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Electronic Supplementary Material

A Convenient Nickel-Catalyzed Hydrosilylation of Carbonyl Derivatives

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I. General information.

All reagents were obtained from commercial sources and used as received, except liquid aldehydes which were distilled prior to use. All reactions were carried out with flame-dried glassware using standard Schlenk techniques under an inert atmosphere of dry argon. Toluene and THF were dried over Braun MB-SPS-800 solvent purification system. Technical grade petroleum ether (40-60 °C bp.), ethyl acetate, dichloromethane and methanol were used for chromatography column. Analytical TLC was performed on Merck 60F254 silica gel plates (0.25 mm thickness). Column chromatography was performed on Acros Organics Ultrapure silica gel (mesh size 40-60μm, 60A).

^{1}H NMR spectra were recorded in $CDCl_3$ at ambient temperature on Bruker AVANCE 300 and 400 spectrometers at 300.1, and 400.1 MHz respectively, using the solvent as internal standard ($CDCl_3$ 7.26 ppm and CD_3OD 3.31 ppm). ^{13}C NMR spectra were obtained at 75 or 100 MHz and referenced to the internal solvent signals ($CDCl_3$, central peak is 77.16 ppm and CD_3OD central peak is 49.00 ppm). Chemical shift (δ) and coupling constants (*J*) are given in ppm and in Hz respectively. The peak patterns are indicated as follows: (s, singlet; d, doublet; t, triplet; q, quartet; oct, octet; m, multiplet, and br. for broad).

GC analyses were performed with GC-2014 (Shimadzu) 2010 equipped with a 30-m capillary column (Supelco, SPBTM-20, fused silica capillary column, 30 M×0.25 mm×0.25 mm film thickness), which was used with N_2/air as vector gas. The following GC conditions were used: Initial temperature 80 °C, for 2 minutes, then rate 10 °C/min. until 220 °C and 220°C for 15 minutes.

GCMS were measured by GCMS-QP2010S (Shimadzu) with GC-2010 equipped with a 30-m capillary column (Supelco, SLBTM-5ms, fused silica capillary column, 30 M × 0.25 mm × 0.25 mm film thickness), which was used with helium as vector gas. The following GC-MS conditions were used: Initial temperature 100 °C, for 2 minutes, then rate 10 °C/min. until 250 °C and 250°C for 10 minutes.

$Ni(OAc)_2.4H_2O$ 99.998% trace metals basis (lot# MKBJ2847V) was purchased from

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Aldrich. Dried $Ni(OAc)_2$ was obtained by heating $Ni(OAc)_2.4H_2O$ overnight at 90 °C under vacuum.[1] ICP analysis were also performed on the same batch, by the Team "Chimie du Solide et Matériaux" of the "Institut des Sciences Chimiques de Rennes", UMR 6226, Université Rennes 1, Rennes, France. The results are listed below for $Ni(OAc)_2.4H_2O$ 99.998%.

Element	Concentration (ppm)	Teneur du composé
Pd	0	0,00%
Fe	0,027	0,0045%
Cu	0,032	0,0053%
Zn	0,196	0,0326%
Co	0,068	0,0113%

II. General procedures for the nickel-catalyzed hydrosilylation reactions

a) General procedure A for the nickel-catalyzed hydrosilylation of aldehydes.

A 10 mL oven dried Schlenk tube containing a stirring bar, was charged with $Ni(OAc)_2{\cdot}4H_2O$ (24.8 mg, 0.1 mmol). After purging with argon (argon-vacuum three cycles), THF (4 mL) was added followed by PCy_3 (336 µL, 0.2 mmol, 20 % in toluene from Sterm), PMHS (360 µL, 3 mmol) and aldehyde (2 mmol). The reaction mixture was stirred in a preheated oil bath at 70 ºC for 16h. After cooling down to room temperature, 2 mL MeOH was added followed by 3 mL of 2M NaOH solution with vigorous stirring. The reaction mixture was further stirred for 16 hours at room temperature and was extracted with diethyl ether (3×10mL). The combined organic layers were dried over anhydrous $MgSO_4$, filtered and concentrated in *vacuo*. The residue was purified by silica gel column chromatography using ethyl acetate-petroleum ether mixture (10 to 50%) or methanol-dichloromethane to achieve the desired product.

b) General procedure B for the nickel-catalyzed hydrosilylation of ketones.

A 10 mL oven dried Schlenk tube containing a stirring bar, was charged with $Ni(OAc)_2{\cdot}4H_2O$ (24.8 mg, 0.1 mmol). After purging with argon (argon-vacuum three cycles), toluene (4 mL) was added followed by PCy_3 (336 µL, 0.2 mmol, 20 % in

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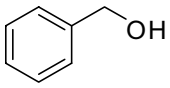
toluene from Sterm), PMHS (480 µL, 8 mmol) and ketone (2 mmol). The reaction mixture was stirred in a preheated oil bath at 100 ºC for 16 h. After cooling down to room temperature, 2 mL of MeOH was added followed by 4 mL of 2M NaOH solution with vigorous stirring. The reaction mixture was further stirred for 16 hours at room temperature and was extracted with diethyl ether (3×10mL). The combined organic layers were dried over anhydrous $MgSO_4$, filtered and concentrated in *vacuo*. The residue was purified by silica gel column chromatography using ethyl acetate-petroleum ether mixture (10 to 50%) to achieve the desired product.

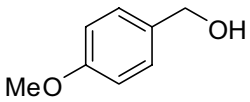
III. Characterization of the hydrosilylation products

Benzyl alcohol [2] (Table 2, entry 1)



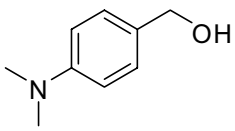
The compound was prepared as described in the general procedure **A** (m = 183 mg, 85 % isolated yield). ^{1}H NMR (300 MHz, $CDCl_3$): δ 7.38-7.26 (m, 5H), 4.69 (s, 2H), 1.77 (br. s, 1H). ^{13}C {^{1}H } NMR (75 MHz, $CDCl_3$): δ 140.9, 128.7, 127.8, 127.1, 65.5.

4-Methoxylbenzyl alcohol [2] (Table 2, entry 2)



The compound was prepared as described in the general procedure **A** (m = 263 mg, 95 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 7.29 (d, *J* = 8.4, 2H), 6.90 (d, *J* = 8.4, 2H), 4.61 (s, 2H), 3.81 (s, 3H), 1.60 (br. s, 1H). ^{13}C {^{1}H } NMR (100 MHz, $CDCl_3$): δ 159.4, 133.3, 128.8, 114.1, 65.2, 55.4.

4-(*N,N*-Dimethylamino)phenylmethanol [2] (Table 2, entry 3)



The compound was prepared as described in the general procedure **A** (m = 273 mg, 90 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 7.24 (d, *J* = 8.7, 2H), 6.73 (d, *J* = 8.7, 2H), 4.56 (s, 2H), 2.95 (s, 6H), 1.79 (br. s, 1H). ^{13}C {^{1}H } NMR (100 MHz, $CDCl_3$):

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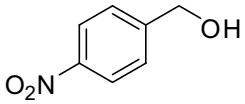
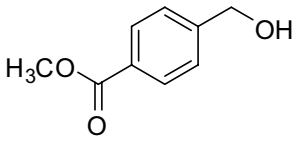
δ 150.5, 129.1, 128.7, 112.7, 65.4, 40.8.

4-Nitrobenzyl alcohol [3] (Table 2, entry 4)



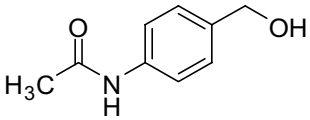
The compound was prepared as described in the general procedure **A** (m = 214 mg, 70 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 8.21 (d, *J* = 8.7, 2H), 7.53 (d, *J* = 8.7, 2H), 4.84 (d, *J* = 4.4, 2H), 1.98 (t, *J* = 4.4, 1H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 148.3, 147.5, 127.1, 123.9, 64.2.

Methyl 4-(hydroxymethyl)benzoate [3] (Table 2, entry 7)



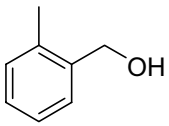
The compound was prepared as described in the general procedure **A** on 1 mmol scale (m = 136 mg, 83 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 7.99 (d, *J* = 8.2, 2H), 7.40 (d, *J* = 8.2, 2H), 4.73 (s, 2H), 3.89 (s, 3H), 2.32 (br. s, 1H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 167.1, 146.2, 129.9, 129.3, 126.5, 64.7, 52.2.

N-(4-(Hydroxymethyl)phenyl)acetamide [4] (Table 2, entry 8)



The compound was prepared as described in the general procedure **A** (m = 290 mg, 88 % isolated yield). ^{1}H NMR (400 MHz, CD_3OD): δ 7.51 (d, *J* = 8.5, 2H), 7.29 (d, *J* = 8.5, 2H), 4.55 (s, 2H), 2.11 (s, 3H). ^{13}C {^{1}H} NMR (100 MHz, CD_3OD): δ 171.6, 139.0, 138.5, 128.6, 121.1, 64.8, 23.7.

2-Tolylmethanol [2] (Table 2, entry 9)



The compound was prepared as described in the general procedure **A** (m = 210 mg, 87 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 7.37-7.33 (m, 1H), 7.24-7.17 (m,

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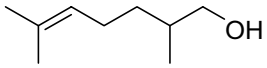
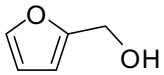
3H), 4.70 (s, 2H), 2.36 (s, 3H), 1.68 (br. s, 1H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 138.8, 136.2, 130.5, 127.9, 127.7, 126.2, 63.7, 18.8.

2,6-Dimethylhept-5-en-1-ol (Table 2, entry 11)



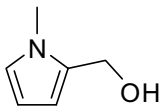
The compound was prepared as described in the general procedure **A** (m = 210 mg, 74 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 5.10 (t, *J* = 7.2, 1H), 3.52-3.39 (m, 2H), 2.09-1.92 (m, 2H), 1.68 (s, 3H), 1.60 (s, 3H) , 1.47-1.10 (m, 3H), 0.93 (d, *J* = 6.7, 3H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 131.6, 124.7, 68.4, 35.5, 33.4, 25.8, 25.5, 17.8, 16.7.

Furan-2-ylmethanol [5] (Table 2, entry 12)



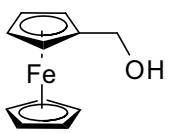
The compound was prepared as described in the general procedure **A** (m = 137 mg, 70 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 7.39 (d, *J* = 1.0, 1H), 6.33 (dd, *J* = 3.0, *J* = 1.0, 1H), 6.28 (d, *J* = 3.0, 1H), 4.59 (s, 2H), 2.05 (br. s, 1H). ^{13}C {^{1}H } NMR (100 MHz, $CDCl_3$): δ 154.1, 142.7, 110.5, 107.9, 57.5.

(1- Methylpyrrol-2-yl)methanol (Table 2, entry 13)



The compound was prepared as described in the general procedure **A** (m = 109 mg, 49 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 6.64 (br. s, 1H), 6.11 (br. s, 1H), 6.06 (br. s, 1H), 4.59 (s, 2H), 3.69 (s, 3H), 1.46 (br. s, 1H). ^{13}C {^{1}H } NMR (100 MHz, $CDCl_3$): δ131.9, 123.7, 109.0, 106.9, 56.9, 33.8.

Ferrocenemethanol [2] (Table 2, entry 14)



The compound was prepared as described in the general procedure **A** (m = 397 mg, 92 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 4.33 (m, 2H), 4.24 (m, 2H), 4.18

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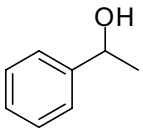
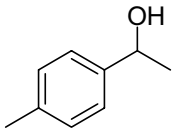
(m, 7H), 1.51 (br. s, 1H). ^{13}C {1H} NMR (100 MHz, $CDCl_3$): δ 88.6, 68.5, 68.4, 68.0, 60.9.

1-Phenylethanol [2] (Table 3, entry 1)



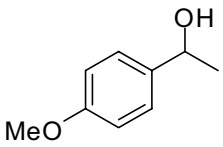
The compound was prepared as described in the general procedure **B** (m = 210 mg, 86 % isolated yield). ^{1}H NMR (300 MHz, $CDCl_3$): δ 7.39-7.26 (m, 5H), 4.90 (q, *J* = 6.4, 1H), 1.87 (br. s, 1H), 1.50 (d, *J* = 6.4, 3H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 145.9, 128.6, 127.6, 125.5, 70.6, 25.3.

1-(4´-Methylphenyl)ethanol [2] (Table 3, entry 2)



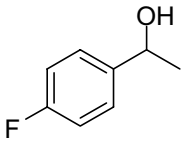
The compound was prepared as described in the general procedure **B** (m = 192 mg, 70 % isolated yield). ^{1}H NMR (300 MHz, $CDCl_3$): δ 7.27 (d, *J* = 8.0, 2H), 7.17 (d, *J* = 8.0, 2H), 4.86 (q, *J* = 6.4, 1H), 2.36 (s, 3H), 1.92 (br. s, 1H), 1.49 (d, *J* = 6.4, 3H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 143.0, 137.2, 129.3, 125.5, 70.3, 25.2, 21.2.

1-(4´-Methoxyphenyl)ethanol [2] (Table 3, entry 3)



The compound was prepared as described in the general procedure **B** (m = 213 mg, 68 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 7.29 (d, *J* = 8.6, 2H), 6.88 (d, *J* = 8.6, 2H), 4.85 (q, *J* = 6.4, 1H), 3.80 (s, 3H), 1.85 (br. s, 1H), 1.48 (d, *J* = 6.4, 3H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 159.1, 138.1, 126.8, 114.0, 70.1, 55.4, 25.1.

1-(4´-Fluorophenyl)ethanol [2] (Table 3, entry 6)



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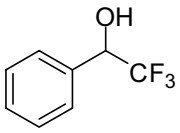
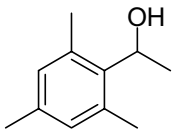
The compound was prepared as described in the general procedure **B** (m = 181 mg, 65 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 7.34-7.31 (m, 2H), 7.04-7.00 (m, 2H), 4.87 (q, *J* = 6.4, 1H), 2.00 (br. s, 1H), 1.46 (d, *J* = 6.4, 3H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 162.2 (d, J_{C-F} = 245), 141.6 (d, J_{C-F} = 3), 127.2 (d, J_{C-F} = 8), 115.4 (d, J_{C-F} = 21), 69.9, 25.4. ^{19}F NMR (376 MHz. $CDCl_3$): δ -115.38.

2,2,2-Trifluoro-1-phenylethanol [2] (Table 3, entry 8)



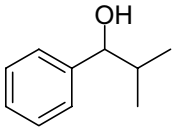
The compound was prepared as described in the general procedure **B** (m = 255 mg, 92 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 7.47-7.41 (m, 5H), 5.01 (q, J_{F-H} = 6.2, 1H), 2.83 (br. s, 1H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 134.1, 129.7, 128.8, 127.6, 124.4 (q, J_{C-F} = 282.1), 73.0 (q, J_{C-F} = 32.0). ^{19}F NMR (376 MHz. $CDCl_3$): δ -78.34 (d, J_{F-H} = 6.7)

1-Mesitylethanol [2] (Table 3, entry 9)



The compound was prepared as described in the general procedure **B** (m = 260 mg, 79 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 6.82 (s, 2H), 5.37 (q, *J* = 6.7, 1H), 2.42 (s, 6H), 2.25 (s, 3H), 1.68 (br. s, 1H), 1.53 (d, *J* = 6.7, 3H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 137.8, 136.6, 135.8, 130.3, 67.6, 21.8, 20.8, 20.7.

2-Methyl-1-phenylpropan-1-ol [6] (Table 3, entry 10)



The compound was prepared as described in the general procedure **B** (m = 271 mg, 90 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 7.36-7.26 (m, 5H), 4.37 (d, *J* = 6.9, 2H), 1.96 (oct, *J* = 6.8, 1H), 1.84 (br. s, 1H), 1.00 (d, *J* = 6.7, 3H), 0.80 (d, *J* = 6.8, 3H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 143.8, 128.3, 127.6, 126.7, 80.2, 35.4, 19.1, 18.4.

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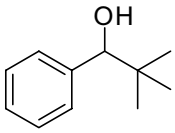
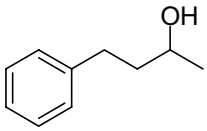
2,2-Dimethyl-1-phenylpropan-1-ol [7] (Table 3, entry 11)



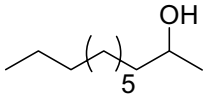
The compound was prepared as described in the general procedure **B** (m = 374 mg, 95 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 7.31-7.27 (m, 5H), 4.40 (d, *J* = 2.1, 1H), 1.84 (d, *J* = 2.4, 1H), 0.93 (s, 9H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 142.3, 127.7, 127.7, 127.4, 82.5, 35.8, 26.1.

4-Phenylbutan-2-ol [8] (Table 3, entry 12)



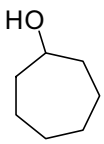
The compound was prepared as described in the general procedure **B** (m = 236 mg, 79 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 7.35-7.30 (m, 2H), 7.26-7.22 (m, 3H), 3.88 (m, 1H), 2.84-2.68 (m, 2H), 1.89-1.64 (m, 2H), 1.64 (br. s, 1H), 1.28 (d, *J* = 6.2, 3H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 142.2, 128.5 (2C), 125.9, 67.6, 41.0, 32.3, 23.7.

2-Undecanol [9] (Table 3, entry 13)



The compound was prepared as described in the general procedure **B** (m = 322 mg, 94 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 3.79 (m, 1H), 1.45-1.18 (m, 20H), 0.88 (m, 3H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 68.4, 39.5, 32.0, 29.8, 29.8, 29.7, 29.5, 25.9, 23.6, 22.8, 14.3.

Cycloheptanol [2] (Table 3, entry 14)



The compound was prepared as described in the general procedure **B** (m = 159 mg, 70 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 3.82 (m, 1H), 1.93-1.86 (m, 2H),

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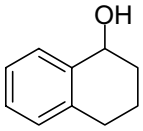
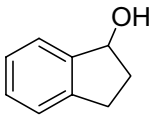
1.66-1.35 (m, 11H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 72.9, 37.7, 28.2, 22.7.

α-tetralol [2] (Table 3, entry 15)



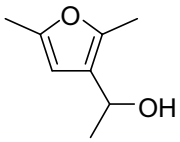
The compound was prepared as described in the general procedure **B** (m = 124 mg, 42 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 7.45-7.42 (m, 1H), 7.24-7.18 (m, 2H), 7.12-7.10 (m, 1H), 4.78 (t, *J* = 4.6, 1H), 2.87-2.80 (m, 1H), 2.77-2.69 (m, 1H), 2.01-1.86 (m, 3H), 1.84-1.73 (m, 2H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 138.9, 137.2, 129.1, 128.8, 127.7, 126.3, 68.3, 32.4, 29.4, 18.9.

1-Indanol [5] (Table 3, entry 16)



The compound was prepared as described in the general procedure **B** (m = 172 mg, 64 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 7.43-7.41 (m, 1H), 7.26-7.24 (m, 3H), 5.25 (t, *J* = 5.9, 1H), 3.10-3.03 (m, 1H), 2.86-2.79 (m, 1H), 2.53-2.45 (m, 1H), 1.99-1.91 (m, 1H), 1.79 (br. s, 1H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 145.1, 143.4, 128.4, 126.8, 125.0, 124.3, 76.6, 36.1, 29.9.

1-(2,5-Dimethylfuran-3-yl)ethanol [10] (Table 3, entry 17)



The compound was prepared as described in the general procedure **B** (m = 173 mg, 62 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 5.94 (s, 1H), 4.75 (q, *J* = 6.4, 1H), 2.22 (s, 3H), 2.21 (s, 3H), 1.73 (br. s, 1H), 1.40 (d, *J* = 6.4, 3H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 145.0, 145.7, 124.2, 104.2, 62.8, 23.9, 13.5, 11.8.

Ferrocenylethan-1-ol [11] (Table 3, entry 20)

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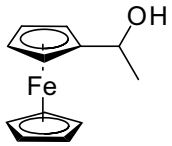

The compound was prepared as described in the general procedure **B** (m = 252 mg, 55 % isolated yield). ^{1}H NMR (400 MHz, $CDCl_3$): δ 4.55 (q, *J* = 6.2, 1H), 4.20-4.17 (m, 9H), 1.85 (br. s, 1H), 1.44 (d, *J* = 6.2, 1H). ^{13}C {^{1}H} NMR (100 MHz, $CDCl_3$): δ 95.0, 68.4, 68.0, 68.0, 66.3, 66.2, 65.7, 23.8.

IV. References.

[1] Q. Songsheng, F. Ying, Y. Ruili, L. Liangchao, *Thermochimica Acta*, **1997**, *303*, 47.
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V. ^{1}H NMR and ^{13}C NMR spectra of the hydrosilylation products.

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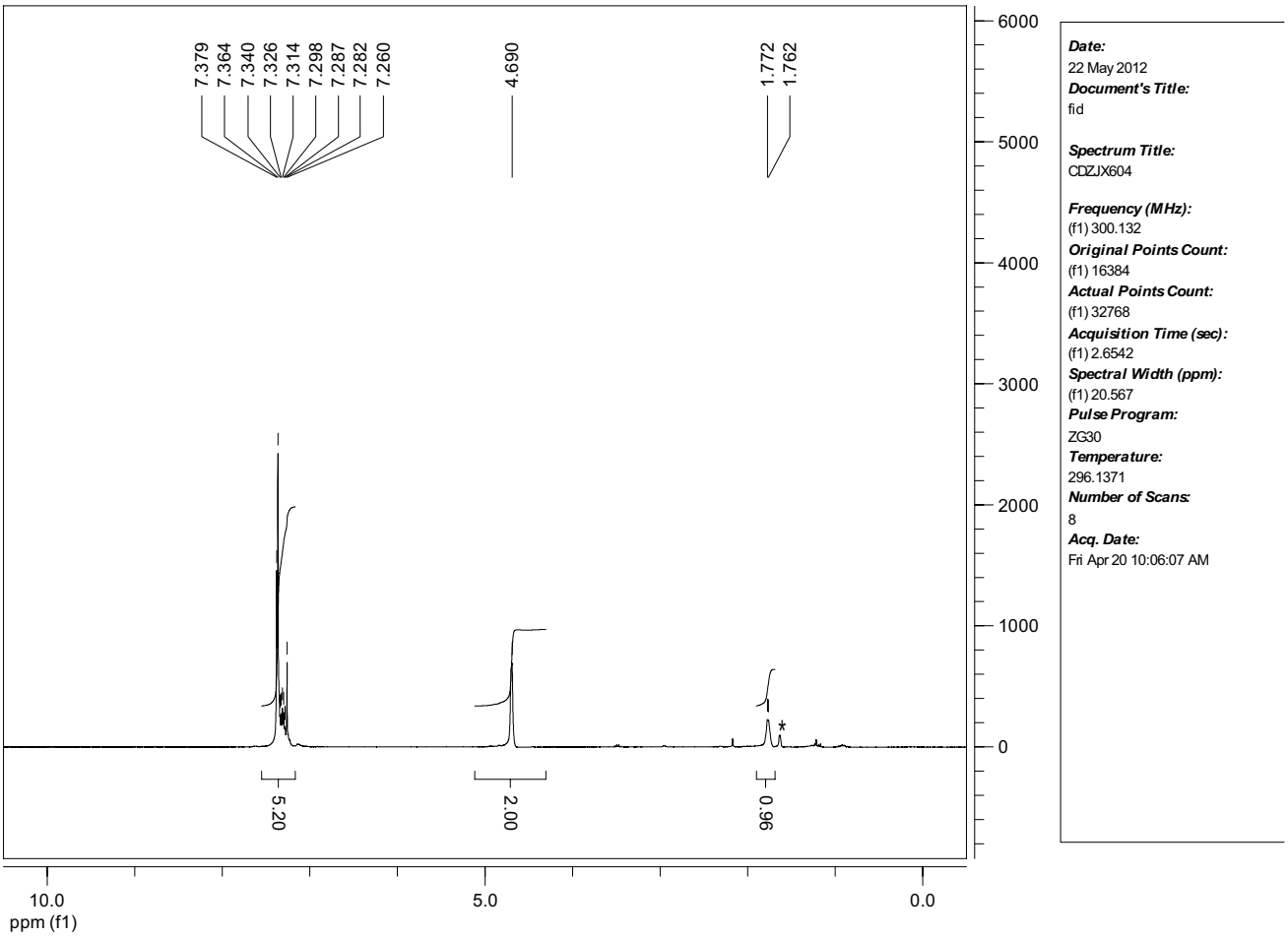
Benzyl alcohol



