



Supporting Information

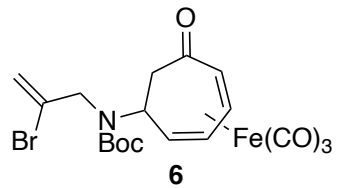
for

Synthesis of 7-azabicyclo[4.3.1]decane ring systems from tricarbonyl(tropone)iron via intramolecular Heck reactions

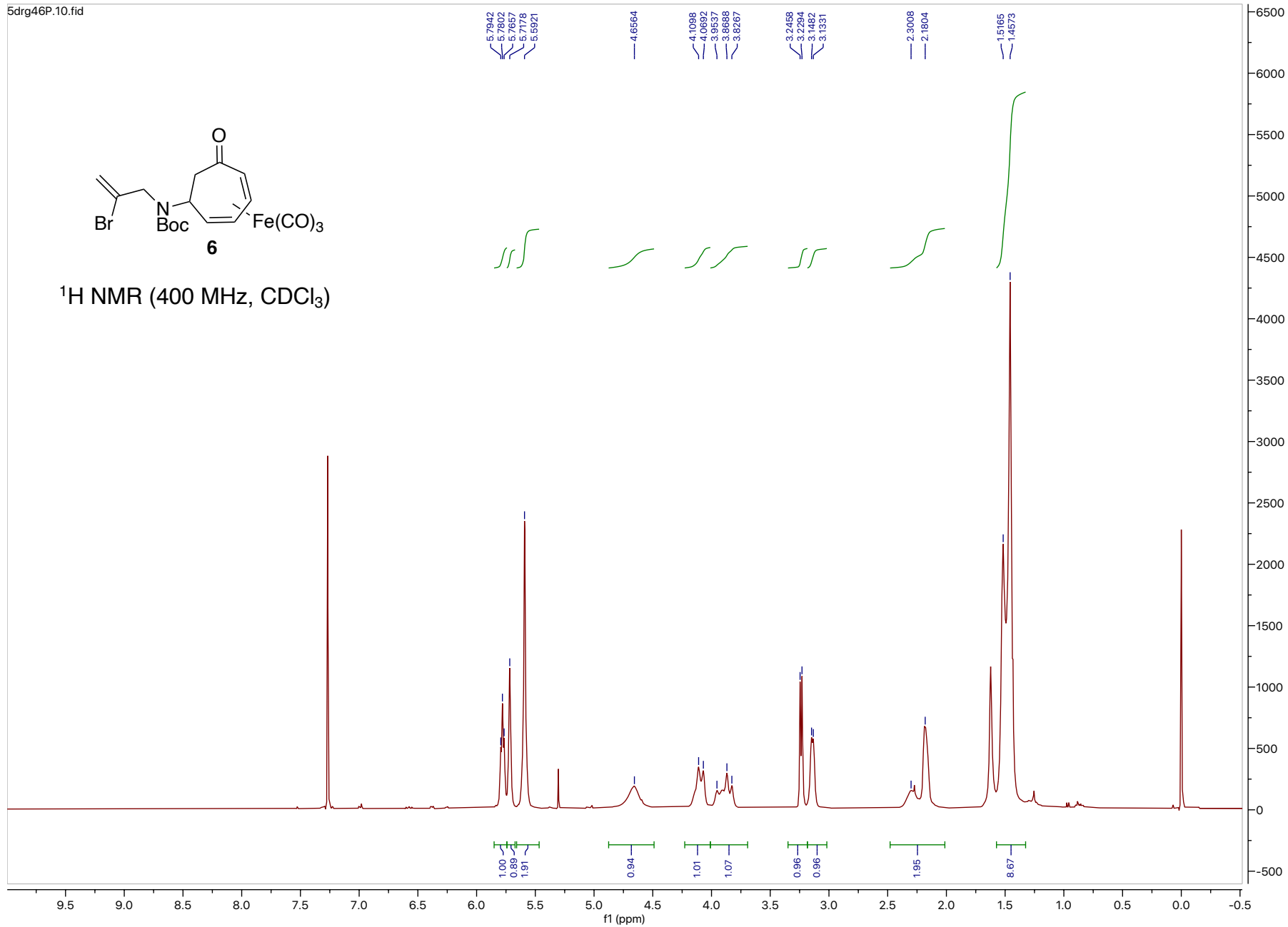
Aaron H. Shoemaker, Elizabeth A. Foker, Elena P. Uttaro, Sarah K. Beitel
and Daniel R. Griffith

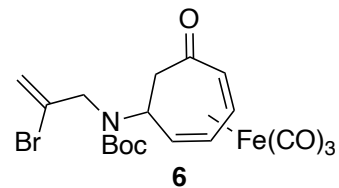
Beilstein J. Org. Chem. **2023**, *19*, 1615–1619. [doi:10.3762/bjoc.19.118](https://doi.org/10.3762/bjoc.19.118)

Copies of ^1H and ^{13}C NMR spectra of all purified novel compounds

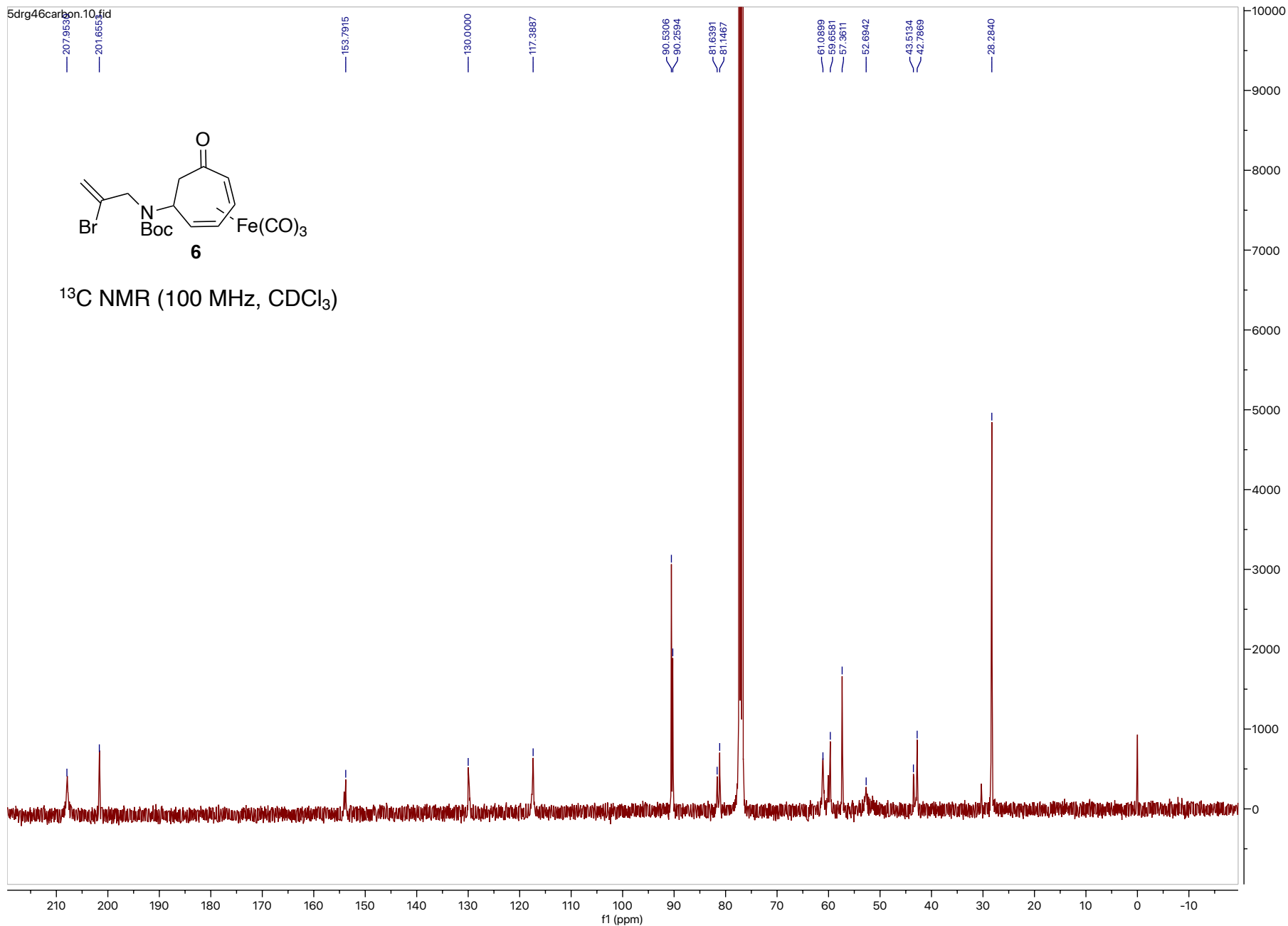


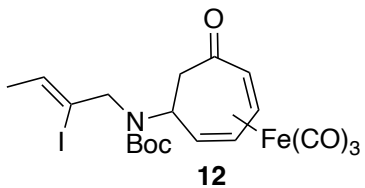
^1H NMR (400 MHz, CDCl_3)



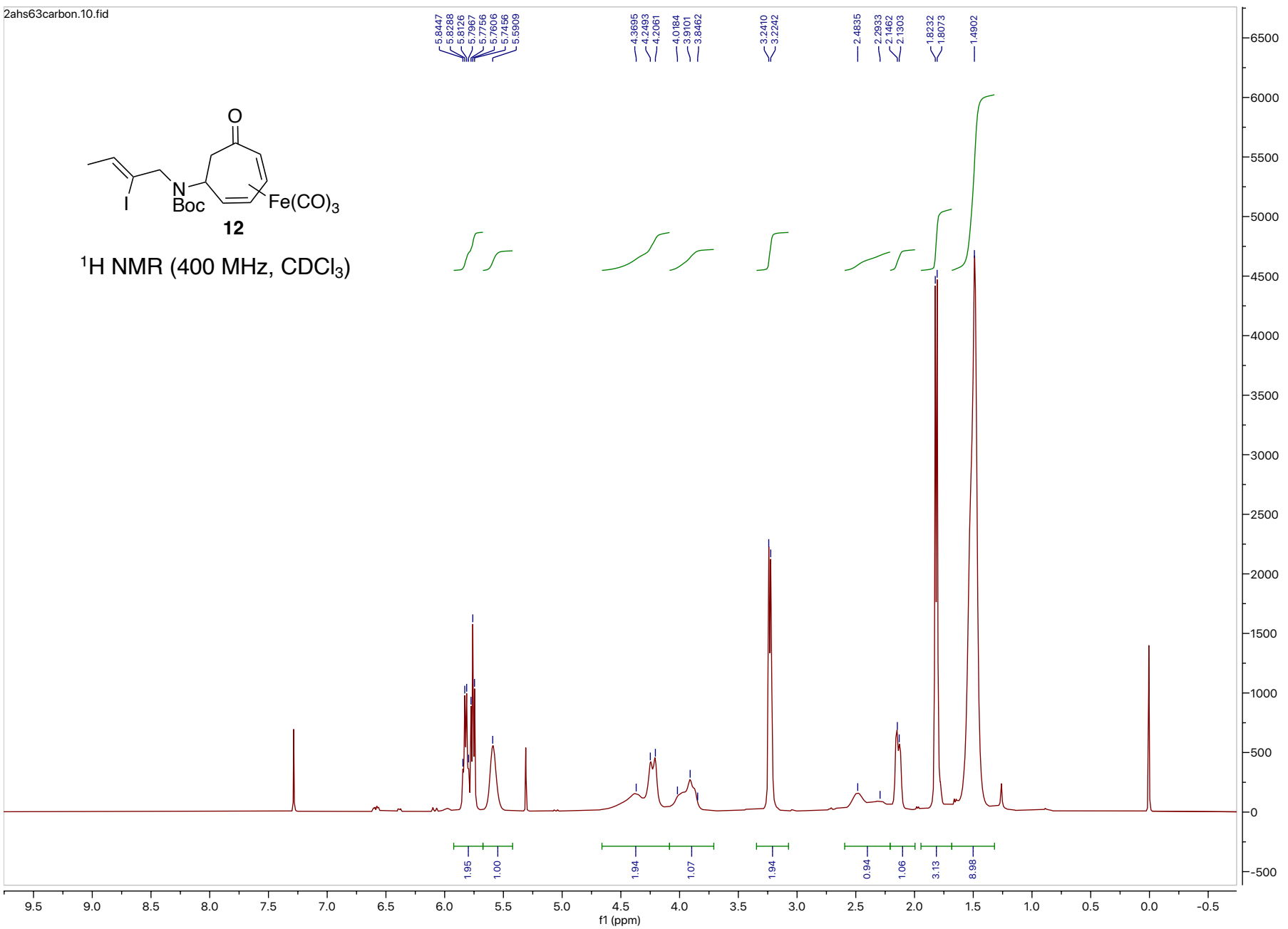


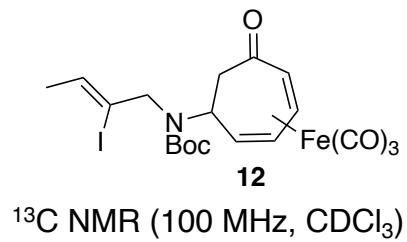
^{13}C NMR (100 MHz, CDCl_3)





¹H NMR (400 MHz, CDCl₃)





—208.0511

—202.2519

154.3452

153.7925

—132.3242

—105.9765

90.6290

90.2042

81.3653

80.8662

61.1755

60.6971

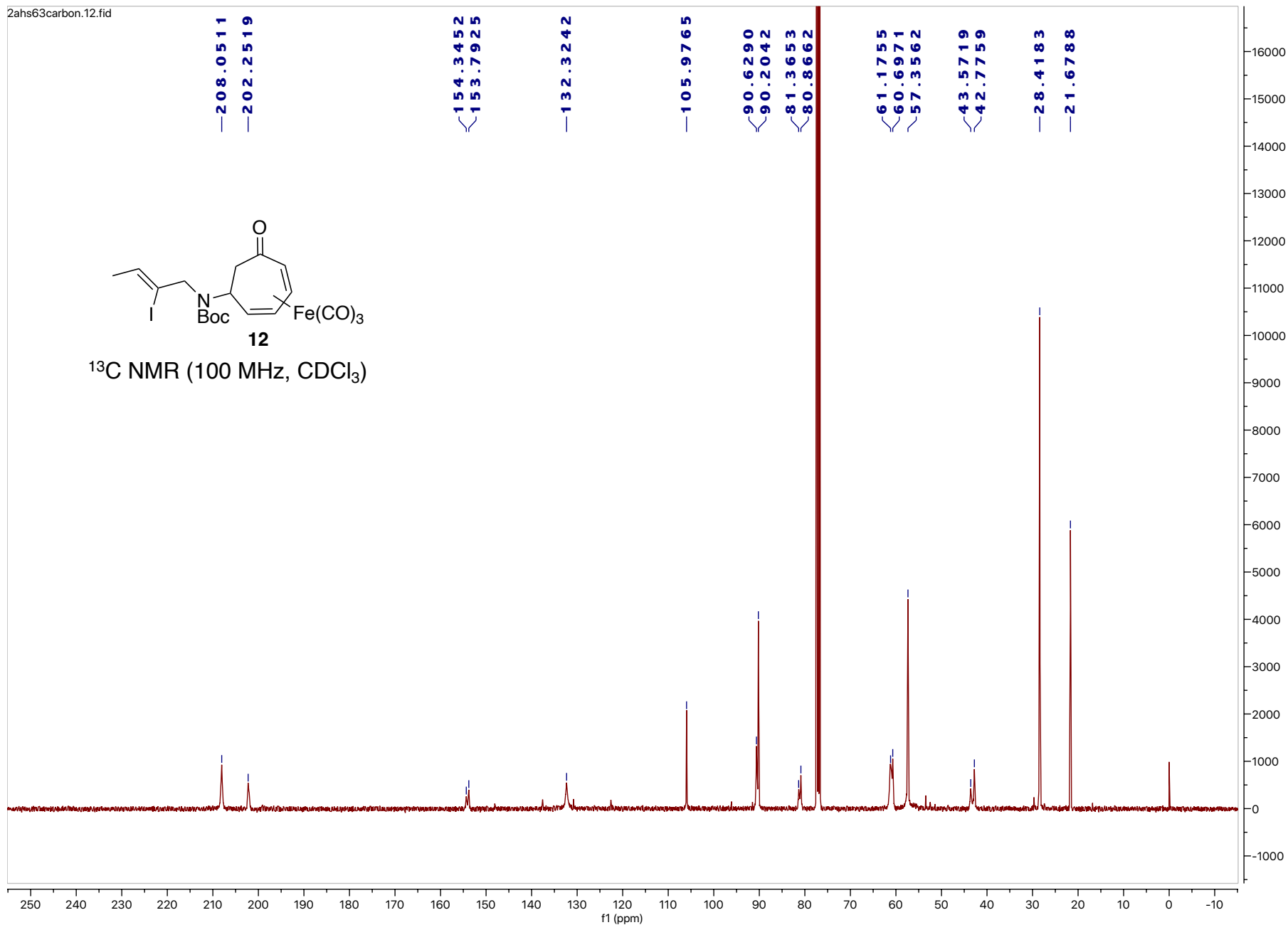
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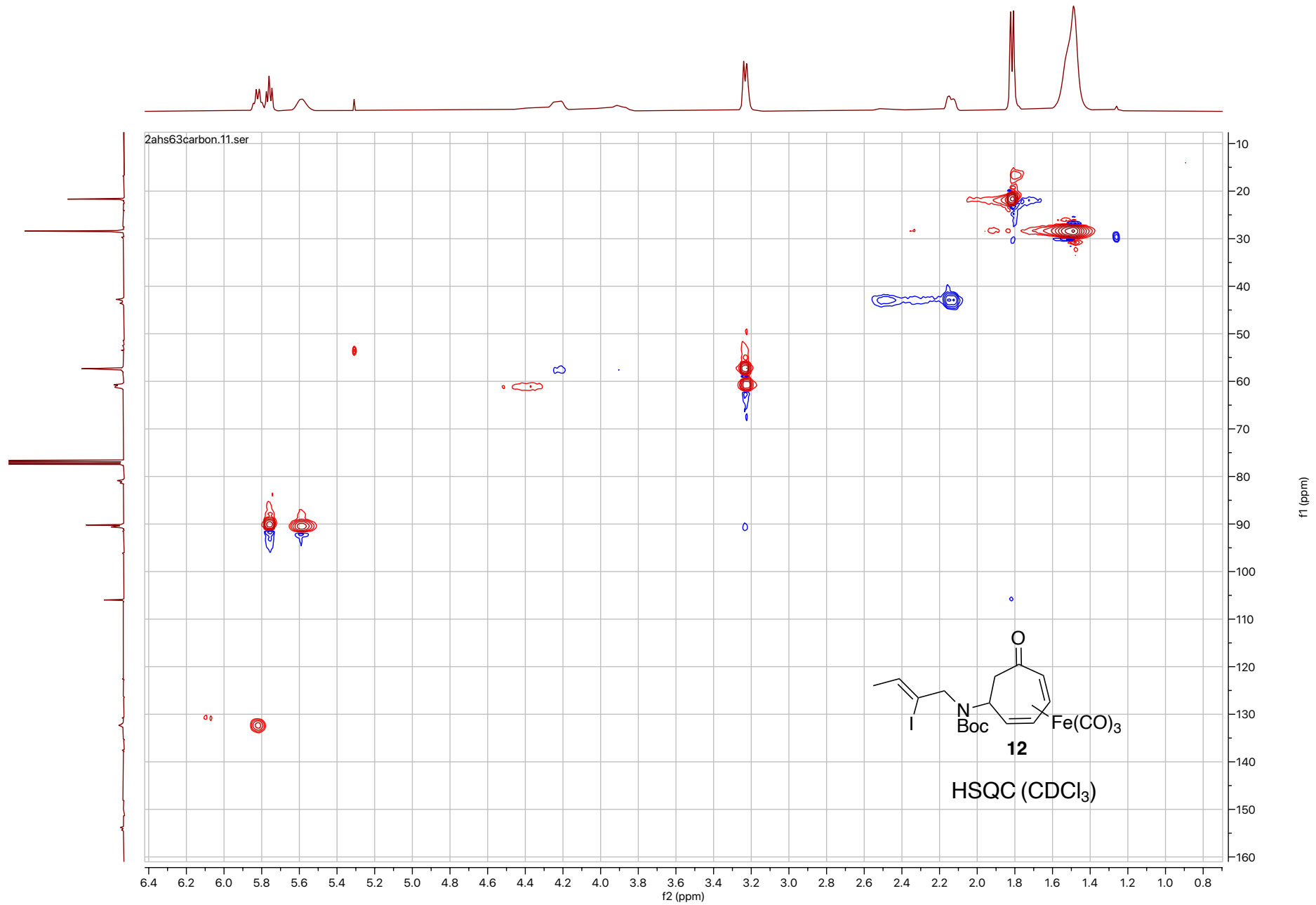
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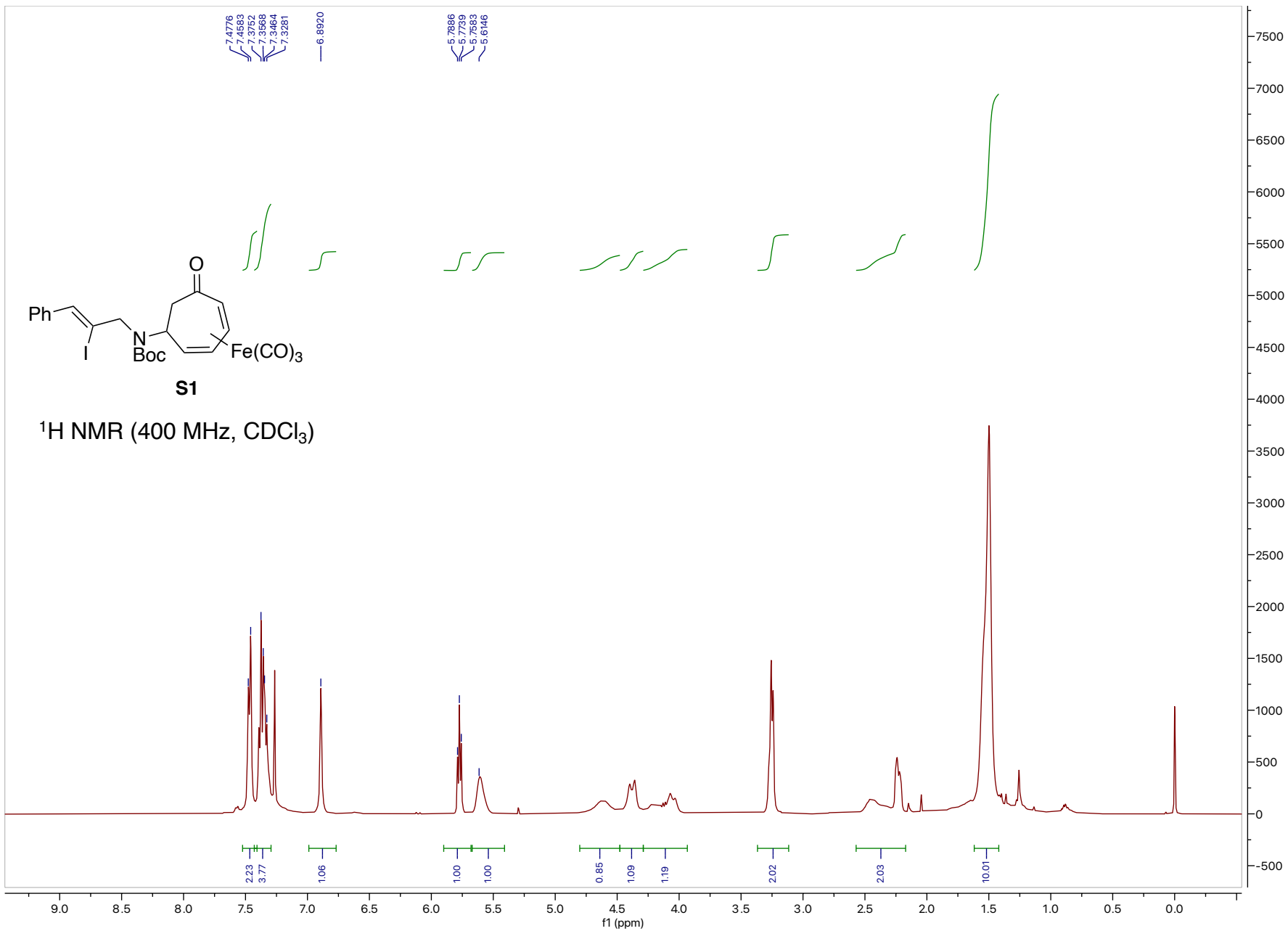
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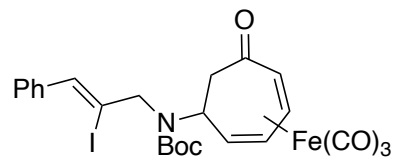
—28.4183

