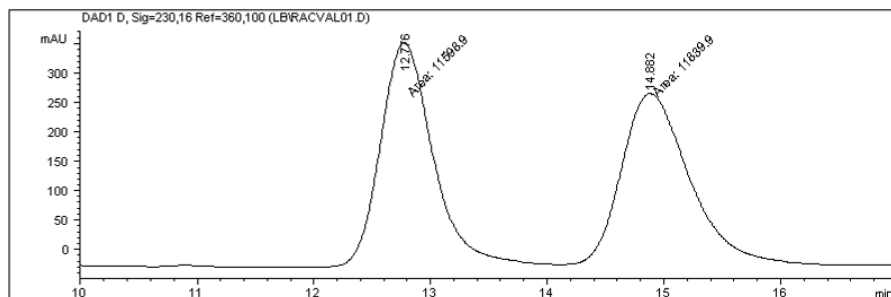
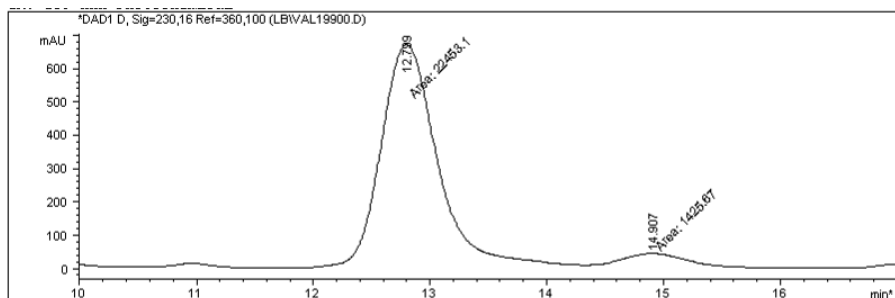


Chiral HPLC chromatographs for 18 and 24

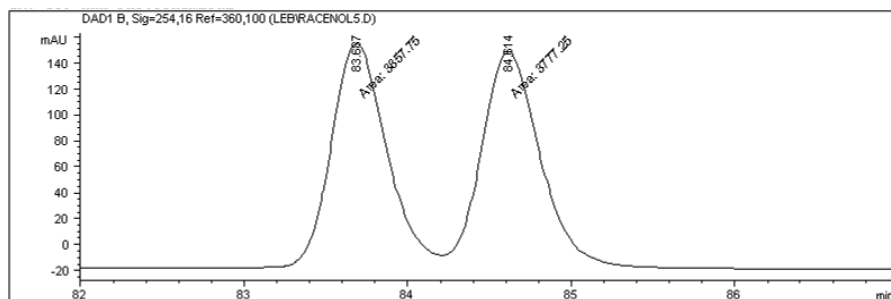
rac-18:



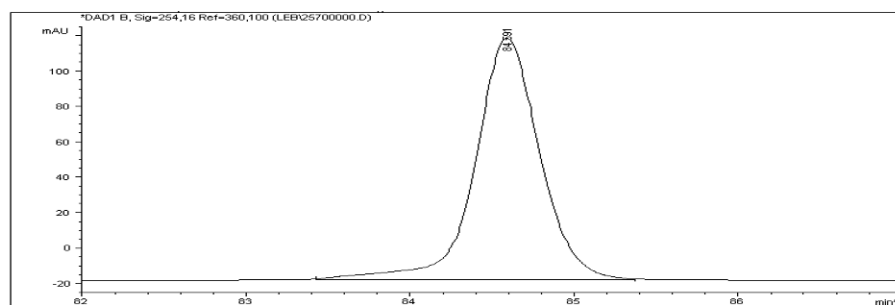
18 (94:6 *er*):



rac-24:

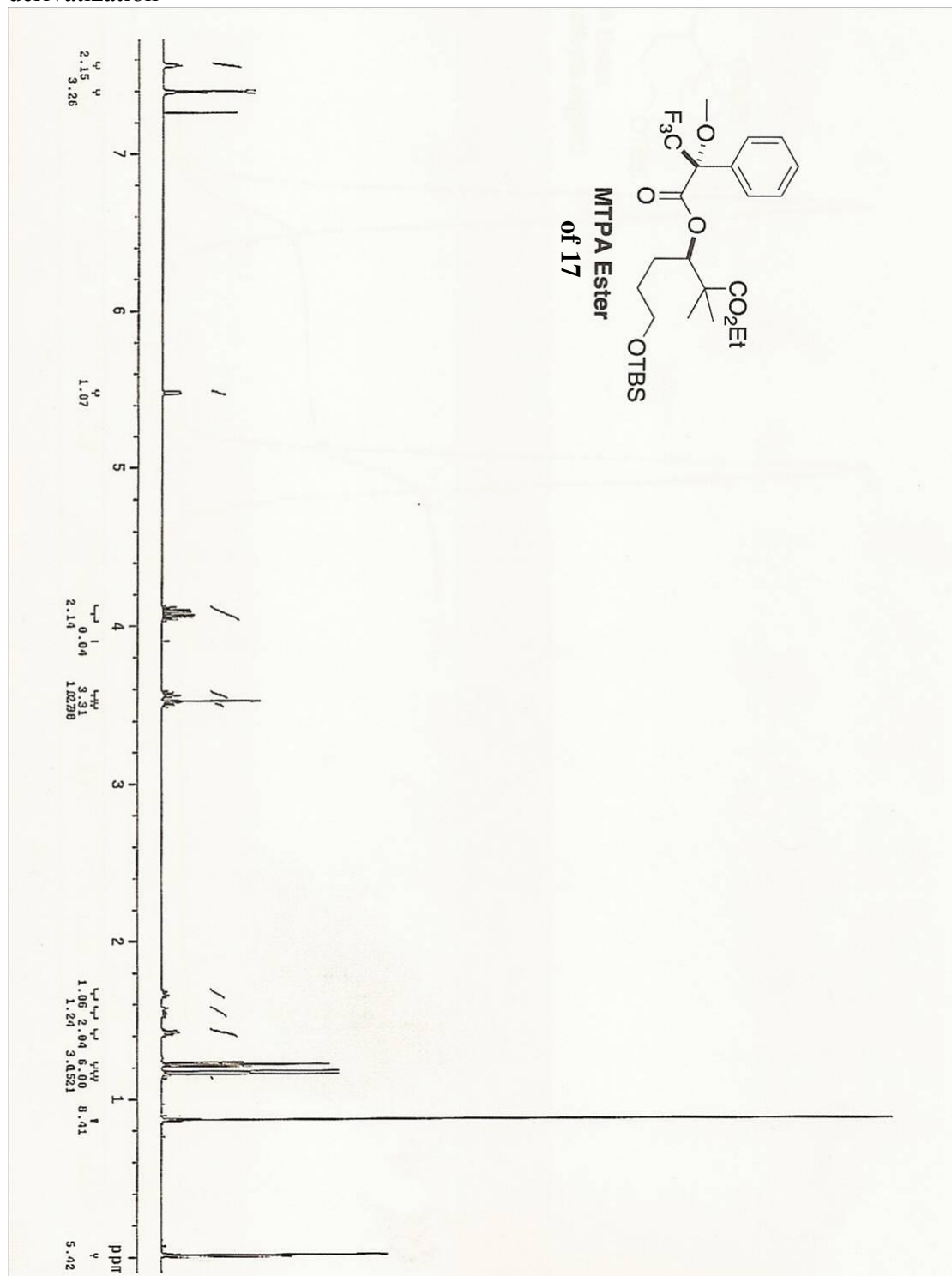


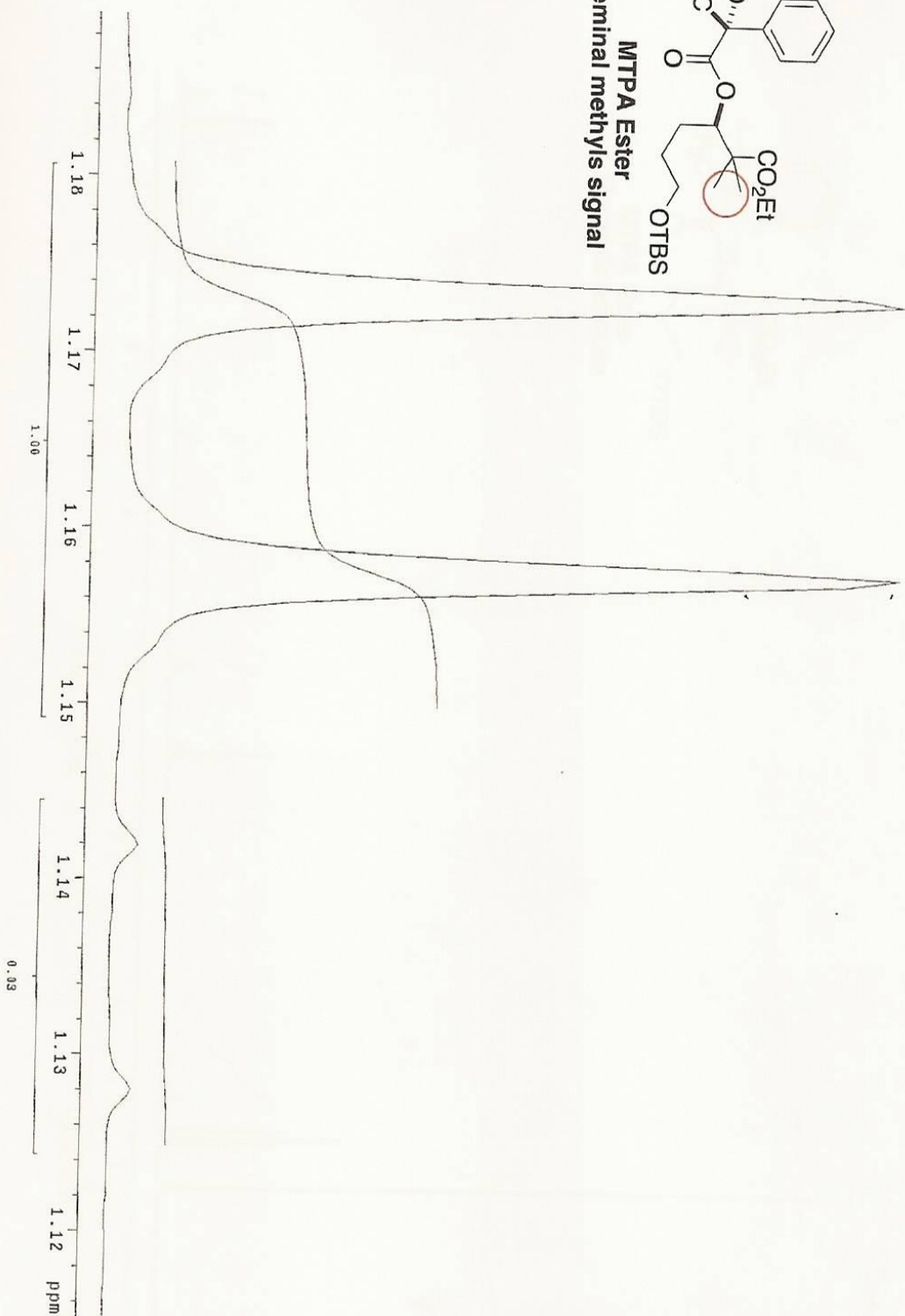
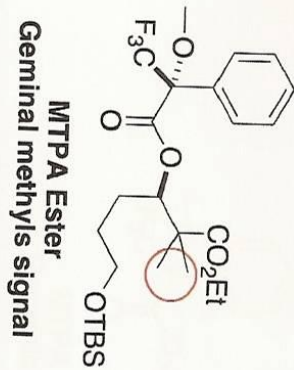
24 (99% ee after one recrystallization of 22):



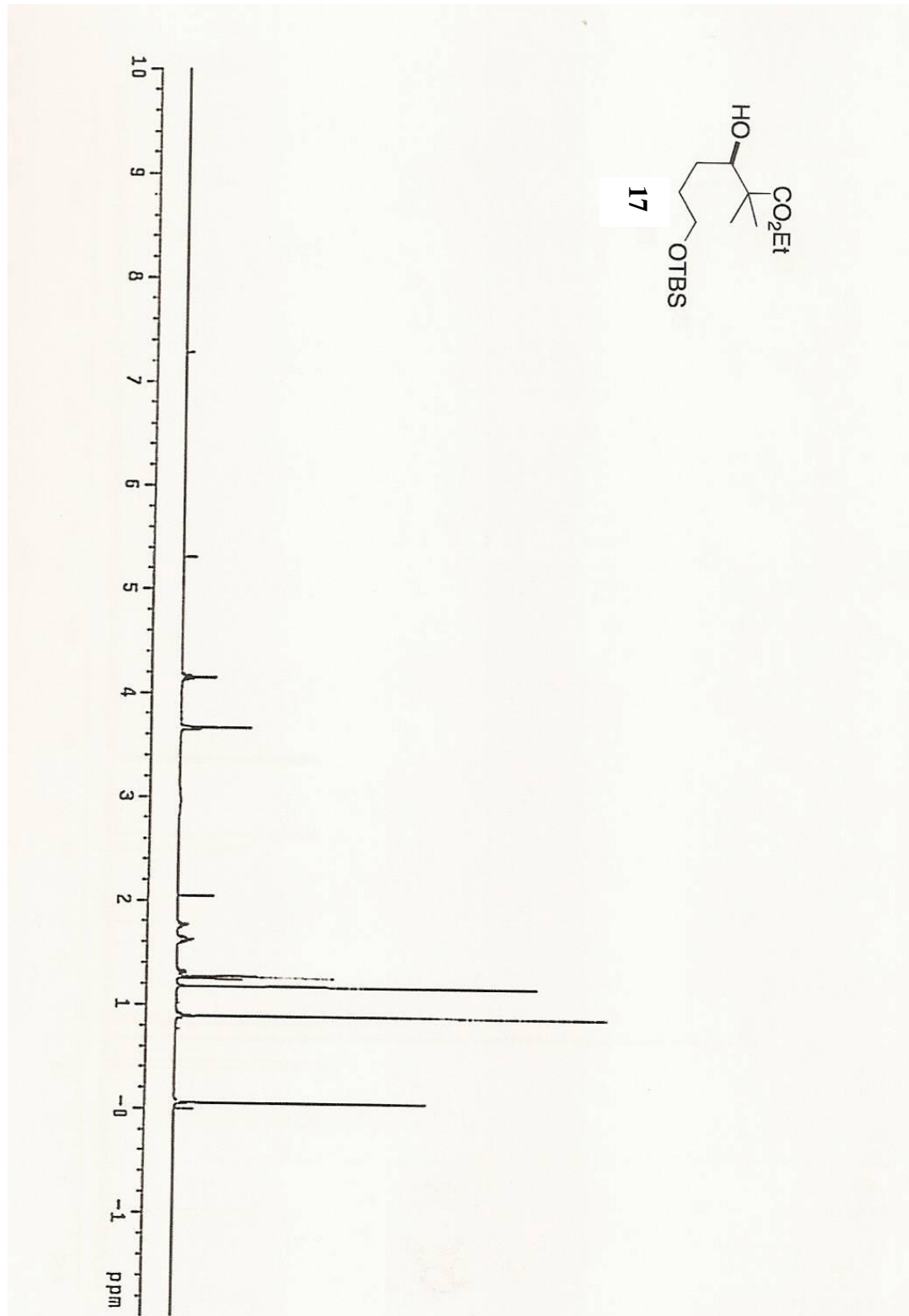
Stereochemical analysis of 17

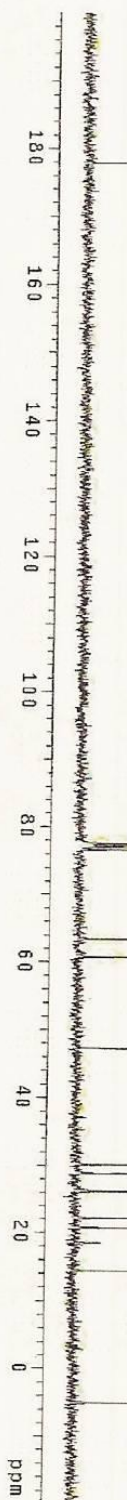
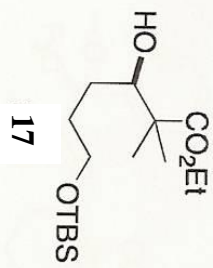
Enantiomeric ratio is estimated by comparative integration of dimethyl signals following derivatization

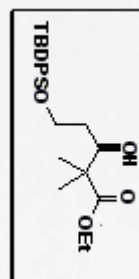




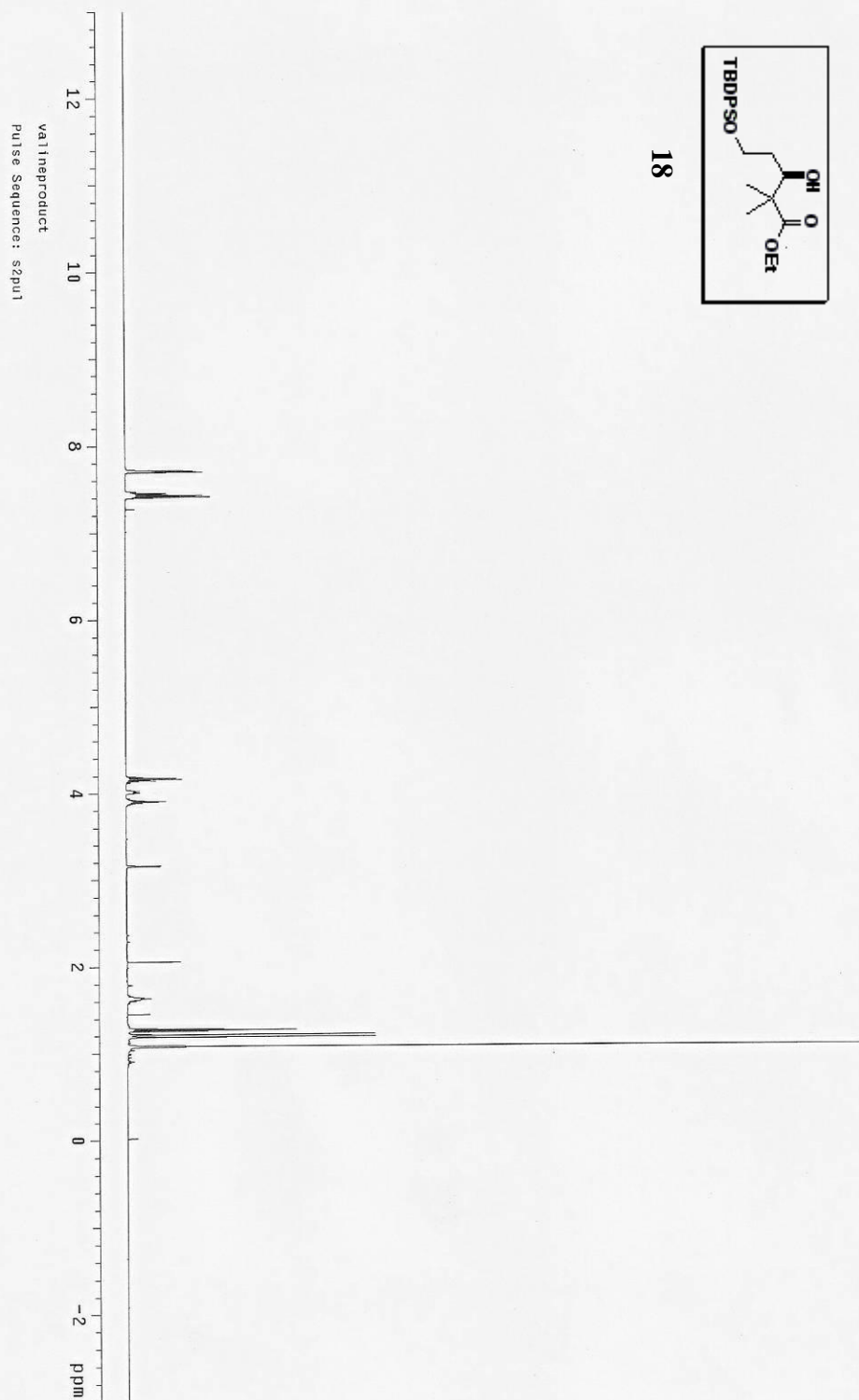
^1H , ^{13}C NMR spectra for all new compounds

