

Rapid Assembly of Explicit, Functional Silicones

John B. Grande,^a Ferdinand Gonzaga,^a and Michael A. Brook^{*a,b}

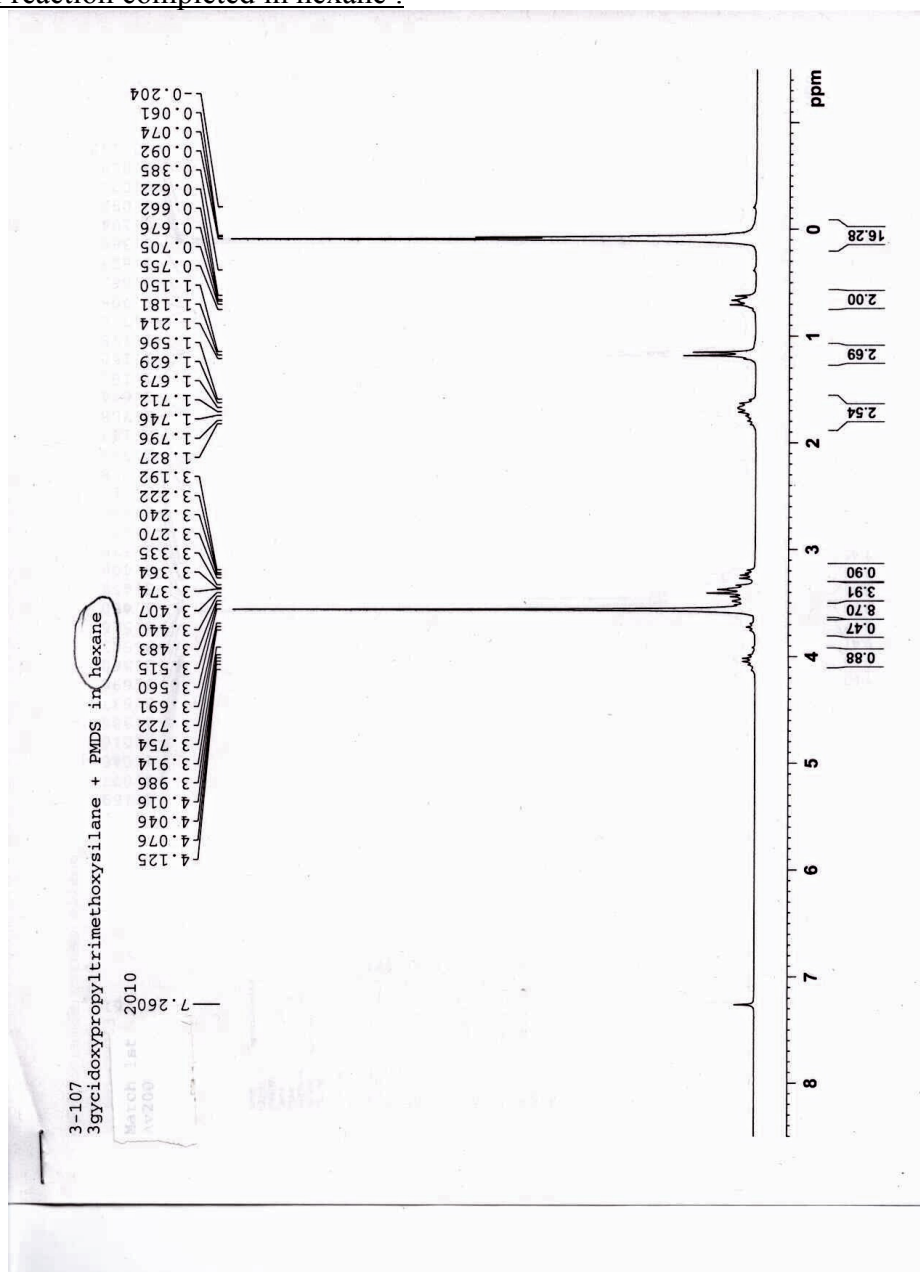
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