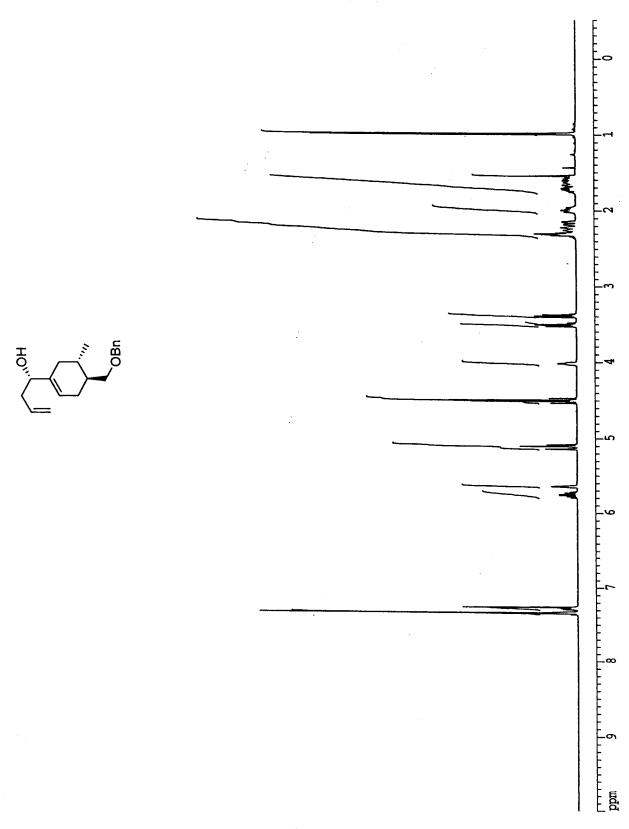
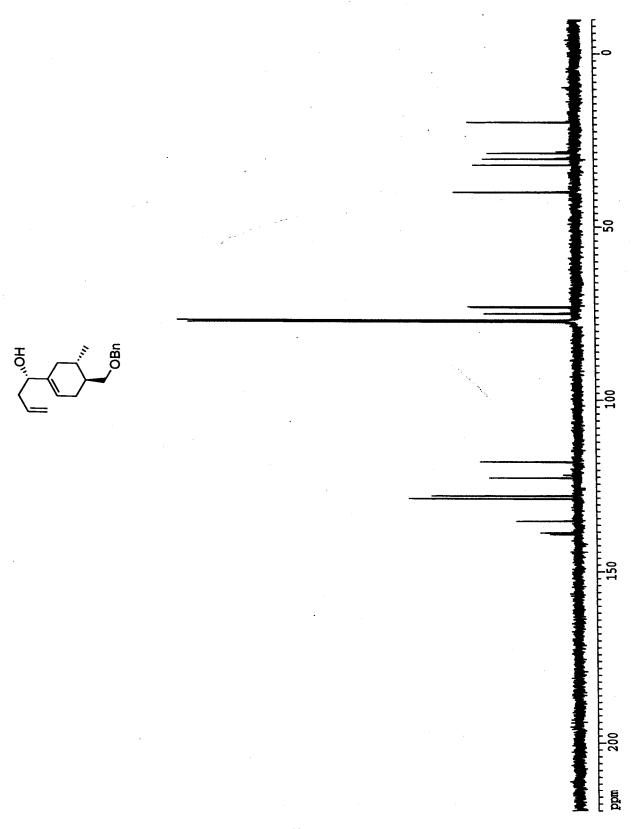
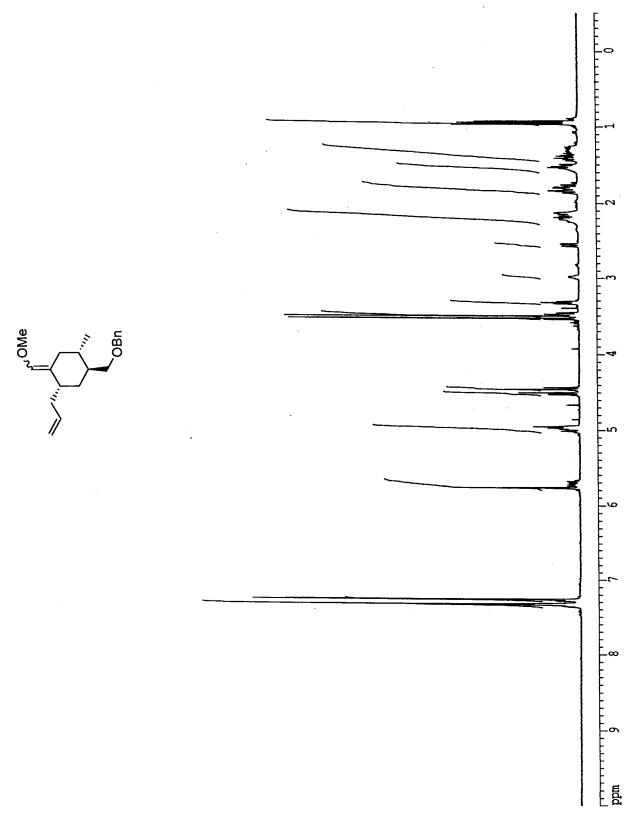
## SPECTROSCOPIC DATA



