

Amphidinolide B: Total Synthesis, Structural Investigation and Biological Evaluation

Liang Lu,^a Wei Zhang,^a Sangkil Nam,^b David A. Horne,^b Richard Jove^b and Rich G. Carter^{*a}

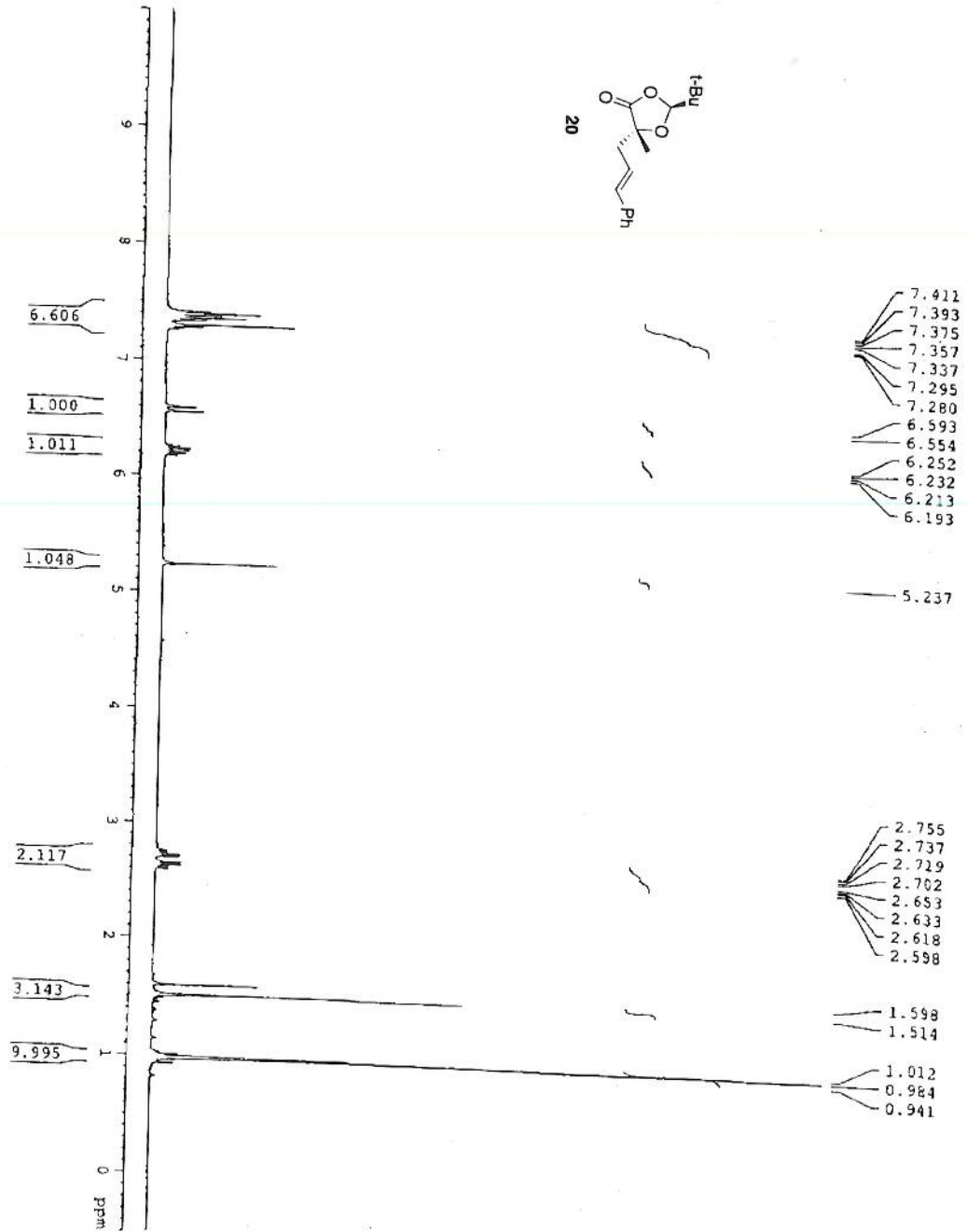
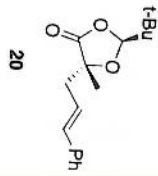
^a *Department of Chemistry, Oregon State University, Corvallis, OR 97331 and* ^b *Department of Molecular Medicine, Beckman Research Institute, City of Hope, Duarte, CA 91010, USA*

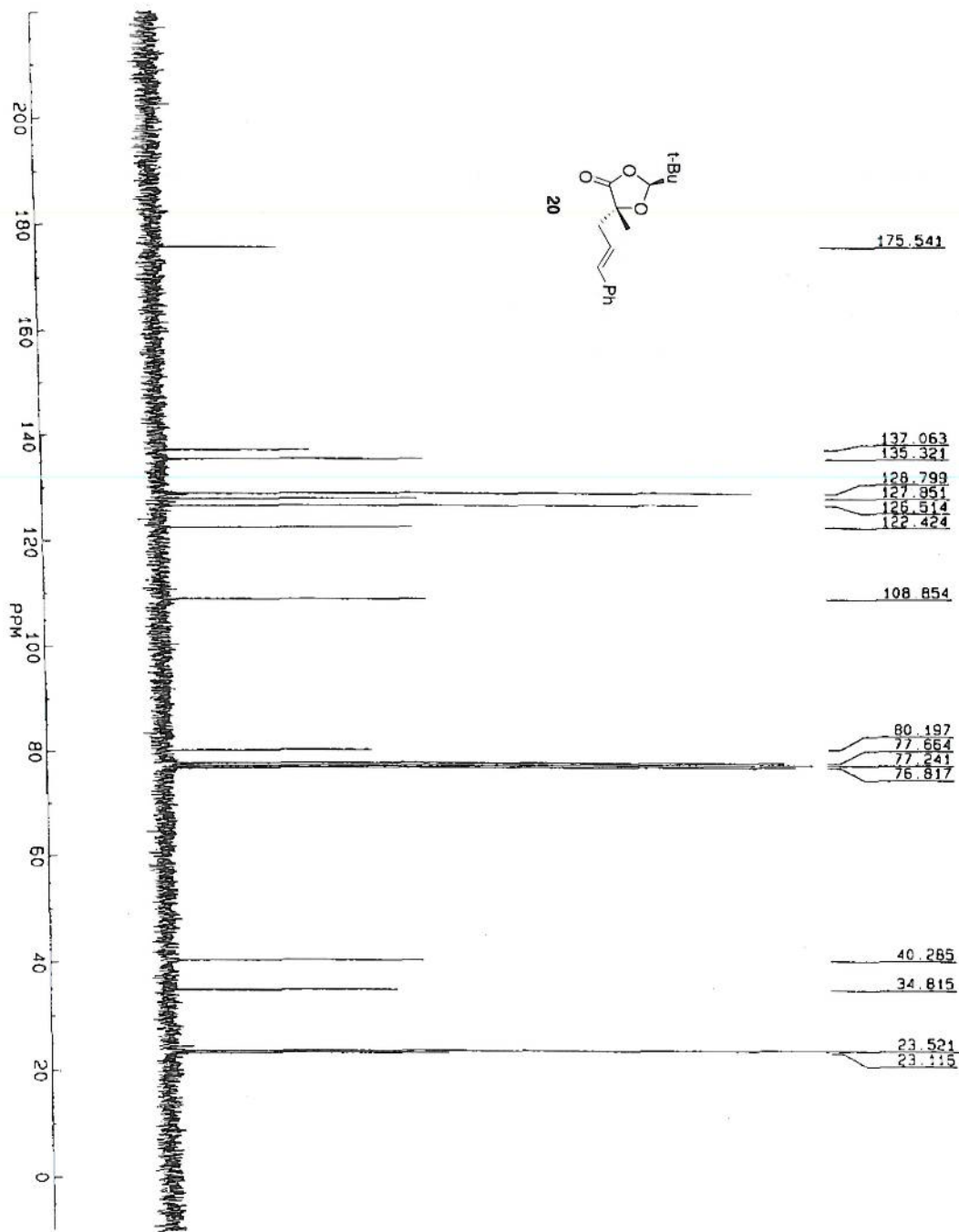
Electronic Supplementary Information: NMR Spectra

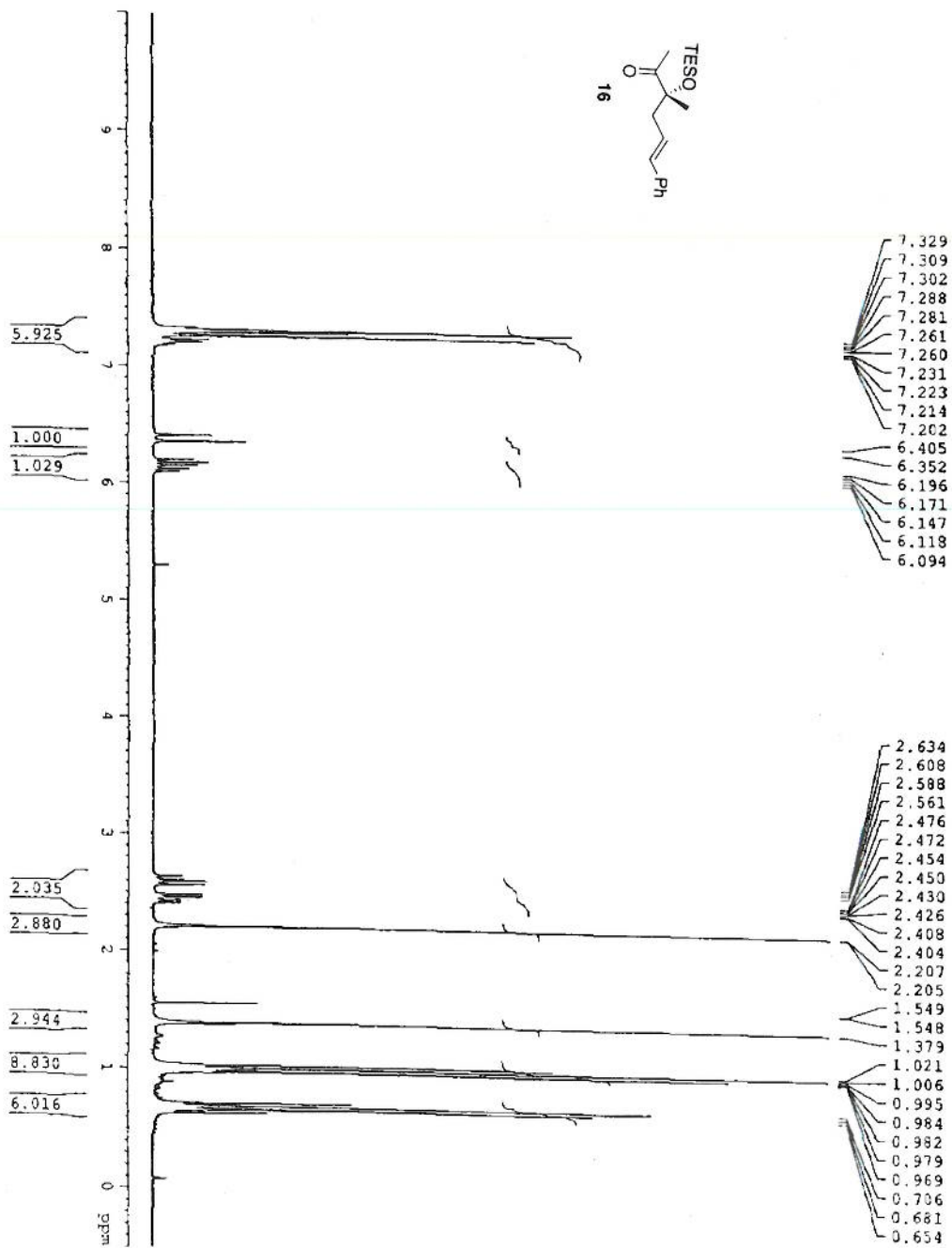
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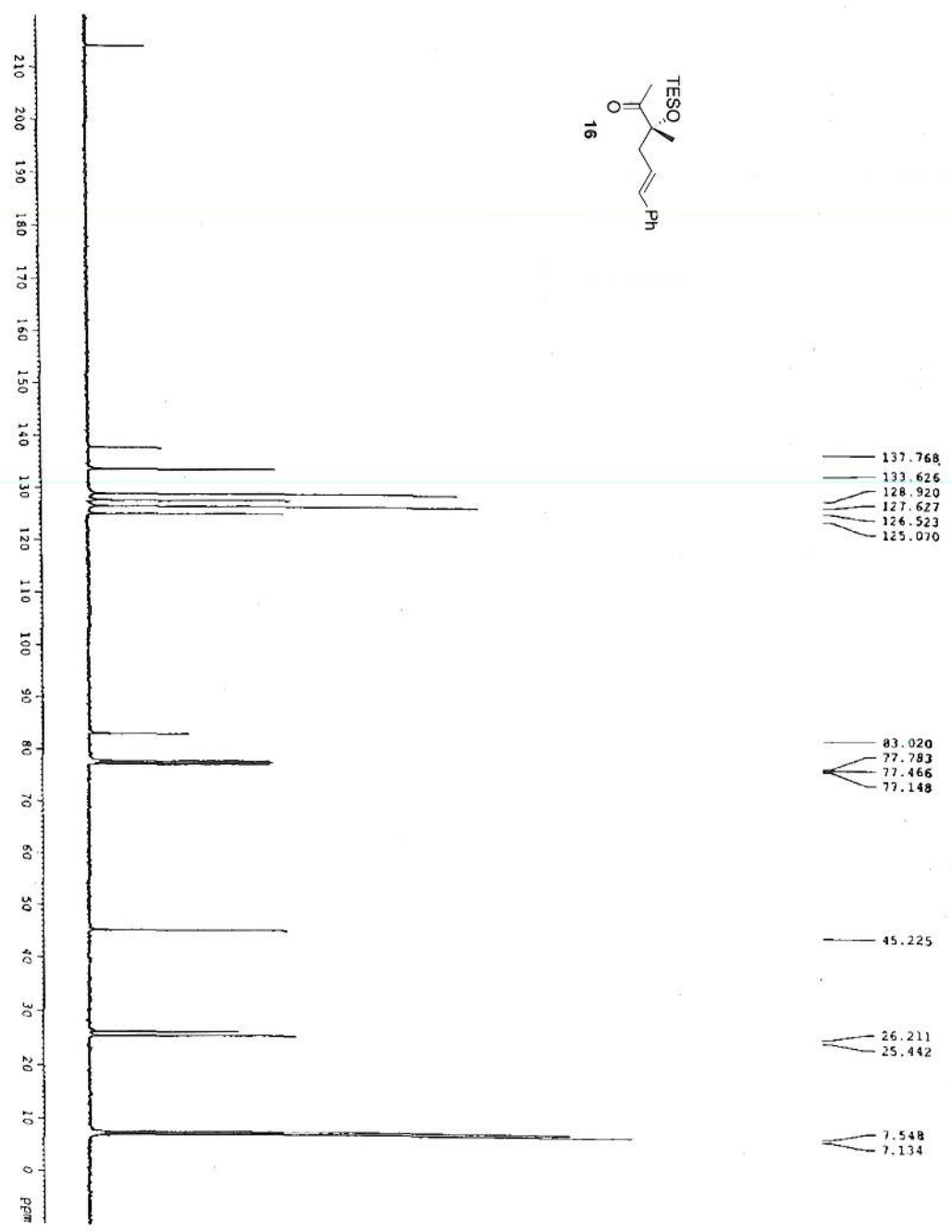
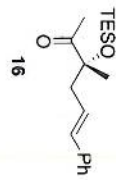
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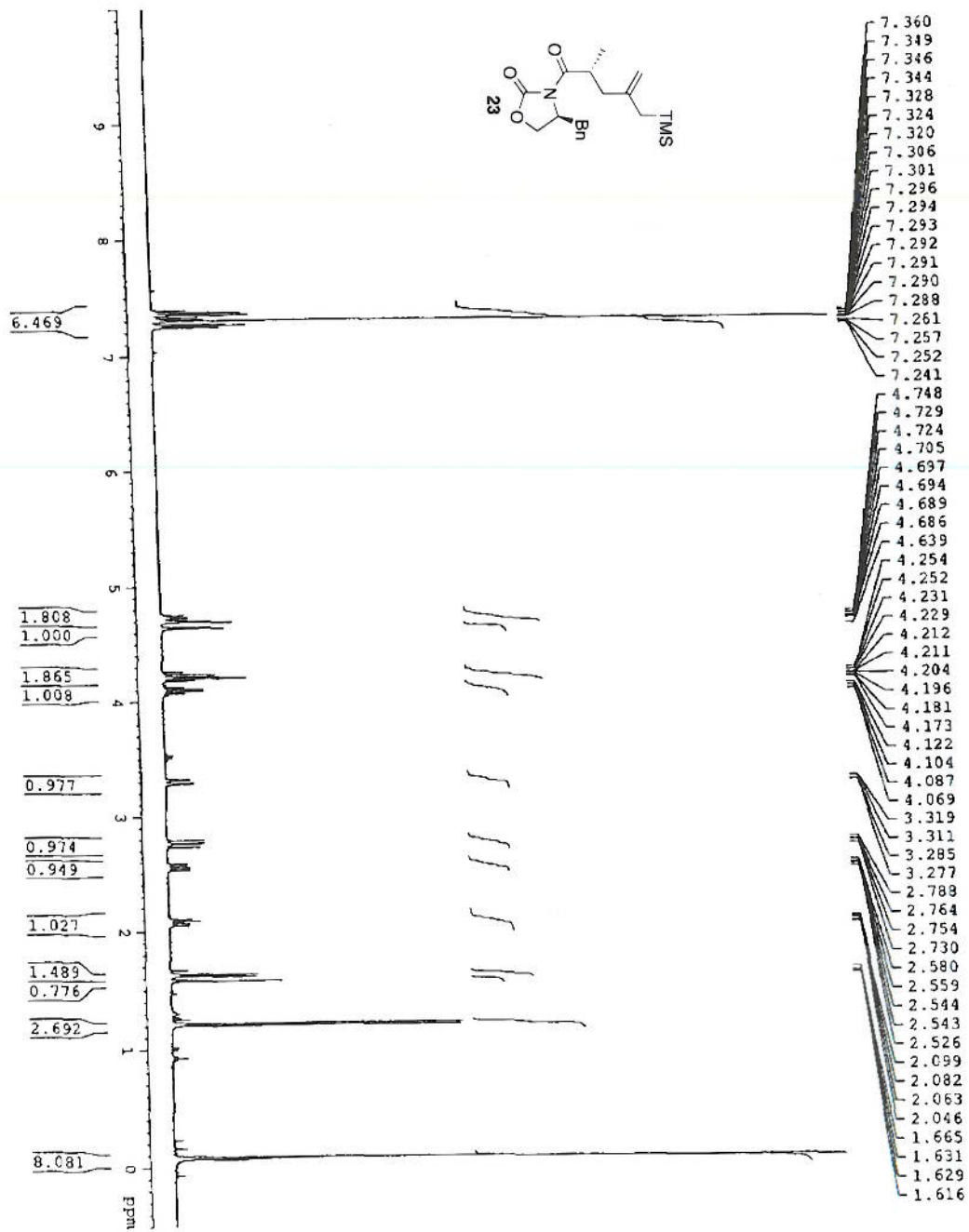
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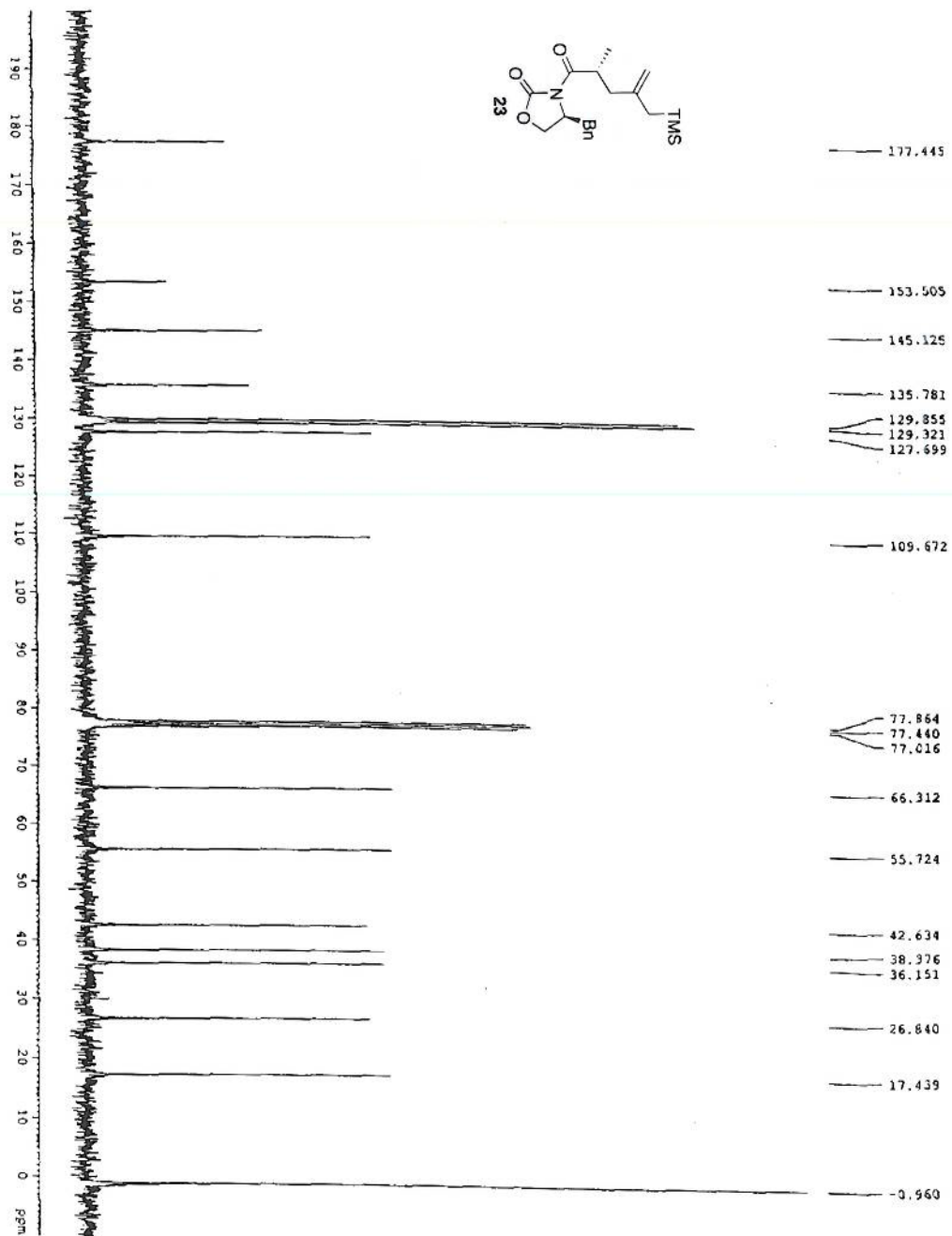


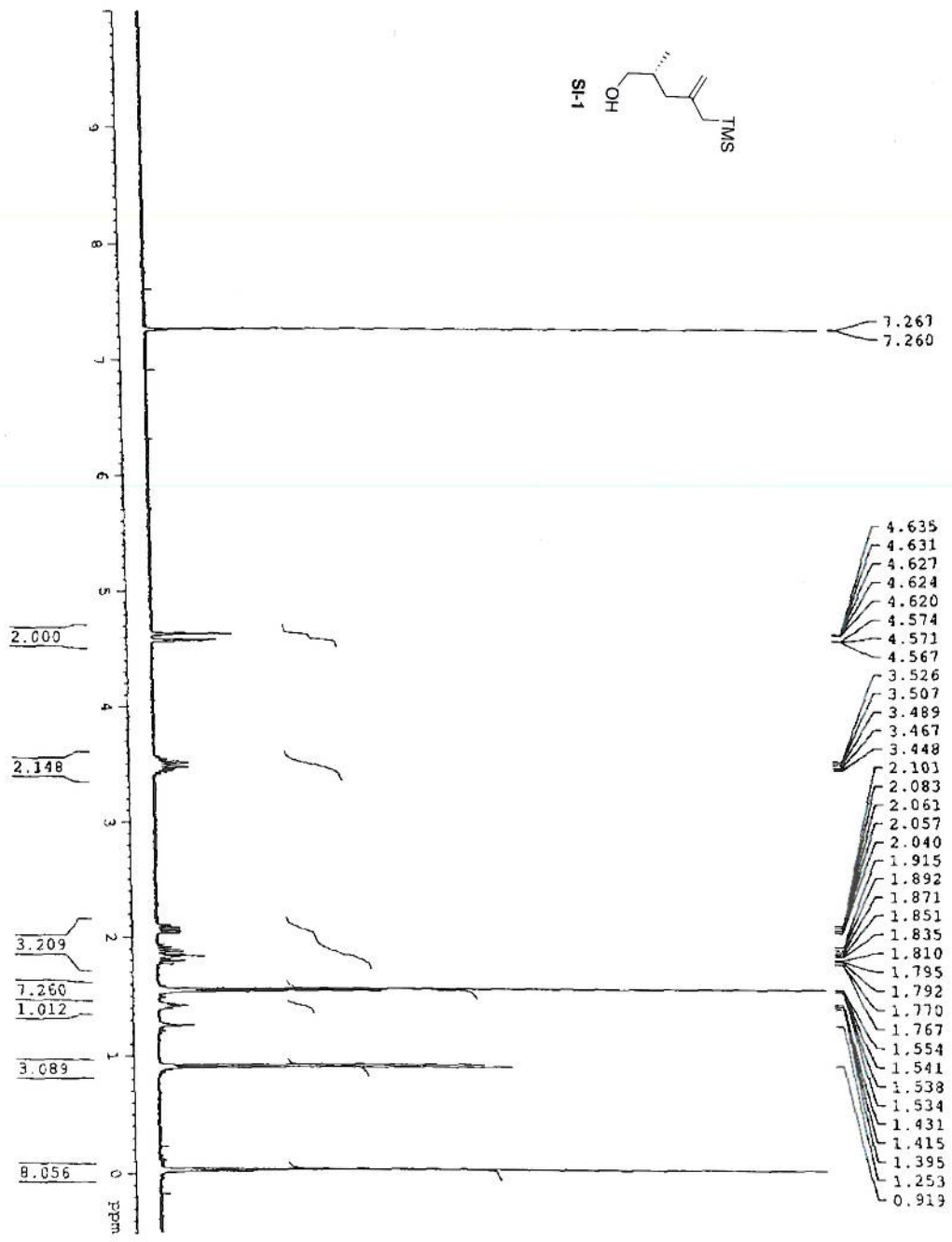


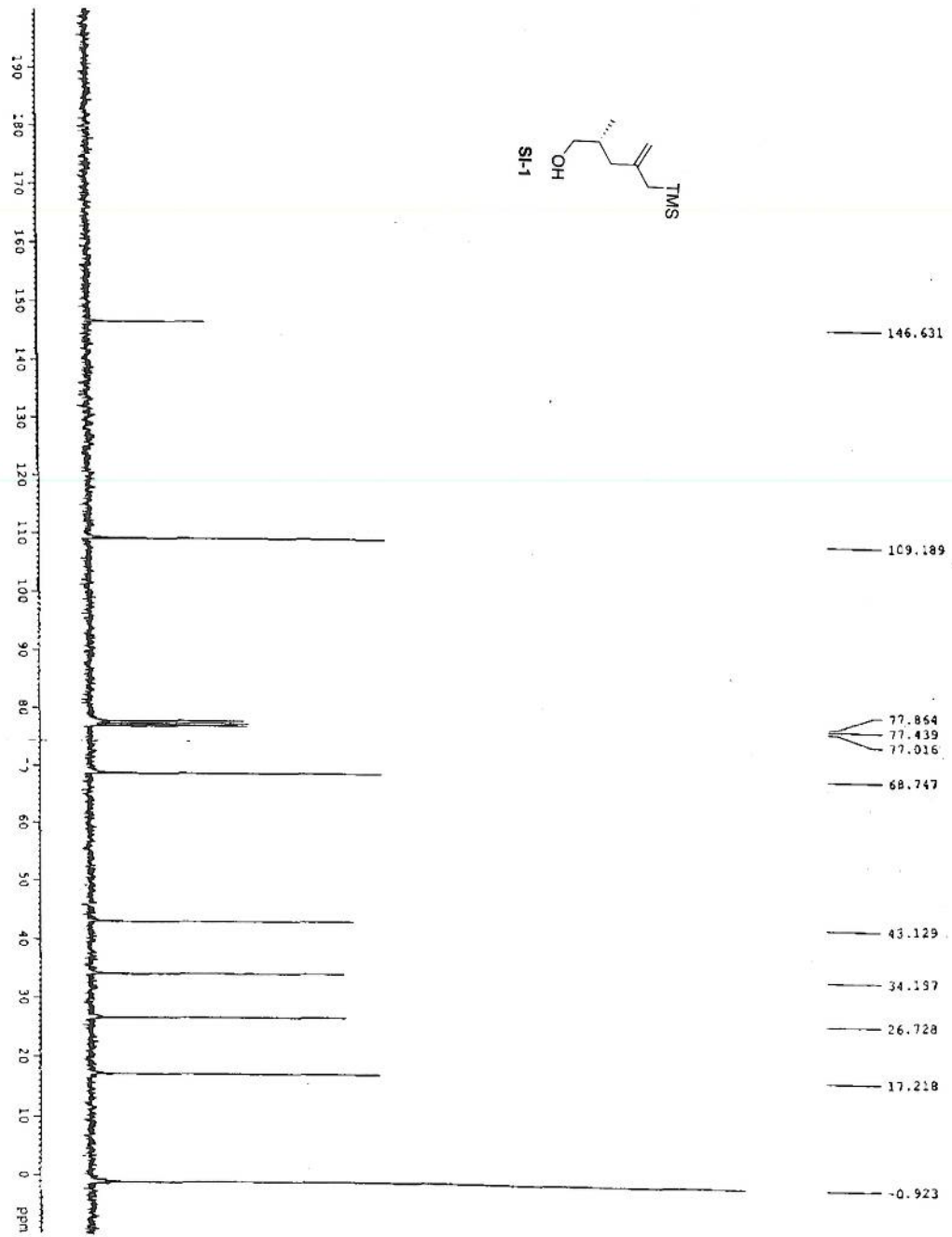


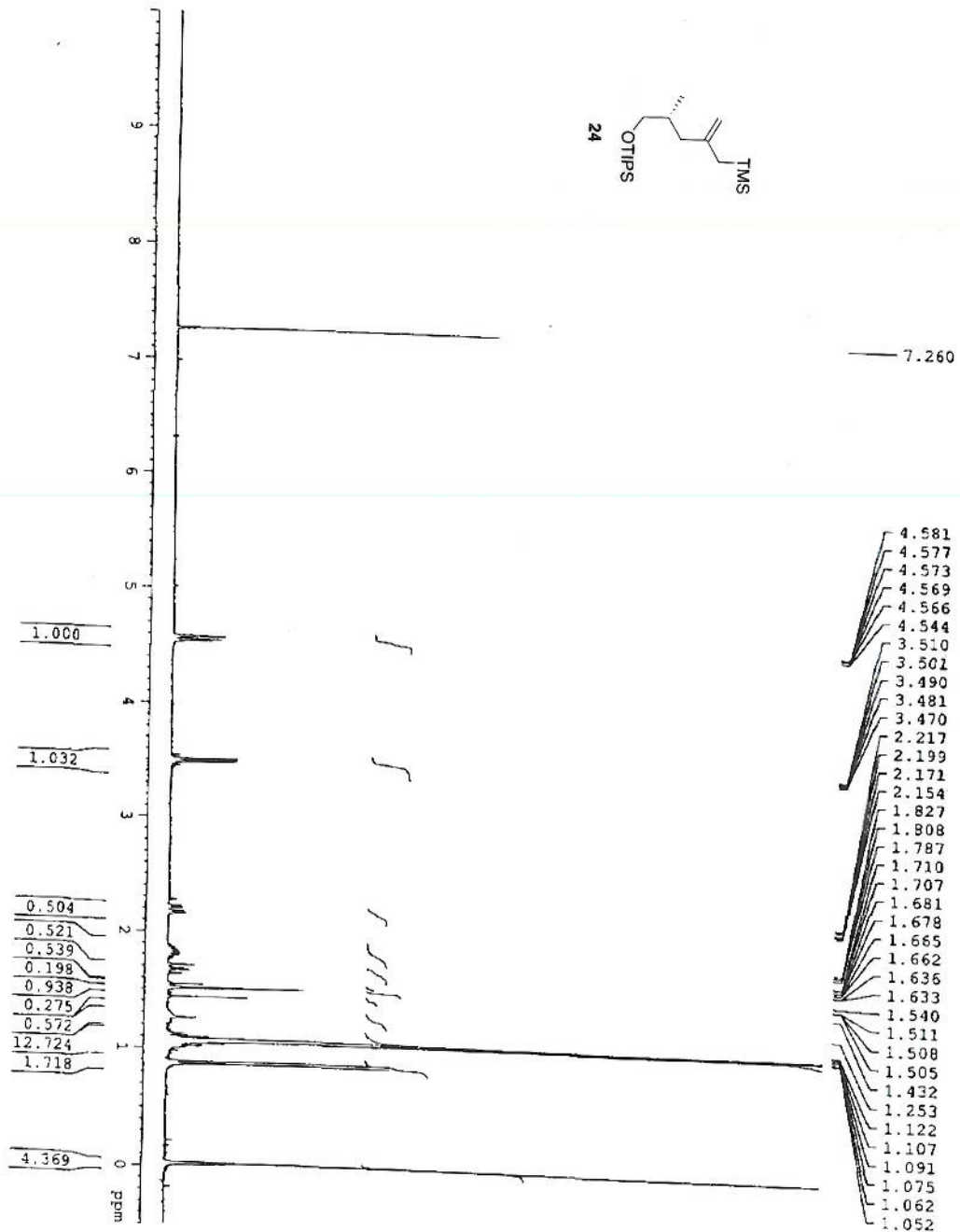
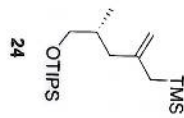


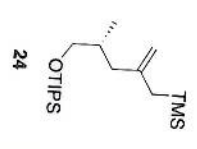
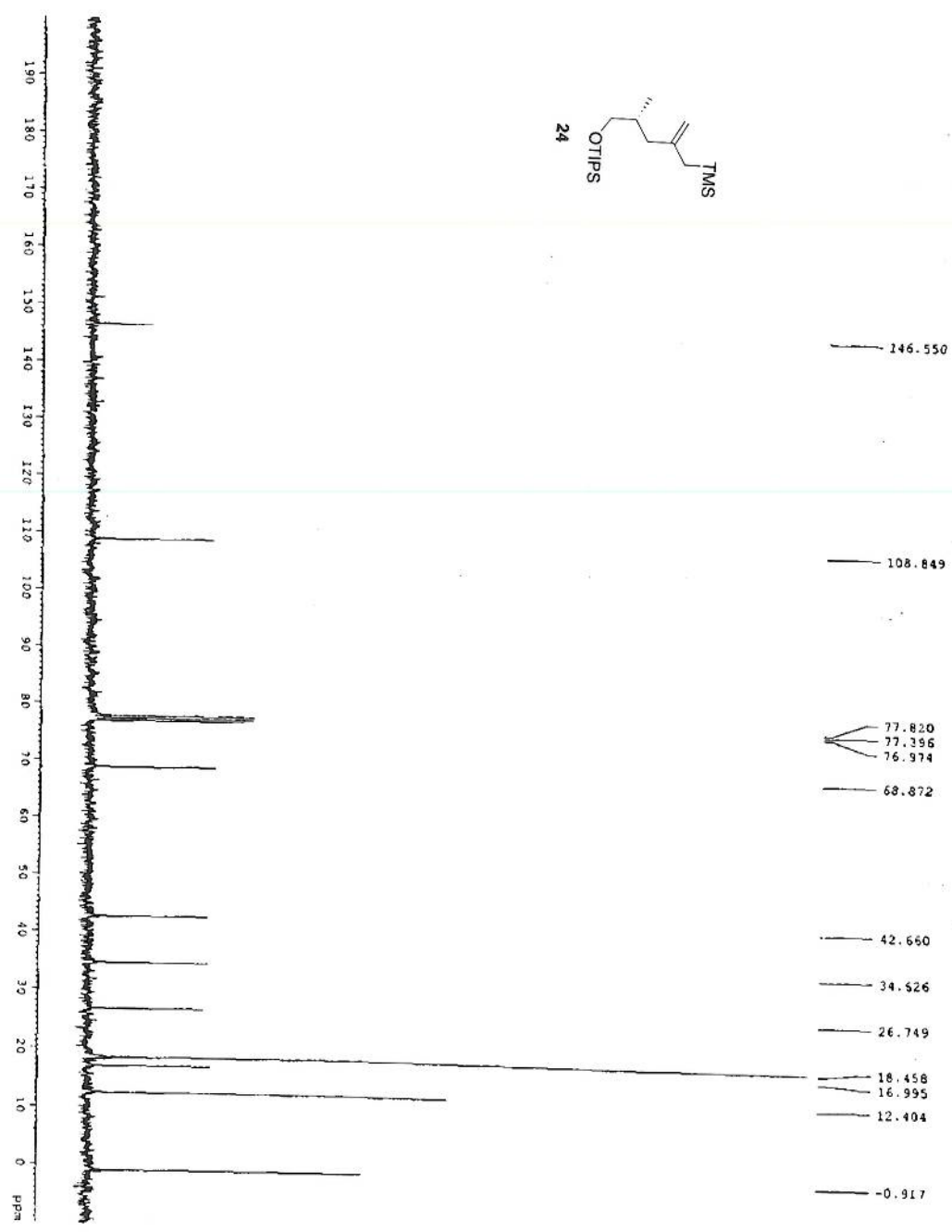


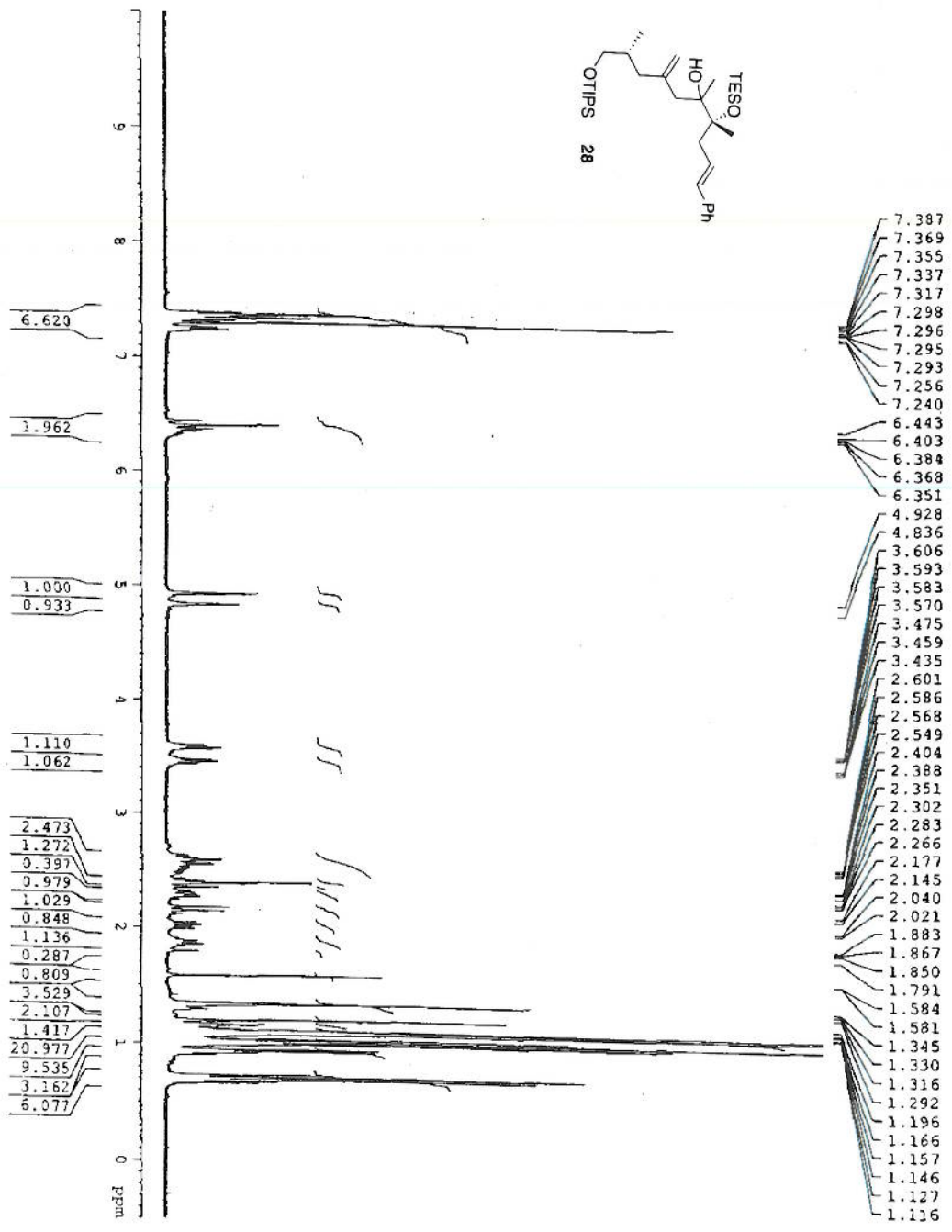


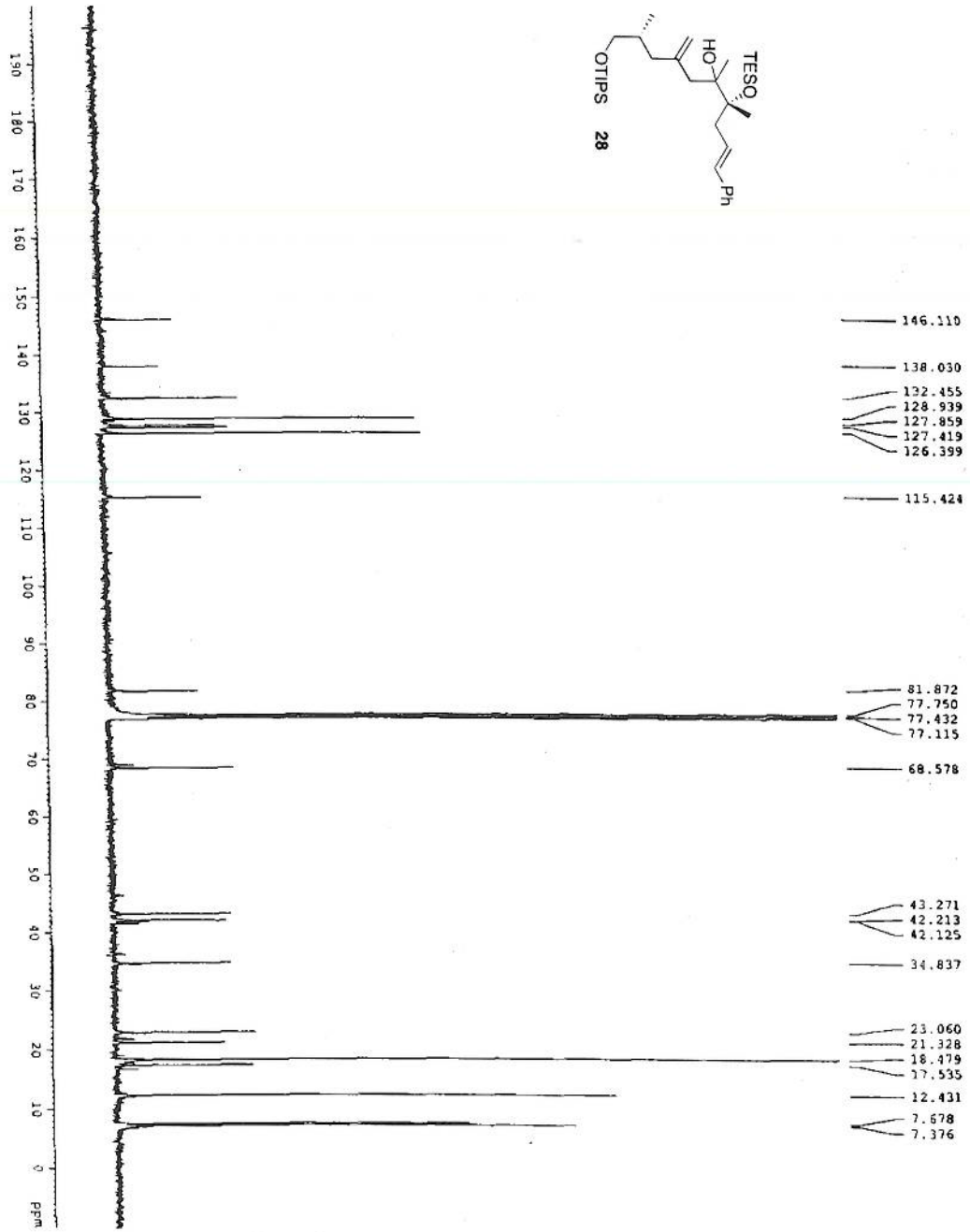
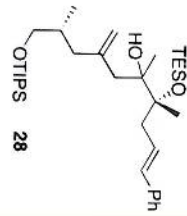


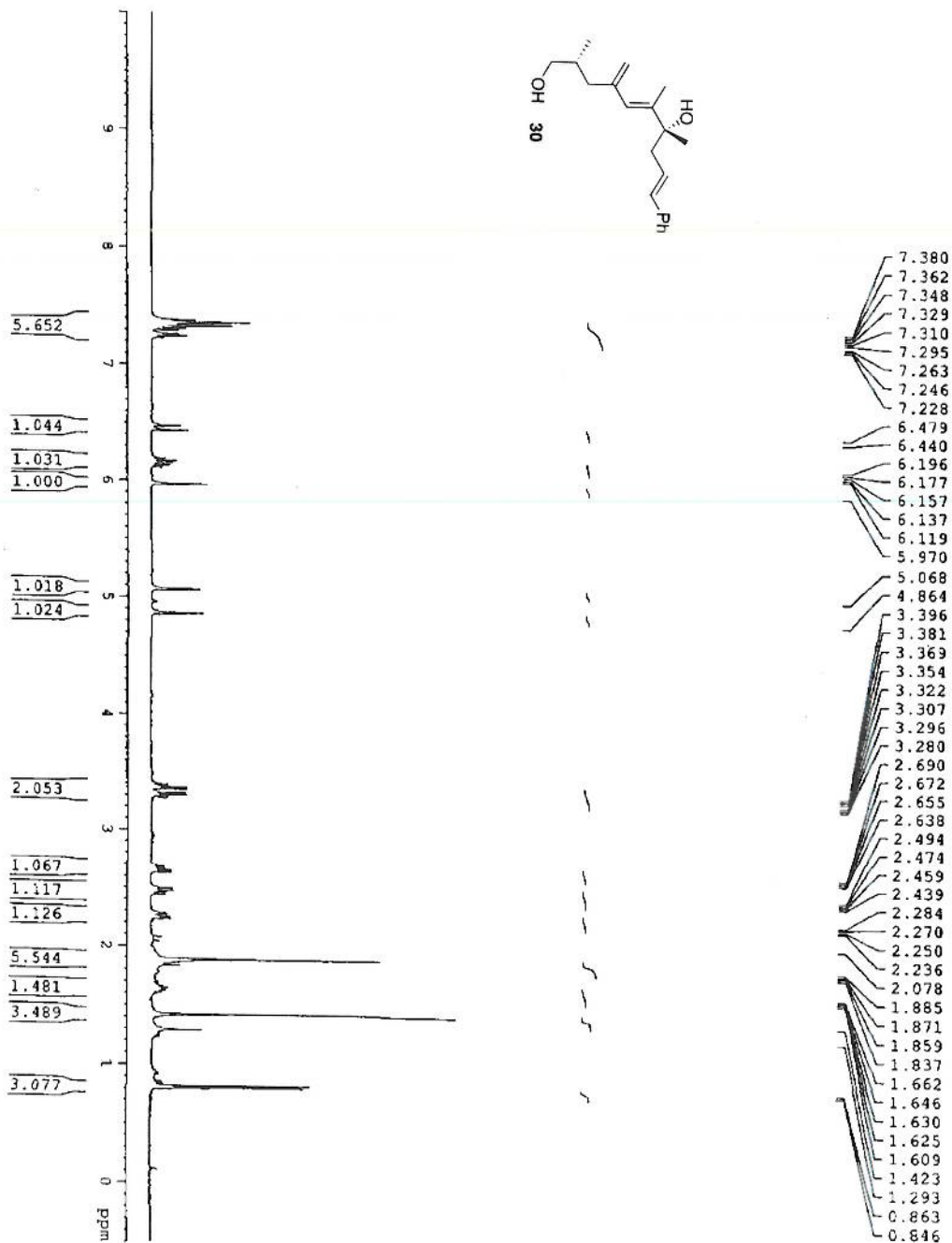
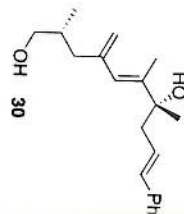


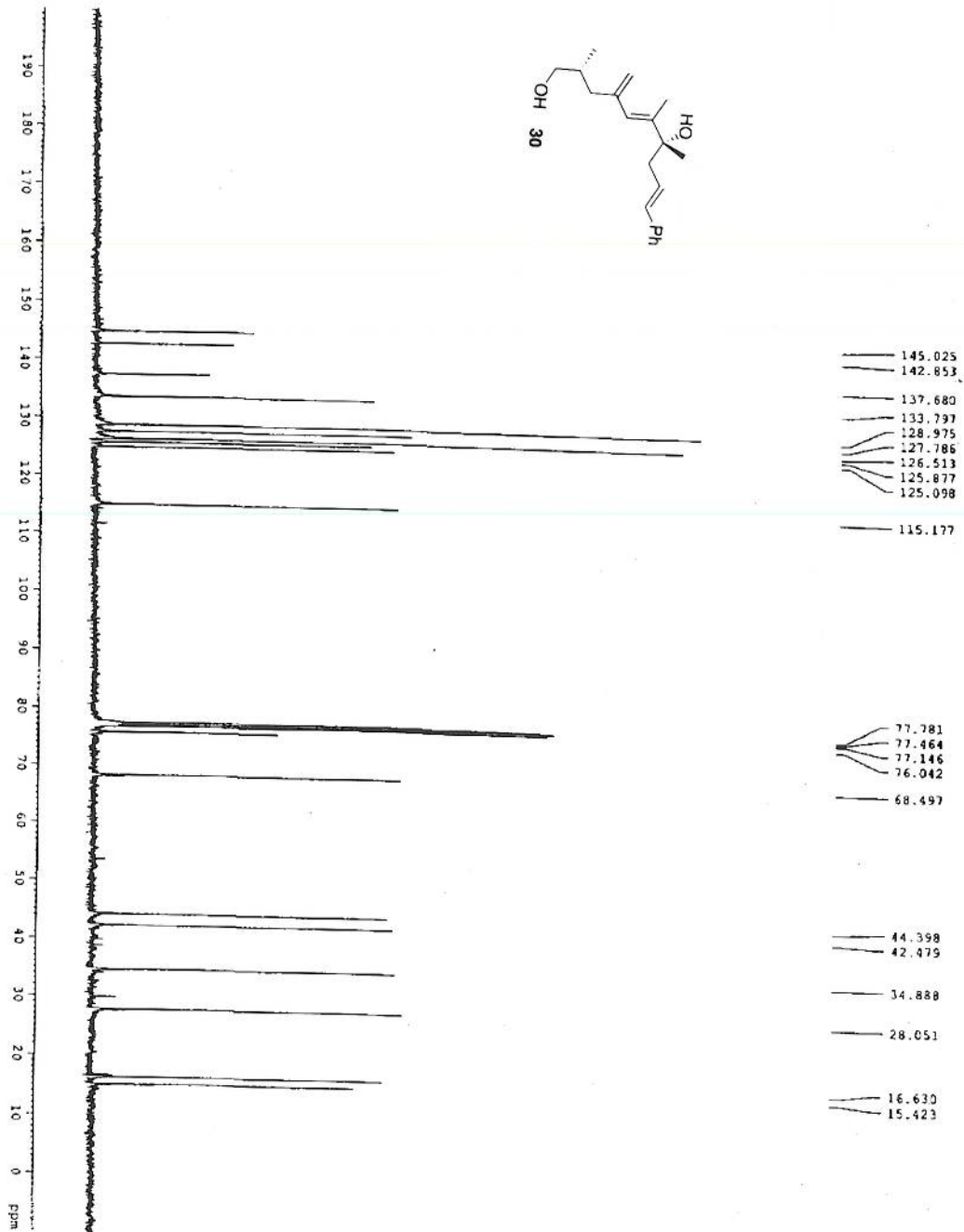


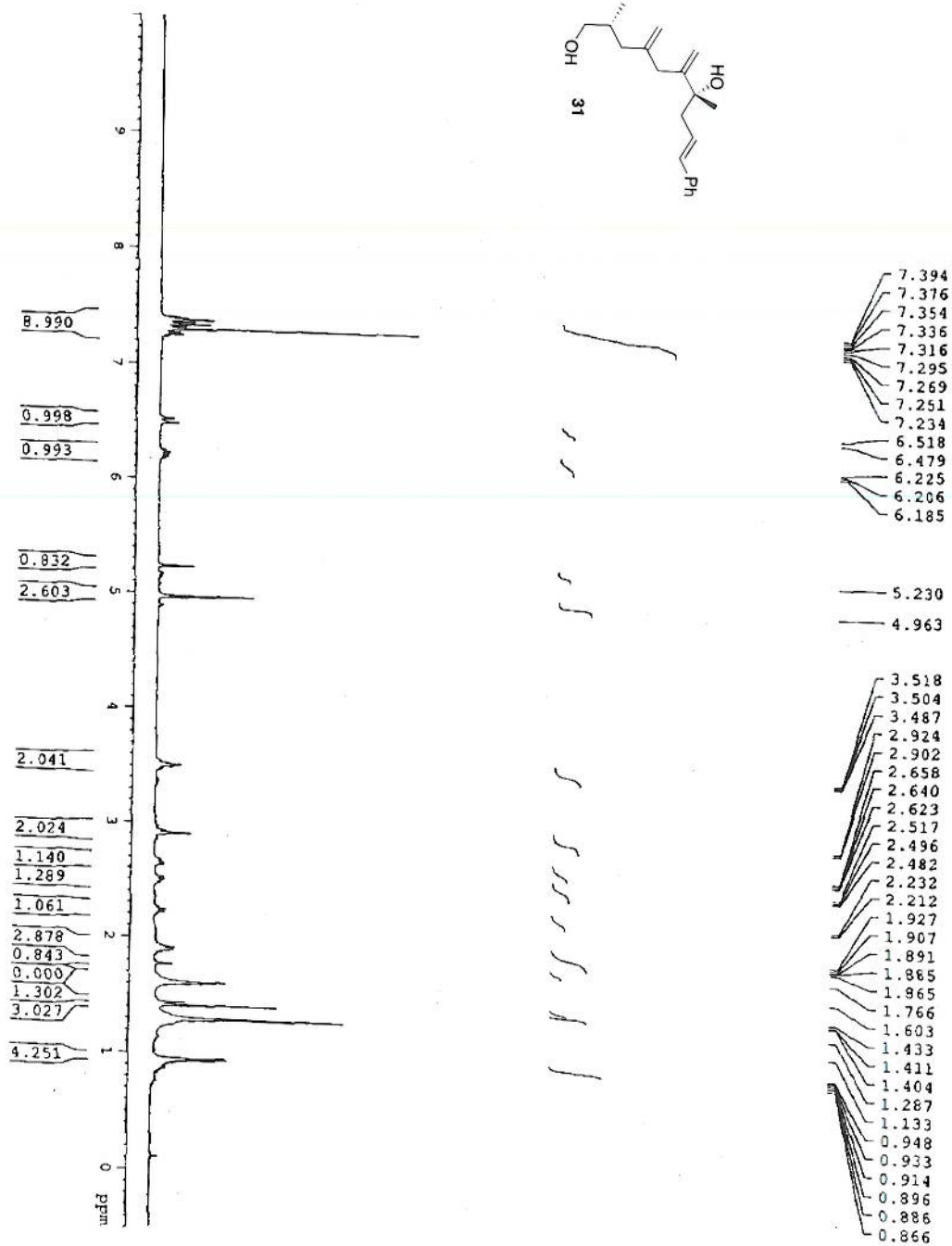


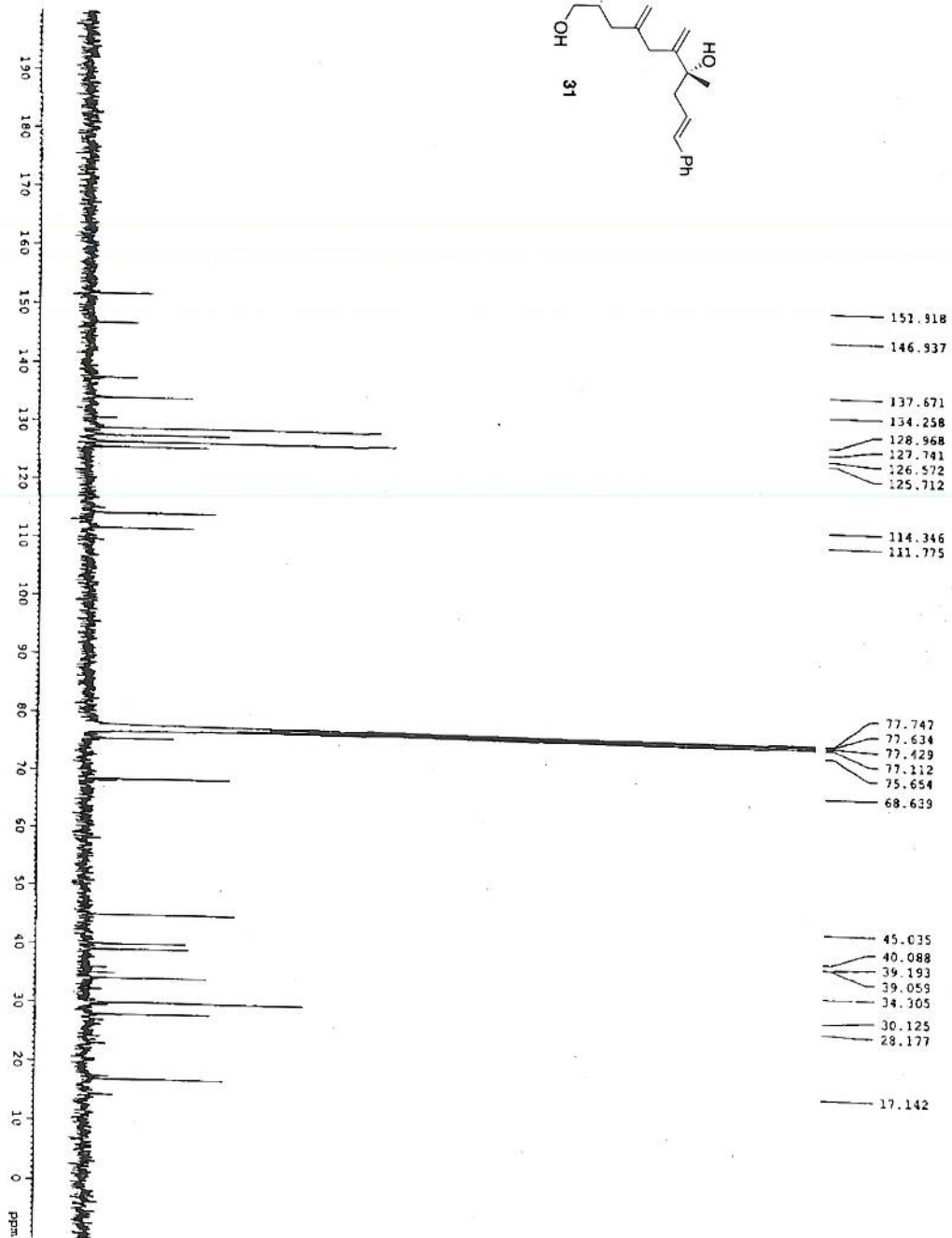
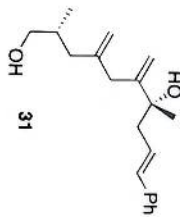


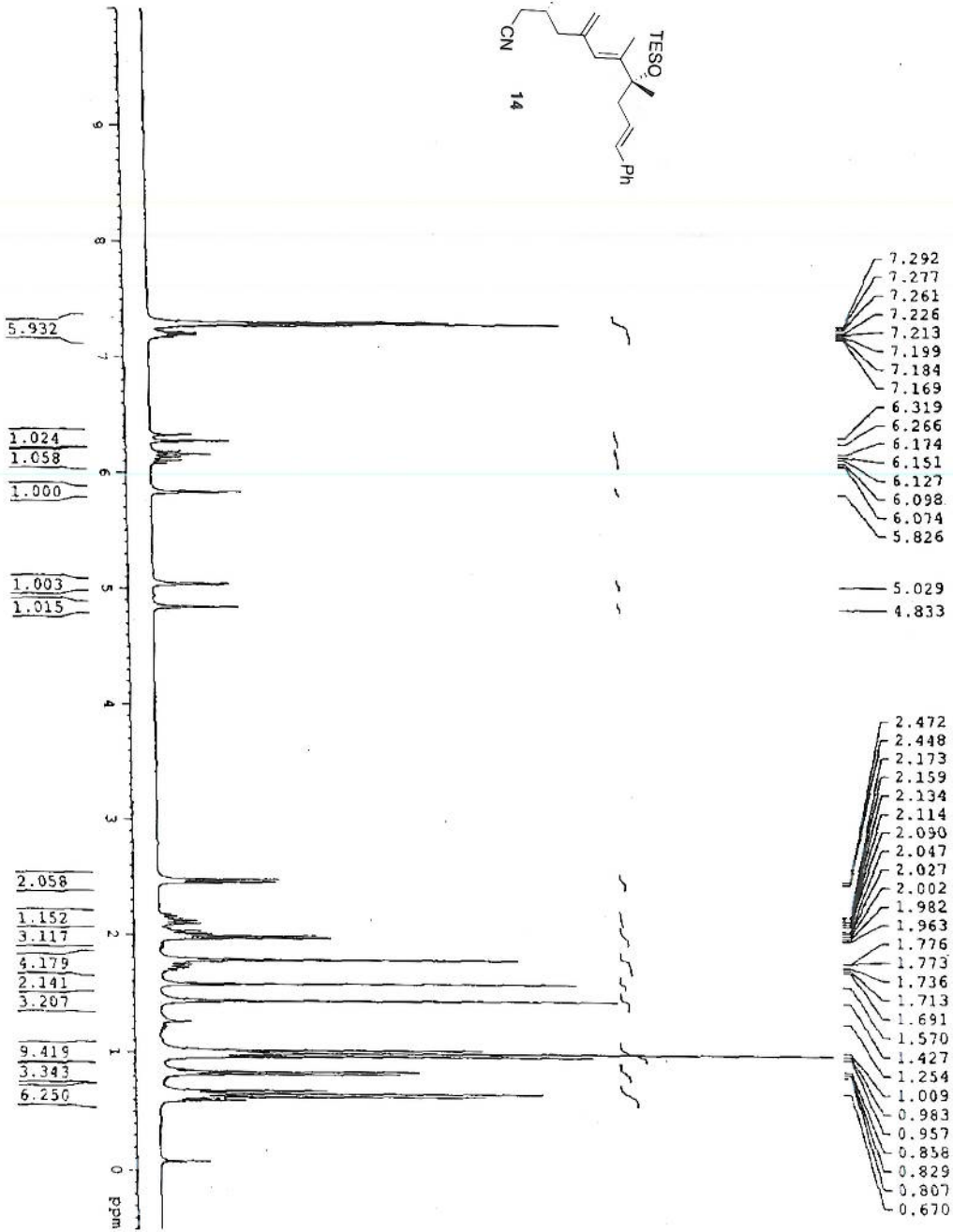
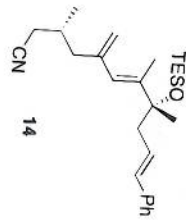


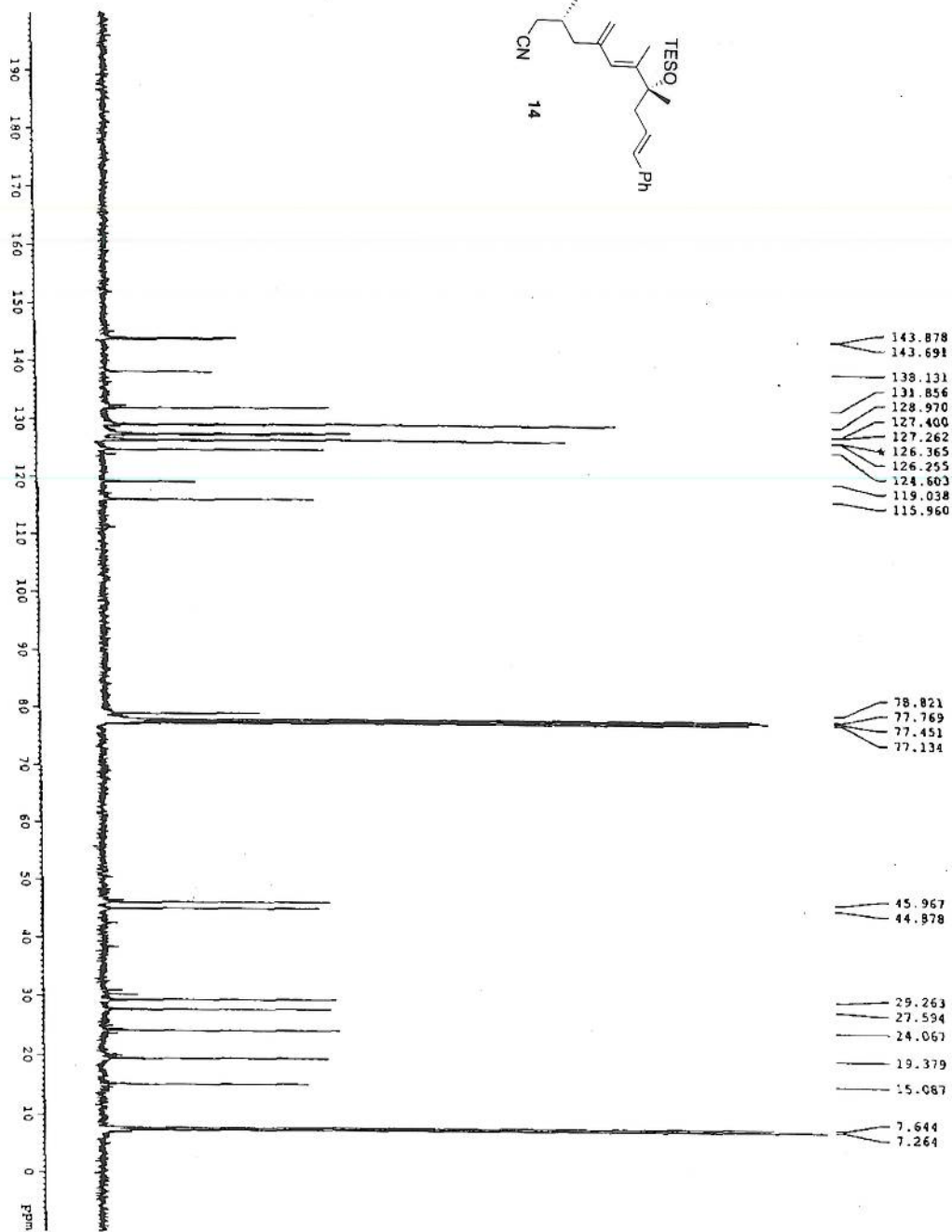
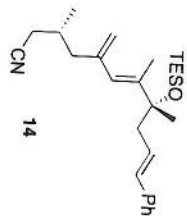


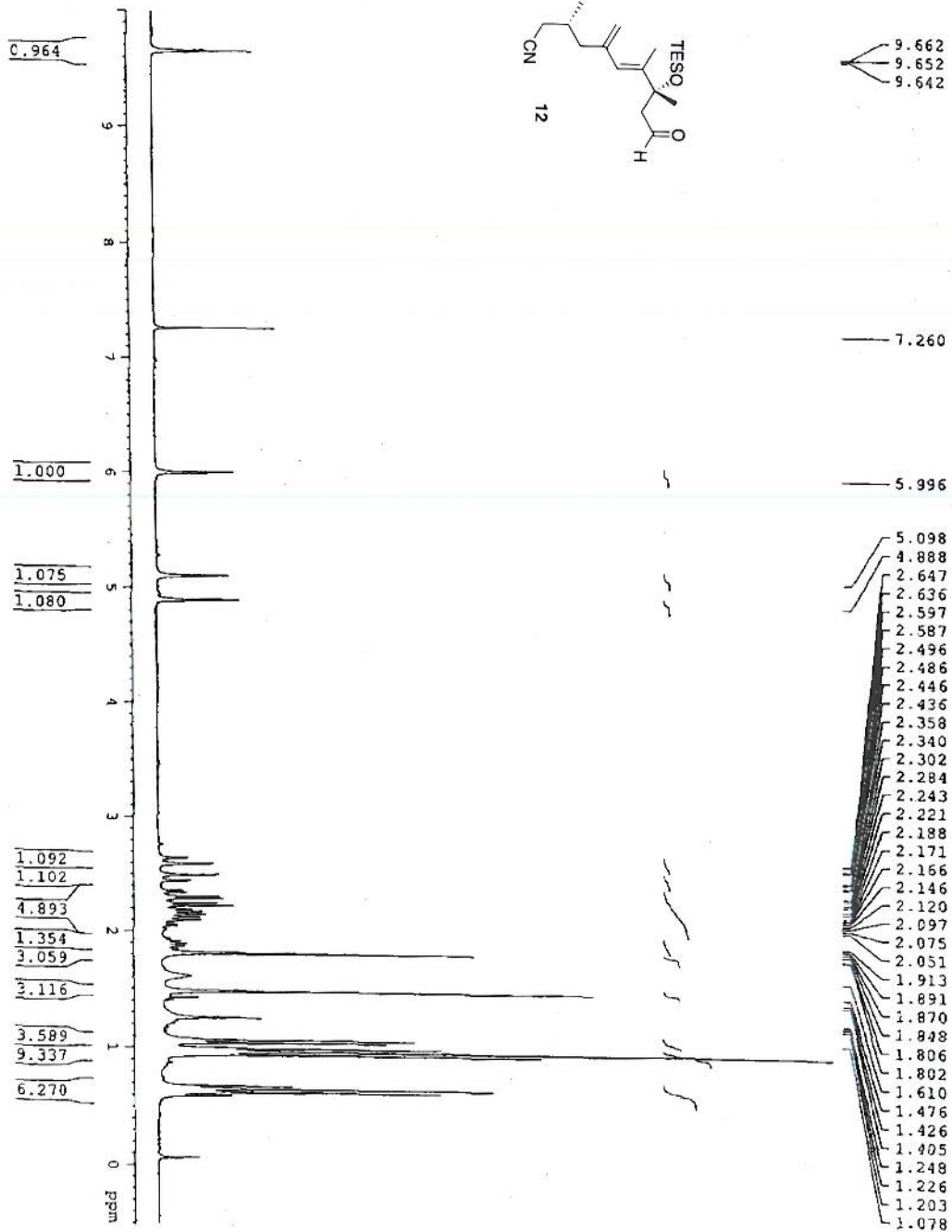


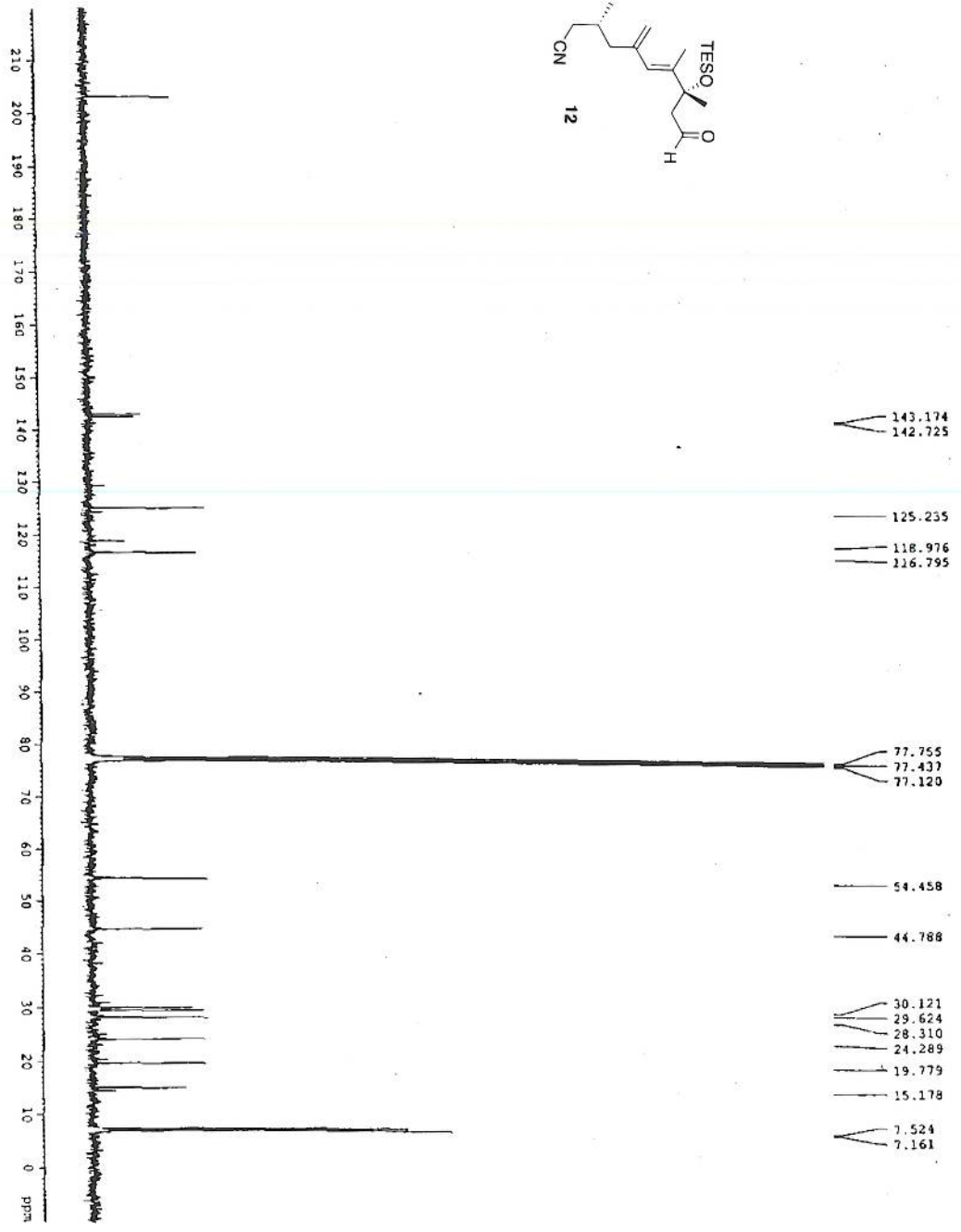
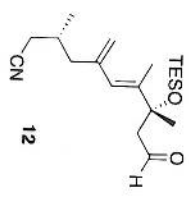


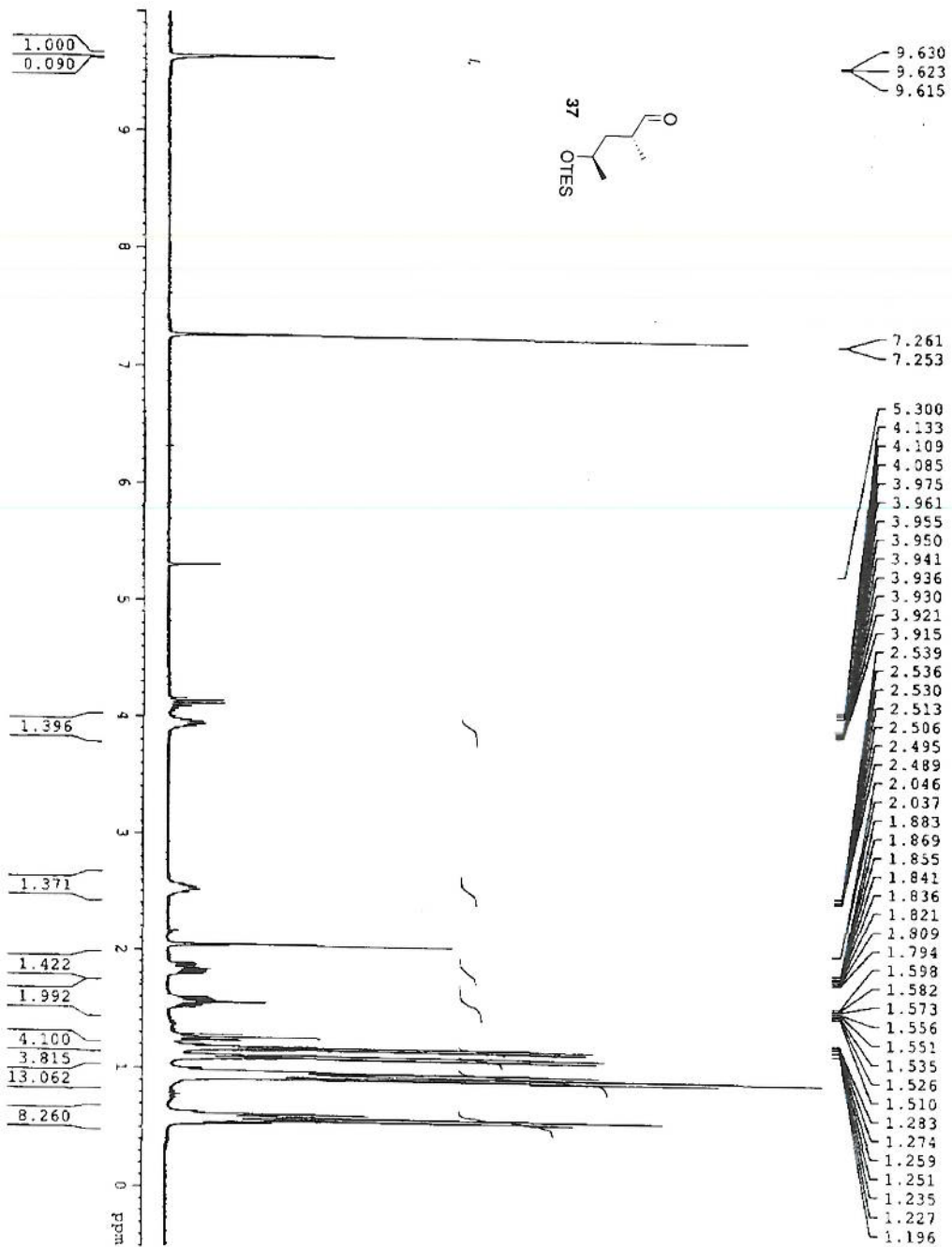


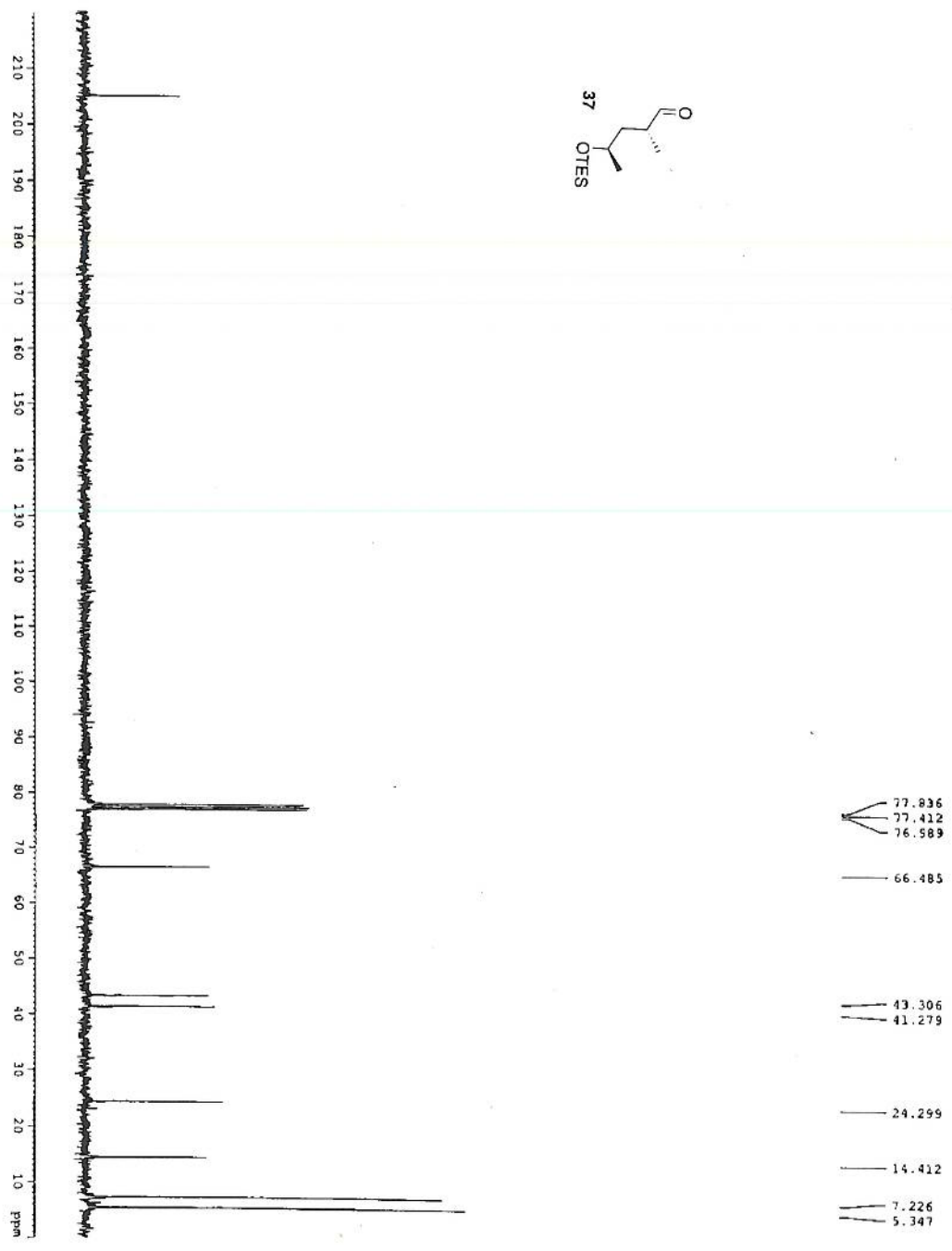
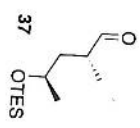


