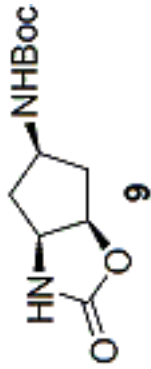


Stereoselective synthesis of fluorinated 1,3 *cis*-diaminocyclopentanes

Morgane Pasco, Roba Moumné, Thomas Lecourt, Laurent Micouin

Supporting Information

Copies of ^1H , ^{13}C and ^{19}F NMR spectra of new compounds.



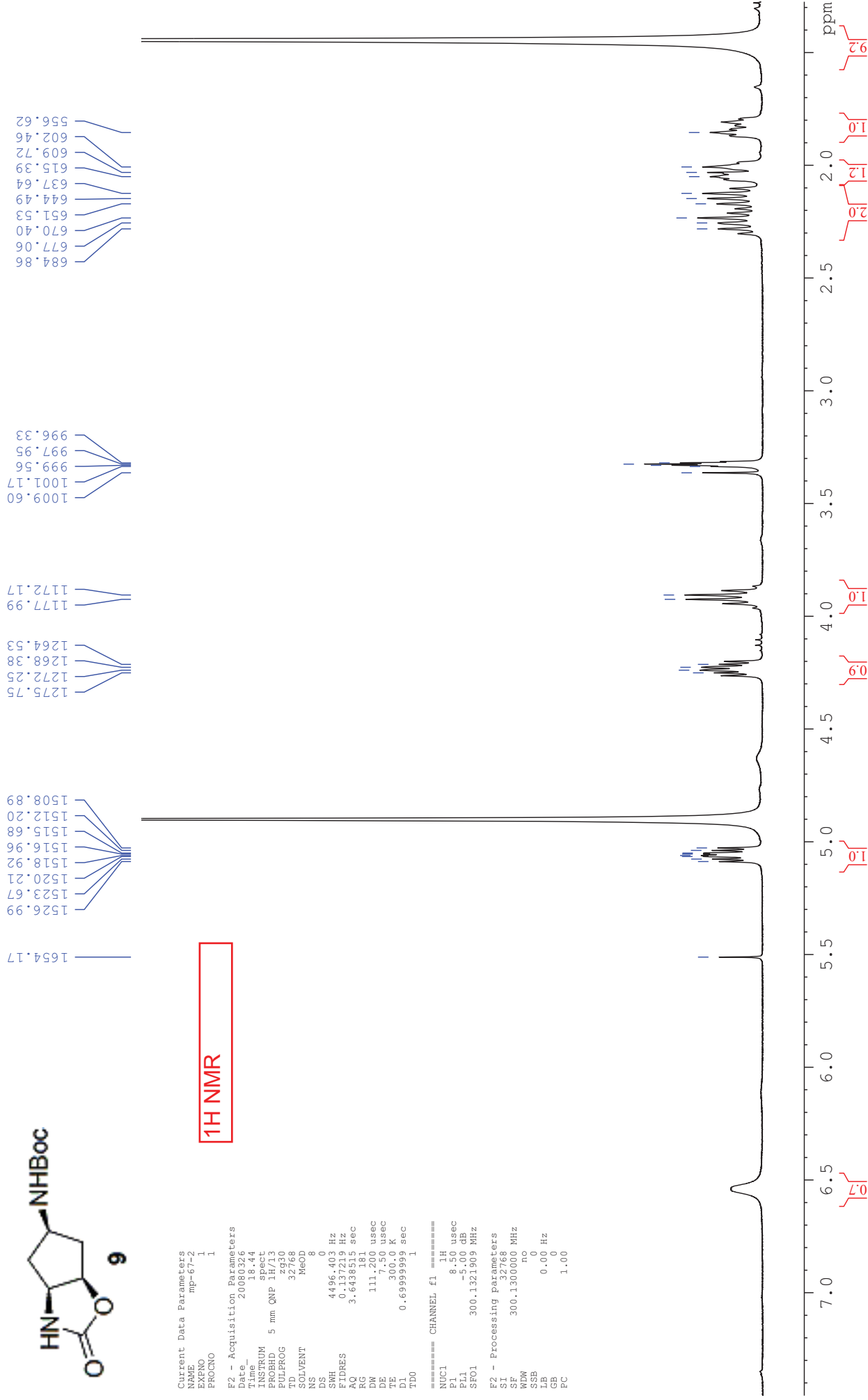
Current Data Parameters
NAME mp-67-2
EXPNO 1
PROCNO 1