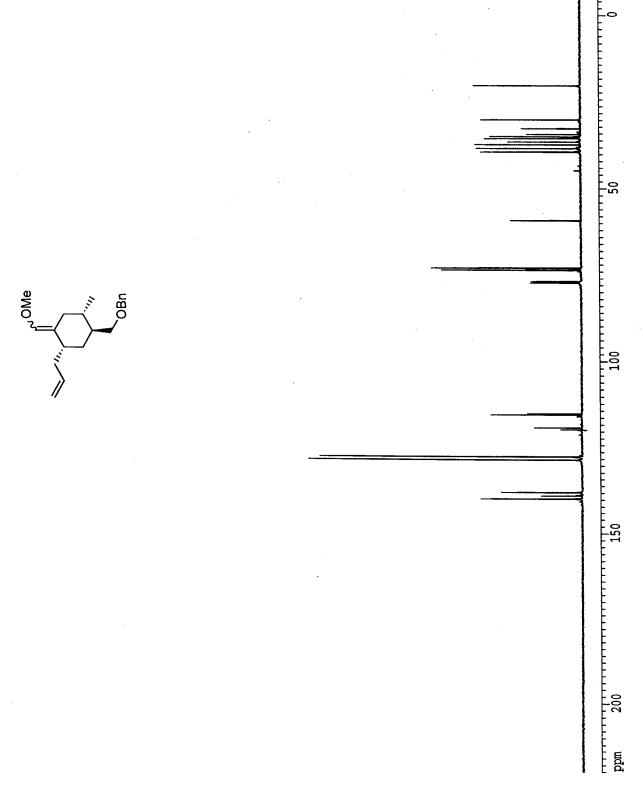
500 MHz  $^1$ H Spectrum of (+)-17 in CDCl $_3$ 



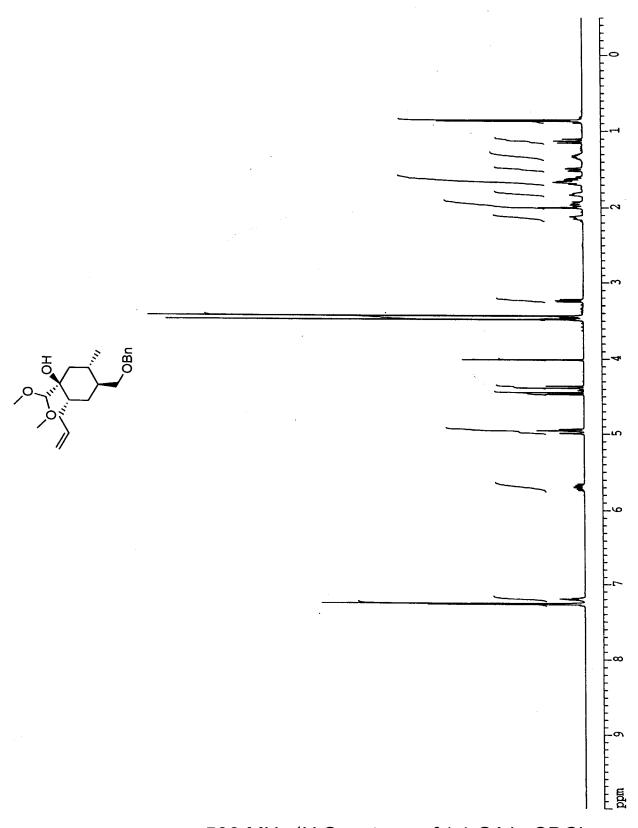
125 MHz  $^{13}$ C Spectrum of (+)-17 in CDCl $_3$ 



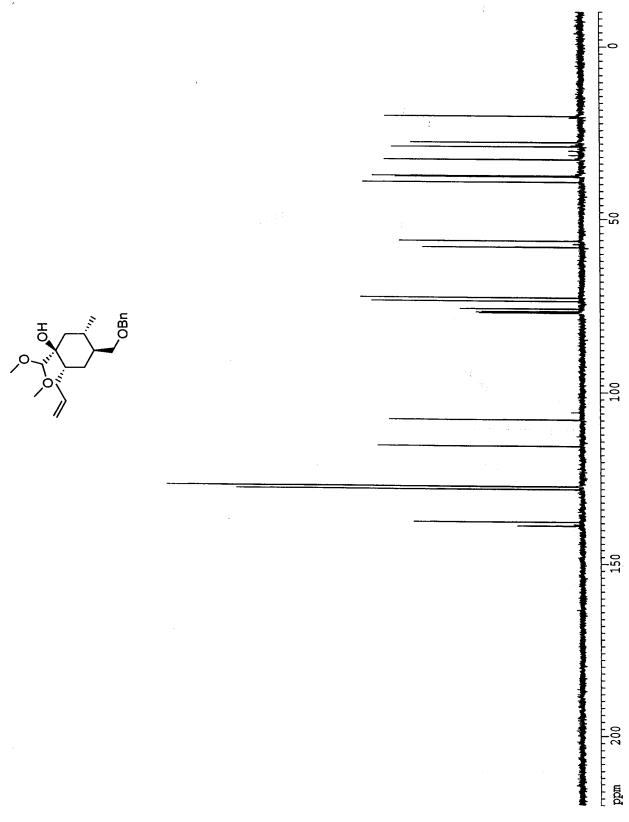
500 MHz <sup>1</sup>H Spectrum of **18** in CDCl<sub>3</sub>



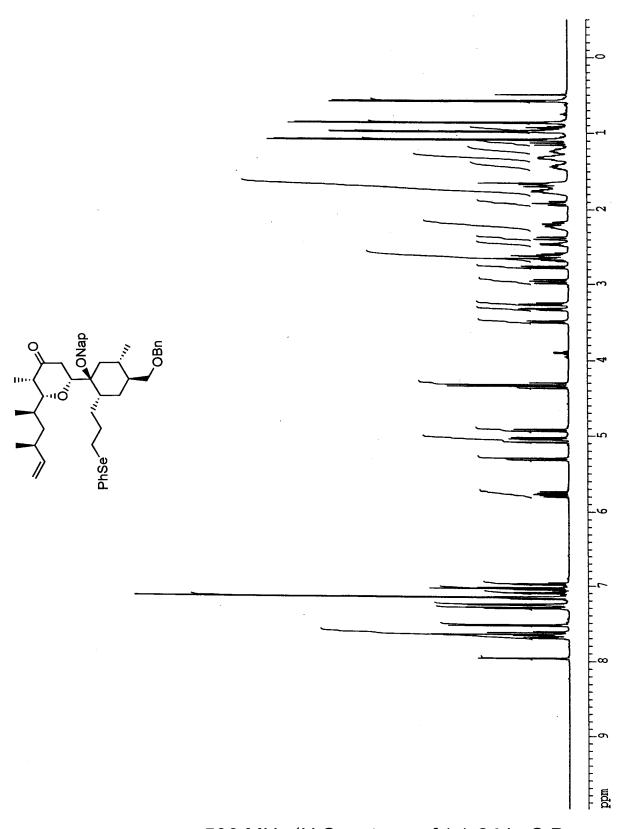
125 MHz <sup>13</sup>C Spectrum of **18** in CDCl<sub>3</sub>



