Supplementary Material (ESI) for Chemical Communications

Supporting Information

A 1,3-Carbonyl Shift in the Platinum-catalyzed Aromatization of 2-Epoxy-1-(methoxyalk-2-ynyl)benzenes

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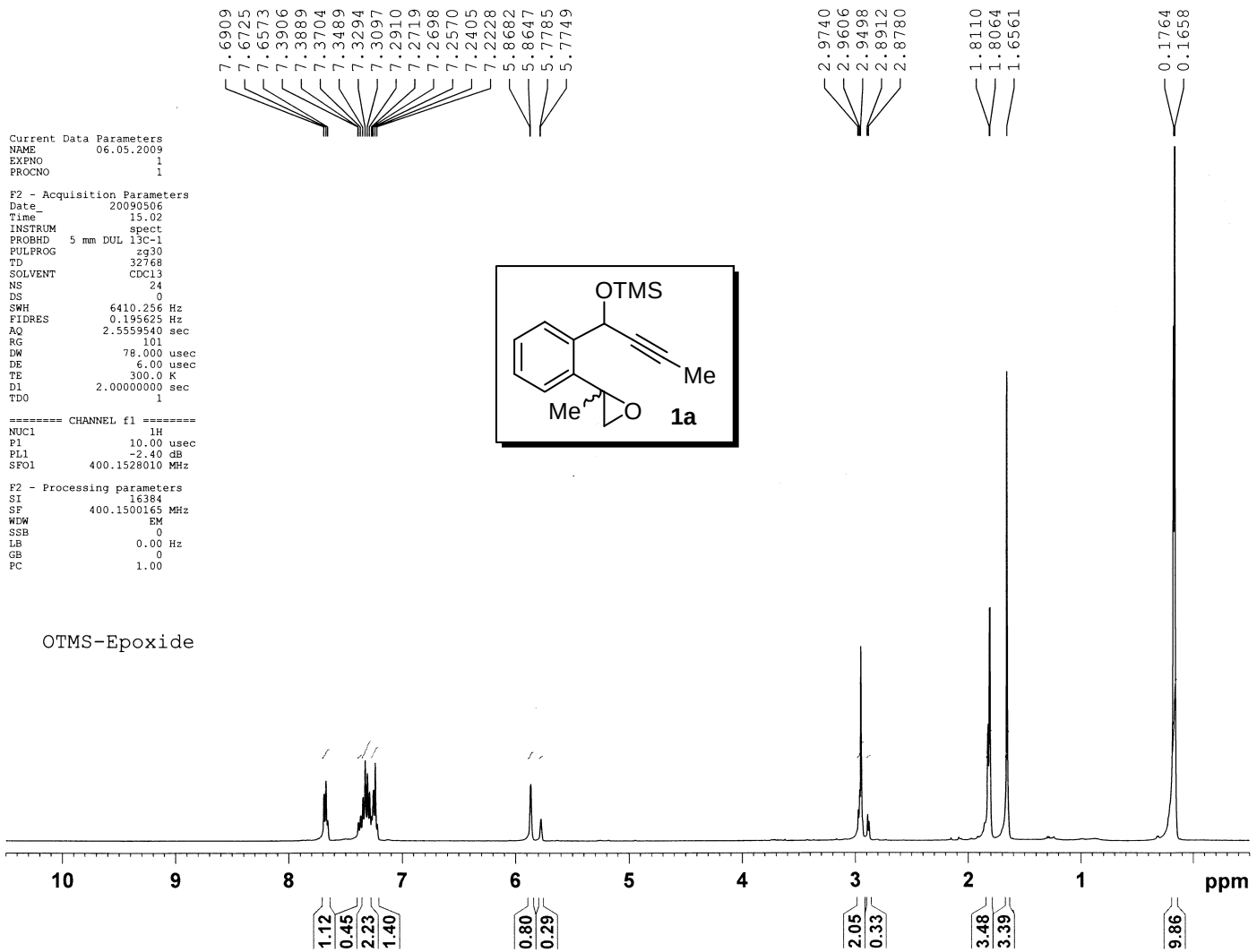
Contents: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7.2719
7.2698
7.2570
7.2405
7.2228
5.8682
5.8647
5.7785
5.7749
2.9740
2.9606
2.9498
2.8912
2.8780
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1.8064
1.6561
0.1764
0.1658
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PROCNO 1
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PULPROG zg30
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SOLVENT CDCl3
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FIDRES 0.195625 Hz
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RG 101
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500165 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
OTMS
Me
Me
O
1a
OTMS-Epoxide
10
9
8
7
6
5
4
3
2
1
ppm
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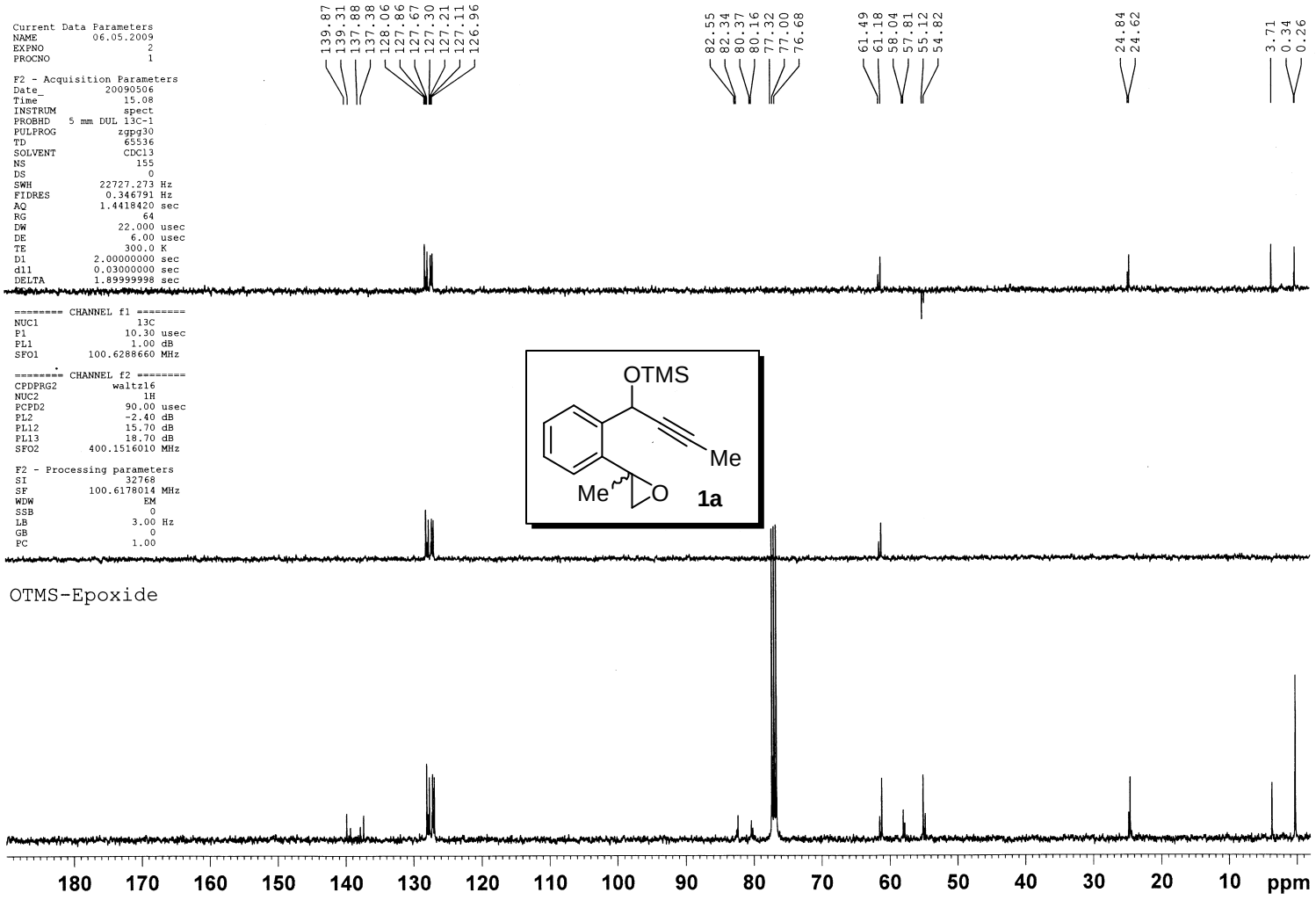
0.45
2.23
1.40
0.80
0.29
2.05
0.33
3.48
3.39
9.86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SOLVENT CDCl3
NS 155
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 64
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178014 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
139.87
139.31
137.88
137.38
128.06
127.86
127.67
127.30
127.21
127.11
126.96
82.55
82.34
80.37
80.16
77.32
77.00
76.68
61.49
61.18
58.04
57.81
55.12
54.82
24.84
24.62
3.71
0.34
0.26
OTMS
Me
Me
O
1a
OTMS-Epoxide
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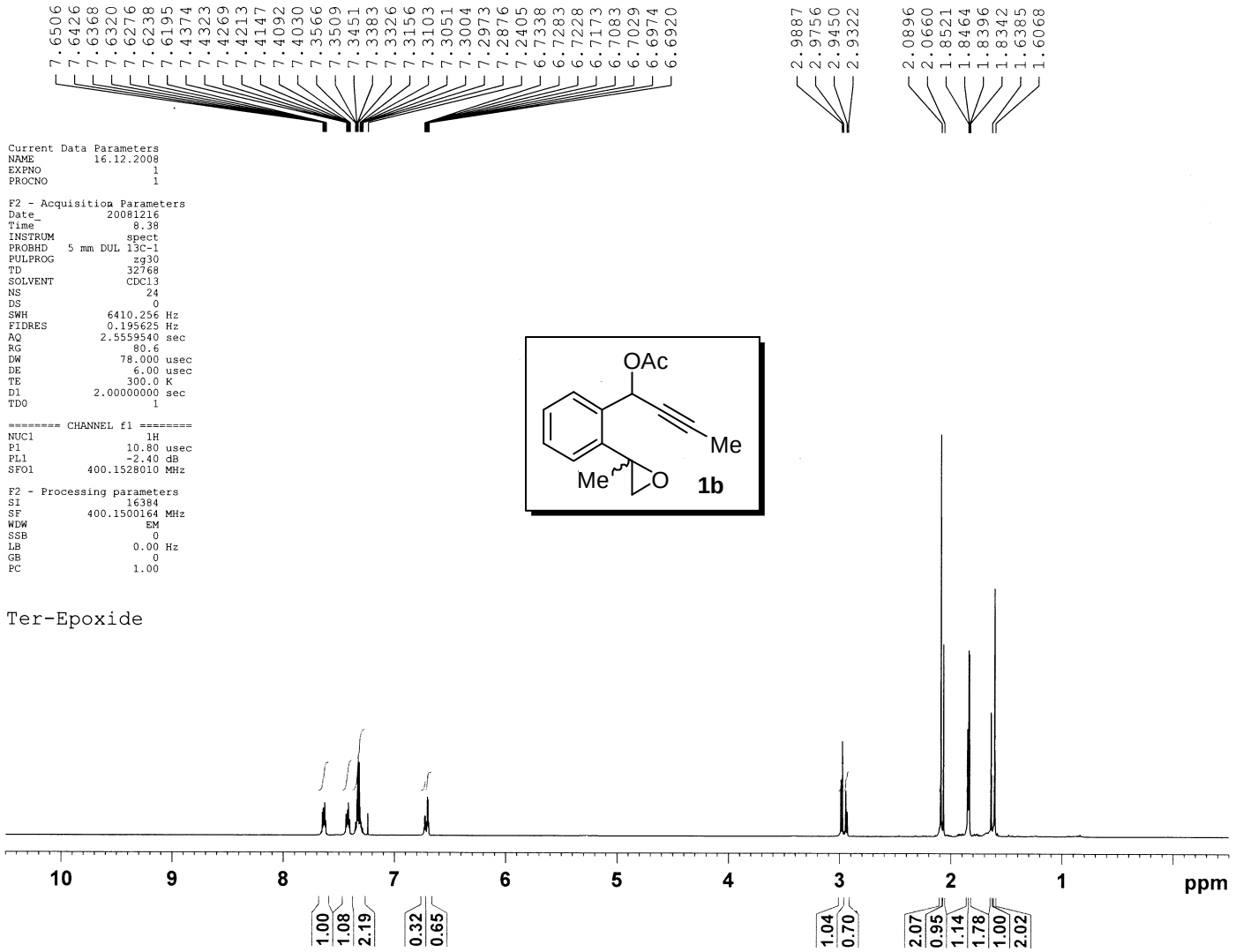
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7.6320
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7.6238
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7.4269
7.4213
7.4147
7.4092
7.4030
7.3566
7.3509
7.3451
7.3383
7.3326
7.3156
7.3103
7.3051
7.3004
7.2973
7.2876
7.2405
6.7338
6.7283
6.7228
6.7173
6.7083
6.7029
6.6974
6.6920
2.9887
2.9756
2.9450
2.9322
2.0896
2.0660
1.8521
1.8464
1.8396
1.8342
1.6385
1.6068
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PROCNO 1
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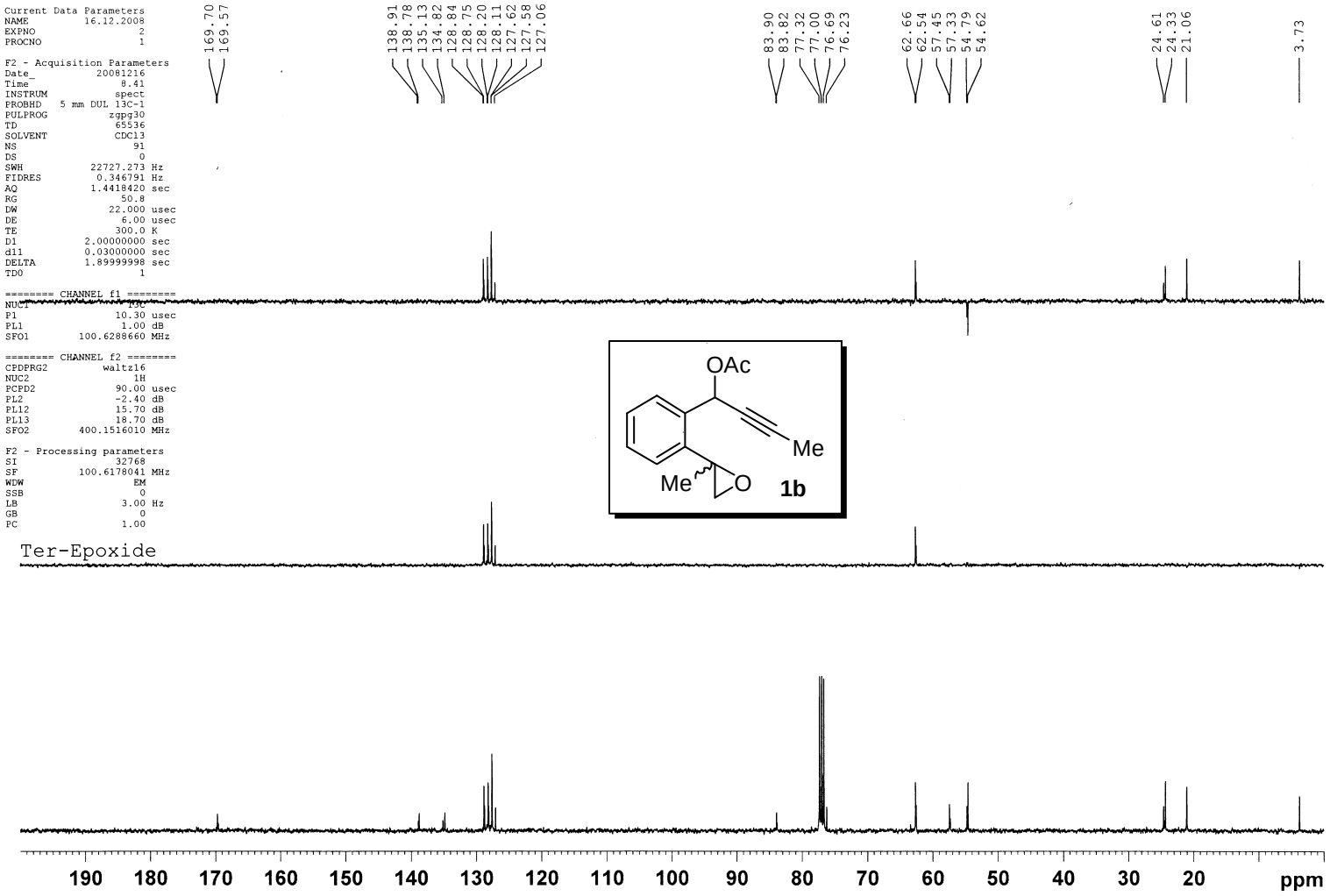
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 80.6
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.80 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500164 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
OAc
Me
Me
O
1b
Ter-Epoxide
10
9
8
7
6
5
4
3
2
1
ppm
1.00
1.08
2.19
0.32
0.65
1.04
0.70
2.07
0.95
1.14
1.78
1.00
2.02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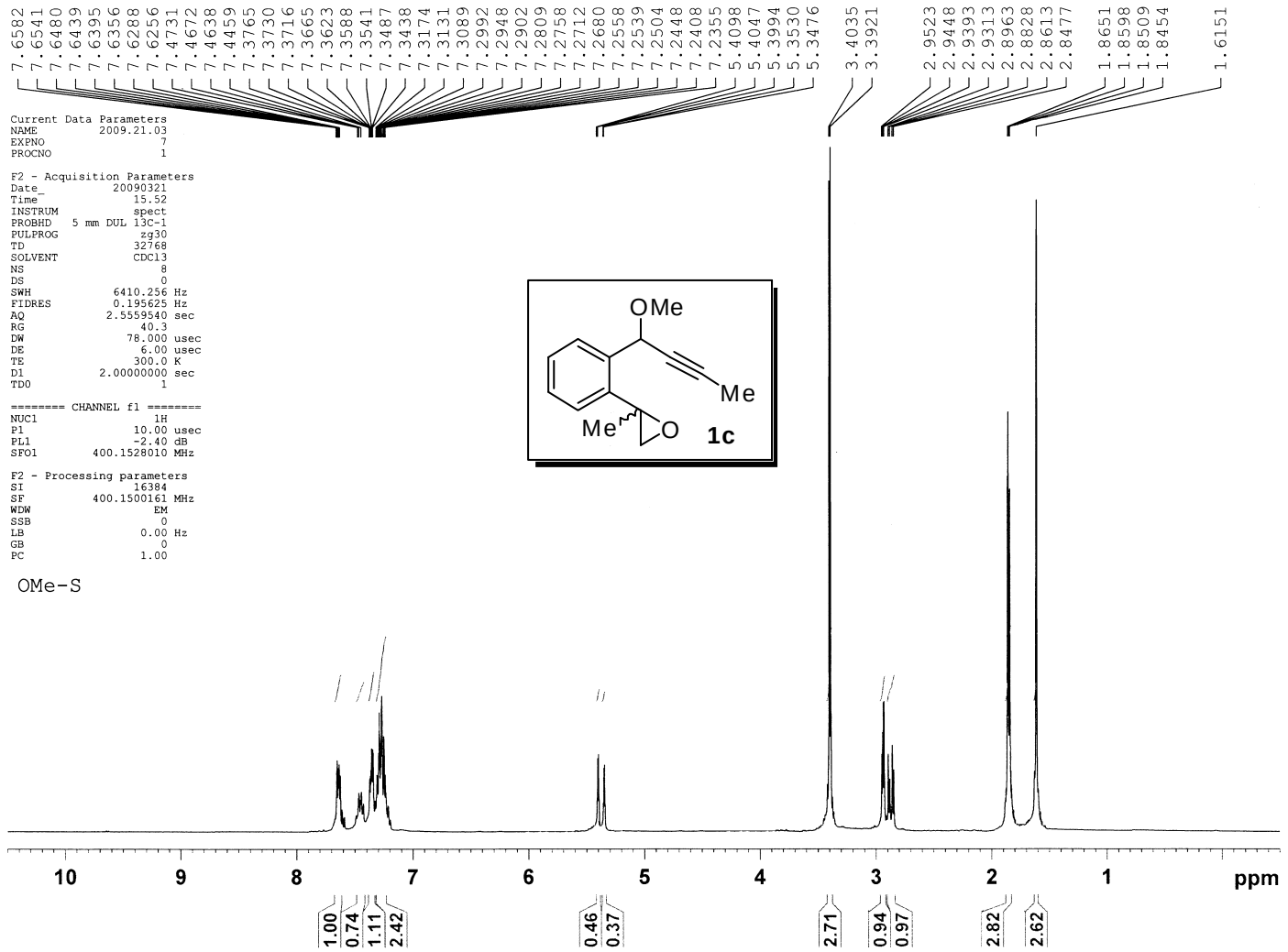
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 91
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 50.8
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178041 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
169.70
169.57
138.91
138.78
135.13
134.82
128.84
128.75
128.20
128.11
127.62
127.58
127.06
83.90
83.82
77.32
77.00
76.69
76.23
62.66
62.54
57.45
57.33
54.79
54.62
24.61
24.33
21.06
3.73
OAc
Me
Me
O
1b
Ter-Epoxide
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm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7.6541
7.6480
7.6439
7.6395
7.6356
7.6288
7.6256
7.4731
7.4672
7.4638
7.4459
7.3765
7.3730
7.3716
7.3665
7.3623
7.3588
7.3541
7.3487
7.3438
7.3174
7.3131
7.3089
7.2992
7.2948
7.2902
7.2809
7.2758
7.2712
7.2680
7.2558
7.2539
7.2504
7.2448
7.2408
7.2355
5.4098
5.4047
5.3994
5.3530
5.3476
3.4035
3.3921
2.9523
2.9448
2.9393
2.9313
2.8963
2.8828
2.8613
2.8477
1.8651
1.8598
1.8509
1.8454
1.6151
Current Data Parameters
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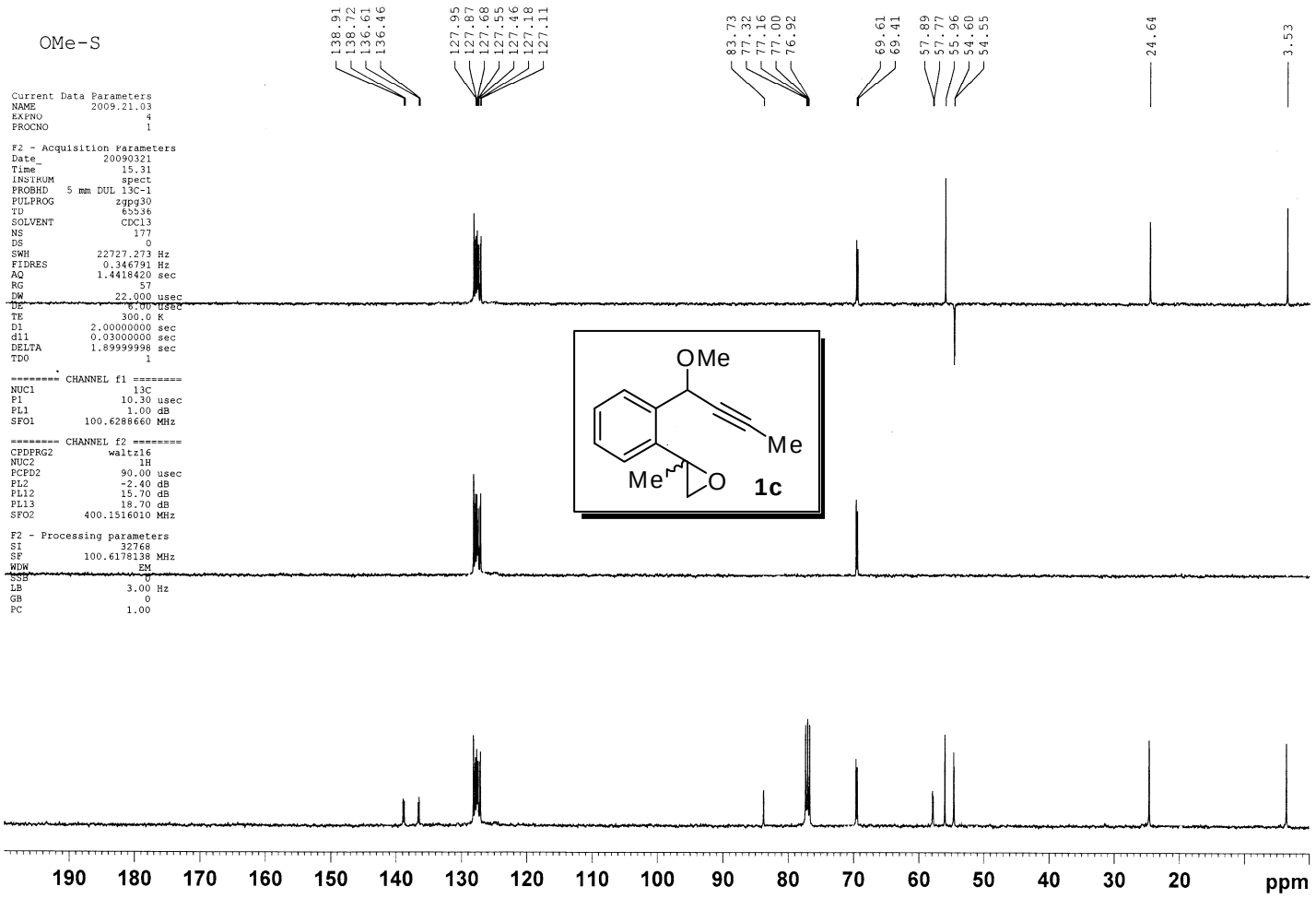
EXPNO 7
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090321
Time 15.52
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 8
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 40.3
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500161 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
OMe-S
OMe
Me
Me
O
1c
10
9
8
7
6
5
4
3
2
1
ppm
1.00
0.74
1.11
2.42
0.46
0.37
2.71
0.94
0.97
2.82
2.62


OMe-S
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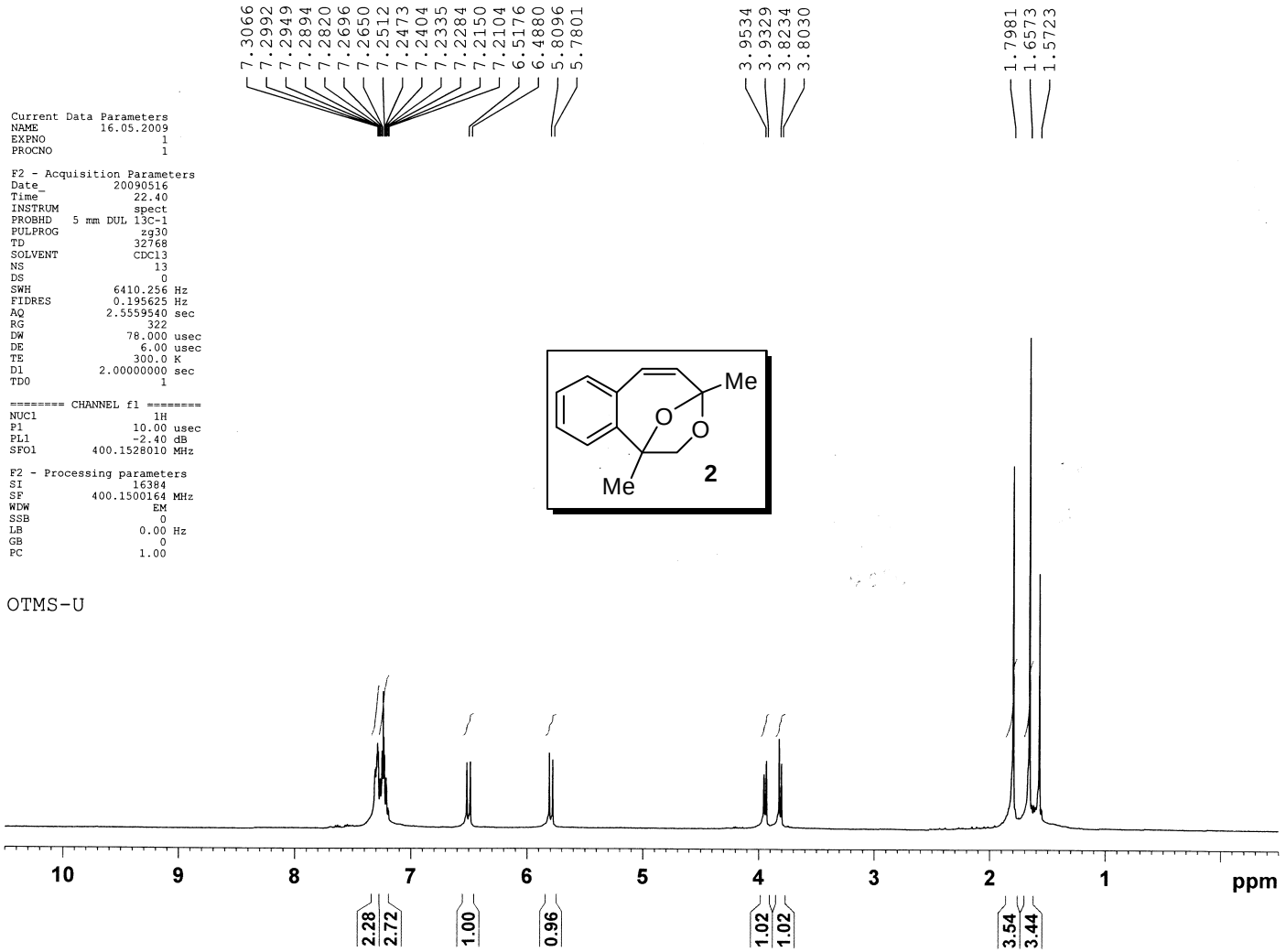
138.72
136.61
136.46
127.95
127.87
127.68
127.55
127.46
127.18
127.11
83.73
77.32
77.16
77.00
76.92
69.61
69.41
57.89
57.77
55.96
54.60
54.55
24.64
3.53
Current Data Parameters
NAME 2009.21.03
EXPNO 4
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090321
Time 15.31
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 177
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 57
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178138 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
OMe
Me
Me
O
1c
190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 ppm


7.3066
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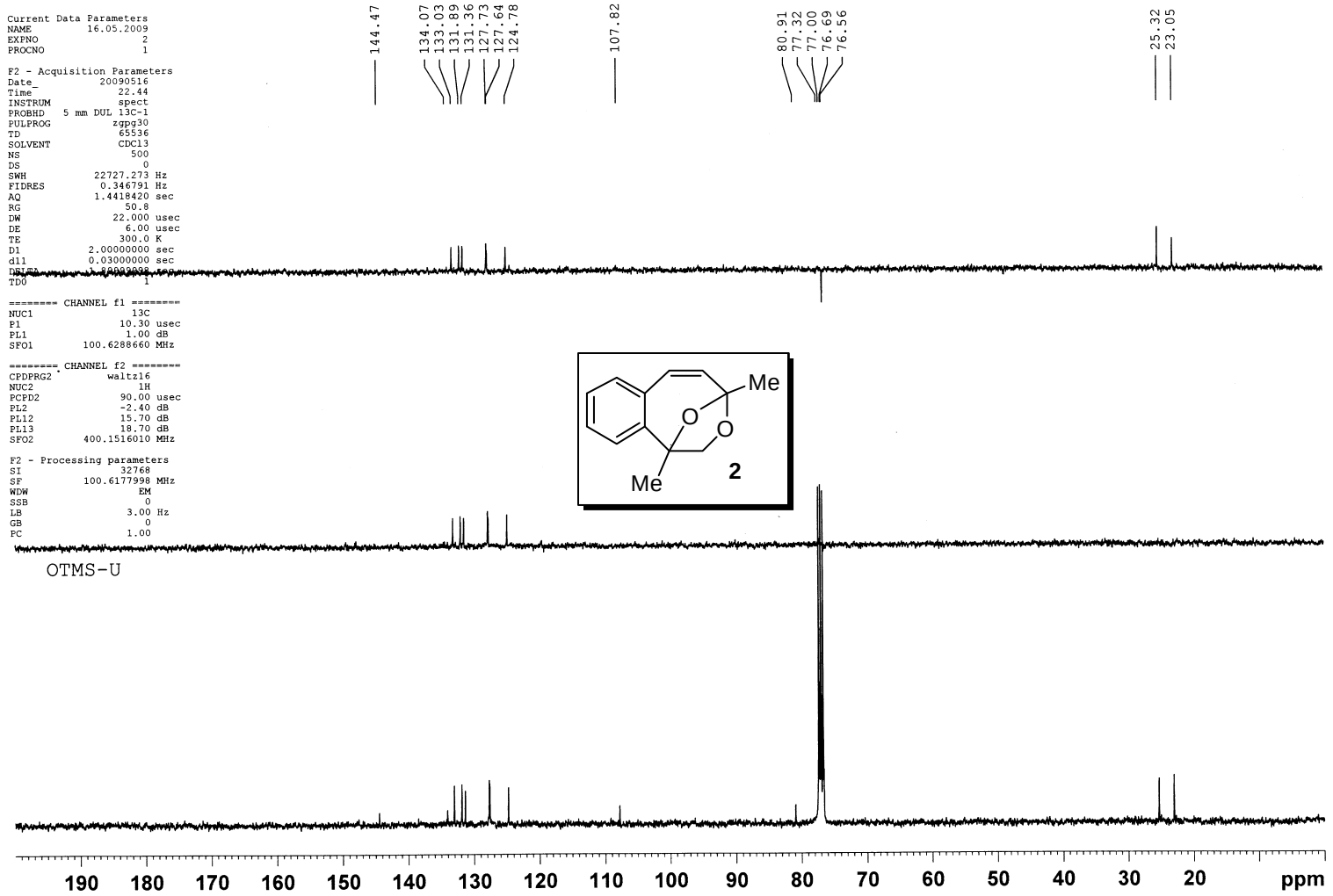
7.2512
7.2473
7.2404
7.2335
7.2284
7.2150
7.2104
6.5176
6.4880
5.8096
5.7801
3.9534
3.9329
3.8234
3.8030
1.7981
1.6573
1.5723
Current Data Parameters
NAME 16.05.2009
EXPNO 1
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090516
Time 22.40
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 13
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 322
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500164 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
Me
O
O
Me
2
OTMS-U
10
9
8
7
6
5
4
3
2
1
ppm
2.28
2.72
1.00
0.96
1.02
1.02
3.54
3.44