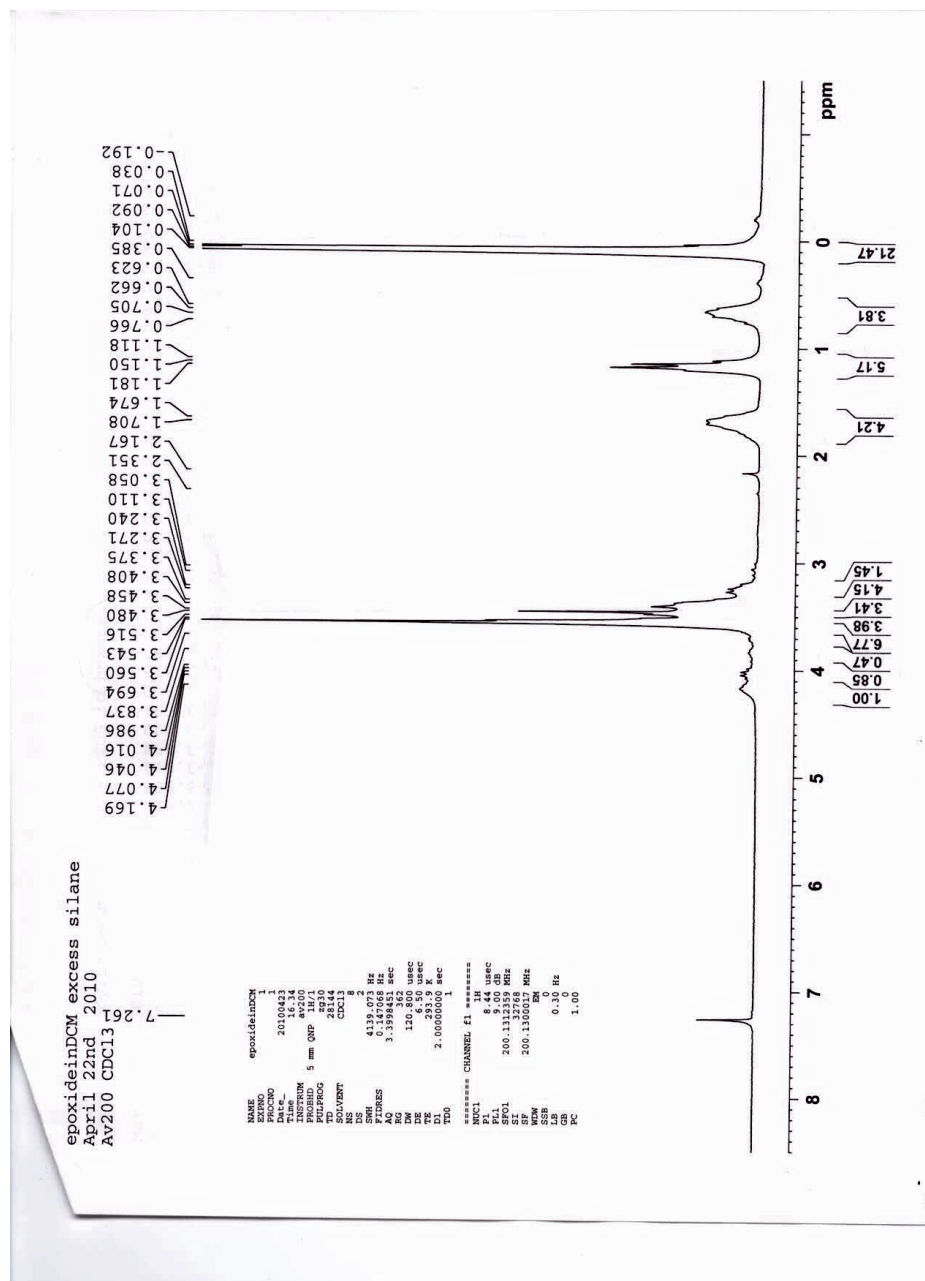
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Reaction of pentamethyldisiloxane with (3-glycidoxypentyl)-trimethoxysilane:

