Supporting information

CeO_2 as a versatile and reusable catalyst for transesterification of esters with alcohols under solvent-free conditions

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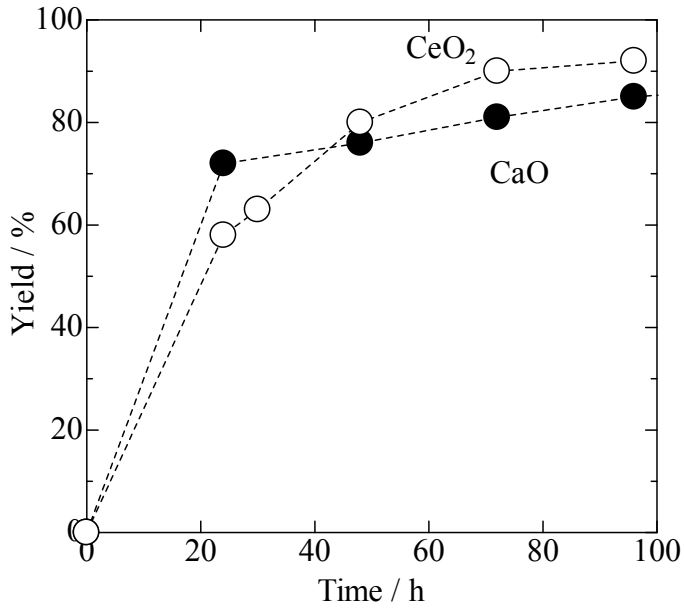


Figure S1. Yield of *n*-octyl benzoate *vs* time in the gram scale transesterification of methyl benzoate (12.5 mmol), *n*-octyl alcohol (15.4 mmol) by CaO or CeO_2 (50 mg) at 160 ^oC under open system.

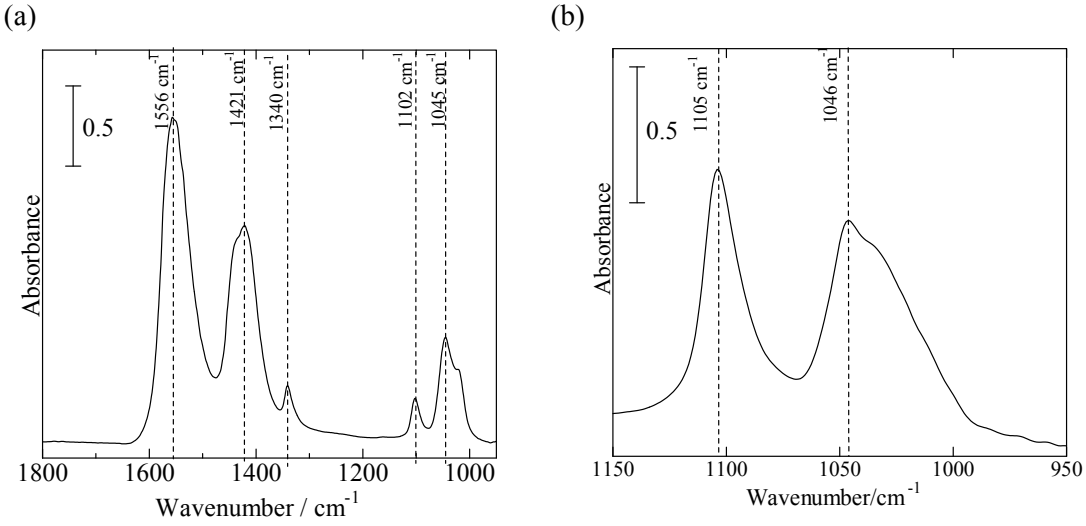


Figure S2. *In-situ* IR spectra of adsorption complexes formed by introduction of 1 μL of (a) methyl acetate or (b) methanol to CeO_2, followed by purging with He flow for 600 s at 30 ^{o}C.

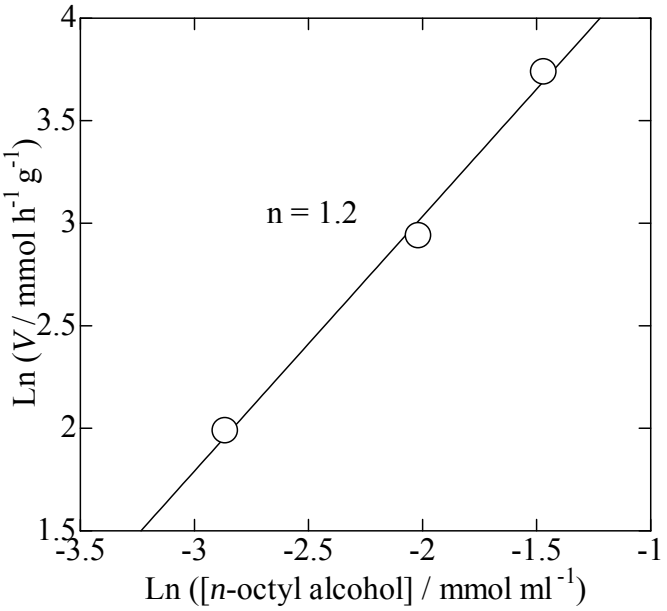


Figure S3. Effect of the *n*-octyl alcohol concentration on the reaction rate (*V*). Reaction conditions: methyl benzoate (1.0 mmol), *n*-octyl alcohol (0.25 - 2 mmol), metal oxide (50 mg), *o*-xylene (0.5 g), reflux.

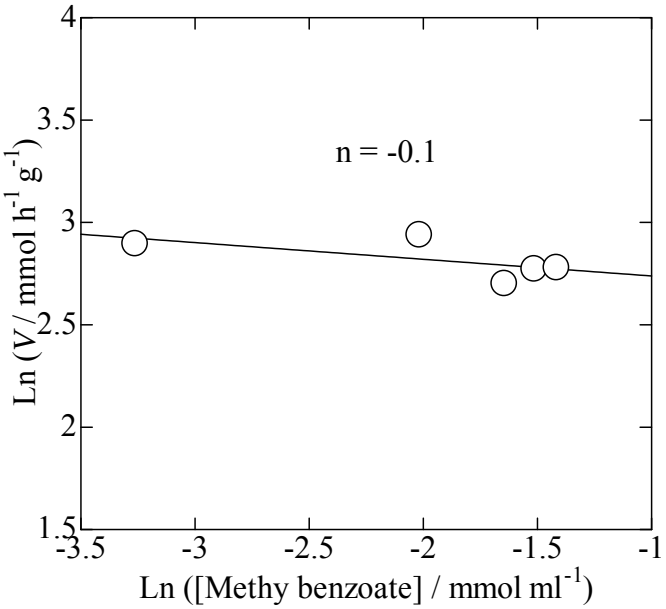
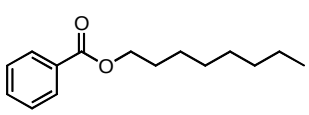


Figure S4. Effect of the concentration of methyl benzoate on the reaction rate (*V*). Reaction conditions: methyl benzoate (0.25 - 2 mmol), *n*-octyl alcohol (1 mmol), metal oxide (50 mg), *o*-xylene (0.5 g), reflux.

NMR and GC/MS analysis

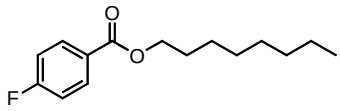
^{1}H and ^{13}C NMR spectra for trans-esters of Table-3 and Table-4 were assigned and reproduced to the corresponding literature. ^{1}H and ^{13}C NMR spectra were recorded using at ambient temperature on JEOL-ECX 600 operating at 600.17 and 150.92 MHz, respectively with tetramethylsilane as an internal standard. All chemical shifts (δ) are reported in ppm and coupling constants (*J*) in Hz. All chemical shifts are reported relative to tetramethylsilane and *d*-solvent peaks (77.00 ppm, chloroform), respectively. Abbreviations used in the NMR experiments: s, singlet d, doublet; t, triplet; q, quartet; m, multiplet. GC-MS spectra was taken by SHIMADZU QP2010.

Data for Table-3



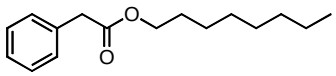
Octyl benzoate (Product of T-3-Entry-1)[1]: ^{1}H NMR ($CDCl_3$) δ 8.04 (d, *J* = 8.28 Hz, 2H), 7.54 (t, *J* = 8.28 Hz, 1H), 7.43 (t, *J* = 7.5 Hz, 2H), 4.31 (t, *J* = 6.84 Hz, 2H), 1.76 (m, 2H), 1.44 (m, 2H), 1.36-1.25 (m, 8H), 0.88 (t, *J* = 7.20 Hz, 3H); ^{13}C NMR ($CDCl_3$) δ 166.64, 132.74, 130.47, 129.48(C×2), 128.26(C×2), 65.09, 29.22(C×2), 29.16, 28.67, 26.01, 22.61, 14.06; GC-MS m/e 234.200.

Octyl 4-fluorobenzoate (Product of T-3-Entry-2)[2]: ^{1}H NMR ($CDCl_3$) δ 8.06 (m, 2H), 7.11 (t



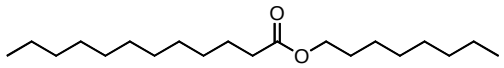
like, 2H), 4.30 (t, *J* = 6.9 Hz, 2H), 1.76 (m, 2H), 1.42 (m, 2H), 1.39-1.22 (m, 8H), 0.89 (t, *J* = 7.20 Hz, 3H); ^{13}C NMR ($CDCl_3$) δ 165.70, 165.64 (d, *J* = 254.31Hz, 4-F-C), 132.01(d, *J* = 8.66 Hz, meta to 4-F, C×2), 126.70, 115.40 (d, *J* = 21.67 Hz, ortho to 4-F, C×2), 65.26, 31.75, 29.21, 29.16, 28.66, 25.99, 22.61, 14.06; GC-MS *m/e* 252.200.

Octyl 2-phenylacetate (Product of T-3-Entry-3)[3]: ^{1}H NMR ($CDCl_3$) δ 7.13-7.28 (m, 5H), 4.07



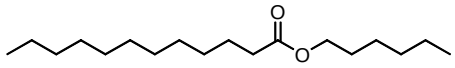
(t, *J* = 6.48 Hz, 2H), 3.61 (s, 2H), 1.63 (m, 2H), 1.42-1.22 (m, 10H), 0.88 (t, *J* = 6.9 Hz, 3H); ^{13}C NMR ($CDCl_3$) δ 171.66, 134.15, 129.20(C×2), 128.48(C×2), 126.97, 64.99, 41.44, 31.72, 29.11(C×2), 28.50, 25.78, 22.60, 14.06; GC-MS *m/e* 248.200.

Octyl dodecanoate (Product of T-3-entry-4)[4]: ^{1}H NMR ($CDCl_3$) δ 4.06 (t, *J* = 6.9 Hz, 2H),



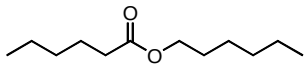
2.29 (m, 2H), 1.71-1.53 (m, 4H), 1.41-1.23 (m, 26H), 0.89-0.88 (m, 6H); ^{13}C NMR ($CDCl_3$) δ 174.02, 64.38, 31.89, 29.58(C×4), 29.45(C×3), 29.31, 29.26, 29.19, 29.17, 29.14, 25.91, 22.62(C×2), 14.07 (C×2); GC-MS *m/e* 298.350.

Hexyl dodecanoate (Product of T-3-Entry-5)[5]: ^{1}H NMR ($CDCl_3$) δ 4.05 (t, *J* = 6.84 Hz, 2H),



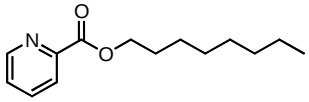
2.29 (m, 2H), 1.57 (m, 4H), 1.31-1.19 (m, 22 H), 0.89-0.87 (m, 6H); ^{13}C NMR ($CDCl_3$) δ 174.03, 64.38, 34.39, 31.89(C×2), 31.76, 31.42, 29.58(C×2), 29.45, 29.32, 29.26, 29.20, 29.14, 28.62, 28.59, 14.10, 13.98; GC-MS *m/e* 284.350.

Hexyl hexanoate (Product of T-3-Entry-6)[6]: ^{1}H NMR ($CDCl_3$) δ 4.05 (t, *J* = 6.84 Hz, 2H),



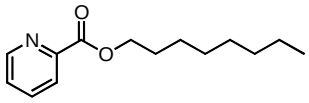
2.29 (m, 2H), 1.55-1.51 (m, 4H), 1.38-1.29 (m, 10H), 0.89-0.88 (m, 6H); ^{13}C NMR ($CDCl_3$) δ 173.96, 64.33, 34.31, 31.38, 31.28, 28.56, 25.55, 24.66, 22.50, 22.28, 13.94, 13.86; GC-MS *m/e* 186.200.

Octyl picolinate (Product of T-3-Entry-7)[7]: ^{1}H NMR ($CDCl_3$) δ 8.77 (d, *J* = 4.8 Hz, 1H), 8.13

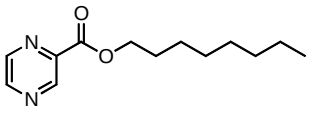


(d, *J* = 7.56 Hz, 1H), 7.85 (t like, 1H), 7.48 (t like, 1H), 4.41 (t, *J* = 6.9 Hz, 2H), 1.83 (m, 2H), 1.43 (m, 2H), 1.38-1.22 (m, 8H), 0.87 (t, *J* = 6.9 Hz, 3H); ^{13}C NMR ($CDCl_3$) δ 165.24, 149.85, 148.24, 136.91, 126.74, 125.04, 66.09, 31.73, 29.19, 29.11, 28.61, 25.85, 22.58, 14.04; GC-MS *m/e* 235.150.

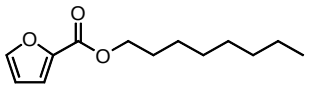
Octyl picolinate (Product of T-3-Entry-8)[7]: ^{1}H NMR ($CDCl_3$) δ 8.77 (d, *J* = 4.8 Hz, 1H), 8.13 (d, *J* = 7.56 Hz, 1H), 7.85 (t like, 1H), 7.48 (t like, 1H), 4.41 (t, *J* = 6.9 Hz, 2H), 1.82 (m, 2H), 1.43 (m, 2H), 1.36-1.22 (m, 8H), 0.87 (t, *J* = 6.9 Hz, 3H); ^{13}C NMR ($CDCl_3$) δ 165.24, 149.85, 148.24, 136.91, 126.74, 125.04, 66.09, 31.73, 29.19, 29.11, 28.61, 25.85, 22.58, 14.04; GC-MS *m/e* 235.150.



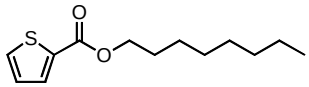
Octyl pyrazine-2-carboxylate (Product of T-3-Entry-9)[8]: ^{1}H NMR ($CDCl_3$) δ 9.31 (s, 1H), 8.77 (d like, 1H), 8.75 (d like, 1H), 4.45 (t, *J* = 6.9 Hz, 2H), 1.83 (m, 2H), 1.44 (m, 2H), 1.36-1.22 (m, 8H), 0.88 (t, *J* = 6.9 Hz, 3H); ^{13}C NMR ($CDCl_3$) δ 163.94, 147.53, 146.22, 144.42, 143.58, 66.50, 31.71, 29.14, 29.10, 28.54, 25.82, 25.58, 14.04; GC-MS *m/e* 236.150.



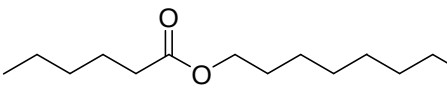
Octyl furan-2-carboxylate (Product of T-3-Entry-10)[9]: ^{1}H NMR ($CDCl_3$) δ 7.57 (s, 1H), 7.17 (d, *J* = 3.42 Hz, 1H), 6.50 (m, 1H), 4.30 (t, *J* = 6.78 Hz, 2H), 1.73 (m, 2H), 1.40 (m, 2H), 1.38-1.22 (m, 8H), 0.88 (t, *J* = 7.2 Hz, 3H) ; ^{13}C NMR ($CDCl_3$) δ 158.84, 146.12, 144.84, 117.64, 111.73, 65.08, 31.73, 29.16, 29.12, 28.63, 25.85, 22.59, 14.04; GC-MS *m/e* 224.140.



Thiophene-2-carboxylic acid octyl ester (Product of T-3-Entry-11)[10]: ^{1}H NMR ($CDCl_3$) δ 7.80 (d, *J* = 4.14 Hz, 1H), 7.54 (d, *J* = 4.80 Hz, 1H), 7.09 (t, *J* = 4.3 Hz, 1H), 4.28 (t, *J* = 6.54 Hz, 2H), 1.75-1.72 (m, 2H), 1.42-1.38 (m, 2H), 1.34-1.26 (m, 8H), 0.88 (t, *J*= 6.87 Hz, 3H); ^{13}C NMR ($CDCl_3$) δ 162.30, 134.06, 133.16, 132.10, 127.63, 65.26, 31.74, 29.17, 29.14, 28.63, 25.90, 22.60, 14.05; GC-MS *m/e* 240.100.



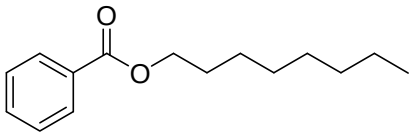
Hexanoic acid octyl ester (Product of T-3-Entry 12)[20]**:** ^{1}H NMR ($CDCl_3$) δ 4.05 (t, *J* = 6.51, Hz, 2H), 2.29 (t, *J* = 7.53 Hz, 2H), 1.63-1.60 (m, 4H), 1.31-1.28 (m, 14H), 0.89-0.87 (m, 6H); ^{13}C NMR ($CDCl_3$) δ 173.97, 64.36, 34.33, 31.74, 31.29, 29.18, 29.16, 28.61, 25.89, 24.68, 22.60, 22.29, 14.04, 13.88; GC-MS *m/e* 228.380.



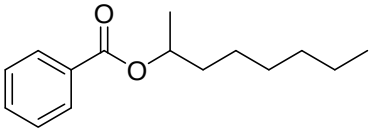
Hexanoic acid 1-methyl-heptyl ester (Product of T-3-Entry 13)[20]**:** ^{1}H NMR ($CDCl_3$) δ 4.89 (m, 1H), 2.26 (t, *J* = 7.56 Hz, 2H), 1.63-1.55 (m, 3H), 1.46 (m, 1H), 1.36-1.22 (m, 12 H), 1.19 (d, *J* = 6.84 Hz, 3H), 0.89-0.87 (m, 6H); ^{13}C NMR ($CDCl_3$) δ 173.54,

70.67, 35.93, 34.68, 31.72, 31.29, 29.07, 25.34, 24.76, 22.54, 22.30, 19.99, 14.02, 13.88; GC-MS *m/e* 228.360.

Octyl benzoate (Product of T-3-Entry-14)[1]: ^{1}H NMR ($CDCl_3$) δ ^{1}H NMR ($CDCl_3$) δ 8.04 (d, *J* = 8.28 Hz, 2H), 7.54 (t, *J* = 8.28 Hz, 1H), 7.43 (t, *J* = 7.5 Hz, 2H), 4.31 (t, *J* = 6.84 Hz, 2H), 1.76 (m, 2H), 1.44 (m, 2H), 1.36-1.25 (m, 8H), 0.88 (t, *J* = 7.20 Hz, 3H); ^{13}C NMR ($CDCl_3$) δ 166.64, 132.74, 130.47, 129.48(C×2), 128.26(C×2), 65.09, 29.22(C×2), 29.16, 28.67, 26.01, 22.61, 14.06; GC-MS *m/e* 234.200.

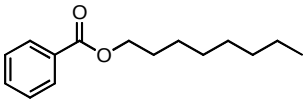


Benzoic acid 1-methyl-heptyl ester (Product of T-3-Entry-15) [3]: ^{1}H NMR ($CDCl_3$) δ 8.04 (d, *J* = 8.26 Hz, 2H), 7.53 (t, *J* = 7.54 Hz, 1H), 7.33 (t, *J* = 7.54 Hz, 2H), 5.14 (m, 1H), 1.73 (m, 1H), 1.60 (m, 1H). 1.45- 1.26 (m, 11H), 0.87 (t, J = 7.25 Hz, 3H); ^{13}C NMR ($CDCl_3$) δ 166.13, 132.59, 130.86, 129.43, 128.19, 71.64, 36.01, 31.68, 29.10, 25.35, 22.52, 20.01, 14.01; GC-MS *m/e* 234.200.

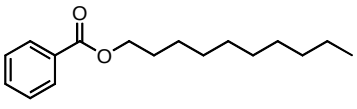


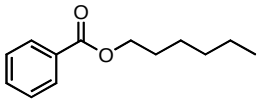
Data for Table-4

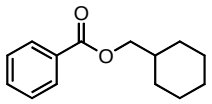
Octyl benzoate (Product of T-4-Entry-1)[1]: ^{1}H NMR ($CDCl_3$) δ 8.04 (d, *J* = 8.28 Hz, 2H), 7.54 (t, *J* = 8.28 Hz, 1H), 7.43 (t, *J* = 7.5 Hz, 2H), 4.31 (t, *J* = 6.84 Hz, 2H), 1.76 (m, 2H), 1.44 (m, 2H), 1.36-1.25 (m, 8H), 0.88 (t, *J* = 7.20 Hz, 3H); ^{13}C NMR ($CDCl_3$) δ 166.64, 132.74, 130.47, 129.48(C×2), 128.26(C×2), 65.09, 29.22(C×2), 29.16, 28.67, 26.01, 22.61, 14.06; GC-MS *m/e* 234.200.

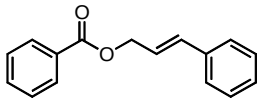


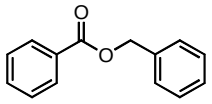
Benzoic acid decyl ester (Product of T-4-Entry-2)[11]: ^{1}H NMR ($CDCl_3$) δ 8.04 (d, *J* = 6.9 Hz, 2H), 7.55 (t, *J* = 7.56 Hz, 1H), 7.43 (t, *J* = 7.56 Hz, 2H), 4.31 (t, *J* = 6.48 Hz, 2H) 1.76 (m, 2H), 1.44 (m, 2H), 1.36-1.22 (m, 12H), 0.88 (t, *J* = 7.2 Hz, 3H); ^{13}C NMR ($CDCl_3$) δ 166.66, 132.75, 130.48, 129.48(C×2), 128.27(C×2), 65.11, 31.86, 29.50(C×2), 29.27, 29.26, 28.68, 26.01, 22.65, 14.09; GC-MS *m/e* 262.350.

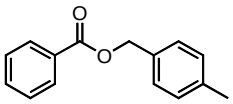


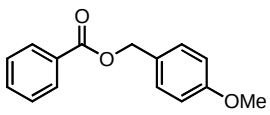
Hexyl benzoate (Product of T-4-Entry-3)[12]: ^{1}H NMR ($CDCl_3$) δ 8.05 (d, *J* = 8.28 Hz, 2H),  7.54 (t, *J* = 7.56 Hz, 1H), 7.43 (t, *J* = 7.56 Hz, 2H), 4.30 (t, *J* = 6.9 Hz, 2H), 1.76 (m, 2H), 1.44 (m, 2H), 1.38-1.32 (m, 4H), 0.90 (t, *J* = 6.54 Hz, 3H); ^{13}C NMR ($CDCl_3$) δ 166.64, 132.74, 130.47, 129.48(C×2), 128.26(C×2), 65.08, 31.43, 28.63, 25.67, 22.51, 13.98; GC-MS *m/e* 206.250.

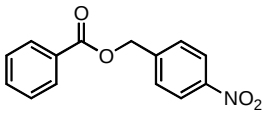
Cyclohexylmethyl benzoate (Product of T-4-Entry-5)[13]: ^{1}H NMR ($CDCl_3$) δ 8.05 (d, *J* = 8.22  Hz, 2H), 7.55 (t, *J* = 7.56 Hz, 1H), 7.43 (t, *J* = 7.56 Hz, 2H) 4.12 (t, *J* = 6.9 Hz, 2H), 1.84 (m, 2H), 1.81-1.75 (m, 3H), 1.69 (m, 1H), 1.28 (m, 2H), 1.20 (m, 1H), 1.07 (m, 2H), ; ^{13}C NMR ($CDCl_3$) δ 166.63, 132.75, 130.49, 129.48(C×2), 128.28(C×2), 70.02, 37.22, 29.71(C×2), 26.33, 25.67(C×2); GC-MS *m/e* 218.250.

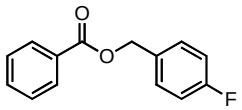
Cinnamyl benzoate (Product of T-4-Entry-6)[14]: ^{1}H NMR ($CDCl_3$) δ 8.09 (d, *J* = 7.86 Hz, 2H),  7.57-7.53 (m, 2H), 7.46-7.42 (m, 2H), 7.36-7.32 (m, 2H), 7.28-7.7.24 (m, 2H), 6.74 (d, *J* = 15.84 Hz, 1H), 6.41 (m, 1H), 4.99 (d, *J* = 6.18 Hz, 2H); ^{13}C NMR ($CDCl_3$) δ 166.38, 136.22, 134.22, 132.98, 129.62(C×2), 128.58(C×2), 128.47, 128.33(C×2), 128.06, 126.60(C×2), 123.19, 65.52; GC-MS *m/e* 238.250.

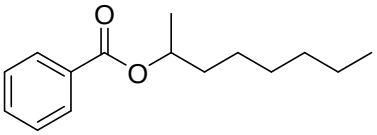
Benzyl benzoate (Product of T-4-Entry-7)[15]: ^{1}H NMR ($CDCl_3$) δ 8.08 (d, *J* = 4.56 Hz, 2H),  7.54 (t, *J* = 7.56 Hz, 1H), 7.45-7.41 (m, 4H), 7.39-7.32 (m, 3H) 5.36 (s, 2H); ^{13}C NMR ($CDCl_3$) δ 166.39, 135.99, 133.0, 130.06, 129.66(C×2), 128.56(C×2), 128.33(C×2), , 128.20, 128.12(C×2), 66.65; GC-MS *m/e* 212.200.

4-methylbenzyl benzoate (Product of T-4-Entry-8)[16]: ^{1}H NMR ($CDCl_3$) δ 8.06 (d, *J* = 8.28 Hz,  2H), 7.54 (t, *J* = 7.92 Hz, 1H), 7.42 (t, *J* = 7.92 Hz, 2H), 7.35 (d, *J* = 8.22 Hz, 2H), 7.19 (d, *J* = 8.22 Hz, 2H), 5.32 (s, 2H), 2.35 (s, 3H); ^{13}C NMR ($CDCl_3$) δ 166.45, 138.05, 132.98, 132.93, 130.15, 129.65(C×2), 129.23(C×2), 128.33(C×2), 128.30(C×2), 66.63, 21.19; GC-MS *m/e* 226.150.

4-methoxybenzyl benzoate (Product of T-4-Entry-9)[17]: ^{1}H NMR ($CDCl_3$) δ 8.05 (d, *J* = 7.56  Hz, 2H), 7.58 (t, *J* = 7.56 Hz, 1H), 7.42-7.38 (m, 4H), 6.90 (d, *J* = 8.22 Hz, 2H), 5.29 (s, 2H), 3.79 (s, 3H); ^{13}C NMR ($CDCl_3$) δ 166.46, 159.57, 132.89, 130.17, 130.02(C×2), 129.60(C×2), 128.27 (C×2), 128.08, 113.89 (C×2), 66.48, 55.22; GC-MS *m/e* 242.200.

4-nitro benzoate (Product of T-4-Entry-10)[18]: ^{1}H NMR ($CDCl_3$) δ 8.24 (d, *J* = 8.22 Hz, 2H),  8.09 (d, *J* = 7.56 Hz, 2H), 7.62-7.59 (m, 3H), 7.47 (t, *J* = 7.56 Hz, 2H), 5.46 (s, 2H); ^{13}C NMR ($CDCl_3$) δ 166.06, 147.84, 143.29, 133.42, 129.66(C×2), 128.50(C×2), 128.25(C×2), 126.90, 123.79(C×2), 65.11; GC-MS *m/e* 257.150.

Benzoic acid 4-fluoro-benzyl ester (Product of T-4-Entry-11)[19]: ^{1}H NMR ($CDCl_3$) δ 8.06 (d,  *J* = 7.56 Hz, 2H), 7.55 (t, *J* = 7.56Hz, 1H), 7.44-7.41 (m, 4H), 7.06 (t, *J* = 8.58 Hz, 2H), 5.32 (s, 2H); ^{13}C NMR ($CDCl_3$) δ 166.33, 162.61 (d, *J* = 247.49 Hz, 4-F-C), 133.07, 131.84(C×2), 130.19, 130.14, 129.93, 129.63(C×2), 128.36(C×2), 115.48(d, *J* = 21.67 Hz, ortho to 4-F), 65.94; GC-MS *m/e* 230.150.

Benzoic acid 1-methyl-heptyl ester (Product of T-4-Entry-12) [3]: ^{1}H NMR ($CDCl_3$) δ 8.04 (d, *J* =  8.26 Hz, 2H), 7.53 (t, *J* = 7.54 Hz, 1H), 7.33 (t, *J* = 7.54 Hz, 2H), 5.14 (m, 1H), 1.73 (m, 1H), 1.60 (m, 1H). 1.45- 1.26 (m, 11H), 0.87 (t, J = 7.25 Hz, 3H); ^{13}C NMR ($CDCl_3$) δ 166.13, 132.59, 130.86, 129.43, 128.19, 71.64, 36.01, 31.68, 29.10, 25.35, 22.52, 20.01, 14.01; GC-MS *m/e* 234.200.