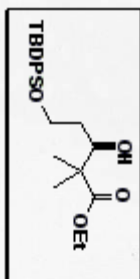




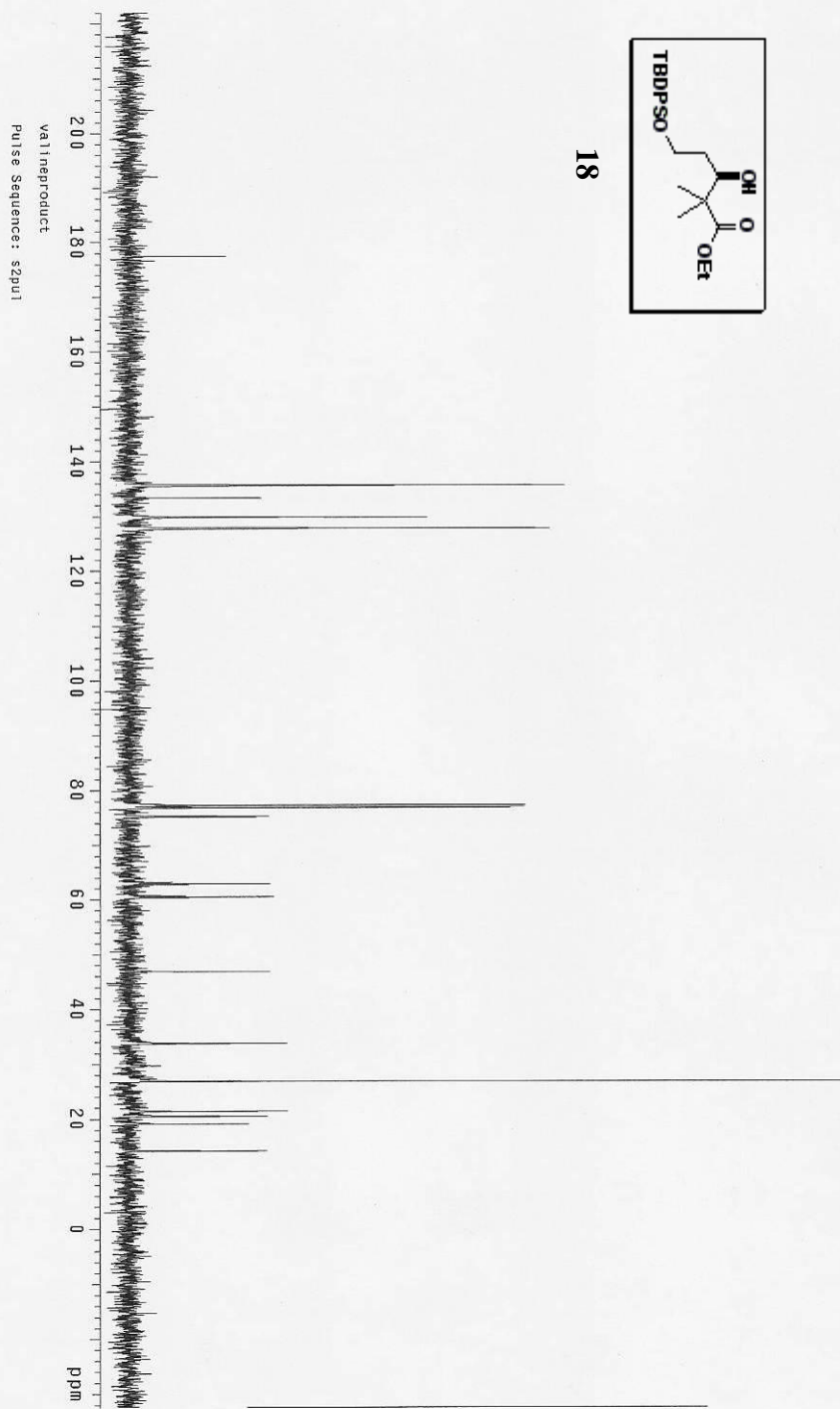


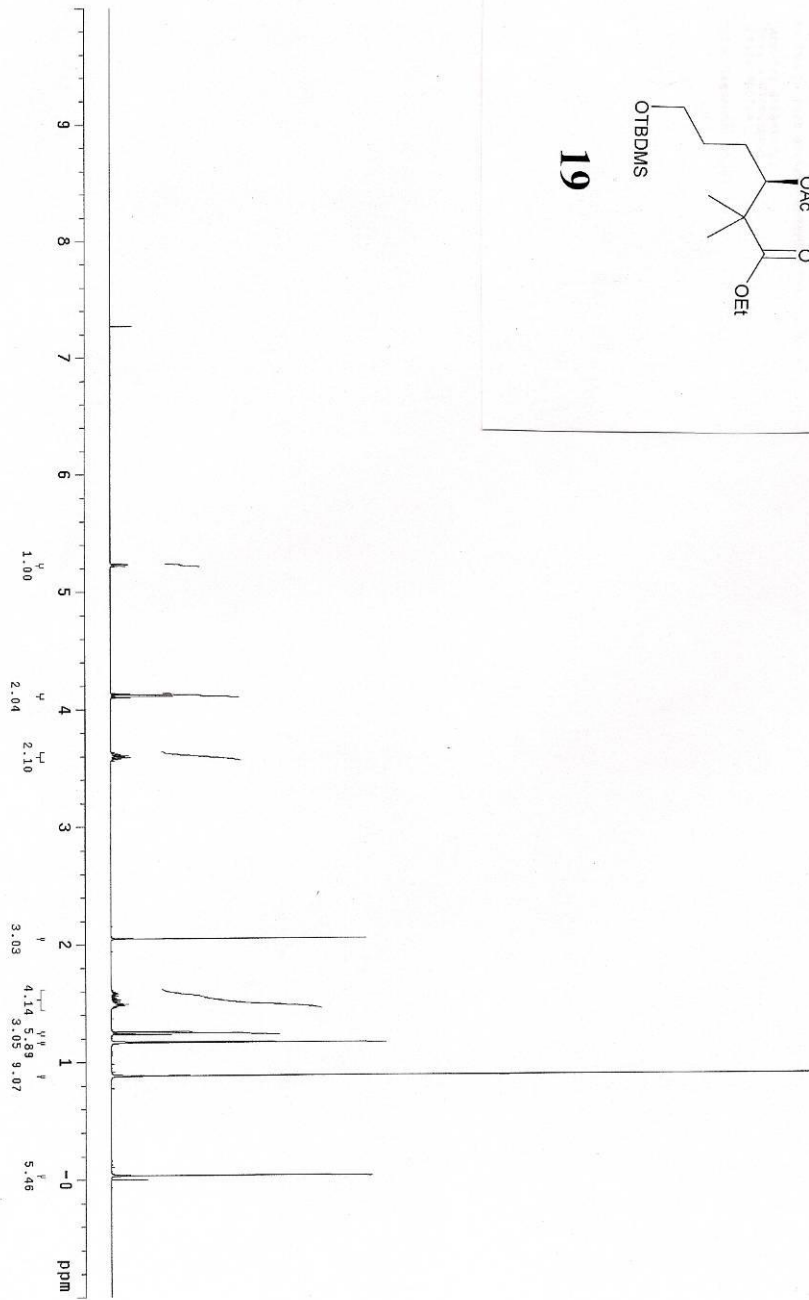
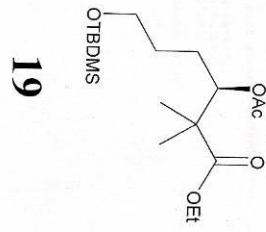
18



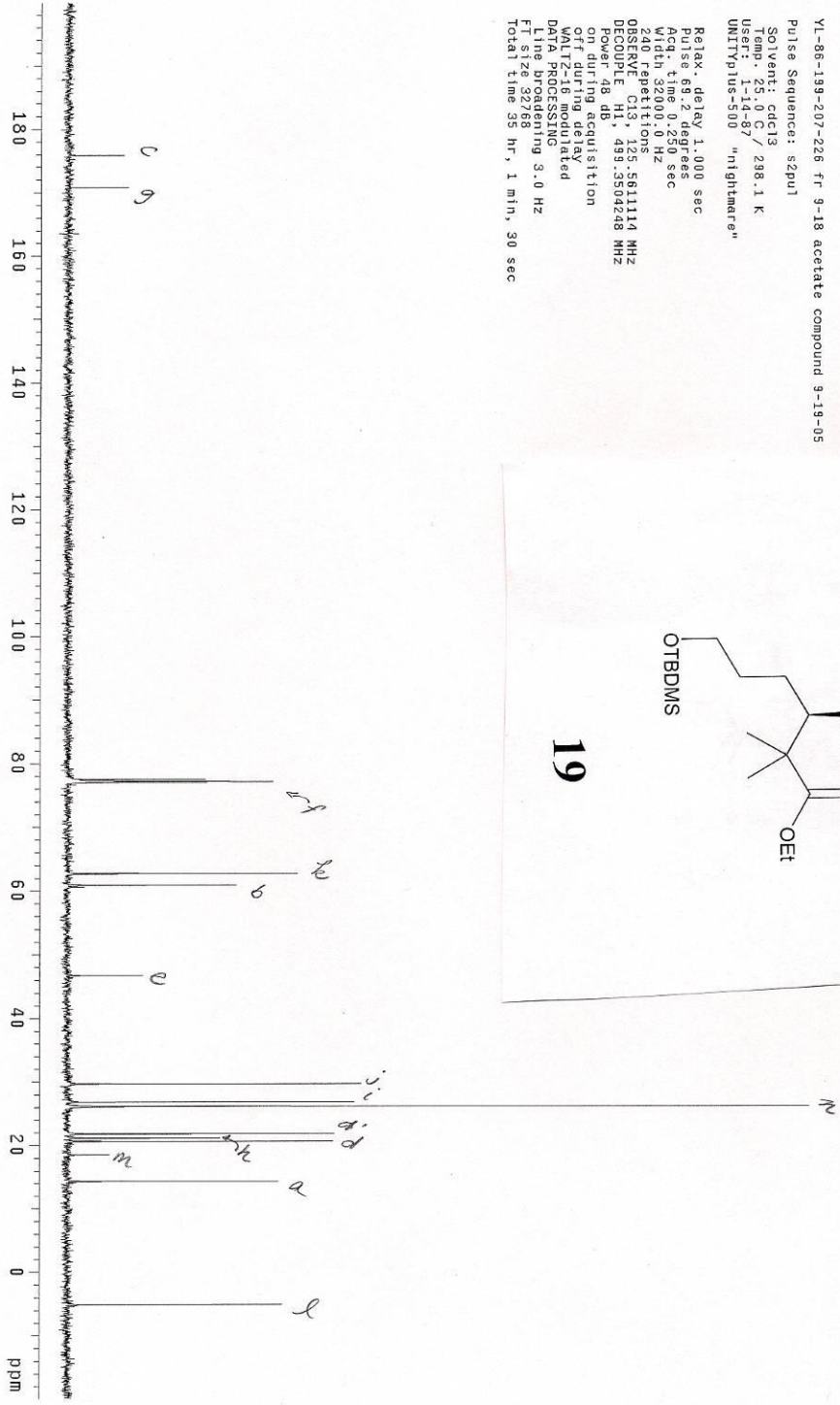
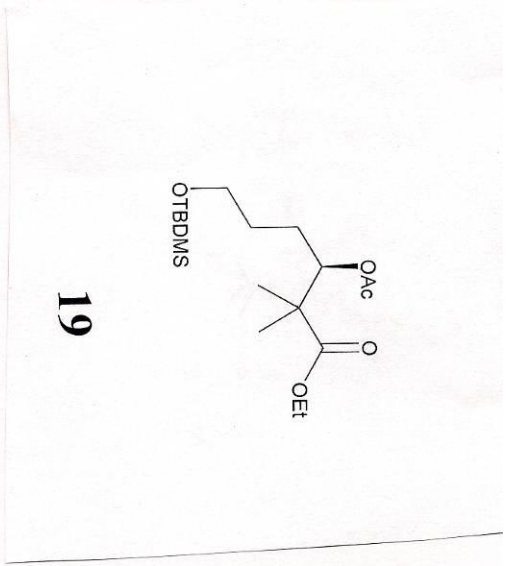


18

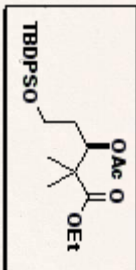




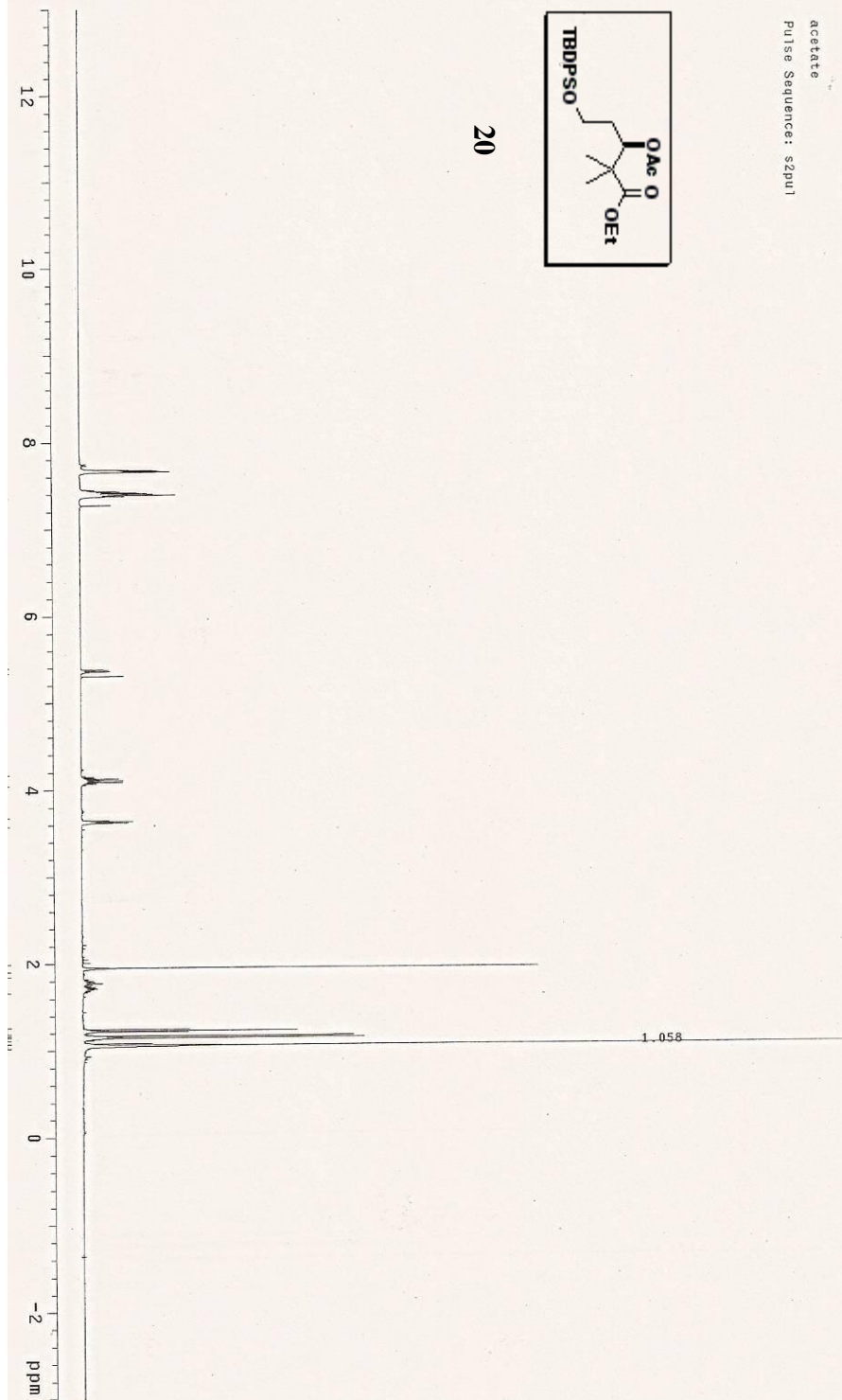
YL-86-199-207-226 fr. 9-18 acetate compound 9-19-05
 Pulse Sequence: s2pul
 Solvent: cdcl3
 Temp: 25.0 C / 298.1 K
 User: L-14-87 "nightmare"
 UTRIPus-300 "nightmare"
 Relax. delay 1.000 sec
 Pulse delay 0.000 sec
 Acq time 0.250 sec
 Width 3200.0 Hz
 240 Repetitions
 OBSERVE C13, 125.561114 MHz
 DECOUPLE H1, 499.3504248 MHz
 Power 48 db
 or during acquisition
 or during relaxation
 WAIT-16 modulated
 DATA PROCESSING
 Line broadening 3.0 Hz
 FT size 32768
 Total time 39 hr, 1 min, 30 sec

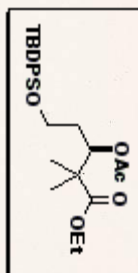


acetate
Pulse Sequence: s2pu1

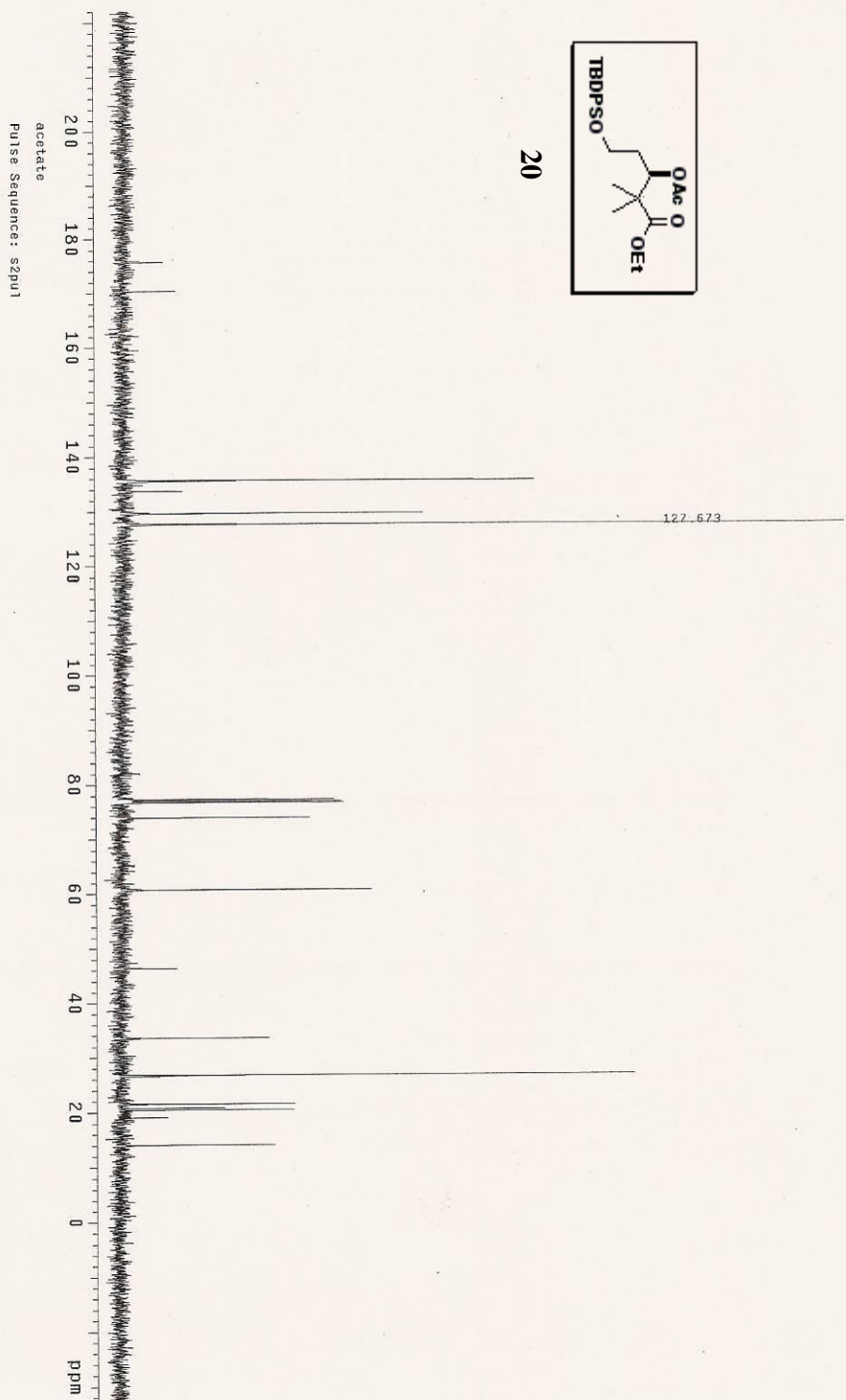


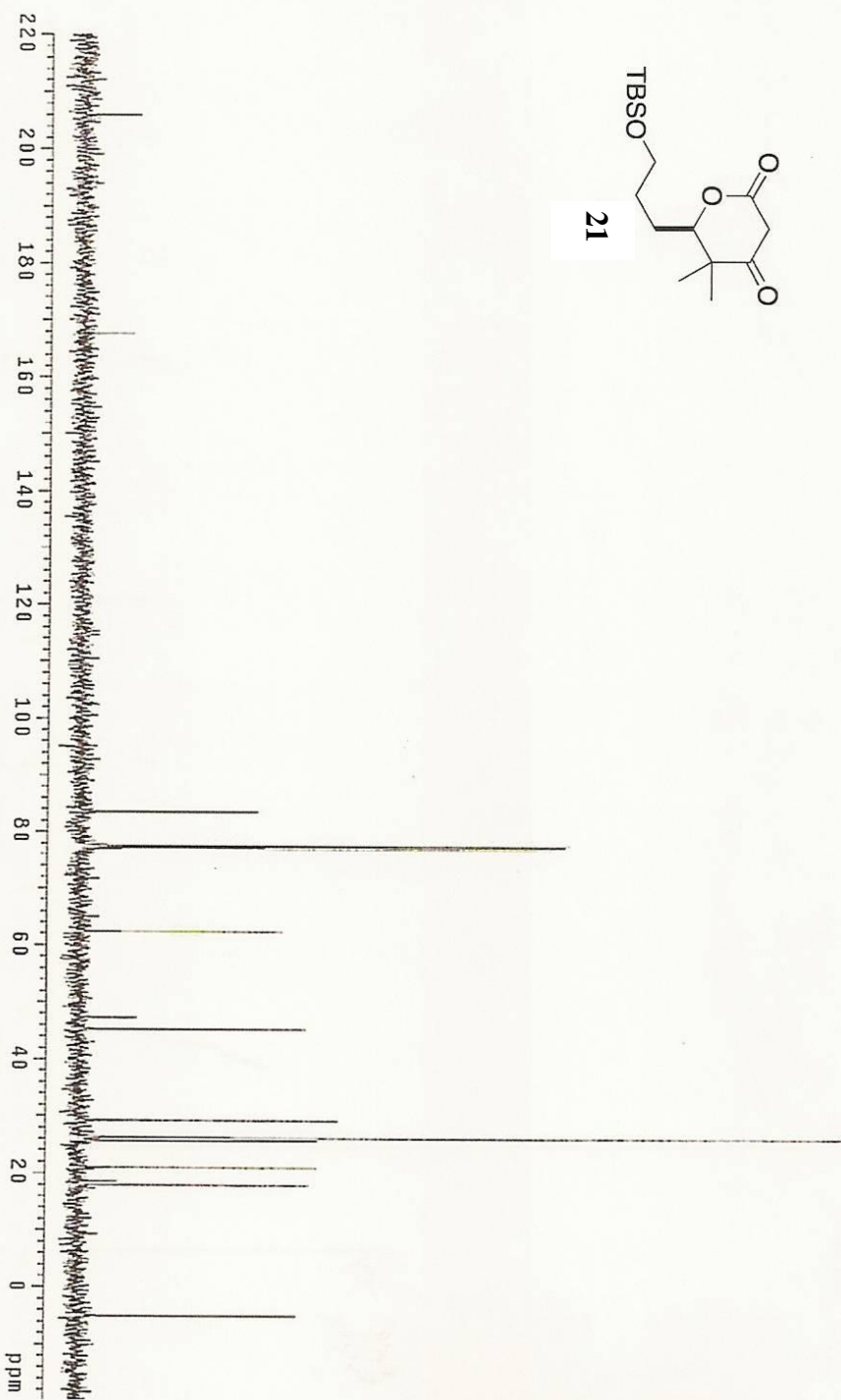
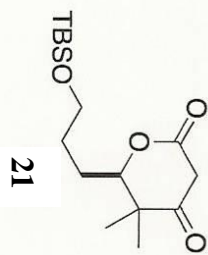
20

