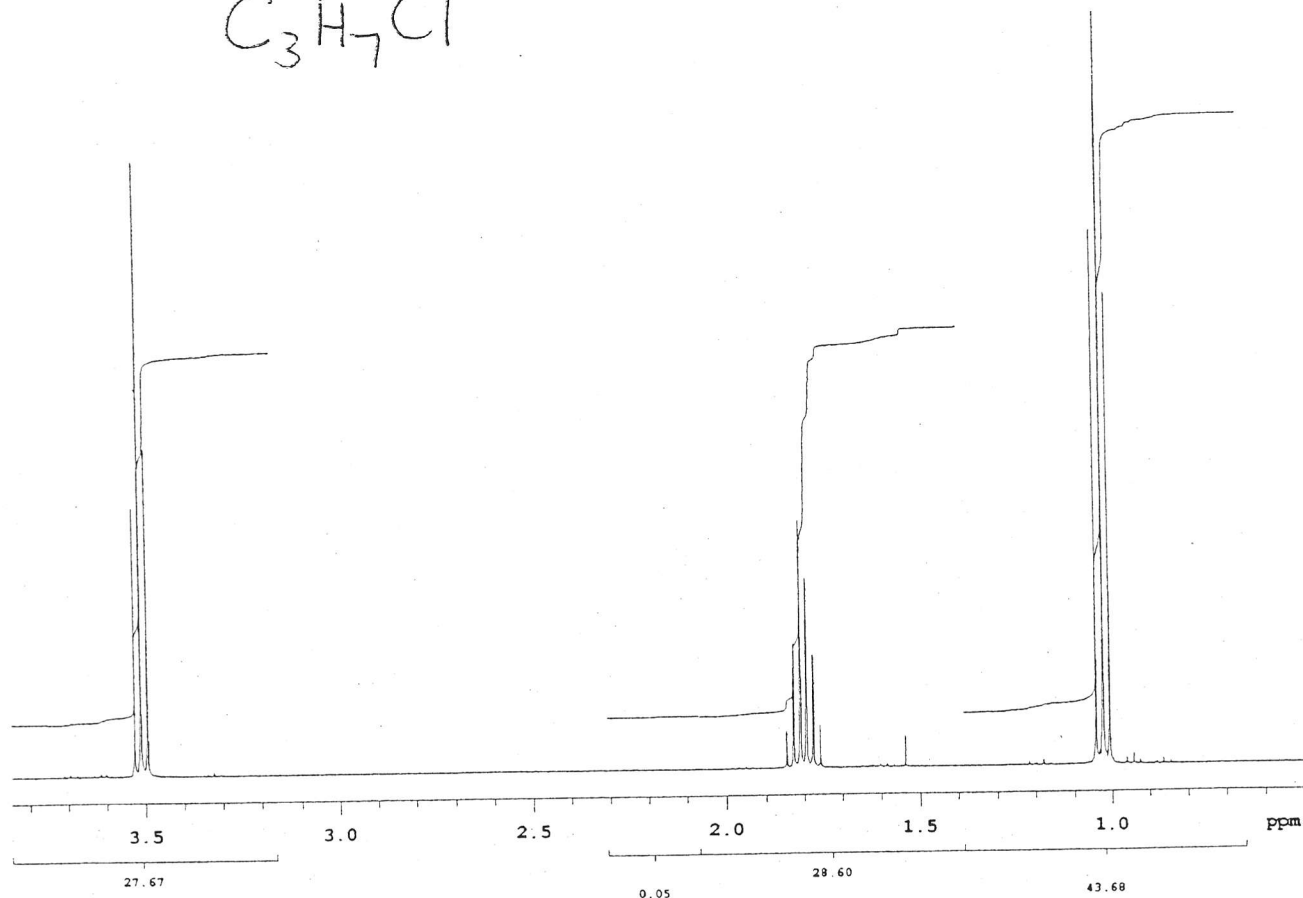
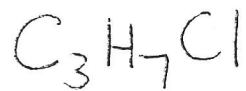
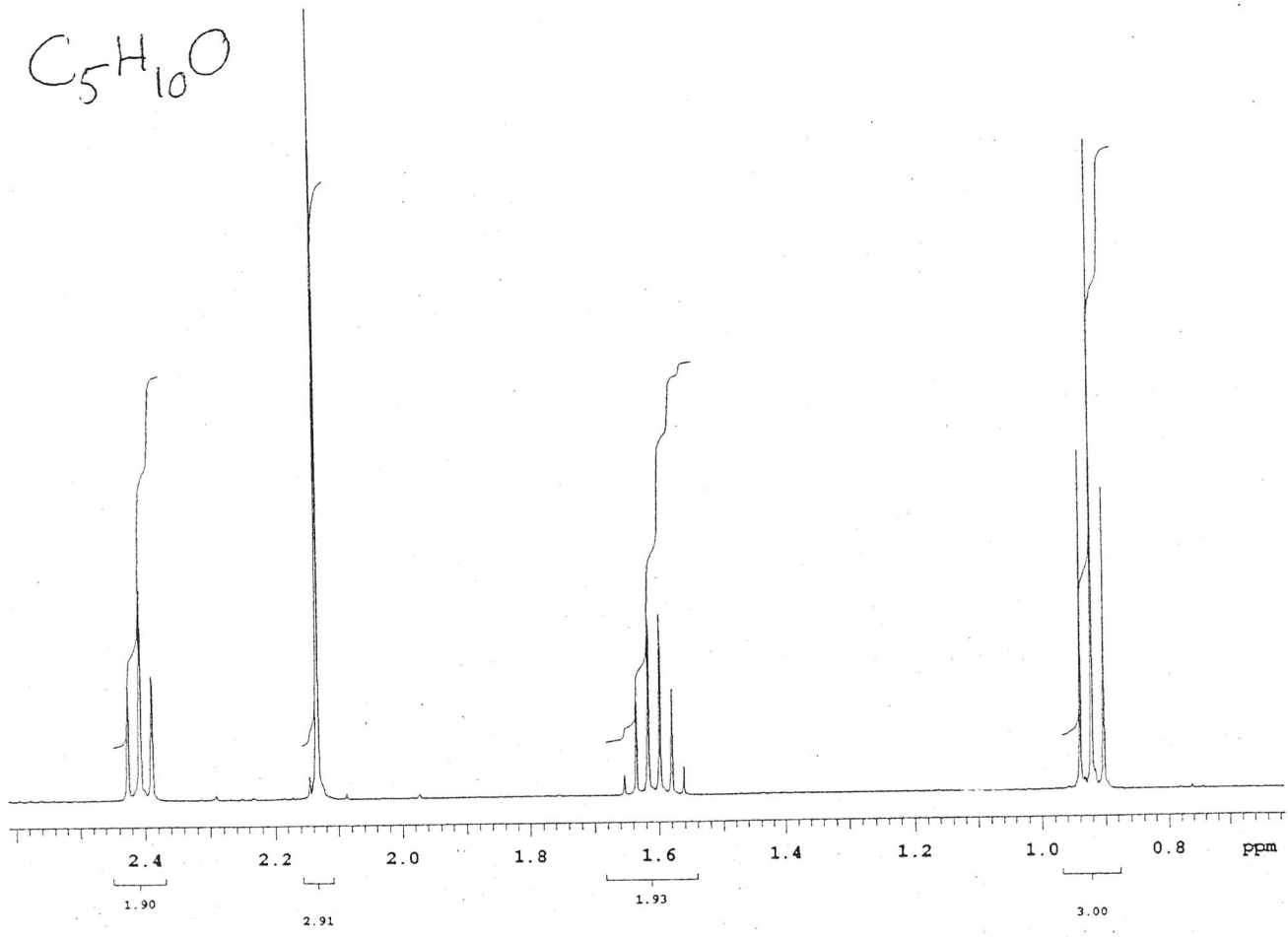
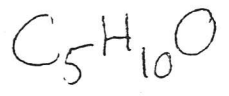


5 asperse Organic II NMR Problems

①

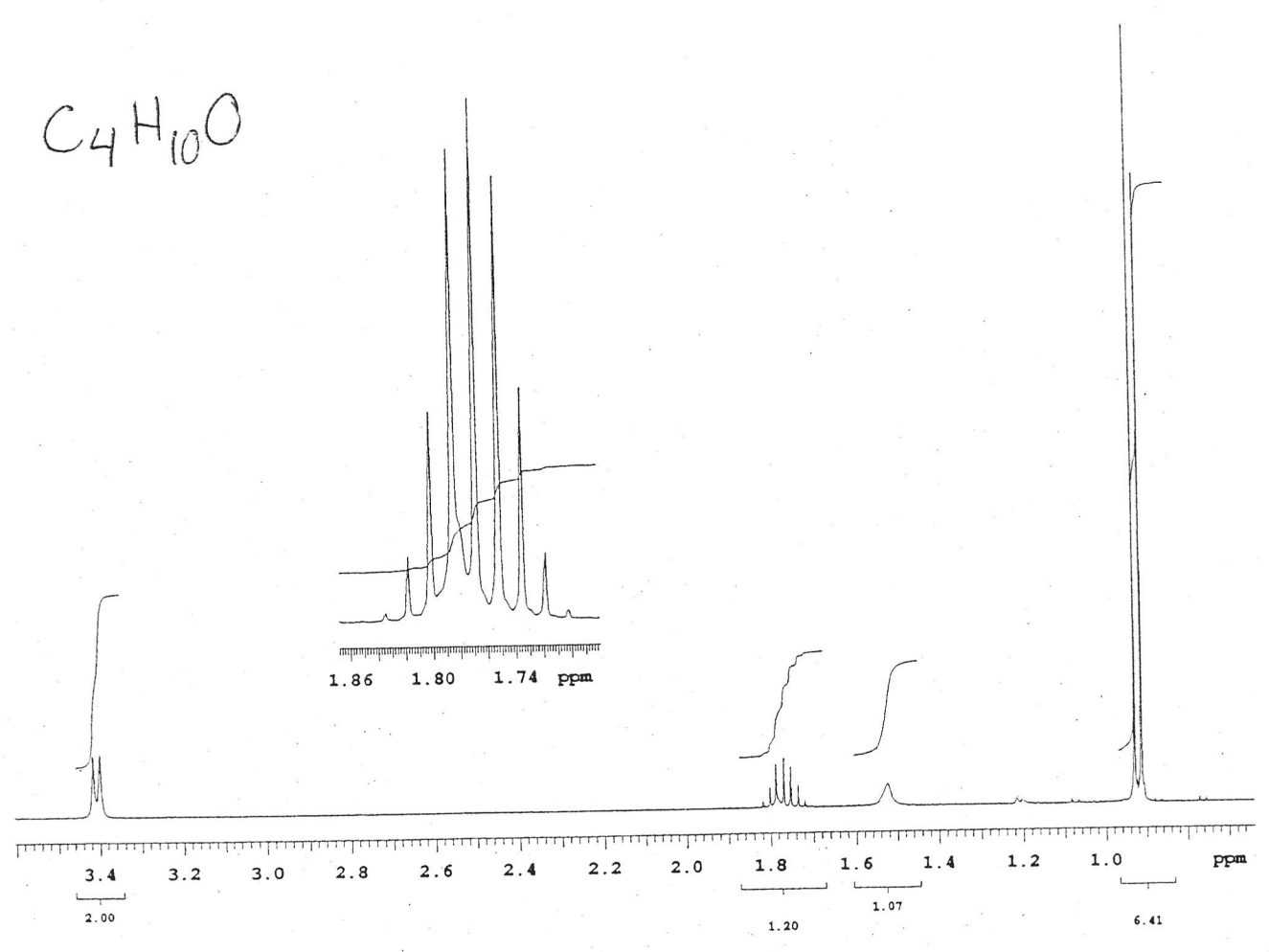


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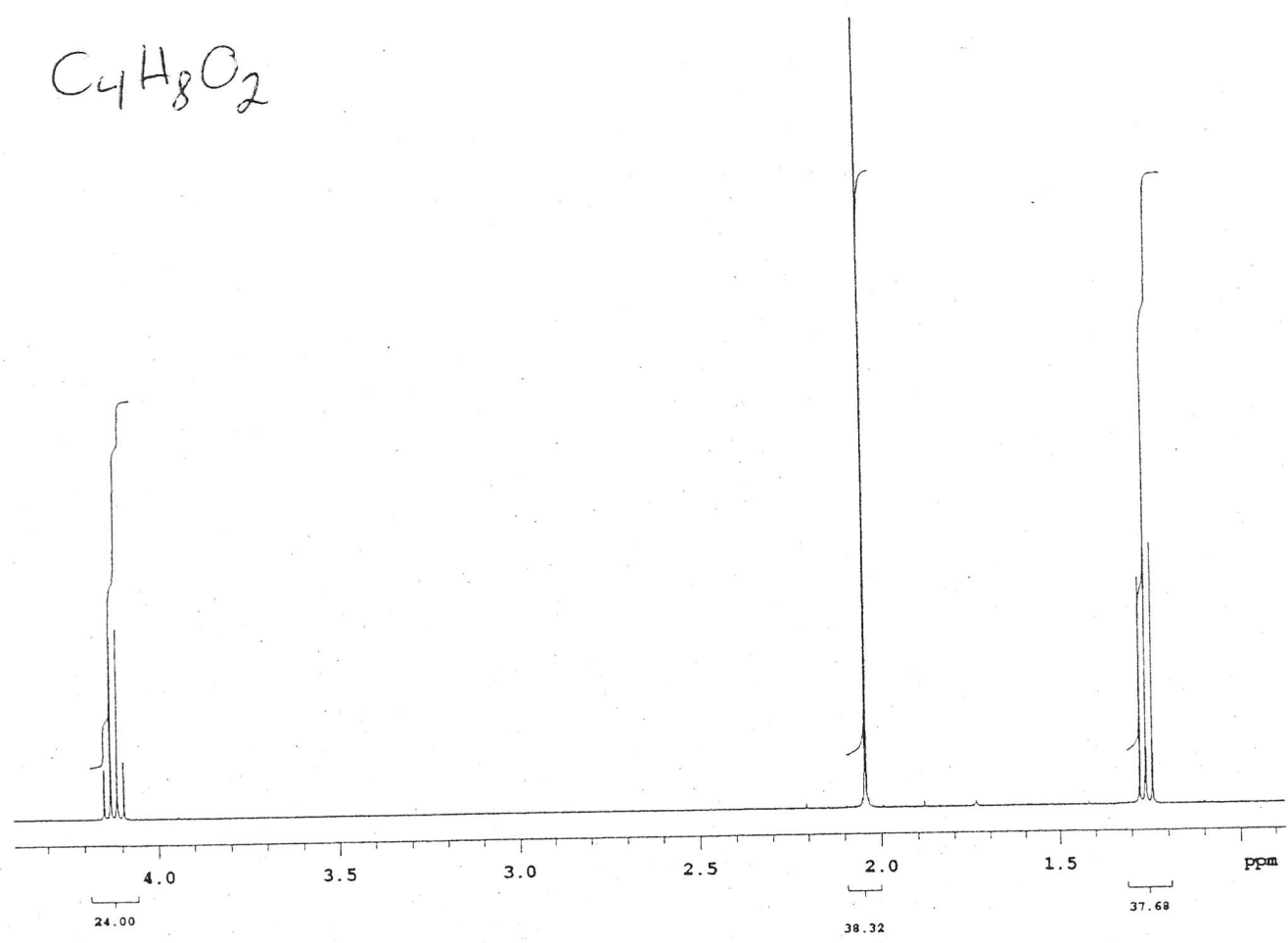
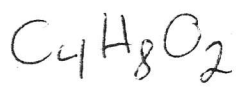


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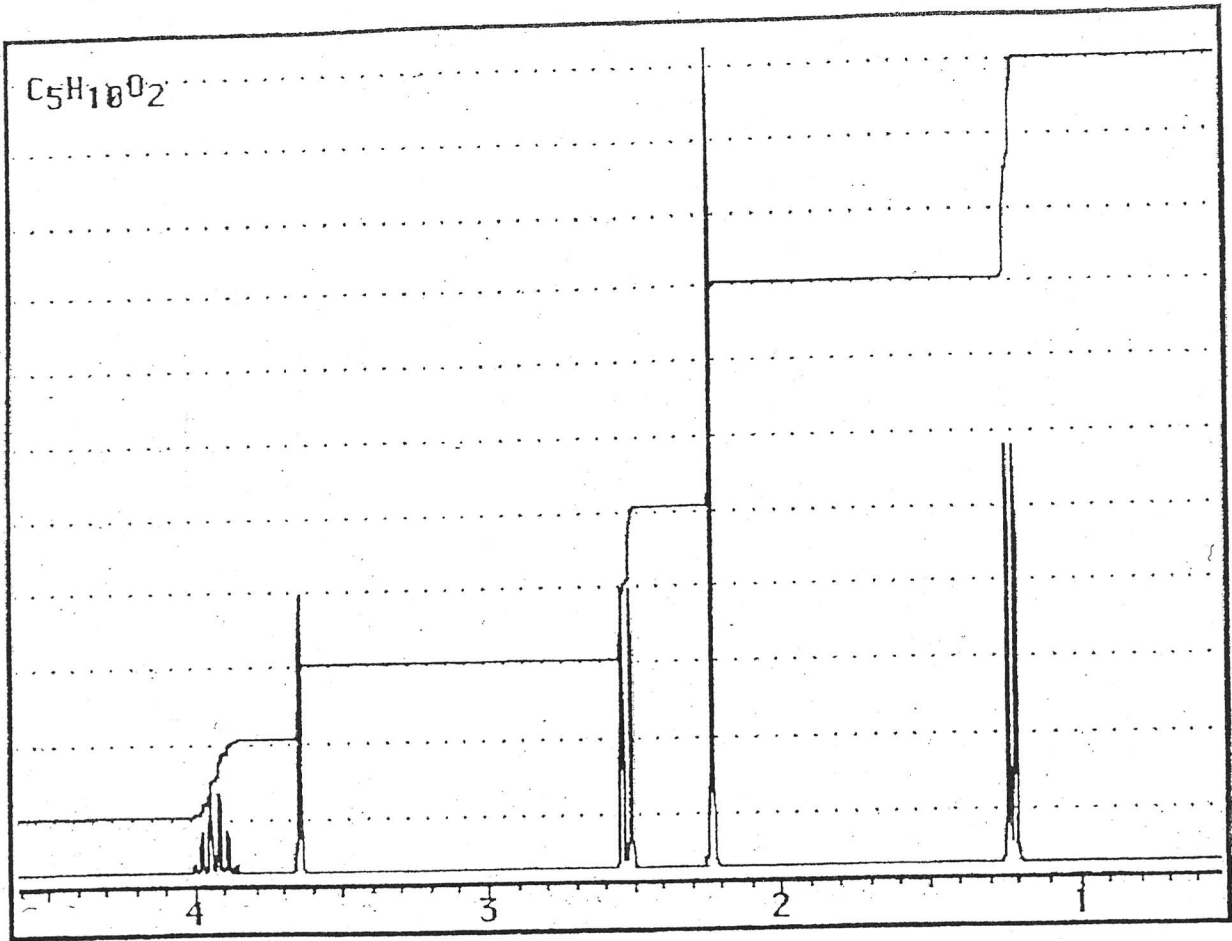
$C_4H_{10}O$