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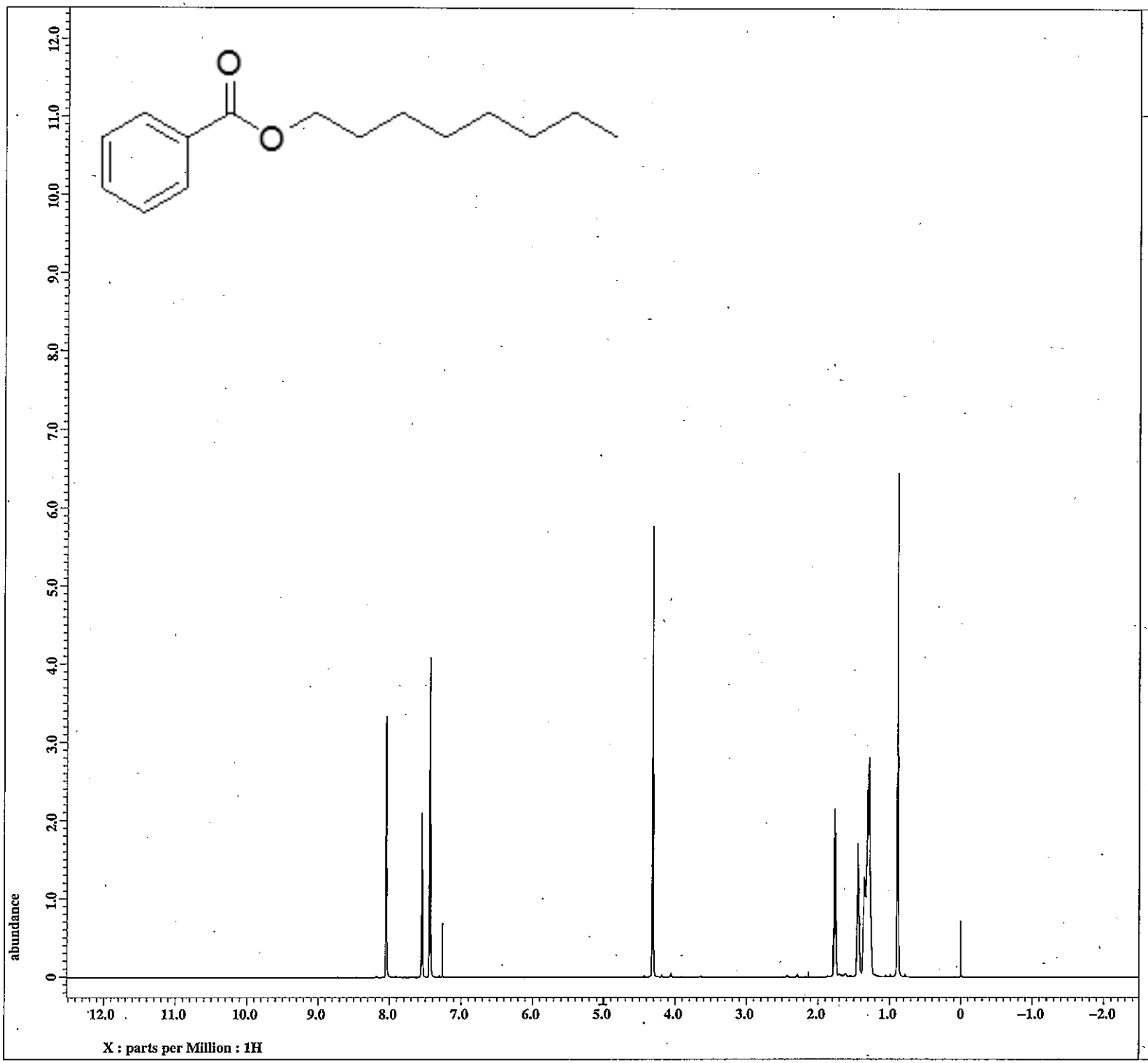

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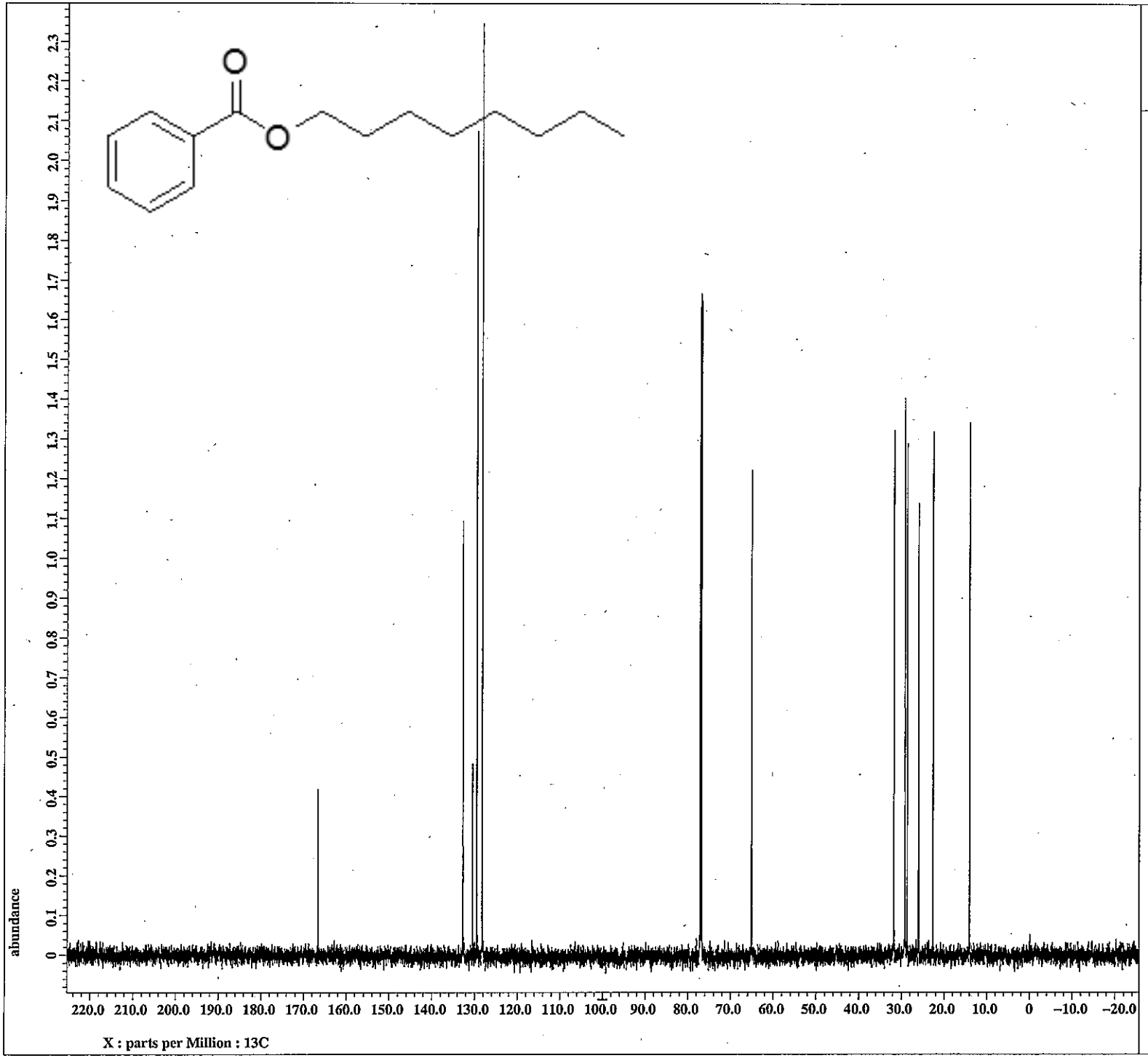

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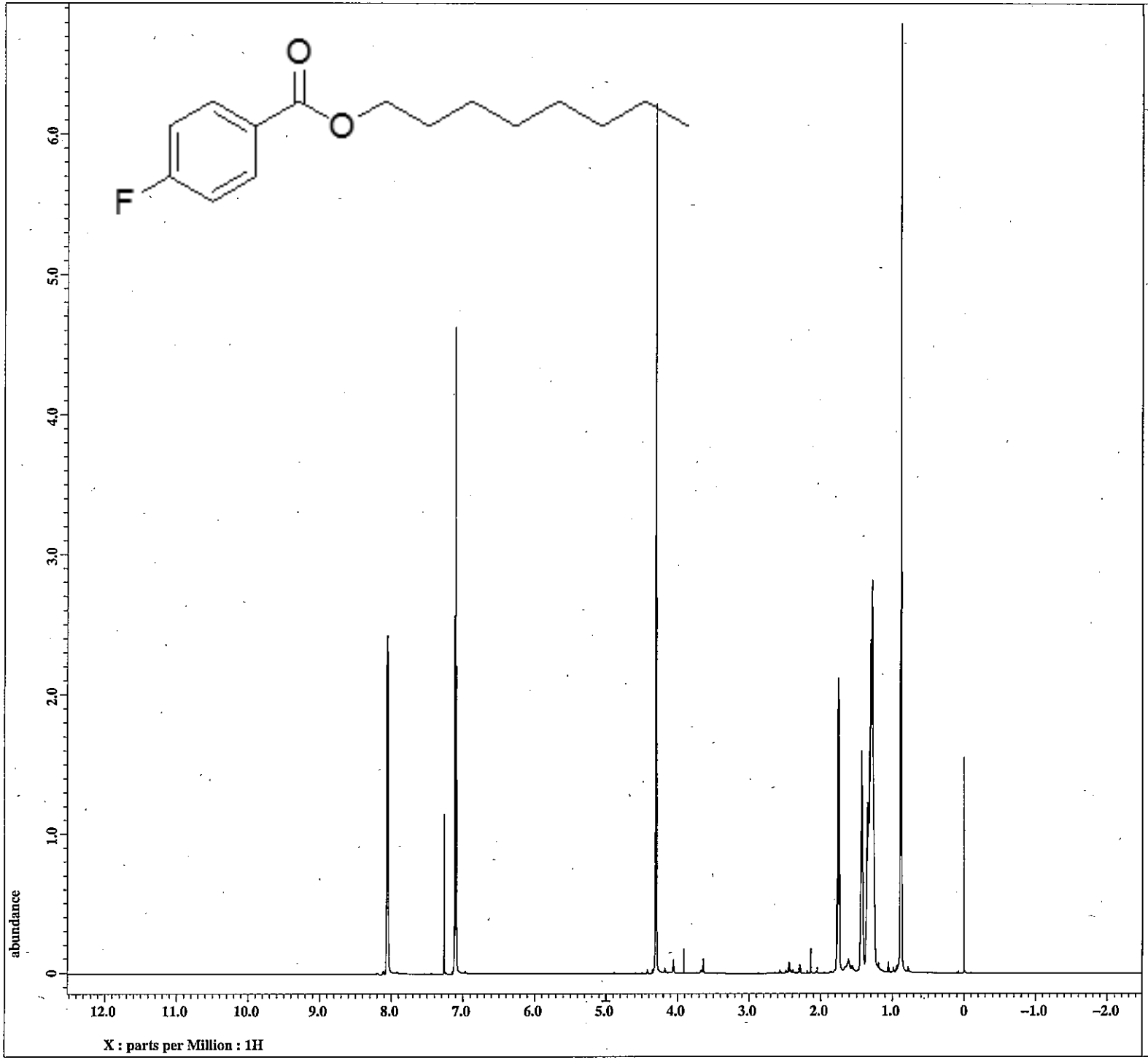

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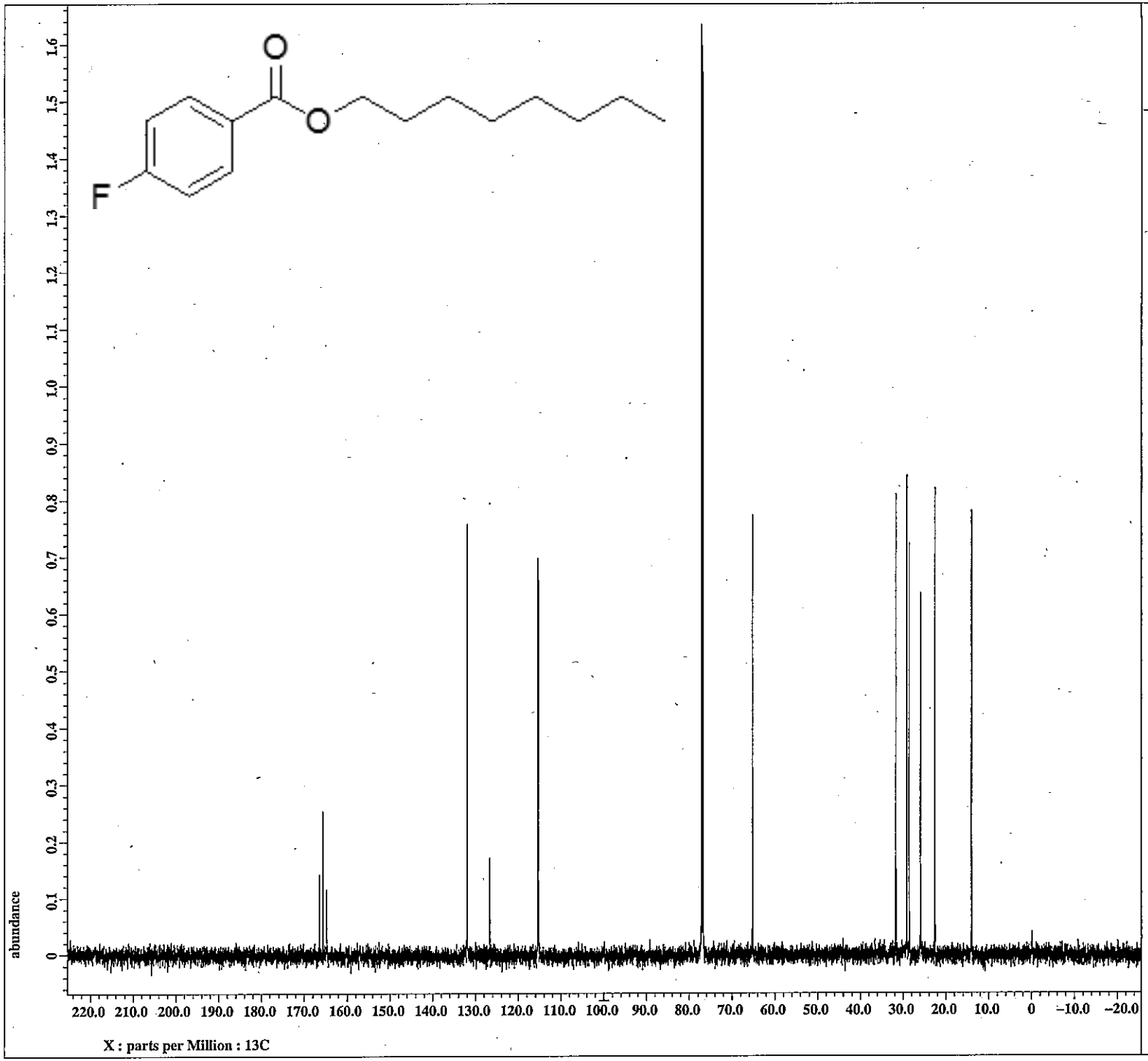

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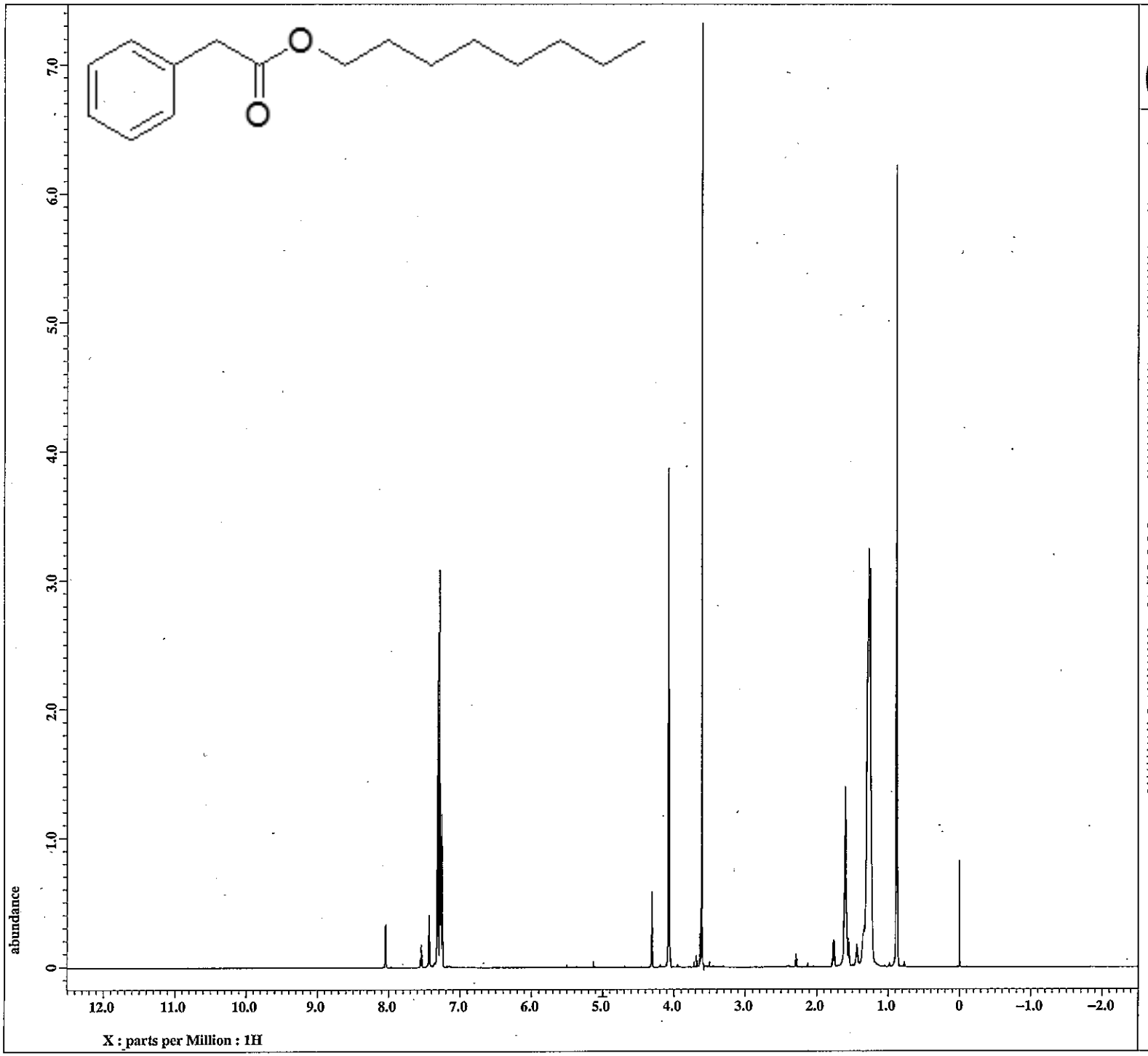

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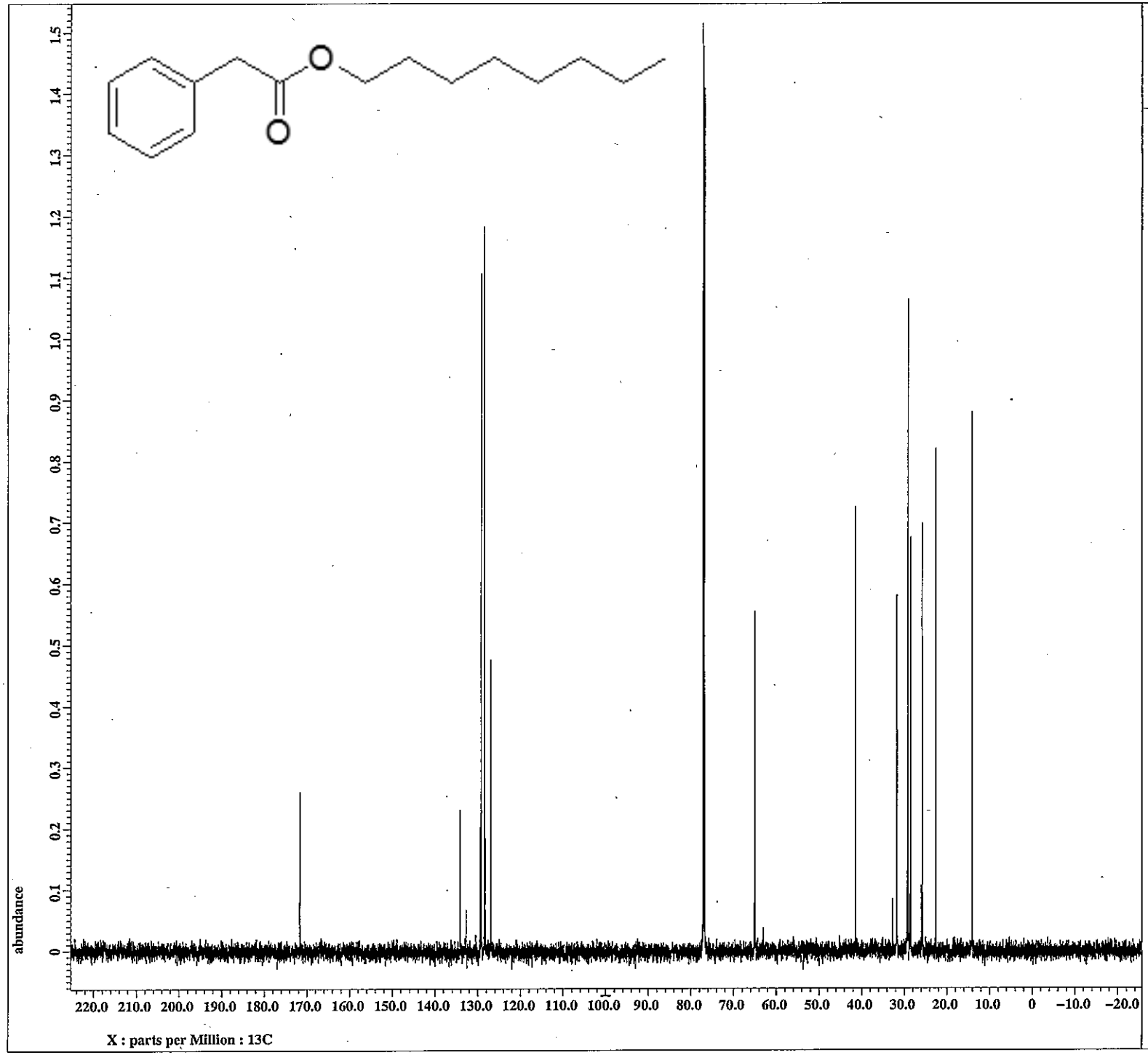

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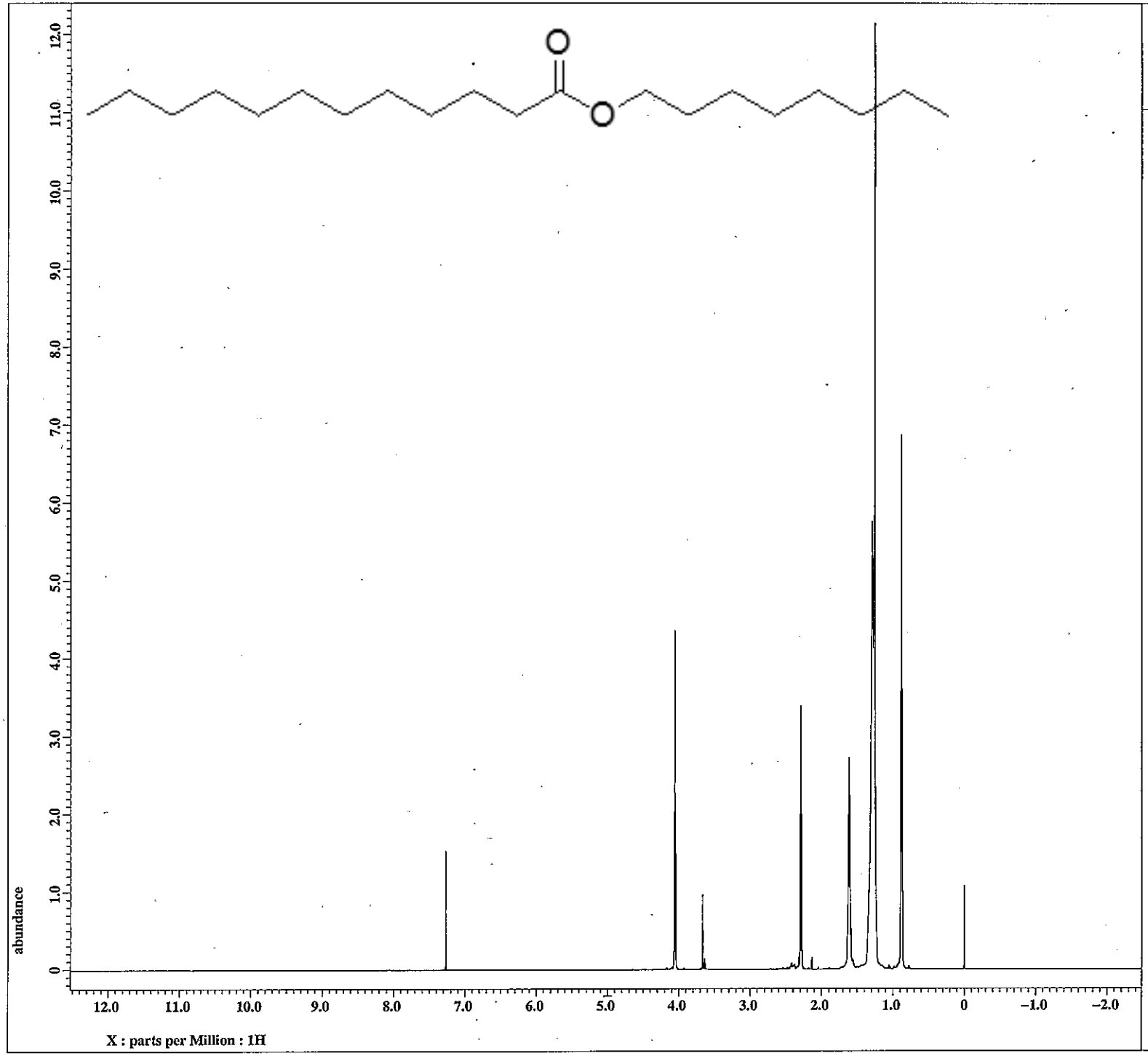
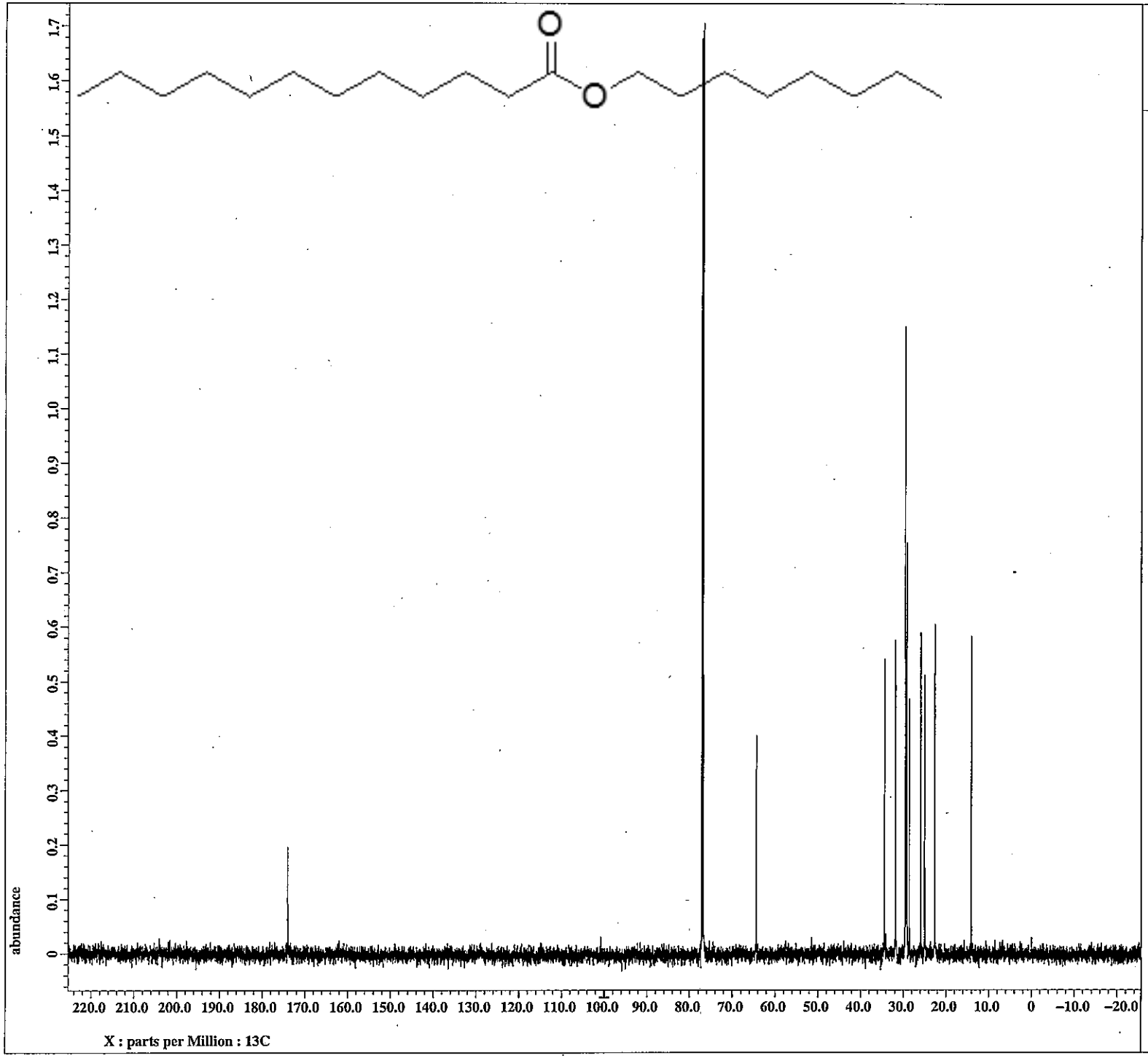