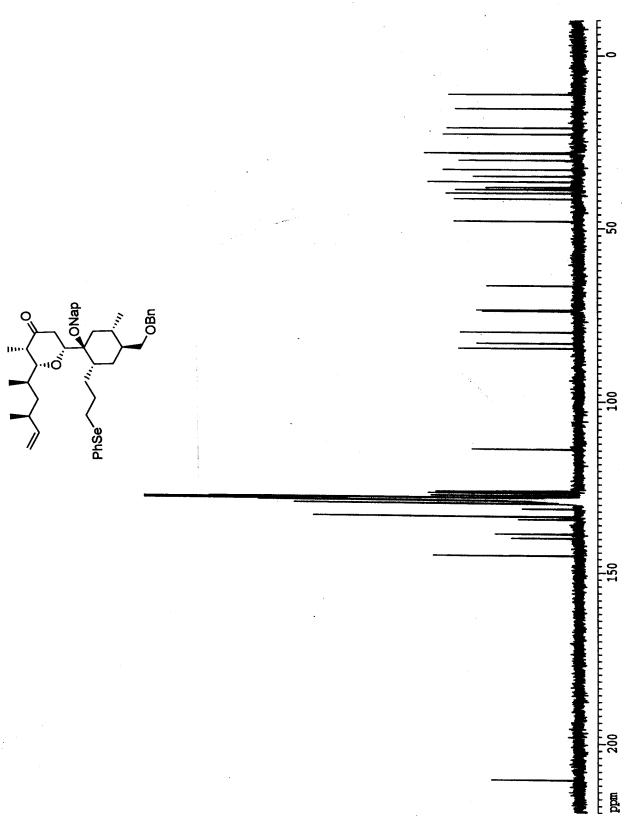
500 MHz <sup>1</sup>H Spectrum of (+)-**S1** in CDCl<sub>3</sub>



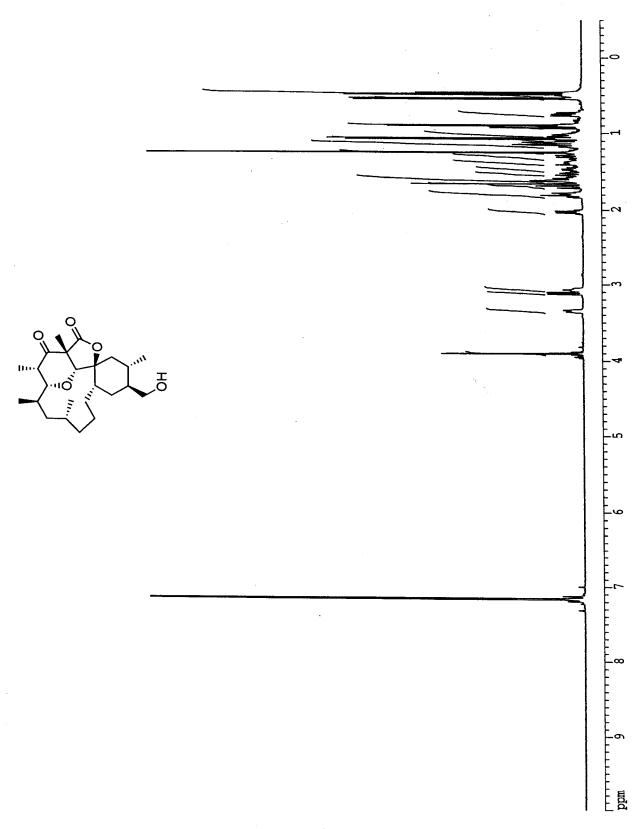
125 MHz <sup>13</sup>C Spectrum of (+)-**S1** in CDCl<sub>3</sub>



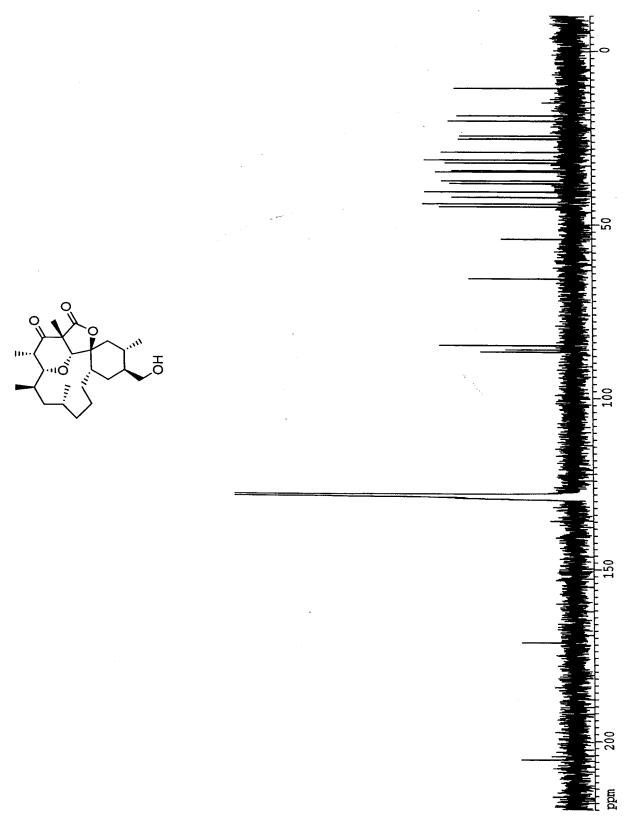
500 MHz  $^1H$  Spectrum of (+)-24 in  $C_6D_6$ 