—21.6788

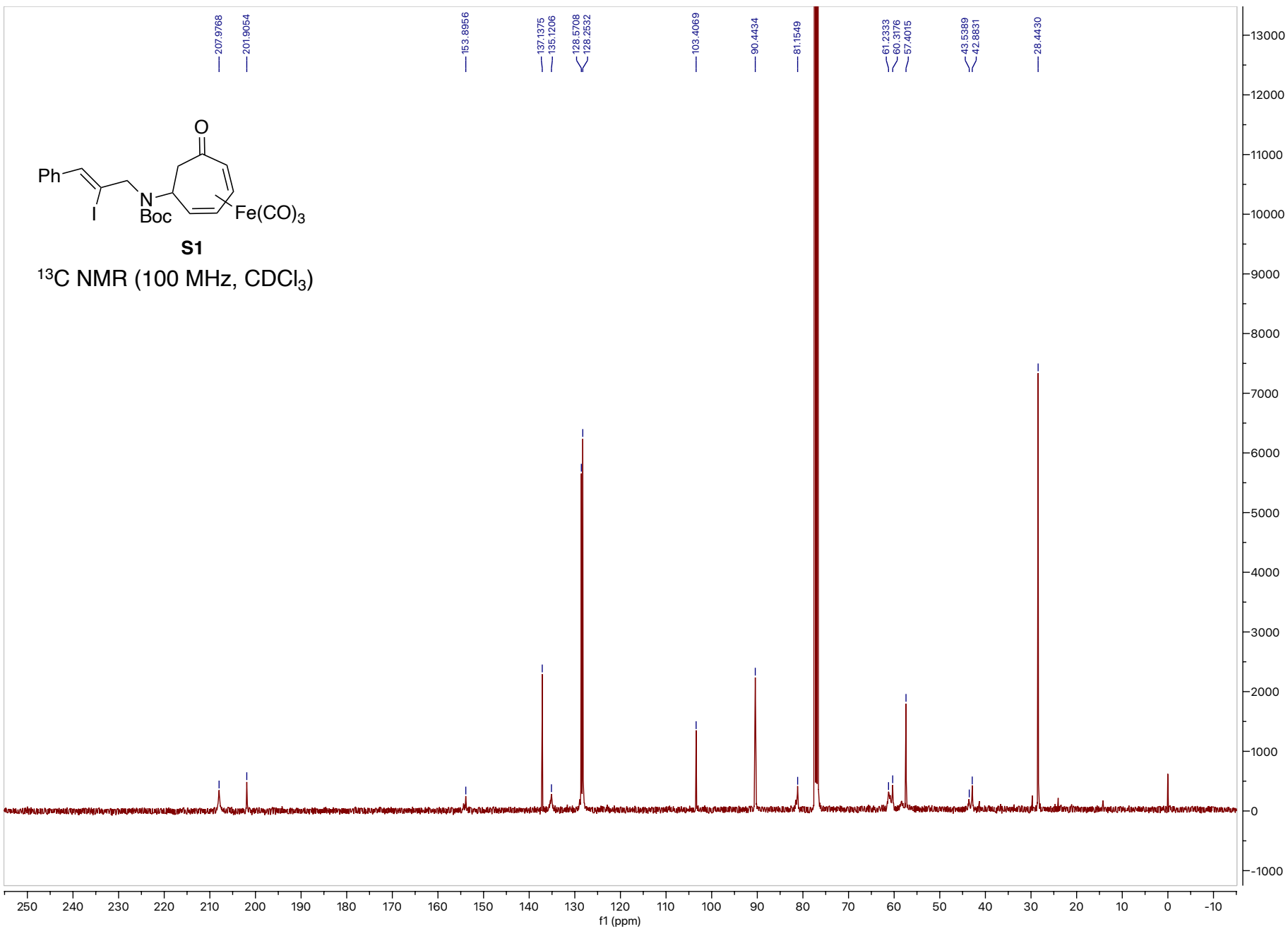


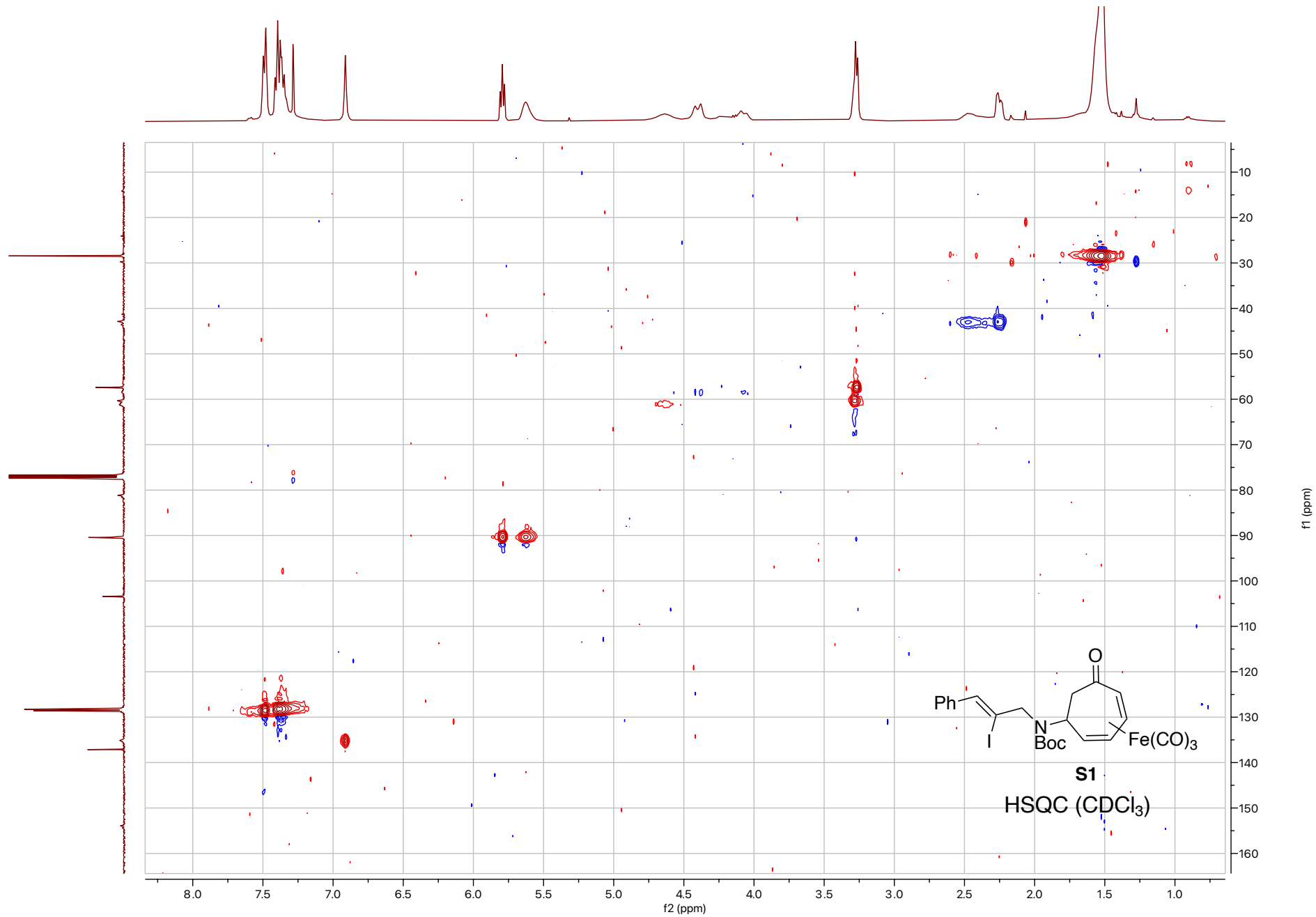


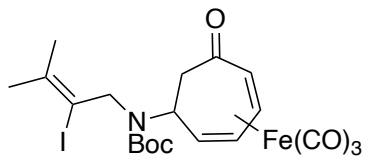




^{13}C NMR (100 MHz, CDCl_3)

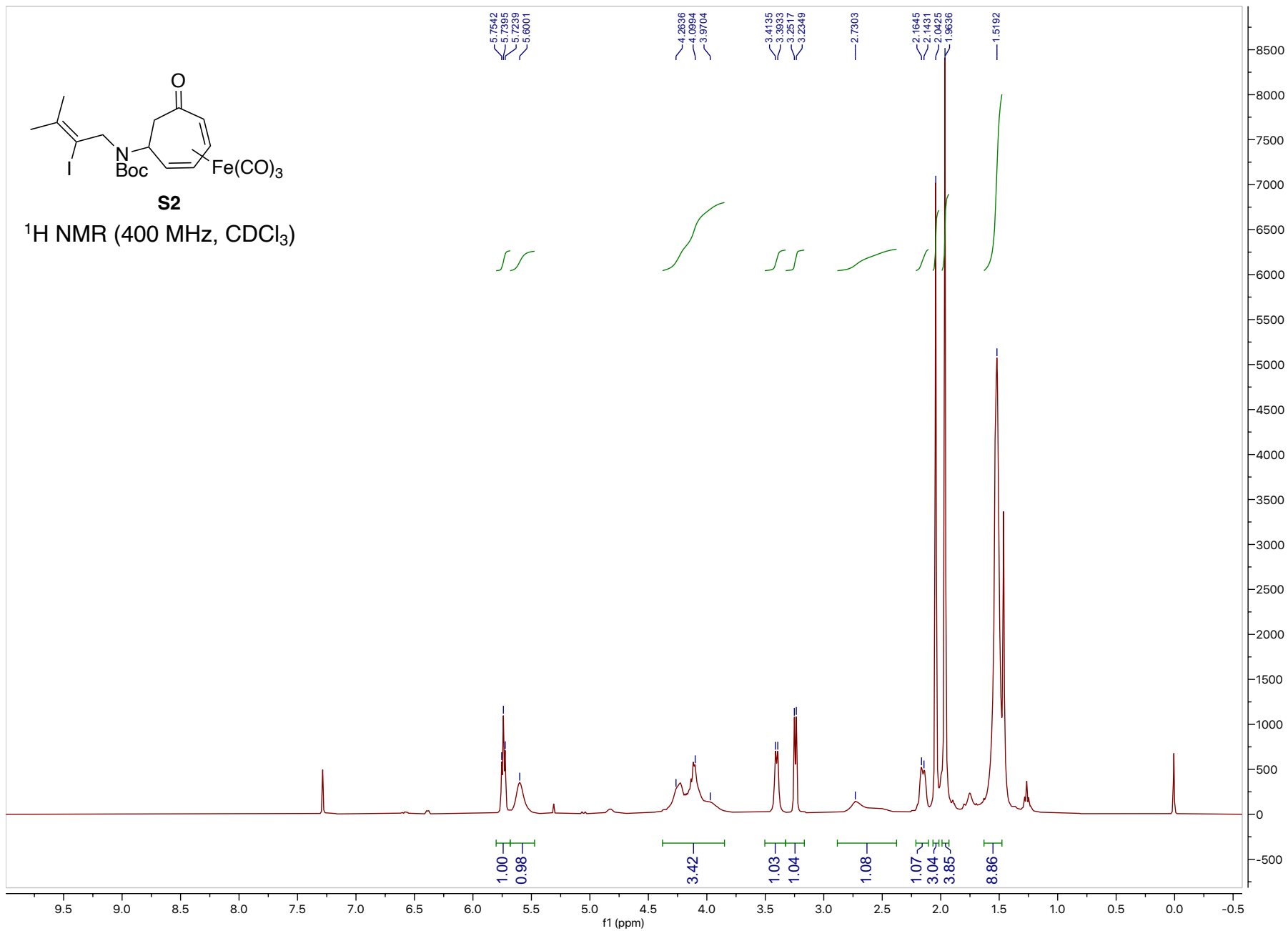


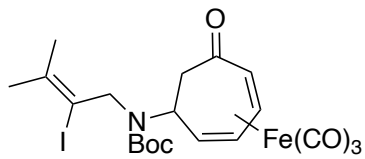




S2

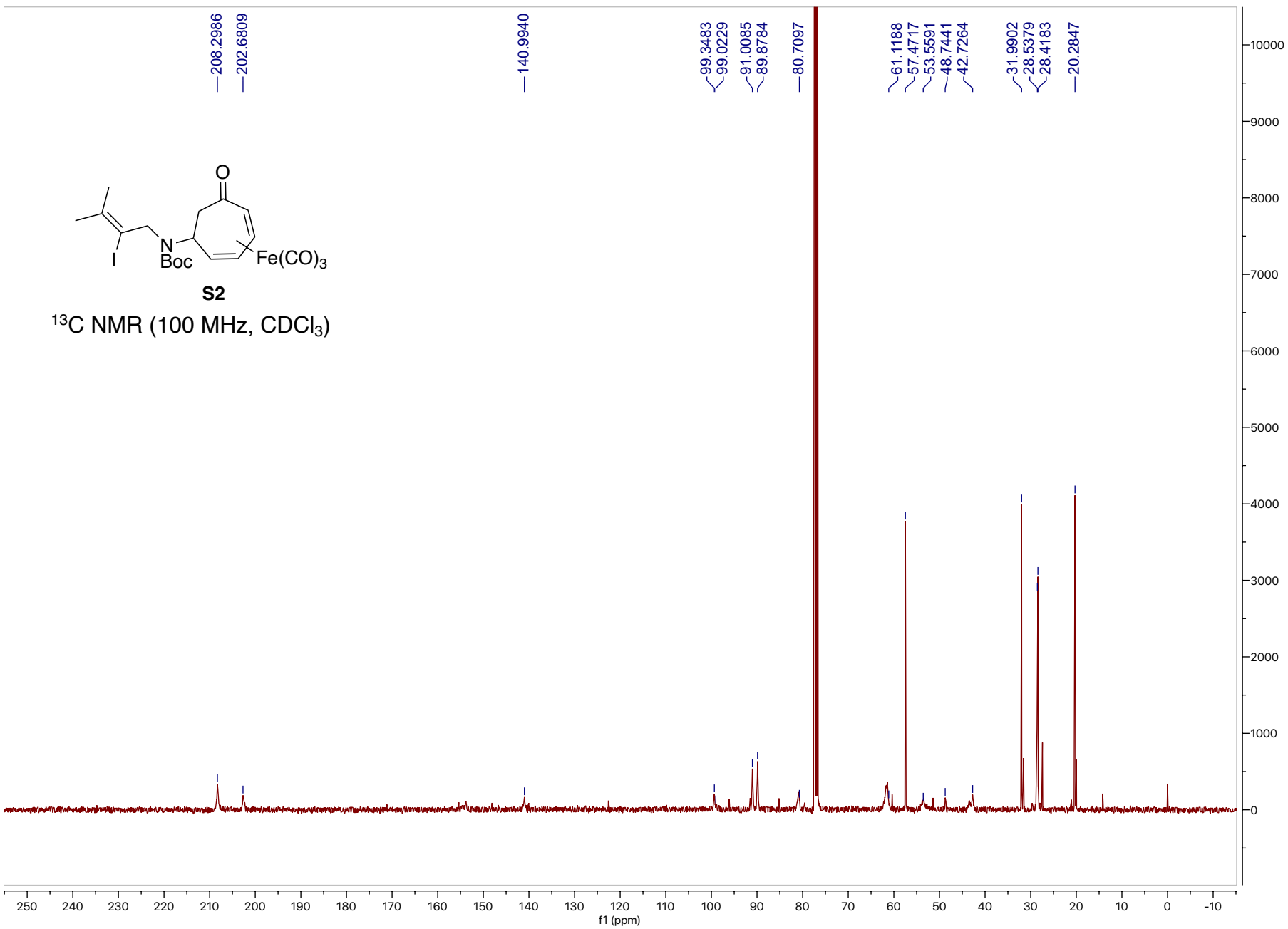
¹H NMR (400 MHz, CDCl₃)

