

## Supporting information

### Antitumor Agents 274. A New Synthetic Strategy for E-ring SAR Study of Antofine and Cryptopleurine Analogs

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#### Contents

<sup>1</sup>H NMR and <sup>13</sup>C NMR spectra of compound **11(a-c)-12(a-c)**

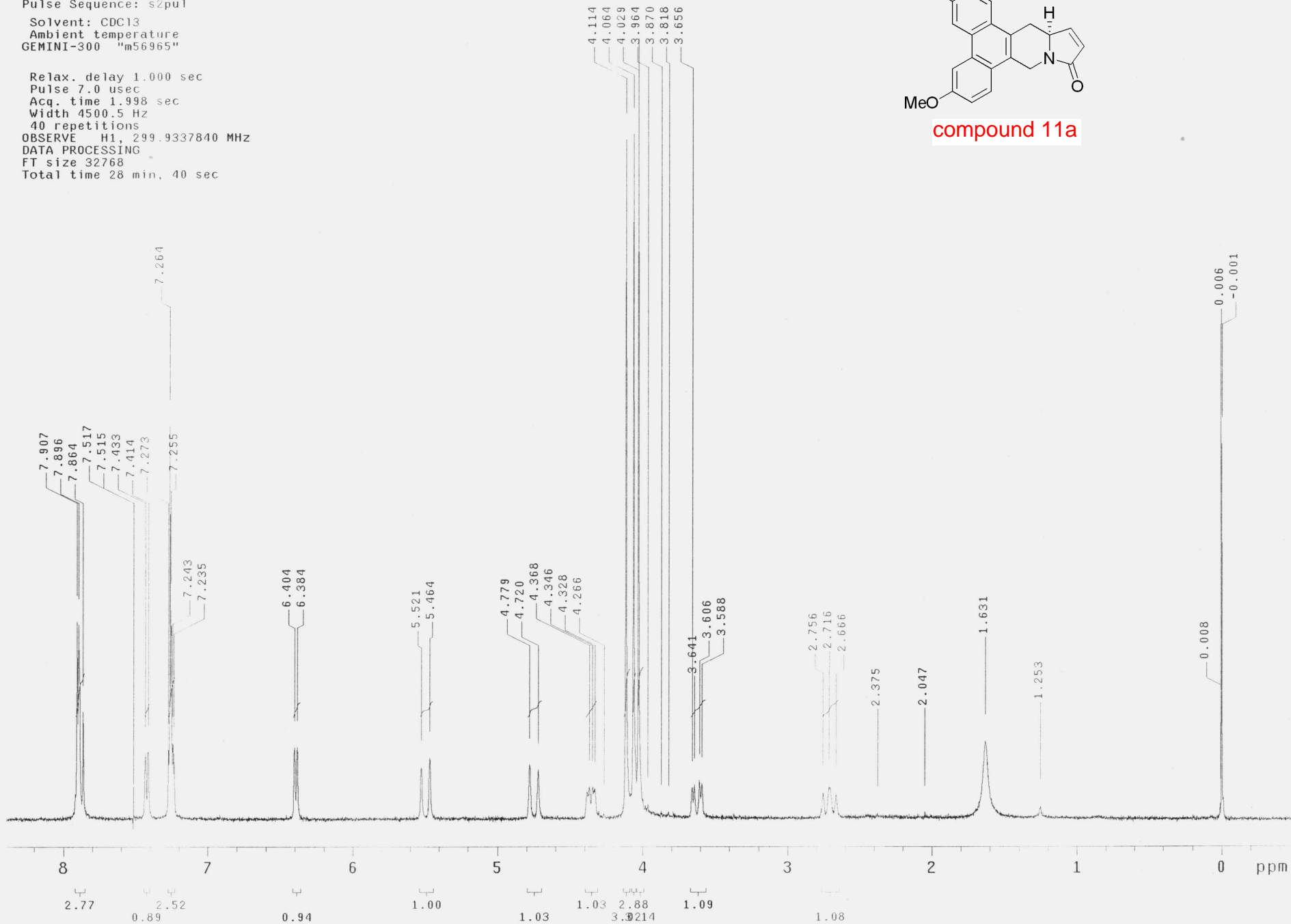
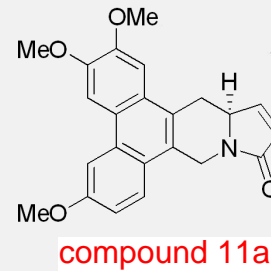
S21-32

yxmsoccer-compound-11a

Pulse Sequence: s2pul

Solvent: CDC13  
Ambient temperature  
GEMINI-300 "m56965"

Relax. delay 1.000 sec  
Pulse 7.0 usec  
Acq. time 1.998 sec  
Width 4500.5 Hz  
40 repetitions  
OBSERVE H1, 299.9337840 MHz  
DATA PROCESSING  
FT size 32768  
Total time 28 min, 40 sec