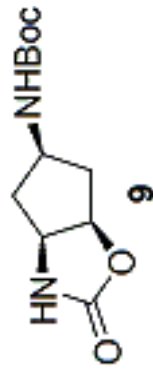
F2 - Acquisition Parameters
Date_ 20080326
Time_ 18.44
INSTRUM spect
PROBHD 5 mm QNP 1H/3
PULPROG zgpg30
TD 32768
SOLVENT Neod
NS 8
DS 0
SWH 4496.403 Hz
FIDRES 0.137219 Hz
AQ 3.6438515 sec
RG 181
DW 111.200 usec
DE 1.00 usec
TE 300.0 K
D1 0.69999999 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 8.50 usec
PL1 -5.00 dB
SFO1 300.1321909 MHz

F2 - Processing parameters
SI 32768
SF 300.1300000 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00

1H NMR





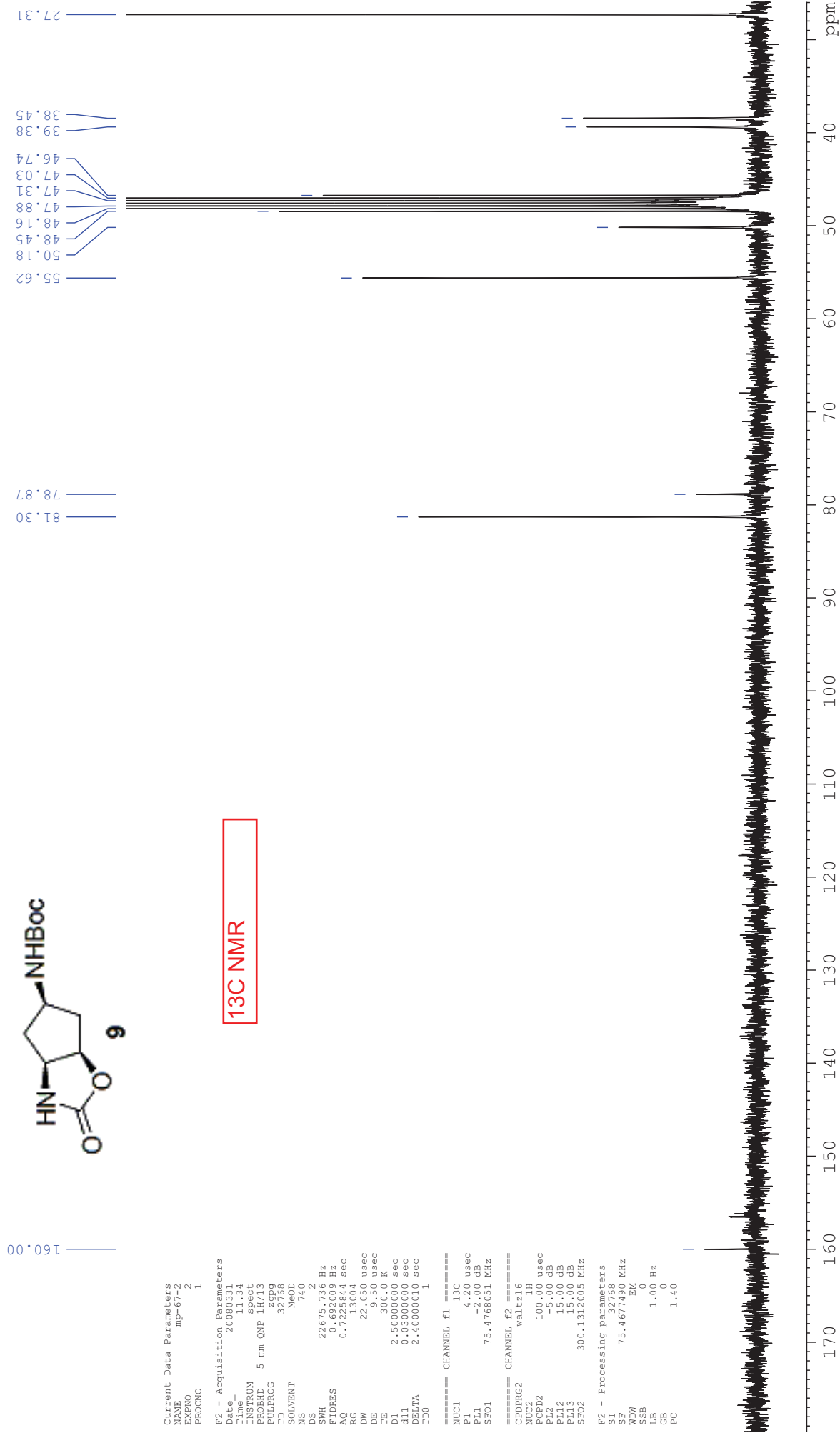
Current Data Parameters	
NAME	mp-67-2
EXPNO	2
PROCNO	1