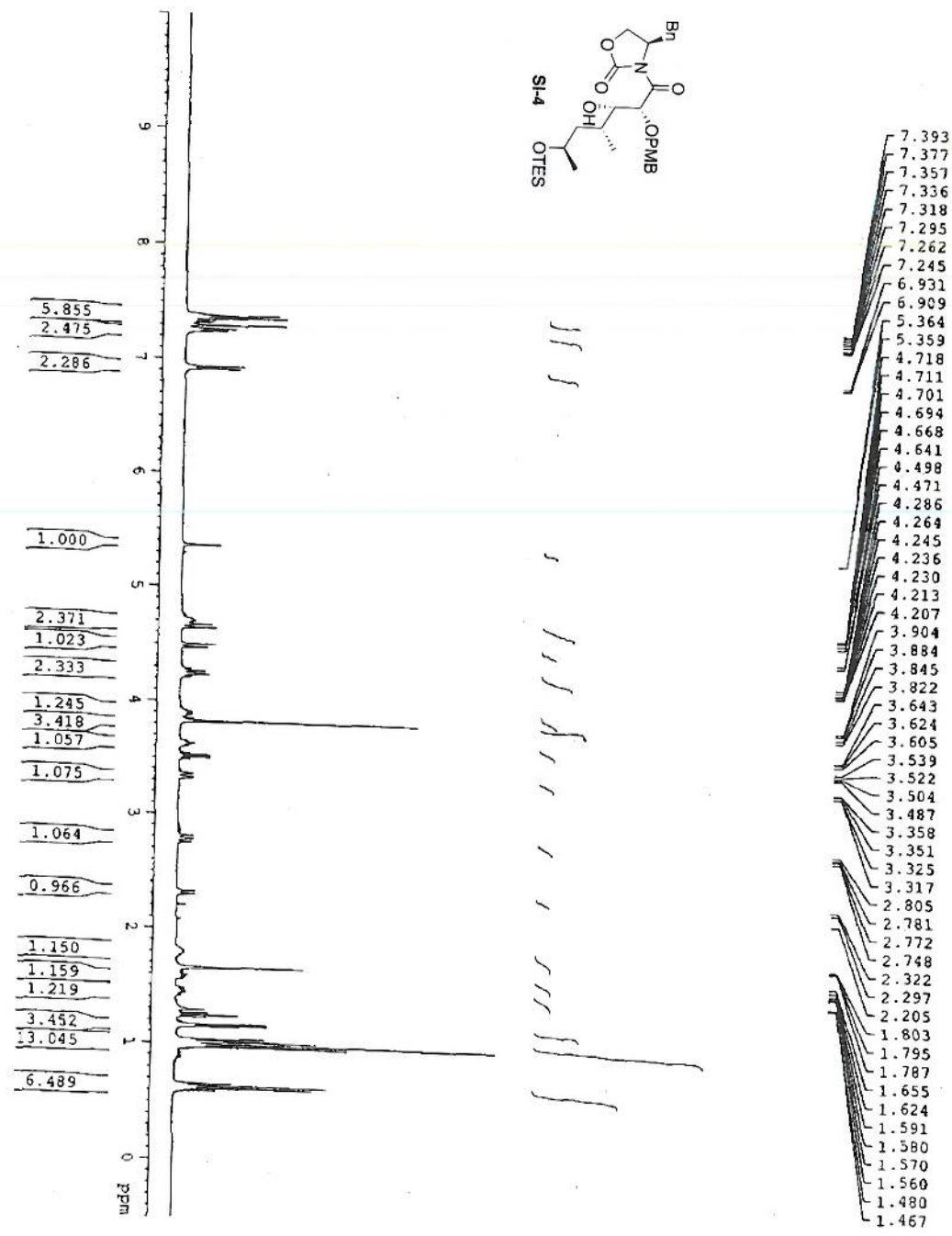


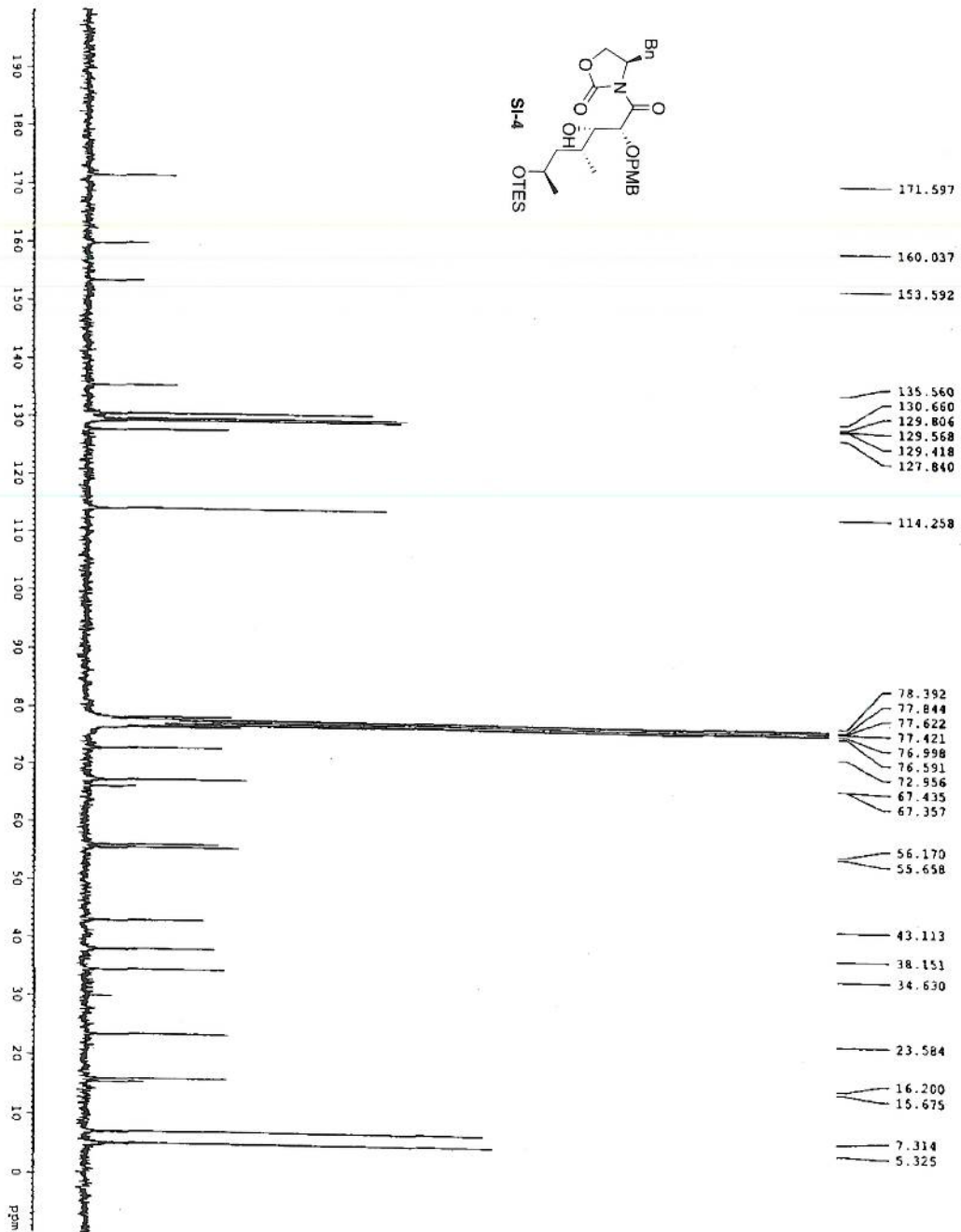


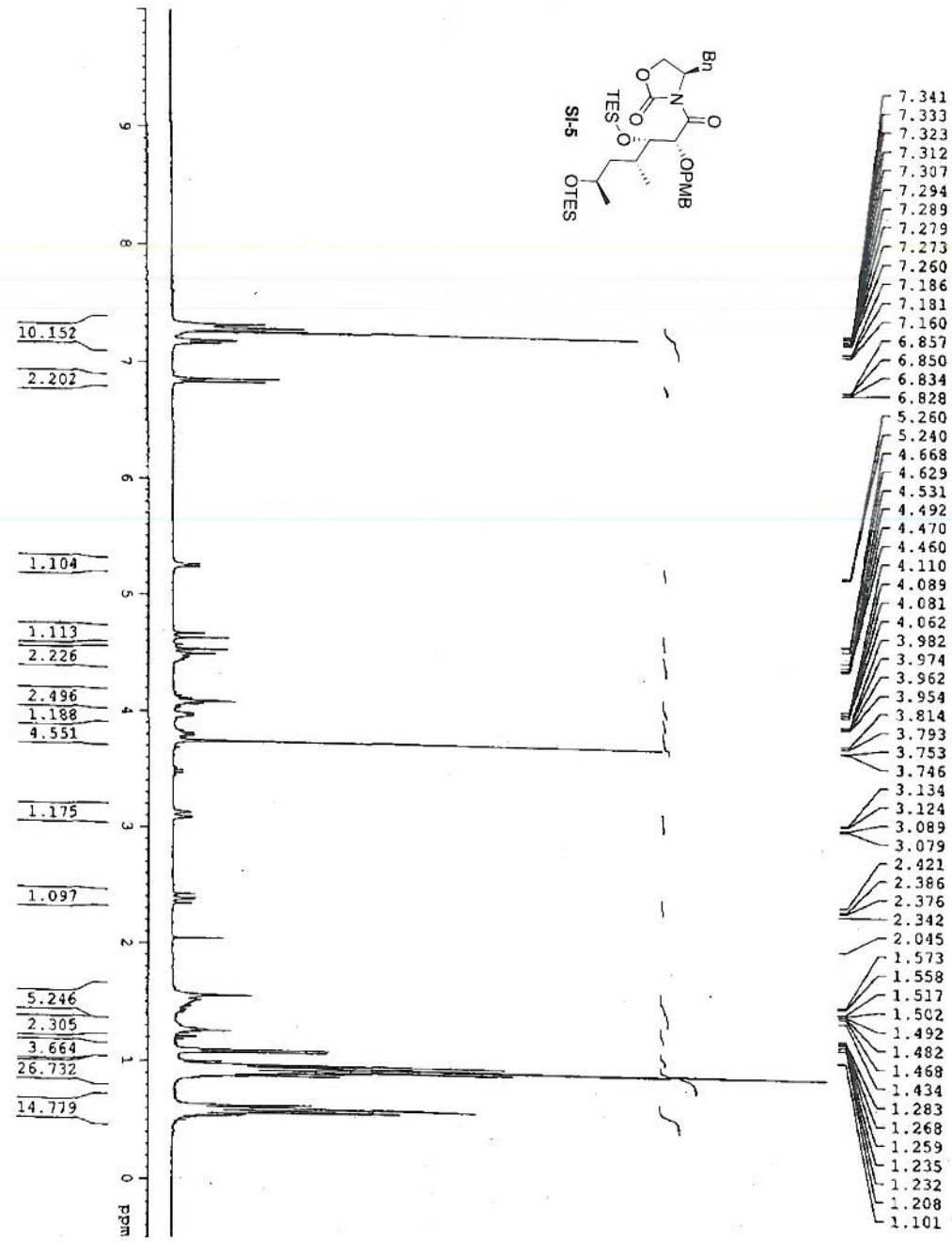


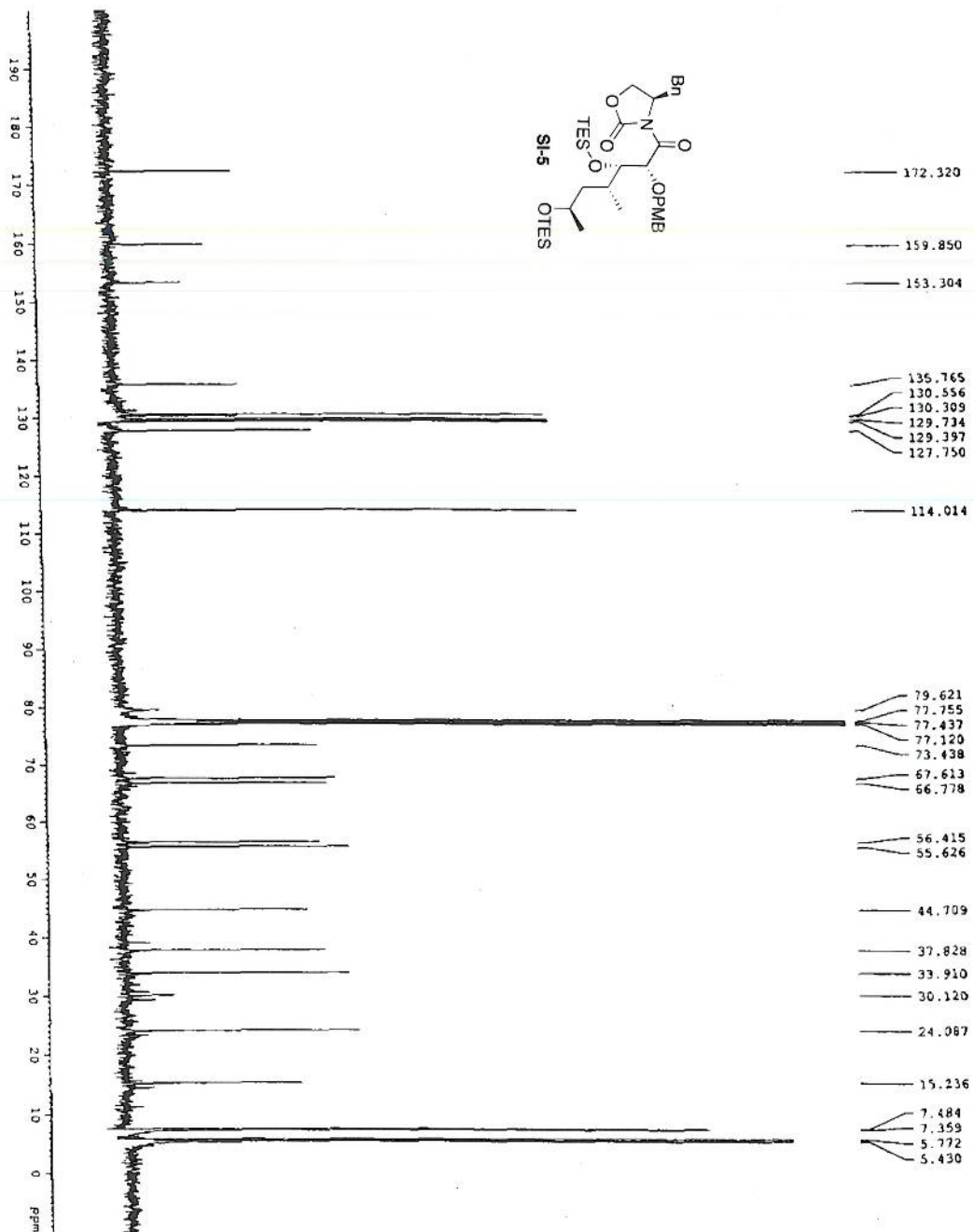


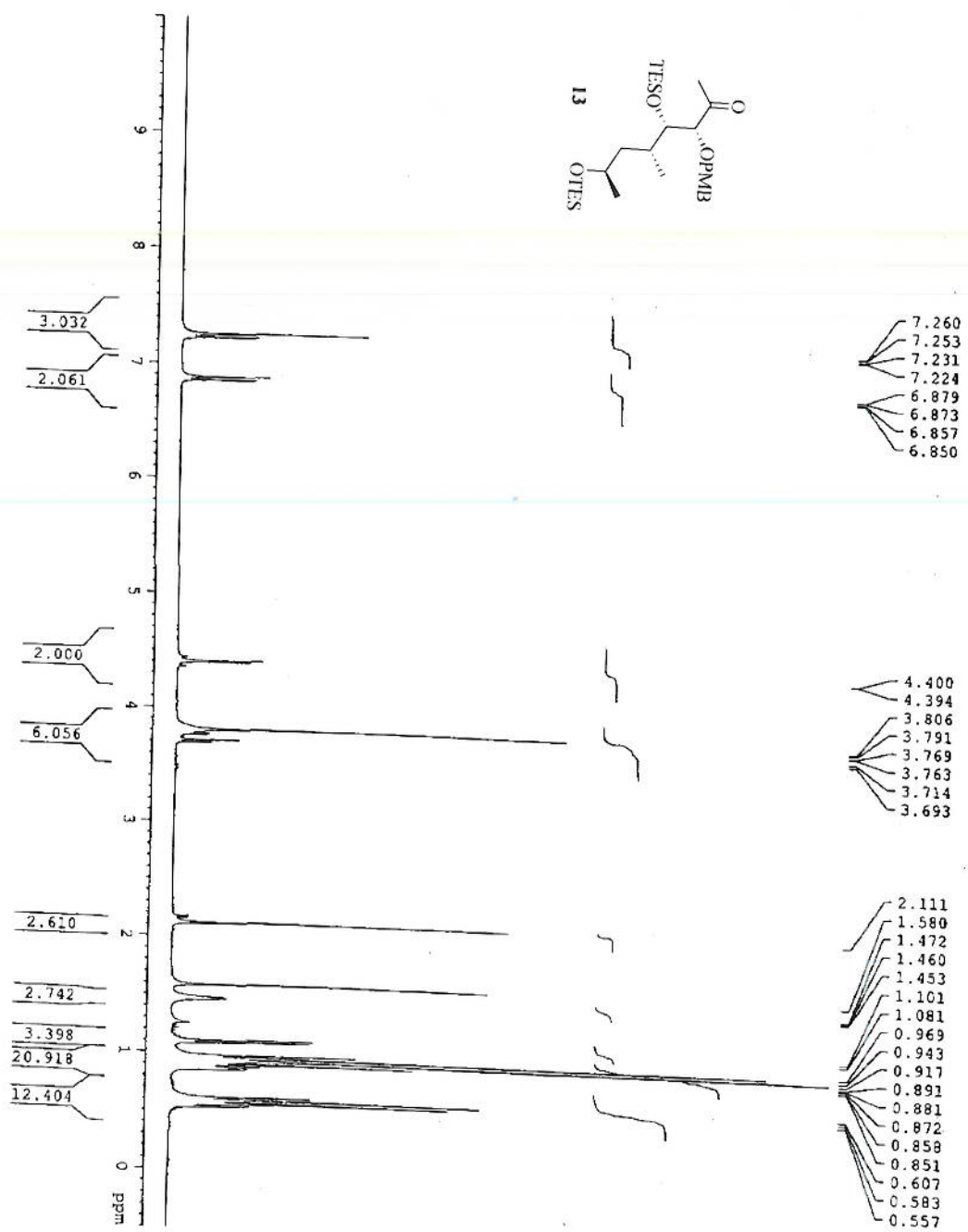
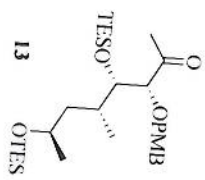


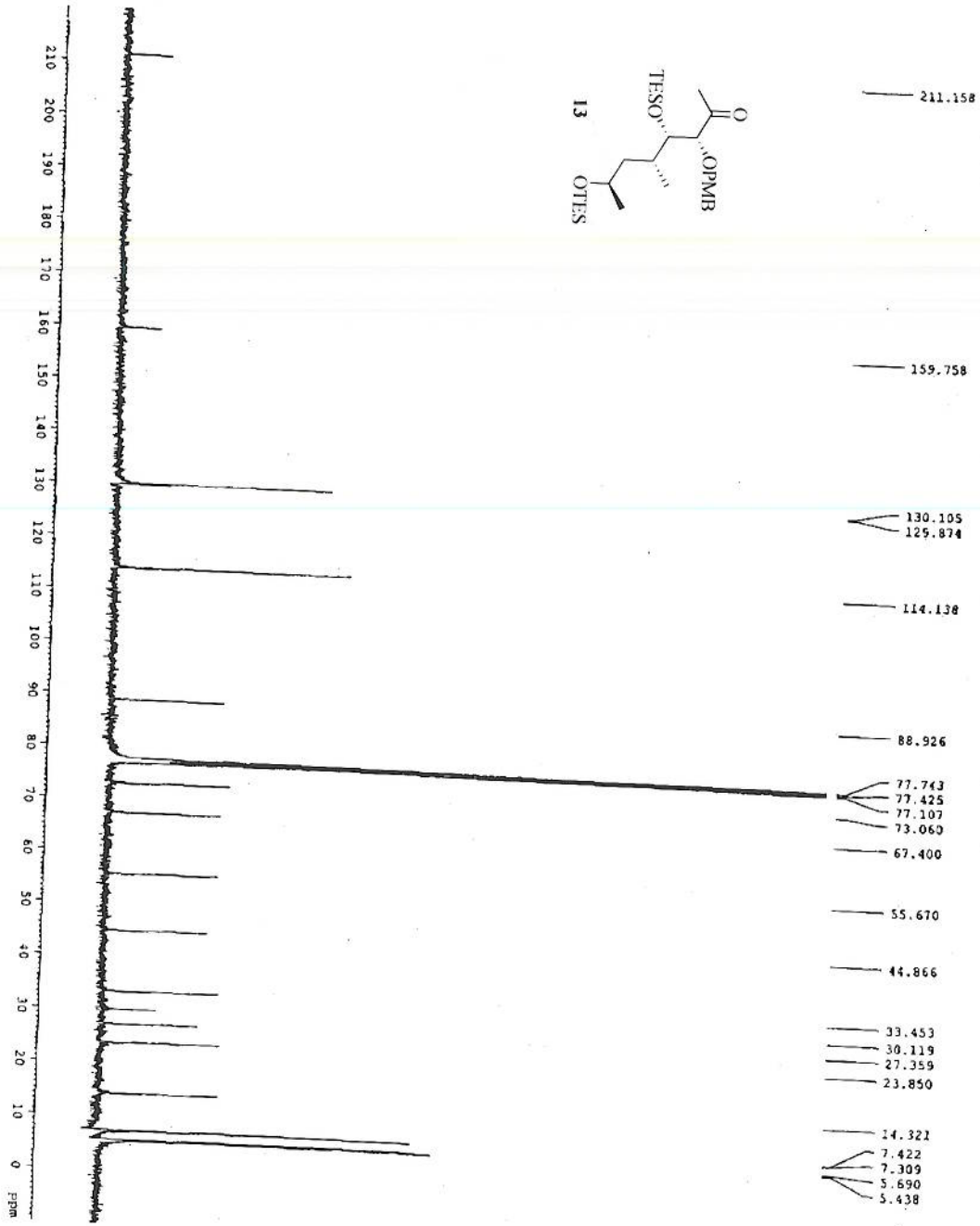


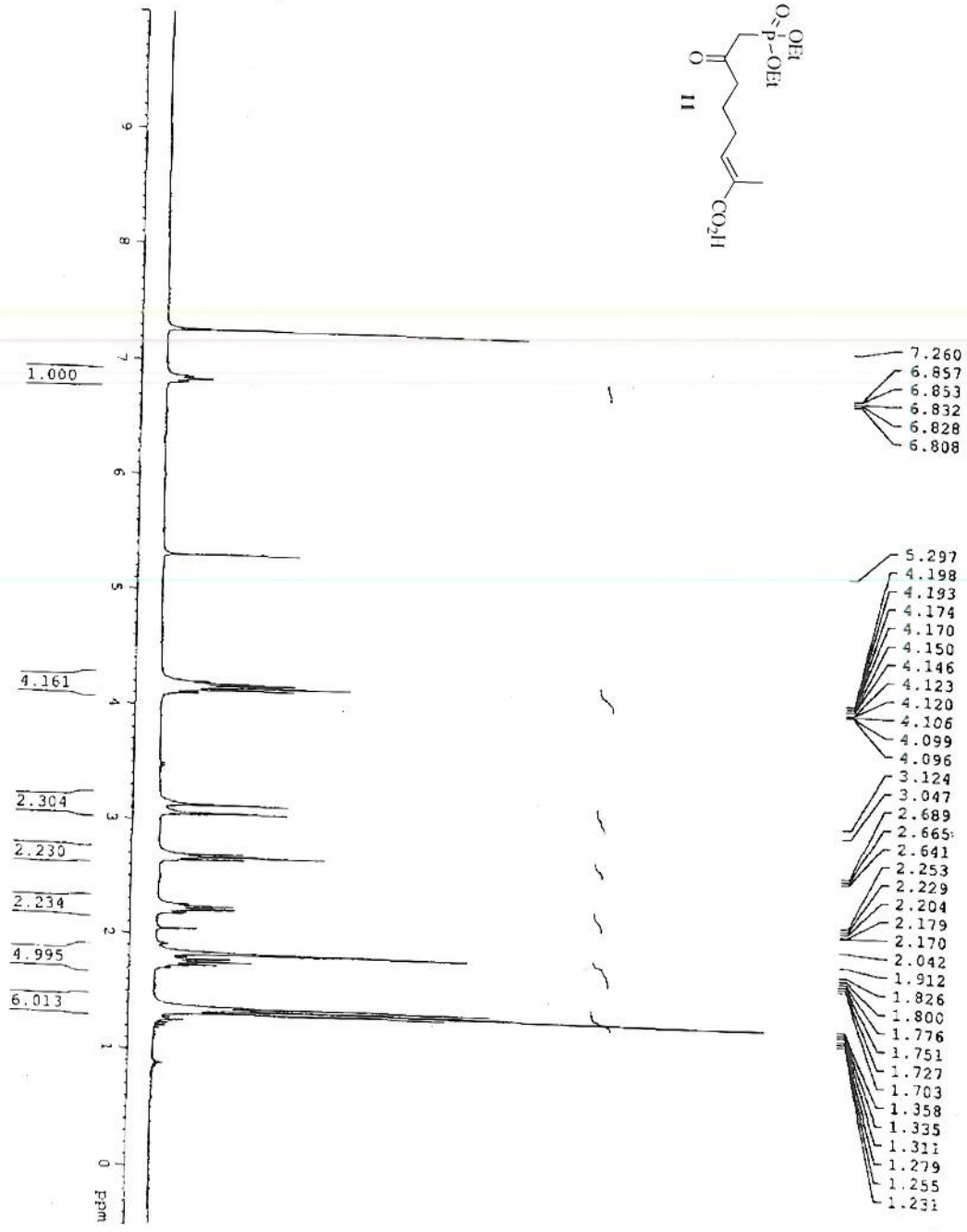
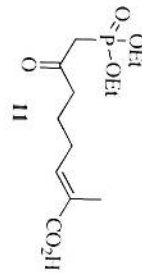


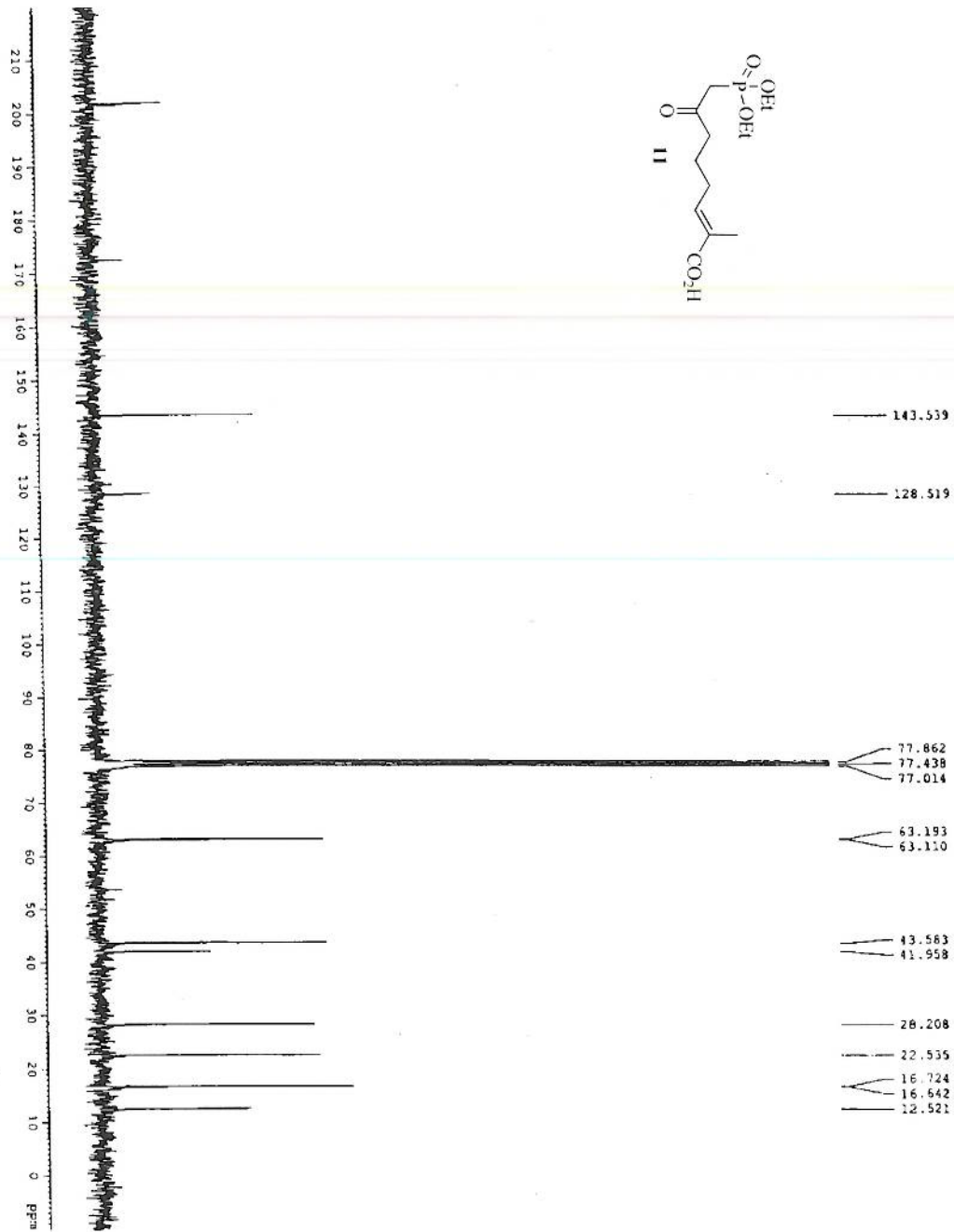


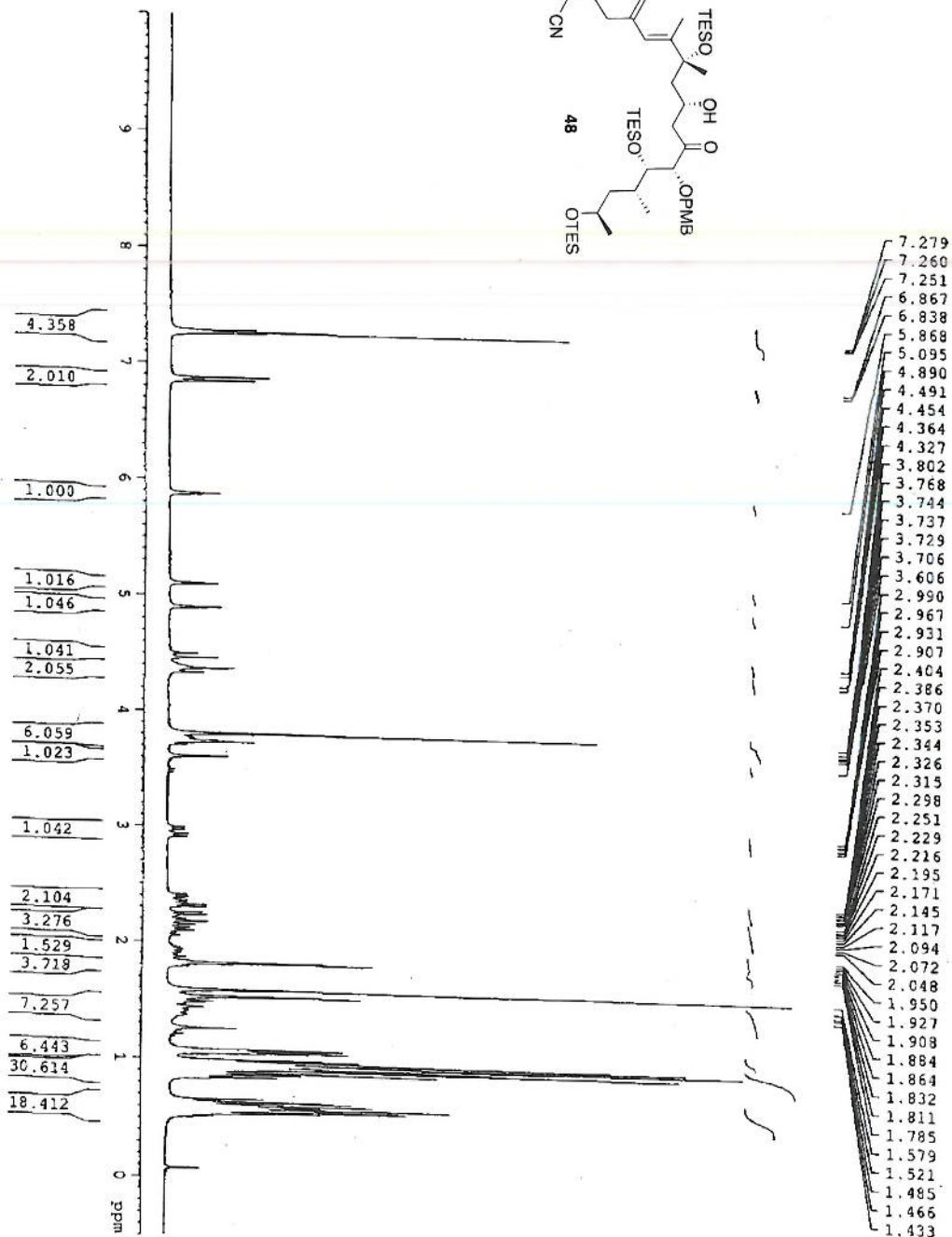
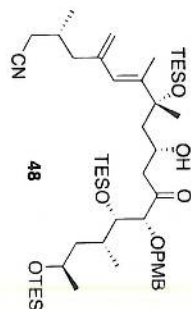


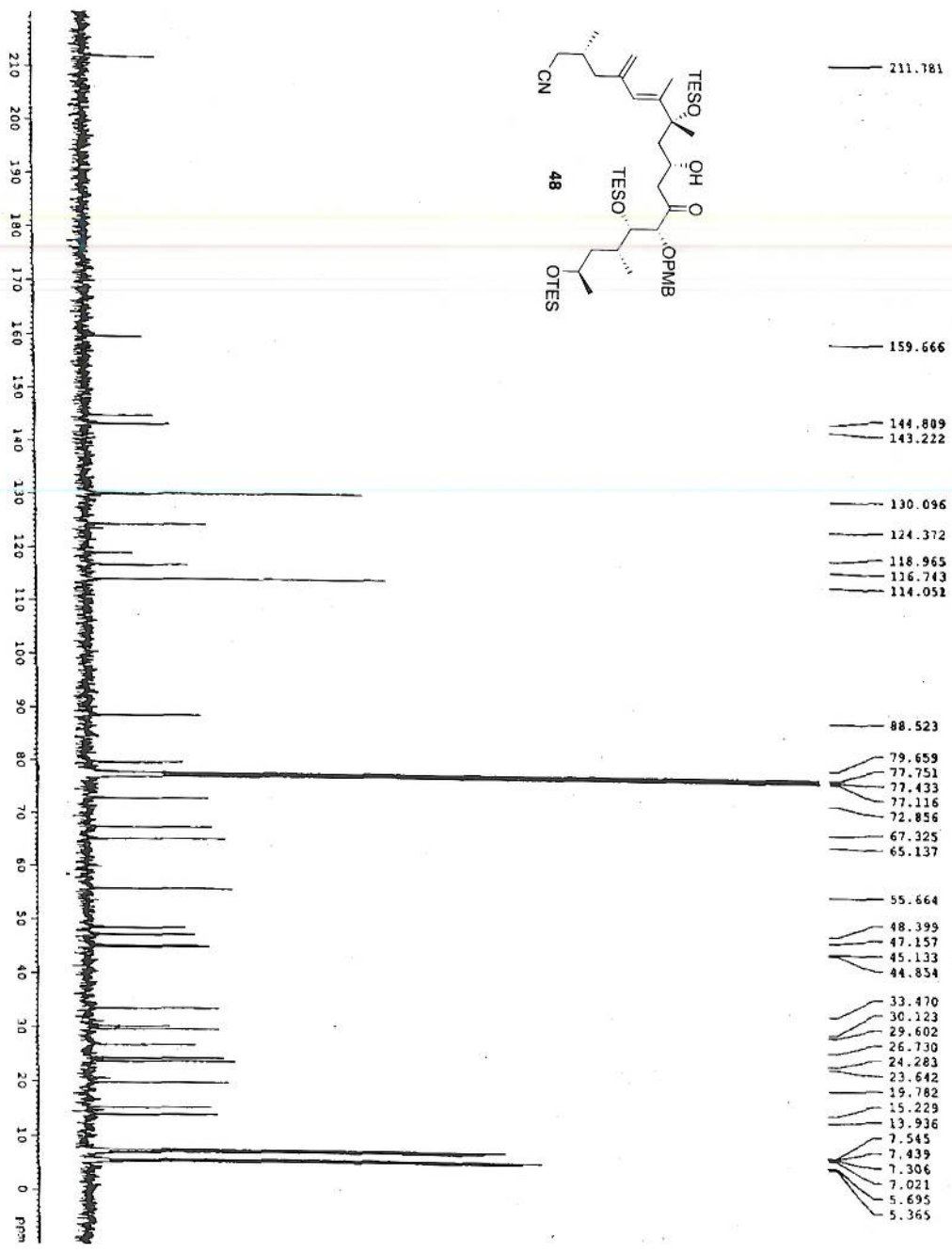


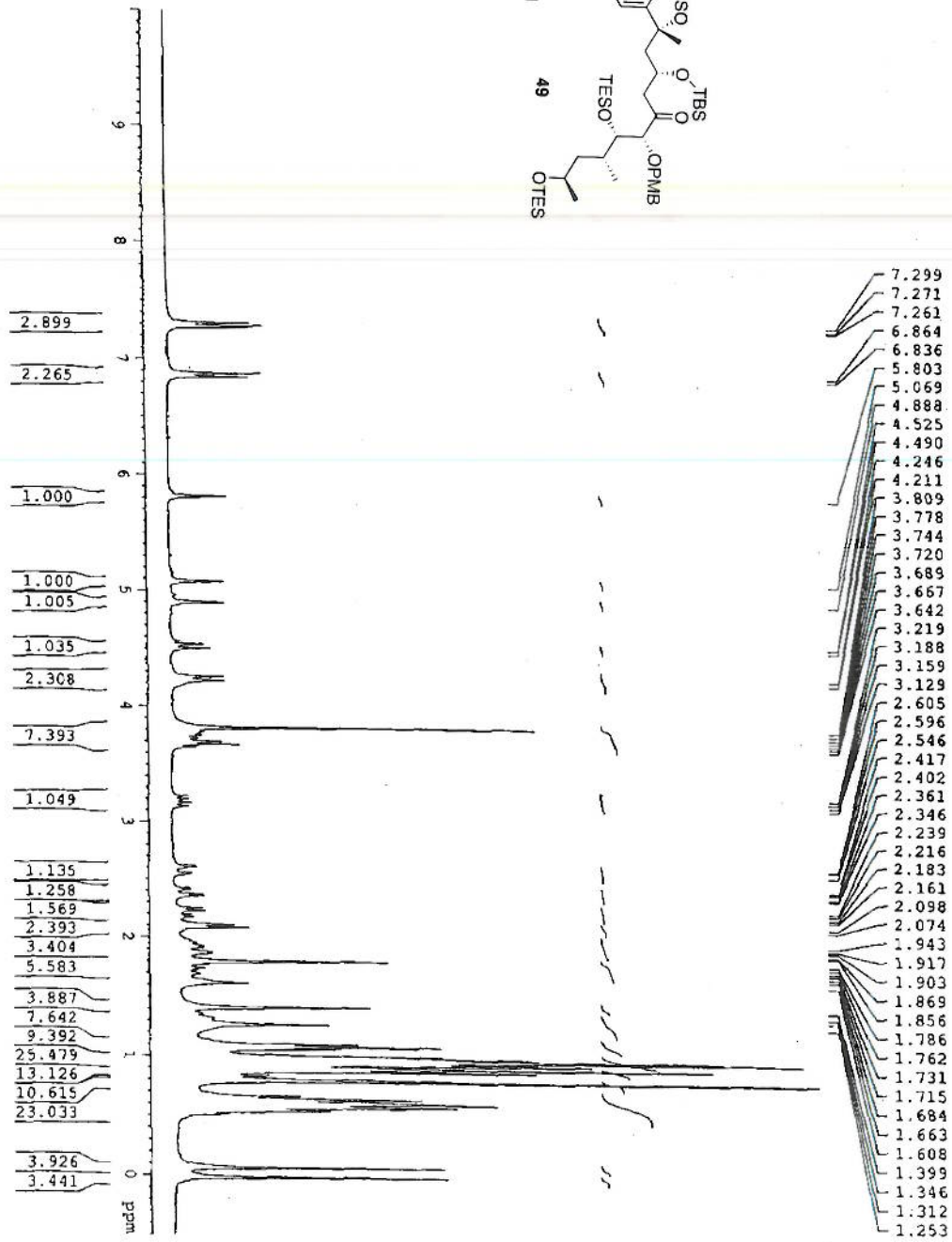
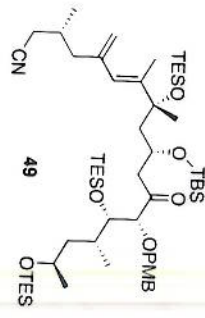


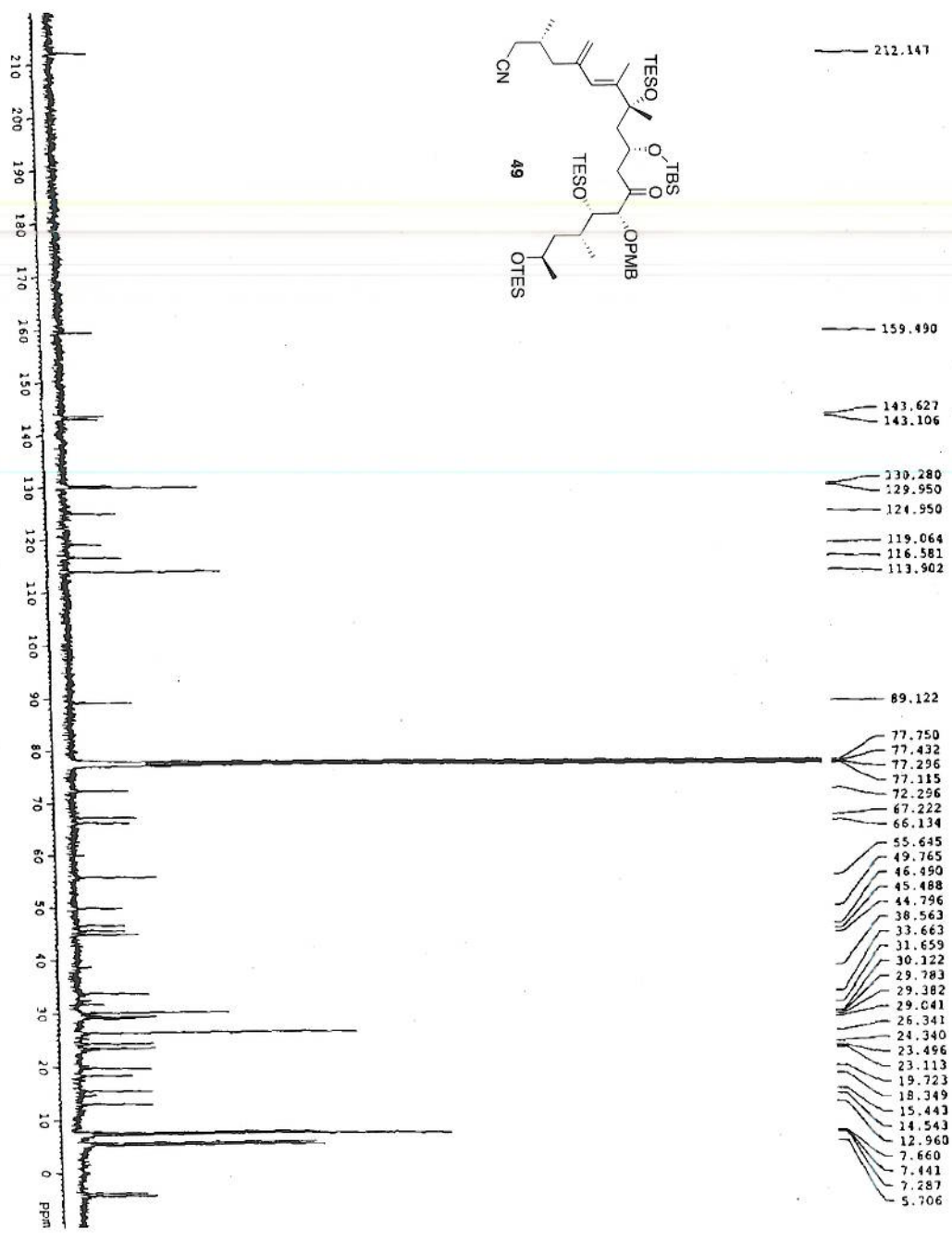


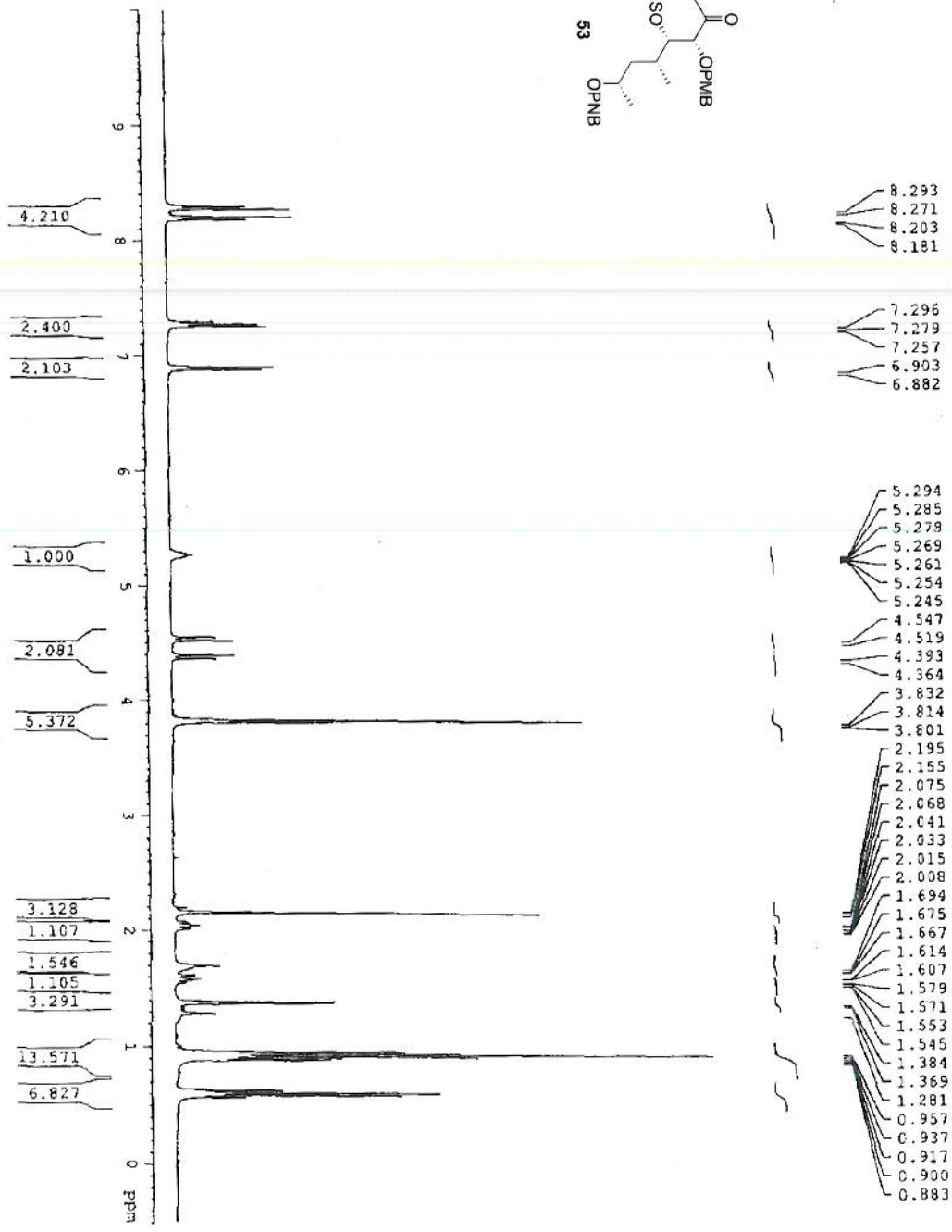
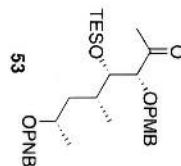


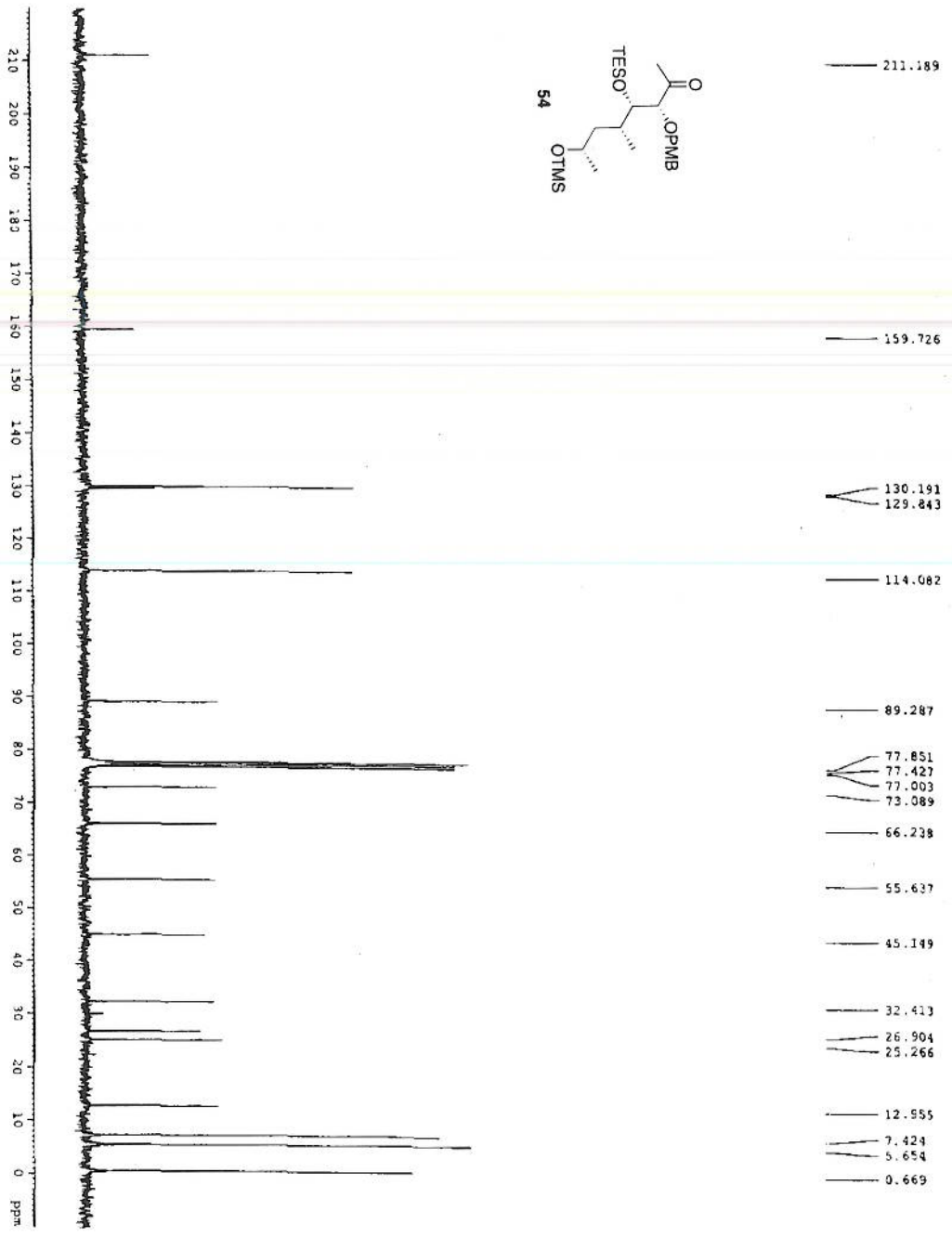


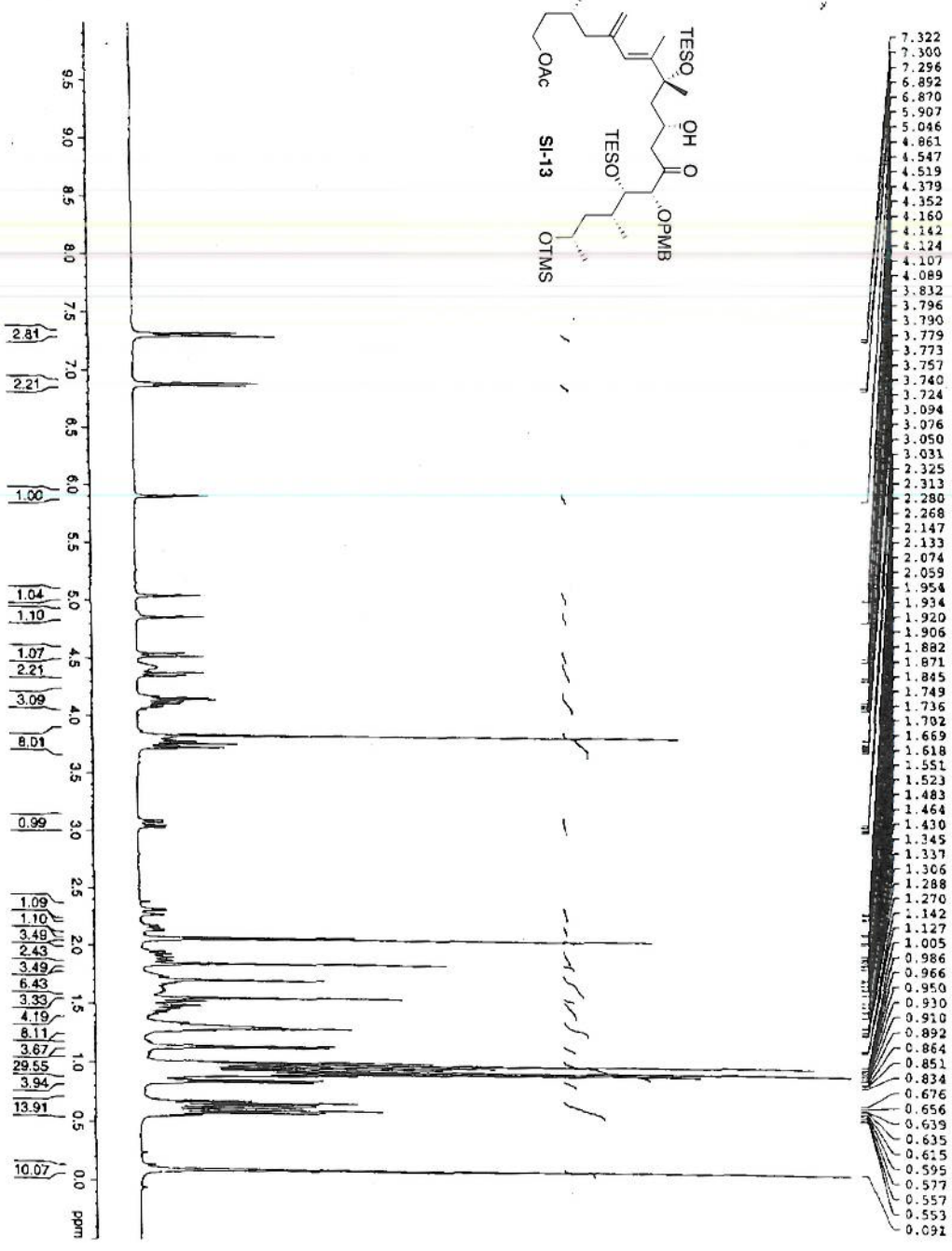


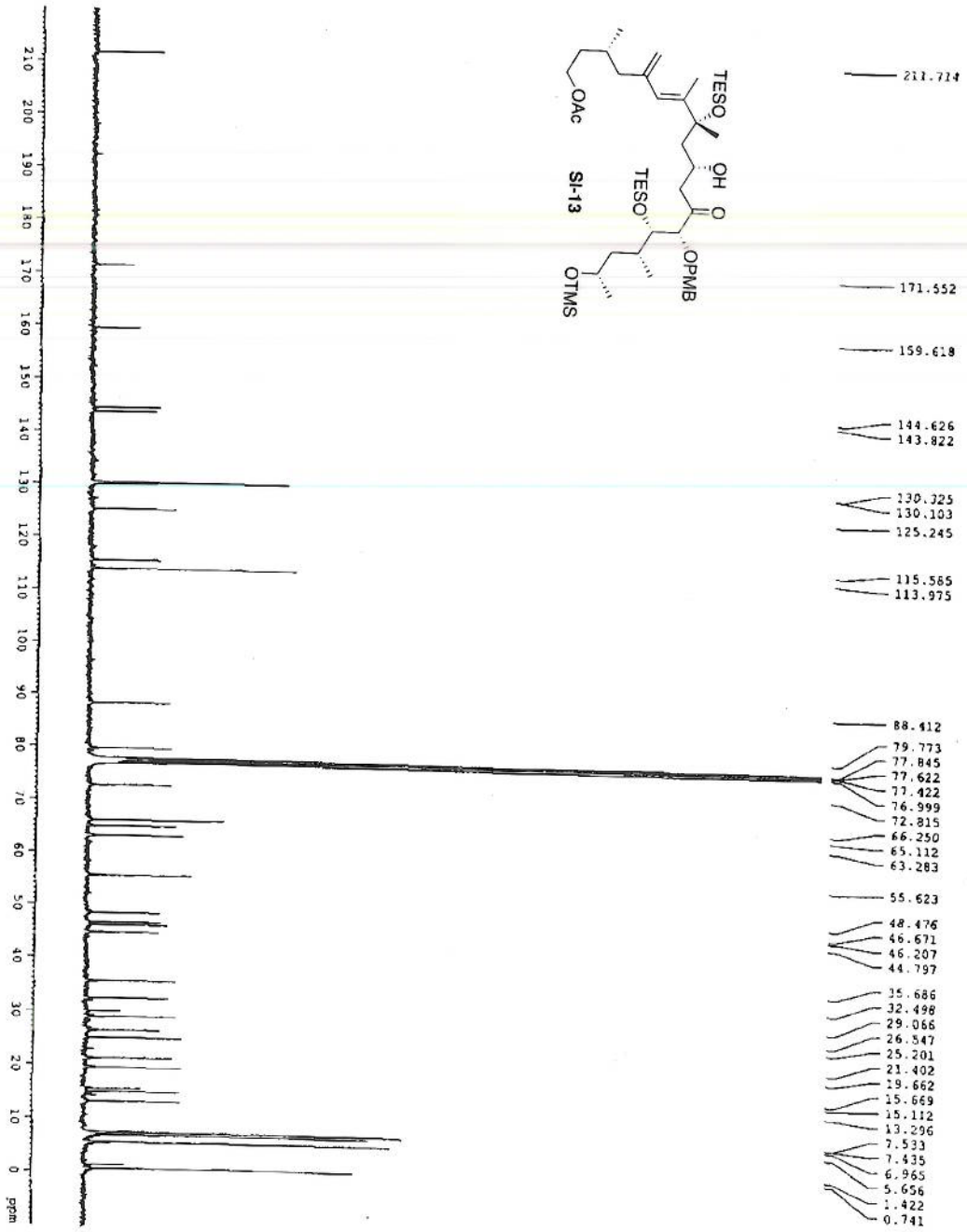


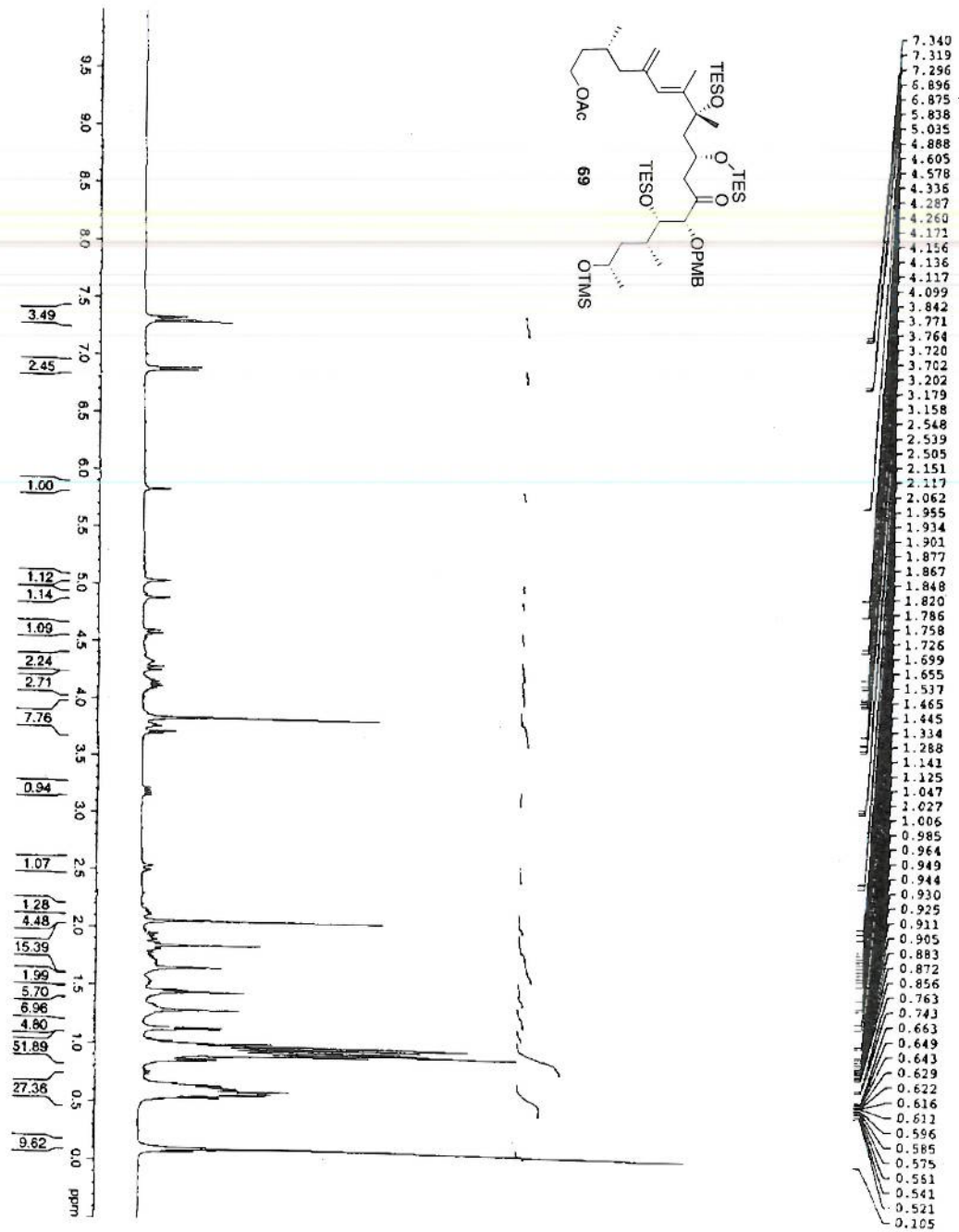


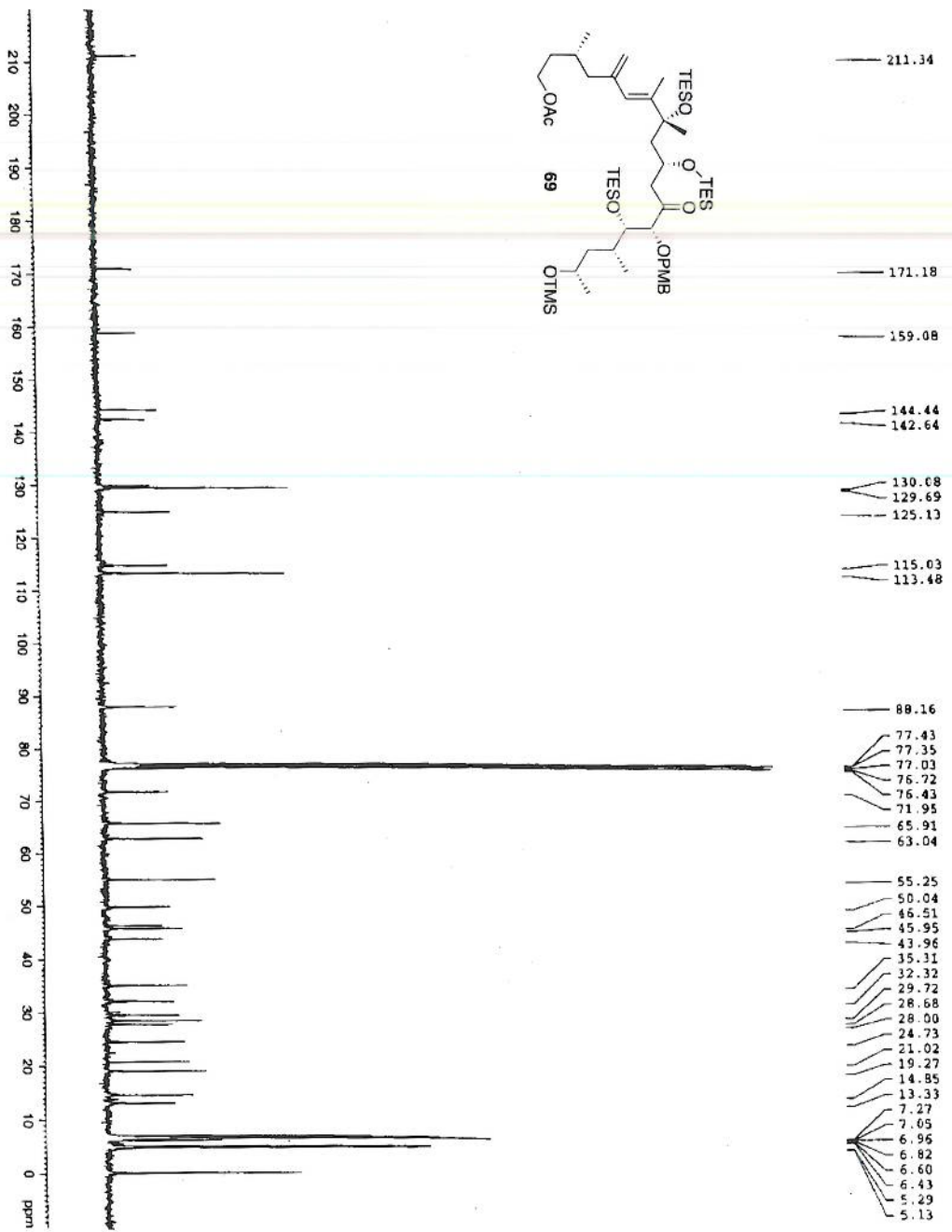


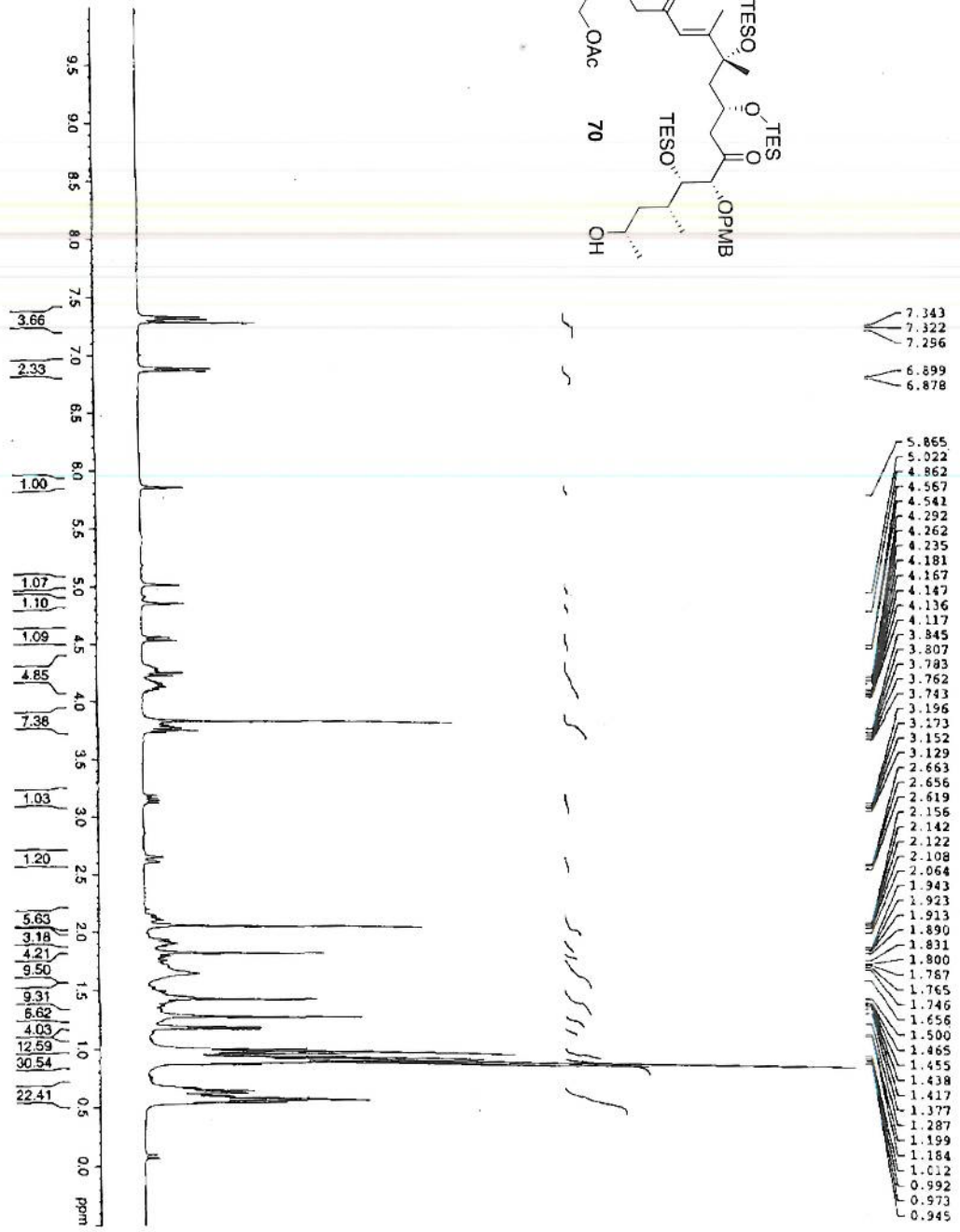
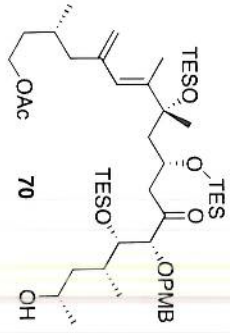