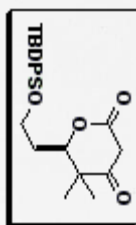




20

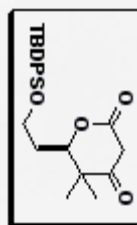




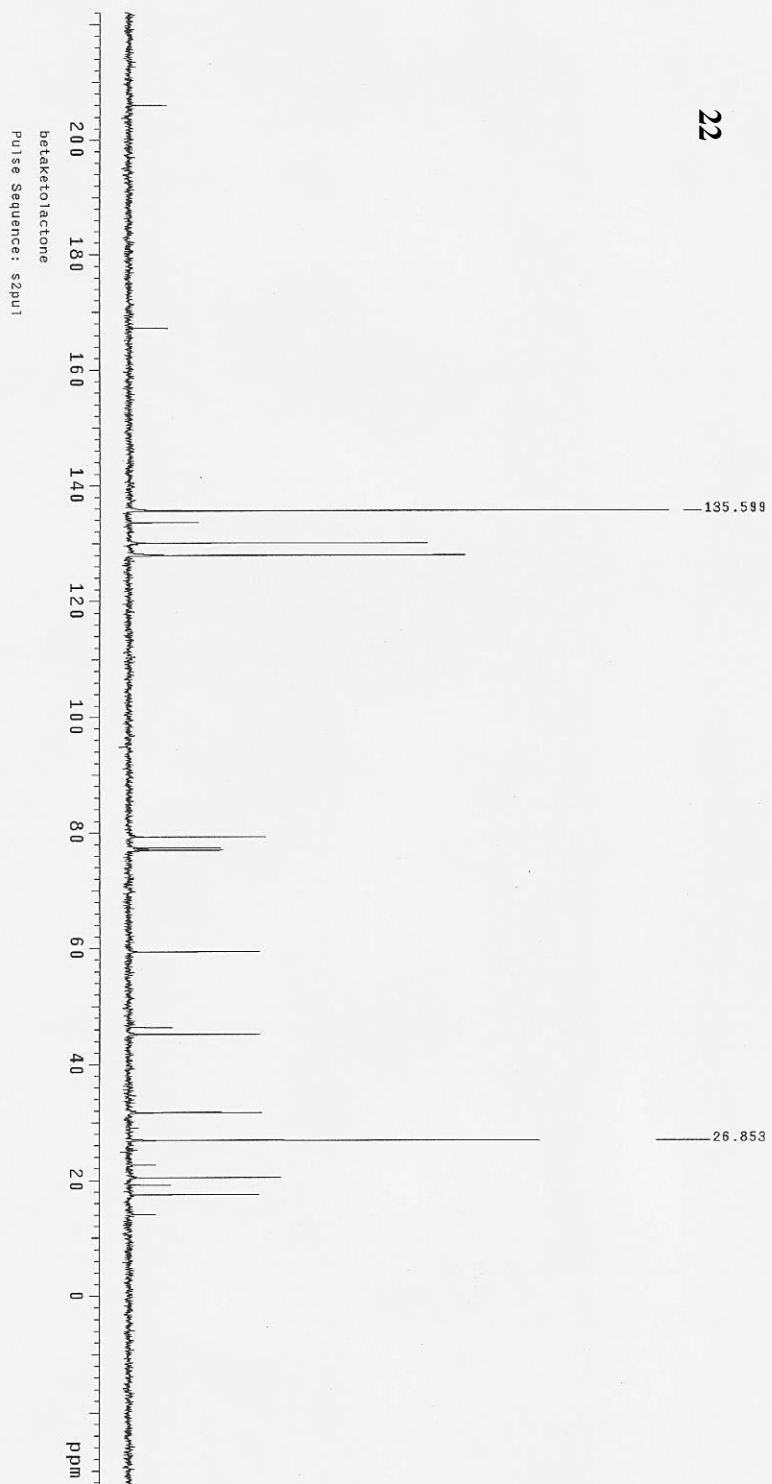


22

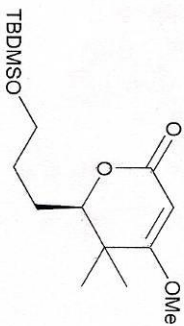




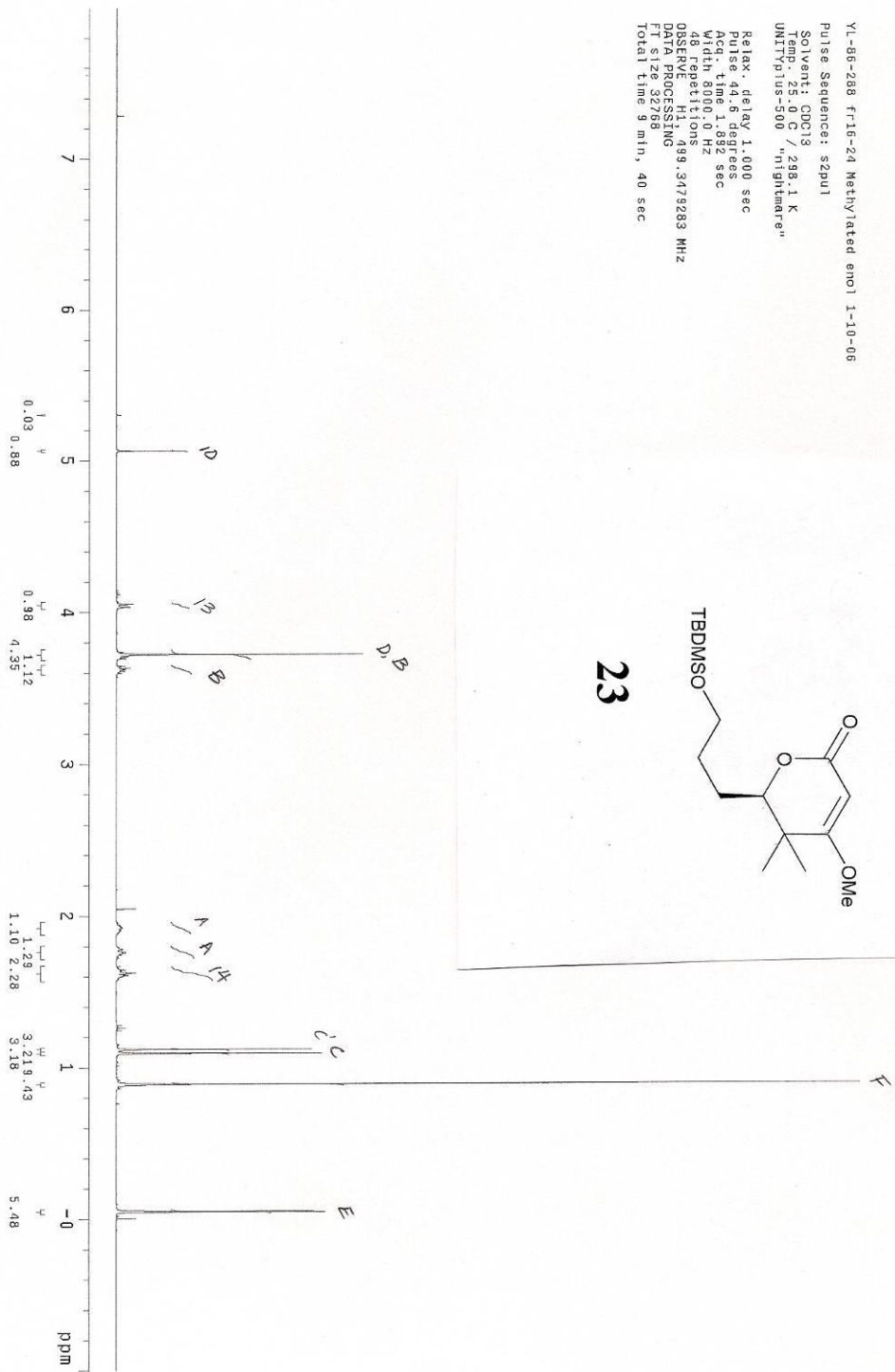
22



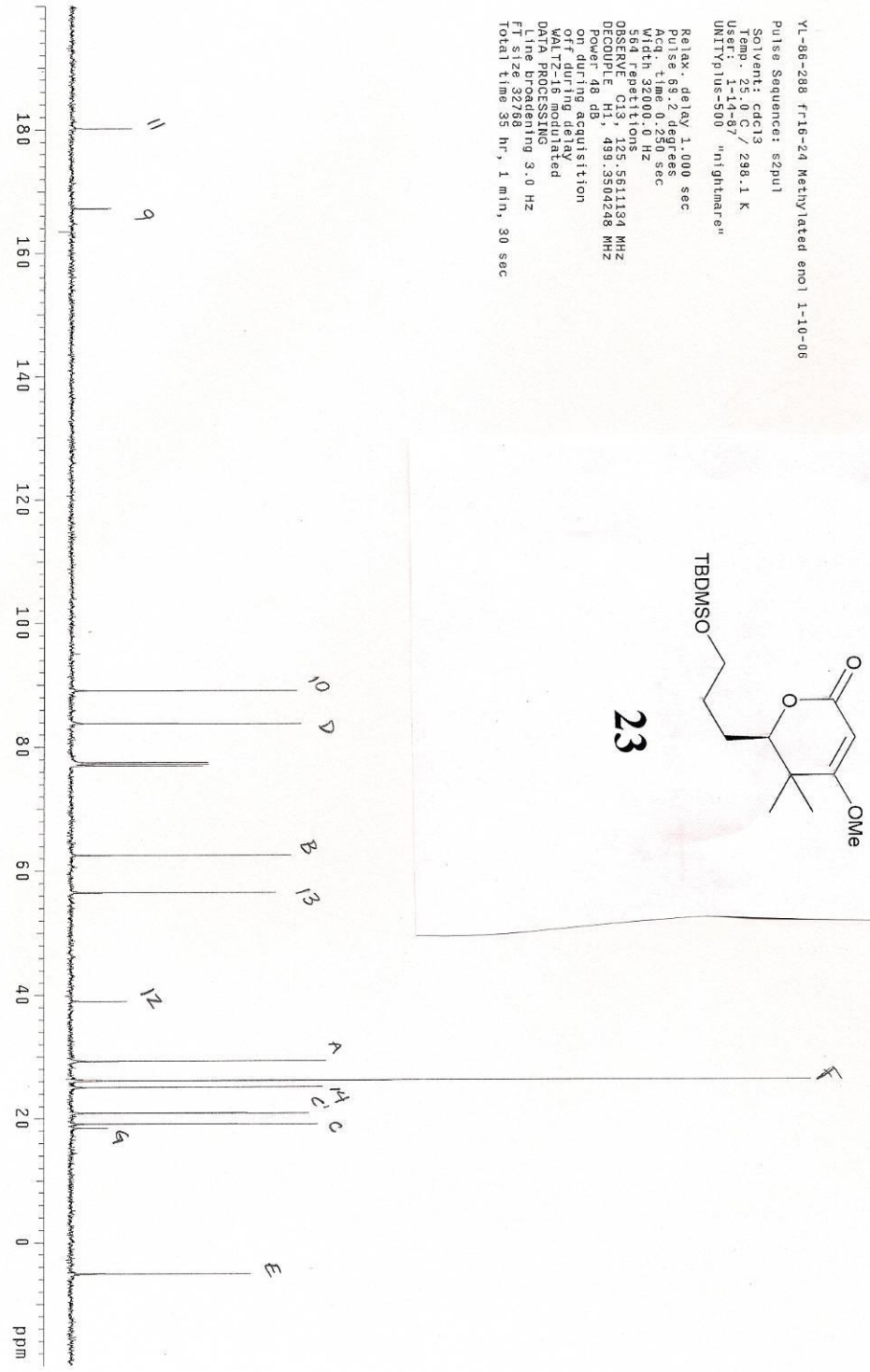
YL-86-288 f-16-24 Methylated enol 1-10-06
 Pulse Sequence: szpu1
 Solvent: CDCl3 / 299.1 K
 Temp: 25.0 C / "lightare"
 Unit: plus-500 "lightare"
 Relax: delay 1.000 sec
 Pulse: 4.000 degrees
 Pulse: 1.000 sec
 Width: 8000.0 Hz
 48 repetitions
 OBSERVE: H1, 499.3479283 MHz
 DATA PROCESSING
 FT size 32768
 Total time 9 min, 40 sec

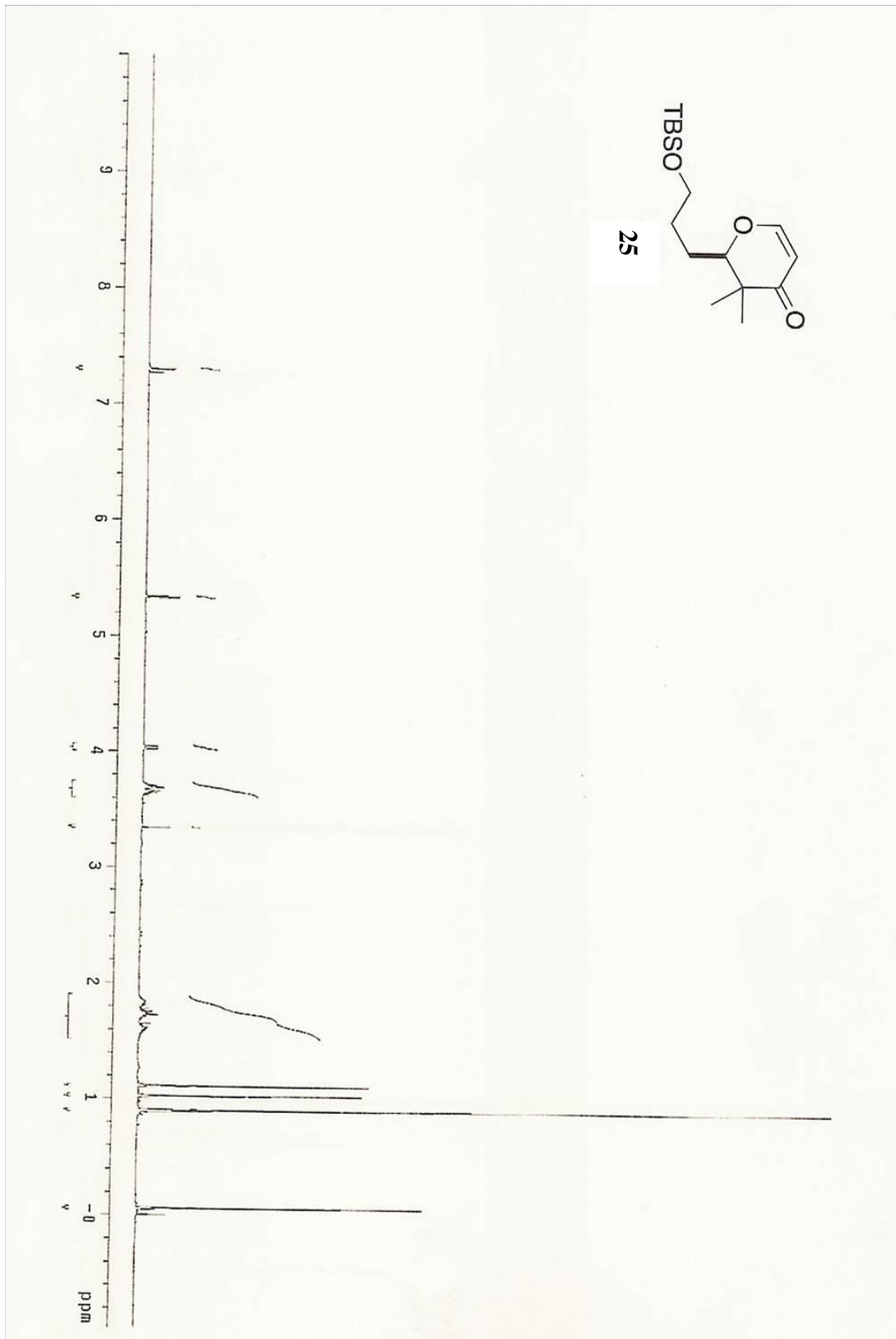


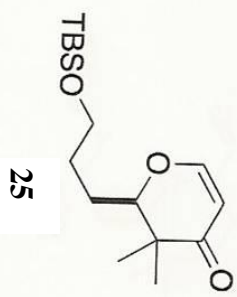
23



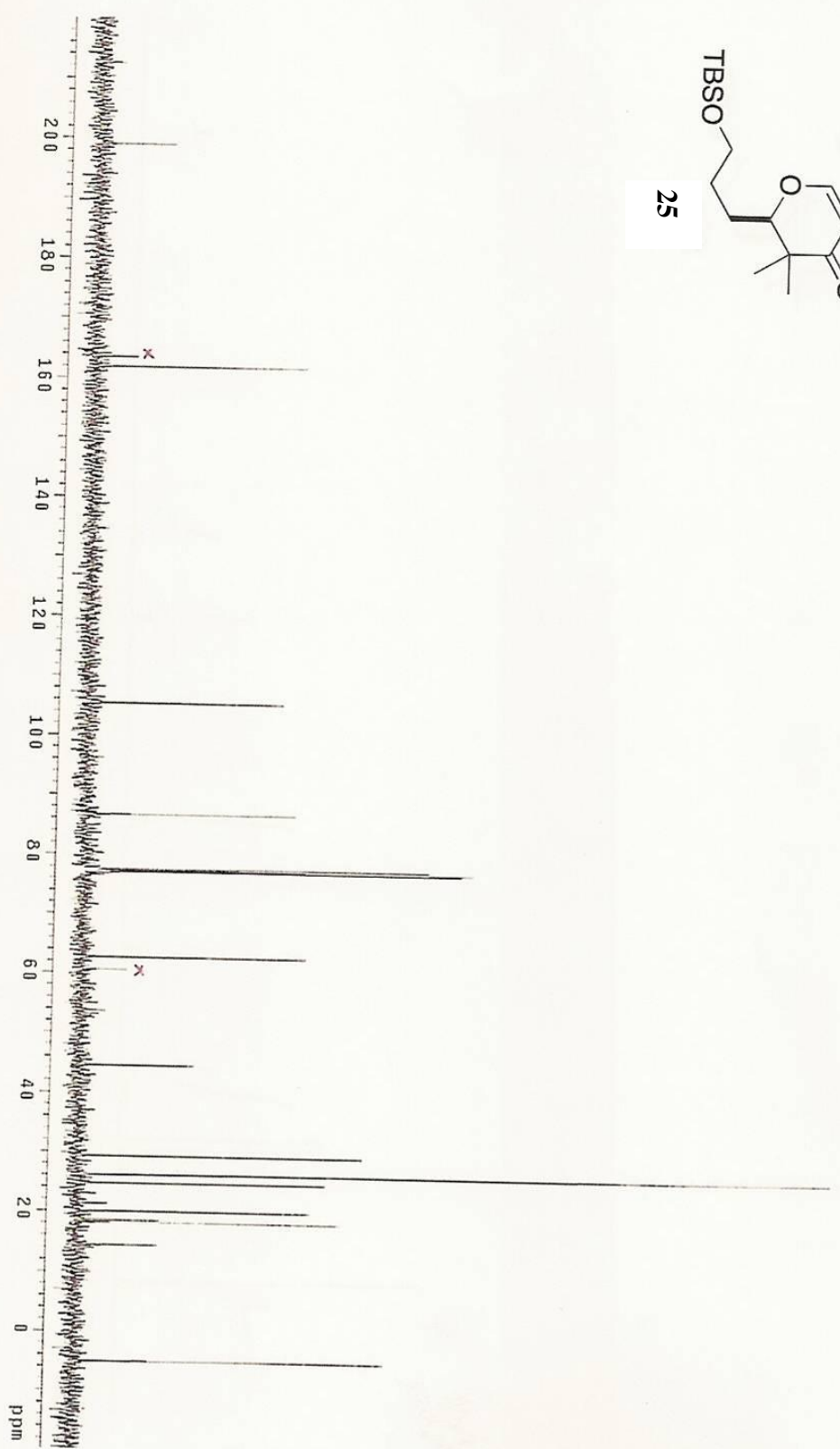
YL-86-288 fr-16-24 Methylated enol 1-10-06
 Pulse Sequence: s2pul
 Solvent: cdcl3
 Temp: 25.0 C / 298.1 K
 User: 1-14-87 "nightmare"
 UNITYplus-500 "nightmare"
 Relax. delay 1.000 sec
 Pulse 99.2 degrees
 Acq. time 0.250 sec
 F1 300.136 MHz
 564 repetitions
 OBSERVE C13, 125.5611194 MHz
 DECOUPLE H1, 499.3504248 MHz
 Power 48 db
 on during delay
 off during acquisition
 WALTZ16 modulated
 DALT 160.000 MHz
 Line broadening 3.0 Hz
 FT size 32768
 Total time 35 hr, 1 min, 30 sec

