

# Chemical Characterization of Lipophilic Constituents in the Skin of Migratory Adult Sea Lamprey from the Great Lakes Region

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## Supplemental data

For compound **1**

**Figure A.** <sup>1</sup>H NMR spectrum of **1** in CDCl<sub>3</sub>

**Figure B.** <sup>13</sup>C NMR spectrum of **1** in CDCl<sub>3</sub>

**Figure C.** DEPT spectrum of **1** in CDCl<sub>3</sub>

**Figure D.** HMBC spectrum of **1** in CDCl<sub>3</sub>

**Figure E.** ESIMS (positive) spectrum **1**

**Figure F.** GCMS of the hexadecanoic acid, methyl ester

For compound **2**

**Figure G.** <sup>1</sup>H NMR spectrum **2** in CDCl<sub>3</sub>

**Figure H.** <sup>13</sup>C NMR spectrum **2** in CDCl<sub>3</sub>

**Figure I.** DEPT spectrum **2** in CDCl<sub>3</sub>

**Figure J.** HMBC spectrum **2** in CDCl<sub>3</sub>

**Figure K.** ESIMS (positive) spectrum **2**

**Figure L.** GCMS of the 9-octadecenoic acid (Z)-, methyl ester

For compound **3**

**Figure M.** <sup>1</sup>H NMR spectrum **3** in CDCl<sub>3</sub>

**Figure N.** <sup>13</sup>C NMR spectrum **3** in CDCl<sub>3</sub>

**Figure O.** DEPT spectrum **3** in CDCl<sub>3</sub>

**Figure P.** HMBC spectrum **3** in CDCl<sub>3</sub>

**Figure Q.** ESIMS (positive) spectrum **3**

**Figure R.** GCMS of the arachidonic acid, methyl ester

For compound **4**

**Figure S.** <sup>1</sup>H NMR spectrum **4** in CDCl<sub>3</sub>

**Figure T.