4

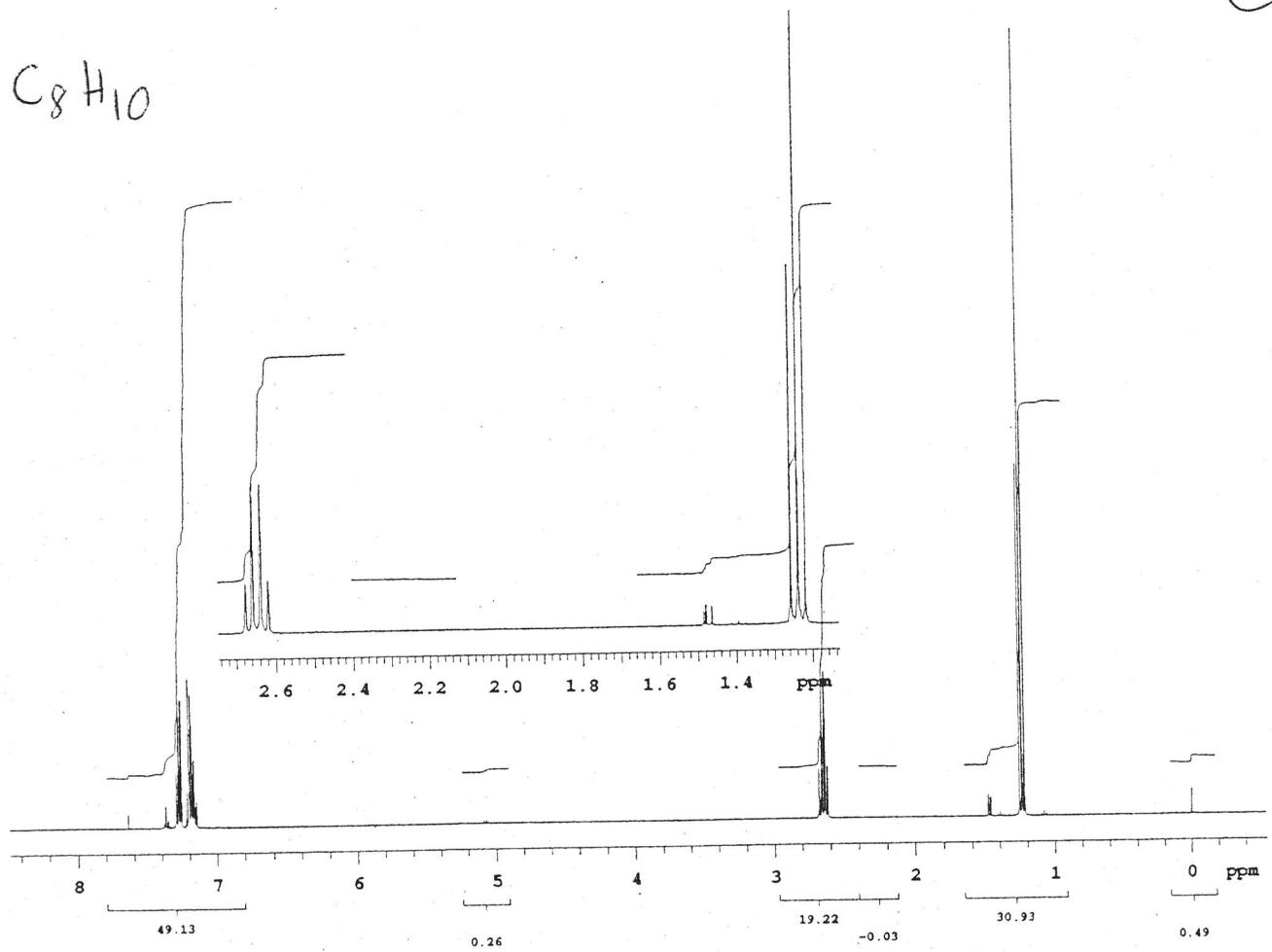


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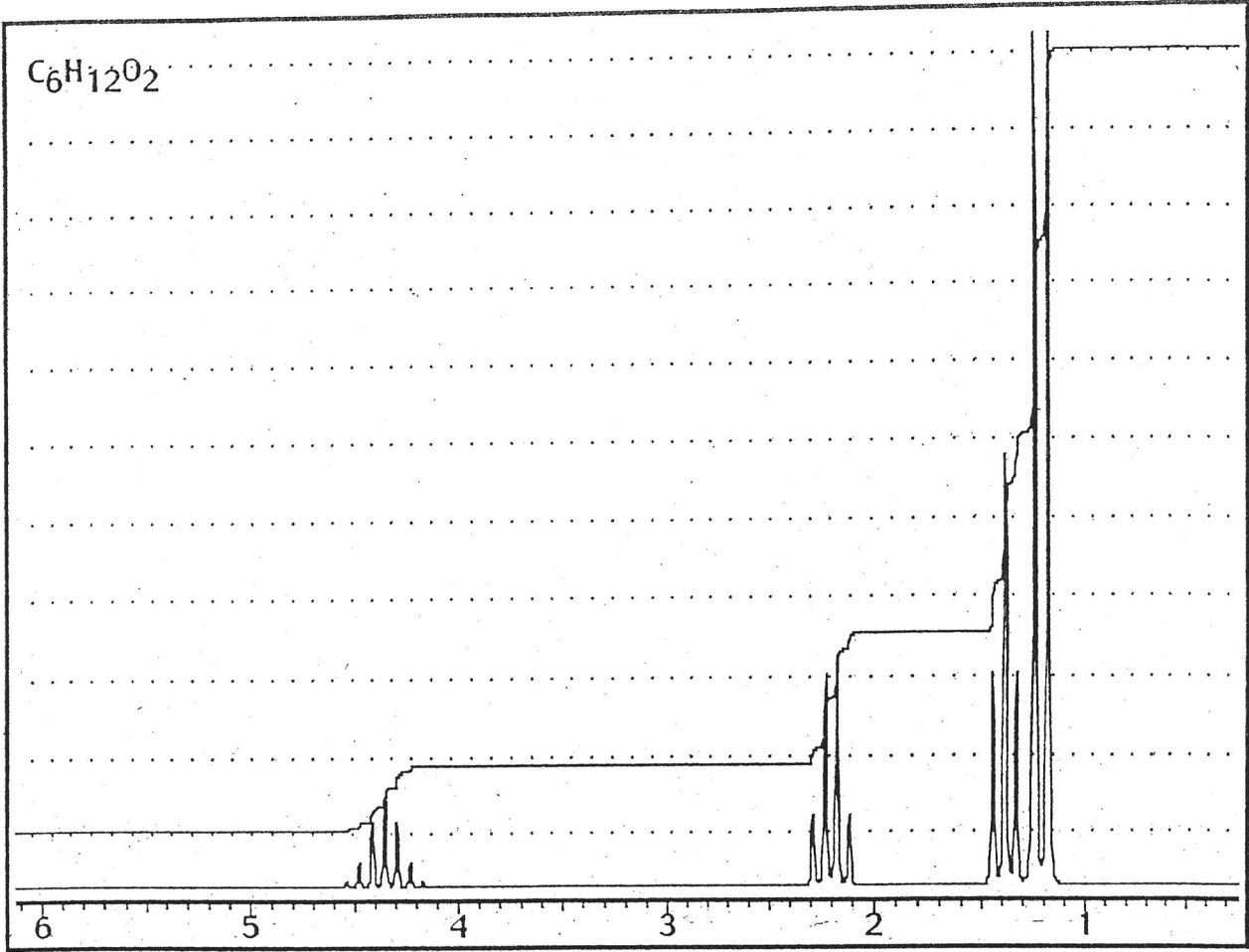


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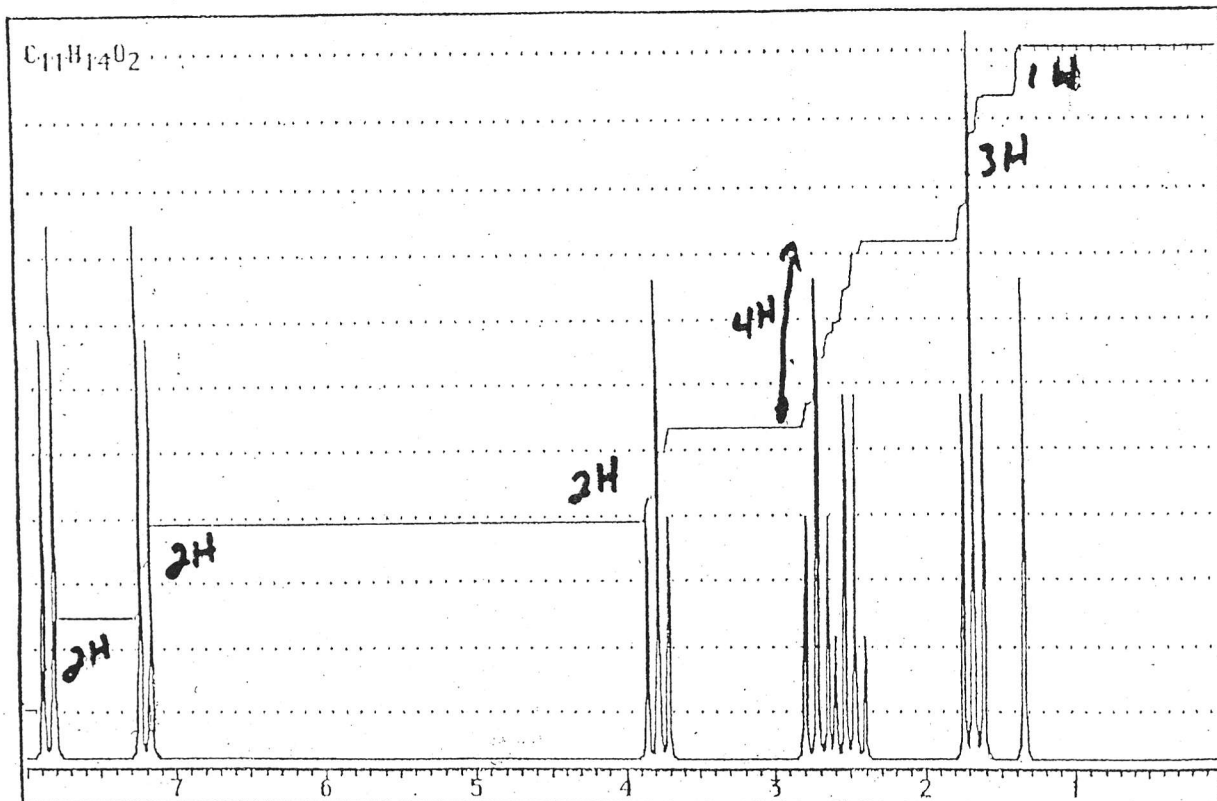
C_8H_{10}



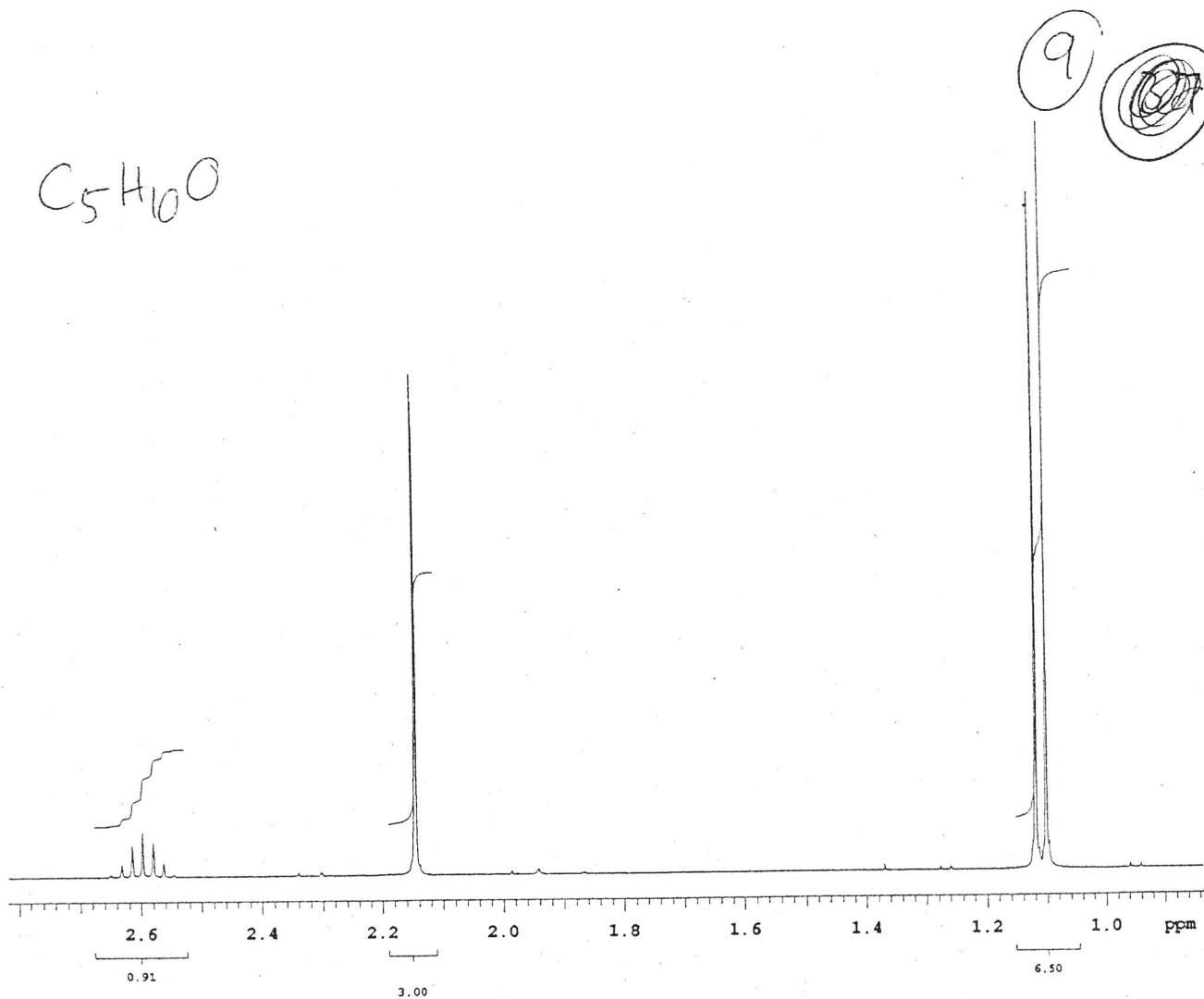
7



8

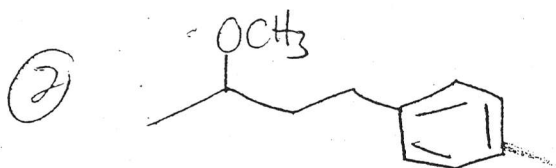
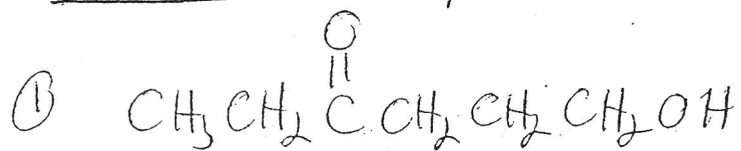


$C_5H_{10}O$

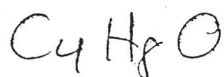


Predict the Spectrum for:

(10)



③ Identify Structure from Shorthand NMR (nongraphic)



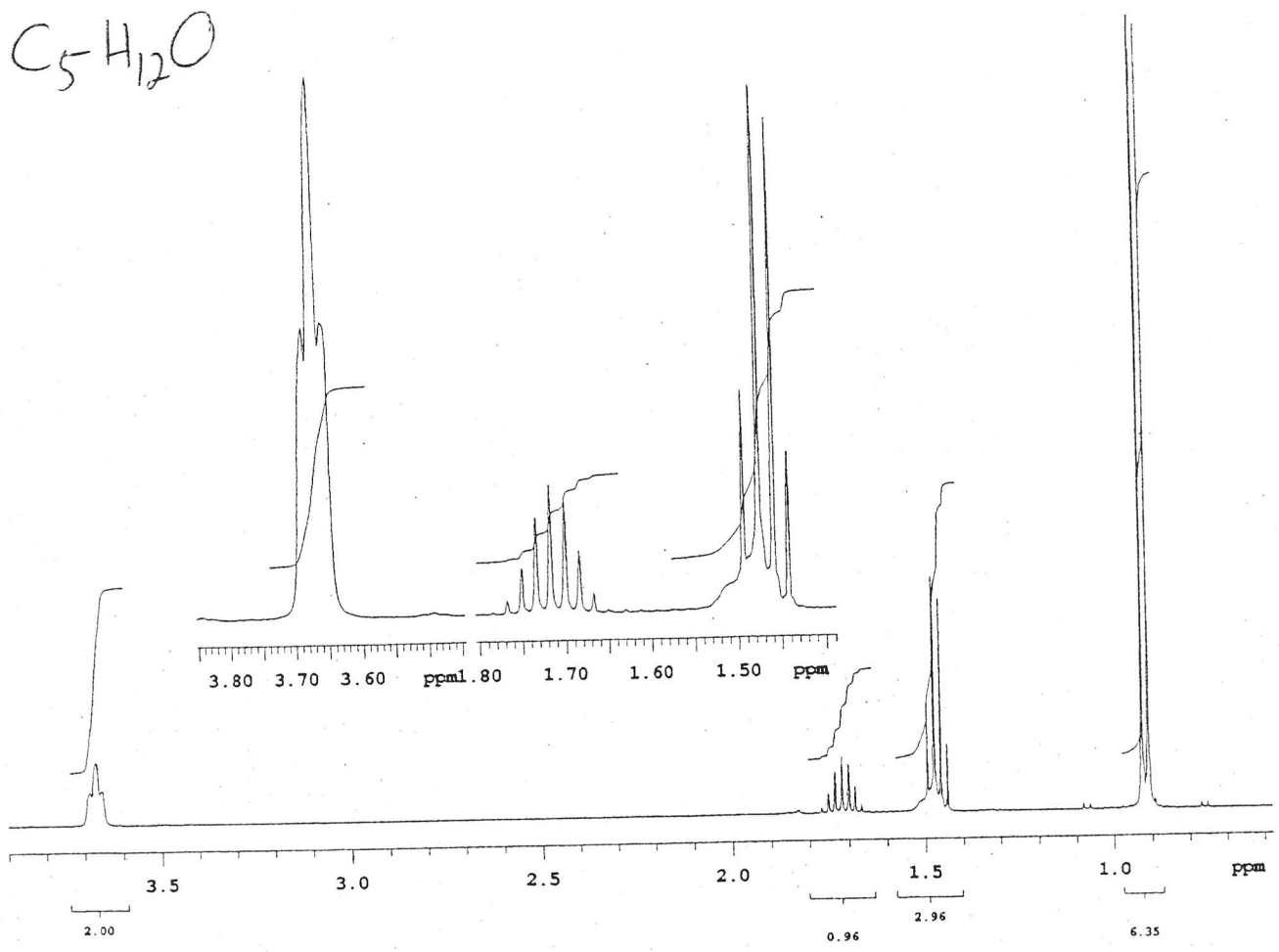
1.05 triplet 3H

2.13 singlet 3H

2.47 quartet 2H

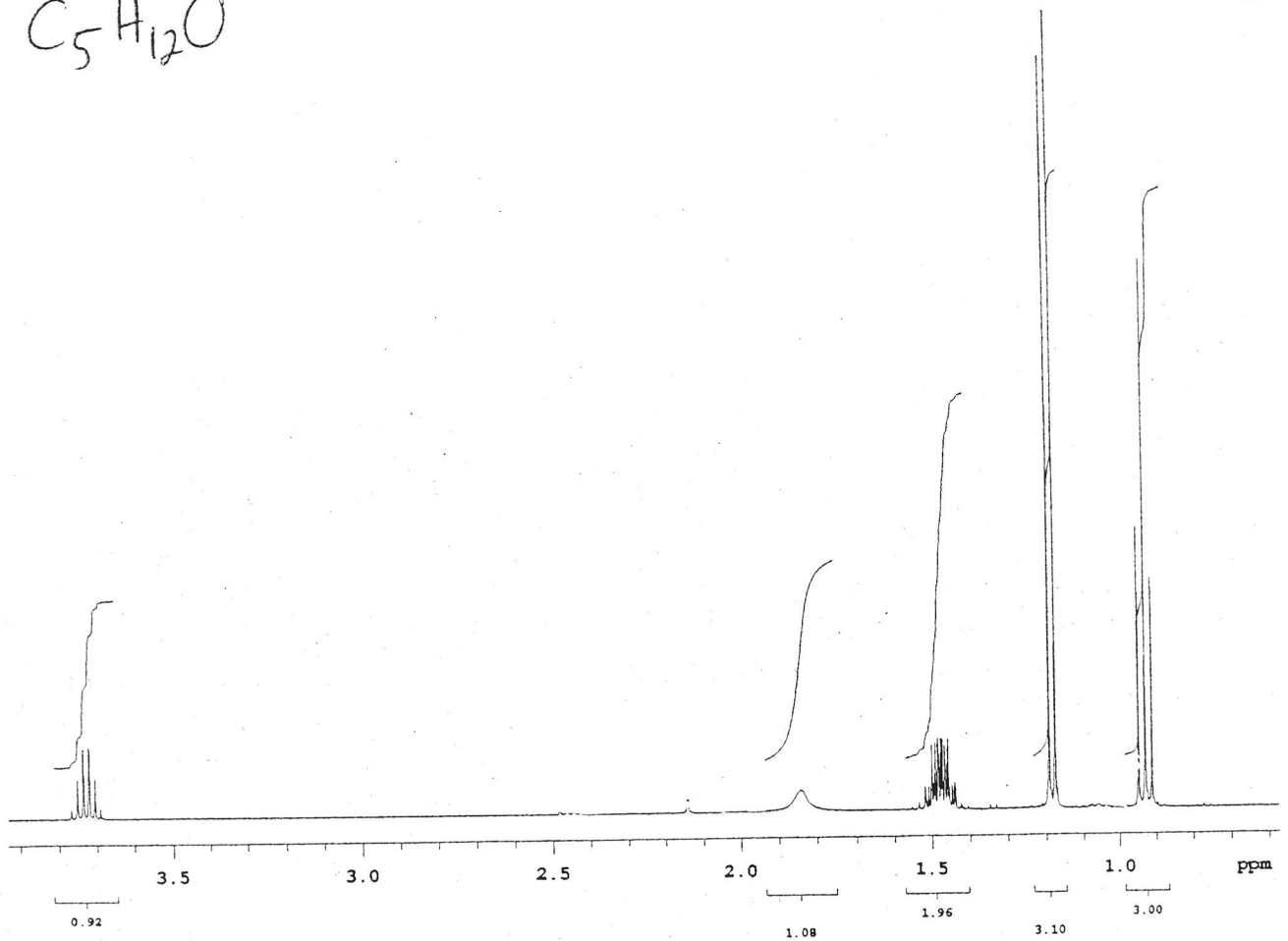
(11)

