

SUPPLEMENTARY CHEMICAL INFORMATION

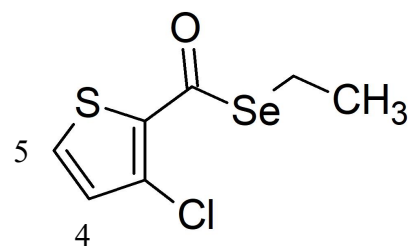
$^1\text{H}$  NMR of compound **1a**

7.55  
7.54

7.07  
7.05

3.14  
3.12  
3.10  
3.08

1.54  
1.52  
1.50



1.0  
H<sub>5</sub>

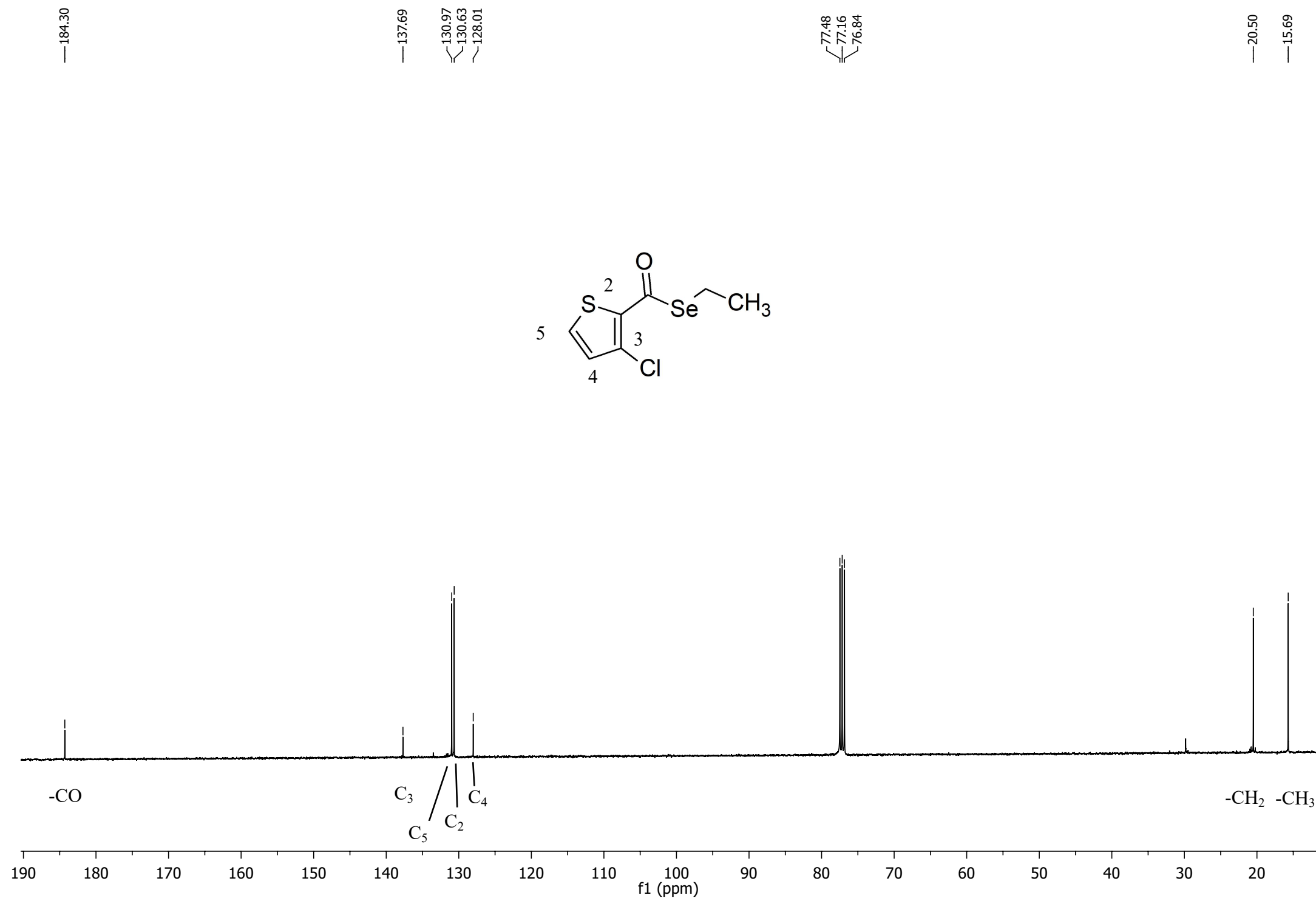
1.0  
H<sub>4</sub>

2.0  
-CH<sub>2</sub>-

