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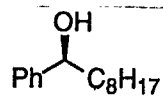
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ppm

7.556
7.527
7.269
7.263
7.257
7.247
7.233
7.227
7.220
7.207
7.177
6.872

5.202
5.167
4.986
4.591
4.559
4.525
4.255
4.222
4.188
3.407
3.372

1.912
1.692
1.677
1.658
1.628
1.612
1.334
1.301
1.280
1.176
1.123
0.827
0.796
0.762
0.000



56a

Current Data Parameters

NAME schw024
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters

Date 940330
Time 5.54
PULPROG zg30
SOLVENT CDCl3
AQ 3.9977160 sec
FIDRES 0.125072 Hz
DM 122.0 usec
RG 360
NUCLEUS 1H
D1 0.1000000 sec
P1 7.8 usec
DE 152.5 usec
SF01 -> 200.1334421 MHz
SMH 4098.36 Hz
TD 32768
NS 16
DS 0

F2 - Processing parameters

SI 16384
SF 200.1323590 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

1D NMR plot parameters

CX 22.00 cm
F1P 11.000 ppm
F1 2201.46 Hz
F2P -0.500 ppm
F2 -100.07 Hz
PPMCM 0.52273 ppm/cm
HZCM 104.61464 Hz/cm

Integral

19.815

3.982

76.203

ppm

10

8

6

4

2

0

D7



PPM

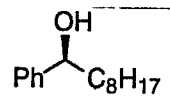
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AU PROG:
X02.AU
DATE 24-4-94

SA.NA SCHWD7
SA.NO AP22 233
SOLVENT CDC13
SF 75.469
SY 75.0
O1 7600.000
SI 65536
TD 65536
SW 20000.000
HZ/PT .610

AQ 1.638
RG 200
NS 192
TE 298

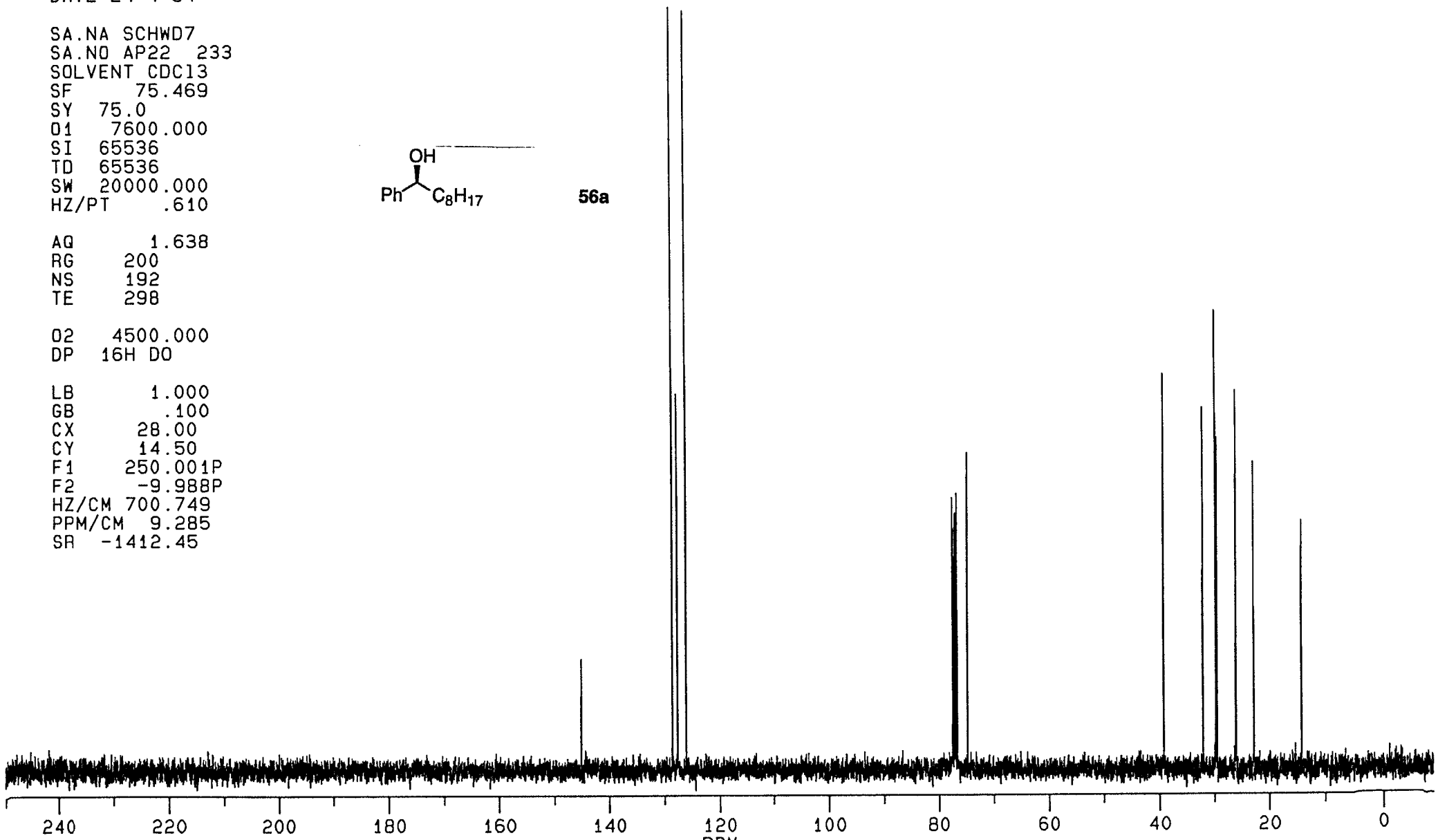
O2 4500.000
DP 16H D0

LB 1.000
GB .100
CX 28.00
CY 14.50
F1 250.001P
F2 -9.988P
HZ/CM 700.749
PPM/CM 9.285
SR -1412.45



56a

145.069
128.494
127.535
125.980
77.525
77.101
76.678
74.787
39.214
31.939
29.619
29.587
29.328
25.914
22.727
14.152



d23 oepv

Current Data Parameters
 NAME schwd23
 EXPNO 10
 PROCNO 1

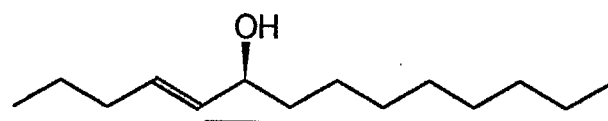
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 Date 940419
 Time 1.19
 PULPROG zg30
 SOLVENT CDC13
 AQ 3.9977160 sec
 FIDRES 0.125072 Hz
 DW 122.0 usec
 RG 256
 NUCLEUS 1H
 D1 0.1000000 sec
 P1 7.8 usec
 DE 152.5 usec
 SF01 200.1334421 MHz
 SWH 4098.36 Hz
 TD 32768
 NS 16
 DS 0

F2 - Processing parameters
 SI 16384
 SF 200.1323508 MHz
 WDW EM
 SSB 0
 LB 0.10 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 22.00 cm
 F1P 11.000 ppm
 F1 2201.46 Hz
 F2P -0.500 ppm
 F2 -100.07 Hz
 PPMCM 0.52273 ppm/cm
 HZCM 104.61464 Hz/cm

ppm

7.669
7.653
7.642
7.625
7.477
7.461
7.449
7.432
7.205
6.991
5.595
5.551
5.518
5.487
5.428
5.423
5.398
5.393
5.388
5.317
4.269
4.235
4.004
3.974
3.942
3.909
2.234
1.954
1.918
1.884
1.547
1.383
1.346
1.309
1.273
1.198
0.864
0.828
0.807
0.792
0.774
0.515
0.000



56b

Integral

6.905

3.434

89.661

ppm

10

8

6

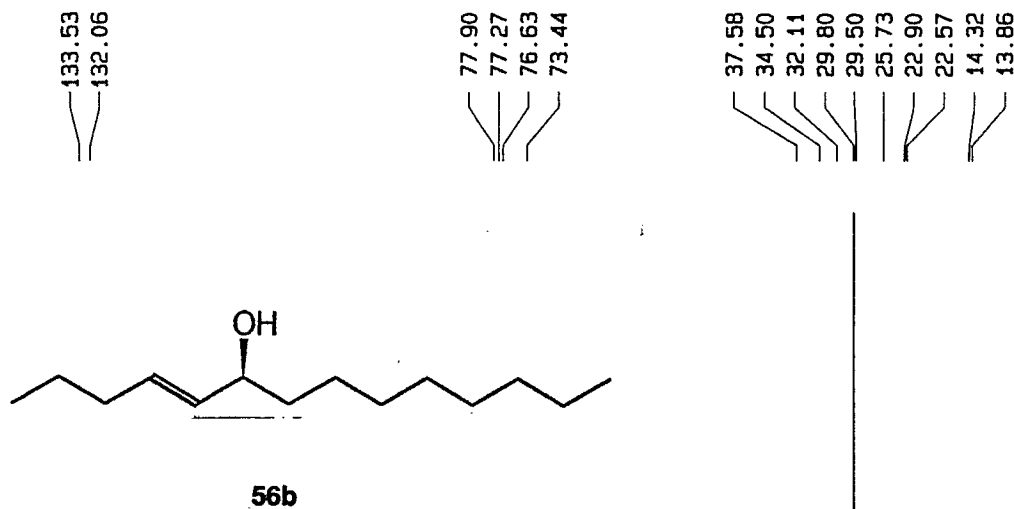
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2

0

d23

ppm



Current Data Parameters

NAME schwd23
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters

Date 940419
Time 1.36
PULPROG zgdc30
SOLVENT CDC13
AQ 2.4248519 sec
FIDRES 0.206200 Hz
Dw 37.0 usec
RG 32768
NUCLEUS 13C
D12 0.0000200 sec
DL5 23.00 dB
P31 100.0 usec
D1 0.0500000 sec
P1 7.5 usec
DE 46.3 usec
SF01 50.3290000 MHz
SWH 13513.51 Hz
TD 65536
NS 384
DS 0
D11 0.0300000 sec

F2 - Processing parameters

SI 32768
SF 50.3233037 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1D NMR plot parameters

CX 22.00 cm
F1P 215.000 ppm
F1 10819.51 Hz
F2P -5.000 ppm
F2 -251.62 Hz
PPMCM 10.00000 ppm/cm
HZCM 503.23303 Hz/cm

ppm 200 180 160 140 120 100 80 60 40 20 0

d24

Current Data Parameters

NAME schwd24a
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters

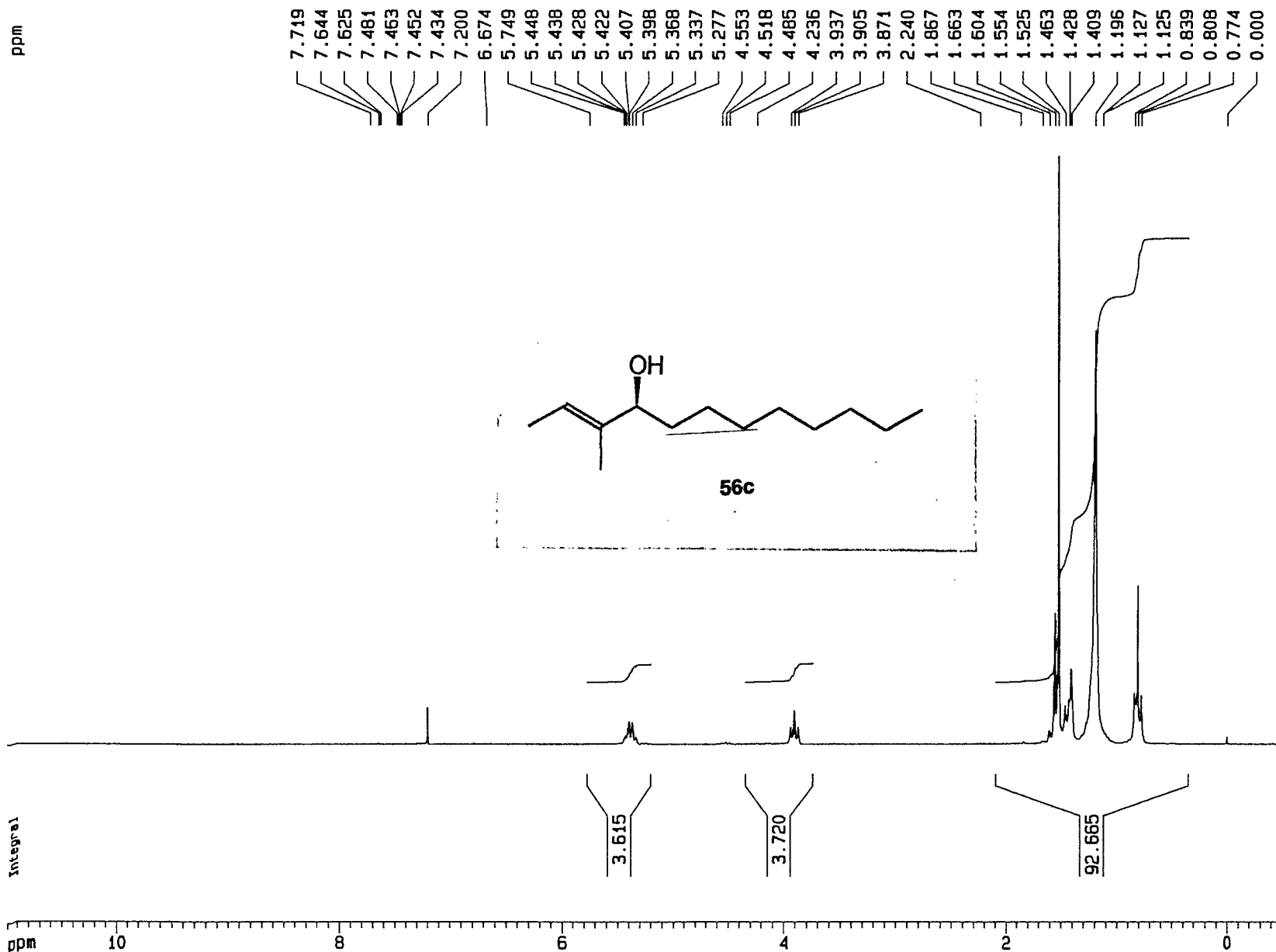
Date 940420
Time 7.03
PULPROG zg30
SOLVENT CDC13
AQ 3.9977160 sec
FIDRES 0.125072 Hz
DM 122.0 usec
RG 360
NUCLEUS 1H
D1 0.1000000 sec
P1 7.8 usec
DE 152.5 usec
SF01 200.1334421 MHz
SMH 4098.36 Hz
TD 32768
NS 16
DS 0

F2 - Processing parameters

SI 16384
SF 200.1323518 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

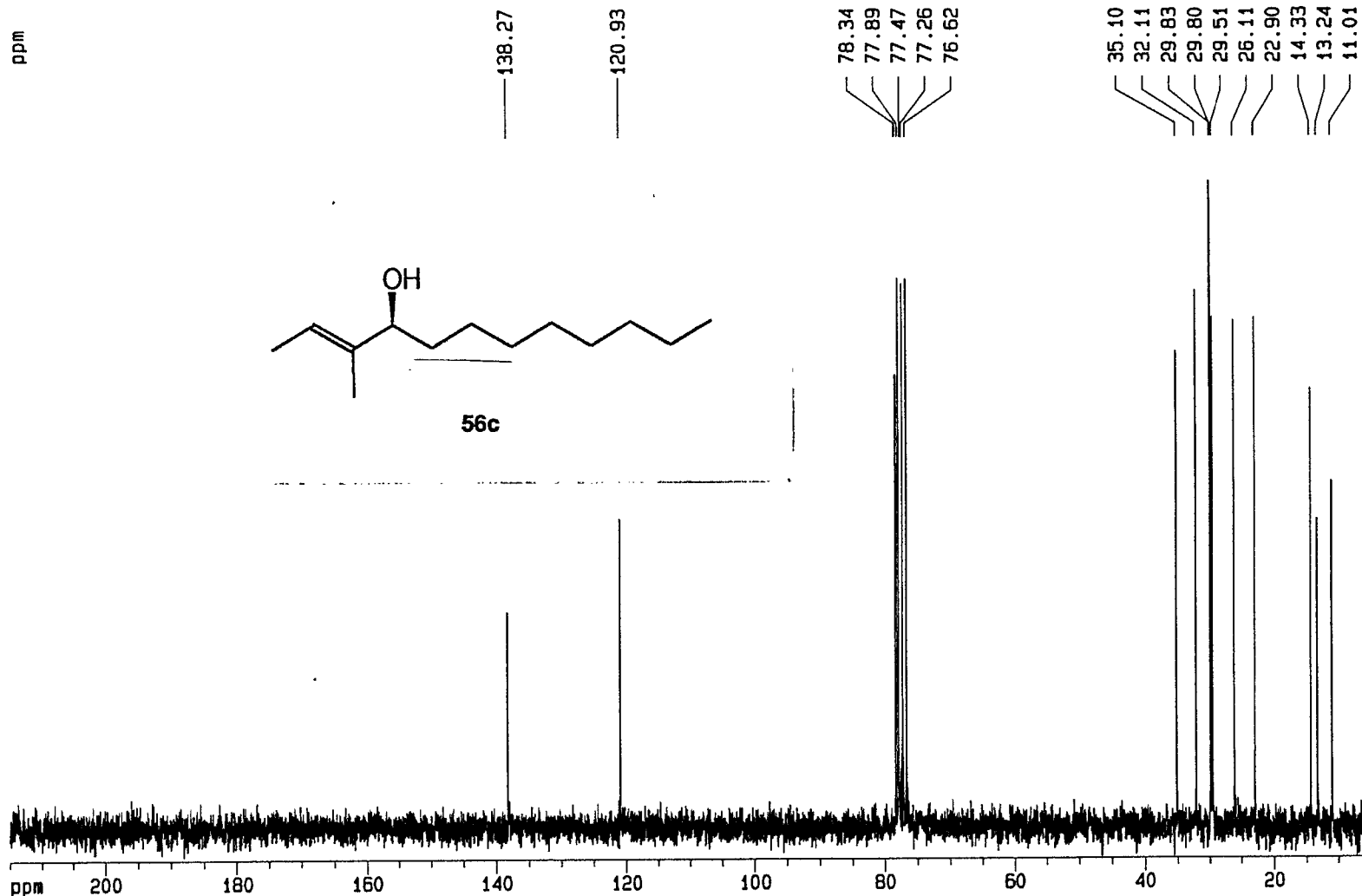
1D NMR plot parameters

CX 22.00 cm
F1P 11.000 ppm
F1 2201.46 Hz
F2P -0.500 ppm
F2 -100.07 Hz
PPMCM 0.52273 ppm/cm
HZCM 104.61464 Hz/cm



d24

ppm



Current Data Parameters

NAME schwd24
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters

Date 940420
Time 10.52
PULPROG zgdc30
SOLVENT CDCl3
AQ 2.4248519 sec
FIDRES 0.206200 Hz
DW 37.0 usec
RG 32768
NUCLEUS 13C
D12 0.0000200 sec
DL5 23.00 dB
P31 100.0 usec
D1 0.0500000 sec
P1 7.5 usec
DE 46.3 usec
SF01 50.3290000 MHz
SWH 13513.51 Hz
TD 65536
NS 384
DS 0
D11 0.0300000 sec

