

Supporting Information for

Photoaddition Reactions of 1,2-Diketones with Silyl Ketene Acetals. Formation of β -Hydroxy- γ -ketoesters.

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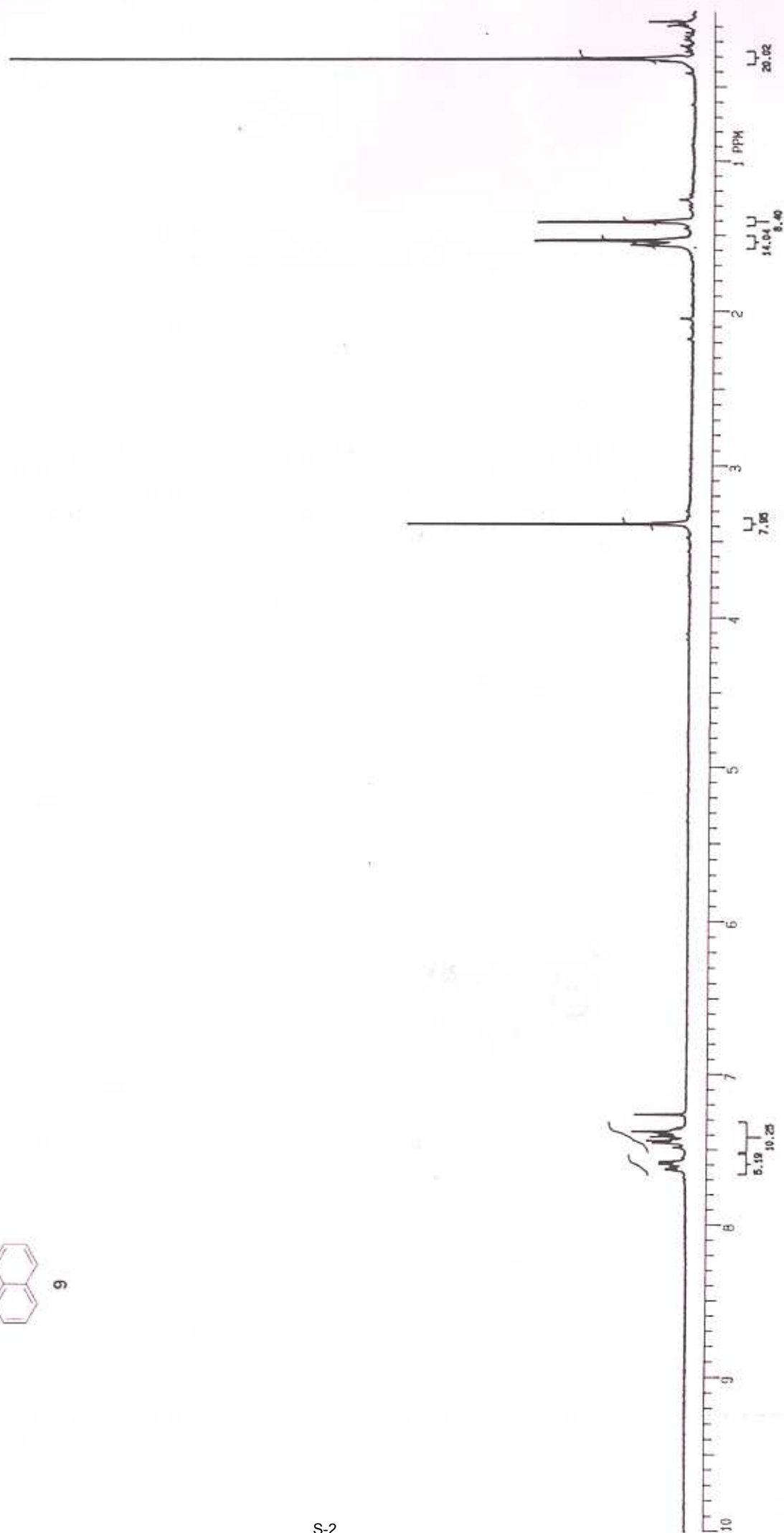
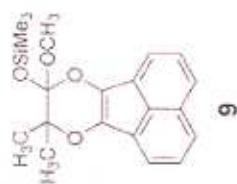
³*Department of Chemistry and Chemical Biology, University of New Mexico, Albuquerque, New*

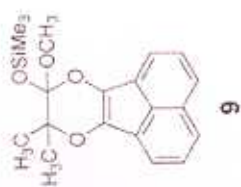
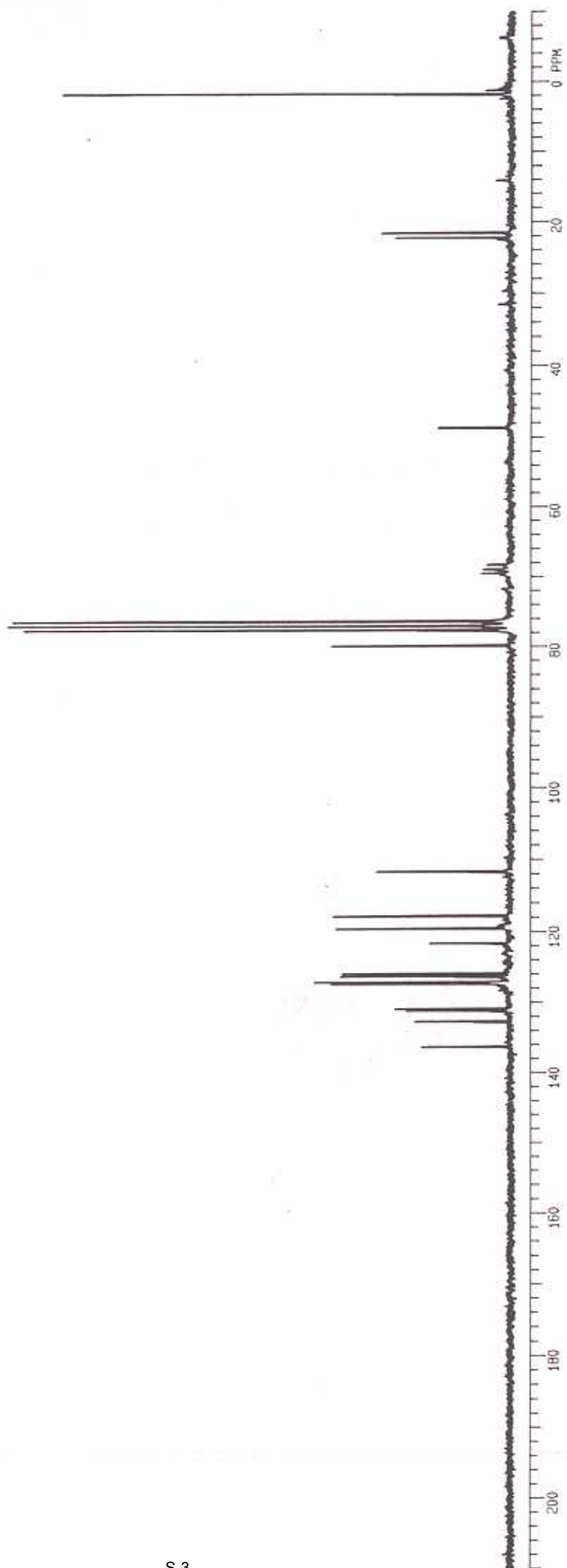
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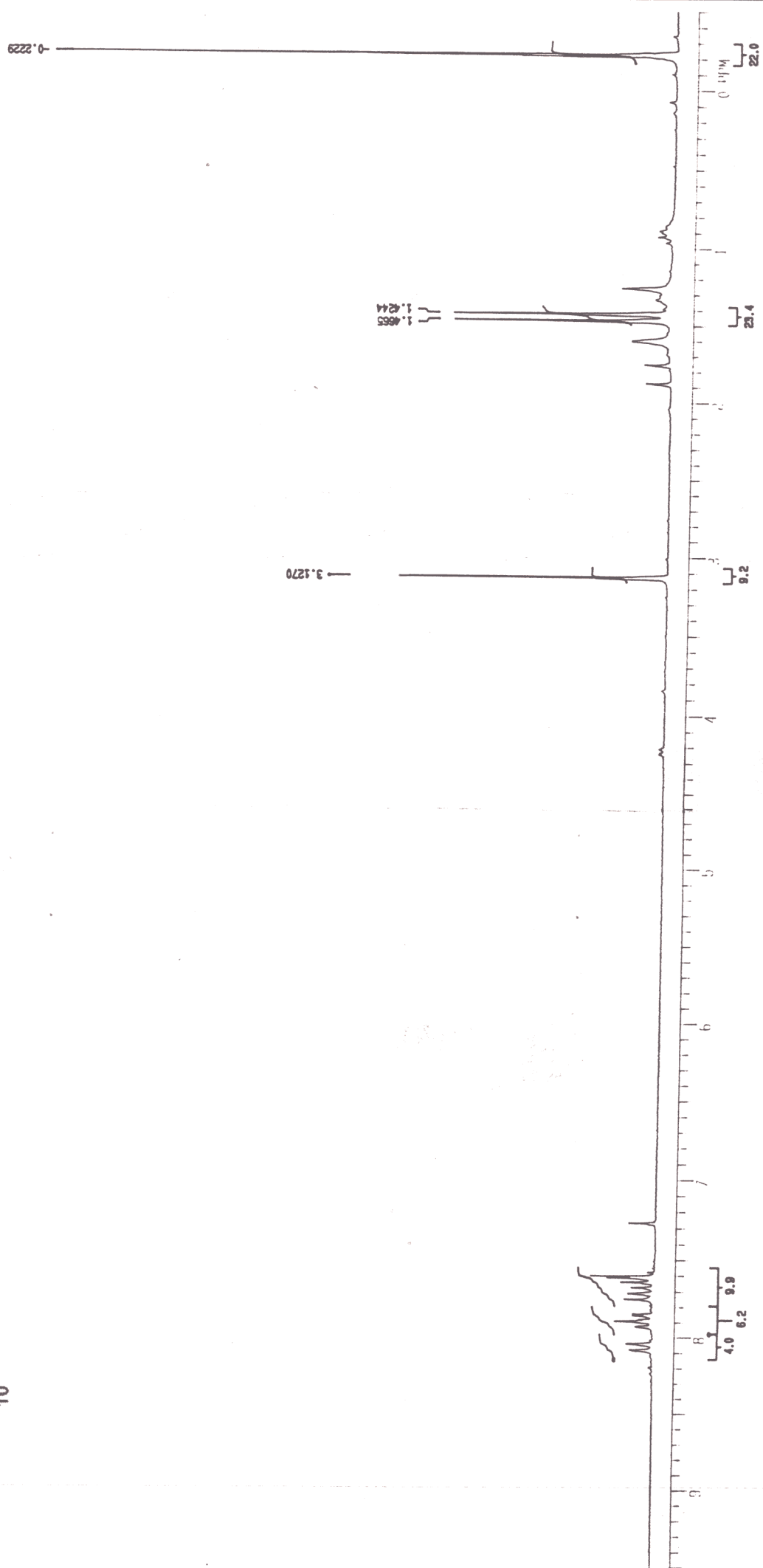
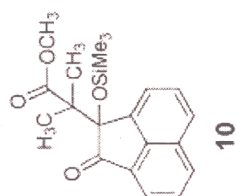
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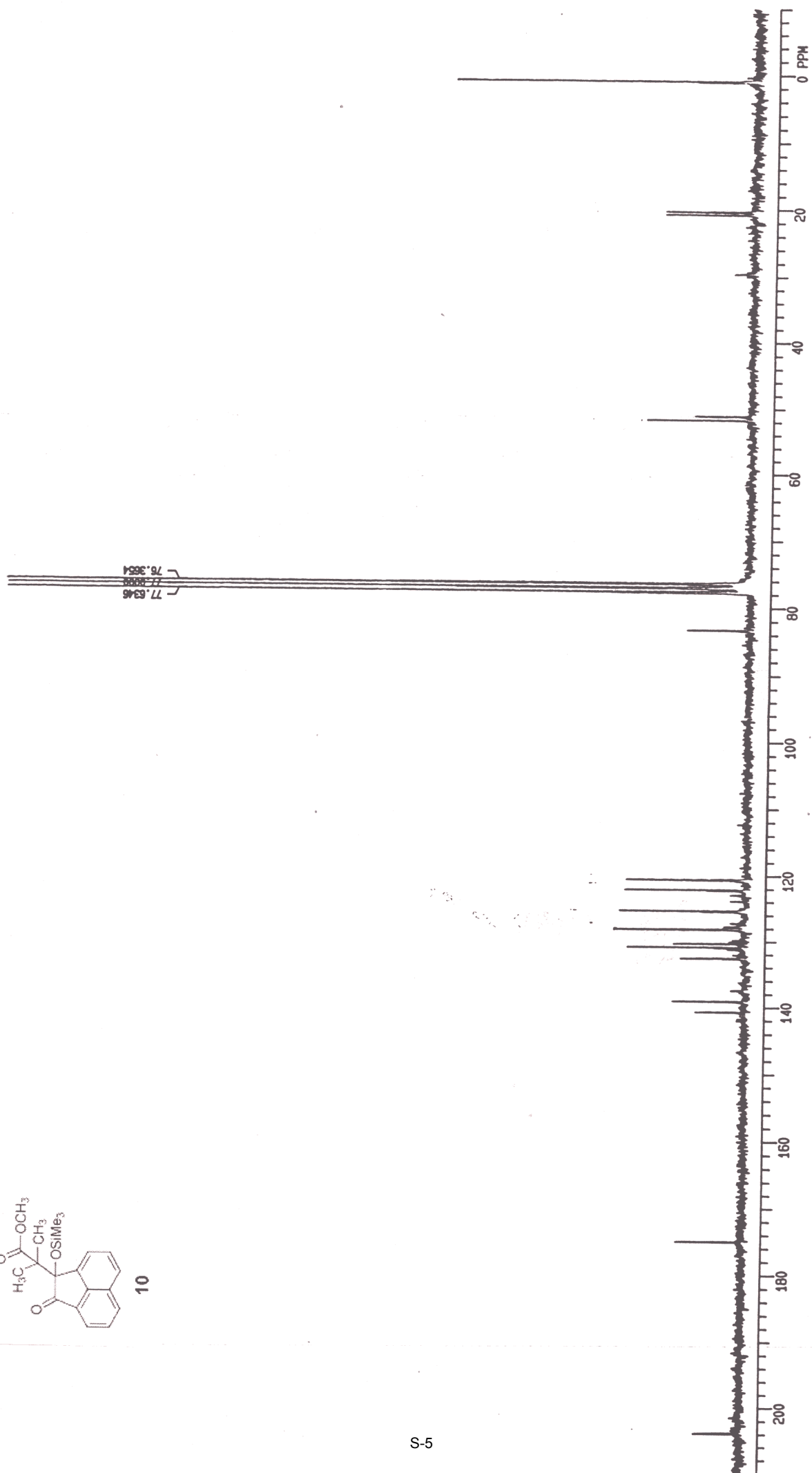
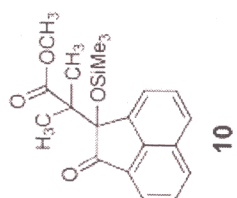
General Procedure

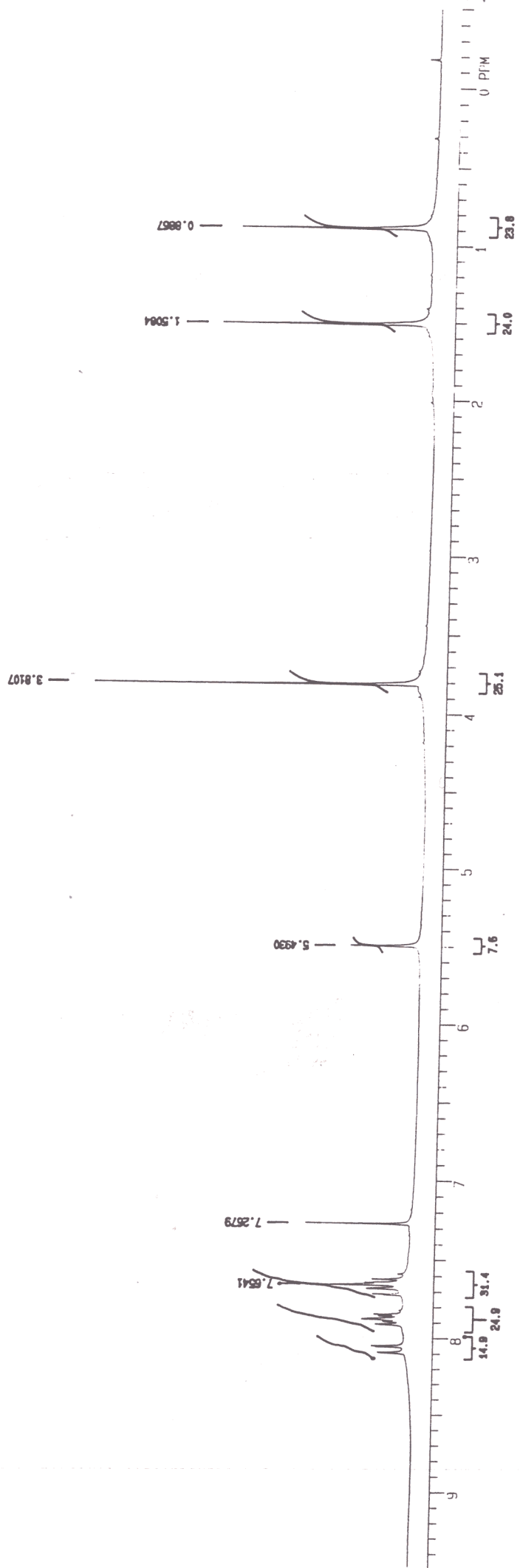
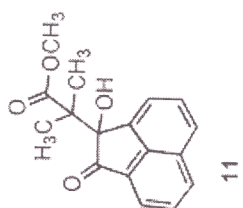
The Chemical shifts of resonances in the ^1H - and ^{13}C -NMR (300 MHz) spectra were recorded on CDCl_3 solutions and are reported in parts per million relative to CHCl_3 peak (7.24 ppm) as an internal standard. IR spectral bands are reported in cm^{-1} . Preparative photochemical reactions were conducted with an apparatus consisting of a 450 W Hanovia medium vapor pressure mercury lamp surrounded by a Uranium glass filter in a water-cooled quartz immersion well surrounded by the solution being irradiated. The photolysis solutions were purged with nitrogen before and during irradiations. The photolysates were concentrated under reduced pressure giving residues which were subjected to silica gel column chromatography. High resolution (HRMS) mass spectra were obtained by use of electron impact ionization unless otherwise noted. All starting materials used in the photoreactions derived from commercial sources. All new compounds described are isolated as oils in >90% purity (by NMR analysis) unless noted otherwise.

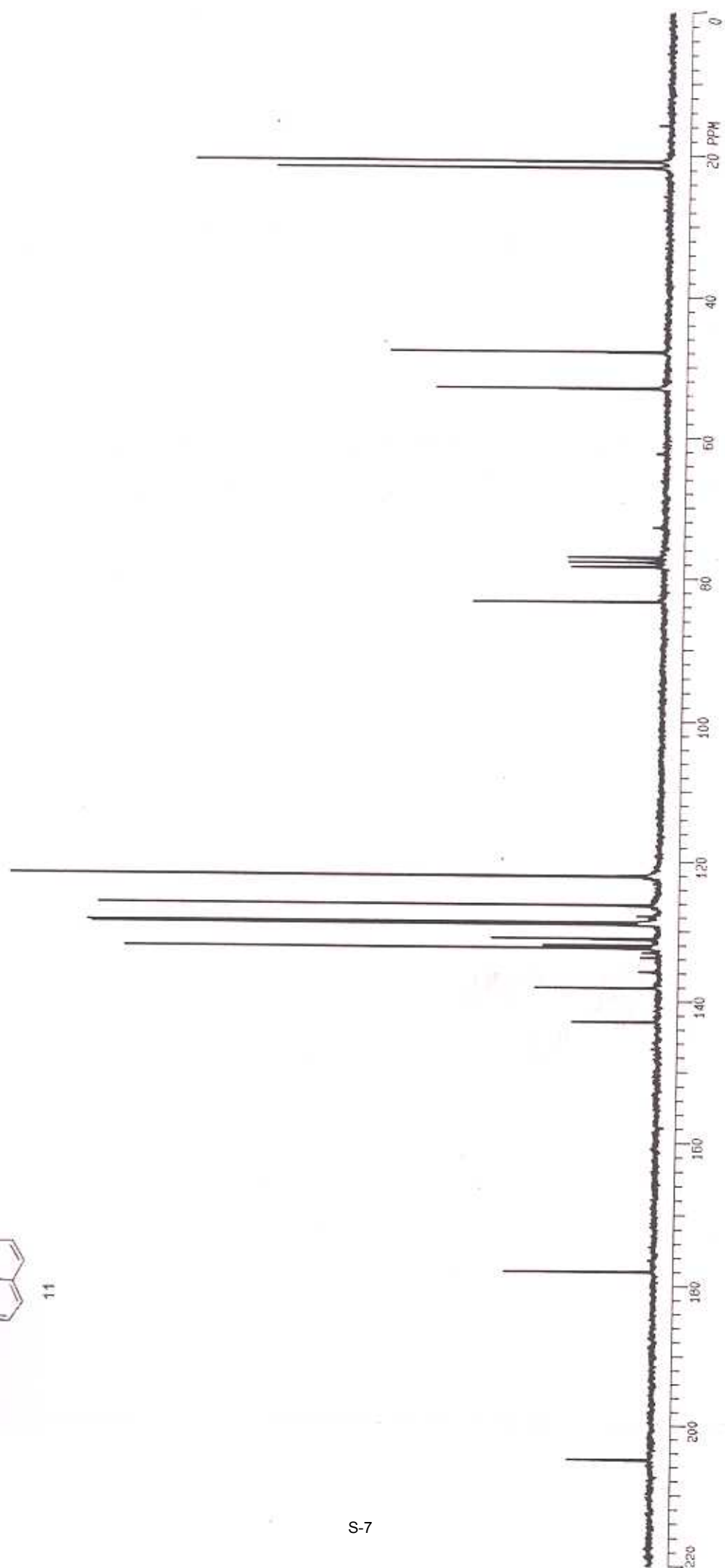
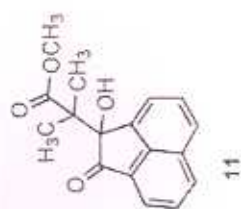


