Electronic Supplementary Material (ESI) for Organic & Biomolecular Chemistry.

Synthetic approaches to the C11-C27 fragments of bryostatins

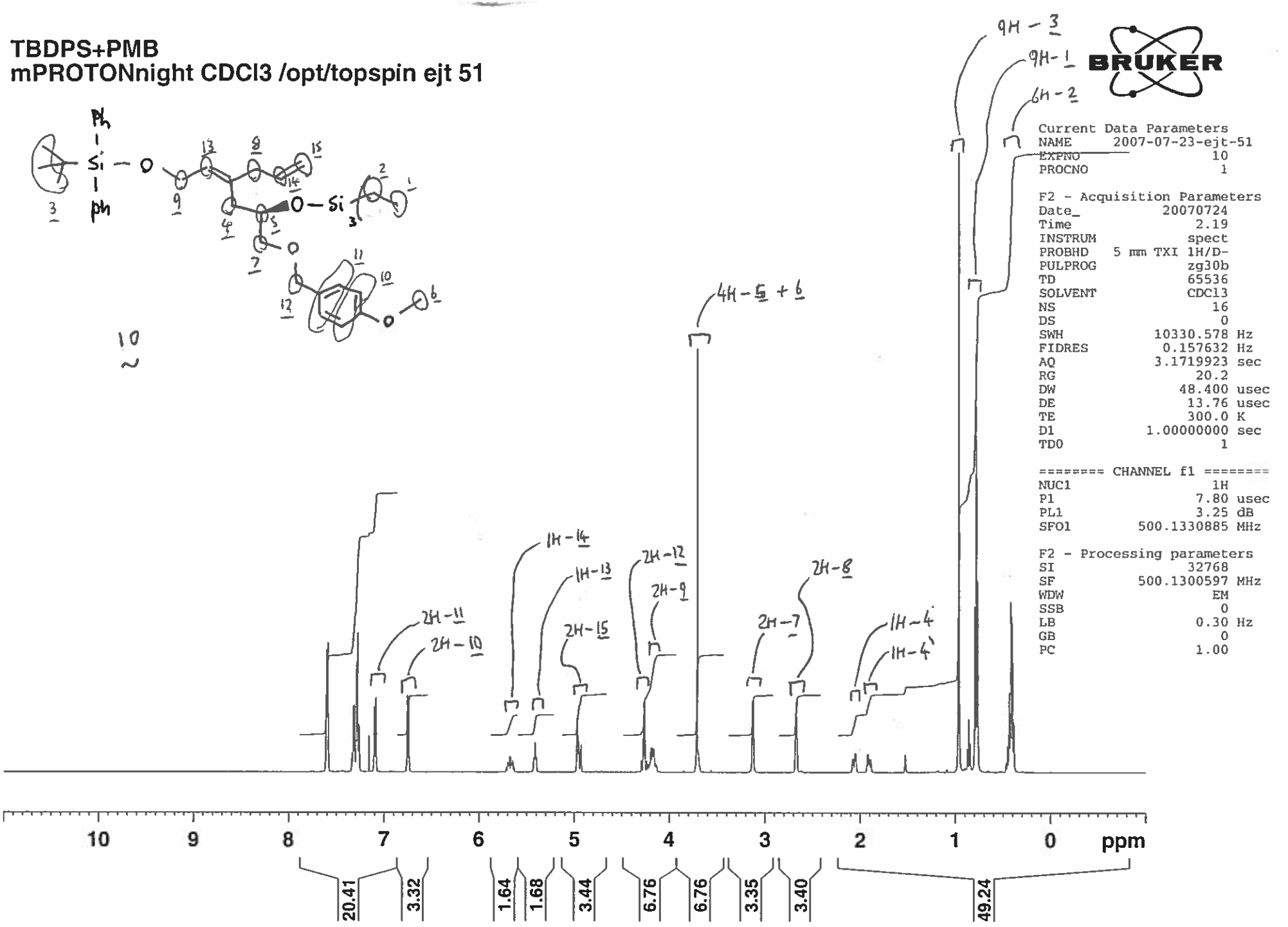
Simon Hardy, Anthony P. Green and Eric J. Thomas

Supplementary data

Copies of ^{1}H and ^{13}C NMR spectra.

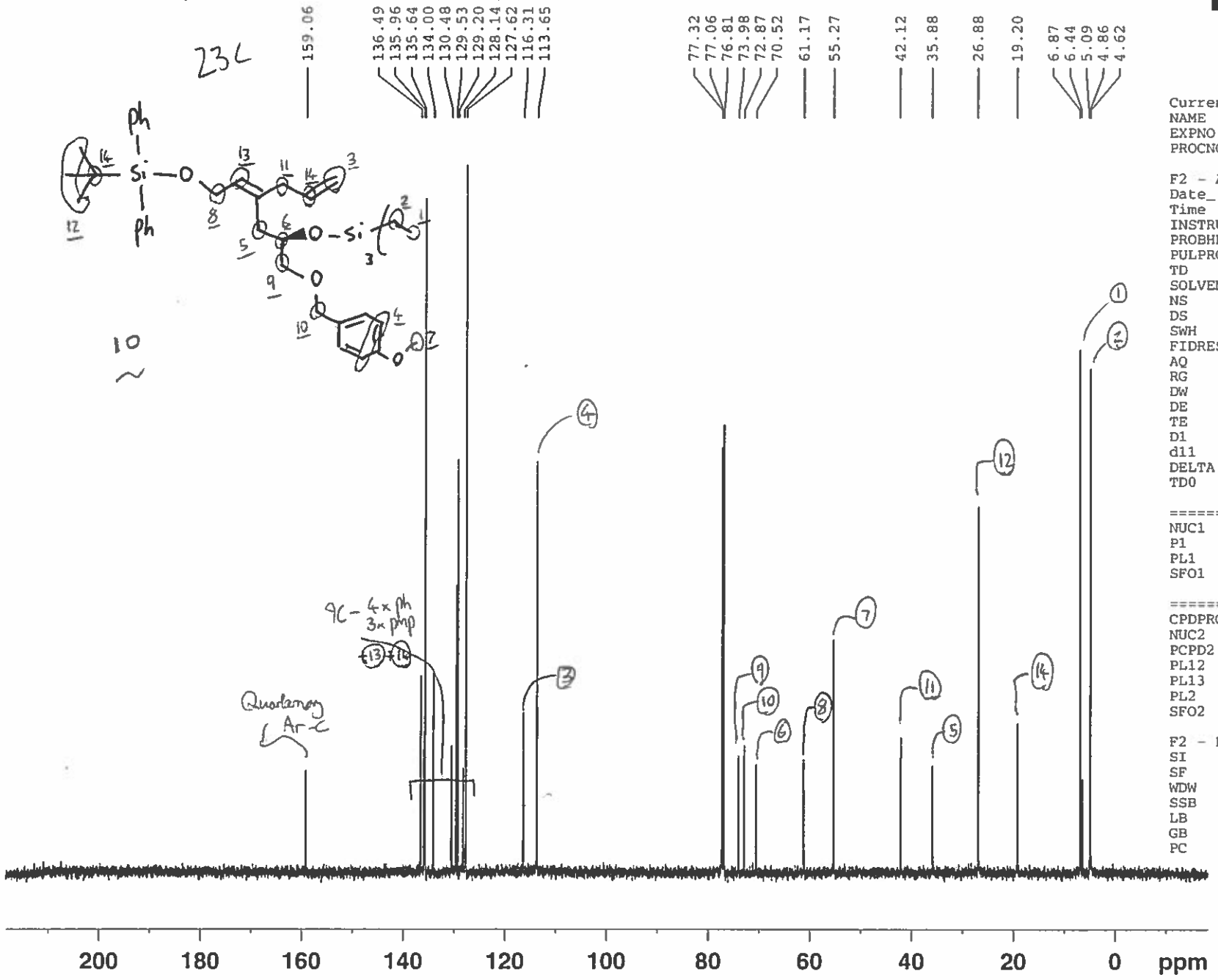
TBDPS+PMB
mPROTONnight CDCl3 /opt/topspin ejt 51

10




```
Current Data Parameters
NAME      2007-07-23-ejt-51
EXPNO                   10
PROCNO                   1

F2 - Acquisition Parameters
Date_              20070724
Time                   2.19
INSTRUM               spect
PROBHD    5 mm TXI 1H/D-
PULPROG               zg30b
TD                    65536
SOLVENT               CDCl3
NS                       16
DS                        0
SWH               10330.578 Hz
FIDRES             0.157632 Hz
AQ                 3.1719923 sec
RG                      20.2
DW                    48.400 usec
DE                    13.76 usec
TE                    300.0 K
D1                1.00000000 sec
TD0                      1

======== CHANNEL f1 ========
NUC1                     1H
P1                    7.80 usec
PL1                   3.25 dB
SFO1           500.1330885 MHz

F2 - Processing parameters
SI                       32768
SF             500.1300597 MHz
WDW                      EM
SSB                       0
LB                     0.30 Hz
GB                        0
PC                     1.00
```

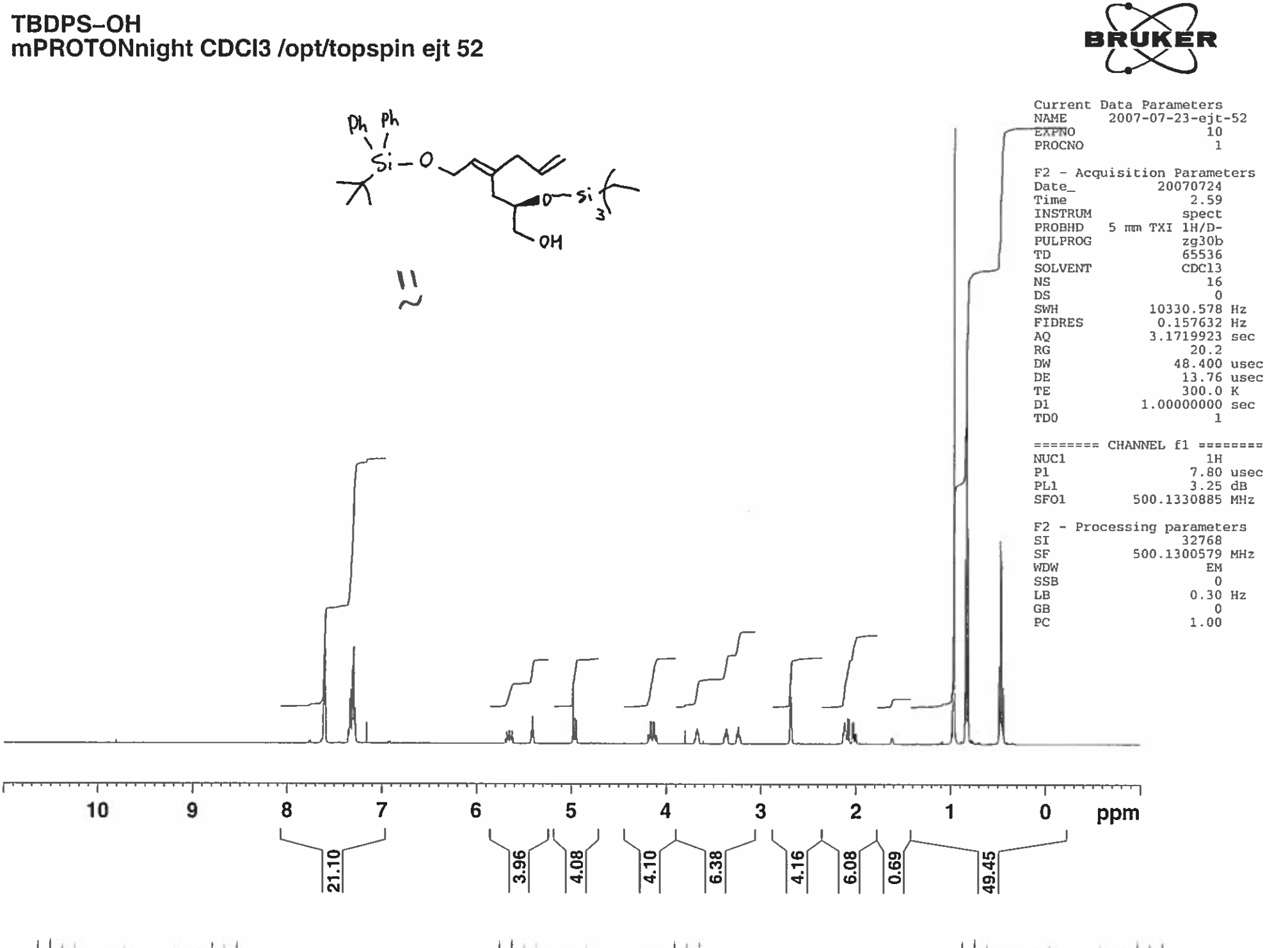
TBDPS+PMB
mCARBONnight CDCl3 /opt/topspin ejt 51



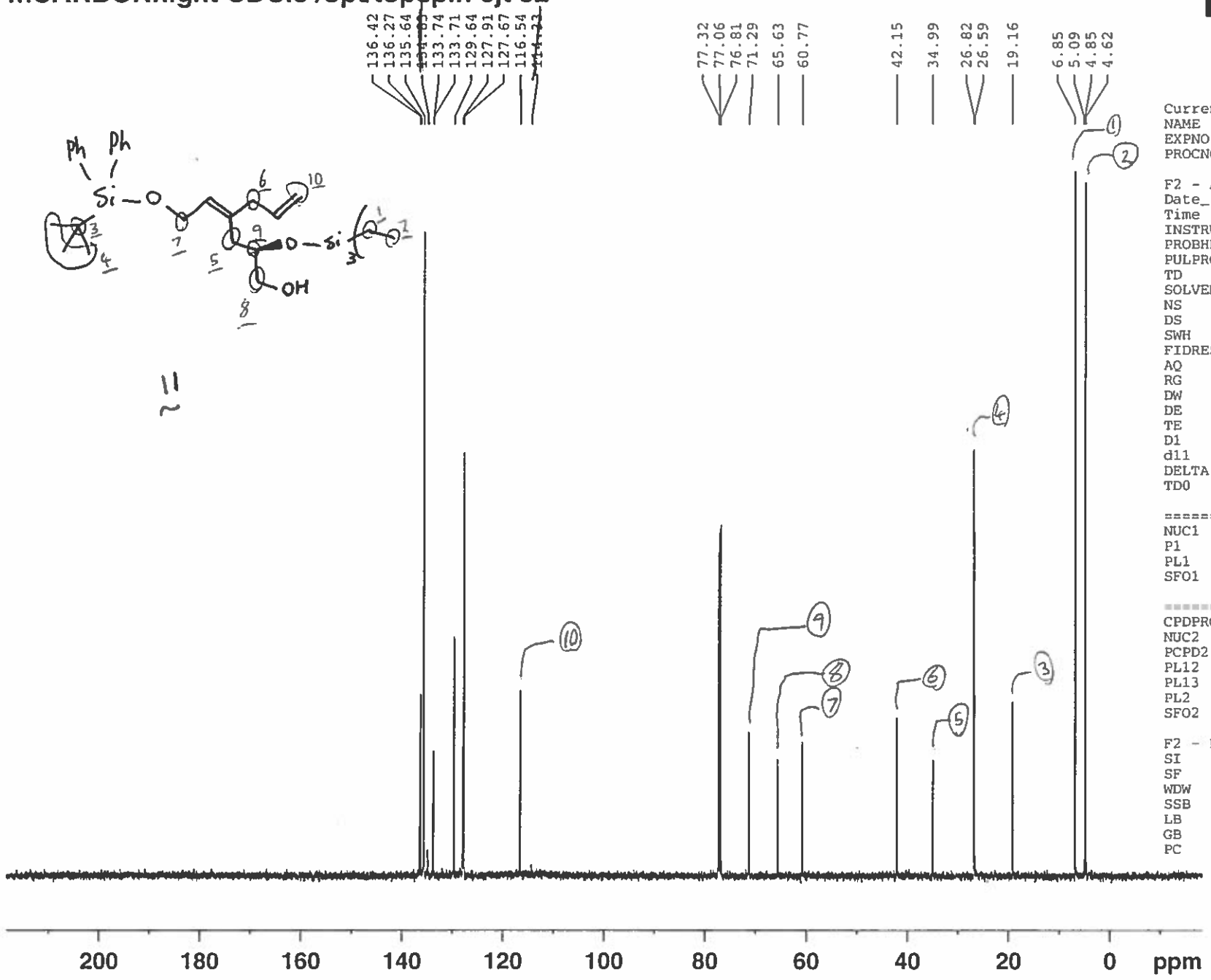
BRUKER

```
Current Data Parameters
NAME      2007-07-23-ejt-51
EXPNO                   11
PROCNO                   1

F2 - Acquisition Parameters
Date_              20070724
Time                   2.32
INSTRUM               spect
PROBHD   5 mm TXI 1H/D-
PULPROG              zgpg30
TD                    65536
SOLVENT               CDCl3
NS                      256
DS                        2
SWH               29761.904 Hz
FIDRES            0.454131 Hz
AQ                1.1010548 sec
RG                      512
DW                 16.800 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                  11.50 usec
PL1                 -4.20 dB
SFO1          125.7703643 MHz

======== CHANNEL f2 ========
CPDPRG2             waltz16
NUC2                   1H
PCPD2               80.00 usec
PL12                23.47 dB
PL13                120.00 dB
PL2                  3.25 dB
SFO2          500.1320005 MHz

F2 - Processing parameters
SI                     32768
SF            125.7577890 MHz
WDW                       EM
SSB                        0
LB                   1.00 Hz
GB                         0
PC                    1.40
```

TBDPS–OH
mPROTONnight CDCl3 /opt/topspin ejt 52



TBDPS–OH
mCARBONnight CDCl3 /opt/topspin ejt 52



BRUKER

```
Current Data Parameters
NAME      2007-07-23-ejt-52
EXPNO                   11
PROCNO                   1

F2 - Acquisition Parameters
Date_              20070724
Time                   3.13
INSTRUM               spect
PROBHD   5 mm TXI 1H/D-
PULPROG              zgpg30
TD                    65536
SOLVENT               CDCl3
NS                      256
DS                        2
SWH               29761.904 Hz
FIDRES            0.454131 Hz
AQ                1.1010548 sec
RG                      512
DW                 16.800 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                 11.50 usec
PL1                -4.20 dB
SFO1          125.7703643 MHz

======== CHANNEL f2 ========
CPDPRG2            waltz16
NUC2                    1H
PCPD2              80.00 usec
PL12               23.47 dB
PL13              120.00 dB
PL2                 3.25 dB
SFO2          500.1320005 MHz

F2 - Processing parameters
SI                    32768
SF          125.7577890 MHz
WDW                      EM
SSB                       0
LB                 1.00 Hz
GB                        0
PC                 1.40
```

rd
STANDARD 1H OBSERVE

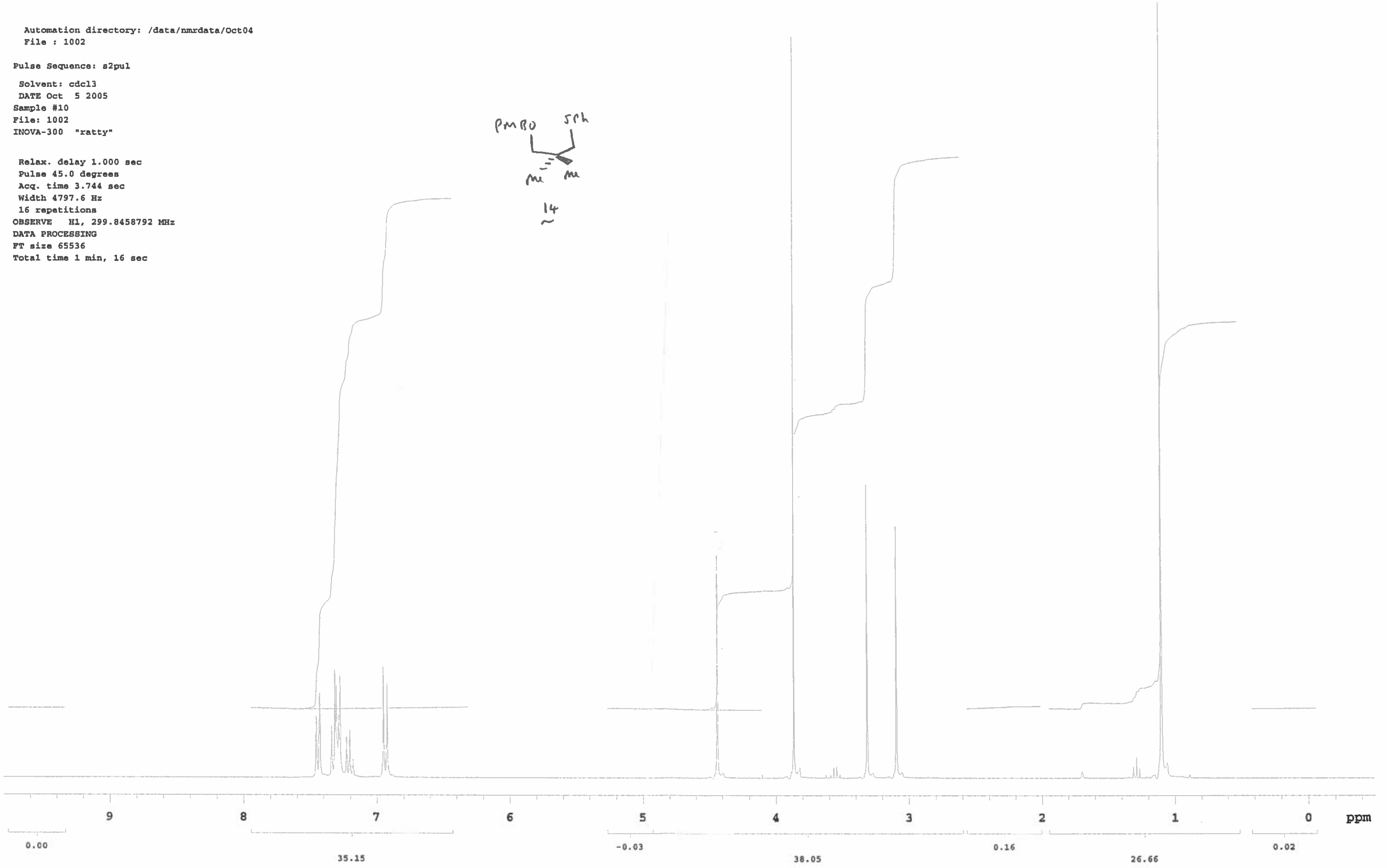
Automation directory: /data/nmrdata/Oct04
File : 1002

Pulse Sequence: s2pul

Solvent: cdcl3
DATE Oct 5 2005
Sample #10
File: 1002
INOVA-300 "ratty"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 3.744 sec
Width 4797.6 Hz
16 repetitions
OBSERVE H1, 299.8458792 MHz
DATA PROCESSING
FT size 65536
Total time 1 min, 16 sec

14



rd
STANDARD 1H OBSERVE

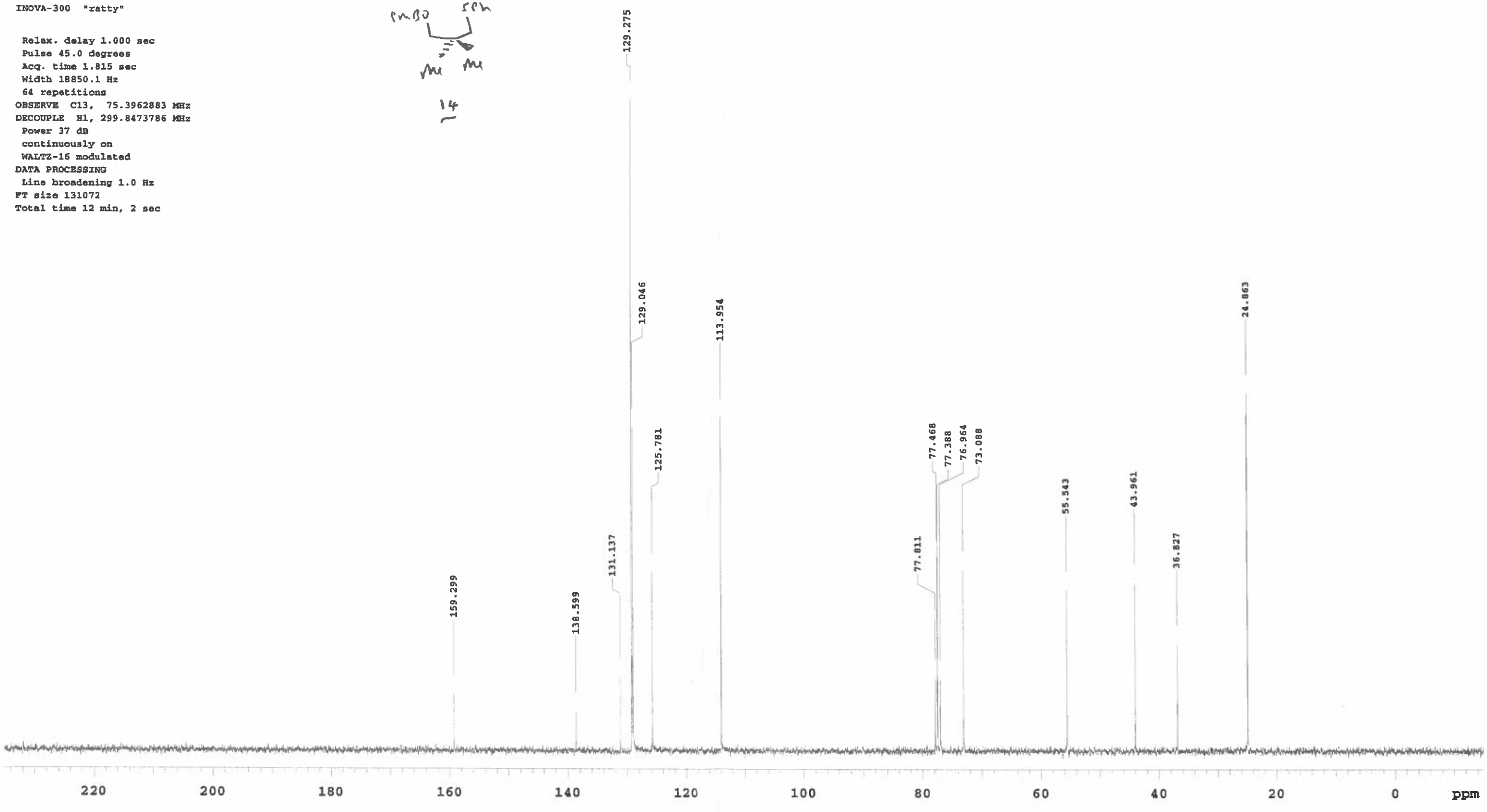
Automation directory: /data/nmrdata/Oct04
File : 1003

Pulse Sequence: s2pul

Solvent: cdcl3
DATE Oct 5 2005
Sample #10
File: 1003
INOVA-300 "ratty"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.815 sec
Width 18850.1 Hz
64 repetitions
OBSERVE C13, 75.3962883 MHz
DECOUPLE H1, 299.8473786 MHz
Power 37 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 131072
Total time 12 min, 2 sec

14



drII
STANDARD 1H OBSERVE

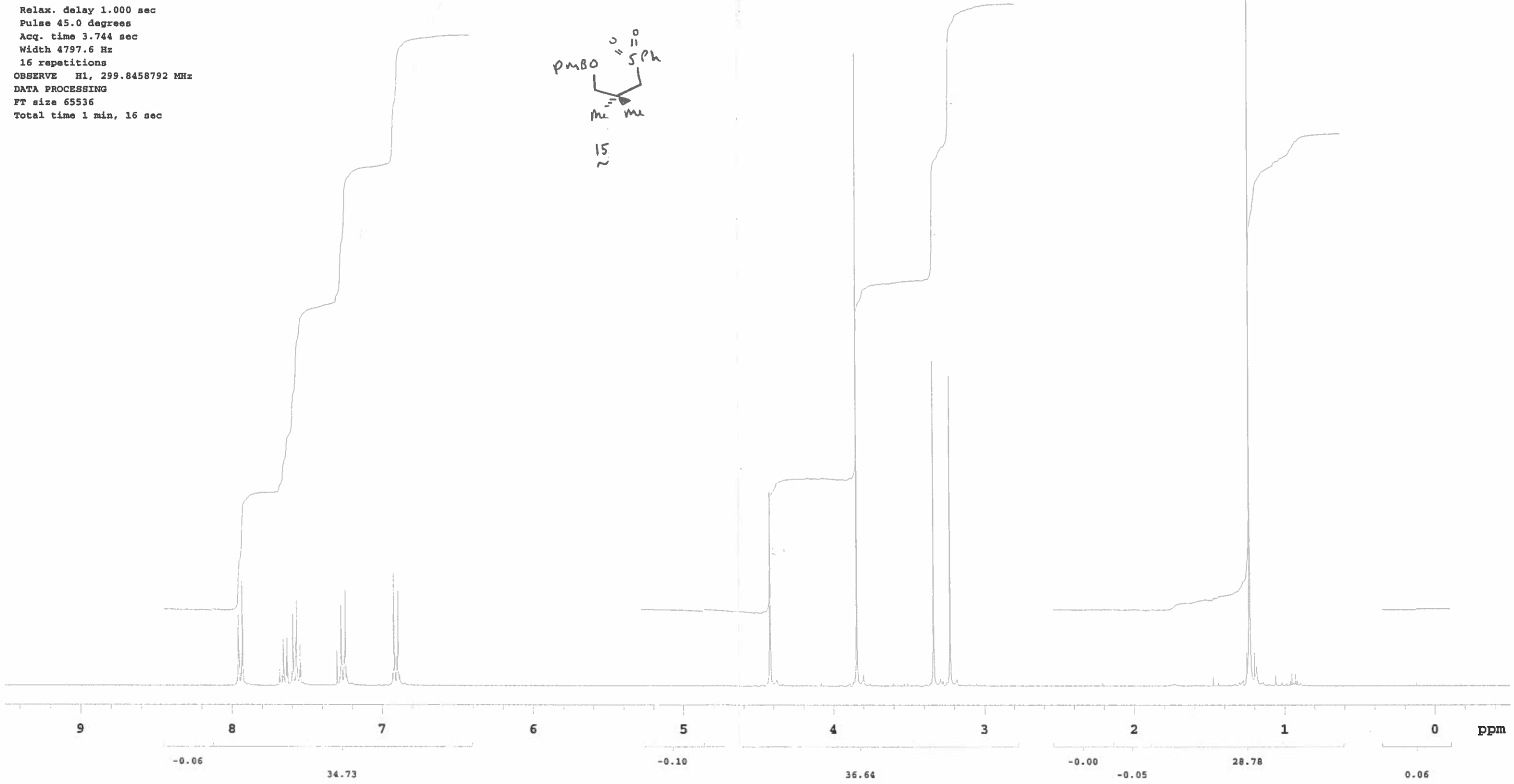
Automation directory: /data/nmrdata/Oct04
File : 1102

Pulse Sequence: s2pul

Solvent: cdcl3
DATE Oct 5 2005
Sample #11
File: 1102
INOVA-300 "ratty"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 3.744 sec
Width 4797.6 Hz
16 repetitions
OBSERVE H1, 299.8458792 MHz
DATA PROCESSING
FT size 65536
Total time 1 min, 16 sec

15



drII
STANDARD 1H OBSERVE

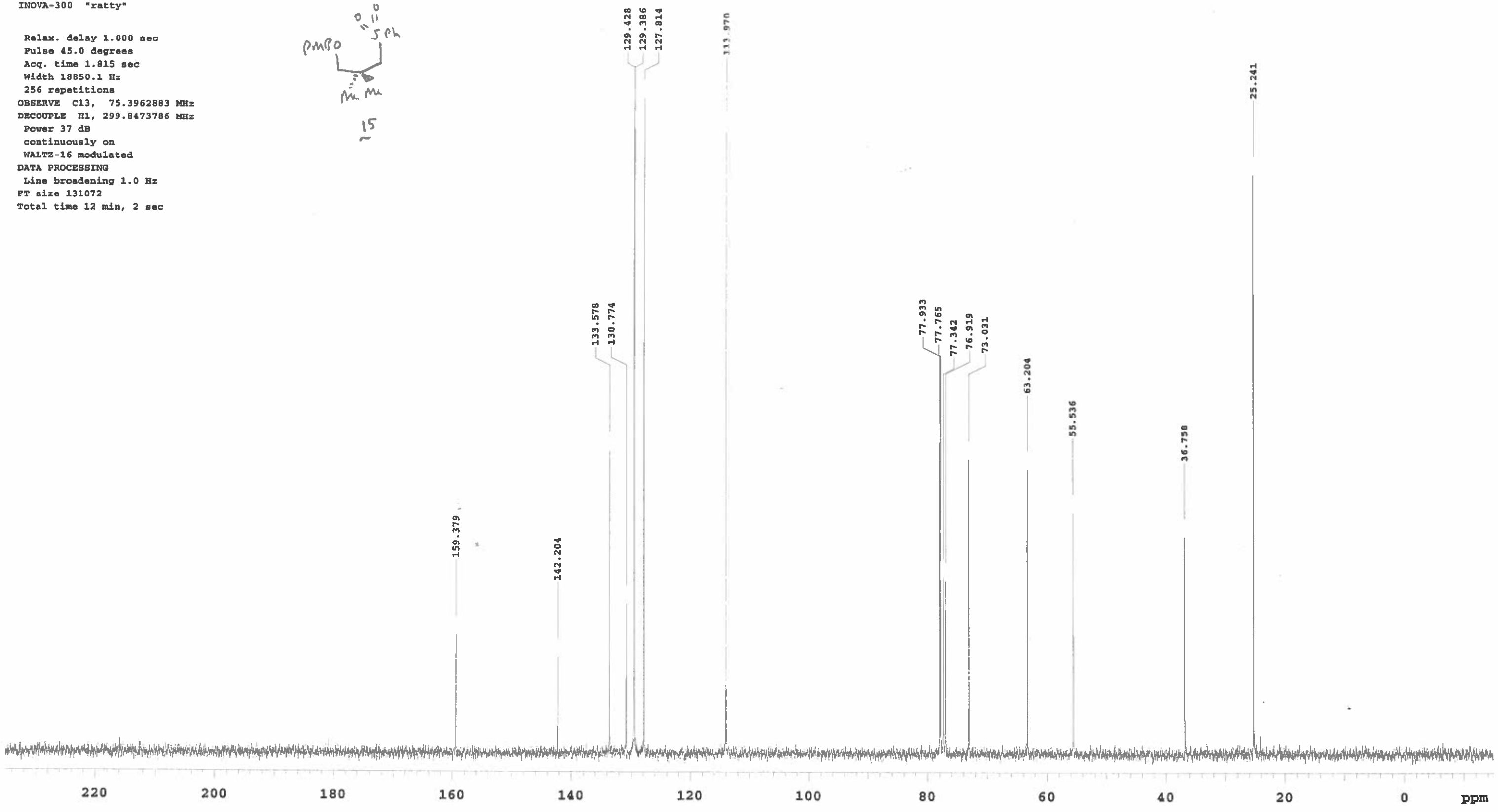
Automation directory: /data/nmrdata/Oct04
File : 1103

Pulse Sequence: s2pul

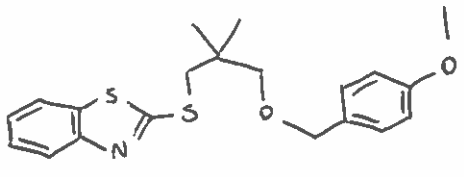
Solvent: cdcl3
DATE Oct 5 2005
Sample #11
File: 1103
INOVA-300 "ratty"

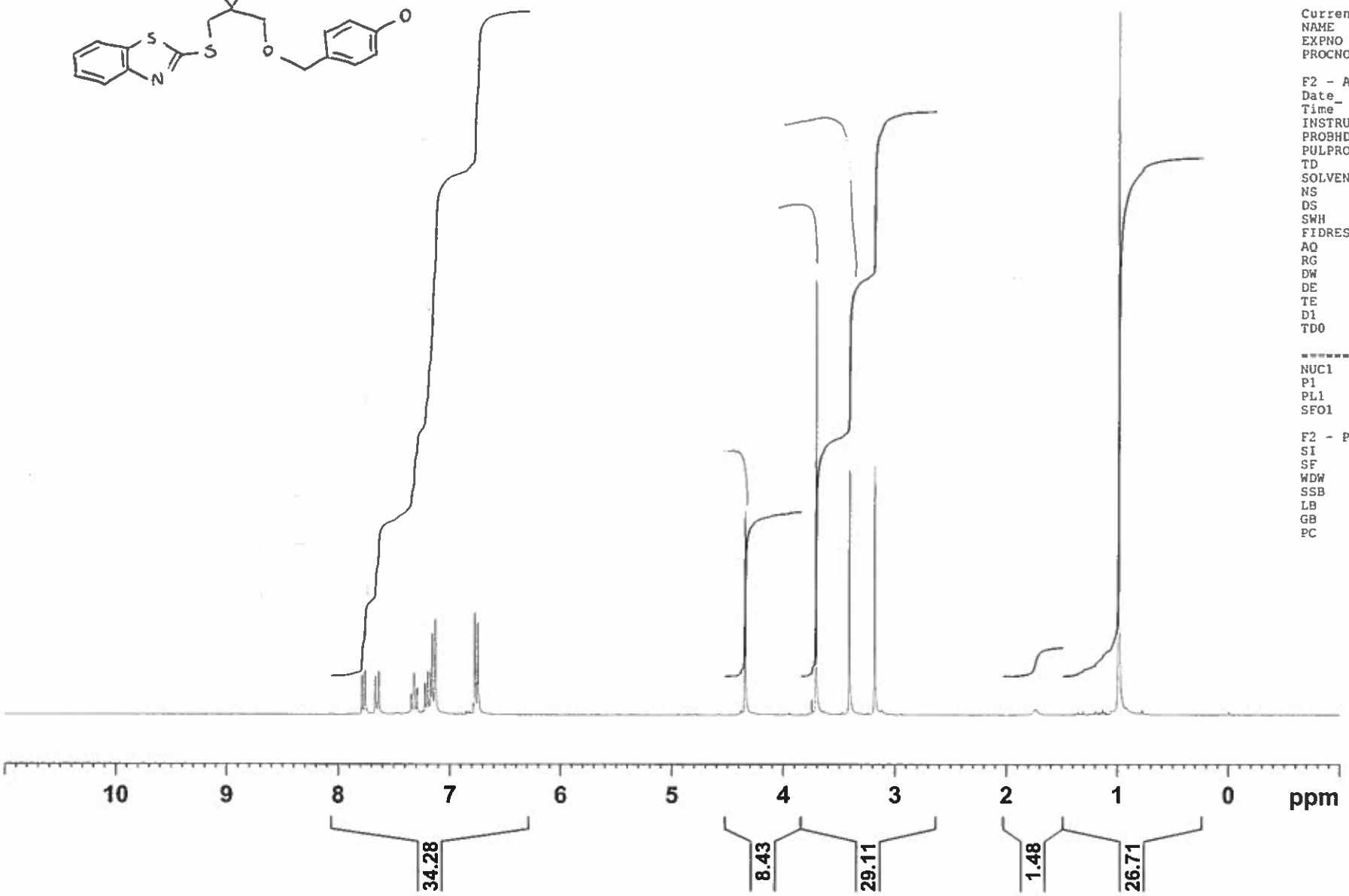
Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.815 sec
Width 18850.1 Hz
256 repetitions
OBSERVE C13, 75.3962883 MHz
DECOUPLE H1, 299.8473786 MHz
Power 37 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 131072
Total time 12 min, 2 sec

15



SH_sulf3
mPROTONnight CDCl3 {C:\bruk300data\2008\Jun} ejt 33

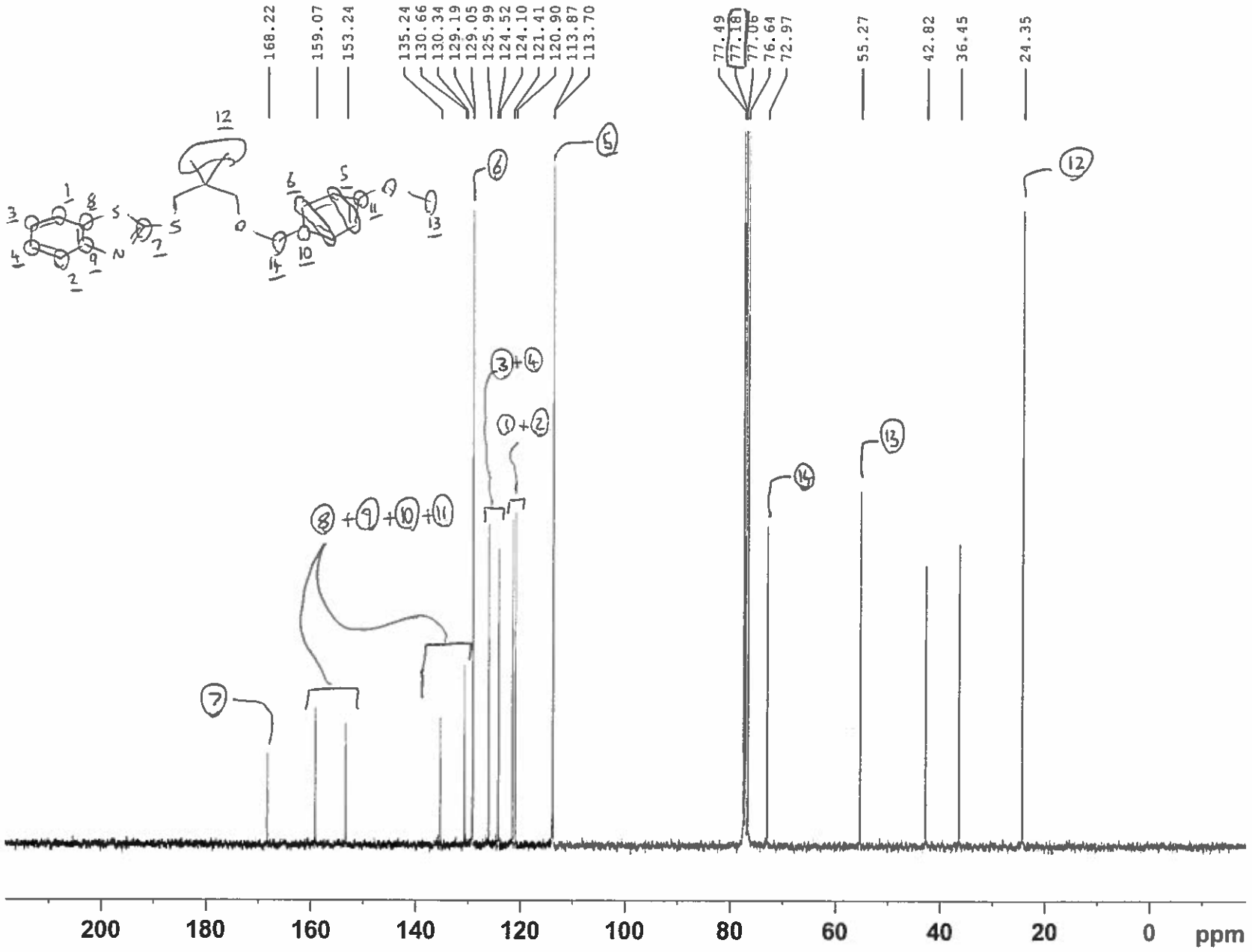




BRUKER 300 MHz

```
Current Data Parameters
NAME      2008-06-09-ejt-31
EXPNO                    30
PROCNO                    1

F2 - Acquisition Parameters
Date_              20080610
Time                   4.43
INSTRUM              DPX300
PROBHD   5 mm DUL 13C-1
PULPROG               zg30
TD                   65536
SOLVENT              CDCl3
NS                      16
DS                       0
SWH             6172.839 Hz
FIDRES          0.094190 Hz
AQ              5.3084660 sec
RG                     181
DW                81.000 usec
DE                 6.00 usec
TE                300.0 K
D1             0.10000000 sec
TD0                      1

======== CHANNEL f1 ========
NUC1                    1H
P1                  10.00 usec
PL1                 -2.60 dB
SFO1         299.9518523 MHz

F2 - Processing parameters
SI                   32768
SF          299.9500325 MHz
WDW                     EM
SSB                      0
LB                  0.30 Hz
GB                       0
PC                    1.00
```

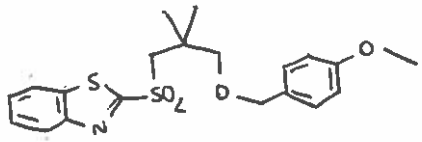
SH_sulf3
mCARBONnight CDCl3 {C:\bruk300data\2008\Jun} ejt 33



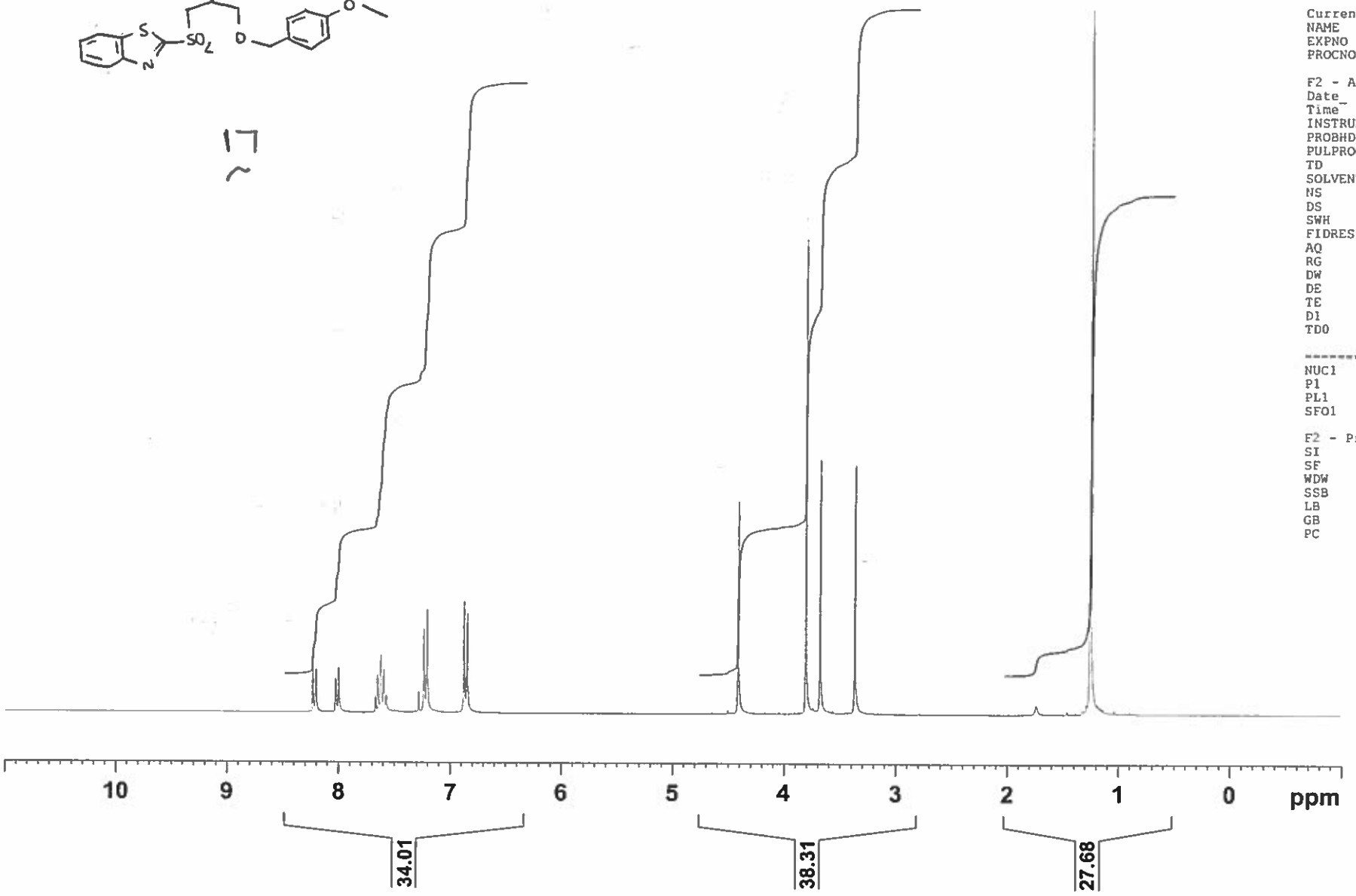
BRUKER 300 MHz

```
Current Data Parameters
NAME      2008-06-09-ejt-31
EXPNO                   32
PROCNO                   1

F2 - Acquisition Parameters
Date_              20080610
Time                   6.00
INSTRUM              DPX300
PROBHD   5 mm DUL 13C-1
PULPROG             zgpg30
TD                   65536
SOLVENT              CDCl3
NS                    1024
DS                       2
SWH              17857.143 Hz
FIDRES           0.272478 Hz
AQ               1.8350580 sec
RG                 14596.5
DW                28.000 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                10.00 usec
PL1               -1.20 dB
SFO1          75.4300300 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                   1H
PCPD2             80.00 usec
PL2               -2.60 dB
PL12              14.50 dB
PL13              15.00 dB
SFO2         299.9512000 MHz

F2 - Processing parameters
SI                   32768
SF            75.4224870 MHz
WDW                    EM
SSB                     0
LB                 1.00 Hz
GB                      0
PC                   1.40
```

SH_sulf1
mPROTONnight CDCl3 {C:\bruk300data\2008\Jun} ejt 34

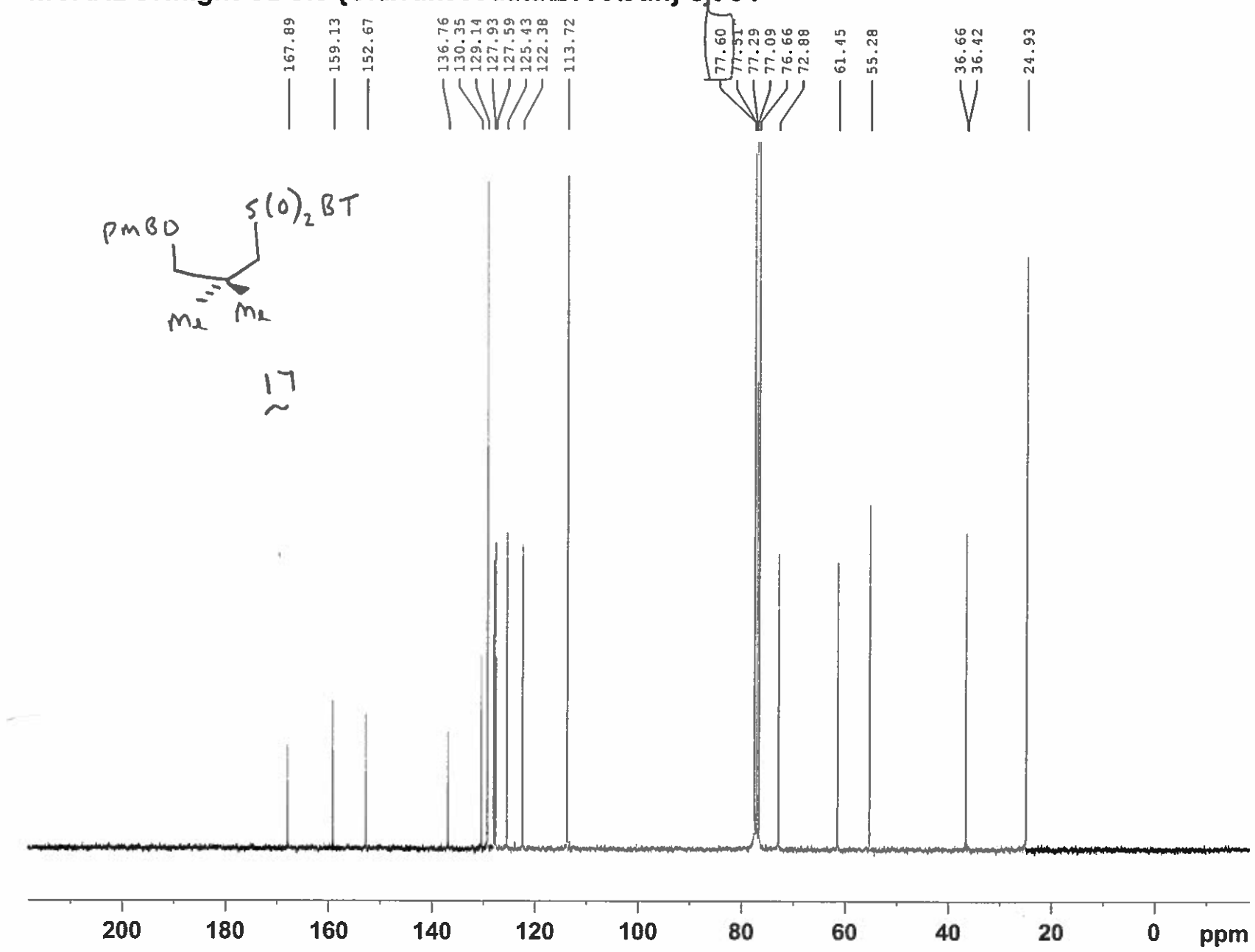


17




```
Current Data Parameters
NAME      2008-06-09-ejt-31
EXPNO                   40
PROCNO                   1

F2 - Acquisition Parameters
Date_              20080610
Time                   6.21
INSTRUM              DPX300
PROBHD   5 mm DUL 13C-1
PULPROG                zg30
TD                    65536
SOLVENT               CDCl3
NS                       16
DS                        0
SWH                6172.839 Hz
FIDRES             0.094190 Hz
AQ                 5.3084660 sec
RG                     143.7
DW                    81.000 usec
DE                     6.00 usec
TE                    300.0 K
D1                0.10000000 sec
TD0                       1

======== CHANNEL f1 ========
NUC1                      1H
P1                    10.00 usec
PL1                   -2.60 dB
SFO1           299.9518523 MHz

F2 - Processing parameters
SI                        32768
SF             299.9500000 MHz
WDW                       EM
SSB                       0
LB                     0.30 Hz
GB                        0
PC                     1.00
```

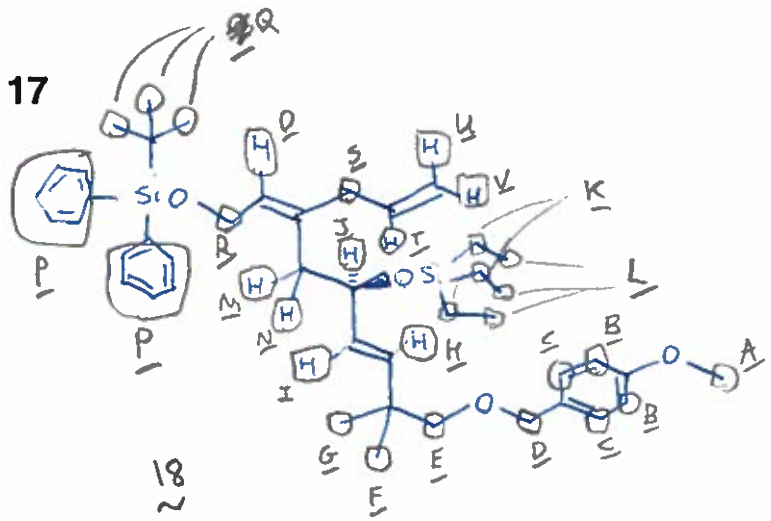
SH_sulf1
mCARBONnight CDCl3 {C:\bruk300data\2008\Jun} ejt 34



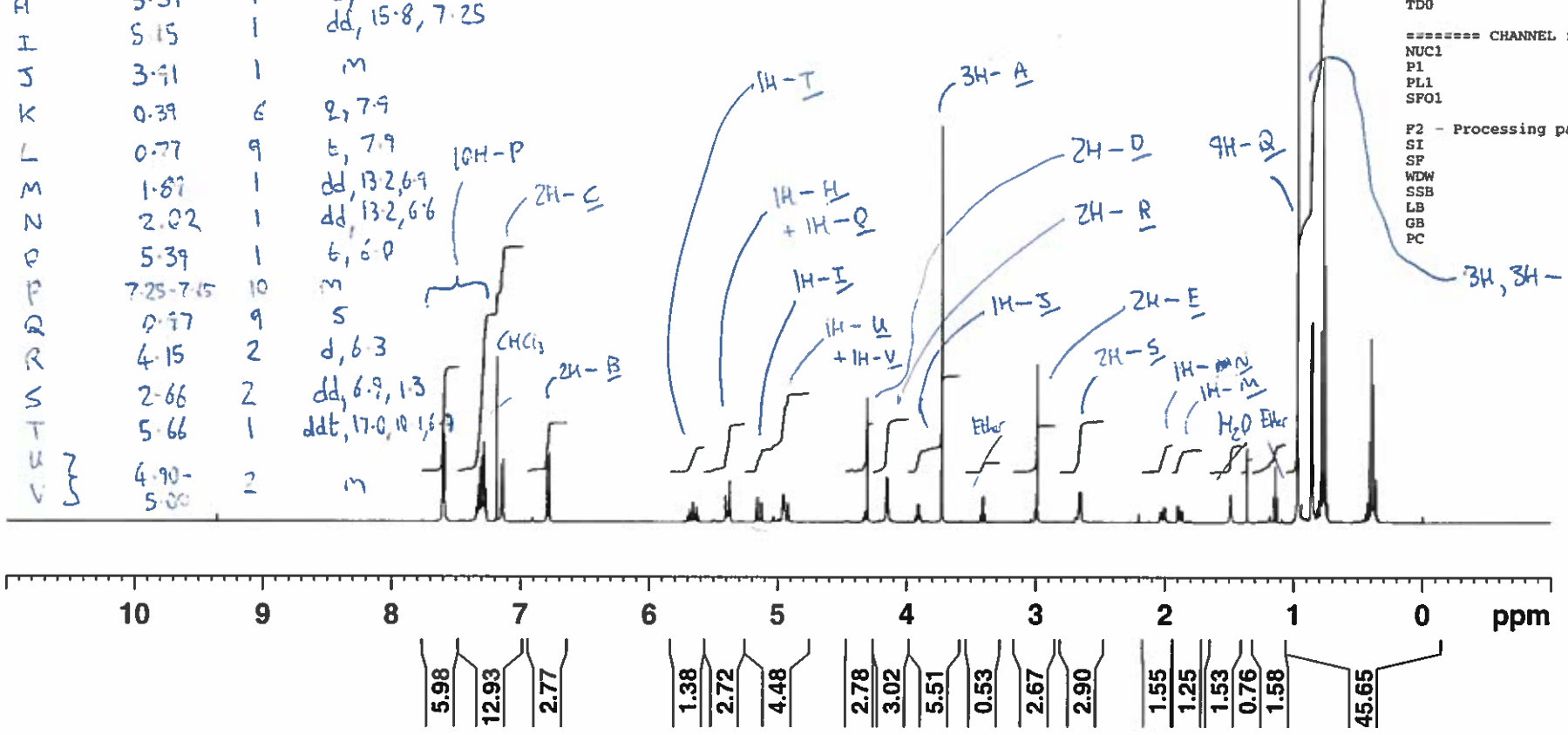
BRUKER 300 MHz

```
Current Data Parameters
NAME      2008-06-09-ejt-31
EXPNO                   42
PROCNO                   1

F2 - Acquisition Parameters
Date_              20080610
Time                   7.37
INSTRUM              DPX300
PROBHD   5 mm DUL 13C-1
PULPROG             zgpg30
TD                   65536
SOLVENT              CDCl3
NS                    1024
DS                       2
SWH              17857.143 Hz
FIDRES            0.272478 Hz
AQ                1.8350580 sec
RG                    16384
DW                 28.000 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                  10.00 usec
PL1                 -1.20 dB
SFO1           75.4300300 MHz

======== CHANNEL f2 ========
CPDPRG2            waltz16
NUC2                    1H
PCPD2               80.00 usec
PL2                 -2.60 dB
PL12                14.50 dB
PL13                15.00 dB
SFO2          299.9512000 MHz

F2 - Processing parameters
SI                      32768
SF             75.4224870 MHz
WDW                        EM
SSB                         0
LB                   1.00 Hz
GB                          0
PC                       1.40
```

SH154_A
mPROTON CDCl3 /opt/topspin ejt 17

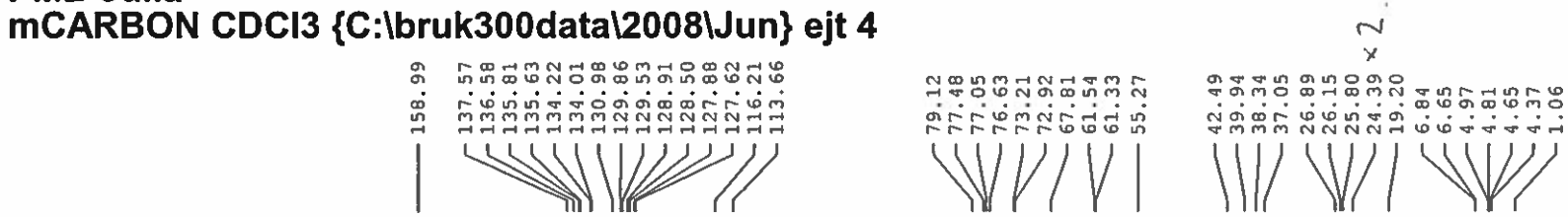


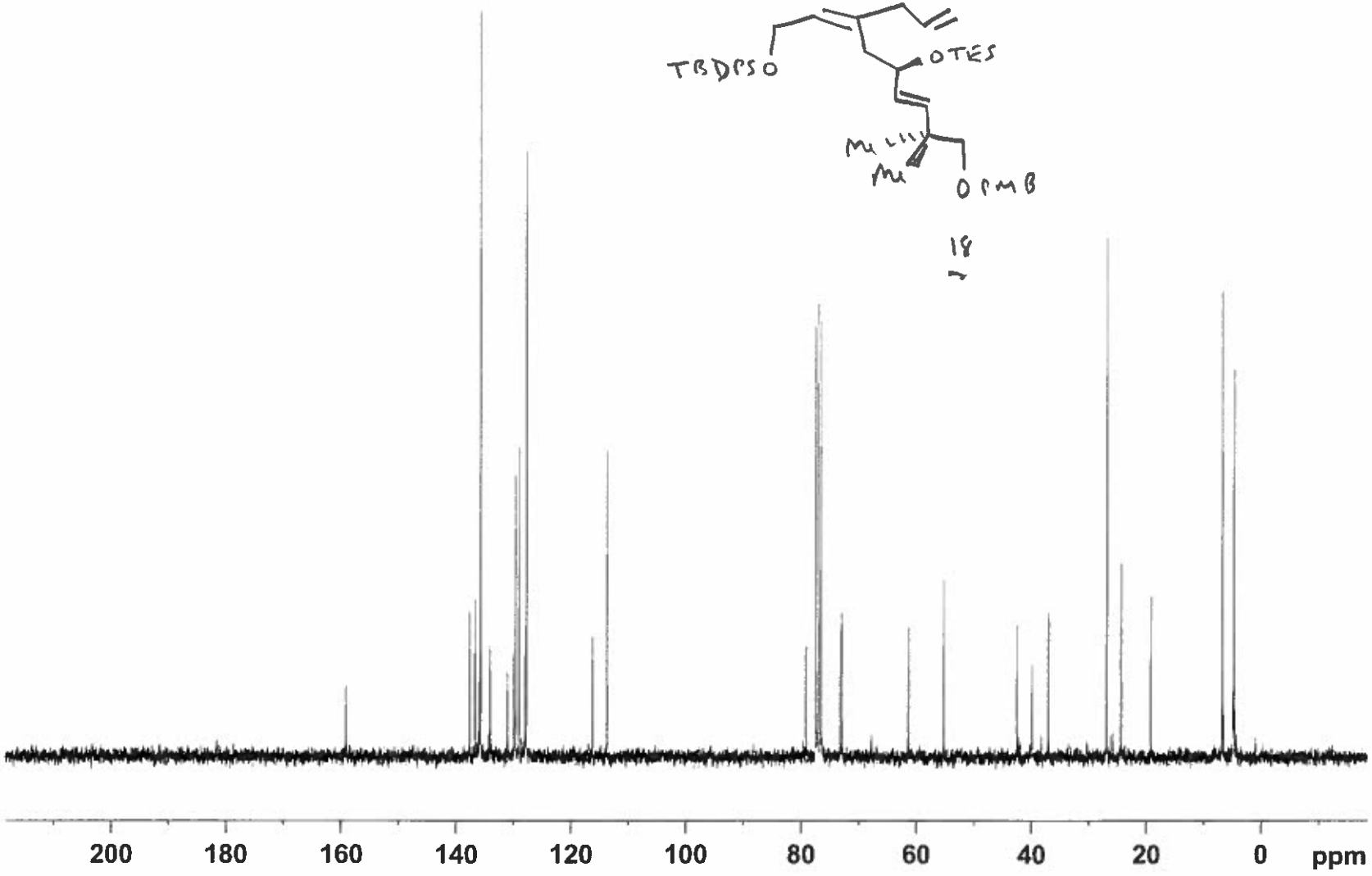
Signal	δ/ppm	n	J/Hz
A	3·73	3	s
B	6·79	2	d, 8·8
C	7·15	2	d, 8·8
D	4·31	2	s
E	2·77	2	s
F	0·85	3	s
G	0·38	3	s
H	5·39	1	d, 15·8
I	5·15	1	dd, 15·8, 7·25
J	3·91	1	m
K	0·39	6	q, 7·9
L	0·77	9	t, 7·9
M	1·87	1	dd, 13·2, 6·9
N	2·02	1	dd, 13·2, 6·6
O	5·39	1	t, 6·9
P	7·25-7·45	10	m
Q	0·77	9	s
R	4·15	2	d, 6·3
S	2·66	2	dd, 6·9, 1·3
T	5·66	1	ddt, 17·0, 10·1, 6·9
U, V	4·90-5·00	2	m




```
Current Data Parameters
NAME                  2006-09-25-ejt-17
EXPNO                                10
PROCNO                                1

F2 - Acquisition Parameters
Date_                          20060925
Time                              10.42
INSTRUM                           spect
PROBHD          5 mm BBO BB-1H
PULPROG                           zg30b
TD                                65536
SOLVENT                           CDCl3
NS                                   16
DS                                    0
SWH                       10330.578 Hz
FIDRES                        0.157632 Hz
AQ                            3.1719923 sec
RG                                  362
DW                               48.400 usec
DE                               13.00 usec
TE                               300.0 K
D1                            1.00000000 sec
TD0                                   1

======== CHANNEL f1 ========
NUC1                                 1H
P1                               10.00 usec
PL1                              -0.30 dB
SFO1                      500.1330885 MHz

F2 - Processing parameters
SI                                32768
SF                        500.1300435 MHz
WDW                                  EM
SSB                                   0
LB                                 0.30 Hz
GB                                    0
PC                                 1.00
```

PMB Julia
mCARBON CDCl3 {C:\bruk300data\2008\Jun} ejt 4





BRUKER 300 MHz

Current Data Parameters
NAME 2008-06-22-ejt-4
EXPNO 12
PROCNO 1

F2 - Acquisition Parameters

Date_	20080622	
Time	14.13	
INSTRUM	DPX300	
PROBHD	5 mm DUL 13C-1	
PULPROG	zgpg30	
TD	65536	
SOLVENT	CDCl3	
NS	256	
DS	2	
SWH	17857.143	Hz
FIDRES	0.272478	Hz
AQ	1.8350580	sec
RG	10321.3	
DW	28.000	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	10.00	usec
PL1	-1.20	dB
SFO1	75.4300300	MHz

======== CHANNEL f2 ========

CPDPRG2	waltz16	
NUC2	1H	
PCPD2	80.00	usec
PL2	-2.60	dB
PL12	14.50	dB
PL13	15.00	dB
SFO2	299.9512000	MHz