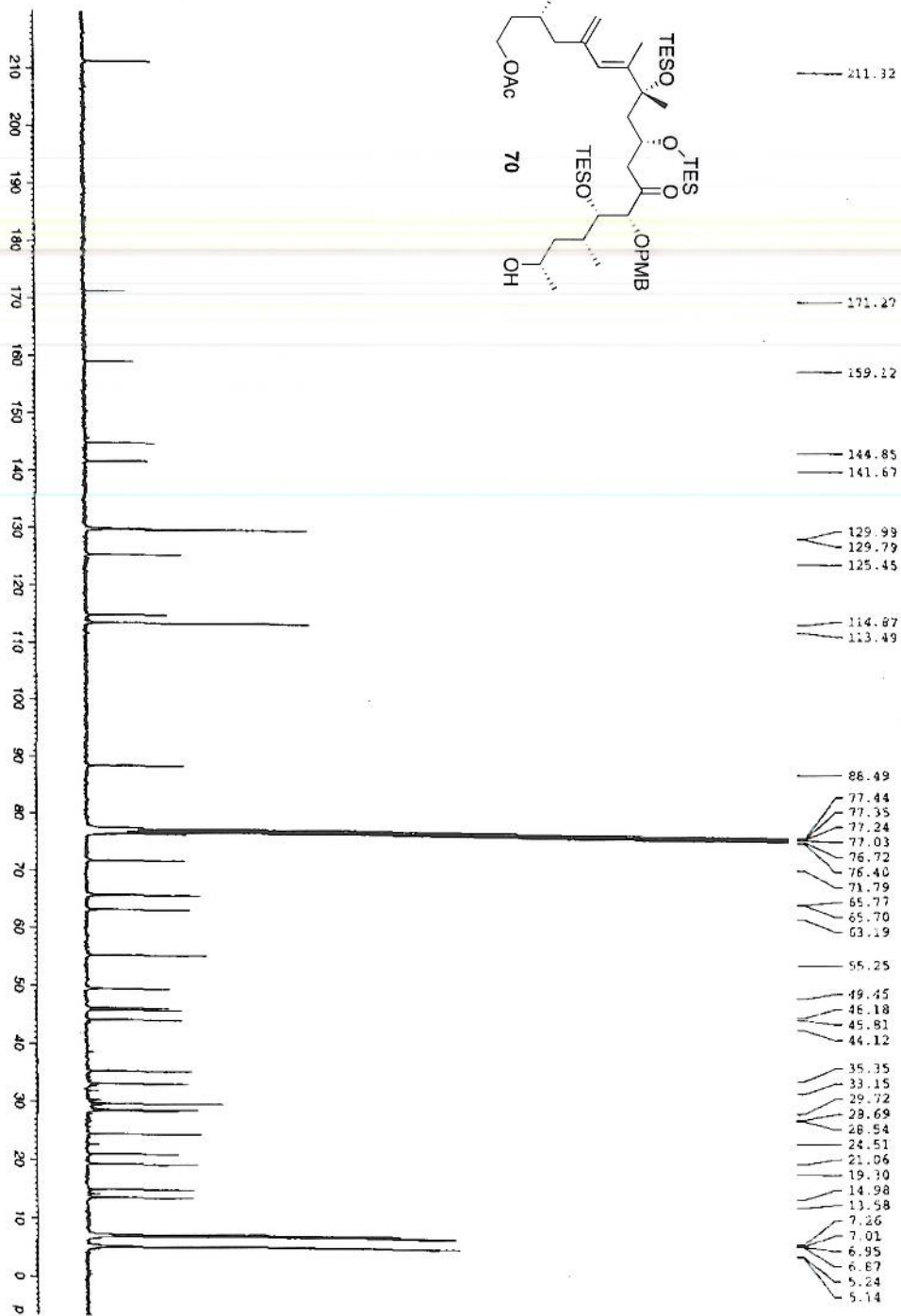


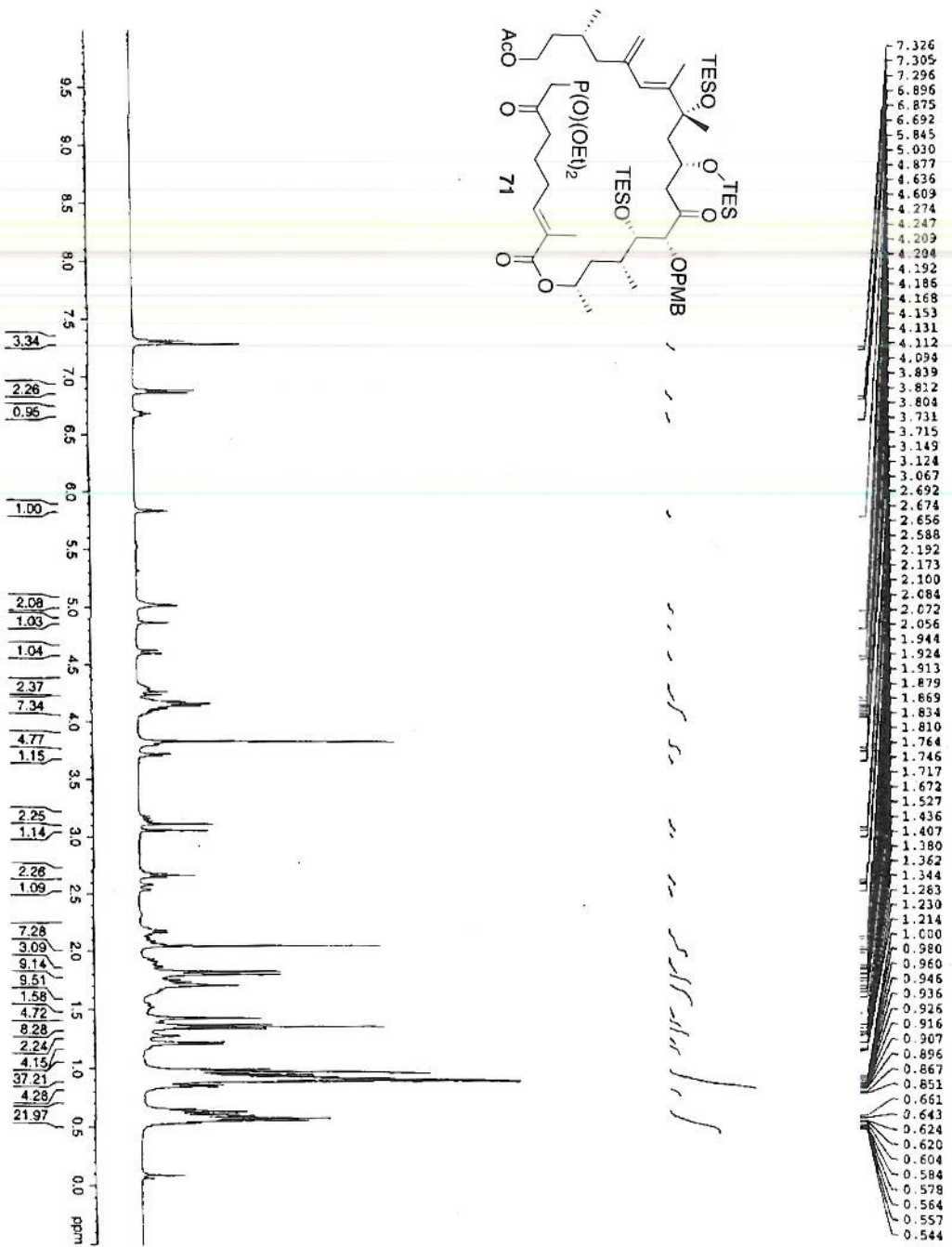


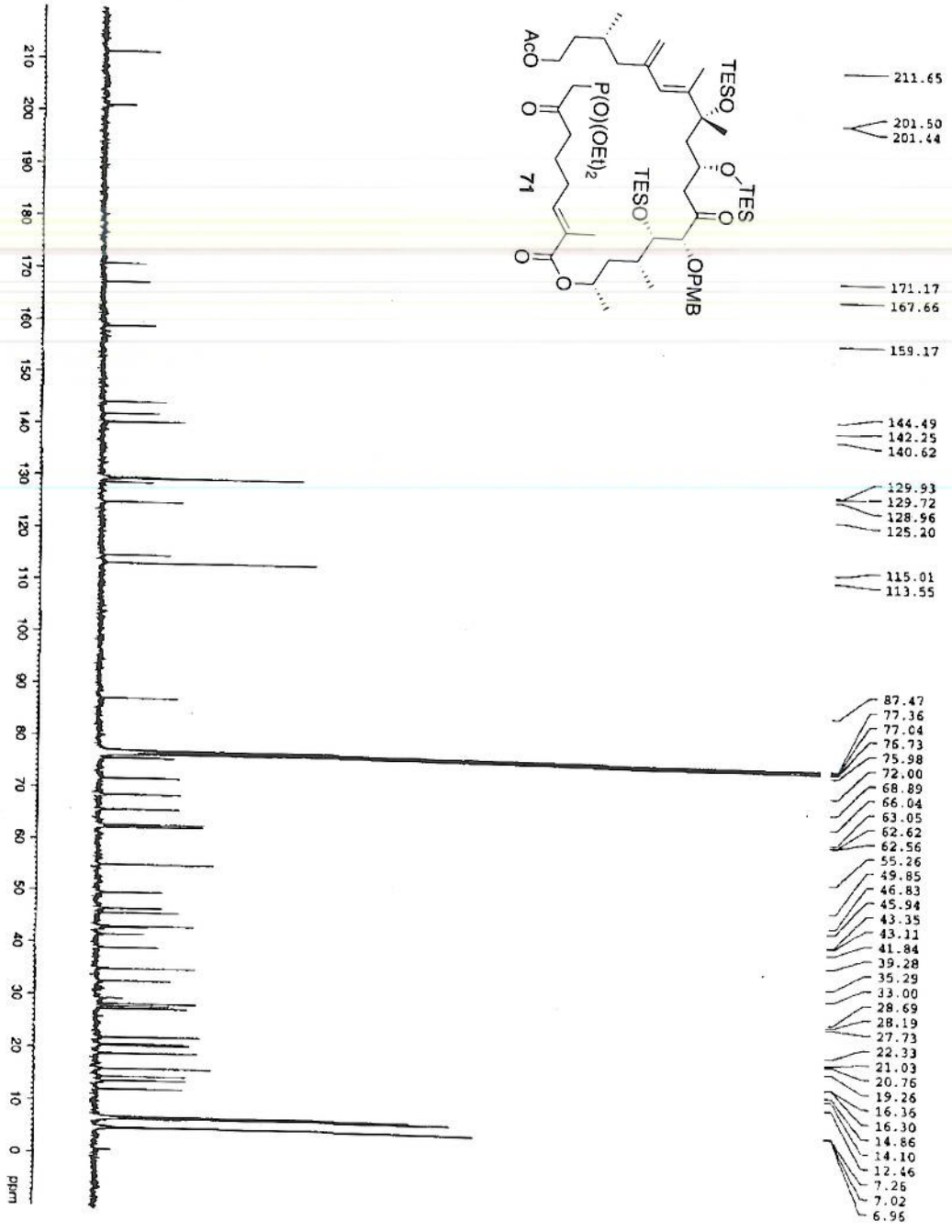


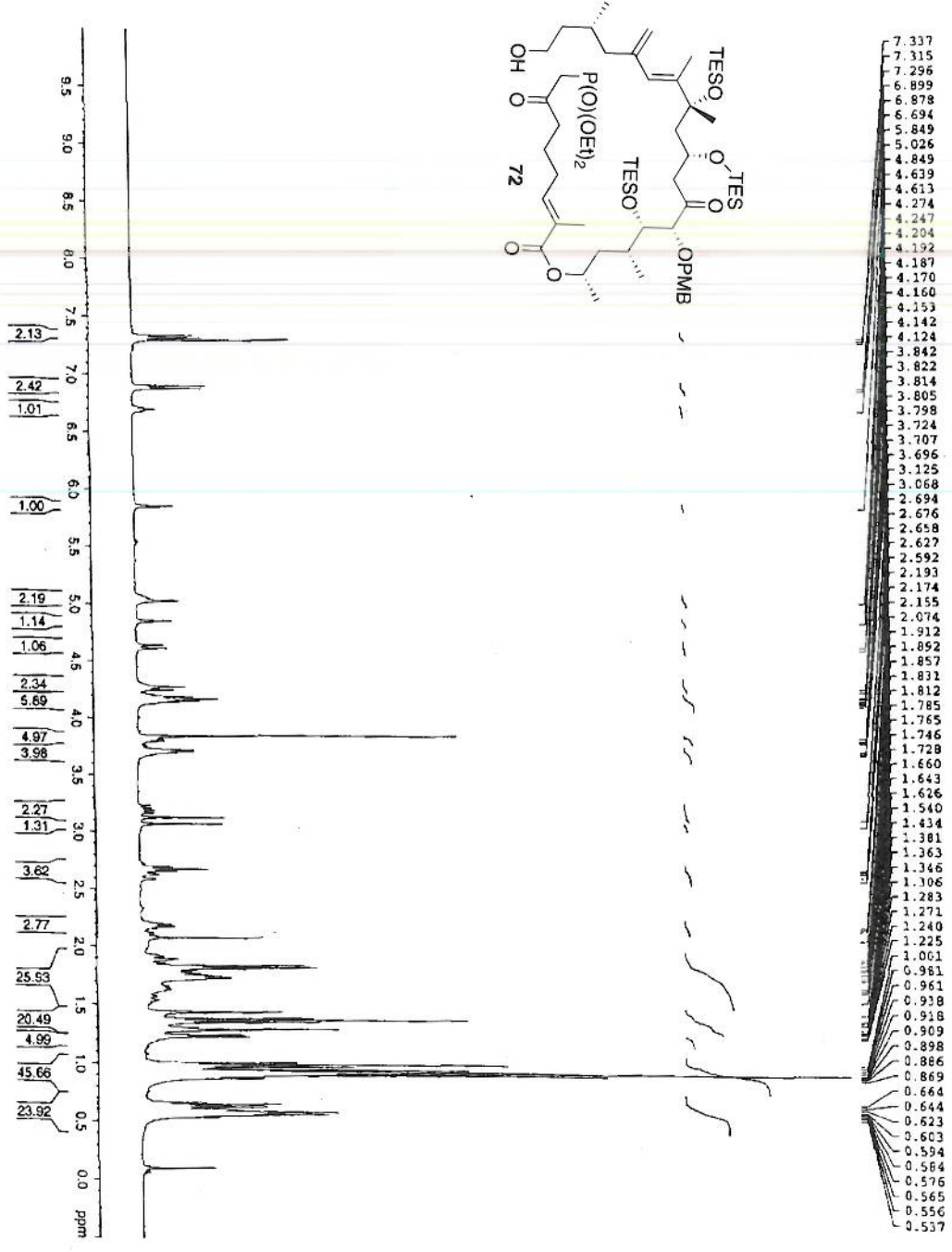


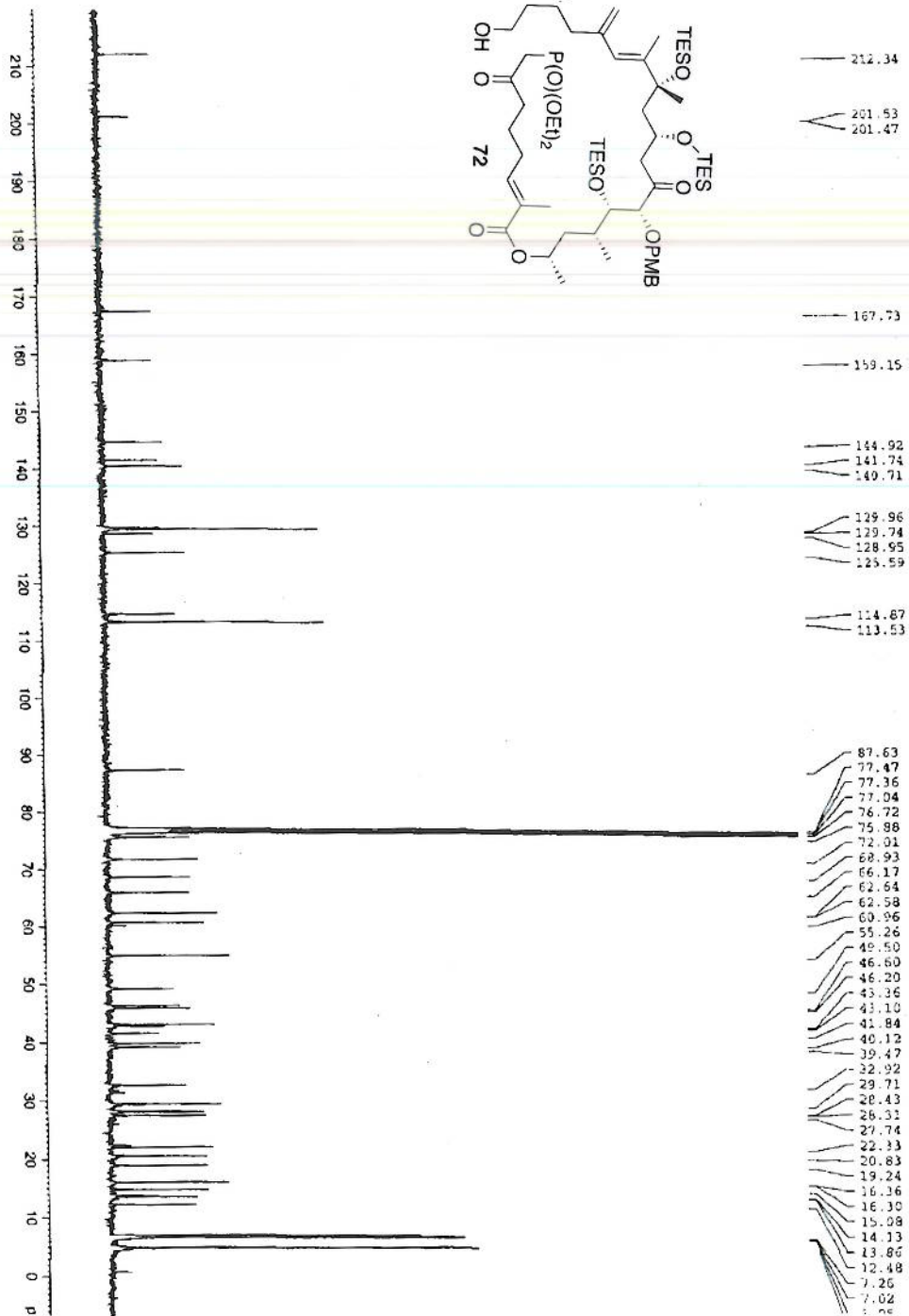


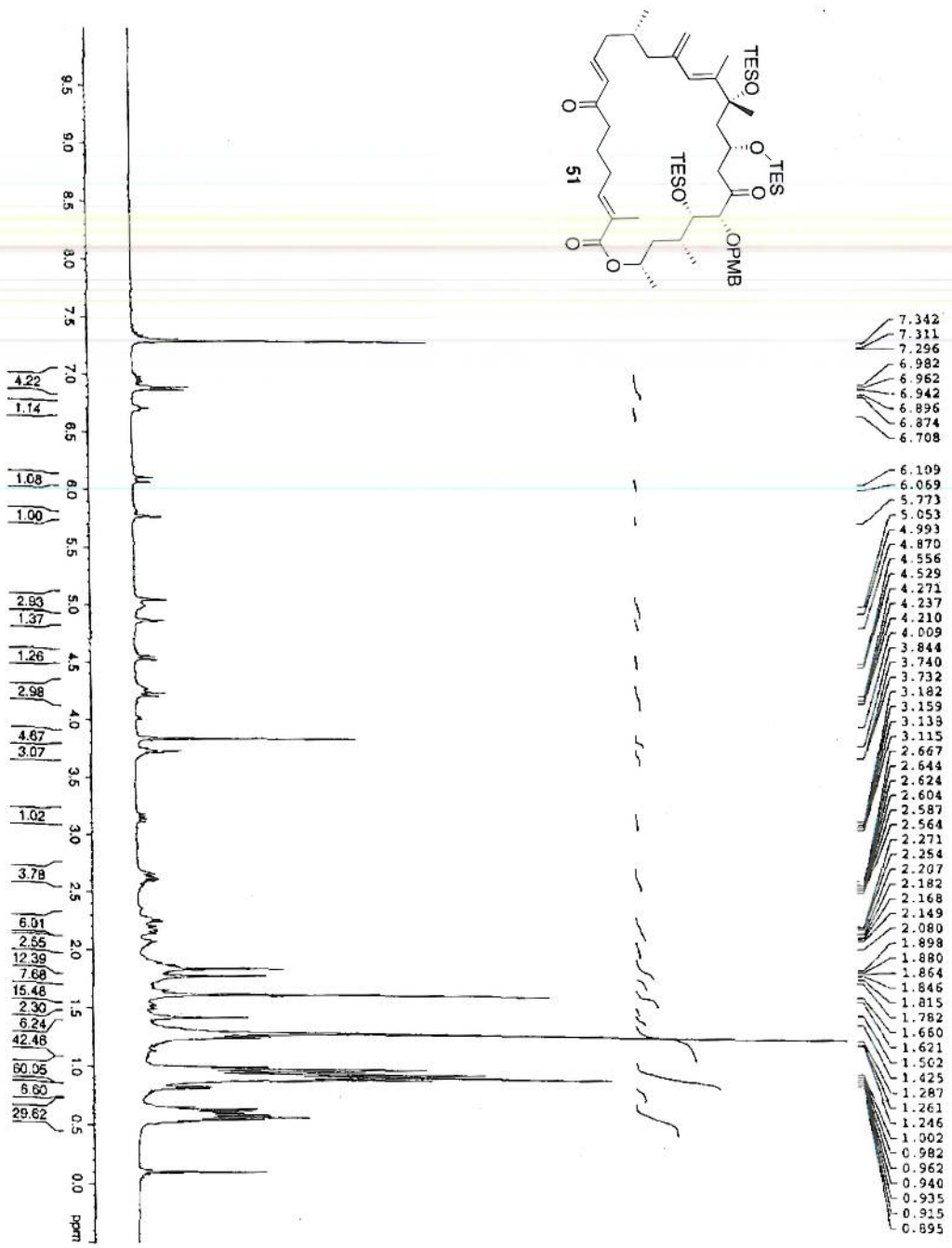


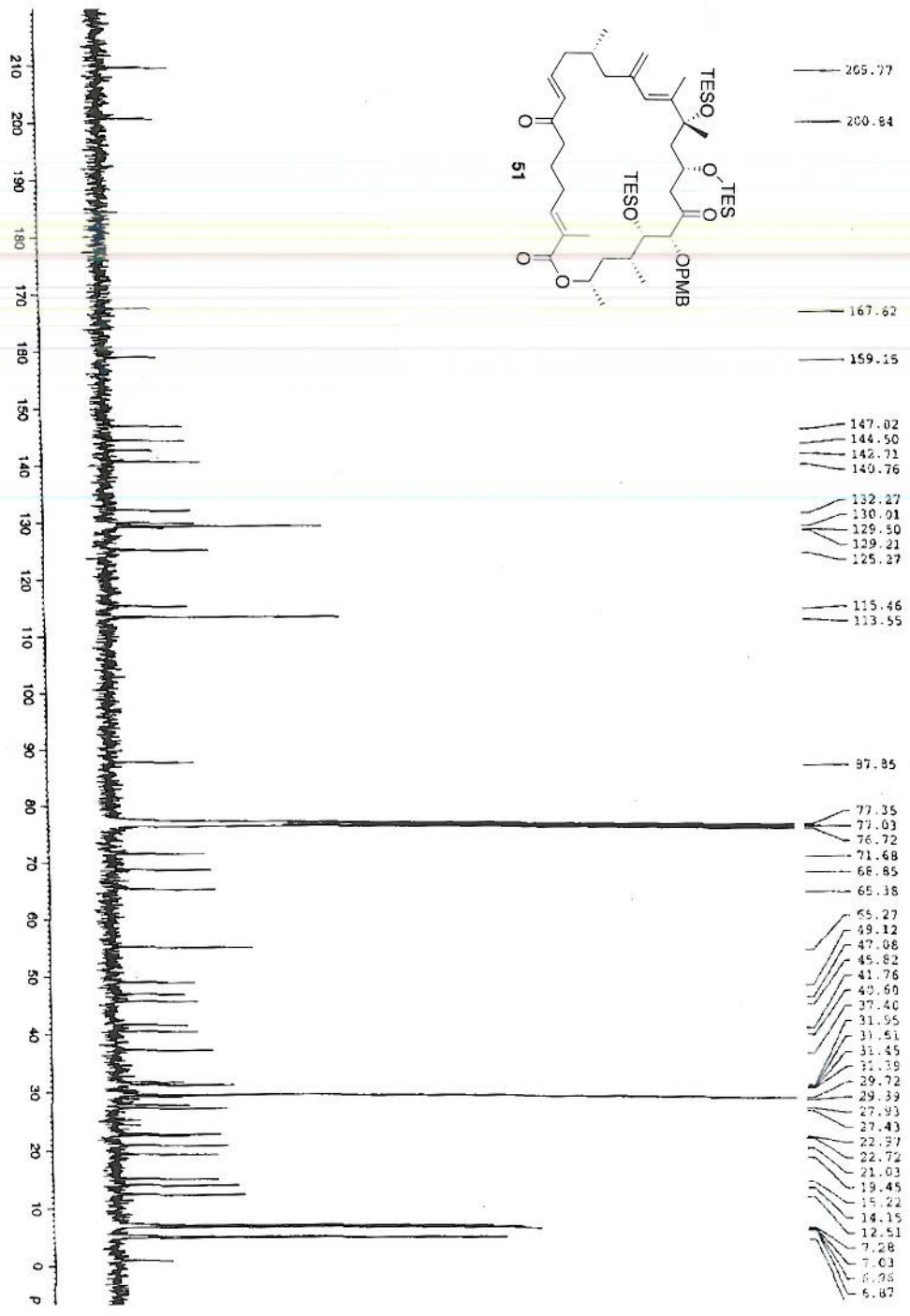


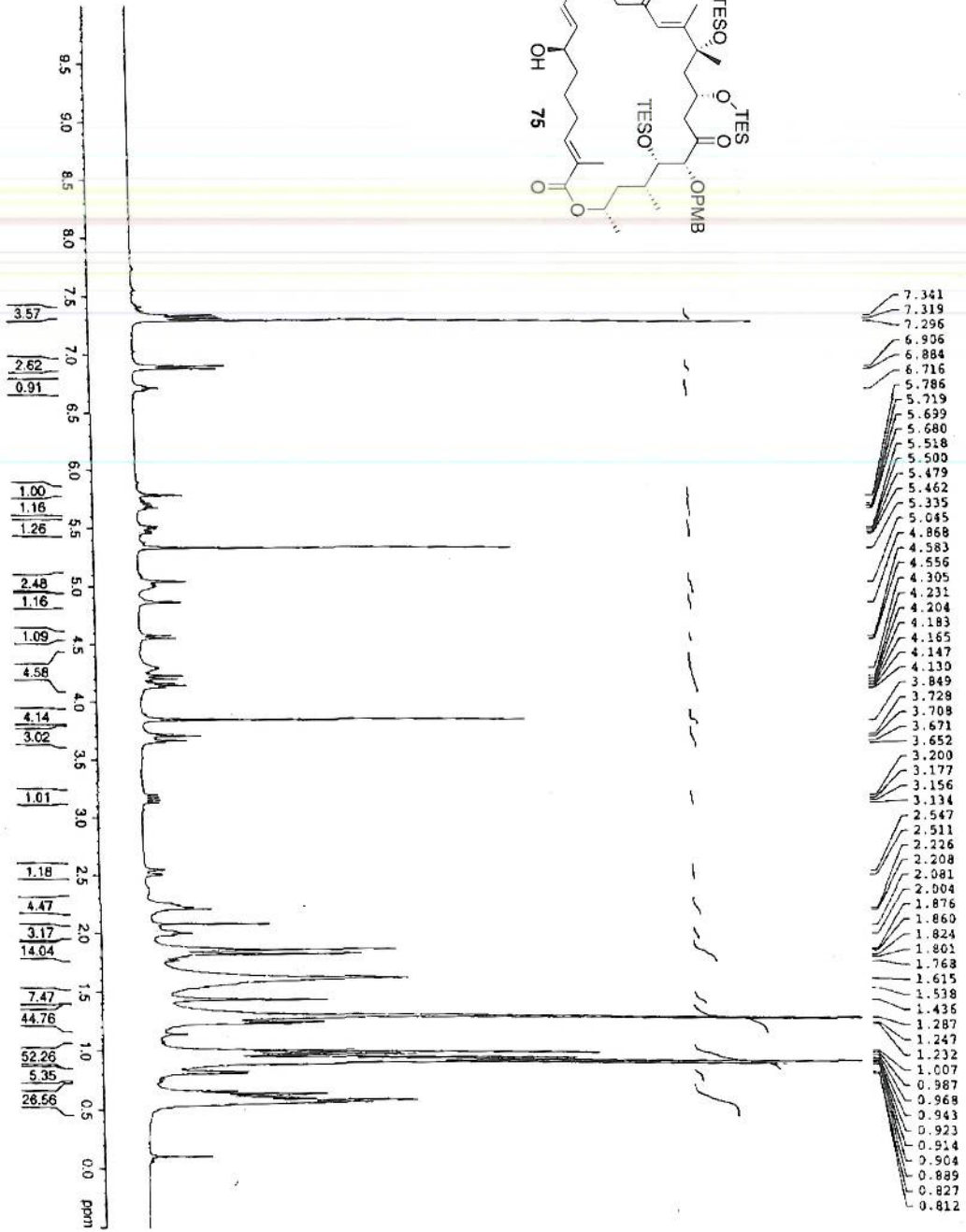
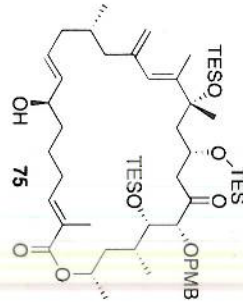


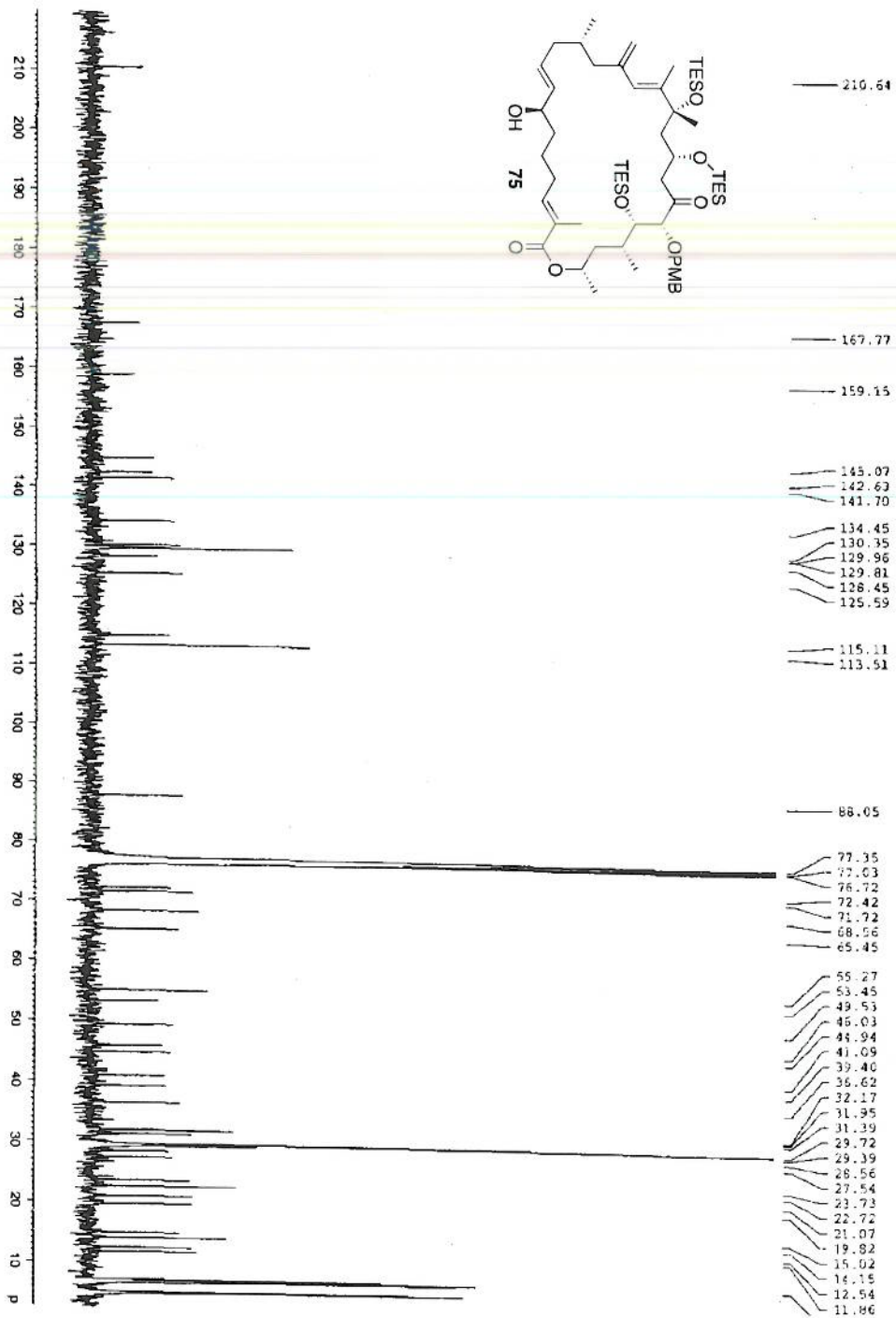


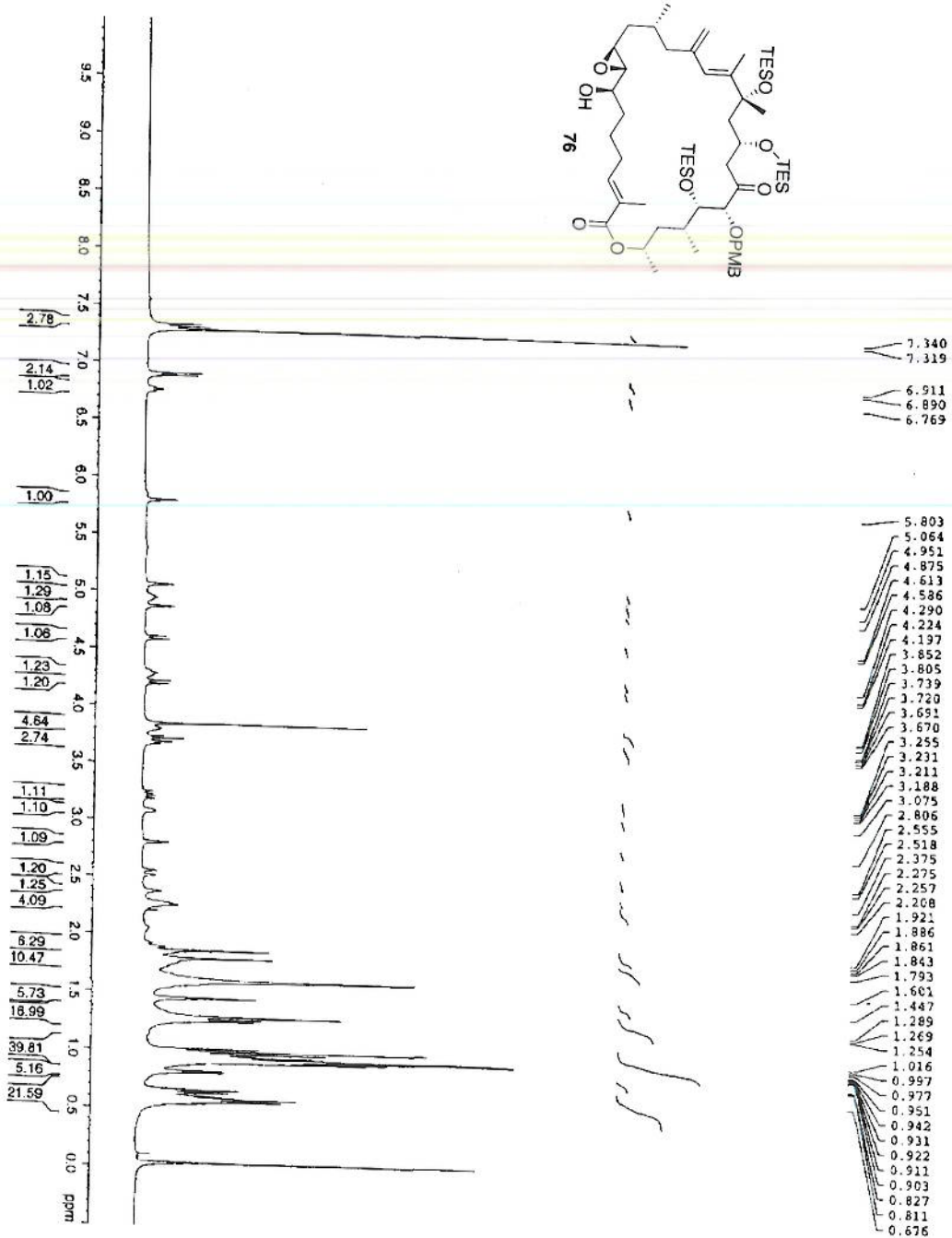


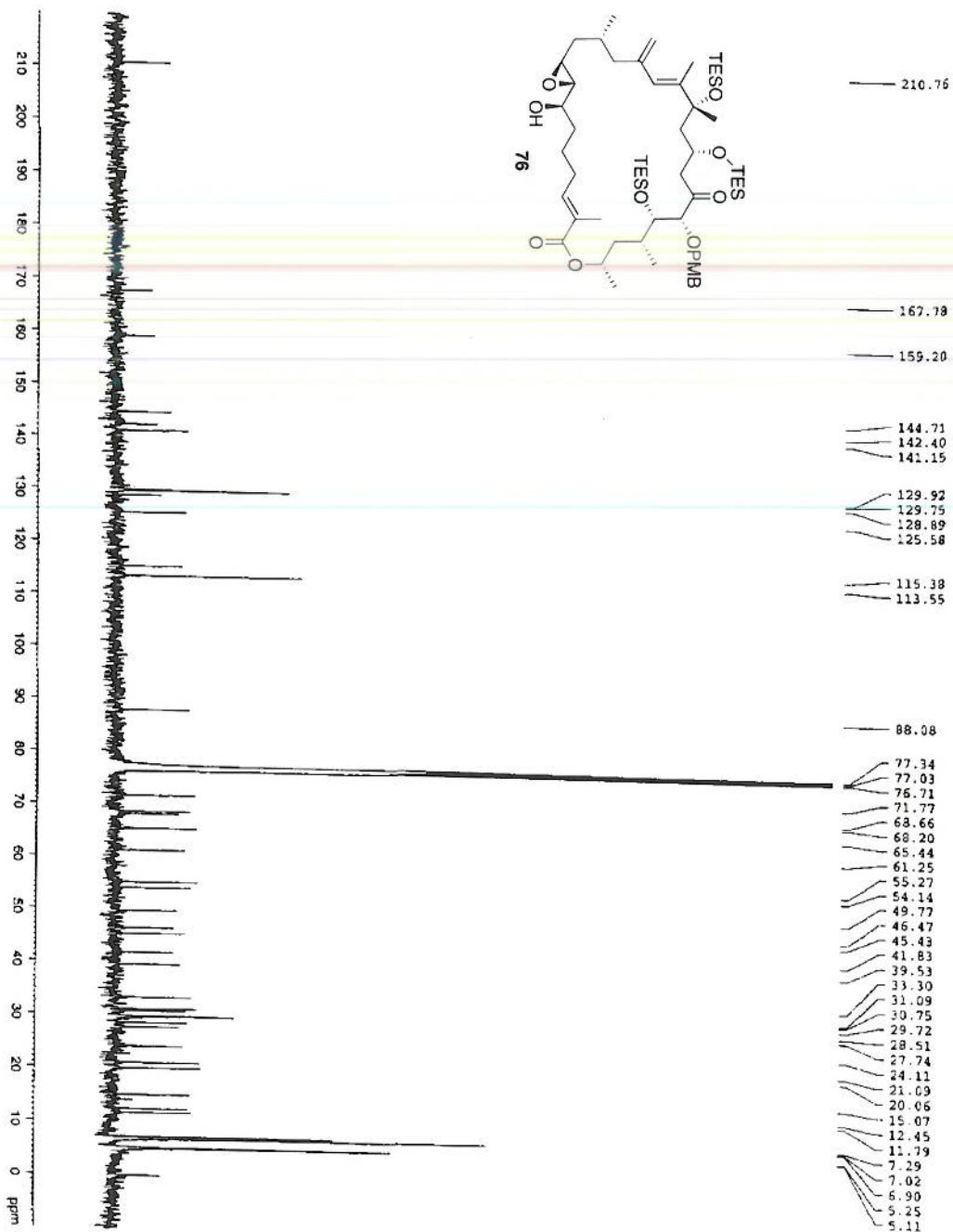


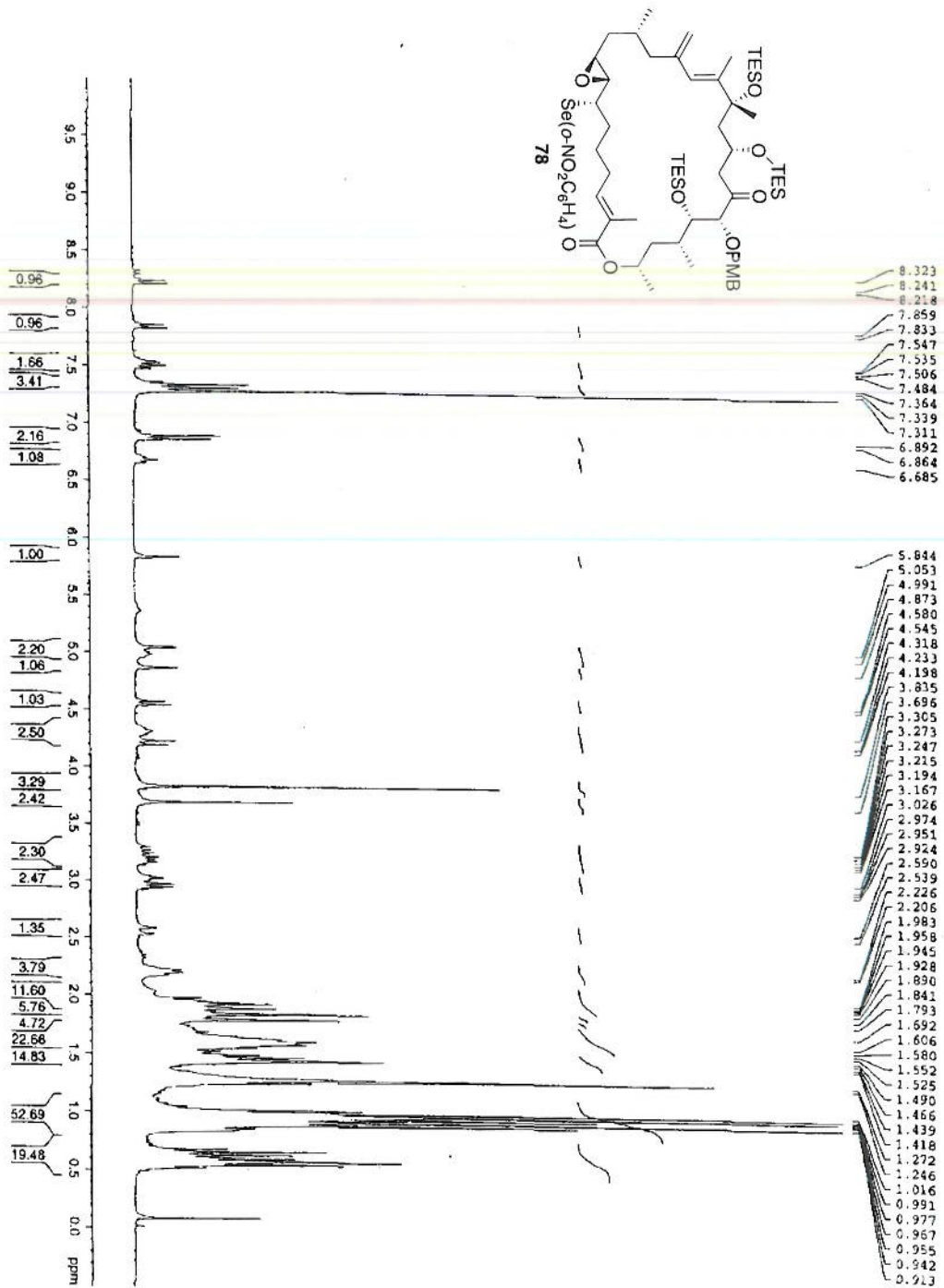


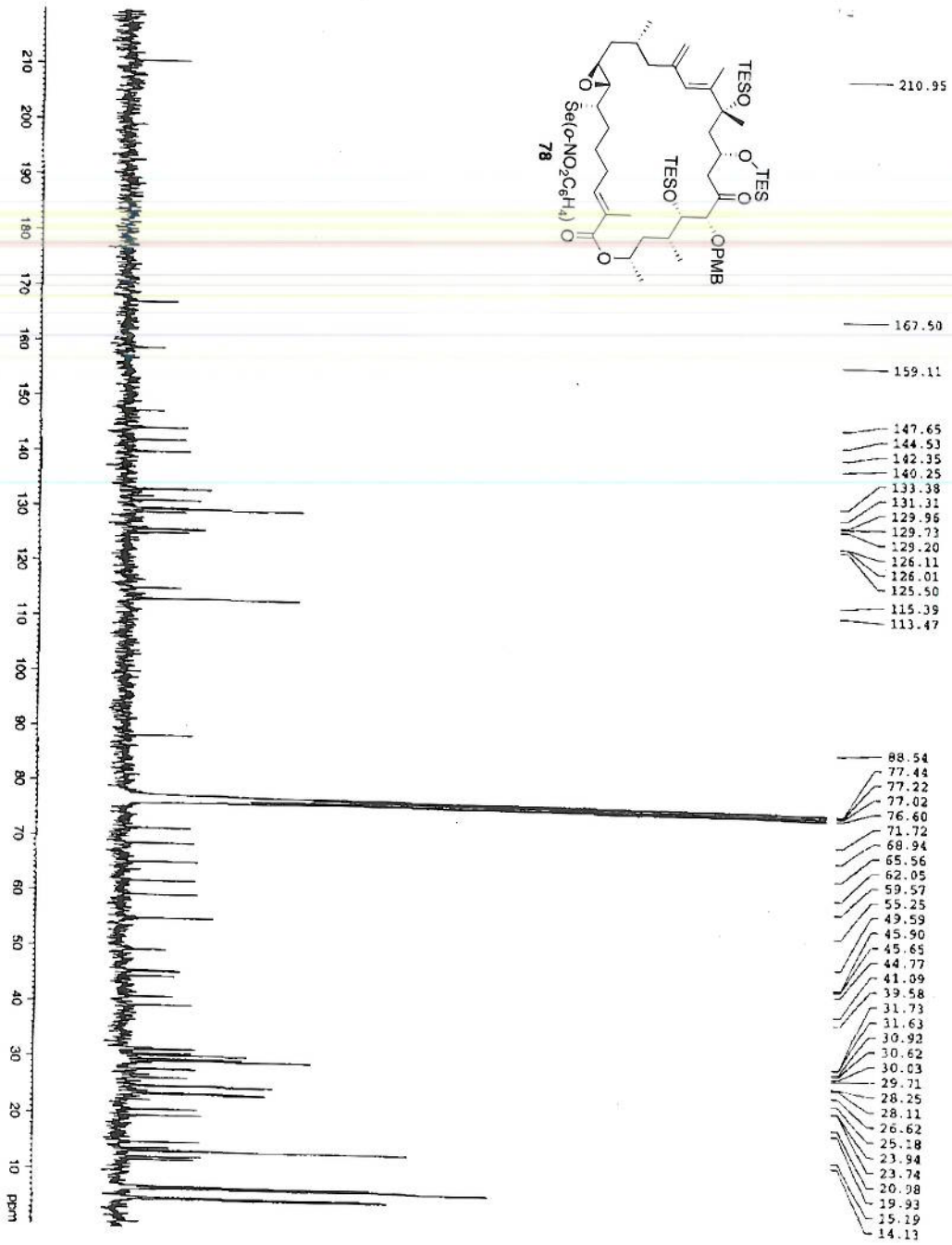


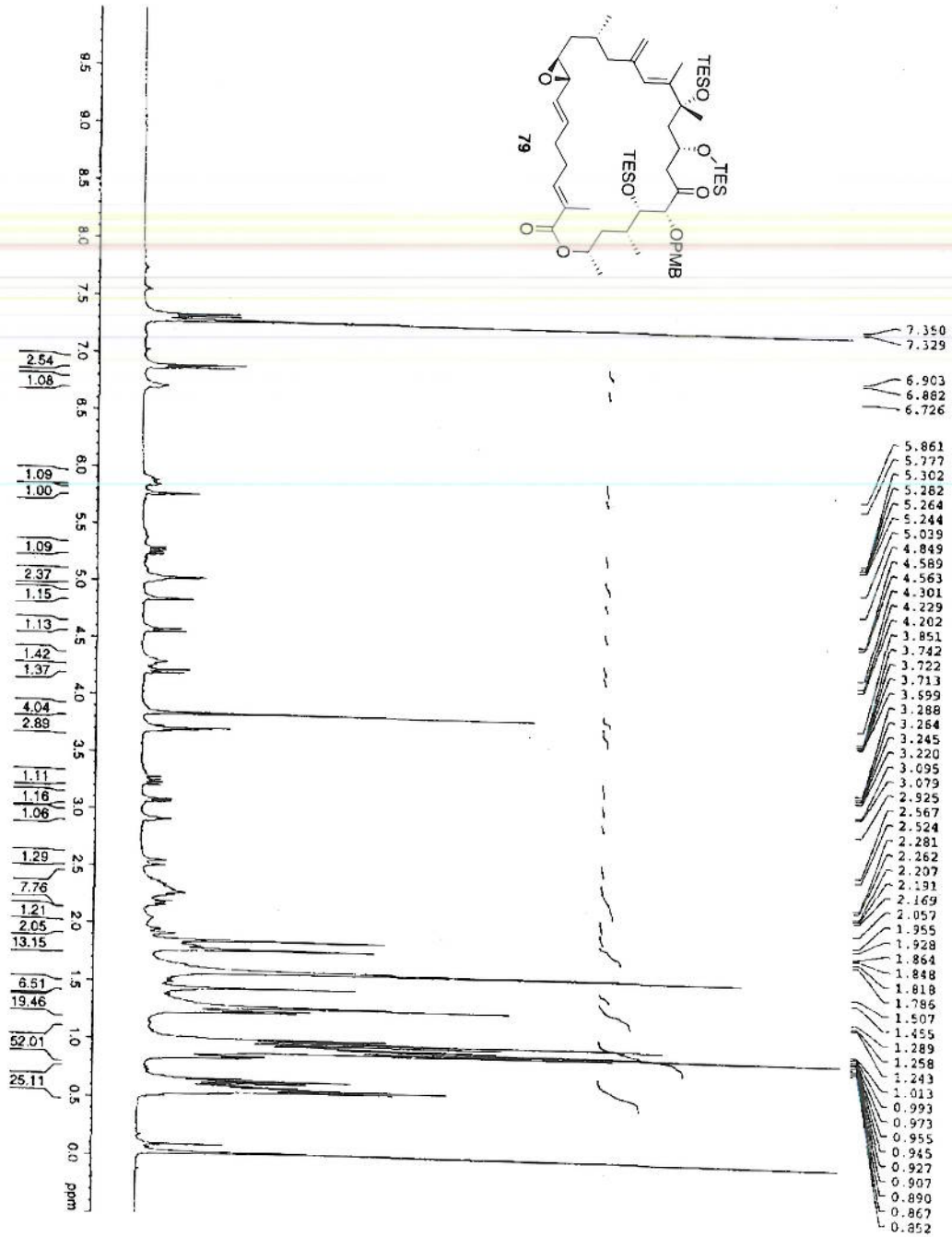


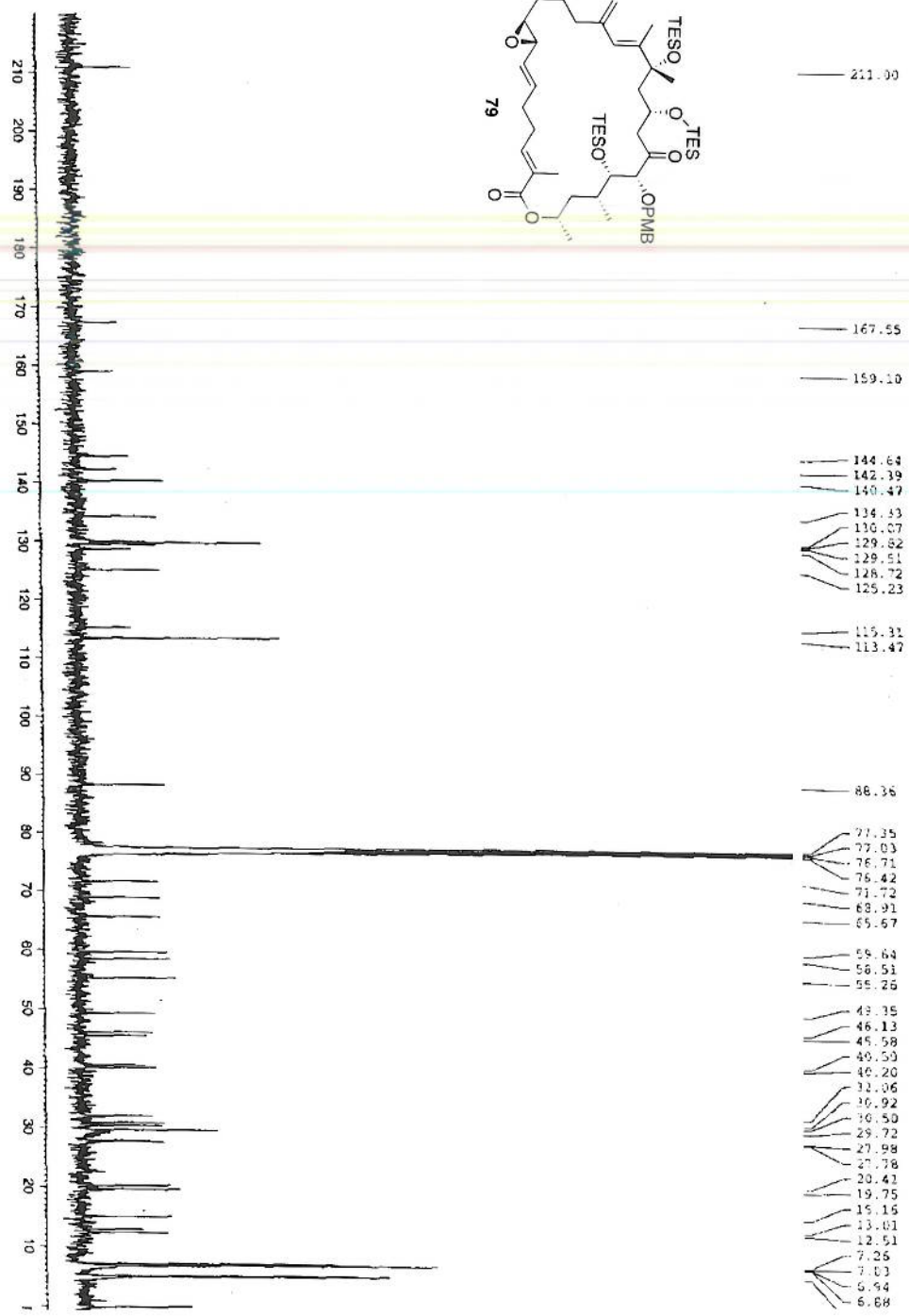


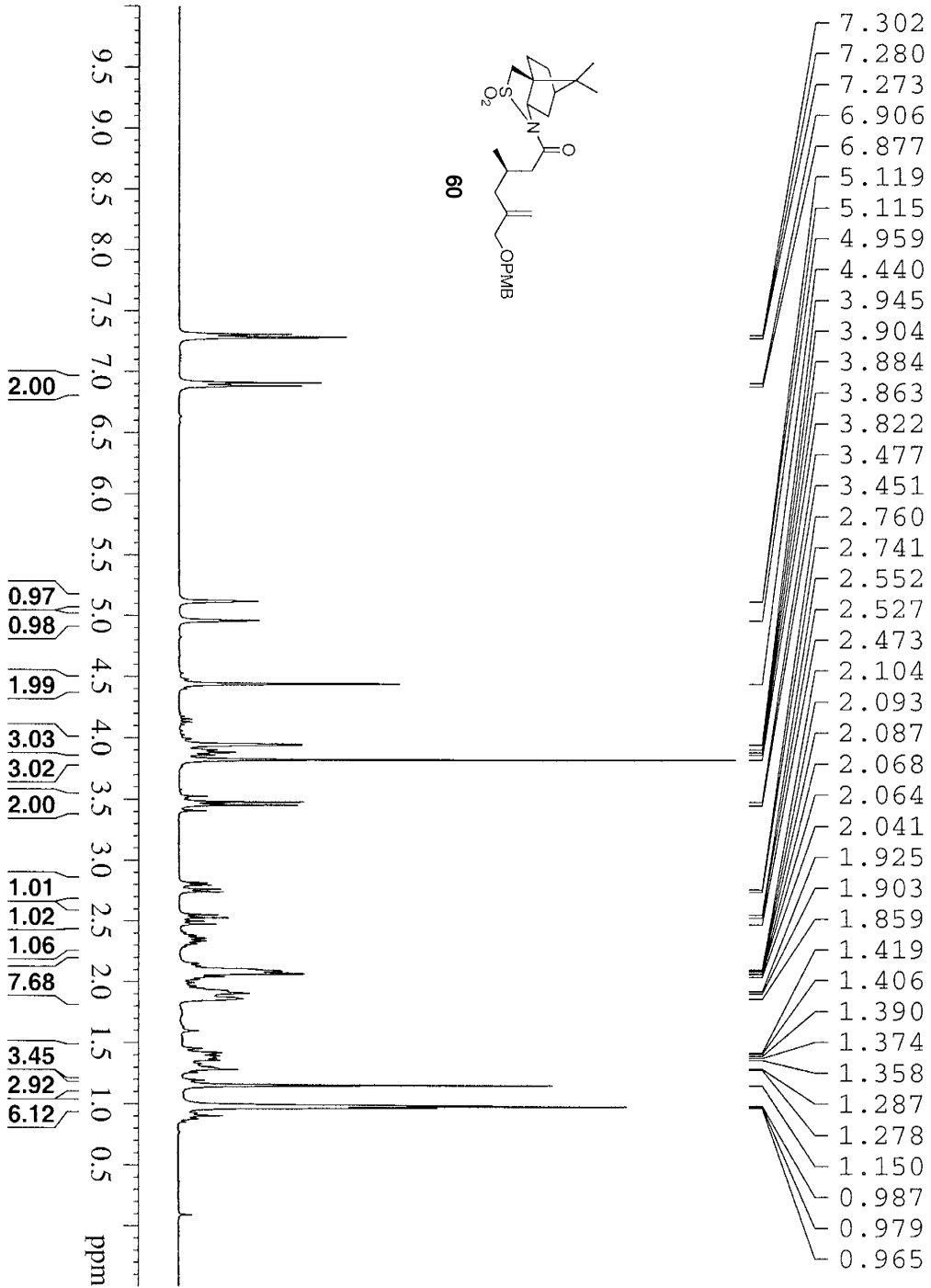
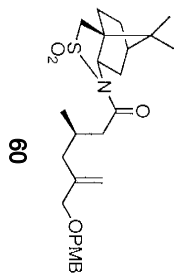






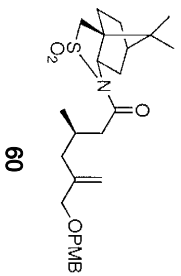
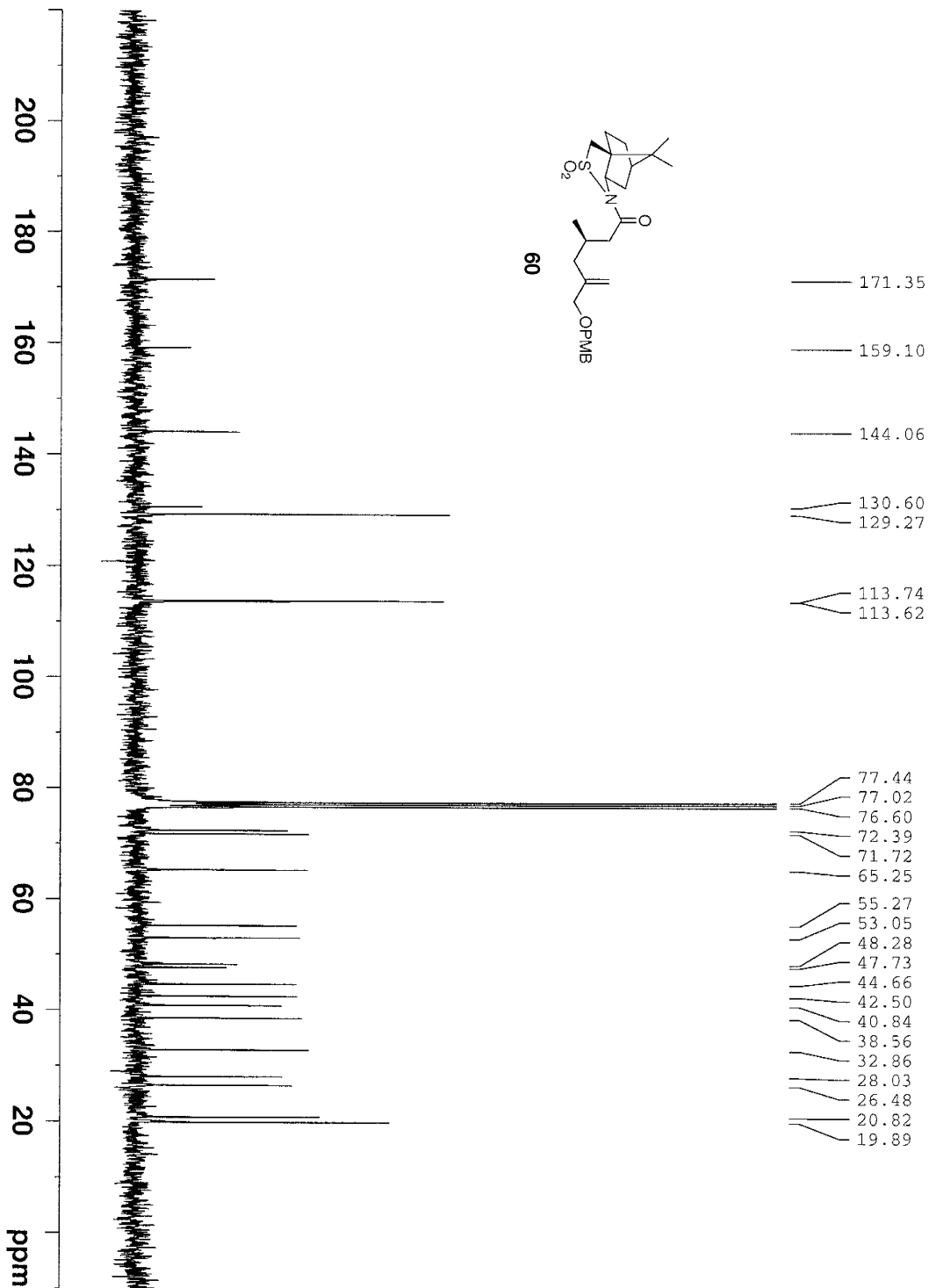






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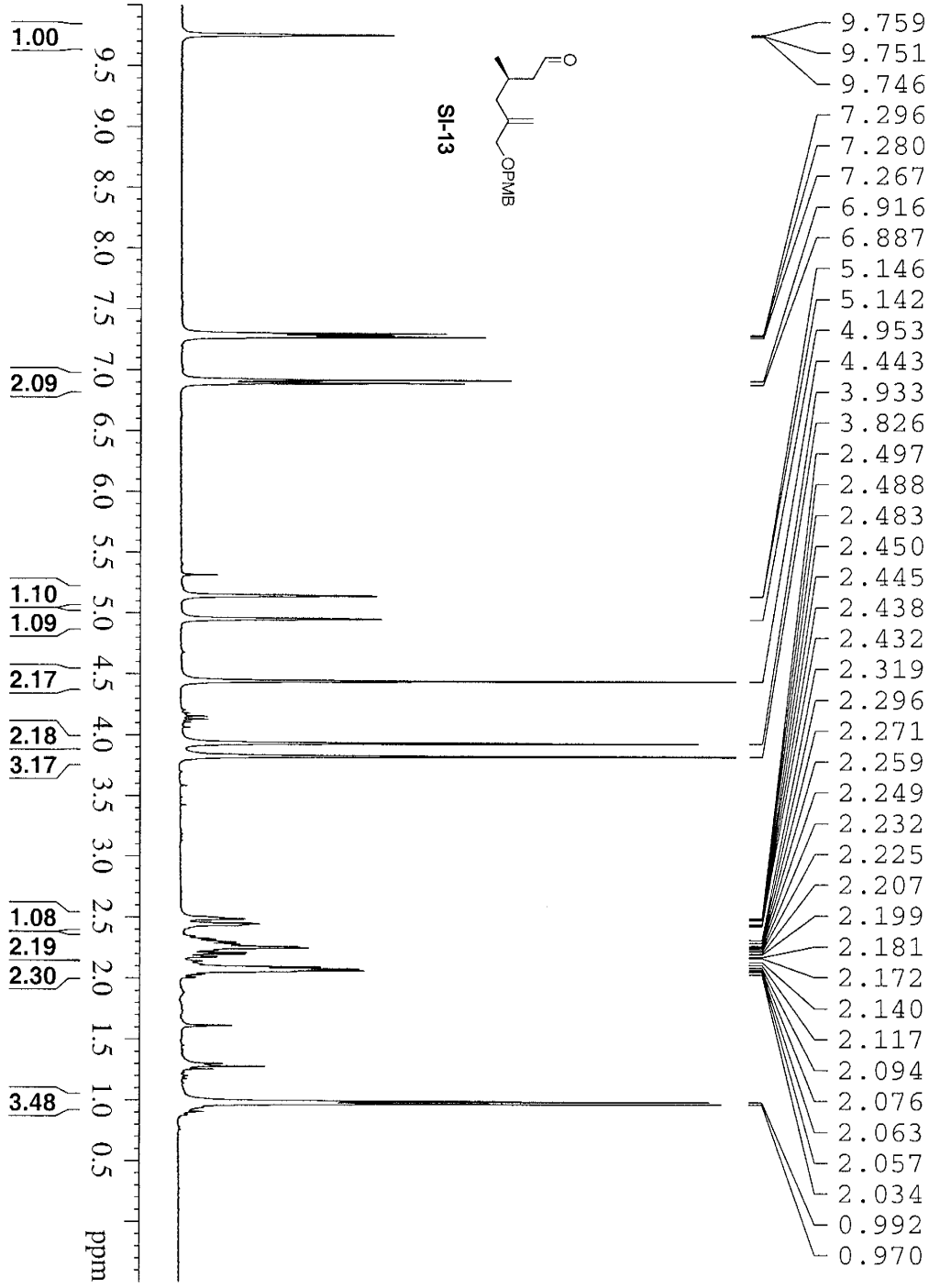
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AQ        104.460 usec
DE        5.00 usec
TE        298.2 K
D1        2.0000000 sec
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P1        9.00 usec
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SFO1      300.1321009 MHz
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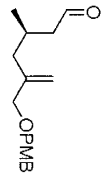
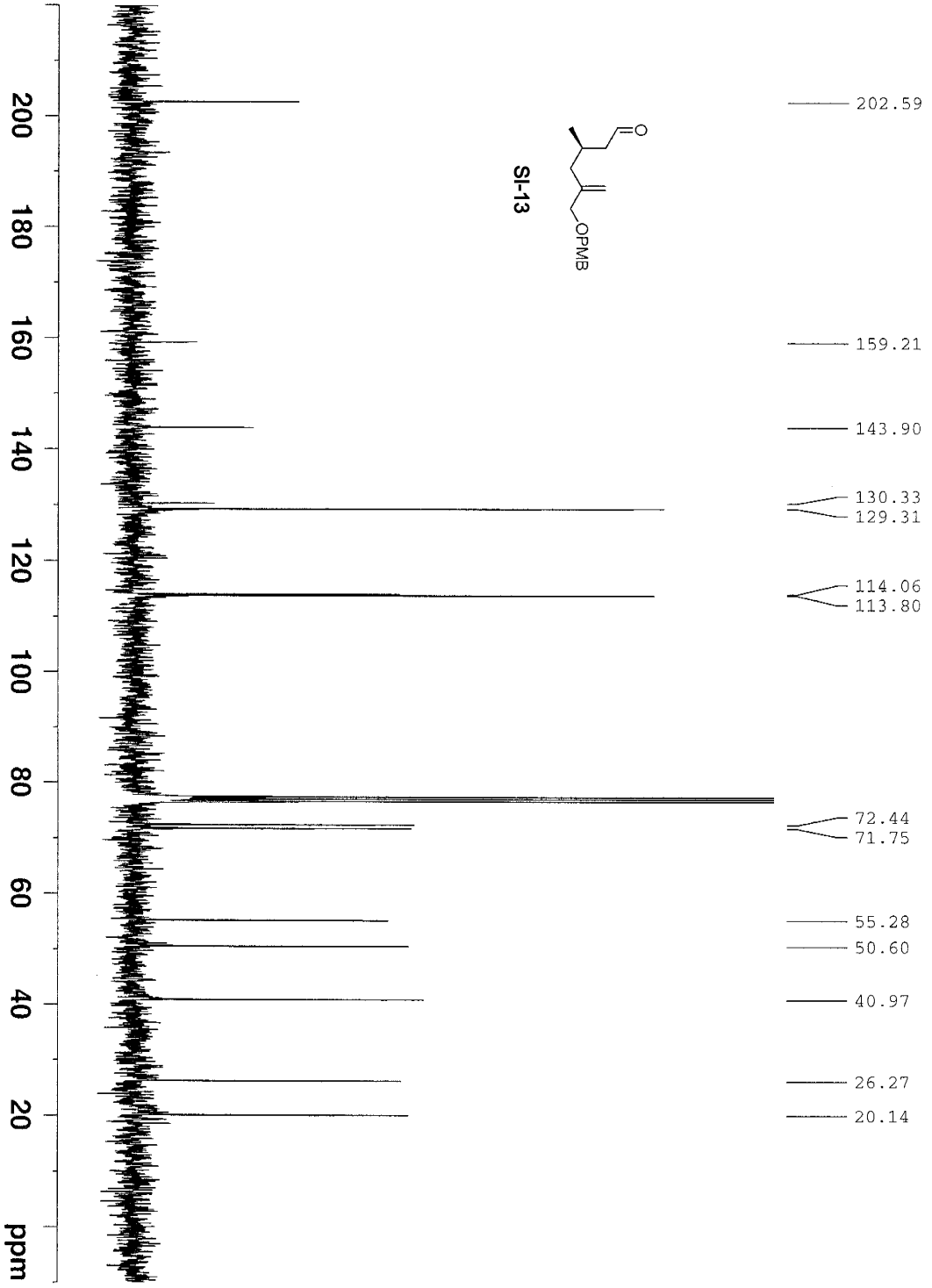
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AQ: 1.7400308 s
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DE: 26.350 us
TE: 6.00 us
T1: 2.98.2 K
d11: 0.03000000 s
DELTA: 0.05000000 s
TDO: 1
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NUC1: 13C
P1: 13.00 us
PL1: 0.00 dB
SFO1: 75.4760505 MHz
===== CHANNEL f2 =====
CPDPRG2: waltz16
NUC2: 1H
PCPD2: 86.00 us
PL2: -3.00 dB
PL12: 17.55 dB
PL13: 17.55 dB
SFO2: 300.1312005 MHz
F2 - Processing parameters
SI: 32768
SF: 75.4677490 MHz
WDW: EM
SSB: 0
LB: 3.00 Hz
GB: 0
PC: 1.40

```



Current Data Parameters
 NAME: SI-13 (200906)
 EXNO: 2
 PROCNO: 1
 C1: /h
 USER: liang

F2 - Acquisition Parameters
 Date_: 20060629
 Time: 23:26
 Name: SI-13
 P1: 10
 P2: 10
 P3: 10
 P4: 10
 P5: 10
 P6: 10
 P7: 10
 P8: 10
 P9: 10
 P10: 10
 P11: 10
 P12: 10
 P13: 10
 P14: 10
 P15: 10
 P16: 10
 P17: 10
 P18: 10
 P19: 10
 P20: 10
 P21: 10
 P22: 10
 P23: 10
 P24: 10
 P25: 10
 P26: 10
 P27: 10
 P28: 10
 P29: 10
 P30: 10
 P31: 10
 P32: 10
 P33: 10
 P34: 10
 P35: 10
 P36: 10
 P37: 10
 P38: 10
 P39: 10
 P40: 10
 P41: 10
 P42: 10
 P43: 10
 P44: 10
 P45: 10
 P46: 10
 P47: 10
 P48: 10
 P49: 10
 P50: 10
 P51: 10
 P52: 10
 P53: 10
 P54: 10
 P55: 10
 P56: 10
 P57: 10
 P58: 10
 P59: 10
 P60: 10
 P61: 10
 P62: 10
 P63: 10
 P64: 10
 P65: 10
 P66: 10
 P67: 10
 P68: 10
 P69: 10
 P70: 10
 P71: 10
 P72: 10
 P73: 10
 P74: 10
 P75: 10
 P76: 10
 P77: 10
 P78: 10
 P79: 10
 P80: 10
 P81: 10
 P82: 10
 P83: 10
 P84: 10
 P85: 10
 P86: 10
 P87: 10
 P88: 10
 P89: 10
 P90: 10
 P91: 10
 P92: 10
 P93: 10
 P94: 10
 P95: 10
 P96: 10
 P97: 10
 P98: 10
 P99: 10
 P100: 10



```

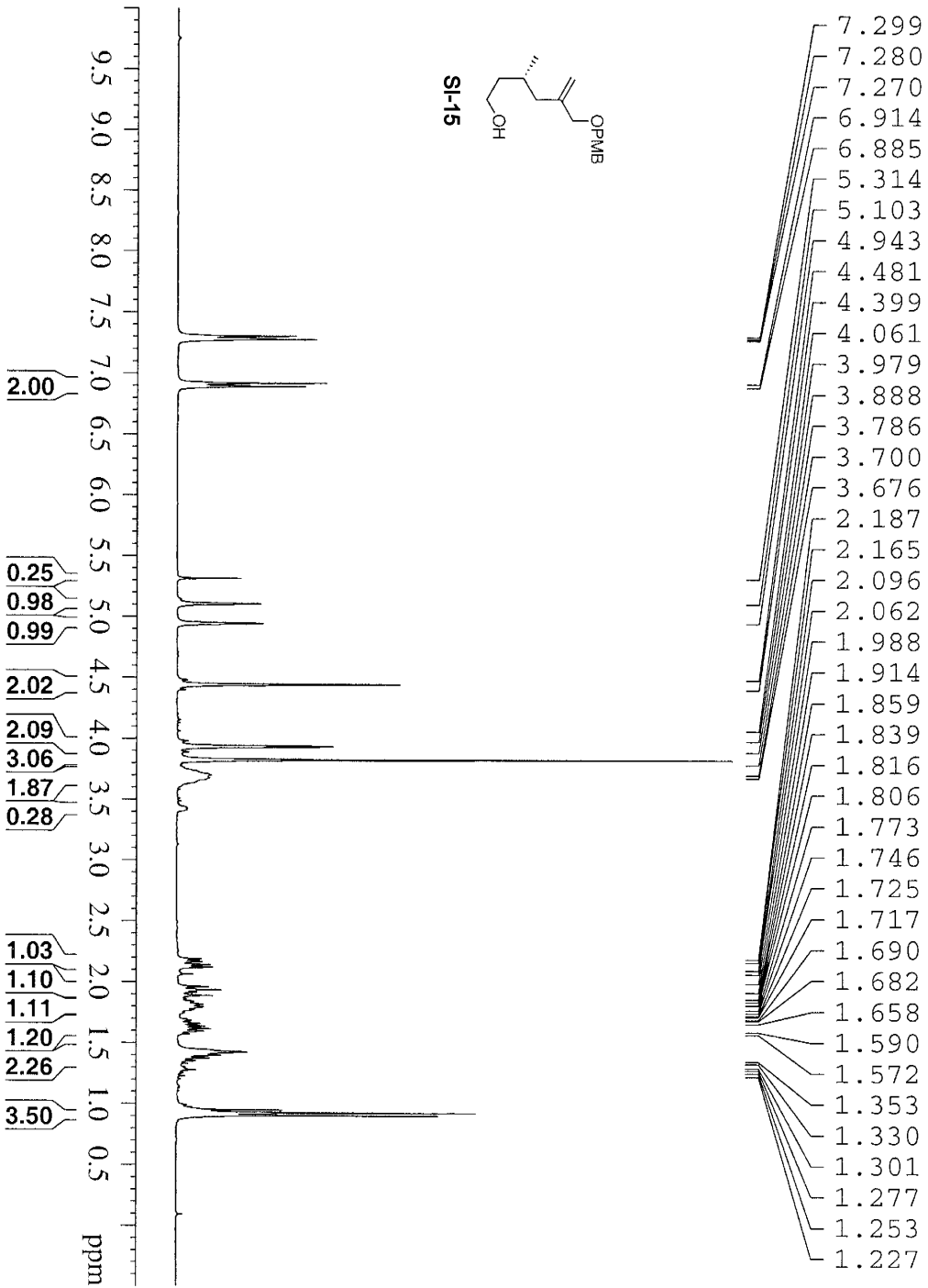
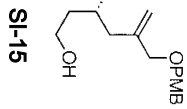
Current Data Parameters
NAME      ampdd1-IV-210629c
EXPNO     4
PROCNO    1
DU        /n
USBR      Liang

F2 - Acquisition Parameters
Date_     20060712
Time      9.56
INSTRUM   DPX300
PROBHD    5 mm QNP 1H/1
PULPROG   zgpg30
TD        65536
SOLVENT   CDCl3
NS        372
DS        4
SWH        18832.393 Hz
FIDRES     0.287360 Hz
AQ         1.7400308 sec
RG         9195.2
DW         28.550 usec
DE         6.00 usec
TE         298.2 K
D1         0.15000001 sec
d11        0.03000000 sec
DELTA     0.05000000 sec
TD0        1

===== CHANNEL F1 =====
NUC1       13C
P1         9.10 usec
PL1        -1.80 dB
SFO1       75.4760905 MHz

===== CHANNEL F2 =====
CDEPRG2    waltz16
NUC2       1H
PCPD2      80.00 usec
PL2        -3.00 dB
PL12       17.55 dB
PL13       17.55 dB
SFO2       300.1312005 MHz

F2 - Processing parameters
SI         32768
SF         75.4677490 MHz
WDW        EM
SSB        0
GB         3.00 Hz
CB         0
PC         1.40
  
```

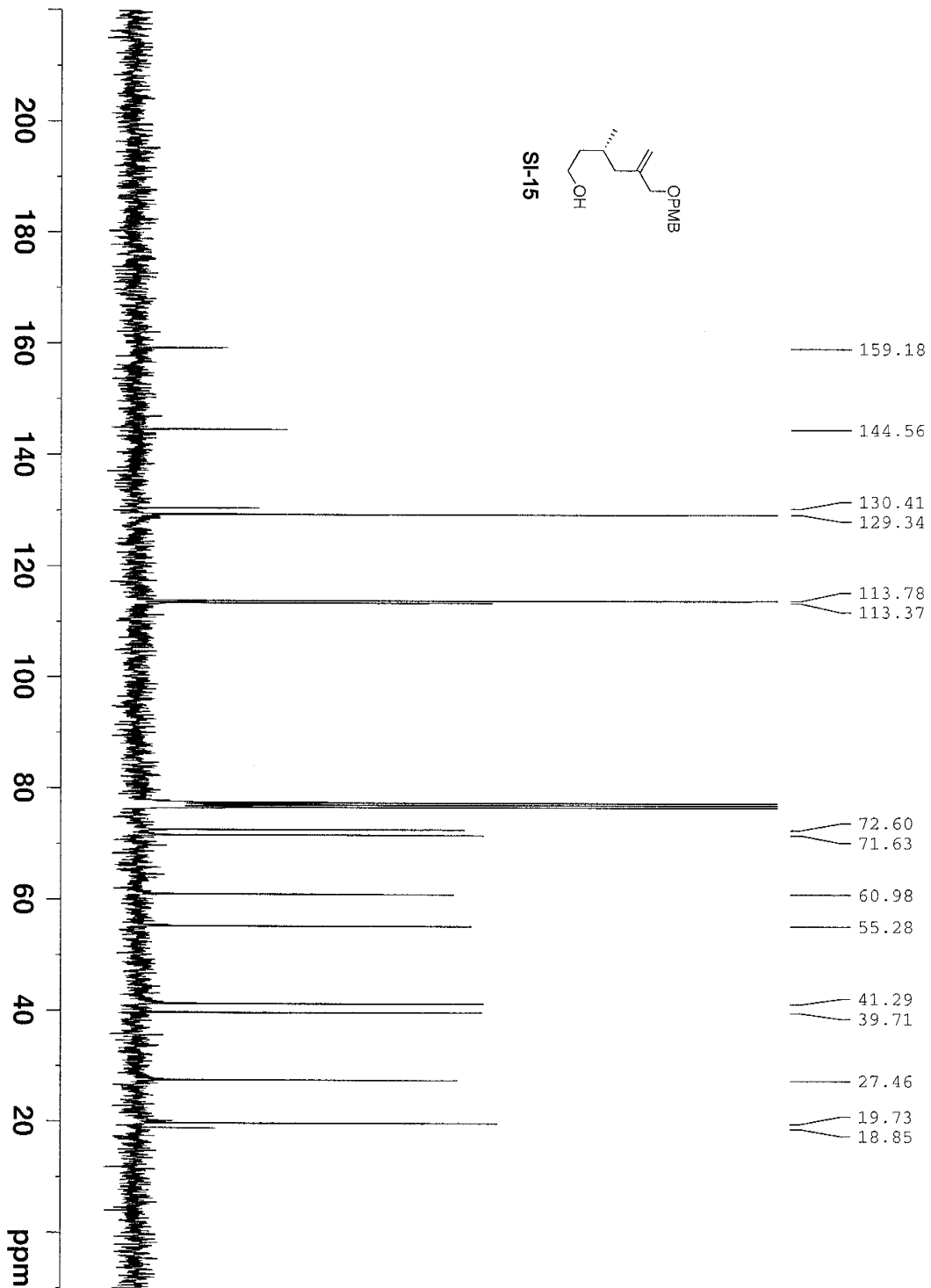



```

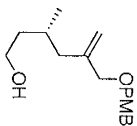
===== CHANNEL f1 =====
NUC1: 1H
P1: 3.00 usec
P2: 3.00 usec
SFO1: 300.1321609 MHz

F2 - Processing parameters
SI: 326.68
SF: 300.1330700 MHz
WDW: pw
SSB: 0
LB: 0.00 Hz
GB: 0
PC: 1.00

===== Acquisition Parameters =====
Date_: 20060630
Time: 14.07
INSTRUM: DPX300
PROBHD: 5 mm QNP
PULPROG: zgpg30
TD: 32768
SOLVENT: CDCl3
NS: 12
DS: 2
SWH: 4789.272 Hz
FIDRES: 0.146157 Hz
AQ: 3.4210291 sec
RG: 655.36
AQ1: 194.4600 usec
DE: 5.00 usec
TE: 298.2 K
T1: 2.00000000 sec
T10: 1
  
```



SI-15