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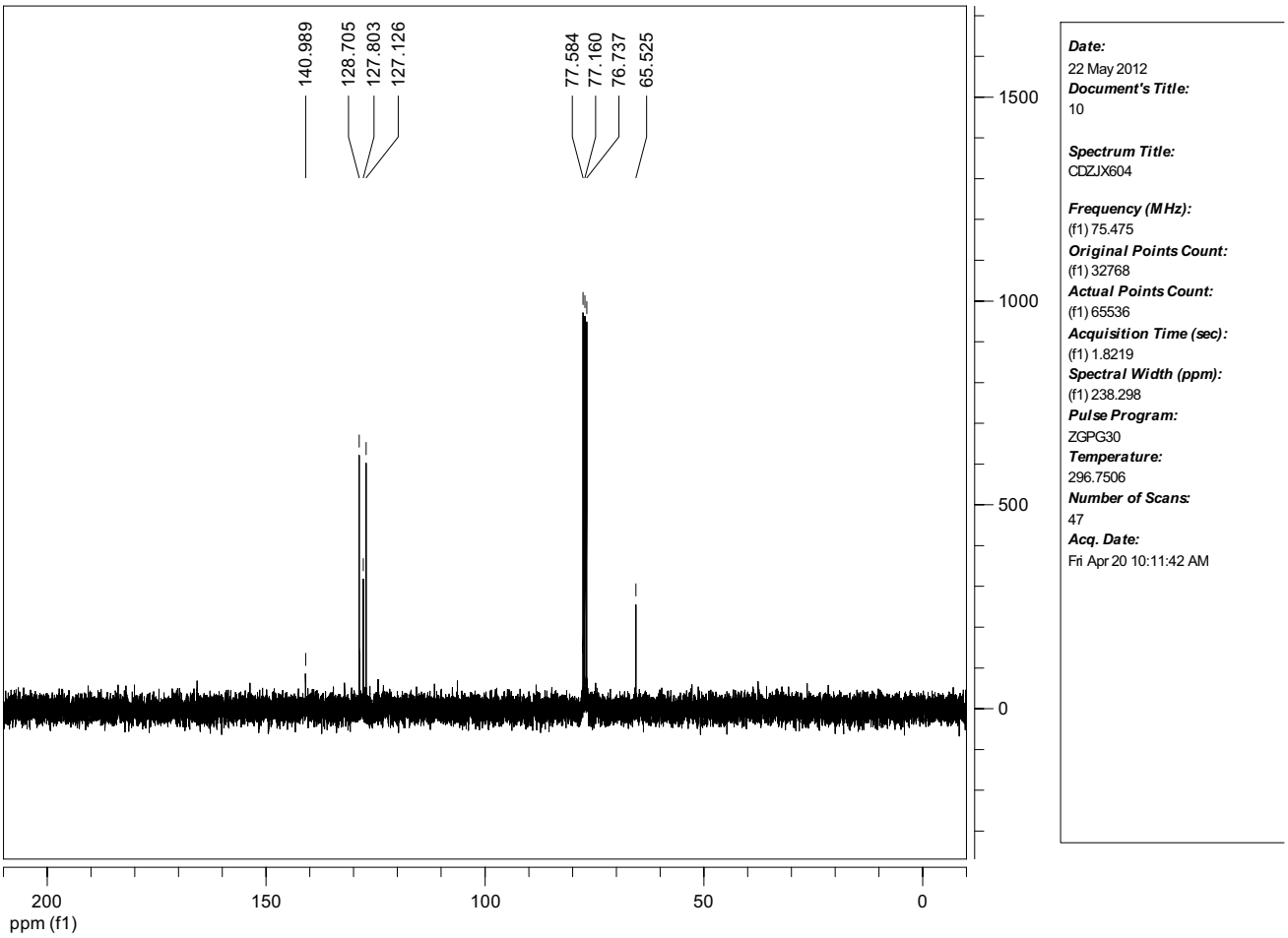

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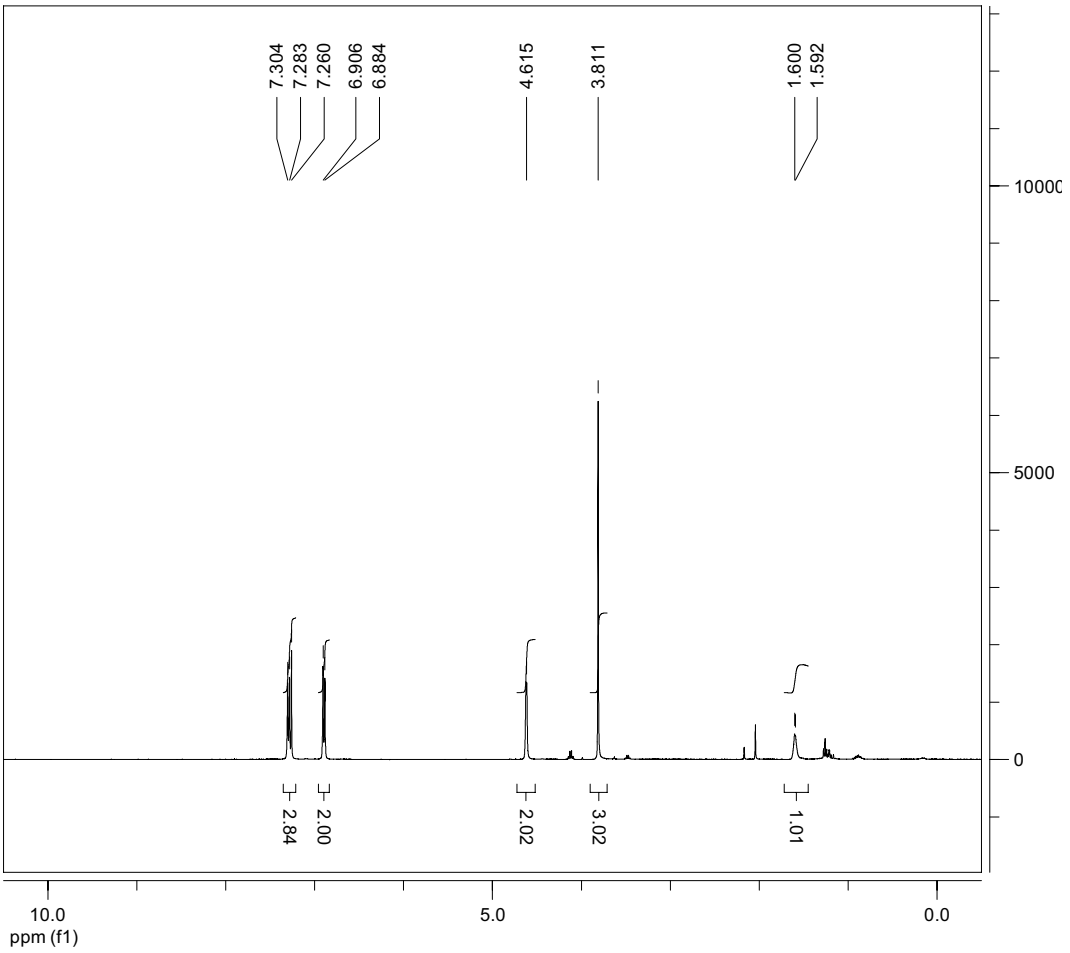
4-Methoxylbenzyl alcohol



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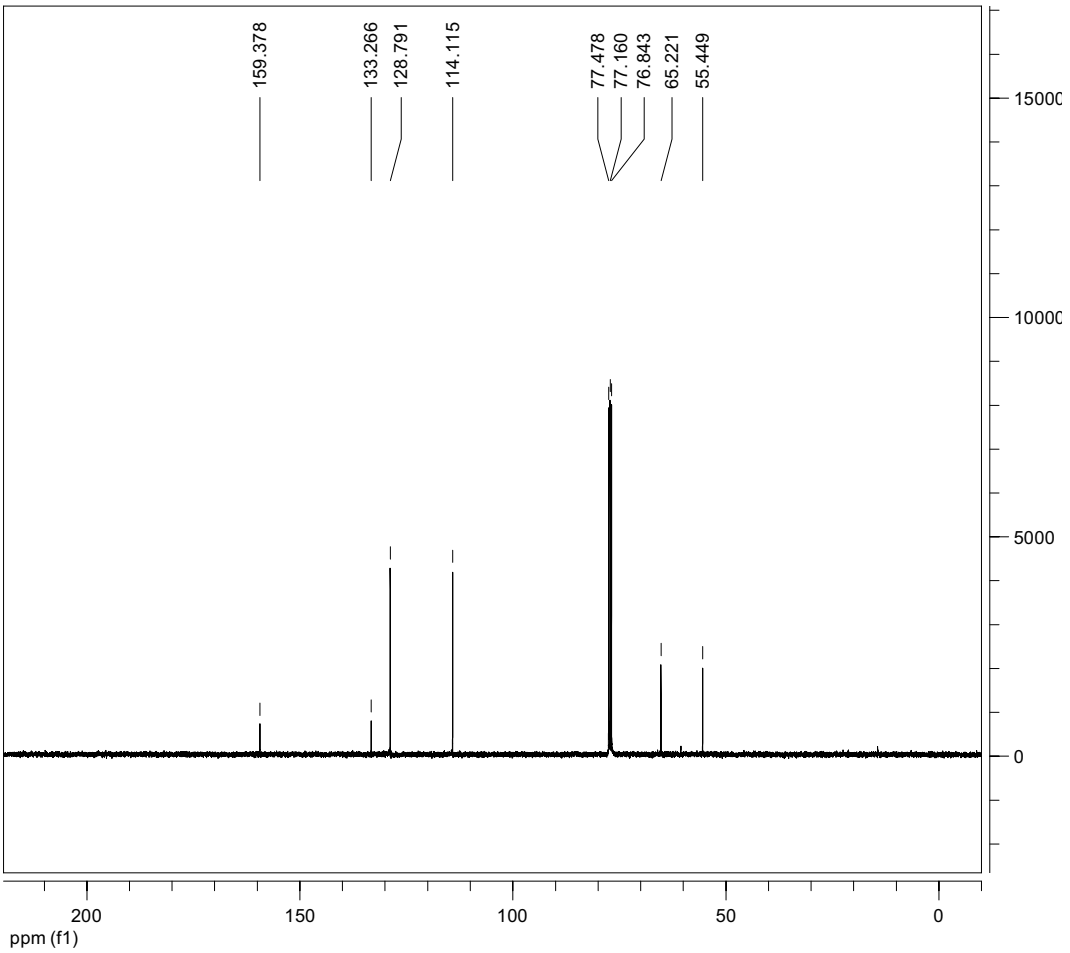

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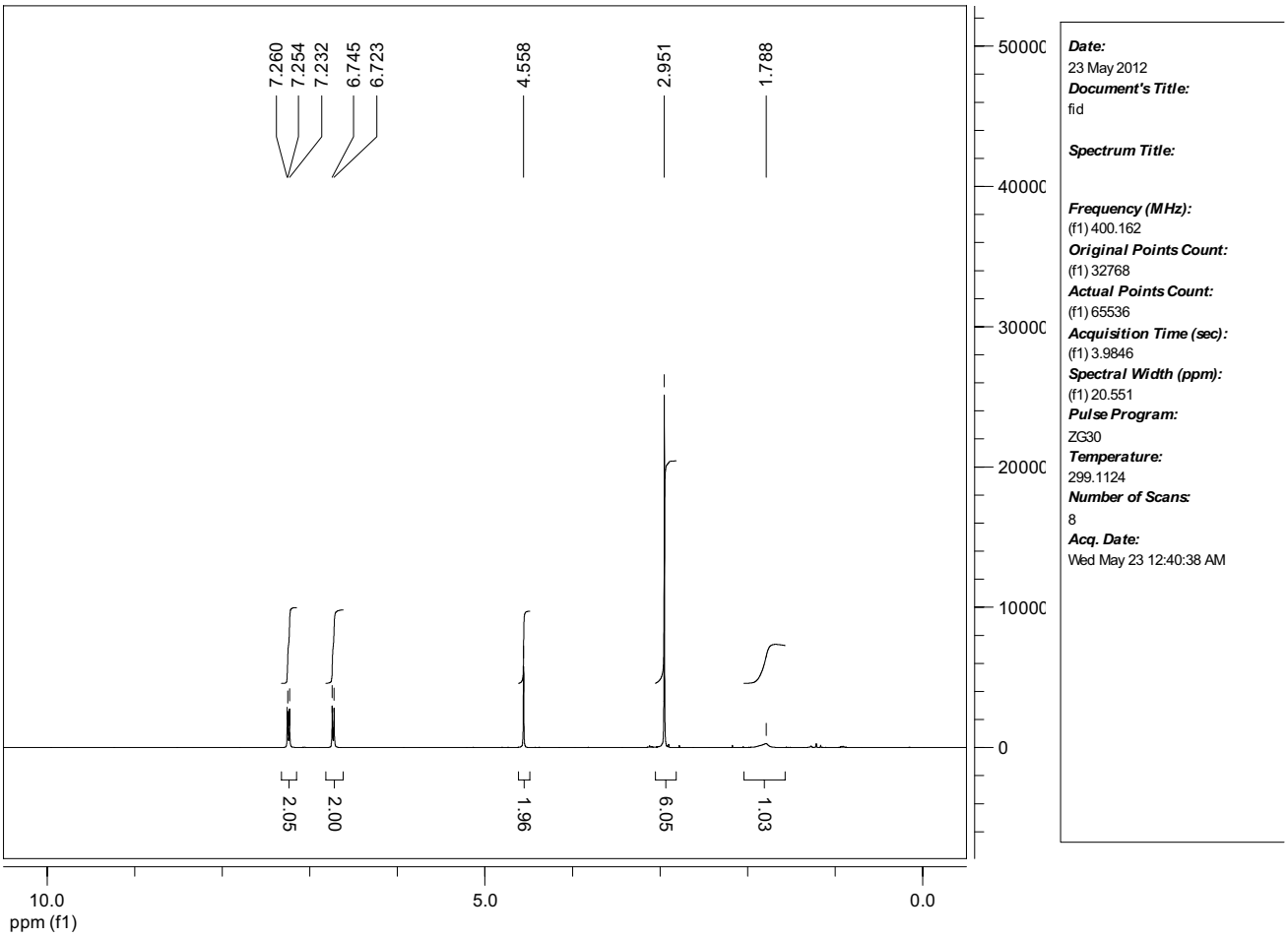
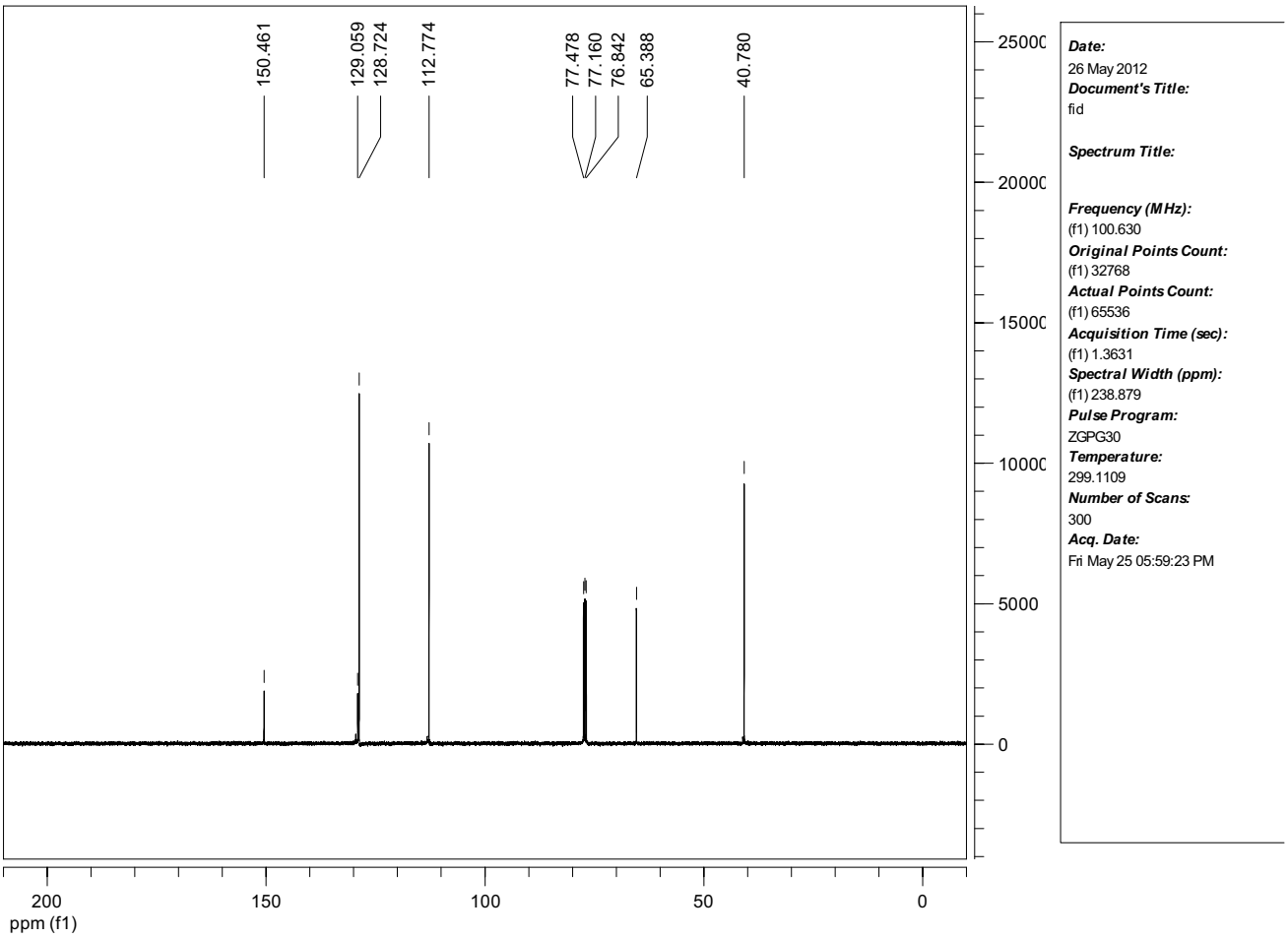
4-(*N*,*N*-Dimethylamino)phenylmethanol





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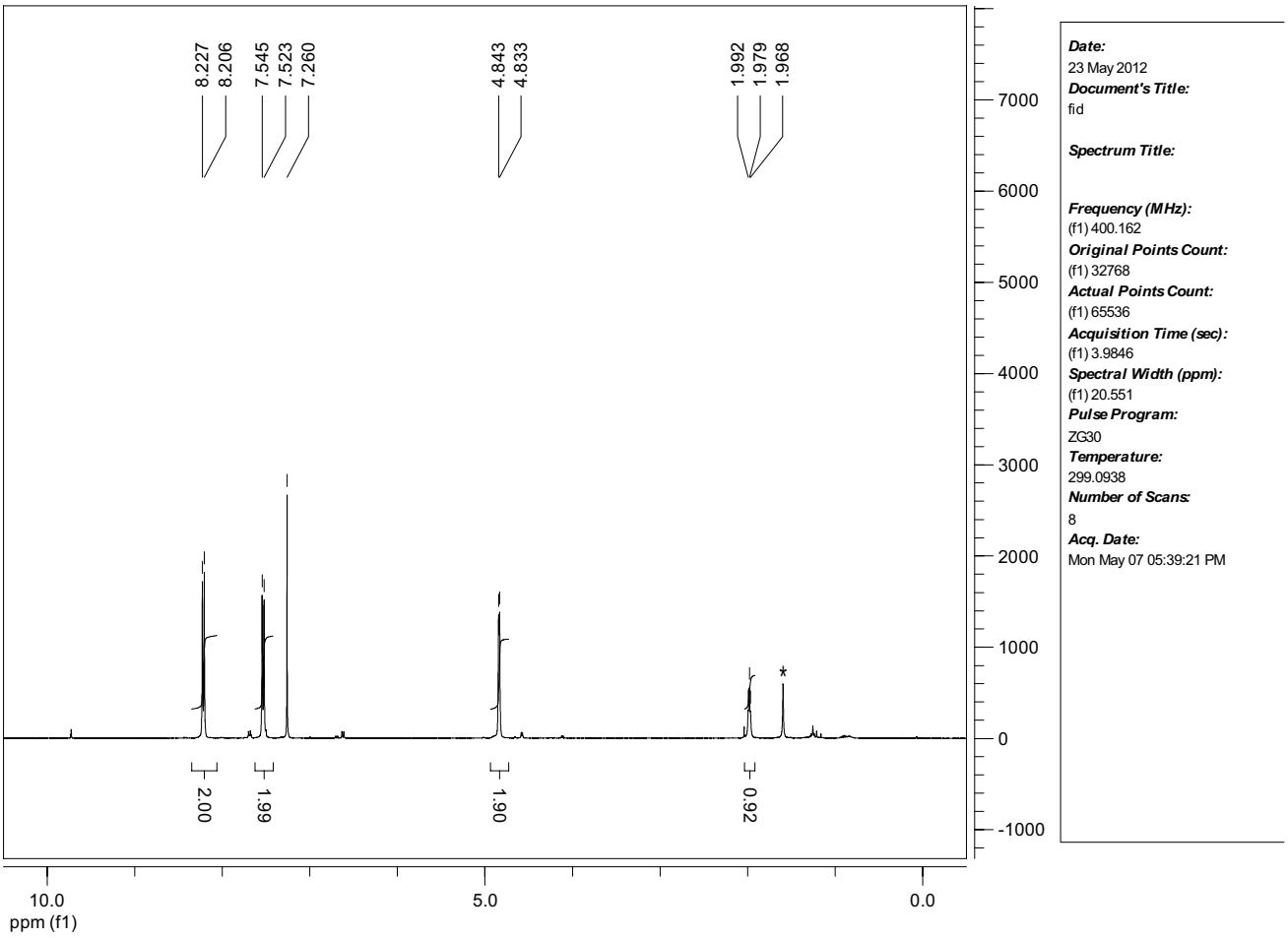
4-Nitrobenzyl alcohol



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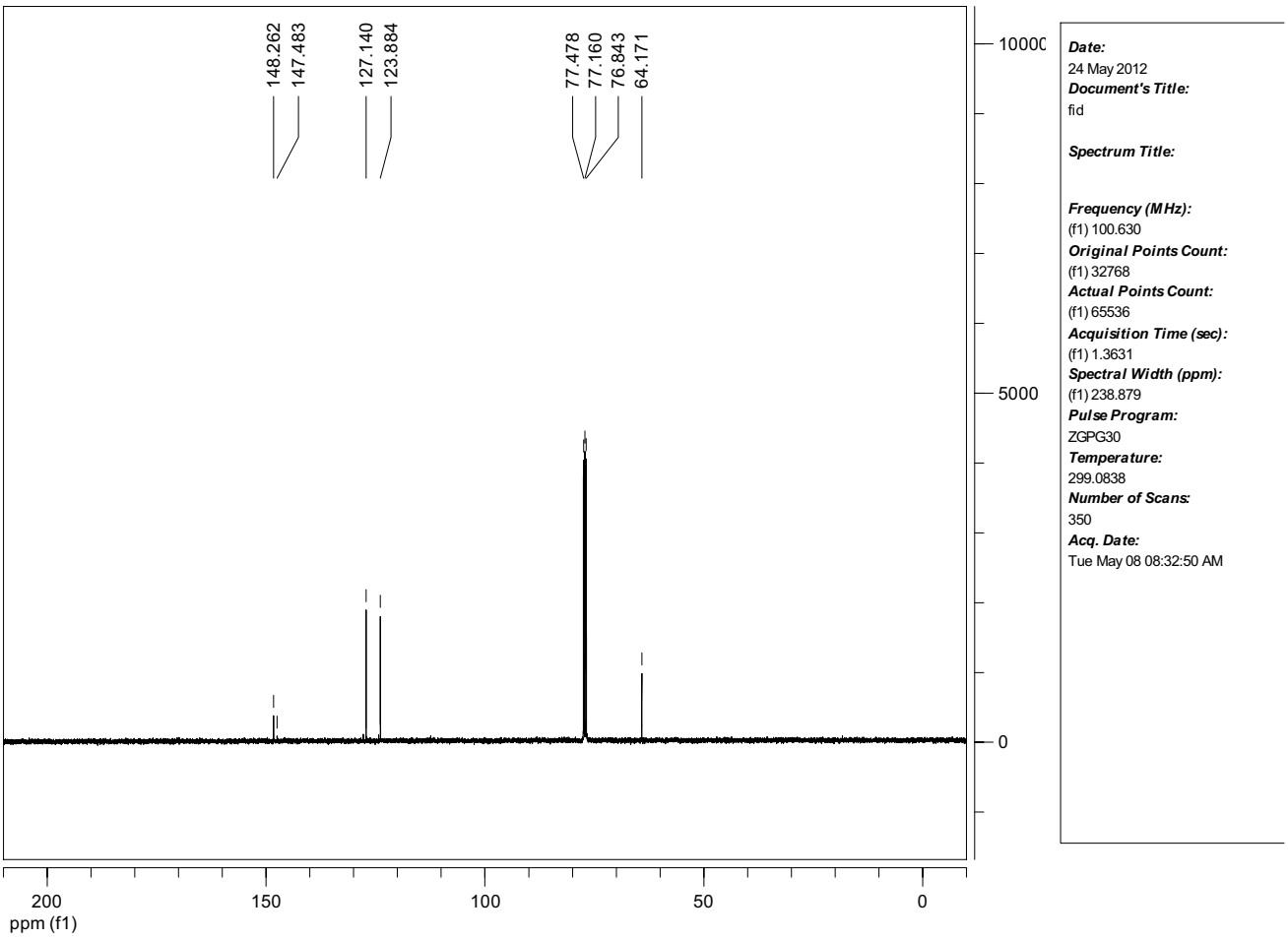

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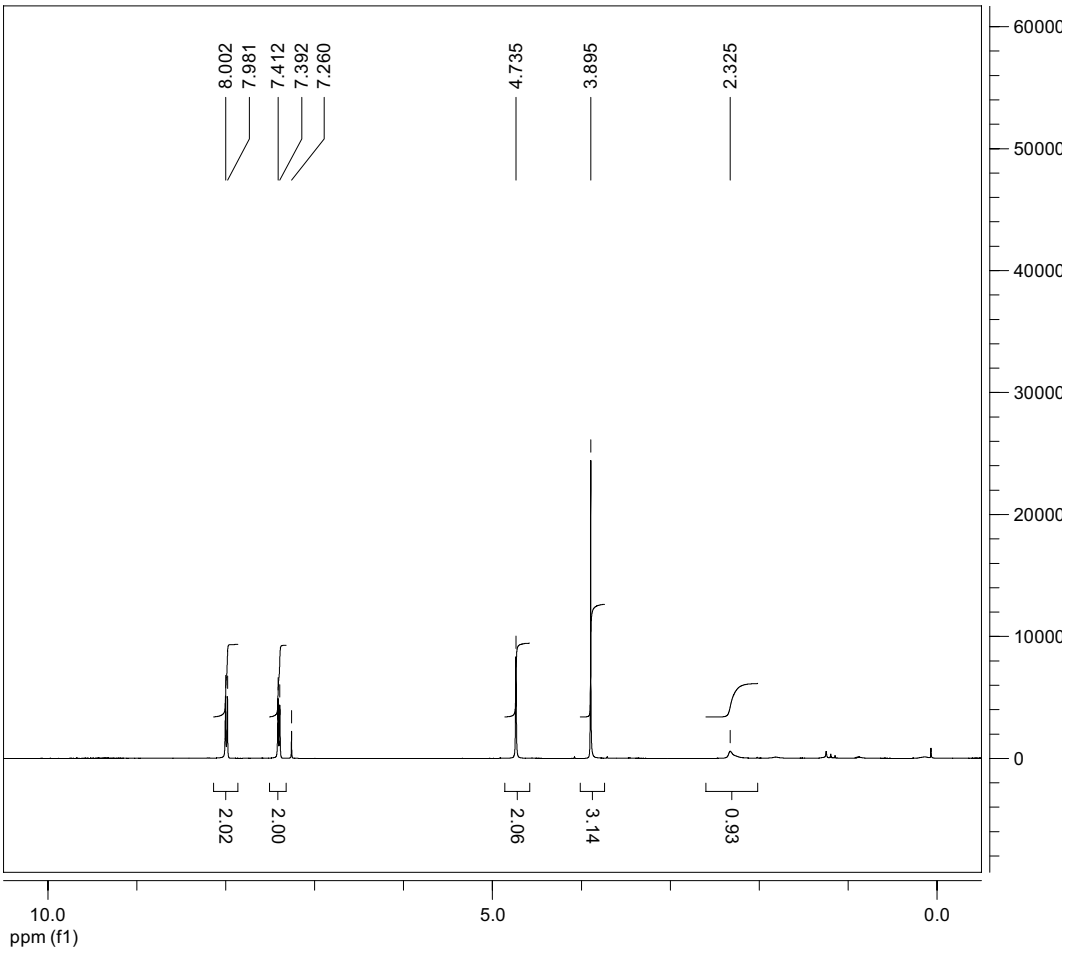