** <sup>13</sup>C NMR spectrum **4** in CDCl<sub>3</sub>

**Figure U.** DEPT spectrum **4** in CDCl<sub>3</sub>

**Figure V.** HMBC spectrum **4** in CDCl<sub>3</sub>

**Figure W.** ESIMS (positive) spectrum **4**

**Figure X.** GCMS of the eicosapentaenoic acid, methyl ester

Figure A

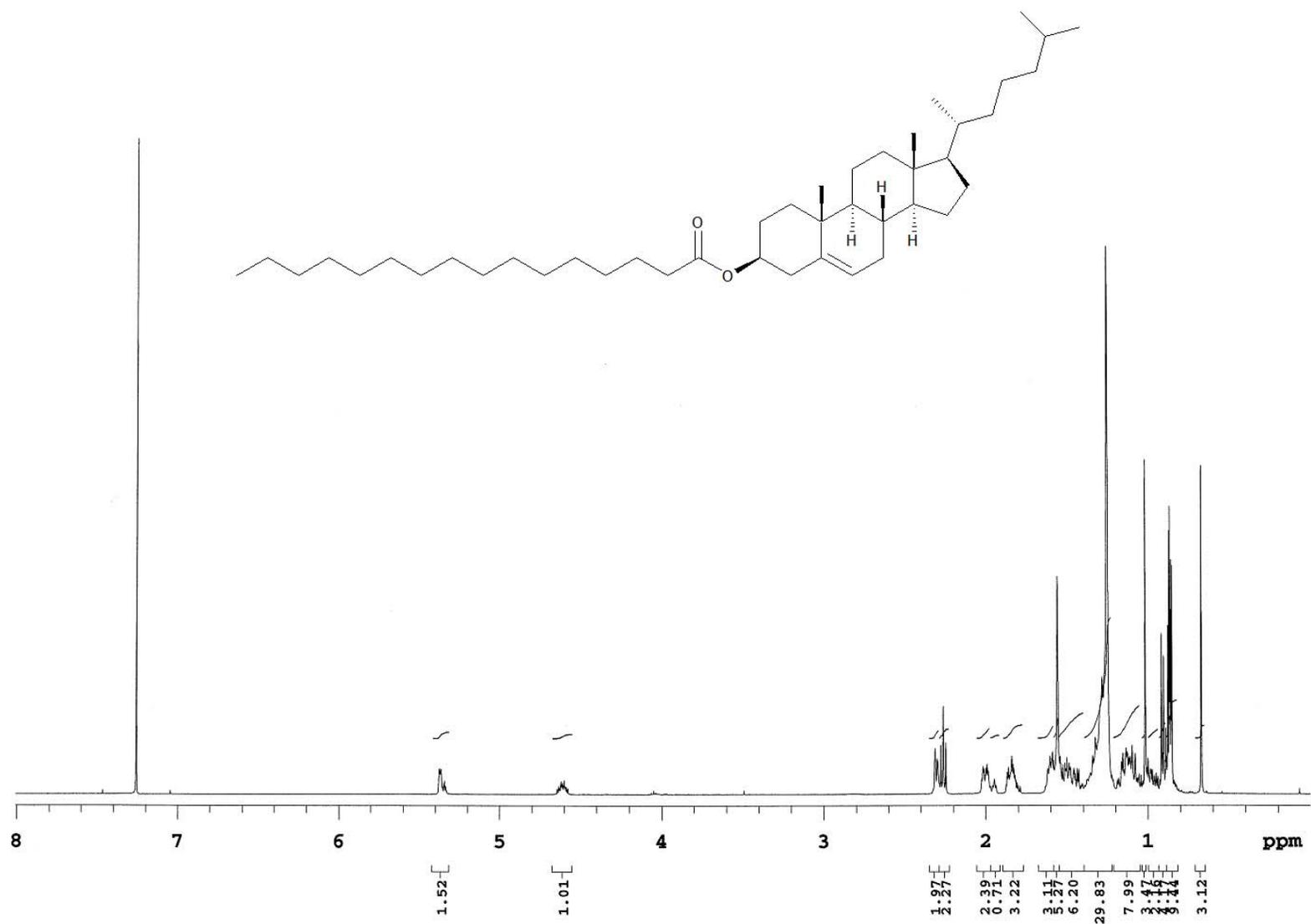


Figure B

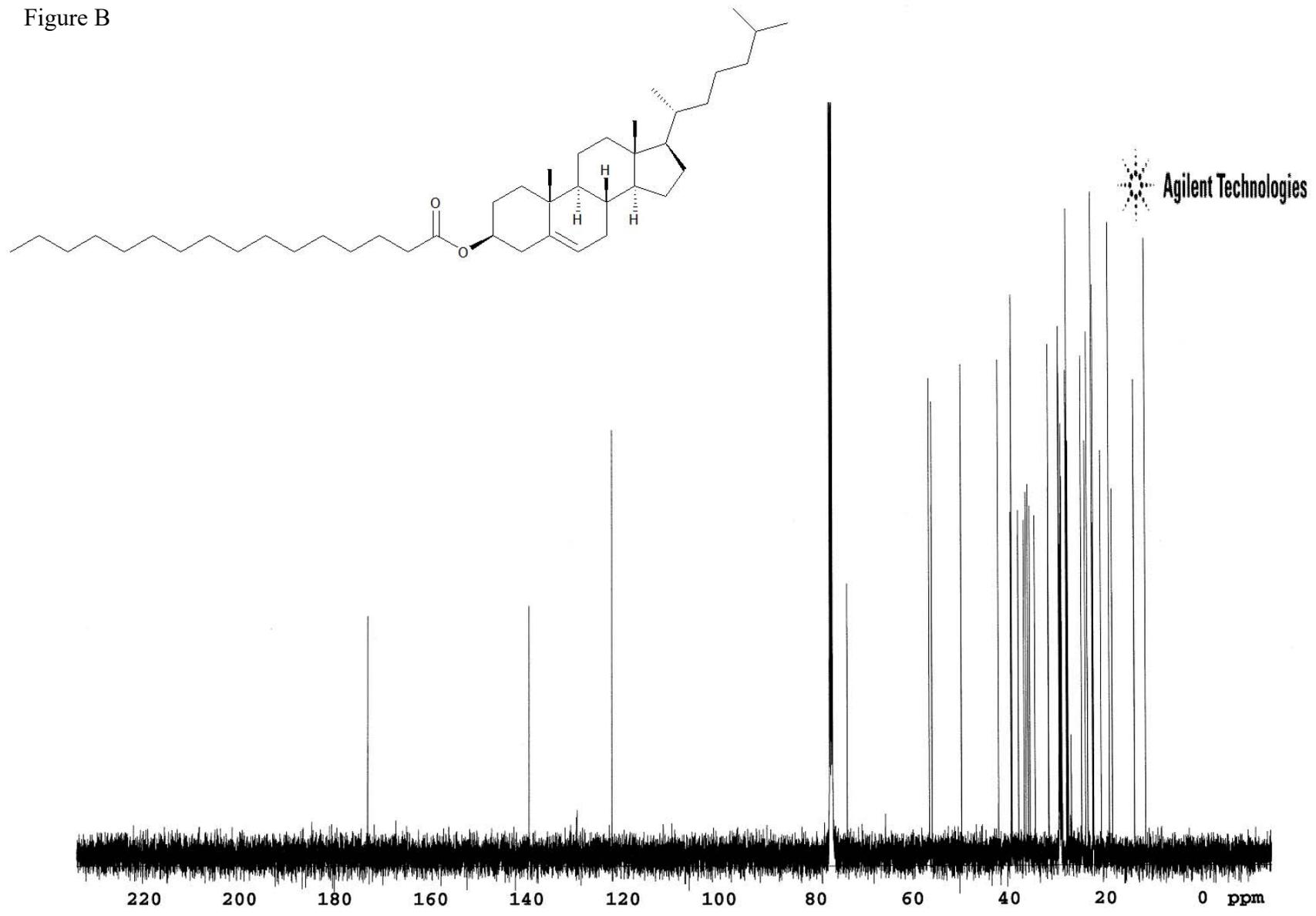


Figure C

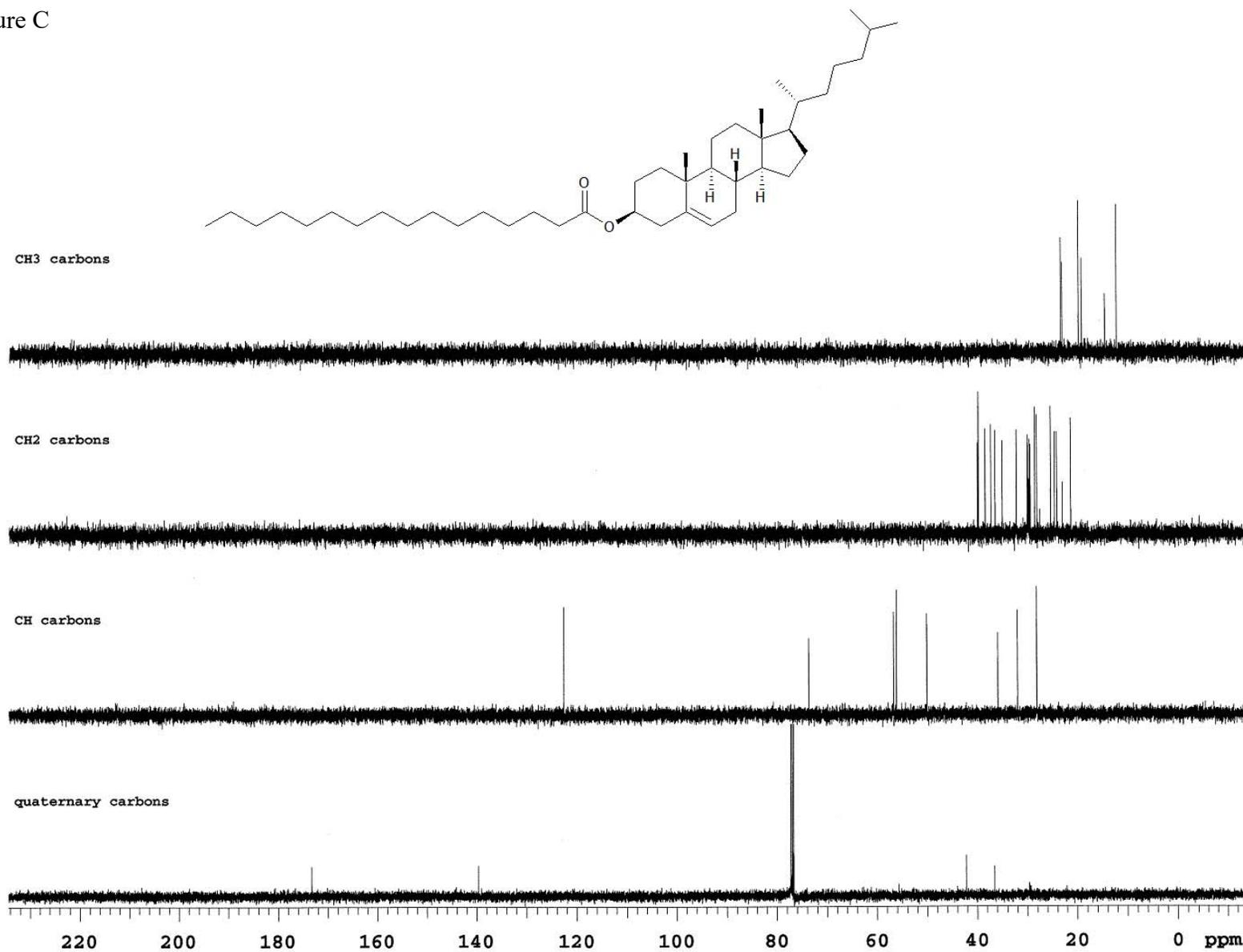


Figure D

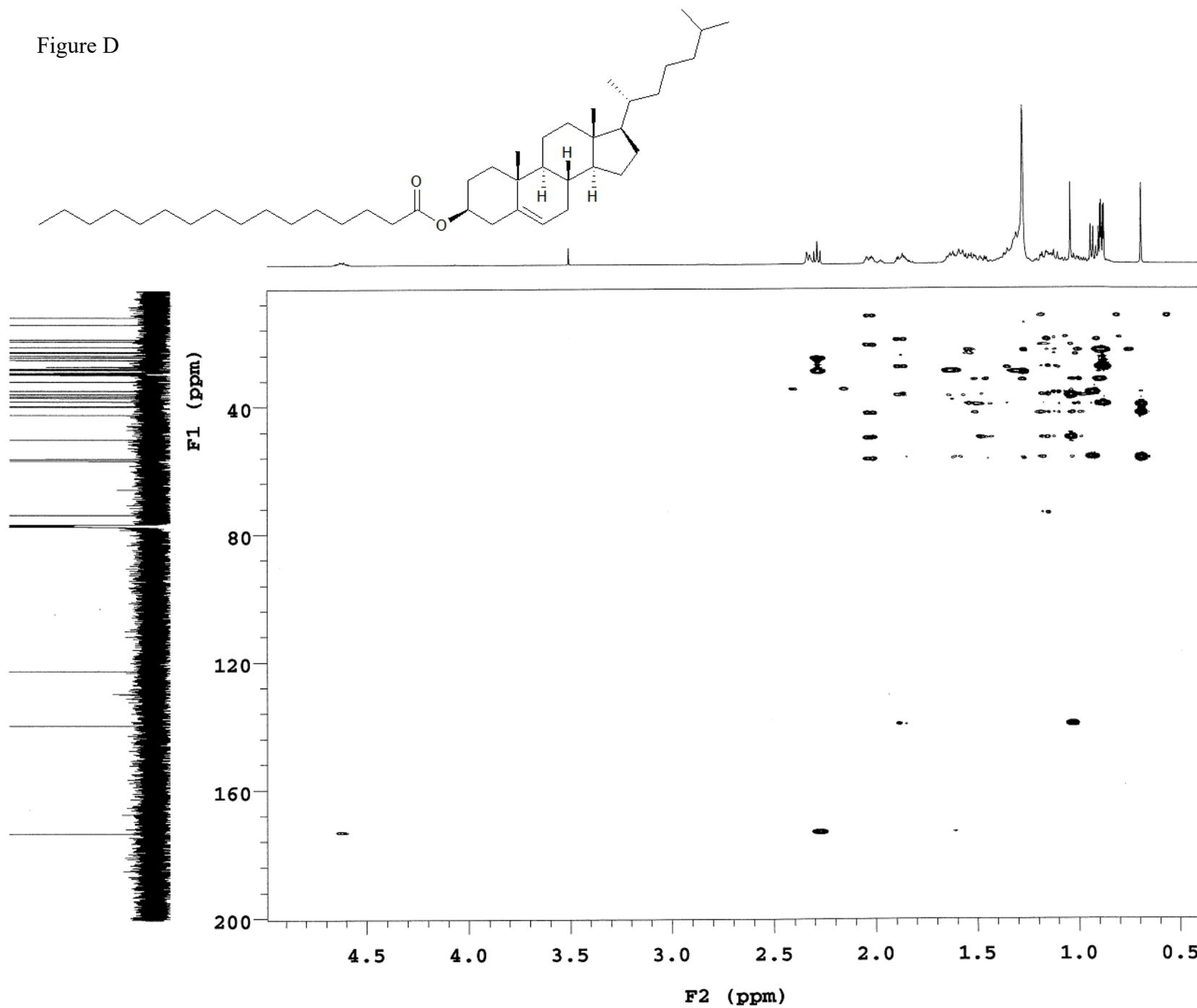


Figure E