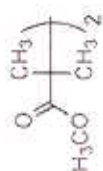




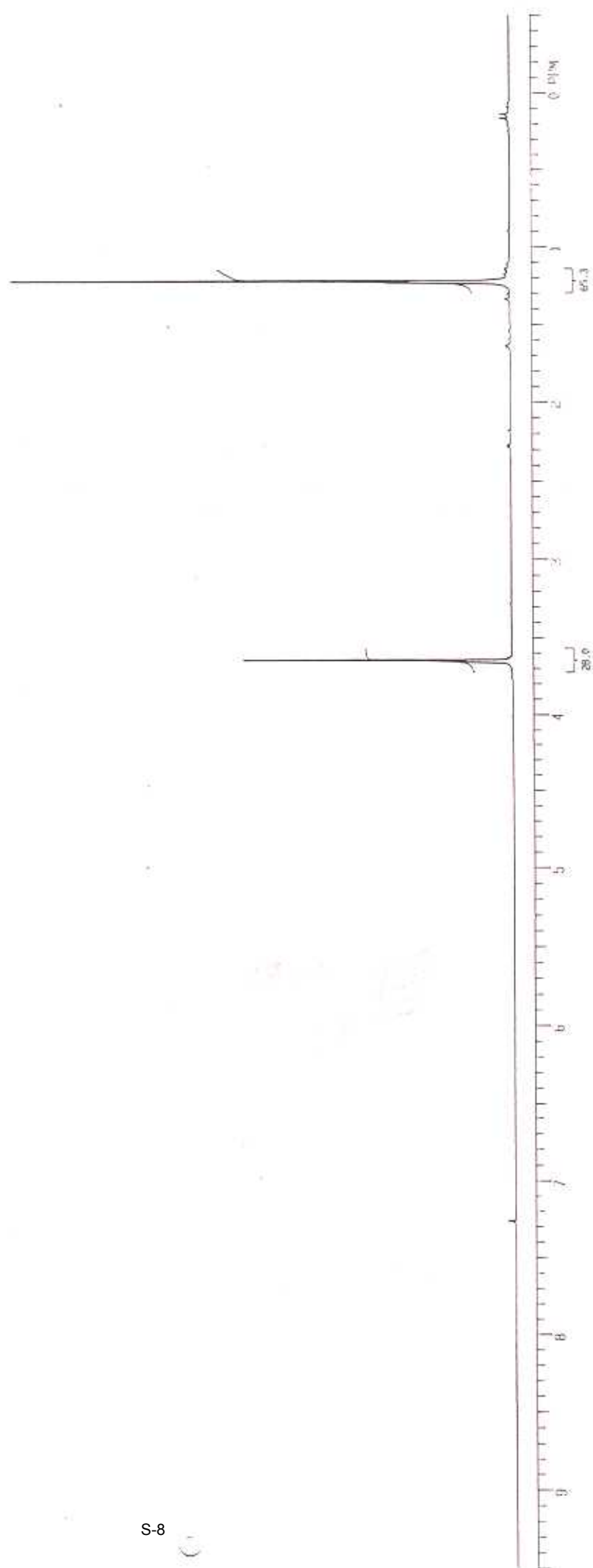


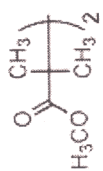




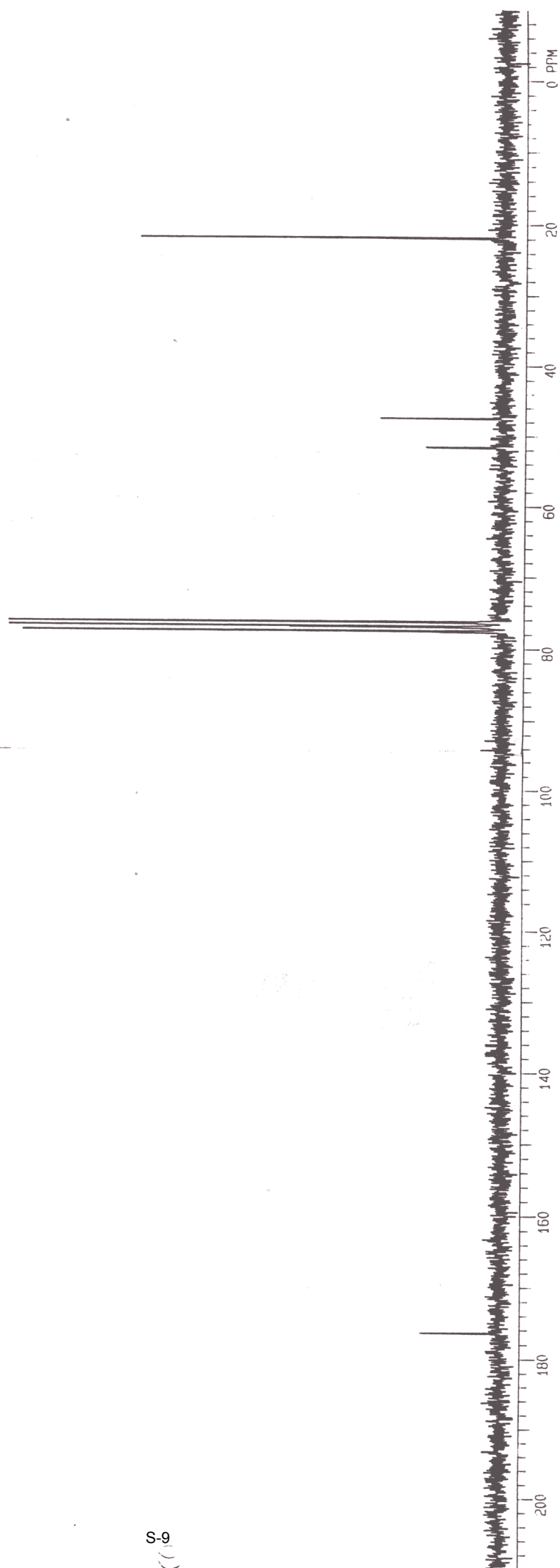


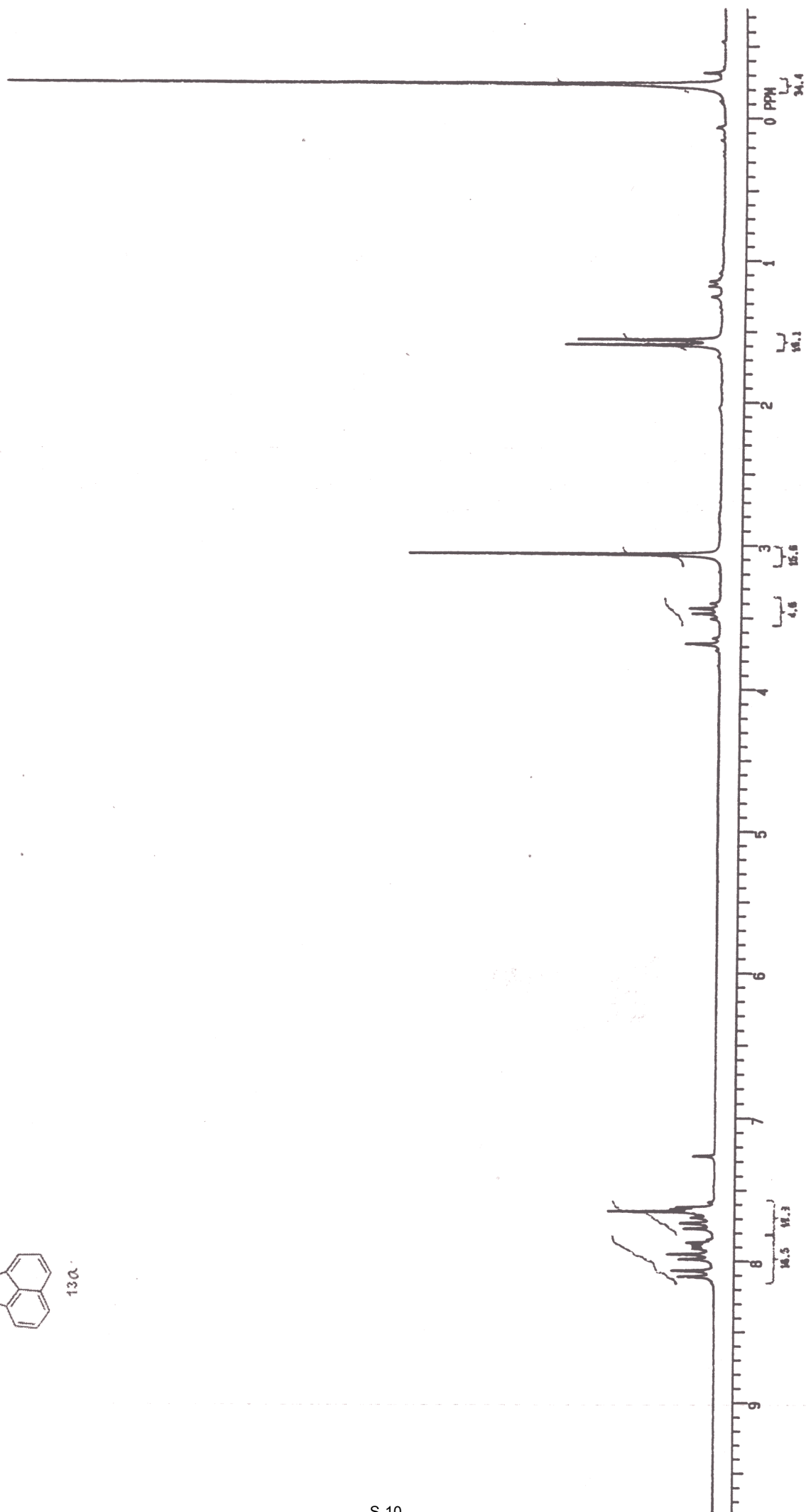
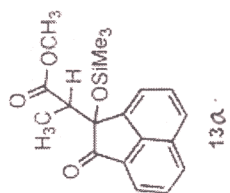
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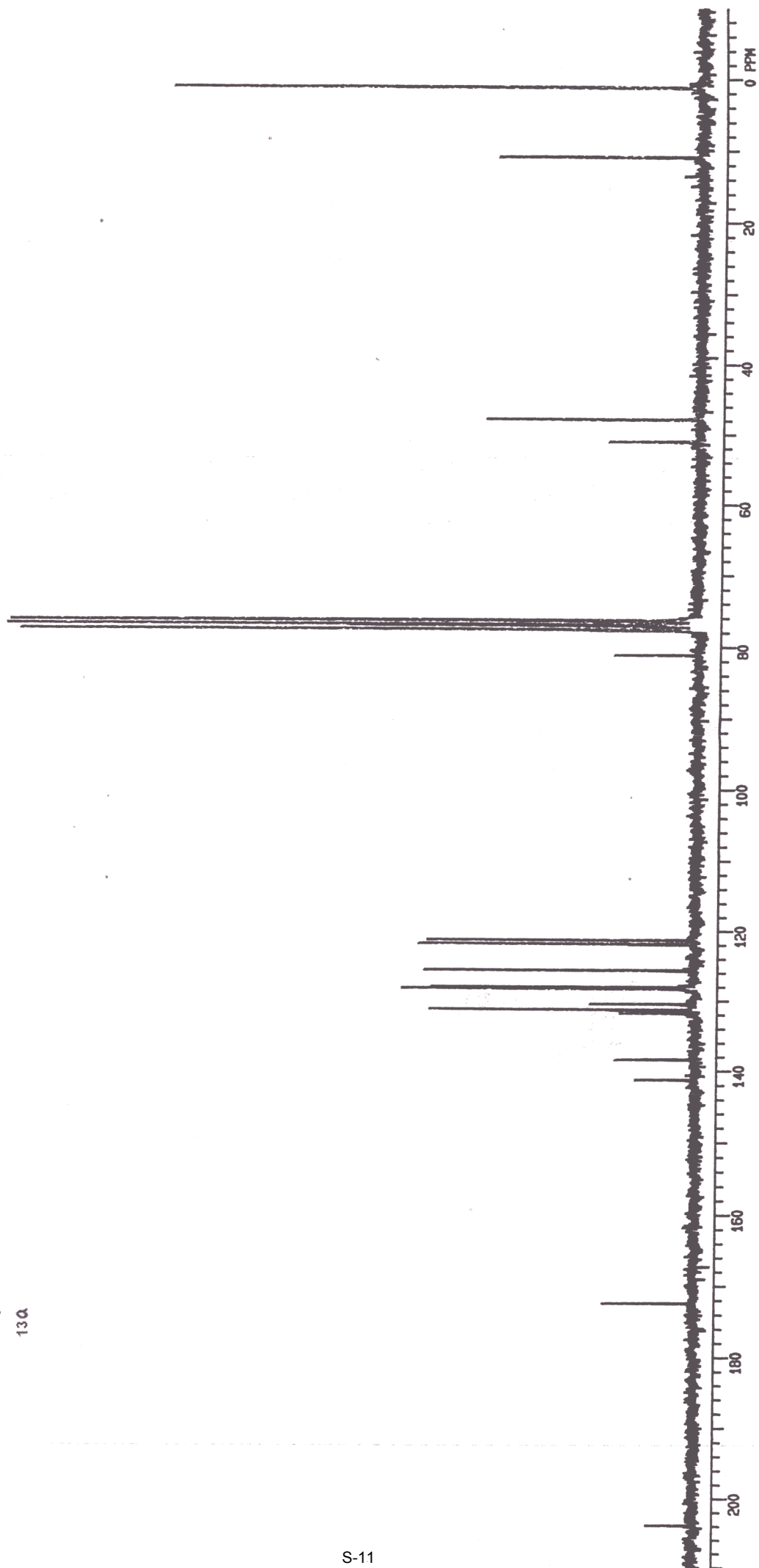
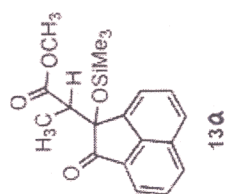


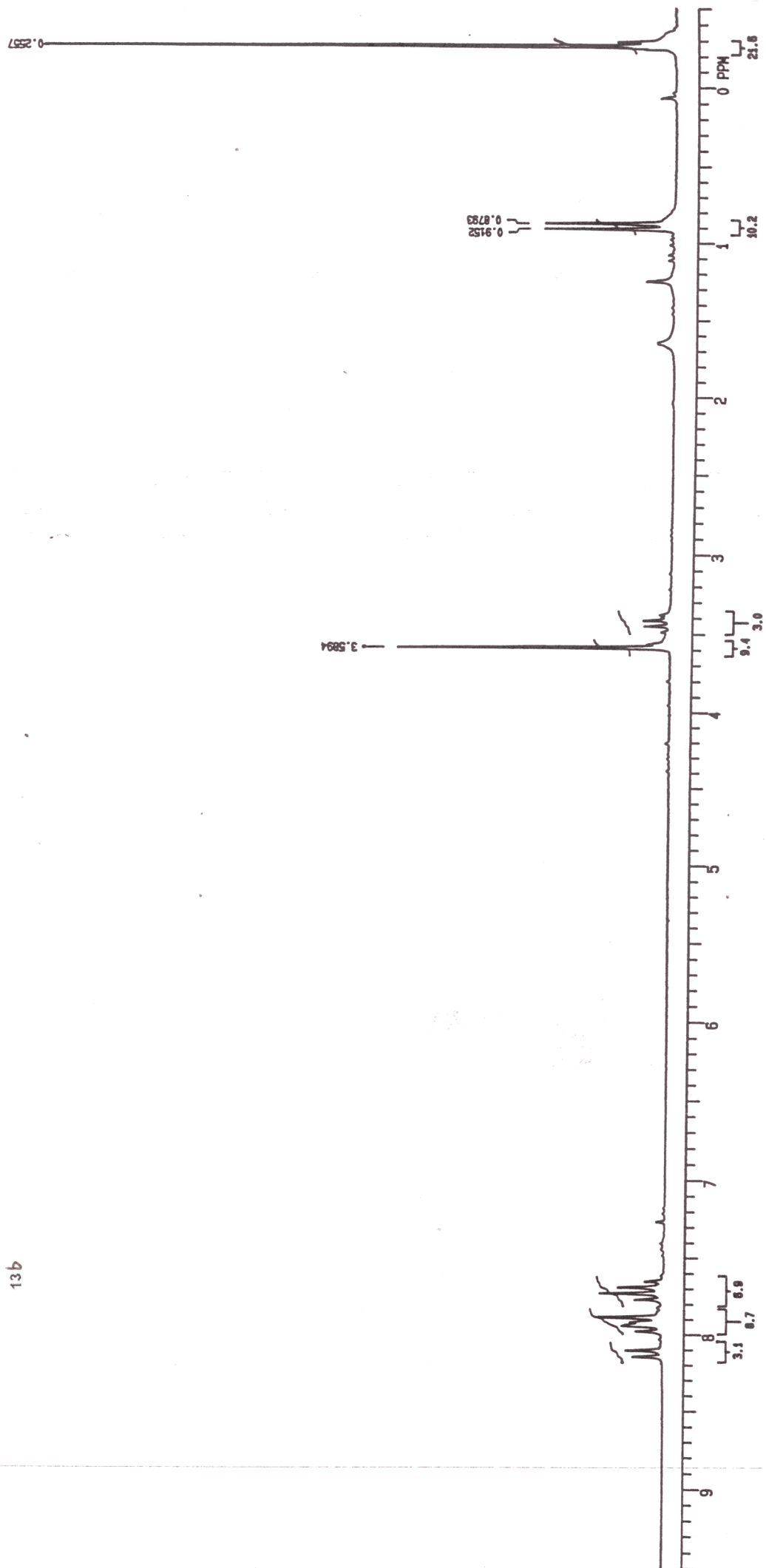
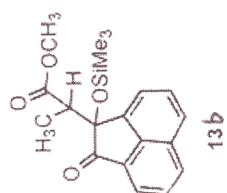


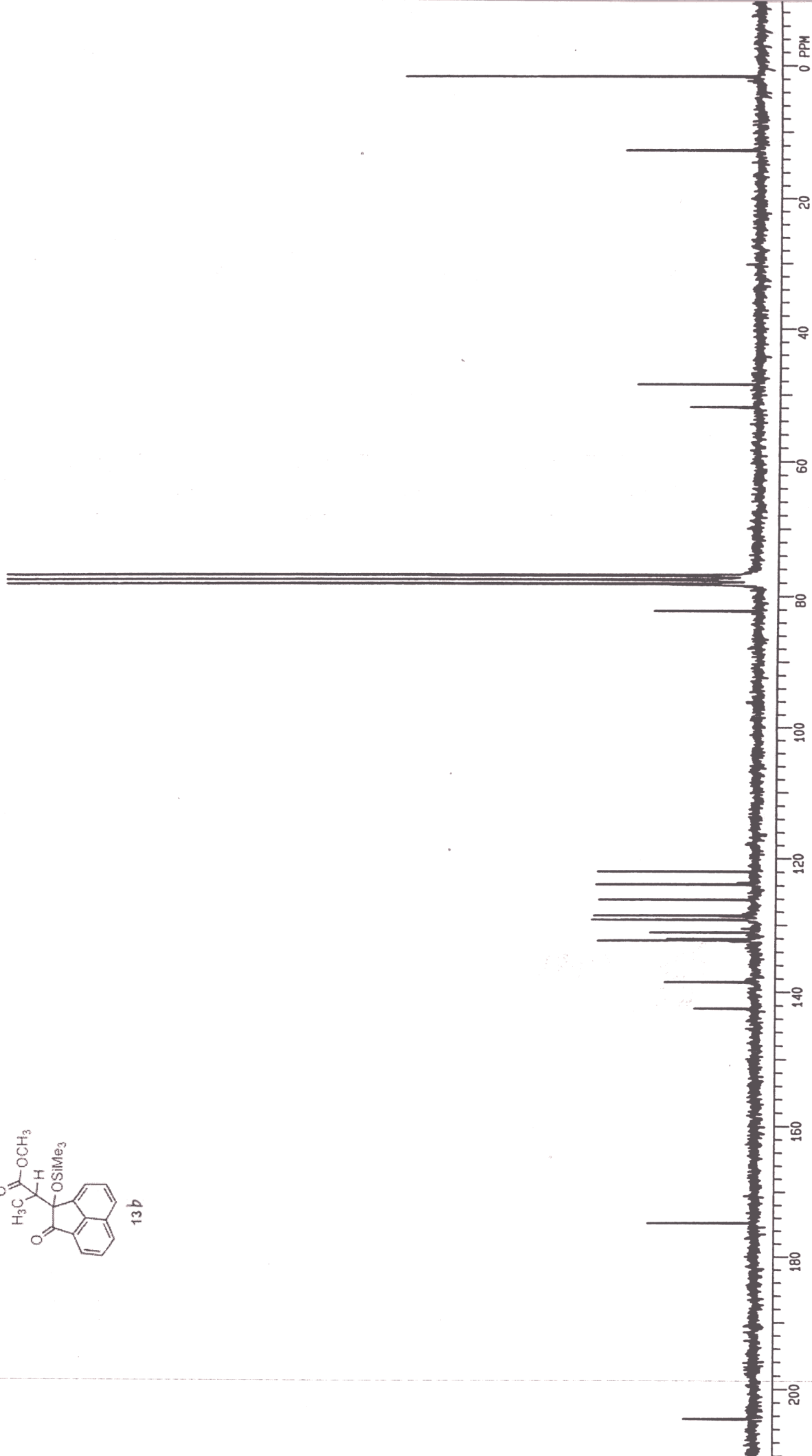
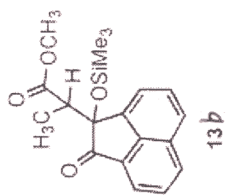
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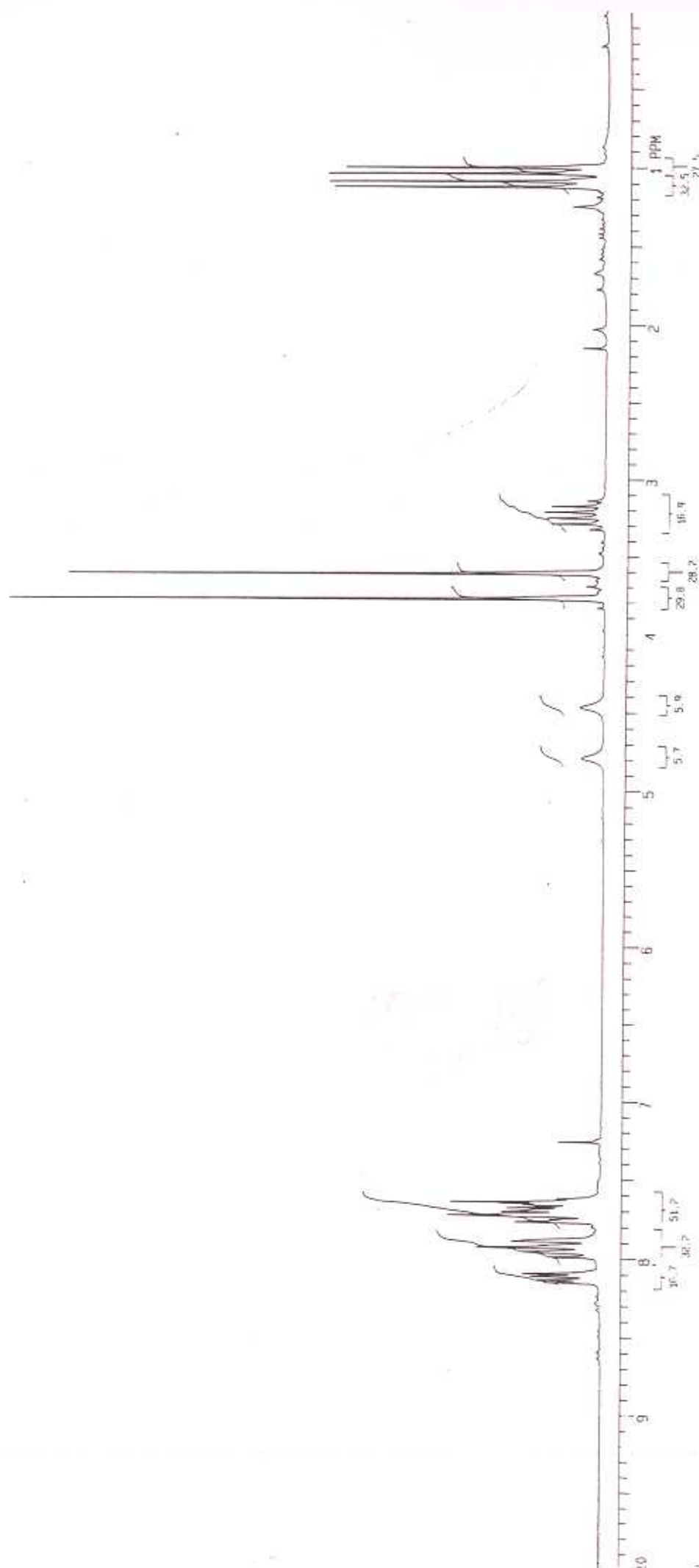
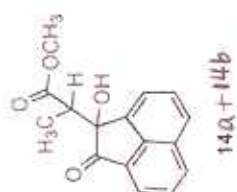




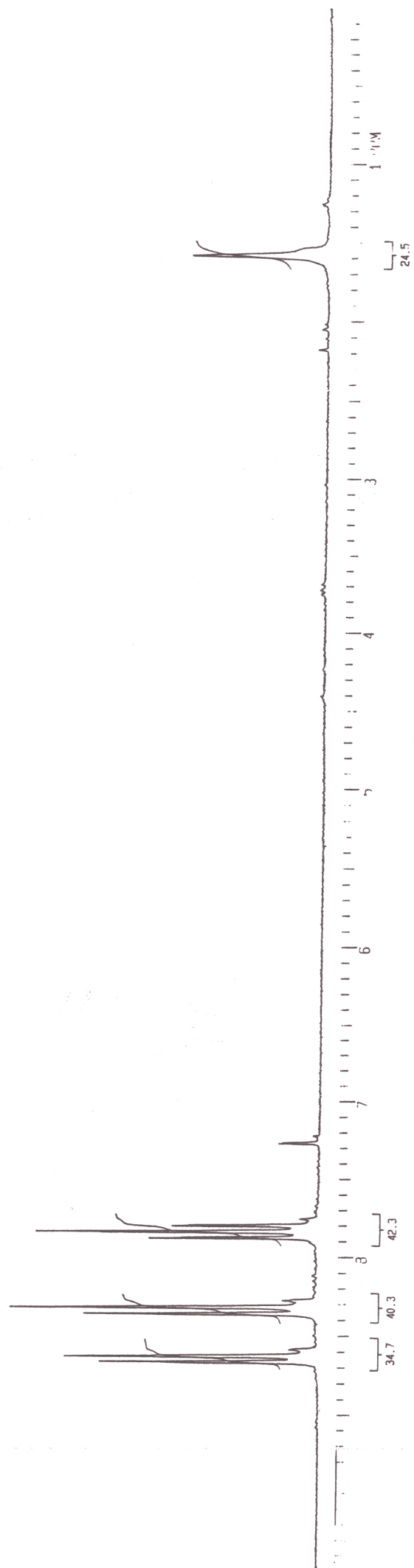
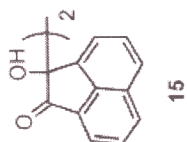


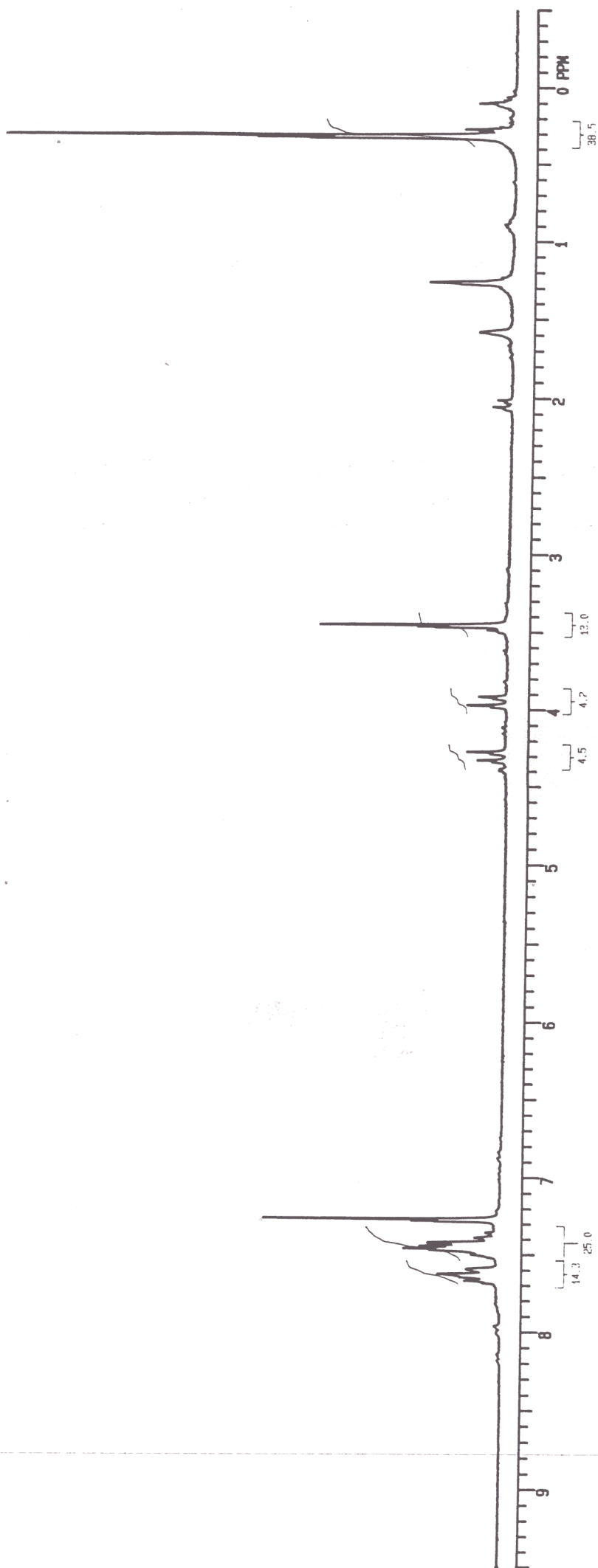
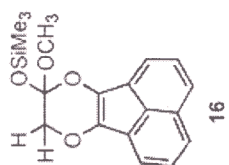


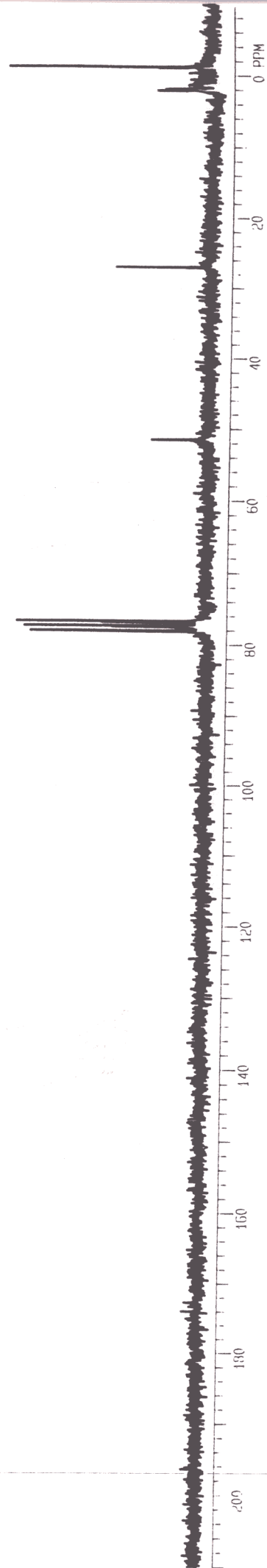
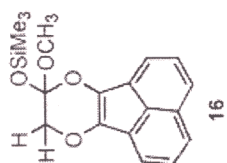