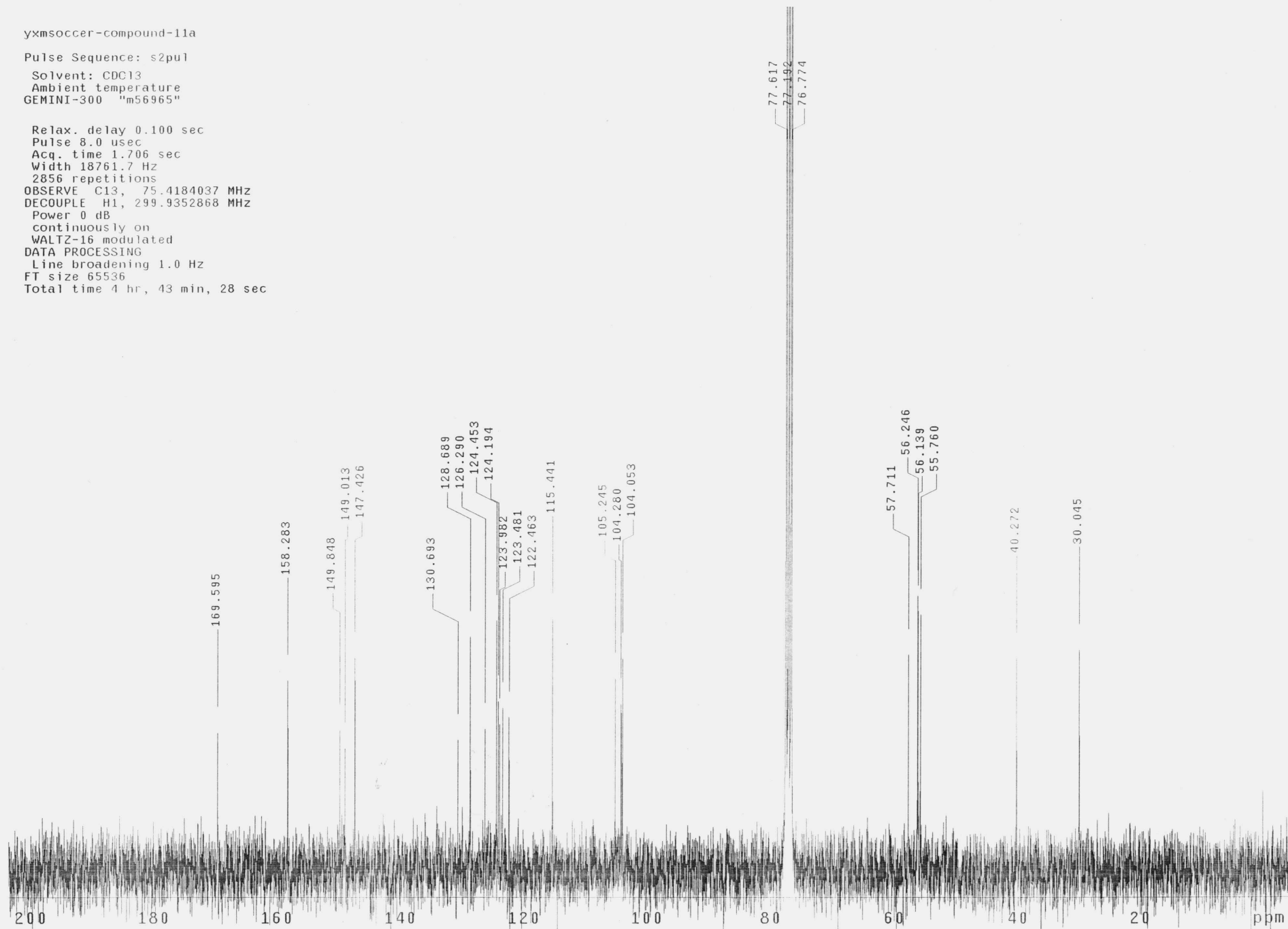


yxmsoccer-compound-11a

Pulse Sequence: s2pul

Solvent: CDC13  
Ambient temperature  
GEMINI-300 "m56965"

Relax. delay 0.100 sec  
Pulse 8.0 usec  
Acq. time 1.706 sec  
Width 18761.7 Hz  
2856 repetitions  
OBSERVE C13, 75.4184037 MHz  
DECOUPLE H1, 299.9352868 MHz  
Power 0 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 1.0 Hz  
FT size 65536  
Total time 4 hr, 43 min, 28 sec

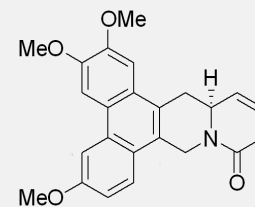


yxmsoccer-compound-11b

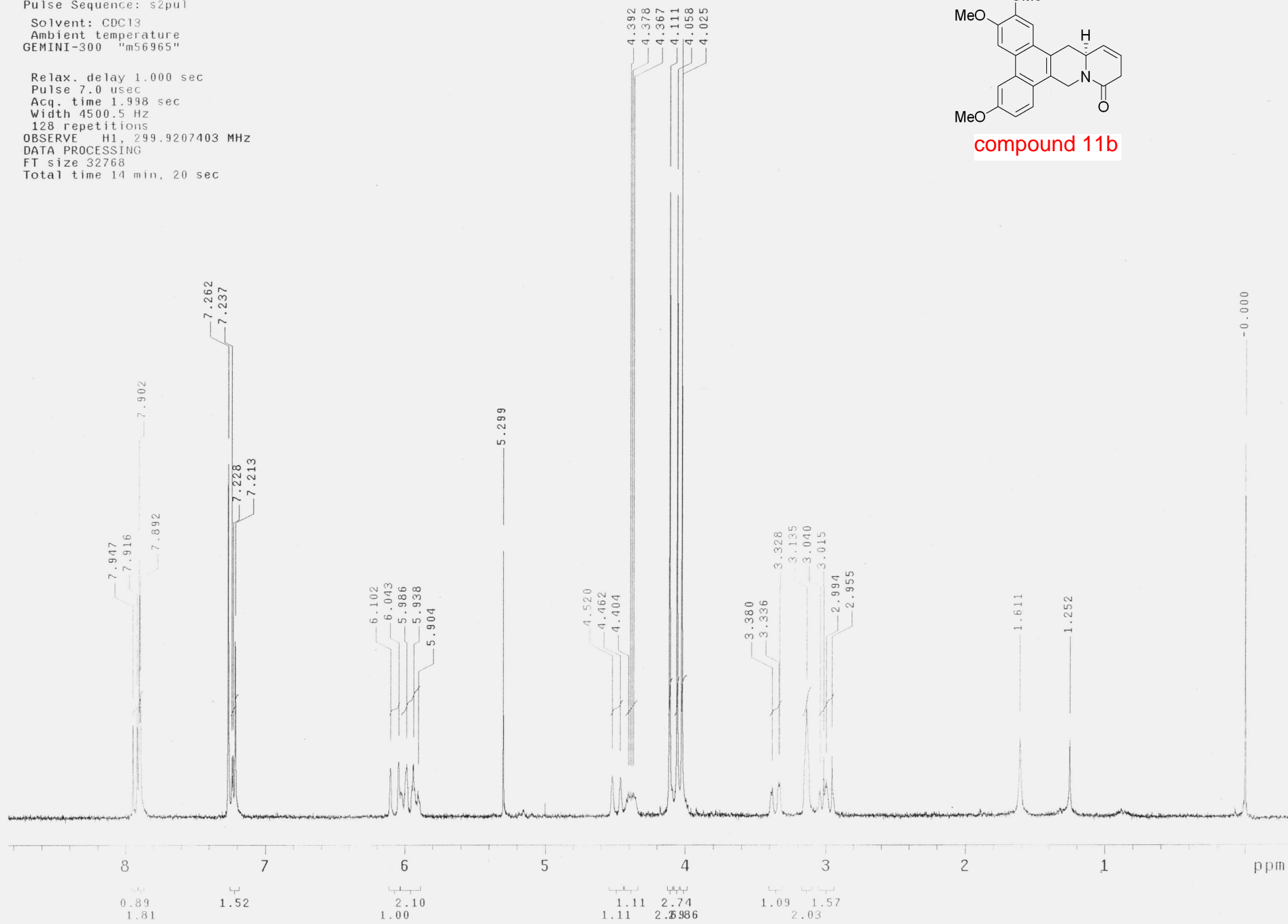
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Solvent: CDC13  
Ambient temperature  
GEMINI-300 "m56965"

