAL	
date	Jan 18 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr500/walkup/data/~	hst	0.008
	Zhang/Guozhu/H1-20~	pw90	14.700
	070118-60.fid	alfa	6.600
ACQUISITION		**FLAGS**	
sw	8012.8	il	n
at	2.049	in	n
np	32830	dp	y
fb	4000	hs	nn
bs	8	**PROCESSING**	
d1	1.000	lb	0.20
nt	1	fn	65536
ct	1	**DISPLAY**	
TRANSMITTER		sp	-751.4
tn	H1	wp	5703.2
sfrq	499.809	rfl	1004.0
tof	499.7	rfp	0
tpwr	54	rp	-170.4
pw	7.350	lp	-24.5
DECOUPLER		**PLOT**	
dn	C13	wc	250
dof	0	sc	0
dm	nnn	vs	185
dmm	c	th	2
dpwr	34	ai	cdc ph
dmf	32258		

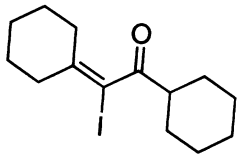


6f

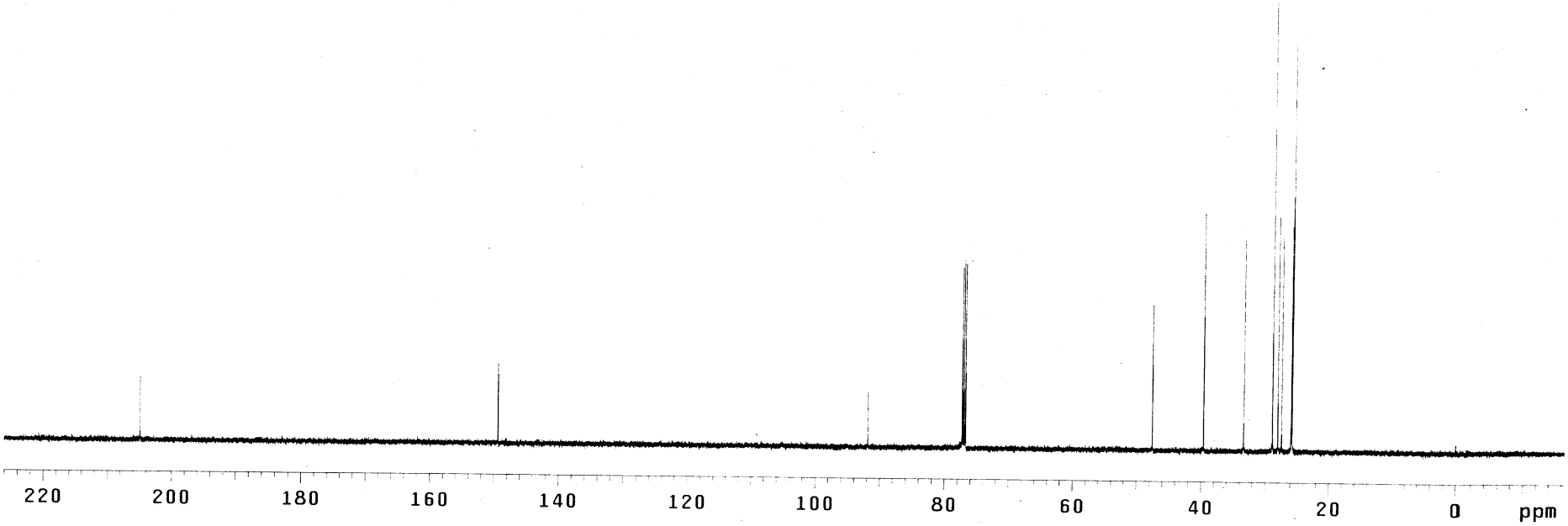


exp1 Carbon

SAMPLE		SPECIAL	
date	Jan 18 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr500/walkup/data/~	hst	0.008
	Zhang/Guozhu/C13-2~	pw90	15.300
	0070118-61.fid	alfa	10.000
ACQUISITION		**FLAGS**	
sw	30487.8	il	n
at	1.300	in	n
np	79298	dp	y
fb	17000	hs	nn
bs	64	**PROCESSING**	
d1	1.000	lb	0.50
nt	1280	fn	not used
ct	320	**DISPLAY**	
TRANSMITTER		sp	-2077.8
tn	C13	wp	30487.3
sfrq	125.689	rfl	11755.3
tof	1255.3	rfp	9677.1
tpwr	49	rp	-102.1
pw	7.650	lp	-252.3
DECOUPLER		**PLOT**	
dn	H1	wc	250
dof	0	sc	0
dm	yyy	vs	12965
dmm	w	th	6
dpwr	39	ai cdc ph	
dmf	12200		