144.47
134.07
133.03
131.89
131.36
127.73
127.64
124.78
107.82
80.91
77.32
77.00
76.69
76.56
25.32
23.05
Current Data Parameters
NAME 16.05.2009
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090516
Time 22.44
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 500
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 50.8
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6177998 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
Me
O
O
Me
2
OTMS-U
190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 ppm

```
Current Data Parameters
NAME        RC4-AU-P-166
EXPNO                  1
PROCNO                 1

F2 - Acquisition Parameters
Date_           20090312
Time              22.06
INSTRUM           spect
PROBHD   5 mm QNP  1H/1
PULPROG              zg
TD                32768
SOLVENT           CDCl3
NS                   16
DS                    0
SWH            9615.385 Hz
FIDRES         0.293438 Hz
AQ             1.7039860 sec
RG                  256
DW               52.000 usec
DE                6.50 usec
TE                298.7 K
D1           1.00000000 sec
MCREST       0.00000000 sec
MCWRK        0.01500000 sec

======== CHANNEL f1 ========
NUC1                 1H
P1                10.50 usec
PL1               -4.00 dB
SFO1        599.2035952 MHz

F2 - Processing parameters
SI                32768
SF          599.2000255 MHz
WDW                  no
SSB                   0
LB                 0.00 Hz
GB                    0
PC                 1.00

1D NMR plot parameters
CX                20.00 cm
CY                20.00 cm
F1P              10.000 ppm
F1             5992.00 Hz
F2P              -0.500 ppm
F2             -299.60 Hz
PPMCM           0.52500 ppm/cm
HZCM          314.58002 Hz/cm
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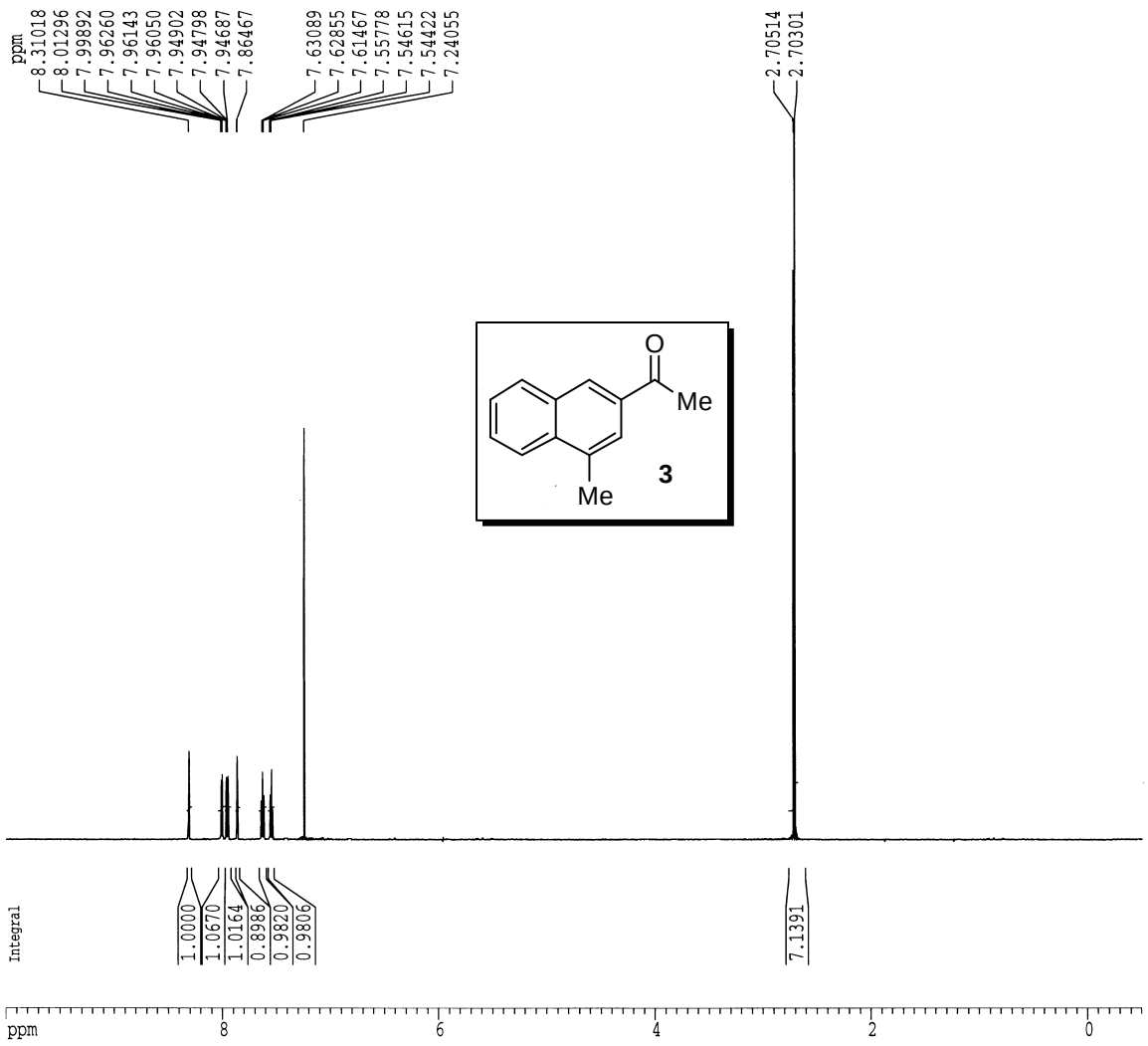

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Current Data Parameters
NAME       RC4-AU-P-166
EXPNO                 2
PROCNO                1

F2 - Acquisition Parameters
Date_          20090312
Time              22.07
INSTRUM           spect
PROBHD   5 mm QNP  1H/1
PULPROG           zgpg
TD               32768
SOLVENT         H2O+D2O
NS                6144
DS                   0
SWH          45045.047 Hz
FIDRES        1.374666 Hz
AQ           0.3637748 sec
RG                2048
DW              11.100 usec
DE               6.50 usec
TE              298.7 K
D1          3.00000000 sec
d11         0.03000000 sec
DELTA       2.90000010 sec
MCREST      0.00000000 sec
MCWRK       0.01500000 sec

======== CHANNEL f1 ========
NUC1                13C
P1                4.80 usec
PL1               0.00 dB
SFO1       150.6855336 MHz

======== CHANNEL f2 ========
CPDPRG2         waltz16
NUC2                1H
PCPD2            92.00 usec
PL2             120.00 dB
PL12              9.00 dB
PL13             14.00 dB
SFO2       599.2029960 MHz

F2 - Processing parameters
SI                65536
SF         150.6689647 MHz
WDW                  EM
SSB                   0
LB                 3.00 Hz
GB                    0
PC                 0.50

1D NMR plot parameters
CX                20.00 cm
CY                10.00 cm
F1P              220.000 ppm
F1             33147.17 Hz
F2P                0.000 ppm
F2                 0.00 Hz
PPMCM          11.00000 ppm/cm
HZCM         1657.35852 Hz/cm
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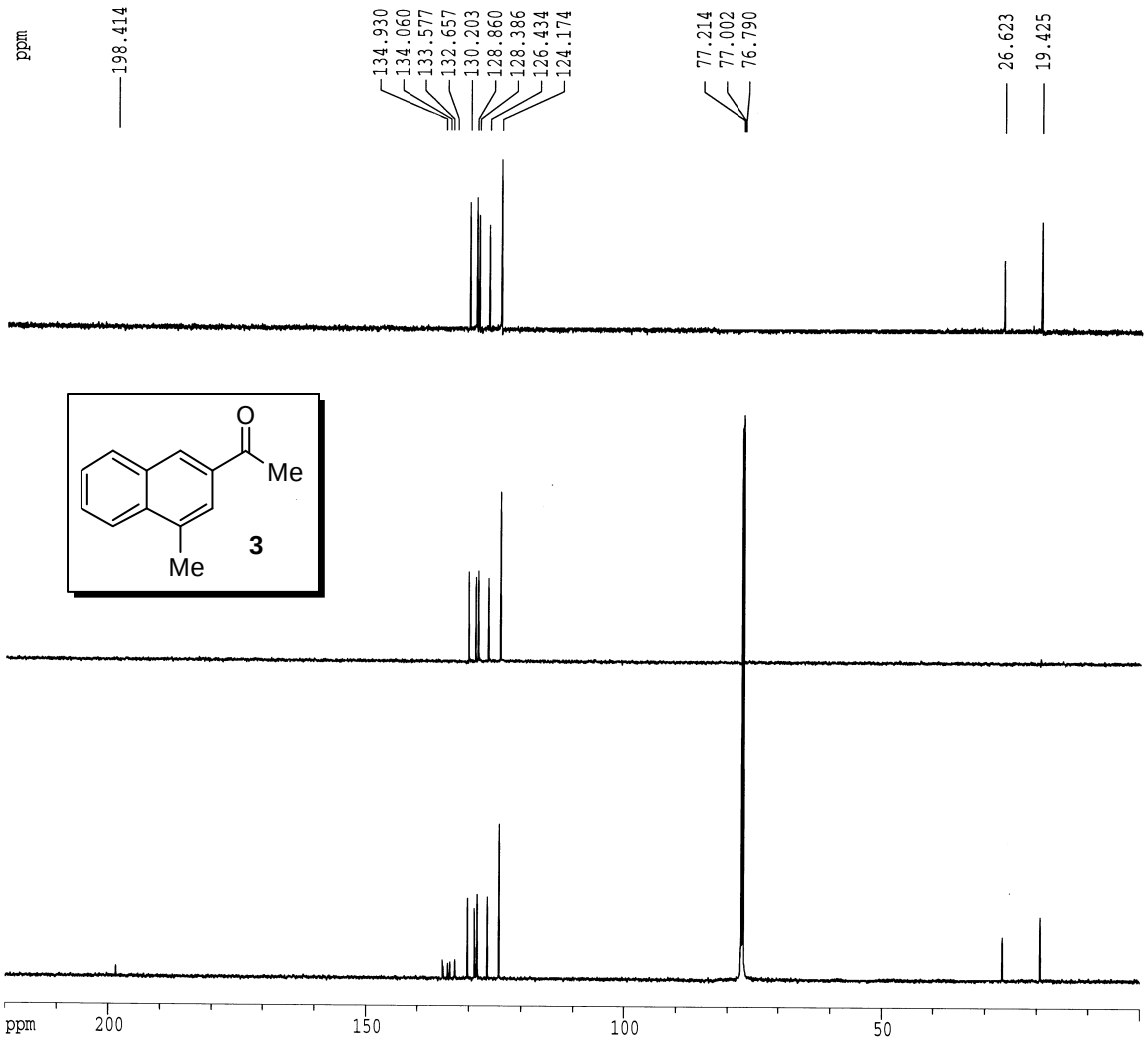

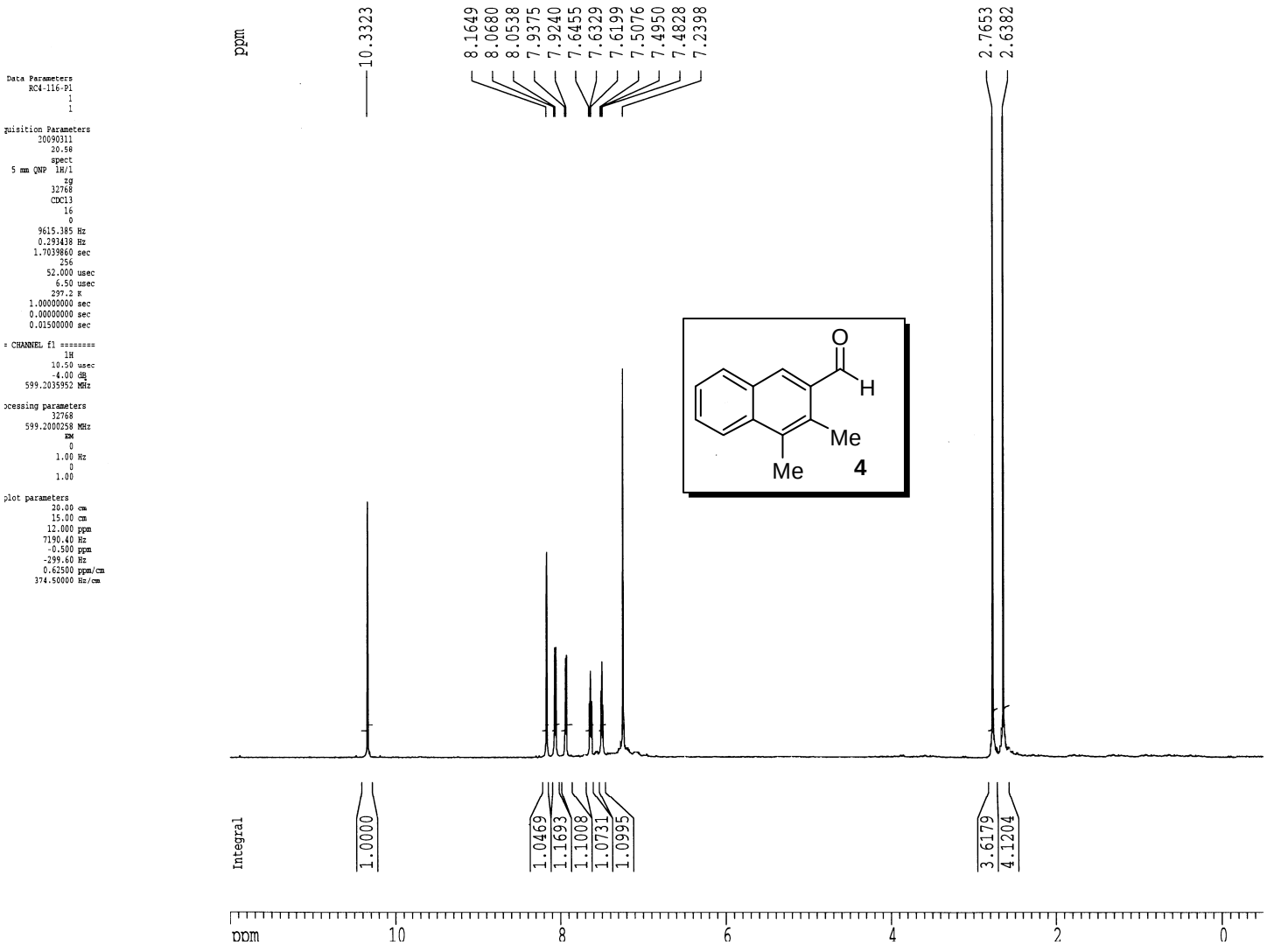
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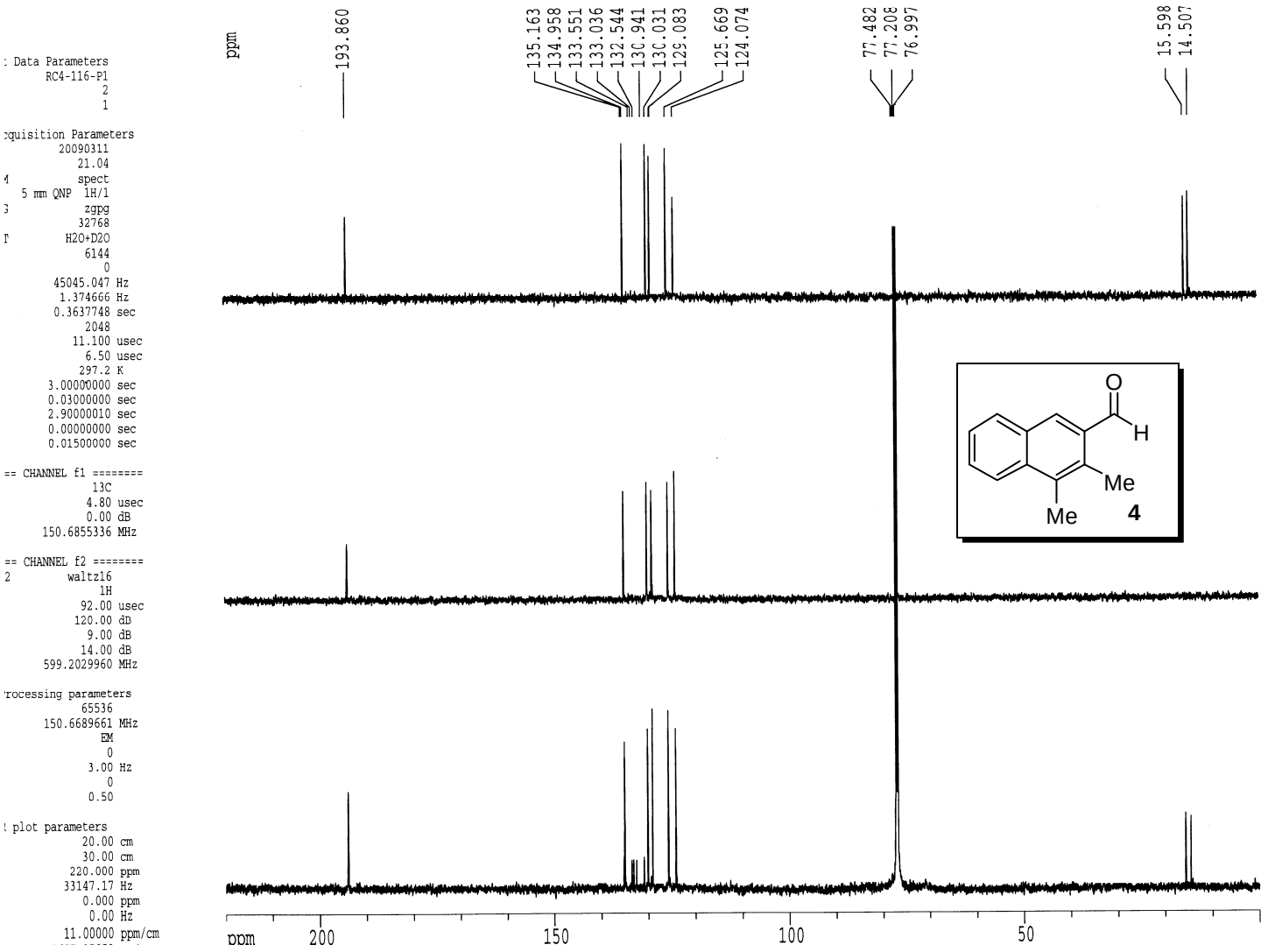
RC4-116-P1
1
1
guisition Parameters
20090311
20.58
spect
5 mm QNP 1H/1
zg
32768
CDCl3
16
0
9615.385 Hz
0.293438 Hz
1.7039860 sec
256
52.000 usec
6.50 usec
297.2 K
1.00000000 sec
0.00000000 sec
0.01500000 sec
= CHANNEL f1 ========
1H
10.50 usec
-4.00 dB
599.2035952 MHz
ocessing parameters
32768
599.2000258 MHz
EM
0
1.00 Hz
0
1.00
plot parameters
20.00 cm
15.00 cm
12.000 ppm
7190.40 Hz
-0.500 ppm
-299.60 Hz
0.62500 ppm/cm
374.50000 Hz/cm
ppm
10.3323
8.1649
8.0680
8.0538
7.9375
7.9240
7.6455
7.6329
7.6199
7.5076
7.4950
7.4828
7.2398
2.7653
2.6382
O
H
Me
Me
4
Integral
1.0000
1.0469
1.1693
1.1008
1.0731
1.0995
3.6179
4.1204
ppm
10
8
6
4
2
0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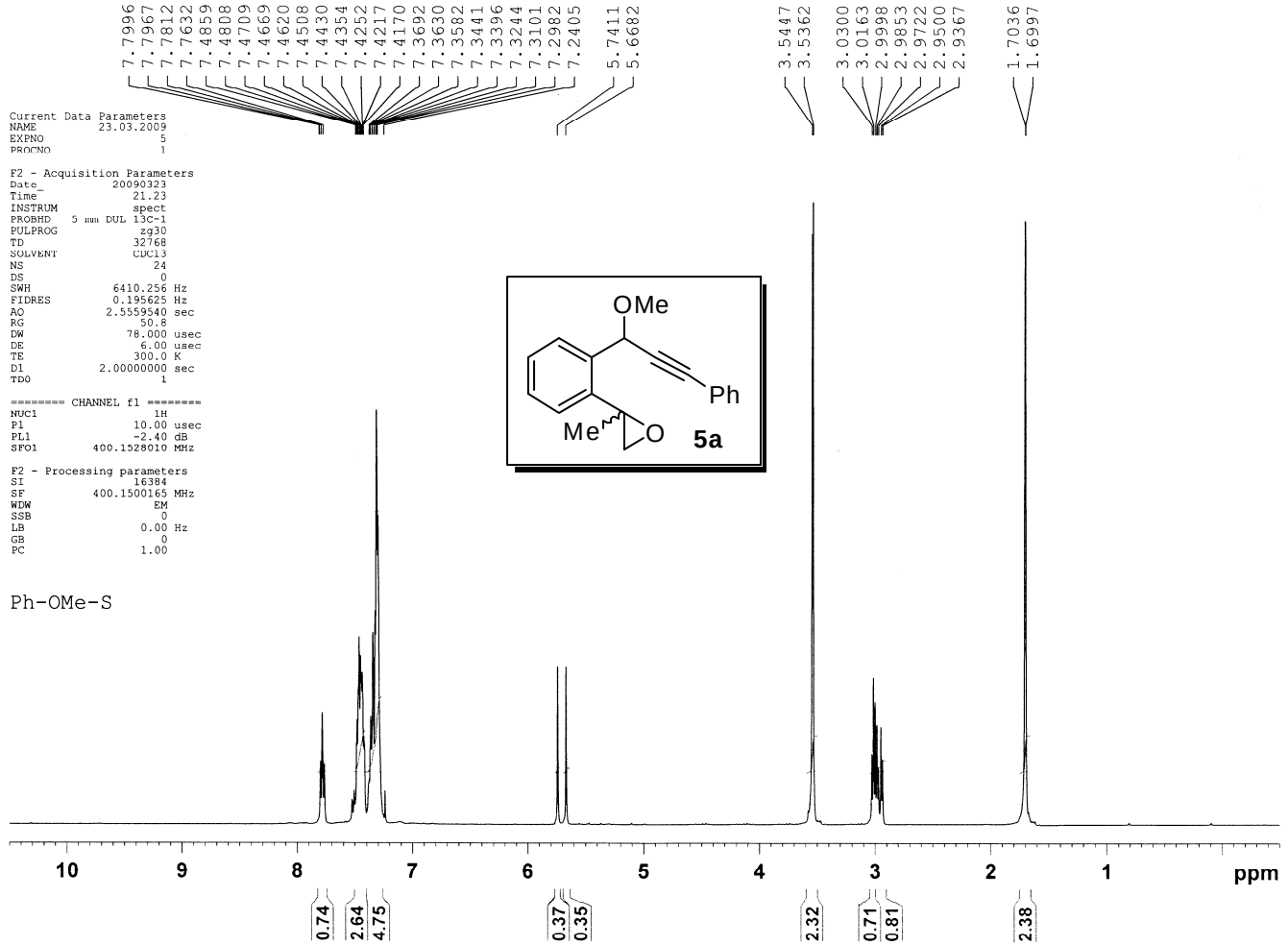
RC4-116-P1
2
1
cquisition Parameters
20090311
21.04
spect
5 mm QNP 1H/1
zgpg
32768
H2O+D2O
6144
0
45045.047 Hz
1.374666 Hz
0.3637748 sec
2048
11.100 usec
6.50 usec
297.2 K
3.00000000 sec
0.03000000 sec
2.90000010 sec
0.00000000 sec
0.01500000 sec
== CHANNEL f1 ========
13C
4.80 usec
0.00 dB
150.6855336 MHz
== CHANNEL f2 ========
waltz16
1H
92.00 usec
120.00 dB
9.00 dB
14.00 dB
599.2029960 MHz
rocessing parameters
65536
150.6689661 MHz
EM
0
3.00 Hz
0
0.50
plot parameters
20.00 cm
30.00 cm
220.000 ppm
33147.17 Hz
0.000 ppm
0.00 Hz
11.00000 ppm/cm
ppm
193.860
135.163
134.958
133.551
133.036
132.544
130.941
130.031
128.083
125.669
124.074
77.482
77.208
76.997
15.598
14.507
O
H
Me
Me
4
ppm
200
150
100
50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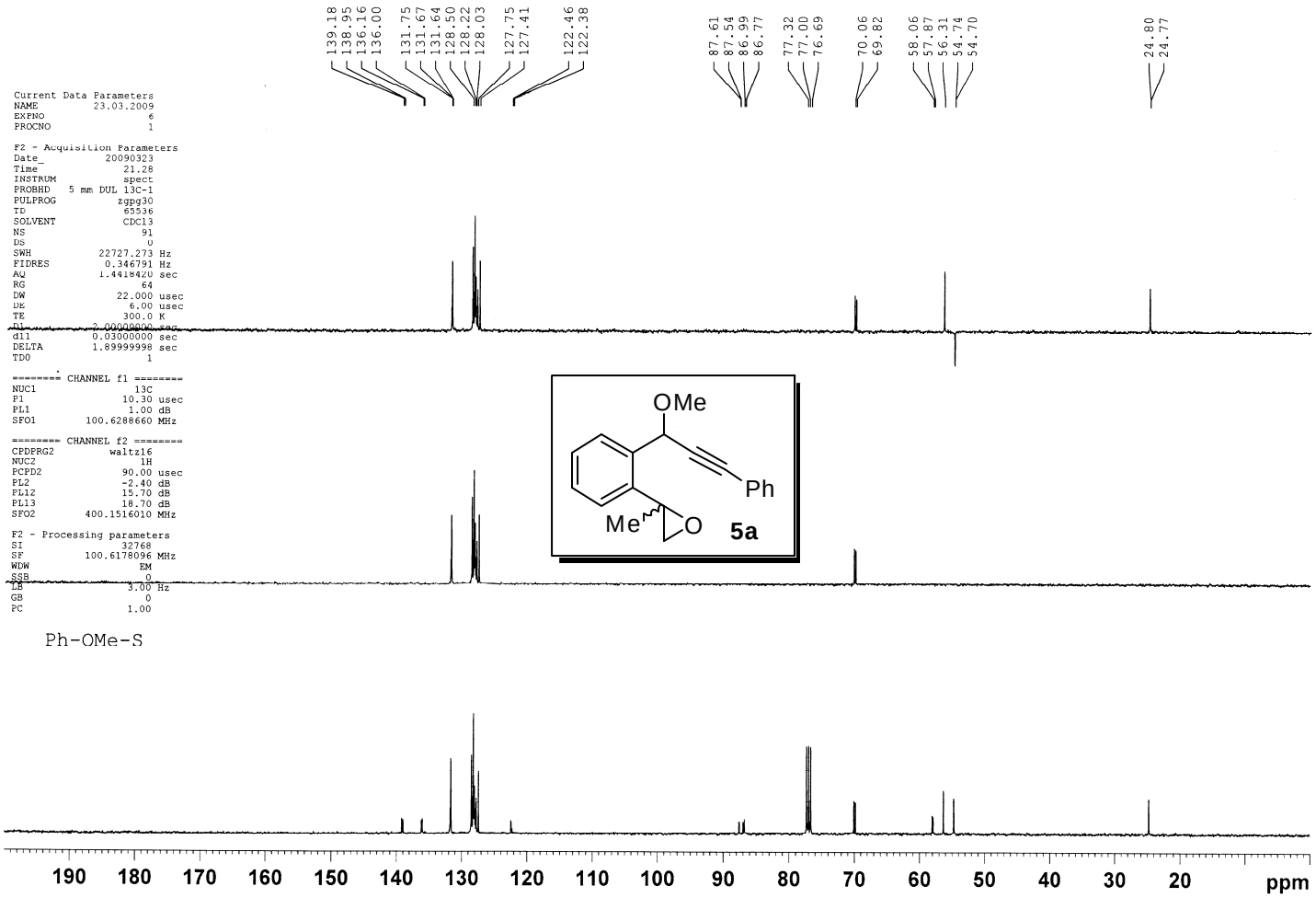
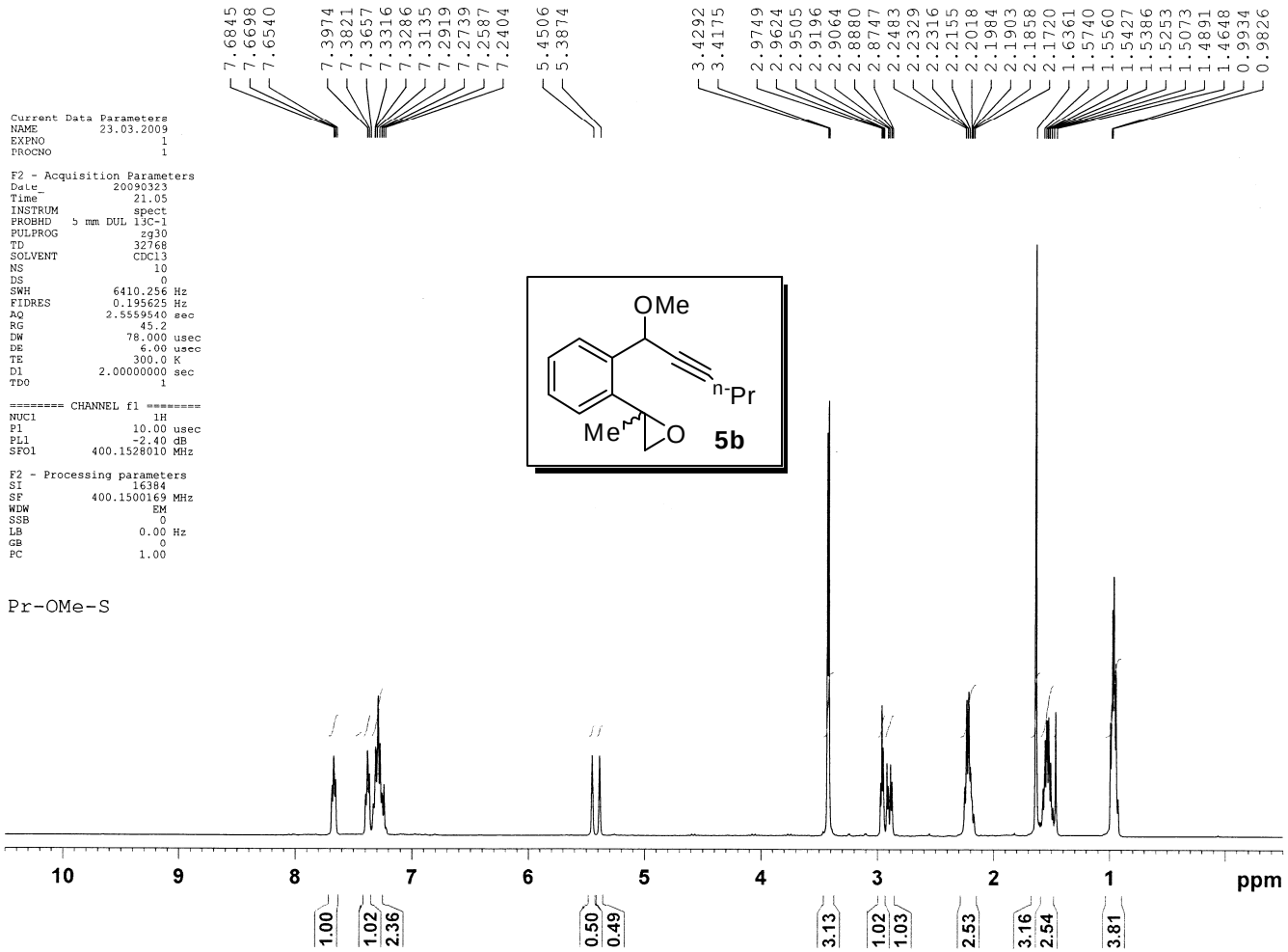
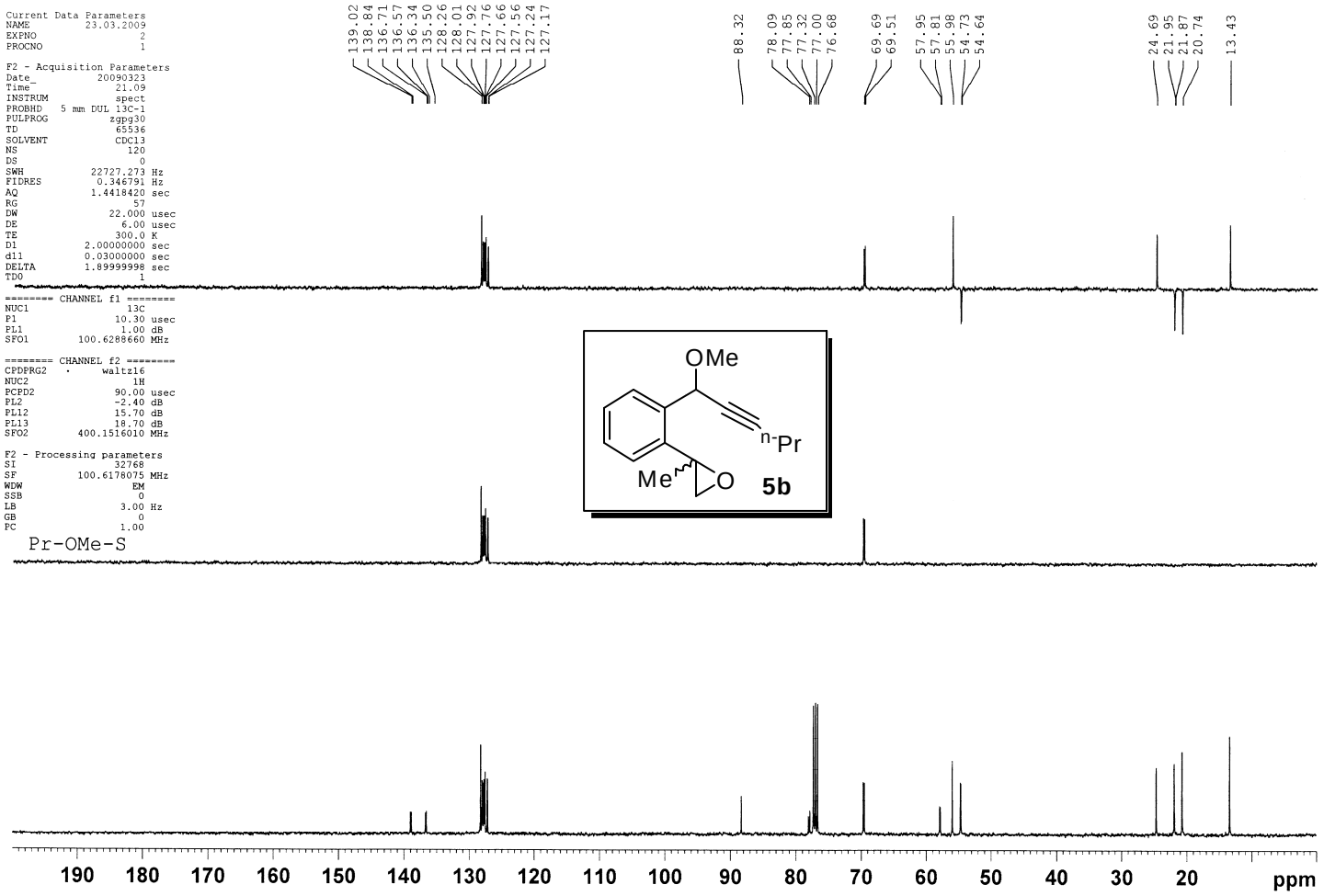
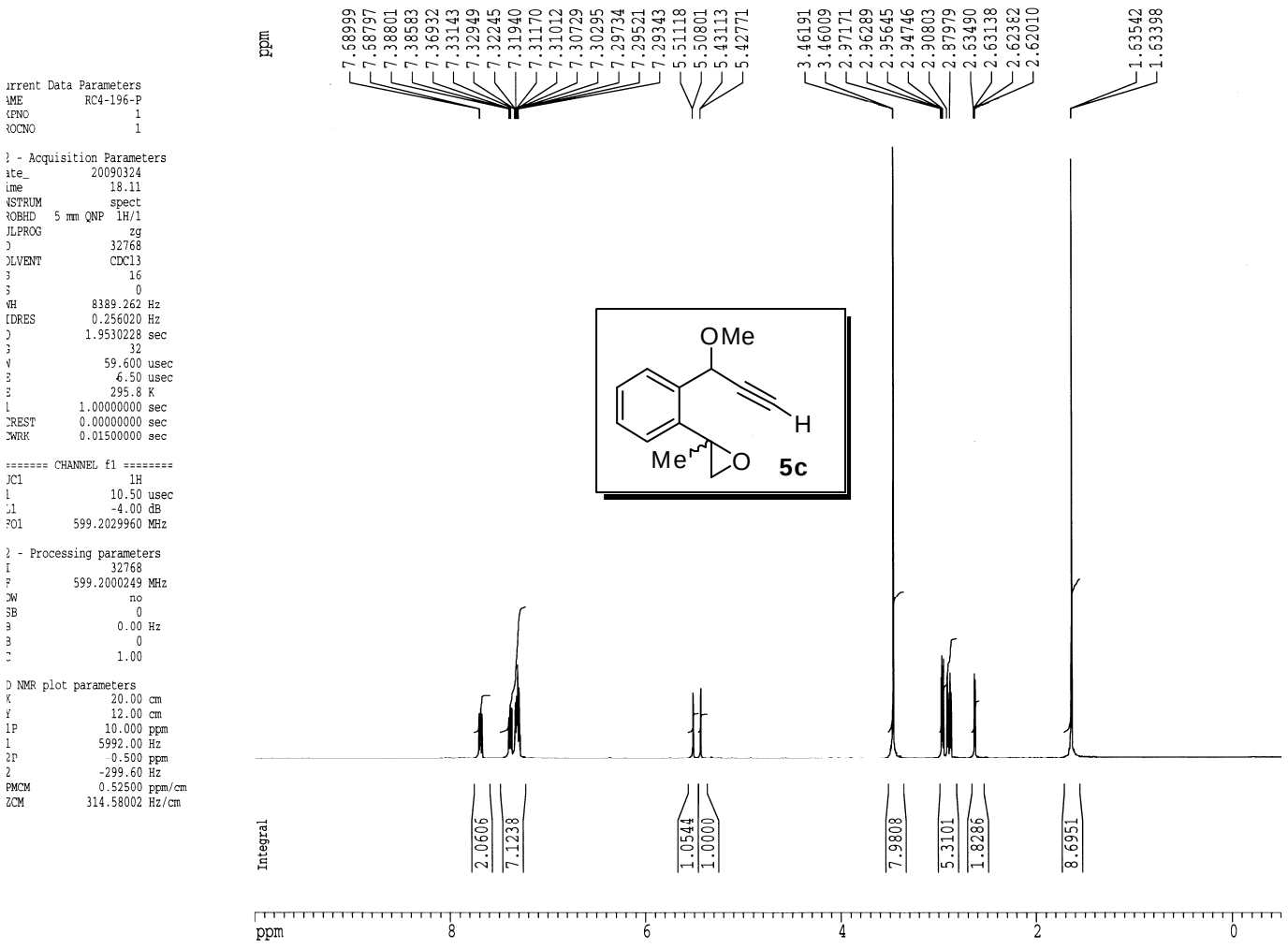
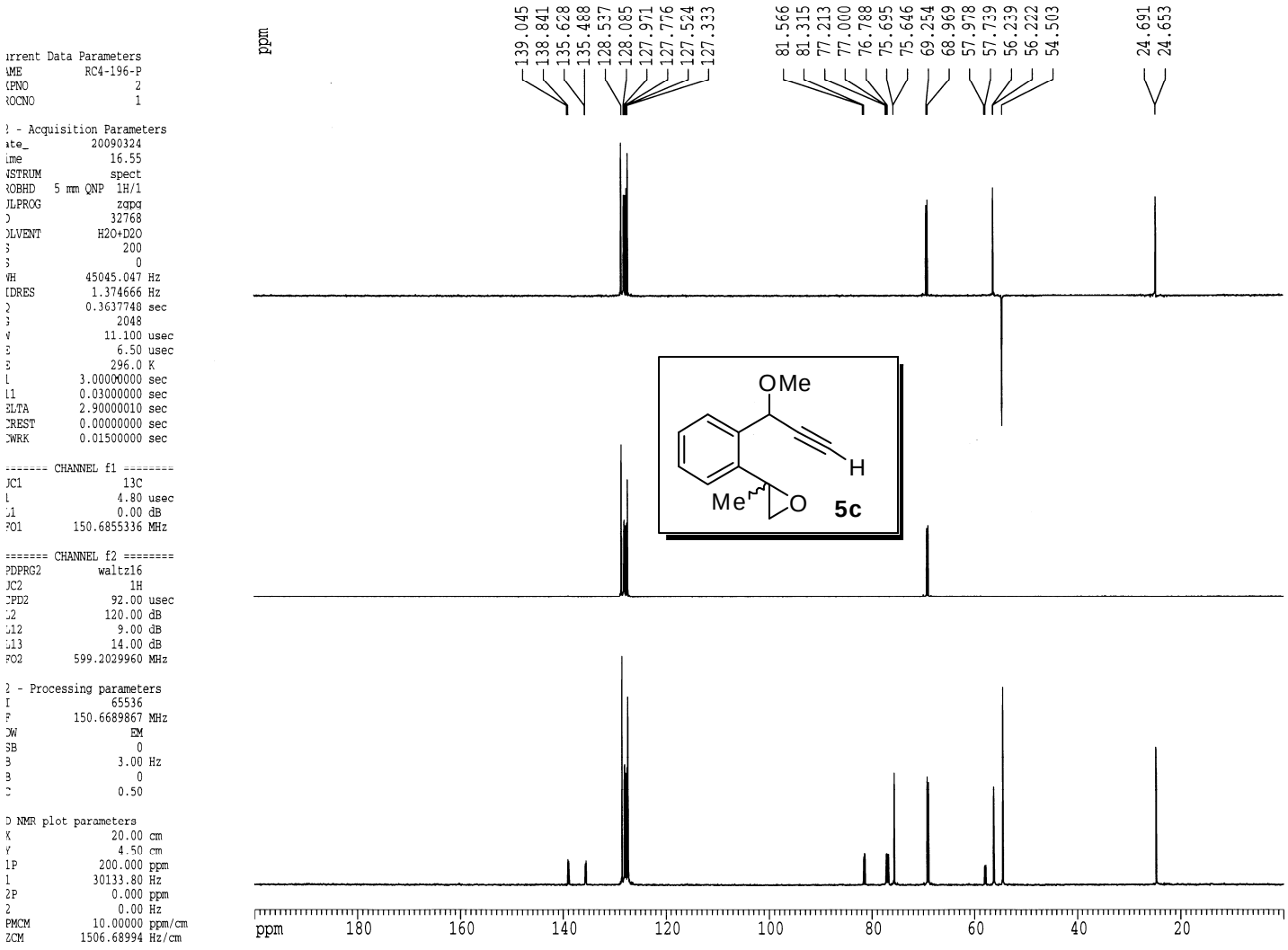
7.4859
7.4808
7.4709
7.4669
7.4620
7.4508
7.4430
7.4354
7.4252
7.4217
7.4170
7.3692
7.3630
7.3582
7.3441
7.3396
7.3244
7.3101
7.2982
7.2405
5.7411
5.6682
3.5447
3.5362
3.0300
3.0163
2.9998
2.9853
2.9722
2.9500
2.9367
1.7036
1.6997
Current Data Parameters
NAME 23.03.2009
EXPNO 5
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090323
Time 21.23
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 50.8
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500165 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
Ph-OMe-S
OMe
Ph
Me
O
5a
10
9
8
7
6
5
4
3
2
1
ppm
0.74
2.64
4.75
0.37
0.35
2.32
0.71
0.81
2.38

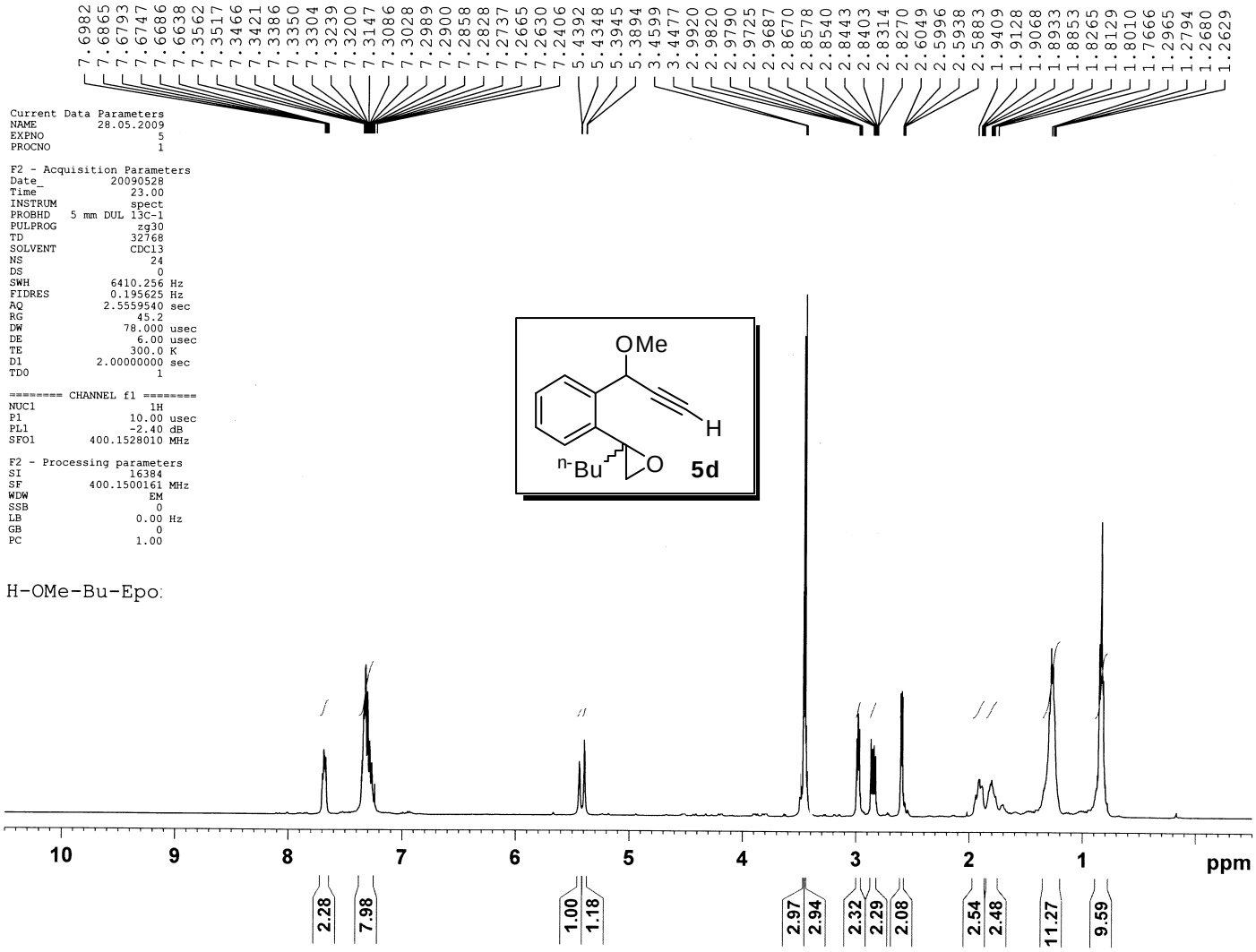

139.18
138.95
136.16
136.00
131.75
131.67
131.64
128.50
128.22
128.03
127.75
127.41
122.46
122.38
87.61
87.54
86.99
86.77
77.32
77.00
76.69
70.06
69.82
58.06
57.87
56.31
54.74
54.70
24.80
24.77
Current Data Parameters
NAME 23.03.2009
EXPNO 6
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090323
Time 21.28
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 91
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 64
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178096 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
OMe
Ph
Me
O
5a
Ph-OMe-S
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm

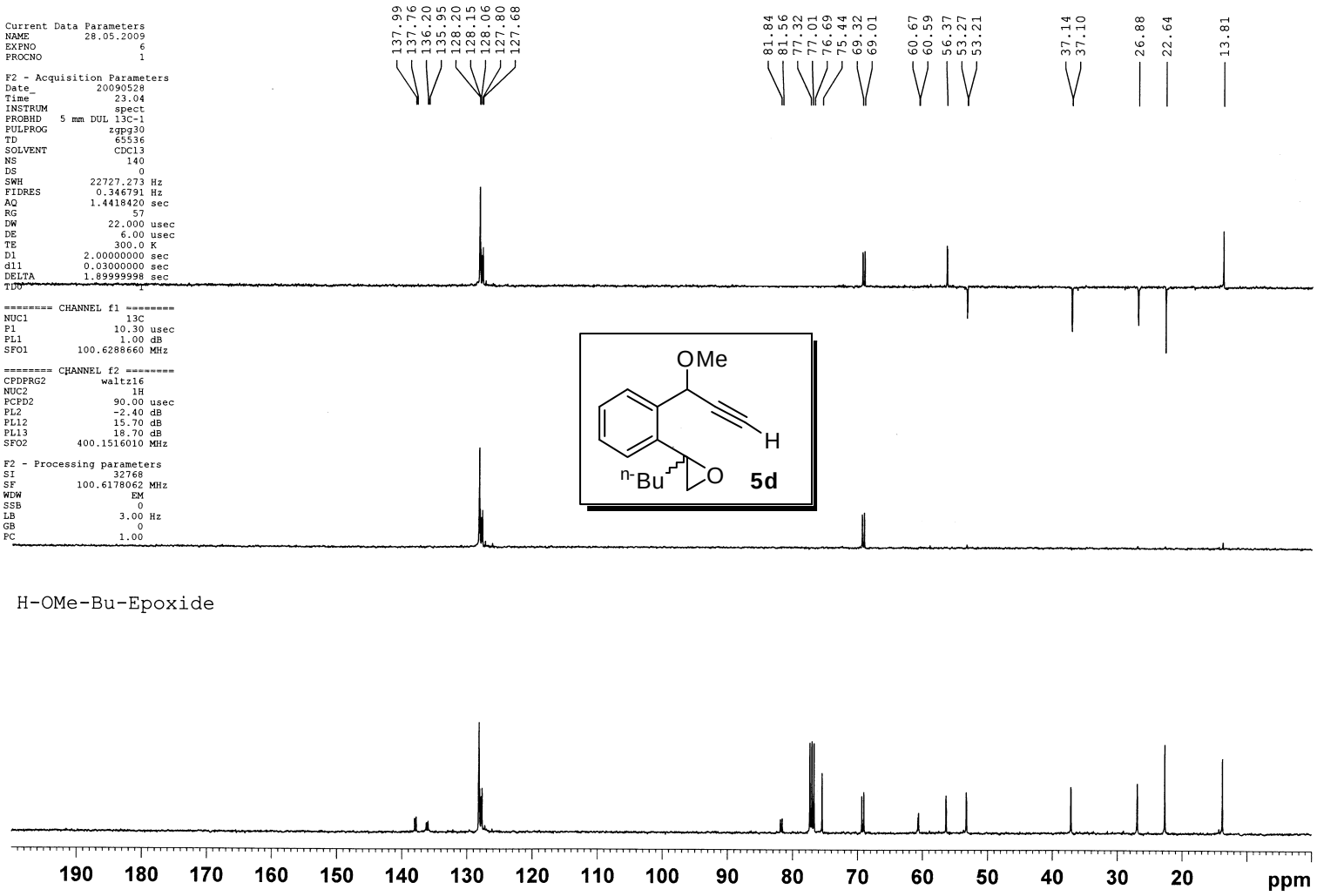

7.6845
7.6698
7.6540
7.3974
7.3821
7.3657
7.3316
7.3286
7.3135
7.2919
7.2739
7.2587
7.2404
5.4506
5.3874
3.4292
3.4175
2.9749
2.9624
2.9505
2.9196
2.9064
2.8880
2.8747
2.2483
2.2329
2.2316
2.2155
2.2018
2.1984
2.1903
2.1858
2.1720
1.6361
1.5740
1.5560
1.5427
1.5386
1.5253
1.5073
1.4891
1.4648
0.9934
0.9826
Current Data Parameters
NAME 23.03.2009
EXPNO 1
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090323
Time 21.05
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 10
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 45.2
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500169 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
Pr-OMe-S
OMe
n-Pr
Me
O
5b
10
9
8
7
6
5
4
3
2
1
ppm
1.00
1.02
2.36
0.50
0.49
3.13
1.02
1.03
2.53
3.16
2.54
3.81


Current Data Parameters
NAME 23.03.2009
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090323
Time 21.09
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 120
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 57
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178075 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
Pr-OMe-S
139.02
138.84
136.71
136.57
136.34
135.50
128.26
128.01
127.92
127.76
127.66
127.56
127.24
127.17
88.32
78.09
77.85
77.32
77.00
76.68
69.69
69.51
57.95
57.81
55.98
54.73
54.64
24.69
21.95
21.87
20.74
13.43
OMe
n-Pr
Me
O
5b
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm

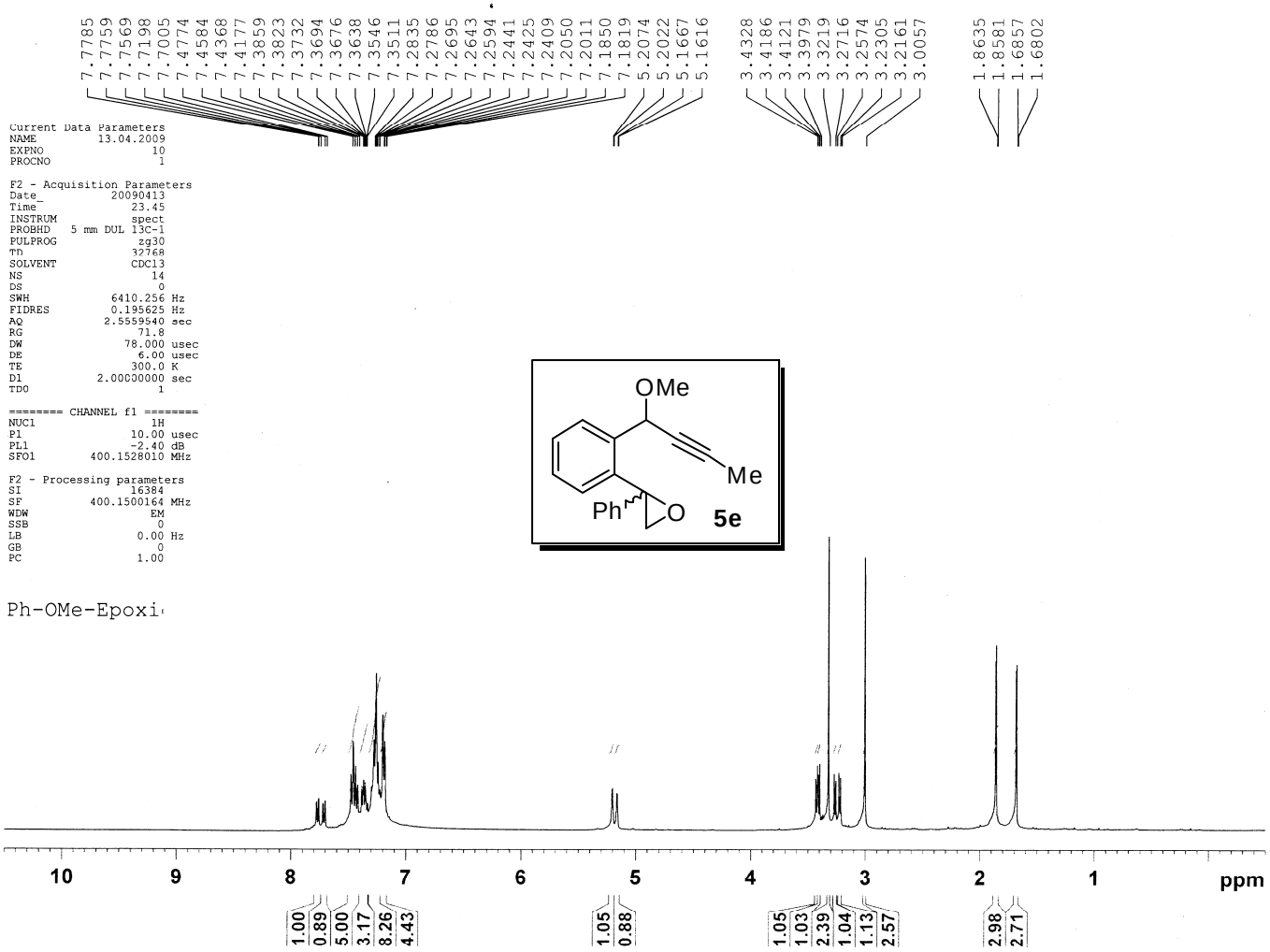

urrent Data Parameters
AME RC4-196-P
XPNO 1
ROCNO 1
2 - Acquisition Parameters
ate_ 20090324
ime 18.11
NSTRUM spect
ROBHD 5 mm QNP 1H/1
ULPROG zg
D 32768
OLVENT CDCl3
G 16
S 0
WH 8389.262 Hz
IDRES 0.256020 Hz
D 1.9530228 sec
G 32
W 59.600 usec
G 6.50 usec
G 295.8 K
L 1.00000000 sec
CREST 0.00000000 sec
CWRK 0.01500000 sec
======= CHANNEL f1 ========
UC1 1H
L 10.50 usec
L1 -4.00 dB
FO1 599.2029960 MHz
2 - Processing parameters
I 32768
F 599.2000249 MHz
OW no
SB 0
B 0.00 Hz
B 0
C 1.00
D NMR plot parameters
X 20.00 cm
Y 12.00 cm
1P 10.000 ppm
L 5992.00 Hz
2P -0.500 ppm
2 -299.60 Hz
PMCM 0.52500 ppm/cm
ZCM 314.58002 Hz/cm
ppm
7.58999
7.58797
7.38801
7.38583
7.36932
7.33143
7.32949
7.32245
7.31940
7.31170
7.31012
7.30729
7.30295
7.29734
7.29521
7.29343
5.51118
5.50801
5.43113
5.42771
3.46191
3.46009
2.97171
2.96289
2.95645
2.94746
2.90803
2.87979
2.53490
2.53138
2.52382
2.52010
1.53542
1.53398
OMe
H
Me
O
5c
Integral
2.0606
7.1238
1.0544
1.0000
7.9808
5.3101
1.8286
8.6951
ppm
8
6
4
2
0

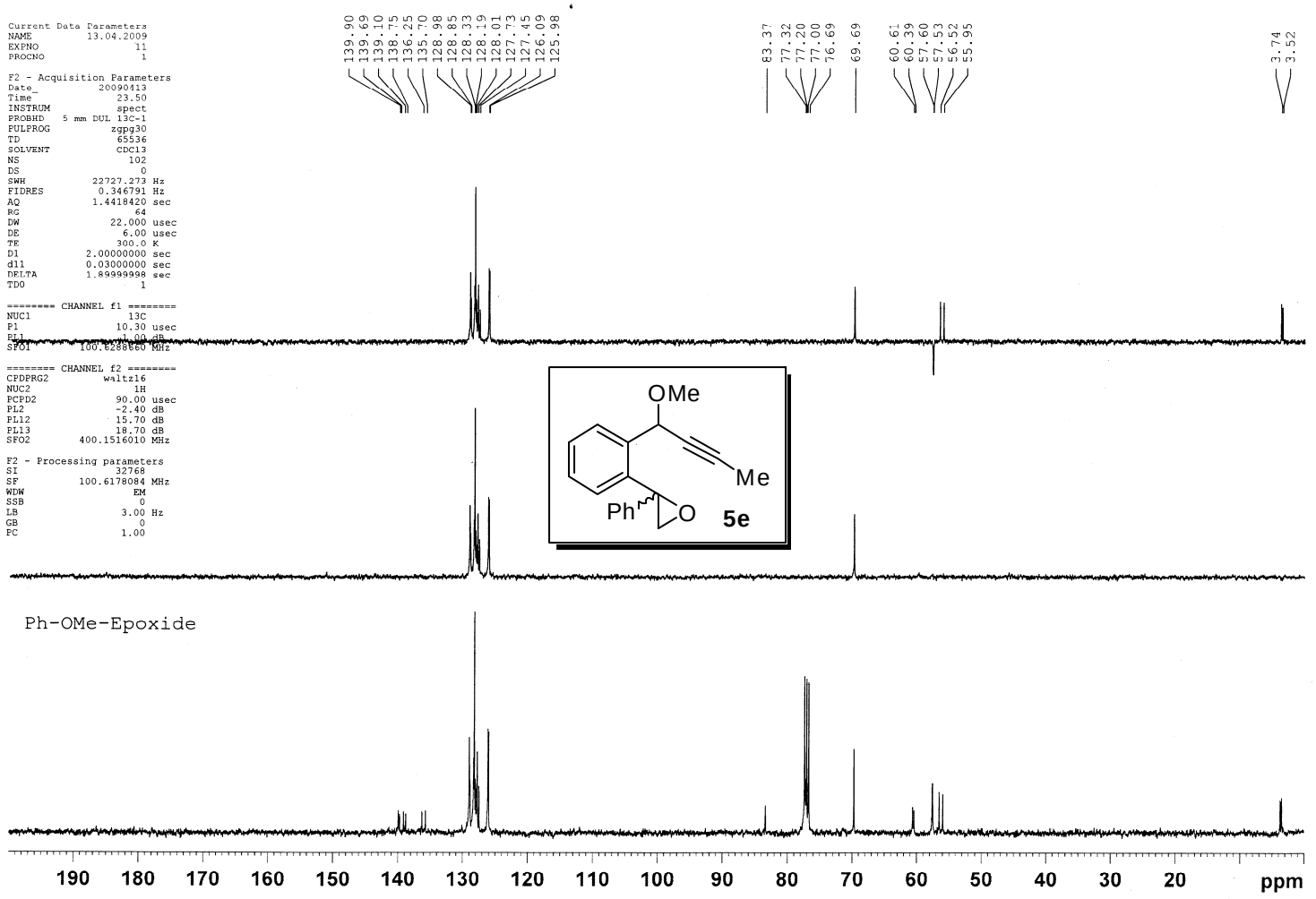

ppm
139.045
138.841
135.628
135.488
128.537
128.065
127.971
127.776
127.524
127.333
81.566
81.315
77.213
77.000
76.788
75.695
75.646
69.254
68.969
57.978
57.739
56.239
56.222
54.503
24.691
24.653
OMe
H
Me
O
5c
ppm
180
160
140
120
100
80
60
40
20

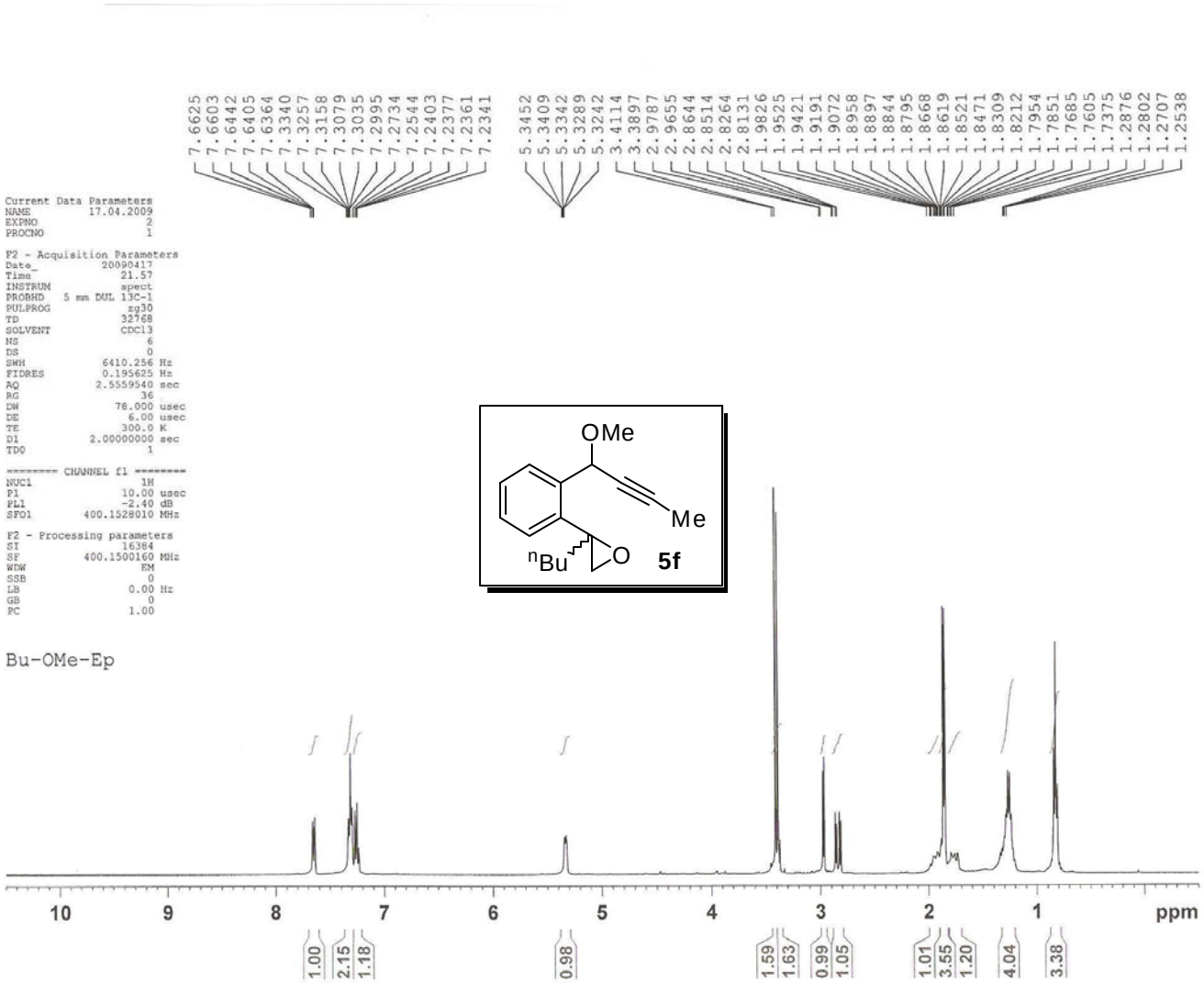

7.6982
7.6865
7.6793
7.6747
7.6686
7.6638
7.3562
7.3517
7.3466
7.3421
7.3386
7.3350
7.3304
7.3239
7.3200
7.3147
7.3086
7.3028
7.2989
7.2900
7.2858
7.2828
7.2737
7.2665
7.2630
7.2406
5.4392
5.4348
5.3945
5.3894
3.4599
3.4477
2.9920
2.9820
2.9790
2.9725
2.9687
2.8670
2.8578
2.8540
2.8443
2.8403
2.8314
2.8270
2.6049
2.5996
2.5938
2.5883
1.9409
1.9128
1.9068
1.8933
1.8853
1.8265
1.8129
1.8010
1.7666
1.2965
1.2794
1.2680
1.2629
Current Data Parameters
NAME 28.05.2009
EXPNO 5
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090528
Time 23.00
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 45.2
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500161 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
H-OMe-Bu-Epo:
OMe
H
n-Bu
O
5d
10
9
8
7
6
5
4
3
2
1
ppm
2.28
7.98
1.00
1.18
2.97
2.94
2.32
2.29
2.08
2.54
2.48
11.27
9.59



H-OMe-Bu-Epoxide


7.7785
7.7759
7.7569
7.7198
7.7005
7.4774
7.4584
7.4368
7.4177
7.3859
7.3823
7.3732
7.3694
7.3676
7.3638
7.3546
7.3511
7.2835
7.2786
7.2695
7.2643
7.2594
7.2441
7.2425
7.2409
7.2050
7.2011
7.1850
7.1819
5.2074
5.2022
5.1667
5.1616
3.4328
3.4186
3.4121
3.3979
3.3219
3.2716
3.2574
3.2305
3.2161
3.0057
1.8635
1.8581
1.6857
1.6802
Current Data Parameters
NAME 13.04.2009
EXPNO 10
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090413
Time 23.45
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 14
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 71.8
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500164 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
Ph-OMe-Epoxi
OMe
Me
Ph
O
5e
10
9
8
7
6
5
4
3
2
1
ppm
1.00
0.89
5.00
3.17
8.26
4.43
1.05
0.88
1.05
1.03
2.39
1.04
1.13
2.57
2.98
2.71


Current Data Parameters
NAME 13.04.2009
EXPNO 11
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090413
Time 23.50
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 102
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 64
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178084 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
139.90
139.69
139.10
138.75
136.25
135.70
128.98
128.85
128.33
128.19
128.01
127.73
127.45
126.09
125.98
83.37
77.32
77.20
77.00
76.69
69.69
60.61
60.39
57.60
57.53
56.52
55.95
3.74
3.52
OMe
Me
Ph
O
5e
Ph-OMe-Epoxide
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm


7.6625
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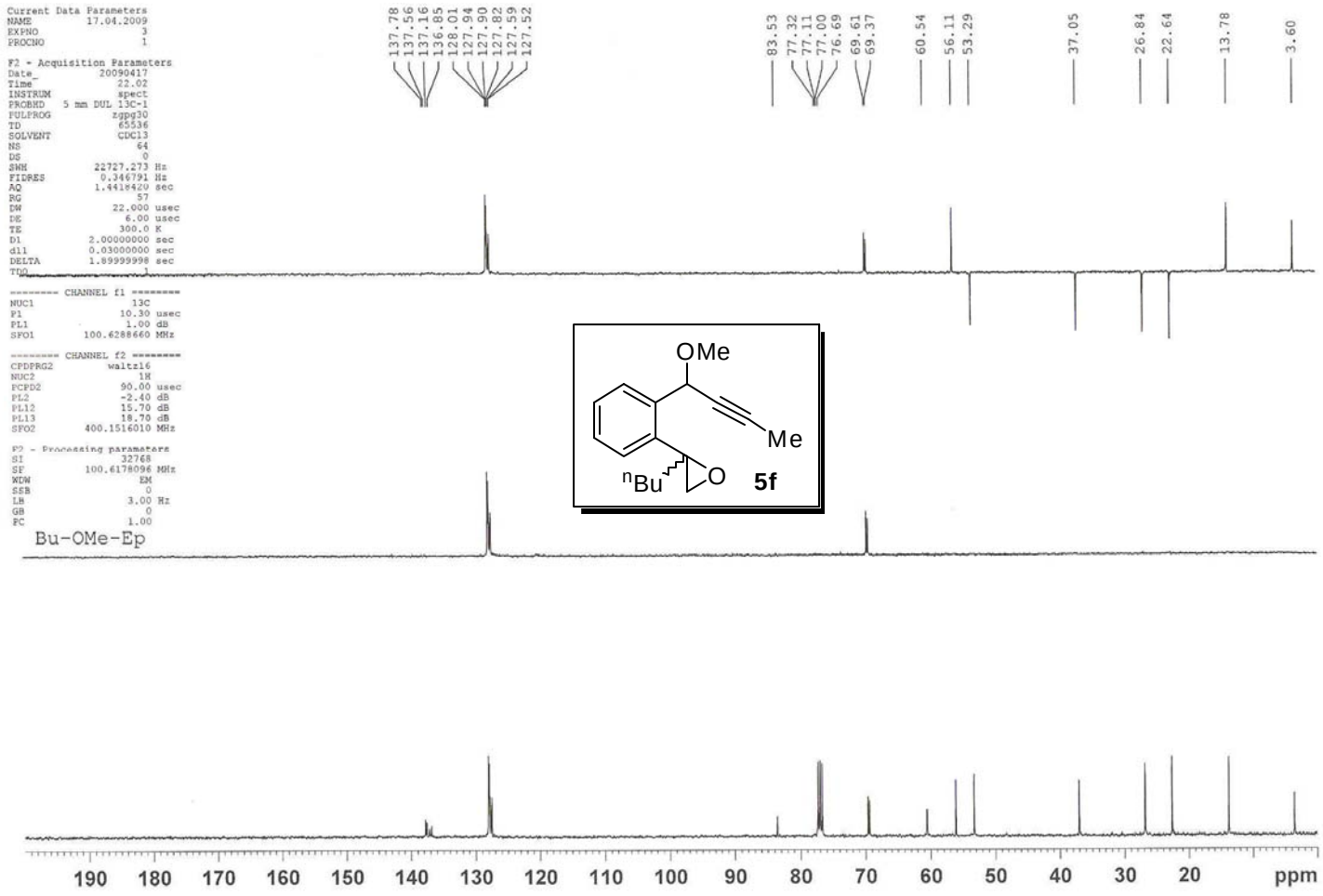
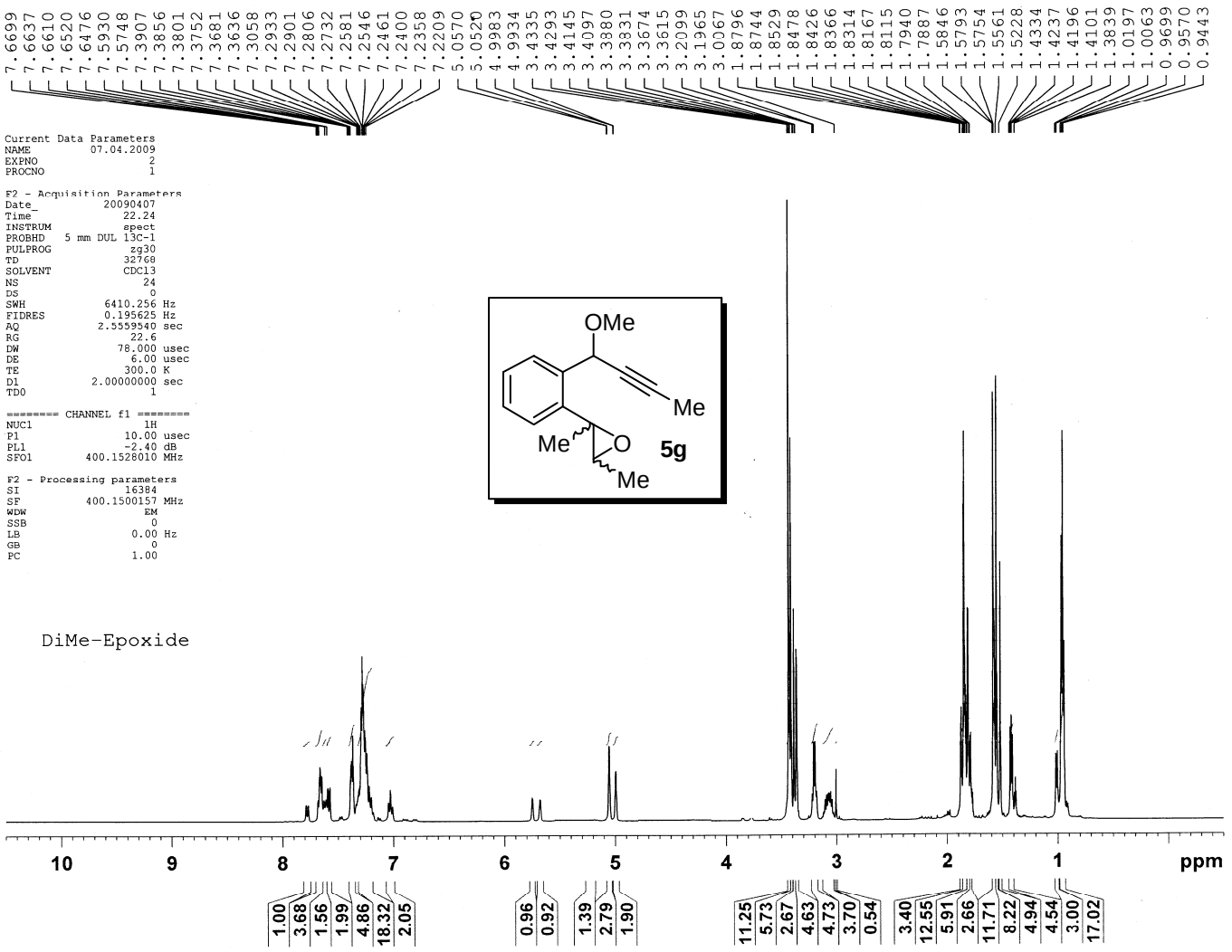
7.6405
7.6364
7.3340
7.3257
7.3158
7.3079
7.3035
7.2995
7.2734
7.2544
7.2403
7.2377
7.2361
7.2341
5.3452
5.3409
5.3342
5.3289
5.3242
3.4114
3.3897
2.9787
2.9655
2.8644
2.8514
2.8264
2.8131
1.9826
1.9525
1.9421
1.9191
1.9072
1.8958
1.8897
1.8844
1.8795
1.8668
1.8619
1.8521
1.8471
1.8309
1.8212
1.7954
1.7851
1.7685
1.7605
1.7375
1.2876
1.2802
1.2707
1.2538
Current Data Parameters
NAME 17.04.2009
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090417
Time 21.57
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 6
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 36
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
CHANNEL f1
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500160 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
OMe
Me
nBu
O
5f
Bu-OMe-Ep
10
9
8
7
6
5
4
3
2
1
ppm
1.00
2.15
1.18
0.98
1.59
1.63
0.99
1.05
1.01
3.55
1.20
4.04
3.38


Current Data Parameters
NAME 17.04.2009
EXPNO 3
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090417
Time 22.02
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 64
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418429 sec
RG 57
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178096 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
Bu-OMe-Ep
137.78
137.56
137.16
136.85
128.01
127.94
127.90
127.82
127.59
127.52
83.53
77.32
77.11
77.00
76.69
69.61
69.37
60.54
56.11
53.29
37.05
26.84
22.64
13.78
3.60
OMe
Me
nBu
O
5f
190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 ppm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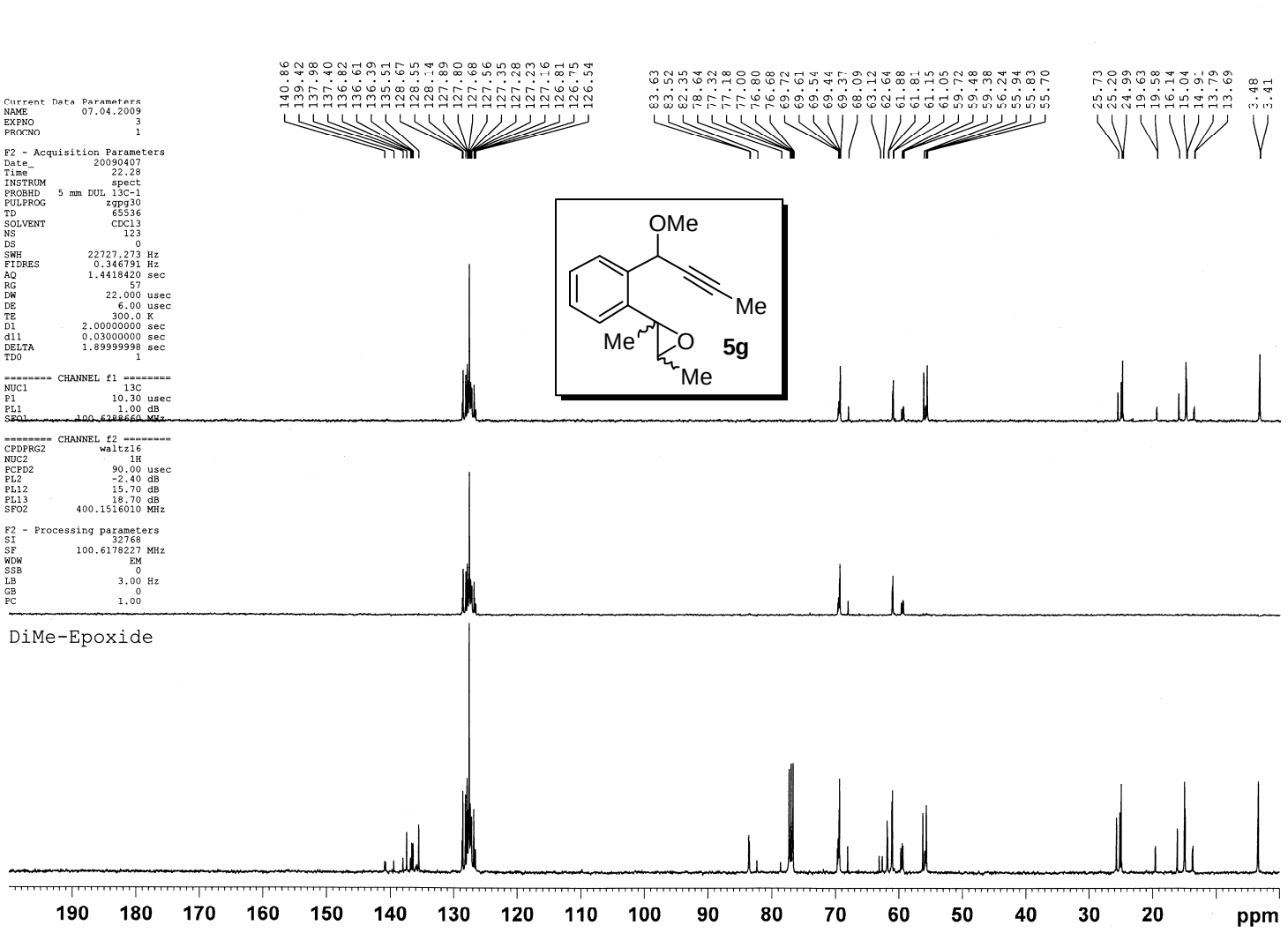
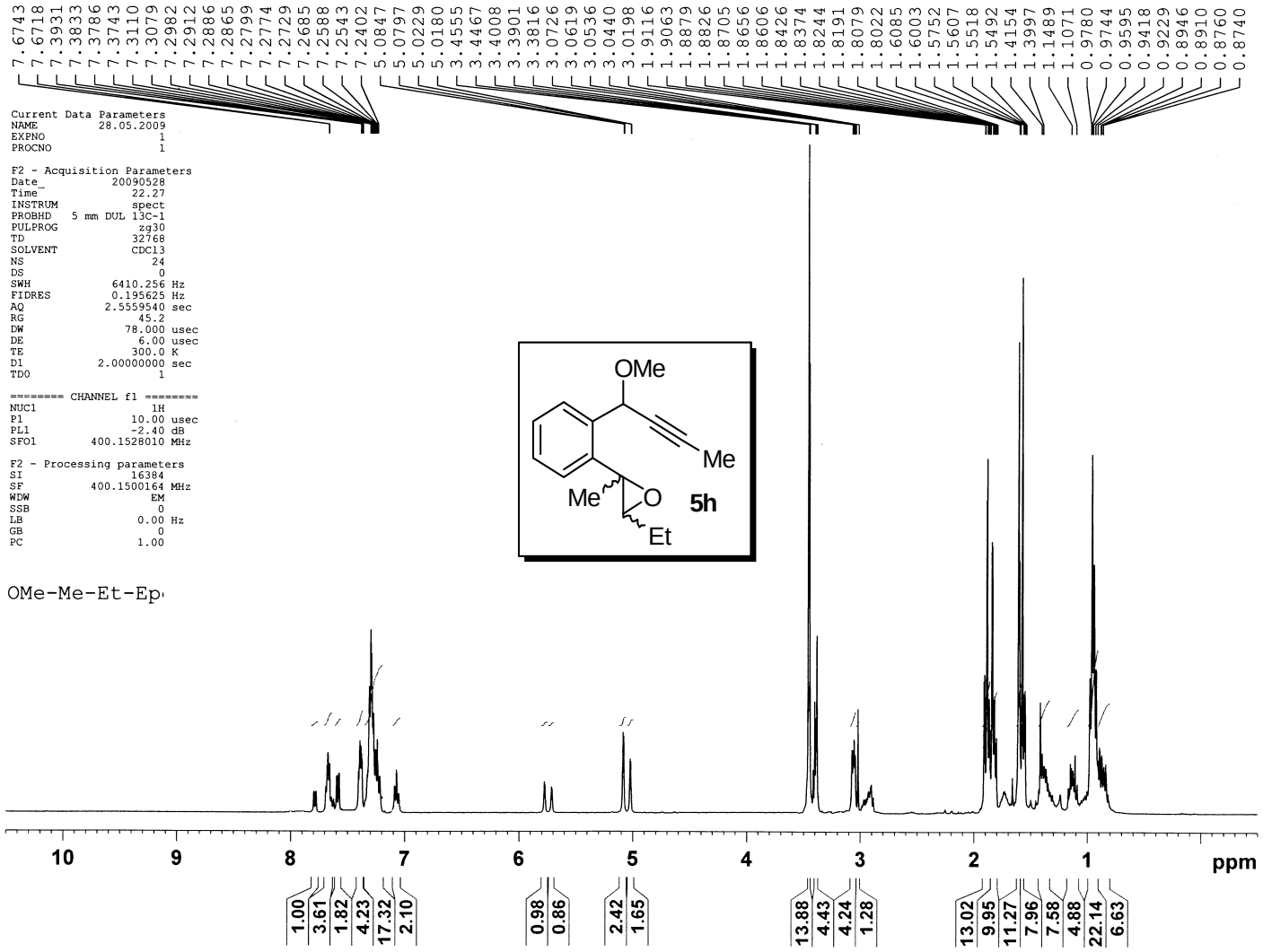
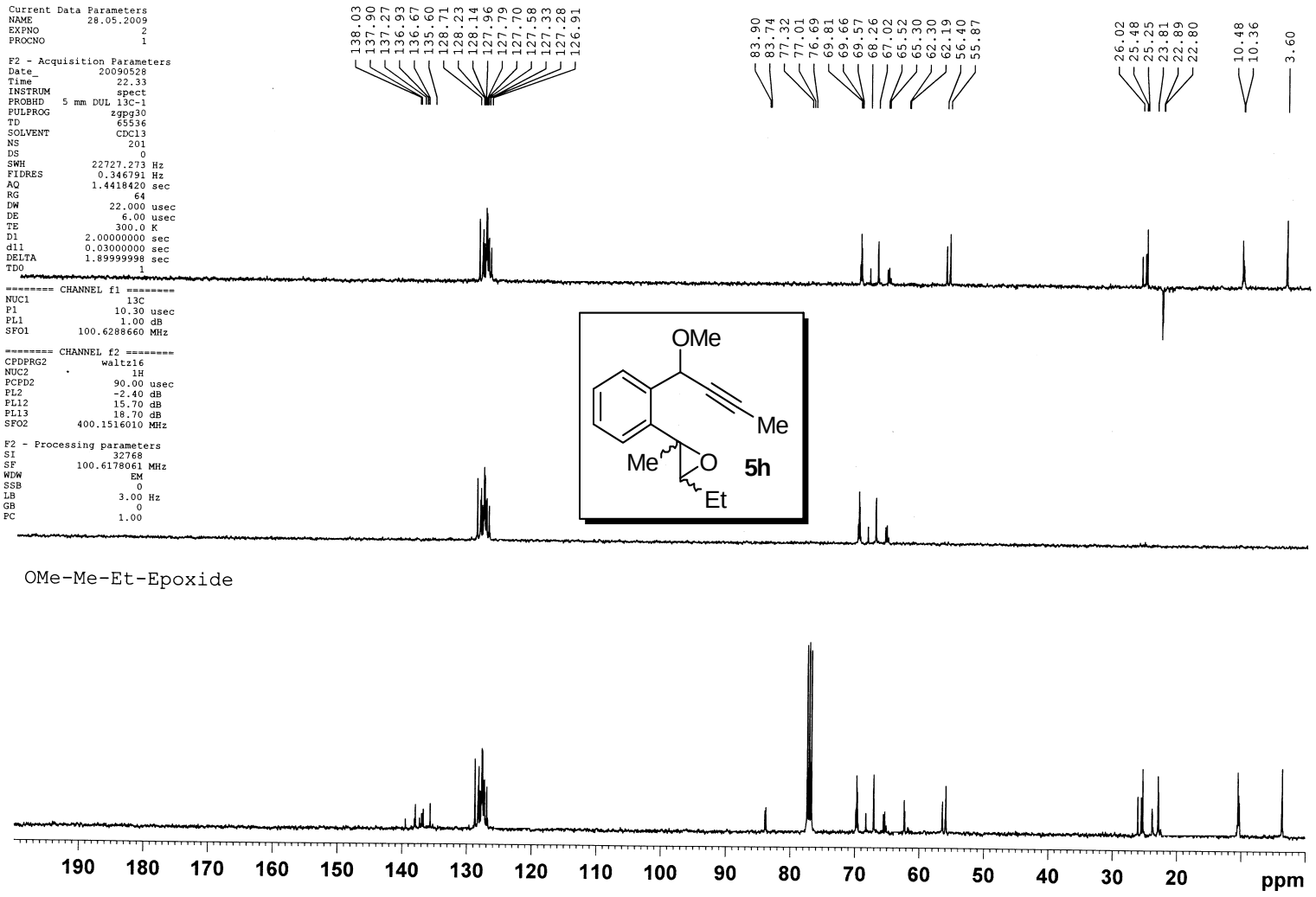
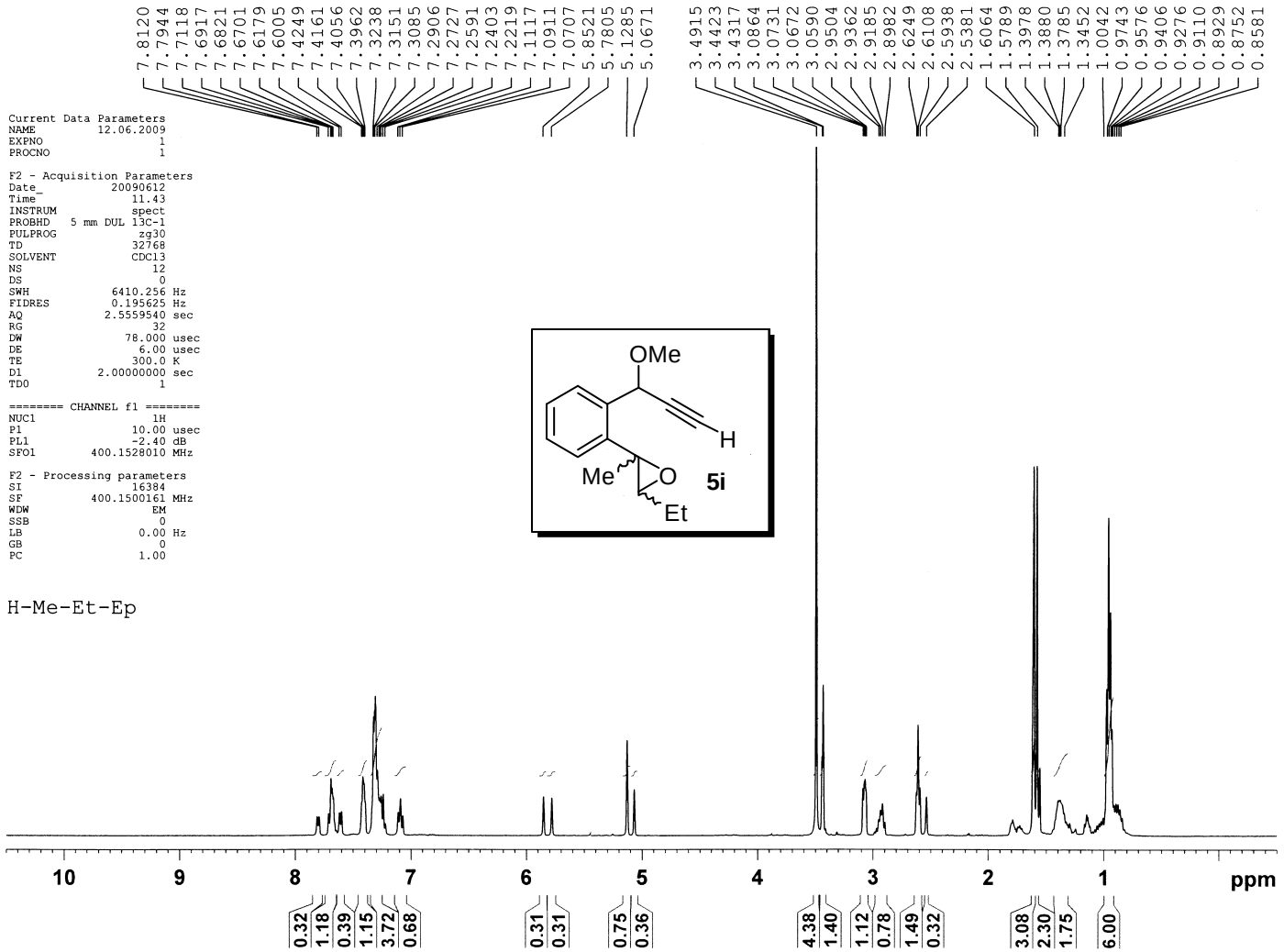
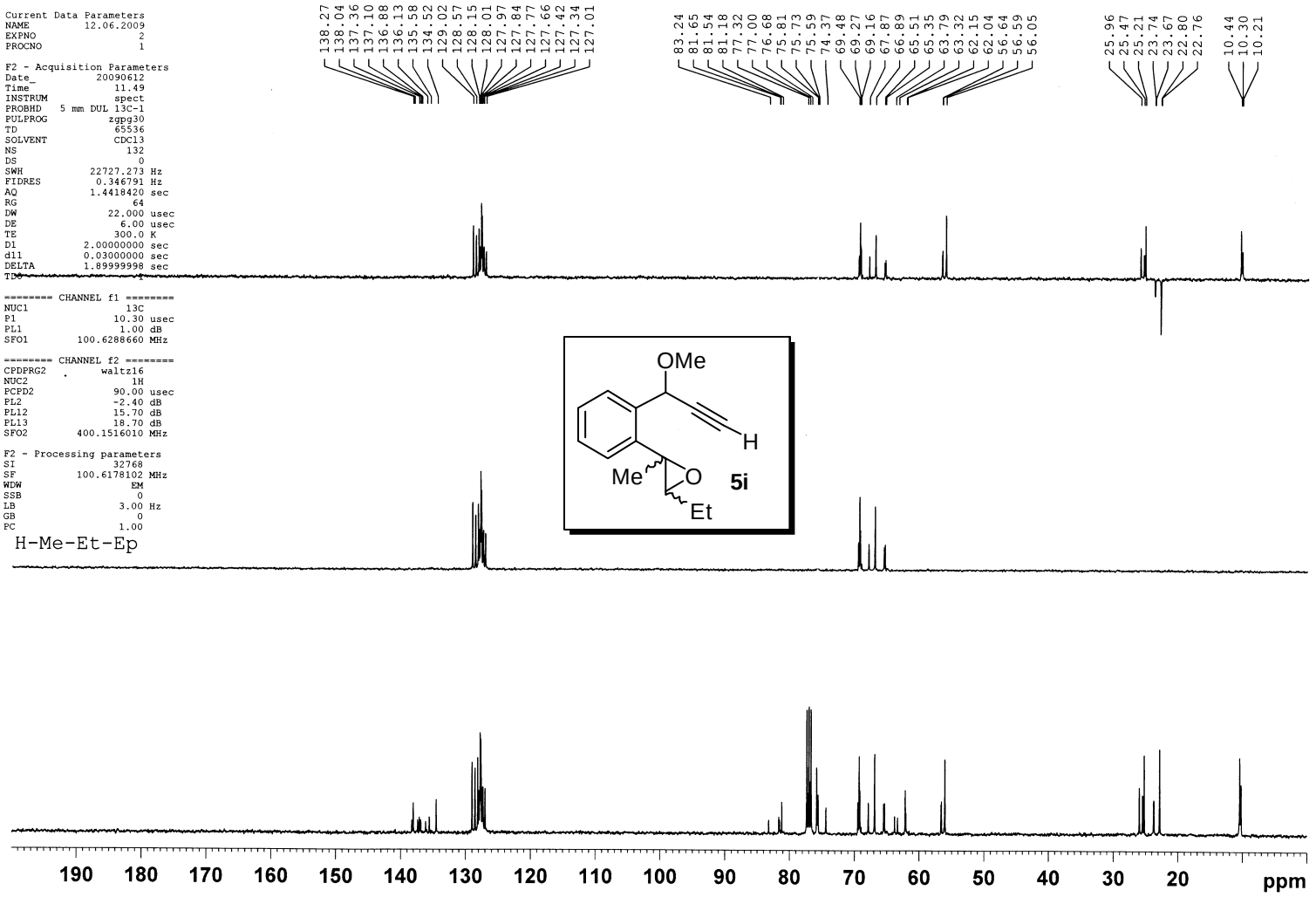
Current Data Parameters
NAME 07.04.2009
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090407
Time_ 22.24
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 22.6
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500157 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
OMe
Me
Me
O
Me
5g
DiMe-Epoxide
10 9 8 7 6 5 4 3 2 1 ppm
1.00 3.68 1.56 1.99 4.86 18.32 2.05
0.96 0.92
1.39 2.79 1.90
11.25 5.73 2.67 4.63 4.73 3.70 0.54
3.40 12.55 5.91 2.66 11.71 8.22 4.94 4.54 3.00 17.02

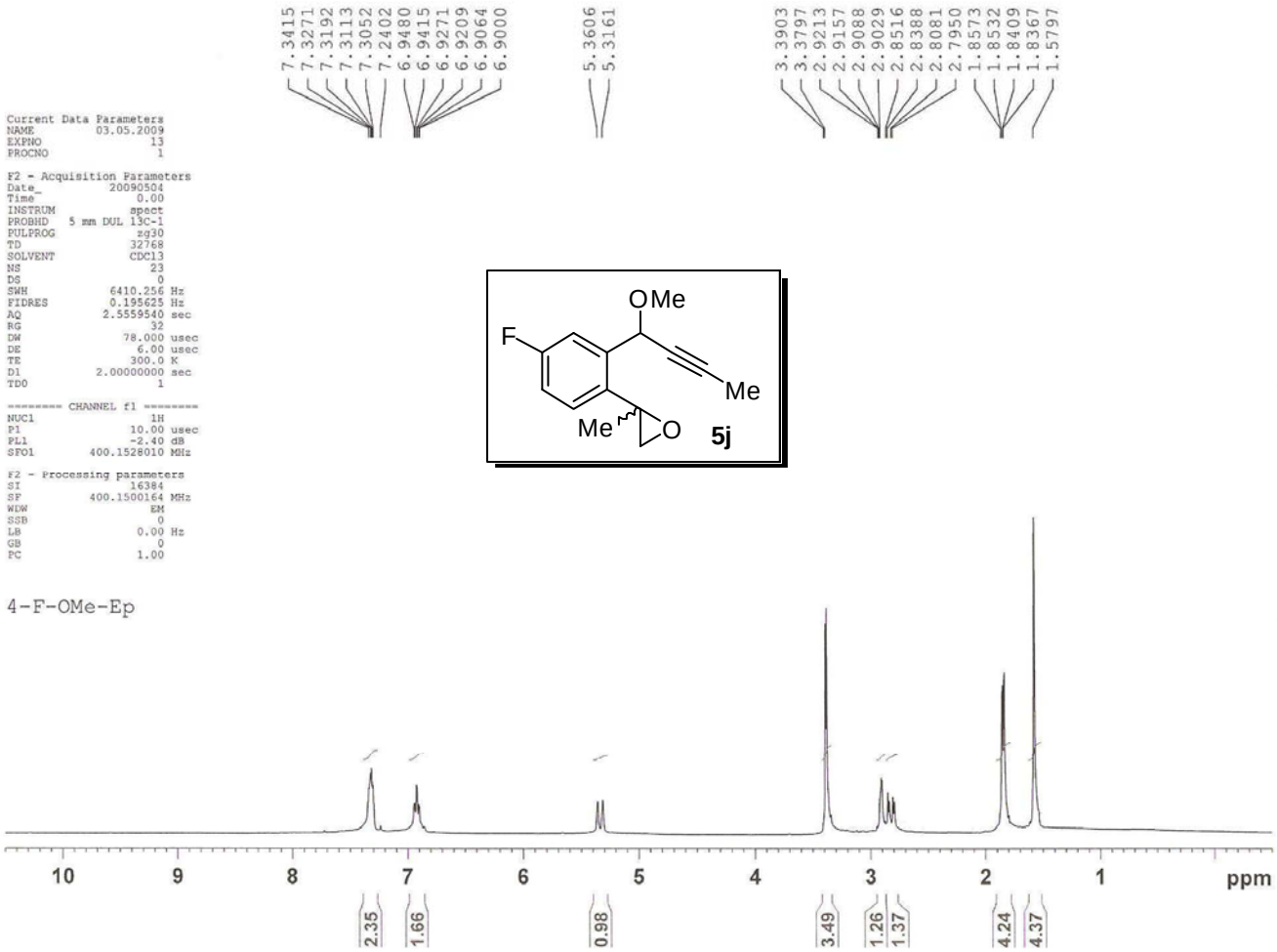

140.86
139.42
137.98
137.40
136.82
136.61
136.39
135.51
128.67
128.55
128.14
127.89
127.80
127.68
127.56
127.35
127.28
127.23
127.16
126.81
126.75
126.54
83.63
83.52
82.35
78.64
77.32
77.18
77.00
76.80
76.68
69.72
69.61
69.54
69.44
69.37
68.09
63.12
62.64
61.88
61.81
61.15
61.05
59.72
59.48
59.38
56.24
55.94
55.83
55.70
25.73
25.20
24.99
19.63
19.58
16.14
15.04
14.9-
13.79
13.69
3.48
3.41
OMe
Me
Me
O
Me
5g
Current Data Parameters
NAME 07.04.2009
EXPNO 3
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090407
Time 22.28
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 123
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 57
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178227 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
DiMe-Epoxide
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm

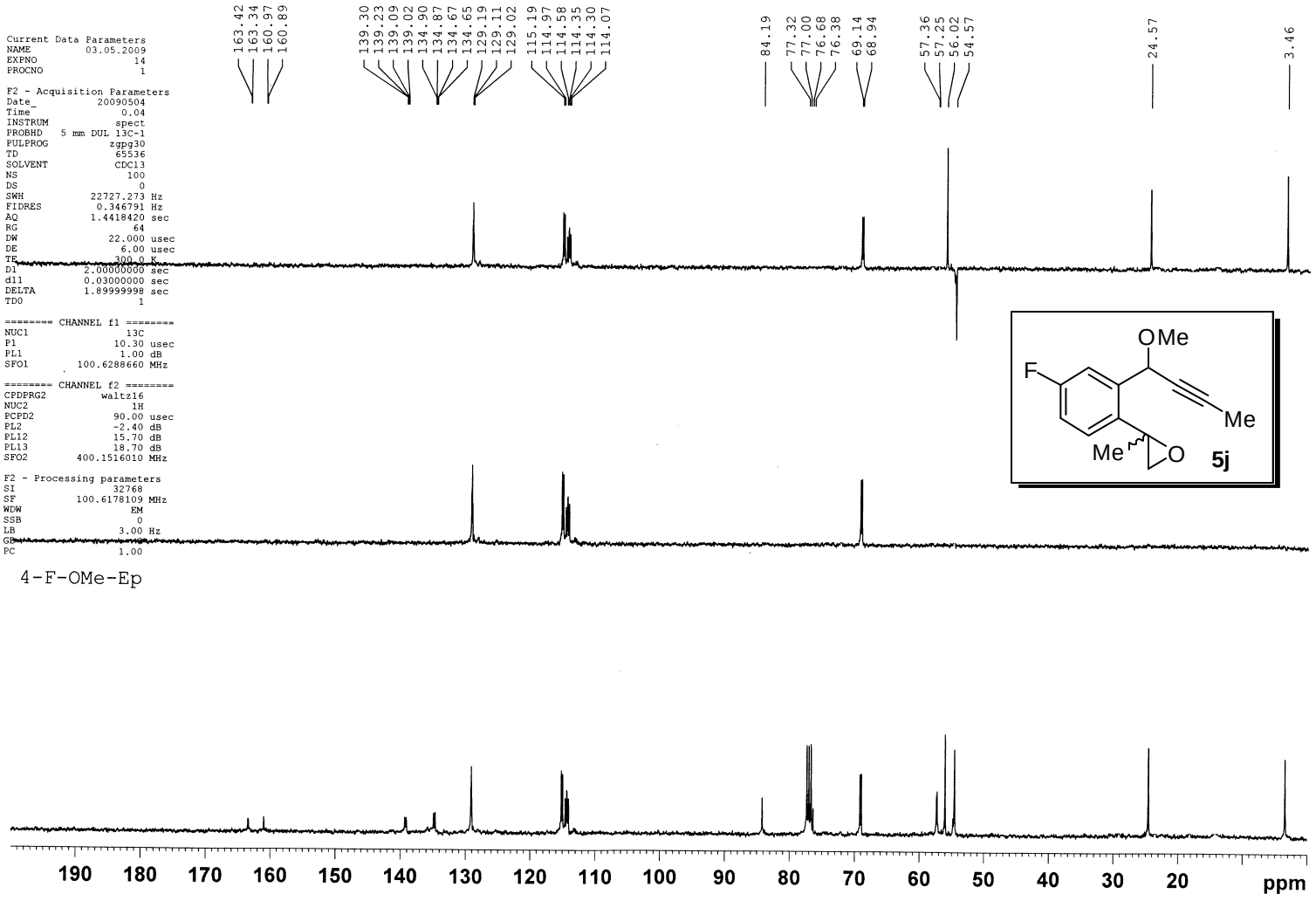

7.6743
7.6718
7.3931
7.3833
7.3786
7.3743
7.3110
7.3079
7.2982
7.2912
7.2886
7.2865
7.2799
7.2774
7.2729
7.2685
7.2588
7.2543
7.2402
5.0847
5.0797
5.0229
5.0180
3.4555
3.4467
3.4008
3.3901
3.3816
3.0726
3.0619
3.0536
3.0440
3.0198
1.9116
1.9063
1.8879
1.8826
1.8705
1.8656
1.8606
1.8426
1.8374
1.8244
1.8191
1.8079
1.8022
1.6085
1.6003
1.5752
1.5607
1.5518
1.5492
1.4154
1.3997
1.1489
1.1071
0.9780
0.9744
0.9595
0.9418
0.9229
0.8946
0.8910
0.8760
0.8740
Current Data Parameters
NAME 28.05.2009
EXPNO 1
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090528
Time 22.27
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 45.2
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500164 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
OMe-Me-Et-Ep
OMe
Me
Me
O
Et
5h
10
9
8
7
6
5
4
3
2
1
ppm
1.00
3.61
1.82
4.23
17.32
2.10
0.98
0.86
2.42
1.65
13.88
4.43
4.24
1.28
13.02
9.95
11.27
7.96
7.58
4.88
22.14
6.63

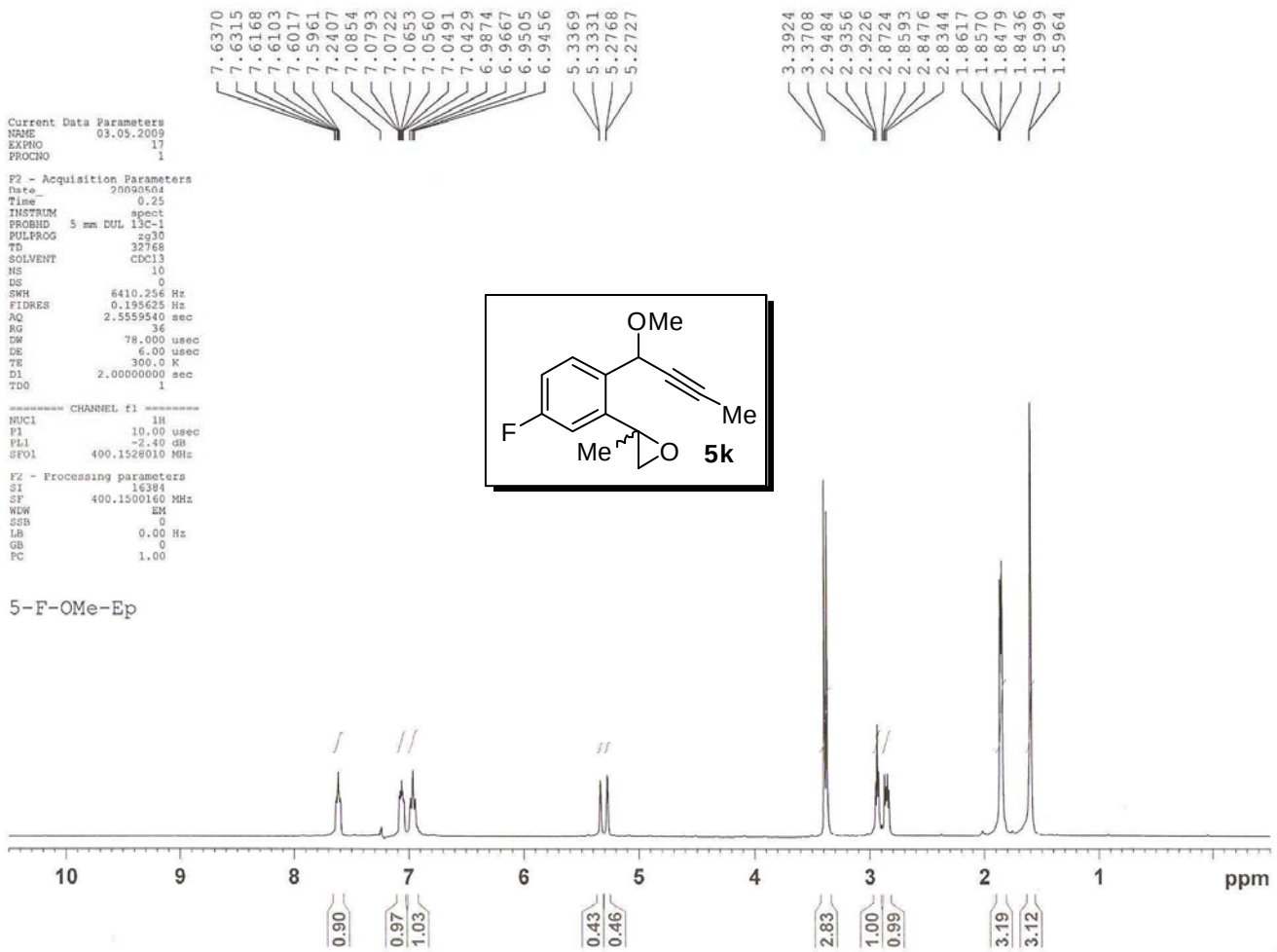

Current Data Parameters
NAME 28.05.2009
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090528
Time 22.33
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 201
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 64
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178061 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
138.03
137.90
137.27
136.93
136.67
135.60
128.71
128.23
128.14
127.96
127.79
127.70
127.58
127.33
127.28
126.91
83.90
83.74
77.32
77.01
76.69
69.81
69.66
69.57
68.26
67.02
65.52
65.30
62.30
62.19
56.40
55.87
26.02
25.48
25.25
23.81
22.89
22.80
10.48
10.36
3.60
OMe
Me
Me
O
Et
5h
OMe-Me-Et-Epoxide
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm

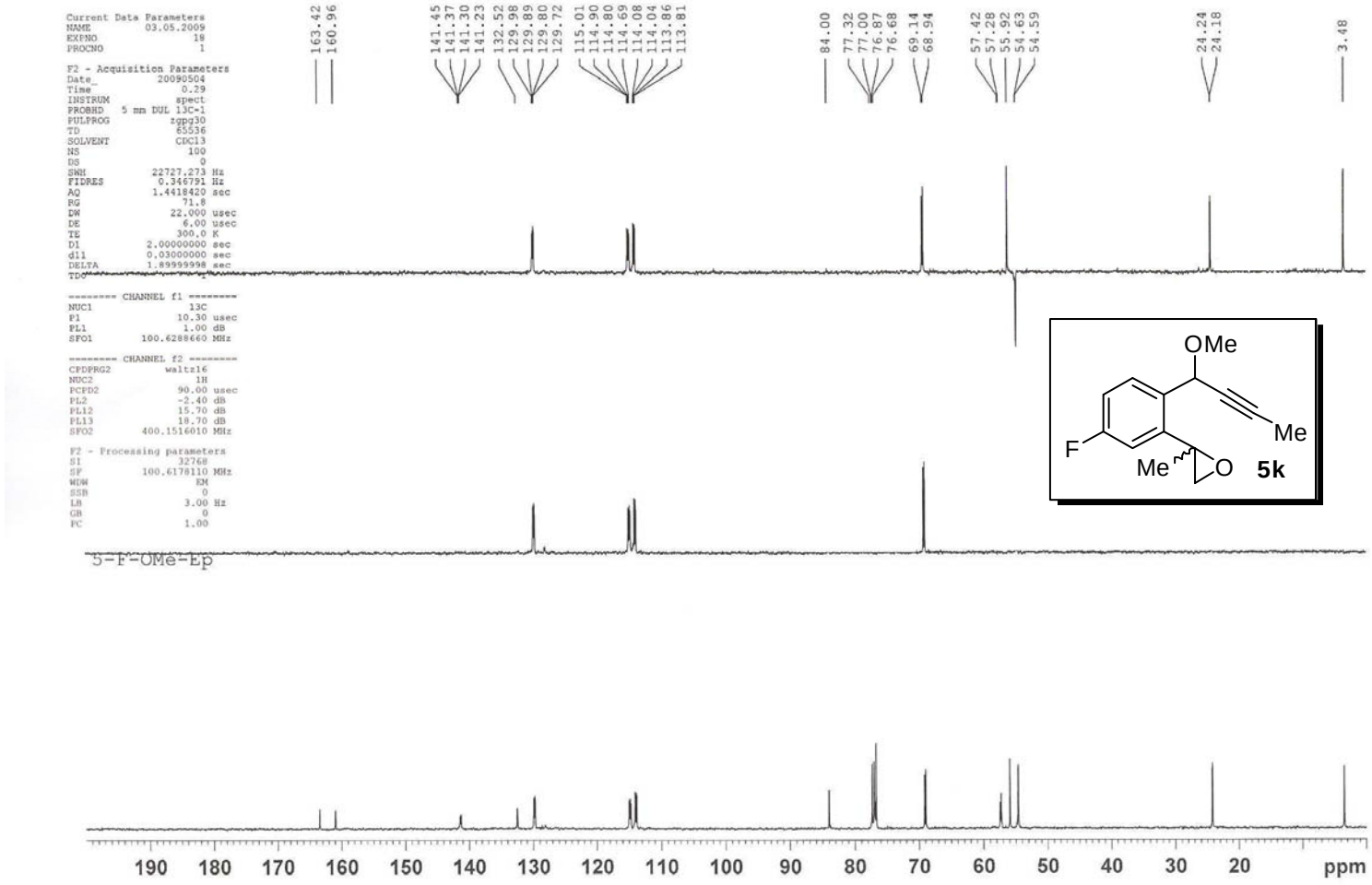

7.8120
7.7944
7.7118
7.6917
7.6821
7.6701
7.6179
7.6005
7.4249
7.4161
7.4056
7.3962
7.3238
7.3151
7.3085
7.2906
7.2727
7.2591
7.2403
7.2219
7.1117
7.0911
7.0707
5.8521
5.7805
5.1285
5.0671
3.4915
3.4423
3.4317
3.0864
3.0731
3.0672
3.0590
2.9504
2.9362
2.9185
2.8982
2.6249
2.6108
2.5938
2.5381
1.6064
1.5789
1.3978
1.3880
1.3785
1.3452
1.0042
0.9743
0.9576
0.9406
0.9276
0.9110
0.8929
0.8752
0.8581
Current Data Parameters
NAME 12.06.2009
EXPNO 1
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090612
Time 11.43
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 12
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 32
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500161 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
H-Me-Et-Ep
OMe
H
Me
O
Et
5i
10
9
8
7
6
5
4
3
2
1
ppm
0.32
1.18
0.39
1.15
3.72
0.68
0.31
0.31
0.75
0.36
4.38
1.40
1.12
0.78
1.49
0.32
3.08
2.30
1.75
6.00

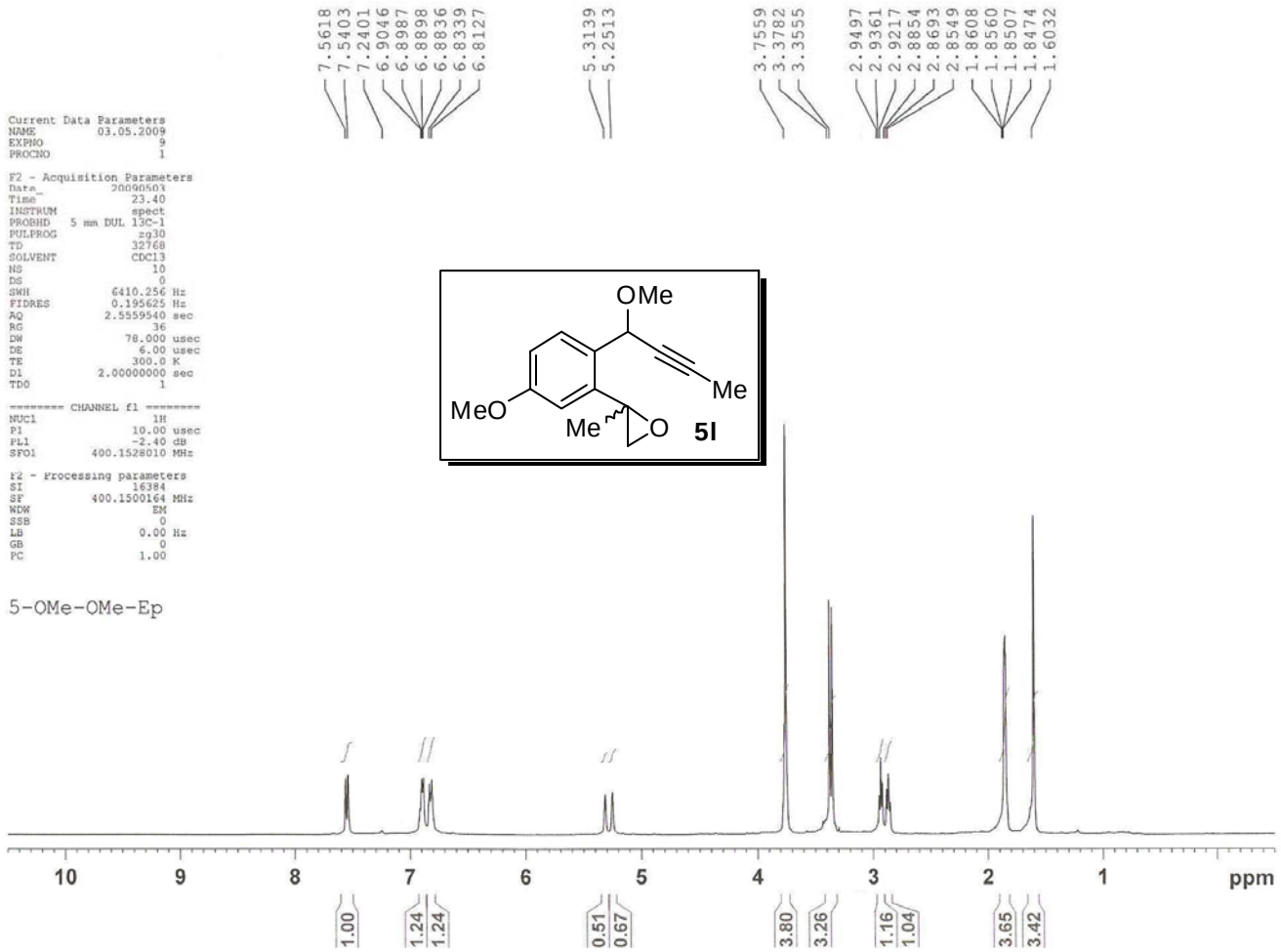

Current Data Parameters
NAME 12.06.2009
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090612
Time 11.49
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 132
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 64
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178102 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
H-Me-Et-Ep
138.27
138.04
137.36
137.10
136.88
136.13
135.58
134.52
129.02
128.57
128.15
128.01
127.97
127.84
127.77
127.66
127.42
127.34
127.01
83.24
81.65
81.54
81.18
77.32
77.00
76.68
75.81
75.73
75.59
74.37
69.48
69.27
69.16
67.87
66.89
65.51
65.35
63.79
63.32
62.15
62.04
56.64
56.59
56.05
25.96
25.47
25.21
23.74
23.67
22.80
22.76
10.44
10.30
10.21
OMe
H
Me
O
Et
5i
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm

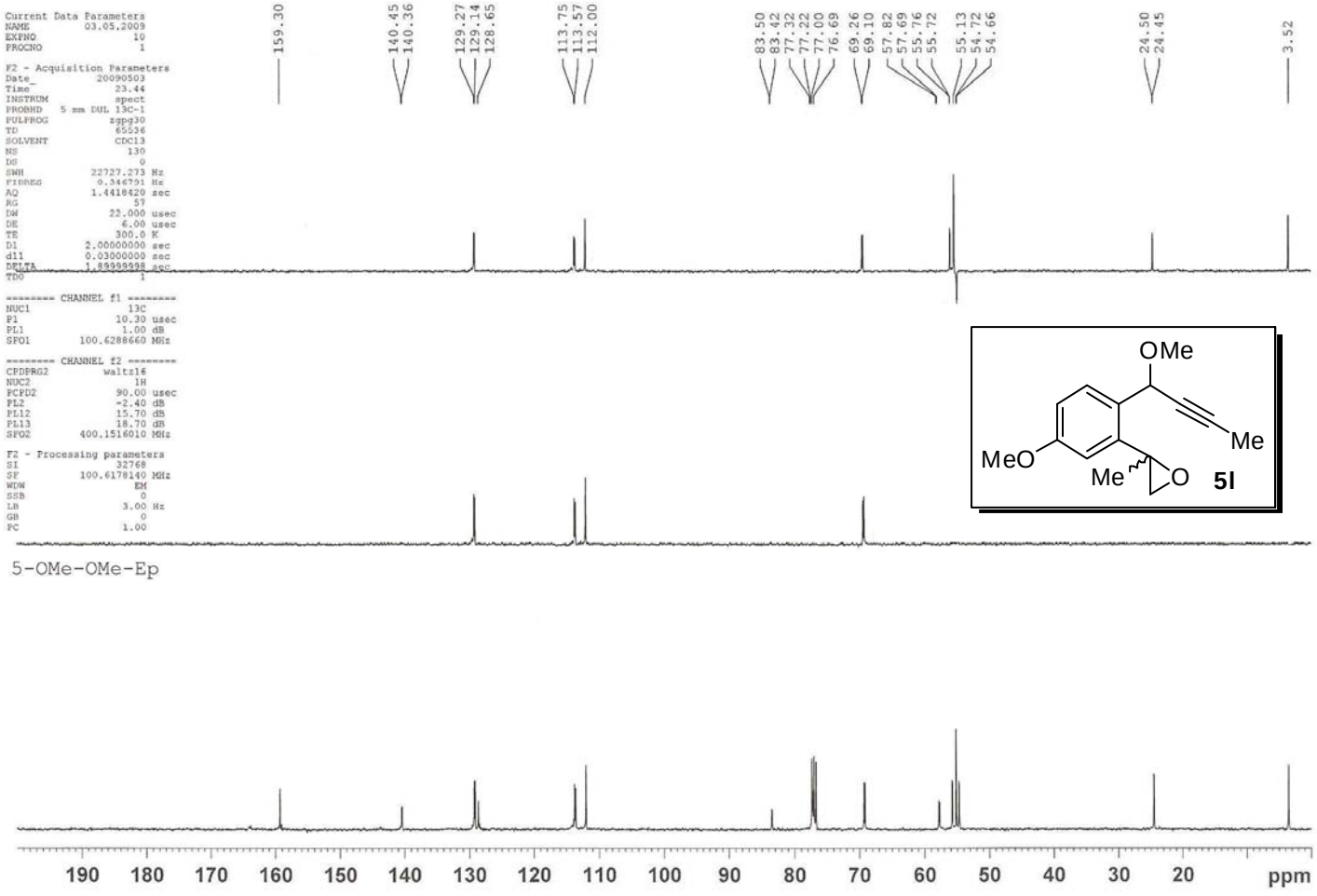

7.3415
7.3271
7.3192
7.3113
7.3052
7.2402
6.9480
6.9415
6.9271
6.9209
6.9064
6.9000
5.3606
5.3161
3.3903
3.3797
2.9213
2.9157
2.9088
2.9029
2.8516
2.8388
2.8081
2.7950
1.8573
1.8532
1.8409
1.8367
1.5797
Current Data Parameters
NAME 03.05.2009
EXPNO 13
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090504
Time 0.00
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 23
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 32
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500164 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
4-F-OMe-Ep
OMe
F
Me
Me
O
5j
10
9
8
7
6
5
4
3
2
1
ppm
2.35
1.66
0.98
3.49
1.26
1.37
4.24
4.37

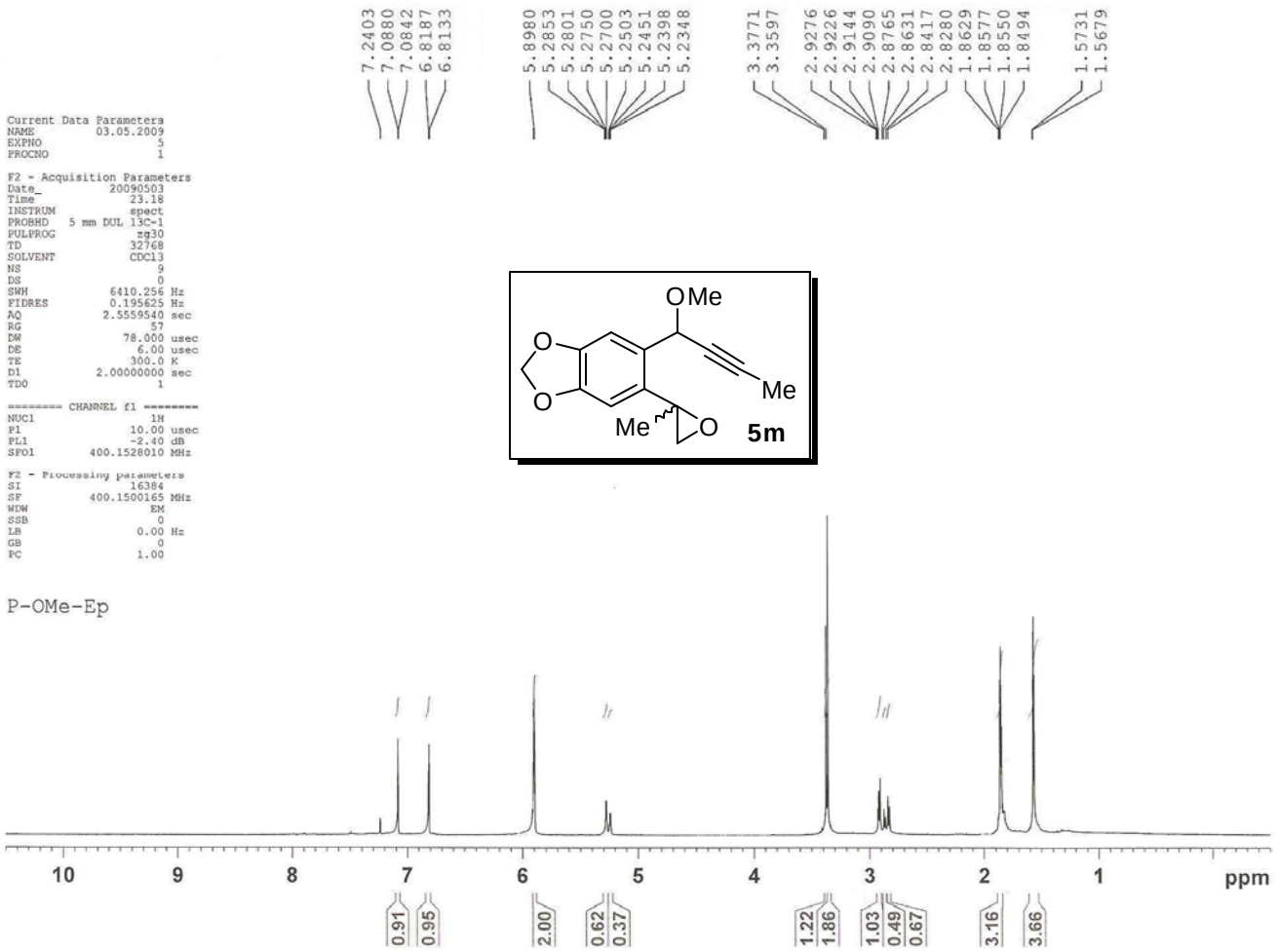

Current Data Parameters
NAME 03.05.2009
EXPNO 14
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090504
Time 0.04
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDC13
NS 100
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 64
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178109 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
163.42
163.34
160.97
160.89
139.30
139.23
139.09
139.02
134.90
134.87
134.67
134.65
129.19
129.11
129.02
115.19
114.97
114.58
114.35
114.30
114.07
84.19
77.32
77.00
76.68
76.38
69.14
68.94
57.36
57.25
56.02
54.57
24.57
3.46
OMe
F
Me
Me
O
5j
4-F-OMe-Ep
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm

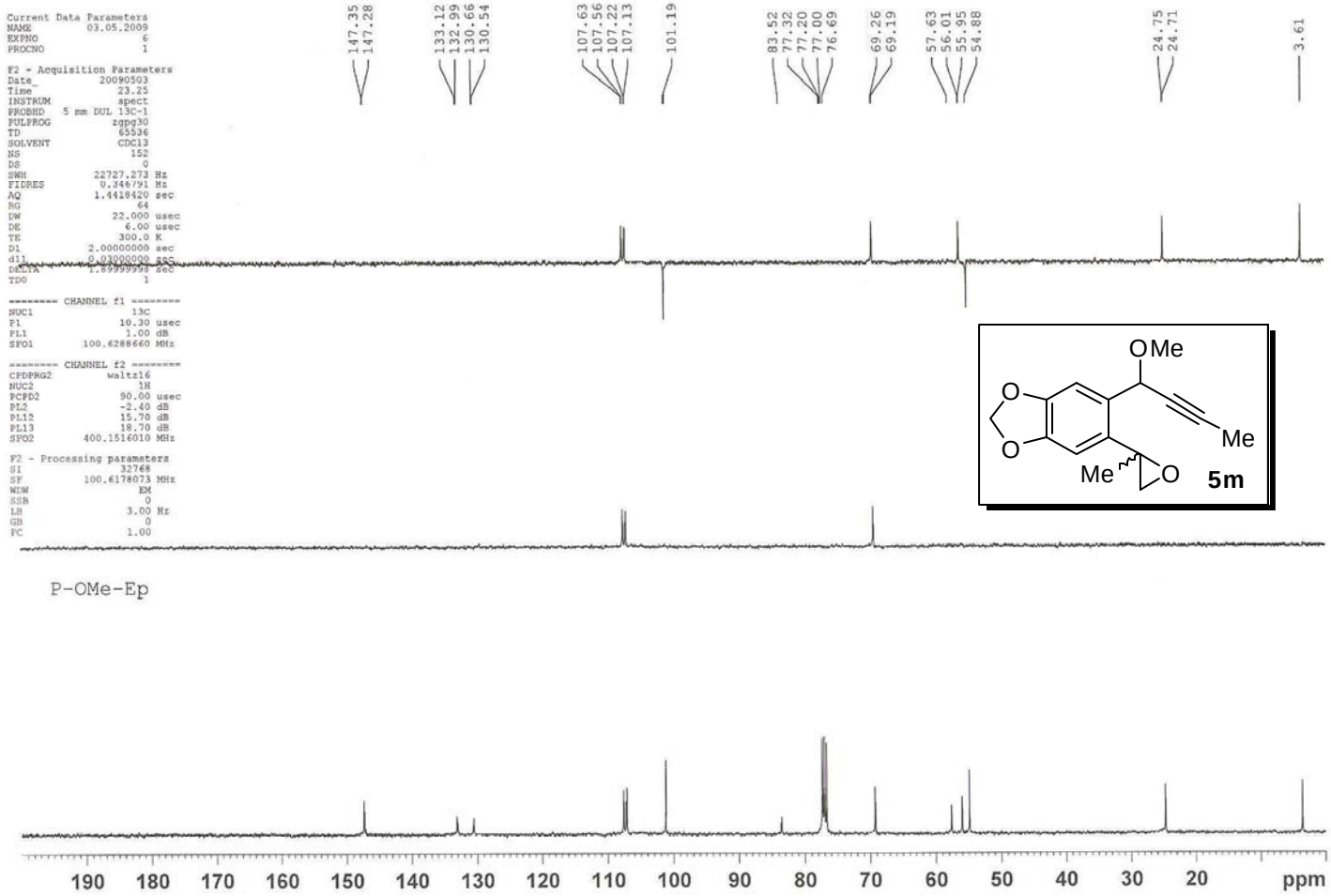

7.6370
7.6315
7.6168
7.6103
7.6017
7.5961
7.2407
7.0854
7.0793
7.0722
7.0653
7.0560
7.0491
7.0429
6.9874
6.9667
6.9505
6.9456
5.3369
5.3331
5.2768
5.2727
3.3924
3.3708
2.9484
2.9356
2.9226
2.8724
2.8593
2.8476
2.8344
1.8617
1.8570
1.8479
1.8436
1.5999
1.5964
Current Data Parameters
NAME 03.05.2009
EXPNO 17
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090504
Time 0.25
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 10
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 36
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500160 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
5-F-OMe-Ep
OMe
Me
F
Me
O
5k
10
9
8
7
6
5
4
3
2
1
ppm
0.90
0.97
1.03
0.43
0.46
2.83
1.00
0.99
3.19
3.12

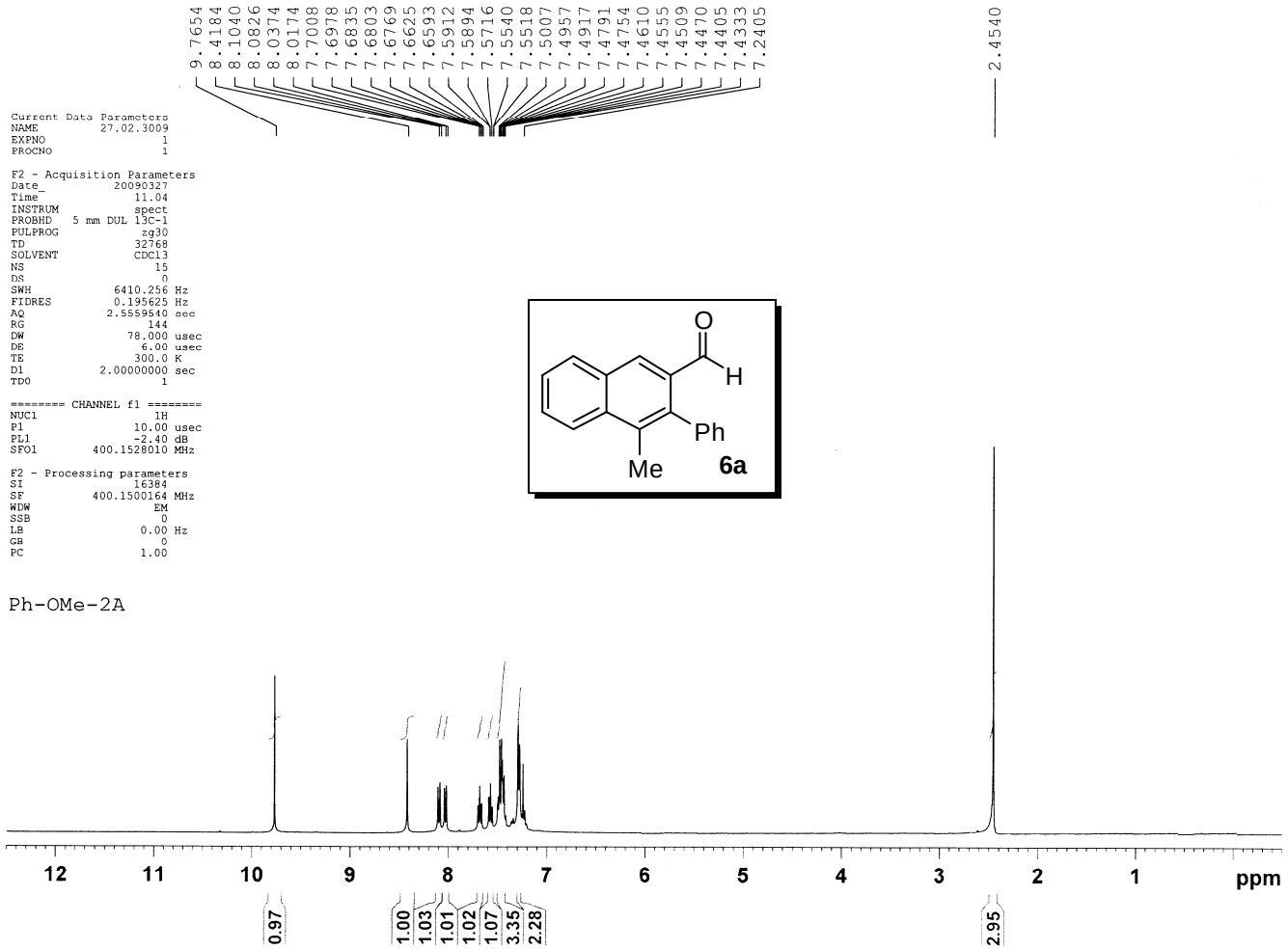

Current Data Parameters
NAME 03.05.2009
EXPNO 18
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090504
Time 0.29
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 100
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 71.8
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD 65536
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178110 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
163.42
160.96
141.45
141.37
141.30
141.23
132.52
129.98
129.89
129.80
129.72
115.01
114.90
114.80
114.69
114.08
114.04
113.86
113.81
84.00
77.32
77.00
76.87
76.68
69.14
68.94
57.42
57.28
55.92
54.63
54.59
24.24
24.18
3.48
OMe
Me
F
Me
O
5k
5-F-OMe-Ep
190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 ppm

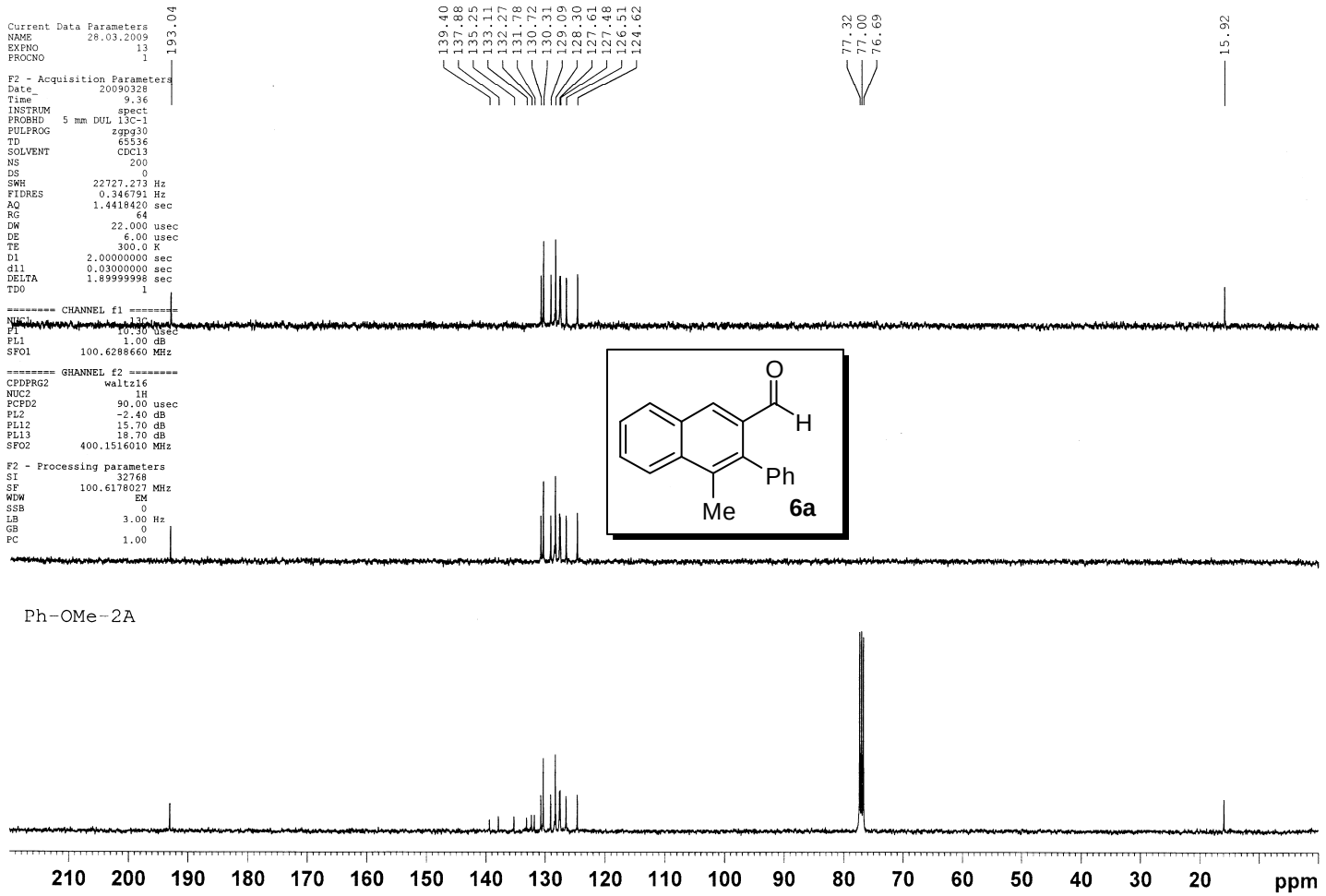

7.5618
7.5403
7.2401
6.9046
6.8987
6.8898
6.8836
6.8339
6.8127
5.3139
5.2513
3.7559
3.3782
3.3555
2.9497
2.9361
2.9217
2.8854
2.8693
2.8549
1.8608
1.8560
1.8507
1.8474
1.6032
Current Data Parameters
NAME 03.05.2009
EXPNO 9
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090503
Time 23.40
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 10
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 36
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500164 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
5-OMe-OMe-Ep
OMe
Me
MeO
Me
O
5l
10
9
8
7
6
5
4
3
2
1
ppm
1.00
1.24
1.24
0.51
0.67
3.80
3.26
1.16
1.04
3.65
3.42

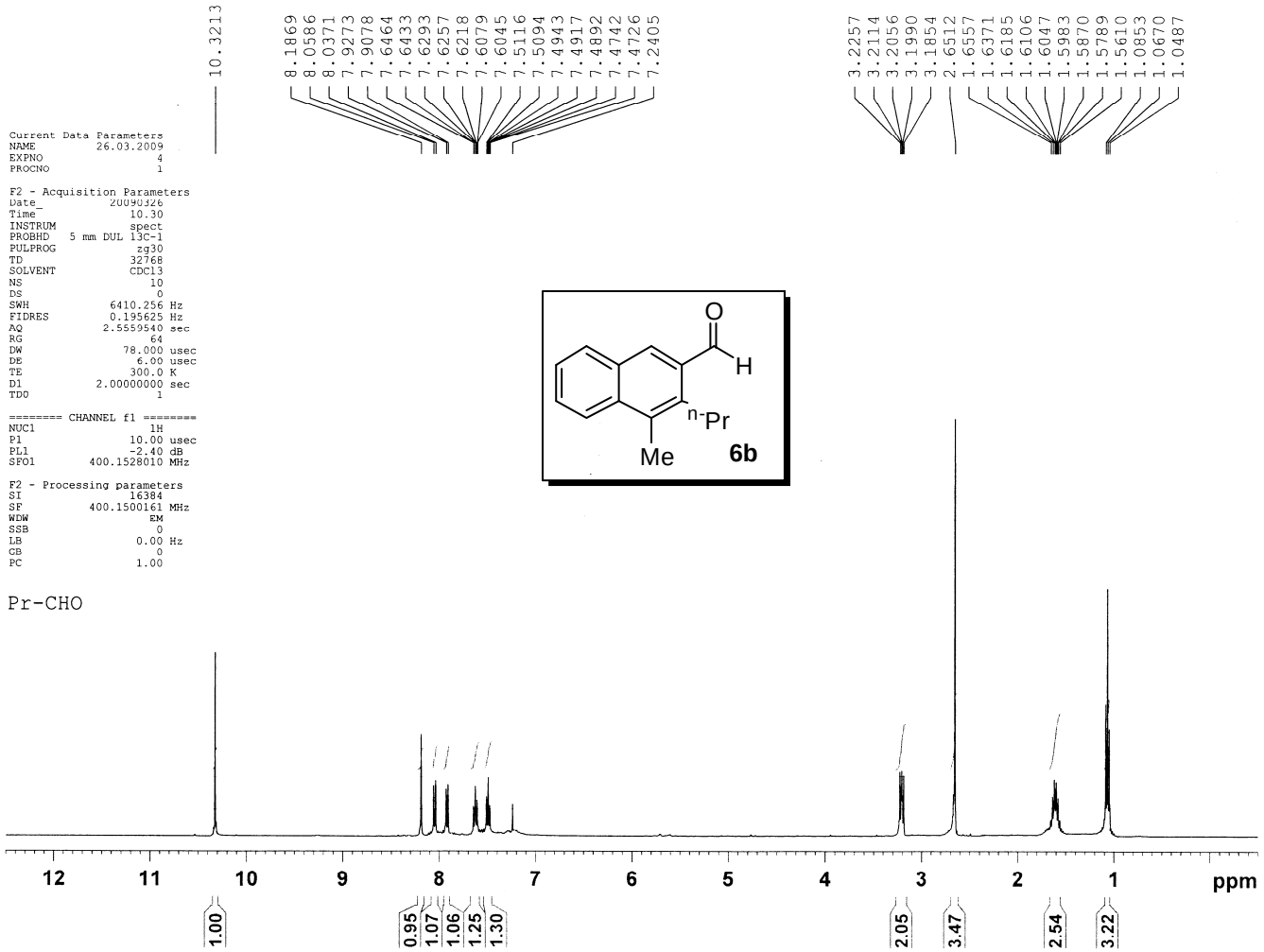

159.30
140.45
140.36
129.27
129.14
128.65
113.75
113.57
112.00
83.50
83.42
77.32
77.22
77.00
76.69
69.26
69.10
57.82
57.69
55.76
55.72
55.13
54.72
54.66
24.50
24.45
3.52
OMe
Me
MeO
Me
O
5l
5-OMe-OMe-Ep
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm

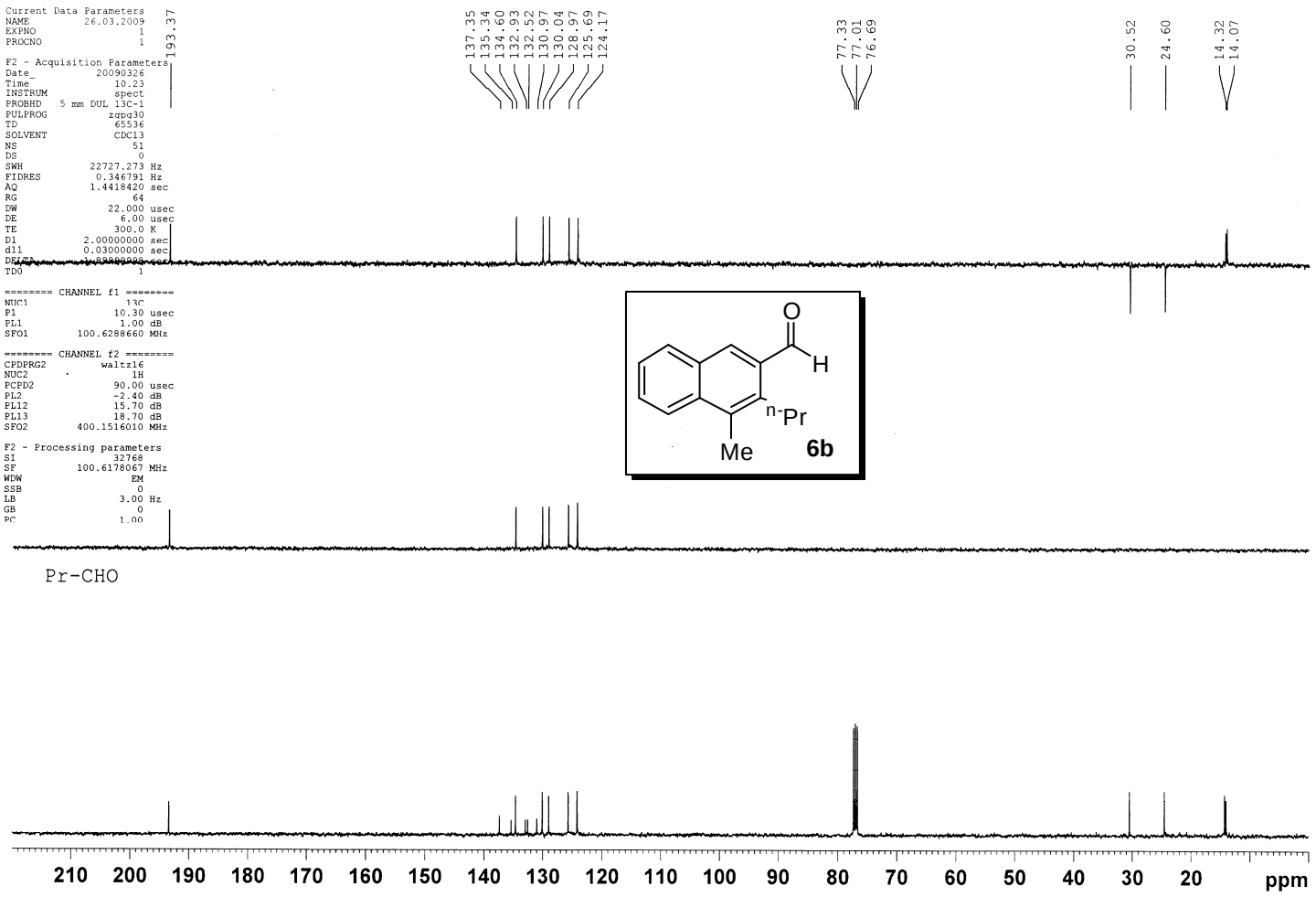

7.2403
7.0880
7.0842
6.8187
6.8133
5.8980
5.2853
5.2801
5.2750
5.2700
5.2503
5.2451
5.2398
5.2348
3.3771
3.3597
2.9276
2.9226
2.9144
2.9090
2.8765
2.8631
2.8417
2.8280
1.8629
1.8577
1.8550
1.8494
1.5731
1.5679
Current Data Parameters
NAME 03.05.2009
EXPNO 5
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090503
Time 23.18
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 9
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 57
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500165 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
OMe
O
O
Me
Me
O
5m
P-OMe-Ep
10
9
8
7
6
5
4
3
2
1
ppm
0.91
0.95
2.00
0.62
0.37
1.22
1.86
1.03
0.49
0.67
3.16
3.66

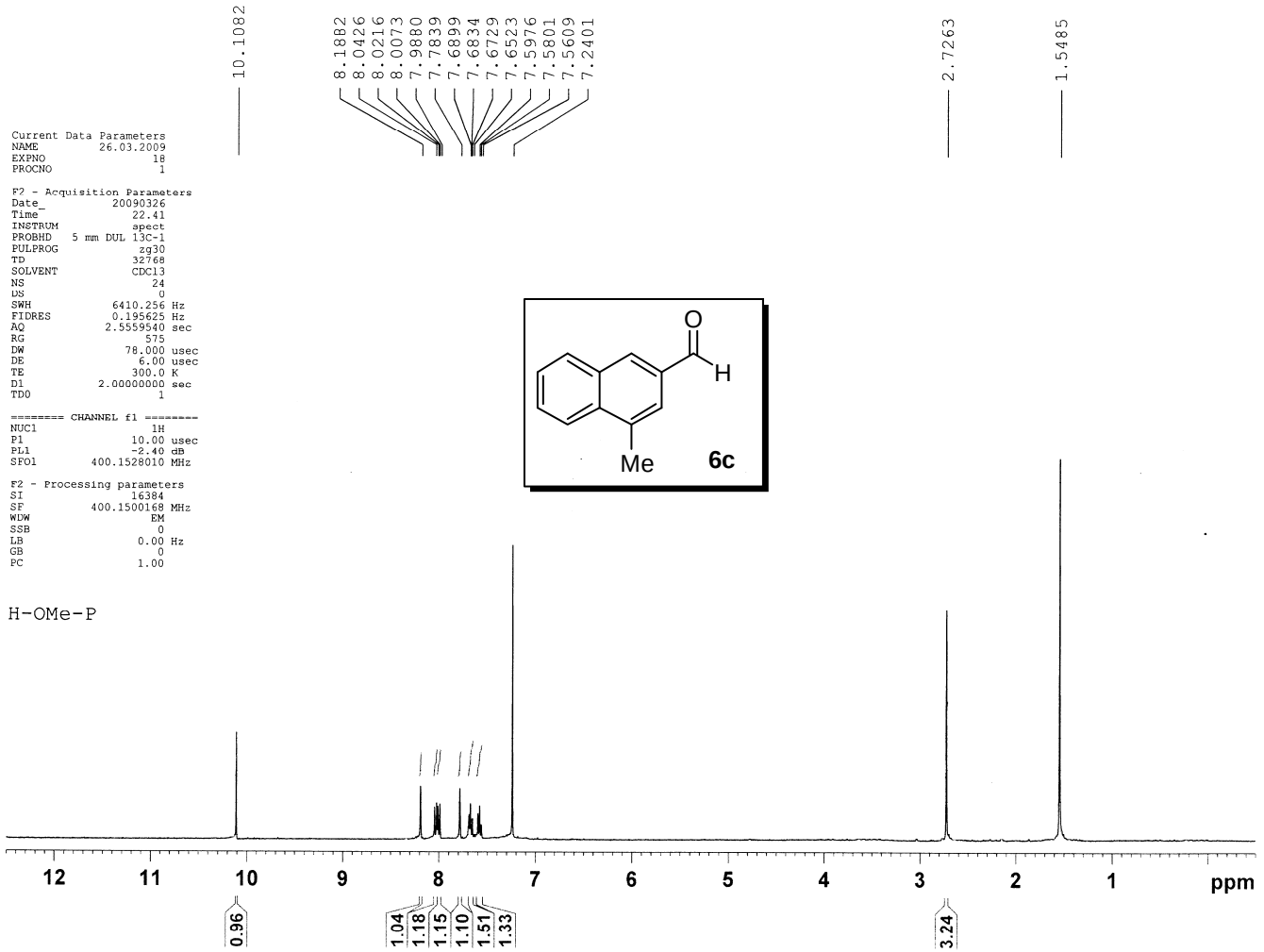

147.35
147.28
133.12
132.99
130.66
130.54
107.63
107.56
107.22
107.13
101.19
83.52
77.32
77.20
77.00
76.69
69.26
69.19
57.63
56.01
55.95
54.88
24.75
24.71
3.61
OMe
O
O
Me
Me
O
5m
P-OMe-Ep
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm

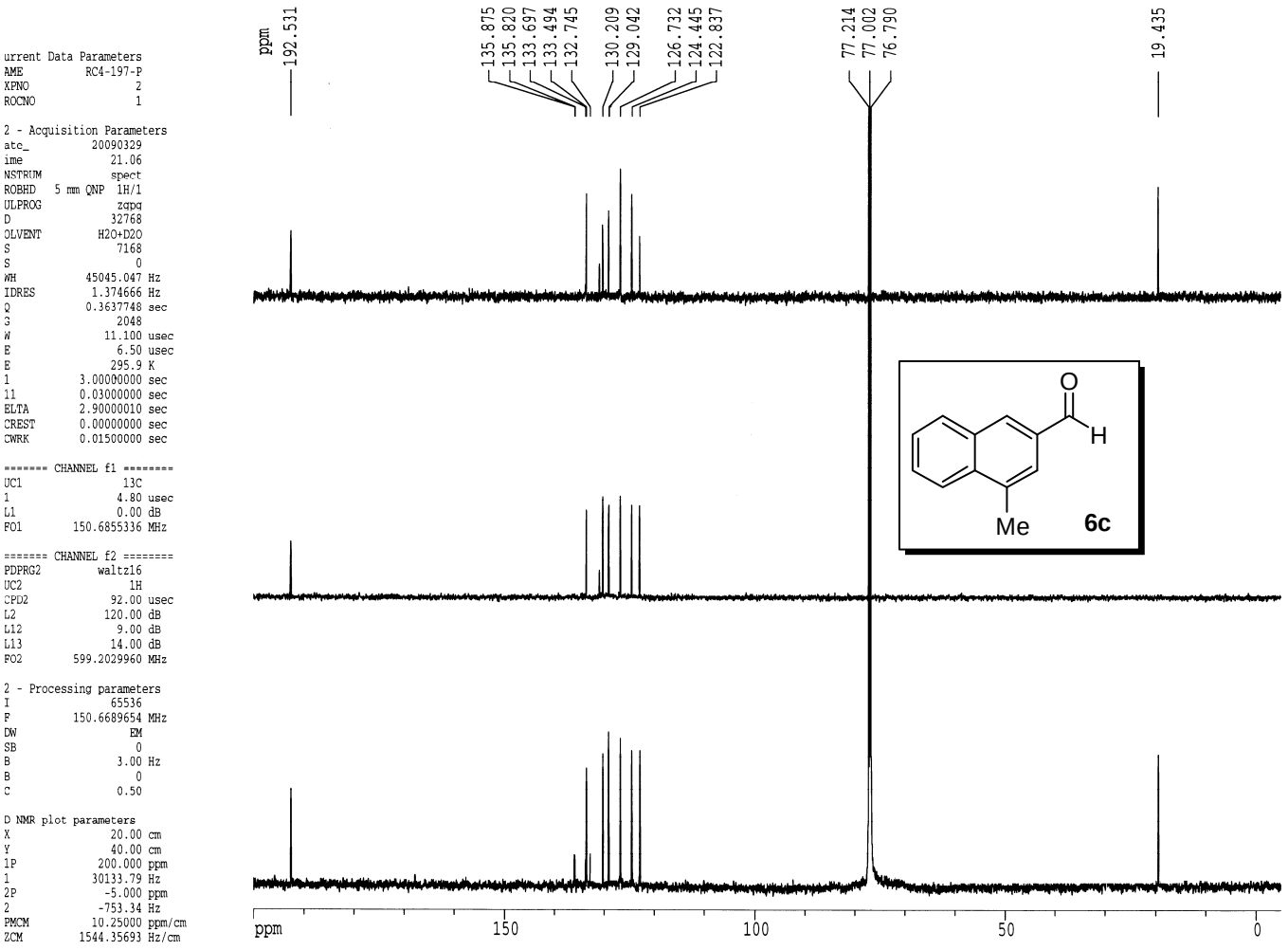

9.7654
8.4184
8.1040
8.0826
8.0374
8.0174
7.7008
7.6978
7.6835
7.6803
7.6769
7.6625
7.6593
7.5912
7.5894
7.5716
7.5540
7.5518
7.5007
7.4957
7.4917
7.4791
7.4754
7.4610
7.4555
7.4509
7.4470
7.4405
7.4333
7.2405
2.4540
Current Data Parameters
NAME 27.02.3009
EXPNO 1
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090327
Time 11.04
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 15
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 144
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500164 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
O
H
Ph
Me
6a
Ph-OMe-2A
12
11
10
9
8
7
6
5
4
3
2
1
ppm
0.97
1.00
1.03
1.01
1.02
1.07
3.35
2.28
2.95

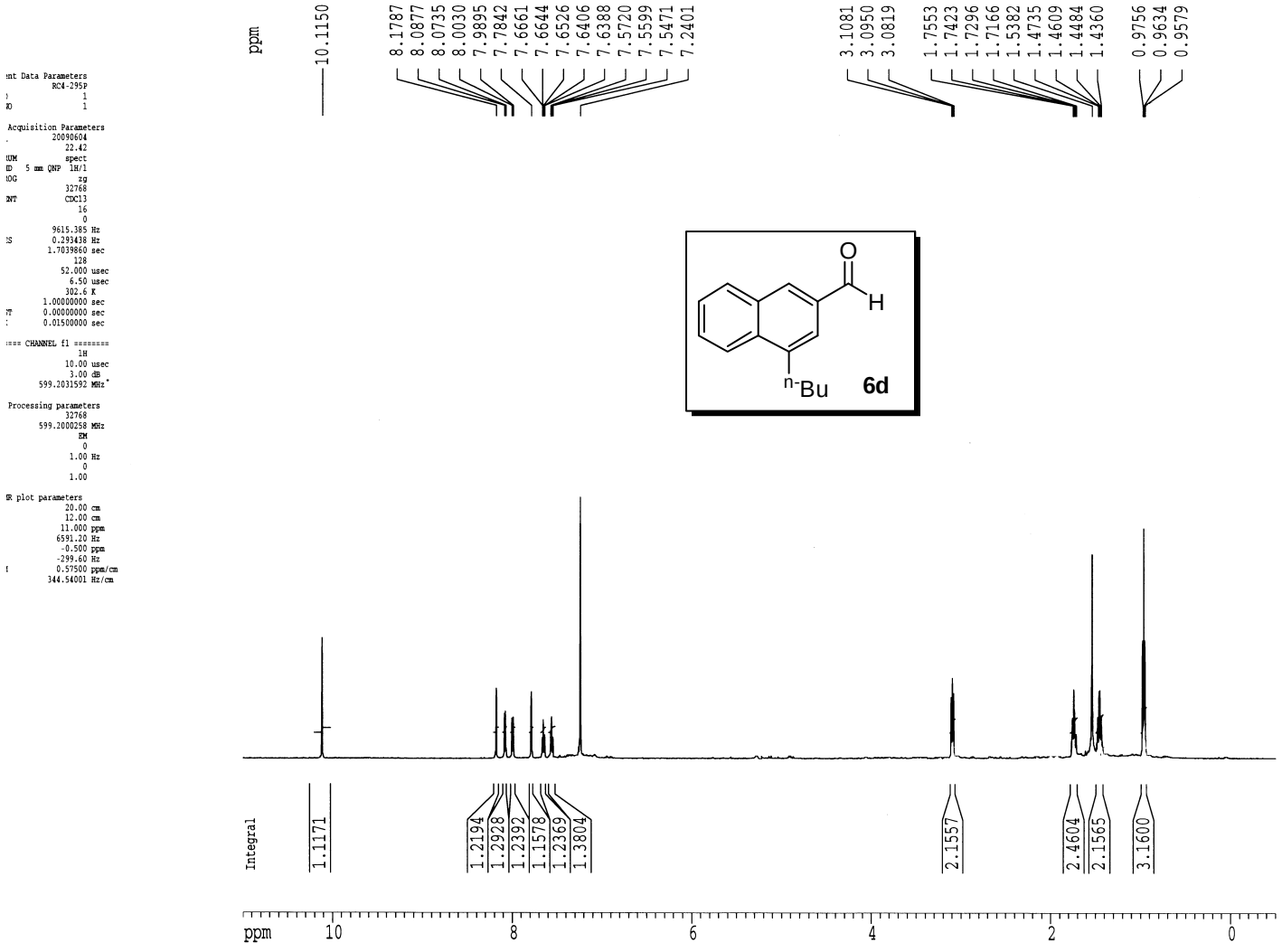

193.04
139.40
137.88
135.25
133.11
132.27
131.78
130.72
130.31
129.09
128.30
127.61
127.48
126.51
124.62
77.32
77.00
76.69
15.92
Current Data Parameters
NAME 28.03.2009
EXPNO 13
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090328
Time 9.36
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 200
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 64
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.50 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178027 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
O
H
Ph
Me
6a
Ph-OMe-2A
210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 ppm

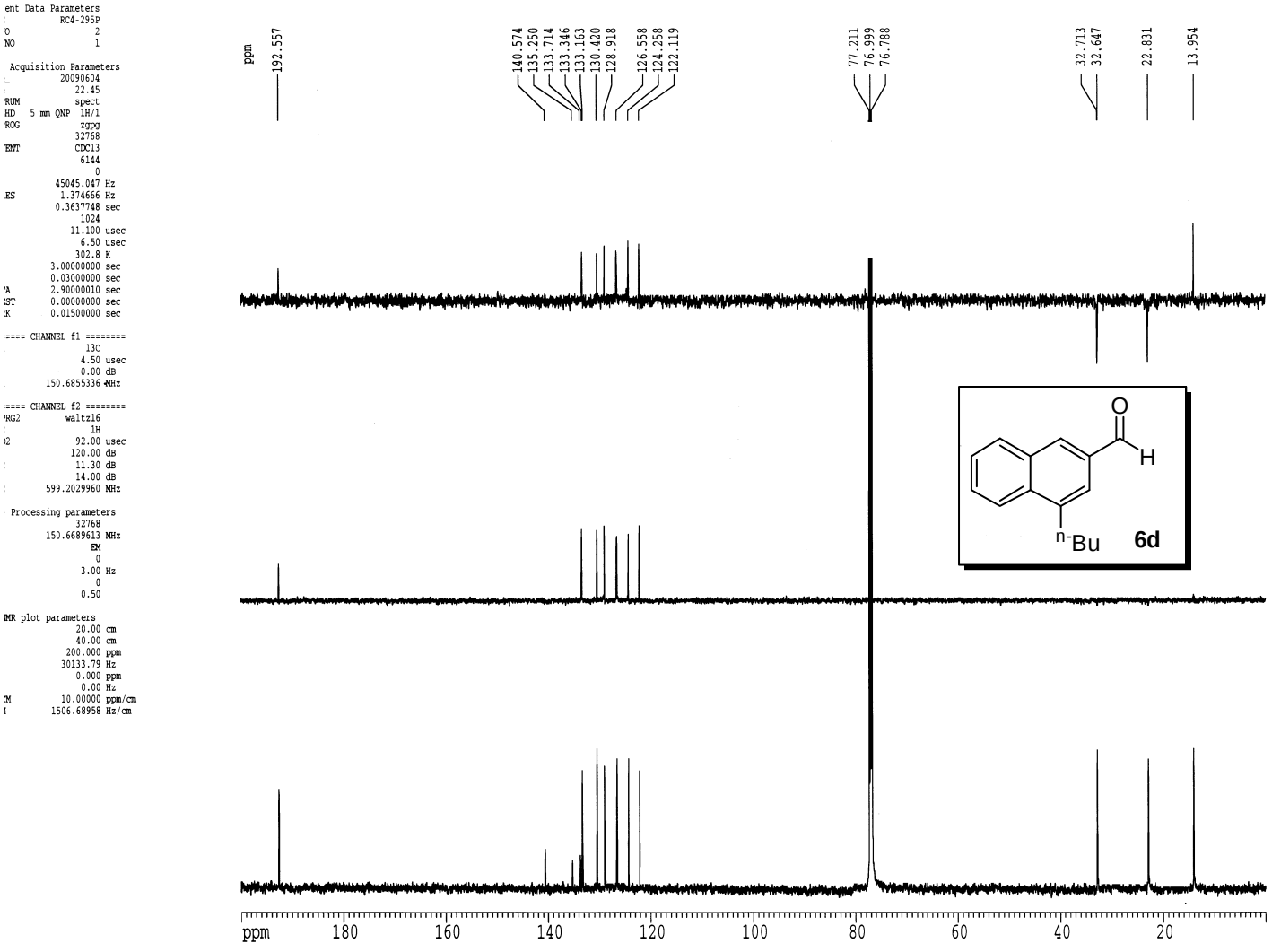

10.3213
8.1869
8.0586
8.0371
7.9273
7.9078
7.6464
7.6433
7.6293
7.6257
7.6218
7.6079
7.6045
7.5116
7.5094
7.4943
7.4917
7.4892
7.4742
7.4726
7.2405
3.2257
3.2114
3.2056
3.1990
3.1854
2.6512
1.6557
1.6371
1.6185
1.6106
1.6047
1.5983
1.5870
1.5789
1.5610
1.0853
1.0670
1.0487
Current Data Parameters
NAME 26.03.2009
EXPNO 4
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090326
Time 10.30
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 10
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 64
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500161 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
Pr-CHO
O
H
n-Pr
Me
6b
12
11
10
9
8
7
6
5
4
3
2
1
ppm
1.00
0.95
1.07
1.06
1.25
1.30
2.05
3.47
2.54
3.22

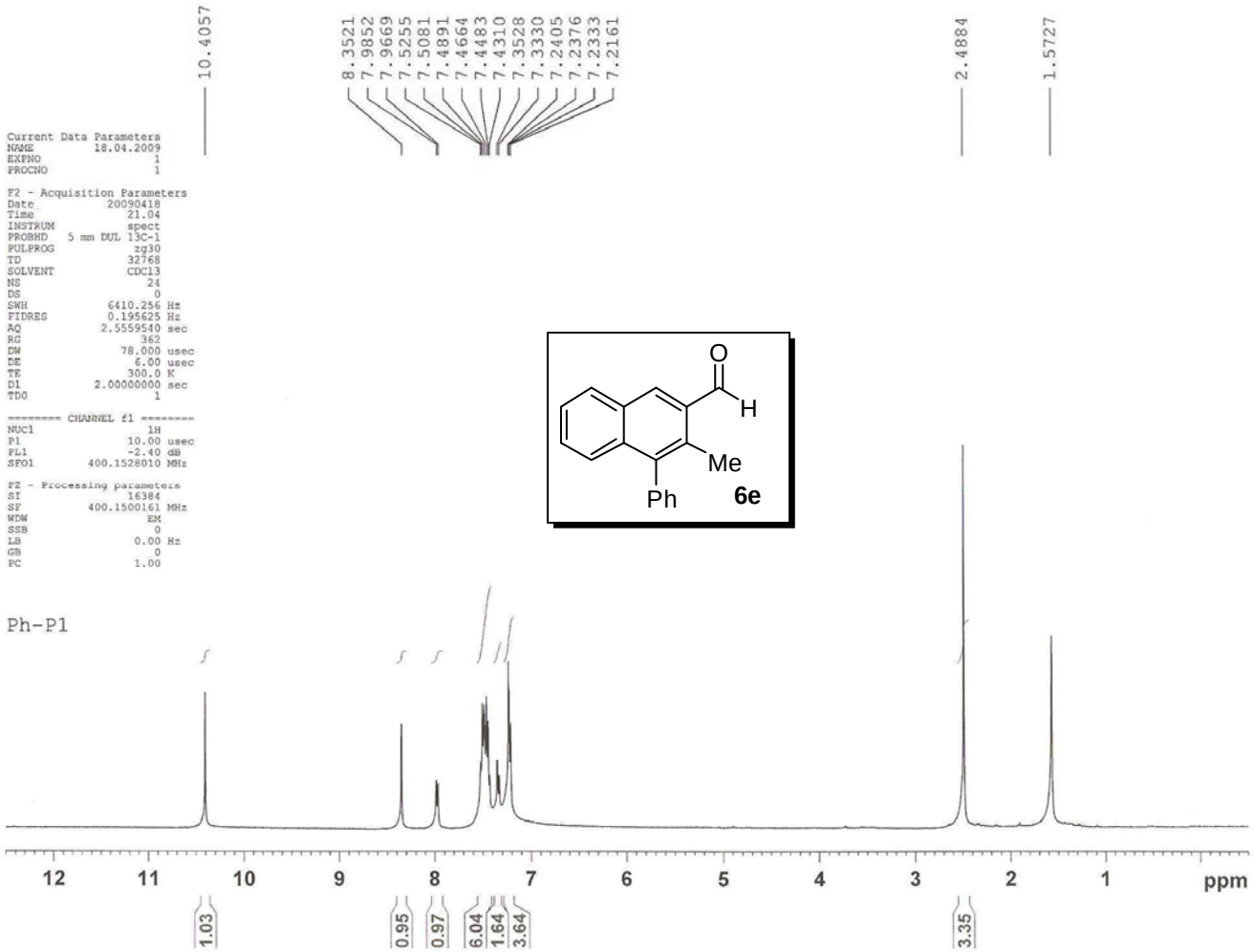

Current Data Parameters
NAME 26.03.2009
EXPNO 1
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090326
Time 10.23
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 51
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 64
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178067 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
193.37
137.35
135.34
134.60
132.93
132.52
130.97
130.04
128.97
125.69
124.17
77.33
77.01
76.69
30.52
24.60
14.32
14.07
O
H
n-Pr
Me
6b
Pr-CHO
210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 ppm

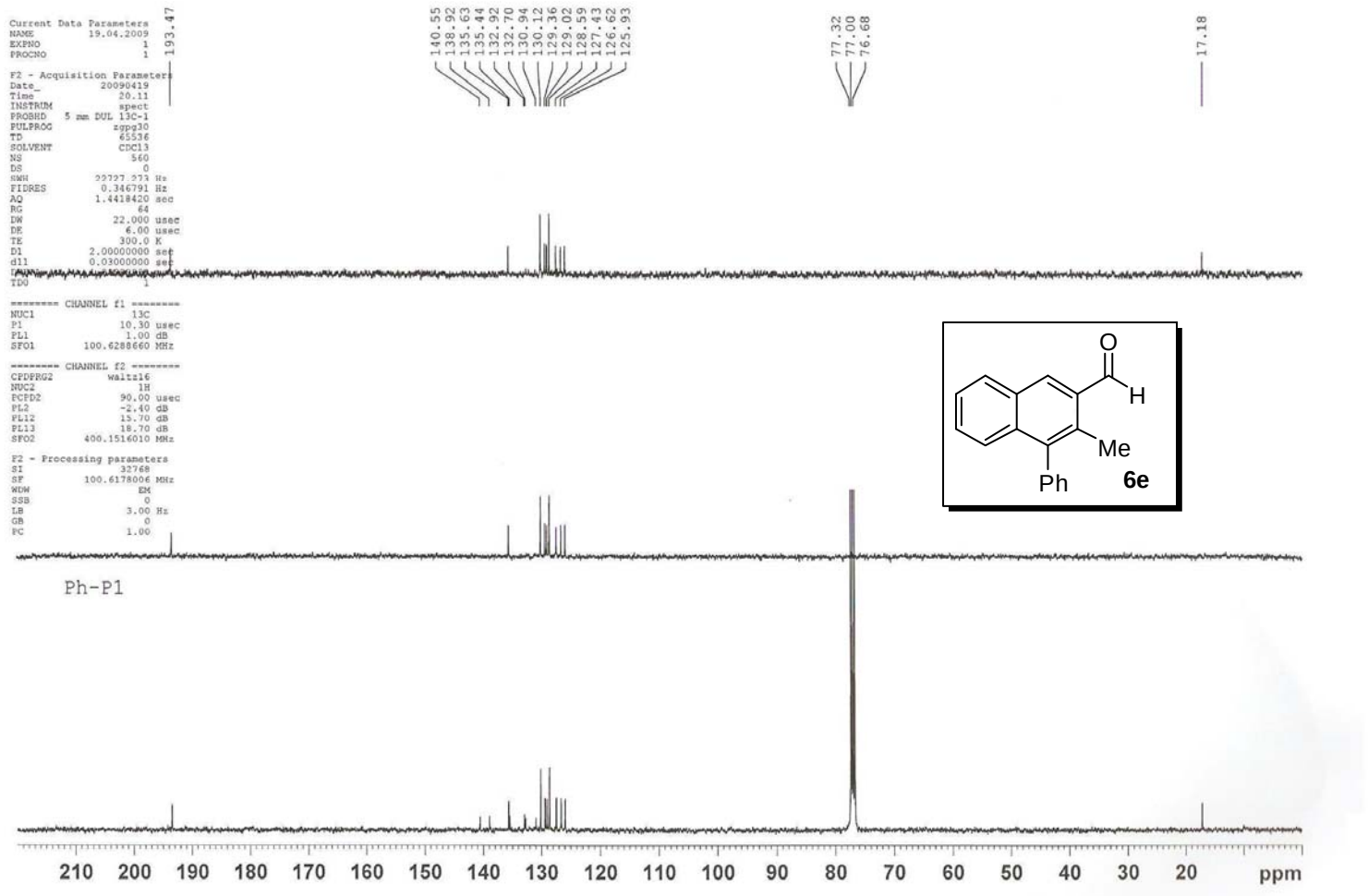

10.1082
8.1882
8.0426
8.0216
8.0073
7.9880
7.7839
7.6899
7.6834
7.6729
7.6523
7.5976
7.5801
7.5609
7.2401
2.7263
1.5485
Current Data Parameters
NAME 26.03.2009
EXPNO 18
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090326
Time 22.41
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDC13
NS 24
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 575
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500168 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
H-OMe-P
O
H
Me
6c
12
11
10
9
8
7
6
5
4
3
2
1
ppm
0.96
1.04
1.18
1.15
1.10
1.51
1.33
3.24

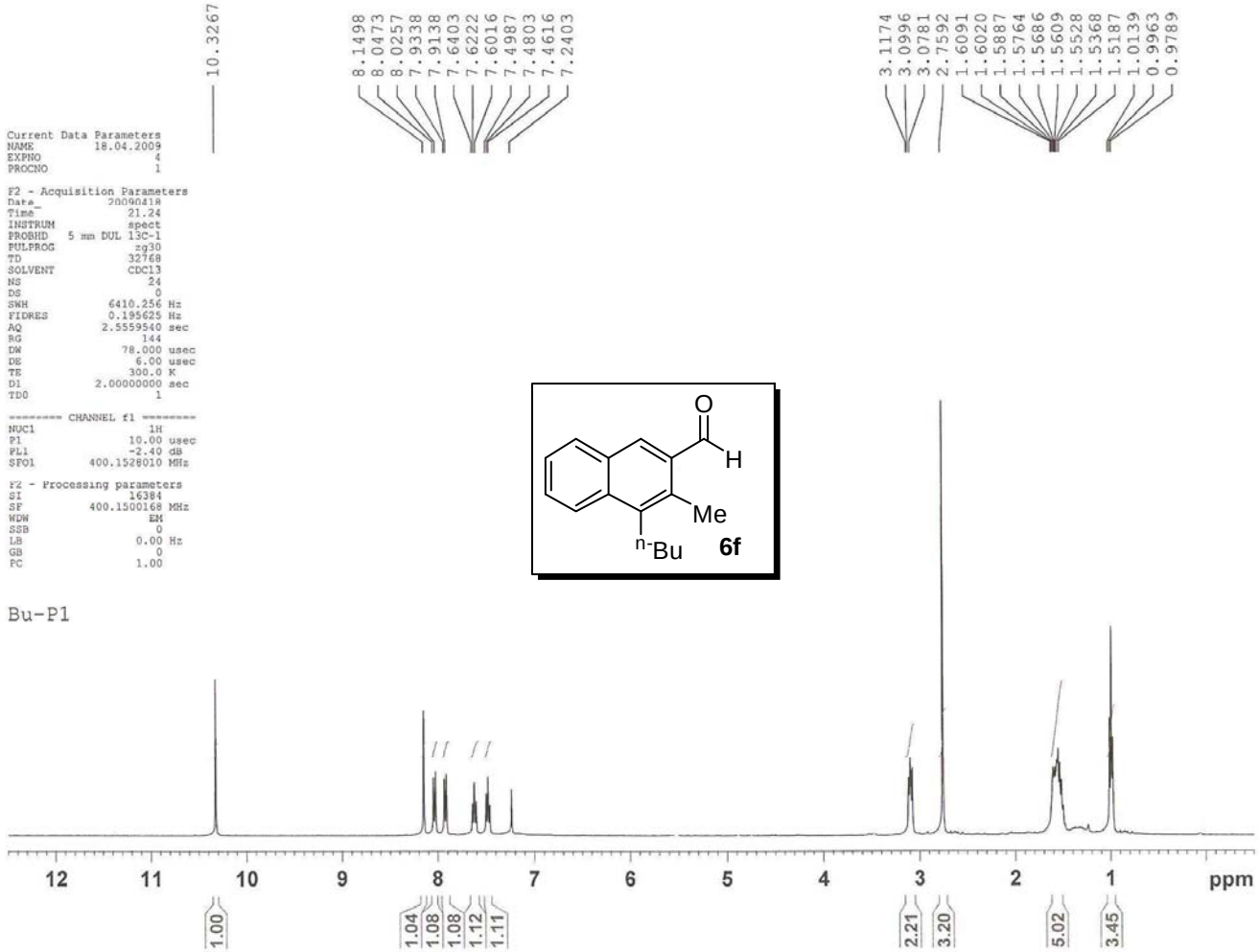

urrent Data Parameters
AME RC4-197-P
XPNO 2
ROCNO 1
2 - Acquisition Parameters
atc_ 20090329
ime 21.06
NSTRUM spect
ROBHD 5 mm QNP 1H/1
ULPROG zgpg
D 32768
OLVENT H2O+D2O
S 7168
S 0
WH 45045.047 Hz
IDRES 1.374666 Hz
Q 0.3637748 sec
3 2048
W 11.100 usec
E 6.50 usec
E 295.9 K
1 3.00000000 sec
11 0.03000000 sec
ELTA 2.90000010 sec
CREST 0.00000000 sec
CWRK 0.01500000 sec
======= CHANNEL f1 ========
UC1 13C
1 4.80 usec
L1 0.00 dB
FO1 150.6855336 MHz
======= CHANNEL f2 ========
PDPRG2 waltz16
UC2 1H
CPD2 92.00 usec
L2 120.00 dB
L12 9.00 dB
L13 14.00 dB
FO2 599.2029960 MHz
2 - Processing parameters
I 65536
F 150.6689654 MHz
DW EM
SB 0
B 3.00 Hz
B 0
C 0.50
D NMR plot parameters
X 20.00 cm
Y 40.00 cm
1P 200.000 ppm
1 30133.79 Hz
2P -5.000 ppm
2 -753.34 Hz
PMCM 10.25000 ppm/cm
ZCM 1544.35693 Hz/cm
ppm
192.531
135.875
135.820
133.697
133.494
132.745
130.209
129.042
126.732
124.445
122.837
77.214
77.002
76.790
19.435
O
H
Me
6c
ppm
150
100
50
0

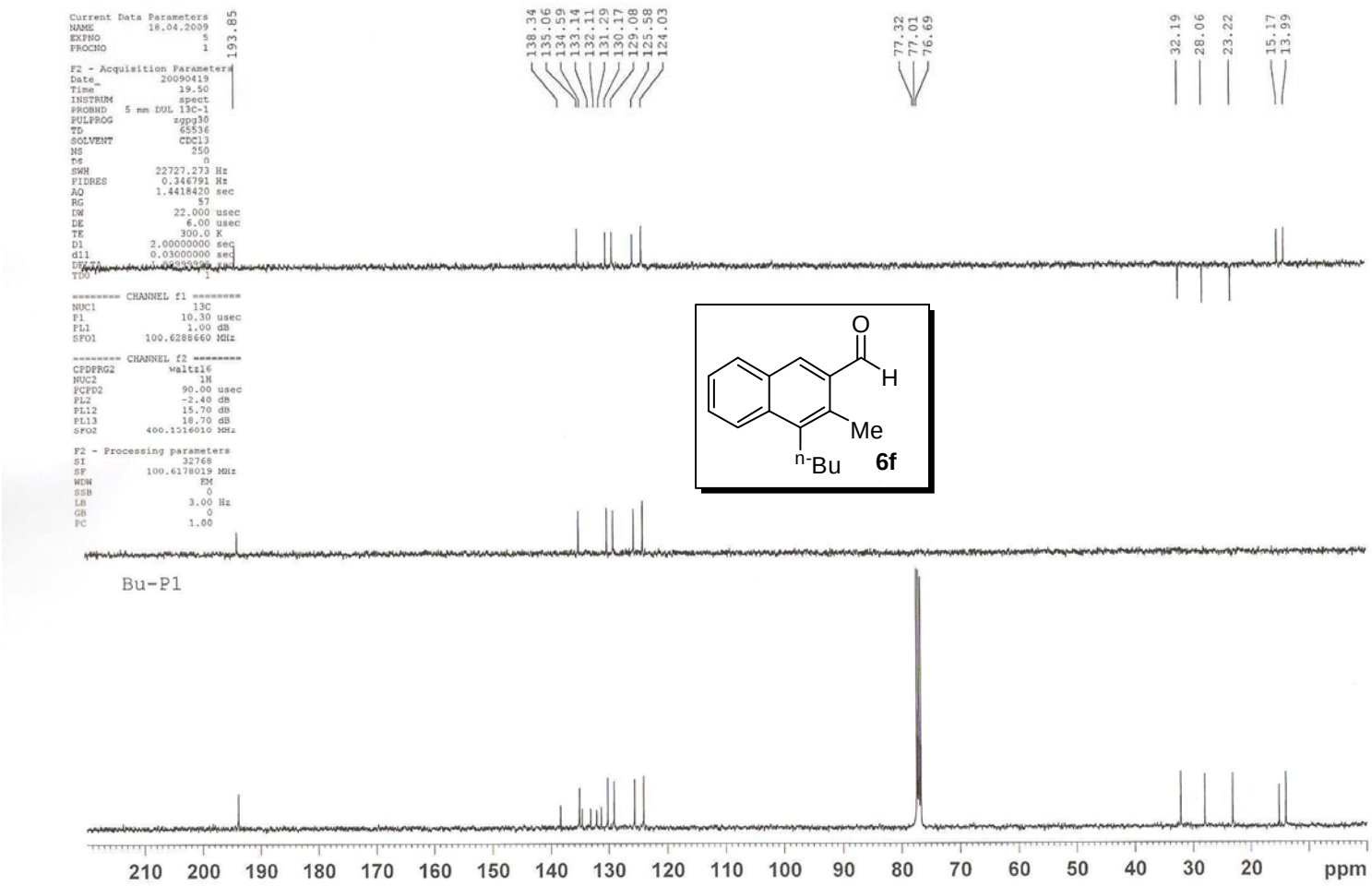

nt Data Parameters
RC4-295P
1
1
Acquisition Parameters
20090604
22.42
spect
5 mm QNP 1H/1
zg
32768
CDCl3
16
0
9615.385 Hz
0.293438 Hz
1.7039860 sec
128
52.000 usec
6.50 usec
302.6 K
1.00000000 sec
0.00000000 sec
0.01500000 sec
CHANNEL f1
1H
10.00 usec
3.00 dB
599.2031592 MHz
Processing parameters
32768
599.2000258 MHz
EM
0
1.00 Hz
0
1.00
plot parameters
20.00 cm
12.00 cm
11.000 ppm
6591.20 Hz
-0.500 ppm
-299.60 Hz
0.57500 ppm/cm
344.54001 Hz/cm
ppm
10.1150
8.1787
8.0877
8.0735
8.0030
7.9895
7.7842
7.6661
7.6644
7.6526
7.6406
7.6388
7.5720
7.5599
7.5471
7.2401
3.1081
3.0950
3.0819
1.7553
1.7423
1.7296
1.7166
1.5382
1.4735
1.4609
1.4484
1.4360
0.9756
0.9634
0.9579
O
H
n-Bu
6d
Integral
1.1171
1.2194
1.2928
1.2392
1.1578
1.2369
1.3804
2.1557
2.4604
2.1565
3.1600
ppm
10
8
6
4
2
0

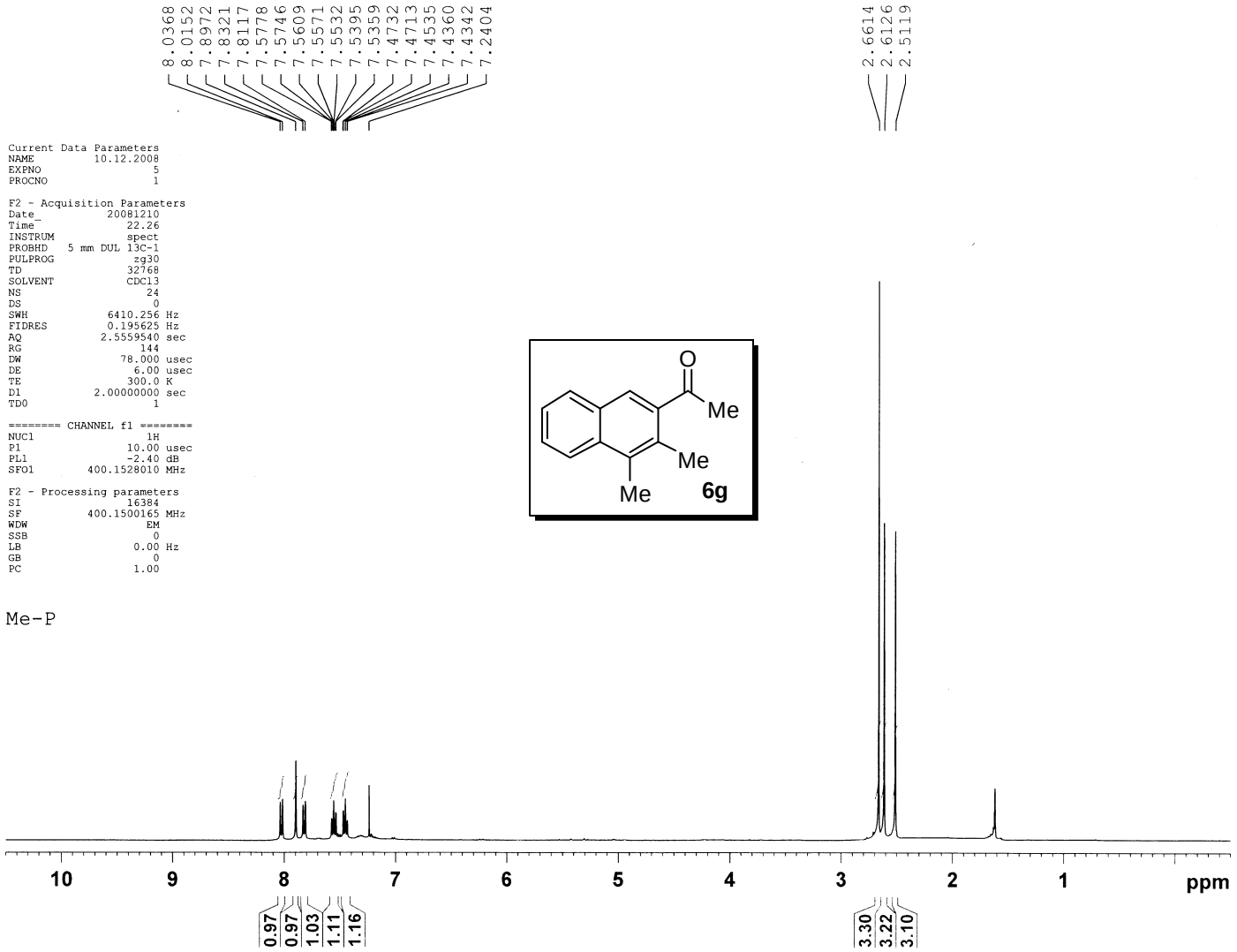

ent Data Parameters
RC4-295P
2
1
Acquisition Parameters
20090604
22.45
spect
5 mm QNP 1H/1
zgpg
32768
CDCl3
6144
0
45045.047 Hz
1.374666 Hz
0.3637748 sec
1024
11.100 usec
6.50 usec
302.8 K
3.00000000 sec
0.03000000 sec
2.90000010 sec
0.00000000 sec
0.01500000 sec
==== CHANNEL f1 ========
13C
4.50 usec
0.00 dB
150.6855336 MHz
==== CHANNEL f2 ========
waltz16
1H
92.00 usec
120.00 dB
11.30 dB
14.00 dB
599.2029960 MHz
Processing parameters
32768
150.6689613 MHz
EM
0
3.00 Hz
0
0.50
MR plot parameters
20.00 cm
40.00 cm
200.000 ppm
30133.79 Hz
0.000 ppm
0.00 Hz
10.00000 ppm/cm
1506.68958 Hz/cm
ppm
192.557
140.574
135.250
133.714
133.346
133.163
130.420
128.918
126.558
124.258
122.119
77.211
76.999
76.788
32.713
32.647
22.831
13.954
O
H
n-Bu
6d
ppm
180
160
140
120
100
80
60
40
20

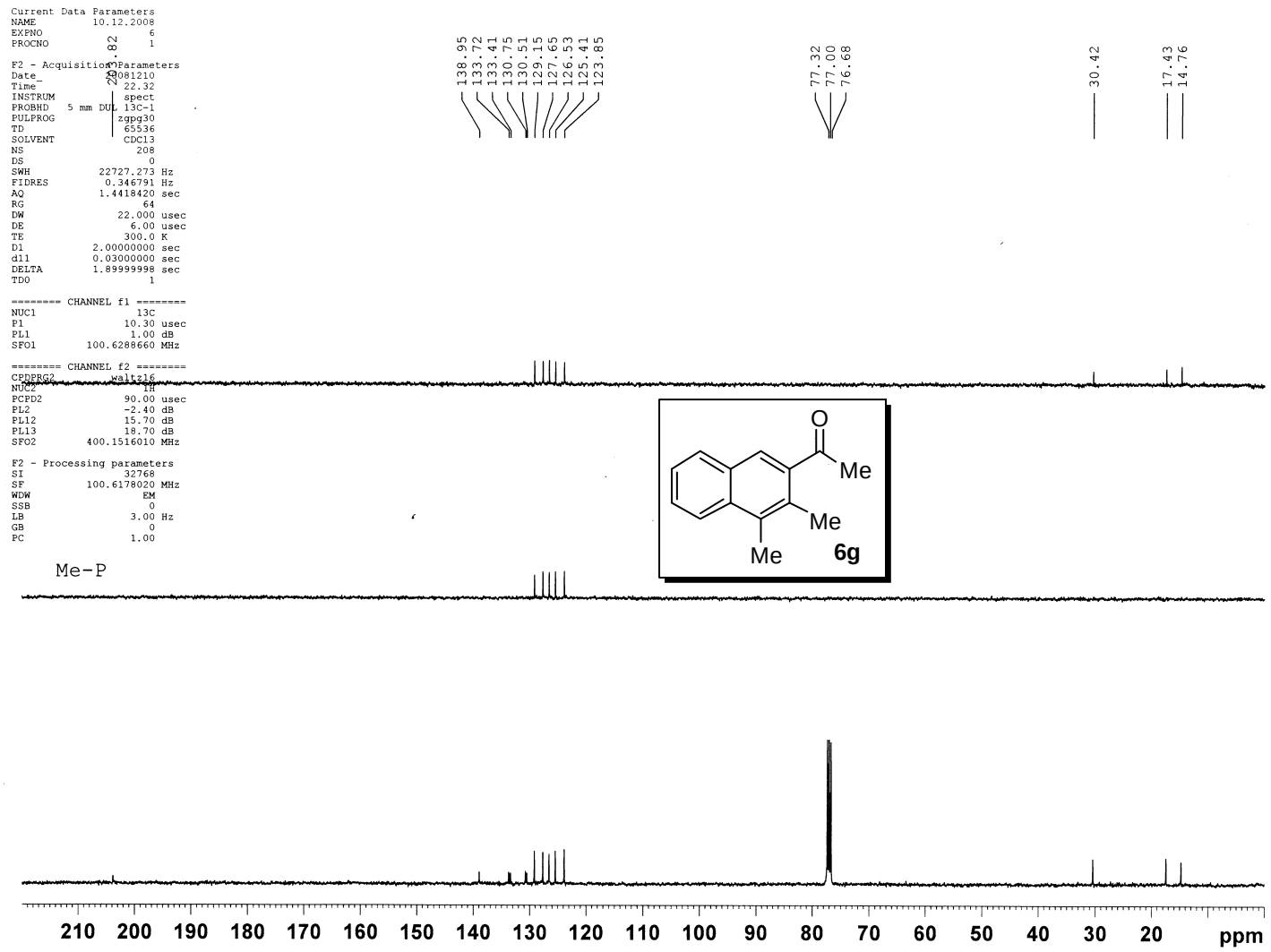

10.4057
8.3521
7.9852
7.9669
7.5255
7.5081
7.4891
7.4664
7.4483
7.4310
7.3528
7.3330
7.2405
7.2376
7.2333
7.2161
2.4884
1.5727
Current Data Parameters
NAME 18.04.2009
EXPNO 1
PROCNO 1
F2 - Acquisition Parameters
Date 20090418
Time 21.04
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 362
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500161 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
O
H
Me
Ph
6e
Ph-P1
12
11
10
9
8
7
6
5
4
3
2
1
ppm
1.03
0.95
0.97
6.04
1.64
3.64
3.35

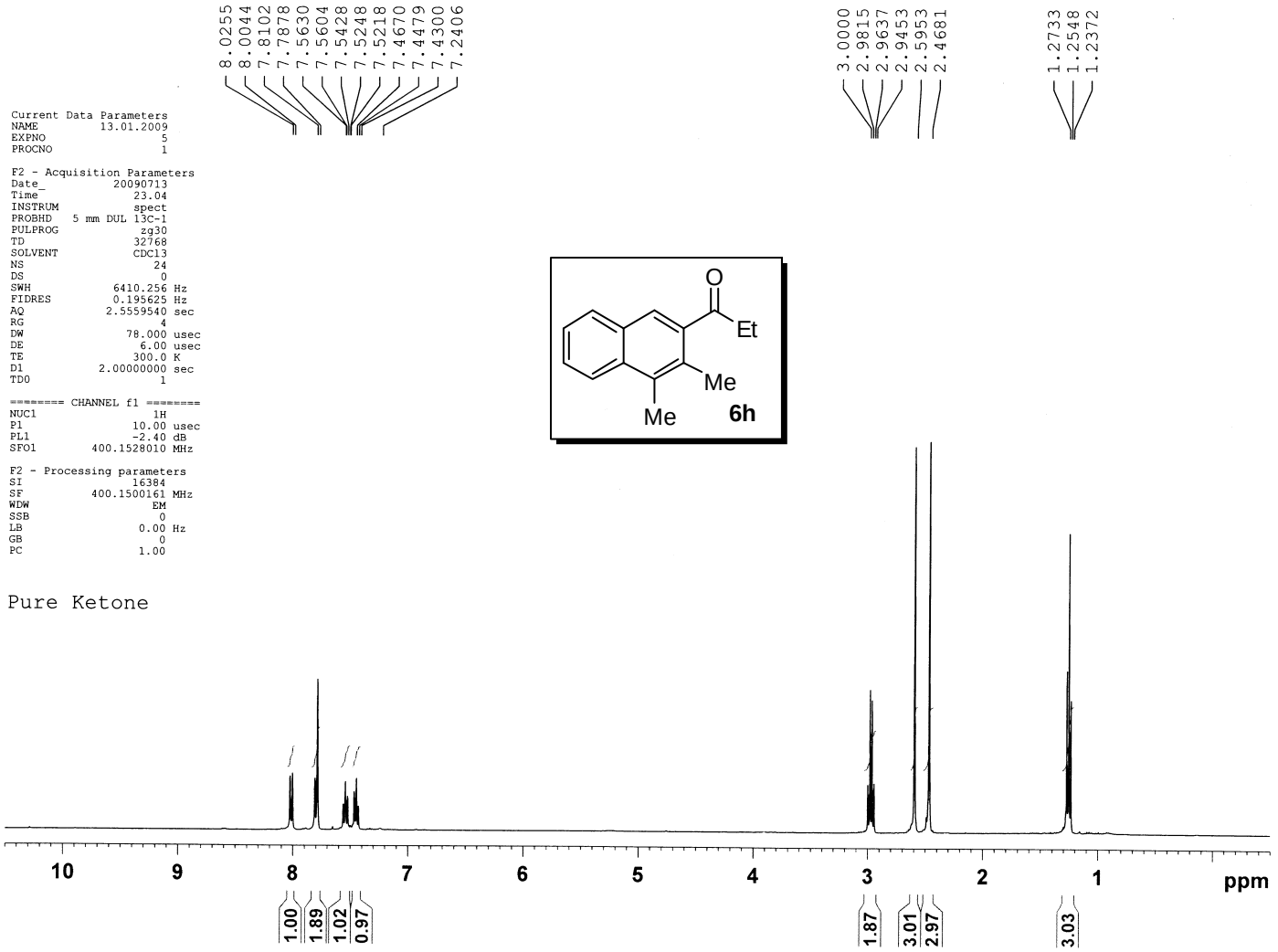

193.47
140.55
138.92
135.63
135.44
132.92
132.70
130.94
130.12
129.36
129.02
128.59
127.43
126.62
125.93
77.32
77.00
76.68
17.18
O
H
Me
Ph
6e
Ph-P1
210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 ppm

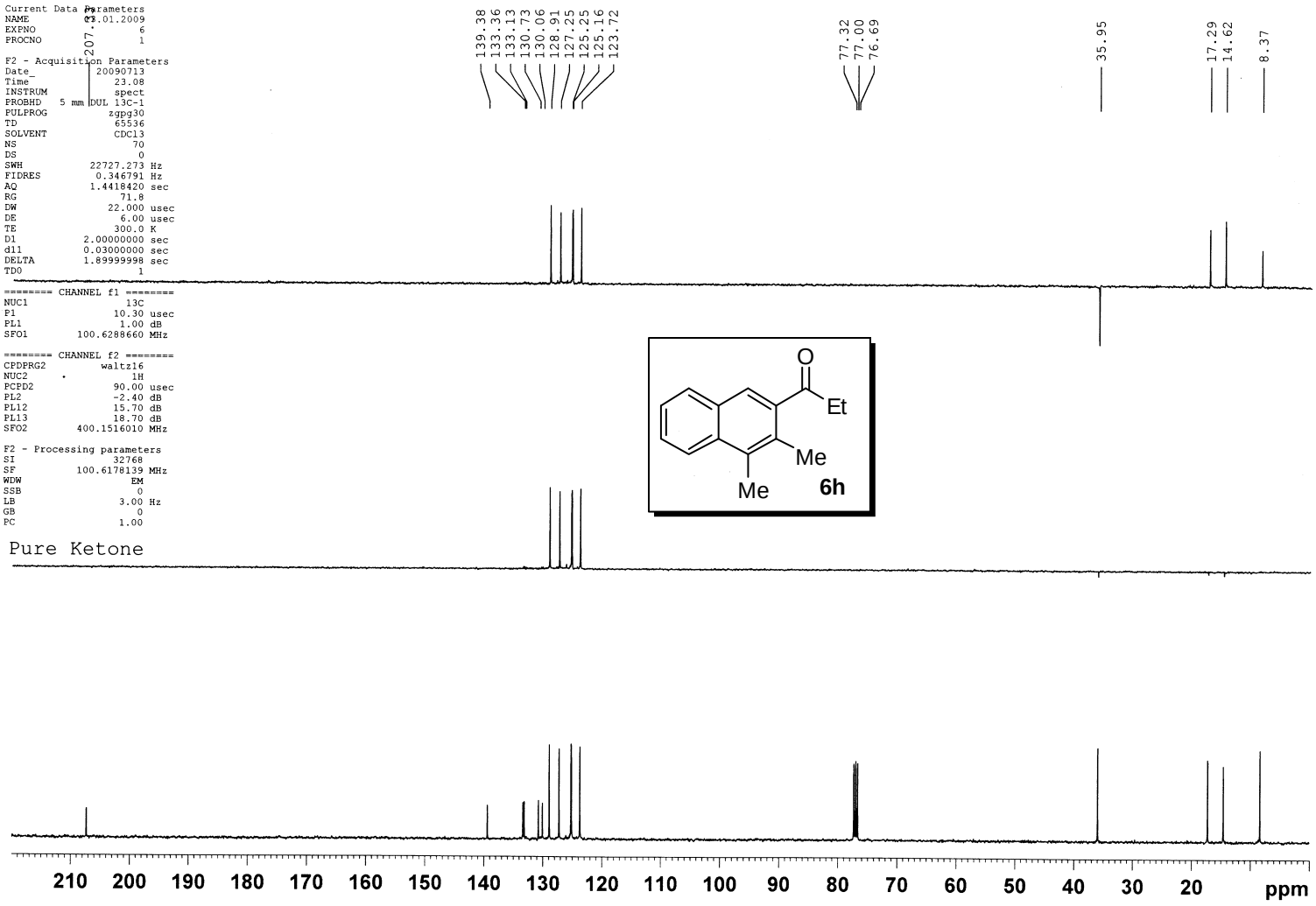

10.3267
8.1498
8.0473
8.0257
7.9338
7.9138
7.6403
7.6222
7.6016
7.4987
7.4803
7.4616
7.2403
3.1174
3.0996
3.0781
2.7592
1.6091
1.6020
1.5887
1.5764
1.5686
1.5609
1.5528
1.5368
1.5187
1.0139
0.9963
0.9789
Current Data Parameters
NAME 18.04.2009
EXPNO 4
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090418
Time 21.24
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 144
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500168 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
O
H
Me
n-Bu
6f
Bu-P1
12
11
10
9
8
7
6
5
4
3
2
1
ppm
1.00
1.04
1.08
1.08
1.12
1.11
2.21
3.20
5.02
3.45

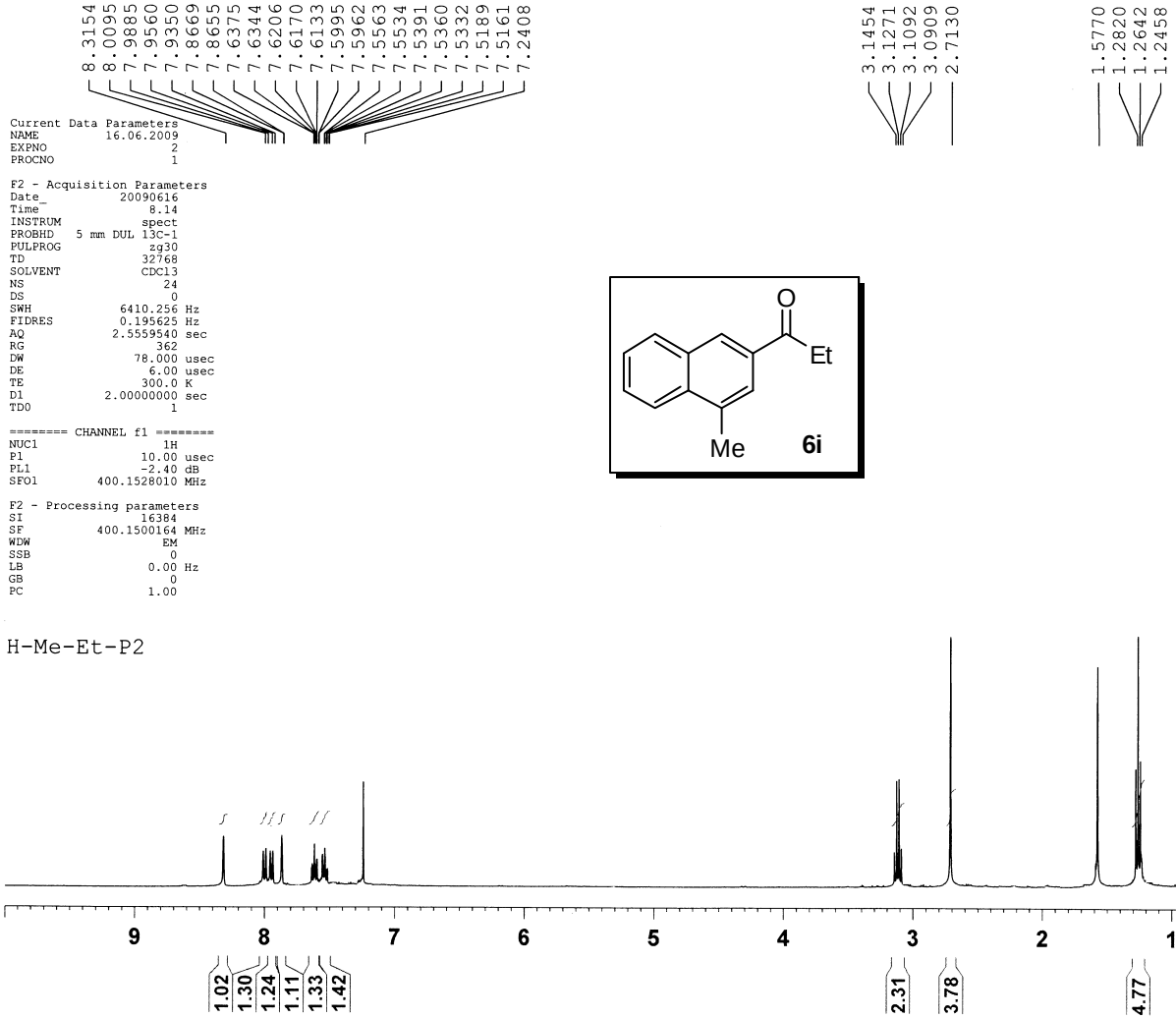

Current Data Parameters
NAME 18.04.2009
EXPNO 5
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090419
Time_ 19.50
INSTRUM spect
PROBND 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 250
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.44184420 sec
RG 57
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178019 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
193.85
138.34
135.06
134.59
133.14
132.11
131.29
130.17
129.08
125.58
124.03
77.32
77.01
76.69
32.19
28.06
23.22
15.17
13.99
O
H
Me
n-Bu
6f
Bu-P1
210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 ppm

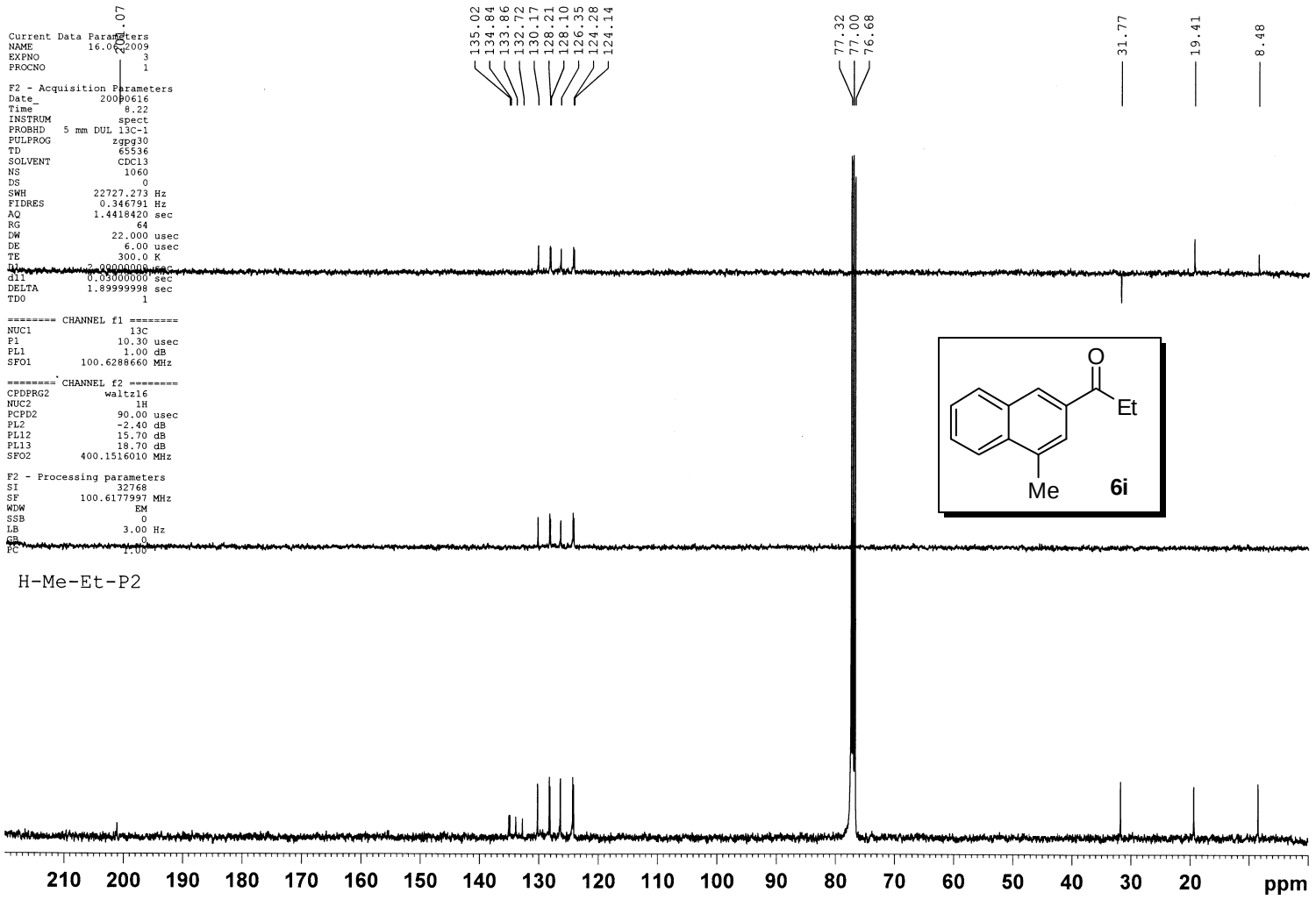

8.0368
8.0152
7.8972
7.8321
7.8117
7.5778
7.5746
7.5609
7.5571
7.5532
7.5395
7.5359
7.4732
7.4713
7.4535
7.4360
7.4342
7.2404
2.6614
2.6126
2.5119
Current Data Parameters
NAME 10.12.2008
EXPNO 5
PROCNO 1
F2 - Acquisition Parameters
Date_ 20081210
Time 22.26
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 144
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500165 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
Me-P
O
Me
Me
Me
6g
10
9
8
7
6
5
4
3
2
1
ppm
0.97
0.97
1.03
1.11
1.16
3.30
3.22
3.10

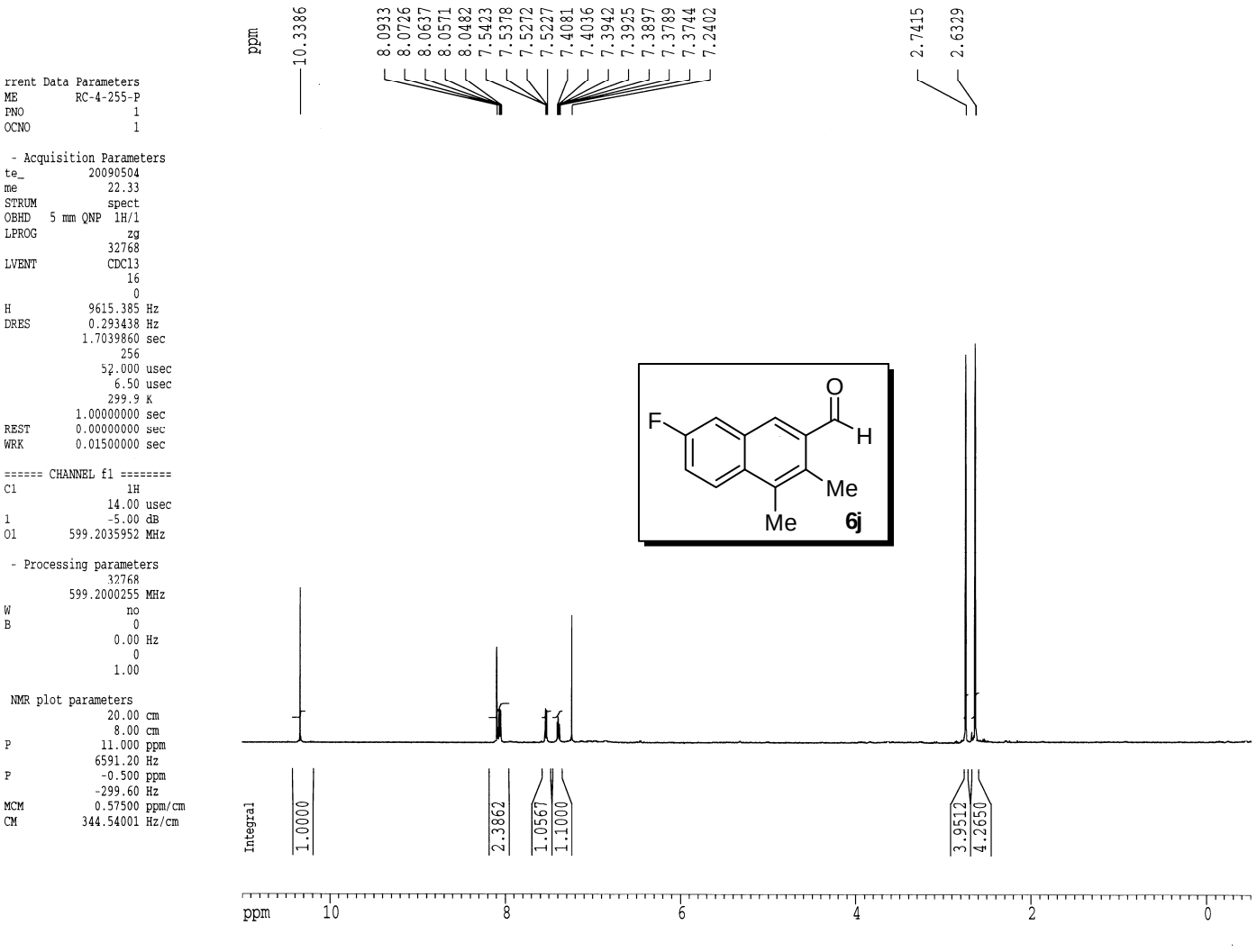

Current Data Parameters
NAME 10.12.2008
EXPNO 6
PROCNO 1
F2 - Acquisition Parameters
Date_ 20081210
Time 22.32
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 208
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 64
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178020 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
138.95
133.72
133.41
130.75
130.51
129.15
127.65
126.53
125.41
123.85
77.32
77.00
76.68
30.42
17.43
14.76
O
Me
Me
Me
6g
Me-P
210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 ppm

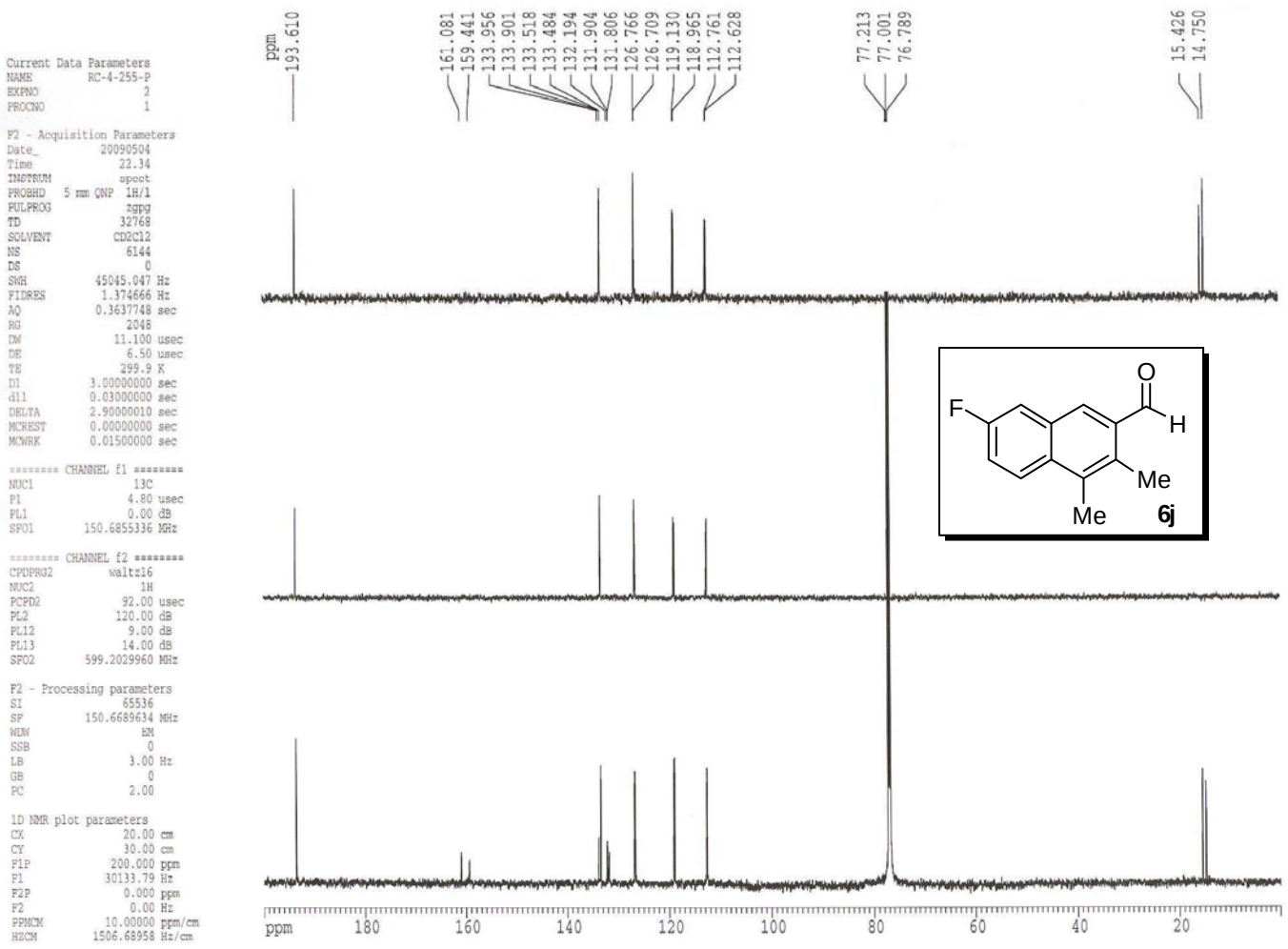

8.0255
8.0044
7.8102
7.7878
7.5630
7.5604
7.5428
7.5248
7.5218
7.4670
7.4479
7.4300
7.2406
3.0000
2.9815
2.9637
2.9453
2.5953
2.4681
1.2733
1.2548
1.2372
Current Data Parameters
NAME 13.01.2009
EXPNO 5
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090713
Time 23.04
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 4
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500161 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
O
Et
Me
Me
6h
Pure Ketone
10
9
8
7
6
5
4
3
2
1
ppm
1.00
1.89
1.02
0.97
1.87
3.01
2.97
3.03

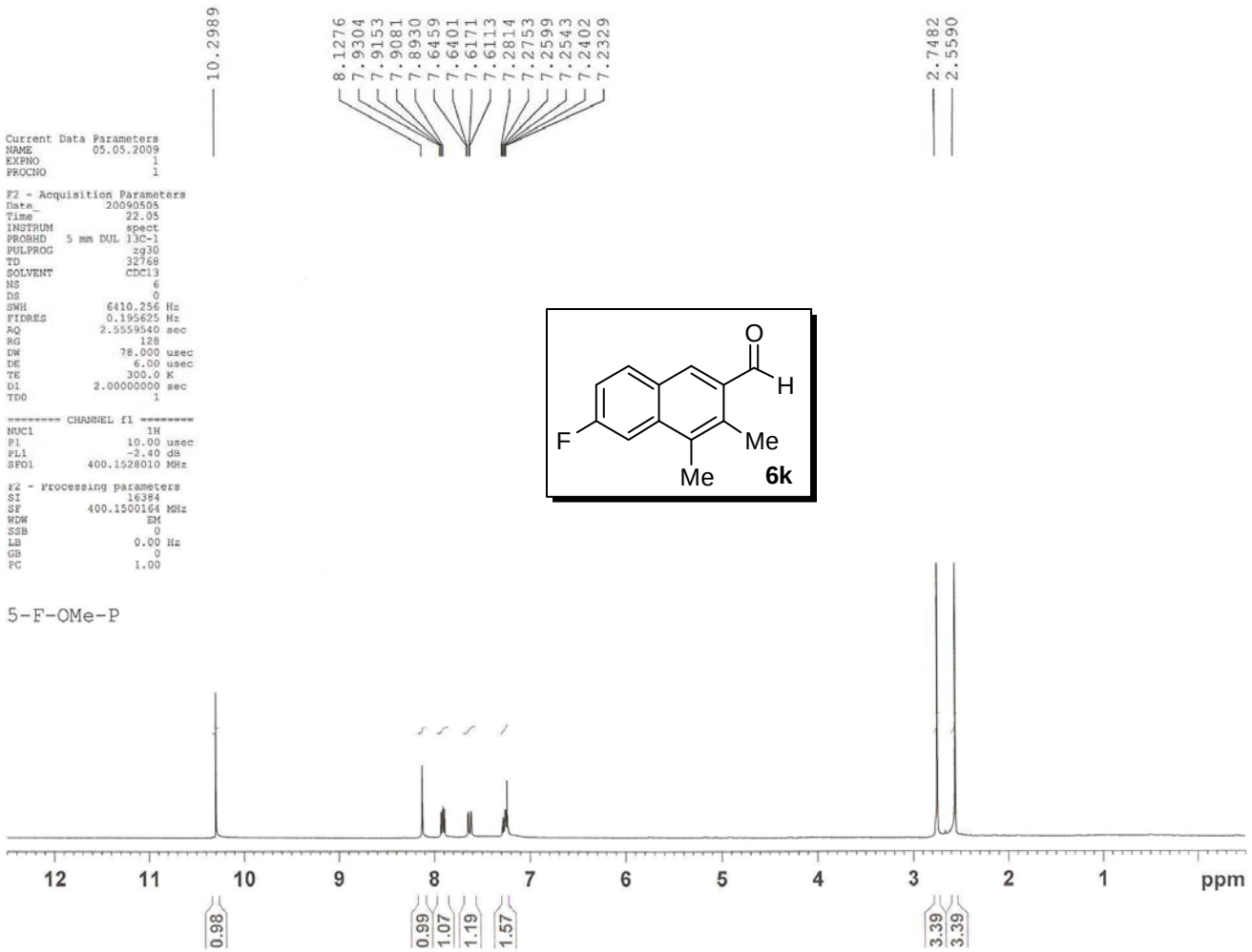

Current Data Parameters
NAME 03.01.2009
EXPNO 6
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090713
Time 23.08
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 70
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 71.8
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178139 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
207.21
139.38
133.36
133.13
130.73
130.06
128.91
127.25
125.25
125.16
123.72
77.32
77.00
76.69
35.95
17.29
14.62
8.37
O
Et
Me
Me
6h
Pure Ketone
210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 ppm

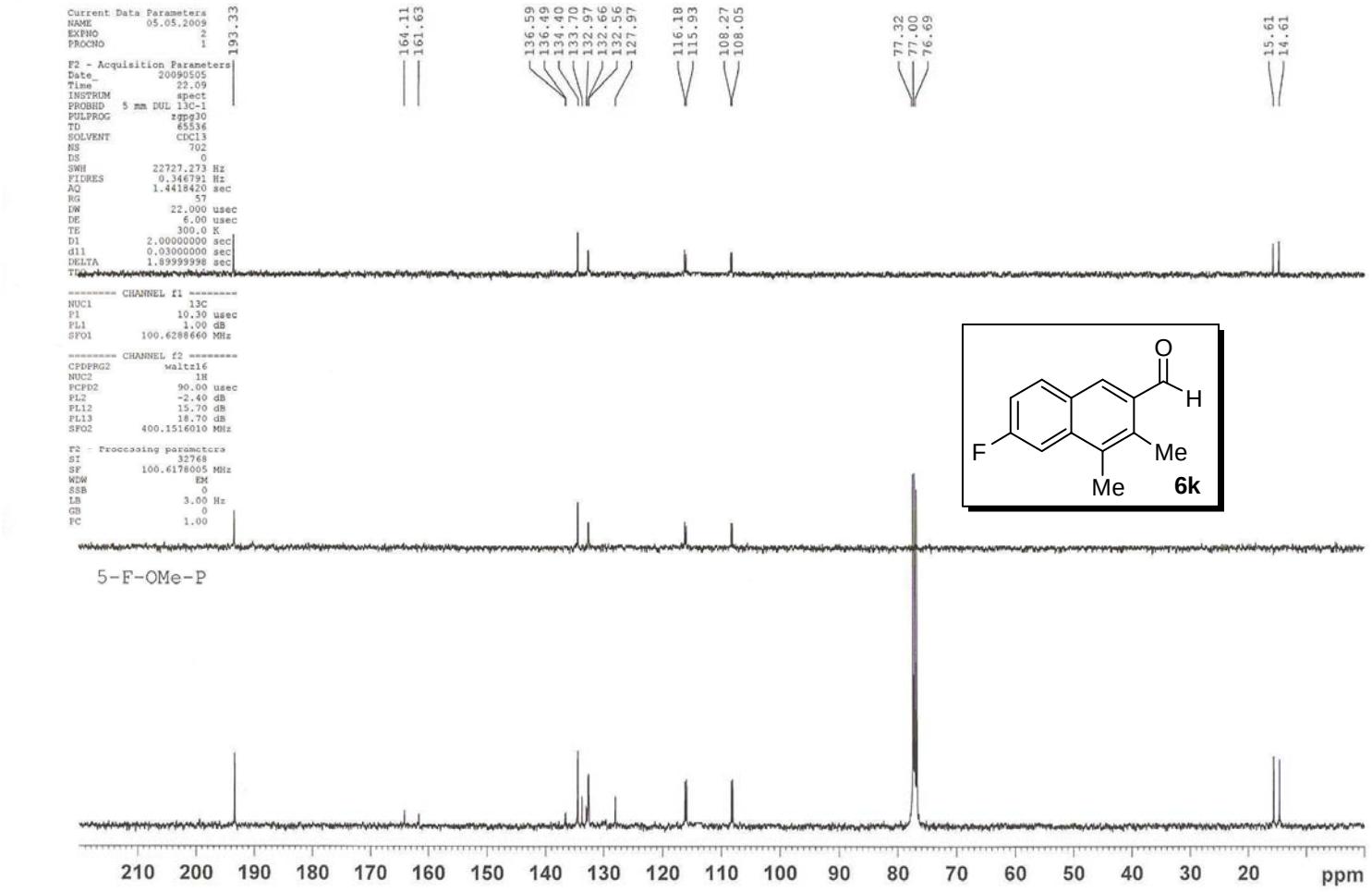

8.3154
8.0095
7.9885
7.9560
7.9350
7.8669
7.8655
7.6375
7.6344
7.6206
7.6170
7.6133
7.5995
7.5962
7.5563
7.5534
7.5391
7.5360
7.5332
7.5189
7.5161
7.2408
3.1454
3.1271
3.1092
3.0909
2.7130
1.5770
1.2820
1.2642
1.2458
Current Data Parameters
NAME 16.06.2009
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090616
Time 8.14
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 362
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500164 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
O
Et
Me
6i
H-Me-Et-P2
9
8
7
6
5
4
3
2
1
ppm
1.02
1.30
1.24
1.11
1.33
1.42
2.31
3.78
4.77

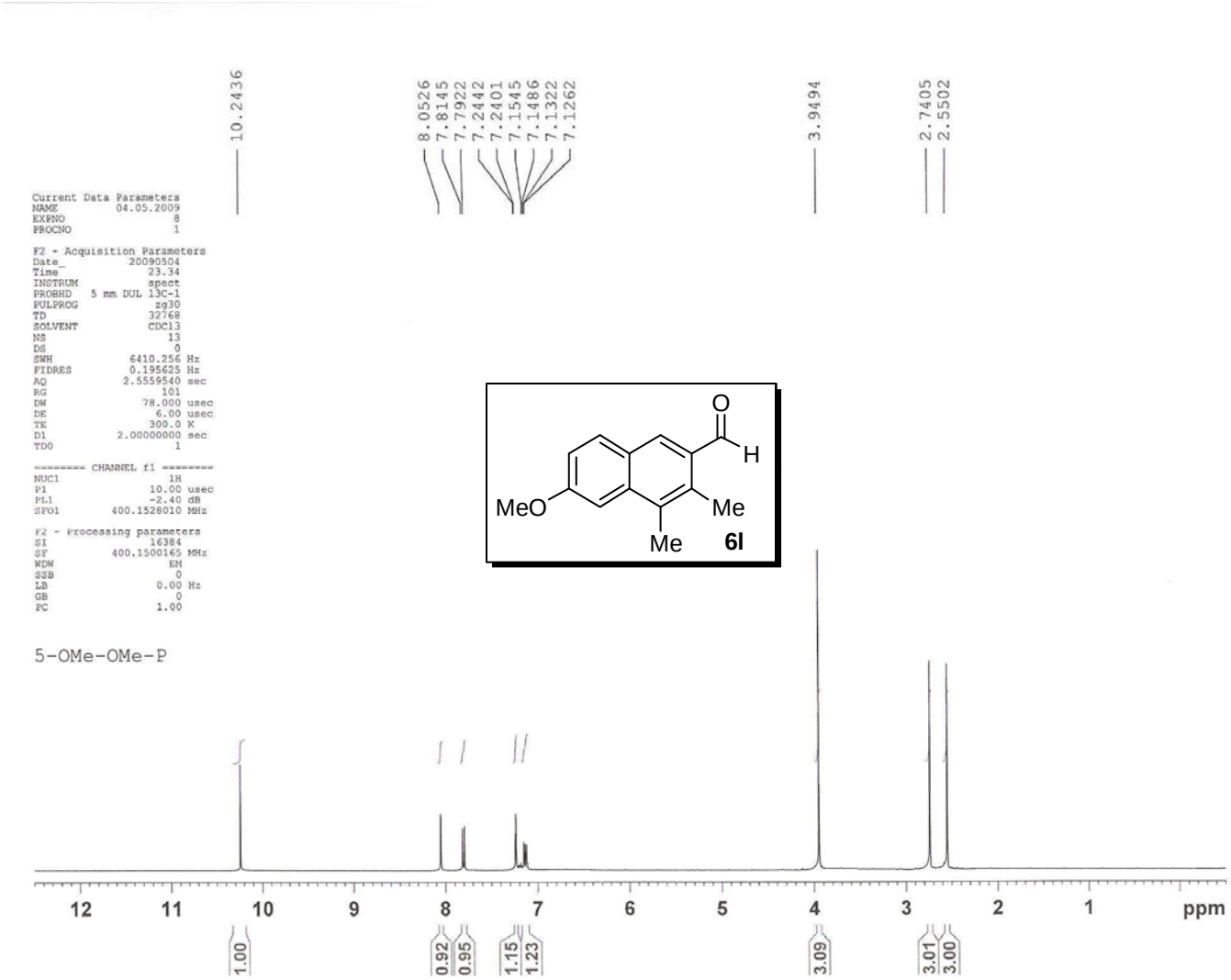

200.07
135.02
134.84
133.86
132.72
130.17
128.21
128.10
126.35
124.28
124.14
77.32
77.00
76.68
31.77
19.41
8.48
Current Data Parameters
NAME 16.06.2009
EXPNO 3
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090616
Time 8.22
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 1060
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 64
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6177997 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
O
Et
Me
6i
H-Me-Et-P2
210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 ppm

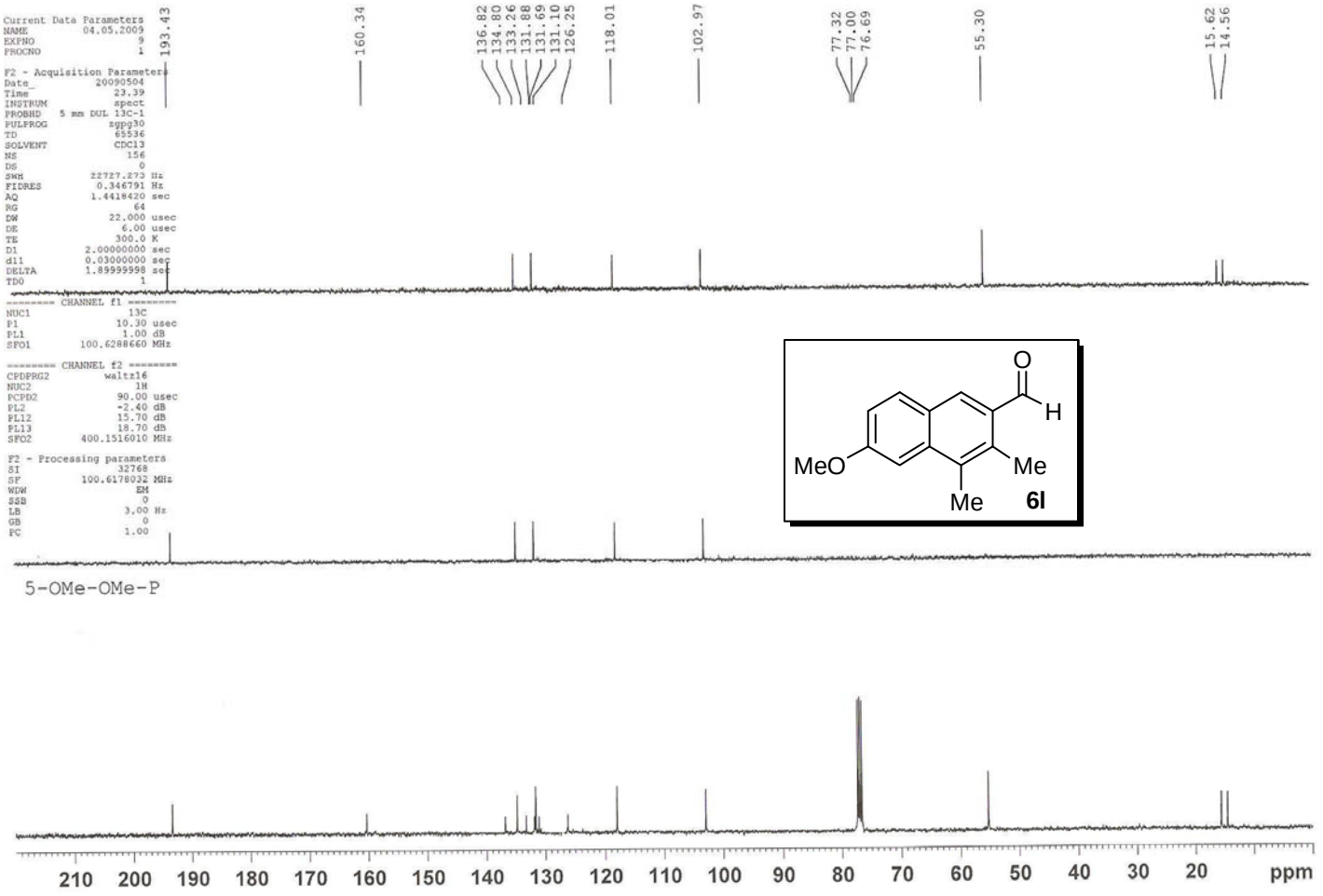

rrent Data Parameters
ME RC-4-255-P
PNO 1
OCNO 1
- Acquisition Parameters
te_ 20090504
me 22.33
STRUM spect
OBHD 5 mm QNP 1H/1
LPROG zg
32768
LVENT CDCl3
16
0
H 9615.385 Hz
DRES 0.293438 Hz
1.7039860 sec
256
52.000 usec
6.50 usec
299.9 K
1.00000000 sec
REST 0.00000000 sec
WRK 0.01500000 sec
====== CHANNEL f1 ========
C1 1H
14.00 usec
1 -5.00 dB
O1 599.2035952 MHz
- Processing parameters
32768
599.2000255 MHz
W no
B 0
0.00 Hz
0
1.00
NMR plot parameters
20.00 cm
8.00 cm
P 11.000 ppm
6591.20 Hz
P -0.500 ppm
-299.60 Hz
MCM 0.57500 ppm/cm
CM 344.54001 Hz/cm
ppm
10.3386
8.0933
8.0726
8.0637
8.0571
8.0482
7.5423
7.5378
7.5272
7.5227
7.4081
7.4036
7.3942
7.3925
7.3897
7.3789
7.3744
7.2402
2.7415
2.6329
F
O
H
Me
Me
6j
Integral
1.0000
2.3862
1.0567
1.1000
3.9512
4.2650
ppm
10
8
6
4
2
0

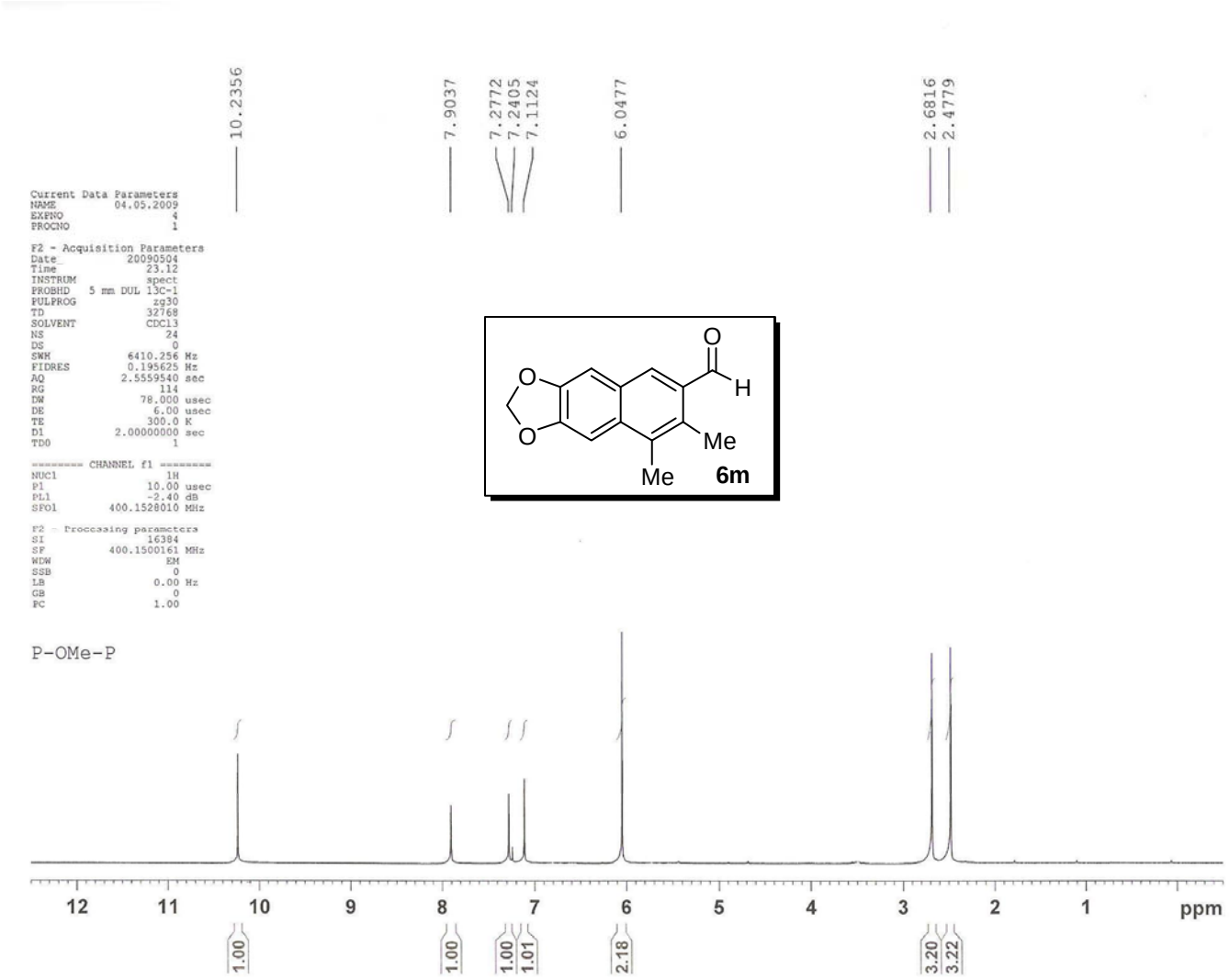

Current Data Parameters
NAME RC-4-255-P
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090504
Time 22.34
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgpg
TD 32768
SOLVENT CD2Cl2
NS 6144
DS 0
SWH 45045.047 Hz
FIDRES 1.374666 Hz
AQ 0.3637748 sec
RG 2048
DW 11.100 usec
DE 6.50 usec
TE 299.9 K
D1 3.00000000 sec
d11 0.03000000 sec
DELTA 2.90000010 sec
MCREST 0.00000000 sec
MCWRK 0.01500000 sec
======== CHANNEL f1 ========
NUC1 13C
P1 4.80 usec
PL1 0.00 dB
SFO1 150.6855336 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 92.00 usec
PL2 120.00 dB
PL12 9.00 dB
PL13 14.00 dB
SFO2 599.2029960 MHz
F2 - Processing parameters
SI 65536
SF 150.6689634 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 2.00
1D NMR plot parameters
CX 20.00 cm
CY 30.00 cm
F1P 200.000 ppm
F1 30133.79 Hz
F2P 0.000 ppm
F2 0.00 Hz
PPMCM 10.00000 ppm/cm
HZCM 1506.68958 Hz/cm
ppm
193.610
161.081
159.441
133.956
133.901
133.518
133.484
132.194
131.904
131.806
126.766
126.709
119.130
118.965
112.761
112.628
77.213
77.001
76.789
15.426
14.750
O
F
H
Me
Me
6j
ppm
180
160
140
120
100
80
60
40
20

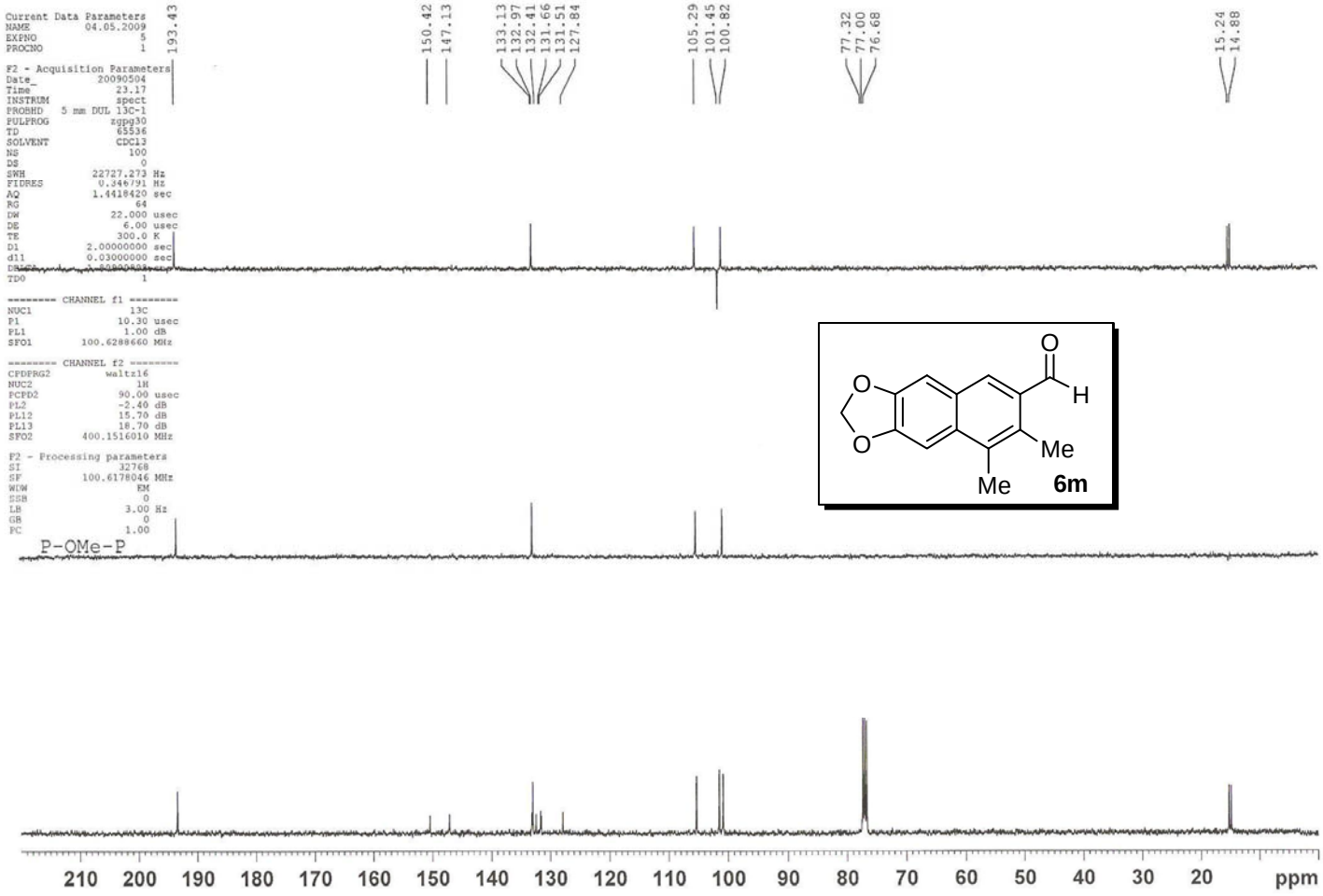

10.2989
8.1276
7.9304
7.9153
7.9081
7.8930
7.6459
7.6401
7.6171
7.6113
7.2814
7.2753
7.2599
7.2543
7.2402
7.2329
2.7482
2.5590
Current Data Parameters
NAME 05.05.2009
EXPNO 1
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090505
Time 22.05
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 6
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 128
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500164 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
5-F-OMe-P
O
H
F
Me
Me
6k
12
11
10
9
8
7
6
5
4
3
2
1
ppm
0.98
0.99
1.07
1.19
1.57
3.39
3.39

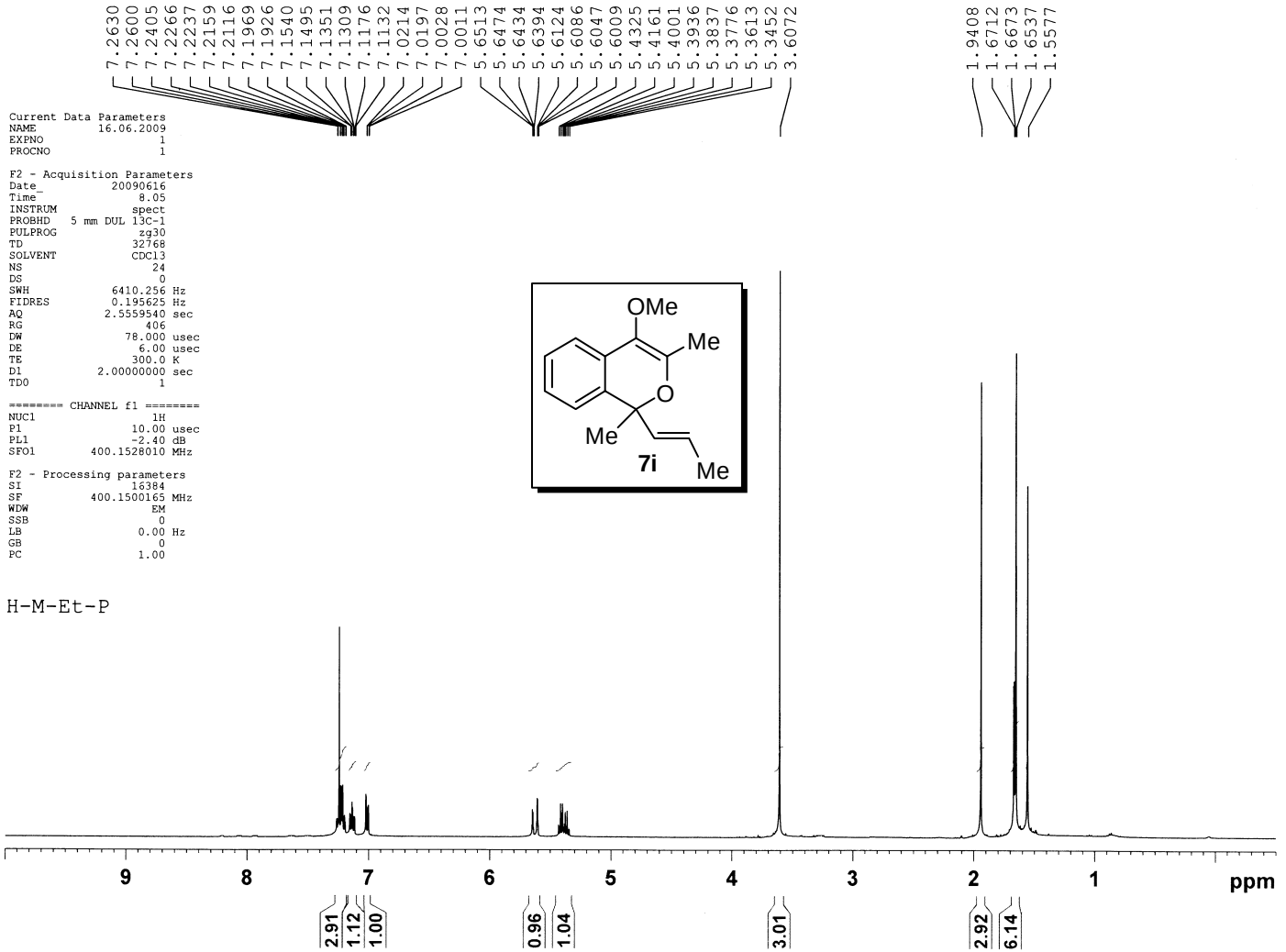

193.33
164.11
161.63
136.59
136.49
134.40
133.70
132.97
132.66
132.56
127.97
116.18
115.93
108.27
108.05
77.32
77.00
76.69
15.61
14.61
Current Data Parameters
NAME 05.05.2009
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090505
Time 22.09
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 702
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 57
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178065 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
O
H
F
Me
Me
6k
5-F-OMe-P
210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 ppm

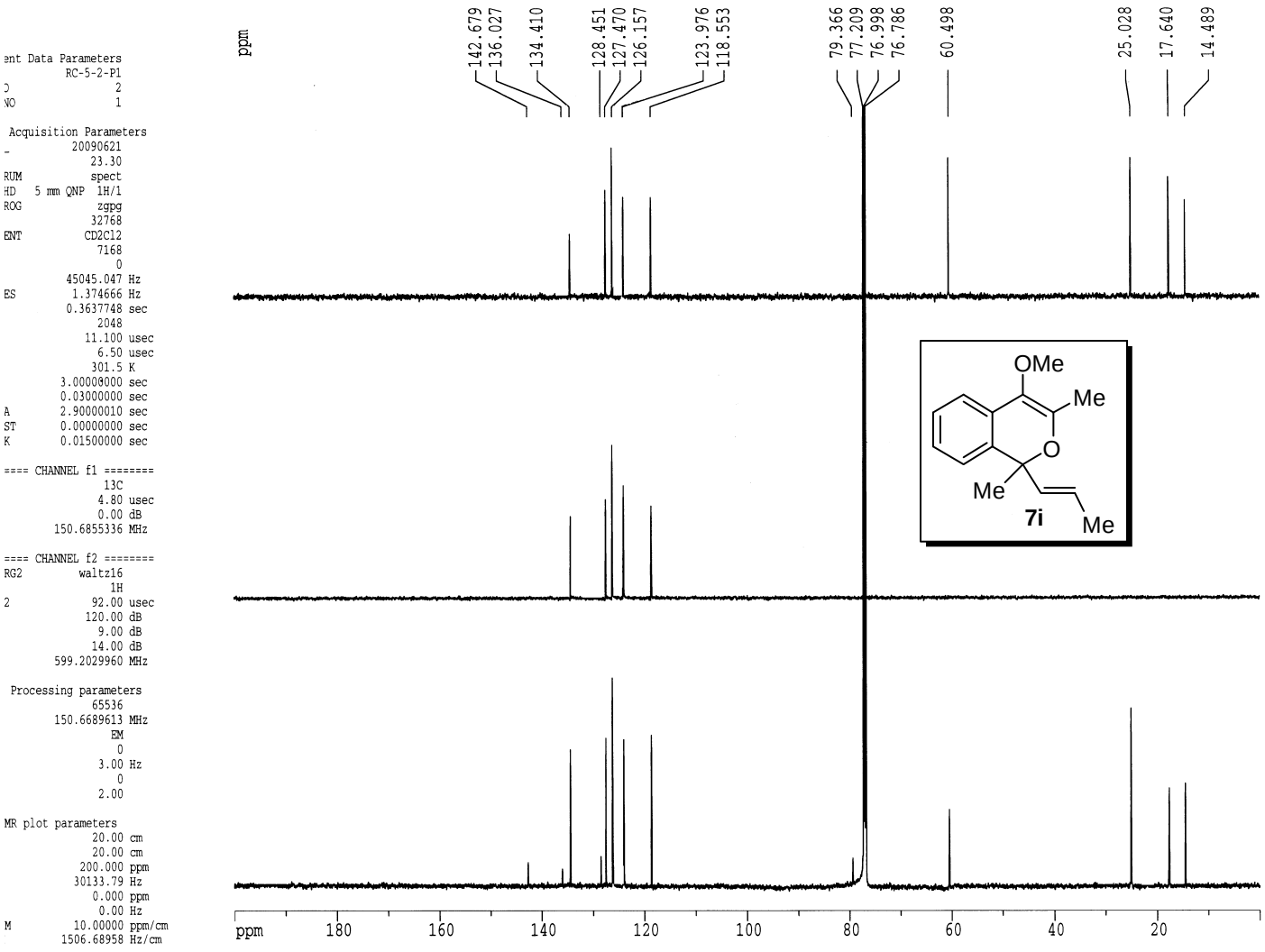

10.2436
8.0526
7.8145
7.7922
7.2442
7.2401
7.1545
7.1486
7.1322
7.1262
3.9494
2.7405
2.5502
Current Data Parameters
NAME 04.05.2009
EXPNO 8
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090504
Time 23.34
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 13
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 101
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500165 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
5-OMe-OMe-P
O
H
MeO
Me
Me
6l
12
11
10
9
8
7
6
5
4
3
2
1
ppm
1.00
0.92
0.95
1.15
1.23
3.09
3.01
3.00

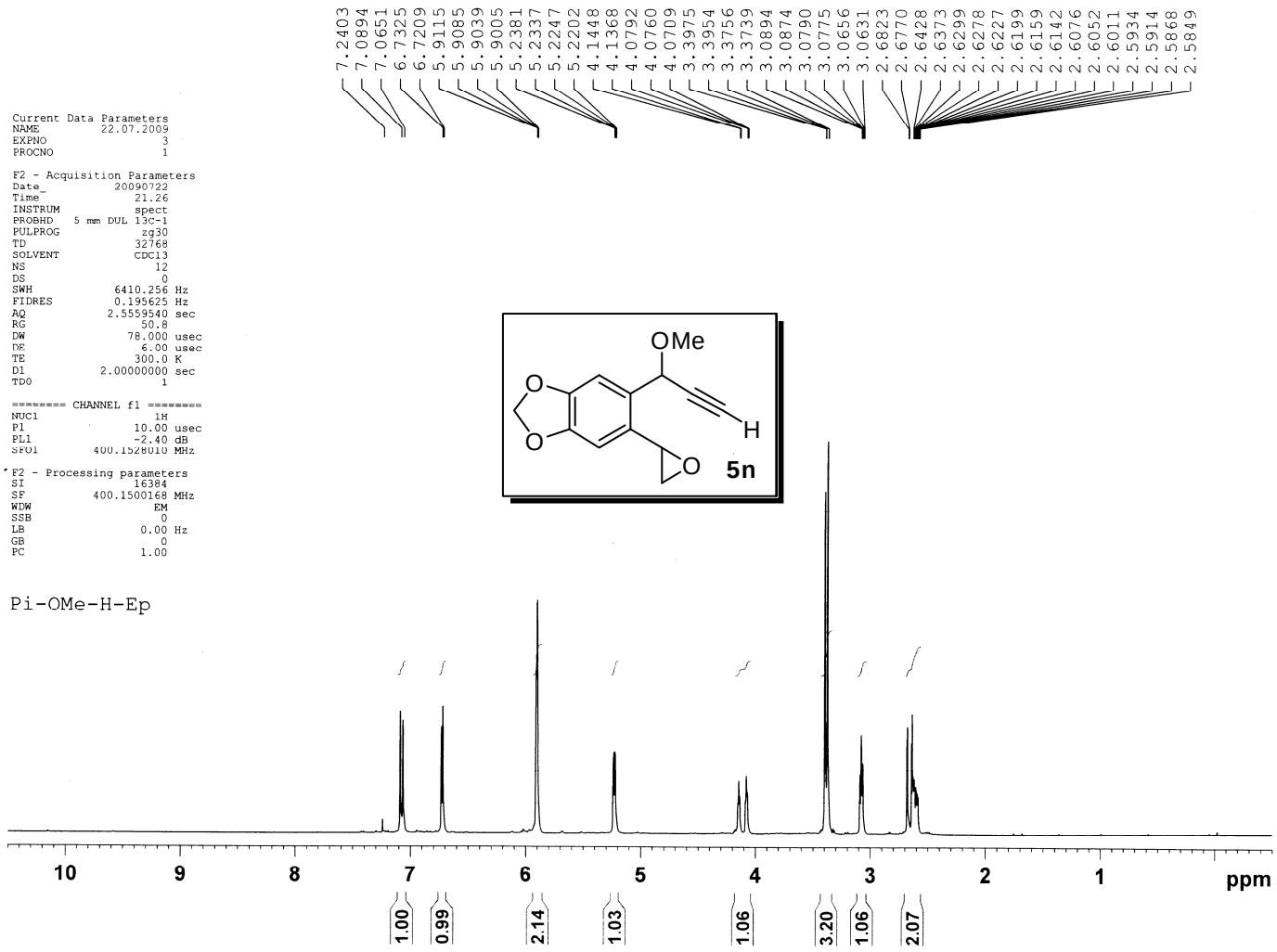

193.43
160.34
136.82
134.80
133.26
131.88
131.69
131.10
126.25
118.01
102.97
77.32
77.00
76.69
55.30
15.62
14.56
Current Data Parameters
NAME 04.05.2009
EXPNO 9
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090504
Time 23.39
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 156
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 64
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178032 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
O
H
MeO
Me
Me
6l
5-OMe-OMe-P
210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 ppm

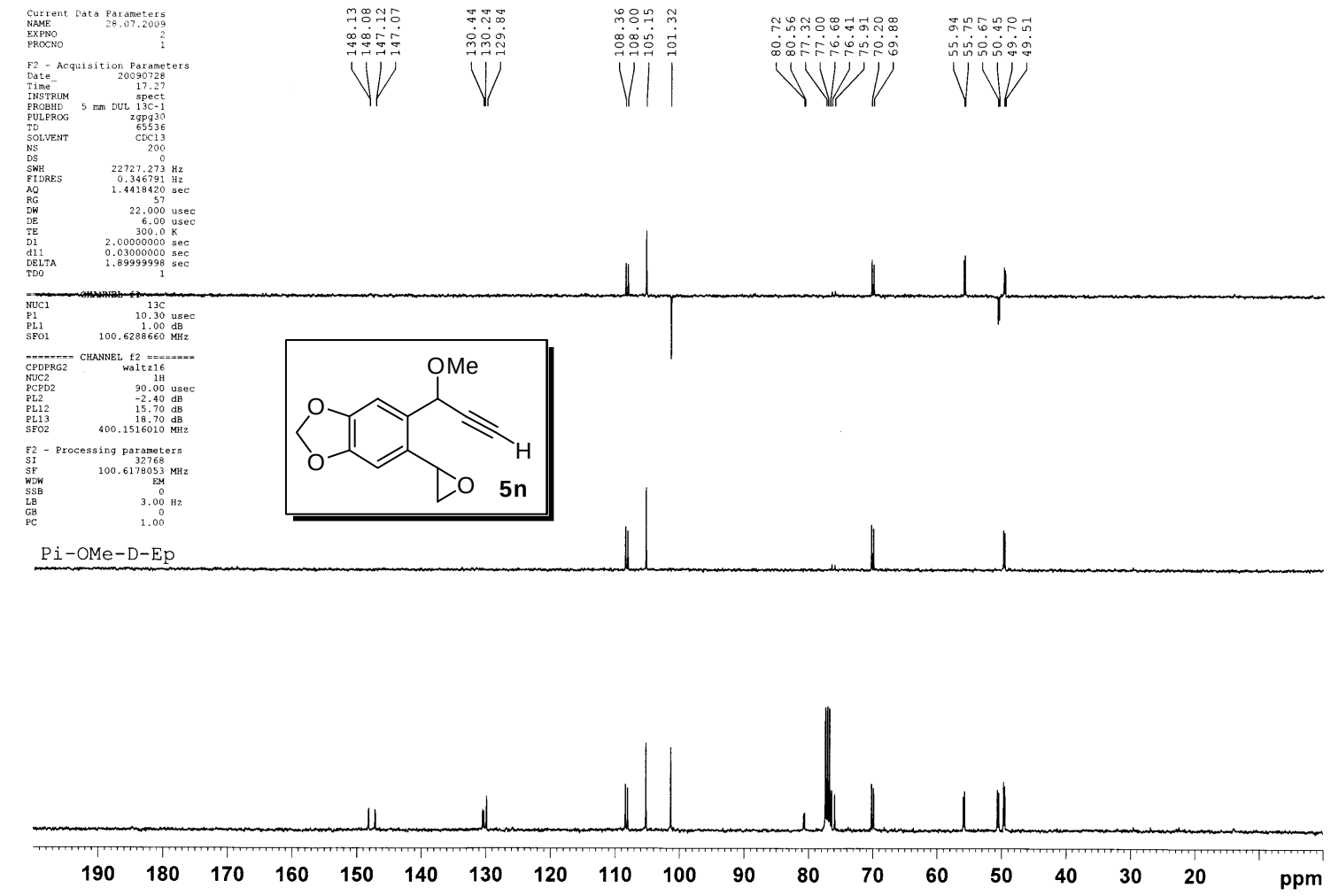

10.2356
7.9037
7.2772
7.2405
7.1124
6.0477
2.6816
2.4779
Current Data Parameters
NAME 04.05.2009
EXPNO 4
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090504
Time 23.12
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 114
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500161 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
O
H
O
O
Me
Me
6m
P-OMe-P
12
11
10
9
8
7
6
5
4
3
2
1
ppm
1.00
1.00
1.00
1.01
2.18
3.20
3.22

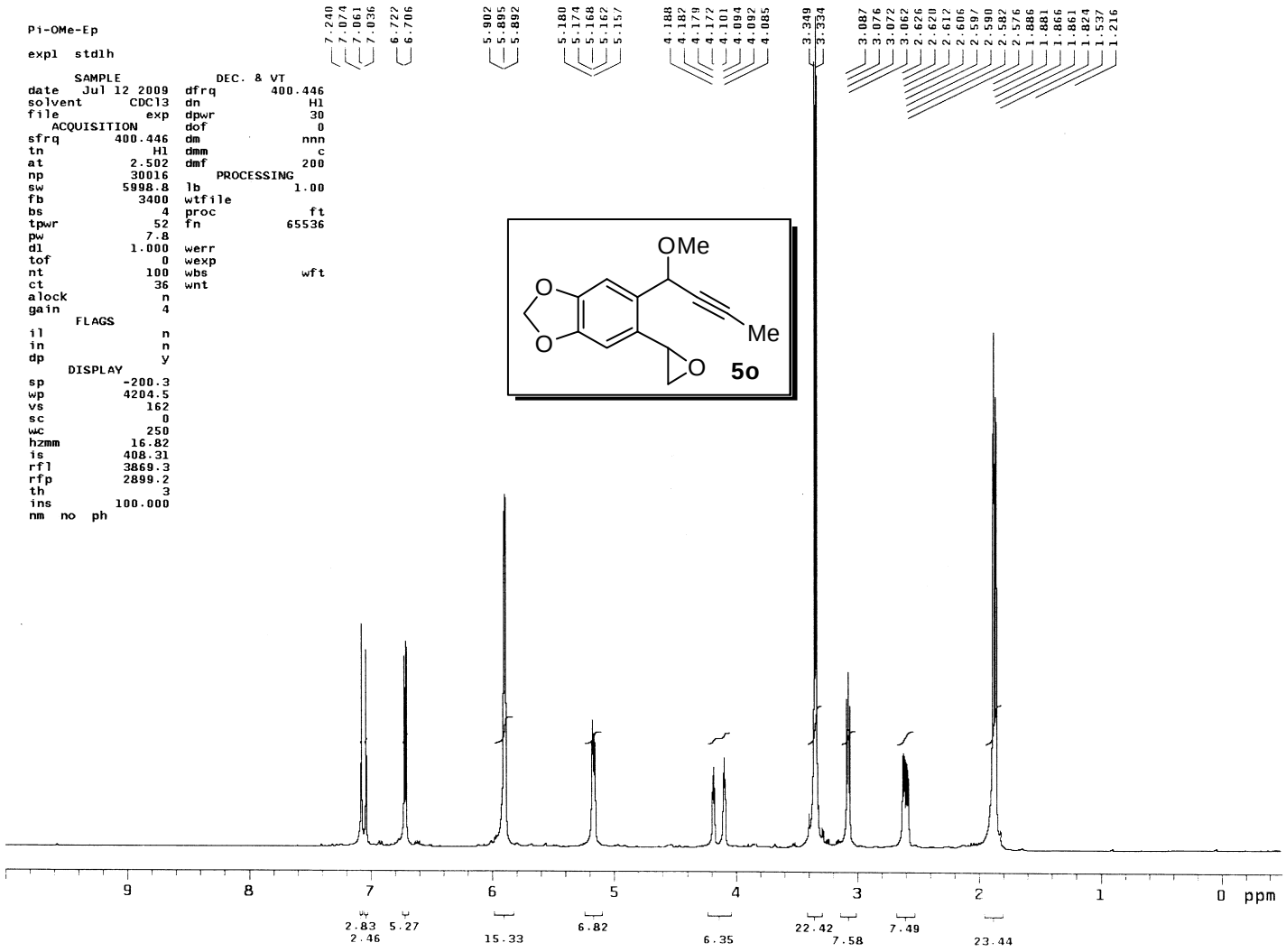

Current Data Parameters
NAME 04.05.2009
EXPNO 5
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090504
Time 23.17
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 100
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 64
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
TD0 1
CHANNEL f1
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
CHANNEL f2
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178046 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
P-OMe-P
193.43
150.42
147.13
133.13
132.97
132.41
131.66
131.51
127.84
105.29
101.45
100.82
77.32
77.00
76.68
15.24
14.88
O
O
O
H
Me
Me
6m
210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 ppm

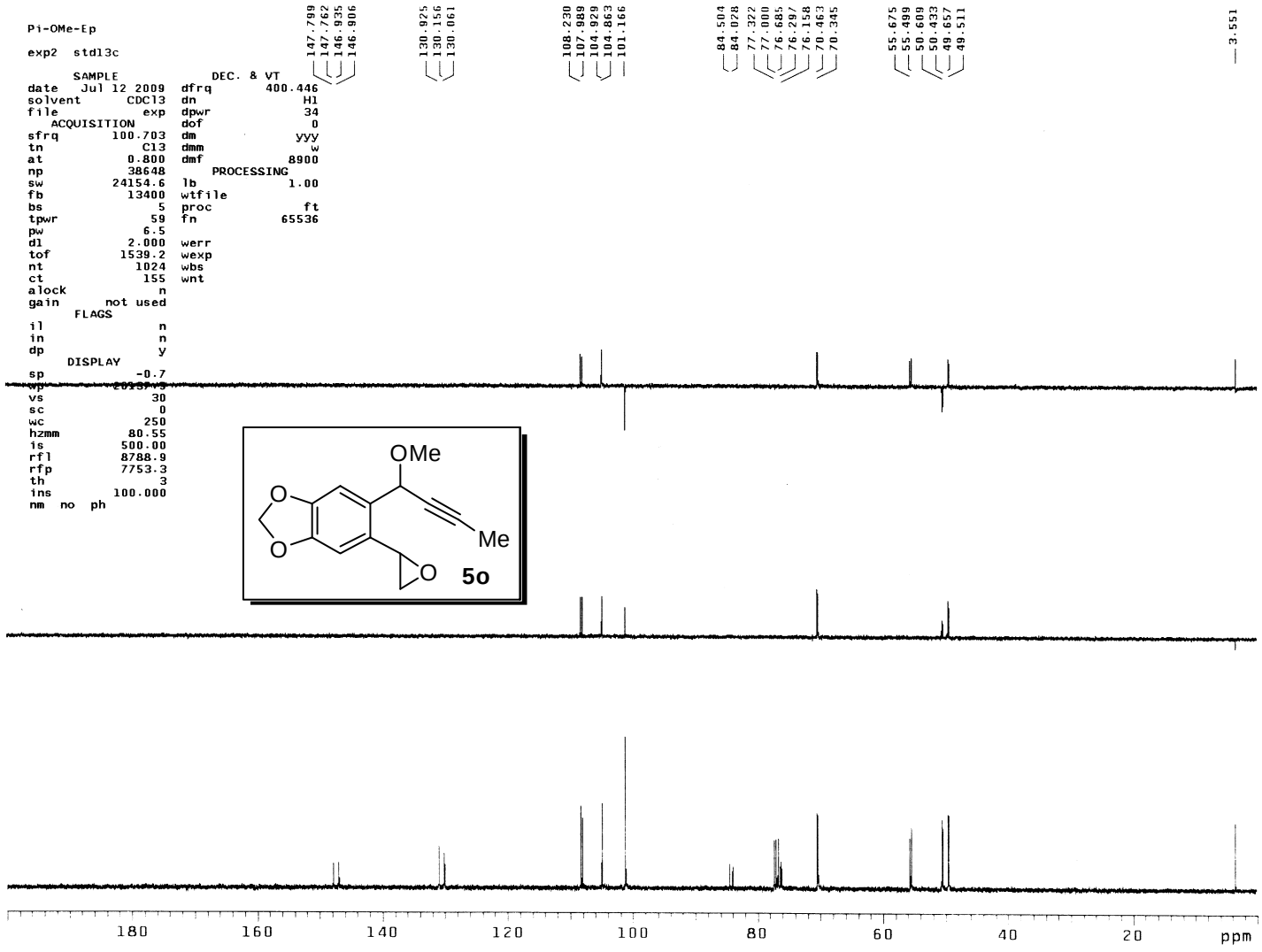

7.2630
7.2600
7.2405
7.2266
7.2237
7.2159
7.2116
7.1969
7.1926
7.1540
7.1495
7.1351
7.1309
7.1176
7.1132
7.0214
7.0197
7.0028
7.0011
5.6513
5.6474
5.6434
5.6394
5.6124
5.6086
5.6047
5.6009
5.4325
5.4161
5.4001
5.3936
5.3837
5.3776
5.3613
5.3452
3.6072
1.9408
1.6712
1.6673
1.6537
1.5577
Current Data Parameters
NAME 16.06.2009
EXPNO 1
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090616
Time 8.05
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 406
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500165 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
H-M-Et-P
OMe
Me
O
Me
7i
Me
9
8
7
6
5
4
3
2
1
ppm
2.91
1.12
1.00
0.96
1.04
3.01
2.92
6.14

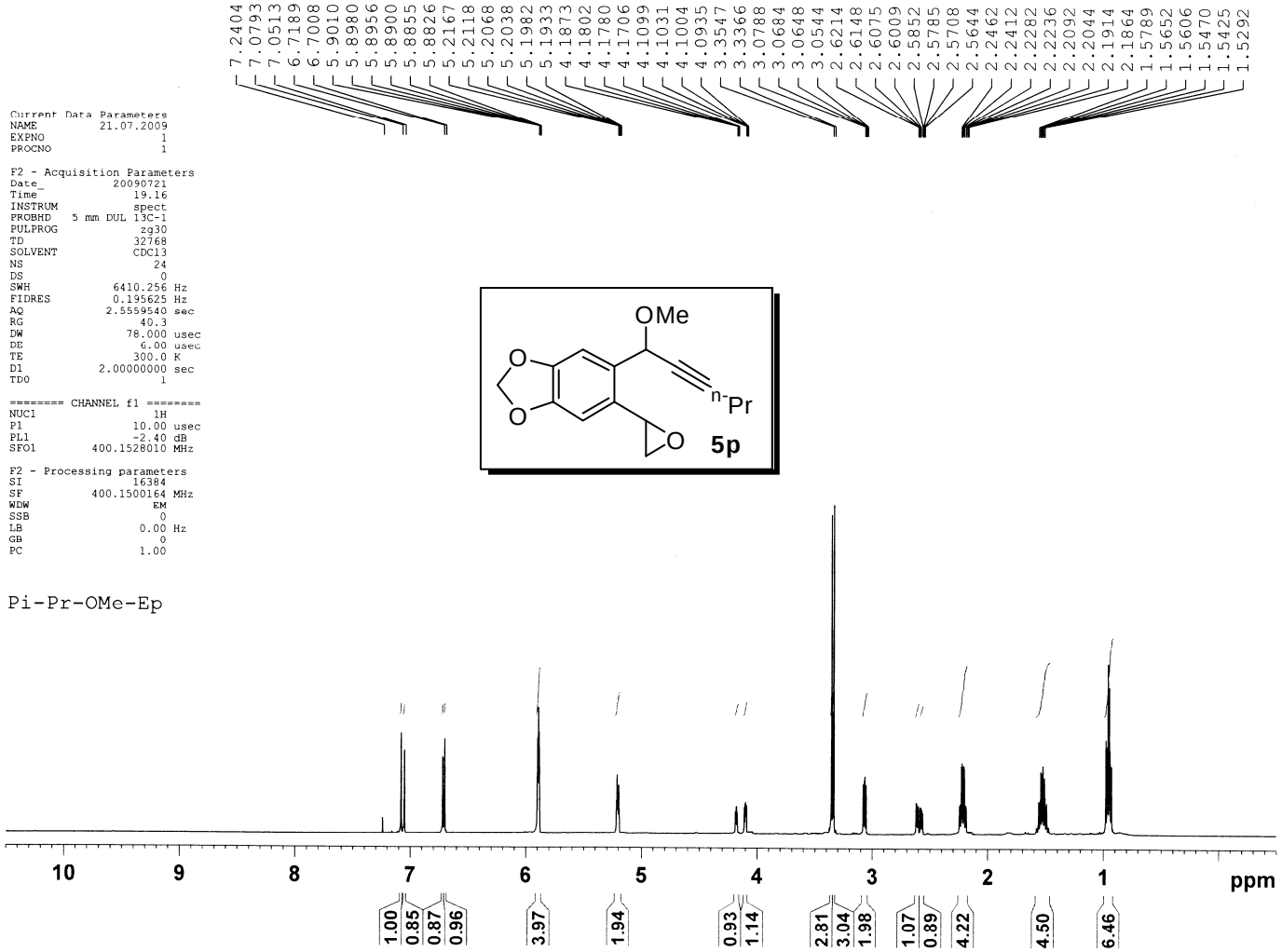

ent Data Parameters
RC-5-2-P1
2
NO 1
Acquisition Parameters
20090621
23.30
RUM spect
HD 5 mm QNP 1H/1
ROG zgpg
32768
ENT CD2Cl2
7168
0
45045.047 Hz
ES 1.374666 Hz
0.3637748 sec
2048
11.100 usec
6.50 usec
301.5 K
3.00000000 sec
0.03000000 sec
A 2.90000010 sec
ST 0.00000000 sec
K 0.01500000 sec
==== CHANNEL f1 ========
13C
4.80 usec
0.00 dB
150.6855336 MHz
==== CHANNEL f2 ========
RG2 waltz16
1H
2 92.00 usec
120.00 dB
9.00 dB
14.00 dB
599.2029960 MHz
Processing parameters
65536
150.6689613 MHz
EM
0
3.00 Hz
0
2.00
MR plot parameters
20.00 cm
20.00 cm
200.000 ppm
30133.79 Hz
0.000 ppm
0.00 Hz
M 10.00000 ppm/cm
1506.68958 Hz/cm
ppm
142.679
136.027
134.410
128.451
127.470
126.157
123.976
118.553
79.366
77.209
76.998
76.786
60.498
25.028
17.640
14.489
OMe
Me
O
Me
7i
Me
ppm
180
160
140
120
100
80
60
40
20

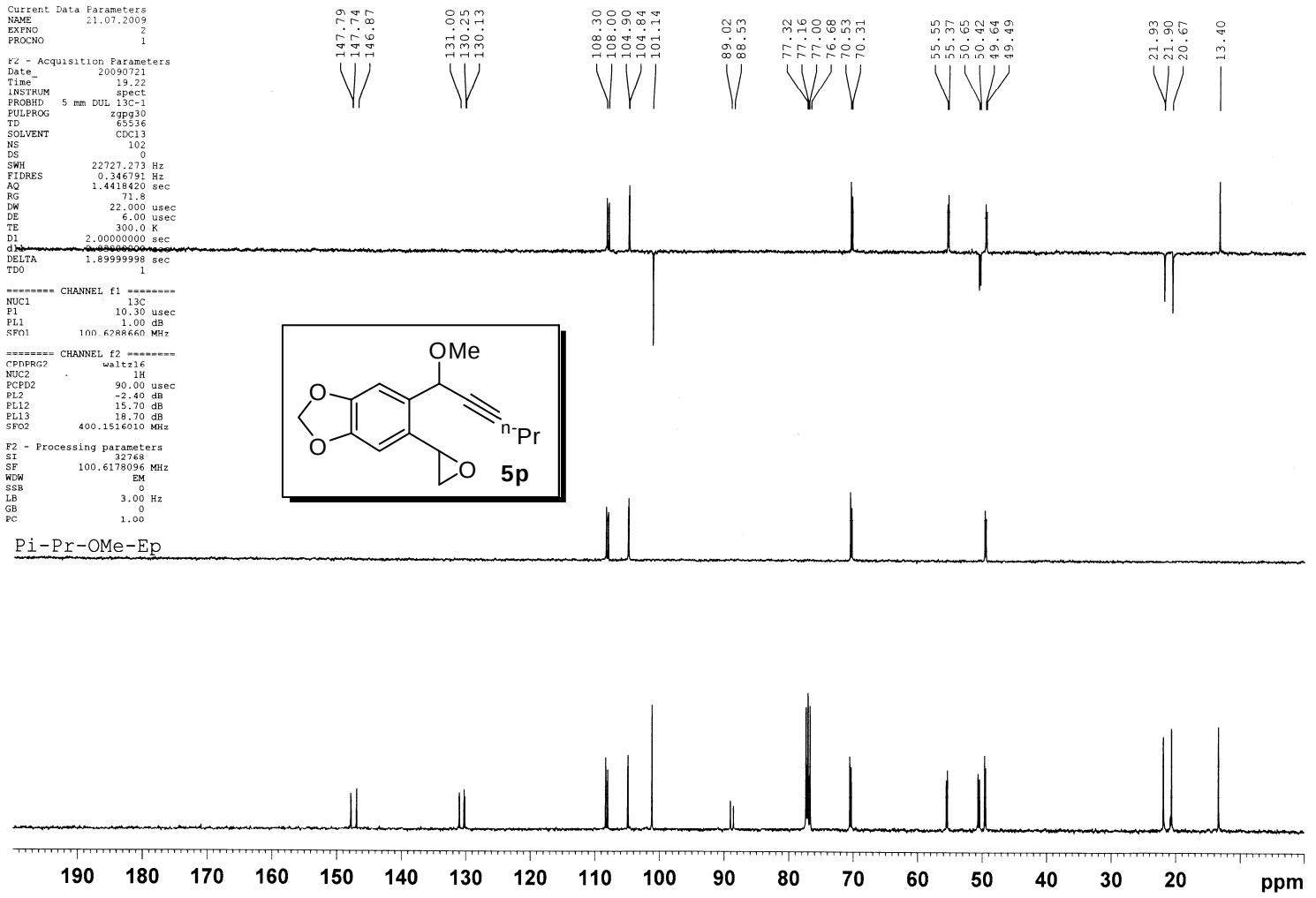

7.2403
7.0894
7.0651
6.7325
6.7209
5.9115
5.9085
5.9039
5.9005
5.2381
5.2337
5.2247
5.2202
4.1448
4.1368
4.0792
4.0760
4.0709
3.3975
3.3954
3.3756
3.3739
3.0894
3.0874
3.0790
3.0775
3.0656
3.0631
2.6823
2.6770
2.6428
2.6373
2.6299
2.6278
2.6227
2.6199
2.6159
2.6142
2.6076
2.6052
2.6011
2.5934
2.5914
2.5868
2.5849
Current Data Parameters
NAME 22.07.2009
EXPNO 3
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090722
Time 21.26
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 12
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 50.8
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500168 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
OMe
O
O
O
H
5n
Pi-OMe-H-Ep
10
9
8
7
6
5
4
3
2
1
ppm
1.00
0.99
2.14
1.03
1.06
3.20
1.06
2.07

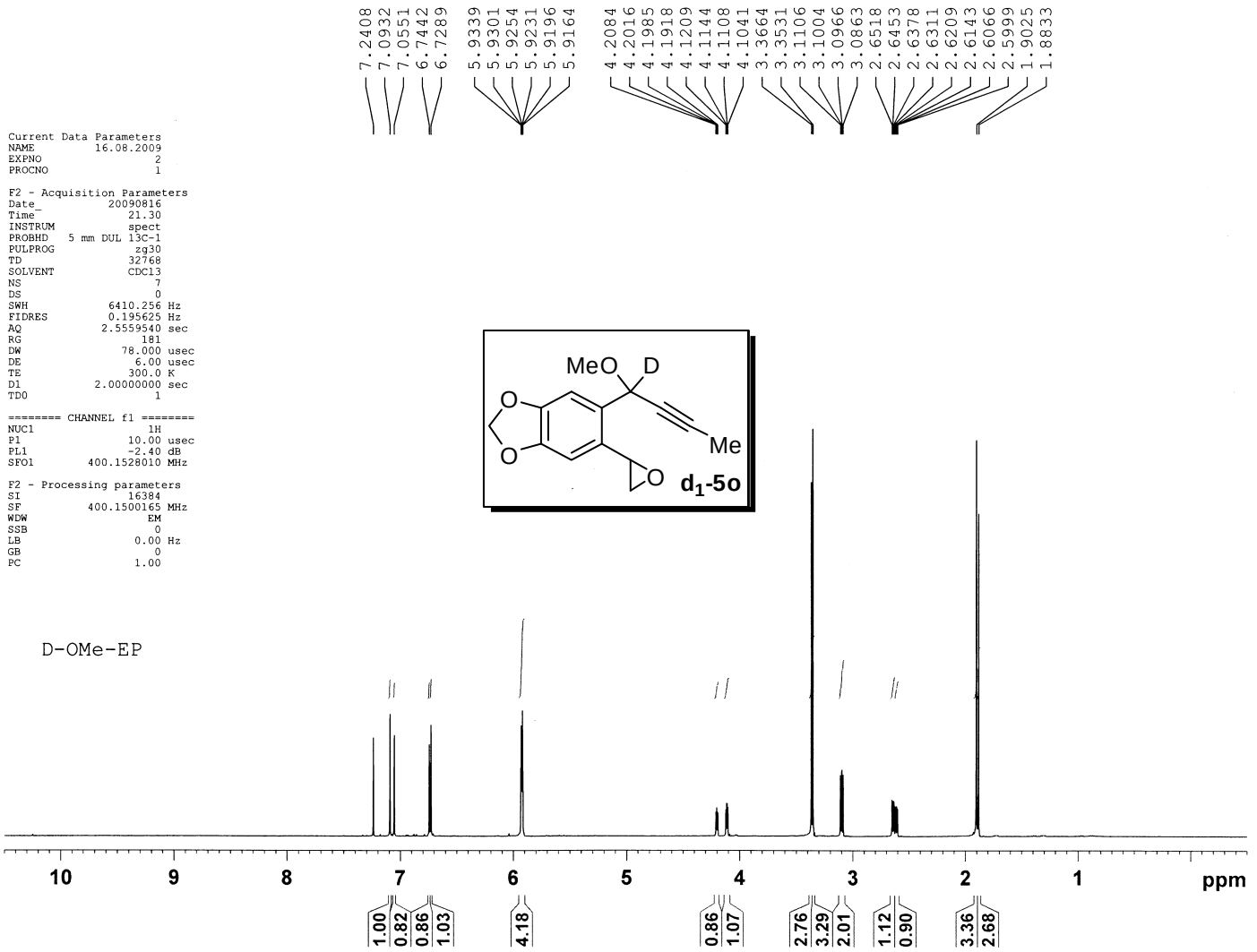

Current Data Parameters
NAME 28.07.2009
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090728
Time 17.27
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 200
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 57
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178053 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
148.13
148.08
147.12
147.07
130.44
130.24
129.84
108.36
108.00
105.15
101.32
80.72
80.56
77.32
77.00
76.68
76.41
75.91
70.20
69.88
55.94
55.75
50.67
50.45
49.70
49.51
OMe
O
O
O
H
5n
Pi-OMe-D-Ep
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm

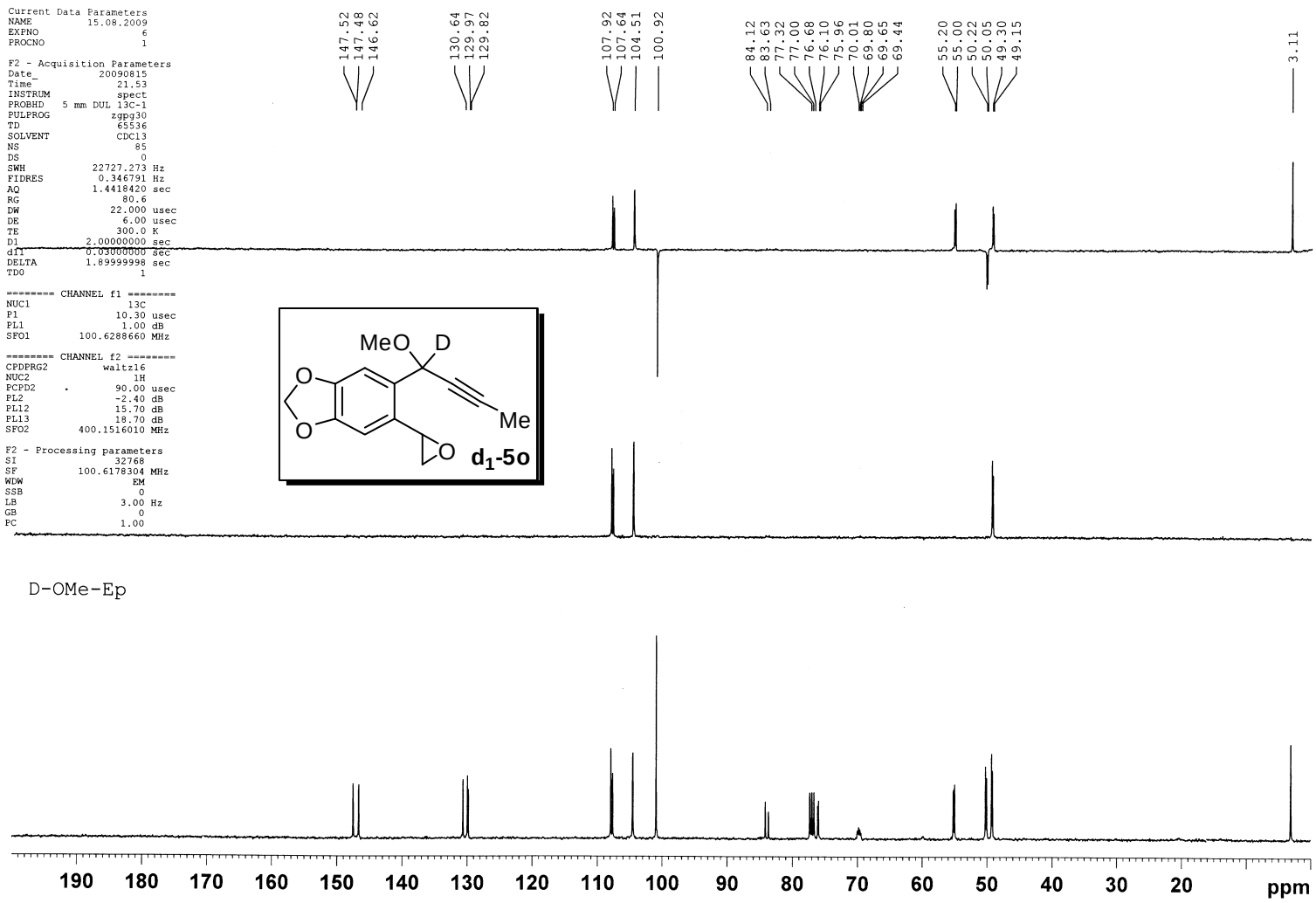

Pi-OMe-Ep
expl stdlh
SAMPLE
date Jul 12 2009
solvent CDCl3
file exp
ACQUISITION
sfrq 400.446
tn H1
at 2.502
np 30016
sw 5998.8
fb 3400
bs 4
tpwr 52
pw 7.8
d1 1.000
tof 0
nt 100
ct 36
alock n
gain 4
FLAGS
il n
in n
dp y
DISPLAY
sp -200.3
wp 4204.5
vs 162
sc 0
wc 250
hzmm 16.82
is 408.31
rfl 3869.3
rfp 2899.2
th 3
ins 100.000
nm no ph
DEC. & VT
dfrq 400.446
dn H1
dpwr 30
dof 0
dm nnn
dmm c
dmf 200
PROCESSING
lb 1.00
wtfile
proc ft
fn 65536
werr
wexp
wbs wft
wnt
7.240
7.074
7.061
7.036
6.722
6.706
5.902
5.895
5.892
5.180
5.174
5.168
5.162
5.157
4.188
4.182
4.179
4.172
4.101
4.094
4.092
4.085
3.349
3.334
3.087
3.076
3.072
3.062
2.626
2.620
2.612
2.606
2.597
2.590
2.582
2.576
1.886
1.881
1.866
1.861
1.824
1.537
1.216
OMe
Me
O
O
O
5o
9
8
7
6
5
4
3
2
1
0 ppm
2.83
2.46
5.27
15.33
6.82
6.35
22.42
7.58
7.49
23.44

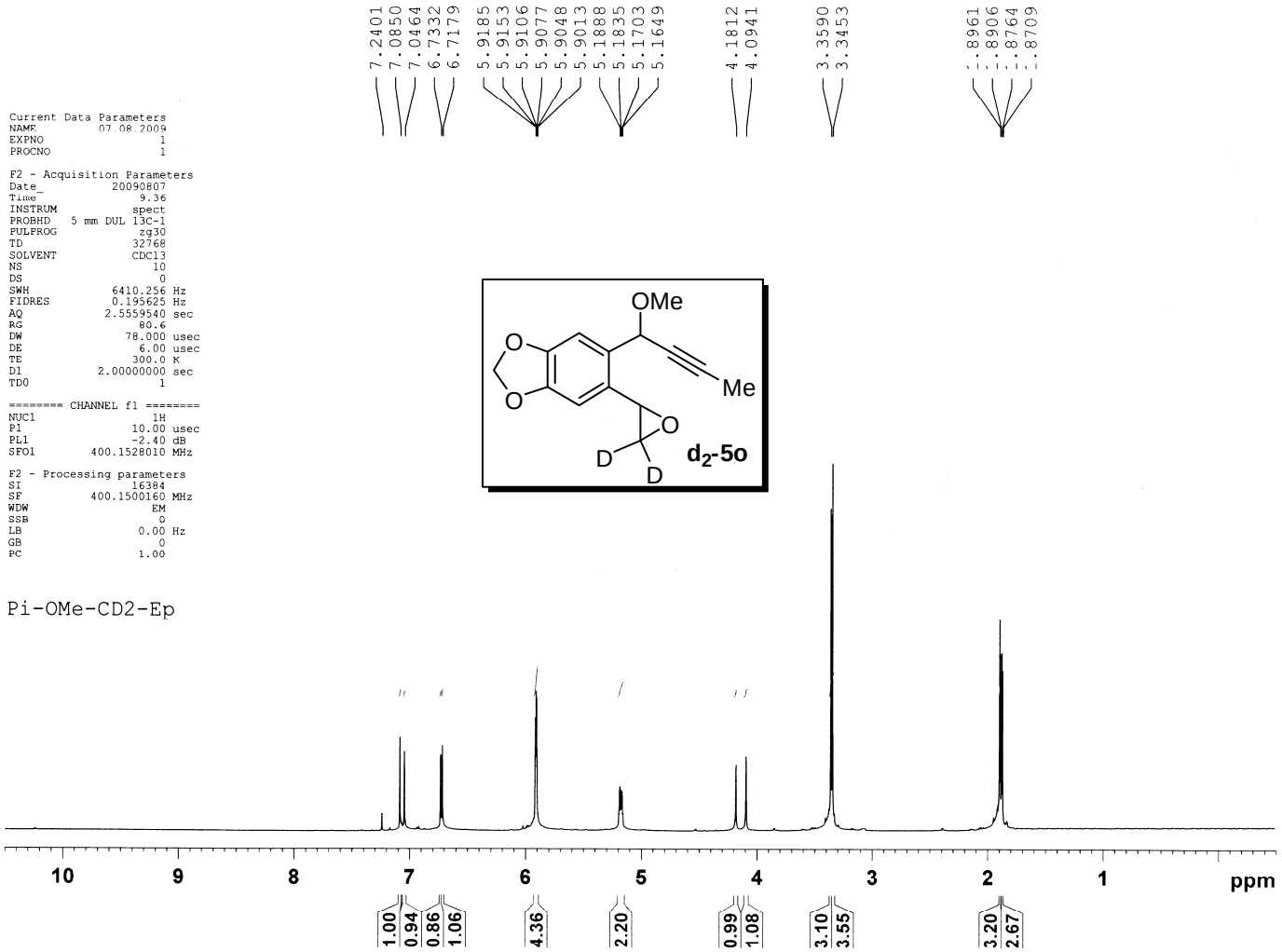

Pi-OMe-Ep
exp2 stdl3c
SAMPLE
date Jul 12 2009
solvent CDCl3
file exp
ACQUISITION
sfrq 100.703
tn C13
at 0.800
np 38648
sw 24154.6
fb 13400
bs 5
tpwr 59
pw 6.5
dl 2.000
tof 1539.2
nt 1024
ct 155
alock n
gain not used
FLAGS
il n
in n
dp y
DISPLAY
sp -0.7
wp 20139.3
vs 30
sc 0
wc 250
hzmm 80.55
is 500.00
rfl 8788.9
rfp 7753.3
th 3
ins 100.000
nm no ph
DEC. & VT
dfrq 400.446
dn H1
dpwr 34
dof 0
dm yyy
dmm w
dmf 8900
PROCESSING
lb 1.00
wtfile
proc ft
fn 65536
werr
wexp
wbs
wnt
147.799
147.762
146.935
146.906
130.925
130.156
130.061
108.230
107.989
104.929
104.863
101.166
84.504
84.028
77.322
77.000
76.685
76.297
76.158
70.463
70.345
55.675
55.499
50.609
50.433
49.657
49.511
3.551
OMe
Me
O
O
O
5o
180
160
140
120
100
80
60
40
20
ppm

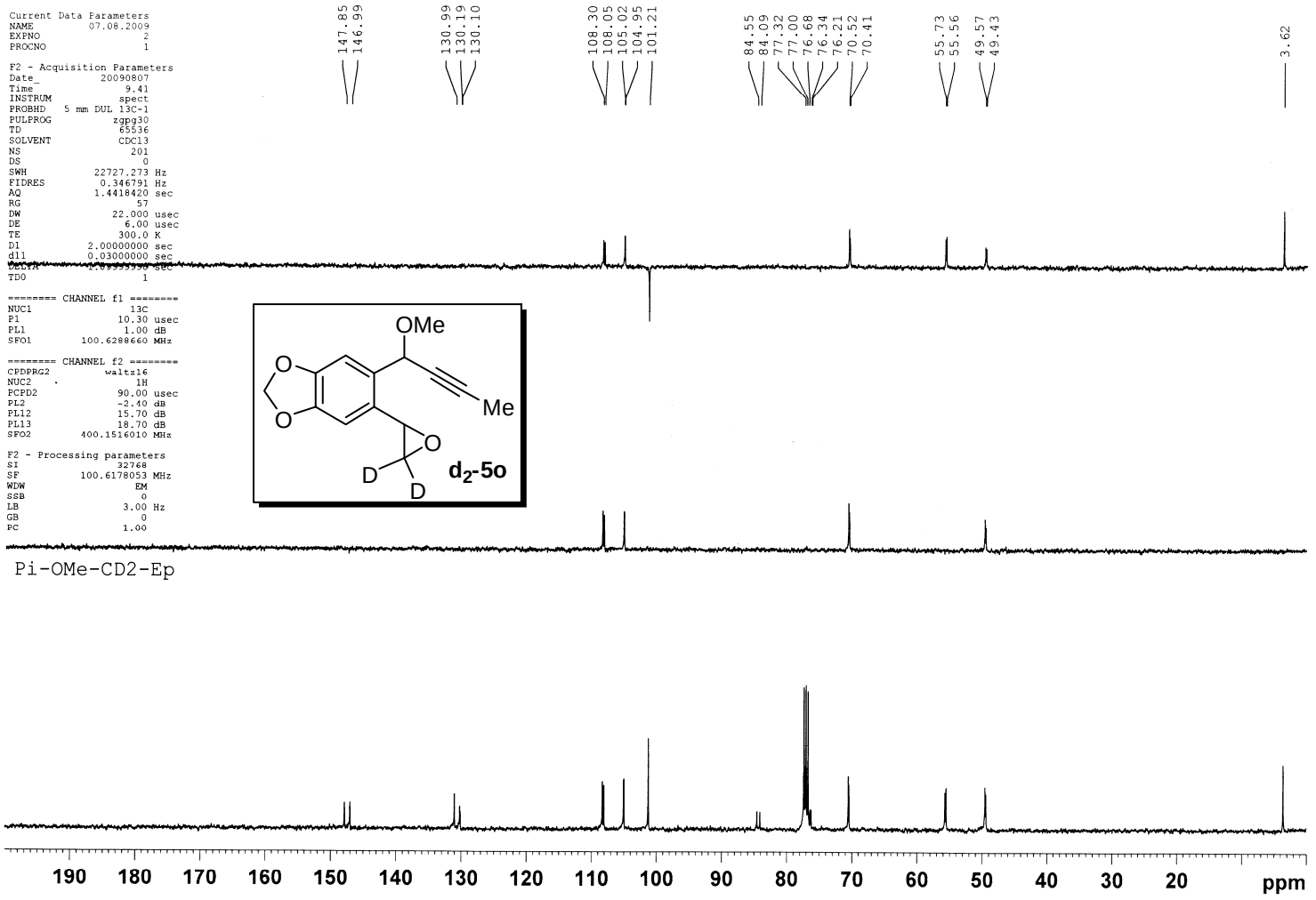

7.2404
7.0793
7.0513
6.7189
6.7008
5.9010
5.8980
5.8956
5.8900
5.8855
5.8826
5.2167
5.2118
5.2068
5.2038
5.1982
5.1933
4.1873
4.1802
4.1780
4.1706
4.1099
4.1031
4.1004
4.0935
3.3547
3.3366
3.0788
3.0684
3.0648
3.0544
2.6214
2.6148
2.6075
2.6009
2.5852
2.5785
2.5708
2.5644
2.2462
2.2412
2.2282
2.2236
2.2092
2.2044
2.1914
2.1864
1.5789
1.5652
1.5606
1.5470
1.5425
1.5292
Current Data Parameters
NAME 21.07.2009
EXPNO 1
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090721
Time 19.16
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDC13
NS 24
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 40.3
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500164 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
OMe
O
O
O
n-Pr
5p
Pi-Pr-OMe-Ep
10
9
8
7
6
5
4
3
2
1
ppm
1.00
0.85
0.87
0.96
3.97
1.94
0.93
1.14
2.81
3.04
1.98
1.07
0.89
4.22
4.50
6.46

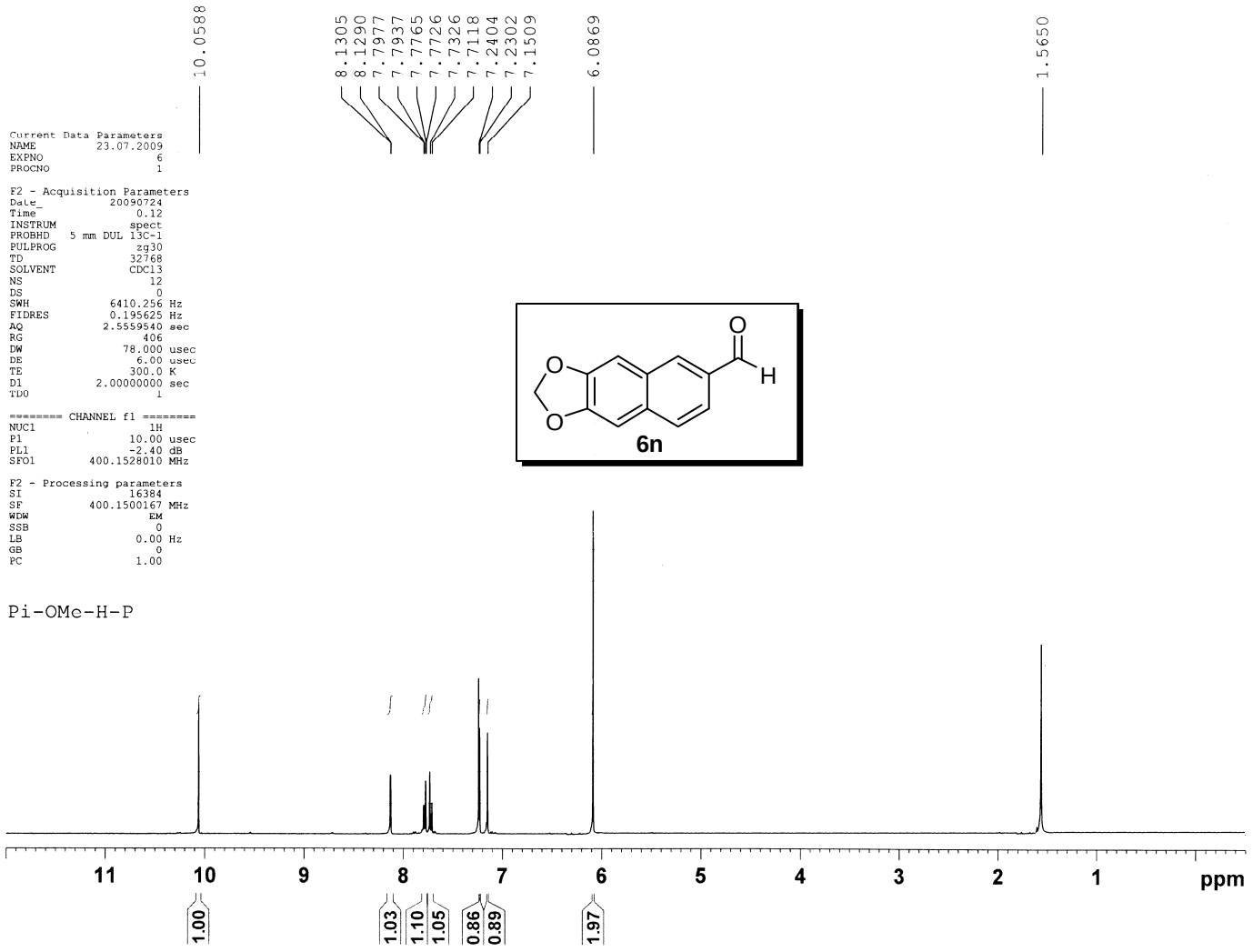

Current Data Parameters
NAME 21.07.2009
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090721
Time 19.22
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 102
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.44118420 sec
RG 71.8
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178096 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
147.79
147.74
146.87
131.00
130.25
130.13
108.30
108.00
104.90
104.84
101.14
89.02
88.53
77.32
77.16
77.00
76.68
70.53
70.31
55.55
55.37
50.65
50.42
49.64
49.49
21.93
21.90
20.67
13.40
OMe
O
O
O
n-Pr
5p
Pi-Pr-OMe-Ep
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm

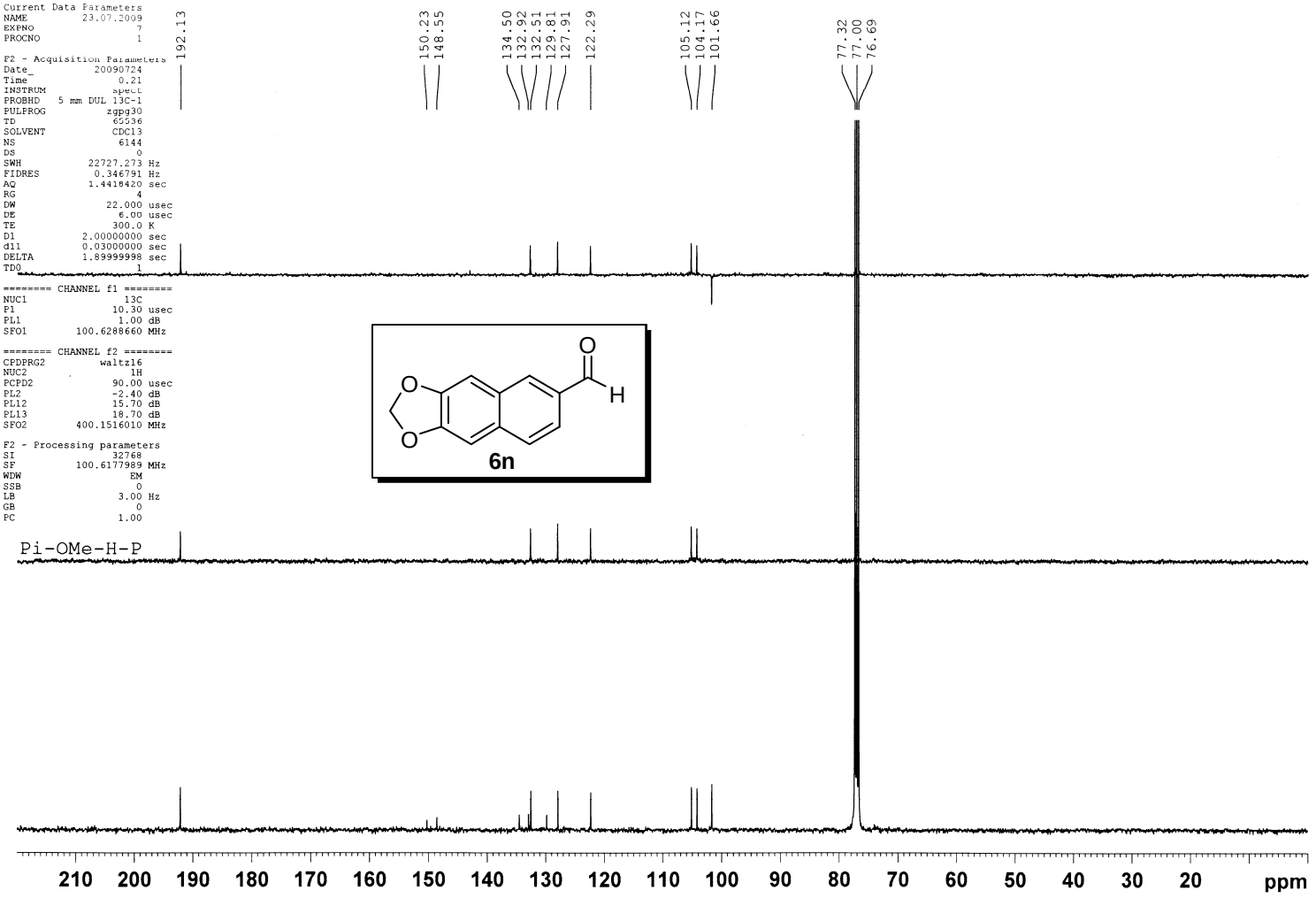

7.2408
7.0932
7.0551
6.7442
6.7289
5.9339
5.9301
5.9254
5.9231
5.9196
5.9164
4.2084
4.2016
4.1985
4.1918
4.1209
4.1144
4.1108
4.1041
3.3664
3.3531
3.1106
3.1004
3.0966
3.0863
2.6518
2.6453
2.6378
2.6311
2.6209
2.6143
2.6066
2.5999
1.9025
1.8833
Current Data Parameters
NAME 16.08.2009
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090816
Time_ 21.30
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 7
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 181
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500165 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
MeO
D
O
O
O
Me
d1-5o
D-OMe-EP
10
9
8
7
6
5
4
3
2
1
ppm
1.00
0.82
0.86
1.03
4.18
0.86
1.07
2.76
3.29
2.01
1.12
0.90
3.36
2.68

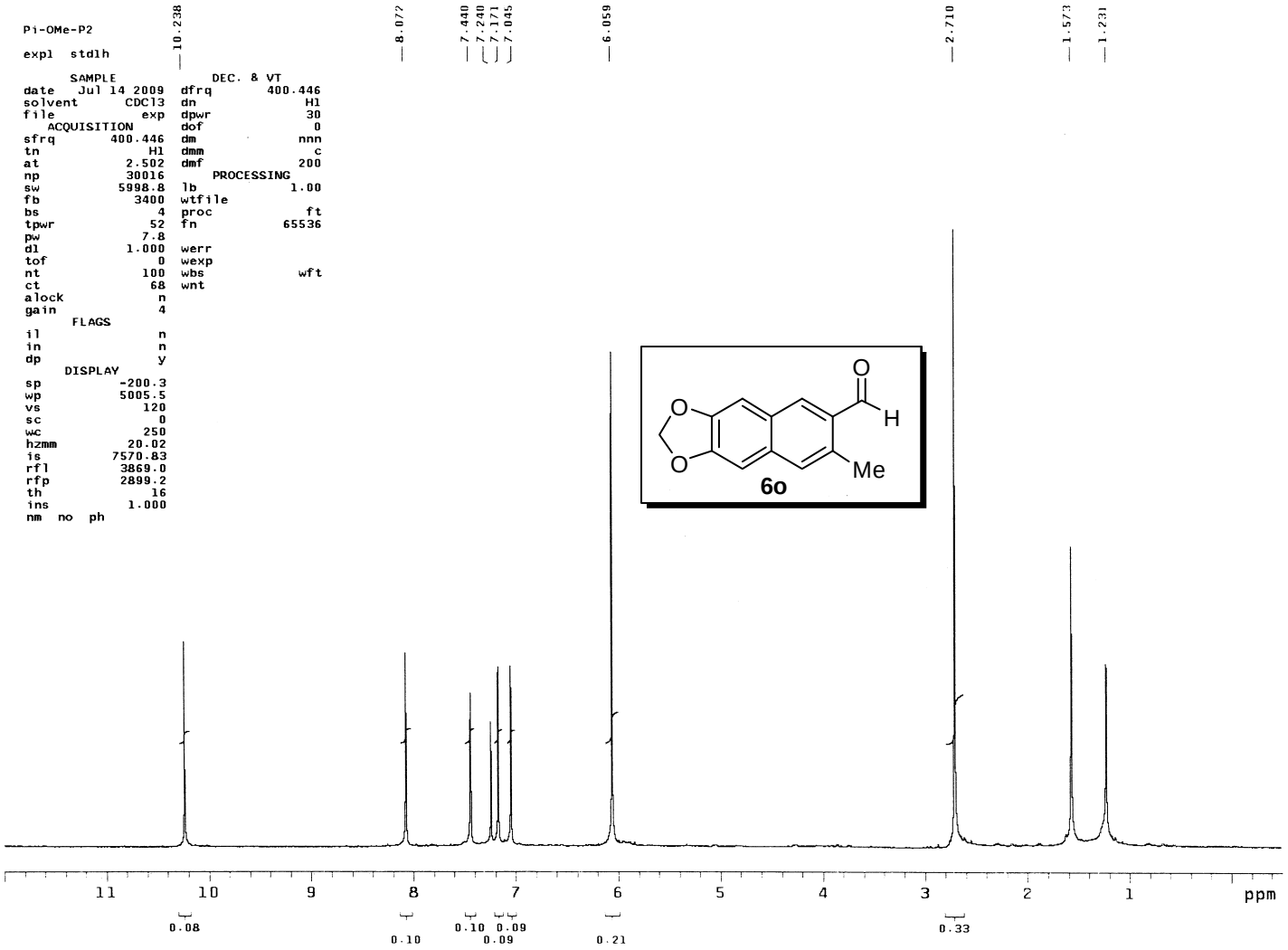

Current Data Parameters
NAME 15.08.2009
EXPNO 6
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090815
Time 21.53
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 85
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 80.6
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178304 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
147.52
147.48
146.62
130.64
129.97
129.82
107.92
107.64
104.51
100.92
84.12
83.63
77.32
77.00
76.68
76.10
75.96
70.01
69.80
69.65
69.44
55.20
55.00
50.22
50.05
49.30
49.15
3.11
MeO
D
O
O
O
Me
d1-5o
D-OMe-Ep
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm

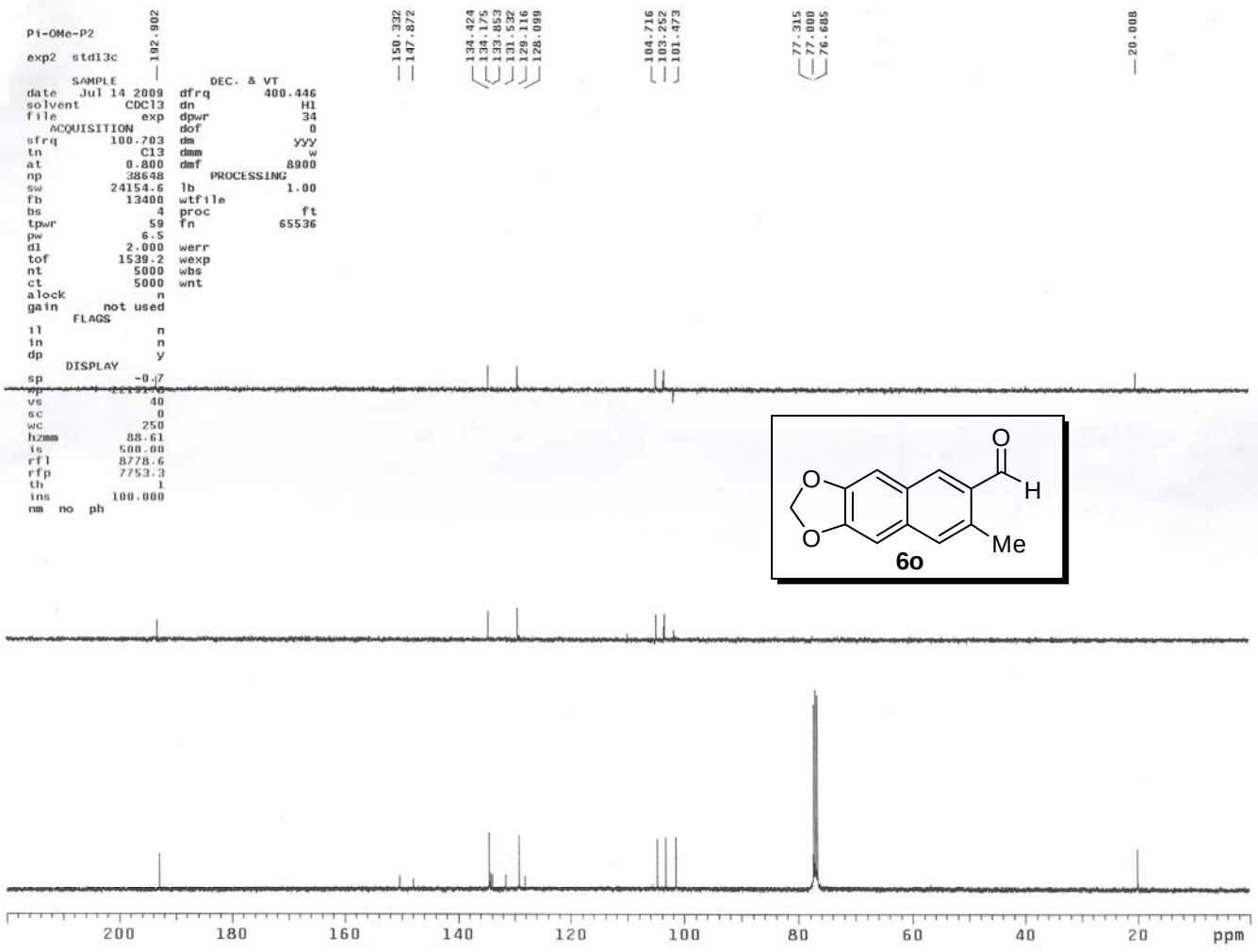

7.2401
7.0850
7.0464
6.7332
6.7179
5.9185
5.9153
5.9106
5.9077
5.9048
5.9013
5.1888
5.1835
5.1703
5.1649
4.1812
4.0941
3.3590
3.3453
1.8961
1.8906
1.8764
1.8709
Current Data Parameters
NAME 07.08.2009
EXPNO 1
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090807
Time 9.36
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 10
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 80.6
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500160 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
Pi-OMe-CD2-Ep
OMe
O
O
Me
O
D
D
d2-5o
10
9
8
7
6
5
4
3
2
1
ppm
1.00
0.94
0.86
1.06
4.36
2.20
0.99
1.08
3.10
3.55
3.20
2.67


Current Data Parameters
NAME 07.08.2009
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090807
Time 9.41
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 201
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 57
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178053 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
147.85
146.99
130.99
130.19
130.10
108.30
108.05
105.02
104.95
101.21
84.55
84.09
77.32
77.00
76.68
76.34
76.21
70.52
70.41
55.73
55.56
49.57
49.43
3.62
OMe
Me
O
O
O
D
D
d2-5o
Pi-OMe-CD2-Ep
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm


10.0588
8.1305
8.1290
7.7977
7.7937
7.7765
7.7726
7.7326
7.7118
7.2404
7.2302
7.1509
6.0869
1.5650
Current Data Parameters
NAME 23.07.2009
EXPNO 6
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090724
Time 0.12
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 12
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 406
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500167 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
O
O
O
H
6n
Pi-OMe-H-P
11
10
9
8
7
6
5
4
3
2
1
ppm
1.00
1.03
1.10
1.05
0.86
0.89
1.97


Current Data Parameters
NAME 23.07.2009
EXPNO 7
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090724
Time 0.21
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 6144
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 4
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6177989 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
192.13
150.23
148.55
134.50
132.92
132.51
129.81
127.91
122.29
105.12
104.17
101.66
77.32
77.00
76.69
O
O
O
H
6n
Pi-OMe-H-P
210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 ppm


Pi-OMe-P2
expl stdlh
SAMPLE
date Jul 14 2009
solvent CDCl3
file exp
ACQUISITION
sfrq 400.446
tn H1
at 2.502
np 30016
sw 5998.8
fb 3400
bs 4
tpwr 52
pw 7.8
dl 1.000
tof 0
nt 100
ct 68
alock n
gain 4
FLAGS
il n
in n
dp y
DISPLAY
sp -200.3
wp 5005.5
vs 120
sc 0
wc 250
hzmm 20.02
is 7570.83
rfl 3869.0
rfp 2899.2
th 16
ins 1.000
nm no ph
DEC. & VT
dfrq 400.446
dn H1
dpwr 30
dof 0
dm nnn
dmm c
dmf 200
PROCESSING
lb 1.00
wtfile
proc ft
fn 65536
werr
wexp
wbs wft
wnt
10.238
8.077
7.440
7.240
7.171
7.045
6.059
2.710
1.573
1.231
6o
11
10
9
8
7
6
5
4
3
2
1
ppm
0.08
0.10
0.10
0.09
0.09
0.21
0.33


Pi-OMe-P2
exp2 stdl3c
SAMPLE
date Jul 14 2009
solvent CDCl3
file exp
ACQUISITION
sfrq 100.703
tn C13
at 0.800
np 38648
sw 24154.6
fb 13400
bs 4
tpwr 59
pw 6.5
d1 2.000
tof 1539.2
nt 5000
ct 5000
alock n
gain not used
FLAGS
il n
in n
dp y
DISPLAY
sp -0.7
vs 40
sc 0
wc 250
hzmm 88.61
is 500.00
rfl 8778.6
rfp 7753.3
th 1
ins 100.000
nm no ph
DEC. & VT
dfrq 400.446
dn H1
dpwr 34
dof 0
dm yyy
dmm w
dmf 8900
PROCESSING
lb 1.00
wtfile
proc ft
fn 65536
werr
wexp
wbs
wnt
192.902
150.332
147.872
134.424
134.175
133.853
131.532
129.116
128.099
104.716
103.252
101.473
77.315
77.000
76.685
20.008
O
O
O
H
Me
6o
200
180
160
140
120
100
80
60
40
20
ppm

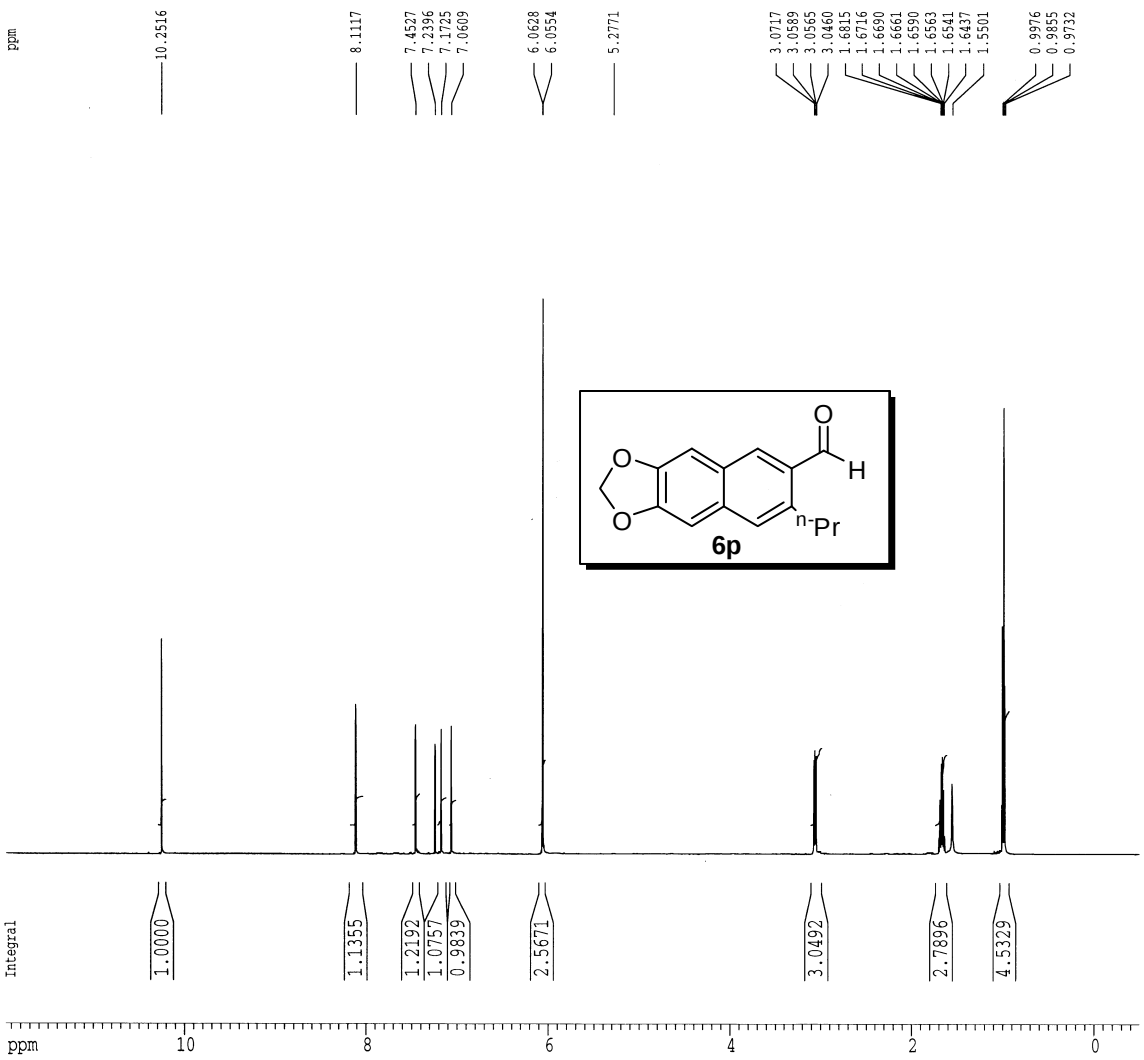
```
rrent Data Parameters
ME          RC-5-42-P
PNO                1
DCNO               1

