

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 **5**

Figure A. ¹H NMR spectrum **5** in CDCl₃

Figure B. ¹³C NMR spectrum of **5** in CDCl₃

Figure C. HMBC spectrum **5** in CDCl₃

Figure D. GC profile of methyl esters of compound **5**

Figure E. GCMS of the hexadecanoic acid, methyl ester

For triglyceride mixture **F**

Figure F. GCMS of the 9-hexadecenoic acid, methyl ester (*Z*)

Figure G. ¹H NMR spectrum of triglyceride mixture **F** in CDCl₃

Figure H. GC profile of methyl esters of triglyceride mixture

For compound **6**

Figure I. ¹H NMR spectrum **6** in CDCl₃

Figure J. ¹³C NMR spectrum **6** in CDCl₃

Figure K. HSQC spectrum **6** in CDCl₃

Figure L. GCMS of compound **6**

For compound **7**

Figure M. ¹H NMR spectrum **7** in CDCl₃

Figure N. ¹³C NMR spectrum **7** in CDCl₃

Figure O. HSQC spectrum **7** in CDCl₃

Figure P. HMBC spectrum **7** in CDCl₃

Figure Q. GCMS of the compound **7**

For compound **8**

Figure R. ¹H NMR spectrum **8** in CDCl₃

Figure S. ¹³C NMR spectrum **8** in CDCl₃

For compound **9**

Figure T. ¹H NMR spectrum **9** in CDCl₃

Figure U. ¹³C NMR spectrum **9** in CDCl₃

For compound **10**

Figure V. ¹H NMR spectrum of **10** in CDCl₃

Figure A

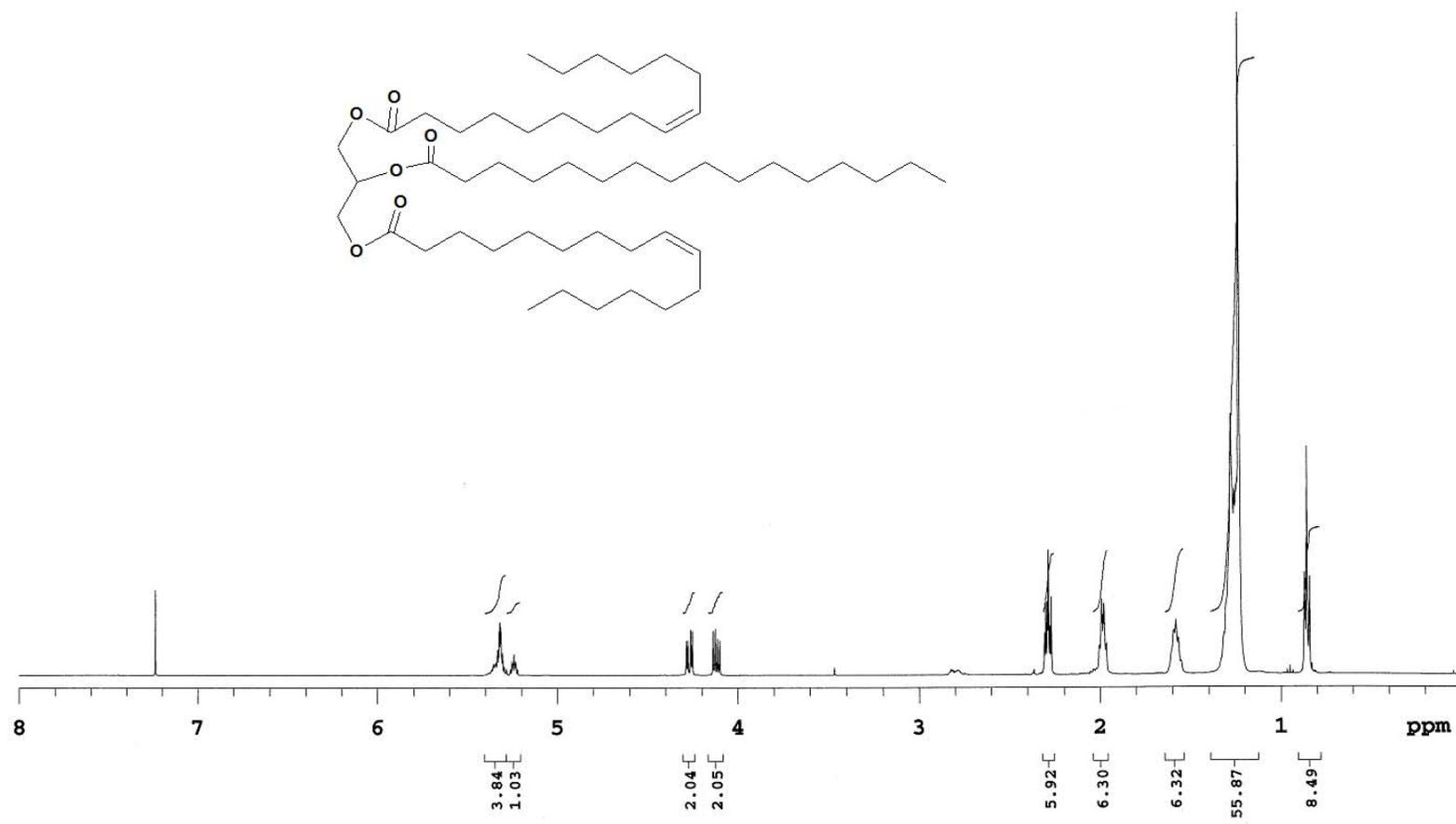


Figure B

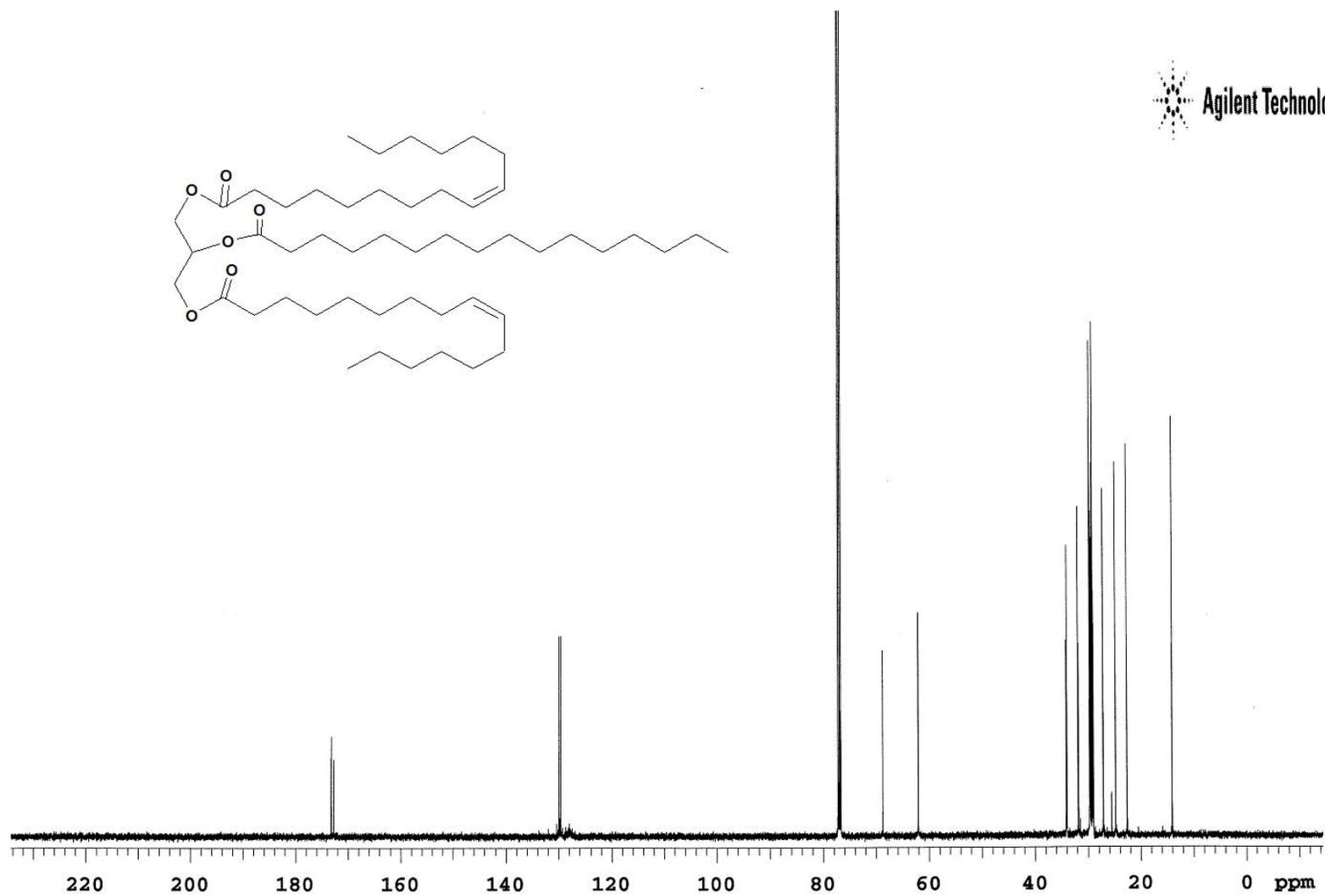


Figure C

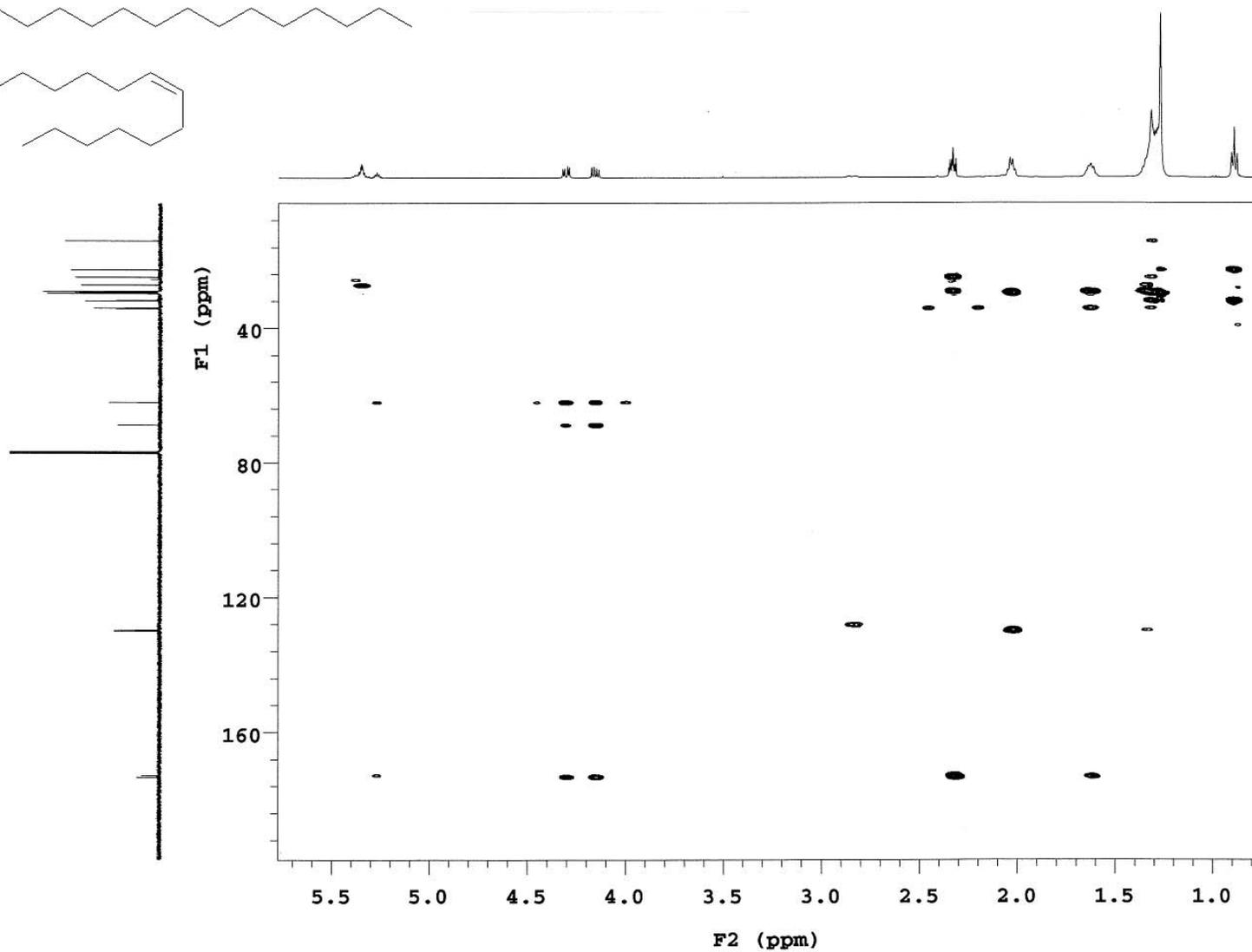
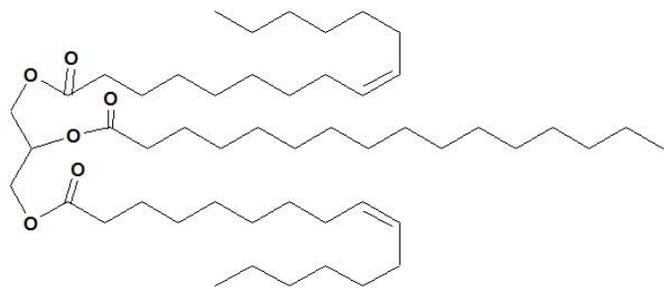