F2 - Processing parameters

SI 32768
SF 50.3233037 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1D NMR plot parameters

CX 22.00 cm
F1P 215.000 ppm
F1 10819.51 Hz
F2P -5.000 ppm
F2 -251.62 Hz
PPMCM 10.00000 ppm/cm
HZCM 503.23303 Hz/cm

D35



AP290F.220
AU PROG:
X00.AU
DATE 1-5-94

SA.NA SCHWD356
SA.NO AP29 220
SOLVENT CDC13
SF 300.133
SY 210.0
O1 5200.000
SI 32768
TD 32768
SW 6024.096
HZ/PT .368

AQ 2.720
RG 4
NS 16
TE 298

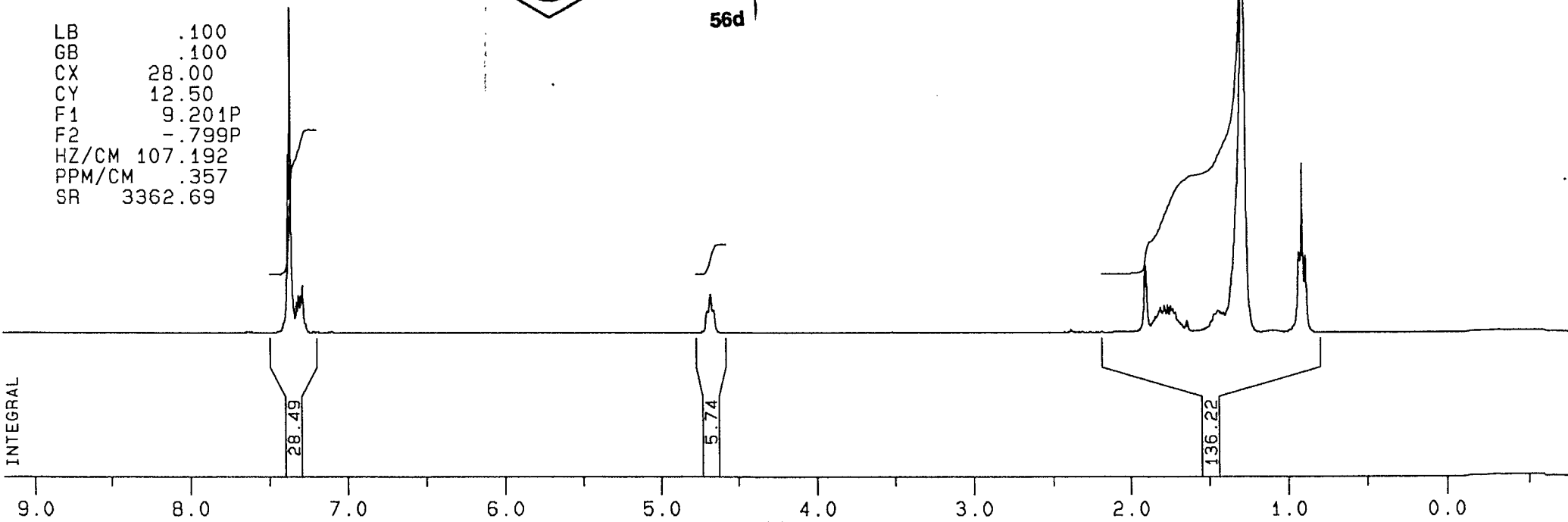
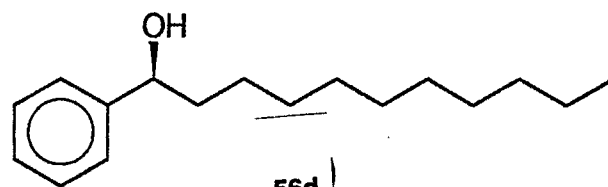
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DP 63L P0

LB .100
GB .100
CX 28.00
CY 12.50
F1 9.201P
F2 -.799P
HZ/CM 107.192
PPM/CM .357
SR 3362.69

PPM
7.37294
7.36835
7.31757
7.30348
7.28872
7.27845

4.69552
4.67660
4.65809

2.38208
1.90436
1.83840
1.80718
1.78071
1.76087
1.74129
1.63876
1.44007
1.40582
1.27833
0.92825
0.90760
0.88489



03



PPM

MZ241F.152
AU PROG:
X02.AU
DATE 25-3-94

SA.NA SCHW049
SA.NO MZ24 152
SOLVENT CDC13
SF 75.469
SY 75.0
O1 7600.000
SI 65536
TD 65536
SW 20000.000
HZ/PT .610

AQ 1.638
RG 160
NS 192
TE 298

O2 4500.000
DP 16H D0

LB 1.000
GB .100
CX 28.00
CY 14.50
F1 250.000P
F2 -9.988P
HZ/CM 700.749
PPM/CM 9.285
SR -1395.97

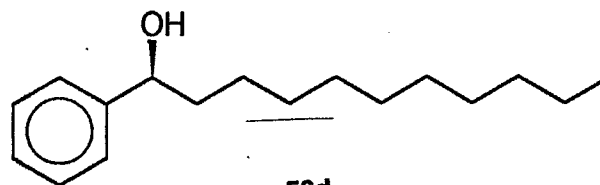
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127.266
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76.521
74.501

39.007

31.820
29.491
29.233
29.729
22.587

13.996



56d

D13 11-26



MZ310F.147
AU PROG:
X00.AU
DATE 2-4-94

SA.NA SCHW074
SA.NO MZ31 147
SOLVENT CDC13
SF 300.133
SY 210.0
Q1 5200.000
SI 32768
TD 32768
SW 6024.096
HZ/PT .368

AQ 2.720
RG 1
NS 16
TE 298

O2 3200.000
DP 63L P0

LB .100
GB .100
CX 28.00
CY 12.50
F1 9.201P
F2 -.799P
HZ/CM 107.192
PPM/CM .357
SR 3382.55

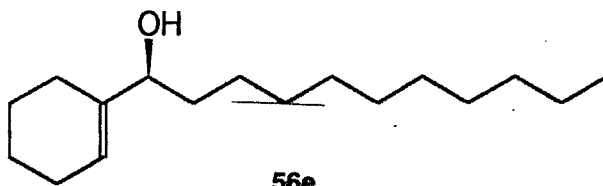
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5.55623

3.88067
3.85846
3.83615

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1.95748
1.94503
1.84828
1.81761
1.79912
1.59793
1.58430
1.56820
1.54911
1.53401
1.52173
1.50344
1.49174
1.48236
1.47031
1.45496
1.43198
1.40936
1.38770
1.30981
1.18986
1.13156
1.10807
1.01210
88841
86253
82820
80690
78376
75508



INTEGRAL

4.69

4.81

156.64

9.0

8.0

7.0

6.0

5.0

PPM

4.0

3.0

2.0

1.0

0.0

212 11-20



PPM

MZ311F.147
AU PROG:
X02.AU
DATE 2-4-94

SA.NA SCHW074
SA.NO MZ31 147
SOLVENT CDC13
SF 75.469
SY 75.0
D1 7600.000
SI 65536
TD 65536
SW 20000.000
HZ/PT .610

AQ 1.638
RG 200
NS 192
TE 298

O2 4500.000
DP 16H D0

LB 1.000
GB .100
CX 28.00
CY 14.50
F1 250.000P
F2 -9.988P
HZ/CM 700.749
PPM/CM 9.285
SR -1395.36

139.986

122.744

77.310

76.887

76.599

76.463

34.714

31.750

29.450

29.170

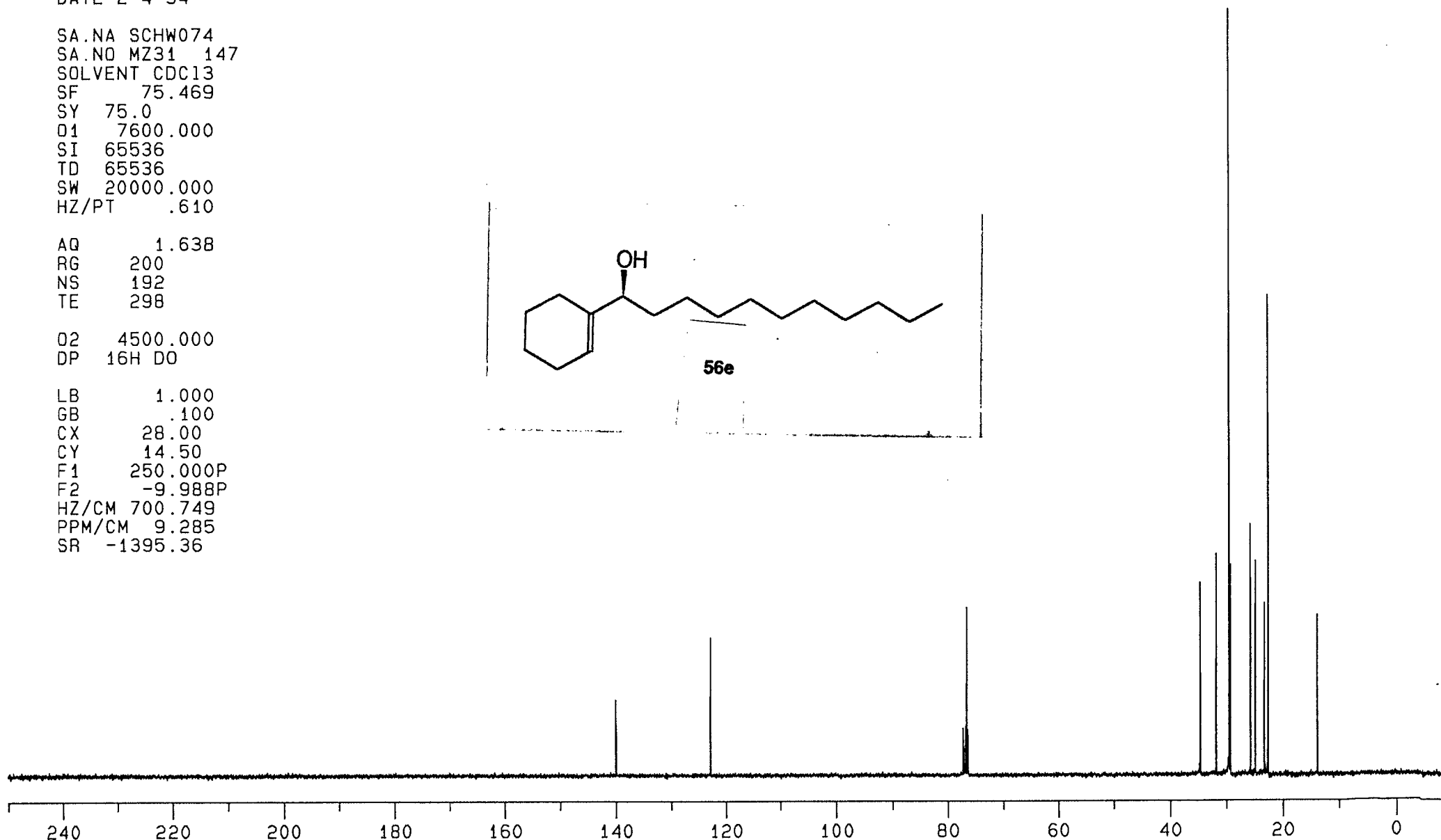
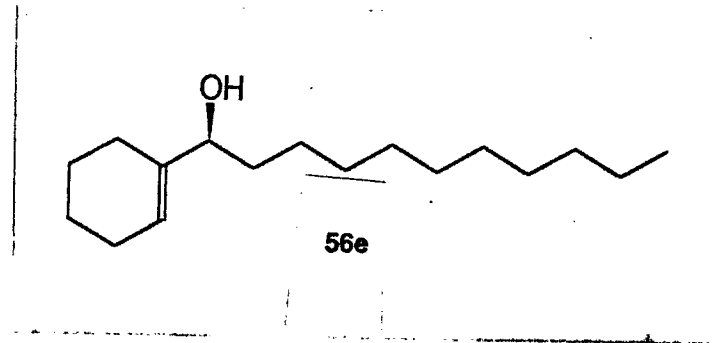
25.671