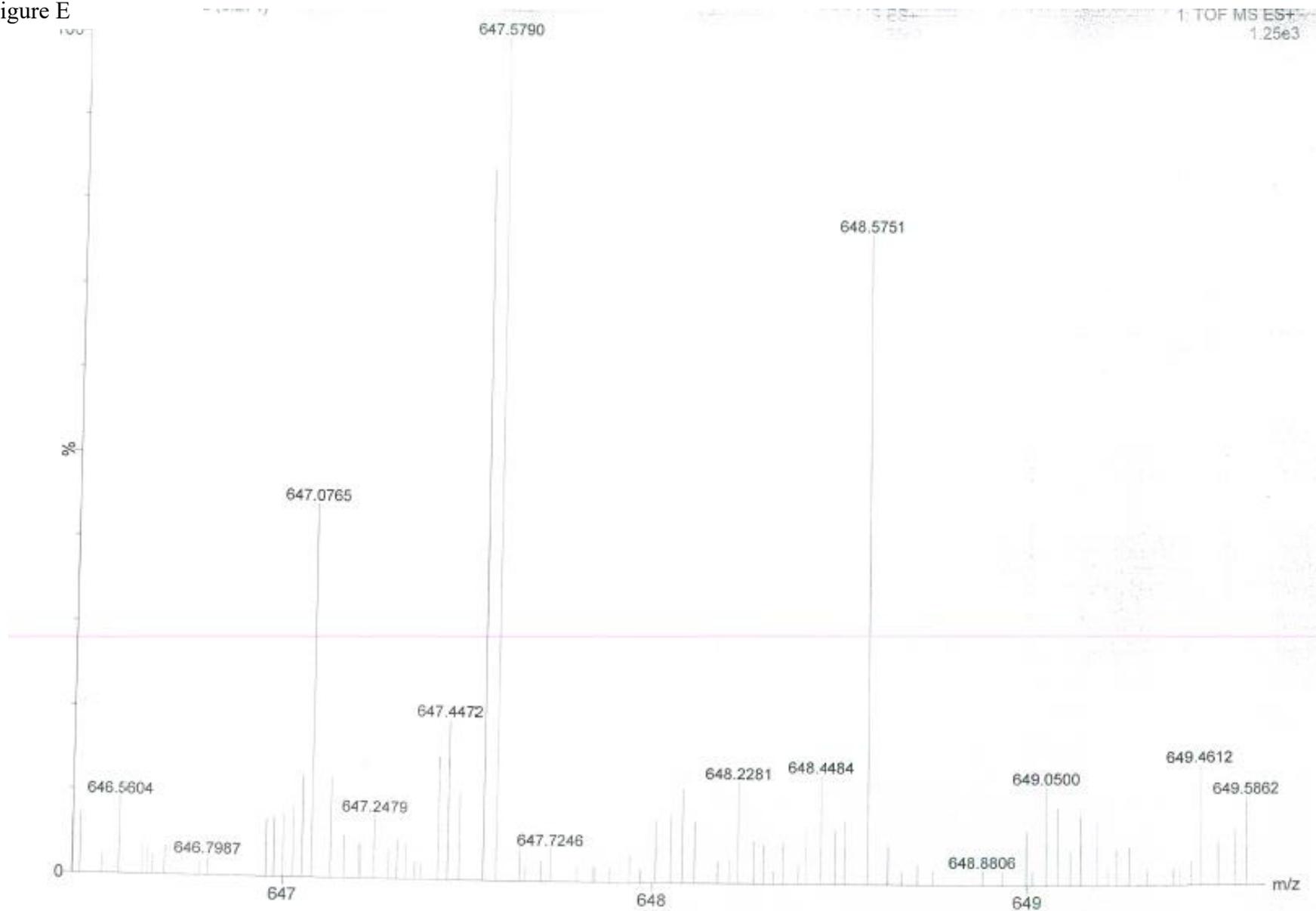


Figure F

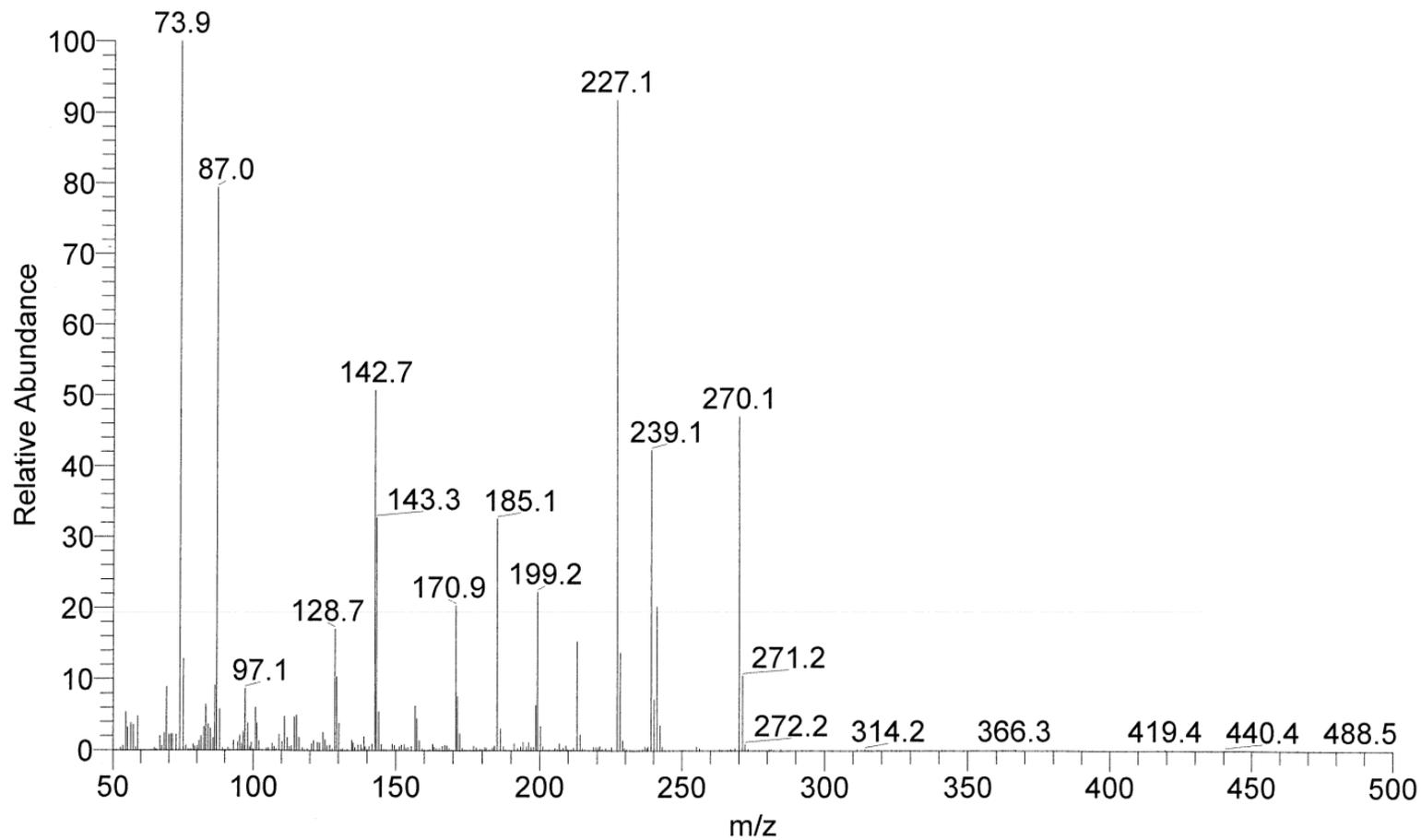


Figure G

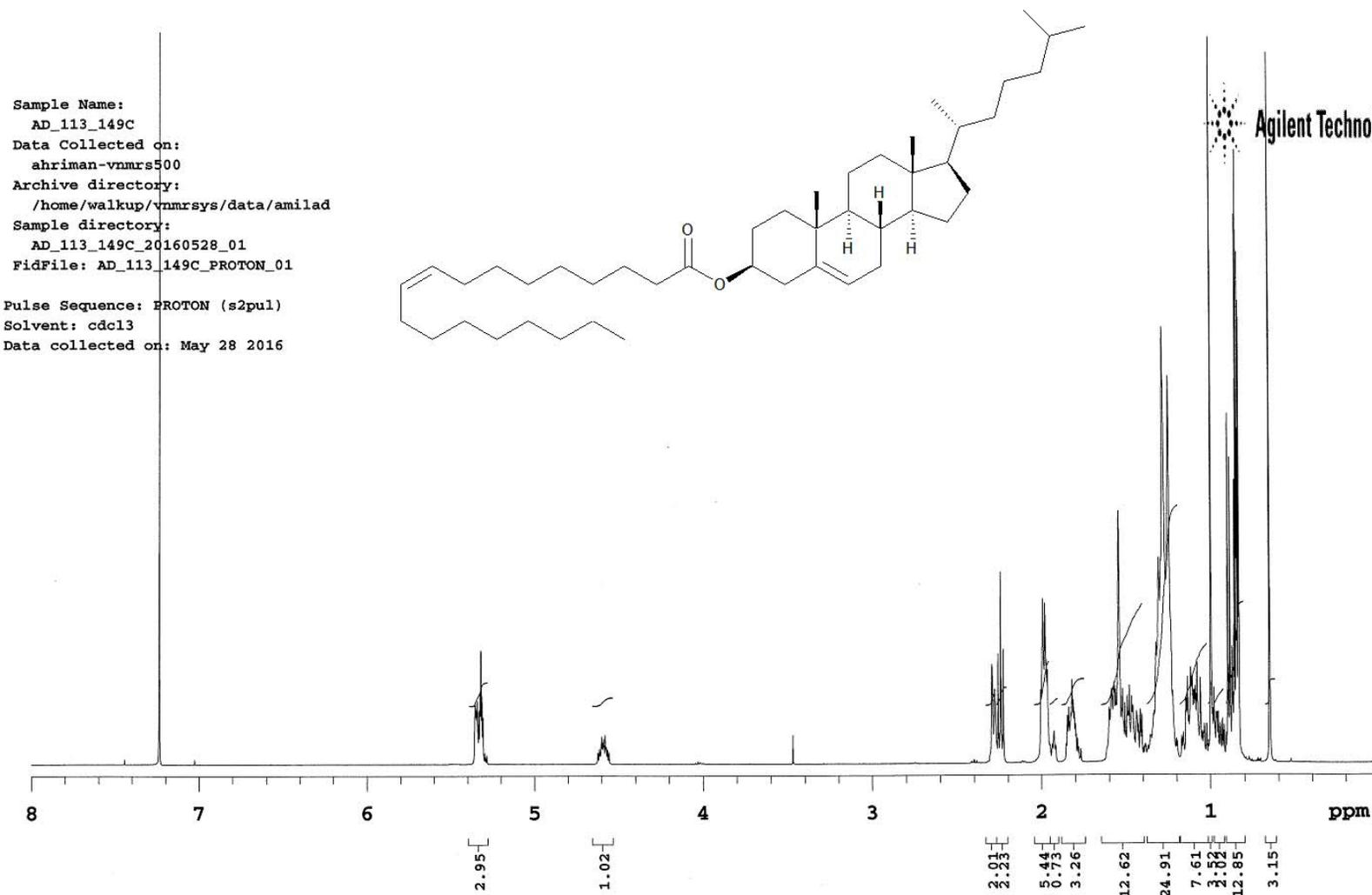


Figure H

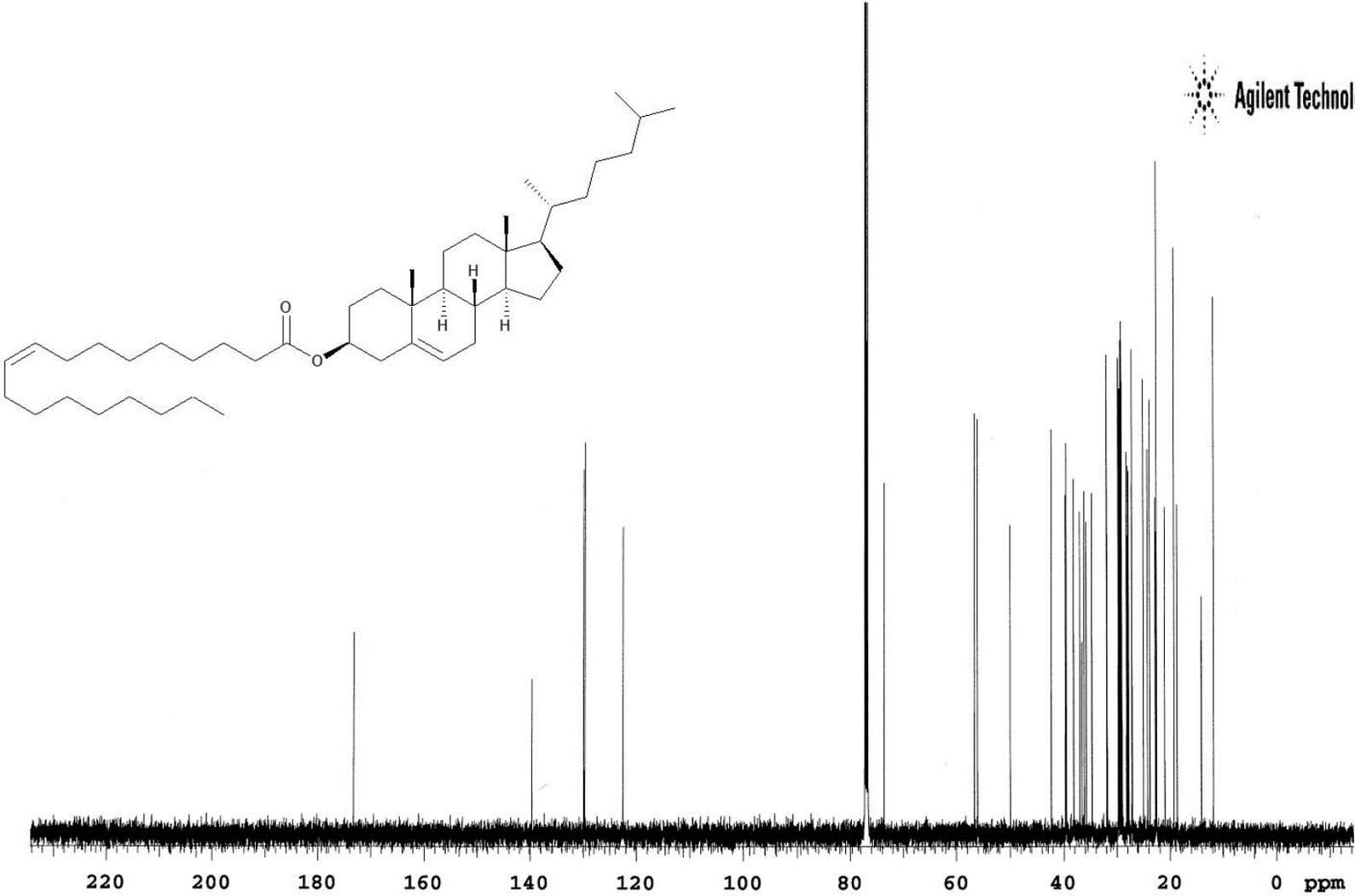


Figure I

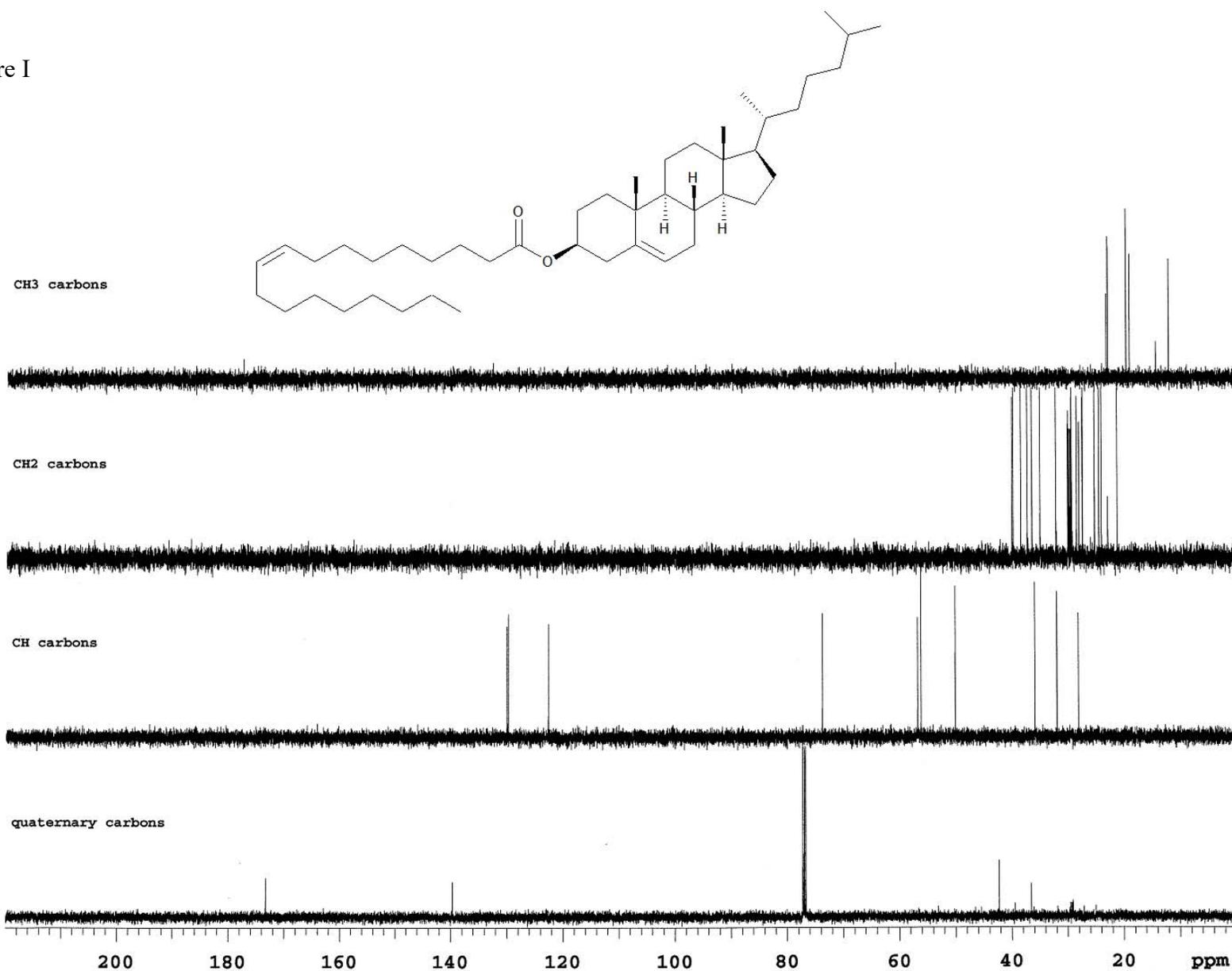


Figure J

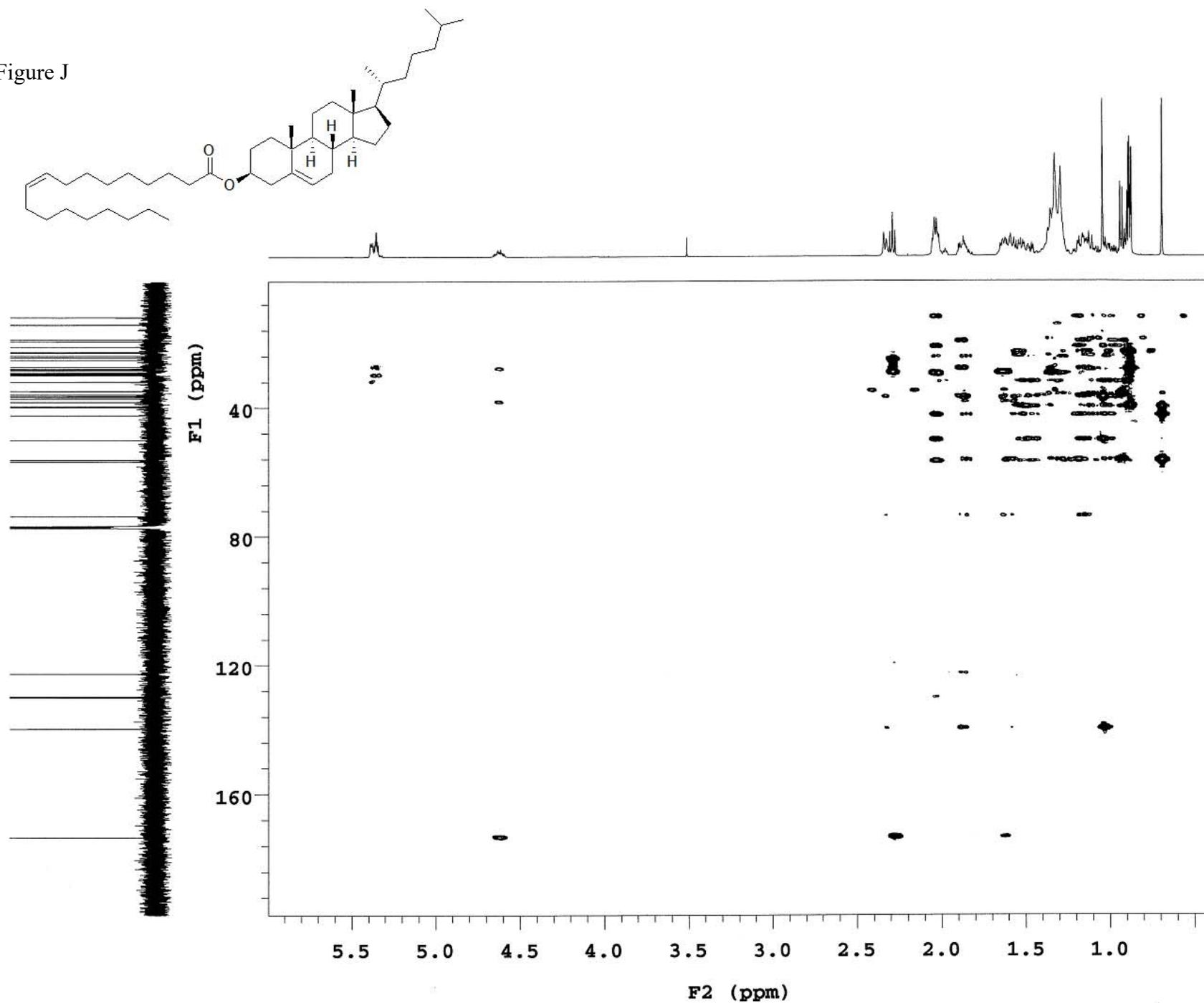


Figure K

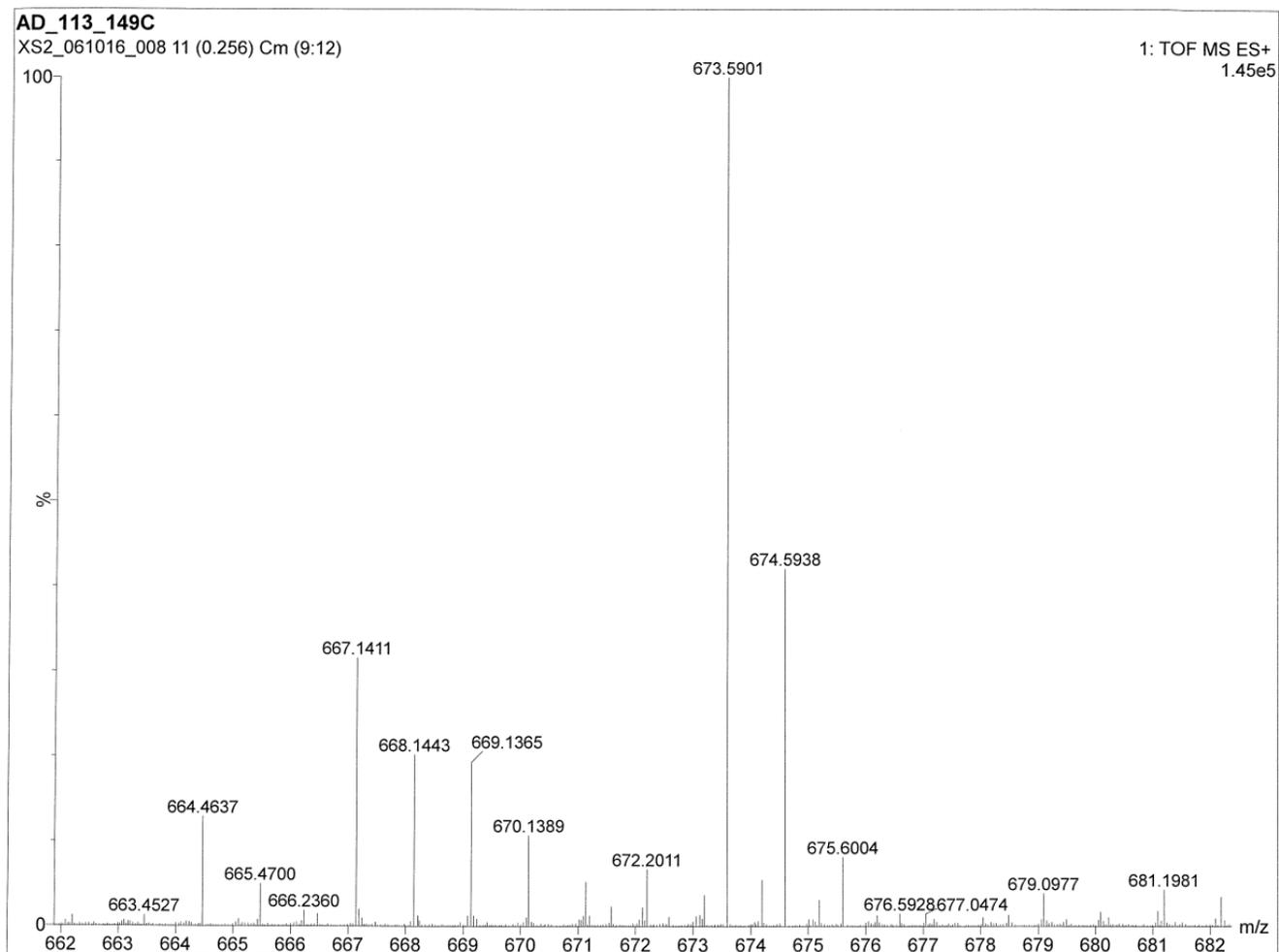


Figure L

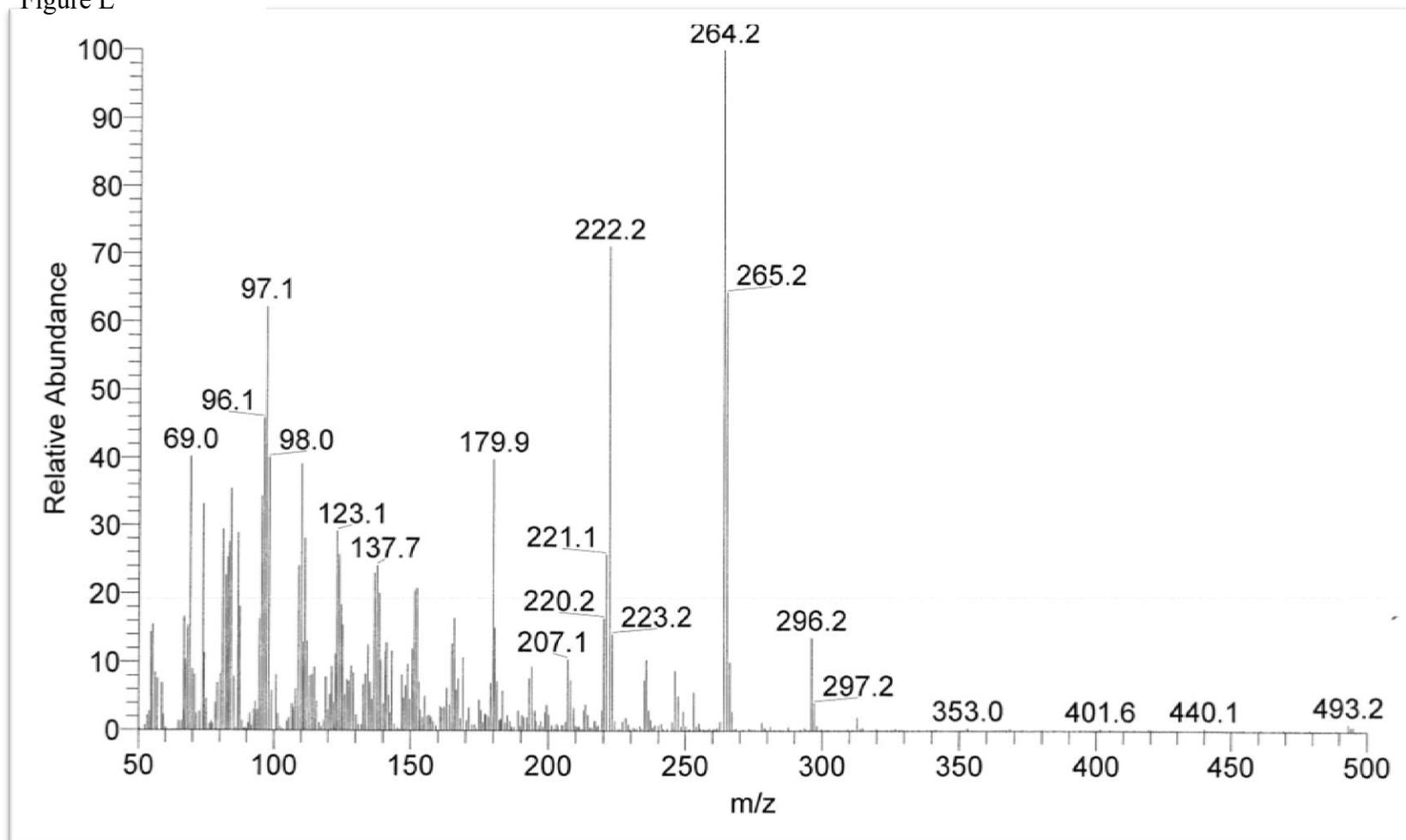




Figure N

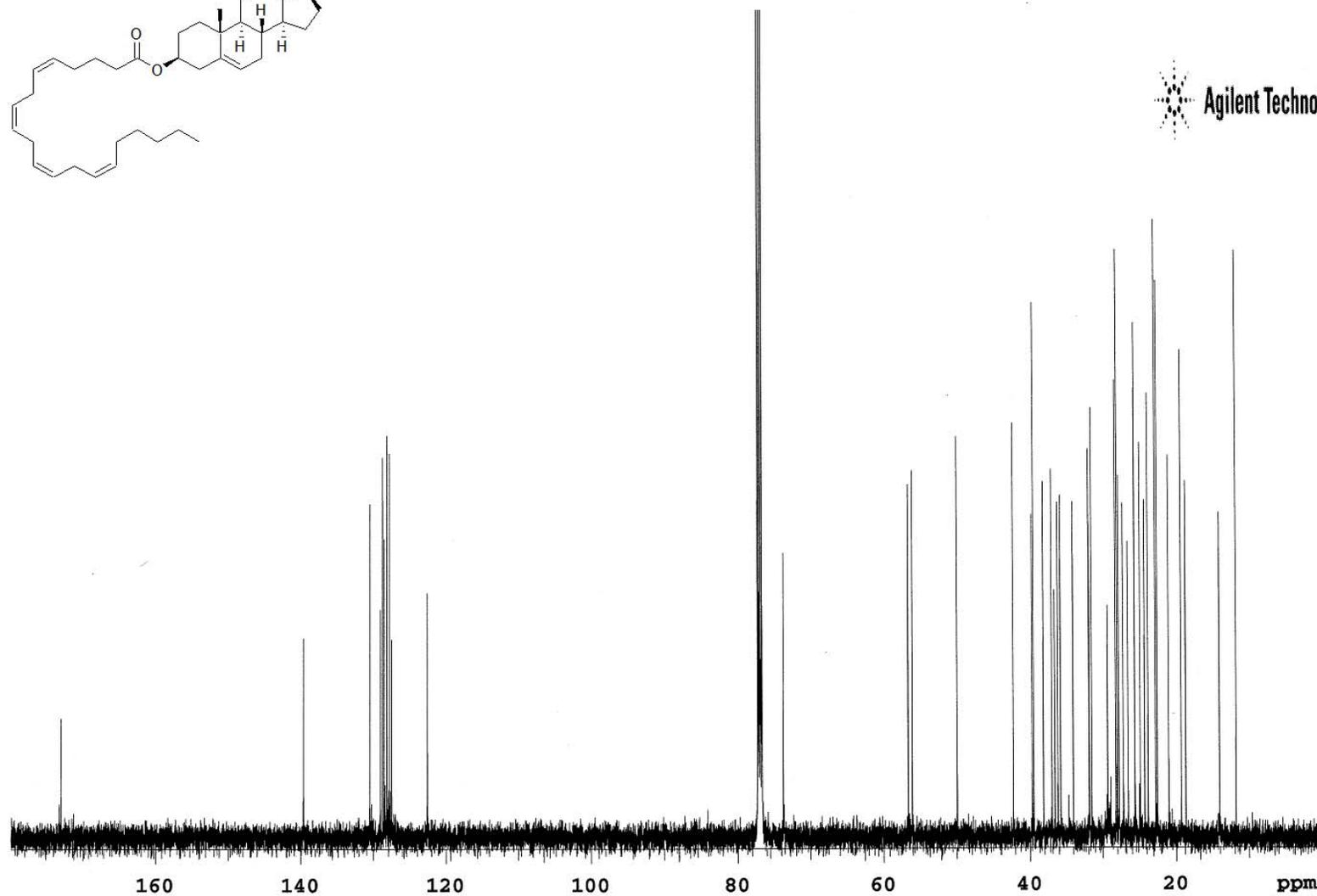
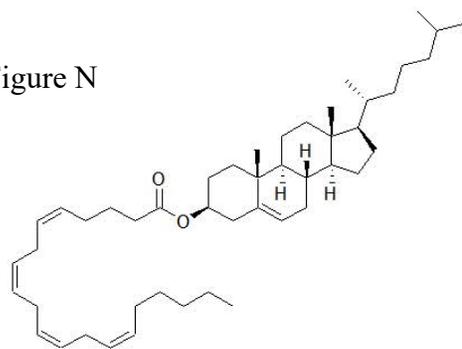