Figure D

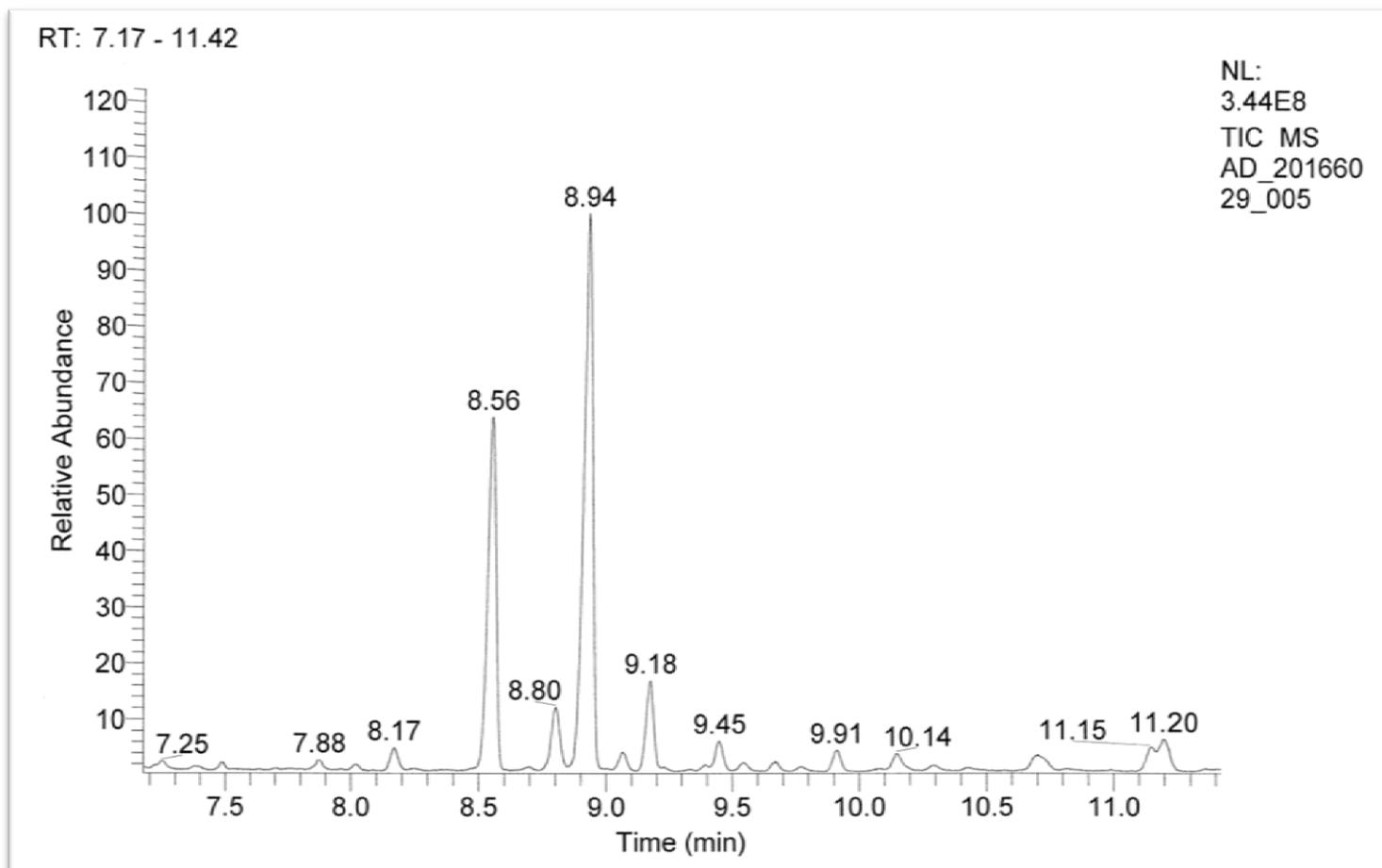


Figure E

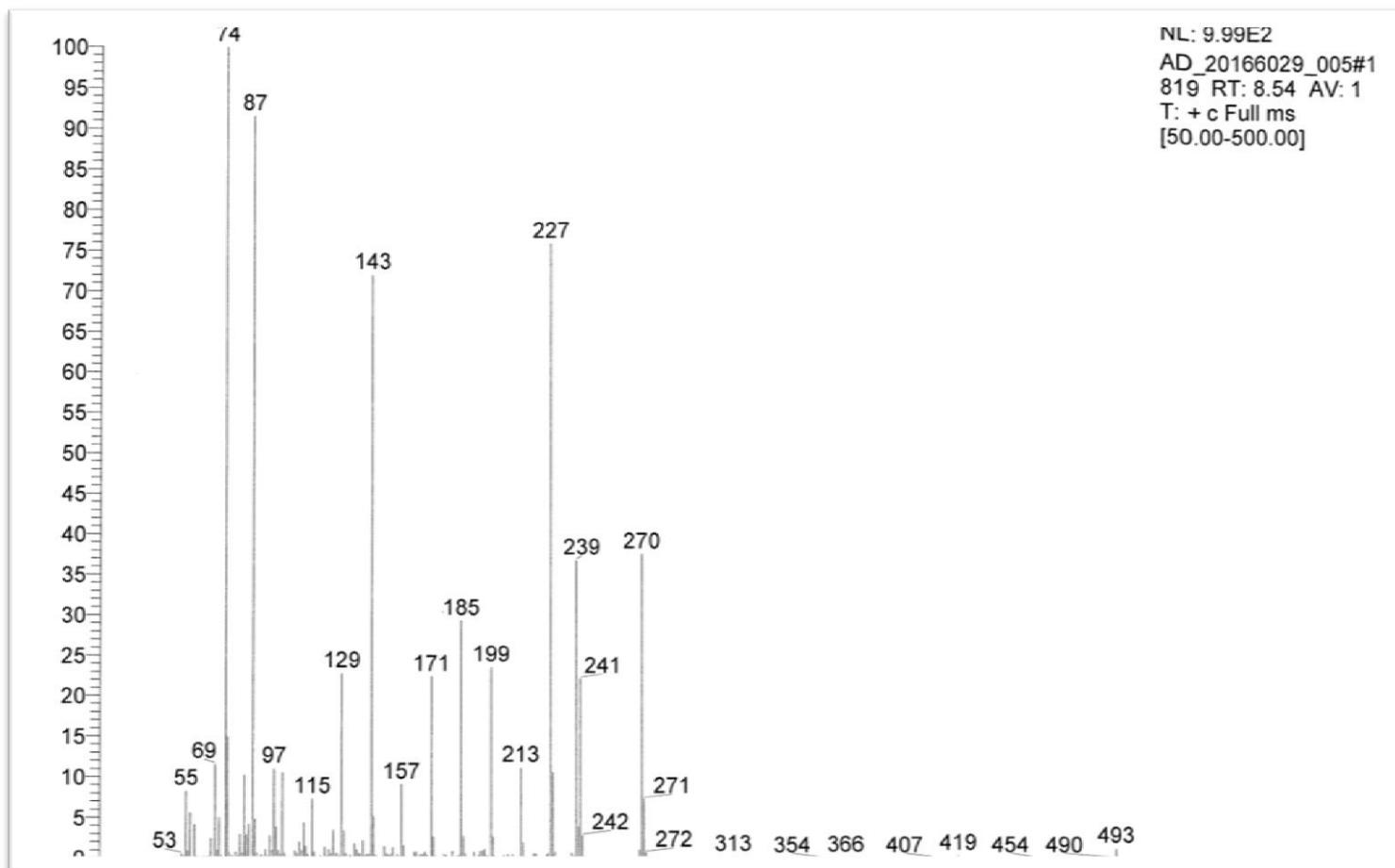


Figure F

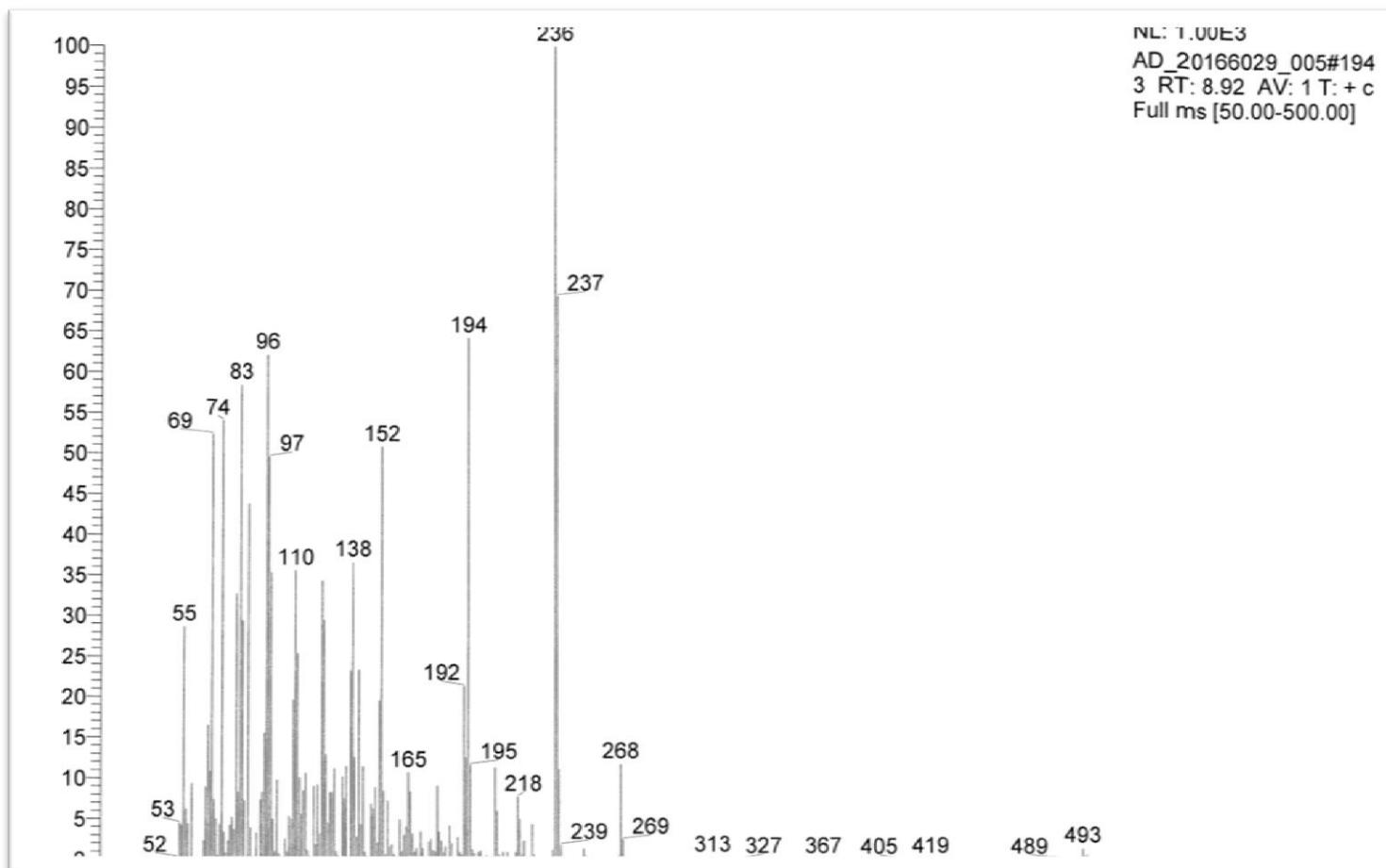


Figure G

Sample Name:
AD_113_140B
Data Collected on:
ormuzd-vnmrs500
Archive directory:
/home/walkup/vnmrsys/data/amilad
Sample directory:
AD_113_140B_20160622_01
FidFile: AD_113_140B_PROTON_01

