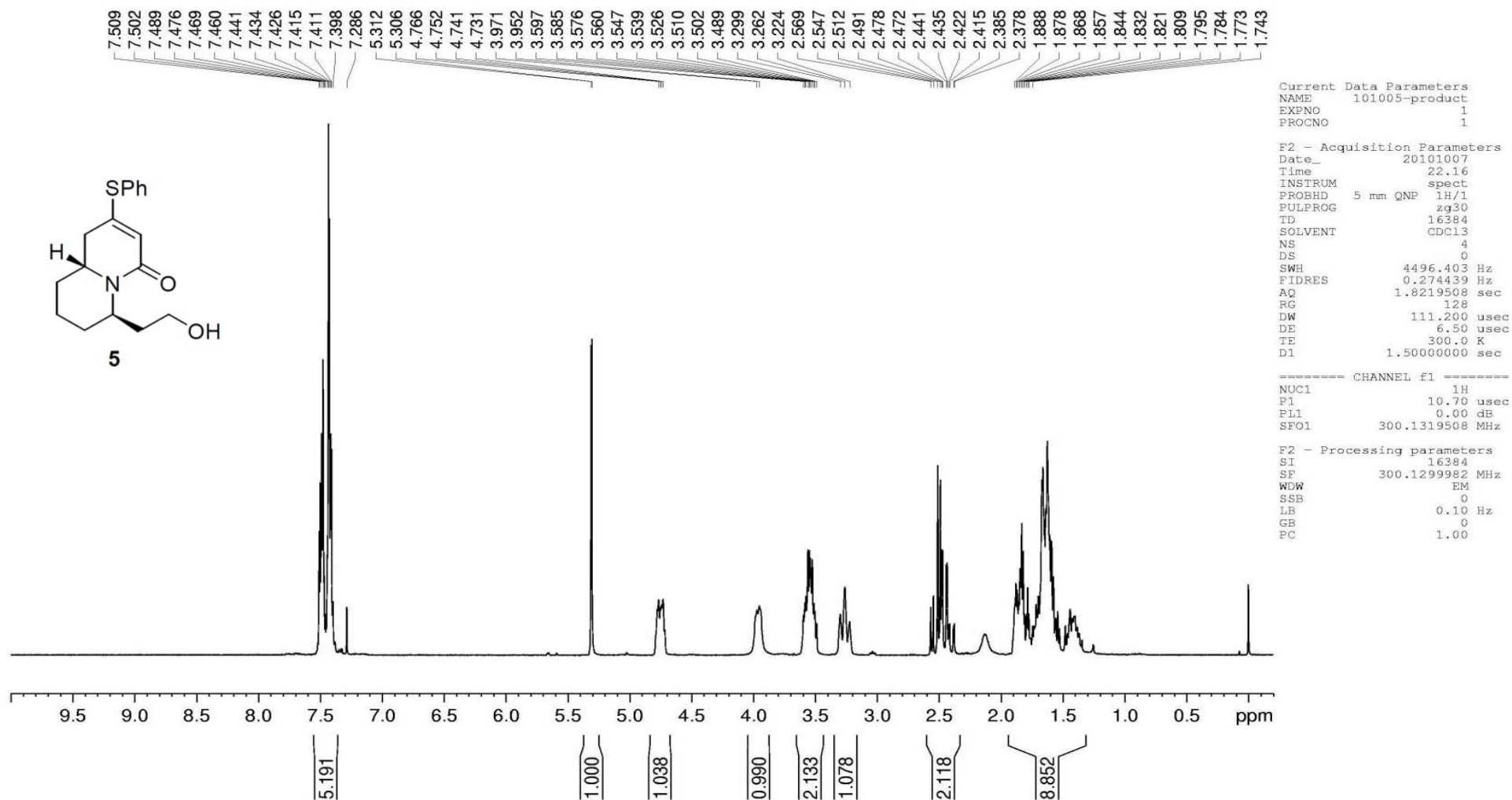


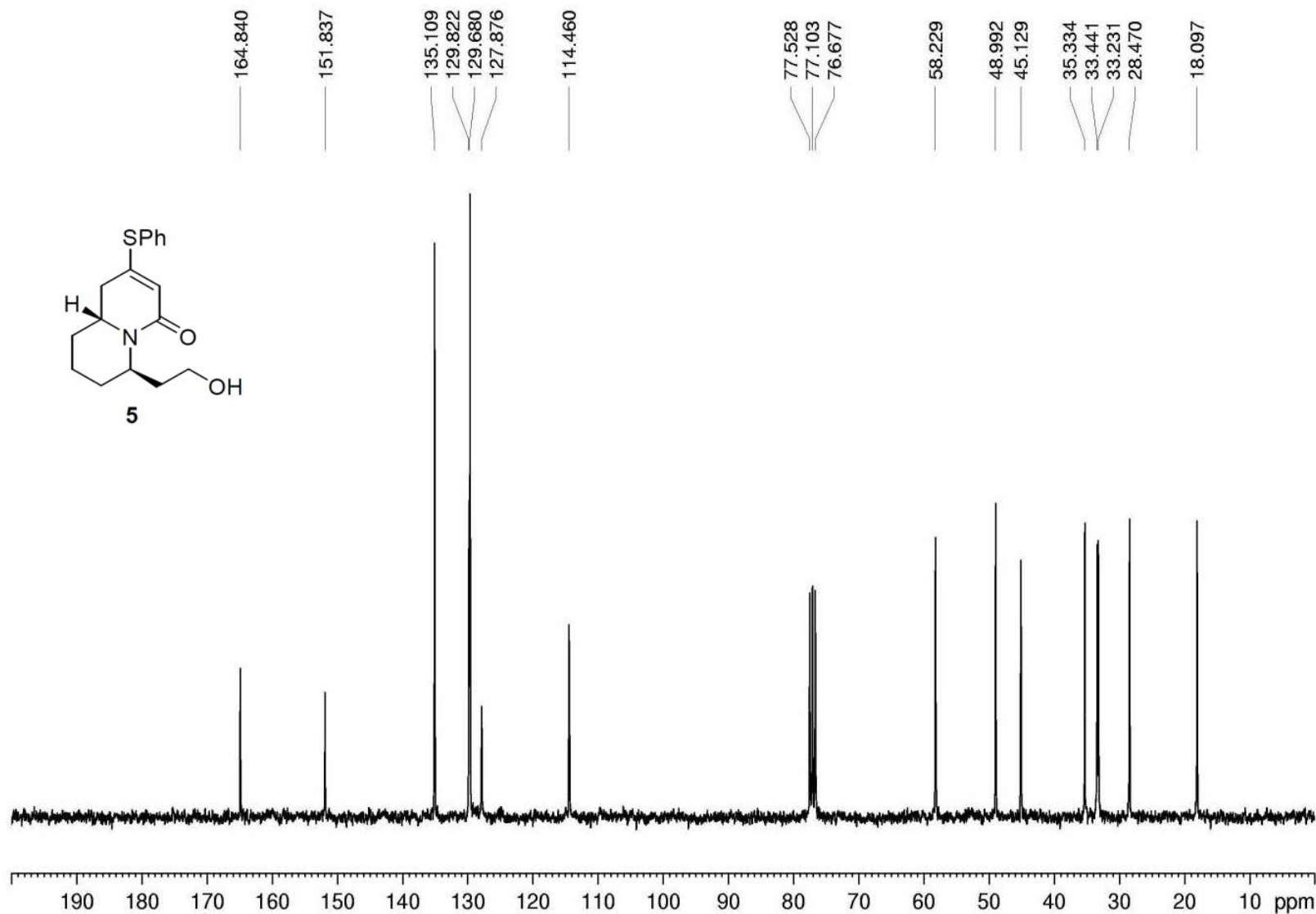
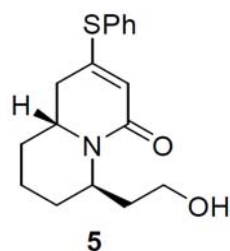
Supplementary Materials

^1H - and ^{13}C -NMR spectra of compounds **5–21**.

101005-product



100811-product-C13



Current Data Parameters
NAME 100811-product
EXPNO 2
PROCNO 1

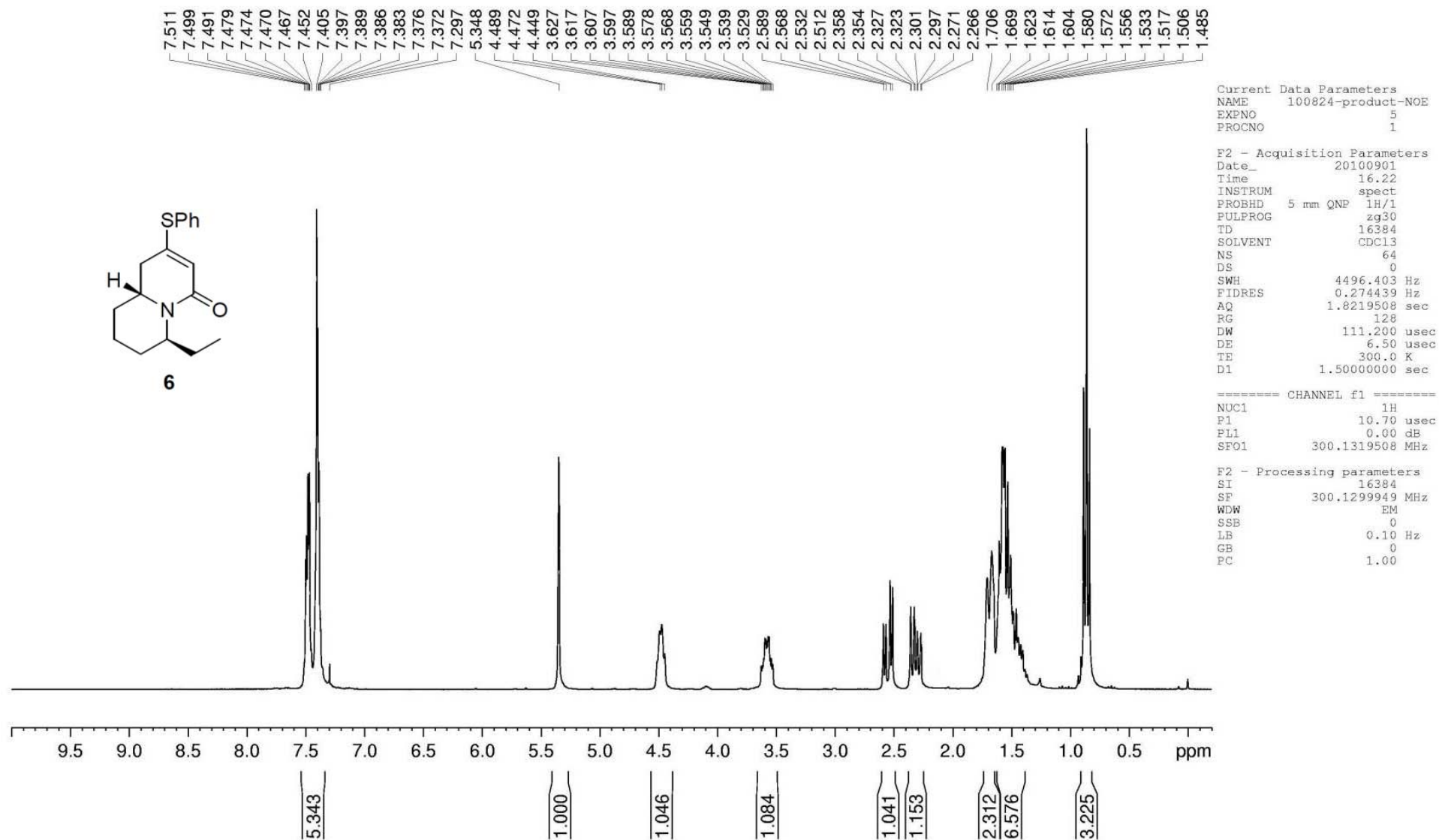
F2 - Acquisition Parameters
Date_ 20100818
Time 0.16
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 128
DS 0
SWH 18832.393 Hz
FIDRES 0.287360 Hz
AQ 1.7400308 sec
RG 14596.5
DW 26.550 usec
DE 6.50 usec
TE 300.0 K
D1 1.20000005 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 10.10 usec
PL1 0.00 dB
SFO1 75.4763978 MHz

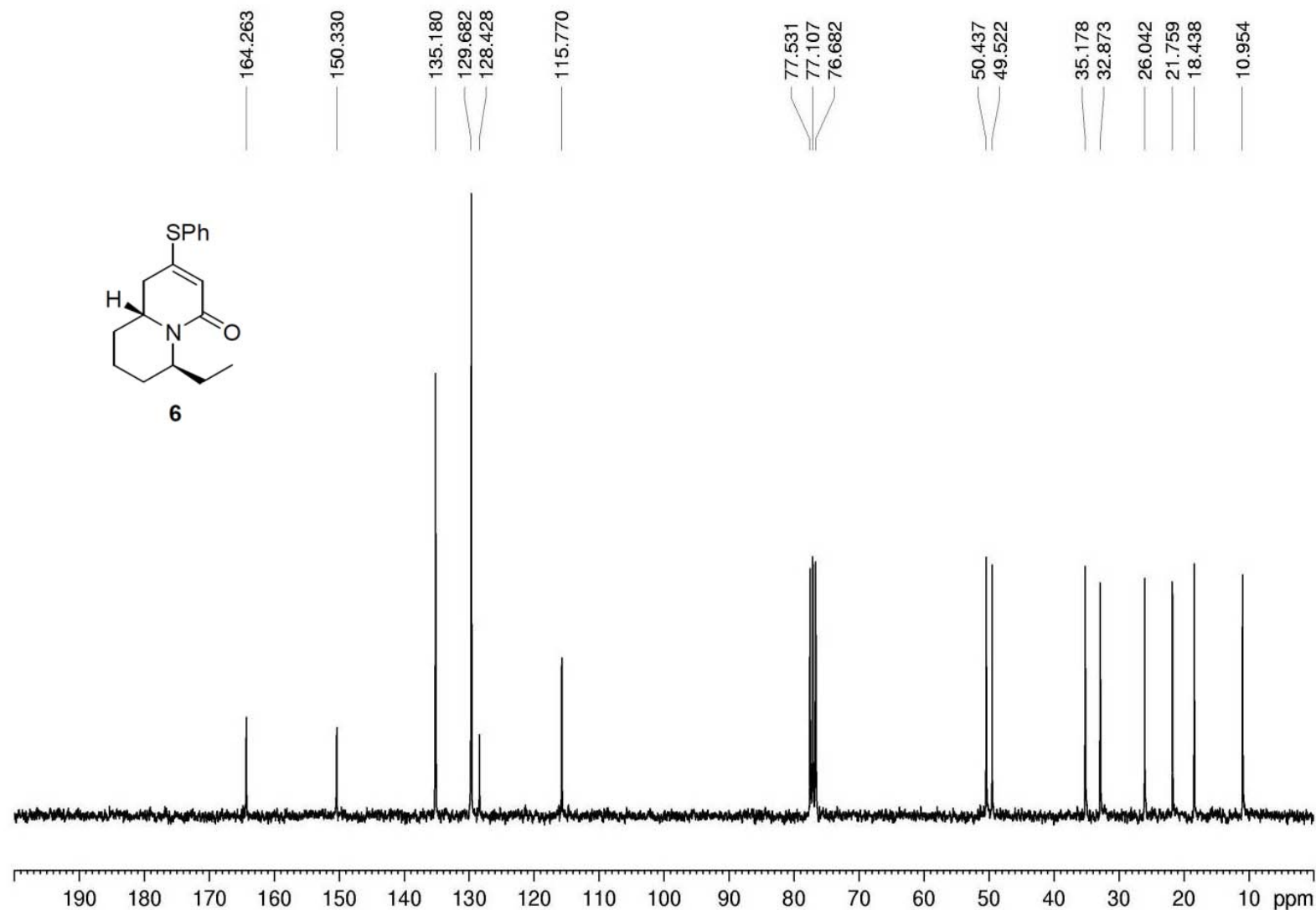
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 0.00 dB
PL12 18.10 dB
PL13 21.10 dB
SFO2 300.1313506 MHz

F2 - Processing parameters
SI 32768
SF 75.4677591 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00