Figure O

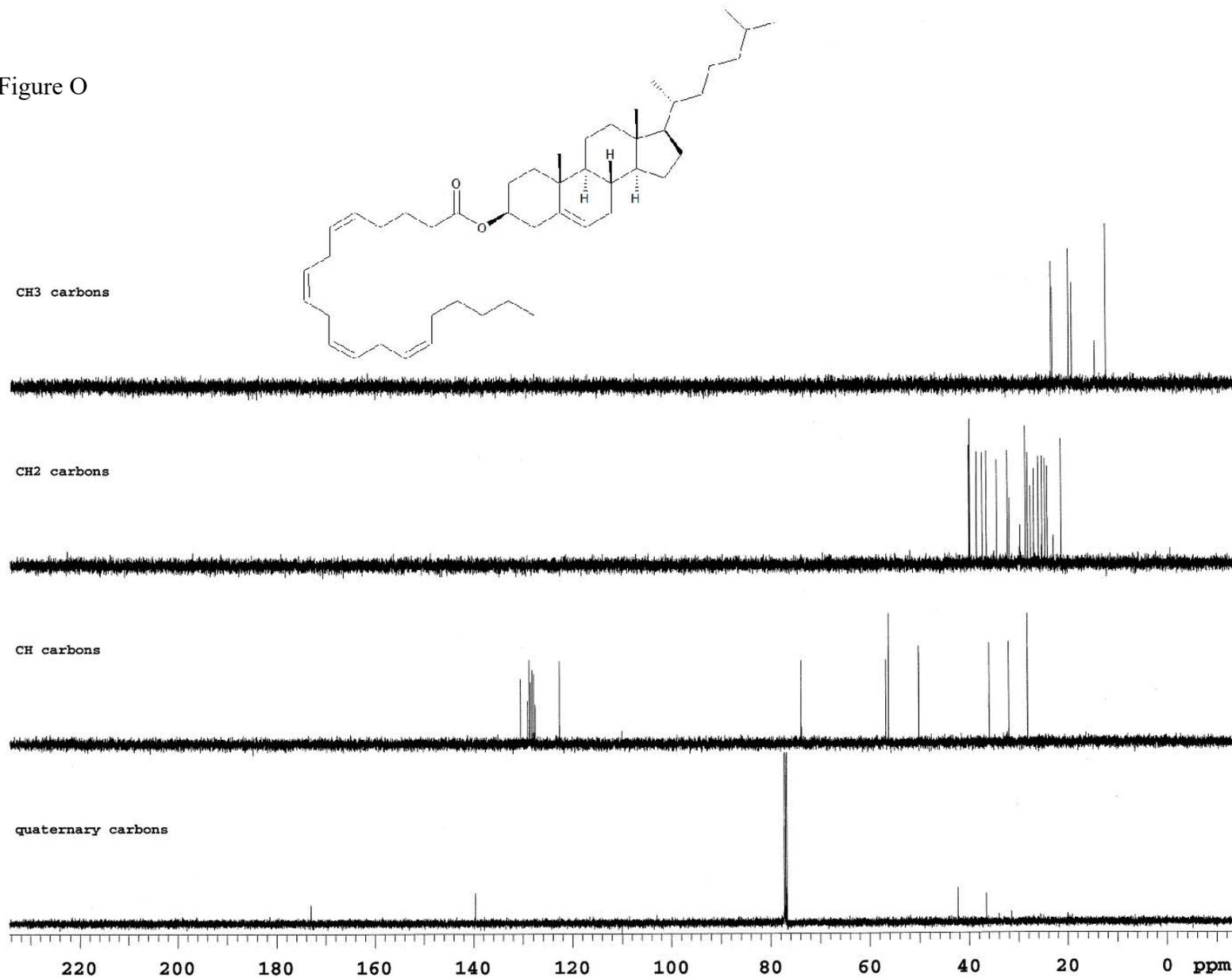




Figure Q

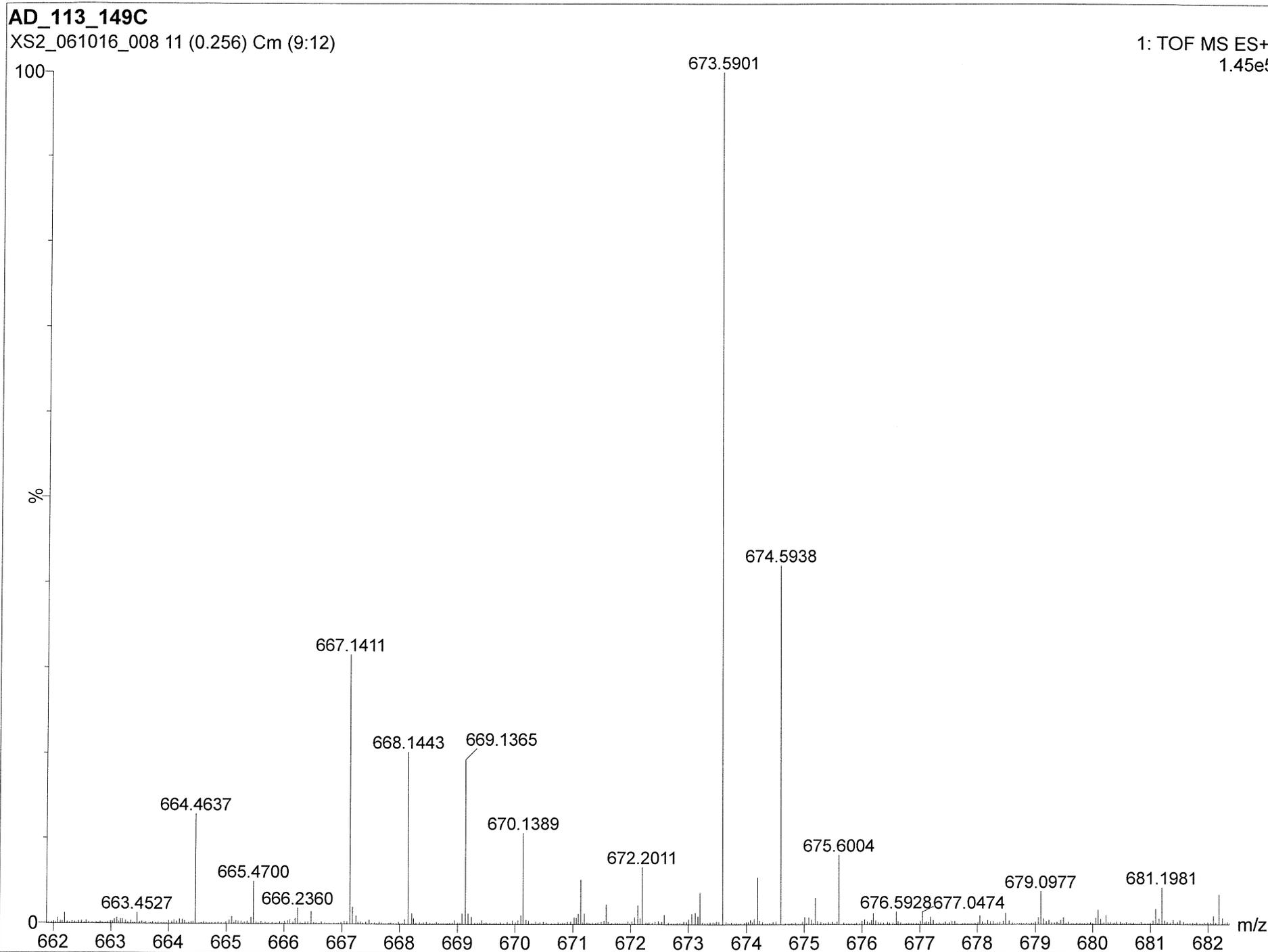


Figure R

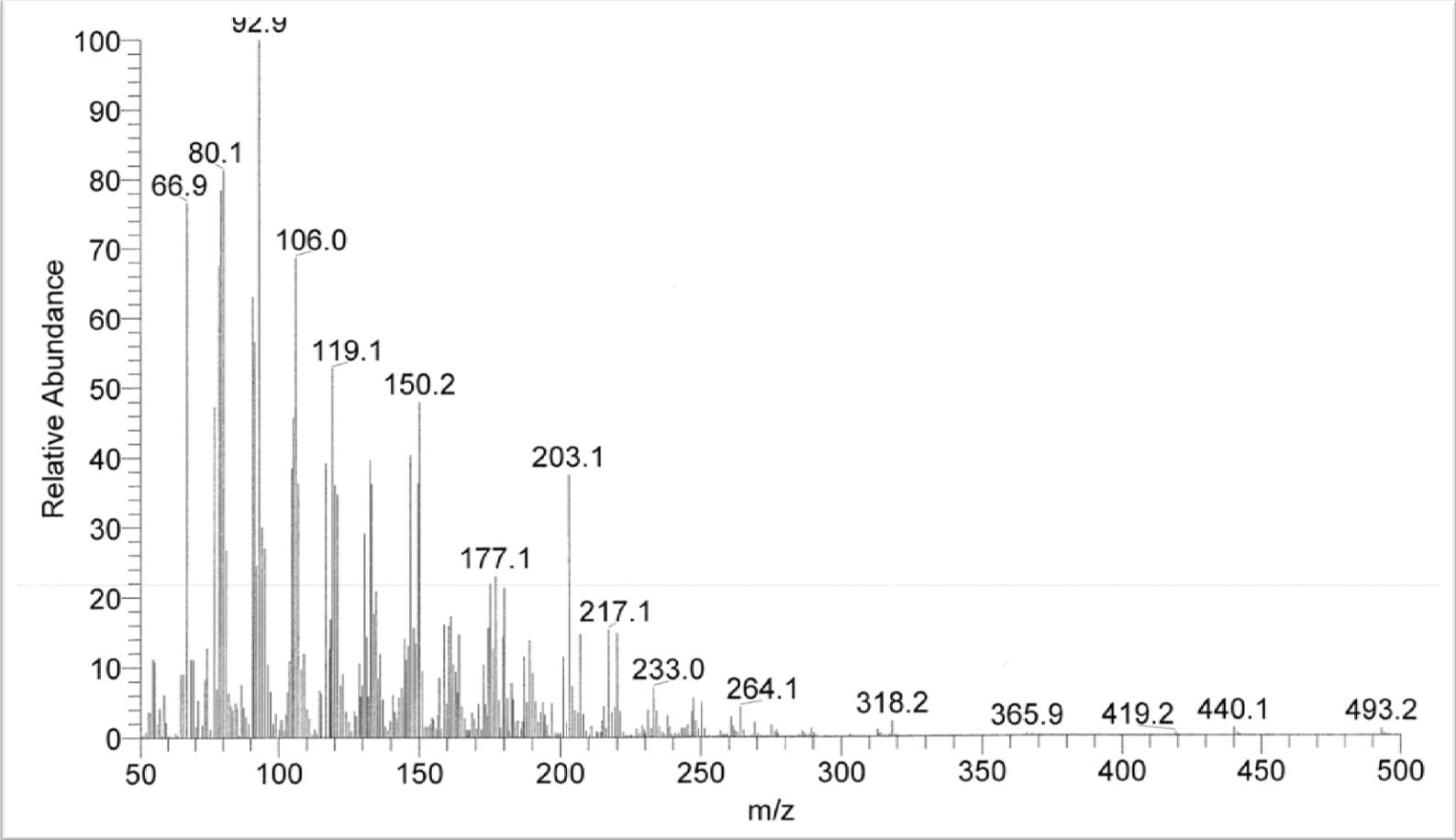


Figure S

Sample Name:  
AD\_113\_149E  
Data Collected on:  
ahriman-vnmrs500  
Archive directory:  