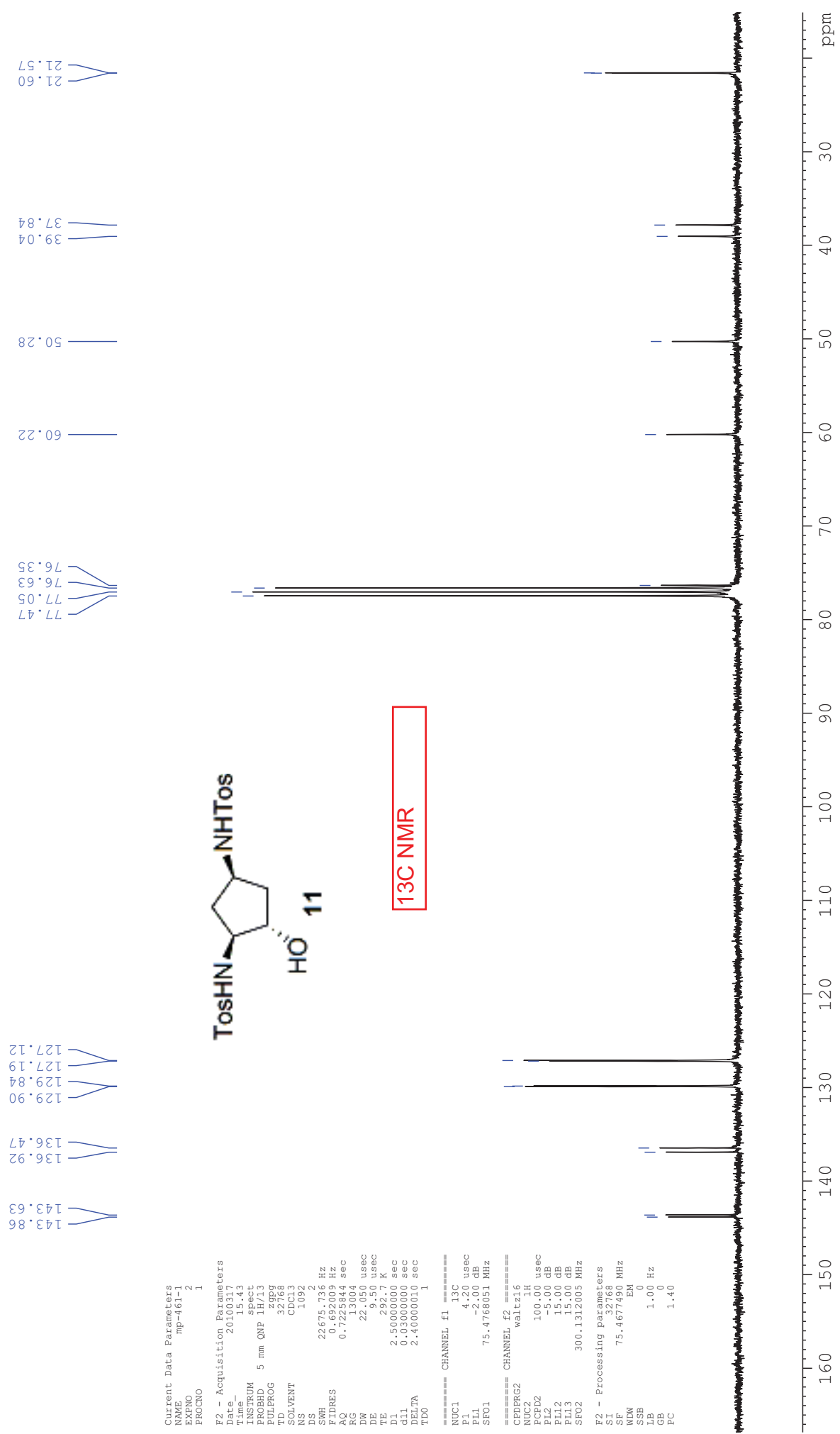
F2 - Acquisition Parameters	
Date_	20080321
Time_	11:34
INSTRUM	spect
PROBHD	5 mm QNP 1H/13
PULPROG	zgpg30
TD	32768
SOLVENT	MeOD
NS	740
DS	2
SWH	22675.736 Hz
FIDRES	0.692009 Hz
AQ	0.7225844 sec
RQ	13004
DM	22,050 used
DE	3.50
TE	300.0
d11	2.5000000 sec
d12	0.0300000 sec
d13	2.4000010 sec
DELTA	1