100824-product-NOE



100824-product-NOE-C13



Current Data Parameters
NAME 100824-product-NOE
EXPNO 2
PROCNO 1

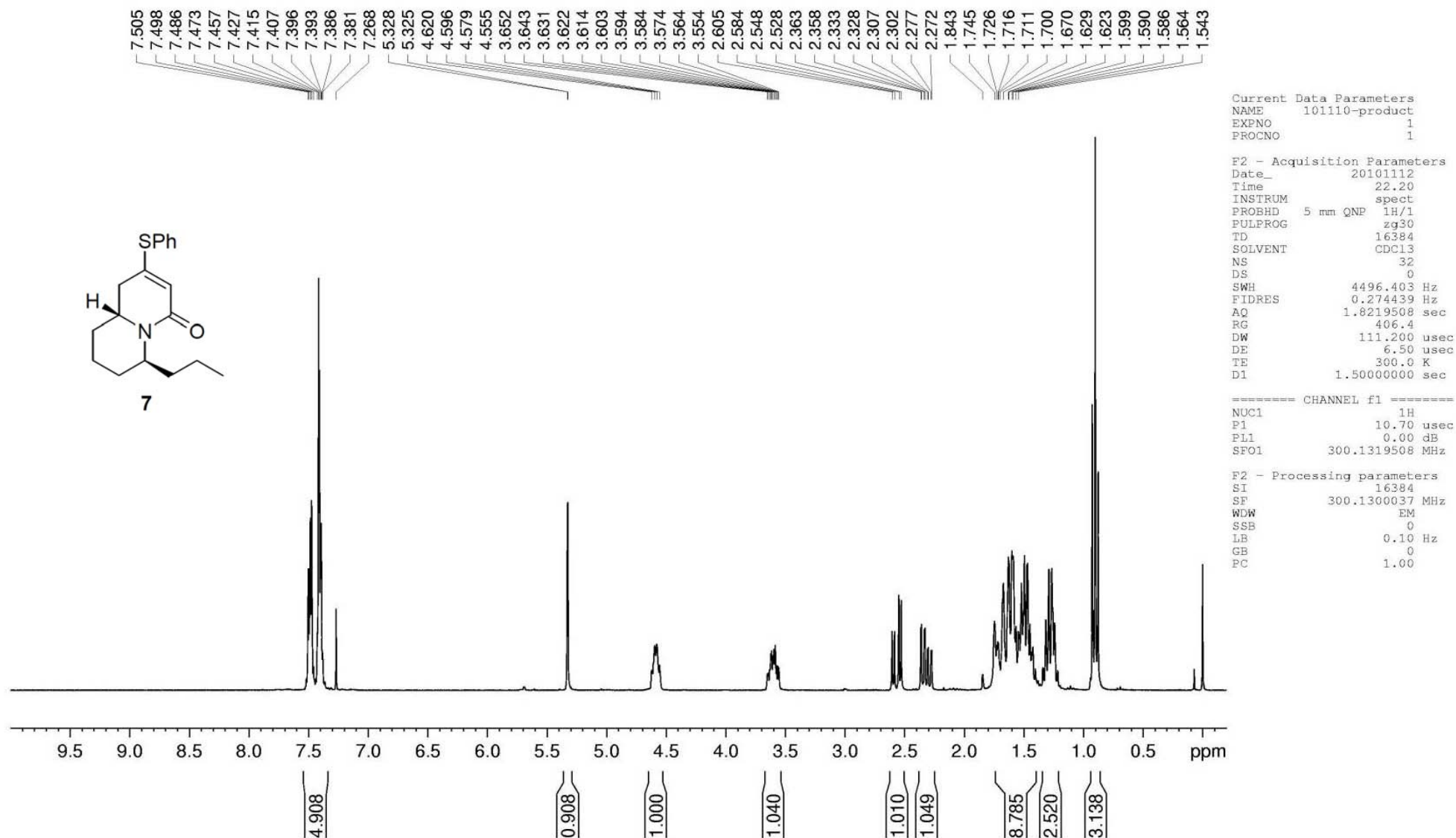
F2 - Acquisition Parameters
Date_ 20100901
Time 16.11
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 128
DS 0
SWH 18832.393 Hz
FIDRES 0.287360 Hz
AQ 1.7400308 sec
RG 14596.5
DW 26.550 usec
DE 6.50 usec
TE 300.0 K
D1 1.20000005 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 10.10 usec
PL1 0.00 dB
SFO1 75.4763978 MHz

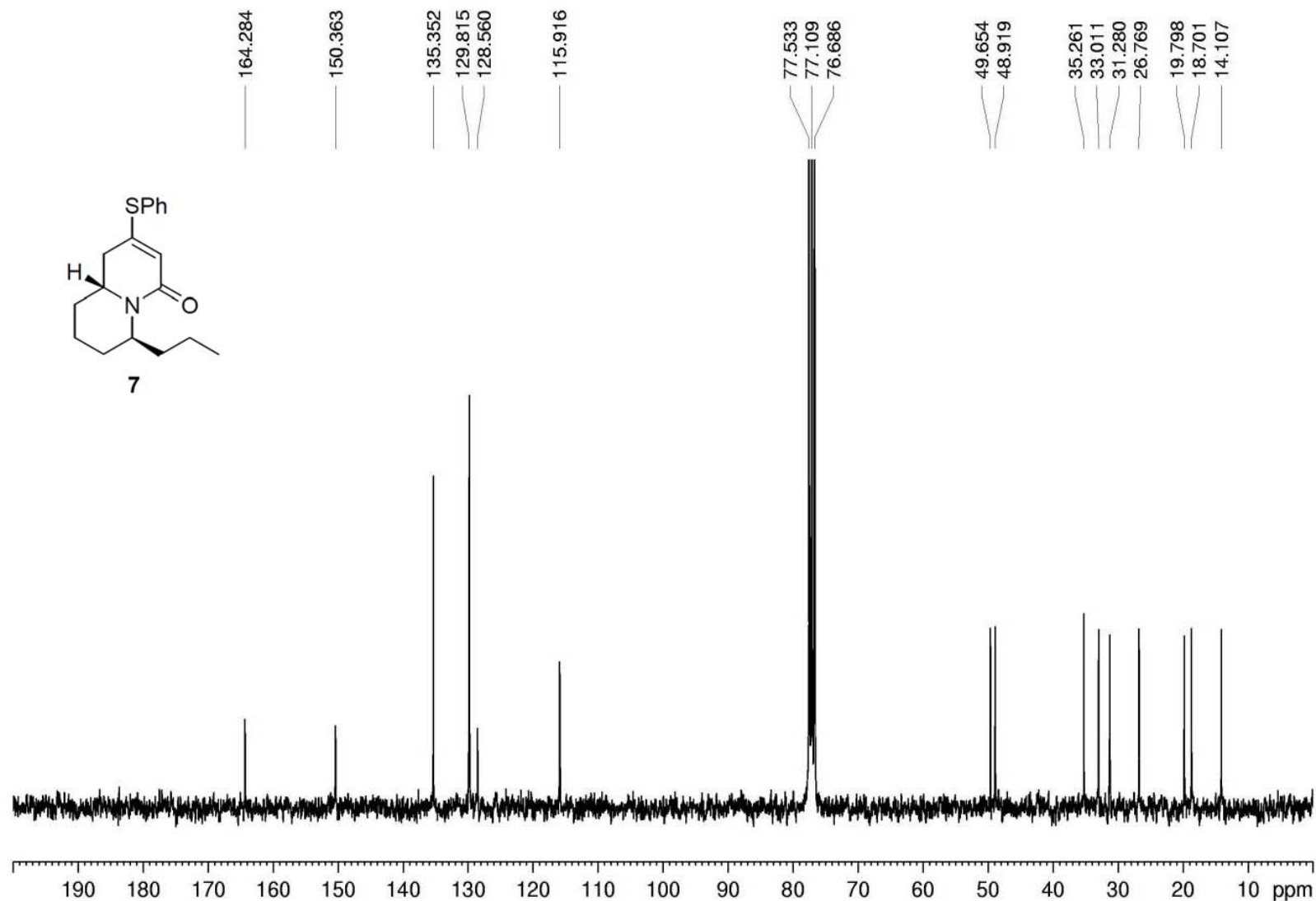
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 0.00 dB
PL12 18.10 dB
PL13 21.10 dB
SFO2 300.1313506 MHz

F2 - Processing parameters
SI 32768
SF 75.4677522 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00

101110-product



101110-product-C13



Current Data Parameters
NAME 101110-product
EXPNO 2
PROCNO 1

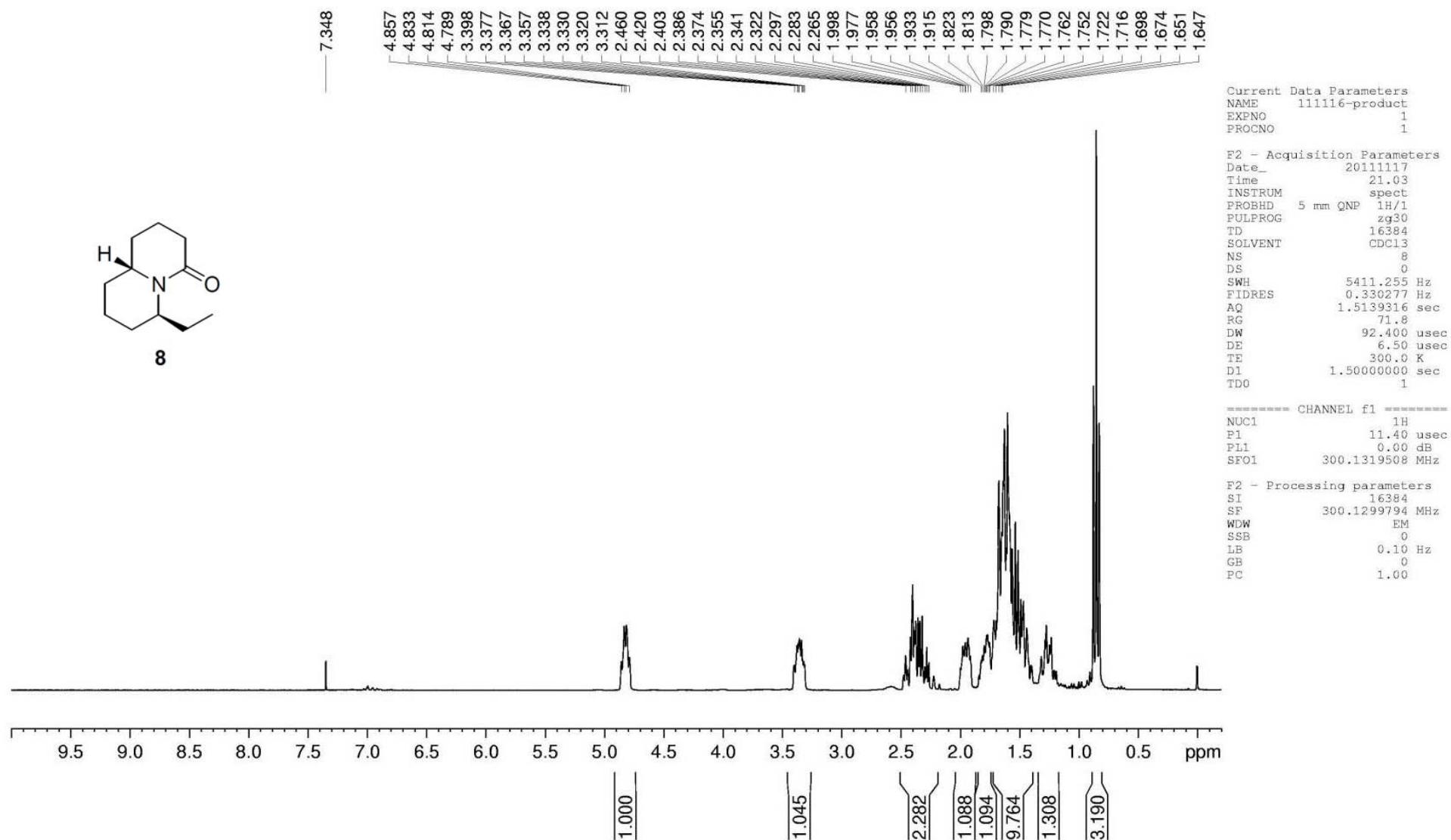
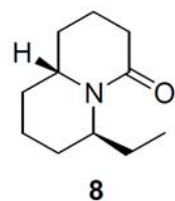
F2 - Acquisition Parameters
Date_ 20101112
Time 22.46
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 512
DS 0
SWH 18832.393 Hz
FIDRES 0.287360 Hz
AQ 1.7400308 sec
RG 11585.2
DW 26.550 usec
DE 6.50 usec
TE 300.0 K
D1 1.20000005 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 10.10 usec
PL1 0.00 dB
SFO1 75.4763978 MHz

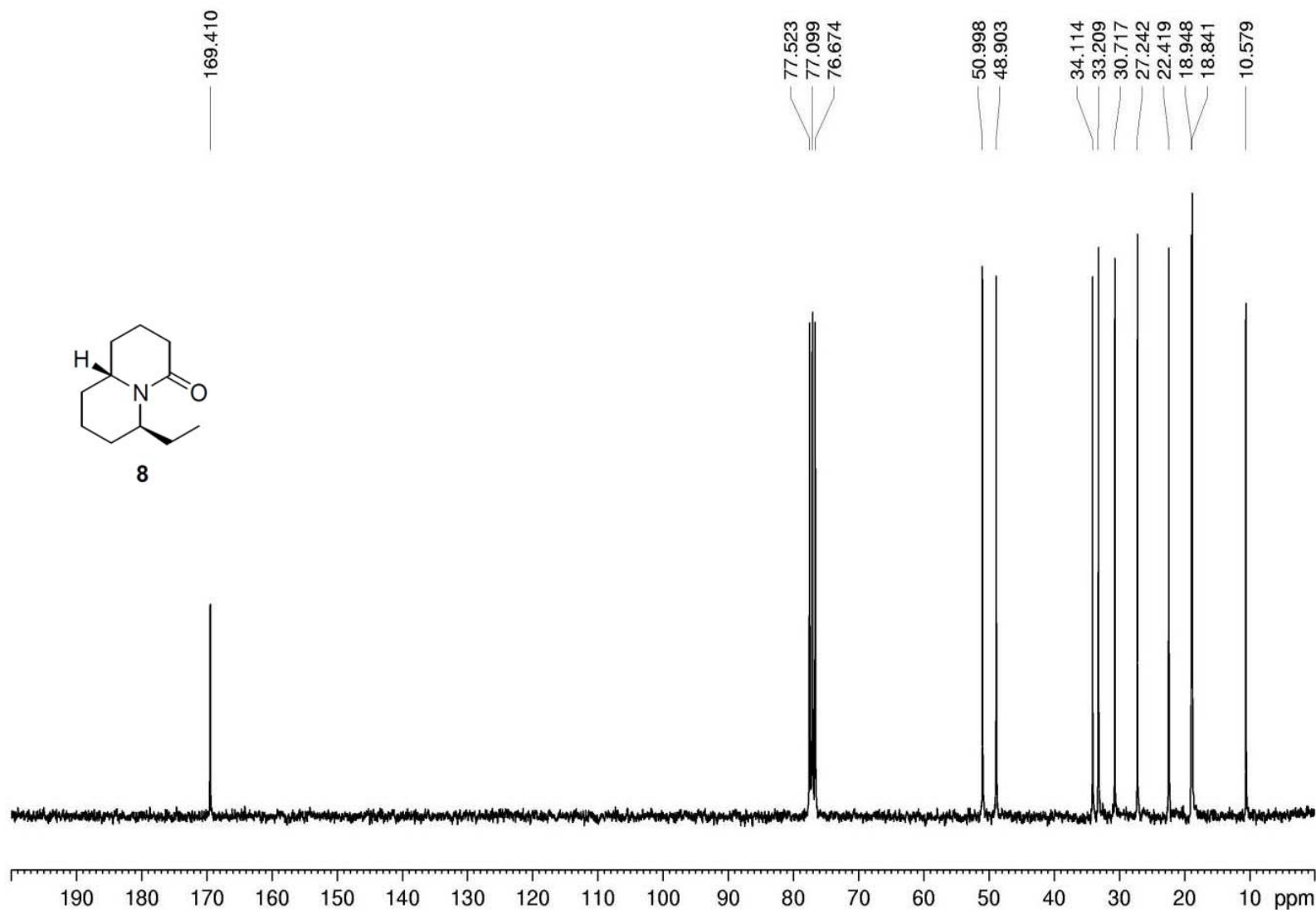
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 0.00 dB
PL12 18.10 dB
PL13 21.10 dB
SFO2 300.1313506 MHz

F2 - Processing parameters
SI 32768
SF 75.4677430 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00