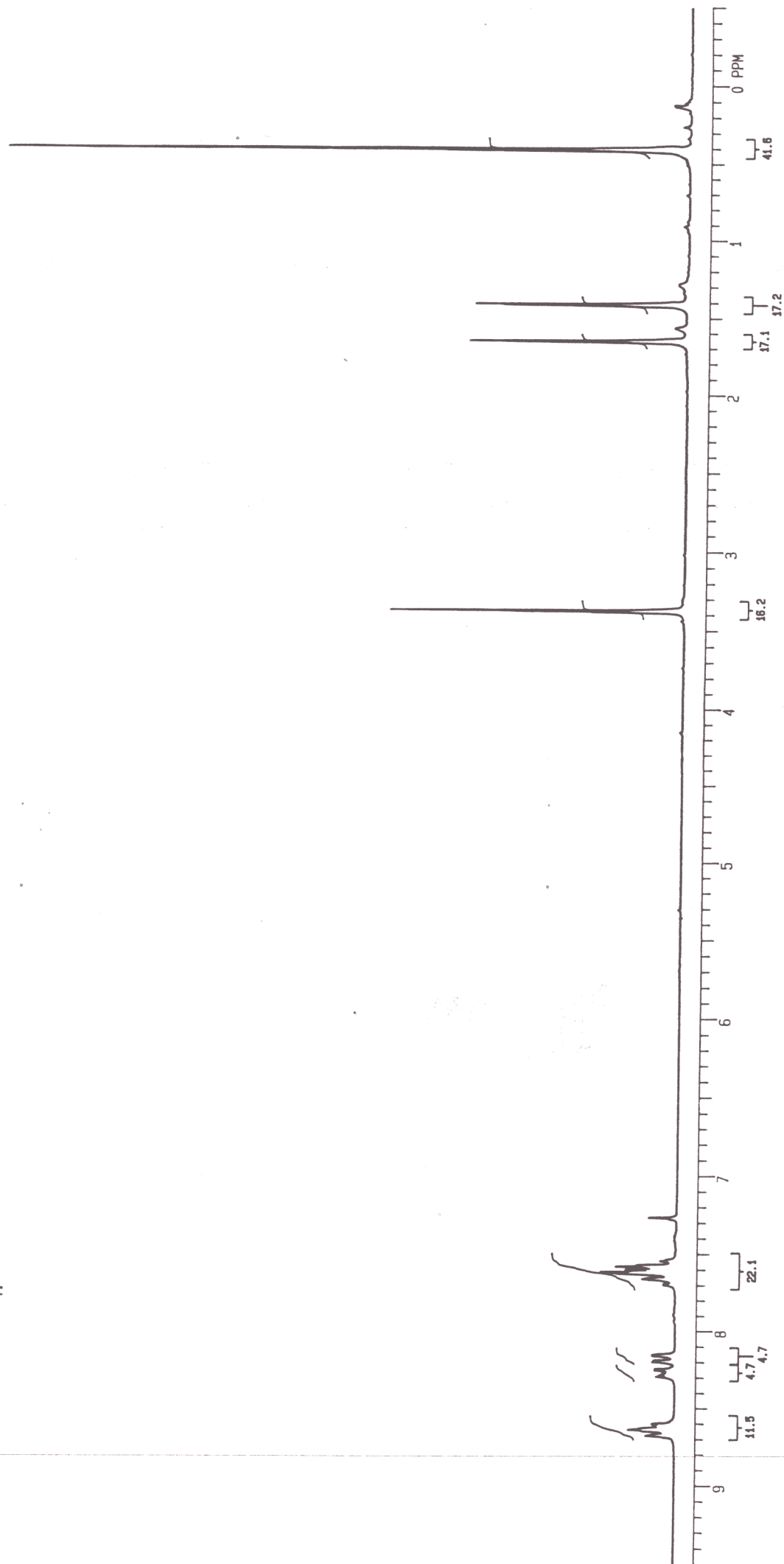
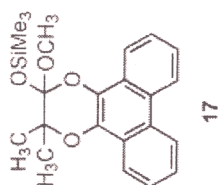


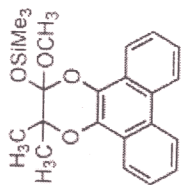




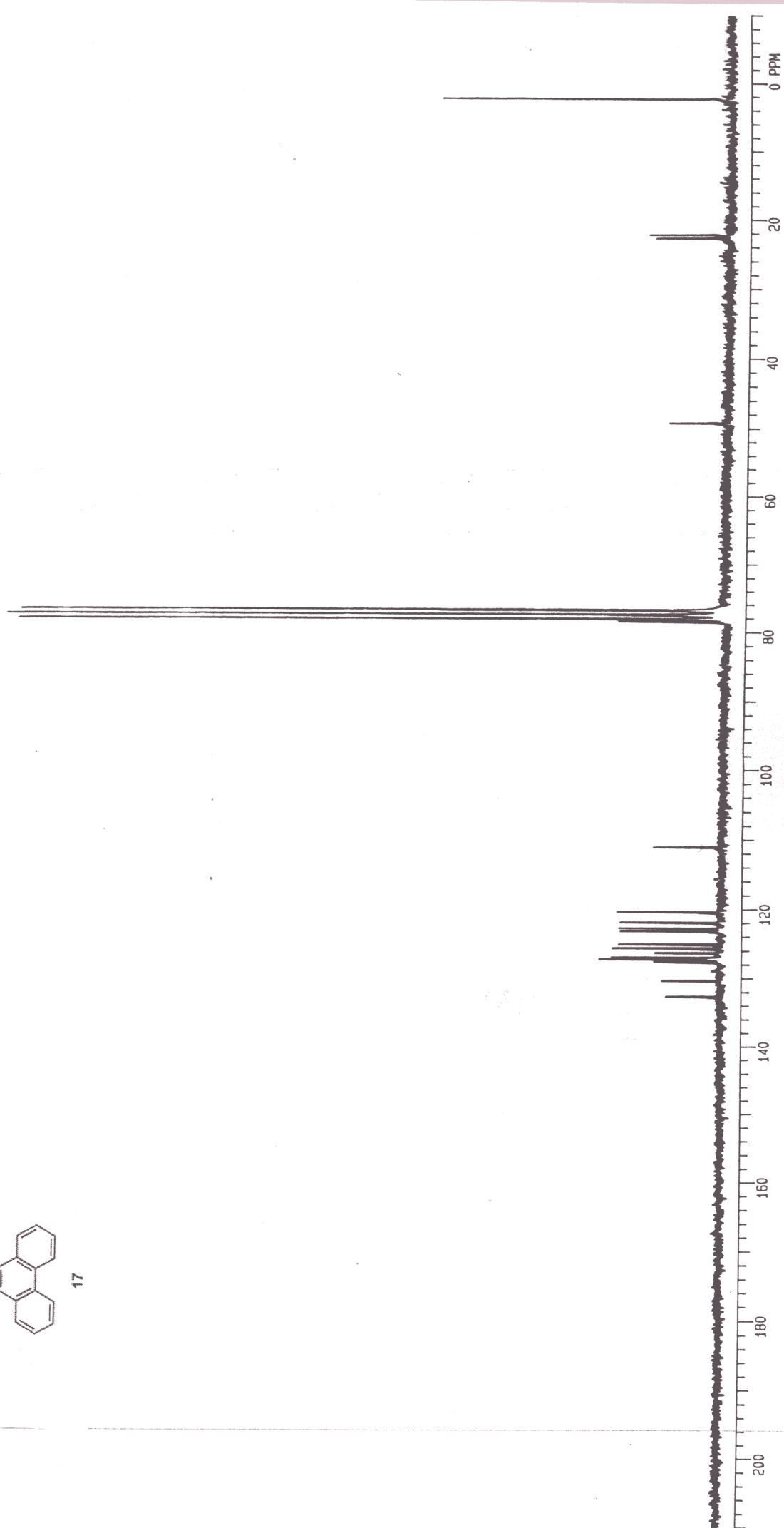


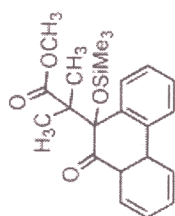




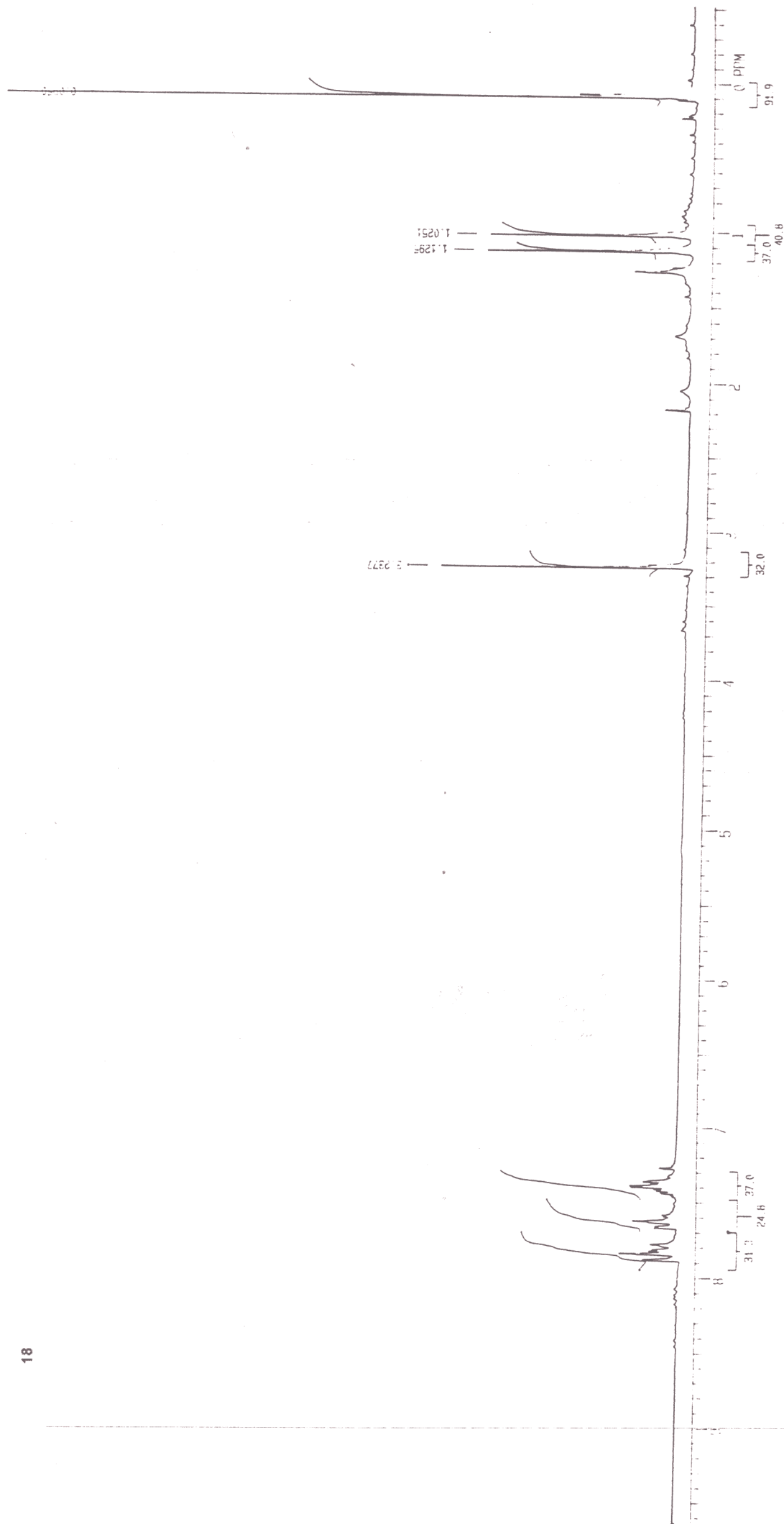


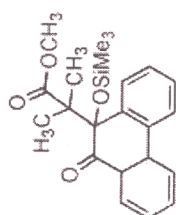
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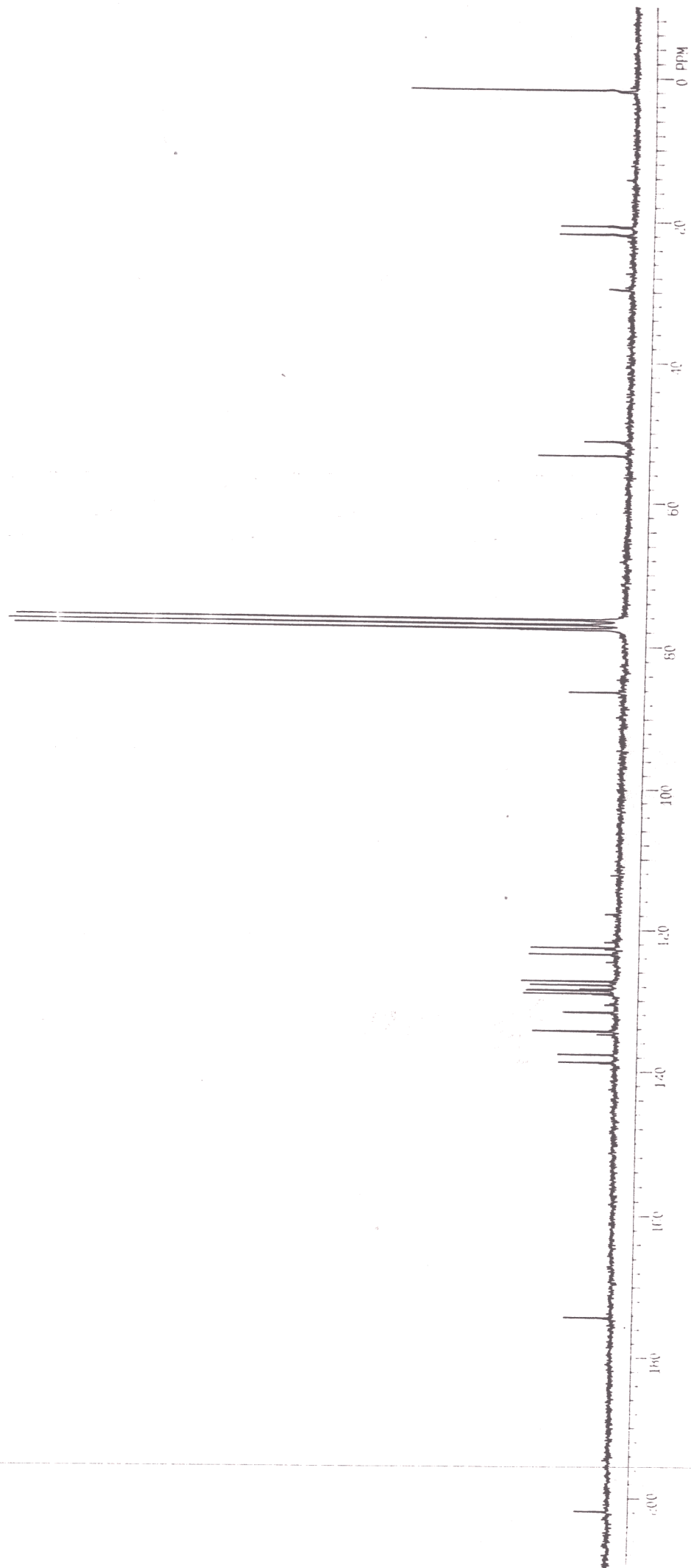


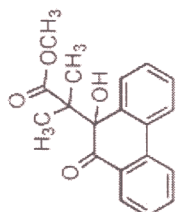
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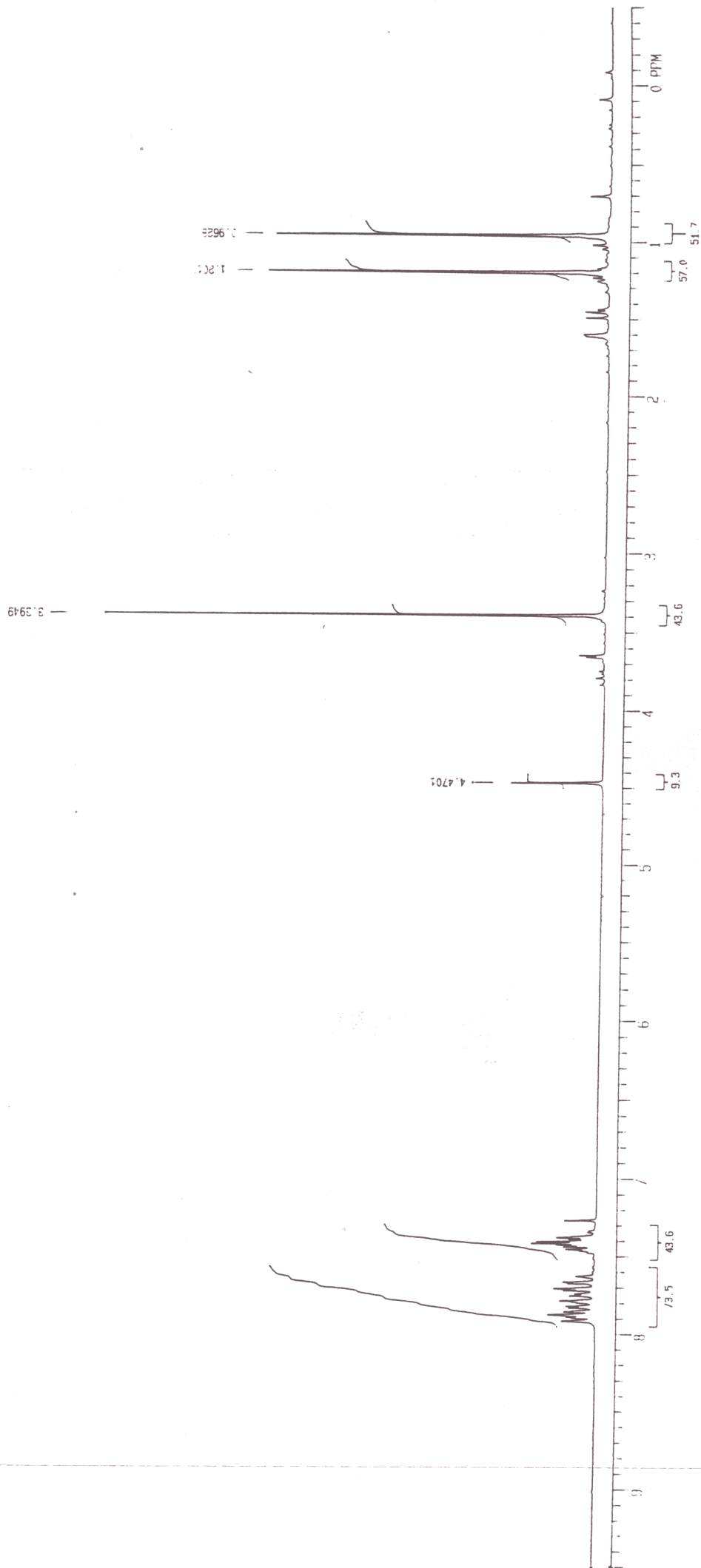


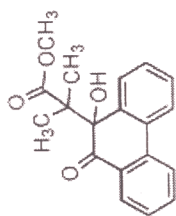
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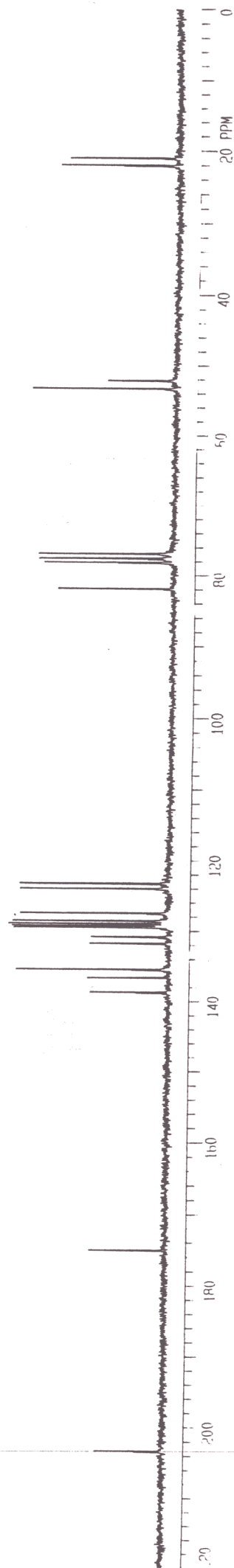


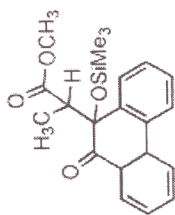
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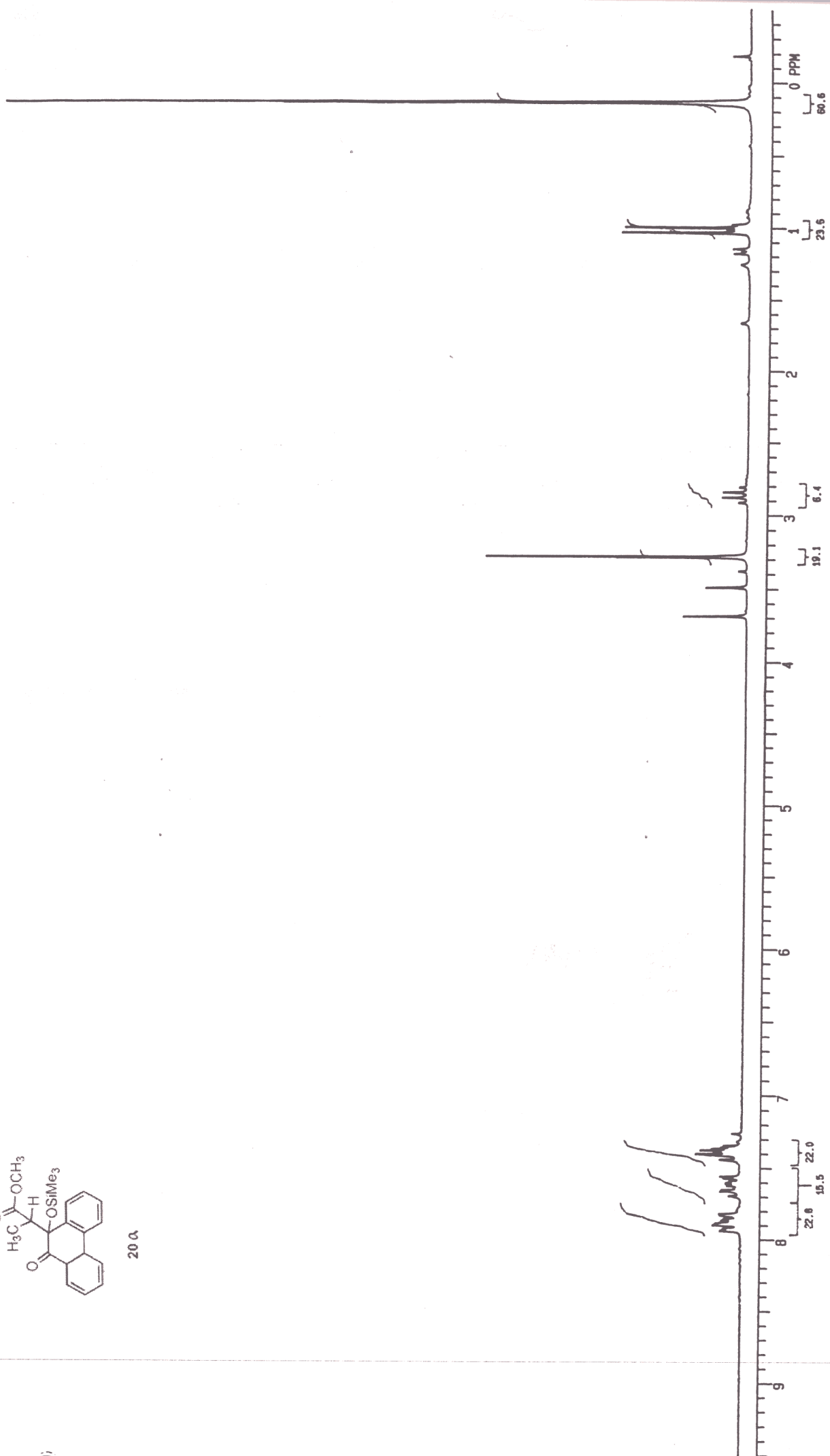


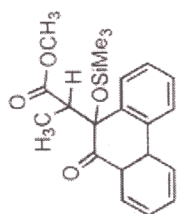
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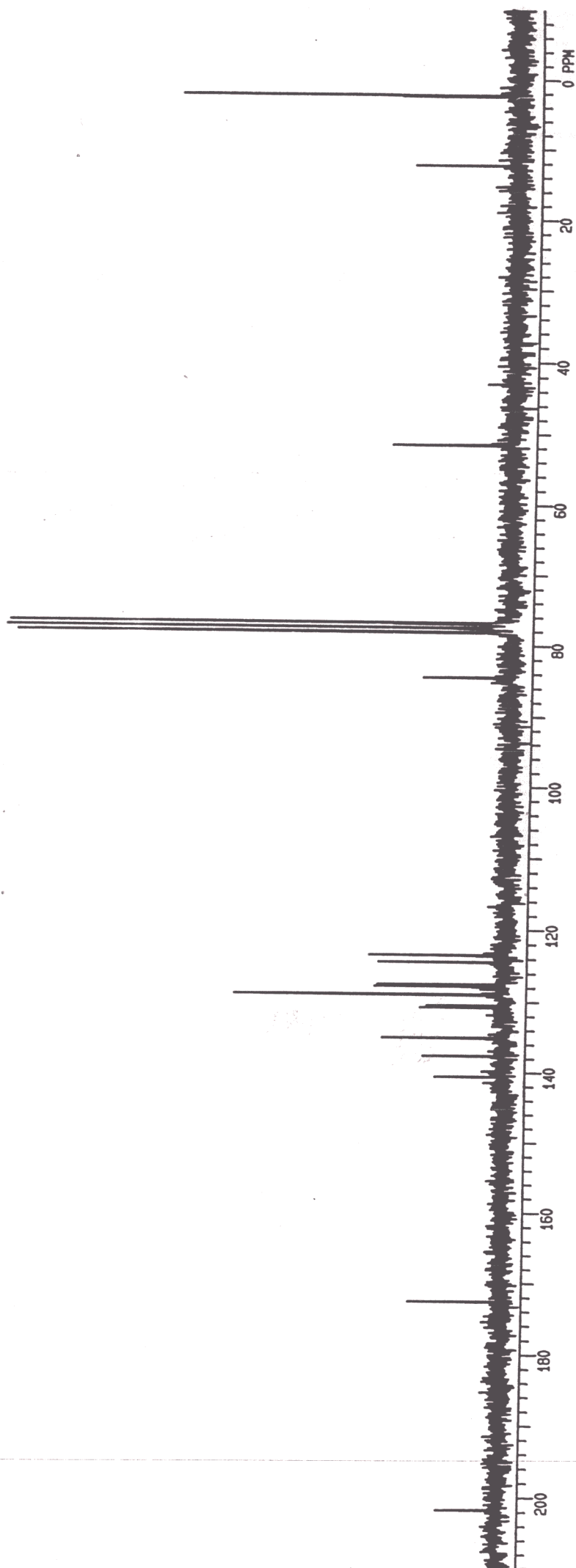