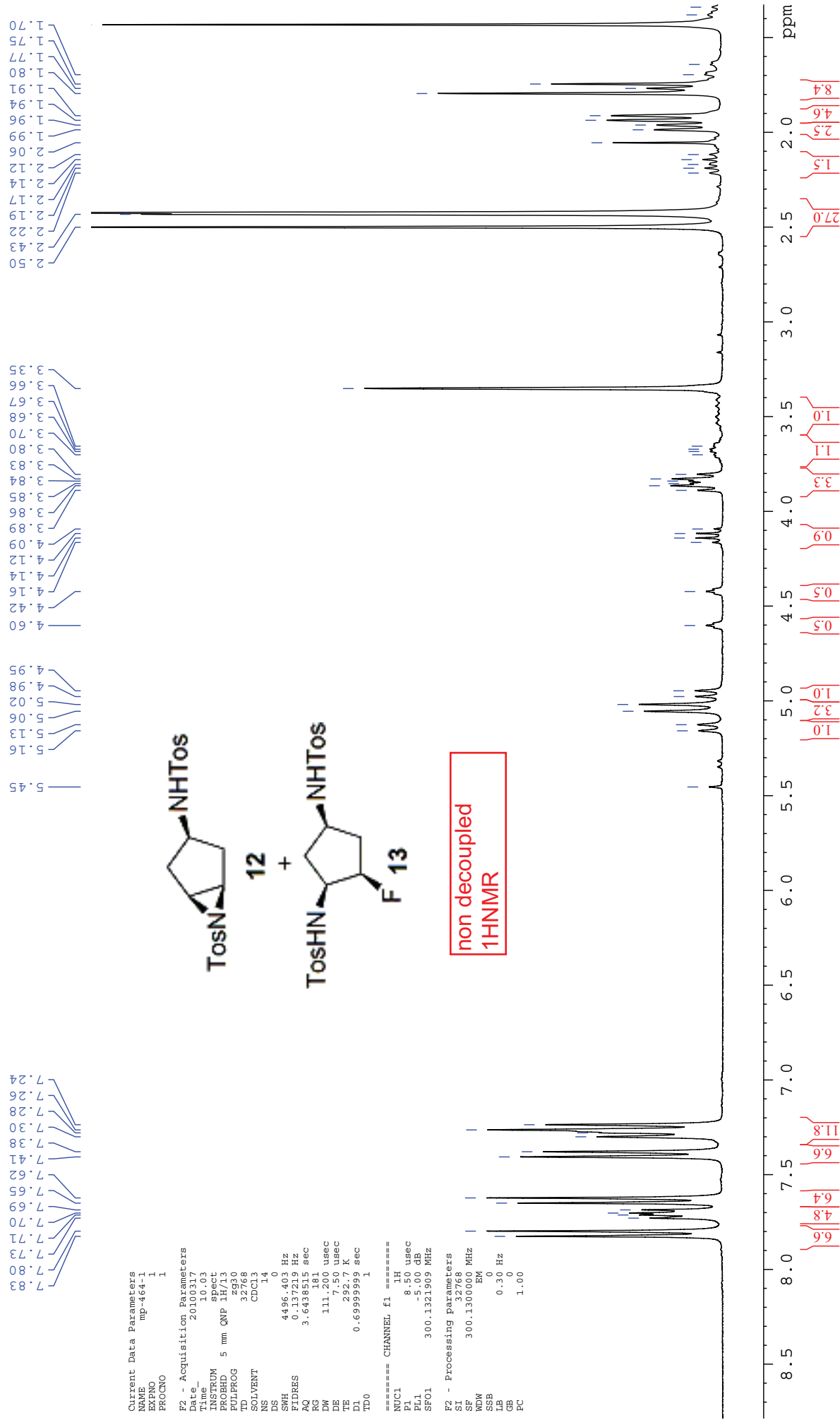
```
===== CHANNEL f1 =====
NUC1      13C
P1        4.20 usec
PL1       -2.00 dB
SF01      75.4768051 MHz
```