111116-product



111116-product



Current Data Parameters
NAME 111116-product
EXPNO 2
PROCNO 1

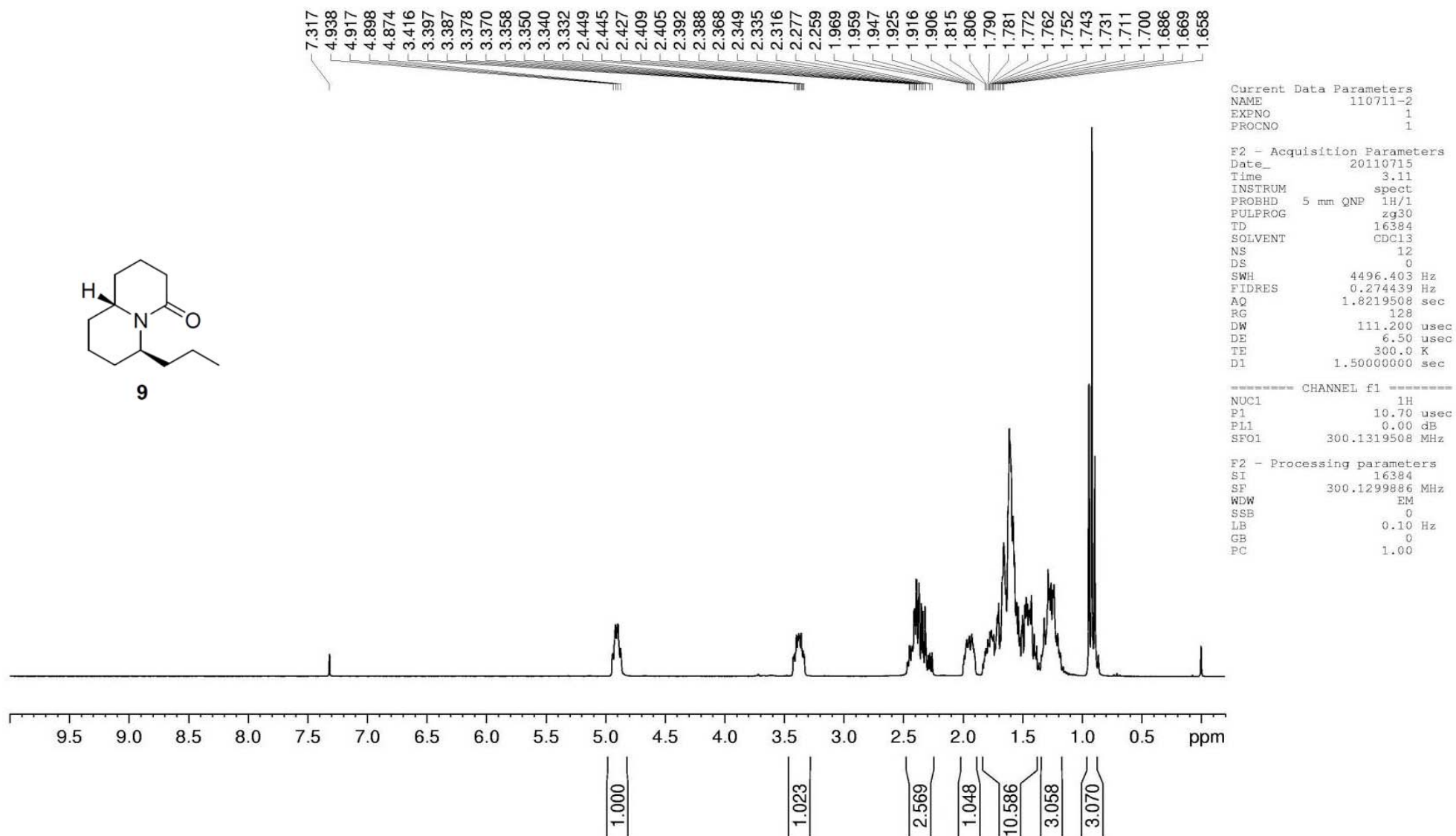
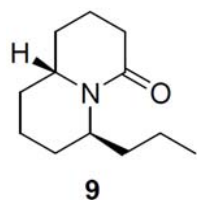
F2 - Acquisition Parameters
Date_ 20111117
Time 21.21
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 256
DS 0
SWH 19267.822 Hz
FIDRES 0.294004 Hz
AQ 1.7007092 sec
RG 14596.5
DW 25.950 usec
DE 6.50 usec
TE 300.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 9.50 usec
PL1 -1.50 dB
SFO1 75.4771825 MHz

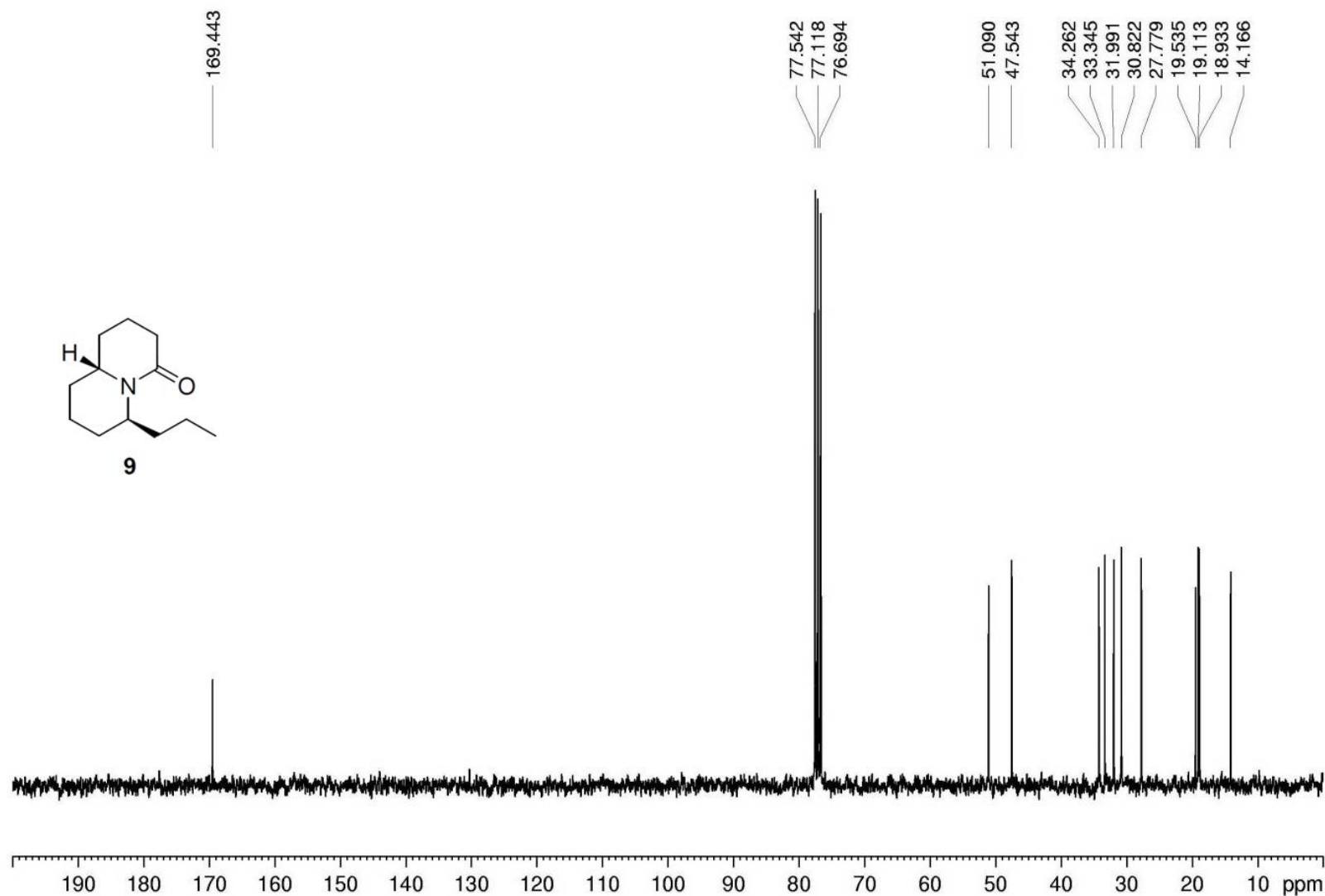
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 0.00 dB
PL12 18.00 dB
PL13 21.00 dB
SFO2 300.1313506 MHz

F2 - Processing parameters
SI 32768
SF 75.4677524 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00

110711-2



75 MHz C13 experiment for QNP probehead



Current Data Parameters
NAME 101222-product'
EXPNO 2
PROCNO 1

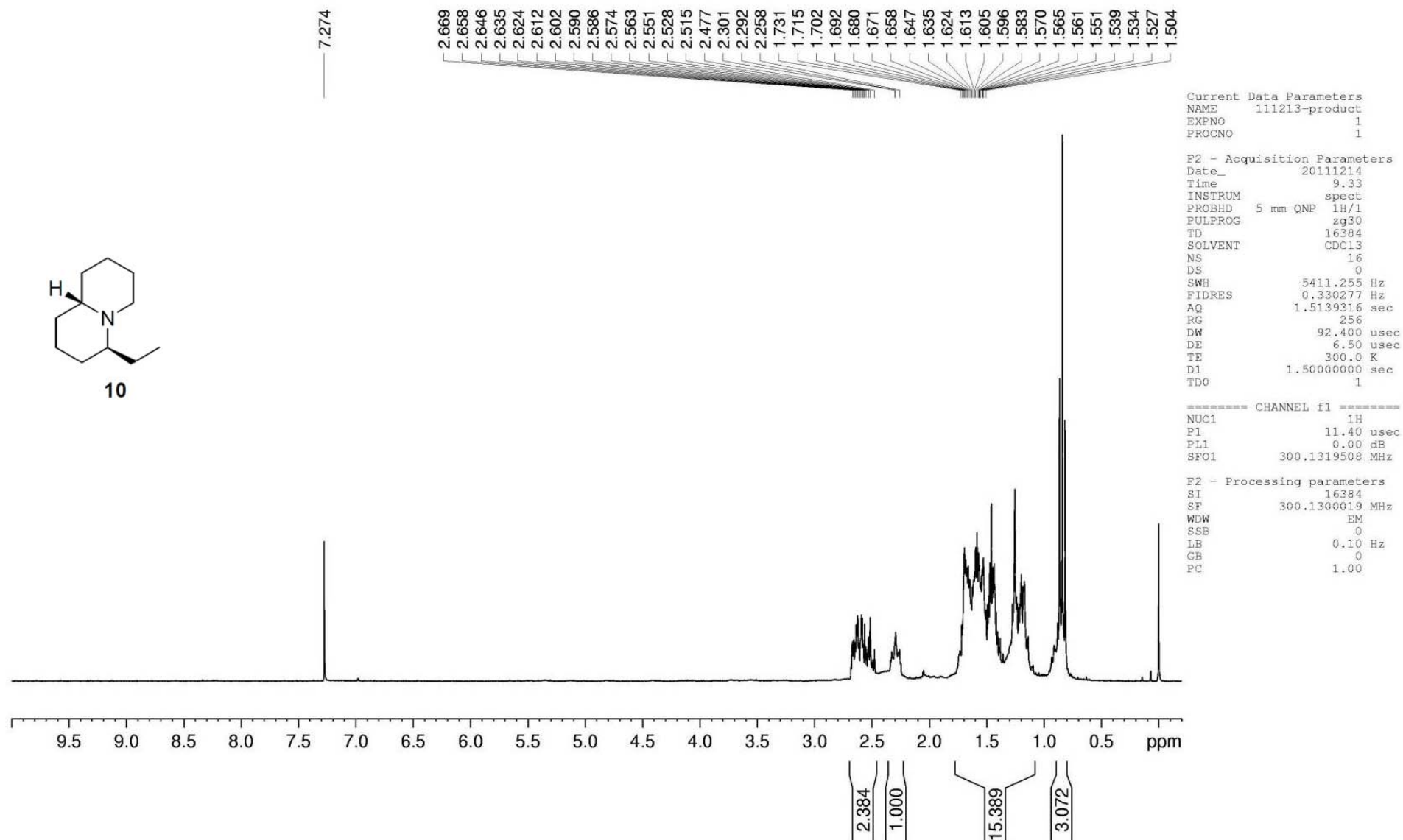
F2 - Acquisition Parameters
Date_ 20101225
Time 1.41
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 32
DS 0
SWH 18832.393 Hz
FIDRES 0.287360 Hz
AQ 1.7400308 sec
RG 14596.5
DW 26.550 usec
DE 6.50 usec
TE 300.0 K
D1 1.20000005 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 10.10 usec
PL1 0.00 dB
SFO1 75.4763978 MHz

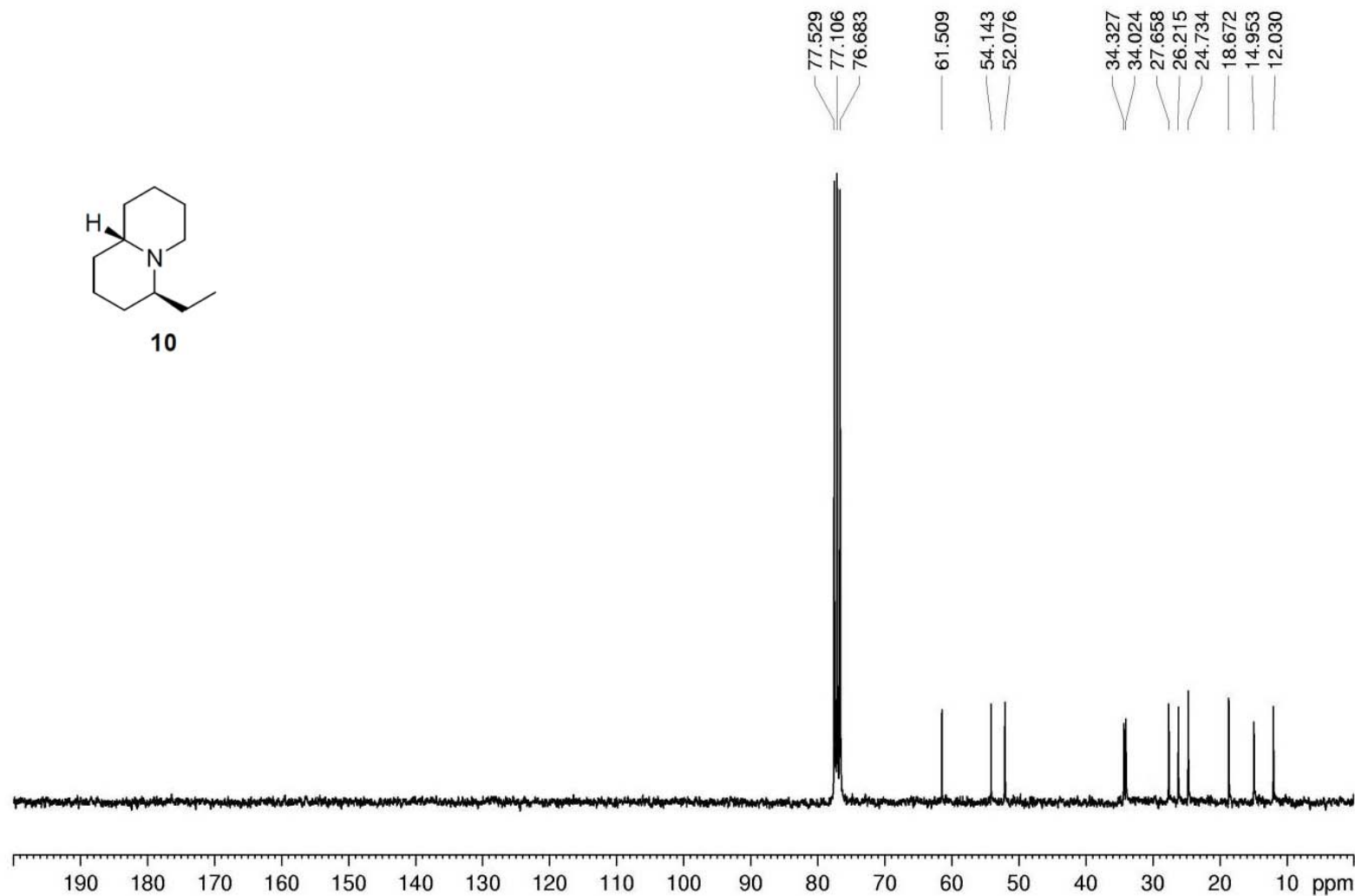
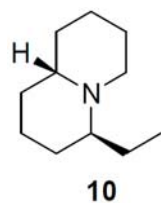
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 0.00 dB
PL12 18.10 dB
PL13 21.10 dB
SFO2 300.1313506 MHz

F2 - Processing parameters
SI 32768
SF 75.4677459 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00