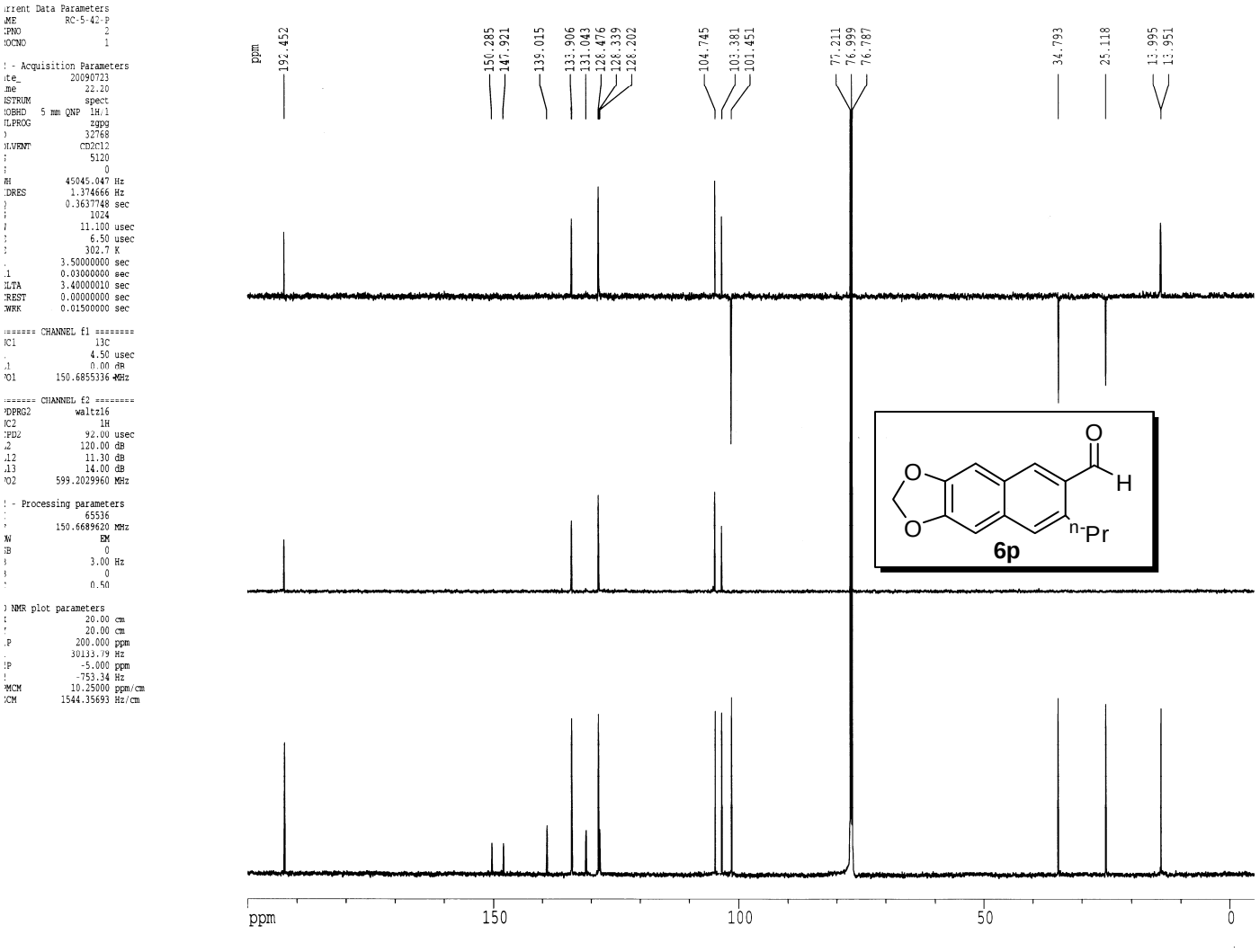
 - Acquisition Parameters
te_          20090723
ne             22.17
STRUM          spect
OBHD   5 mm QNP  1H/1
LPROG            zg
             32768
LVENT         CDCl3
               16
                0
H           8389.262 Hz
DRES        0.256020 Hz
          1.9530228 sec
              256
           59.600 usec
             6.50 usec
            302.5 K
         1.00000000 sec
REST     0.00000000 sec
WRK      0.01500000 sec