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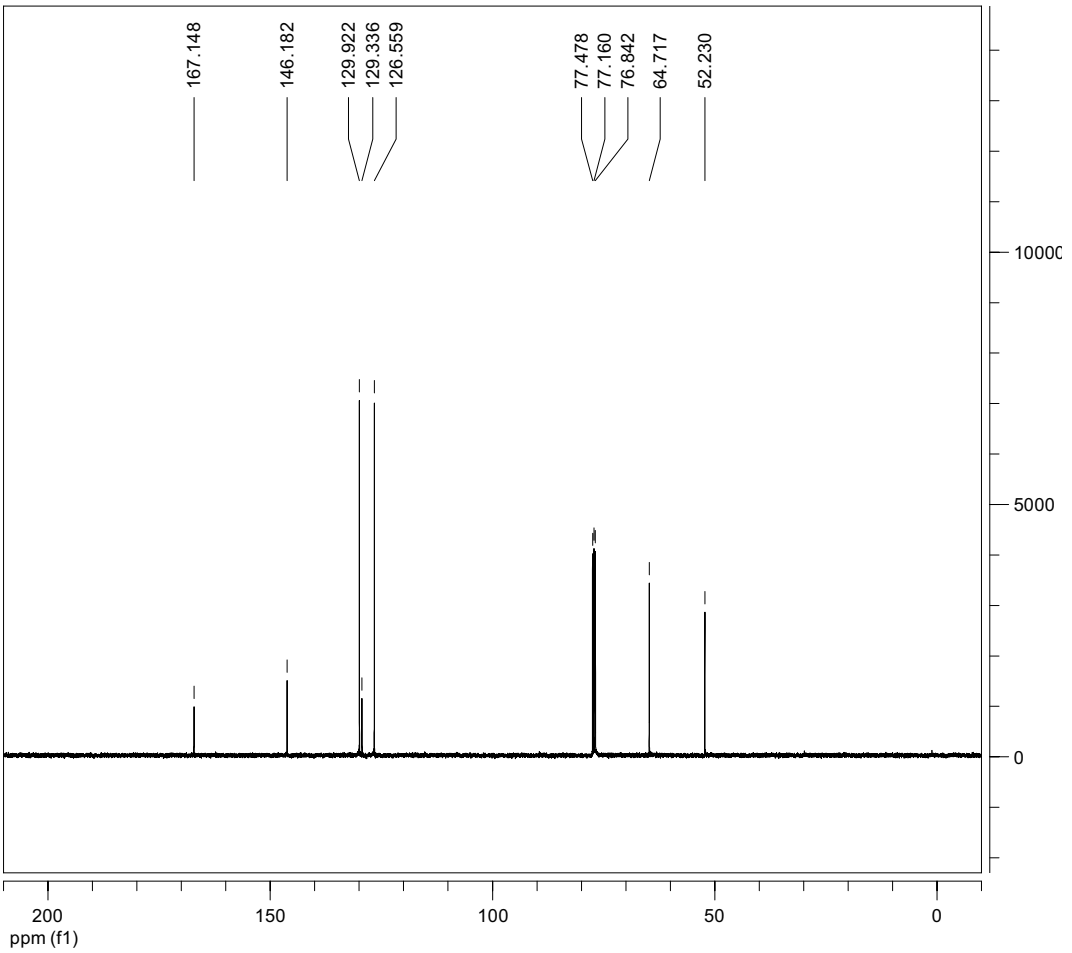

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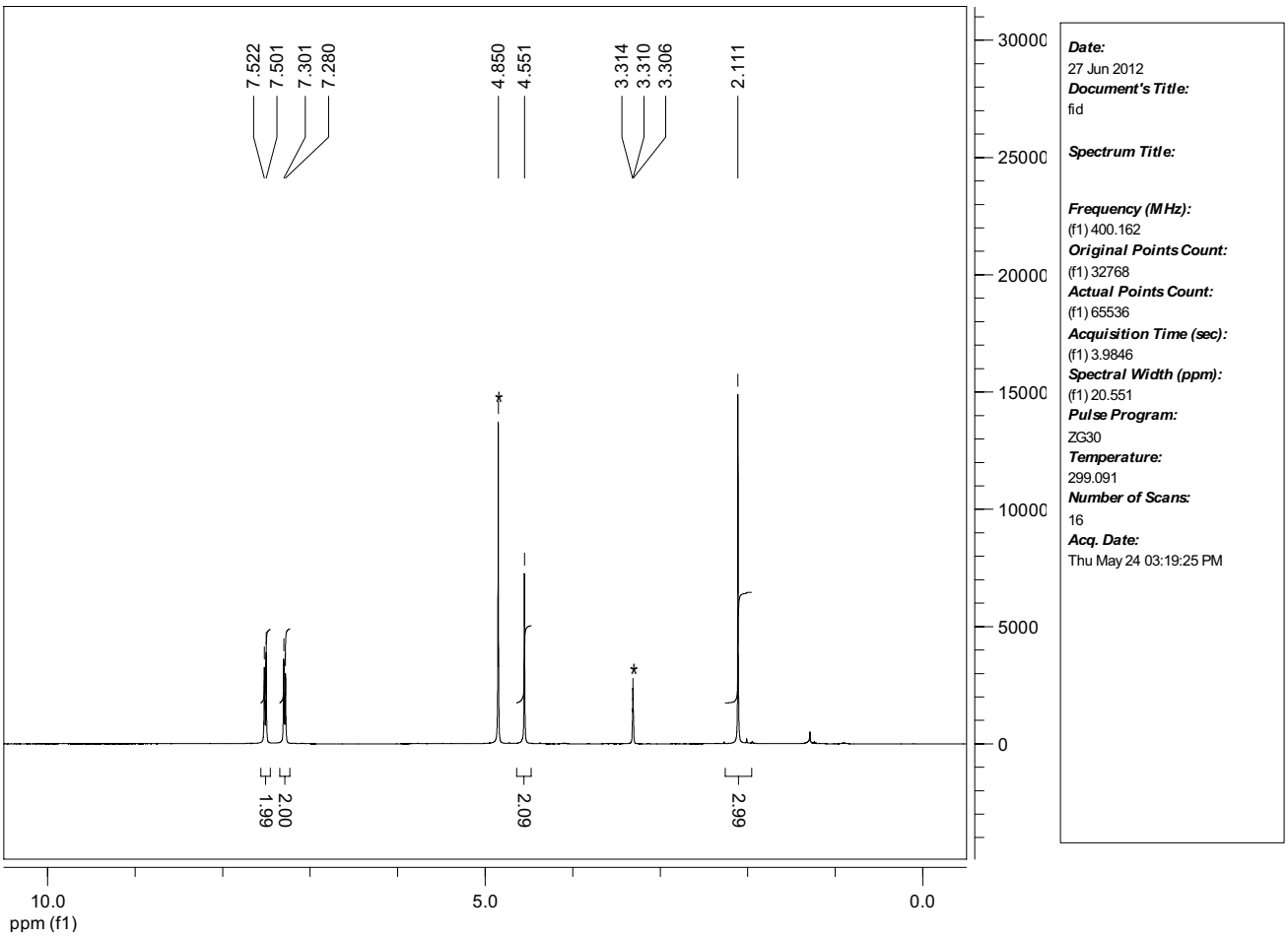

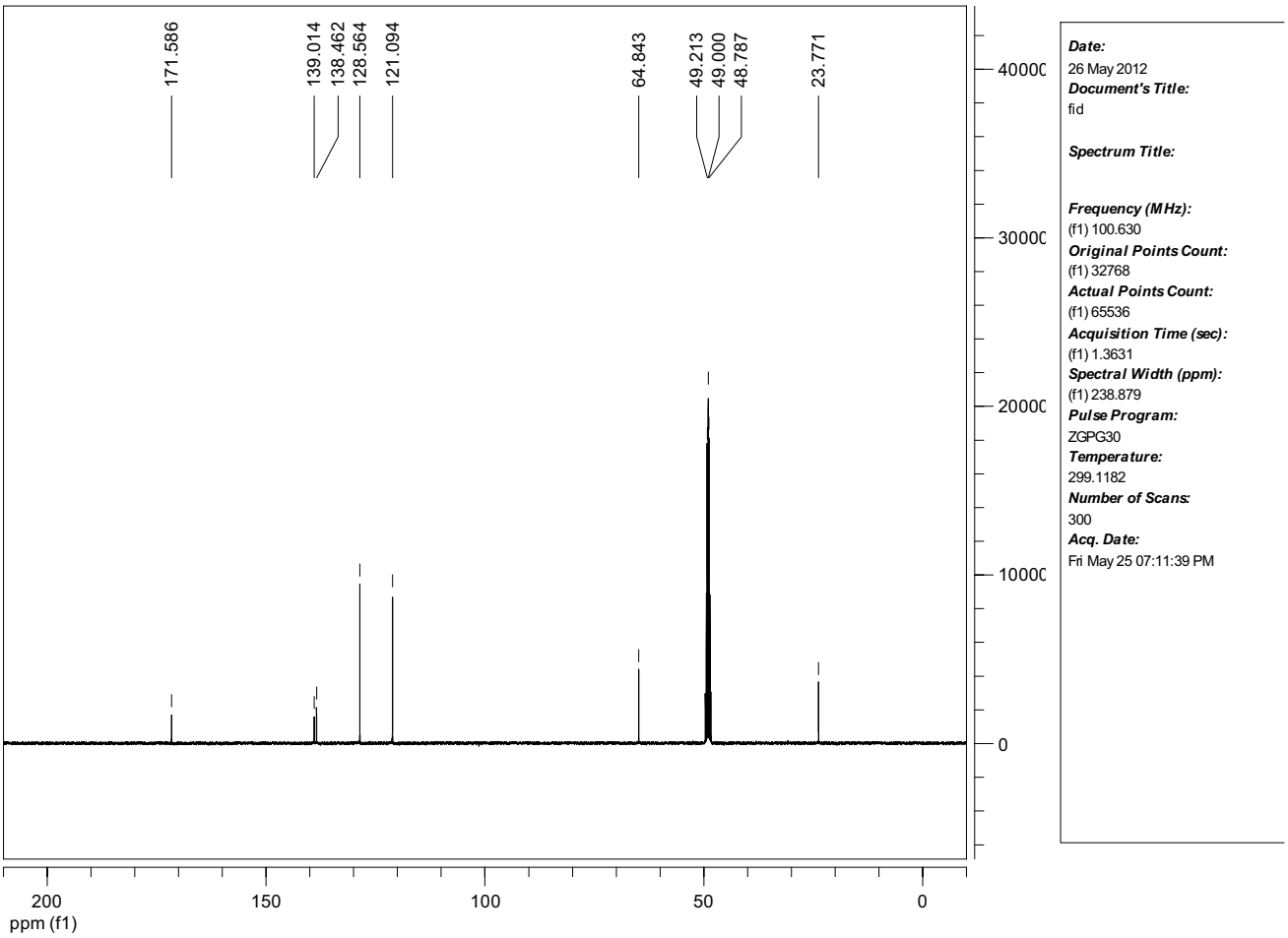

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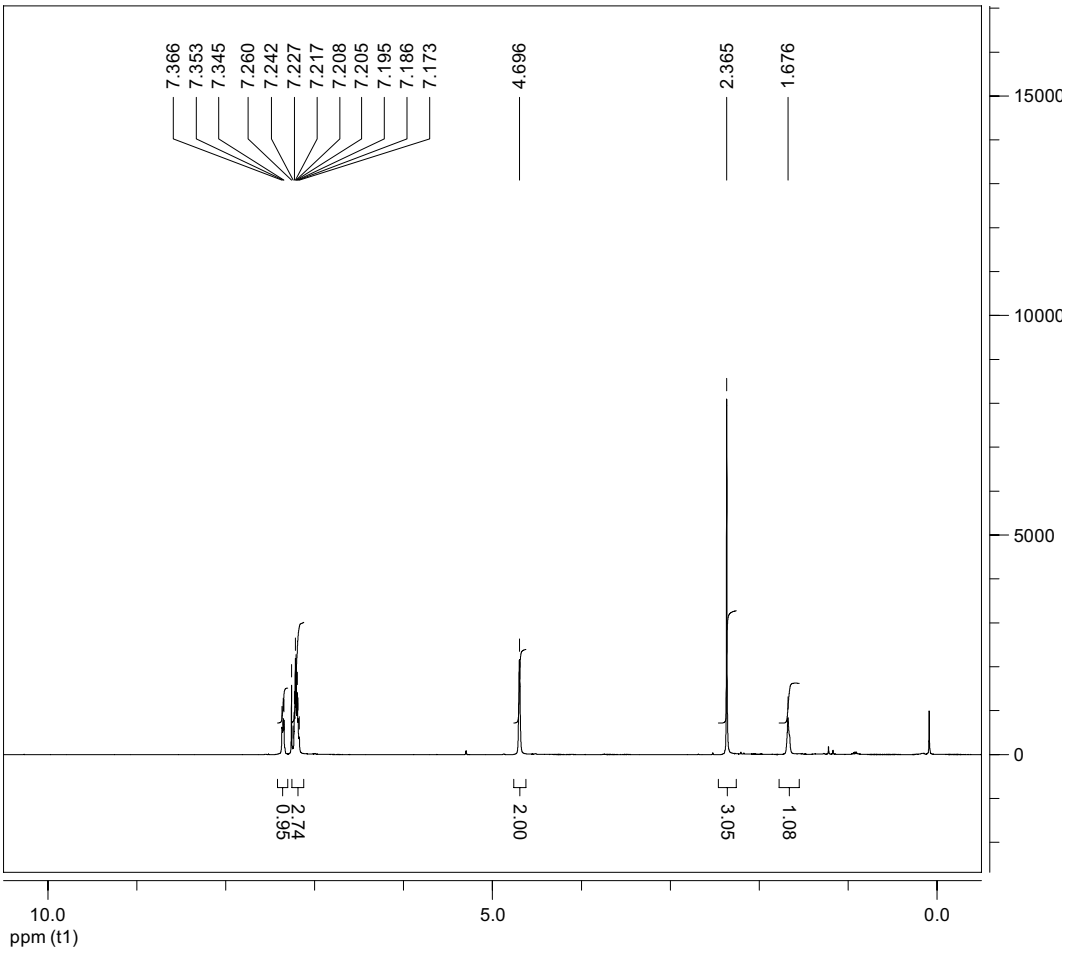

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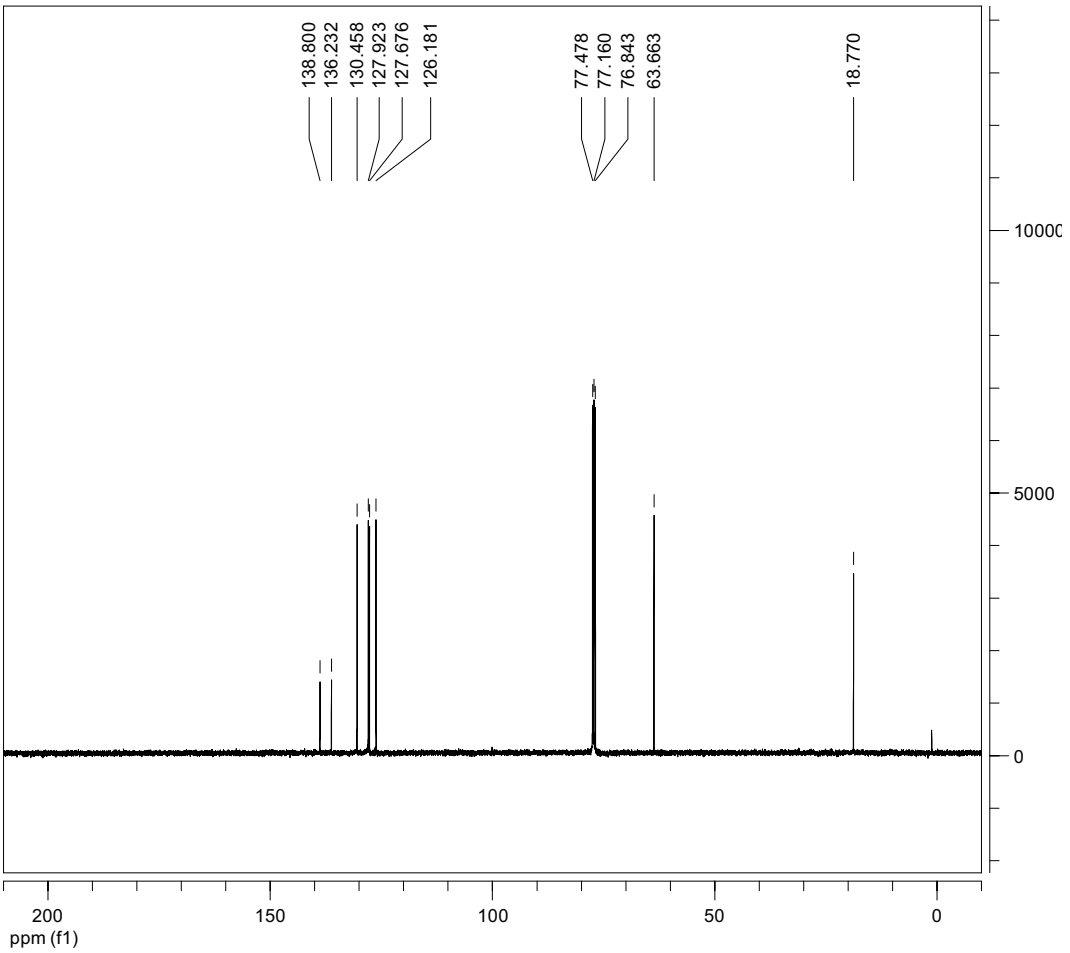

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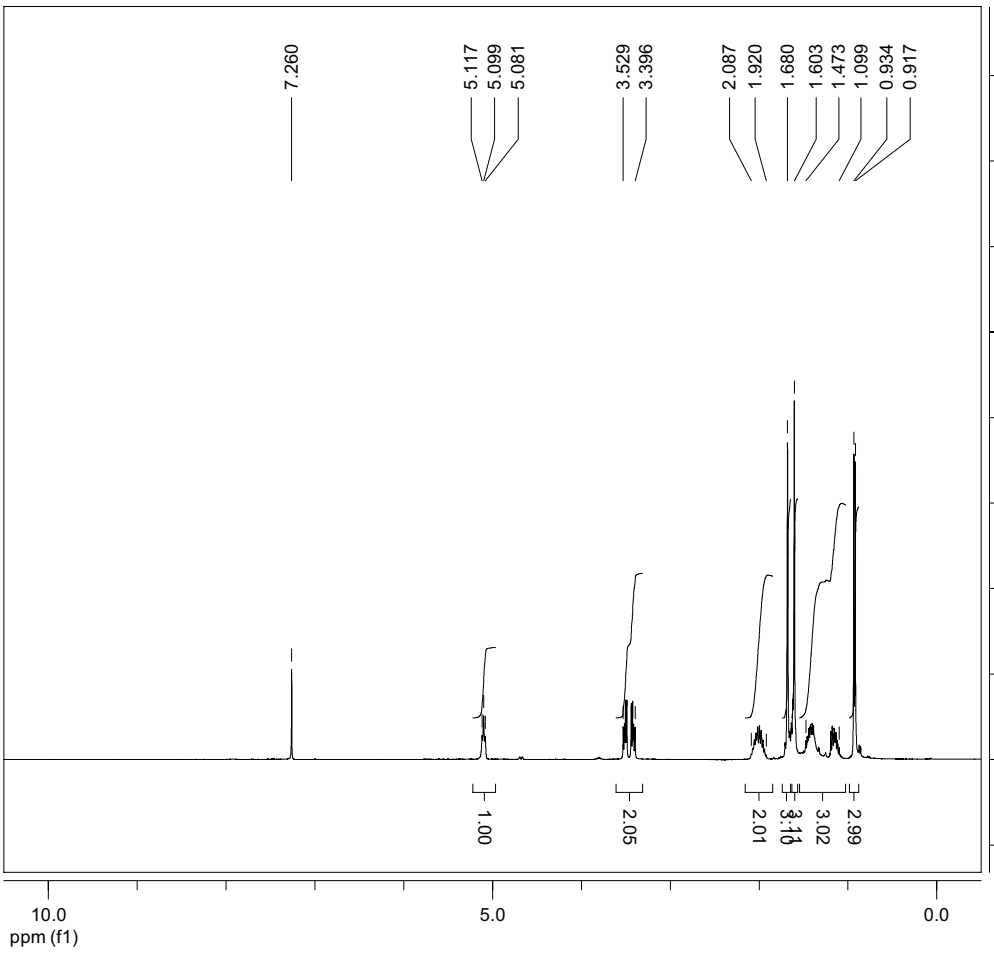
2,6-Dimethylhept-5-en-1-ol



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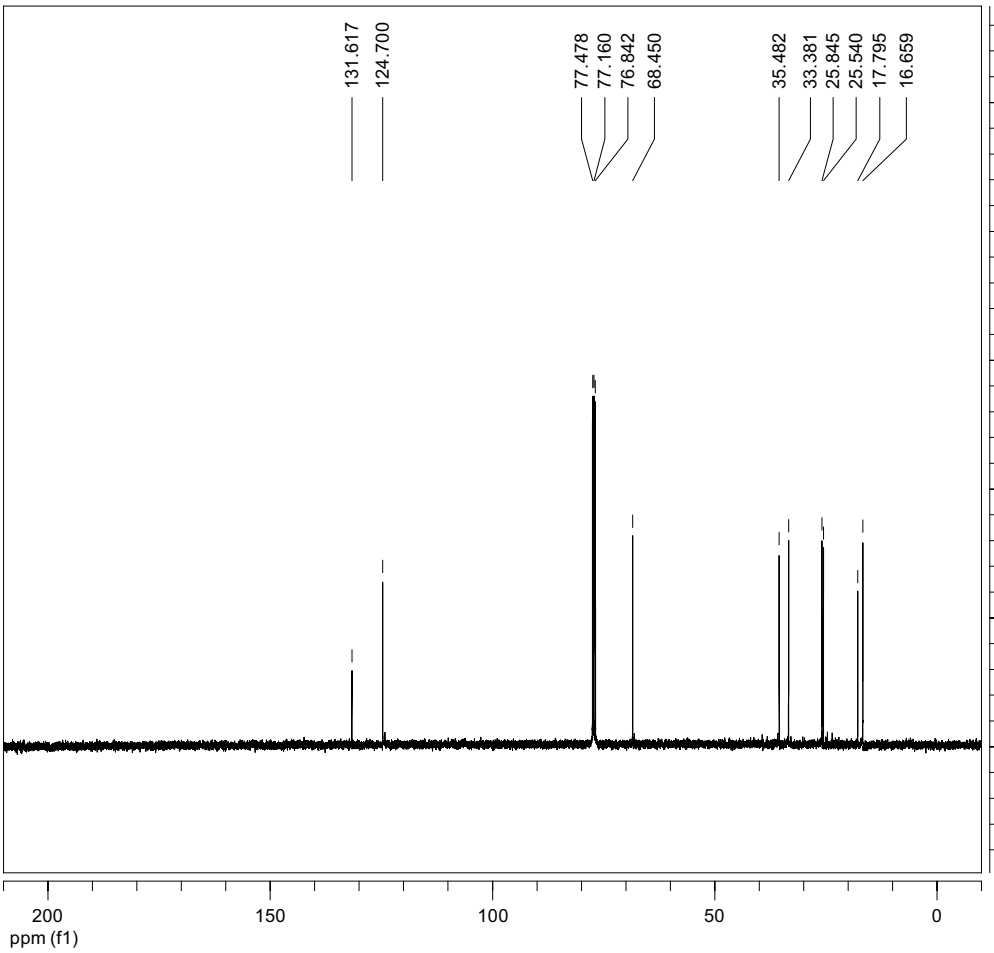