24.825

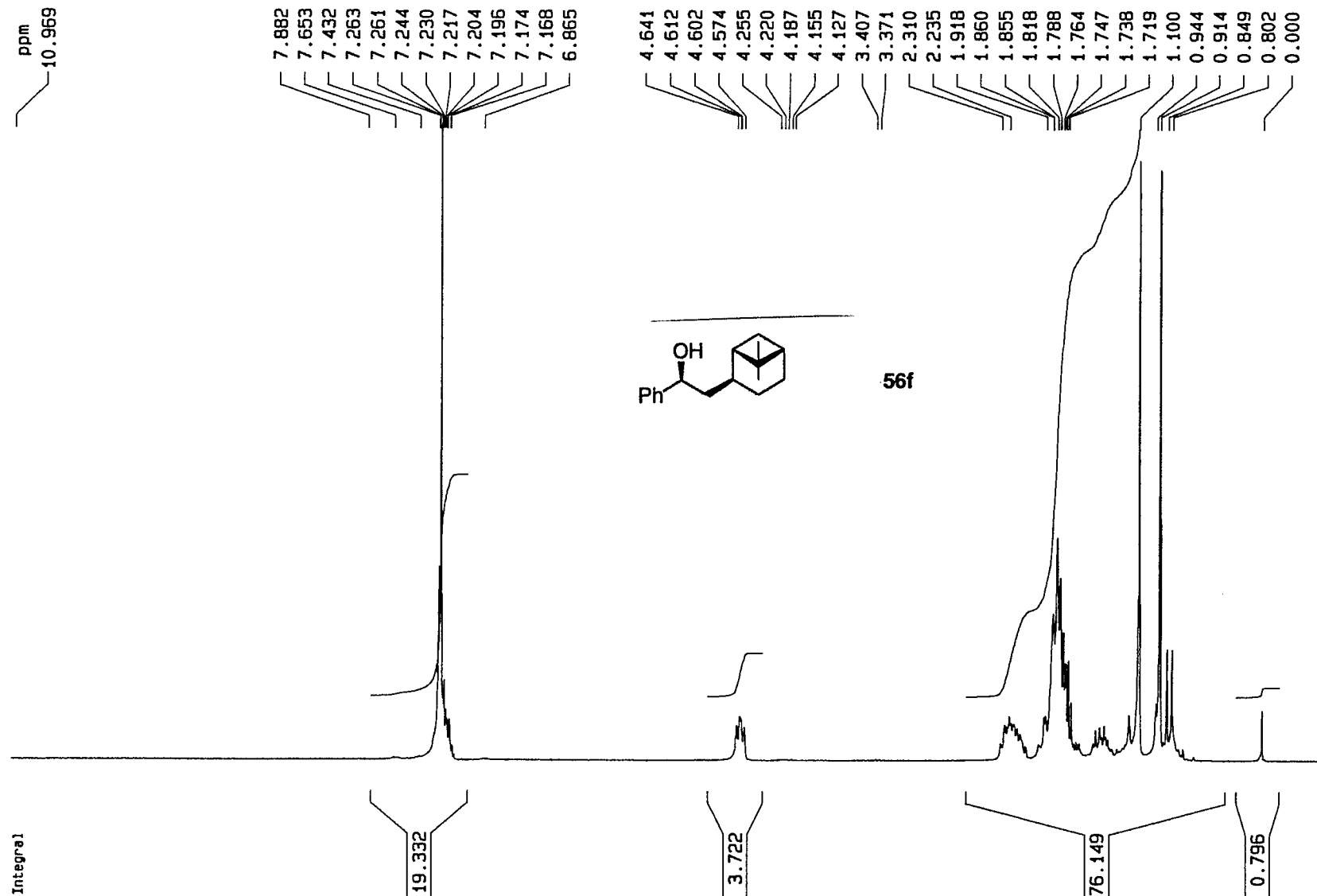
23.212

22.536

13.896



Title: d21 19-32



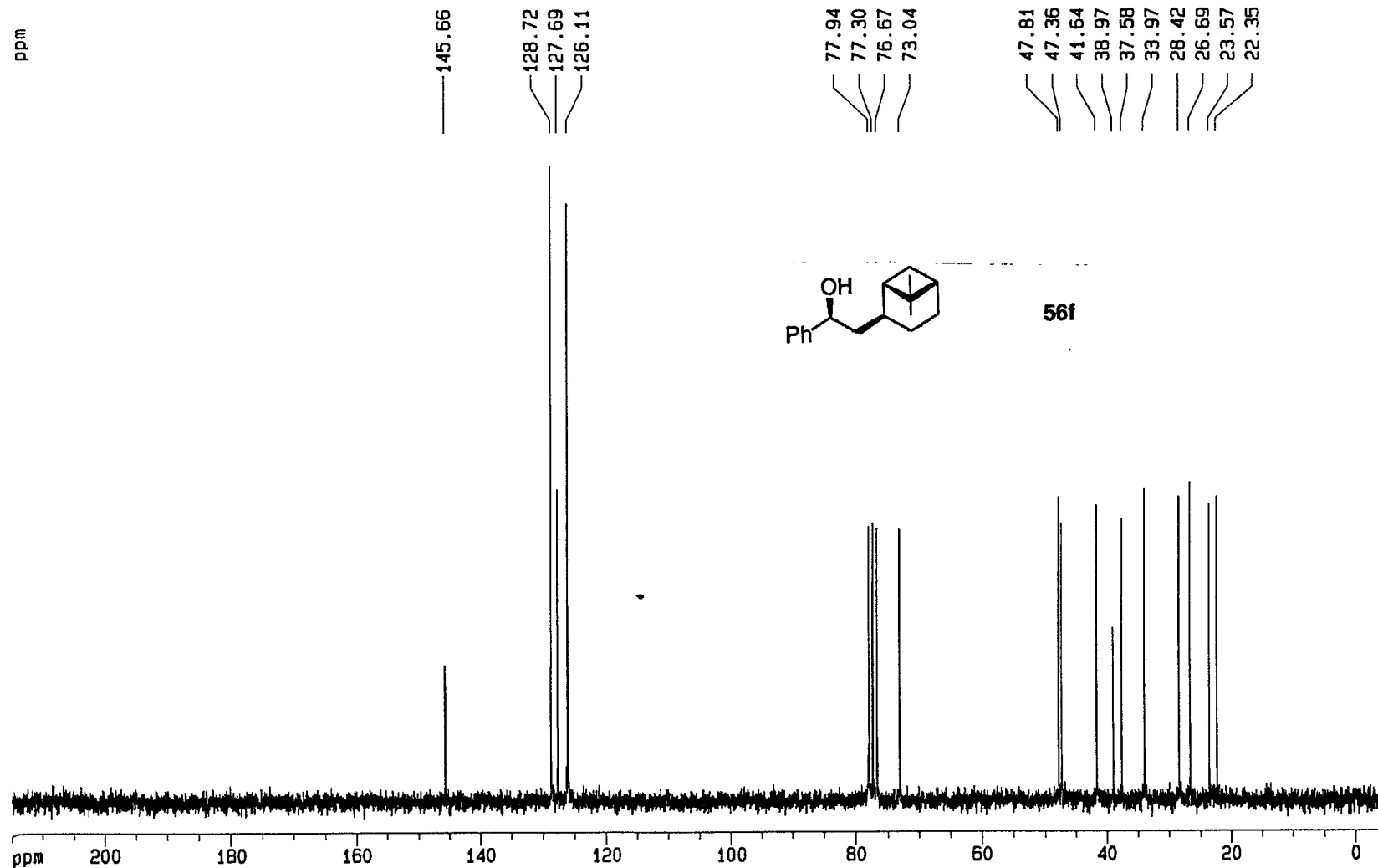
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 NAME schw088
 EXPNO 10
 PROCNO 1

F2 - Acquisition Parameters
 Date 940413
 Time 1.08
 PULPROG zg30
 SOLVENT CDC13
 AQ 3.9977160 sec
 FIDRES 0.125072 Hz
 DW 122.0 usec
 RG 360
 NUCLEUS 1H
 D1 0.1000000 sec
 P1 7.8 usec
 DE 152.5 usec
 SF01 200.1334421 MHz
 SWH 4098.36 Hz
 TD 32768
 NS 16
 DS 0

F2 - Processing parameters
 SI 16384
 SF 200.1323577 MHz
 WDW EM
 SSB 0
 LB 0.10 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 22.00 cm
 F1P 11.000 ppm
 F1 2201.46 Hz
 F2P -0.500 ppm
 F2 -100.07 Hz
 PPMCM 0.52273 ppm/cm
 HZCM 104.61464 Hz/cm

D2-1 19-32



Current Data Parameters

NAME schw088
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters

Date 940413
Time 1.25
PULPROG zgdc30
SOLVENT CDCl3
AQ 2.4248519 sec
FIDRES 0.206200 Hz
DM 37.0 usec
RG 32768
NUCLEUS 13C
D12 0.0000200 sec
DL5 23.00 dB
P31 100.0 usec
D1 0.0500000 sec
P1 7.5 usec
DE 46.3 usec
SF01 50.3290000 MHz
SWH 13513.51 Hz
TD 65536
NS 384
DS 0
D11 0.0300000 sec

F2 - Processing parameters

SI 32768
SF 50.3233037 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1D NMR plot parameters

CX 22.00 cm
F1P 215.000 ppm
F1 10819.51 Hz
F2P -5.000 ppm
F2 -251.62 Hz
PPMCM 10.00000 ppm/cm
HZCM 503.23303 Hz/cm

d88 21-26

Current Data Parameters

NAME schwd88
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters

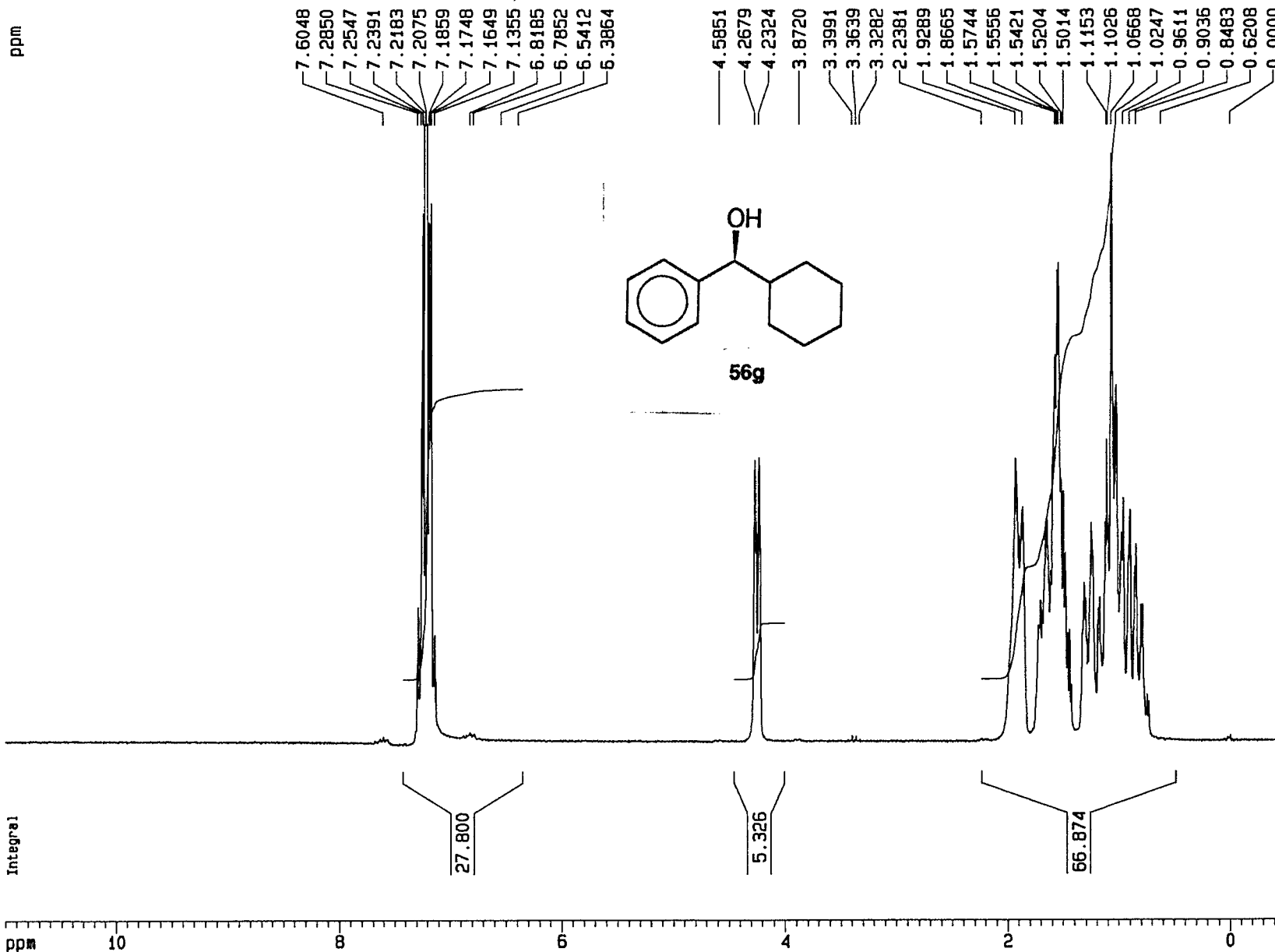
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Time 10.49
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SOLVENT CDCl3
AQ 3.9977160 sec
FIDRES 0.125072 Hz
DQ 122.0 usec
RG 360
NUCLEUS 1H
D1 0.1000000 sec
P1 7.8 usec
DE 152.5 usec
SF01 200.1334421 MHz
SWH 4098.36 Hz
TO 32768
NS 16
DS 0

F2 - Processing parameters

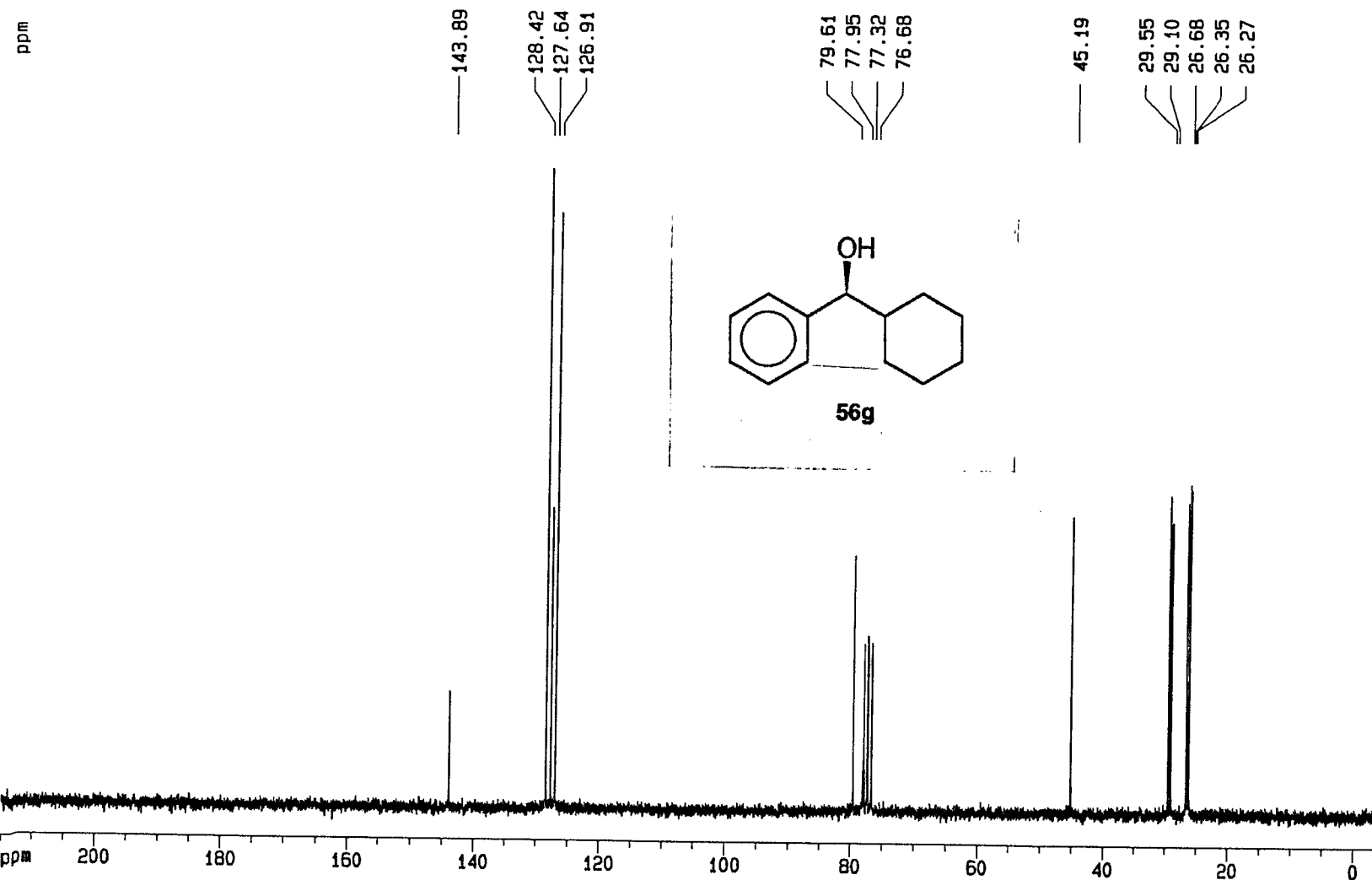
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SF 200.1323596 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

1D NMR plot parameters

CX 22.00 cm
F1P 11.000 ppm
F1 2201.46 Hz
F2P -0.500 ppm
F2 -100.07 Hz
PPMCM 0.52273 ppm/cm
HZCM 104.61464 Hz/cm



d88 21-26



Current Data Parameters

NAME schwd88
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters

Date 940630
Time 11.06
PULPROG zgdc30
SOLVENT CDCl3
AQ 2.4248519 sec
FIDRES 0.206200 Hz
DM 37.0 usec
RG 32768
NUCLEUS 13C
D12 0.0000200 sec
DL5 23.00 dB
P31 100.0 usec
D1 0.0500000 sec
P1 7.5 usec
DE 46.3 usec
SFO1 50.3290000 MHz
SWH 13513.51 Hz
TD 65536
NS 384
DS 0
D11 0.0300000 sec

F2 - Processing parameters

SI 32768
SF 50.3233037 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1D NMR plot parameters

CX 22.00 cm
F1P 215.000 ppm
F1 10819.51 Hz
F2P -5.000 ppm
F2 -251.62 Hz
PPMCM 10.00000 ppm/cm
HZCM 503.23303 Hz/cm

d47

Current Data Parameters

NAME schwd47
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters

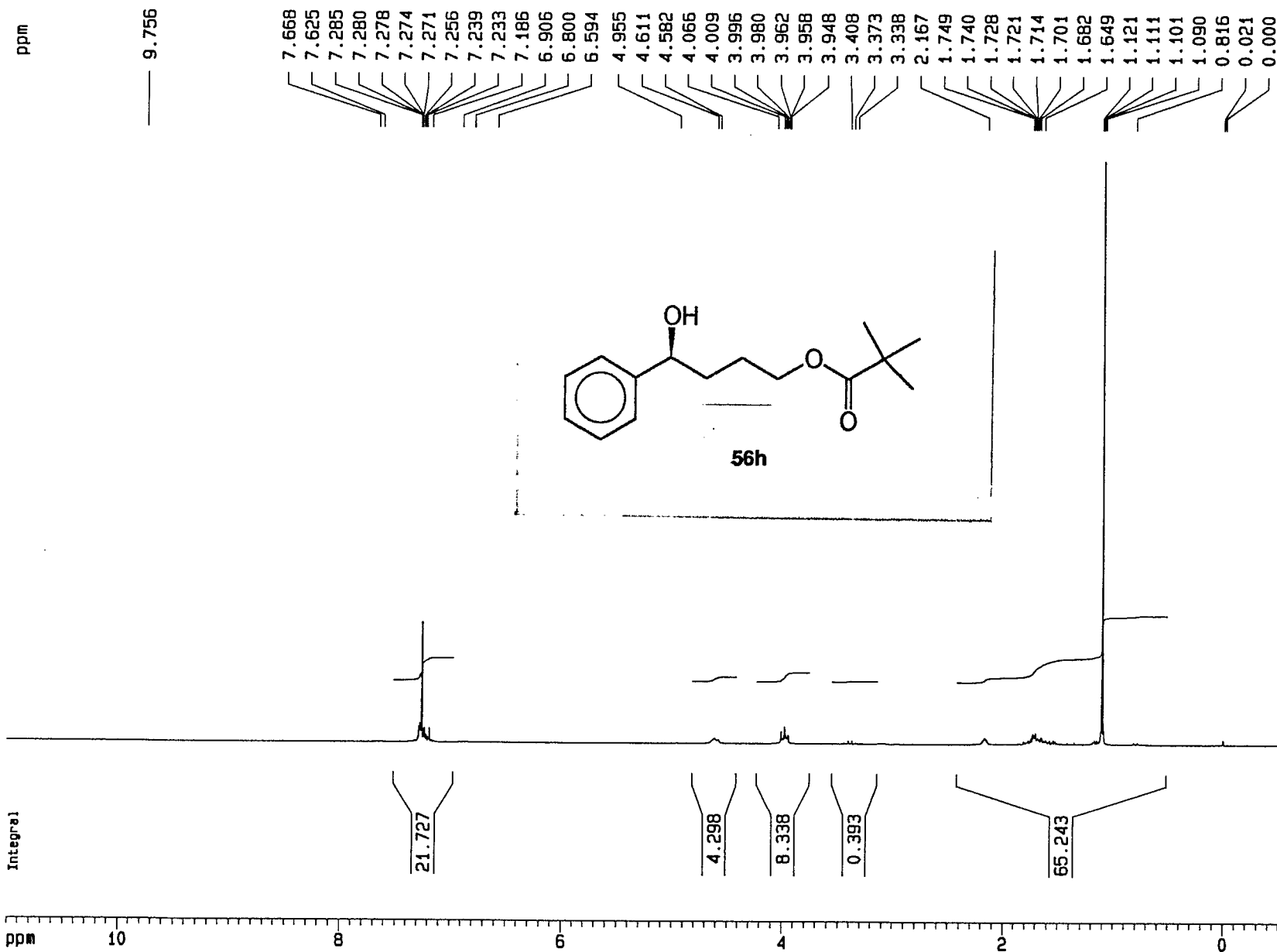
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Time 3.47
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SOLVENT CDC13
AQ 3.9977160 sec
FIDRES 0.125072 Hz
DQ 122.0 usec
RG 715
NUCLEUS 1H
D1 0.1000000 sec
P1 7.8 usec
DE 152.5 usec
SF01 200.1334421 MHz
SMH 4098.36 Hz
TD 32768
NS 16
DS 0