Relax. delay 1.000 sec  
Pulse 7.0 usec  
Acq. time 1.998 sec  
Width 4500.5 Hz  
128 repetitions  
OBSERVE H1, 299.9207403 MHz  
DATA PROCESSING  
FT size 32768  
Total time 14 min, 20 sec



compound 11b

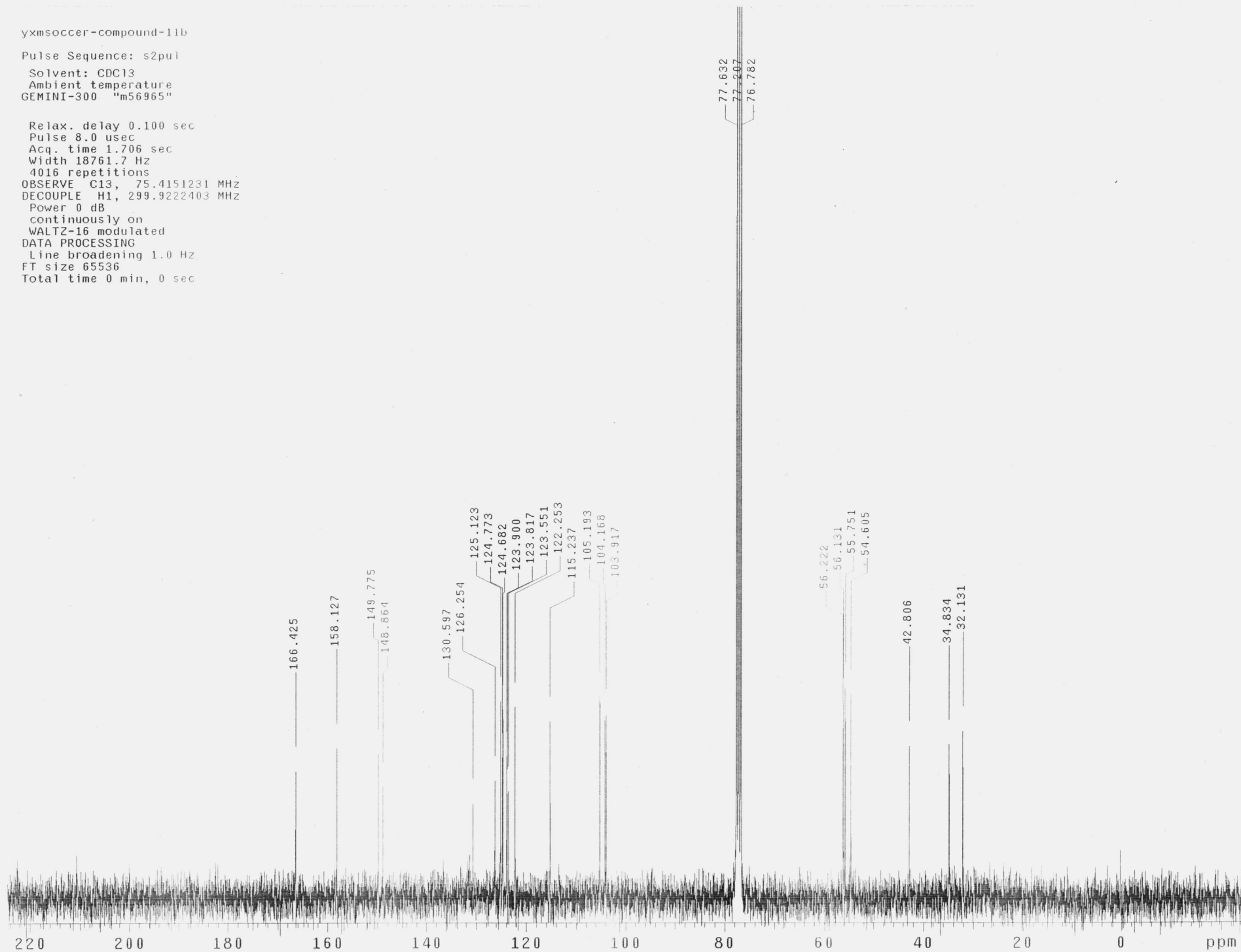


yxmsoccer-compound-11b

Pulse Sequence: s2pul

Solvent: CDC13  
Ambient temperature  
GEMINI-300 "m56965"

Relax. delay 0.100 sec  
Pulse 8.0 usec  
Acq. time 1.706 sec  
Width 18761.7 Hz  
4016 repetitions  
OBSERVE C13, 75.4151231 MHz  
DECOUPLE H1, 299.9222403 MHz  
Power 0 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 1.0 Hz  
FT size 65536  
Total time 0 min, 0 sec