F2 - Processing parameters

SI	32768	
SF	75.4224870	MHz
WDW	EM	
SSB	0	
LB	1.00	Hz
GB	0	
PC	1.40	

SH_aldehyde
mPROTONnight CDCl3 {e:\bruk400data\2008\Nov} ejt 33

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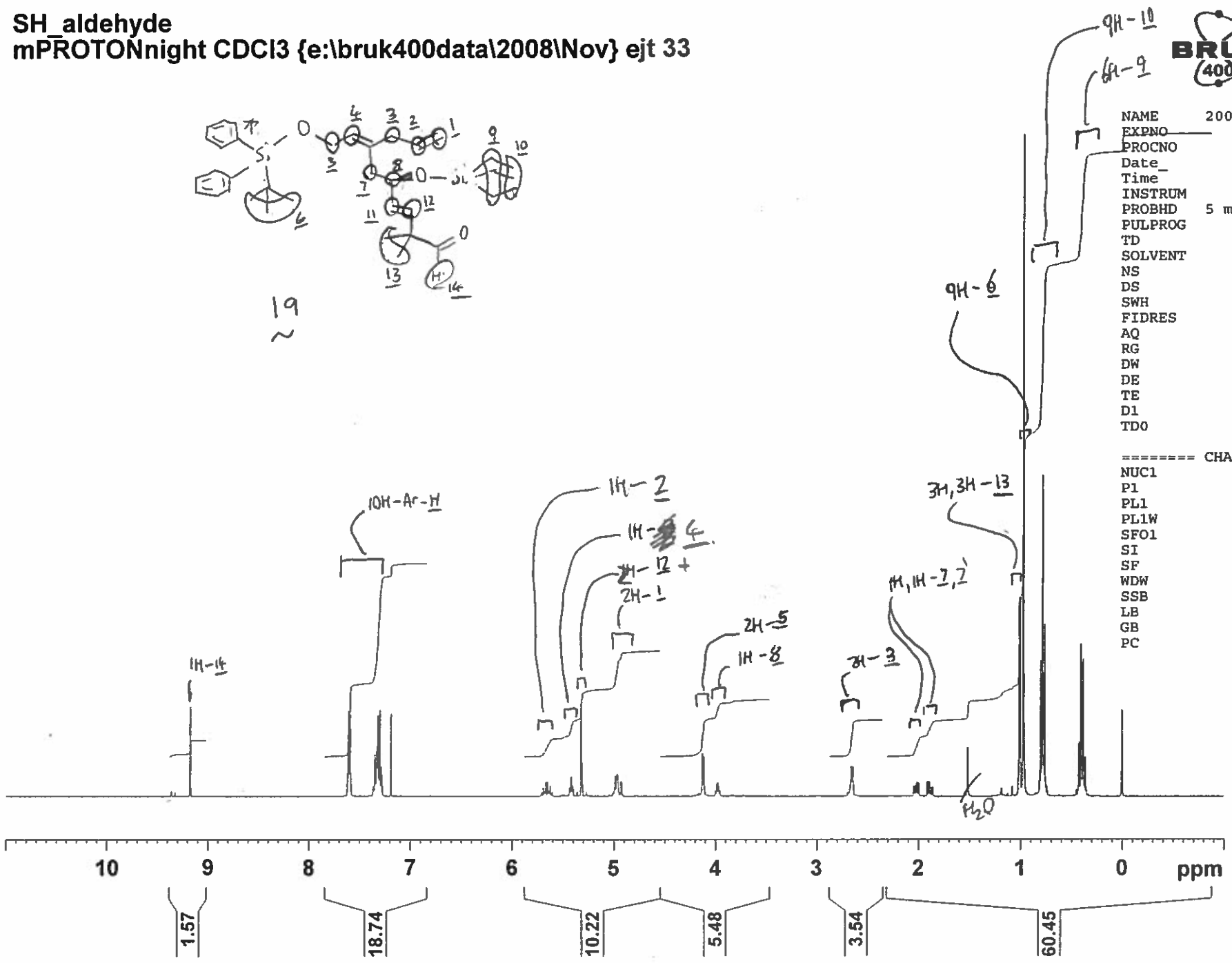
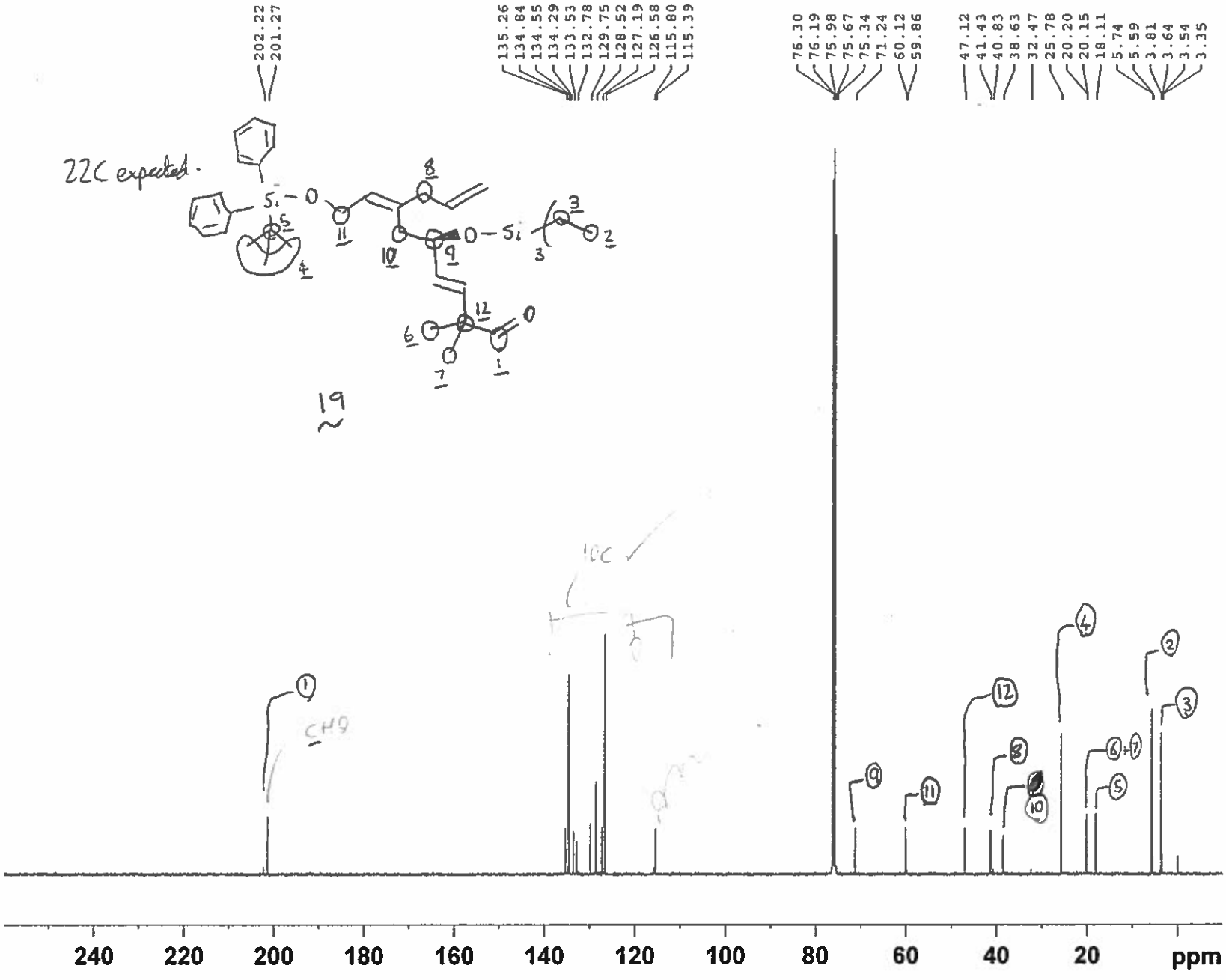



```
NAME        2008-11-24-ejt-33
EXPNO                      20
PROCNO                      1
Date_                20081125
Time                     3.36
INSTRUM                 AV400
PROBHD    5 mm PABBO BB-
PULPROG                 zg30b
TD                      65536
SOLVENT                 CDCl3
NS                         96
DS                          0
SWH                  8264.463 Hz
FIDRES               0.126106 Hz
AQ                   3.9649780 sec
RG                        161
DW                     60.500 usec
DE                      9.40 usec
TE                     290.8 K
D1                1.00000000 sec
TD0                         1

======== CHANNEL f1 ========
NUC1                       1H
P1                     10.00 usec
PL1                    -3.60 dB
PL1W             17.83863831 W
SFO1             400.1324710 MHz
SI                      32768
SF               400.1300381 MHz
WDW                        EM
SSB                         0
LB                      0.30 Hz
GB                          0
PC                       1.00
```

164, 102, 6

SH_aldehyde
mCARBONnight CDCl3 {e:\bruk400data\2008\Nov} ejt 33



BRUKER 400 MHz

NAME	2008-11-24-ejt-33
EXPNO	22
PROCNO	1
Date_	20081125
Time	6.59
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	3072
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	291.4 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6128751 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

TBS–cyano
mPROTONnight CDCl3 /opt/topspin ejt 49

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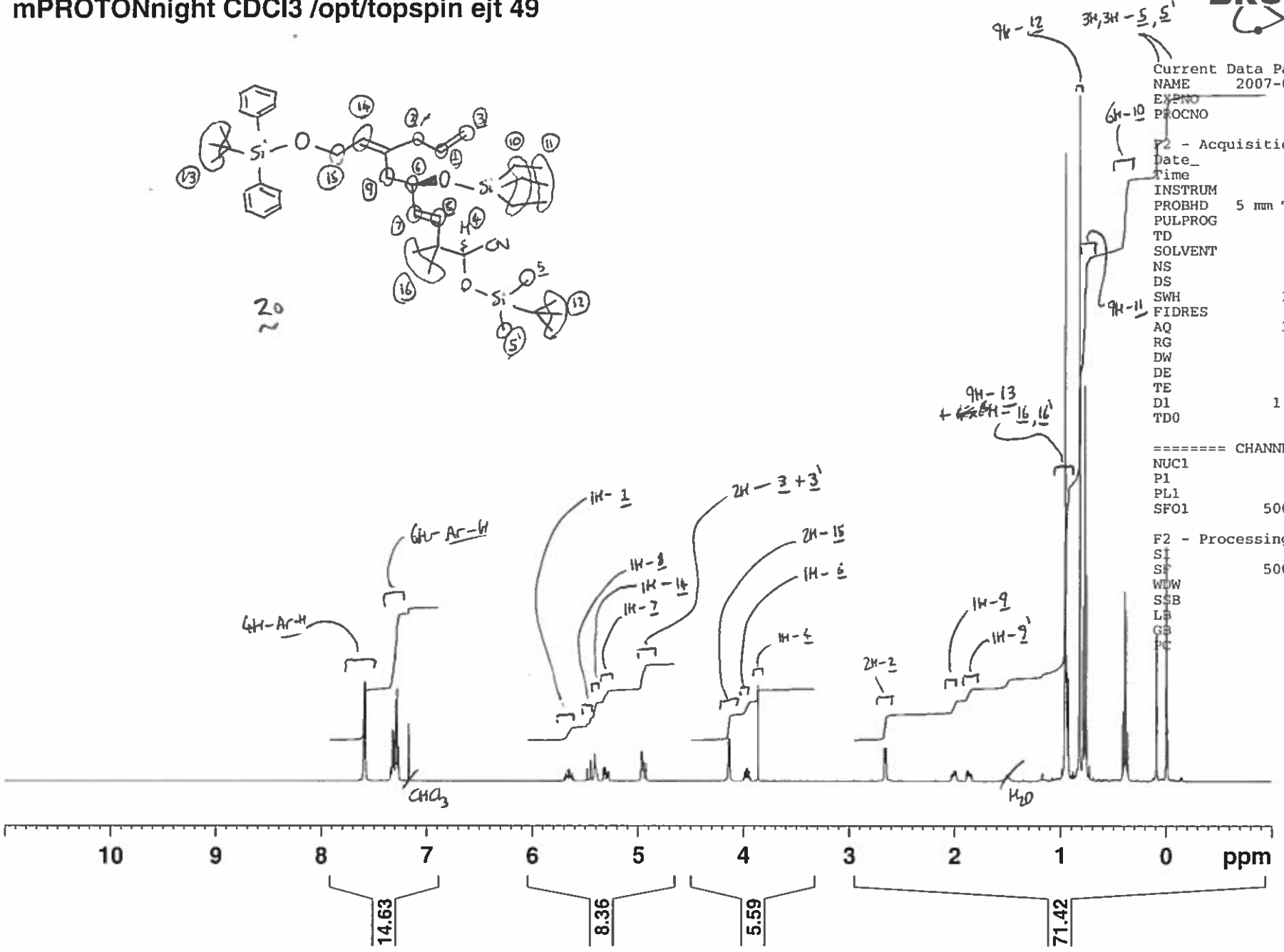


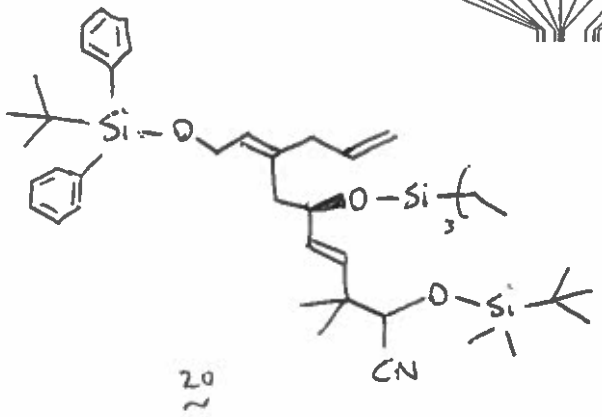

```
Current Data Parameters
NAME      2007-07-23-ejt-49
EXPNO                   10
PROCNO                   1

F2 - Acquisition Parameters
Date_              20070724
Time                   1.38
INSTRUM               spect
PROBHD    5 mm TXI 1H/D-
PULPROG               zg30b
TD                    65536
SOLVENT               CDCl3
NS                       16
DS                        0
SWH             10330.578 Hz
FIDRES           0.157632 Hz
AQ              3.1719923 sec
RG                       32
DW                 48.400 usec
DE                 13.76 usec
TE                 300.0 K
D1              1.00000000 sec
TD0                      1

======== CHANNEL f1 ========
NUC1                     1H
P1                 7.80 usec
PL1                3.25 dB
SFO1          500.1330885 MHz

F2 - Processing parameters
SI                    32768
SF          500.1300542 MHz
WDW                      EM
SSB                       0
LB                 0.30 Hz
GB                        0
PC                     1.00
```

TBS–cyano
mCARBONnight CDCl3 /opt/topspin ejt 49

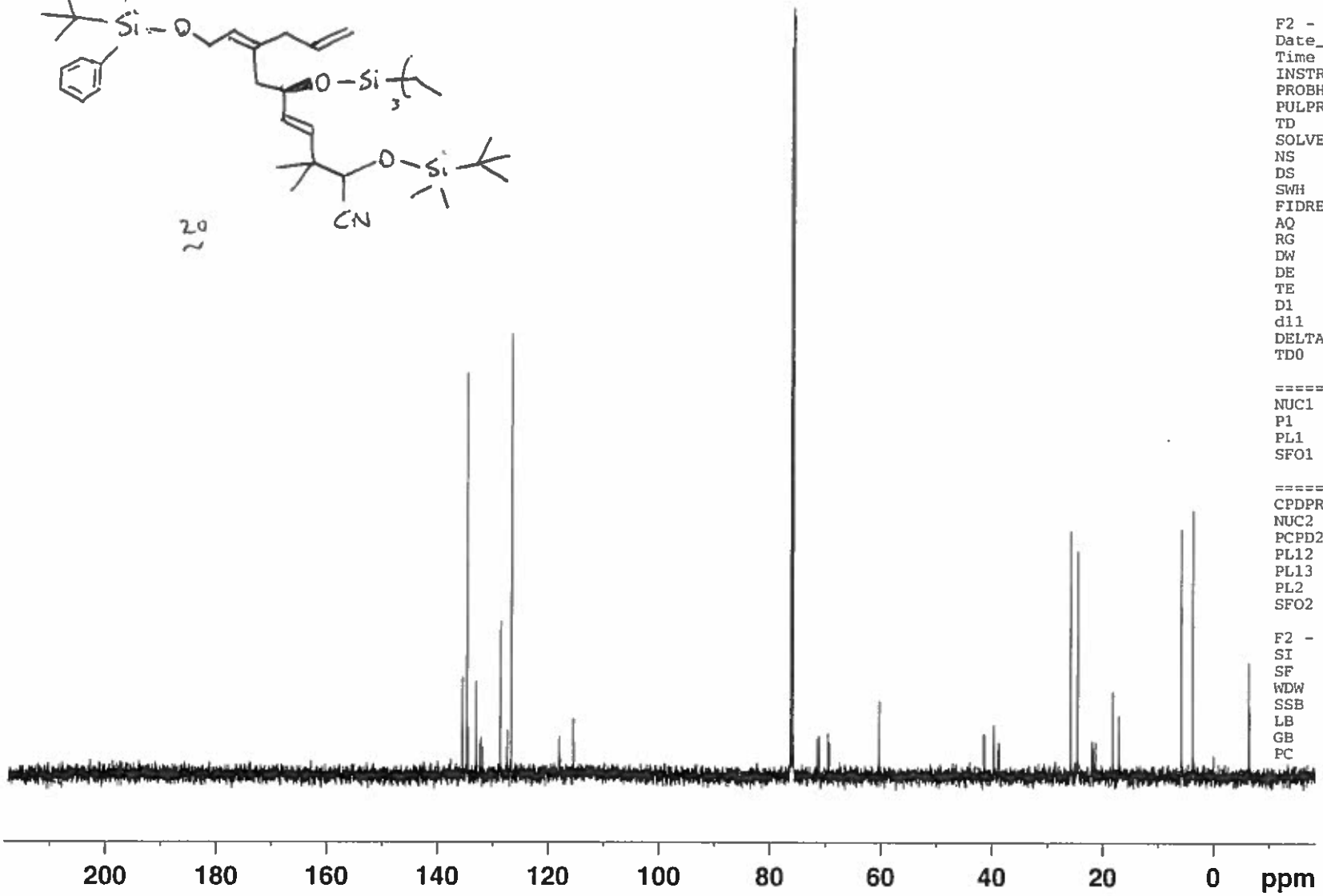


20

135.36 134.56 134.34 134.30 132.87 132.38 132.07 131.98 131.67 128.50 127.22 126.57 117.82 117.76 115.30

76.24 75.99 75.74 71.37 71.06 69.43 69.27 60.21

41.37 41.34 39.68 39.65 38.78 38.65 25.80 24.48 21.98 21.82 21.54 21.24 18.13 17.06 5.80 5.79 3.72 -6.30 -6.54



Current Data Parameters
NAME 2007-07-23-ejt-49
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters
Date_ 20070724
Time 1.52
INSTRUM spect
PROBHD 5 mm TXI 1H/D-
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 256
DS 2
SWH 29761.904 Hz
FIDRES 0.454131 Hz
AQ 1.1010548 sec
RG 512
DW 16.800 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 11.50 usec
PL1 -4.20 dB
SFO1 125.7703643 MHz

======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL12 23.47 dB
PL13 120.00 dB
PL2 3.25 dB
SFO2 500.1320005 MHz

F2 - Processing parameters
SI 32768
SF 125.7579202 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

Benzyl cyanohydrin
mPROTONnight CDCl3 {e:\bruk400data\2008\Nov} ejt 46

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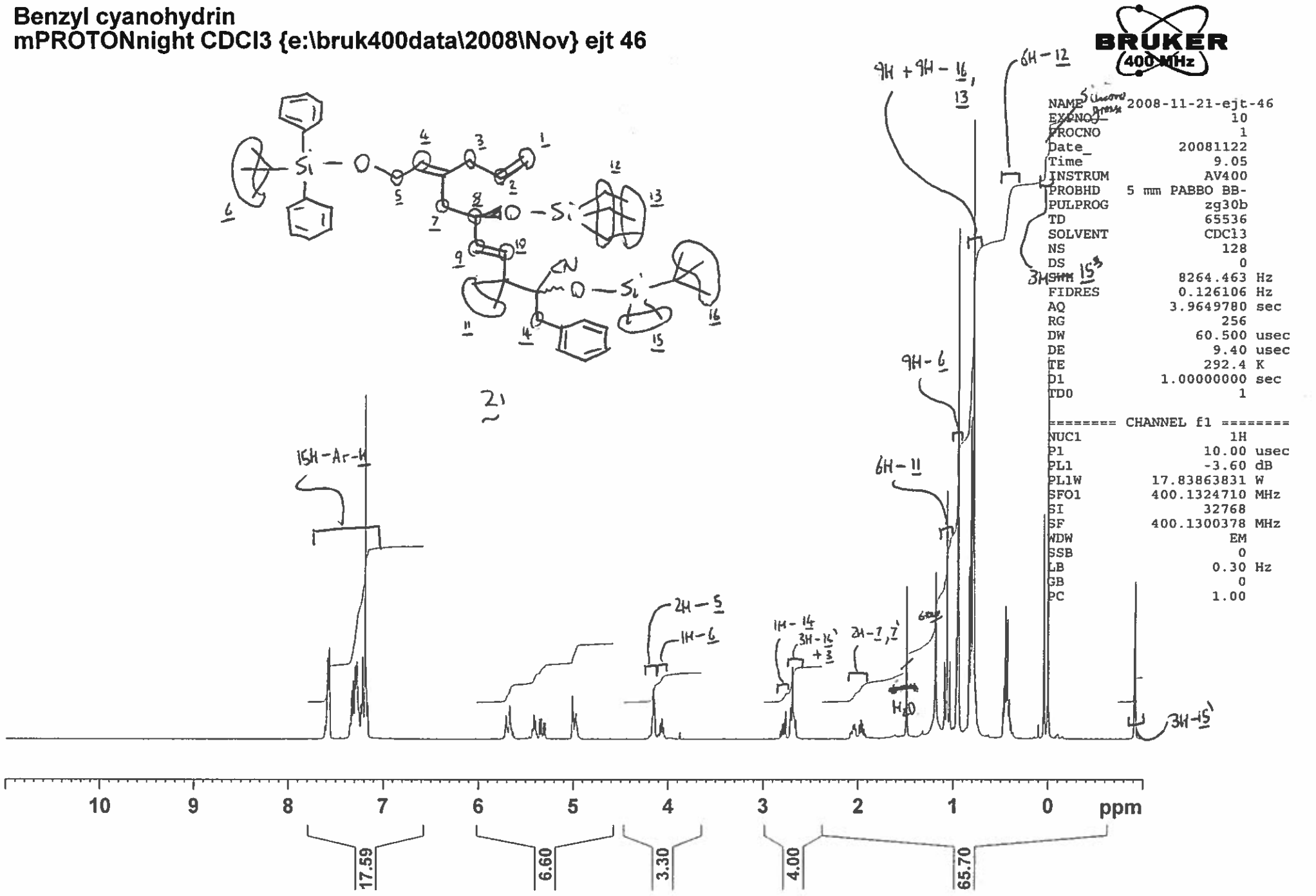
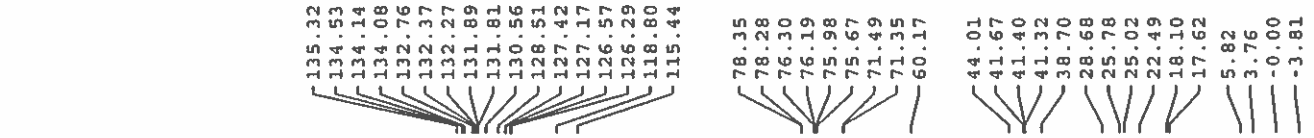
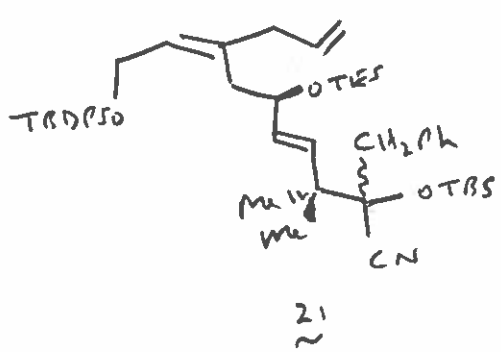


NAME	2008-11-21-ejt-46
EXPNO	10
PROCNO	1
Date_	20081122
Time	9.05
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	128
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	256
DW	60.500 usec
DE	9.40 usec
TE	292.4 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300378 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

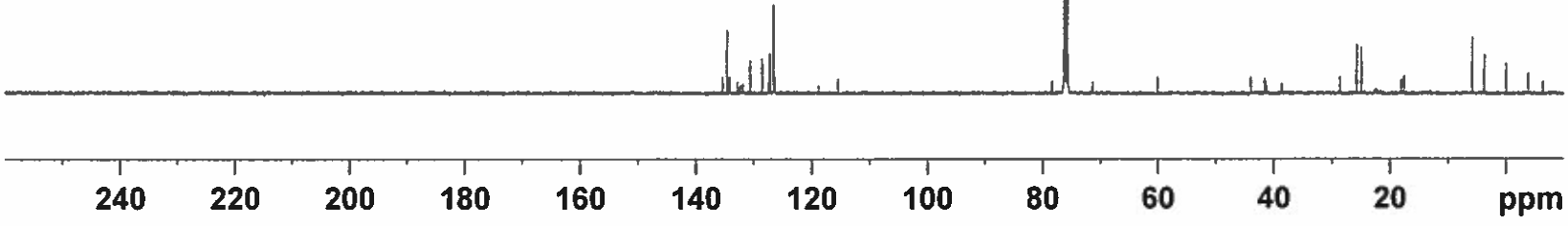
Benzyl cyanohydrin
mCARBONnight CDCl3 {e:\bruk400data\2008\Nov} ejt 46



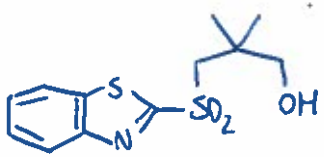


21

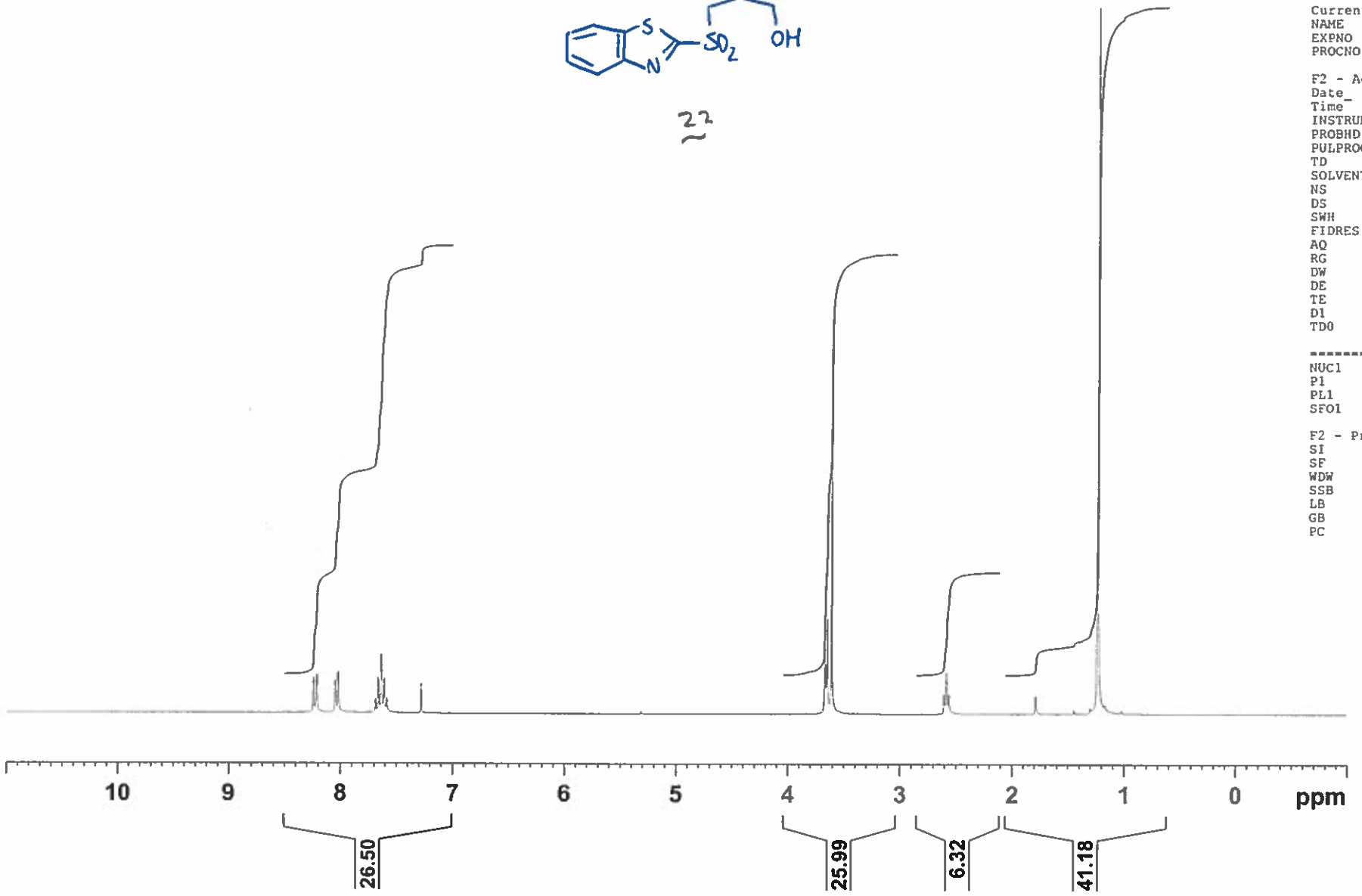
NAME	2008-11-21-ejt-46
EXPNO	11
PROCNO	1
Date_	20081122
Time	11.46
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	3072
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	293.0 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6128743 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40



SH_sulf5
mPROTONnight CDCl3 {C:\bruk300data\2008\Jun} ejt 12



22



BRUKER 300 MHz

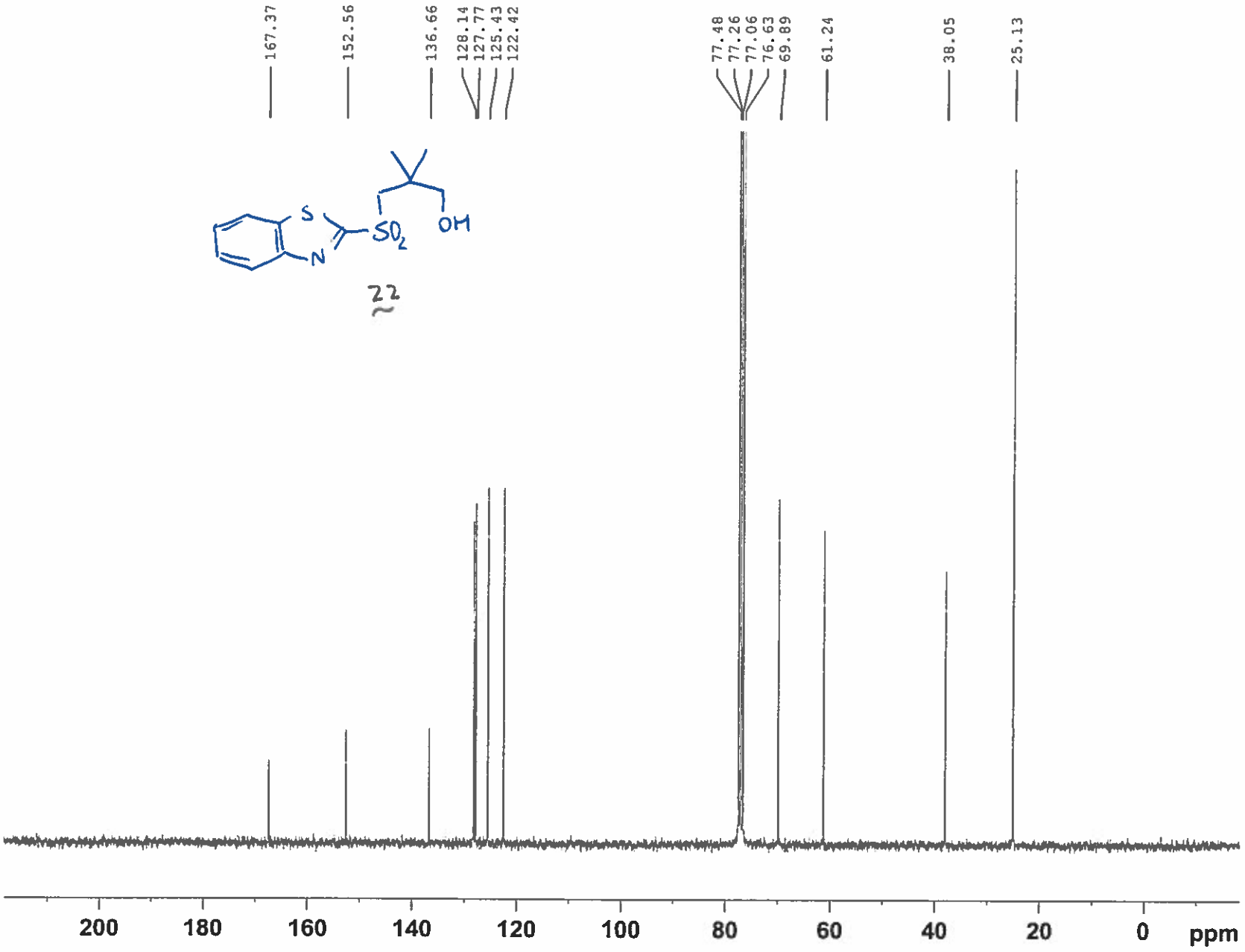
```
Current Data Parameters
NAME      2008-06-15-ejt-12
EXPNO                   10
PROCNO                   1

F2 - Acquisition Parameters
Date_              20080615
Time                 20.17
INSTRUM            DPX300
PROBHD   5 mm DUL 13C-1
PULPROG              zg30
TD                  65536
SOLVENT             CDCl3
NS                     16
DS                      0
SWH             6172.839 Hz
FIDRES          0.094190 Hz
AQ              5.3084660 sec
RG                  287.4
DW                 81.000 usec
DE                  6.00 usec
TE                 300.0 K
D1            0.10000000 sec
TD0                     1

======== CHANNEL f1 ========
NUC1                   1H
P1                 10.00 usec
PL1                -2.60 dB
SFO1          299.9518523 MHz

F2 - Processing parameters
SI                  32768
SF          299.9500000 MHz
WDW                    EM
SSB                     0
LB                 0.30 Hz
GB                      0
PC                   1.00
```

SH_sulf5
mCARBONnight CDCl3 {C:\bruk300data\2008\Jun} ejt 12



BRUKER 300 MHz

```
Current Data Parameters
NAME      2008-06-15-ejt-12
EXPNO                   12
PROCNO                   1

F2 - Acquisition Parameters
Date_              20080615
Time                 21.33
INSTRUM             DPX300
PROBHD   5 mm DUL 13C-1
PULPROG            zgpg30
TD                  65536
SOLVENT             CDCl3
NS                   1024
DS                      2
SWH             17857.143 Hz
FIDRES          0.272478 Hz
AQ              1.8350580 sec
RG                 9195.2
DW                28.000 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                 10.00 usec
PL1                -1.20 dB
SFO1          75.4300300 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                   1H
PCPD2              80.00 usec
PL2                -2.60 dB
PL12               14.50 dB
PL13               15.00 dB
SFO2          299.9512000 MHz

F2 - Processing parameters
SI                  32768
SF            75.4224870 MHz
WDW                    EM
SSB                     0
LB                 1.00 Hz
GB                      0
PC                 1.40
```

SH_sulfone6
mPROTON CDCl3 {C:\bruk300data\2008\Jun} ejt 25

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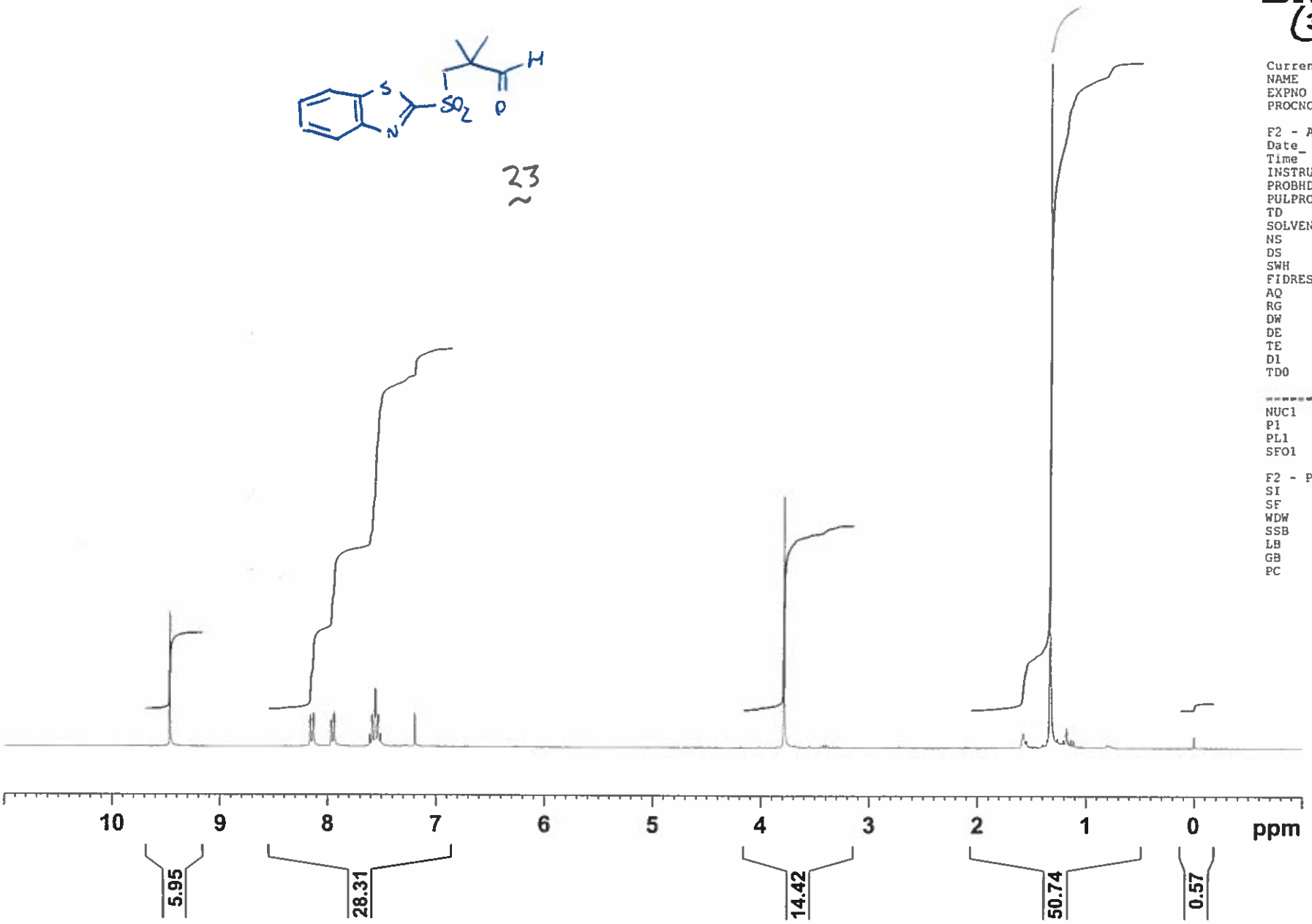


BRUKER 300 MHz

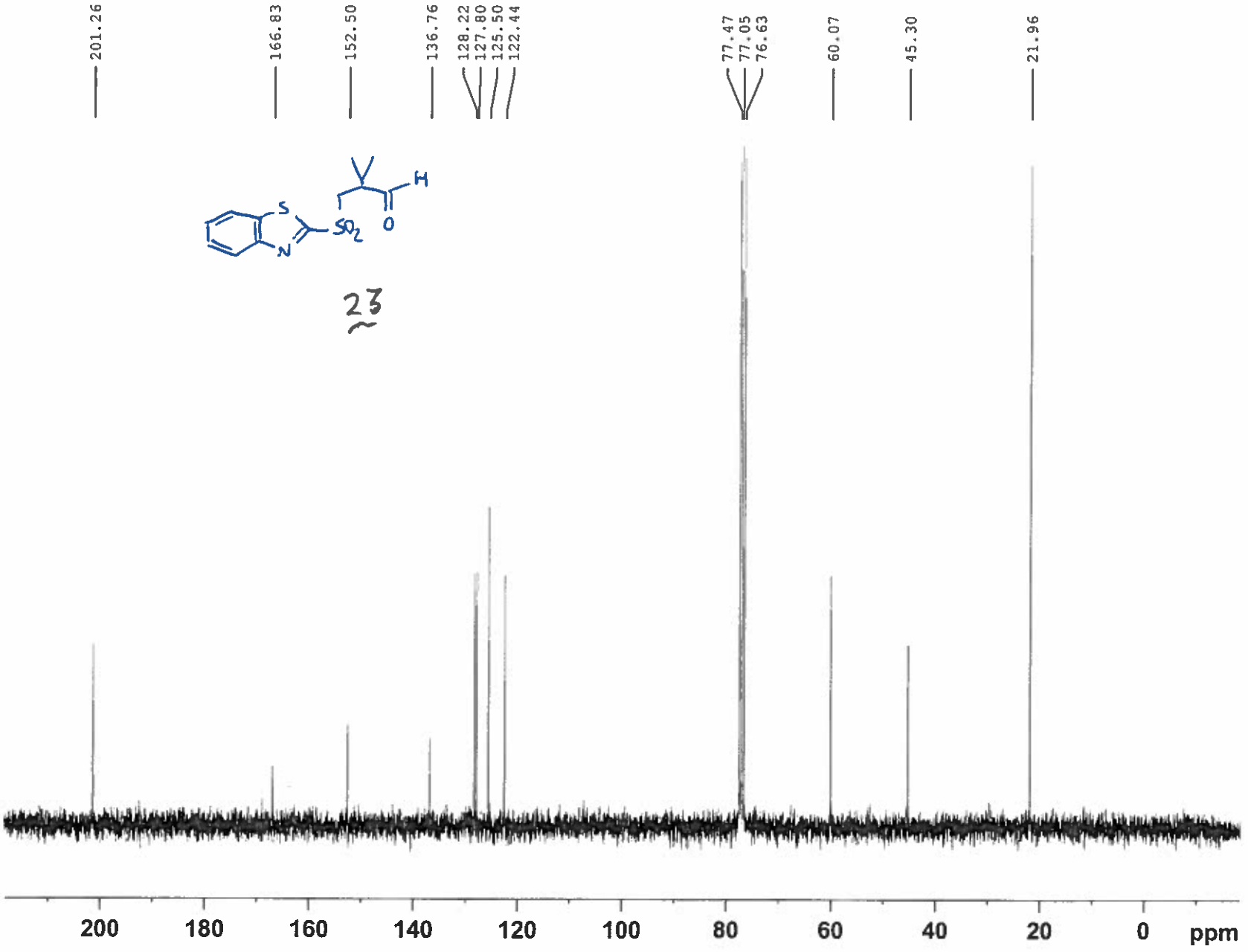
```
Current Data Parameters
NAME      2008-06-21-ejt-25
EXPNO                   10
PROCNO                   1

F2 - Acquisition Parameters
Date_              20080621
Time                 21.49
INSTRUM             DPX300
PROBHD   5 mm DUL 13C-1
PULPROG               zg30
TD                   65536
SOLVENT              CDCl3
NS                      16
DS                       0
SWH              6172.839 Hz
FIDRES           0.094190 Hz
AQ               5.3084660 sec
RG                     362
DW                81.000 usec
DE                 6.00 usec
TE                 300.0 K
D1             0.10000000 sec
TD0                      1

======== CHANNEL f1 ========
NUC1                    1H
P1                  10.00 usec
PL1                 -2.60 dB
SFO1           299.9518523 MHz

F2 - Processing parameters
SI                   32768
SF             299.9500259 MHz
WDW                     EM
SSB                      0
LB                  0.30 Hz
GB                       0
PC                    1.00
```

SH_sulfone6
mCARBON CDCl3 {C:\bruk300data\2008\Jun} ejt 25



BRUKER 300 MHz

```
Current Data Parameters
NAME      2008-06-21-ejt-25
EXPNO                    11
PROCNO                    1

F2 - Acquisition Parameters
Date_              20080621
Time                  22.06
INSTRUM              DPX300
PROBHD   5 mm DUL 13C-1
PULPROG            zgpg30
TD                  65536
SOLVENT             CDCl3
NS                    256
DS                      2
SWH             17857.143 Hz
FIDRES          0.272478 Hz
AQ              1.8350580 sec
RG                  16384
DW                 28.000 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                  10.00 usec
PL1                 -1.20 dB
SFO1          75.4300300 MHz

======== CHANNEL f2 ========
CPDPRG2           waltz16
NUC2                   1H
PCPD2               80.00 usec
PL2                 -2.60 dB
PL12                14.50 dB
PL13                15.00 dB
SFO2          299.9512000 MHz

F2 - Processing parameters
SI                    32768
SF              75.4224870 MHz
WDW                      EM
SSB                       0
LB                  1.00 Hz
GB                        0
PC                     1.40
```

SH303_A
mPROTON CDCl3 /opt/topspin ejt 15

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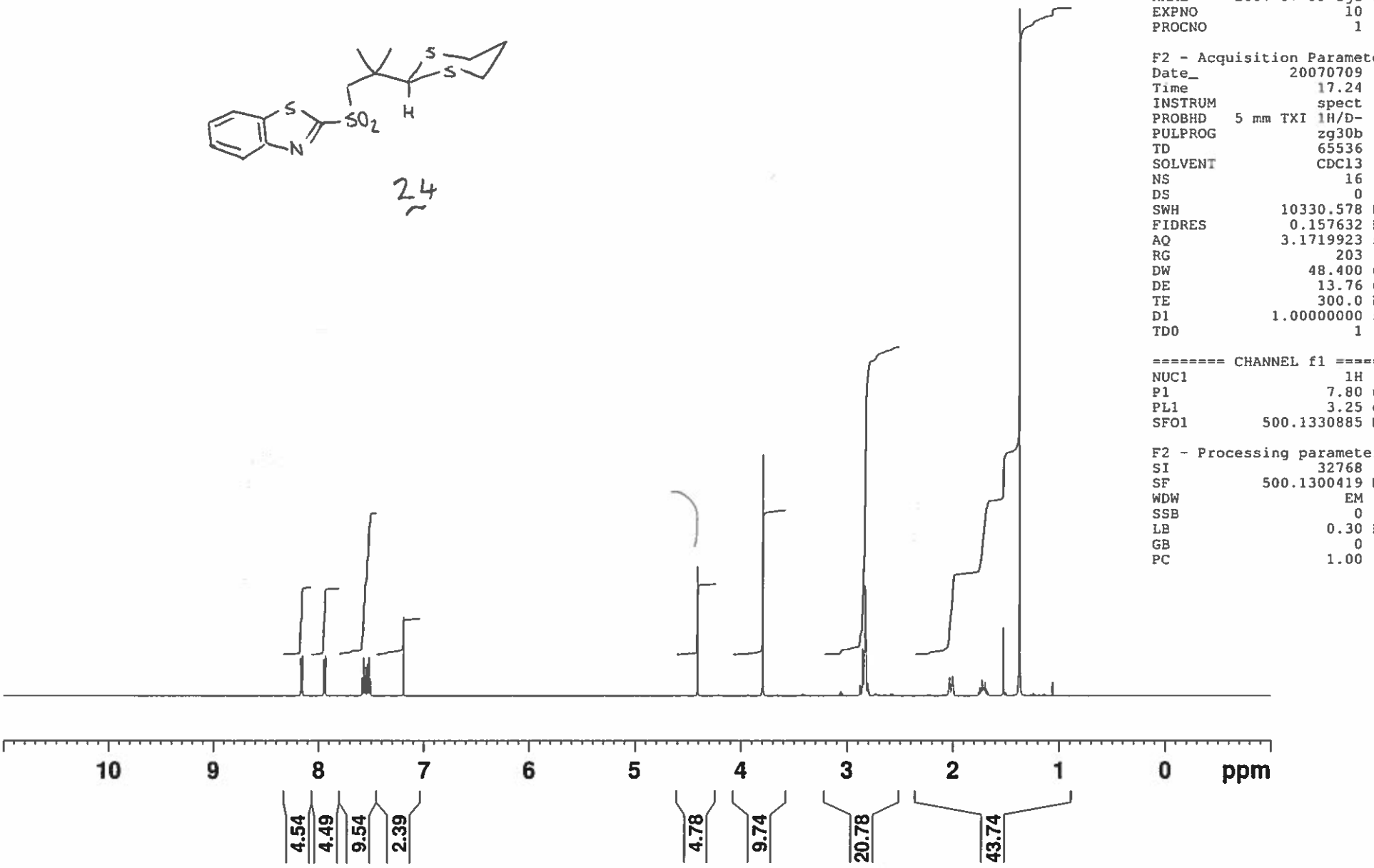
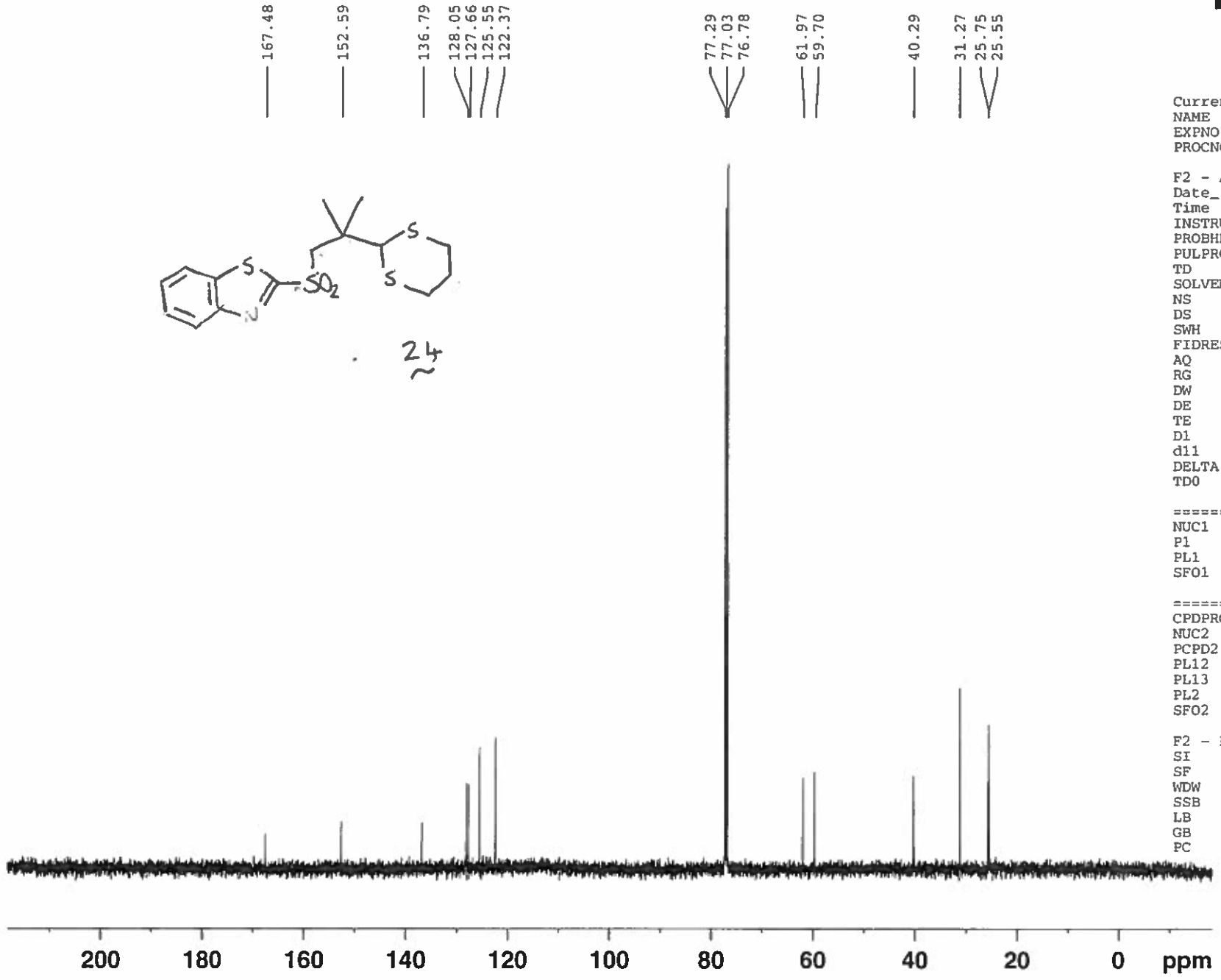



```
Current Data Parameters
NAME      2007-07-09-ejt-15
EXPNO                   10
PROCNO                   1

F2 - Acquisition Parameters
Date_              20070709
Time                  17.24
INSTRUM               spect
PROBHD   5 mm TXI 1H/D-
PULPROG               zg30b
TD                    65536
SOLVENT               CDCl3
NS                       16
DS                        0
SWH              10330.578 Hz
FIDRES            0.157632 Hz
AQ               3.1719923 sec
RG                      203
DW                 48.400 usec
DE                 13.76 usec
TE                 300.0 K
D1              1.00000000 sec
TD0                       1

======== CHANNEL f1 ========
NUC1                    1H
P1                   7.80 usec
PL1                  3.25 dB
SFO1          500.1330885 MHz

F2 - Processing parameters
SI                    32768
SF            500.1300419 MHz
WDW                     EM
SSB                      0
LB                    0.30 Hz
GB                       0
PC                    1.00
```

SH303_A
mCARBONnight CDCl3 /opt/topspin ejt 15

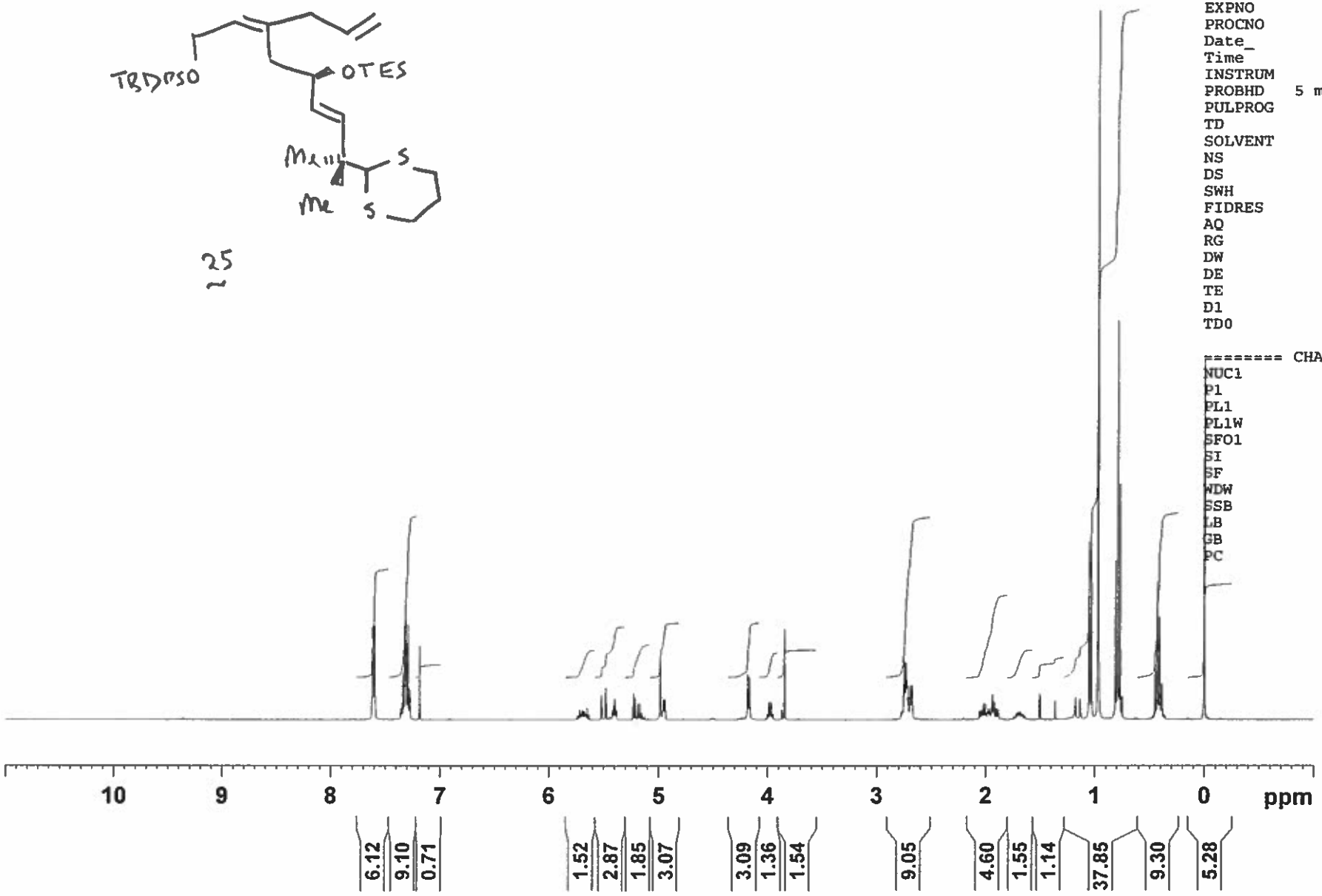



```
Current Data Parameters
NAME      2007-07-09-ejt-15
EXPNO                   11
PROCNO                   1

F2 - Acquisition Parameters
Date_              20070710
Time                   0.03
INSTRUM               spect
PROBHD    5 mm TXI 1H/D-
PULPROG              zgpg30
TD                    65536
SOLVENT               CDCl3
NS                      256
DS                        2
SWH               29761.904 Hz
FIDRES            0.454131 Hz
AQ                1.1010548 sec
RG                      512
DW                  16.800 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                  11.50 usec
PL1                  -4.20 dB
SFO1           125.7703643 MHz

======== CHANNEL f2 ========
CPDPRG2             waltz16
NUC2                    1H
PCPD2               80.00 usec
PL12                23.47 dB
PL13               120.00 dB
PL2                  3.25 dB
SFO2           500.1320005 MHz

F2 - Processing parameters
SI                      32768
SF             125.7577890 MHz
WDW                        EM
SSB                         0
LB                   1.00 Hz
GB                          0
PC                       1.40
```

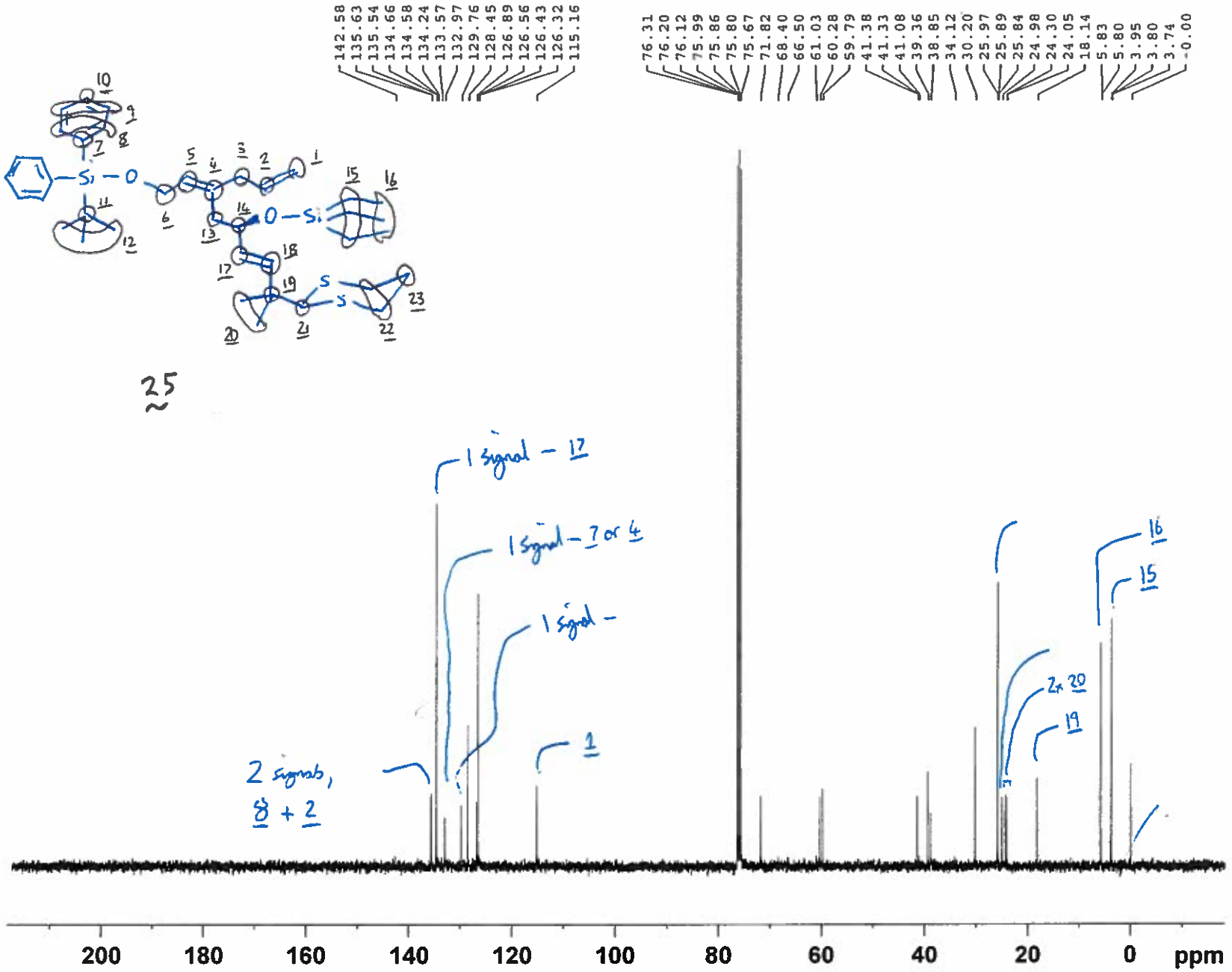
SH460_Julia
mPROTON CDCl3 {C:\bruk400data\2008\Jul} ejt 20

25

NAME	2008-07-06-ejt-20
EXPNO	10
PROCNO	1
Date_	20080706
Time	17.21
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	101
DW	60.500 usec
DE	9.40 usec
TE	294.6 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300359 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

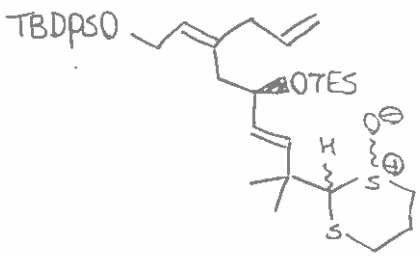


SH460_Julia
mCARBON CDCl3 {C:\bruk400data\2008\Jul} ejt 20



NAME	2008-07-06-ejt-20
EXPNO	11
PROCNO	1
Date_	20080706
Time	17.36
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	256
DS	2
SWH	23809.523 Hz
FIDRES	0.363304 Hz
AQ	1.3763061 sec
RG	512
DW	21.000 usec
DE	7.66 usec
TE	296.1 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6228294 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 usec
PL2	-3.60 dB
PL12	13.80 dB
PL13	14.00 dB
PL2W	17.83863831 W
PL12W	0.32460985 W
PL13W	0.31000000 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6128727 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	0.20

SH_monosulfoxide
mPROTON CDCl3 /opt/topspin ejt 20



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Current Data Parameters

NAME	2007-01-08-ejt-20
EXPNO	10
PROCNO	1

F2 - Acquisition Parameters

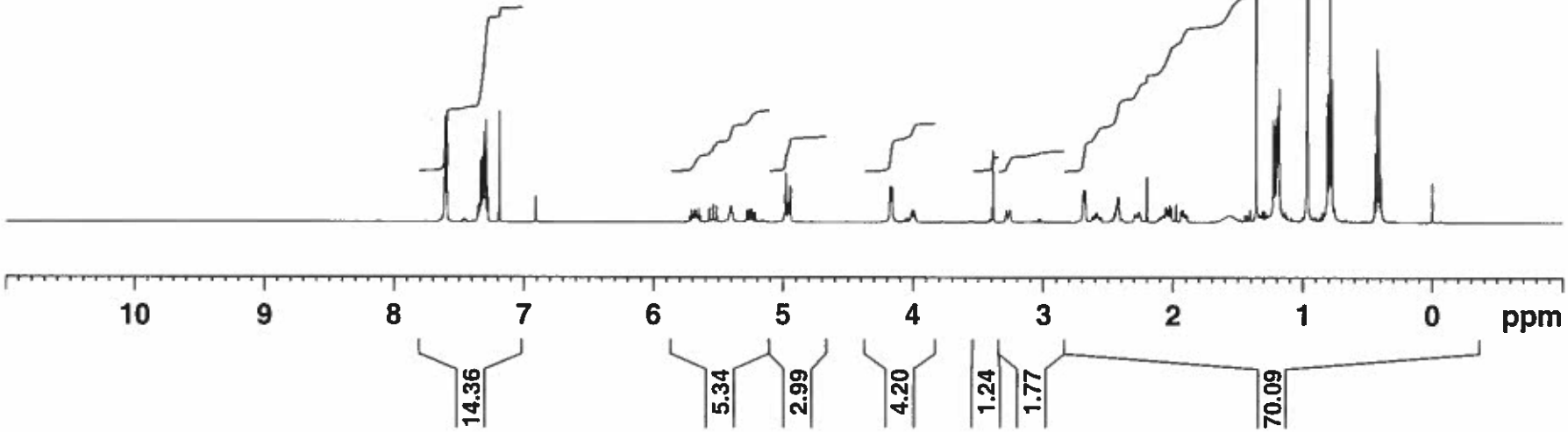
Date_	20070108
Time	10.09
INSTRUM	spect
PROBHD	5 mm BBO BB-1H
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	10330.578 Hz
FIDRES	0.157632 Hz
AQ	3.1719923 sec
RG	322
DW	48.400 usec
DE	13.30 usec
TE	300.0 K
D1	1.00000000 sec
TD0	1

======== CHANNEL f1 ========

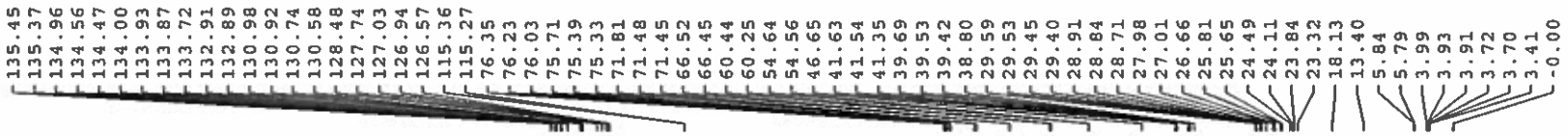
NUC1	1H
P1	10.00 usec
PL1	-0.30 dB
SFO1	500.1330885 MHz

F2 - Processing parameters

SI	32768
SF	500.1300428 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



SH524
mCARBONnight CDCl3 {C:\bruk400data\2008\Oct} ejt 6



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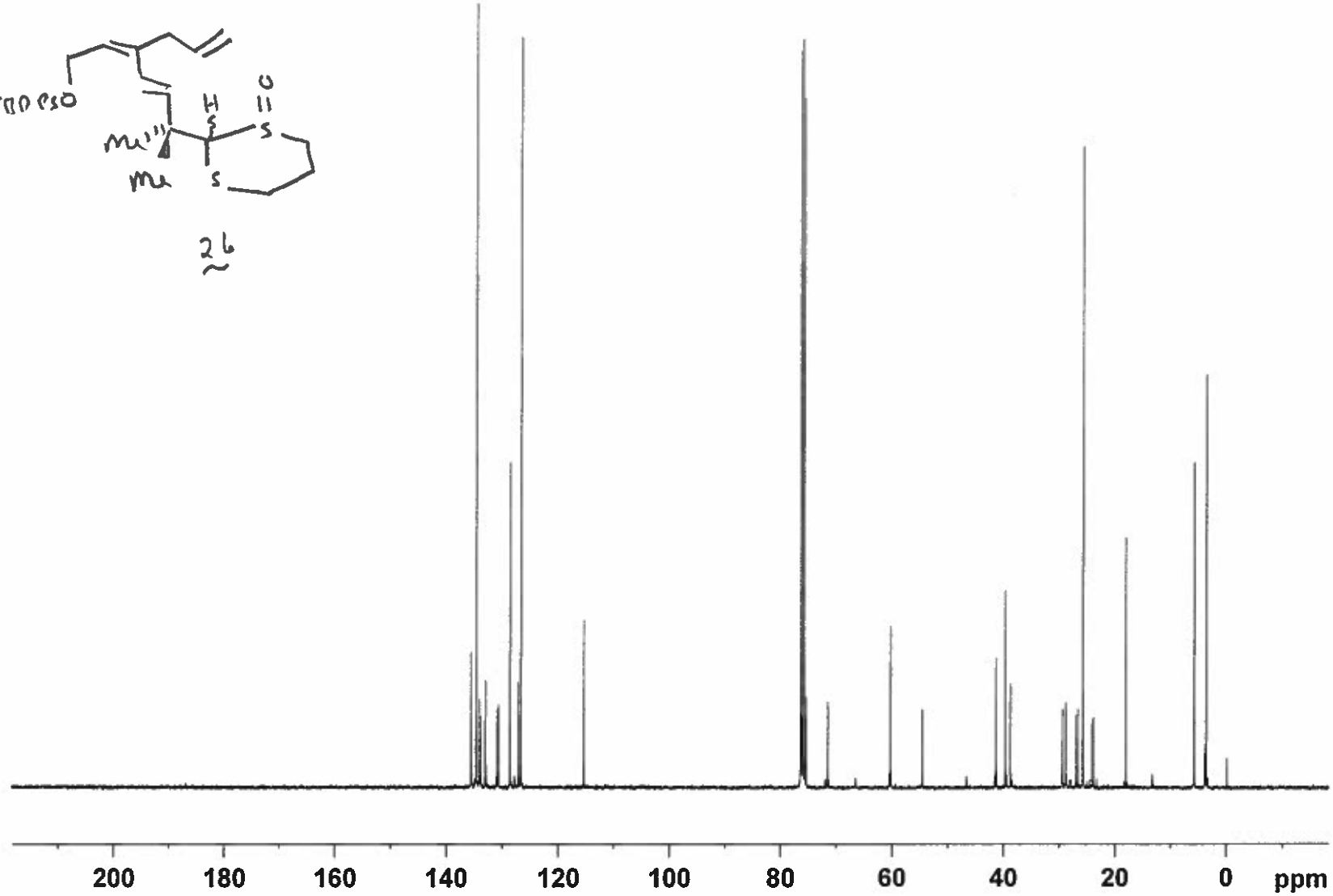
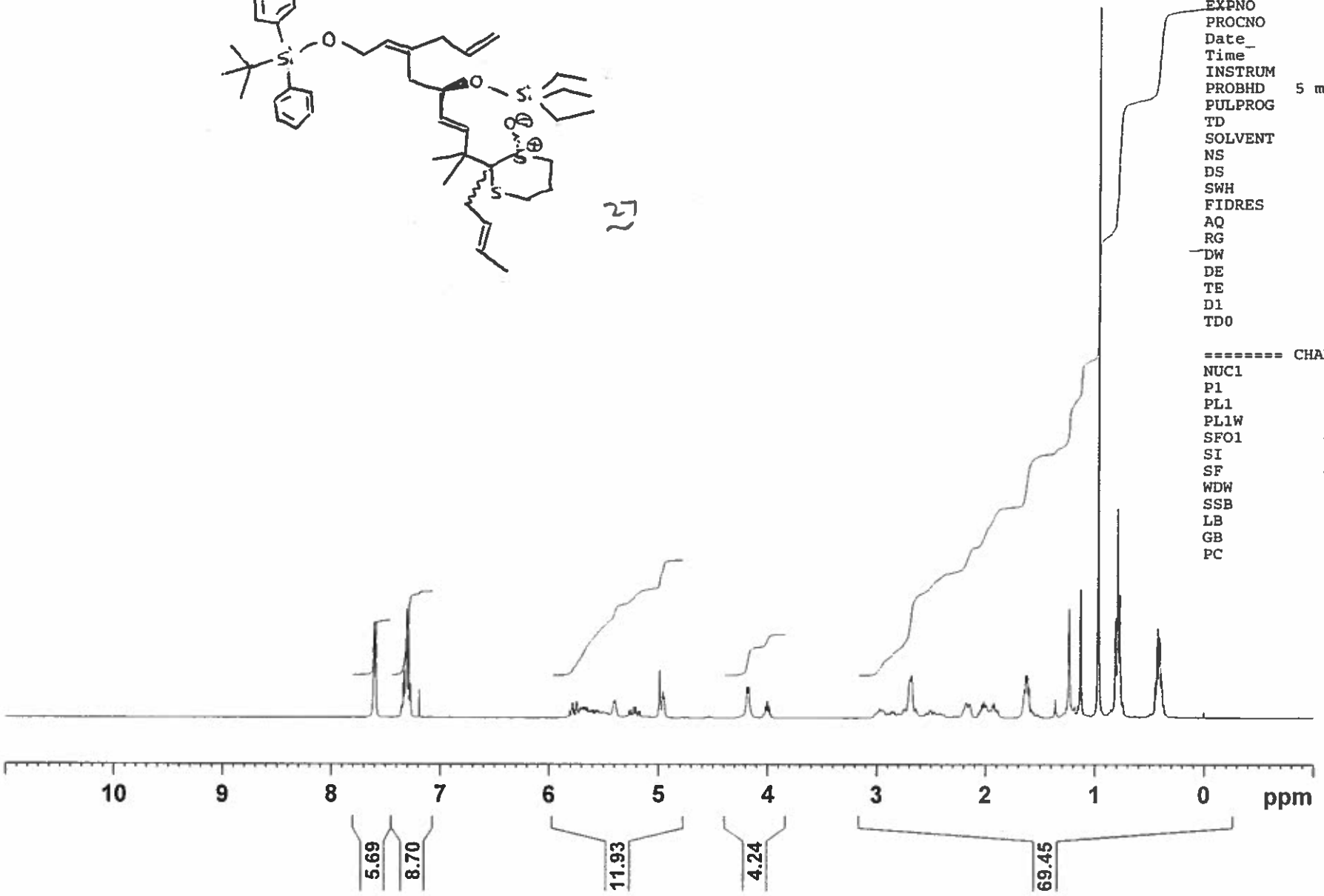