F2 - Processing parameters

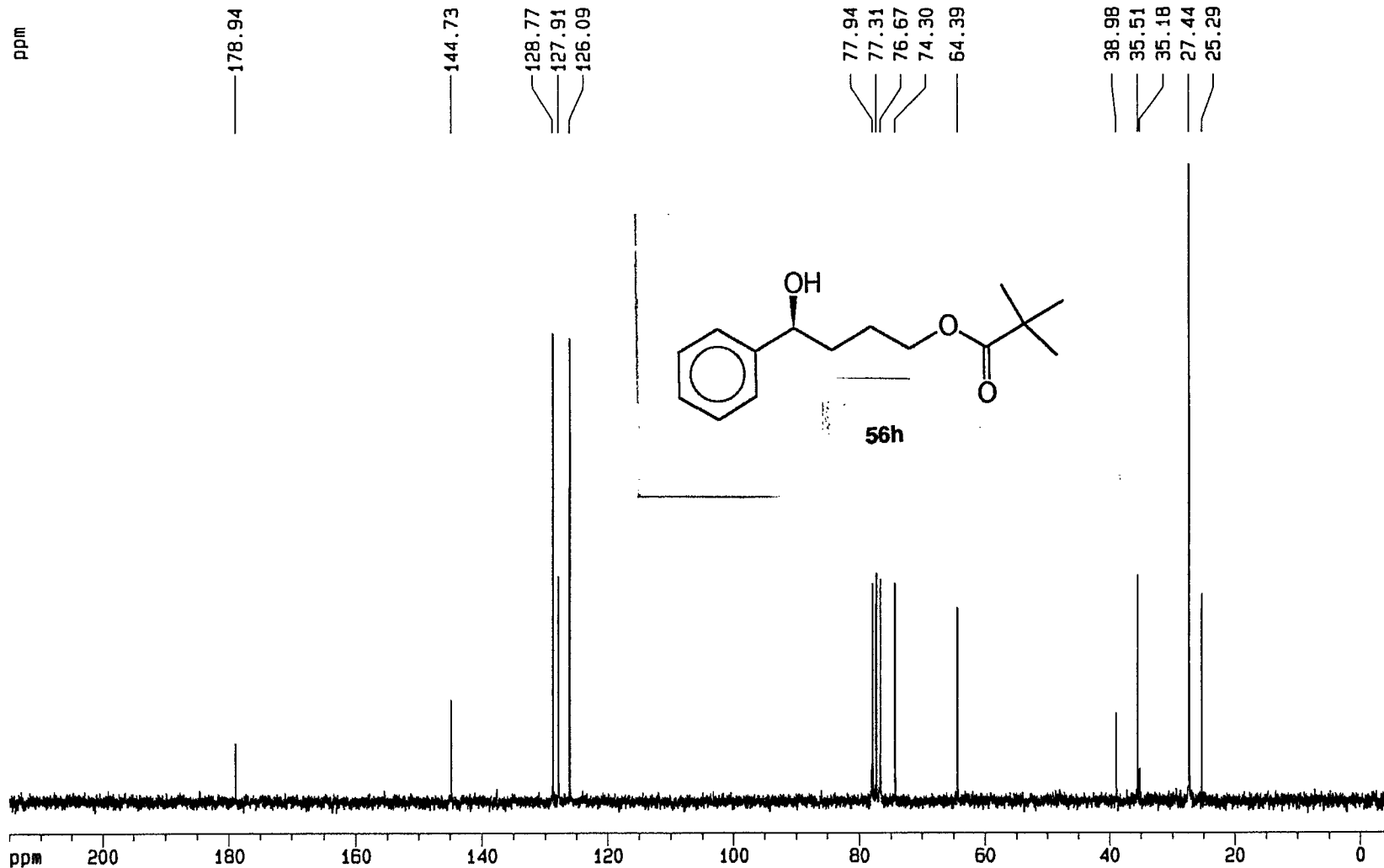
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SF 200.1323554 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

1D NMR plot parameters

CX 22.00 cm
F1P 11.000 ppm
F1 2201.46 Hz
F2P -0.500 ppm
F2 -100.07 Hz
PPMCM 0.52273 ppm/cm
HZCM 104.61464 Hz/cm



d47



Current Data Parameters

NAME schwd47
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters

Date 940511
Time 4.04
PULPROG zgdc30
SOLVENT CDC13
AQ 2.4248519 sec
FIDRES 0.206200 Hz
DQ 37.0 usec
RG 32768
NUCLEUS 13C
D12 0.0000200 sec
DL5 23.00 dB
P31 100.0 usec
D1 0.0500000 sec
P1 7.5 usec
DE 46.3 usec
SF01 50.3290000 MHz
SWH 13513.51 Hz
TD 65536
NS 384
DS 0
D11 0.0300000 sec

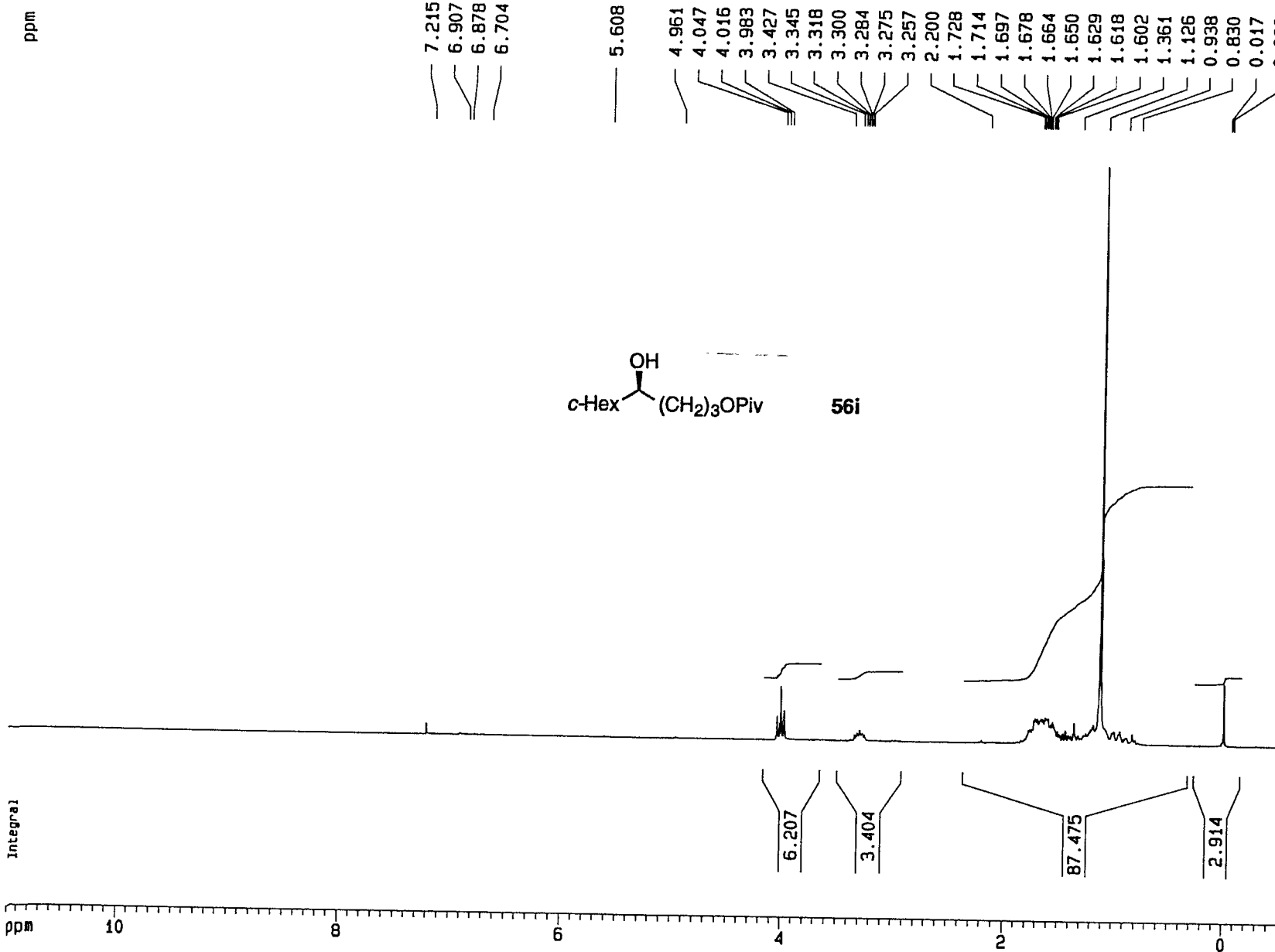
F2 - Processing parameters

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SF 50.3233037 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1D NMR plot parameters

CX 22.00 cm
F1P 215.000 ppm
F1 10819.51 Hz
F2P -5.000 ppm
F2 -251.62 Hz
PPMCM 10.00000 ppm/cm
HZCM 503.23303 Hz/cm

d49



Current Data Parameters
NAME schwd49
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date 940518
Time 7.00
PULPROG zg30
SOLVENT CDCl₃
AQ 3.9977160 sec
FIDRES 0.125072 Hz
DM 122.0 usec
RG 256
NUCLEUS 1H
D1 0.1000000 sec
P1 7.8 usec
DE 152.5 usec
SF01 200.1334421 MHz
SWH 4098.36 Hz
TD 32768
NS 16
DS 0

F2 - Processing parameters
SI 16384
SF 200.1323498 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 22.00 cm
F1P 11.000 ppm
F1 2201.46 Hz
F2P -0.500 ppm
F2 -100.07 Hz
PPMCM 0.52273 ppm/cm
HZCM 104.61464 Hz/cm

d49

Current Data Parameters

NAME schwd49
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters

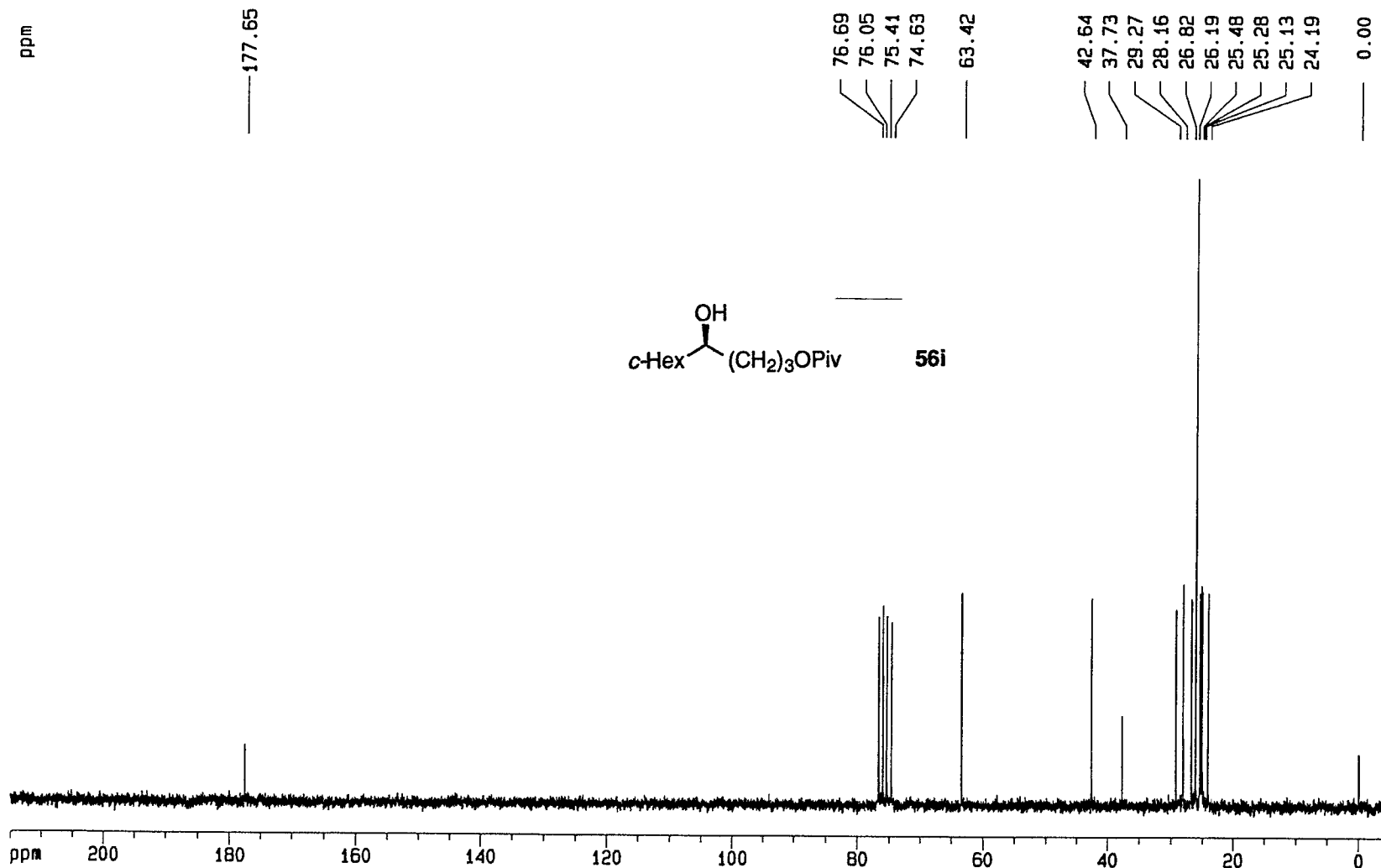
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SOLVENT CDC13
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FIDRES 0.206200 Hz
DQ 37.0 usec
RG 32768
NUCLEUS 13C
D12 0.0000200 sec
DL5 23.00 dB
P31 100.0 usec
D1 0.0500000 sec
P1 7.5 usec
DE 46.3 usec
SF01 50.3290000 MHz
SWH 13513.51 Hz
TO 65536
NS 384
DS 0
D11 0.0300000 sec

F2 - Processing parameters

SI 32768
SF 50.3233659 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1D NMR plot parameters

CX 22.00 cm
F1P 215.000 ppm
F1 10819.52 Hz
F2P -5.000 ppm
F2 -251.62 Hz
PPMCM 10.00000 ppm/cm
HZCM 503.23364 Hz/cm