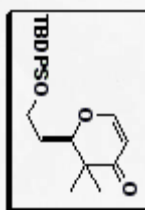




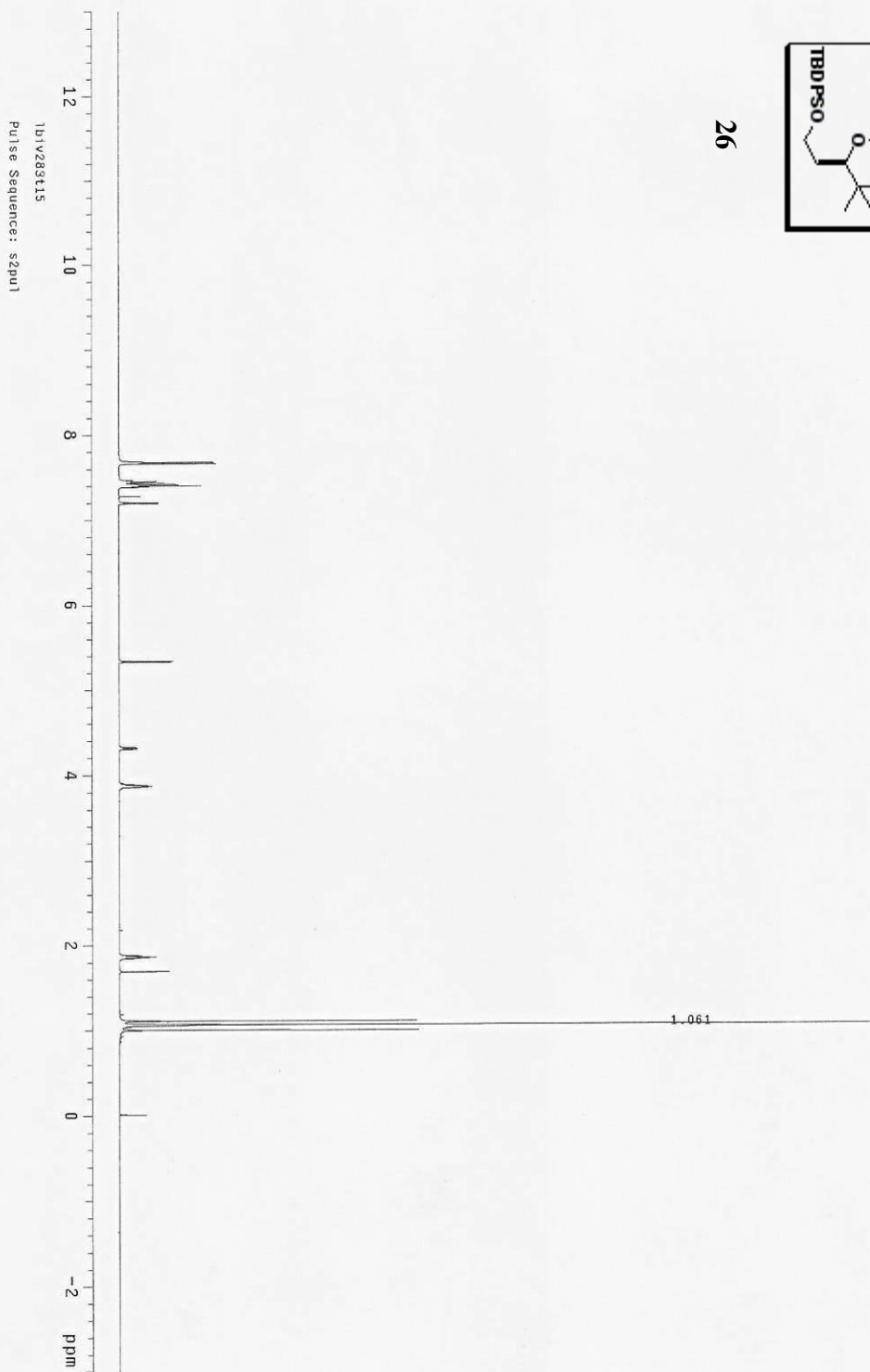


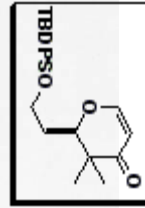
25



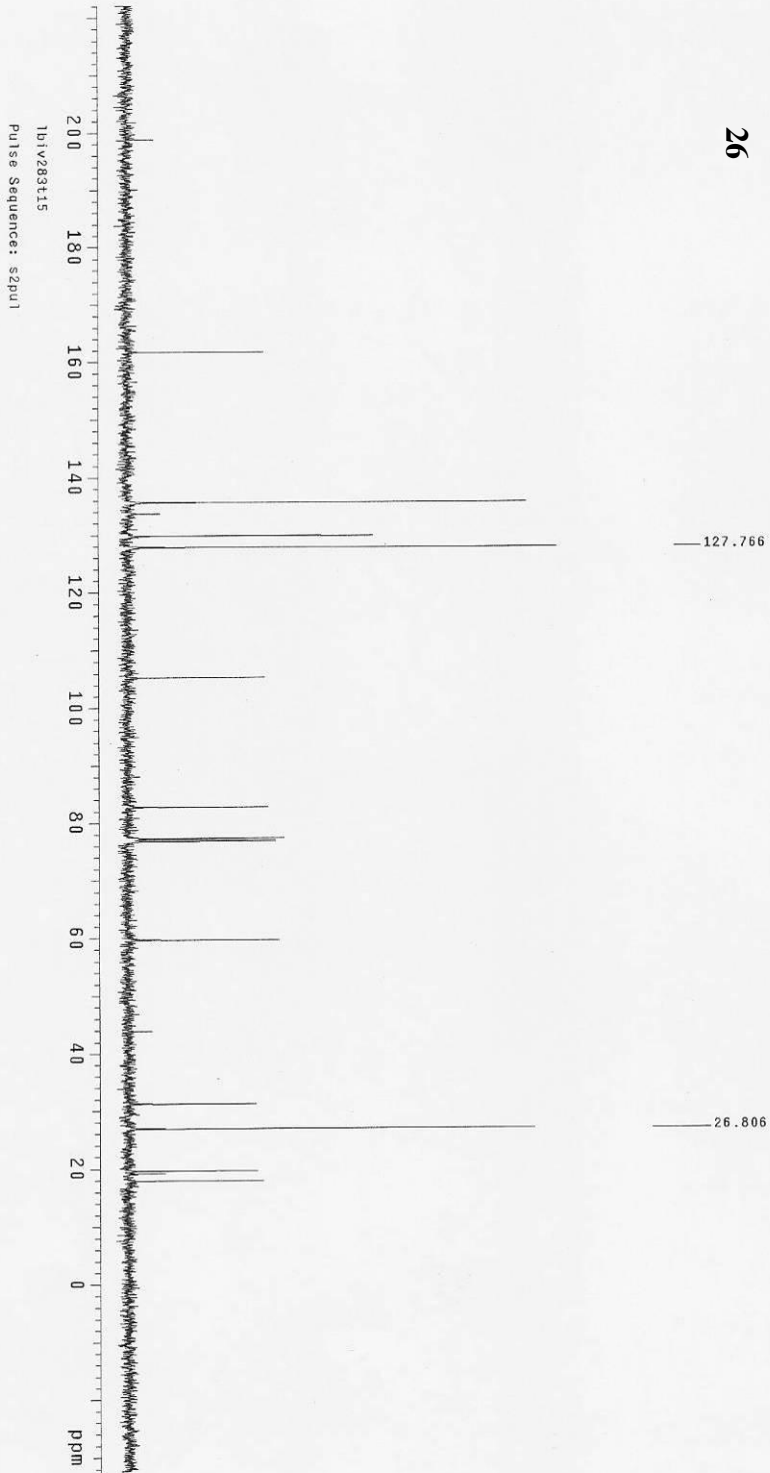


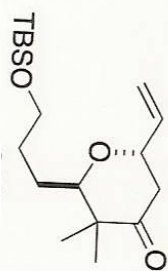
26



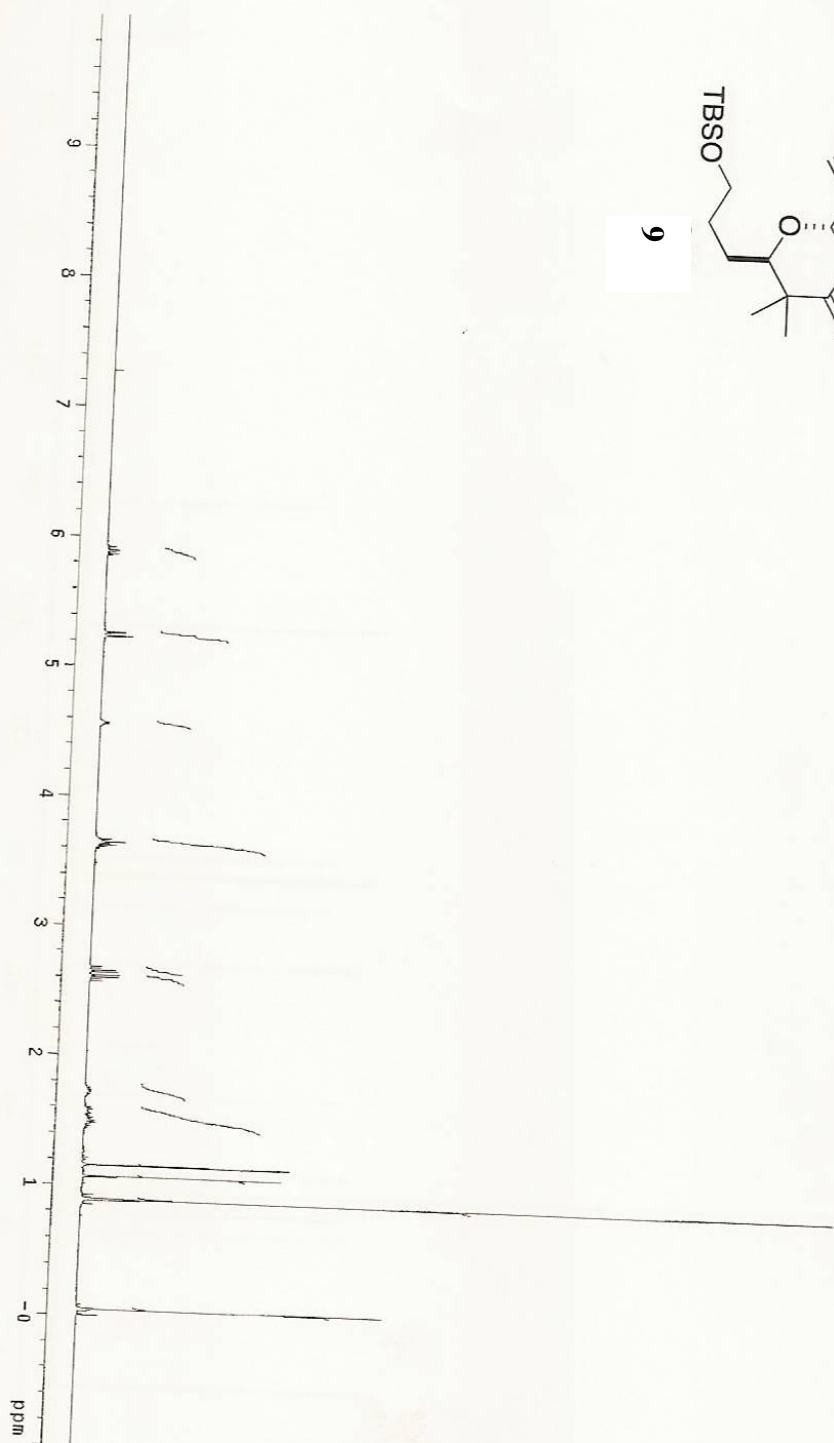


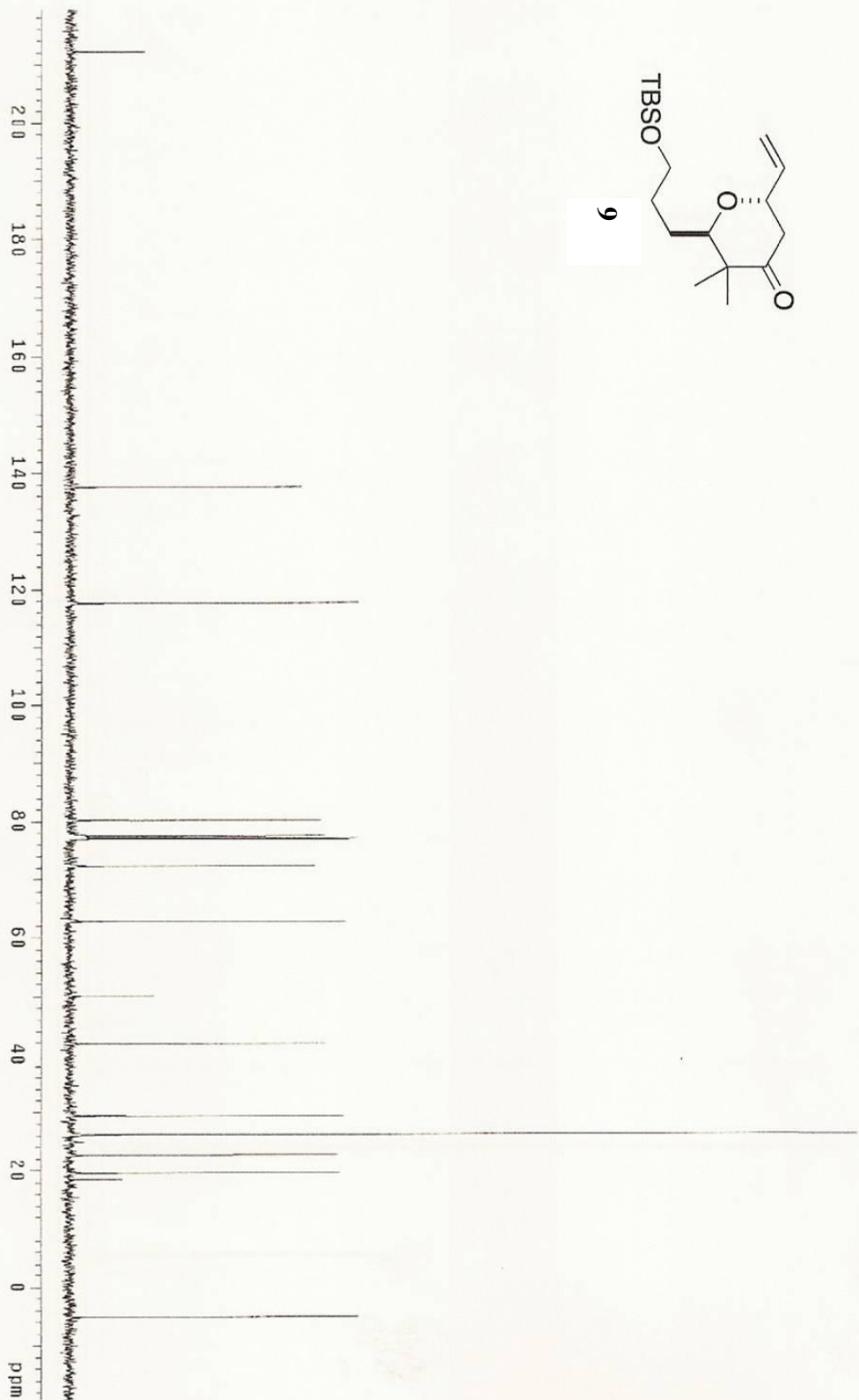
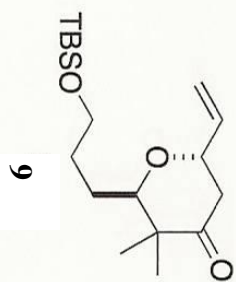
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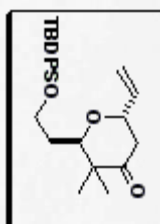




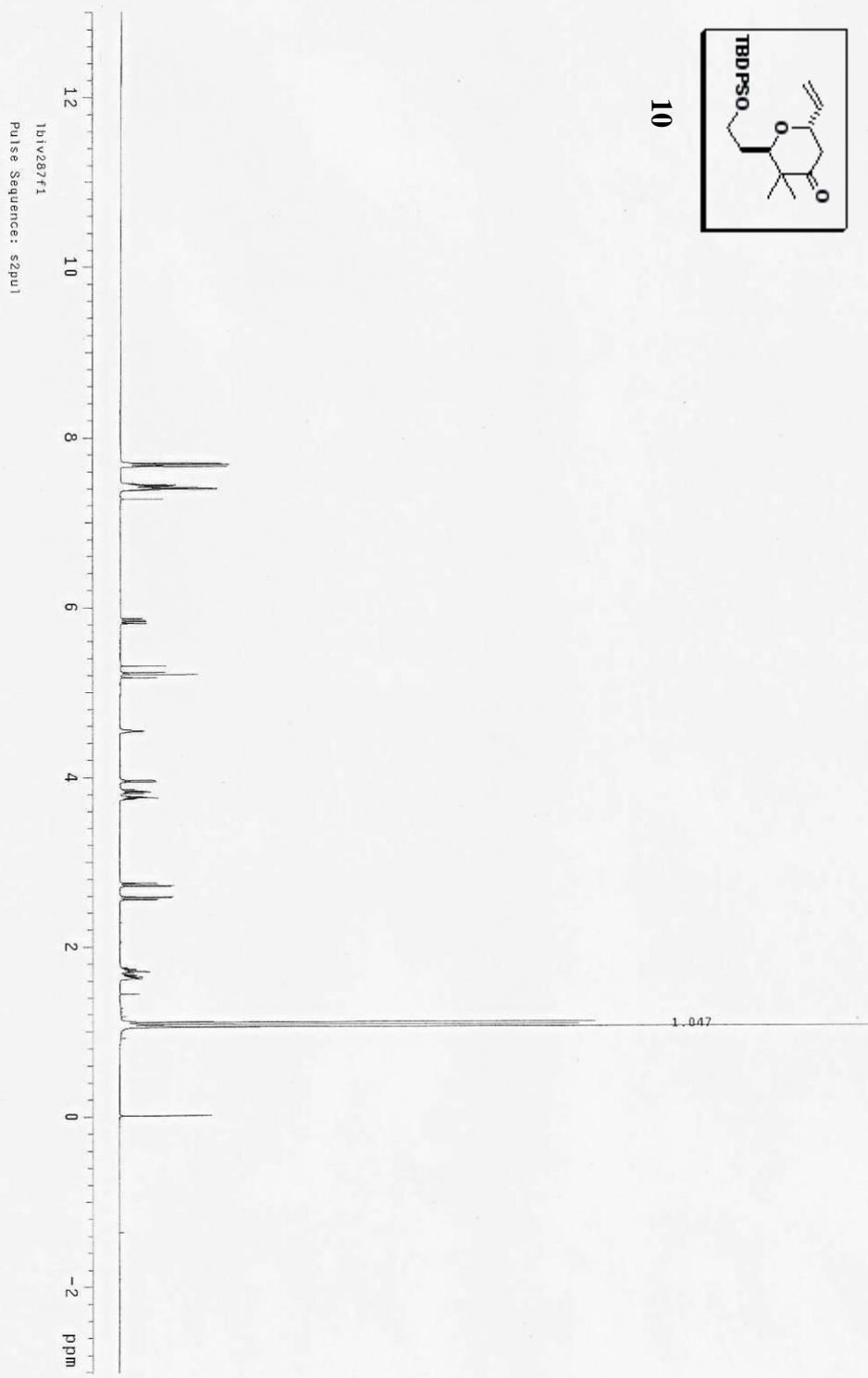
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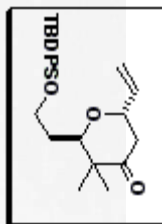




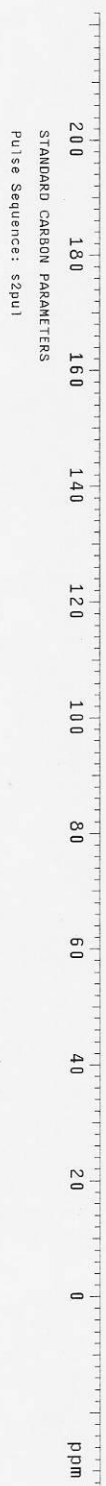


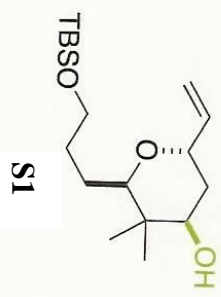
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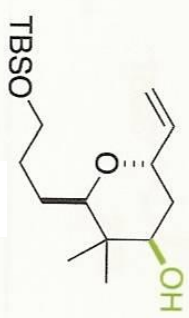