$C_5H_{12}O$



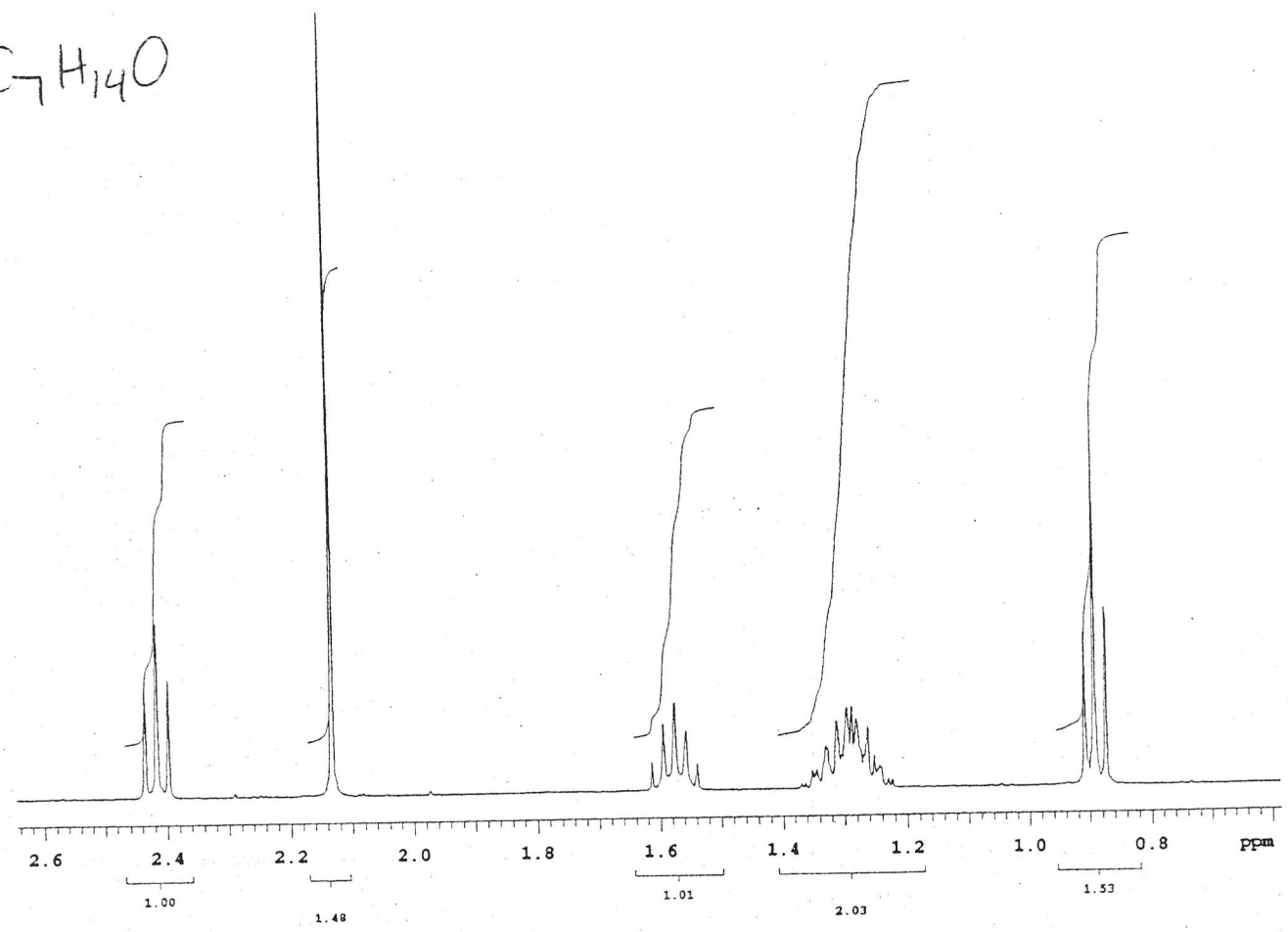
$C_5H_{12}O$

(12)



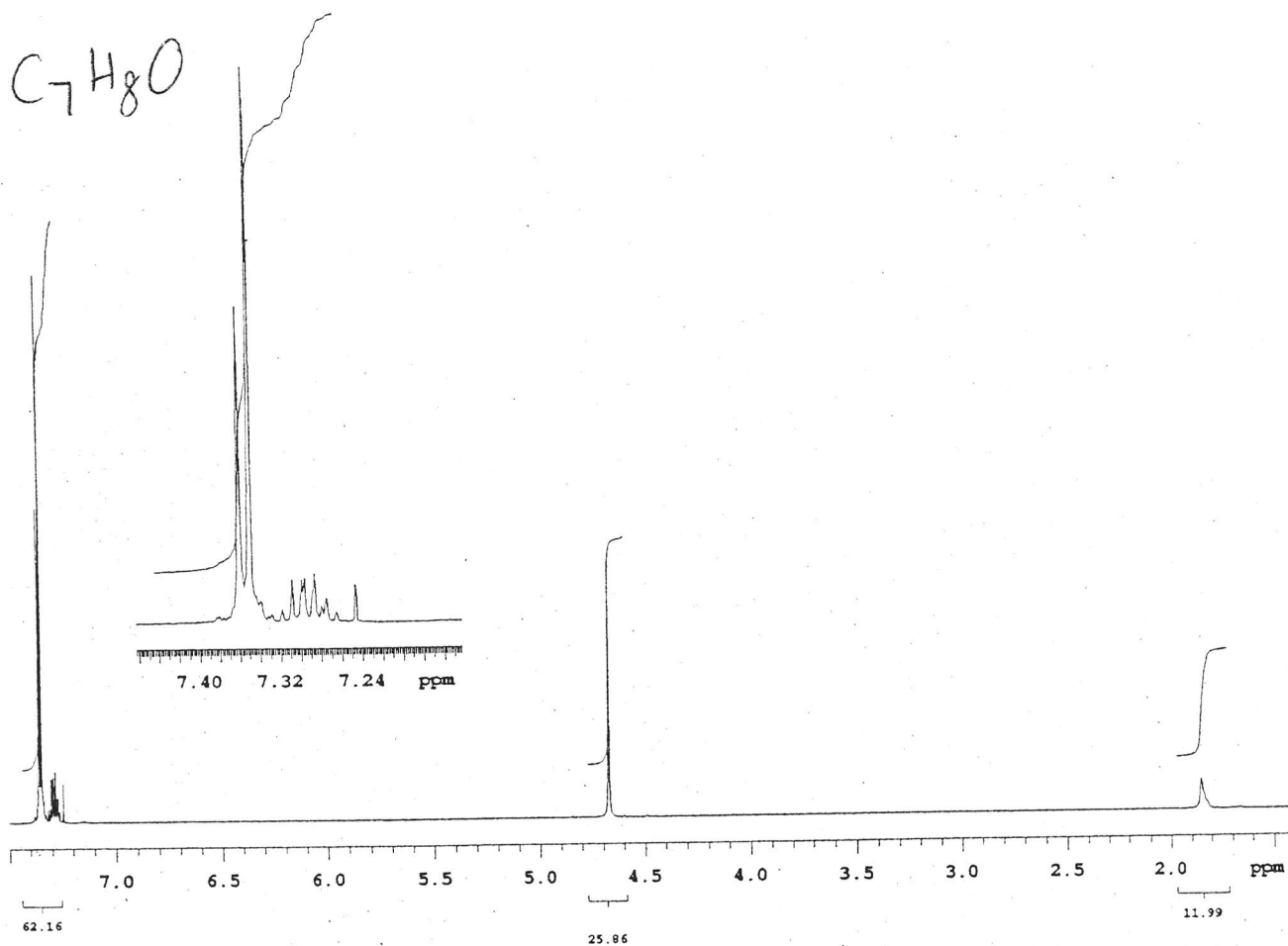
13

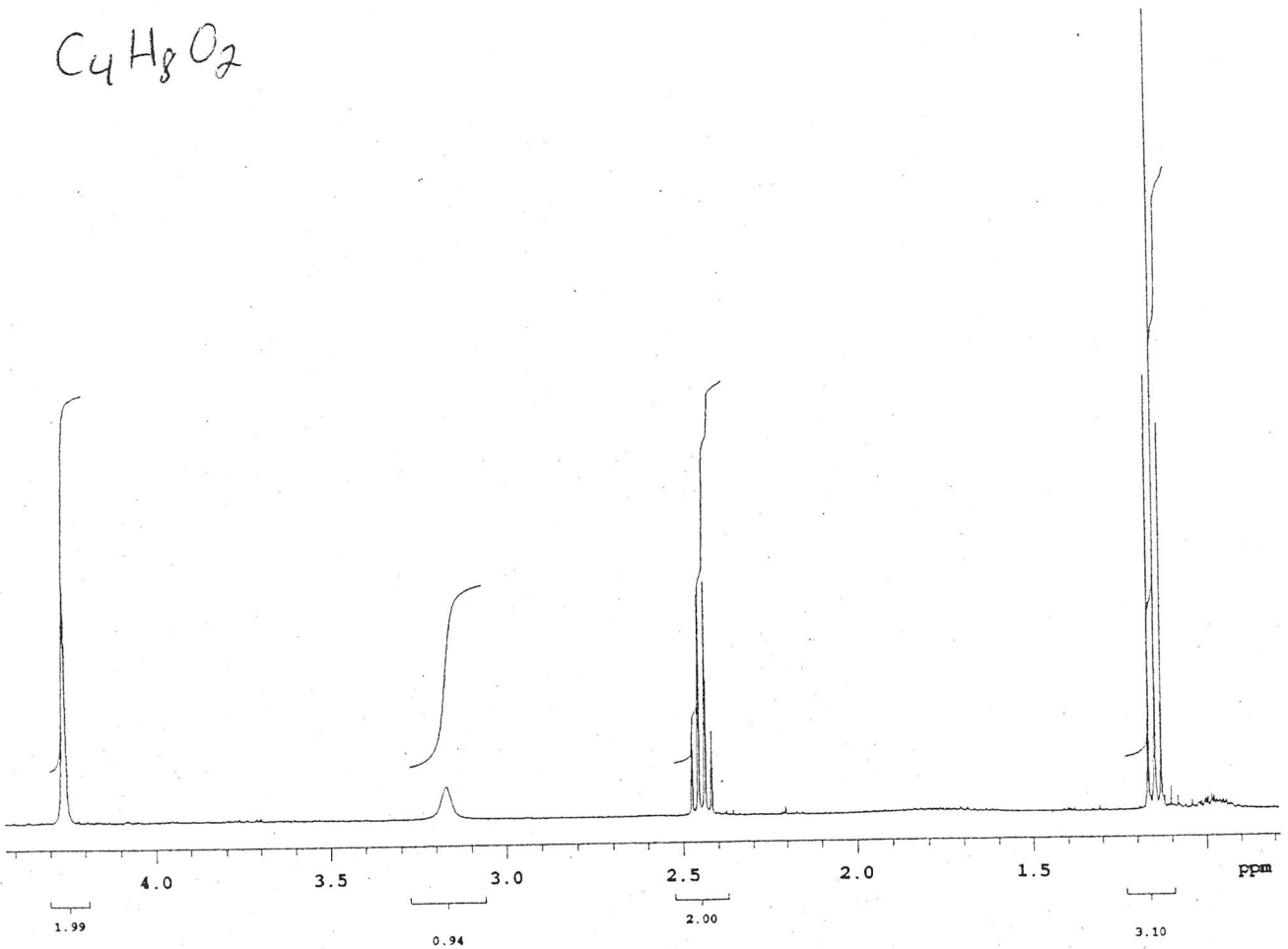
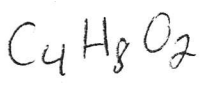
$C_7H_{14}O$



14

C₇H₈O

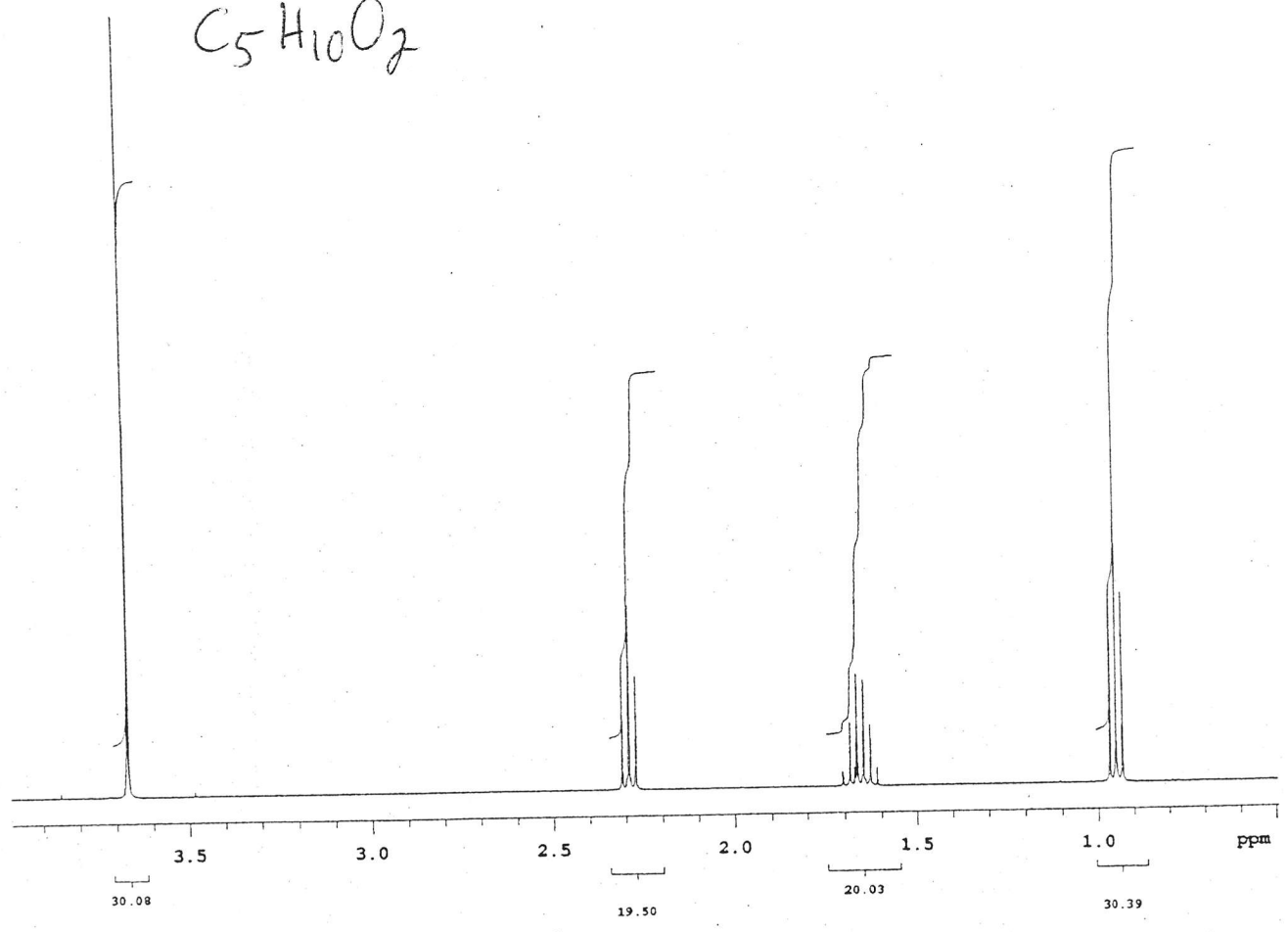




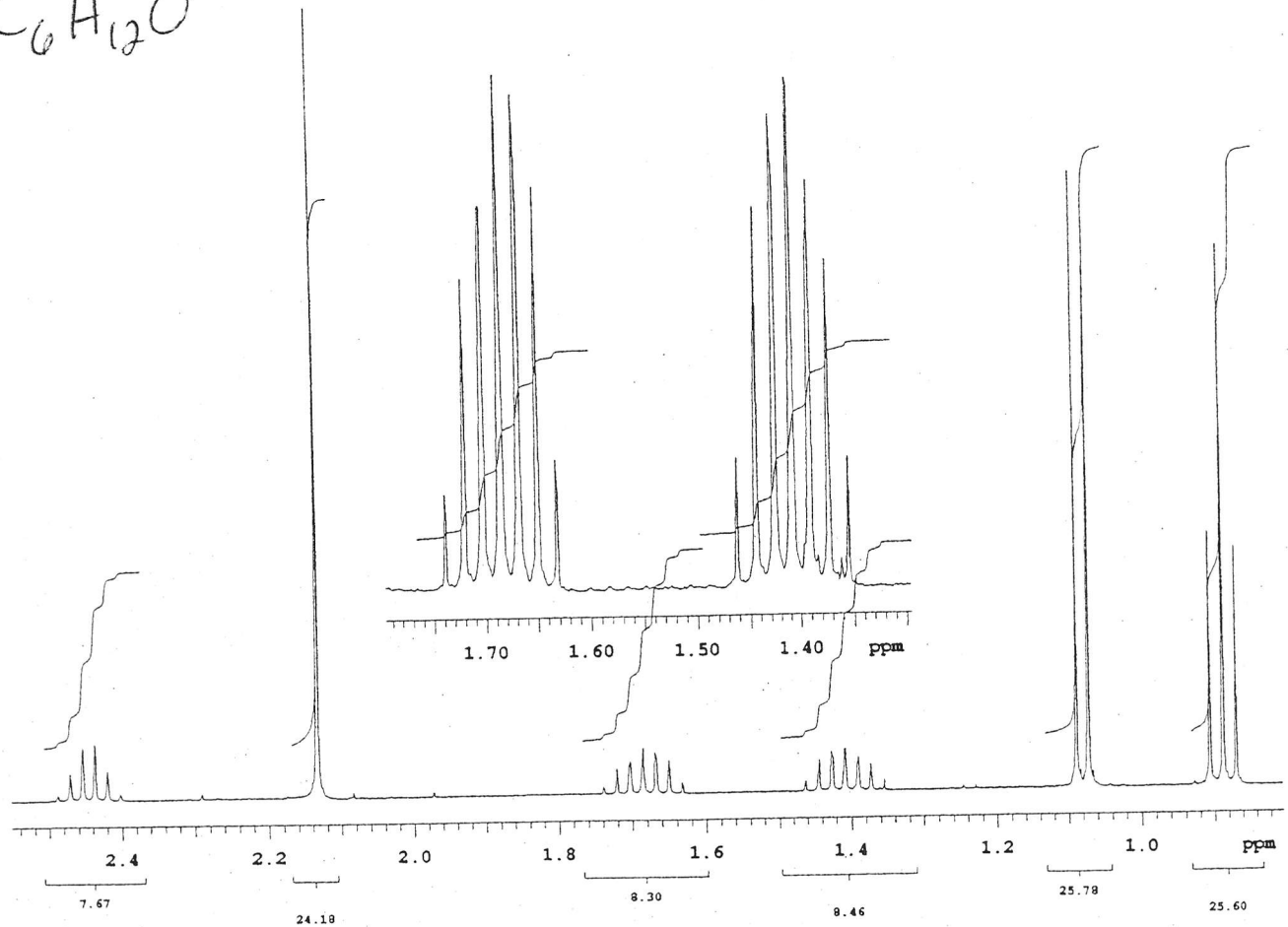
Plotname: 1-Hydroxy-2-Butanone_PROTON_01_plot02