NAME	2008-11-02-ejt-6
EXPNO	11
PROCNO	1
Date_	20081102
Time	23.18
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	2560
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	293.2 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6128745 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

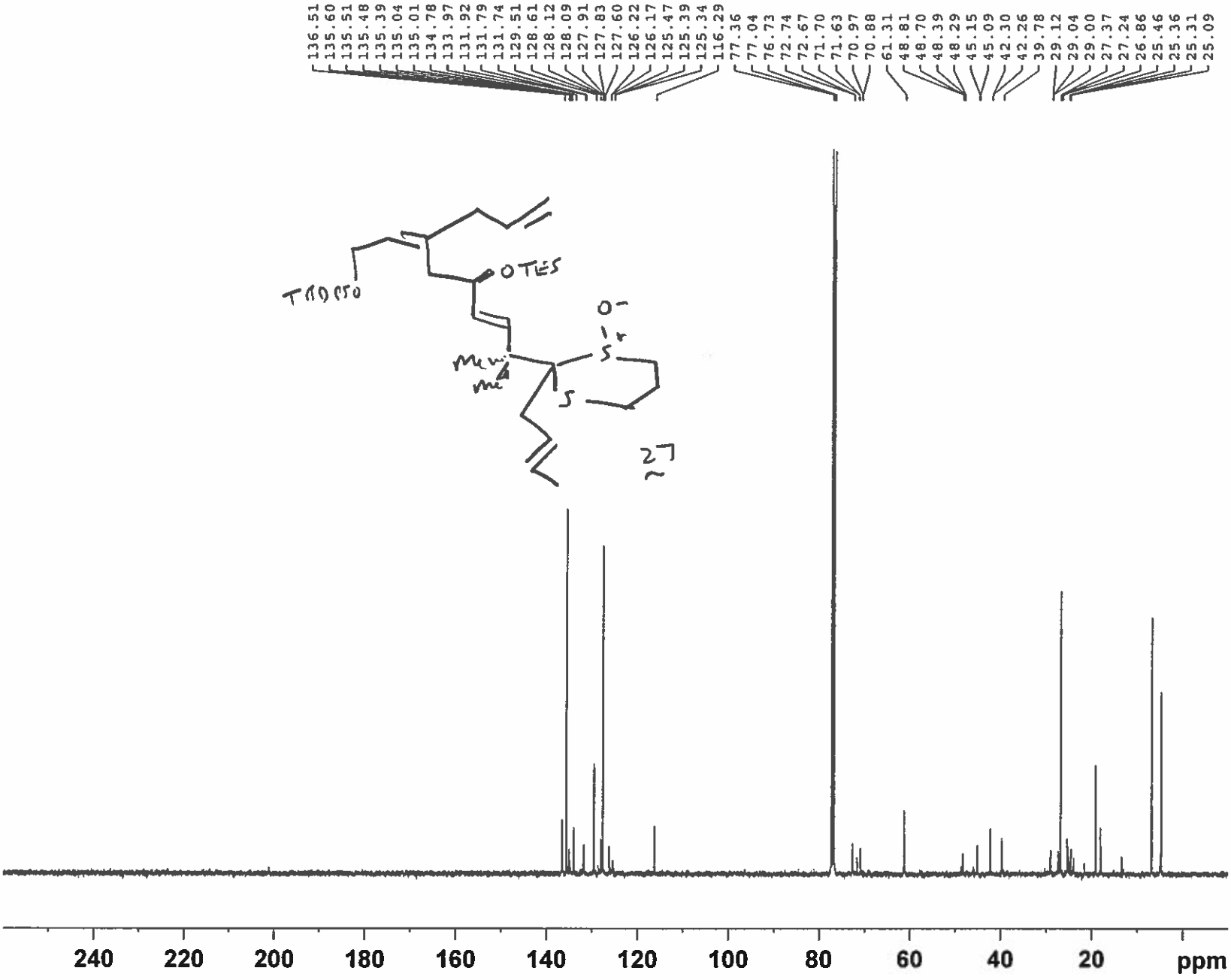
Crotyl diene
mPROTON CDCl3 {C:\bruk400data\2008\Nov} ejt 38

27

NAME	2008-11-10-ejt-38
EXPNO	10
PROCNO	1
Date_	20081110
Time	17.21
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	64
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	90.5
DW	60.500 usec
DE	9.40 usec
TE	293.7 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300375 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



Crotyl diene
mCARBONnight CDCl3 {C:\bruk400data\2008\Nov} ejt 38

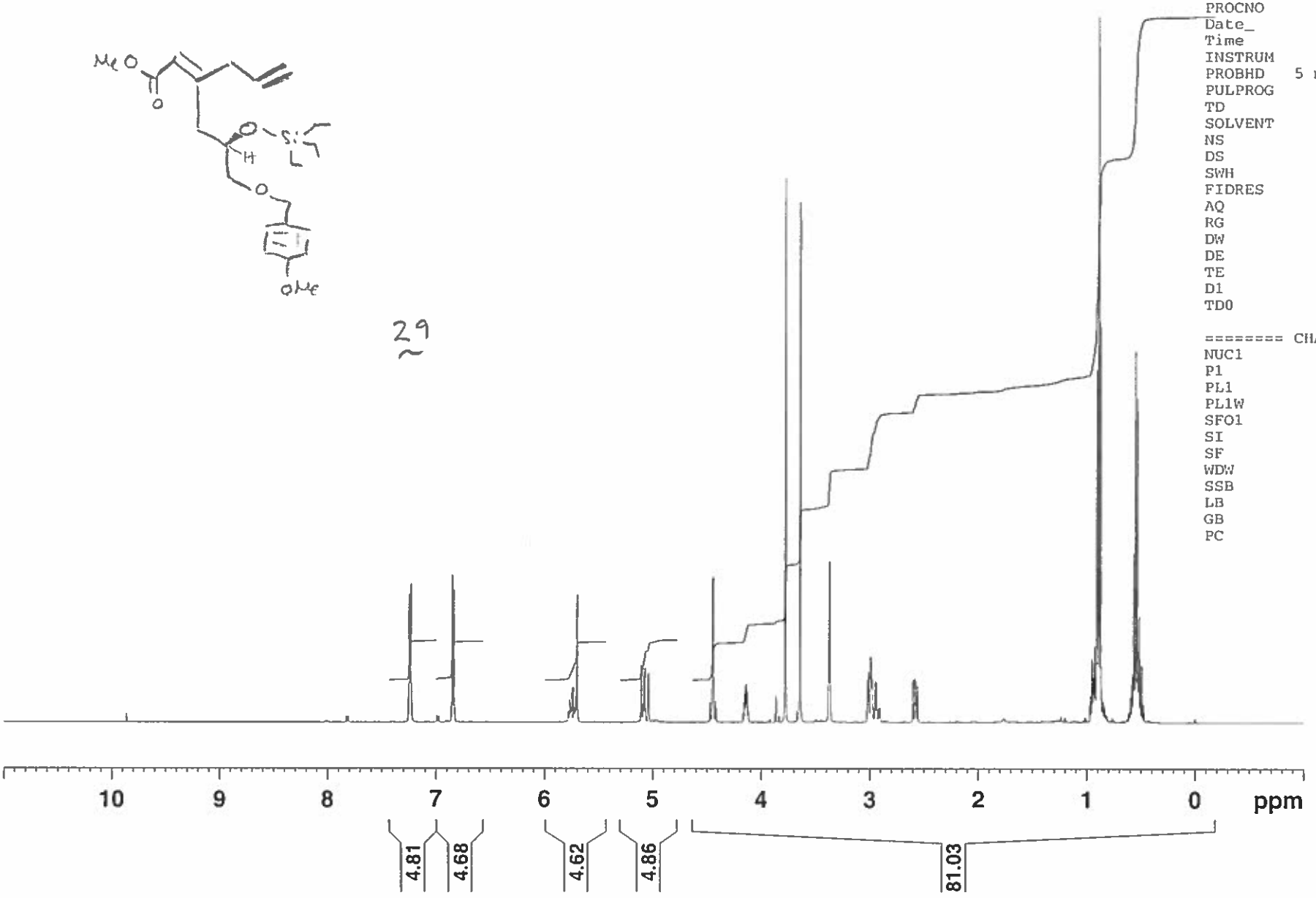


NAME	2008-11-10-ejt-38
EXPNO	13
PROCNO	1
Date_	20081111
Time	3.26
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	1280
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	294.3 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6127690 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

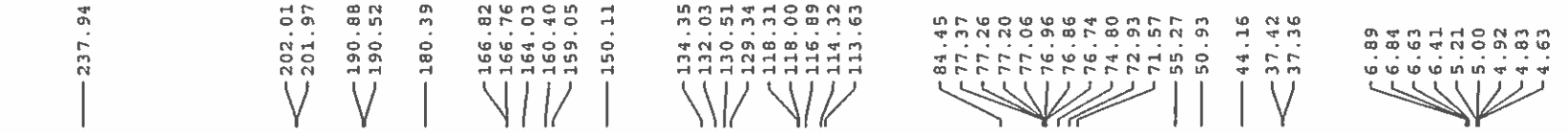
apg2
mPROTON CDCl3 /opt/bruk500data/2009/Jan ejt 16

29

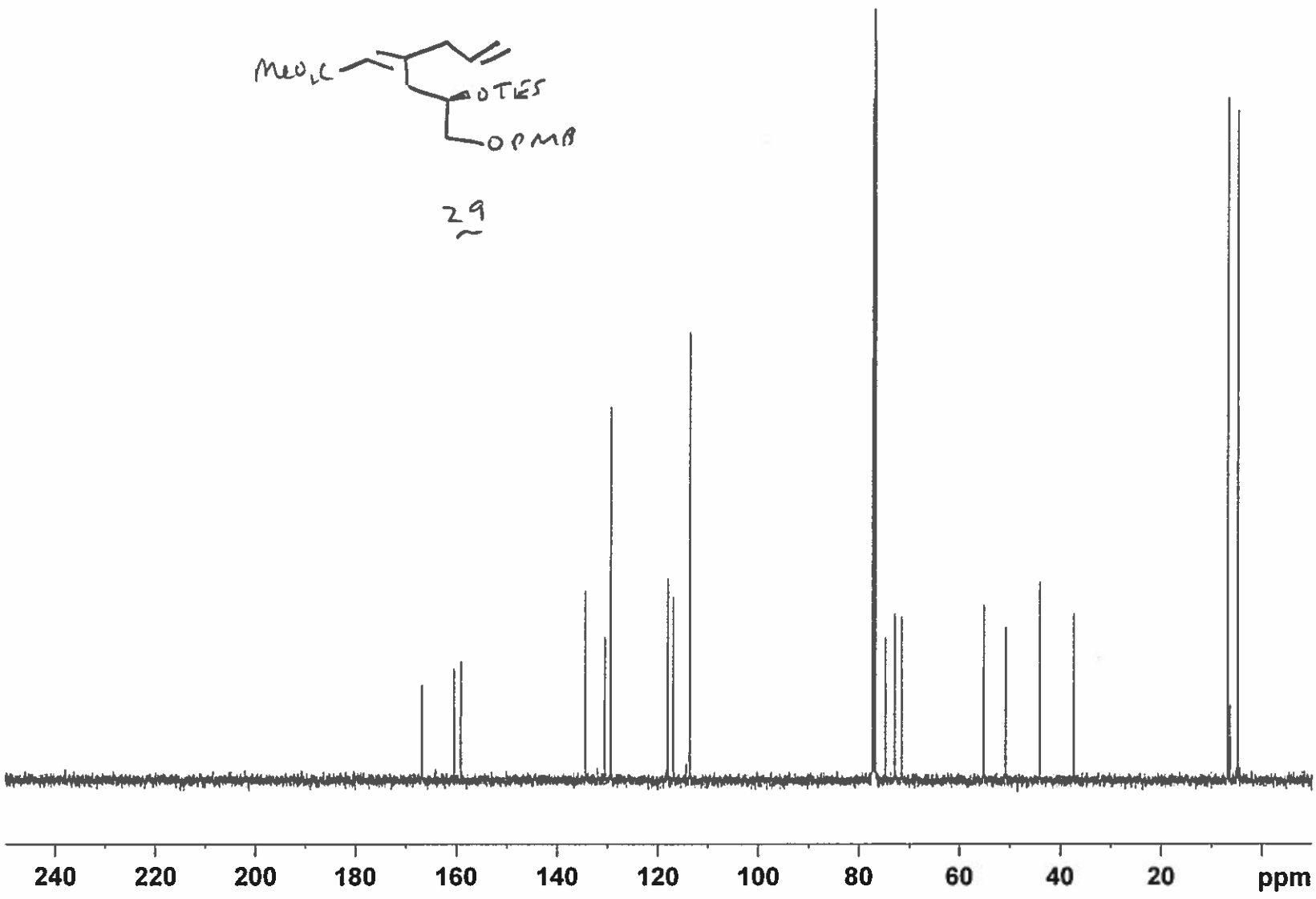
NAME	2009-01-05-ejt-16
EXPNO	10
PROCNO	1
Date_	20090105
Time	11.31
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	10330.578 Hz
FIDRES	0.157632 Hz
AQ	3.1719923 sec
RG	18
DW	48.400 usec
DE	13.38 usec
TE	293.3 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	8.20 usec
PL1	3.25 dB
PL1W	12.12272263 W
SFO1	500.1330885 MHz
SI	32768
SF	500.1300224 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



apgtesprot
mCARBON CDCl3 {e:\bruk400data\2009\Jan} ejt 18

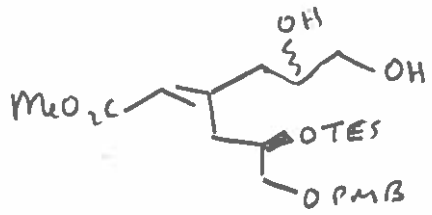


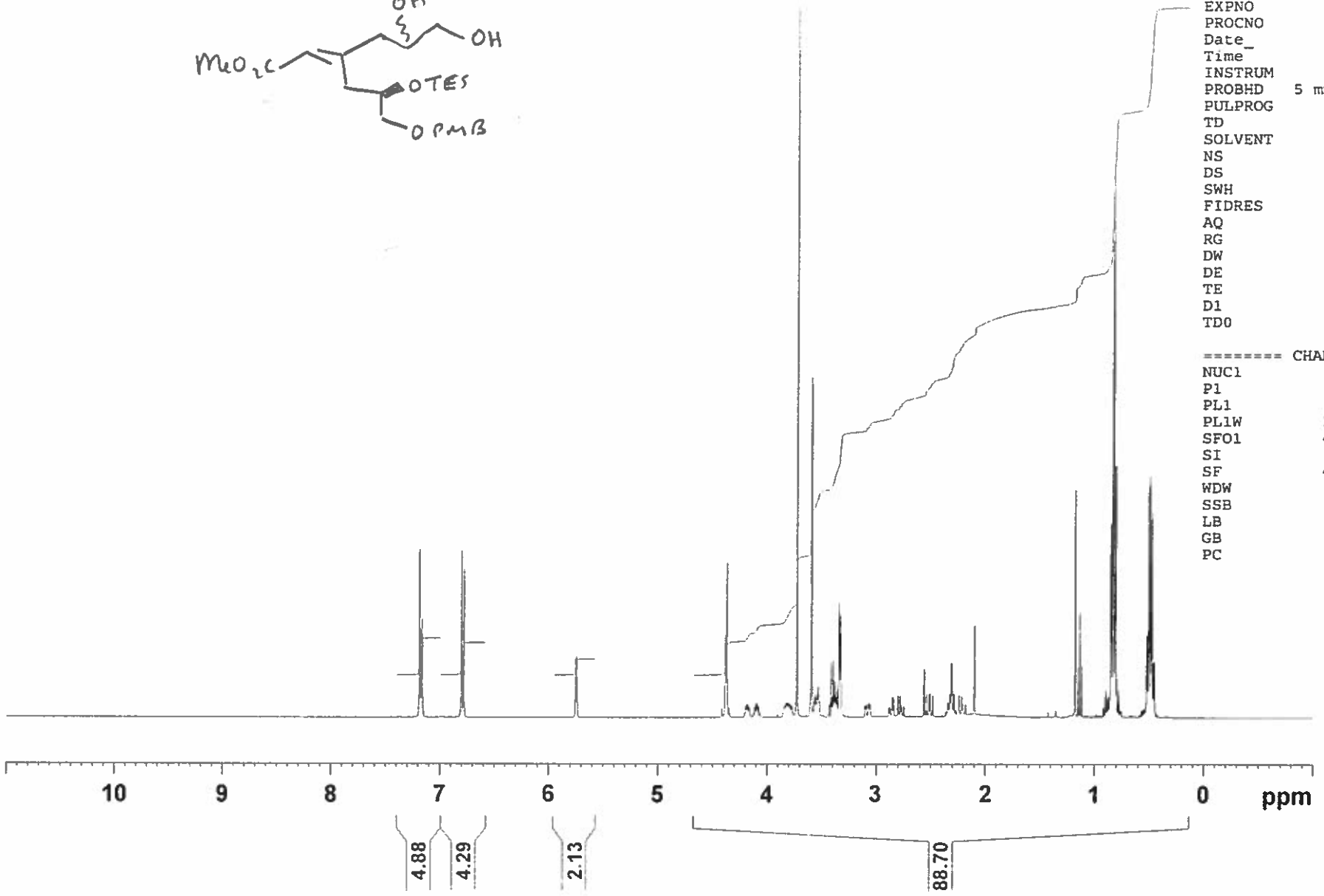
29



NAME	2009-01-06-ejt-18	
EXPNO	10	
PROCNO	1	
Date_	20090106	
Time	10.16	
INSTRUM	AV400	
PROBHD	5 mm PABBO BB-	
PULPROG	zgpg30	
TD	65536	
SOLVENT	CDCl3	
NS	256	
DS	2	
SWH	30241.936	Hz
FIDRES	0.461455	Hz
AQ	1.0835786	sec
RG	512	
DW	16.533	usec
DE	7.83	usec
TE	291.6	K
D1	2.00000000	sec
D11	0.03000000	sec
TD0	1	
======== CHANNEL f1 ========		
NUC1	13C	
P1	8.00	usec
PL1	0.00	dB
PL1W	34.91522217	W
SFO1	100.6241042	MHz
======== CHANNEL f2 ========		
CPDPRG2	waltz16	
NUC2	1H	
PCPD2	90.00	usec
PL2	-3.60	dB
PL12	15.31	dB
PL13	18.00	dB
PL2W	17.83863831	W
PL12W	0.22927761	W
PL13W	0.12341322	W
SFO2	400.1316005	MHz
SI	32768	
SF	100.6127690	MHz
WDW	EM	
SSB	0	
LB	1.00	Hz
GB	0	
PC	0.20	

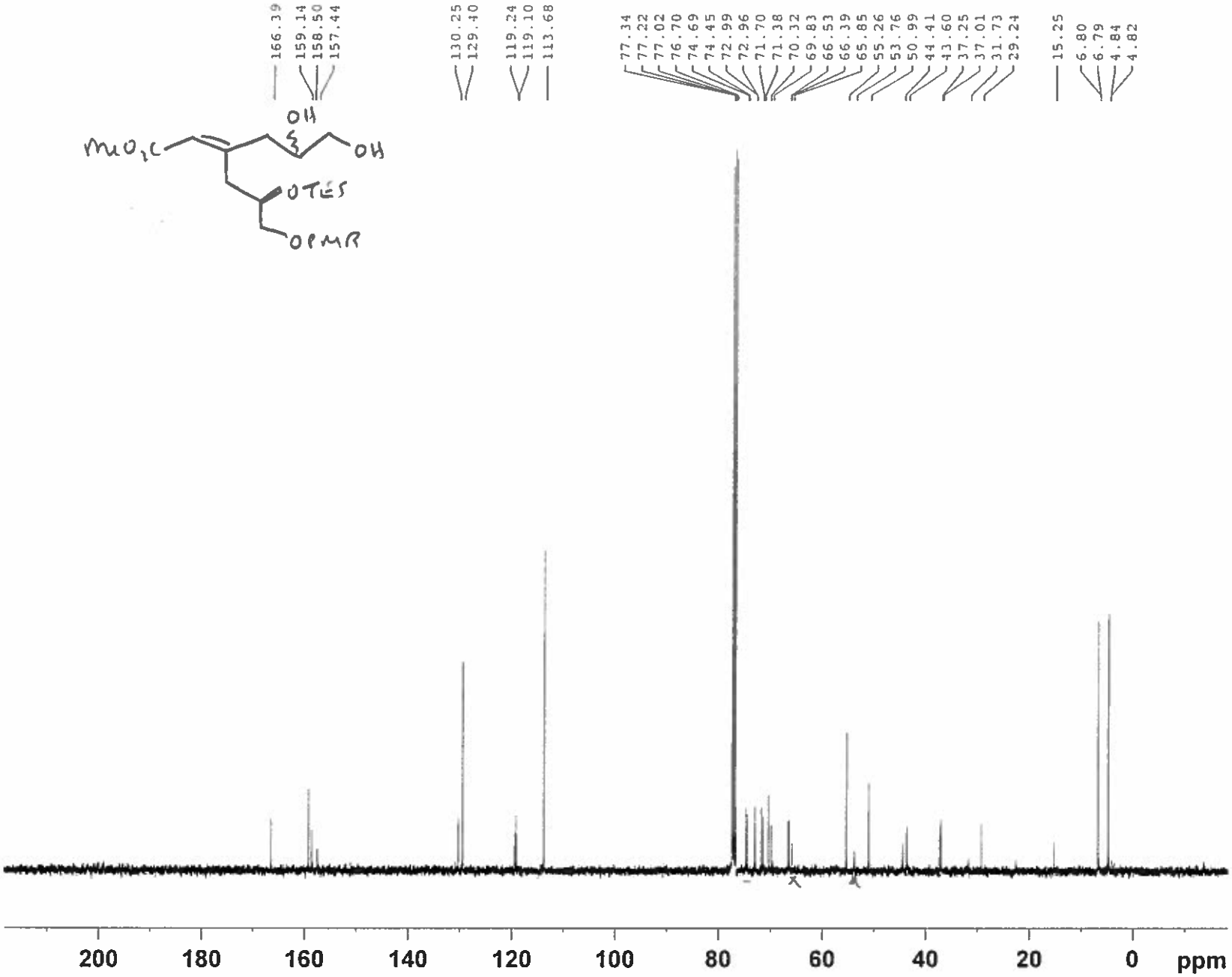
CompoundG
mPROTONnight CDCl3 {C:\bruk400data\2008\May} ejt 10





NAME	2008-05-26-ejt-10
EXPNO	10
PROCNO	1
Date_	20080526
Time	20.12
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	90.5
DW	60.500 usec
DE	9.40 usec
TE	295.0 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300339 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

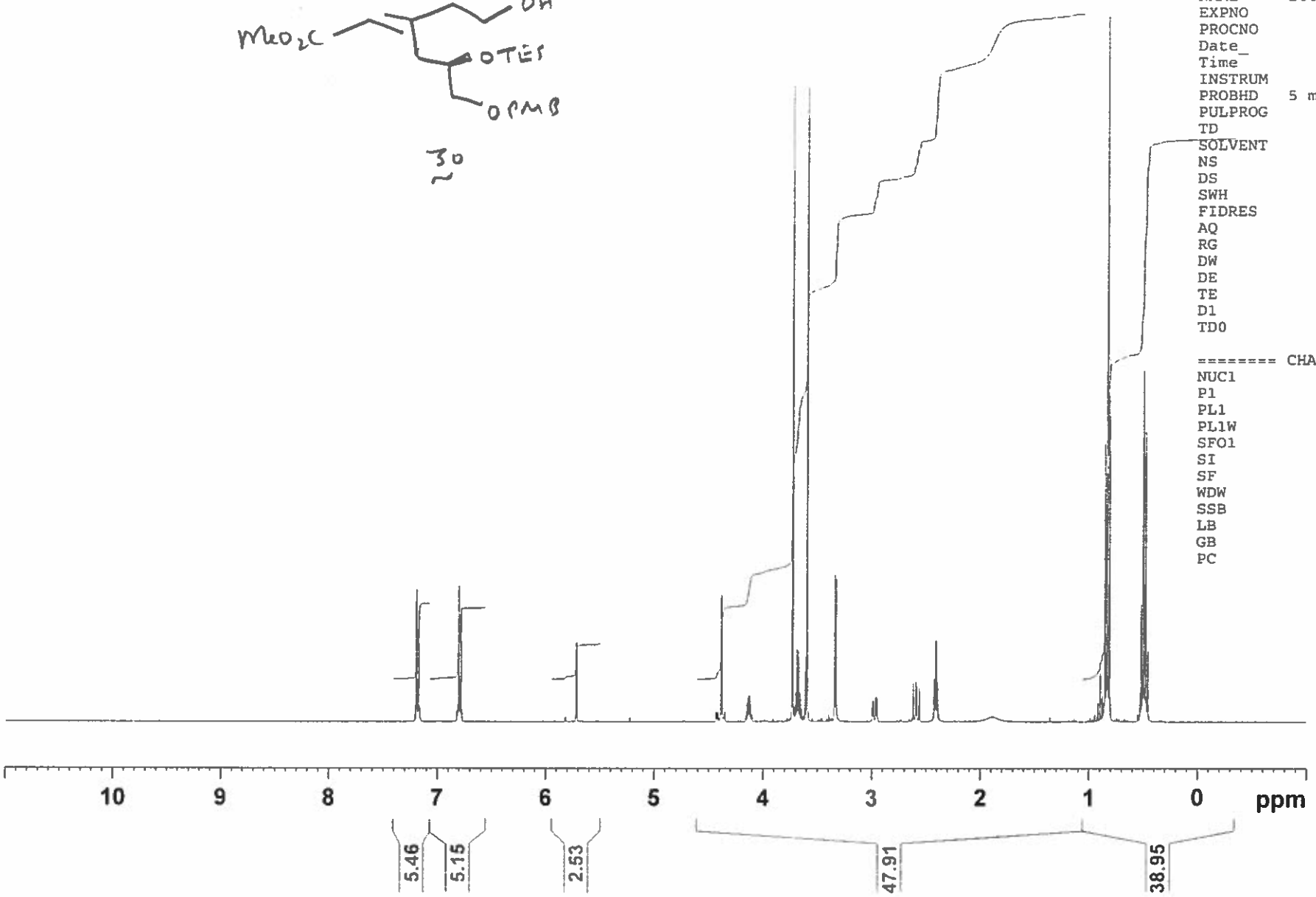
CompoundG
mCARBONnight CDCl3 {C:\bruk400data\2008\May} ejt 10



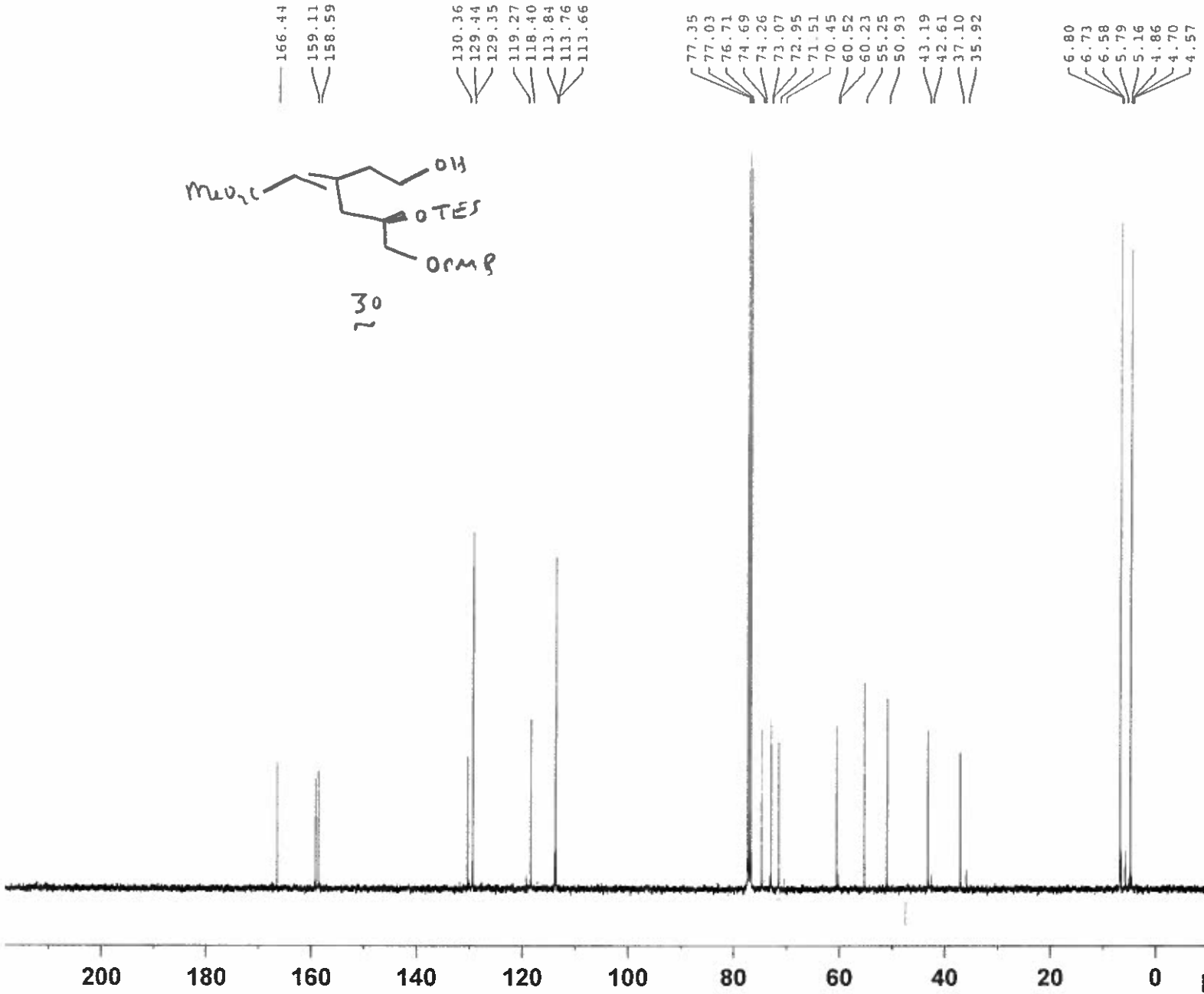
NAME	2008-05-26-ejt-10
EXPNO	12
PROCNO	1
Date_	20080526
Time	20.50
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	512
DS	2
SWH	23809.523 Hz
FIDRES	0.363304 Hz
AQ	1.3763061 sec
RG	512
DW	21.000 usec
DE	7.66 usec
TE	296.4 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6228294 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 usec
PL2	-3.60 dB
PL12	13.80 dB
PL13	14.00 dB
PL2W	17.83863831 W
PL12W	0.32460985 W
PL13W	0.31000000 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6127690 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

compoundF
mPROTONnight CDCl3 {C:\bruk400data\2008\May} ejt 6

NAME	2008-05-11-ejt-1
EXPNO	50
PROCNO	1
Date_	20080512
Time	1.47
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	90.5
DW	60.500 usec
DE	9.40 usec
TE	295.7 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300322 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



compoundF
mCARBONnight CDCl3 {C:\bruk400data\2008\May} ejt 6

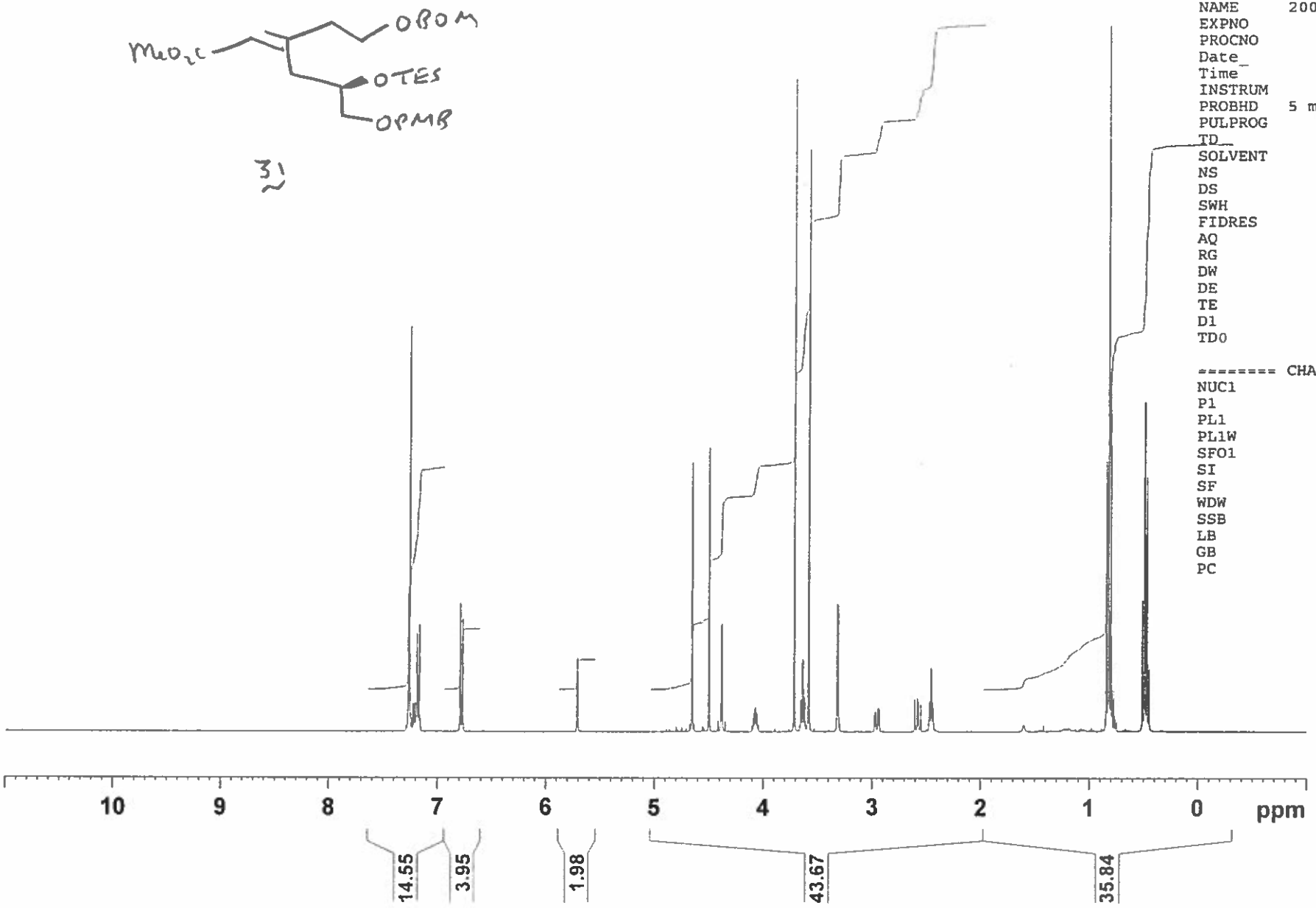


NAME	2008-05-11-ejt-1
EXPNO	52
PROCNO	1
Date_	20080512
Time	2.25
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	512
DS	2
SWH	23809.523 Hz
FIDRES	0.363304 Hz
AQ	1.3763061 sec
RG	512
DW	21.000 usec
DE	7.66 usec
TE	297.0 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6228294 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 usec
PL2	-3.60 dB
PL12	13.80 dB
PL13	14.00 dB
PL2W	17.83863831 W
PL12W	0.32460985 W
PL13W	0.31000000 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6127690 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

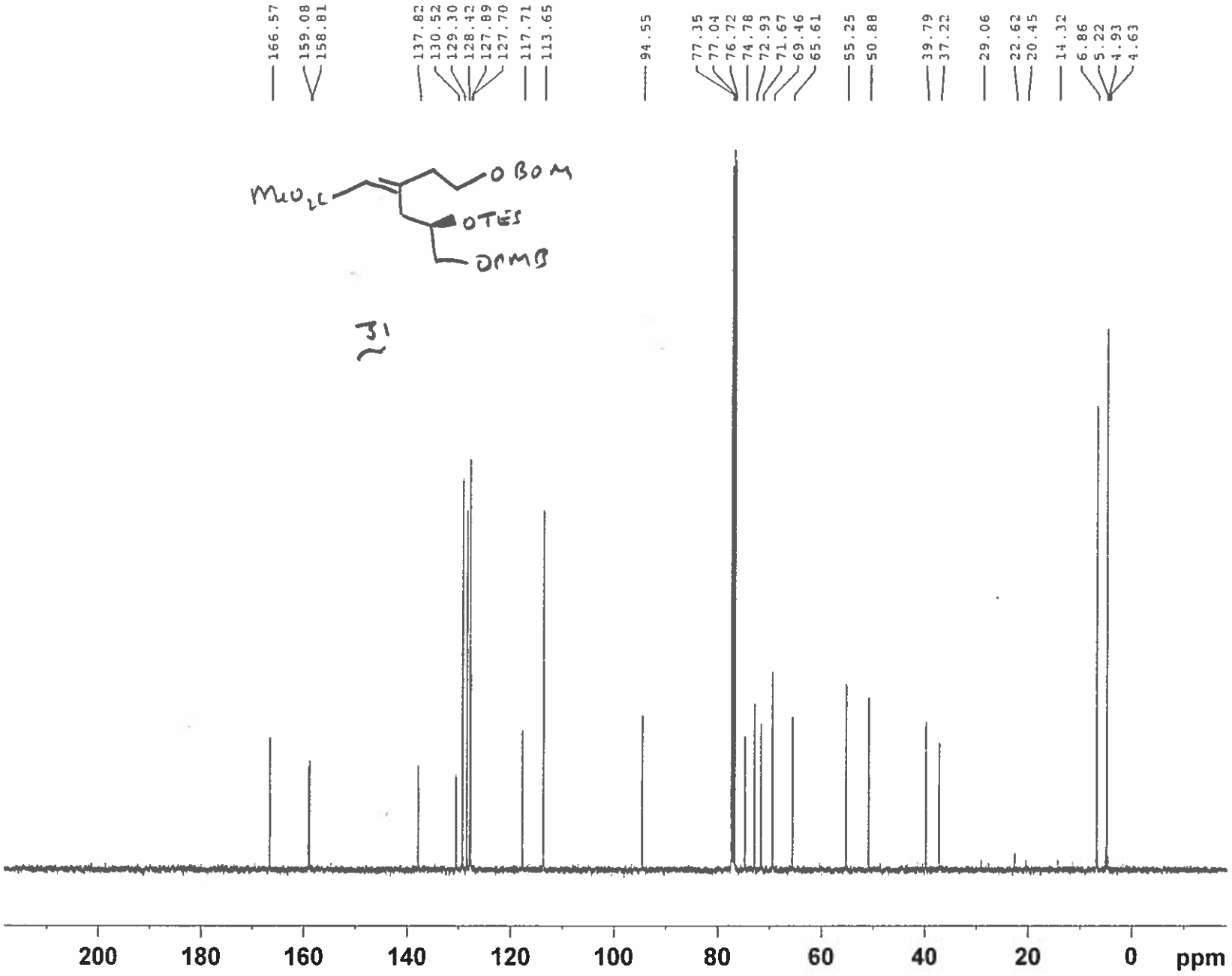
compoundE
mPROTONnight CDCl3 {C:\bruk400data\2008\May} ejt 5

31

NAME	2008-05-11-ejt-1
EXPNO	40
PROCNO	1
Date_	20080512
Time	0.43
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	90.5
DW	60.500 usec
DE	9.40 usec
TE	295.7 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300396 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



compoundE
mCARBONnight CDCl3 {C:\bruk400data\2008\May} ejt 5

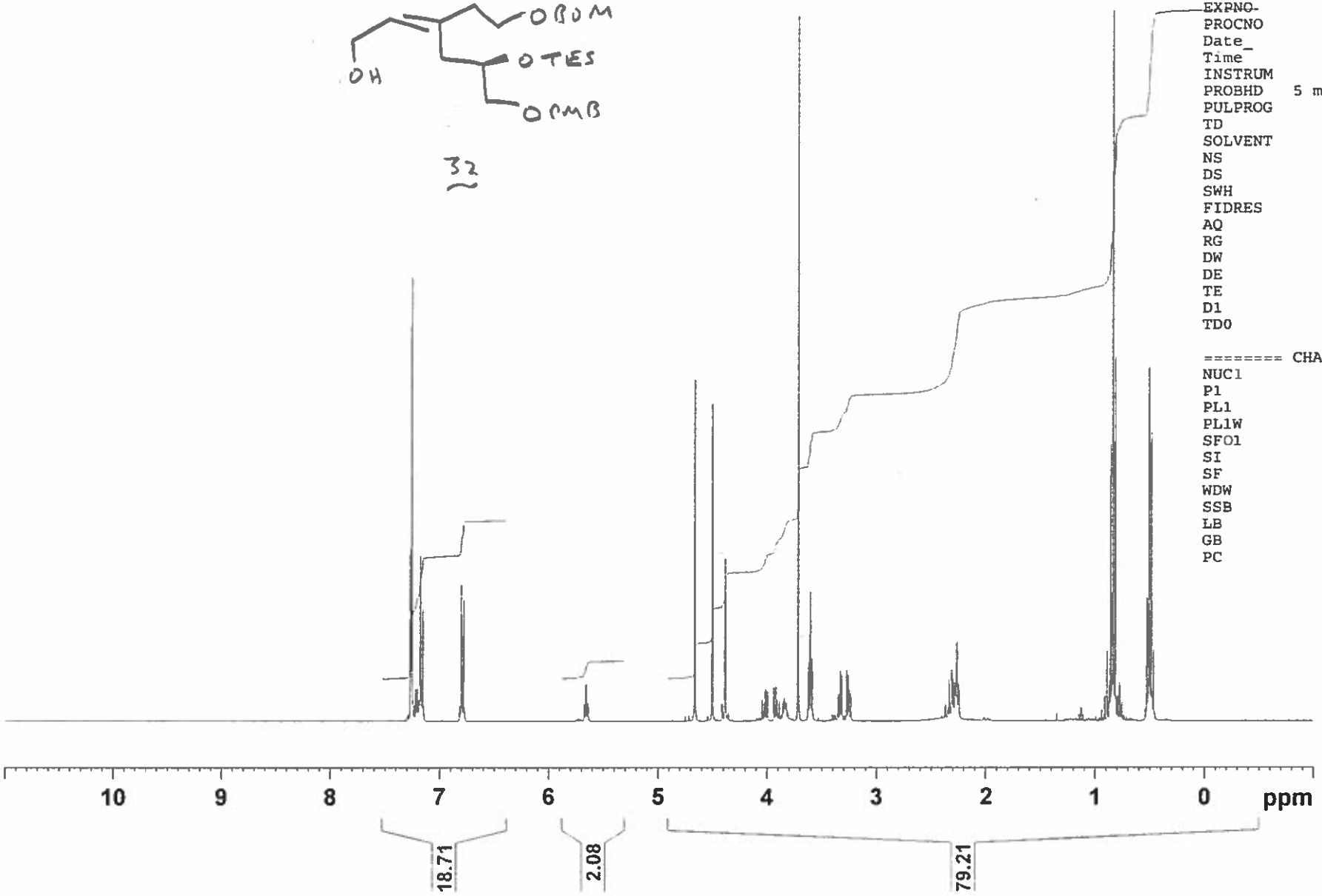


NAME	2008-05-11-ejt-1
EXPNO	42
PROCNO	1
Date_	20080512
Time	1.22
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	512
DS	2
SWH	23809.523 Hz
FIDRES	0.363304 Hz
AQ	1.3763061 sec
RG	512
DW	21.000 usec
DE	7.66 usec
TE	297.0 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6228294 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 usec
PL2	-3.60 dB
PL12	13.80 dB
PL13	14.00 dB
PL2W	17.83863831 W
PL12W	0.32460985 W
PL13W	0.31000000 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6127690 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

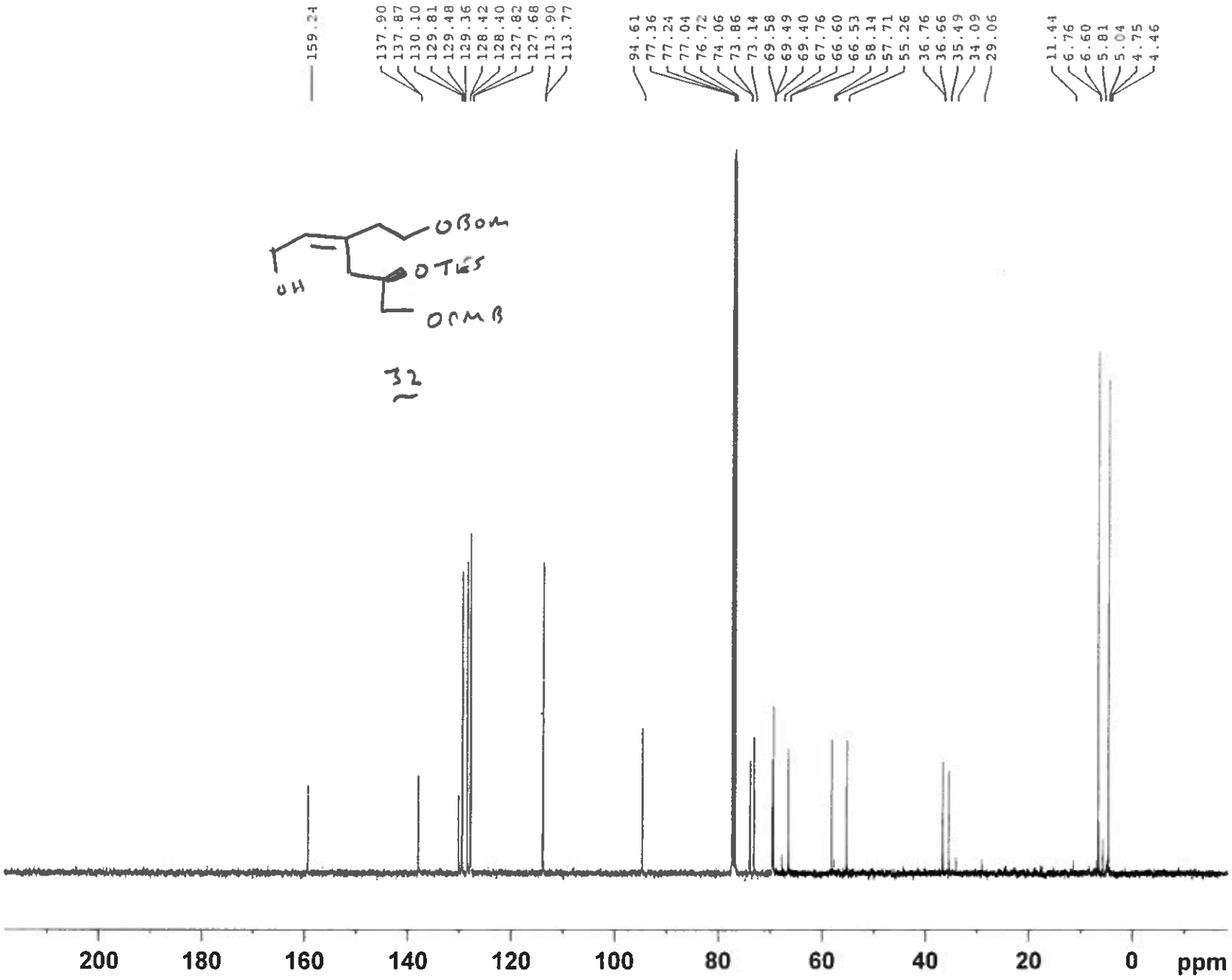
compoundD
mPROTONnight CDCl3 {C:\bruk400data\2008\May} ejt 4

32

NAME	2008-05-11-ejt-1
EXPNO	30
PROCNO	1
Date_	20080511
Time	23.40
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	90.5
DW	60.500 usec
DE	9.40 usec
TE	295.8 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300388 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

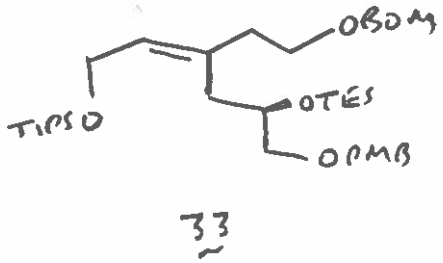


compoundD
mCARBONnight CDCl3 {C:\bruk400data\2008\May} ejt 4



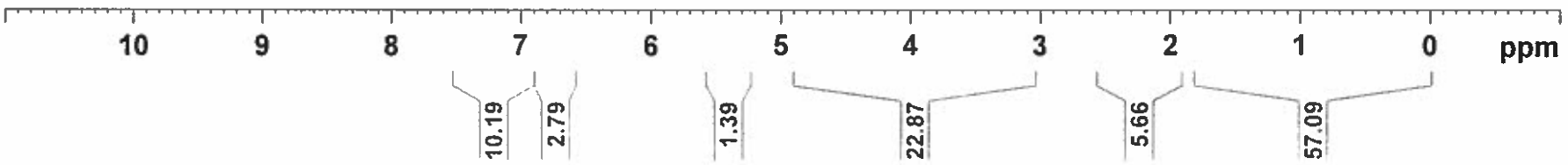
NAME	2008-05-11-ejt-1
EXPNO	32
PROCNO	1
Date_	20080512
Time	0.18
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	512
DS	2
SWH	23809.523 Hz
FIDRES	0.363304 Hz
AQ	1.3763061 sec
RG	512
DW	21.000 usec
DE	7.66 usec
TE	297.0 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6228294 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 usec
PL2	-3.60 dB
PL12	13.80 dB
PL13	14.00 dB
PL2W	17.83863831 W
PL12W	0.32460985 W
PL13W	0.31000000 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6127690 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

compoundC
mPROTONnight CDCl3 {C:\bruk400data\2008\May} ejt 2

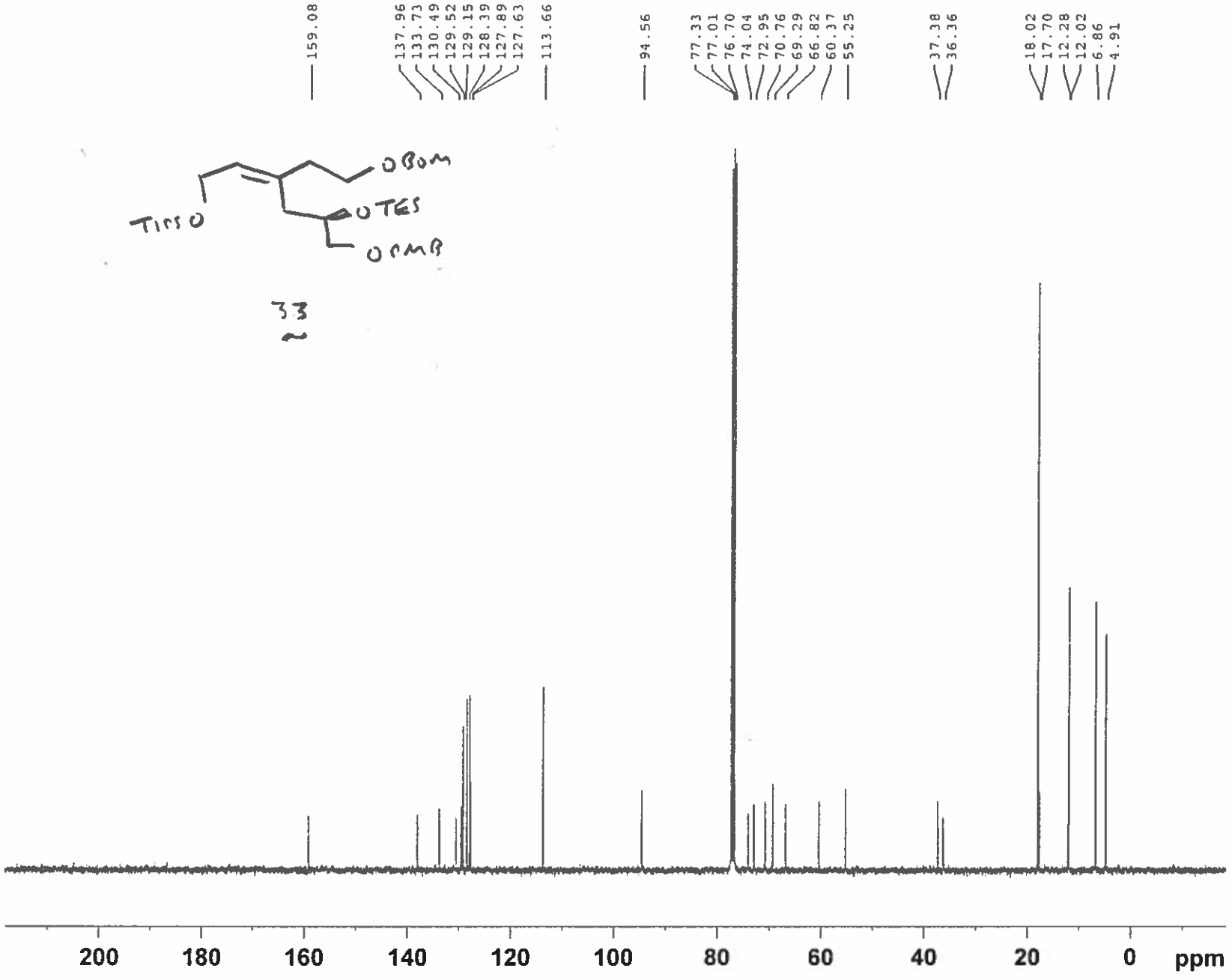


33

NAME	2008-05-11-ejt-1
EXPNO	10
PROCNO	1
Date_	20080511
Time	21.33
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	90.5
DW	60.500 usec
DE	9.40 usec
TE	295.7 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300357 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



compoundC
mCARBONnight CDCl3 {C:\bruk400data\2008\May} ejt 2



NAME	2008-05-11-ejt-1
EXPNO	12
PROCNO	1
Date_	20080511
Time	22.11
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	512
DS	2
SWH	23809.523 Hz
FIDRES	0.363304 Hz
AQ	1.3763061 sec
RG	512
DW	21.000 usec
DE	7.66 usec
TE	297.1 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6228294 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 usec
PL2	-3.60 dB
PL12	13.80 dB
PL13	14.00 dB
PL2W	17.83863831 W
PL12W	0.32460985 W
PL13W	0.31000000 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6127690 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

BOM-Free OH
mPROTONnight CDCl3 /opt/topspin ejt 13

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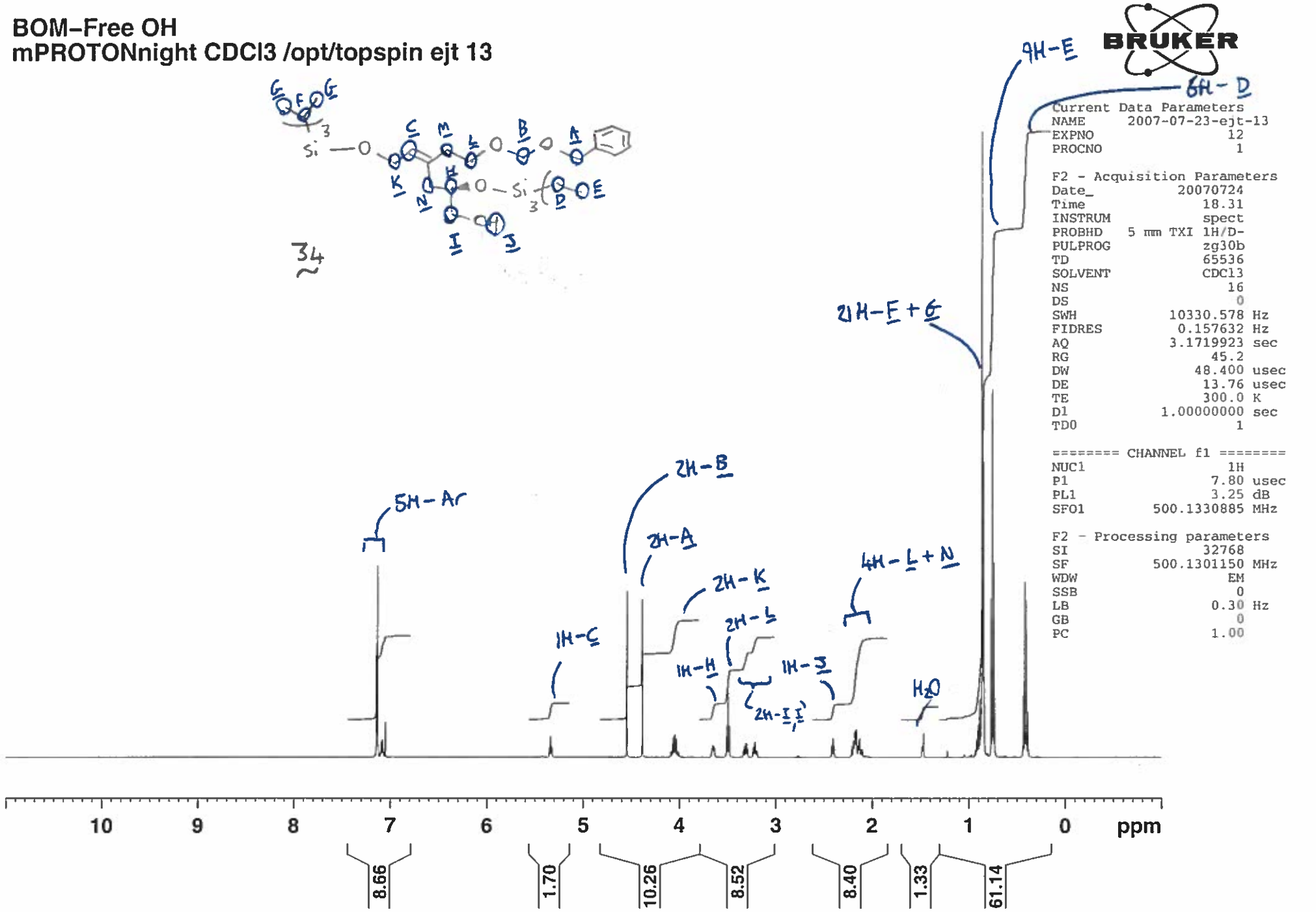
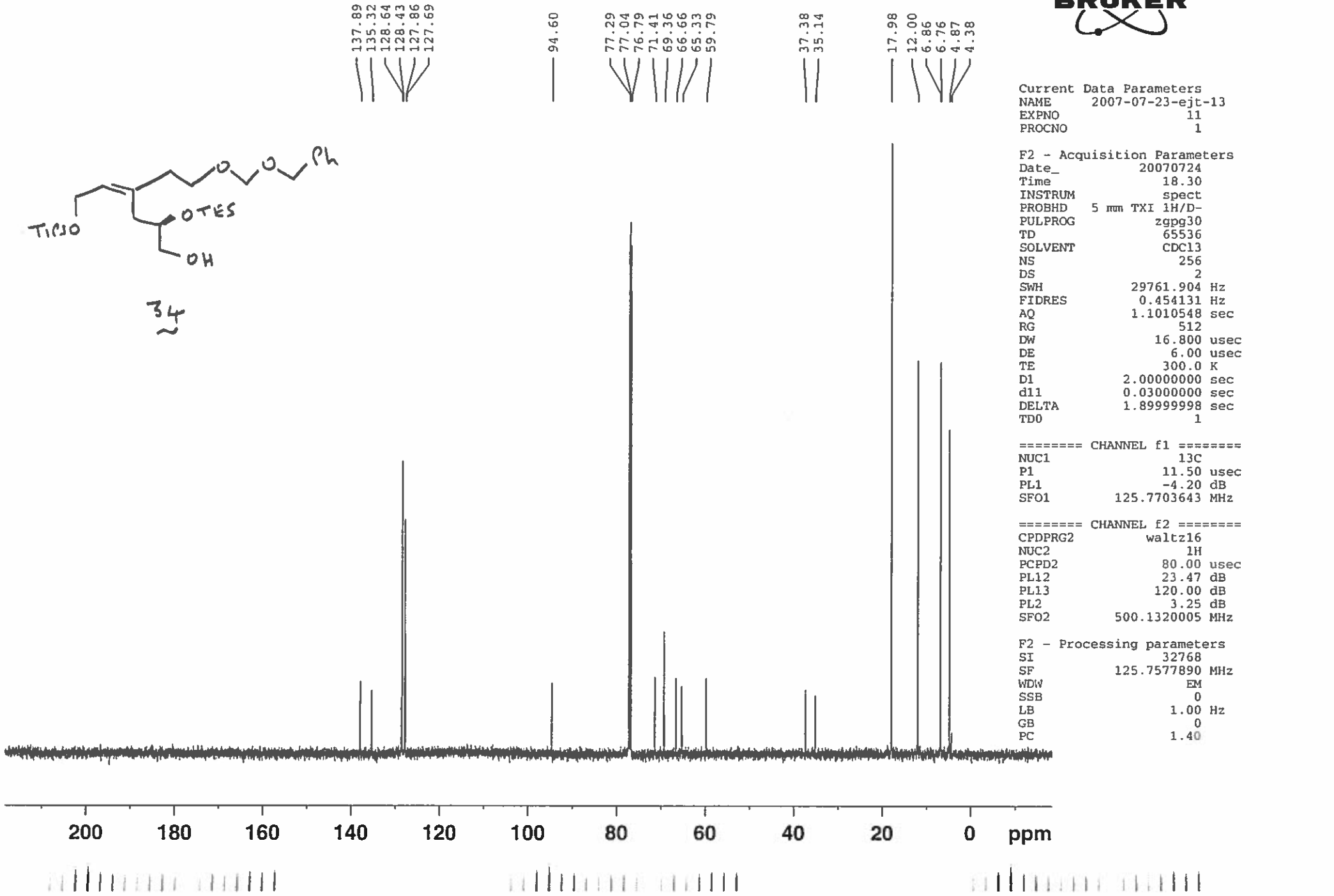



```
Current Data Parameters
NAME      2007-07-23-ejt-13
EXPNO                   12
PROCNO                   1

F2 - Acquisition Parameters
Date_              20070724
Time                 18.31
INSTRUM              spect
PROBHD    5 mm TXI 1H/D-
PULPROG              zg30b
TD                   65536
SOLVENT              CDCl3
NS                      16
DS                       0
SWH            10330.578 Hz
FIDRES          0.157632 Hz
AQ             3.1719923 sec
RG                    45.2
DW                48.400 usec
DE                13.76 usec
TE                 300.0 K
D1            1.00000000 sec
TD0                      1

======== CHANNEL f1 ========
NUC1                    1H
P1                  7.80 usec
PL1                 3.25 dB
SFO1          500.1330885 MHz

F2 - Processing parameters
SI                   32768
SF            500.1301150 MHz
WDW                     EM
SSB                      0
LB                  0.30 Hz
GB                       0
PC                    1.00
```

BOM–Free OH
mCARBONnight CDCl3 /opt/topspin ejt 13

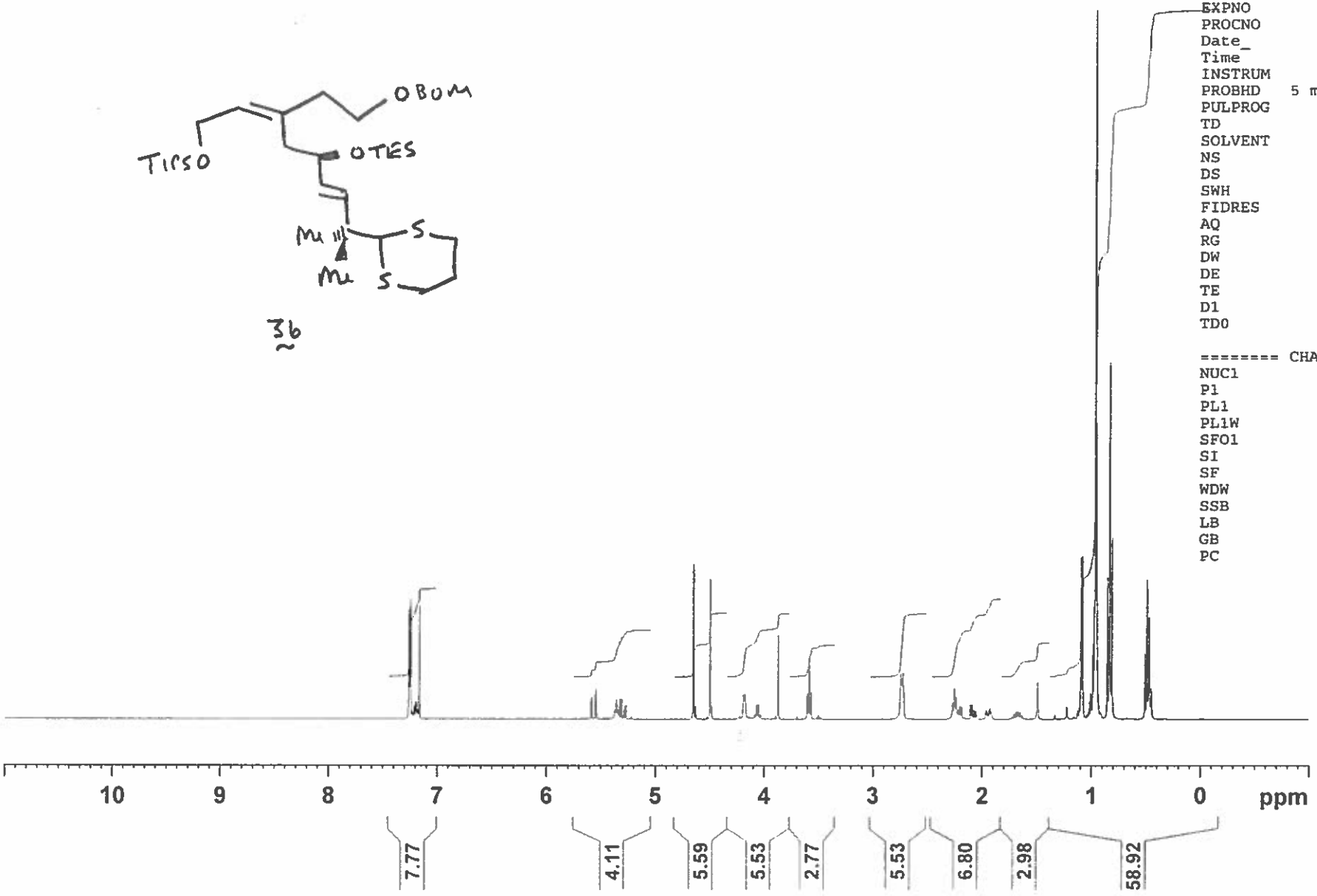



```
Current Data Parameters
NAME      2007-07-23-ejt-13
EXPNO                    11
PROCNO                    1

F2 - Acquisition Parameters
Date_              20070724
Time                  18.30
INSTRUM               spect
PROBHD   5 mm TXI 1H/D-
PULPROG              zgpg30
TD                    65536
SOLVENT               CDCl3
NS                      256
DS                        2
SWH               29761.904 Hz
FIDRES            0.454131 Hz
AQ                1.1010548 sec
RG                      512
DW                 16.800 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                  11.50 usec
PL1                 -4.20 dB
SFO1          125.7703643 MHz

======== CHANNEL f2 ========
CPDPRG2            waltz16
NUC2                    1H
PCPD2               80.00 usec
PL12                23.47 dB
PL13               120.00 dB
PL2                 3.25 dB
SFO2          500.1320005 MHz

F2 - Processing parameters
SI                      32768
SF            125.7577890 MHz
WDW                        EM
SSB                         0
LB                   1.00 Hz
GB                          0
PC                       1.40
```