111213-product



111213-product



Current Data Parameters
NAME 111213-product
EXPNO 2
PROCNO 1

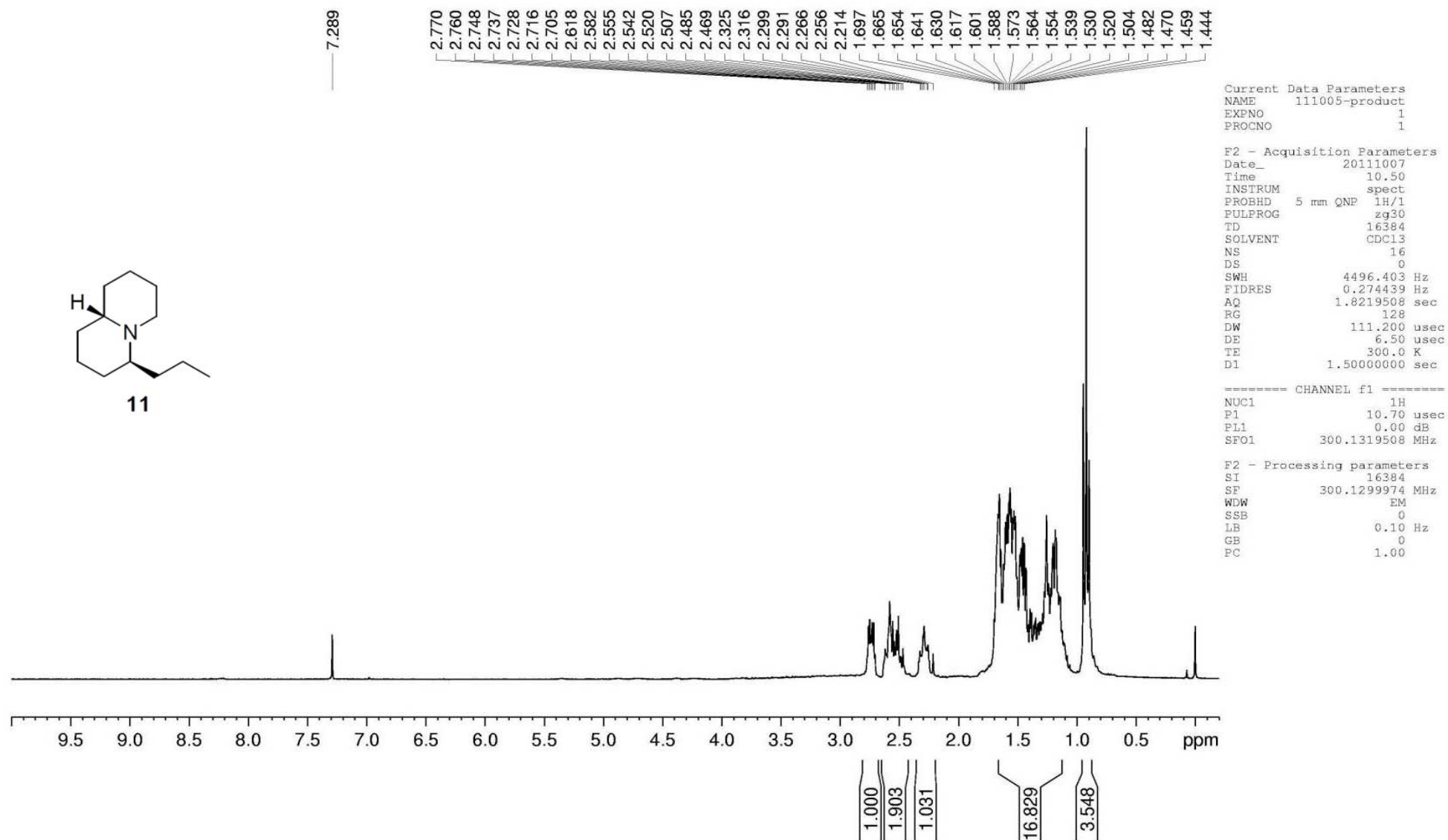
F2 - Acquisition Parameters
Date_ 20111214
Time 10.06
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 512
DS 0
SWH 19267.822 Hz
FIDRES 0.294004 Hz
AQ 1.7007092 sec
RG 8192
DW 25.950 usec
DE 6.50 usec
TE 300.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 9.50 usec
PL1 -1.50 dB
SF01 75.4771825 MHz

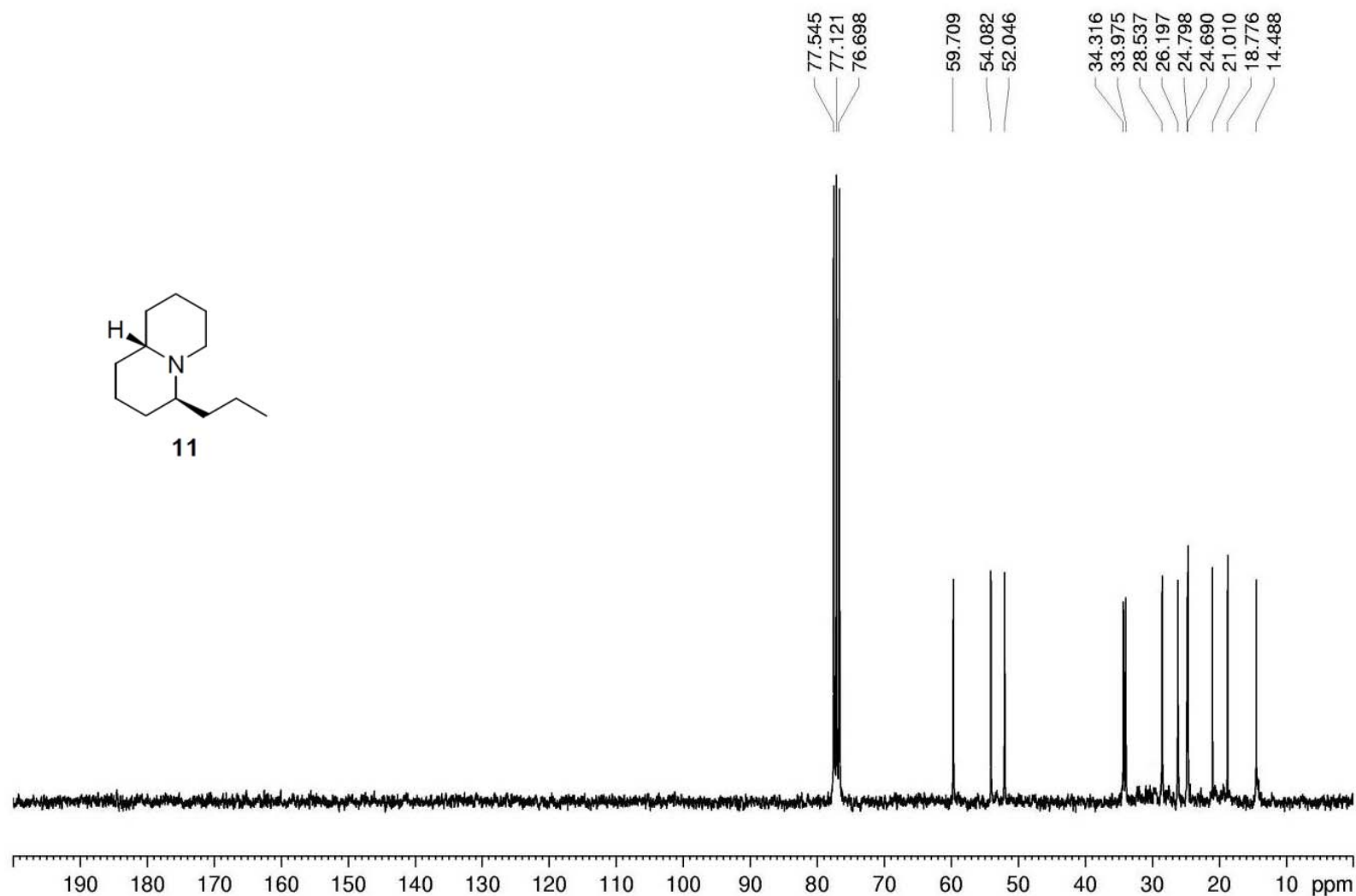
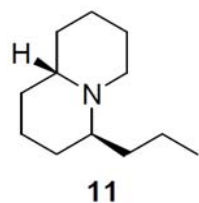
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 0.00 dB
PL12 18.00 dB
PL13 21.00 dB
SF02 300.1313506 MHz

F2 - Processing parameters
SI 32768
SF 75.4677424 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00

111005-product



111005-product-C13



Current Data Parameters
NAME 111005-product
EXPNO 2
PROCNO 1

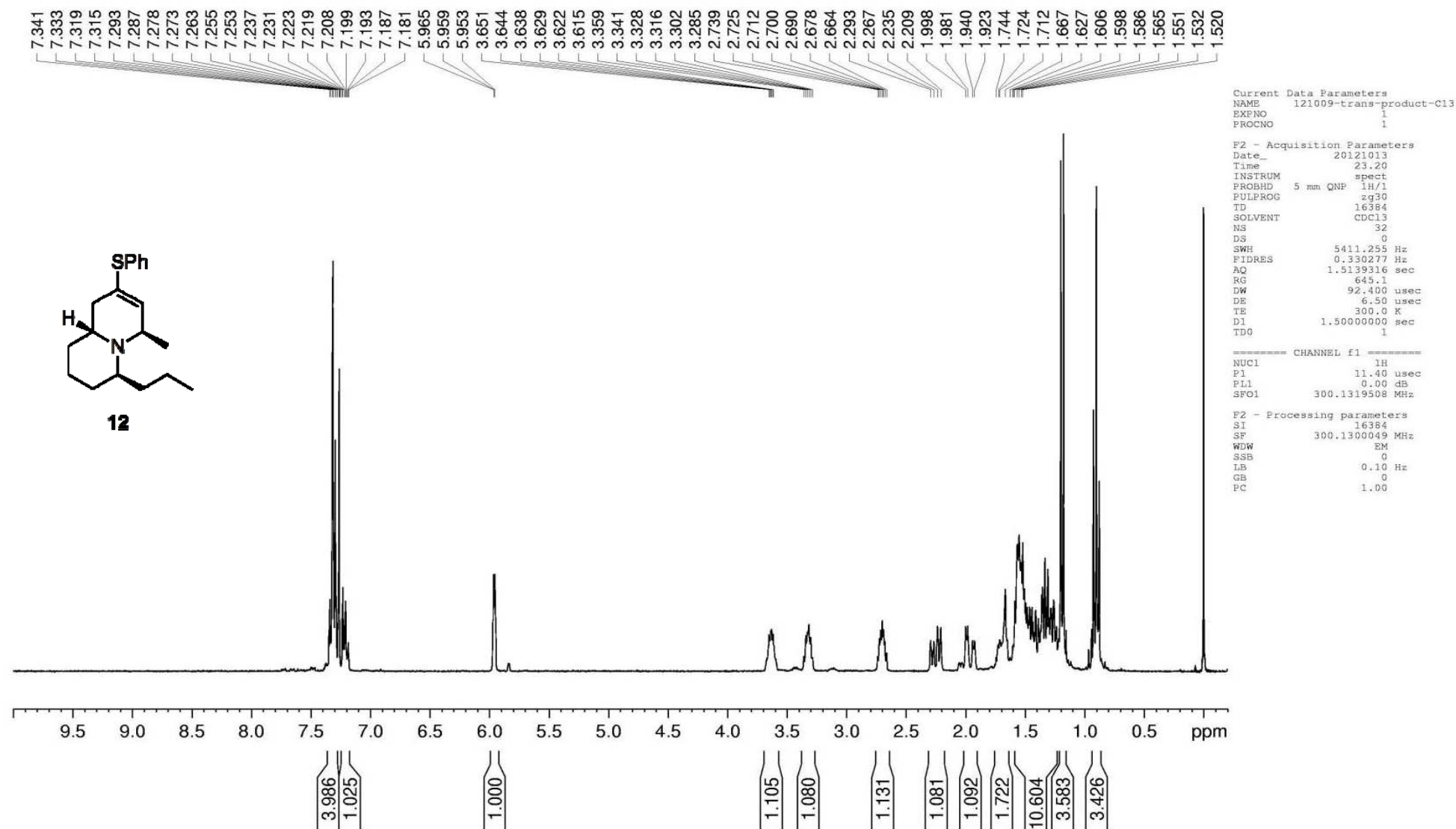
F2 - Acquisition Parameters
Date_ 20111007
Time 11.17
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 512
DS 0
SWH 18832.393 Hz
FIDRES 0.287360 Hz
AQ 1.7400308 sec
RG 13004
DW 26.550 usec
DE 6.50 usec
TE 300.0 K
D1 1.20000005 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 10.10 usec
PL1 0.00 dB
SF01 75.4763978 MHz

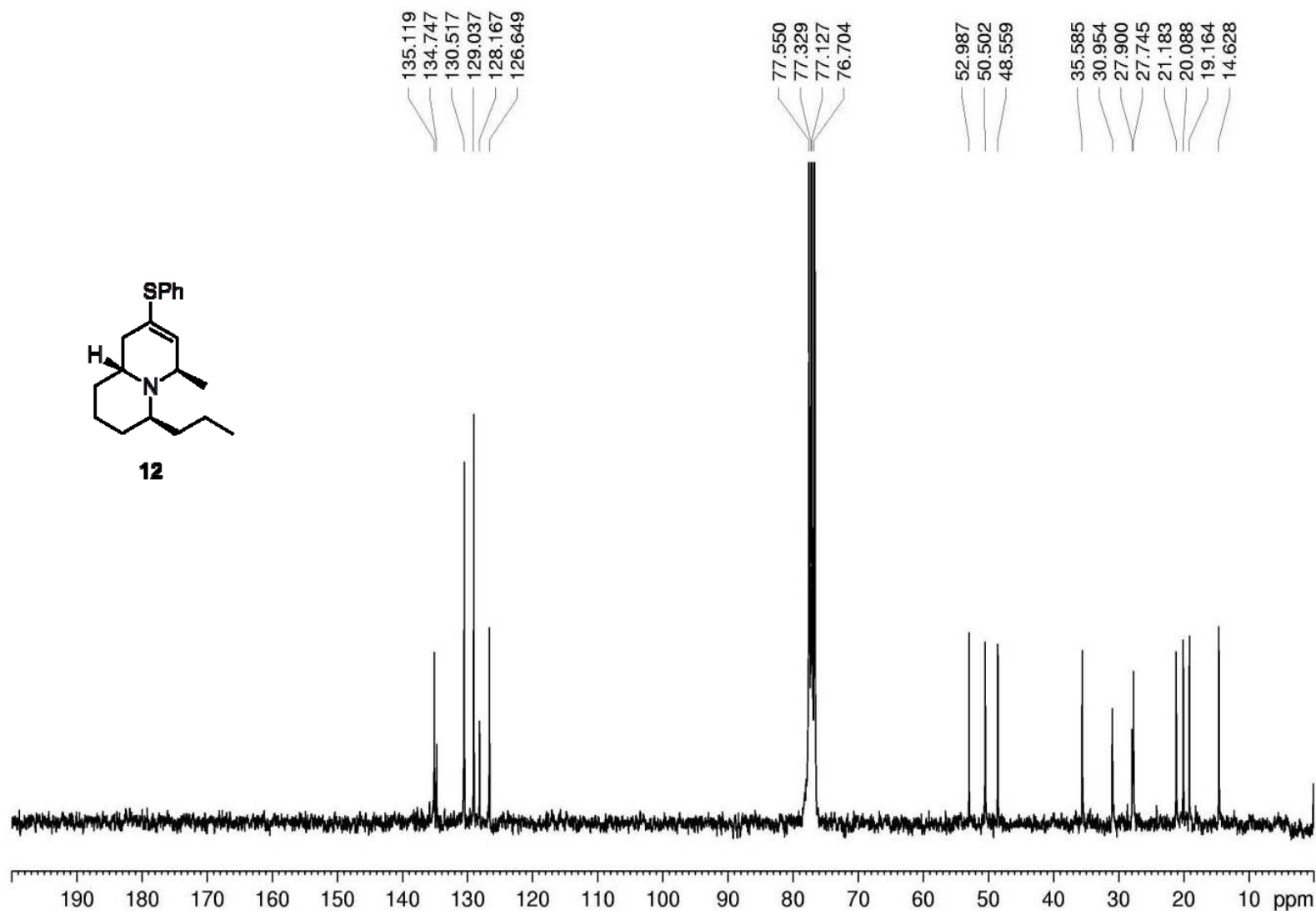
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 0.00 dB
PL12 18.10 dB
PL13 21.10 dB
SF02 300.1313506 MHz

F2 - Processing parameters
SI 32768
SF 75.4677418 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00