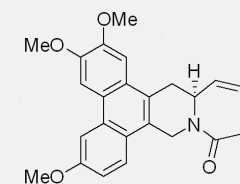


yxmsoccer-compound-11c

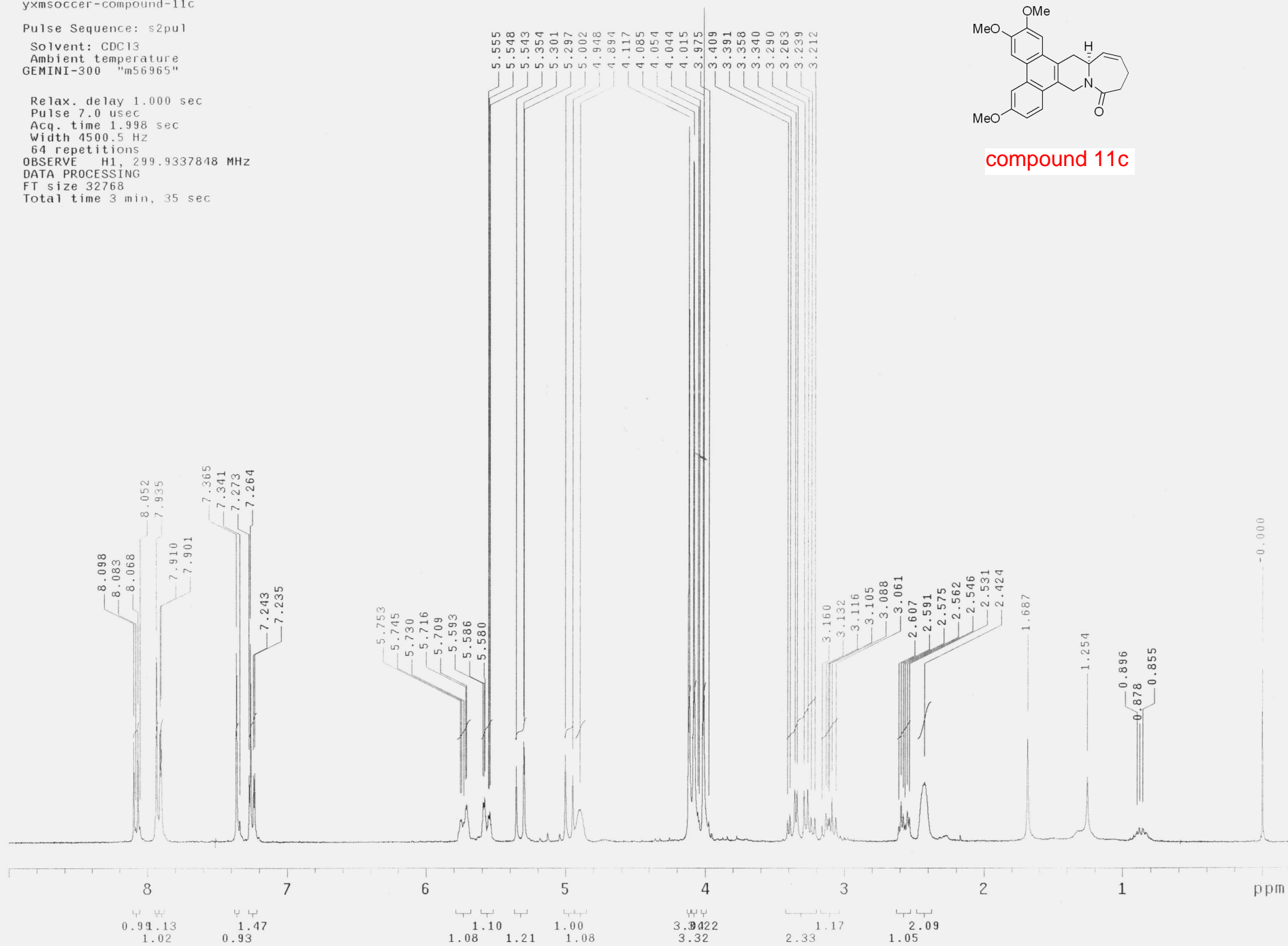
Pulse Sequence: s2pul

Solvent: CDC13  
Ambient temperature  
GEMINI-300 "m56965"

Relax. delay 1.000 sec  
Pulse 7.0 usec  
Acq. time 1.998 sec  
Width 4500.5 Hz  
64 repetitions  
OBSERVE H1, 299.9337848 MHz  
DATA PROCESSING  
FT size 32768  
Total time 3 min, 35 sec