16

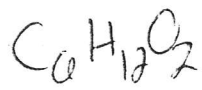
C₅H₁₀O₂



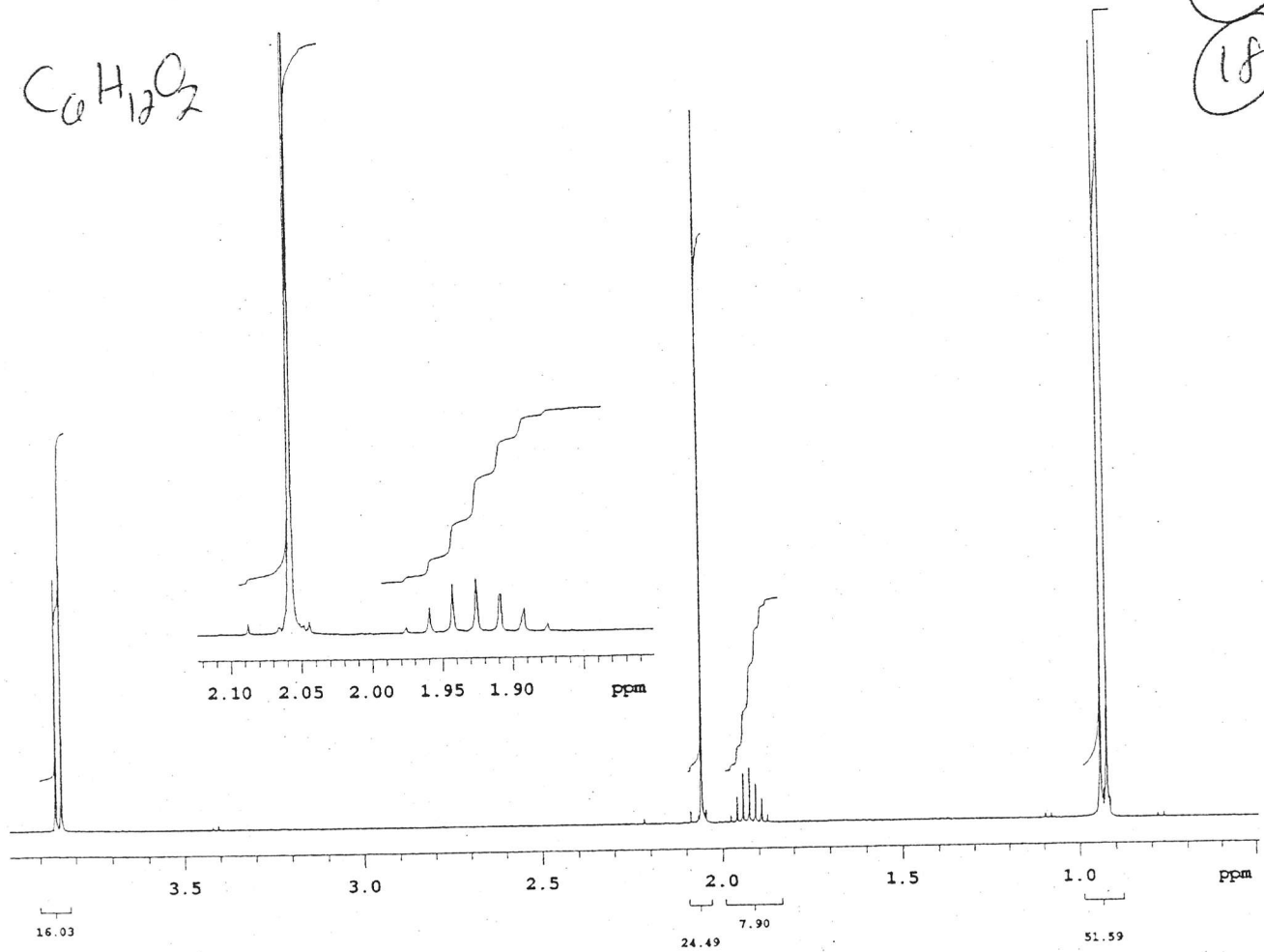
C₆H₁₂O



Plotname: 3-Methyl-2-pentanone_PROTON_01_plot02

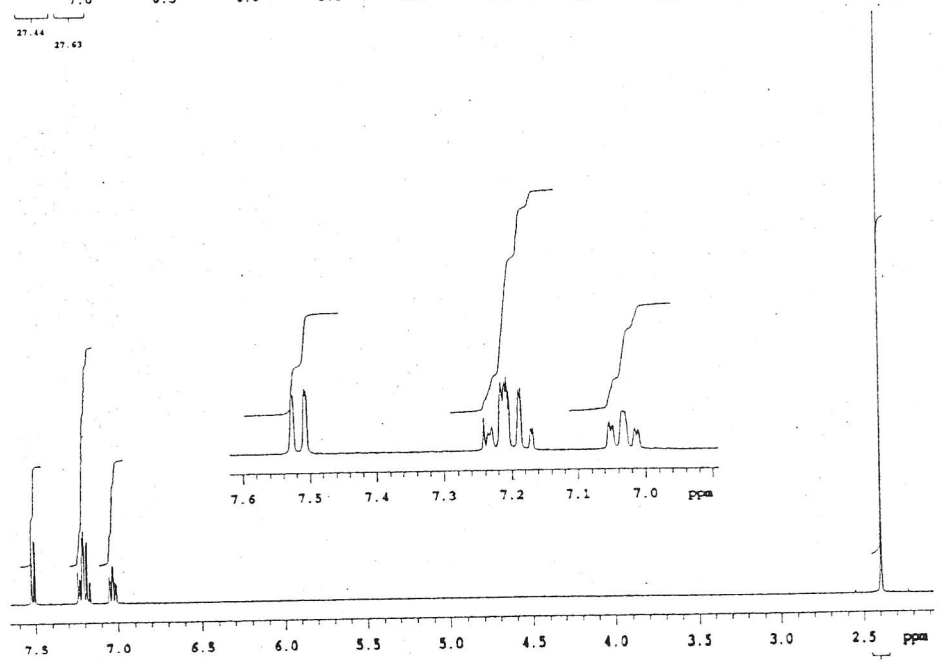
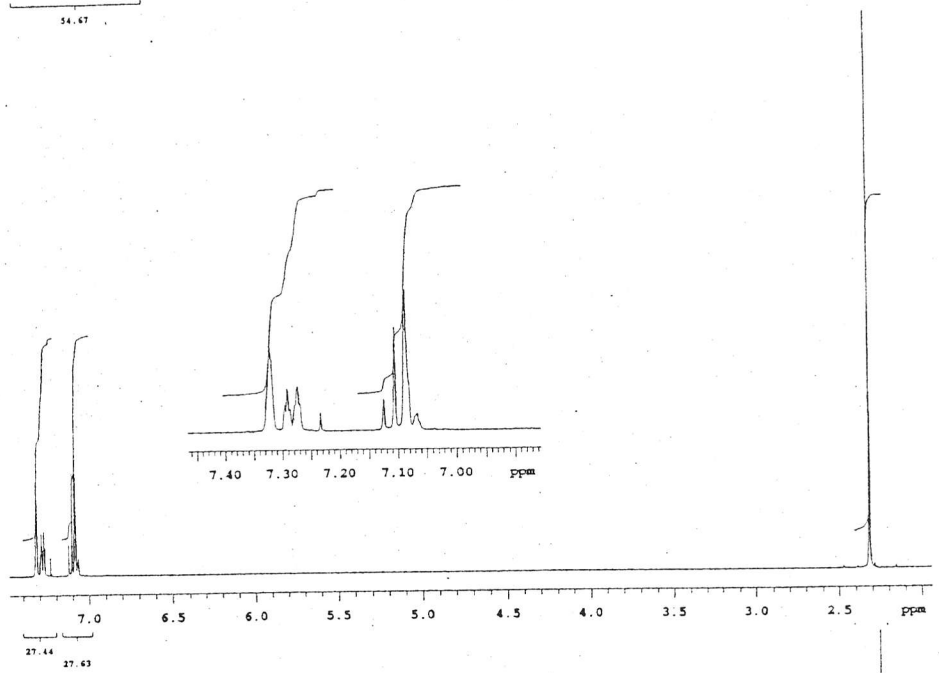
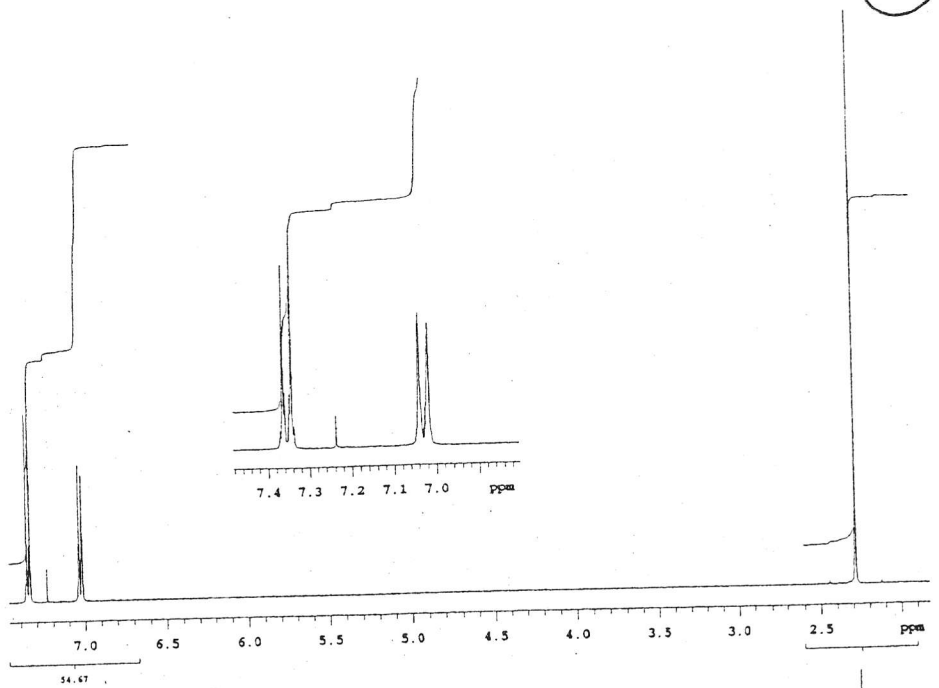