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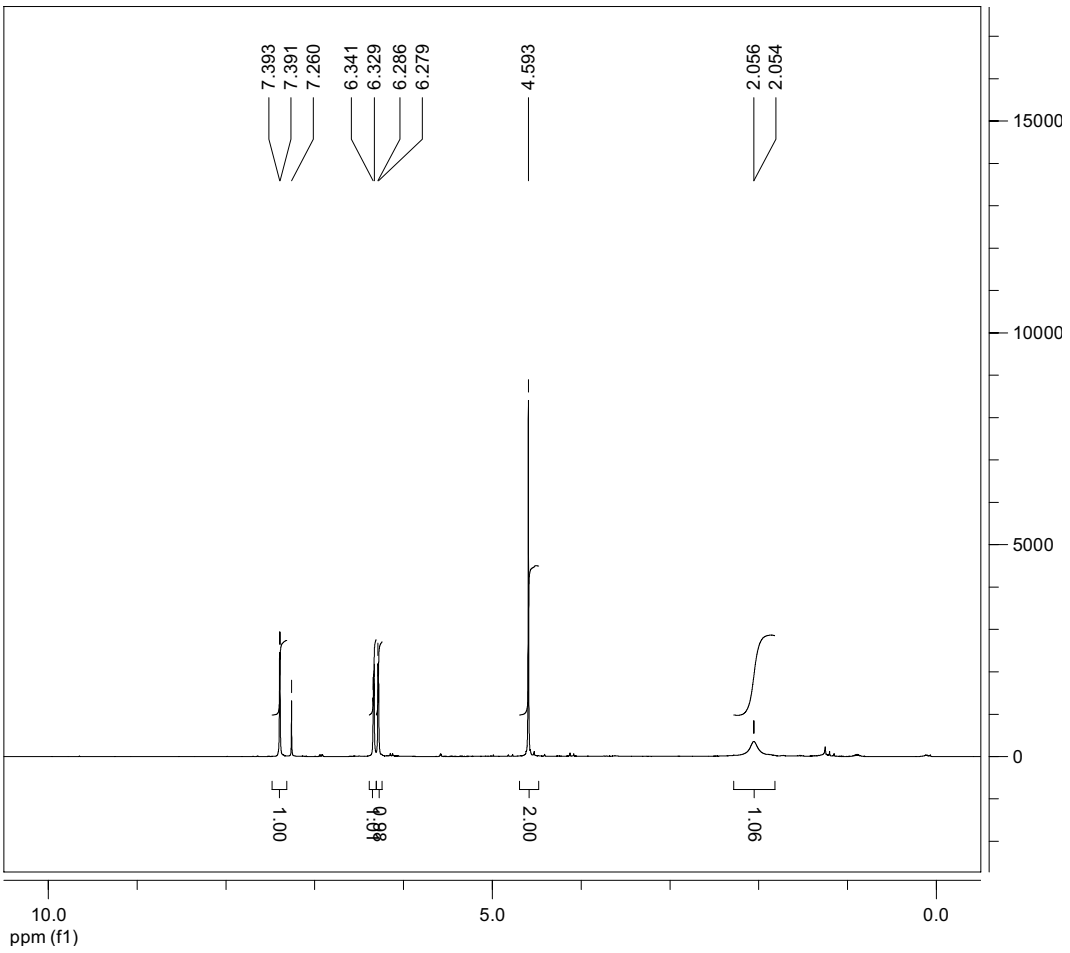
Furan-2-ylmethanol



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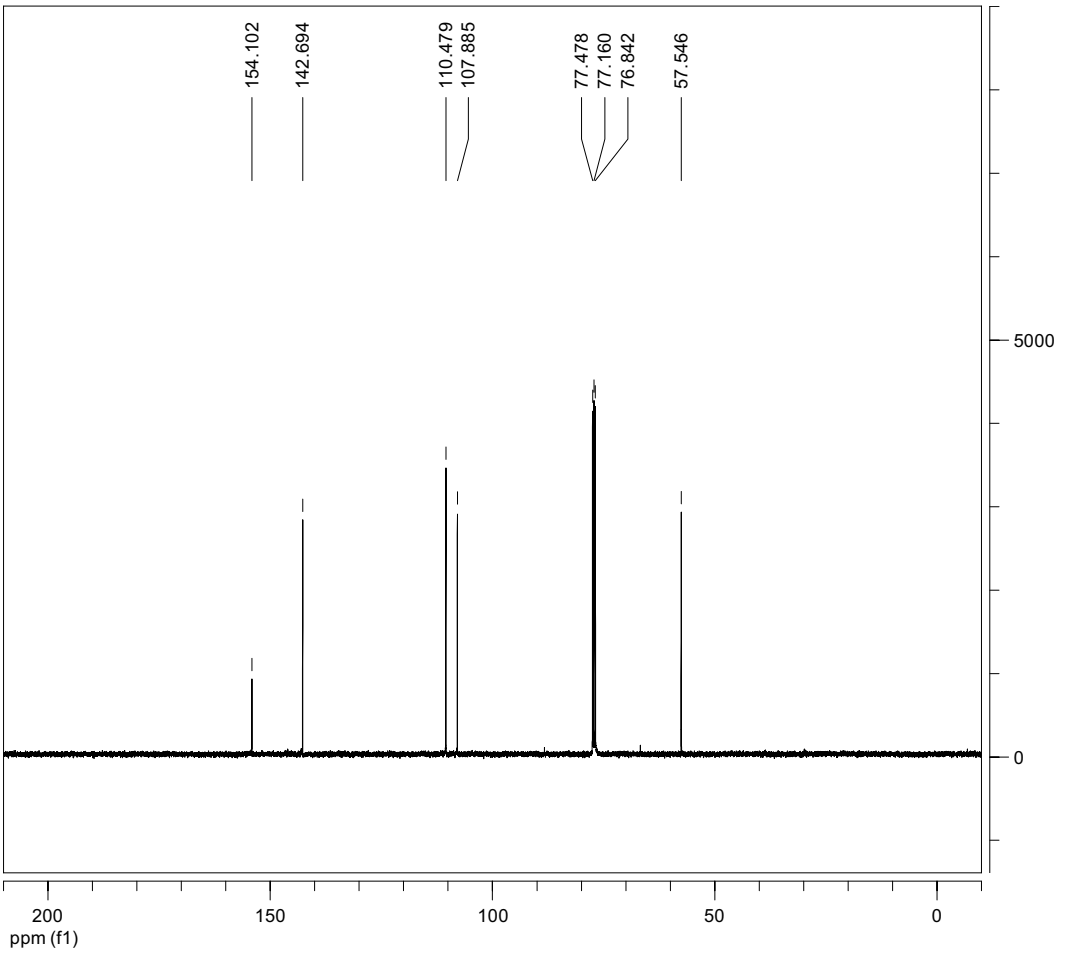

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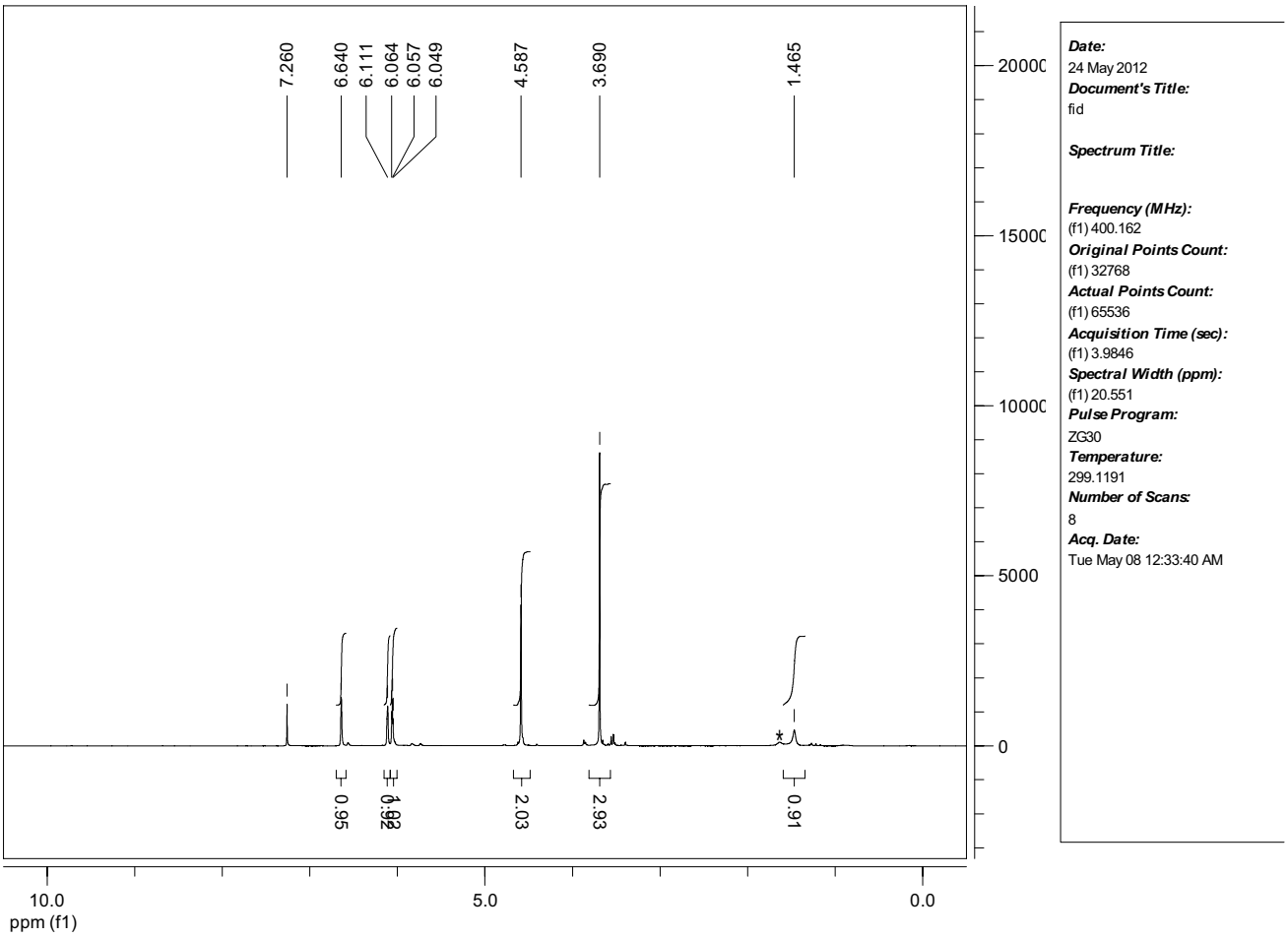
(1-Methyl-1H-pyrrol-2-yl)methanol



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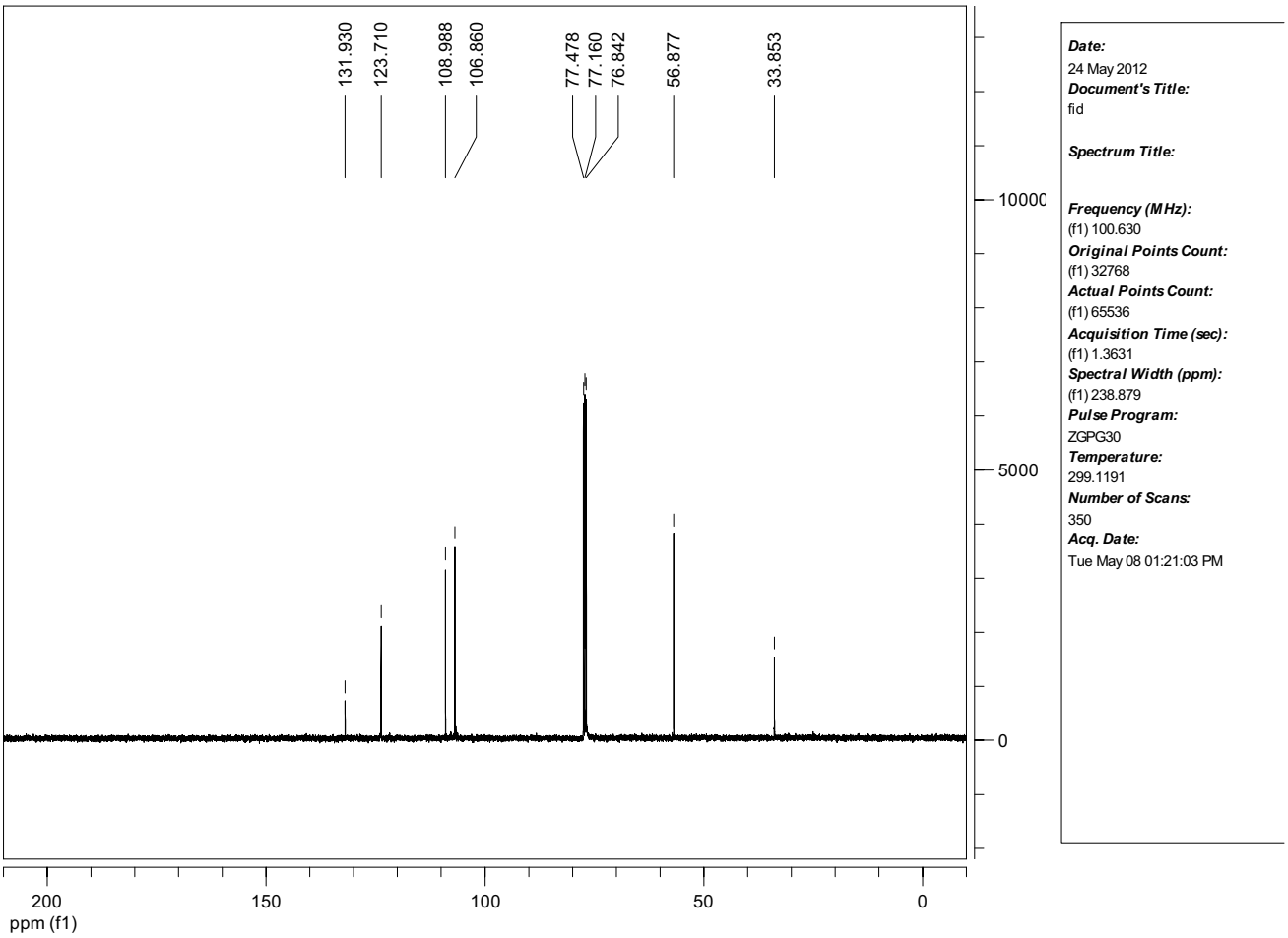

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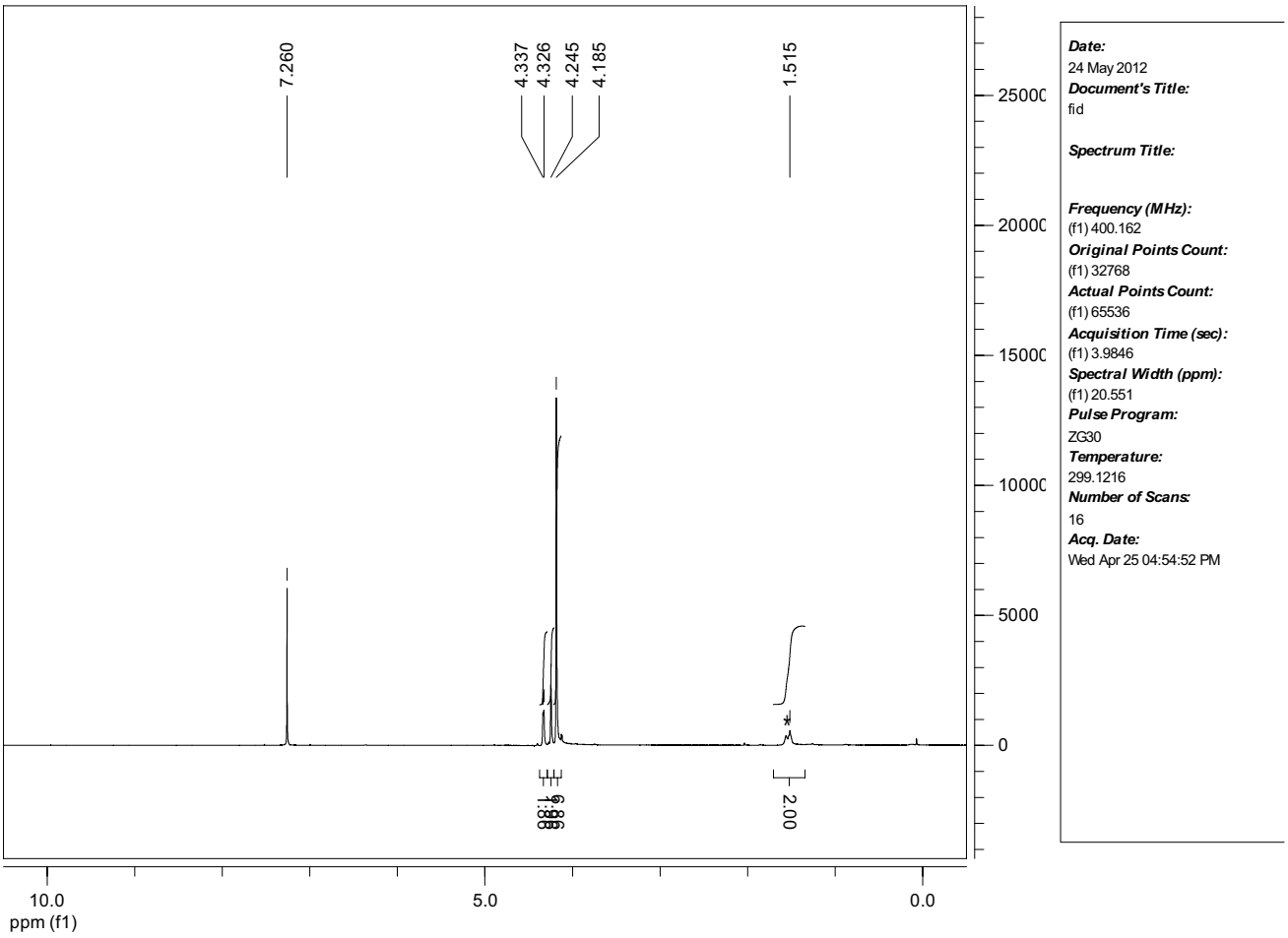
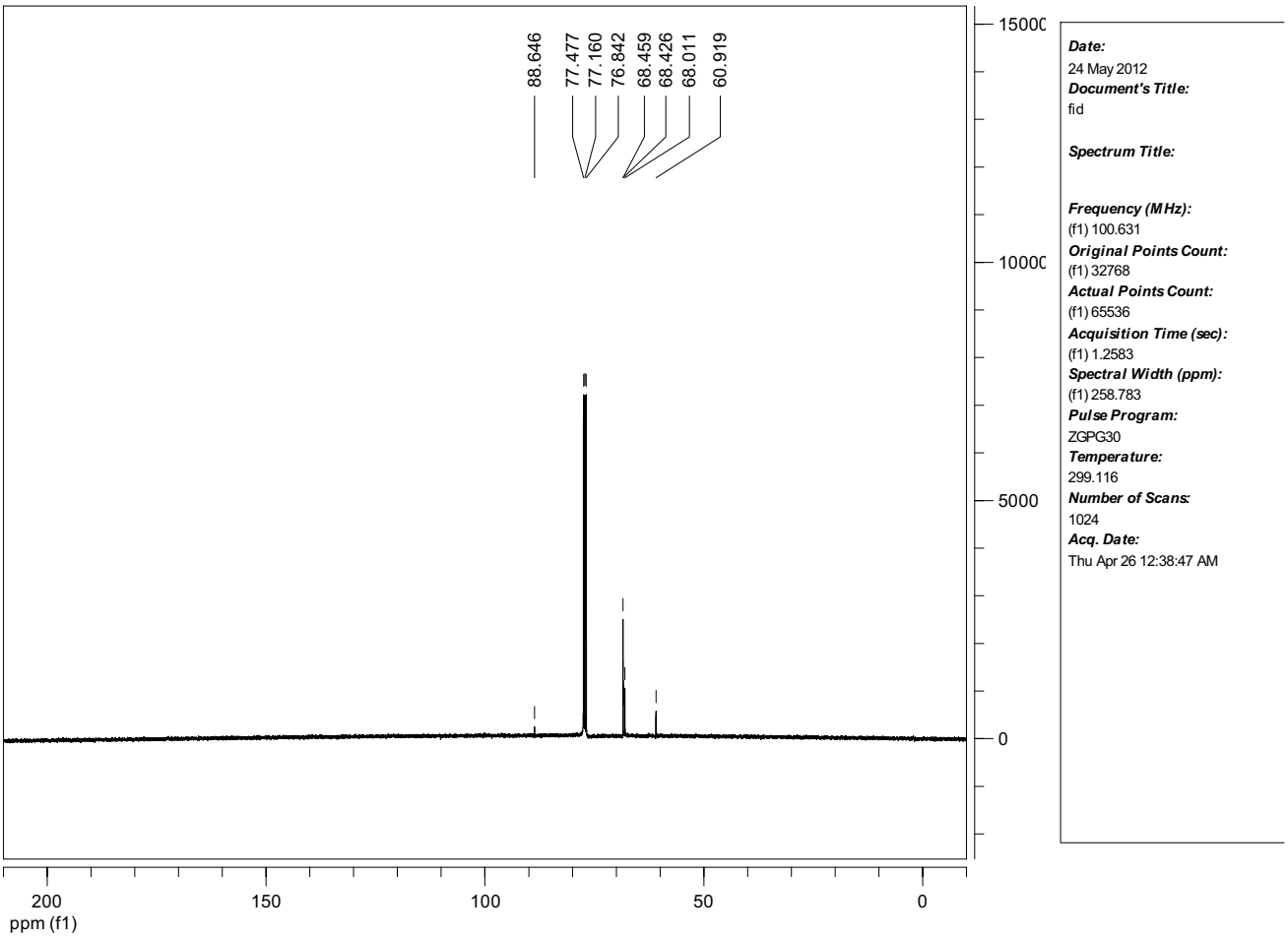
Ferrocenemethanol





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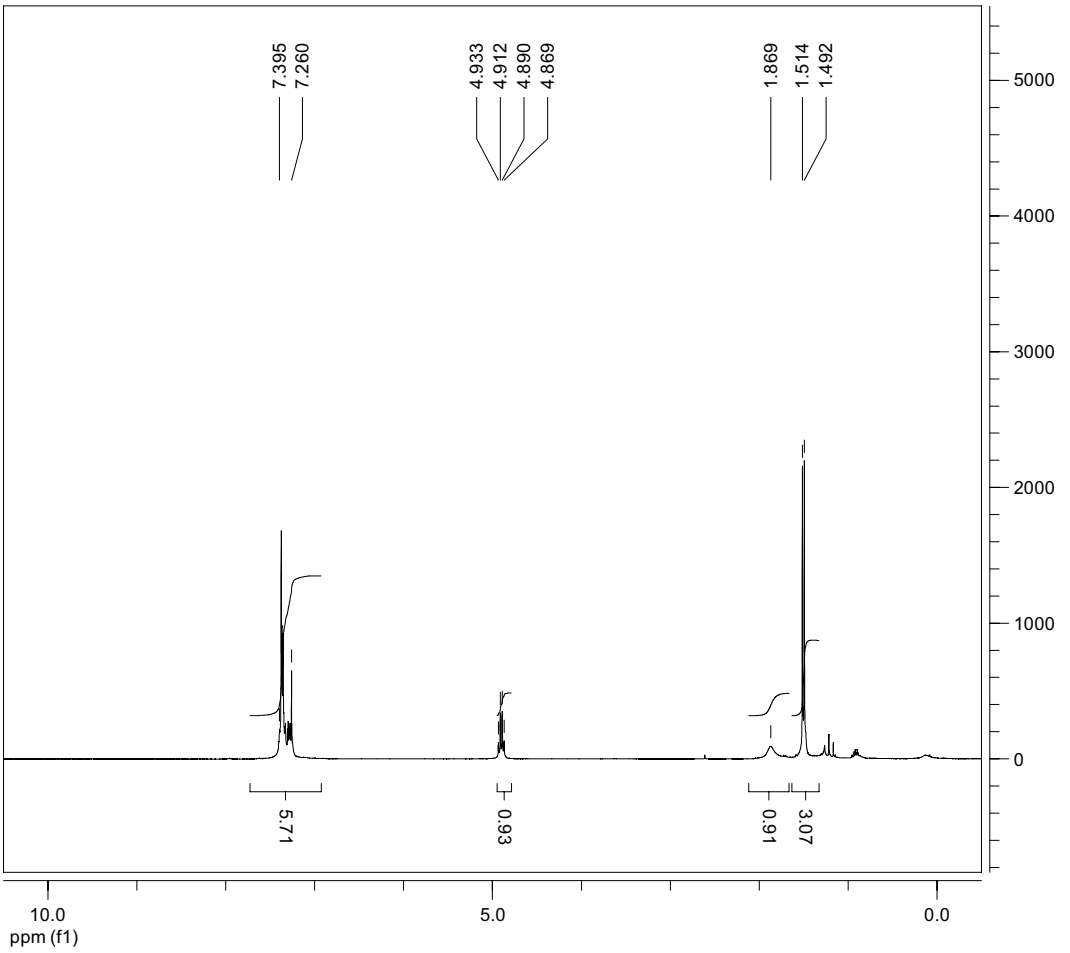
1-Phenylethanol