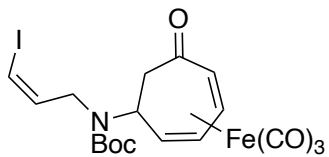




S2

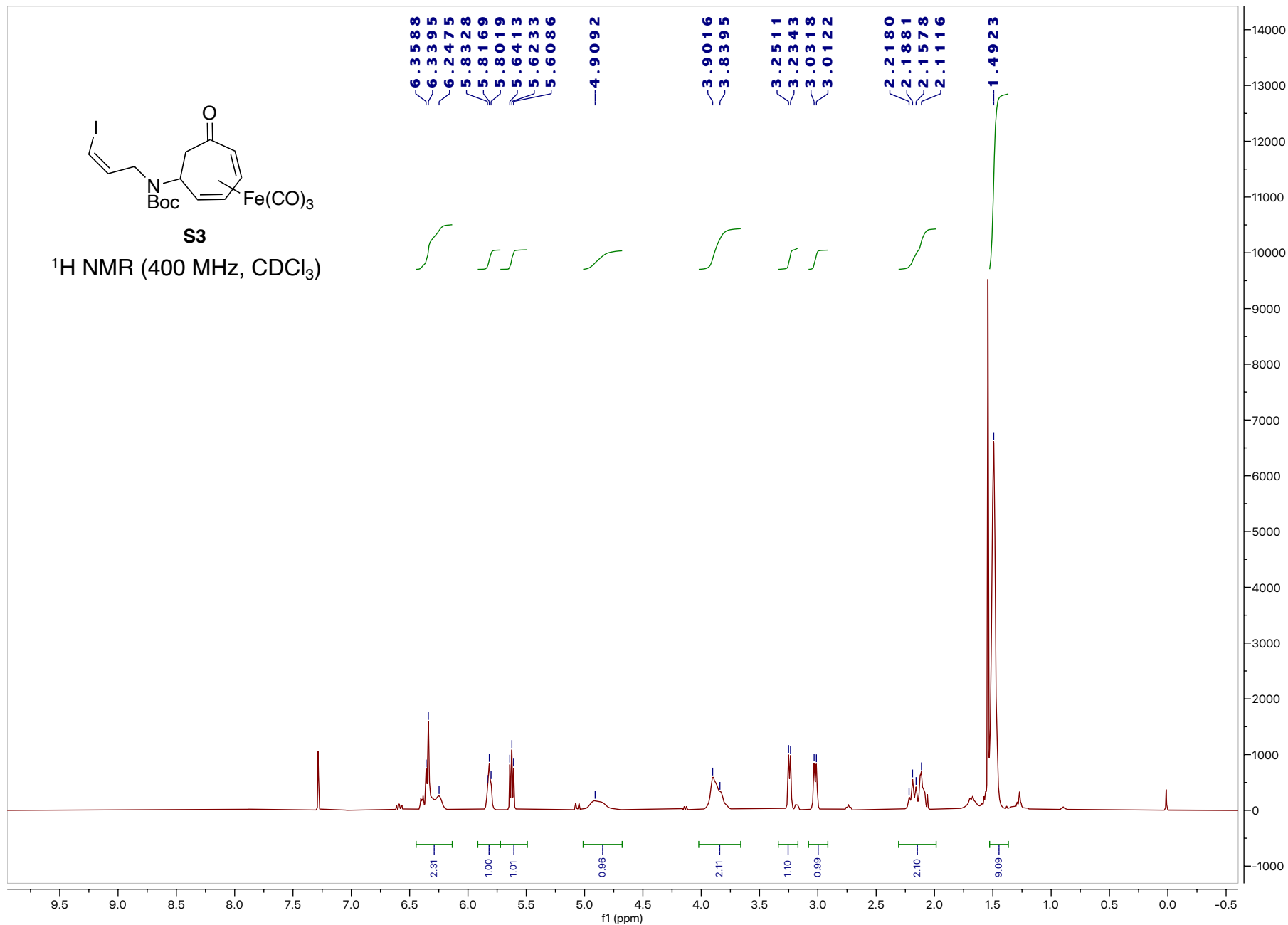
^{13}C NMR (100 MHz, CDCl_3)





S3

$^1\text{H NMR}$ (400 MHz, CDCl_3)



207.9161

201.4653

164.0985

138.8289

90.6668

90.2326

82.6215

81.2459

80.8811

60.3976

59.9488

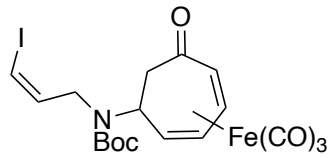
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48.2038

43.8218

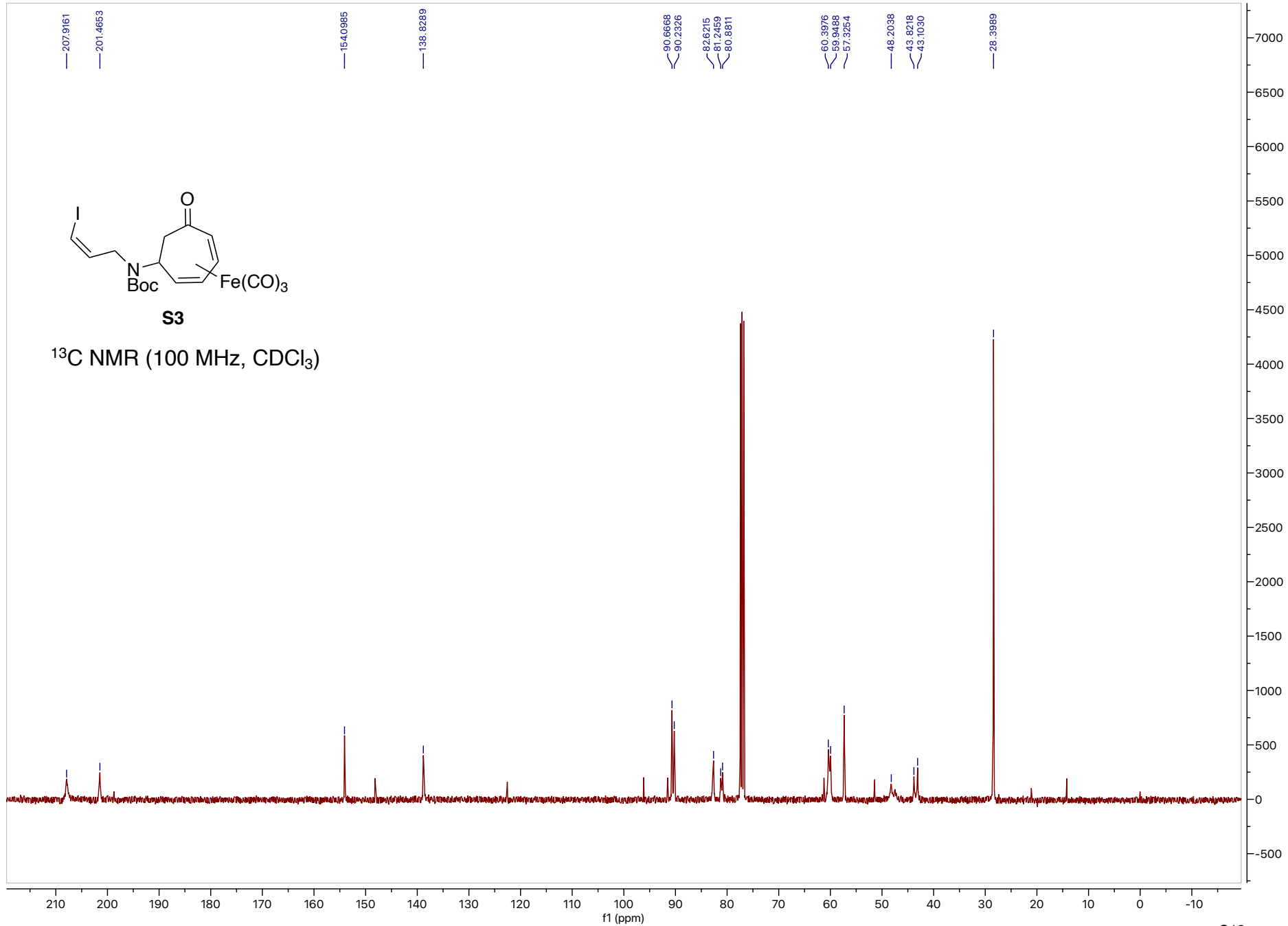
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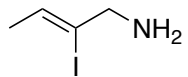
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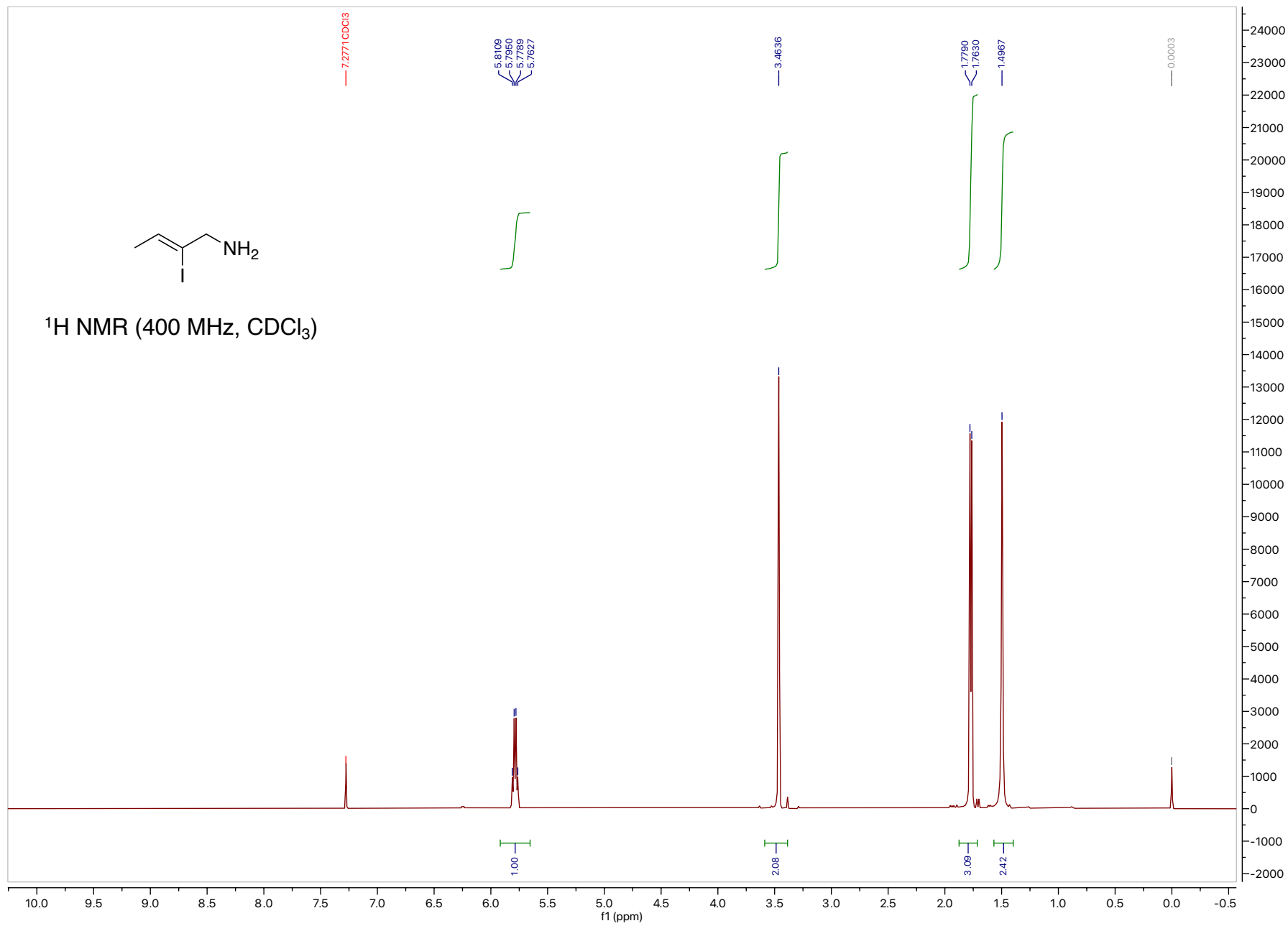
S3

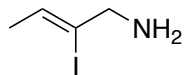
¹³C NMR (100 MHz, CDCl₃)



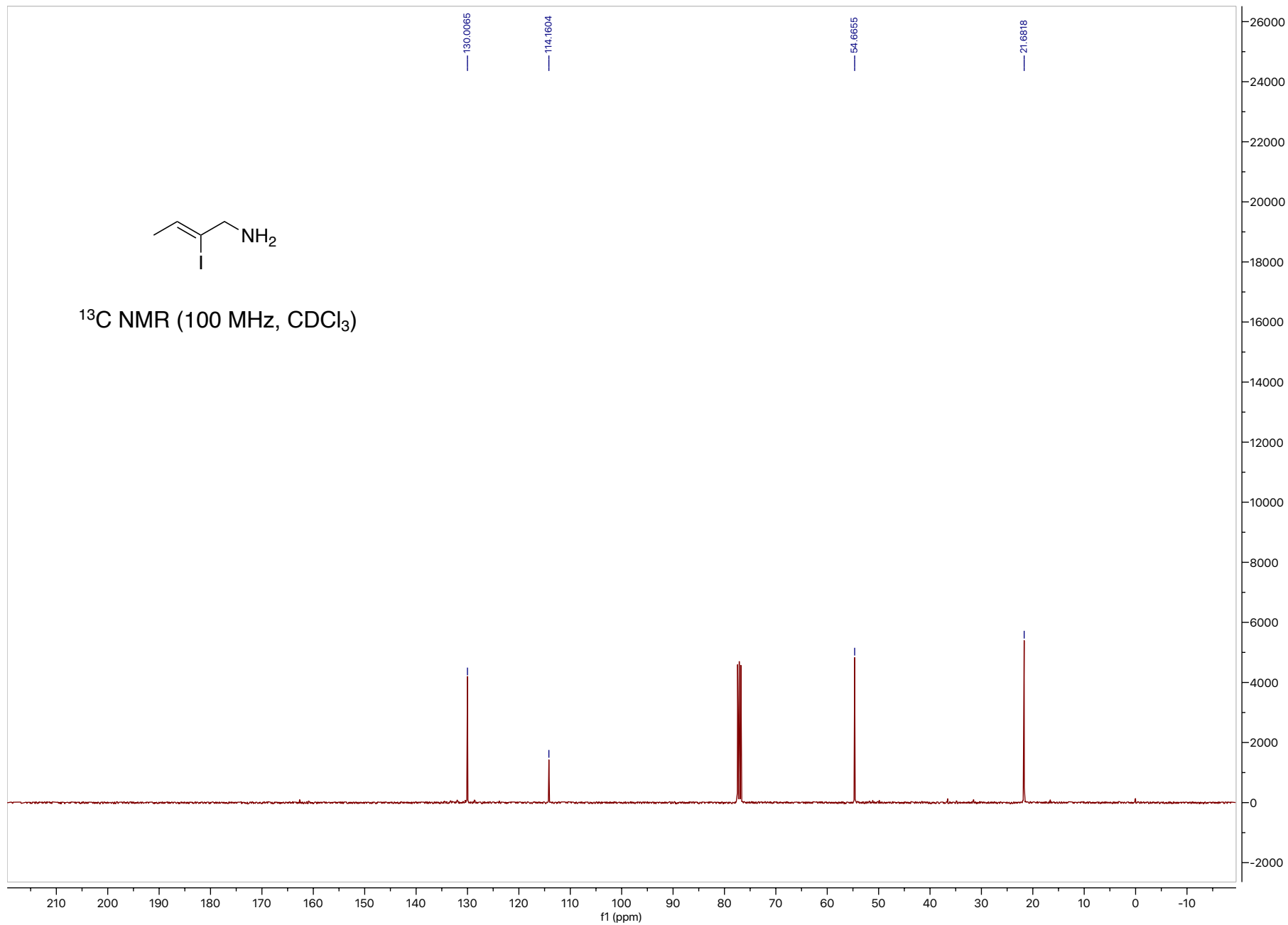


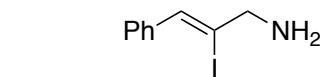
^1H NMR (400 MHz, CDCl_3)



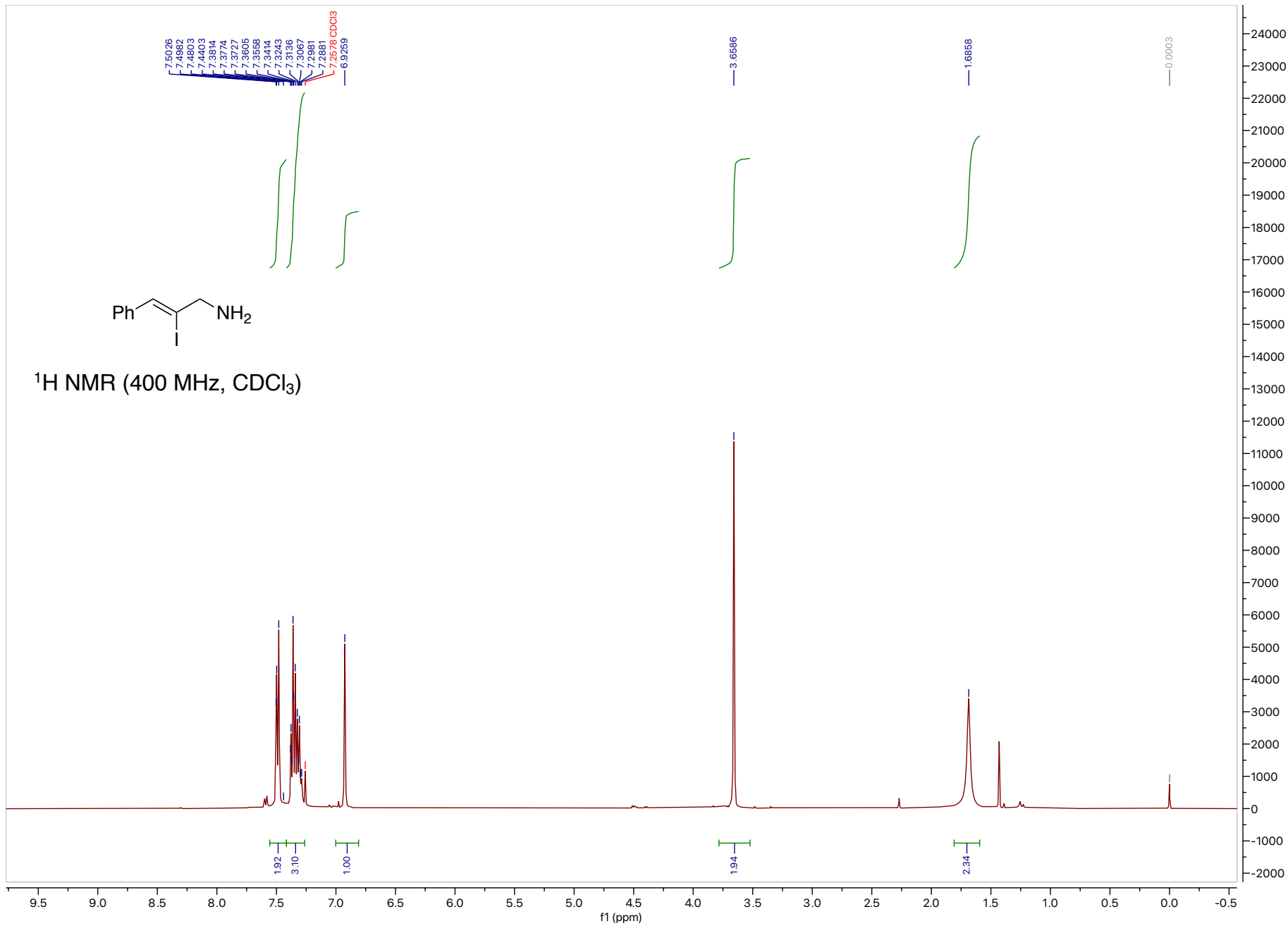


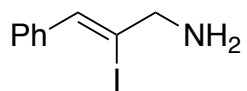
^{13}C NMR (100 MHz, CDCl_3)