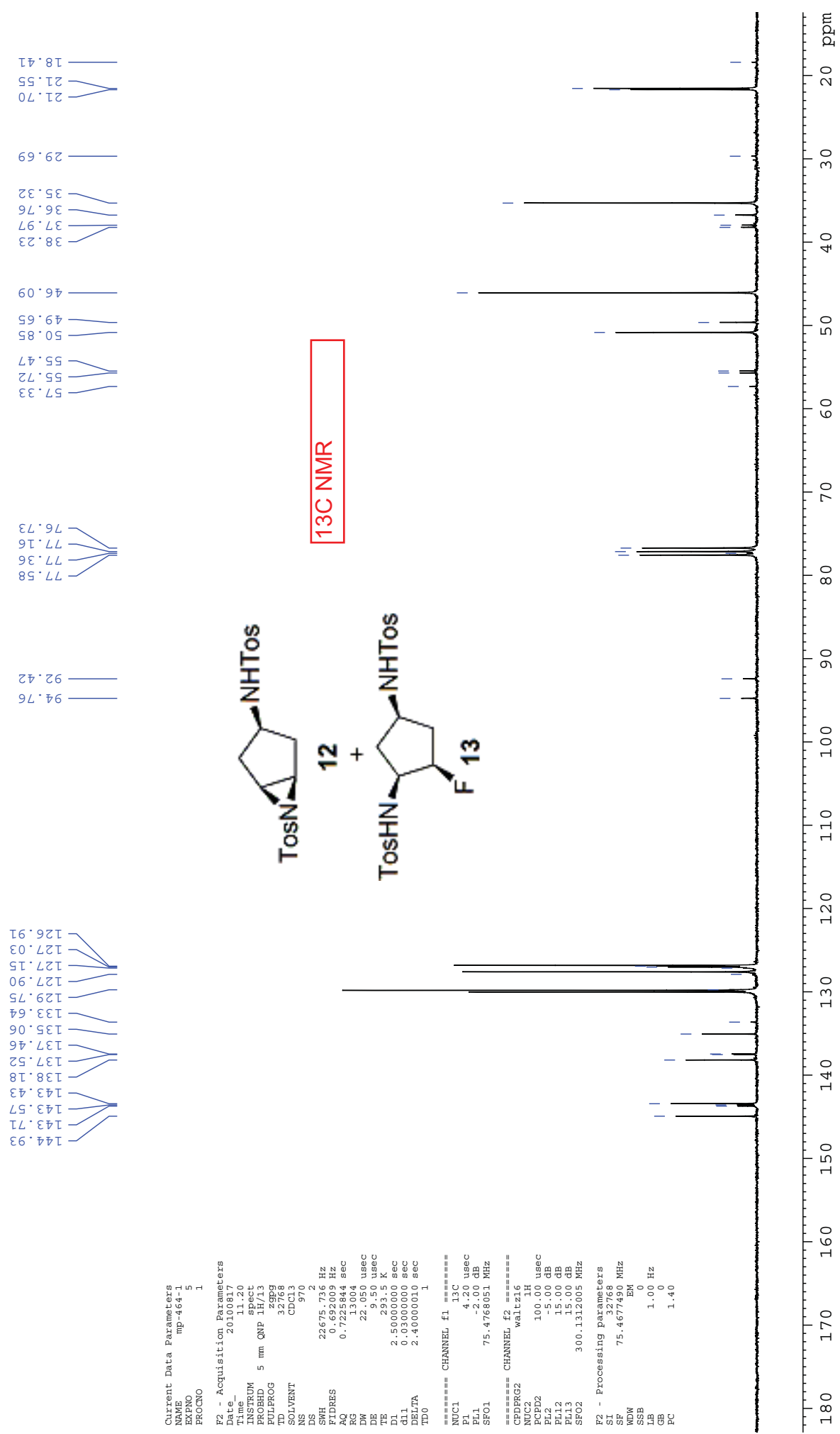
```
===== CHANNEL f2 =====
CPDRG2      waltz16
NUC2        1H
PCPD2       100.00 usec
PL2         -5.00 dB
PL12        15.00 dB
PL13        15.00 dB
SFO2        300.1312005 MHz
```