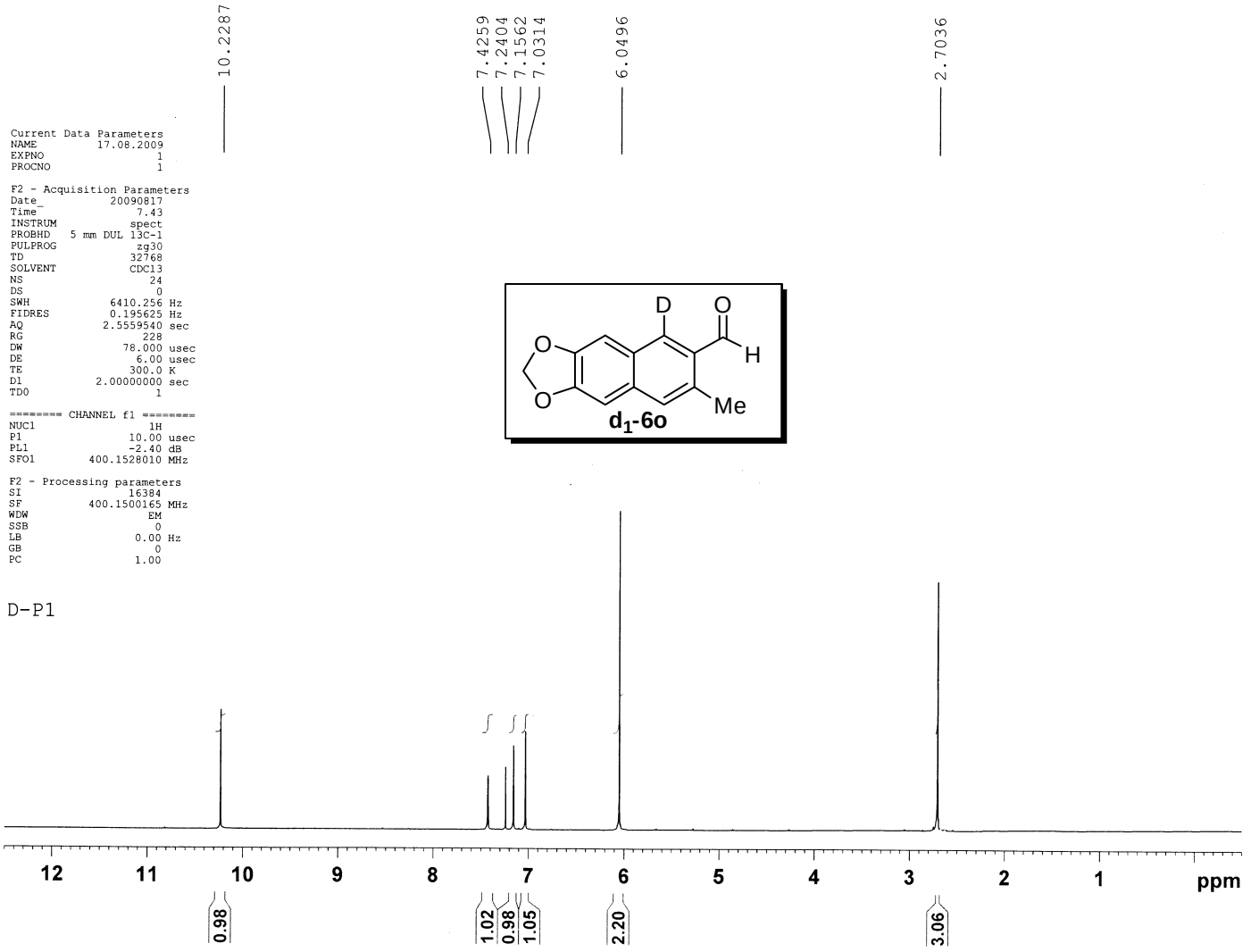
====== CHANNEL f1 ========
C1              1H.
             9.80 usec
l               0.00 dB
O1       599.2029960 MHz