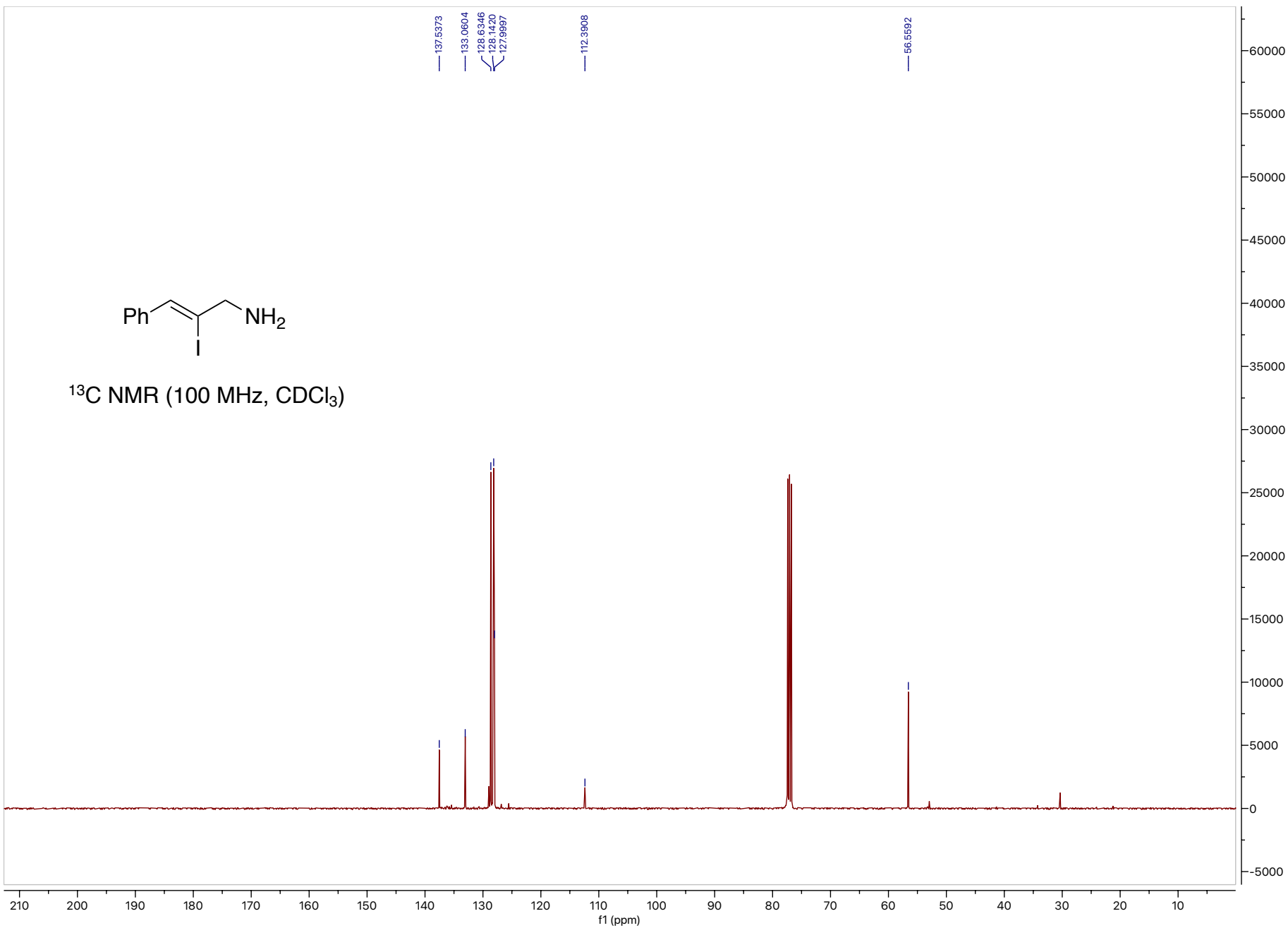


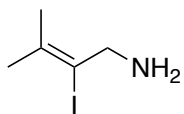
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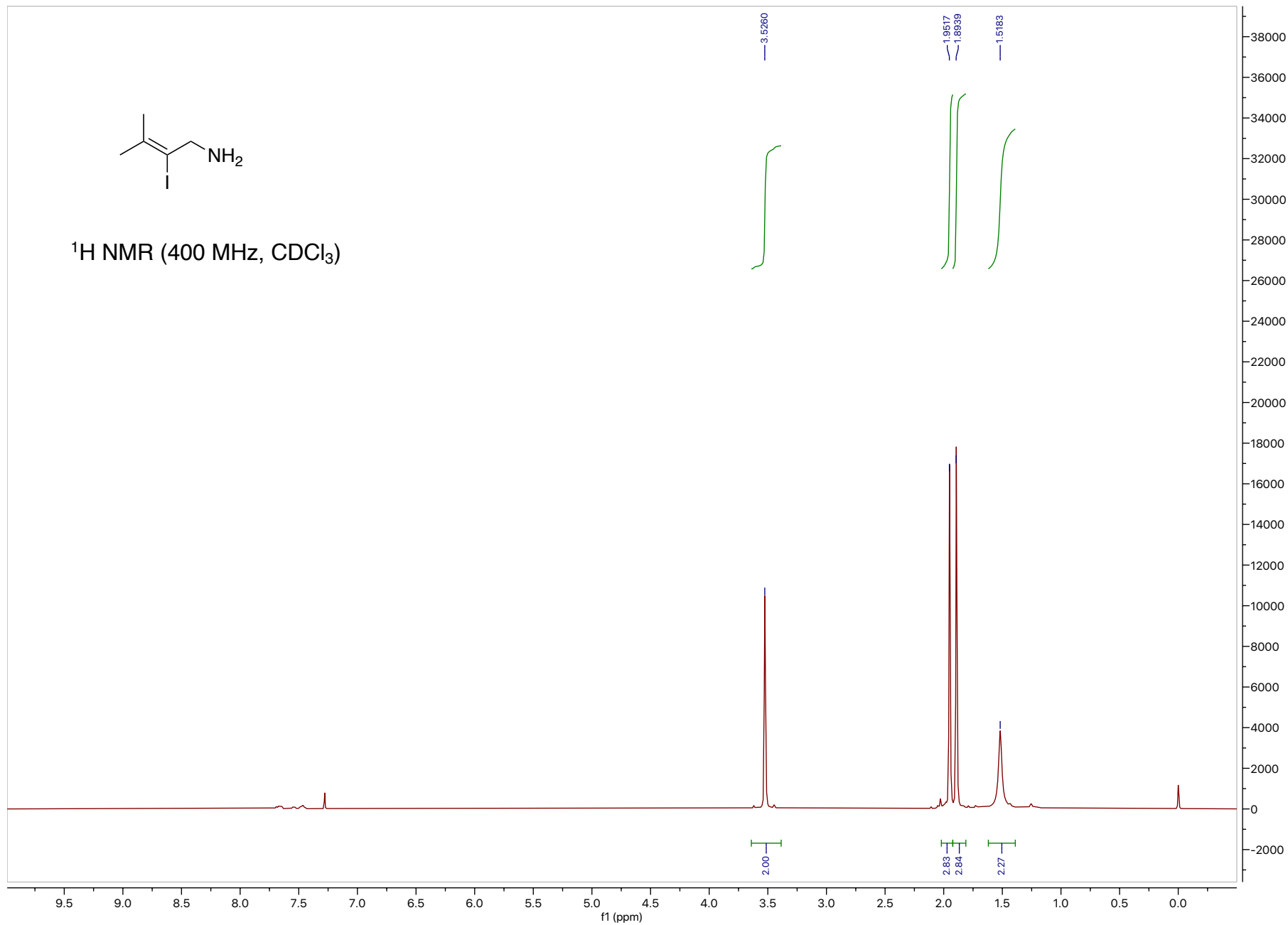


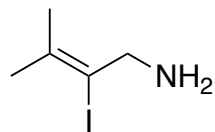
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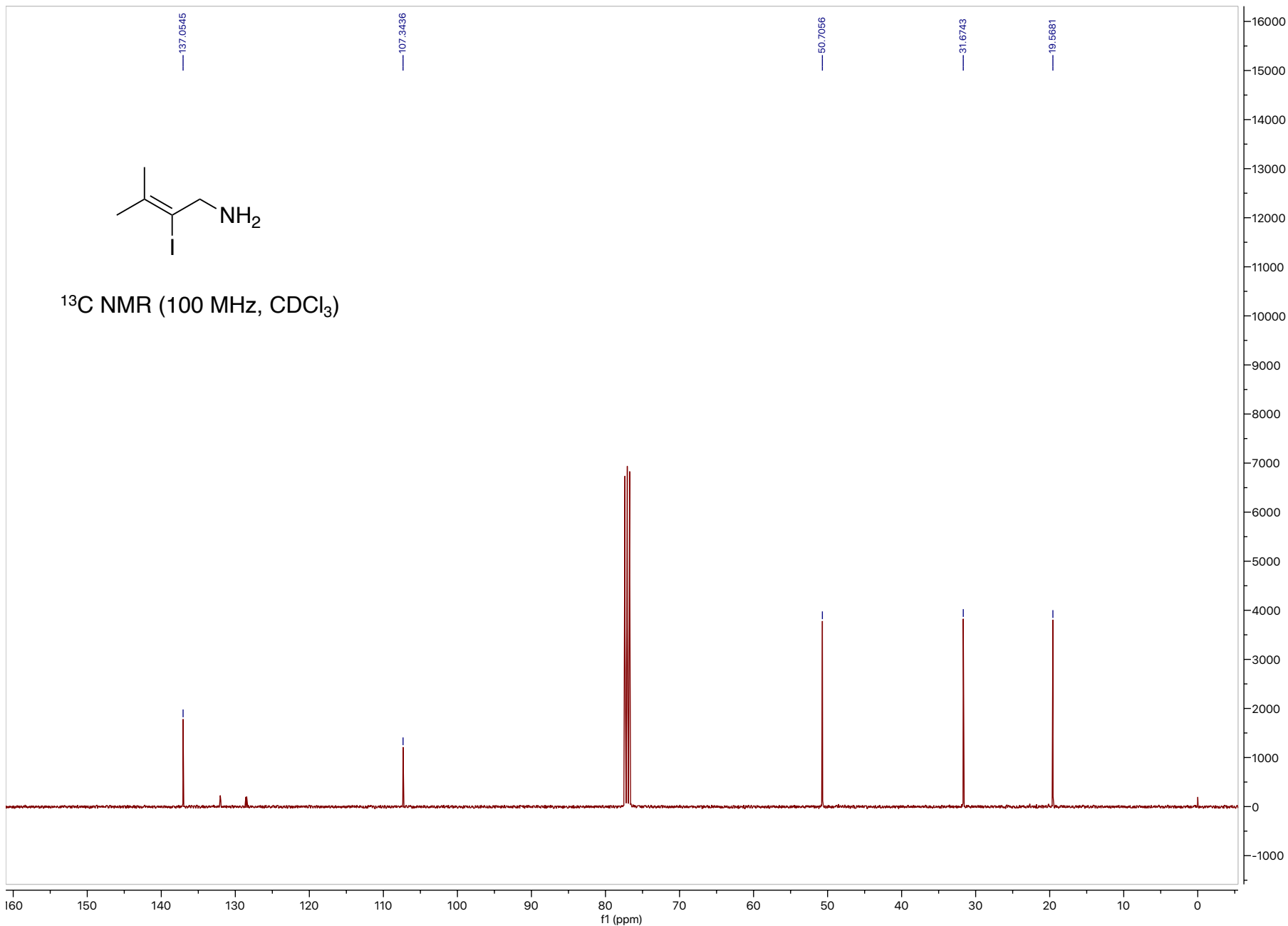


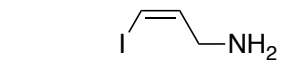
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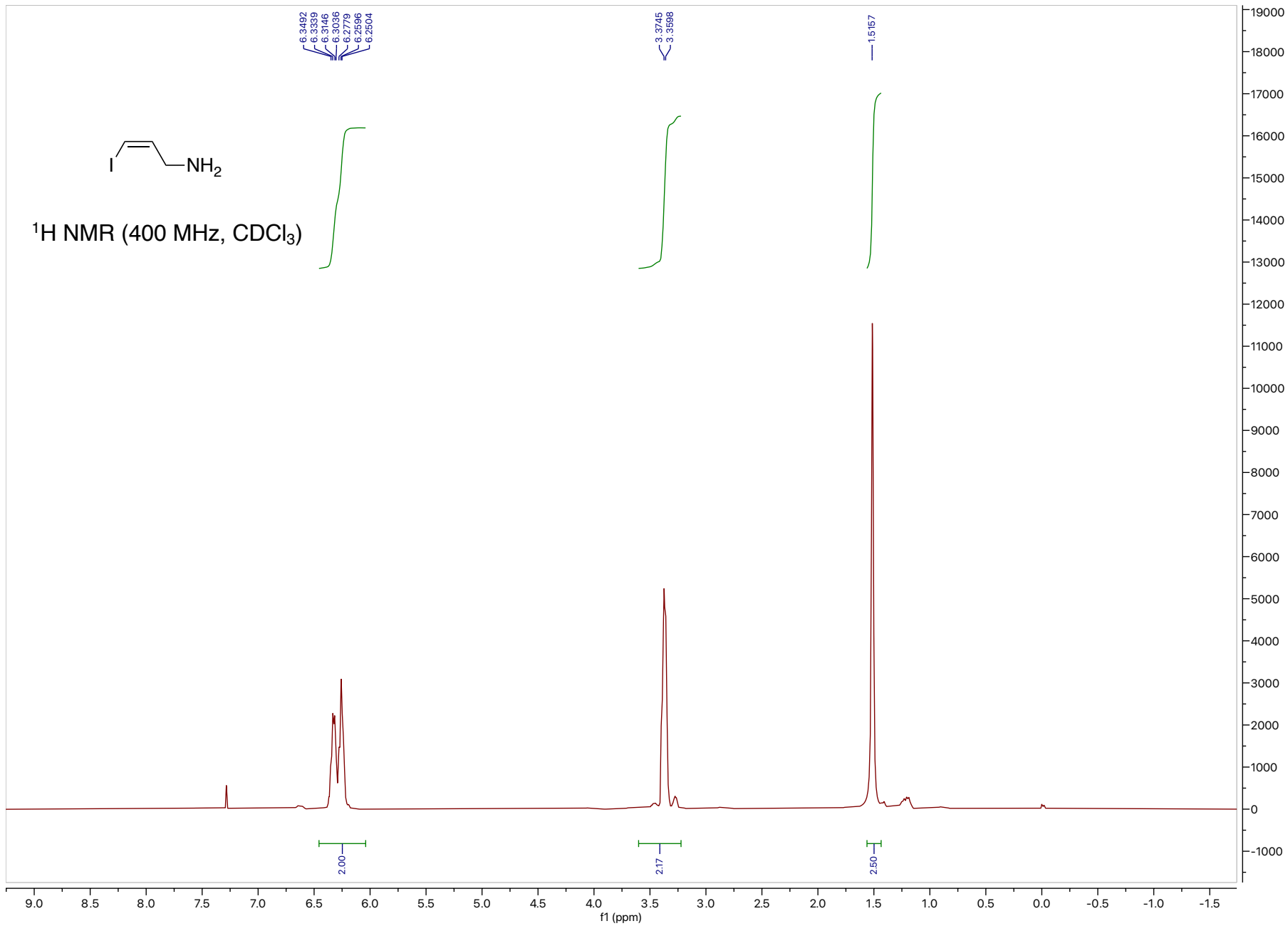


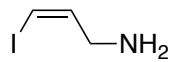
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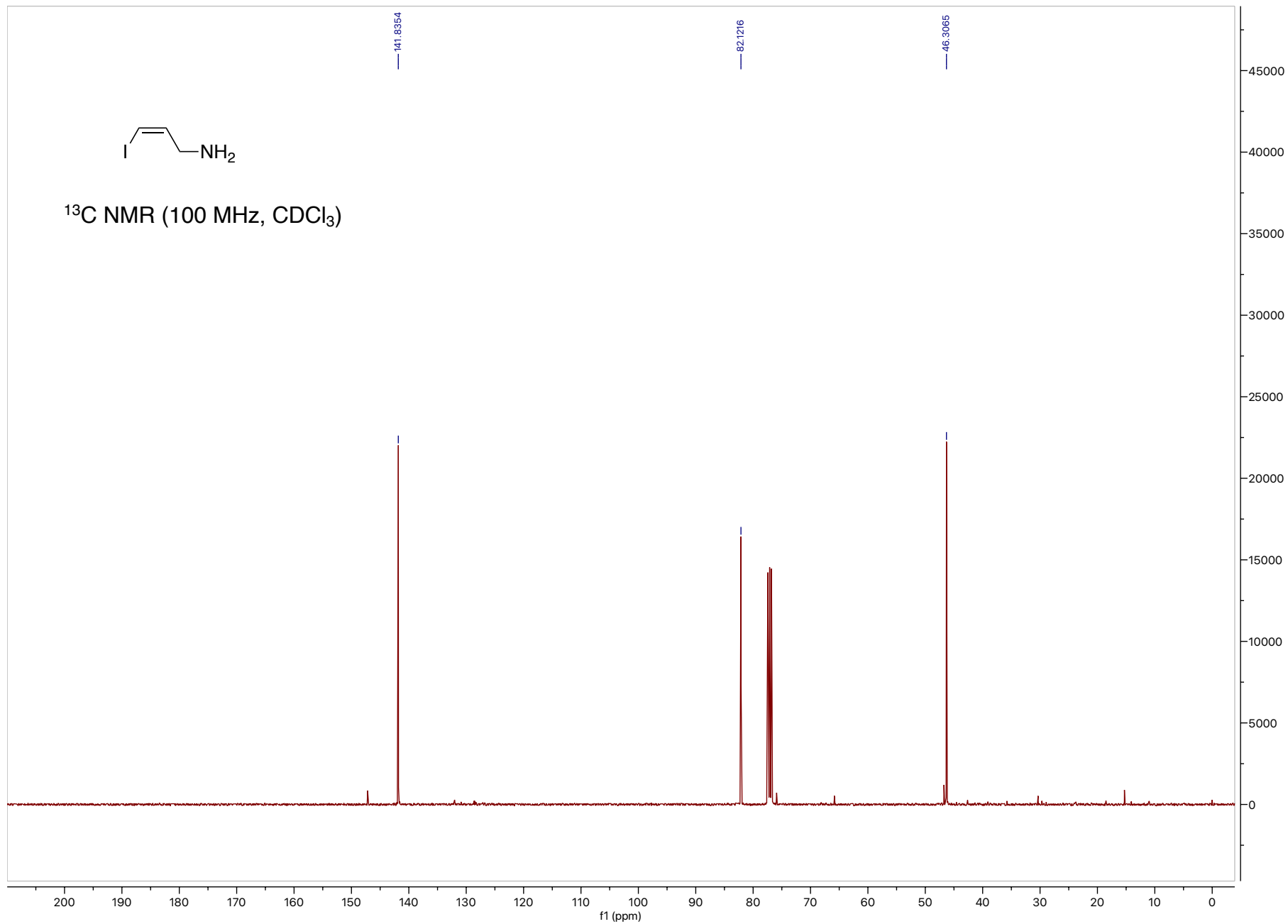


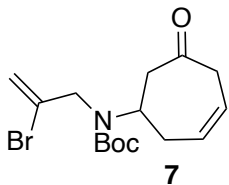
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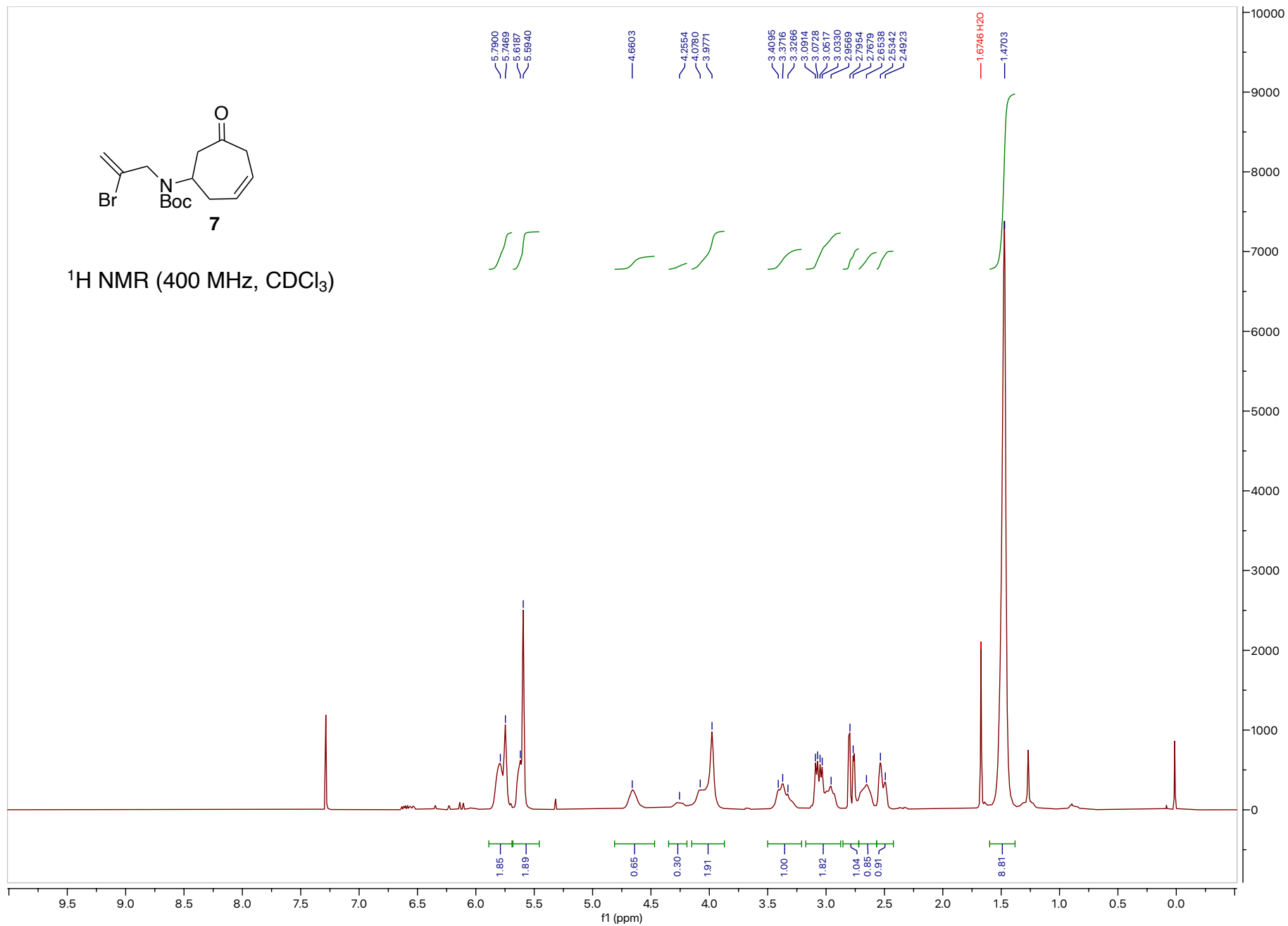