3.0  
-CH<sub>3</sub>

8.2 7.8 7.6 7.4 7.2 7.0 6.8 6.4 6.0 5.6 5.2 4.8 4.4 4.0 3.6 3.2 2.8 2.4 2.0 1.6  
f1 (ppm)

<sup>13</sup>C NMR of compound **1a**



<sup>1</sup>H NMR of compound **1b**

7.45  
7.44

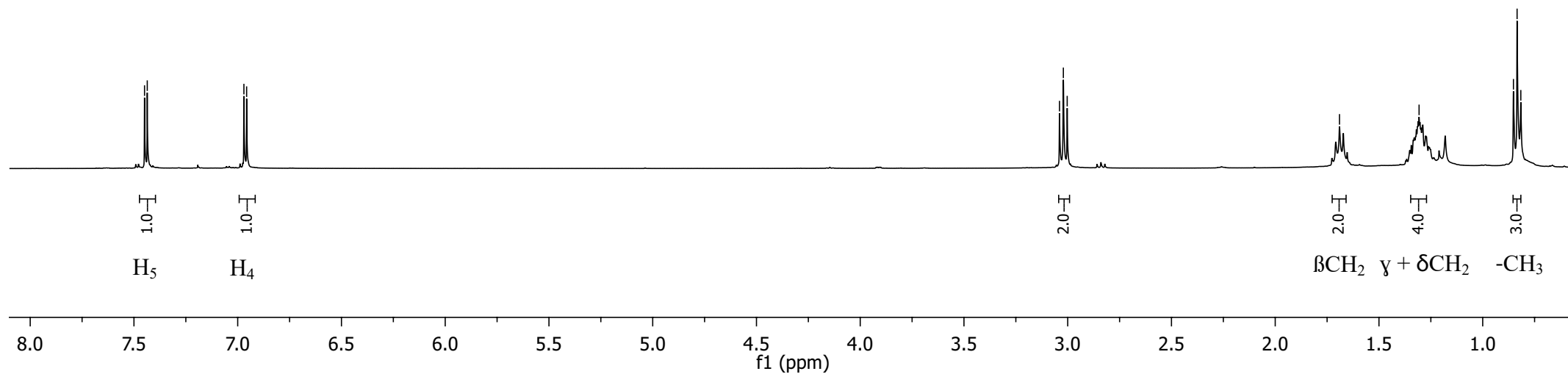
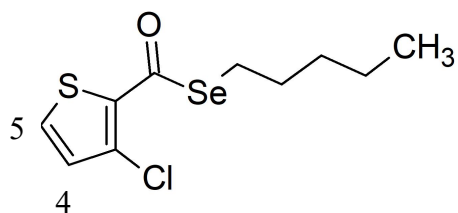
6.97  
6.96