~~18~~
18

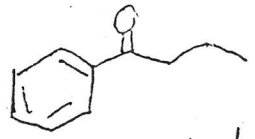


Isomers of
Bromotoluene

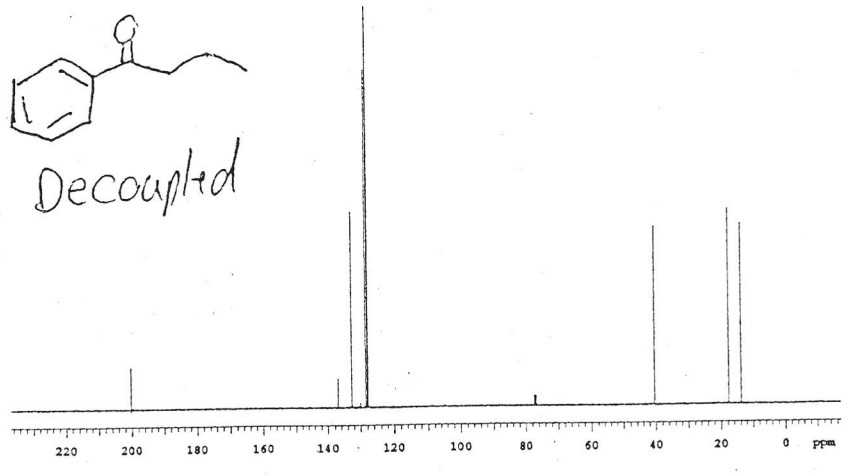
19



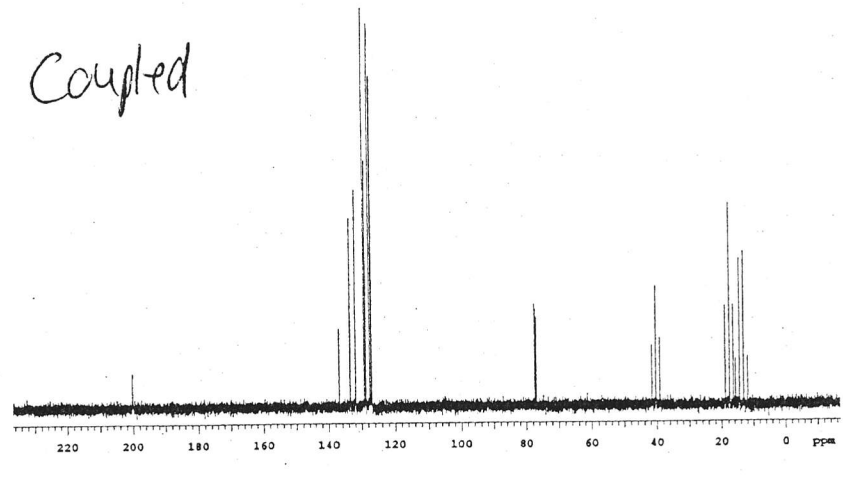
7C



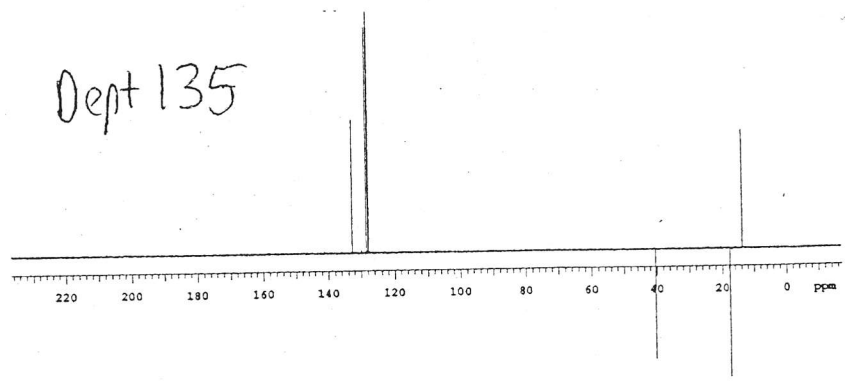
Decoupled



Coupled

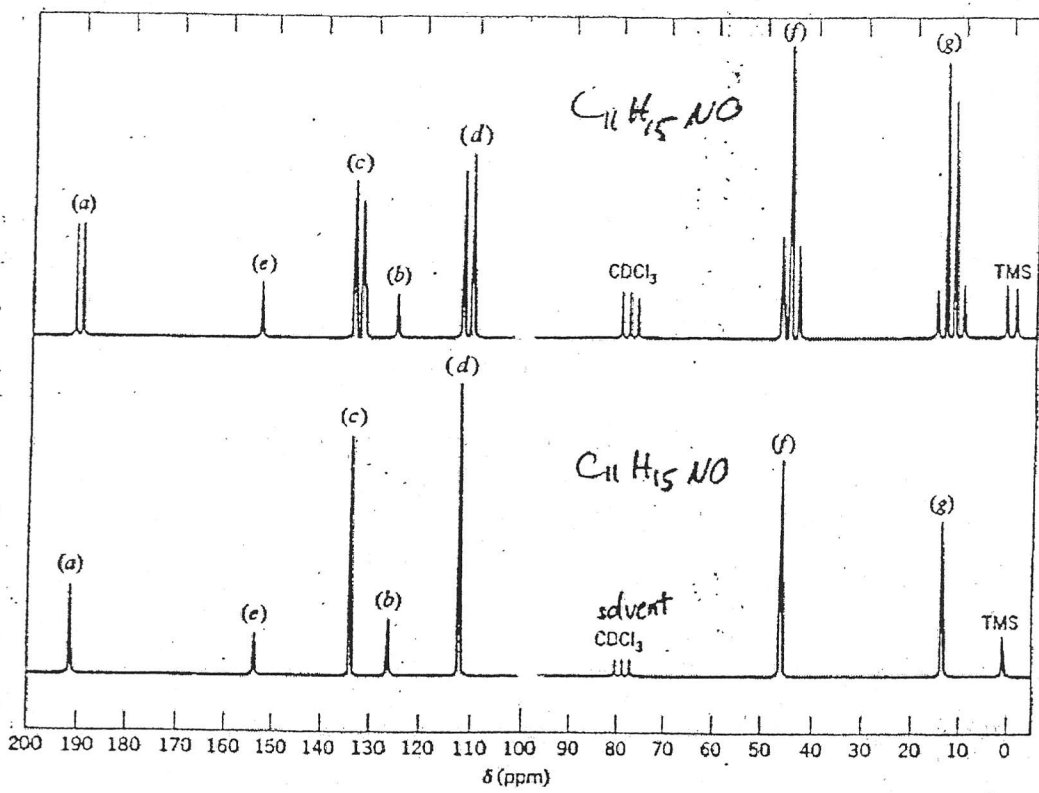


Dept 135

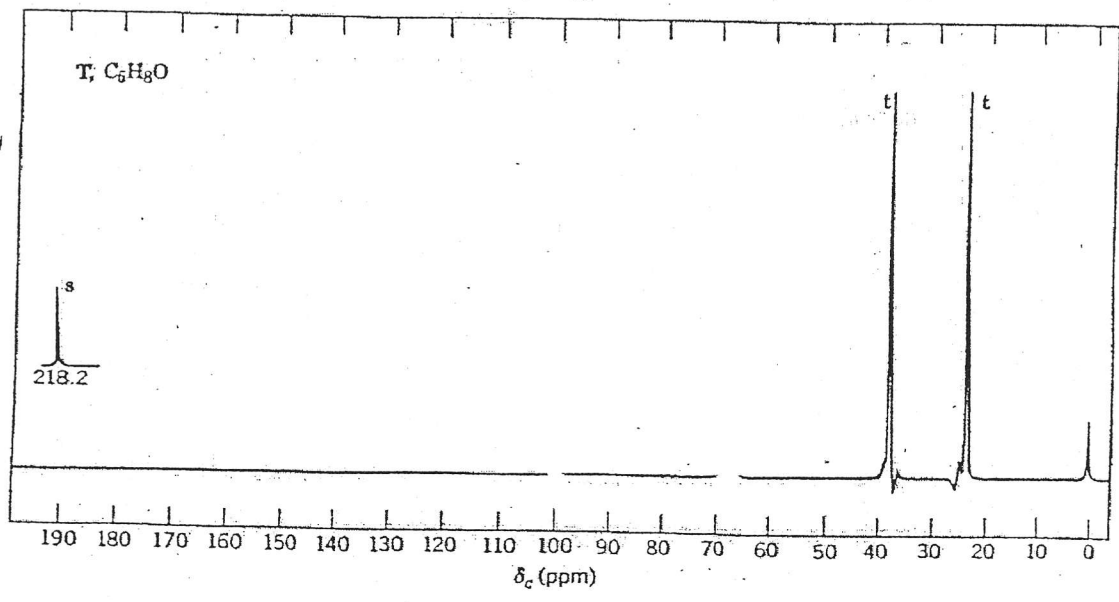


21

$CDCl_3$ - ①

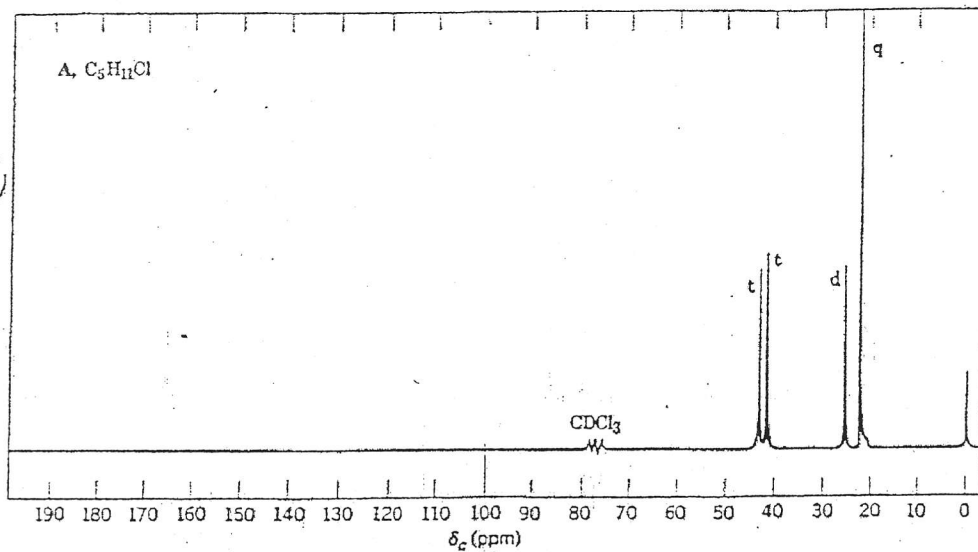


②

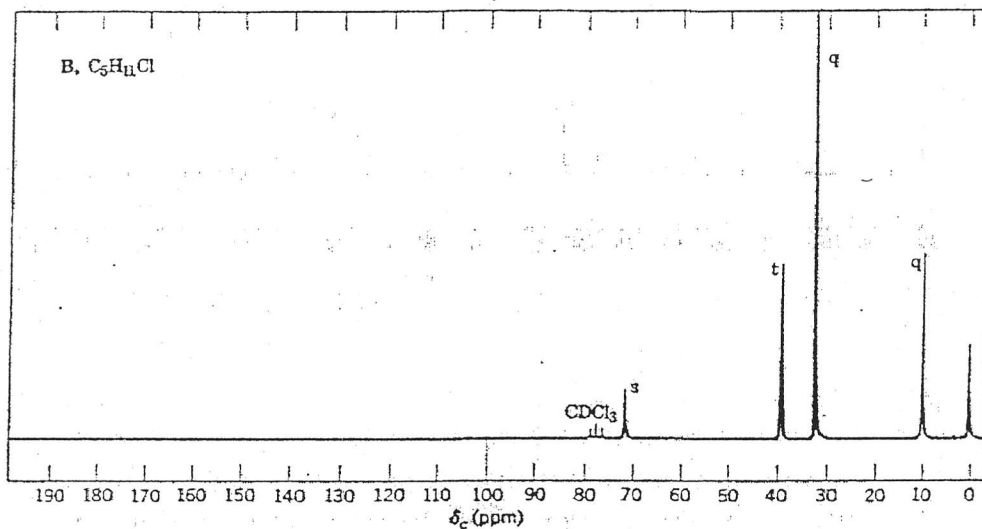


22
13C-2

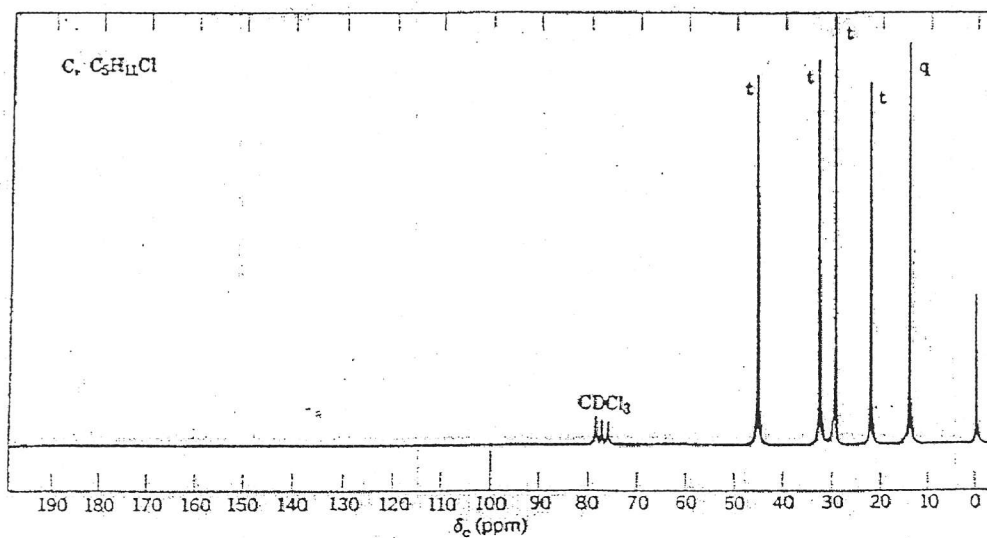
3



4

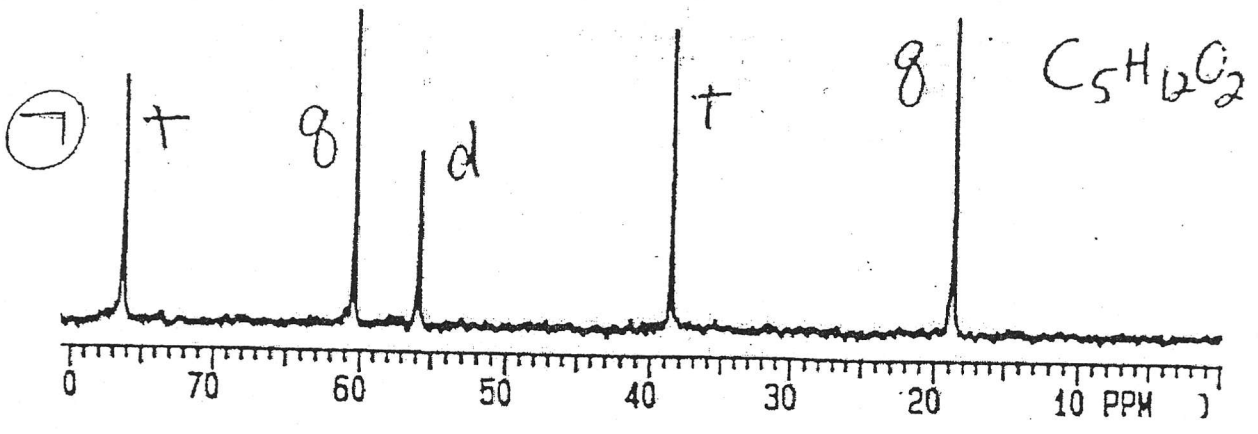
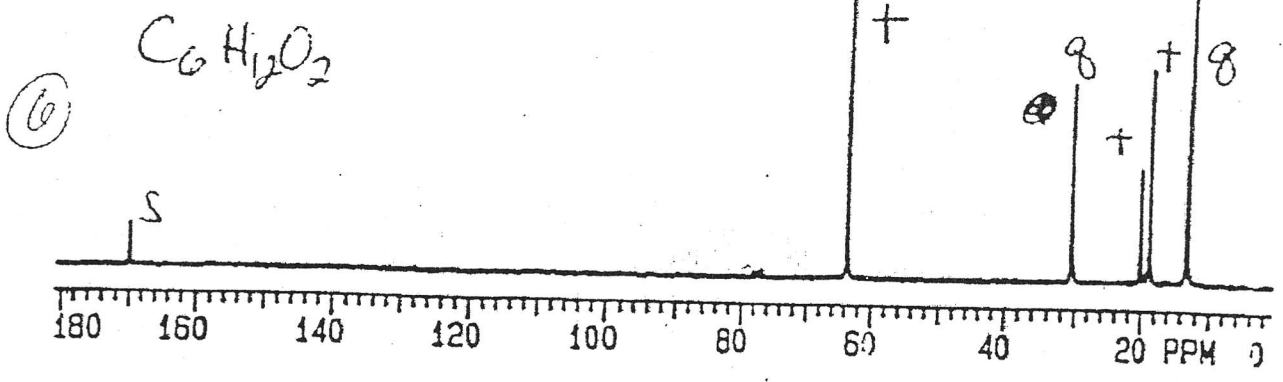


5



23

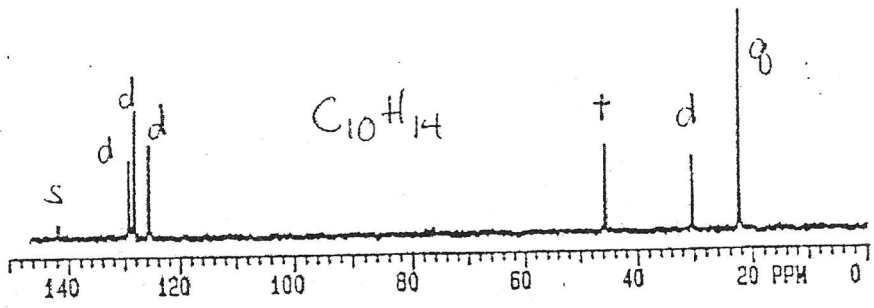
13C- (3)



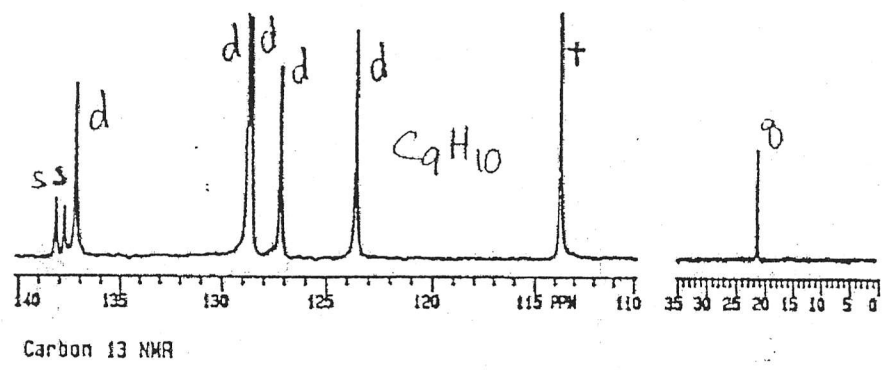
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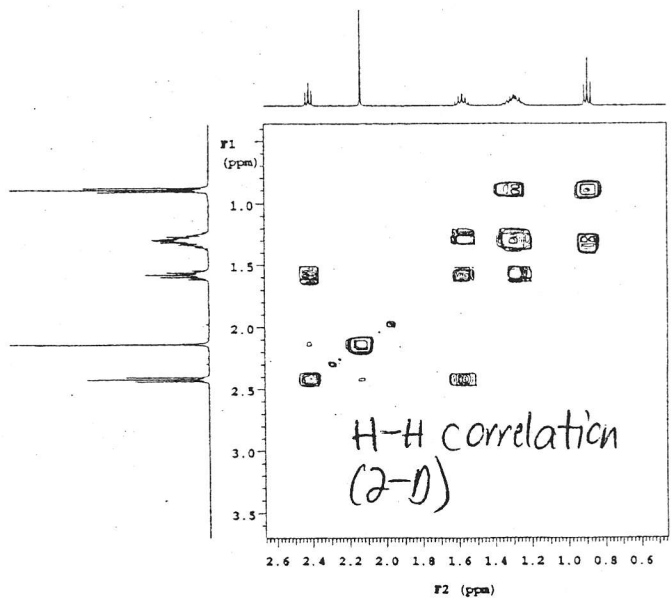
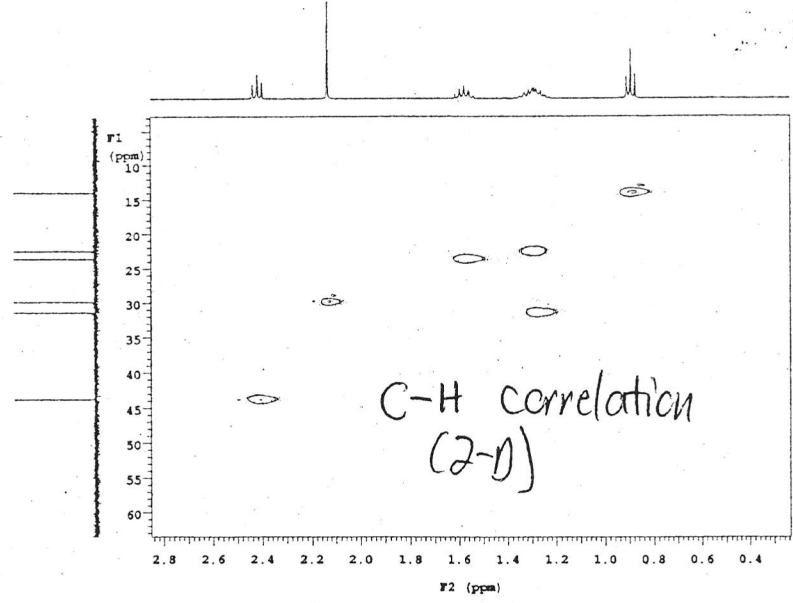
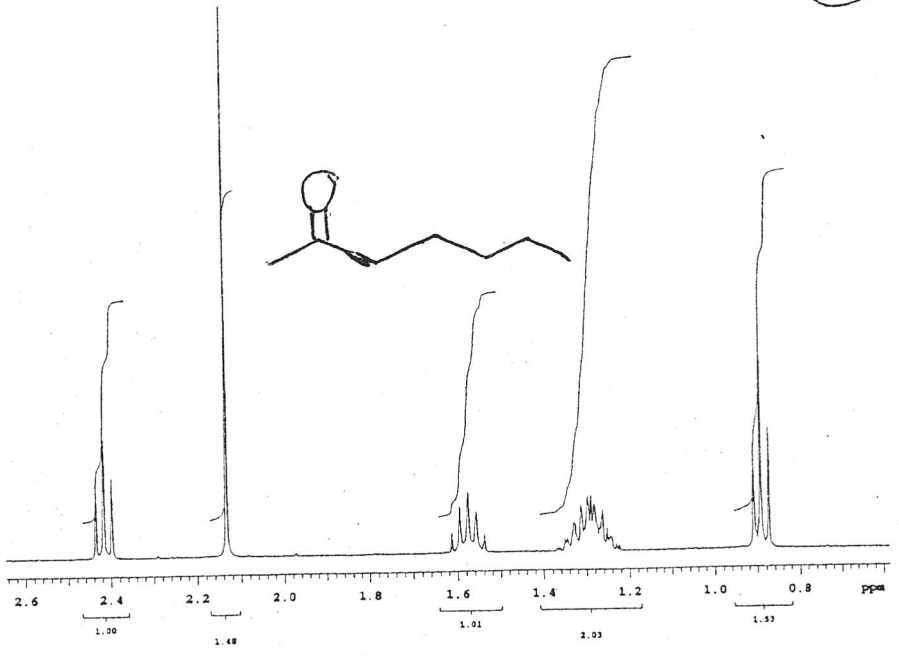
3c-4

(8)