compound 11c

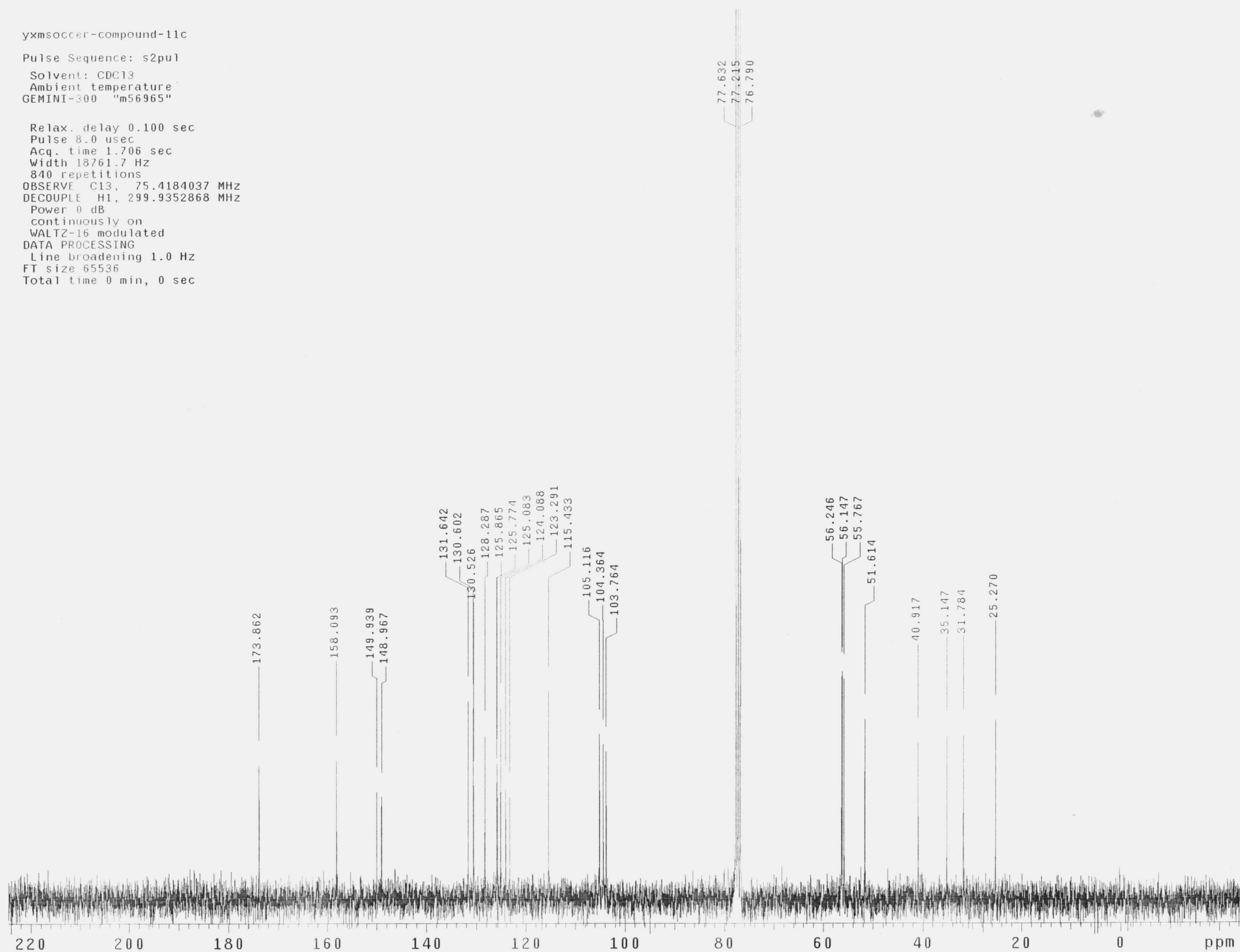


yxmsoccer-compound-11c

Pulse Sequence: s2pu1

Solvent: CDC13  
Ambient temperature  
GEMINI-300 "m56965"

Relax. delay 0.100 sec  
Pulse 8.0 usec  
Acq. time 1.706 sec  
Width 18761.7 Hz  
840 repetitions  
OBSERVE C13, 75.4184037 MHZ  
DECOUPLE H1, 299.9352868 MHZ  
Power 0 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 1.0 Hz  
FT size 65536  
Total time 0 min, 0 sec



yxmsoccer-compound-12a

Pulse Sequence: s2pu1

Solvent: CDC13

Ambient temperature

GEMINI-300 "m56965"