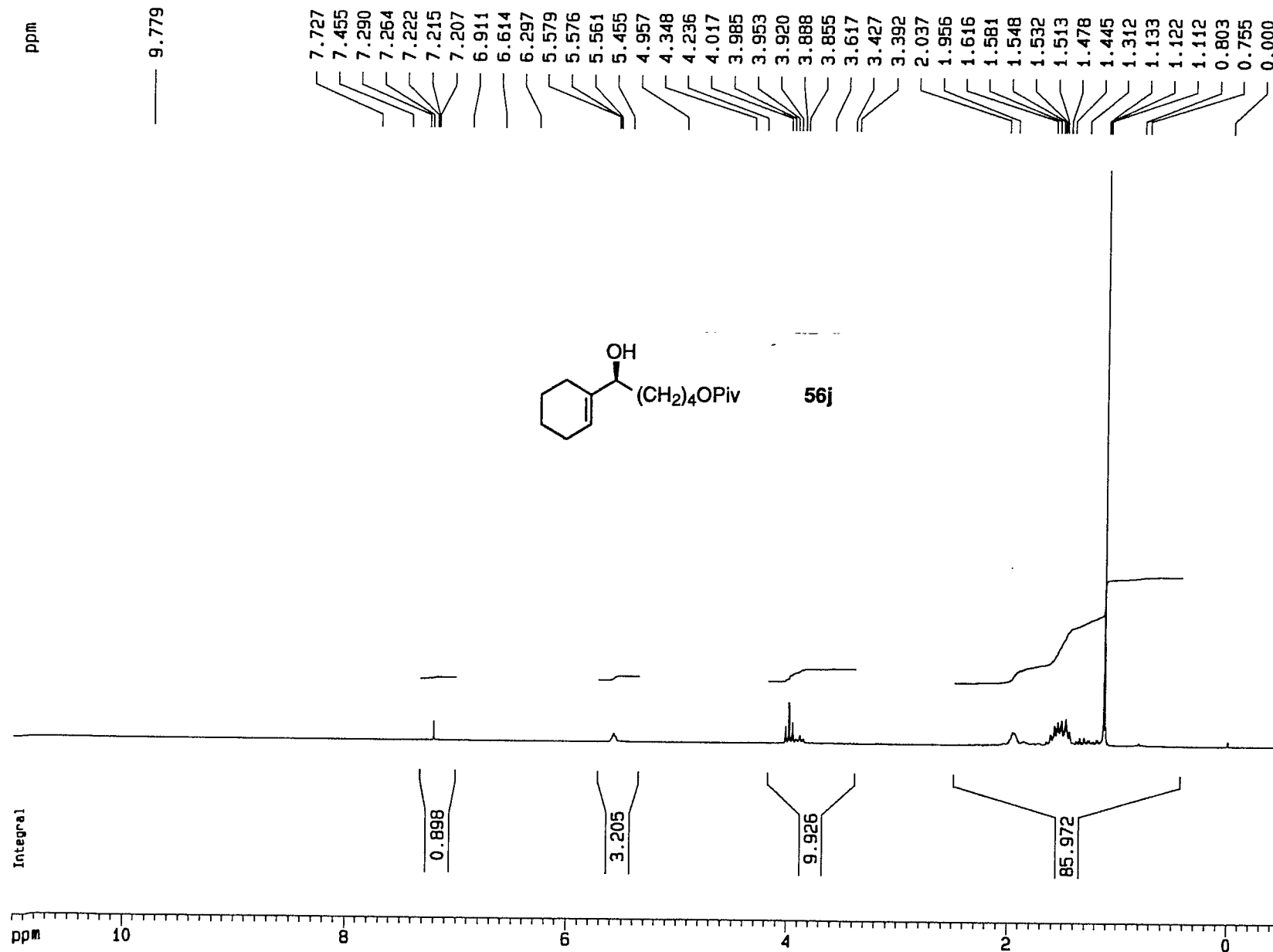
d45 10-22

Current Data Parameters
 NAME schwd45
 EXPNO 10
 PROCNO 1

F2 - Acquisition Parameters
 Date 940507
 Time 10.12
 PULPROG zg30
 SOLVENT CDCl3
 AQ 3.9977160 sec
 FIDRES 0.125072 Hz
 DM 122.0 usec
 RG 512
 NUCLEUS 1H
 D1 0.1000000 sec
 P1 7.8 usec
 DE 152.5 usec
 SF01 200.1334421 MHz
 SWH 4098.36 Hz
 TD 32768
 NS 16
 DS 0

F2 - Processing parameters
 SI 16384
 SF 200.1323513 MHz
 WDW EM
 SSB 0
 LB 0.10 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 22.00 cm
 F1P 11.000 ppm
 F1 2201.46 Hz
 F2P -0.500 ppm
 F2 -100.07 Hz
 PPMCM 0.52273 ppm/cm
 HZCM 104.61464 Hz/cm



d45 10-22

Current Data Parameters

NAME schwd45
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters

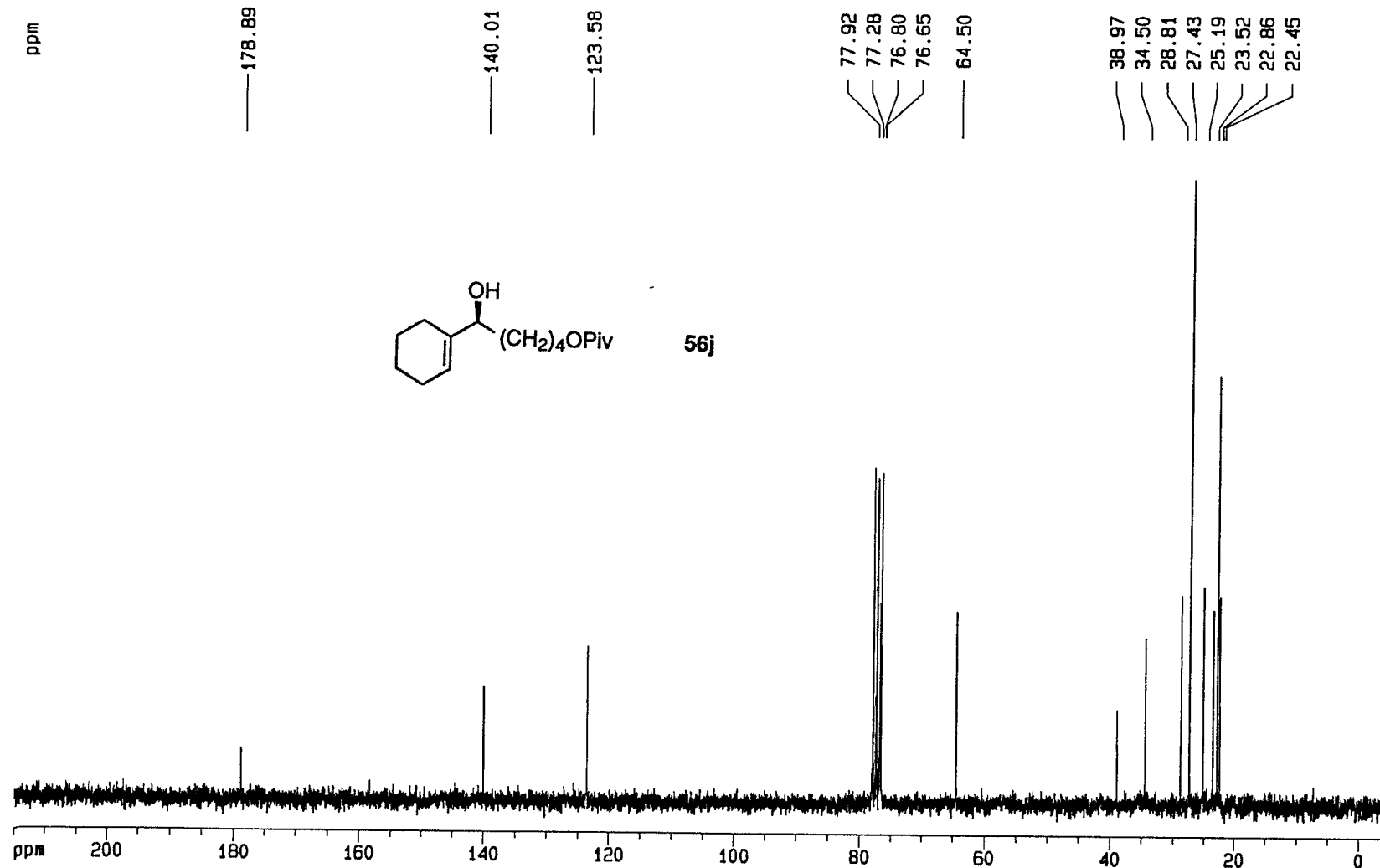
Date 940507
Time 10.29
PULPROG zgdc30
SOLVENT CDCl3
AQ 2.4248519 sec
FIDRES 0.206200 Hz
DQ 37.0 usec
RG 32768
NUCLEUS 13C
D12 0.0000200 sec
DL5 23.00 dB
P31 100.0 usec
D1 0.0500000 sec
P1 7.5 usec
DE 46.3 usec
SF01 50.3290000 MHz
SWH 13513.51 Hz
TD 65536
NS 384
DS 0
D11 0.0300000 sec

F2 - Processing parameters

SI 32768
SF 50.3233037 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1D NMR plot parameters

CX 22.00 cm
F1P 215.000 ppm
F1 10819.51 Hz
F2P -5.000 ppm
F2 -251.62 Hz
PPMCM 10.00000 ppm/cm
HZCM 503.23303 Hz/cm



d22 45-60

Current Data Parameters

NAME schw111
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters

Date 940414
Time 9.17
PULPROG zg30
SOLVENT CDC13
AQ 3.9977160 sec
FIDRES 0.125072 Hz
DQ 122.0 usec
RG 360
NUCLEUS 1H
D1 0.1000000 sec
P1 7.8 usec
DE 152.5 usec
SF01 200.1334421 MHz
SWH 4098.36 Hz
TO 32768
NS 16
DS 0

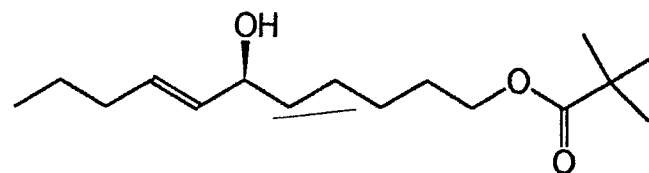
F2 - Processing parameters

SI 16384
SF 200.1323495 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

1D NMR plot parameters

CX 22.00 cm
F1P 11.000 ppm
F1 2201.46 Hz
F2P -0.500 ppm
F2 -100.07 Hz
PPMCM 0.52273 ppm/cm
HZCM 104.61464 Hz/cm

7.483
7.212
7.116
7.075
7.037
6.992
6.917
6.663
5.634
5.602
5.571
5.558
5.525
5.494
5.430
5.395
5.353
5.318
4.008
3.975
3.943
3.918
3.607
3.426
2.245
1.954
1.919
1.590
1.548
1.437
1.418
1.383
1.345
1.310
1.273
1.121
0.865
0.829
0.792
0.516
0.000



56k

6.275

9.558

84.167

Integral

ppm 10 8 6 4 2 0

d22 45-60

Current Data Parameters
 NAME schw111
 EXPNO 11
 PROCNO 1

F2 - Acquisition Parameters

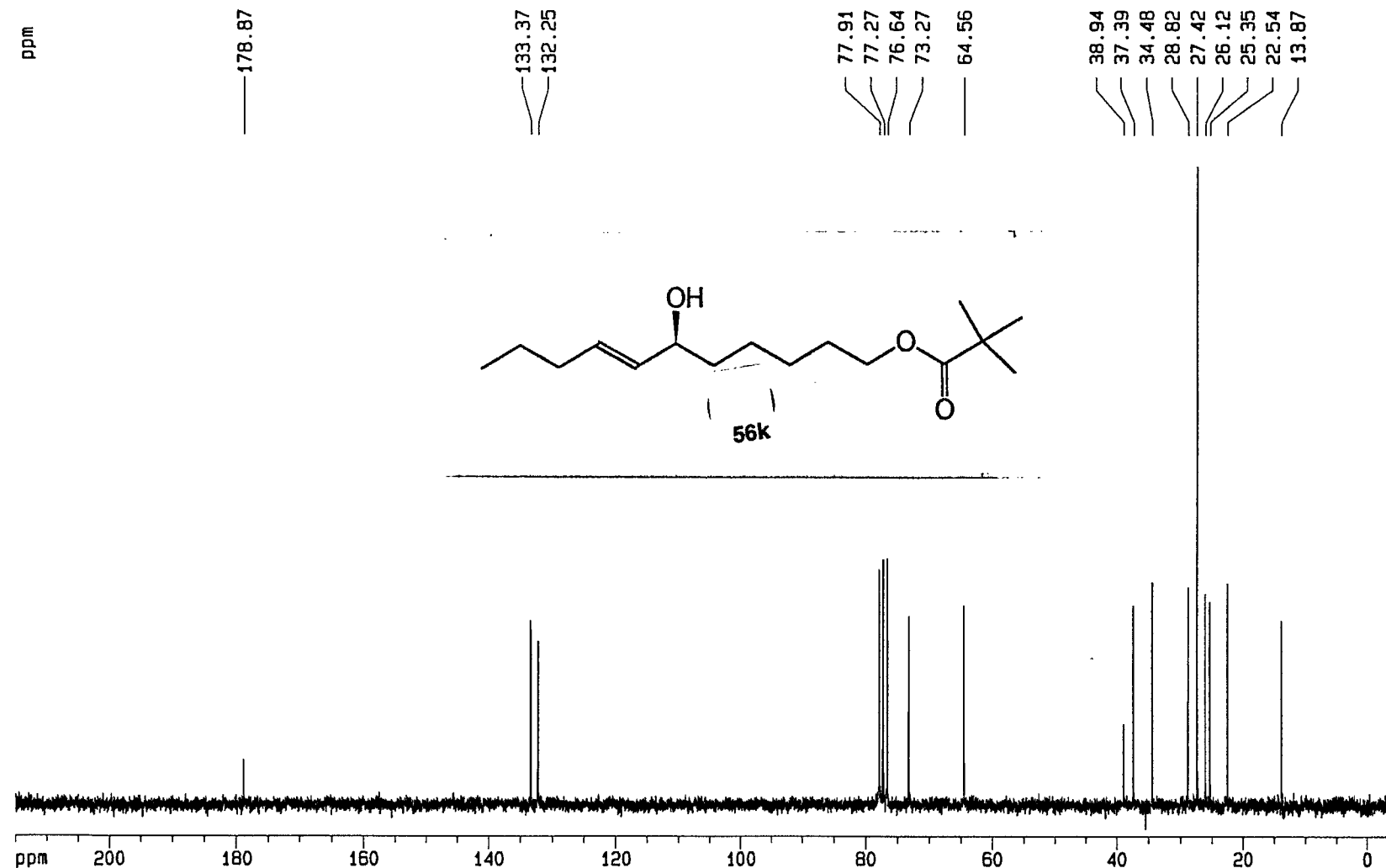
Date 940414
 Time 9.34
 PULPROG zgdc30
 SOLVENT CDC13
 AQ 2.4248519 sec
 FIDRES 0.206200 Hz
 DW 37.0 usec
 RG 32768
 NUCLEUS 13C
 D12 0.0000200 sec
 DL5 23.00 dB
 P31 100.0 usec
 D1 0.0500000 sec
 P1 7.5 usec
 DE 46.3 usec
 SF01 50.3290000 MHz
 SWH 13513.51 Hz
 TD 65536
 NS 384
 DS 0
 D11 0.0300000 sec

F2 - Processing parameters

SI 32768
 SF 50.3233037 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

1D NMR plot parameters

CX 22.00 cm
 F1P 215.000 ppm
 F1 10819.51 Hz
 F2P -5.000 ppm
 F2 -251.62 Hz
 PPMCM 10.00000 ppm/cm
 HZCM 503.23303 Hz/cm



d51

Current Data Parameters

NAME schwd51
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters

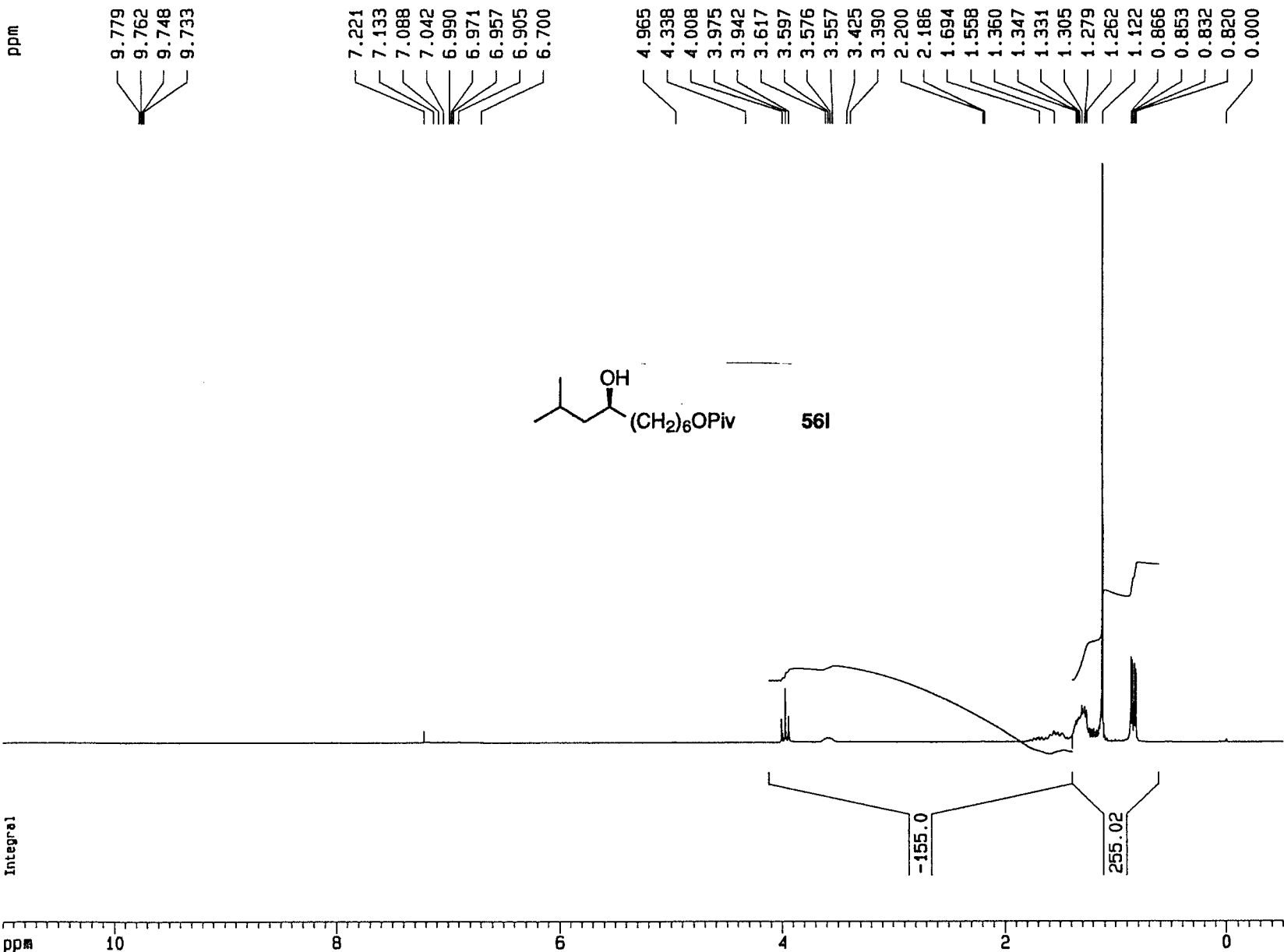
Date 940514
Time 23.47
PULPROG zg30
SOLVENT CDC13
AQ 3.9977160 sec
FIDRES 0.125072 Hz
DM 122.0 usec
RG 180
NUCLEUS 1H
D1 0.1000000 sec
P1 7.8 usec
DE 152.5 usec
SF01 200.1334421 MHz
SWH 4098.36 Hz
TD 32768
NS 16
DS 0