Pulse Sequence: PROTON (s2pul)
Solvent: cdcl3
Data collected on: Jun 22 2016

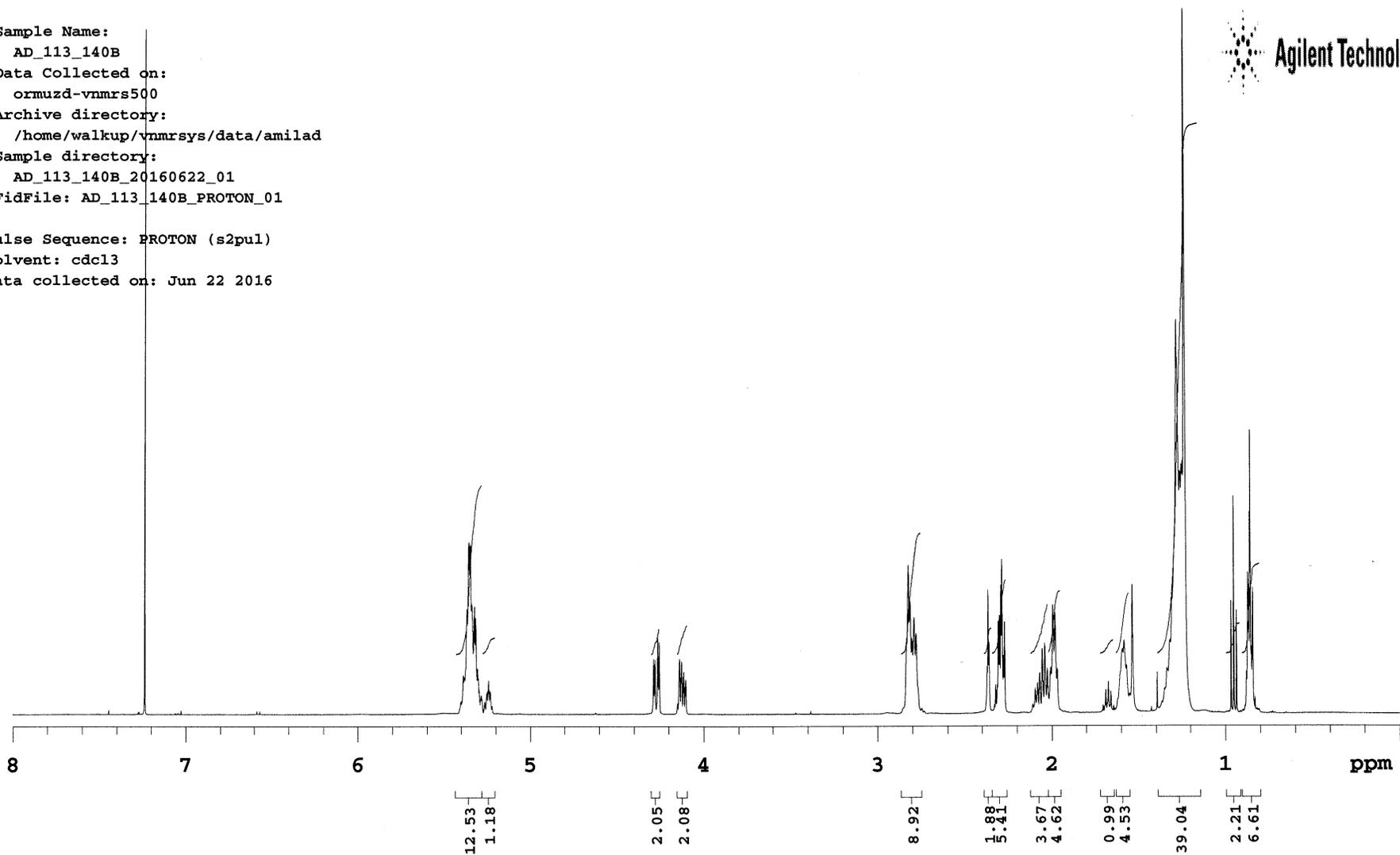


Figure H

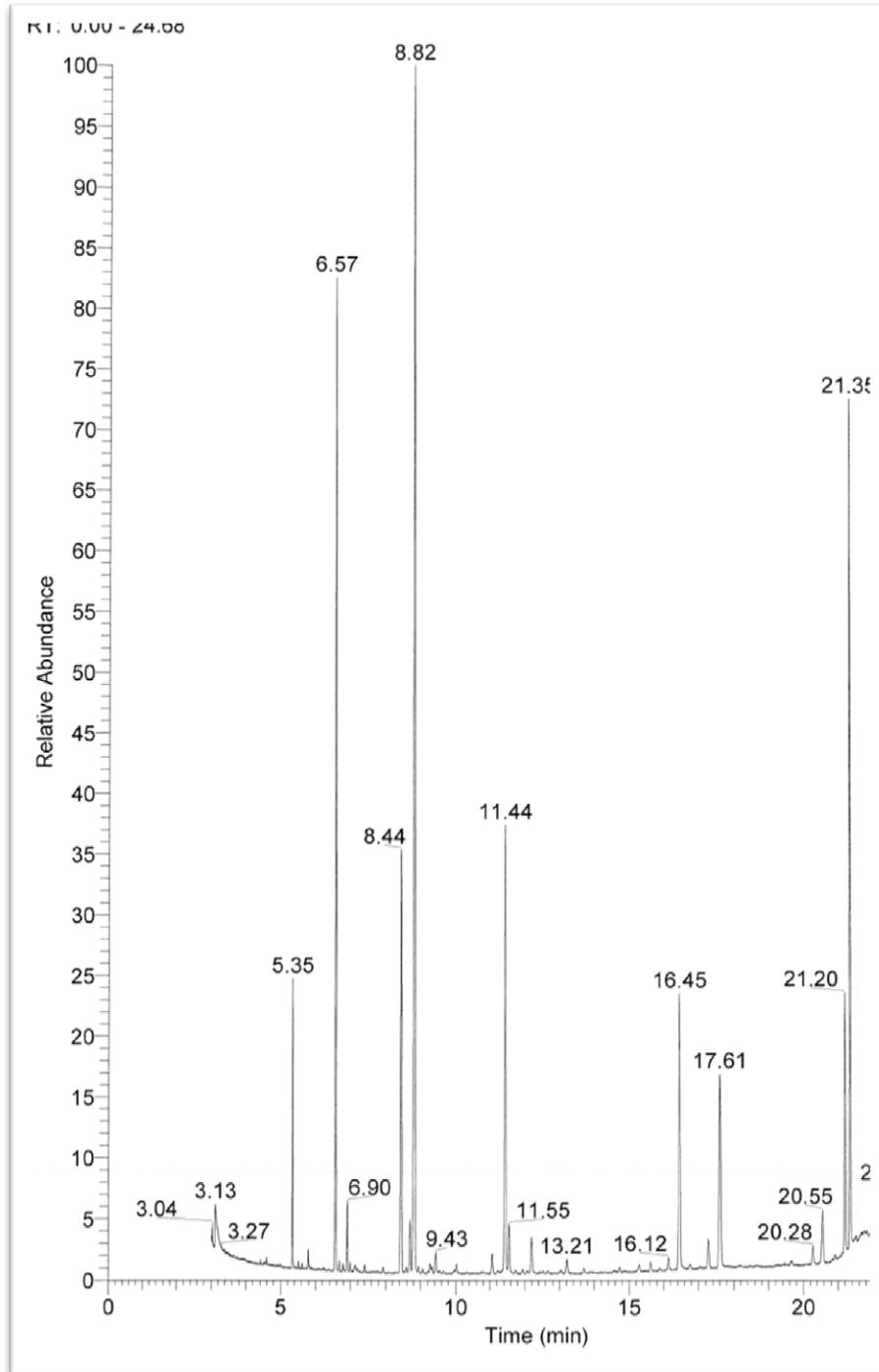


Figure I

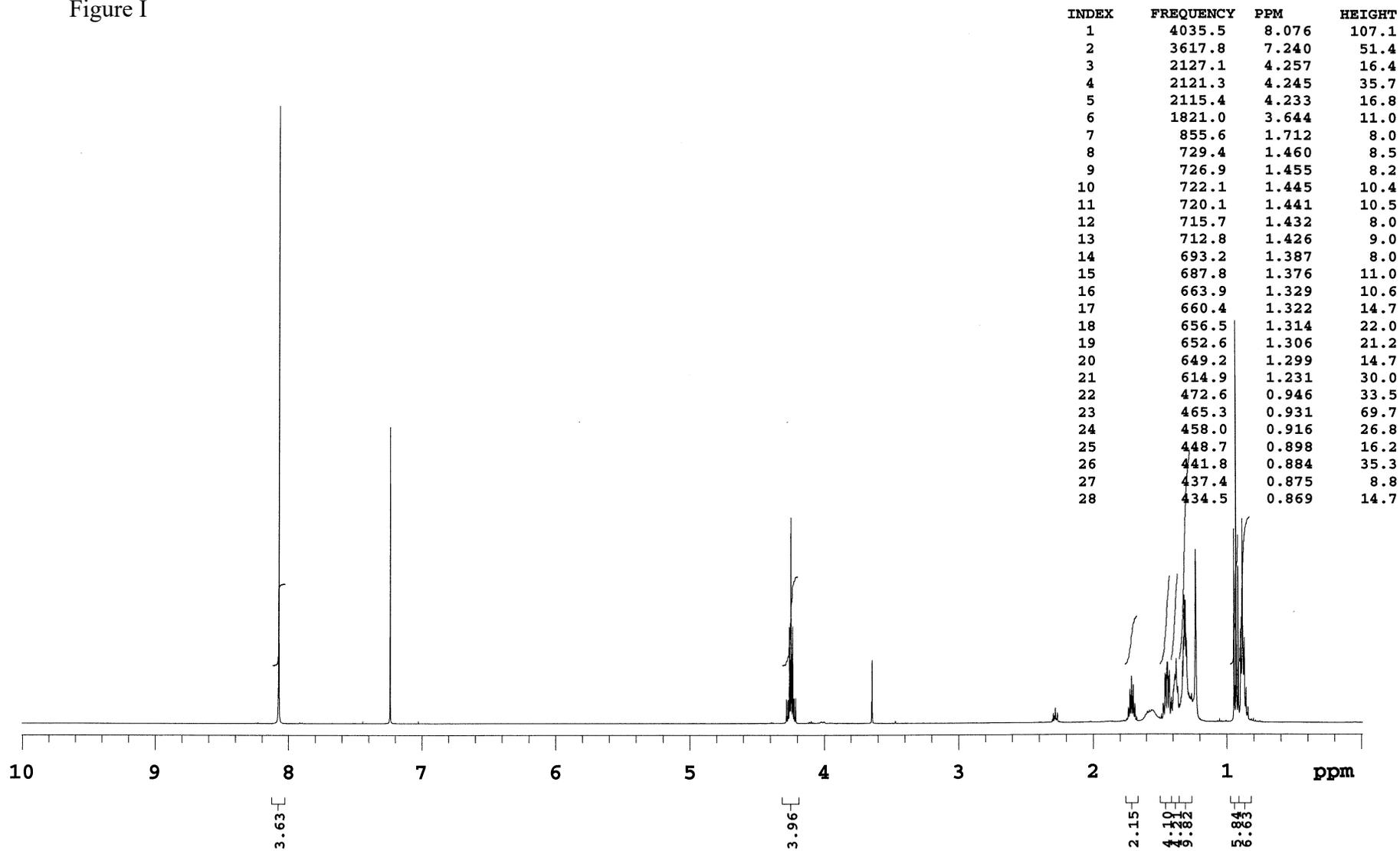


Figure J

Sample Name:
AD_120_4A
Data Collected on:
ormuzd-vnmrs500
Archive directory:
/home/walkup/vnmrsys/data/amilad
Sample directory:
AD_120_4A_20160719_02
FidFile: AD_120_4A_CARBO_01