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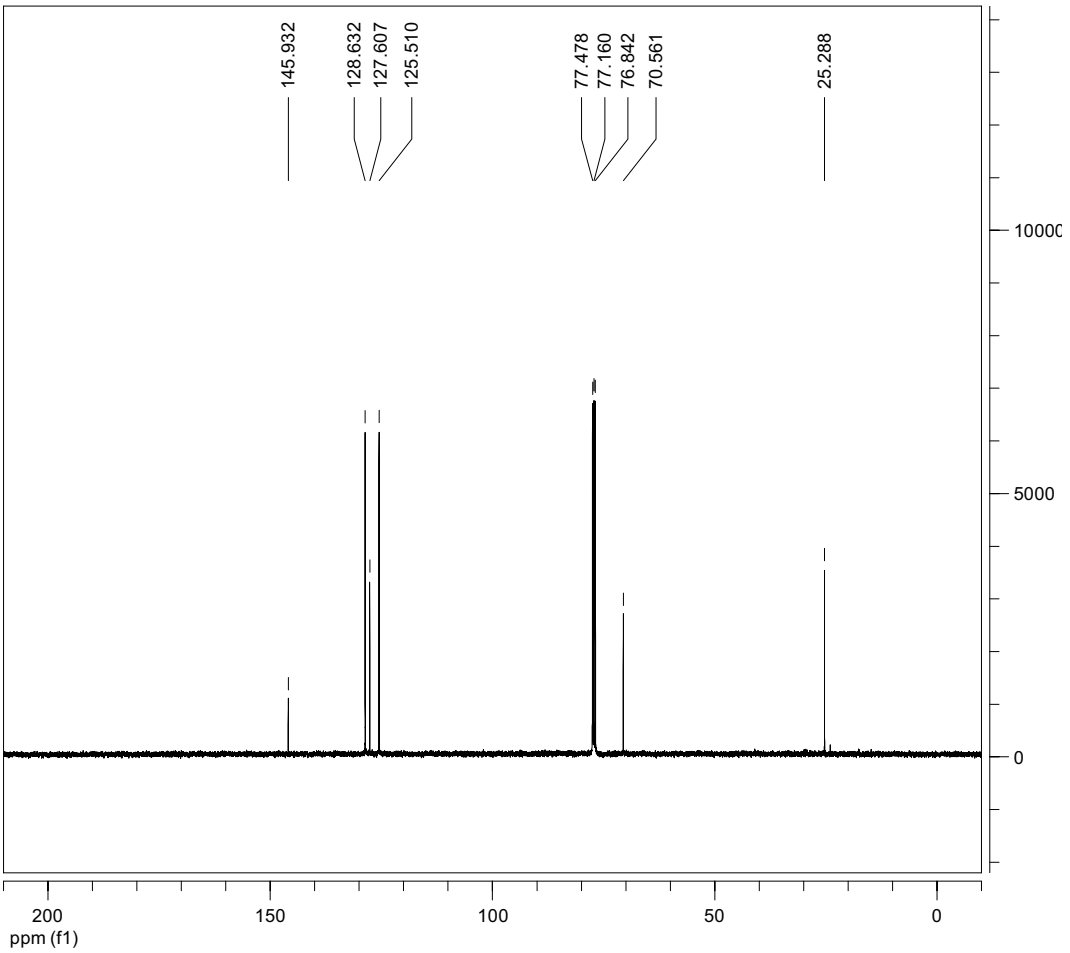

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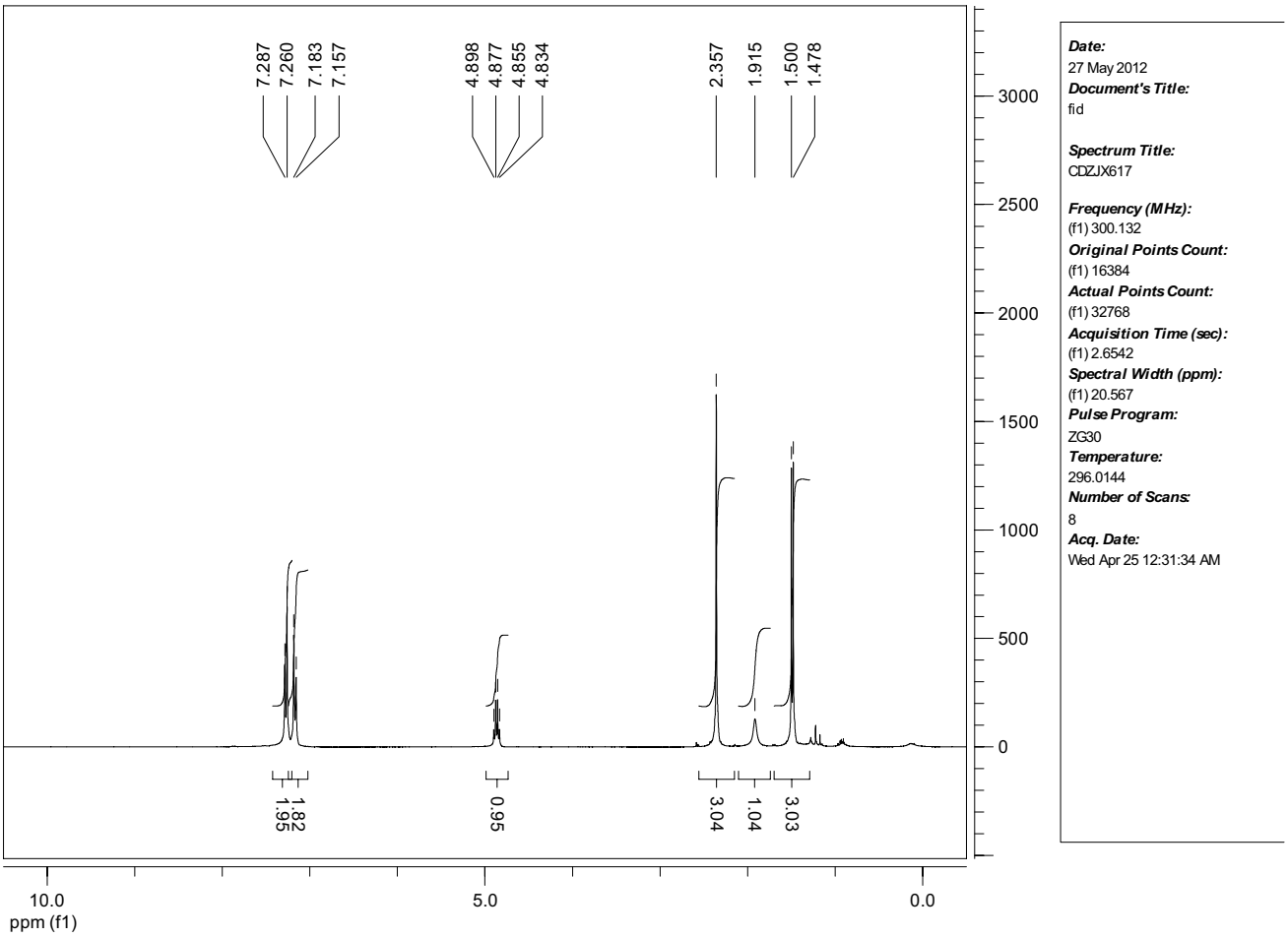
1-(4′-Methylphenyl)ethanol



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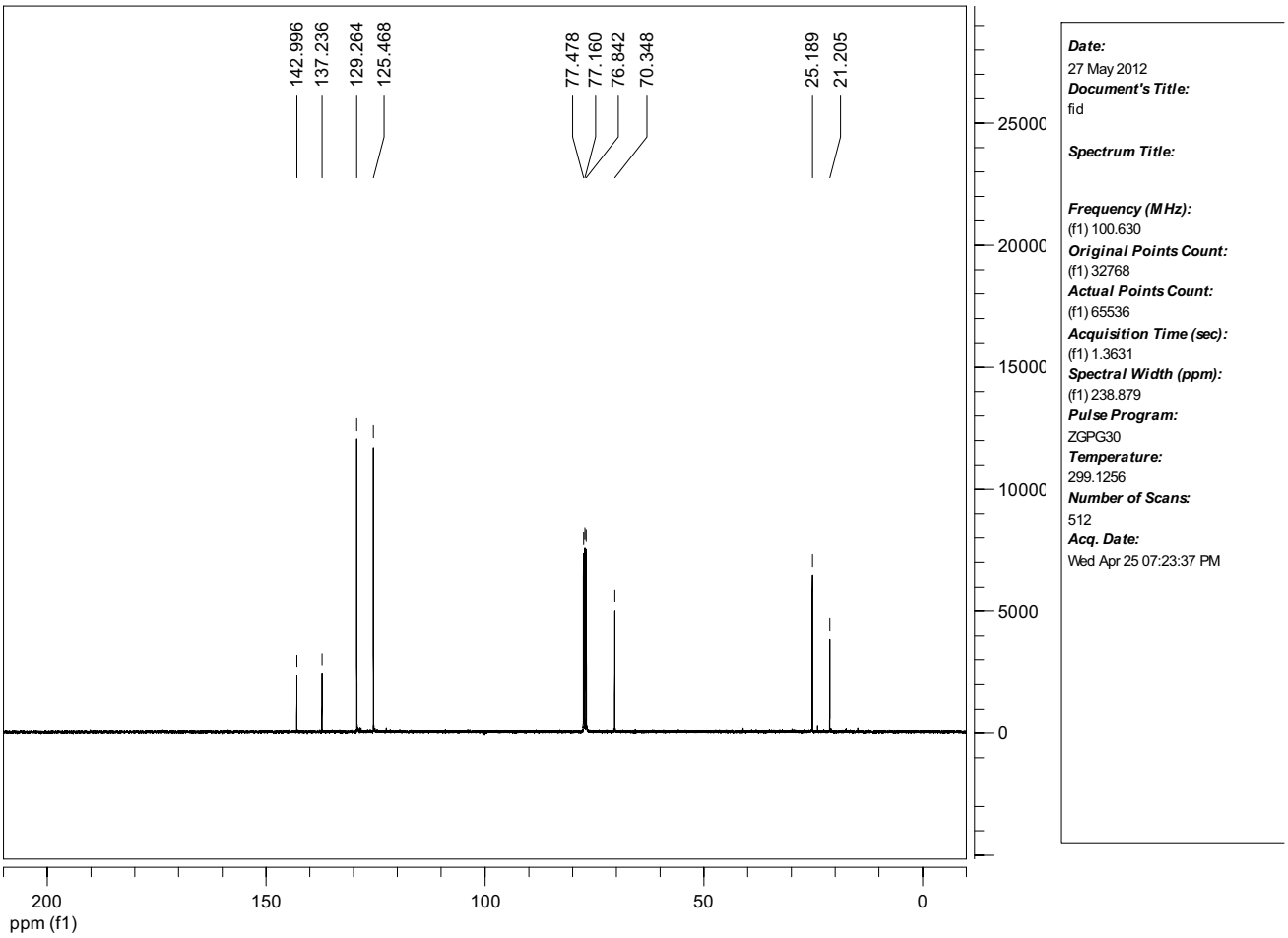

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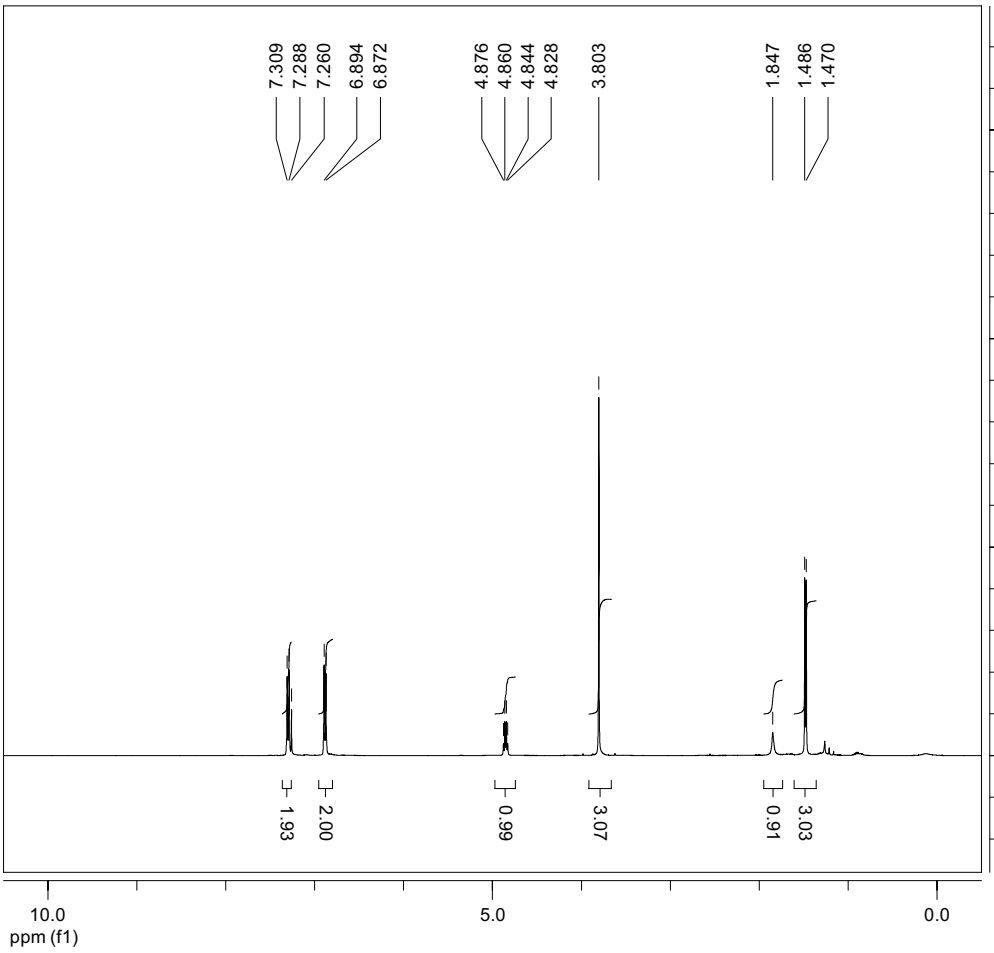
1-(4′-Methoxyphenyl)ethanol



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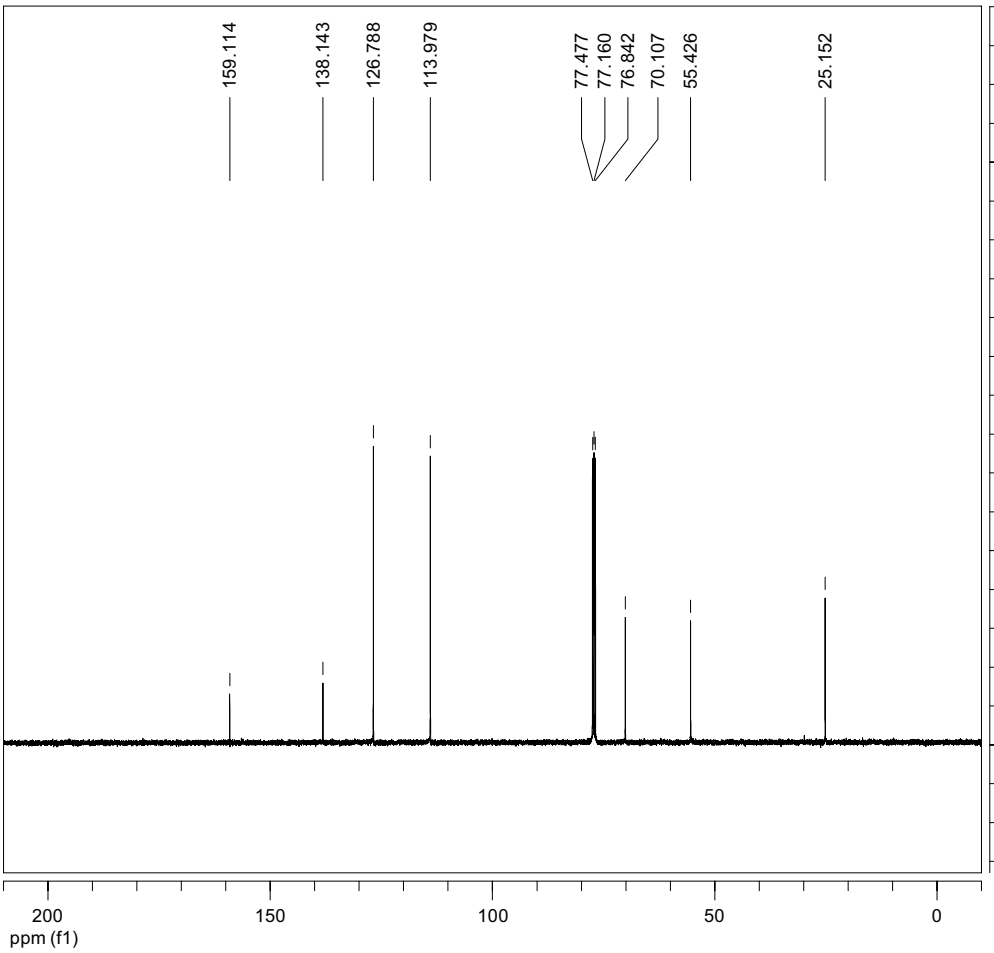

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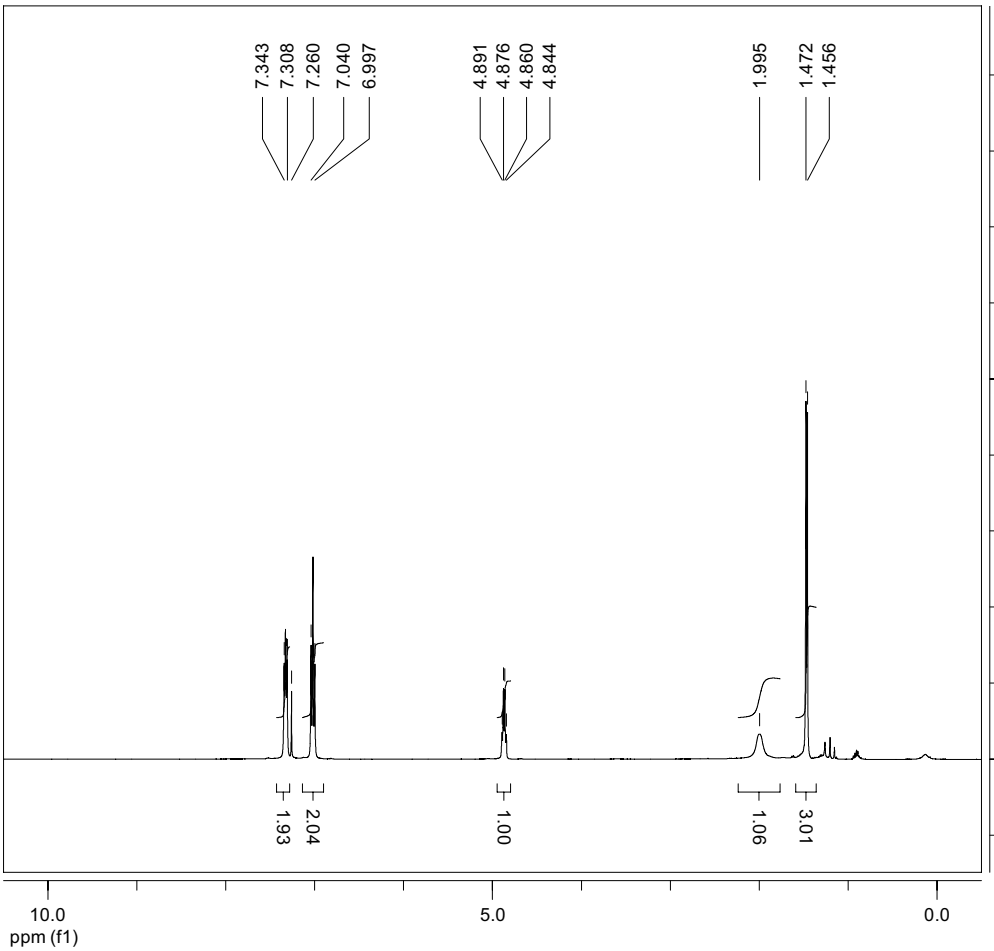
1-(4′-Fluorophenyl)ethanol



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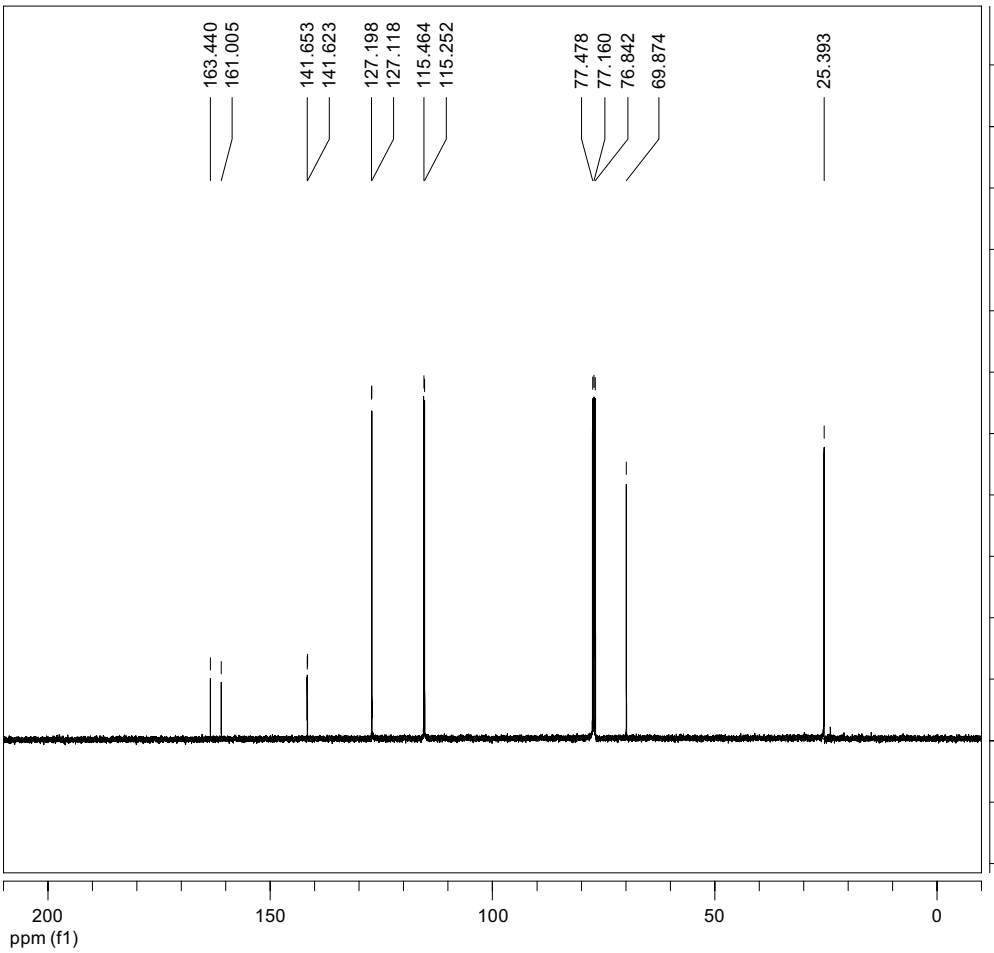

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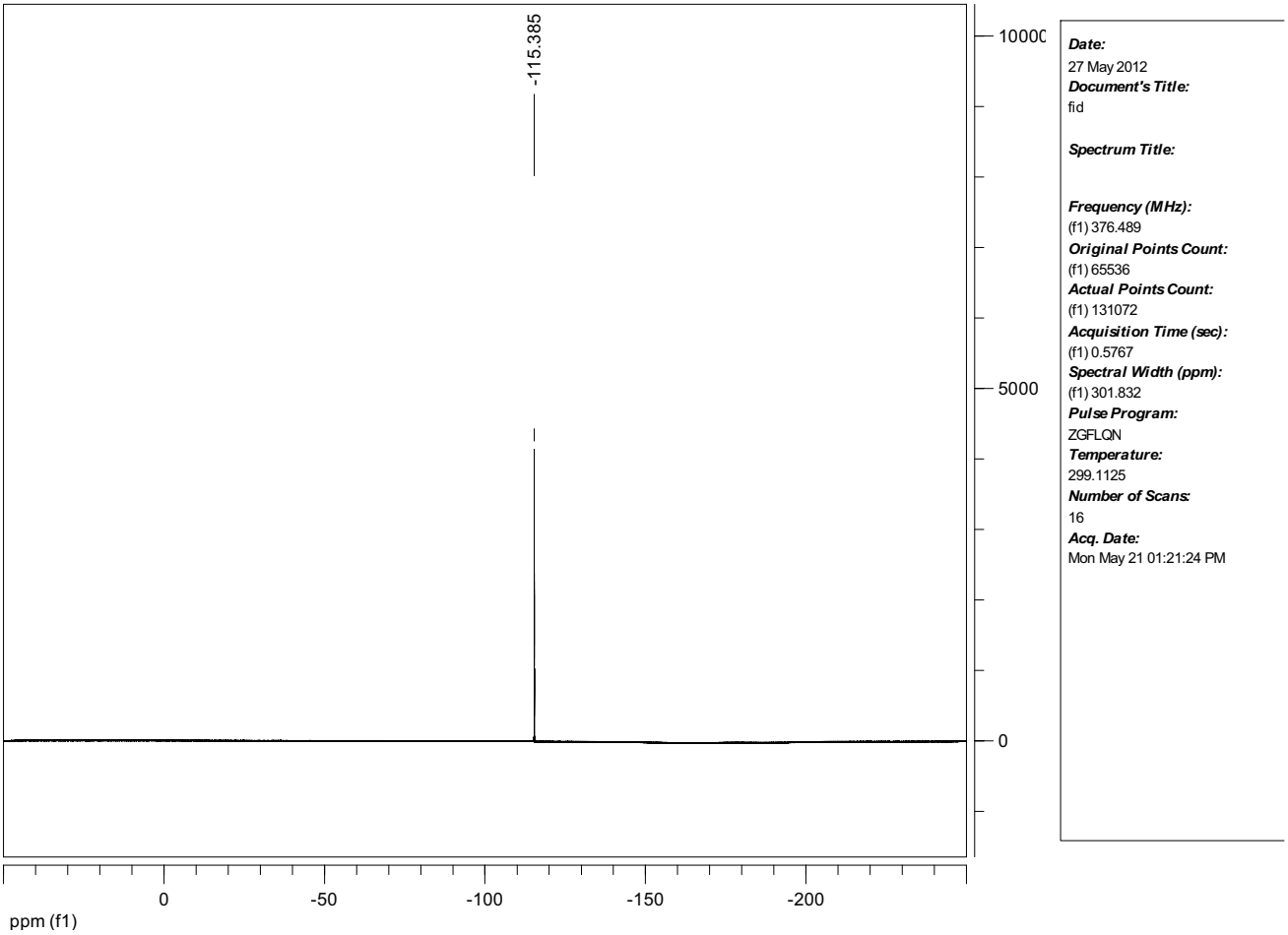