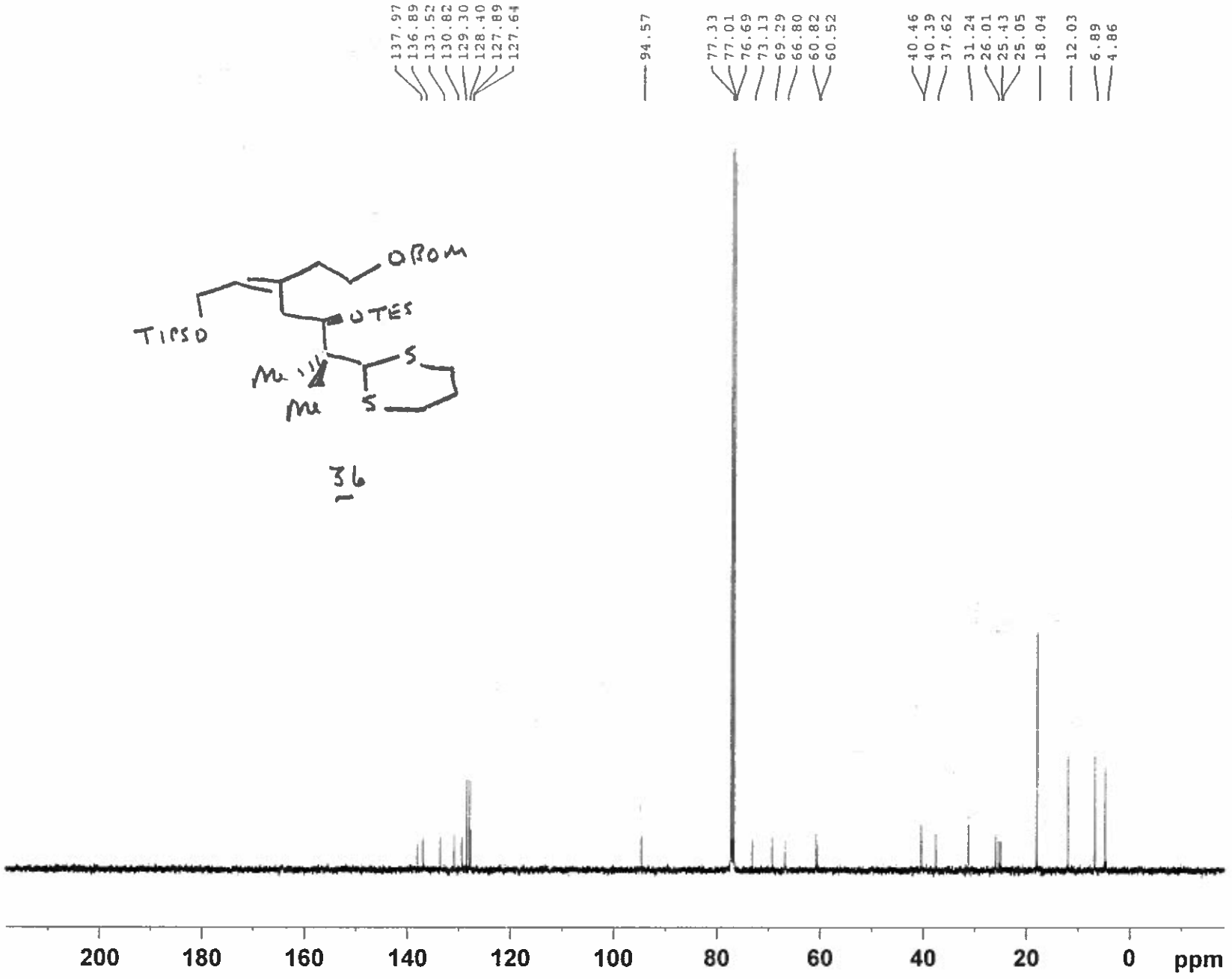
compoundA
mPROTONnight CDCl3 {C:\bruk400data\2008\May} ejt 1

36

NAME	2008-05-11-ejt-1
EXPNO	11
PROCNO	1
Date_	20080511
Time	20.29
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	203
DW	60.500 usec
DE	9.40 usec
TE	295.6 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300445 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



compoundA
mCARBONnight CDCl3 {C:\bruk400data\2008\May} ejt 1

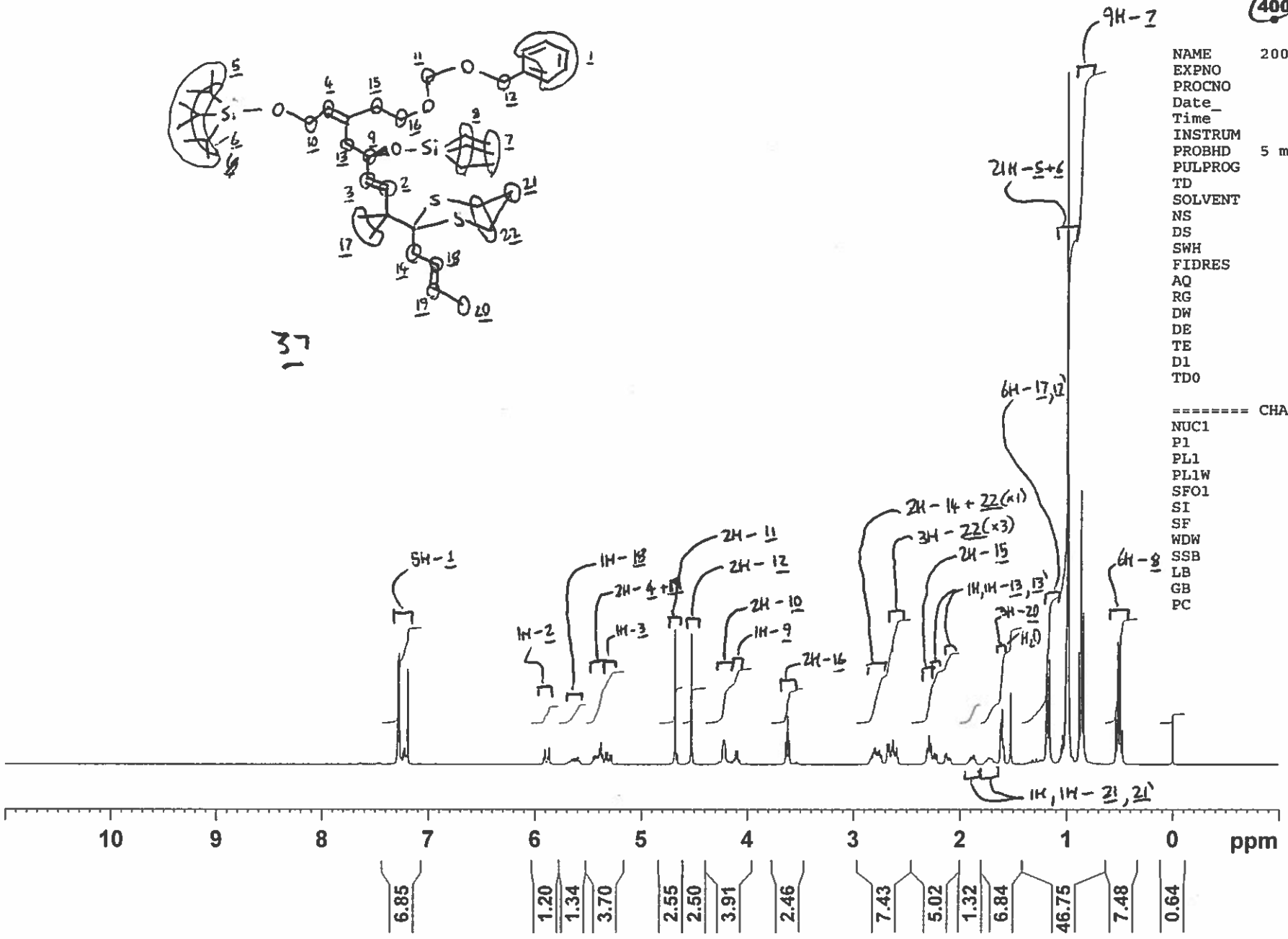


NAME	2008-05-11-ejt-1
EXPNO	13
PROCNO	1
Date_	20080511
Time	21.08
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	512
DS	2
SWH	23809.523 Hz
FIDRES	0.363304 Hz
AQ	1.3763061 sec
RG	512
DW	21.000 usec
DE	7.66 usec
TE	297.0 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6228294 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 usec
PL2	-3.60 dB
PL12	13.80 dB
PL13	14.00 dB
PL2W	17.83863831 W
PL12W	0.32460985 W
PL13W	0.31000000 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6127690 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

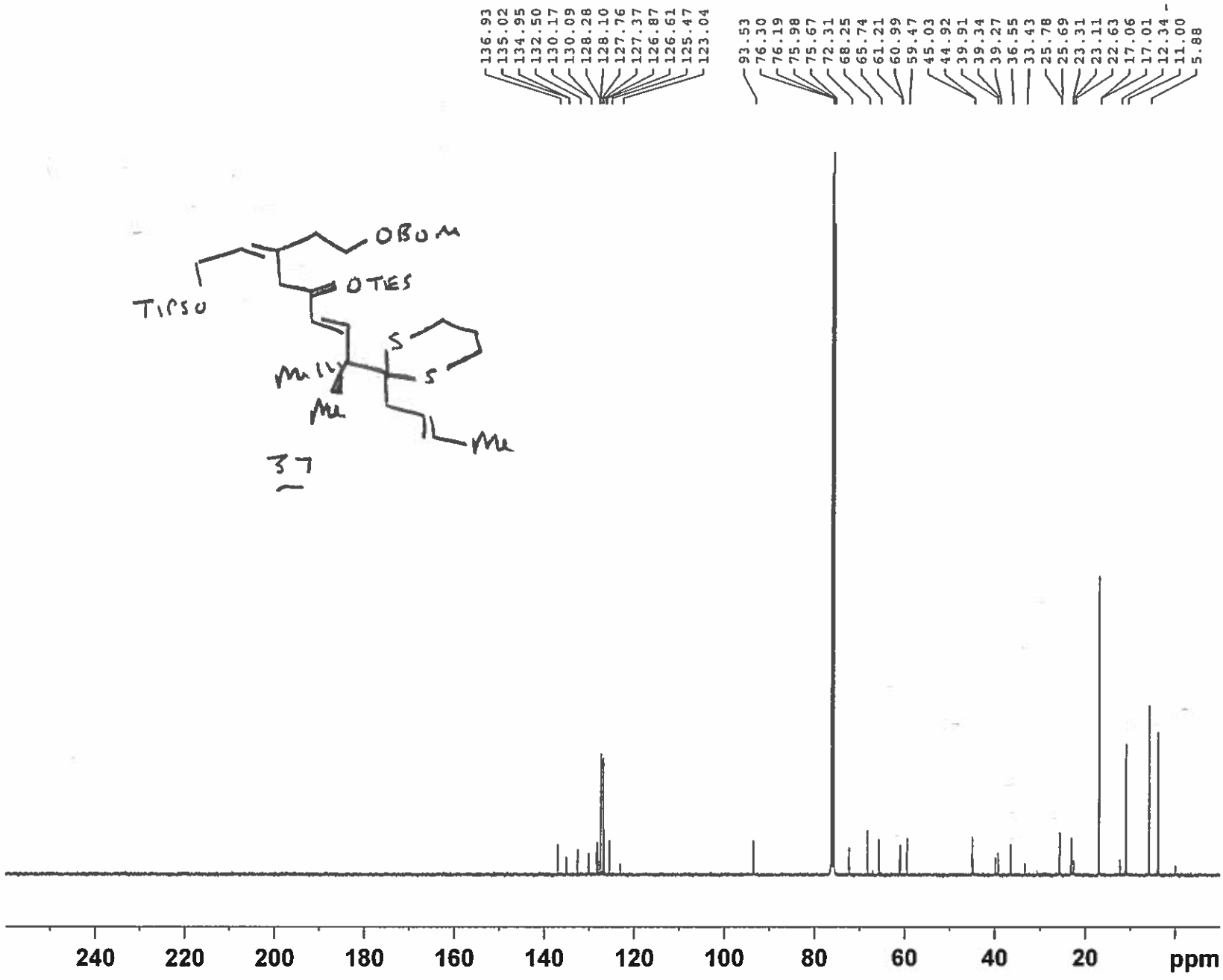
P2I4
mPROTON CDCl3 {e:\bruk400data\2008\Nov} ejt 38

37

NAME	2008-11-12-ejt-38
EXPNO	10
PROCNO	1
Date_	20081112
Time	10.26
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	64
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	181
DW	60.500 usec
DE	9.40 usec
TE	293.5 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300369 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

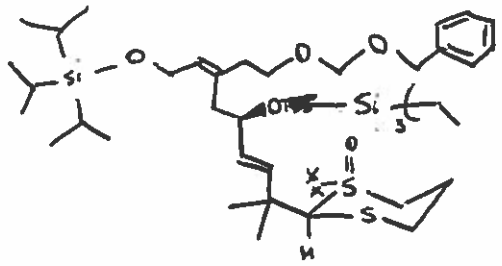


P2I4
mCARBONnight CDCl3 {e:\bruk400data\2008\Nov} ejt 38



NAME	2008-11-12-ejt-38
EXPNO	14
PROCNO	1
Date_	20081112
Time	20.57
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	3072
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	294.3 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6128734 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

SH239_A
mPROTON CDCl3 /opt/topspin ejt 39



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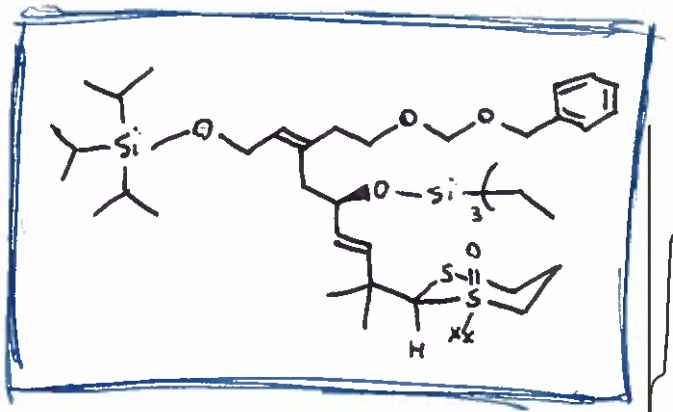


38

Current Data Parameters

NAME	2007-03-07-ejt-39
EXPNO	10
PROCNO	1

F2 - Acquisition Parameters

Date_	20070307
Time	15.56
INSTRUM	spect
PROBHD	5 mm BBO BB-1H
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	10330.578 Hz
FIDRES	0.157632 Hz
AQ	3.1719923 sec
RG	90.5
DW	48.400 usec
DE	13.47 usec
TE	300.0 K
D1	1.00000000 sec
TD0	1

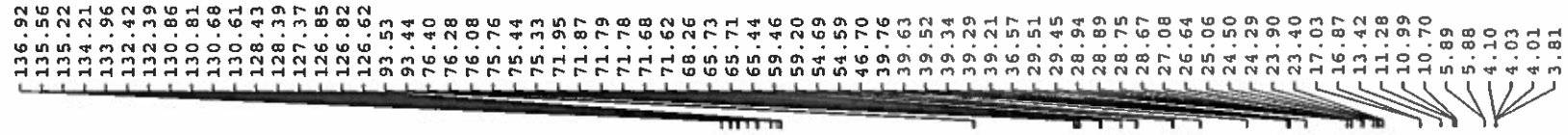
======== CHANNEL f1 ========

NUC1	1H
P1	9.20 usec
PL1	-0.30 dB
SFO1	500.1330885 MHz

F2 - Processing parameters

SI	32768
SF	500.1300398 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

BOM_sulfoxides
mCARBONnight CDCl3 {C:\bruk400data\2008\Nov} ejt 14



38
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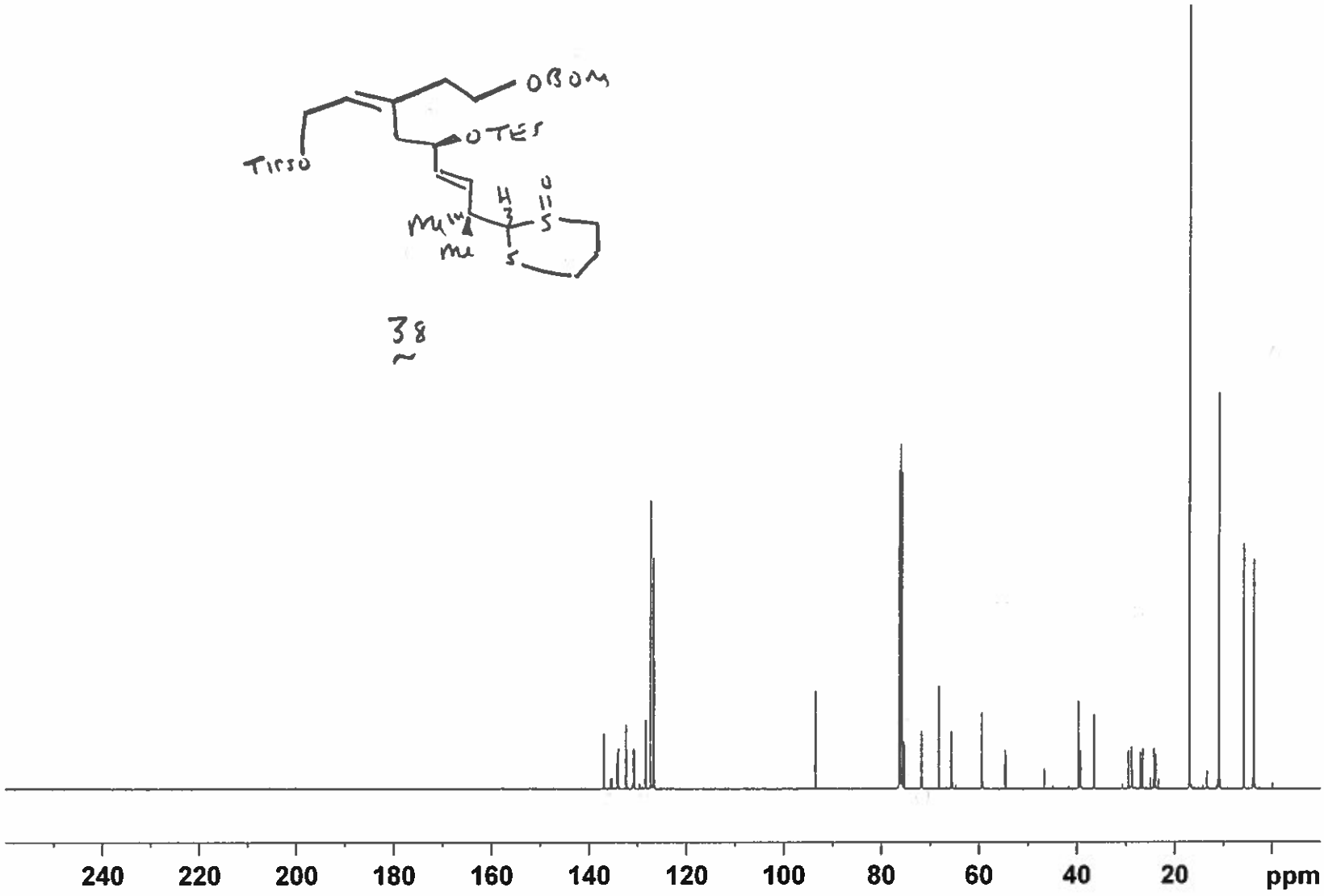
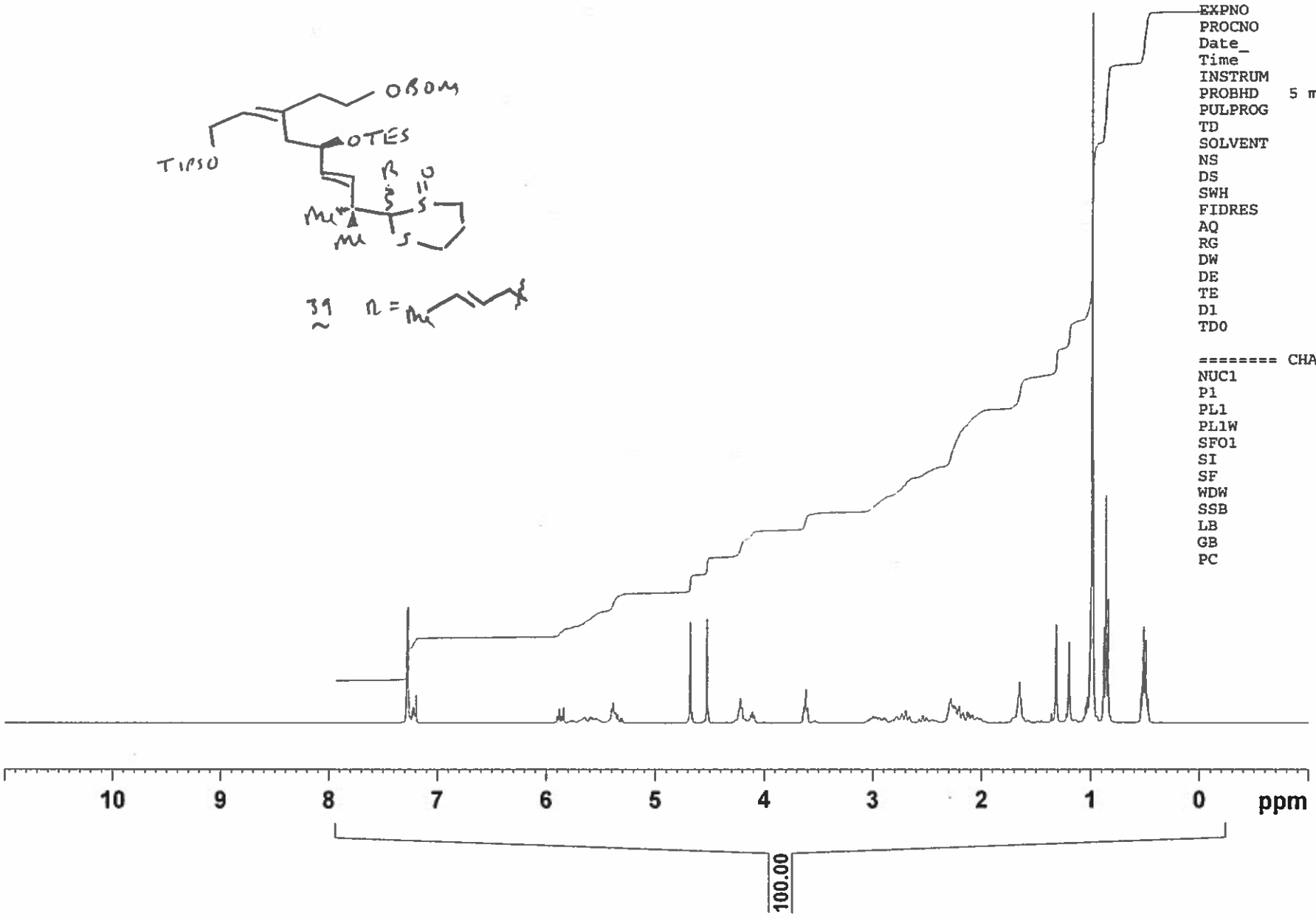


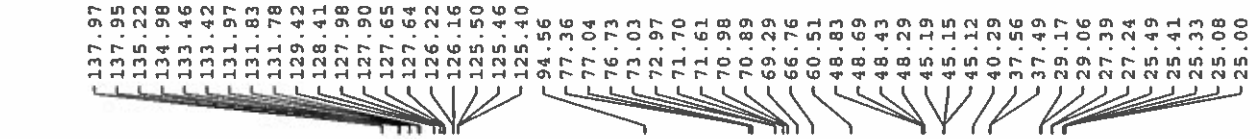
NAME	2008-11-05-ejt-14
EXPNO	21
PROCNO	1
Date_	20081106
Time	20.56
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	3072
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	294.6 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6128723 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

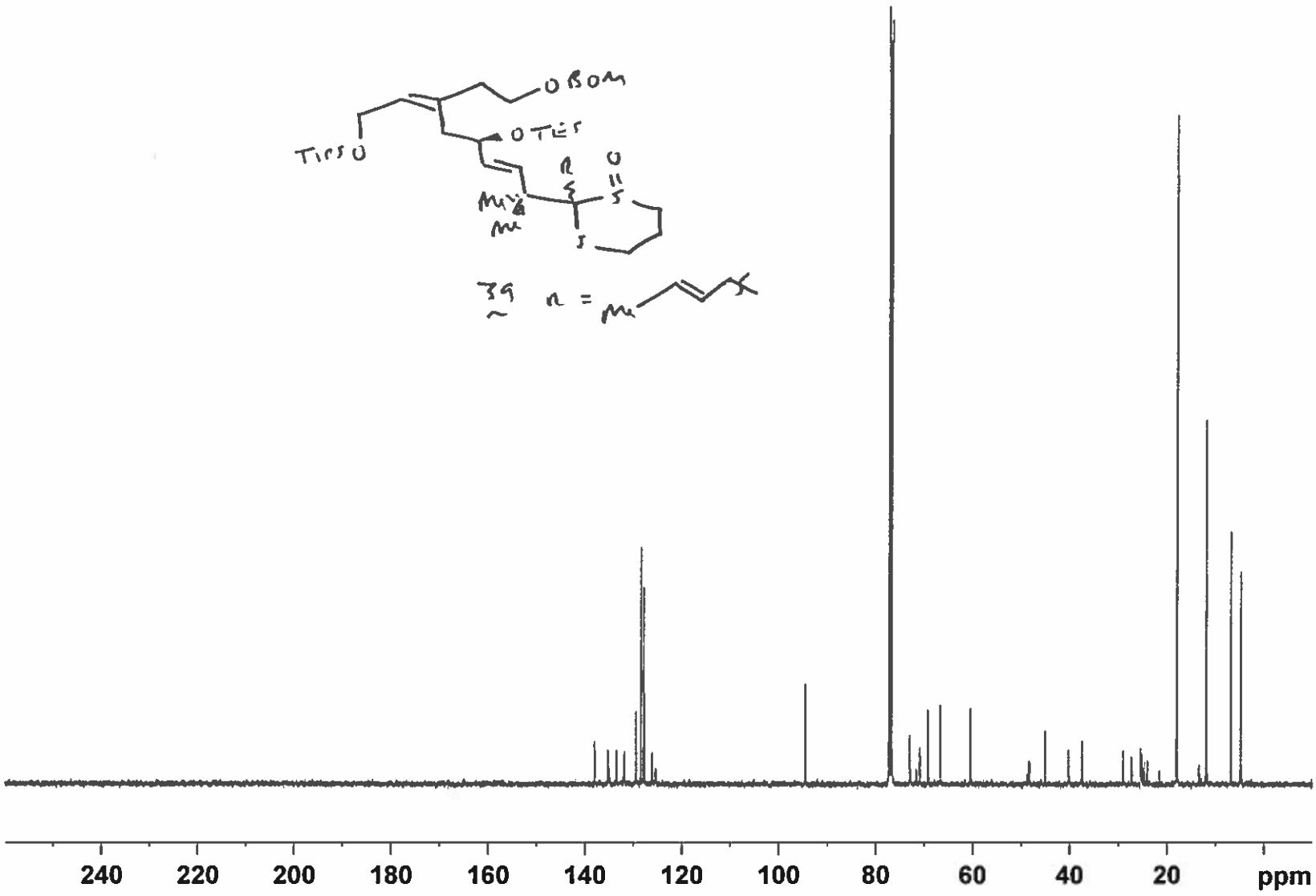
Crotyl BOM
mPROTONnight CDCl3 {C:\bruk400data\2008\Nov} ejt 39

NAME	2008-11-10-ejt-39
EXPNO	11
PROCNO	1
Date_	20081111
Time	4.03
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	64
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	90.5
DW	60.500 usec
DE	9.40 usec
TE	293.6 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300355 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



Crotyl BOM
mCARBONnight CDCl3 {C:\bruk400data\2008\Nov} ejt 39





NAME	2008-11-10-ejt-39
EXPNO	13
PROCNO	1
Date_	20081111
Time	5.43
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	1280
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	294.3 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6127690 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

SH261_B
mPROTON CDCl3 /opt/topspin ejt 32

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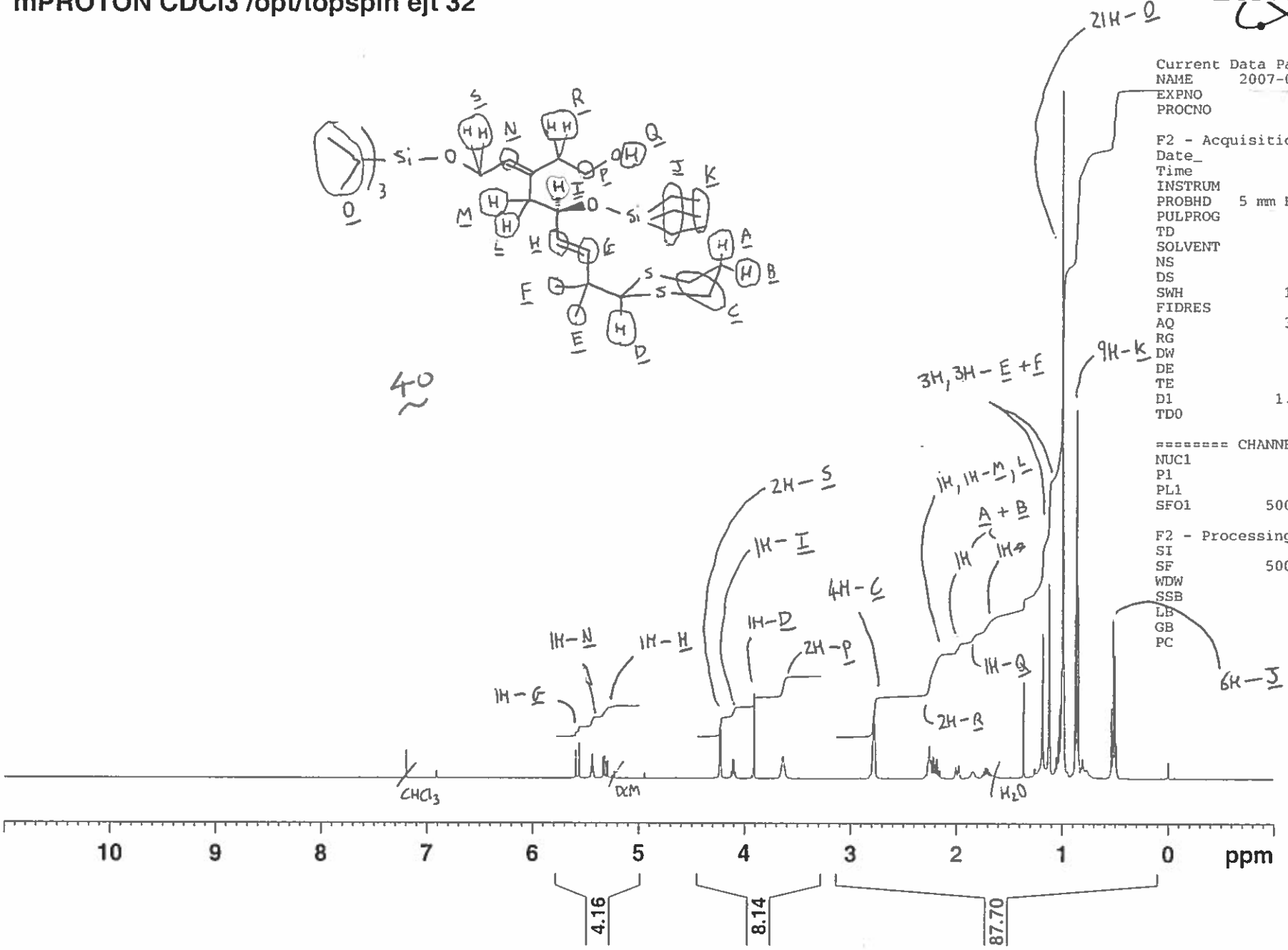



```
Current Data Parameters
NAME      2007-04-12-ejt-32
EXPNO                   10
PROCNO                   1

F2 - Acquisition Parameters
Date_              20070412
Time                  11.01
INSTRUM               spect
PROBHD    5 mm BBO BB-1H
PULPROG               zg30b
TD                    65536
SOLVENT               CDCl3
NS                       32
DS                        0
SWH             10330.578 Hz
FIDRES          0.157632 Hz
AQ              3.1719923 sec
RG                     90.5
DW                48.400 usec
DE                13.47 usec
TE                300.0 K
D1             1.00000000 sec
TD0                      1

======== CHANNEL f1 =======
NUC1                    1H
P1                 9.20 usec
PL1                -0.30 dB
SFO1          500.1330885 MHz

F2 - Processing parameters
SI                    32768
SF          500.1300383 MHz
WDW                     EM
SSB                      0
LB                0.30 Hz
GB                       0
PC                    1.00
```

SH266_C
13C OBSERVE

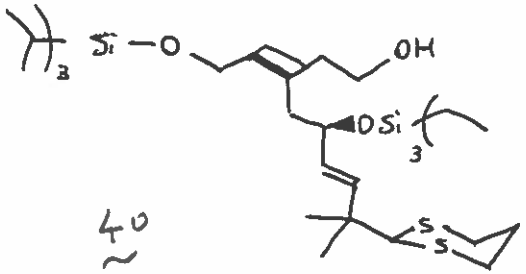
pad=2 run with findz0 before acquisition

Automation directory: /data/nmrdata/Apr20
File : 0403

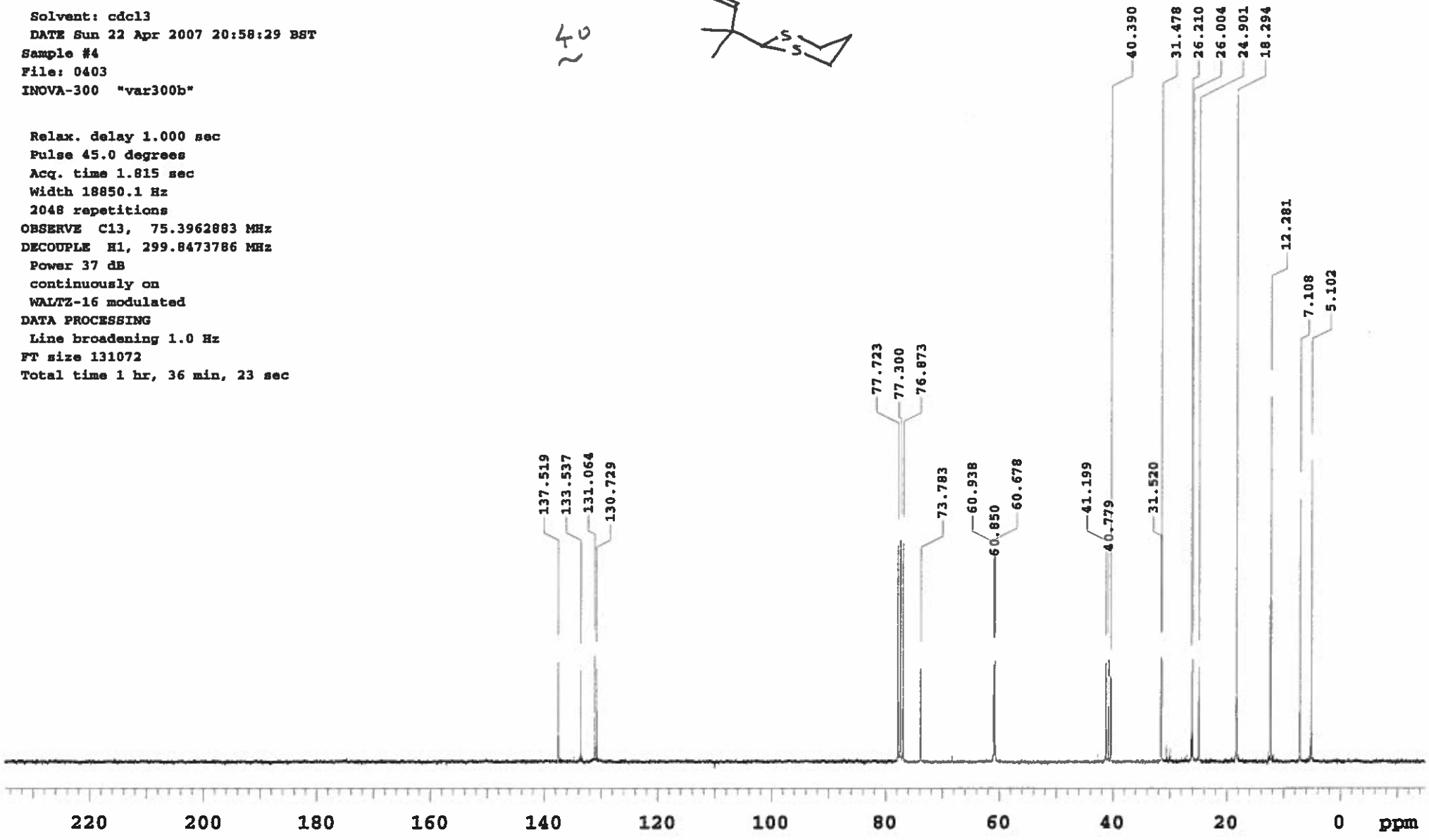
Pulse Sequence: s2pul

Solvent: cdcl3
DATE Sun 22 Apr 2007 20:58:29 BST
Sample #4
File: 0403
INOVA-300 "var300b"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.815 sec
Width 18850.1 Hz
2048 repetitions
OBSERVE C13, 75.3962883 MHz
DECOUPLE H1, 299.8473786 MHz
Power 37 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 131072
Total time 1 hr, 36 min, 23 sec



40



mPROTON CDCl3 {C:\bruk400data\2008\Nov} ejt 56

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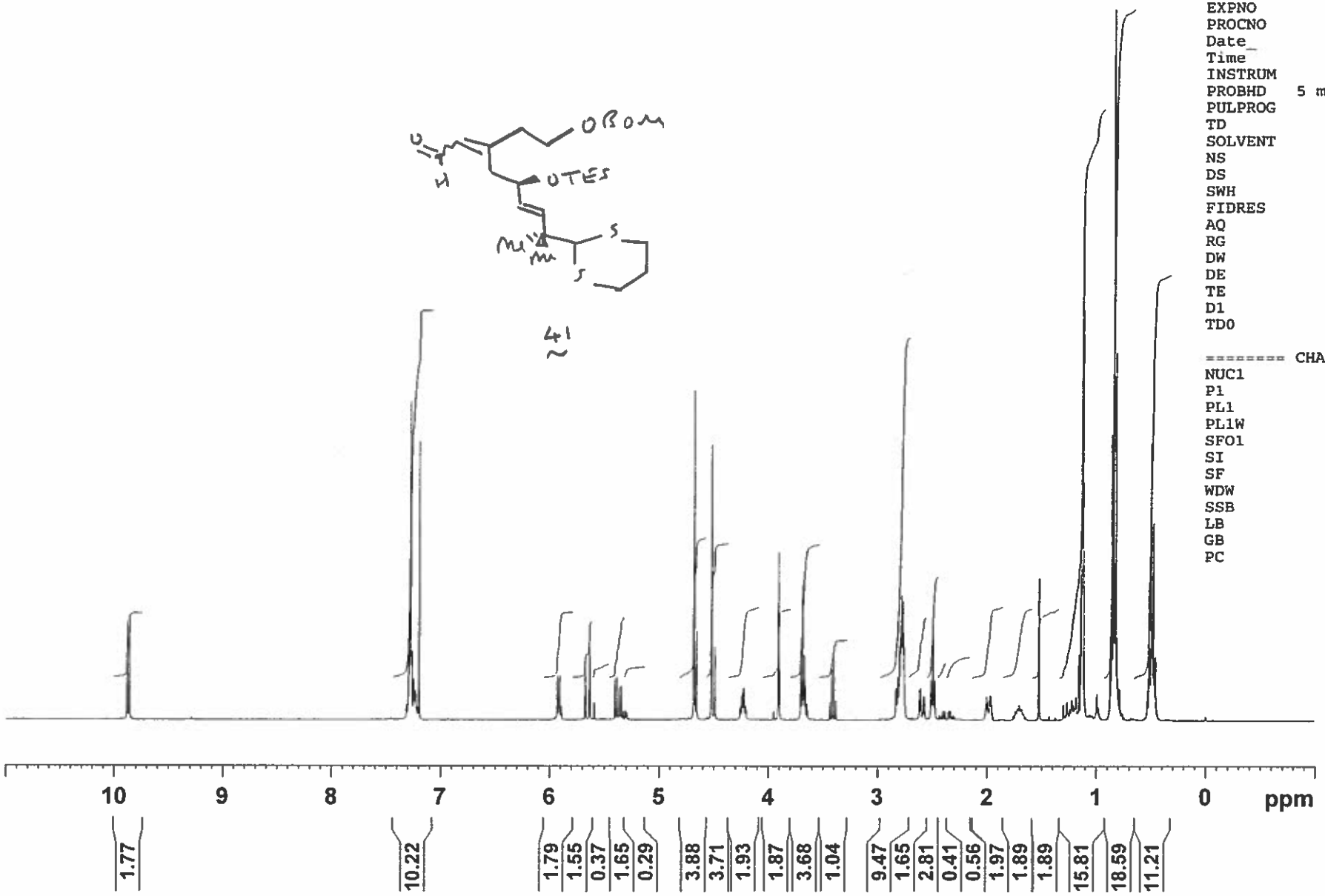
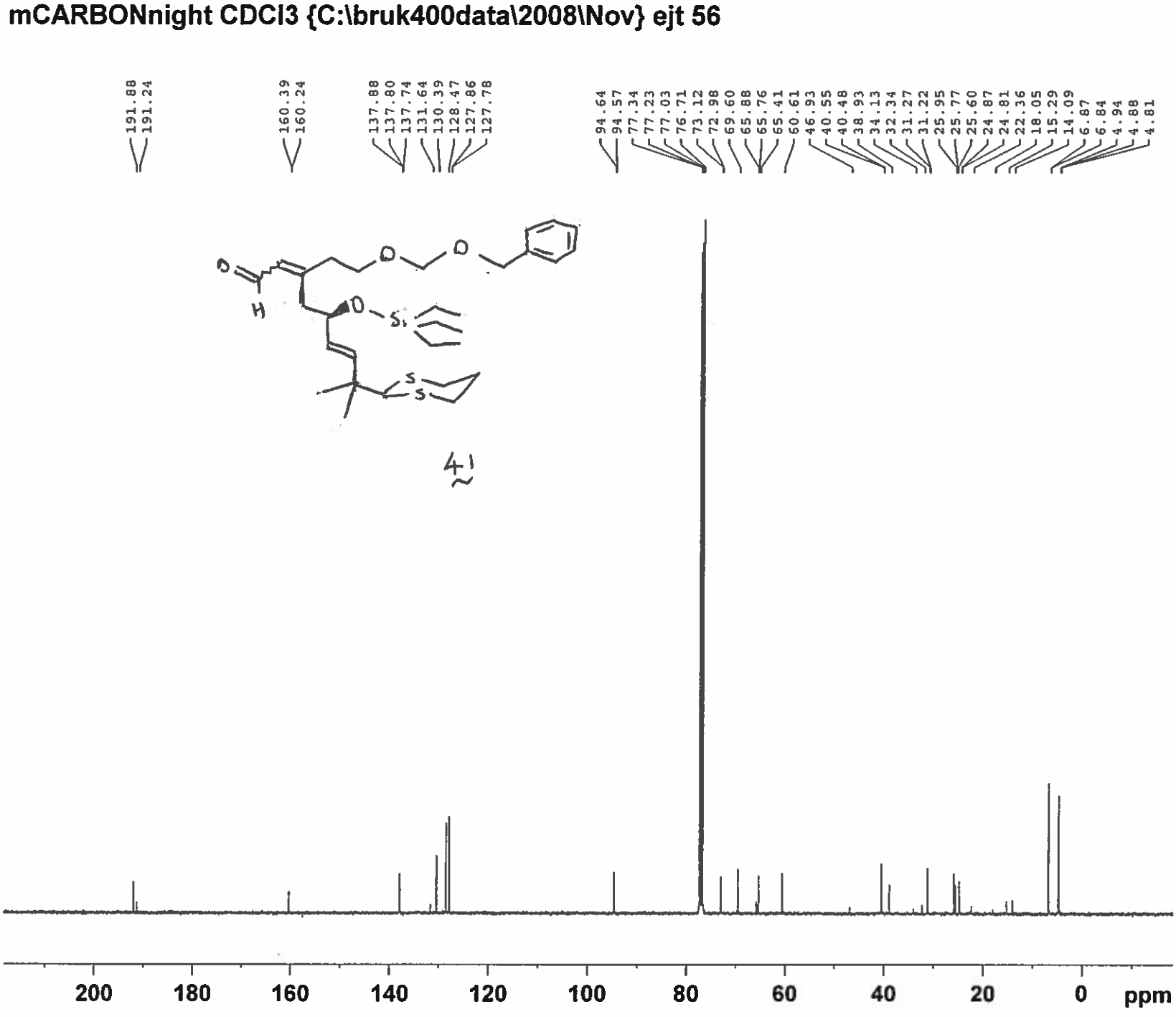
NAME	2008-11-04-ejt-56
EXPNO	10
PROCNO	1
Date_	20081104
Time	9.12
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	64
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	203
DW	60.500 usec
DE	9.40 usec
TE	293.0 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300360 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

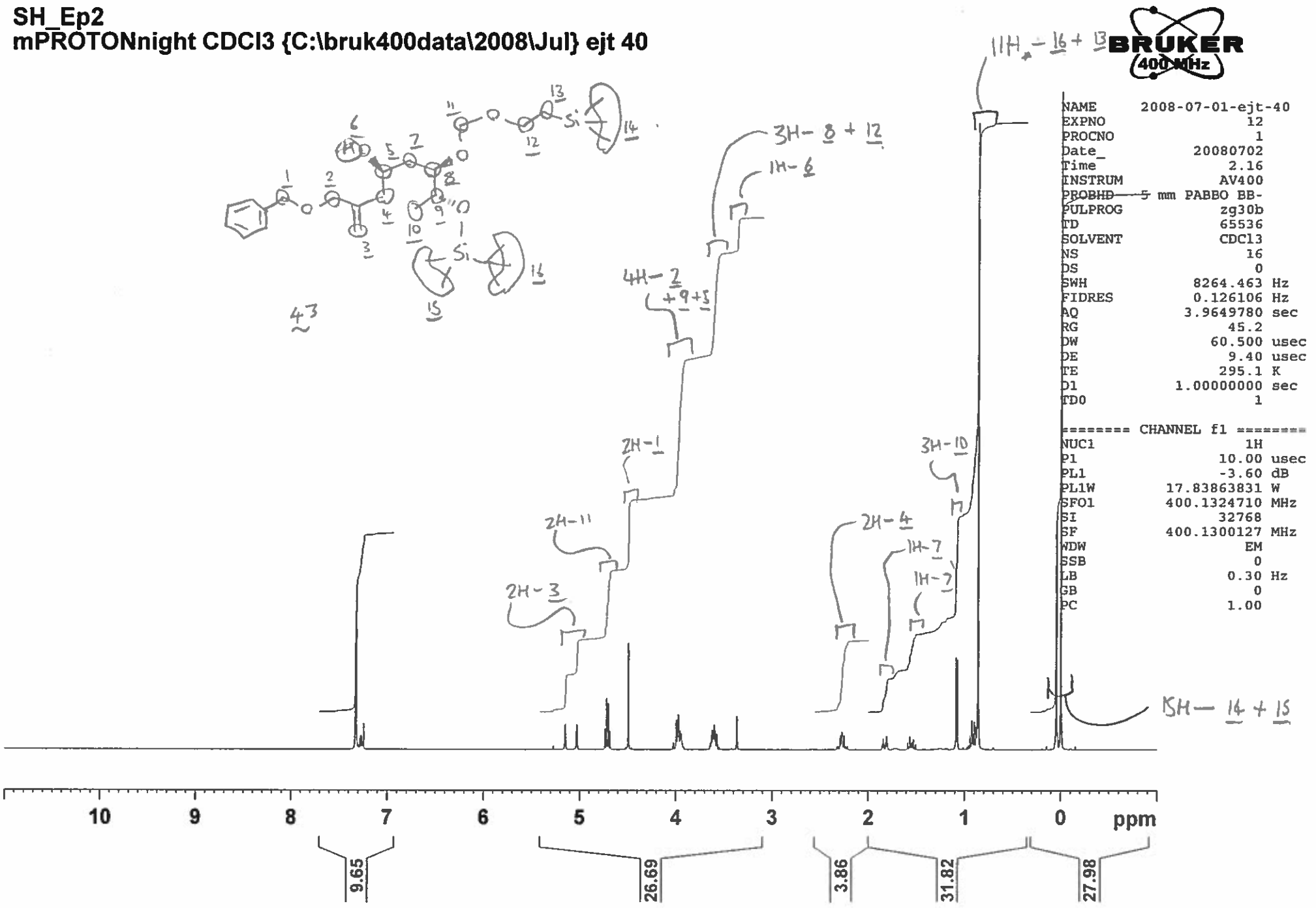


mCARBONnight CDCl3 {C:\bruk400data\2008\Nov} ejt 56

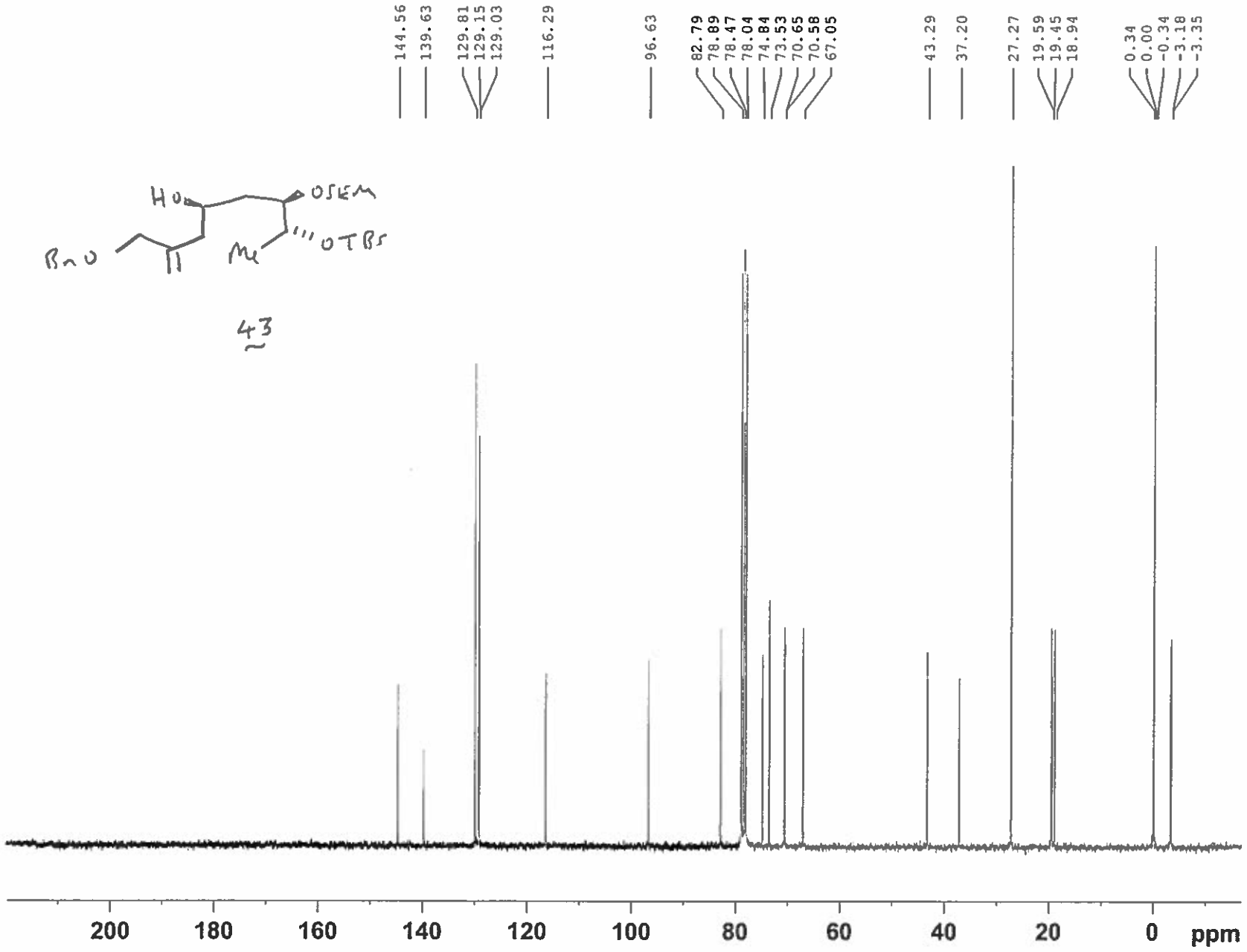


NAME	2008-11-04-ejt-56
EXPNO	12
PROCNO	1
Date_	20081104
Time	20.48
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	3072
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	294.2 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6127690 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

SH_Ep2
mPROTONnight CDCl3 {C:\bruk400data\2008\Jul} ejt 40



SH_62
mCARBONnight CDCl3 {C:\bruk300data\2008\Oct} ejt 20



BRUKER 300 MHz

Current Data Parameters
NAME 2008-10-22-ejt-20
EXPNO 21
PROCNO 1

F2 - Acquisition Parameters

Date_	20081024
Time	20.51
INSTRUM	DPX300
PROBHD	5 mm DUL 13C-1
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	1024
DS	2
SWH	17857.143 Hz
FIDRES	0.272478 Hz
AQ	1.8350580 sec
RG	18390.4
DW	28.000 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	10.00 usec
PL1	-1.20 dB
SFO1	75.4300300 MHz

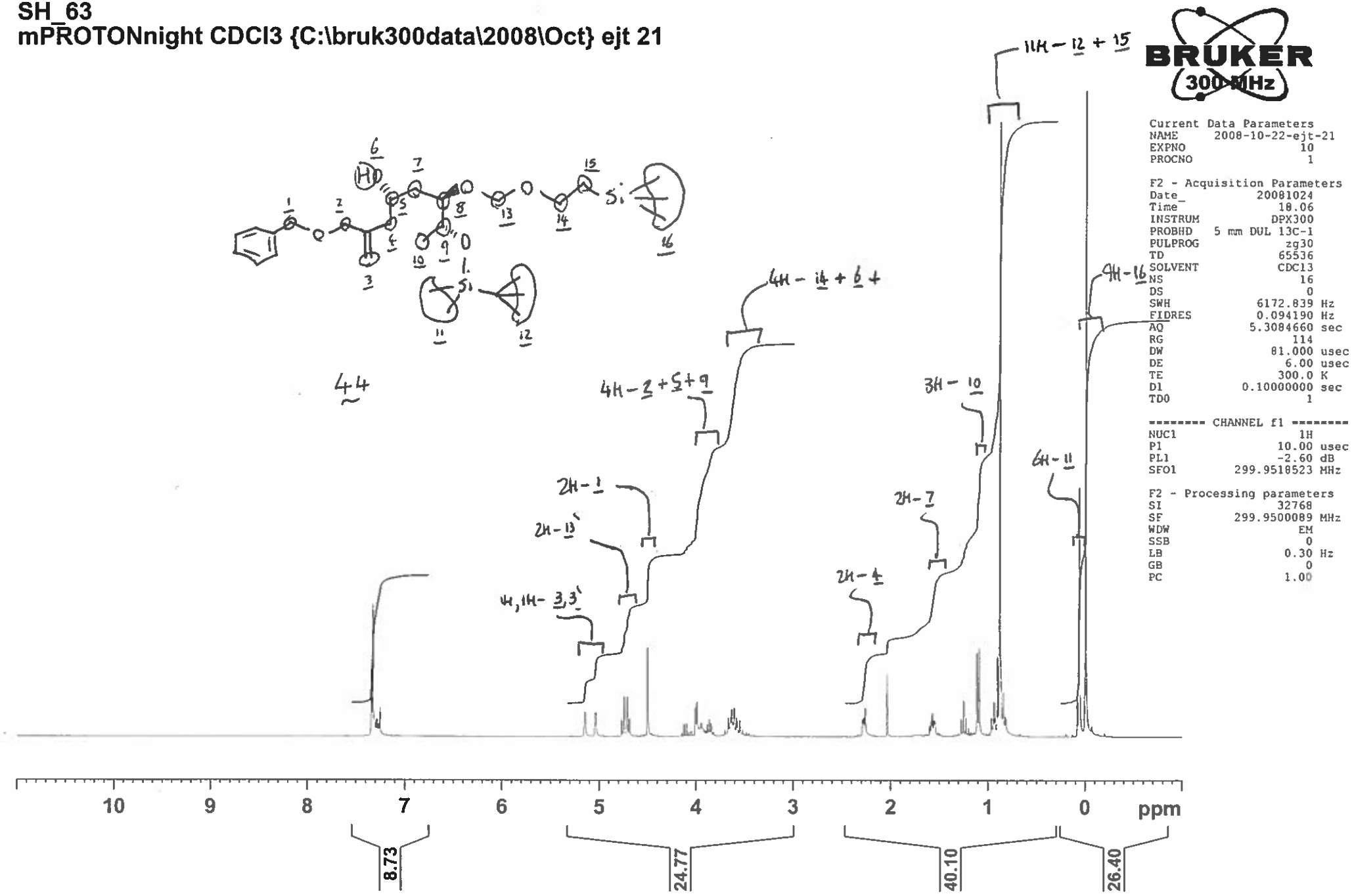
======== CHANNEL f2 ========

CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 usec
PL2	-2.60 dB
PL12	14.50 dB
PL13	15.00 dB
SFO2	299.9512000 MHz

F2 - Processing parameters

SI	32768
SF	75.4223800 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

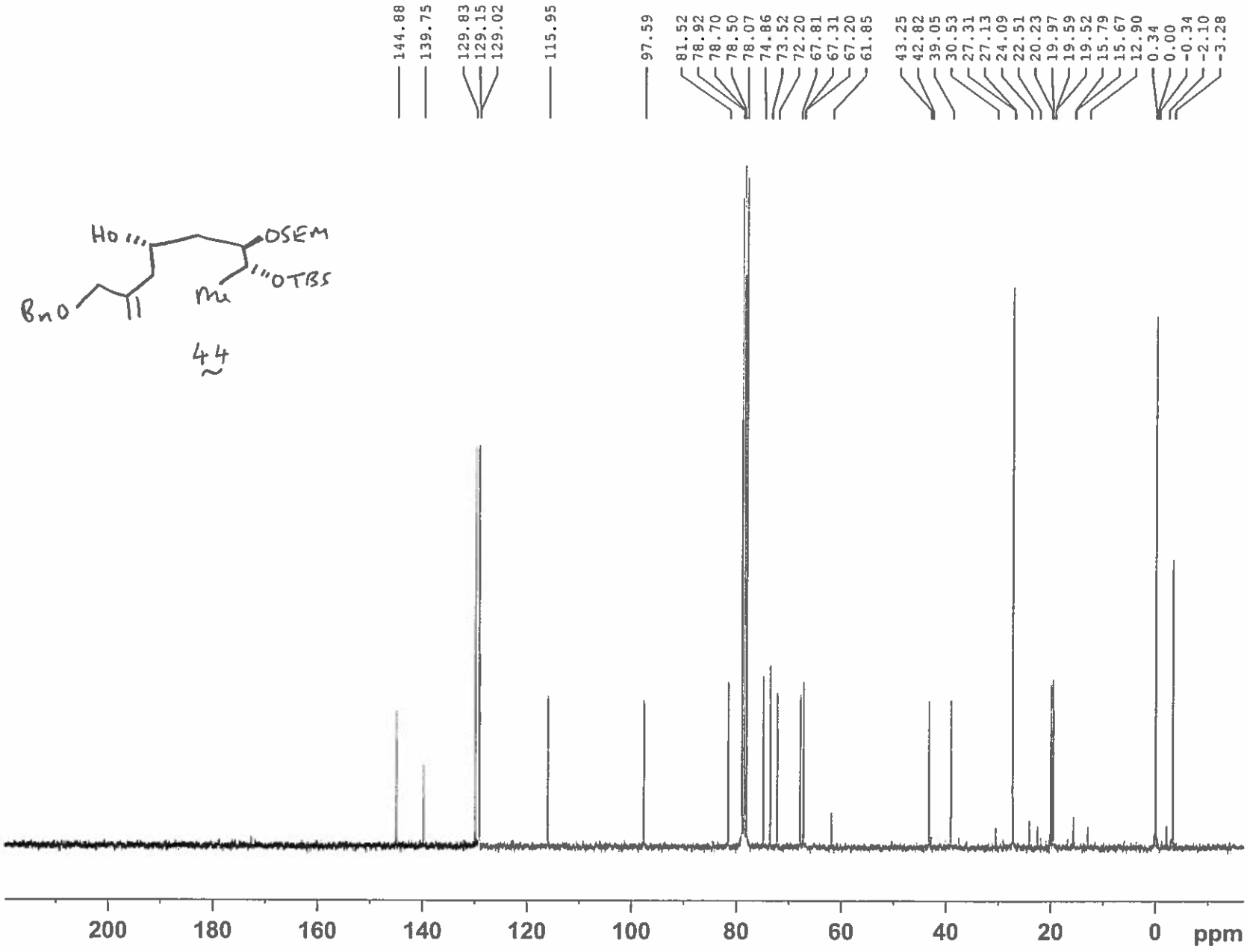
SH_63
mPROTONnight CDCl3 {C:\bruk300data\2008\Oct} ejt 21



BRUKER 300 MHz

```
Current Data Parameters
NAME      2008-10-22-ejt-21
EXPNO                   10
PROCNO                   1

F2 - Acquisition Parameters
Date_              20081024
Time                 18.06
INSTRUM             DPX300
PROBHD   5 mm DUL 13C-1
PULPROG               zg30
TD                   65536
SOLVENT              CDCl3
NS                      16
DS                       0
SWH               6172.839 Hz
FIDRES            0.094190 Hz
AQ                5.3084660 sec
RG                     114
DW                  81.000 usec
DE                   6.00 usec
TE                  300.0 K
D1             0.10000000 sec
TD0                      1

======== CHANNEL f1 ========
NUC1                    1H
P1                  10.00 usec
PL1                 -2.60 dB
SFO1          299.9518523 MHz

F2 - Processing parameters
SI                   32768
SF            299.9500089 MHz
WDW                     EM
SSB                      0
LB                  0.30 Hz
GB                       0
PC                    1.00
```

SH_63
mCARBONnight CDCl3 {C:\bruk300data\2008\Oct} ejt 21

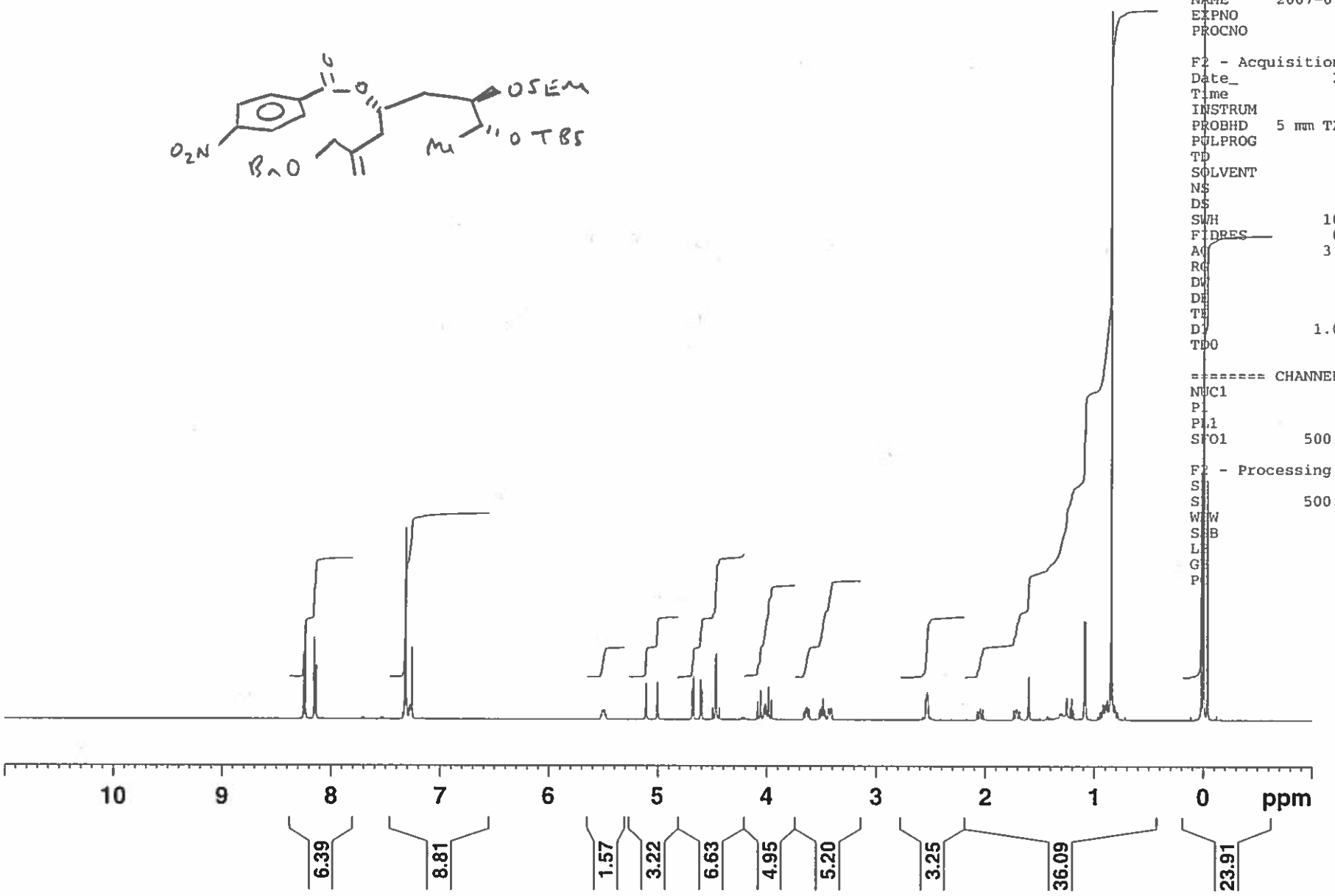


BRUKER 300 MHz

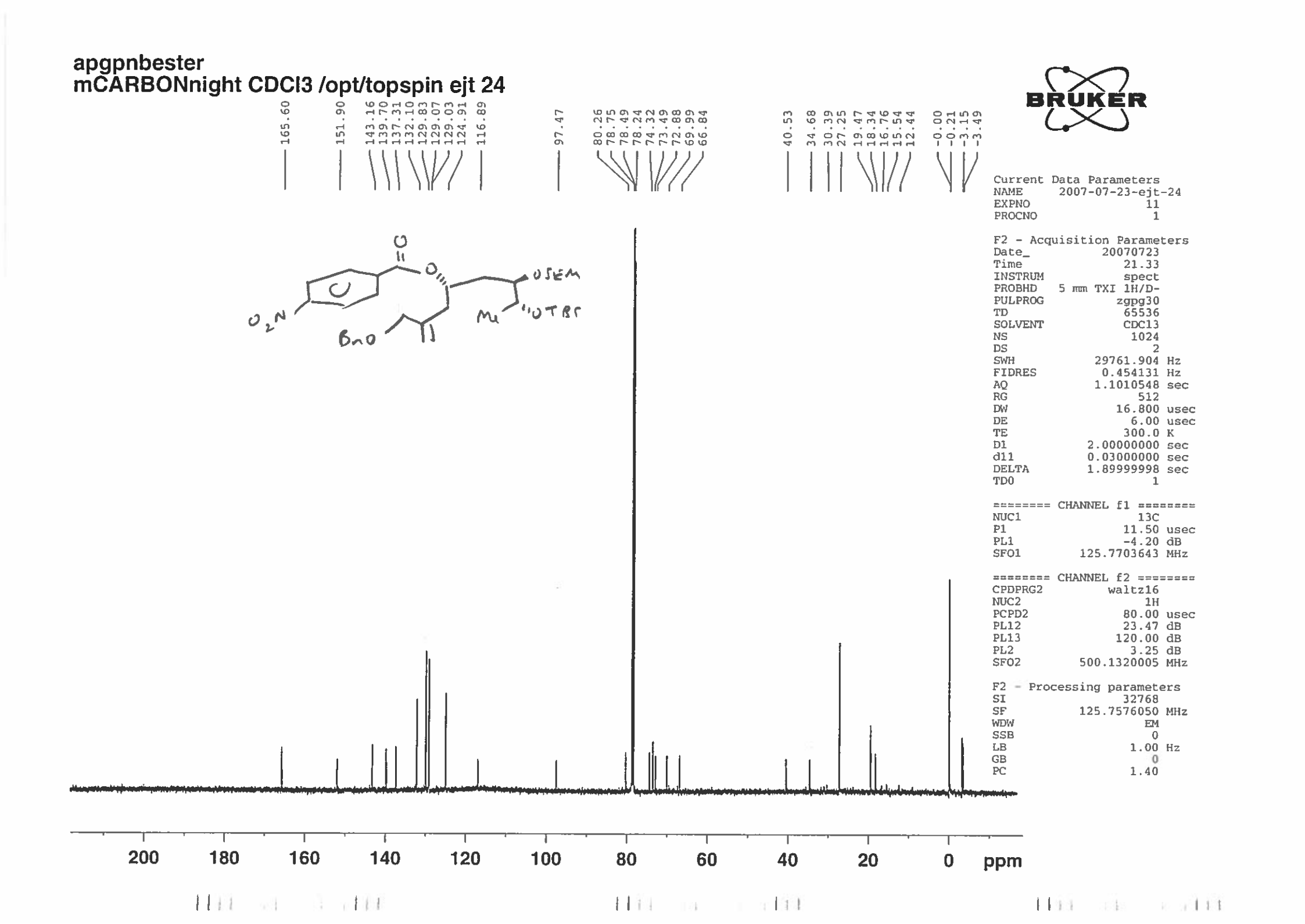
```
Current Data Parameters
NAME      2008-10-22-ejt-21
EXPNO                   11
PROCNO                   1

F2 - Acquisition Parameters
Date_             20081024
Time                 19.14
INSTRUM             DPX300
PROBHD   5 mm DUL 13C-1
PULPROG            zgpg30
TD                  65536
SOLVENT             CDCl3
NS                   1024
DS                      2
SWH             17857.143 Hz
FIDRES          0.272478 Hz
AQ              1.8350580 sec
RG                14596.5
DW                 28.000 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                 10.00 usec
PL1                -1.20 dB
SFO1          75.4300300 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                  1H
PCPD2              80.00 usec
PL2                -2.60 dB
PL12               14.50 dB
PL13               15.00 dB
SFO2         299.9512000 MHz

F2 - Processing parameters
SI                 32768
SF          75.4223772 MHz
WDW                   EM
SSB                    0
LB                  1.00 Hz
GB                     0
PC                  1.40
```

apgpnbester
mPROTONnight CDCl3 /opt/topspin ejt 24


```
Current Data Parameters
NAME      2007-07-23-ejt-24
EXPNO                    10
PROCNO                    1

F2 - Acquisition Parameters
Date_              20070723
Time                 20.39
INSTRUM              spect
PROBHD   5 mm TXI 1H/D-
PULPROG              zg30b
TD                   65536
SOLVENT              CDCl3
NS                      16
DS                       0
SWH             10330.578 Hz
FIDRES          0.157632 Hz
AQ              3.1719923 sec
RG                    90.5
DW                48.400 usec
DE                13.76 usec
TE                300.0 K
D1             1.00000000 sec
TD0                      1

======== CHANNEL f1 ========
NUC1                    1H
P1                   7.80 usec
PL1                  3.25 dB
SFO1          500.1330885 MHz

F2 - Processing parameters
SI                    32768
SF            500.1300105 MHz
WDW                      EM
SSB                       0
LB                   0.30 Hz
GB                        0
PC                     1.00
```



apgpnbester
mCARBONnight CDCl3 /opt/topspin ejt 24



Current Data Parameters

NAME	2007-07-23-ejt-24
EXPNO	11
PROCNO	1

F2 - Acquisition Parameters

Date_	20070723
Time	21.33
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	1024
DS	2
SWH	29761.904 Hz
FIDRES	0.454131 Hz
AQ	1.1010548 sec
RG	512
DW	16.800 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	11.50 usec
PL1	-4.20 dB
SFO1	125.7703643 MHz

