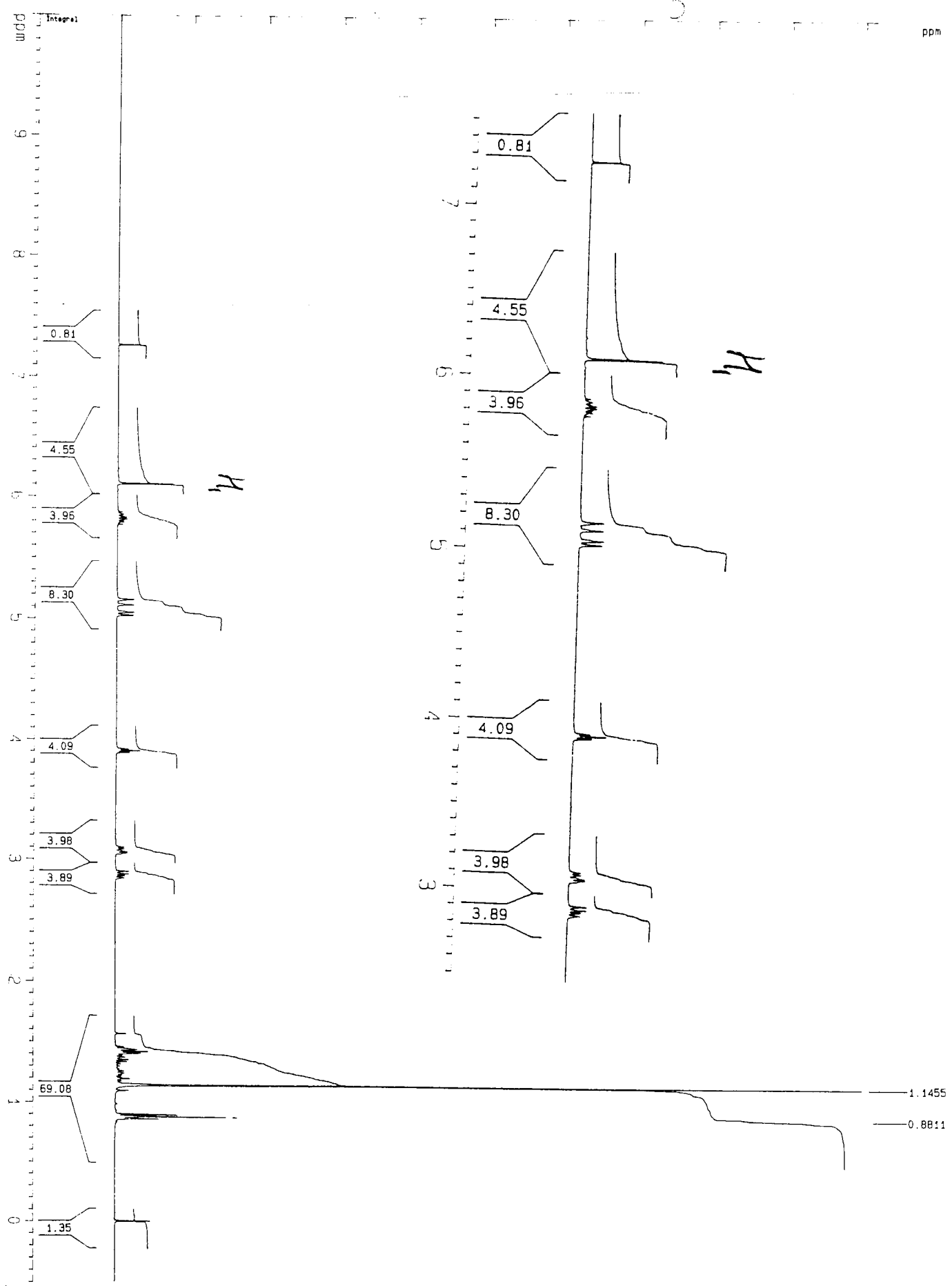
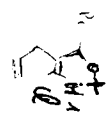




Current Data Parameters
 NAME Isa
 EXPNO 11
 PROCNO 1

F2 - Acquisition Parameters
 Date 941104
 Time 19.31
 PULPROG zg30
 SOLVENT CDCl3
 AQ 1.9661000 sec
 FIDRES 0.254313 Hz
 DW 60.0 usec
 RG 512
 NUCLEUS 1H