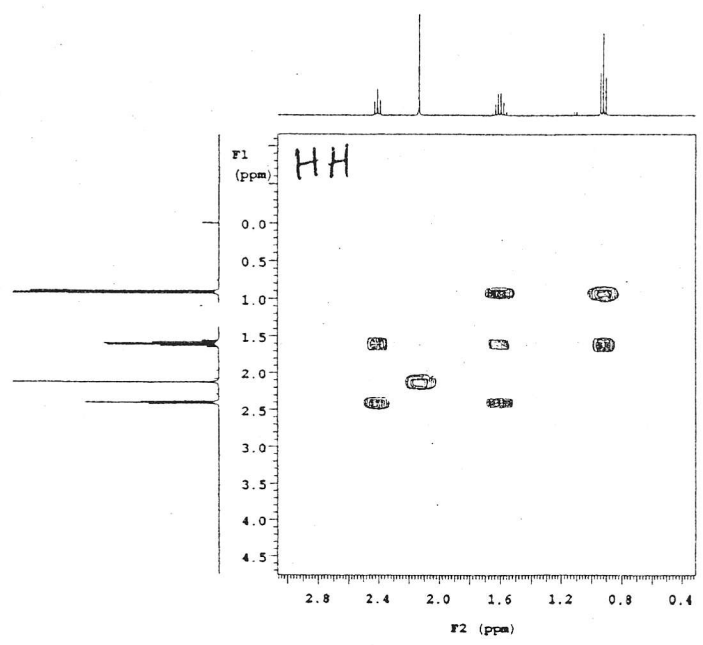
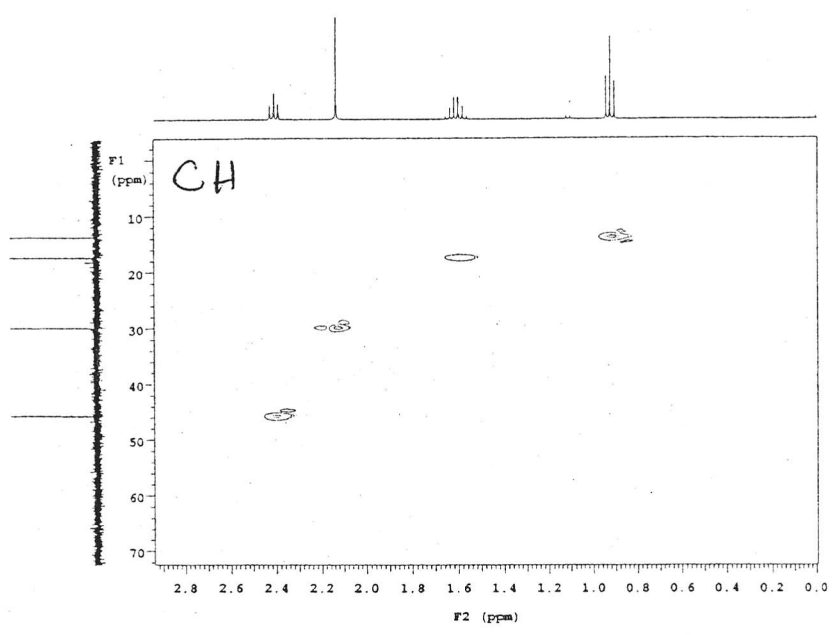
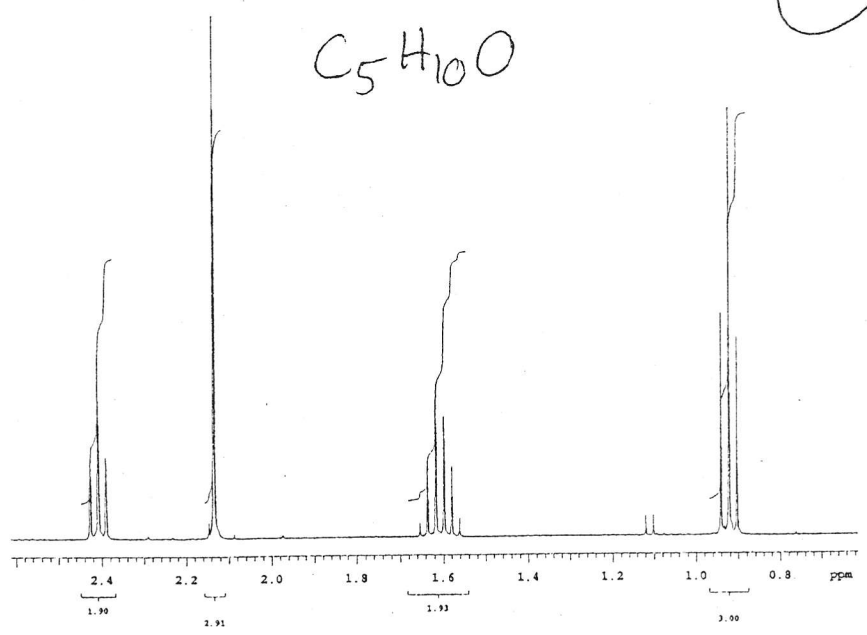
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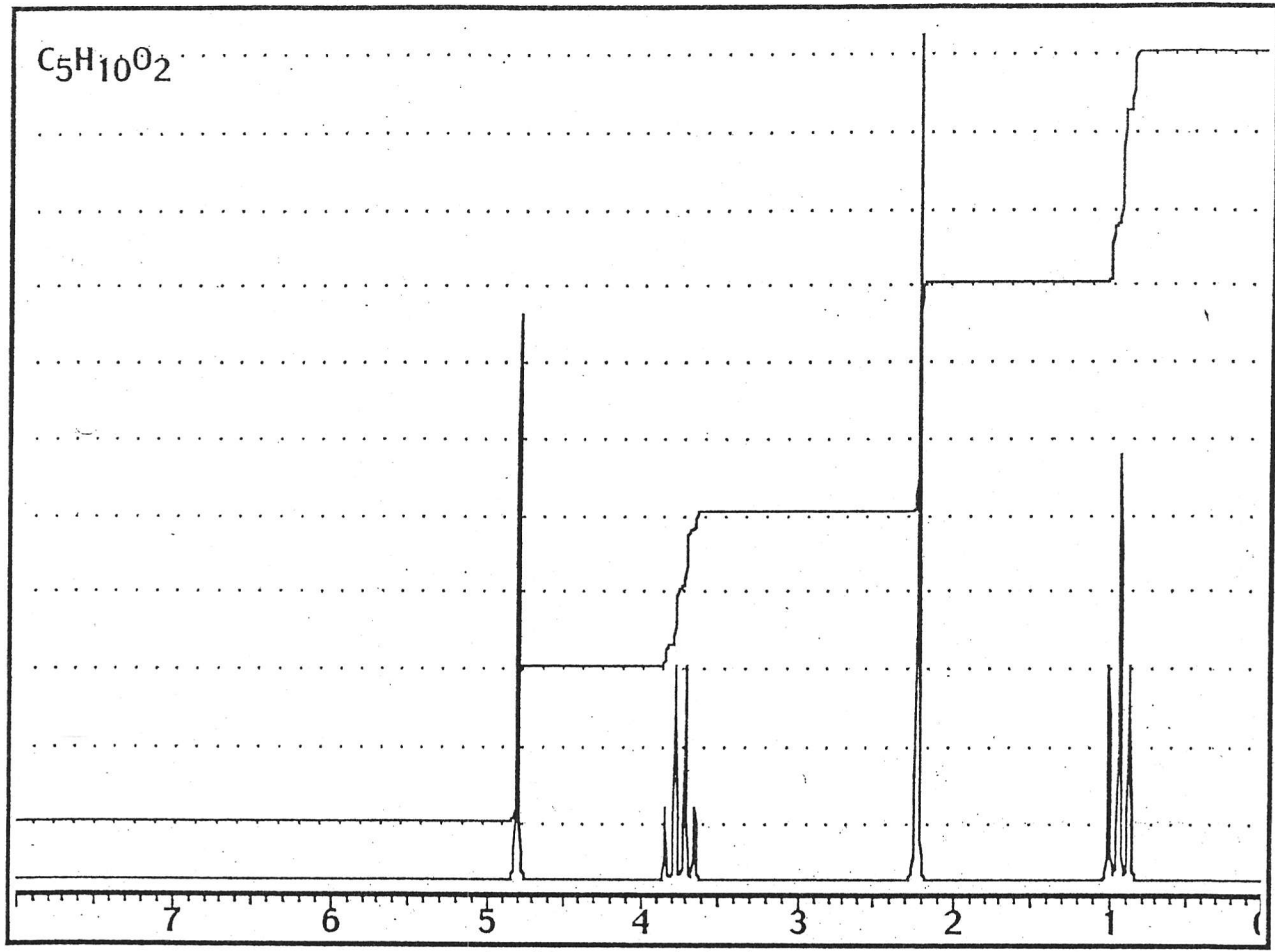
26

$C_5H_{10}O$

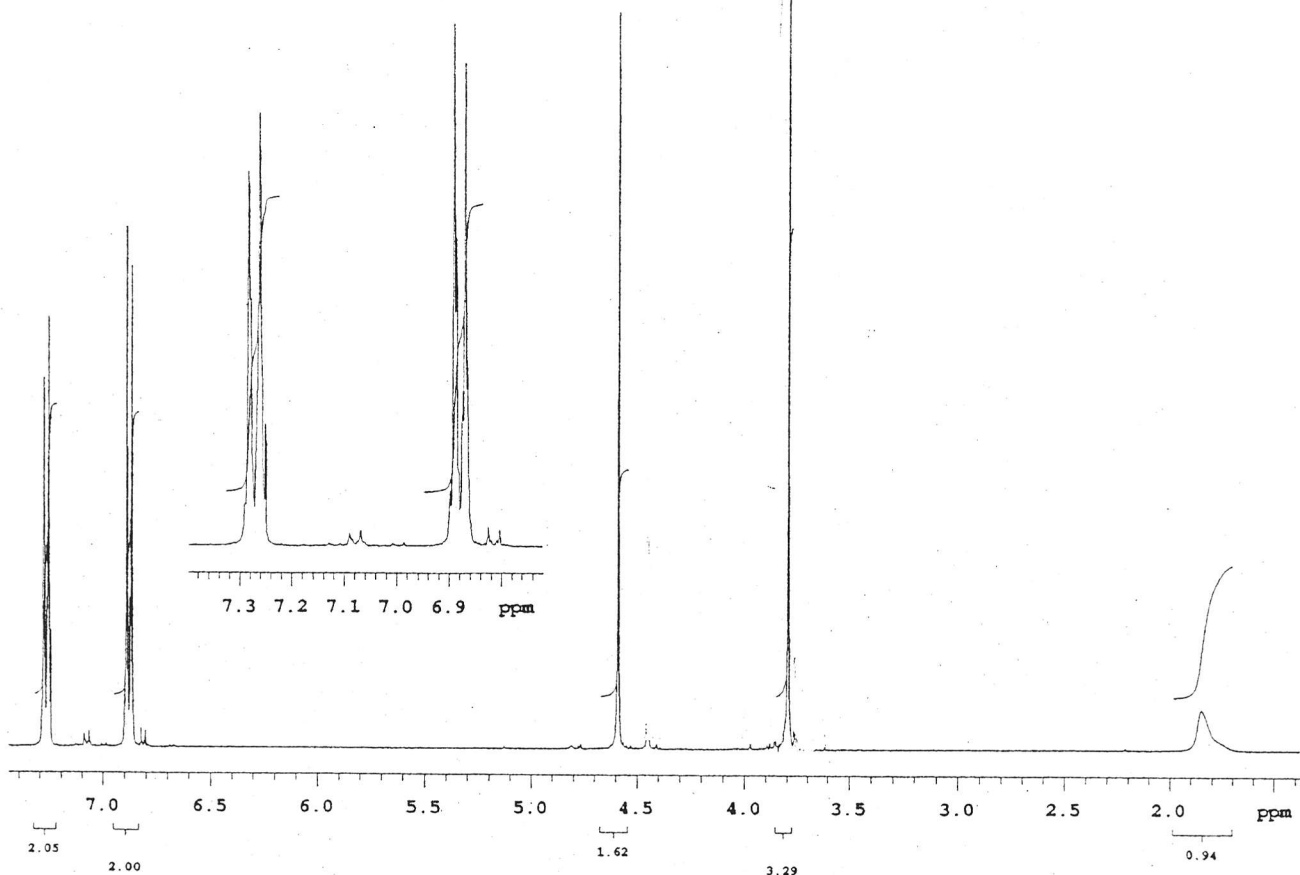
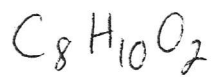