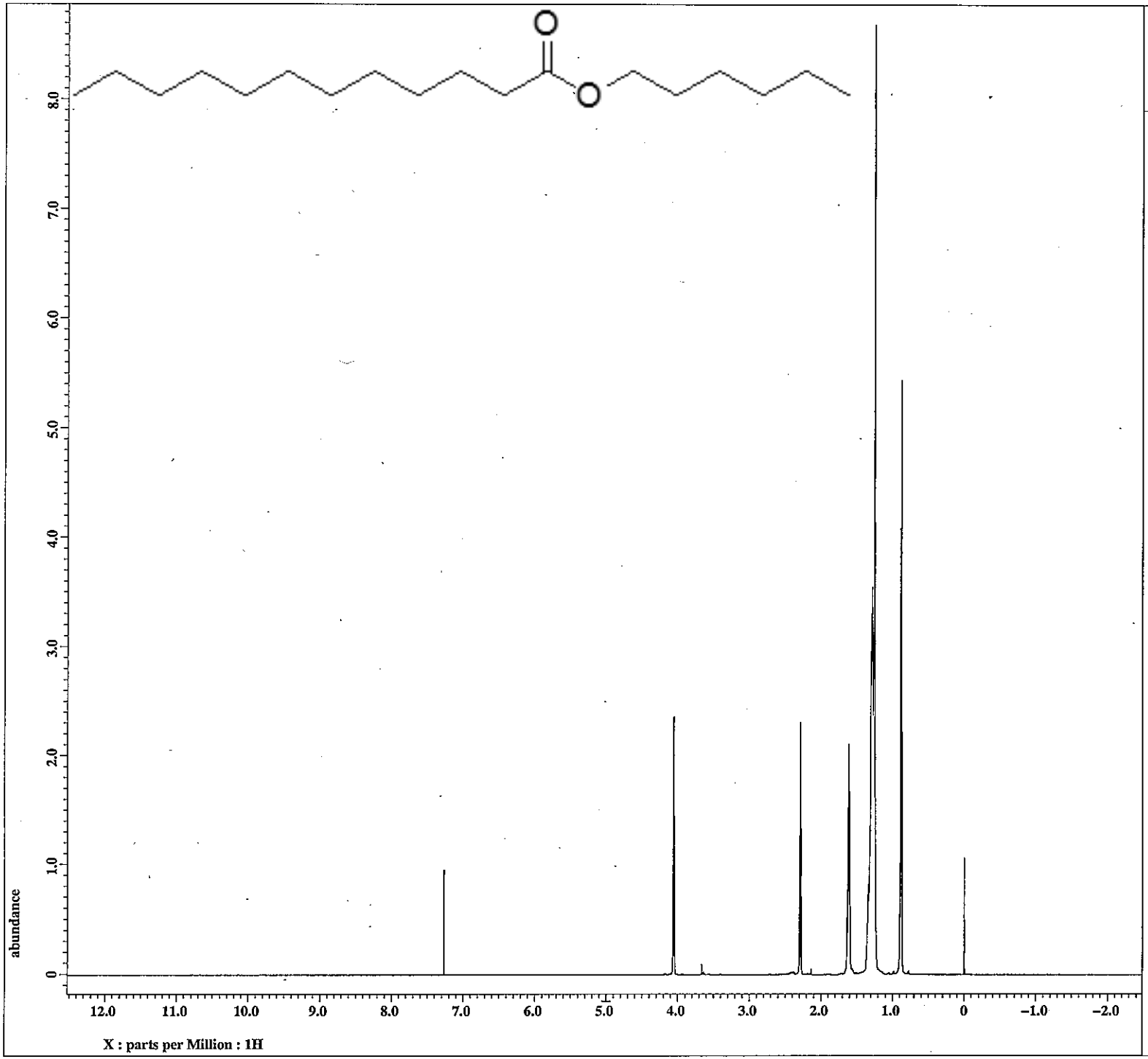
JEOL

Filename	= Exp-T-3-4-proton-3.jd
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= Exp-T-3-4-proton
Solvent	= CHLOROFORM-D
Creation_time	= 29-NOV-2012 20:29:09
Revision_time	= 5-DEC-2012 20:20:21
Current_time	= 5-DEC-2012 20:20:31
Content	= Exp-T-3-4-proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= TRUE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 42
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 18.8[dC]



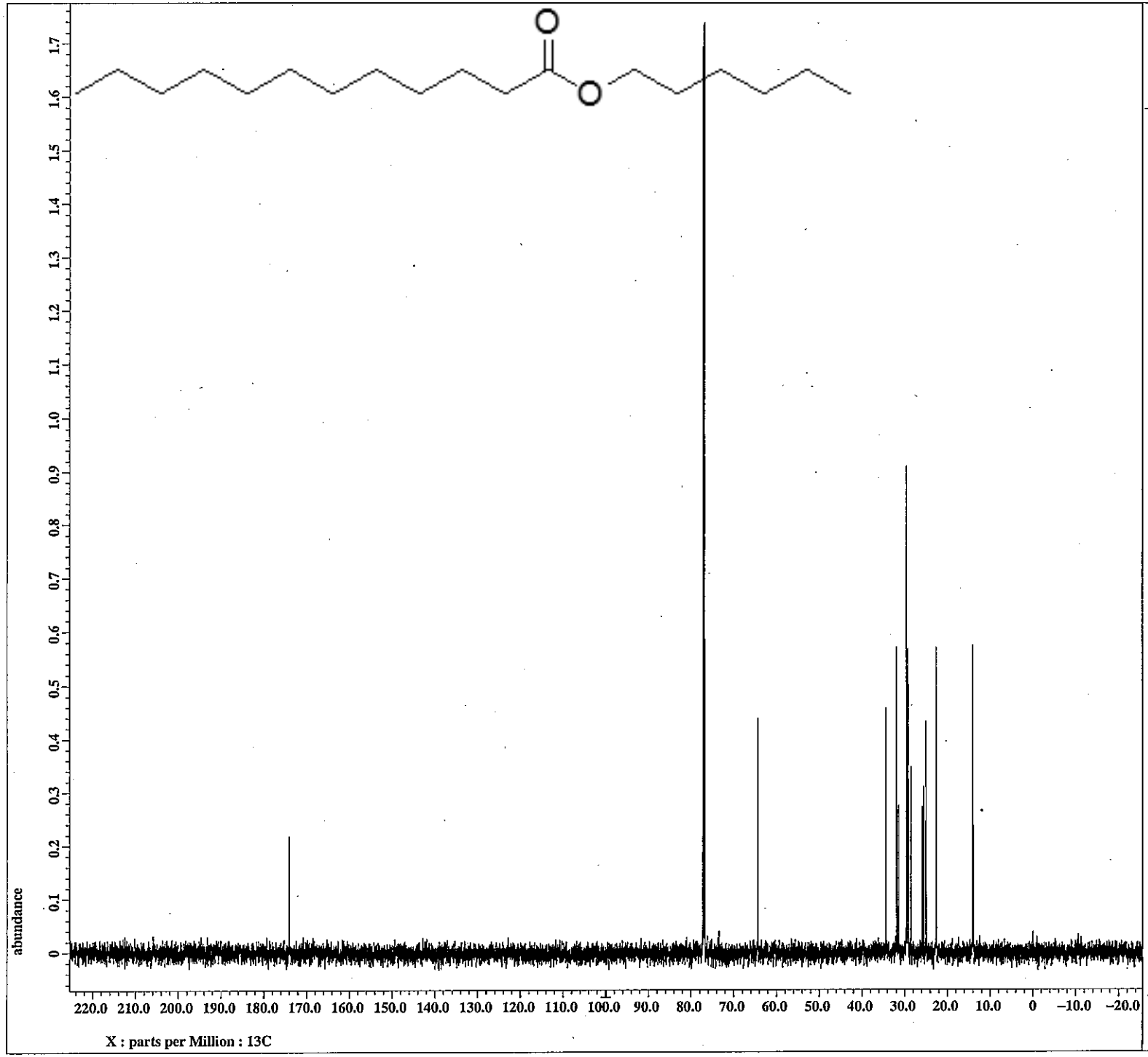
JEOL

Filename	= Exp-T-3-4-carbon-3.jd
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-T-3-4-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 29-NOV-2012 20:35:26
Revision_time	= 5-DEC-2012 20:21:05
Current_time	= 5-DEC-2012 20:21:12
Content	= Exp-T-3-4-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 124
Total_scans	= 124
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 20.1[dC]



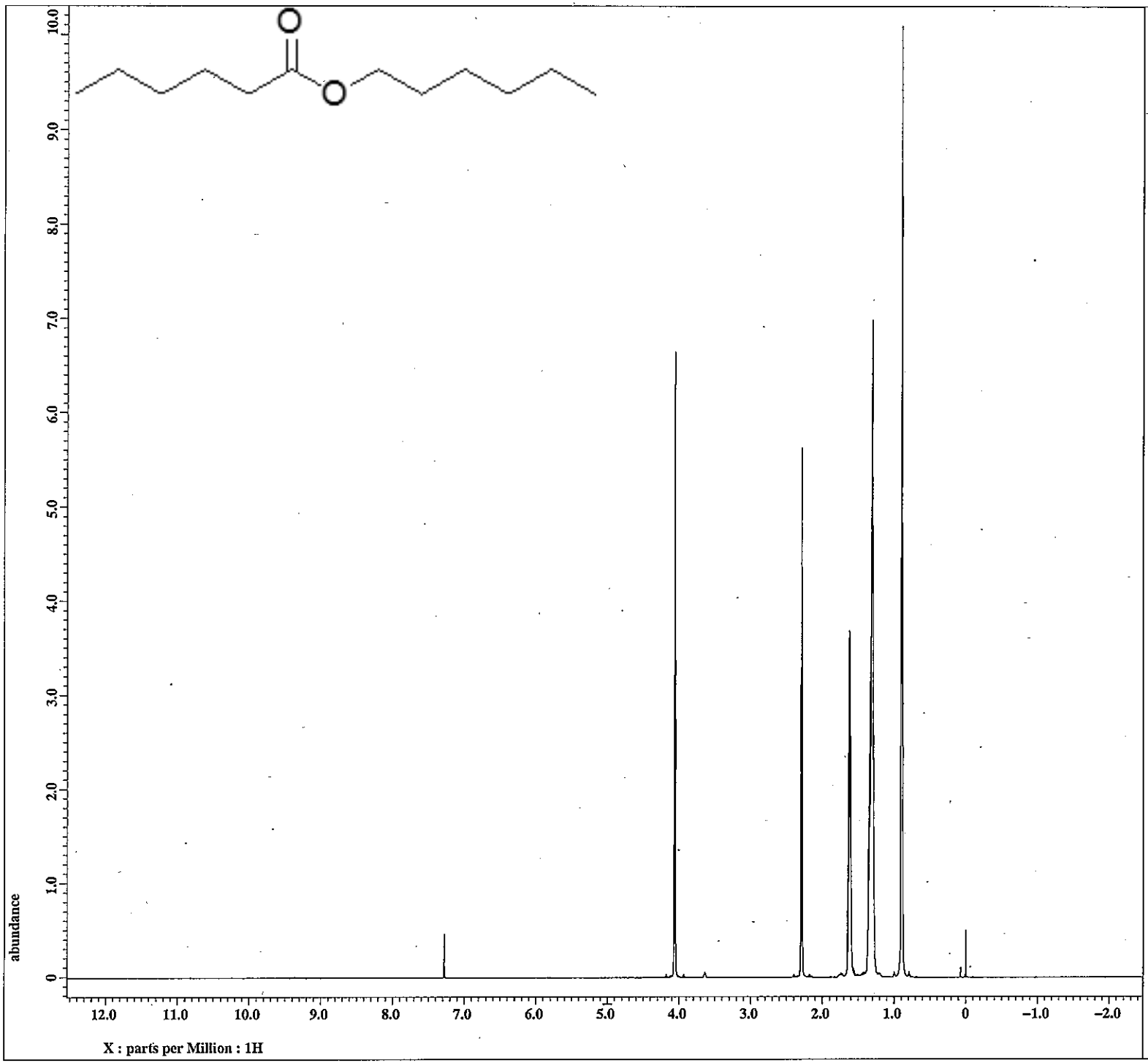
JEOL

Filename	= Exp-T-3-5-proton-3.jd
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= Exp-T-3-5-proton
Solvent	= CHLOROFORM-D
Creation_time	= 29-NOV-2012 20:44:25
Revision_time	= 5-DEC-2012 20:29:44
Current_time	= 5-DEC-2012 20:29:51
Content	= Exp-T-3-5-proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 40
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 18.9[dC]

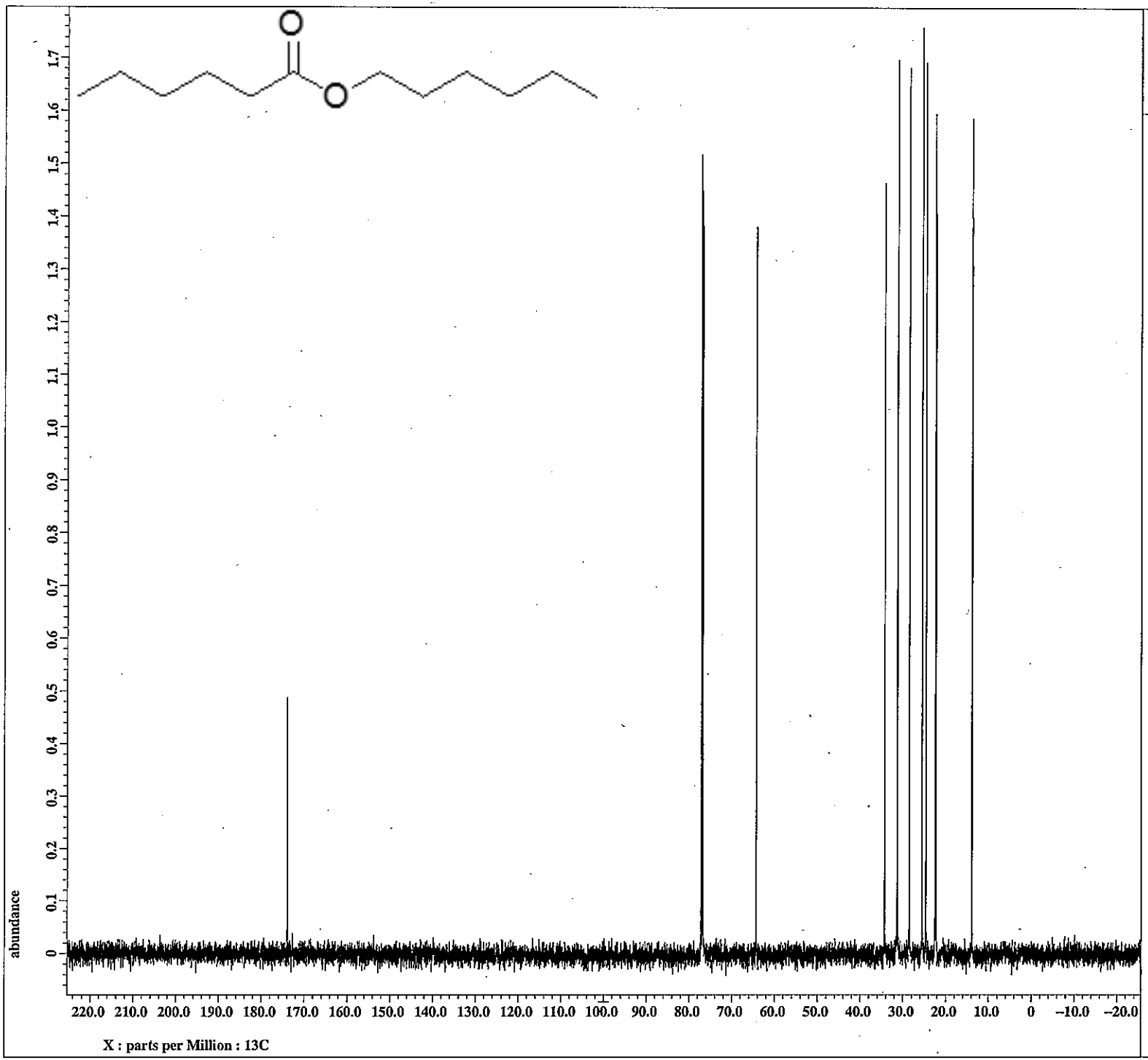


JEOL

Filename	= Exp-T-3-5-carbon-3.jd
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-T-3-5-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 29-NOV-2012 20:48:36
Revision_time	= 5-DEC-2012 20:30:36
Current_time	= 5-DEC-2012 20:30:42
Content	= Exp-T-3-5-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 77
Total_scans	= 77
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 19.6[dC]

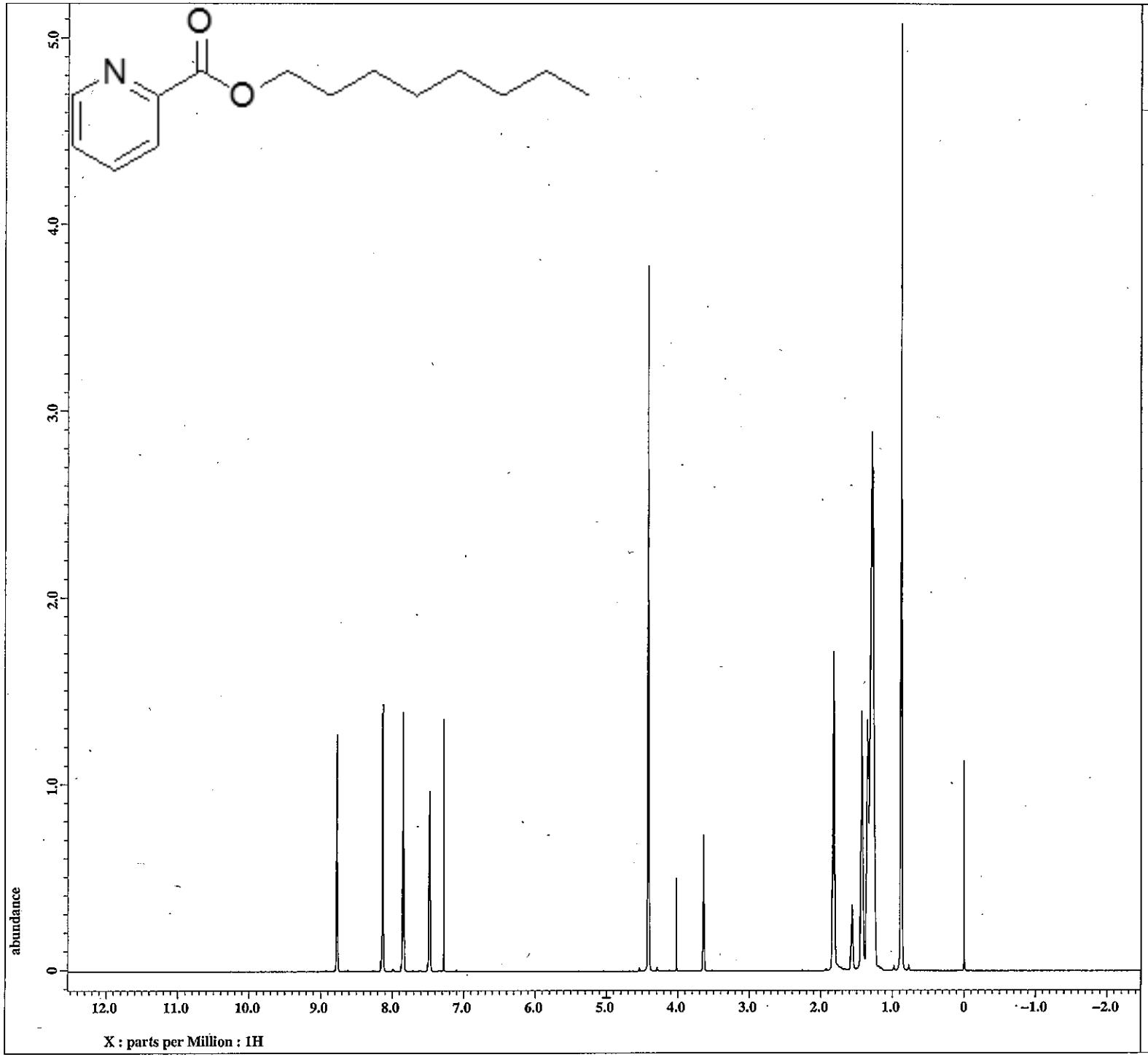


Filename	= Exp-T-3-6-proton-3.jd
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= Exp-T-3-6-proton
Solvent	= CHLOROFORM-D
Creation_time	= 29-NOV-2012 20:57:57
Revision_time	= 5-DEC-2012 20:31:21
Current_time	= 5-DEC-2012 20:31:26
Content	= Exp-T-3-6-proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= TRUE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 36
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 19.4[dC]



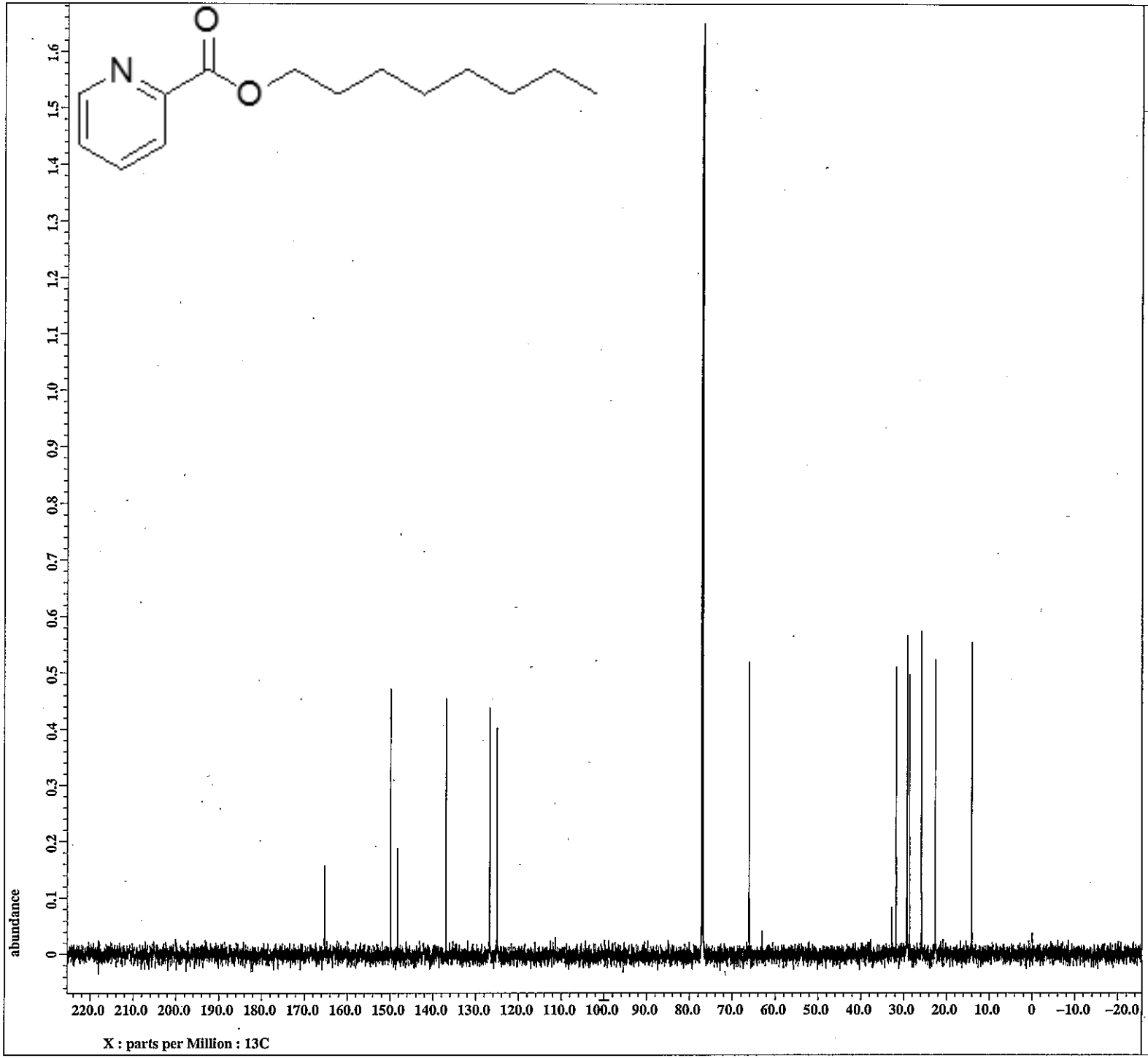
JEOL

Filename	= Exp-T-3-6-carbon-3.jd
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-T-3-6-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 29-NOV-2012 21:01:37
Revision_time	= 5-DEC-2012 20:32:00
Current_time	= 5-DEC-2012 20:32:09
Content	= Exp-T-3-6-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 66
Total_scans	= 66
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 19.7[dC]



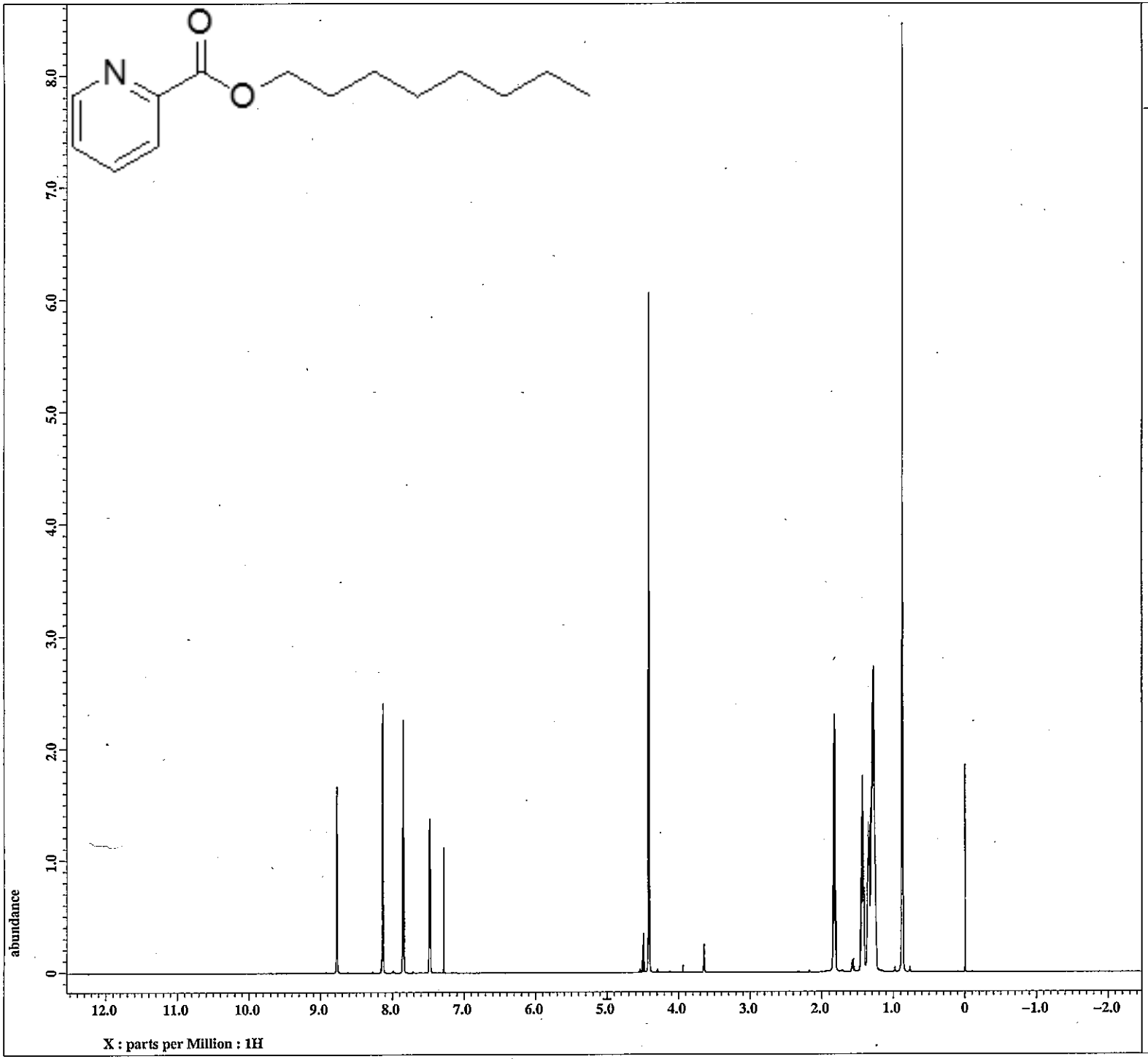
JEOL

Filename	= Exp-T-3-7-proton-3.jd
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= Exp-T-3-7-proton
Solvent	= CHLOROFORM-D
Creation_time	= 29-NOV-2012 21:08:51
Revision_time	= 5-DEC-2012 20:32:44
Current_time	= 5-DEC-2012 20:32:52
Content	= Exp-T-3-7-proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 44
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 19.2[dC]