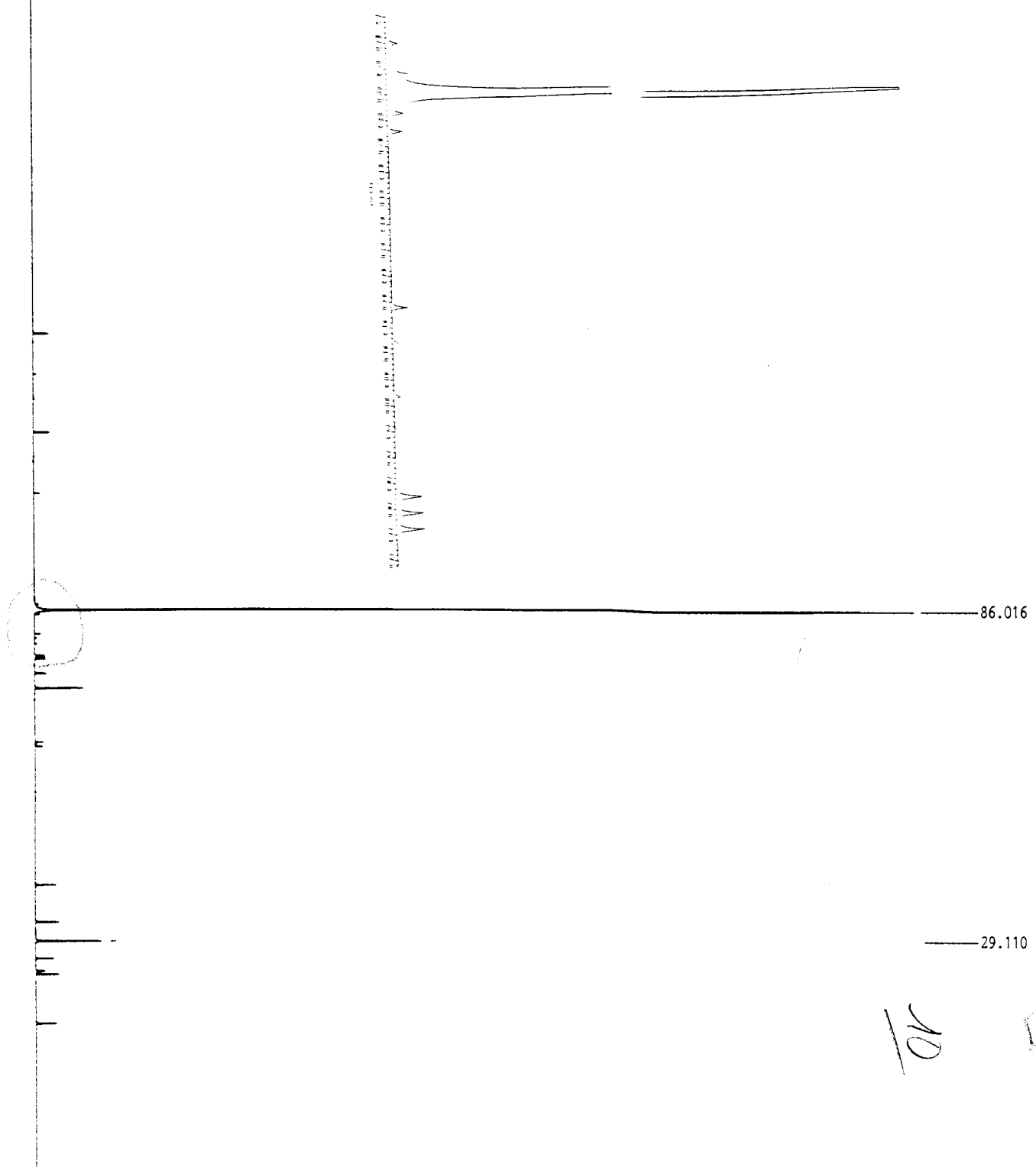
D1 1.0000000 sec
 P1 7.6 usec
 DE 85.7 usec
 SF01 400.1324508 MHz
 SMH 8333.33 Hz
 T0 32768
 NS 16
 DS 2

F2 - Processing parameters
 SI 16384
 SF 400.1300088 MHz
 WDW EM
 SSB 0
 LB 0.10 Hz
 GB 0
 PC 1.00

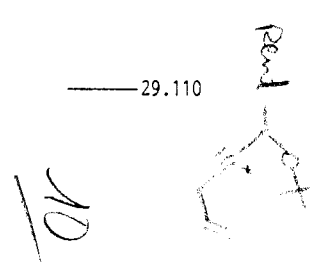
1D NMR plot parameters
 CX 34.00 cm
 F1P 10.000 ppm
 F1 4001.30 Hz
 F2P -0.500 ppm
 F2 -200.07 Hz
 PPMCM 0.30882 ppm/cm
 HZCM 123.56956 Hz/cm

ppm

200
180
160
140
120
100
80
60
40
20
0



Current Data Parameters
NAME mb431f1
EXPNO 11
PROCNO 1



10

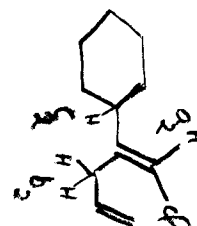
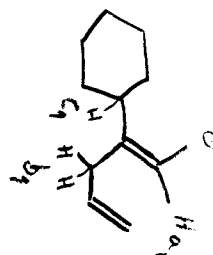
F2 - Acquisition Parameters
Date_ 990218
Time 23.40
INSTRUM spect
PROBHD 5 mm QNP 1H
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 512
DS 2
SWH 33333.332 Hz
FIDRES 0.508626 Hz
AQ 0.983090 sec
RG 16384
DW 15.000 usec
DE 21.43 usec
TE 300.0 K
D12 0.00002000 sec
D16 120.00 dB
D1 1.00000000 sec
CPDPRG waltz16
P31 100.00 usec
D11 0.03000000 sec
D15 16.00 usec
P1 1.00 usec
P2 21.43 usec
SFO1 100.6250150 MHz
INSTRUM spect

F2 - Processing parameters
SI 16384
SF 100.6250150 MHz
WDW EM
SSB 0
LB 1.50 Hz
GB 0
PC 1.00