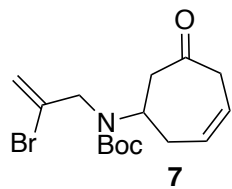
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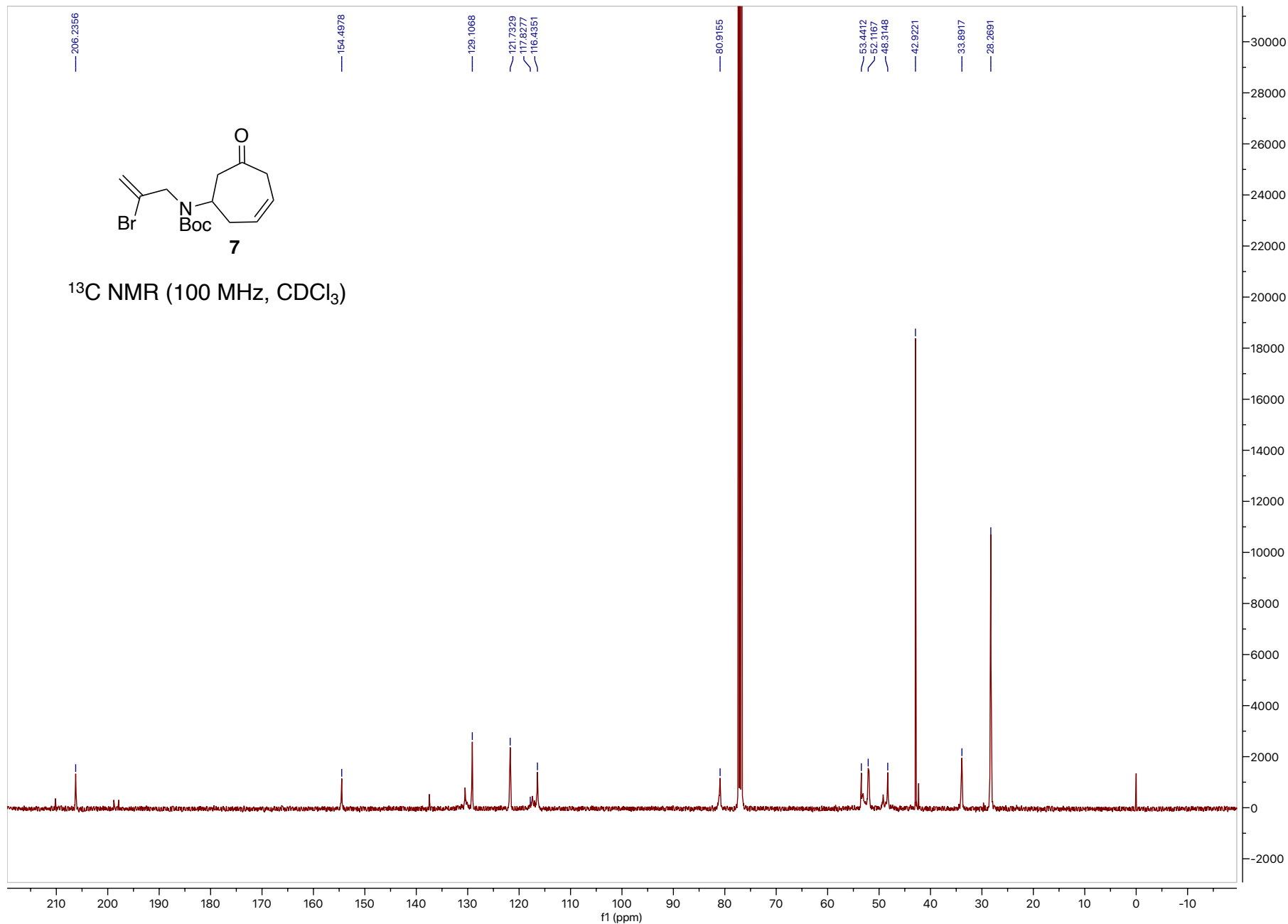


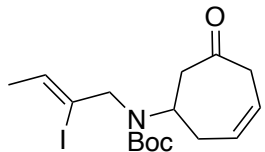
$^1\text{H NMR}$ (400 MHz, CDCl_3)





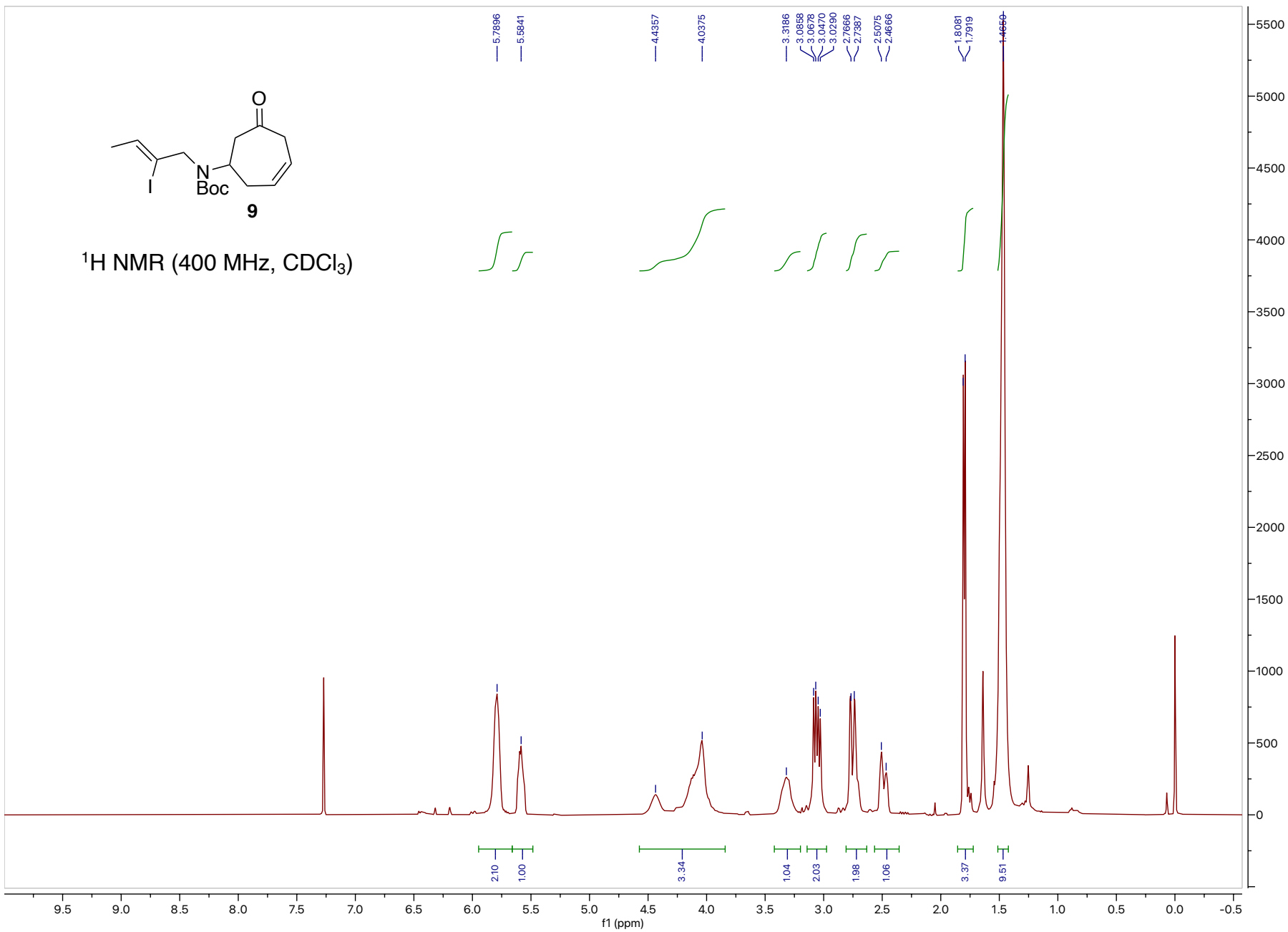
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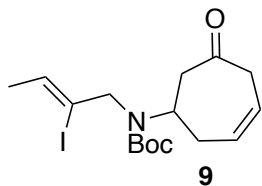




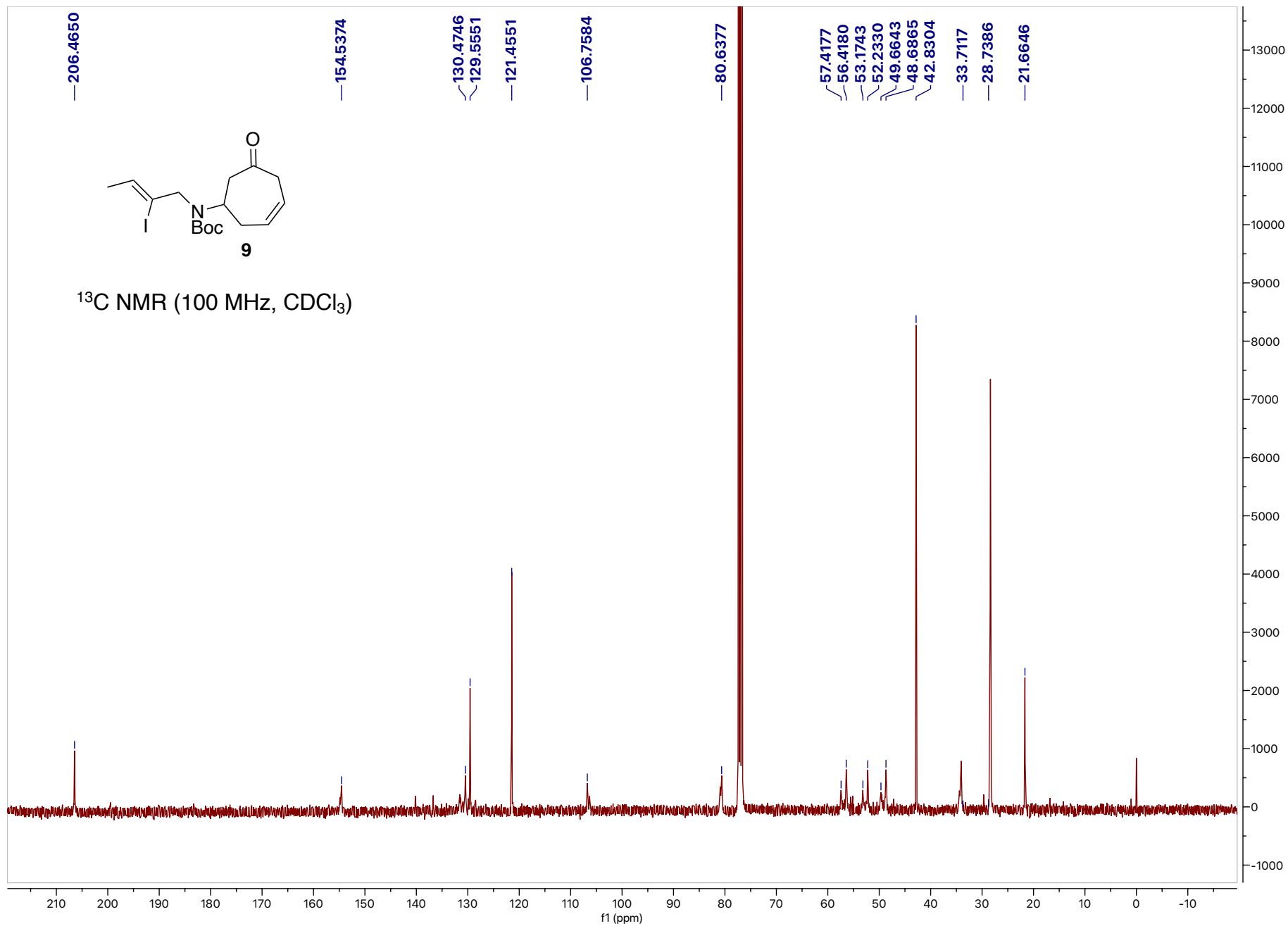
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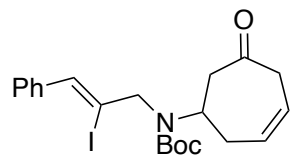
^1H NMR (400 MHz, CDCl_3)





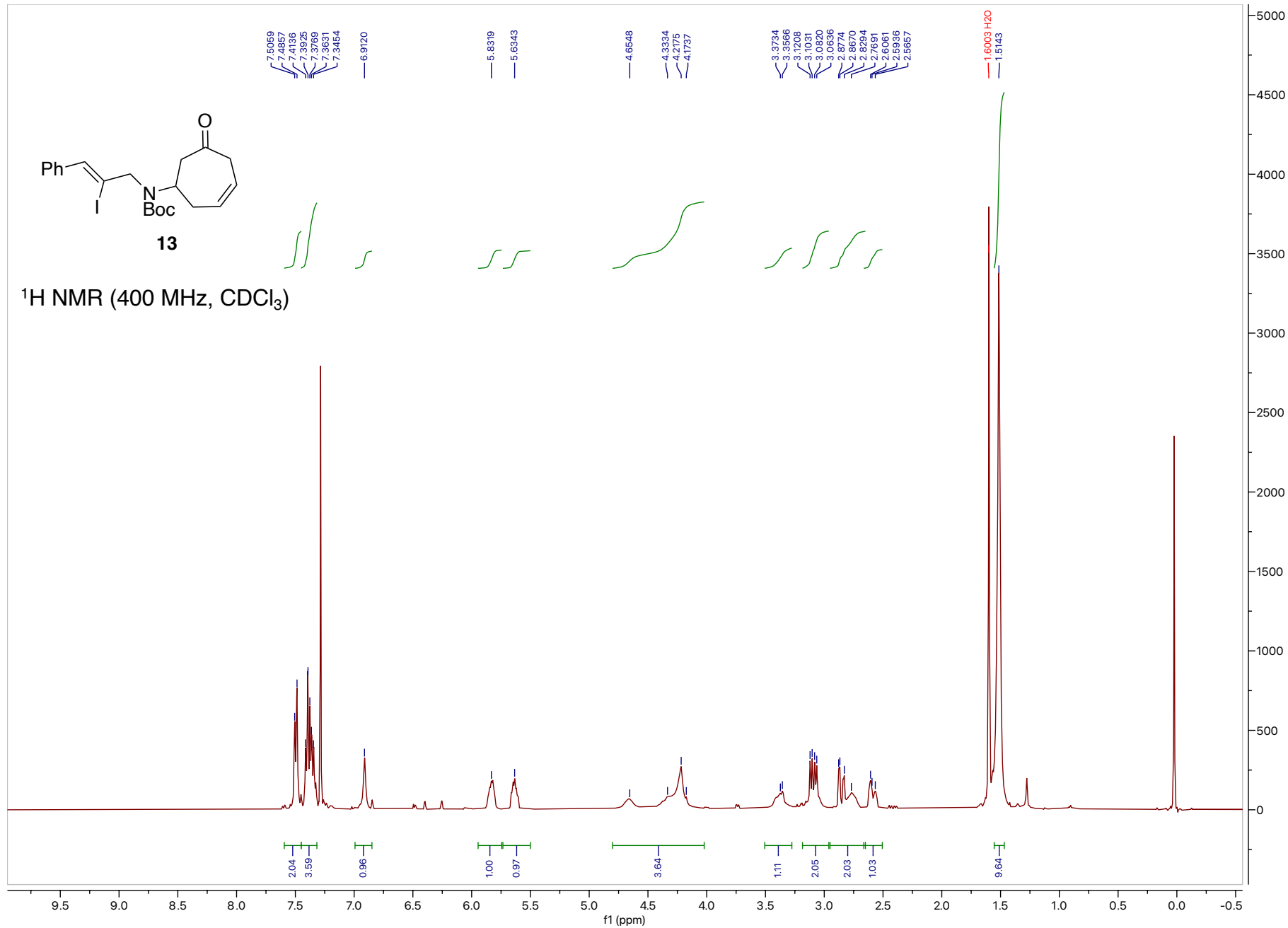
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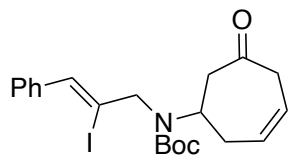




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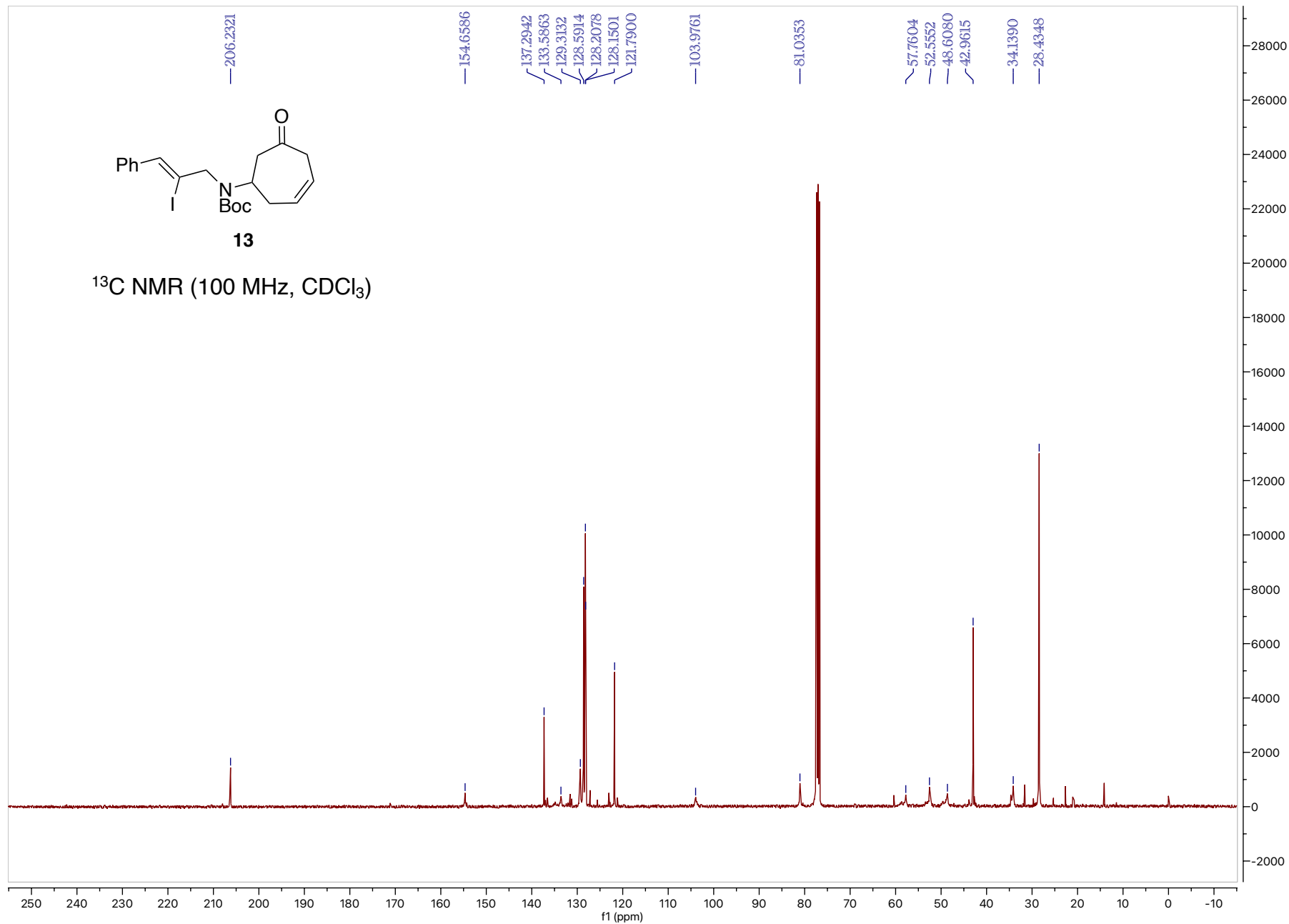
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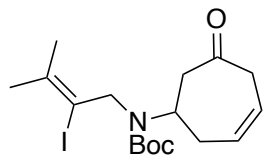