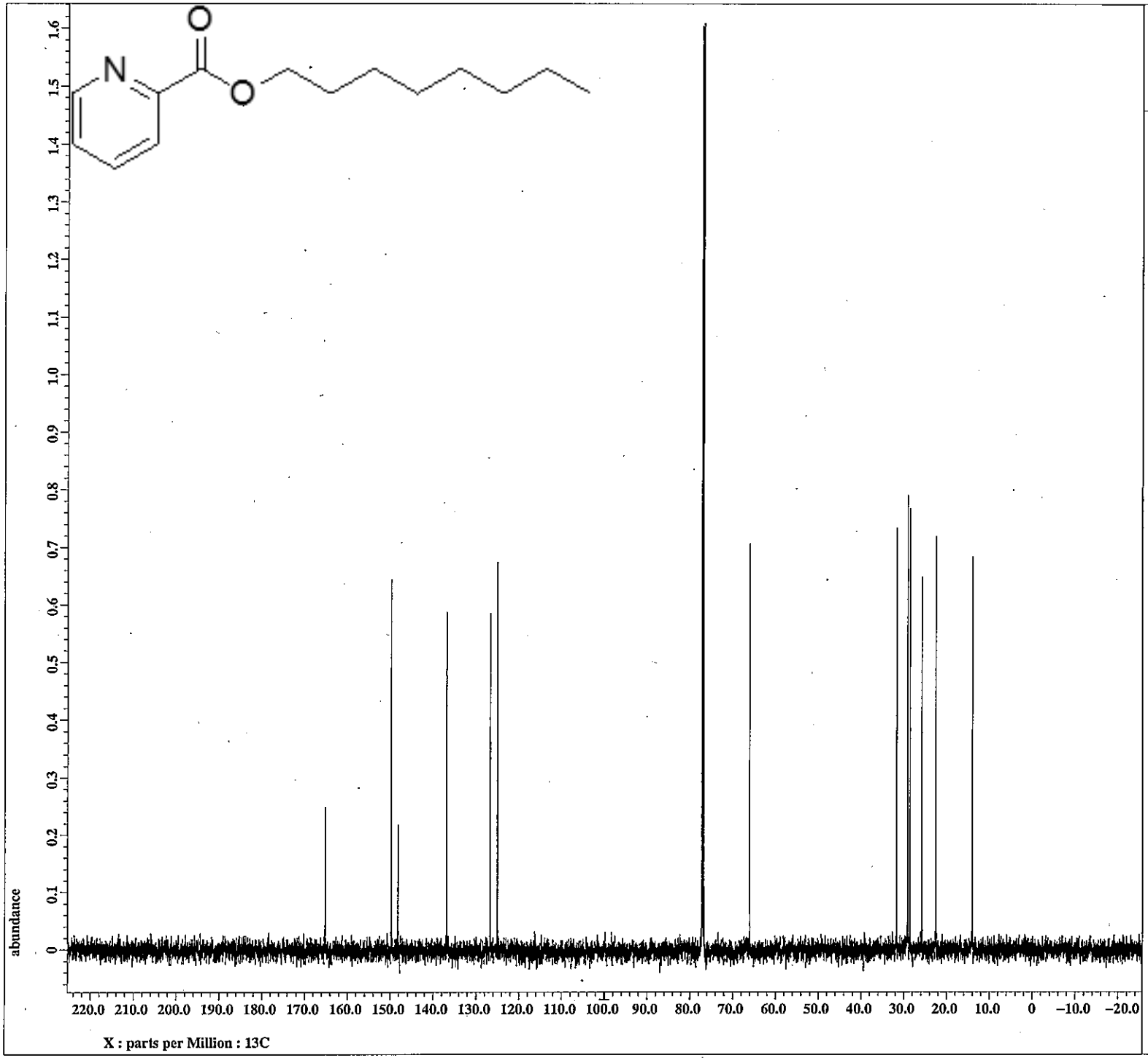
JEOL

Filename	= Exp-T-3-7-carbon-3.jd
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-T-3-7-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 29-NOV-2012 21:14:02
Revision_time	= 5-DEC-2012 20:33:19
Current_time	= 5-DEC-2012 20:33:27
Content	= Exp-T-3-7-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 100
Total_scans	= 100
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 19.8[dC]



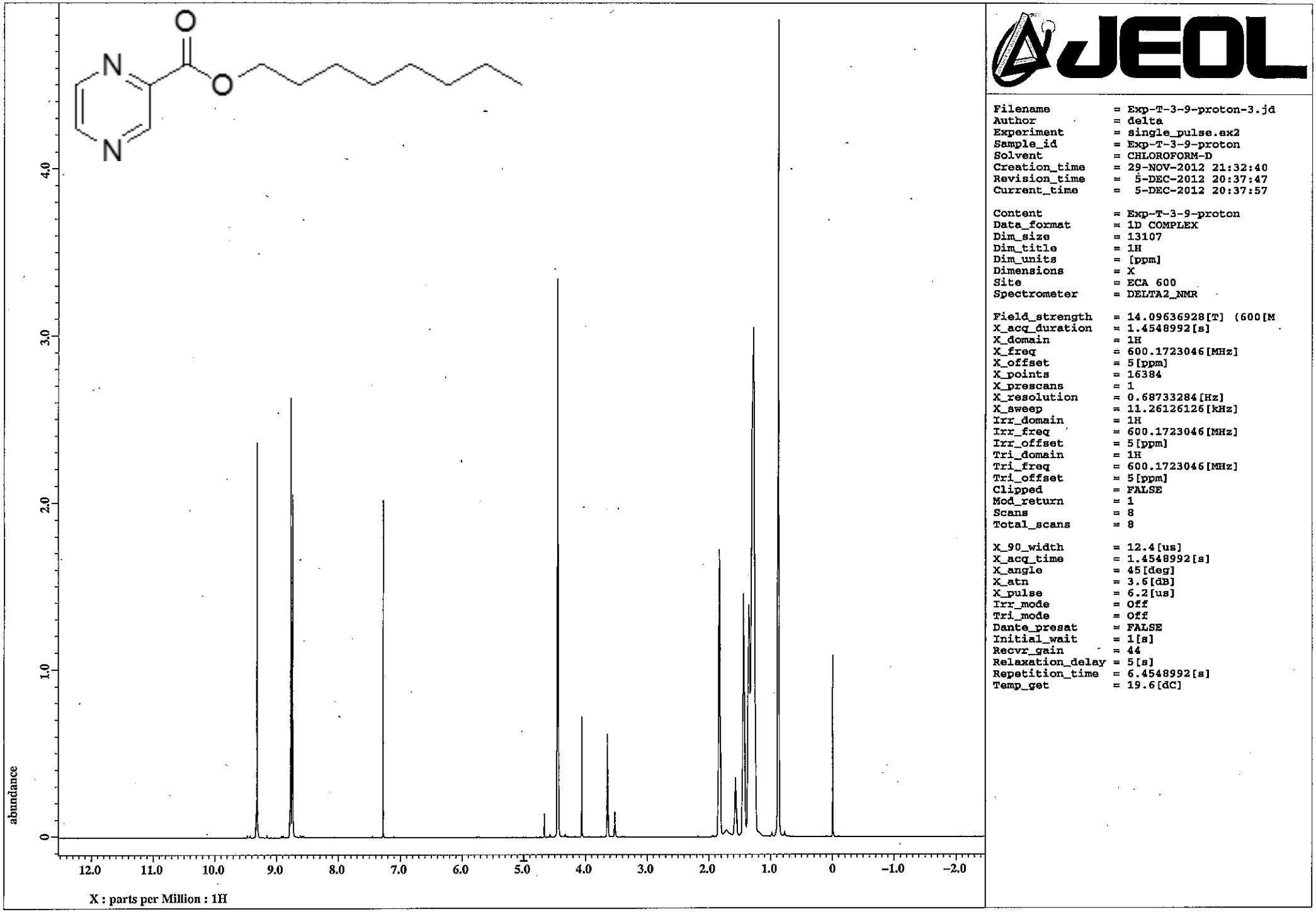
JEOL

Filename	= Exp-T-3-8-proton-3.jd
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= Exp-T-3-8-proton
Solvent	= CHLOROFORM-D
Creation_time	= 29-NOV-2012 21:22:40
Revision_time	= 5-DEC-2012 20:36:15
Current_time	= 5-DEC-2012 20:36:25
Content	= Exp-T-3-8-proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 42
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 19.1[dC]



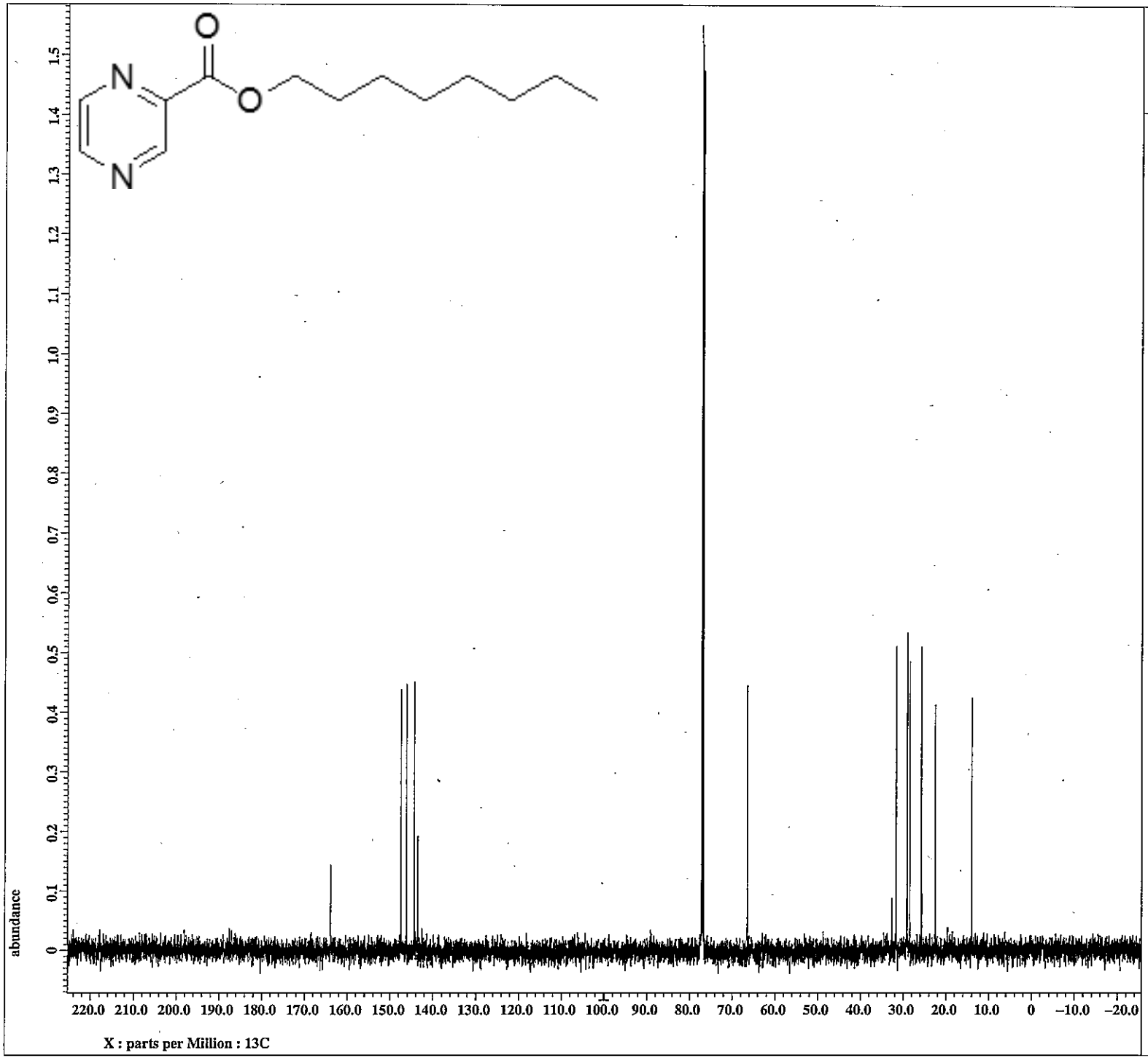
JEOL

Filename	= Exp-T-3-8-carbon-3.jd
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-T-3-8-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 29-NOV-2012 21:26:54
Revision_time	= 5-DEC-2012 20:37:01
Current_time	= 5-DEC-2012 20:37:09
Content	= Exp-T-3-8-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 78
Total_scans	= 78
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 19.9[dC]



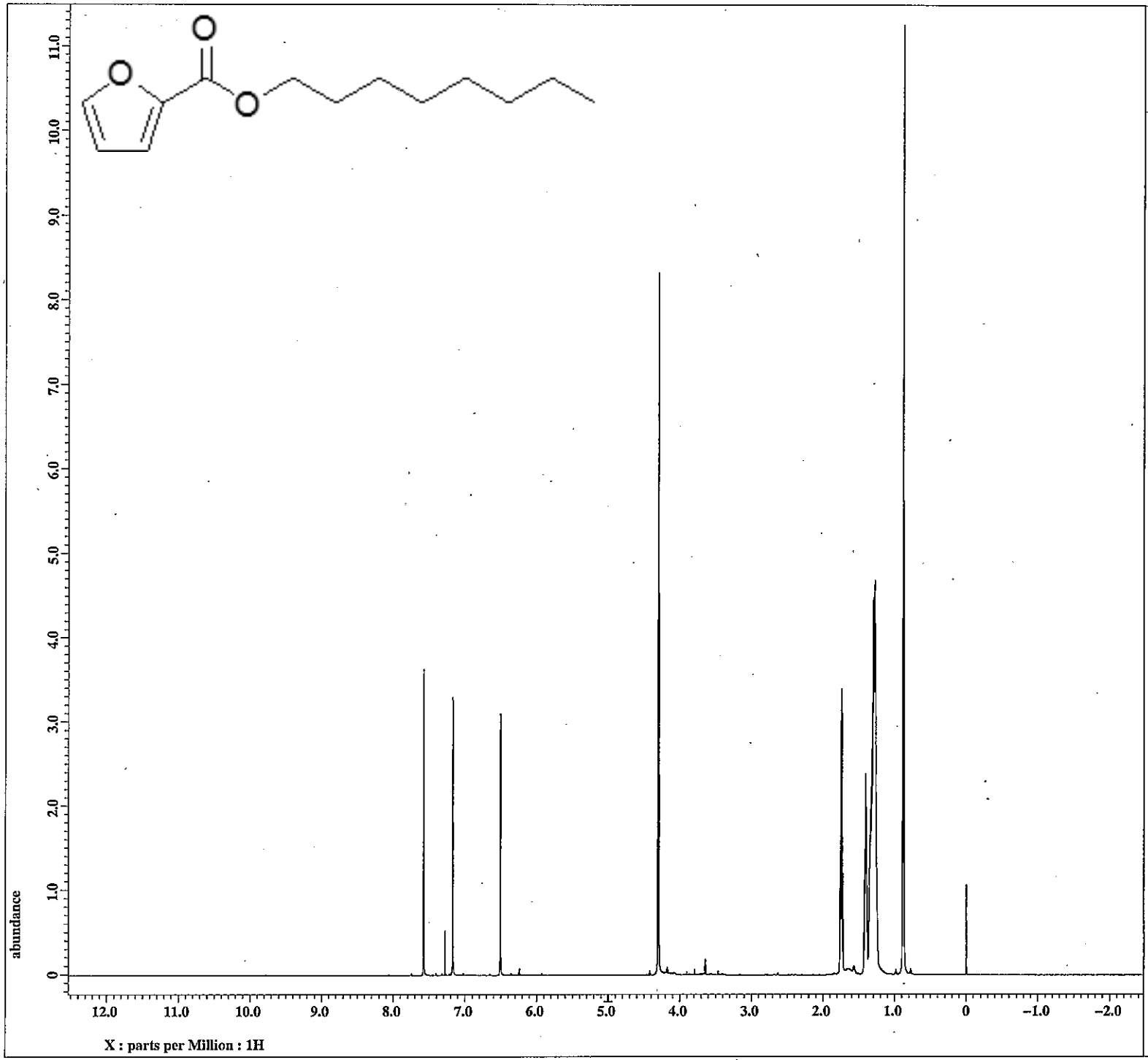
JEOL

Filename	= Exp-T-3-9-proton-3.jd
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= Exp-T-3-9-proton
Solvent	= CHLOROFORM-D
Creation_time	= 29-NOV-2012 21:32:40
Revision_time	= 5-DEC-2012 20:37:47
Current_time	= 5-DEC-2012 20:37:57
Content	= Exp-T-3-9-proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 44
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 19.6[dC]

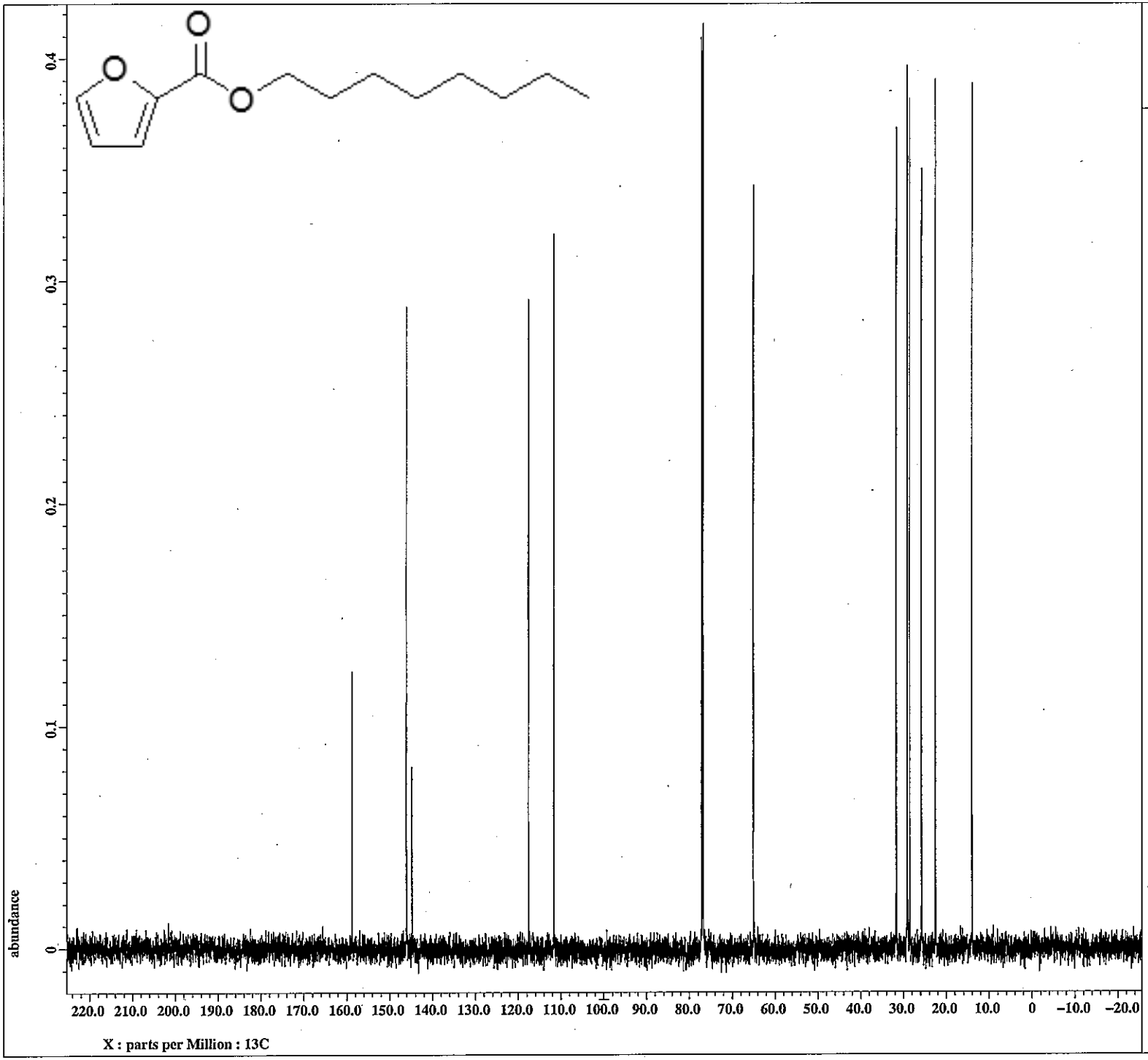


JEOL

Filename	= Exp-T-3-9-carbon-3.jd
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-T-3-9-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 29-NOV-2012 21:36:23
Revision_time	= 5-DEC-2012 20:38:32
Current_time	= 5-DEC-2012 20:38:38
Content	= Exp-T-3-9-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 67
Total_scans	= 67
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 20.1[dC]

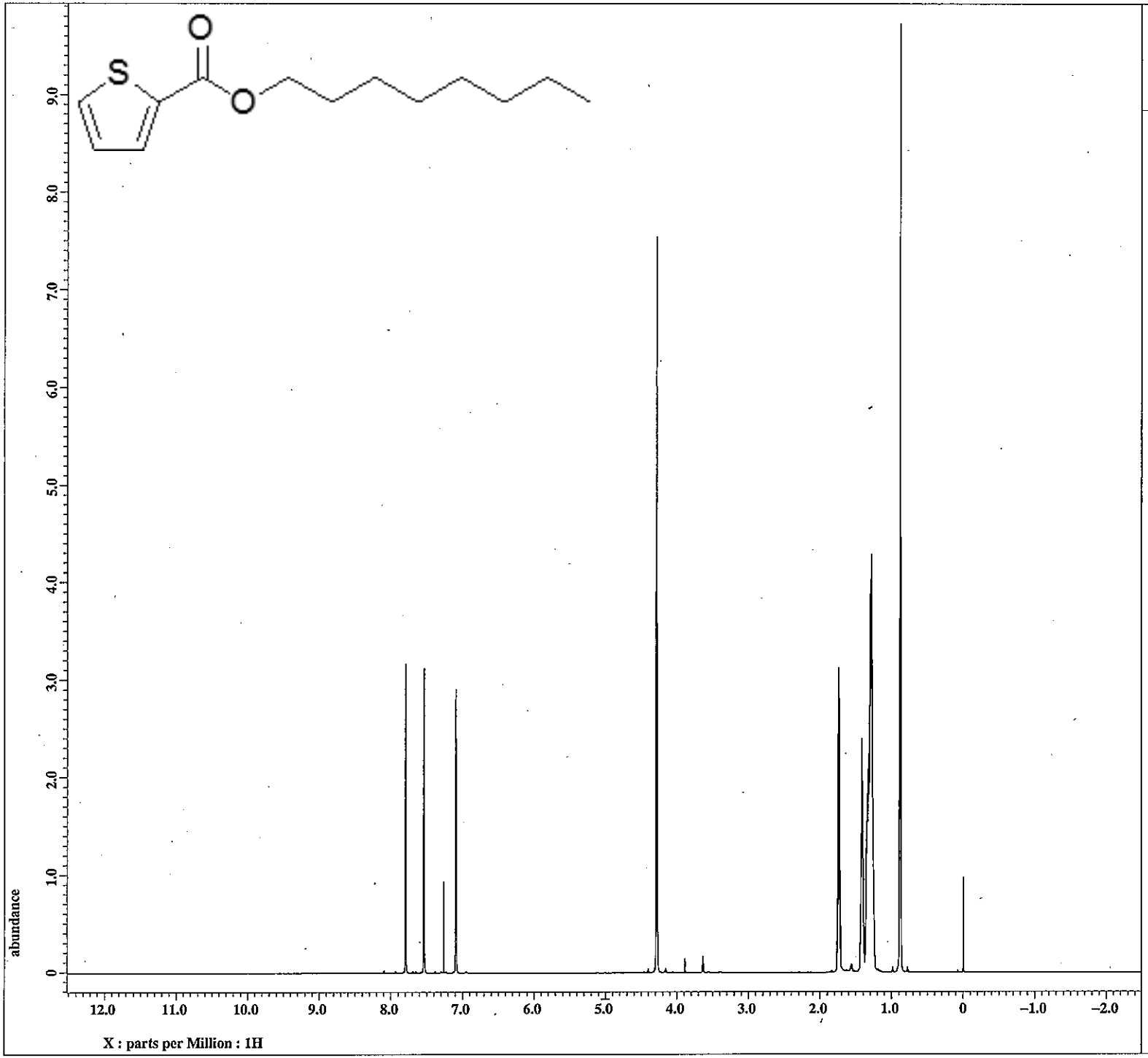


Filename	= Exp-T-3-10-proton-3.j
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= Exp-T-3-10-proton
Solvent	= CHLOROFORM-D
Creation_time	= 29-NOV-2012 21:42:24
Revision_time	= 5-DEC-2012 20:39:39
Current_time	= 5-DEC-2012 20:39:46
Content	= Exp-T-3-10-proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= TRUE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 40
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 19.3[dC]



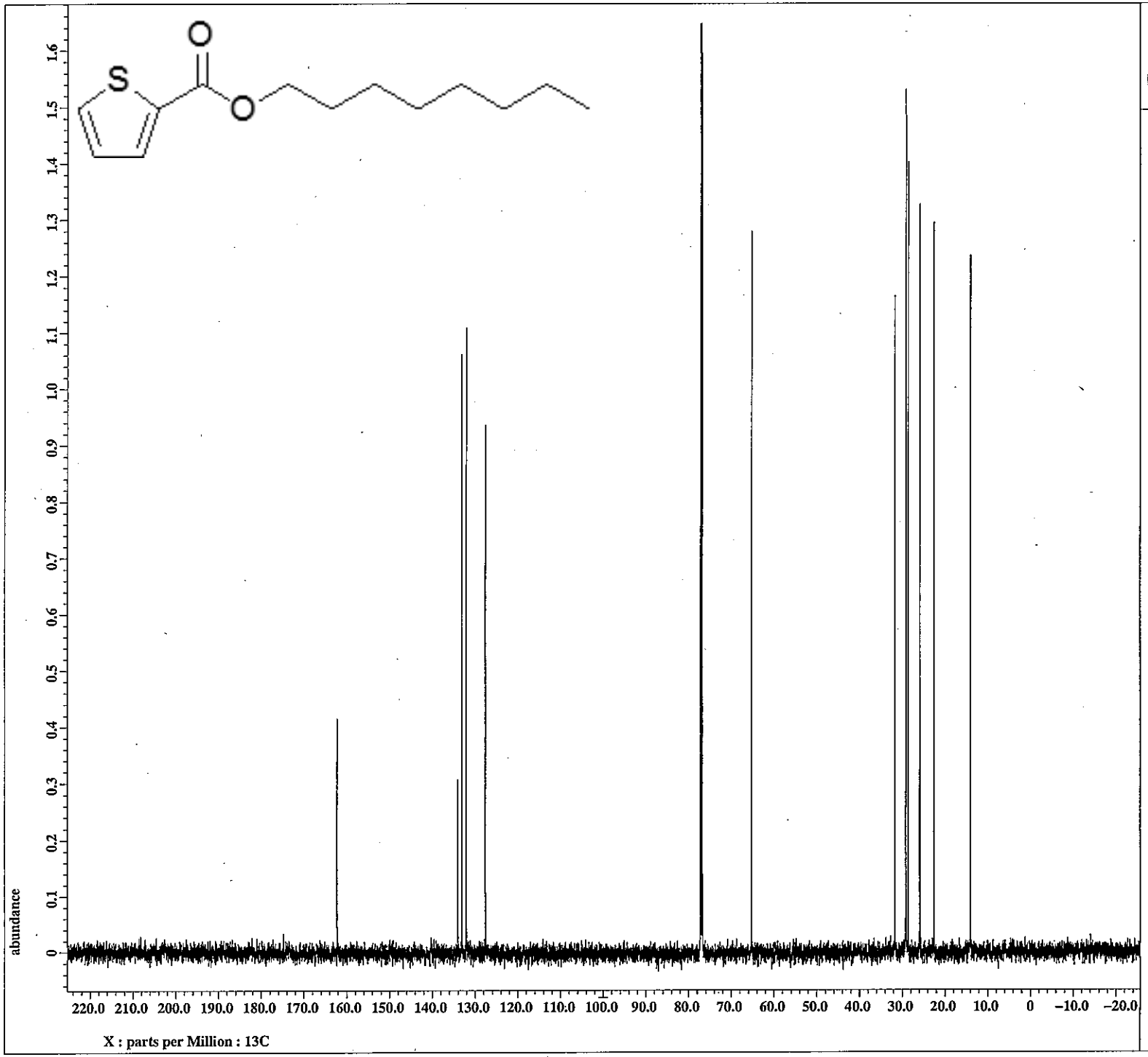
JEOL

Filename	= Exp-T-3-10-carbon-3.j
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-T-3-10-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 29-NOV-2012 21:46:04
Revision_time	= 5-DEC-2012 21:37:25
Current_time	= 5-DEC-2012 21:37:32
Content	= Exp-T-3-10-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 76
Total_scans	= 76
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 50
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 20[dC]