①

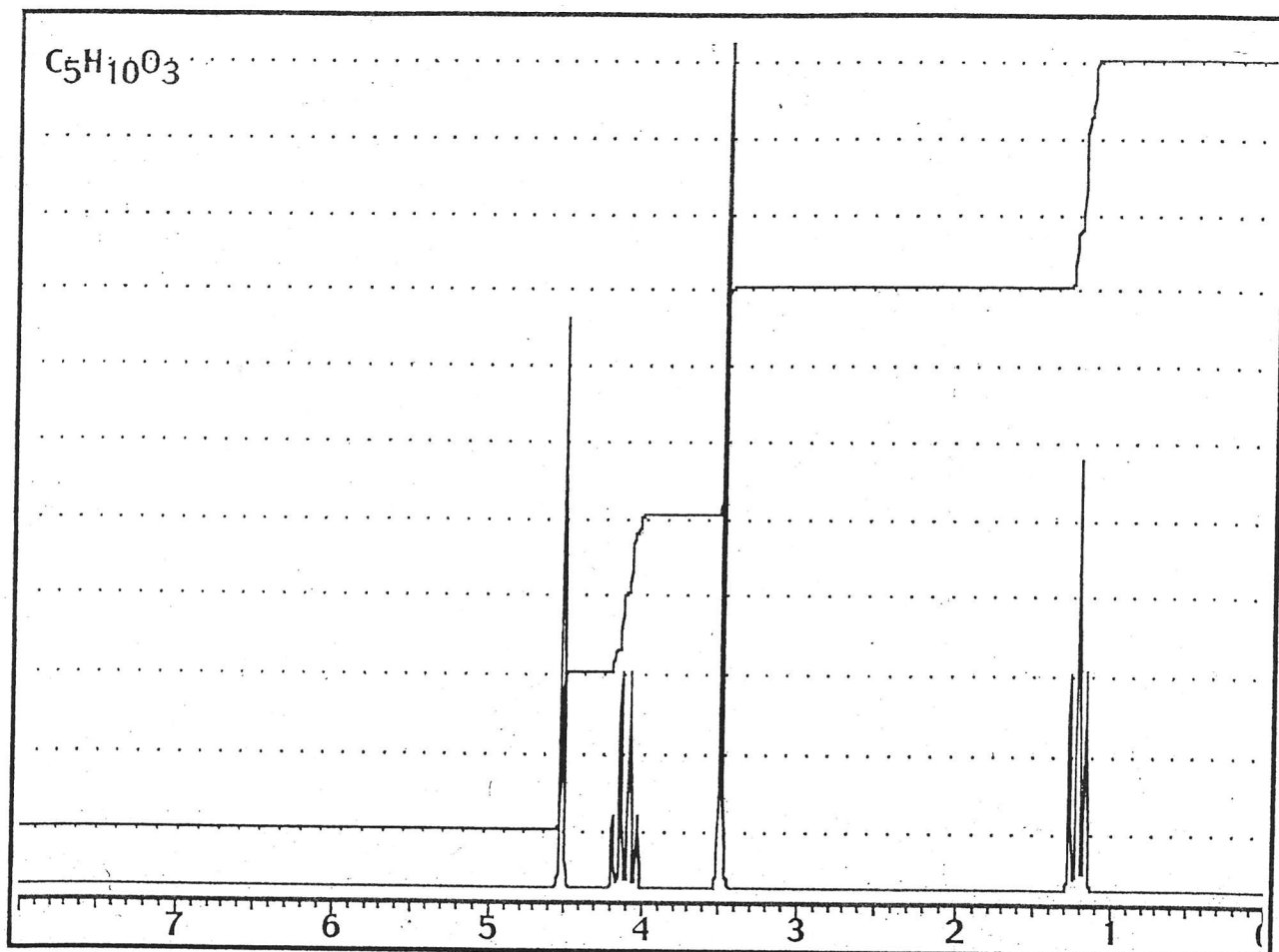
27

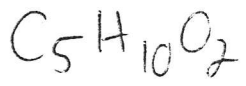


28

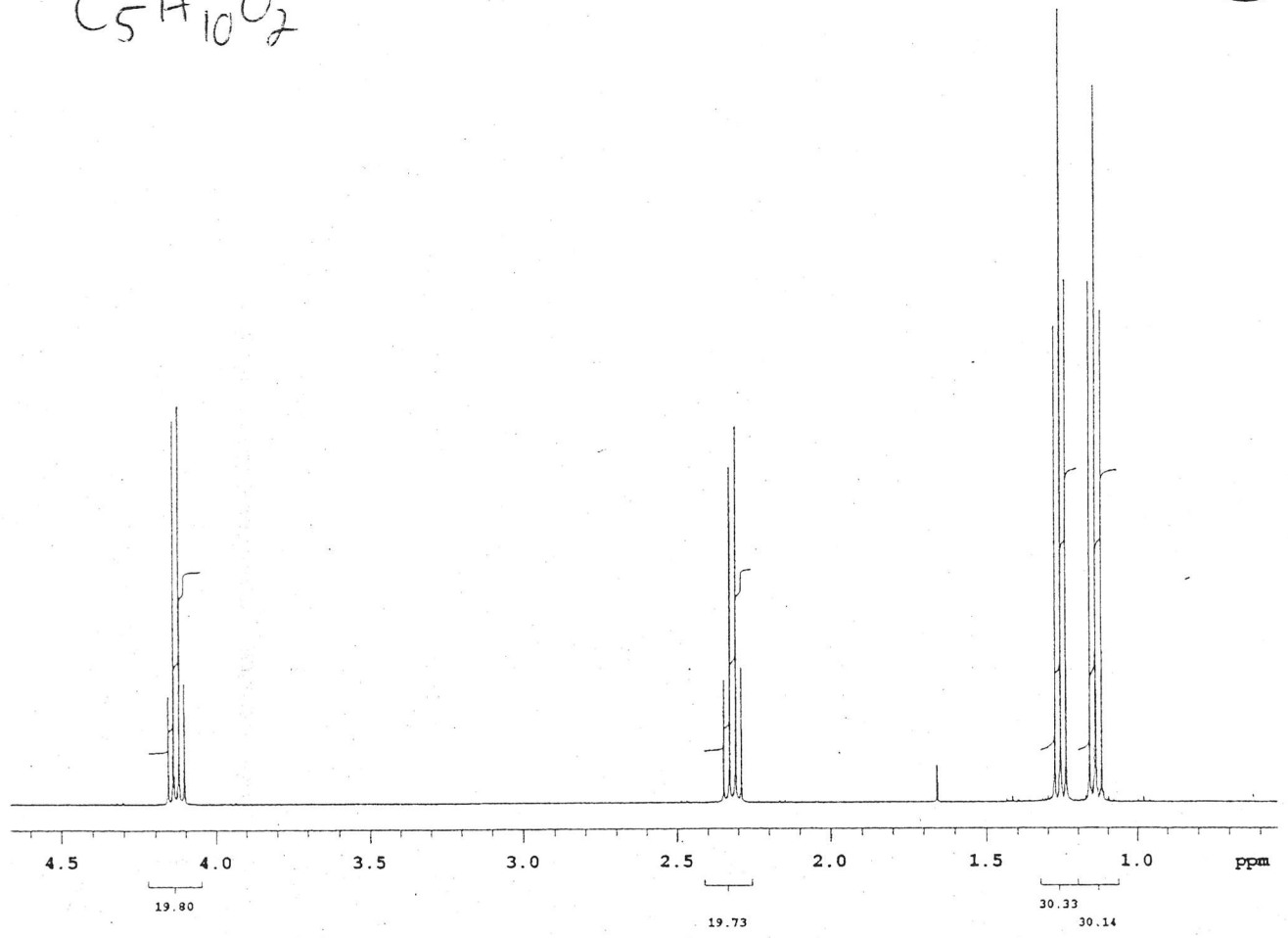


29



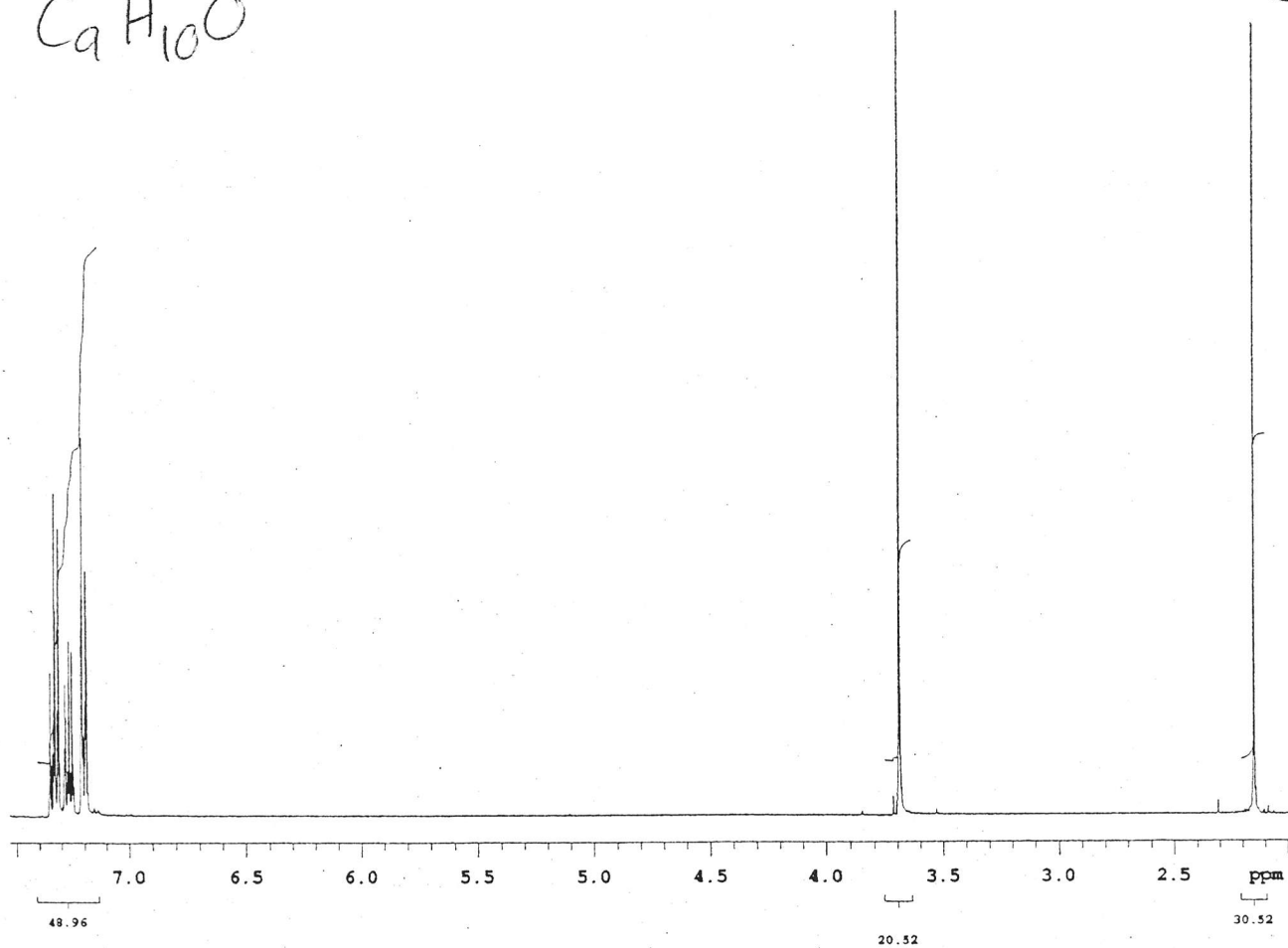


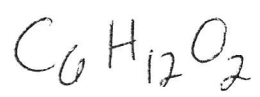
30



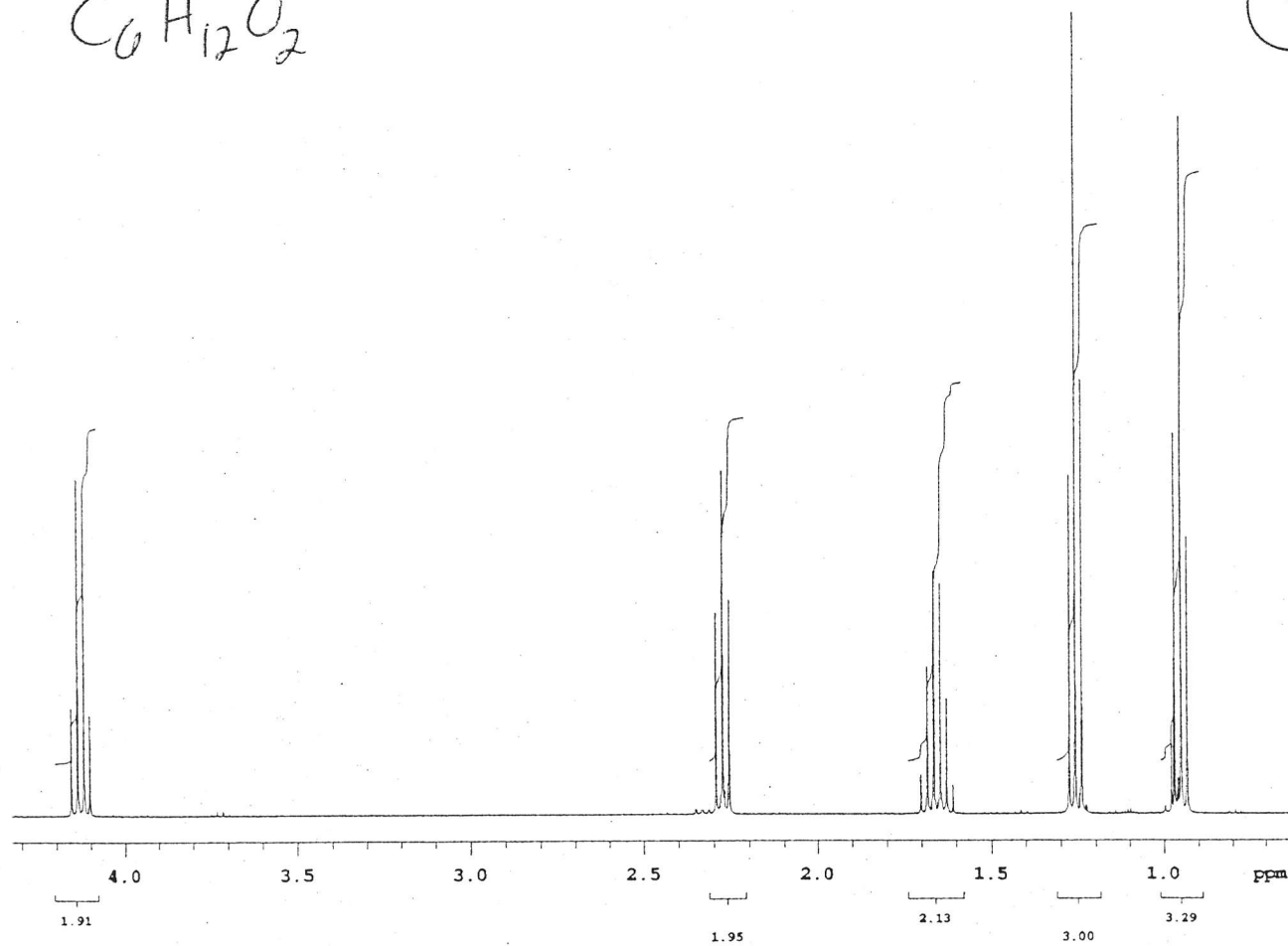
$C_9H_{10}O$

31

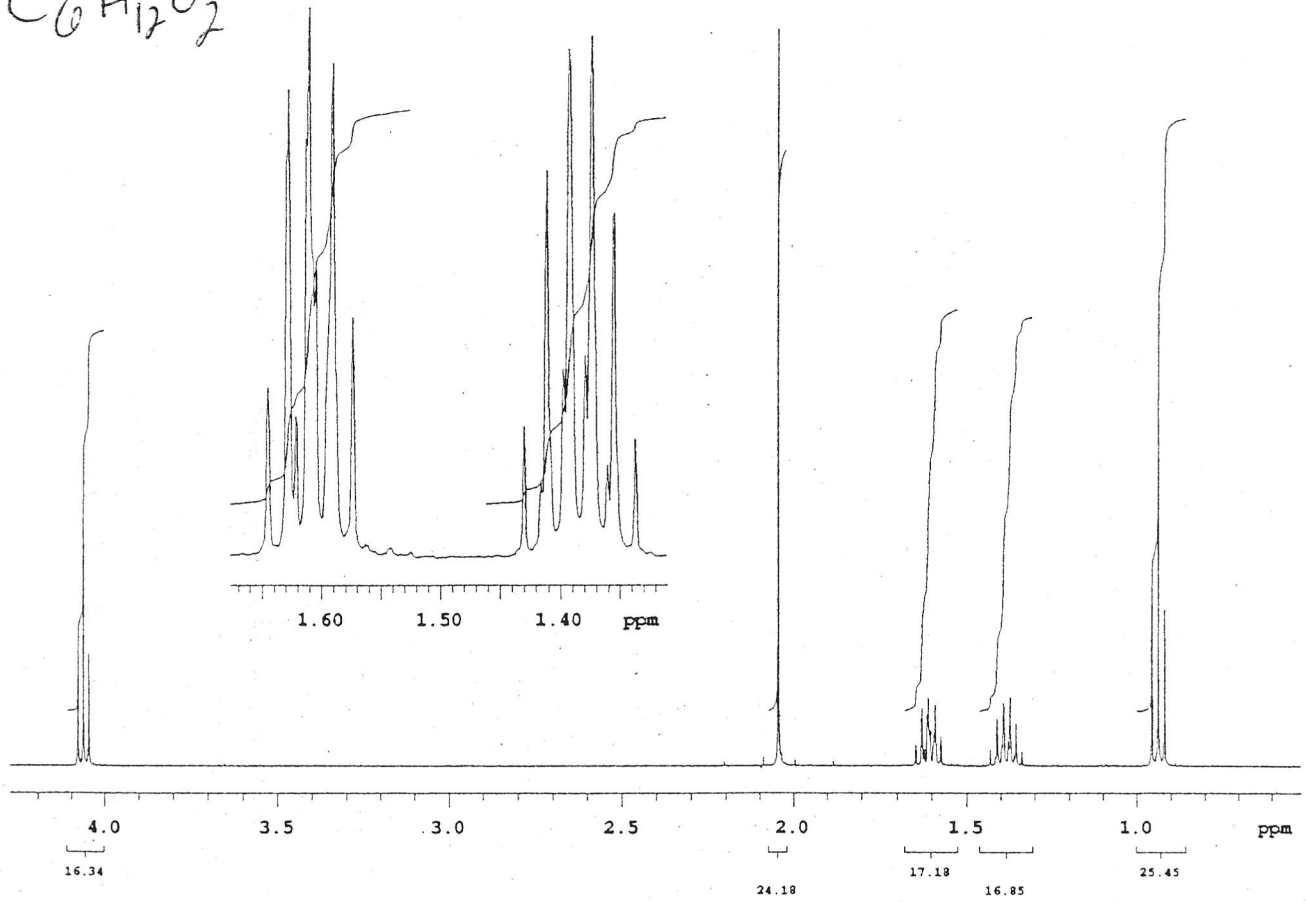
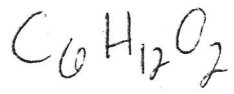




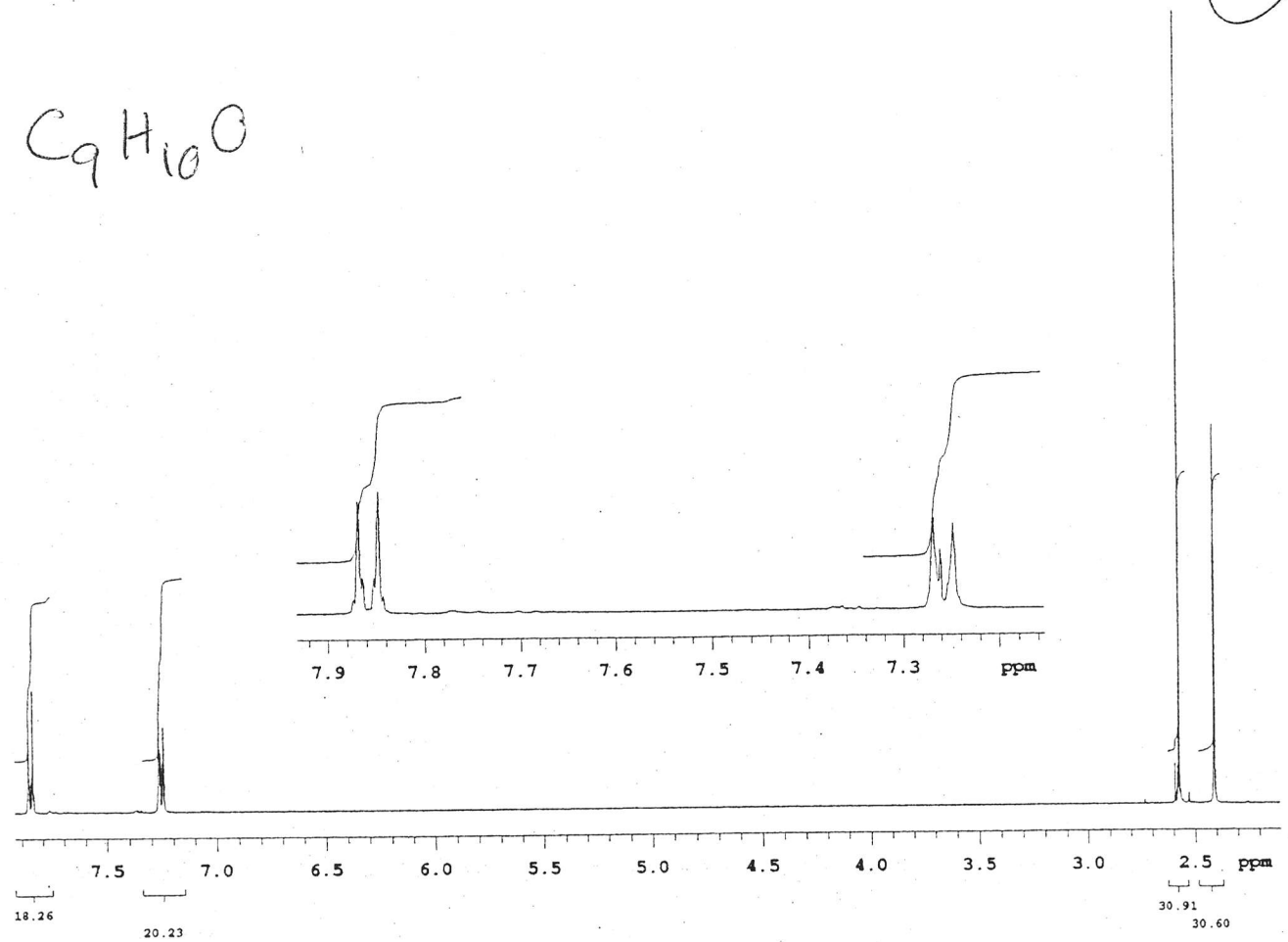
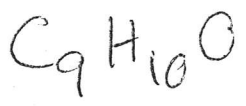
(32)