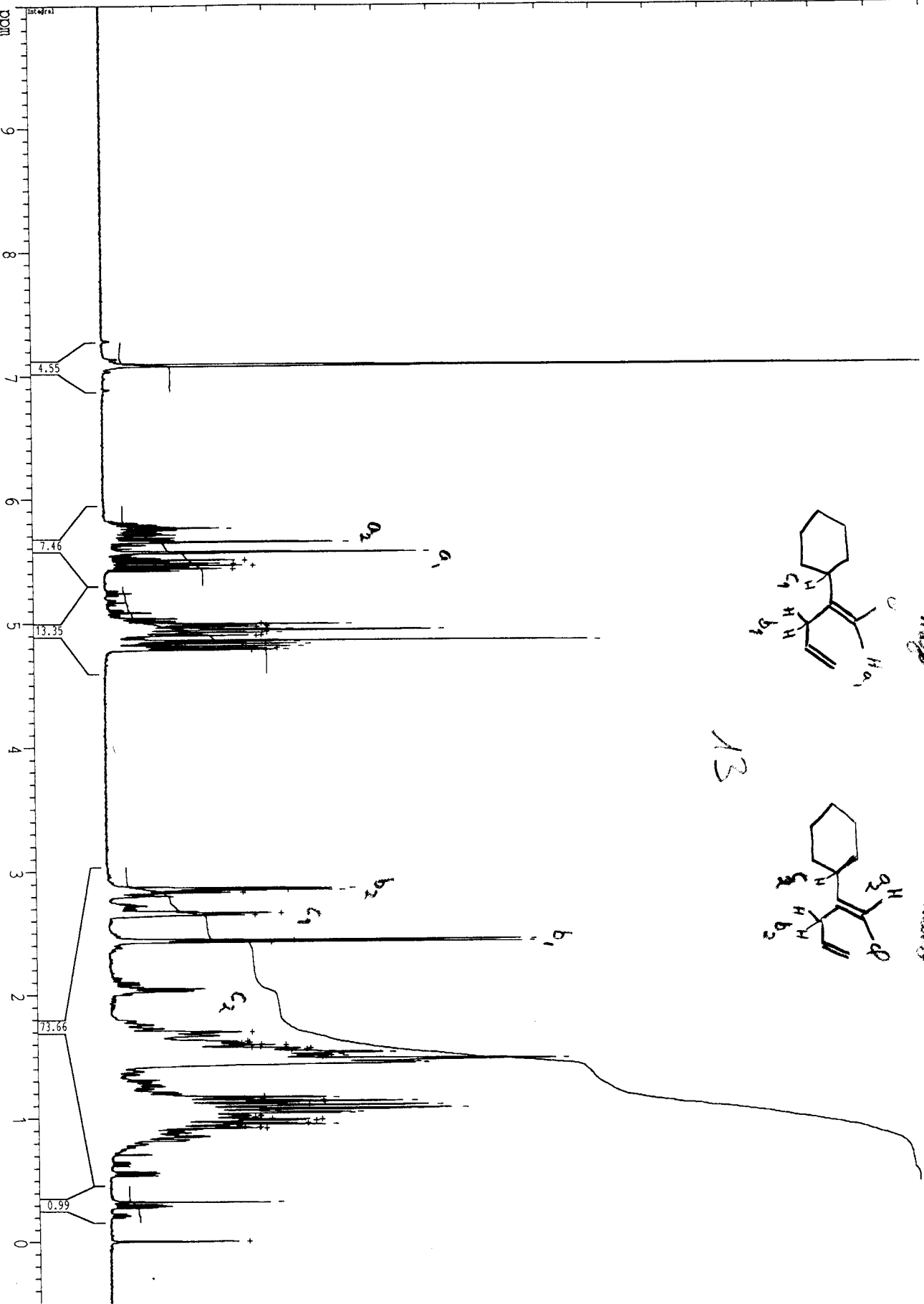
1H NMR parameters
CX 44.00 cm
FID 240.000 ppm
F1 23340.92 Hz
F2 10.000 ppm
F2 1006.13 Hz
P1 10.000000 ppm/Hz
P2 1006.13 Hz/Hz
P3 1006.13 Hz/Hz

ppm

7.087
5.762
5.651
5.570
5.567
5.563
4.996
4.991
4.958
4.953
4.949
4.945
4.926
4.865
4.862
4.859
4.855
4.836
4.817
4.813
4.789
2.869
2.865
2.861
2.849
2.447
2.444
2.440
2.430
2.427
2.423
1.541
1.531
1.525
1.511
1.502
1.486
1.475
1.466
1.463
1.458
1.453
1.449
1.445
1.441
1.165
1.133
1.101
1.075
1.068
1.045
1.037
0.947
0.322



13

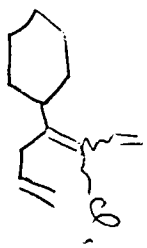


Current Data Parameters
NAME h631
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters
Date_ 991031
Time_ 17.05
INSTRUM spect
PROBHD 5 mm QNP 1H
PULPROG zg30
TD 32768
SOLVENT C6D6
NS 16
DS 2
SWH 8333.33 Hz
FIDRES 0.254313 Hz
AQ 1.9661300 sec
RG 1024
RG 60.000 usec
DE 85.71 usec
TE 300.0 K
D1 1.00000000 sec
P1 10.70 usec
DE 85.71 usec
SFO1 400.1324508 MHz
NUC1D5 1H

F2 - Processing parameters
SI 16384
SF 400.1300734 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 24.00 cm
F1P 10.000 ppm
F1 4001.30 Hz
F2P -0.500 ppm
F2 -200.07 Hz
PPMCM 0.43750 ppm/cm
HZCM 175.05690 Hz/cm