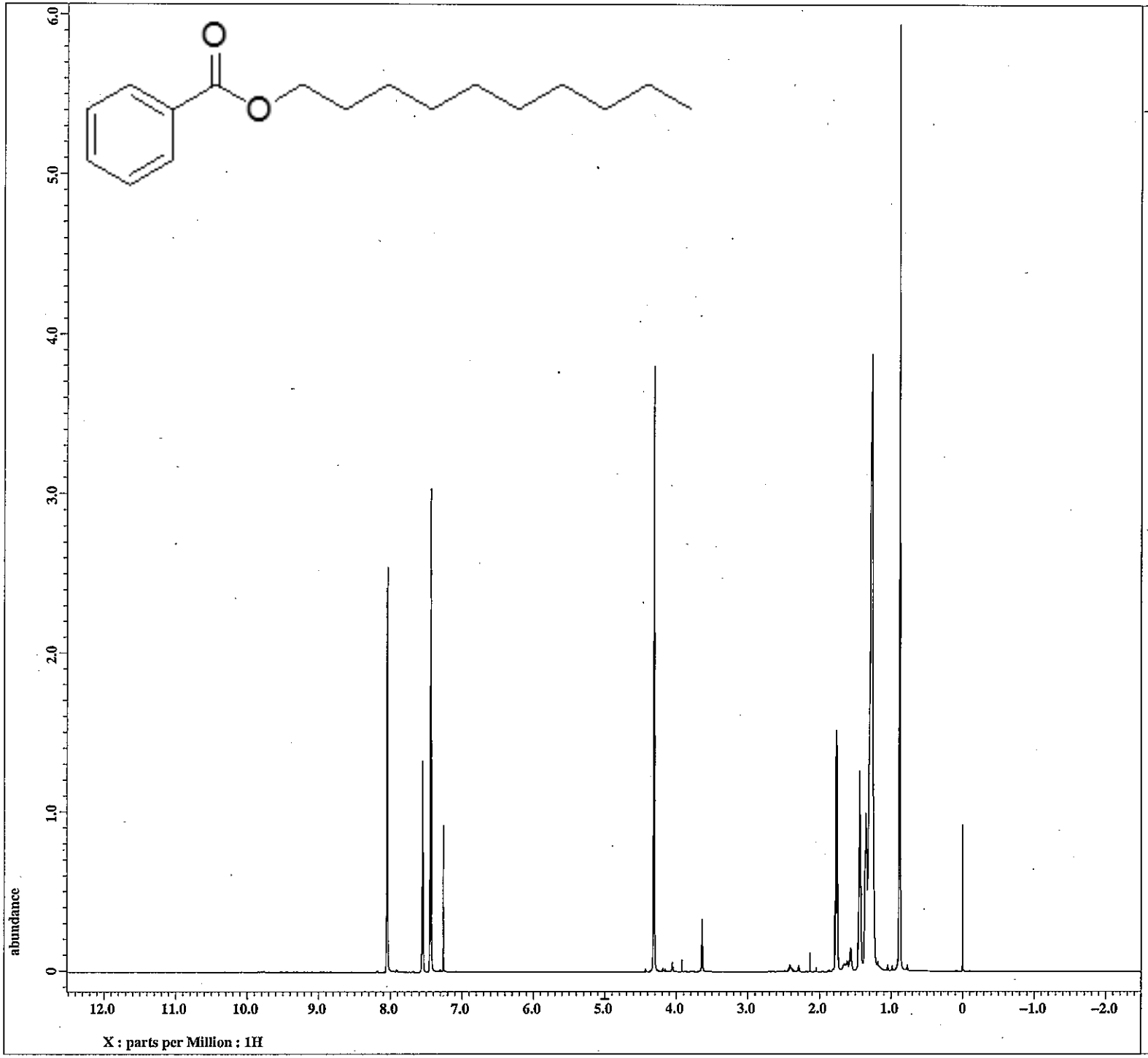
JEOL

```
Filename          = Exp-T-3-11-proton-3.j
Author            = delta
Experiment        = single_pulse.ex2
Sample_id         = Exp-T-3-11-proton
Solvent           = CHLOROFORM-D
Creation_time     = 29-NOV-2012 21:52:11
Revision_time     =  5-DEC-2012 20:41:51
Current_time      =  5-DEC-2012 20:41:57

Content           = Exp-T-3-11-proton
Data_format       = 1D COMPLEX
Dim_size          = 13107
Dim_title         = 1H
Dim_units         = [ppm]
Dimensions        = X
Site              = ECA 600
Spectrometer      = DELTA2_NMR

Field_strength    = 14.09636928[T] (600[M
X_acq_duration    = 1.4548992[s]
X_domain          = 1H
X_freq            = 600.1723046[MHz]
X_offset          = 5[ppm]
X_points          = 16384
X_prescans        = 1
X_resolution      = 0.68733284[Hz]
X_sweep           = 11.26126126[kHz]
Irr_domain        = 1H
Irr_freq          = 600.1723046[MHz]
Irr_offset        = 5[ppm]
Tri_domain        = 1H
Tri_freq          = 600.1723046[MHz]
Tri_offset        = 5[ppm]
Clipped           = TRUE
Mod_return        = 1
Scans             = 8
Total_scans       = 8

X_90_width        = 12.4[us]
X_acq_time        = 1.4548992[s]
X_angle           = 45[deg]
X_atn             = 3.6[dB]
X_pulse           = 6.2[us]
Irr_mode          = Off
Tri_mode          = Off
Dante_presat      = FALSE
Initial_wait      = 1[s]
Recvr_gain        = 40
Relaxation_delay  = 5[s]
Repetition_time   = 6.4548992[s]
Temp_get          = 19[dC]
```

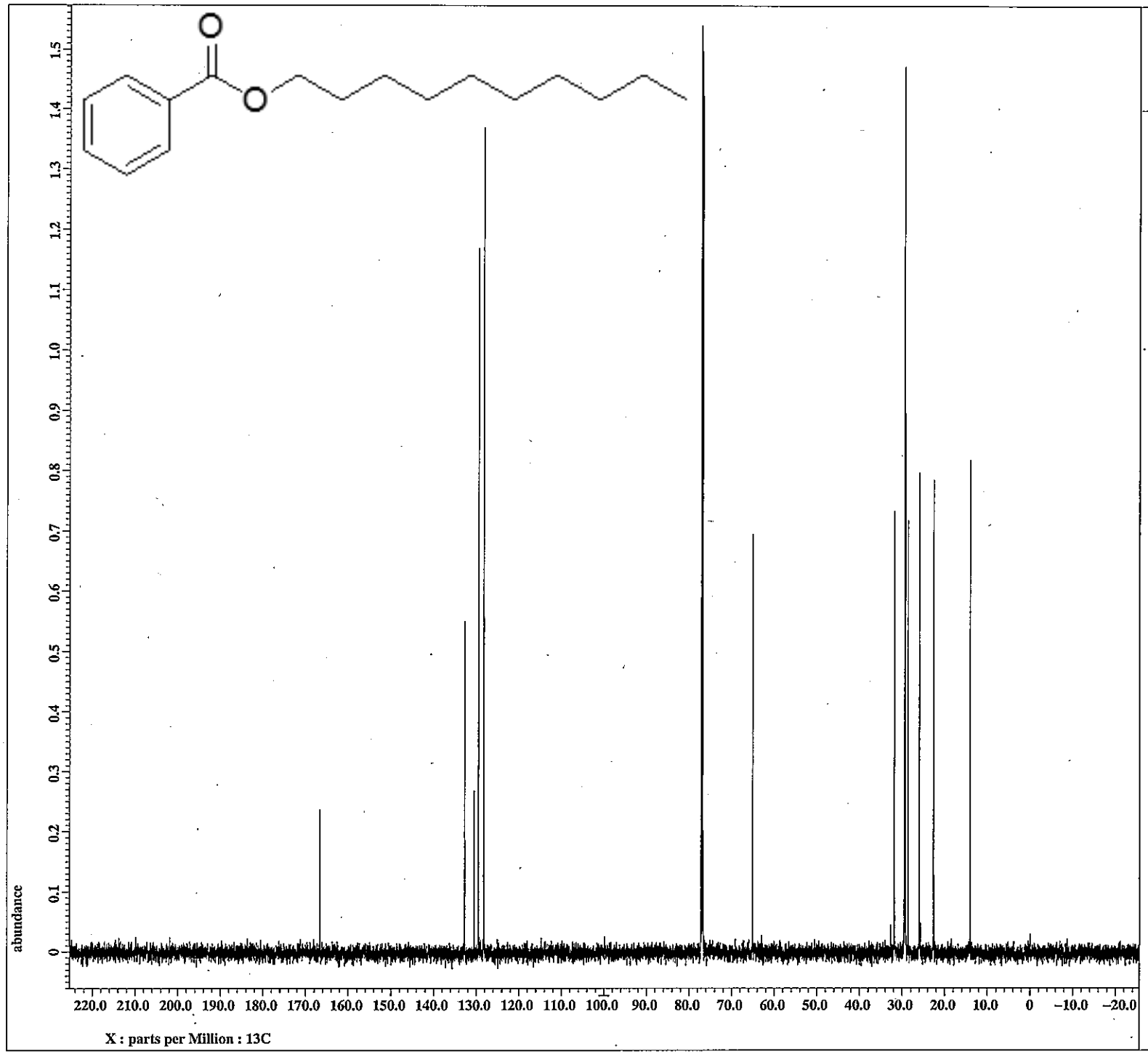


JEOL

Filename	= Exp-T-3-11-carbon-3.j
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-T-3-11-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 29-NOV-2012 21:57:29
Revision_time	= 5-DEC-2012 20:42:32
Current_time	= 5-DEC-2012 20:42:38
Content	= Exp-T-3-11-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 102
Total_scans	= 102
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 20.1[dC]

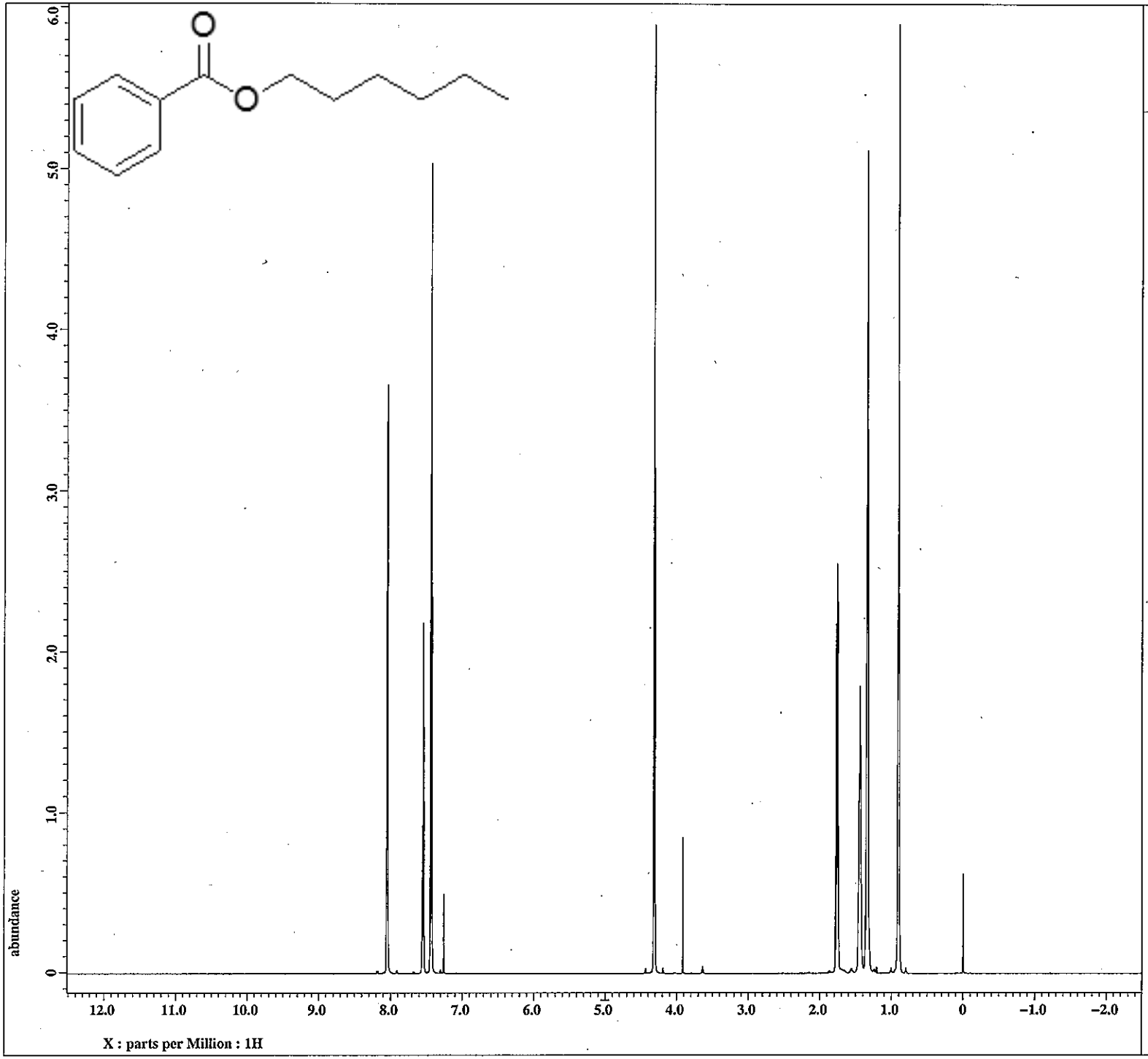


Filename	= EXP-T-4-2-Proton-3.jd
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= EXP-T-4-2-Proton
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 19:15:32
Revision_time	= 5-DEC-2012 20:43:24
Current_time	= 5-DEC-2012 20:43:32
Content	= EXP-T-4-2-Proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 38
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 18.9[dC]

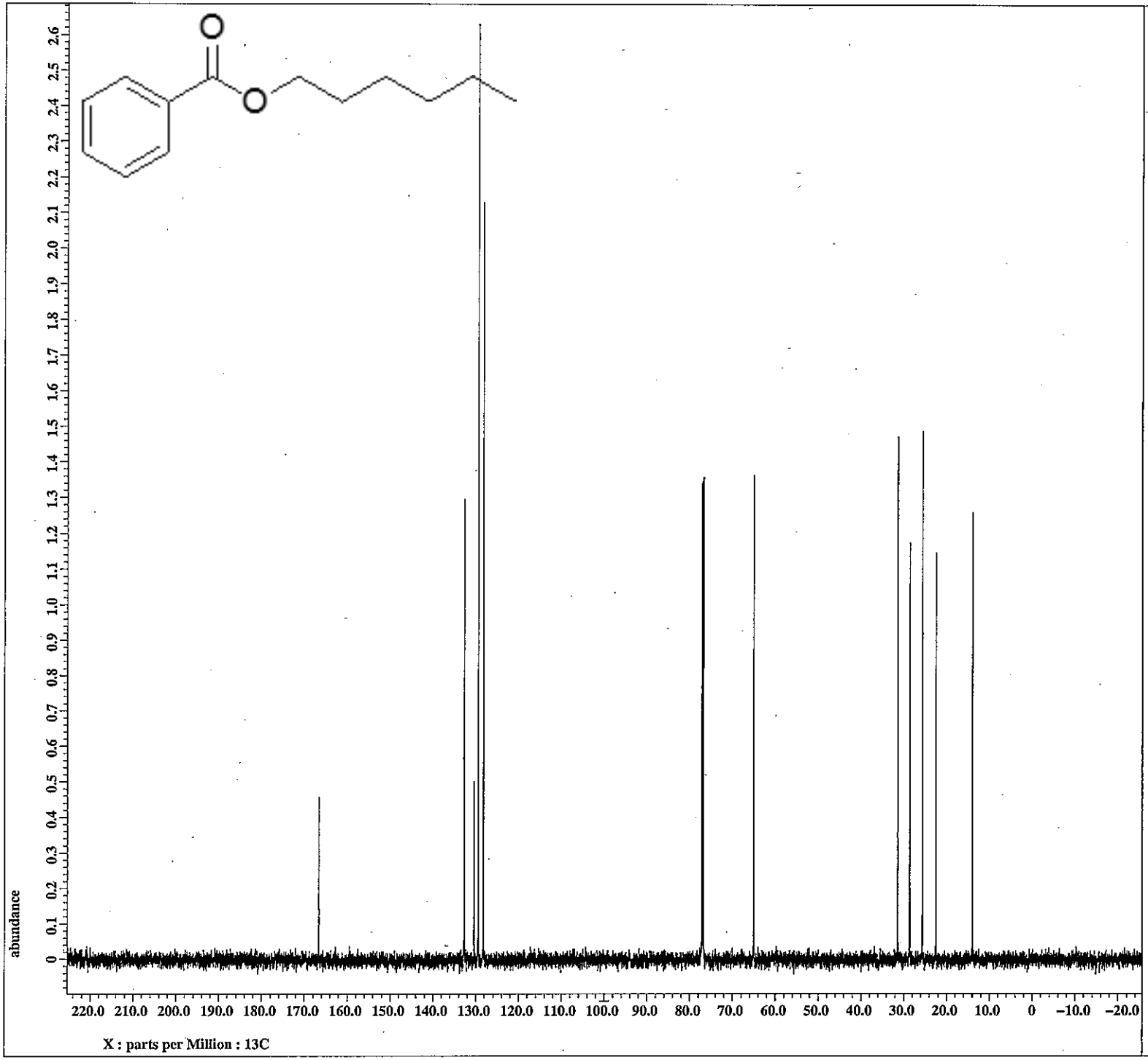


JEOL

Filename	= Exp-T-4-2-carbon-3.jd
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-T-4-2-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 19:22:16
Revision_time	= 5-DEC-2012 20:44:09
Current_time	= 5-DEC-2012 20:44:18
Content	= Exp-T-4-2-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 134
Total_scans	= 134
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 19.7[dC]

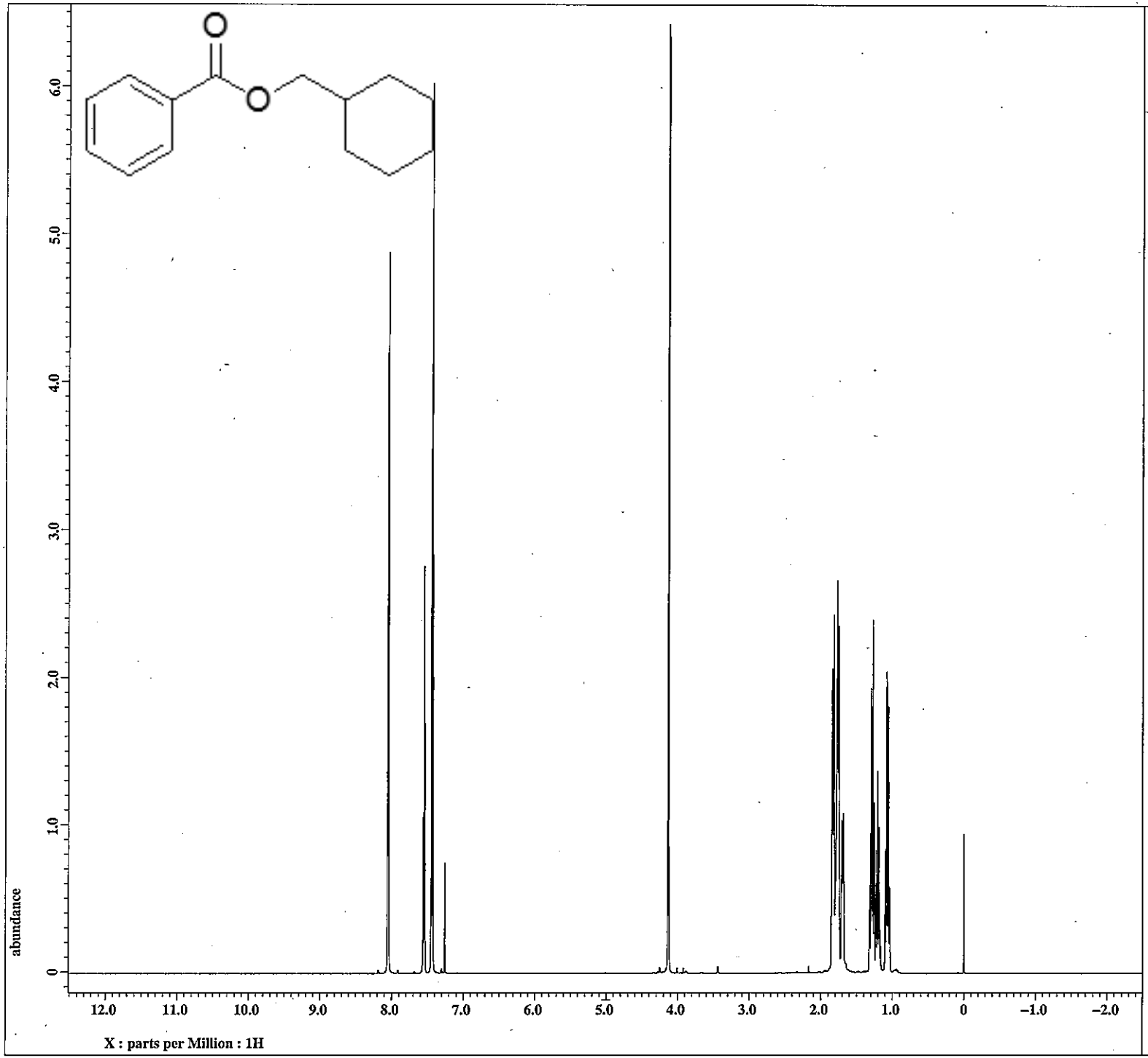


Filename	= EXP-T-4-3-Proton-3.jd
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= EXP-T-4-3-Proton
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 19:27:56
Revision_time	= 5-DEC-2012 20:46:47
Current_time	= 5-DEC-2012 20:46:54
Content	= EXP-T-4-3-Proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 36
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 19[dC]



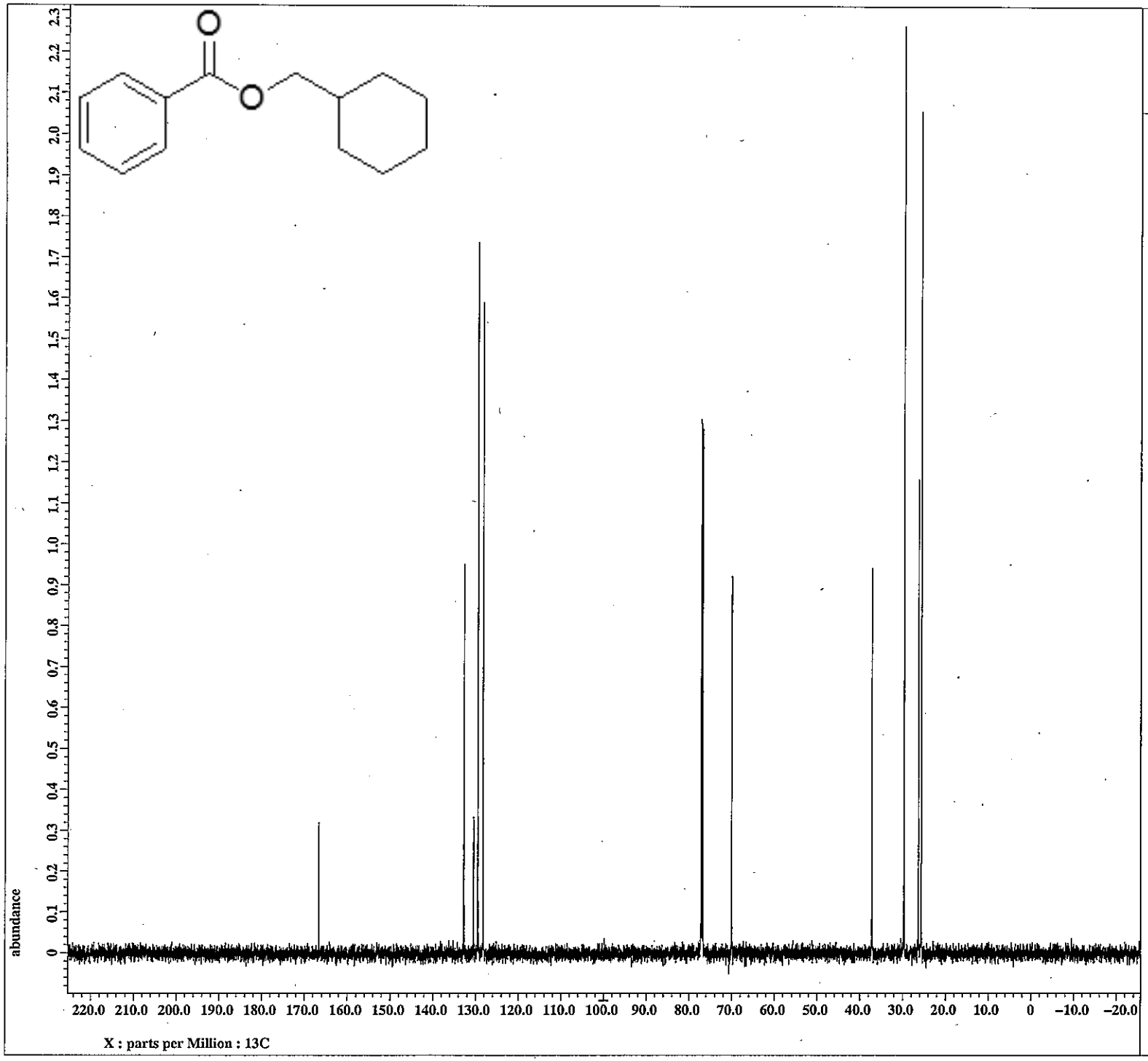
JEOL

Filename	= Exp-T-4-3-carbon-3.jd
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-T-4-3-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 19:31:12
Revision_time	= 5-DEC-2012 20:46:00
Current_time	= 5-DEC-2012 20:46:08
Content	= Exp-T-4-3-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 57
Total_scans	= 57
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 19.5[dC]

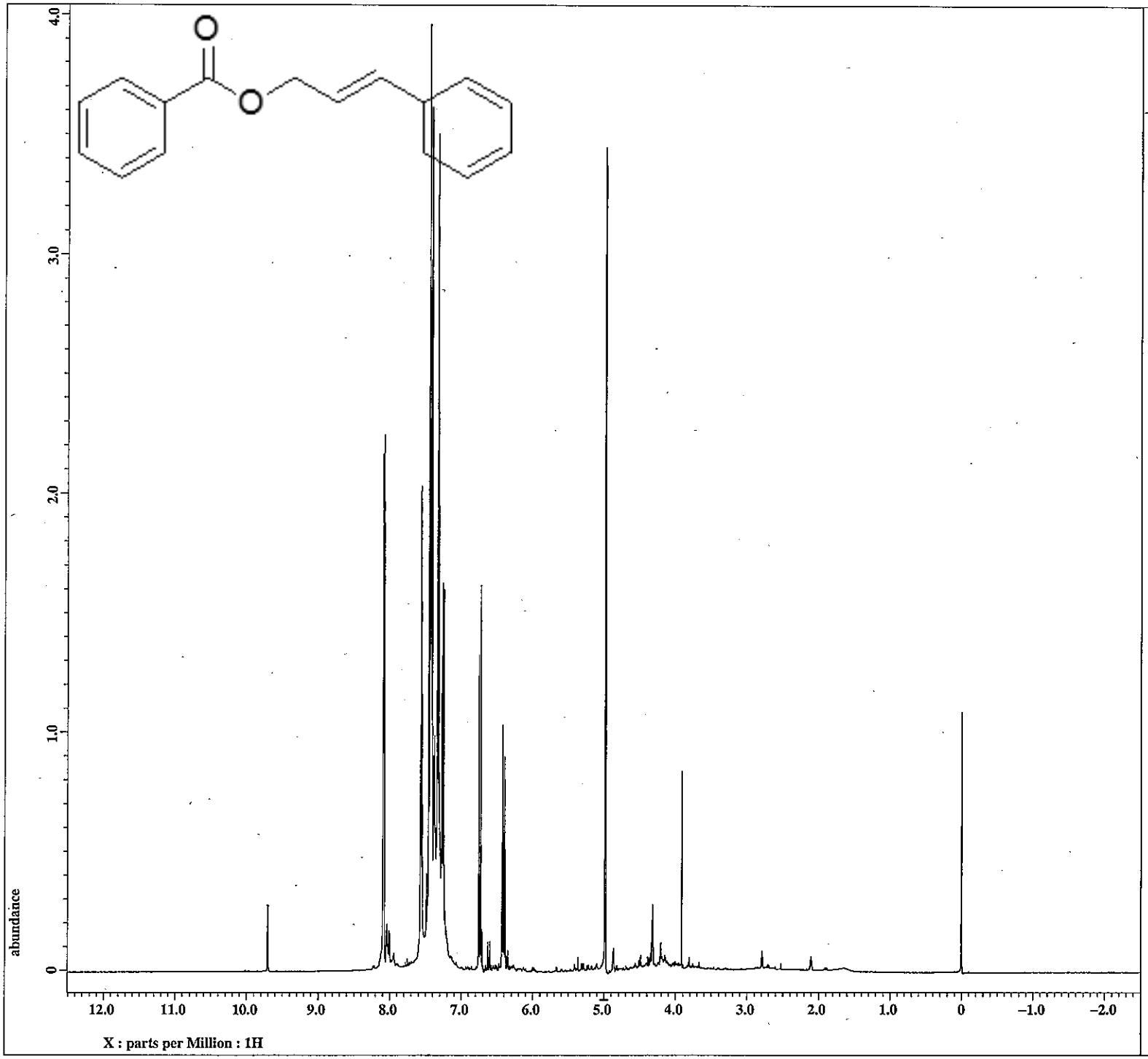


JEOL

Filename	= EXP-T-4-5-Proton-3.jd
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= EXP-T-4-5-Proton
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 19:52:39
Revision_time	= 5-DEC-2012 20:47:49
Current_time	= 5-DEC-2012 20:47:55
Content	= EXP-T-4-5-Proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 40
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 18.9[dC]