```

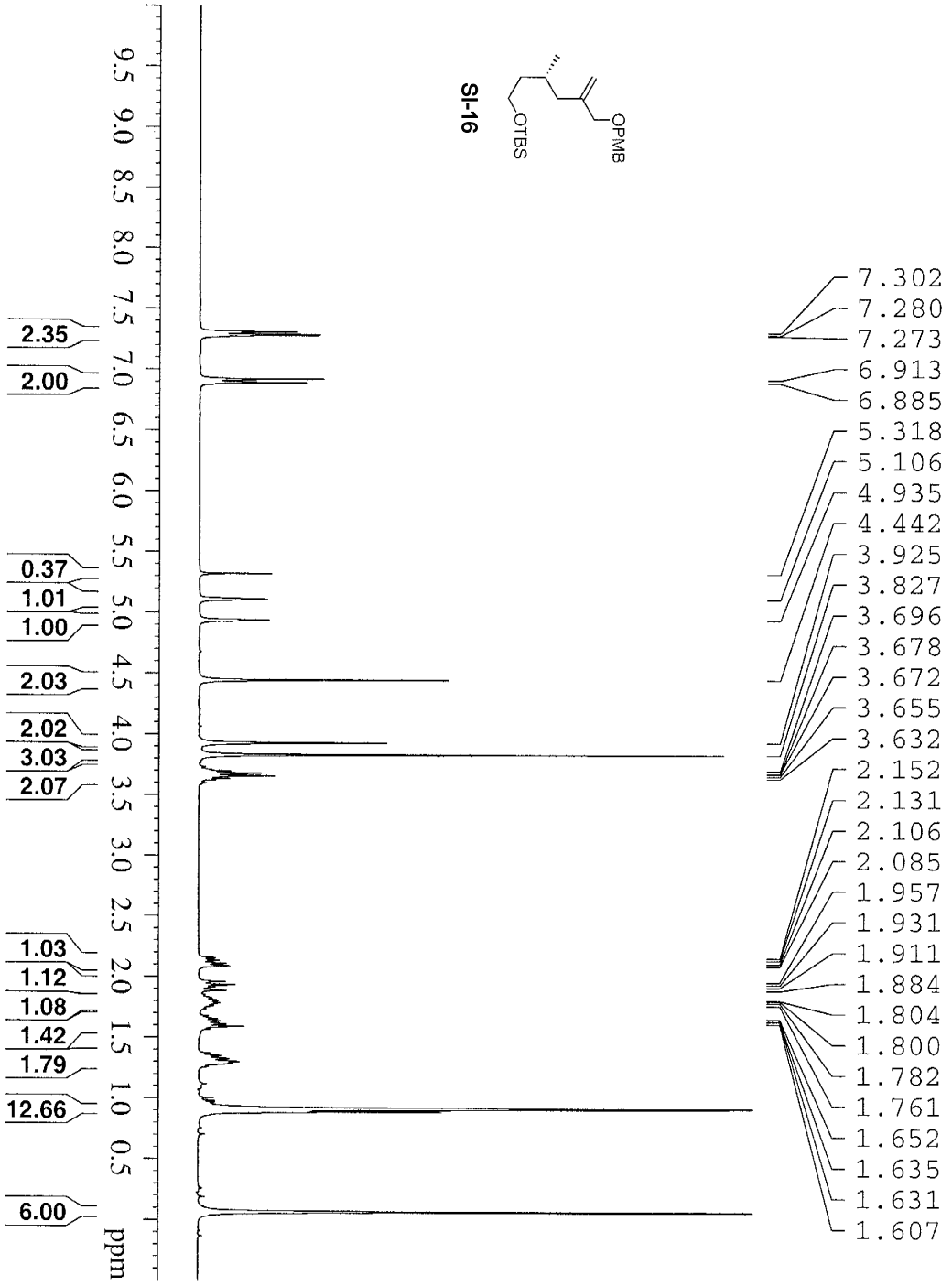
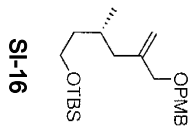
Current Data Parameters
NAME      ampdd1-iv-310530
EXPNO     1
PROCNO    1
F2        /h
USER      Liang

F2 - Acquisition Parameters
Date_     20060630
Time      23.00
INSTRUM   DFX100
PROBHD    zppr30
PULPROG   zgpg30
TD         65536
SOLVENT   CDCl3
NS         602
DS         4
SWH        13832.393 Hz
FIDRES     0.287360 Hz
AQ         1.7409308 sec
RG         11585.2
DE         26.550 uS
TE         6.00 uS
TE        298.2 K
D1         0.15000001 sec
d1.1       0.03000000 sec
DELTA     0.05000000 sec
TD0        1

===== CHANNEL f1 =====
NUC1       13C
P1         130
RG1        31.80 uS
RG1        3.00 uS
SFO1       75.4760935 MHz

===== CHANNEL f2 =====
CPDPRG2   waltz16
NUC2       1H
PCPD2      80.00 uS
PL2        -3.00 dB
PL12       17.55 dB
PL13       17.55 dB
SFO2       390.1312005 MHz

F2 - Processing parameters
SI         32768
SF         75.4677492 MHz
WDW        EM
SSS        0
LB         3.00 Hz
GB         0
PC         1.40
  
```

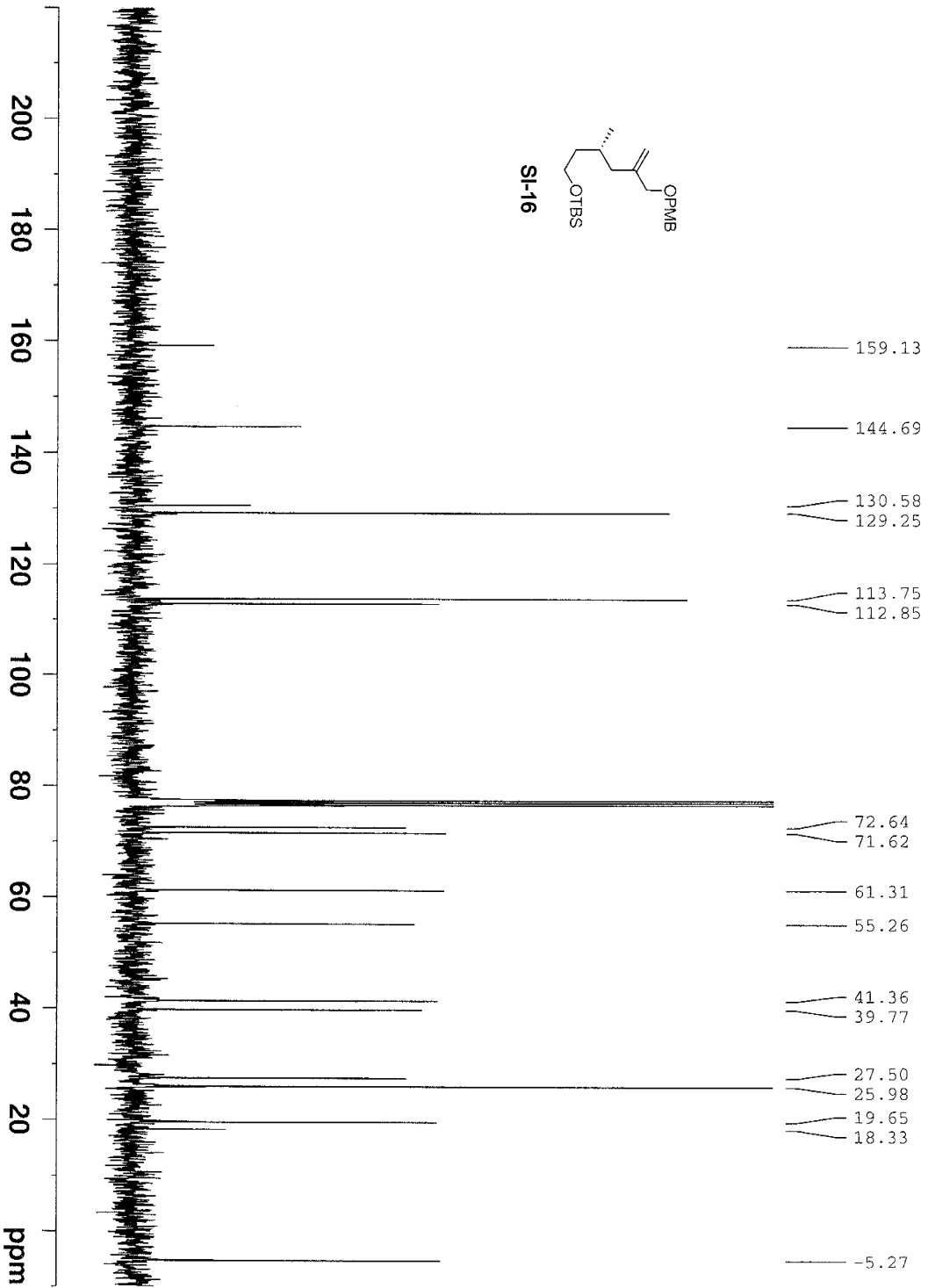


Current Data Parameters
 NAME ampdls1-iv-4(063006)
 EXNO 2
 PROCMO 1
 SI 2
 USER Lhsjg

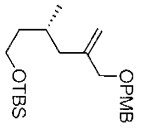
F2 - Acquisition Parameters
 Date 20060630
 Time 22:42
 Name D242
 PROCMO 5 mm QNP 1H/1
 PULPROG zg30
 TD 32768
 NQ 1
 SOLVENT CDCl3
 DS 2
 SFRS 4789.272 Hz
 FIDRES 0.146157 Hz
 AQ 0.020271 sec
 RQ 0.020271 sec
 DW 104.460 usec
 DE 6.00 usec
 TE 298.2 K
 TD0 2.0000000 sec

***** CHANNEL f1 *****
 NUCL1 1H
 P1 9.00 usec
 PL1 -3.00 dB
 SFO1 300.1321009 MHz

F2 - Processing parameters
 SI 2
 SF 300.1300000 MHz
 WBW no
 SSB 0
 GB 0
 PC 1.00



SI-16



```

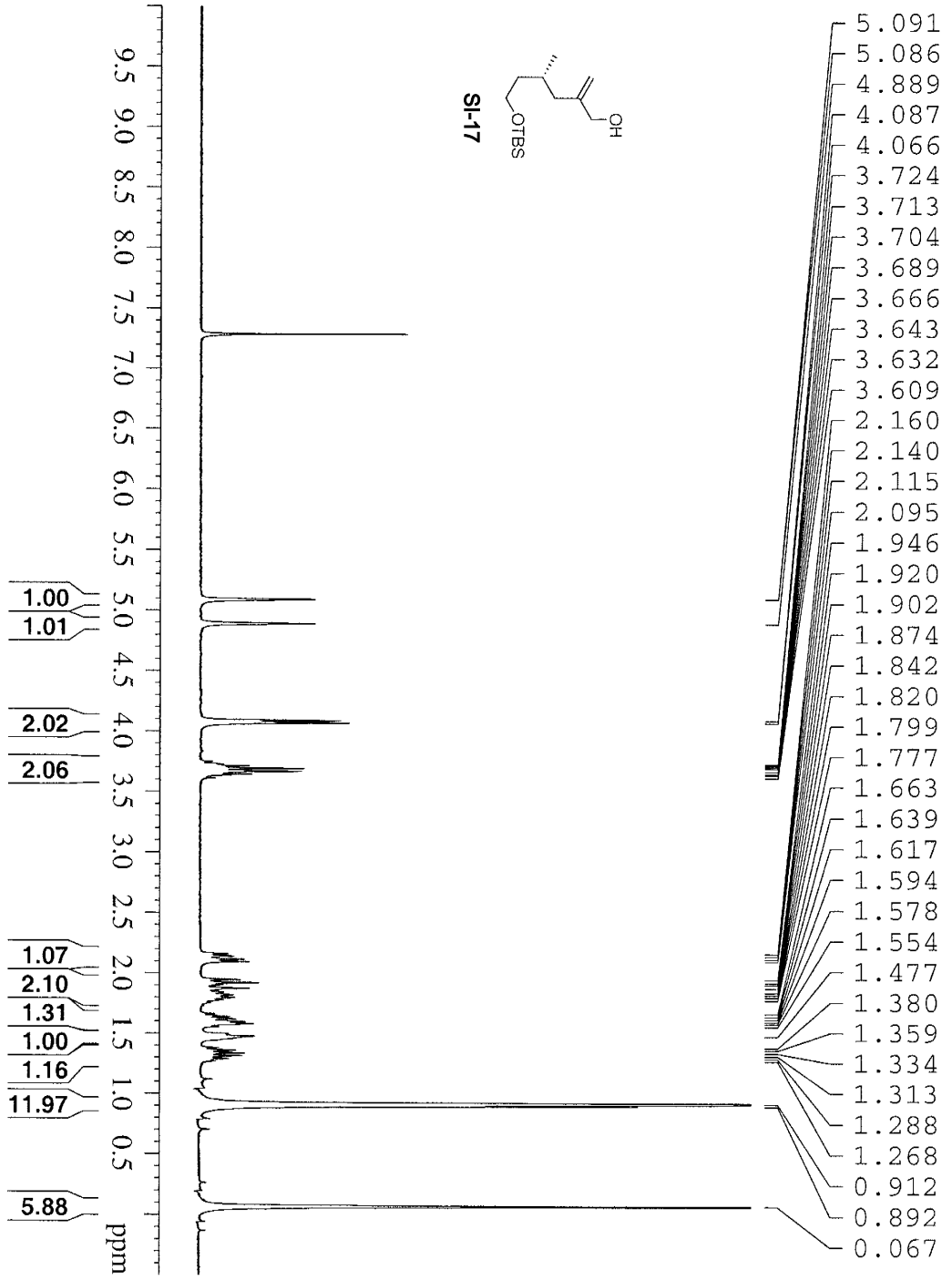
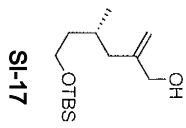
Current Data Parameters
NAME ampdd1-IV-410630C
EXPNO 1
PROCNO 1
DT /n
USER L:ang

F2 - Acquisition Parameters
Date_ 20060630
Time 22.31
INSTRUM 5 nm QNP
PROBHD DEX300
PULPROG zgpg30
TD 299330
SOLVENT CDCl3
NS 528
DS 4
SWH 13832.393 Hz
FIDRES 0.287360 Hz
AQ 1.7400308 sec
RG 9195.2
DE 26.556 us
TE 298.2 K
D1 0.15000001 sec
d11 0.03000000 sec
DELTA 0.05000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 130
PCPD2 8.80 us
P2 1.7400308 sec
SFO1 75.4760505 MHz

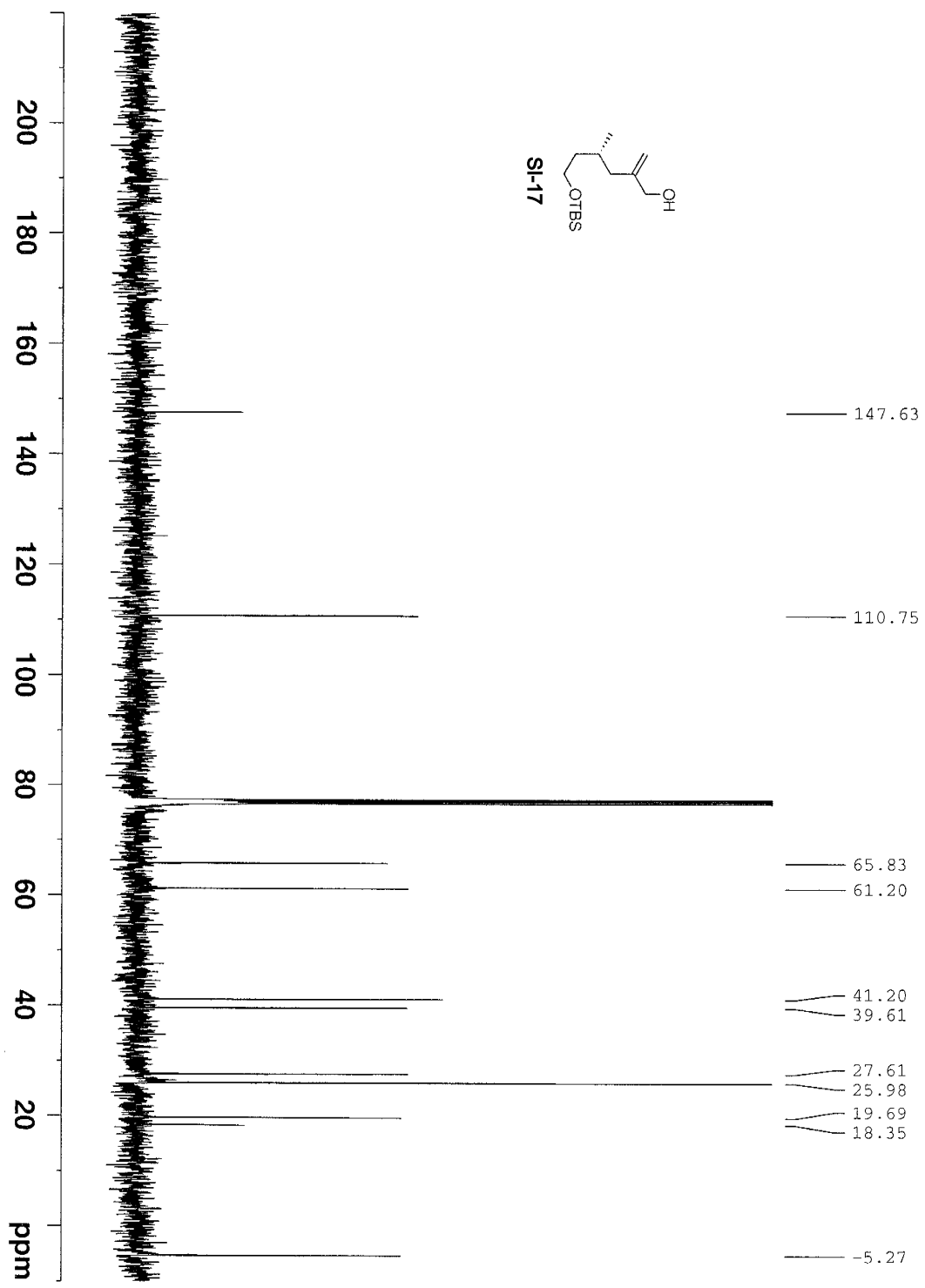
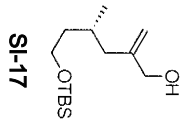
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 us
PL2 -3.00 dB
PL12 17.55 dB
PL13 17.55 dB
SFO2 300.1312005 MHz

F2 - Processing parameters:
SI 32768
SF 75.4677490 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.40
  
```



```

Current Data Parameters
Name: SI-17
EXPNO: 1
PROCNO: 1
F2 - Acquisition Parameters
Date_ : 20060801
Time: 14.20
INSTRUM: DSI
PROBHD: 5 mm QNP
PULPROG: zg30
TD: 32768
SOLVENT: CDCl3
NS: 2
DS: 2
SWH: 4789.272 Hz
F1FRES: 0.146157 Hz
AQ: 3.4210291 sec
RG: 104.400 usec
DE: 6.00 usec
TE: 298.2 K
D1: 2.00000000 sec
TDO: 1
===== CHANNEL f1 =====
NUC1: 1H
P1: 9.00 usec
PL1: -3.00 dB
SFO1: 300.1321009 MHz
F2 - Processing parameters
SI: 32768
SF: 300.1321009 MHz
WDW: no
SSB: 0
LB: 0.00 Hz
GB: 0
PC: 1.00
  
```



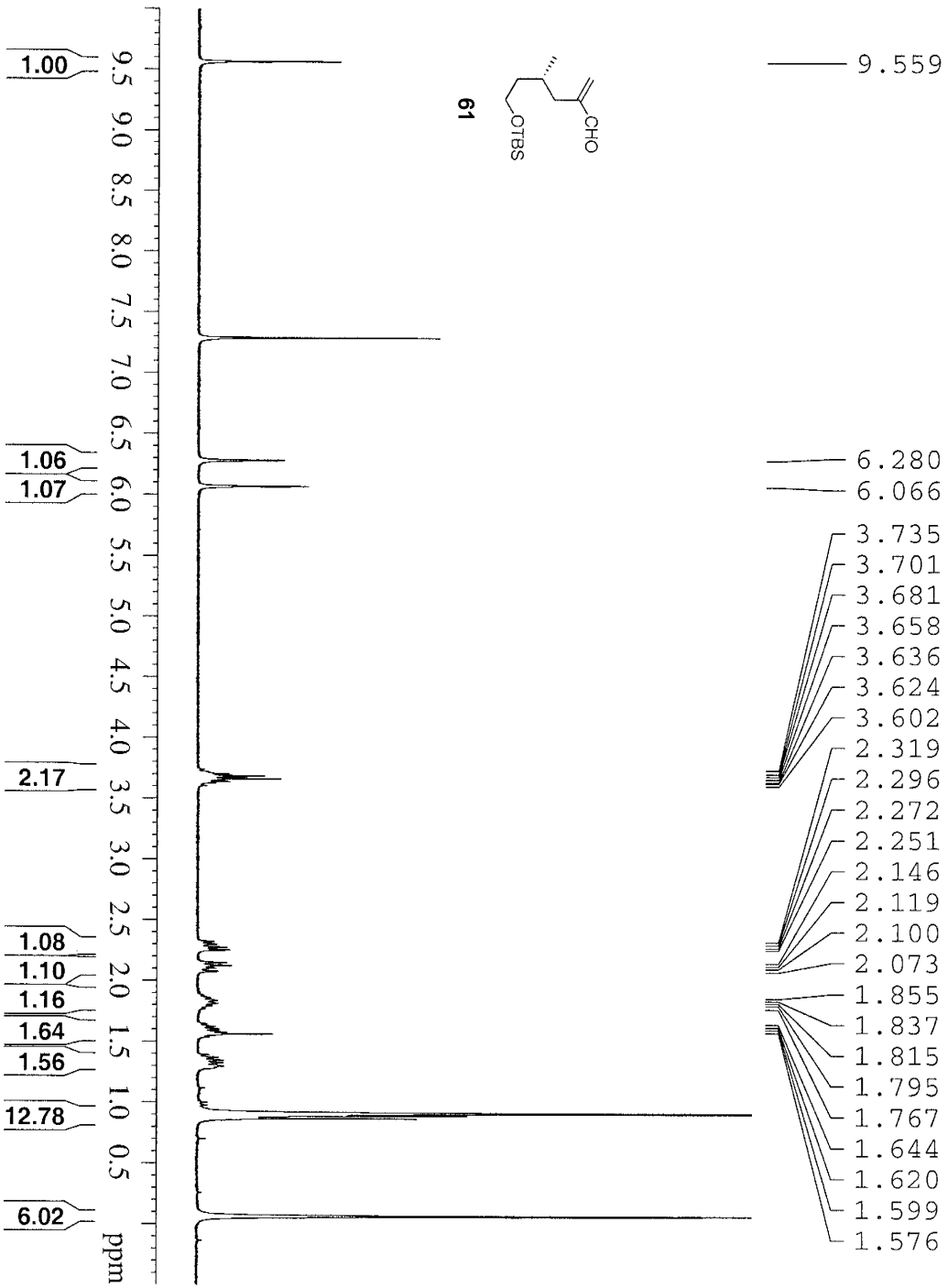
```

Current Data Parameters
NAME      ampdd1-1v-10301k
EXPNO    3
PROCNO   1
F2 - Acquisition Parameters
Date_    20060801
Time     15.39
INSTRUM  DFX400
PROBHD   5 mm BBO BB-1H
PULPROG  zgpg30
TD        65536
SOLVENT  CDCl3
NS        1743
DS        4
SWH       25325.629 Hz
F2 - Processing parameters
SI        32768
SF        100.5825950 MHz
WDW       EM
SSB       0
LB        3.00 Hz
GB        0
PC        1.40

===== CHANNEL f1 =====
NUC1      13C
P1        7.80 us
PL1       -3.00 dB
SFO1      100.5996591 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2      13C
P2        135.00 us
PL2       17.40 dB
SFO2      400.0116000 MHz

===== CHANNEL f3 =====
CPDPRG3  waltz16
NUC3      13C
P3        135.00 us
PL3       17.40 dB
SFO3      400.0116000 MHz
  
```

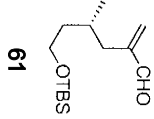
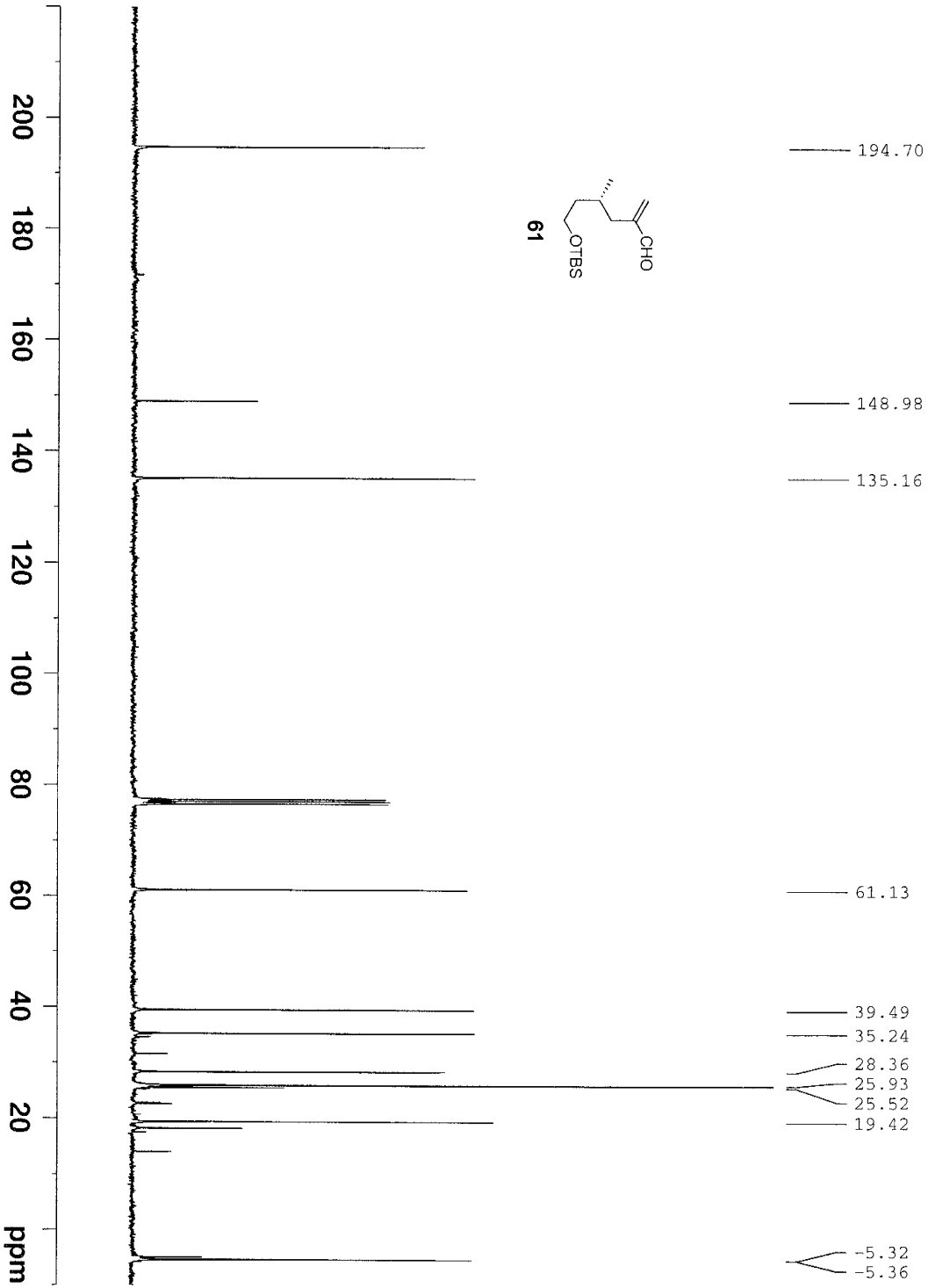


Current Data Parameters
 Name: mp302-17-8 (612061)
 EXNO: 1
 PROCK: 1
 B1: 1
 B2: /n
 USER: Liang

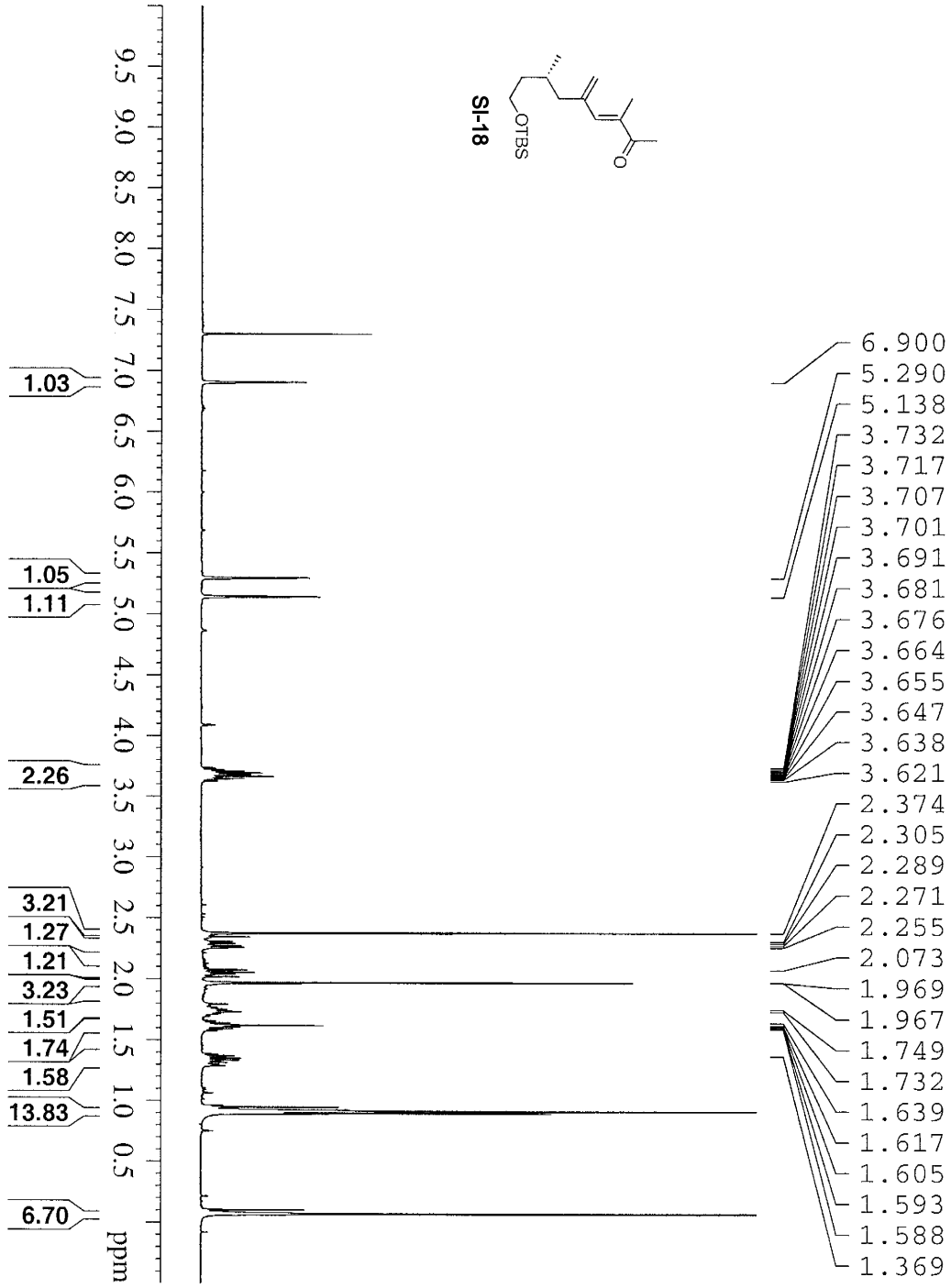
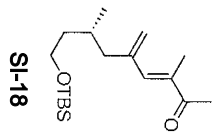
F2 - Acquisition Parameters
 Date_: 20060802
 Time: 18.25
 Run#: 1
 F1: 400
 F2: 100
 F3: 400
 F4: 400
 F5: 400
 F6: 400
 F7: 400
 F8: 400
 F9: 400
 F10: 400
 PULPROG: zgpg30
 TD: 32768
 SOLVENT: CDCl3
 NS: 1
 DS: 4
 SWH: 4789.272 Hz
 FIDRES: 0.146157 Hz
 AQ: 3.4240291 sec
 NQ: 1024
 DW: 104.400 usec
 DE: 6.00 usec
 TE: 298.2 K
 D1: 2.00000000 sec
 TDO: 1

===== CHANNEL F1 =====
 NUC1: 1H
 P1: 9.00 usec
 PL1: -3.00 dB
 SFO: 300.1321009 MHz

F2 - Processing parameters
 SI: 32768
 SF: 300.1300000 MHz
 WID: no
 SSB: 0
 CB: 0.00 Hz
 PC: 1.00



Current Data Parameters
 NAME: 4q04b1-1V-DMP-topqput107
 PROCNO: 1
 F2: Acquisition Parameters
 Date_: 20060702
 TIME: 09:10
 INSTRUM: DSI300
 PULPROG: zgpg30
 PROCNO: 18/1
 F2: 125.761 MHz
 C1P15: 125.761 MHz
 SOLVENT: CDCl3
 NS: 1850
 DS: 4
 SWH: 18832.393 Hz
 FIDRES: 0.287160 Hz
 AQ: 1.7400208 sec
 RG: 327.500
 DQ: 26.550 usec
 DE: 6.00 usec
 TE: 298.2 K
 T1: 0.15000000 sec
 T1RHO: 0.05000000 sec
 DELTA: 0.05000000 sec
 TDD: 1
 ===== CHANNEL f1 =====
 NUC1: 13C 13C
 P1: 9.00 usec
 PL1: -1.00 dB
 SFO: 75.476505 MHz
 ===== CHANNEL f2 =====
 CEPRGR2: CHANRR, f2
 NUC2: 1H 1H
 P2: 80.18 usec
 PL2: 19.00 dB
 F2: 400.146400 MHz
 E2: 17.55 dB
 F2: 300.131005 MHz
 SFO2: 400.146400 MHz
 F2 - Processing parameters
 SI: 32768
 SF: 75.4677486 MHz
 WDW: EM
 SSB: 0 Hz
 GB: 3.00 Hz
 PC: 1.40

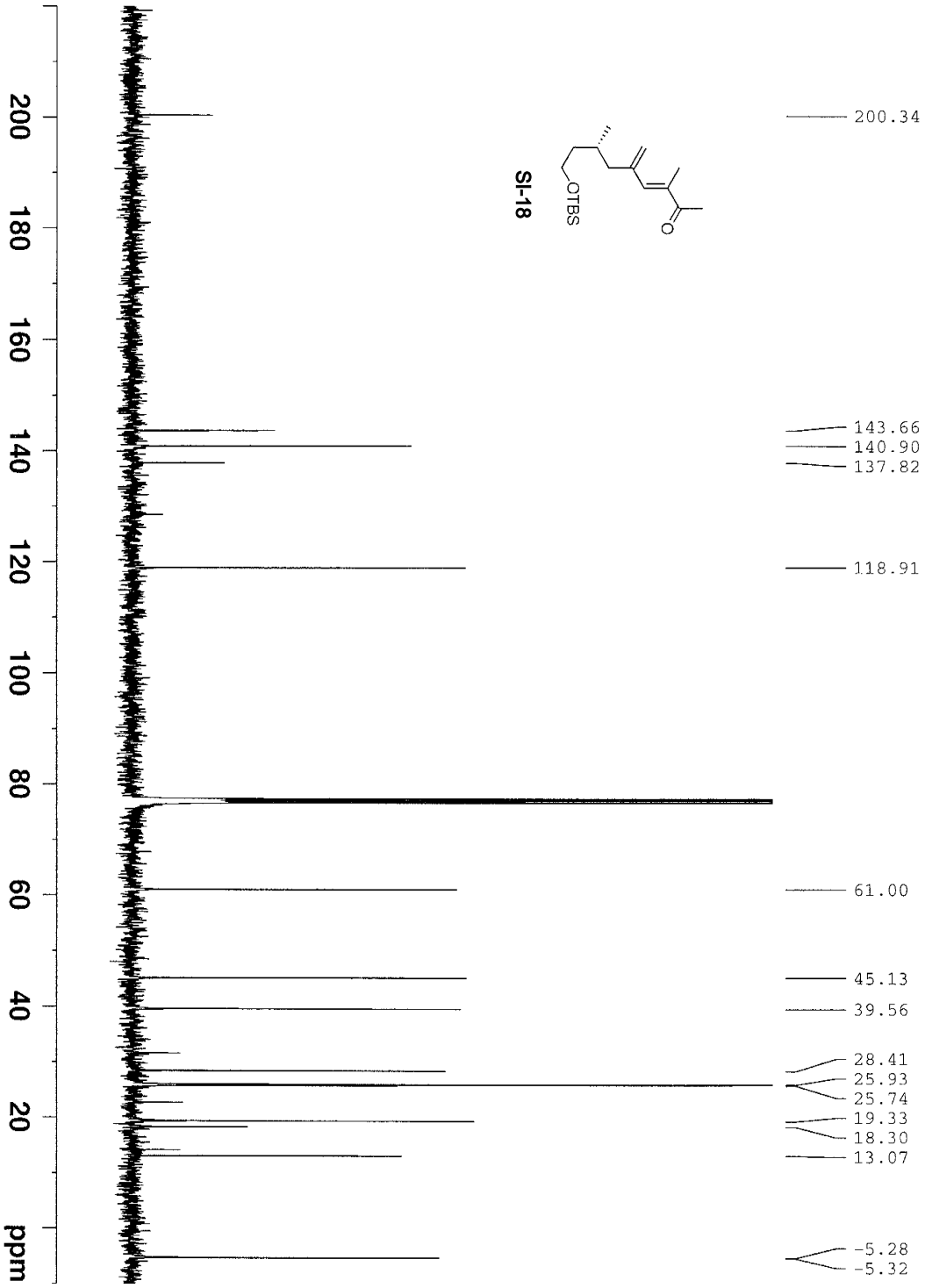


Chemical Shift (ppm)
6.900
5.290
5.138
3.732
3.717
3.707
3.701
3.691
3.681
3.676
3.664
3.655
3.647
3.638
3.621
2.374
2.305
2.289
2.271
2.255
2.073
1.969
1.967
1.749
1.732
1.639
1.617
1.605
1.593
1.588
1.369

Current Data Parameters
 Name: amp03-14-1 (091061)
 EXNO: 1
 DE: 1
 DS: /h
 F2 - Acquisition Parameters
 Date_: 20060703
 Time: 14.18
 P1: 12.18
 PRGMR: 5 mm BBO
 PULPROG: zg30
 TD: 32768
 SOLVENT: CDCl3
 NS: 12
 DS: 2
 SWH: 6410.256 Hz
 FIDRES: 0.195625 Hz
 AQ: 2.592540 sec
 RG: 327.68
 TA: 78.400 usec
 SFO: 400.128001 MHz
 TE: 298.2 K
 T1: 2.00000000 sec
 T20: 1

***** CHANNEL F1 *****
 NUC1: 1H
 P1: 14.00 usec
 PL1: 0.00 dB
 SFO1: 400.128001 MHz

F2 - Processing parameters
 SI: 32768
 SF: 400.010000 MHz
 WDW: no
 SSB: 0
 LB: 0.00 Hz
 GB: 0
 PC: 1.00



```

Current Data Parameters
NAME      ampdd1-iv-7(0703)
EXPNO    2
PROCNO   1
F2       /n
USER     Liang

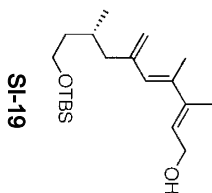
F2 - Acquisition Parameters
Date_    20060703
Time     17.50
INSTRUM  DFX400
PROBHD   5 mm BBO BB-1H
PULPROG  zgpg30
TD        65536
SOLVENT  CDCl3
NS        2009
DS        2
SWH       25125.629 Hz
FIDRES    0.183387 Hz
AQ        1.3022164 sec
RG        4597.6
CW        19.900 usec
DE        6.00 usec
TE        298.2 K
D1        0.15000001 sec
d11       0.03000000 sec
DELTA    0.05000000 sec
TD0       1

===== CHANNEL f1 =====
NUC1      13C
P1        7.80 usec
SFO1     100.625591 MHz

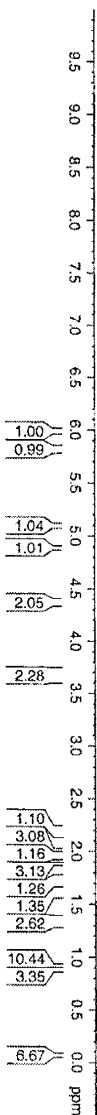
===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2      1H
PCPD2    135.00 usec
P12      17.40 GHz
P13      17.40 GHz
SFO2     400.0156000 MHz

F2 - Processing parameters:
SI        32768
SF        100.625591 MHz
WDW       EM
SSB       0
GB        0
PC        1.40
  
```


alcohol



5.988
5.833
5.818
5.800
5.097
5.095
5.092
4.886
4.372
4.356
3.723
3.709
3.705
3.698
3.691
3.683
3.679
3.673
3.665
3.656
3.648
3.638
3.630
3.613
2.216
2.201
2.183
2.167
2.008
2.006
1.987
1.967
1.954
1.933
1.882
1.743
1.721
1.710
1.694
1.649
1.637
1.632
1.619
1.616
1.598
1.585
1.580
1.567
1.457
1.433
1.377



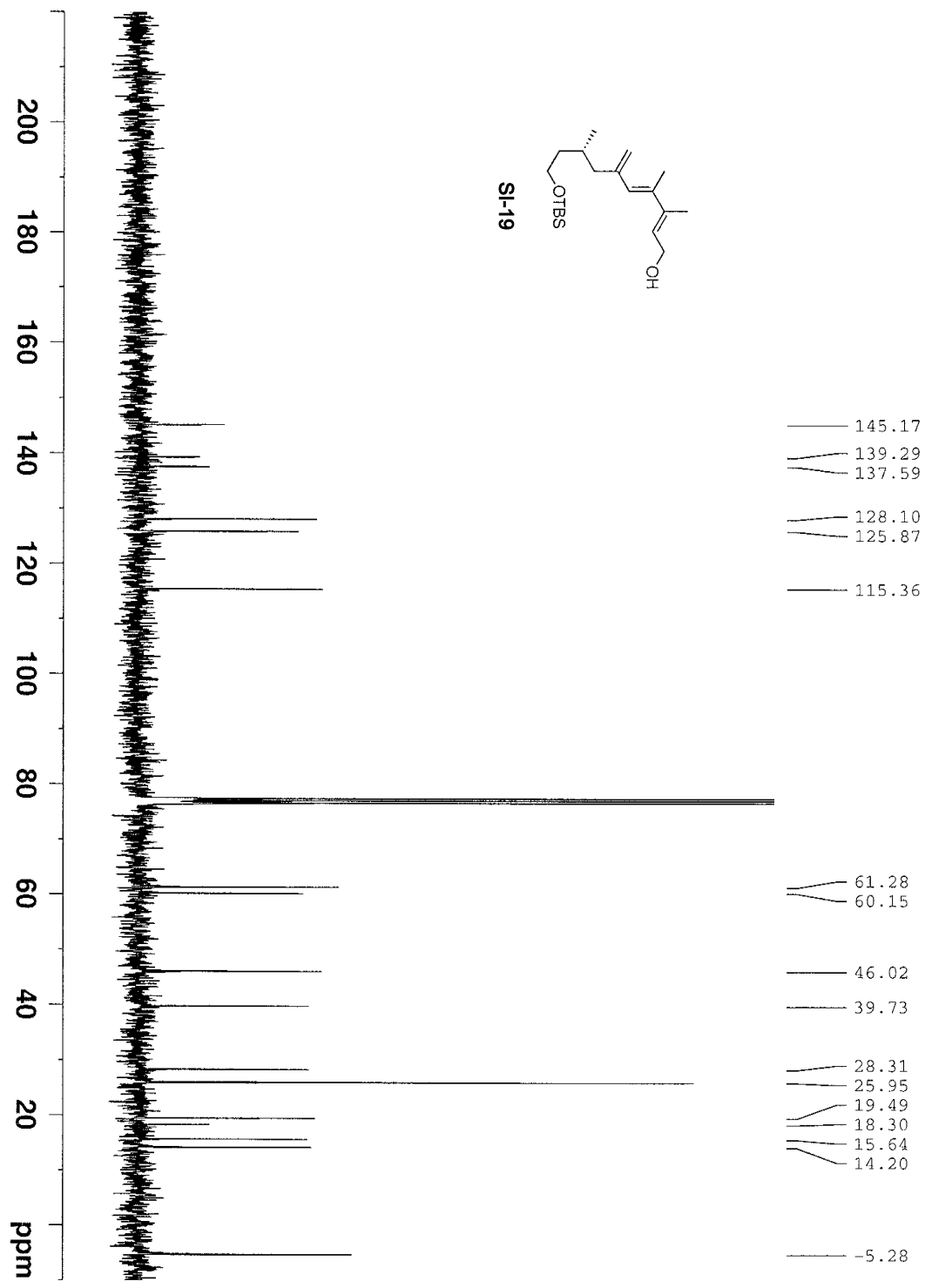
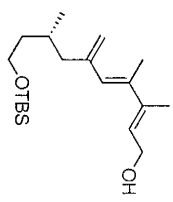
```

Current Data Parameters
NAME          SI-19 (071706)
EXPNO        1
PROCNO       1
PROCNAME     /
USER         Liang

F2 - Acquisition Parameters
-----
Date_         20070717
Time         16.25
INSTRUM      spect
PROBHD       5 mm BBO BB30
PULPROG      zgpg30
TD           32768
SOLVENT      CDCl3
DS           2
SWH          6410.256 Hz
FIDRES       0.158625 Hz
AQ           2.525812 sec
RG           312
AQ           78.000 usec
RG           286.2 usec
TE           298.2 K
DE           2.0000000 sec
D1           1

===== CHANNEL f1 =====
NUC1          1H
P1           14.00 usec
PL1          0.00 dB
SFO1         400.0128001 MHz

F2 - Processing parameters
-----
SI           400.0100000 MHz
SF          400.0128001 MHz
WDW         EM
SSB         0
LB          0.00 Hz
GB          0
PC          1.00
  
```



- 145.17
- 139.29
- 137.59
- 128.10
- 125.87
- 115.36
- 61.28
- 60.15
- 46.02
- 39.73
- 28.31
- 25.95
- 19.49
- 18.30
- 15.64
- 14.20
- 5.28

```

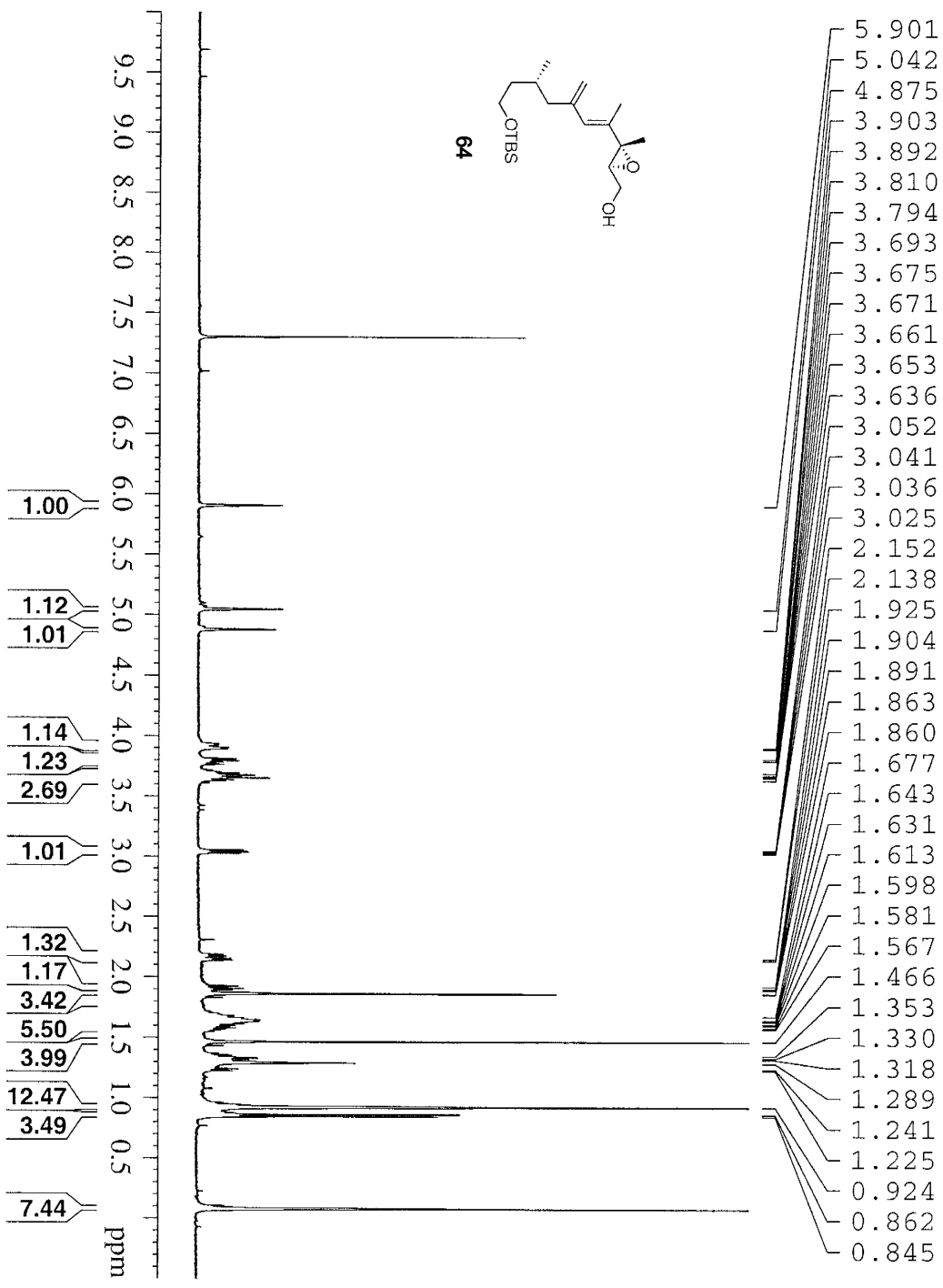
Current Data Parameters
NAME ampdb1-1v-910808
EXPNO 2
PROCNO 1
DU /h
USER Liang

F2 - Acquisition Parameters
Date_ 20060808
Time 12.31
INSTRUM 5 mm QNP 1H/1
PROBHD zgpg30
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 492
DS 4
SWH 18832.393 Hz
FIDRES 0.287766 Hz
AQ 1.7440308 s
RG 10321.3
DM 26.550 uS
DE 6.00 uS
TE 298.2 K
D1 0.15000001 s
d11 0.03000000 s
DELTA 0.05000000 s
TDO 1

===== CHANNEL f1 =====
NUC1 13C
P1 8.00 uS
PL1 -3.00 dB
SFO1 75.476505 MHz

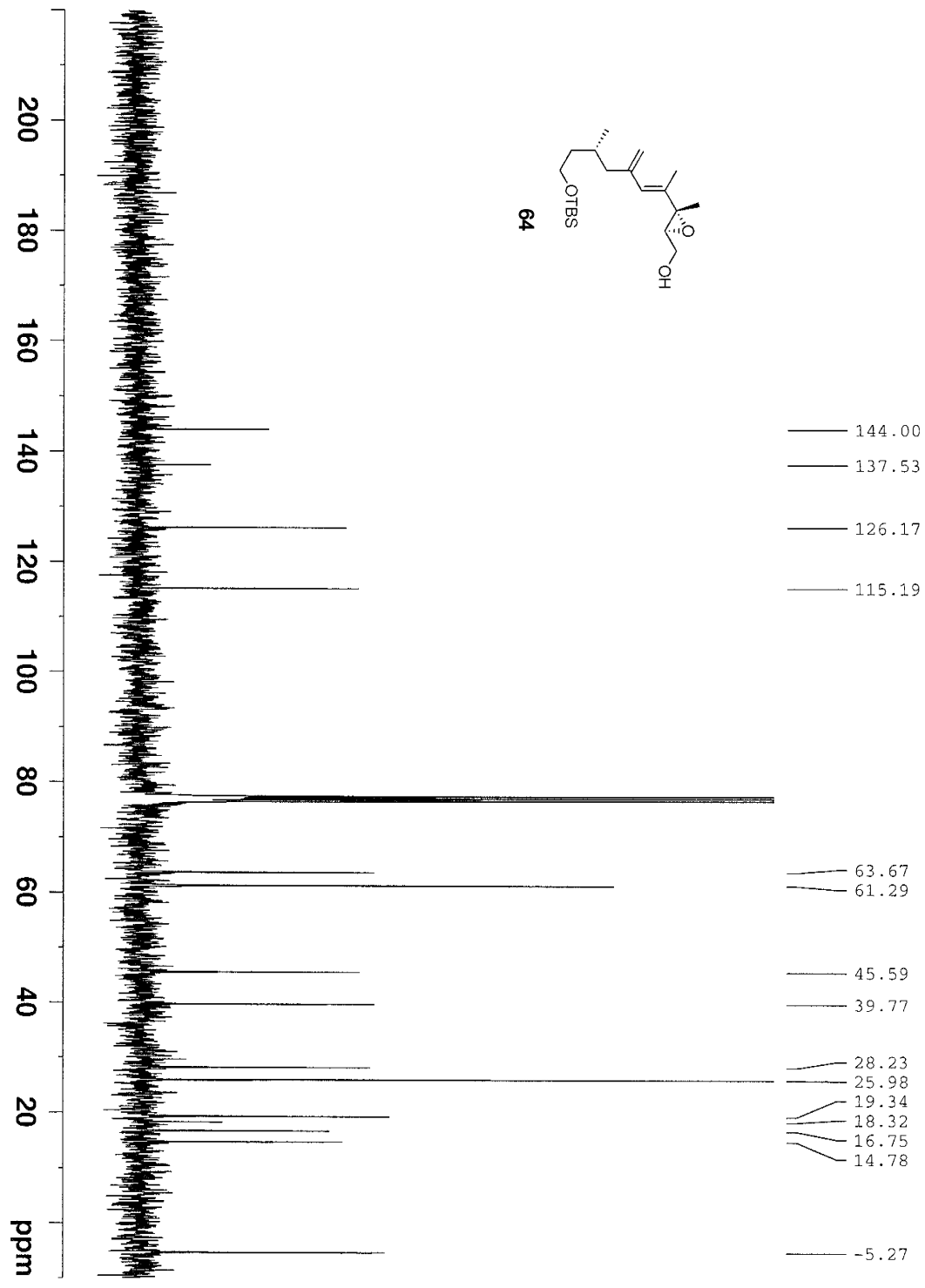
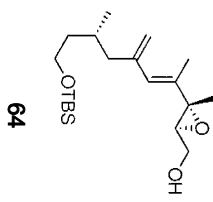
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 uS
PL2 -3.00 dB
PL12 17.55 dB
PL13 17.55 dB
SFO2 300.1312005 MHz

F2 - Processing parameters
SI 32768
SF 75.4677490 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.40
  
```



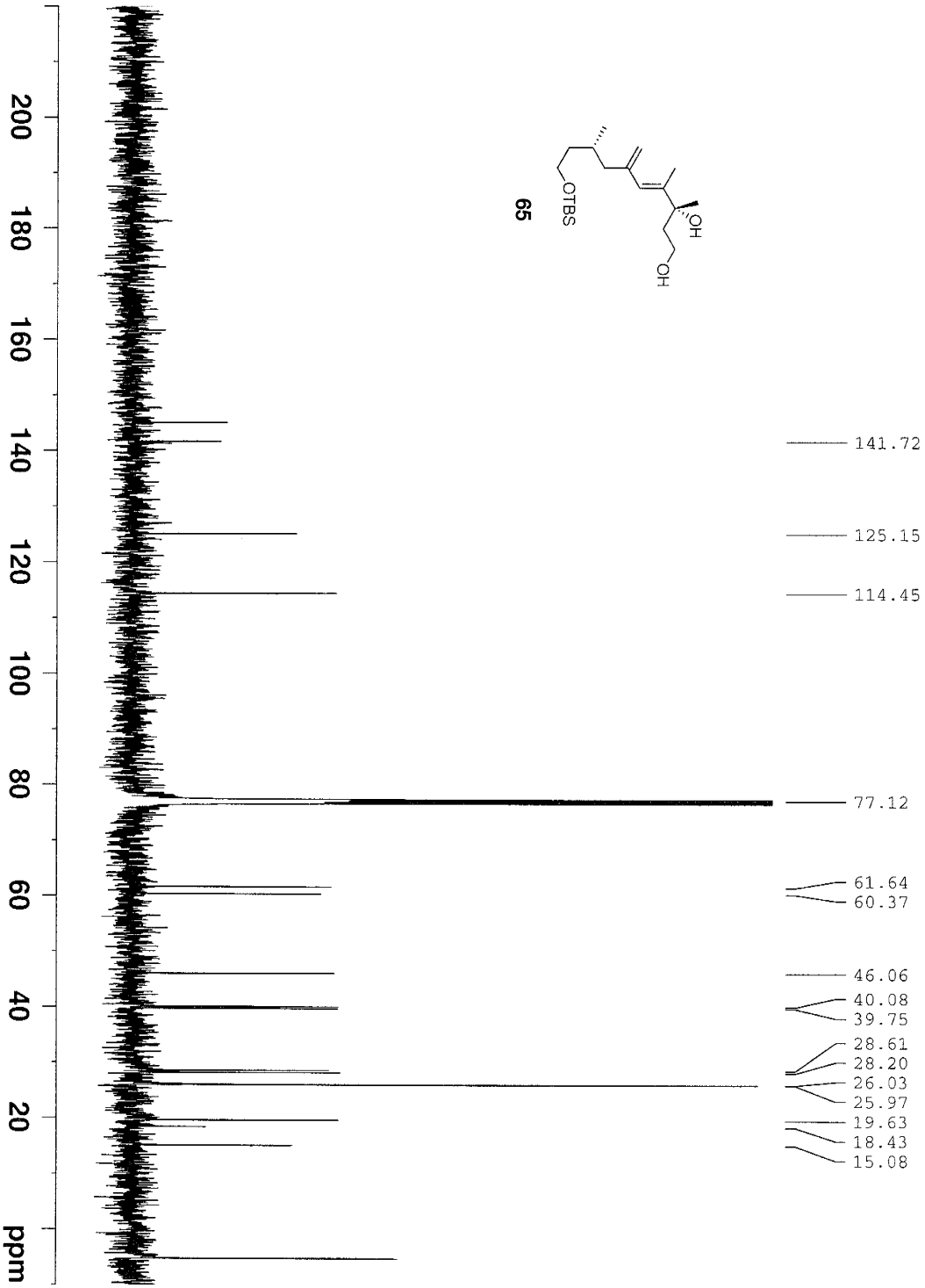
```

Current Data Parameters
EXPNO          1
PROCNO         1
F2 - Acquisition Parameters
Date_          20080719
Time           17.34
INSTRUM       DRK400
PROBHD        5 mm BBO 5mm1H
PULPROG       zgpg30
TD             32768
SOLVENT       CDCl3
NS            32
DS            2
SWH           6410.256 Hz
FIDRES       0.1966265 Hz
AQ           2.1559540 sec
RG           78.010
BR           6.00 usec
DE           238.2 K
TE           300.2 K
D1           2.00000000 sec
TD0          1
===== CHANNEL f1 =====
NUC1          1H
P1           14.70 usec
PL1          0.00 dB
SFO1         400.0128001 MHz
F2 - Processing parameters
SI           32768
SF           400.0100000 MHz
WDW          EM
SSB          0
LB           0.00 Hz
GB           0
PC           1.00
  
```



```

Current Data Parameters
NAME      angphd1-1v-11-21071
EXPNO    2
PROCNO   1
SOLVENT  /n
USER     L:ang
===== Acquisition Parameters
Date_    20060711
Time     17.50
INSTRUM  DEK300
PROBHD   5 mm QNP 1H/1
PULPROG  zgpg30
TD        65536
SOLVENT  CDCl3
NS        1074
DS        4
SWH       18832.393 Hz
FIDRES    0.287360 Hz
AQ         9195.2
RG         26.550 use
DE         6.00 use
TE         298.2 K
===== Processing parameters
SI         32768
SF         75.4677490 MHz
WDW        EM
SSB        0
LB         3.00 Hz
GB         0
PC         1.40
===== CHANNEL f1 =====
NUC1       13C
P1         8.88 use
PL1        -3.00 dB
SFO1       75.4760503 MHz
===== CHANNEL f2 =====
CHPRG2    waltz16
NUC2       1H
PCPD2     80.00 use
PL2        -3.00 dB
PL12      17.55 dB
PL13      17.55 dB
SFO2       300.1312005 MHz
===== Processing parameters
SI         32768
SF         75.4677490 MHz
WDW        EM
SSB        0
LB         3.00 Hz
GB         0
PC         1.40
  
```

- 141.72
- 125.15
- 114.45
- 77.12
- 61.64
- 60.37
- 46.06
- 40.08
- 39.75
- 28.61
- 28.20
- 26.03
- 25.97
- 19.63
- 18.43
- 15.08

Current Data Parameters
 NAME ampdb1-IV-11-diol(072)
 EXPNO 4
 PROCNO 1
 F2 - Acquisition Parameters
 Date_ 2006/7/20
 Time 11:00:00
 INSTRUM DSI400
 PRCBHD 5 mm HHD BB-1H
 PULPROG zgpg30
 TD 65536
 F2 - Processing Parameters
 SI 32768
 SF 100.626390 MHz
 MDW 0
 SSB 0
 LB 3.00 Hz
 GB 0
 PC 1.40

===== CHANNEL f1 =====
 NUC1 13C
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 100.626391 MHz
 ===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 135.00 usec
 F2 17.40 dB
 F2 17.40 dB
 F2 17.40 dB
 SFO2 400.0116000 MHz

===== CHANNEL f3 =====
 NUC3 13C
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 100.626391 MHz

===== CHANNEL f4 =====
 NUC4 1H
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 400.0116000 MHz

===== CHANNEL f5 =====
 NUC5 13C
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 100.626391 MHz

===== CHANNEL f6 =====
 NUC6 1H
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 400.0116000 MHz

===== CHANNEL f7 =====
 NUC7 13C
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 100.626391 MHz

===== CHANNEL f8 =====
 NUC8 1H
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 400.0116000 MHz

===== CHANNEL f9 =====
 NUC9 13C
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 100.626391 MHz

===== CHANNEL f10 =====
 NUC10 1H
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 400.0116000 MHz

===== CHANNEL f11 =====
 NUC11 13C
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 100.626391 MHz

===== CHANNEL f12 =====
 NUC12 1H
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 400.0116000 MHz

===== CHANNEL f13 =====
 NUC13 13C
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 100.626391 MHz

===== CHANNEL f14 =====
 NUC14 1H
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 400.0116000 MHz

===== CHANNEL f15 =====
 NUC15 13C
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 100.626391 MHz

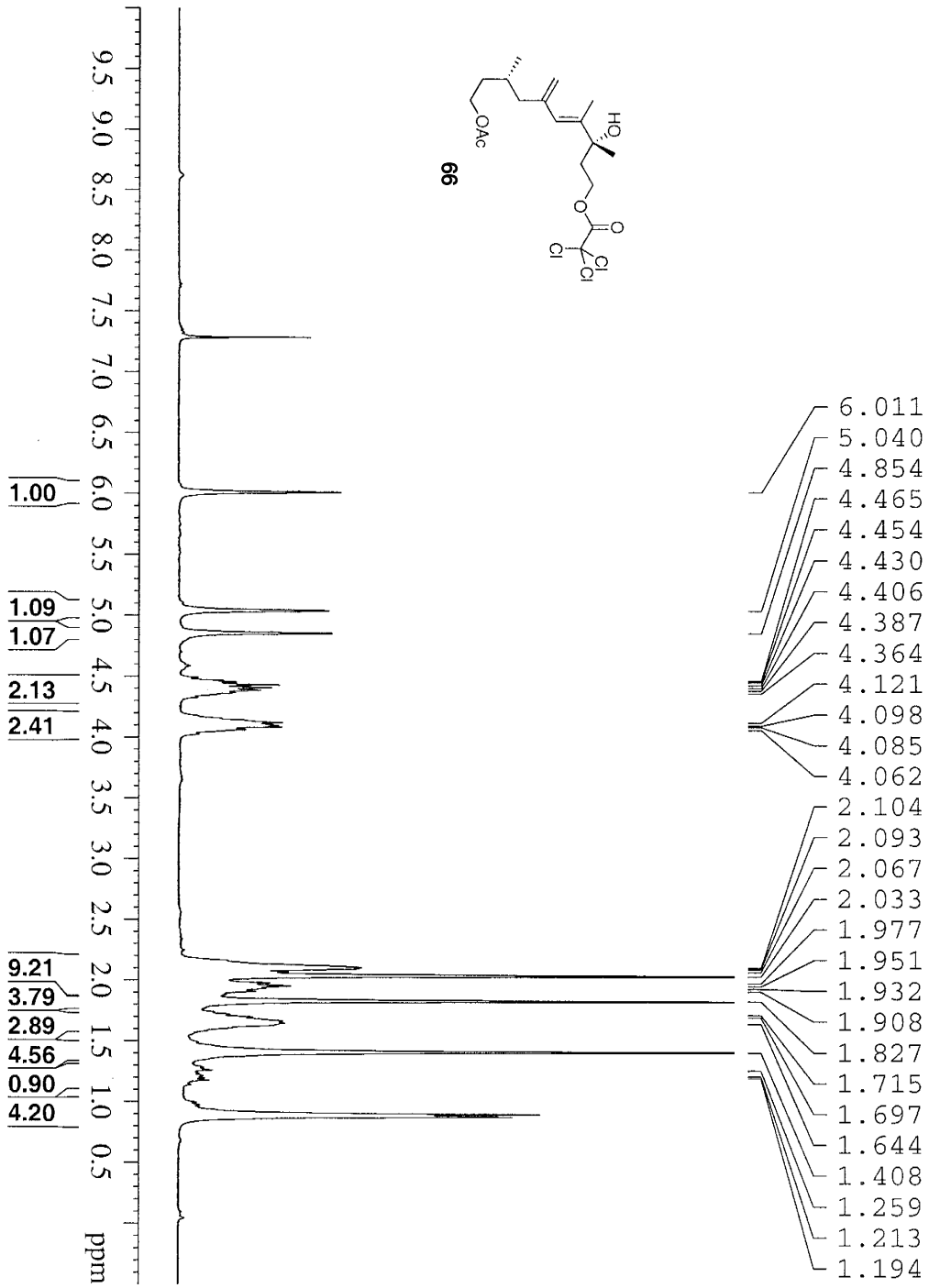
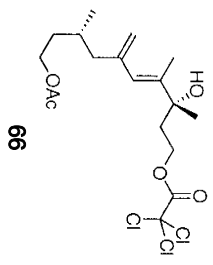
===== CHANNEL f16 =====
 NUC16 1H
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 400.0116000 MHz

===== CHANNEL f17 =====
 NUC17 13C
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 100.626391 MHz

===== CHANNEL f18 =====
 NUC18 1H
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 400.0116000 MHz

===== CHANNEL f19 =====
 NUC19 13C
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 100.626391 MHz

===== CHANNEL f20 =====
 NUC20 1H
 P1 7.50 usec
 PL1 -3.00 dB
 SFO1 400.0116000 MHz

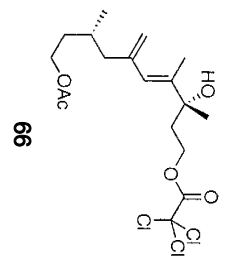
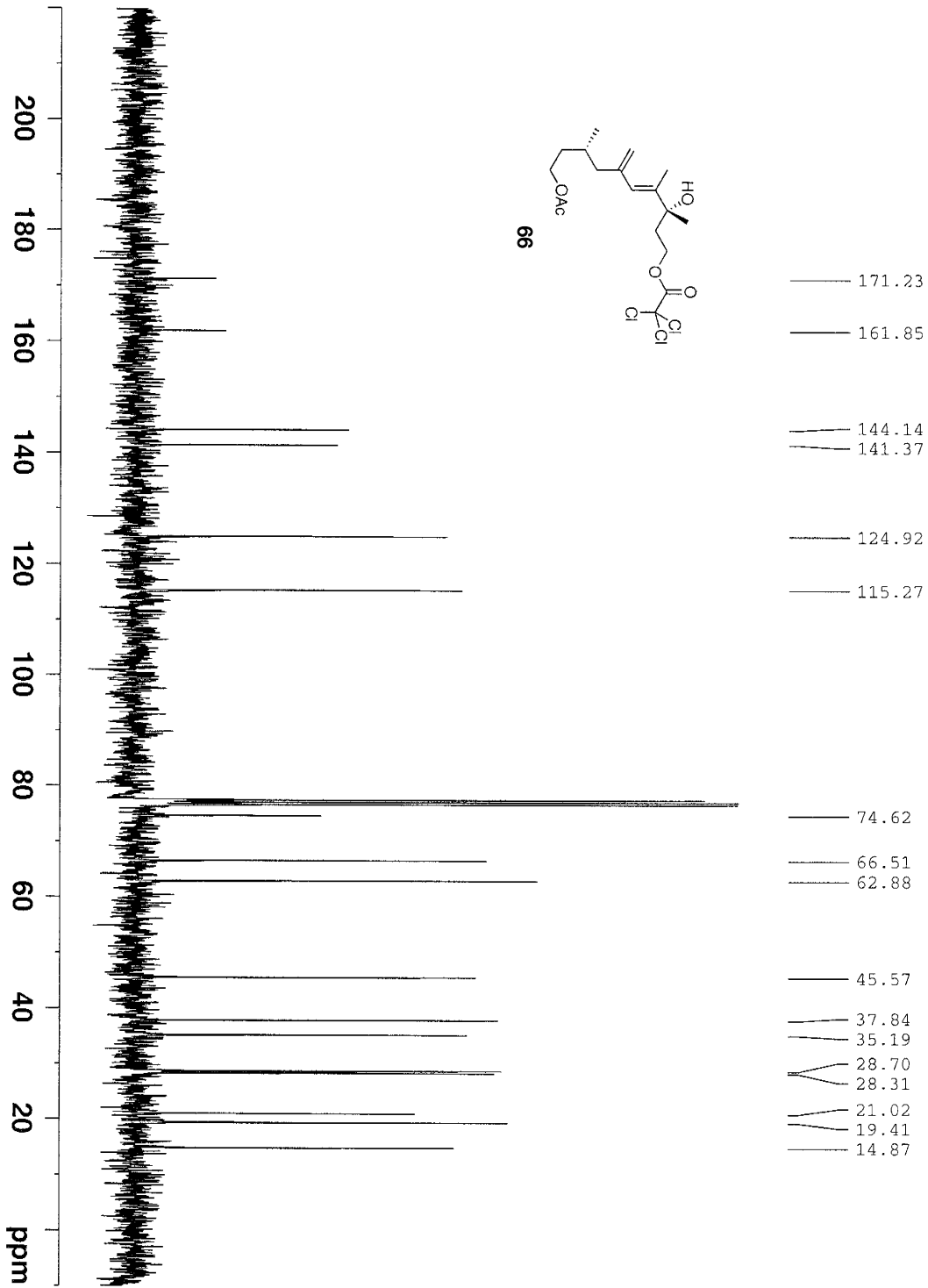


Current Data Parameters
 Name: 7-79-2
 EXNO: 1
 PROCNO: 1
 IN: /h
 USER: Liang

F2 - Acquisition Parameters
 Date_: 20080205
 Time: 10.23
 Operator: JYK/LL
 PROBHD: 5 mm QNP
 PULPROG: zgpg30
 TD: 32768
 SOLVENT: CDCl3
 DS: 12
 SWH: 4789.272 Hz
 FIDRES: 0.146157 Hz
 AQ: 3.4210291 sec
 EQ: 104.400 usec
 DE: 6.00 usec
 TE: 298.2 K
 D1: 2.00000000 sec
 D10: 1

===== CHANNEL f1 =====
 NUC1: 1H
 P1: 9.00 usec
 PL1: -1.00 dB
 SFO1: 300.132009 MHz

F2 - Processing parameters
 SI: 300.132009 MHz
 WDW: no
 SSB: 0
 LB: 0.00 Hz
 GB: 0
 PC: 1.00



- 171.23
- 161.85
- 144.14
- 141.37
- 124.92
- 115.27
- 74.62
- 66.51
- 62.88
- 45.57
- 37.84
- 35.19
- 28.70
- 28.31
- 21.02
- 19.41
- 14.87

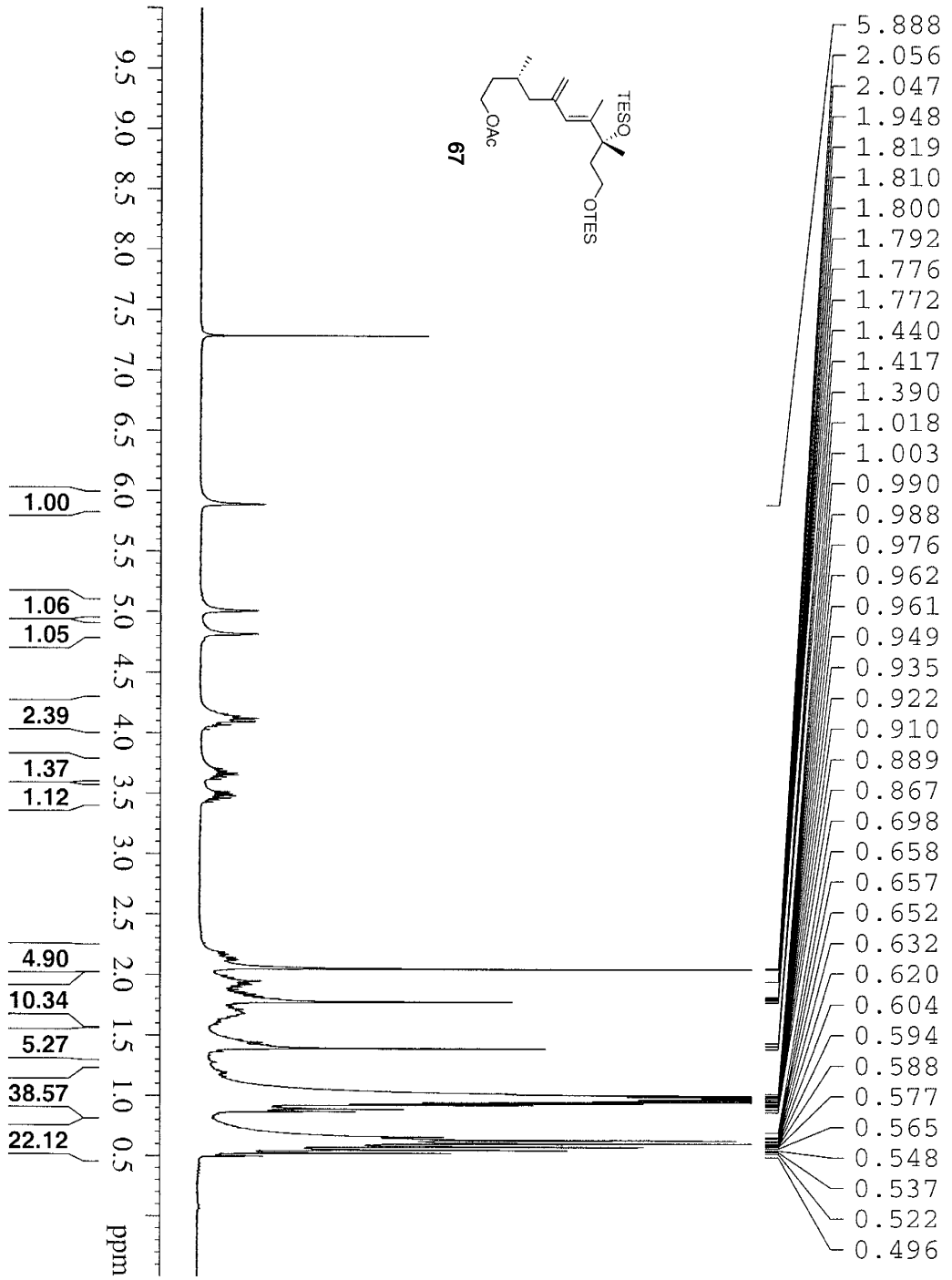
Current Data Parameters
 NAME 7-75-2
 EXPMO 3
 PROCNO 1
 EX /n
 USER Liang

F2 - Acquisition Parameters
 Date_ 20080205
 Time 10.26
 INSTRUM DPX300
 PROBHD 5 mm QNP 1H/1
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 136
 DS 4
 SH 18812.284 Hz
 FIDRES 0.287160 Hz
 AQ 1.7400308 sec
 RG 9195.2
 DM 25.550 us
 DE 6.00 us
 TE 298.2 K
 D1 0.15000001 sec
 d11 0.03000000 sec
 DELTA 0.05000000 sec
 TD0 1

==== CHANNEL f1 =====
 NUCl 13C
 P1 8.86 us
 PL1 -3.00 dB
 SF01 75.476505 MHz

==== CHANNEL f2 =====
 CDPORG2 waterz16
 NUC2 1H
 PCPD2 80.00 us
 P22 -3.00 dB
 P112 17.55 dB
 P113 17.55 dB
 SF02 300.1312005 MHz

F2 - Processing parameters:
 S1 32768
 SF 75.4677490 MHz
 WDW EM
 SSB 0
 LB 3.00 Hz
 GB 0
 PC 1.40

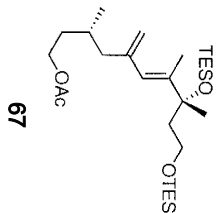
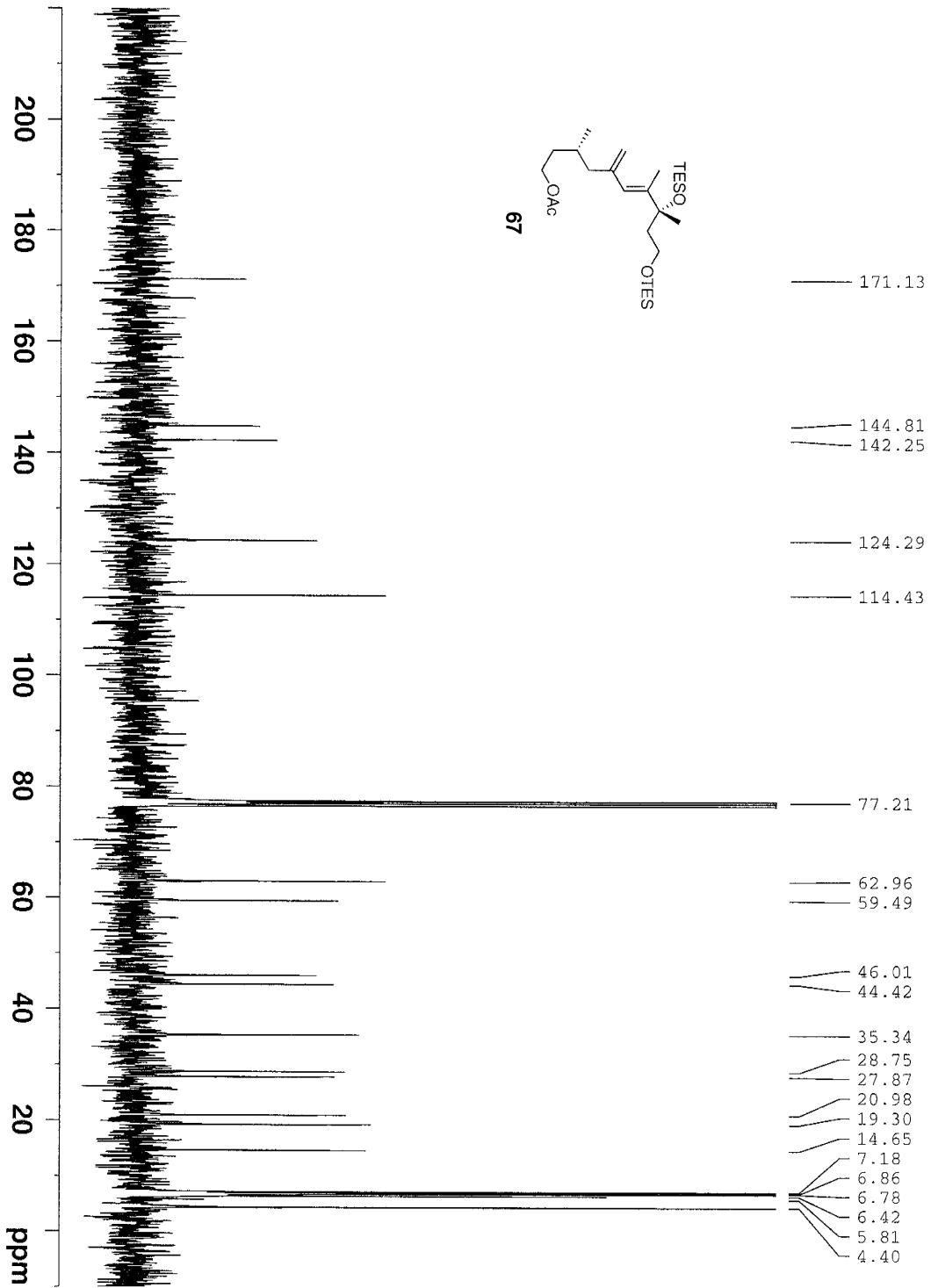


Current Data Parameters
 Name: 7-18-1
 EXPNO: 1
 PROCNO: 1
 DU: 1
 USER: /n
 Listing

F2 - Acquisition Parameters
 Date_: 20080214
 Time: 15:26
 INSTRUM: DPX100
 PULPROG: zgpg30
 TD: 32768
 SOLVENT: CDCl3
 DS: 2
 SSB: 4789.272 Hz
 FIDRES: 0.146157 Hz
 AQ: 3.4210291 sec
 RG: 104.400
 DE: 5.00 usec
 TE: 298.2 K
 D1: 2.00000000 sec
 TDO: 1

***** CHANNEL f1 *****
 NUCL1: 1H
 P1: 0.00 usec
 PL1: -3.00 dB
 SFO1: 300.1321009 MHz

F2 - Processing parameters
 SI: 300.130000 MHz
 SF: 300.130000 MHz
 KW: 0
 SSB: 0
 LB: 0.00 Hz
 GB: 0
 PC: 1.00