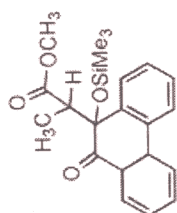
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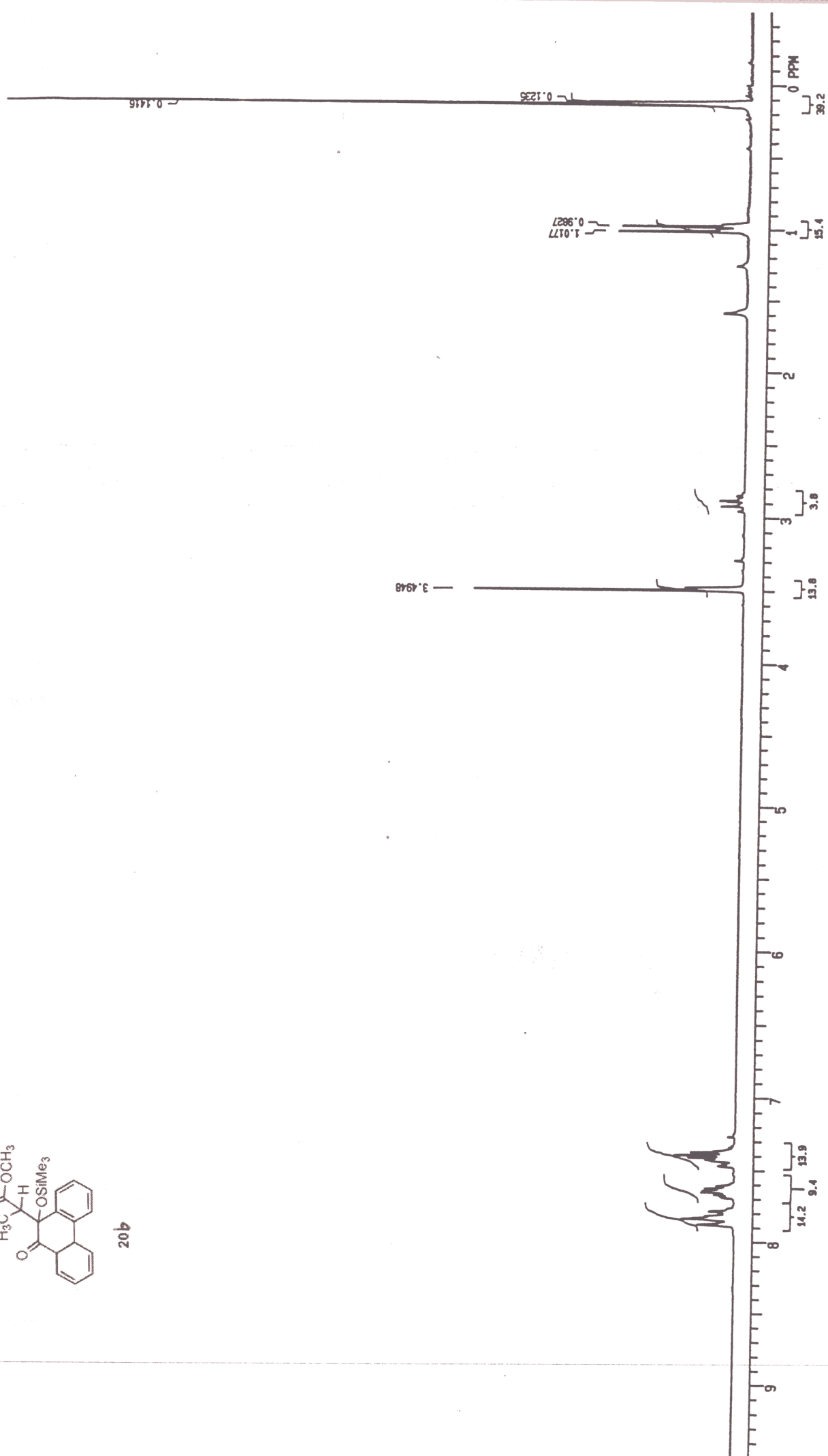


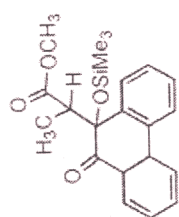
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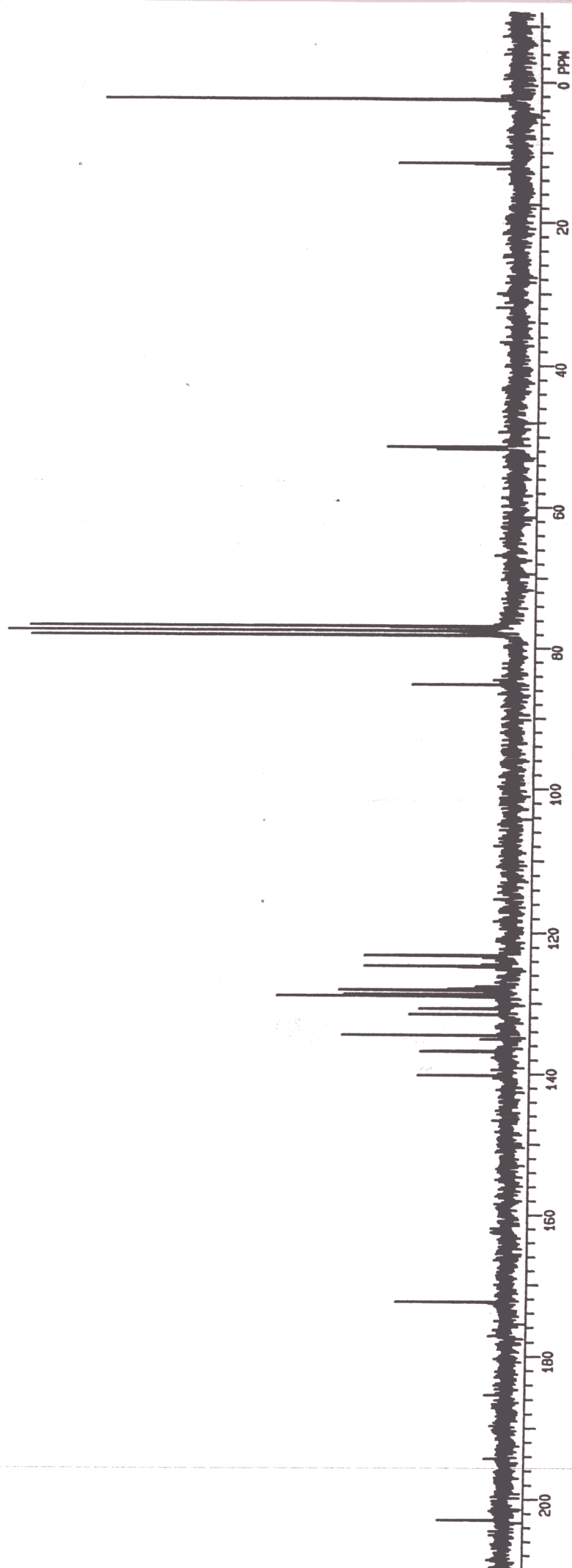


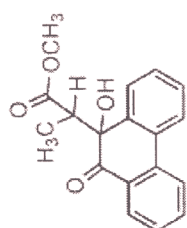
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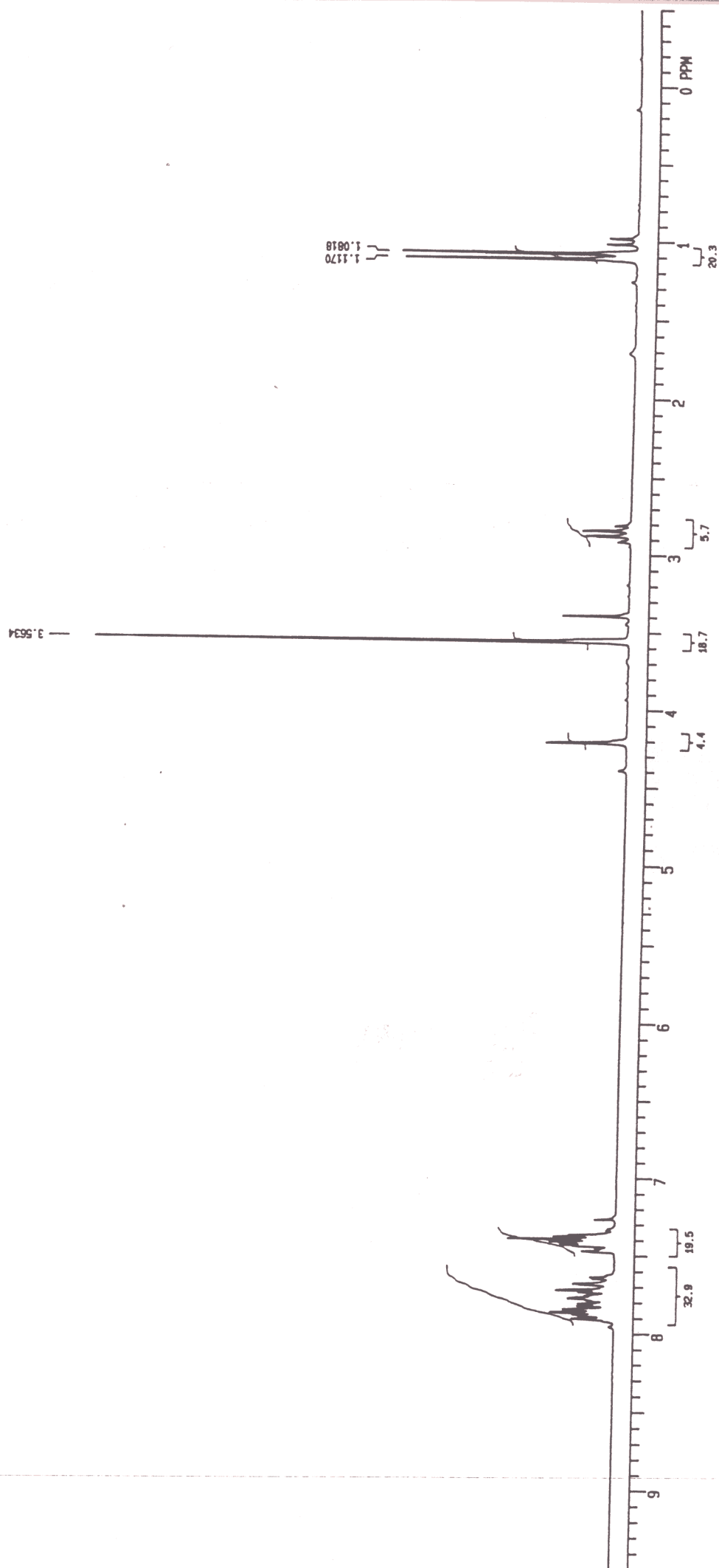


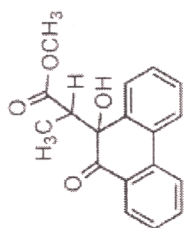
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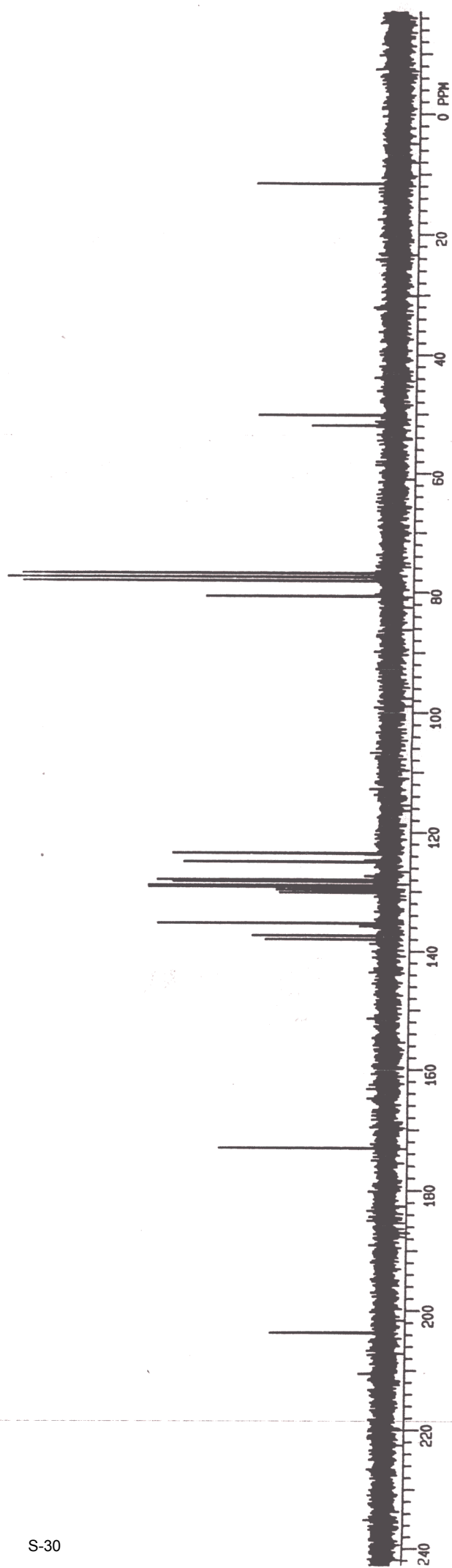


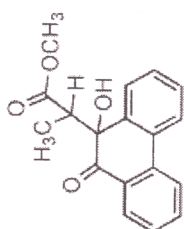
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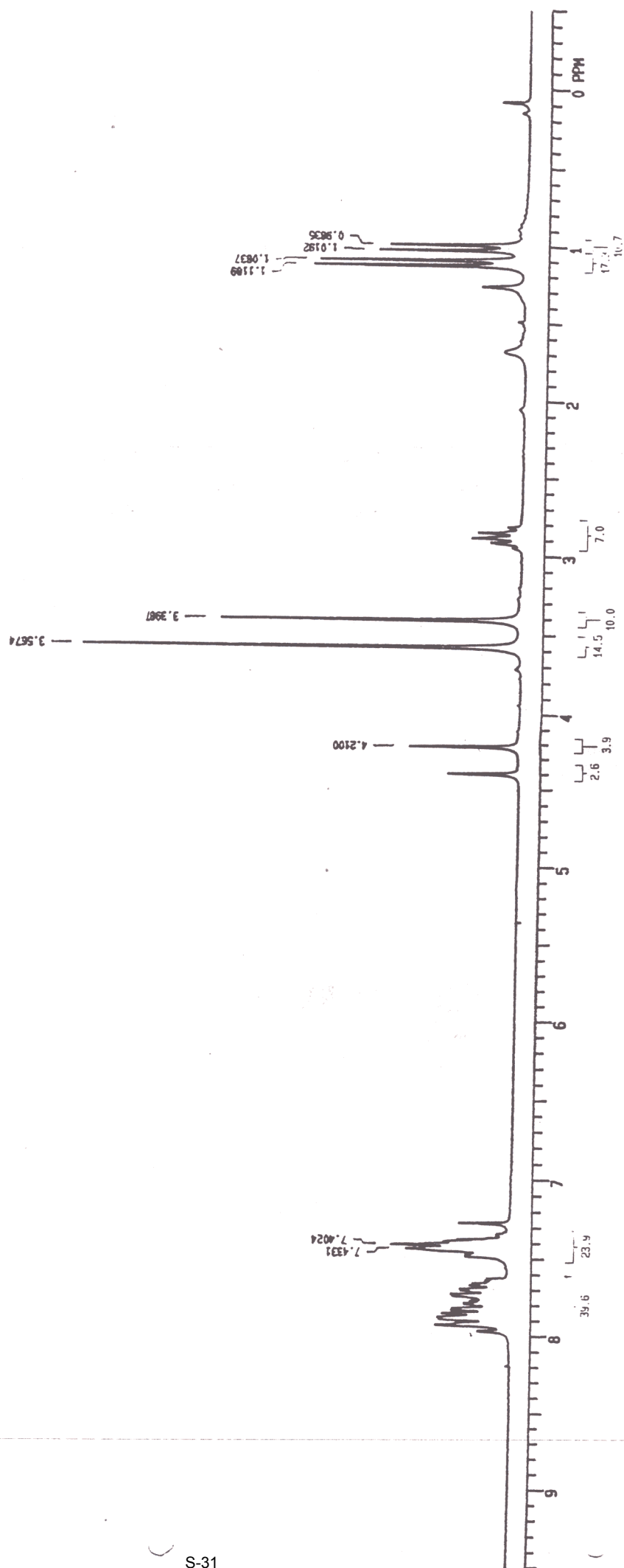


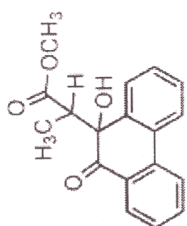
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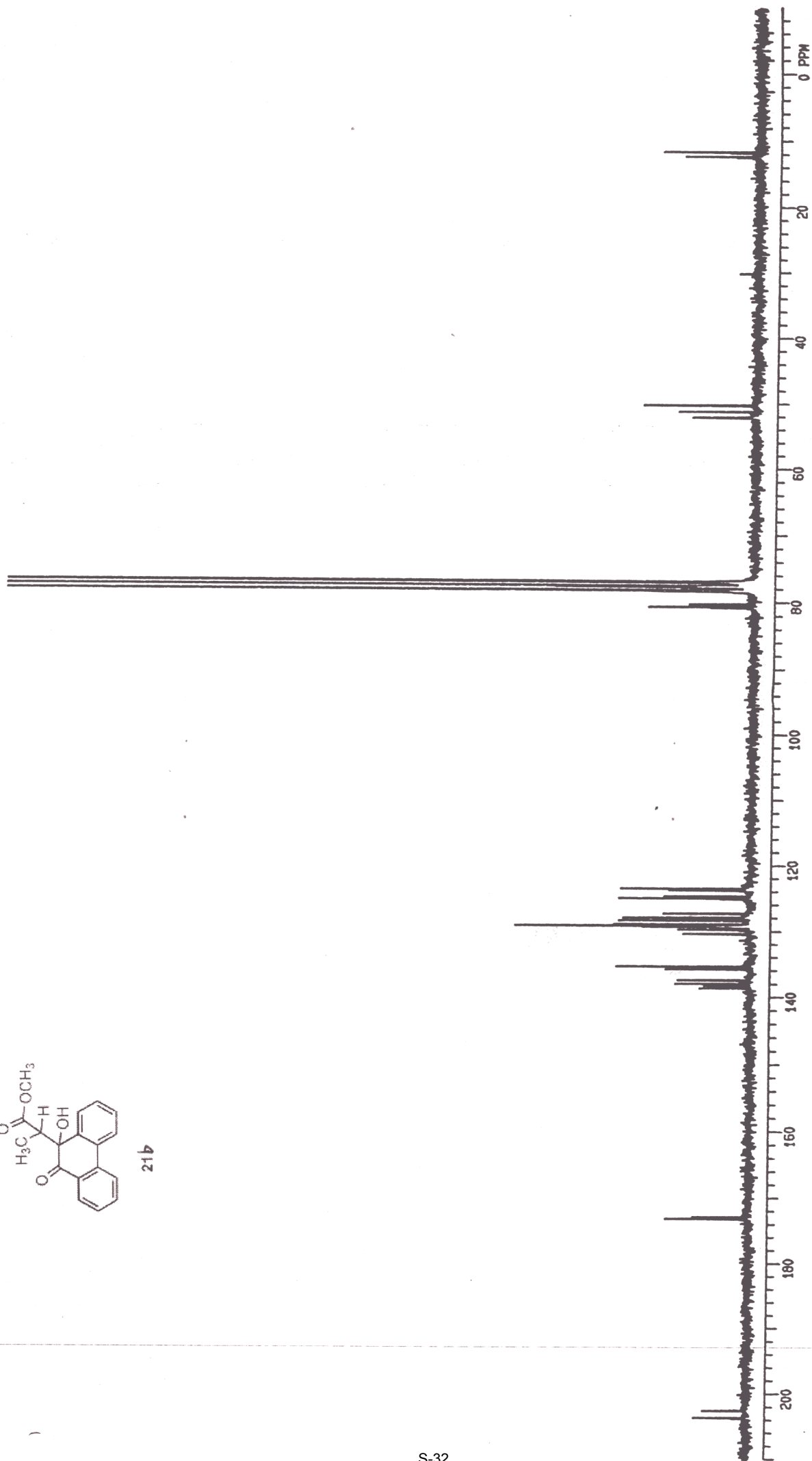


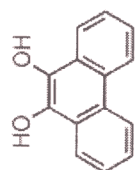
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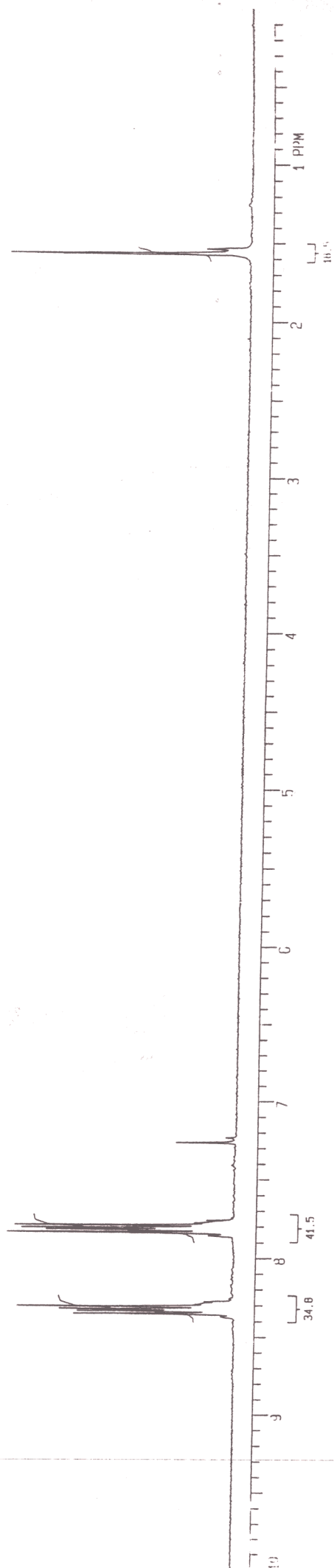


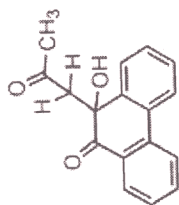
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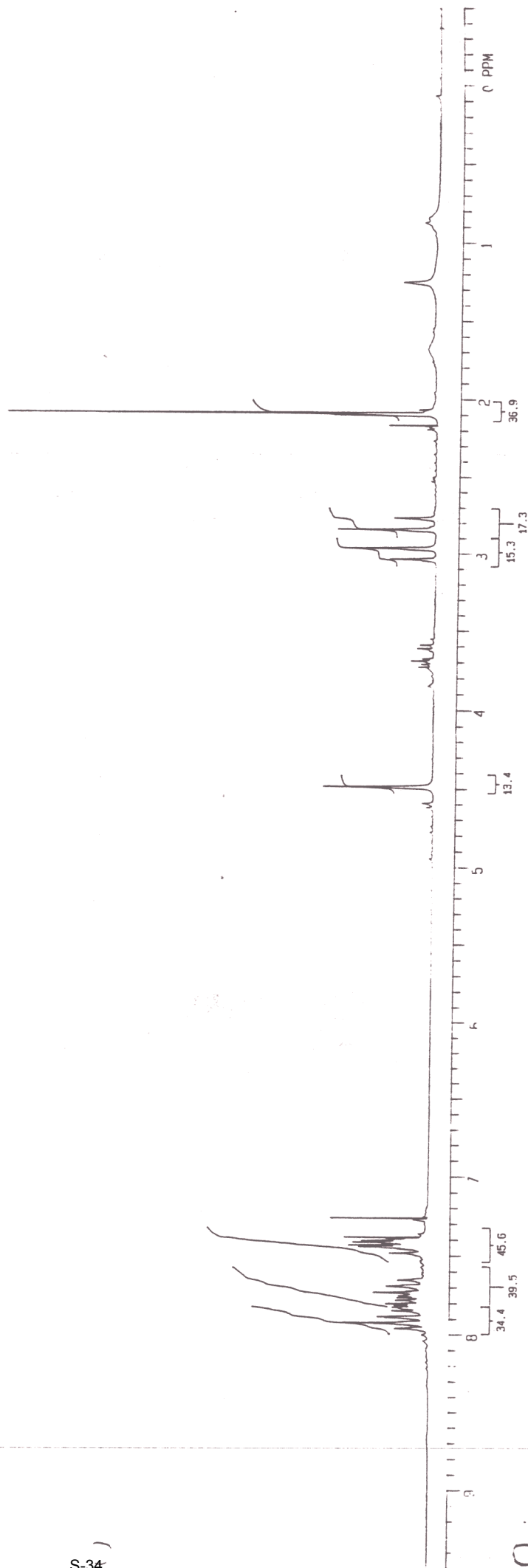


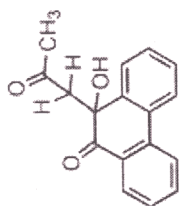
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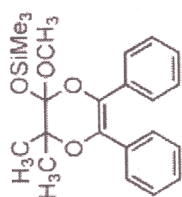
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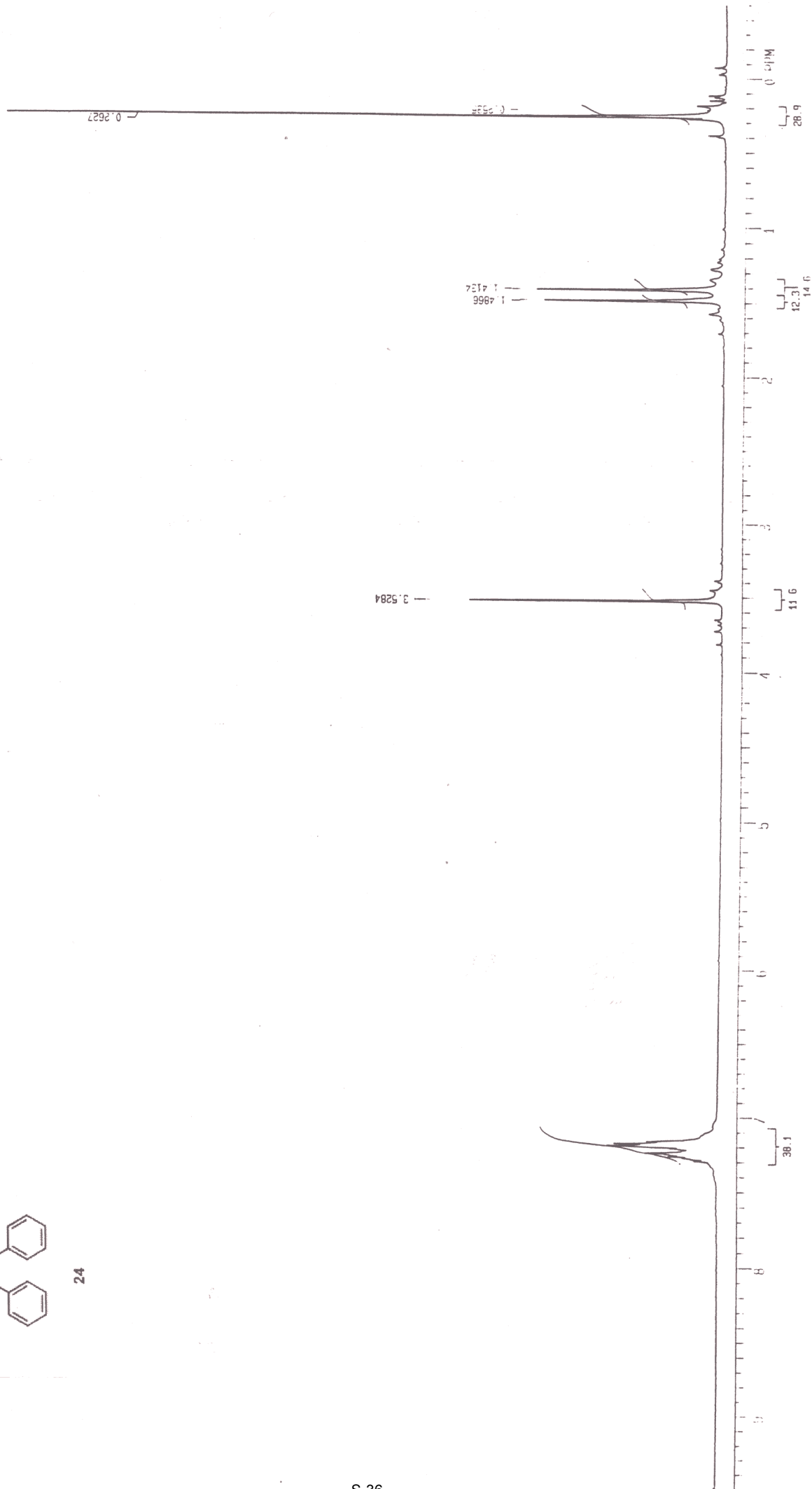