3.04  
3.02  
3.00

1.69

1.31

0.85  
0.83  
0.82



<sup>13</sup>C NMR APT of compound **1b**

—183.18

—136.56

—129.76

—129.50

—126.82

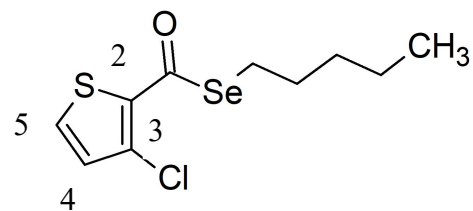
—31.18

—28.89

—25.56

—21.19

—12.94



βC  
αC  
γC  
δC

C<sub>3</sub>

C<sub>4</sub>

-CO

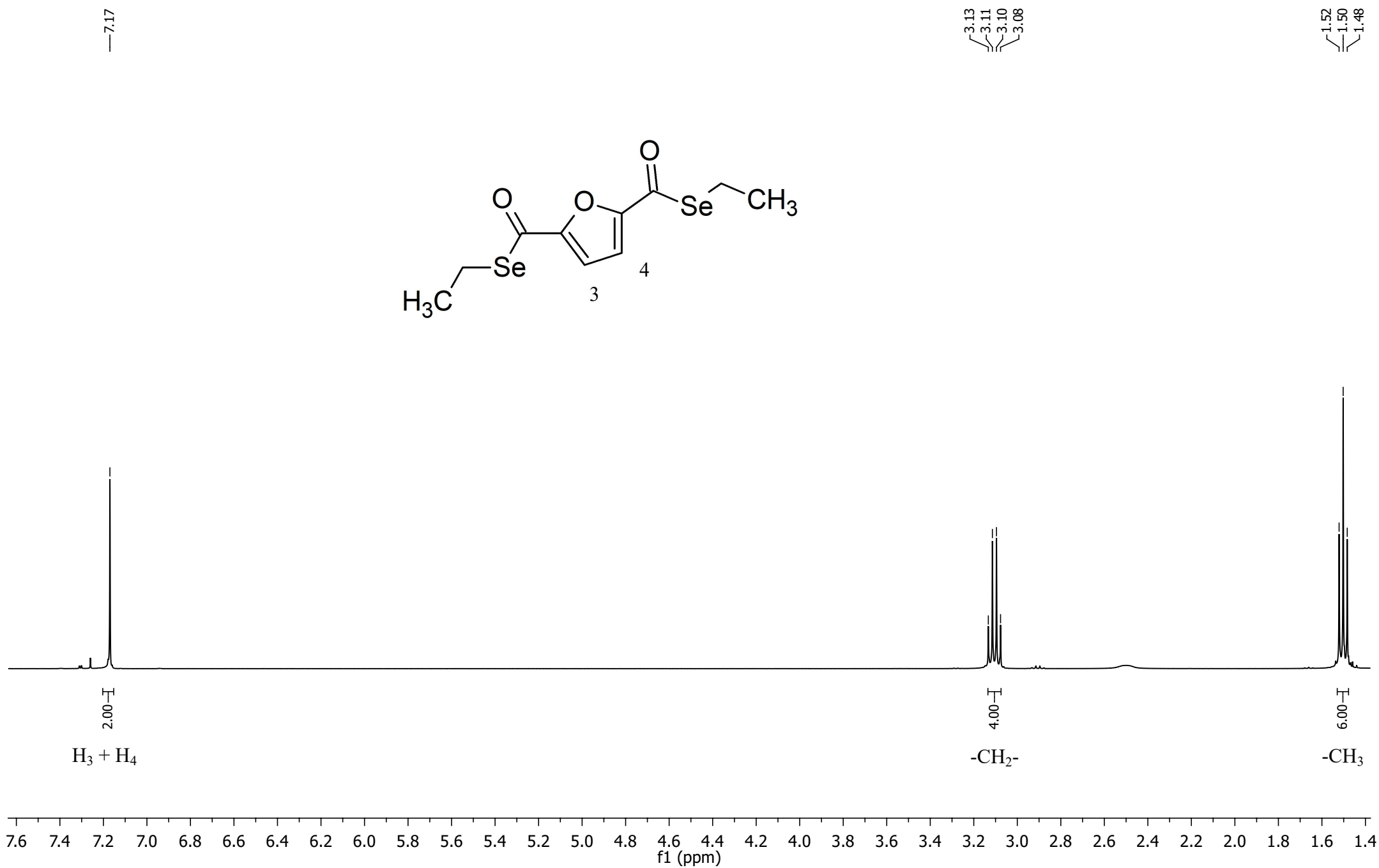
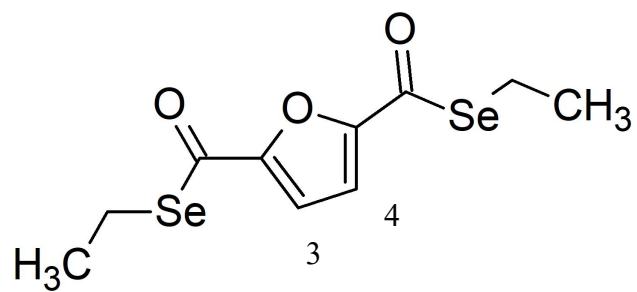
C<sub>5</sub>