121009-trans-product-C13



121009-trans-product-C13



Current Data Parameters
NAME 121009-trans-product-C13
EXPNO 2
PROCNO 1

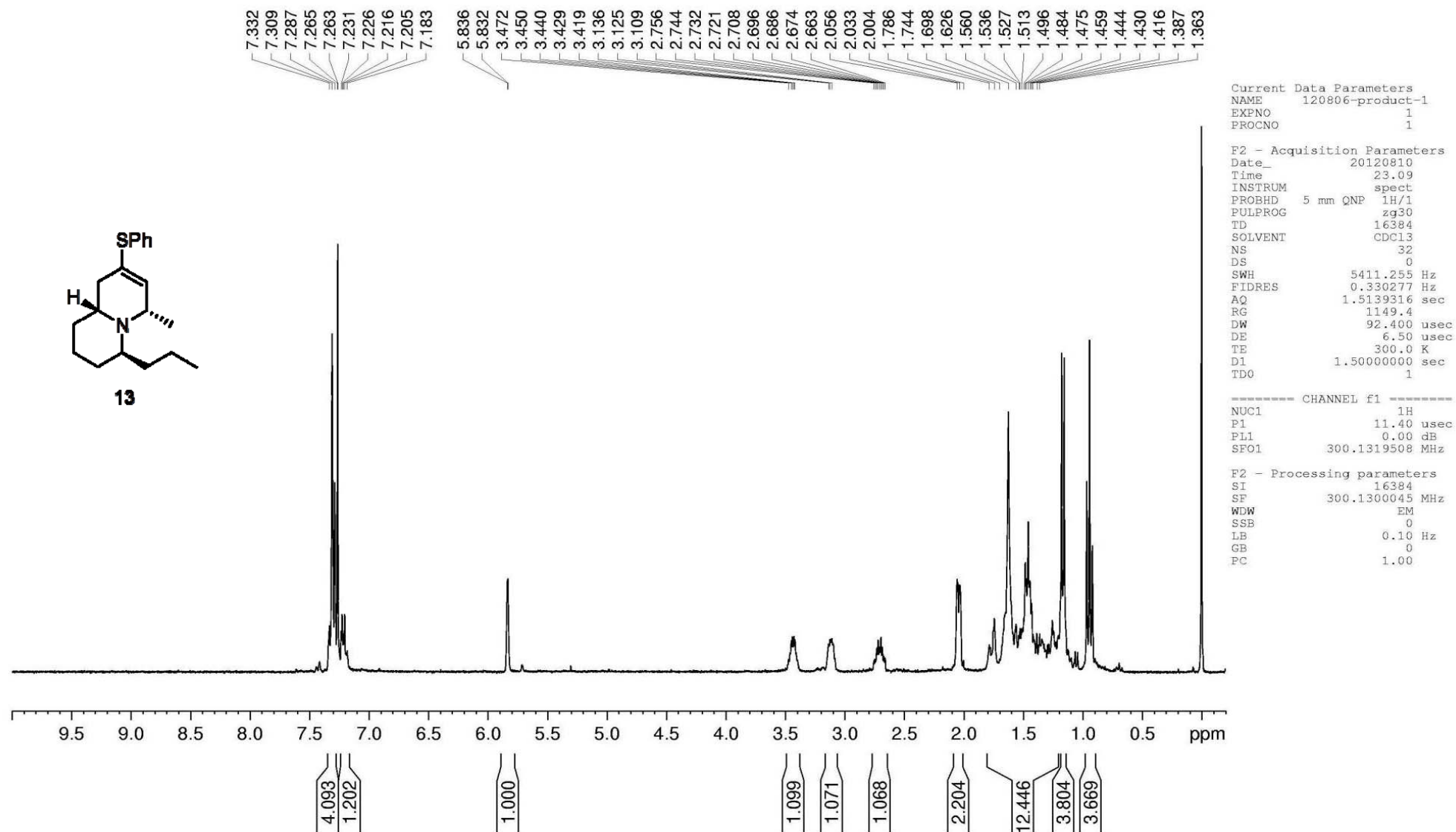
F2 - Acquisition Parameters
Date_ 20121014
Time 4.43
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 5120
DS 0
SWH 19267.822 Hz
FIDRES 0.294004 Hz
AQ 1.7007092 sec
RG 14596.5
DW 25.950 usec
DE 6.50 usec
TE 300.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL f1
NUC1 13C
P1 9.50 usec
PL1 -1.50 dB
SFO1 75.4771825 MHz

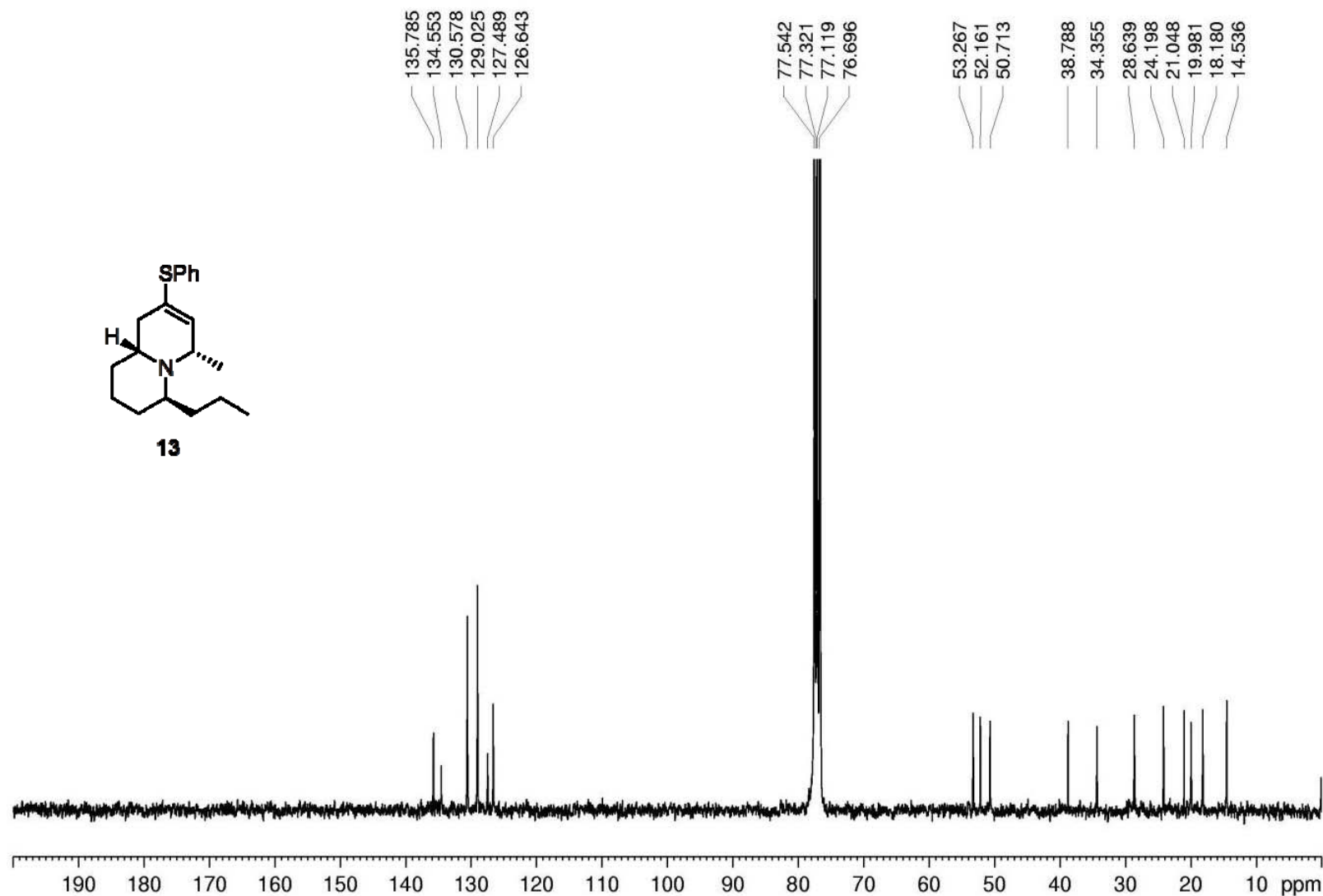
CHANNEL f2
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 0.00 dB
PL12 18.00 dB
PL13 21.00 dB
SFO2 300.1313506 MHz

F2 - Processing parameters
SI 32768
SF 75.4677400 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00

120806-product-1



120806-product-1



Current Data Parameters
NAME 120806-product-1
EXPNO 2
PROCNO 1

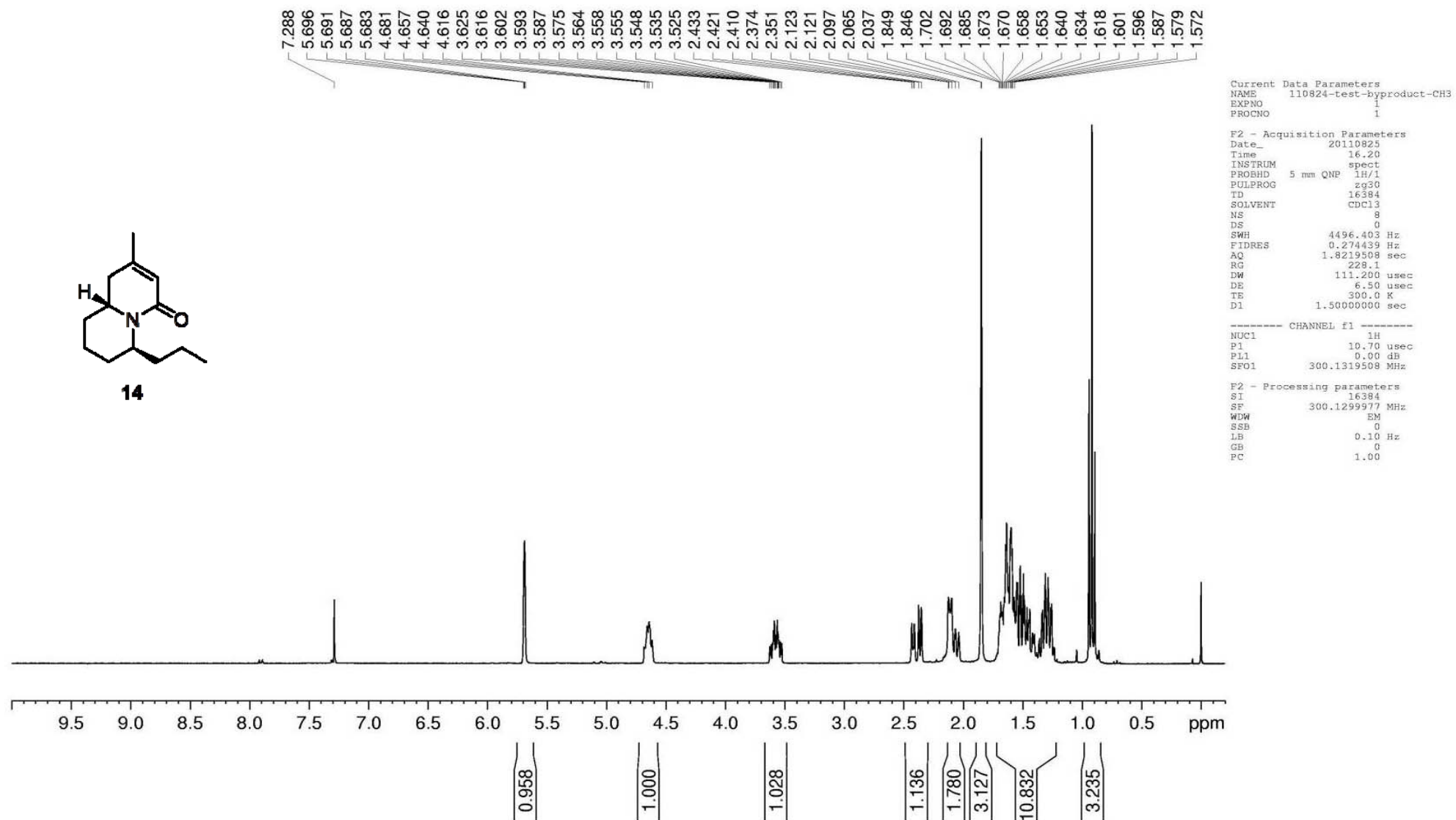
F2 - Acquisition Parameters
Date_ 20120811
Time 4.32
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 5120
DS 0
SWH 19267.822 Hz
FIDRES 0.294004 Hz
AQ 1.7007092 sec
RG 11585.2
DW 25.950 usec
DE 6.50 usec
TE 300.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 9.50 usec
PL1 -1.50 dB
SFO1 75.4771825 MHz

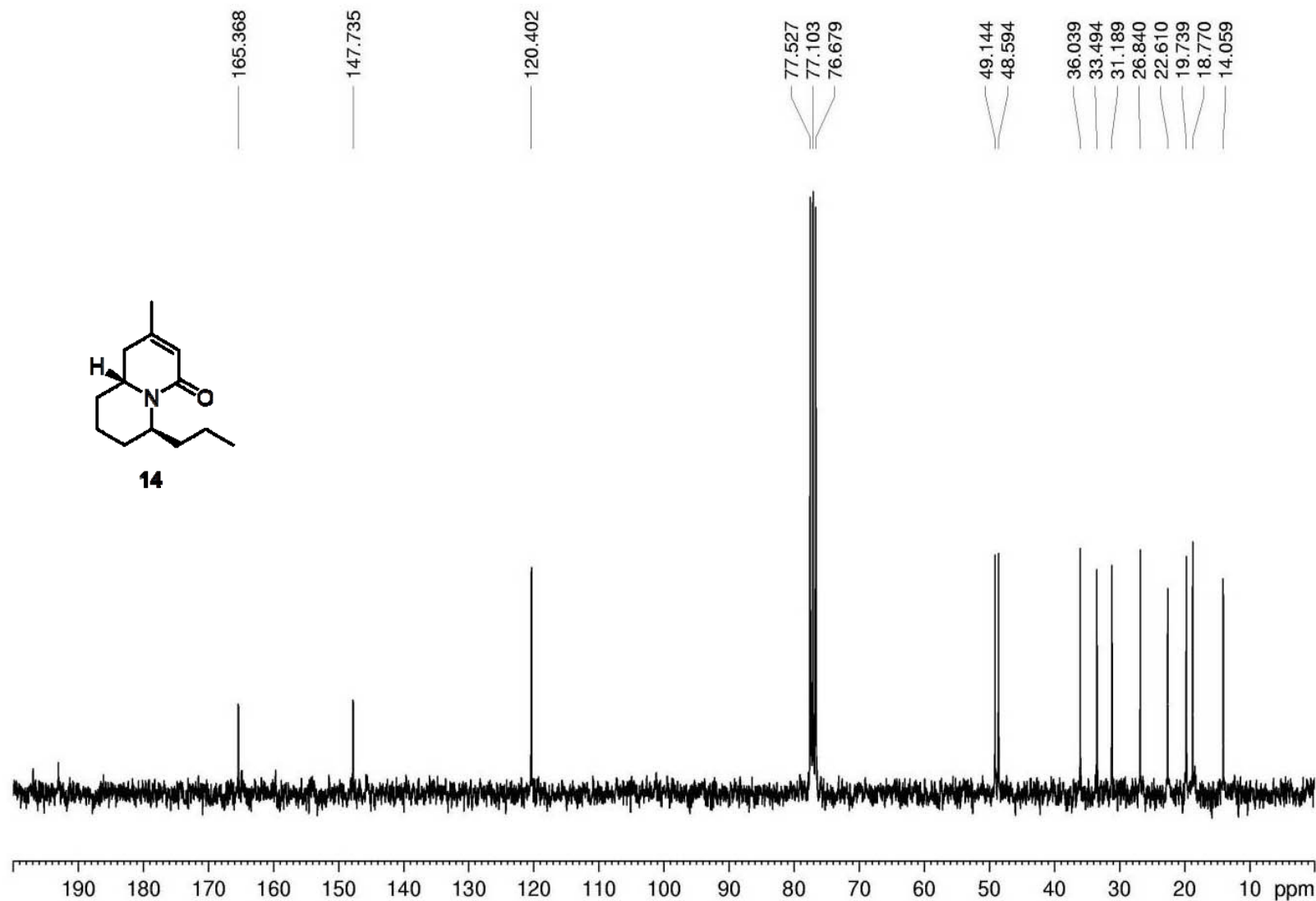
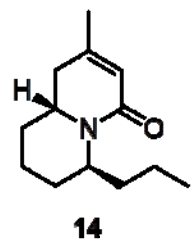
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 0.00 dB
PL12 18.00 dB
PL13 21.00 dB
SFO2 300.1313506 MHz

F2 - Processing parameters
SI 32768
SF 75.4677406 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00