/home/walkup/vnmrsys/data/amilad  
Sample directory:  
AD\_113\_149E\_20160528\_01  
FidFile: AD\_113\_149E\_PROTON\_01  
  
Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: May 28 2016

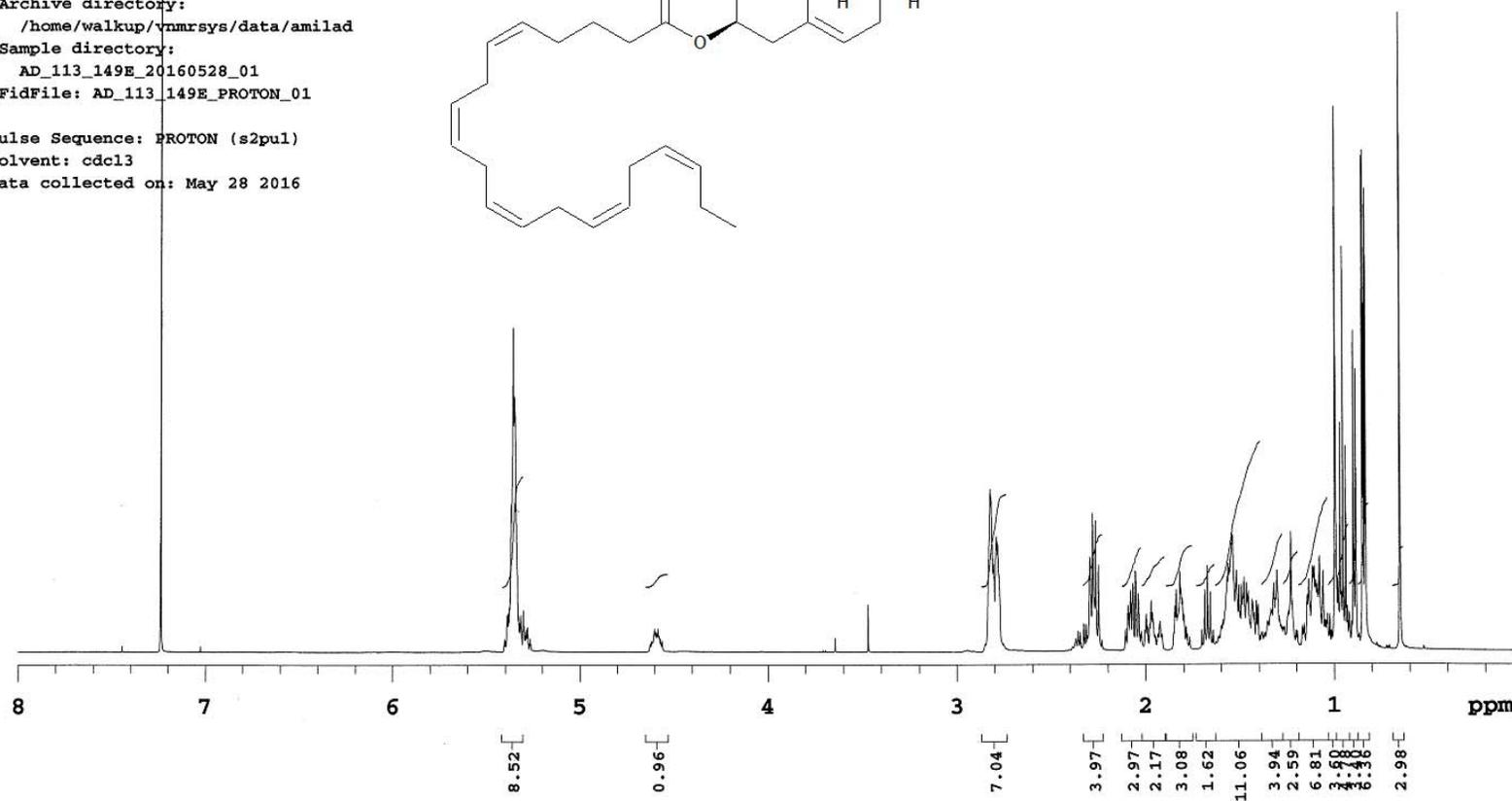
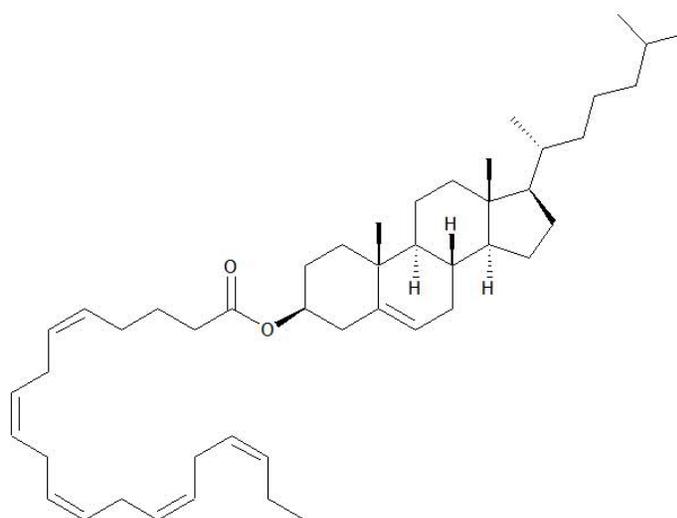