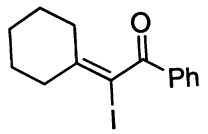


6f

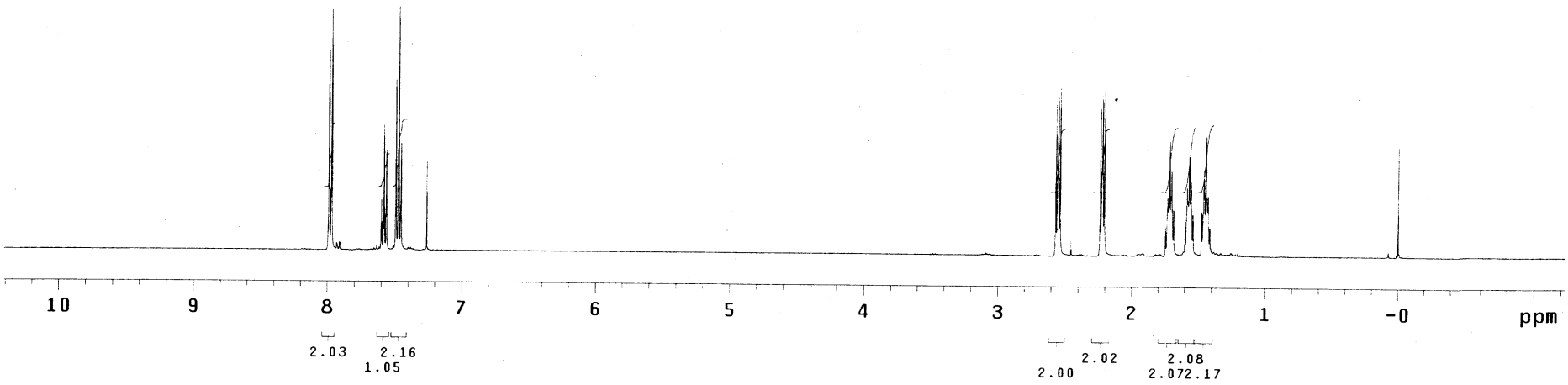


exp1 Proton

SAMPLE		SPECIAL	
date	Jan 18 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr400/walkup/data/~	hst	0.008
	Zhang/Guozhu/H1-20~	pw90	13.900
	070117-56.fid	alfa	6.600
ACQUISITION		**FLAGS**	
sw	6410.3	il	n
at	2.049	in	n
np	26264	dp	y
fb	4000	hs	nn
bs	8	**PROCESSING**	
d1	1.000	lb	0.20
nt	1	fn	65536
ct	1	**DISPLAY**	
TRANSMITTER		sp	-492.2
tn	H1	wp	4653.5
sfrq	399.782	rfl	805.2
tof	399.5	rfp	0
tpwr	59	rp	139.3
pw	6.950	lp	-23.1
DECOUPLER		**PLOT**	
dn	C13	wc	250
dof	0	sc	0
dm	nnn	vs	2720
dmm	c	th	3
dpwr	34	ai	cdc ph
dmf	29412		

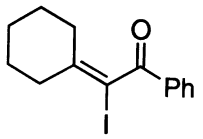


6g



exp1 Carbon

SAMPLE		SPECIAL	
date	Jan 18 2007	temp	25.0
solvent	cdcl3	gain	30
file	/home/vnmr1/n~	spin	not used
	mr500/walkup/data/~	hst	0.008
	Zhang/Guozhu/C13-2~	pw90	15.300
	0070118-58.fid	alfa	10.000
ACQUISITION		**FLAGS**	
sw	30487.8	il	n
at	1.300	in	n
np	79298	dp	y
fb	17000	hs	nn
bs	64	**PROCESSING**	
d1	1.000	lb	0.50
nt	1280	fn	not used
ct	768	**DISPLAY**	
TRANSMITTER		sp	-2081.0
tn	C13	wp	30487.3
sfrq	125.689	rfl	11758.6
tof	1255.3	rfp	9677.1
tpwr	49	rp	-101.7
pw	7.650	lp	-263.1
DECOUPLER		**PLOT**	
dn	H1	wc	250
dof	0	sc	0
dm	yyy	vs	9090
dmm	w	th	2
dpwr	39	ai	cdc ph
dmf	12200		



6g