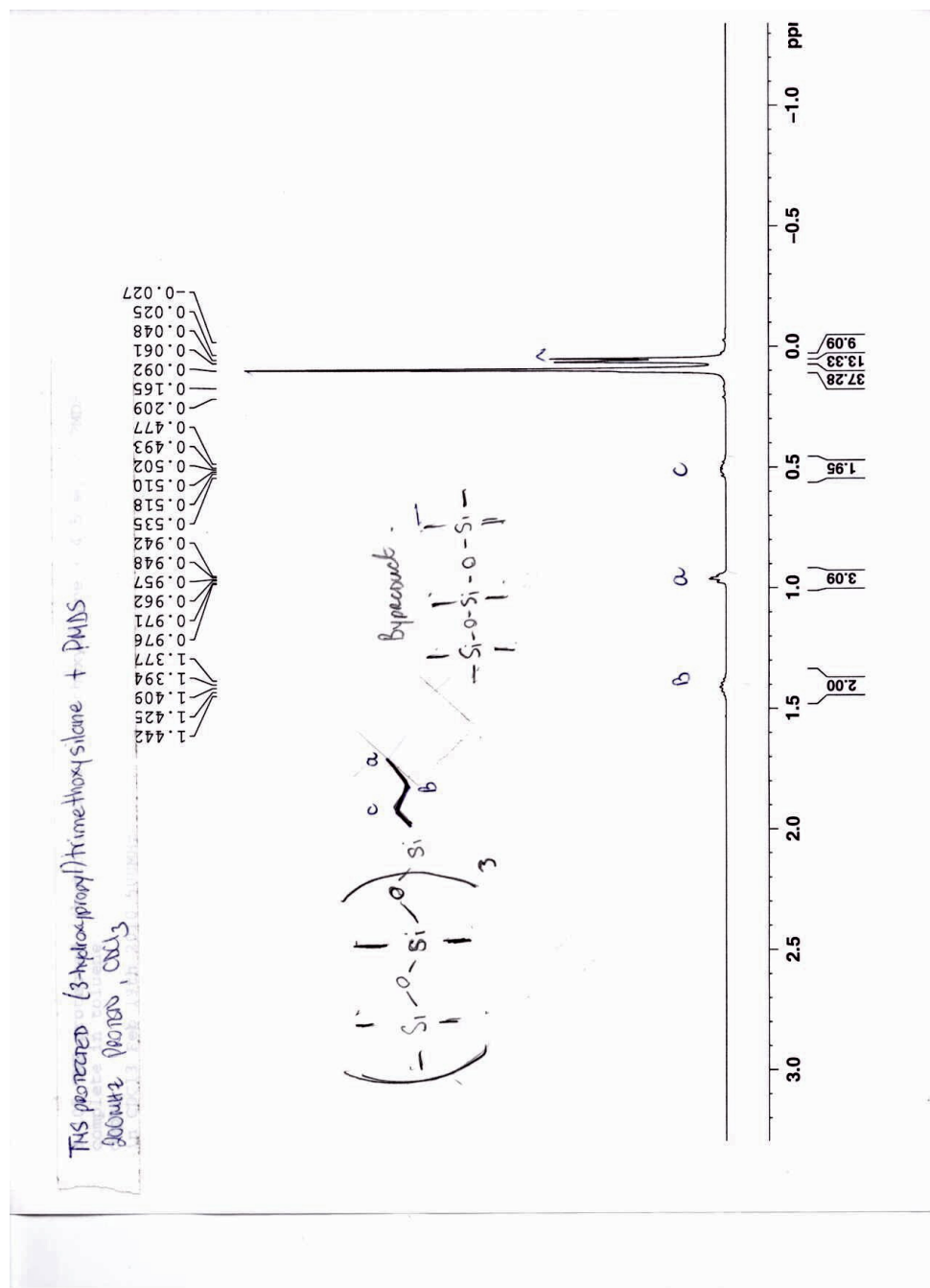
NMR of reaction completed in hexane :