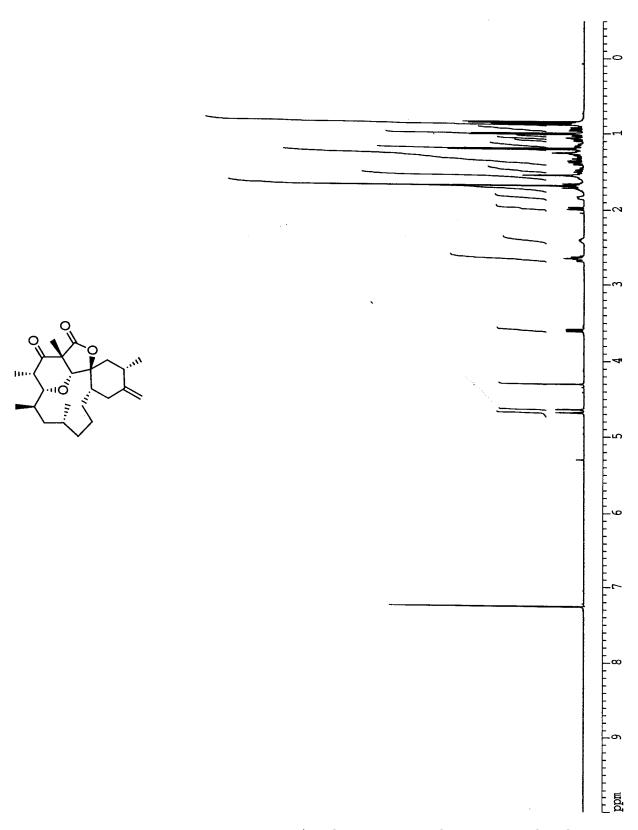
125 MHz  $^{13}$ C Spectrum of (+)-**24** in  $C_6D_6$ 



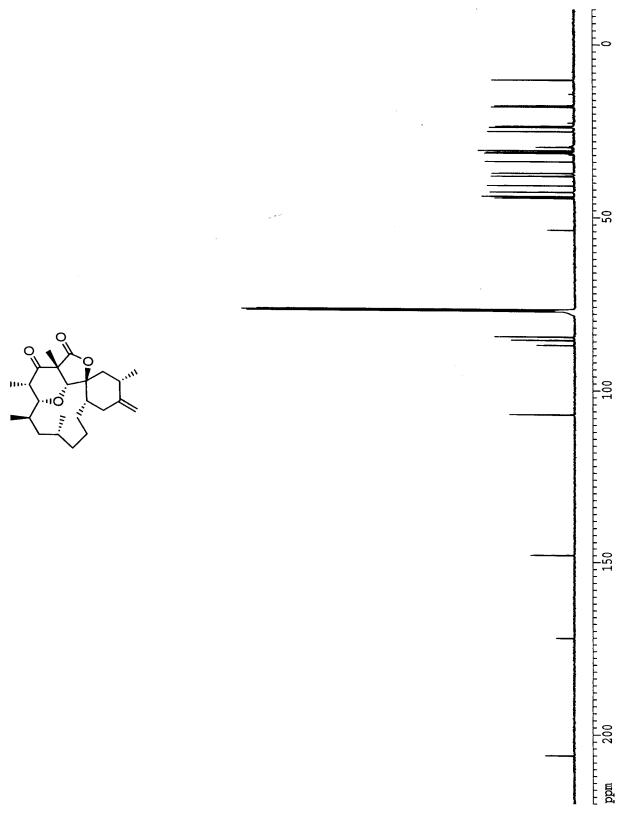
500 MHz <sup>1</sup>H Spectrum of (-)-**29** in C<sub>6</sub>D<sub>6</sub>



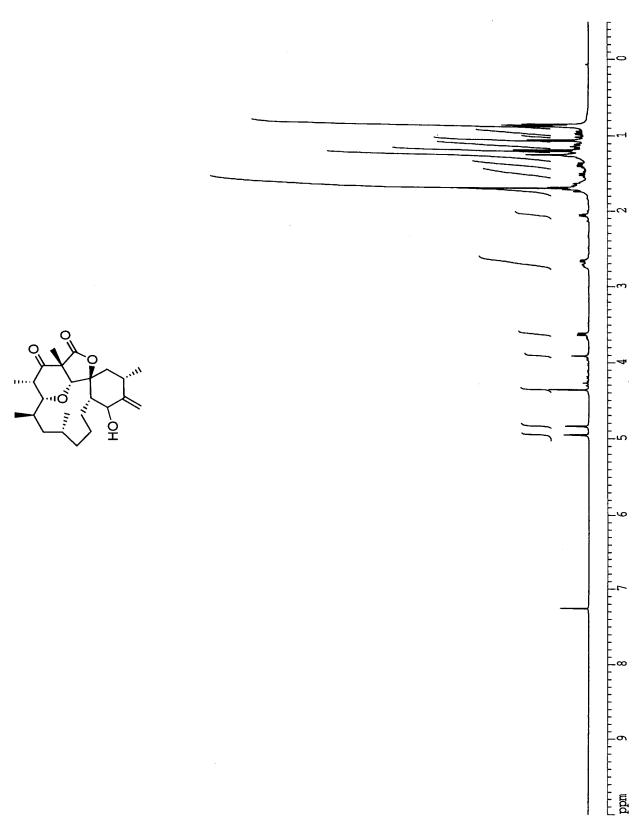
125 MHz  $^{\scriptscriptstyle 13}C$  Spectrum of (-)-29 in  $C_{\scriptscriptstyle 6}D_{\scriptscriptstyle 6}$ 