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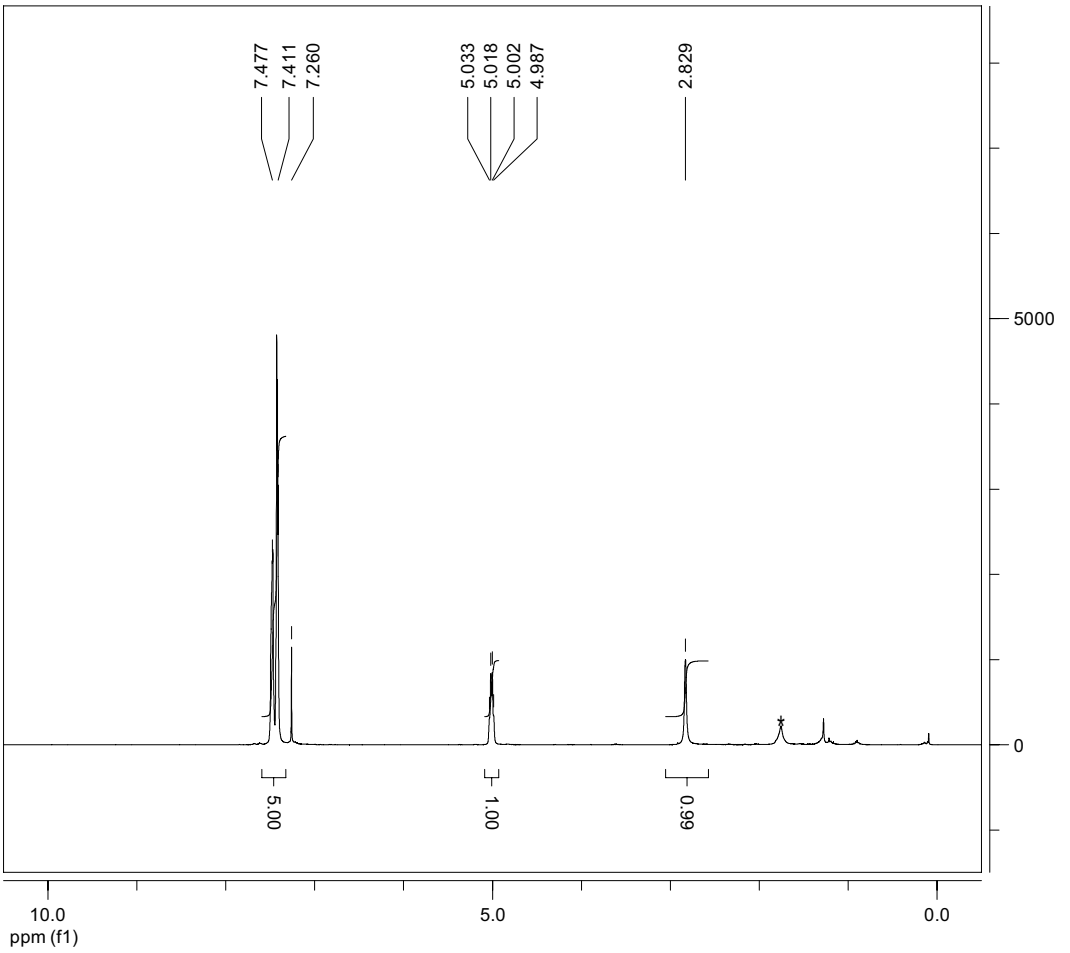
2,2,2-Trifluoro-1-phenylethanol



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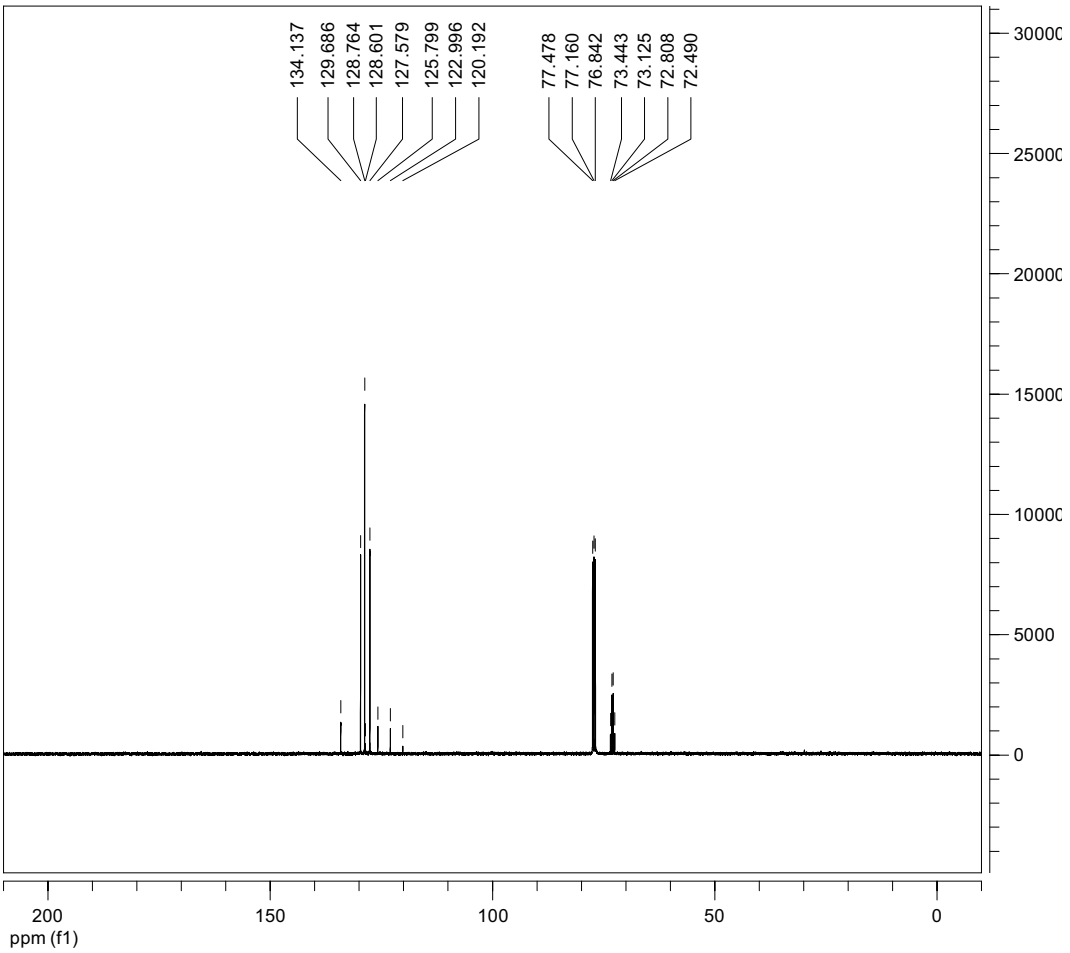

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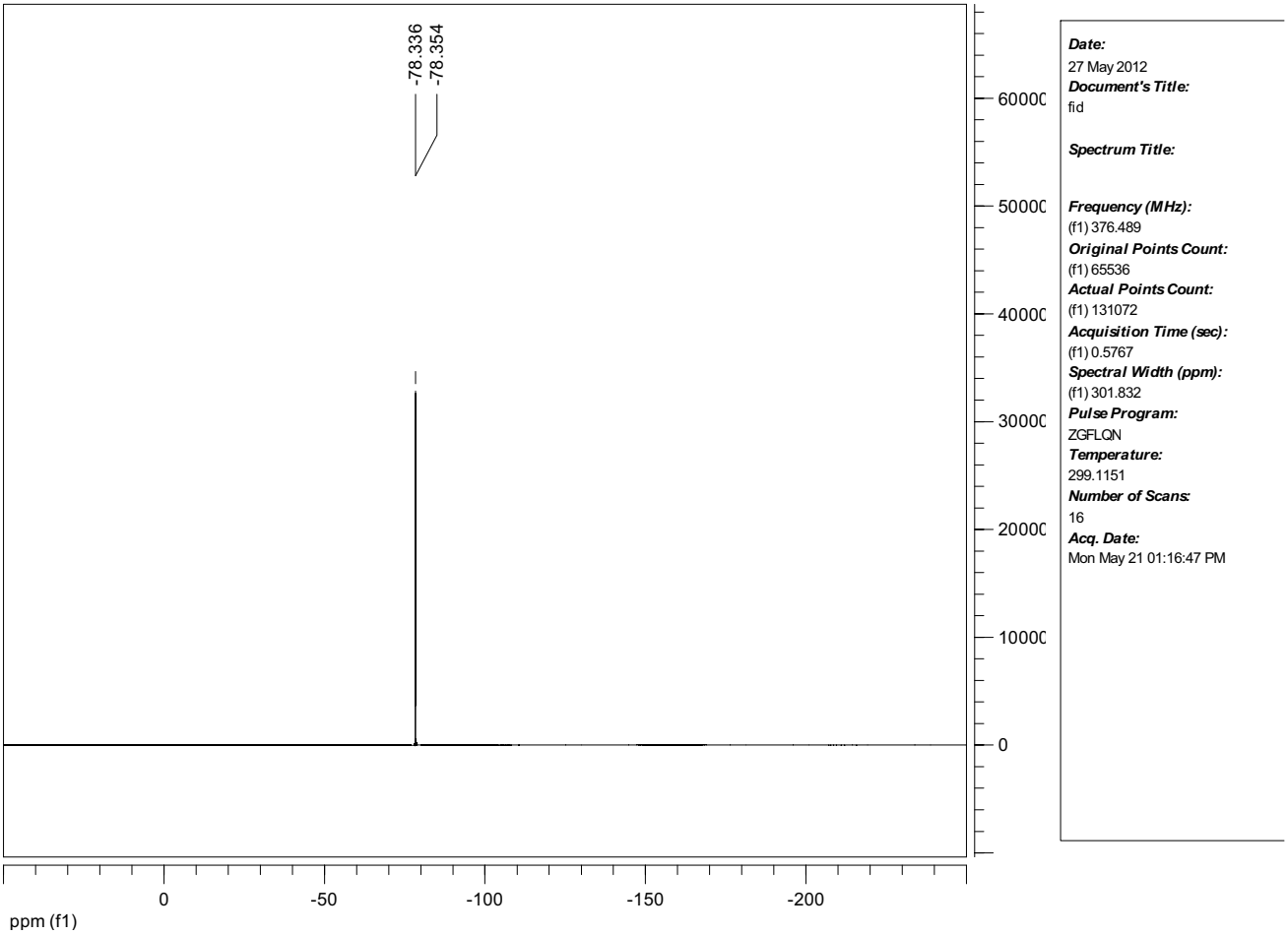

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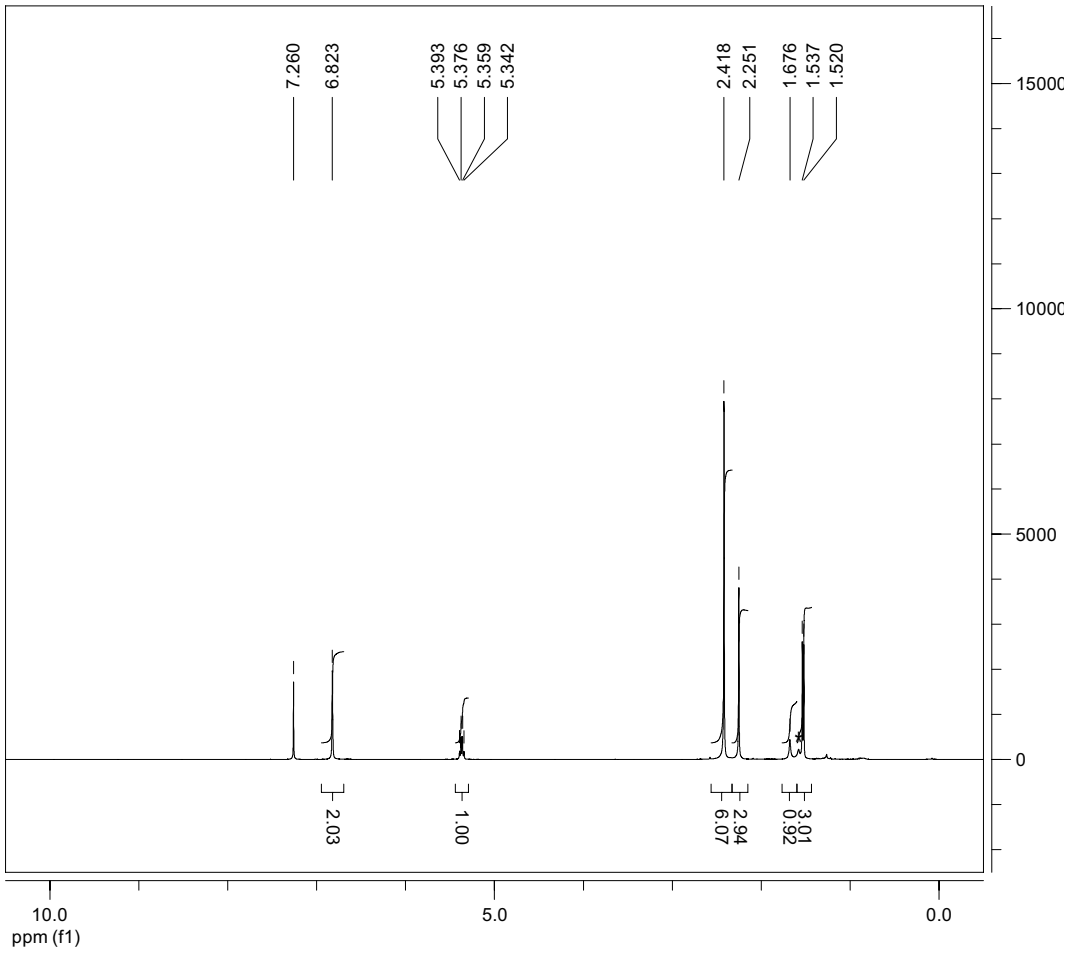
1-Mesitylethanol



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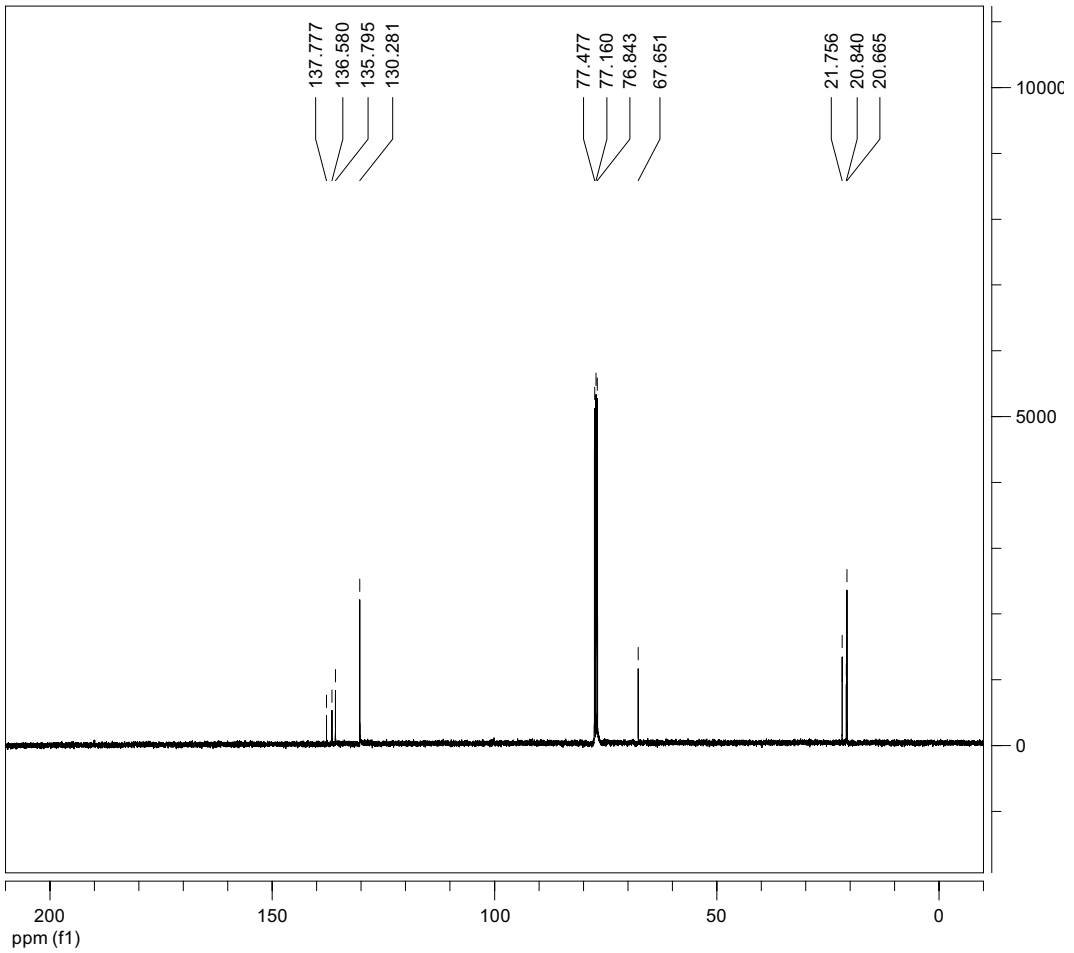

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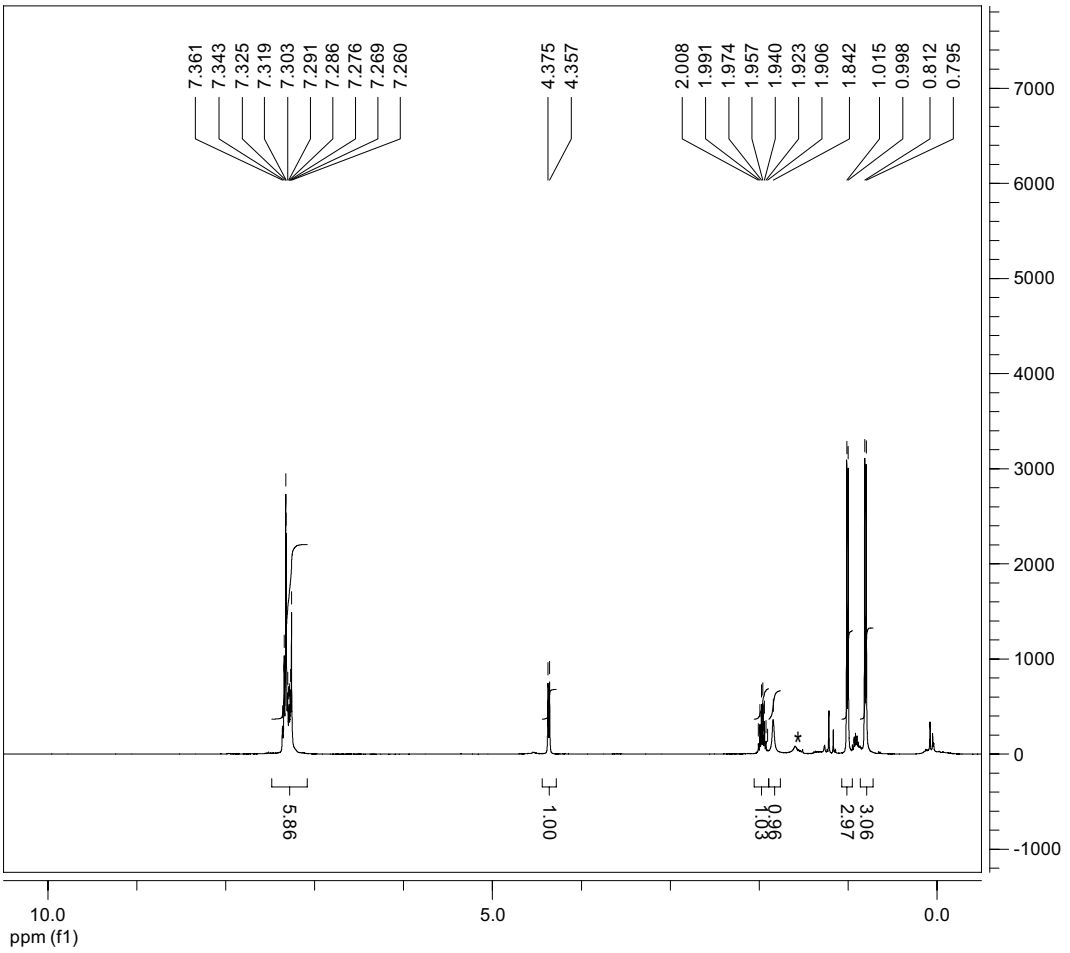
2-Methyl-1-phenylpropan-1-ol



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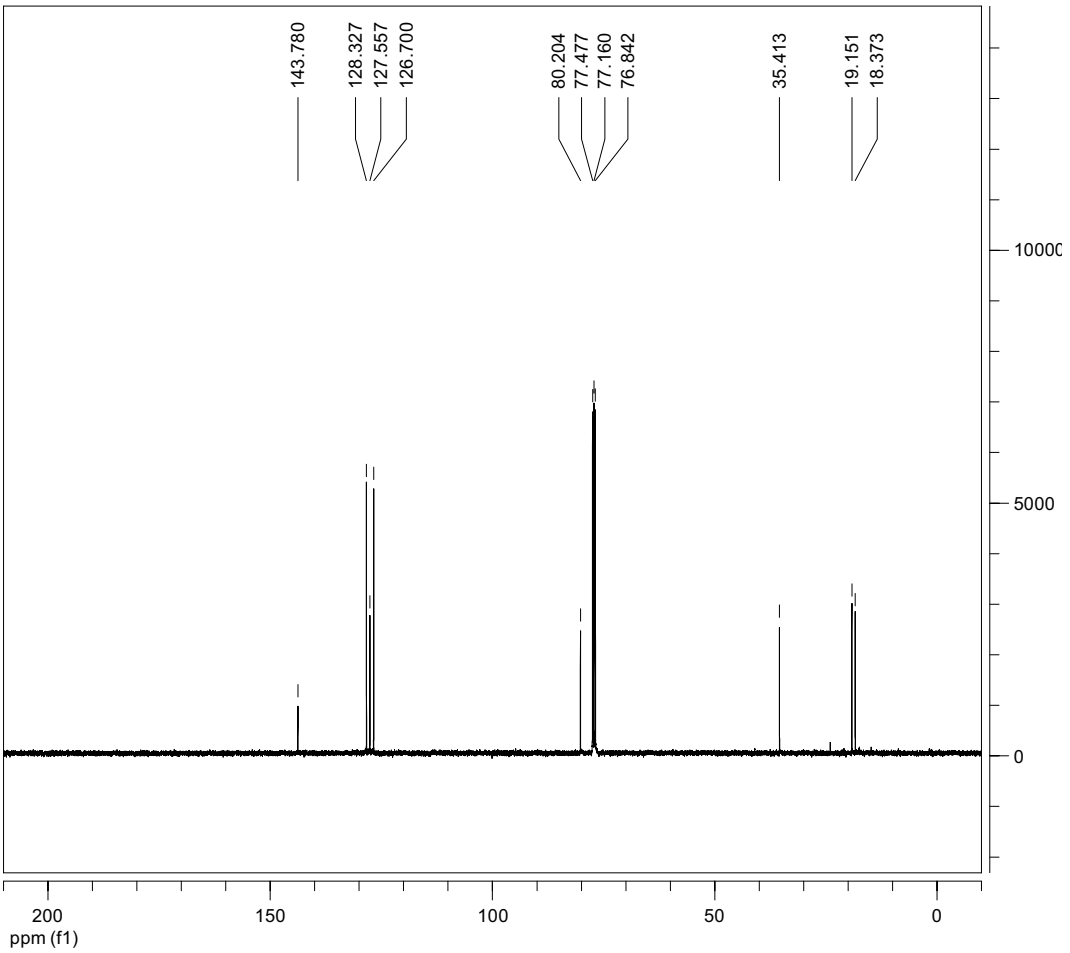

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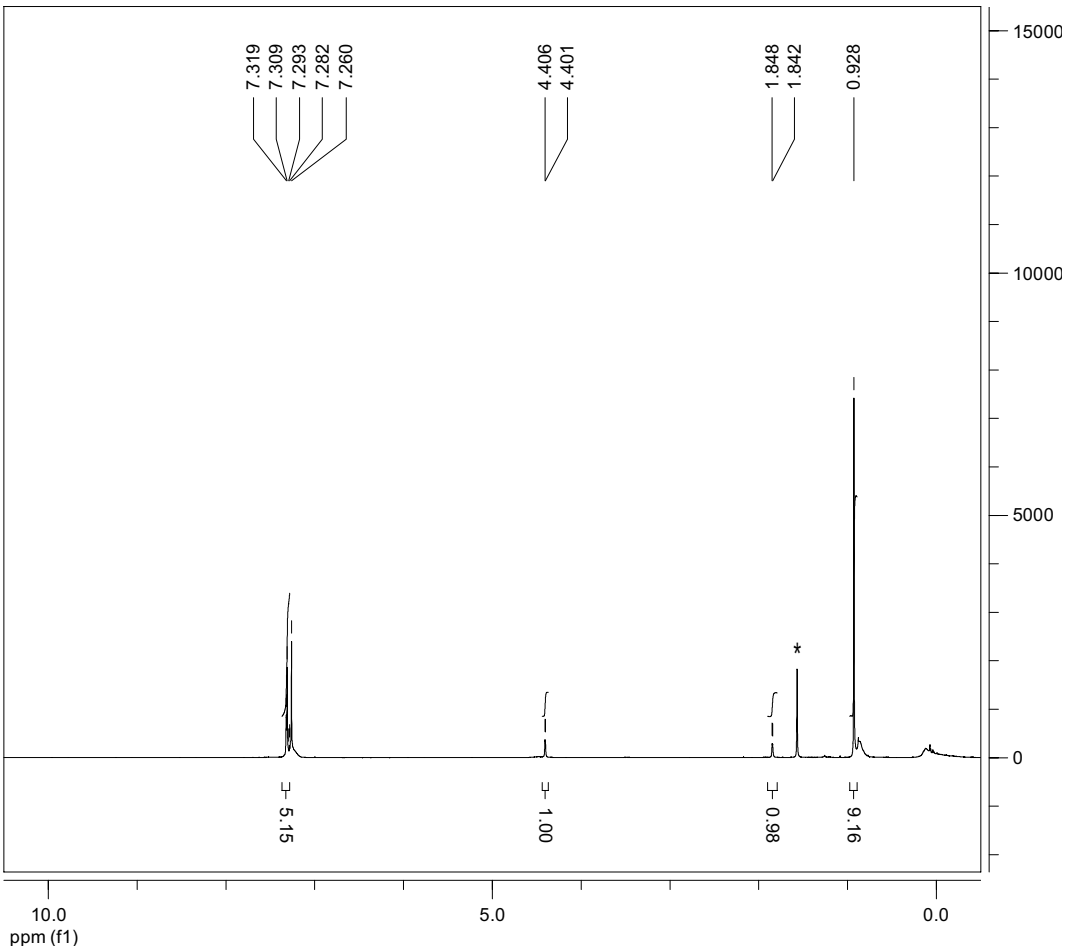
2,2-Dimethyl-1-phenylpropan-1-ol