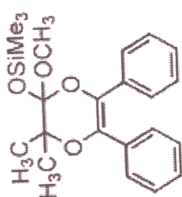
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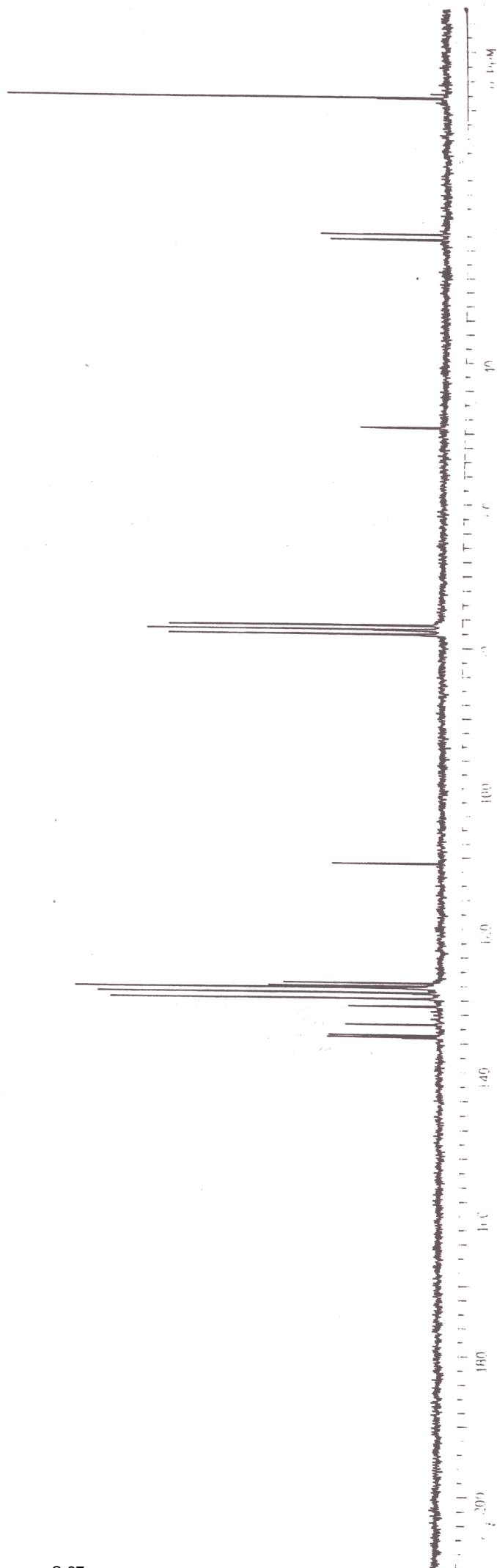


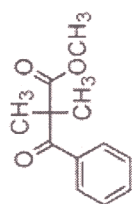
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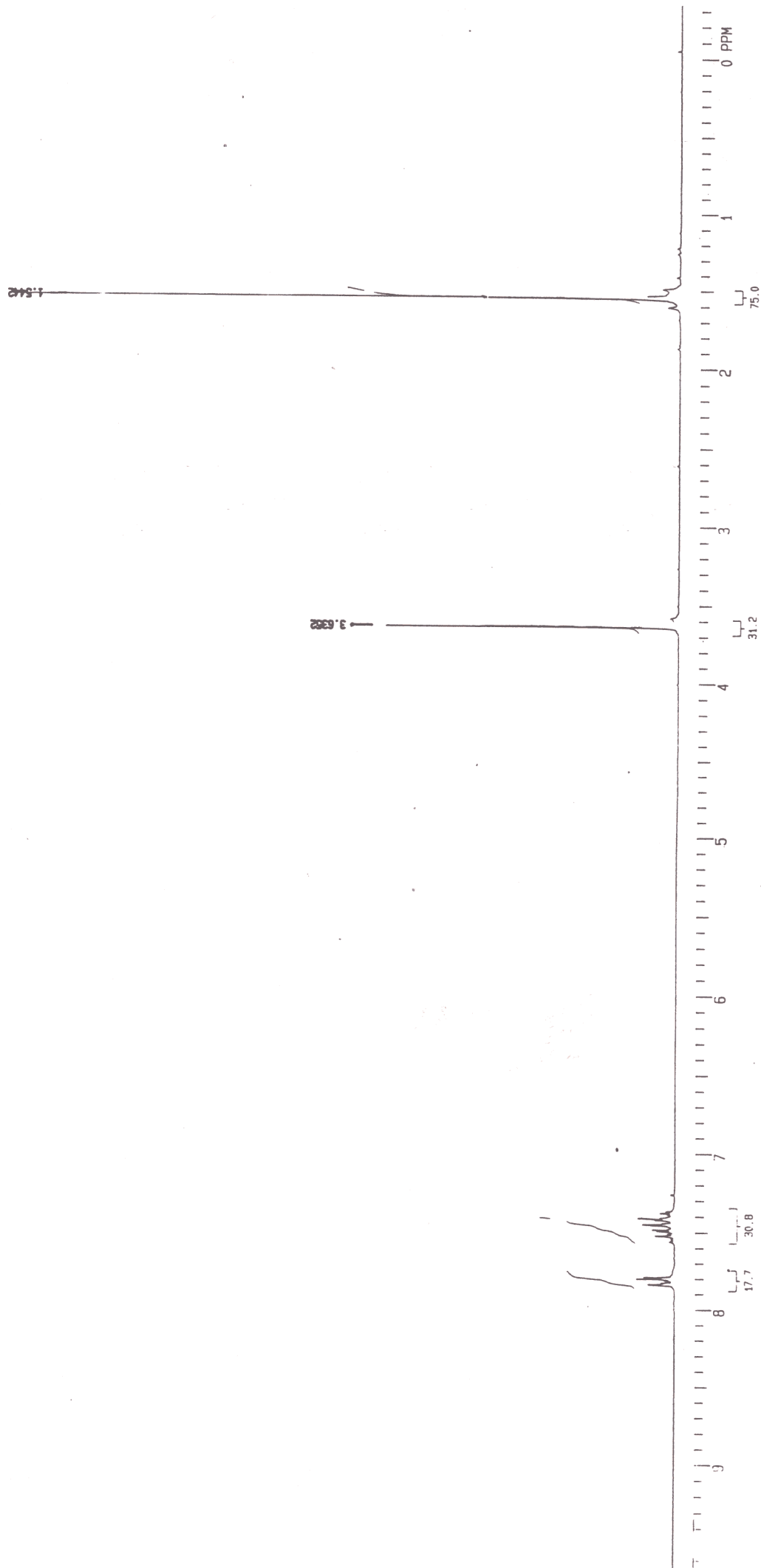


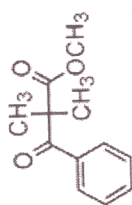
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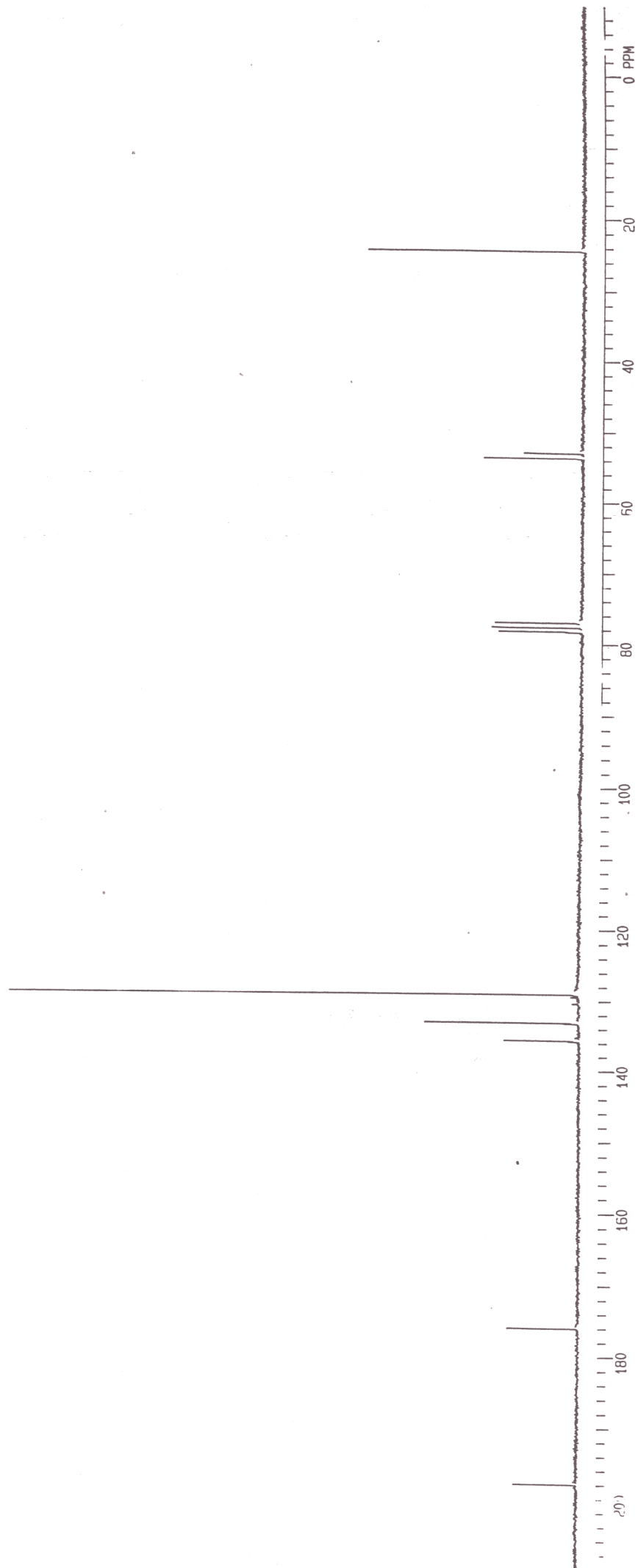


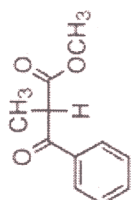
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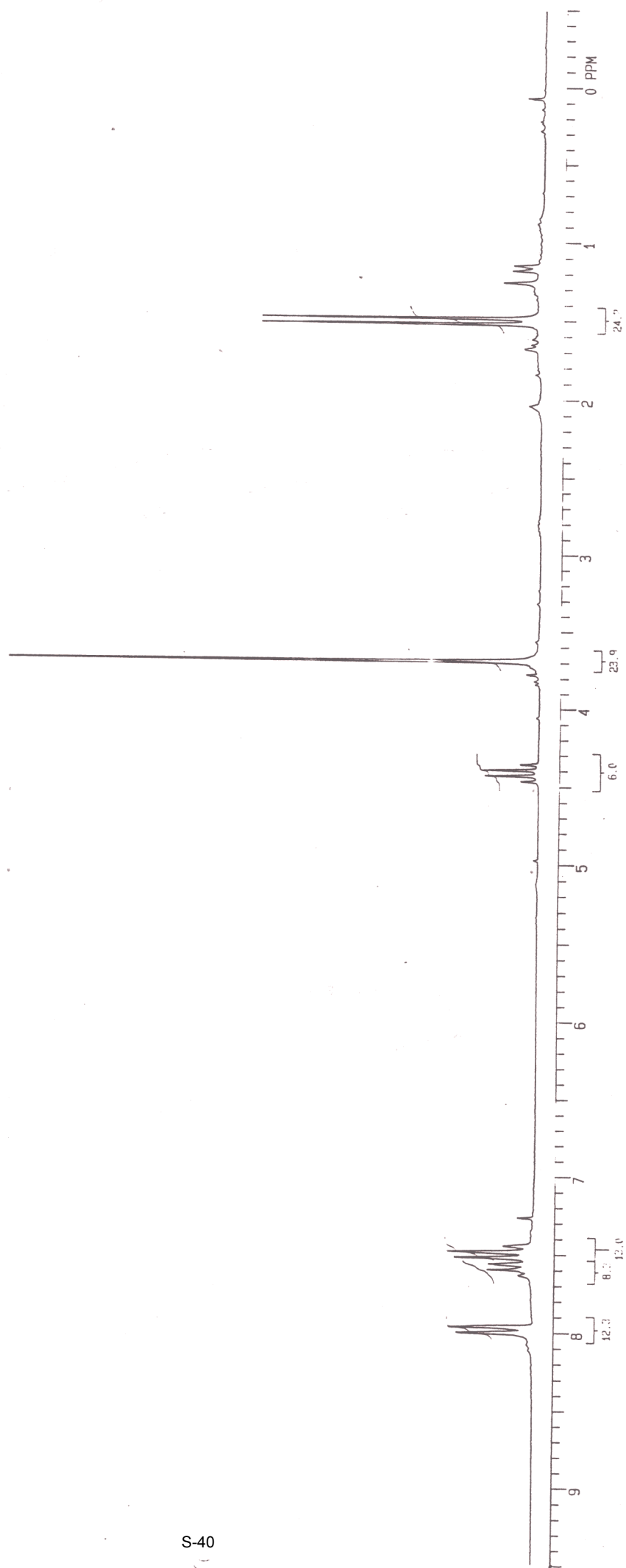


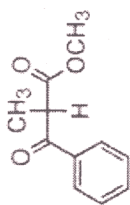
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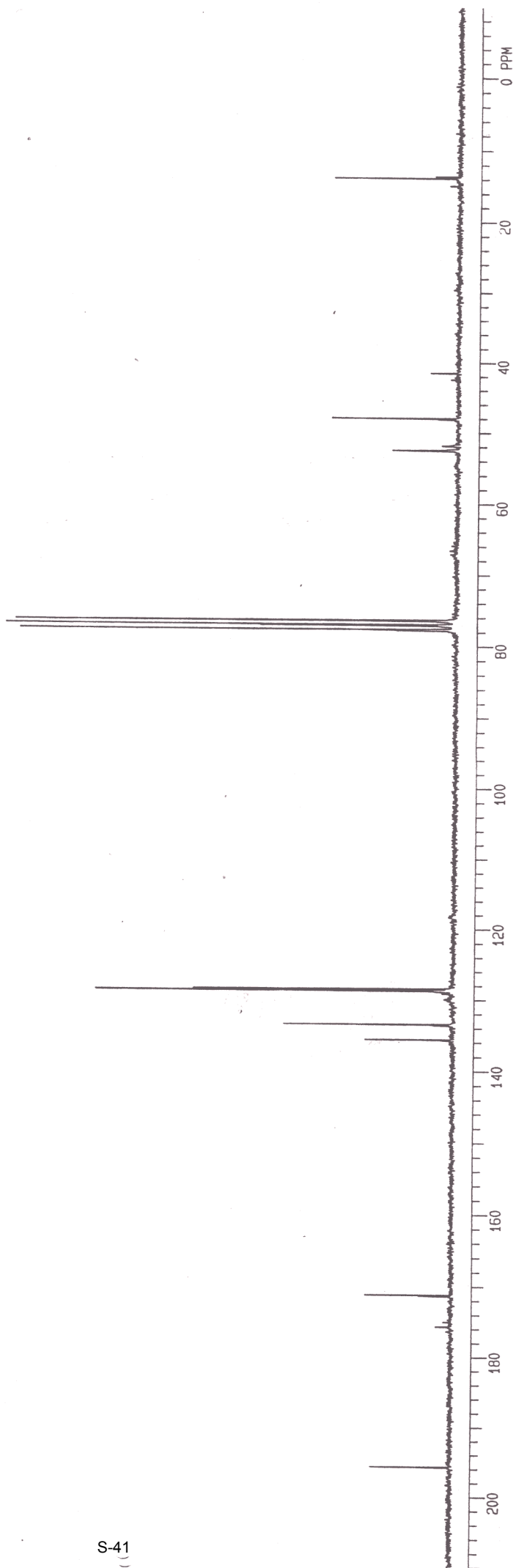


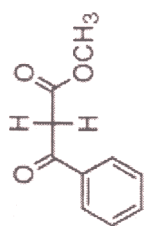
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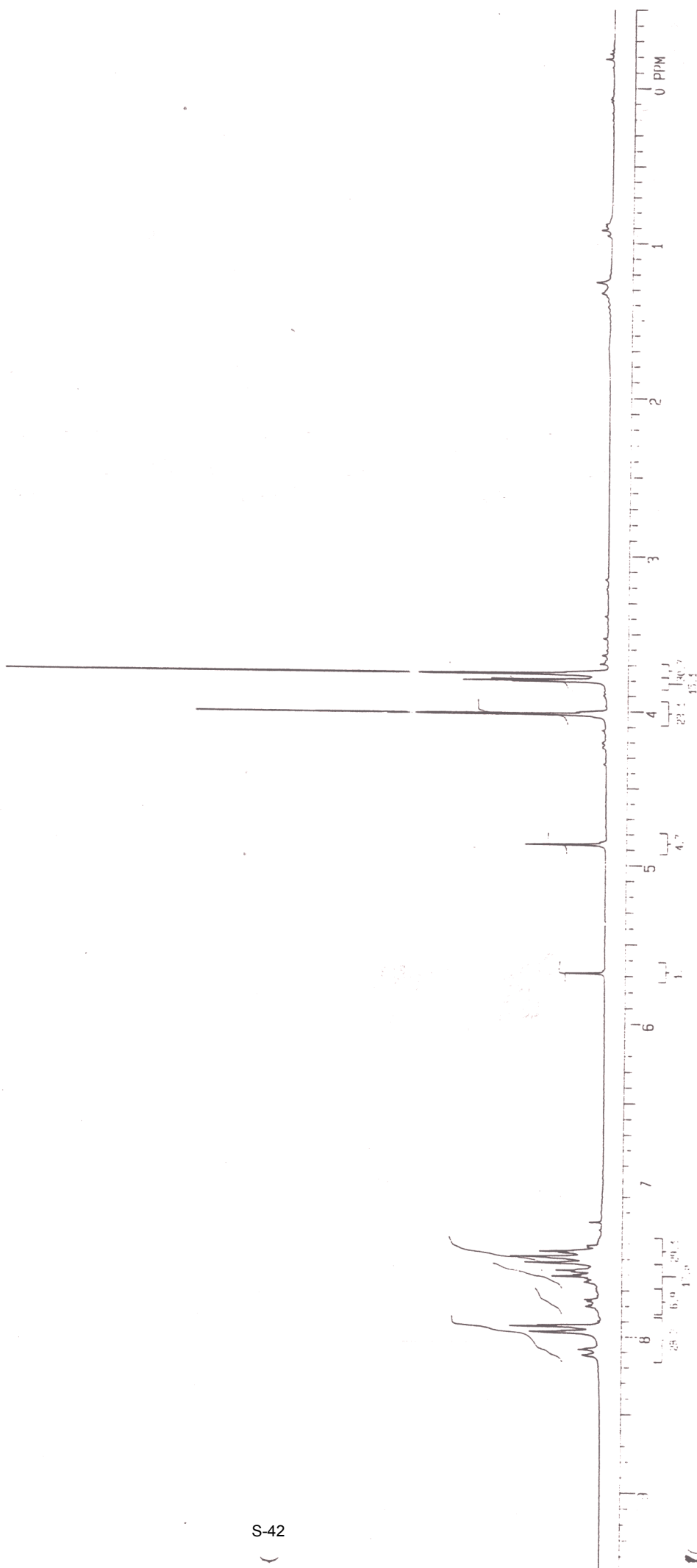


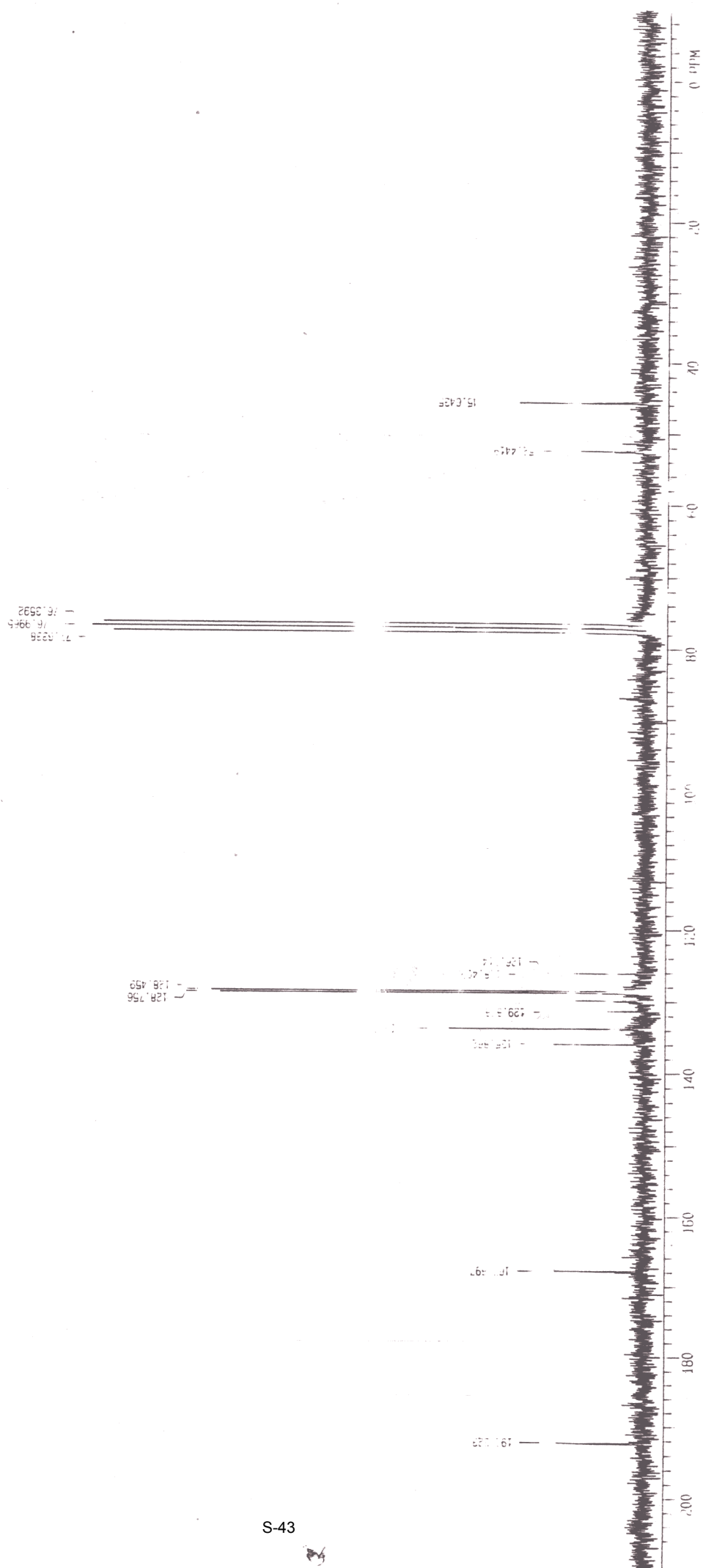
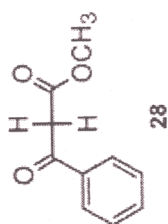
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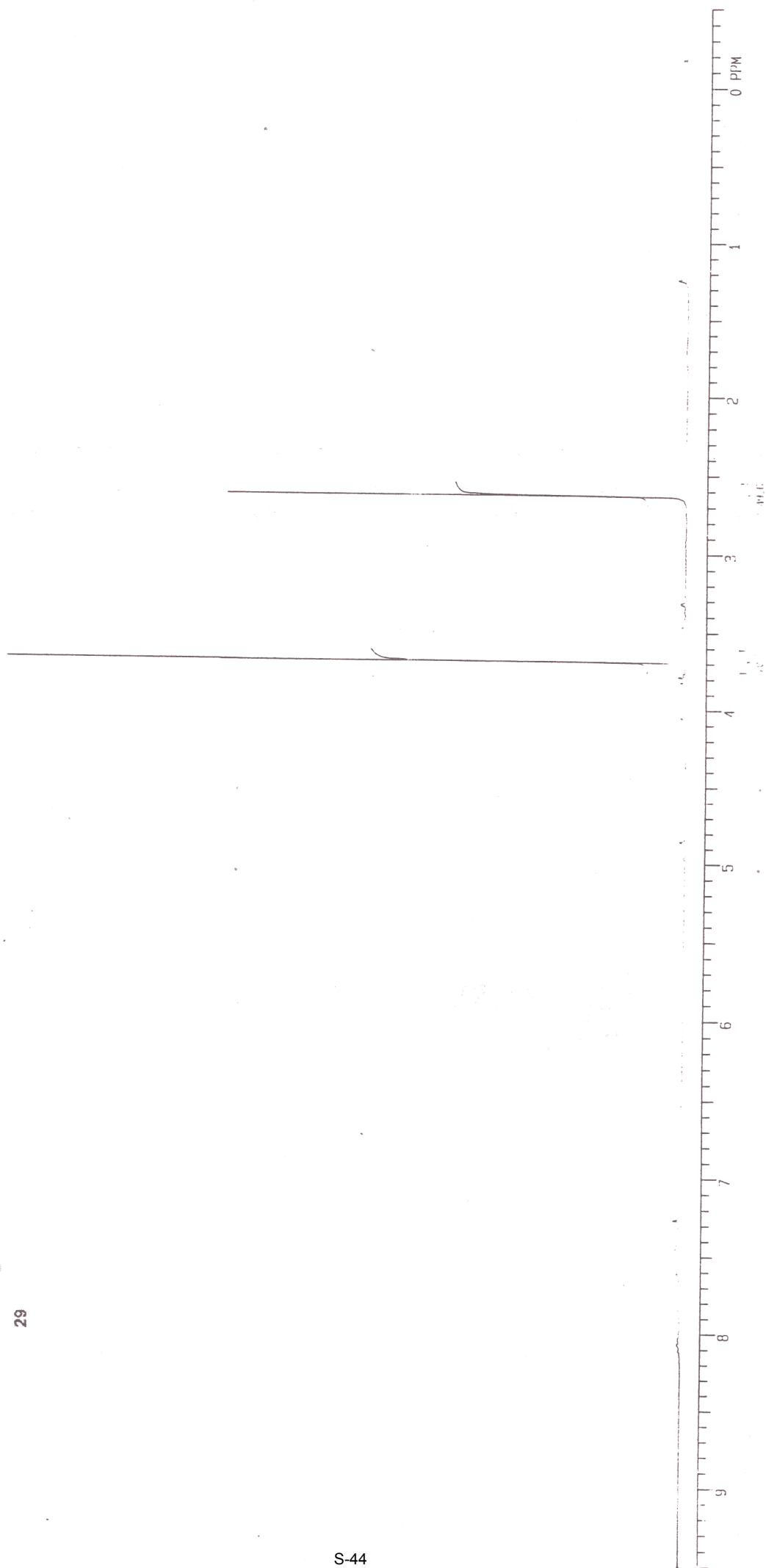
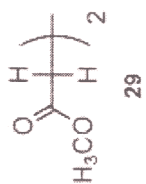


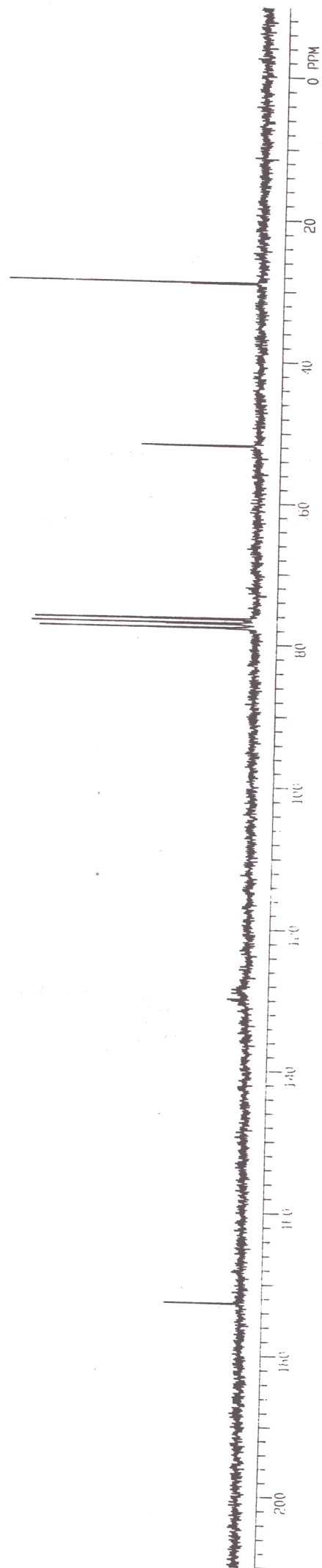
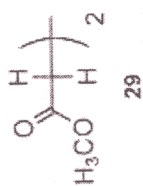