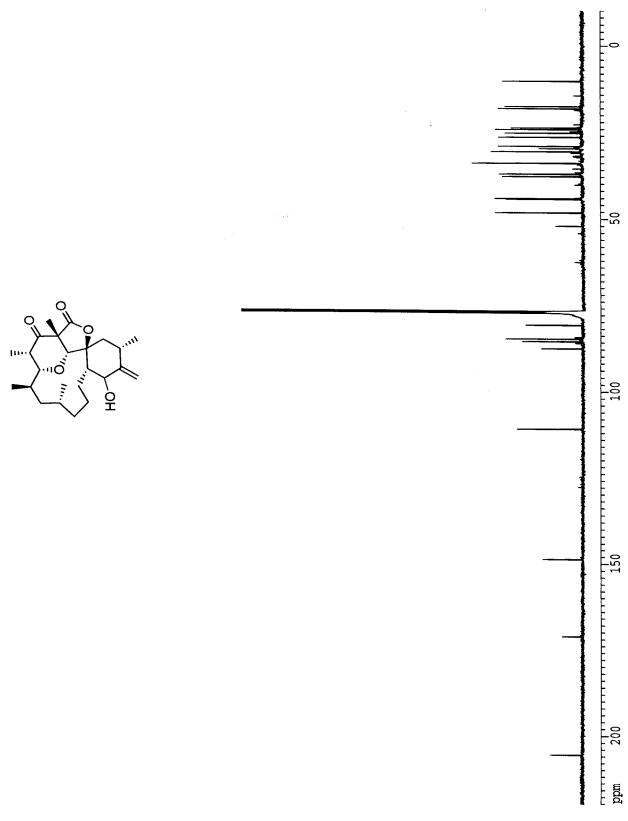
500 MHz <sup>1</sup>H Spectrum of (-)-33 in CDCl<sub>3</sub>



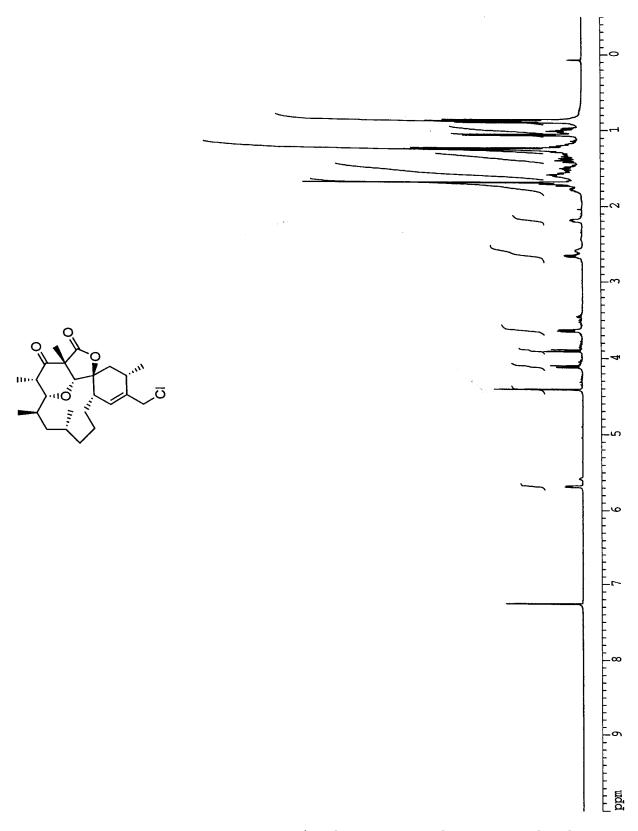
125 MHz  $^{13}$ C Spectrum of (-)-33 in CDCl $_3$ 



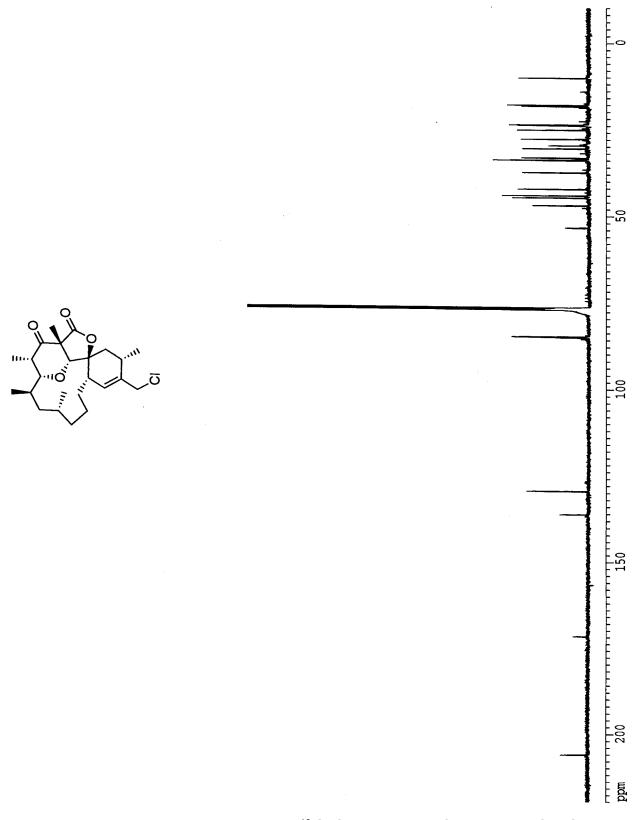
500 MHz <sup>1</sup>H Spectrum of (-)-**\$4** in CDCl<sub>3</sub>