110824-test-byproduct-CH3



101116-1-C13



Current Data Parameters
NAME 101116-1
EXPNO 2
PROCNO 1

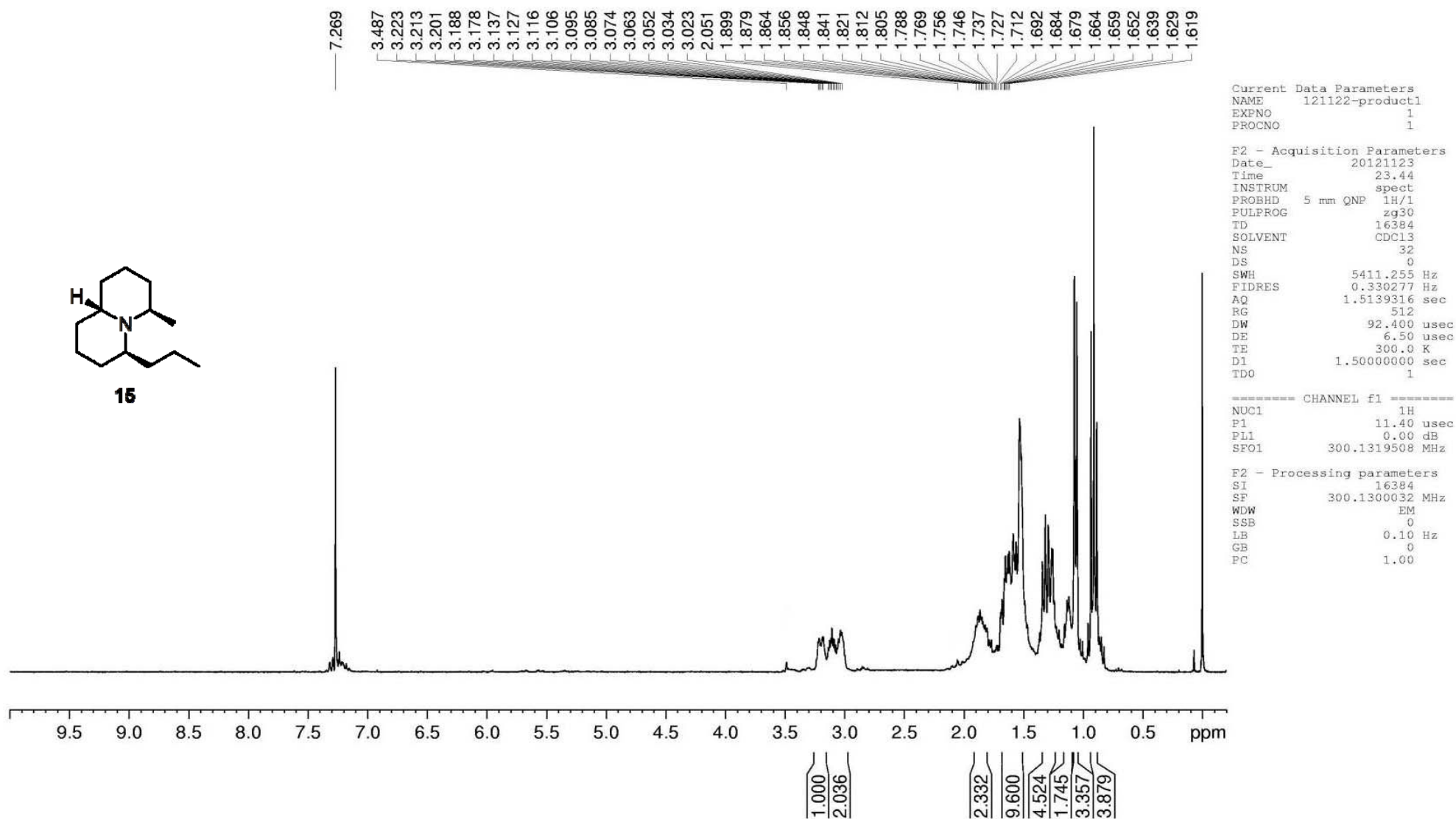
F2 - Acquisition Parameters
Date_ 20101119
Time 0.58
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 64
DS 0
SWH 18832.393 Hz
FIDRES 0.287360 Hz
AQ 1.7400308 sec
RG 13004
DW 26.550 usec
DE 6.50 usec
TE 300.0 K
D1 1.20000005 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 10.10 usec
PL1 0.00 dB
SFO1 75.4763978 MHz

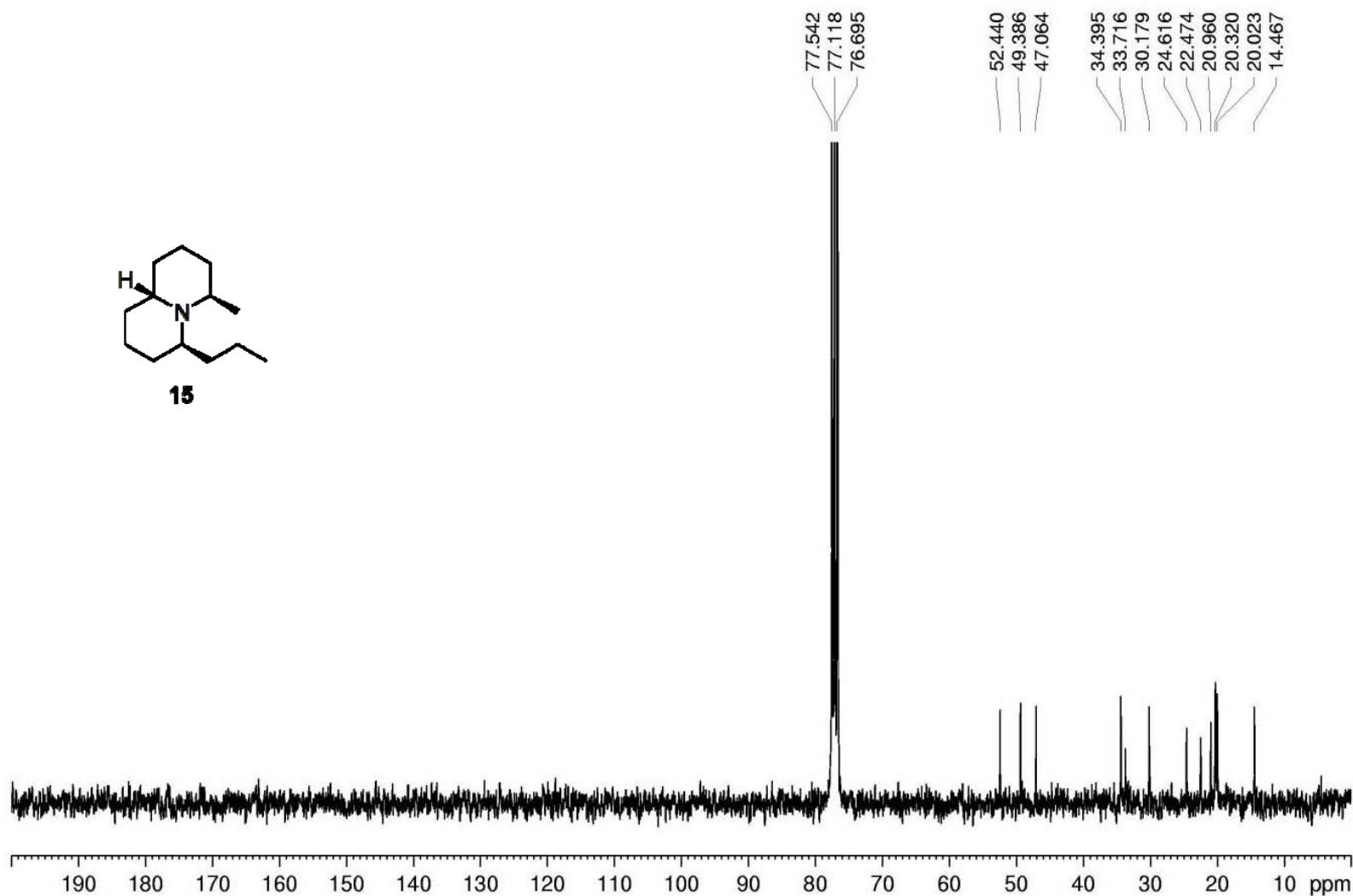
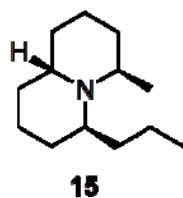
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 0.00 dB
PL12 18.10 dB
PL13 21.10 dB
SFO2 300.1313506 MHz

F2 - Processing parameters
SI 32768
SF 75.4677470 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00

121122-product1



121122-2



Current Data Parameters
NAME 121122-2
EXPNO 2
PROCNO 1

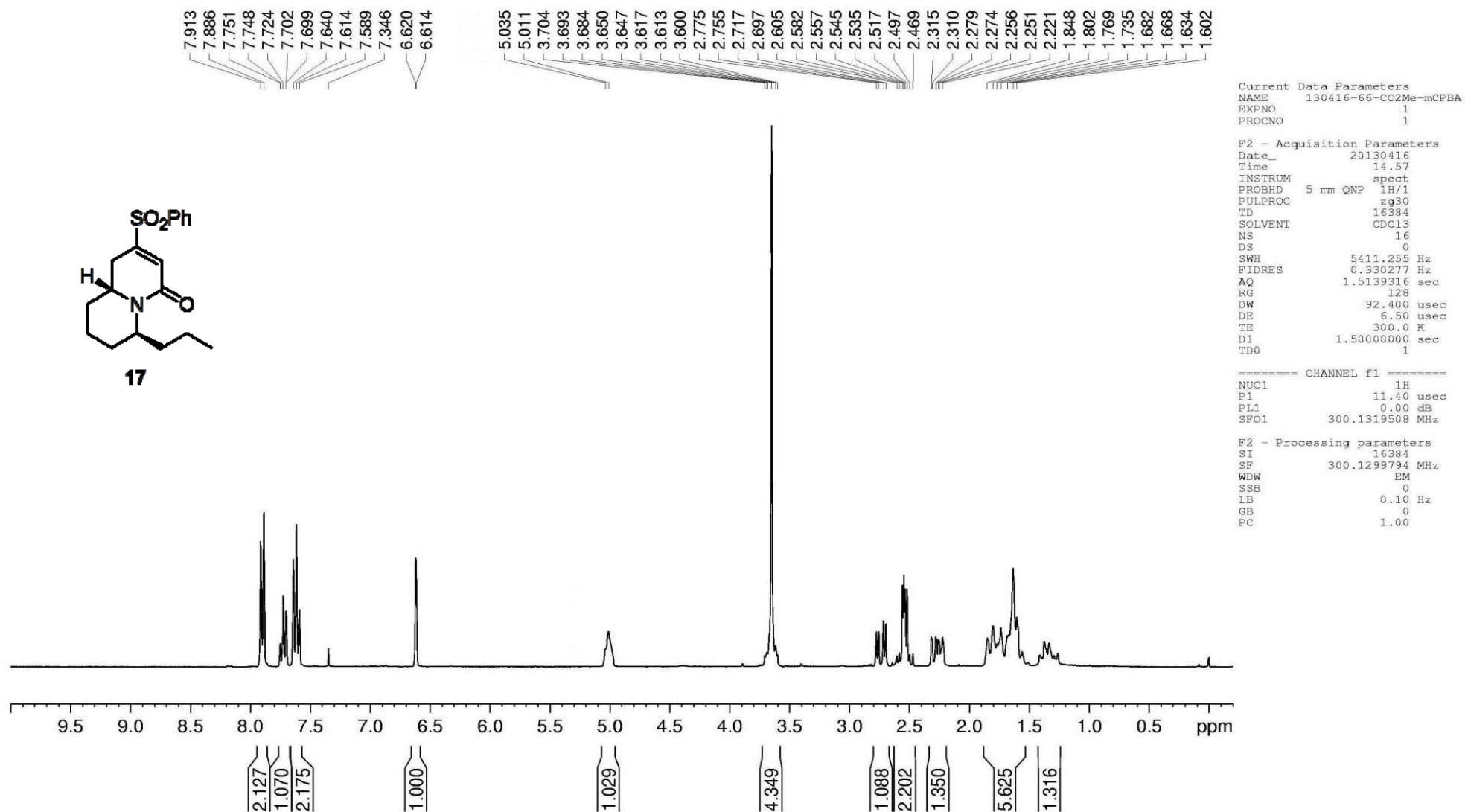
F2 - Acquisition Parameters
Date_ 20121123
Time 14.04
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 1024
DS 0
SWH 19267.822 Hz
FIDRES 0.294004 Hz
AQ 1.7007092 sec
RG 16384
DW 25.950 usec
DE 6.50 usec
TE 300.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 9.50 usec
PL1 -1.50 dB
SFO1 75.4771825 MHz

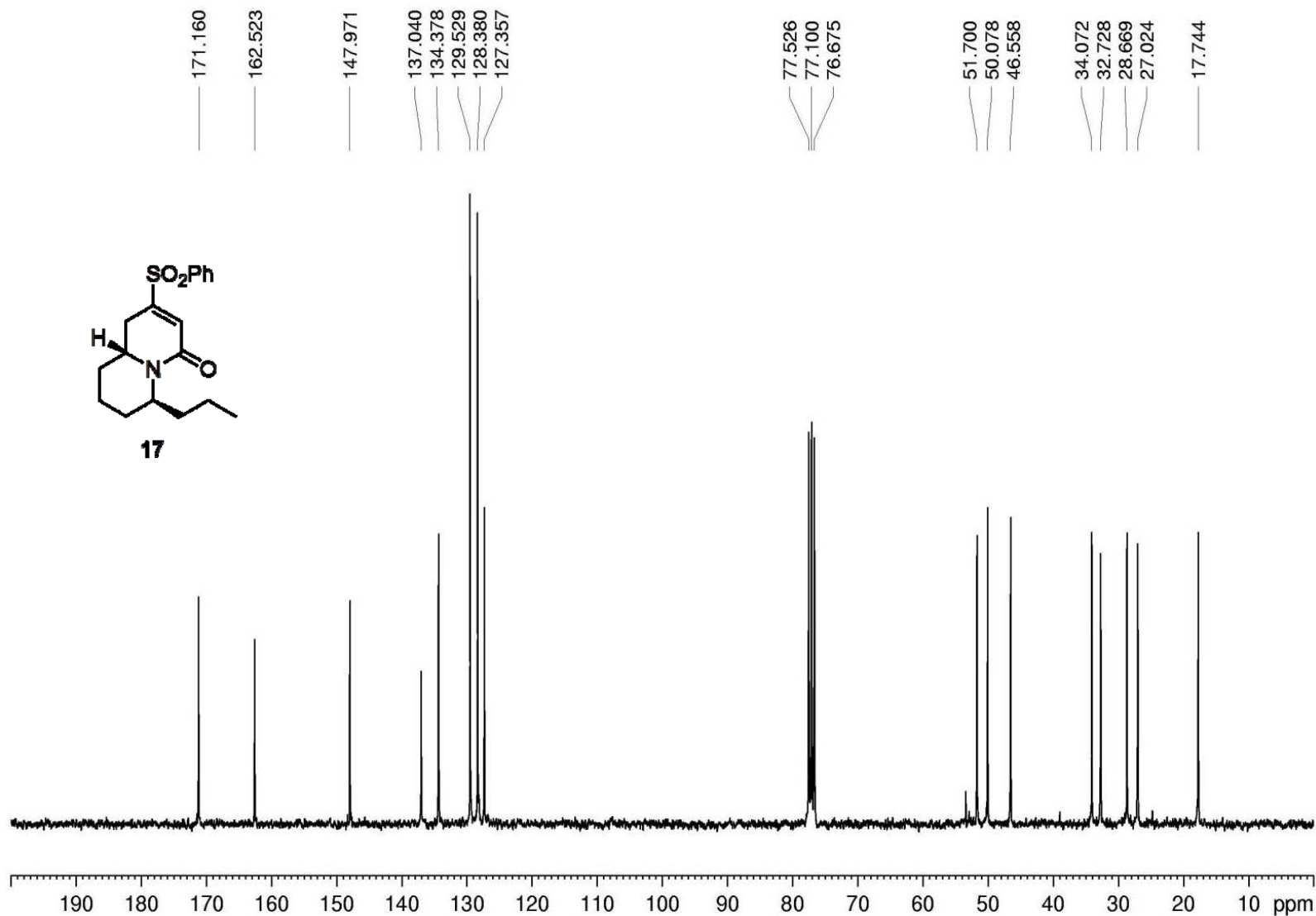
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 0.00 dB
PL12 18.00 dB
PL13 21.00 dB
SFO2 300.1313506 MHz

F2 - Processing parameters
SI 32768
SF 75.4677412 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00