Pulse Sequence: CARBON (s2pul)
Solvent: cdc13
Data collected on: Jul 19 2016

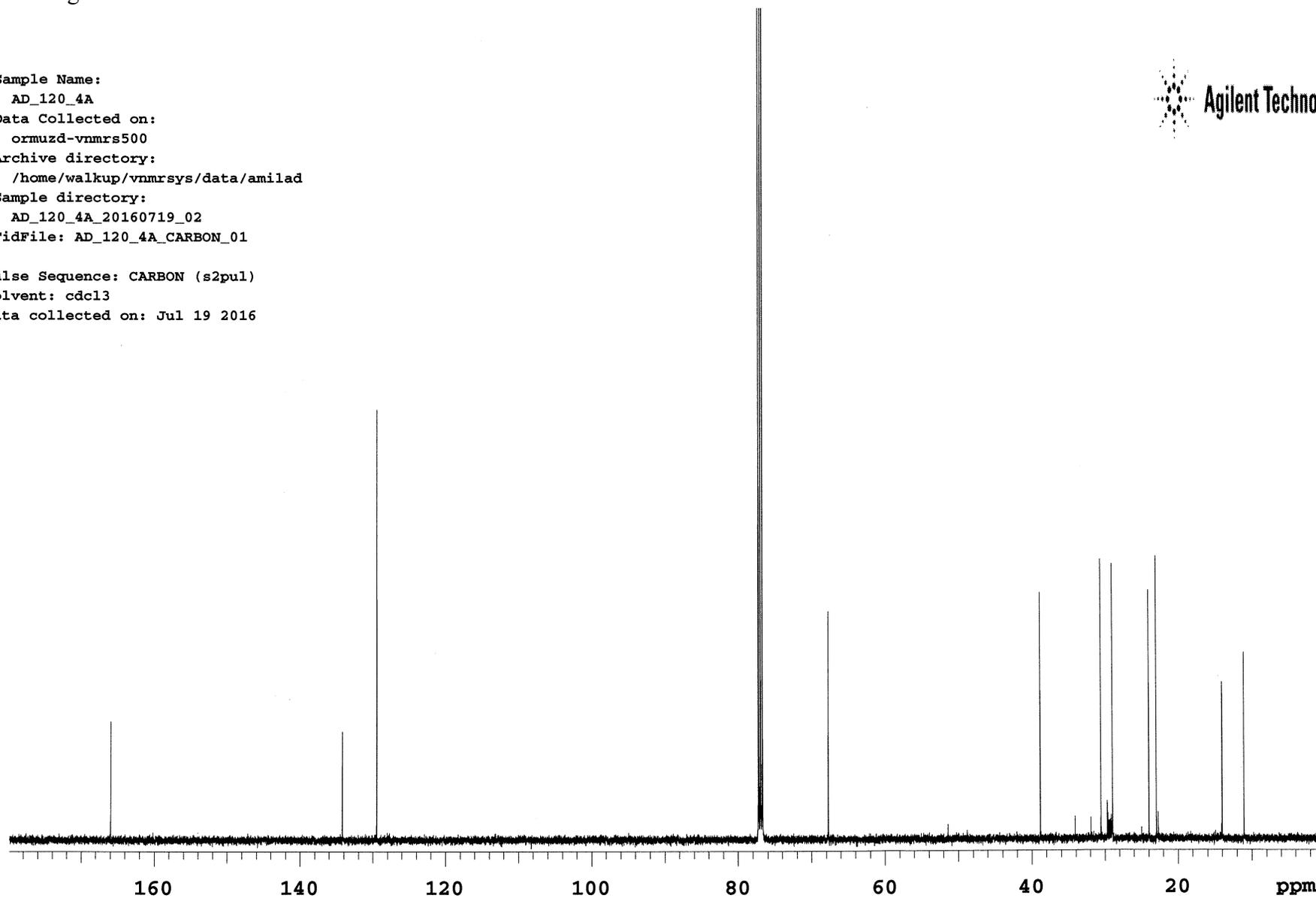


Figure K

AD_120_4A

Sample Name **AD_120_4A**
Date collected **2016-07-19**

Pulse sequence **HSQCAD**
Solvent **cdcl3**

Temperature **25**
Spectrometer **ormuzd-vnmrs500**

Study owner **amilad**
Operator **amilad**

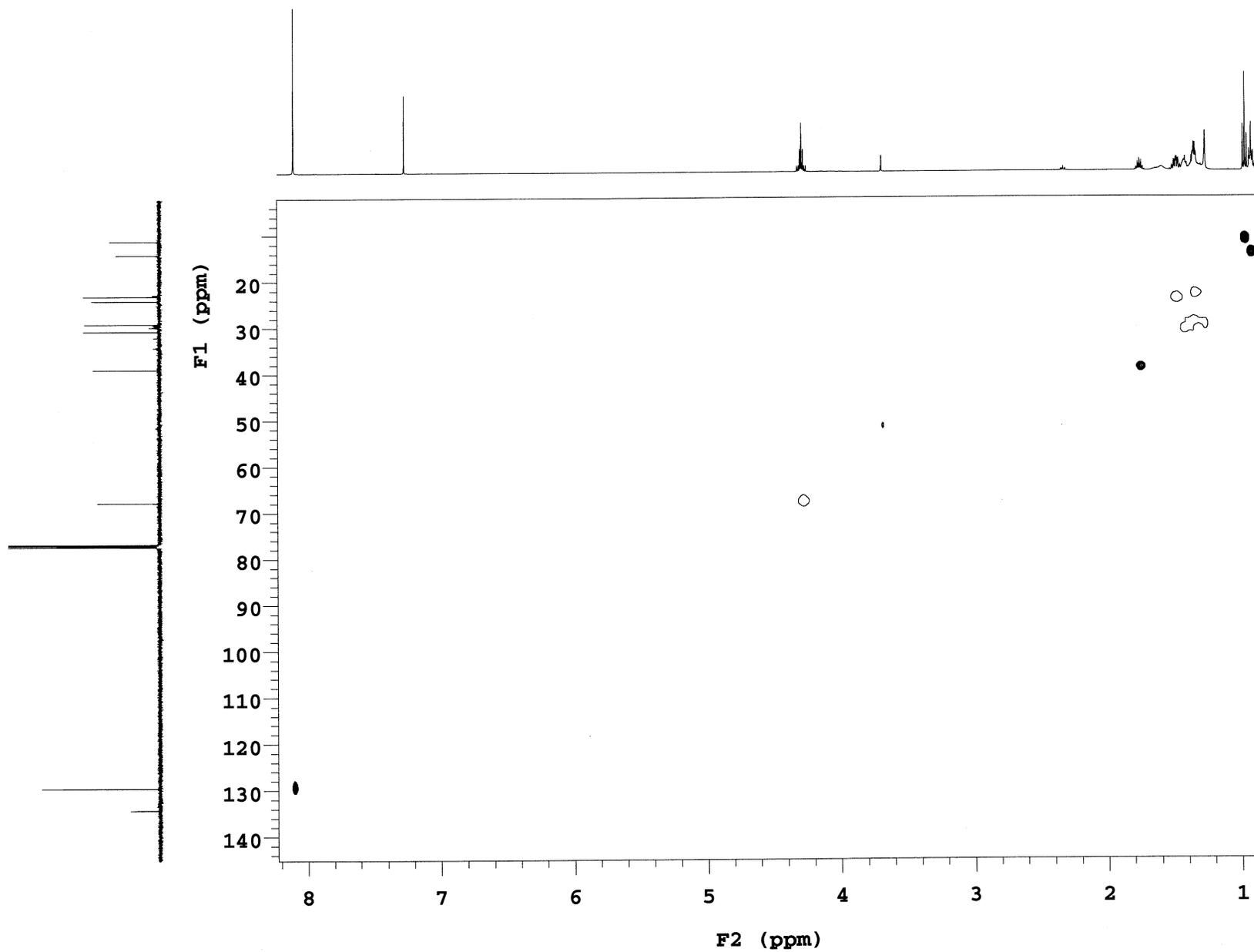


Figure L

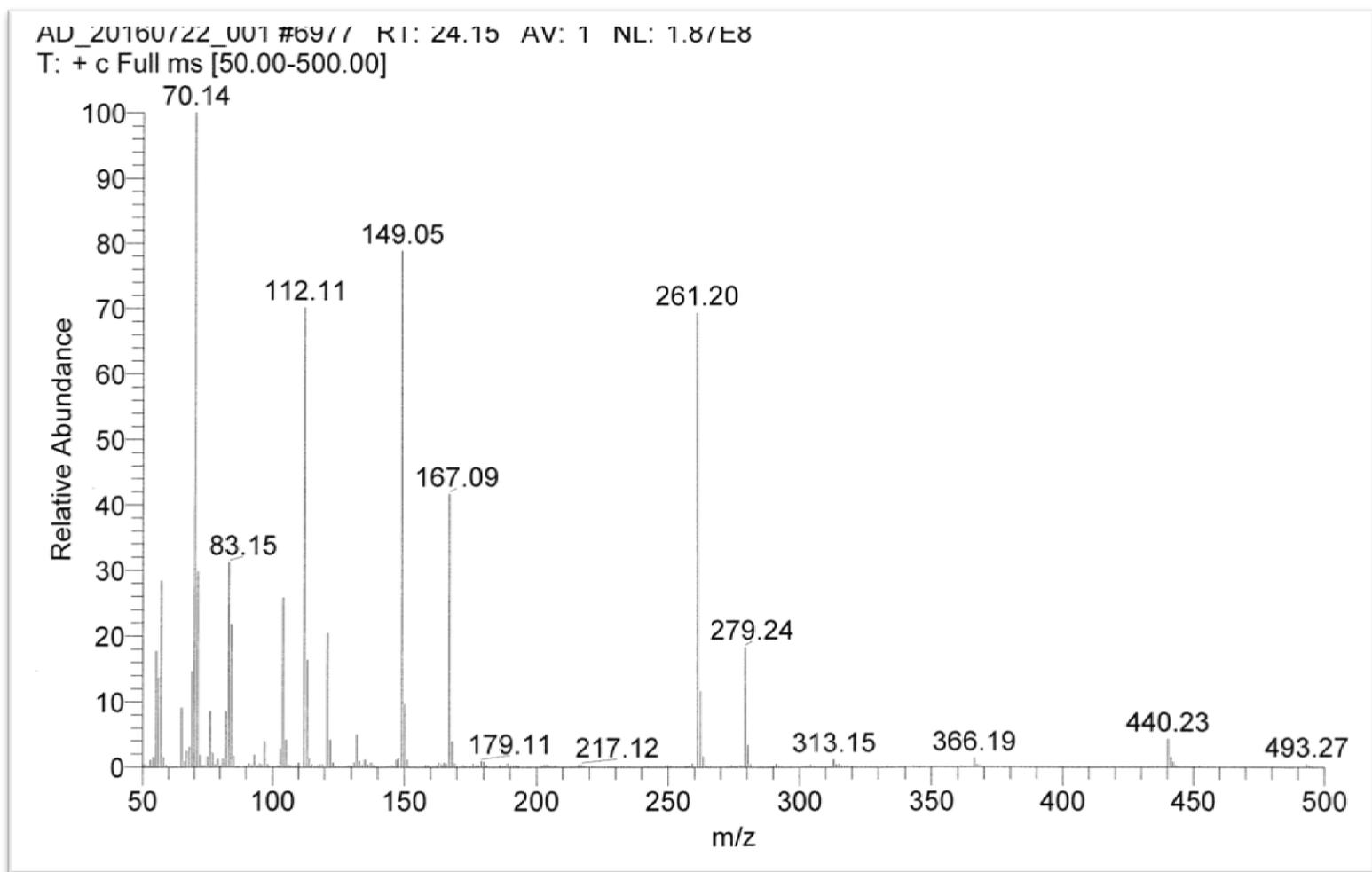
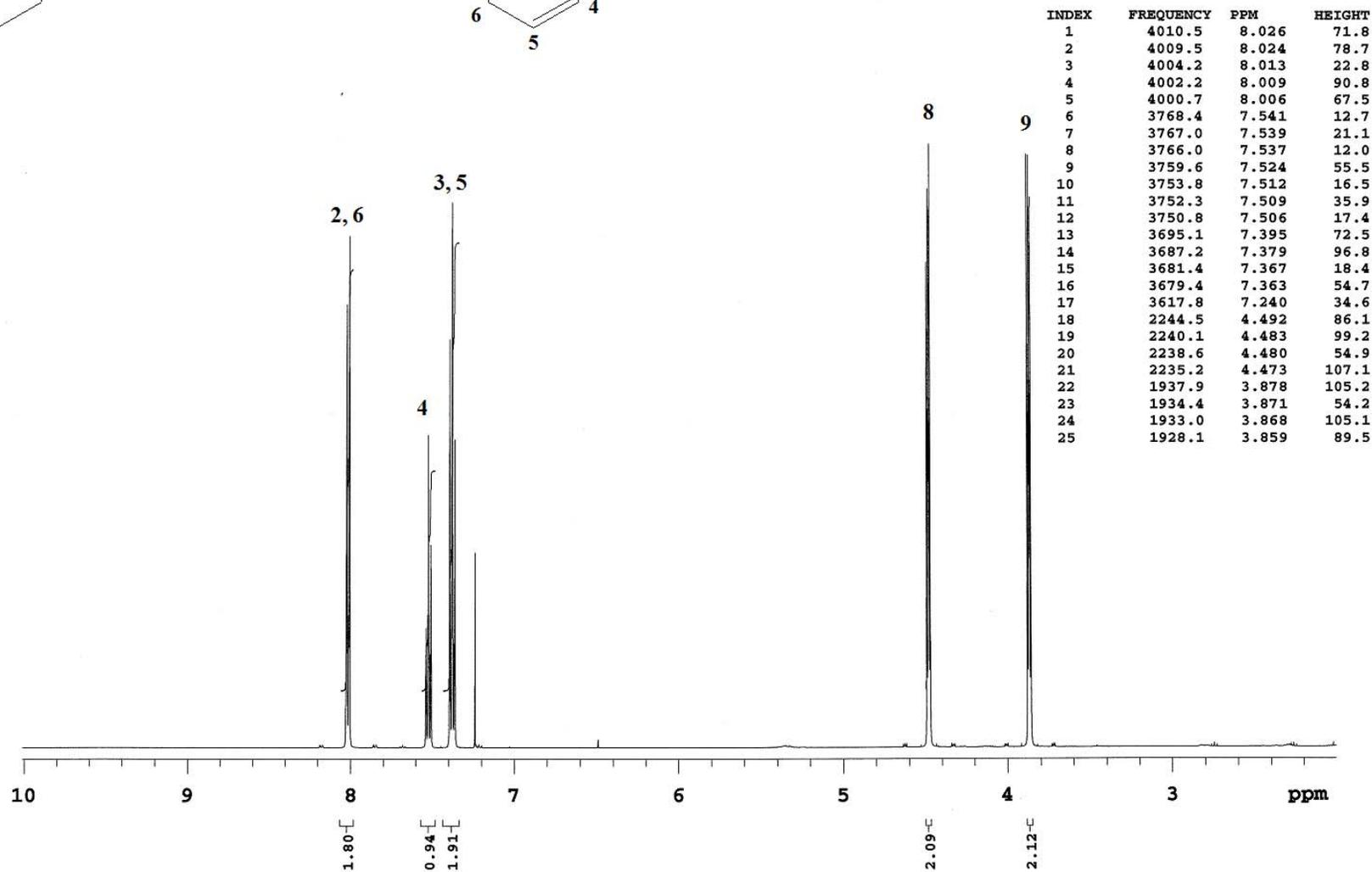
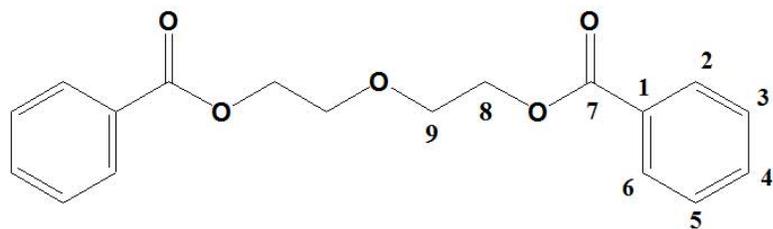
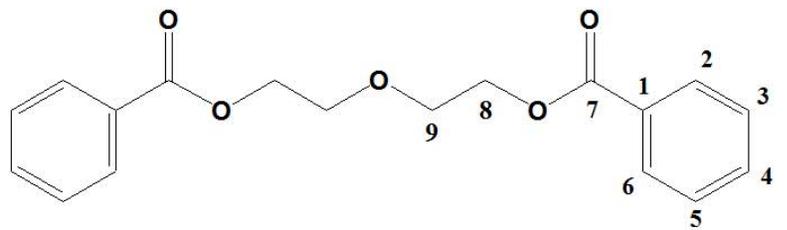


Figure M



INDEX	FREQUENCY	PPM	HEIGHT
1	4010.5	8.026	71.8
2	4009.5	8.024	78.7
3	4004.2	8.013	22.8
4	4002.2	8.009	90.8
5	4000.7	8.006	67.5
6	3768.4	7.541	12.7
7	3767.0	7.539	21.1
8	3766.0	7.537	12.0
9	3759.6	7.524	55.5
10	3753.8	7.512	16.5
11	3752.3	7.509	35.9
12	3750.8	7.506	17.4
13	3695.1	7.395	72.5
14	3687.2	7.379	96.8
15	3681.4	7.367	18.4
16	3679.4	7.363	54.7
17	3617.8	7.240	34.6
18	2244.5	4.492	86.1
19	2240.1	4.483	99.2
20	2238.6	4.480	54.9
21	2235.2	4.473	107.1
22	1937.9	3.878	105.2
23	1934.4	3.871	54.2
24	1933.0	3.868	105.1
25	1928.1	3.859	89.5