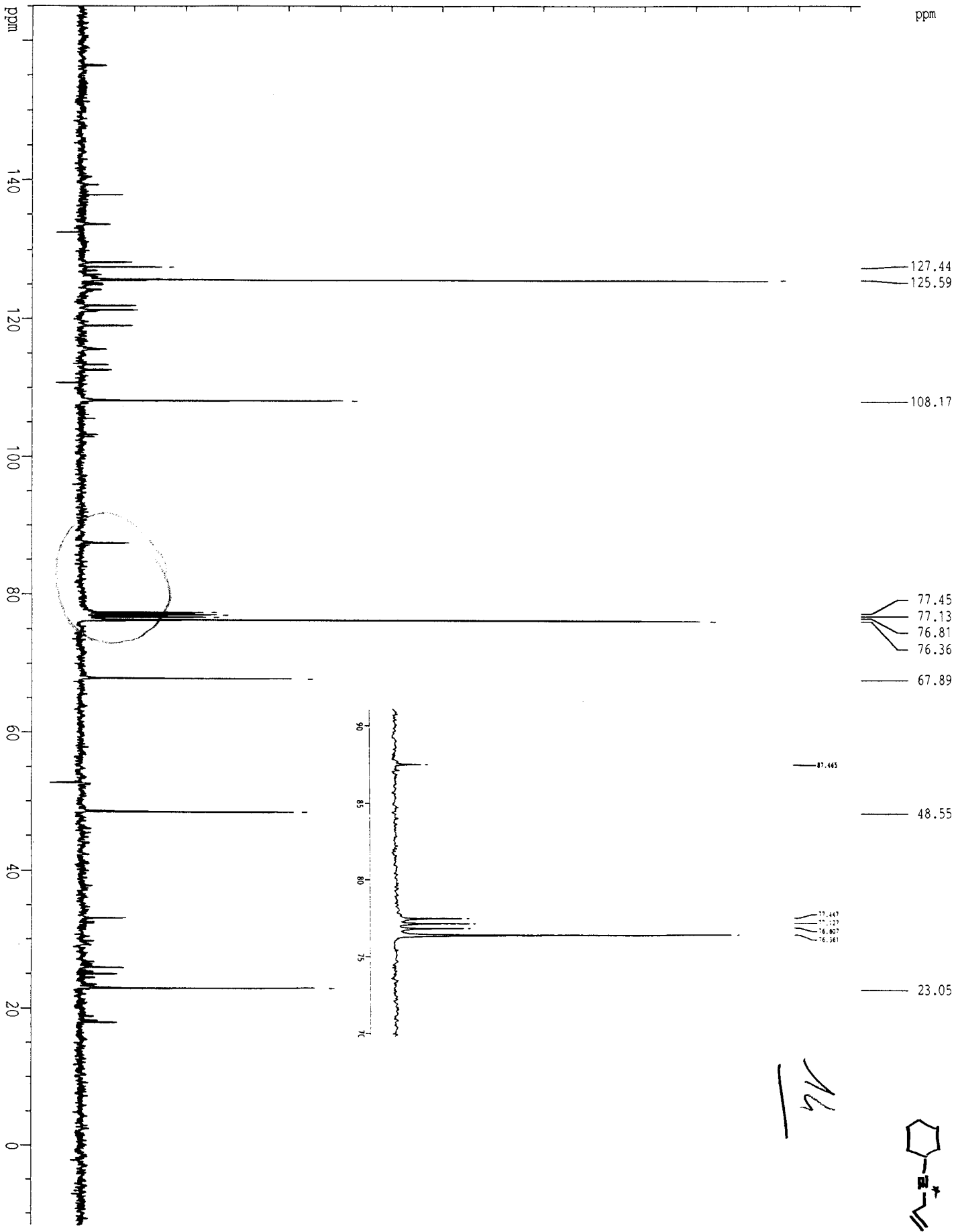
Current Data Parameters
 NAME hr637
 EXNO 1
 PROCNO 1