130416-66-CO2Me-mCPBA



130416-66-CO2Me-mCPBA



Current Data Parameters
NAME 130416-66-CO2Me-mCPBA
EXPNO 2
PROCNO 1

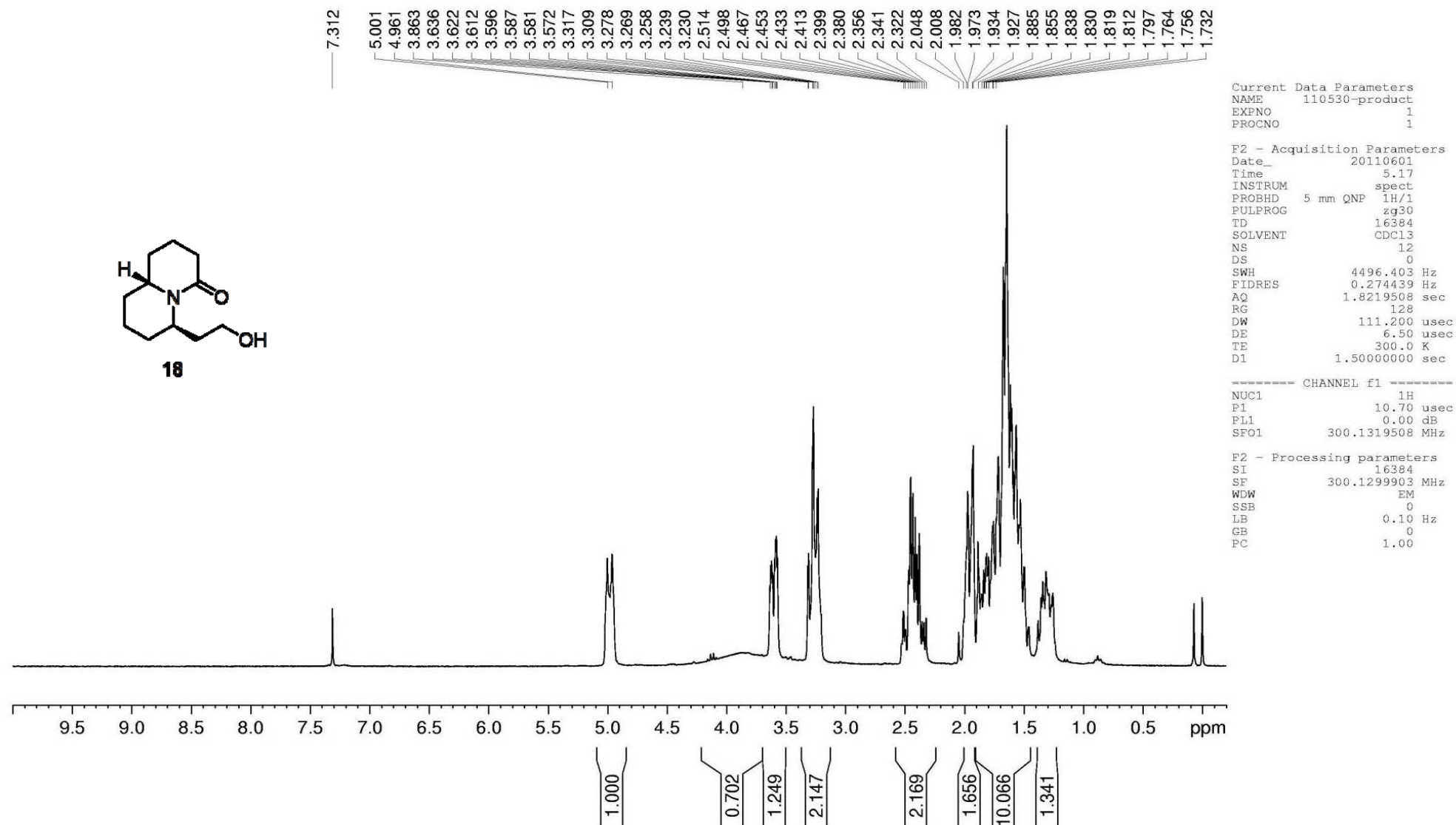
F2 - Acquisition Parameters
Date_ 20130416
Time 15.36
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 600
DS 0
SWH 19267.822 Hz
FIDRES 0.294004 Hz
AQ 1.7007092 sec
RG 14596.5
DW 25.950 usec
DE 6.50 usec
TE 300.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 9.50 usec
PL1 -1.50 dB
SFO1 75.4760505 MHz

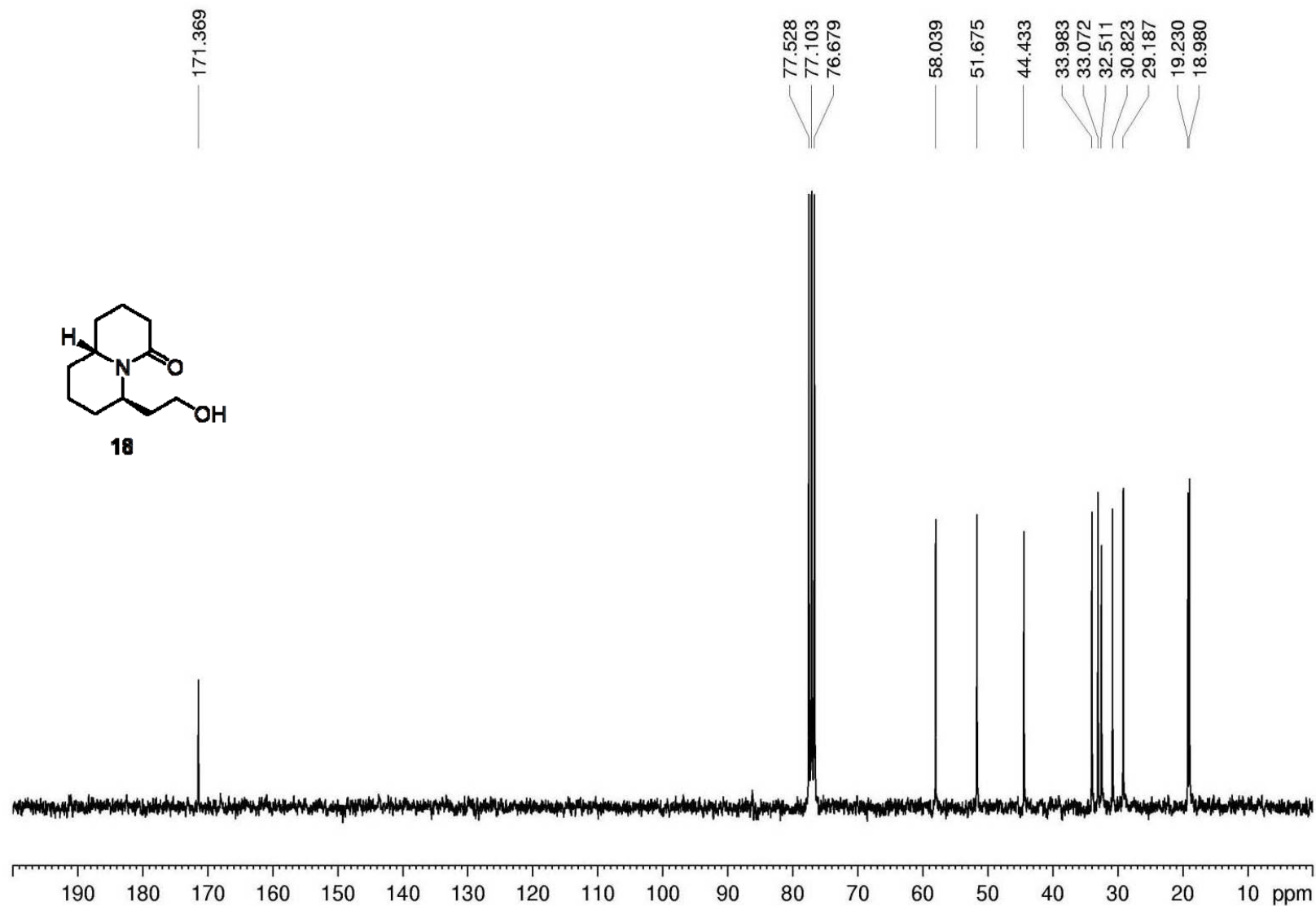
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 0.00 dB
PL12 18.00 dB
PL13 21.00 dB
SFO2 300.1313506 MHz

F2 - Processing parameters
SI 32768
SF 75.4677587 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00

110530-product



110530-product-C13



Current Data Parameters
NAME 110530-product
EXPNO 2
PROCNO 1

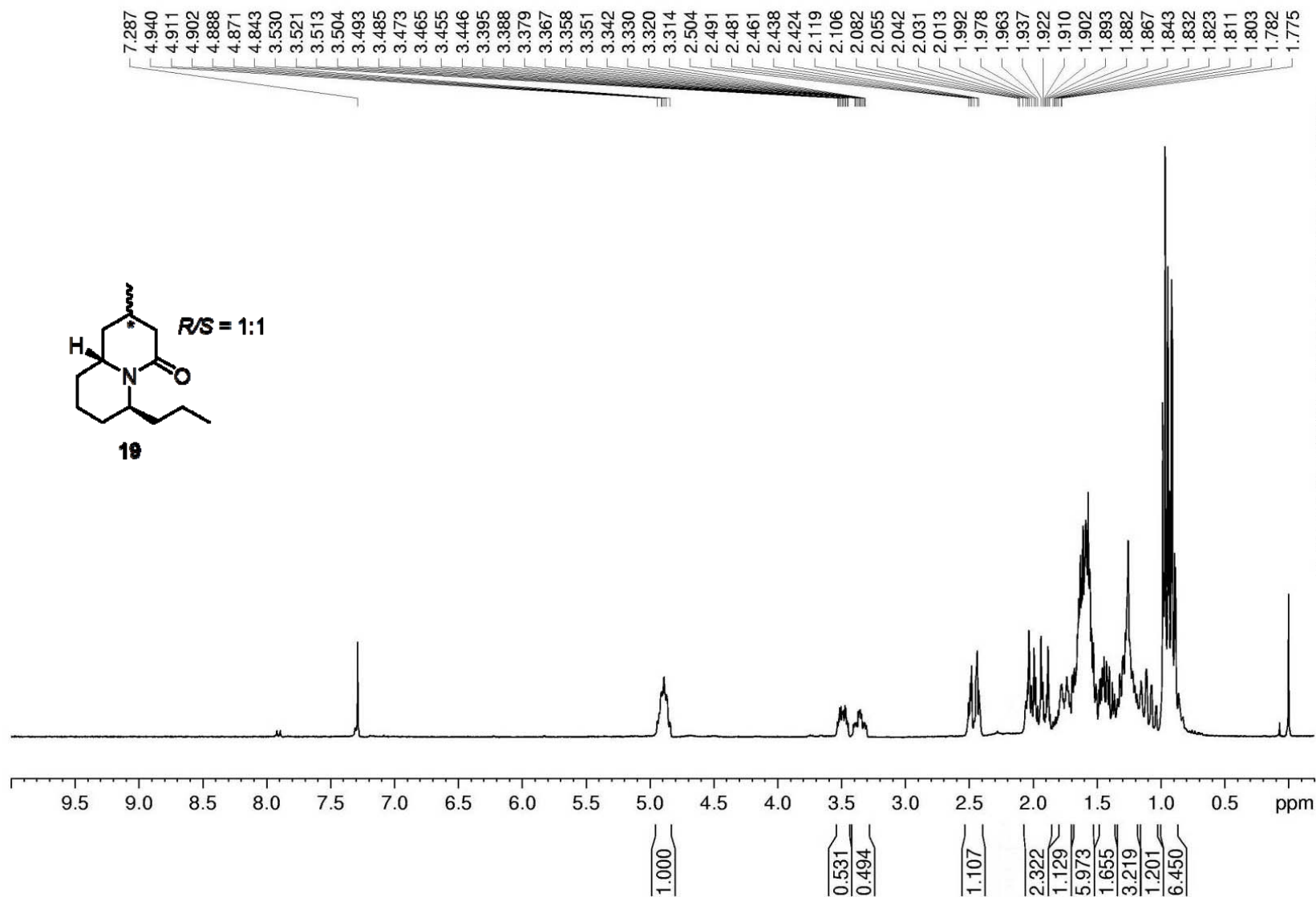
F2 - Acquisition Parameters
Date_ 20110601
Time 5.32
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 256
DS 0
SWH 18832.393 Hz
FIDRES 0.287360 Hz
AQ 1.7400308 sec
RG 14596.5
DW 26.550 usec
DE 6.50 usec
TE 300.0 K
D1 1.20000005 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 10.10 usec
PL1 0.00 dB
SFO1 75.4763978 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 0.00 dB
PL12 18.10 dB
PL13 21.10 dB
SFO2 300.1313506 MHz

F2 - Processing parameters
SI 32768
SF 75.4677482 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00

110929-byproduct-PtO2



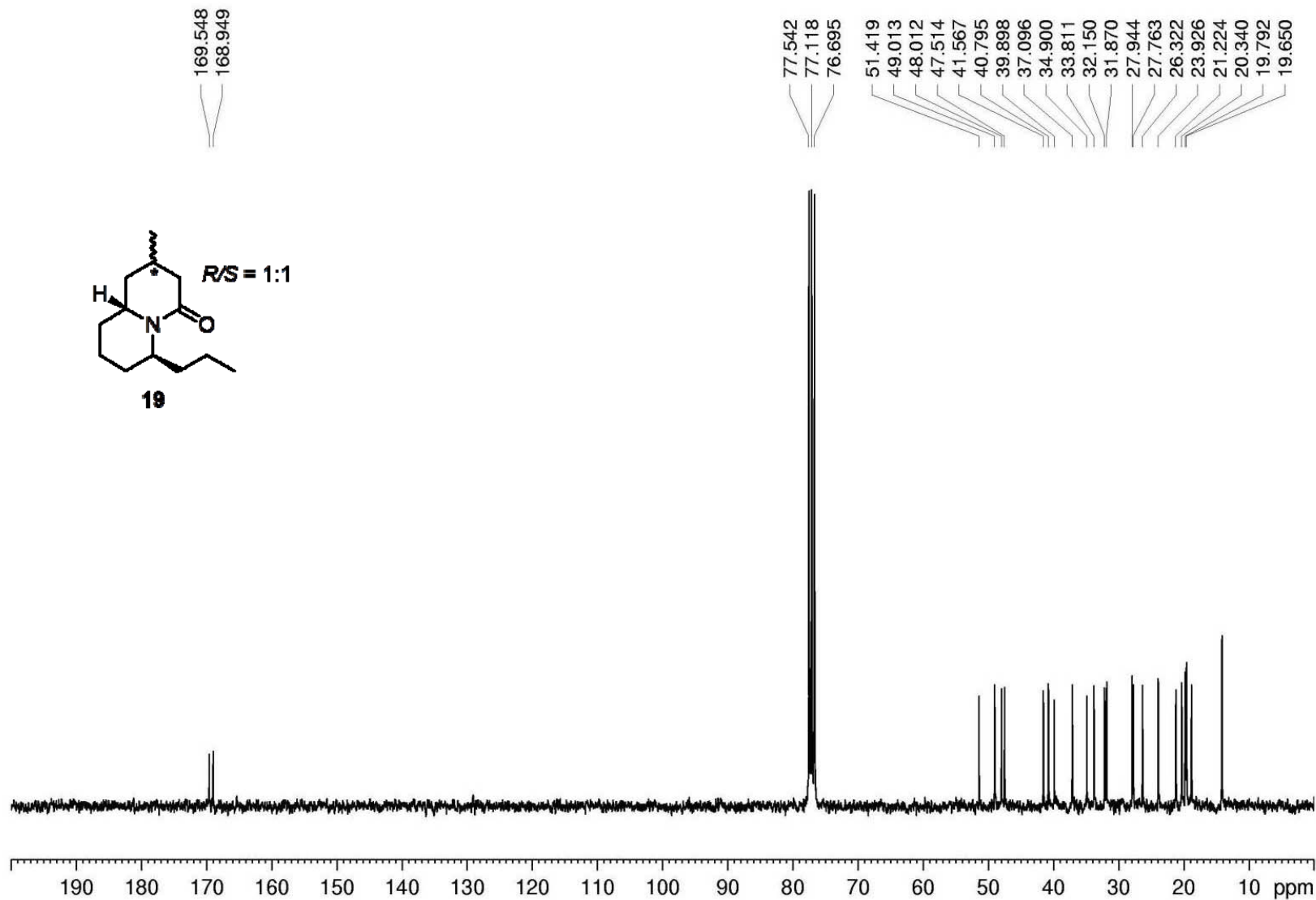
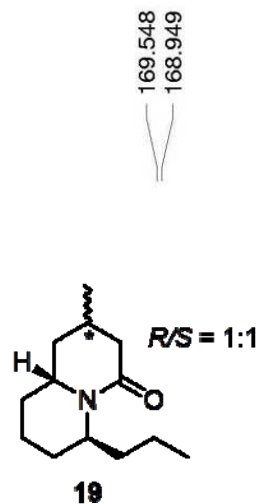
Current Data Parameters
NAME 110929-byproduct-PtO2
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20110930
Time 2.32
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 16384
SOLVENT CDCl3
NS 8
DS 0
SWH 4496.403 Hz
FIDRES 0.274439 Hz
AQ 1.8219508 sec
RG 228.1
DW 111.200 usec
DE 6.50 usec
TE 300.0 K
D1 1.50000000 sec

===== CHANNEL f1 =====
NUC1 1H
P1 10.70 usec
PL1 0.00 dB
SFO1 300.1319508 MHz

F2 - Processing parameters
SI 16384
SF 300.1299979 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