Figure N



INDEX	FREQUENCY	PPM	HEIGHT
1	20921.6	166.509	14.5
2	16706.4	132.961	61.3
3	16329.7	129.963	19.0
4	16287.7	129.629	116.3
5	16120.8	128.301	117.9
6	9706.4	77.250	38.5
7	9674.9	77.000	34.4
8	9642.5	76.742	39.1
9	8690.8	69.167	35.7
10	8037.5	63.968	56.3

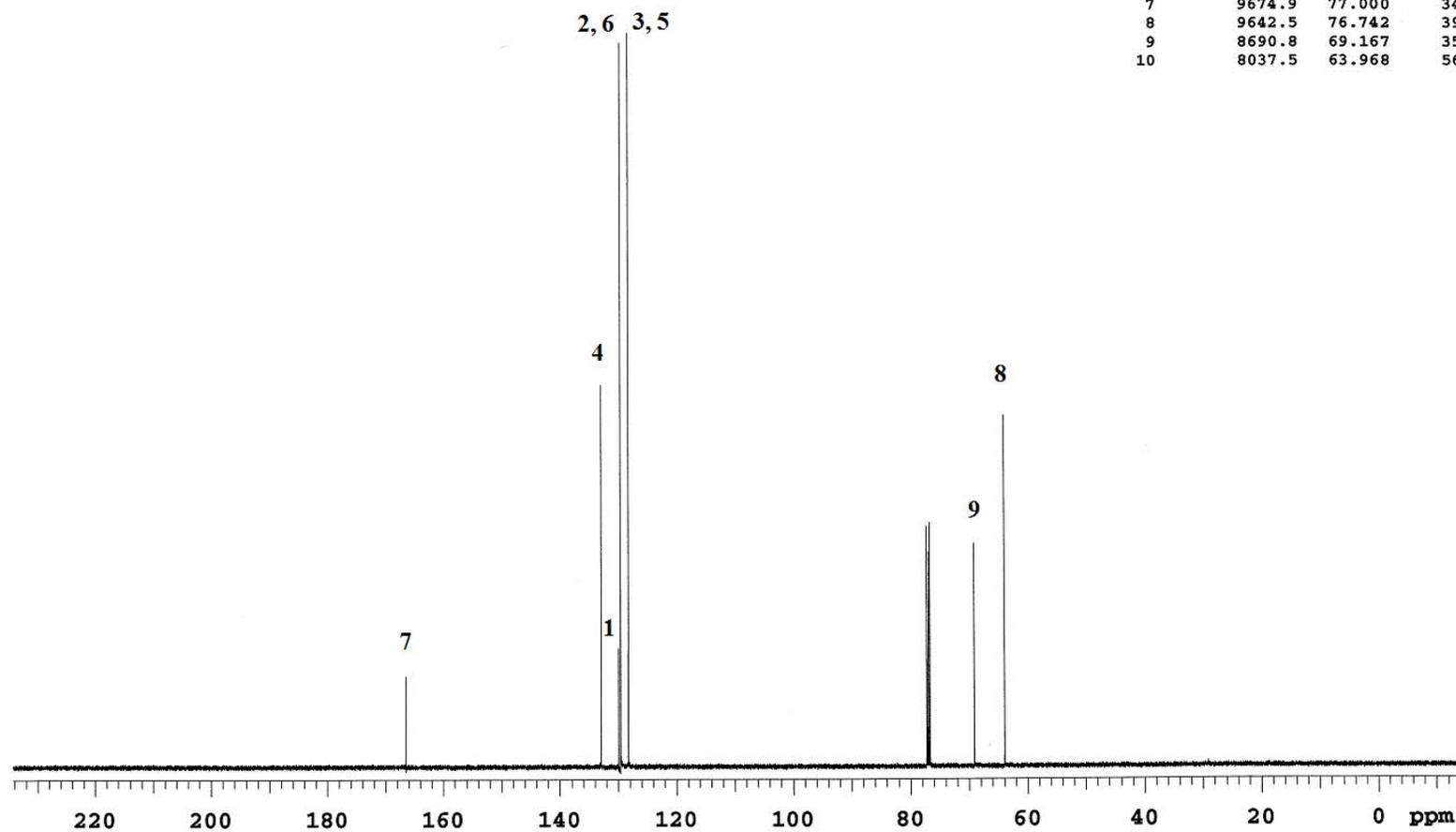


Figure O

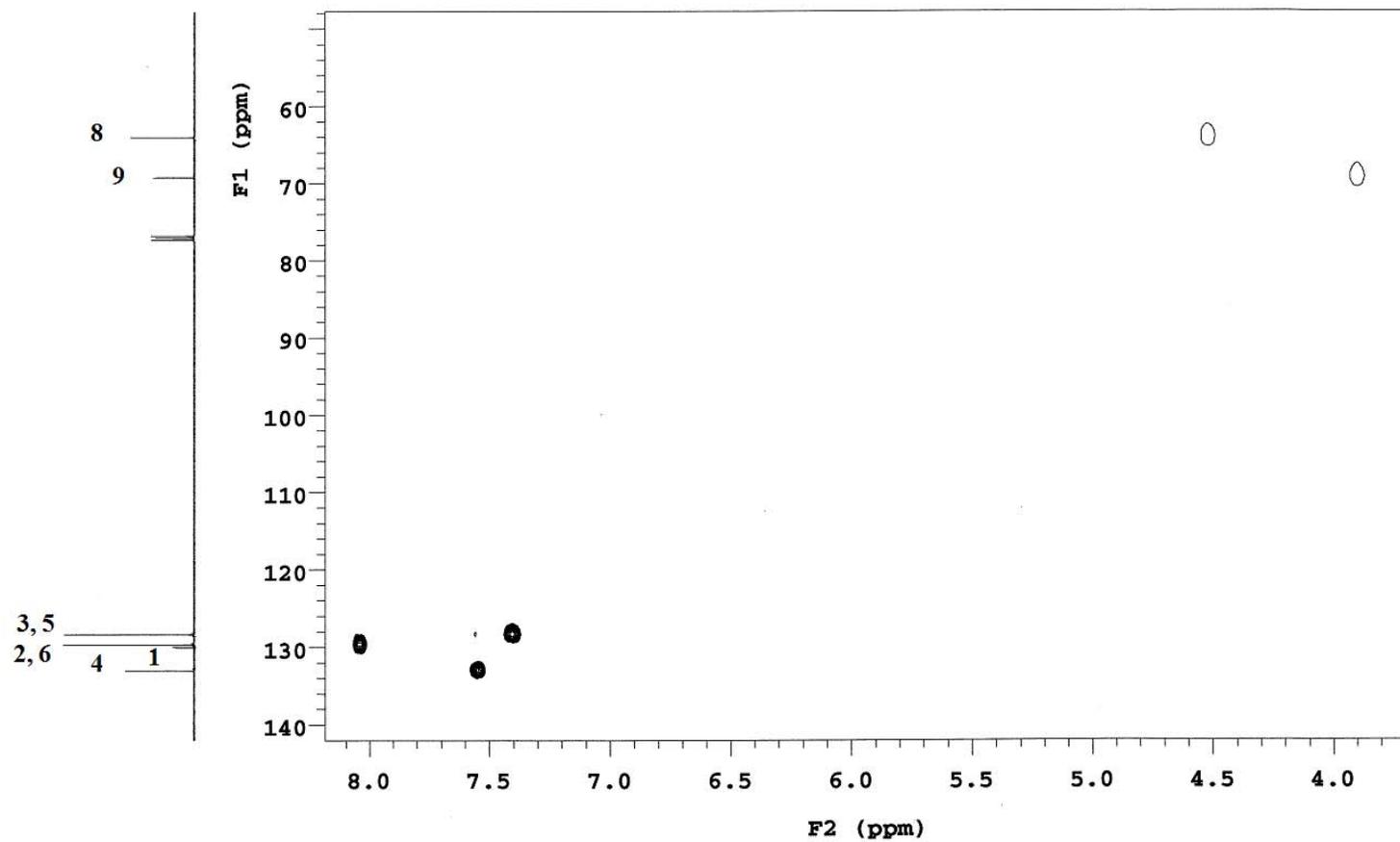
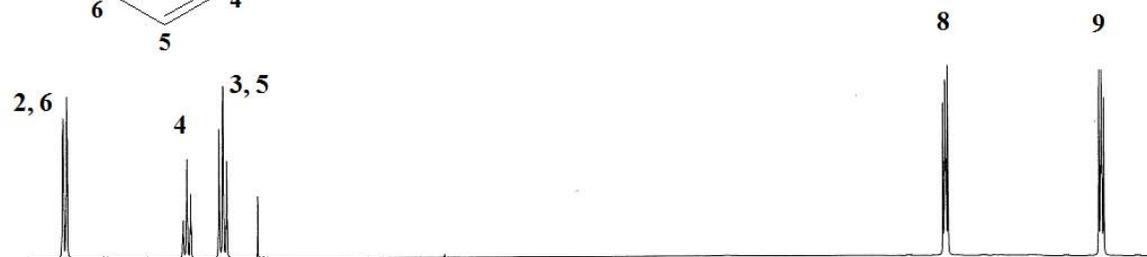
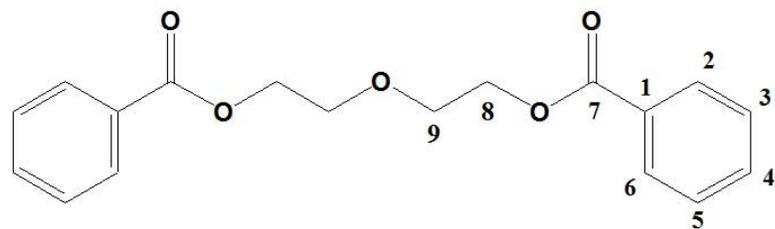