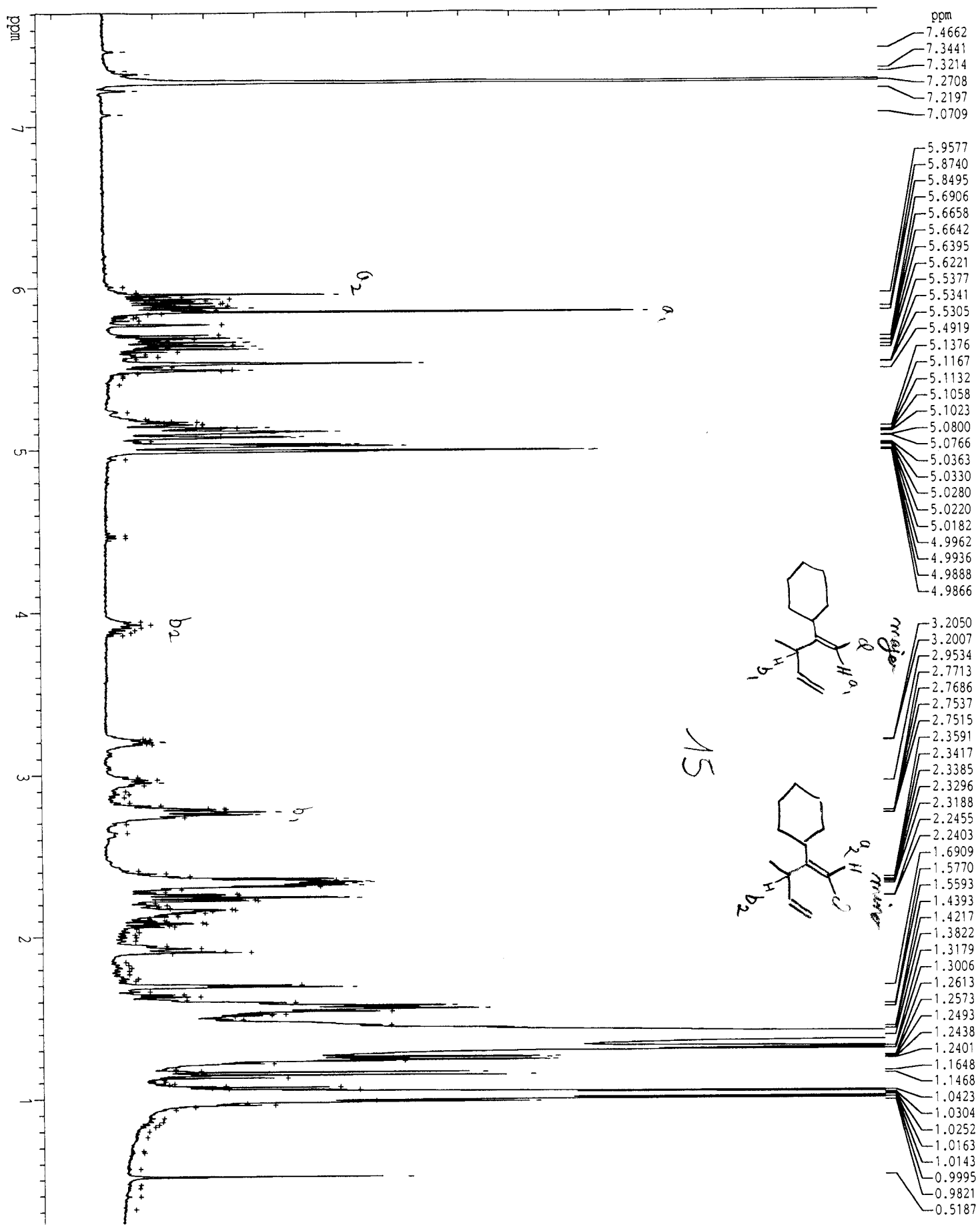
F2 - Acquisition Parameters
 Date_ 991104
 Time 17.39

INSTRUM spect
 PROBD 5 mm QNP 1H
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 79
 DS 2
 SWH 3333.332 Hz
 FIDRES 0.508626 Hz
 AQ 0.9830900 sec
 RG 16384
 DW 15.000 usec
 DE 21.43 usec
 TE 300.0 K
 D12 0.00002000 sec
 DL6 120.00 dB
 D1 1.00000000 sec
 CPDPRG waltz16
 P31 100.00 usec
 D11 0.03000000 sec
 DL5 16.00 dB
 P1 7.75 usec
 DE 21.43 usec
 SFO1 100.6250730 MHz
 NUCLEUS 13C

F2 - Processing parameters
 SI 16384
 SF 100.6127598 MHz
 MDW EM
 SSB 0
 LB 3.50 Hz
 GB 0
 PC 1.00

ID NMR plot parameters
 CX 24.00 cm
 P1P 165.095 ppm
 F1 16610.67 Hz
 P2P -11.699 ppm
 F2 -1177.08 Hz
 PPMCM 7.3642 ppm/cm
 HZCM 741.15607 Hz/cm