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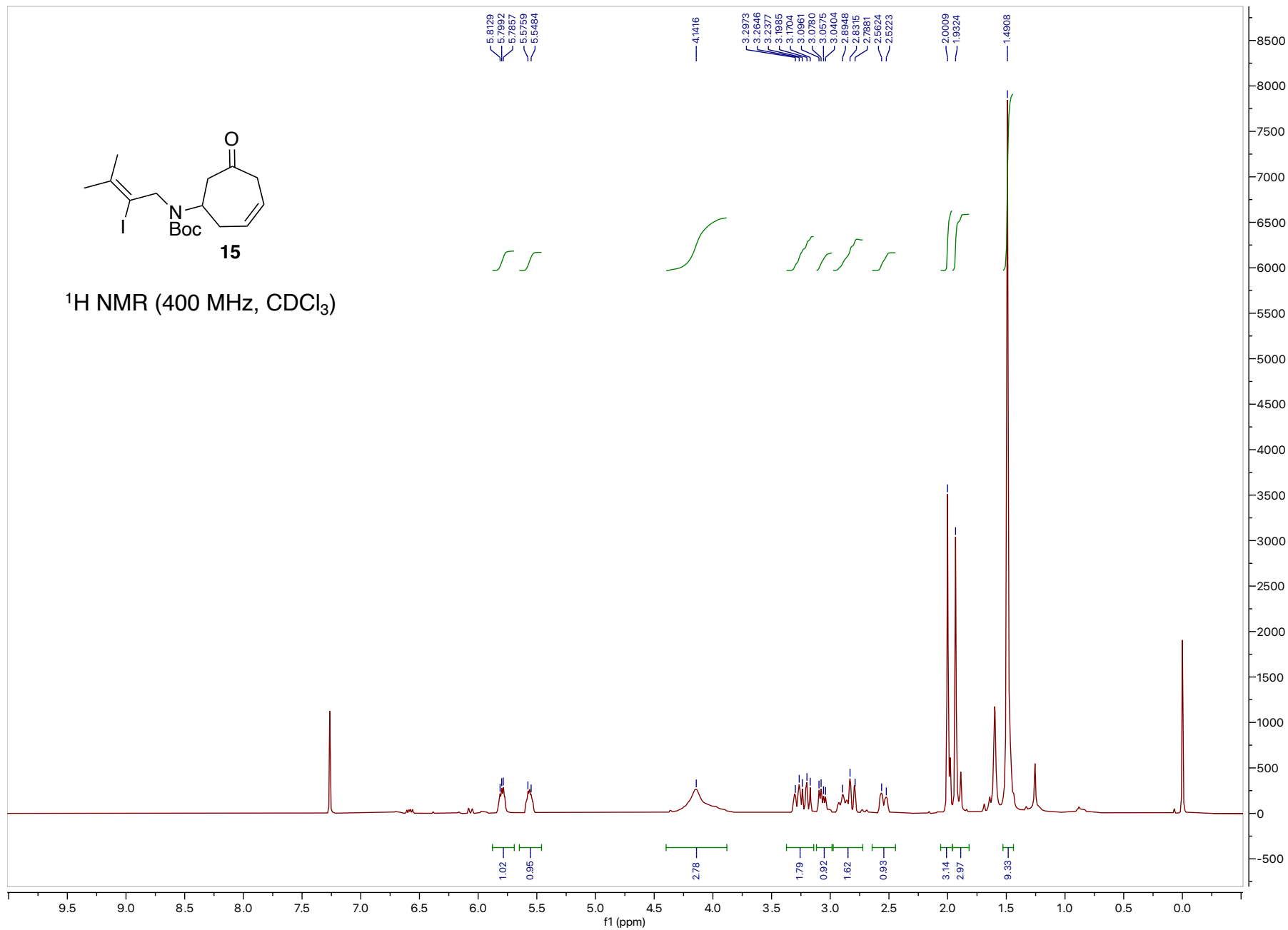
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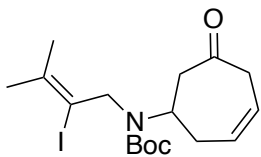




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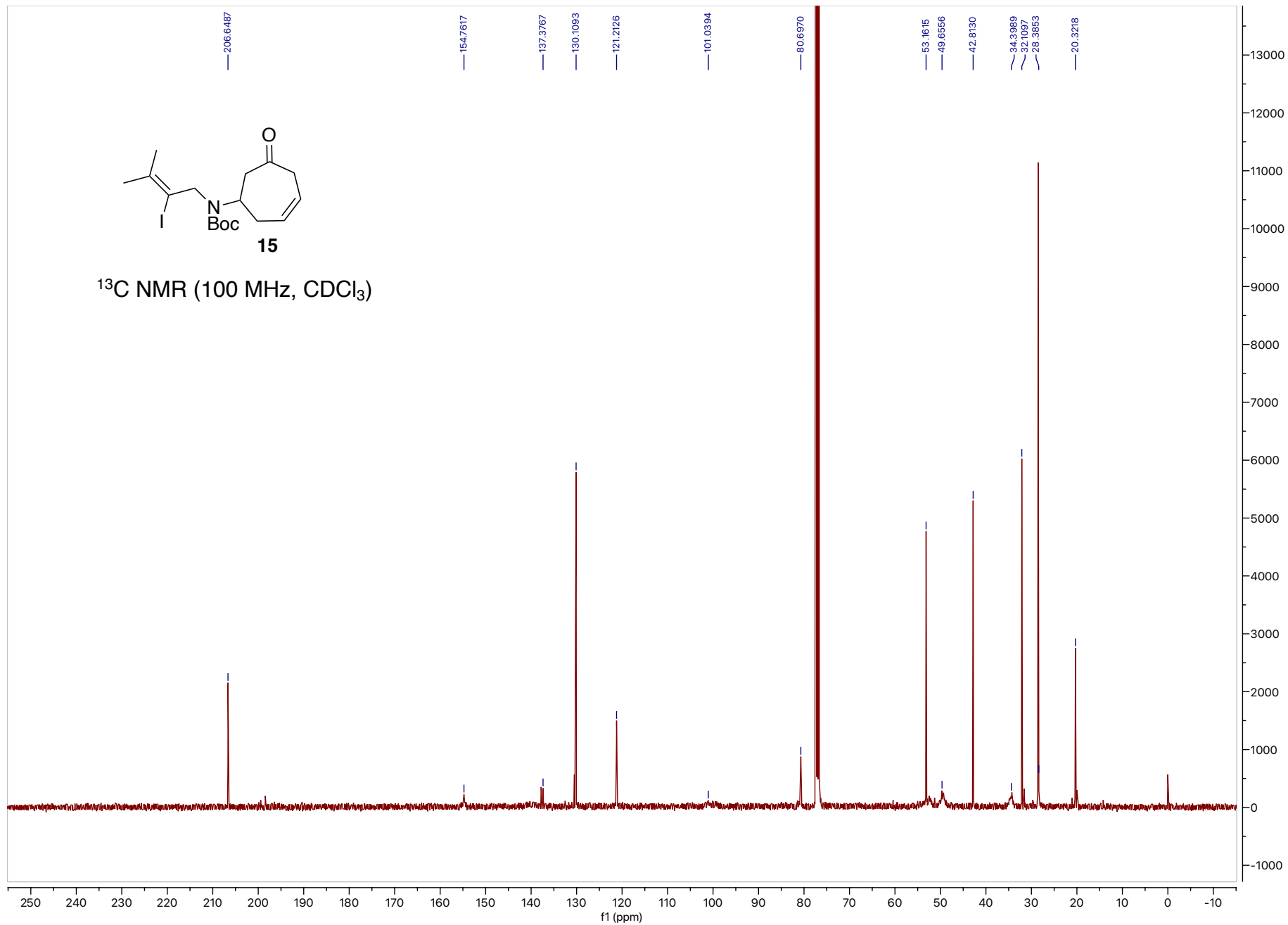
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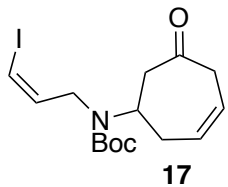




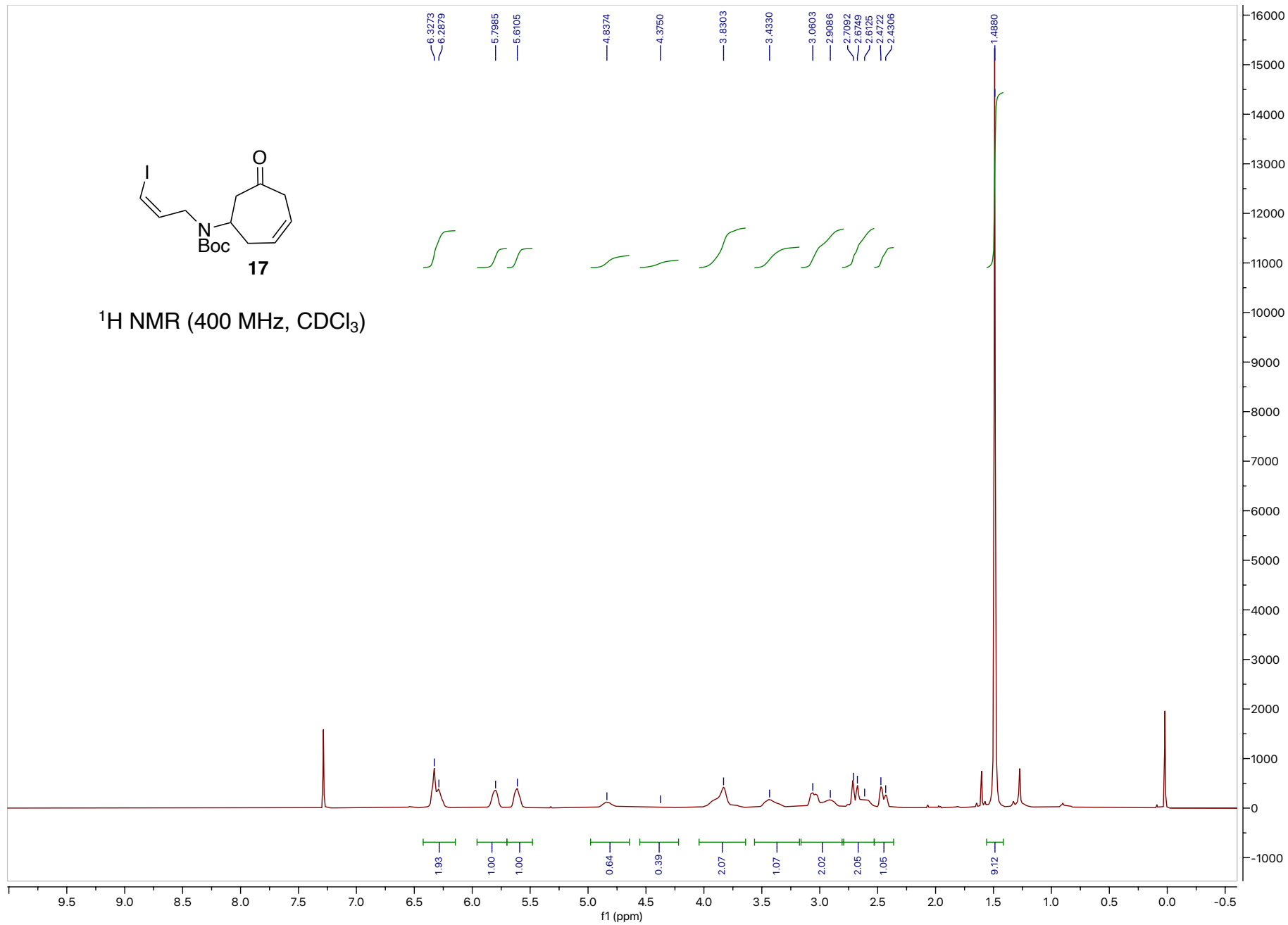
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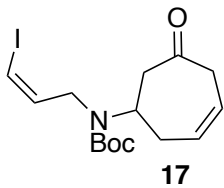
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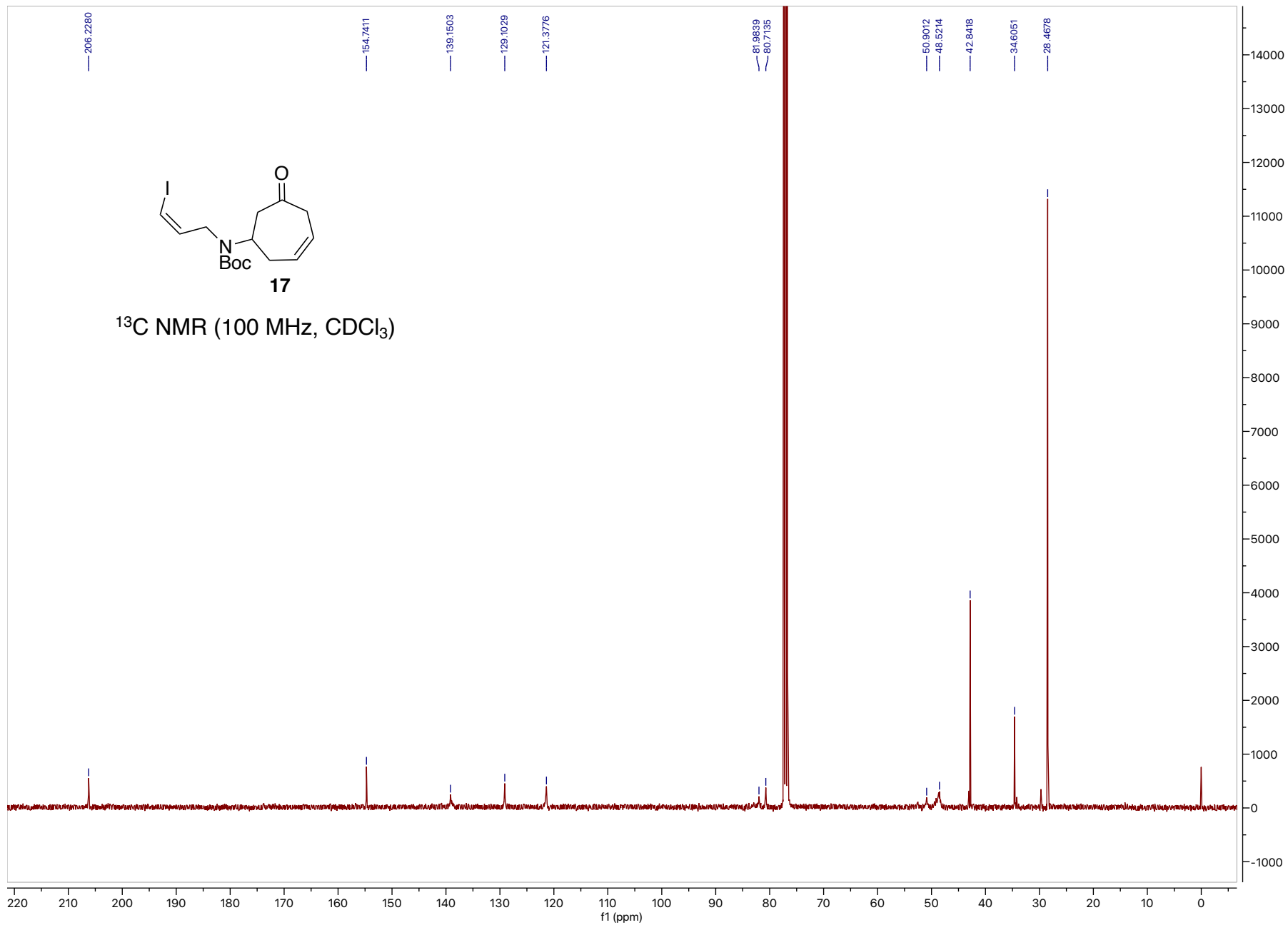


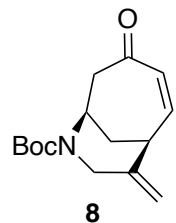
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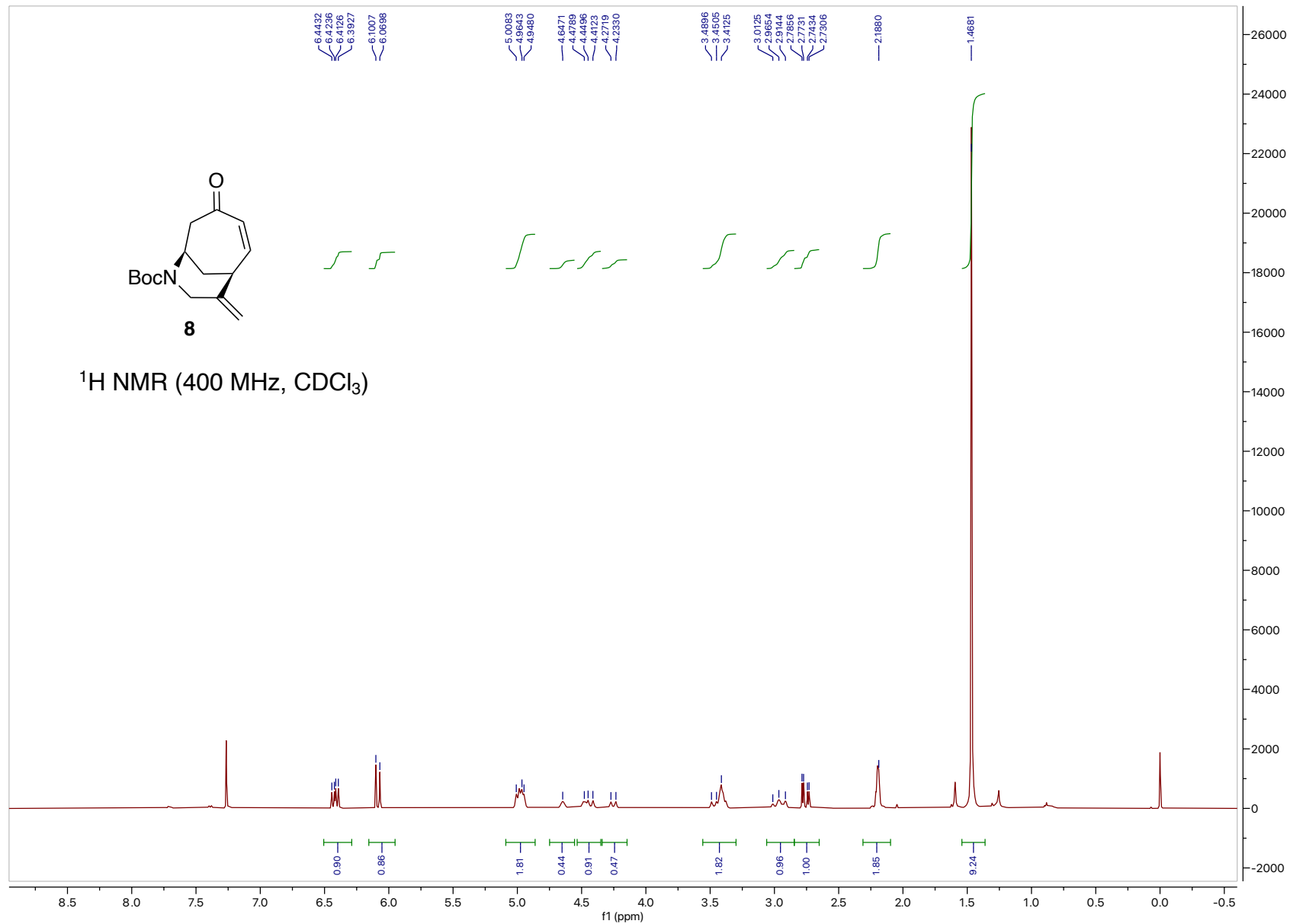