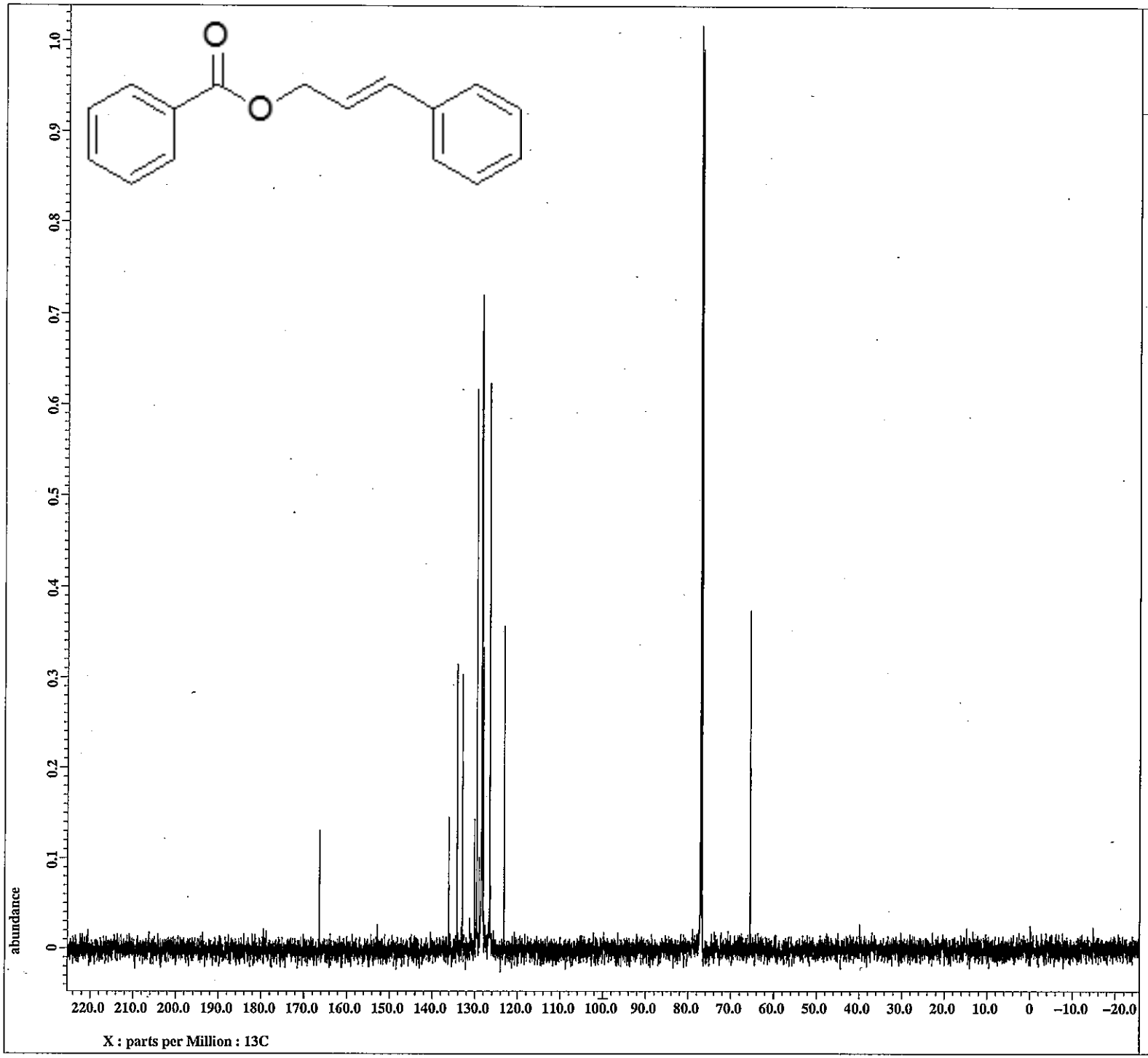


Filename	= Exp-T-4-5-carbon-3.jd
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-T-4-5-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 19:56:42
Revision_time	= 5-DEC-2012 20:48:41
Current_time	= 5-DEC-2012 20:48:49
Content	= Exp-T-4-5-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 74
Total_scans	= 74
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 19.8[dC]



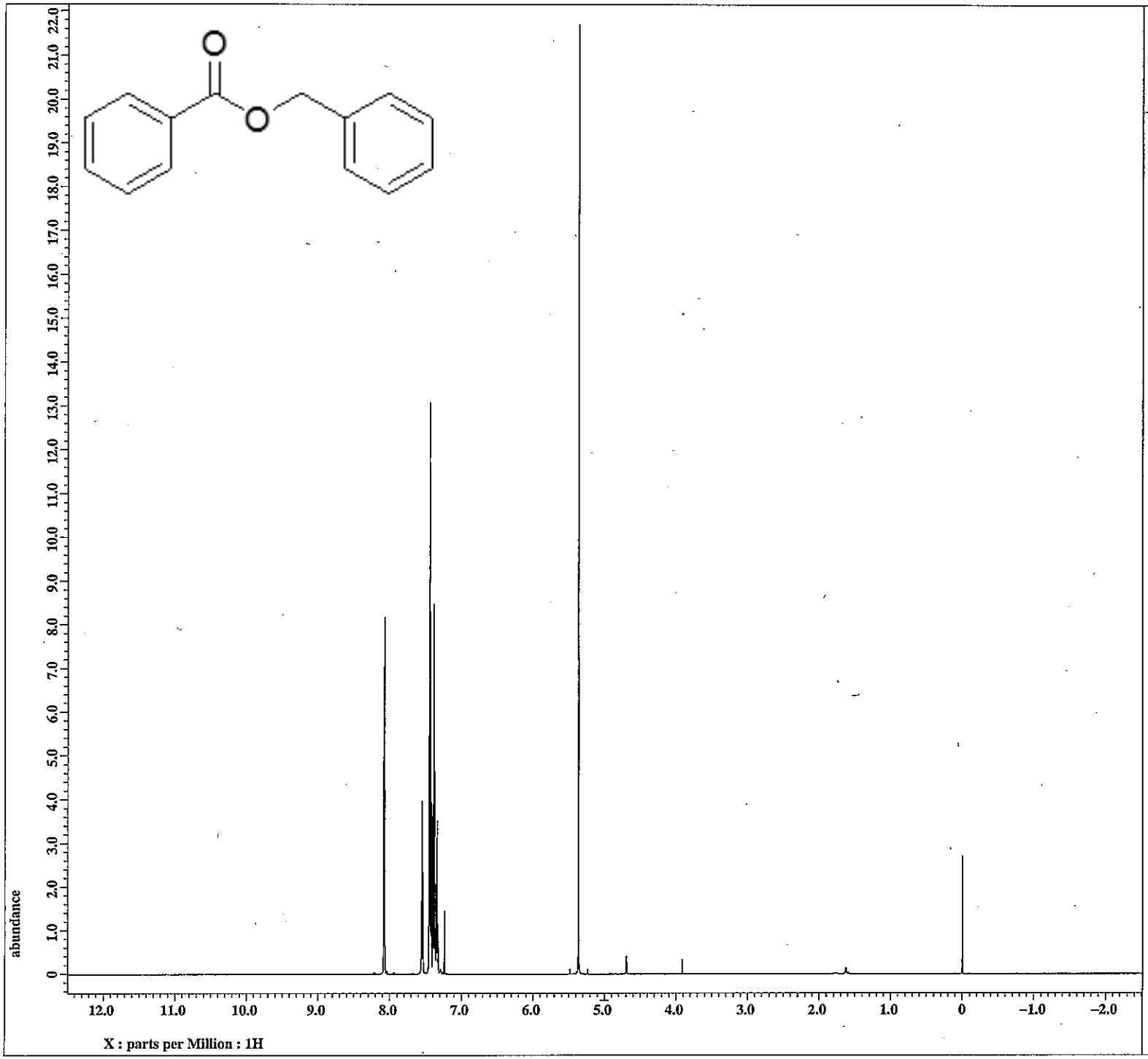
JEOL

Filename	= EXP-T-4-6-Proton-2.jd
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= EXP-T-4-6-Proton
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 19:37:35
Revision_time	= 5-DEC-2012 20:50:07
Current_time	= 5-DEC-2012 20:50:20
Content	= EXP-T-4-6-Proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 44
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 18.9[dC]

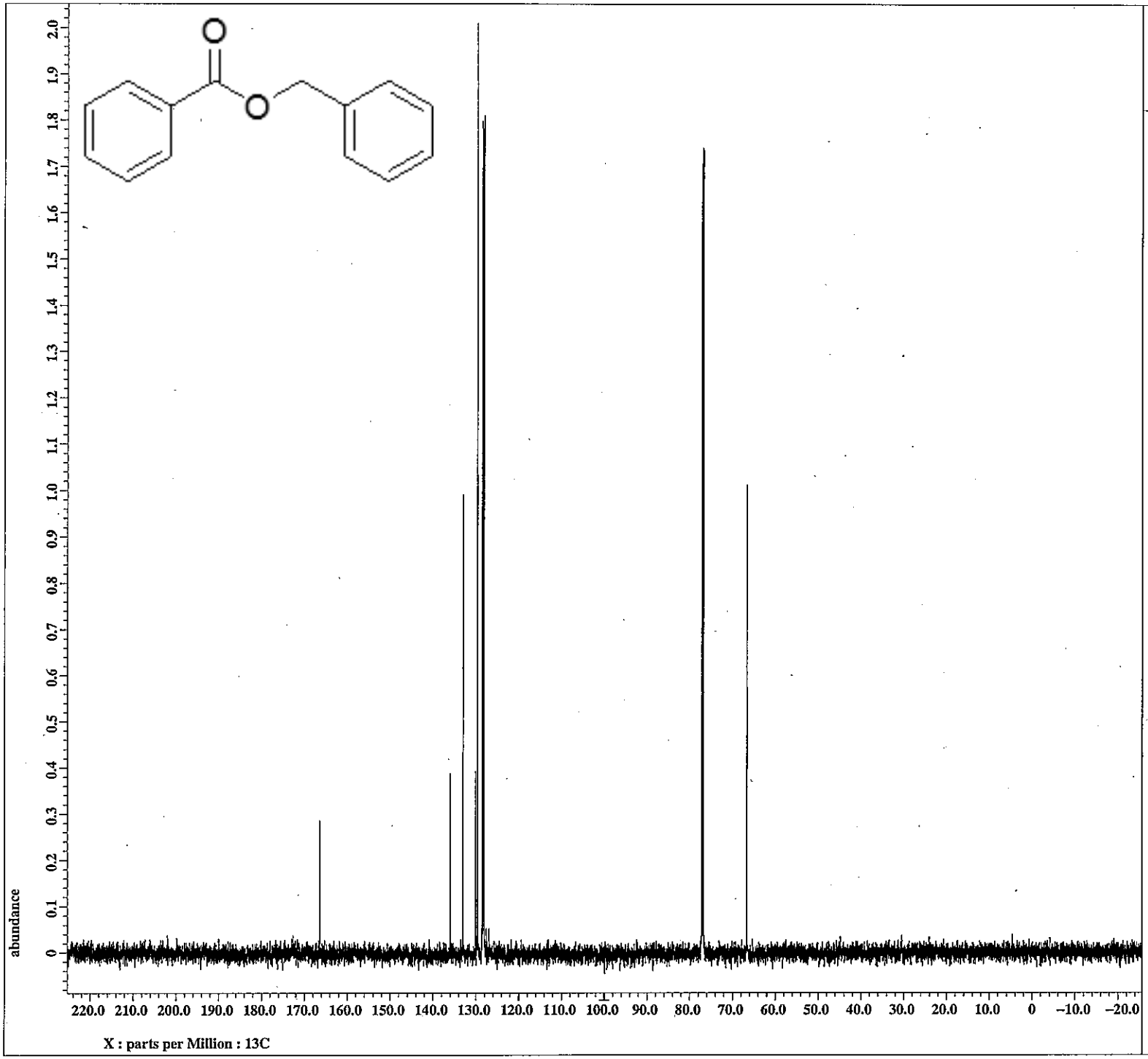


JEOL

Filename	= Exp-T-4-6-carbon-3.jd
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-T-4-6-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 19:45:20
Revision_time	= 5-DEC-2012 20:51:03
Current_time	= 5-DEC-2012 20:51:07
Content	= Exp-T-4-6-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= TRUE
Mod_return	= 1
Scans	= 157
Total_scans	= 157
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 19.8[dC]

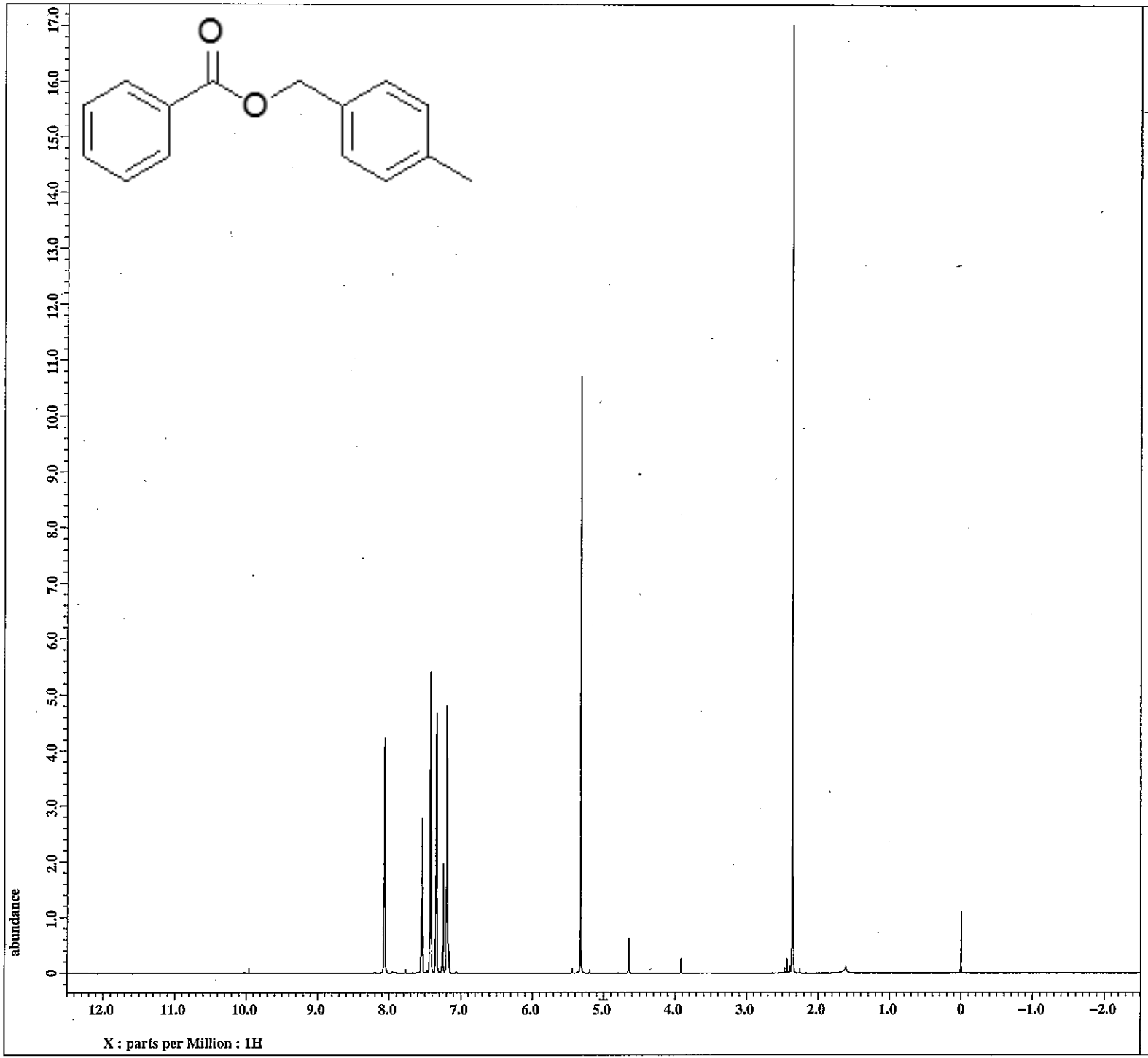


Filename	= EXP-T-4-7-Proton-3.jd
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= EXP-T-4-7-Proton
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 20:02:31
Revision_time	= 5-DEC-2012 20:53:26
Current_time	= 5-DEC-2012 20:53:34
Content	= EXP-T-4-7-Proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 44
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 19.4[dC]



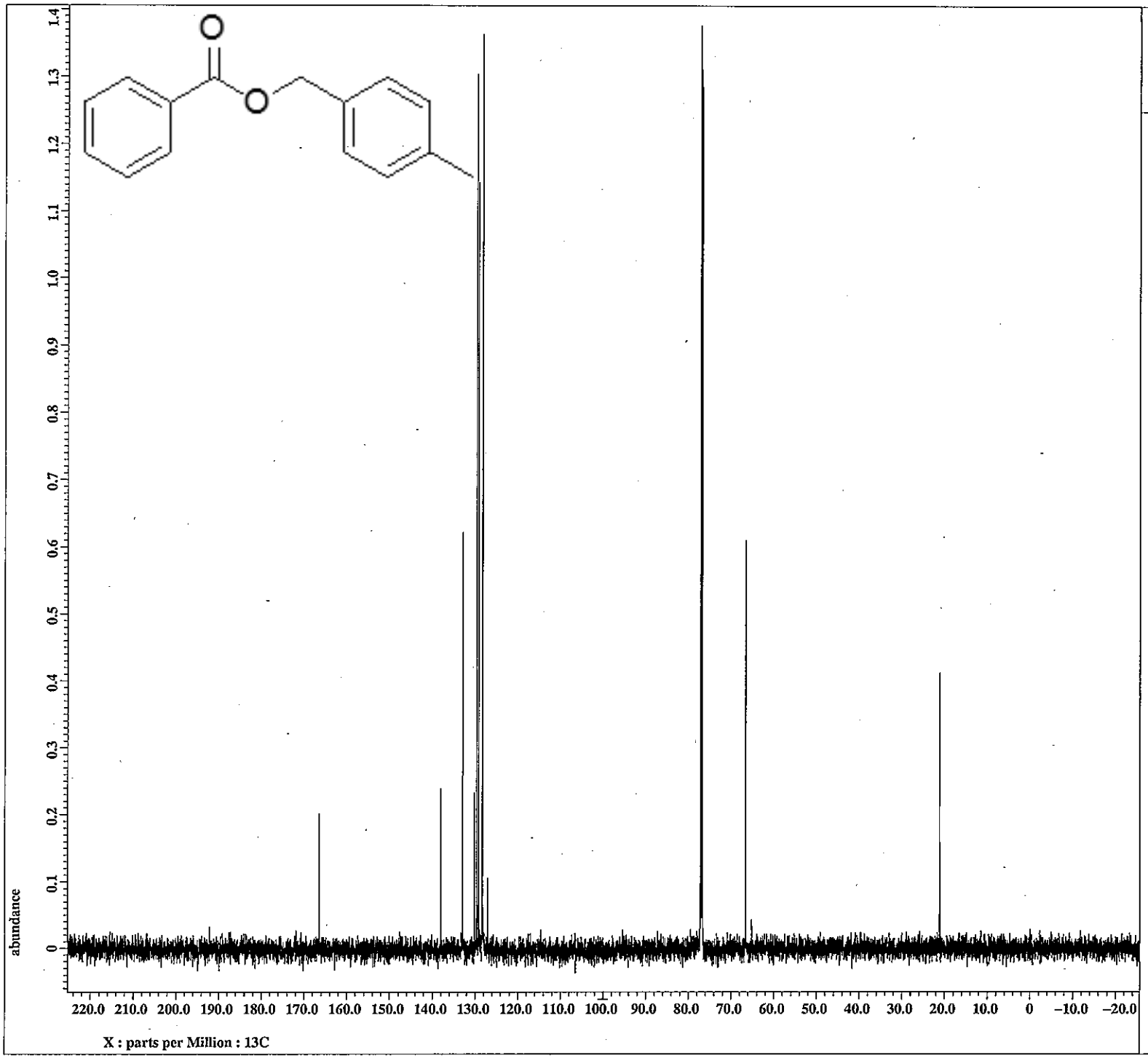
JEOL

Filename	= Exp-T-4-7-carbon-3.jd
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-T-4-7-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 20:06:08
Revision_time	= 5-DEC-2012 20:54:28
Current_time	= 5-DEC-2012 20:54:33
Content	= Exp-T-4-7-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 65
Total_scans	= 65
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 19.4[dC]



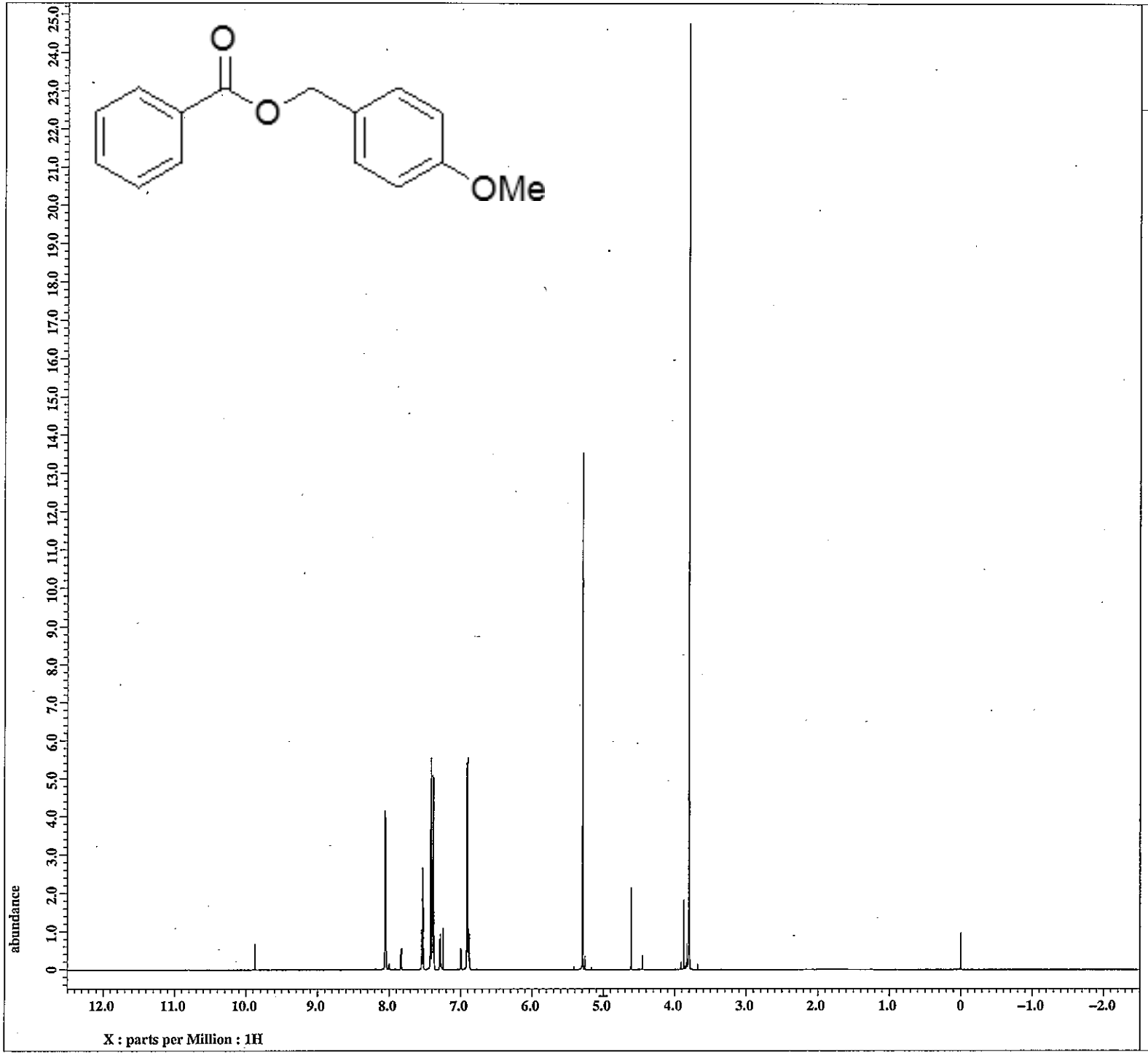
JEOL

Filename	= EXP-T-4-8-Proton-3.jd
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= EXP-T-4-8-Proton
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 20:12:20
Revision_time	= 5-DEC-2012 20:55:02
Current_time	= 5-DEC-2012 20:55:07
Content	= EXP-T-4-8-Proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 44
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 19[dC]



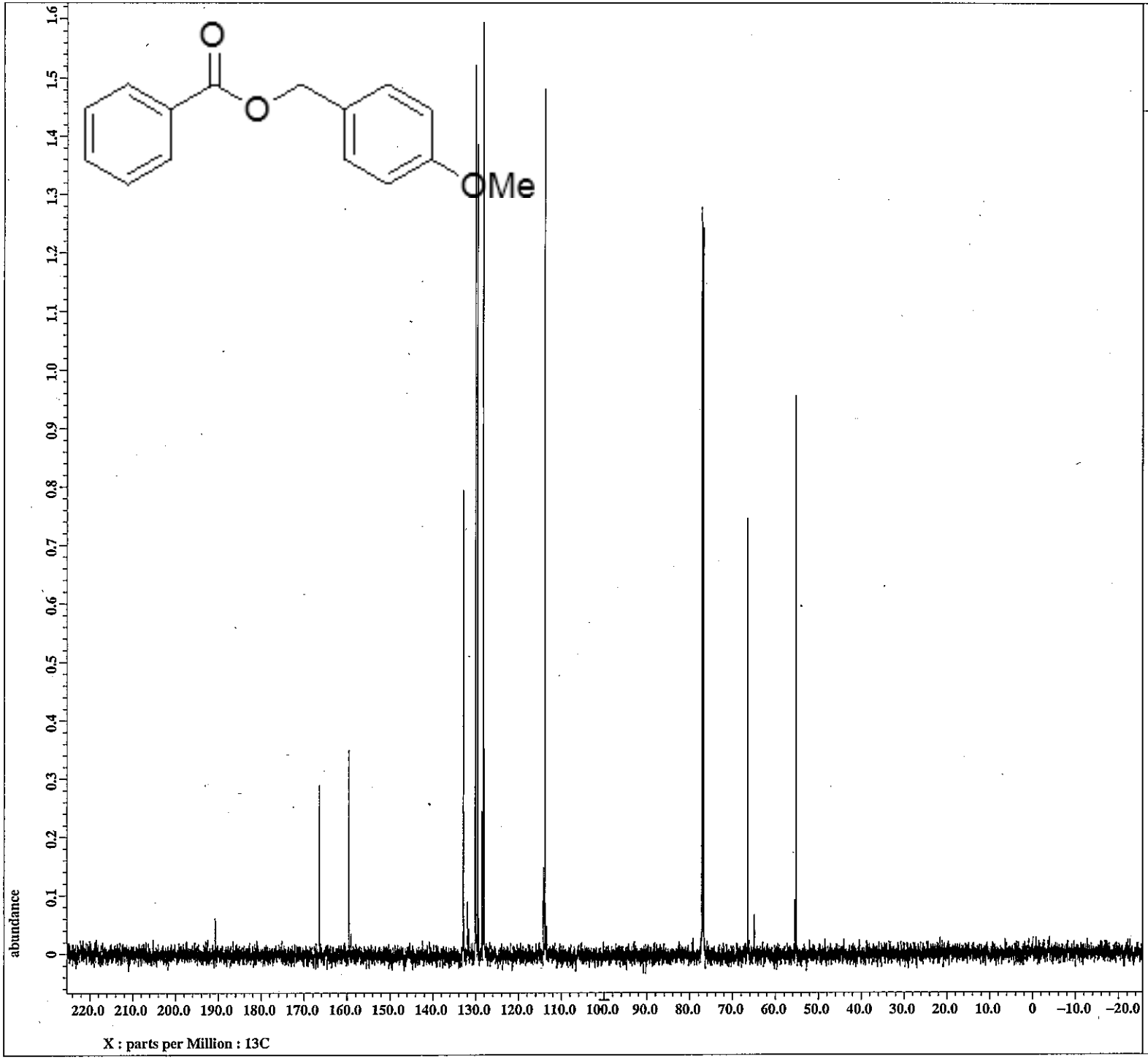
JEOL

Filename	= Exp-T-4-8-carbon-3.jd
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-T-4-8-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 20:17:08
Revision_time	= 5-DEC-2012 20:55:52
Current_time	= 5-DEC-2012 20:55:59
Content	= Exp-T-4-8-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 91
Total_scans	= 91
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 20[dC]