Current Data Parameters

NAME: 16345

EXPNO: 1

PROCNO: 1

F2 - Acquisition Parameters

Date_: 991112

Time: 17.06

INSTRUM: spect

PROBHD: 5 mm QNP 1H

PULPROG: zg30

TD: 32768

SOLVENT: CDCl3

NS: 7

DS: 2

SWH: 8333.333 Hz

FIDRES: 0.254313 Hz

AQ: 1.9661300 sec

RG: 715

DM: 60.000 usec

DE: 85.71 usec

TE: 300.0 K

D1: 1.00000000 sec

DE: 10.75 usec

SFO1: 400.1324508 MHz

NUCLEUS: 1H

F2 - Processing Parameters

SI: 16384

SP: 400.1300000 MHz

WDW: EM

SSB: 0

LB: 0.10 Hz

GB: 0

PC: 1.00

1D NMR plot parameters

CX: 24.00 cm

F1P: 7.706 ppm

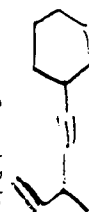
F1: 3083.22 Hz

F2P: 0.229 ppm

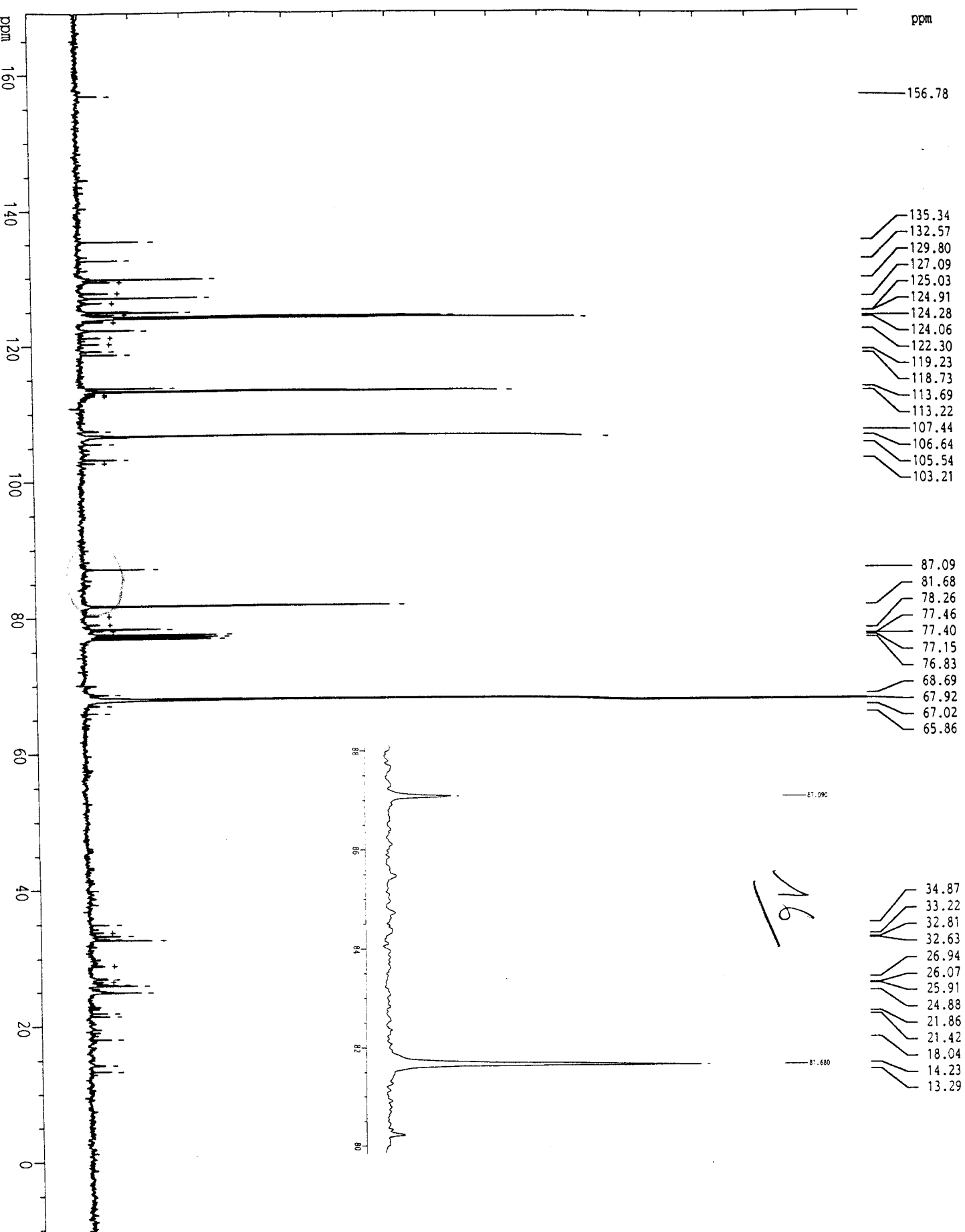
F2: 91.58 Hz

PPMCM: 0.31153 ppm/cm

HZCM: 124.65141 Hz/cm



ppm



156.78

135.34
132.57
129.80
127.09
125.03
124.91
124.28
124.06
122.30
119.23
118.73
113.69
113.22
107.44
106.64
105.54
103.21

87.09
81.68
78.26
77.46
77.40
77.15
76.83
68.69
67.92
67.02
65.86

34.87
33.22
32.81
32.63
26.94
26.07
25.91
24.88
21.86
21.42
18.04
14.23
13.29

87.090

87.680

16

Current Data Parameters
NAME hr643
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 991110
Time 19.44

INSTRUM spect
PROBHD 5 mm QNP 1H
PULPROG zgpg30

TD 65536
SOLVENT CDCl3
NS 205

DS 2
SWH 3333.332 Hz
FIDRES 0.508626 Hz

AQ 0.9830900 sec
RG 16384

DW 15.000 usec
DE 21.43 usec

TE 300.0 K
D12 0.0002000 sec
DL6 120.00 dB

D1 1.0000000 sec
CPDPRG waltz16

P31 100.00 usec
D11 0.0300000 sec

DL5 16.00 dB
P1 7.75 usec

DE 21.43 usec
SF01 100.6250730 MHz

NUCLEUS 13C

F2 - Processing parameters
SI 16384

SF 100.6127598 MHz
WDW EM

SSB 0
LB 3.50 Hz

GB 0
PC 1.00

ID NMR plot parameters
CX 24.00 cm

F1P 169.172 ppm
F1 17020.86 Hz

F2P -10.441 ppm
F2 -1050.49 Hz

PPMCM 7.48386 ppm/cm
HZCM 752.97394 Hz/cm

ppm

7.231

5.861

5.809

5.731

5.668

5.651

5.624

5.607

5.600

5.582

5.135

5.131

5.091

5.088

5.071

5.067

5.064

5.041

5.038

4.997

4.994

4.986

4.982

4.957

4.954

4.710

4.701

3.923

3.906

3.888

3.873

3.855

2.841

2.746

2.729

2.714

2.712

2.318

2.307

2.301

2.298

2.289

2.285

2.278

2.268

1.888

1.867

1.535

1.518

1.342

1.298

1.285

1.269

1.266

1.248

1.216

1.210

1.193

1.125

1.108

1.003

0.989

0.986

0.977

0.959

0.478

0.110

0.100

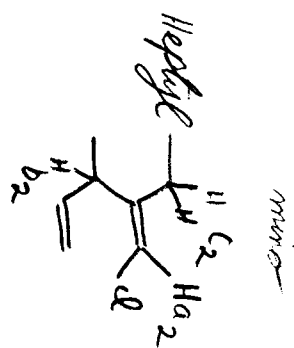
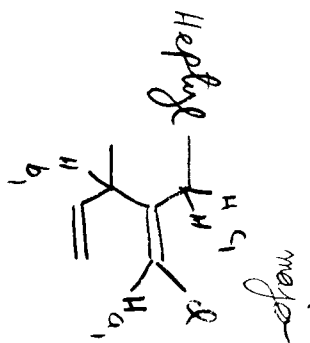
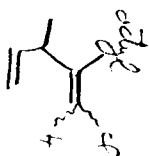
0.092