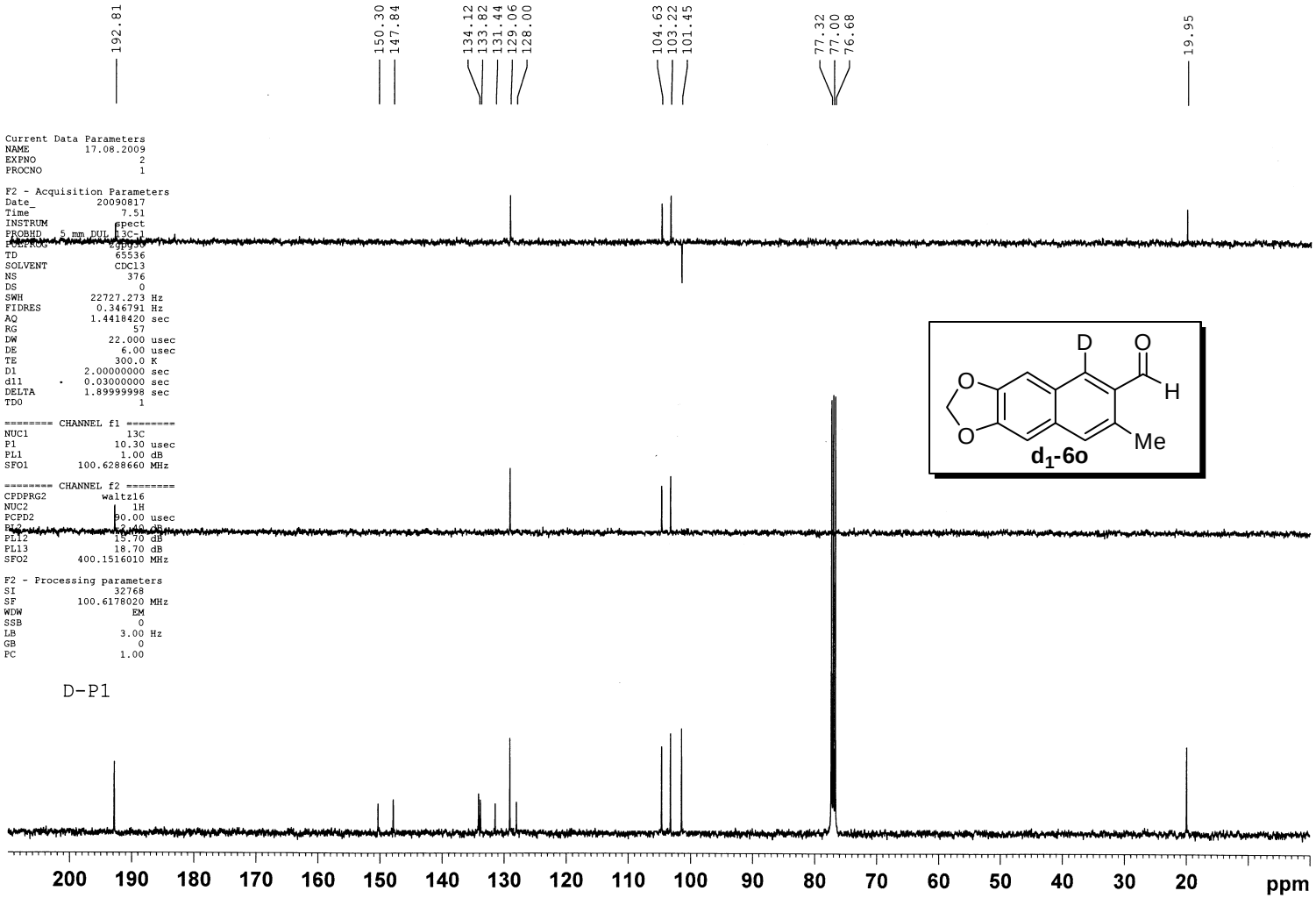
 - Processing parameters
              16384
       599.2000260 MHz
W                no
B                 0
             0.00 Hz
                0
             0.10