C<sub>2</sub>

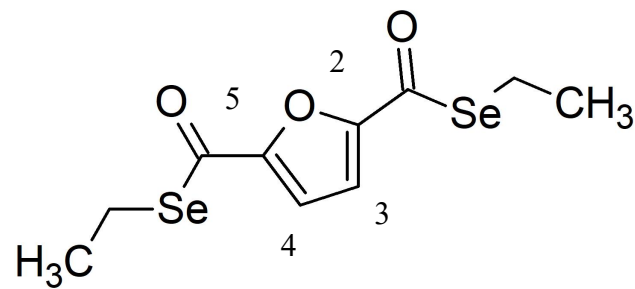
-CH<sub>3</sub>

f1 (ppm)

$^1\text{H}$  NMR of compound **2a**



<sup>13</sup>C NMR of Compound **2a**



—183.46

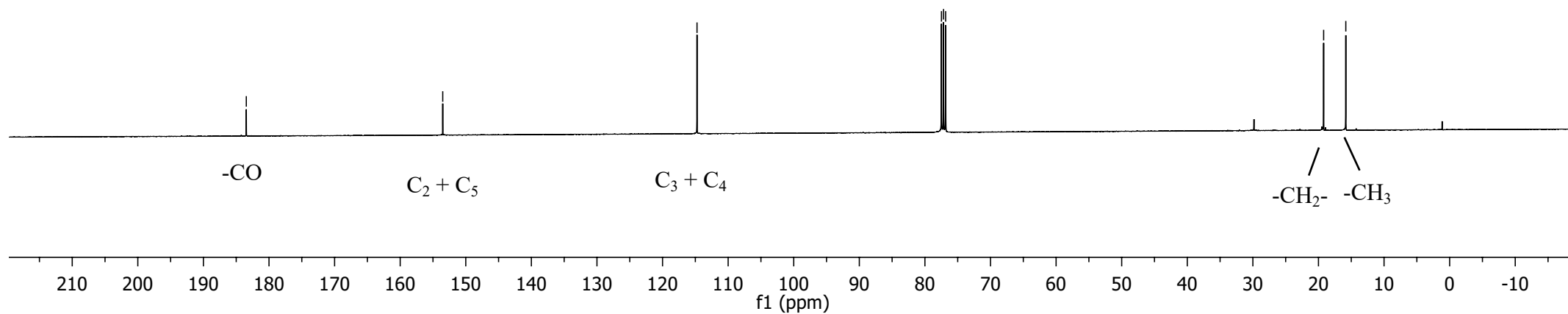