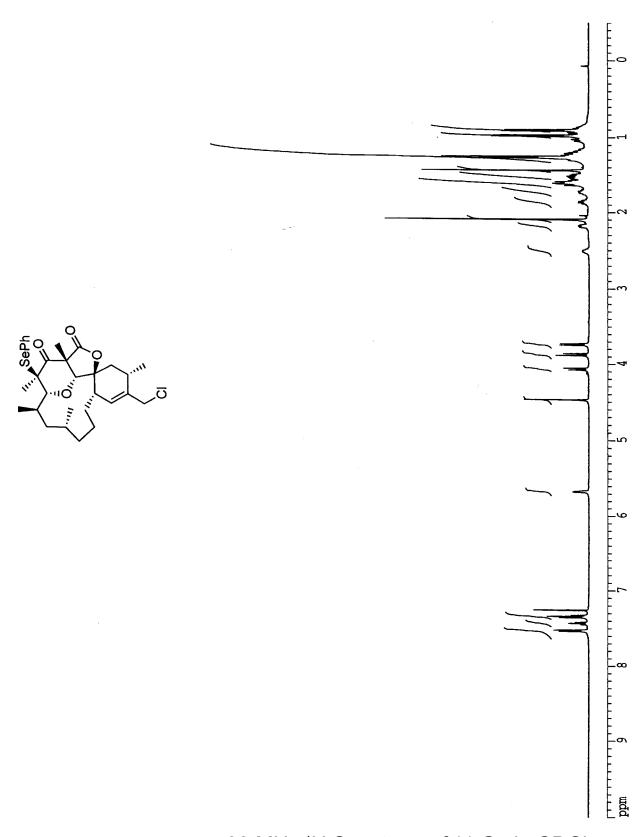
125 MHz <sup>13</sup>C Spectrum of (-)-**\$4** in CDCl<sub>3</sub>



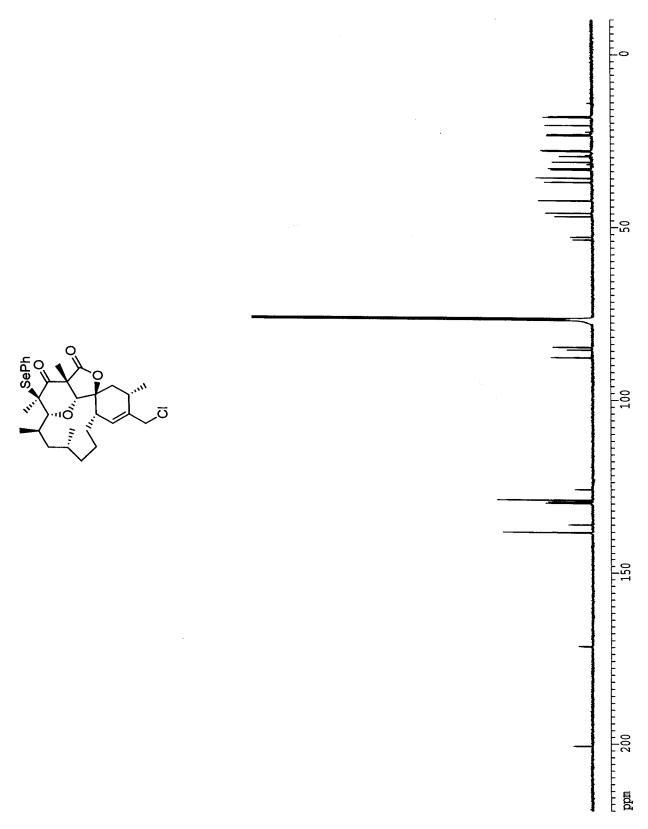
500 MHz <sup>1</sup>H Spectrum of (-)-**34** in CDCl<sub>3</sub>



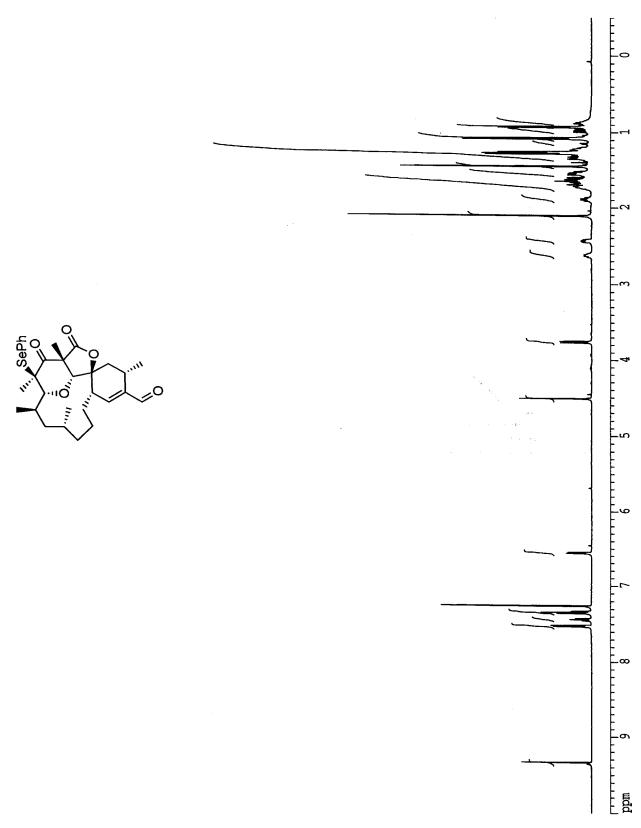
125 MHz  $^{13}$ C Spectrum of (-)-34 in CDCl $_3$ 



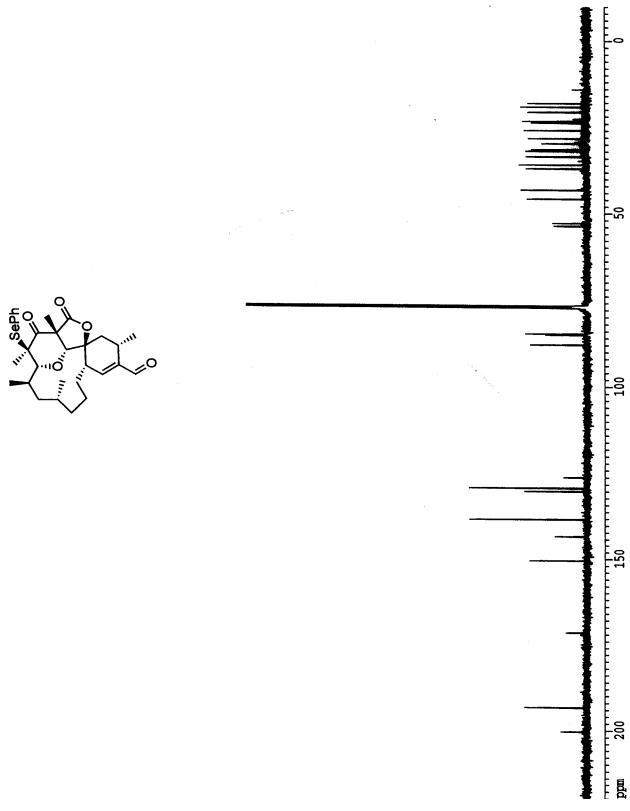
500 MHz  $^1$ H Spectrum of (-)-**S5** in CDCl $_3$ 