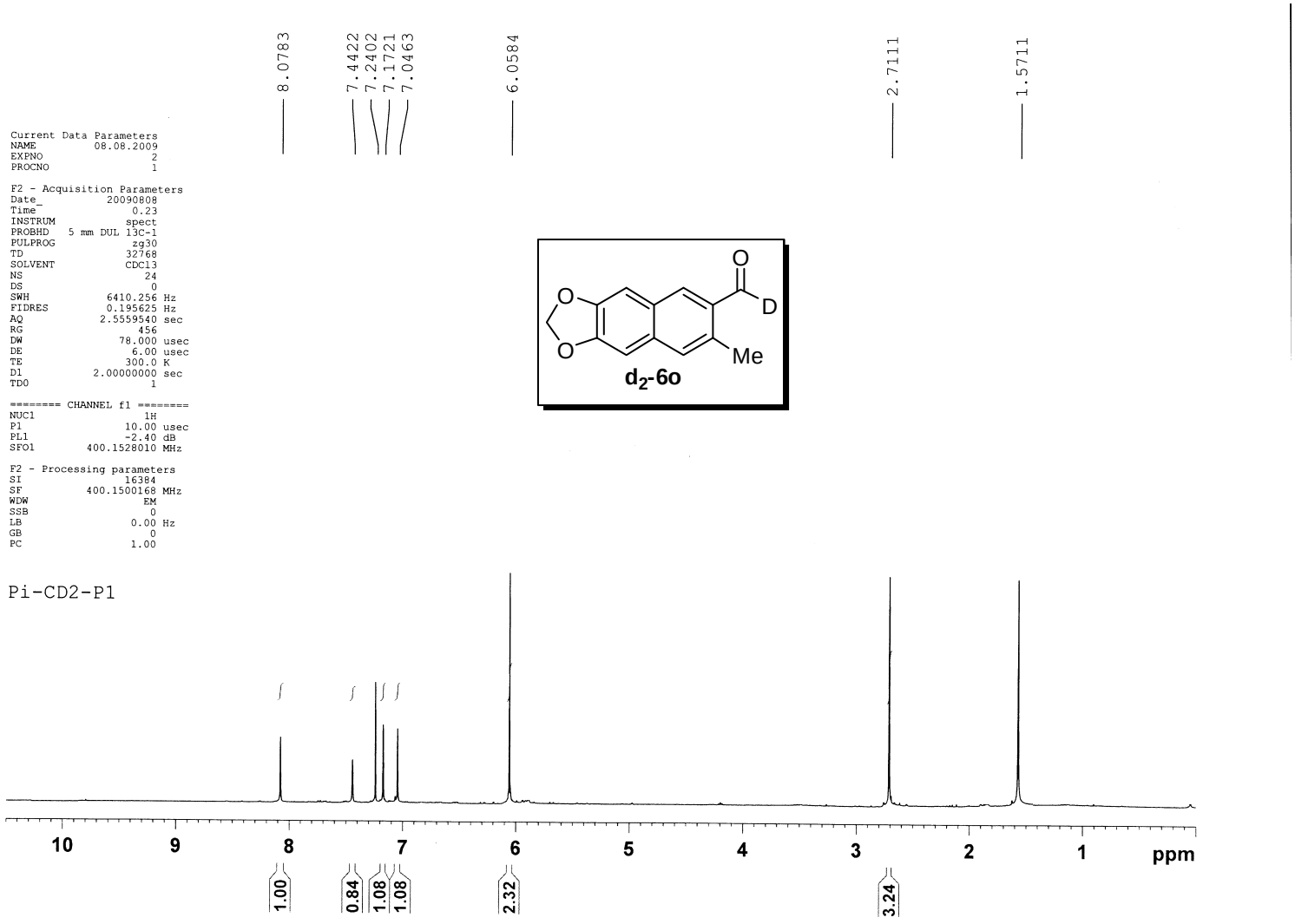
 NMR plot parameters
            20.00 cm
            10.00 cm
P           12.000 ppm
          7190.40 Hz
P            -0.500 ppm
         -299.60 Hz
MCM       0.62500 ppm/cm
CM       374.50000 Hz/cm
```




ppm
192.452
150.285
147.921
139.015
133.906
131.043
128.476
128.339
128.202
104.745
101.381
101.451
77.211
76.999
76.787
34.793
25.118
13.995
13.951
O
O
O
H
n-Pr
6p
ppm
150
100
50
0


10.2287
7.4259
7.2404
7.1562
7.0314
6.0496
2.7036
Current Data Parameters
NAME 17.08.2009
EXPNO 1
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090817
Time 7.43
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 228
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500165 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
D-P1
D
O
O
O
H
Me
d1-6o
12
11
10
9
8
7
6
5
4
3
2
1
ppm
0.98
1.02
0.98
1.05
2.20
3.06


192.81
150.30
147.84
134.12
133.82
131.44
129.06
128.00
104.63
103.22
101.45
77.32
77.00
76.68
19.95
Current Data Parameters
NAME 17.08.2009
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090817
Time 7.51
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 376
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 57
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178020 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
D-P1
D
O
O
O
H
Me
d1-6o
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm


8.0783
7.4422
7.2402
7.1721
7.0463
6.0584
2.7111
1.5711
Current Data Parameters
NAME 08.08.2009
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090808
Time 0.23
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 456
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500168 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
O
O
O
D
Me
d2-6o
Pi-CD2-P1
10
9
8
7
6
5
4
3
2
1
ppm
1.00
0.84
1.08
1.08
2.32
3.24

```
rrent Data Parameters
AME            RC5-54-P1
PNO                    2
DCNO                   1