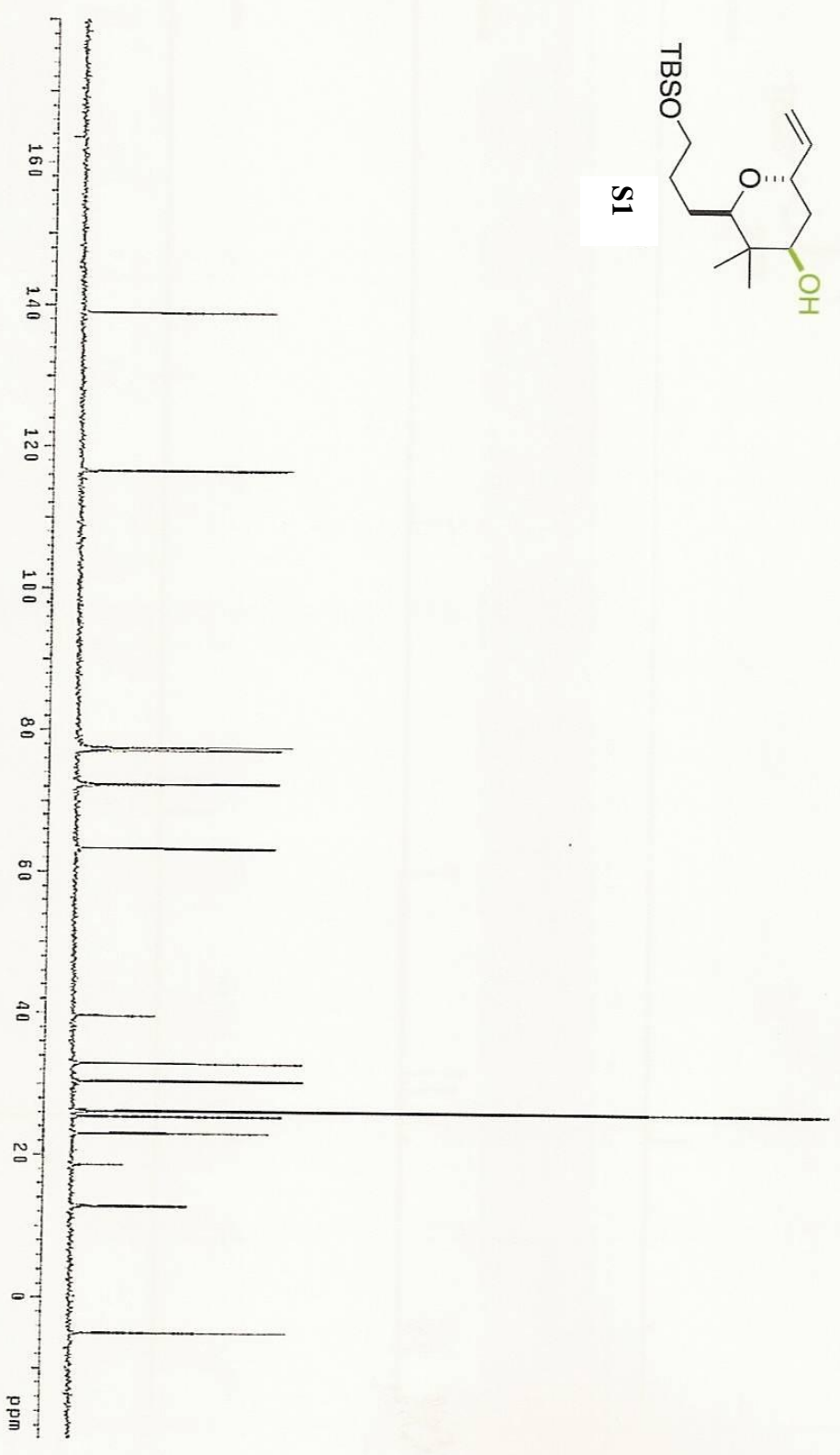
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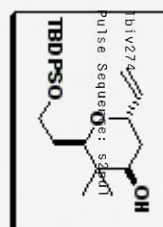




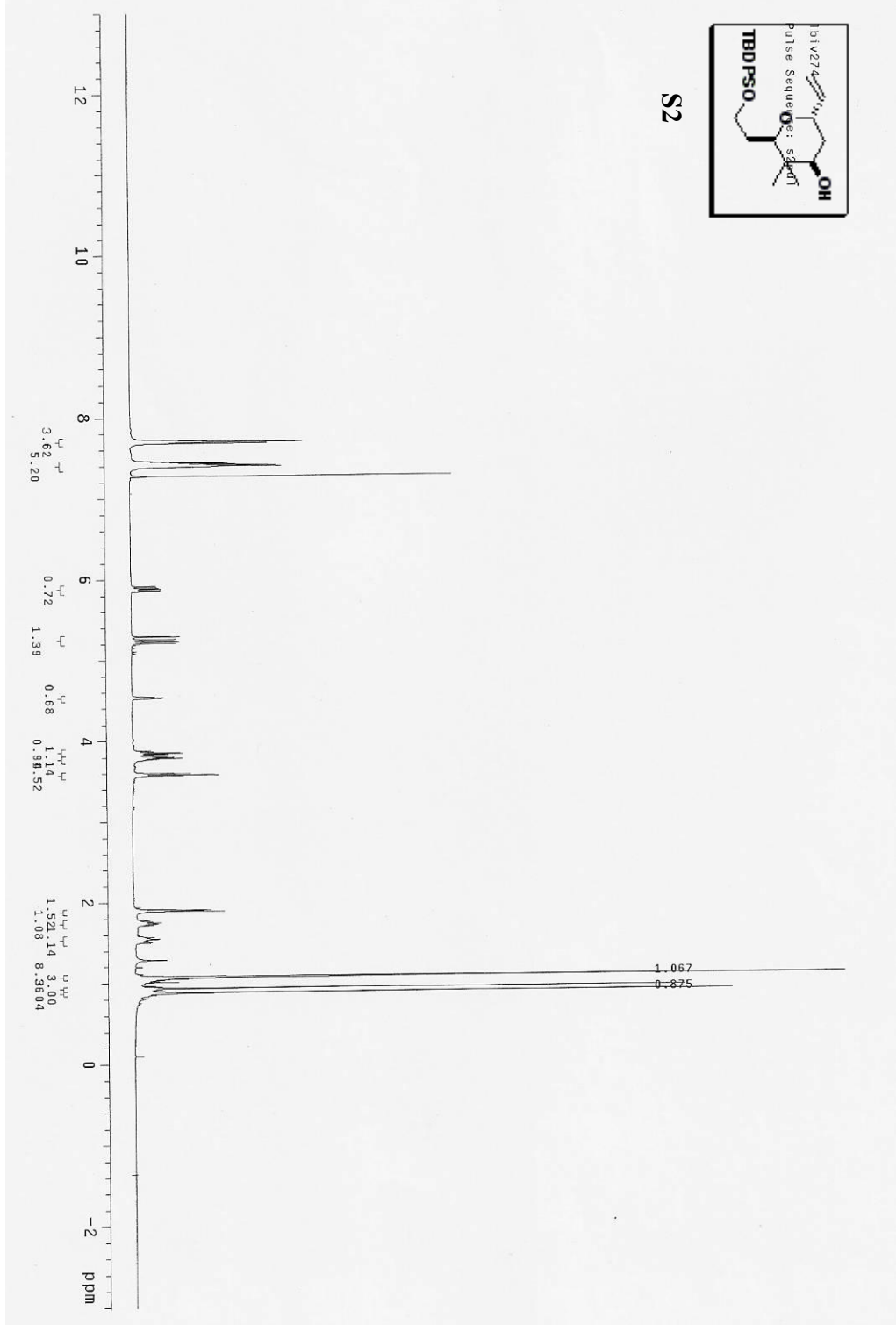


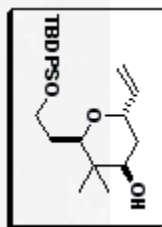
S1



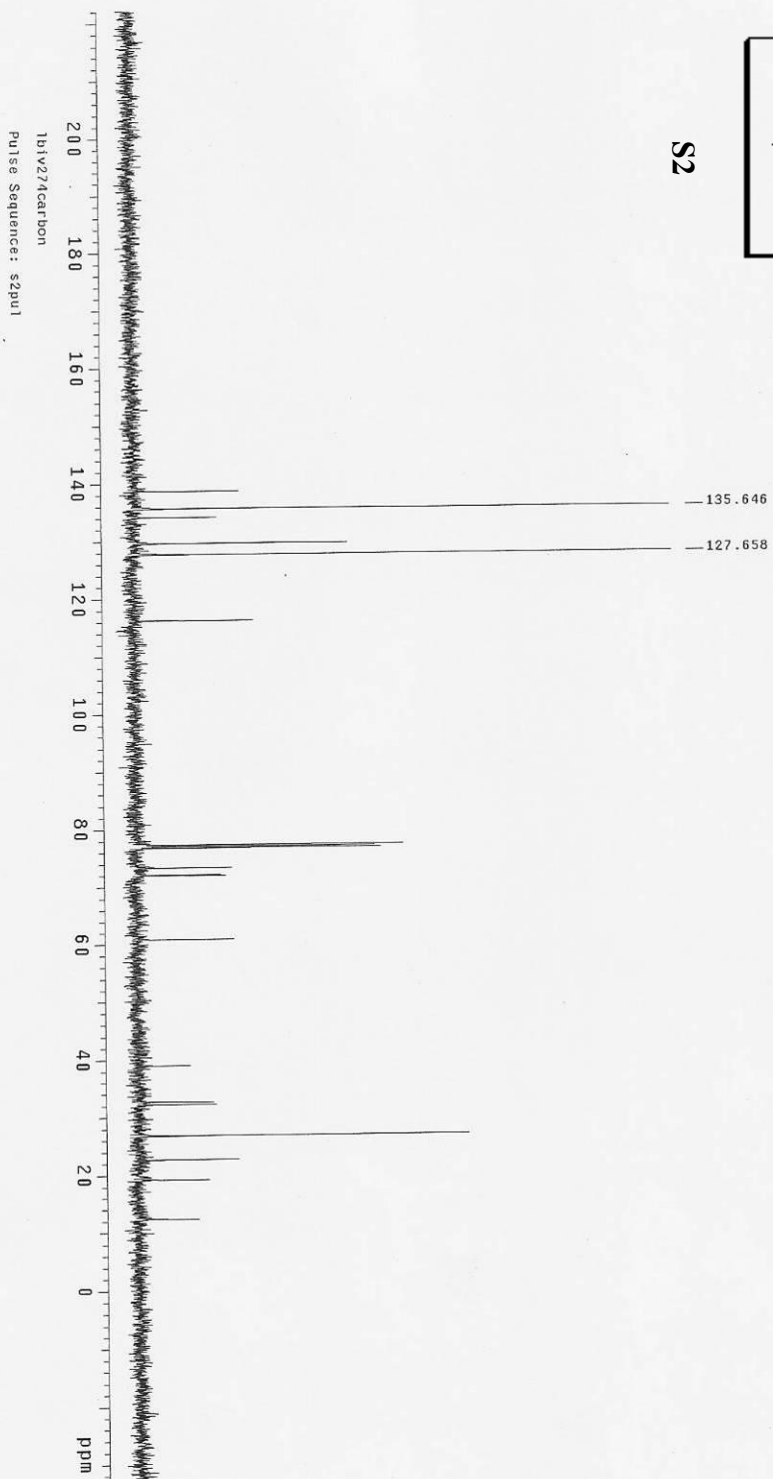


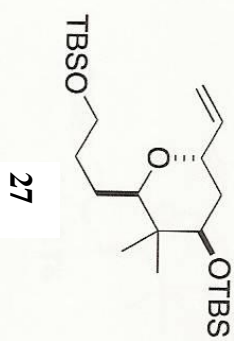
S2

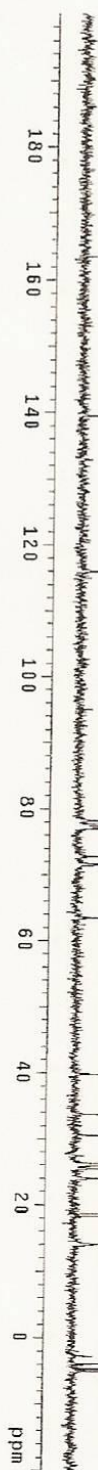
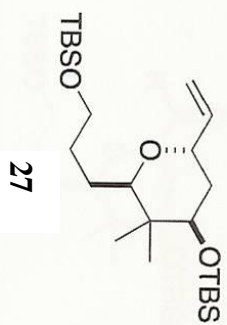


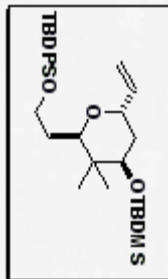


S2

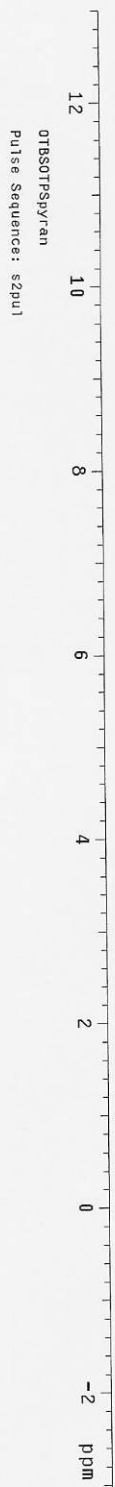


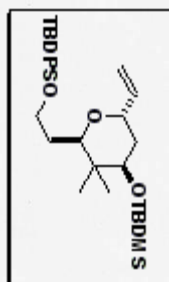






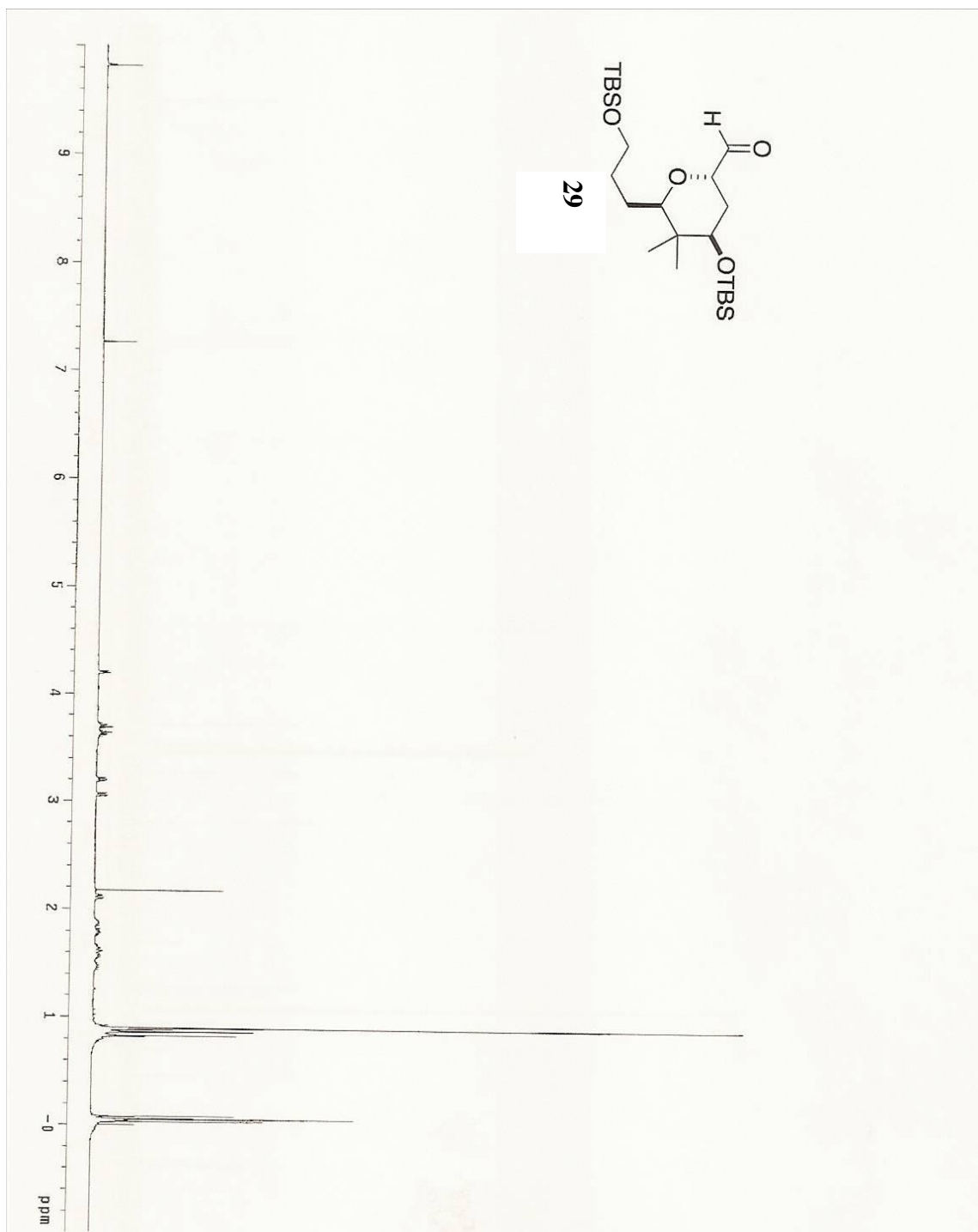
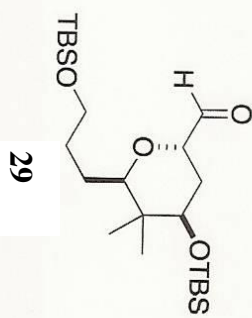
28