Figure P

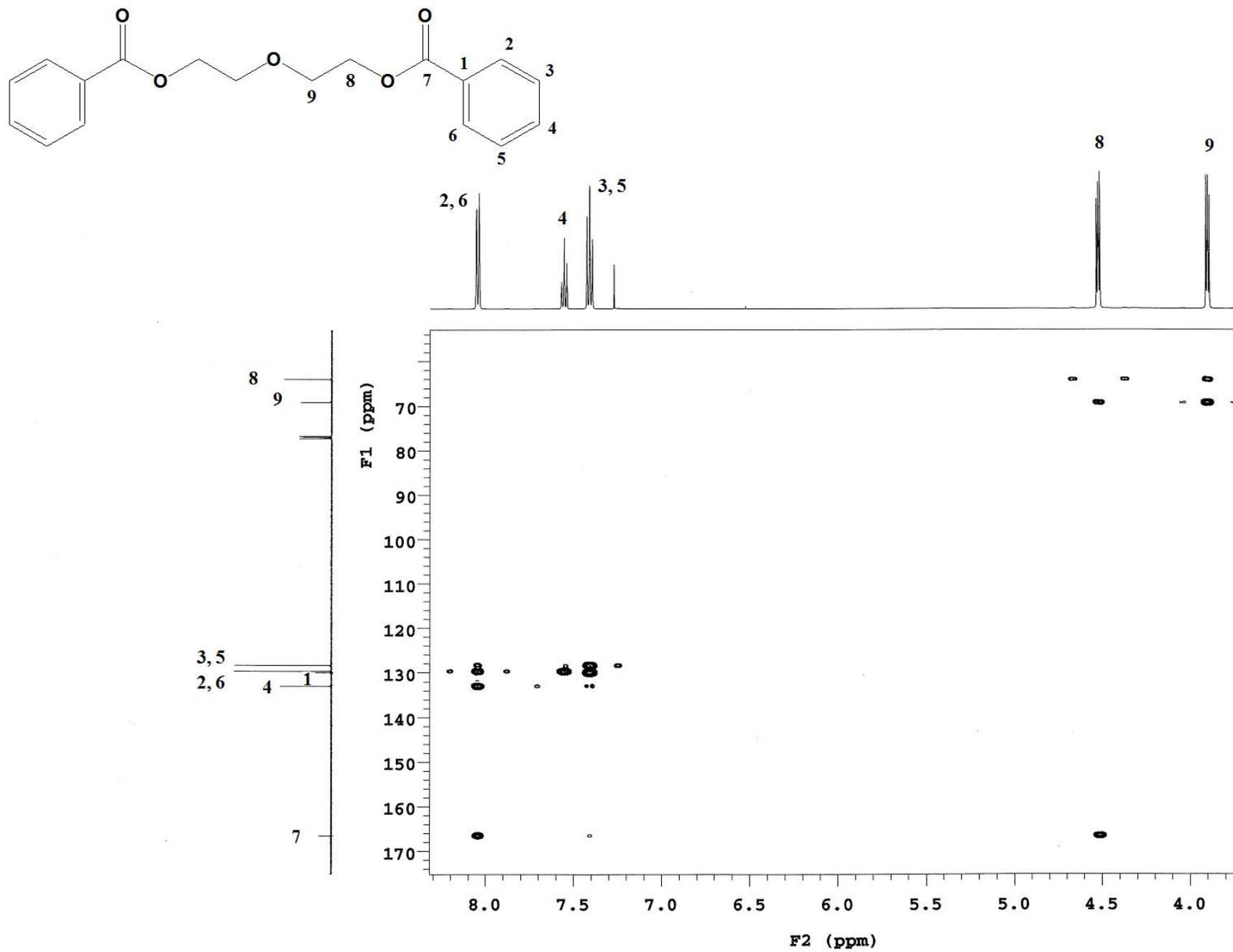


Figure Q

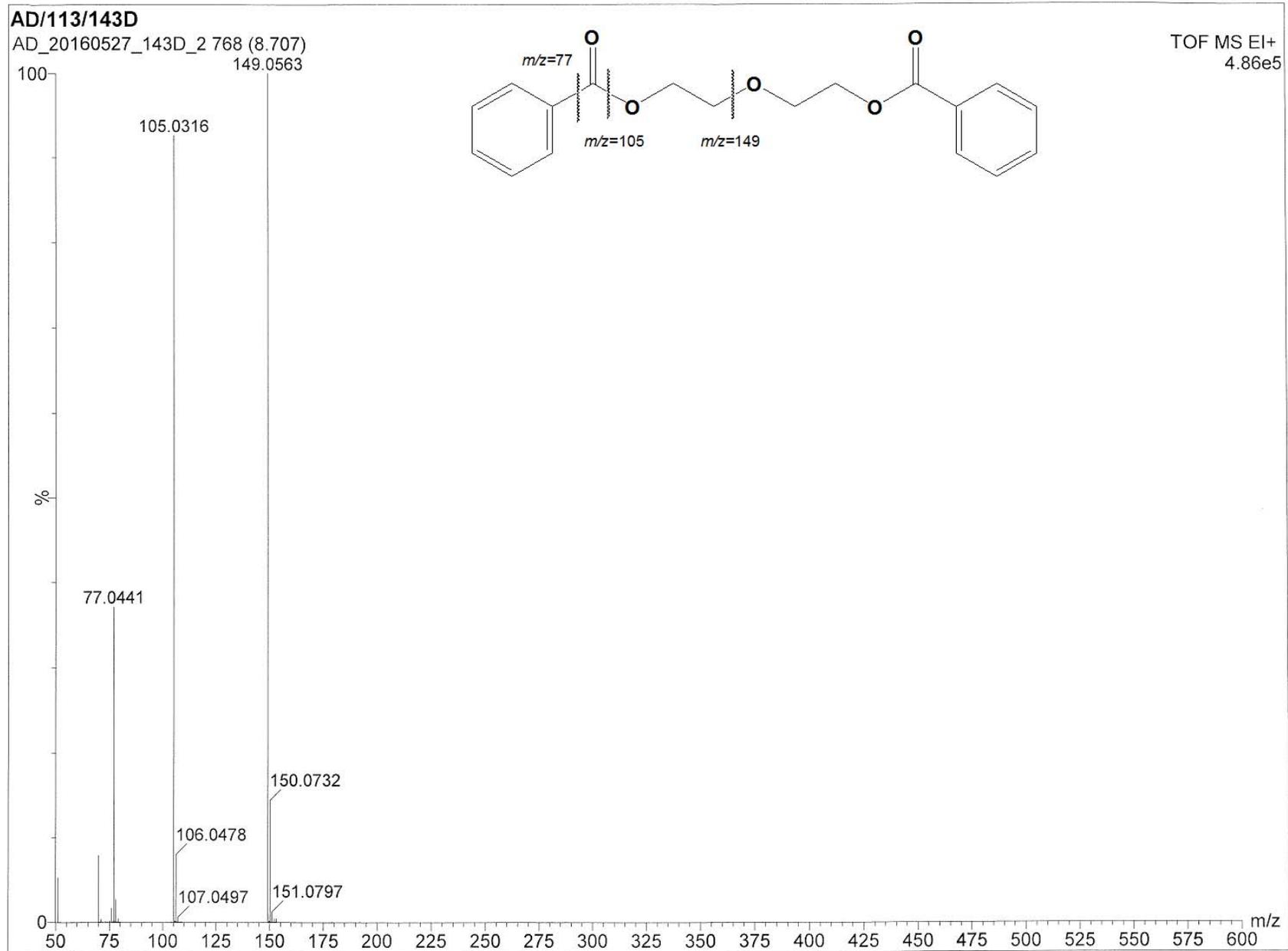


Figure R

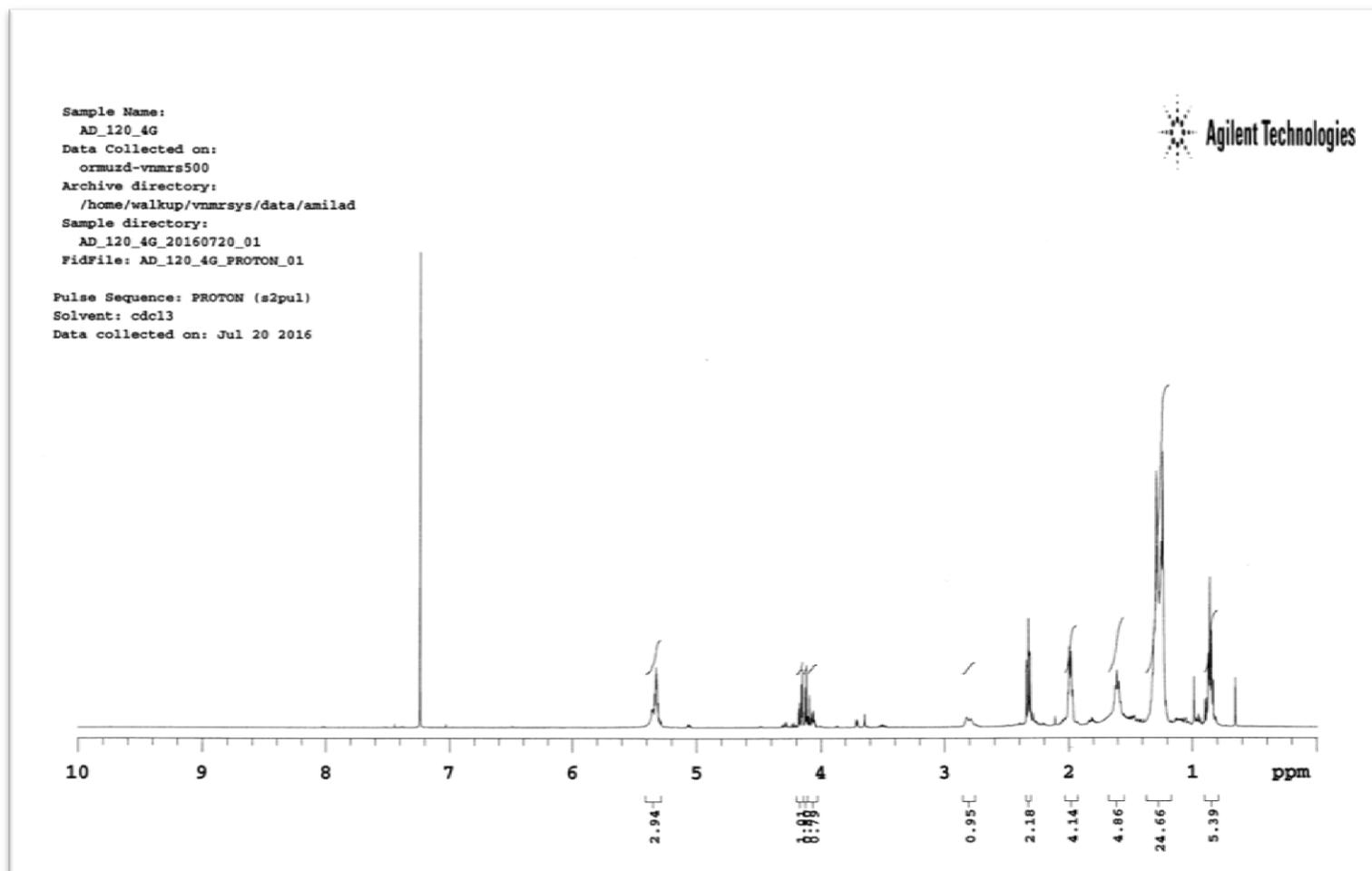