F2 - Processing parameters

SI 16384
SF 200.1323484 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

1D NMR plot parameters

CX 22.00 cm
F1P 11.000 ppm
F1 2201.46 Hz
F2P -0.500 ppm
F2 -100.07 Hz
PPMCM 0.52273 ppm/cm
HZCM 104.61464 Hz/cm



d51

Current Data Parameters

NAME schwd51
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters

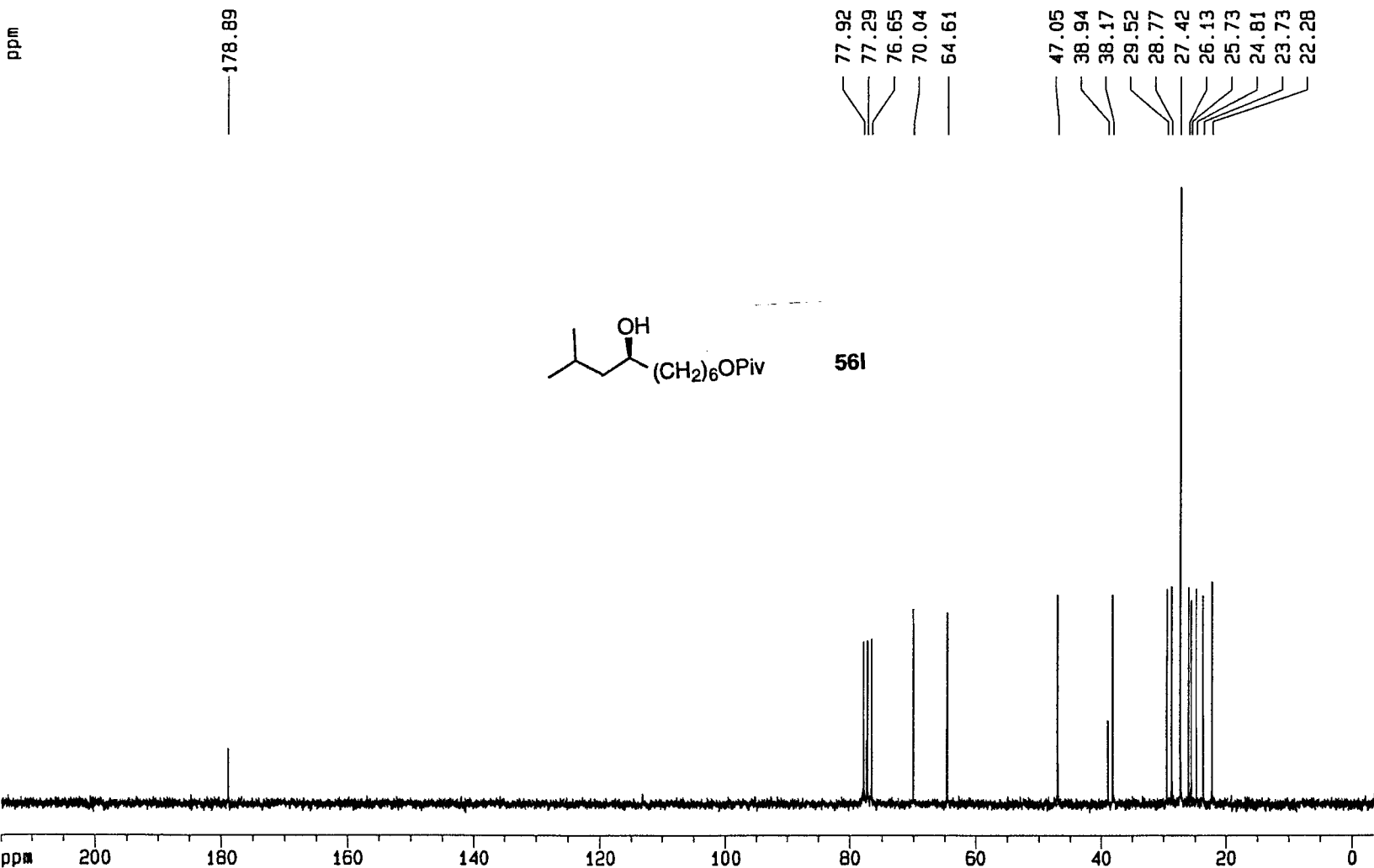
Date 940515
Time 0.03
PULPROG zgdc30
SOLVENT CDCl3
AQ 2.4248519 sec
FIDRES 0.206200 Hz
DQ 37.0 usec
RG 32768
NUCLEUS 13C
D12 0.0000200 sec
DL5 23.00 dB
P31 100.0 usec
D1 0.0500000 sec
P1 7.5 usec
DE 46.3 usec
SF01 50.3290000 MHz
SWH 13513.51 Hz
TD 65536
NS 384
DS 0
D11 0.0300000 sec

F2 - Processing parameters

SI 32768
SF 50.3233037 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1D NMR plot parameters

CX 22.00 cm
F1P 215.000 ppm
F1 10819.51 Hz
F2P -5.000 ppm
F2 -251.62 Hz
PPMCM 10.00000 ppm/cm
HZCM 503.23303 Hz/cm



d86 et2o

Current Data Parameters

NAME schwd86s
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters

Date 940629
Time 7.03
PULPROG zg30
SOLVENT CDC13
AQ 3.9977160 sec
FIDRES 0.125072 Hz
DM 122.0 usec
RG 360
NUCLEUS 1H
D1 0.1000000 sec
P1 7.8 usec
DE 152.5 usec
SF01 200.1334421 MHz
SWH 4098.35 Hz
TD 32768
NS 16
DS 0

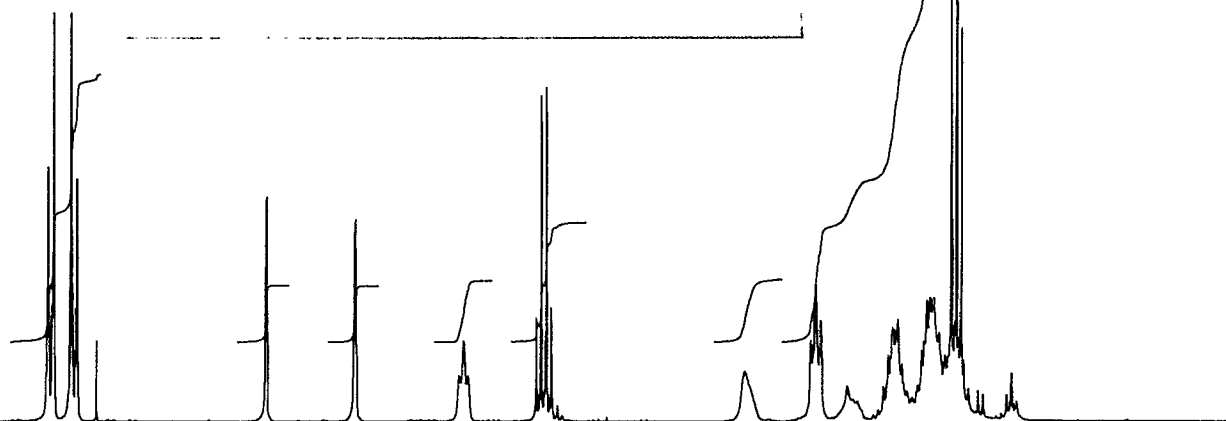
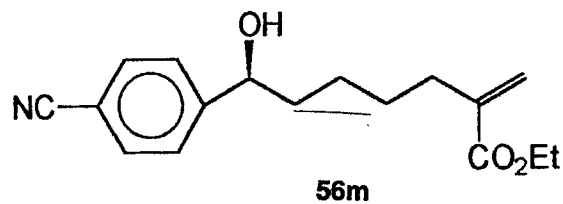
F2 - Processing parameters

SI 16384
SF 200.1322917 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

1D NMR plot parameters

CX 22.00 cm
F1P 11.000 ppm
F1 2201.46 Hz
F2P -0.500 ppm
F2 -100.07 Hz
PPMCM 0.52273 ppm/cm
HZCM 104.61461 Hz/cm

8.2416
8.2083
8.0809
8.0456
7.8381
7.7979
7.6786
7.6361
7.5030
7.4196
7.2732
6.3190
6.3145
5.9158
5.7026
5.6968
4.9677
4.9382
4.9069
4.4358
4.4336
4.4006
4.3976
4.3647
4.3623
4.3293
4.3266
2.9746
2.4785
2.4418
1.9068
1.6996
1.6753
1.6603
1.6494
1.5283
1.5264
1.4924
1.4903
1.4570
1.4552
1.0974
0.8174
0.6313
0.2866



18.137

3.810

3.763

4.119

8.066

4.209

57.896

ppm

Integral

ppm

10

8

6

4

2

0

d86 et2o

Current Data Parameters

NAME schwd86s
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters

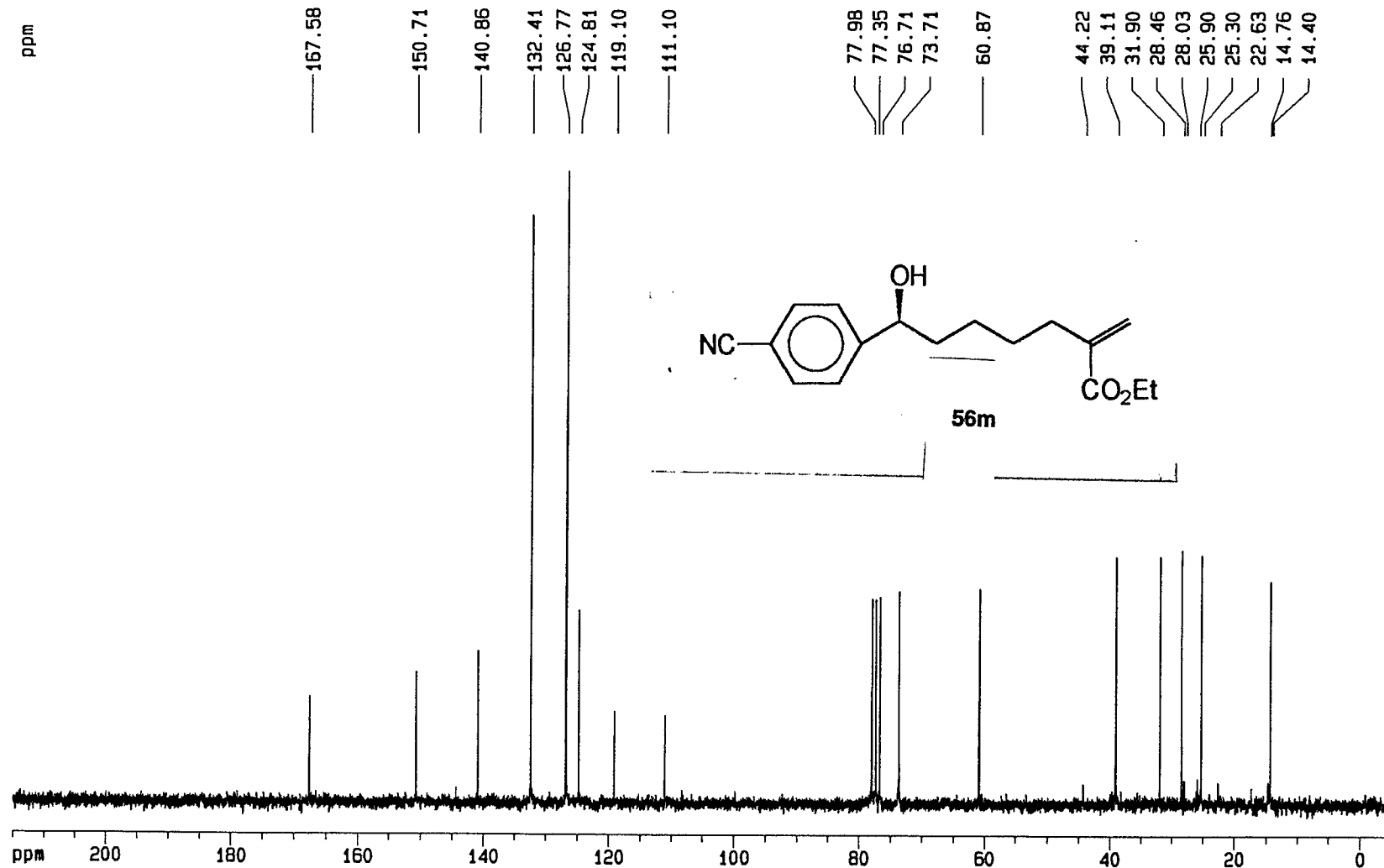
Date 940629
Time 7.20
PULPROG zgdc30
SOLVENT CDC13
AQ 2.4248519 sec
FIDRES 0.206200 Hz
DQ 37.0 usec
RG 32768
NUCLEUS 13C
D12 0.0000200 sec
DL5 23.00 dB
P31 100.0 usec
D1 0.0500000 sec
P1 7.5 usec
DE 46.3 usec
SF01 50.3290000 MHz
SWMH 13513.51 Hz
TD 65536
NS 384
DS 0
D11 0.0300000 sec

F2 - Processing parameters

SI 32768
SF 50.3233037 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1D NMR plot parameters

CX 22.00 cm
F1P 215.000 ppm
F1 10819.51 Hz
F2P -5.000 ppm
F2 -251.62 Hz
PPMCM 10.00000 ppm/cm
HZCM 503.23303 Hz/cm



d85 et2o

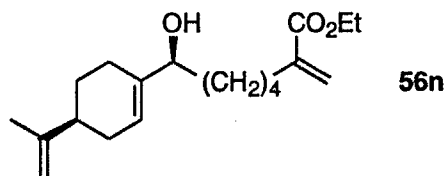
Current Data Parameters
 NAME schwd85s
 EXPNO 10
 PROCNO 1

F2 - Acquisition Parameters
 Date 940629
 Time 6.40
 PULPROG zg30
 SOLVENT CDC13
 AQ 3.9977160 sec
 FIDRES 0.125072 Hz
 DW 122.0 usec
 RG 256
 NUCLEUS 1H
 D1 0.1000000 sec
 P1 7.8 usec
 DE 152.5 usec
 SF01 200.1334421 MHz
 SWH 4098.36 Hz
 TO 32768
 NS 16
 DS 0

F2 - Processing parameters
 SI 16384
 SF 200.1323705 MHz
 WDW EM
 SSB 0
 LB 0.10 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 22.00 cm
 F1P 11.000 ppm
 F1 2201.46 Hz
 F2P -0.500 ppm
 F2 -100.07 Hz
 PPMCM 0.52273 ppm/cm
 HZCM 104.61465 Hz/cm

7.507
7.362
7.345
7.333
7.110
7.055
7.022
5.942
5.937
5.472
5.356
5.327
5.320
4.764
4.536
4.529
4.517
4.066
4.030
3.994
3.959
3.916
3.824
3.793
3.760
2.116
2.078
1.829
1.550
1.390
1.351
1.346
1.318
1.306
1.275
1.147
1.112
1.076
1.028
0.720
-0.112