F2 - Processing parameters	
SI	32768
SF	75.4677490 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

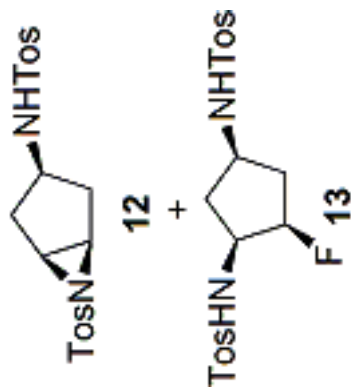








-189.38



decoupled ¹⁹F
NMR

Current Data Parameters
NAME mp-464-1
EXPNO 3
PROCNO 1

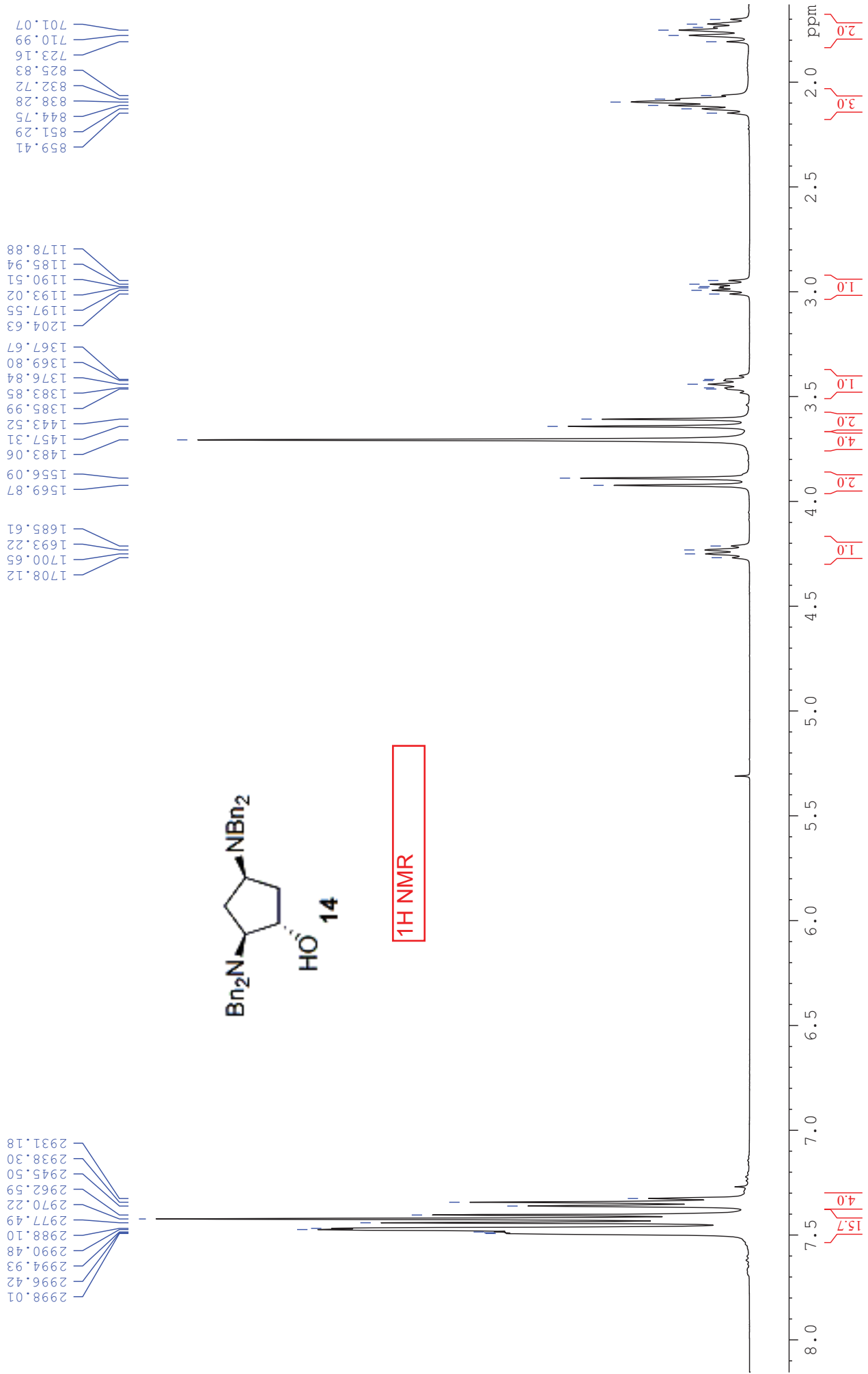
F2 - Acquisition Parameters
Date_ 20100317
Time 10.08
INSTRUM spect
PROBHD 5 mm QNP 1H/13
PULPROG zgpg30
TD 65536
F2 - Processing parameters
SI 65536
SF 282.4043550 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.00