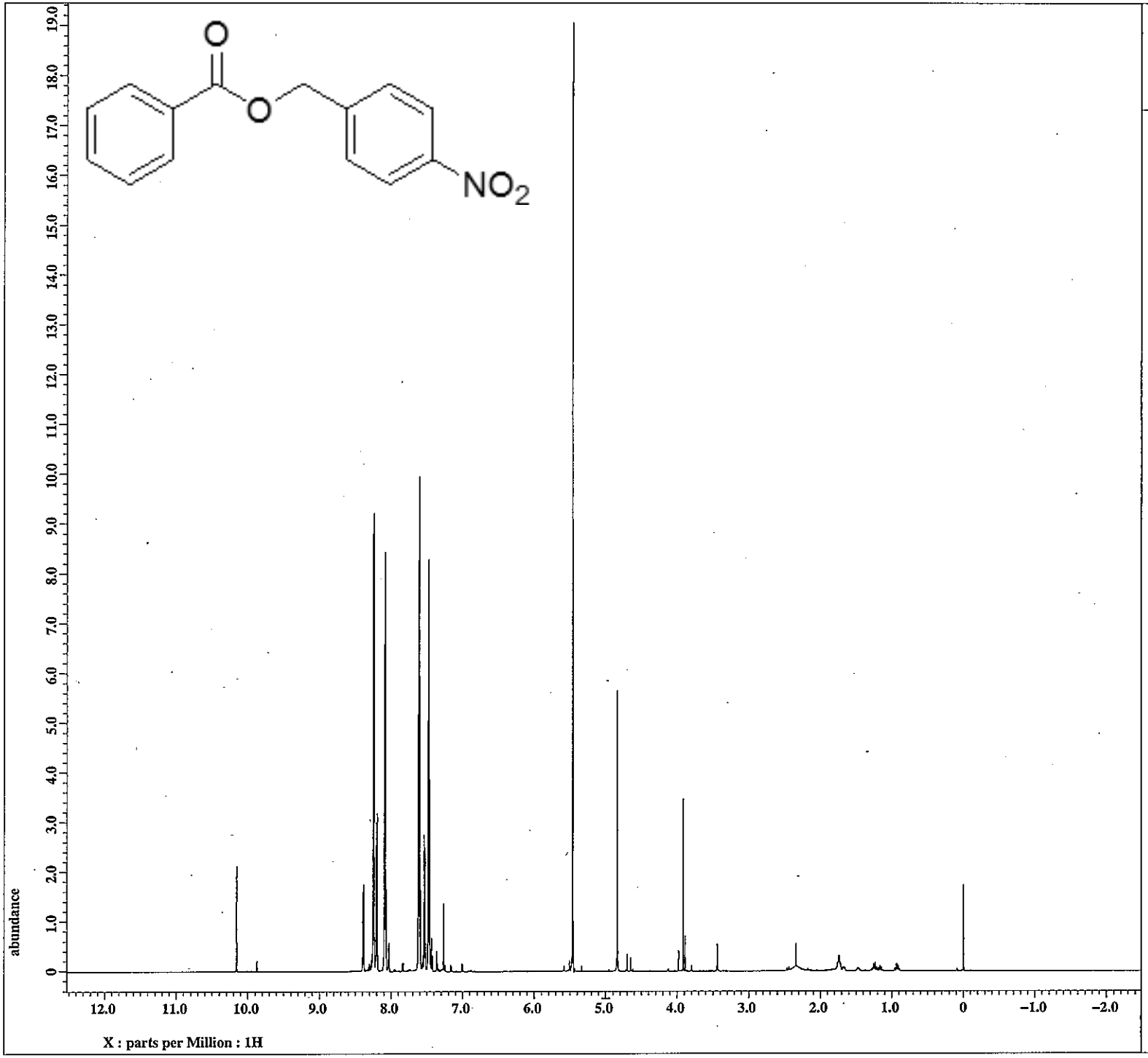
JEOL

Filename	= EXP-T-4-9-Proton-3.jd
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= EXP-T-4-9-Proton
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 20:23:10
Revision_time	= 5-DEC-2012 20:56:32
Current_time	= 5-DEC-2012 20:56:37
Content	= EXP-T-4-9-Proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 40
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 19.5[dC]



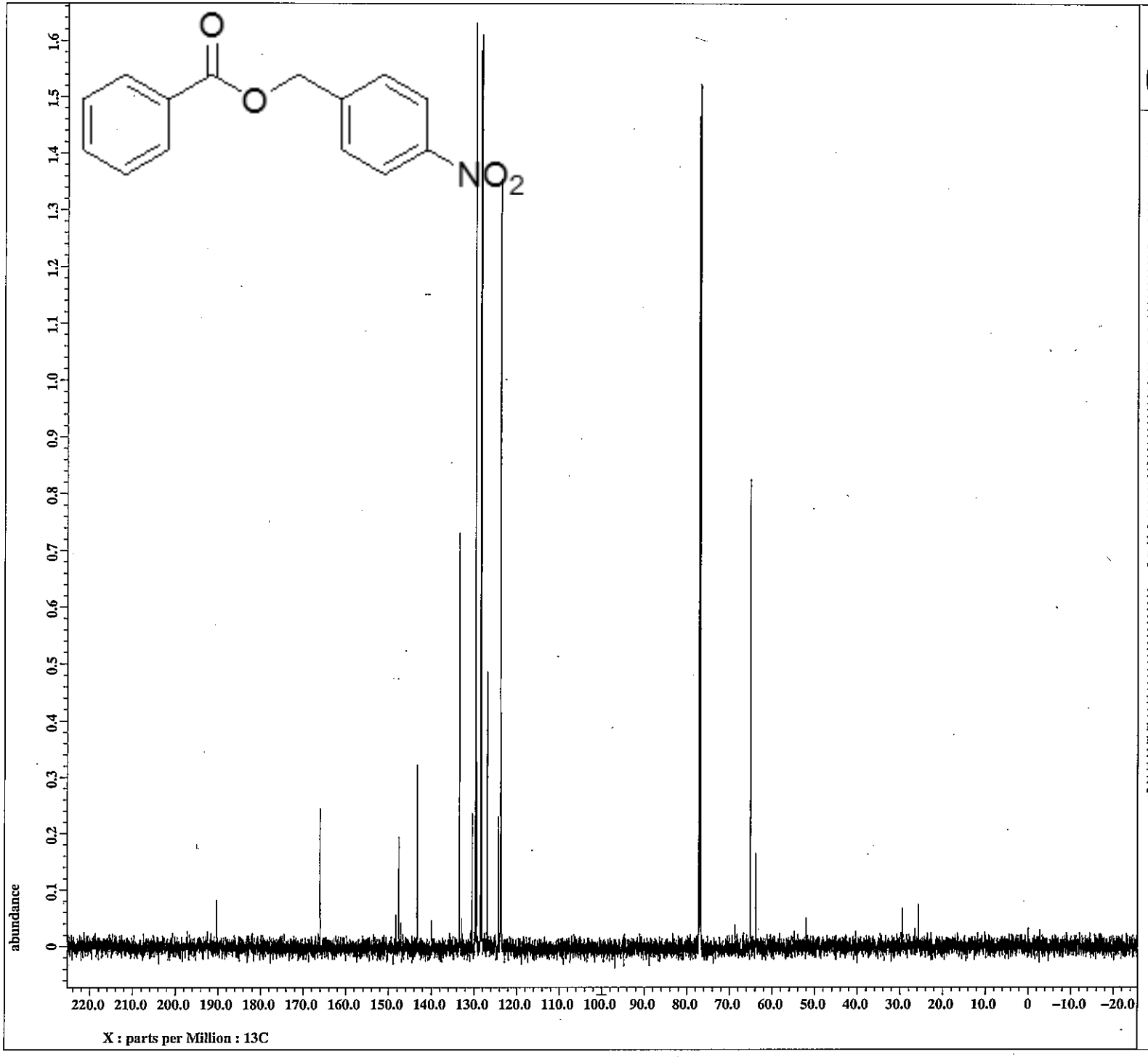
JEOL

Filename	= Exp-T-4-9-carbon-3.jd
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-T-4-9-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 20:28:46
Revision_time	= 5-DEC-2012 20:57:22
Current_time	= 5-DEC-2012 20:57:31
Content	= Exp-T-4-9-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 109
Total_scans	= 109
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 19.7[dC]



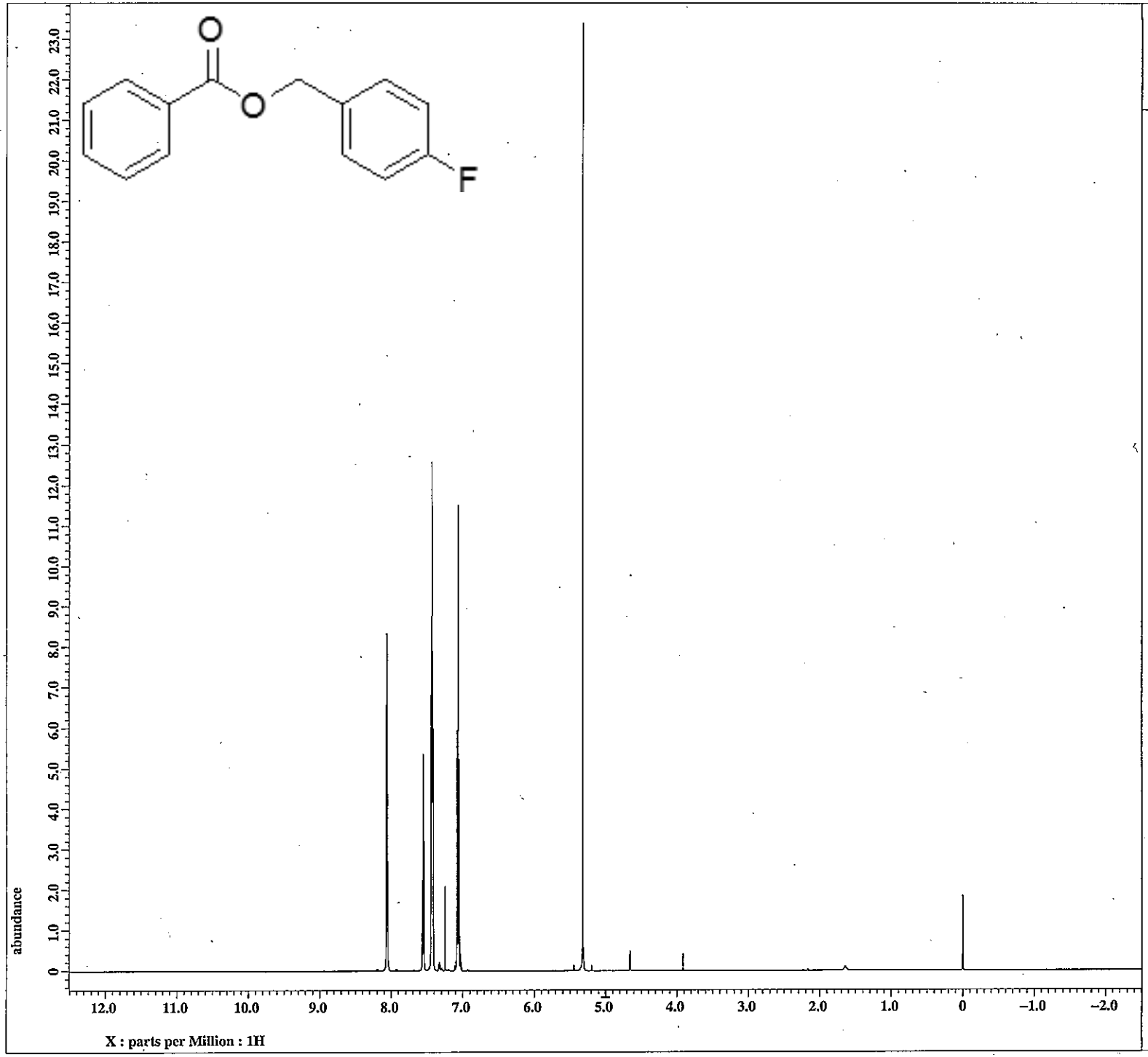
JEOL

Filename	= EXP-T-4-10-Proton-3.j
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= EXP-T-4-10-Proton
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 20:36:17
Revision_time	= 5-DEC-2012 21:00:13
Current_time	= 5-DEC-2012 21:00:20
Content	= EXP-T-4-10-Proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 44
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 19.1[dC]



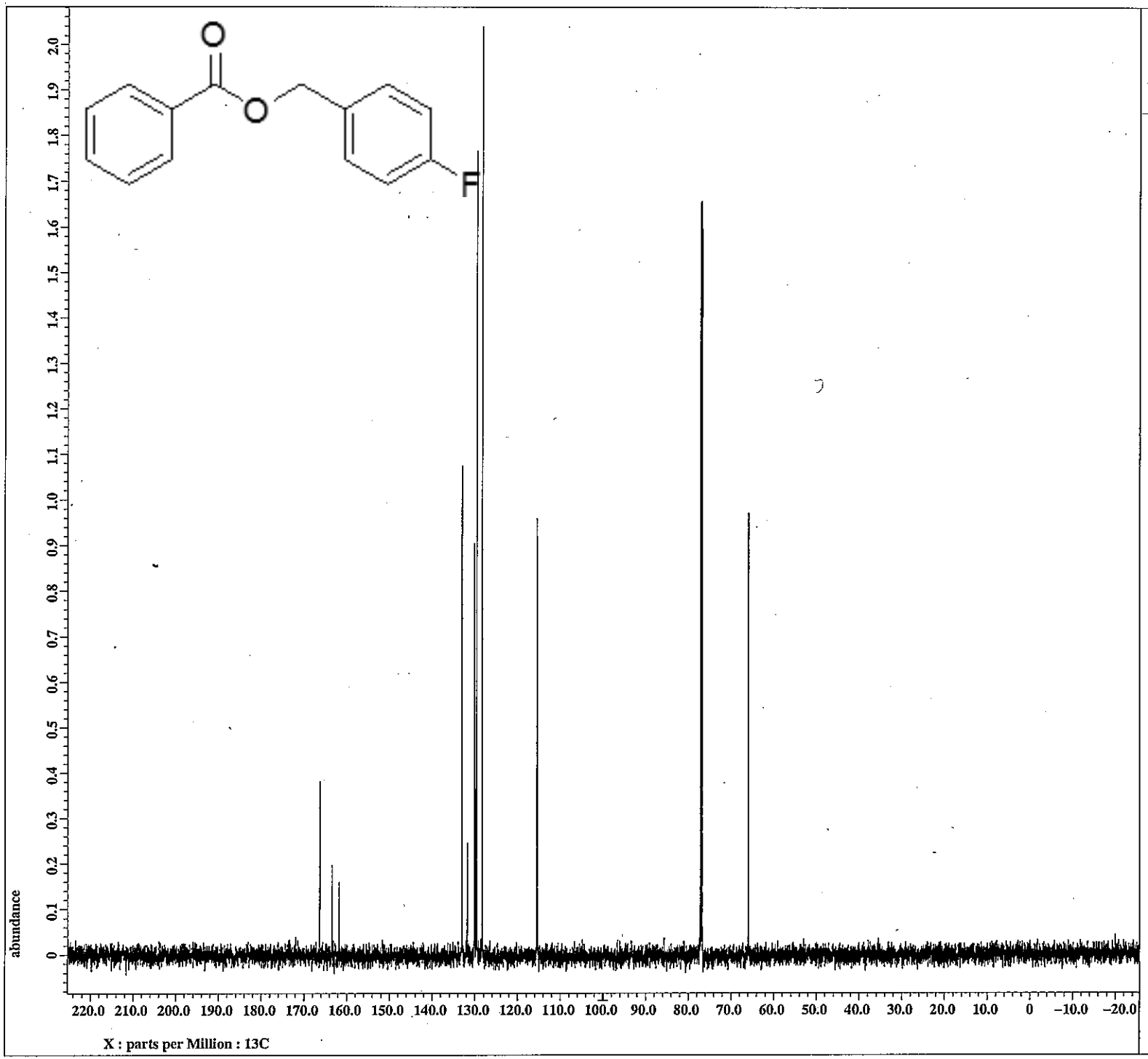
JEOL

Filename	= Exp-T-4-10-carbon-3.j
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-T-4-10-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 20:41:10
Revision_time	= 5-DEC-2012 21:01:07
Current_time	= 5-DEC-2012 21:01:15
Content	= Exp-T-4-10-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 93
Total_scans	= 93
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 19.9[dC]



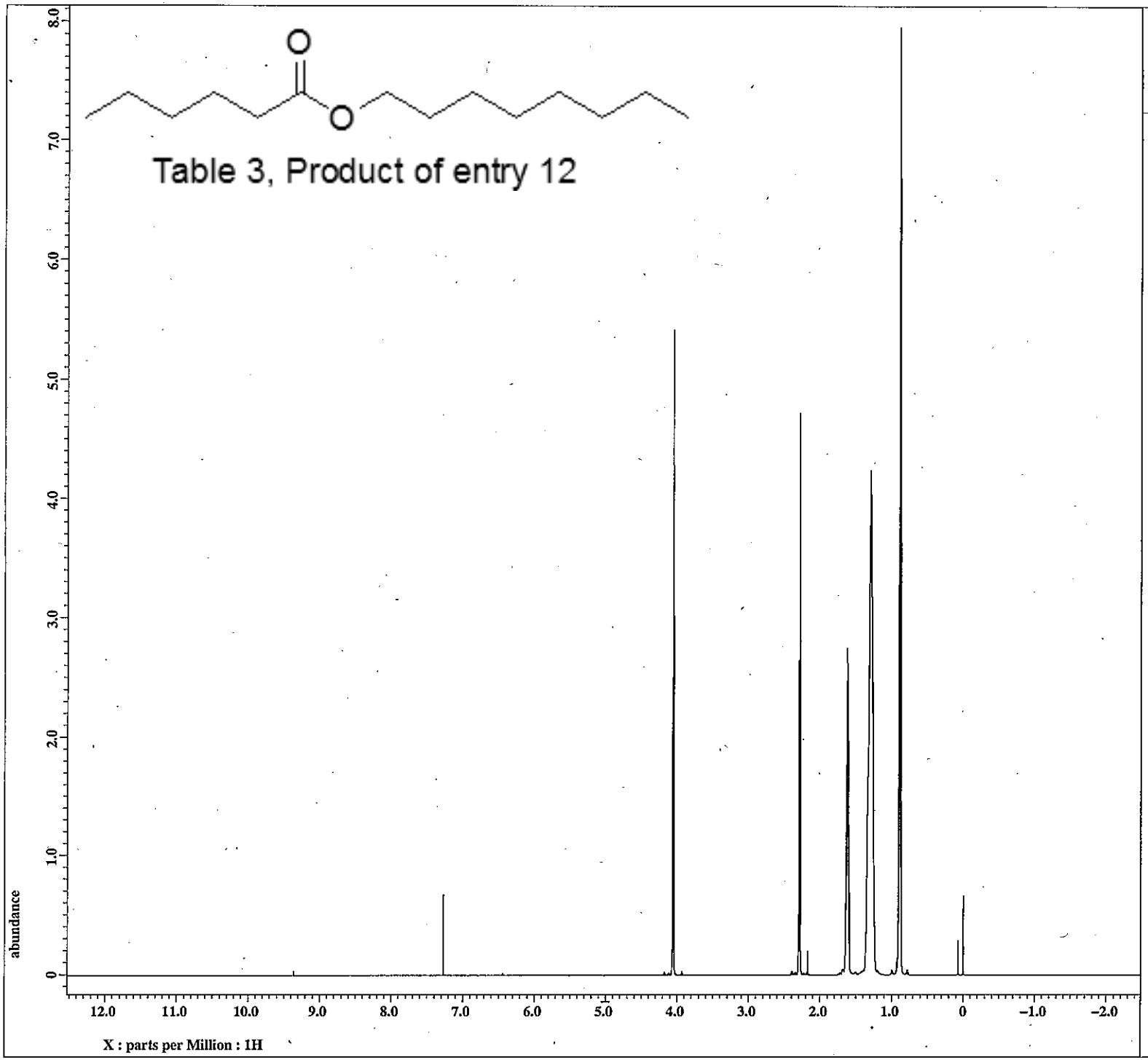
JEOL

Filename	= Exp-T-4-11-Proton-3.j
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= Exp-T-4-11-Proton
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 20:47:51
Revision_time	= 5-DEC-2012 21:03:40
Current_time	= 5-DEC-2012 21:03:47
Content	= Exp-T-4-11-Proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 44
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 19.3[dC]



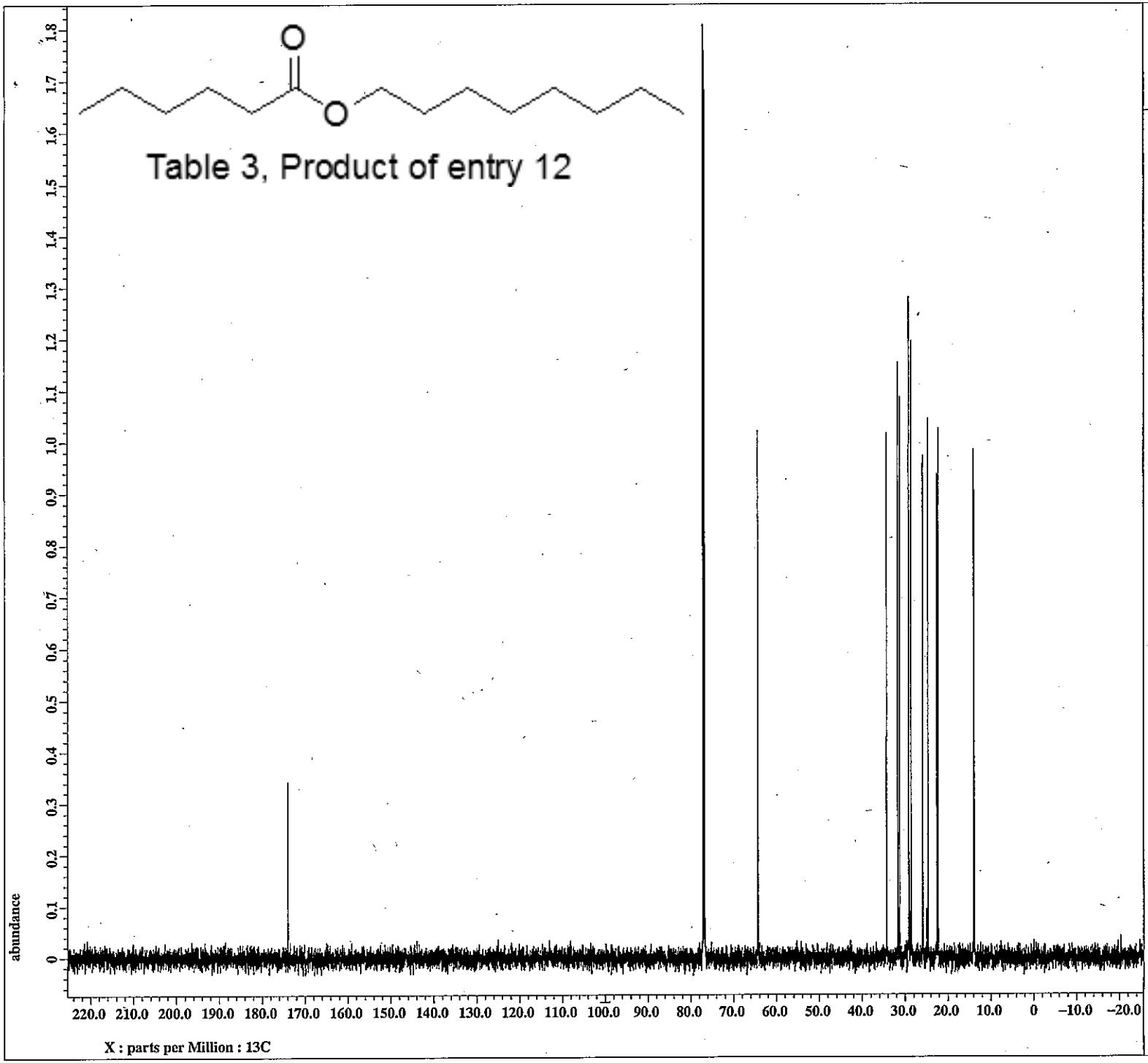
Filename	= Exp-T-4-11-carbon-3.j
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-T-4-11-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 30-NOV-2012 20:51:05
Revision_time	= 5-DEC-2012 21:04:31
Current_time	= 5-DEC-2012 21:04:37
Content	= Exp-T-4-11-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 56
Total_scans	= 56
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 19.4[dC]

Table 3, Product of entry 12



JEOL

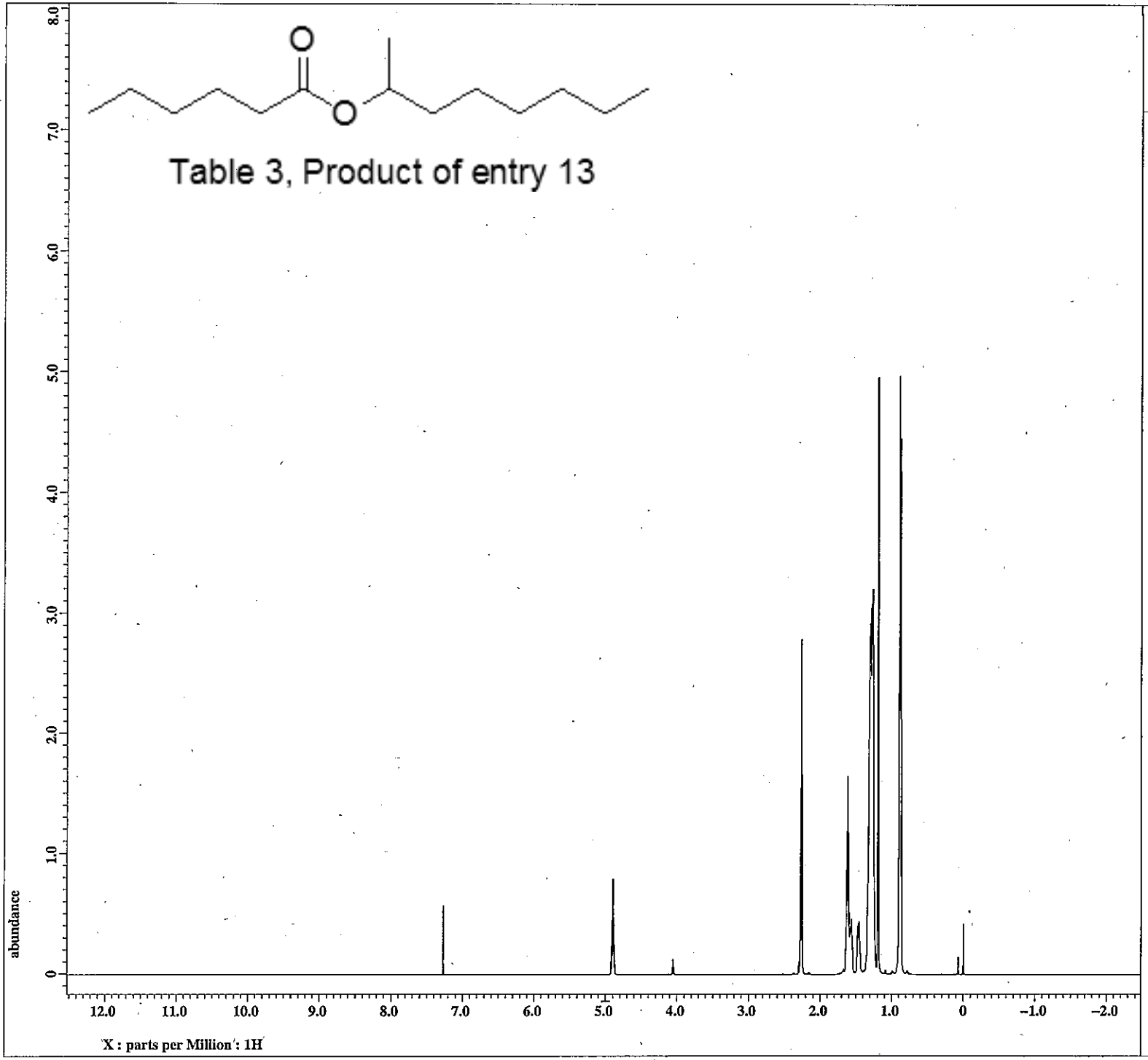
Filename	= Exp-124-1-p-1-proton-
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= Exp-124-1-p-1-proton
Solvent	= CHLOROFORM-D
Creation_time	= 18-FEB-2013 19:26:45
Revision_time	= 18-FEB-2013 19:54:10
Current_time	= 18-FEB-2013 19:54:14
Content	= Exp-124-1-p-1-proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 34
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 20.5[dC]



JEOL

Filename	= Exp-124-1-p-1-carbon-
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-124-1-p-1-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 18-FEB-2013 19:30:26
Revision_time	= 18-FEB-2013 19:54:55
Current_time	= 18-FEB-2013 19:54:59
Content	= Exp-124-1-p-1-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 66
Total_scans	= 66
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 21.1[dC]