Relax. delay 1.000 sec

Pulse 7.0 usec

Acq. time 1.998 sec

Width 4500.5 Hz

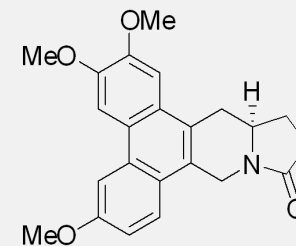
60 repetitions

OBSERVE H1, 299.9337840 MHz

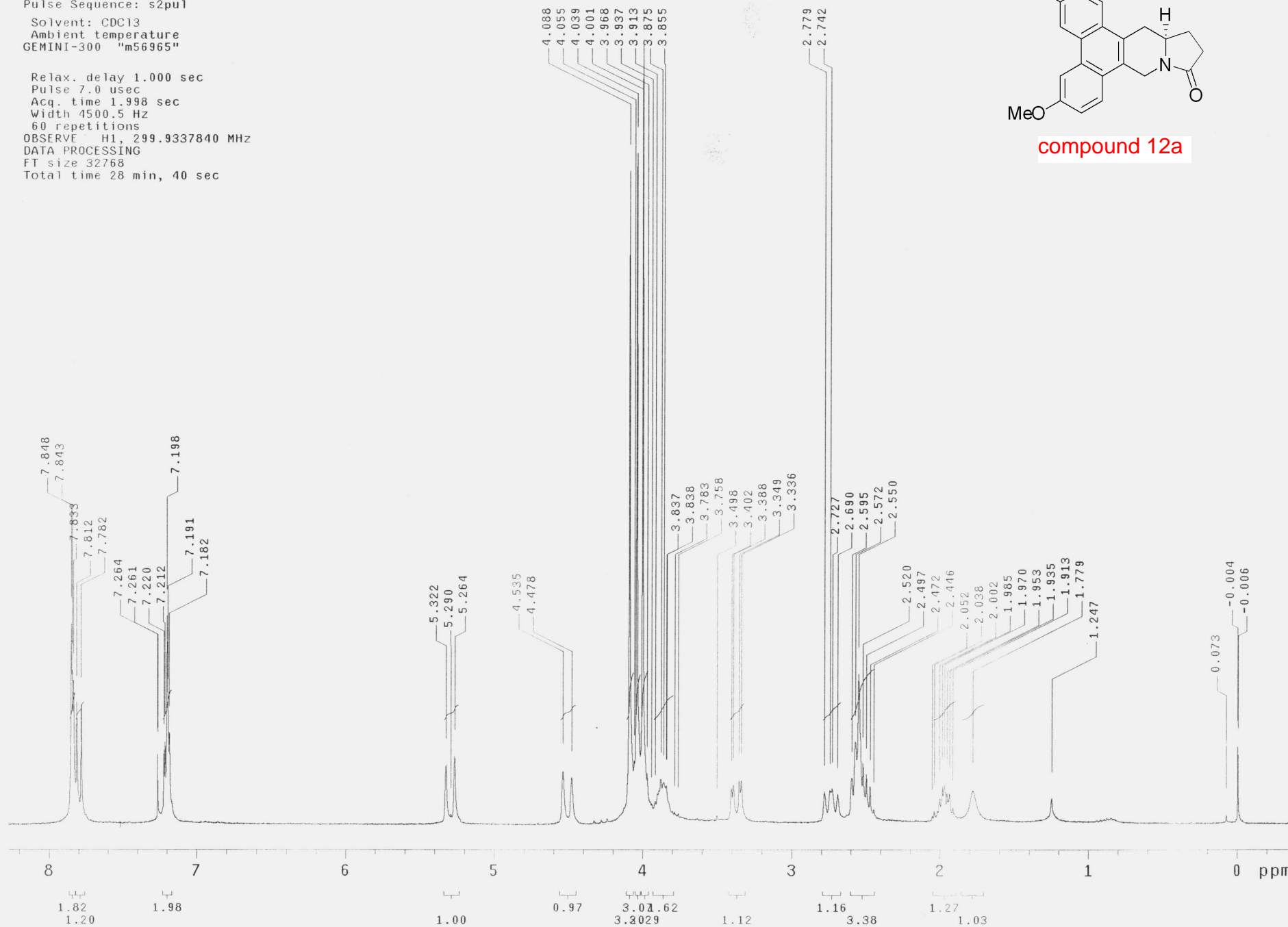
DATA PROCESSING

FT size 32768

Total time 28 min, 40 sec



compound 12a



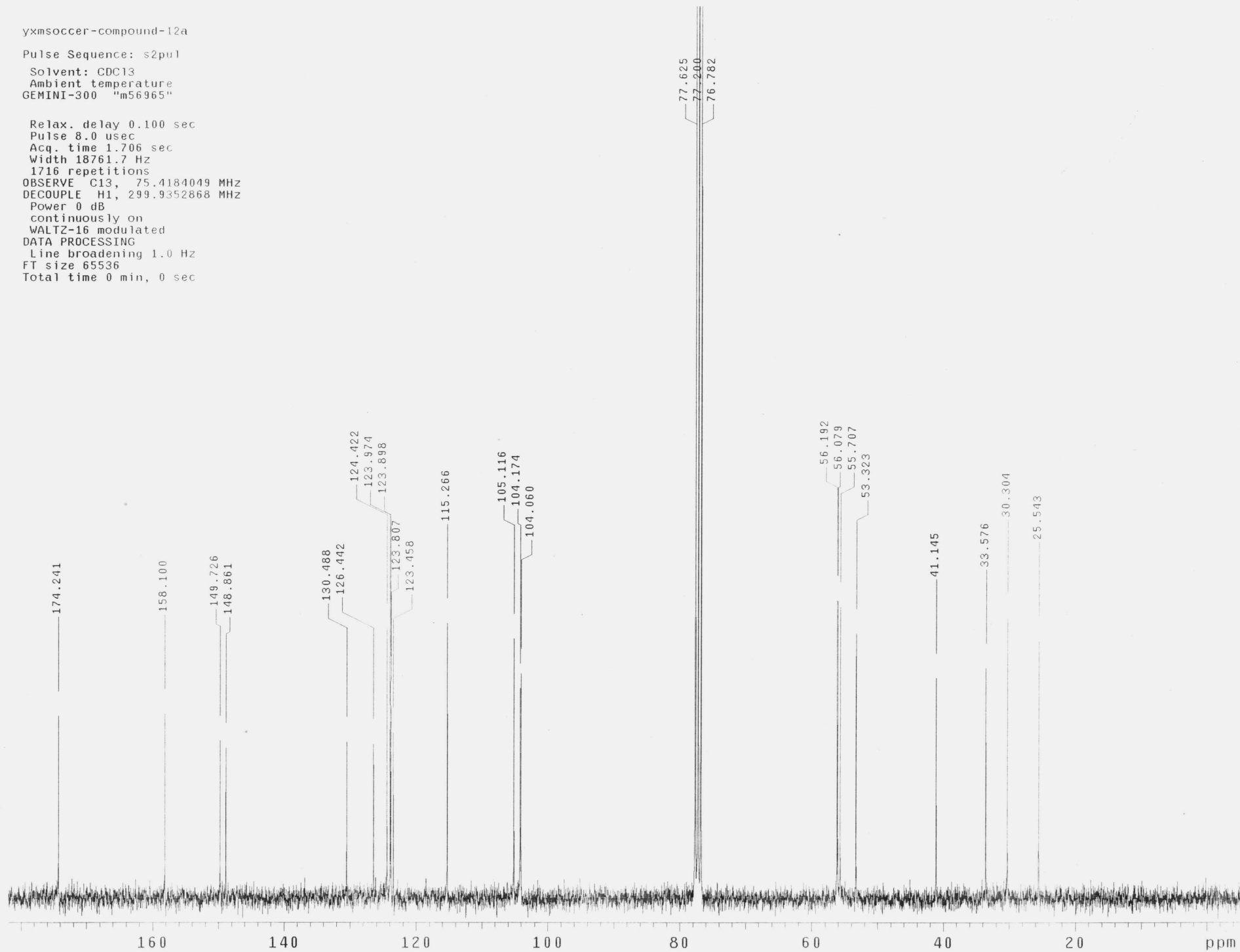


yxmsoccer-compound-12a

Pulse Sequence: s2pul

Solvent: CDC13  
Ambient temperature  
GEMINI-300 "m56965"

Relax. delay 0.100 sec  
Pulse 8.0 usec  
Acq. time 1.706 sec  
Width 18761.7 Hz  
1716 repetitions  
OBSERVE C13, 75.4184049 MHz  
DECOUPLE H1, 299.9352868 MHz  
Power 0 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 1.0 Hz  
FT size 65536  
Total time 0 min, 0 sec