2.890
5.803
5.940
9.321
76.047

ppm

Integral

ppm

10

8

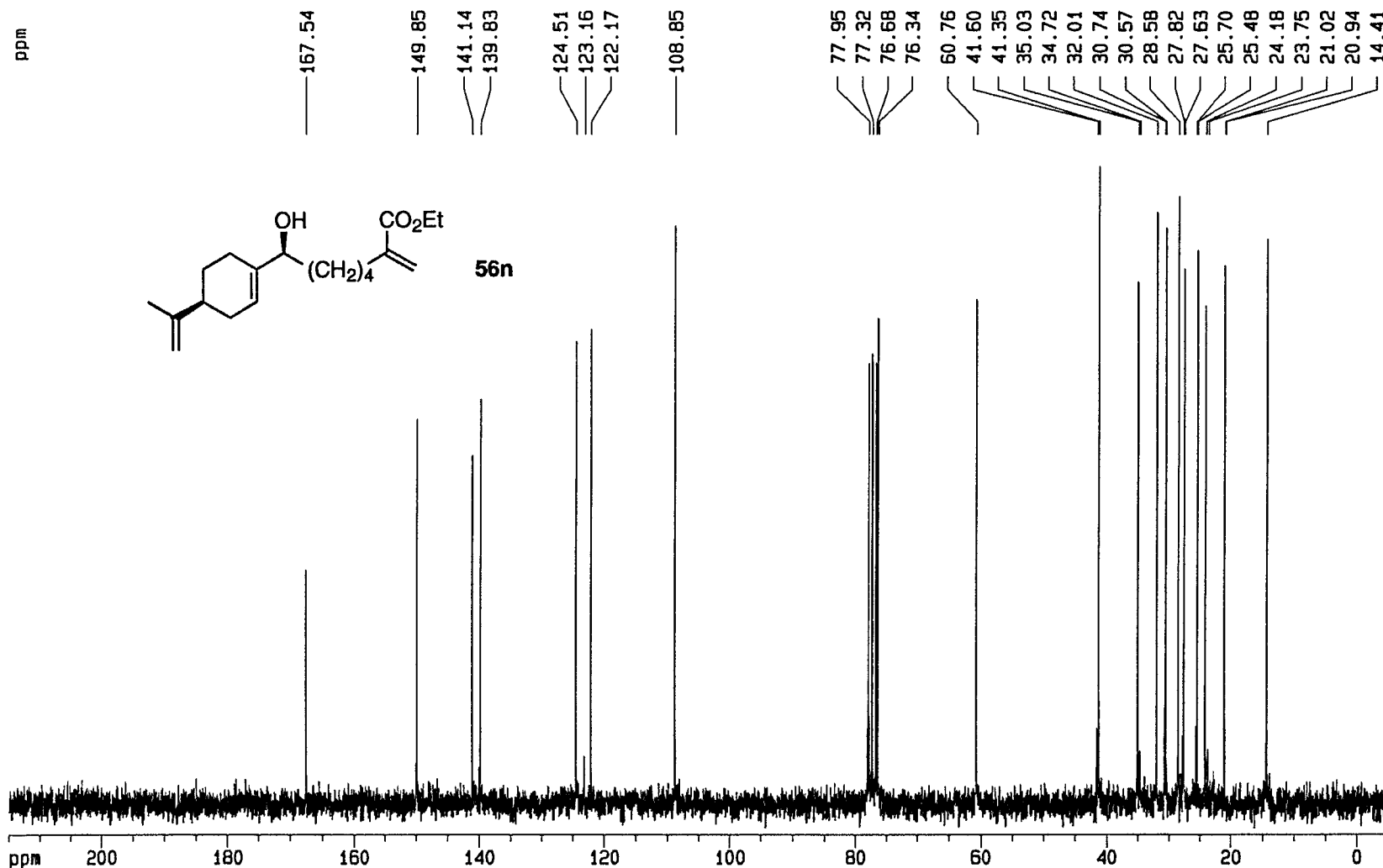
6

4

2

0

d85 et20



Current Data Parameters

NAME schwd85s
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters

Date 940629
Time 6.57
PULPROG zgdc30
SOLVENT CDC13
AQ 2.4248519 sec
FIDRES 0.206200 Hz
DQ 37.0 usec
RG 32768
NUCLEUS 13C
D12 0.0000200 sec
DL5 23.00 dB
P31 100.0 usec
D1 0.0500000 sec
P1 7.5 usec
DE 46.3 usec
SF01 50.3290000 MHz
SWH 13513.51 Hz
TD 65536
NS 384
DS 0
D11 0.0300000 sec

F2 - Processing parameters

SI 32768
SF 50.3233037 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

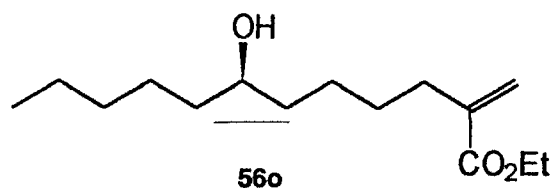
10 NMR plot parameters

CX 22.00 cm
F1P 215.000 ppm
F1 10819.51 Hz
F2P -5.000 ppm
F2 -251.62 Hz
PPMCM 10.00000 ppm/cm
HZCM 503.23303 Hz/cm

d82 2.saeule

ppm

7.6195
7.2447
6.4541
6.0509
5.8274
5.6471
5.4922
5.4444
5.4384
5.0432
4.5072
4.4716
4.1775
4.1419
4.1063
4.0707
4.0283
3.9927
3.6700
3.4956
2.3538
2.2325
2.1991
1.8574
1.5383
1.3771
1.3631
1.3435
1.3019
1.2588
1.2234
1.1878
1.1393
0.8403
0.8132
0.7800
0.5020
0.0000



Current Data Parameters

NAME schwd822
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters

Date 940624
Time 4.23
PULPROG zg30
SOLVENT CDC13
AQ 3.9977160 sec
FIDRES 0.125072 Hz
DQ 122.0 usec
RG 128
NUCLEUS 1H
D1 0.1000000 sec
P1 7.8 usec
DE 152.5 usec
SF01 200.1334421 MHz
SWH 4098.36 Hz
TO 32768
NS 16
DS 0

F2 - Processing parameters

SI 16384
SF 200.1323432 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

1D NMR plot parameters

CX 22.00 cm
F1P 11.000 ppm
F1 2201.46 Hz
F2P -0.500 ppm
F2 -100.07 Hz
PPMCM 0.52273 ppm/cm
HZCM 104.61463 Hz/cm

Integral

3.348
3.336
6.803
3.439
83.074

ppm

10

8

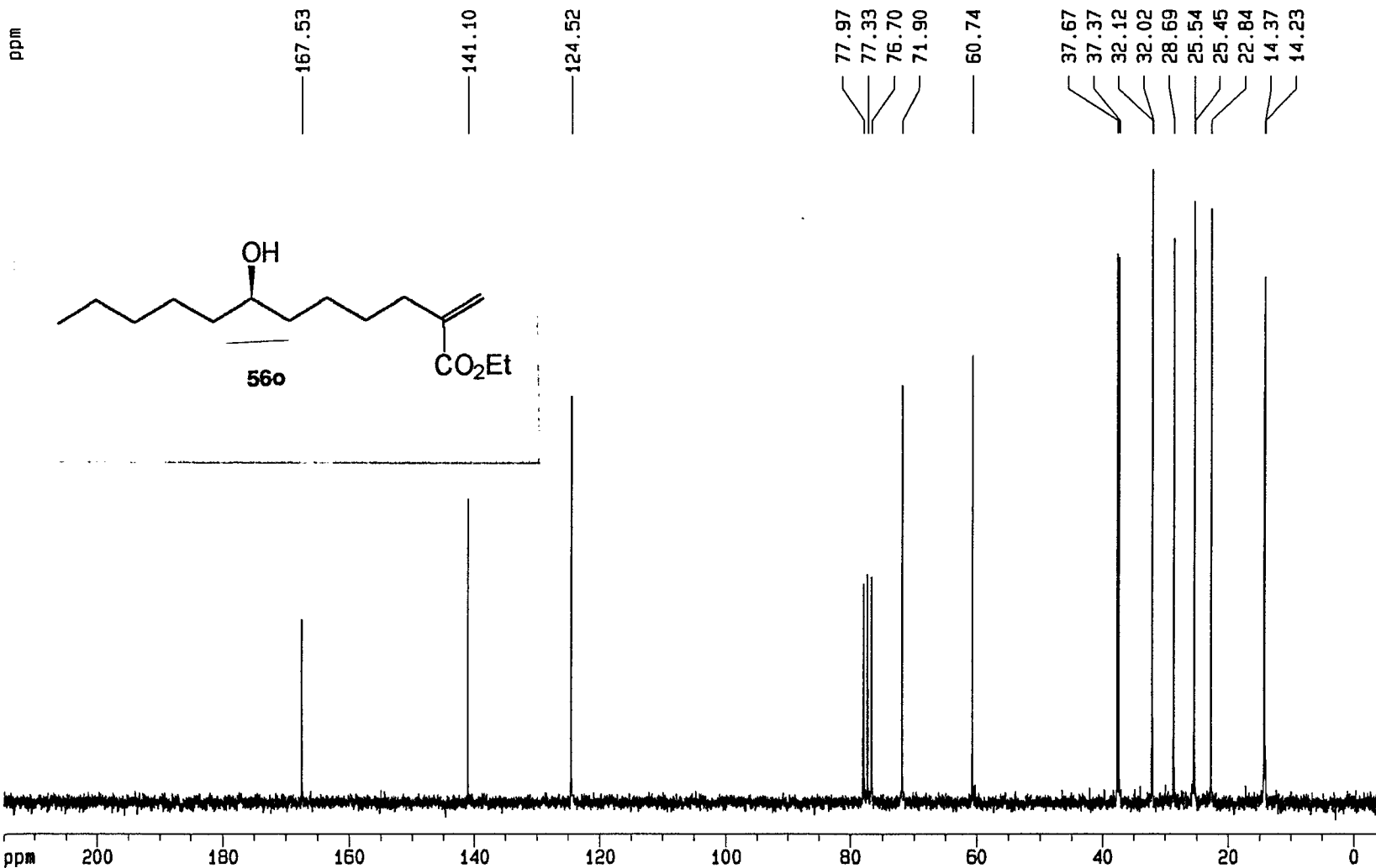
6

4

2

0

d82 2.saeule



Current Data Parameters

NAME schwd882
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters

Date 940624
Time 4.41
PULPROG zgpg30
SOLVENT CDCl₃
AQ 2.4248519 sec
FIDRES 0.206200 Hz
DQ 37.0 usec
RG 32768
NUCLEUS 13C
D12 0.0000200 sec
DL5 23.00 dB
P31 100.0 usec
D1 0.0500000 sec
P1 7.5 usec
DE 46.3 usec
SF01 50.3290000 MHz
SWH 13513.51 Hz
TD 65536
NS 384
DS 0
D11 0.0300000 sec

F2 - Processing parameters

SI 32768
SF 50.3233037 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1D NMR plot parameters

CX 22.00 cm
F1P 215.000 ppm
F1 10819.51 Hz
F2P -5.000 ppm
F2 -251.62 Hz
PPMCM 10.00000 ppm/cm
HZCM 503.23303 Hz/cm

d69 58-66 2.

Current Data Parameters

NAME schwd69
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters

Date 940604
Time 3.47
PULPROG zg30
SOLVENT CDC13
AQ 3.9977160 sec
FIDRES 0.125072 Hz
DQ 122.0 usec
RG 180
NUCLEUS 1H
D1 0.1000000 sec
P1 7.8 usec
DE 152.5 usec
SF01 200.1334421 MHz
SWH 4098.36 Hz
TD 32768
NS 16
DS 0

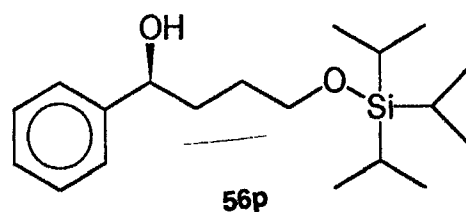
F2 - Processing parameters

SI 16384
SF 200.1323609 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

1D NMR plot parameters

CX 22.00 cm
F1P 11.000 ppm
F1 2201.46 Hz
F2P -0.500 ppm
F2 -100.07 Hz
PPMCM 0.52273 ppm/cm
HZCM 104.61464 Hz/cm

7.631
7.449
7.268
7.262
7.249
7.237
7.234
7.199
7.191
7.177
7.147
6.899
5.402
4.937
4.647
4.633
4.610
4.585
4.571
3.691
3.689
3.661
3.634
3.629
3.398
3.362
3.189
1.803
1.799
1.795
1.790
1.761
1.585
1.036
1.014
0.996
0.980
0.959
0.953
0.927
0.689
0.000



ppm

Integral

13.869

2.829

5.375

2.769

75.158

ppm

10

8

6

4

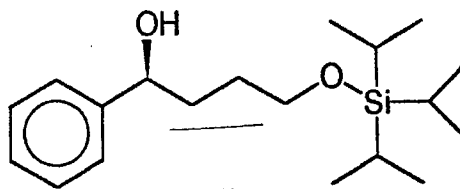
2

0

d69 58-66 2.

ppm

145.32
128.55
127.43
126.12
77.96
77.32
76.69
74.39
63.87
36.98
29.65
18.26
12.79
12.21
11.62



56p

Current Data Parameters

NAME schwd69
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters

Date 940604
Time 4.03
PULPROG zgdc30
SOLVENT CDC13
AQ 2.4248519 sec
FIDRES 0.206200 Hz
DM 37.0 usec
RG 32768
NUCLEUS 13C
D12 0.0000200 sec
DL5 23.00 dB
P31 100.0 usec
D1 0.0500000 sec
P1 7.5 usec
DE 46.3 usec
SF01 50.3290000 MHz
SMH 13513.51 Hz
TD 65536
NS 384
DS 0
D11 0.0300000 sec

F2 - Processing parameters

SI 32768
SF 50.3233037 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1D NMR plot parameters

CX 22.00 cm
F1P 215.000 ppm
F1 10819.51 Hz
F2P -5.000 ppm
F2 -251.62 Hz
PPMCM 10.00000 ppm/cm
HZCM 503.23303 Hz/cm

ppm 200 180 160 140 120 100 80 60 40 20 0

8 63-58

Current Data Parameters
NAME schwp8
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date 940727
Time 3.28
PULPROG zg30
SOLVENT CDC13
AQ 3.9977160 sec
FIDRES 0.125072 Hz
DW 122.0 usec
RG 180
NUCLEUS 1H
D1 0.1000000 sec
P1 7.8 usec
DE 152.5 usec
SF01 200.1334421 MHz
SWH 4098.36 Hz
TD 32768
NS 16
DS 0

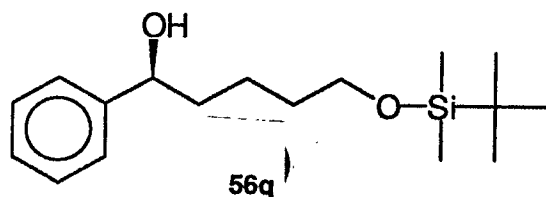
F2 - Processing parameters
SI 16384
SF 200.1323512 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 22.00 cm
F1P 11.000 ppm
F1 2201.46 Hz
F2P -0.500 ppm
F2 -100.07 Hz
PPMCM 0.52273 ppm/cm
HZCM 104.61464 Hz/cm

ppm
10.903
10.873
10.437
10.428
10.052

8.117
7.640
7.459
7.282
7.266
7.251
7.241
7.229
7.220
7.208
7.199
7.191
6.890
6.415

4.599
4.567
4.533
4.491
3.835
3.811
3.799
3.736
3.575
3.543
3.511
3.434
2.448
1.726
1.694
1.649
1.527
1.494
1.462
0.891
0.872
0.865
0.851
0.837
0.047
0.015
0.000
0.015



Integral

15.827

3.187

6.657

74.298

ppm
10
8
6
4
2
0

8 58-63

Current Data Parameters

NAME schwp8
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters

Date 940727
Time 3.45
PULPROG zgdc30
SOLVENT CDC13
AQ 2.4248519 sec
FIDRES 0.206200 Hz
DQ 37.0 usec
RG 11400
NUCLEUS 13C
D12 0.0000200 sec
DL5 23.00 dB
P31 100.0 usec
D1 0.0500000 sec
P1 7.5 usec
DE 46.3 usec
SF01 50.3290000 MHz
SWH 13513.51 Hz
TD 65536
NS 384
DS 0
D11 0.0300000 sec

F2 - Processing parameters

SI 32768
SF 50.3232595 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1D NMR plot parameters

CX 22.00 cm
F1P 215.000 ppm
F1 10819.50 Hz
F2P -5.000 ppm
F2 -251.62 Hz
PPMCM 10.00000 ppm/cm
HZCM 503.23260 Hz/cm

ppm

146.07

129.49

128.52

127.13

127.05

78.86

78.23

77.59

77.02

75.60

64.21

63.72

41.16

39.95

33.74

33.01

27.12

27.00

24.42

23.23

19.49

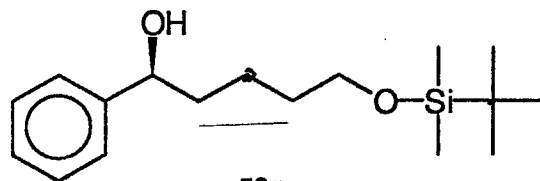
11.28

-3.57

-4.13

-4.38

-4.70



ppm

200

180

160

140

120

100

80

60

40

20

0

ppm
10.963
10.959
10.363

5.590
5.480
5.204
4.618
4.293
4.260
3.932
3.901

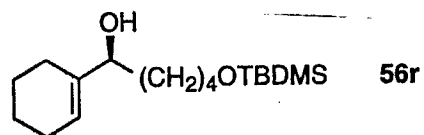
Year	Number of people (millions)
1980	3.824
1985	3.798
1990	3.789
1995	3.595
2000	3.564

1.981	1.964	1.642	1.582	1.561	1.555
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Year	Number of people (millions)
1980	1.450
1985	1.484
1990	1.492
1995	1.524
2000	1.450
2020	0.847