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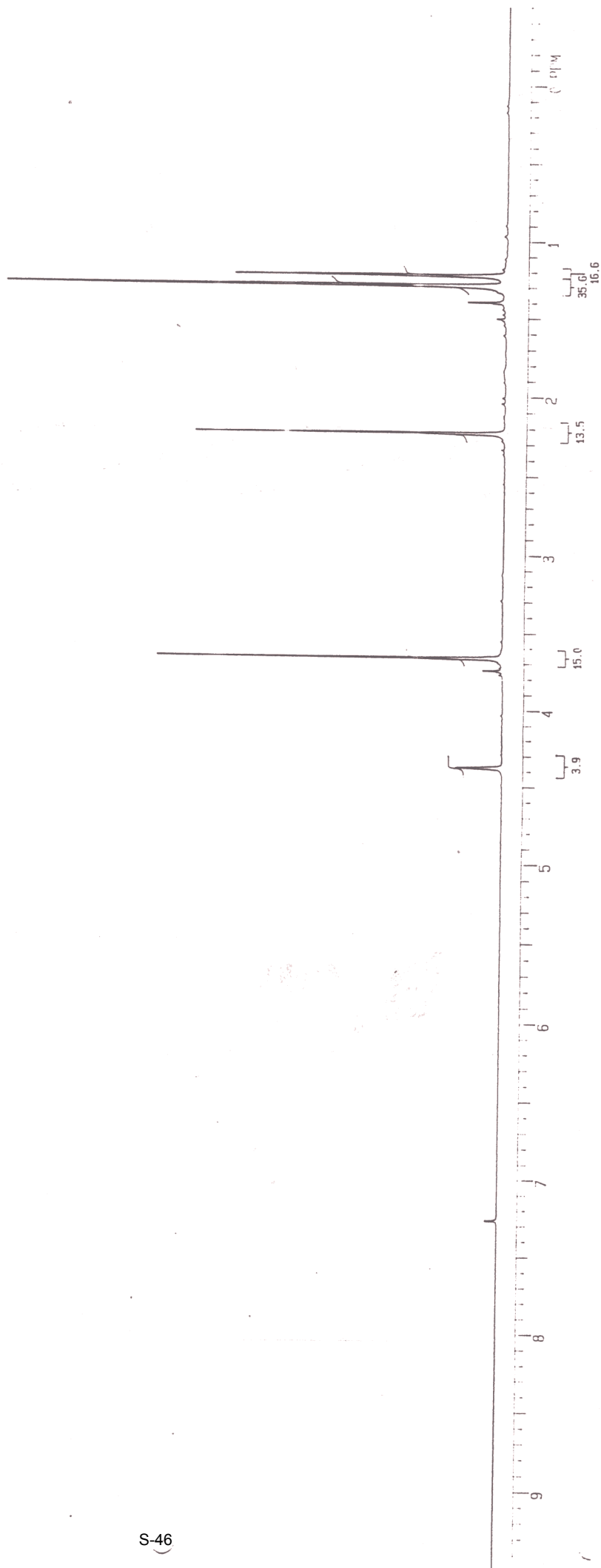






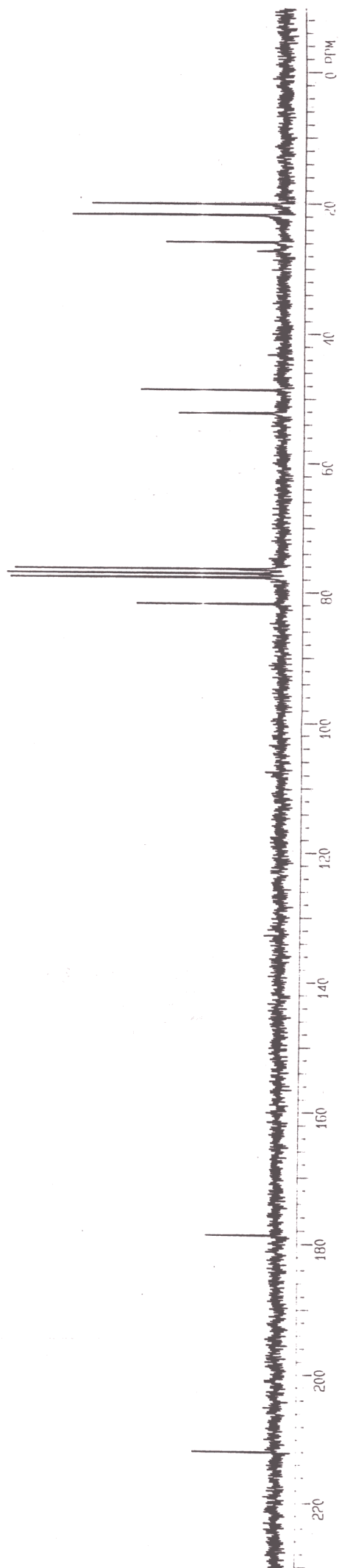


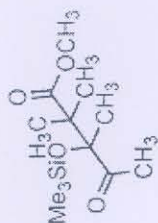
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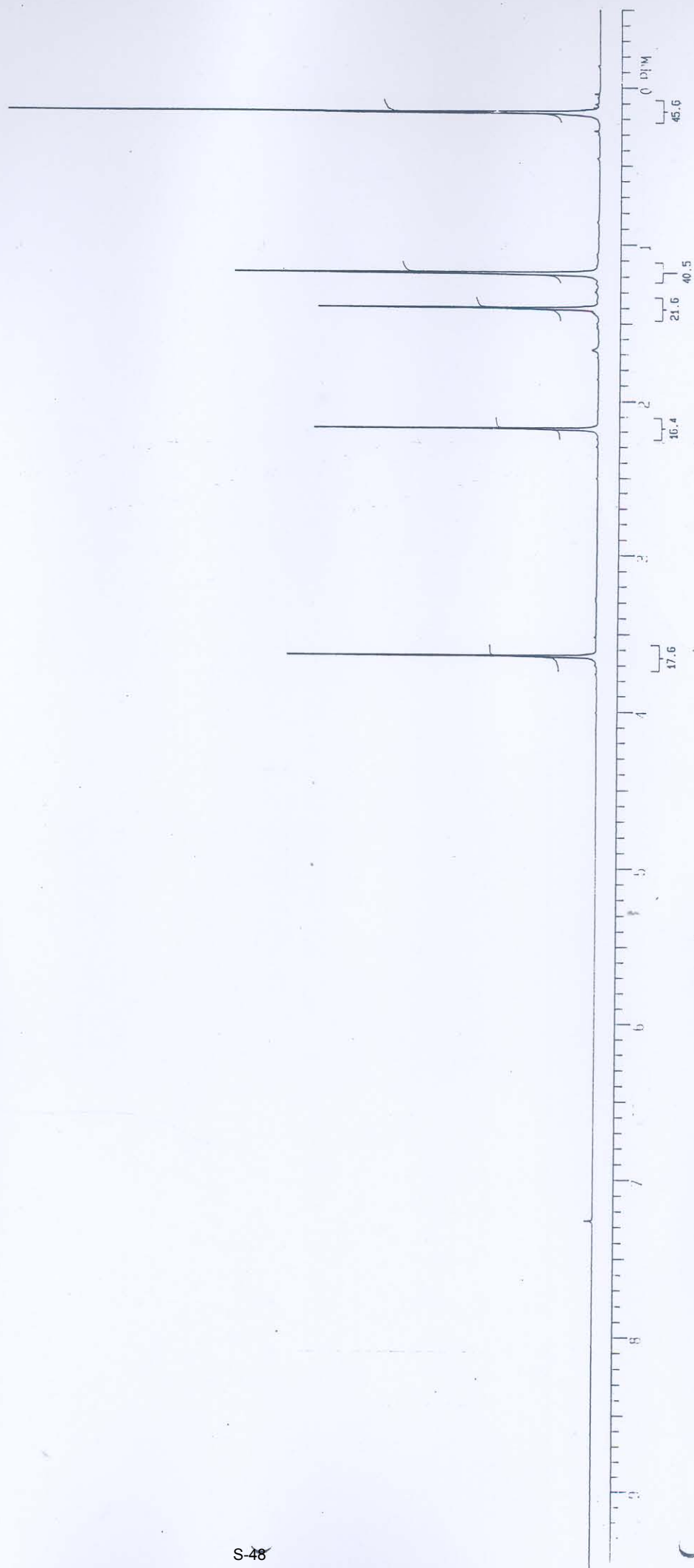


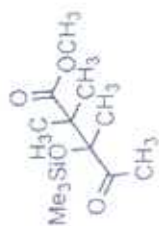
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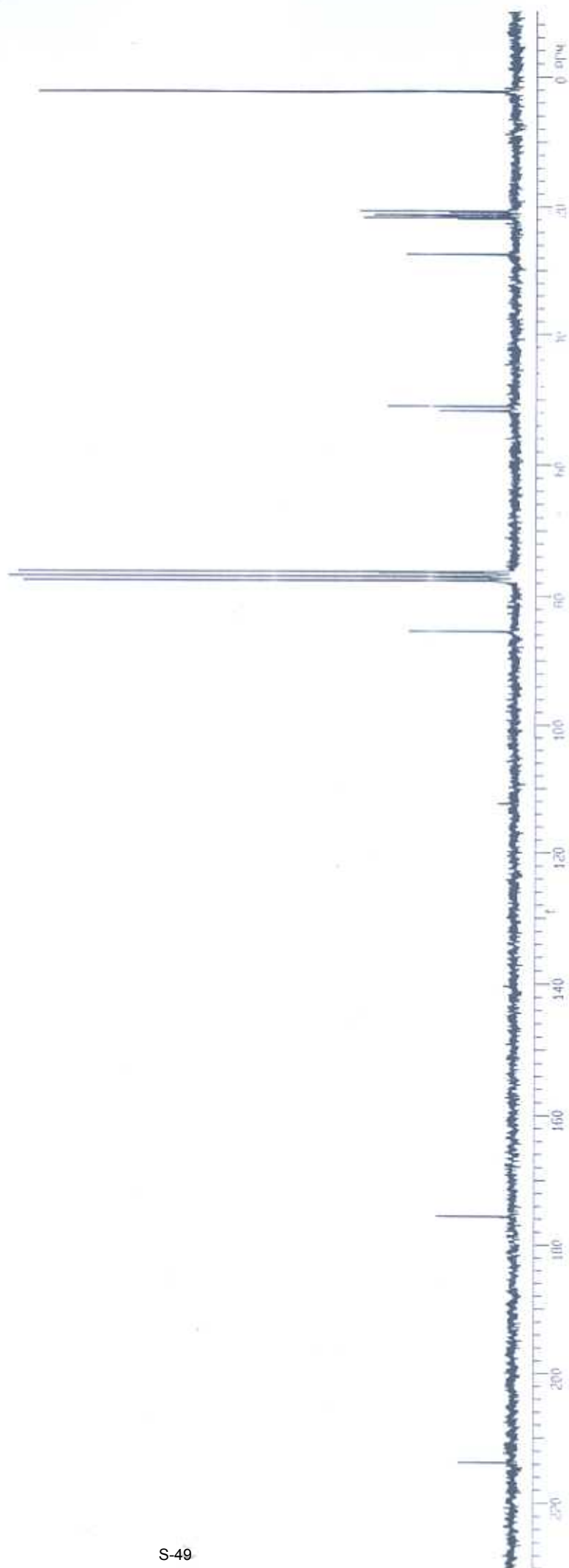


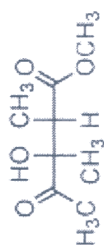
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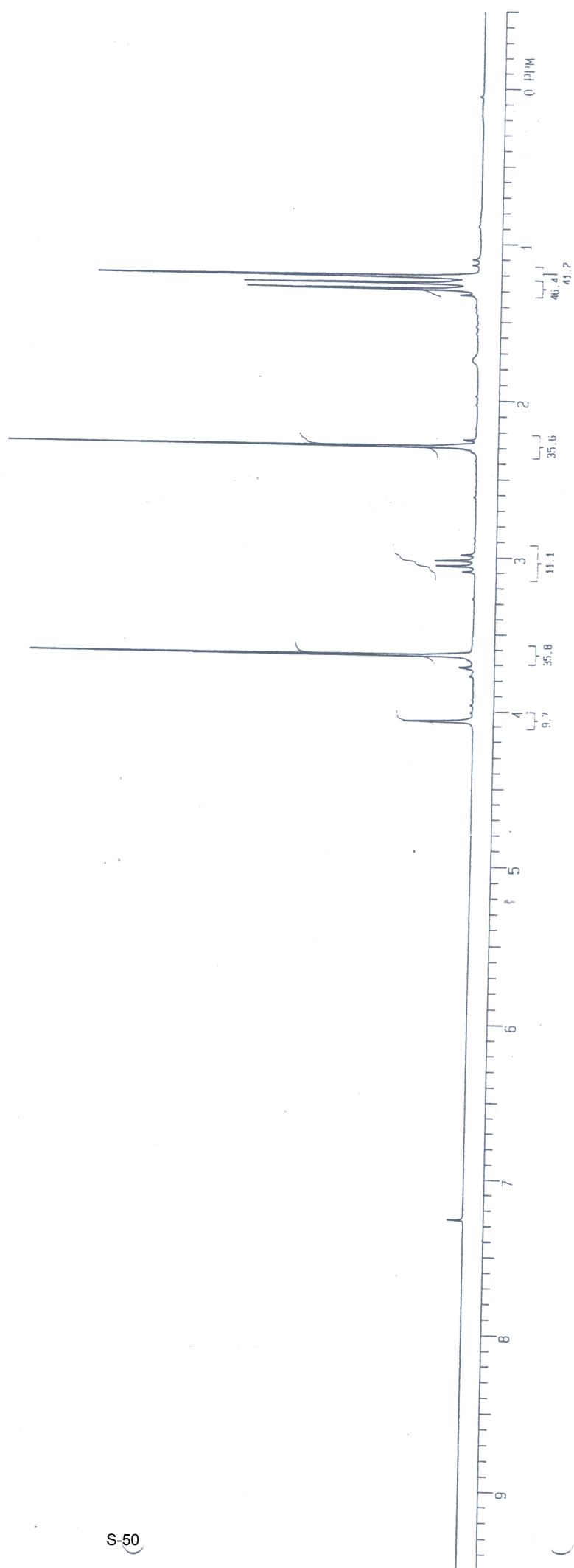


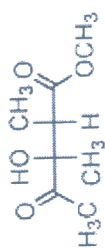
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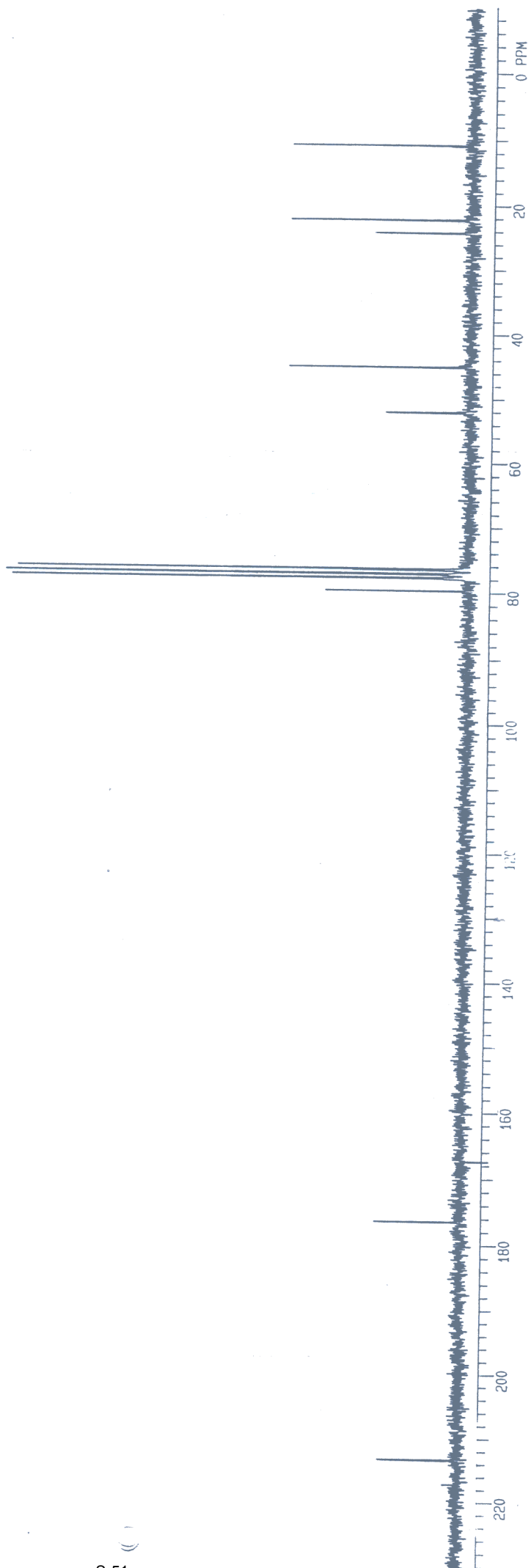


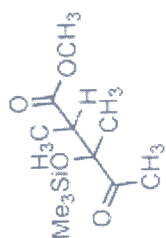
32



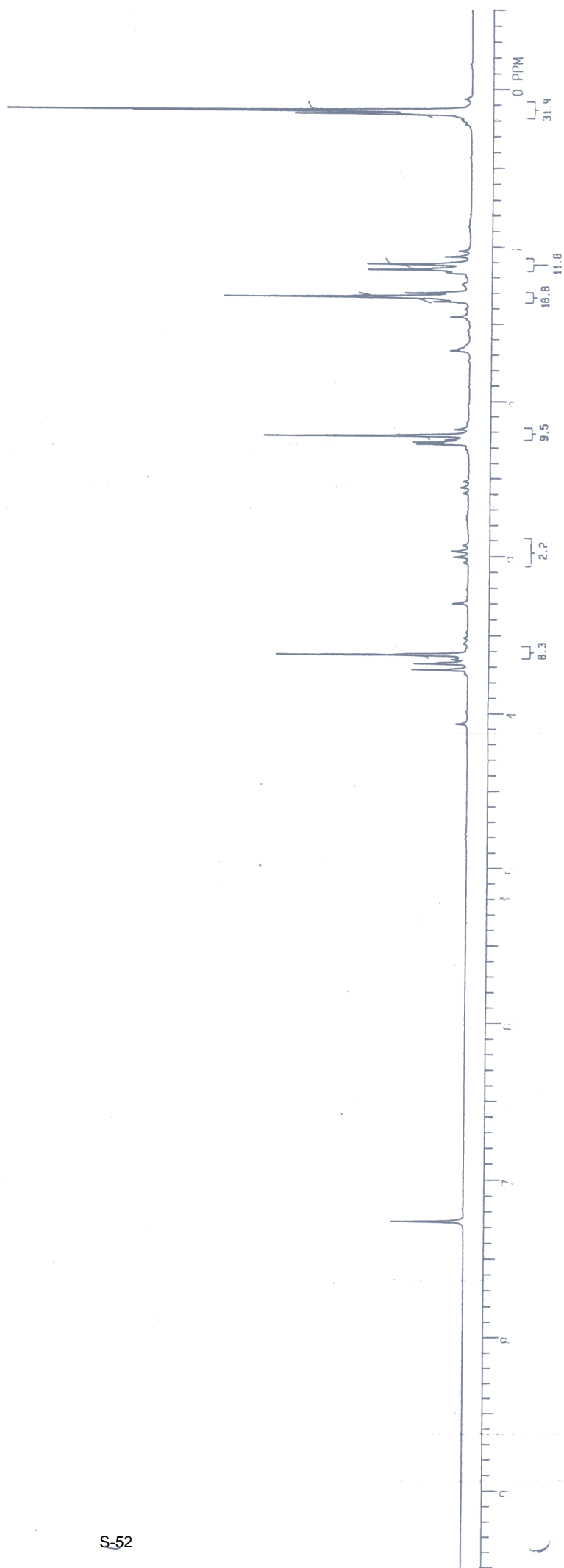


32

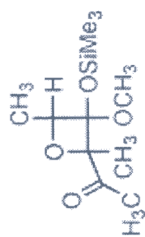




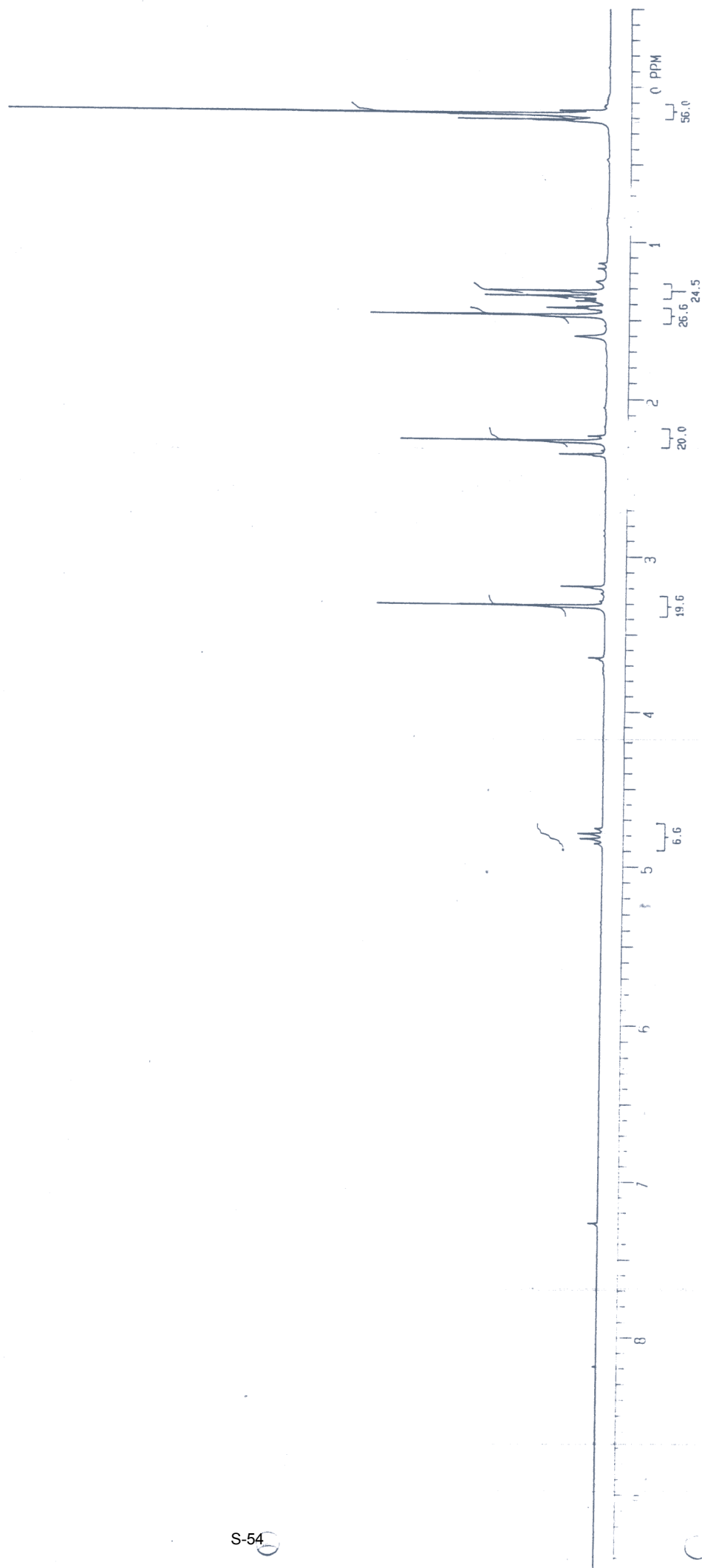
33

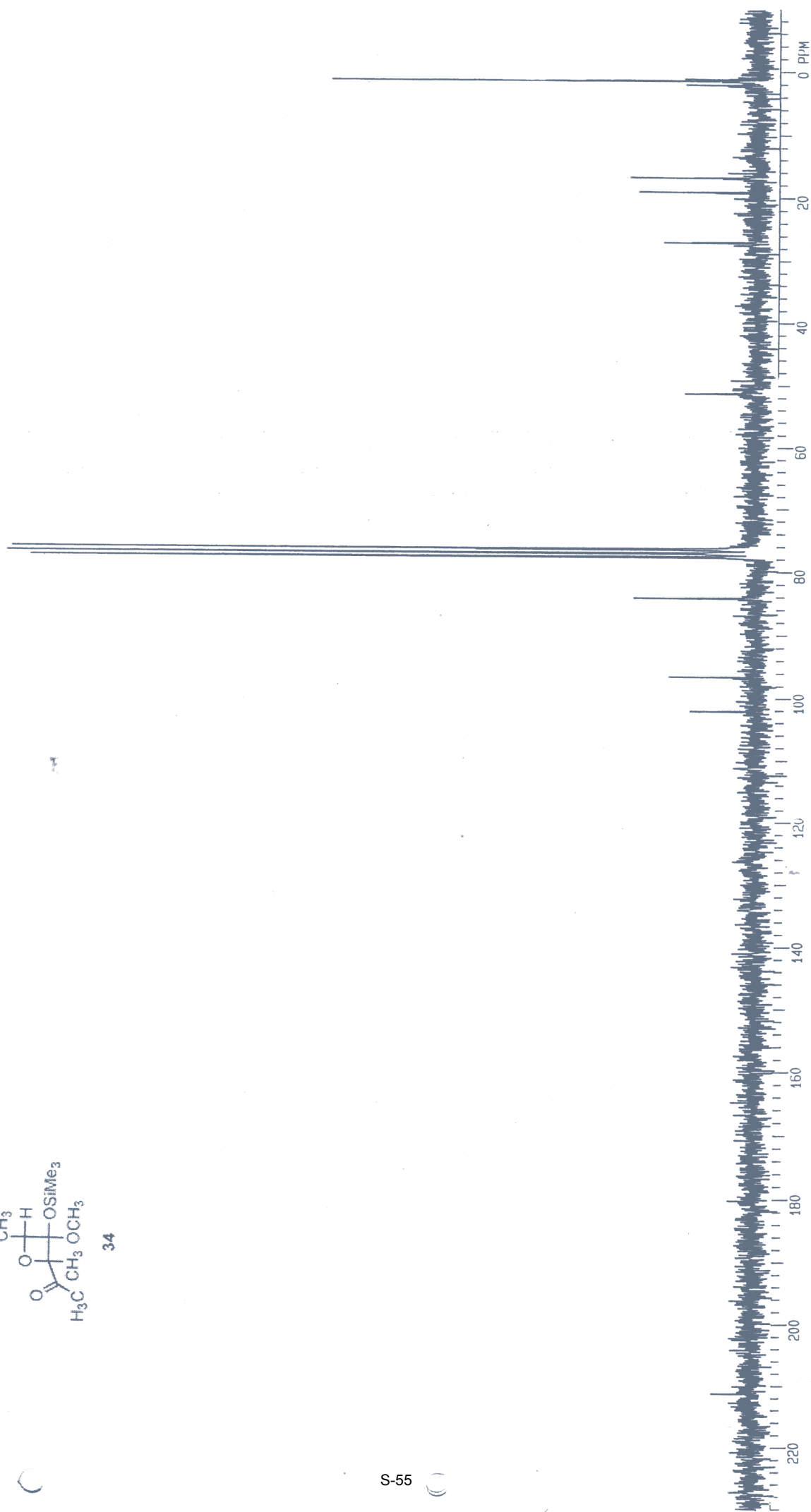
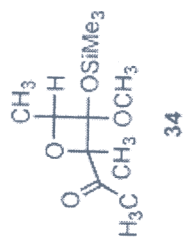