======== CHANNEL f2 ========

CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 usec
PL12	23.47 dB
PL13	120.00 dB
PL2	3.25 dB
SFO2	500.1320005 MHz

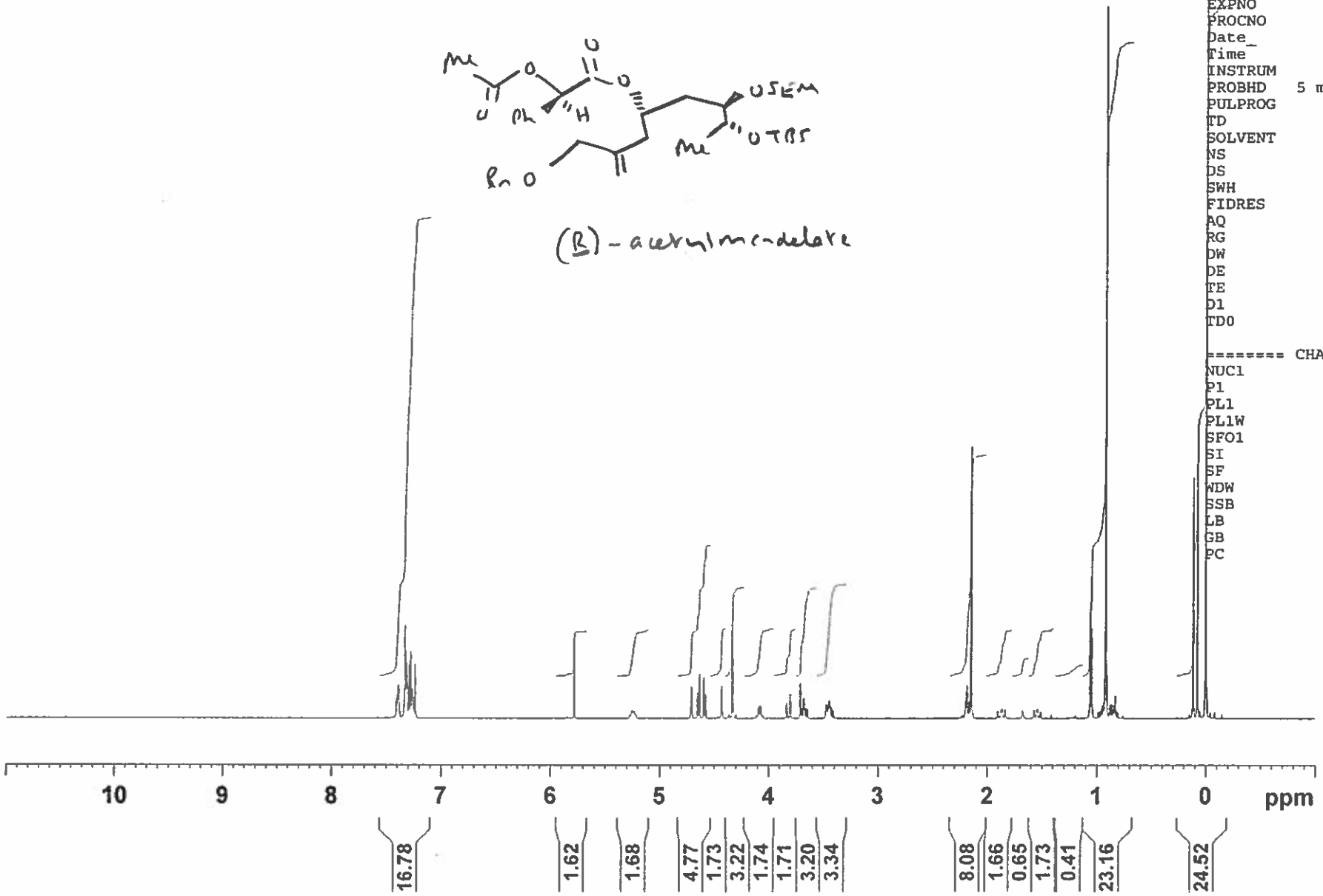
F2 - Processing parameters

SI	32768
SF	125.7576050 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

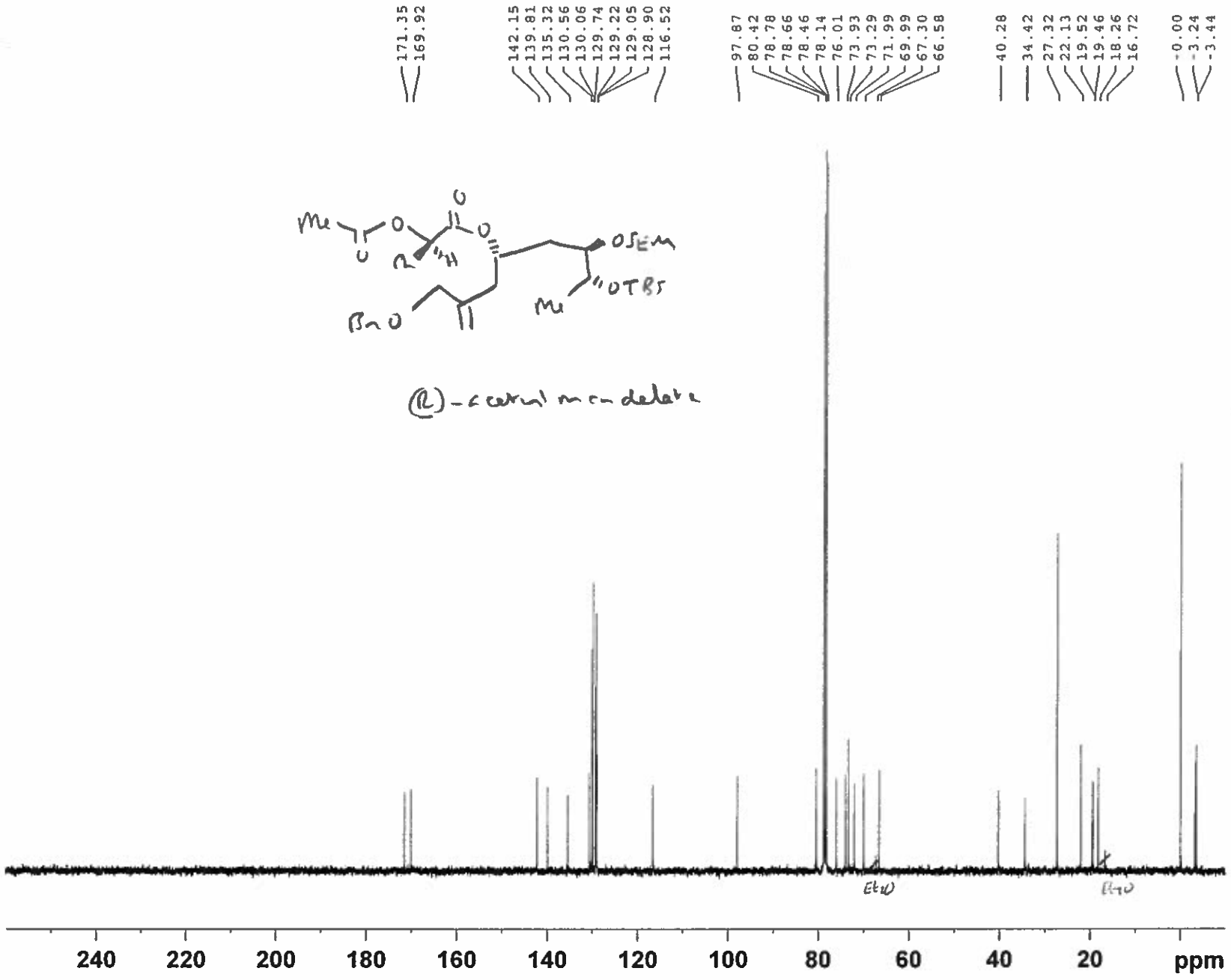
apg(R)
mPROTON CDCl3 {e:\bruk400data\2009\Jan} ejt 2

(R)-acetylmandelate

NAME	2009-01-22-ejt-2
EXPNO	10
PROCNO	1
Date_	20090122
Time	17.25
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	90.5
DW	60.500 usec
DE	9.40 usec
TE	293.4 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300186 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



apg(R)acetylmandelate
mCARBONnight CDCl3 {e:\bruk400data\2009\Jan} ejt 30

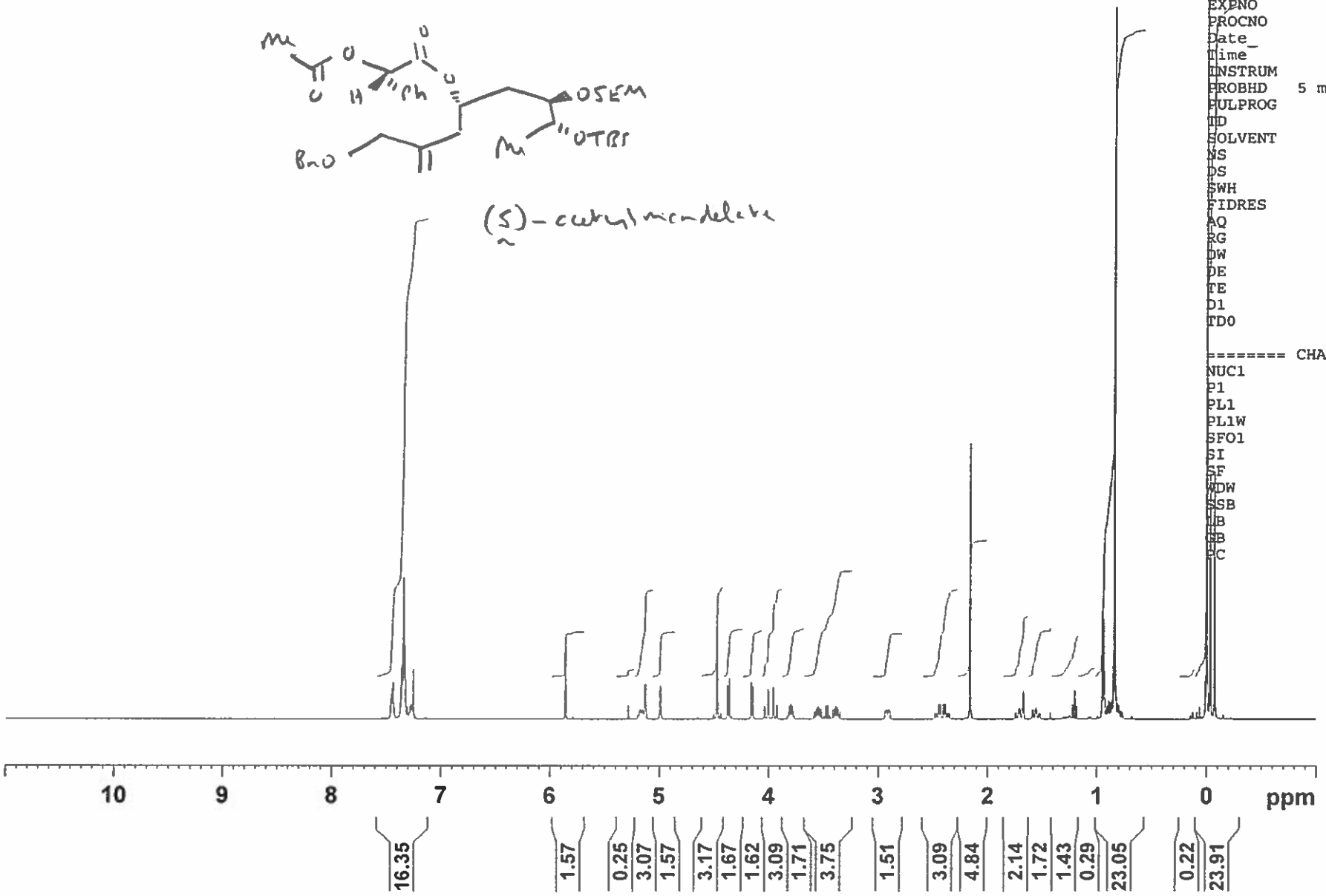


NAME	2009-01-20-ejt-30
EXPNO	12
PROCNO	1
Date_	20090120
Time	23.47
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	512
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	293.3 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6126269 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

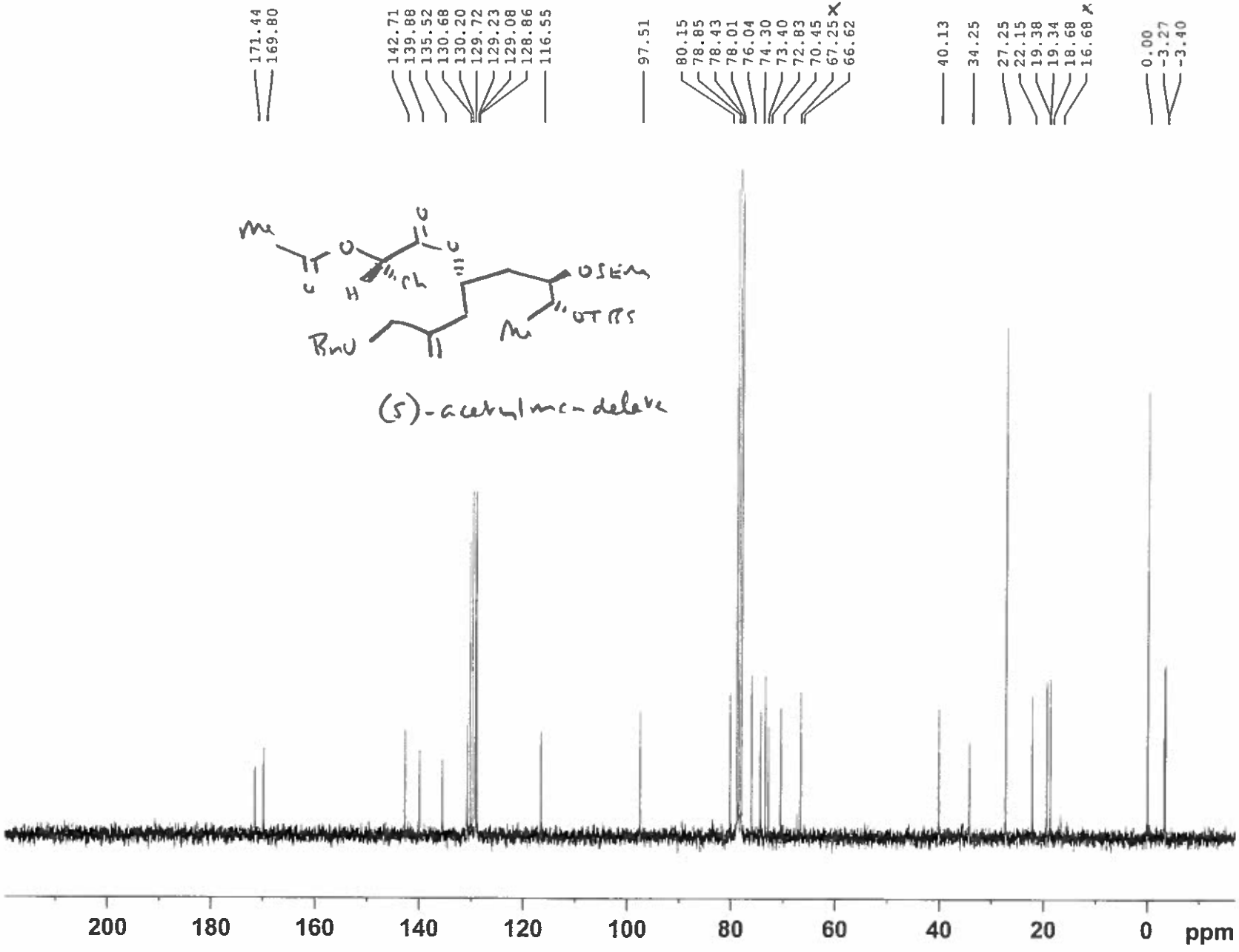
apg(S)acetylmandelate
mPROTON CDCl3 {e:\bruk400data\2009\Jan} ejt 49

(S)-acetylmandelate

NAME	2009-01-25-ejt-49
EXPNO	10
PROCNO	1
Date_	20090125
Time	13.46
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	80.6
DW	60.500 usec
DE	9.40 usec
TE	291.5 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300133 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



apg(S)mandelate
mCARBON CDCl3 {E:\bruk300data\2009\Jan} ejt 27



BRUKER 300 MHz

```
Current Data Parameters
NAME      2009-01-25-ejt-27
EXPNO                   10
PROCNO                   1

F2 - Acquisition Parameters
Date_              20090125
Time                 15.17
INSTRUM             DPX300
PROBHD   5 mm DUL 13C-1
PULPROG             zgpg30
TD                   65536
SOLVENT              CDCl3
NS                     256
DS                       2
SWH              17857.143 Hz
FIDRES           0.272478 Hz
AQ               1.8350580 sec
RG                 18390.4
DW                28.000 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                10.00 usec
PL1               -1.20 dB
SFO1         75.4300300 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                   1H
PCPD2             80.00 usec
PL2               -2.60 dB
PL12              14.50 dB
PL13              15.00 dB
SFO2        299.9512000 MHz

F2 - Processing parameters
SI                   32768
SF           75.4223823 MHz
WDW                    EM
SSB                     0
LB                 1.00 Hz
GB                      0
PC                   1.40
```

apgacrylicester
mPROTONnight CDCl3 /opt/topspin ejt 3

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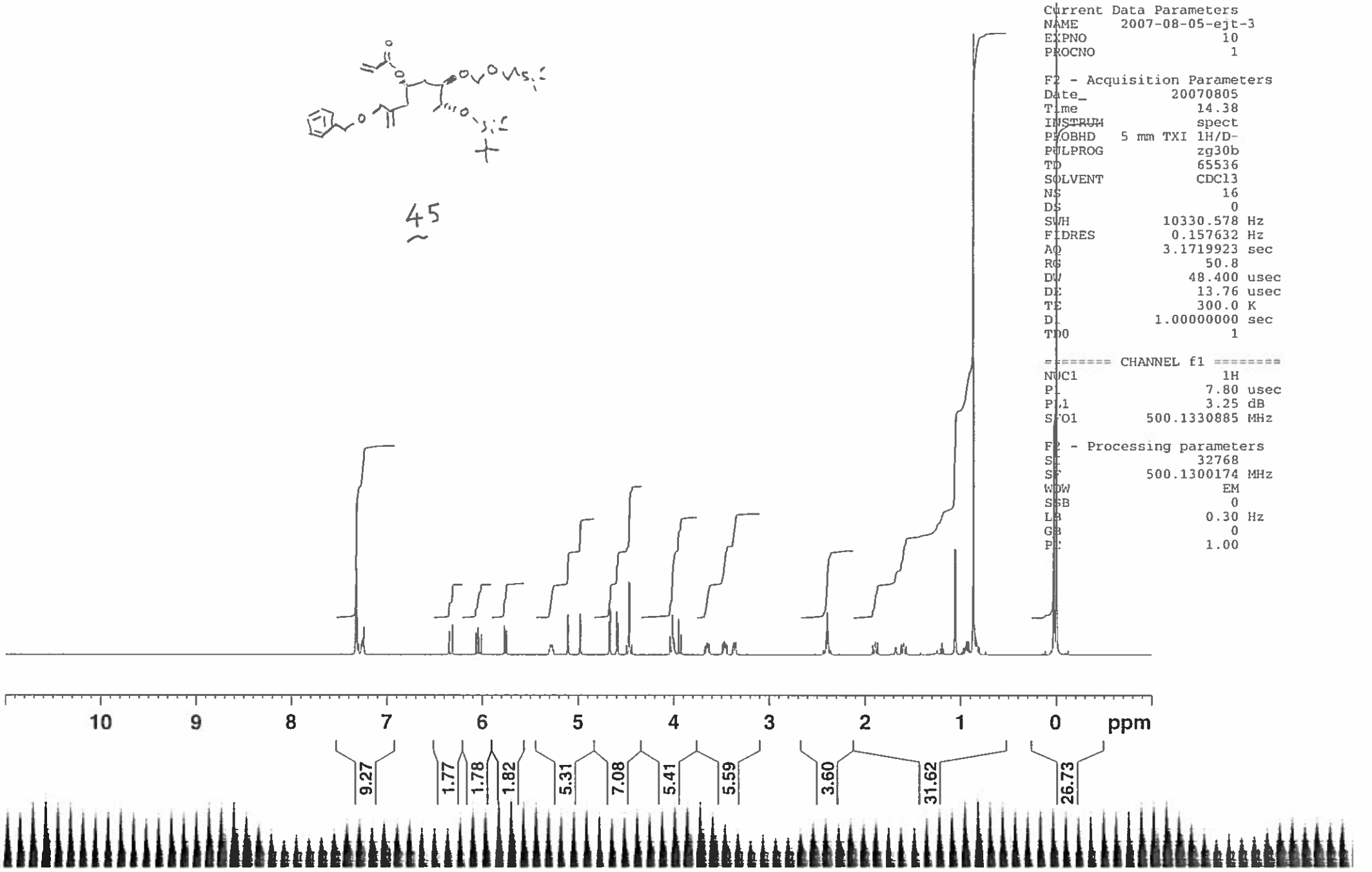
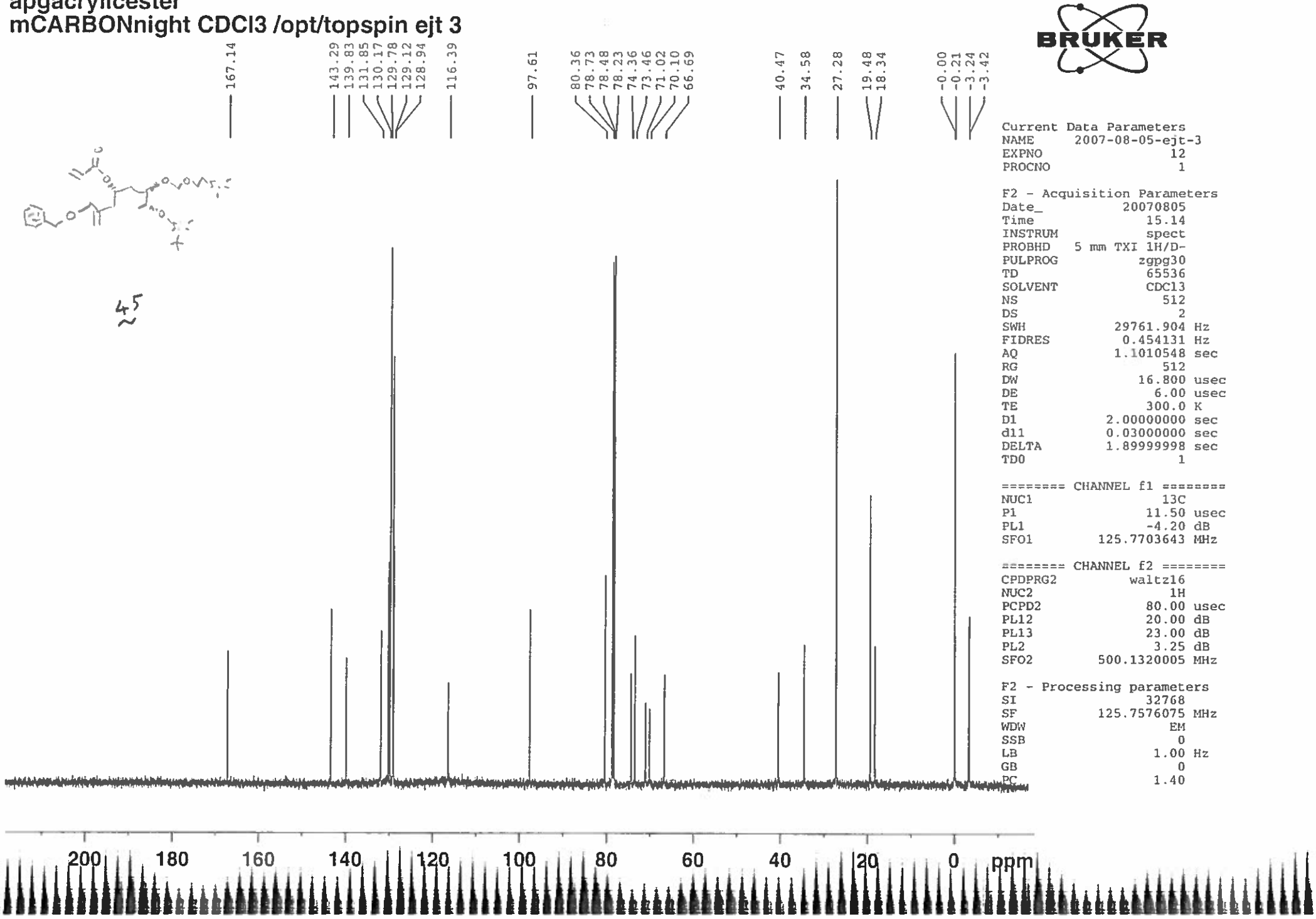


apgacrylicester
mCARBONnight CDCl3 /opt/topspin ejt 3



Current Data Parameters
NAME 2007-08-05-ejt-3
EXPNO 12
PROCNO 1

F2 - Acquisition Parameters
Date_ 20070805
Time 15.14
INSTRUM spect
PROBHD 5 mm TXI 1H/D-
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 512
DS 2
SWH 29761.904 Hz
FIDRES 0.454131 Hz
AQ 1.1010548 sec
RG 512
DW 16.800 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 11.50 usec
PL1 -4.20 dB
SFO1 125.7703643 MHz

======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL12 20.00 dB
PL13 23.00 dB
PL2 3.25 dB
SFO2 500.1320005 MHz

F2 - Processing parameters
SI 32768
SF 125.7576075 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

apgmetathesisproduct
mPROTONnight CDCl3 /opt/topspin ejt 4

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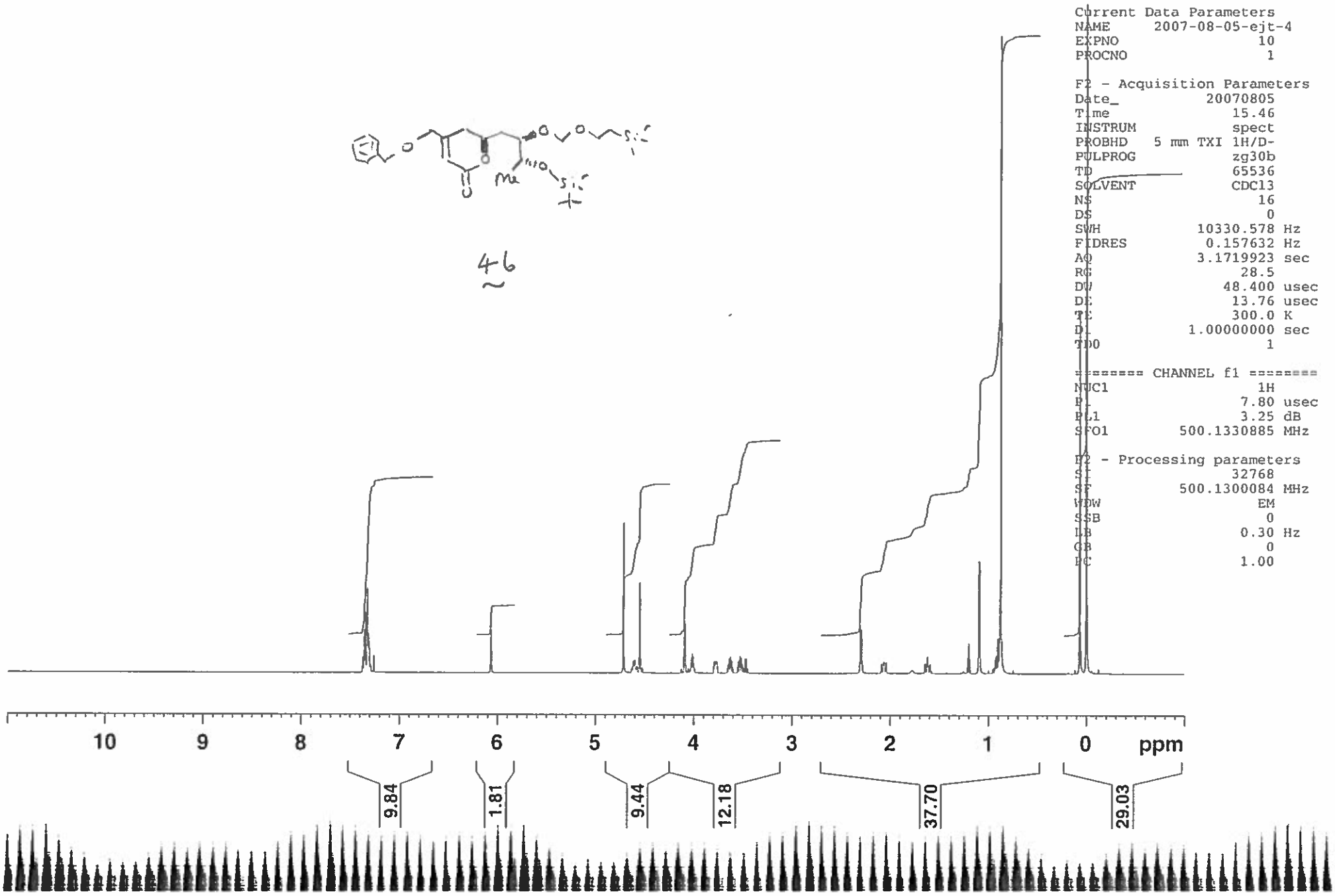


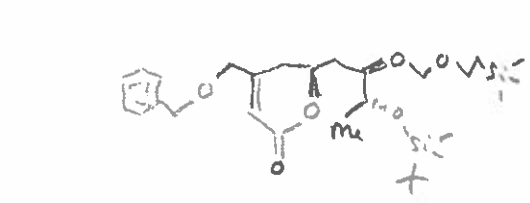

```
Current Data Parameters
NAME      2007-08-05-ejt-4
EXPNO                   10
PROCNO                   1

F2 - Acquisition Parameters
Date_              20070805
Time                 15.46
INSTRUM              spect
PROBHD   5 mm TXI 1H/D-
PULPROG              zg30b
TD                   65536
SOLVENT              CDCl3
NS                      16
DS                       0
SWH             10330.578 Hz
FIDRES           0.157632 Hz
AQ              3.1719923 sec
RG                    28.5
DW                 48.400 usec
DE                 13.76 usec
TE                 300.0 K
D1            1.00000000 sec
TD0                      1

======== CHANNEL f1 ========
NUC1                    1H
P1                   7.80 usec
PL1                  3.25 dB
SFO1          500.1330885 MHz

F2 - Processing parameters
SI                   32768
SF            500.1300084 MHz
WDW                     EM
SSB                      0
LB                    0.30 Hz
GB                       0
PC                    1.00
```

apgmetathesisproduct
mCARBONnight CDCl3 /opt/topspin ejt 4



46

166.09
157.63
138.69
129.99
129.46
129.11
117.09
97.33
79.14
78.75
78.50
78.24
75.73
74.34
72.02
70.40
66.90
35.87
32.35
27.29
19.71
19.52
19.48
19.33
18.80
16.72
0.20
-0.00
-0.21
-3.06
-3.26
-3.28

Current Data Parameters
NAME 2007-08-05-ejt-4
EXPNO 12
PROCNO 1

F2 - Acquisition Parameters
Date_ 20070805
Time 16.21
INSTRUM spect
PROBHD 5 mm TXI 1H/D-
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 512
DS 2
SWH 29761.904 Hz
FIDRES 0.454131 Hz
AQ 1.1010548 sec
RG 512
DW 16.800 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 11.50 usec
PL1 -4.20 dB
SFO1 125.7703643 MHz

======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL12 20.00 dB
PL13 23.00 dB
PL2 3.25 dB
SFO2 500.1320005 MHz

F2 - Processing parameters
SI 32768
SF 125.7576086 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

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

apgluchereduction
mPROTON CDCl3 /opt/topspin ejt 39

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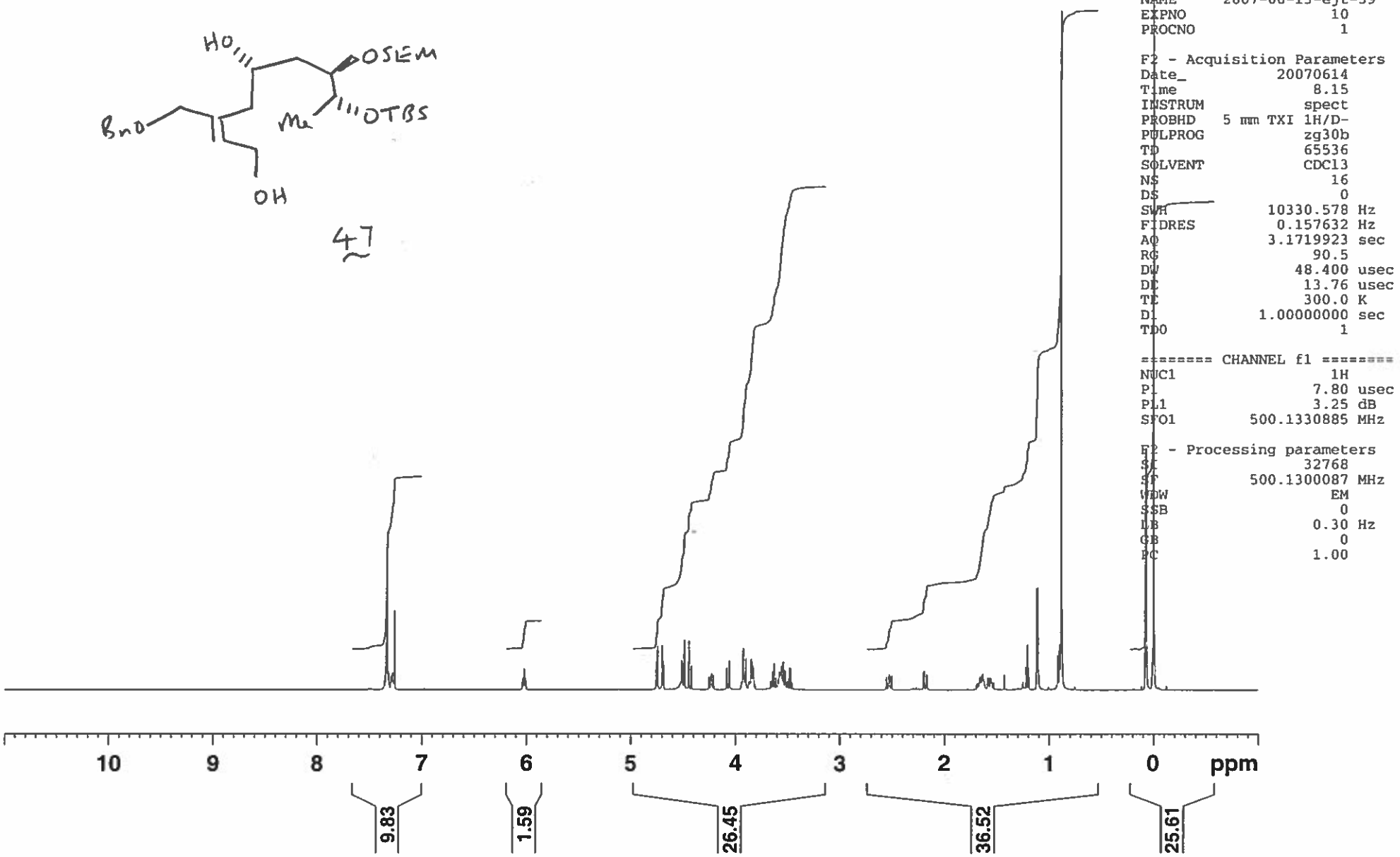


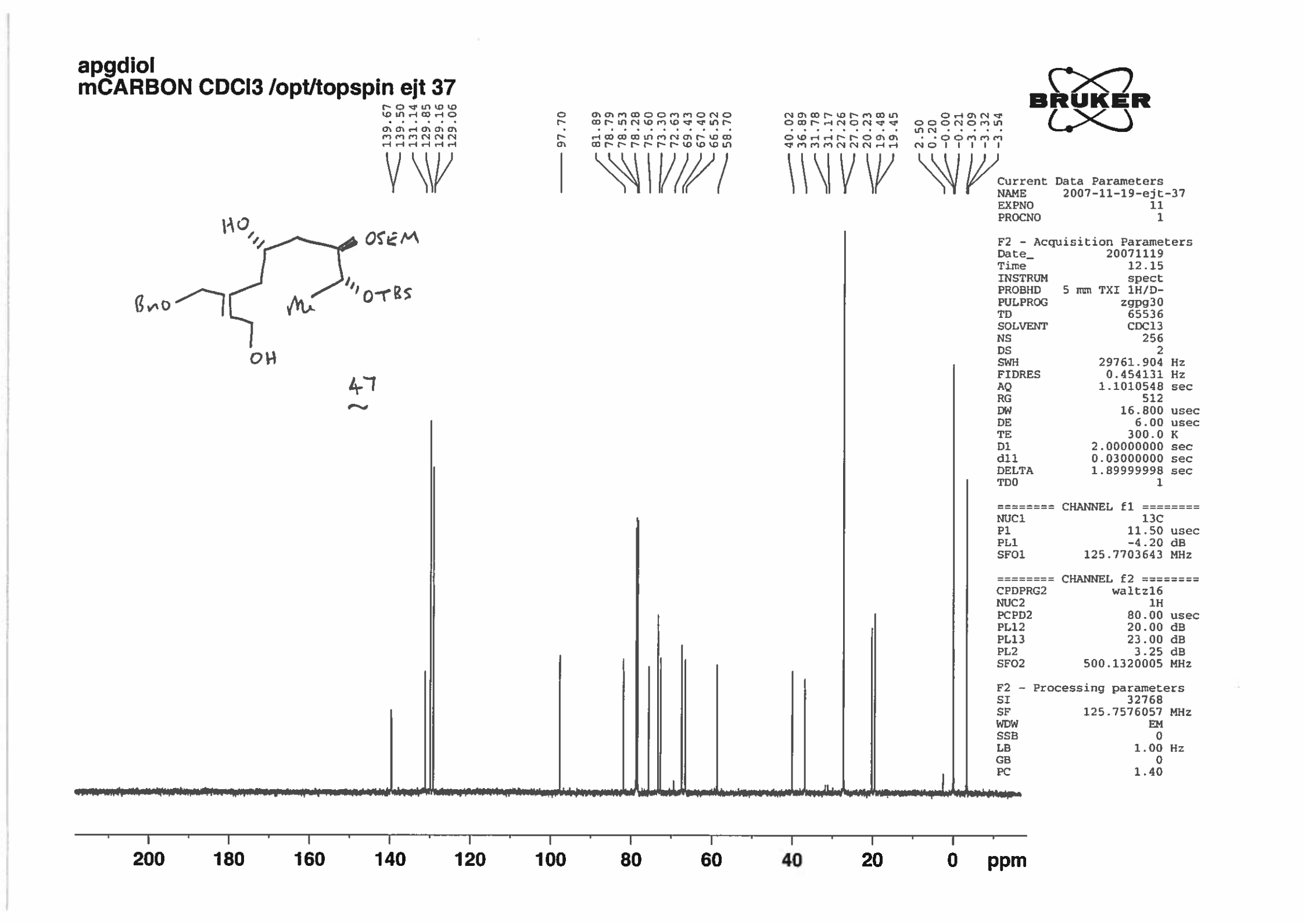

```
Current Data Parameters
NAME      2007-06-13-ejt-39
EXPNO                   10
PROCNO                   1

F2 - Acquisition Parameters
Date_              20070614
Time                  8.15
INSTRUM              spect
PROBHD   5 mm TXI 1H/D-
PULPROG              zg30b
TD                   65536
SOLVENT              CDCl3
NS                      16
DS                       0
SWH             10330.578 Hz
FIDRES           0.157632 Hz
AQ               3.1719923 sec
RG                    90.5
DW                  48.400 usec
DE                  13.76 usec
TE                  300.0 K
D1             1.00000000 sec
TD0                      1

======== CHANNEL f1 ========
NUC1                    1H
P1                   7.80 usec
PL1                  3.25 dB
SFO1          500.1330885 MHz

F2 - Processing parameters
SI                   32768
SF            500.1300087 MHz
WDW                     EM
SSB                      0
LB                    0.30 Hz
GB                       0
PC                    1.00
```

apgdiol
mCARBON CDCl3 /opt/topspin ejt 37



Current Data Parameters
NAME 2007-11-19-ejt-37
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters

Date_	20071119
Time	12.15
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	256
DS	2
SWH	29761.904 Hz
FIDRES	0.454131 Hz
AQ	1.1010548 sec
RG	512
DW	16.800 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	11.50 usec
PL1	-4.20 dB
SFO1	125.7703643 MHz

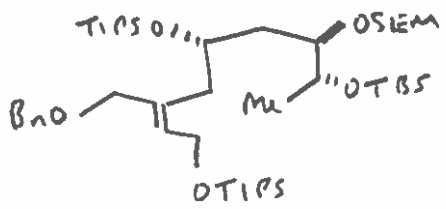
======== CHANNEL f2 ========

CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 usec
PL12	20.00 dB
PL13	23.00 dB
PL2	3.25 dB
SFO2	500.1320005 MHz

F2 - Processing parameters

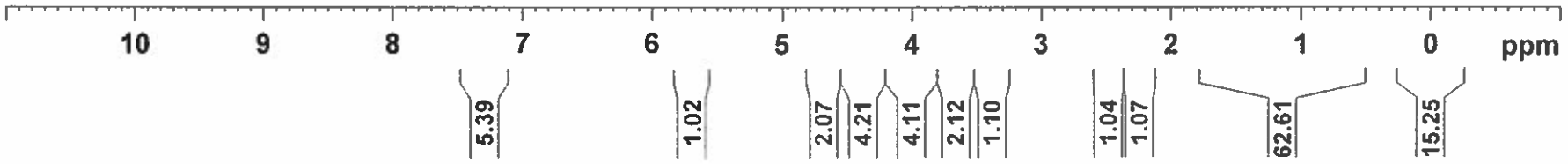
SI	32768
SF	125.7576057 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

apgbistipsprot
mPROTON CDCl3 {e:\bruk400data\2009\Jan} ejt 22



48

NAME	2009-01-13-ejt-22
EXPNO	10
PROCNO	1
Date_	20090113
Time	17.08
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	36
DW	60.500 usec
DE	9.40 usec
TE	292.4 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300154 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



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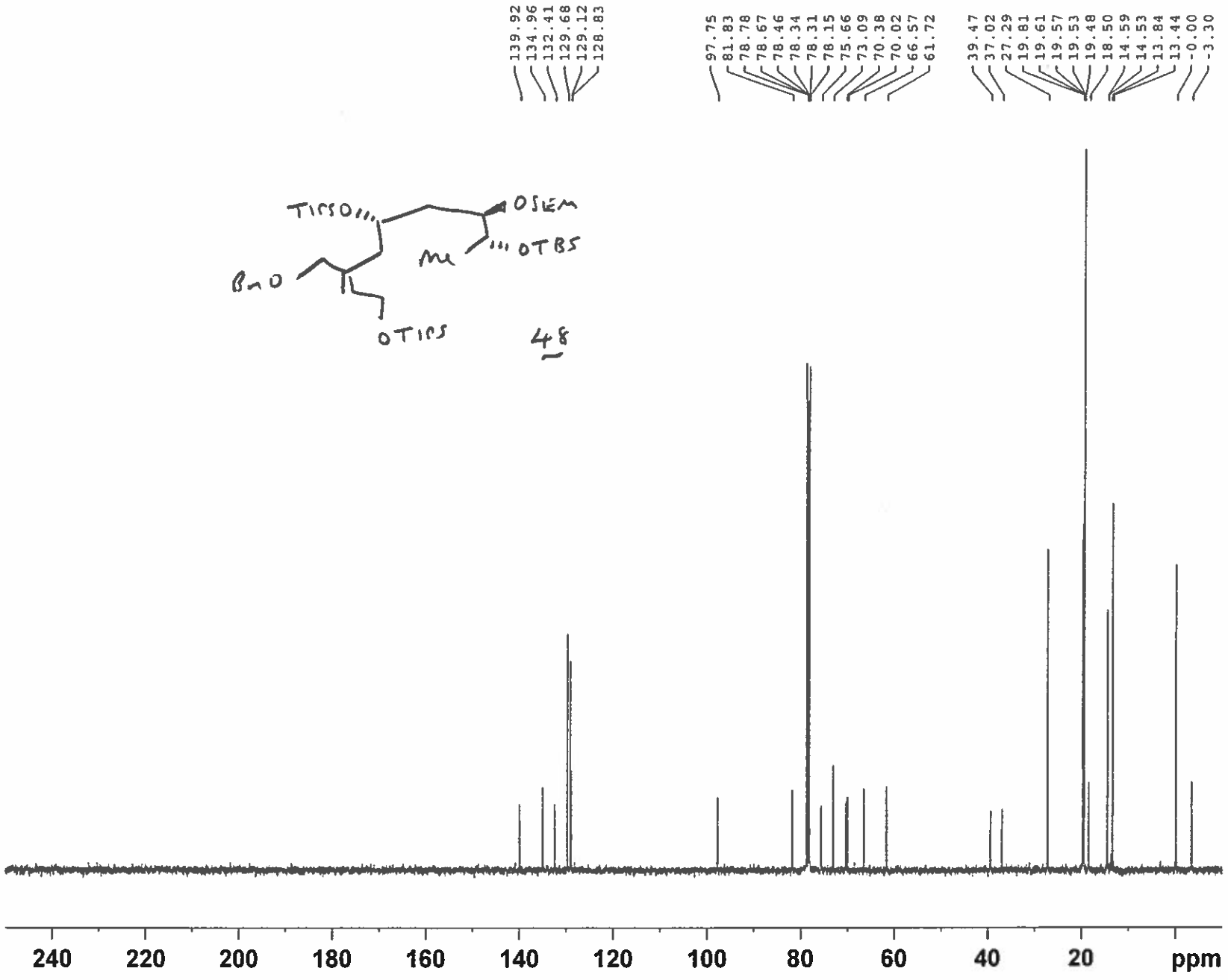
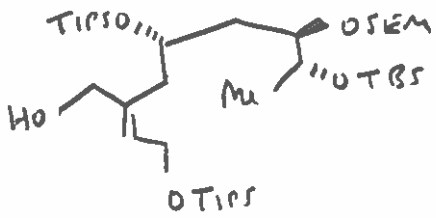
mCARBON CDCl3 {e:\bruk400data\2009\Jan} ejt 22



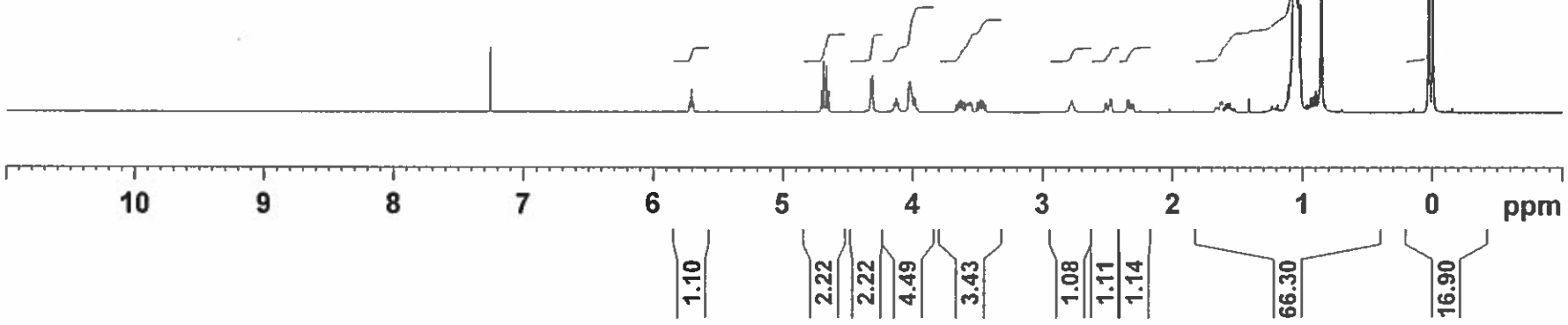
NAME	2009-01-13-ejt-22
EXPNO	11
PROCNO	1
Date_	20090113
Time	17.23
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	256
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	293.1 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6126252 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	0.20

apgluchereduction
mPROTON CDCl3 {e:\bruk400data\2008\Dec} ejt 43



49

NAME	2008-12-02-ejt-43
EXPNO	10
PROCNO	1
Date_	20081202
Time	13.36
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	36
DW	60.500 usec
DE	9.40 usec
TE	291.8 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300118 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



apgluche
mCARBON CDCl3 {E:\bruk300data\2008\Dec} ejt 26

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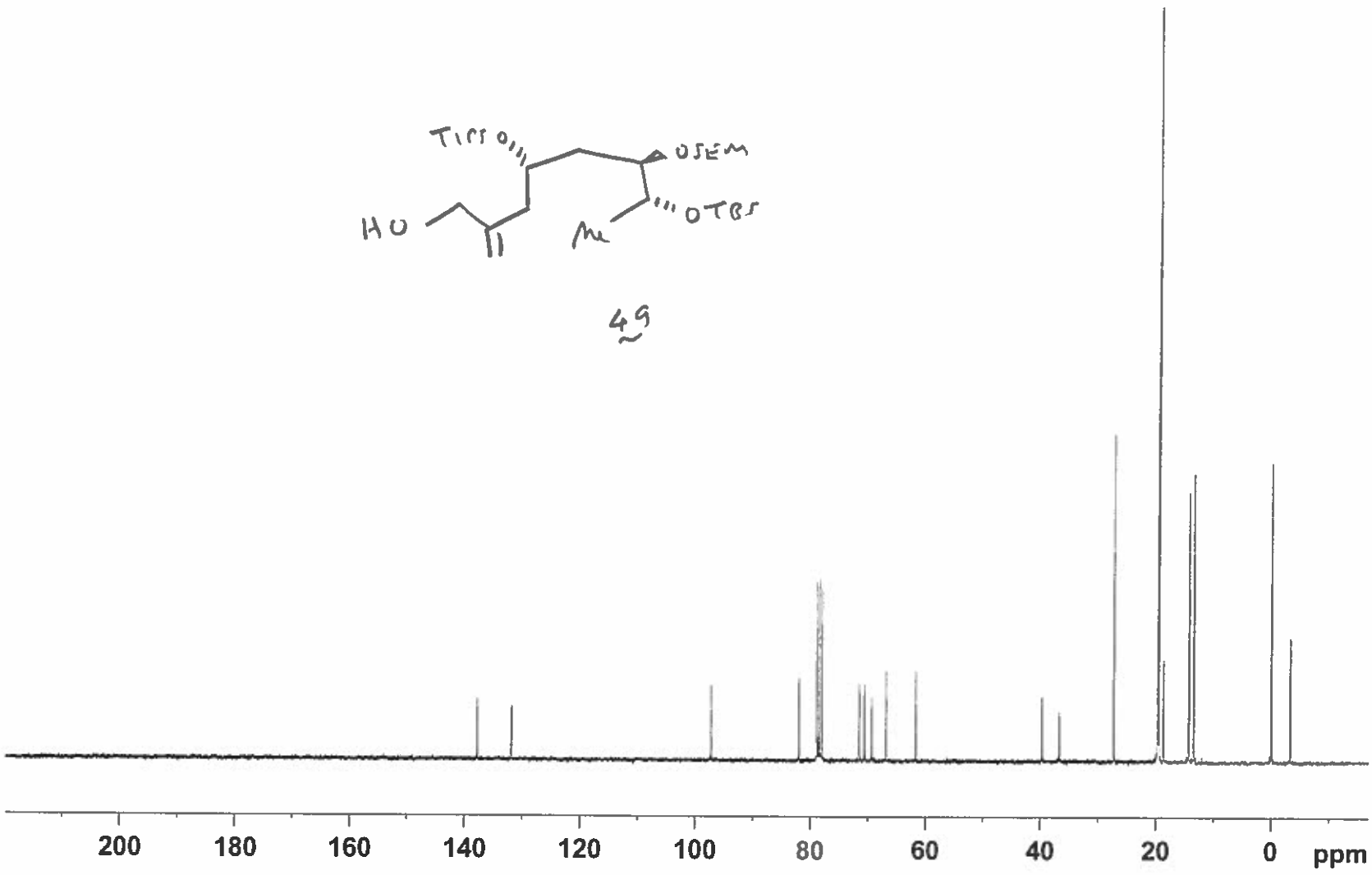

BRUKER 300 MHz

Current Data Parameters
NAME 2008-12-02-mib-26
EXPNO 13
PROCNO 1

F2 - Acquisition Parameters
Date_ 20081202
Time 14.21
INSTRUM DPX300
PROBHD 5 mm DUL 13C-1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 256
DS 2
SWH 17857.143 Hz
FIDRES 0.272478 Hz
AQ 1.8350580 sec
RG 11585.2
DW 28.000 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 10.00 usec
PL1 -1.20 dB
SFO1 75.4300300 MHz

======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -2.60 dB
PL12 14.50 dB
PL13 15.00 dB
SFO2 299.9512000 MHz

F2 - Processing parameters
SI 32768
SF 75.4223762 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

apgallylbromide
mPROTONnight CDCl3 {e:\bruk400data\2008\Dec} ejt 31

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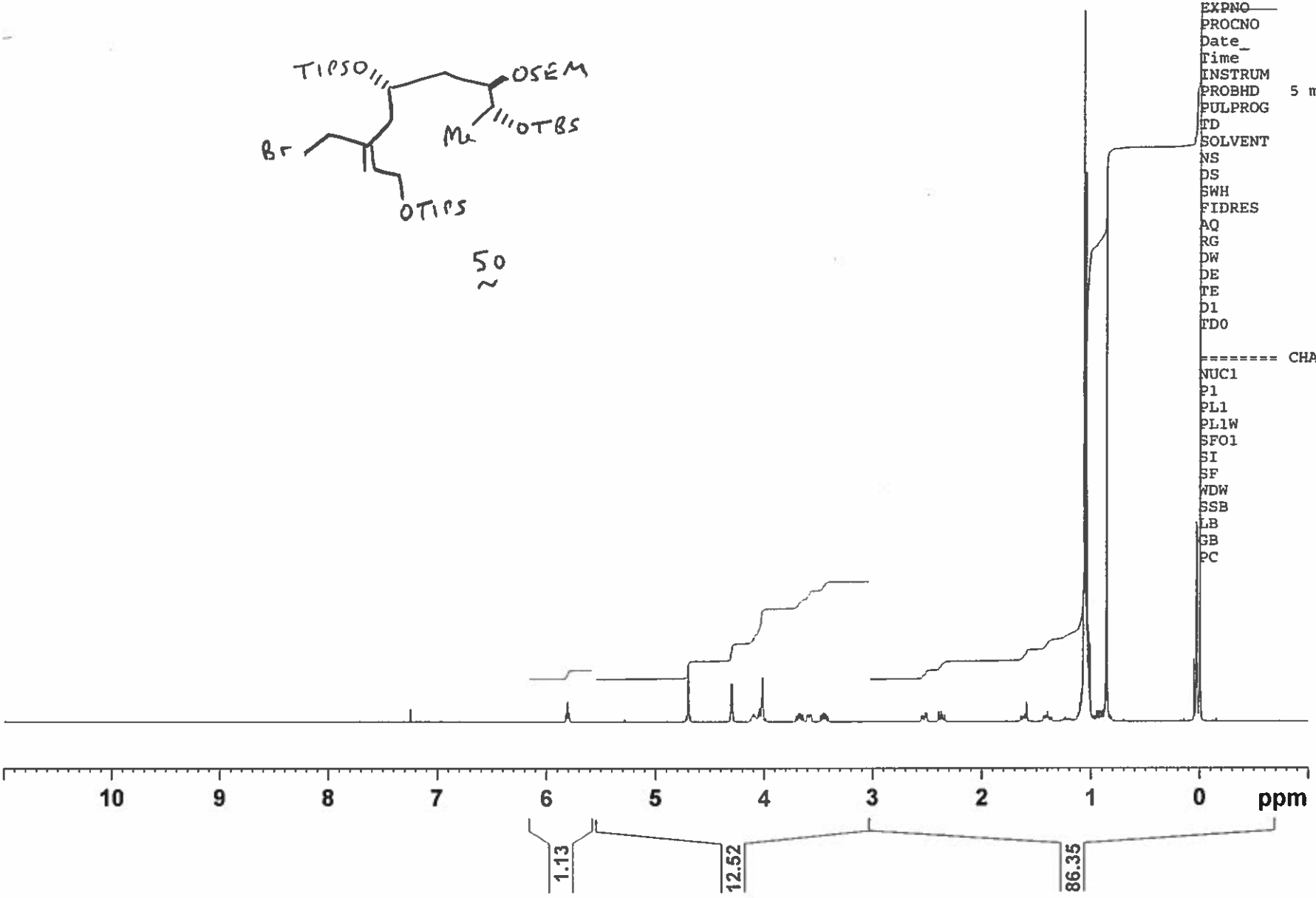
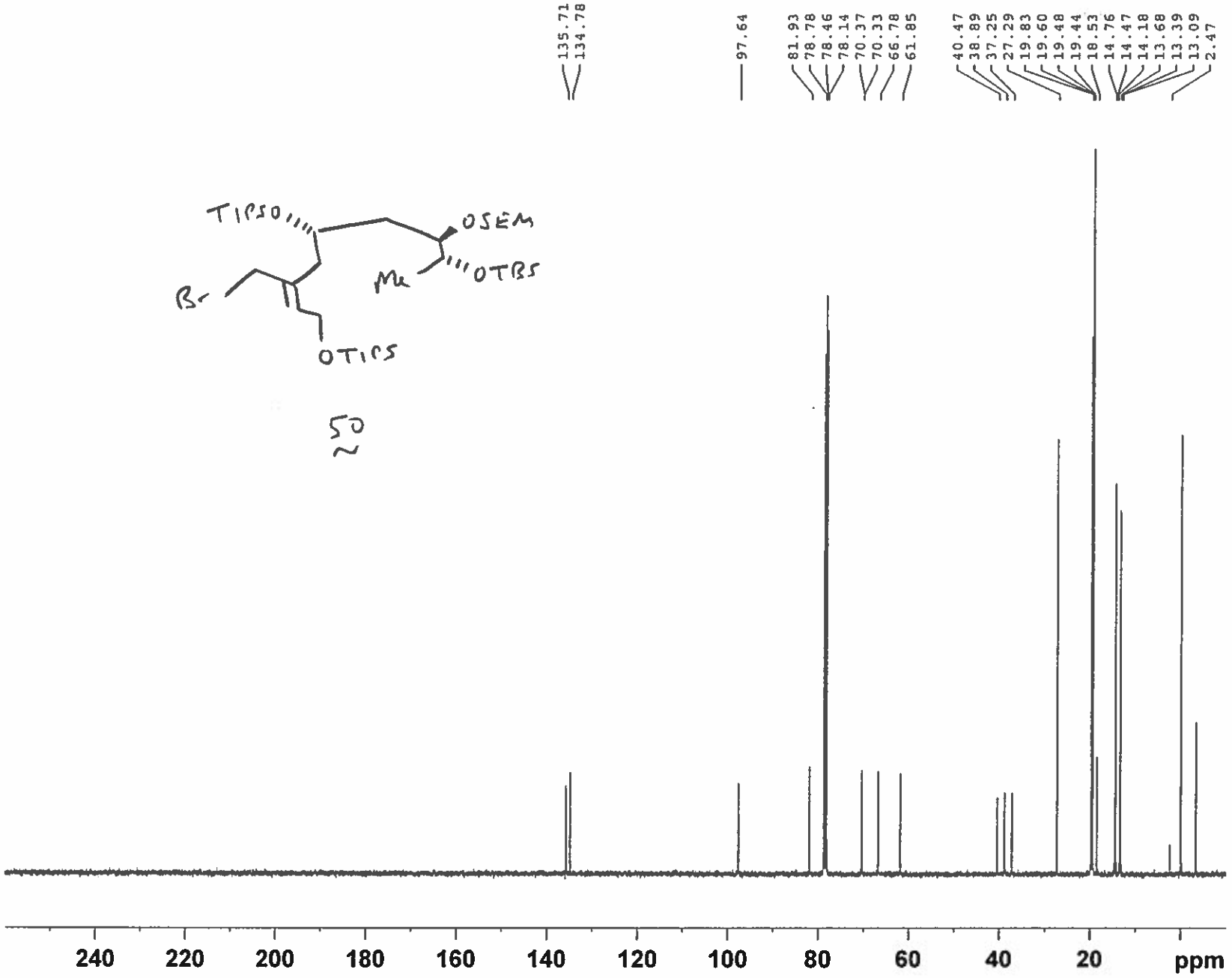
NAME	2008-12-03-ejt-31
EXPNO	11
PROCNO	1
Date_	20081203
Time	23.23
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	64
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	32
DW	60.500 usec
DE	9.40 usec
TE	291.5 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300151 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



apgallylbromide
mCARBONnight CDCl3 {e:\bruk400data\2008\Dec} ejt 31



NAME	2008-12-03-ejt-31
EXPNO	13
PROCNO	1
Date_	20081203
Time	23.59
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	512
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	292.2 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6126251 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

apgmonotipsprot
mPROTON CDCl3 {e:\bruk400data\2009\Jan} ejt 2

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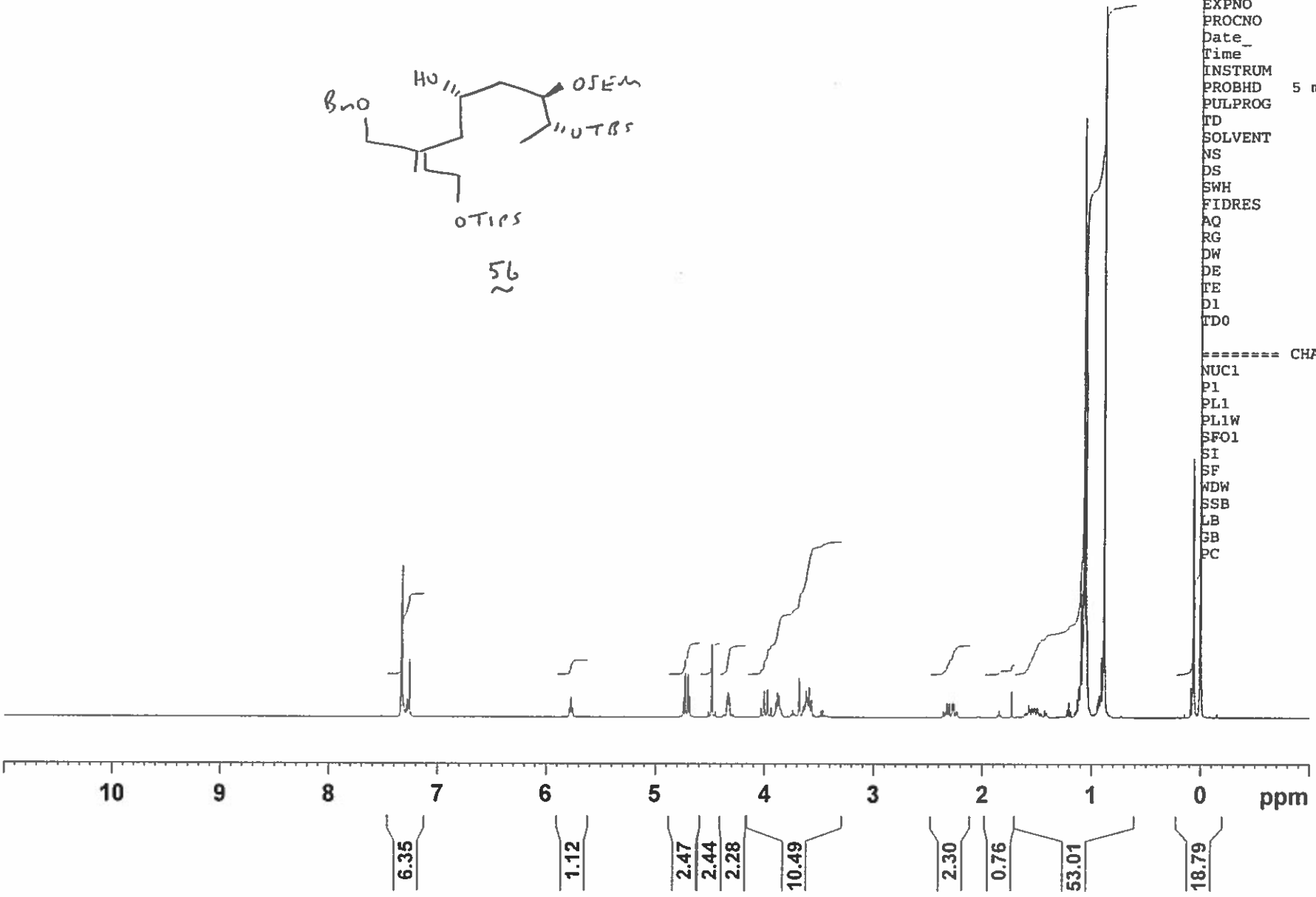
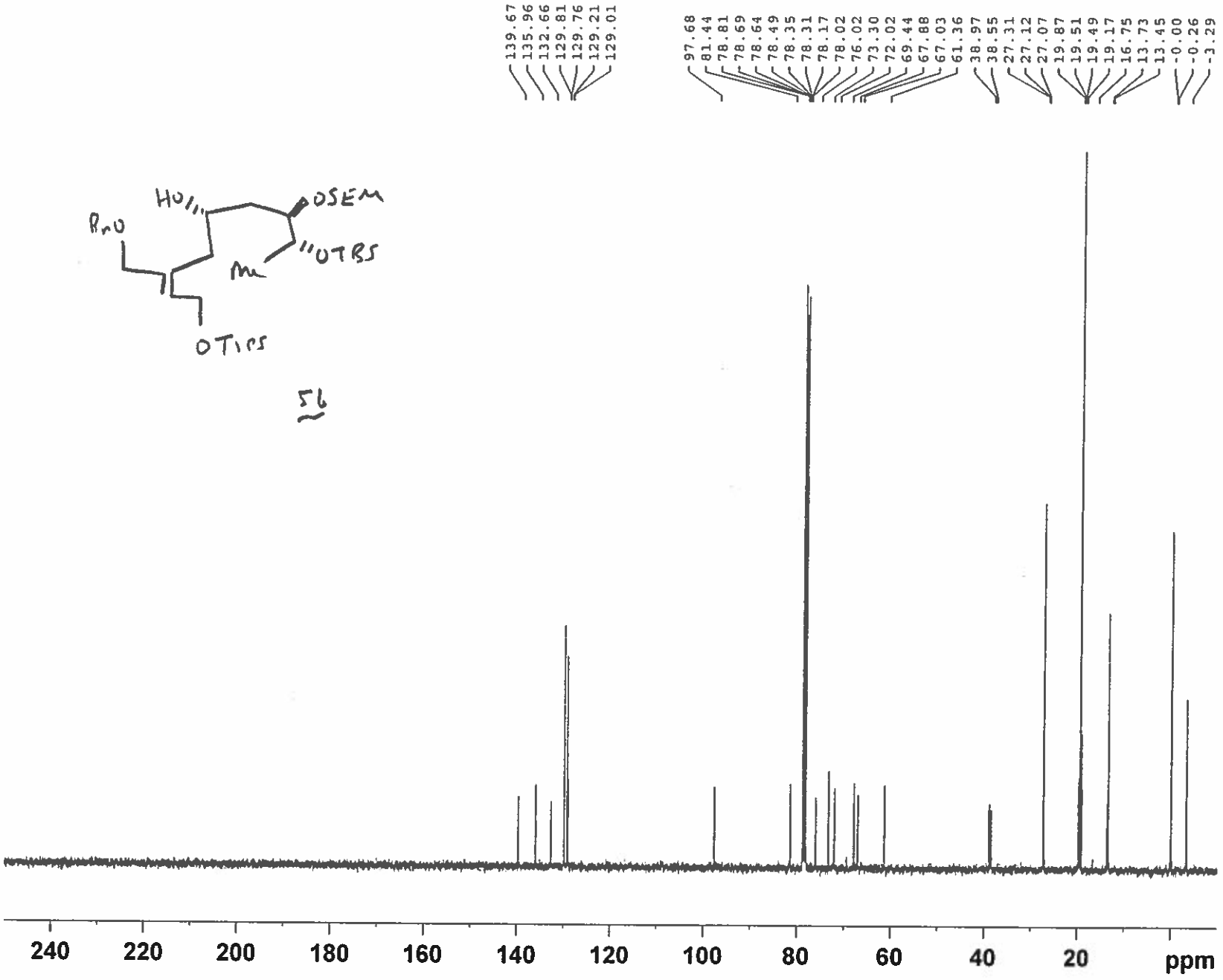
NAME	2009-01-14-ejt-2
EXPNO	10
PROCNO	1
Date_	20090114
Time	13.37
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	57
DW	60.500 usec
DE	9.40 usec
TE	292.6 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300110 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



apgmonotipsprot
mCARBON CDCl3 {e:\bruk400data\2009\Jan} ejt 2



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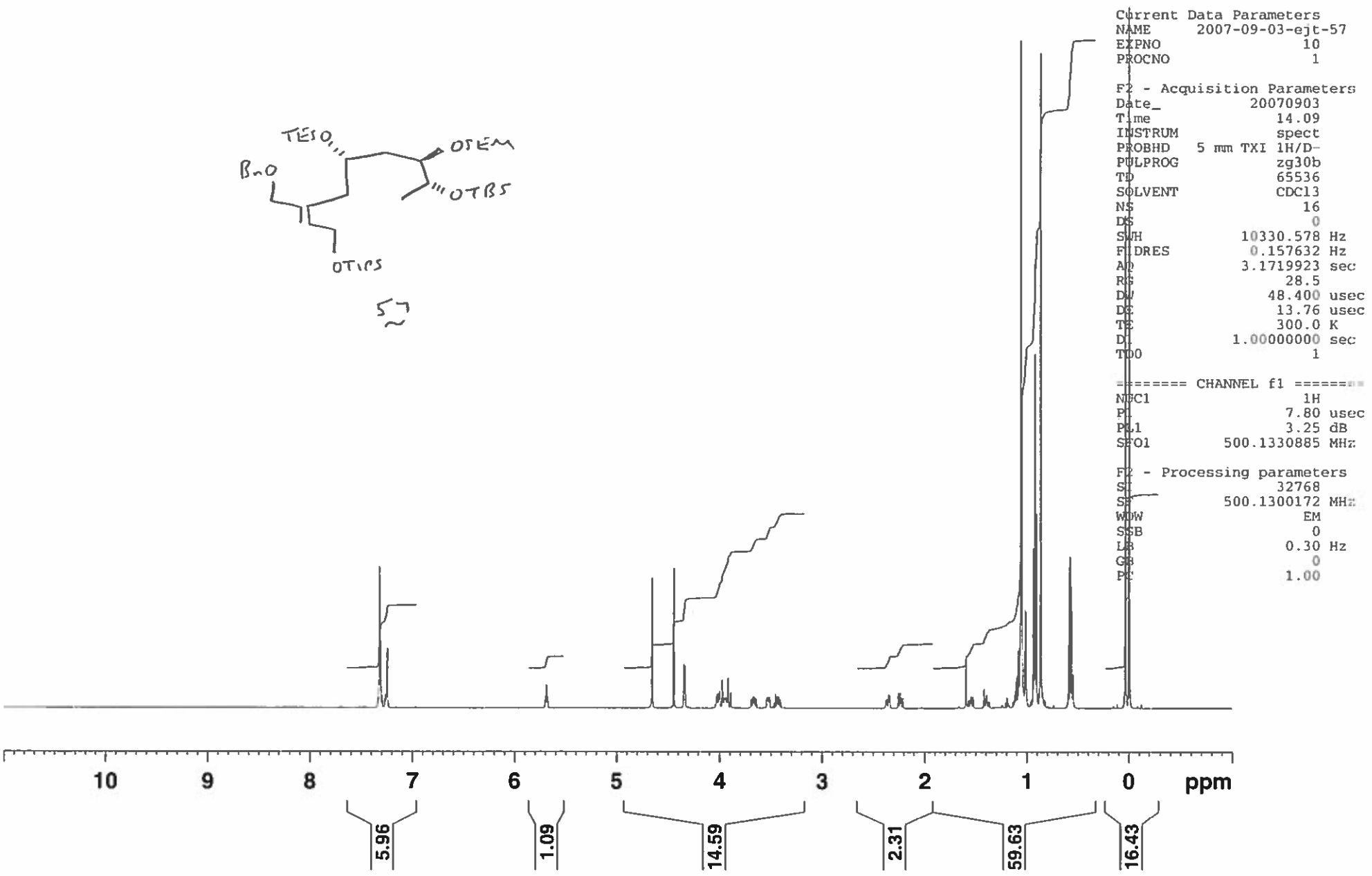
NAME	2009-01-14-ejt-2
EXPNO	11
PROCNO	1
Date_	20090114
Time	13.51
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	256
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	293.3 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6126232 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	0.20

apgtesprot
mPROTON CDCl3 /opt/topspin ejt 57



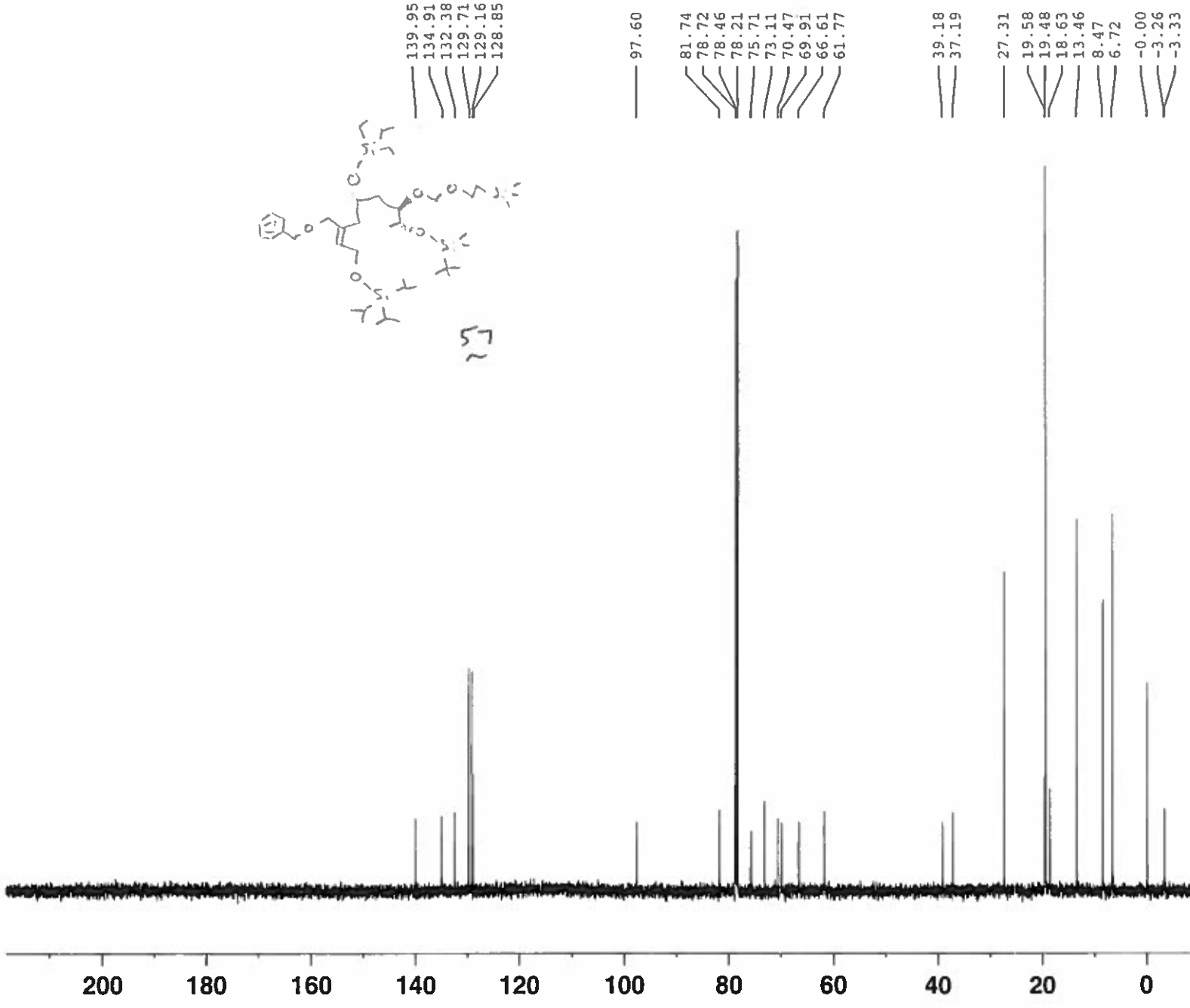

```
Current Data Parameters
NAME      2007-09-03-ejt-57
EXPNO                   10
PROCNO                   1

F2 - Acquisition Parameters
Date_              20070903
Time                 14.09
INSTRUM              spect
PROBHD    5 mm TXI 1H/D-
PULPROG              zg30b
TD                   65536
SOLVENT              CDCl3
NS                      16
DS                       0
SWH             10330.578 Hz
FIDRES          0.157632 Hz
AQ              3.1719923 sec
RG                    28.5
DW                 48.400 usec
DE                 13.76 usec
TE                 300.0 K
D1              1.00000000 sec
TD0                      1

======== CHANNEL f1 ========
NUC1                    1H
P1                 7.80 usec
PL1                3.25 dB
SFO1          500.1330885 MHz

F2 - Processing parameters
SI                   32768
SF            500.1300172 MHz
WDW                     EM
SSB                      0
LB                  0.30 Hz
GB                       0
PC                    1.00
```

apgtesprot
mCARBON CDCl3 /opt/topspin ejt 57



Current Data Parameters
NAME 2007-09-03-ejt-57
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters
Date_ 20070903
Time 14.23
INSTRUM spect
PROBHD 5 mm TXI 1H/D-
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 256
DS 2
SWH 29761.904 Hz
FIDRES 0.454131 Hz
AQ 1.1010548 sec
RG 512
DW 16.800 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 11.50 usec
PL1 -4.20 dB
SFO1 125.7703643 MHz