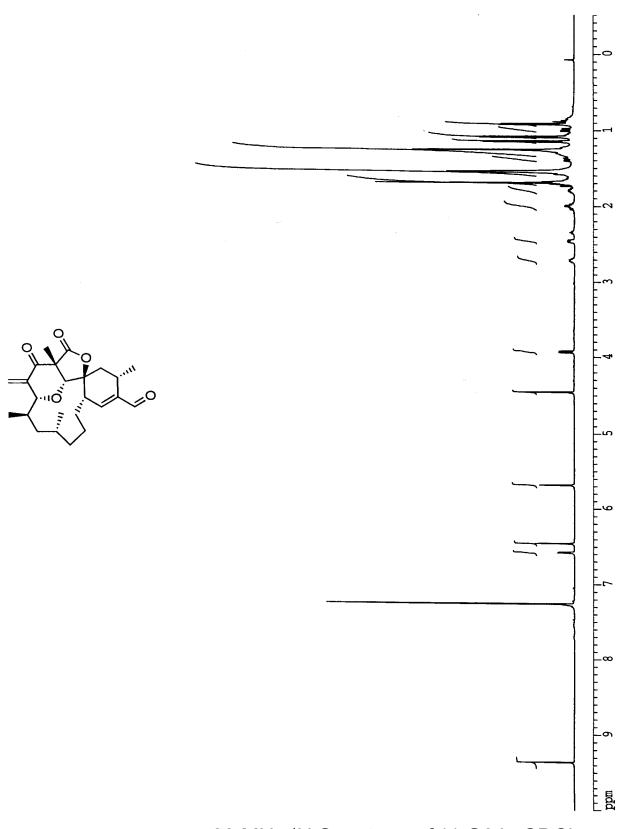
125 MHz  $^{13}$ C Spectrum of (-)-**S5** in CDCl $_3$ 



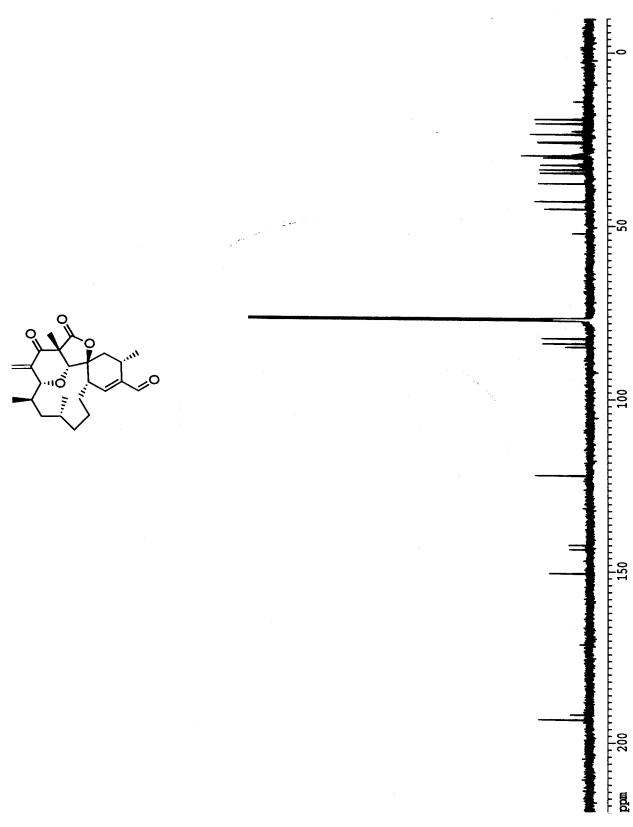
500 MHz <sup>1</sup>H Spectrum of (-)-35 in CDCl<sub>3</sub>



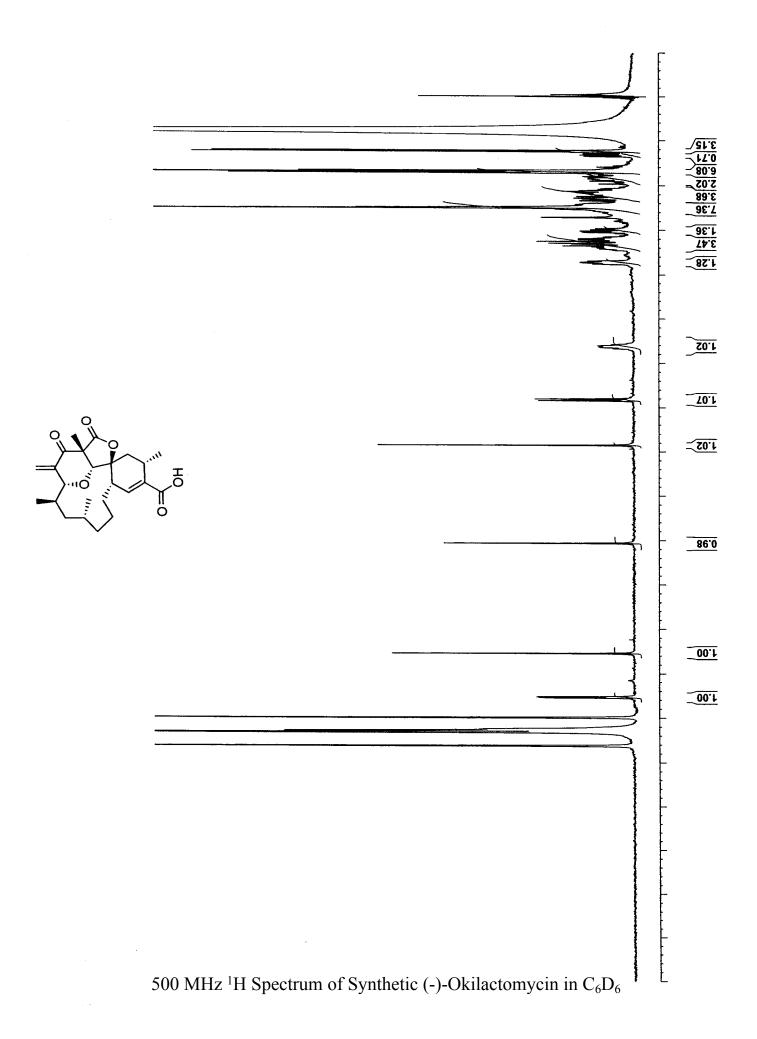
125 MHz  $^{13}$ C Spectrum of (-)-35 in CDCl $_3$ 