Figure S

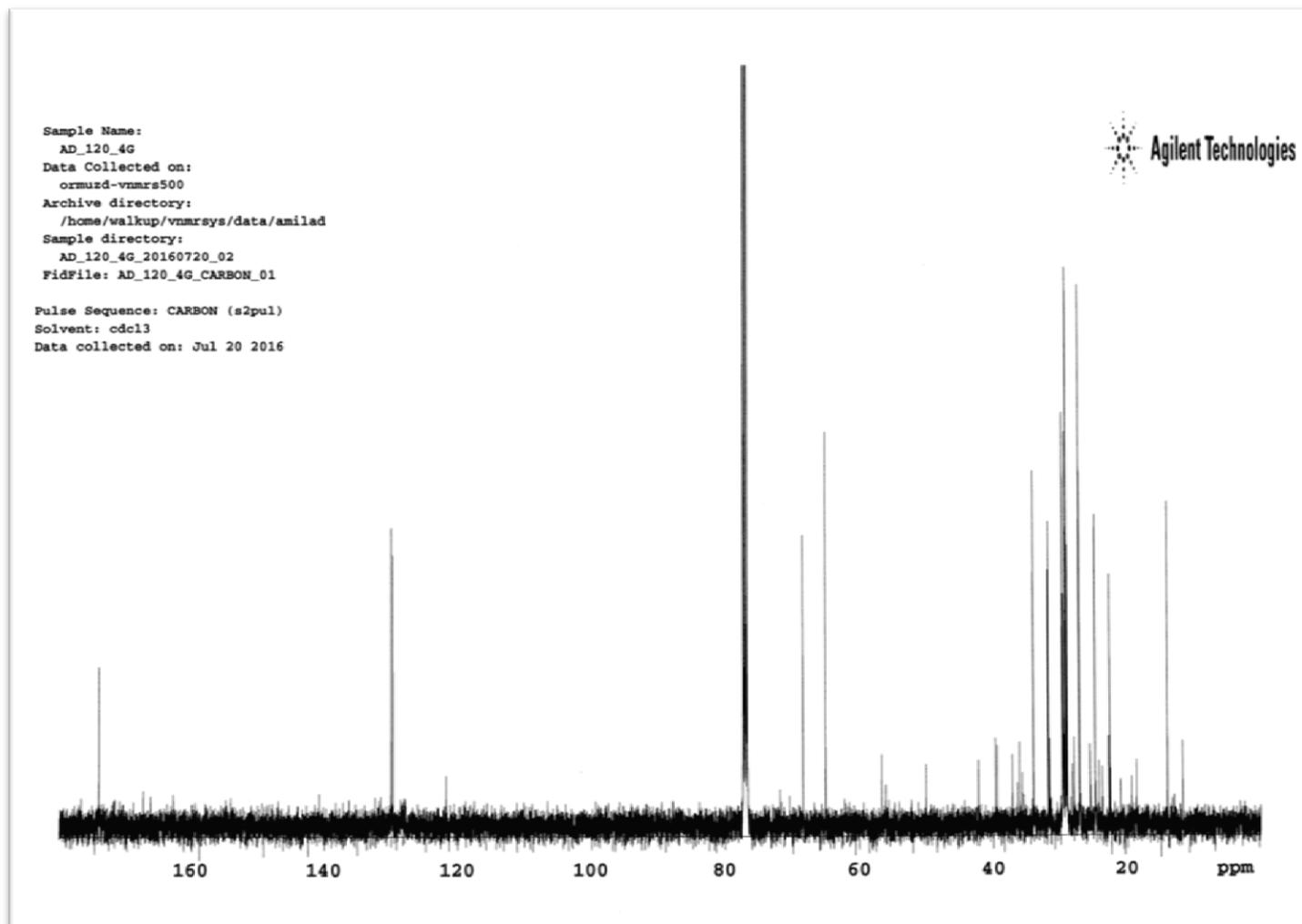


Figure T

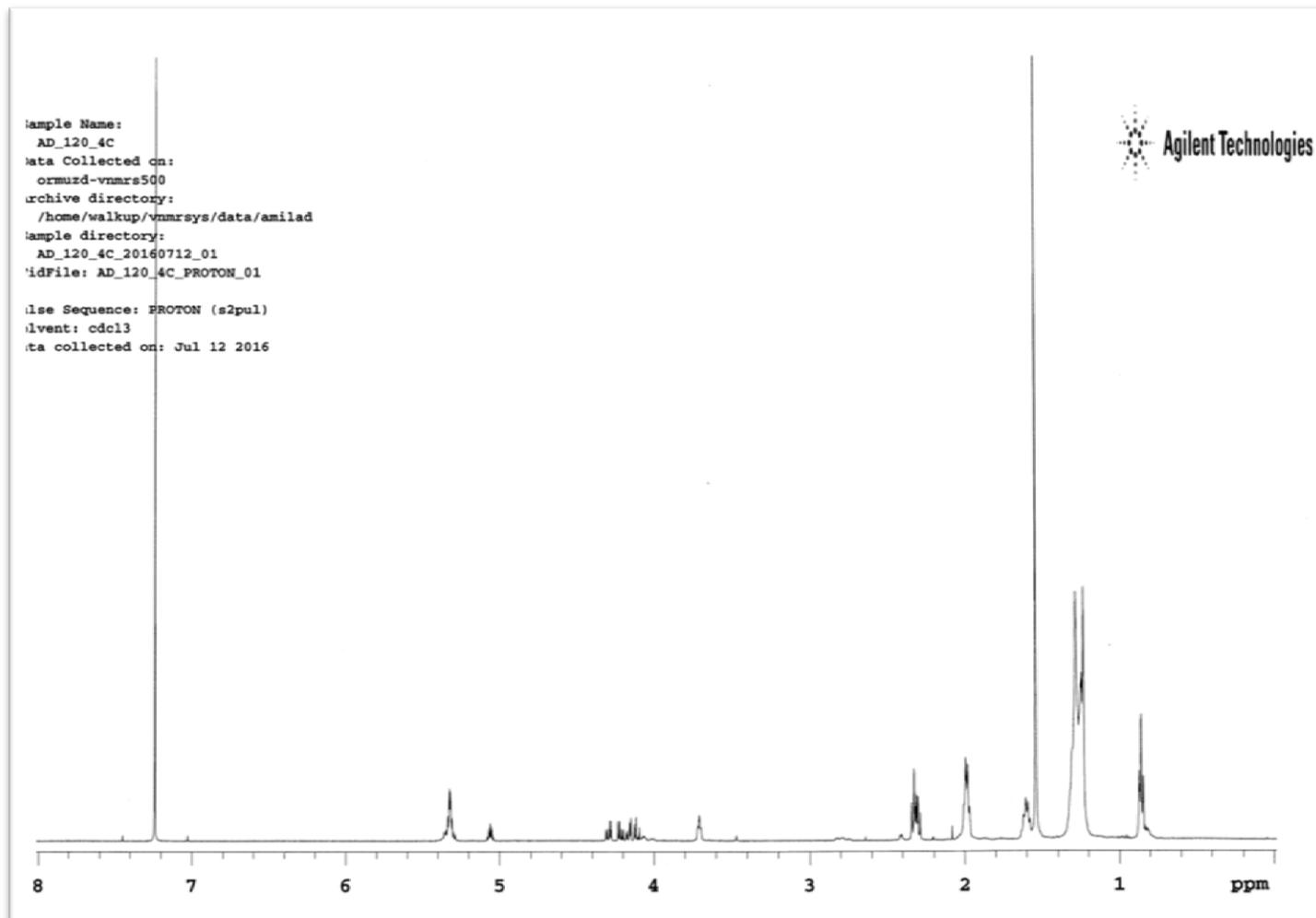


Figure U

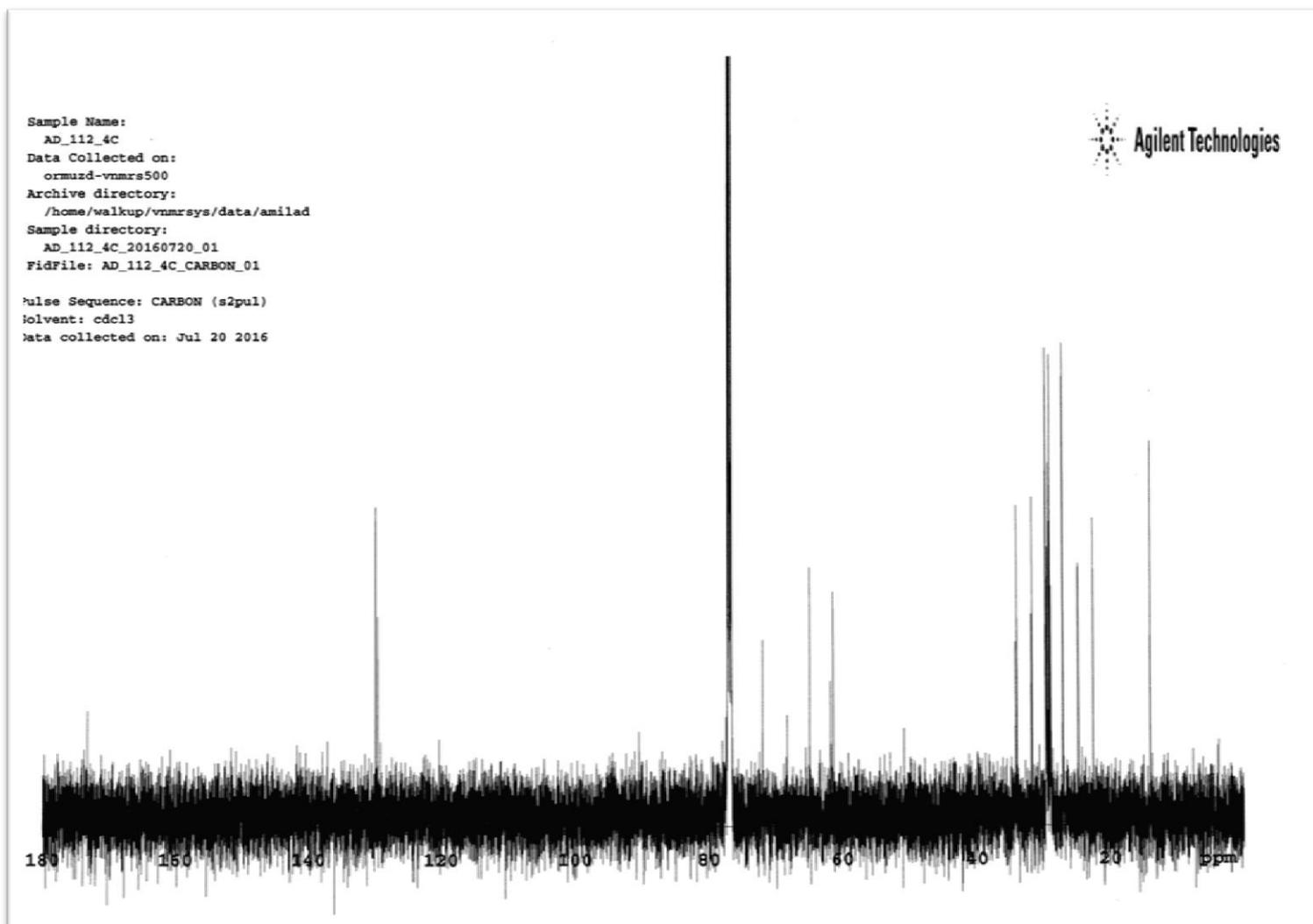


Figure V