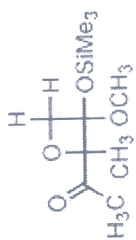




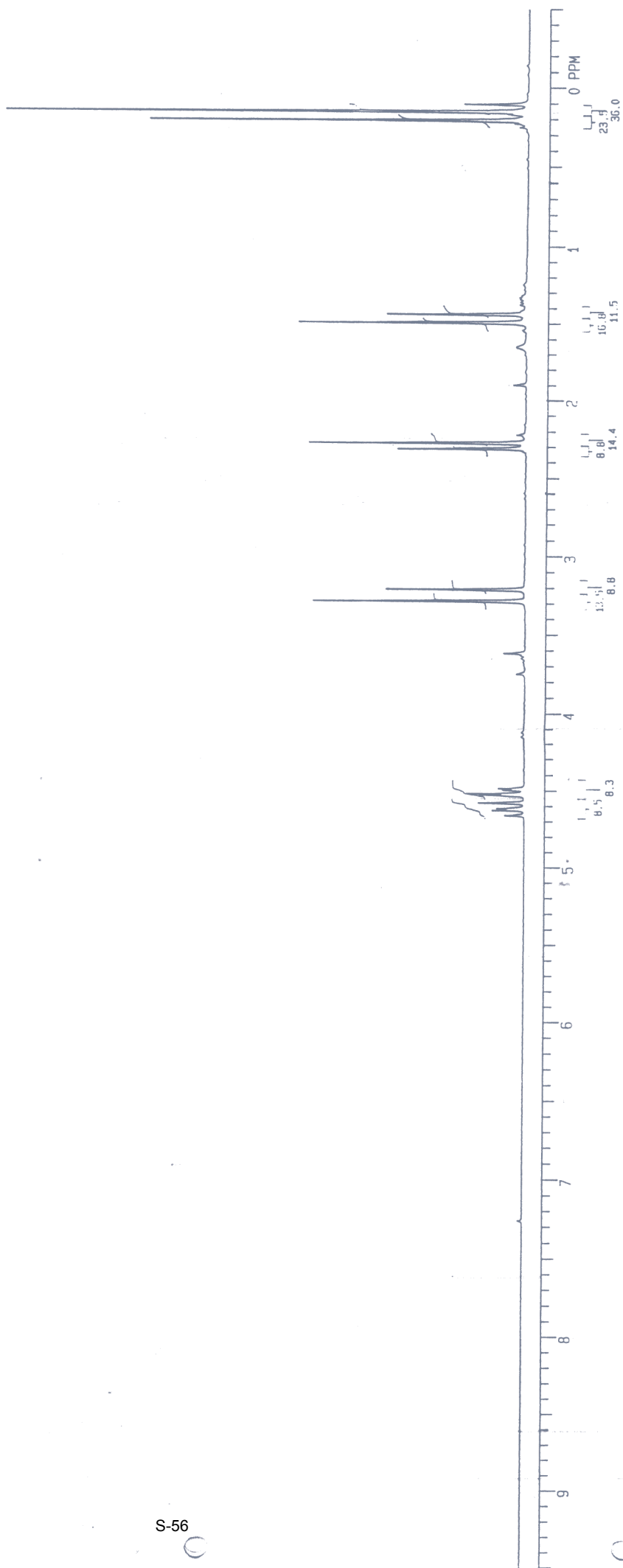
34

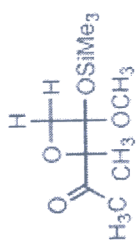




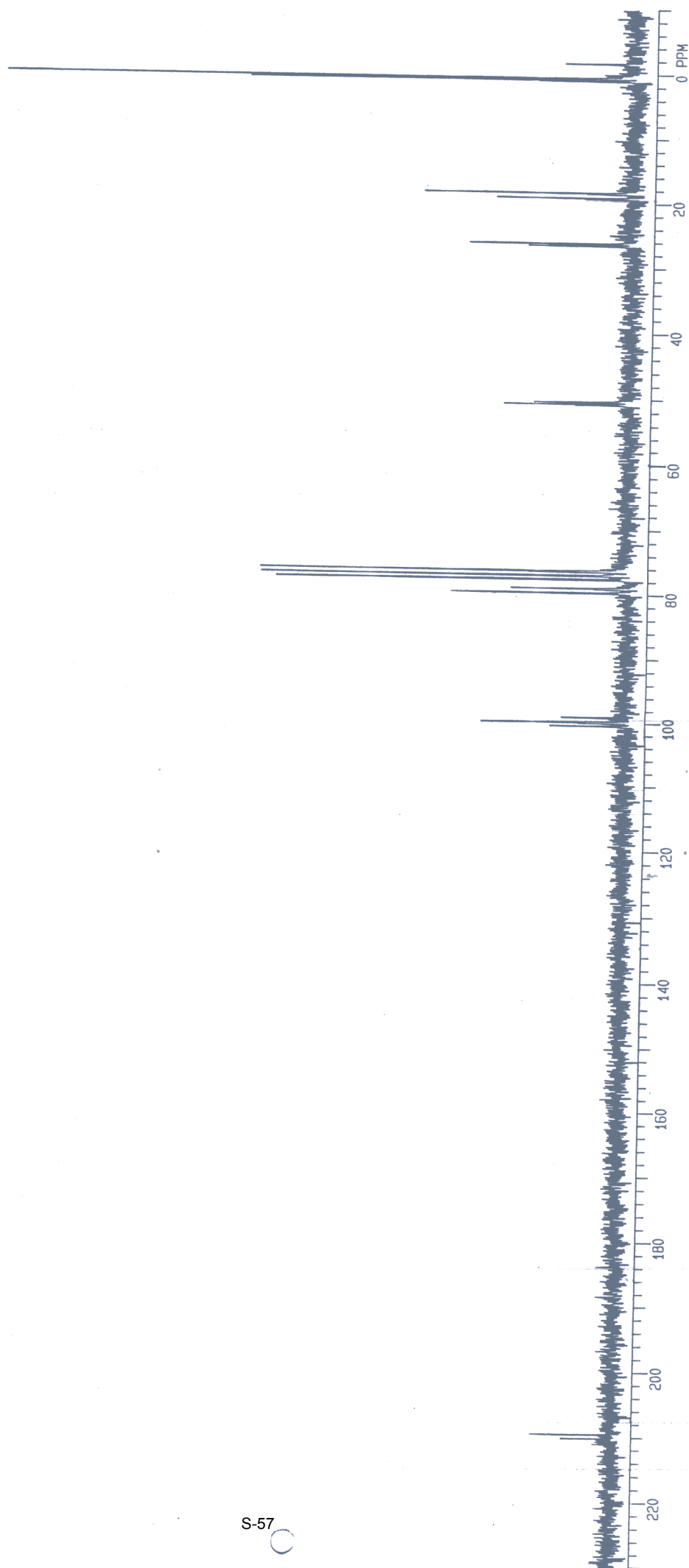


350+356





35a + 35b

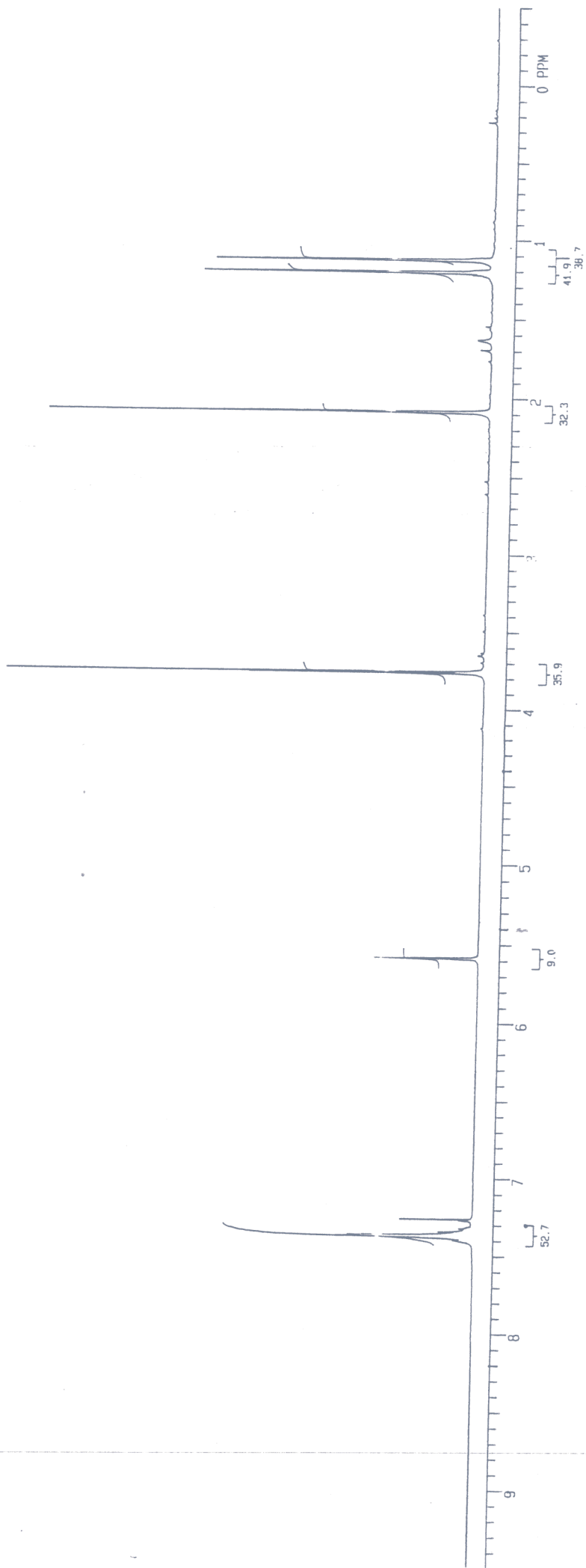






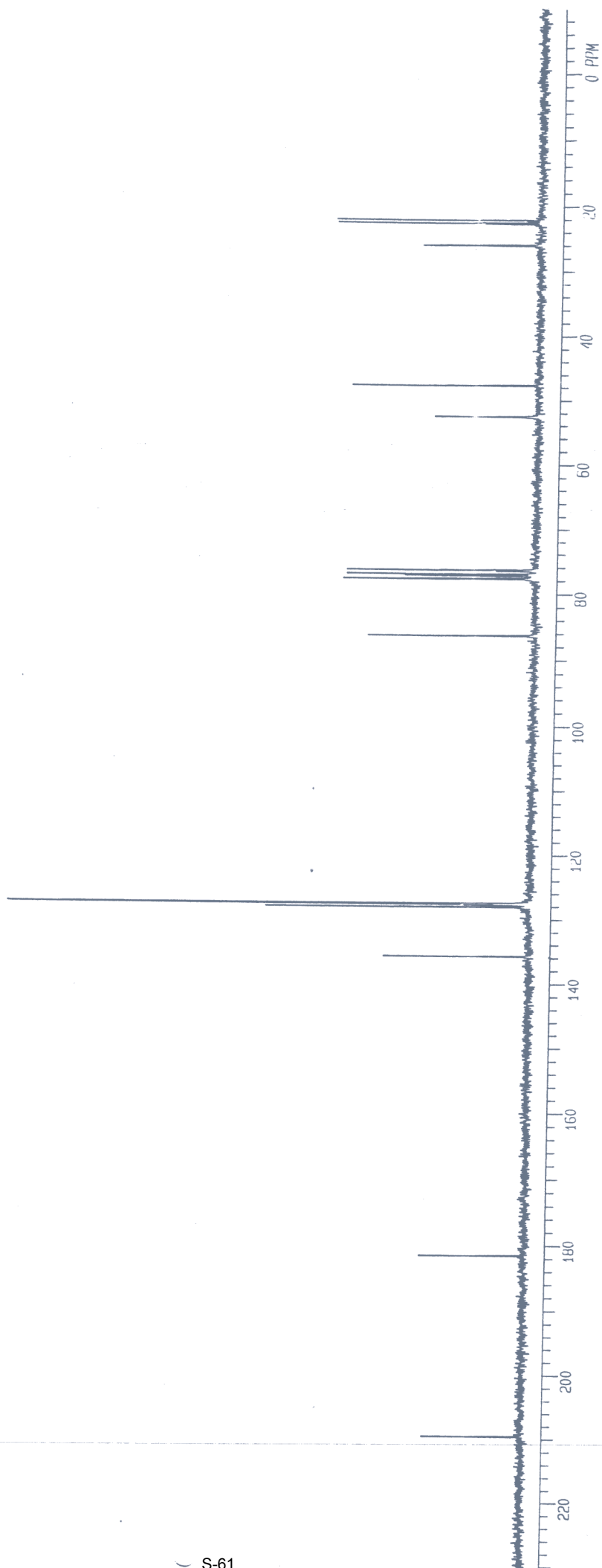


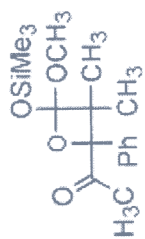
37



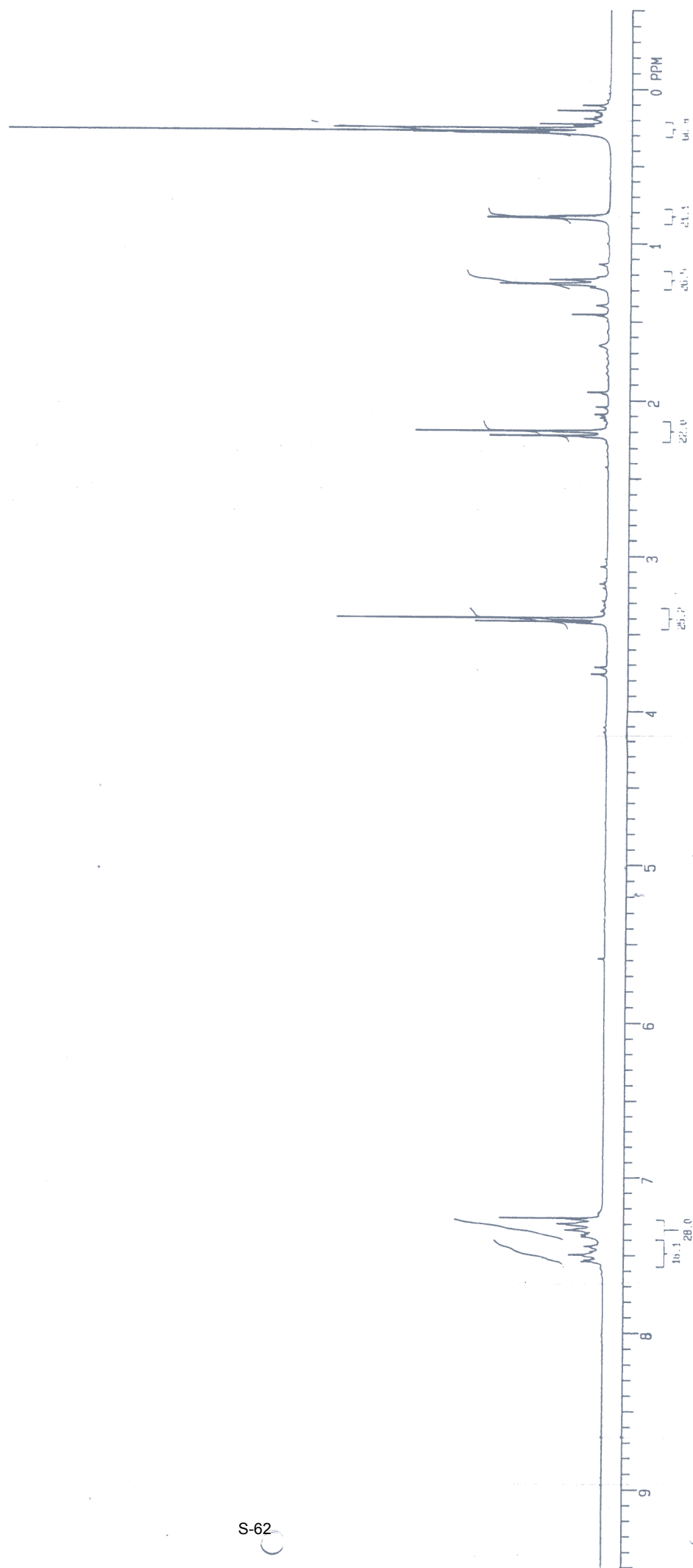


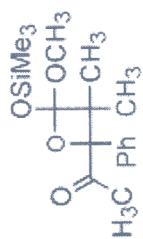
37



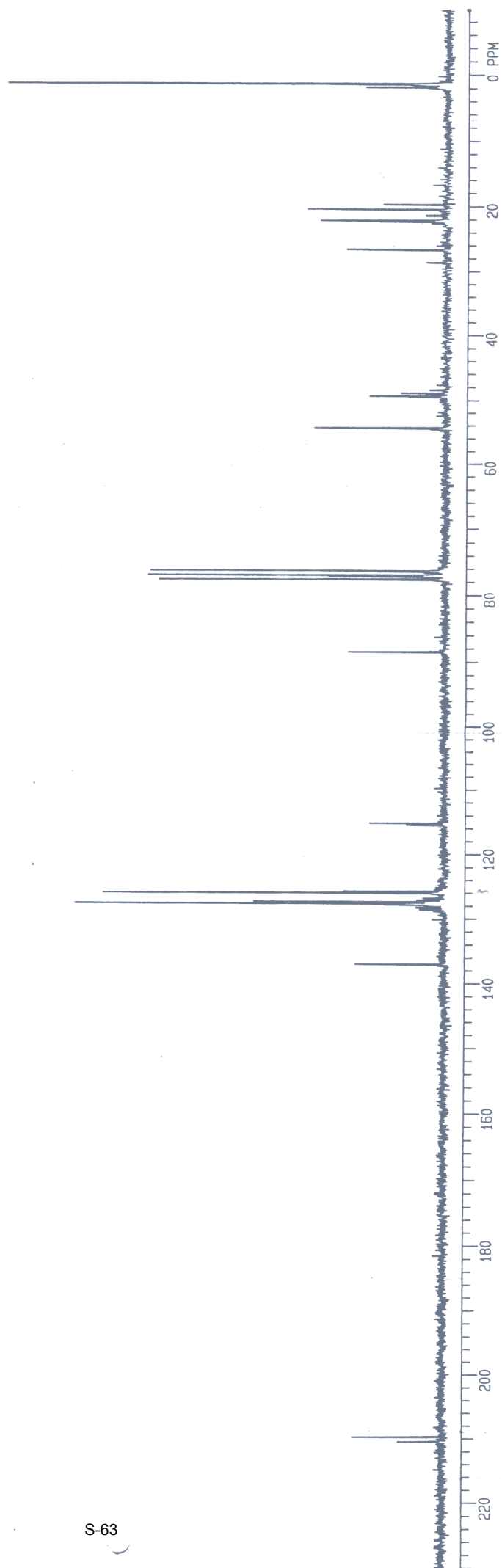


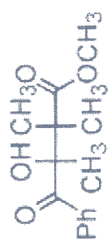
38a + 38b





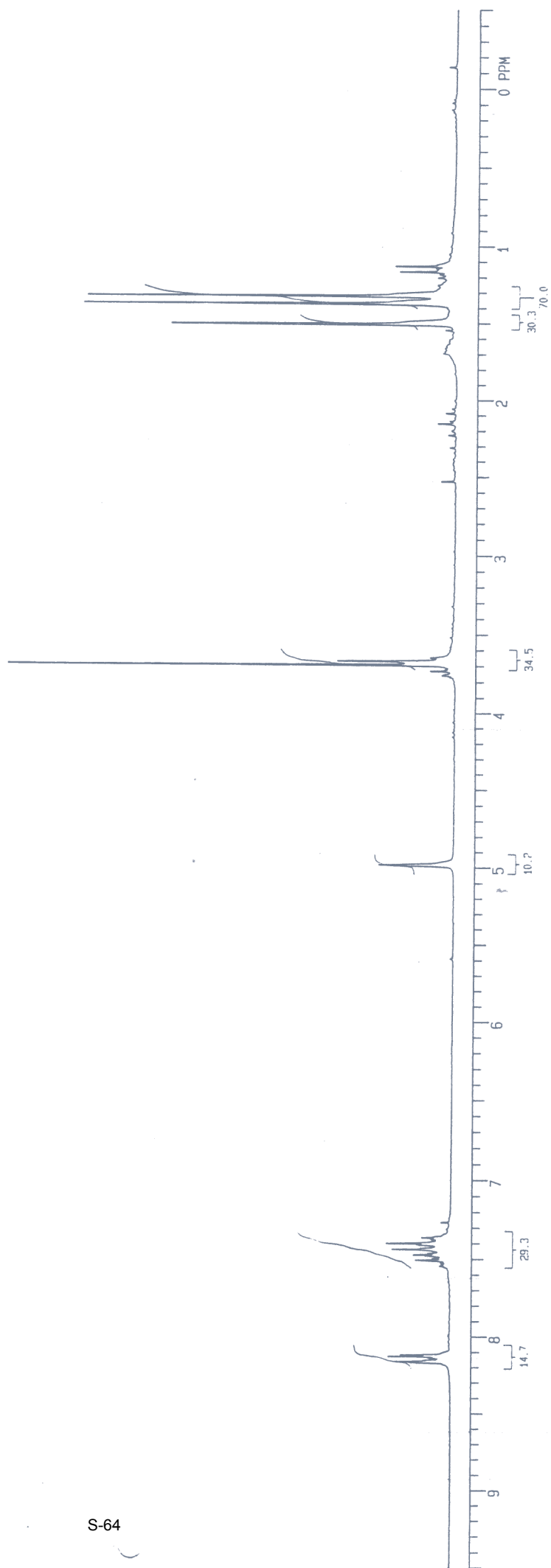
38A + 38B





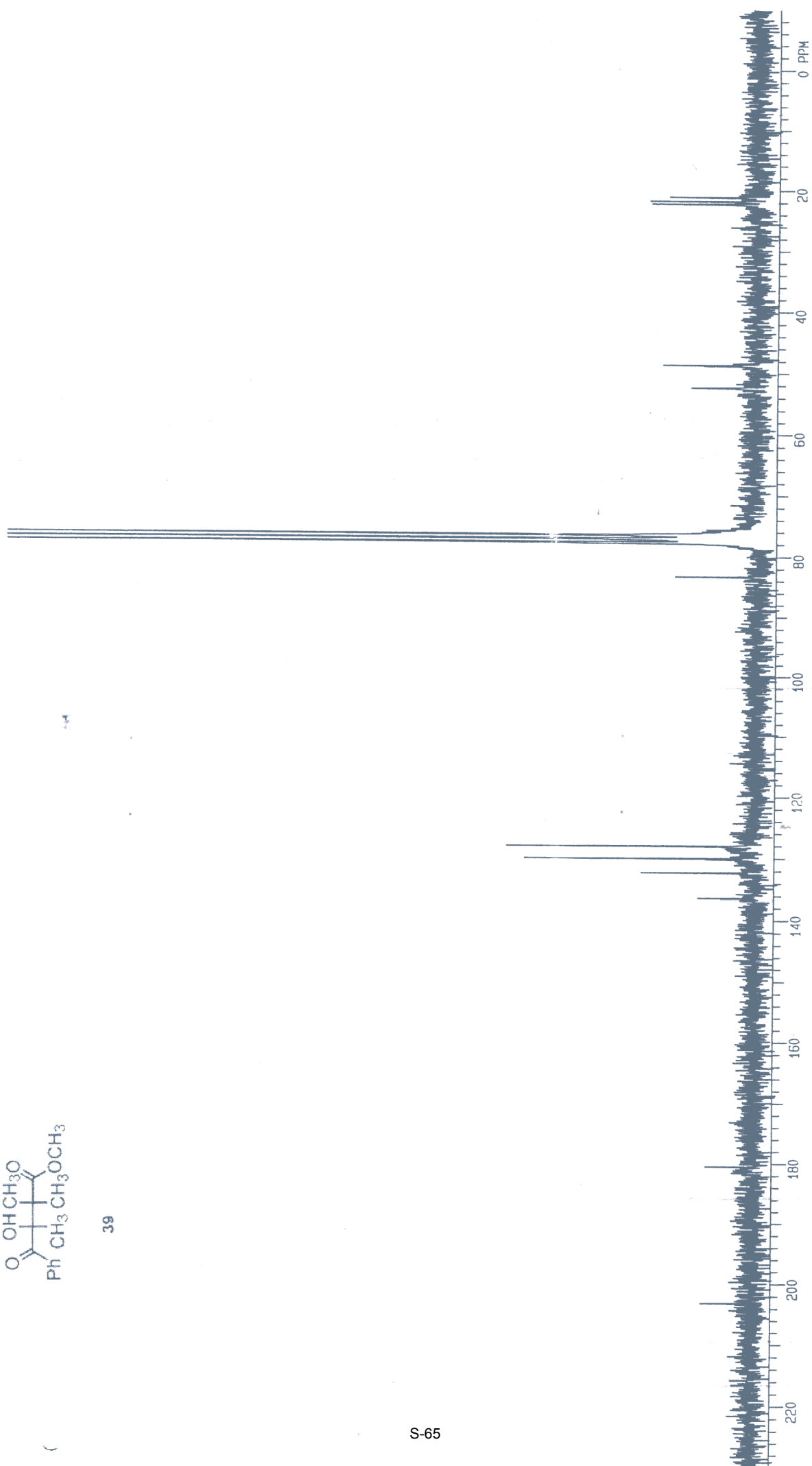
39

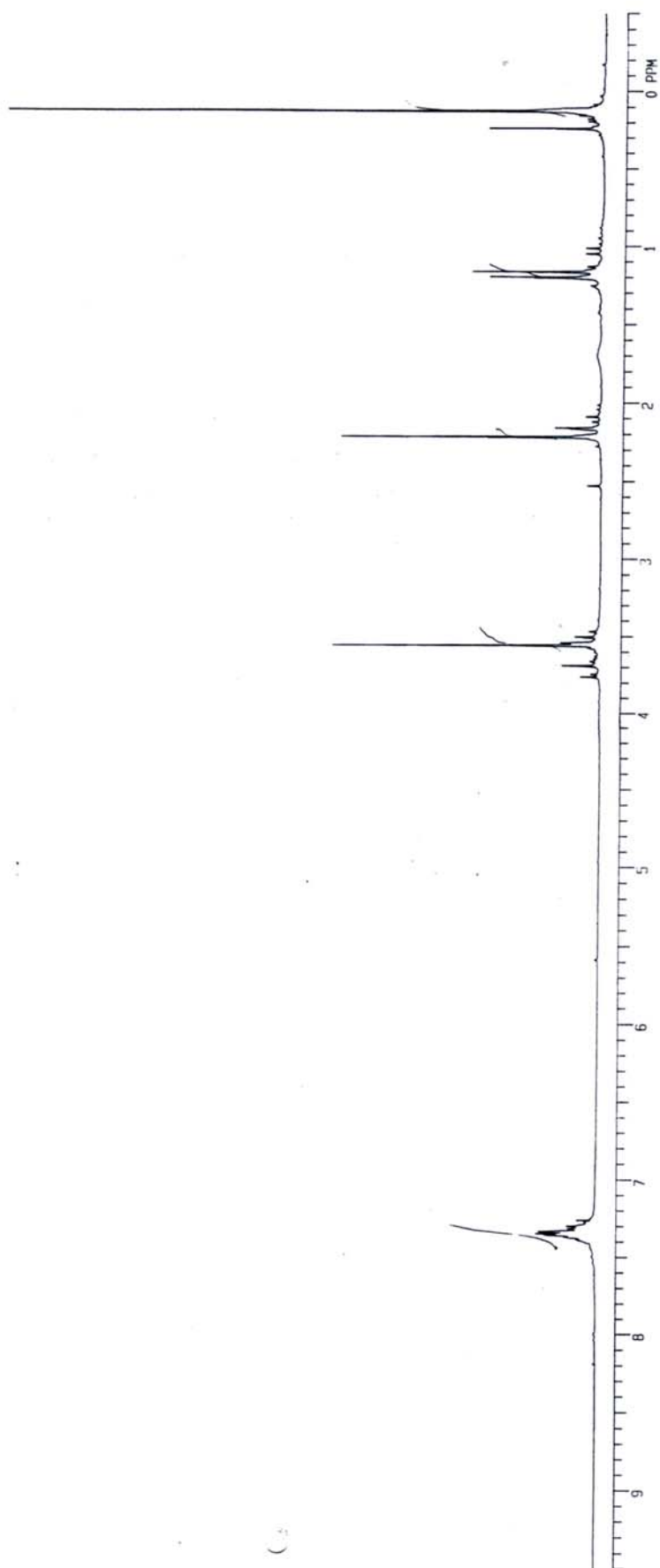
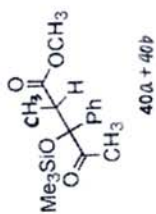
S-64