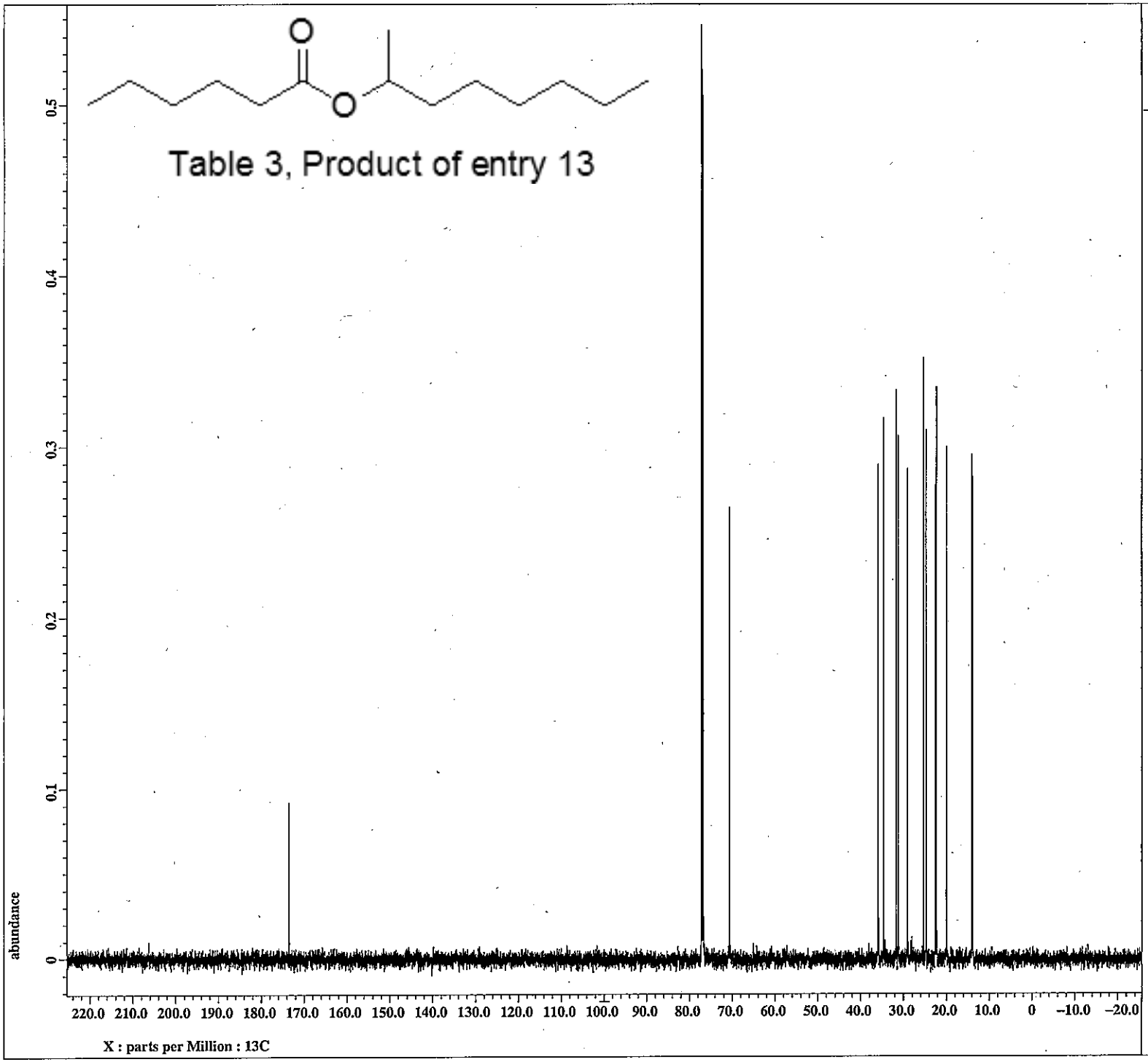
Table 3, Product of entry 13



JEOL

Filename	= Exp-124-3a-proton-3.j
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= Exp-124-3a-proton
Solvent	= CHLOROFORM-D
Creation_time	= 18-FEB-2013 11:52:28
Revision_time	= 18-FEB-2013 12:22:50
Current_time	= 18-FEB-2013 12:22:58
Content	= Exp-124-3a-proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 34
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 20.6[dC]

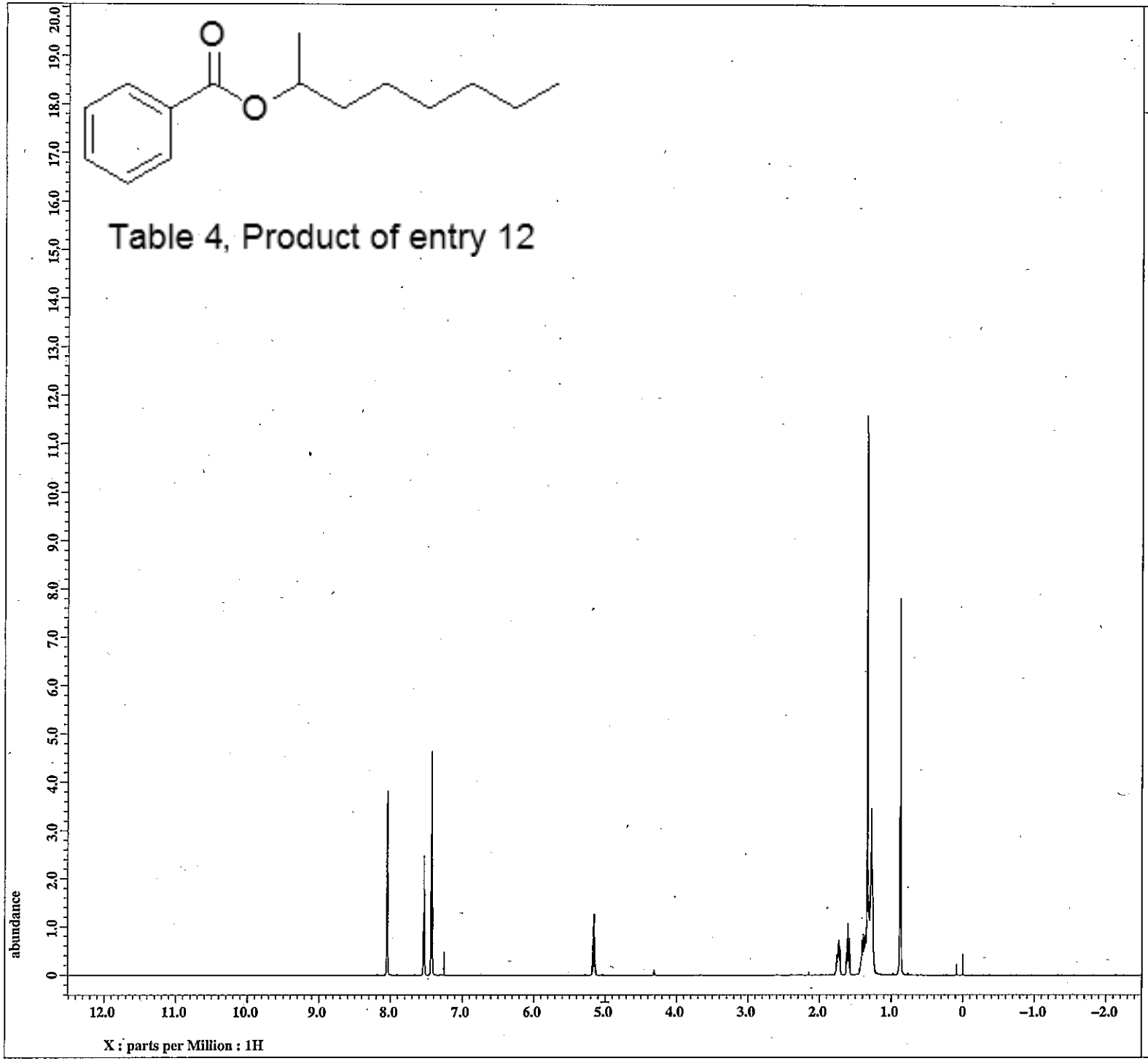
Table 3, Product of entry 13



JEOL

Filename	= Exp-124-3a-carbon-6.j
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-124-3a-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 18-FEB-2013 12:06:06
Revision_time	= 18-FEB-2013 12:28:21
Current_time	= 18-FEB-2013 12:28:25
Content	= Exp-124-3a-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 116.0
Total_scans	= 116.0
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 50
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 20.6[dC]

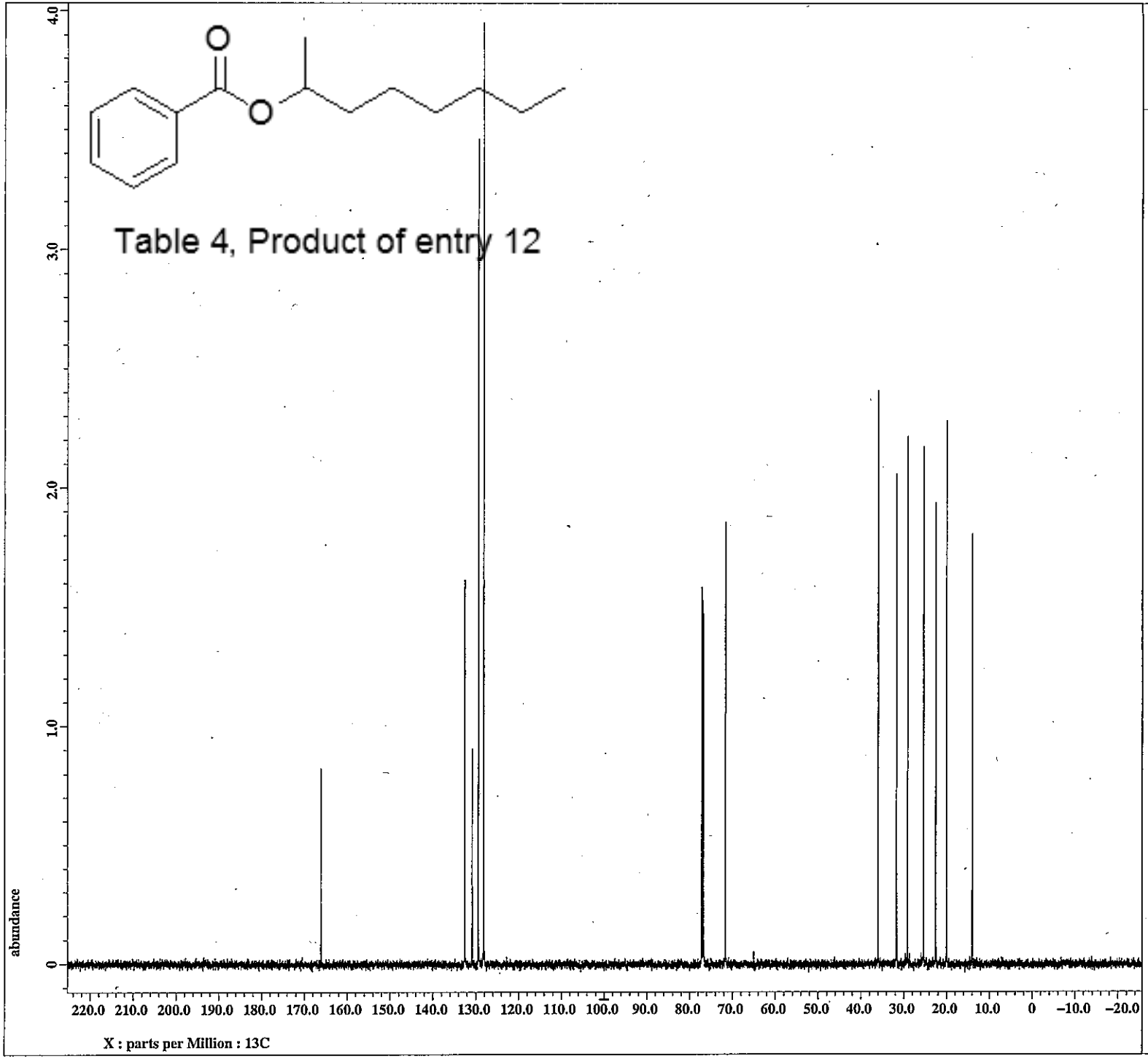
Table 4, Product of entry 12



JEOL

Filename	= Exp-121-3-p-1-proton-
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= Exp-121-3-p-1-proton
Solvent	= CHLOROFORM-D
Creation_time	= 15-FEB-2013 22:23:44
Revision_time	= 18-FEB-2013 12:25:56
Current_time	= 18-FEB-2013 12:26:04
Content	= Exp-121-3-p-1-proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 30
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 20.2[dC]

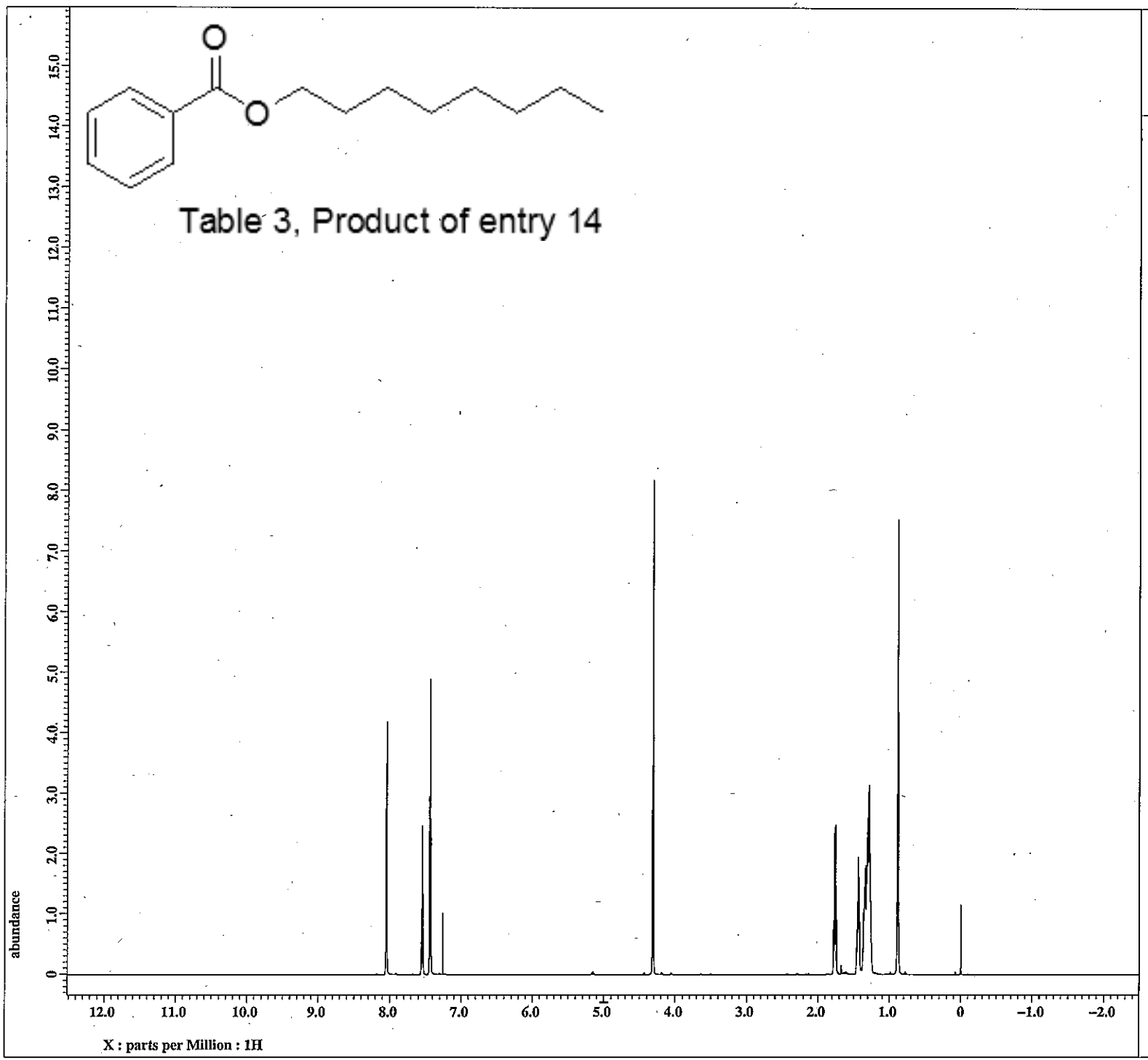
Table 4, Product of entry 12



JEOL

Filename	= Exp-121-3-p-1-carbon-
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-121-3-p-1-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 15-FEB-2013 22:28:32
Revision_time	= 18-FEB-2013 12:26:42
Current_time	= 18-FEB-2013 12:26:49
Content	= Exp-121-3-p-1-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 91
Total_scans	= 91
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 21[dC]

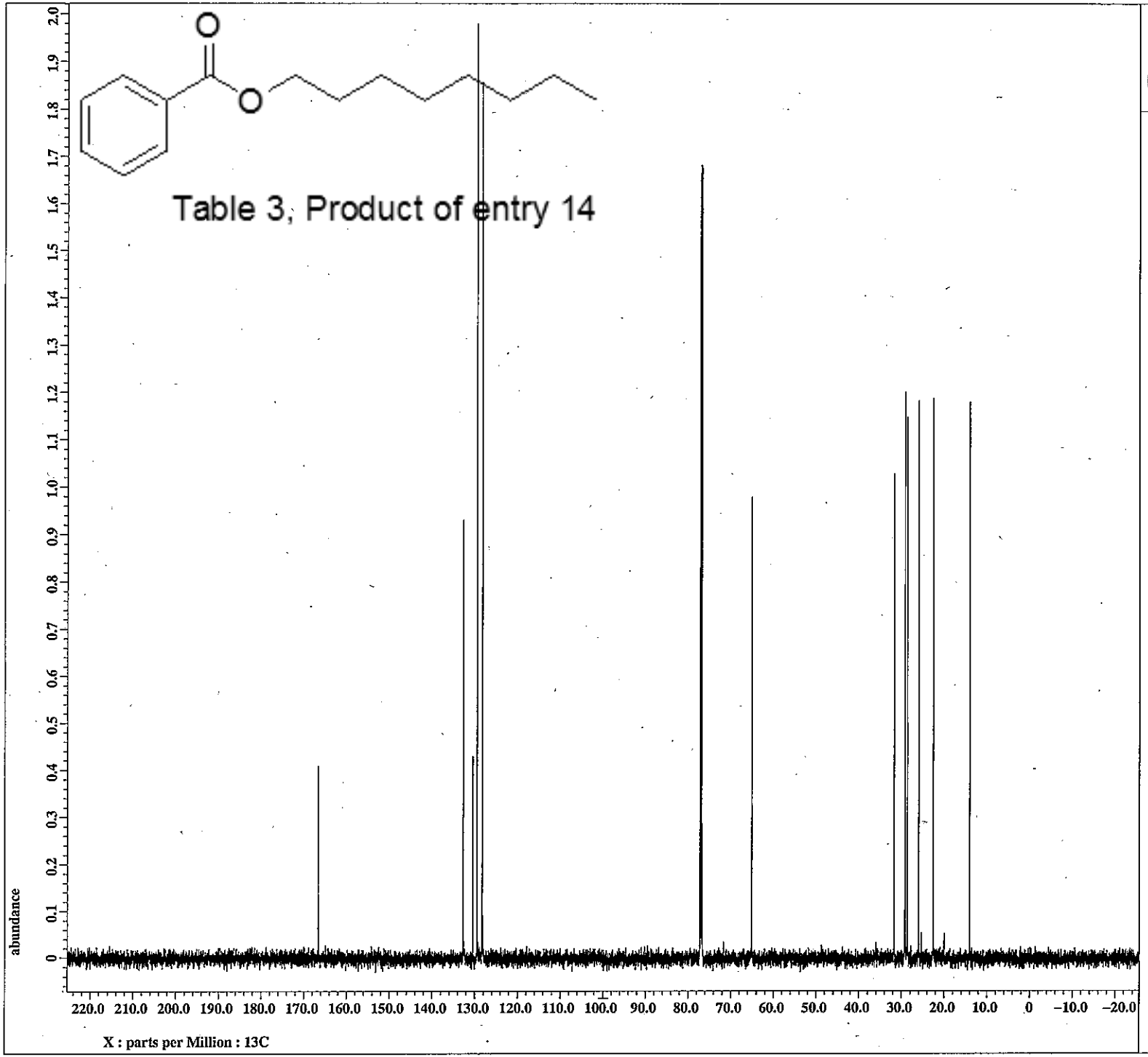
Table 3, Product of entry 14



JEOL

Filename	= Exp-129-2-proton-3.jd
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= Exp-129-2-proton
Solvent	= CHLOROFORM-D
Creation_time	= 19-FEB-2013 18:24:22
Revision_time	= 19-FEB-2013 18:26:52
Current_time	= 19-FEB-2013 18:27:26
Content	= Exp-129-2-proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 36
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 20.1[dC]

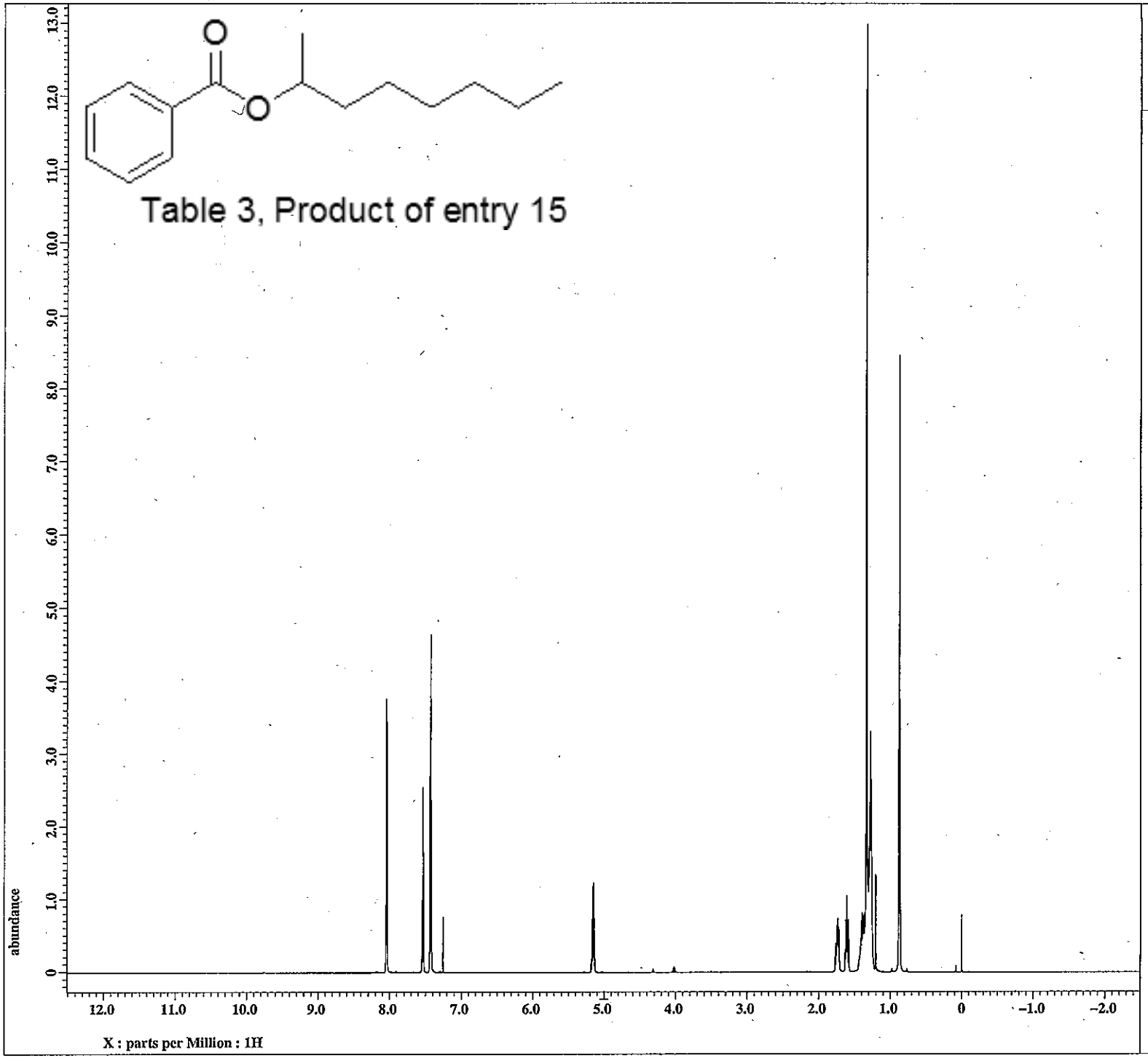
Table 3, Product of entry 14



JEOL

Filename	= Exp-129-2-carbon-5.jd
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-129-2-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 19-FEB-2013 18:29:32
Revision_time	= 19-FEB-2013 18:31:00
Current_time	= 19-FEB-2013 18:31:03
Content	= Exp-129-2-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 99
Total_scans	= 99
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 20.7[dC]

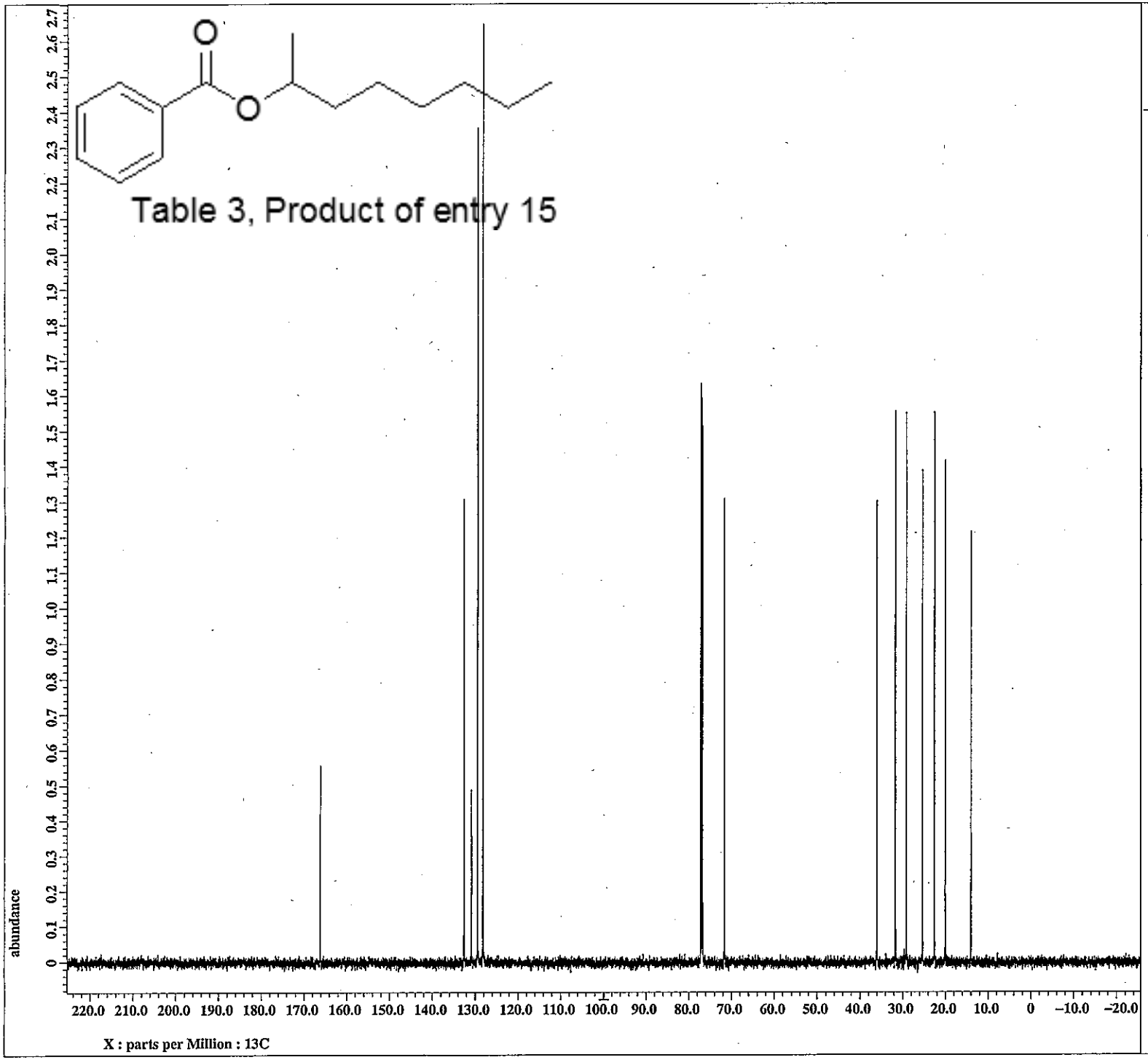
Table 3, Product of entry 15



JEOL

Filename	= Exp-129-4-proton-3.jd
Author	= delta
Experiment	= single_pulse.ex2
Sample_id	= Exp-129-4-proton
Solvent	= CHLOROFORM-D
Creation_time	= 19-FEB-2013 18:37:22
Revision_time	= 19-FEB-2013 18:44:03
Current_time	= 19-FEB-2013 18:44:07
Content	= Exp-129-4-proton
Data_format	= 1D COMPLEX
Dim_size	= 13107
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 1.4548992[s]
X_domain	= 1H
X_freq	= 600.1723046[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 1
X_resolution	= 0.68733284[Hz]
X_sweep	= 11.26126126[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Tri_domain	= 1H
Tri_freq	= 600.1723046[MHz]
Tri_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 8
Total_scans	= 8
X_90_width	= 12.4[us]
X_acq_time	= 1.4548992[s]
X_angle	= 45[deg]
X_atn	= 3.6[dB]
X_pulse	= 6.2[us]
Irr_mode	= Off
Tri_mode	= Off
Dante_presat	= FALSE
Initial_wait	= 1[s]
Recvr_gain	= 34
Relaxation_delay	= 5[s]
Repetition_time	= 6.4548992[s]
Temp_get	= 20.3[dC]

Table 3, Product of entry 15



JEOL

Filename	= Exp-129-4-carbon-4.jd
Author	= delta
Experiment	= single_pulse_dec
Sample_id	= Exp-129-4-carbon
Solvent	= CHLOROFORM-D
Creation_time	= 19-FEB-2013 18:44:16
Revision_time	= 19-FEB-2013 18:45:30
Current_time	= 19-FEB-2013 18:45:33
Content	= Exp-129-4-carbon
Data_format	= 1D COMPLEX
Dim_size	= 26214
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= ECA 600
Spectrometer	= DELTA2_NMR
Field_strength	= 14.09636928[T] (600[M
X_acq_duration	= 0.69206016[s]
X_domain	= 13C
X_freq	= 150.91343039[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 1.44496109[Hz]
X_sweep	= 47.34848485[kHz]
Irr_domain	= 1H
Irr_freq	= 600.1723046[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 138
Total_scans	= 138
X_90_width	= 11.3[us]
X_acq_time	= 0.69206016[s]
X_angle	= 30[deg]
X_atn	= 8[dB]
X_pulse	= 3.76666667[us]
Irr_atn_dec	= 19.34784[dB]
Irr_atn_noe	= 19.34784[dB]
Irr_noise	= WALTZ
Decoupling	= TRUE
Initial_wait	= 1[s]
Noe	= TRUE
Noe_time	= 2[s]
Recvr_gain	= 60
Relaxation_delay	= 2[s]
Repetition_time	= 2.69206016[s]
Temp_get	= 21.1[dC]