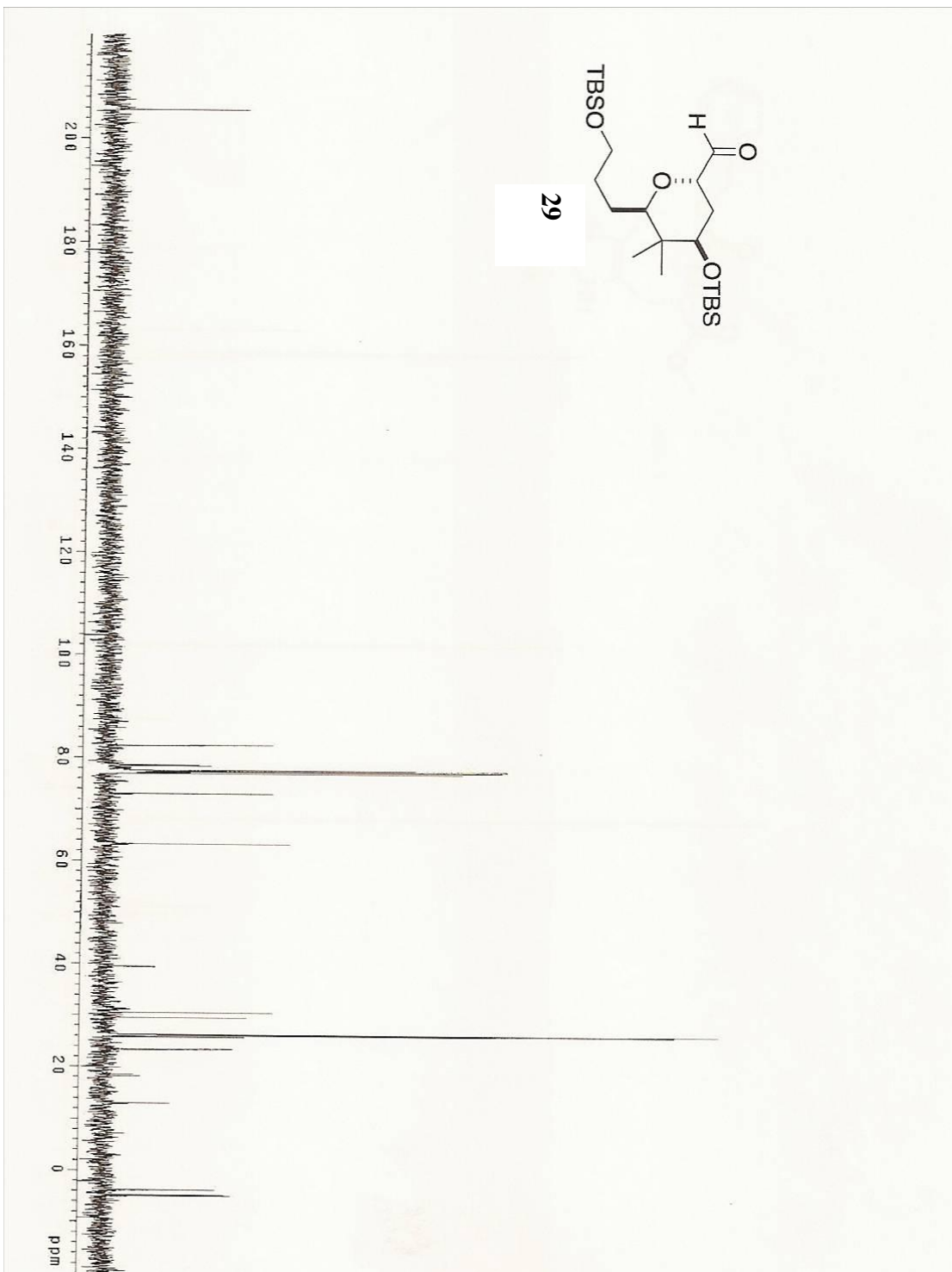


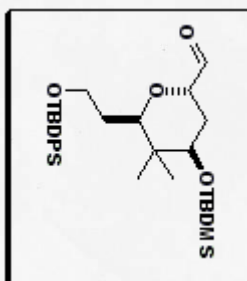


28

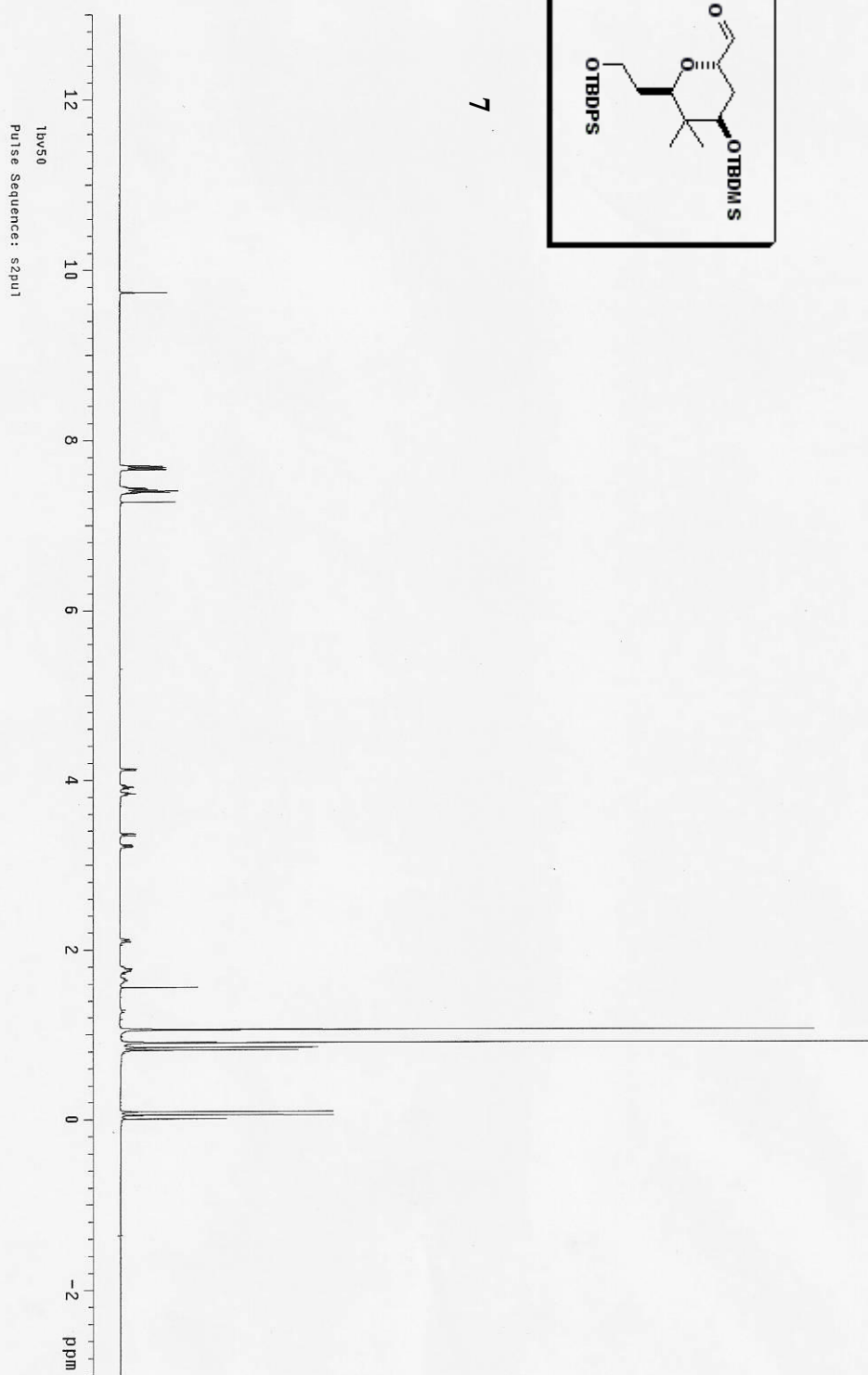


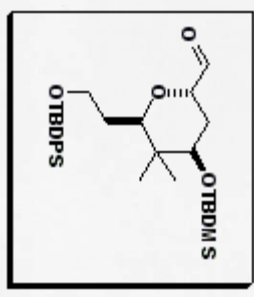




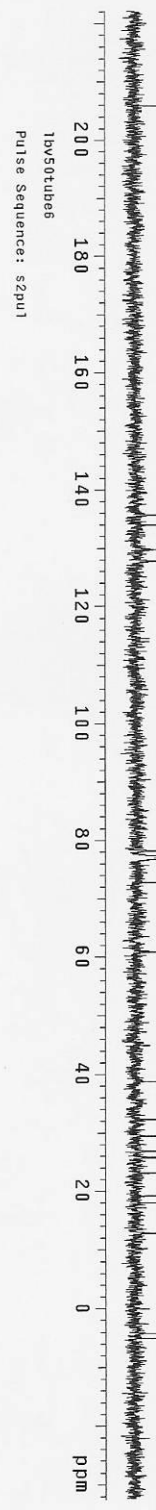


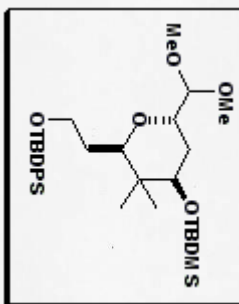
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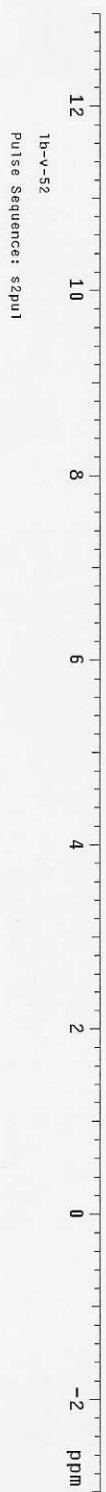


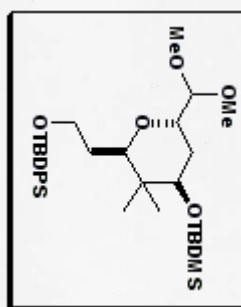
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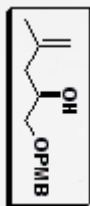
6



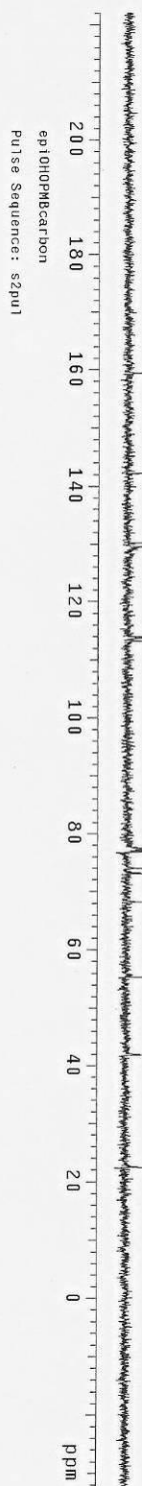


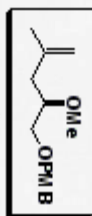
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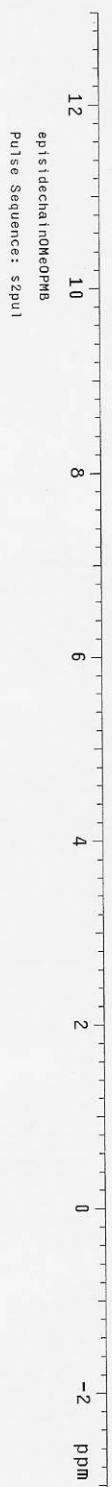


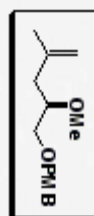
31





32



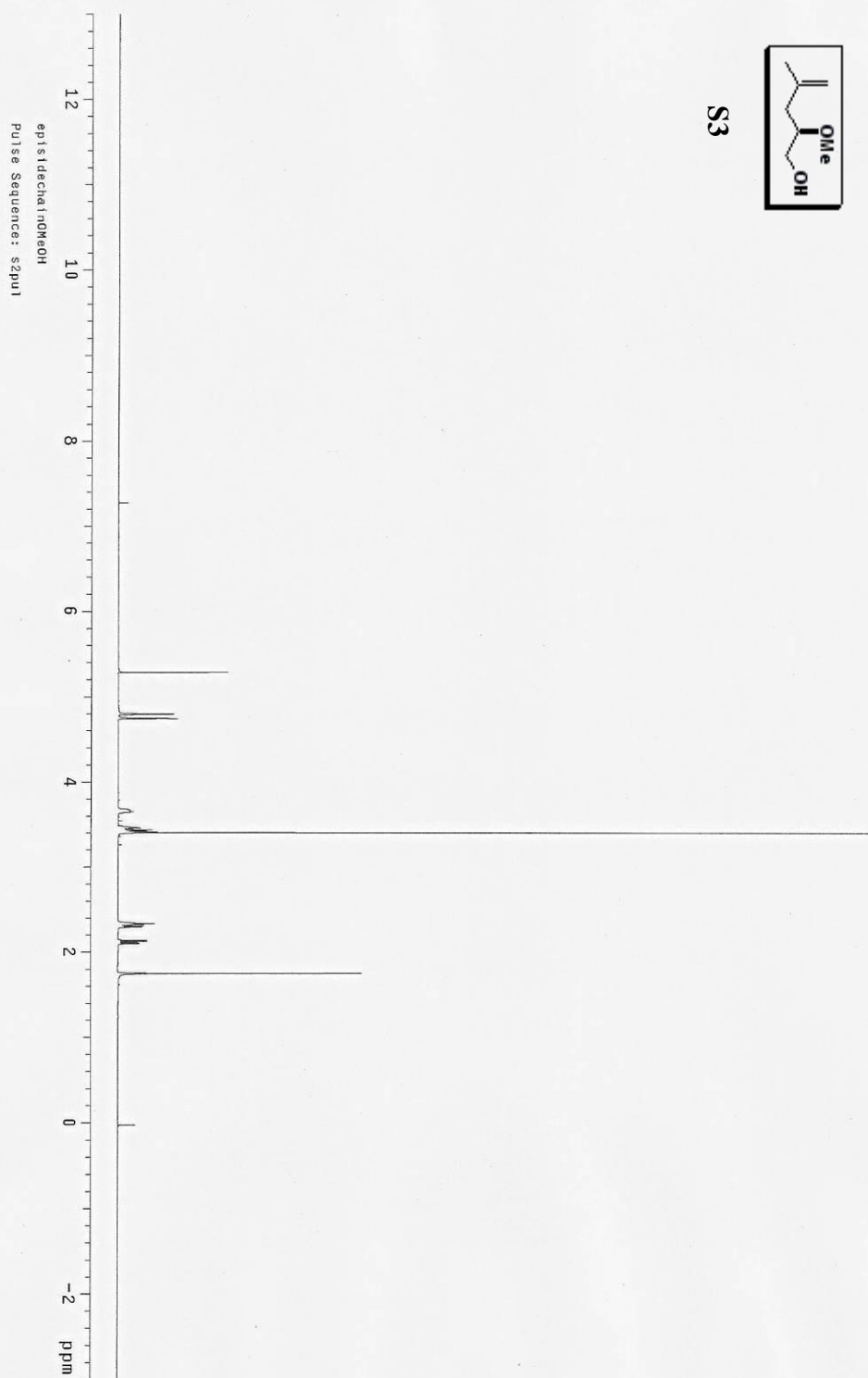


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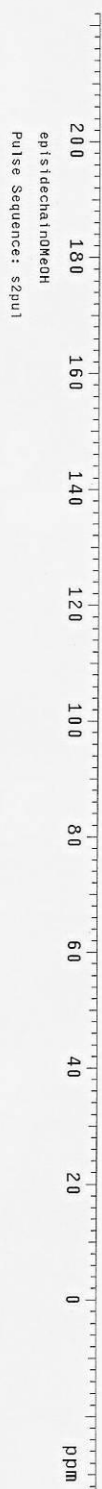


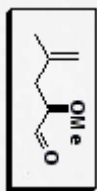
S3





S3





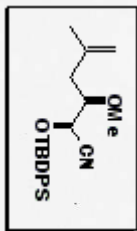
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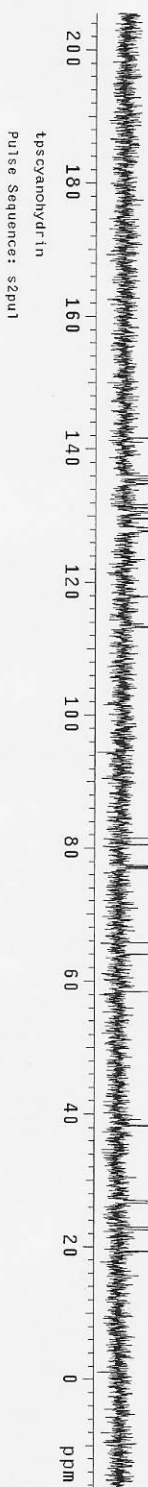


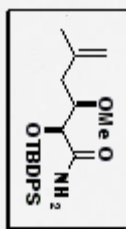
33



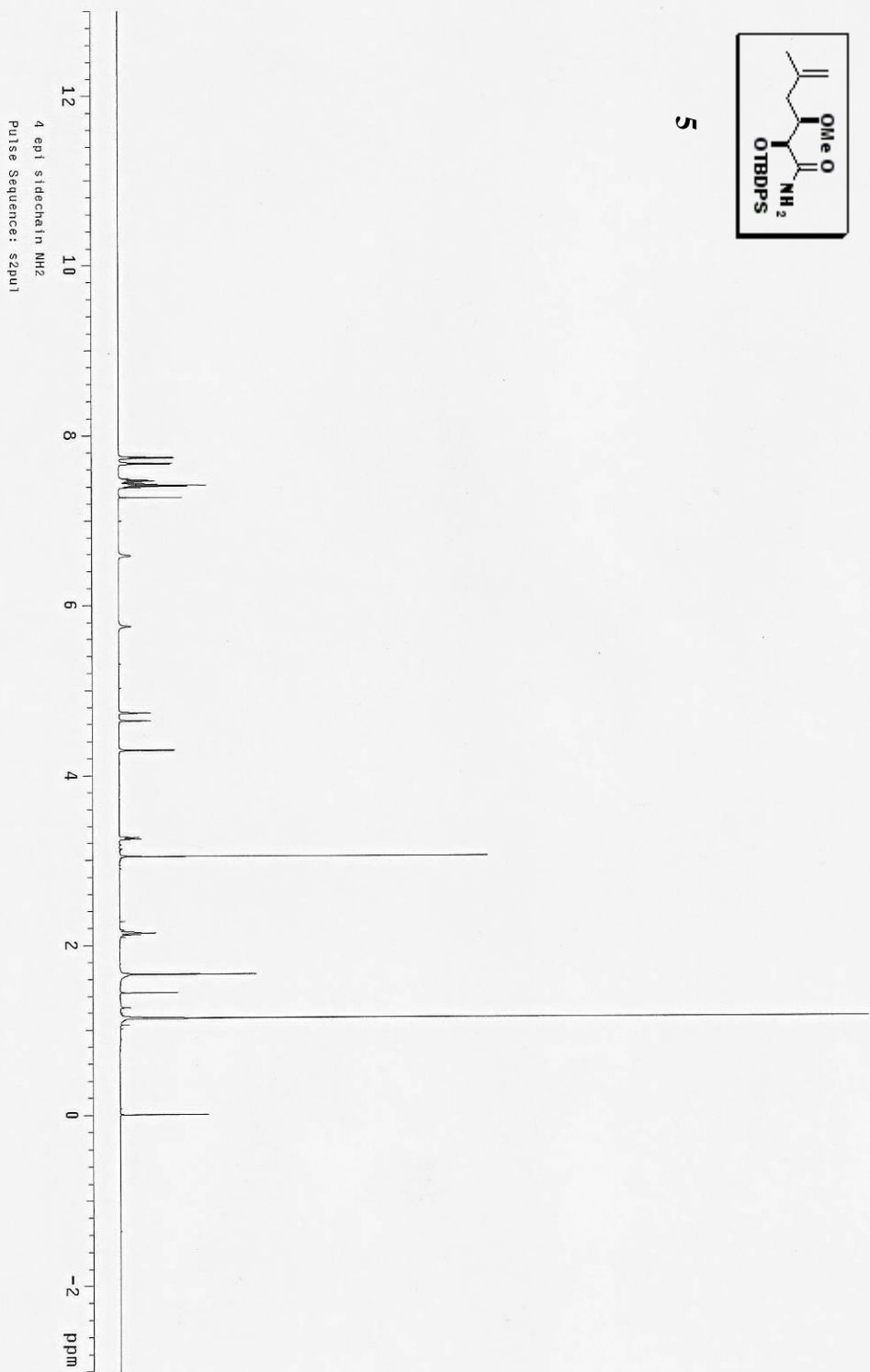


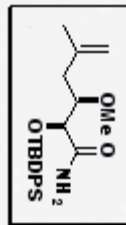
34



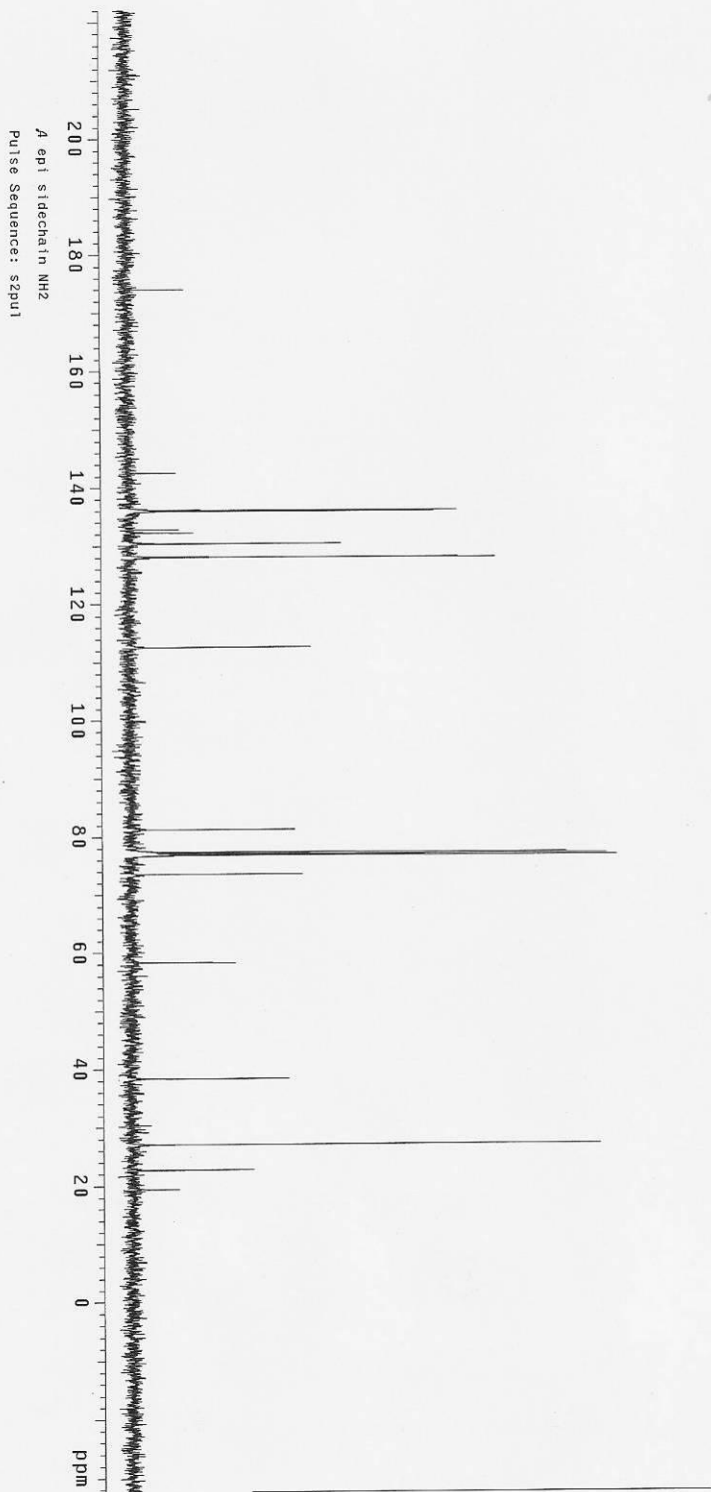


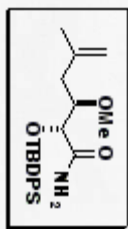
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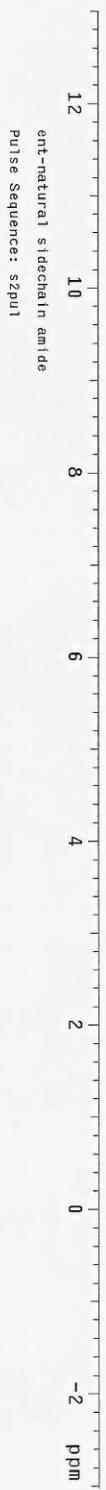


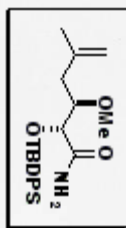
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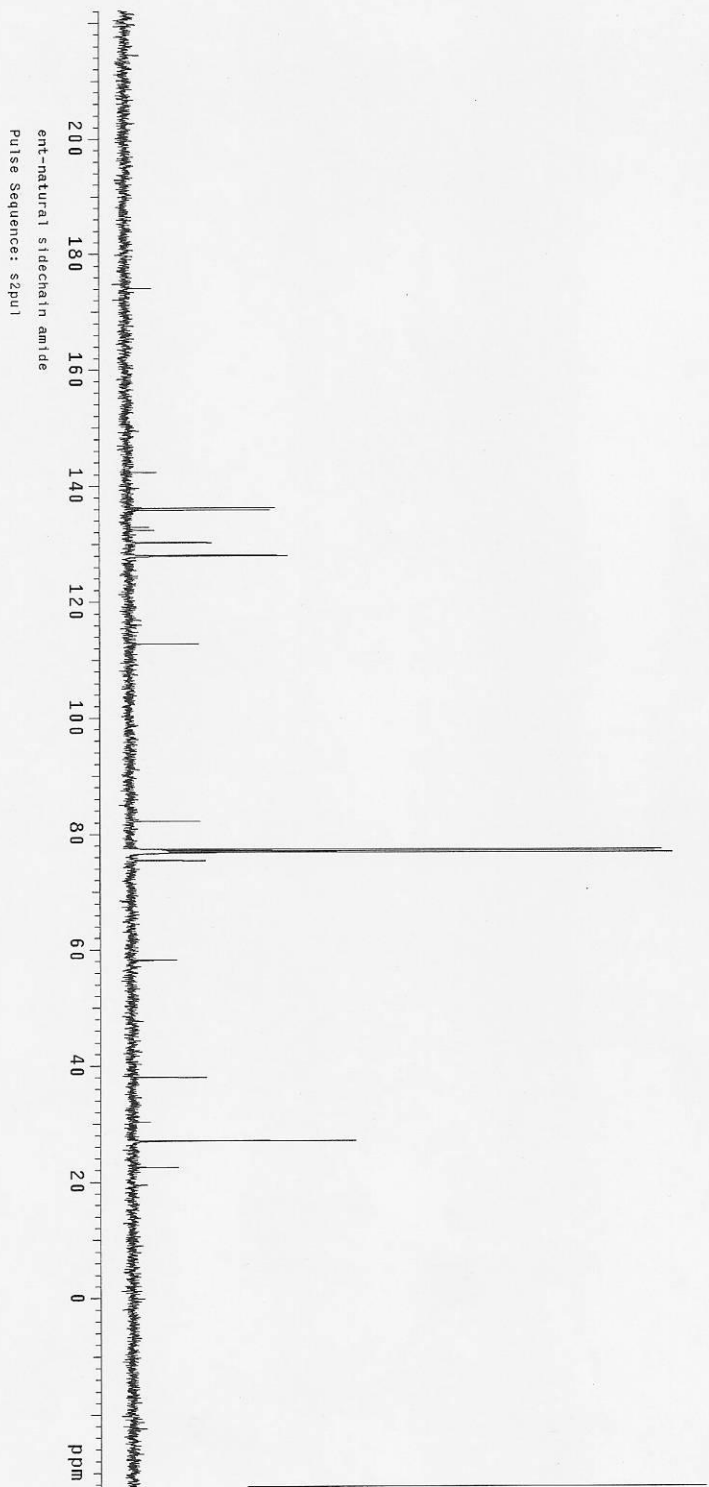