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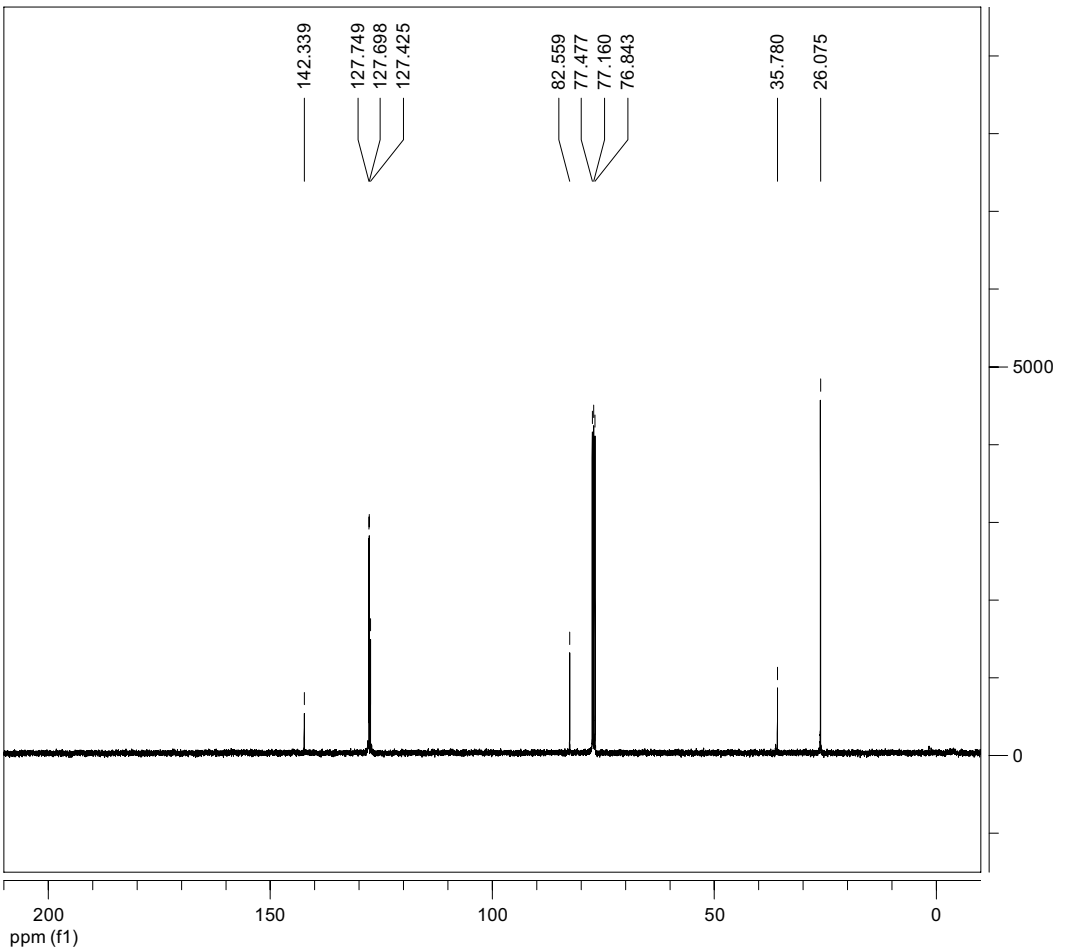

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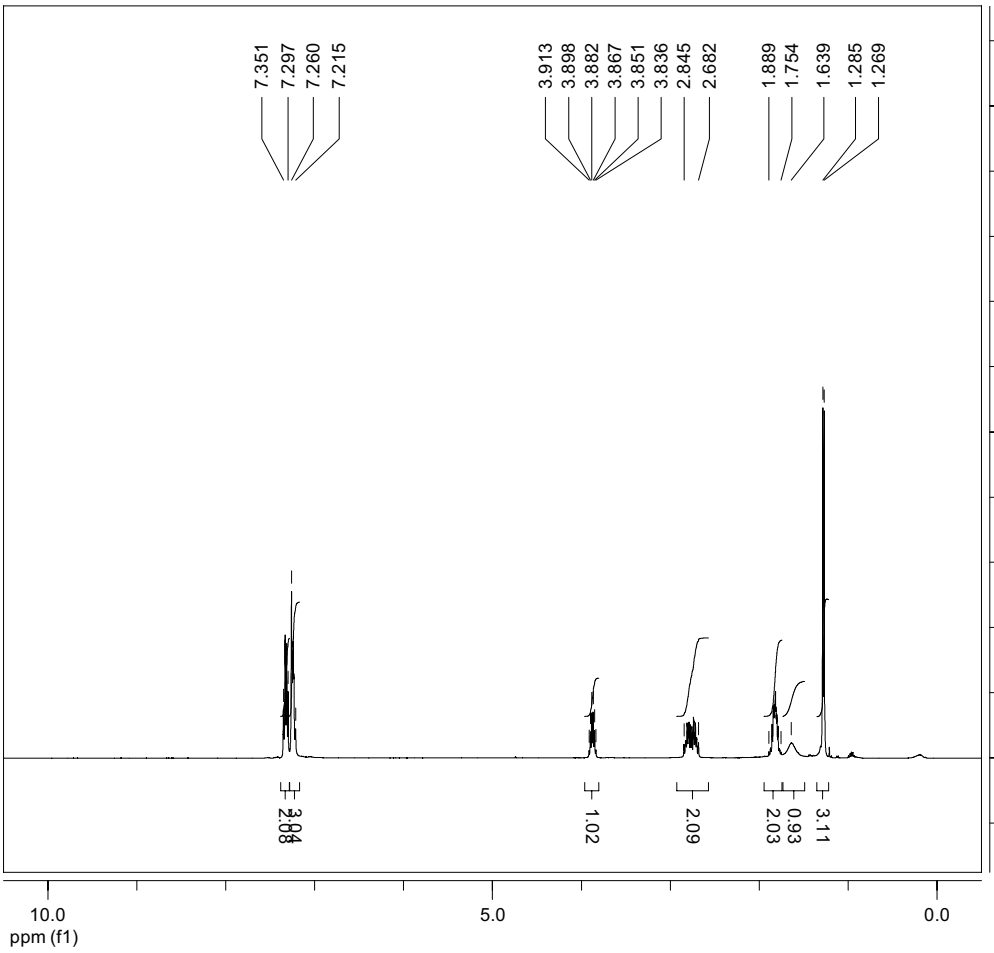

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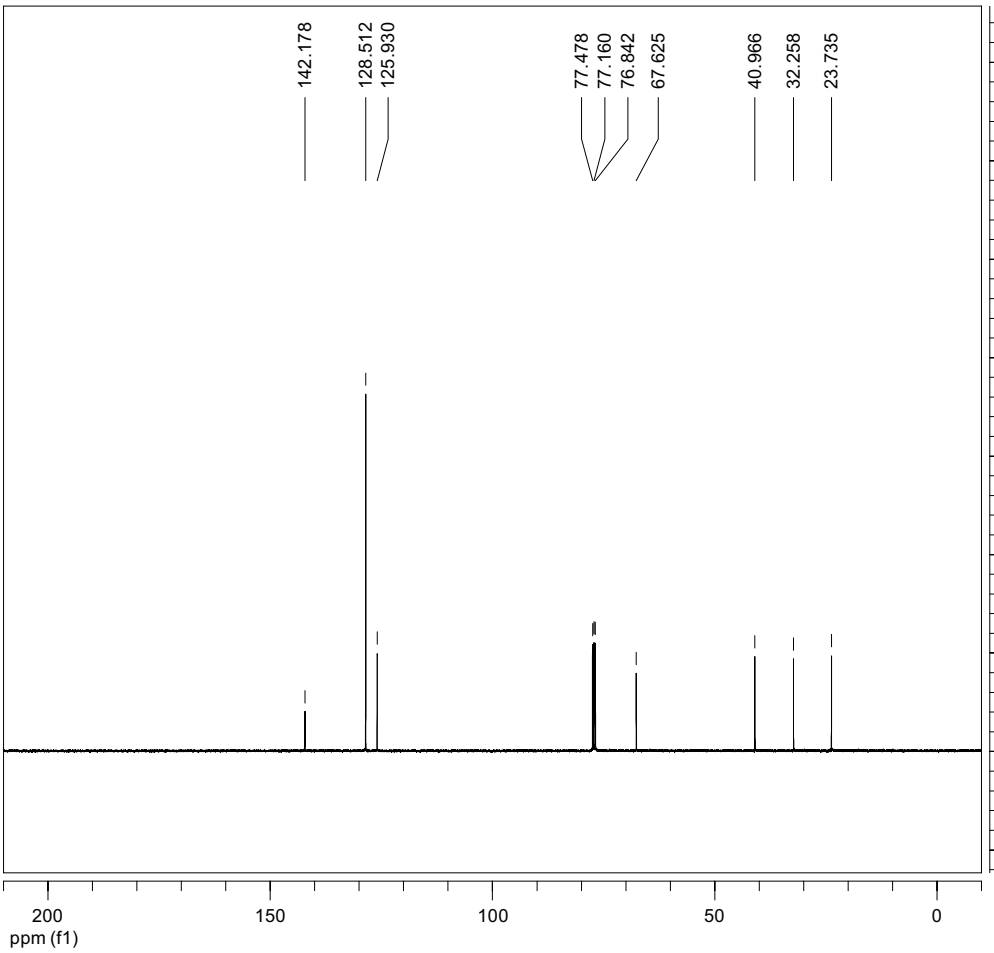

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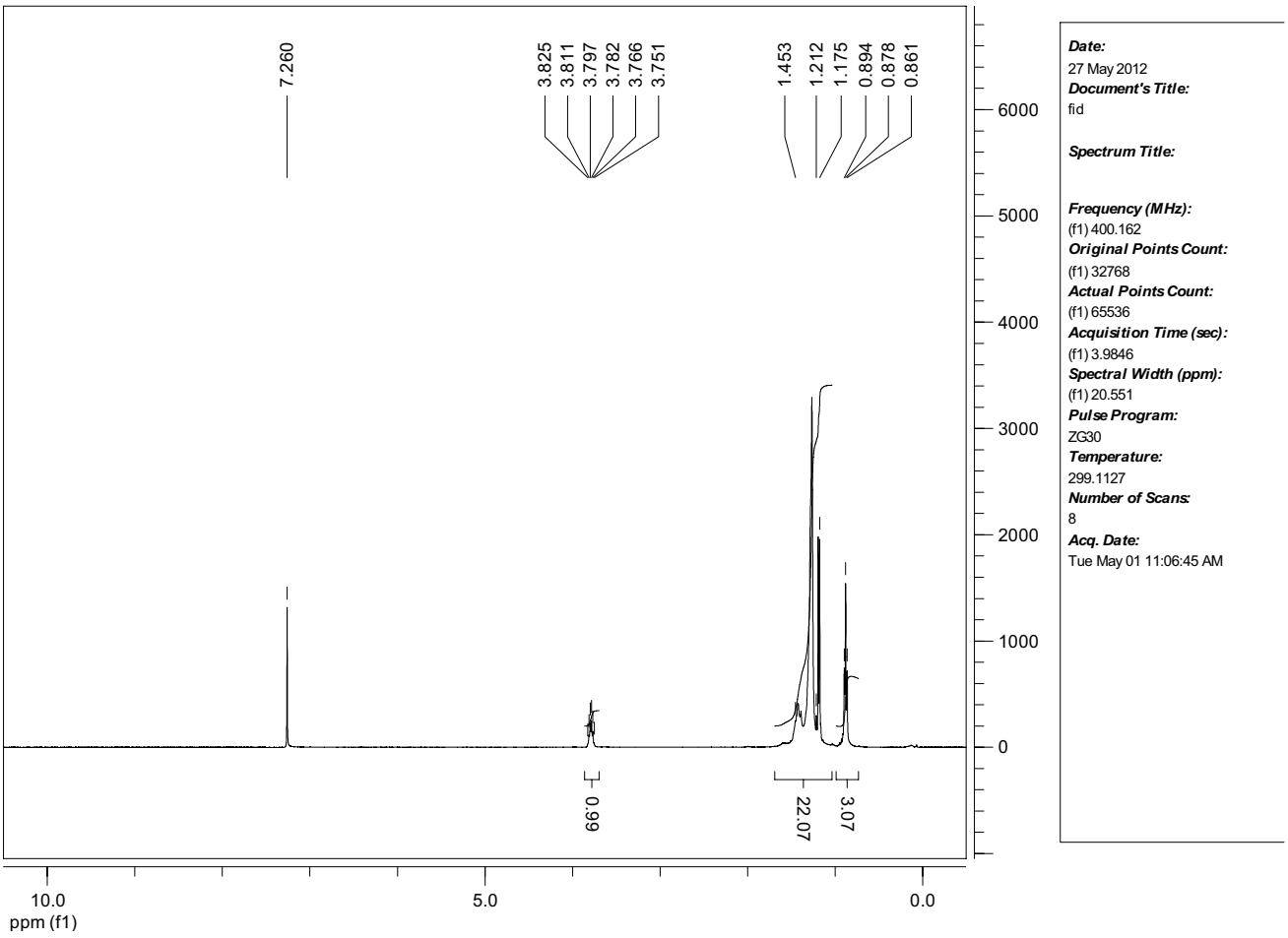
2-Undecanol



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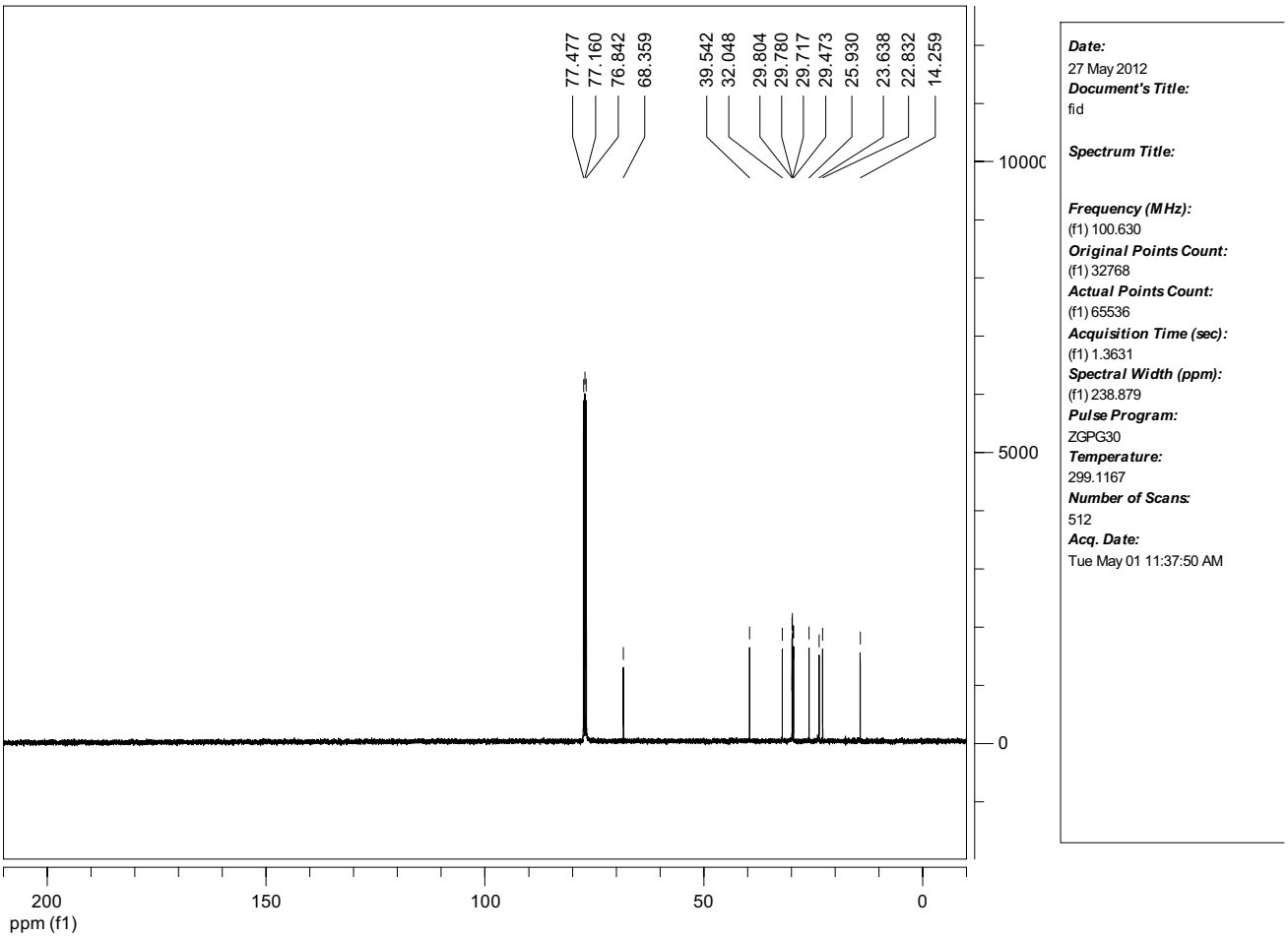

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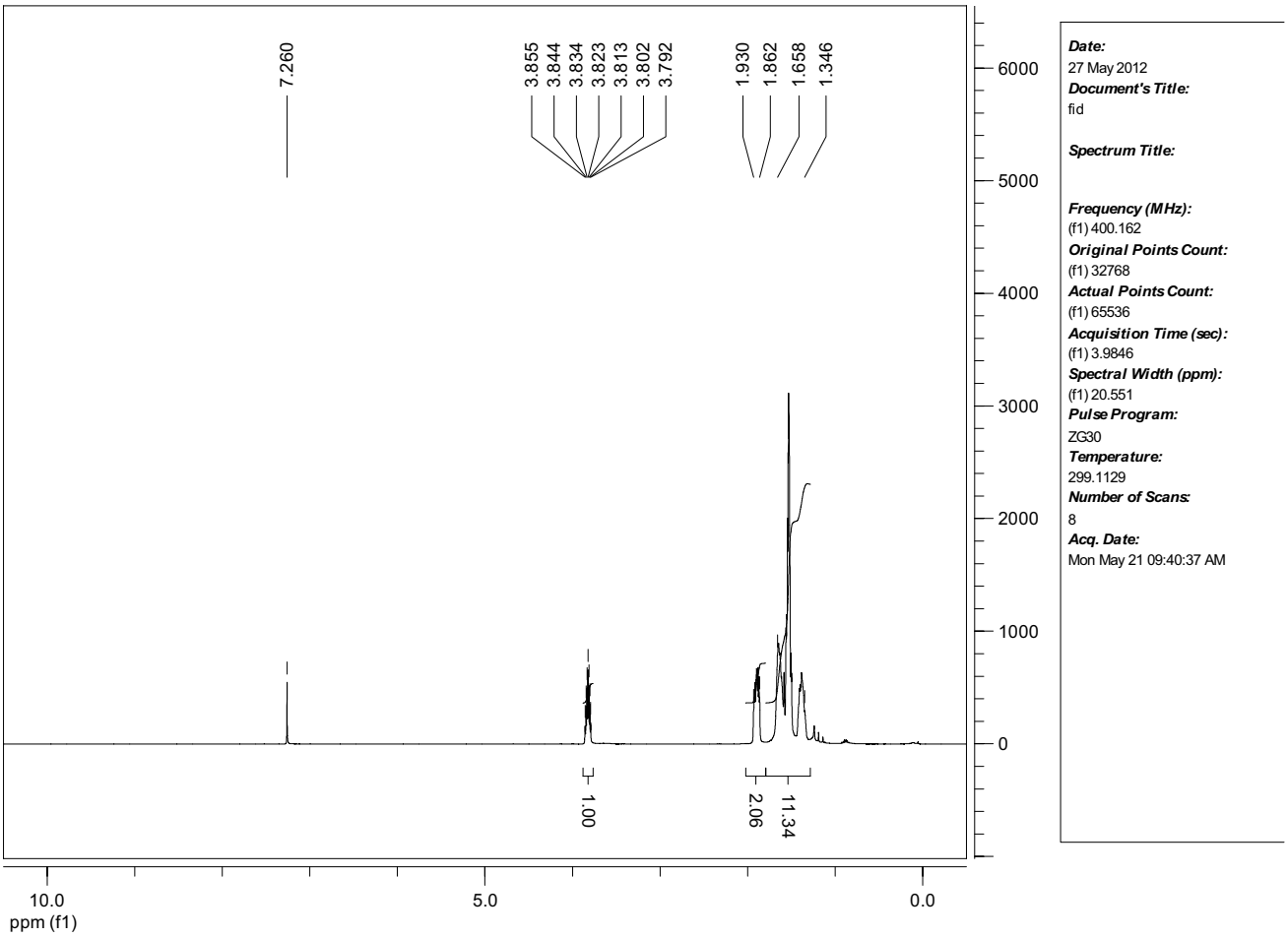
Cycloheptanol



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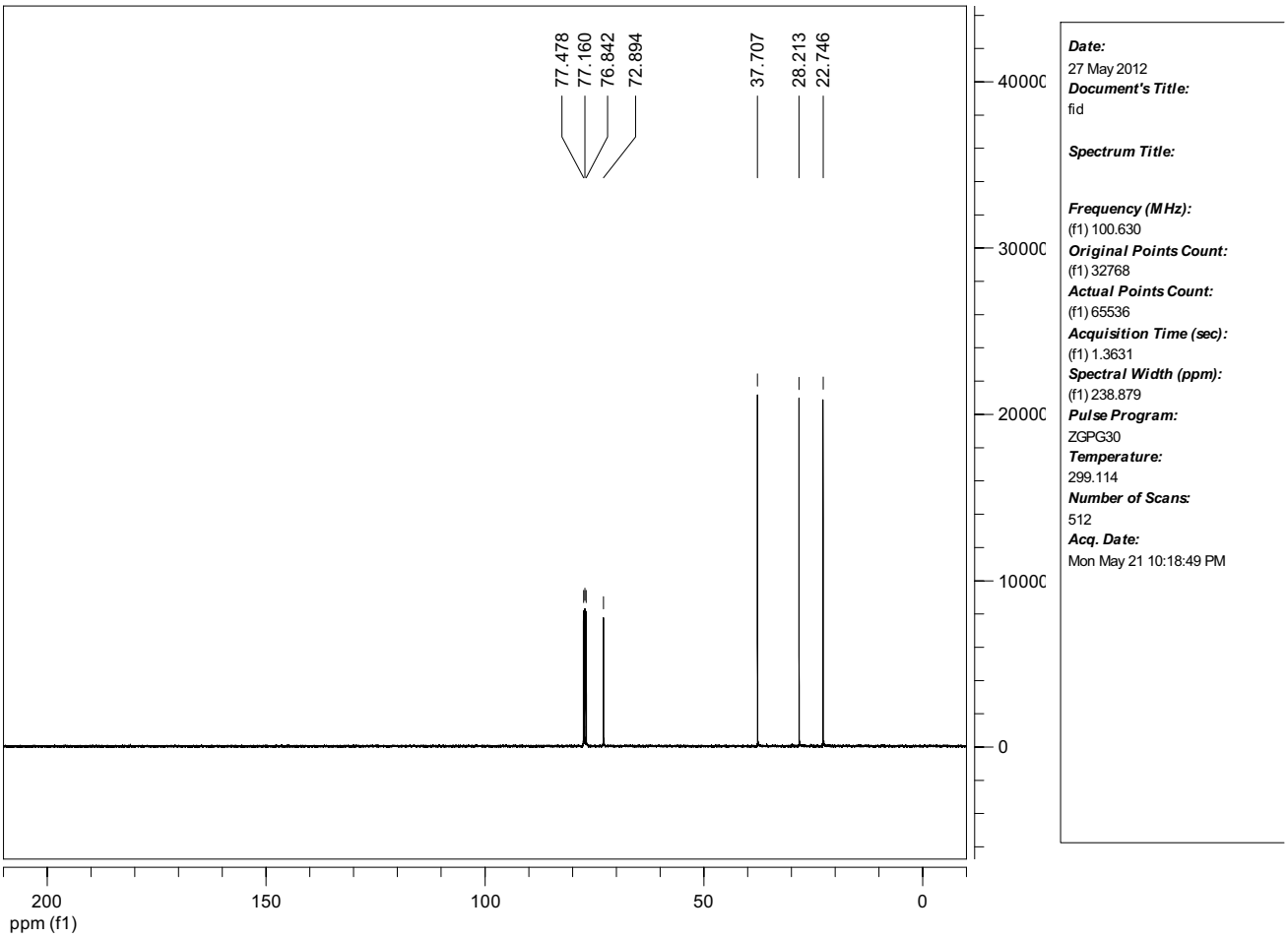