110929-byproduct-PtO2-C13



Current Data Parameters
NAME 110929-byproduct-PtO2
EXPNO 2
PROCNO 1

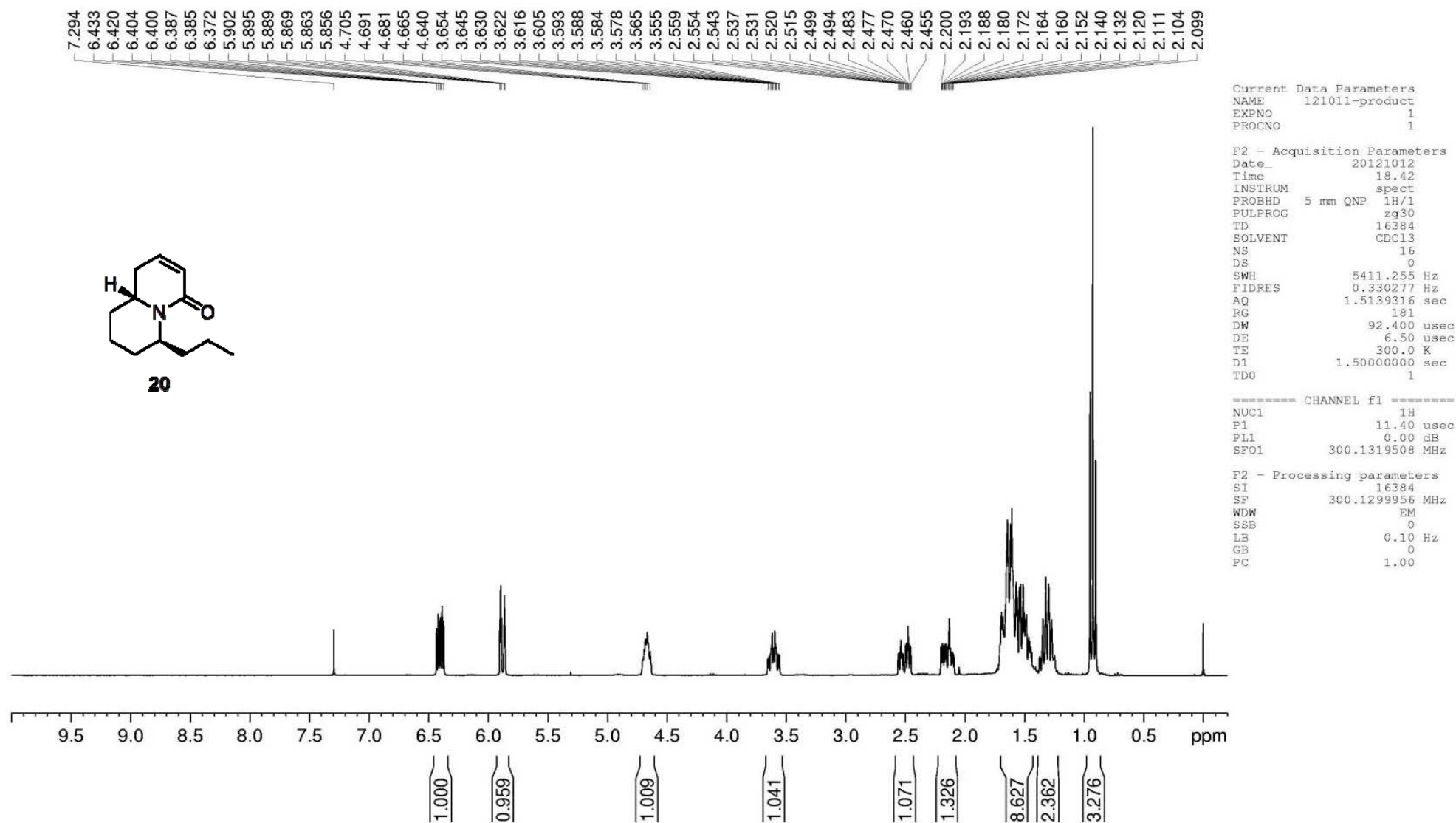
F2 - Acquisition Parameters
Date_ 20110930
Time 3.24
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDC13
NS 1024
DS 0
SWH 18832.393 Hz
FIDRES 0.287360 Hz
AQ 1.7400308 sec
RG 14596.5
DW 26.550 usec
DE 6.50 usec
TE 300.0 K
D1 1.20000005 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 10.10 usec
PL1 0.00 dB
SFO1 75.4763978 MHz

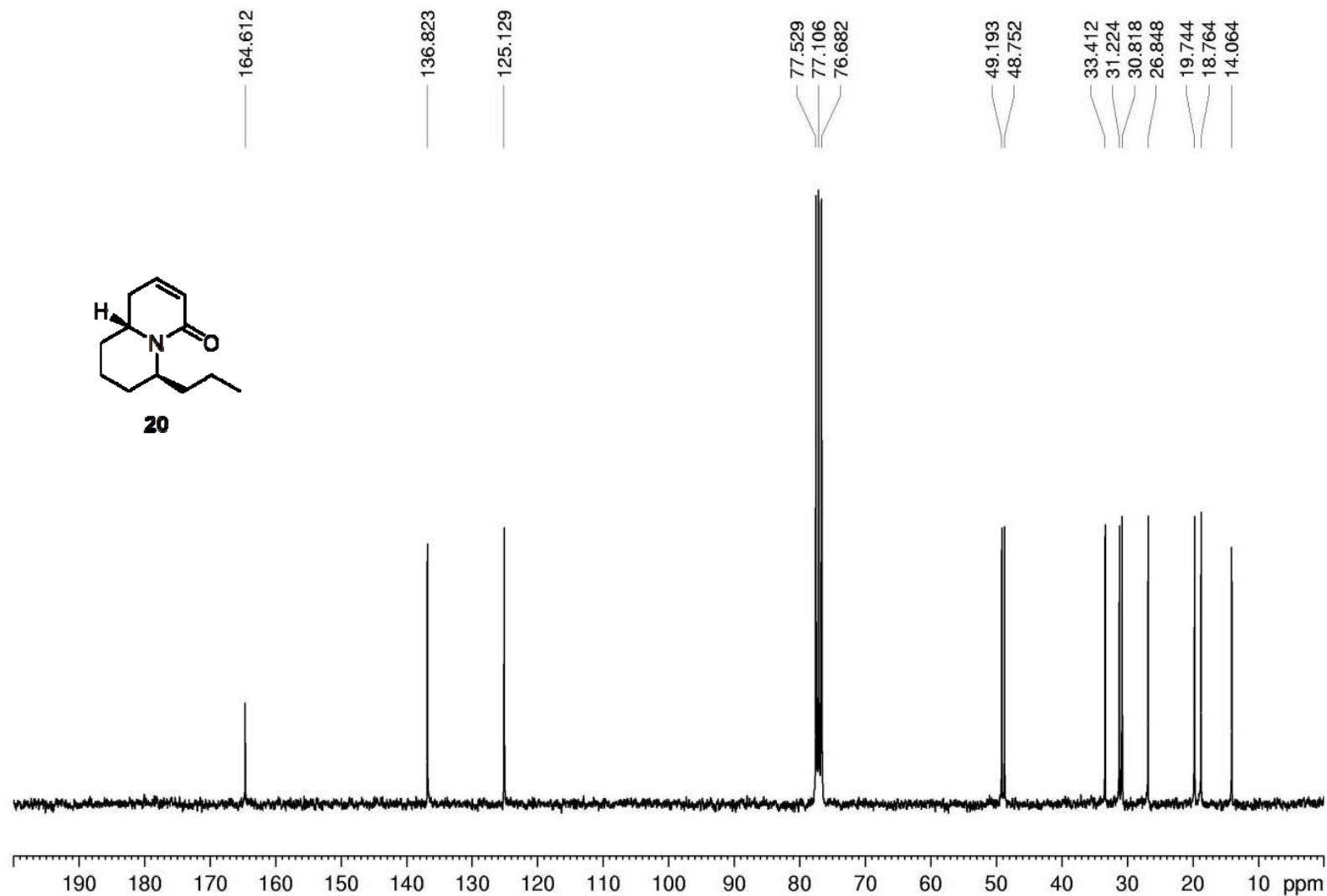
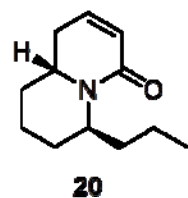
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 0.00 dB
PL12 18.10 dB
PL13 21.10 dB
SFO2 300.1313506 MHz

F2 - Processing parameters
SI 32768
SF 75.4677430 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00

121011-product



121011-product



Current Data Parameters
NAME 121011-product
EXPNO 2
PROCNO 1

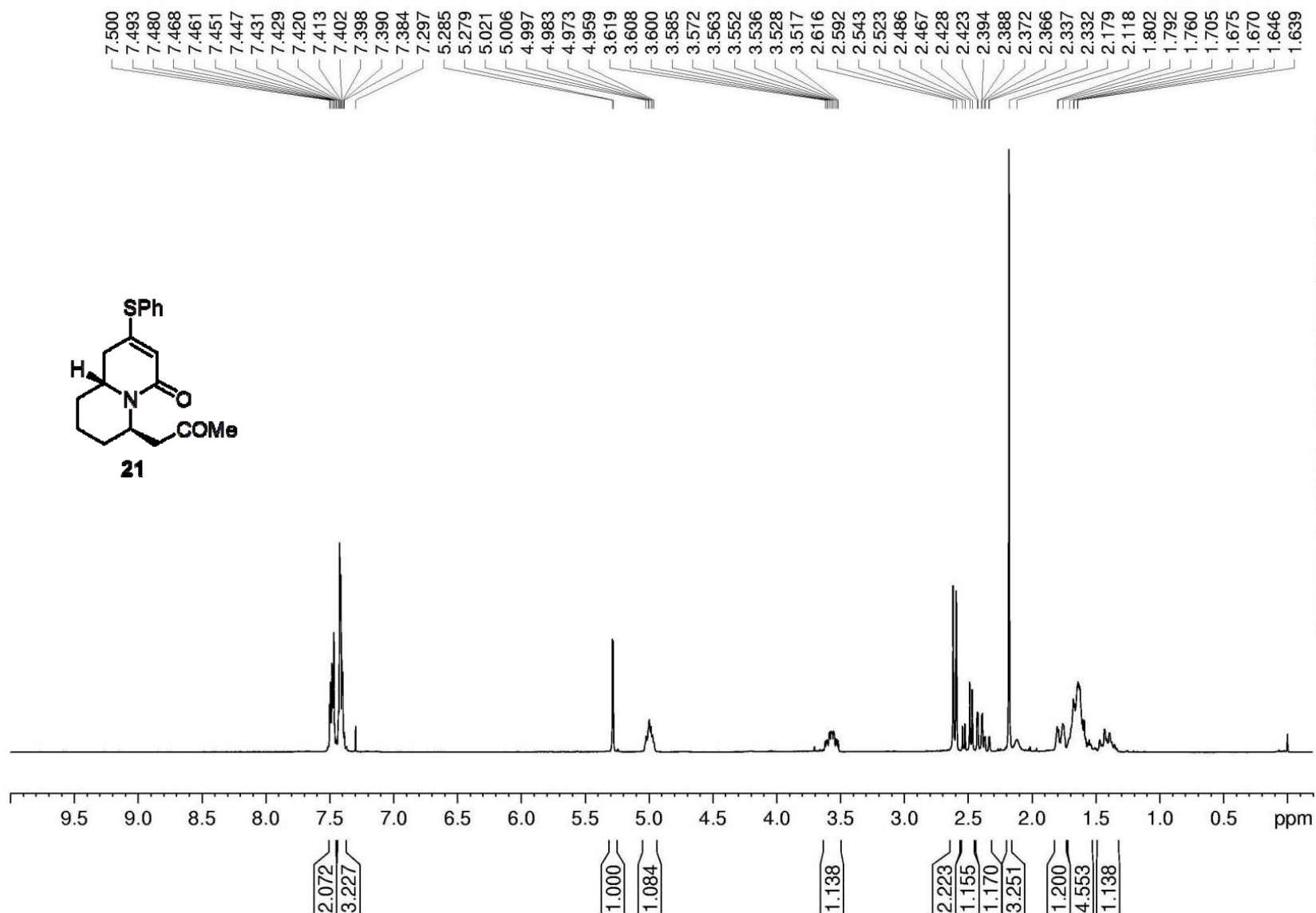
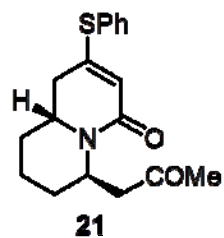
F2 - Acquisition Parameters
Date_ 20121012
Time 19.15
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 512
DS 0
SWH 19267.822 Hz
FIDRES 0.294004 Hz
AQ 1.7007092 sec
RG 13004
DW 25.950 usec
DE 6.50 usec
TE 300.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 9.50 usec
PL1 -1.50 dB
SF01 75.4771825 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 0.00 dB
PL12 18.00 dB
PL13 21.00 dB
SF02 300.1313506 MHz

F2 - Processing parameters
SI 32768
SF 75.4677459 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00

120604-COMe



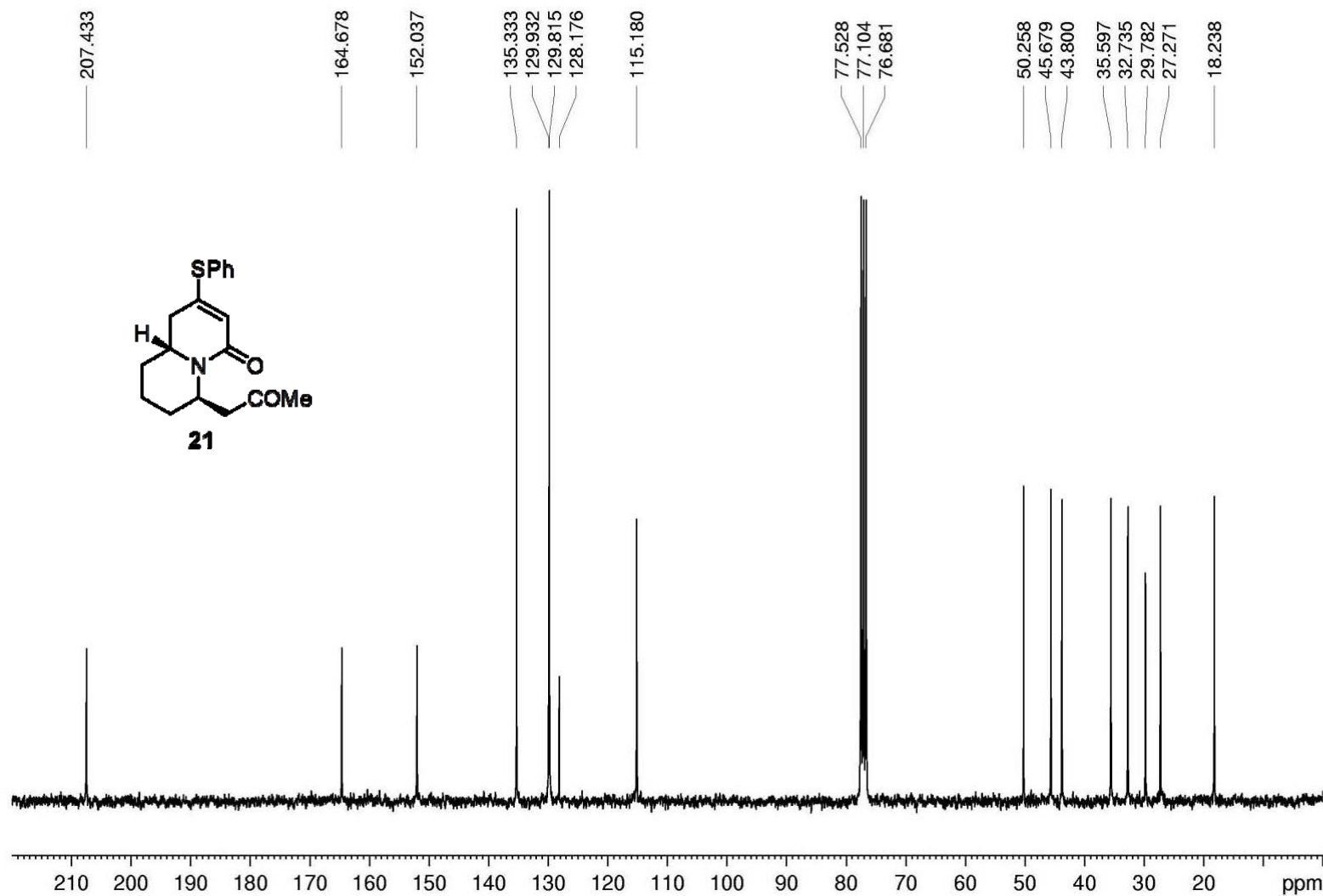
Current Data Parameters
NAME 120604-COMe
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20120629
Time 11.55
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 16384
SOLVENT CDCl3
NS 12
DS 0
SWH 5411.255 Hz
FIDRES 0.330277 Hz
AQ 1.5139316 sec
RG 128
DW 92.400 usec
DE 6.50 usec
TE 300.0 K
D1 1.50000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 11.40 usec
PL1 0.00 dB
SFO1 300.1319508 MHz

F2 - Processing parameters
SI 16384
SF 300.1299946 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

120501-COMe



Current Data Parameters
NAME 120501-COMe
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters
Date_ 20120502
Time 9.37
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 640
DS 0
SWH 19267.822 Hz
FIDRES 0.294004 Hz
AQ 1.7007092 sec
RG 14596.5
DW 25.950 usec
DE 6.50 usec
TE 300.0 K
D1 2.0000000 sec
D11 0.0300000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 9.50 usec
PL1 -1.50 dB
SFO1 75.4771825 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 0.00 dB
PL12 18.00 dB
PL13 21.00 dB
SFO2 300.1313506 MHz

F2 - Processing parameters
SI 32768
SF 75.4677477 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00