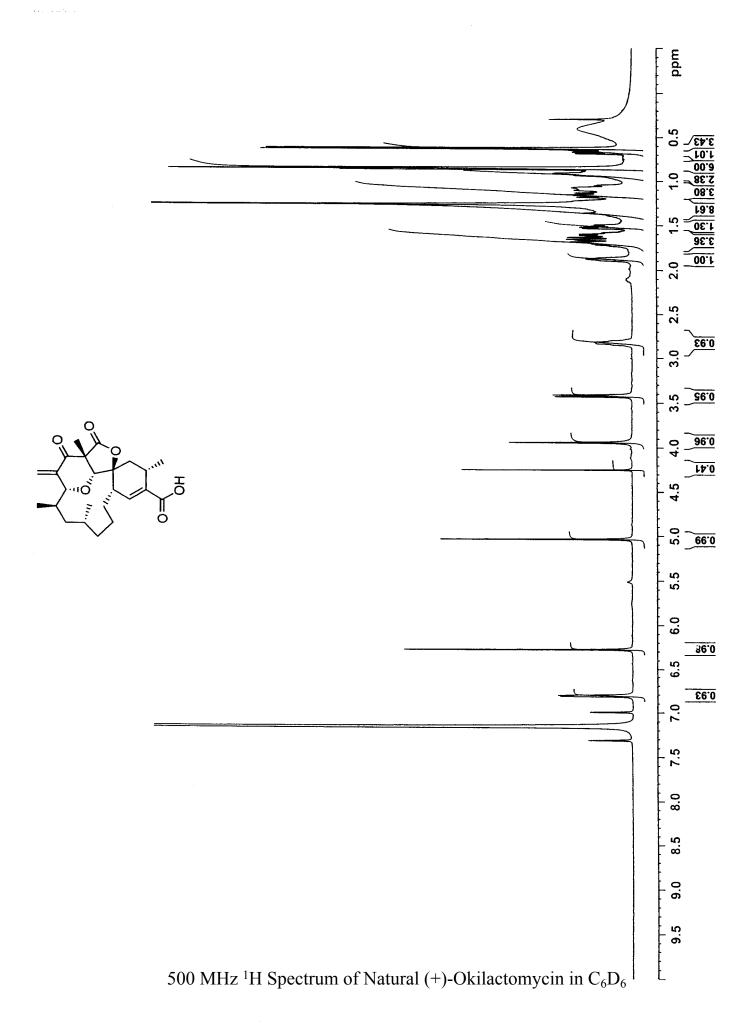


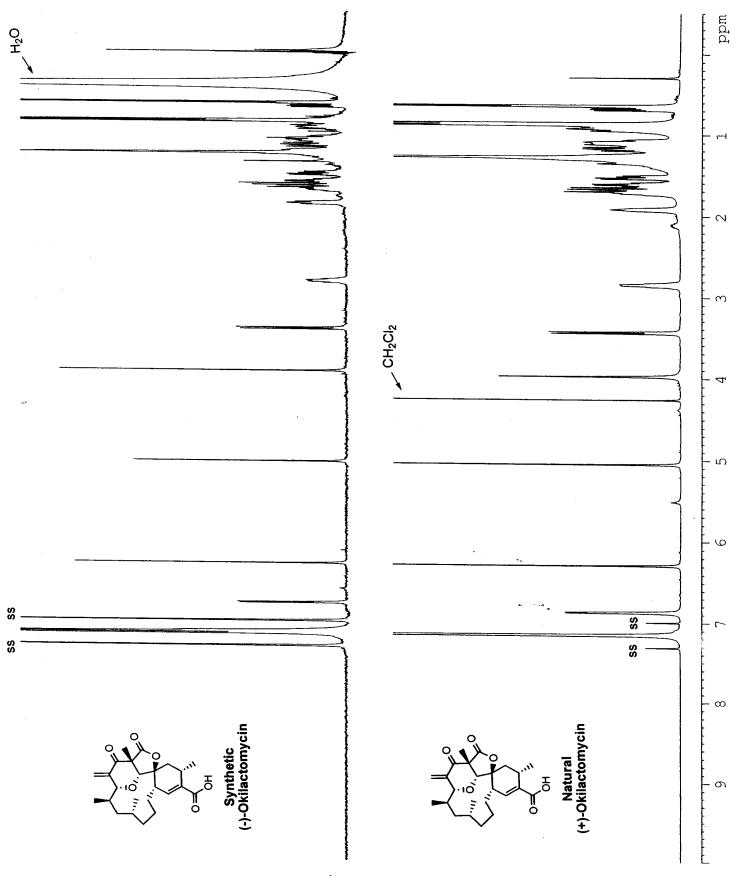
500 MHz <sup>1</sup>H Spectrum of (-)-**S6** in CDCl<sub>3</sub>



125 MHz  $^{13}$ C Spectrum of (-)-**S6** in CDCl $_3$ 







Comparison of  ${}^{1}H$  Spectra in  $C_{6}D_{6}$