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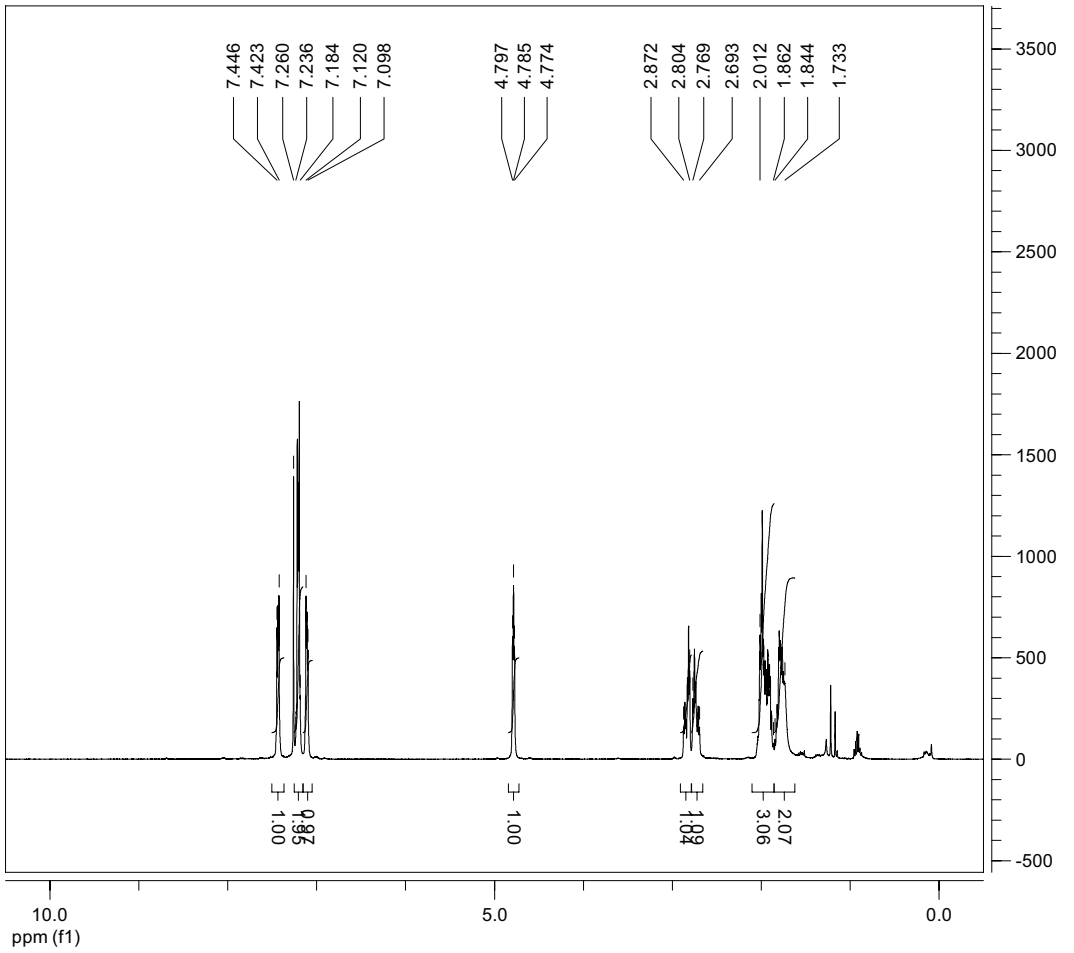
Alpha-tetralol



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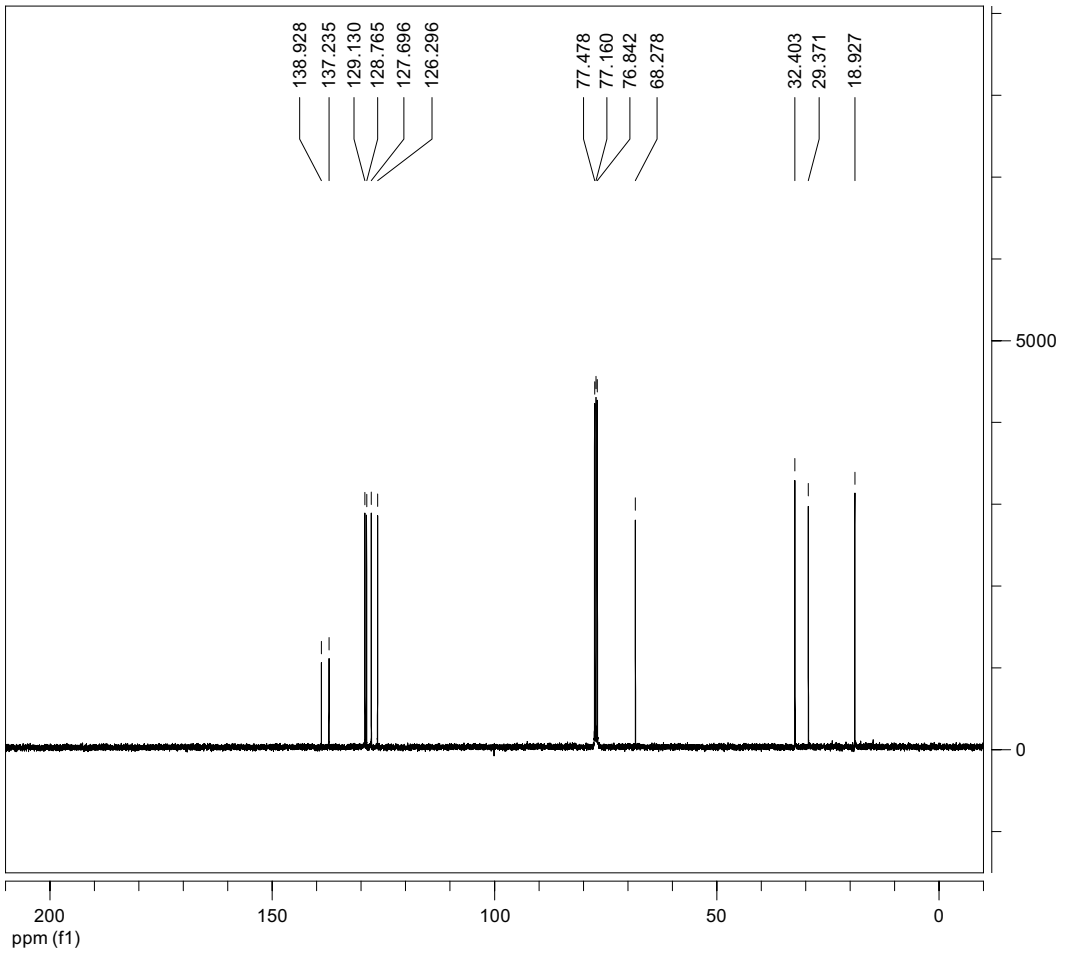

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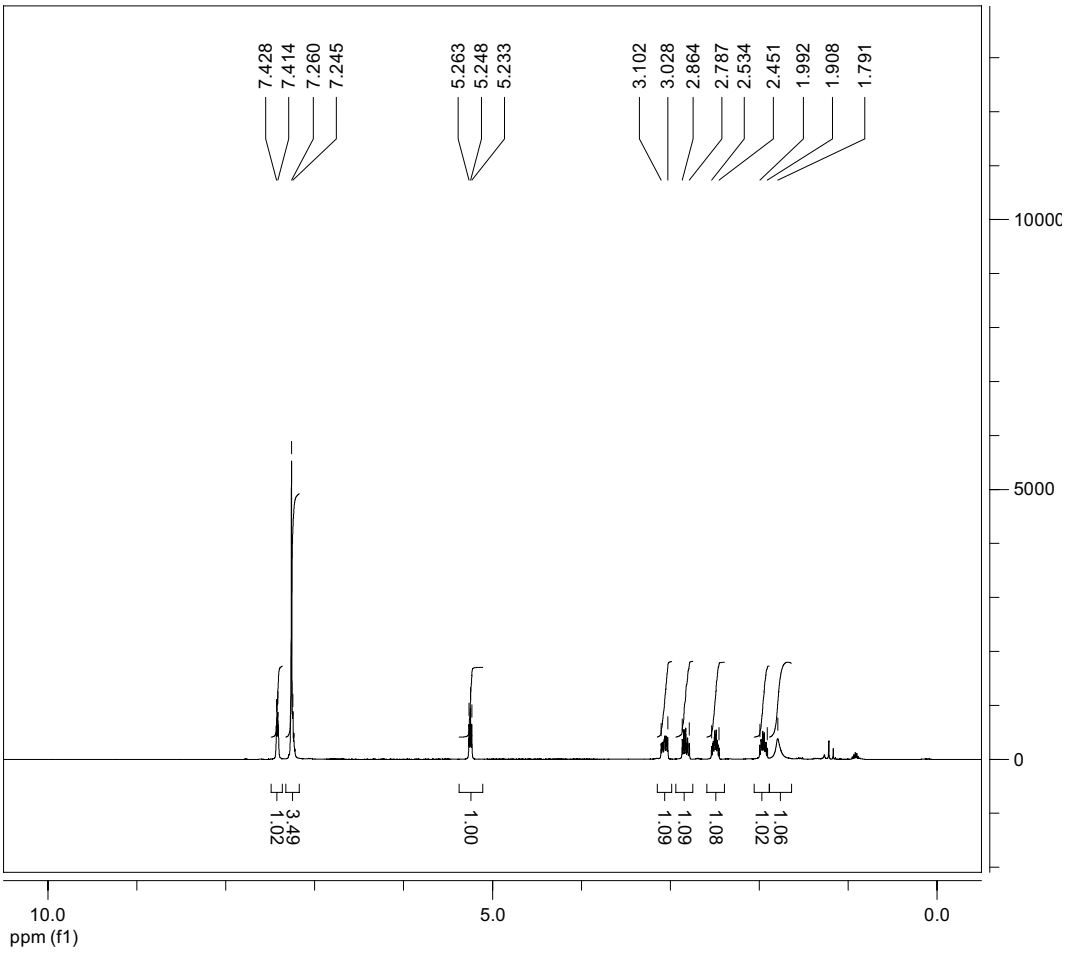
1-Indanol



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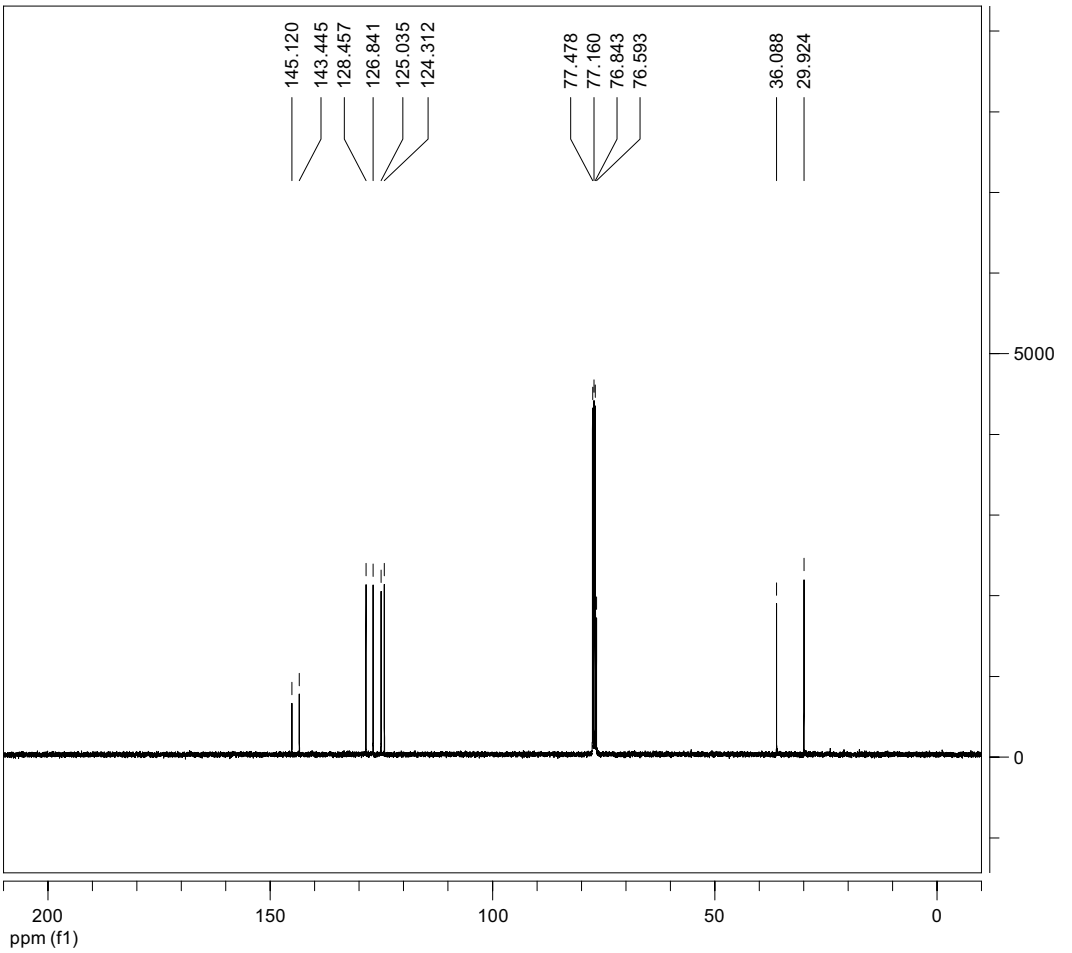

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Actual Points Count:
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Acq. Date:
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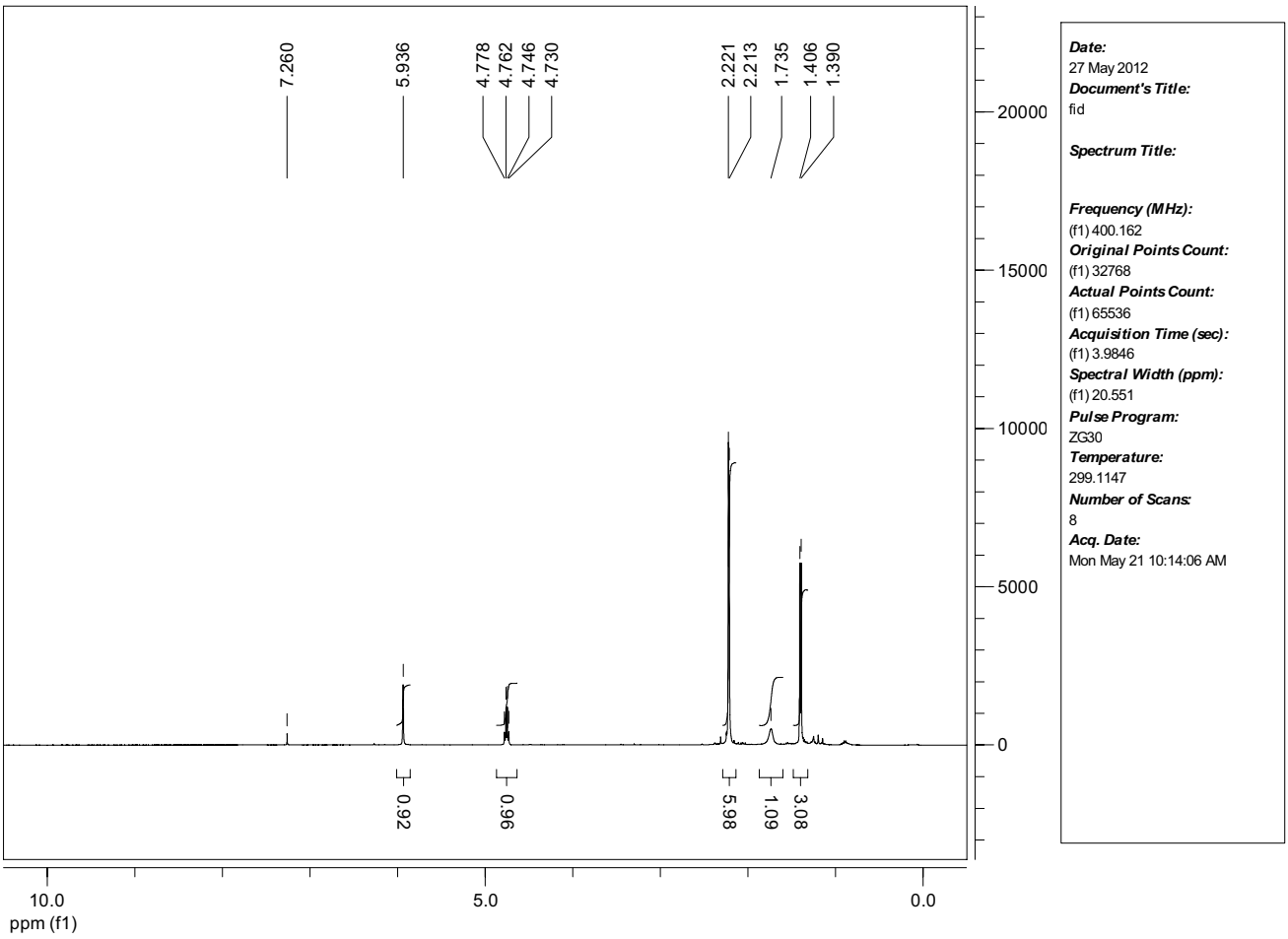
1-(2,5-Dimethylfuran-3-yl)ethanol



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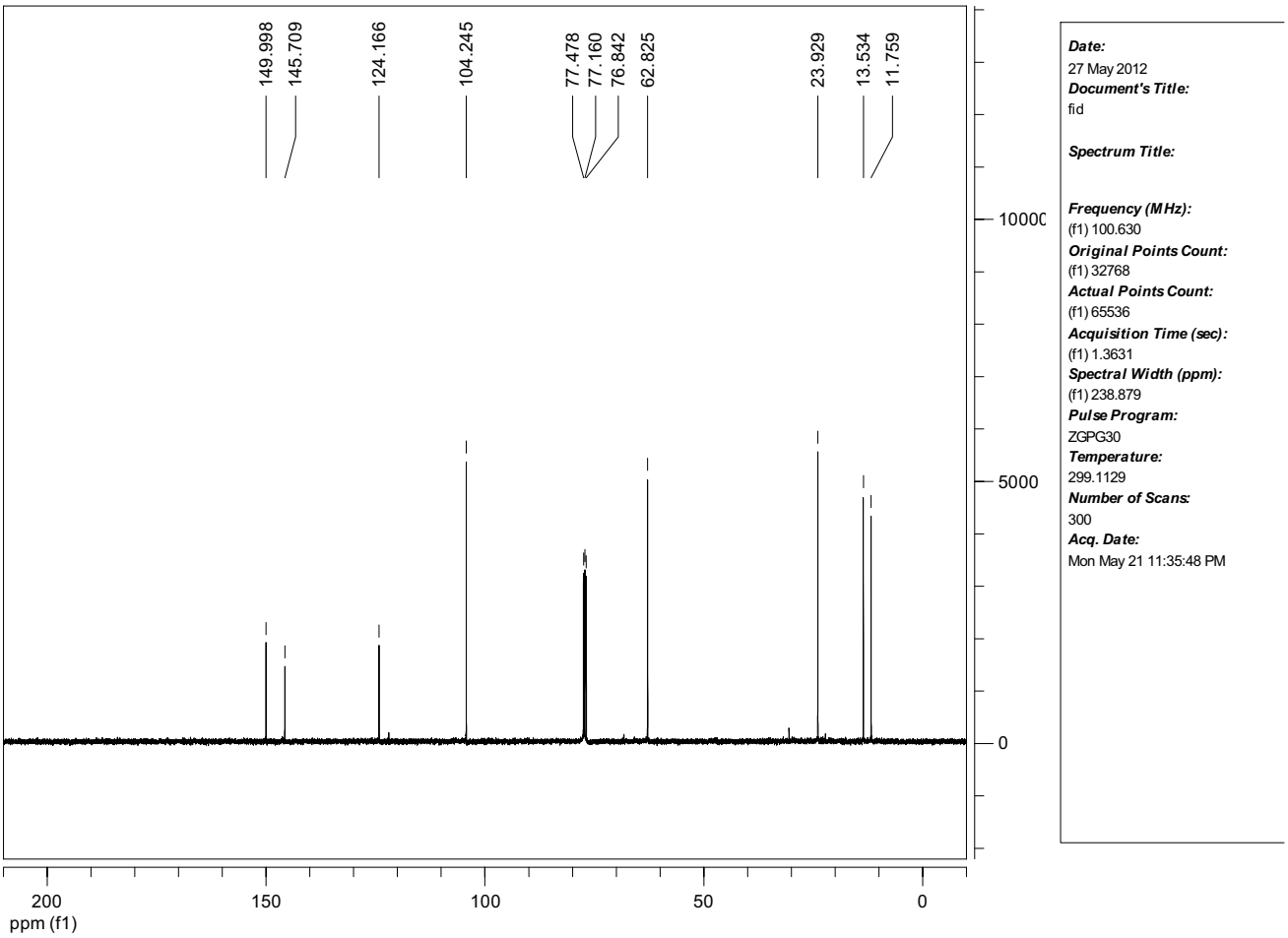

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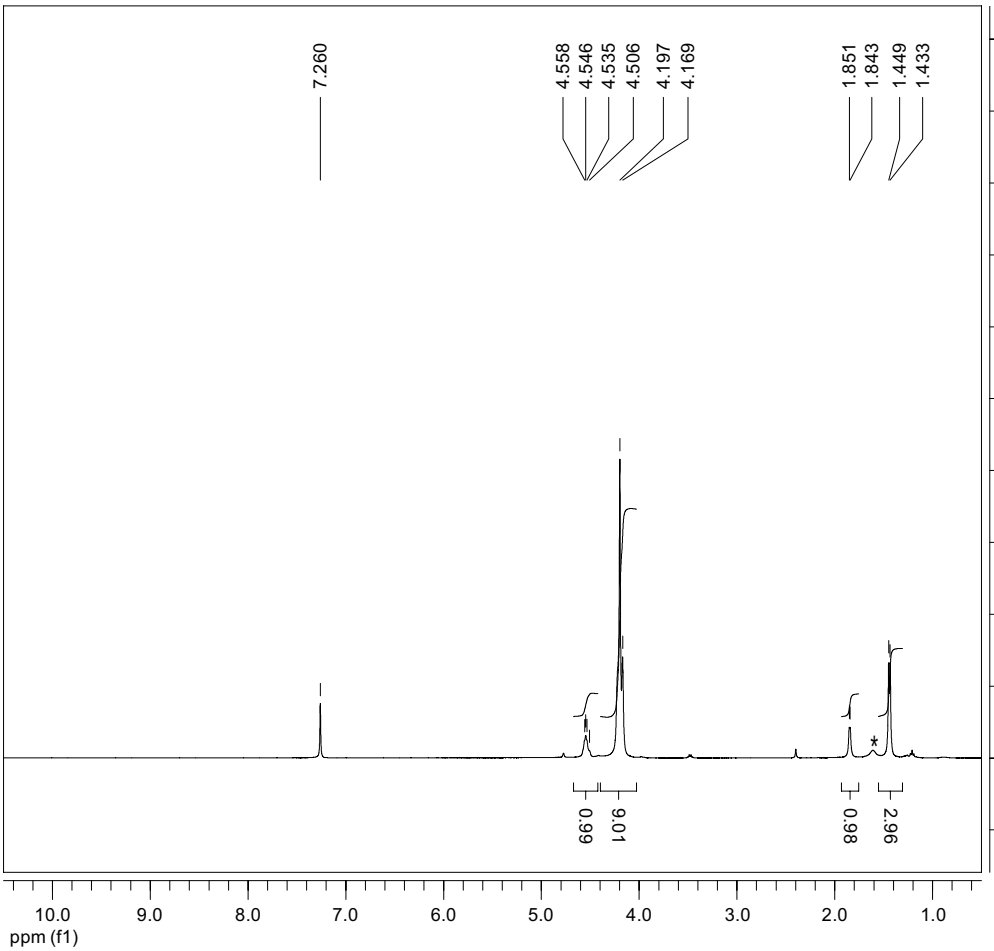
Ferroceneethanol



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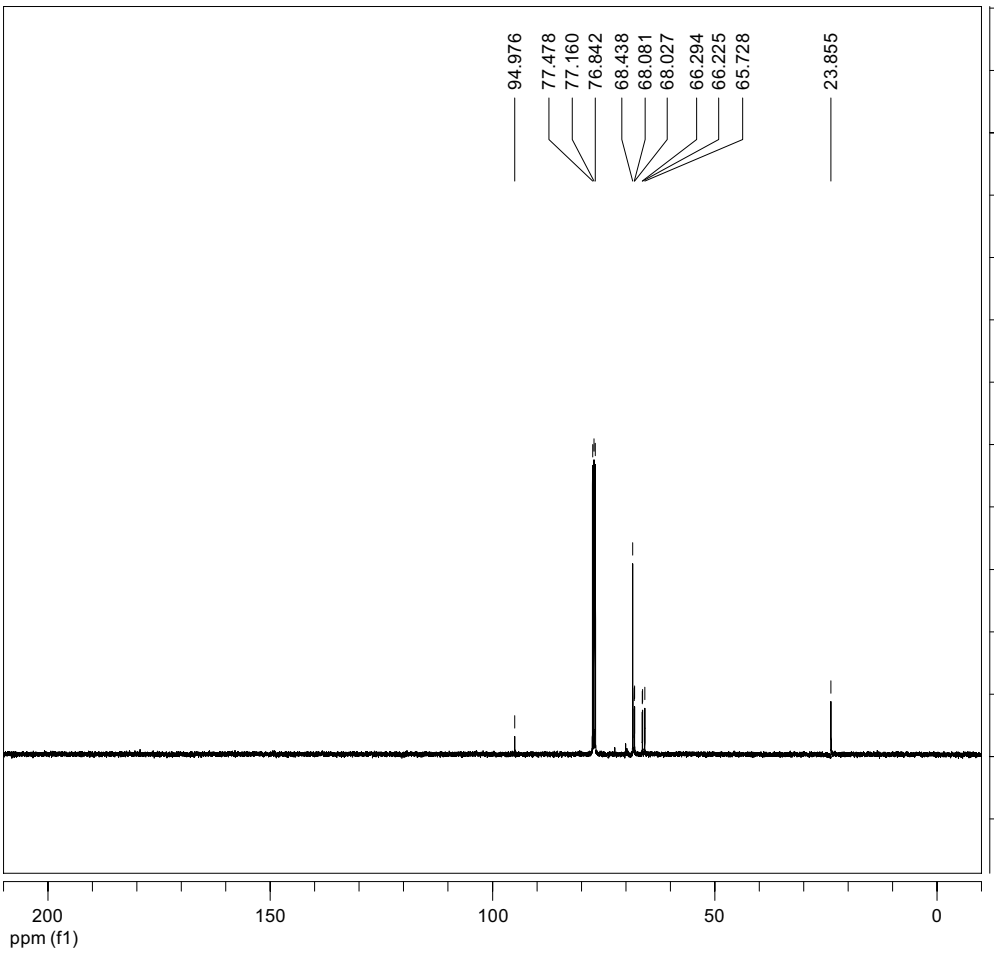

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