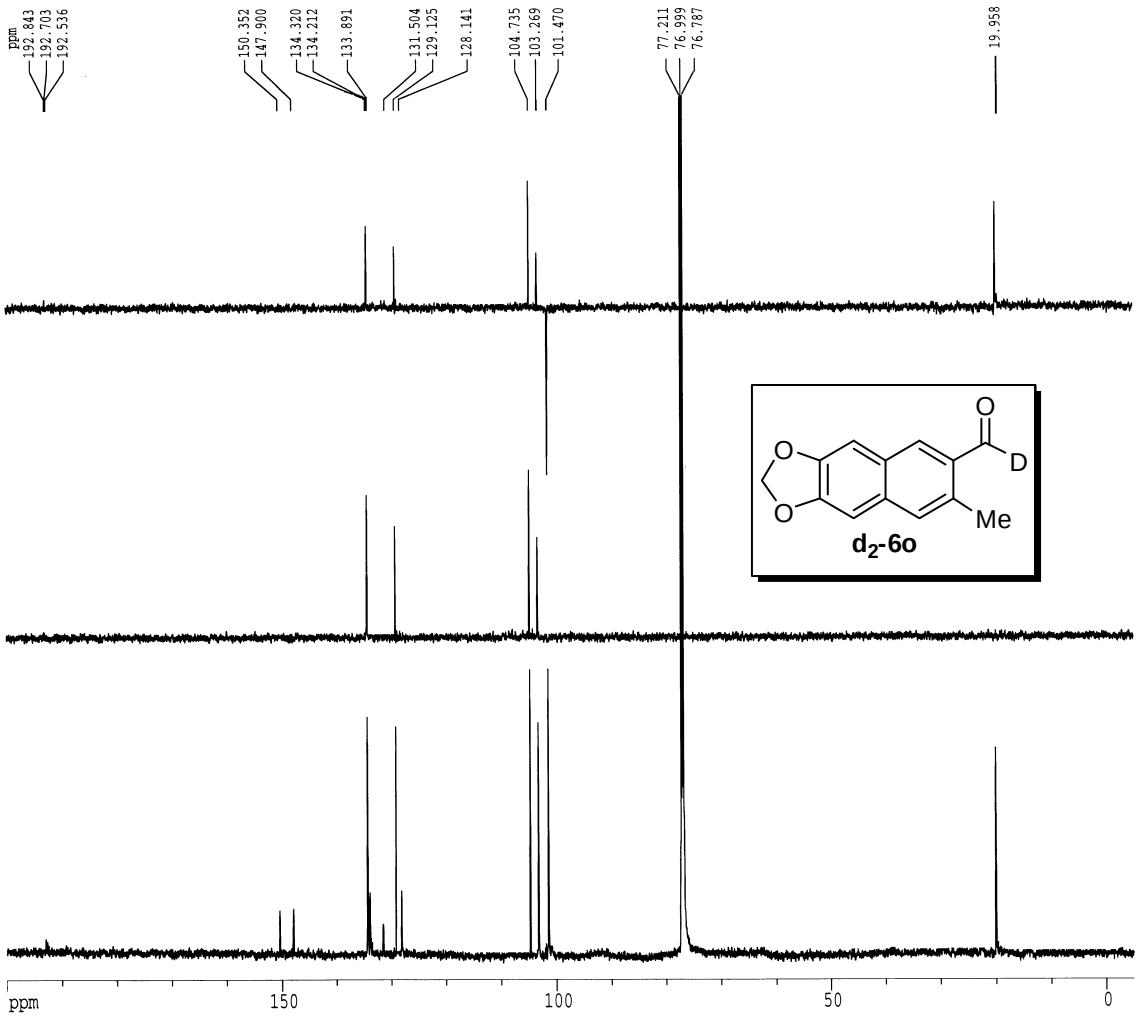
 - Acquisition Parameters
Te_              20090807
me                 16.37
STRUM              spect
OBHD   5 mm QNP  1H/1
LPROG                zgpg
                    32768
LVENT            CD2Cl2
                    10240
                        0
4               45045.047 Hz
DRES             1.374666 Hz
                0.3637748 sec
                     1024
                   11.100 usec
                    6.50 usec
                   302.5 K
               3.50000000 sec
1              0.03000000 sec
LTA            3.40000010 sec
REST           0.00000000 sec
WRK            0.01500000 sec

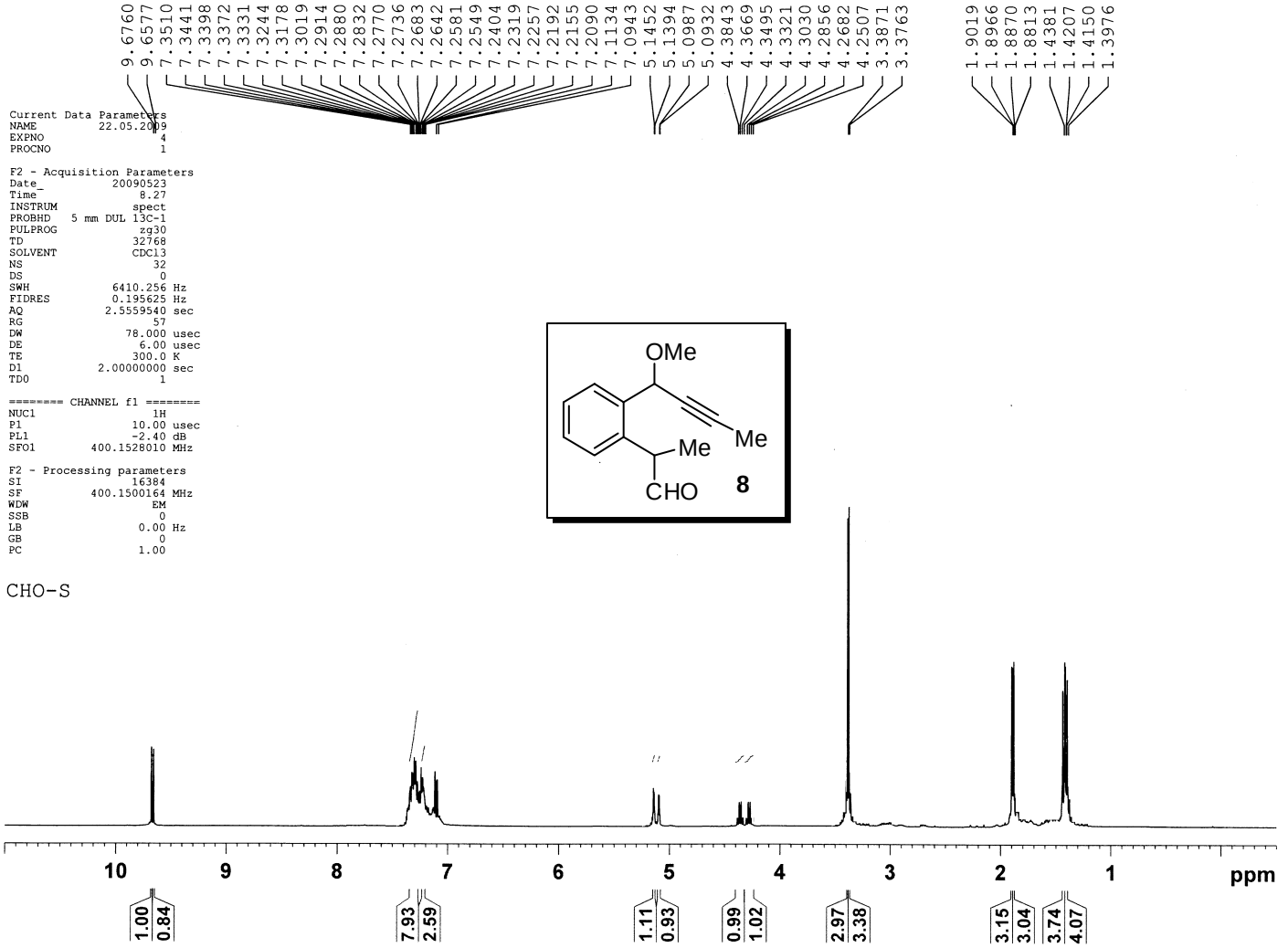
====== CHANNEL f1 ========
C1                    13C
                     4.50 usec
1                    0.00 dB
O1           150.6855336 MHz

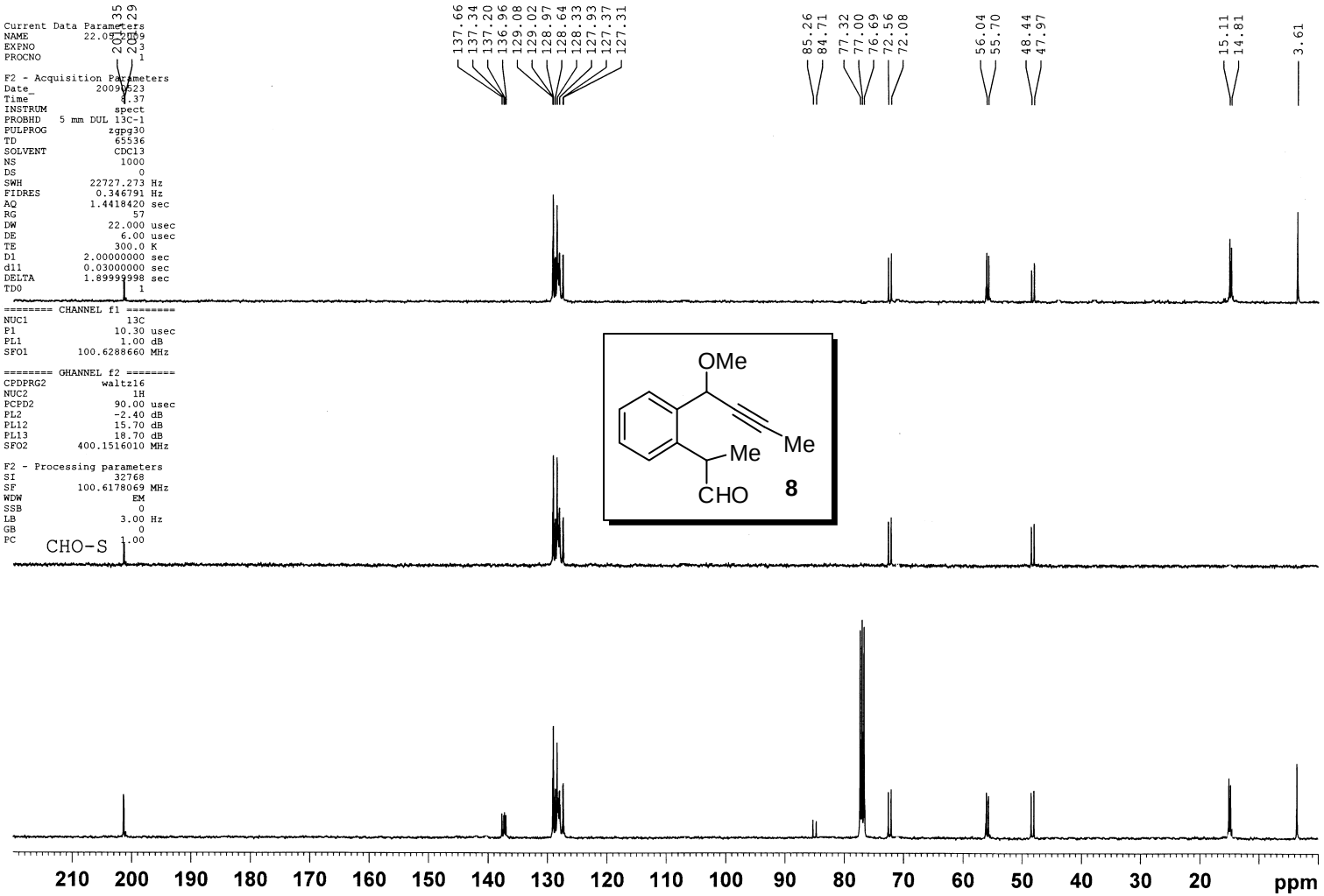
====== CHANNEL f2 ========
DPRG2            waltz16
C2                    1H
PD2                92.00 usec
2                 120.00 dB
12                 11.30 dB
13                 14.00 dB
O2           599.2029960 MHz

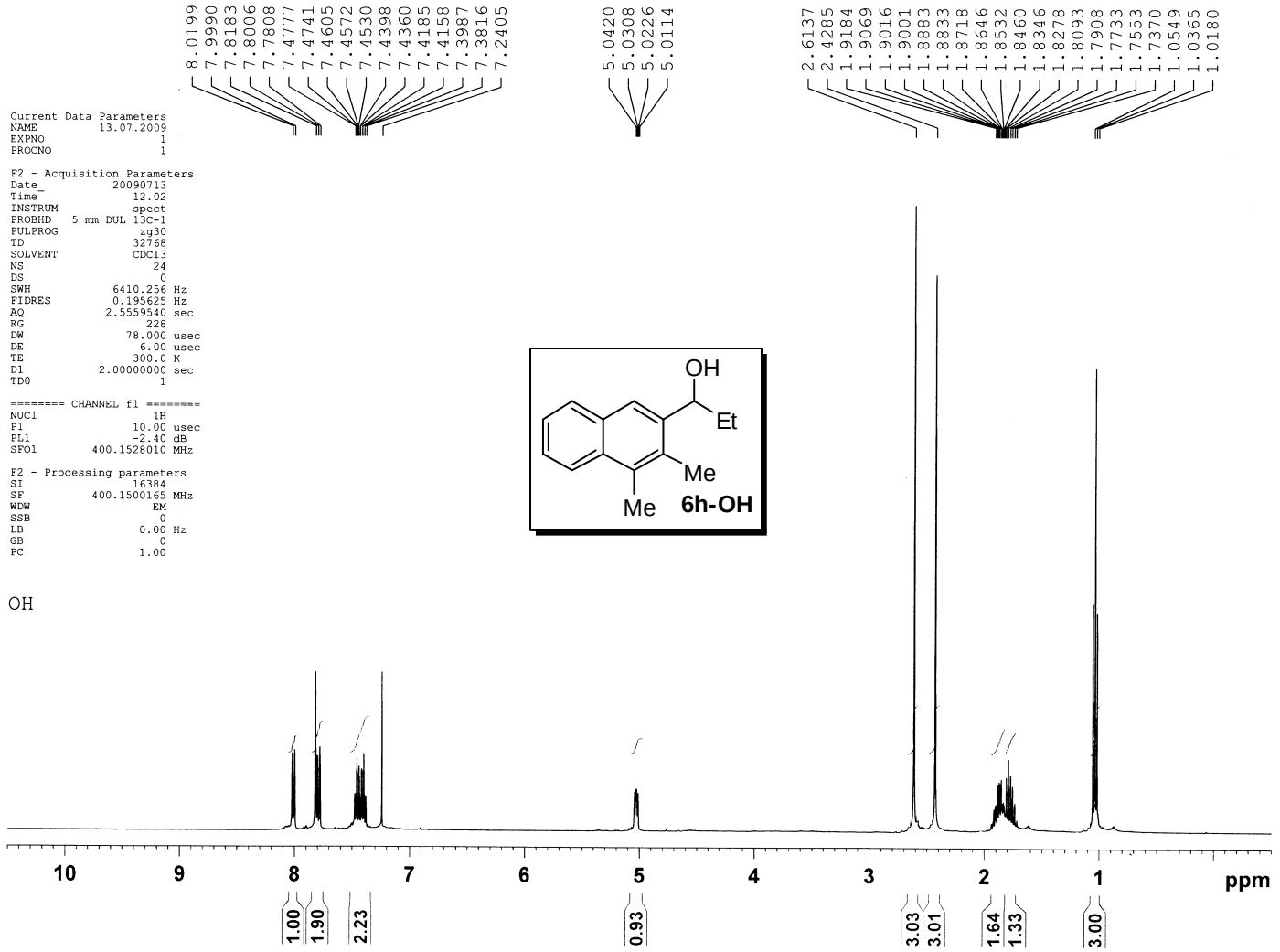
 - Processing parameters
                    65536
              150.6689606 MHz
W                      EM
B                       0
                     3.00 Hz
                        0
                     0.50