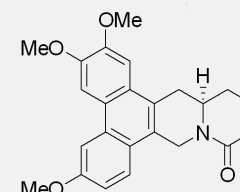


yxmsoccer-compound-12b

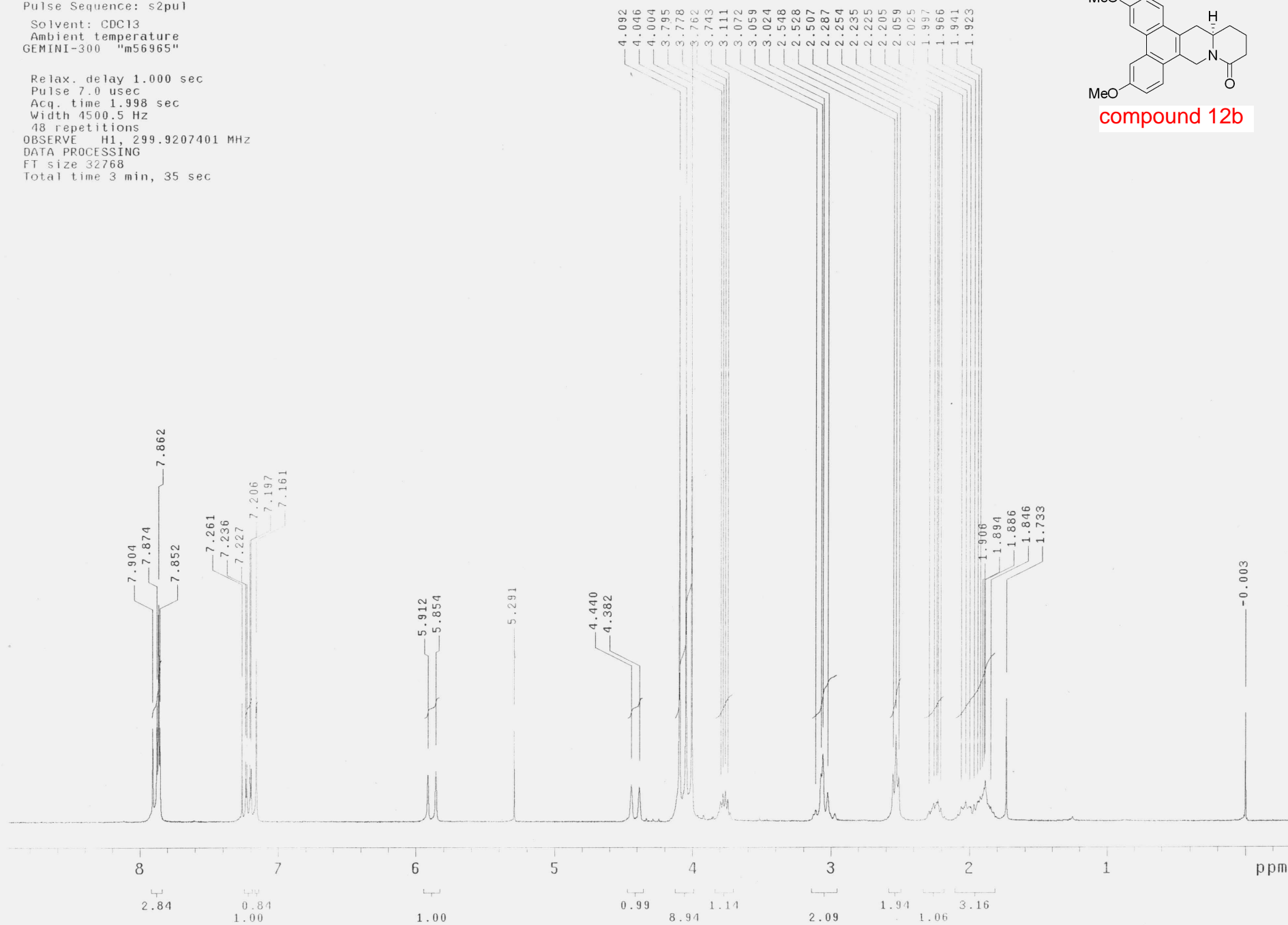
Pulse Sequence: s2pul

Solvent: CDC13  
Ambient temperature  
GEMINI-300 "m56965"

Relax. delay 1.000 sec  
Pulse 7.0 usec  
Acq. time 1.998 sec  
Width 4500.5 Hz  
48 repetitions  
OBSERVE H1, 299.9207401 MHz  
DATA PROCESSING  
FT size 32768  
Total time 3 min, 35 sec



compound 12b

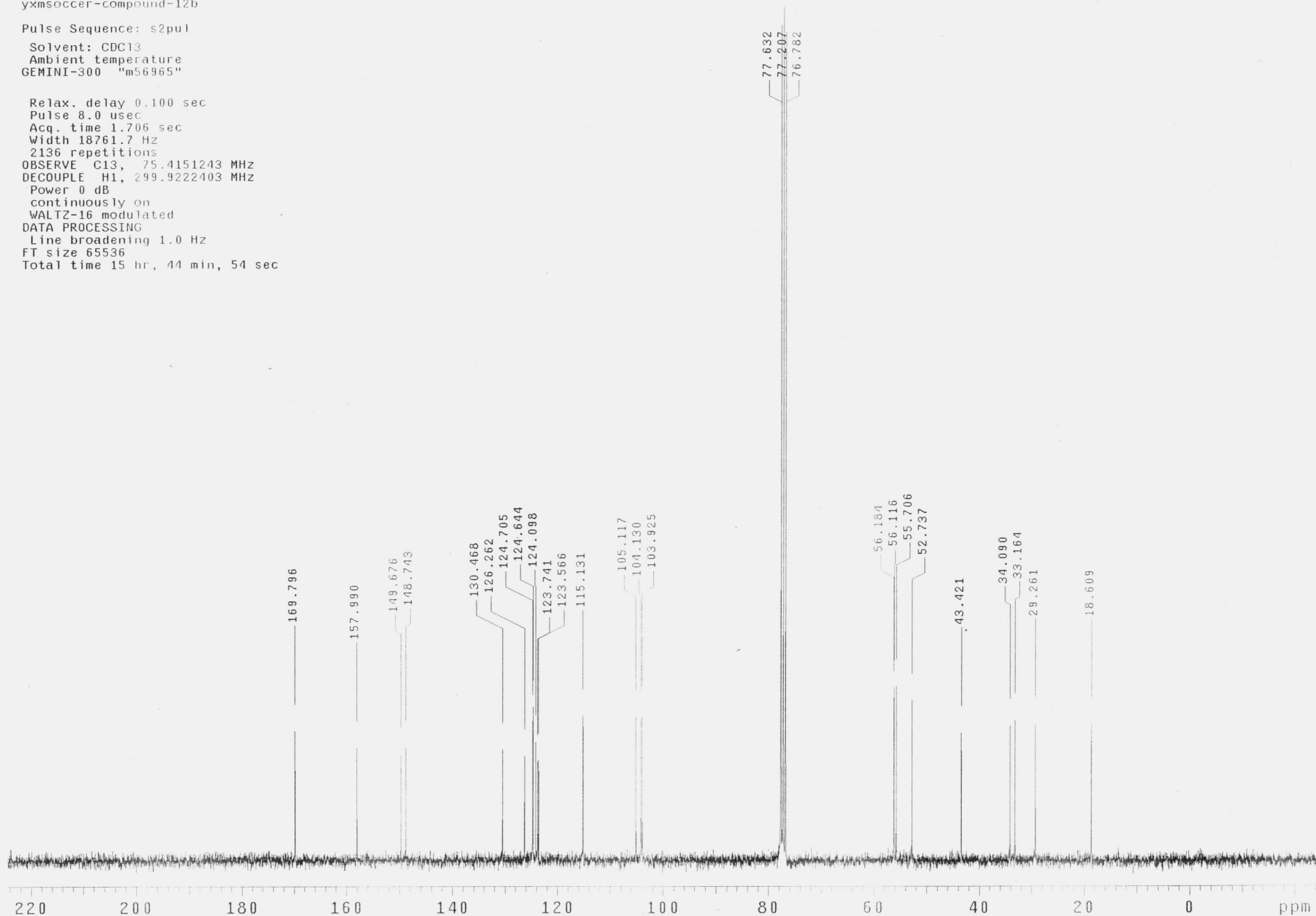


yxmsoccer-compound-12b

Pulse Sequence: s2pul

Solvent: CDC13  
Ambient temperature  
GEMINI-300 "m56965"