0.833	
0.037	
0.015	
0.000	

1126A 104.01405 1127C#



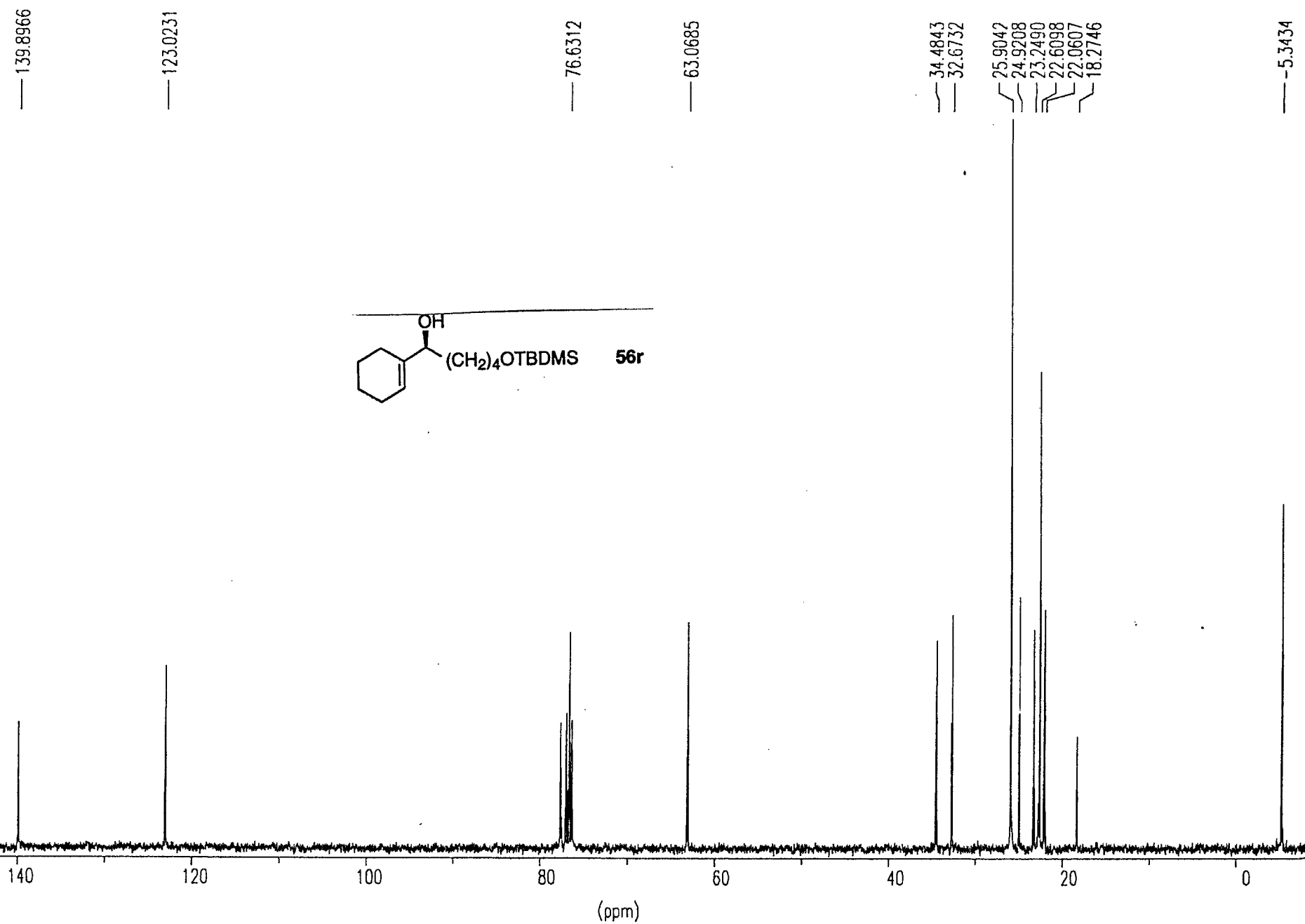
3.319

8.912

7.769

Integral

1-Cyclohex-1-en-1-yl-5-(tert-butyl-dimethylsiloxy)pentan-1-ol



d58 2. 33-37

Current Data Parameters

NAME schwd582
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters

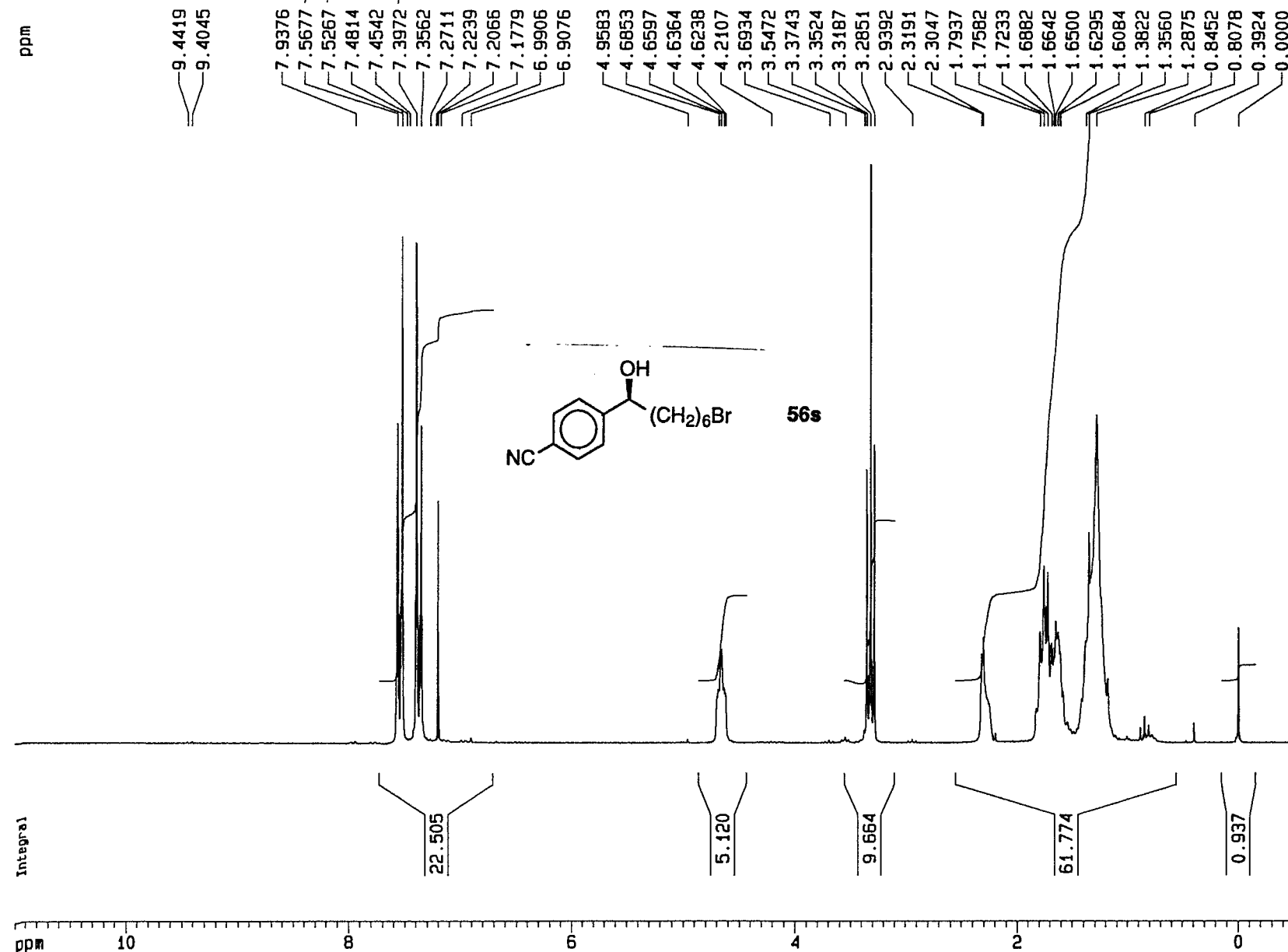
Date 940531
Time 5.57
PULPROG zg30
SOLVENT CDCl3
AQ 3.9977160 sec
FIDRES 0.125072 Hz
DQ 122.0 usec
RG 715
NUCLEUS 1H
D1 0.1000000 sec
P1 7.8 usec
DE 152.5 usec
SF01 200.1334421 MHz
SWH 4098.36 Hz
TO 32768
NS 16
DS 0

F2 - Processing parameters

SI 16384
SF 200.1323513 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

1D NMR plot parameters

CX 22.00 cm
F1P 11.000 ppm
F1 2201.46 Hz
F2P -0.500 ppm
F2 -100.07 Hz
PPMCM 0.52273 ppm/cm
HZCM 104.61464 Hz/cm



d58 2. 33-37

Current Data Parameters

NAME schwd582
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters

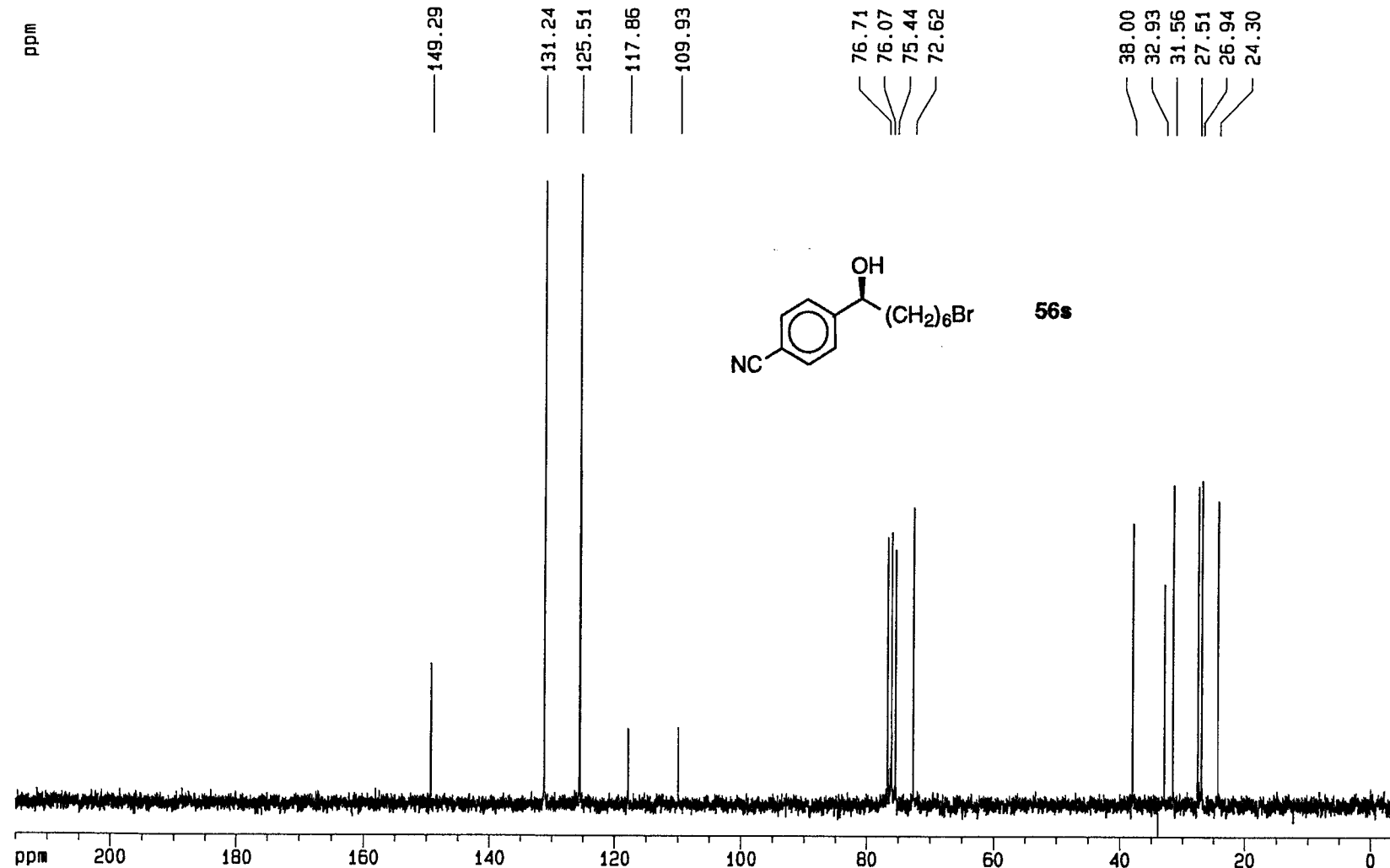
Date 940531
Time 6.14
PULPROG zgdc30
SOLVENT CDCl3
AQ 2.4248519 sec
FIDRES 0.206200 Hz
DQ 37.0 usec
RG 32768
NUCLEUS 13C
D12 0.0000200 sec
DL5 23.00 dB
P31 100.0 usec
D1 0.0500000 sec
P1 7.5 usec
DE 46.3 usec
SF01 50.3290000 MHz
SWH 13513.51 Hz
TD 65536
NS 384
DS 0
D11 0.0300000 sec

F2 - Processing parameters

SI 32768
SF 50.3233676 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1D NMR plot parameters

CX 22.00 cm
F1P 215.000 ppm
F1 10819.52 Hz
F2P -5.000 ppm
F2 -251.62 Hz
PPMCM 10.00000 ppm/cm
HZCM 503.23367 Hz/cm



d63 24-38

Current Data Parameters

NAME schwd63
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters

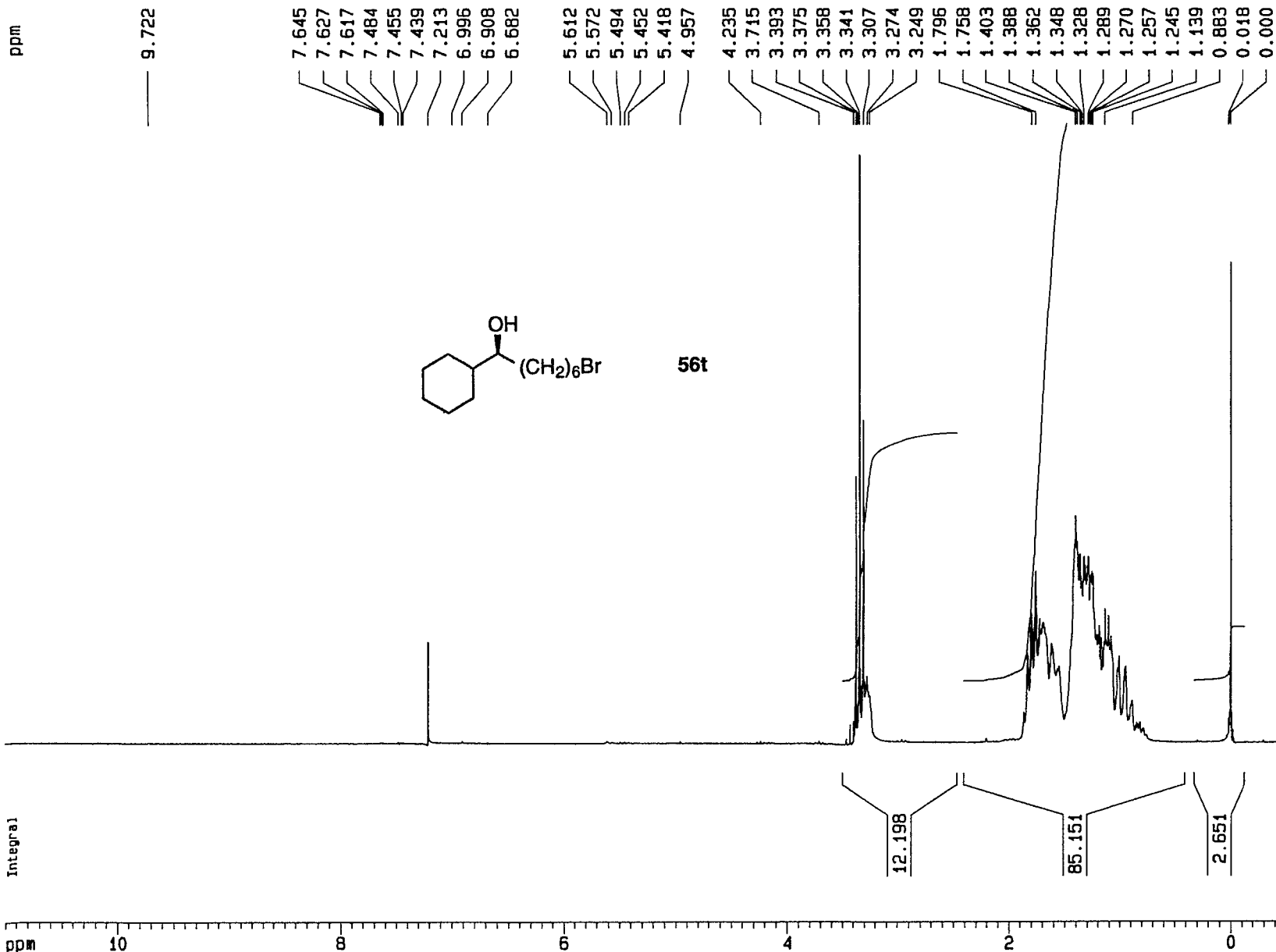
Date 940525
Time 22.38
PULPROG zg30
SOLVENT CDCl3
AQ 3.9977160 sec
FIDRES 0.125072 Hz
DW 122.0 usec
RG 256
NUCLEUS 1H
D1 0.1000000 sec
P1 7.8 usec
DE 152.5 usec
SF01 200.1334421 MHz
SWH 4098.36 Hz
TD 32768
NS 16
DS 0

F2 - Processing parameters

SI 16384
SF 200.1323497 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

1D NMR plot parameters

CX 22.00 cm
F1P 11.000 ppm
F1 2201.46 Hz
F2P -0.500 ppm
F2 -100.07 Hz
PPMCM 0.52273 ppm/cm
HZCM 104.61464 Hz/cm



d63 24-38

Current Data Parameters
 NAME schwd63
 EXPNO 11
 PROCNO 1

F2 - Acquisition Parameters
 Date 940525
 Time 22.55
 PULPROG zgdc30
 SOLVENT CDC13
 AQ 2.4248519 sec
 FIDRES 0.206200 Hz
 DM 37.0 usec
 RG 32768
 NUCLEUS 13C
 D12 0.0000200 sec
 DL5 23.00 dB
 P31 100.0 usec
 D1 0.0500000 sec
 P1 7.5 usec
 DE 46.3 usec
 SF01 50.3290000 MHz
 SWH 13513.51 Hz
 TO 65536
 NS 384
 DS 0
 D11 0.0300000 sec

F2 - Processing parameters
 SI 32768
 SF 50.3233664 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

1D NMR plot parameters
 CX 22.00 cm
 F1P 215.000 ppm
 F1 10819.52 Hz
 F2P -5.000 ppm
 F2 -251.62 Hz
 PPMCM 10.00000 ppm/cm
 HZCM 503.23367 Hz/cm