Figure T

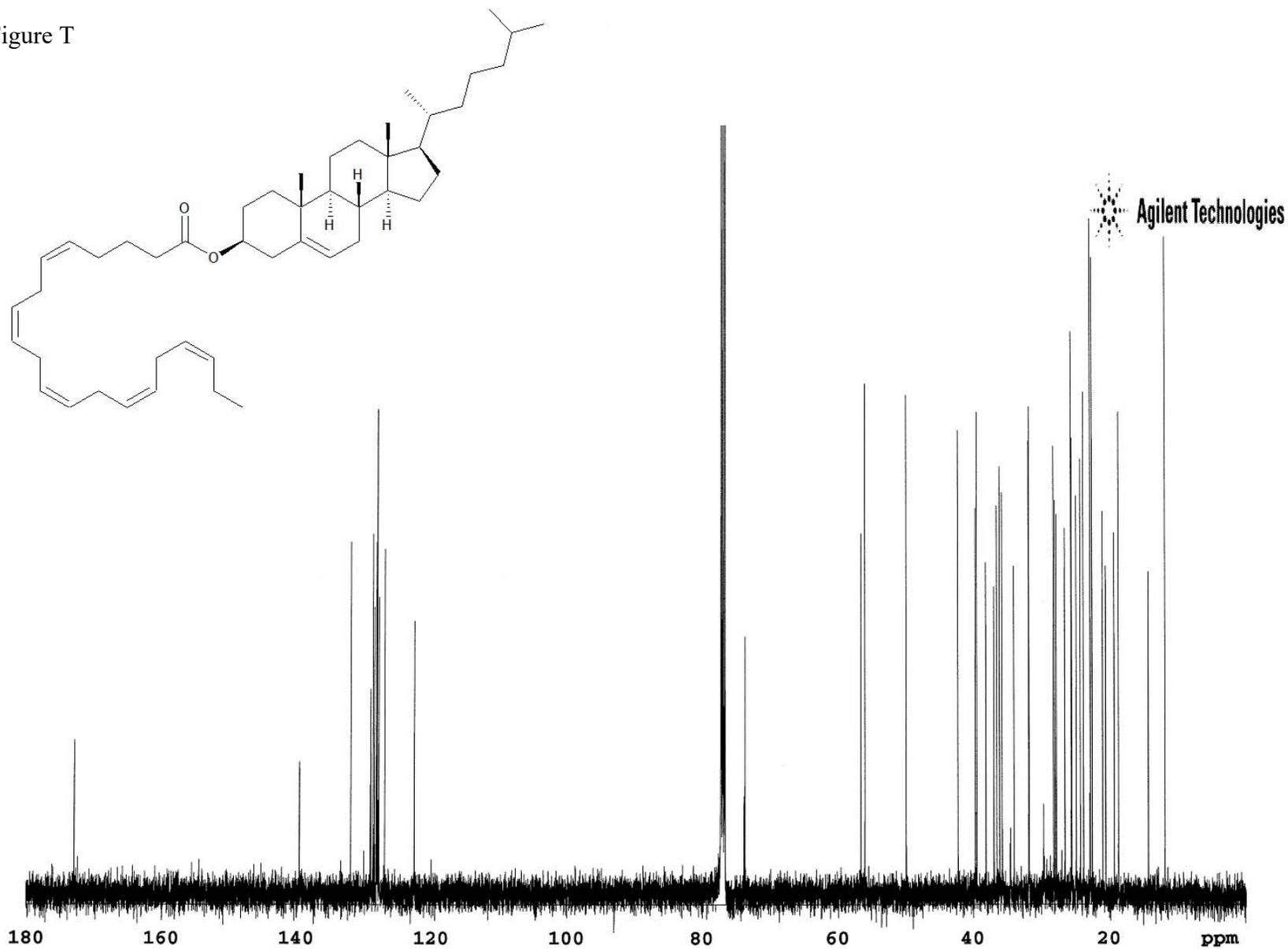


Figure U

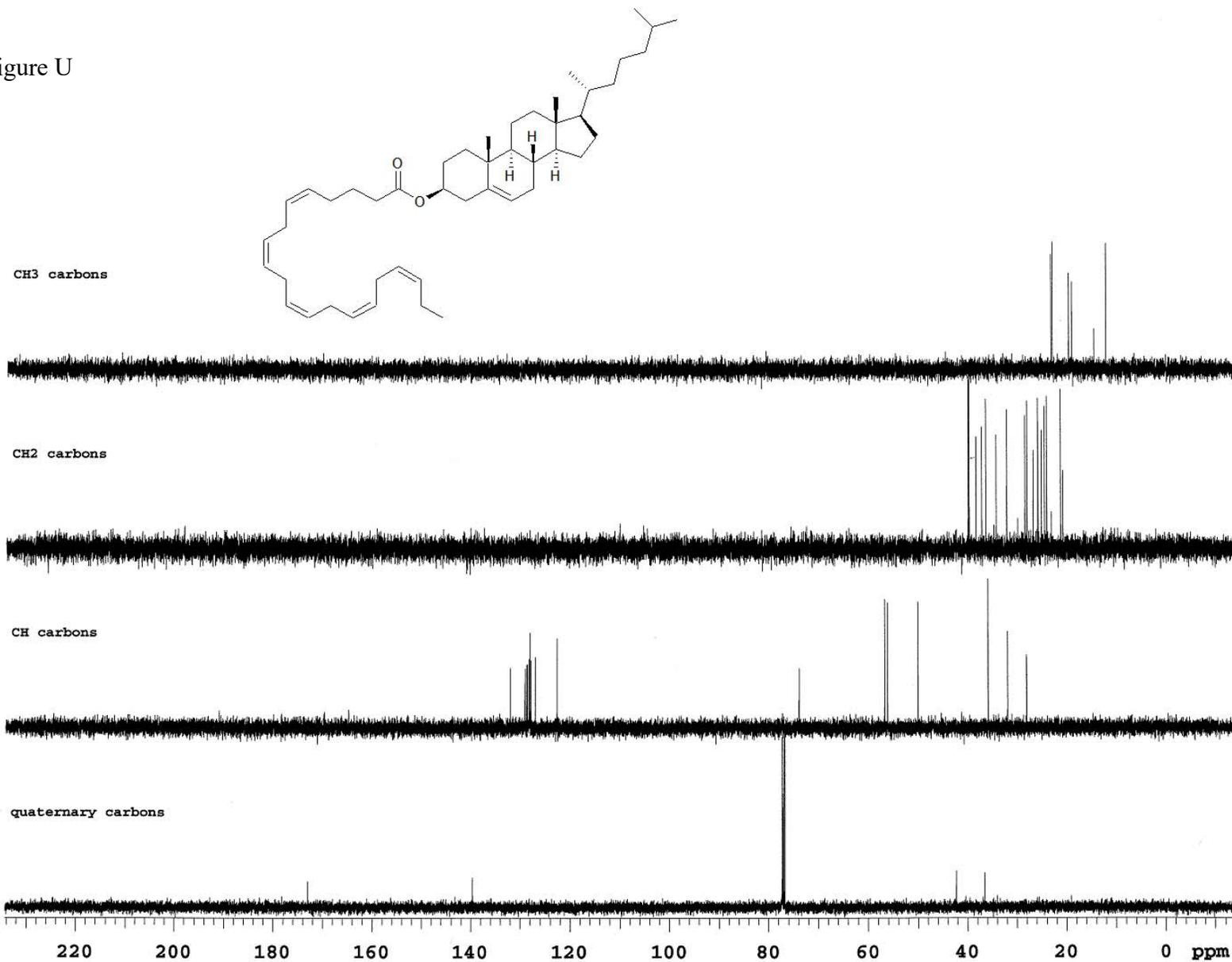
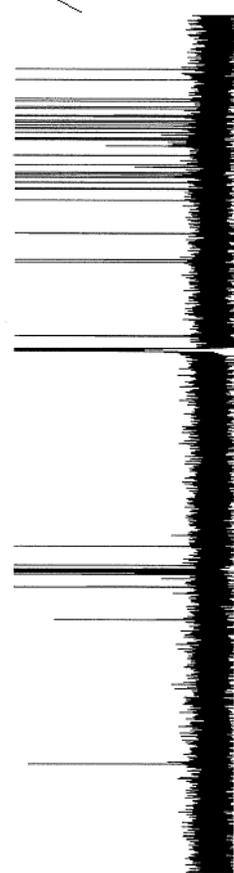
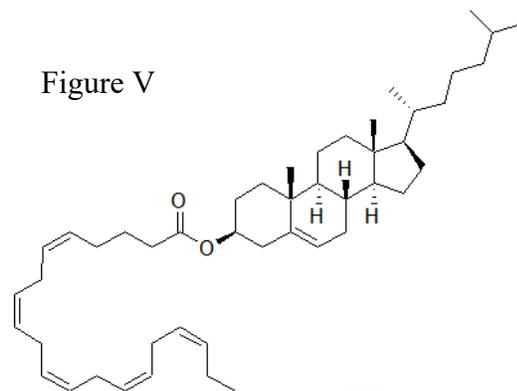
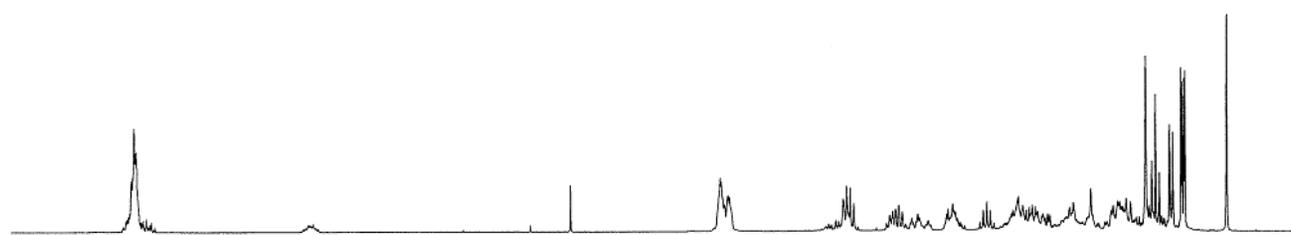


Figure V



F1 (ppm)

40  
80  
120  
160



5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0

F2 (ppm)

Figure W

AD\_113\_149E

XS2\_061016\_010 13 (0.310) Cm (13:16)

1: TOF MS ES+  
2.83e6

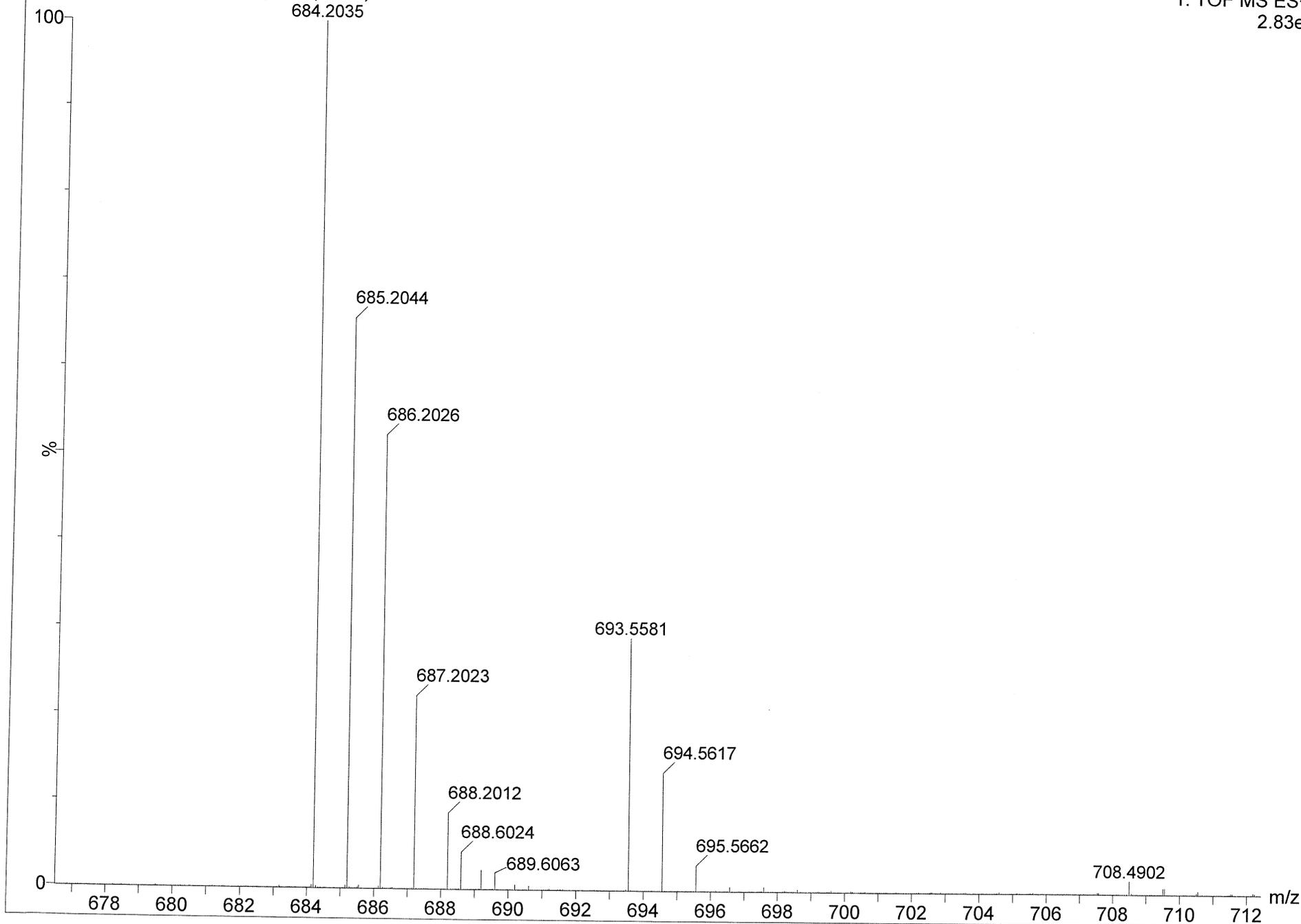


Figure X