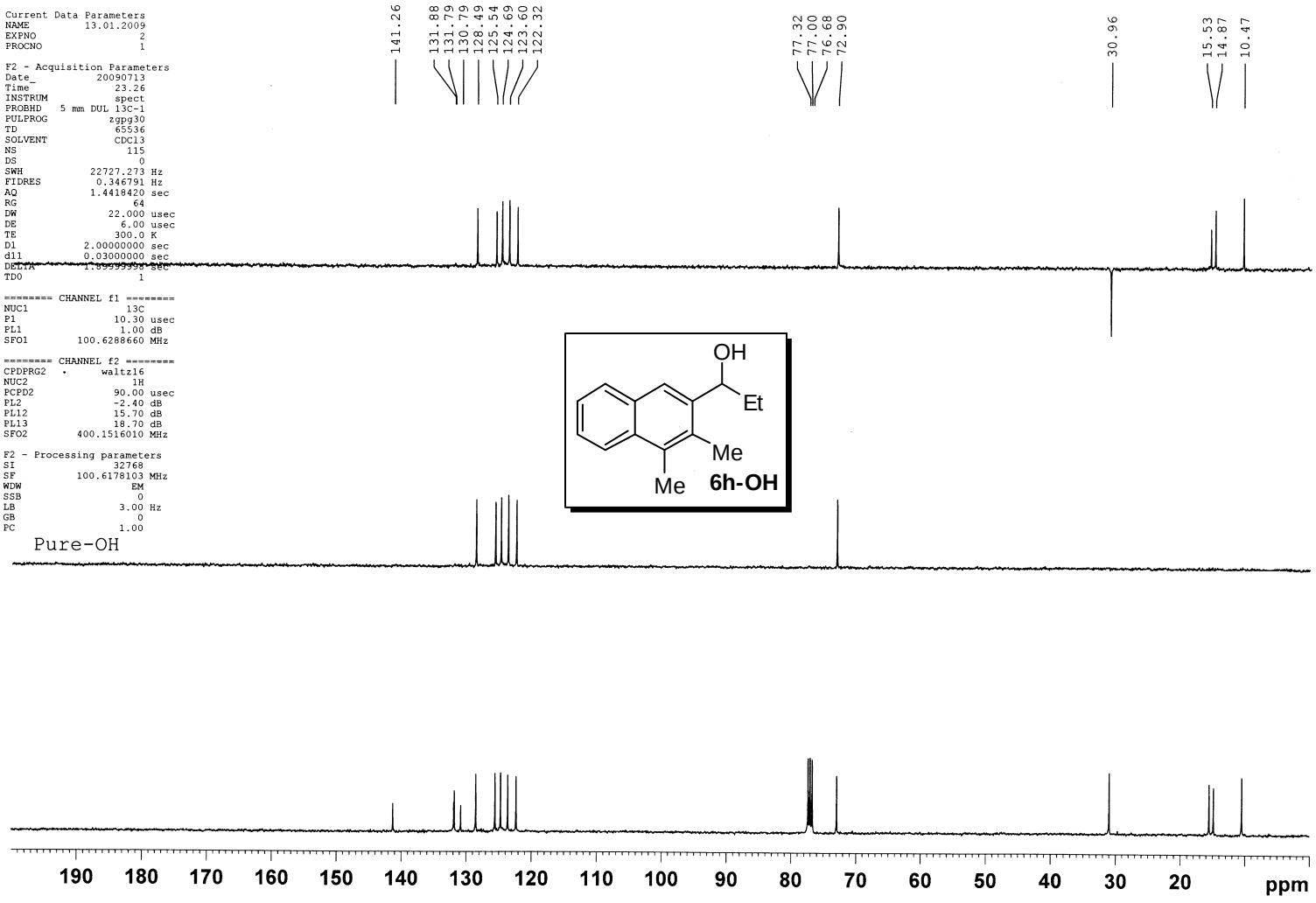
 NMR plot parameters
                    20.00 cm
                    40.00 cm
P                200.000 ppm
               30133.79 Hz
P                 -5.000 ppm
                 -753.34 Hz
MCM             10.25000 ppm/cm
CM           1544.35693 Hz/cm
```

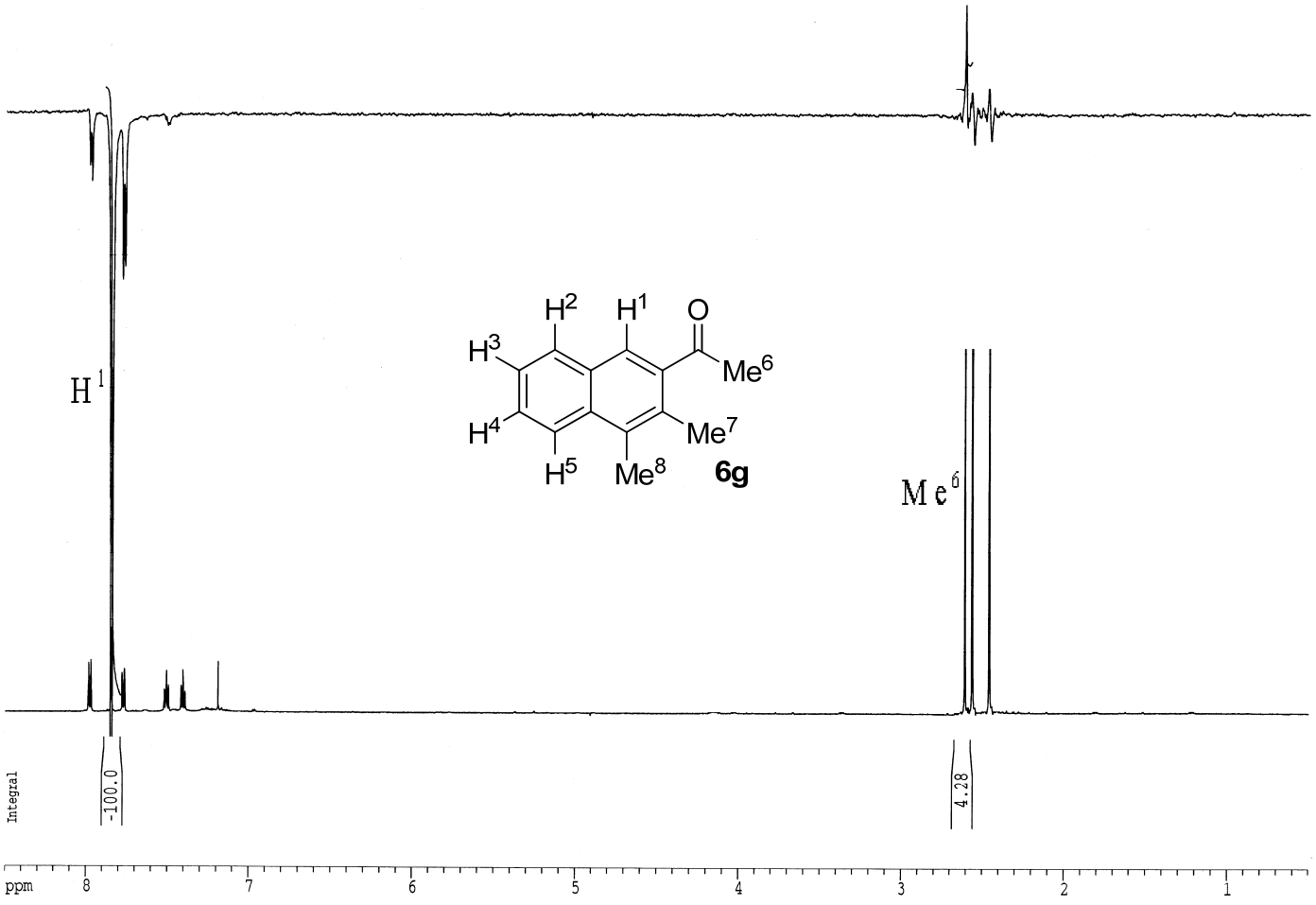


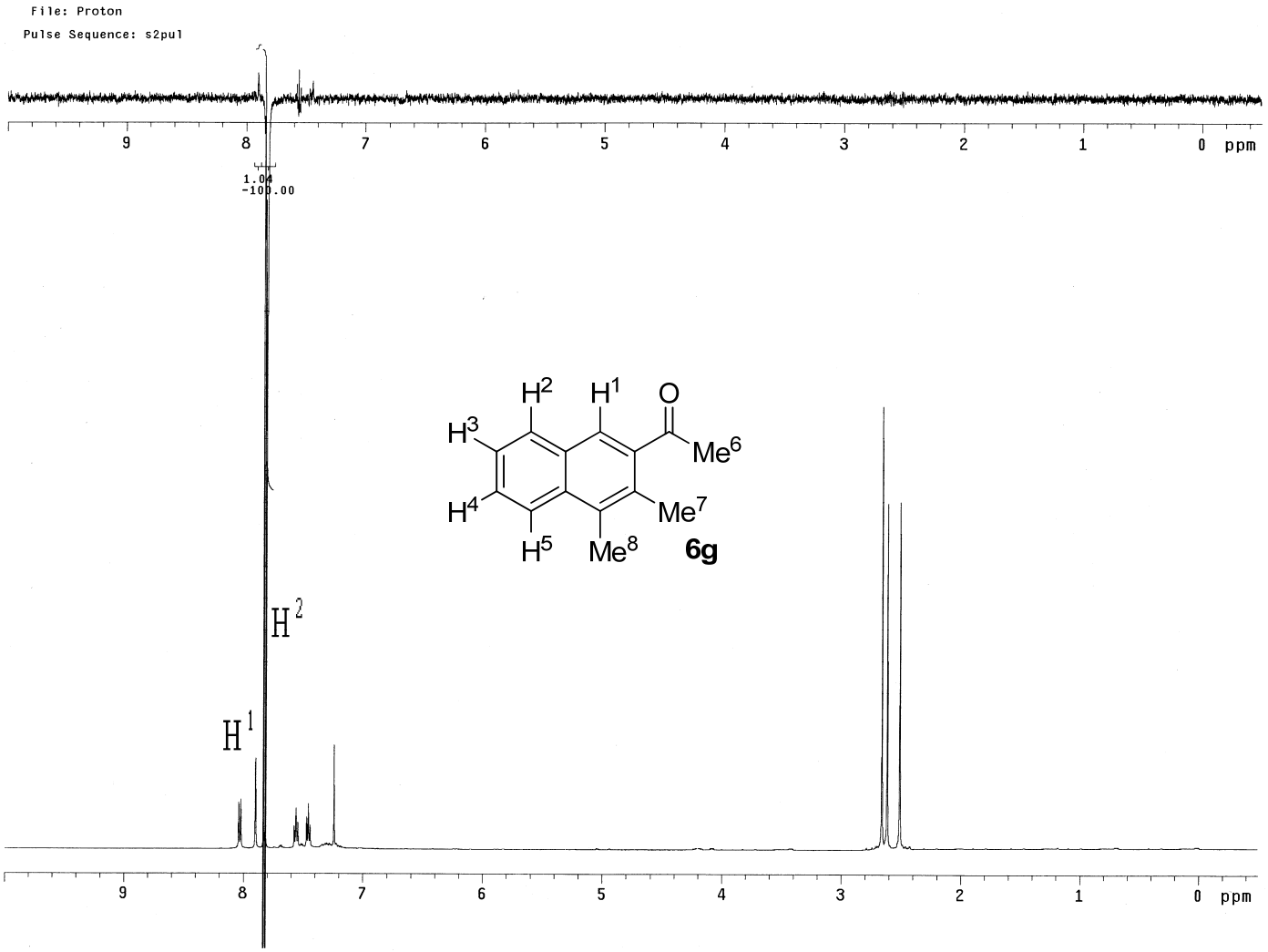

9.6760
9.6577
7.3510
7.3441
7.3398
7.3372
7.3331
7.3244
7.3178
7.3019
7.2914
7.2880
7.2832
7.2770
7.2736
7.2683
7.2642
7.2581
7.2549
7.2404
7.2319
7.2257
7.2192
7.2155
7.2090
7.1134
7.0943
5.1452
5.1394
5.0987
5.0932
4.3843
4.3669
4.3495
4.3321
4.3030
4.2856
4.2682
4.2507
3.3871
3.3763
1.9019
1.8966
1.8870
1.8813
1.4381
1.4207
1.4150
1.3976
Current Data Parameters
NAME 22.05.2009
EXPNO 4
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090523
Time 8.27
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 32
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 57
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500164 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
CHO-S
OMe
Me
Me
CHO
8
10
9
8
7
6
5
4
3
2
1
ppm
1.00
0.84
7.93
2.59
1.11
0.93
0.99
1.02
2.97
3.38
3.15
3.04
3.74
4.07

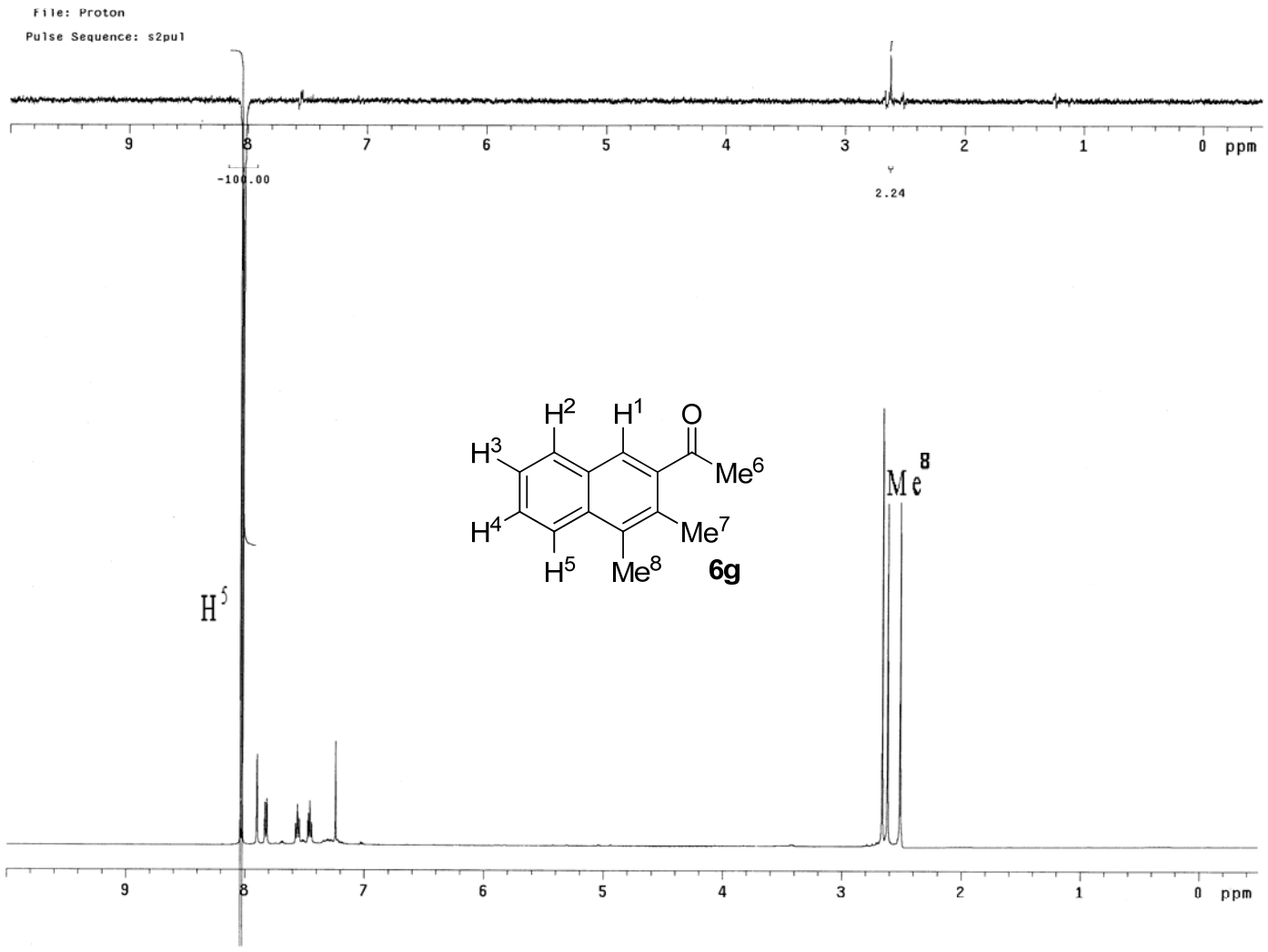

Current Data Parameters
NAME 22.05.2009
EXPNO 3
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090523
Time 8.37
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 1000
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 57
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== GHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178069 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
CHO-S
OMe
Me
Me
CHO
8
ppm

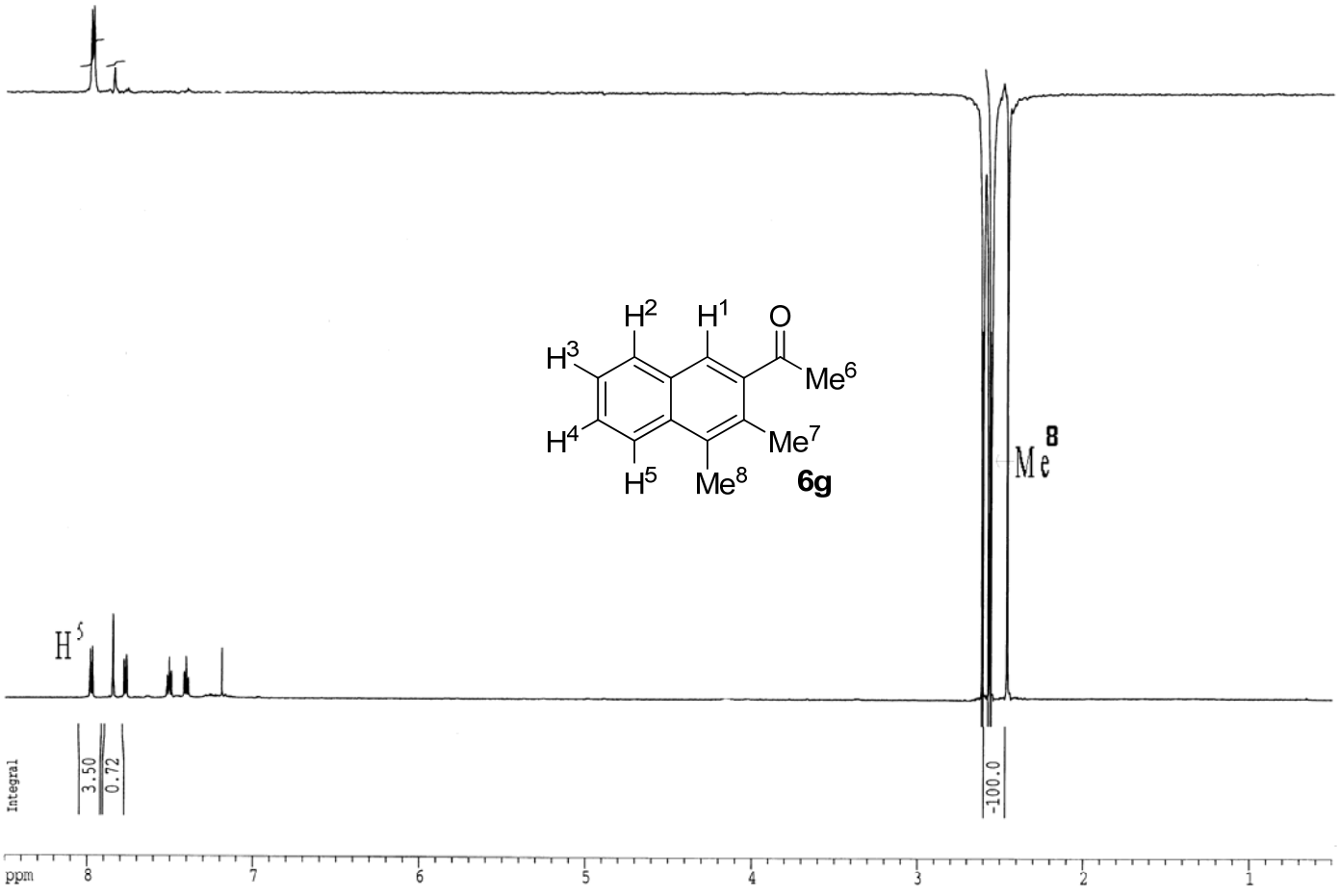

8.0199
7.9990
7.8183
7.8006
7.7808
7.4777
7.4741
7.4605
7.4572
7.4530
7.4398
7.4360
7.4185
7.4158
7.3987
7.3816
7.2405
5.0420
5.0308
5.0226
5.0114
2.6137
2.4285
1.9184
1.9069
1.9016
1.9001
1.8883
1.8833
1.8718
1.8646
1.8532
1.8460
1.8346
1.8278
1.8093
1.7908
1.7733
1.7553
1.7370
1.0549
1.0365
1.0180
Current Data Parameters
NAME 13.07.2009
EXPNO 1
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090713
Time 12.02
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 0
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 228
DW 78.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 10.00 usec
PL1 -2.40 dB
SFO1 400.1528010 MHz
F2 - Processing parameters
SI 16384
SF 400.1500165 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
OH
OH
Et
Me
Me
6h-OH
OH
10
9
8
7
6
5
4
3
2
1
ppm
1.00
1.90
2.23
0.93
3.03
3.01
1.64
1.33
3.00

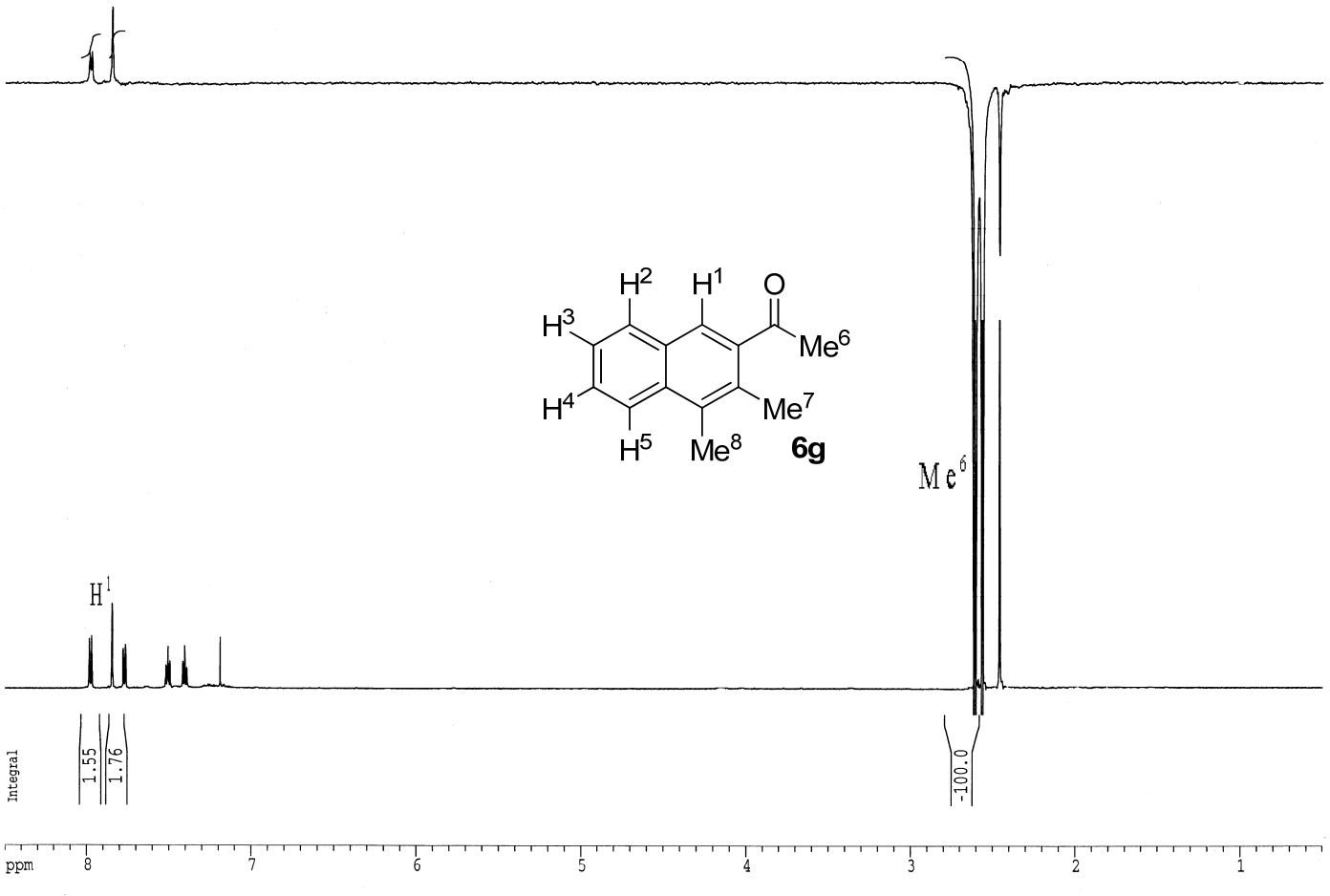

Current Data Parameters
NAME 13.01.2009
EXPNO 2
PROCNO 1
F2 - Acquisition Parameters
Date_ 20090713
Time 23.26
INSTRUM spect
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDC13
NS 115
DS 0
SWH 22727.273 Hz
FIDRES 0.346791 Hz
AQ 1.4418420 sec
RG 64
DW 22.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 13C
P1 10.30 usec
PL1 1.00 dB
SFO1 100.6288660 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -2.40 dB
PL12 15.70 dB
PL13 18.70 dB
SFO2 400.1516010 MHz
F2 - Processing parameters
SI 32768
SF 100.6178103 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00
Pure-OH
141.26
131.88
131.79
130.79
128.49
125.54
124.69
123.60
122.32
77.32
77.00
76.68
72.90
30.96
15.53
14.87
10.47
OH
Et
Me
Me
6h-OH
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
ppm

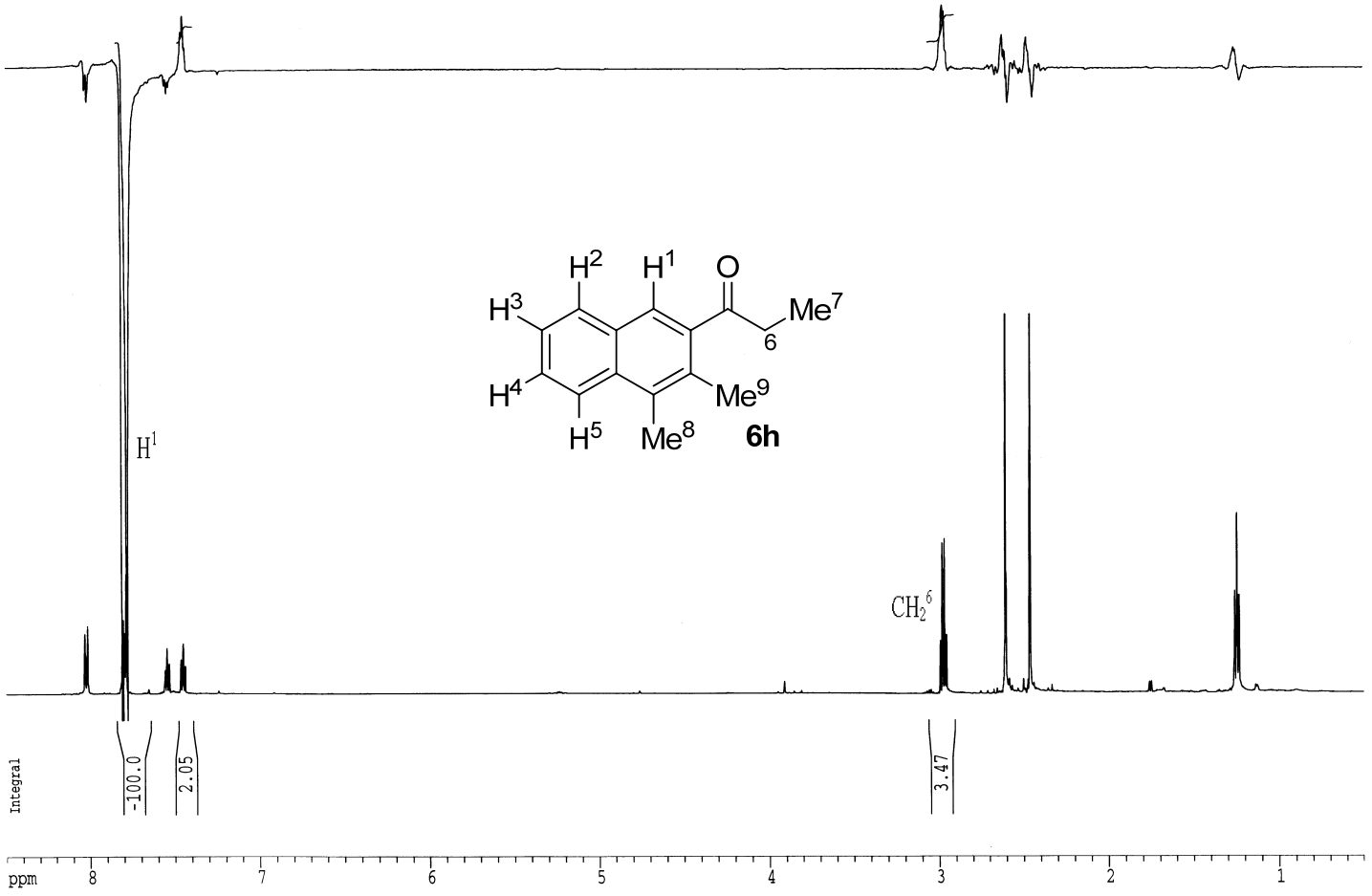

H1
H2
H1
O
H3
Me6
H4
Me7
H5
Me8
6g
Me6
Integral
100.0
4.28
ppm
8
7
6
5
4
3
2
1

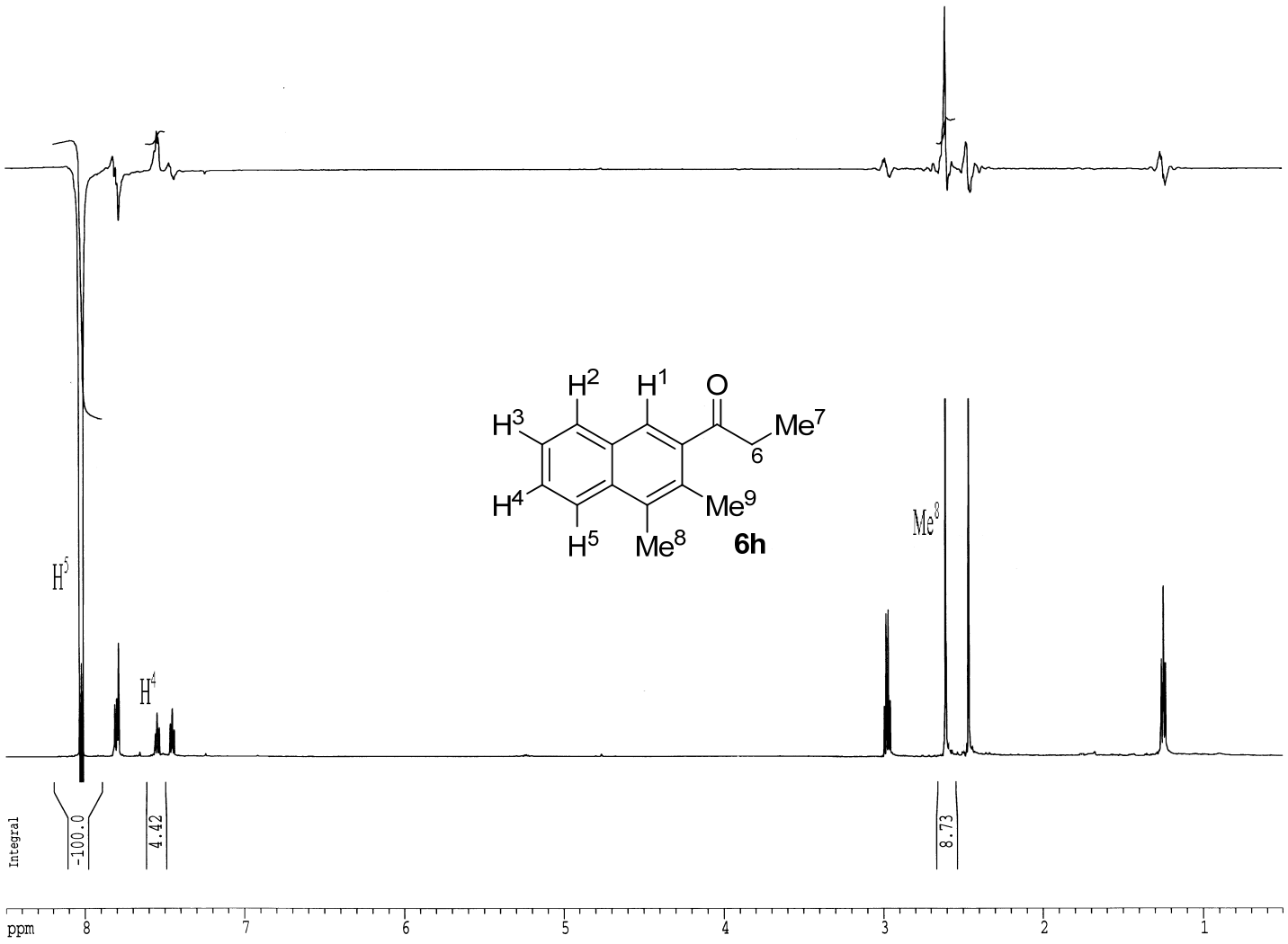

File: Proton
Pulse Sequence: s2pul
9
8
7
6
5
4
3
2
1
0 ppm
1.04
-100.00
H2
H1
O
H3
Me6
H4
Me7
H5
Me8
6g
H2
H1
9
8
7
6
5
4
3
2
1
0 ppm

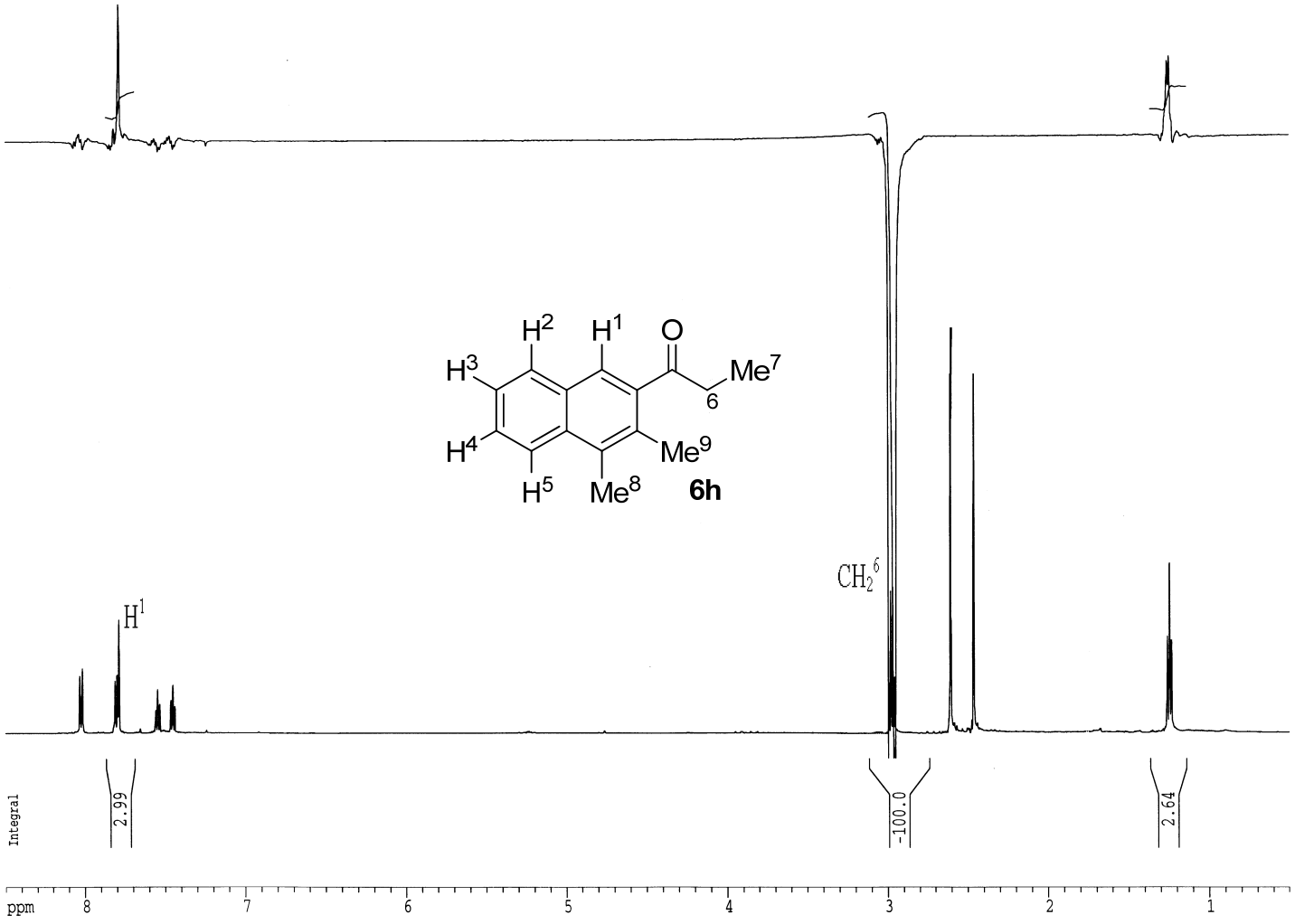

File: Proton
Pulse Sequence: s2pul
9
8
7
6
5
4
3
2
1
0 ppm
-100.00
2.24
H5
Me8
H2
H1
O
H3
Me6
H4
Me7
H5
Me8
6g

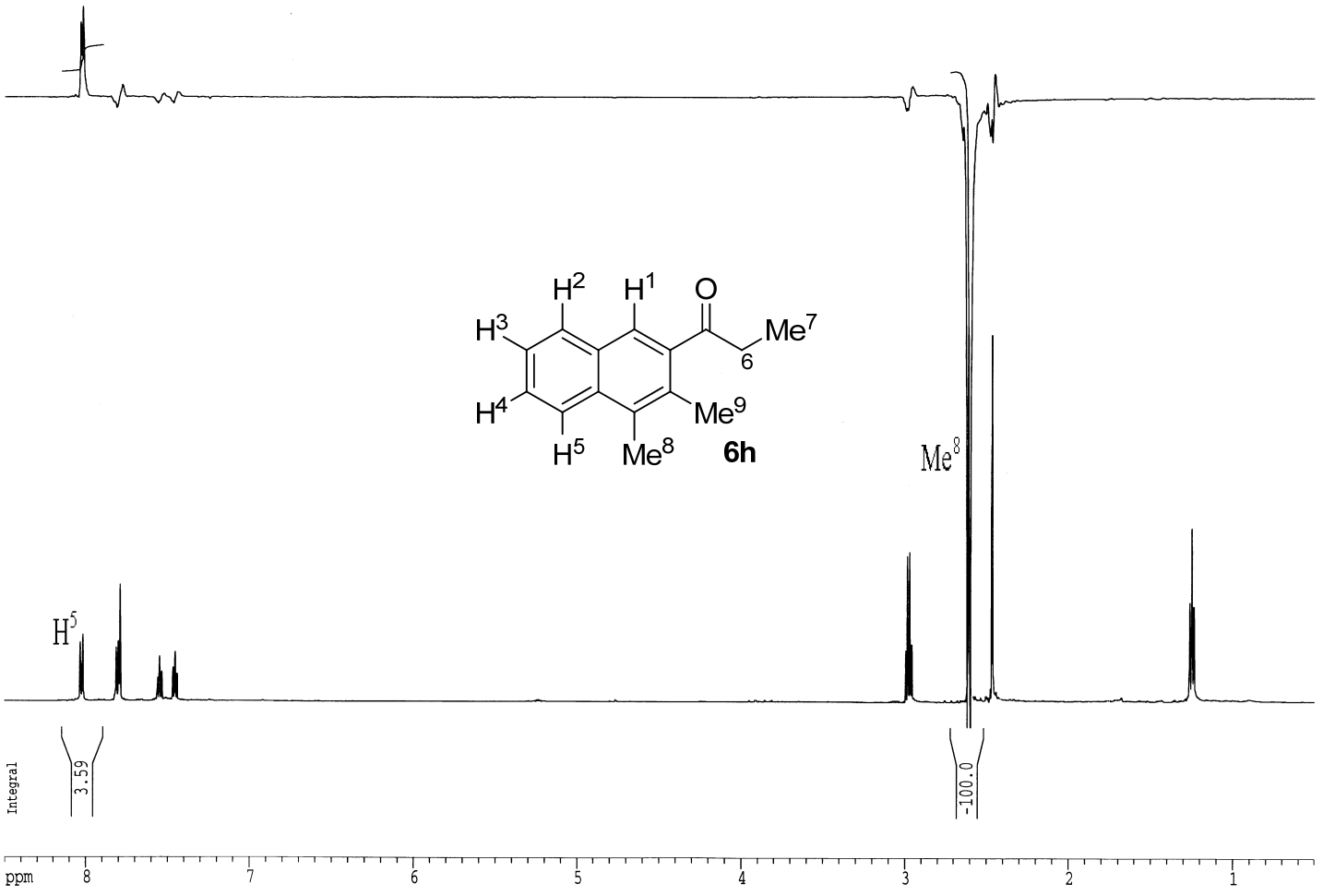

H2
H1
O
H3
Me6
H4
Me7
H5
Me8
6g
Me8
H5
Integral
3.50
0.72
-100.0
ppm
8
7
6
5
4
3
2
1

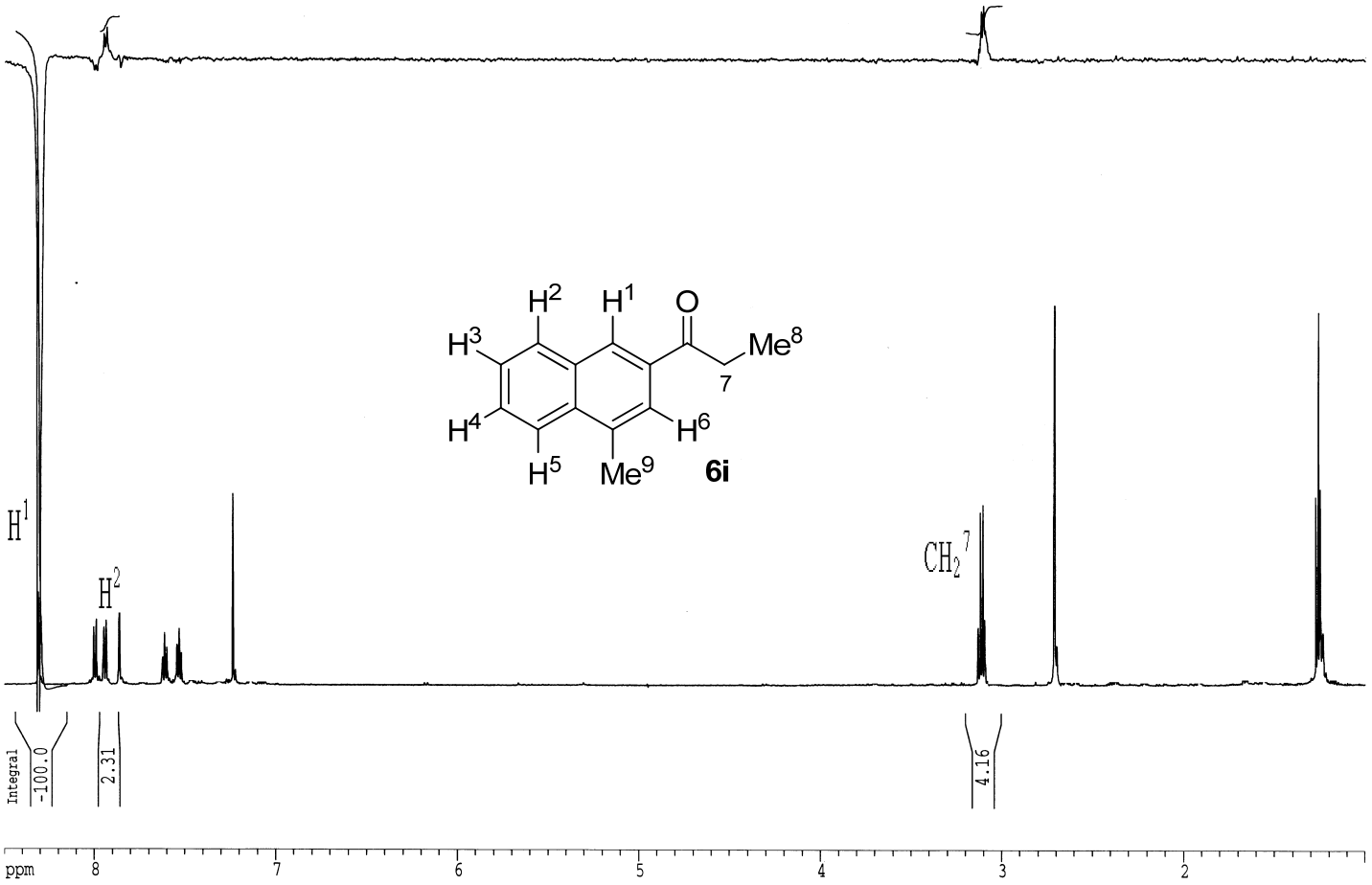

H2
H1
O
H3
Me6
H4
Me7
H5
Me8
6g
Me6
H1
Integral
1.55
1.76
-100.0
ppm
8
7
6
5
4
3
2
1

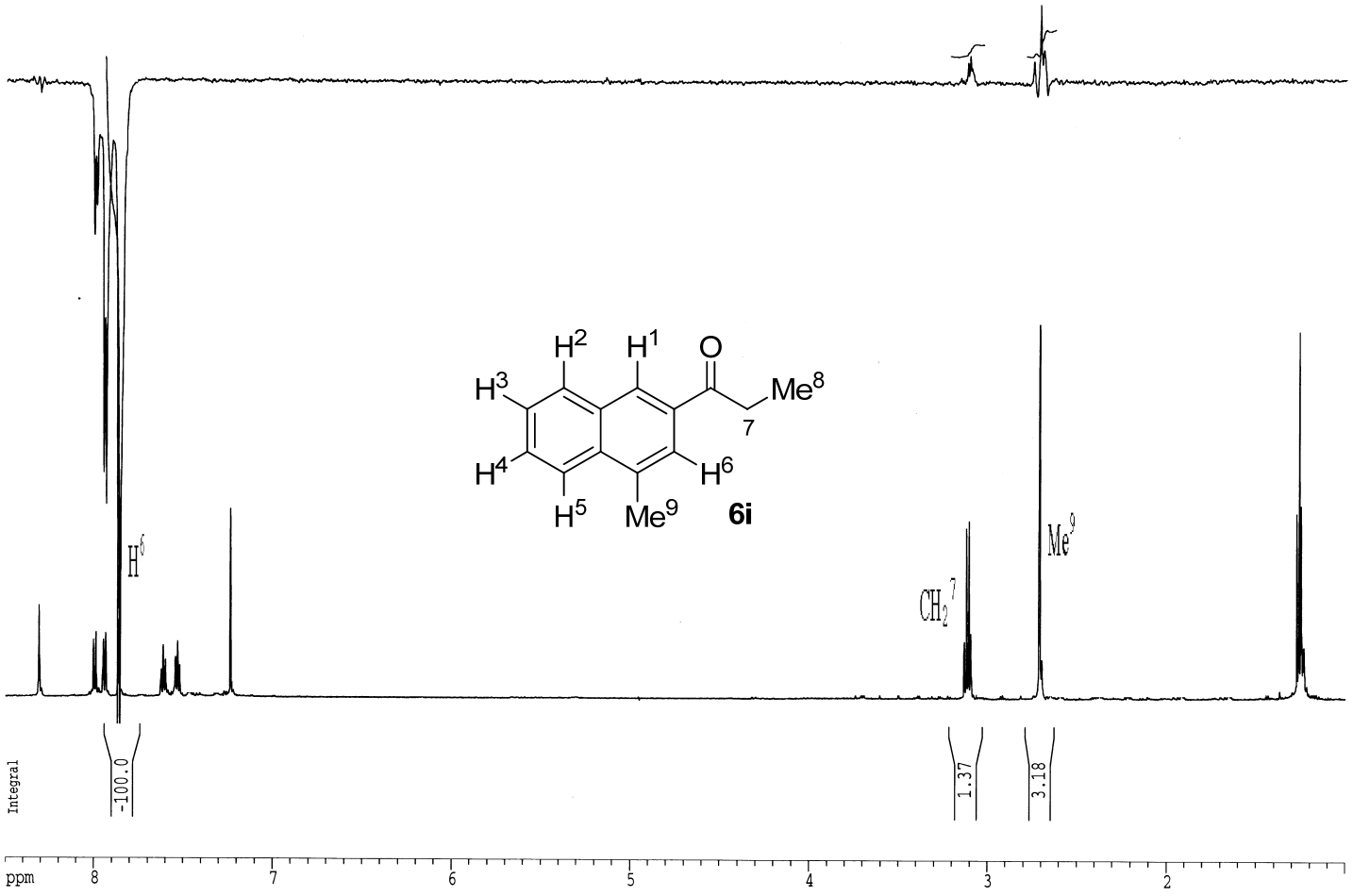

H2
H1
O
H3
Me7
6
H4
Me9
H5
Me8
6h
H1
CH2 6
Integral
100.0
2.05
3.47
ppm
8
7
6
5
4
3
2
1

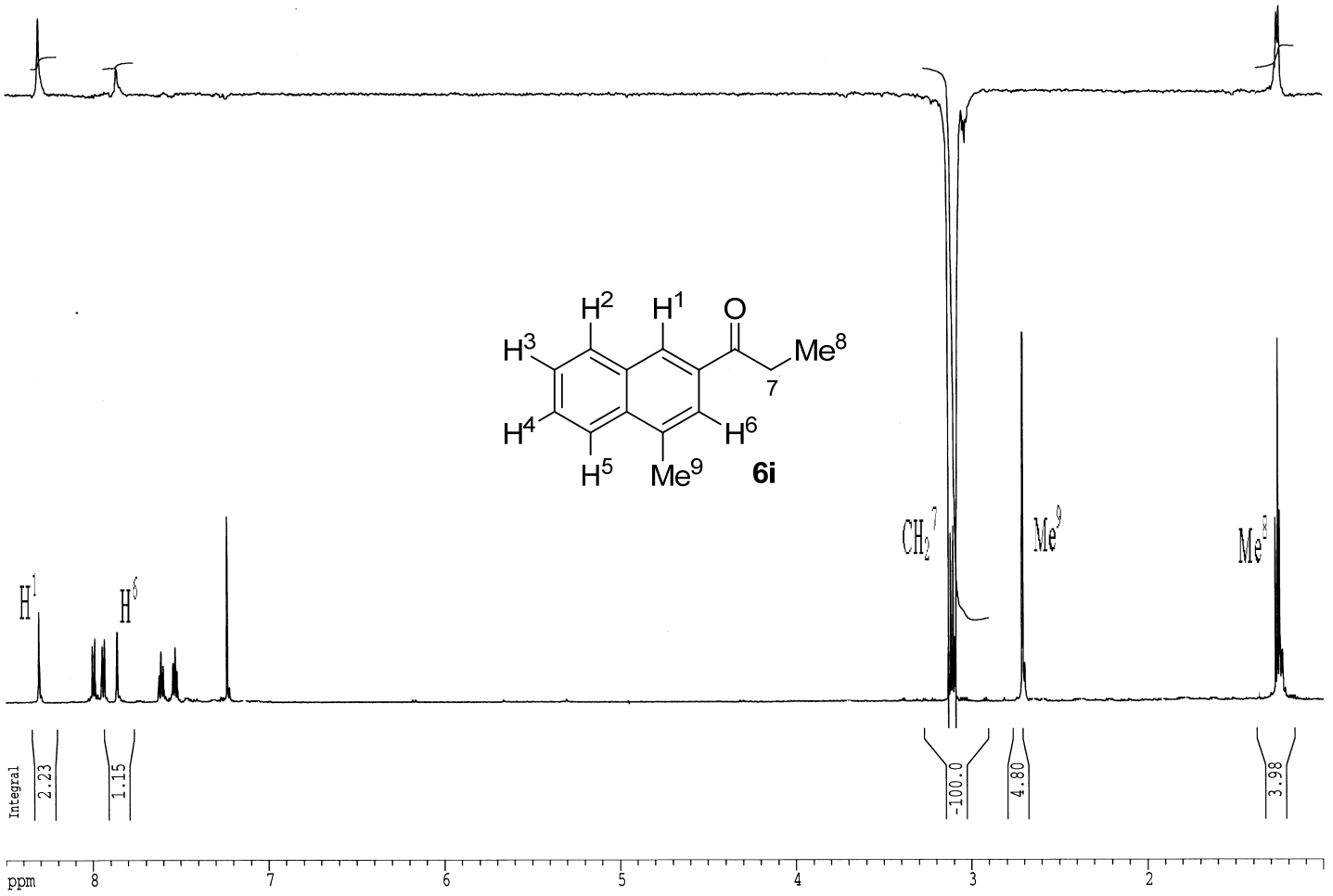

H5
H4
Me8
H2
H1
O
H3
Me7
6
H4
Me9
H5
Me8
6h
Integral
100.0
4.42
8.73
ppm
8
7
6
5
4
3
2
1

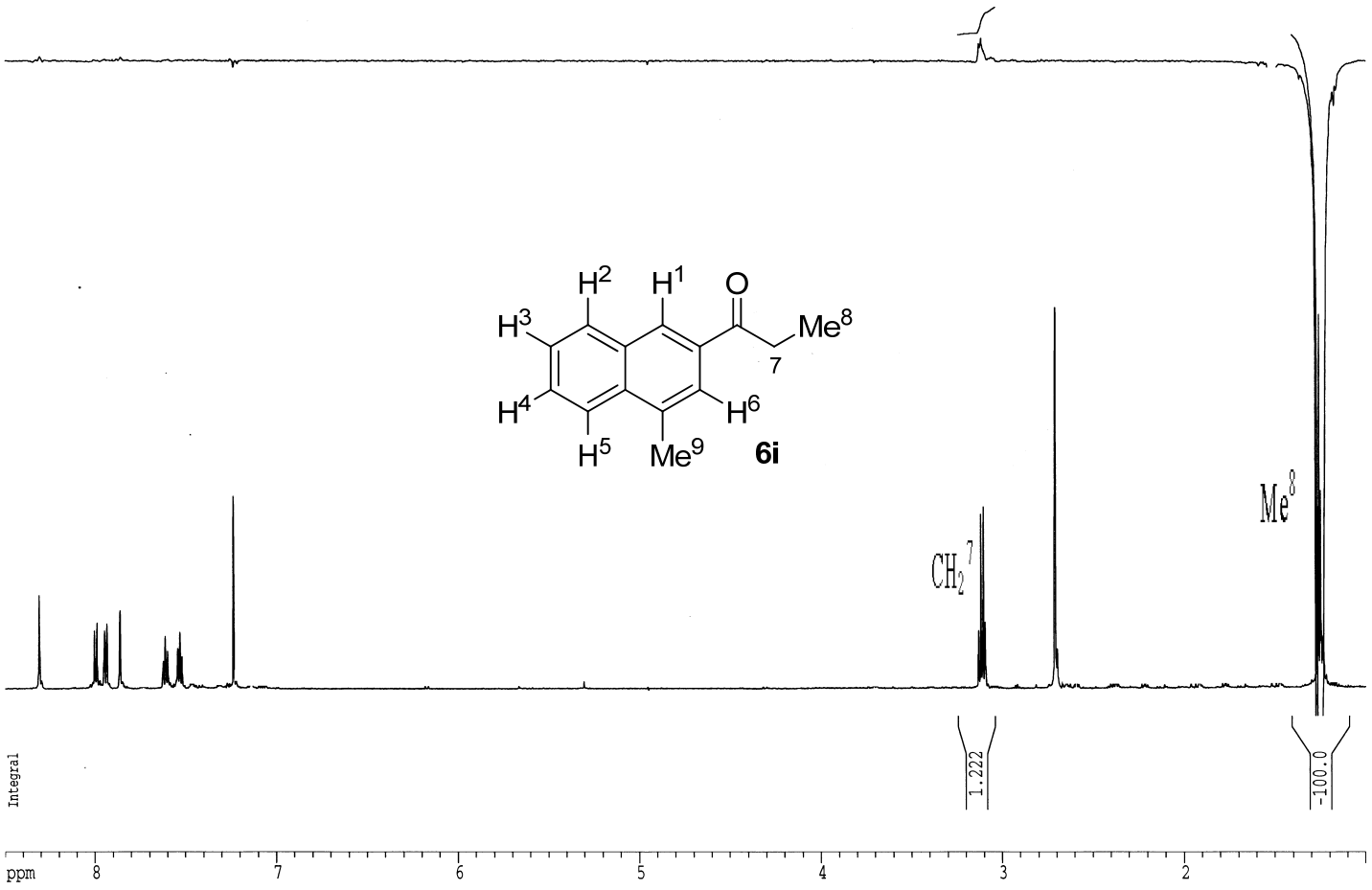

H2
H1
O
H3
Me7
6
H4
Me9
H5
Me8
6h
CH2 6
H1
Integral
2.99
-100.0
2.64
ppm
8
7
6
5
4
3
2
1

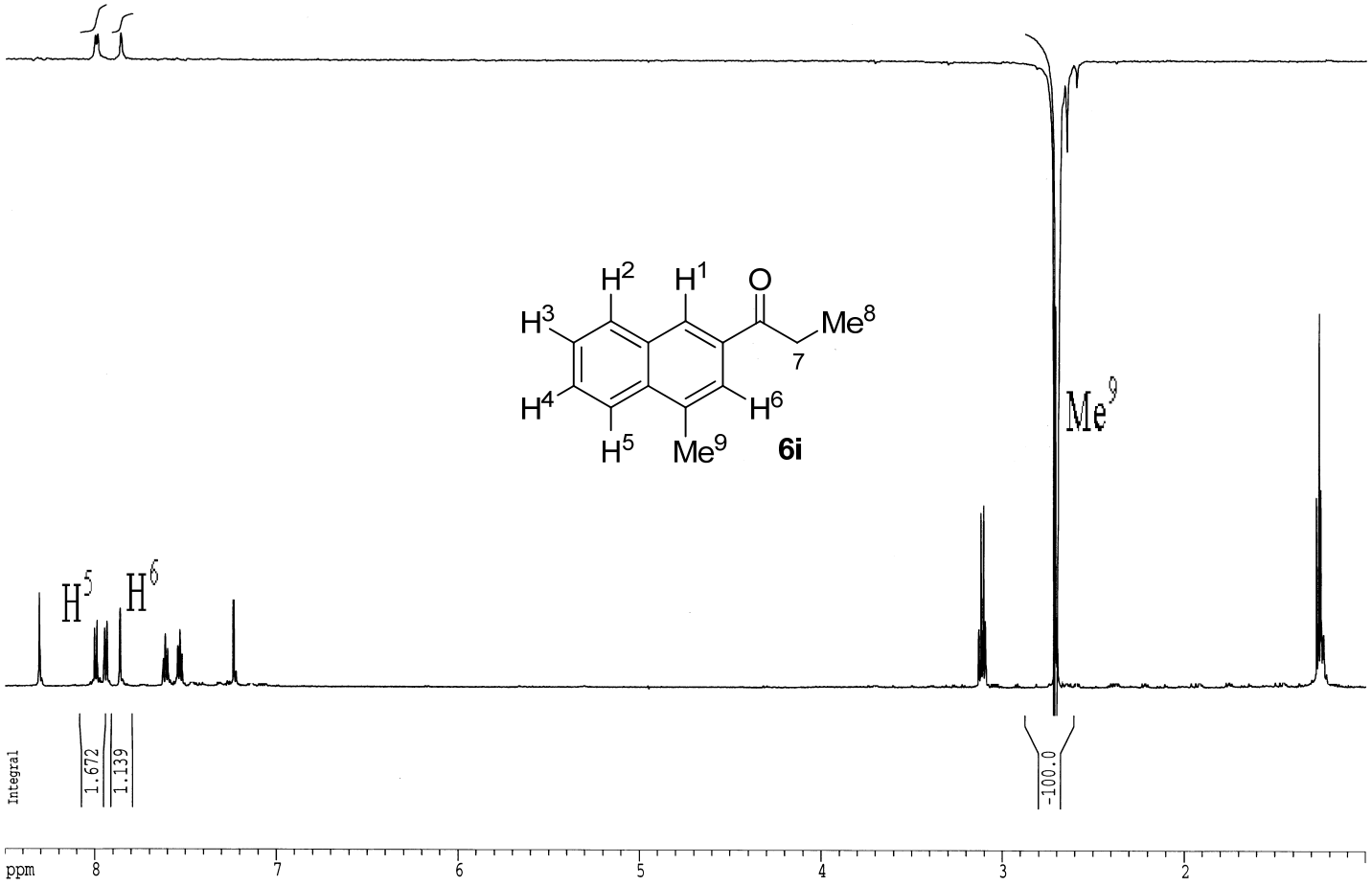

H2
H1
O
H3
Me7
6
H4
Me9
H5
Me8
6h
Me8
H5
Integral
3.59
-100.0
ppm
8
7
6
5
4
3
2
1

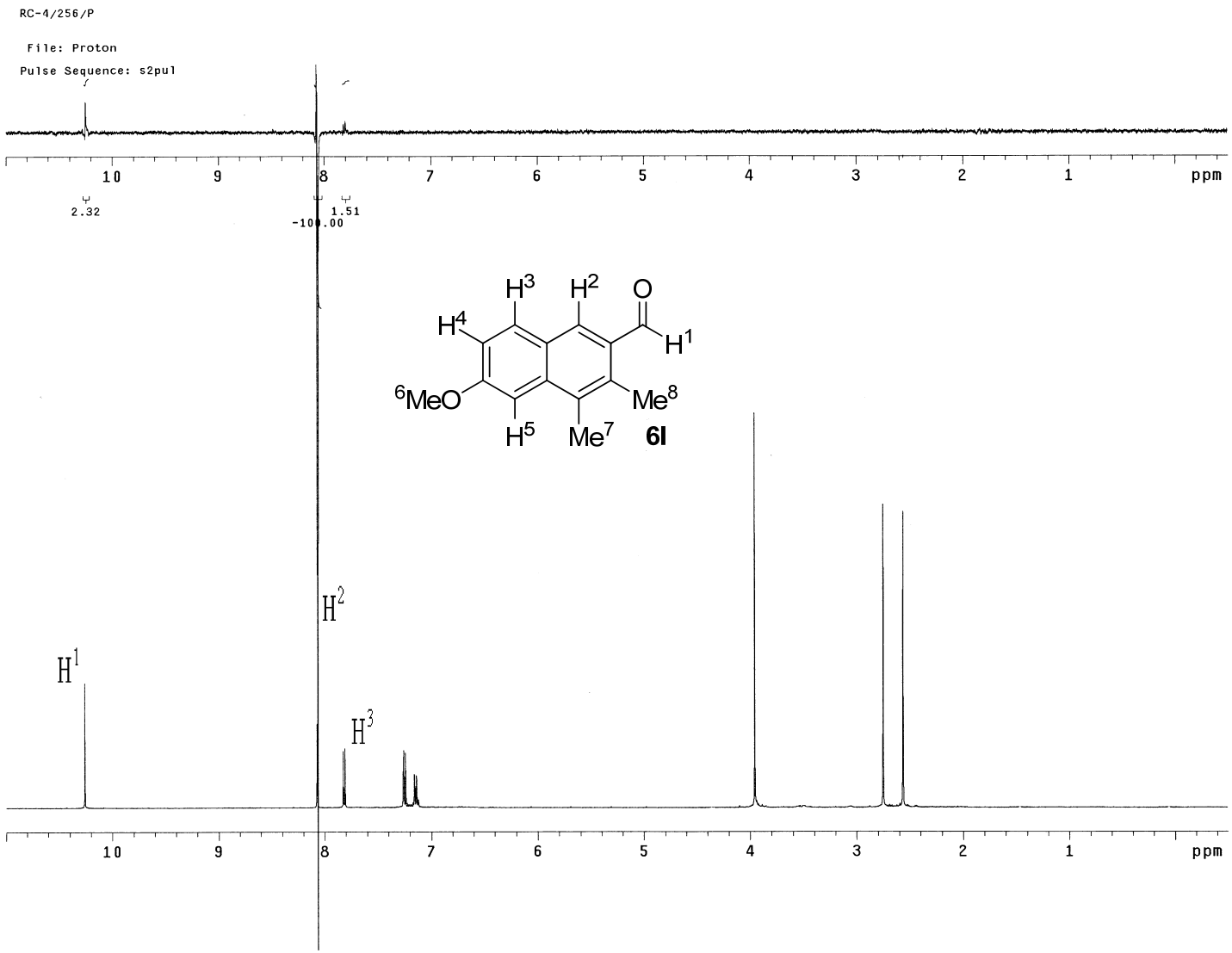

H2
H1
O
H3
Me8
7
H4
H6
H5
Me9
6i
H1
H2
CH2 7
Integral
-100.0
2.31
4.16
ppm
8
7
6
5
4
3
2

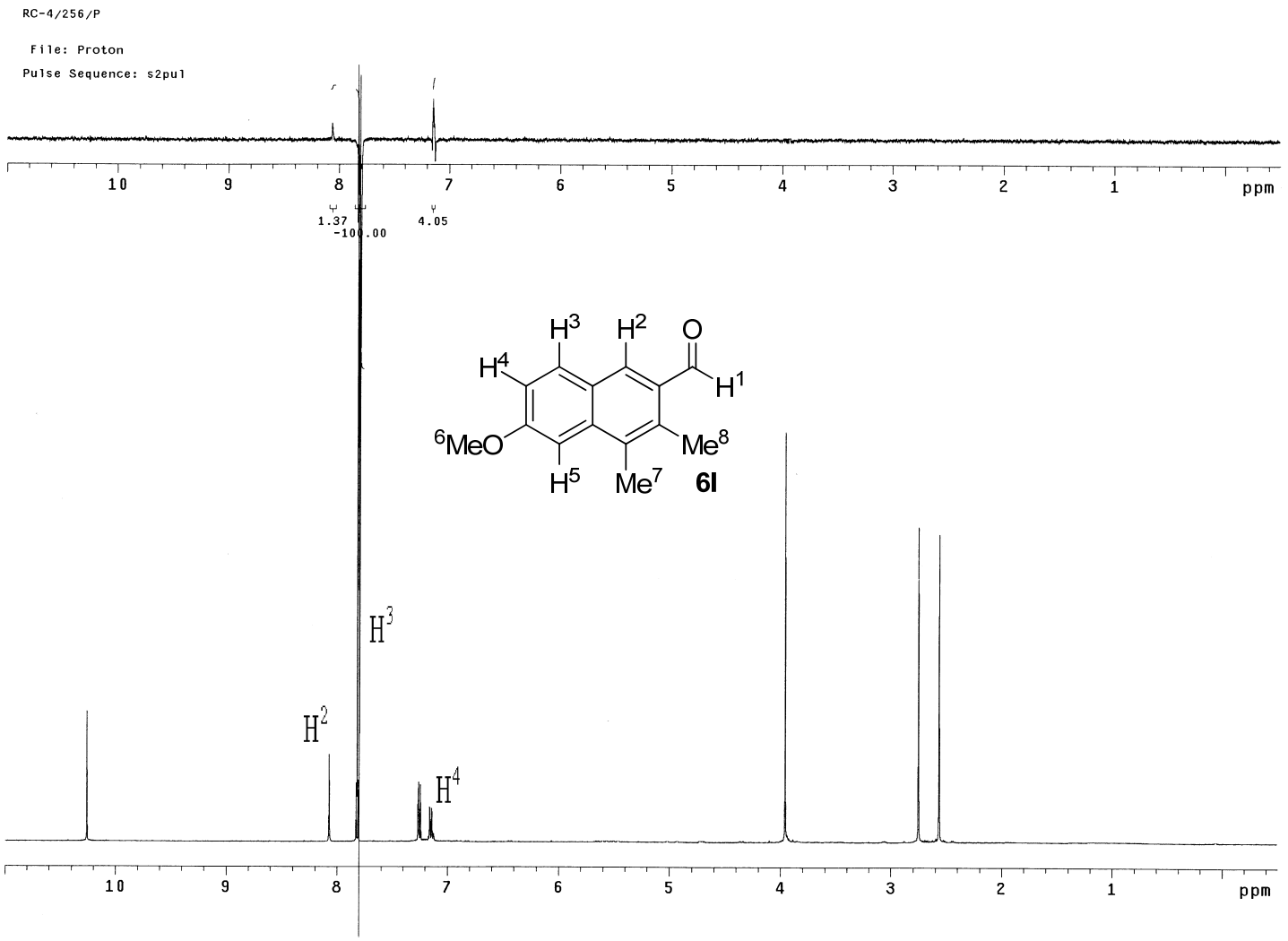

H2
H1
O
H3
Me8
7
H4
H6
H5
Me9
6i
H6
CH2 7
Me9
Integral
-100.0
1.37
3.18
ppm
8
7
6
5
4
3
2

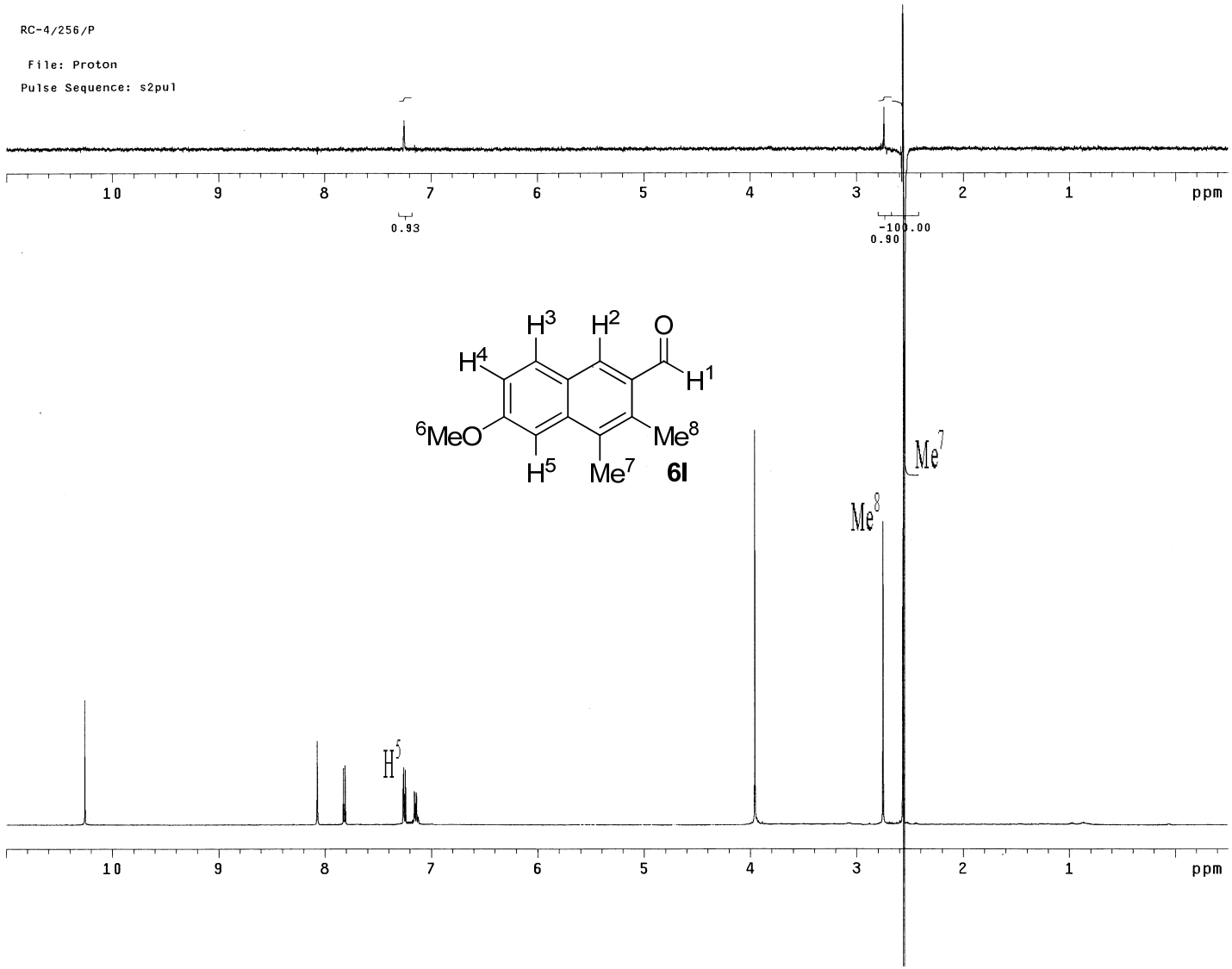

H2
H1
O
H3
Me8
7
H4
H6
H5
Me9
6i
H1
H5
CH2 7
Me9
Me8
Integral
2.23
1.15
-100.0
4.80
3.98
ppm
8
7
6
5
4
3
2

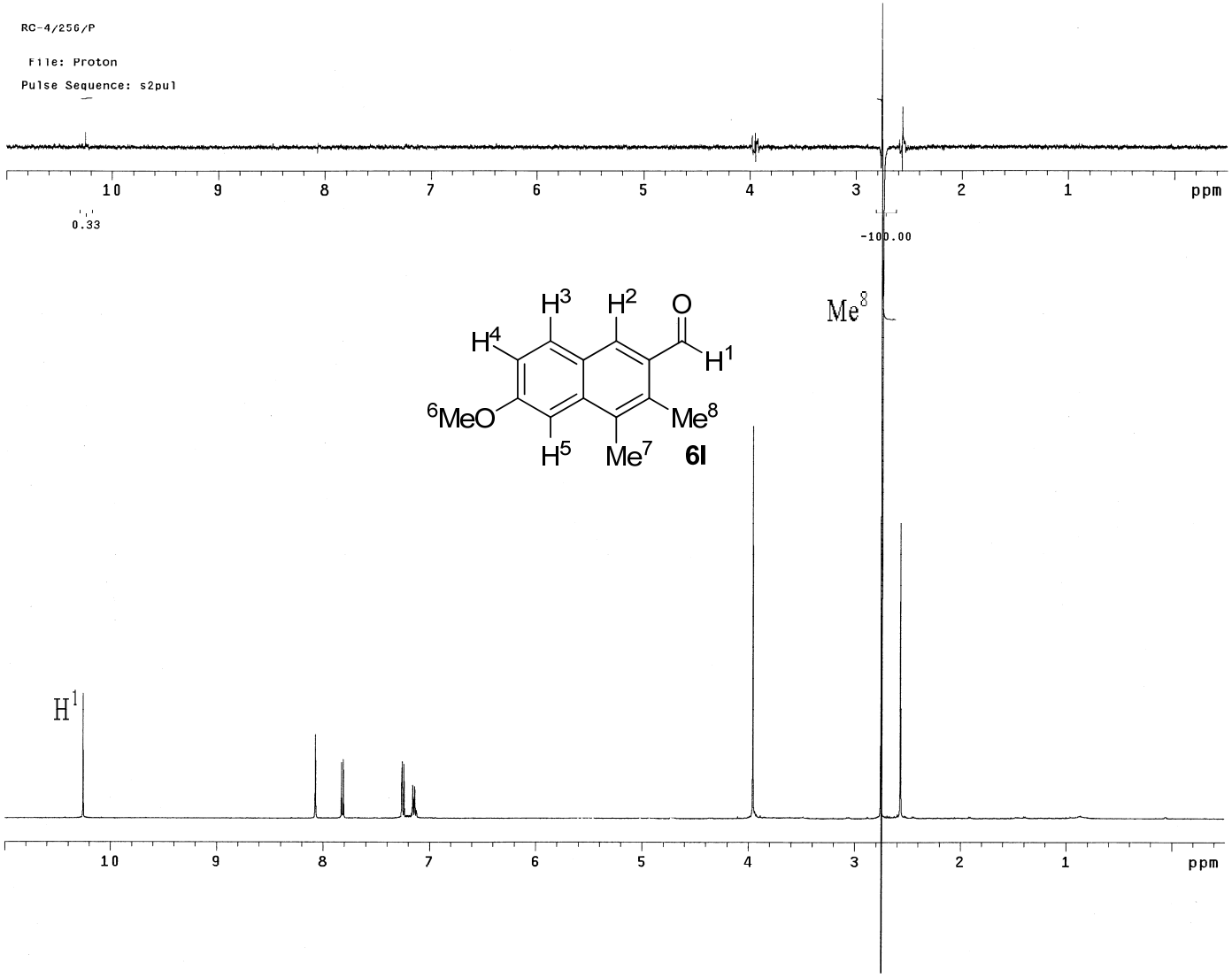

H2
H1
O
H3
Me8
7
H4
H6
H5
Me9
6i
CH2 7
Me8
Integral
1.222
100.0
ppm
8
7
6
5
4
3
2

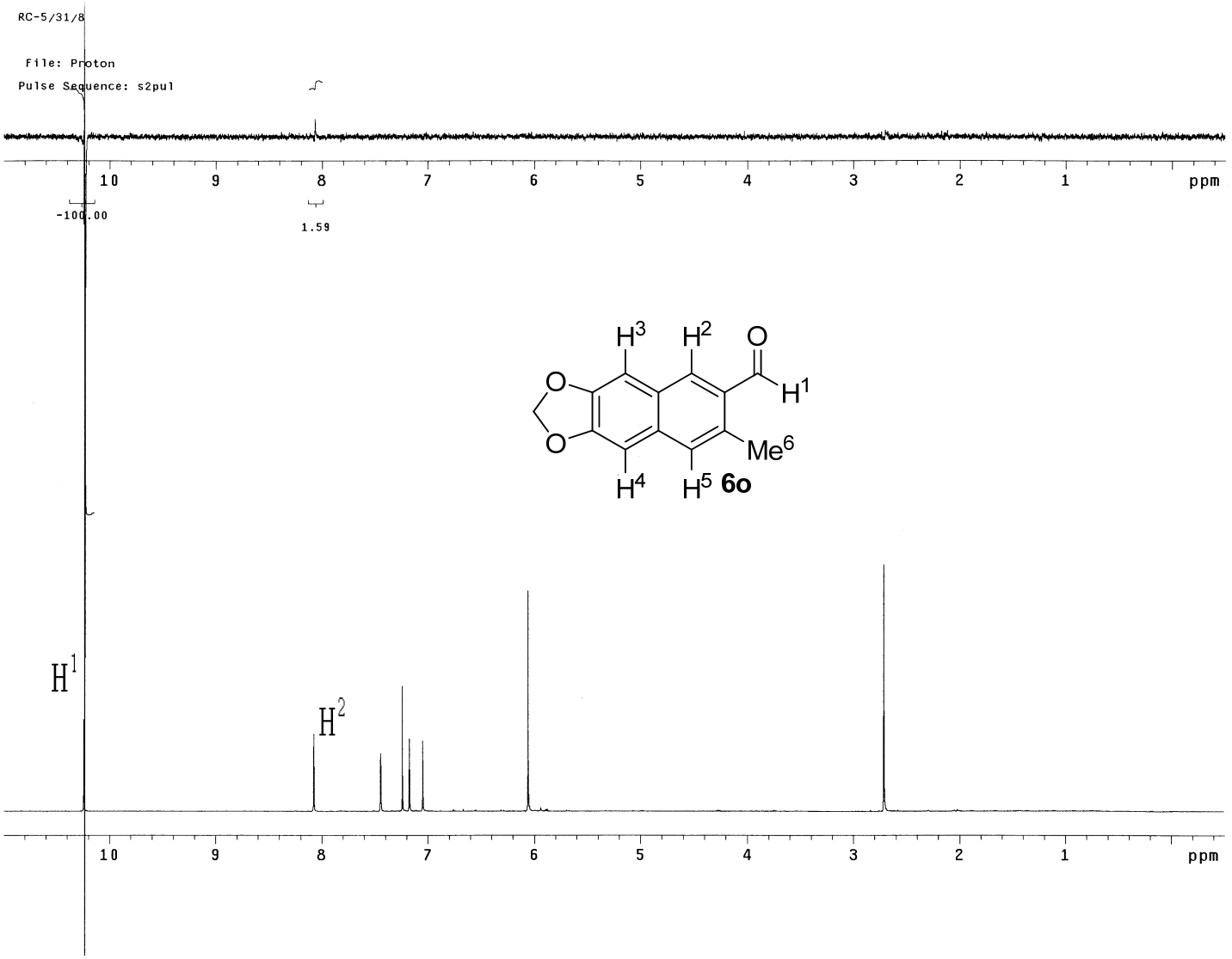

H2
H1
O
H3
Me8
7
H4
H6
H5
Me9
6i
Me9
H5
H6
Integral
1.672
1.139
-100.0
ppm
8
7
6
5
4
3
2

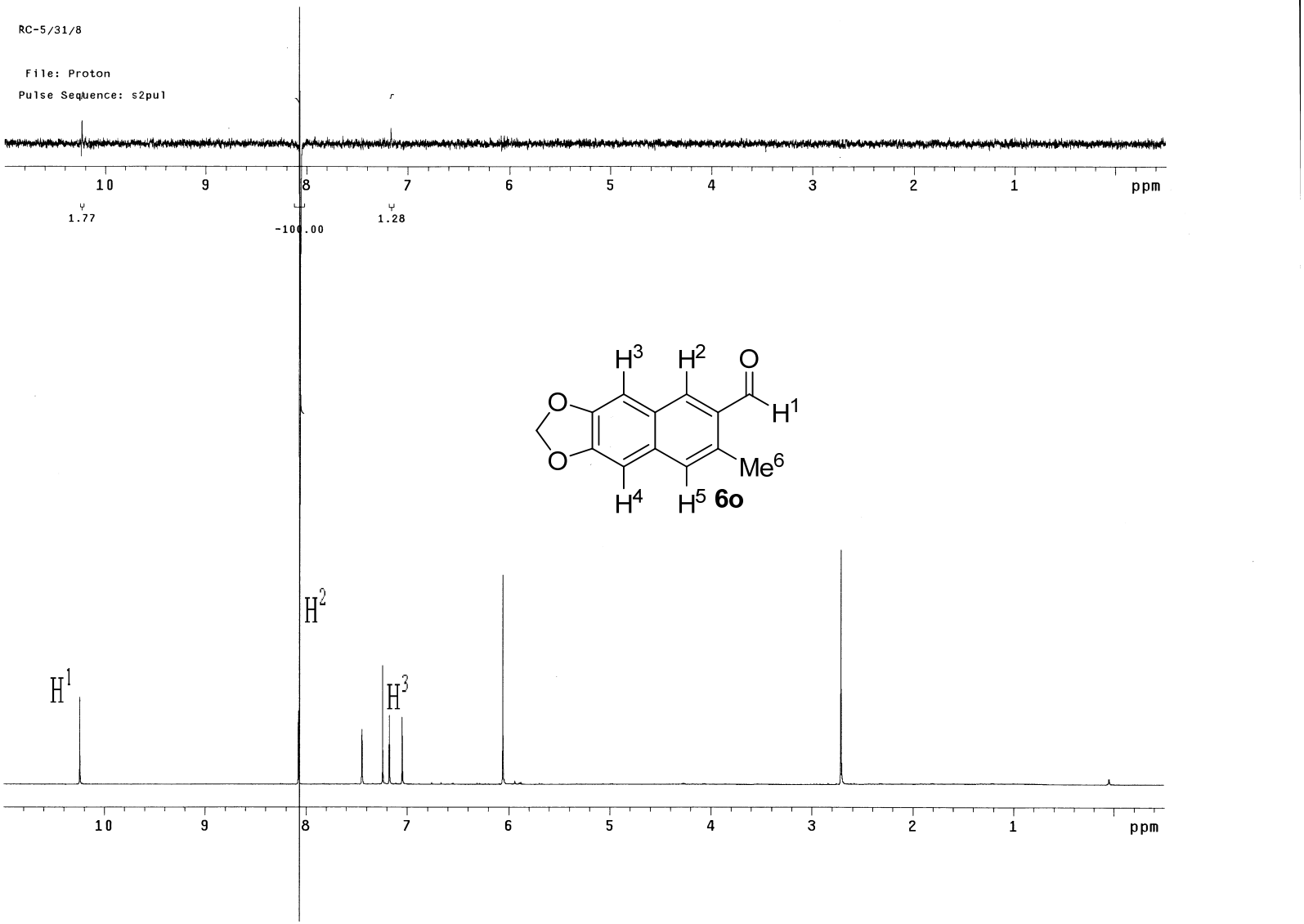

RC-4/256/P
File: Proton
Pulse Sequence: s2pul
10
9
8
7
6
5
4
3
2
1
ppm
2.32
1.51
-100.00
H3
H2
O
H4
H1
6MeO
Me8
H5
Me7
6l
H1
H2
H3

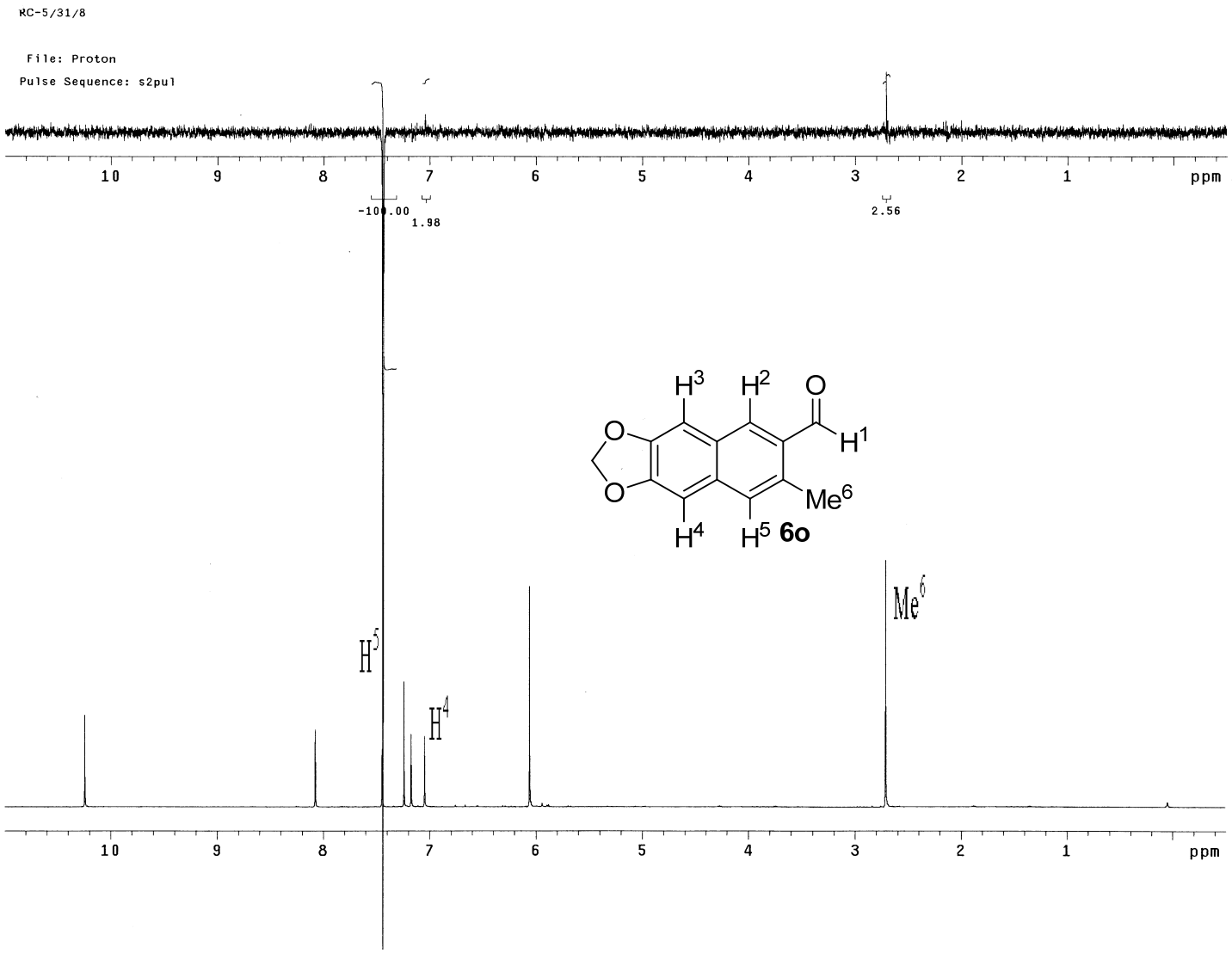

RC-4/256/P
File: Proton
Pulse Sequence: s2pul
10
9
8
7
6
5
4
3
2
1
ppm
1.37
-100.00
4.05
H3
H2
O
H4
H1
6MeO
Me8
H5
Me7
6l
H3
H2
H4
10
9
8
7
6
5
4
3
2
1
ppm

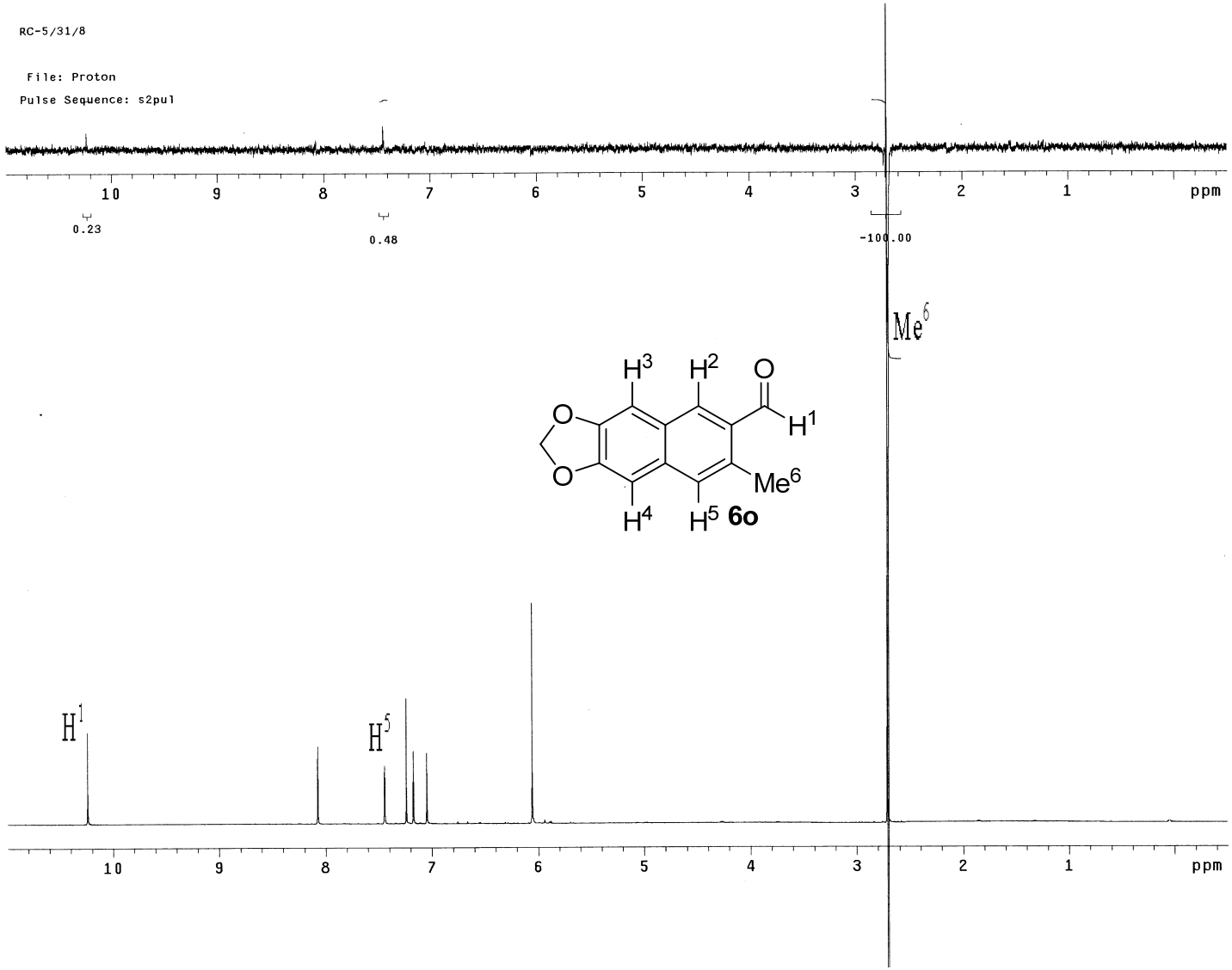

RC-4/256/P
File: Proton
Pulse Sequence: s2pul
10
9
8
7
6
5
4
3
2
1
ppm
0.93
-100.00
0.90
H3
H2
O
H4
H1
6MeO
Me8
H5
Me7
6l
Me7
Me8
H5

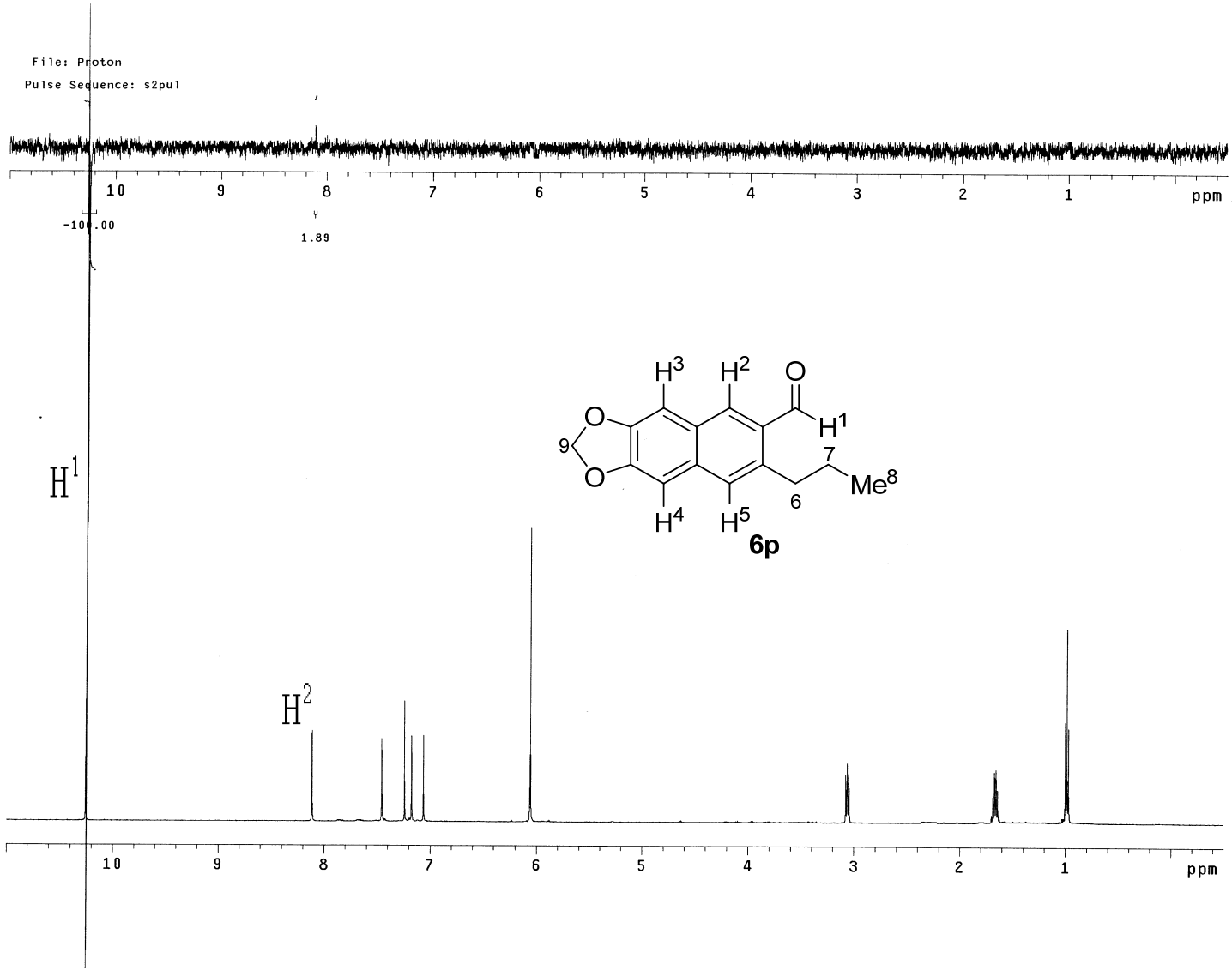

RC-4/256/P
File: Proton
Pulse Sequence: s2pul
10
9
8
7
6
5
4
3
2
1
ppm
0.33
-100.00
H3
H2
O
H4
H1
6MeO
Me8
H5
Me7
6l
Me8
H1
10
9
8
7
6
5
4
3
2
1
ppm

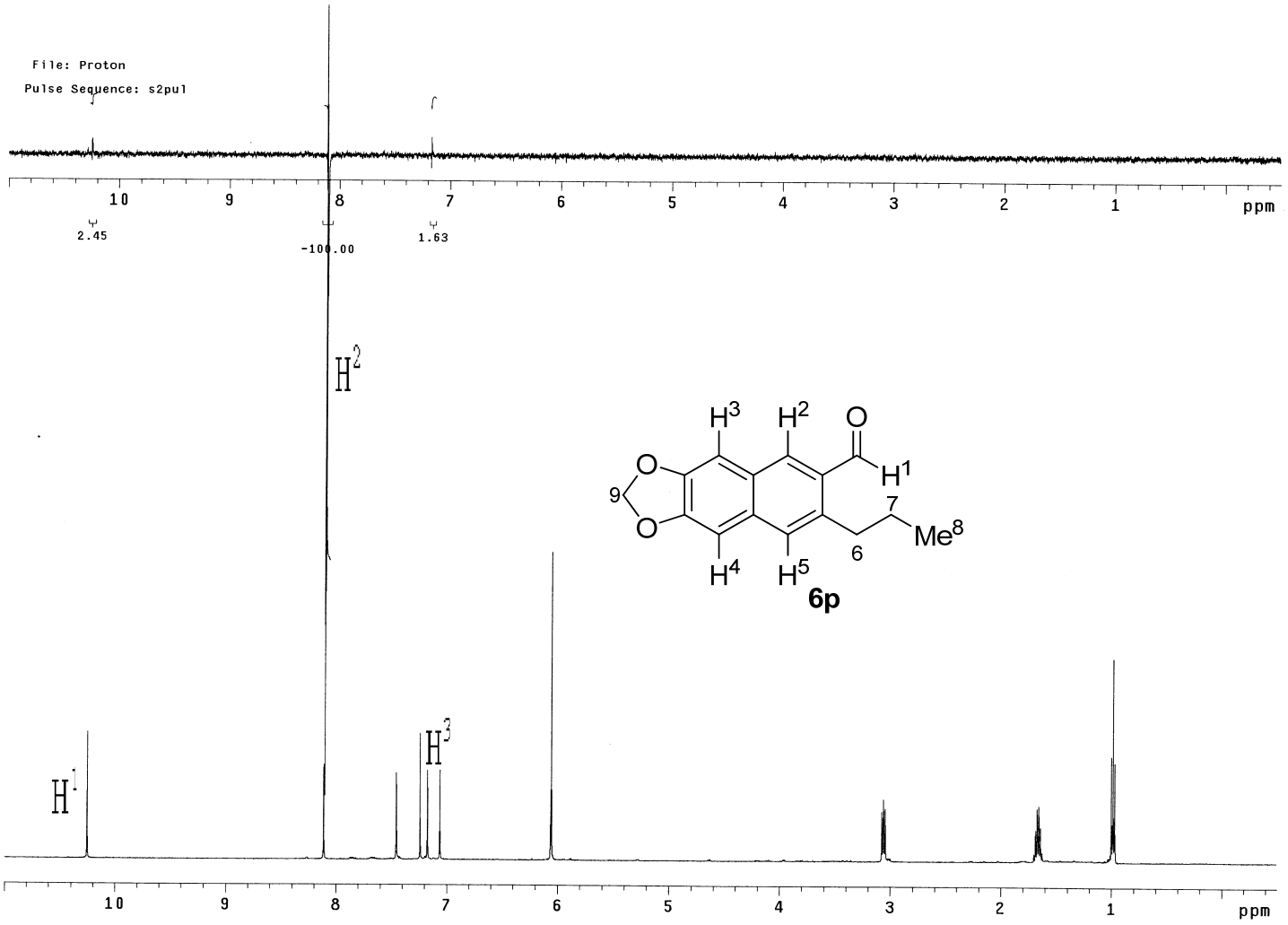

RC-5/31/8
File: Proton
Pulse Sequence: s2pul
10
9
8
7
6
5
4
3
2
1
ppm
-100.00
1.59
H3
H2
O
H1
O
O
Me6
H4
H5
6o
H1
H2

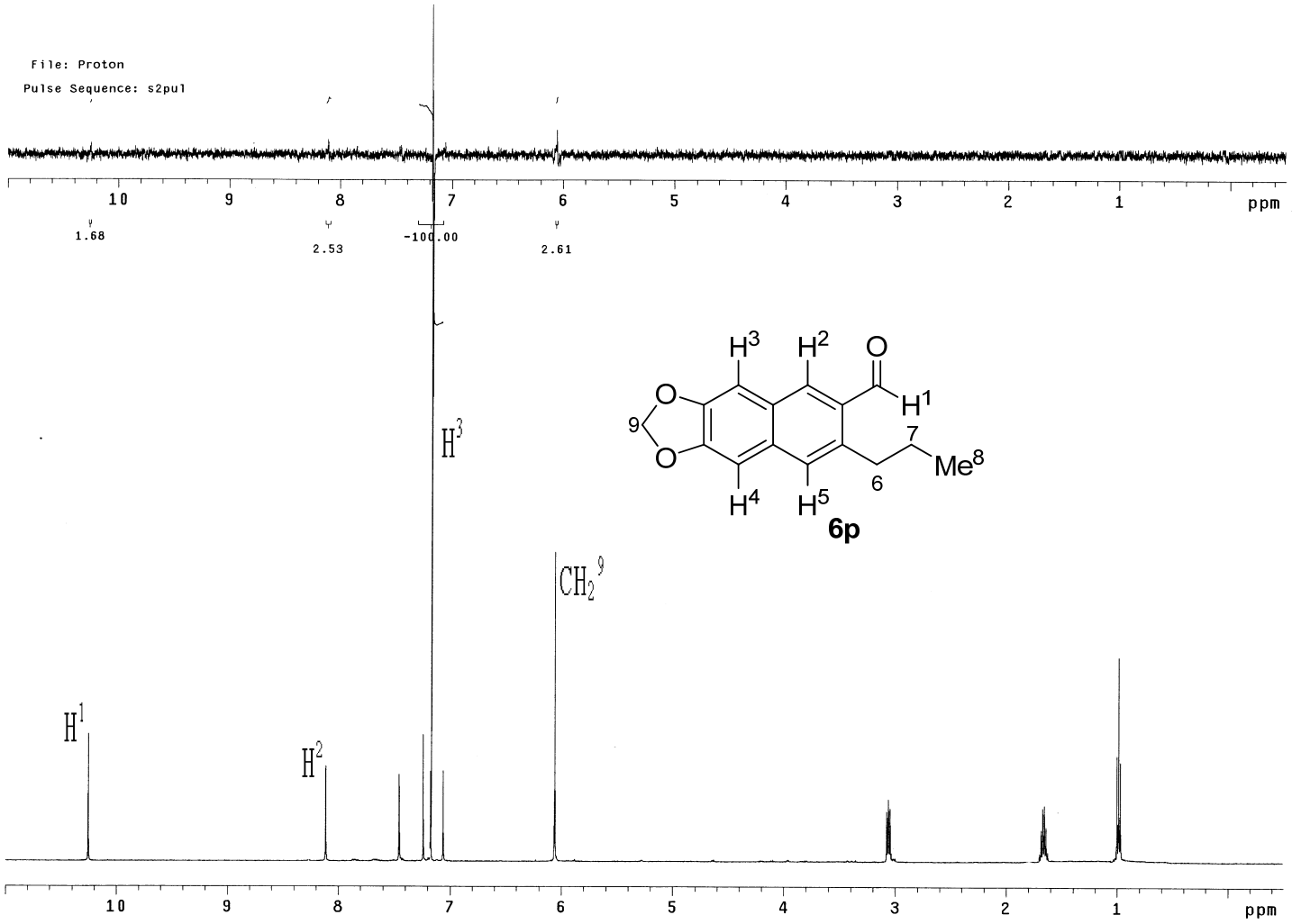

RC-5/31/8
File: Proton
Pulse Sequence: s2pul
10
9
8
7
6
5
4
3
2
1
ppm
1.77
-100.00
1.28
H3
H2
O
H1
O
O
Me6
H4
H5
6o
H1
H2
H3
10
9
8
7
6
5
4
3
2
1
ppm

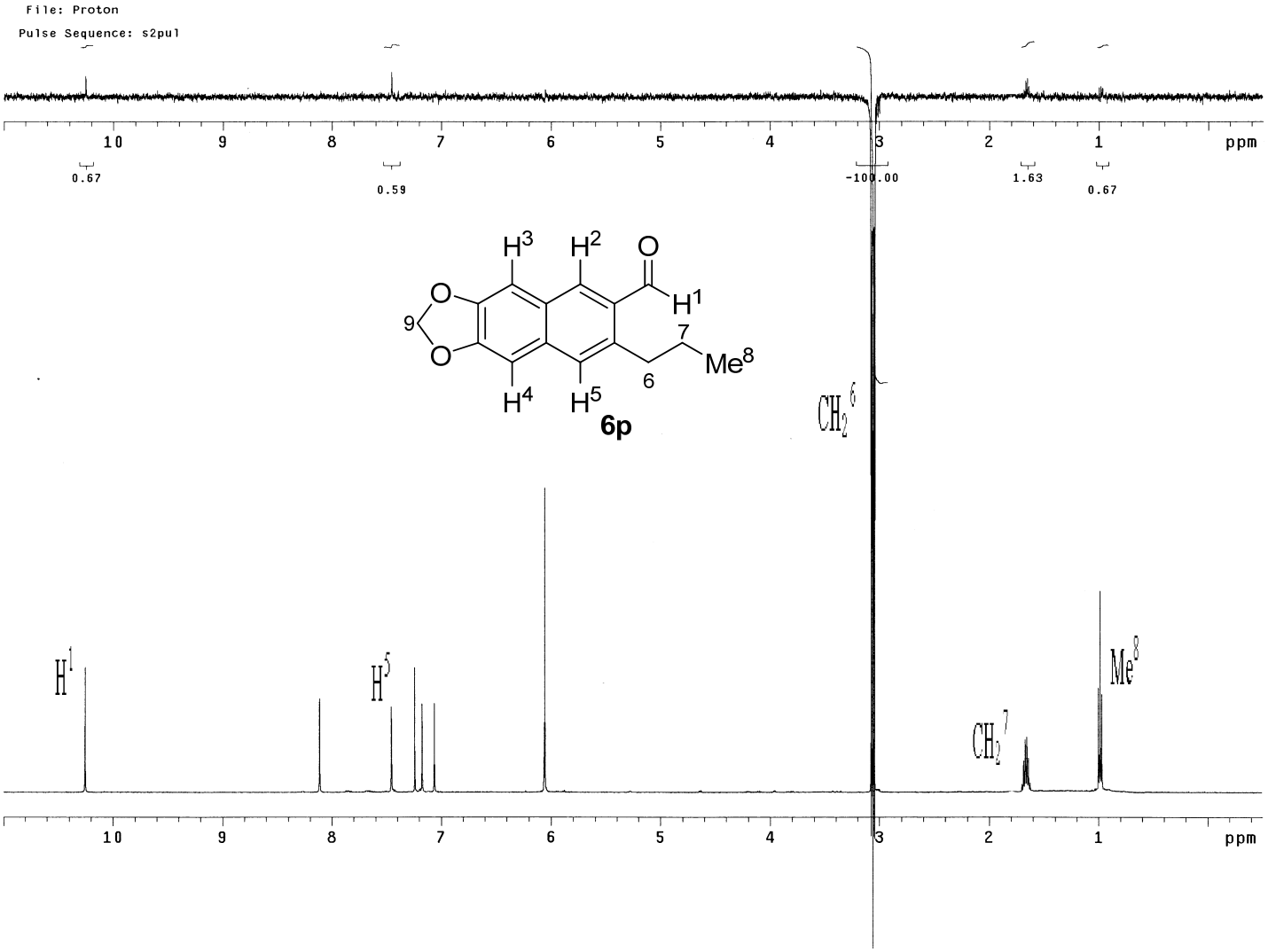

RC-5/31/8
File: Proton
Pulse Sequence: s2pul
10
9
8
7
6
5
4
3
2
1
ppm
-100.00
1.98
2.56
H3
H2
O
H1
O
O
Me6
H4
H5
6o
H5
H4
Me6


RC-5/31/8
File: Proton
Pulse Sequence: s2pul
10
9
8
7
6
5
4
3
2
1
ppm
0.23
0.48
-100.00
Me6
H3
H2
O
H1
O
O
Me6
H4
H5
6o
H1
H5
10
9
8
7
6
5
4
3
2
1
ppm


File: Proton
Pulse Sequence: s2pul
10
9
8
7
6
5
4
3
2
1
ppm
-100.00
1.89
H1
H2
H3
H2
O
H1
O
9
O
7
Me8
6
H4
H5
6p
10
9
8
7
6
5
4
3
2
1
ppm


File: Proton
Pulse Sequence: s2pul
2.45
-100.00
1.63
ppm
H2
H3
H1
H3
H2
O
O
O
9
H1
7
Me8
6
H4
H5
6p
ppm


File: Proton
Pulse Sequence: s2pul
10
9
8
7
6
5
4
3
2
1
ppm
1.68
2.53
-100.00
2.61
H3
H2
O
H1
O
9
O
7
Me8
6
H4
H5
6p
H3
CH2 9
H1
H2
10
9
8
7
6
5
4
3
2
1
ppm


File: Proton
Pulse Sequence: s2pul
10
9
8
7
6
5
4
3
2
1
ppm
0.67
0.59
-100.00
1.63
0.67
H3
H2
O
H1
O
9
O
7
Me8
6
H4
H5
6p
CH2 6
H1
H5
CH2 7
Me8