Relax. delay 0.100 sec  
Pulse 8.0 usec  
Acq. time 1.706 sec  
Width 18761.7 Hz  
2136 repetitions  
OBSERVE C13, 75.4151243 MHz  
DECOUPLE H1, 299.9222403 MHz  
Power 0 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 1.0 Hz  
FT size 65536  
Total time 15 hr, 44 min, 54 sec

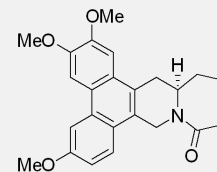


yxmsoccer-compound-12c

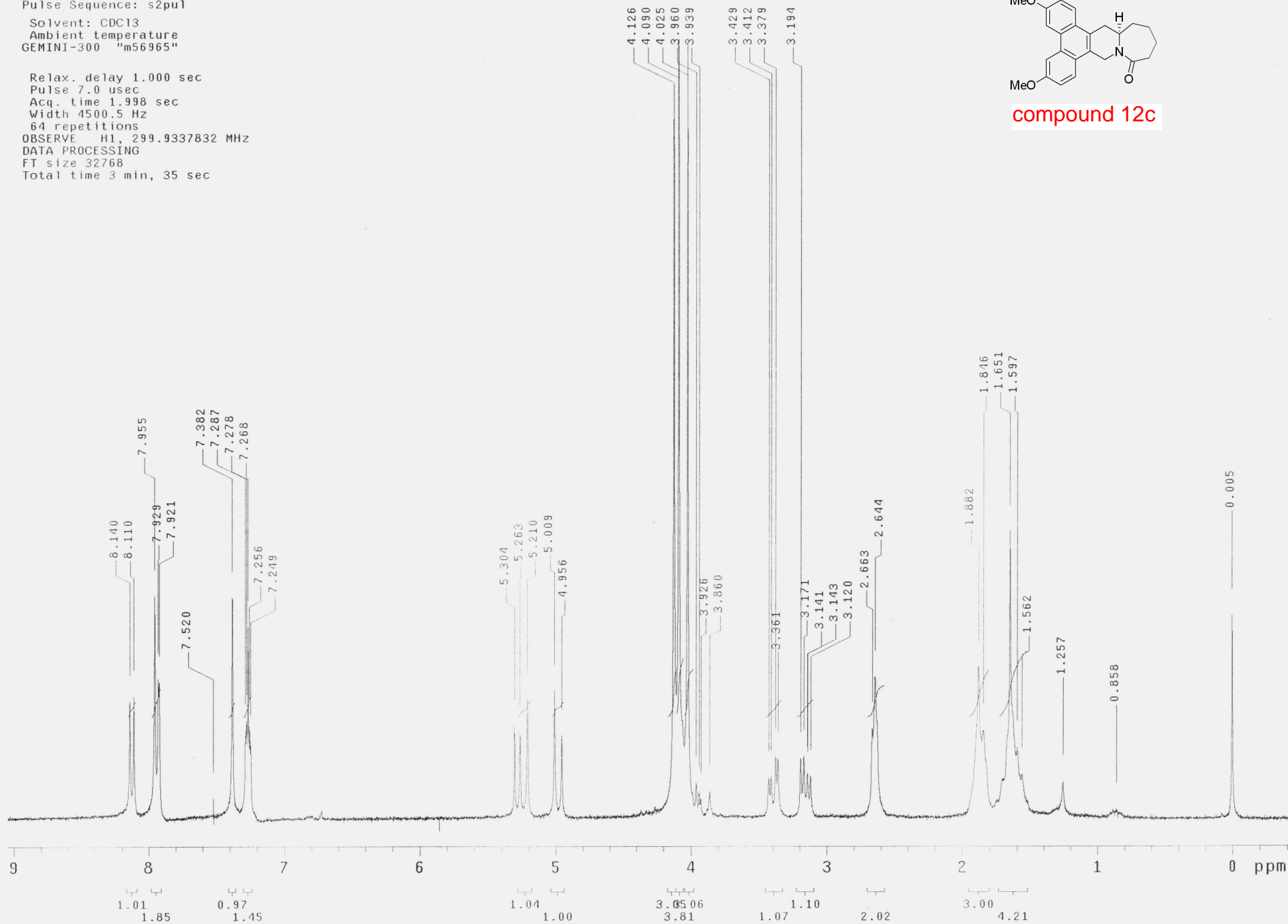
Pulse Sequence: s2pu1

Solvent: CDCl3  
Ambient temperature  
GEMINI-300 "m56965"

Relax. delay 1.000 sec  
Pulse 7.0 usec  
Acq. time 1.998 sec  
Width 4500.5 Hz  
64 repetitions  
OBSERVE H1, 299.9337832 MHz  
DATA PROCESSING  
FT size 32768  
Total time 3 min, 35 sec



compound 12c



yxmsoccer-compound-12c

Pulse Sequence: s2pul

Solvent: CDC13  
Ambient temperature  
GEMINI-300 "m56965"

Relax. delay 0.100 sec  
Pulse 8.0 usec  
Acq. time 1.706 sec  
Width 18761.7 Hz  
12000 repetitions  
OBSERVE C13, 75.4184032 MHz  
DECOUPLE H1, 299.9352868 MHz  
Power 0 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 1.0 Hz  
FT size 65536  
Total time 9 hr, 26 min, 56 sec