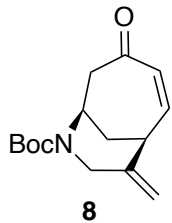
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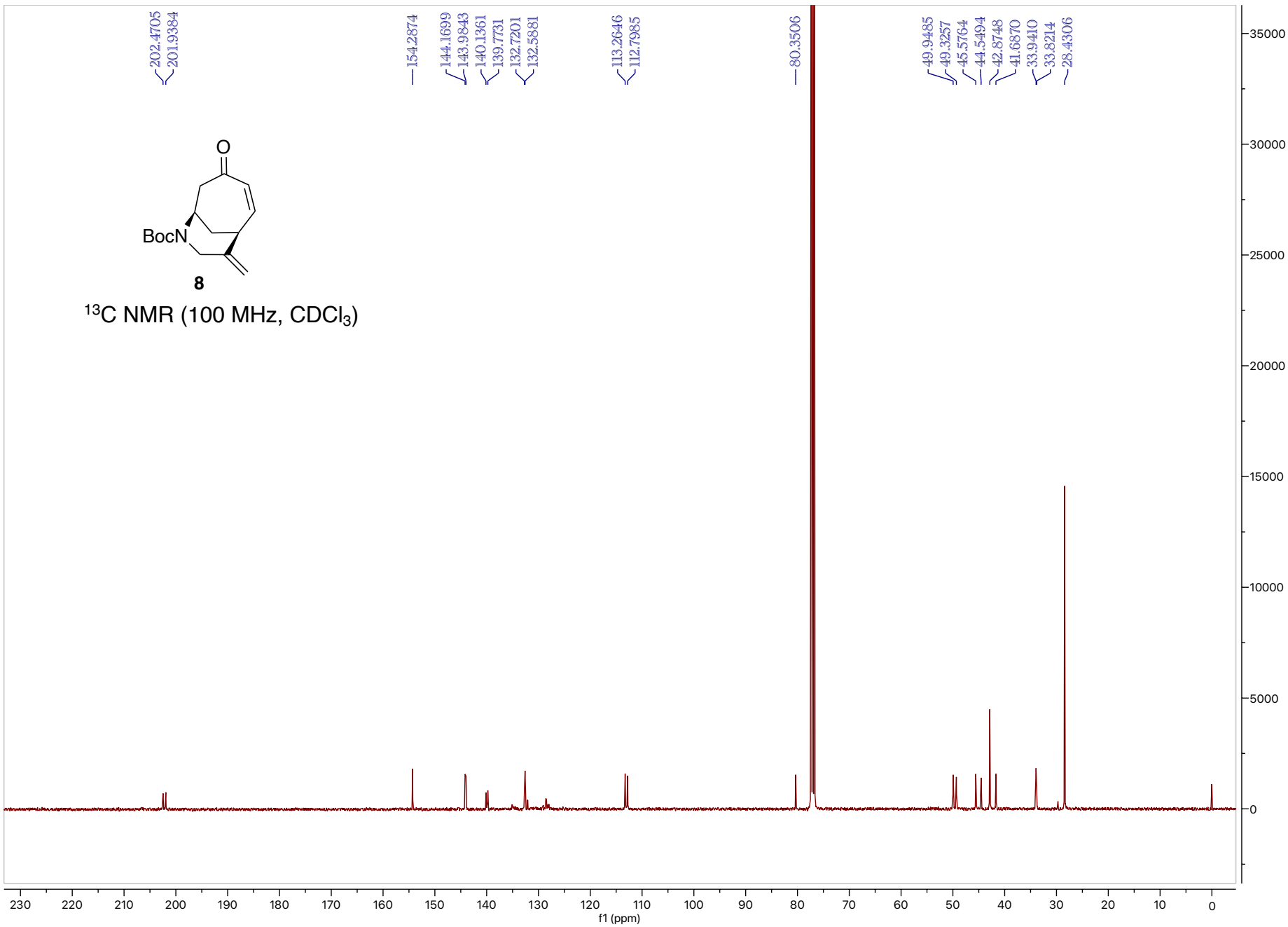


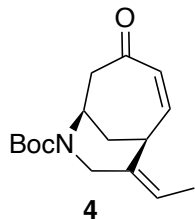
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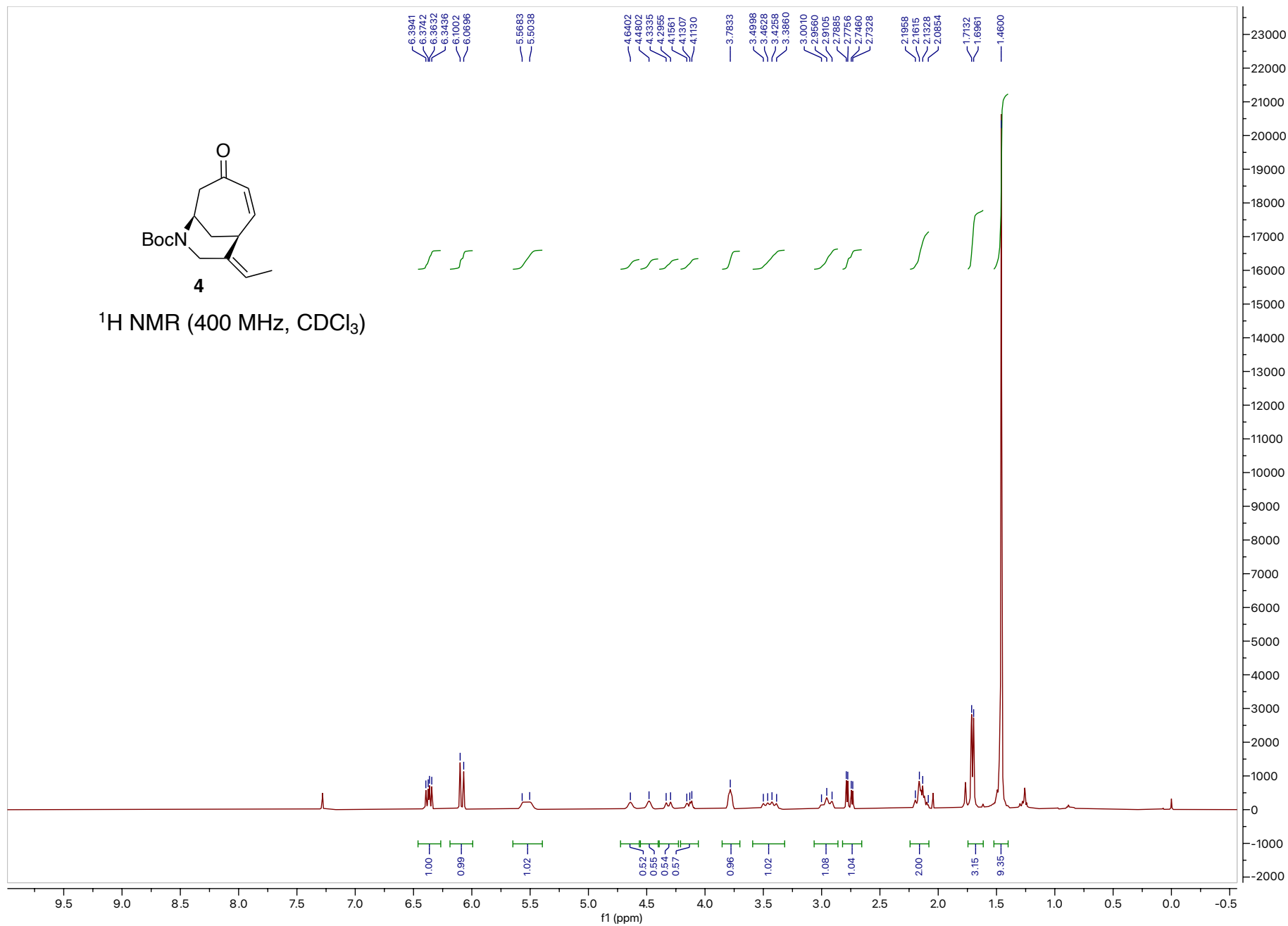


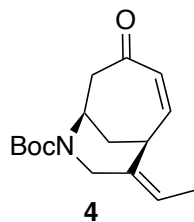
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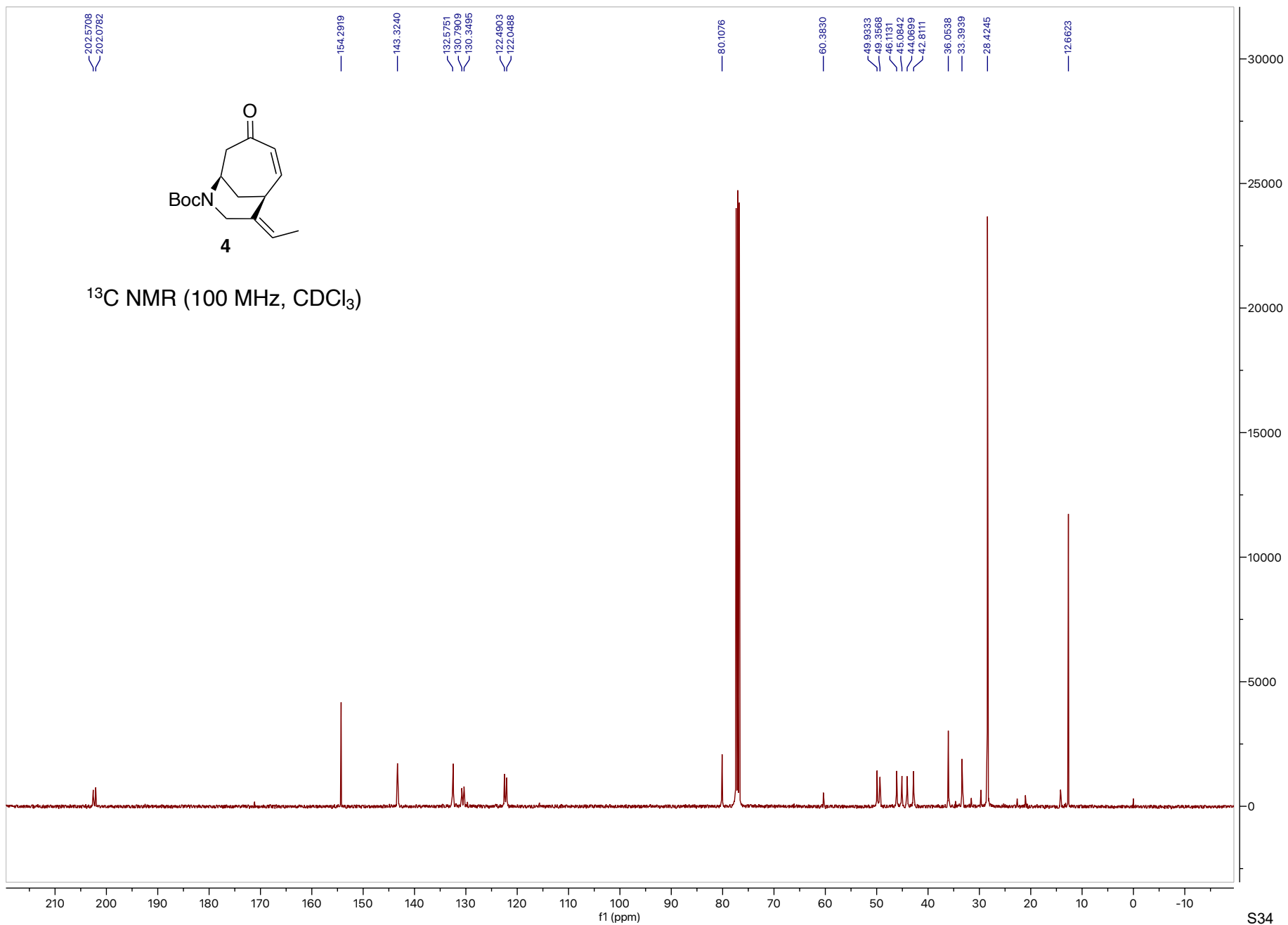


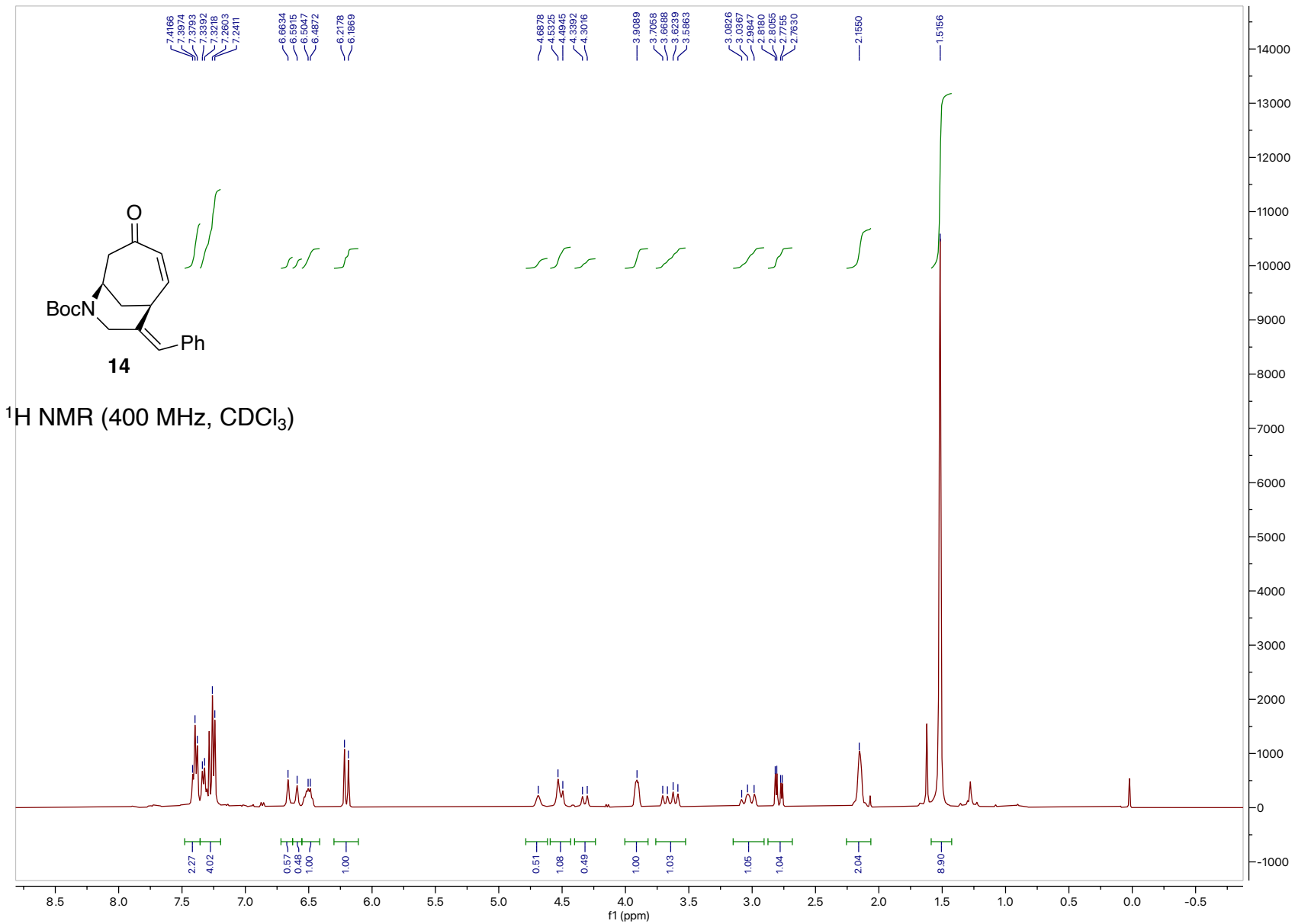
¹H NMR (400 MHz, CDCl₃)

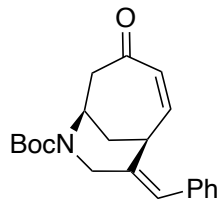




^{13}C NMR (100 MHz, CDCl_3)