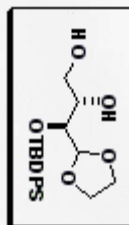
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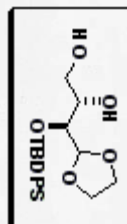
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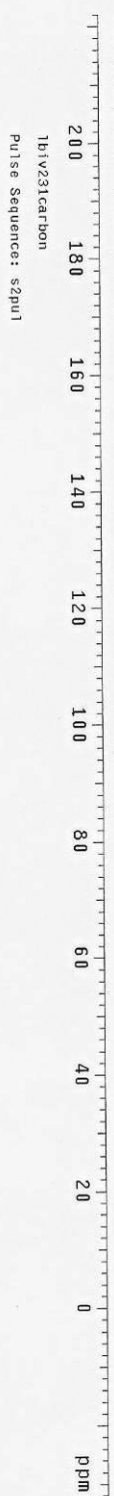


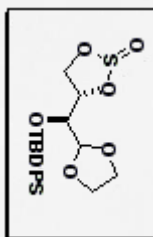
38





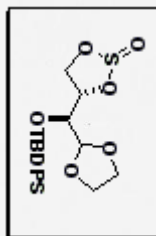
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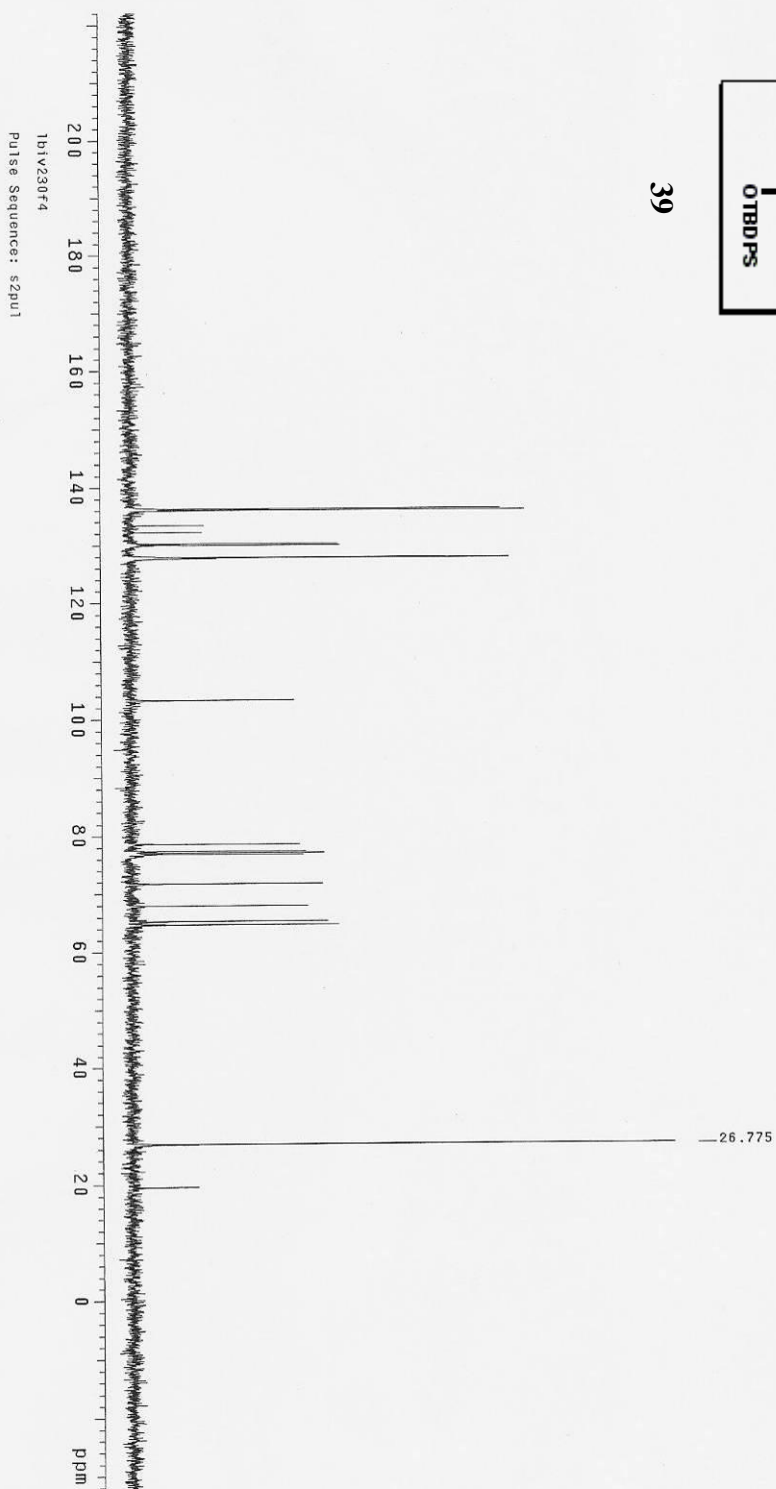


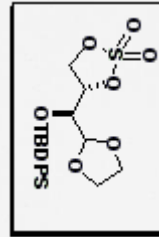
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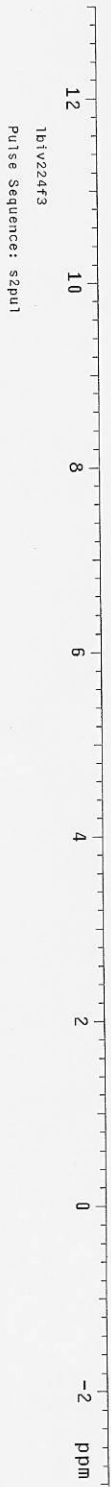


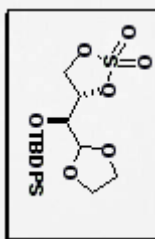
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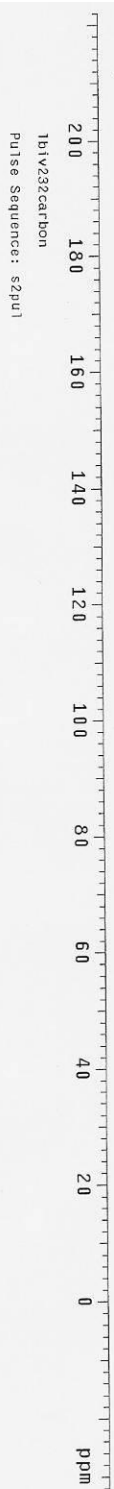


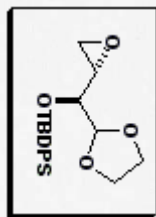
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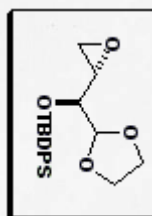
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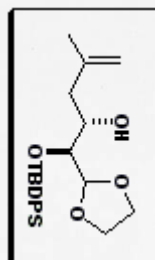
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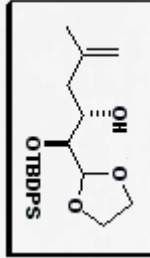
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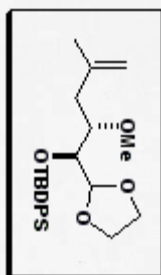
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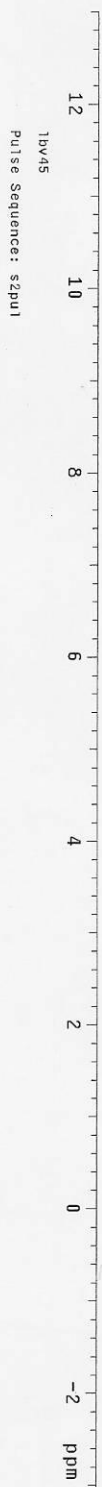


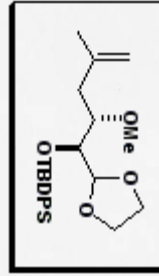
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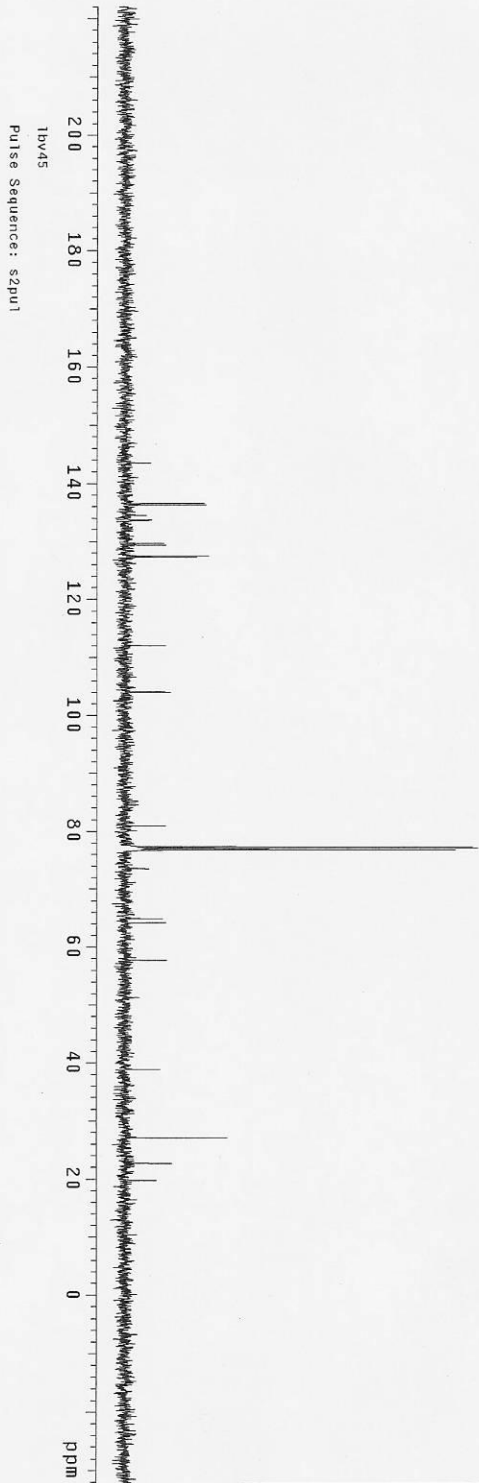


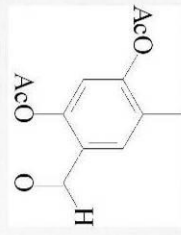
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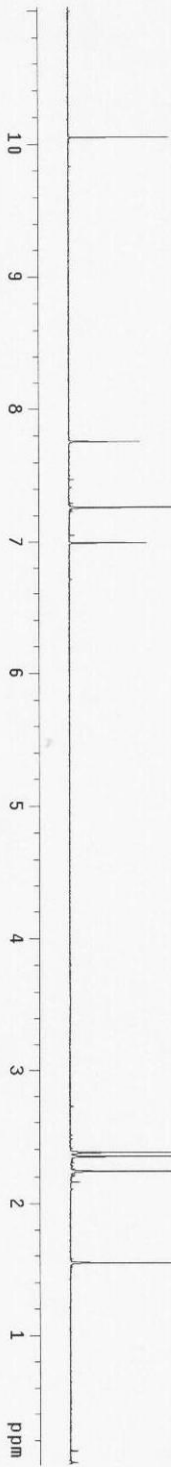


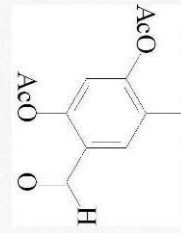
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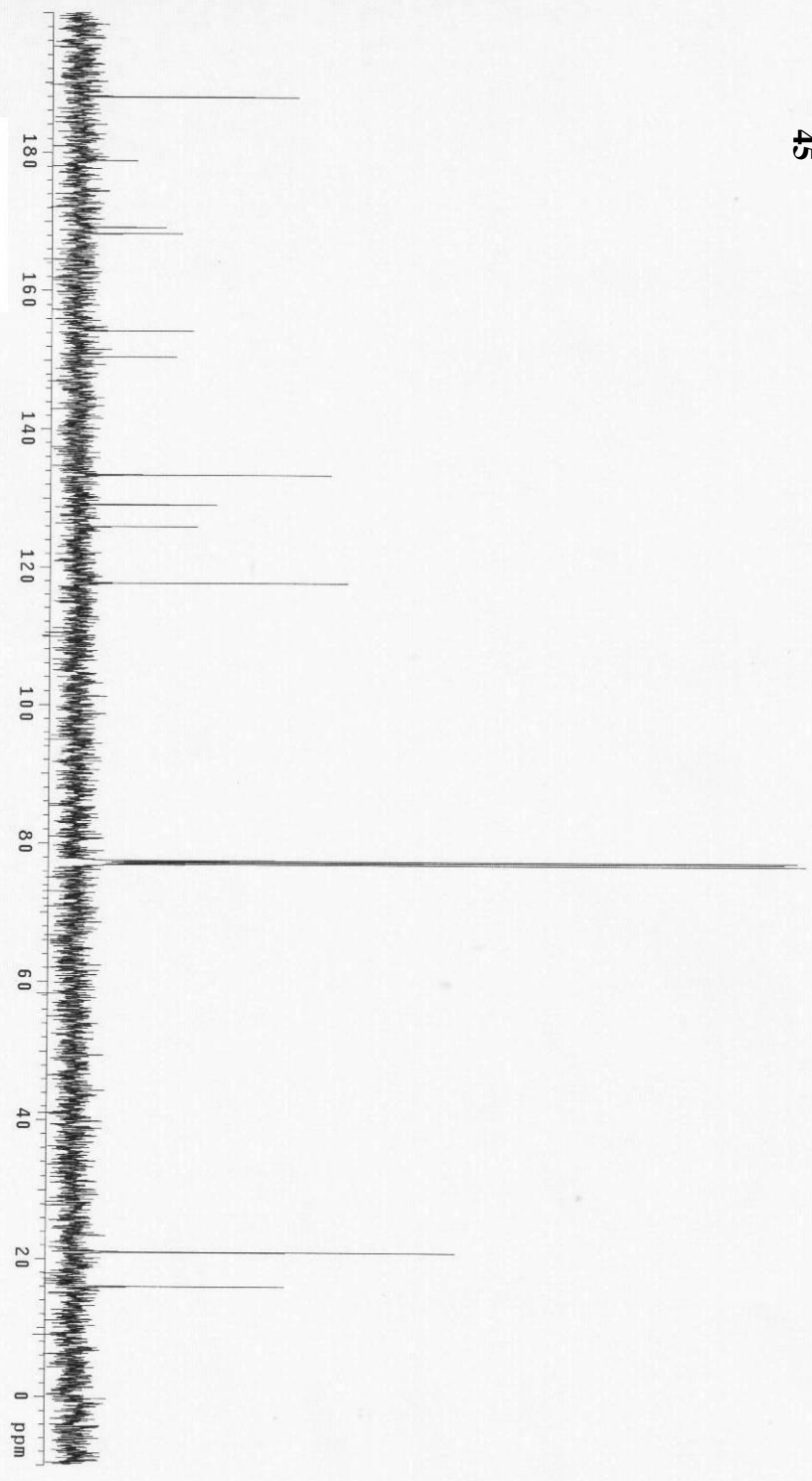


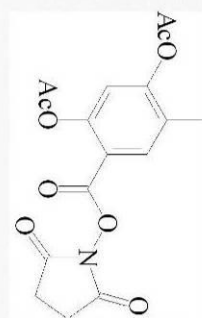
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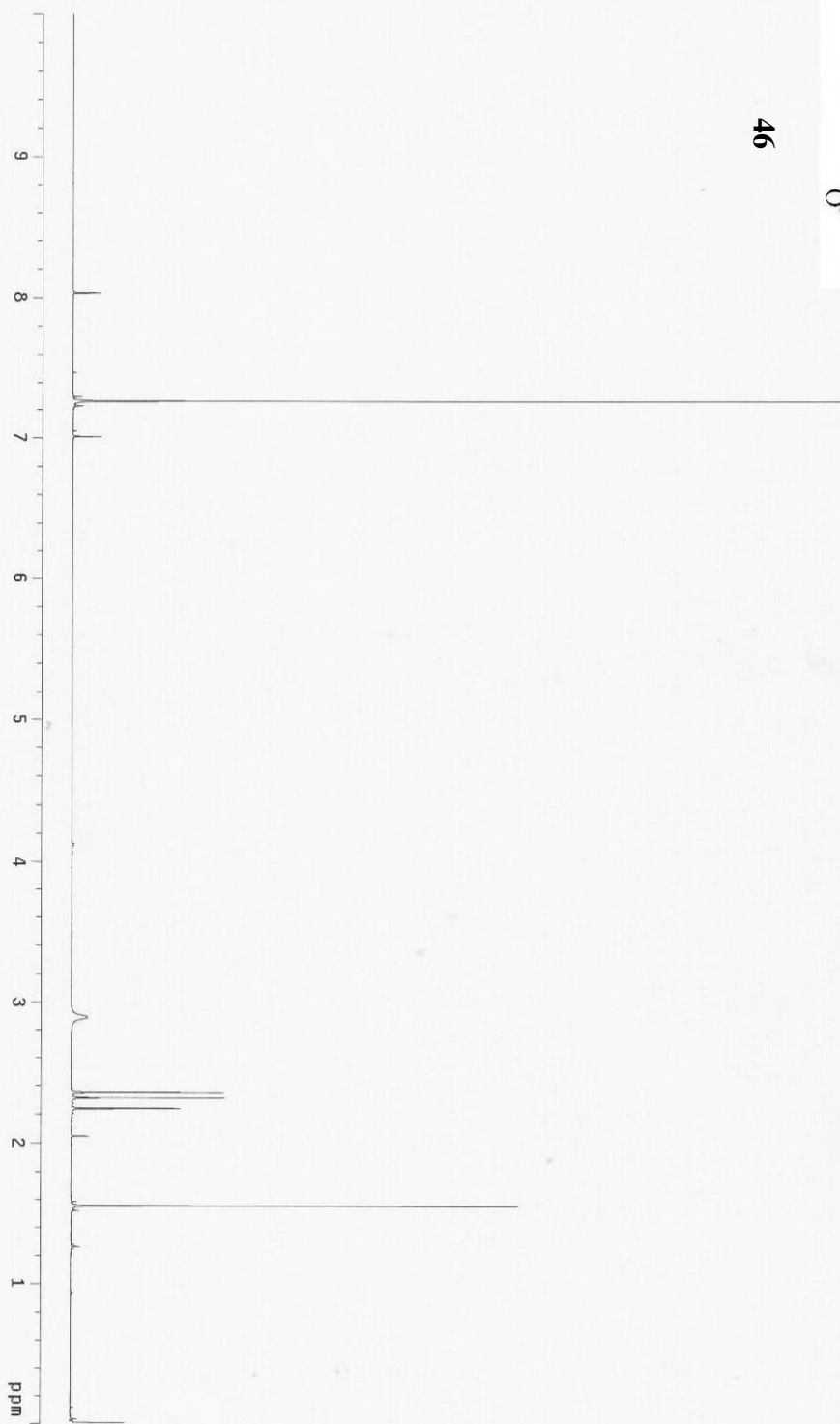


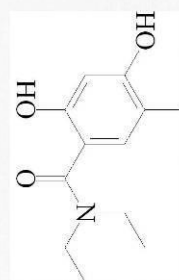
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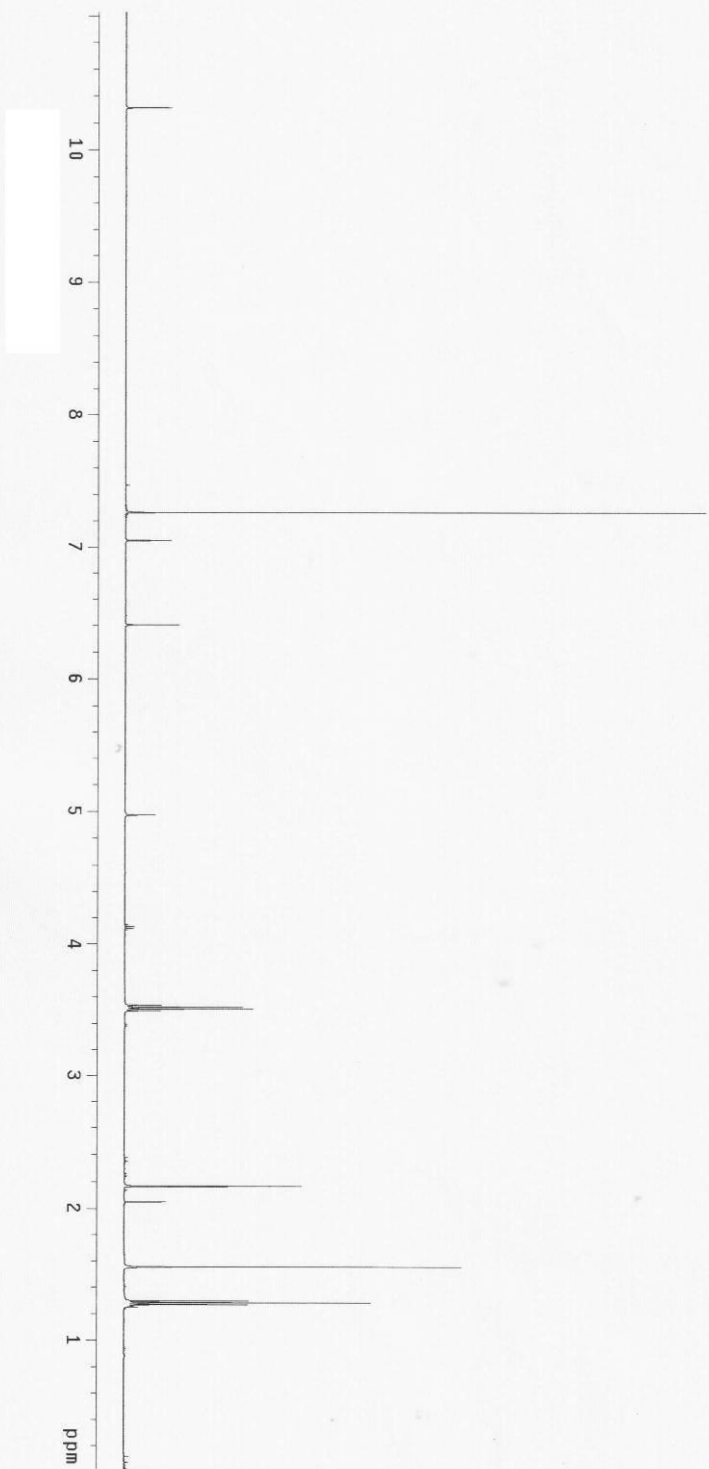