—153.51

—114.74

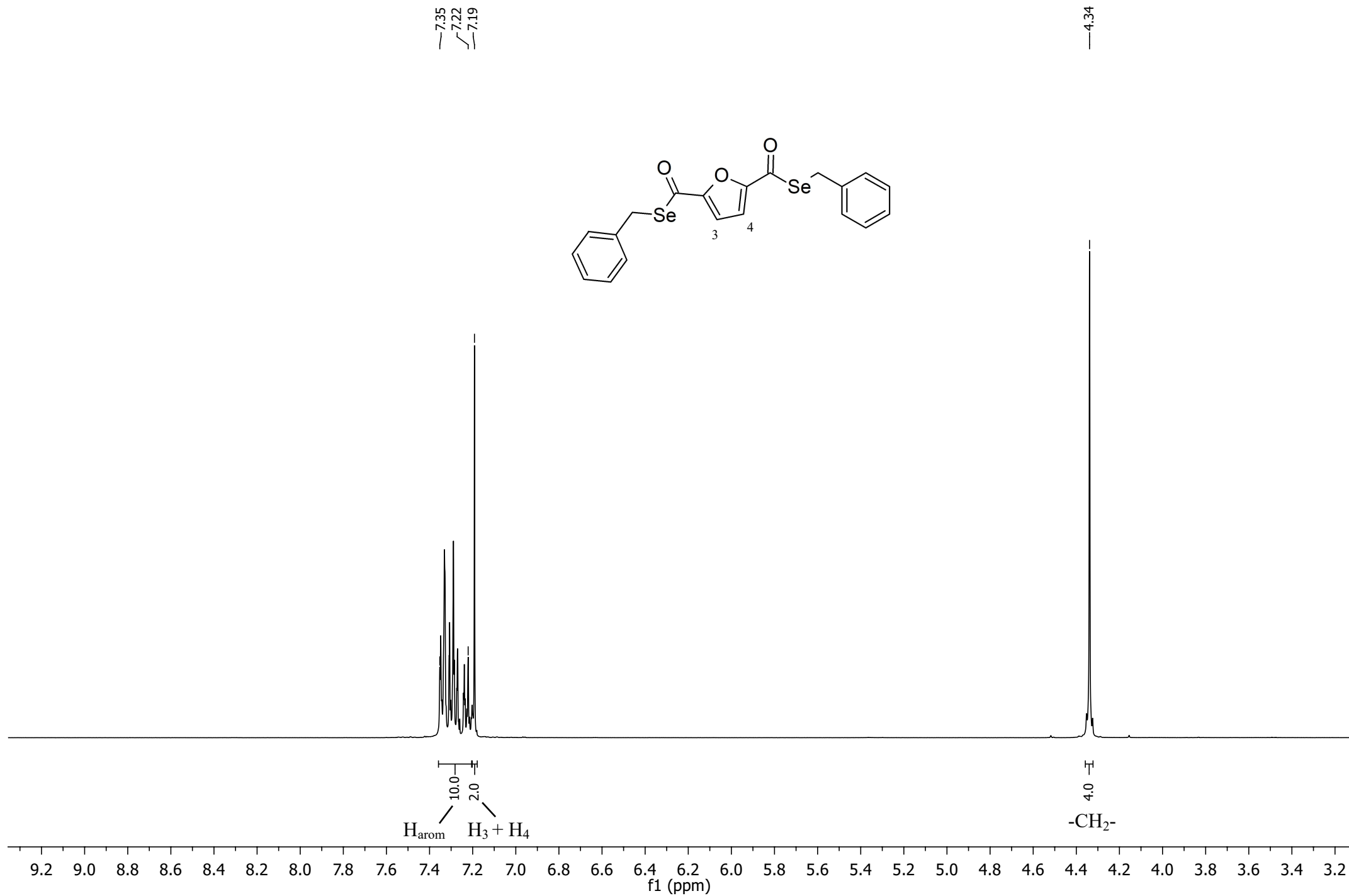
77.48  
77.16  
76.84

—19.21

—15.83



<sup>1</sup>H NMR of compound **2c**



$^{13}\text{C}$  NMR APT of compound **2c**