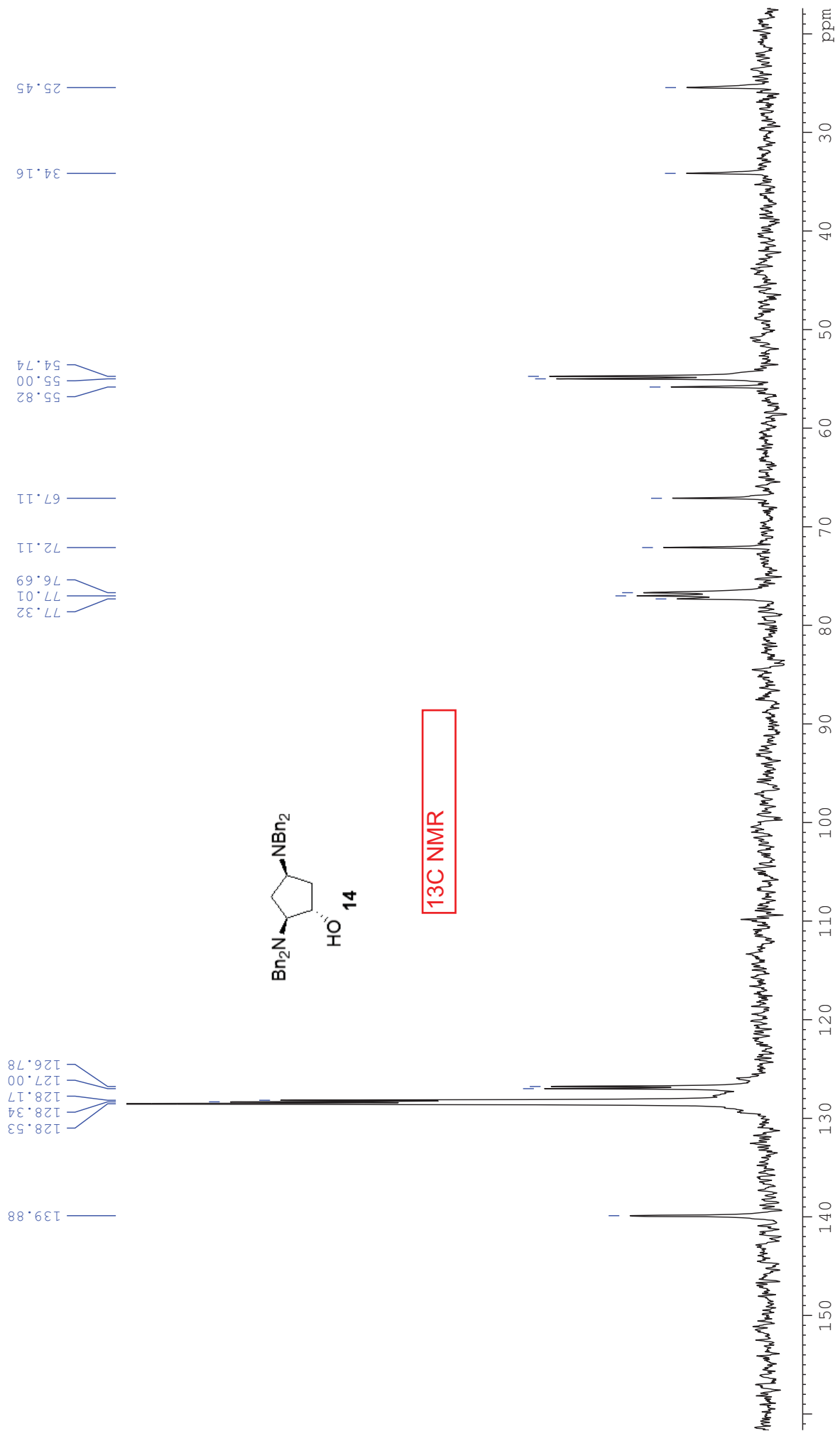
===== CHANNEL f1 =====
NUC1 19F
P1 7.60 usec
PL1 -6.00 dB
SFO1 282.3704665 MHz