```

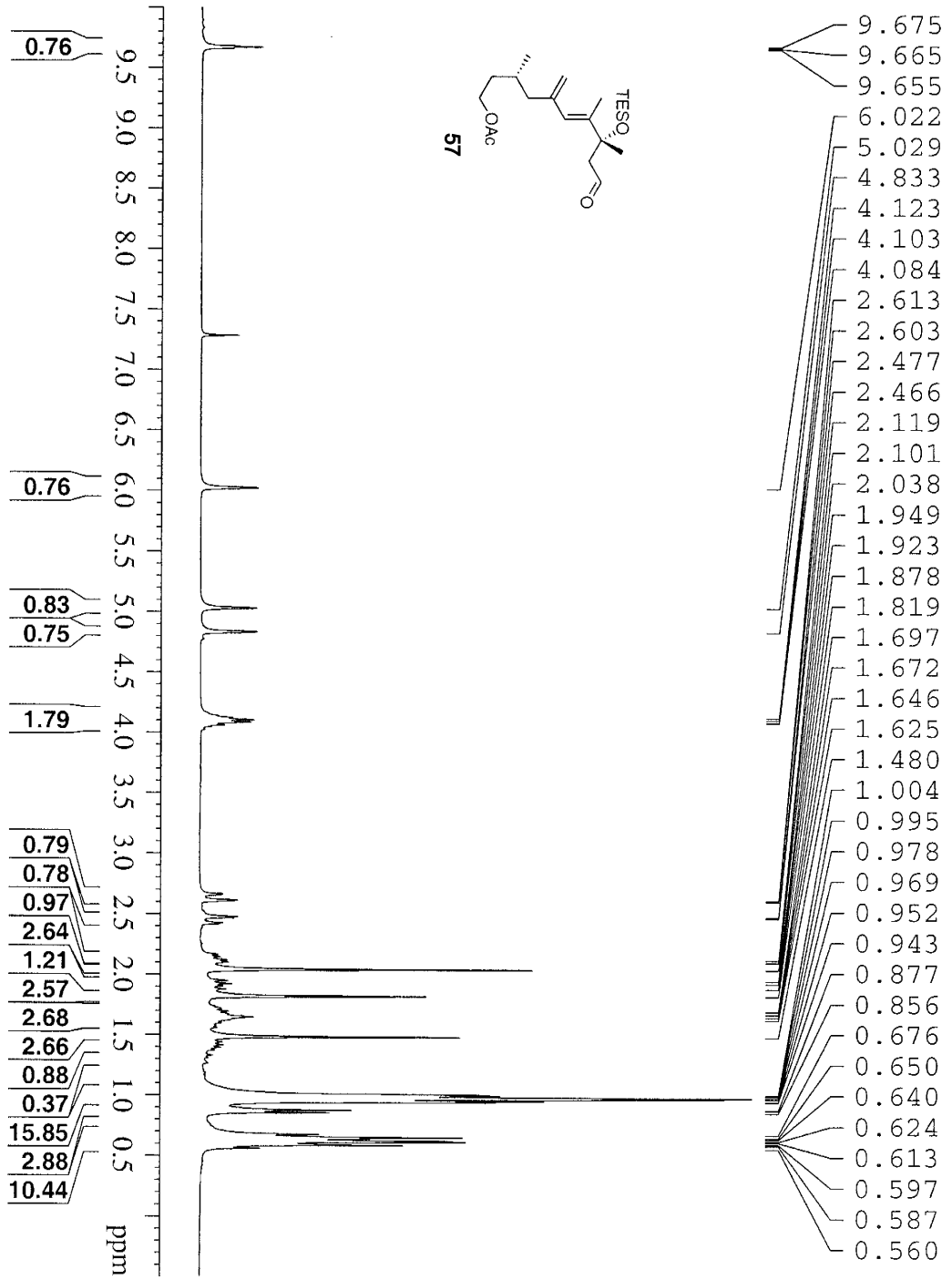
Current Data Parameters
NAME          7-76-2
EXPNO        1
PROCNO       1
DU           /n
C/SR          Liang

F2 - Acquisition Parameters
Date_        20080214
Time         15.30
INSTRUM     DFX300
PROBHD      1H/1
PULPROG     zgpg30
TD          65536
SOLVENT     CDCl3
NS          189
DS          4
SWH         19812.194 Hz
FIDRES     0.287360 Hz
AQ         1.7400308 sec
RG         9195.2
CW         26.550 us
DE         6.00 us
TE         298.2 K
D1         0.15000001 sec
d11        0.03000000 sec
DELTA      0.05000000 sec
TD0        1

===== CHANNEL f1 =====
NUC1        13C
P1         8.80 us
PL1        -3.00 dB
SFO1       75.4760905 MHz

===== CHANNEL f2 =====
CDDPRG2     waltz16
NUC2        1H
PCPD2       80.00 us
PL2         -3.00 dB
PL12        17.55 dB
PL13        17.55 dB
SFO2       300.1312005 MHz

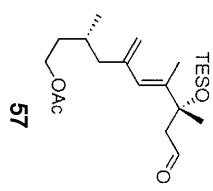
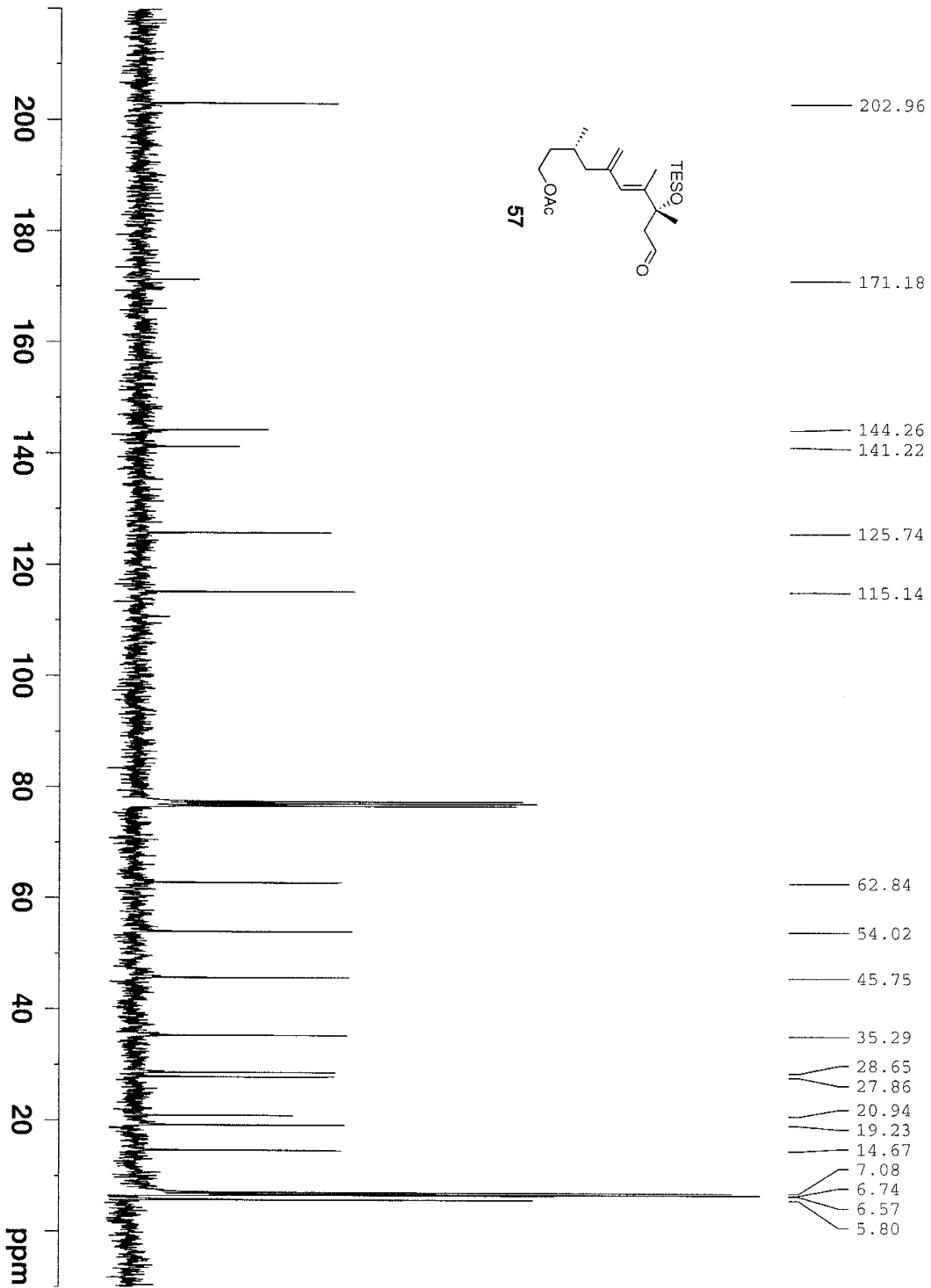
F2 - Processing parameters
SI          32768
SF         75.4677490 MHz
WDW         EM
SSB         0
LB          3.00 Hz
GB          0
PC          1.40
  
```



Current Data Parameters
 EXPNO 1
 PROCNO 1
 F2 - Acquisition Parameters
 Date_ 20080216
 Time 15:08
 INSTRUM spect
 PULPROG zgpg30
 TD 32768
 SOLVENT CDCl3
 DS 2
 SWH 4789.272 Hz
 FIDRES 0.146157 Hz
 AQ 3.4210291 sec
 IZ1 104.420 usec
 DE 6.90 usec
 TE 299.2 K
 D1 2.00000000 sec
 TDO 1

***** CHANNEL f1 *****
 NUC1 1H
 P1 8.00 usec
 PL 0.00 dB
 SFO1 300.131009 MHz

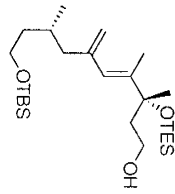
F2 - Processing parameters
 SI 32768
 SF 300.131009 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00



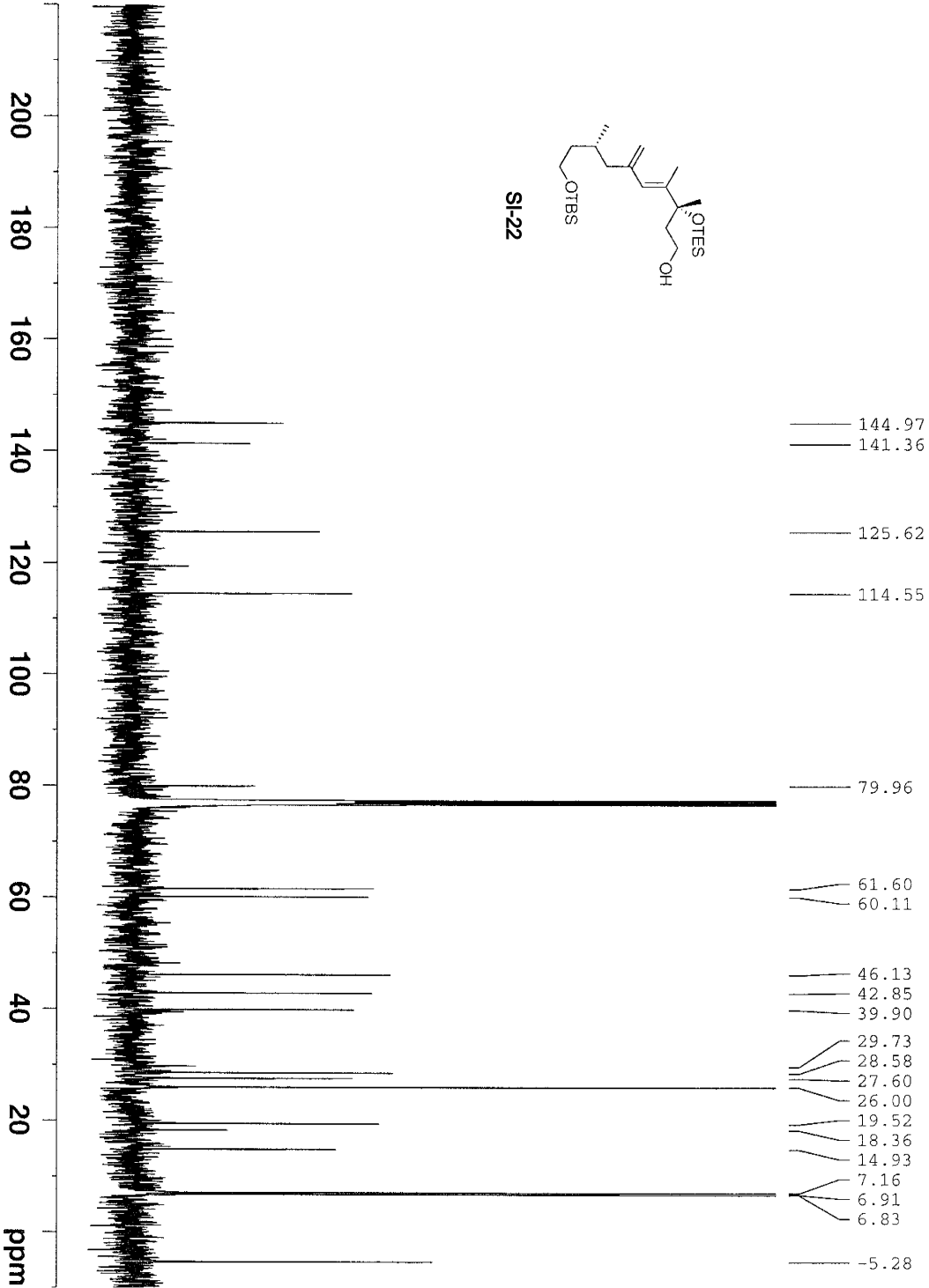
```

Current Data Parameters
NAME          7-31
EXPNO         1
PROCNO        1
DU             /n
CUSER
===== CHANNEL F1 =====
NUC1          13C
P1            8.80 us
P2            3.00 us
PULS          75.4760505 W
SFO1
===== CHANNEL F2 =====
COPPRPG2     waltz16
NUC2          1H
PCPD2        80.00 us
PL2          -3.00 dB
PL12         17.55 dB
PL13         17.55 dB
SFO2         300.312605 MHz
F2 - Processing Parameters
SI           32768
SF           75.4677490 MHz
WDW          EM
SSS          0
LB           3.00 Hz
GB           0
PC           1.40

F2 - Acquisition Parameters
Date_        20080216
Time         15.23
INSTRUM      DPX300
PROBHD       5 mm QNP 1H/1
PULPROG      zgpg30
TD            65536
SOLVENT      CDCl3
NS            188
DS            4
SWH           18922.343 Hz
FIDRES       0.261366 Hz
AQ            1.7460398 s
RG            9.95 2
DE            26.550 us
TE           298.2 K
D1            0.15000001 s
d11           0.03000000 s
DELTA        0.05000000 s
TDO          1
  
```

SI-22



```

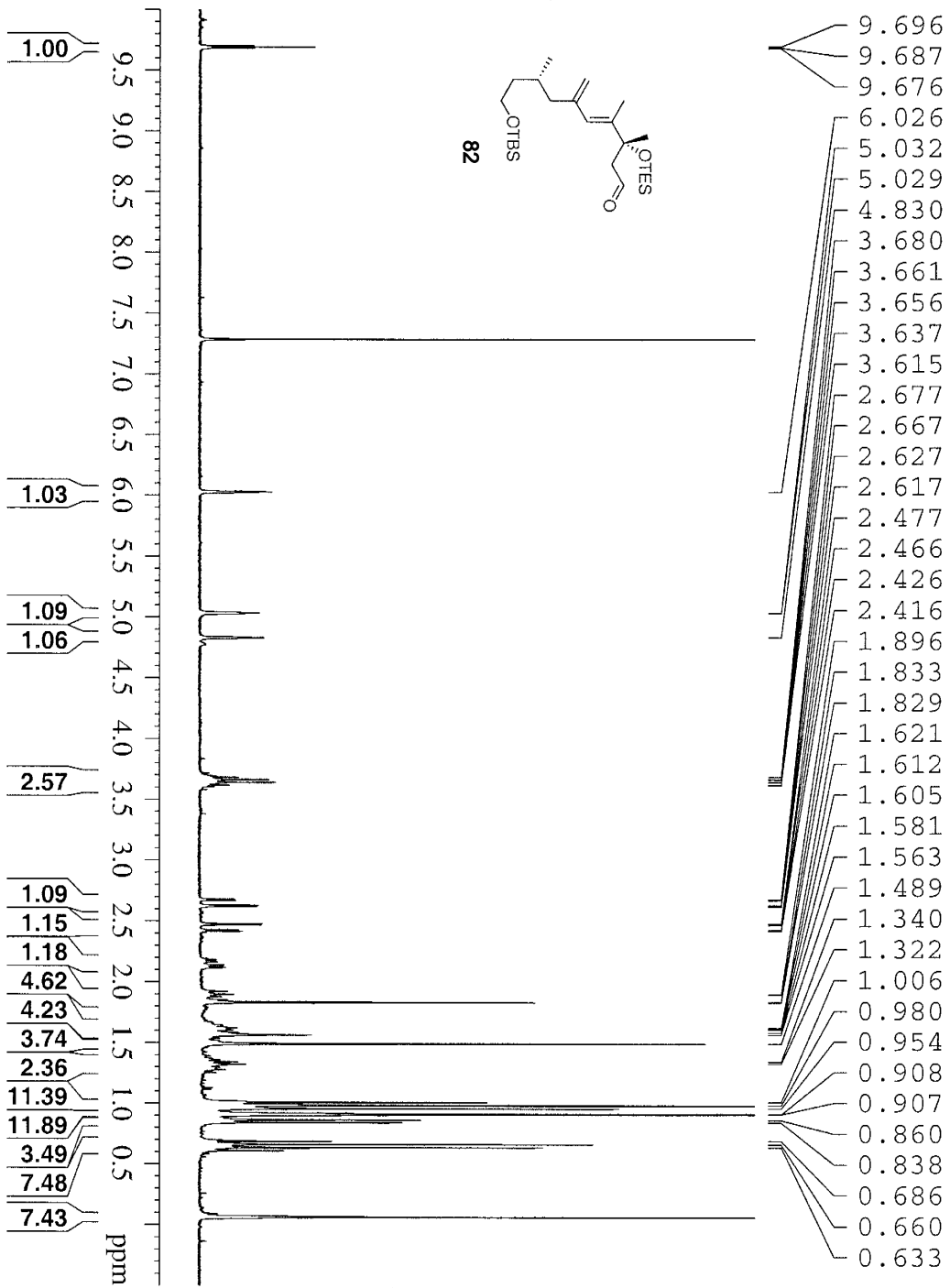
Current Data Parameters
NAME ampddj-1v-1510914
EXPNO 1
PROCNO 5
DU /c
USER L:ang

F2 - Acquisition Parameters
Date_ 20060914
Time 21.48
INSTRUM DPX400
PROBHD 5 mm BBO BB-1H
PULPROG zgpg30
TD 65536
SOLVENT 2450
DS 4
SS 2
SWH 25125.629 Hz
FIDRES 0.361387 Hz
AQ 1.3042164 sec
RG 6502
DW 19.900 usec
DE 6.00 usec
TE 298.2 K
D1 0.15000001 sec
d11 0.03000000 sec
DELTA 0.05000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 7.80 usec
PL1 -2.50 dB
SFO1 100.591691 MHz

===== CHANNEL f2 =====
CDDPRG2 waltz16
NUC2 1H
PCPD2 135.00 usec
PL2 17.40 dB
PL12 17.40 dB
PL13 17.40 dB
SFO2 400.0116000 MHz

F2 - Processing parameters
S- 32768
SF 100.5825950 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.40
  
```



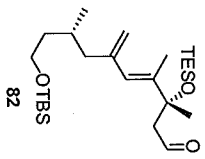
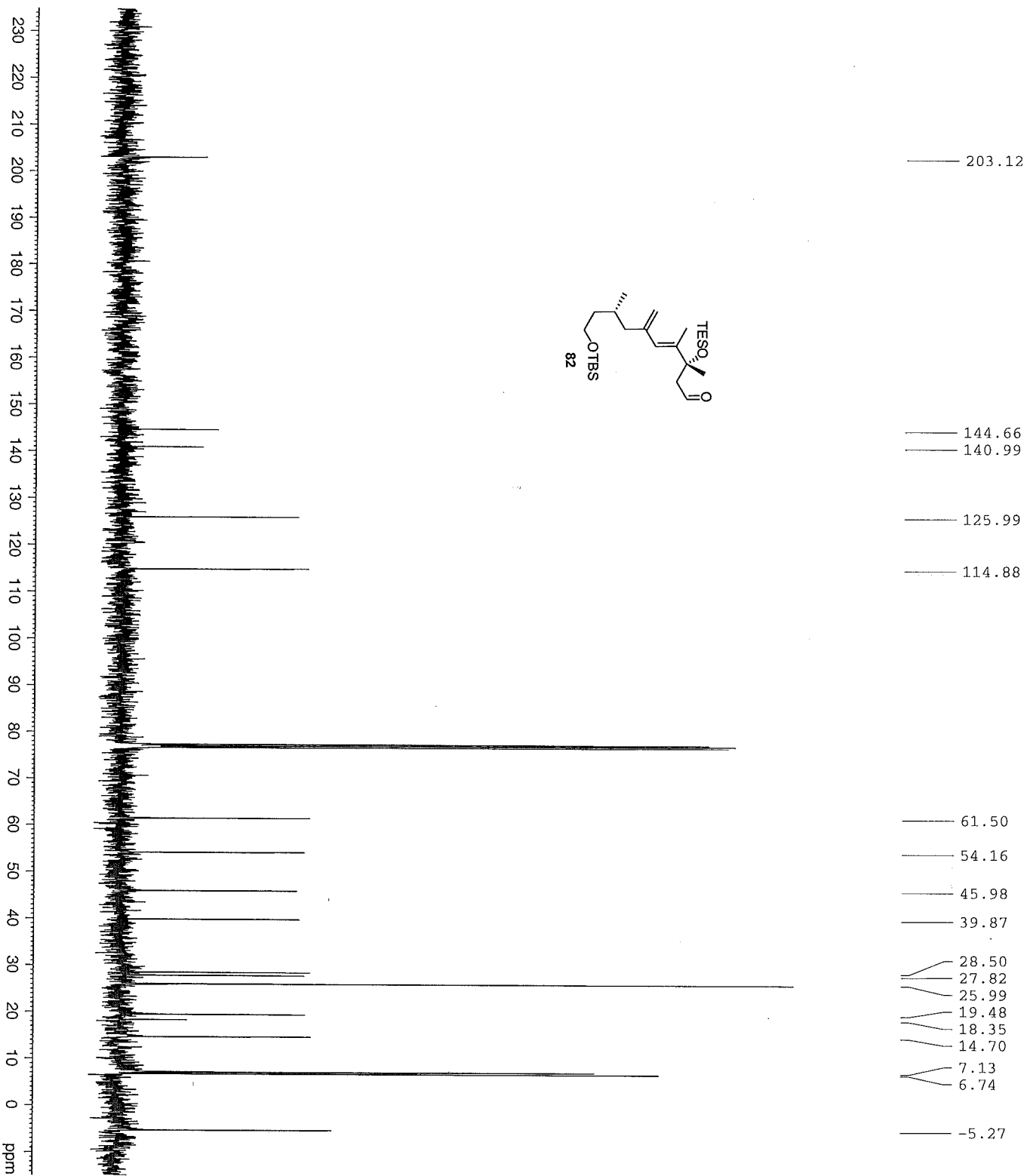
```

Current Data Parameters
NAME      emp02-19-14 (1)
EXNO      1
PROCNO    1
DS         /n
USER       Liang

F2 - Acquisition Parameters
Date_     20060915
Time      15.03
INSTRUM   DPX300
PROBHD    5 mm QNP
PULPROG   zgpg30
TD         65536
SOLVENT   CDCl3
NS         32
DS         2
SFO1       300.1321009 MHz
SFO2       75.2618250 MHz
FIDRES    0.146157 Hz
AQ         3.4210291 sec
RG         104.400 usec
DE         6.00 usec
TE         298.2 K
D1         2.00000000 sec
TD0        1

***** CHANNEL f1 *****
NUC1       1H
P1         9.00 usec
PL1        0.00 dB
SFO1       300.1321009 MHz

F2 - Processing parameters
SI         32768
SF         300.130000 MHz
WDW        EM
SSB        0
LB         0.00 Hz
GB         0
PC         1.00
  
```



Current Data Parameters
 NAME ampdd1-IV-14(091506)
 EXPNO 3
 PROCNO 1
 DU /n
 USER Liang

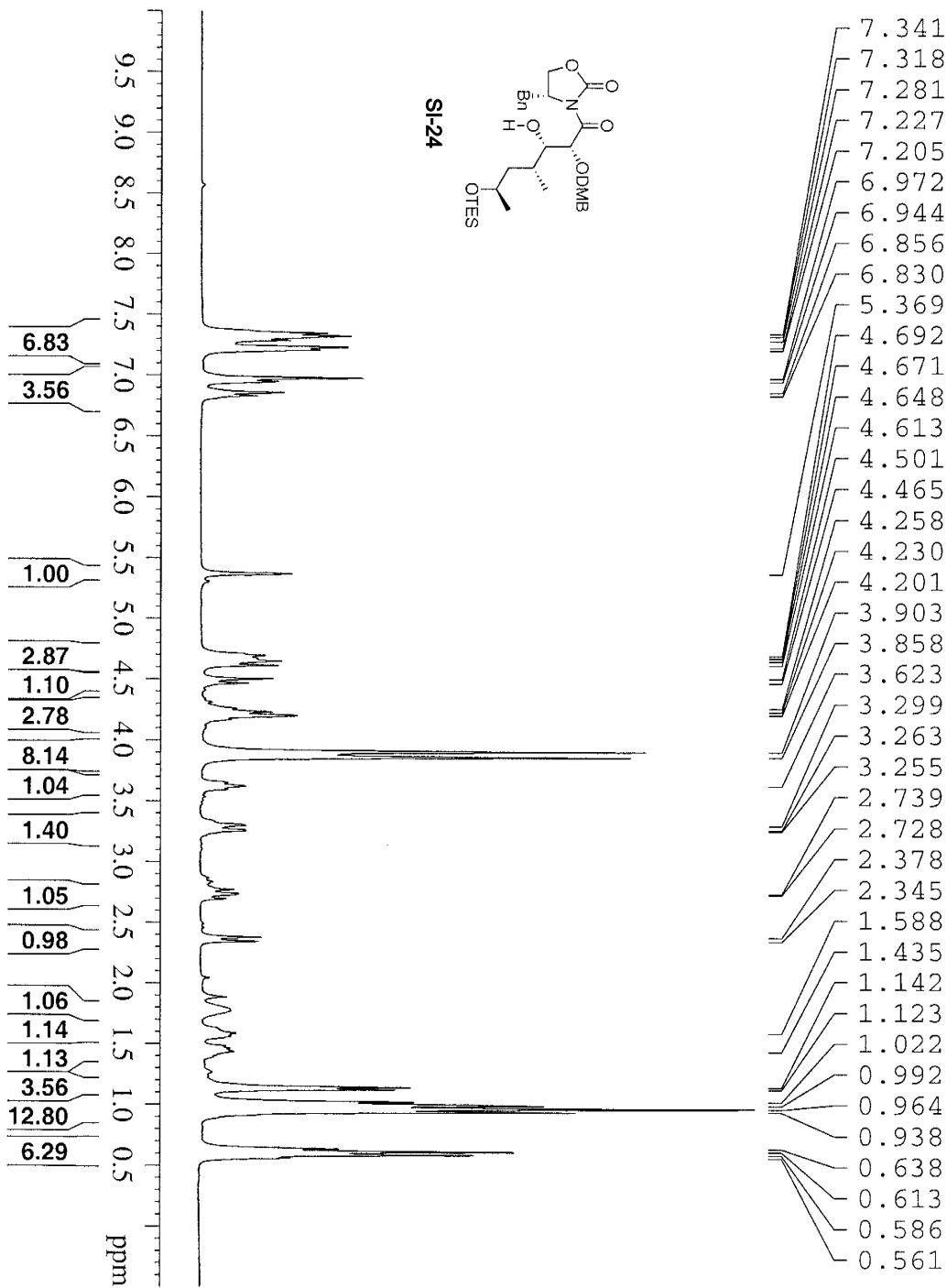
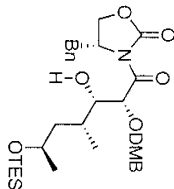
F2 - Acquisition Parameters
 Date_ 20060915
 Time 17.28
 INSTRUM DPX400
 PROBHD 5 mm BBO BB-1H
 PULPROG zgpg30
 TD 65536
 SOLVENT NS
 NS 112
 DS 4
 SMH 25125.629 H2
 FIDRES 0.383387 H2
 AQ 1.3042164 sec
 RG 4597.6
 DW 19.900 usec
 DE 6.00 usec
 TE 298.2 K
 D1 0.15000001 sec
 d11 0.03000000 sec
 DELTA 0.05000000 sec
 TD0 1

==== CHANNEL F1 =====
 NUC1 13C
 P1 7.80 usec
 PL1 -3.00 dB
 SFO1 100.5936591 MHz

==== CHANNEL F2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 135.00 usec
 PL2 17.40 dB
 PL12 17.40 dB
 PL13 17.40 dB
 SFO2 400.0116000 MHz

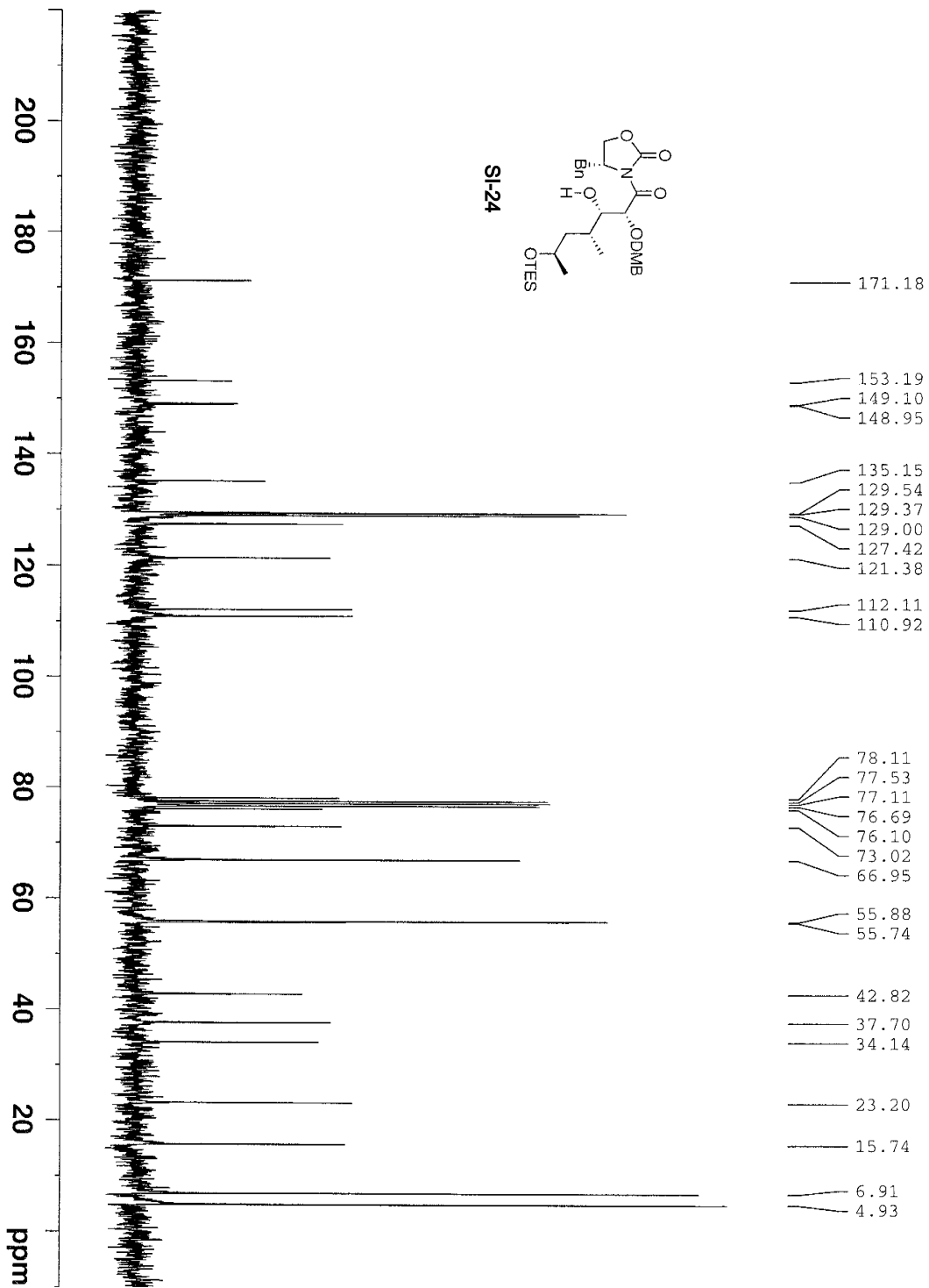
F2 - Processing parameters
 SI 32768
 SF 100.5825950 MHz
 WDW EM
 SSB 0
 LB 3.00 Hz
 GB 0
 PC 1.40

SI-24



```

Current Data Parameters
EXPNO 4-31-2
PROCNO 1
DS 1
USER Liangs
F2 - Acquisition Parameters
Date_ 20061212
Time 16.45
INSTRUM dp430
PROBHD 5 mm QNP
PULPROG zgpg30
TD 2430
SOLVENT CDCl3
NS 15
DS 15
SWH 4789.272 Hz
FIDRES 0.146157 Hz
AQ 3.4219281 sec
RG 104.400 usac
DE 6.00 usac
TE 298.2 K
D1 2.00000000 sec
D11 1.00
D12 1.00
***** CHANNEL f1 *****
NUC1 1H
P1 9.00 usac
PL 0.00 dB
SFO1 300.1321009 MHz
F2 - Processing parameters
SI 32768
SF 300.130000 MHz
WDW CO
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
  
```



Current Data Parameters

NAME 451-2

EXPNO 4

PROCNO 1

F2 USER Liang

F2 - Acquisition Parameters

Date_ 20061212

Time 17:03

INSTRUM DPM300

PROBHD 5 mm QNP 1H/1

PULPROG zgpg30

TD 65536

SOLVENT CDCl3

NS 38

DS 2

SWH 18832.303 Hz

FIDRES 0.287360 Hz

AQ 1.7400308 sec

RG 16384

DW 26.550 usec

DE 6.00 usec

TE 298.2 K

D1 0.15000001 sec

d11 0.03000000 sec

DELTA 0.05000000 sec

TDC 1

==== CHANNEL f1 =====

NUC1 13C

F1 8.80 usec

PL1 -3.00 dB

SFO1 75.476505 MHz

==== CHANNEL f2 =====

CPDPRG2 waltz16

NUC2 1H

PCPD2 80.40 usec

PL2 -3.00 dB

PL12 17.55 dB

PL13 17.55 dB

SFO2 300.1312005 MHz

F2 - Processing parameters

SI 32768

SF 75.4677490 MHz

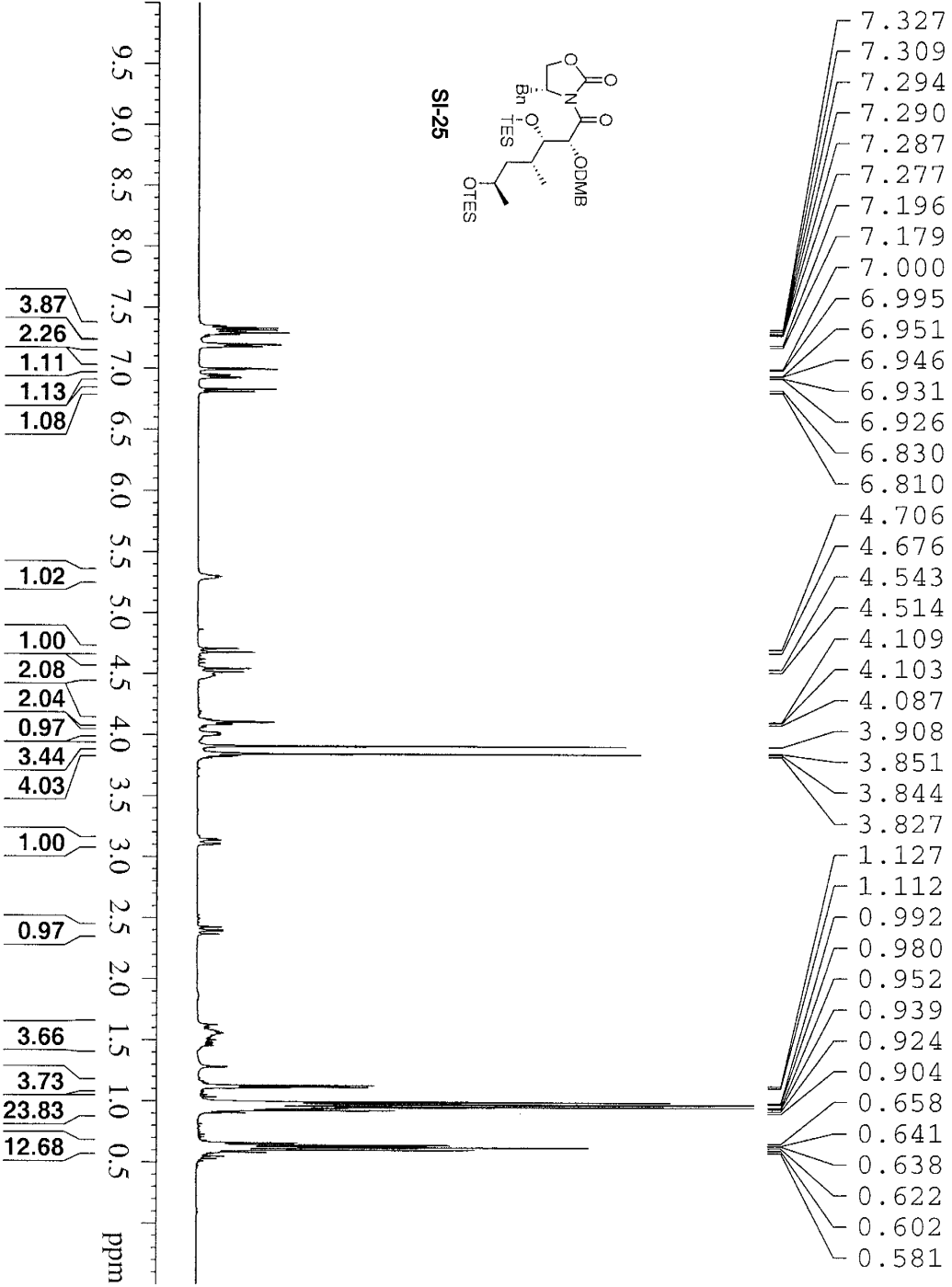
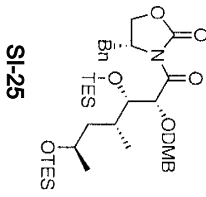
WDW EM

SSB 0

LB 3.00 Hz

GB 0

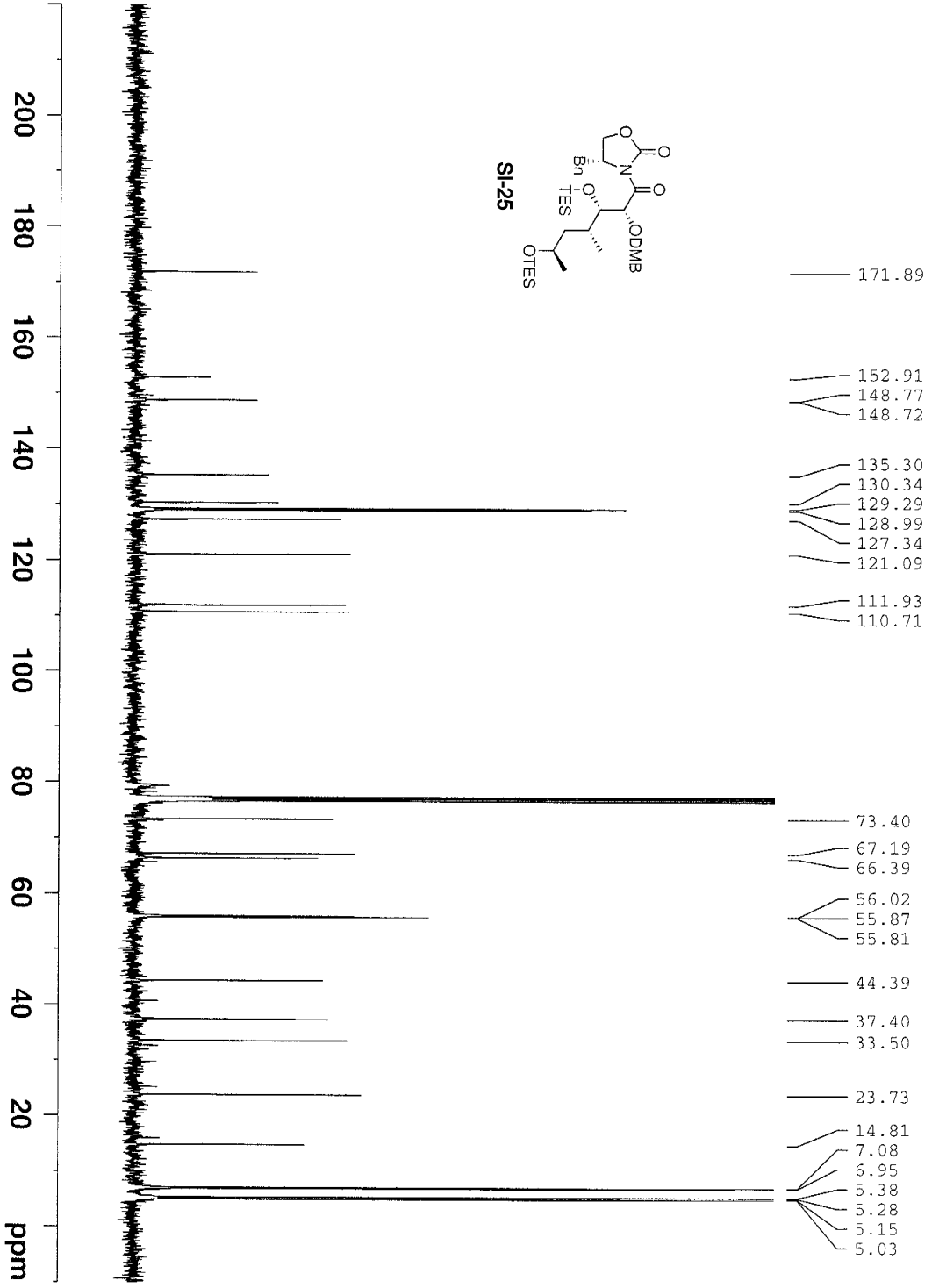
PC 1.40



Nutrient Data Parameters
 Name: SI-25
 EXPNO: 1
 PROCNO: 1
 USR: /n
 DS: 1
 F2 - Acquisition Parameters
 Date_ Time: 20081125 19:46
 INSTRUM: PRB400
 NUC1: 13C
 PULPROG: zgpg30
 TD: 65536
 SOLVENT: CDCl3
 NS: 128
 DS: 12
 SWH: 6410.256 Hz
 FIDRES: 0.199625 Hz
 AQ: 2.559240 sec
 RM: 0.000000
 DM: 78.000 usec
 DE: 6.00 usec
 TE: 298.2 K
 D1: 2.0000000 sec
 TDO: 1

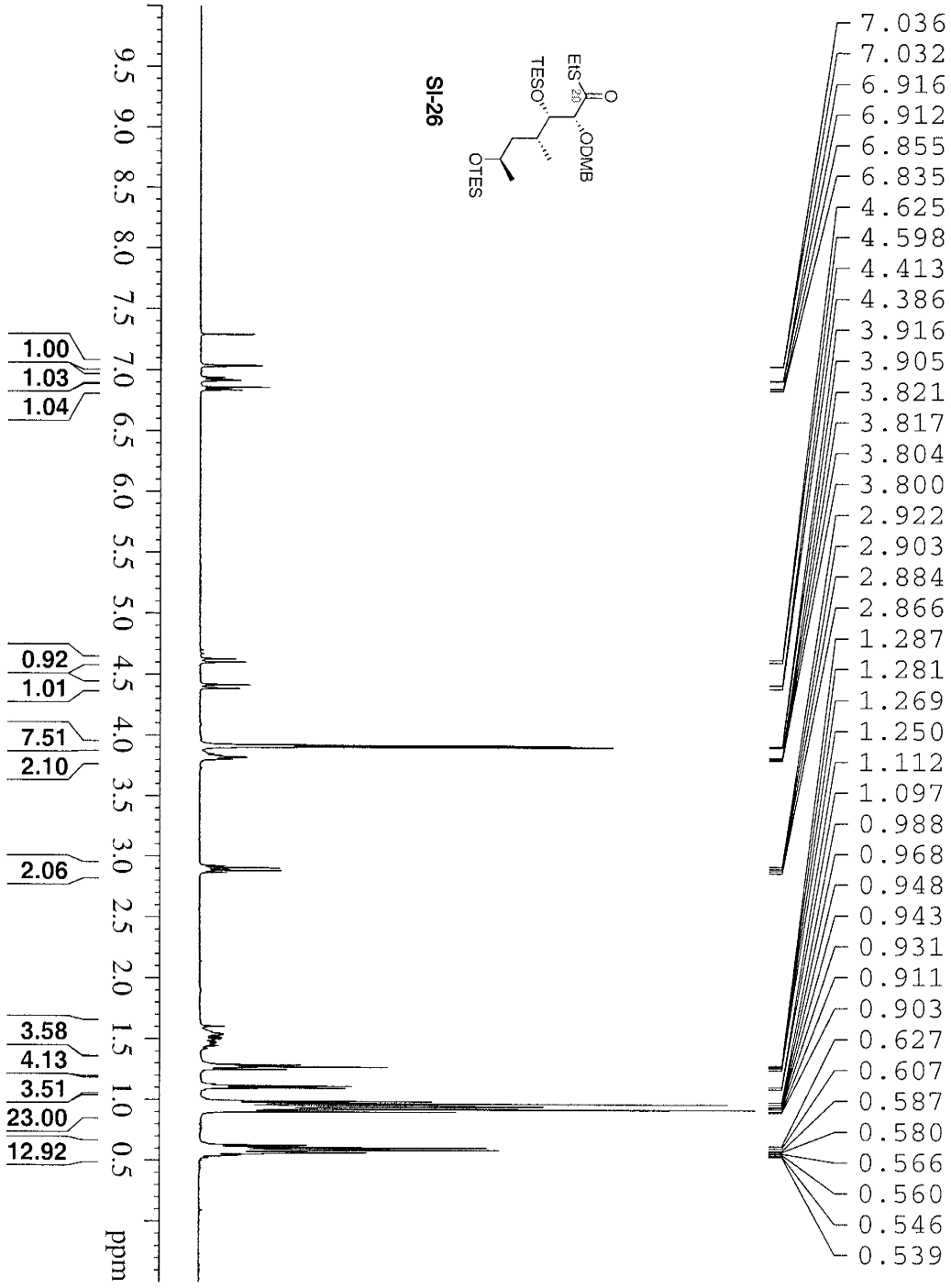
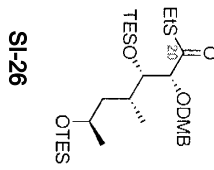
===== CHANNEL f1 =====
 NUC1: 13C
 P1: 14.70 usec
 PL1: 0.00 dB
 SFO1: 399.9926000 MHz

F2 - Processing parameters
 SI: 32768
 SF: 399.9926000 MHz
 WIDW: 65536
 SSB: 0
 LB: 0.00 Hz
 GB: 0
 PC: 1.00



```

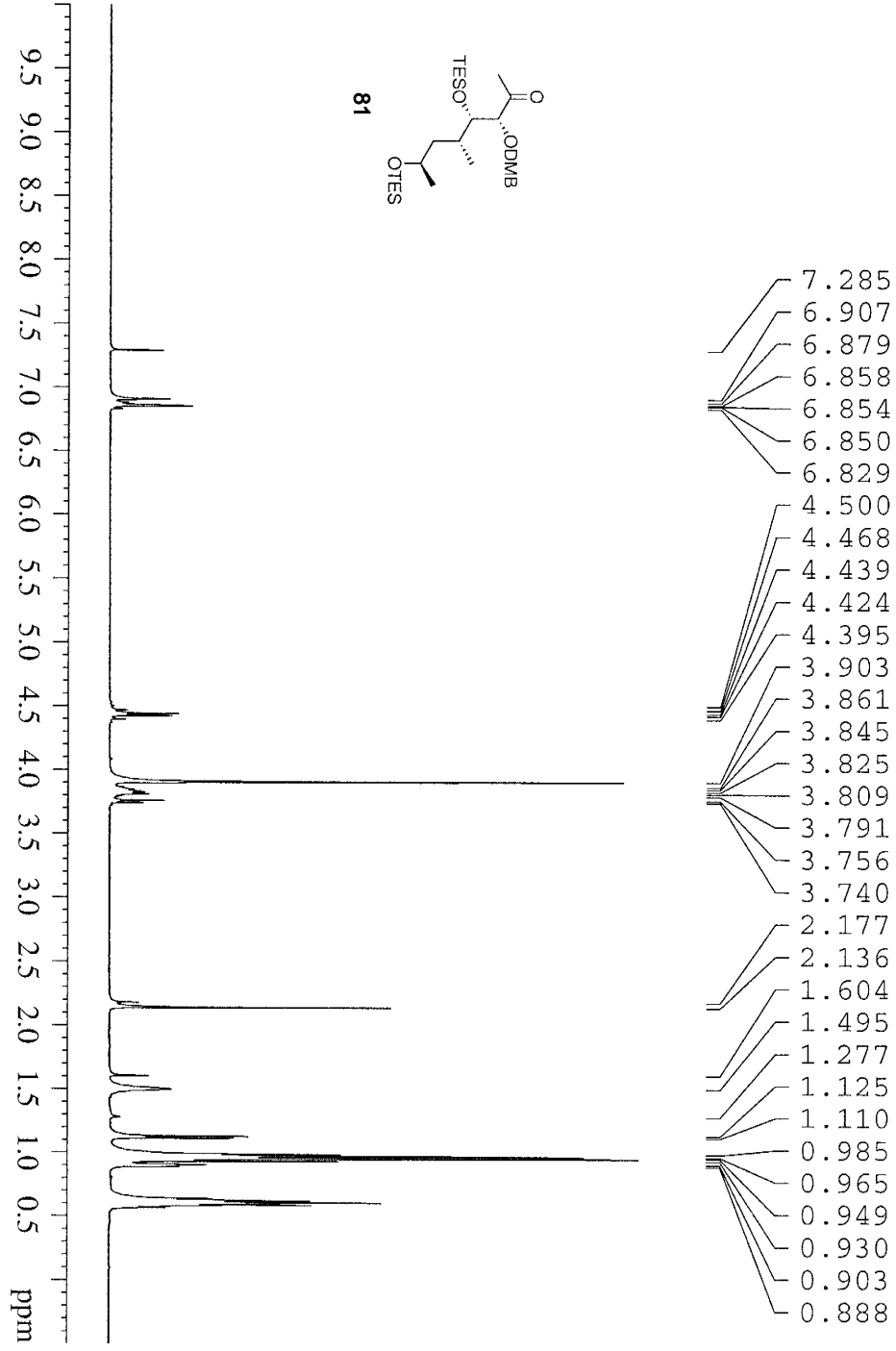
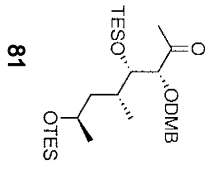
Current Data Parameters
NAME      DMB-aldol-RES_eti
EXPNO    3
PROCNO   1
F2       /n
USER
=====
F2 - Acquisition Parameters
Date_    20081125
Time     20.41
INSTRUM  dpx400
PROBHD   5 mm BBO BB-1H
PULPROG  zgpg30
SOLVENT  CDCL3
NS       1641
DS       4
SWH      25125.629 Hz
FIDRES   0.381387 Hz
AQ       1.3042164 s
RG       16384
DW       19.900 us
DE       6.00 us
TE       298.2 K
D1       0.15000001 s
d11      0.03000000 s
DELTA    0.05000000 s
TD0      1
=====
CHANNEL F1
NUC1      13C
P1        7.80 us
PL1       -7.80 dB
SFO1      100.5785700 MHz
=====
CHANNEL F2
CPDPRG2  waltz16
NUC2      1H
PC222    135.00 us
PL2      17.40 dB
PL12     17.40 dB
PL13     17.40 dB
SFO2      399.9515000 MHz
=====
F2 - Processing parameters
SI        32768
SF        100.5675680 MHz
WDW       EM
SSB       0
LB        3.00 Hz
GB        0
PC        1.40
  
```



Current Data Parameters
 EXPNO 1
 PROCNO 1
 F2 - Acquisition Parameters
 Date_ 20081125
 Time 20.56
 INSTRUM DPX400
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 1024
 DS 4
 SWH 6410.256 Hz
 FIDRES 0.195625 Hz
 AQ 2.5519540 sec
 RG 768.00
 DW 7.6200 usec
 DE 6.00 usec
 TE 298.2 K
 D1 2.0000000 sec
 TDO 1

***** CHANNEL f1 *****
 NUCL1 1H
 P1 14.70 usec
 PL1 0.00 dB
 SFO1 399.9528000 MHz

F2 - Processing parameters
 SI 32768
 SF 399.9500000 MHz
 WDW 10
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.30

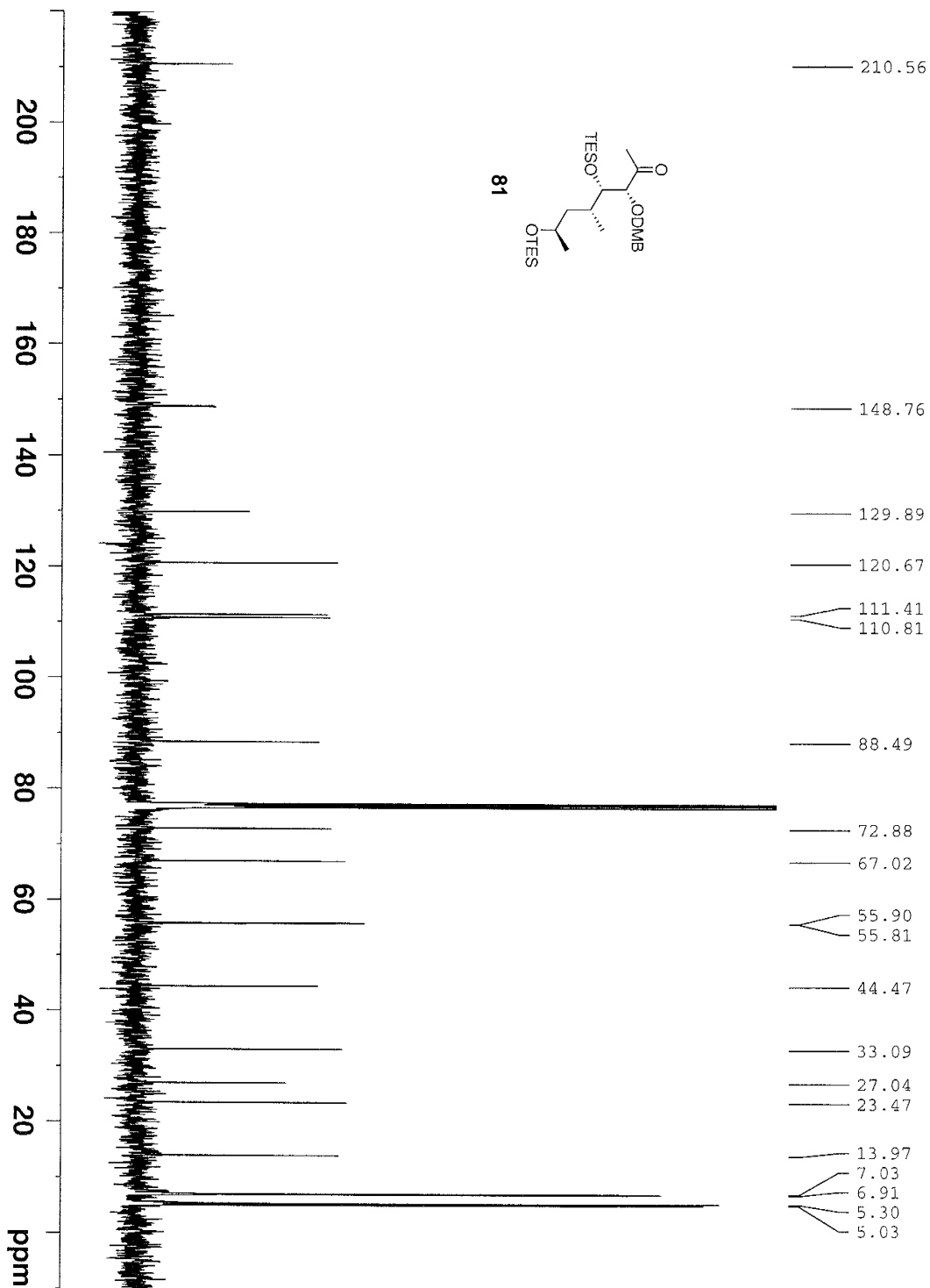


Current Data Parameters
 Name: 2MP-methyl-1ecnone
 EXPNO: 1
 PROCNO: 1
 DU: /n
 USER: Liang

F2 - Acquisition Parameters
 Date_: 20081125
 Time: 21.31
 INSTRUM: zgpg30
 PULPROG: zgpg30
 TD: 32768
 SOLOVENT: CDCl3
 DS: 10
 DE: 10
 SSB: 0
 Gain: 641C.256 Hz
 FIDRES: 0.195625 Hz
 AQ: 2.5519540 sec
 SFO: 78.000 usec
 DE: 5.00 usec
 TE: 298.2 K
 D1: 2.00000000 sec
 :30

***** CHANNEL f1 *****
 NUC1: 1H
 P1: 14.70 usec
 PL1: 0.00 dB
 SFO1: 399.9928000 MHz

F2 - Processing parameters
 SI: 32768
 SF: 399.990000 MHz
 WDW: pw
 SSB: 0
 LB: 3.00 Hz
 GB: 0
 PC: 1.40



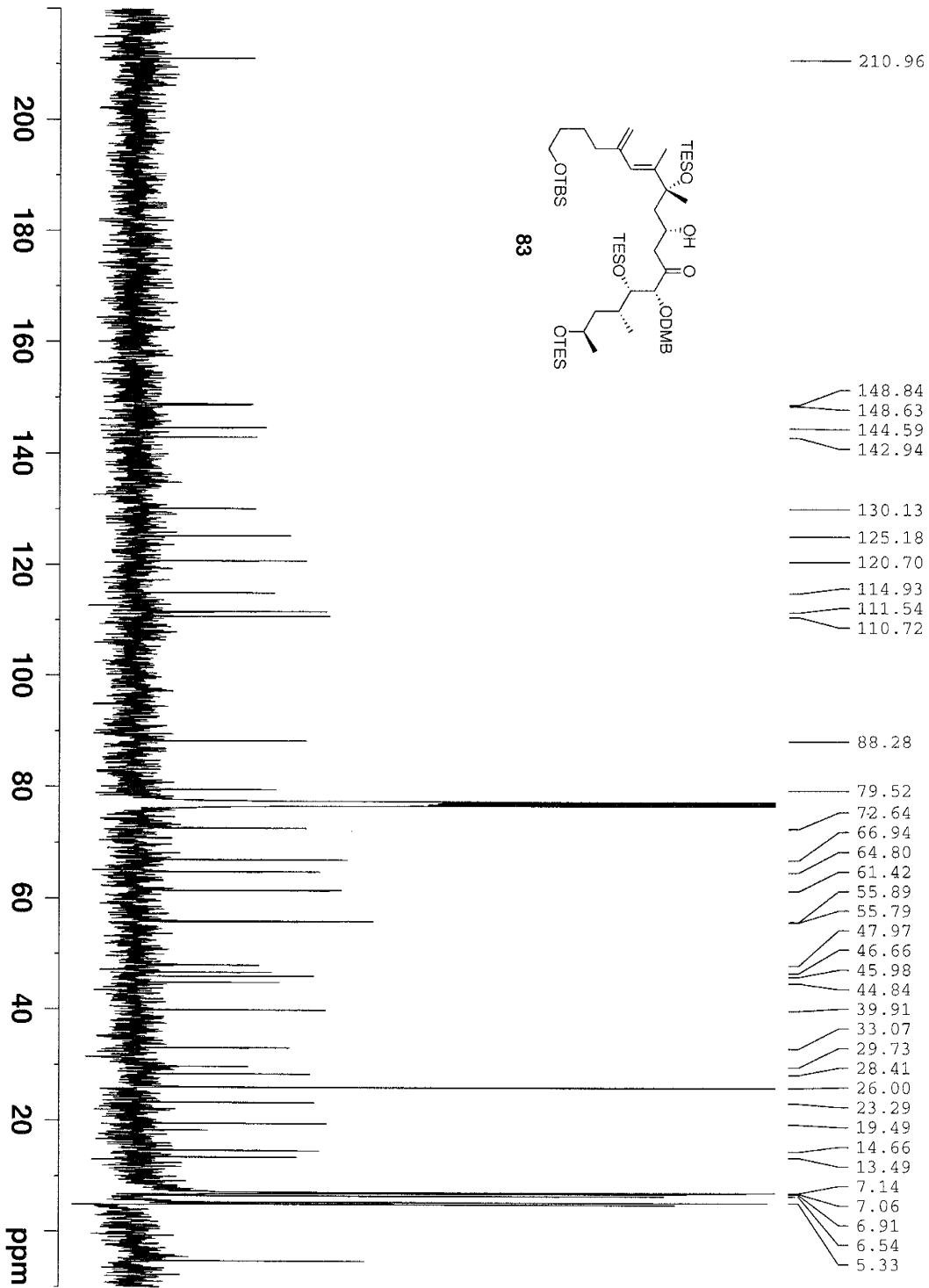
Current Data Parameters
 NAME: DMS-methylketone
 EXNO: 1
 PROCNO: 3
 DU: 1
 CSBR: /n
 Liang

F2 - Acquisition Parameters
 Date_: 20081125
 Time: 21.45
 INSTRUM: DFX400
 PROBEHD: 5 mm BBO H3-1H
 PULPROG: zgpg30
 TD: 65536
 SOLVENT: DMS
 NS: 494
 DS: 4
 SWH: 23125.629 Hz
 FIDRES: 0.1613387 Hz
 AQ: 1.3042164 sec
 RG: 5792.6
 DW: 19.900 usec
 DE: 6.00 usec
 TE: 298.2 K
 D1: 0.15000001 sec
 g11: 0.03000000 sec
 DELTA: 6.05000000 sec
 TDO: 1

==== CHANNEL F1 =====
 NUCL1: 13C
 P1: 7.80 usec
 PL1: -1.00 dB
 SFO1: 100.5785700 MHz

==== CHANNEL F2 =====
 CPDPRG2: waltz16
 NUCL2: 1H
 PCPD2: 135.00 usec
 PL2: 17.40 dB
 PL:2: 17.40 dB
 PL:3: 17.40 dB
 SFO2: 399.9510000 MHz

F2 - Processing parameters
 SI: 32768
 SF: 100.5675080 MHz
 WDW: EM
 SSB: 0
 LB: 3.00 Hz
 GB: 0
 PC: 1.40

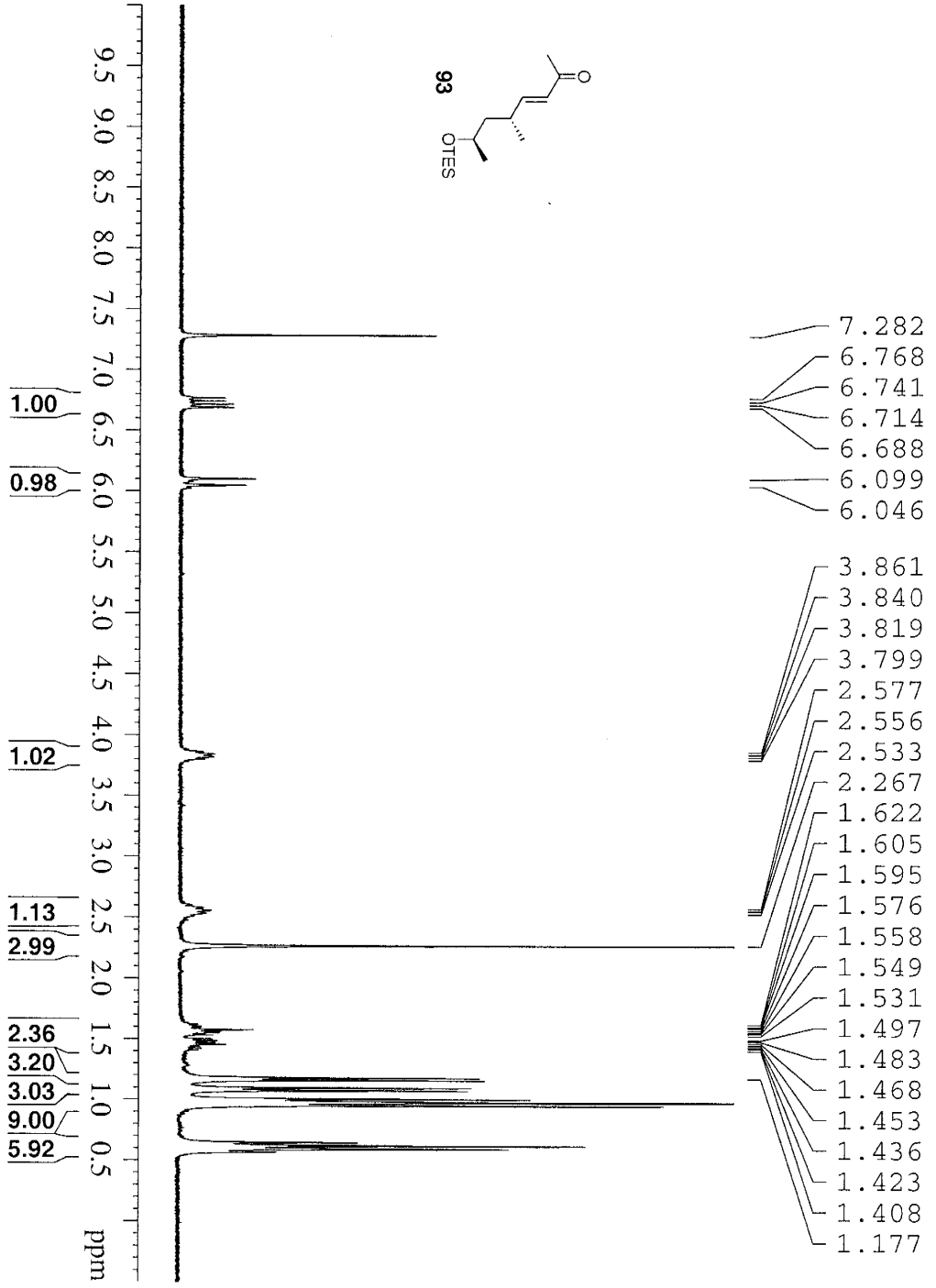
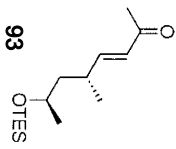


Current Data Parameters
 NAME 434
 EXPRNO 1
 PROCNO 1
 DT /C
 USER Li:acg

F2 - Acquisition Parameters
 Date_ 20070112
 Time 17.21
 INSTRUM DFX400
 PROBHD 5 mm BBO SB-1H
 PULPROG zgpg30
 TD 65536
 SOLVENT
 NS 2442
 DS 4
 SWH 26126.629 Hz
 FIDRES 0.389382 Hz
 AQ 1.3062164 sec
 RG 18390.4
 DW 19.900 usec
 DE 6.00 usec
 TE 298.2 K
 D1 0.15000001 sec
 d11 0.03000000 sec
 DELTA 0.05000000 sec
 *D0 1

==== CHANNEL F1 =====
 NUCL1 13C
 P1 7.80 usec
 PL1 3.00 dB
 SFO1 100.5985951 MHz
 ===== CHANNEL F2 =====
 CPDPRG2 waltz16
 NUC2 1H
 ROPD2 135.00 usec
 PL2 17.40 dB
 PL12 17.40 dB
 PL13 17.40 dB
 SFO2 400.0116000 MHz

F2 - Processing Parameters
 SI 32768
 SF 100.5825950 MHz
 WDM EM
 SSB 0
 LB 3.00 Hz
 GB 0
 PC 1.40

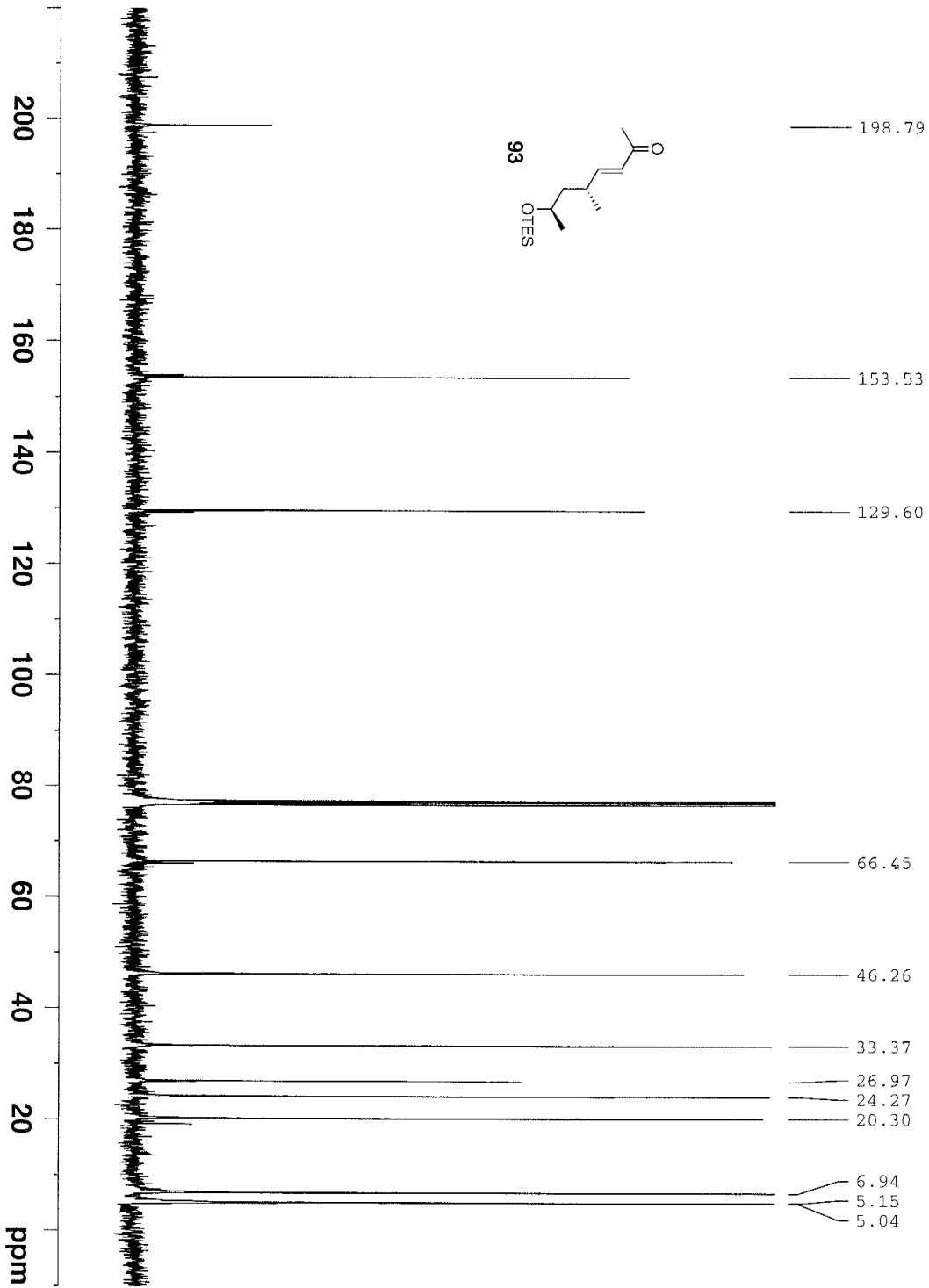


Current Data Parameters
 EXPNO 3
 PROCNO 1
 DU 1
 USER /n
 Liang

F2 - Acquisition Parameters
 Date_ 20070222
 Time 14.37
 INSTRUM D24300
 PULPROG zg30
 TD 32768
 SOLVENT CMC13
 NS 11
 DS 1
 SWH 4789.272 Hz
 FIDRES 0.146157 Hz
 AQ 3.4219291 sec
 DE 104.400 usec
 TE 298.2 K
 D1 2.00000000 sec
 TDO 1

***** CHANNEL f1 *****
 NUCL1 1H
 P1 5.00 usec
 PL 0.00 dB
 SFO1 300.1321009 MHz

F2 - Processing parameters
 SI 32768
 SF 300.1300000 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00



Current Data Parameters

NAME	5-3472
EXPNO	3
PROCNO	1
DI	1/n
USER	Liang

F2 - Acquisition Parameters

Date_	20070417
Time	16.34
INSTRUM	DPX400
PROBHD	5 mm BBO BB-1H
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	1184
DS	1
SWH	25125.629 Hz
F2	132.9123 Hz
NUC2	13C
RG	1.3042164 SK
RO	4597.6
LB	19.900 us
DE	6.00 us
TE	298.2 K
TD	0.15000001 sec
DI1	0.03000000 sec
DELTA	0.05000000 sec
TD0	1

==== CHANNEL f1 =====

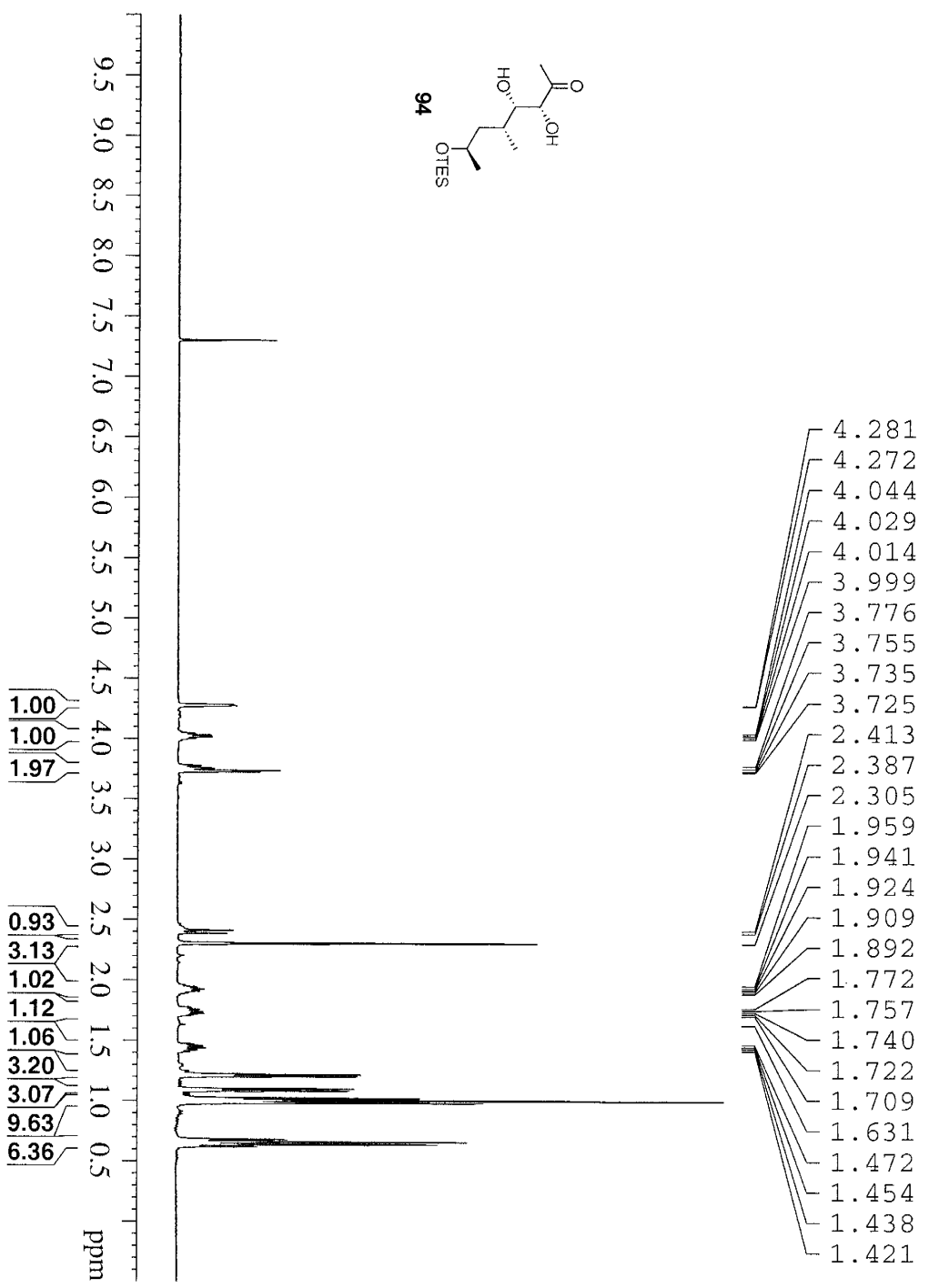
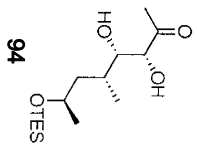
NUC1	13C
P1	7.88 us
F1	-3.09 GHz
SFO1	100.6259591 MHz

==== CHANNEL f2 =====

CAPPROG2	waltz16
NUC2	1H
PCPD2	135.00 us
PL2	17.40 dB
PL12	17.40 dB
PL13	17.40 dB
SFO2	400.0116000 MHz

F2 - Processing parameters

SI	32768
SF	100.6259590 MHz
WDW	EM
SSB	0
LB	3.00 Hz
GB	0
PC	1.40

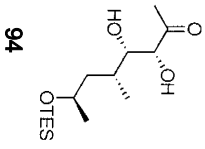
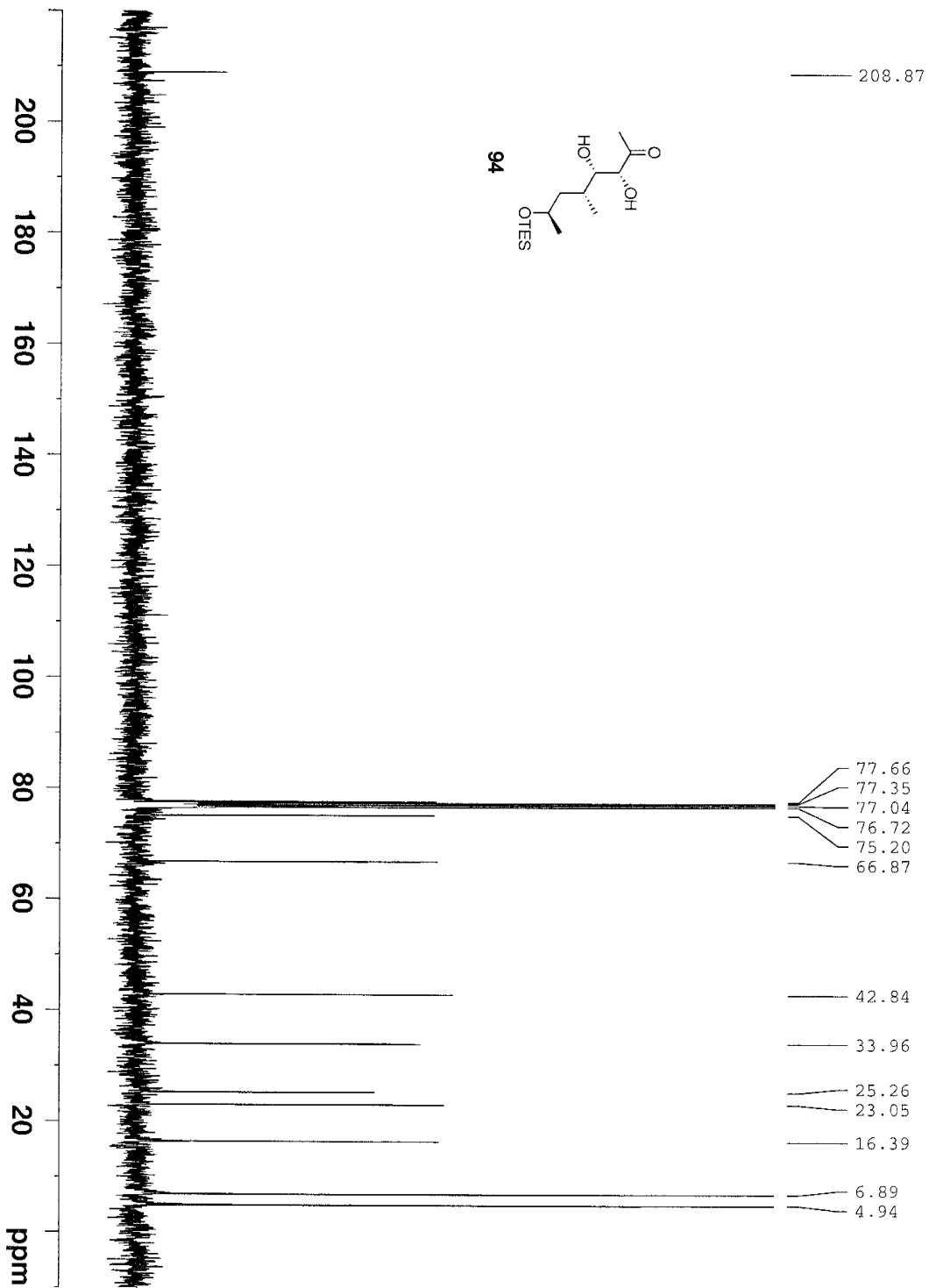


Current Data Parameters
 EXPNO 5-3
 PROCNO 1
 DU /h
 USER Liang

F2 - Acquisition Parameters
 Date_ 20070419
 Time 21.48
 INSTRUM DSI400
 PULPROG zgpg30
 TD 32768
 SOLVENT CDCl3
 NS 32
 DS 2
 SWH 6410.295 Hz
 FIDRES 0.195625 Hz
 AQ 2.3559540 sec
 SFO1 400.0128001 MHz
 DE 78.401 usec
 TE 298.2 K
 D1 2.00000000 sec
 TDO 1

***** CHANNEL f1 *****
 NUC1 1H
 P1 14.70 usec
 SFO1 400.0128001 MHz

F2 - Processing parameters
 SI 32768
 SF 400.0100000 MHz
 WDW DO
 SSB 0
 LA 0.00 Hz
 LB 0
 PC 1.00



208.87

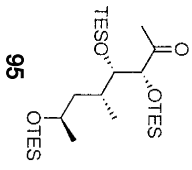
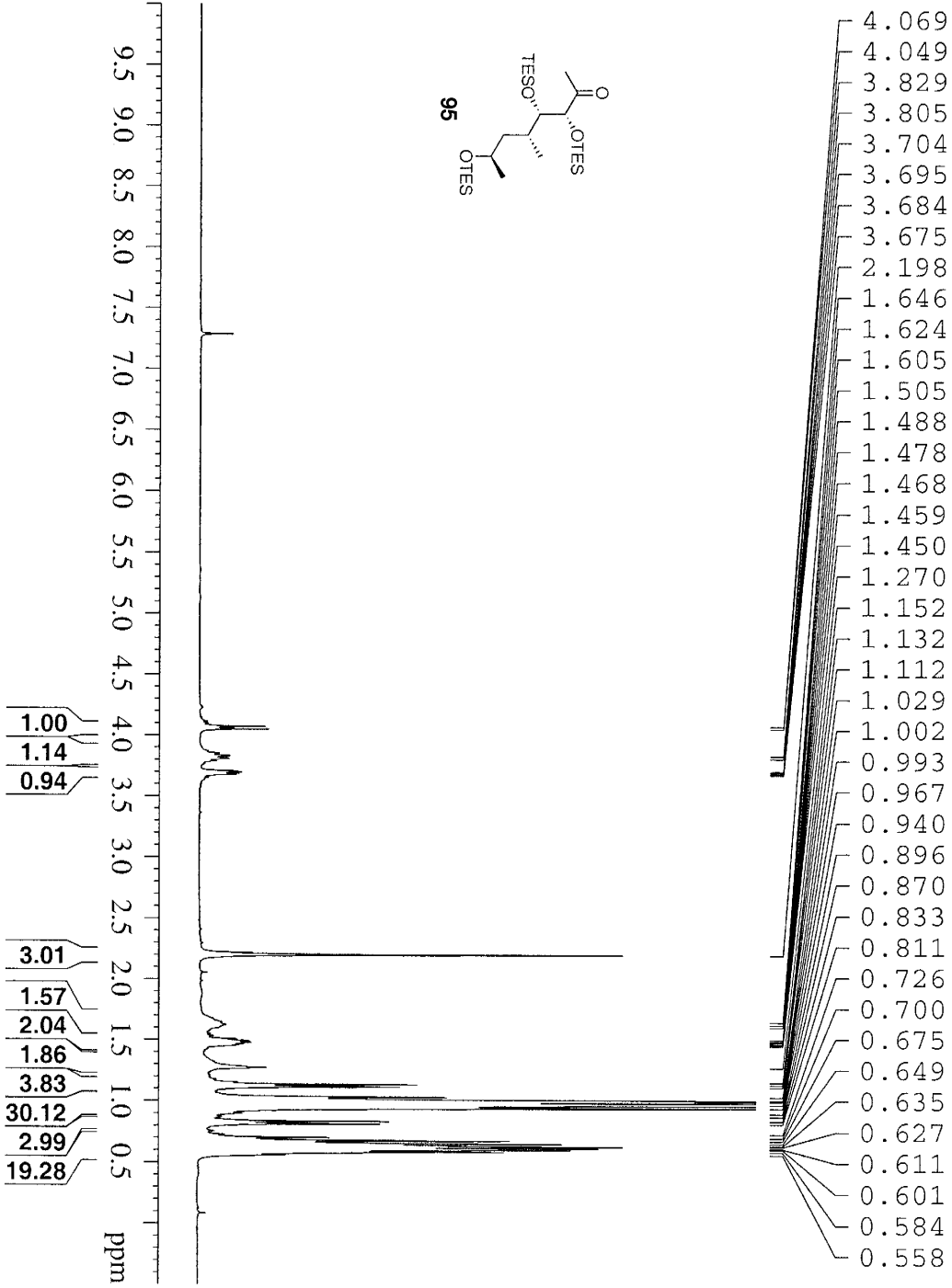
77.66
77.35
77.04
76.72
75.20
66.87

42.84
33.96
25.26
23.05
16.39

6.89
4.94

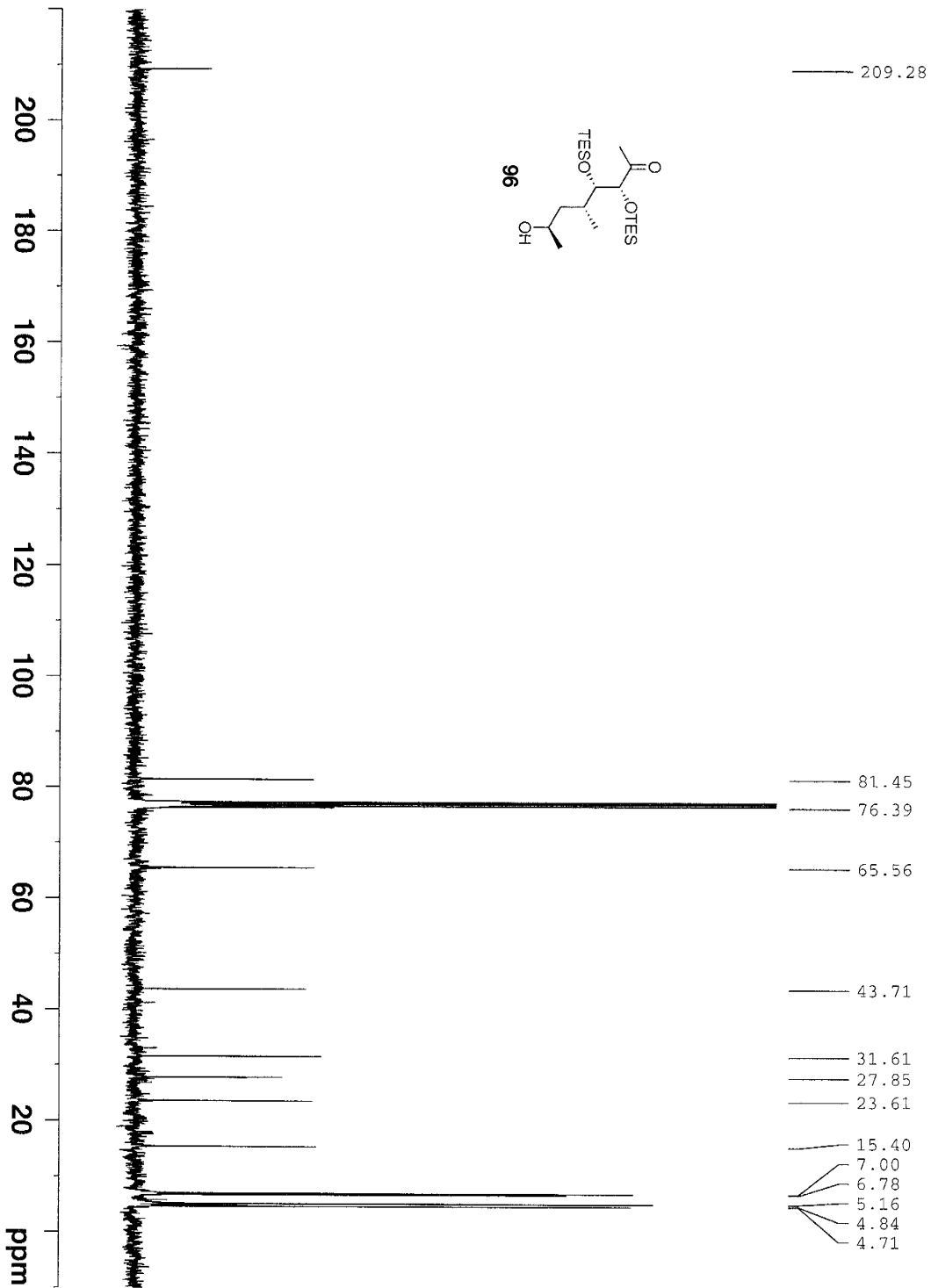
```