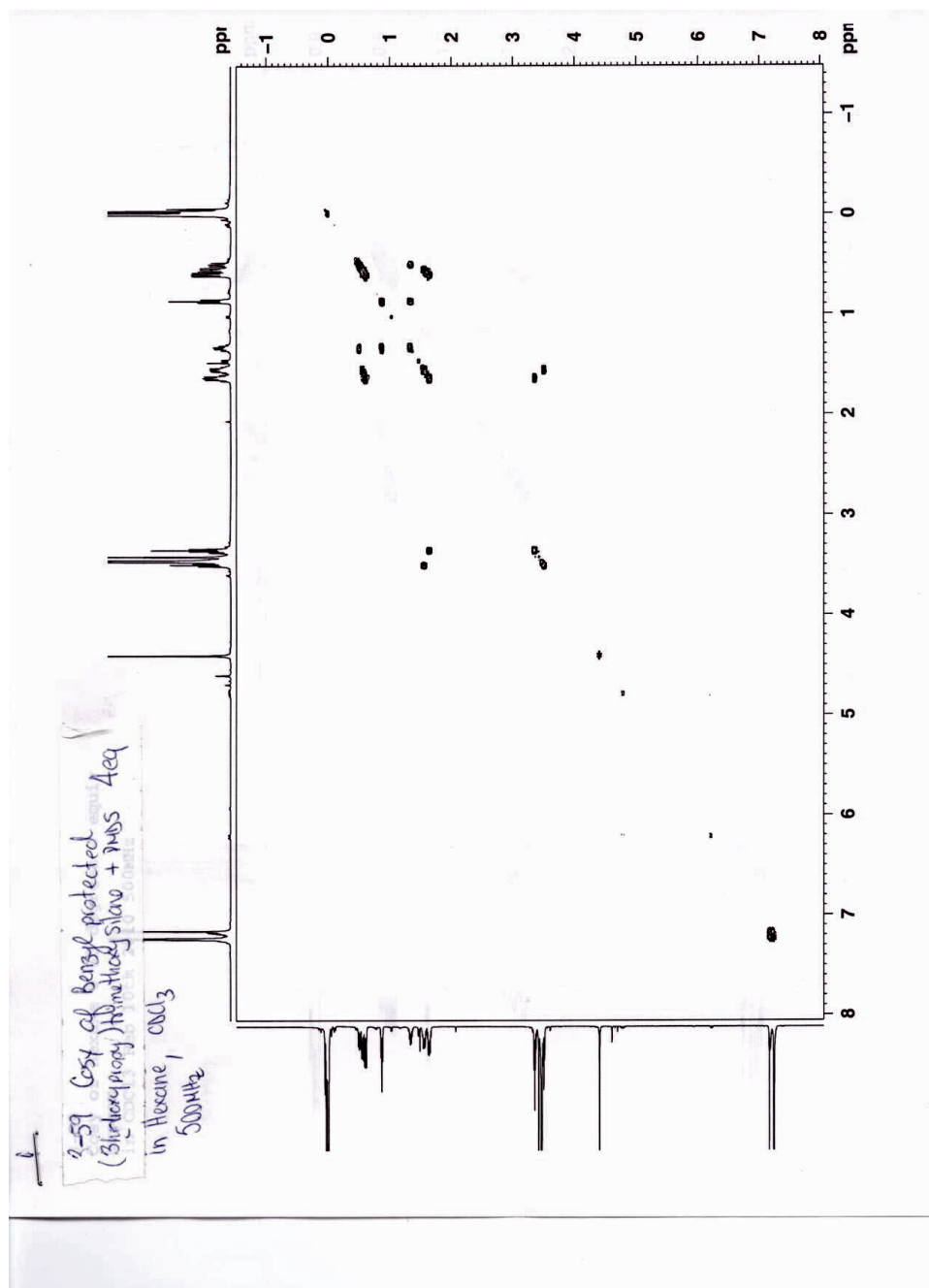
NMR of reaction completed in dichloromethane :



Reaction of Trimethylsilyl protected (3-hydroxypropyl)trimethoxysilane with pentamethyldisiloxane (excess hydrosilane 6 equiv):



Reaction of Benzyl protected (3-hydroxypropyl)trimethoxysilane with pentamethyldisiloxane (COSY):



3-59 Cost of benzyl protected
(3-bromopropyl)trimethylsilane + DMS 4 eq

in hexane, CSeCl_3
 SO_2Me_2