======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL12 20.00 dB
PL13 23.00 dB
PL2 3.25 dB
SFO2 500.1320005 MHz

F2 - Processing parameters
SI 32768
SF 125.7576073 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

apgbenzyldeprot
mPROTONnight CDCl3 /opt/topspin ejt 17

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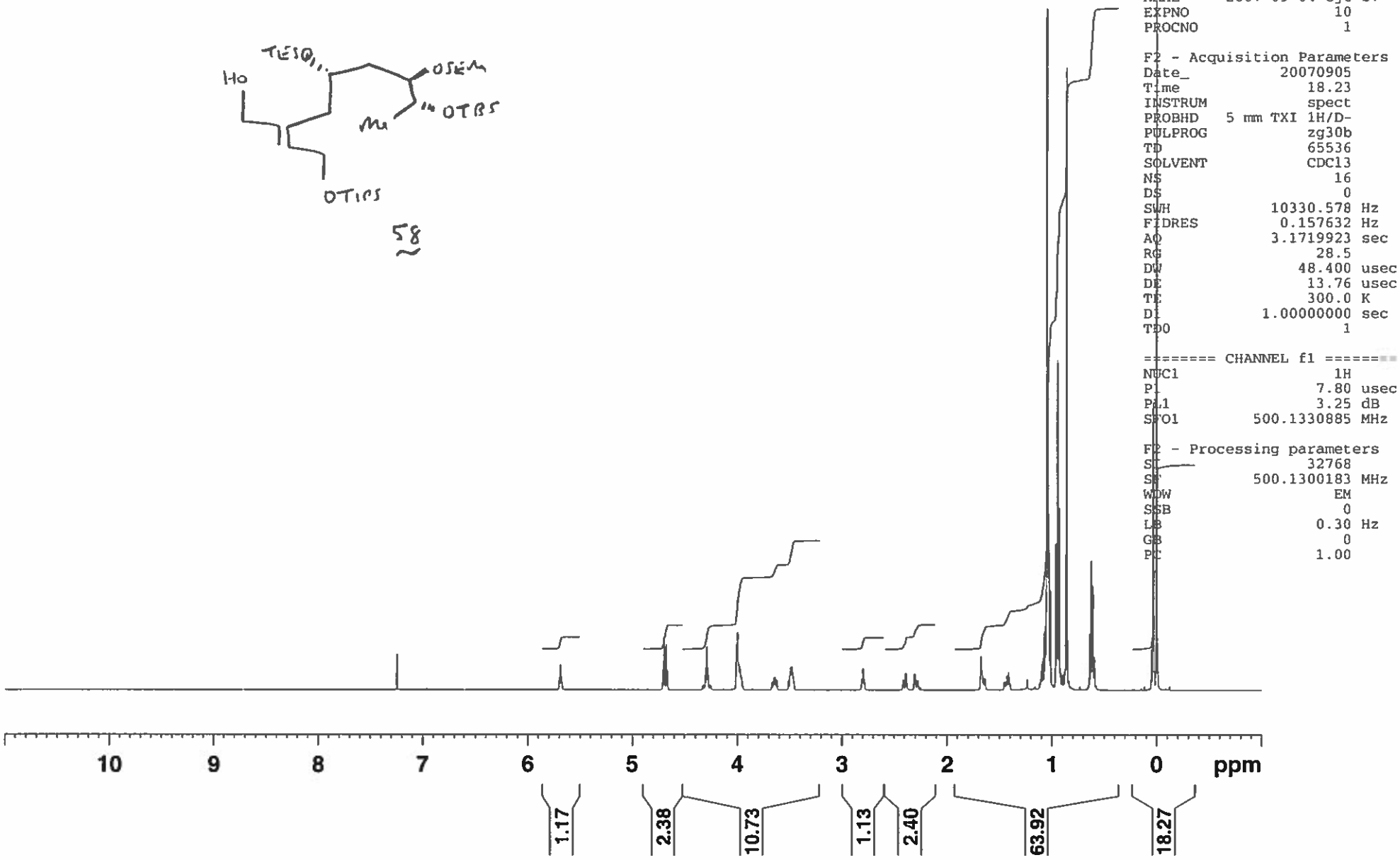


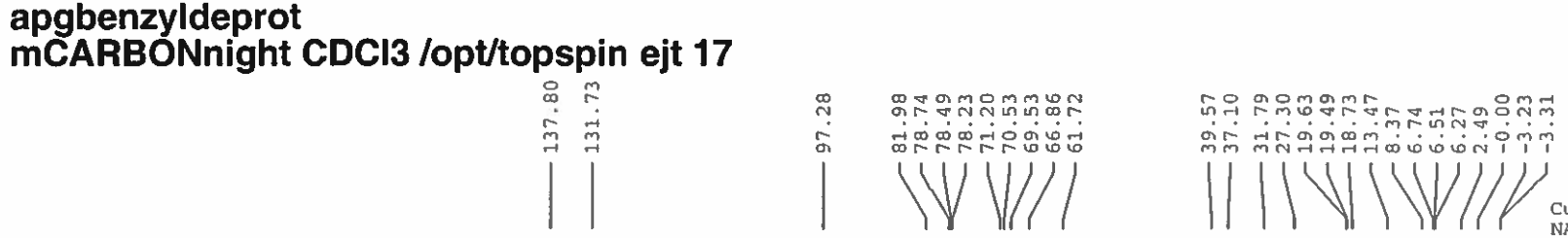

```
Current Data Parameters
NAME      2007-09-04-ejt-17
EXPNO                   10
PROCNO                   1

F2 - Acquisition Parameters
Date_              20070905
Time                  18.23
INSTRUM               spect
PROBHD    5 mm TXI 1H/D-
PULPROG               zg30b
TD                    65536
SOLVENT               CDCl3
NS                       16
DS                        0
SWH               10330.578 Hz
FIDRES             0.157632 Hz
AQ                 3.1719923 sec
RG                      28.5
DW                    48.400 usec
DE                    13.76 usec
TE                    300.0 K
D1                1.00000000 sec
TD0                      1

======== CHANNEL f1 ========
NUC1                     1H
P1                    7.80 usec
PL1                   3.25 dB
SFO1           500.1330885 MHz

F2 - Processing parameters
SI                    32768
SF             500.1300183 MHz
WDW                      EM
SSB                       0
LB                    0.30 Hz
GB                        0
PC                    1.00
```

apgbenzyldeprot
mCARBONnight CDCl3 /opt/topspin ejt 17



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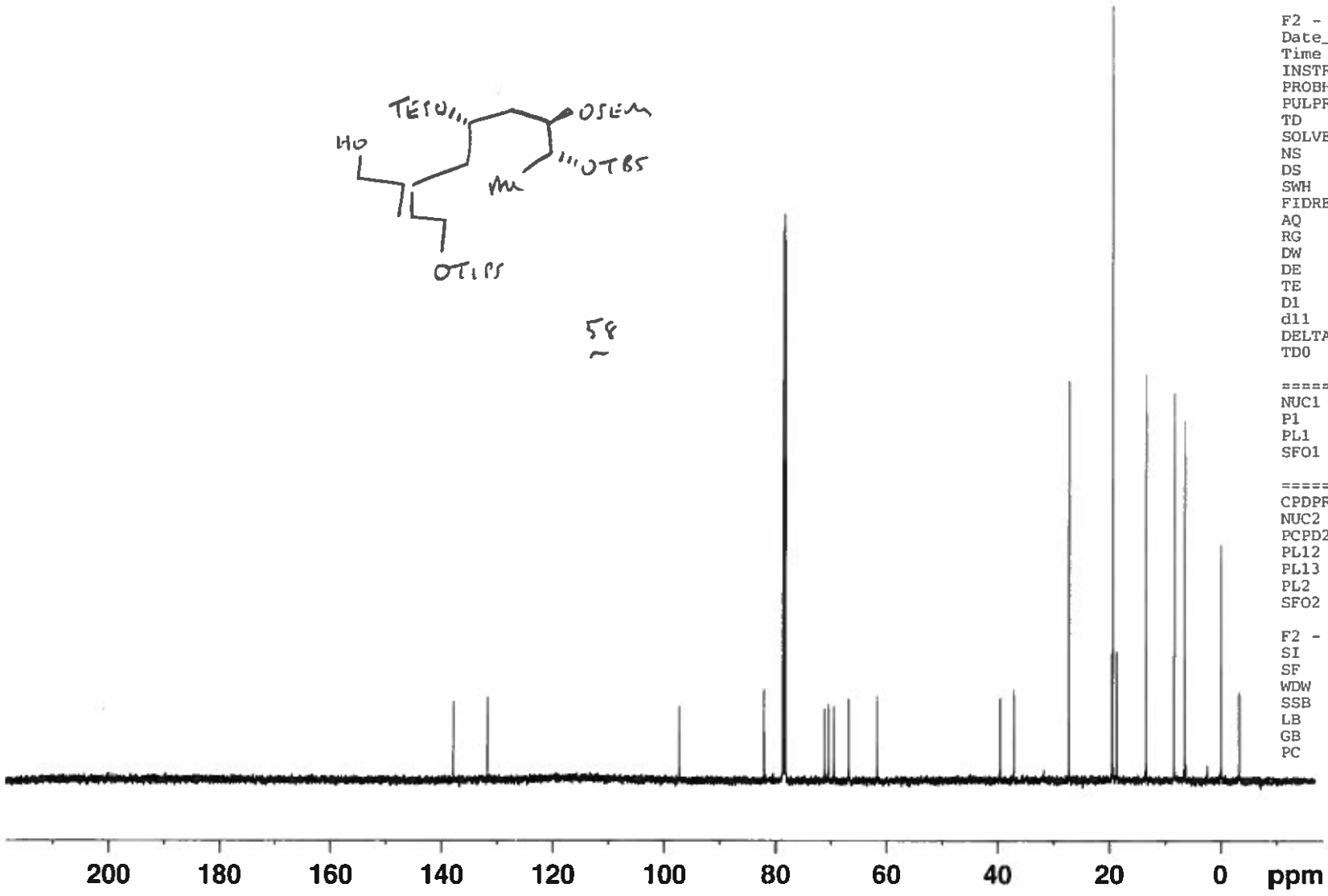
Current Data Parameters
NAME 2007-09-04-ejt-17
EXPNO 13
PROCNO 1

F2 - Acquisition Parameters
Date_ 20070905
Time 18.59
INSTRUM spect
PROBHD 5 mm TXI 1H/D-
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 512
DS 2
SWH 29761.904 Hz
FIDRES 0.454131 Hz
AQ 1.1010548 sec
RG 512
DW 16.800 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 11.50 usec
PL1 -4.20 dB
SFO1 125.7703643 MHz

======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL12 20.00 dB
PL13 23.00 dB
PL2 3.25 dB
SFO2 500.1320005 MHz

F2 - Processing parameters
SI 32768
SF 125.7576044 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



apgaldehyde
mPROTON CDCl3 /opt/topspin ejt 38

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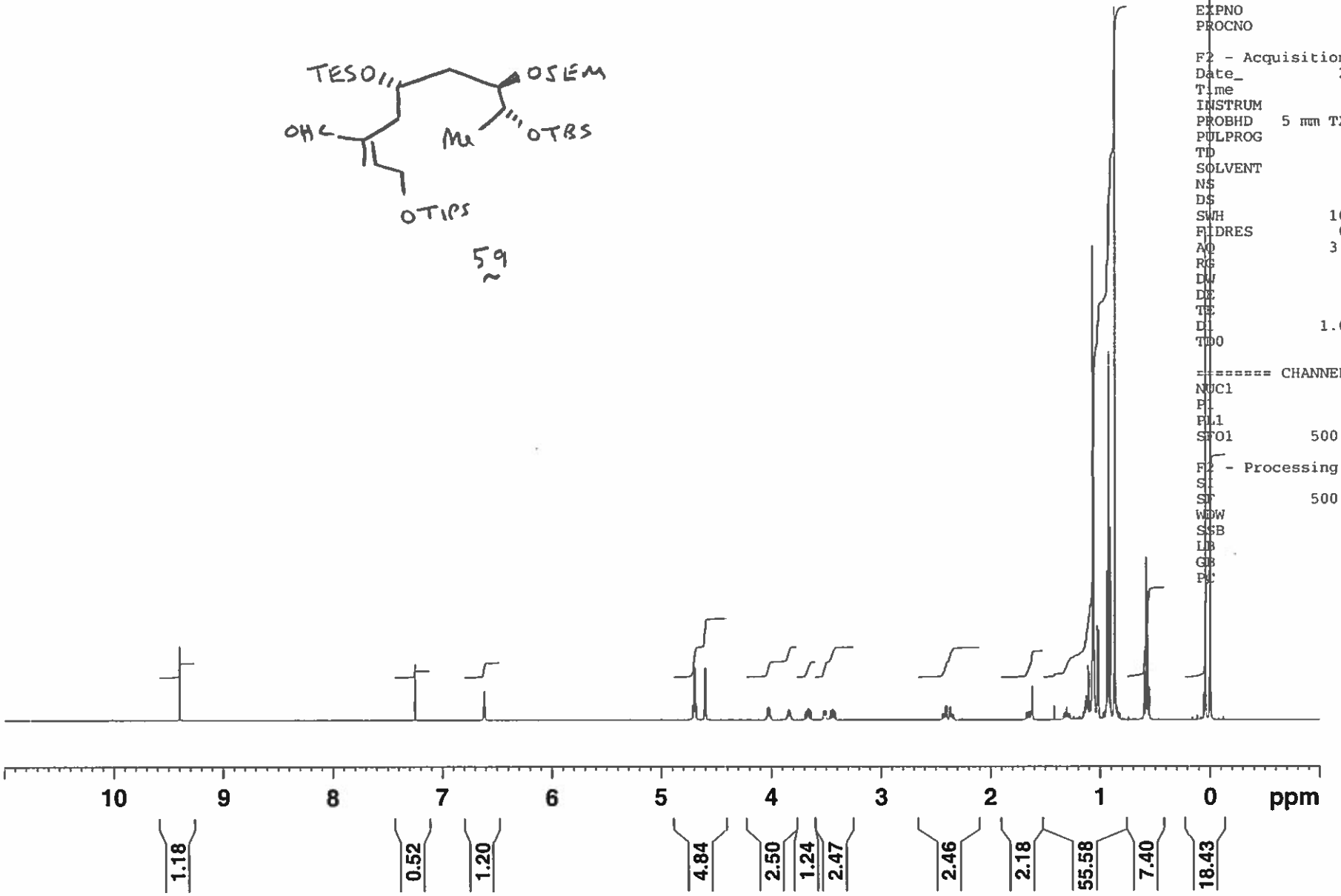
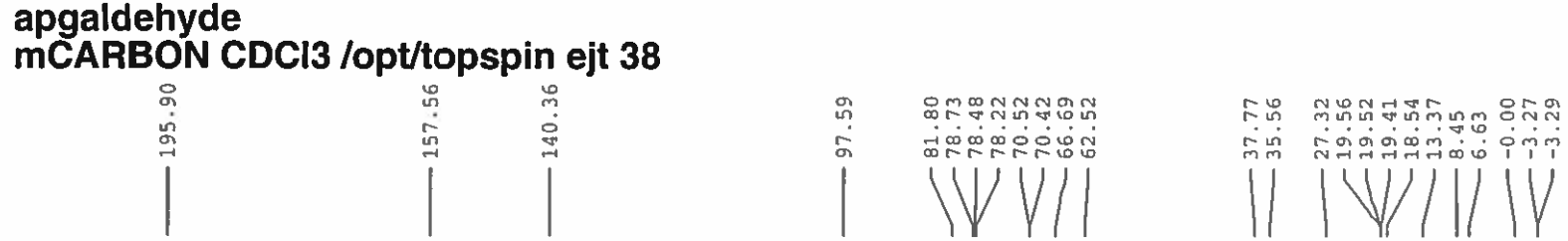
```
Current Data Parameters
NAME      2007-09-18-ejt-38
EXPNO                   10
PROCNO                   1

F2 - Acquisition Parameters
Date_              20070919
Time                 10.56
INSTRUM              spect
PROBHD    5 mm TXI 1H/D-
PULPROG              zg30b
TD                   65536
SOLVENT              CDCl3
NS                      16
DS                       0
SWH              10330.578 Hz
FIDRES           0.157632 Hz
AQ               3.1719923 sec
RG                    28.5
DW                  48.400 usec
DE                  13.76 usec
TE                  300.0 K
D1             1.00000000 sec
TD0                      1

======== CHANNEL f1 ========
NUC1                    1H
P1                   7.80 usec
PL1                  3.25 dB
SFO1          500.1330885 MHz

F2 - Processing parameters
SI                   32768
SF            500.1300130 MHz
WDW                     EM
SSB                      0
LB                   0.30 Hz
GB                       0
PC                   1.00
```



apgaldehyde
mCARBON CDCl3 /opt/topspin ejt 38



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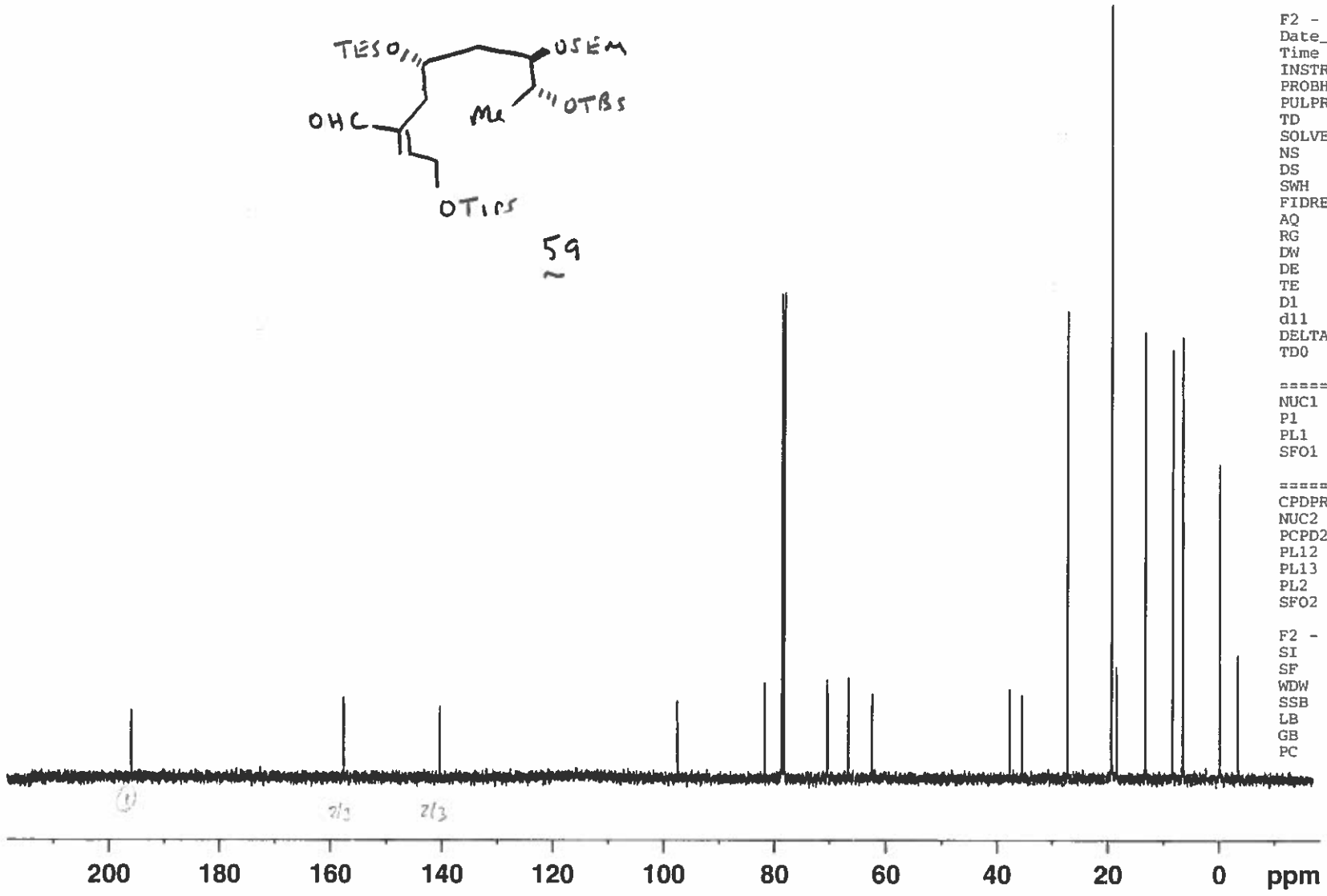


```
Current Data Parameters
NAME      2007-09-18-ejt-38
EXPNO                    12
PROCNO                    1

F2 - Acquisition Parameters
Date_              20070919
Time                  11.18
INSTRUM               spect
PROBHD   5 mm TXI 1H/D-
PULPROG              zgpg30
TD                    65536
SOLVENT               CDCl3
NS                      256
DS                        2
SWH               29761.904 Hz
FIDRES             0.454131 Hz
AQ                1.1010548 sec
RG                      512
DW                  16.800 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                  11.50 usec
PL1                  -4.20 dB
SFO1           125.7703643 MHz

======== CHANNEL f2 ========
CPDPRG2             waltz16
NUC2                    1H
PCPD2               80.00 usec
PL12                20.00 dB
PL13                23.00 dB
PL2                  3.25 dB
SFO2           500.1320005 MHz

F2 - Processing parameters
SI                      32768
SF             125.7576050 MHz
WDW                        EM
SSB                         0
LB                   1.00 Hz
GB                          0
PC                       1.40
```

apgbenzylprotectesdithiane
mPROTONnight CDCl3 {e:\bruk400data\2008\Dec} ejt 2

60
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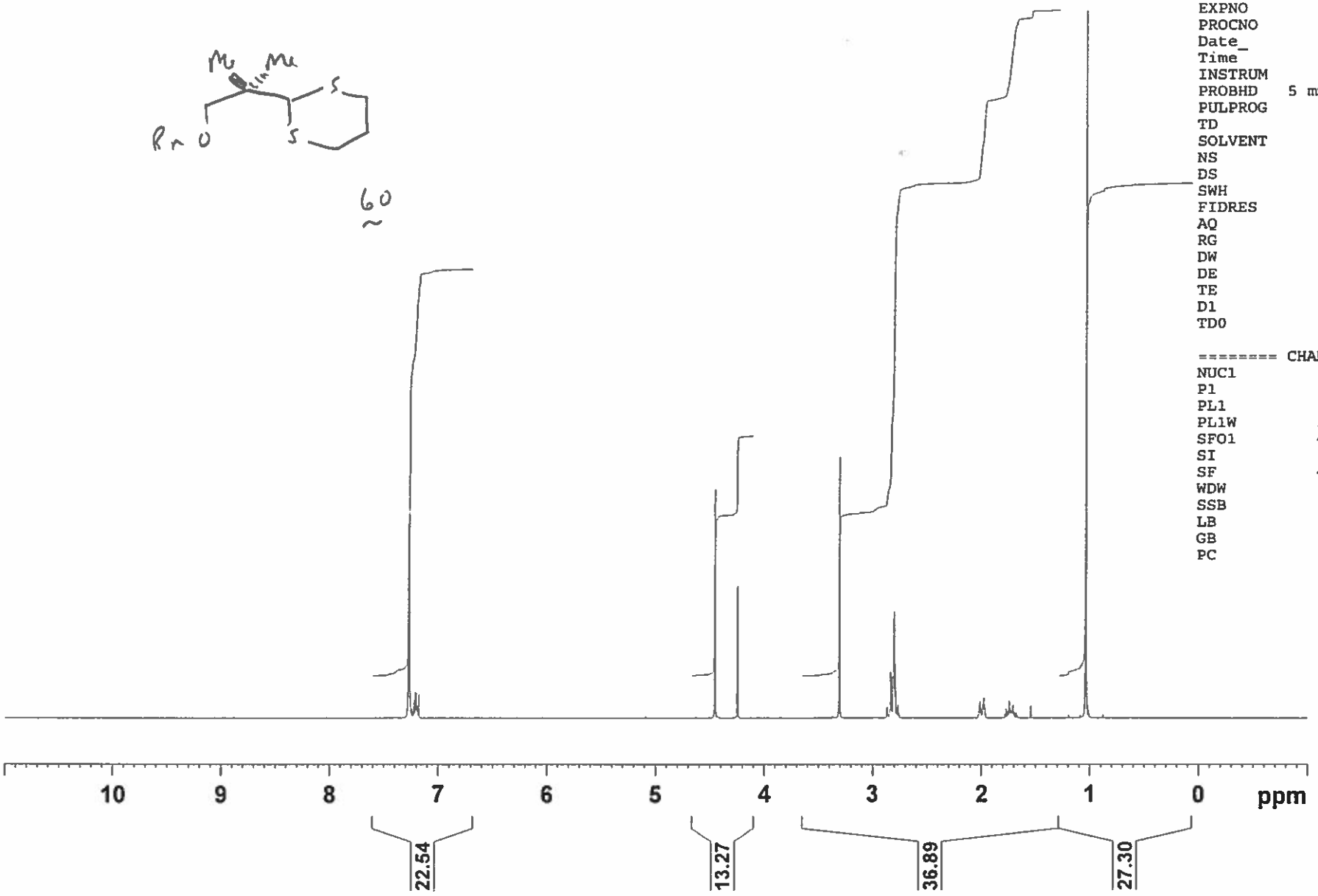
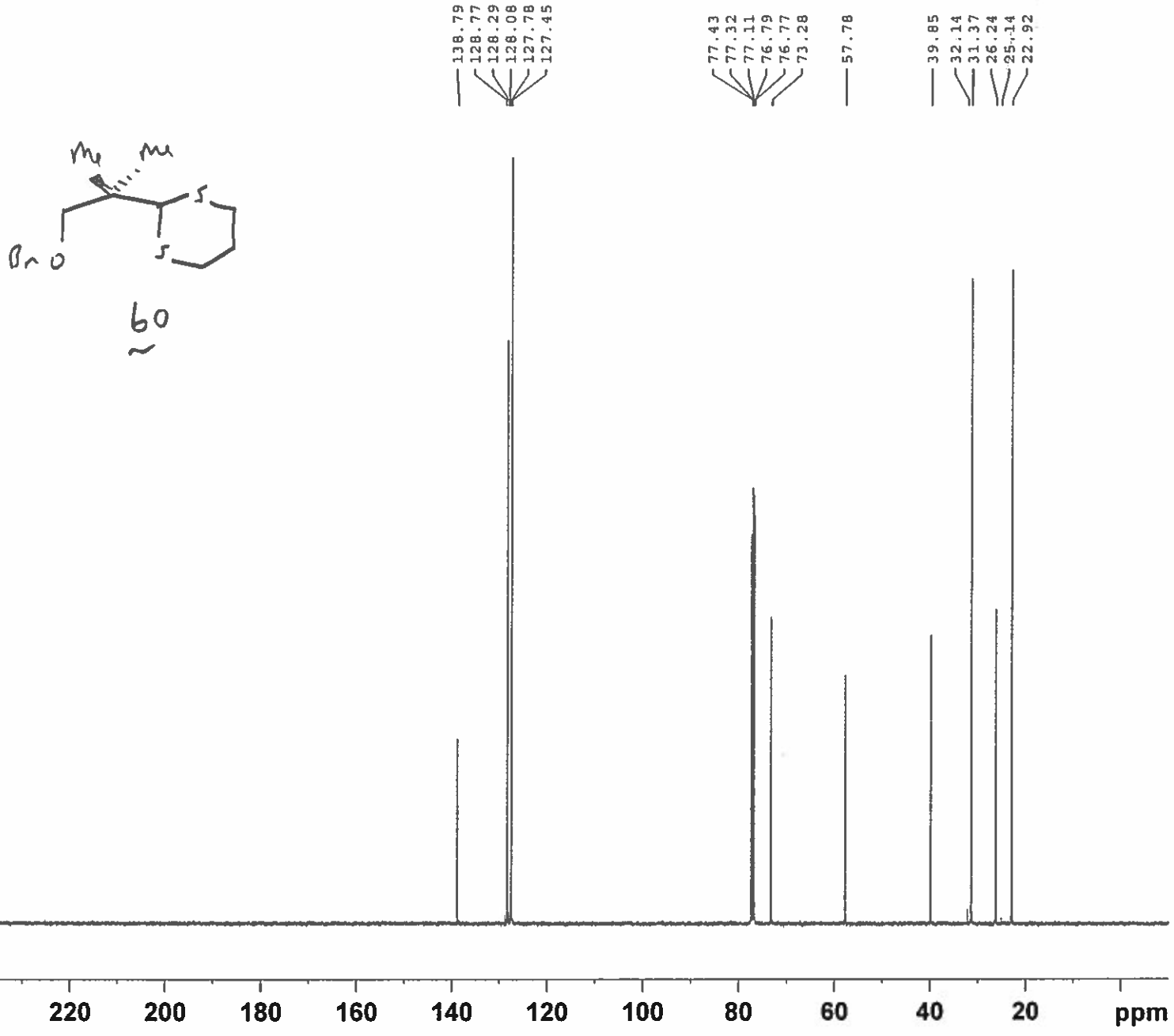


NAME	2008-12-21-ejt-2
EXPNO	11
PROCNO	1
Date_	20081221
Time	17.18
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	40.3
DW	60.500 usec
DE	9.40 usec
TE	293.1 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300437 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

apgbenzylprotectesdithiane
mCARBONnight CDCl3 {e:\bruk400data\2008\Dec} ejt 2



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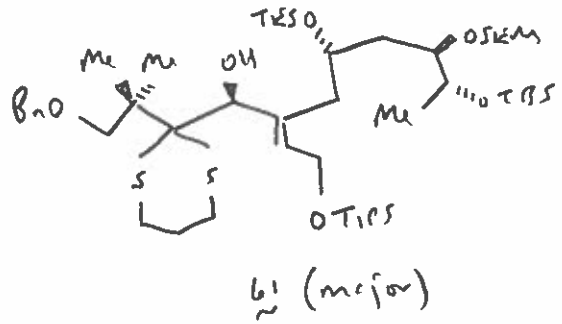
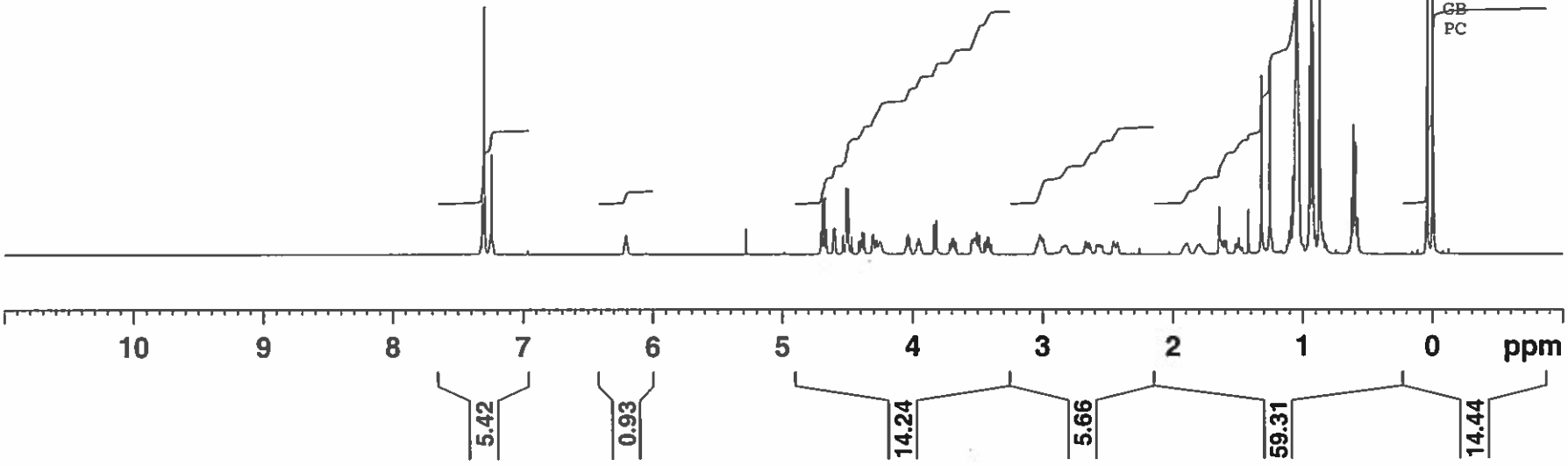
NAME	2008-12-21-ejt-2
EXPNO	13
PROCNO	1
Date_	20081221
Time	17.54
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	512
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	293.8 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6127690 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

apgdithianeaddnmajor
mPROTON CDCl3 /opt/bruk500data/2008/Jan ejt 40

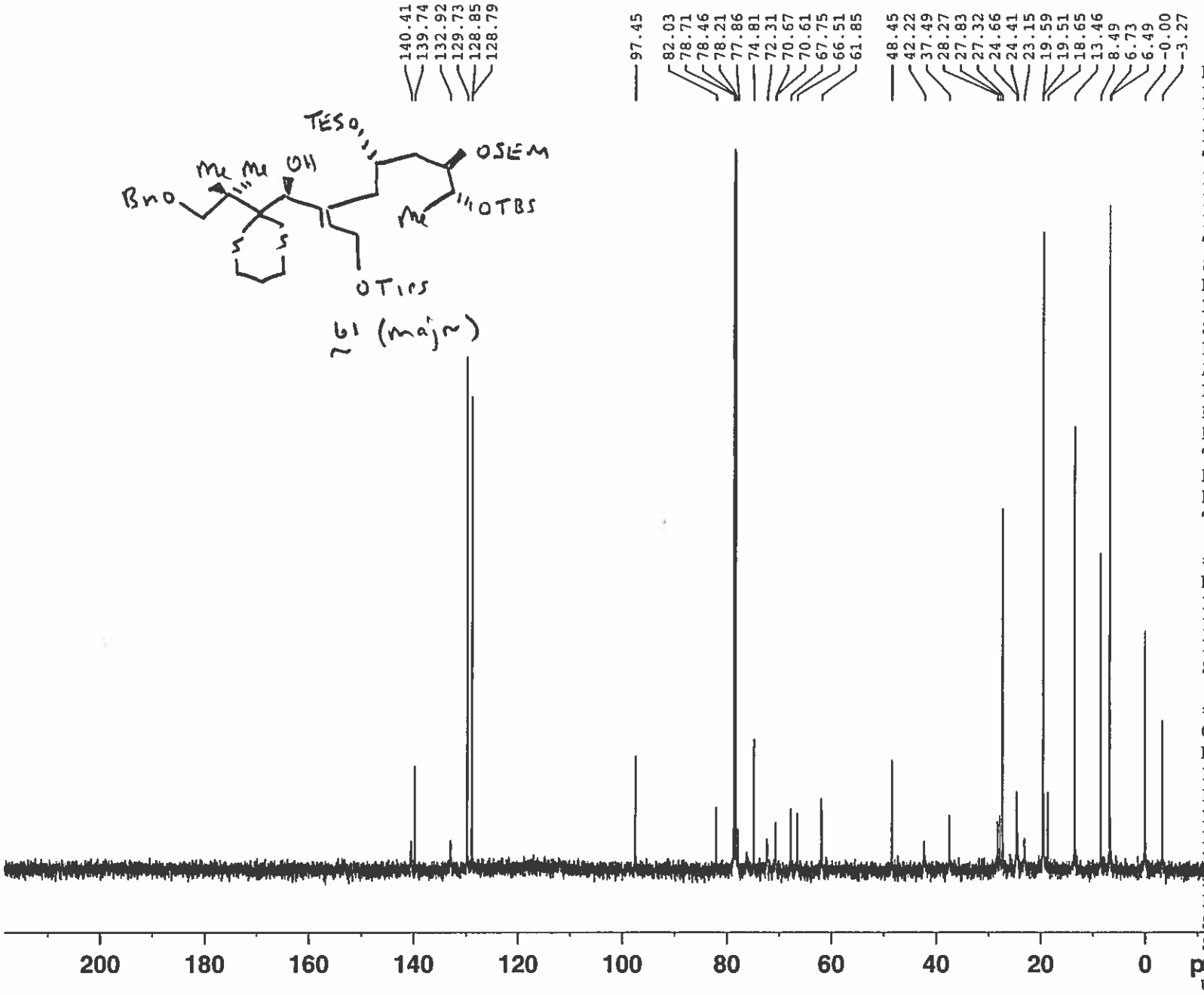


61 (major)

NAME	2008-01-17-ejt-40
EXPNO	10
PROCNO	1
Date_	20080117
Time	12.10
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	10330.578 Hz
FIDRES	0.157632 Hz
AQ	3.1719923 sec
RG	50.8
DW	48.400 usec
DE	13.46 usec
TE	300.0 K
D1	3.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	7.80 usec
PL1	3.25 dB
PL1W	12.12272263 W
SFO1	500.1330885 MHz
SI	32768
SF	500.1300145 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

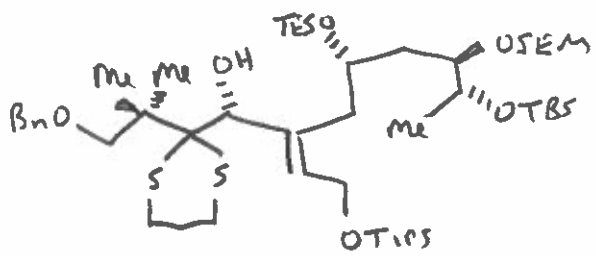


apgdithianeaddnmajor
mCARBON CDCl3 /opt/bruk500data/2008/Jan ejt 55



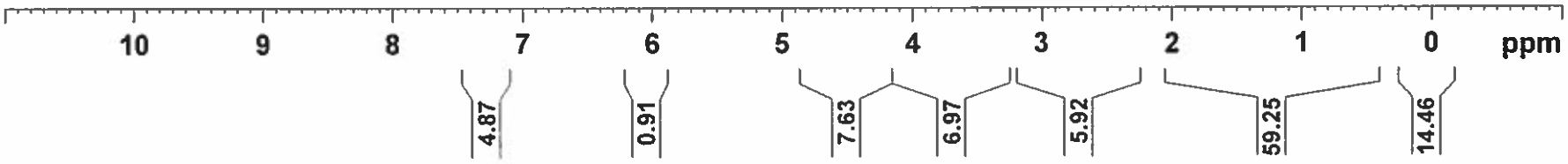
NAME	2008-01-17-ejt-55
EXPNO	10
PROCNO	1
Date_	20080117
Time	14.22
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	256
DS	2
SWH	29761.904 Hz
FIDRES	0.454131 Hz
AQ	1.1010548 se
RG	512
DW	16.800 us
DE	32.63 us
TE	300.0 K
D1	2.00000000 se
D11	0.03000000 se
TD0	1
======== CHANNEL f1 ======	
NUC1	13C
P1	9.50 us
PL1	-4.20 dB
PL1W	218.02882385 W
SFO1	125.7703643 MH
======== CHANNEL f2 ======	
CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 us
PL2	4.20 dB
PL12	24.42 dB
PL13	23.00 dB
PL2W	9.74092484 W
PL12W	0.09259769 W
PL13W	0.12841040 W
SFO2	500.1320005 MH
SI	32768
SFO1	125.7576079 MH
WDW	EM

apgminorepimerdithianeaddn
mPROTON CDCl3 {e:\bruk400data\2008\Dec} ejt 9



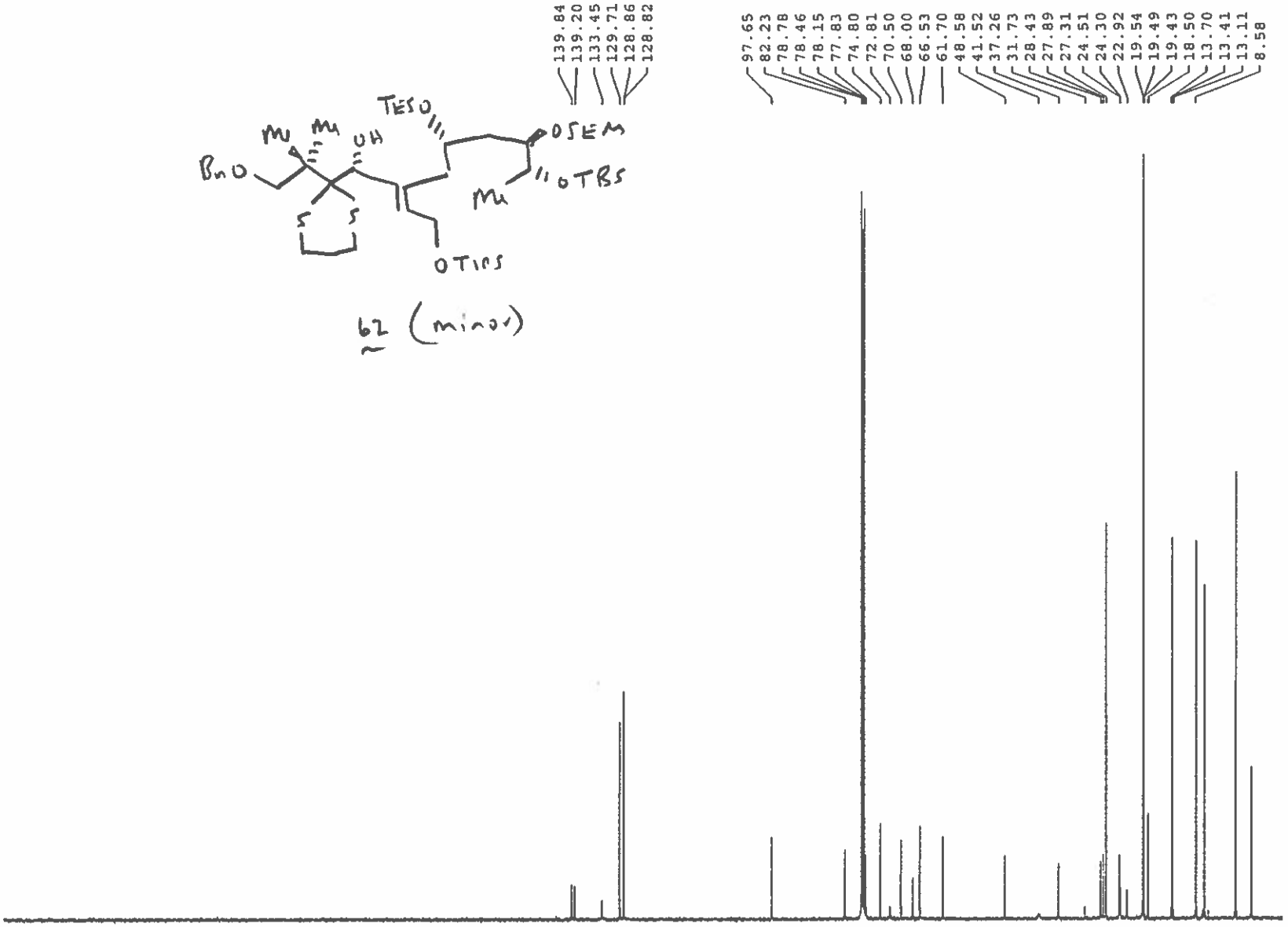
62 (minor)

NAME	2008-12-07-ejt-9
EXPNO	10
PROCNO	1
Date_	20081207
Time	14.20
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	36
DW	60.500 usec
DE	9.40 usec
TE	291.1 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300164 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



apgdithianeaddnminorepimer
mCARBONnight CDCl3 {e:\bruk400data\2008\Dec} ejt 10

62 (minor)

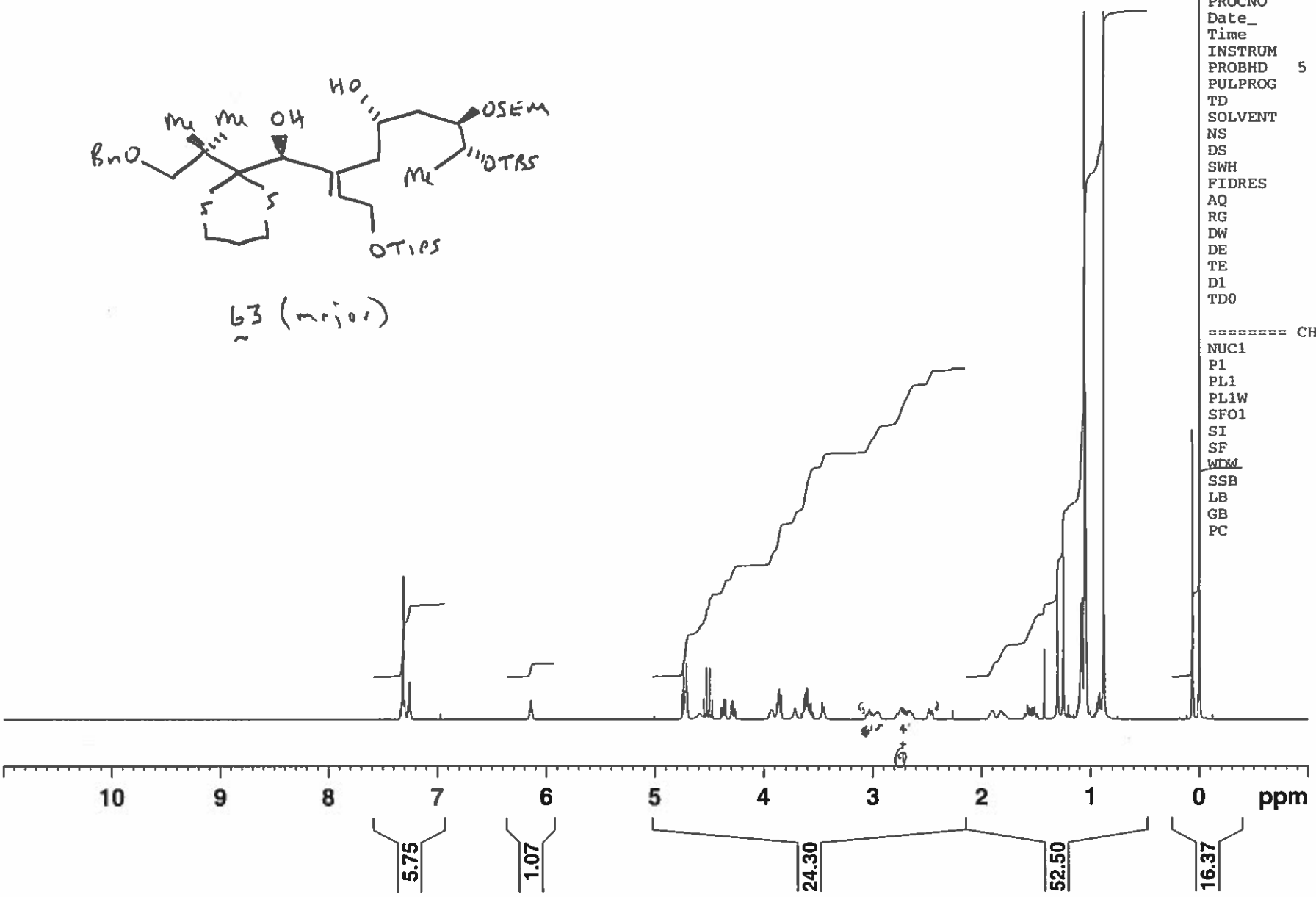


NAME	2008-12-07-ejt-10
EXPNO	10
PROCNO	1
Date_	20081207
Time	17.27
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	1600
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	291.7 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6126269 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

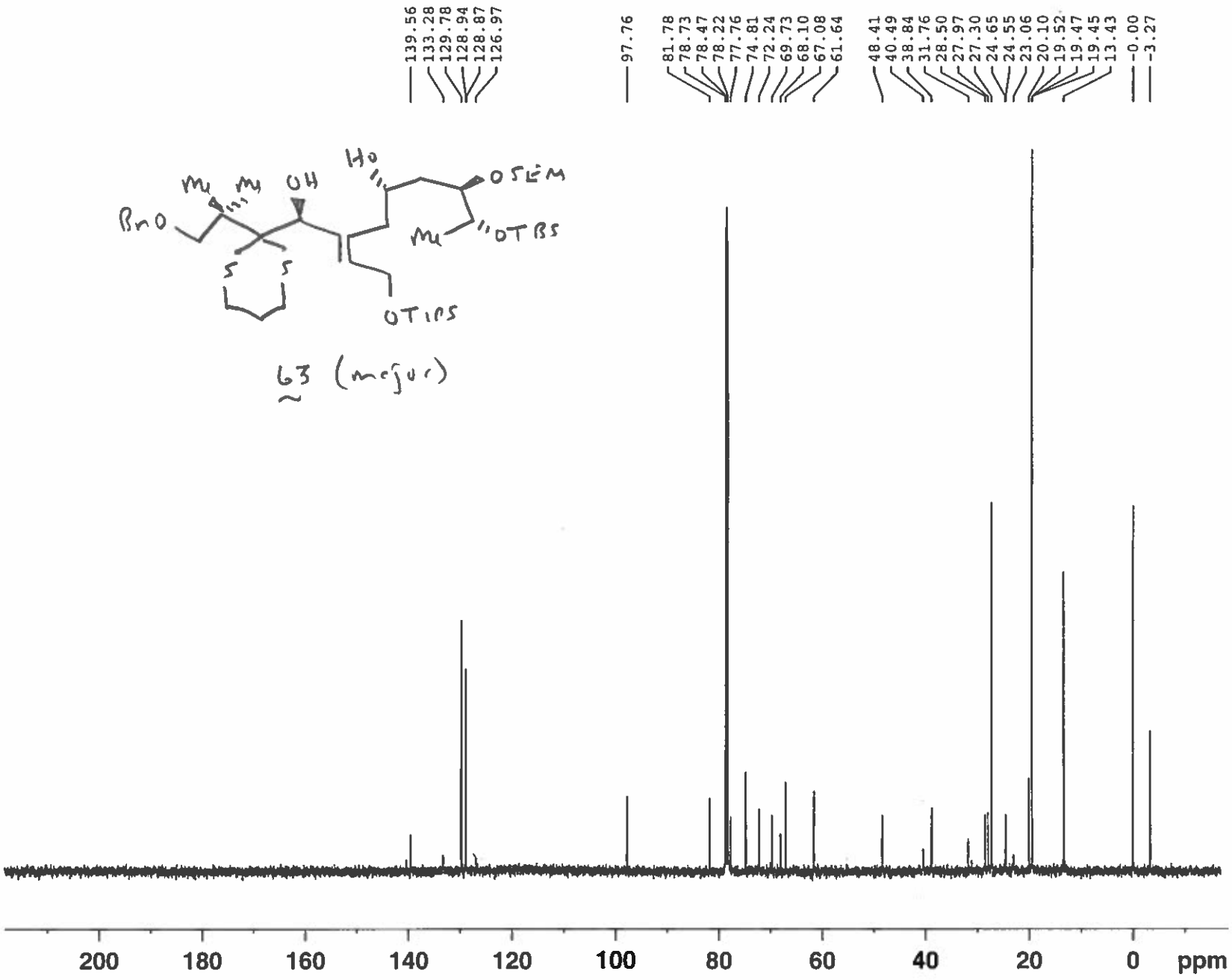
apgTesdeprot(diol)
mPROTON CDCl3 /opt/bruk500data/2008/Apr ejt 37

63 (major)

NAME	2008-04-01-ejt-37
EXPNO	10
PROCNO	1
Date_	20080401
Time	15.58
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	10330.578 Hz
FIDRES	0.157632 Hz
AQ	3.1719923 sec
RG	20.2
DW	48.400 usec
DE	13.46 usec
TE	293.9 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	7.80 usec
PL1	3.25 dB
PL1W	12.12272263 W
SFO1	500.1330885 MHz
SI	32768
SF	500.1300102 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



apgtesdeprot
mCARBON CDCl3 /opt/bruk500data/2008/Apr acr 51



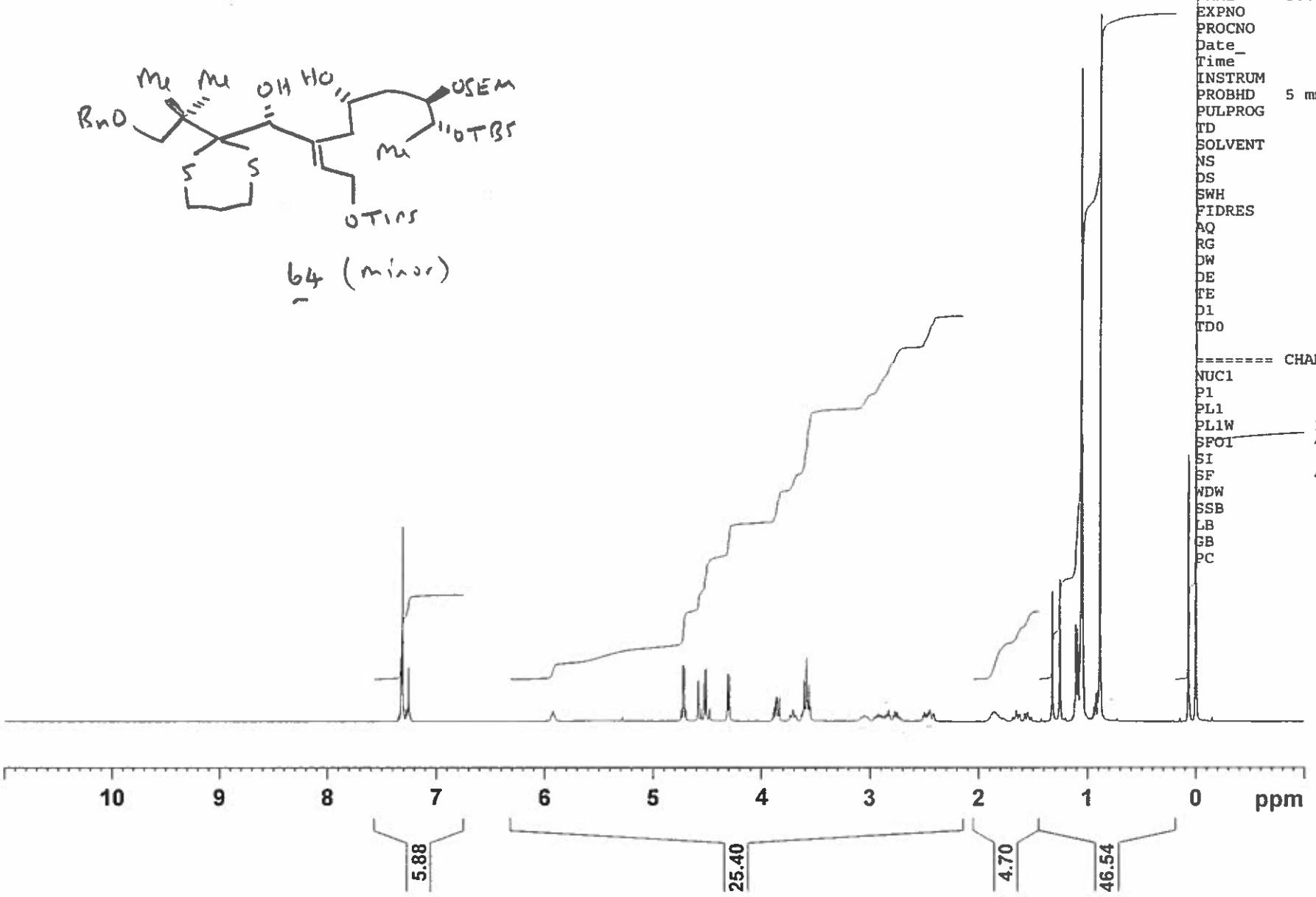
63 (major)

NAME	2008-04-01-acr-51
EXPNO	10
PROCNO	1
Date_	20080401
Time	17.31
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	256
DS	2
SWH	29761.904 Hz
FIDRES	0.454131 Hz
AQ	1.1010548 sec
RG	512
DW	16.800 usec
DE	32.63 usec
TE	294.8 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	9.50 usec
PL1	-4.20 dB
PL1W	218.02882385 W
SFO1	125.7703643 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 usec
PL2	4.20 dB
PL12	23.47 dB
PL13	23.00 dB
PL2W	9.74092484 W
PL12W	0.11523920 W
PL13W	0.12841040 W
SFO2	500.1320005 MHz
SI	32768
SF	125.7576078 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

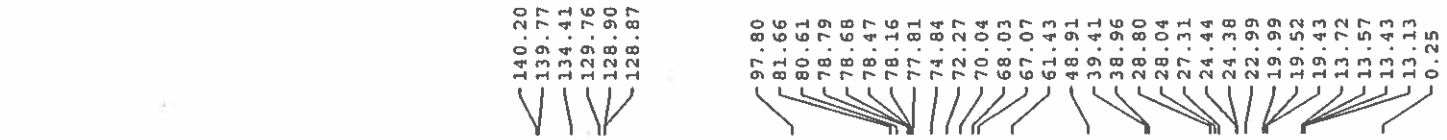
apgdiolminorepimer
mPROTONnight CDCl3 {e:\bruk400data\2008\Dec} ejt 1

64 (minor)

NAME	2008-12-21-ejt-1
EXPNO	10
PROCNO	1
Date_	20081221
Time	15.17
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	36
DW	60.500 usec
DE	9.40 usec
TE	292.6 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300128 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

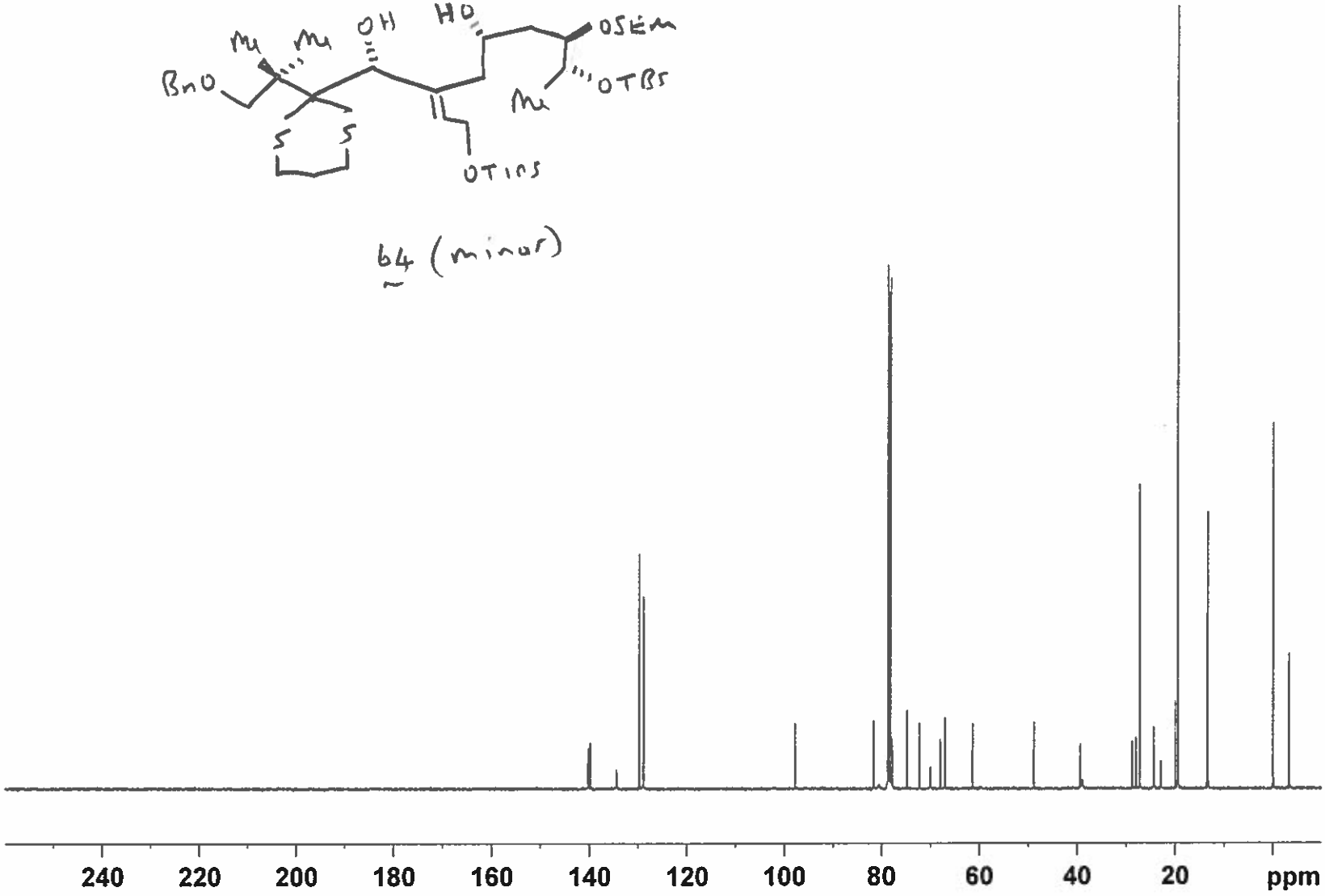


apgdiolminorepimer
mCARBONnight CDCl3 {e:\bruk400data\2008\Dec} ejt 1

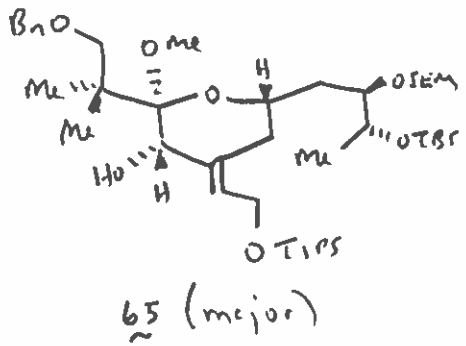


64 (minor)