Current Data Parameters
NAME          5-37
EXPNO         1
PROCNO       1
F2           /n
USER
===== CHANNEL F1 =====
NUC1          13C
F2            7.80 us
PC1           3.00 us
SFO1         100.5936991 MHz
===== CHANNEL F2 =====
CPDPRG2      waltz16
NMIC2        135.00 us
PCPD2        17.46 us
PL12         17.46 us
PL13         17.46 us
SFO2         400.0116000 MHz
F2 - Processing parameters
SI           32768
SF          100.5825950 MHz
WDW          EM
SSB          0
LB           3.00 Hz
GB           0
PC           1.40
===== Acquisition Parameters =====
Date_        20070419
Time         22.24
INSTRUM     DPX400
PROBHD      5 mm BBO BB-1H
PULPROG     zgpg30
TD           65536
SOLVENT     CDCl3
NS           342
DS           4
SWH          25126.629 Hz
FIDRES       0.181187 Hz
AQ           1.3042164 sec
RG           31585.2
DE           19.900 us
TE           298.2 K
D1           C.15000001 sec
DELTA       C.03000000 sec
TDO         1
  
```



```

Current Data Parameters
NAME          5-37-2
EXPNO        5
PROCNO       1
F2           /h
SOLVENT      2:anis
=====
F2 - Acquisition Parameters
Date_         20070425
Time         15:34
INSTRUM      DSI-300
PROBHD       5 mm QNP 1H/1
PULPROG      zg30
TD           32768
SOLVENT      CDCl3
NS           1
DS           2
SFO1         4789.272 Hz
FIDRES       0.146157 Hz
AQ           3.9210291 sec
RG           409.5
DE           1.04400 usec
TE           298.2 K
TD0          2.00000000 sec
===== CHANNEL f1 =====
NUC1         13
P1           9.10 usec
PL1         -1.00 dB
SFO1        300.1321009 MHz
=====
F2 - Processing parameters
SI          300.1320000 MHz
WDW         wE
SSB         0
GB          0.00 Hz
PC          1.00
  
```

```

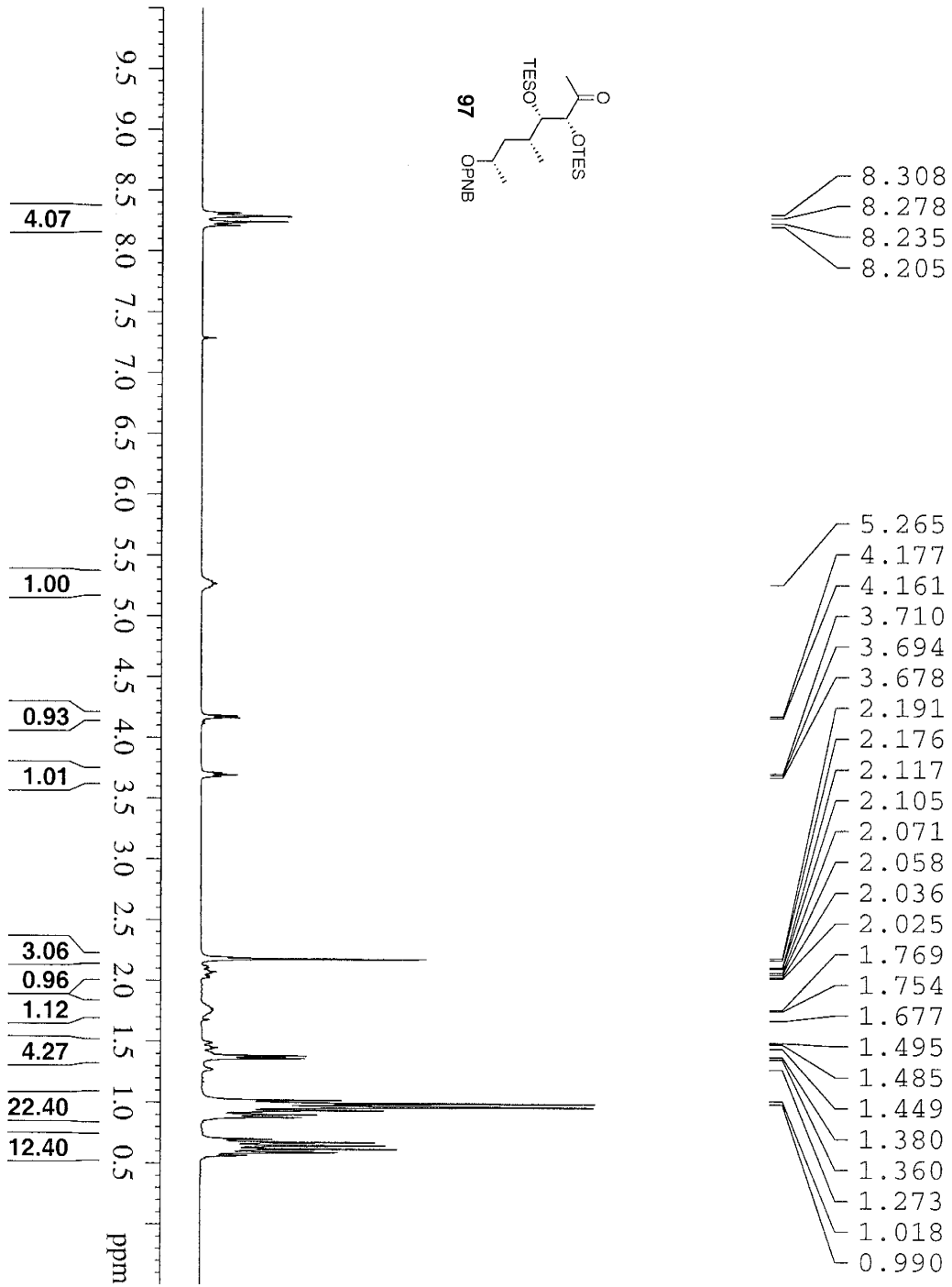
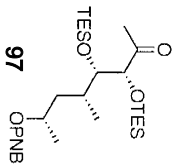
Current Data Parameters
NAME          5-33
EXPNO         1
PROCNO        1
DI             /n
USER          .jiang

F2 - Acquisition Parameters
Date_         20070424
Time          18.56
INSTRUM      DPX400
PROBHD       5 mm BBO BB-1H
PULPROG      zgpg30
TD            65536
SOLVENT      SOLVENT
NS            740
DS            4
SWH           2535.629 Hz
FWHM          0.323327 Hz
AQC           1.362164 sec
RG            4597.6
AQ            19.900 us
DE            6.00 us
TE            298.2 K
D1            0.15000001 sec
d11           0.03000000 sec
DELTA        0.05000000 sec
TDC           1

===== CHANNEL f1 =====
NUC1          13C
P1            7.80 us
PC1           -3.00 dB
SFO1         100.6283592 MHz

===== CHANNEL f2 =====
CPDPRG2      waltz16
NUC2          135.00 us
PCPD2        135.00 us
PL2          17.40 dB
PL12         17.40 dB
PL13         17.40 dB
SFO2         400.0116000 MHz

F2 - Processing parameters:
SI           32768
SF           100.6283592 MHz
WDW          EM
SSB          0
L3           3.00 Hz
GB           0
PC           1.40
  
```

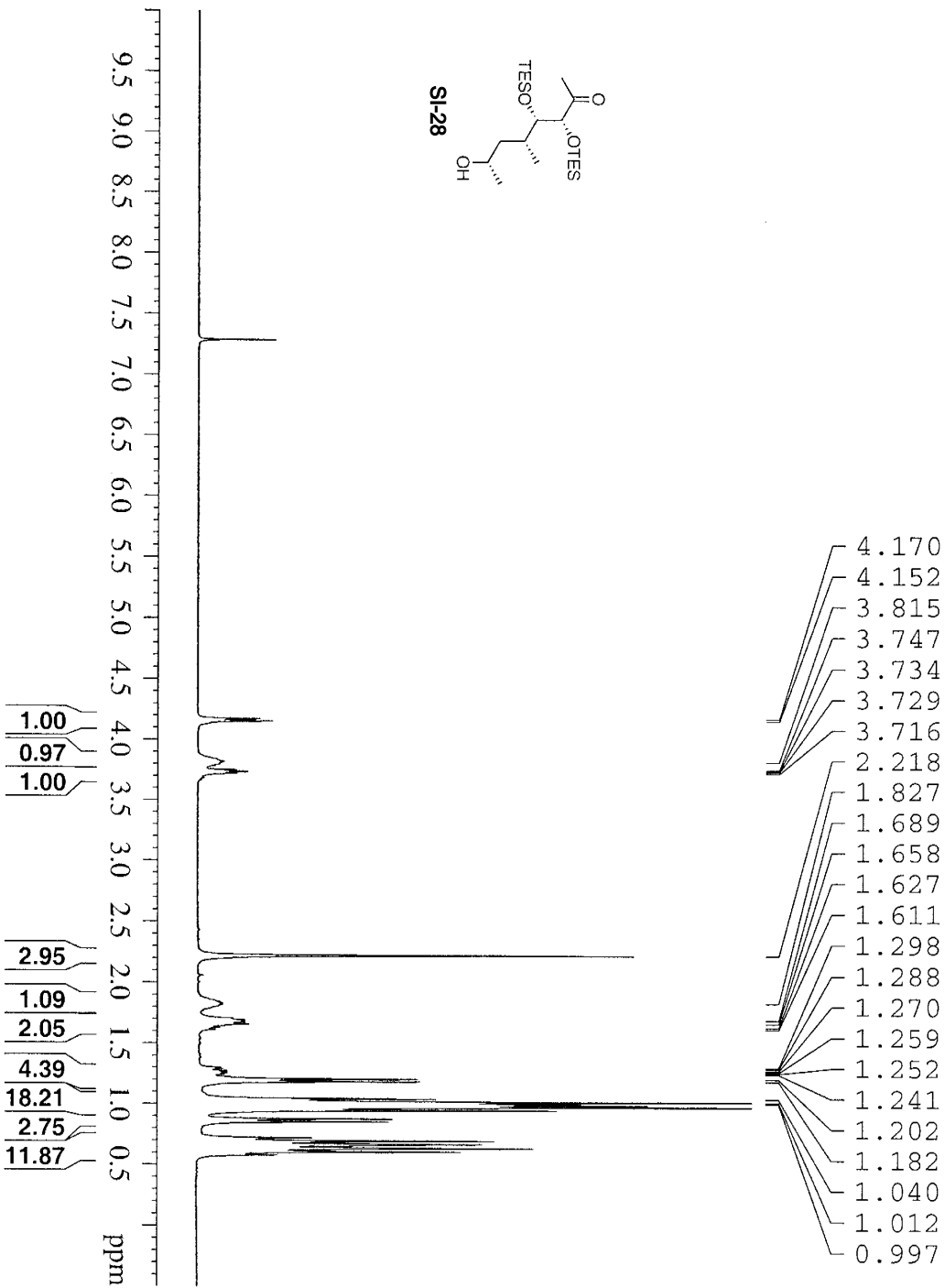
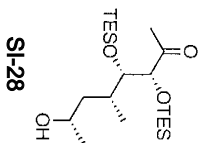



Current Data Parameters
 Name: 5-32
 EXNO: 1
 PROGNO: /n
 DN: 1
 USR: 1
 Chan: 1

F2 - Acquisition Parameters
 Date_: 20070424
 Time: 17.33
 INSTRUM: PEX300
 PULPROG: zgpg30
 TD: 32768
 SOLVENT: CDCl3
 NS: 32
 DS: 2
 SWH: 4789.272 Hz
 FIDRES: 0.146157 Hz
 AQ: 3.421029 sec
 DE: 104.400 usec
 TE: 298.2 K
 D1: 2.00000000 sec
 TDO: 1

***** CHANNEL f2: *****
 NUC1: 13
 P1: 9.00 usec
 PL1: 0.00 dB
 SFO1: 300.132109 MHz

F2 - Processing parameters
 SI: 32768
 SF: 300.132109 MHz
 WCN: 4096
 SSB: 0
 LB: 0.00 Hz
 GB: 0
 PC: 1.00

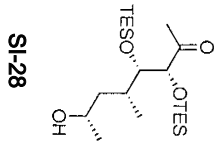
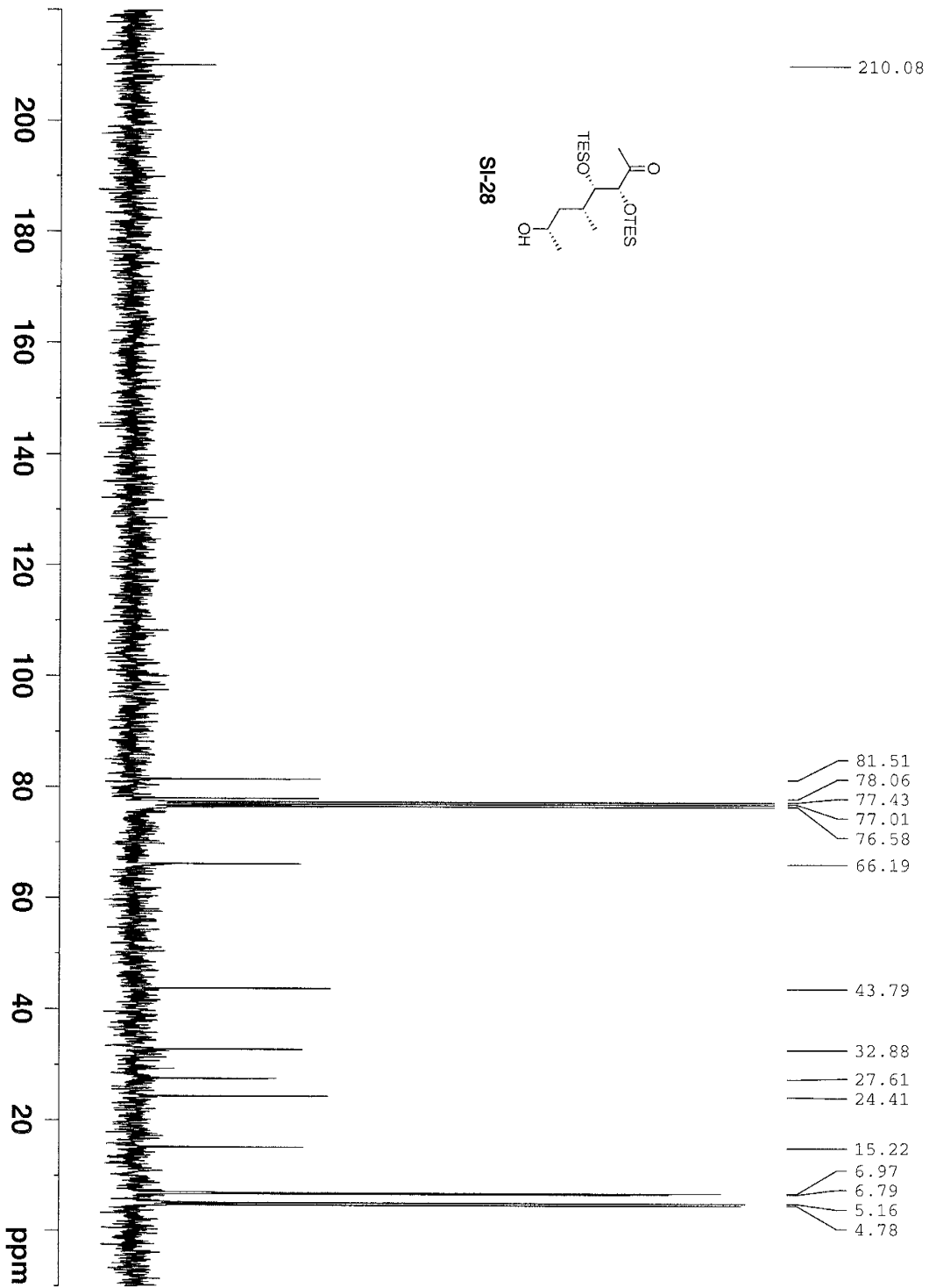


Current Data Parameters
 NAME: SI-28
 EXNO: 2
 PROCNO: 1
 DIR: /n
 USER: Listing

F2 - Acquisition Parameters
 Date_: 20070426
 Time: 11.14
 INSTRUM: DSW446
 PROBD: HPL
 PULPROG: zgpg30
 TD: 2430
 SFO1: 32768
 SOLVENT: CDCl3
 DS: 1
 SWH: 4789.272 Hz
 FIDRES: 0.146157 Hz
 AQ: 3.4219291 sec
 RG: 104.400 usec
 CE: 5.00 usec
 TE: 298.2 K
 TD0: 2.0000000 sec
 TDO: 1

***** CHANNEL f1 *****
 NUC1: 1H
 P1: 9.10 usec
 PL1: -3.00 dB
 SFO1: 300.1321009 MHz

F2 - Processing parameters
 SF: 300.1300000 MHz
 WDW: no
 SSB: 0
 GB: 0.00 Hz
 PC: 1.00



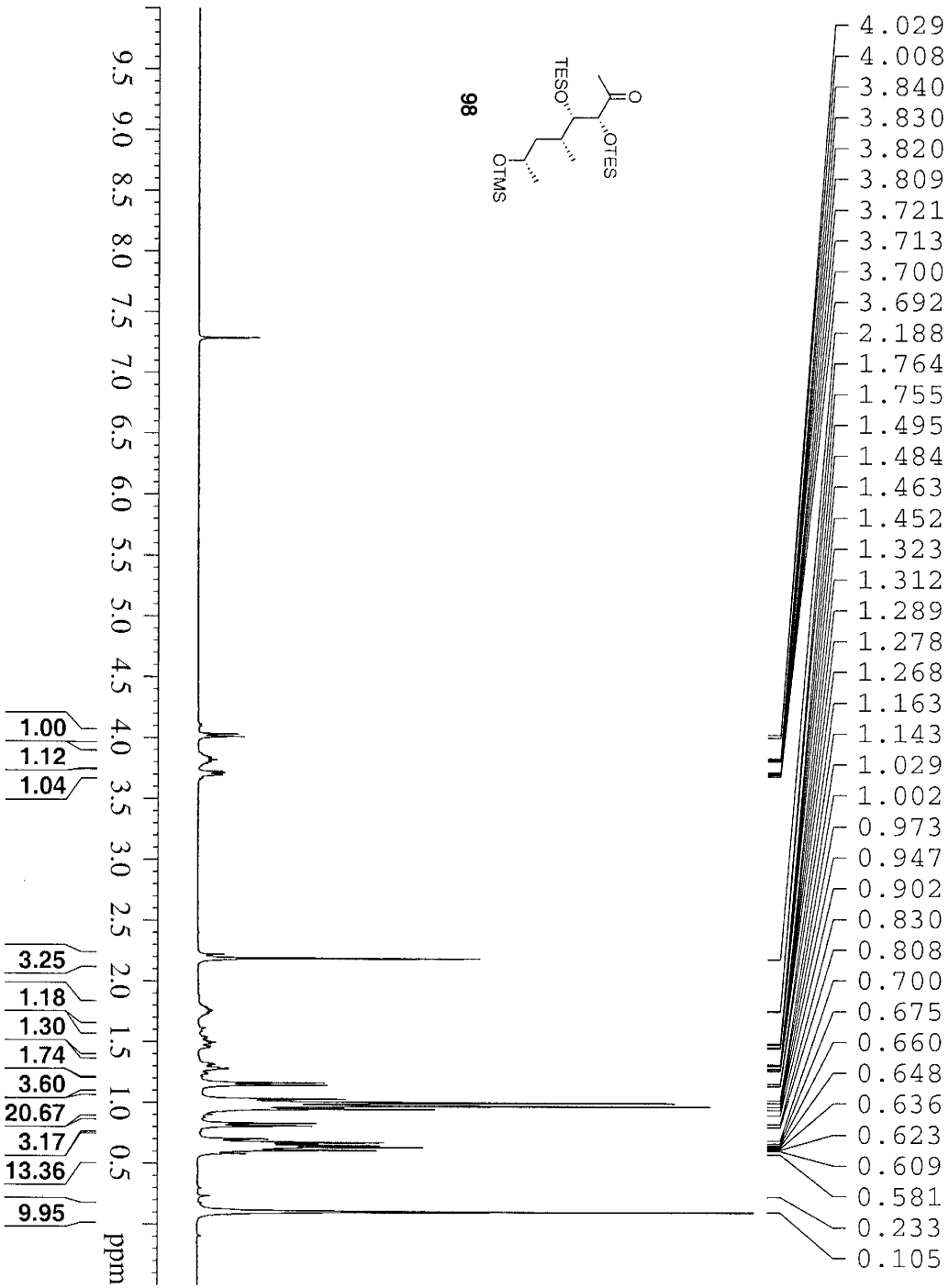
Current Data Parameters
 NAME 5-40
 EXPNO 1
 PROCNO 1
 DU /n
 USER
 LANG

F2 - Acquisition Parameters
 Date_ 20070426
 Time 11.26
 INSTRUM CPX300
 PROBRD 5 mm QNP 1H/1
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 204
 DS 4
 SFO 18932.363 Hz
 FIDRES 0.287360 Hz
 AQ 1.7480309 s
 RG 9.952
 DW 26.550 us
 DE 6.00 us
 TE 298.2 K
 D1 0.15000001 s
 d11 0.03000000 s
 DELTA 0.05000000 s
 TD0 1

===== CHANNEL f1 =====
 NUC1 13C
 P1 8.80 us
 PL1 -3.00 dB
 SFO1 75.476305 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 us
 PL2 -3.00 dB
 PL12 17.55 dB
 PL13 17.55 dB
 SFO2 300.131205 MHz

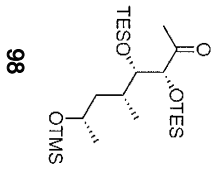
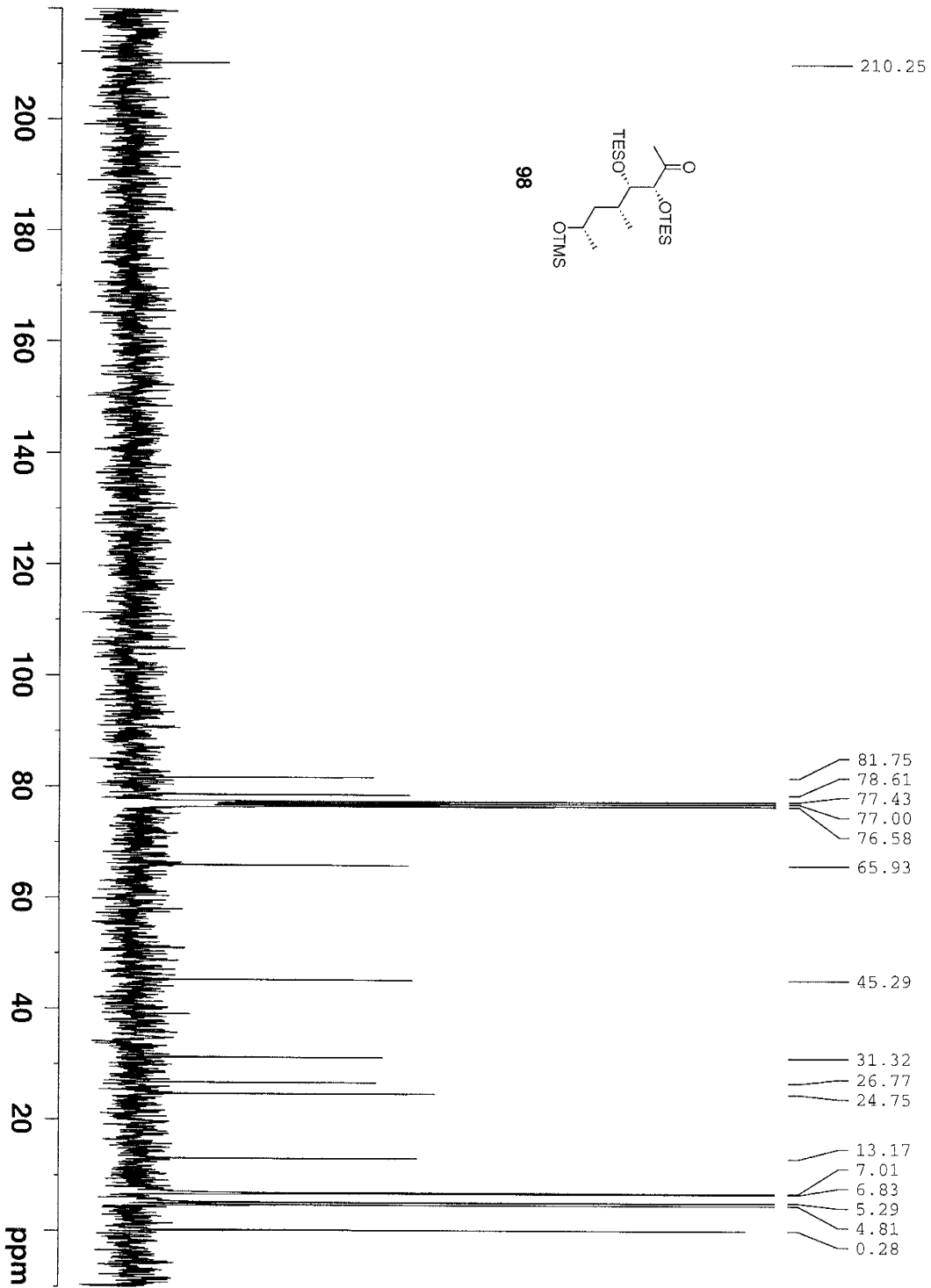
F2 - Processing Parameters
 SI 32768
 SF 75.4677490 MHz
 WDM EM
 SSB 0
 LB 3.00 Hz
 GB 0
 PC 1.40



```

Current Data Parameters
NAME: 5-41
EXPNO: 1
PROCNO: 1
DU: /n
USBR: /m
F2 - Acquisition Parameters
Date_: 20070426
Time: 22.31
INSTRUM: DR2
PROBHD: 5 mm QNP
PULPROG: zgpg30
TD: 32768
SOLVENT: CDCl3
DS: 2
AQ: 4.789272 Hz
FIDRES: 0.146157 Hz
AQ: 3.4210281 sec
RG: 655
DE: 104.400 usec
TE: 298.2 K
TD0: 2.0000000 sec
===== CHANNEL f1 =====
NUC1: 1H
P1: 9.10 usec
PL1: -3.00 dB
SFO1: 300.1321009 MHz
F2 - Processing parameters
SI: 300.1300000 MHz
WDW: no
SSB: 0
LB: 0.00 Hz
GB: 0
PC: 1.00

```



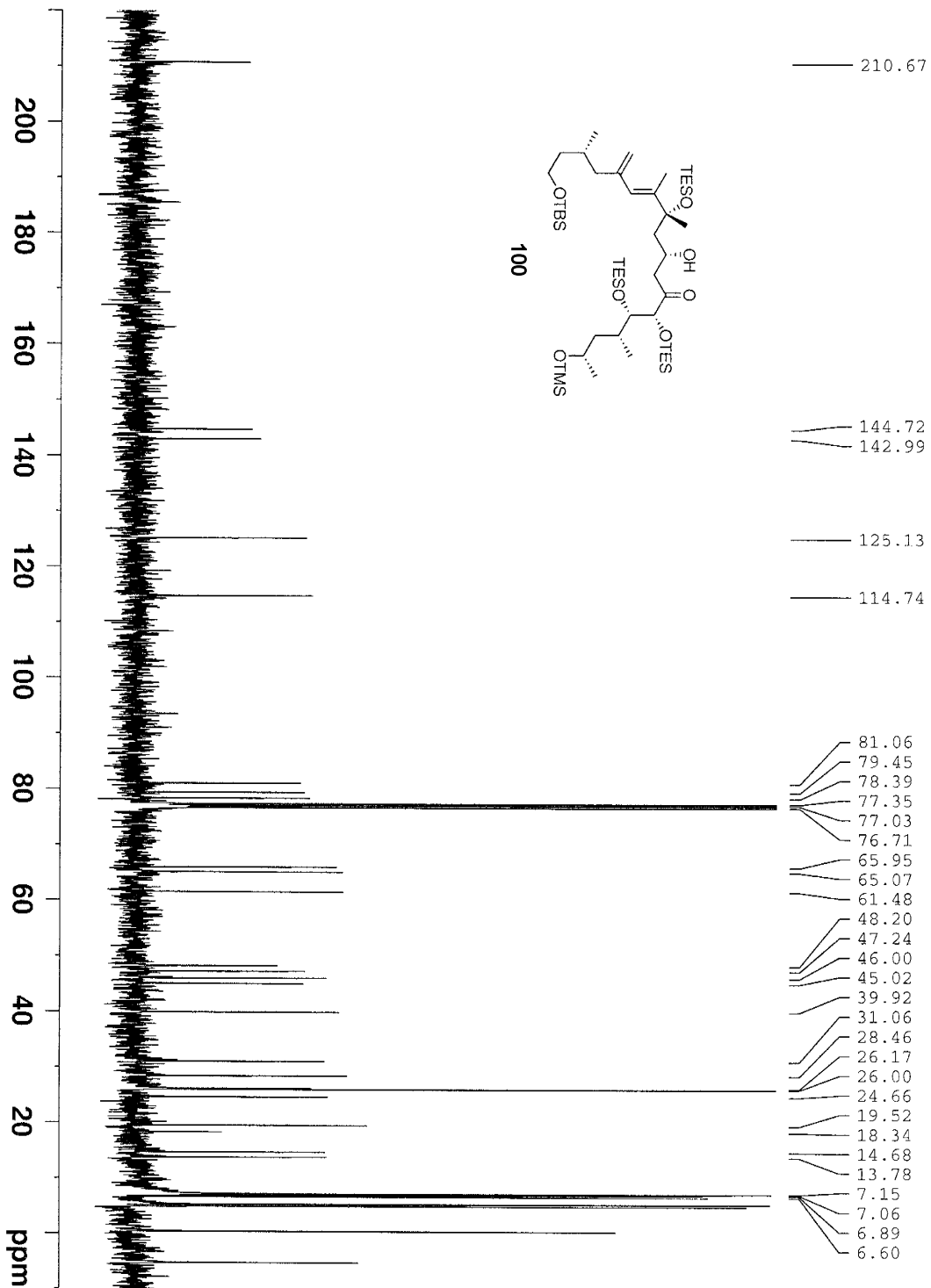
Current Data Parameters
 NAME 5-42
 EXPNO 1
 PROCNO 1
 DU /5
 USER Ljanc

F2 - Acquisition Parameters
 Date_ 20070426
 Time 22.45
 INSTRUM DFX300
 PROBHD 5 mm QNP 1H/1
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 407
 DS 4
 SWH 1892.393 Hz
 FIDRES 0.240320 Hz
 AQC 1.7460300 s
 RG 9195.2
 DE 26.550 us
 TE 298.2 K
 D1 0.15000001 s
 d11 0.03000000 s
 DELTA 0.05000000 s
 TDO 1

===== CHANNEL f1 =====
 NUC1 13C
 P1 8.80 us
 PL1 -3.00 dB
 SFO1 75.476505 MHz

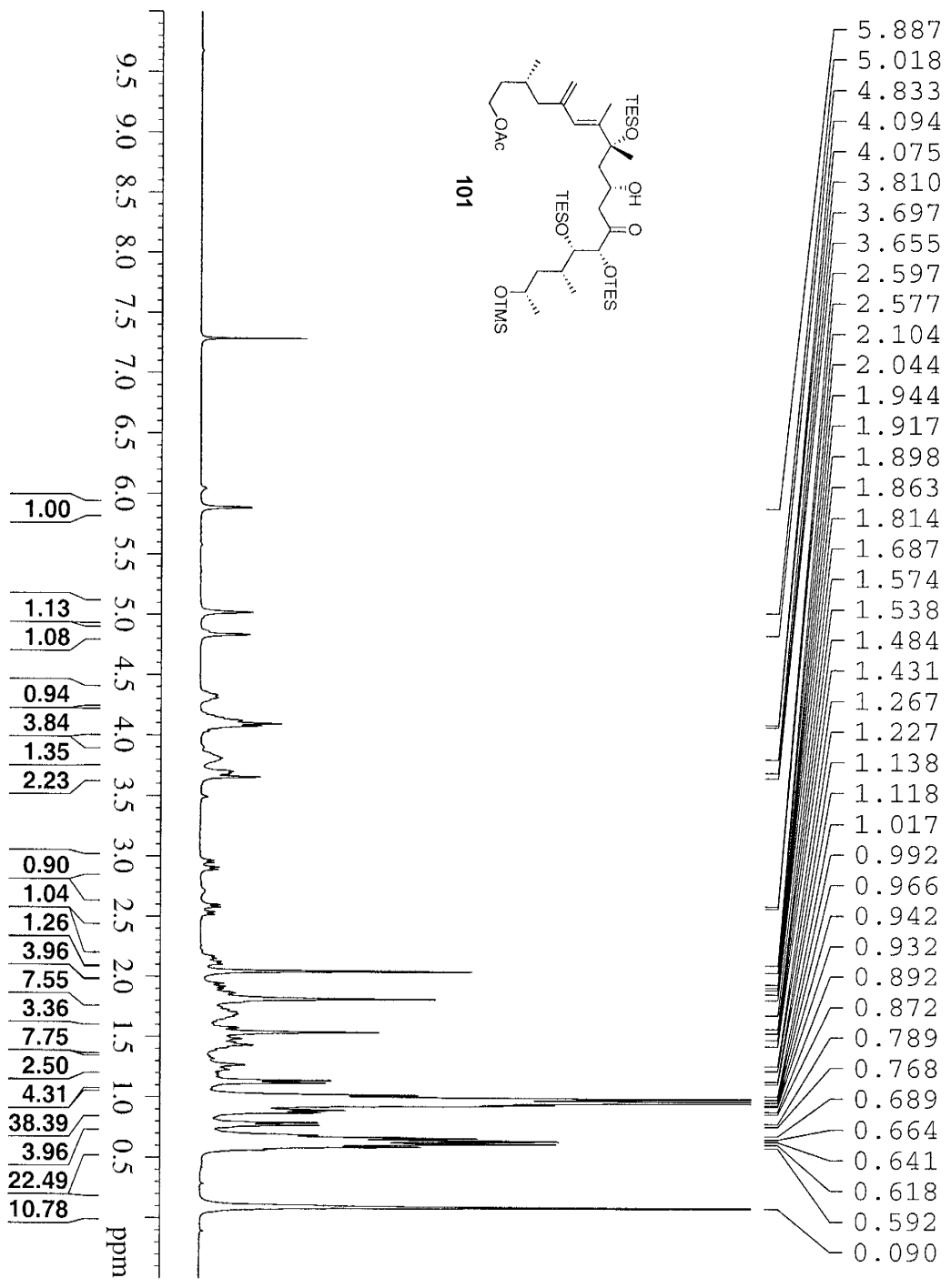
===== CHANNEL f2 =====
 NUC2 1H
 WALTZ16
 RCPD2 80.00 us
 PL2 -3.00 dB
 PL12 17.55 dB
 PL13 17.55 dB
 SFO2 300.1312005 MHz

F2 - Processing parameters
 SI 32768
 SF 75.4677490 MHz
 WDM EM
 SSB 0
 CB 3.00 Hz
 GB 0
 PC 1.40



```

Current Data Parameters
NAME          5-50
EXPNO        3
PROCNO       3
PROCRES      /n
USER         J.Lang
F2 - Acquisition Parameters
Date_        20070508
Time         20:38
Pulseprog    zgpg30
PROBHD       5 mm BBO BB-4H
PULPROG      convp30f
TD           2048
SOLVENT      2048
NS           2
DS           2
SWH          4006.410 Hz
FIDRES      1.356255 Hz
AQ          0.2556404 sec
RG          322.5
RQ          124.600 usec
SN          6.00
SS          299.2 X usec
TE          299.2 X
D0          0.00000000 sec
d11         0.00000000 sec
d12         0.00000000 sec
tau         0.00024960 sec
===== CHANNEL f1 =====
NUC1         1H
P1           1.00 usec
PL1          0.00 dB
SFO1         400.0120000 MHz
===== GRADIENT CHANNEL =====
GPMX2        100
SFO2         100.6261316 MHz
GR21         0.00 %
GR22         10.00 %
P16          1000.00 usec
F1 - Acquisition Parameters
HD0          128
TD           128
SFO1         400.012 MHz
FIDRES      31.300079 Hz
SI          0.016 EPM
RG          0
F2 - Processing parameters
SI          32768
SF          100.5825950 MHz
EX          0
SSB         0
GB          0
PC          1.40
  
```

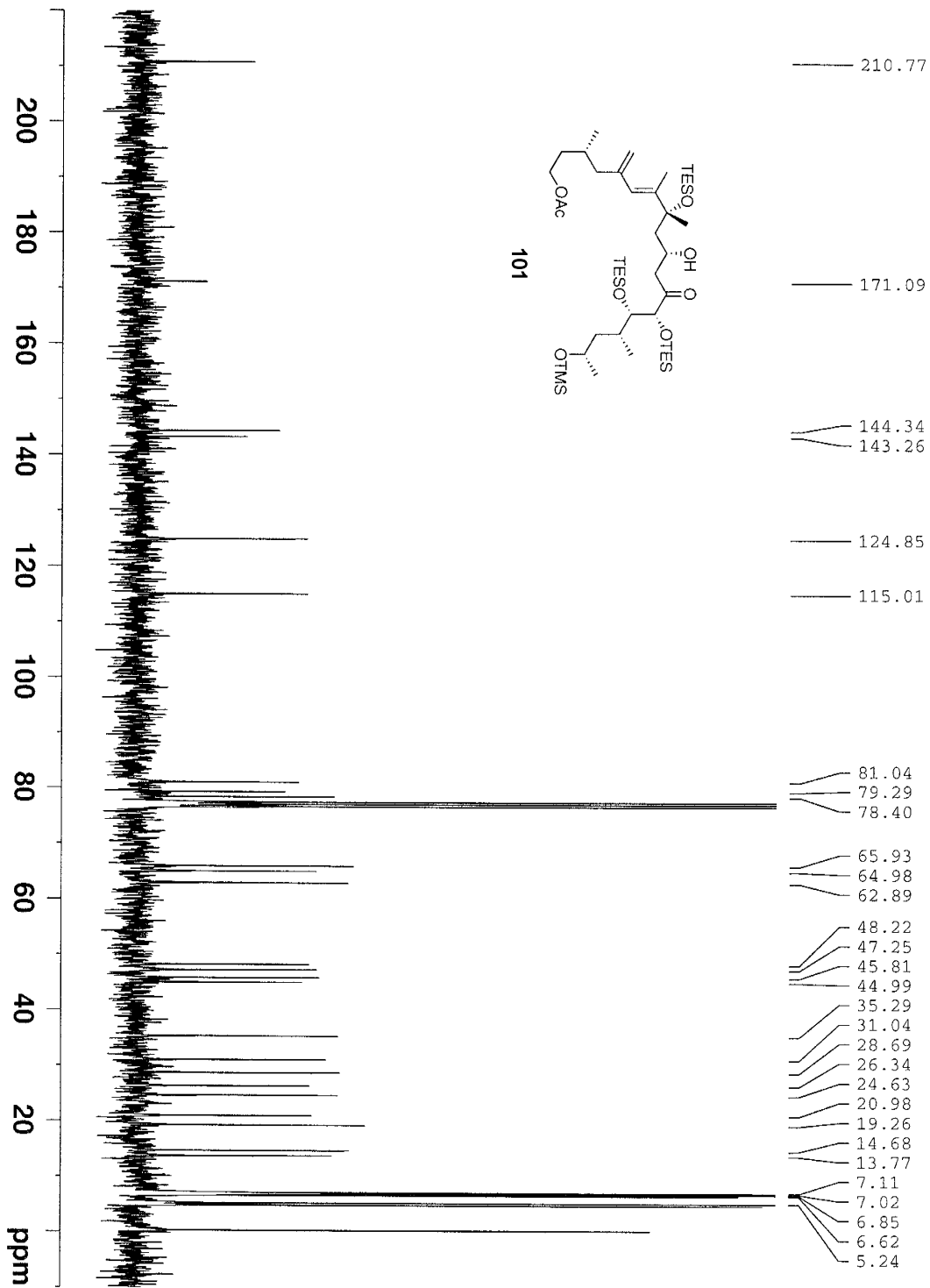



Current Data Parameters
 Name: 7-84-1
 ExpNO: 1
 PROCNO: 1
 DU: 1
 USER: Llsmy

F2 - Acquisition Parameters
 Date_: 20080310
 Time: 21.23
 Instrument: spect
 Processor: 5 mm QNP
 PULPROG: zgpg30
 TD: 32768
 SOLVENT: CDCl3
 NS: 2
 DS: 2
 SWH: 4789.272 Hz
 FIDRES: 0.146457 Hz
 AQ: 1.111 sec
 RG: 3.4210291
 DW: 104.400 usec
 DE: 6.00 usec
 TE: 298.2 K
 D1: 2.00000000 sec
 T20: 1

***** CHANNEL f1 *****
 NUC1: 1H
 P1: 9.00 usec
 PL1: -3.00 dB
 SFO1: 300.132109 MHz

F2 - Processing parameters
 SI: 300.132109 MHz
 SF: 300.132109 MHz
 WTW: 0.00 Hz
 SSB: 0
 CB: 0
 PC: 1.00



- 210.77
- 171.09
- 144.34
- 143.26
- 124.85
- 115.01
- 81.04
- 79.29
- 78.40
- 65.93
- 64.98
- 62.89
- 48.22
- 47.25
- 45.81
- 44.99
- 35.29
- 31.04
- 28.69
- 26.34
- 24.63
- 20.98
- 19.26
- 14.68
- 13.77
- 7.11
- 7.02
- 6.85
- 6.62
- 5.24

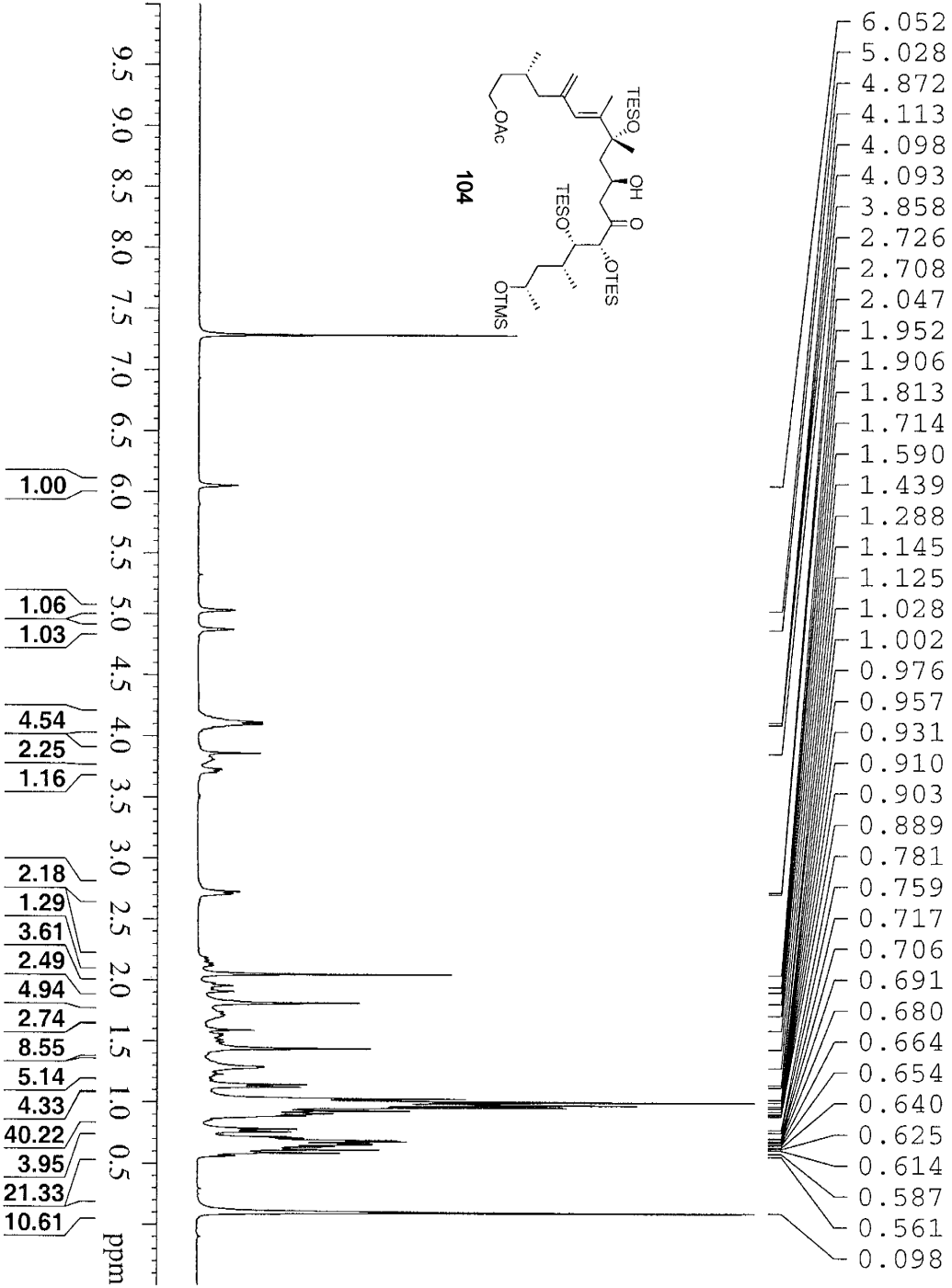
Current Data Parameters
 NAME 7-84-2
 EXPNO 3
 PROCNO 1
 DU 1/n
 USER Liang

F2 - Acquisition Parameters
 Date_ 20080310
 Time 21.40
 INSTRUM DPX300
 PULPROG zgpg30
 TD 65536
 SOLVENT CCl3
 DS 2/7
 SWH 18832.393 Hz
 FIDRES 0.287160 Hz
 AQ 1.7400308 sec
 RG 9195.2
 DW 26.550 usec
 DE 6.00 usec
 TE 298.2 K
 D1 0.15000001 sec
 d11 0.03000000 sec
 DELTA 0.05000000 sec
 TDC 1

==== CHANNEL f1 =====
 NUCl 13C
 P1 8.86 usec
 PC1 -3.00 dB
 SFO1 75.4760905 MHz

==== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 P2 80.00 usec
 PCP2 -3.00 dB
 PL2 -3.00 dB
 PL12 17.55 dB
 PL13 17.55 dB
 SFO2 300.1312005 MHz

F2 - Processing parameters
 SI 32768
 SF 75.4677490 MHz
 WDW EM
 SSB 0
 LB 3.00 Hz
 GB 0
 PC 1.40

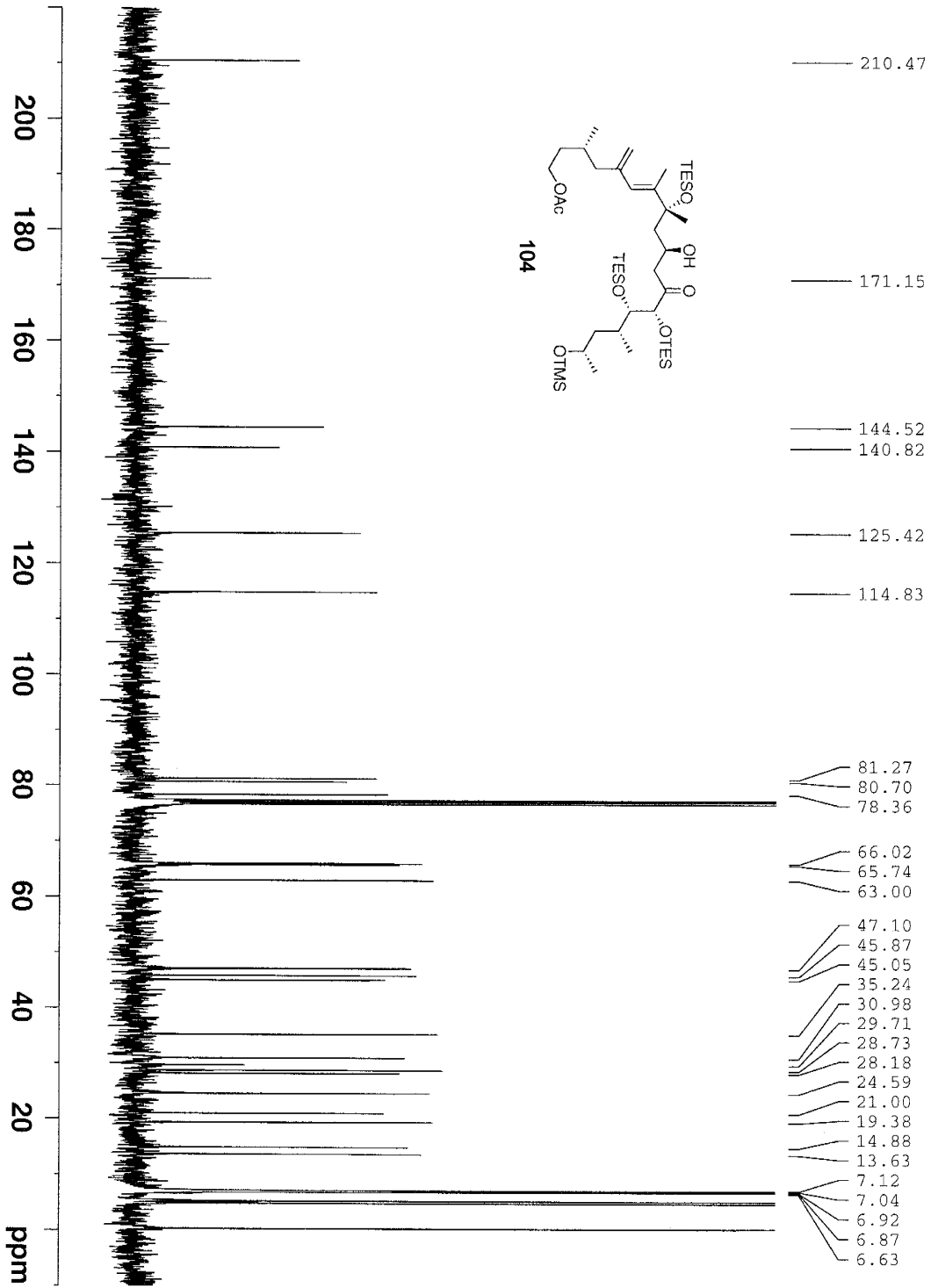


Current Data Parameters
 Name: 104
 EXPNO: 5
 PROCNO: 1
 DE: /h
 USR: /n
 Liang

F2 - Acquisition Parameters
 Date_: 20080218
 Time: 15:36
 INSTRUM: zgpg30
 PROBHD: 5 mm QNP 291
 PULPROG: zgpg30
 TD: 32768
 SOLVENT: CDCl3
 NS: 2
 DS: 4
 SWH: 4789.272 Hz
 FIDRES: 0.146157 Hz
 AQ: 3.4210291 sec
 RG: 104
 IQY: 104.400 usec
 DE: 6.00 usec
 TE: 298.2 K
 D1: 2.00000000 sec
 D10: 1

***** CHANNEL f1 *****
 NUC1: 1H
 P1: 9.100 usec
 PL1: -3.00 dB
 SFO1: 300.132109 MHz

F2 - Processing parameters
 SI: 300.132000 MHz
 SF: 300.132000 MHz
 WDW: EM
 SSB: 0
 LB: 0.30 Hz
 GB: 0
 PC: 1.00



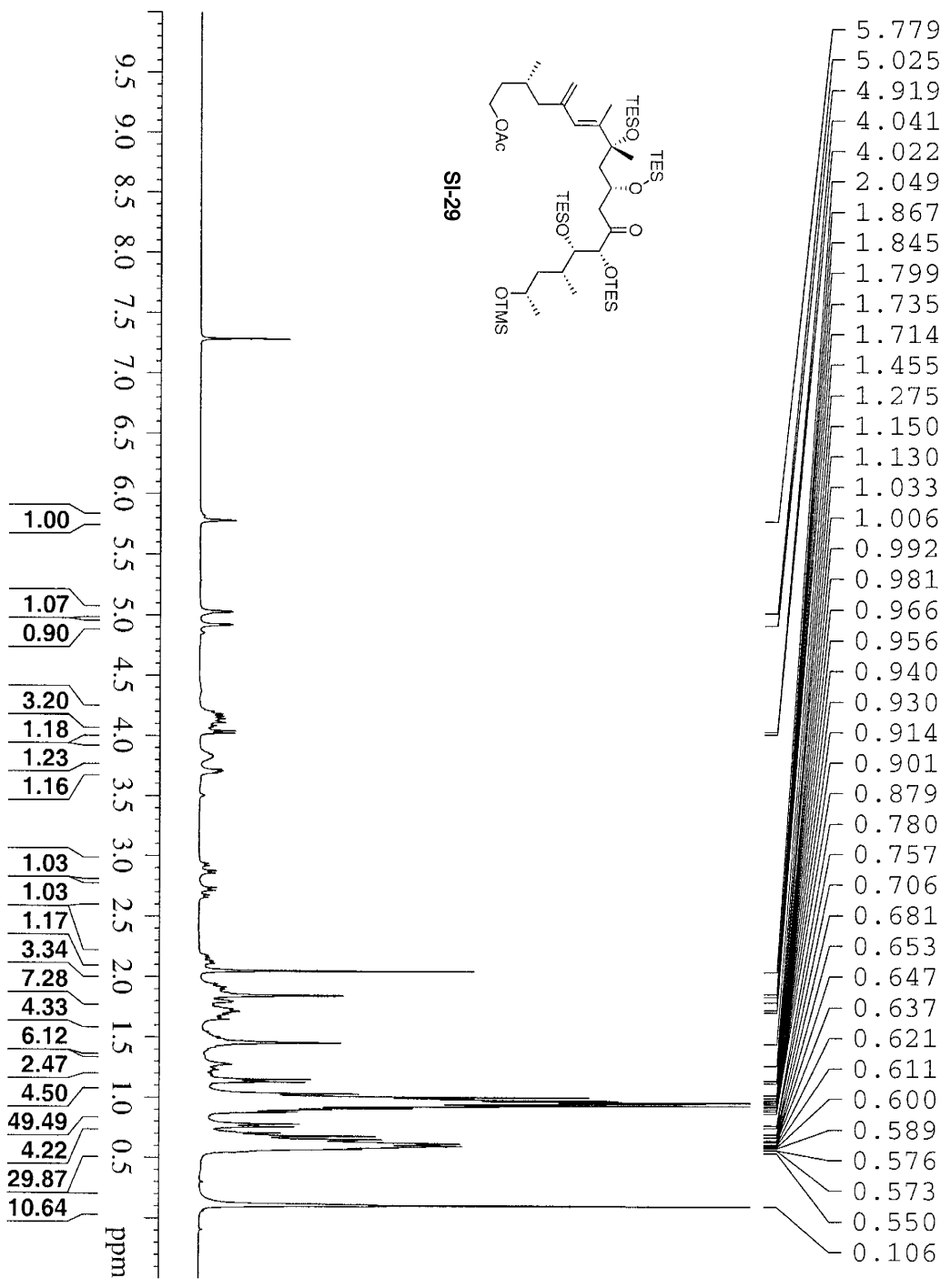
```

Current Data Parameters
NAME      643
EXPNO     2
PROCNO    1
PROCNO    1
F2 - Acquisition Parameters
Date_     20071011
Time      18.28
INSTRUM   DPK400
PROBHD    5 mm BBO BB-1H
PULPROG   zgpg30
TD         65536
SOLVENT   SOLVENT
NS         253
DS         4
SWH        26135.628 Hz
FIDRES     0.381929 Hz
AQ         1.3042186 s
RG         4597.6
WDW        19.900 us
DE         6.00 us
TE         299.2 K
D1         C.15600001 s
d11        C.03000000 s
DELTA     C.05000000 s
TD0        1

===== CHANNEL f1 =====
NUC1       13C
P1         7.80 us
PL1        -3.00 dB
SFO1       100.6261891 MHz

===== CHANNEL f2 =====
CPDPRG2   waltz16
NUC2       135.00 us
PCPD2     135.00 us
PL2        17.40 dB
PL12      17.40 dB
PL13      17.40 dB
SFO2       400.0156000 MHz

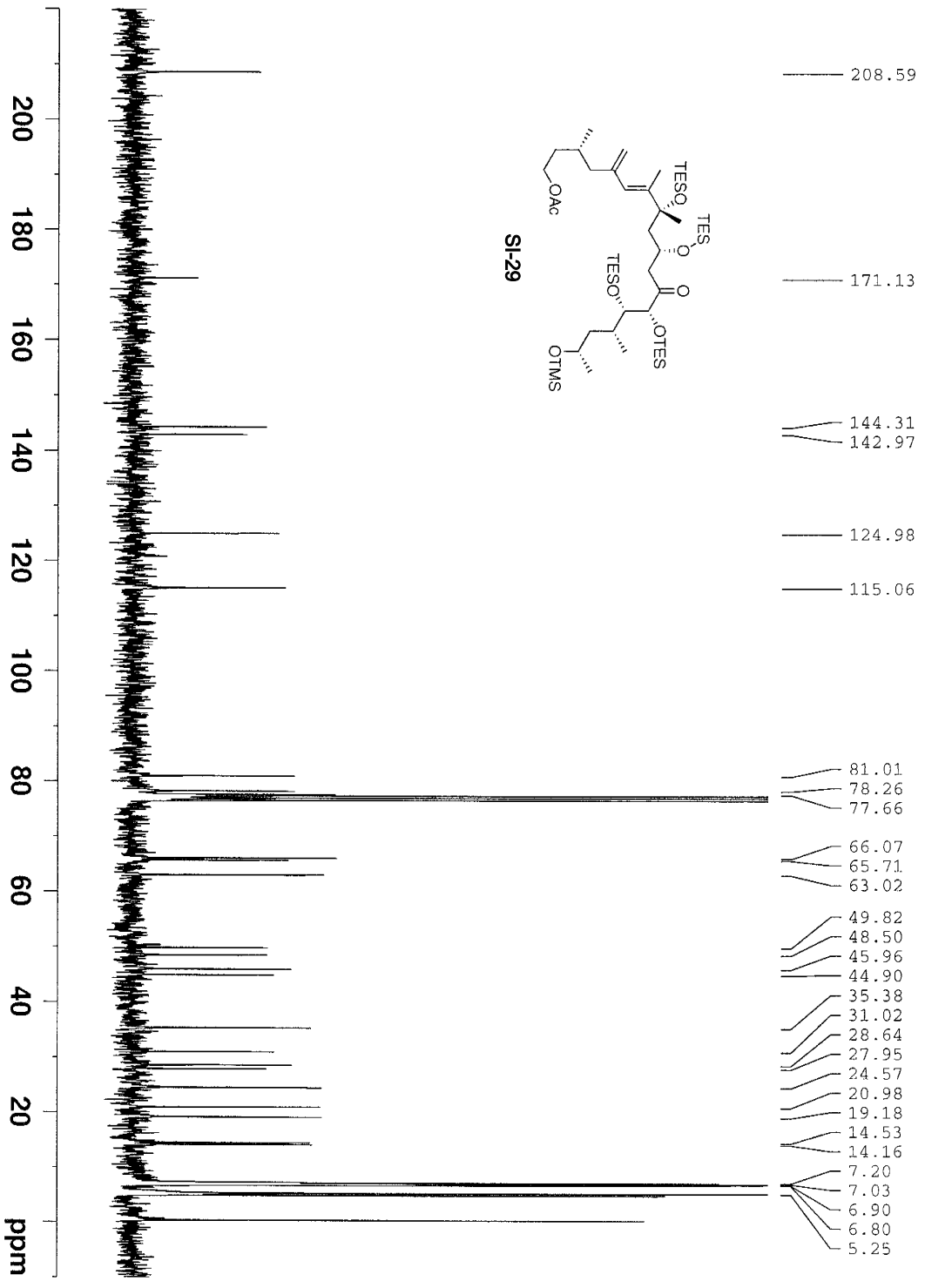
F2 - Processing parameters
SI         32768
SF         100.6261891 MHz
WDW        EM
SSB        0
LB         3.00 Hz
GB         0
PC         1.40
  
```



SI-29

```

Current Data Parameters
Date_ 20080315
Time 16.46
INSTRUM DPX300
PROBHD 5 mm QNP
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
DS 2
DE 2.5
SWH 4789.272 Hz
FIDRES 0.14637 Hz
AQ 3.4210291 sec
RG 655.36
DE 104.400 usec
TE 298.2 K
D0 2.0000000 sec
TD0 1
===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL 0.00 dB
SFO1 300.132109 MHz
F2 - Processing Parameters
SI 320.68 MHz
SF 300.132000 MHz
WDW nc
SSB 0
LB 0.00 Hz
GB 0
MC 1.00
  
```



SI-29

- 208.59
- 171.13
- 144.31
- 142.97
- 124.98
- 115.06
- 81.01
- 78.26
- 77.66
- 66.07
- 65.71
- 63.02
- 49.82
- 48.50
- 45.96
- 44.90
- 35.38
- 31.02
- 28.64
- 27.95
- 24.57
- 20.98
- 19.18
- 14.53
- 14.16
- 7.20
- 7.03
- 6.90
- 6.80
- 5.25

```

Current Data Parameters
NAME      7-100-1
EXPNO    3
PROCNO   1
ID       /n
USER     Liang

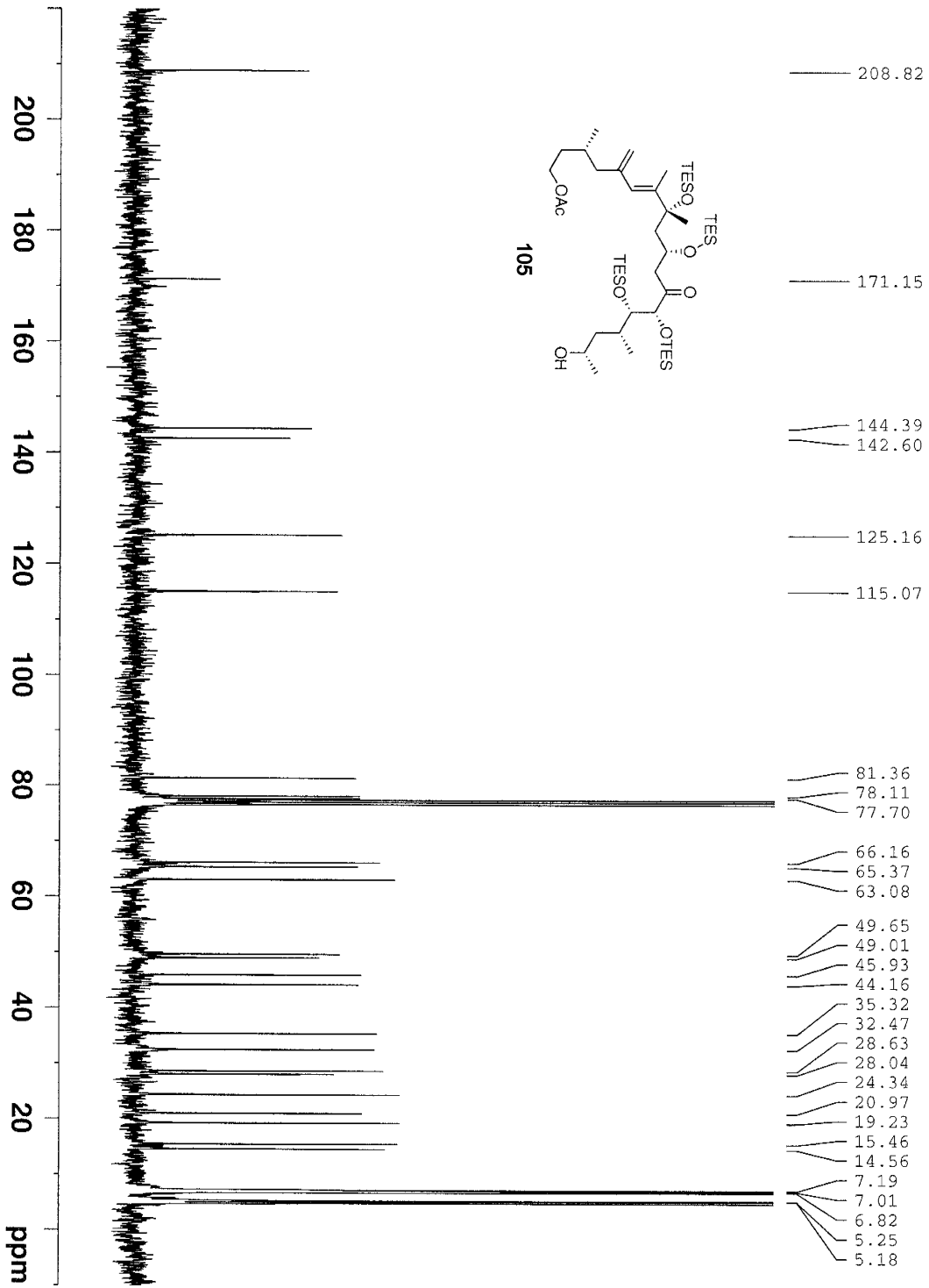
F2 - Acquisition Parameters
Date_    20080315
Time     17.04
INSTRUM  DPK300
PROBHD   5 mm QNP 1H/1
PULPROG  zgpg30
TD       65536
SFO      300.13
AQ       5.2
RG       32
DS       4
SWH      18832.393 Hz
FIDRES   0.267360 Hz
AQ       1.7400308 sec
RG       9195.2
DE       26.550 uF
TE       6.00 uF
D1       0.15000001 sec
d11      0.03000000 sec
DELTA    0.05000000 sec
TD0      1