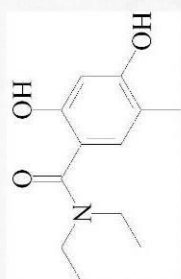
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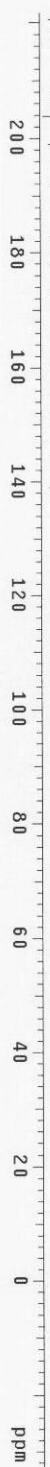


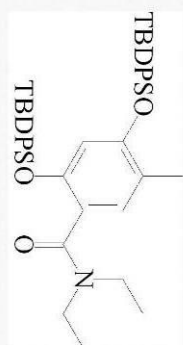
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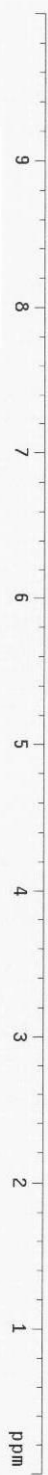


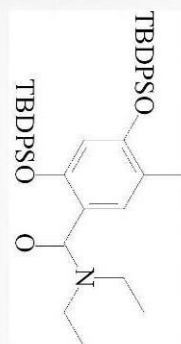
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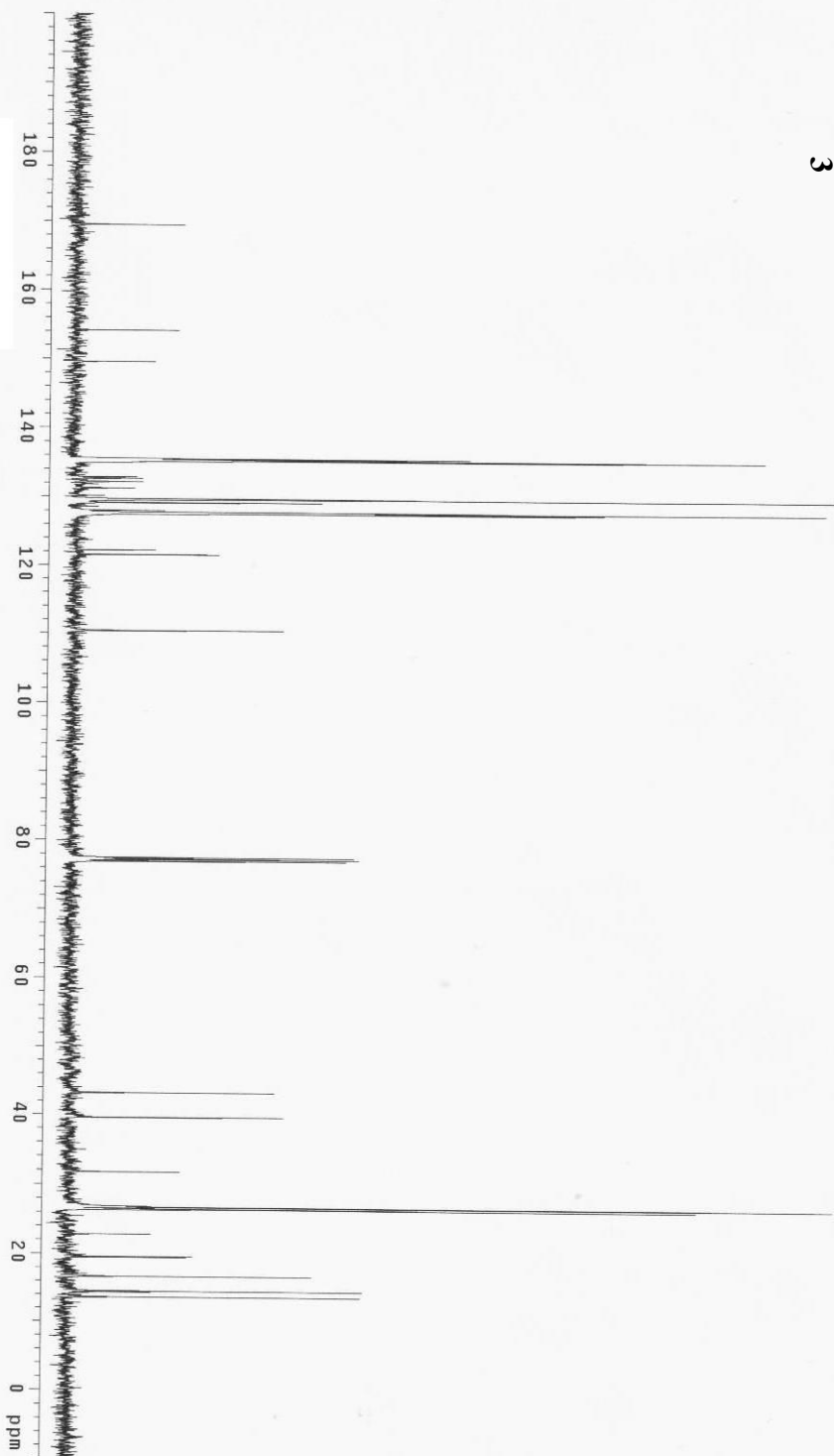


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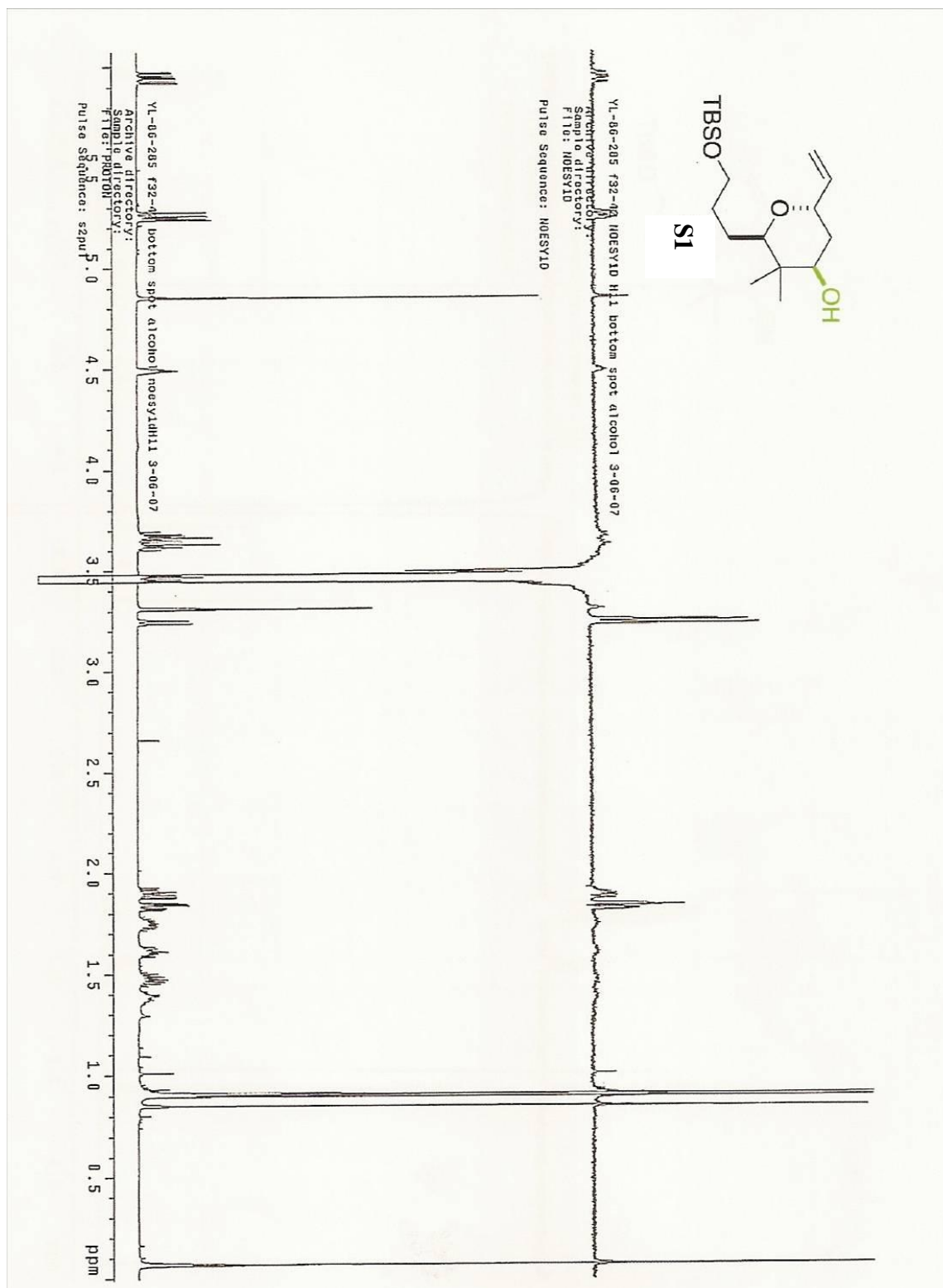




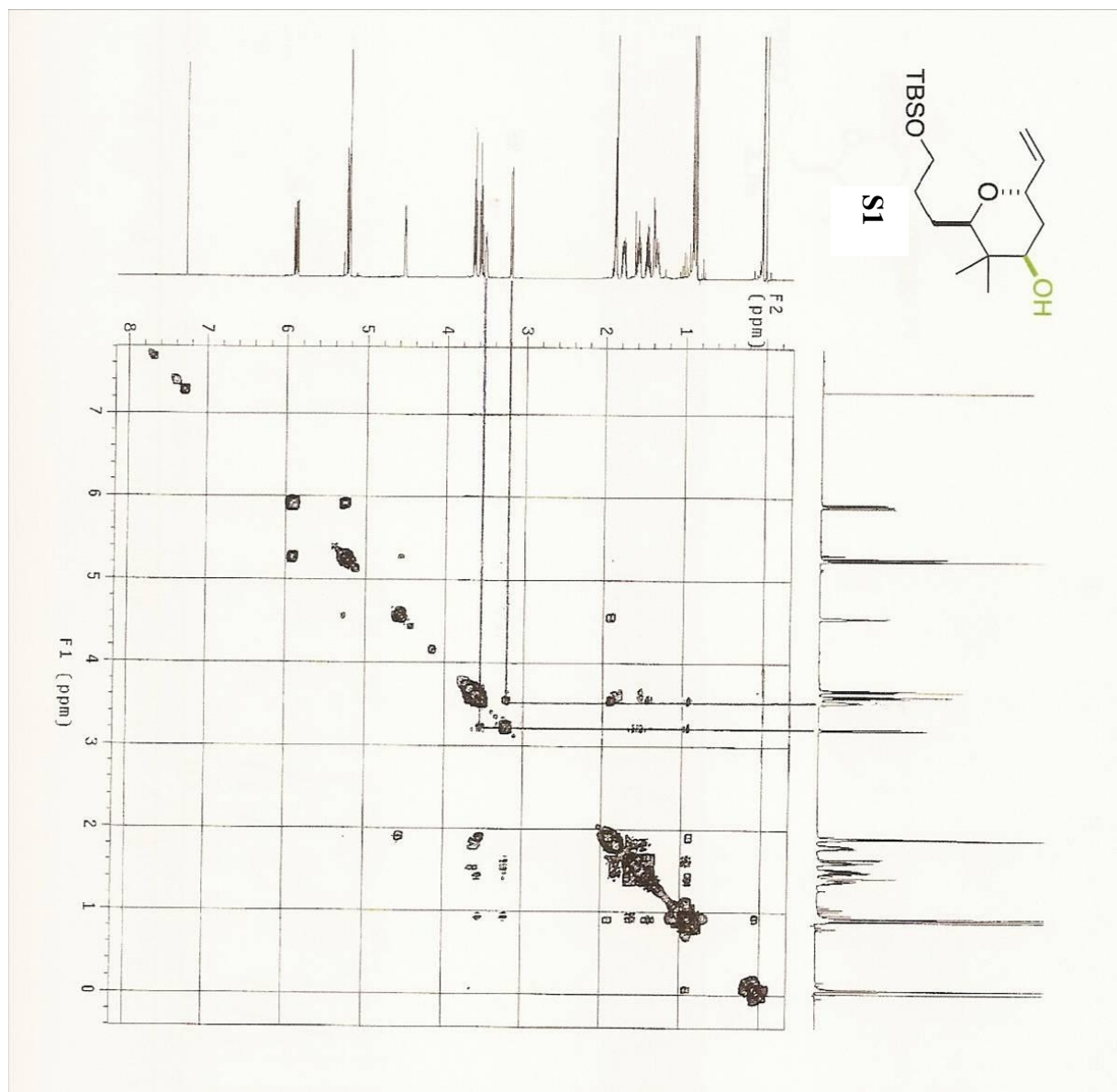
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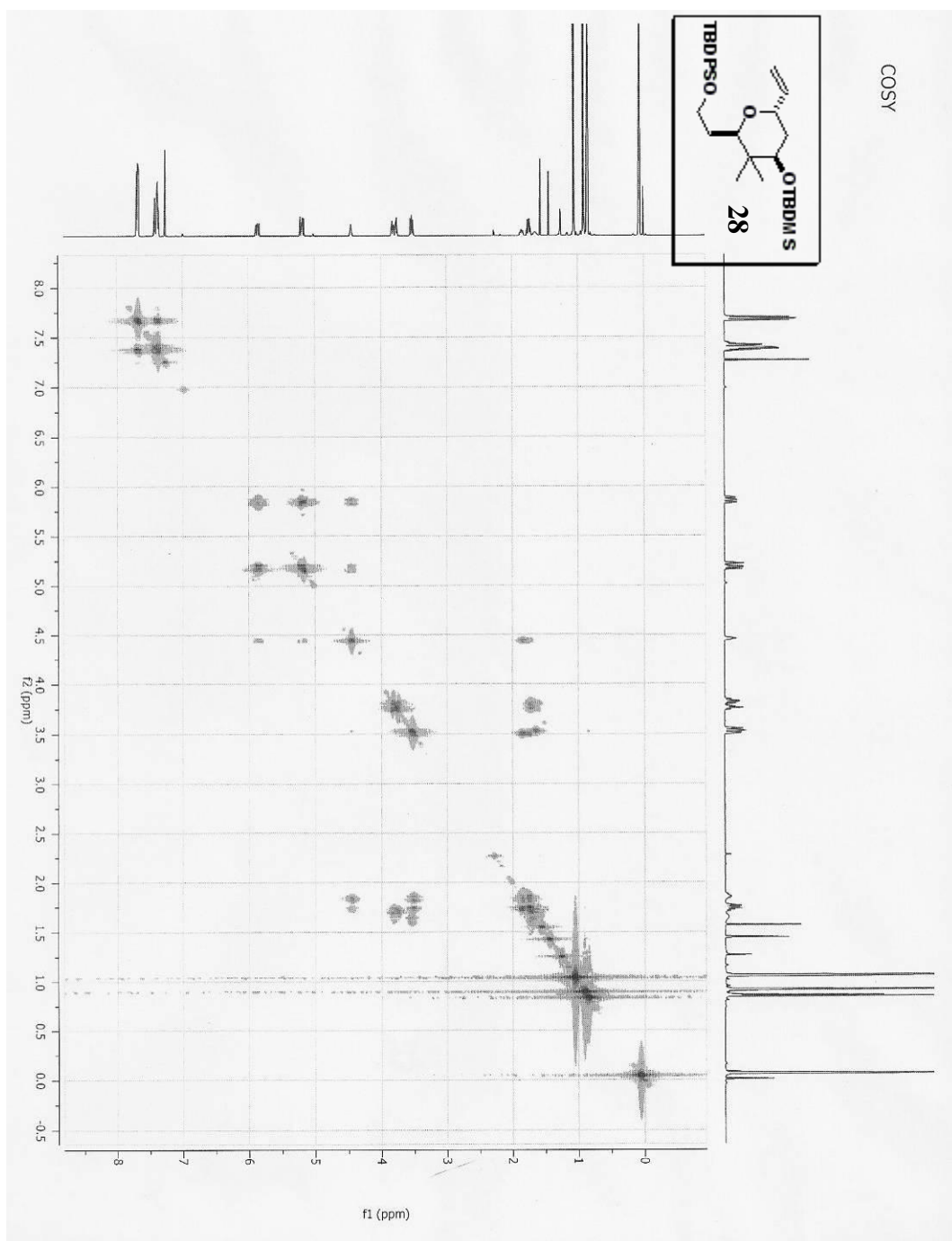
1D NOESY enhancement spectrum for S1



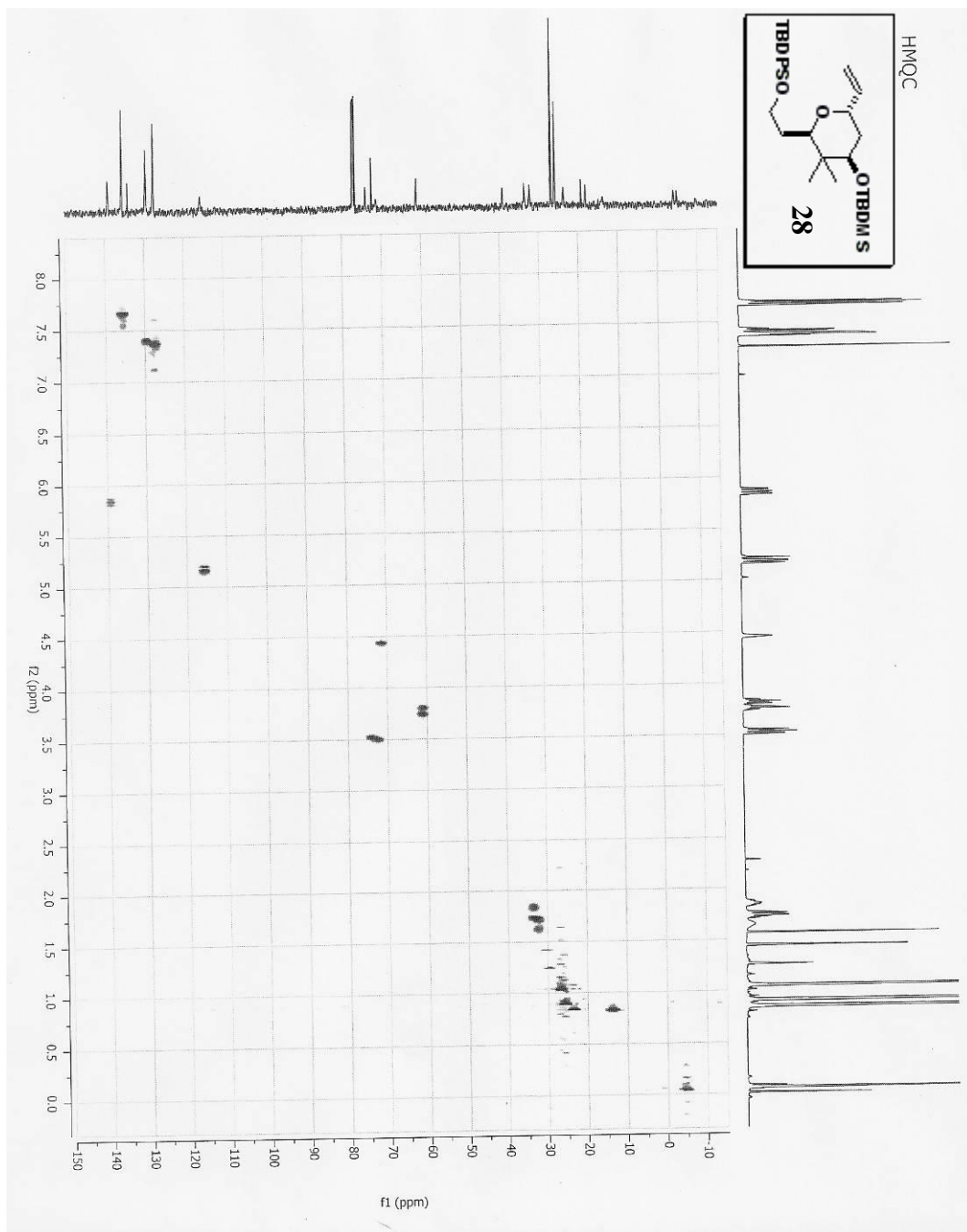
2D NOESY spectrum for S1



COSY Spectrum for **28**



HMQC spectrum for **28**



2D NOESY spectrum for **28**