NAME	2008-12-21-ejt-1
EXPNO	12
PROCNO	1
Date_	20081221
Time	16.45
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	1500
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	293.6 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6126260 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

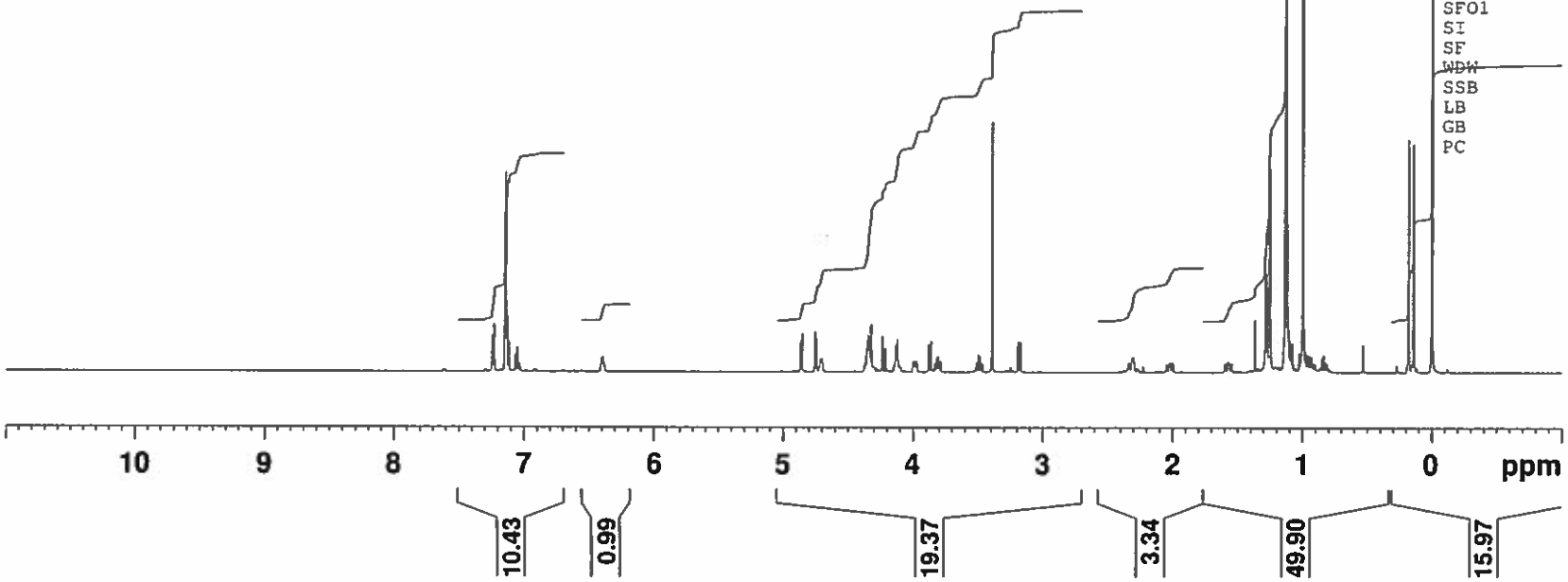


apgtopspot
mPROTON C6D6 /opt/bruk500data/2008/Feb ejt 18

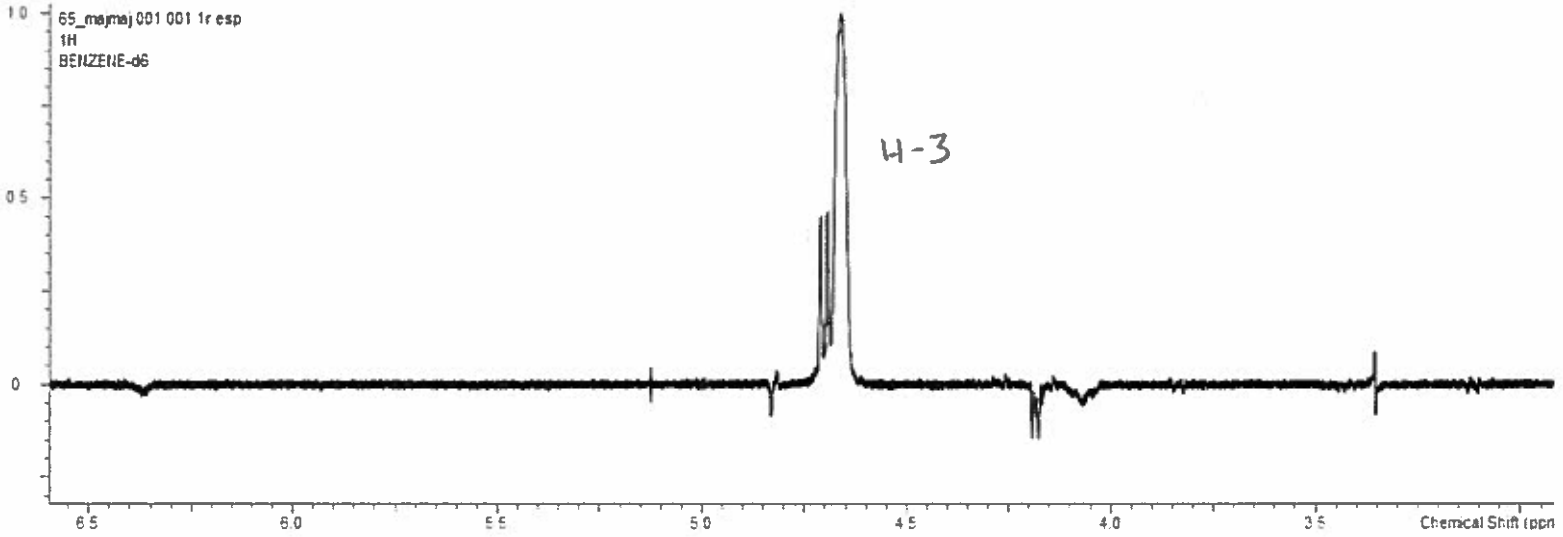


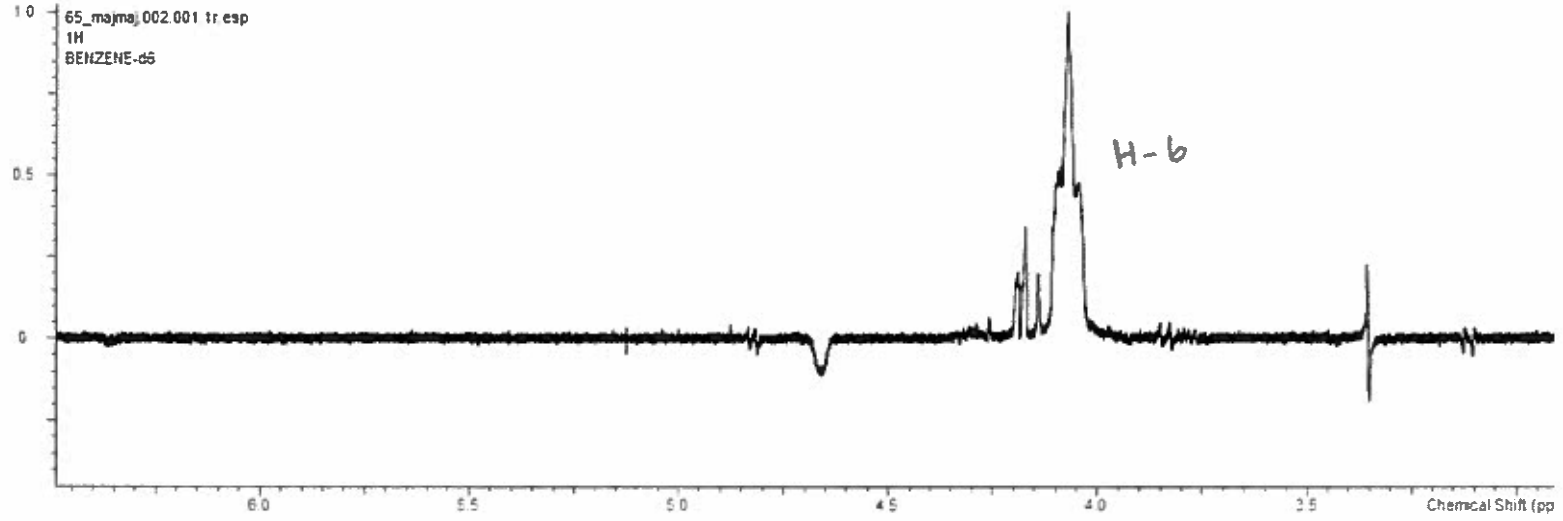
65 (major)

NAME	2008-02-22-ejt-18
EXPNO	10
PROCNO	1
Date_	20080222
Time	16.51
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zg30b
TD	65536
SOLVENT	C6D6
NS	16
DS	0
SWH	10330.578 Hz
FIDRES	0.157632 Hz
AQ	3.1719923 sec
RG	36
DW	48.400 usec
DE	10.67 usec
TE	300.0 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	21.07 usec
PL1	3.25 dB
PL1W	12.12272263 W
SFO1	500.1330885 MHz
SI	32768
SF	500.1300591 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

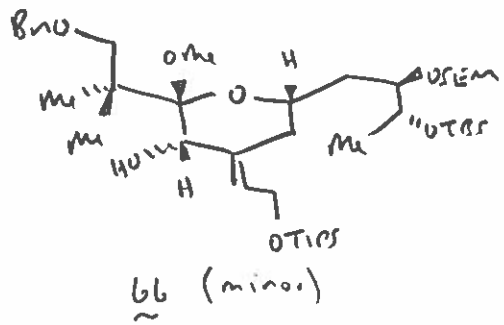


Compound 65


65_majmaj.001.001.1r.esp
1H
BENZENE-d6
H-3
1.0
0.5
0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
Chemical Shift (ppm

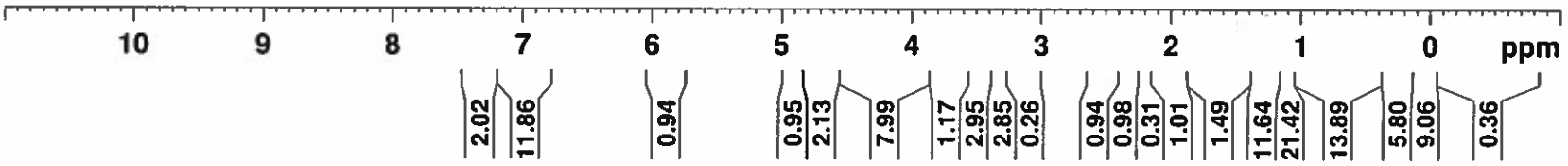

65_majmaj.002.001.1r.esp
1H
BENZENE-d6
H-6
1.0
0.5
0
6.0
5.5
5.0
4.5
4.0
3.5
Chemical Shift (pp

apgbottomspot
mPROTON C6D6 /opt/bruk500data/2008/Feb ejt 19

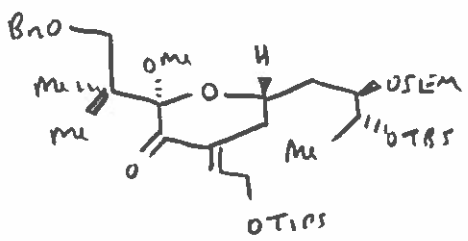


66 (minor)

NAME	2008-02-22-ejt-19
EXPNO	10
PROCNO	1
Date_	20080222
Time	17.03
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zg30b
TD	65536
SOLVENT	C6D6
NS	16
DS	0
SWH	10330.578 Hz
FIDRES	0.157632 Hz
AQ	3.1719923 sec
RG	64
DW	48.400 usec
DE	10.67 usec
TE	300.0 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	21.07 usec
PL1	3.25 dB
PL1W	12.12272263 W
SFO1	500.1330885 MHz
SI	32768
SF	500.1300575 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

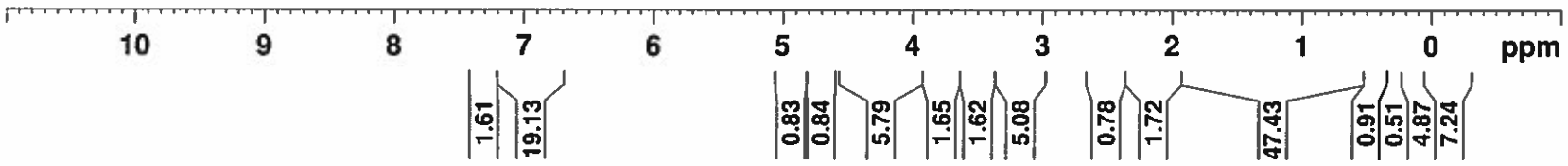


apgketonemajor/major
mPROTON C6D6 /opt/bruk500data/2008/Feb ejt 31



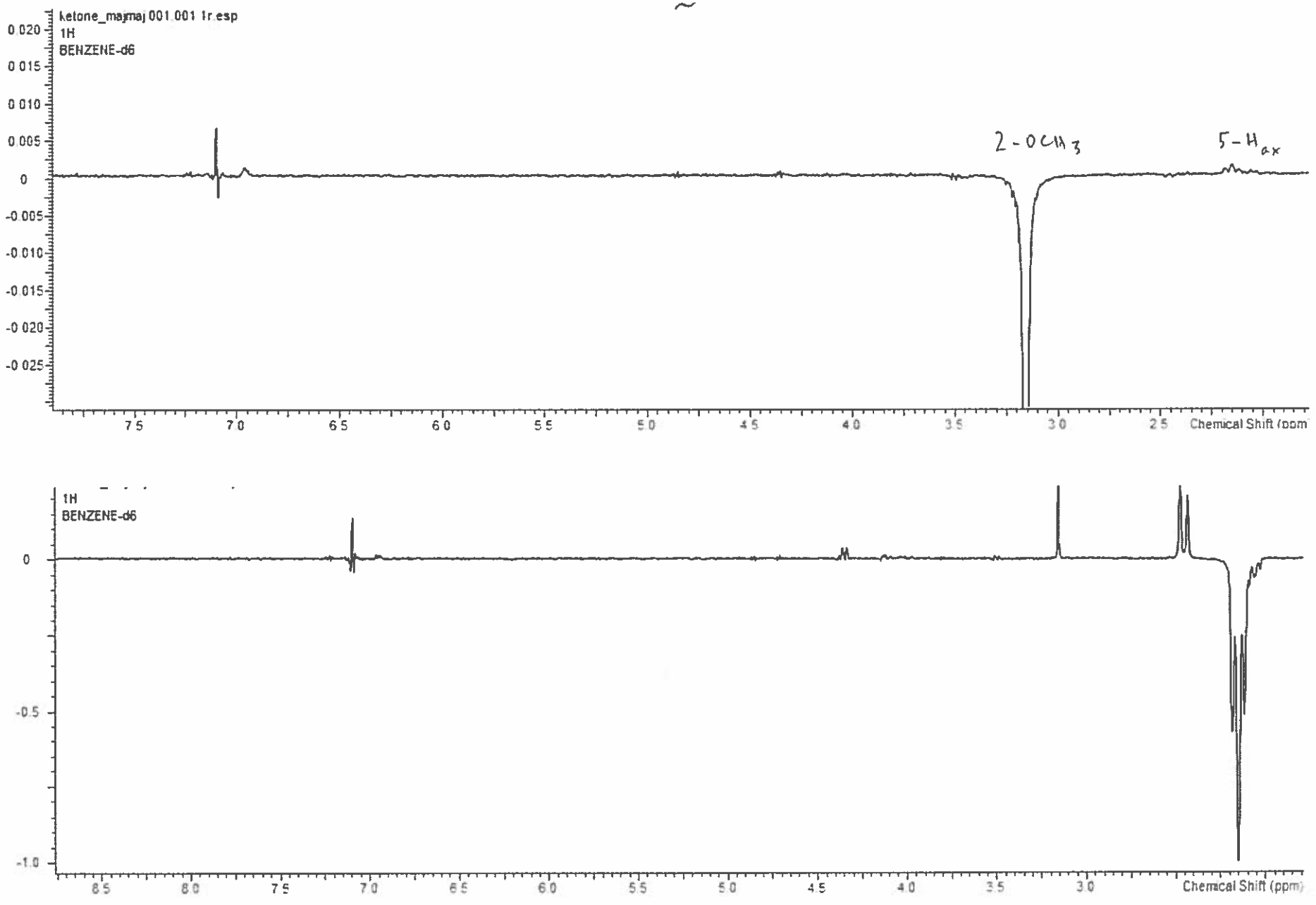
67

NAME	2008-02-25-ejt-31
EXPNO	10
PROCNO	1
Date_	20080225
Time	17.41
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zg30b
TD	65536
SOLVENT	C6D6
NS	16
DS	0
SWH	10330.578 Hz
FIDRES	0.157632 Hz
AQ	3.1719923 sec
RG	90.5
DW	48.400 usec
DE	10.67 usec
TE	300.0 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	21.07 usec
PL1	3.25 dB
PL1W	12.12272263 W
SFO1	500.1330885 MHz
SI	32768
SF	500.1300602 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



Ketone majmaj

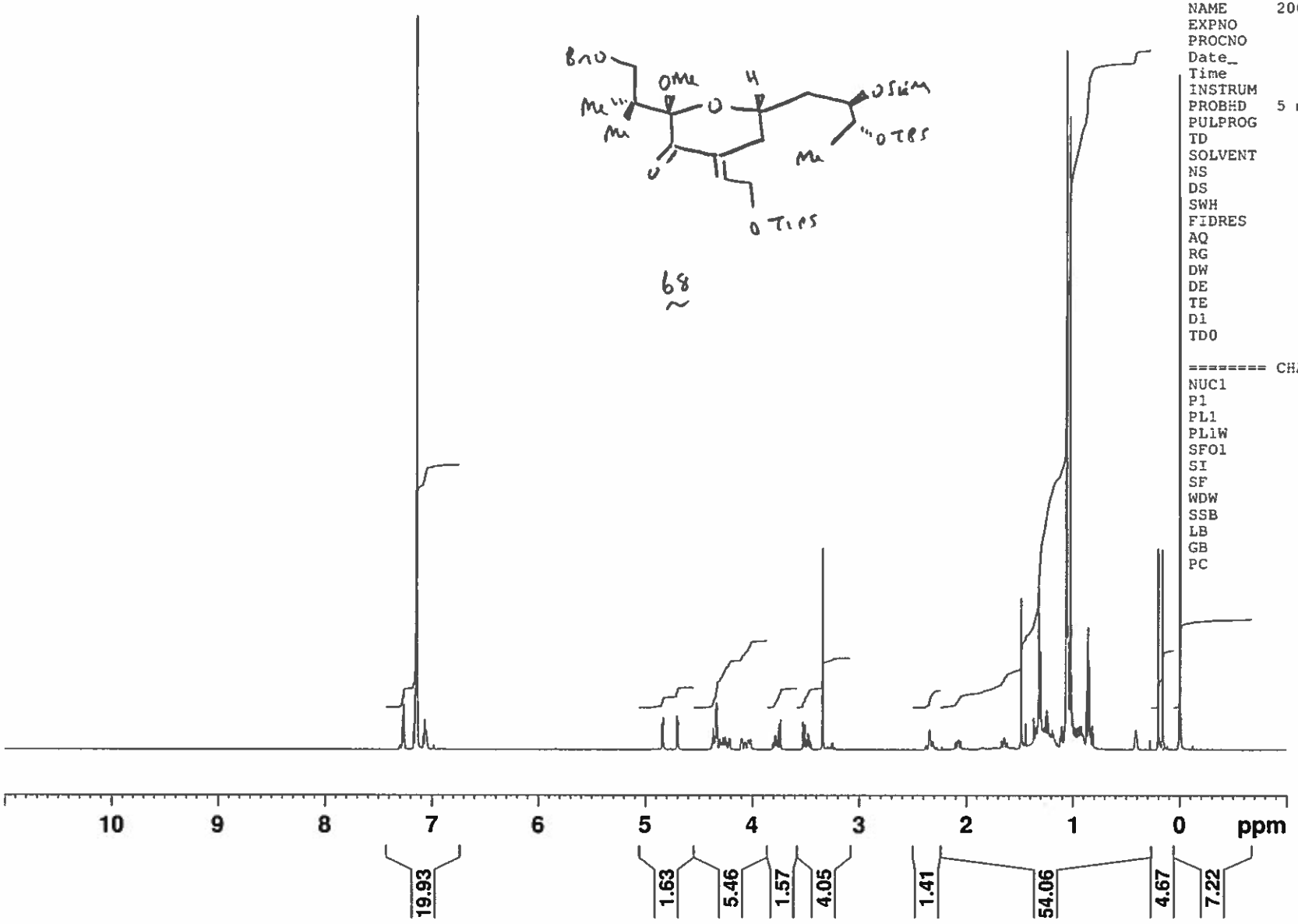
67



apgketonemaj/min
mPROTON C6D6 /opt/bruk500data/2008/Feb ejt 59

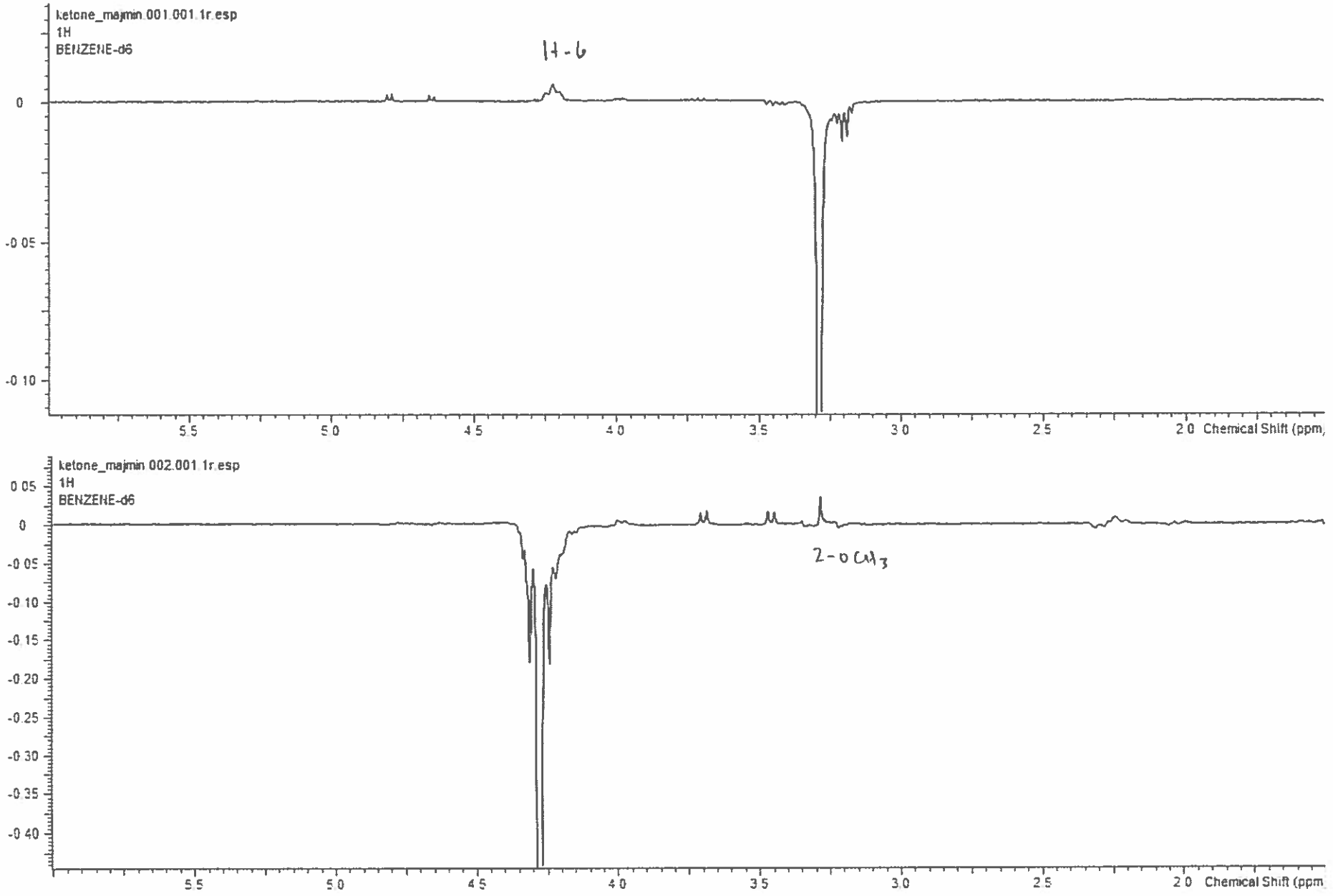
68

NAME	2008-02-26-ejt-59
EXPNO	10
PROCNO	1
Date_	20080226
Time	16.32
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zg30b
TD	65536
SOLVENT	C6D6
NS	16
DS	0
SWH	10330.578 Hz
FIDRES	0.157632 Hz
AQ	3.1719923 sec
RG	90.5
DW	48.400 usec
DE	10.67 usec
TE	300.0 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	21.07 usec
PL1	3.25 dB
PL1W	12.12272263 W
SFO1	500.1330885 MHz
SI	32768
SF	500.1300586 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

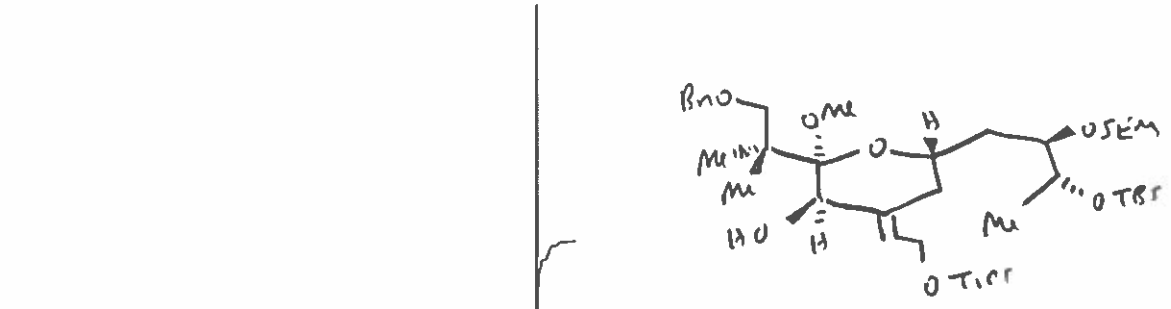


Ketone majmin

68

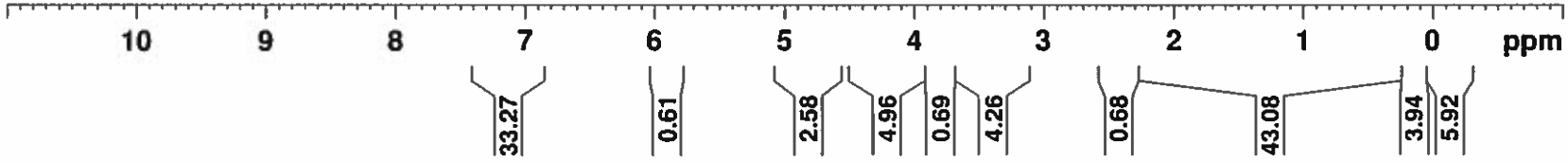


apgmethoxyacetalminor
mPROTON C6D6 /opt/bruk500data/2008/Feb ejt 24



69 (minor)

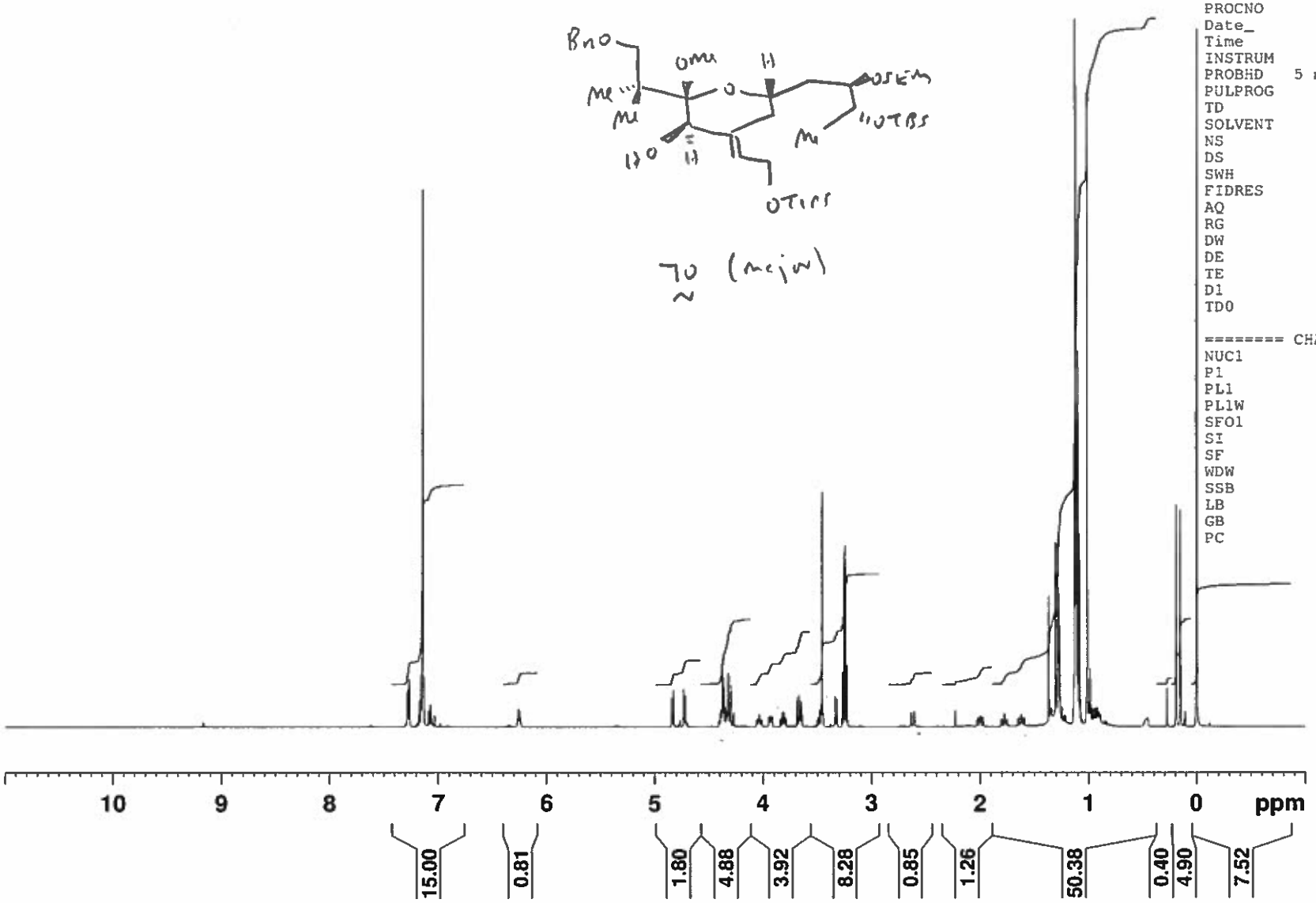
NAME	2008-02-13-ejt-24
EXPNO	10
PROCNO	1
Date_	20080213
Time	15.17
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zg30b
TD	65536
SOLVENT	C6D6
NS	64
DS	0
SWH	10330.578 Hz
FIDRES	0.157632 Hz
AQ	3.1719923 sec
RG	203
DW	48.400 usec
DE	10.67 usec
TE	300.0 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	21.07 usec
PL1	3.25 dB
PL1W	12.12272263 W
SFO1	500.1330885 MHz
SI	32768
SF	500.1300604 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



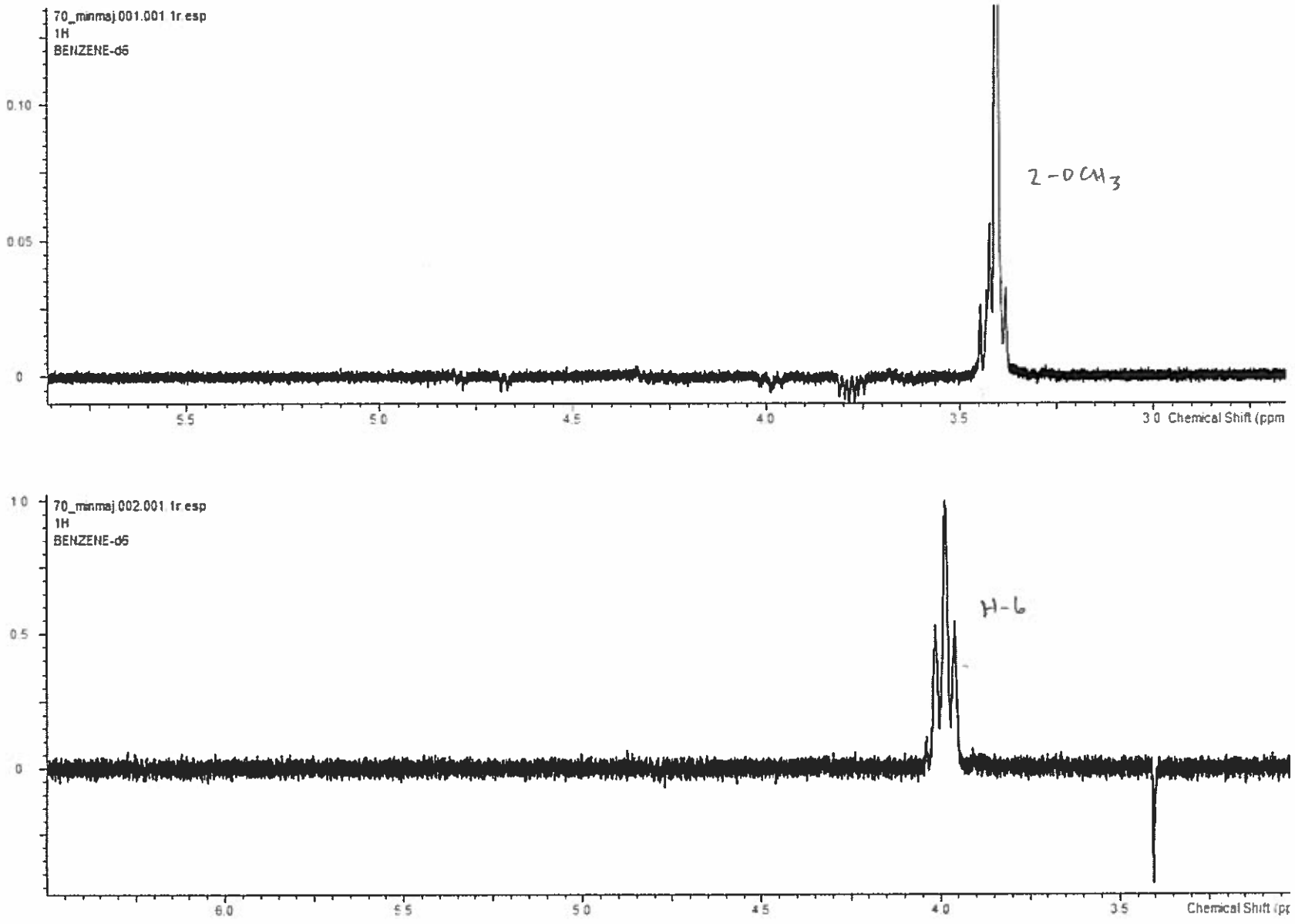
apgmethoxyacetalmaj(minorepimer)
mPROTON C6D6 /opt/bruk500data/2008/Feb ejt 22

70 (major)

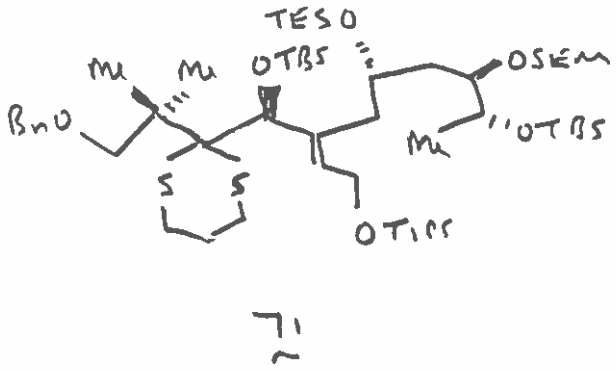
NAME	2008-02-14-ejt-22
EXPNO	10
PROCNO	1
Date_	20080214
Time	11.15
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zg30b
TD	65536
SOLVENT	C6D6
NS	32
DS	0
SWH	10330.578 Hz
FIDRES	0.157632 Hz
AQ	3.1719923 sec
RG	90.5
DW	48.400 usec
DE	10.67 usec
TE	300.0 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	21.07 usec
PL1	3.25 dB
PL1W	12.12272263 W
SFO1	500.1330885 MHz
SI	32768
SF	500.1300599 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



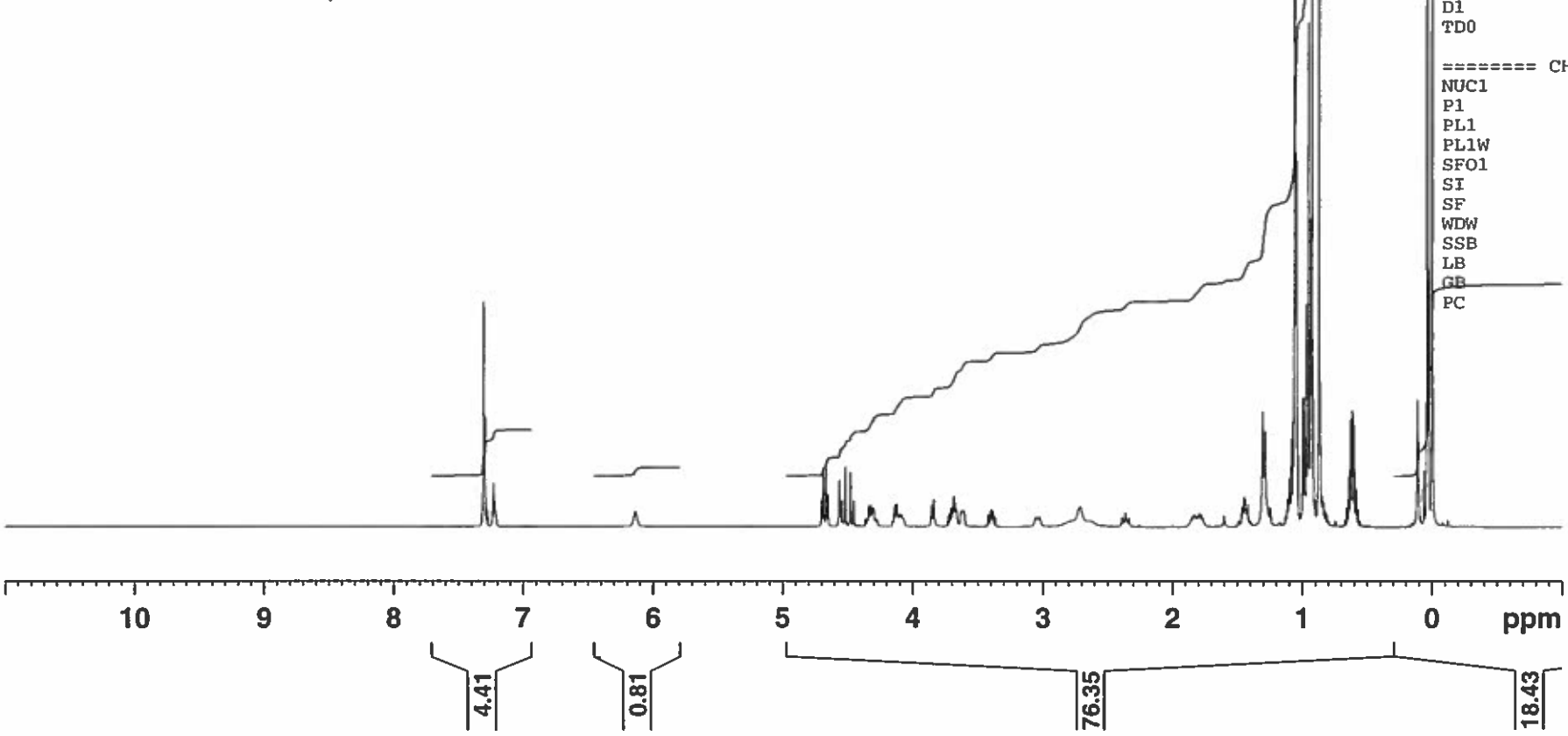
Compound 70


70_minmaj.001.001.1r.esp
1H
BENZENE-d6
0.10
0.05
0
2-OCH3
5.5
5.0
4.5
4.0
3.5
3.0 Chemical Shift (ppm
70_minmaj.002.001.1r.esp
1H
BENZENE-d6
1.0
0.5
0
H-6
6.0
5.5
5.0
4.5
4.0
3.5
Chemical Shift (pp

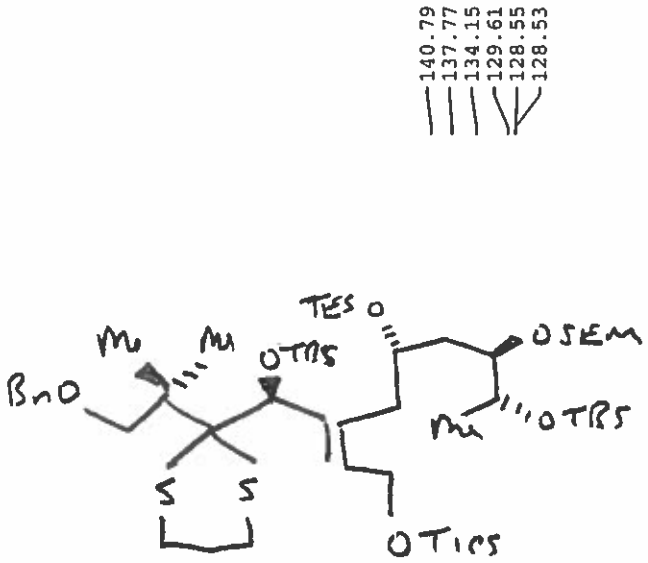
apgtbsprotmajor
mPROTONnight CDCl3 /opt/bruk500data/2008/Jan ejt 12



NAME	2008-01-21-ejt-12
EXPNO	12
PROCNO	1
Date_	20080121
Time	23.42
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	10330.578 Hz
FIDRES	0.157632 Hz
AQ	3.1719923 sec
RG	11.3
DW	48.400 usec
DE	13.46 usec
TE	300.0 K
D1	3.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	7.80 usec
PL1	3.25 dB
PL1W	12.12272263 W
SFO1	500.1330885 MHz
SI	32768
SF	500.1300220 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



apgtbsprotmajor
mCARBON CDCl3 /opt/bruk500data/2008/Jan ejt 57



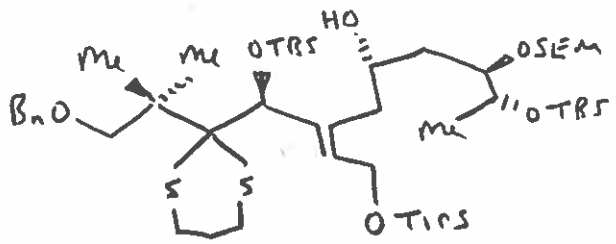
71

140.79 137.77 134.15 129.61 128.55 128.53
97.85 81.88 78.70 78.45 78.19 77.89 77.27 74.78 71.89 69.93 69.03 66.56 62.17 50.48 43.16 36.14 31.14 28.27 27.78 27.29 23.96 22.37 20.18 19.52 19.45 19.19 18.48 13.42 8.57 7.40 7.16 2.46 -0.00 -0.21 -0.65

NAME	2008-01-21-ejt-57
EXPNO	10
PROCNO	1
Date_	20080121
Time	16.48
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	256
DS	2
SWH	29761.904 Hz
FIDRES	0.454131 Hz
AQ	1.1010548 se
RG	512
DW	16.800 us
DE	32.63 us
TE	300.0 K
D1	2.00000000 se
D11	0.03000000 se
TD0	1
======== CHANNEL f1 ======	
NUC1	13C
P1	9.50 us
PL1	-4.20 dB
PL1W	218.02882385 W
SFO1	125.7703643 MH
======== CHANNEL f2 ======	
CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 us
PL2	4.20 dB
PL12	23.47 dB
PL13	23.00 dB
PL2W	9.74092484 W
PL12W	0.11523920 W
PL13W	0.12841040 W
SFO2	500.1320005 MH
SI	32768
SFO1	125.7576080 MH
WDW	EM

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

apgtesdeprot
mPROTONnight CDCl3 /opt/bruk500data/2008/Jan ejt 14



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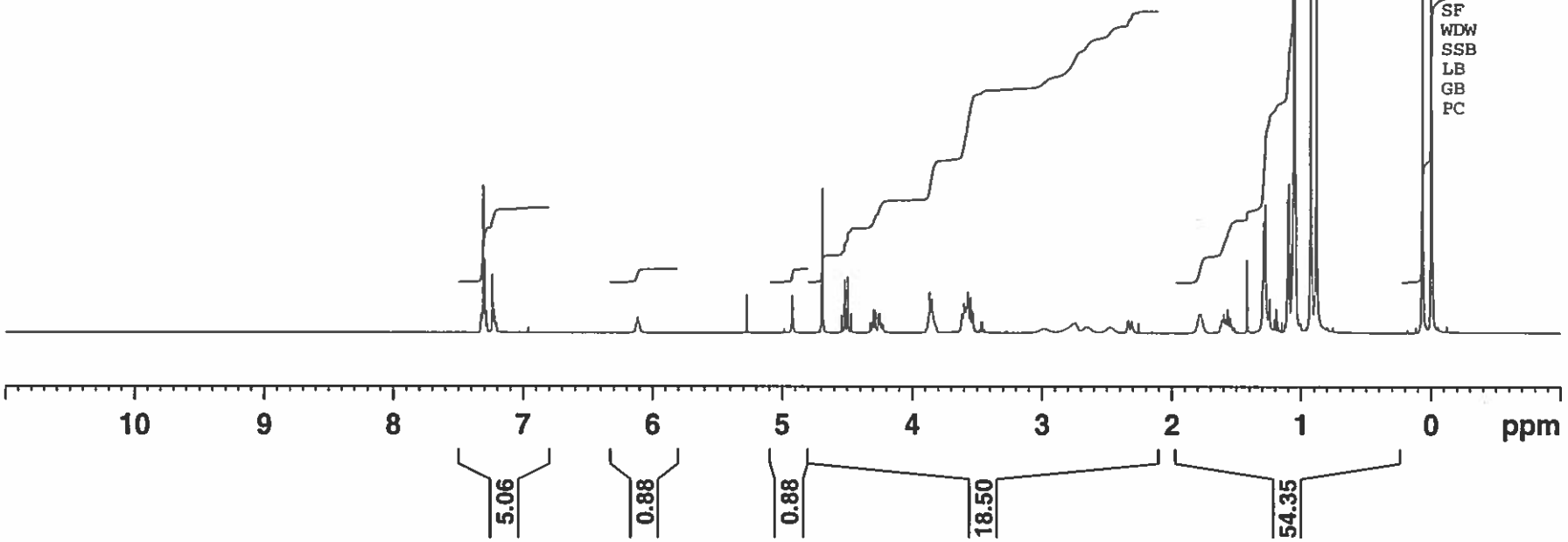
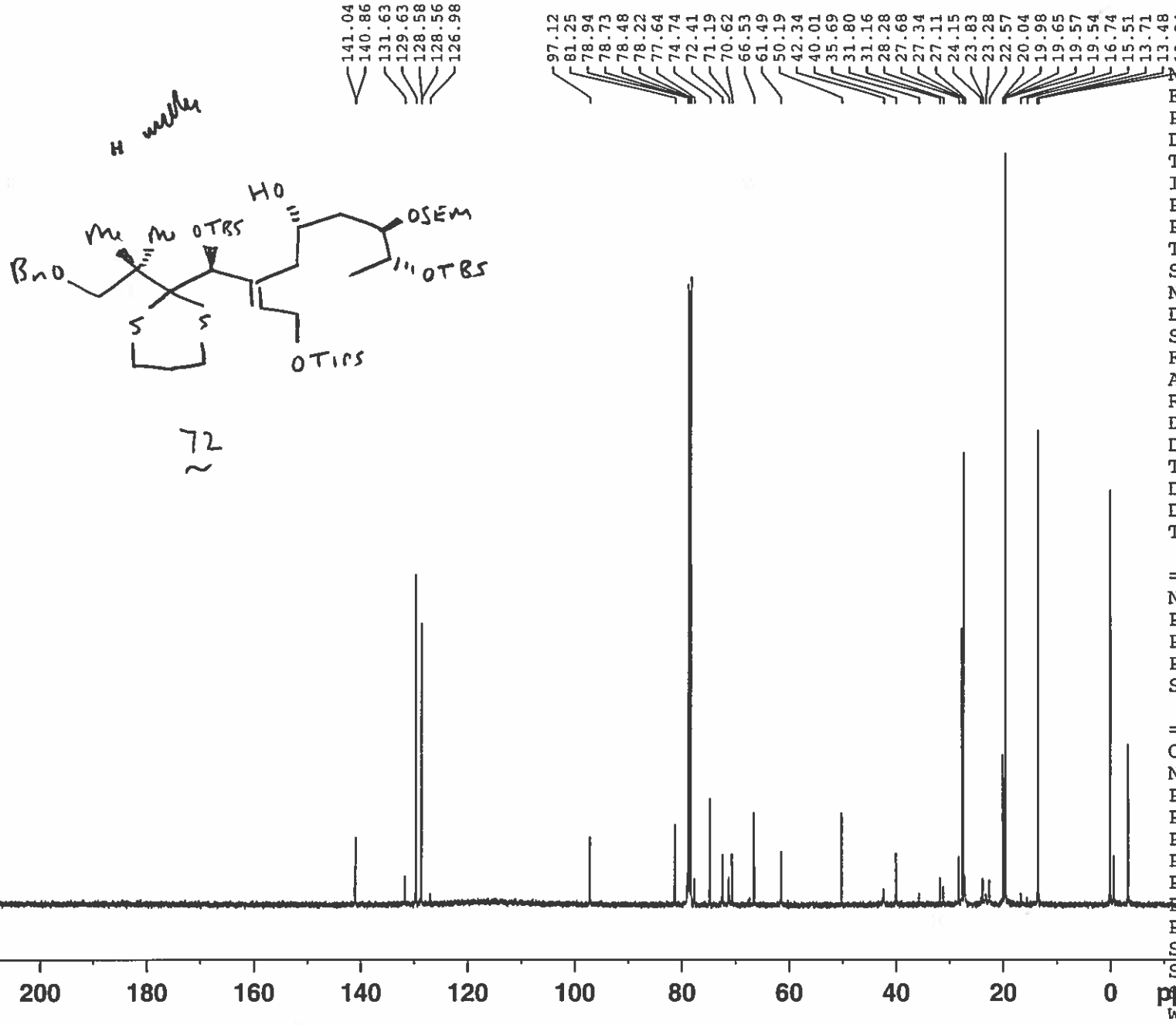
NAME	2008-01-23-ejt-14
EXPNO	20
PROCNO	1
Date_	20080124
Time	4.04
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	10330.578 Hz
FIDRES	0.157632 Hz
AQ	3.1719923 sec
RG	20.2
DW	48.400 usec
DE	13.46 usec
TE	300.0 K
D1	3.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	7.80 usec
PL1	3.25 dB
PL1W	12.12272263 W
SFO1	500.1330885 MHz
SI	32768
SF	500.1300166 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

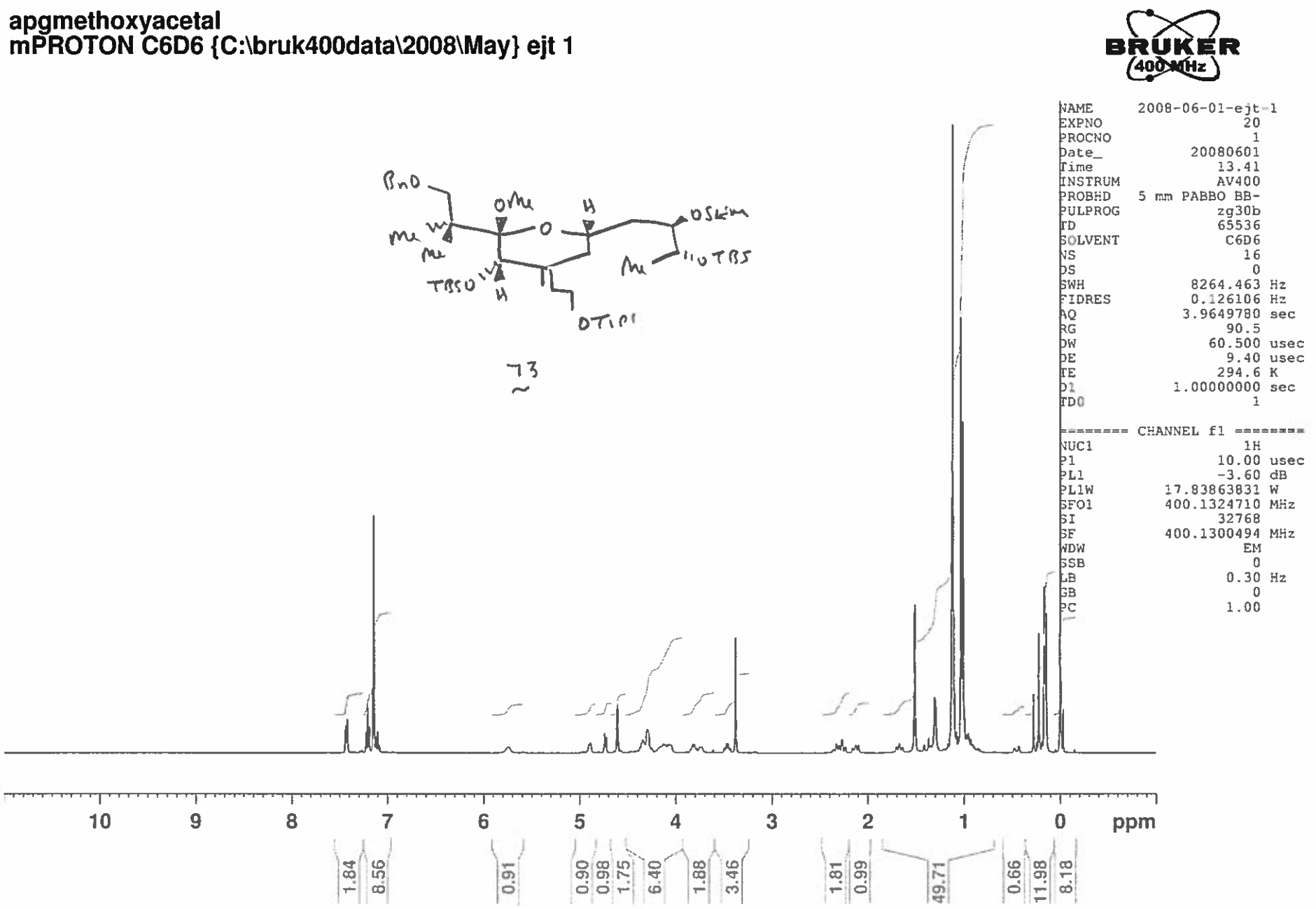


apgtesdeprot
mCARBONnight CDCl3 /opt/bruk500data/2008/Jan ejt 14

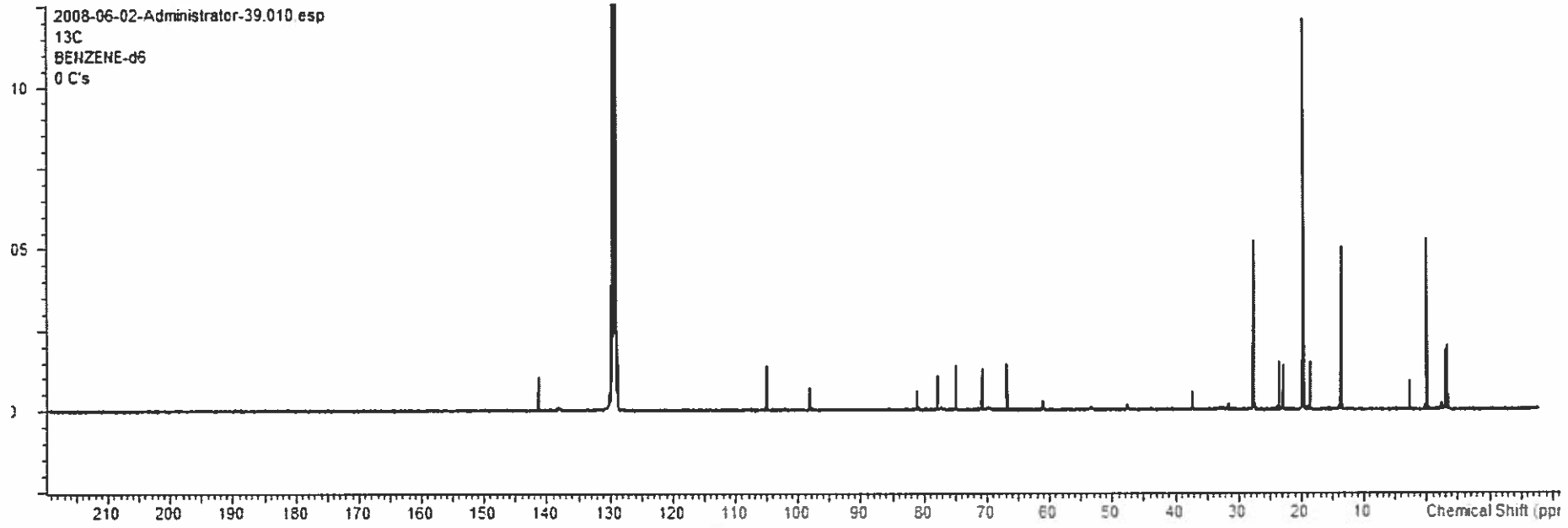


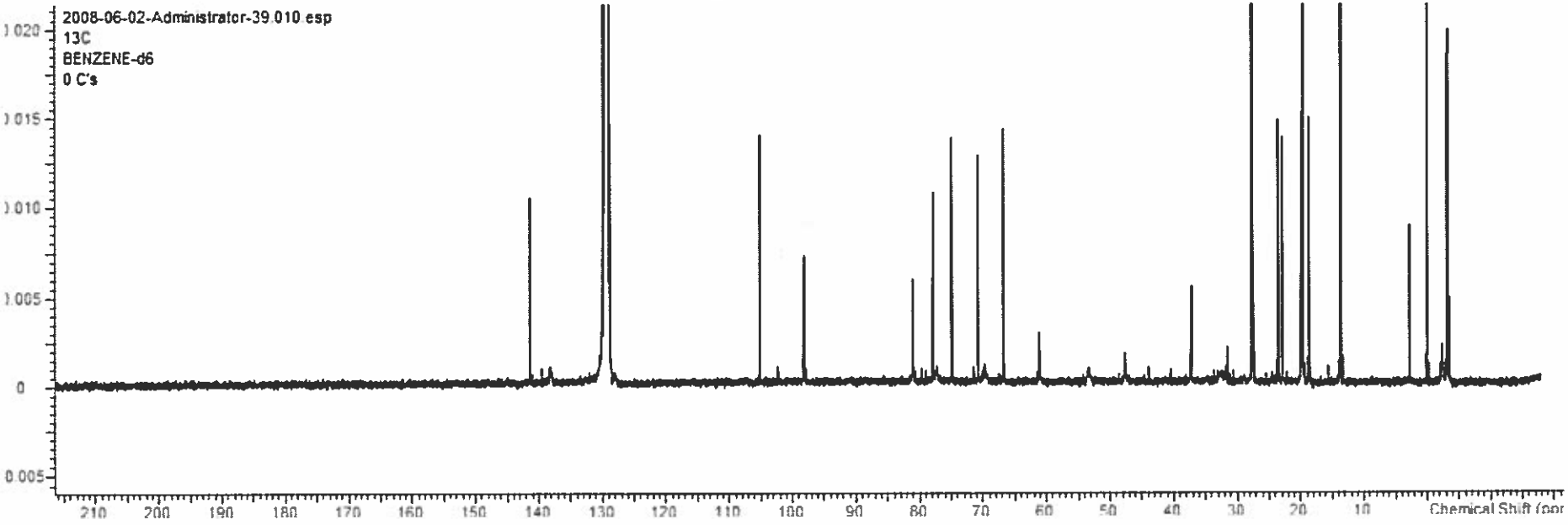
NAME	2008-01-23-ejt-14
EXPNO	22
PROCNO	1
Date_	20080124
Time	5.37
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	1600
DS	2
SWH	29761.904 Hz
FIDRES	0.454131 Hz
AQ	1.1010548 se
RG	512
DW	16.800 us
DE	32.63 us
TE	300.0 K
D1	2.00000000 se
D11	0.03000000 se
TD0	1
======== CHANNEL f1 ======	
NUC1	13C
P1	9.50 us
PL1	-4.20 dB
PL1W	218.02882385 W
SFO1	125.7703643 MH
======== CHANNEL f2 ======	
CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 us
PL2	4.20 dB
PL12	23.47 dB
PL13	23.00 dB
PL2W	9.74092484 W
PL12W	0.11523920 W
PL13W	0.12841040 W
SFO2	500.1320005 MH
SI	32768
SFO1	125.7576041 MH
WDW	EM

apgmethoxyacetal
mPROTON C6D6 {C:\bruk400data\2008\May} ejt 1

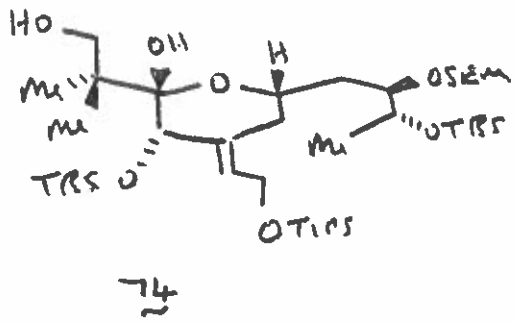


Compound 73


2008-06-02-Administrator-39.010 esp
13C
BENZENE-d6
0 C's
Chemical Shift (ppr

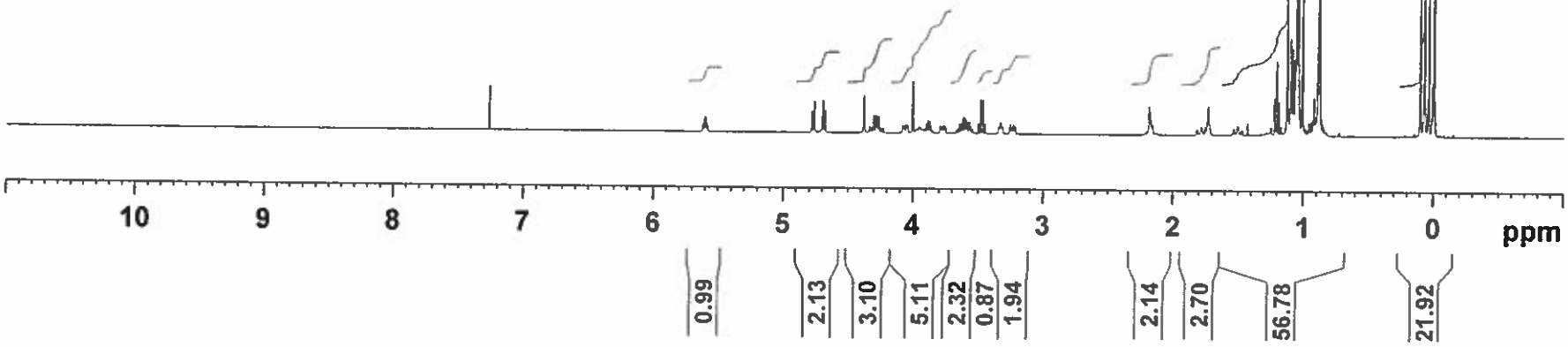

2008-06-02-Administrator-39.010 esp
13C
BENZENE-d6
0 C's
Chemical Shift (ppr

apghemiketal
mPROTON CDCl3 {C:\bruk400data\2008\Jul} ejt 11



74

NAME	2008-07-24-ejt-11
EXPNO	10
PROCNO	1
Date_	20080724
Time	14.20
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	101
DW	60.500 usec
DE	9.40 usec
TE	295.0 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300042 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



apghemiacetal
C13CPD CDCl3 {C:\bruk400data\2008\Jul} staff 22

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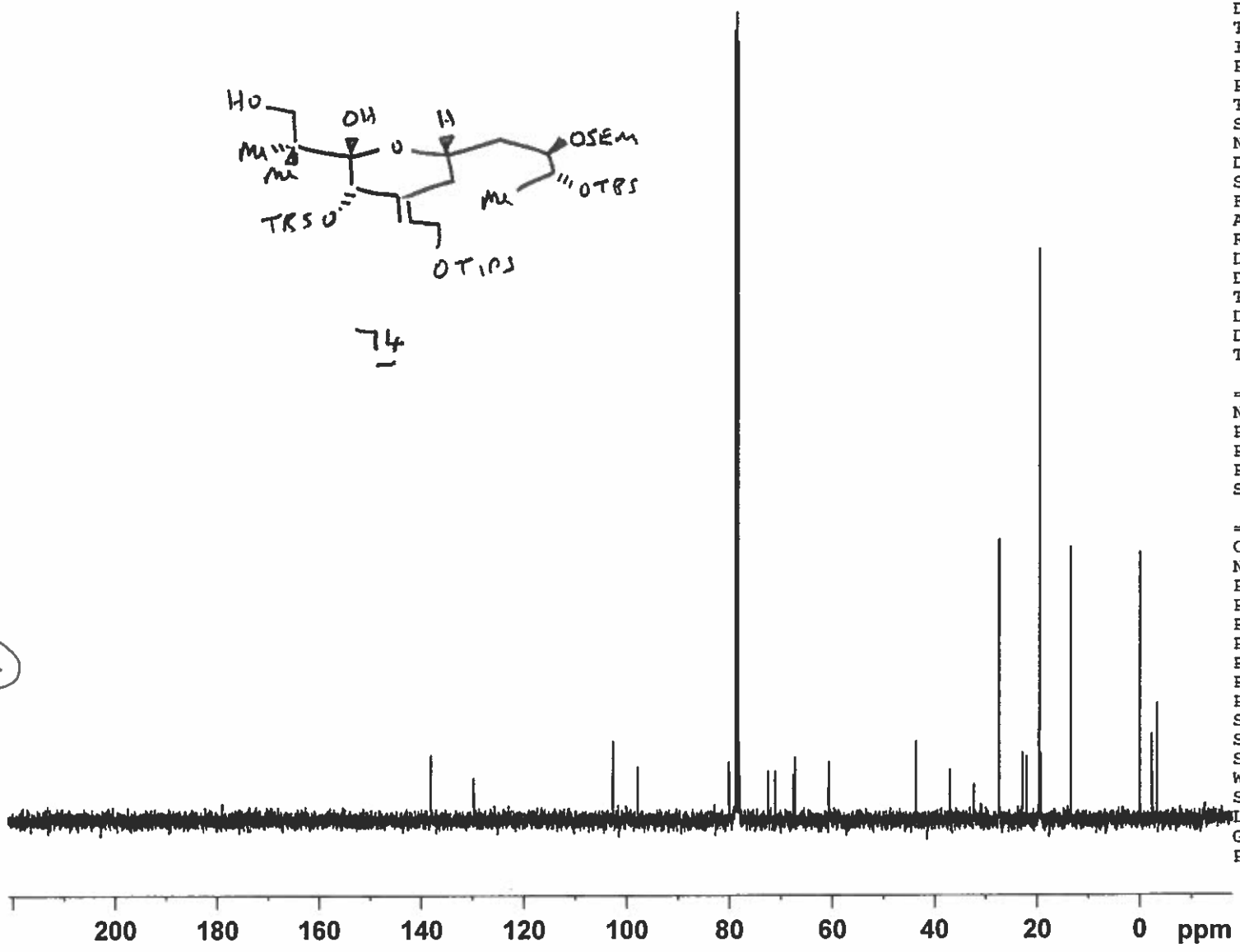
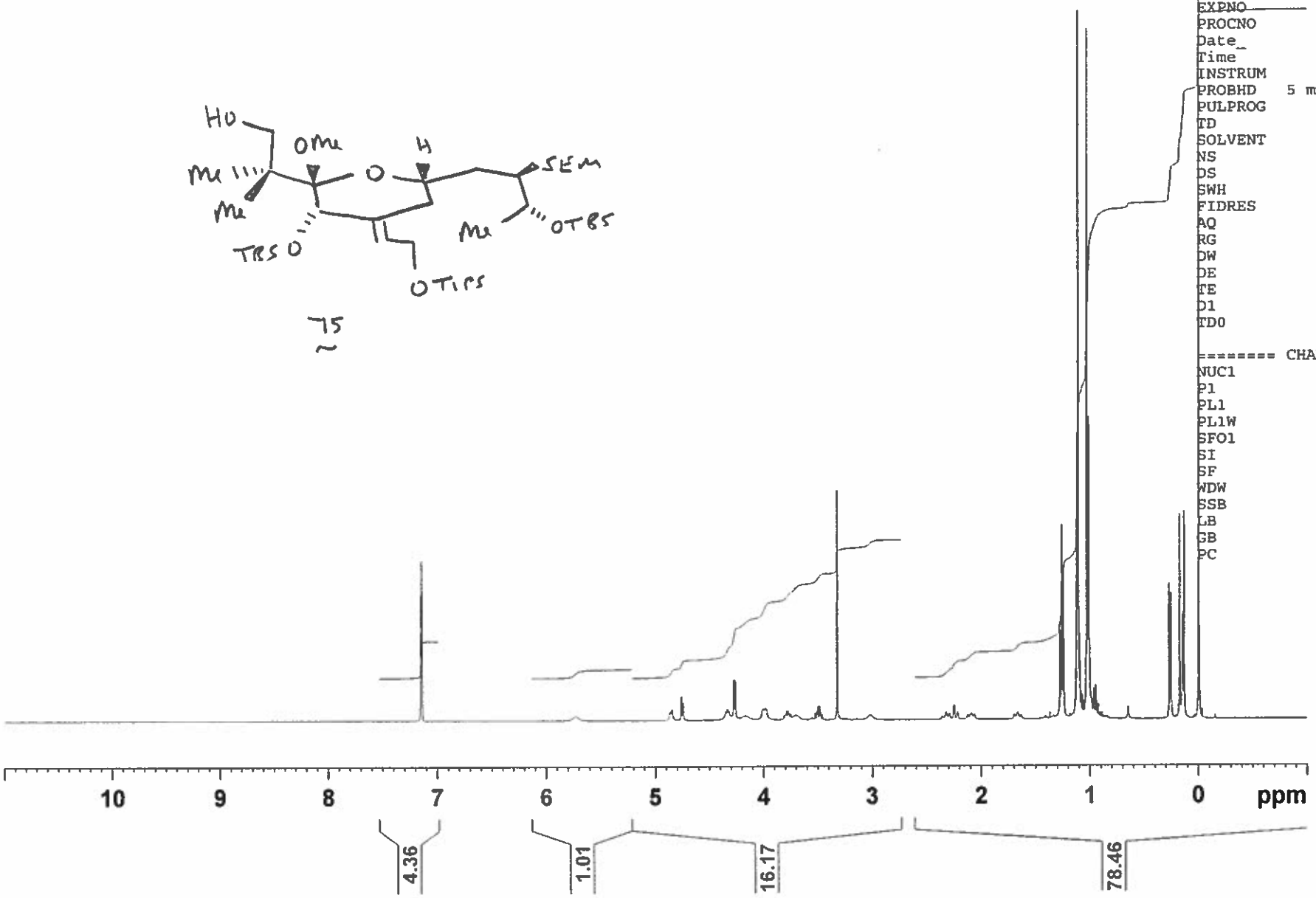