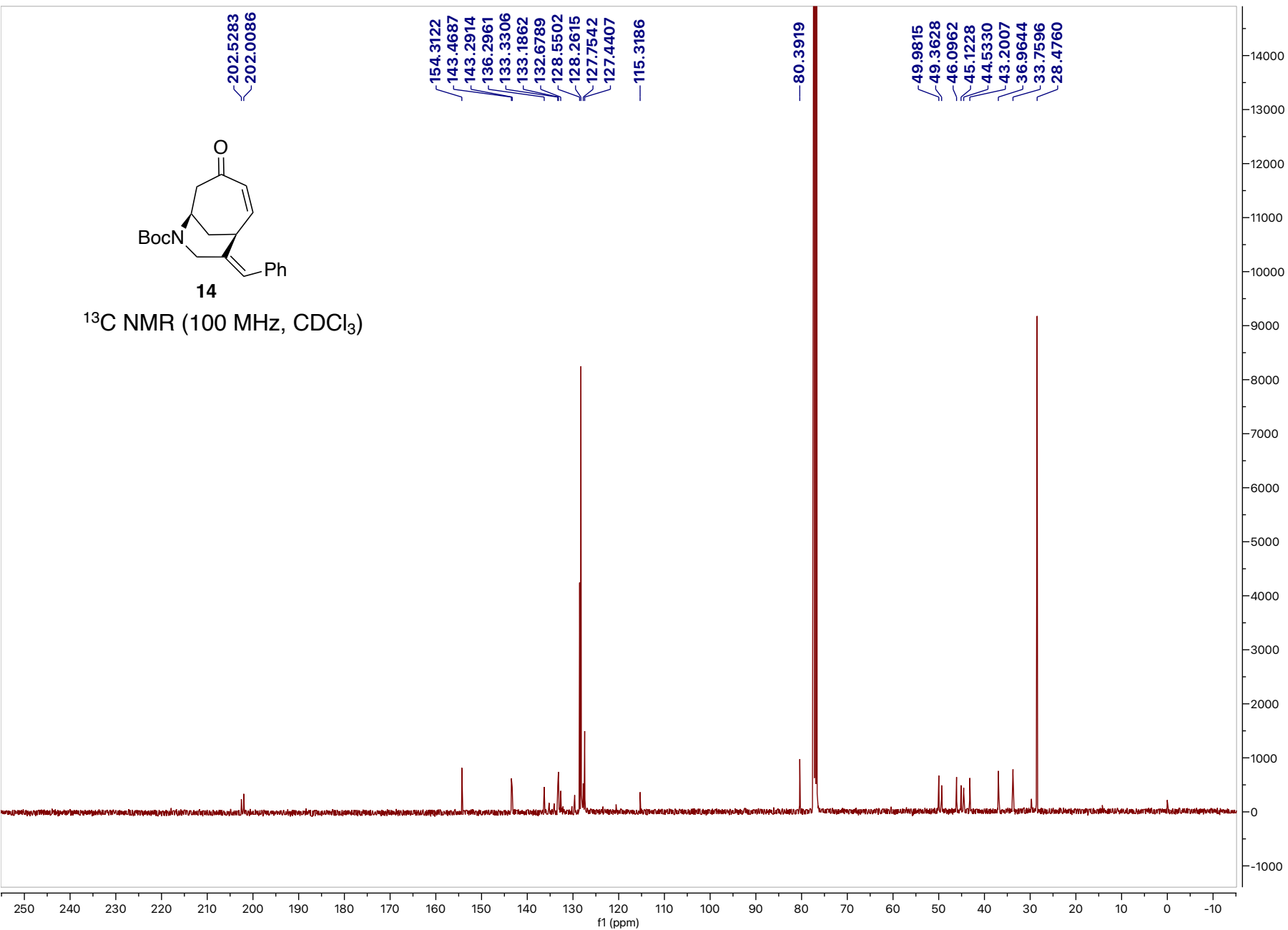


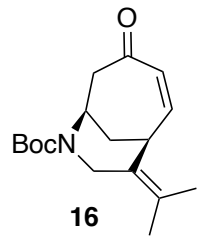




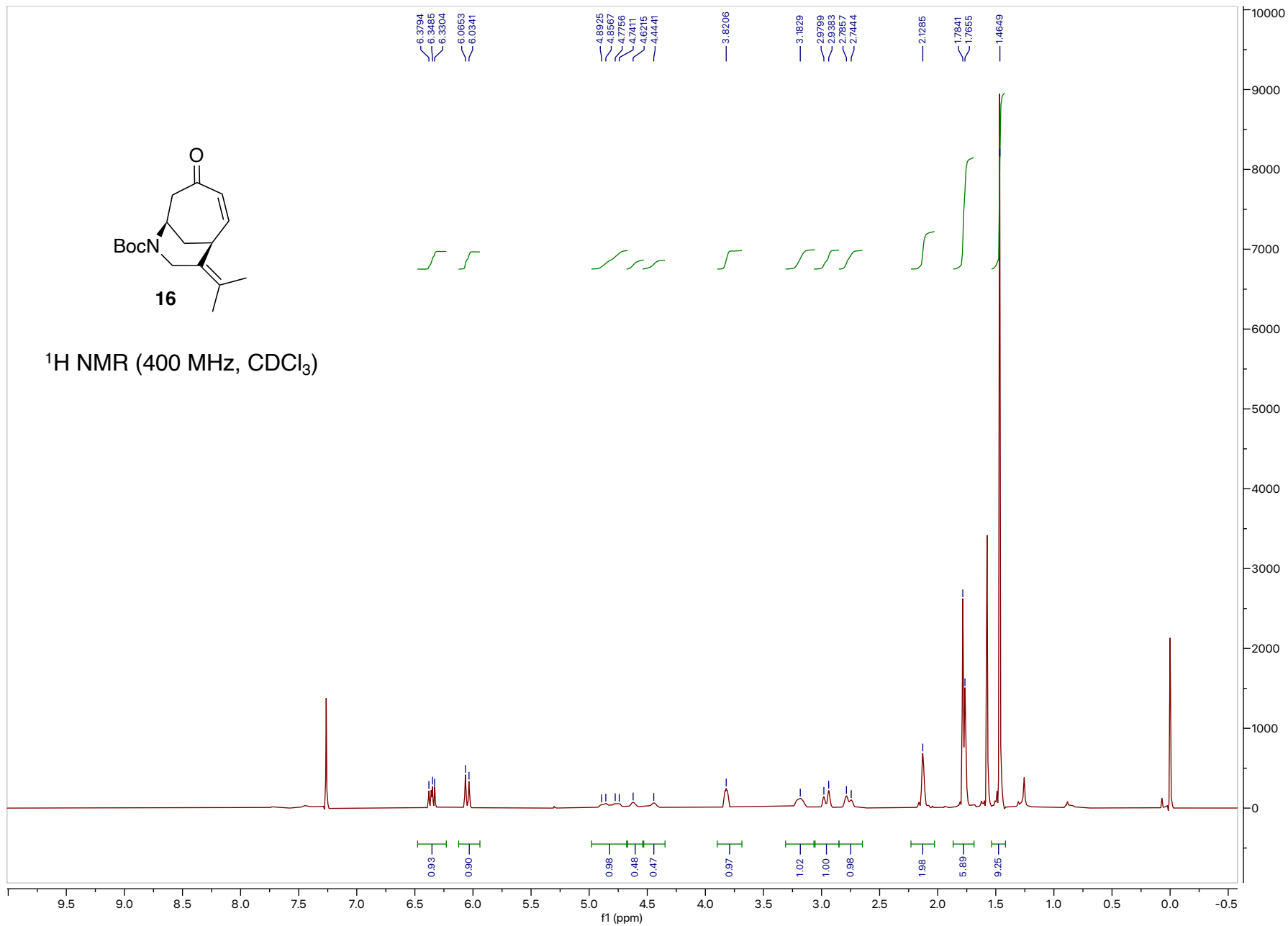
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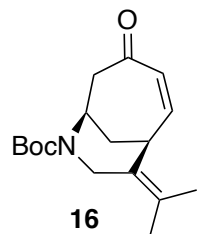
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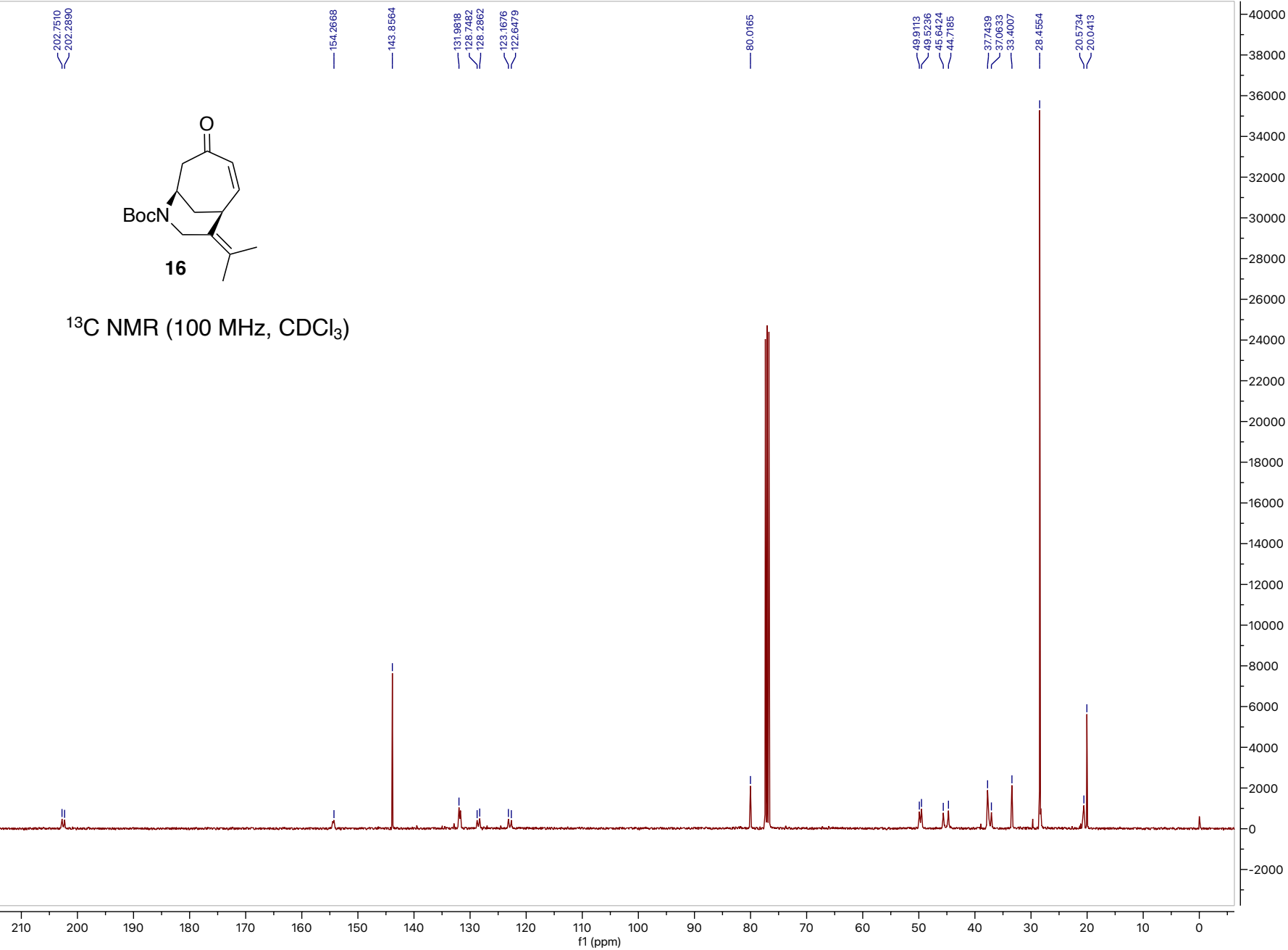


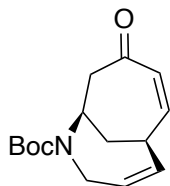
^1H NMR (400 MHz, CDCl_3)



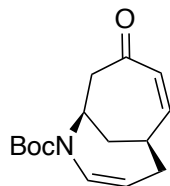


^{13}C NMR (100 MHz, CDCl_3)





18



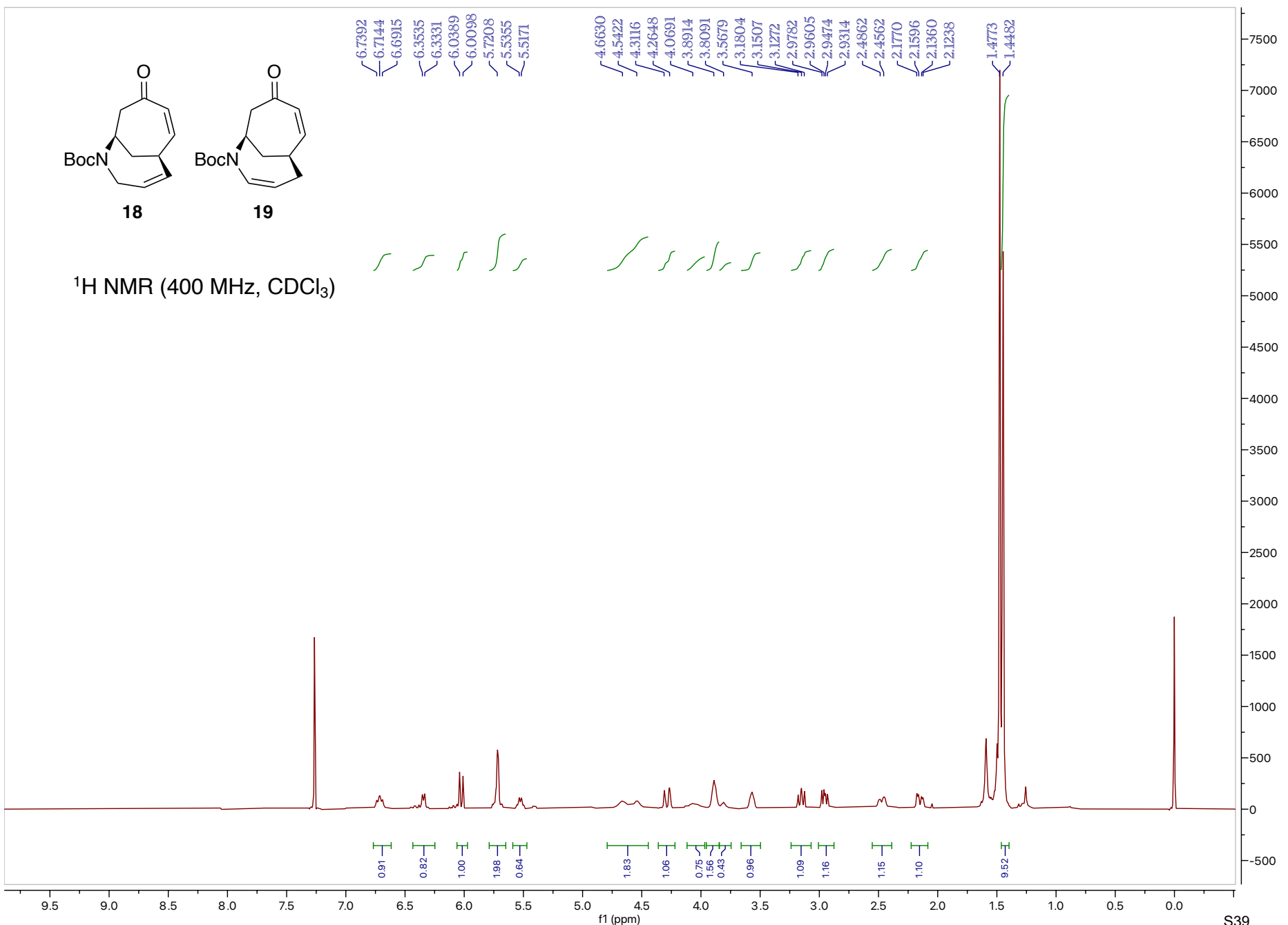
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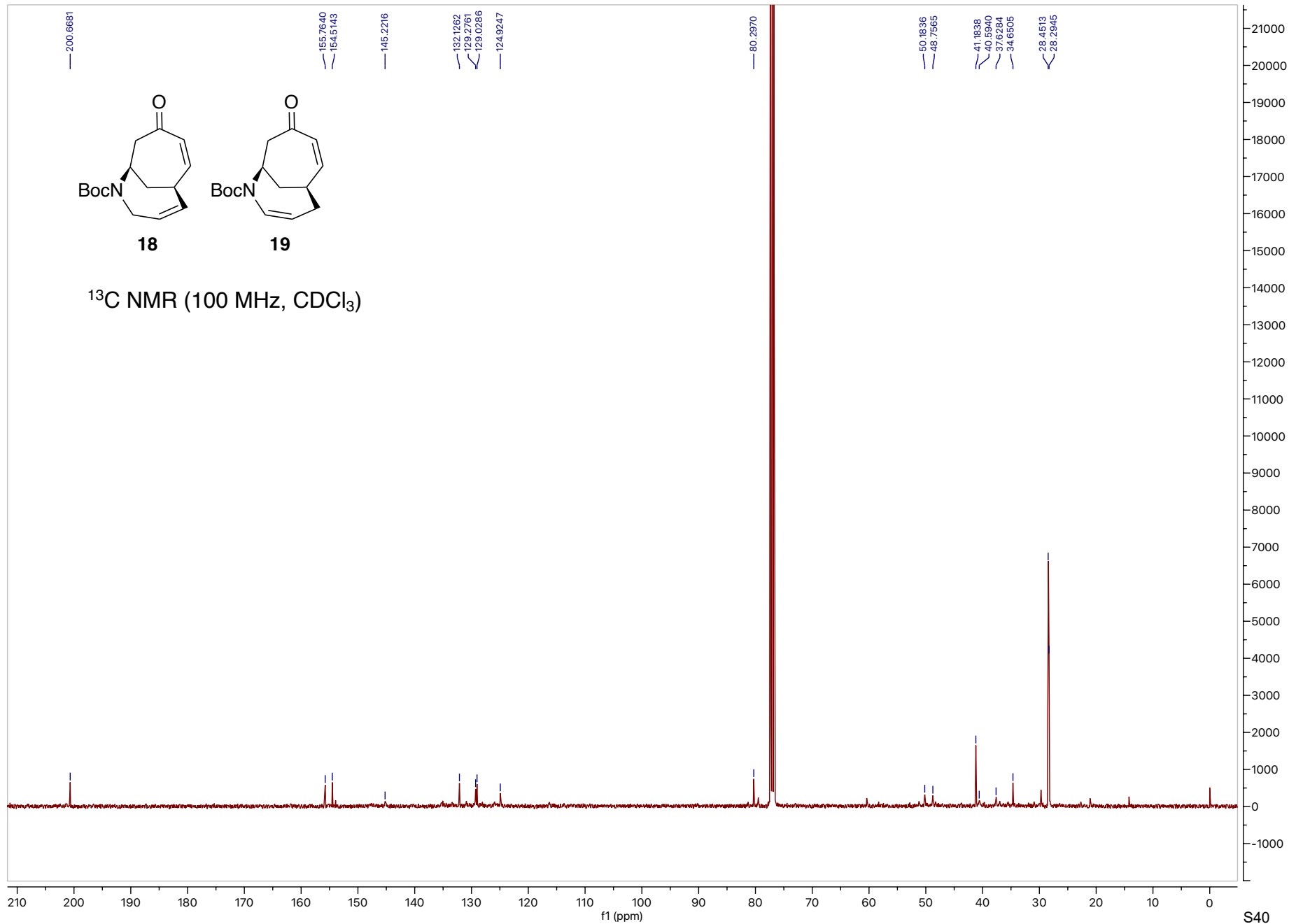
¹H NMR (400 MHz, CDCl₃)

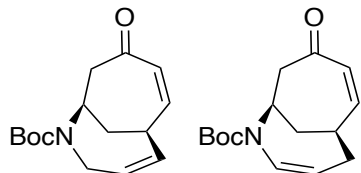
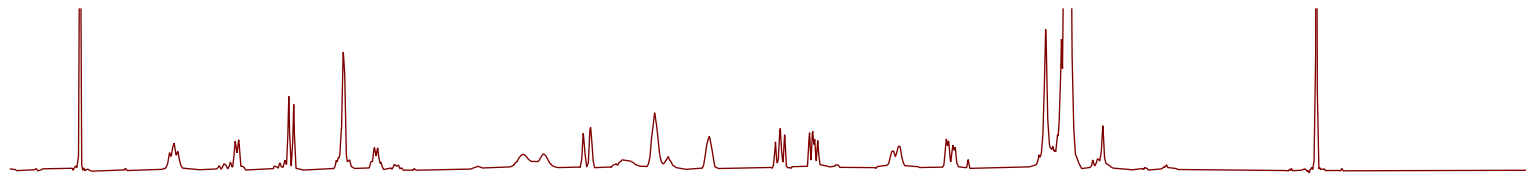
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3.8914
3.8091
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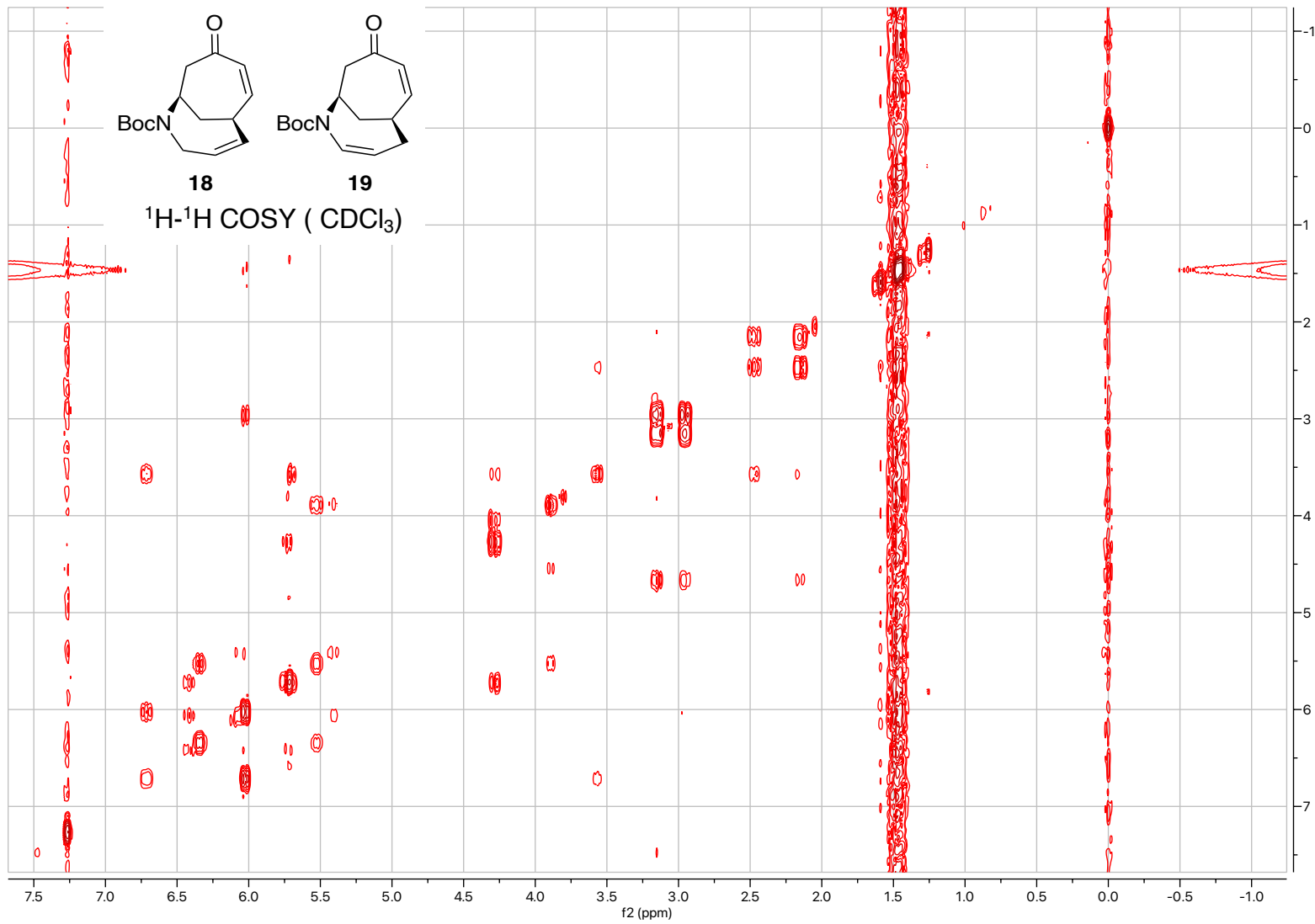
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1.15
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9.52



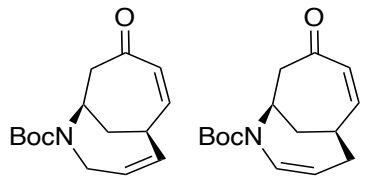
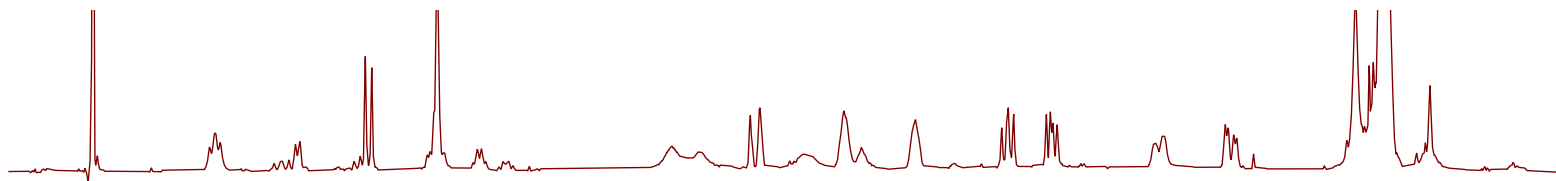




¹H-¹H COSY (CDCl₃)



f1 (ppm)



^1H - ^{13}C HSQC (CDCl_3)