0.087

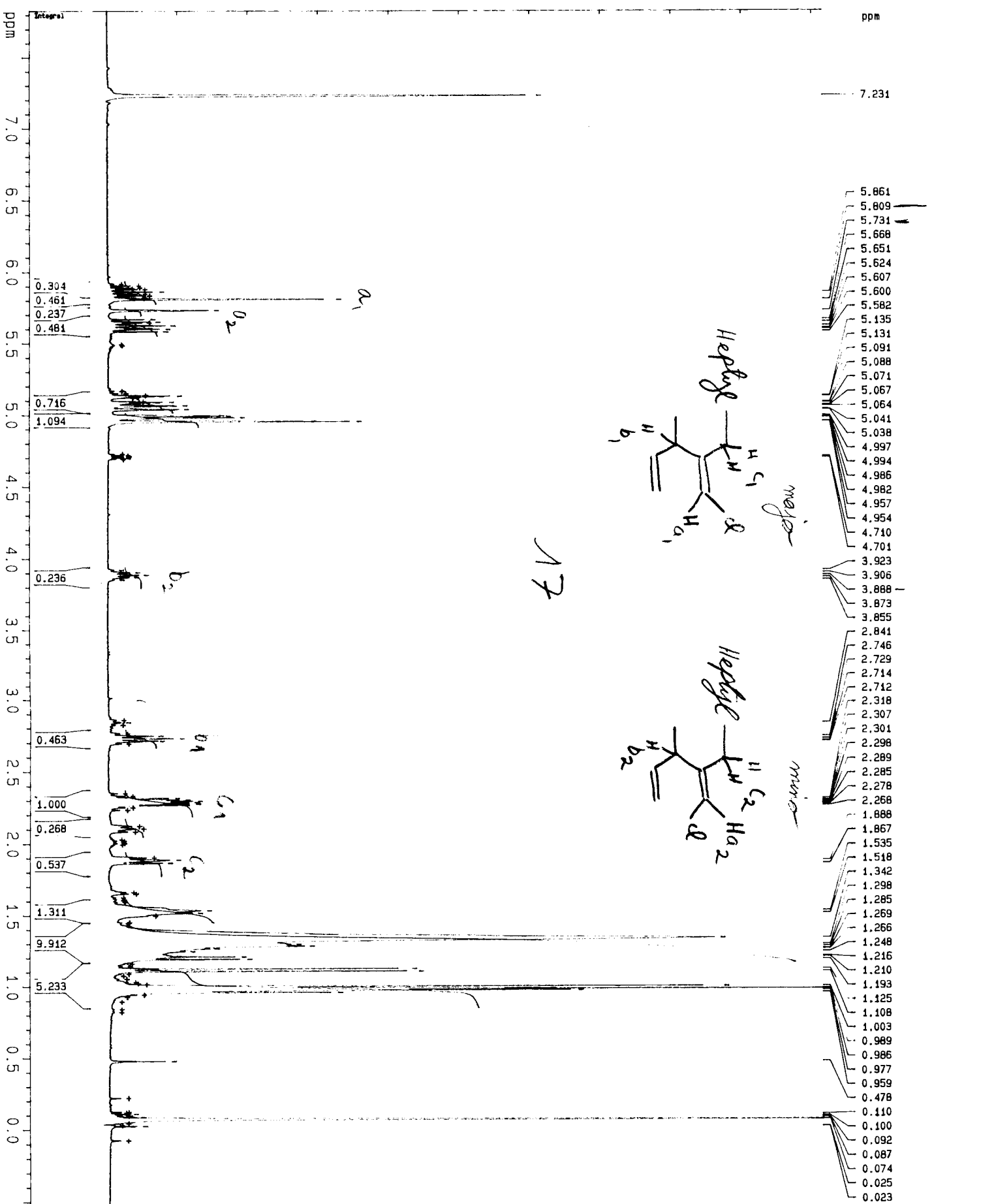
0.074

0.025

0.023



17



Current Data Parameters
NAME hr623
EXPNO 3
PROCNO 1

F2 - Acquisition Parameters

Date_ 991019

Time 11.54

INSTRUM spect

PROBHD 5 mm QNP 1H

PULPROG zg30

TD 32768

SOLVENT ~~CDCl3~~ C6D6

NS 8

DS 2

SWH 8333.333 Hz

FIDRES 0.25413 Hz

AQ 1.9661300 sec

R6 512

DM 60.000 usec

DE 85.71 usec

TE 300.0 K

D1 1.00000000 sec

P1 10.75 usec

DE 85.71 usec

SFO1 400.1324508 MHz

NUCLEUS 1H

F2 - Processing parameters

SI 16384

SF 400.1300000 MHz

WDW EM

SSB 0

LB 0.10 Hz

GB 0

PC 1.00

10 NMR plot parameters

CX 34.00 cm

F1P 7.830 DPM

F1 3132.84 Hz

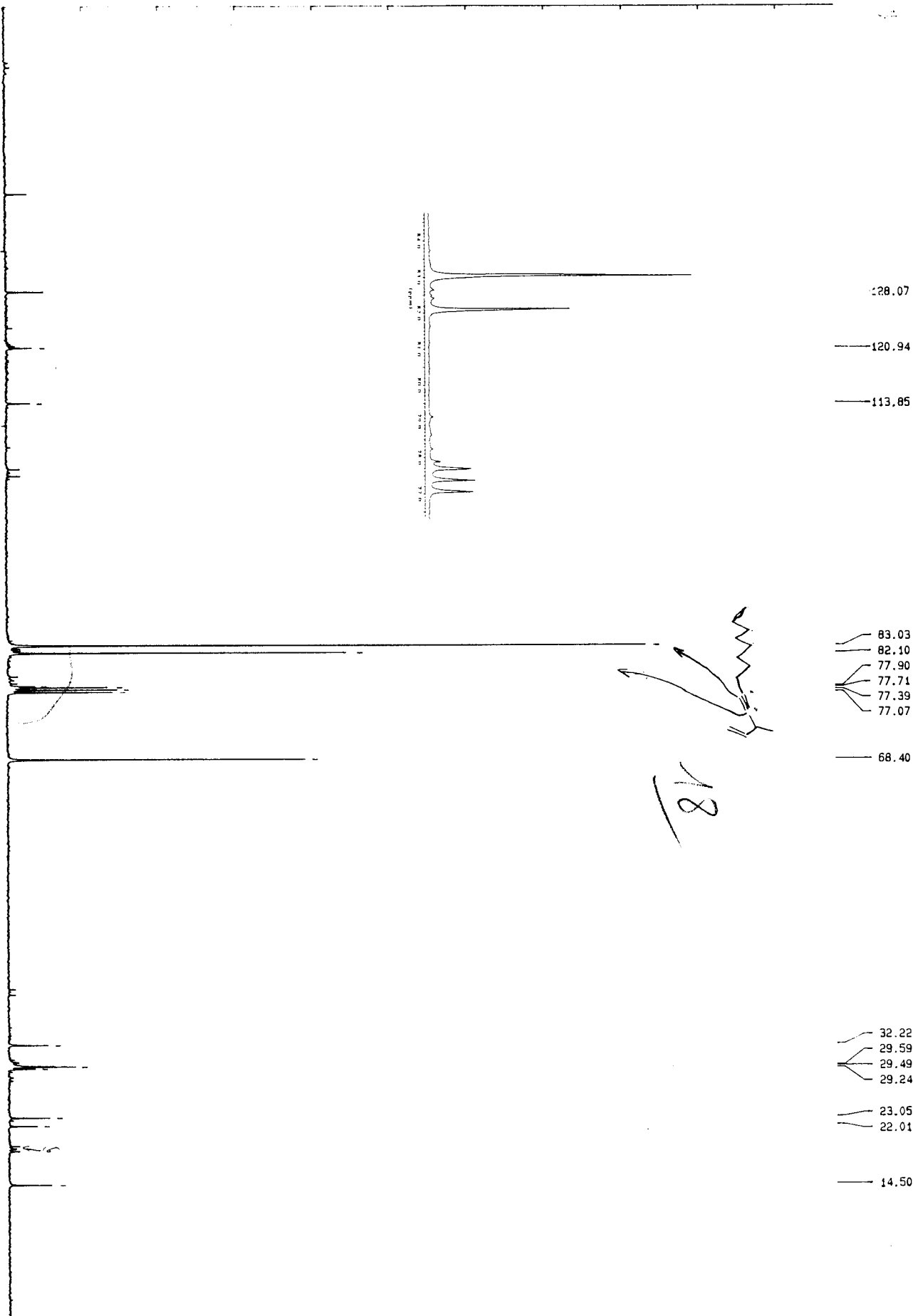
F2P -0.529 DPM

F2 -211.71 Hz

PPMCM 0.24584 DPM/cm

HZCM 98.36896 Hz/cm

ppm 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10



128.07
120.94
113.85
83.03
82.10
77.90
77.71
77.39
77.07
68.40
32.22
29.59
29.49
29.24
23.05
22.01
14.50

Current Data Parameters
NAME hr495
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 990430
Time 20.04

INSTRUM spect
PROBHD 5 mm QNP 1H
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 2048
DS 2
SWH 3333.332 Hz
FIDRES 0.508626 Hz
AQ 0.983090 sec
RG 11400
DM 15.000 usec
DE 21.43 usec
TE 300.0 K
D12 0.0002000 sec
DL6 120.00 dB
D1 1.00000000 sec
CPDPRG waltz16
P31 100.00 usec
D11 0.03000000 sec
DL5 16.00 dB
P1 7.70 usec
DE 21.43 usec
SF01 100.6250730 MHz
NUCLEUS 13C

F2 - Processing parameters
SI 16384
SF 100.6127290 MHz
WDW EM
SSB 0
LB 3.50 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 34.00 cm
F1P 164.464 ppm
F1 16547.19 Hz
F2P -1.954 ppm
F2 -196.63 Hz
PPMCM 4.89466 ppm/cm
HZCM 492.46548 Hz/cm