NAME	25072008-staff
EXPNO	11
PROCNO	1
Date_	20080725
Time	13.00
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	256
DS	4
SWH	24038.461 Hz
FIDRES	0.366798 Hz
AQ	1.3631988 sec
RG	32800
DW	20.800 usec
DE	6.50 usec
TE	296.6 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6228298 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 usec
PL2	-3.60 dB
PL12	13.80 dB
PL13	14.00 dB
PL2W	17.83863831 W
PL12W	0.32460985 W
PL13W	0.31000000 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6126188 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

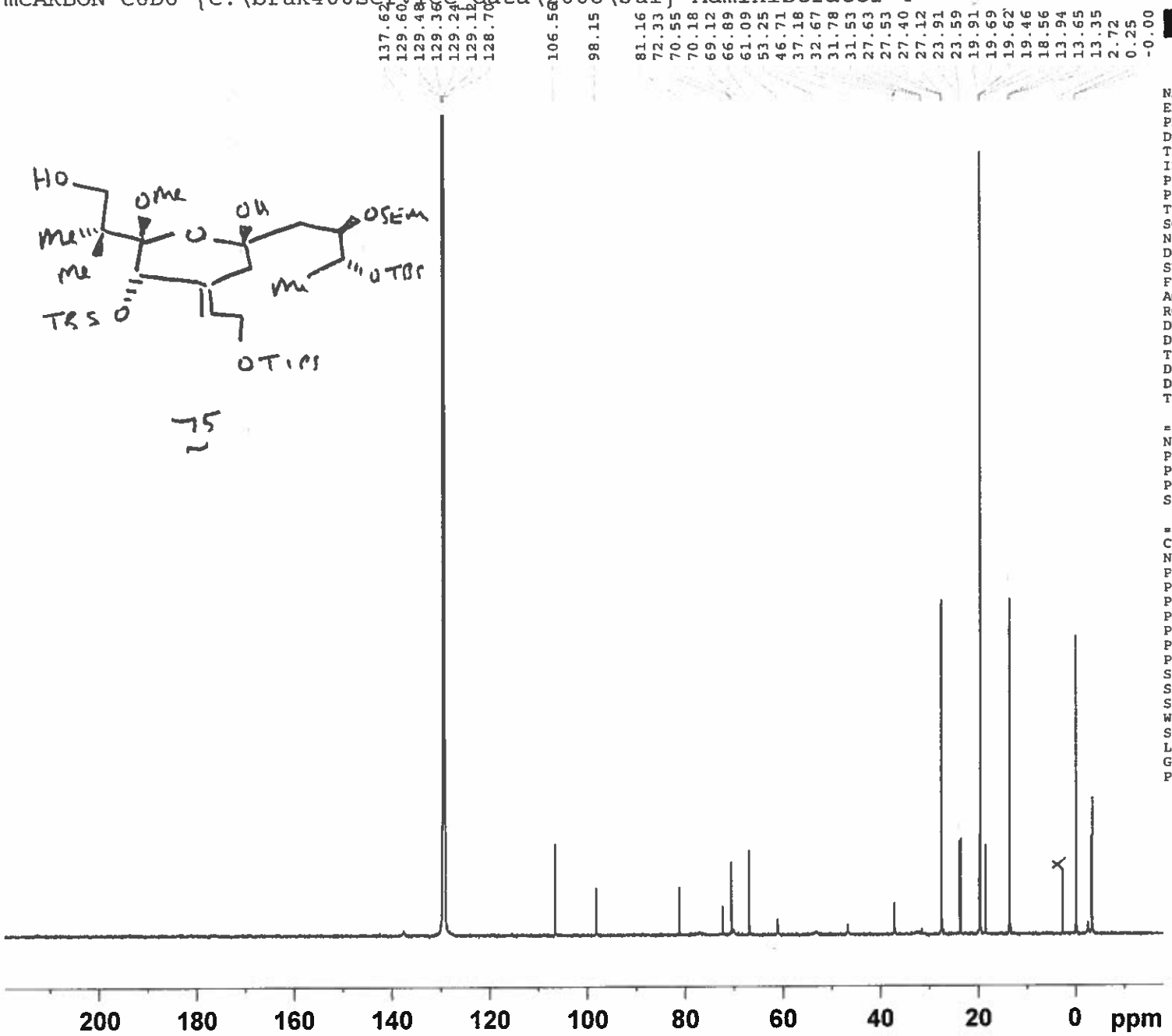
apgmethoxyacetalfreeOH
mPROTONnight C6D6 {C:\bruk400data\2008\Jul} ejt 30

75

NAME	2008-07-27-ejt-30
EXPNO	10
PROCNO	1
Date_	20080727
Time	12.58
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	C6D6
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	90.5
DW	60.500 usec
DE	9.40 usec
TE	295.2 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300485 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



A Green 0708065 APG methoyaceted
mCARBON C6D6 {C:\bruk400service data\2008\Jul} Administrator 4



75

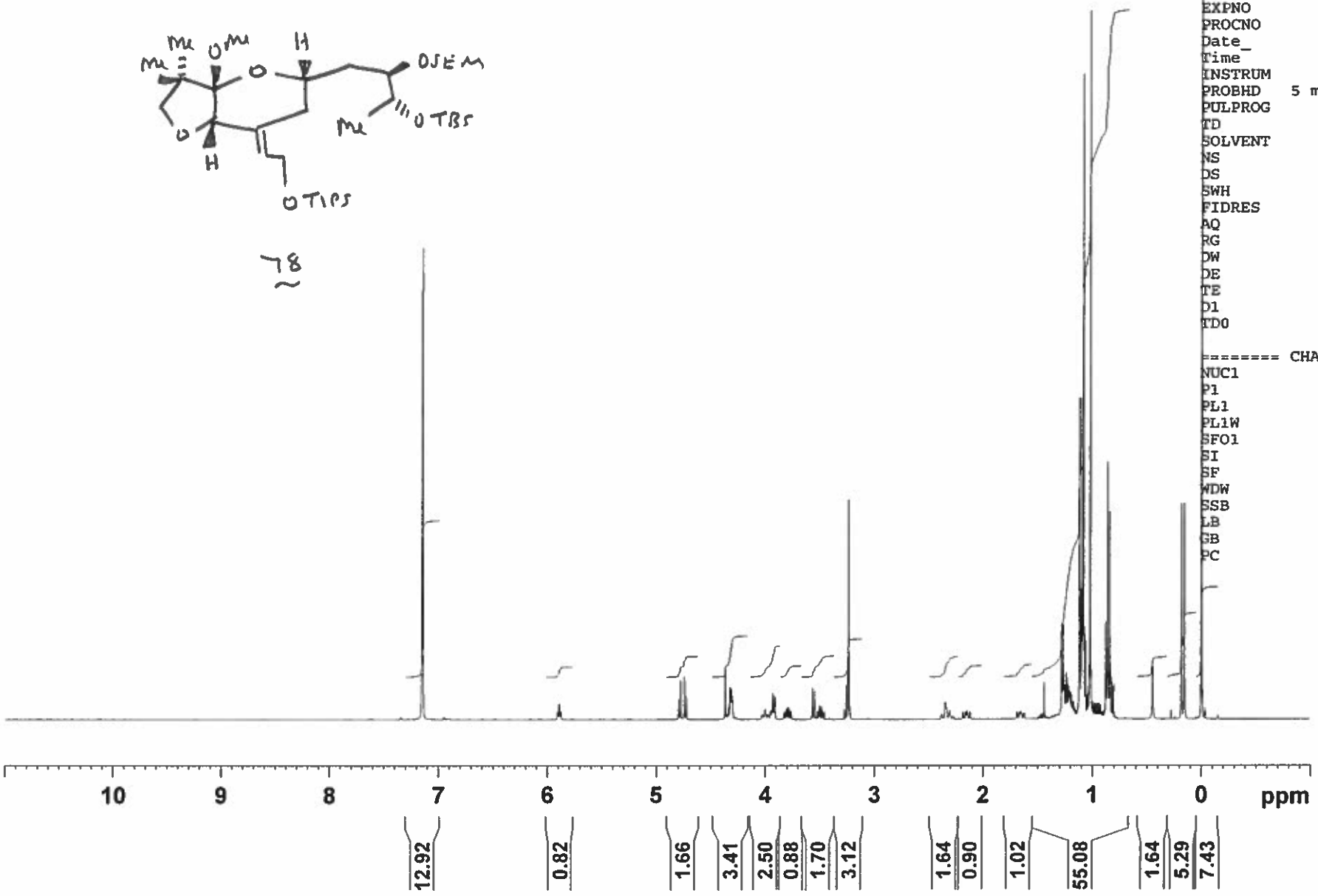
BRUKER 400 MHz

NAME	2008-07-28-Administrator-4
EXPNO	11
PROCNO	1
Date_	20080728
Time	13.24
INSTRUM	AV400_S
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	C6D6
NS	4096
DS	4
SWH	24038.461 Hz
FIDRES	0.366798 Hz
AQ	1.3631988 sec
RG	362
DW	20.800 usec
DE	6.50 usec
TE	294.0 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	33.91046524 W
SFO1	100.6479773 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 usec
PL2	3.60 dB
PL12	13.80 dB
PL13	14.00 dB
PL2W	18.98951721 W
PL12W	0.34555241 W
PL13W	0.33000001 W
SFO2	400.2316009 MHz
SI	32768
SF	100.6377580 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

apgmitsonobu
mPROTON C6D6 {C:\bruk400data\2008\Jun} ejt 54

78

NAME	2008-06-30-ejt-54
EXPNO	10
PROCNO	1
Date_	20080630
Time	17.07
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	C6D6
NS	64
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	181
DW	60.500 usec
DE	9.40 usec
TE	294.8 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300502 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



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APG CYC
mCARBON C6D6 {C:\bruk400service_data\2008\Jul} Administrator 21

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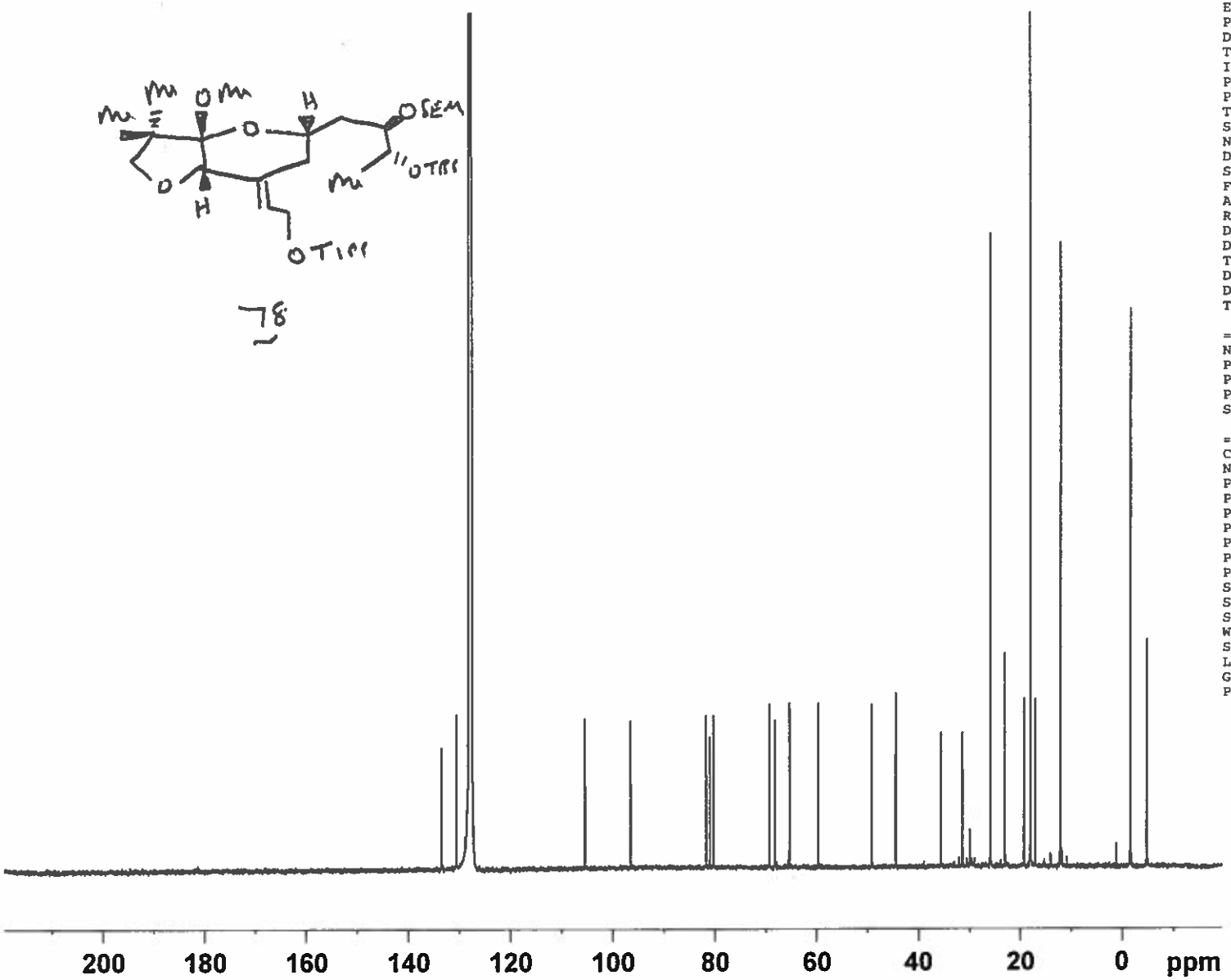
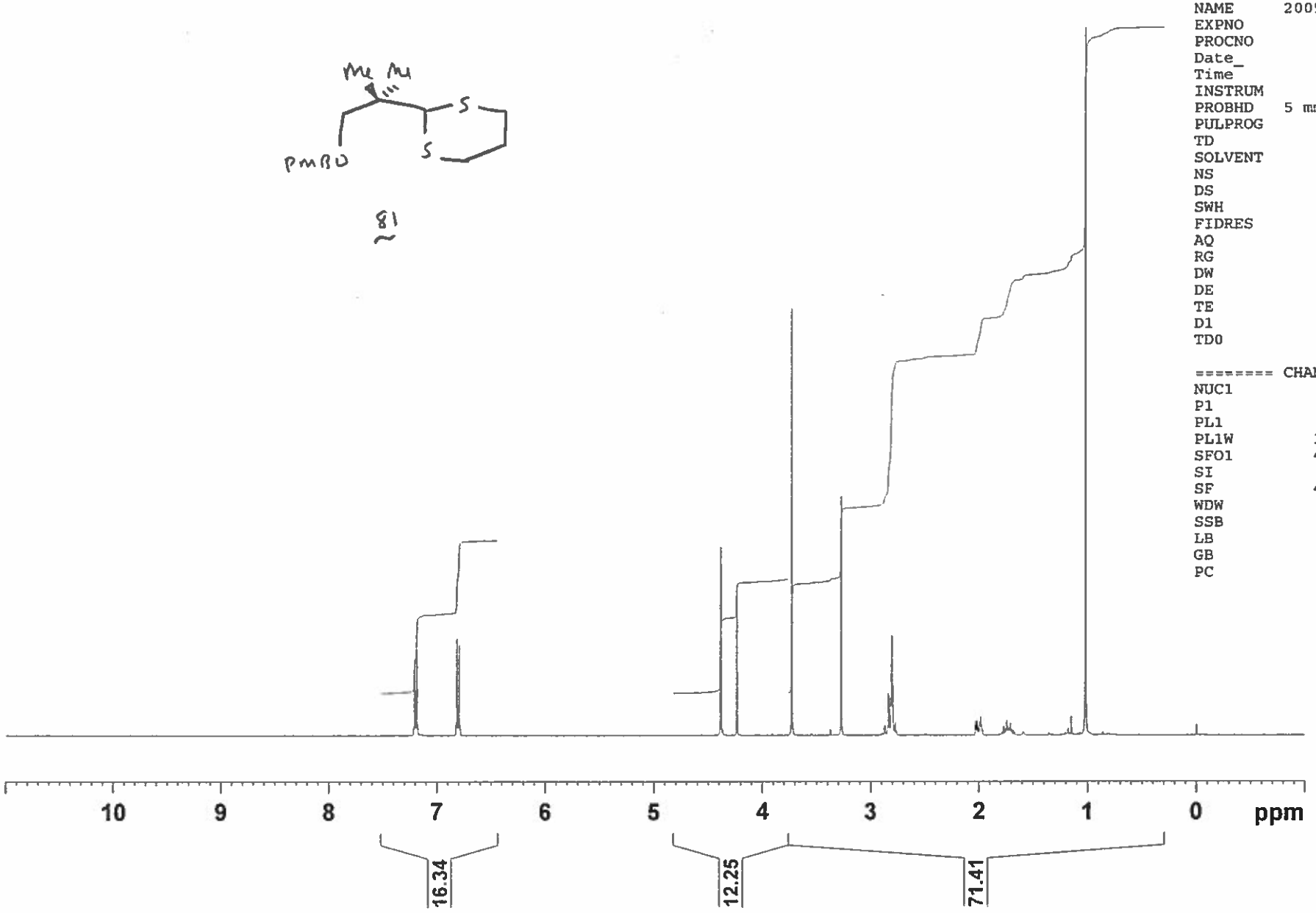


NAME	2008-07-04-Administrator-21
EXPNO	10
PROCNO	1
Date_	20080707
Time	7.26
INSTRUM	AV400_S
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	C6D6
NS	65536
DS	4
SWH	24038.461 Hz
FIDRES	0.366798 Hz
AQ	1.3631988 sec
RG	287
DW	20.800 usec
DE	6.50 usec
TE	295.1 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	33.91046524 W
SFO1	100.6479773 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 usec
PL2	-3.60 dB
PL12	13.80 dB
PL13	14.00 dB
PL2W	18.98951721 W
PL12W	0.34555241 W
PL13W	0.33000001 W
SFO2	400.2316009 MHz
SI	32768
SF	100.6379140 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

apgdithianepmbprotected
mPROTONnight CDCl3 {e:\bruk400data\2009\Jan} ejt 8

81

NAME	2009-01-07-ejt-8
EXPNO	10
PROCNO	1
Date_	20090107
Time	19.45
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	64
DW	60.500 usec
DE	9.40 usec
TE	291.1 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300387 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



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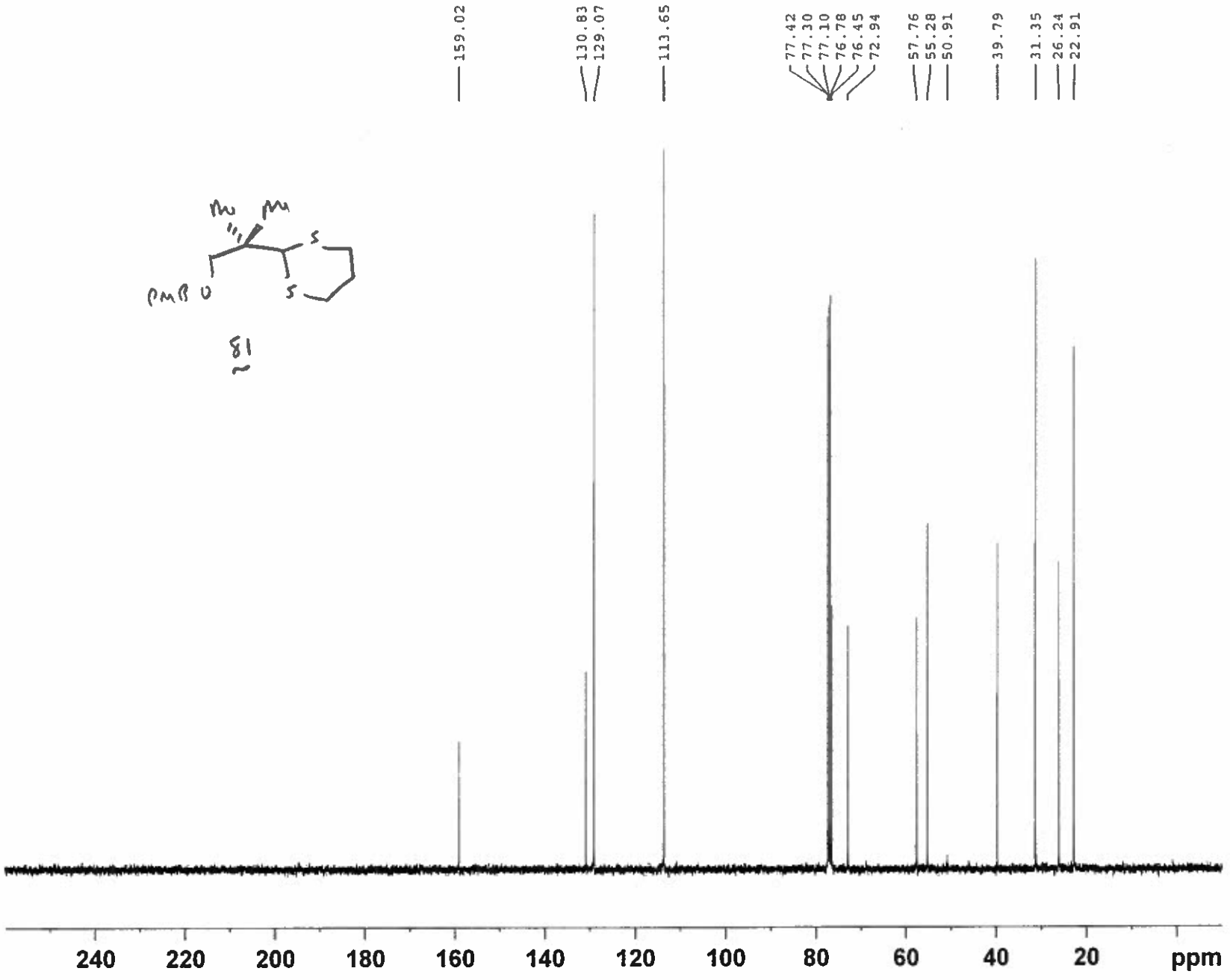
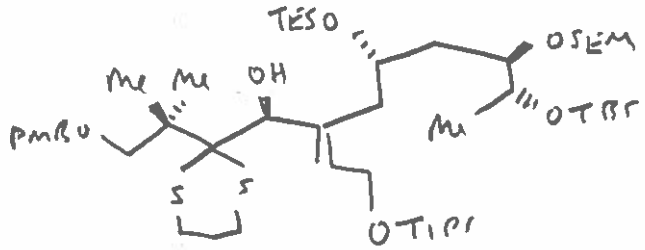
mCARBONnight CDCl3 {e:\bruk400data\2009\Jan} ejt 8



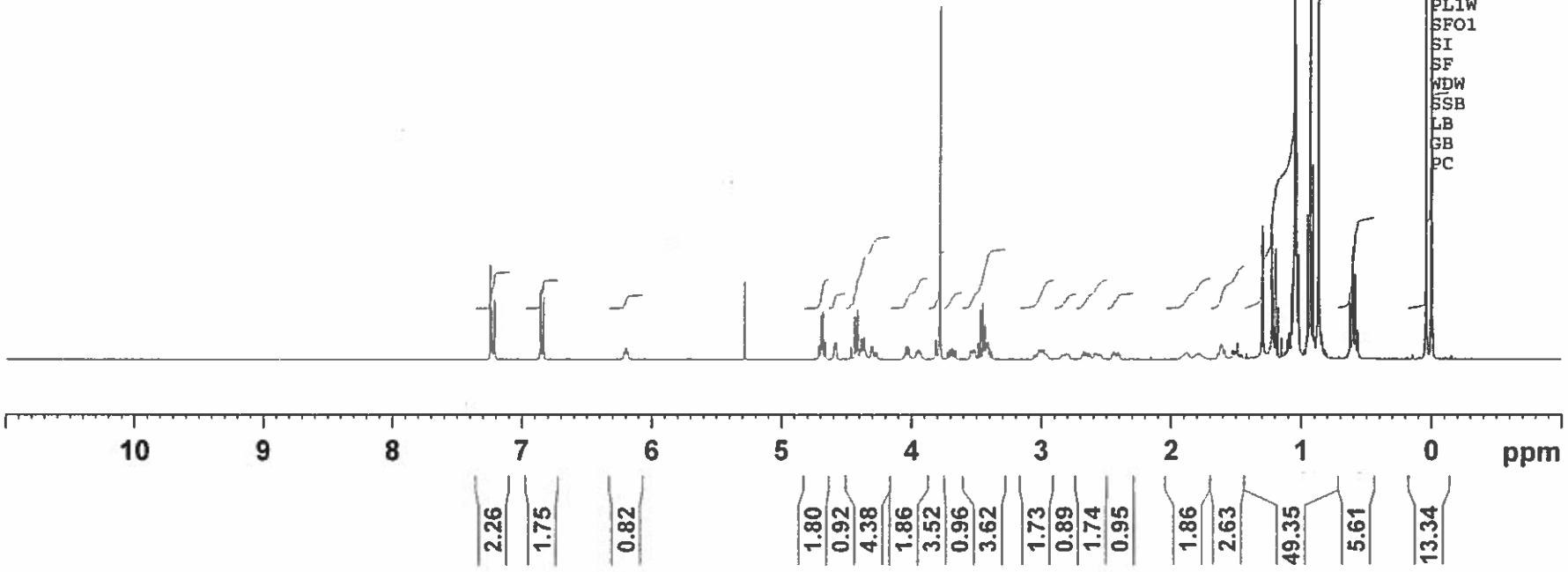
NAME	2009-01-07-ejt-8
EXPNO	12
PROCNO	1
Date_	20090107
Time	20.08
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	256
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	291.8 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6127690 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

apgcheck
mPROTON CDCl3 {e:\bruk400data\2009\May} ejt 12



82 (major)

NAME	2009-05-25-ejt-12
EXPNO	20
PROCNO	1
Date_	20090525
Time	22.23
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	144
DW	60.500 usec
DE	9.40 usec
TE	296.0 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300138 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



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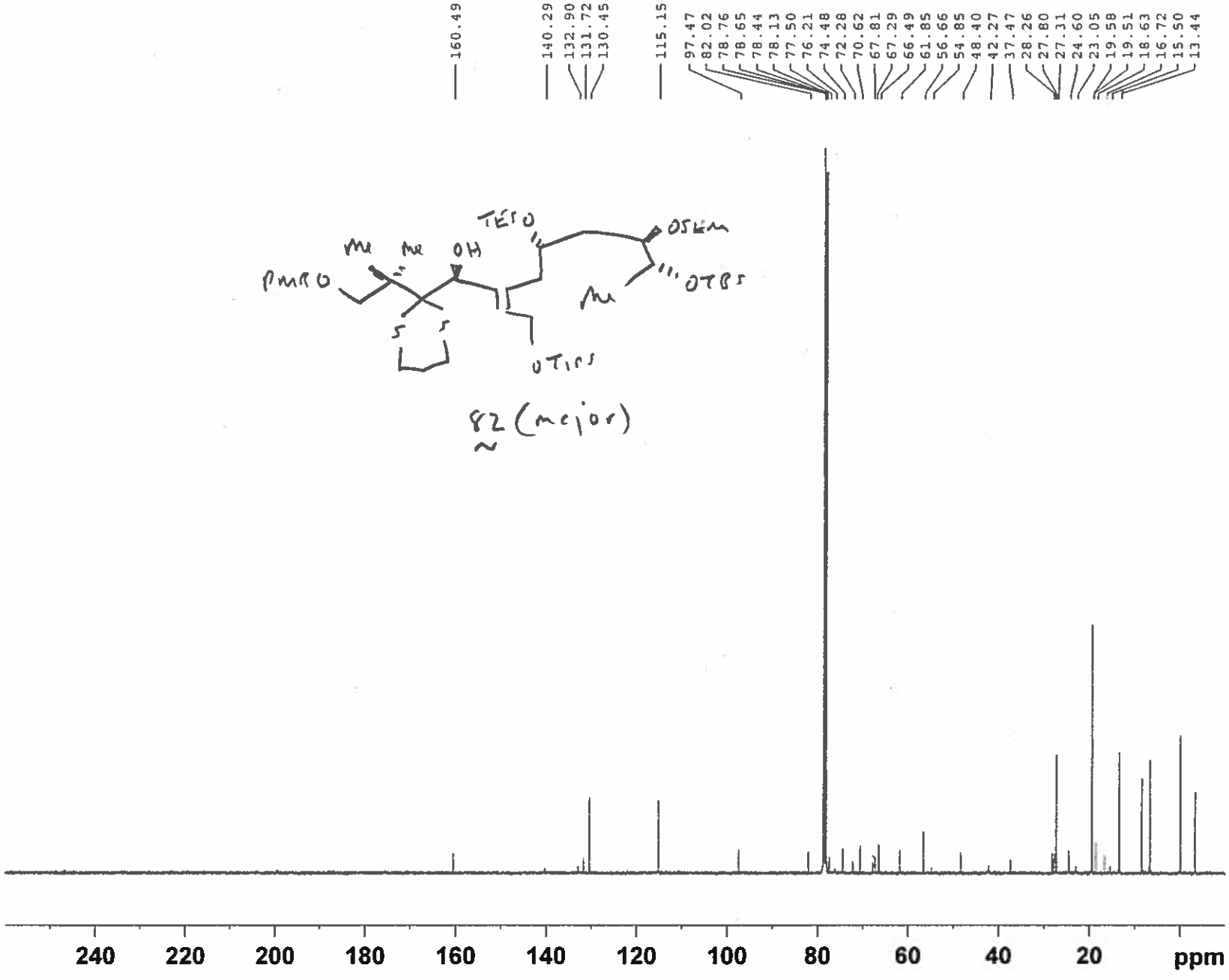
mCARBONnight CDCl3 {e:\bruk400data\2009\May} ejt 12

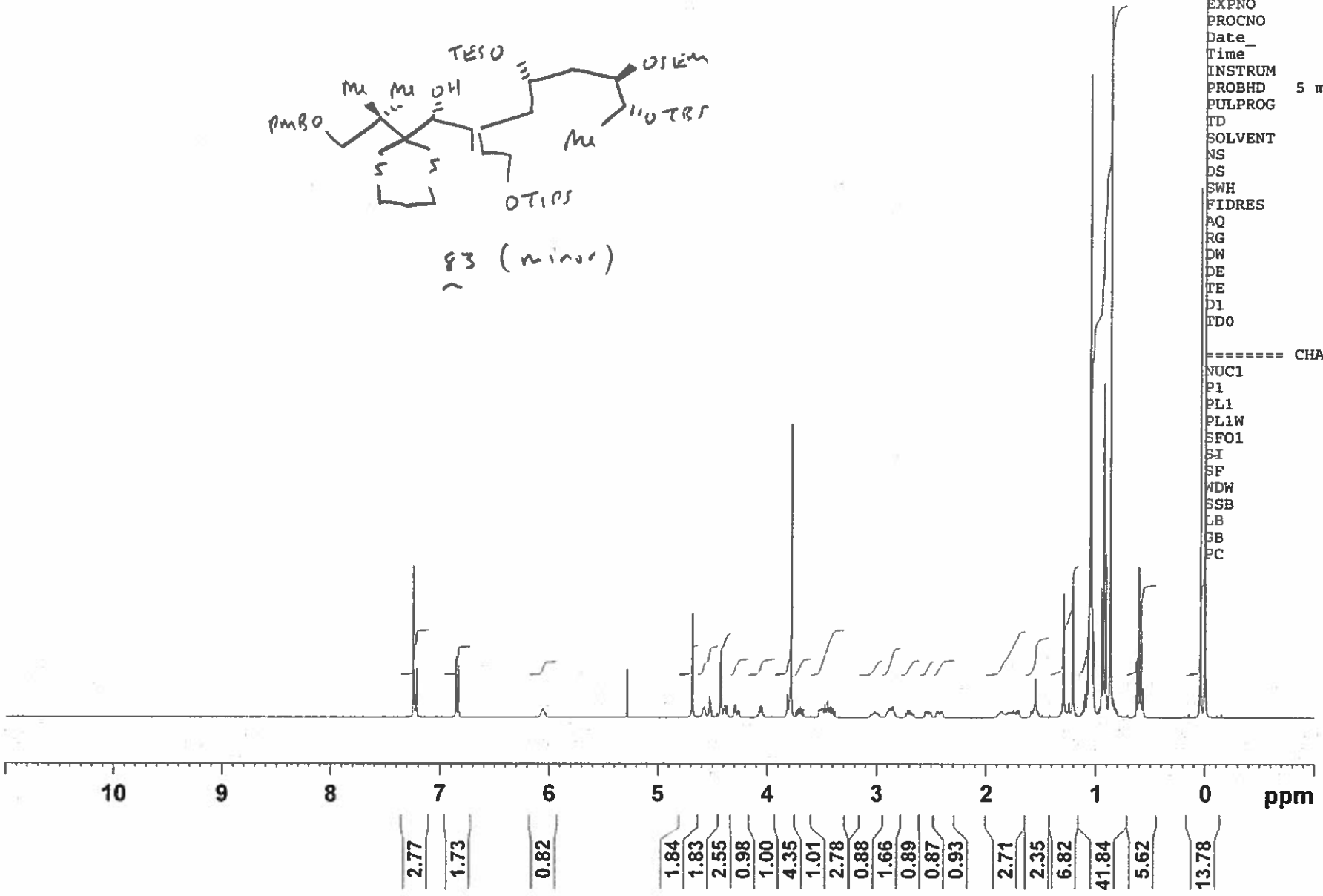


NAME	2009-05-25-ejt-12
EXPNO	12
PROCNO	1
Date_	20090525
Time	22.04
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	3072
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	296.6 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6126251 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

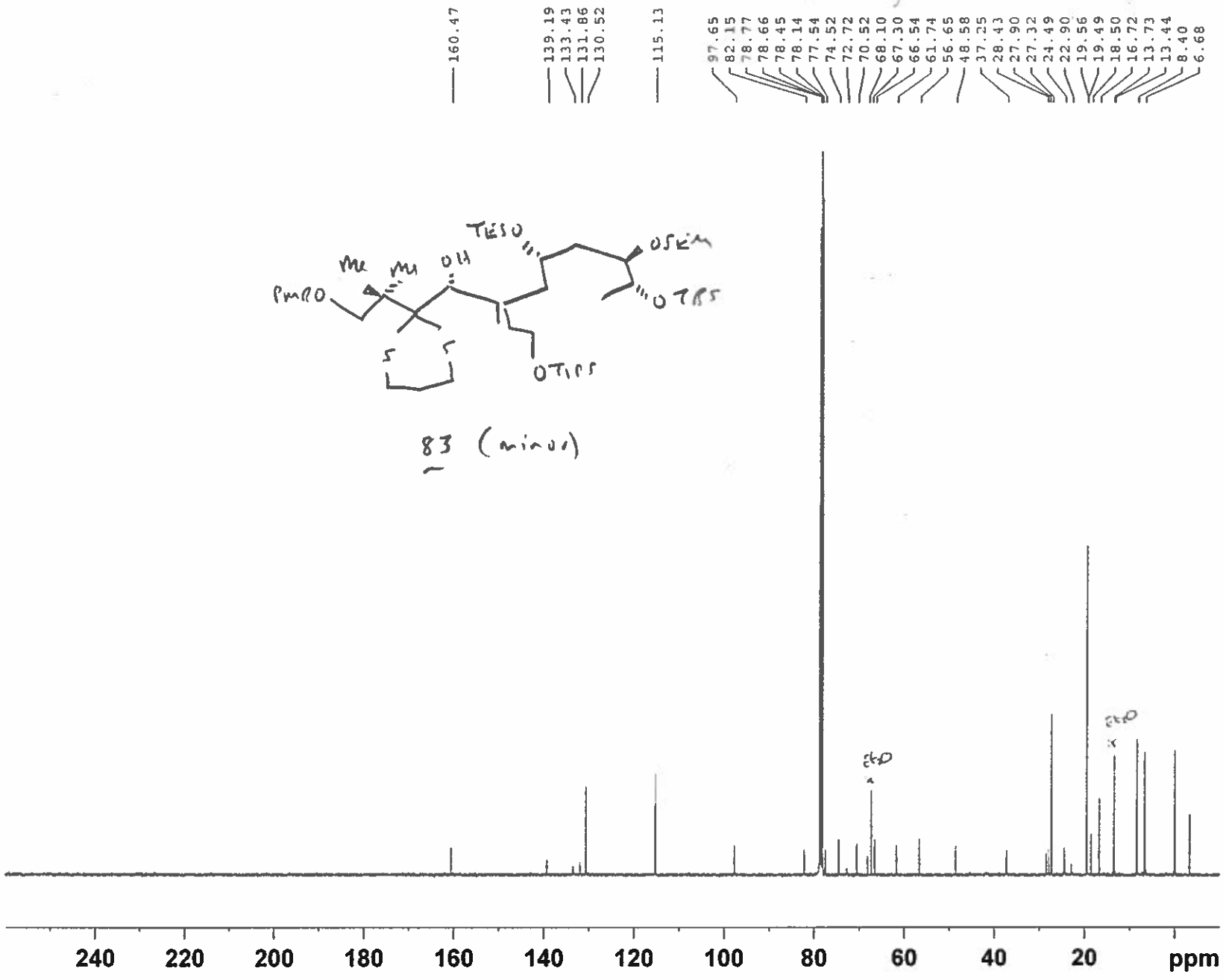
apgminor
mPROTON CDCl3 {e:\bruk400data\2009\May} ejt 18

83 (minor)

NAME	2009-05-26-ejt-18
EXPNO	10
PROCNO	1
Date_	20090526
Time	9.55
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	256
DW	60.500 usec
DE	9.40 usec
TE	296.7 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300155 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



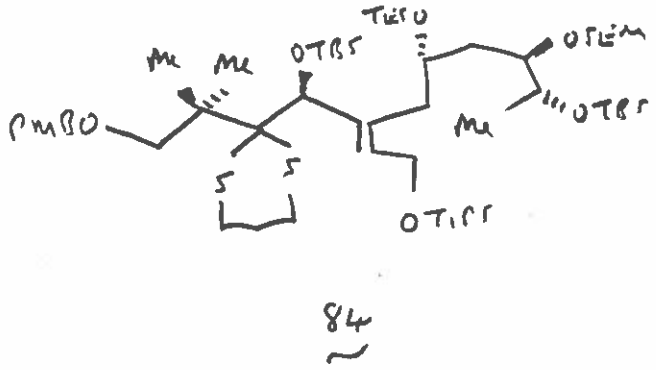
apgminorepimer
mCARBONnight CDCl3 {e:\bruk400data\2009\May} ejt 3



BRUKER 400 MHz

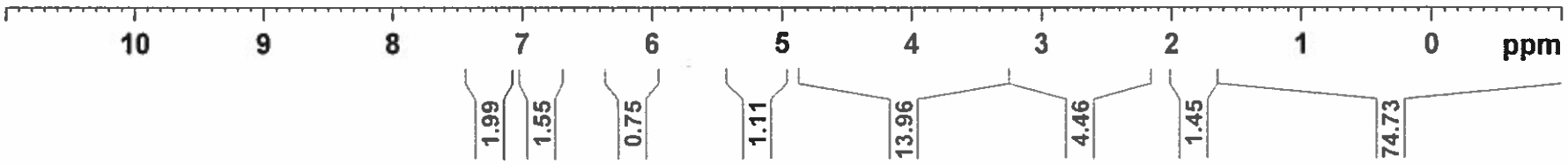
NAME	2009-05-24-ejt-3
EXPNO	12
PROCNO	1
Date_	20090524
Time	21.17
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	3072
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	296.2 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6126248 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

apgtbsprot
mPROTONnight CDCl3 {e:\bruk400data\2009\May} ejt 12



84

NAME	2009-05-26-ejt-12
EXPNO	11
PROCNO	1
Date_	20090526
Time	23.06
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	161
DW	60.500 usec
DE	9.40 usec
TE	296.0 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300140 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



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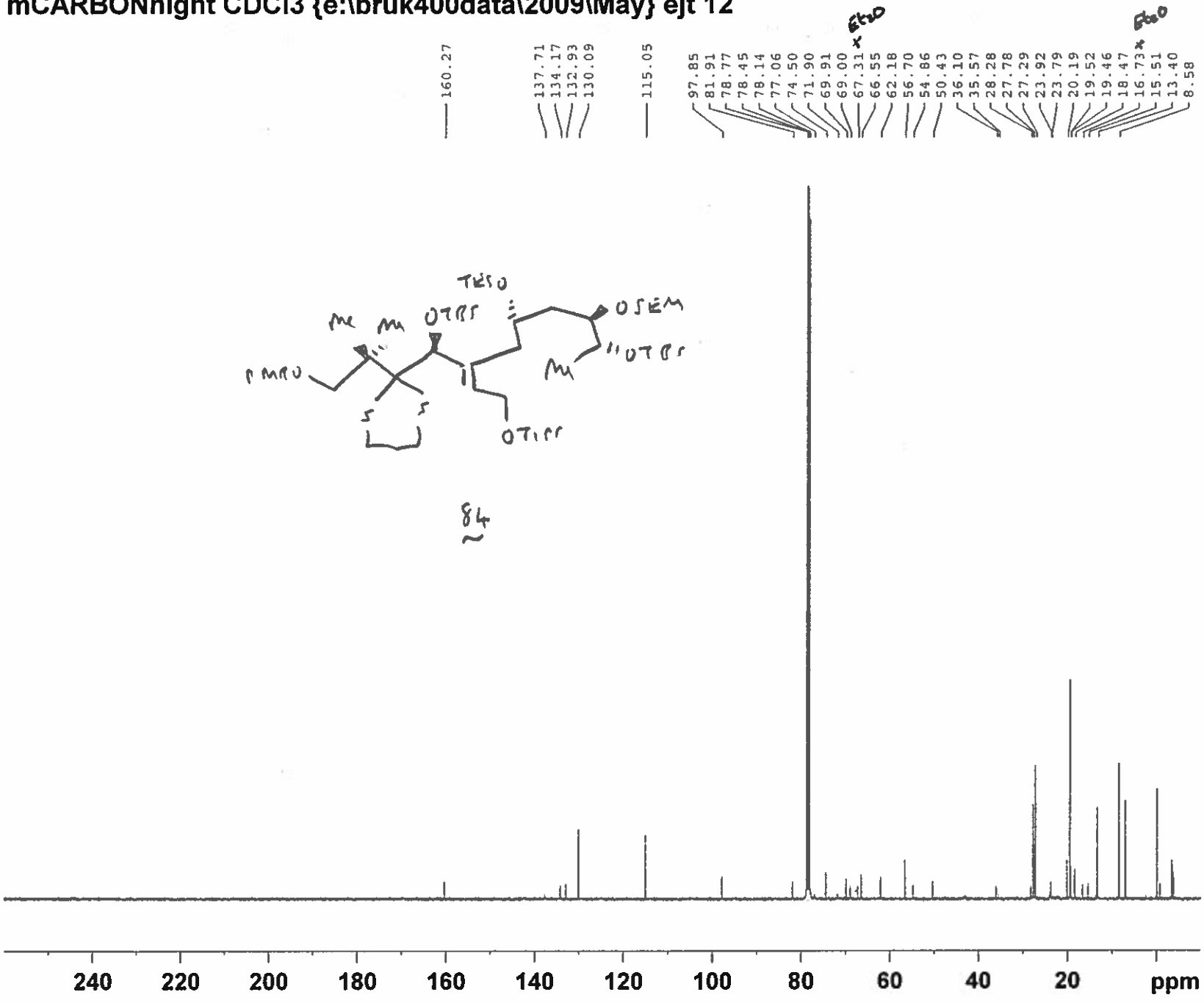
mCARBONnight CDCl3 {e:\bruk400data\2009\May} ejt 12



BRUKER 400 MHz

NAME	2009-05-26-ejt-12
EXPNO	10
PROCNO	1
Date_	20090526
Time	23.04
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	3072
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	296.6 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6126240 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

apgpmbdeprotection
mPROTONnight CDCl3 {e:\bruk400data\2009\May} ejt 12

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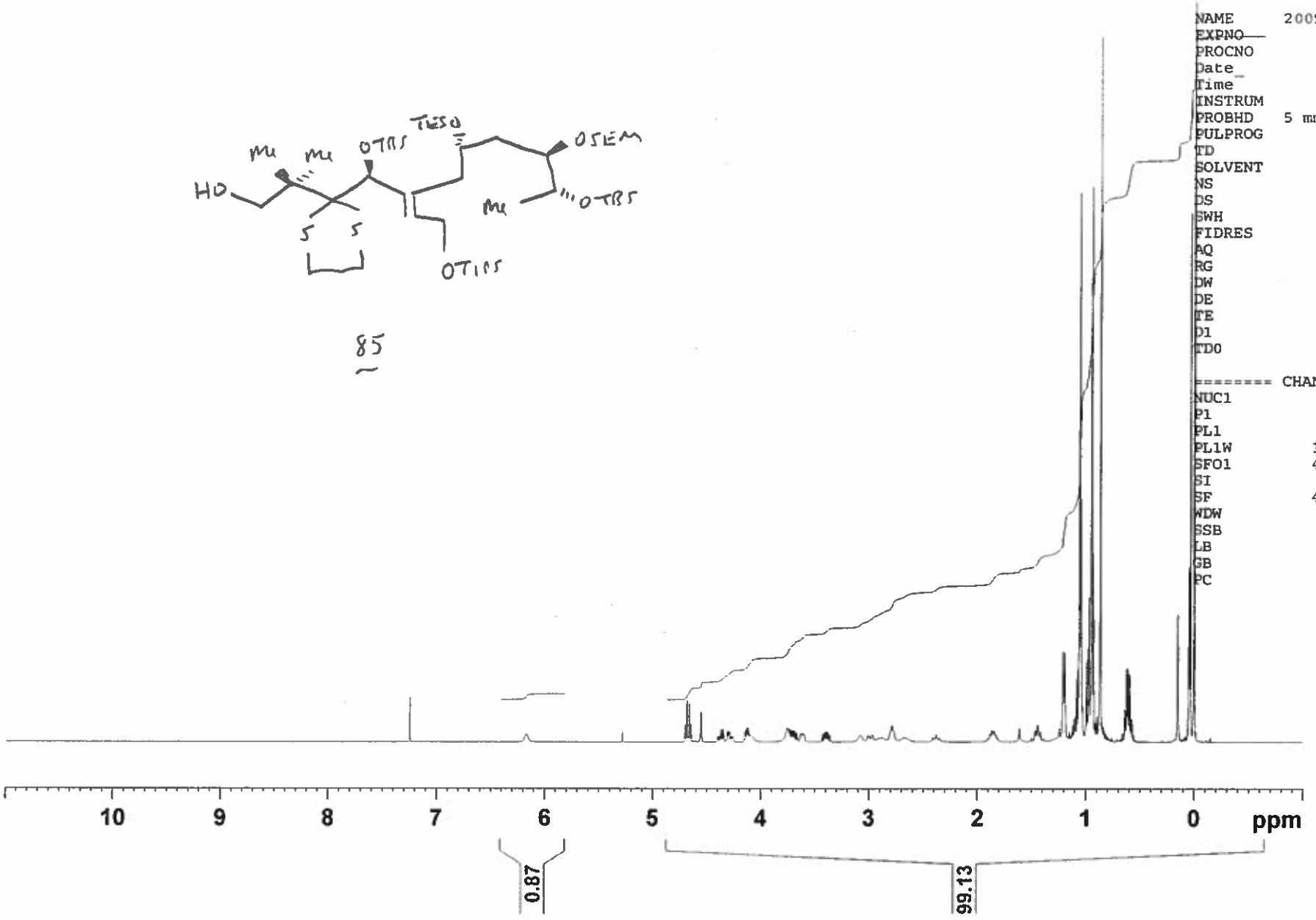
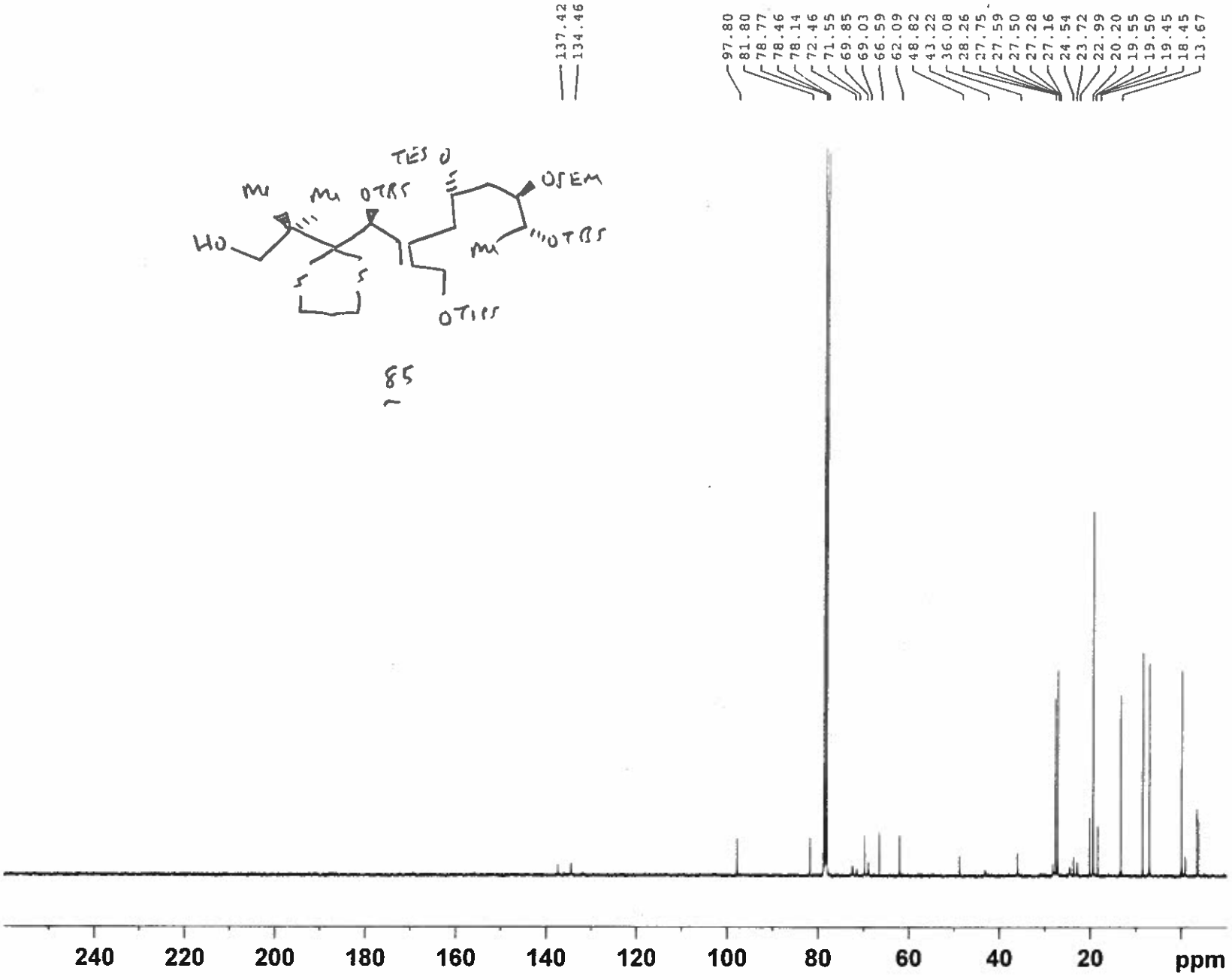


NAME	2009-05-30-ejt-12
EXPNO	10
PROCNO	1
Date_	20090530
Time	11.29
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	90.5
DW	60.500 usec
DE	9.40 usec
TE	295.1 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300141 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

apgpmbdeprotection
mCARBONnight CDCl3 {e:\bruk400data\2009\May} ejt 12



NAME	2009-05-30-ejt-12
EXPNO	12
PROCNO	1
Date_	20090530
Time	14.19
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	3072
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	295.8 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6126241 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

apgcheck
mPROTON CDCl3 {e:\bruk400data\2009\May} ejt 21

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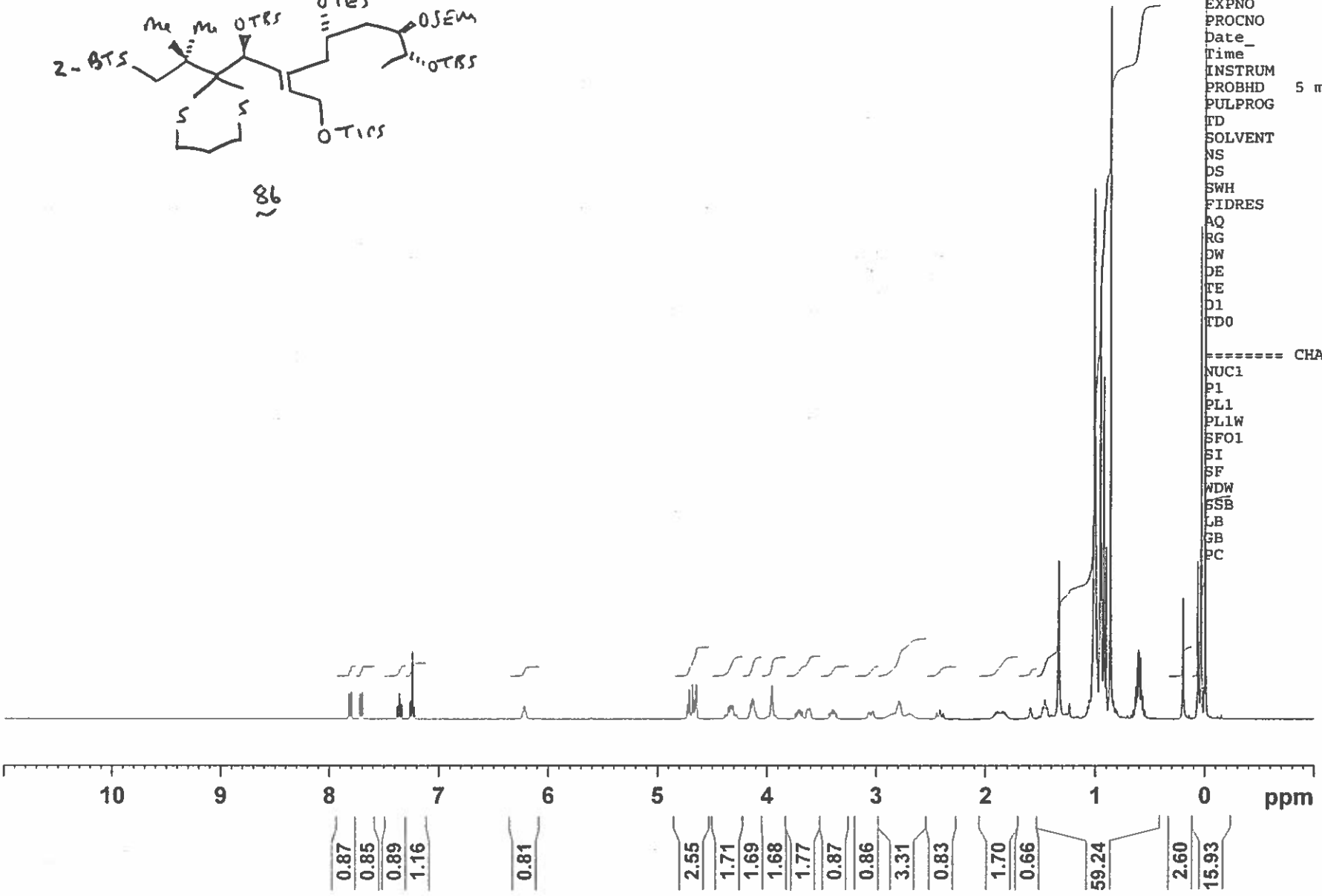
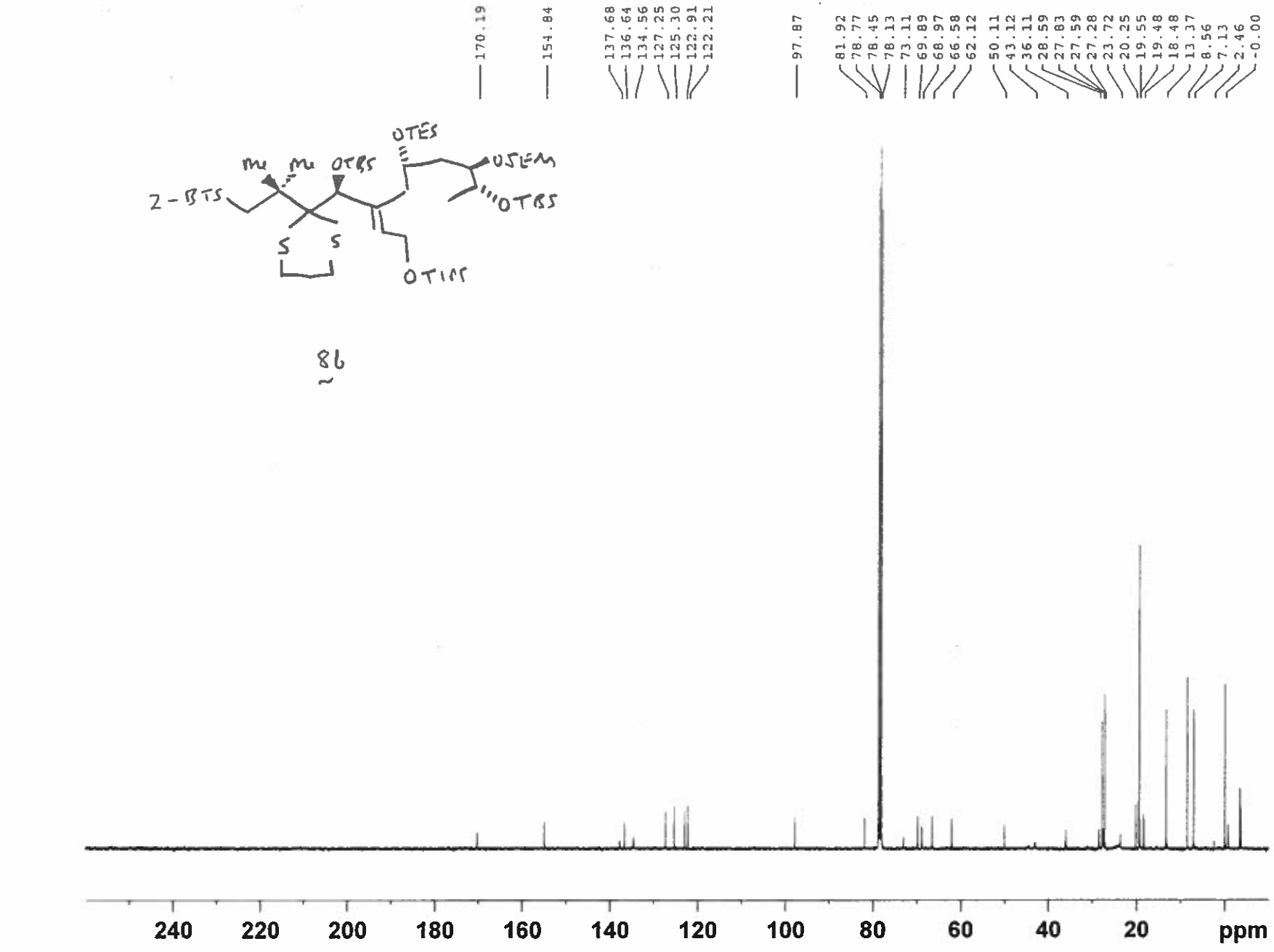
NAME	2009-05-31-ejt-21
EXPNO	20
PROCNO	1
Date_	20090531
Time	18.27
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	8264.463 Hz
FIDRES	0.126106 Hz
AQ	3.9649780 sec
RG	101
DW	60.500 usec
DE	9.40 usec
TE	295.1 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	10.00 usec
PL1	-3.60 dB
PL1W	17.83863831 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300171 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



apgmitsunobu
mCARBONnight CDCl3 {e:\bruk400data\2009\May} ejt 21



86

NAME	2009-05-31-ejt-21
EXPNO	12
PROCNO	1
Date_	20090531
Time	16.13
INSTRUM	AV400
PROBHD	5 mm PABBO BB-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	3072
DS	2
SWH	30241.936 Hz
FIDRES	0.461455 Hz
AQ	1.0835786 sec
RG	512
DW	16.533 usec
DE	7.83 usec
TE	295.8 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	8.00 usec
PL1	0.00 dB
PL1W	34.91522217 W
SFO1	100.6241042 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	90.00 usec
PL2	-3.60 dB
PL12	15.31 dB
PL13	18.00 dB
PL2W	17.83863831 W
PL12W	0.22927761 W
PL13W	0.12341322 W
SFO2	400.1316005 MHz
SI	32768
SF	100.6126252 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

apgjulia
mPROTON CDCl3 /opt/bruk500data/2009/May ejt 31

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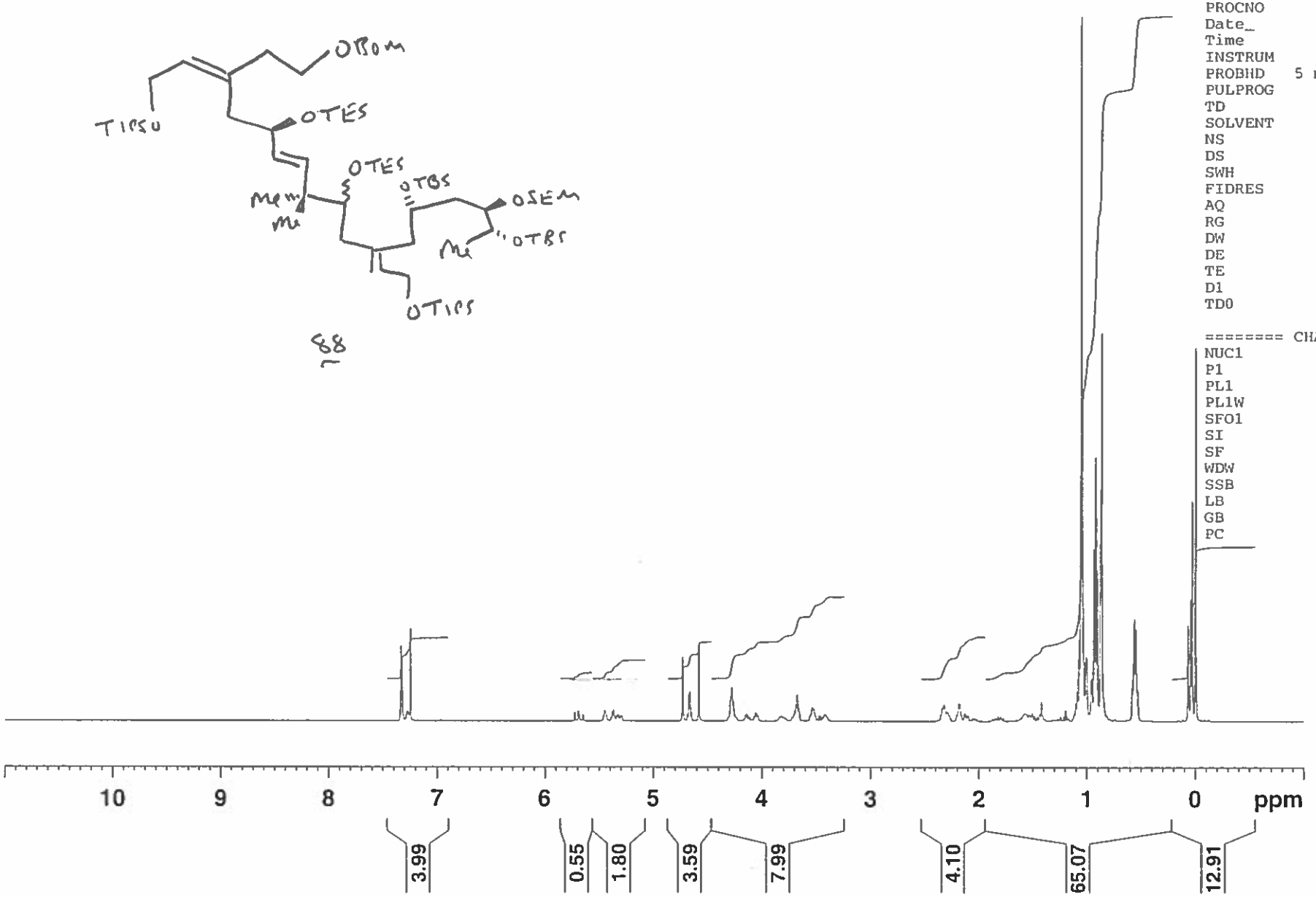
NAME	2009-05-18-ejt-31
EXPNO	10
PROCNO	1
Date_	20090518
Time	16.24
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zg30b
TD	65536
SOLVENT	CDCl3
NS	16
DS	0
SWH	10330.578 Hz
FIDRES	0.157632 Hz
AQ	3.1719923 sec
RG	90.5
DW	48.400 usec
DE	13.38 usec
TE	297.0 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	8.20 usec
PL1	3.25 dB
PL1W	12.12272263 W
SFO1	500.1330885 MHz
SI	32768
SF	500.1300189 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



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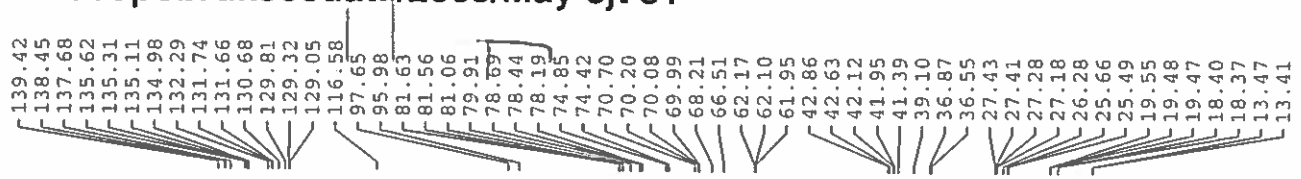
mCARBONnight CDCl3 /opt/bruk500data/2009/May ejt 31



88

NAME	2009-05-18-ejt-31
EXPNO	12
PROCNO	1
Date_	20090518
Time	19.48
INSTRUM	spect
PROBHD	5 mm TXI 1H/D-
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	2000
DS	2
SWH	29761.904 Hz
FIDRES	0.454131 Hz
AQ	1.1010548 sec
RG	512
DW	16.800 usec
DE	32.21 usec
TE	297.3 K
D1	2.00000000 sec
D11	0.03000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	13C
P1	11.50 usec
PL1	-4.20 dB
PL1W	218.02882385 W
SFO1	125.7703643 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	80.00 usec
PL2	4.20 dB
PL12	23.99 dB
PL13	23.00 dB
PL2W	9.74092484 W
PL12W	0.10223514 W
PL13W	0.12841040 W
SFO2	500.1320005 MHz
SI	32768
SF	125.7576100 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40