===== CHANNEL f1 =====
NUC1     13C
P1       9.80 uF
PL1      3.00 dB
SFO1     75.4763505 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2     1H
PCPD2    80.00 uF
PL2      -3.00 dB
PL12     17.55 dB
PL13     17.55 dB
SFO2     300.1312005 MHz

F2 - Processing parameters
SI       32768
SF       75.4677490 MHz
WDW      EM
SSB      0
GB       0
PC       3.00 MHz
SC       1.40

```

- 208.82
- 171.15
- 144.39
- 142.60
- 125.16
- 115.07
- 81.36
- 78.11
- 77.70
- 66.16
- 65.37
- 63.08
- 49.65
- 49.01
- 45.93
- 44.16
- 35.32
- 32.47
- 28.63
- 28.04
- 24.34
- 20.97
- 19.23
- 15.46
- 14.56
- 7.19
- 7.01
- 6.82
- 5.25
- 5.18

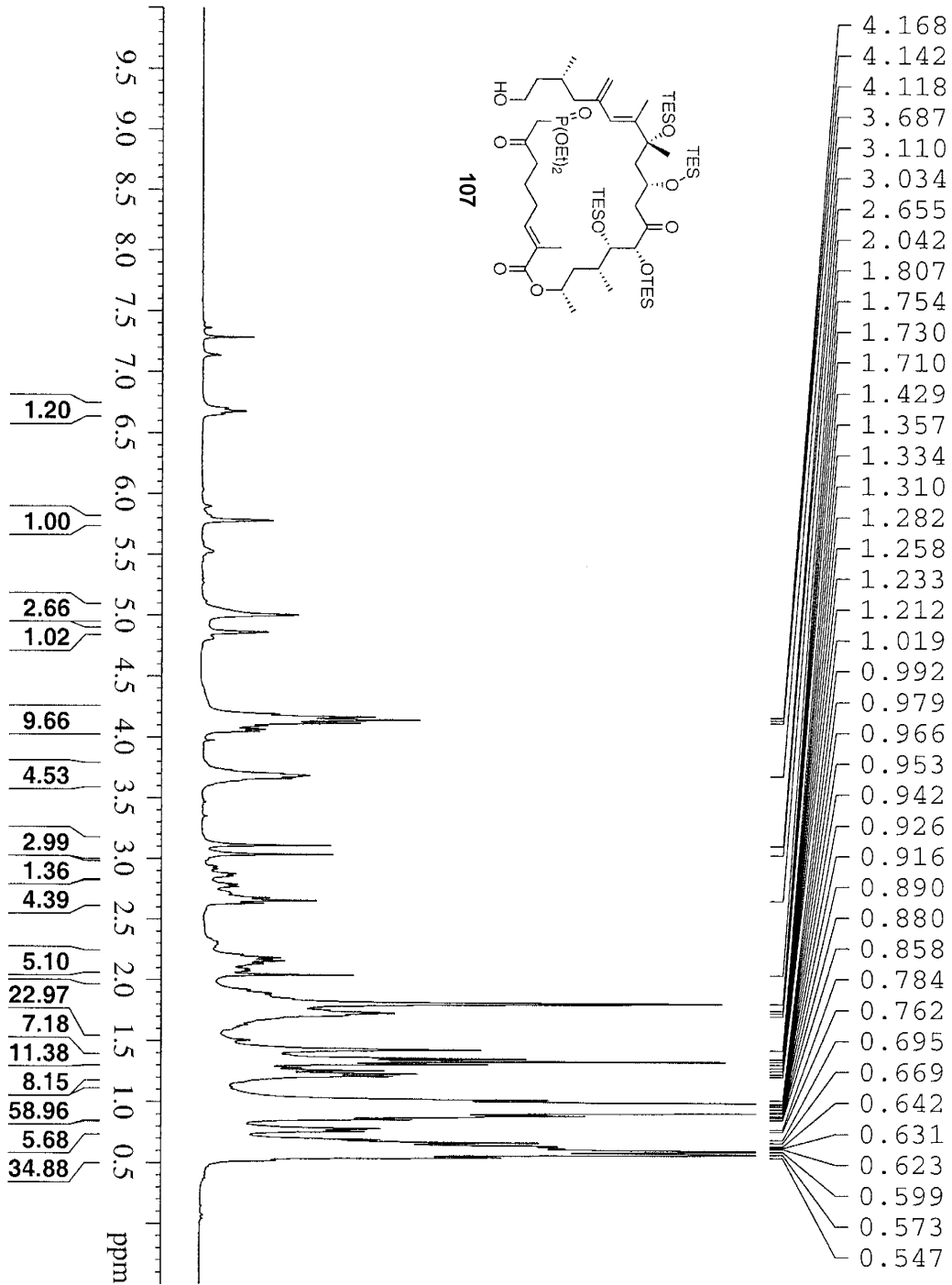
Current Data Parameters
 NAME: 8-103
 EXPNO: 1
 PROCNO: 1
 DT: 1/n
 USER: L:ang

F2 - Acquisition Parameters
 Date_: 20080317
 Time: 10.58
 INSTRUM: DPX100
 PROBHD: 5 mm QNP 1H/1
 PULPROG: zgpg30
 TD: 65536
 SOLVENT: CDCl3
 NS: 423
 DS: 4
 SWH: 18832.363 Hz
 STDRS: 0.262760 Hz
 AQ: 1.7400308 s
 RG: 91982
 DW: 26.556 us
 DE: 6.00 us
 TE: 298.2 K
 D1: 0.15000001 s
 d11: 0.03000000 s
 DELTA: 0.05000000 s
 TDO: 1

==== CHANNEL f1 =====
 NUC1: 13C
 P1: 8.80 us
 PL1: -3.00 dB
 SFO1: 75.4780505 MHz

==== CHANNEL f2 =====
 NUC2: 1H
 P2: 80.00 us
 PL2: -3.00 dB
 PL12: 17.55 dB
 PL13: 17.55 dB
 SFO2: 300.132005 MHz

F2 - Processing parameters
 SI: 32768
 SF: 75.4677494 MHz
 WDW: EM
 SSB: 0
 LB: 3.00 Hz
 GB: 0
 PC: 1.40

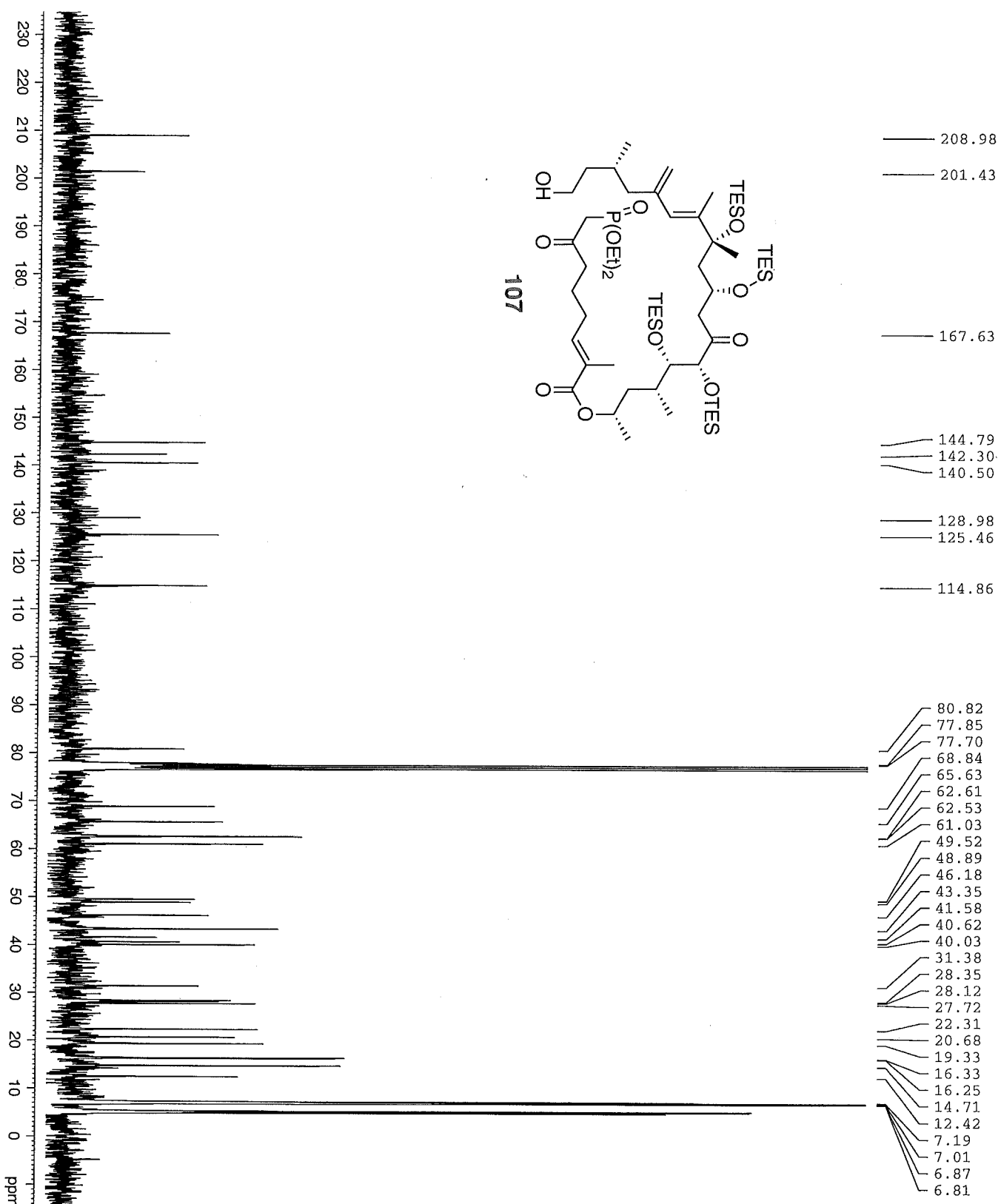


Current Data Parameters
 Name: 9-12
 EXNO: 1
 PROCNO: 1
 DN: /n
 USER: Liang

F2 - Acquisition Parameters
 Date_: 20080126
 Time: 12.07
 Name: D1310
 INSTRUM: spect
 PROBD: 5 mm QNP
 PULPROG: zgpg30
 TD: 2630
 SFO1: 32768
 SOLVENT: CDCl3
 DS: 12
 DE: 1.00
 AS: 4789.272 Hz
 SMH: 0.146157 Hz
 FIDRES: 3.4210291 sec
 AQ: 2.727272727 sec
 DW: 104.460 usec
 DE: 6.00 usec
 TE: 298.2 K
 D1: 2.00000000 sec
 TDO: 1

===== CHANNEL f1 =====
 NUC1: 1H
 P1: 9.00 usec
 PL1: -3.00 dB
 SFO1: 300.1321009 MHz

F2 - Processing parameters
 SI: 32768
 SF: 300.130000 MHz
 KHZ: EM
 SSB: 0
 LB: 0.30 Hz
 GB: 0
 PC: 1.00



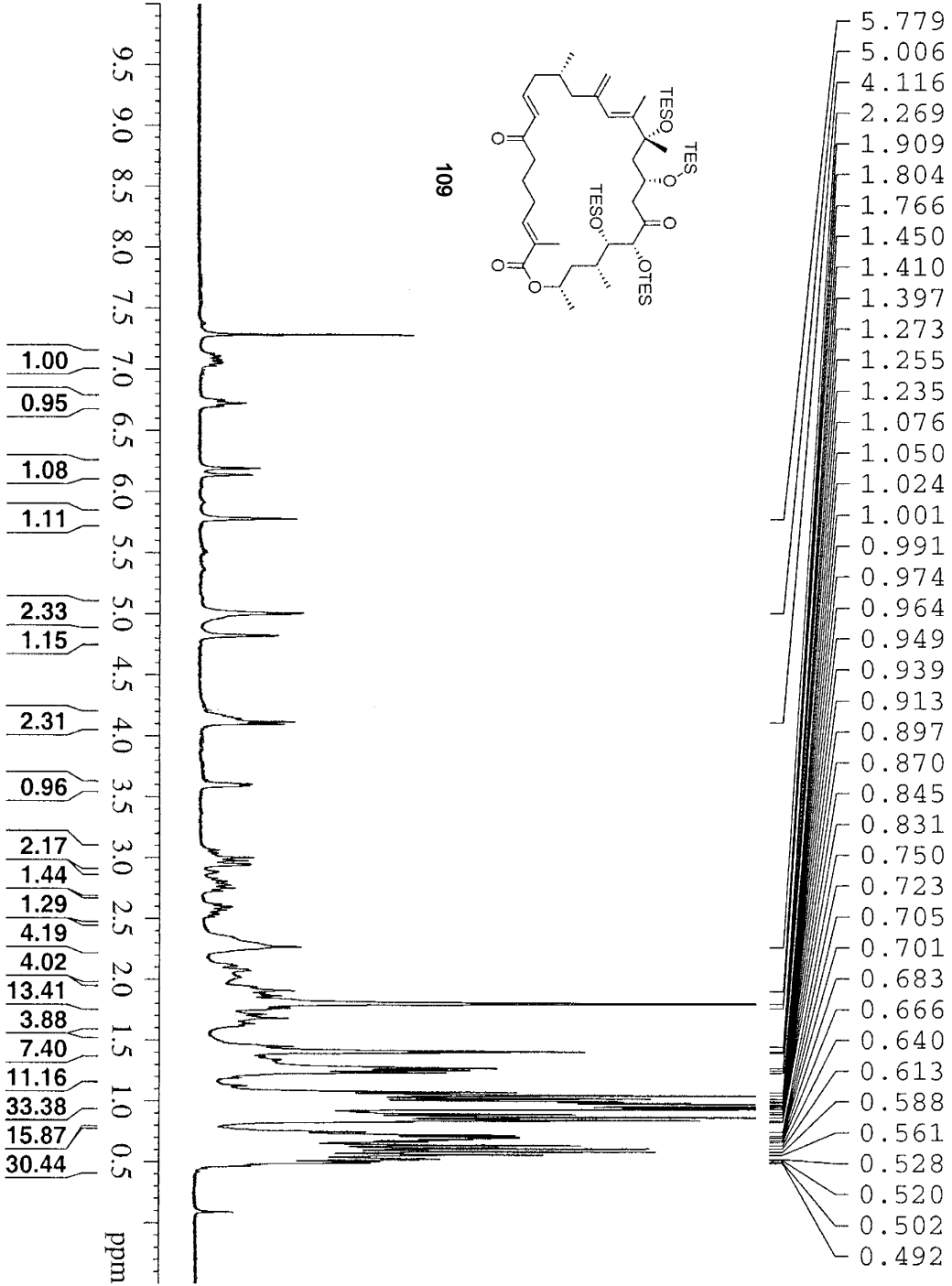
Current Data Parameters
 NAME 8-18
 EXPNO 4
 PROCNO 1
 DU /n
 USER Liang

F2 - Acquisition Parameters
 Date_ 20080326
 Time 14.25
 INSTRUM DPX300
 PROBHD 5 mm QNP 1H/1
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 529
 DS 4
 SWH 18832.393 Hz
 FIDRES 0.287360 Hz
 AQ 1.740308 sec
 RG 9195.2
 DW 26.550 usec
 DE 6.00 usec
 TE 298.2 K
 D1 0.15000001 sec
 d11 0.03000000 sec
 DELTA 0.05000000 sec
 TDO 1

==== CHANNEL F1 =====
 NUC1 13C
 P1 8.80 usec
 PL1 -3.00 dB
 SF01 75.4760505 MHz

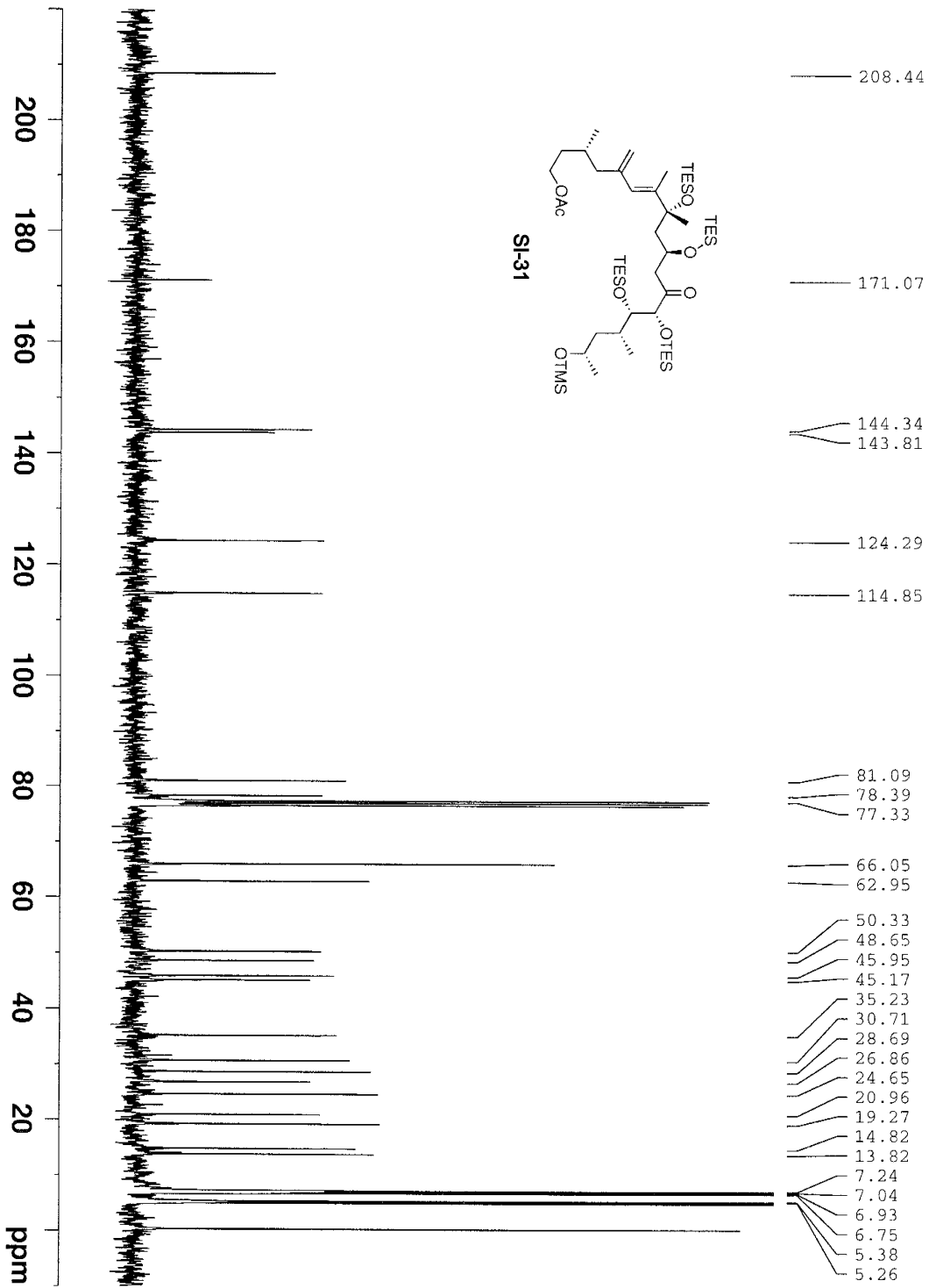
==== CHANNEL F2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 -3.00 dB
 PL12 17.55 dB
 PL13 17.55 dB
 SFO2 300.1312005 MHz

F2 - Processing Parameters
 SI 32768
 SF 75.4677490 MHz
 WDW EM
 SSB 0
 LB 3.00 Hz
 GB 0
 PC 1.40

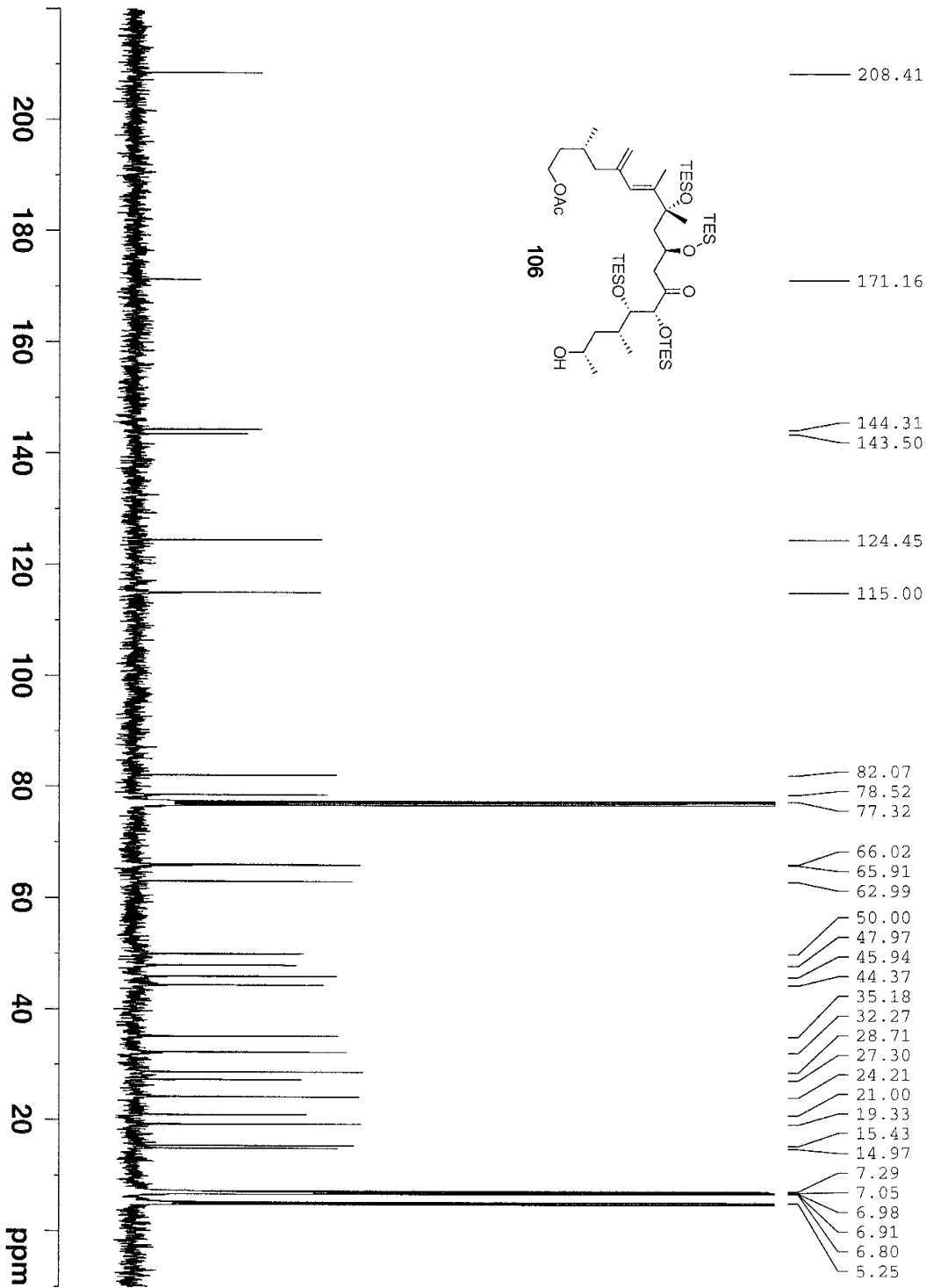


```

Current Data Parameters
NAME          F-18-2
EXPNO        2
PROCNO       1
DS           1
USERS
===== Acquisition Parameters
Date_        20080402
Time         14:11
INSTRUM      DPX11
PROBHD       5 mm QNP 1H/1
PULPROG      zg30
TD           32768
SOLVENTF1    CDCl3
NS           2
DS           2
SWH          4789.272 Hz
FIDRES       0.146157 Hz
AQ           3.4210291 sec
RG           104.400 usec
DE           6.00 usec
TE           298.2 K
D1           2.00000000 sec
TDC          1
===== CHANNEL f1 =====
NUC1         1H
P1           9.00 usec
PL1         -3.00 dB
SFO1         300.1321009 MHz
===== Processing parameters
SI           300.1300000 MHz
WDW          EM
SSB          0
LB           0.00 Hz
GB           0
PC           1.00
  
```

Current Data Parameters
NAME 6493
EXPNO 3
PROCNO 1
F2 - Acquisition Parameters
Date_ 20071014
Time 21:15
INSTRUM DPX300
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDC13
NS 335
DS 28
SWH 18832.349 Hz
FIDRES 0.2873668 Hz
AQ 1.7400389 s
RG 9195.2
DE 26.550 us
TE 298.2 K
D1 0.15000001 s
d11 0.03000000 s
DELTA 0.05000000 s
TD0 1
===== CHANNEL f1 =====
NUC1 13C
P1 8.80 us
PL1 -3.00 dB
SFO1 75.4760505 MHz
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 us
PL2 -3.00 dB
PL12 17.55 dB
PL13 17.55 dB
SF02 300.1312005 MHz
F2 - Processing parameters
SI 32768
SE 75.4677490 MHz
WPM EX
SSB 0
LB 3.00 MHz
GB 0
PC 1.40



```

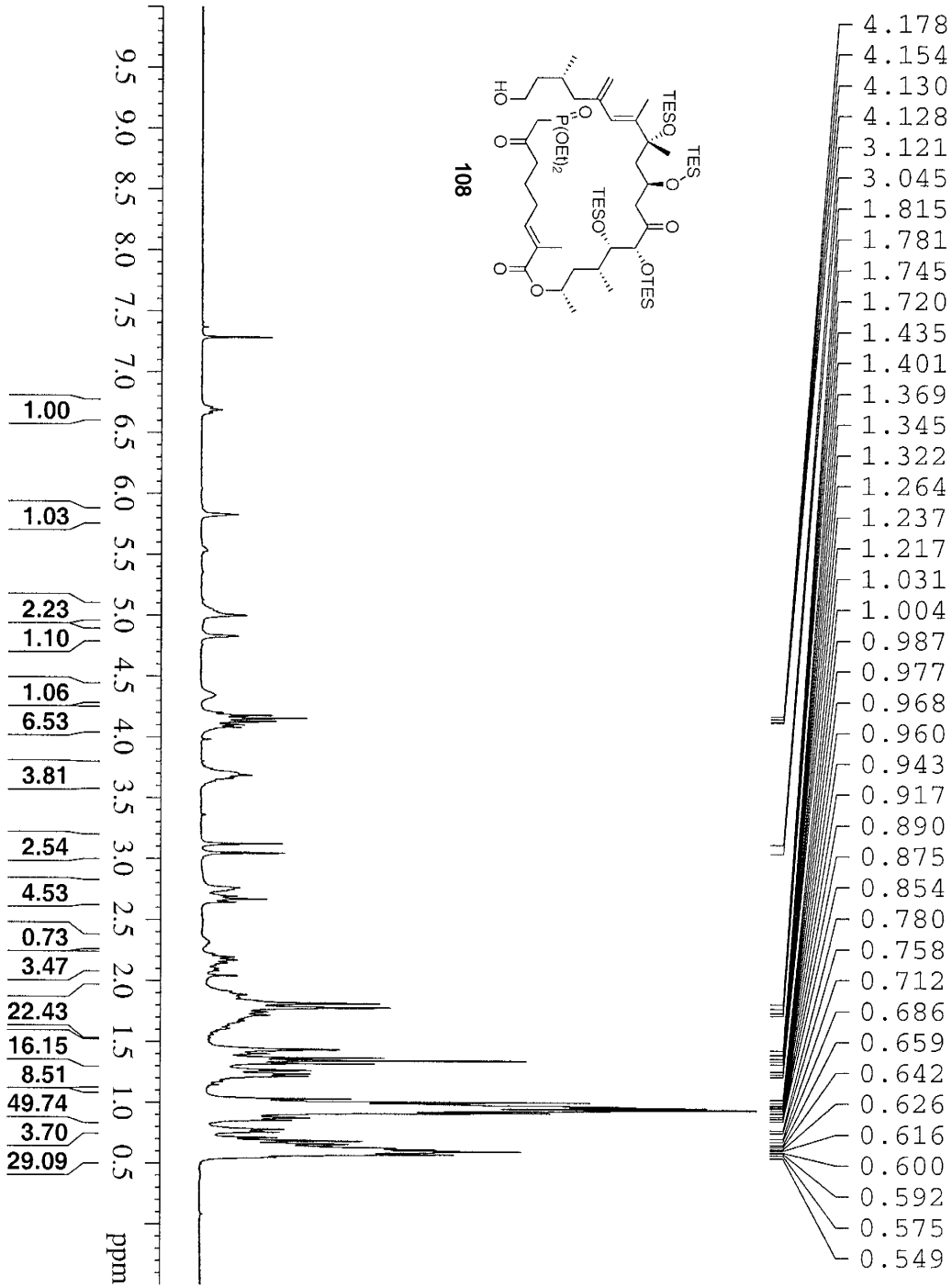
Current Data Parameters
NAME          6994
EXPNO         1
PROCNO        1
DU             /s
USER          Llang

F2 - Acquisition Parameters
Date_         20071017
Time          14.51
INSTRUM      DPX400
PROBHD       5 mm BBO BB-1H
PULPROG      zgpg30
TD            65536
SOLVENT      SOLVENT
NS            305
DS            4
SWH           26125.629 Hz
FIDRES        0.1383397 Hz
AQ            1.3042164 s
RG            4597.6
LW           19.900 us
DE            6.00 us
TE            299.2 K
D1            0.15000001 s
d11           0.03000000 s
DELTA        0.05000000 s
TD0           1

===== CHANNEL f1 =====
NUC1          13C
P1            7.88 us
PC1           3.08 dB
SFO1         100.5936991 MHz

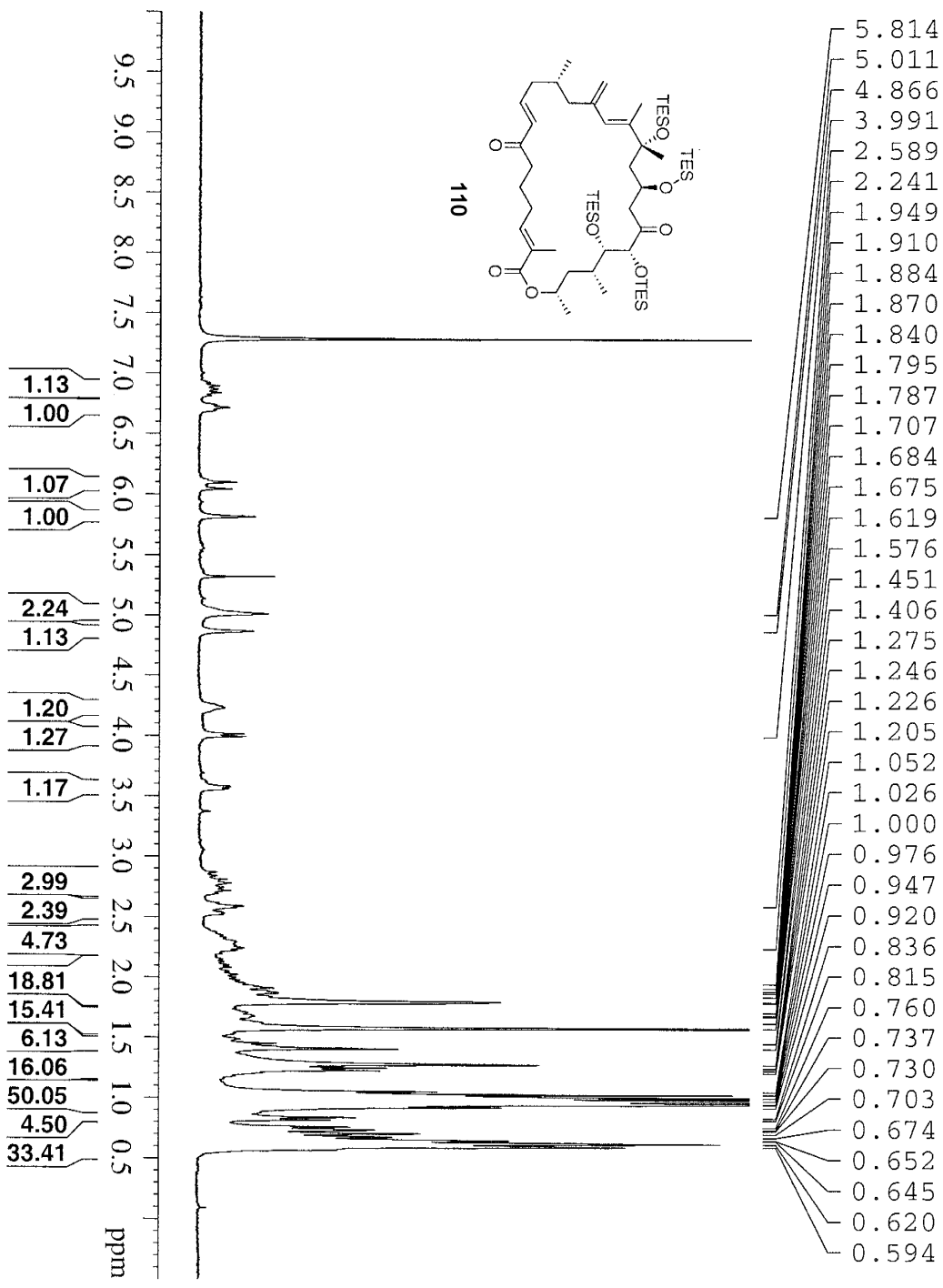
===== CHANNEL f2 =====
CPDPRG2      waltz16
NUC2          1H
PCPD2        135.00 us
PL2          17.40 dB
PL12         17.40 dB
PL13         17.40 dB
SFO2         400.0116000 MHz

F2 - Processing parameters
SI            32768
SF            100.5825950 MHz
WDW           EM
SSS           0
GB            0
PC            1.40
  
```

```

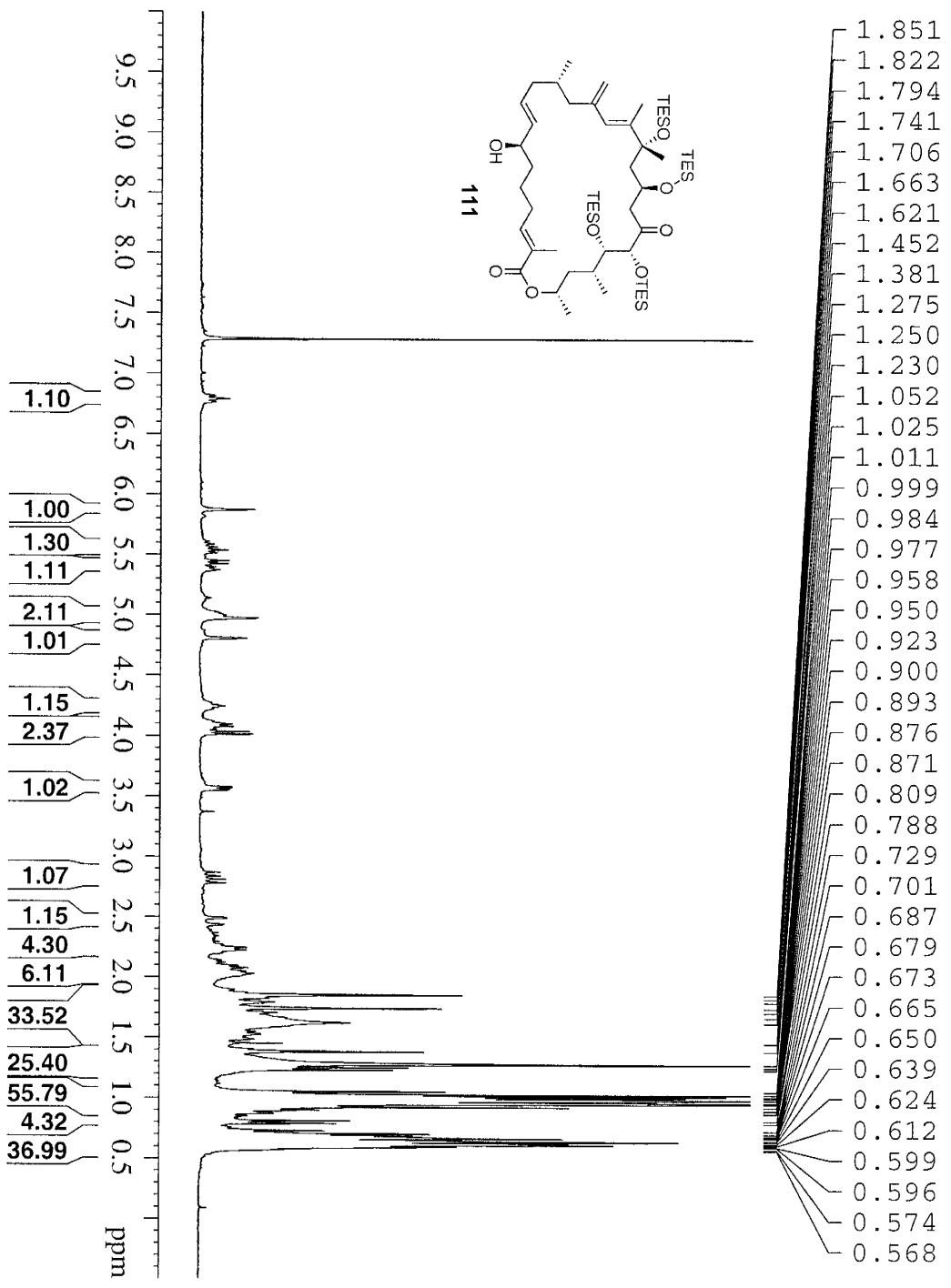
Current Data Parameters
NAME: 108
EXPNO: 6
PROCNO: 1
DU: 1
USER:
F2 - Acquisition Parameters
Date_: 20071021
Time: 18.19
INSTRUM: DSI300
PROBHD: 5 mm QNP 1H/13
PULPROG: zgpg30
TD: 32768
SOLVENT: CDCl3
NS: 20
DS: 2
SWH: 4789.372 Hz
FIDRES: 0.146157 Hz
AQ: 3.4210291 sec
RG: 655
AQ: 0.04100 usec
DE: 6.00 usec
TE: 298.2 K
D1: 2.00000000 sec
TD0: 1
===== CHANNEL f1 =====
NUC1: 13
P1: 9.00 usec
PL1: 0.00 dB
SFO1: 300.1321009 MHz
E2 - Processing parameters
SI: 32768
SF: 300.1320000 MHz
WDW: EM
SSB: 0
LB: 3.00 Hz
GB: 0
PC: 1.00
  
```

Current Data Parameters
 EXPNO 6.71
 PROCNO 1
 DS 1
 DE /h
 USER Liany
 F2 - Acquisition Parameters
 Date_ 20071021
 Time 21.58
 INSTRUM JNM-EX200
 NUC1 13C
 PULPROG zgpg30
 TD 32768
 SOLVENT CDCl3
 NS 32
 DS 2
 SWH 4789.372 Hz
 FIDRES 0.146157 Hz
 AQ 3.421024 sec
 DE 10.4400 usec
 TE 298.2 K
 D1 2.0000000 sec
 T20 1

***** CHANNEL f1 *****
 NUC1 13C
 P1 9.00 usec
 PL 0.00 dB
 SFO1 300.132109 MHz

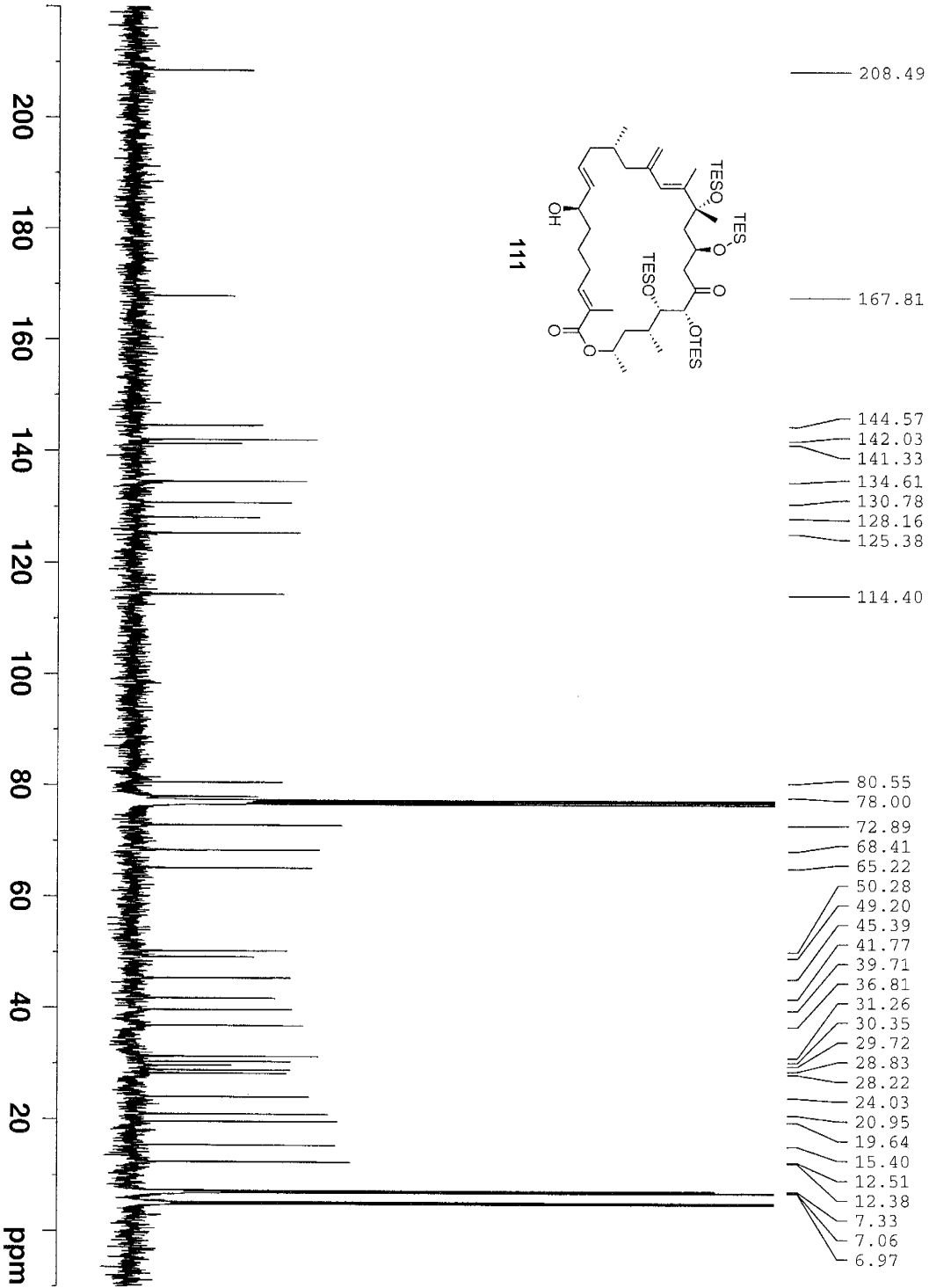
F2 - Processing parameters
 SI 32768
 SF 300.132109 MHz
 MD 4
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00



1.851
1.822
1.794
1.741
1.706
1.663
1.621
1.452
1.381
1.275
1.250
1.230
1.052
1.025
1.011
0.999
0.984
0.977
0.958
0.950
0.923
0.900
0.893
0.876
0.871
0.809
0.788
0.729
0.701
0.687
0.679
0.673
0.665
0.650
0.639
0.624
0.612
0.599
0.596
0.574
0.568

```

Current Data Parameters
EXPNO 7-02
PROCNO 1
DU /n
USER
F2 - Acquisition Parameters
Date_ 20071024
Time 16.05
INSTRUM DPX300
PROBHD 5 mm QNP
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 32
DS 2
SWH 4789.272 Hz
FIDRES 0.146157 Hz
AQ 3.4210291 sec
RG 104.60
DE 6.00 usec
TE 296.2 K
D1 2.0000000 sec
D10 1
===== CHANNEL f1 =====
NUC1 1H
P1 9.00 usec
PL 0.00 dB
SFO1 300.1321009 MHz
F2 - Processing parameters
SI 32768
SF 300.130000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00
  
```



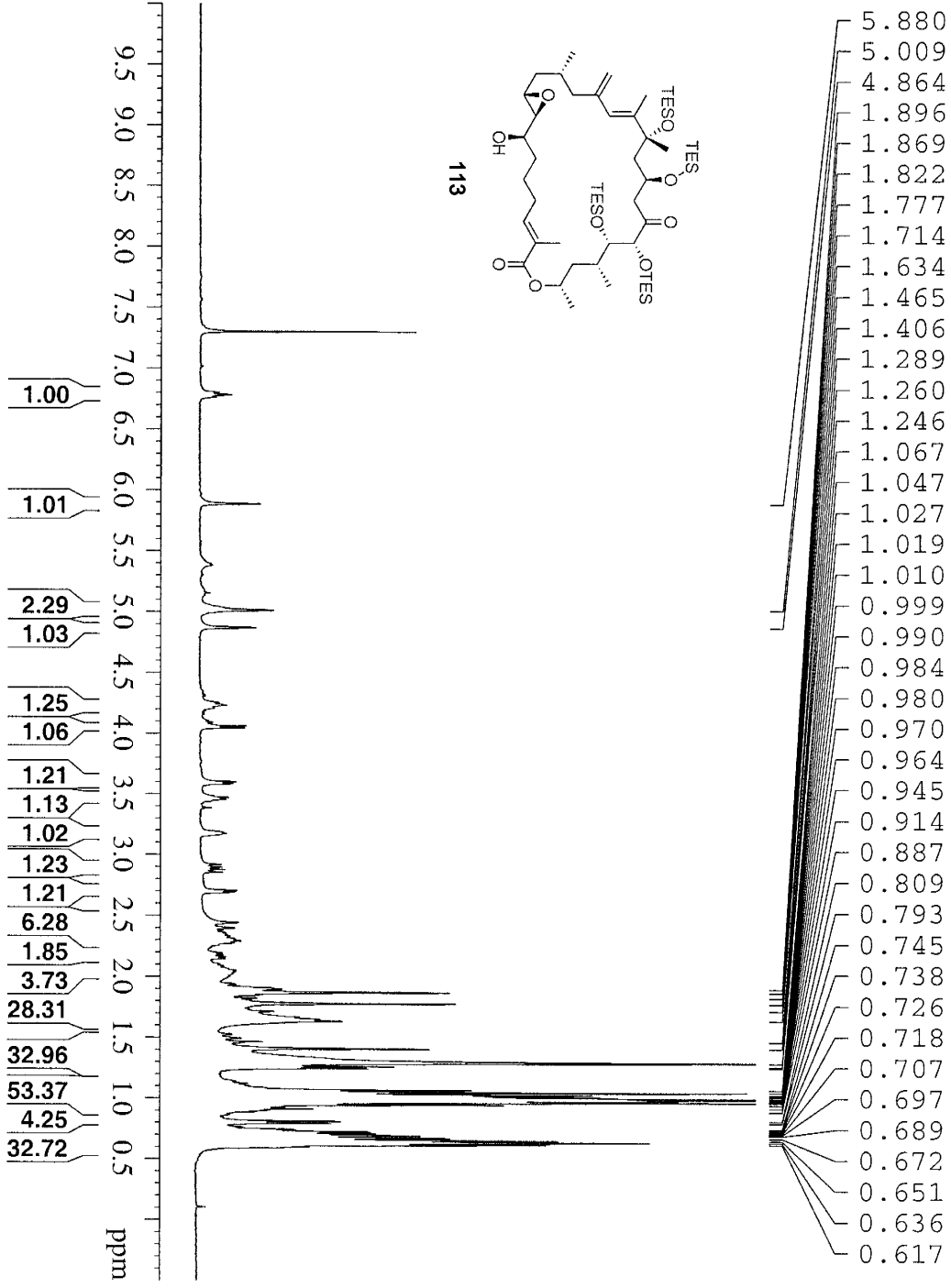
Current Data Parameters
 NAME 7-11
 EXPNO 3
 PROCNO 1
 F2 USER /n
 USER /n
 LANG

F2 - Acquisition Parameters
 Date_ 20071028
 Time 19.33
 INSTRUM DPM400
 PROBH1 5 mm BBO BB-1H
 PULPRG1 zgpg30
 TD 65536
 SOLVENT 115
 NS 1
 DS 1
 SWH 25125.679 Hz
 FIDRES 0.383387 Hz
 AQ 1.3042164 sec
 RG 5792.6
 DW 19.900 usec
 DE 6.00 usec
 TE 299.2 K
 D1 0.15000001 sec
 d11 0.03000000 sec
 DELTA 0.05000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 13C
 P1 7.80 usec
 PL1 -2.00 dB
 SFO1 100.596951 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 135.00 usec
 PL2 17.40 dB
 PL12 17.40 dB
 PL13 17.40 dB
 SFO2 400.011630 MHz

F2 - Processing parameters
 S1 32768
 SF 100.5825950 MHz
 WDW EM
 SSB 0
 LB 3.00 Hz
 GB 0
 FC 1.40



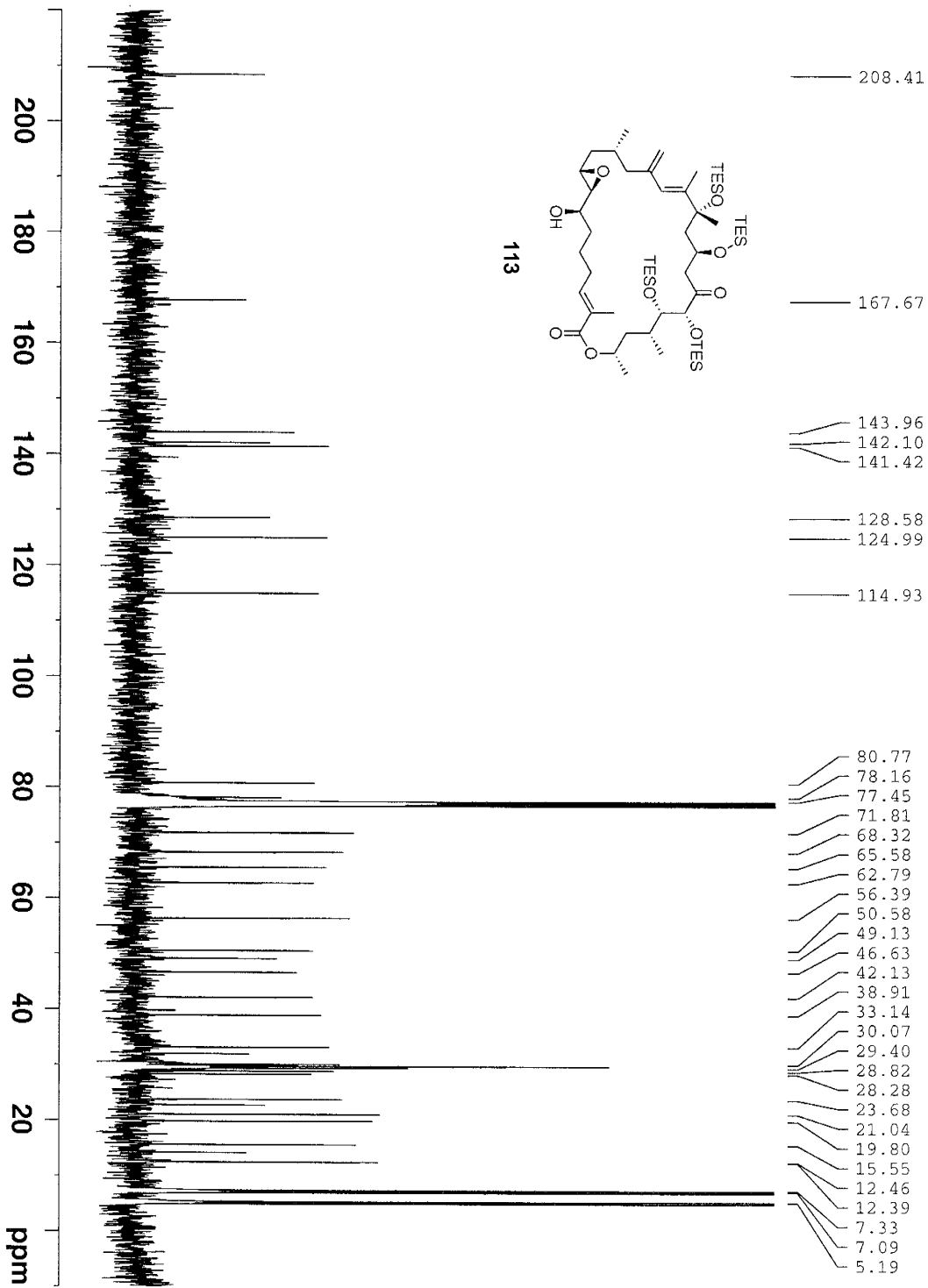
5.880	5.009	4.864	1.896	1.869	1.822	1.777	1.714	1.634	1.465	1.406	1.289	1.260	1.246	1.067	1.047	1.027	1.019	1.010	0.999	0.990	0.984	0.980	0.970	0.964	0.945	0.914	0.887	0.809	0.793	0.745	0.738	0.726	0.718	0.707	0.697	0.689	0.672	0.651	0.636	0.617
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

```

Current Data Parameters
EXPNO      7
PROCNO     1
F2         149
Date_      20071104
Time       14.41
INSTRUM    DRB400
PROBHD     5 mm BBO
PULPROG    zg30
TD         32768
SOLVENT    CDCl3
NS         32
DS         4
SWH         6410.256 Hz
FIDRES     0.195625 Hz
AQ         2.5559540 sec
RG         78.000
DE         6.00 usec
TE         299.2 K
D1         2.00000000 sec
TD0        1

***** CHANNEL f1 *****
NUC1       1H
P1         14.70 usec
PL1        0.00 dB
SFO1       400.0128001 MHz

F2 - Processing parameters
SI         32768
SF         400.010000 MHz
WDW        EM
SSB        0
LB         0.70 Hz
GB         0
SN         1.00
  
```



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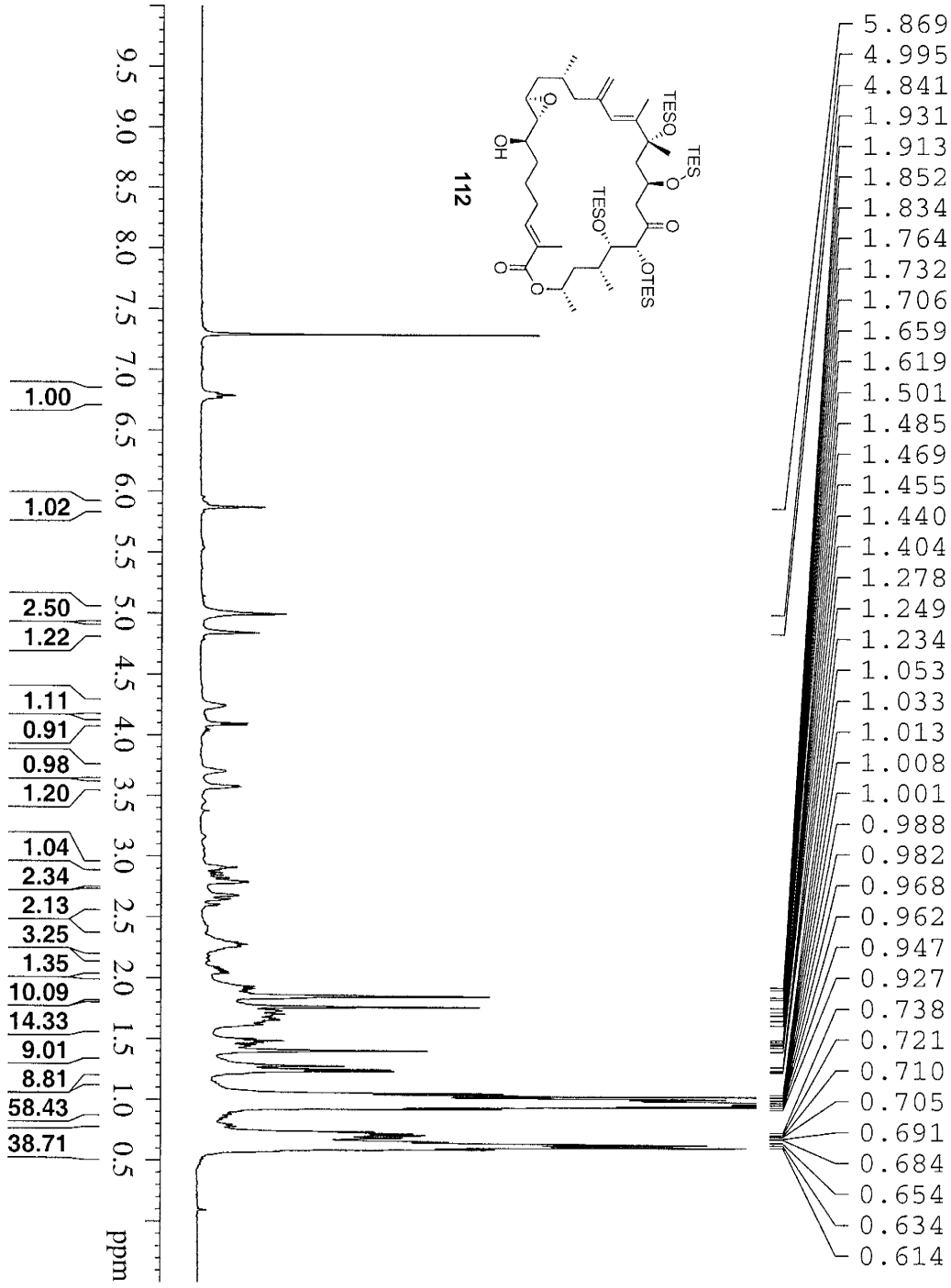
```

Current Data Parameters
NAME          7-12
EXPNO         2
PROCNO        1
F2 - Acquisition Parameters
Date_         20071104
Time          14.50
INSTRUM      DPX400
PROBHD       5 mm BBO BB-1H
PULPROG      zgpg30
TD            65536
SOLVENT      CDCl3
NS            4003
DS            4
SWH           26125.628 Hz
FIDRES        0.138387 Hz
AQ            1.3042164 sec
RG            4597.6
SW            19.900 us
DE            6.00 us
TE            299.2 K
D1            0.15000001 sec
d1:1          0.03000000 sec
DELTA        0.05000000 sec
TD0           1

===== CHANNEL f1 =====
NUC1          13C
P1            7.89 us
PL1           3.00 dB
SFO1         100.5938951 MHz

===== CHANNEL f2 =====
CPDPRG2      waltz16
NUC2          1H
PCPD2        135.00 us
PL2           17.40 dB
PL1:2        17.40 dB
PL1:3        17.40 dB
SFO2         400.0116000 MHz

F2 - Processing parameters:
SI            32768
SF            100.5825950 MHz
WDW           EM
SSB           0
GB            0
PC            1.40
  
```

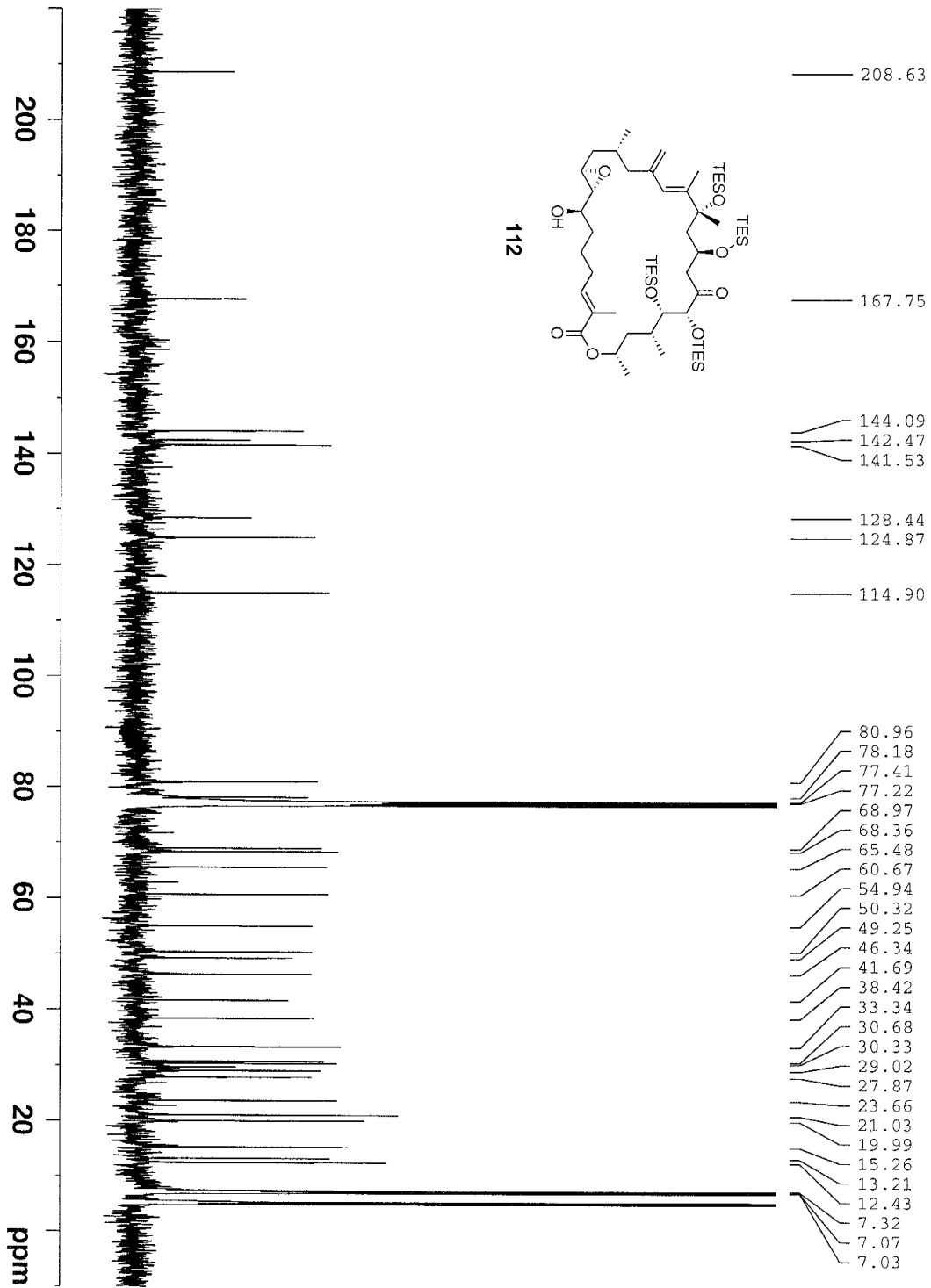


```

Current Data Parameters
NAME: 112
EXPNO: 3
PROCNO: 1
ESJ: /n
USJR: Liang
===== CHANNEL F1 =====
NUC1: 1H
P1: 14.70 usec
PI: 4.70 usec
SF01: 399.5528000 MHz
F2 - Processing parameters
SI: 32768
SF: 399.9530000 MHz
WDW: EM
SSB: 0
LB: 0.70 Hz
GB: 0
PC: 1.00

===== CHANNEL F2 =====
Date_: 20080411
Time: 19.14
INSTRUM: DPX400
PROBHD: 5 mm BBO
PULPROG: zg30
TD: 65536
SOLVENT: CDCl3
DE: 14
DS: 4
AQ: 6.410296 Hz
RG: 0.195625 Hz
FREQ: 2.5559540 sec
AQ: 78.000 usec
DE: 6.00 usec
TE: 298.2 K
C1: 2.00000000 sec
T10: 1
===== CHANNEL F3 =====
NUC1: 1H
P1: 14.70 usec
PI: 4.70 usec
SF01: 399.5528000 MHz
===== CHANNEL F4 =====
Date_: 20080411
Time: 19.14
INSTRUM: DPX400
PROBHD: 5 mm BBO
PULPROG: zg30
TD: 65536
SOLVENT: CDCl3
DE: 14
DS: 4
AQ: 6.410296 Hz
RG: 0.195625 Hz
FREQ: 2.5559540 sec
AQ: 78.000 usec
DE: 6.00 usec
TE: 298.2 K
C1: 2.00000000 sec
T10: 1

```



Current Data Parameters

NAME	8-32
EXPERNO	3
PROCNO	1
DT	1/n
USER	Liang

F2 - Acquisition Parameters

Date_	20080411
Time	19.32
INSTRUM	DPX400
PROBHD	5 mm BBO BB-1H
F1FLPRG3	ZPGP30
T2	65536
SOLVENT	
NS	4030
DS	4
SWH	25125.629 Hz
FIDRES	0.383357 Hz
AQ	1.3042164 sec
RG	16384
DW	15.900 usec
DE	6.00 usec
TE	298.2 K
D1	0.15000001 sec
D1.1	0.03000000 sec
DELTA	0.05000000 sec
TDC	1

==== CHANNEL F1 =====

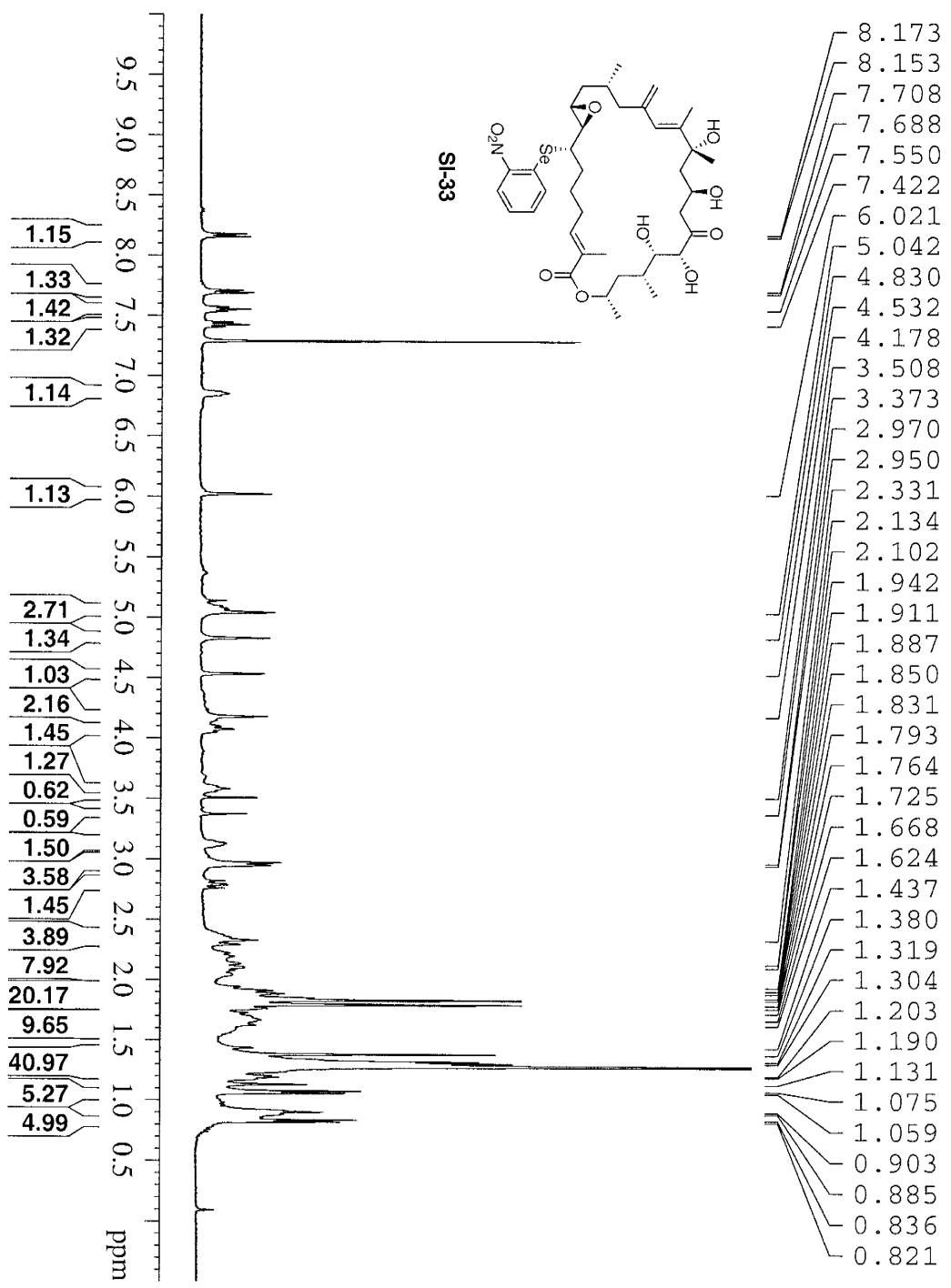
NUC1	13C
F1	7.80 usec
P1	-3.00 dB
SFO1	100.5785700 MHz

==== CHANNEL F2 =====

CPDPRG2	waltz16
NUC2	1H
PCPD2	135.00 usec
PL2	17.40 dB
PL12	17.40 dB
PL13	17.40 dB
SFO2	399.9516000 MHz

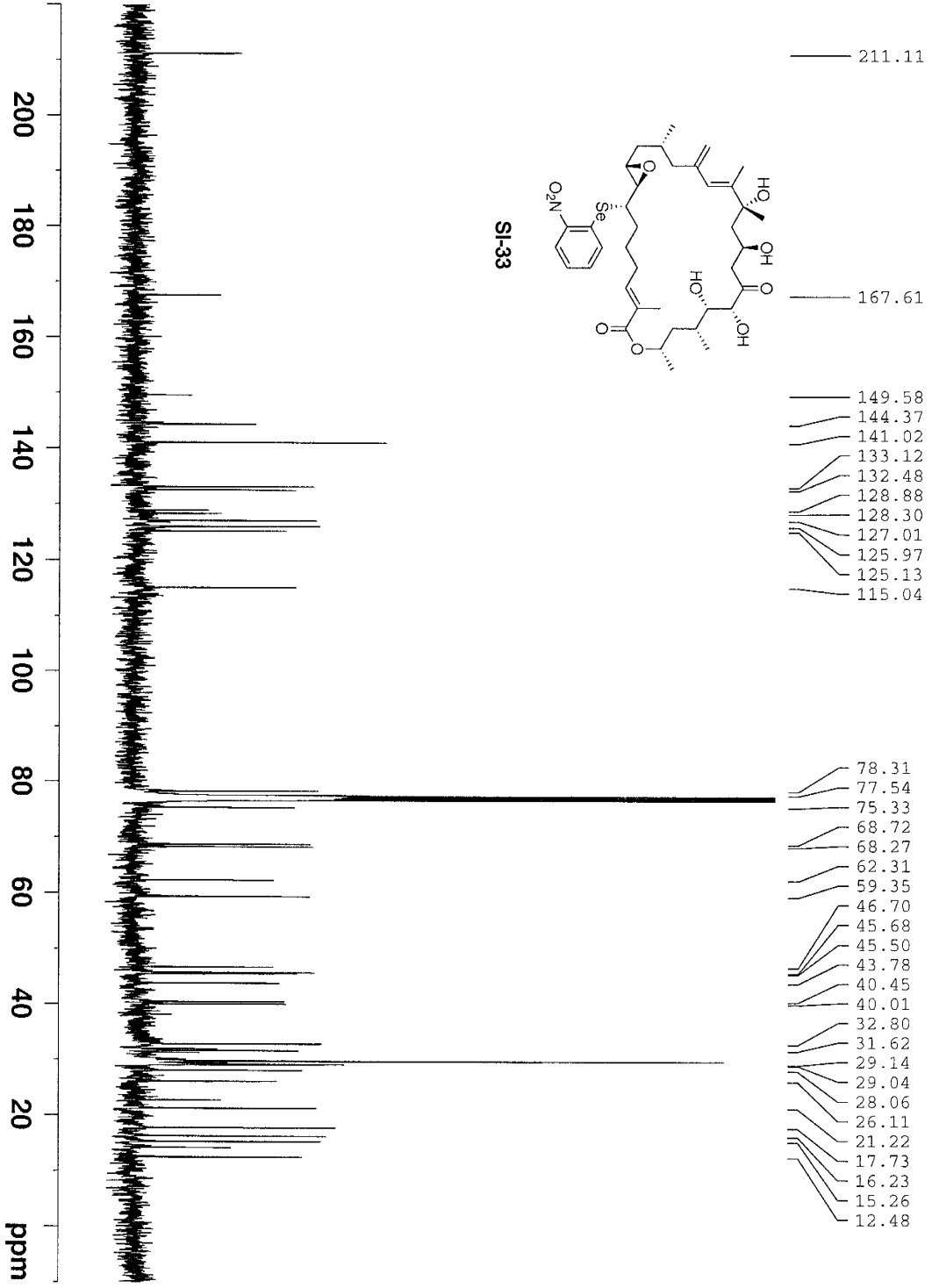
F2 - Processing Parameters

SF	32768
SR	100.5675080 MHz
WDW	EM
SSB	0
GB	0
FC	1.40



Current Data Parameters
 Name: SI-33
 EXNO: 1
 PROCN: 2
 DS: 1
 USER: Liang

F2 - Acquisition Parameters
 Date_: 20080313
 Time: 17.13
 P1: 0.2400
 P2: 0.1000
 P3: 0.1000
 P4: 0.1000
 P5: 0.1000
 P6: 0.1000
 P7: 0.1000
 P8: 0.1000
 P9: 0.1000
 P10: 0.1000
 P11: 0.1000
 P12: 0.1000
 P13: 0.1000
 P14: 0.1000
 P15: 0.1000
 P16: 0.1000
 P17: 0.1000
 P18: 0.1000
 P19: 0.1000
 P20: 0.1000
 P21: 0.1000
 P22: 0.1000
 P23: 0.1000
 P24: 0.1000
 P25: 0.1000
 P26: 0.1000
 P27: 0.1000
 P28: 0.1000
 P29: 0.1000
 P30: 0.1000
 P31: 0.1000
 P32: 0.1000
 P33: 0.1000
 P34: 0.1000
 P35: 0.1000
 P36: 0.1000
 P37: 0.1000
 P38: 0.1000
 P39: 0.1000
 P40: 0.1000
 P41: 0.1000
 P42: 0.1000
 P43: 0.1000
 P44: 0.1000
 P45: 0.1000
 P46: 0.1000
 P47: 0.1000
 P48: 0.1000
 P49: 0.1000
 P50: 0.1000
 P51: 0.1000
 P52: 0.1000
 P53: 0.1000
 P54: 0.1000
 P55: 0.1000
 P56: 0.1000
 P57: 0.1000
 P58: 0.1000
 P59: 0.1000
 P60: 0.1000
 P61: 0.1000
 P62: 0.1000
 P63: 0.1000
 P64: 0.1000
 P65: 0.1000
 P66: 0.1000
 P67: 0.1000
 P68: 0.1000
 P69: 0.1000
 P70: 0.1000
 P71: 0.1000
 P72: 0.1000
 P73: 0.1000
 P74: 0.1000
 P75: 0.1000
 P76: 0.1000
 P77: 0.1000
 P78: 0.1000
 P79: 0.1000
 P80: 0.1000
 P81: 0.1000
 P82: 0.1000
 P83: 0.1000
 P84: 0.1000
 P85: 0.1000
 P86: 0.1000
 P87: 0.1000
 P88: 0.1000
 P89: 0.1000
 P90: 0.1000
 P91: 0.1000
 P92: 0.1000
 P93: 0.1000
 P94: 0.1000
 P95: 0.1000
 P96: 0.1000
 P97: 0.1000
 P98: 0.1000
 P99: 0.1000
 P100: 0.1000



- 211.11
- 167.61
- 149.58
- 144.37
- 141.02
- 133.12
- 132.48
- 128.88
- 128.30
- 127.01
- 125.97
- 125.13
- 115.04
- 78.31
- 77.54
- 75.33
- 68.72
- 68.27
- 62.31
- 59.35
- 46.70
- 45.68
- 45.50
- 43.78
- 40.45
- 40.01
- 32.80
- 31.62
- 29.14
- 29.04
- 28.06
- 26.11
- 21.22
- 17.73
- 16.23
- 15.26
- 12.48

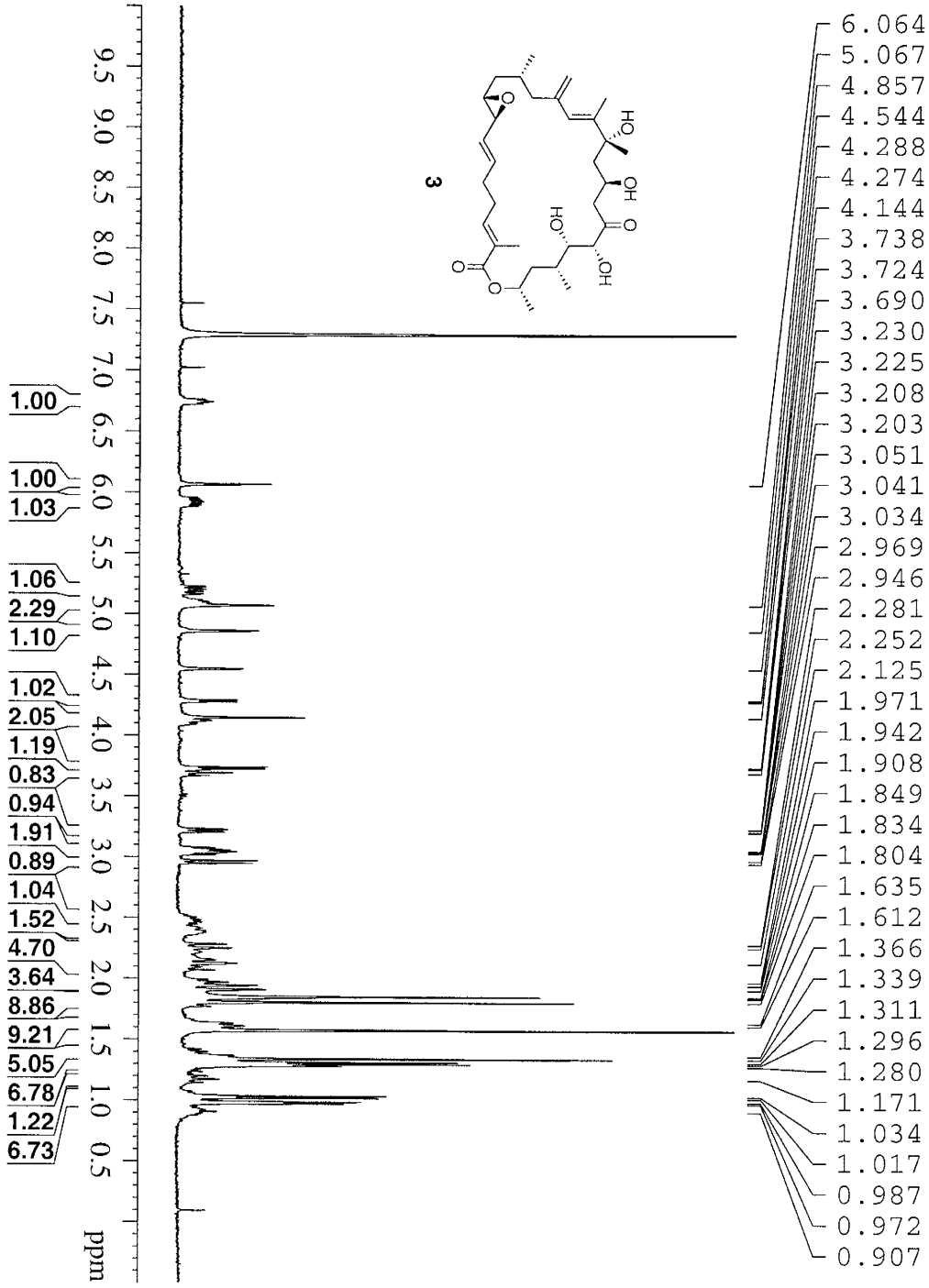
Current Data Parameters
 NAME 7-94
 EXNO 1
 PROCNO 4
 DV /n
 USER Liang

F2 - Acquisition Parameters
 Date_ 20080313
 Time 17.32
 INSTRUM DPK405
 PROBD 5 mm BBO-BB-1H
 PULPROG zgpg30
 SOLVENT g5558
 NS 4199
 DS 4
 SWH 25125.629 Hz
 FIDRES 0.381387 Hz
 AQ 1.3042164 sec
 RG 16384
 DW 19.900 usec
 DE 6.00 usec
 TE 298.2 K
 D1 0.15000001 sec
 D11 0.03000000 sec
 DELTA 0.05000000 sec
 TD0 1

==== CHANNEL F1 =====
 NUC1 13C
 P1 7.00 usec
 PL1 -3.00 dB
 SFO1 100.5785700 MHz

==== CHANNEL F2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 135.00 usec
 PL2 17.40 dB
 PL12 17.40 dB
 PL13 17.40 dB
 SFO2 399.9516000 MHz

F2 - Processing parameters
 S1 32768
 SF 100.5675880 MHz
 WDM 0
 SSB 0
 GB 3.00 Hz
 PC 1.40

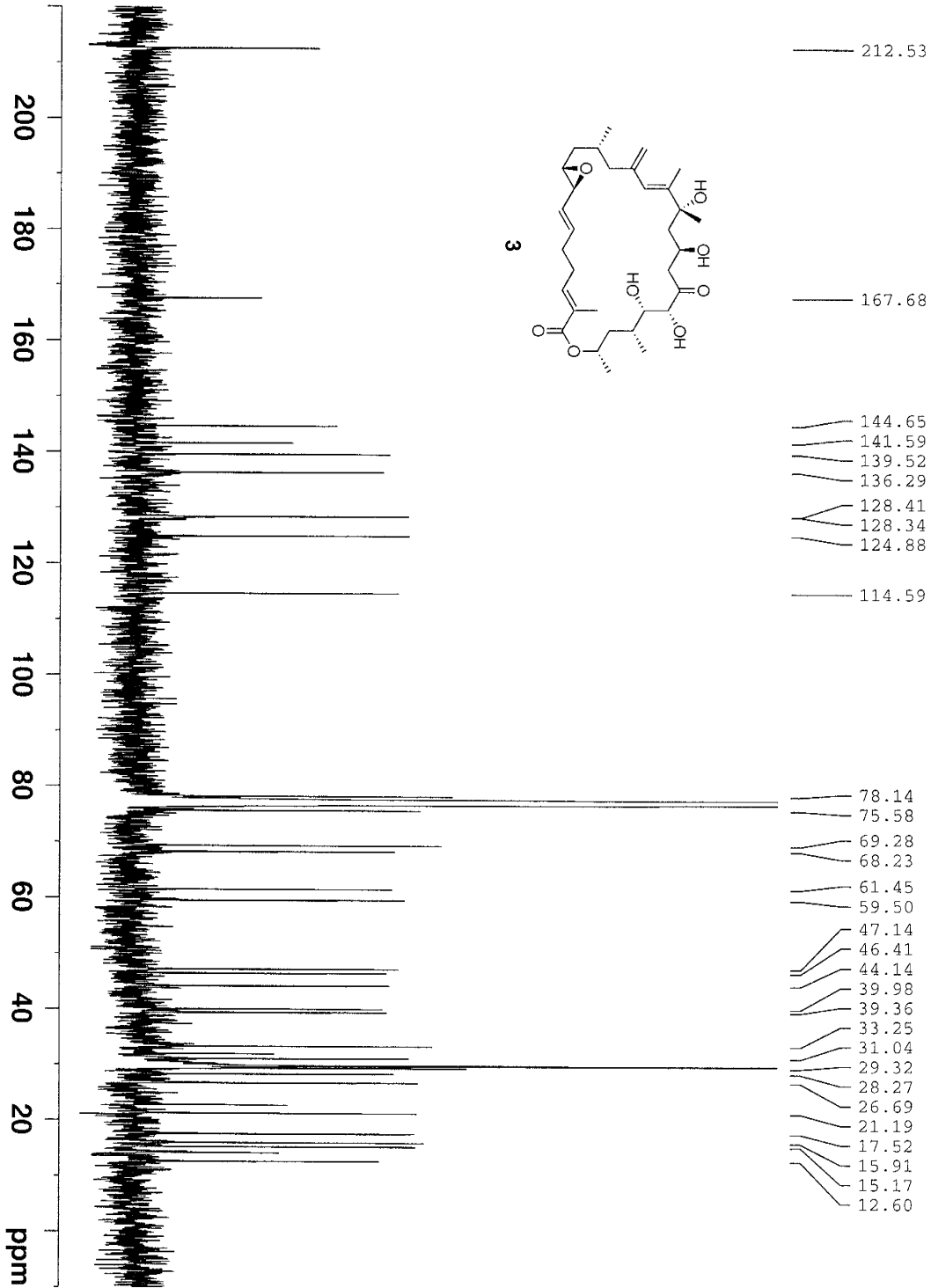