39

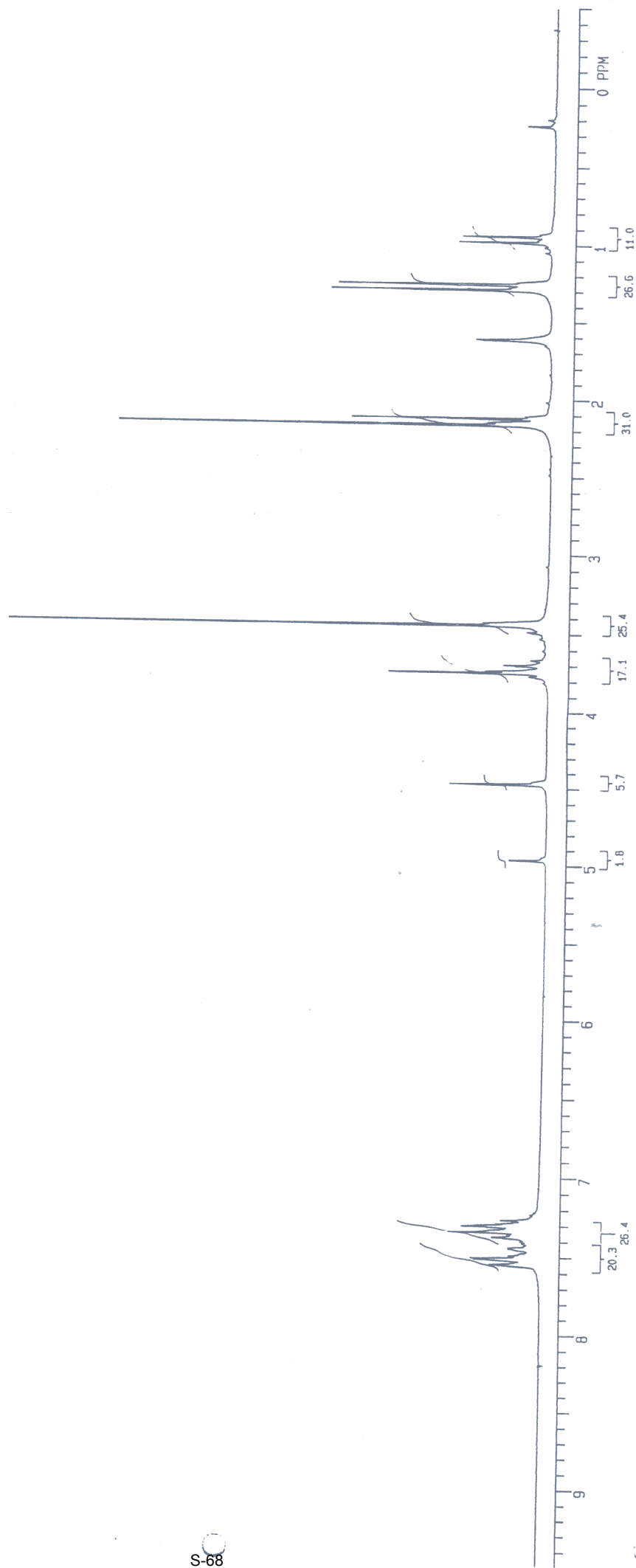


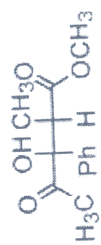




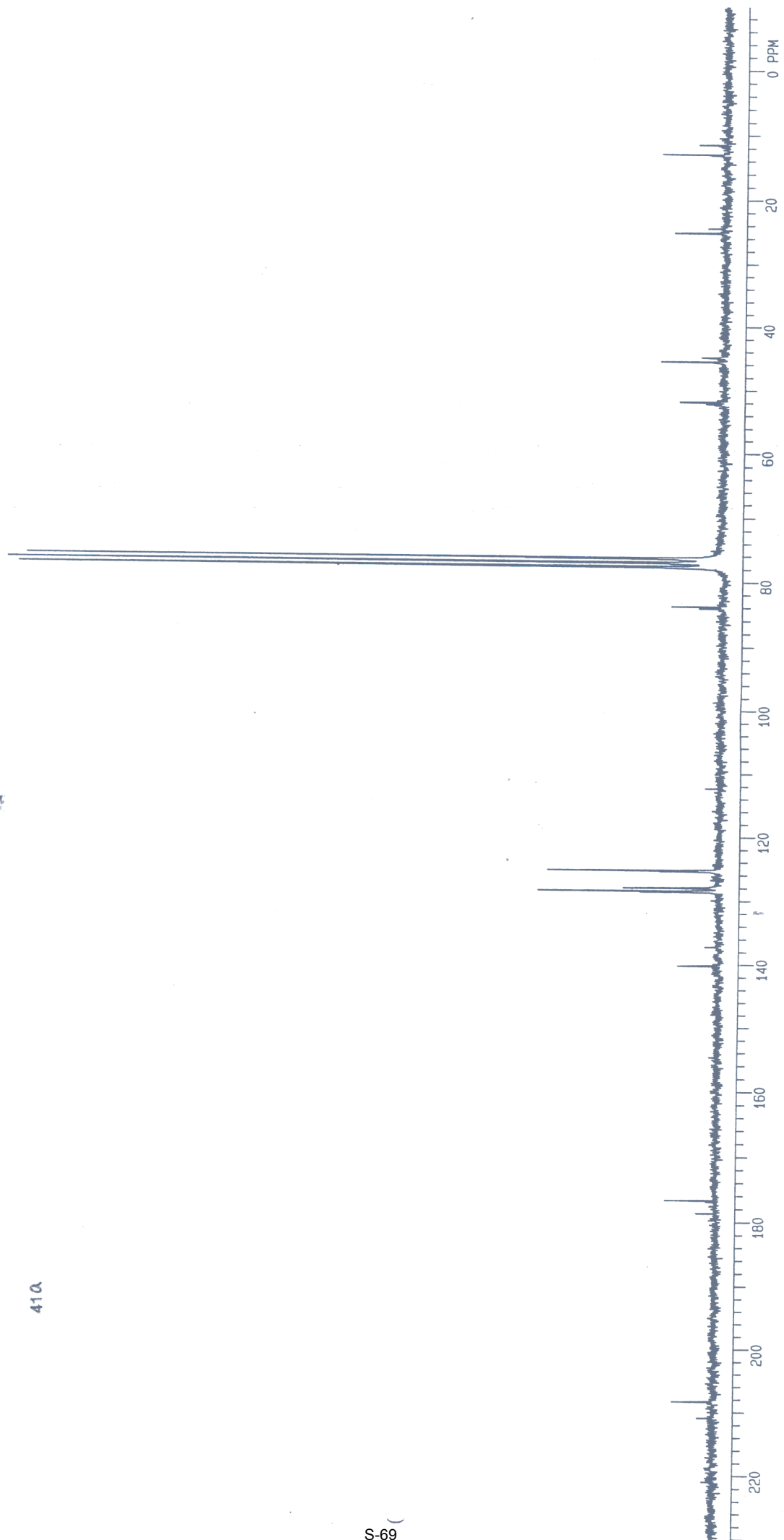


41A



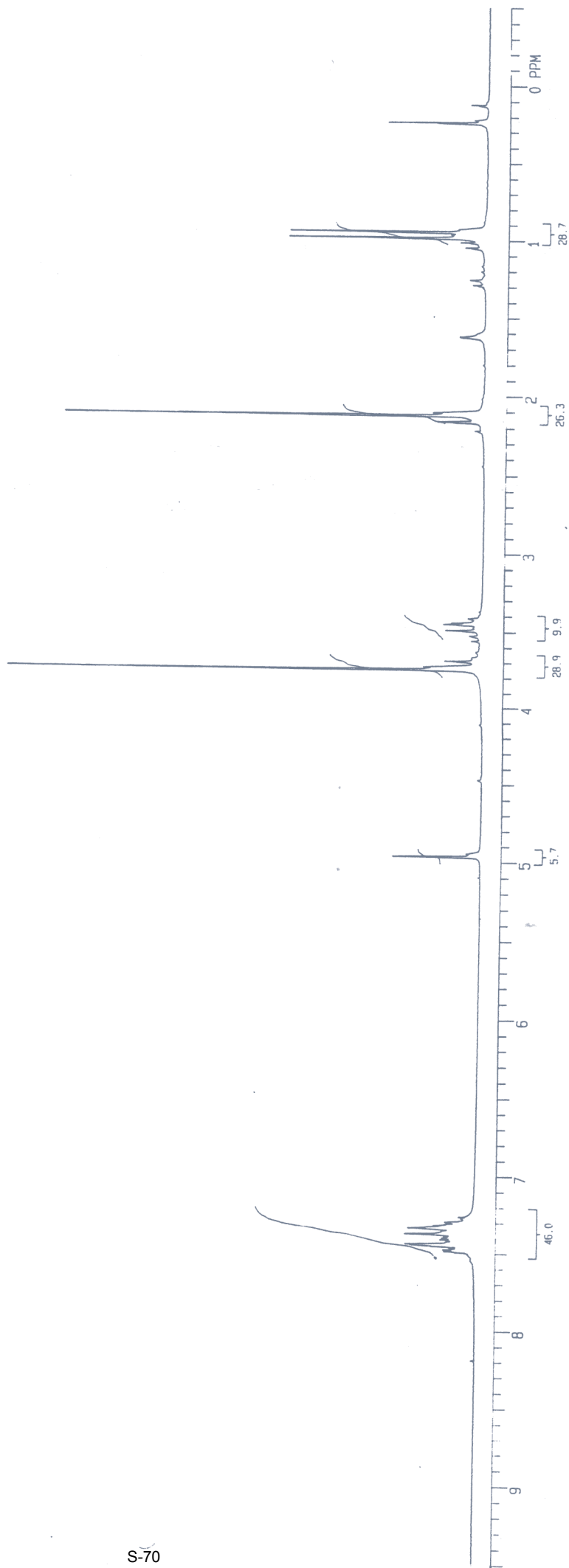


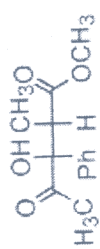
41a



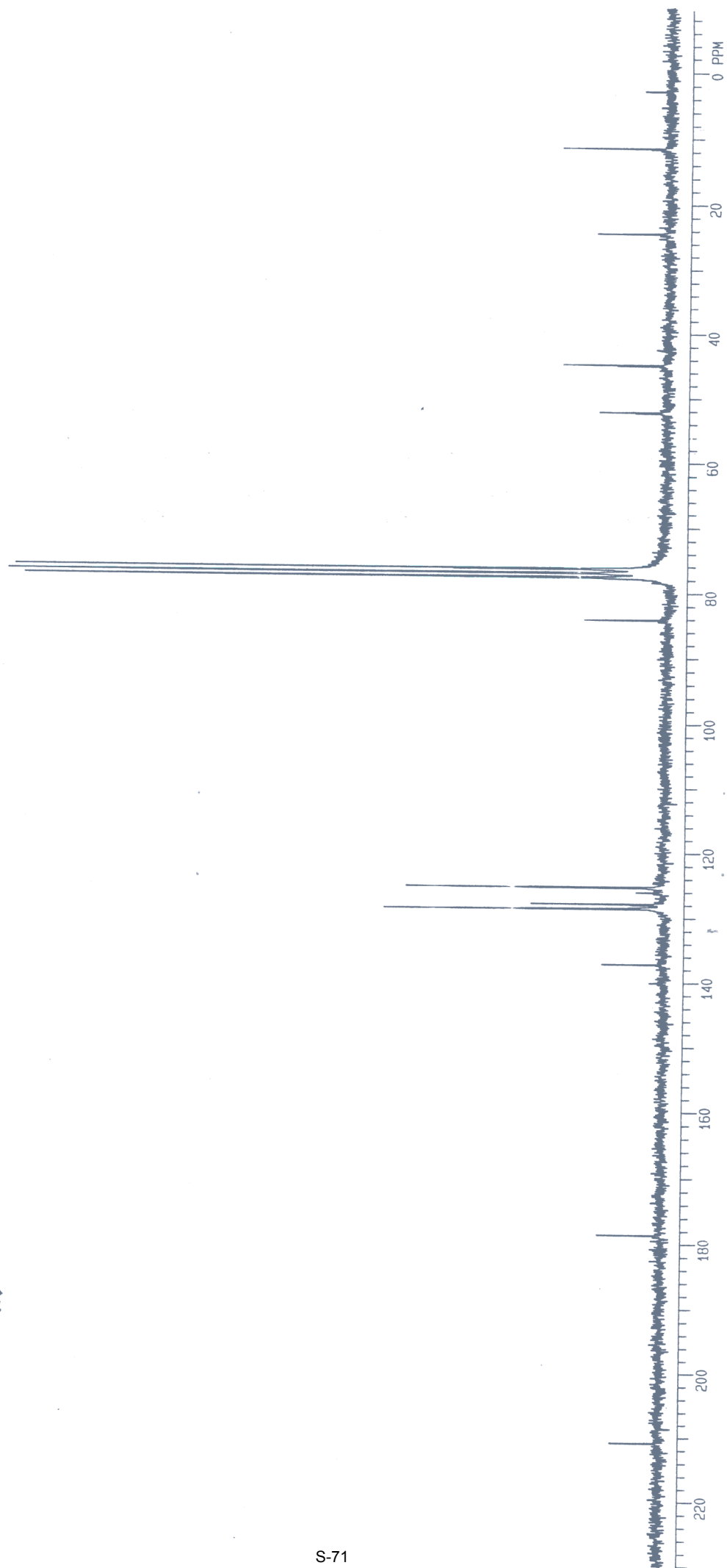


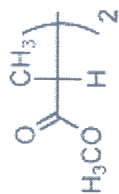
41b



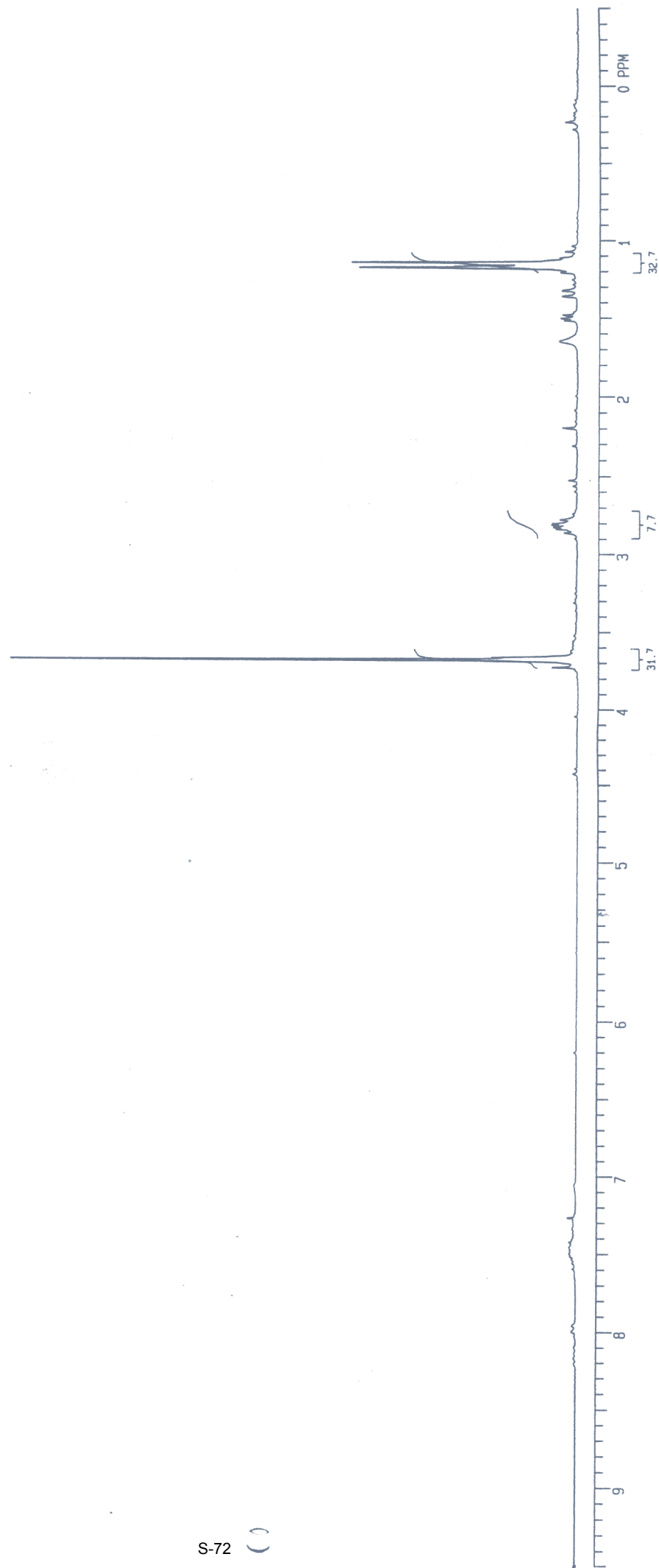


41b

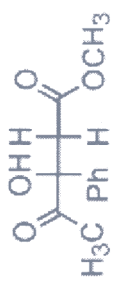




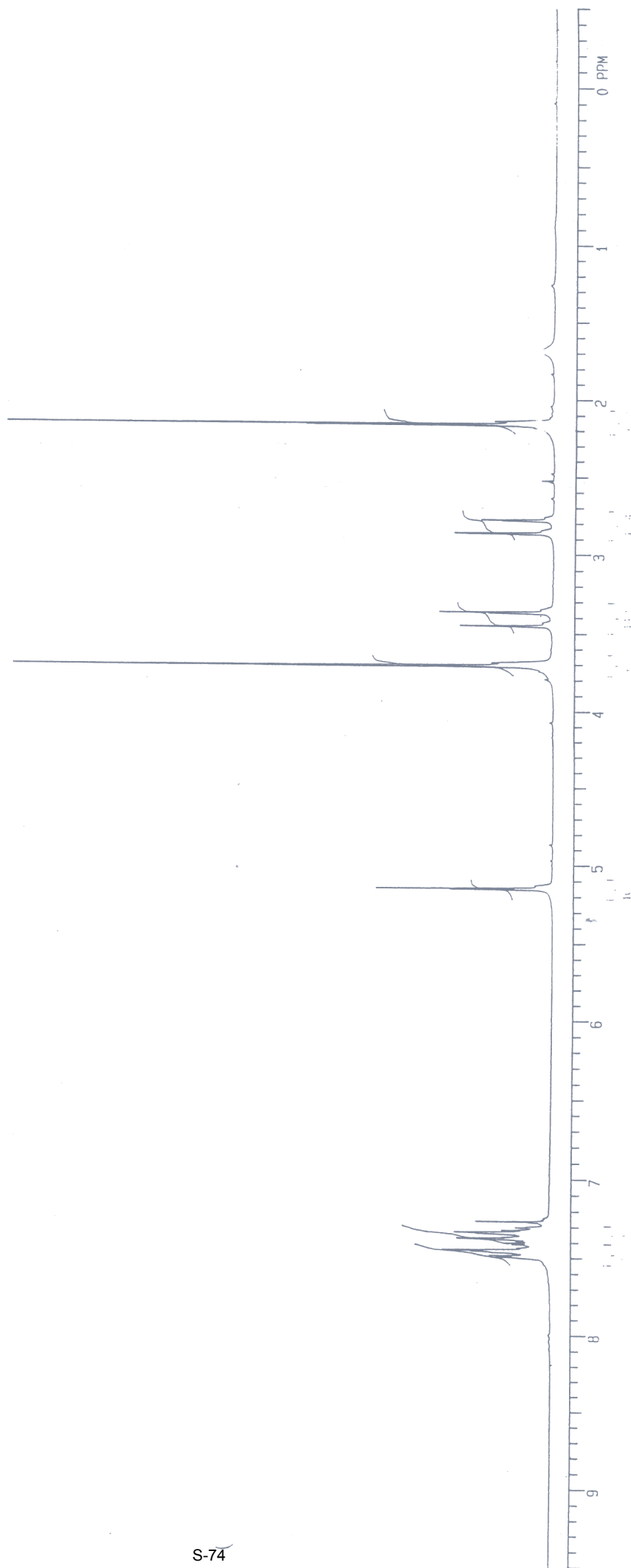
42

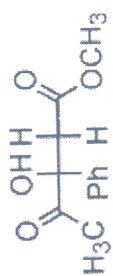




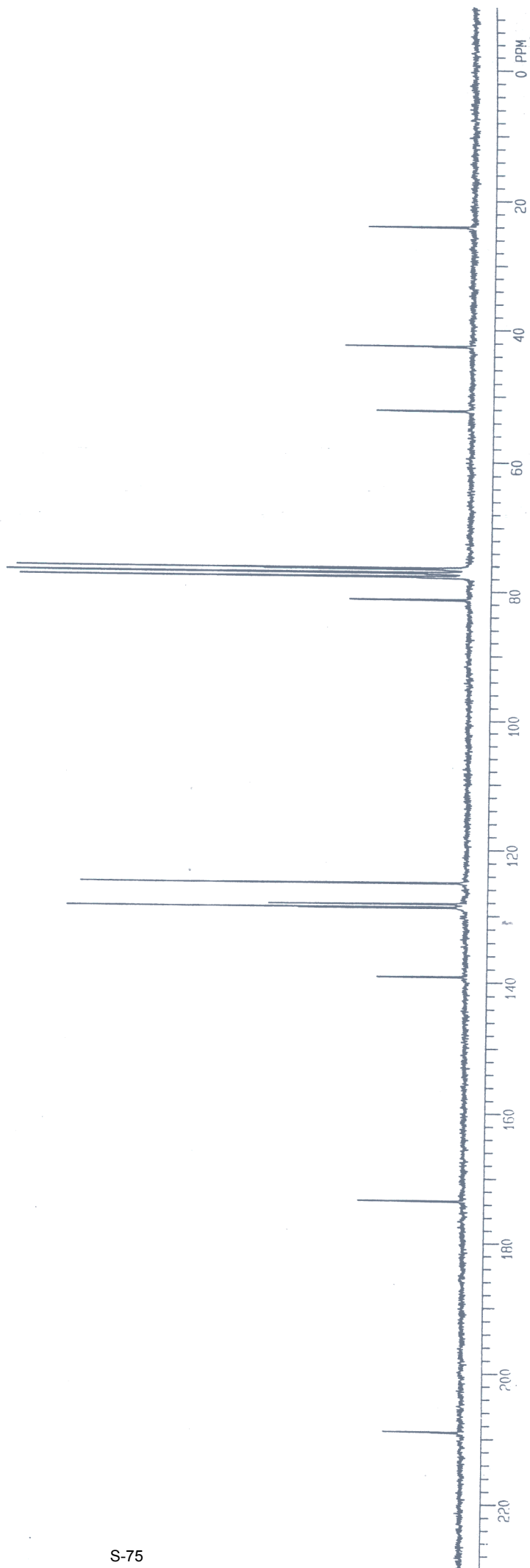


43



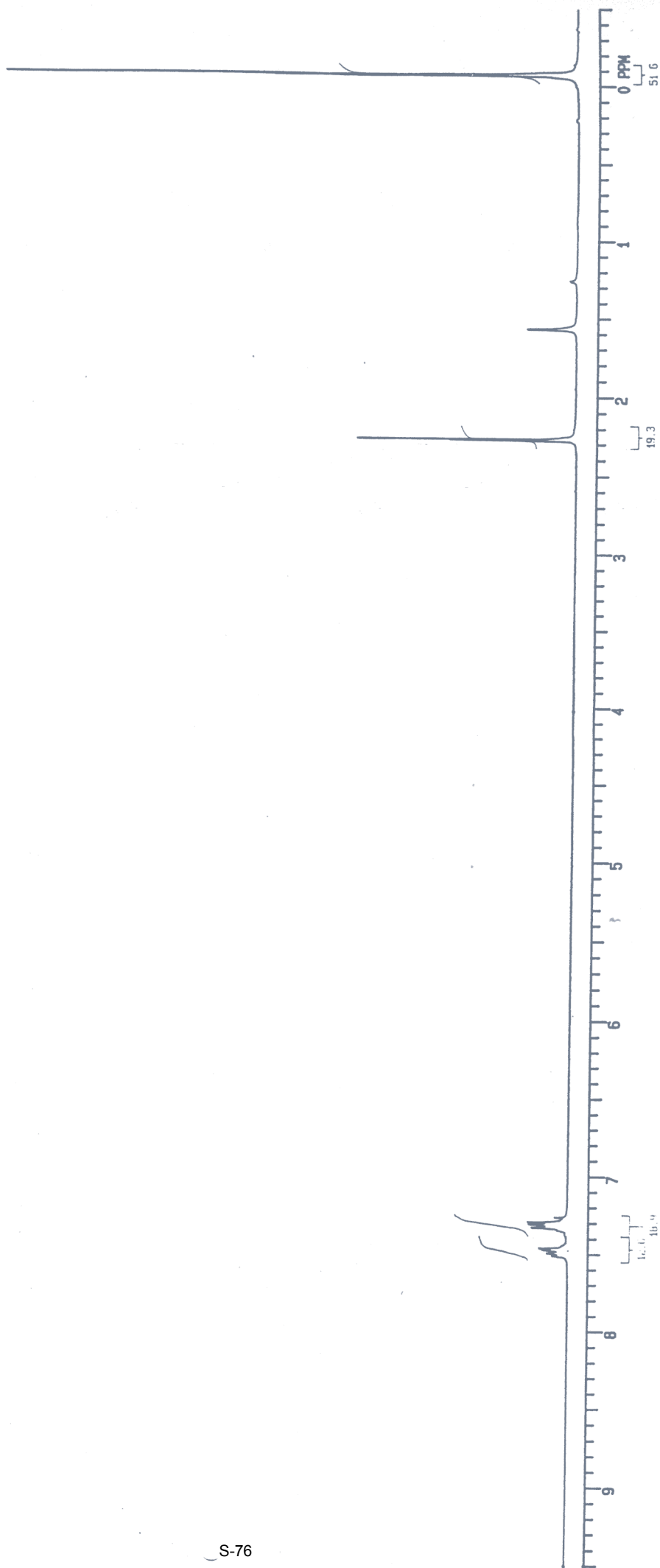


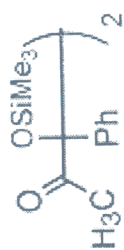
43





44





44

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