33

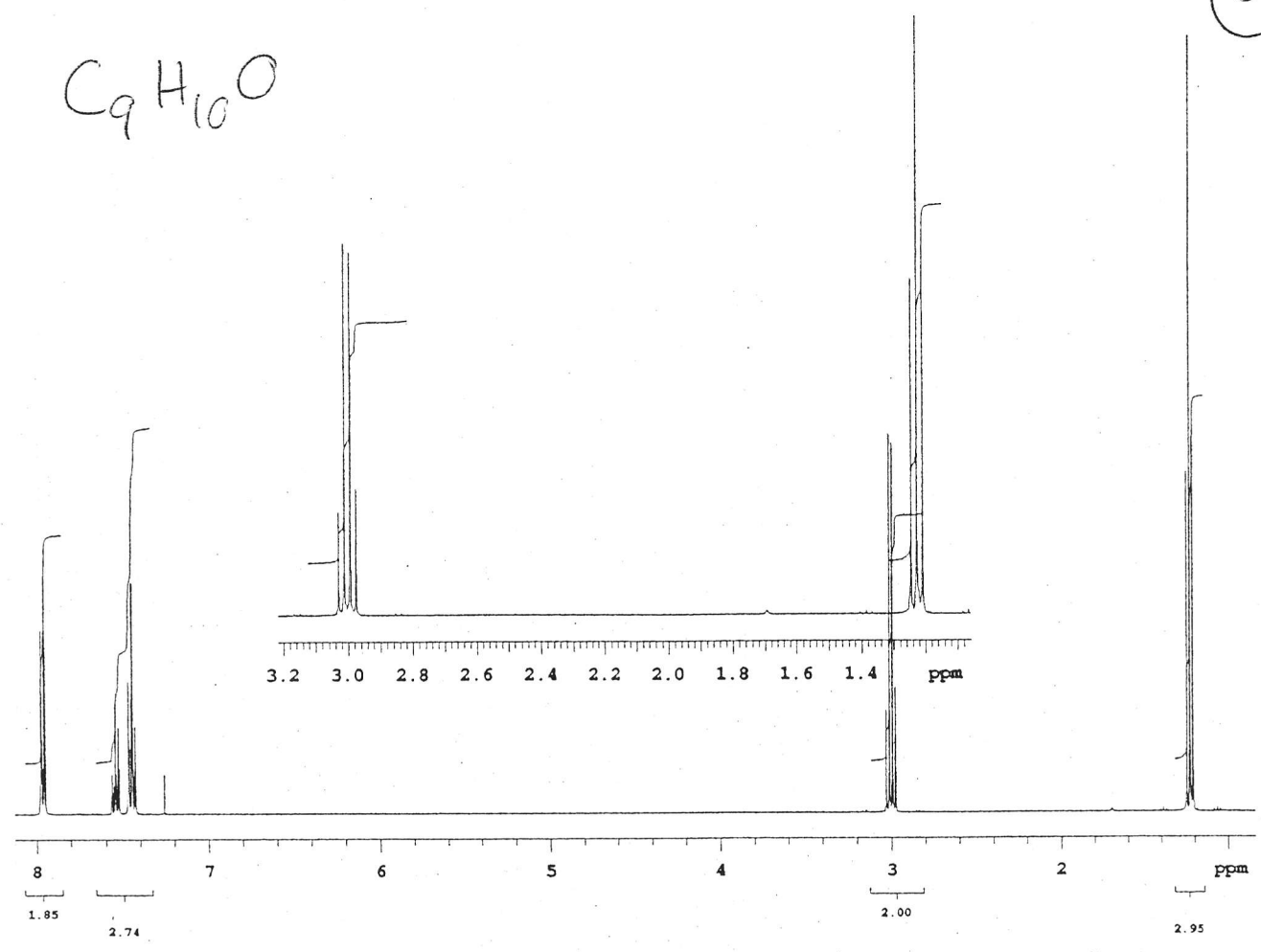


34

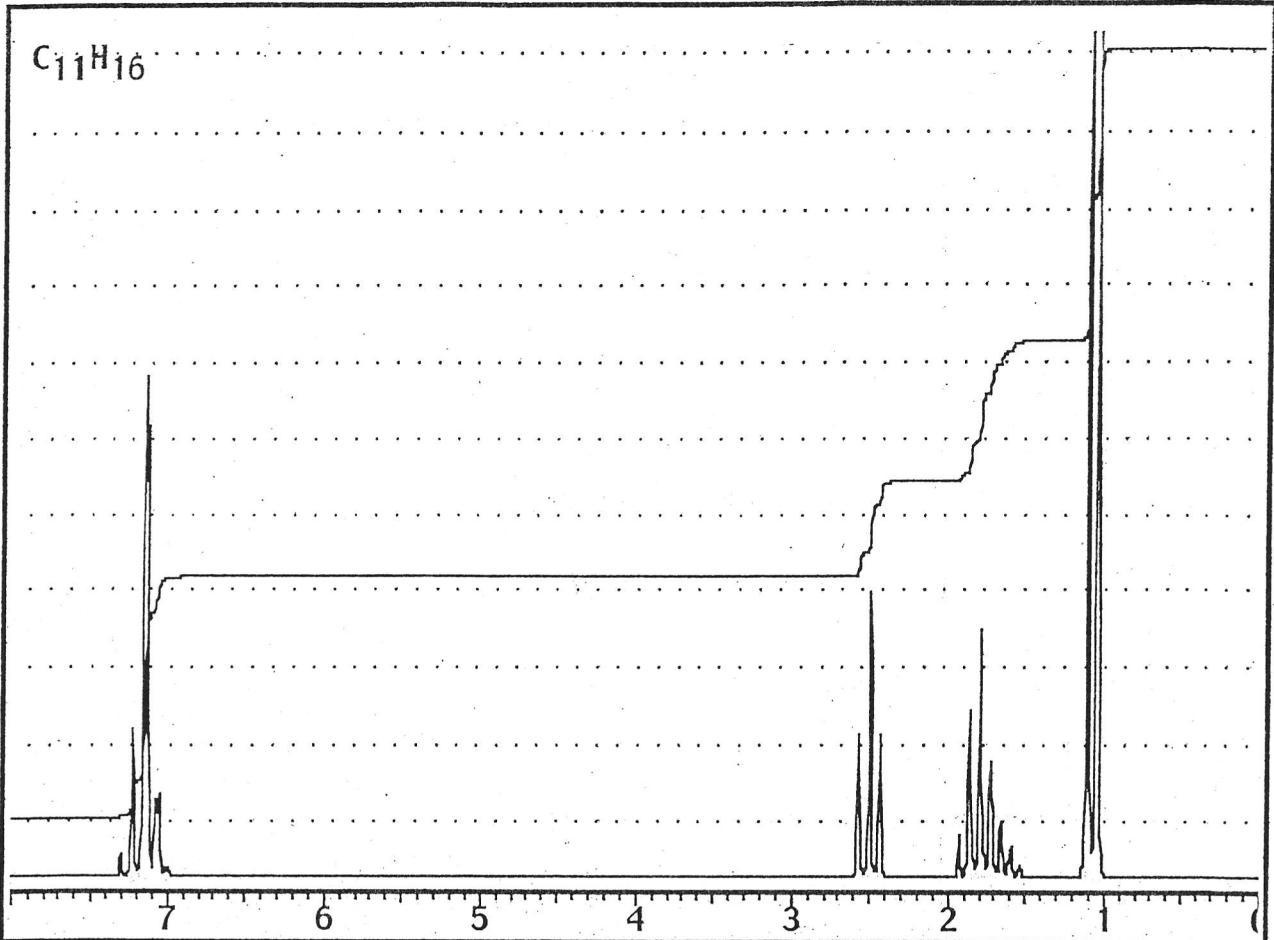


35

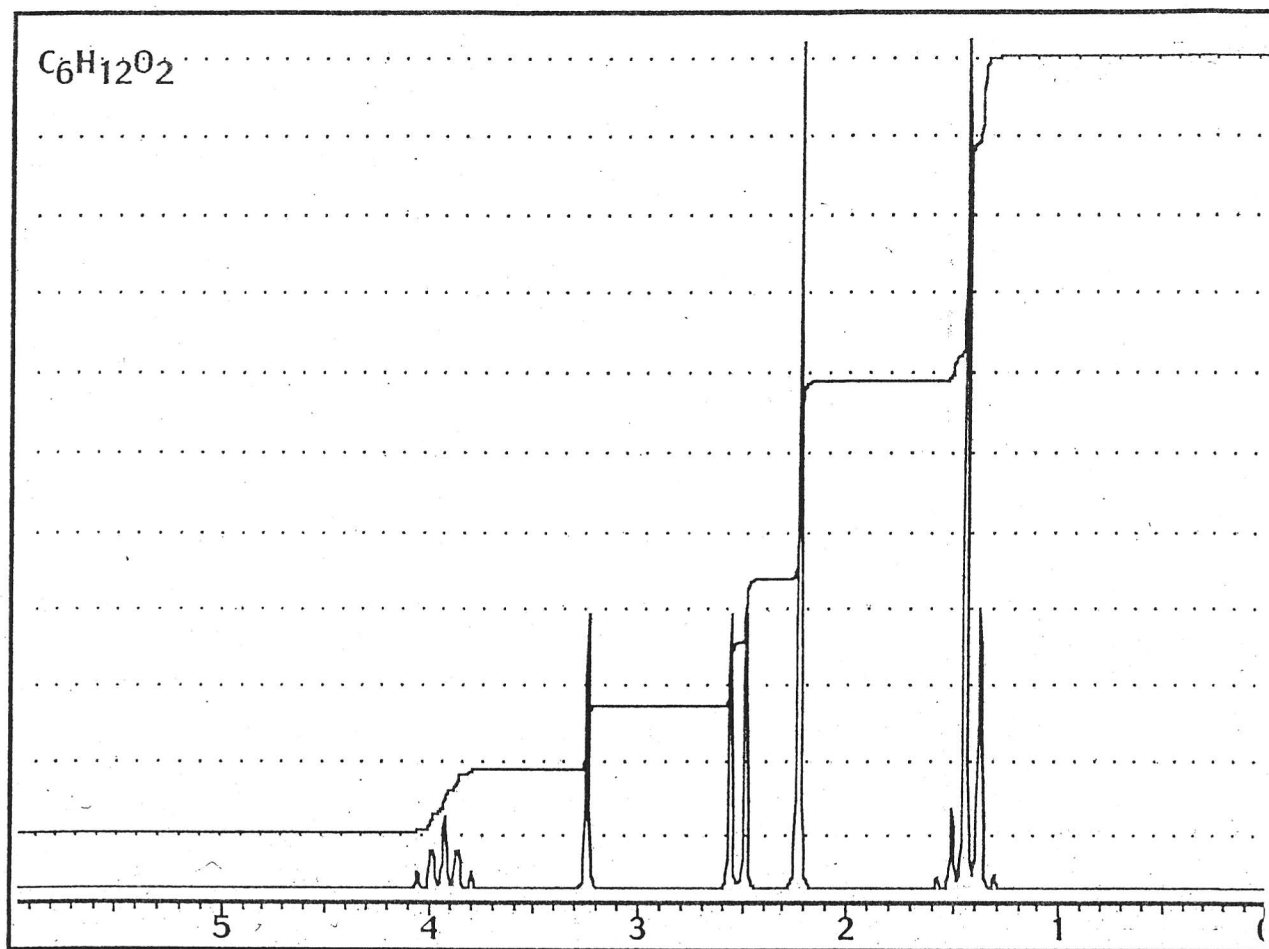
$C_9H_{10}O$



36

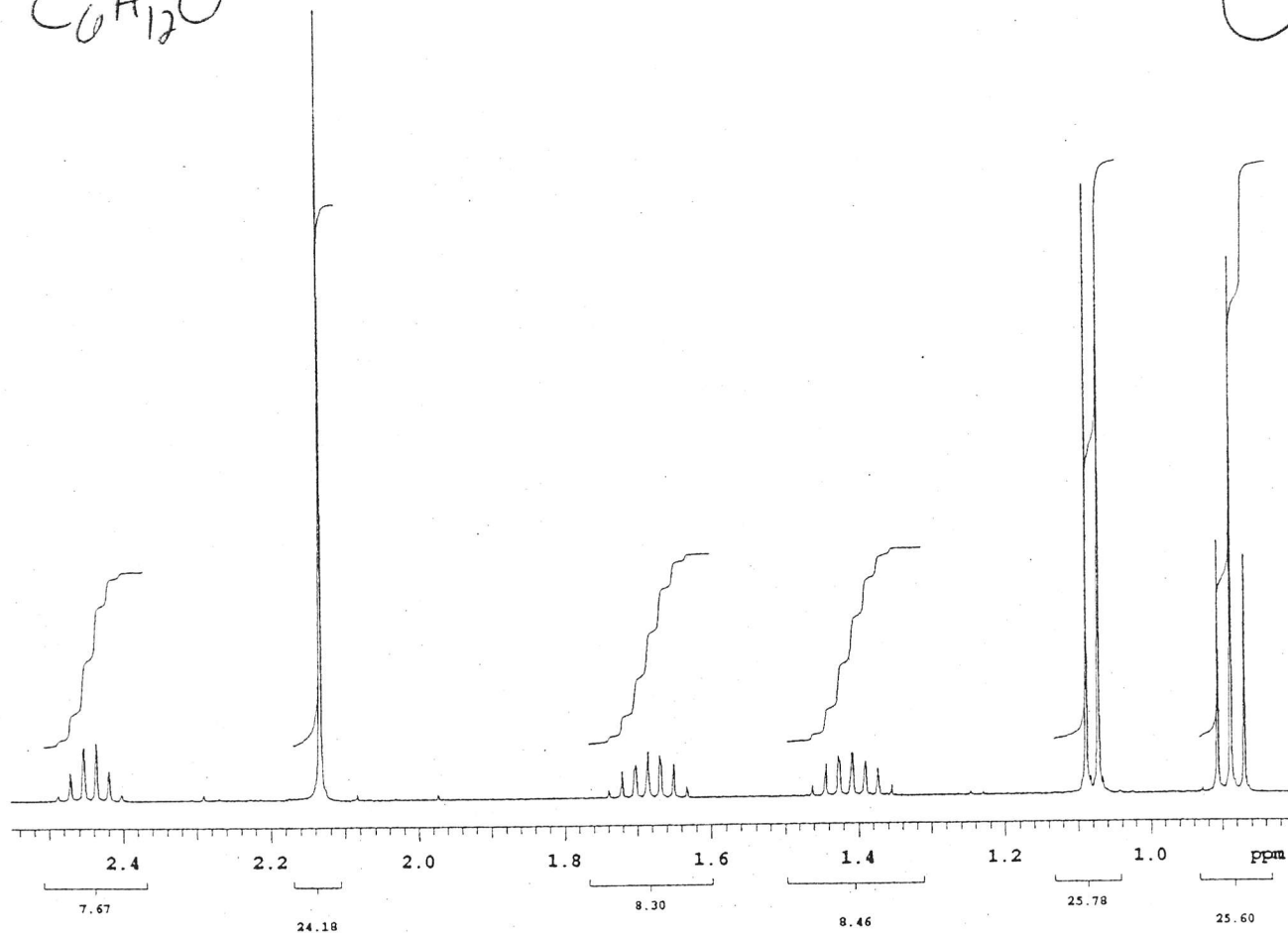


37



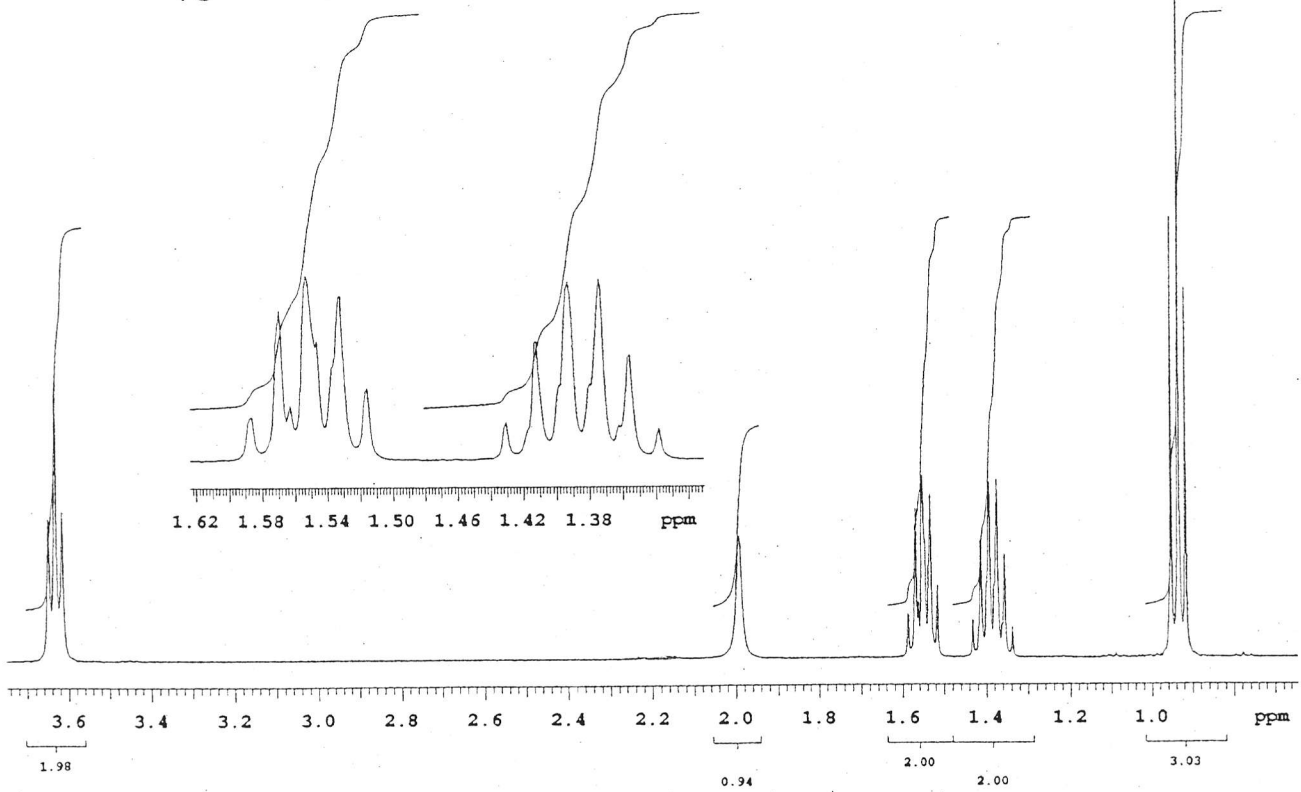
$C_6H_{12}O$

38



39

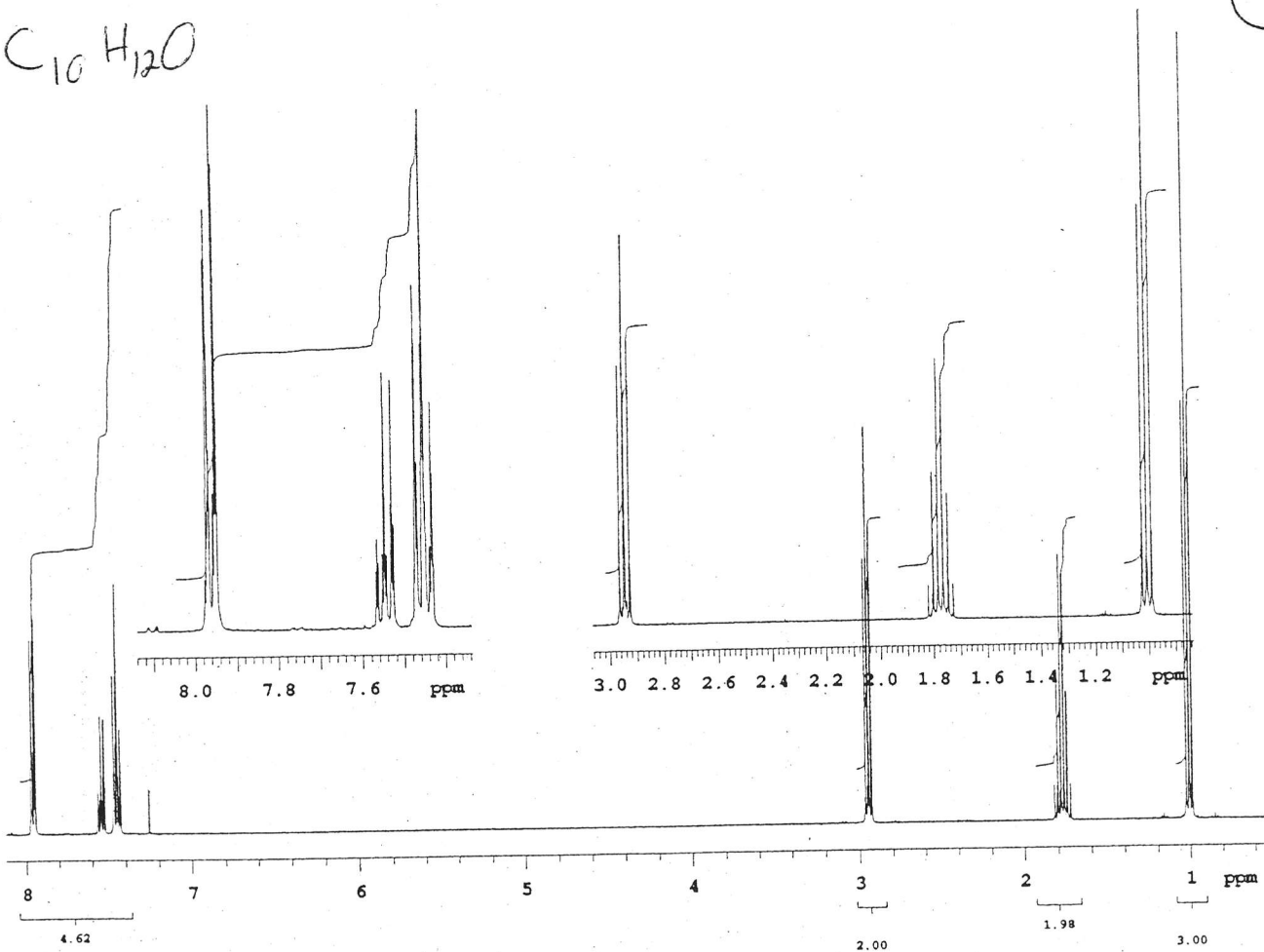
C₄H₁₀O
10



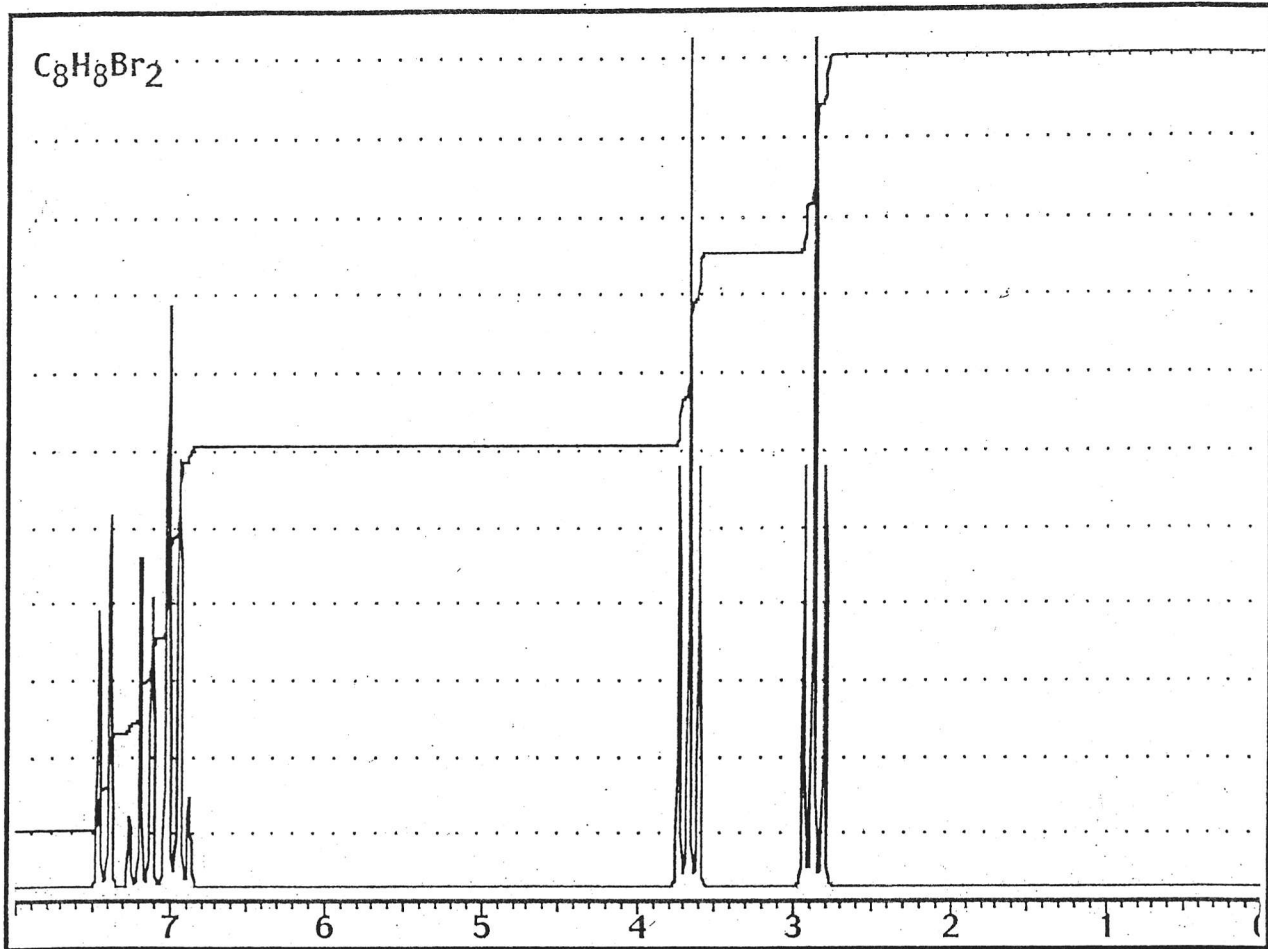
Plotname: 1-Butanol_PROTON_01_plot02

40

$C_{10}H_{12}O$



41



(42)