```

Current Data Parameters
Date_ 20080417
Time 22.15
EXPNO 1
PROCNO 1
PROBHD 5 mm BBO
PULPROG zgpg30
SOLVENT CPC13
NS 72
DS 2
SWH 6410.256 Hz
FIDRES 0.195635 Hz
AQ 2.555940 sec
RG 784.00
DE 784.00 usec
TE 298.2 K
D1 2.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 14.70 usec
PL 0.00 dB
SFO1 399.9528000 MHz

F2 - Processing parameters
SI 32768
WDW EM
SSB 0
LB 0
GB 0
PC 1.00
  
```



```

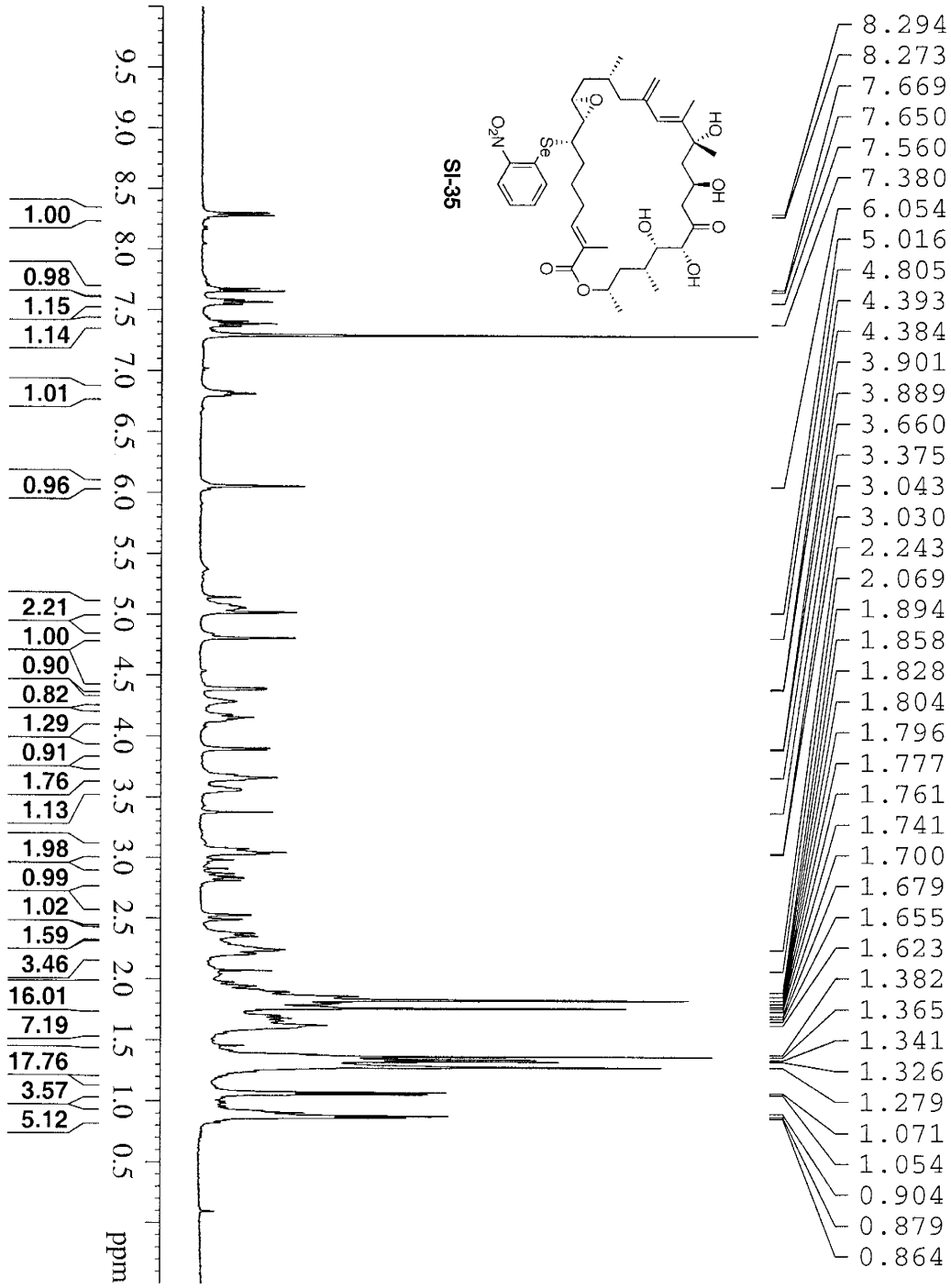
Current Data Parameters
NAME          7-97
EXPNO         1
PROCNO        1
DU             /-
USER          Liang

F2 - Acquisition Parameters
Date_         20080313
Time          7.57
INSTRUM      DPX400
PROBHD       5 mm BBO BB-1H
PULPROG      zgpg30
TD            65536
SOLVENT      22500
NS            2500
DS            4
SWH           25125.629 Hz
FIDRES        0.393387 Hz
AQ            1.3082164 s
RG            5792.6
DR            19.500 us
DE            6.00 us
TE            298.2 K
D1            0.15000001 s
d11           0.03000000 s
DELTA        0.05000000 s
TDC           1

===== CHANNEL f1 =====
NUC1          13C
P1            7.80 us
PL1          -3.00 dB
SFO1         100.5785700 MHz

===== CHANNEL f2 =====
CPDPRG2      waltz16
NUC2          1H
PCPD2        135.00 us
PL2          17.40 dB
PL12         17.40 dB
PL13         17.40 dB
SFO2         399.9516000 MHz

F2 - Processing parameters
SI            32768
SF           100.5675080 MHz
WDW          EM
SSB          3
LB           3.00 Hz
GB           0
PC           1.40
  
```



- 8.294
- 8.273
- 7.669
- 7.650
- 7.560
- 7.380
- 6.054
- 5.016
- 4.805
- 4.393
- 4.384
- 3.901
- 3.889
- 3.660
- 3.375
- 3.043
- 3.030
- 2.243
- 2.069
- 1.894
- 1.858
- 1.828
- 1.804
- 1.796
- 1.777
- 1.761
- 1.741
- 1.700
- 1.679
- 1.655
- 1.623
- 1.382
- 1.365
- 1.341
- 1.326
- 1.279
- 1.071
- 1.054
- 0.904
- 0.879
- 0.864

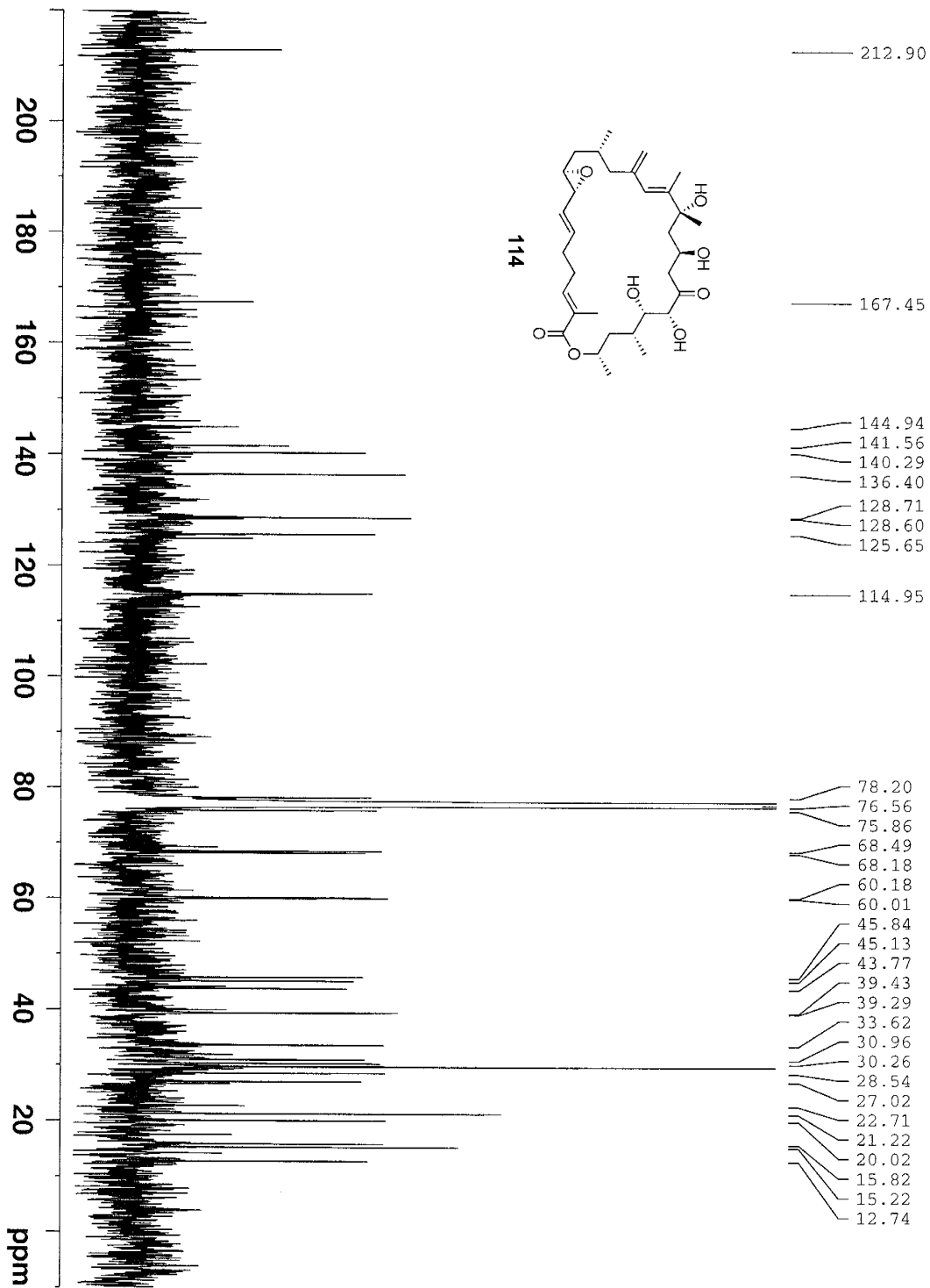
- 1.00
- 0.98
- 1.15
- 1.14
- 1.01
- 0.96
- 2.21
- 1.00
- 0.90
- 0.82
- 1.29
- 0.91
- 1.76
- 1.13
- 1.98
- 0.99
- 1.02
- 1.59
- 3.46
- 16.01
- 7.19
- 17.76
- 3.57
- 5.12

Current Data Parameters
 Name: SI-35
 EXPNO: 1
 PROCNO: 1
 DU: /n
 USER: Liang

F2 - Acquisition Parameters
 Date_: 20080413
 Time: 23.14
 INSTRUM: spect
 P1: 0.00000000
 P2: 0.00000000
 PULPROG: zgpg30
 TD: 32768
 SOLVENT: CDCl3
 NS: 21
 DS: 2
 SWH: 6410.256 Hz
 FIDRES: 0.195625 Hz
 AQ: 2.5559540 sec
 SFO: 399.9528000 MHz
 DSI: 78.000 usec
 DE: 6.00 usec
 TE: 298.2 K
 D1: 2.00000000 sec
 TDO: 1

***** CHANNEL f1 *****
 NUCL1: 1H
 P1: 14.70 usec
 PL1: 0.00000000
 SFO1: 399.9528000 MHz

F2 - Processing parameters
 SI: 32768
 SF: 399.9528000 MHz
 WIDW: 0
 SSB: 0
 LB: 0.70 Hz
 GB: 0
 PC: 1.00



```

Current Data Parameters
NAME 7-97-2
EXPNO 3
PROCNO 1
DU /h
USER Liang

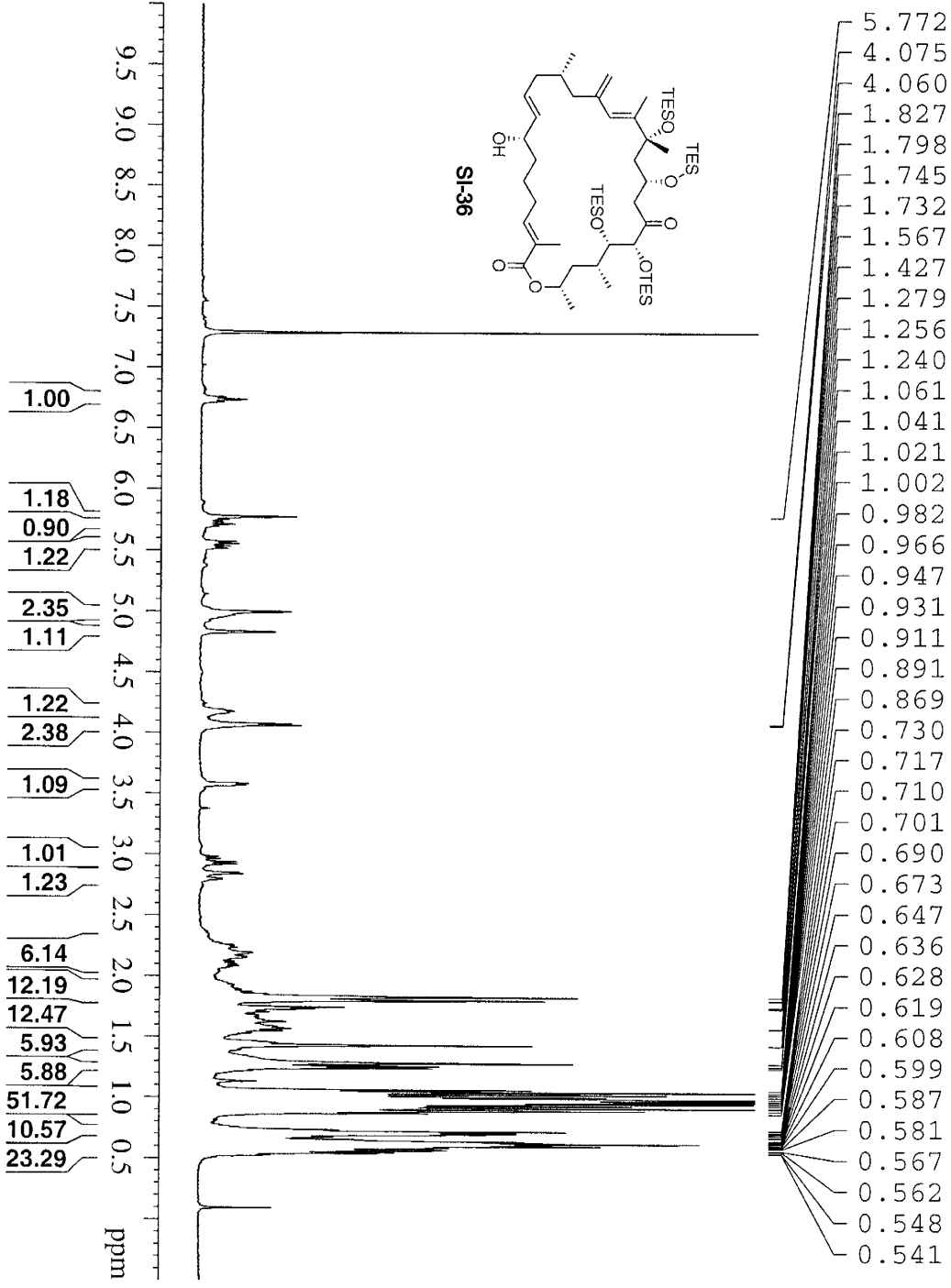
F2 - Acquisition Parameters
Date_ 20080314
Time 7.52
INSTRUM DFX400
PROBHD 5 mm BBO ES-1H
PULPROG zgpg30
TD 65536
SOLVENT
NS 19200
DS 4
SWH 25125.629 Hz
FIDRES 0.383387 Hz
AQ 3.022164 sec
RG 11585.2
DE 19.900 us
TE 298.2 K
D1 0.15000001 sec
D11 0.03000000 sec
DELTA 0.05000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 13C
RG1 12.80 us
SF01 100.5785100 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 135.00 us
PL2 17.40 dB
PL12 17.40 dB
PL13 17.40 dB
SFO2 399.9516000 MHz

F2 - Processing Parameters
SI 32768
SF 100.5675080 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.40

```

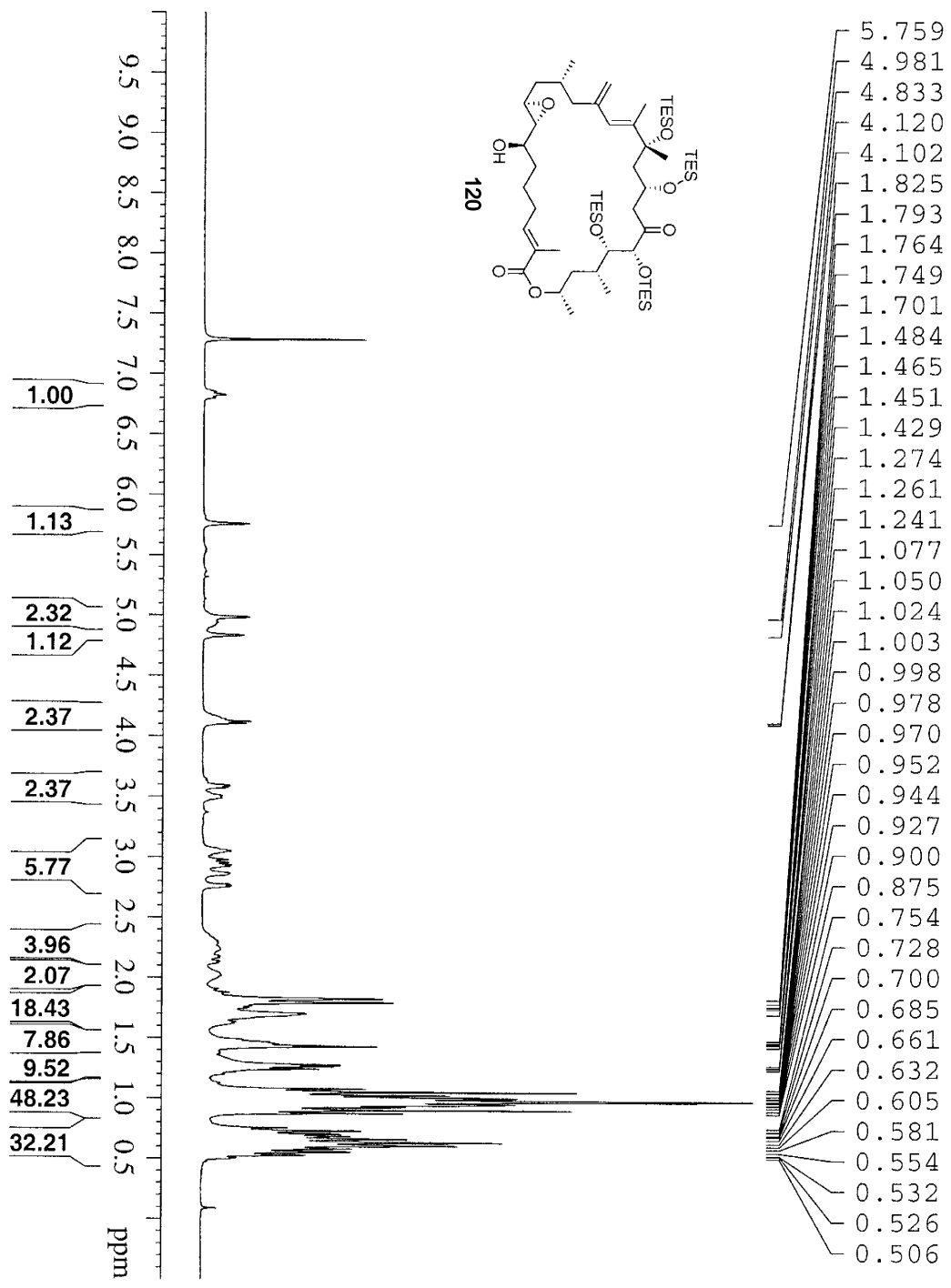
Chemical Shift (ppm)
5.772
4.075
4.060
1.827
1.798
1.745
1.732
1.567
1.427
1.279
1.256
1.240
1.061
1.041
1.021
1.002
0.982
0.966
0.947
0.931
0.911
0.891
0.869
0.730
0.717
0.710
0.701
0.690
0.673
0.647
0.636
0.628
0.619
0.608
0.599
0.587
0.581
0.567
0.562
0.548
0.541

Current Data Parameters
 EXPNO 8-26
 PROCNO 1
 DU 1/n
 USER Liang

F2 - Acquisition Parameters
 Date_ 20080421
 Time 17.57
 INSTRUM DPX400
 PULPROG zgpg30
 TD 32768
 SOLVENT CDCl3
 NS 19
 DS 4
 SWH 6410.256 Hz
 FIDRES 0.195635 Hz
 AQ 2.5595940 sec
 RG 78.181
 BQ 78.181 ussec
 DE 6.00 ussec
 TE 298.2 K
 D1 2.00000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 1H
 P1 4.70 ussec
 PL 0.00 dB
 SFO 399.952800 MHz

F2 - Processing parameters
 SI 399.953768 MHz
 SF 399.953000 MHz
 WDW 0
 SSB 0
 LB 0.70 Hz
 GB 0
 PC 1.00



5.759
4.981
4.833
4.120
4.102
1.825
1.793
1.764
1.749
1.701
1.484
1.465
1.451
1.429
1.274
1.261
1.241
1.077
1.050
1.024
1.003
0.998
0.978
0.970
0.952
0.944
0.927
0.900
0.875
0.754
0.728
0.700
0.685
0.661
0.632
0.605
0.581
0.554
0.532
0.526
0.506

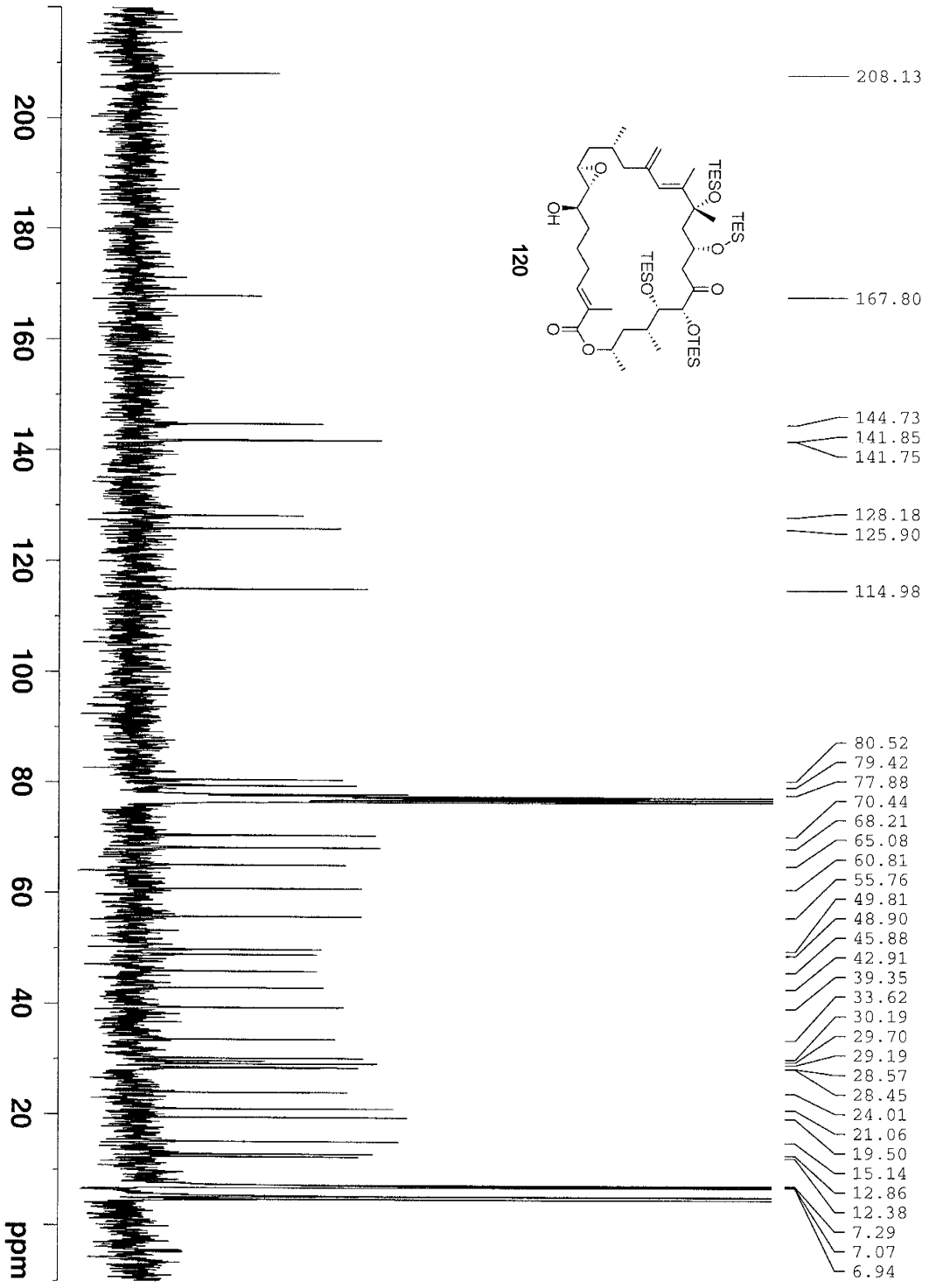
```

Current Data Parameters
NAME          8-22
EXPNO        2
PROCNO       1
DS            1
USBR         /n
LARG         /m

F2 - Acquisition Parameters
Date_         20080403
Time         22:50
INSTRUM      spect
PROBHD       5 mm QNP
PULPROG      zg30
TD           32768
SOLVENT      CDCl3
NS           32
DS           2
SWH          4789.272 Hz
FIDRES      0.146157 Hz
AQ          3.421291 sec
RG          104.400
AQ          104.400 usec
DE          6.00 usec
TE          298.2 K
T20        2.00000000 sec
T30        1

***** CHANNEL f1 *****
NUC1         1H
P1           9.10 usec
PL1         -3.00 dB
SFO1        300.1321009 MHz

F2 - Processing parameters
SI          300.1321009 MHz
WDW         EM
SSB         0
LB          0.30 Hz
GB          0
PC          1.00
  
```



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```

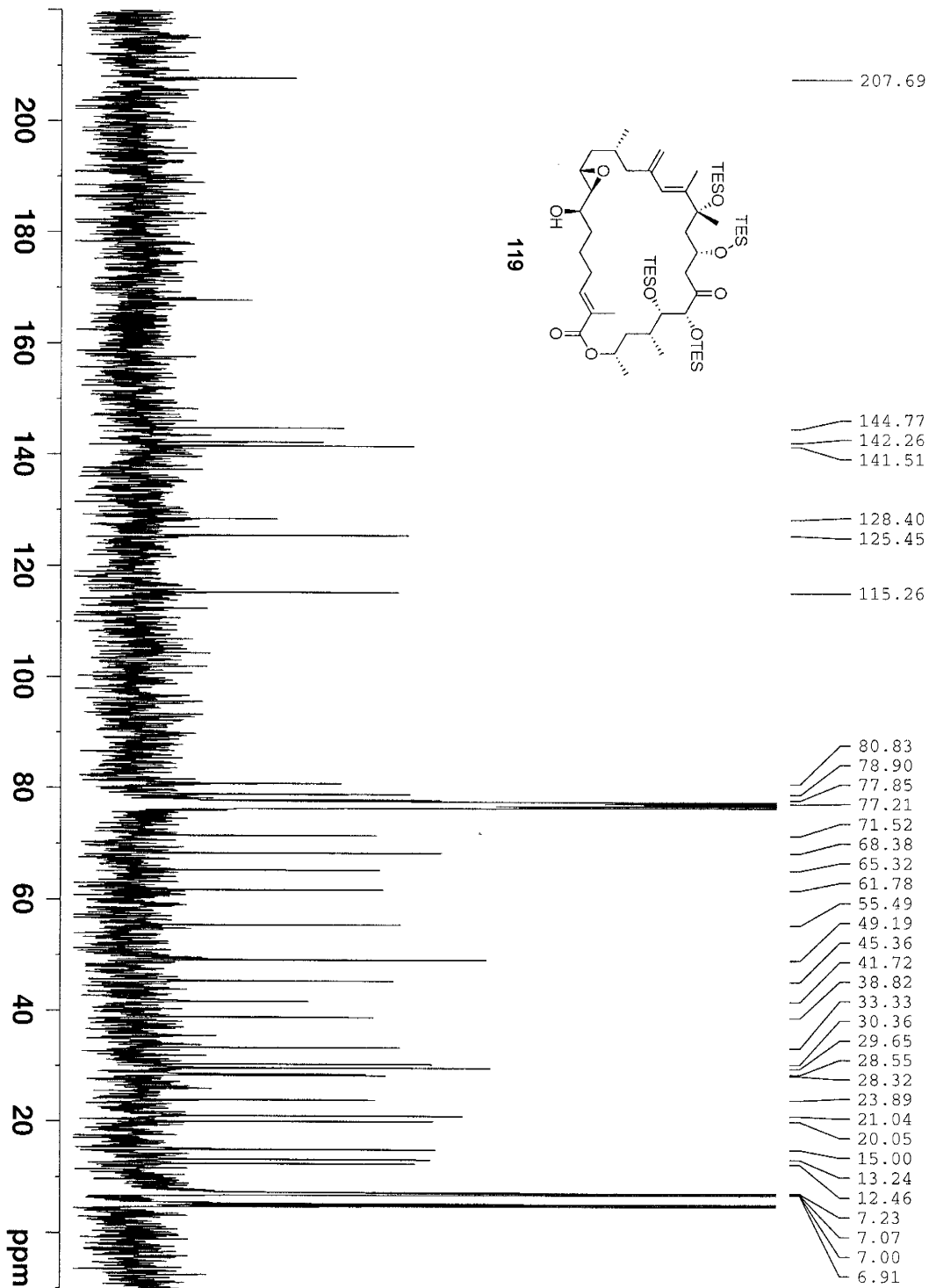
Current Data Parameters
NAME      8-22
EXPNO    4
PROCNO   1
F2       /n
USER     Liang

F2 - Acquisition Parameters
Date_    20080403
Time     23.05
INSTRUM  5 mm QNP
PROBHD   DFX100
PULPROG  zgpg30
SOLVENT  CDCl3
NS       1392
DS       2
SWH      18812.393 Hz
FIDRES   0.287360 Hz
AQ       1.7460308 sec
RG       812.7
DE       26.550 um
TE       298.2 K
D1       0.15000001 sec
c11      0.03000000 sec
DELTA    0.05000000 sec
TDU      1

===== CHANNEL f1 =====
NUC1     13C
P1       9.126 um
PL1      -3.00 dB
SFO1     75.4760505 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2     1H
PCPDZ    80.00 um
PL2      -3.00 dB
PL12     17.55 dB
PL13     17.55 dB
SFO2     300.1312005 MHz

F2 - Processing parameters
SI       32768
SF       75.4677499 MHz
WDW      EM
SSB      0
GB       0
PC       1.40
  
```

119

```

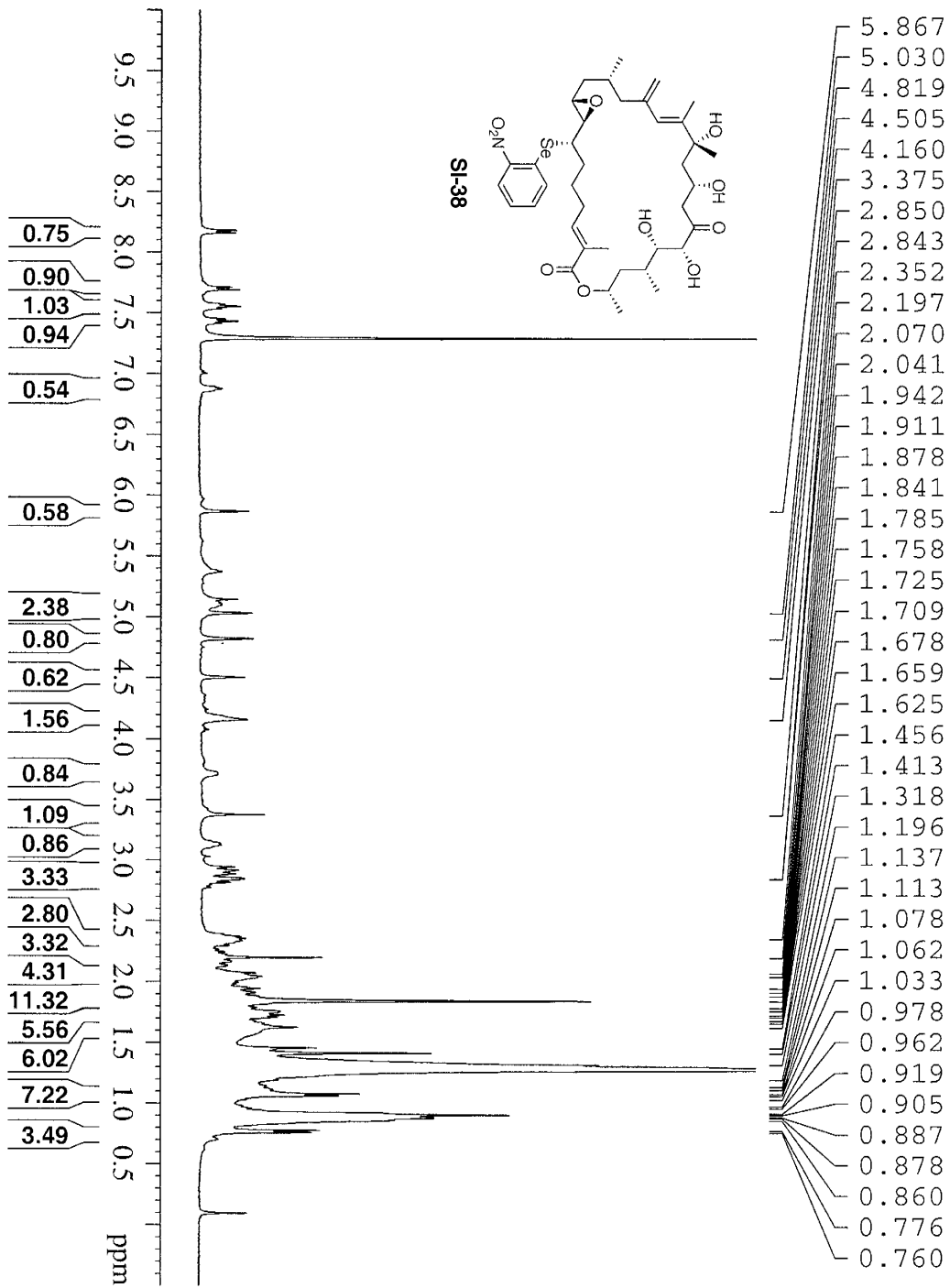
Current Data Parameters
NAME      8-22-2
EXPNO    1
PROCNO   1
CU       /n
USER     Liang

F2 - Acquisition Parameters
Date_    20080406
Time     12.20
INSTRUM  5 mm QNP 1H/1
PROBHD   DFX100
PULPROG  zgpg30
TD        65536
CQ13     13.62
SOLVENT  CDCl3
NS       3364
DS       4
SWH      19832.393 Hz
FIDRES   0.287360 Hz
AQ        1.7400308 sec
RG         912.3
DE        26.550 us
TE        6.00 us
D1        298.2 K
d11       0.15000001 sec
DELTA    0.03000000 sec
DELTA2   0.05000000 sec
TD0       1

===== CHANNEL f1 =====
NUC1      13C
P1        13.00 us
PC1       3.20 dB
RF1       75.4760505 MHz

===== CHANNEL f2 =====
CPDPRG2   waltz16
NUC2       1H
PCPD2     80.00 us
PL2       -3.00 dB
PL12      17.55 dB
PL13      17.55 dB
SFO2      300.1312005 MHz

F2 - Processing parameters
SI         32768
SF         75.4677490 MHz
WDW        EM
SSB        0
LB         3.00 Hz
GB         0
PC         1.40
  
```

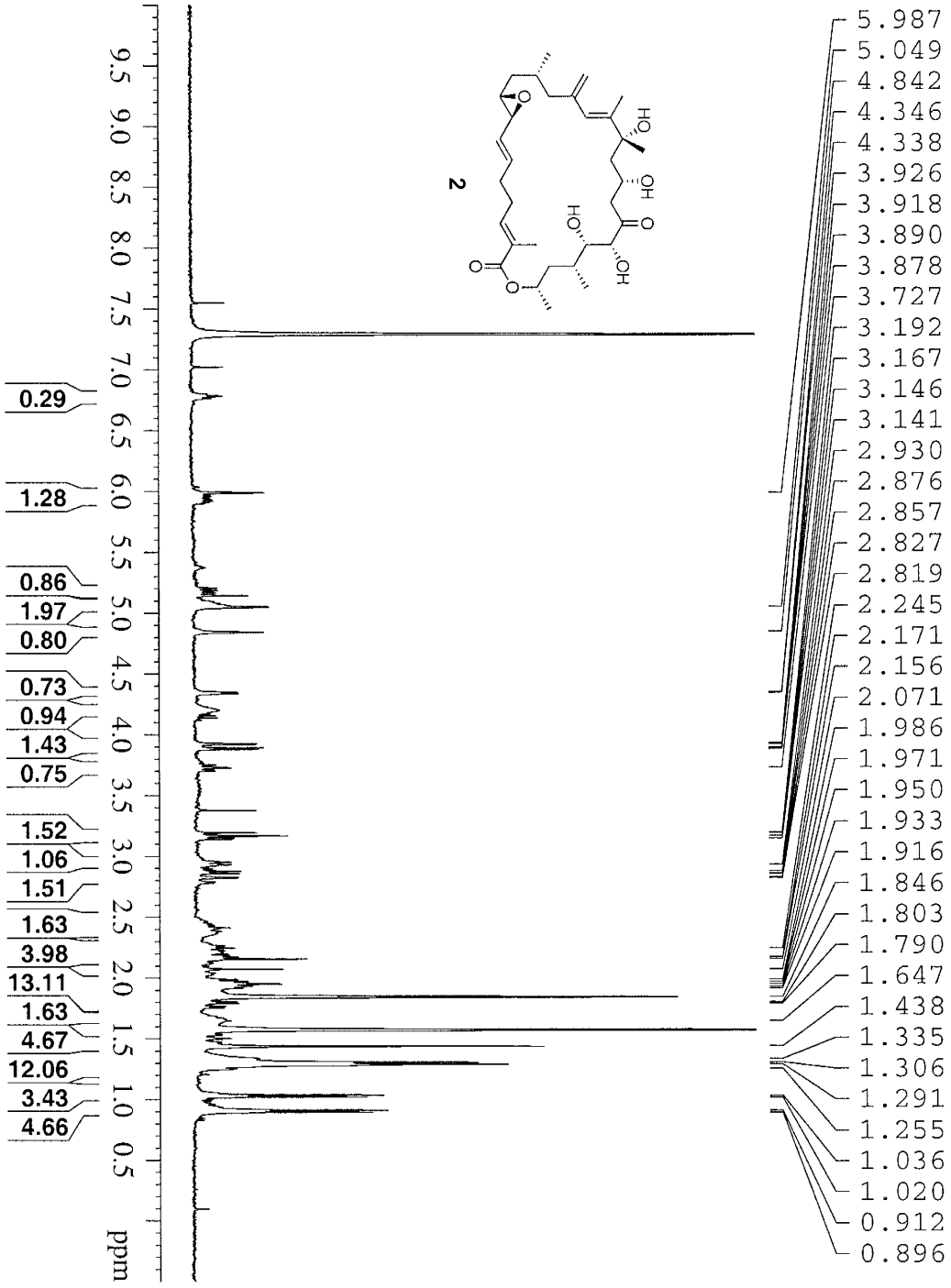


Current Data Parameters
 Name: SI-38
 EXPNO: 9-2
 PROCNO: 1
 DU: 1
 USER: Llang

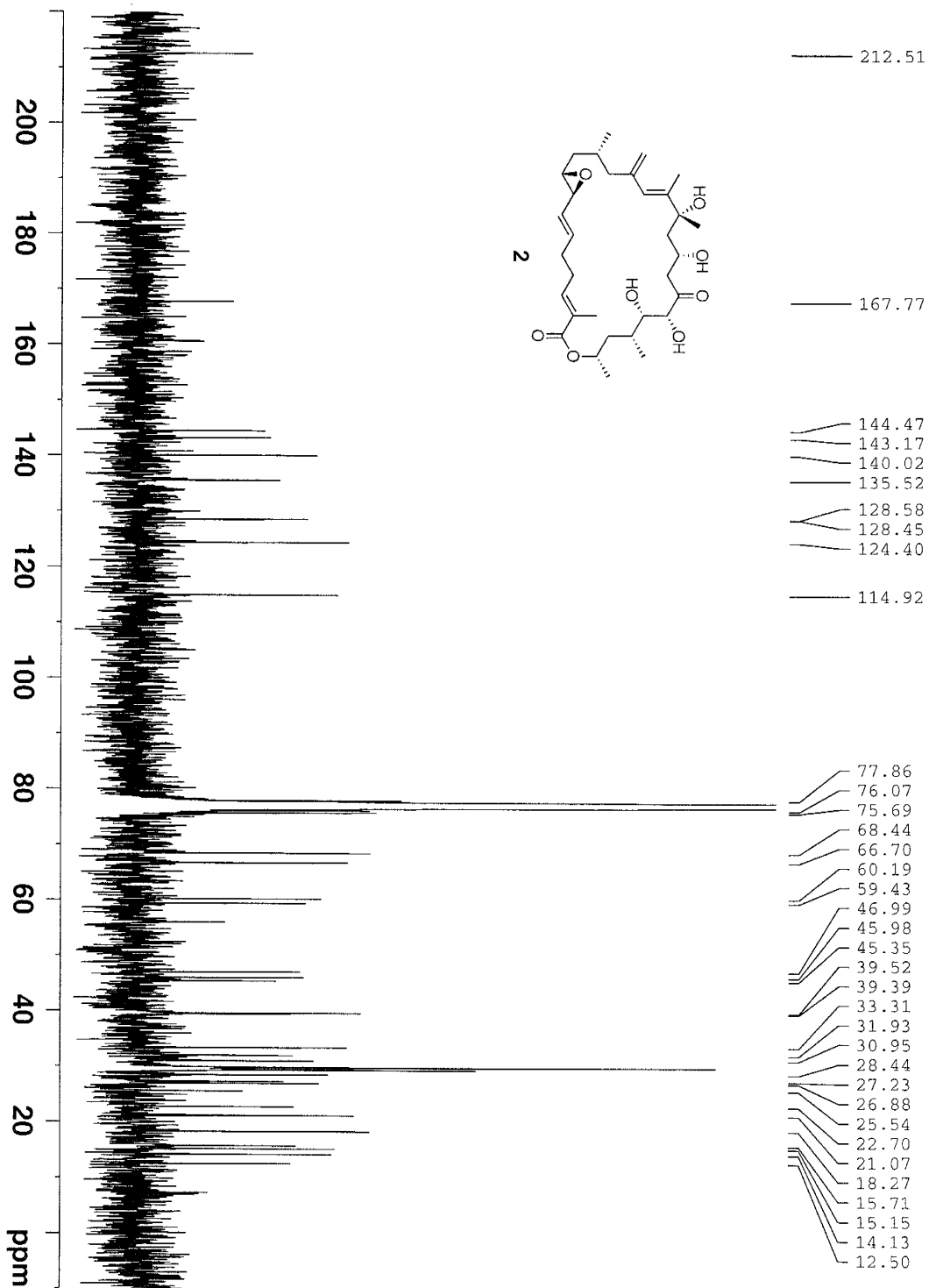
F2 - Acquisition Parameters
 Date_: 20080407
 Time: 12.34
 P1: 12.34
 P2: 64.19
 PROBHD: 5 mm BBO
 PULPROG: zgpg30
 TD: 2630
 SOLVENT: CDCl3
 NS: 32
 DS: 2
 SWH: 6410.256 Hz
 FIDRES: 0.195625 Hz
 AQ: 2.5559540 sec
 RG: 441
 DQ: 78.000 usec
 DE: 6.30 usec
 TE: 298.2 K
 D1: 2.00000000 sec
 L1: 1

===== CHANNEL f1 =====
 NUC1: 1H
 P1: 14.00 usec
 PL1: 0.00 dB
 SFO1: 399.9528000 MHz

F2 - Processing parameters
 SI: 200000
 SF: 399.9500000 MHz
 WDW: EM
 SSB: 0
 LB: 0.70 Hz
 GB: 0
 PC: 1.00



Current Data Parameters
 NAME: 8-52
 EXNO: 5
 PRONO: 1
 CN: 1
 USR: /n
 F2 - Acquisition Parameters
 Date_: 20080410
 Time: 17.12
 Name: P1712
 PULPROG: zgpg30
 BRGDND: 5 mm BBO BB-1H
 PULPROG: zgpg30
 TD: 32768
 SOLVENT: CDCl3
 NS: 6
 DS: 2
 SWH: 6410.256 Hz
 FIDRES: 0.195625 Hz
 AQ: 2.155940 sec
 RG: 1296
 CW: 78.000 usec
 CE: 6.00 usec
 TE: 298.2 K
 TD0: 2.00000000 sec
 ===== CHANNEL f1 =====
 NUC1: 1H
 P1: 14.00 usec
 PL1: 0.00 dB
 SFO1: 399.9528000 MHz
 F2 - Processing parameters
 SF: 399.9500000 MHz
 WIDW: EM
 SSB: 0
 LB: 0.70 Hz
 GB: 0
 PC: 1.00



Current Data Parameters
 NAME 8-32
 EXPRG 10
 PROCNO 1
 DU /h
 USER Liang

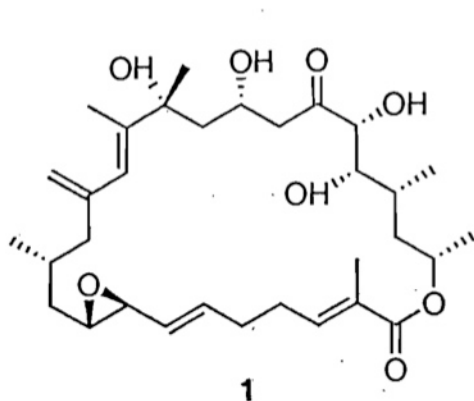
F2 - Acquisition Parameters
 Date_ 20080411
 Time 21.28
 INSTRUM CPX400
 PROBNB 5 mm BBO BB-1H
 FREQH0 299.930
 F2PRG0 65536
 TD
 SOLVENT
 NS 57641
 DS 1
 SFR1 25125.629 Hz
 R1DRBS 0.381387 Hz
 AQ 1.3042164 sec
 RG 3649.1
 DW 19.900 usec
 DE 6.00 usec
 CE 298.2 K
 D1 0.15000001 sec
 D11 0.03000000 sec
 DELTA 0.05000000 sec
 TDO 1

==== CHANNEL f1 =====
 NUC1 13C
 P1 7.80 usec
 P2 -3.100 usec
 SFO1 100.5785700 MHz

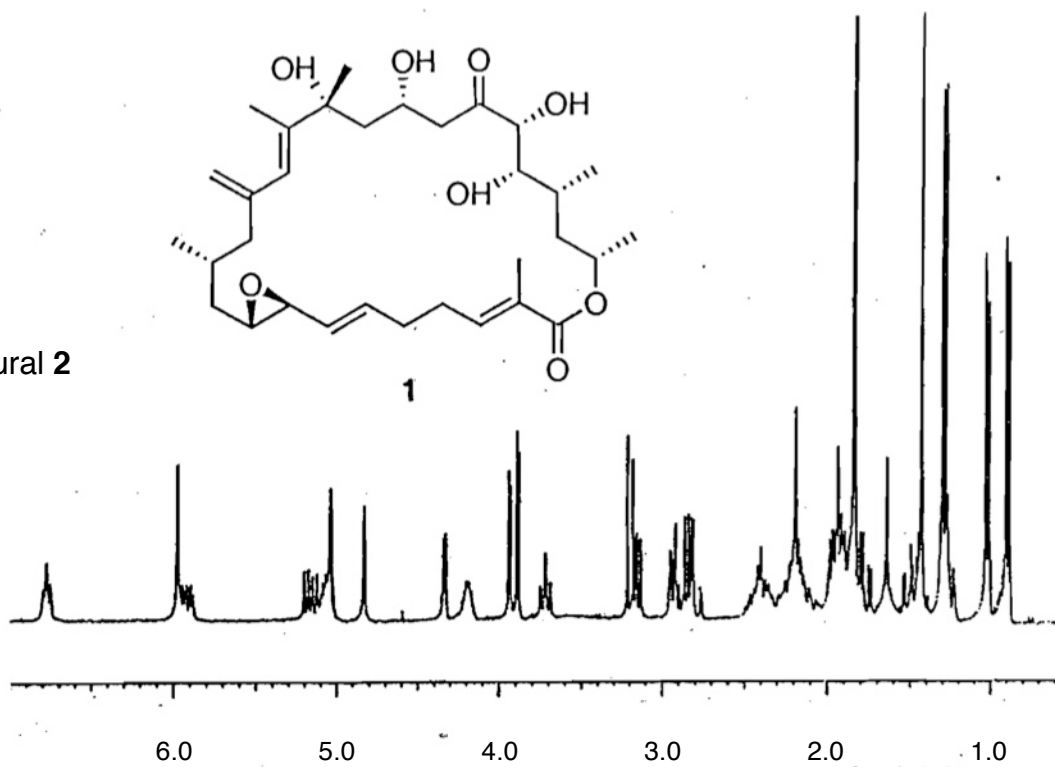
==== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 P1 135.00 usec
 P2 17.40 usec
 P12 17.40 usec
 P13 17.40 usec
 SFO2 399.9516000 MHz

F2 - Processing parameters
 SI 32768
 SF 100.5575080 MHz
 WDM 0
 SSB EM
 LB 3.00 Hz
 GB 0
 FC 1.40

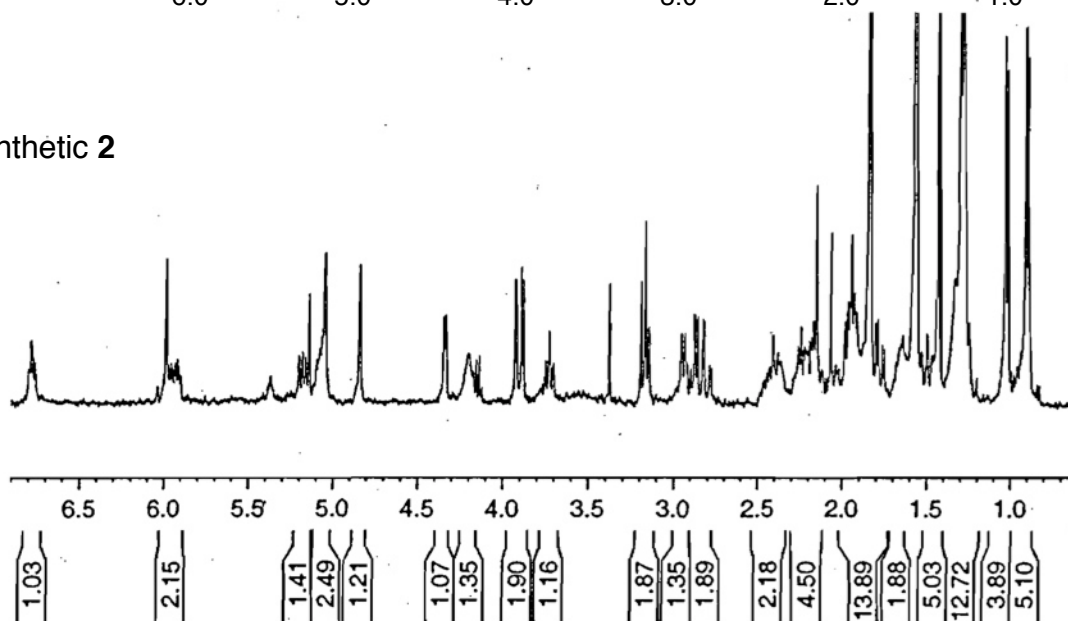
Comparison of ^1H NMR Data for Synthesis and Natural Amphidinolide B₁ (2)



Natural 2



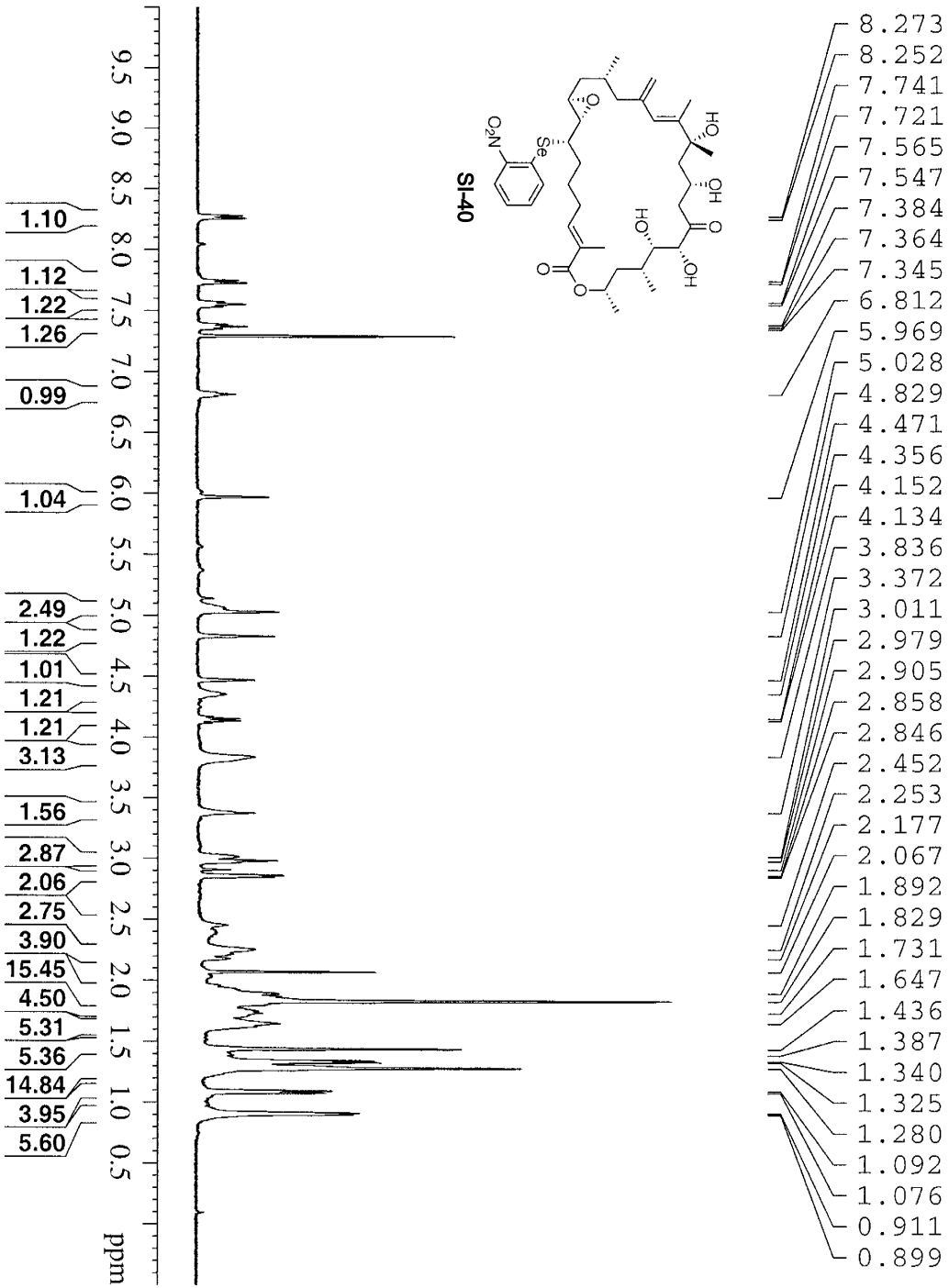
Synthetic 2



Comparison of ^{13}C NMR Data for Synthesis and Natural Amphidinolide B₁ (2)

Synthetic 2 ^{13}C NMR Data (CDCl ₃ , 100 MHz)	Natural 2 ^{13}C NMR Data ^a (CDCl ₃ , 150 MHz)
212.51	212.49
167.77	167.77
144.47	144.47
143.17	143.16
140.02	140.04
135.52	135.45
128.58	128.60
128.45	128.44
124.40	124.37
114.92	114.89
77.86	77.84
76.07	76.01
75.69	75.62
68.44	68.46
66.70	66.58
60.19	60.11
46.99	46.96
45.98	45.97
45.35	45.36
39.52	39.51
39.39	39.45
33.31	33.27
30.95	30.92
29.35	29.26
28.44	28.40
26.88	26.87
21.07	21.04
18.27	18.33
15.71	15.71
15.15	15.10
12.50	12.48

^a Tsuda, M.; Kubota, T.; Sakuma, Y.; Kobayashi, J. *Chem. Pharm. Bull.* **2001**, *49*, 1366-67. See also, Ishibashi, M.; Ohizumi, Y.; Hamashima, M.; Nakamura, H.; Hirata, Y.; Sasaki, T.; Kobayashi, J. *J. Chem. Soc., Chem. Commun.* **1987**, 1127-29.



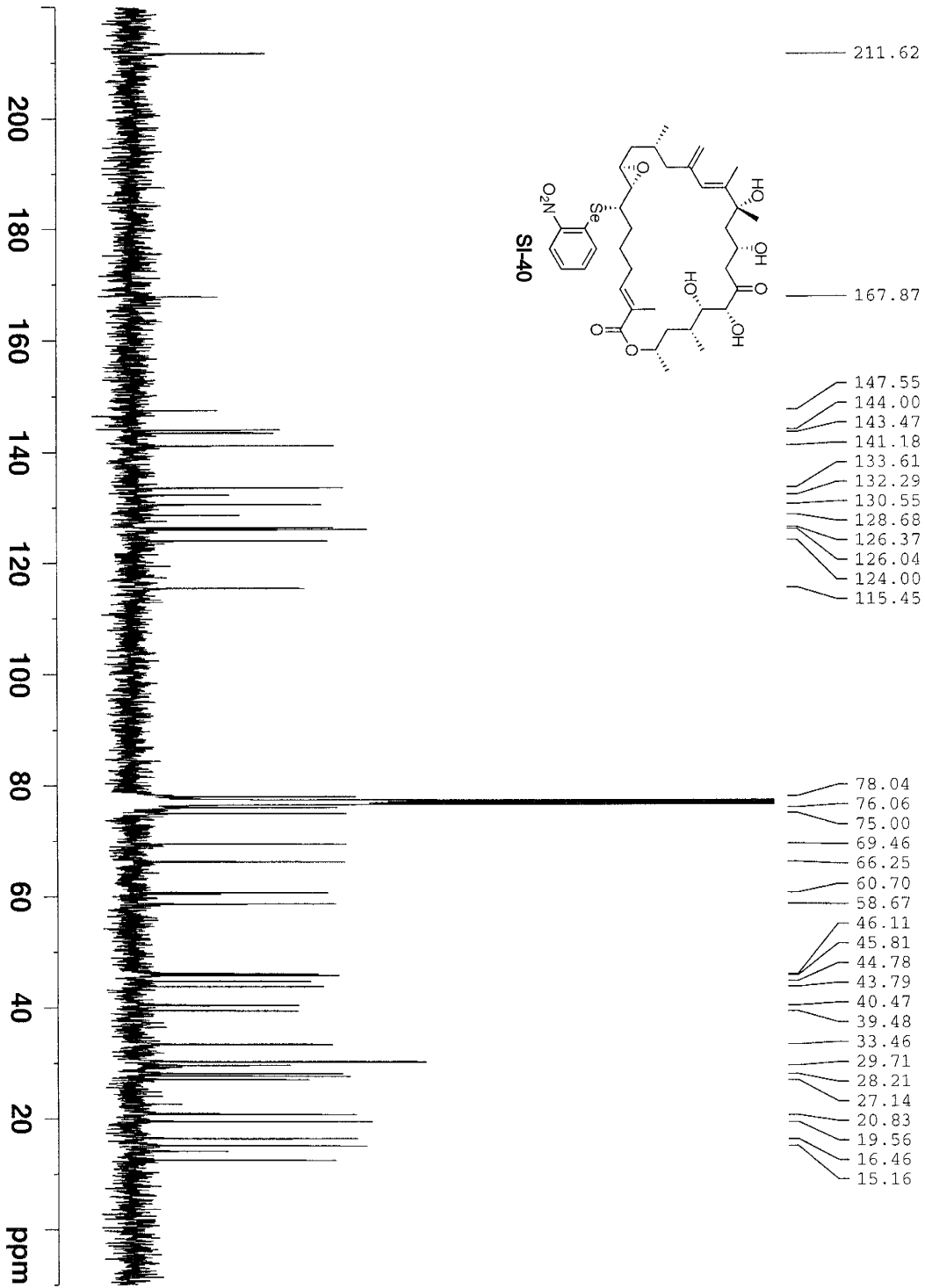
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Current Data Parameters
NAME          8.22
EXPNO        2
PROCNO       1
DS            1
USER         /n

F2 - Acquisition Parameters
Date_         20080405
Time         16.05
Date_        20080405
PROBHD       5 mm BBO BB-1H
PULPROG      zg30
TD           32768
SOLVENT      CHCl3
NUC1          13
DS            2
SWH           6410.256 Hz
FIDRES       0.195625 Hz
AQ           2.1559542 sec
RG           78.500
DE           6.00 usec
TE           298.2 K
TD0          2.0030000 sec

***** CHANNEL f1 *****
NUC1          1H
PUL1          zgpg30
SFO1          399.9528000 MHz

F2 - Processing parameters
SI           399.9500000 MHz
SF           0
SSB          0
GB           0
PC           1.00
  
```



211.62

167.87

147.55
144.00
143.47
141.18
133.61
132.29
130.55
128.68
126.37
126.04
124.00
115.45

78.04
76.06
75.00
69.46
66.25
60.70
58.67
46.11
45.81
44.78
43.79
40.47
39.48
33.46
29.71
28.21
27.14
20.83
19.56
16.46
15.16

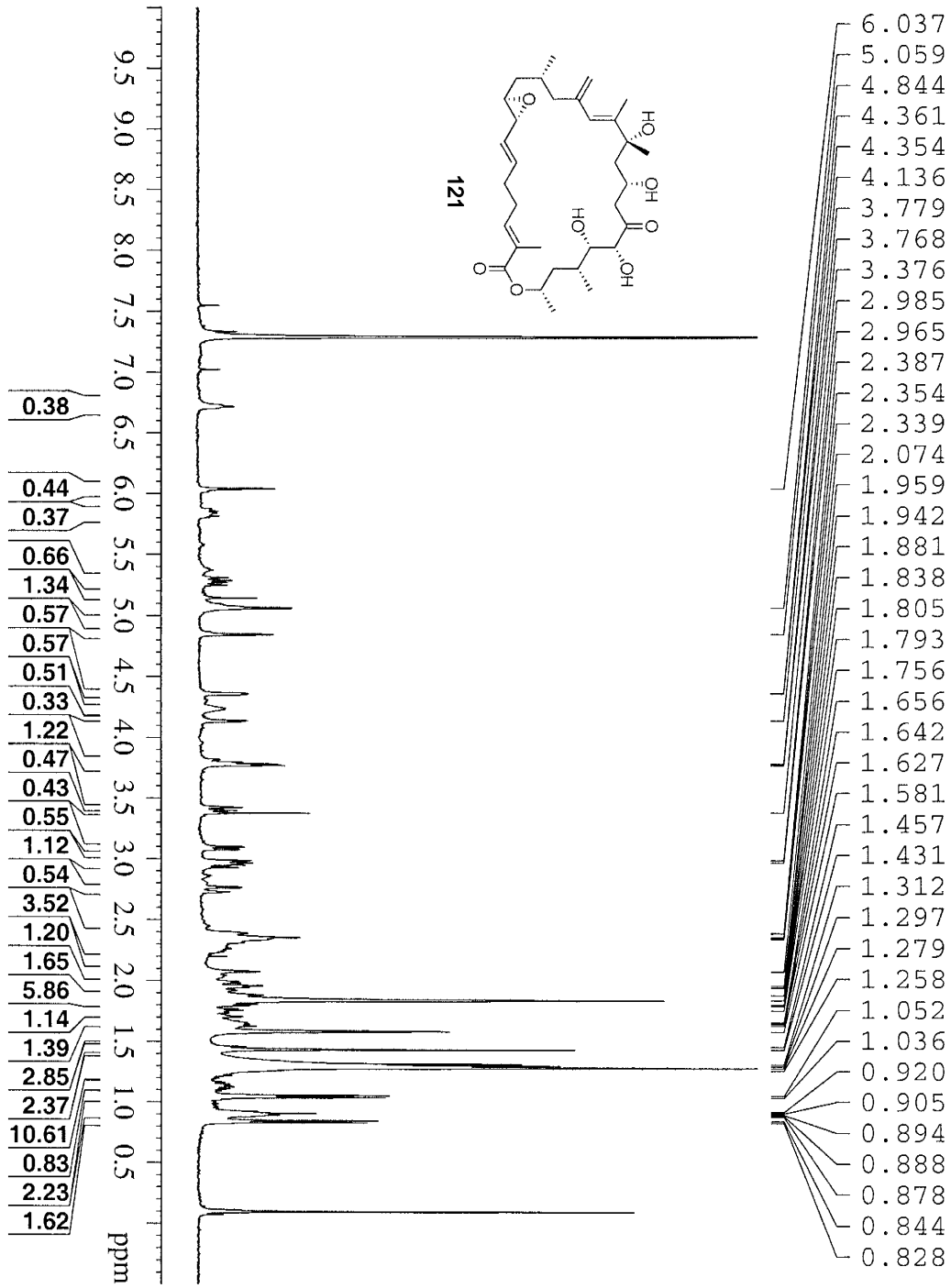
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Current Data Parameters
NAME      8-26
EXPNO     4
PROCNO    1
PU         1/h
USER      Lang
F2 - Acquisition Parameters
Date_     20080405
Time      16.55
INSTRUM   DEK400
PROBHD    5 mm BBO BB-1H
PULPROG   zgpg30
TD         65536
SOLVENT    CDCl3
NS         3726
DS         4
SFO        25125.629 Hz
F1DRHS     0.383387 Hz
AQ         1.3042164 sec
RG         4096
DM         19.900 us
DE         6.00 us
TE         298.2 K
D1         0.15000001 sec
D1.1       0.03000000 sec
DELTA     0.05000000 sec
TDO        1

===== CHANNEL f1 =====
NUC1       13C
P1         7.88 us
PC         3.00 dB
SFO1       100.5785100 MHz

===== CHANNEL f2 =====
CPDPRG2    waltz16
NUC2       135.00 us
PCPD2      17.40 dB
PL2        17.40 dB
PL12       17.40 dB
PL13       17.40 dB
SFO2       399.9516000 MHz

F2 - Processing Parameters
SI         32768
SF         100.5675080 MHz
WDW        EM
SS         0
SBS        3.00 Hz
GB         0
PC         1.40
  
```



- 6.037
- 5.059
- 4.844
- 4.361
- 4.354
- 4.136
- 3.779
- 3.768
- 3.376
- 2.985
- 2.965
- 2.387
- 2.354
- 2.339
- 2.074
- 1.959
- 1.942
- 1.881
- 1.838
- 1.805
- 1.793
- 1.756
- 1.656
- 1.642
- 1.627
- 1.581
- 1.457
- 1.431
- 1.312
- 1.297
- 1.279
- 1.258
- 1.052
- 1.036
- 0.920
- 0.905
- 0.894
- 0.888
- 0.878
- 0.844
- 0.828

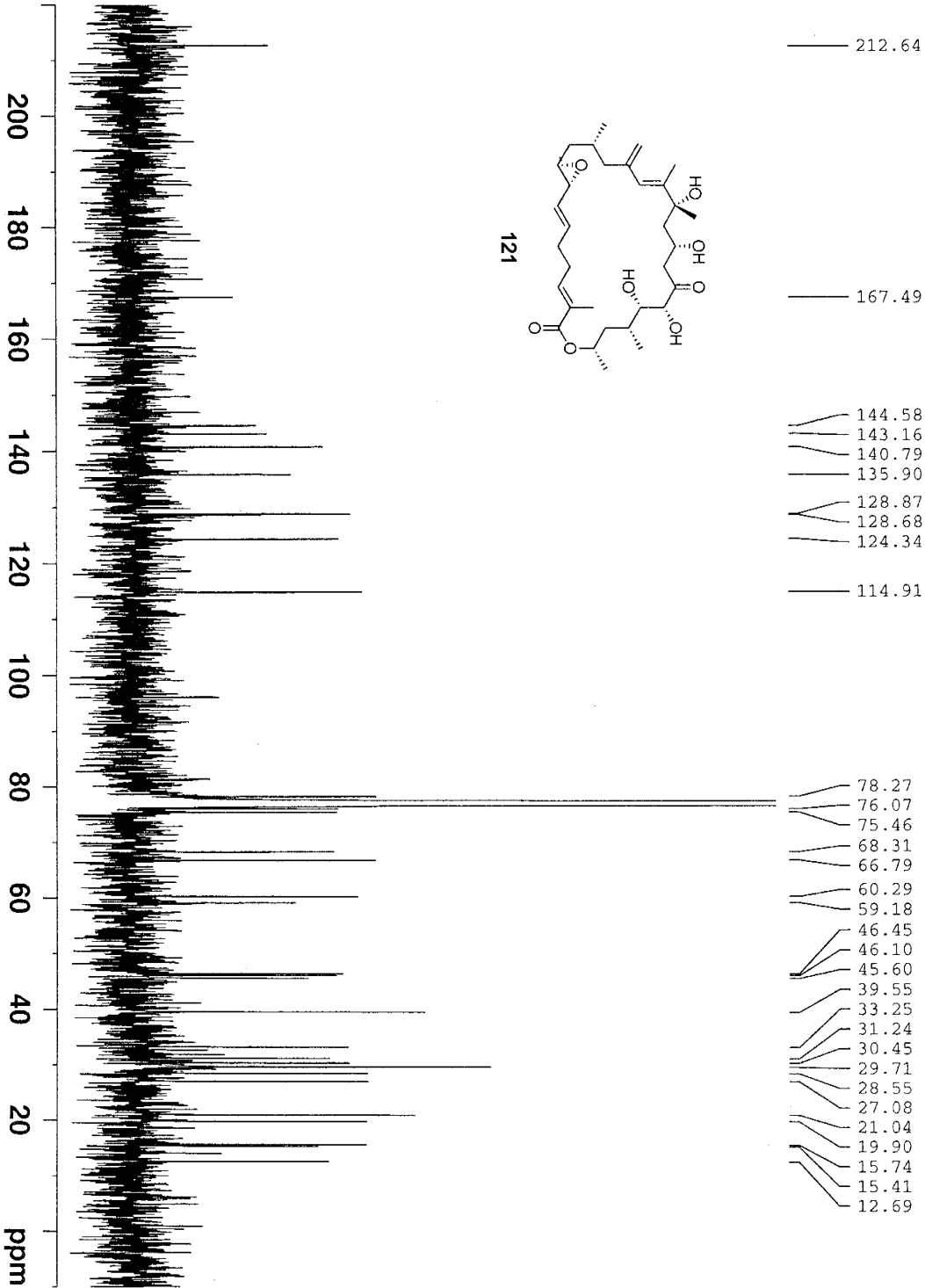
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Current Data Parameters
NAME          57
EXTN          3
PROCNO       1
DE            /n
USER
===== CHANNEL F1 =====
INSTR        1H
NUC1          1H
PUL1         14
PL1          0.00 dB
SFO1         399.9528000 MHz

F2 - Processing parameters
S          5
SF         399.9500000 MHz
WDW        EM
SSB        0
GB          0
PC          1.00

===== Acquisition Parameters
Date_      20080414
Time       22:44
INSTRUM    spect
PROBHD     5 mm BBO BB-1H
PULPROG    zg30
TD         65536
FIDRES     0.32768
SOLVENT    CDCl3
DS          2
SWH         6410.256 Hz
FIDRES     0.195625 Hz
AQ         2.559540 sec
RG         78.000 usec
DE         78.000 usec
TE         298.2 K
TD0        2.00000000 sec
=====

```



Current Data Parameters
 NAME 8-27
 EXNO 5
 PROCNO 1
 DU /n
 USER Ljang

F2 - Acquisition Parameters
 Date_ 20080414
 Time 23:58
 INSTRUM DPK400
 PROBMID 5 mm BBO BB-1H
 PULPROG zgpg30
 TD 65536
 SOLVENT
 NS 18937
 DS 4
 SSB 25125.629 Hz
 FT2RES 0.1383387 Hz
 AC 1.1042164 sec
 RG 6502
 LW 19.900 us
 DE 6.00 us
 FE 298.2 K
 DI1 0.15000001 sec
 DI2 0.03000000 sec
 DELTA 0.05000000 sec
 T30 1

==== CHANNEL F1 =====
 NUCL1 13C
 P1 7.80 us
 F1 100.5785700 MHz
 SF01 100.5785700 MHz

==== CHANNEL F2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 135.00 us
 P2 17.40 dt
 P42 17.40 dt
 P43 17.40 dt
 SFO2 399.9516000 MHz

F2 - Processing Parameters
 SI 32768
 SF 100.5675080 MHz
 WDW EM
 SSB 0
 LB 3.00 Hz
 GB 0
 PC 1.40