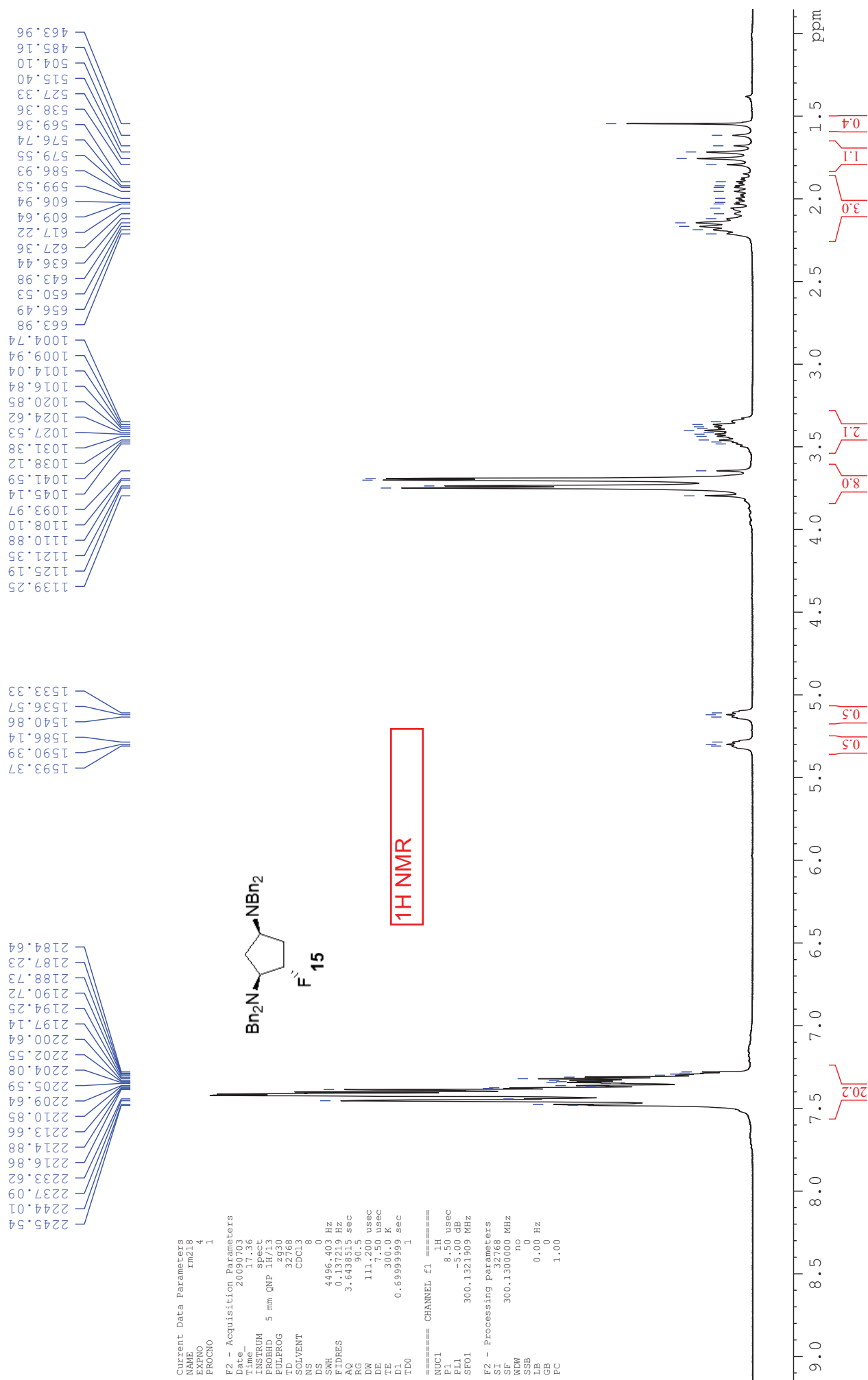
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 13C
PCPD2 100.00 usec
PL2 -5.00 dB
PL12 15.00 dB
SFO2 300.1312000 MHz

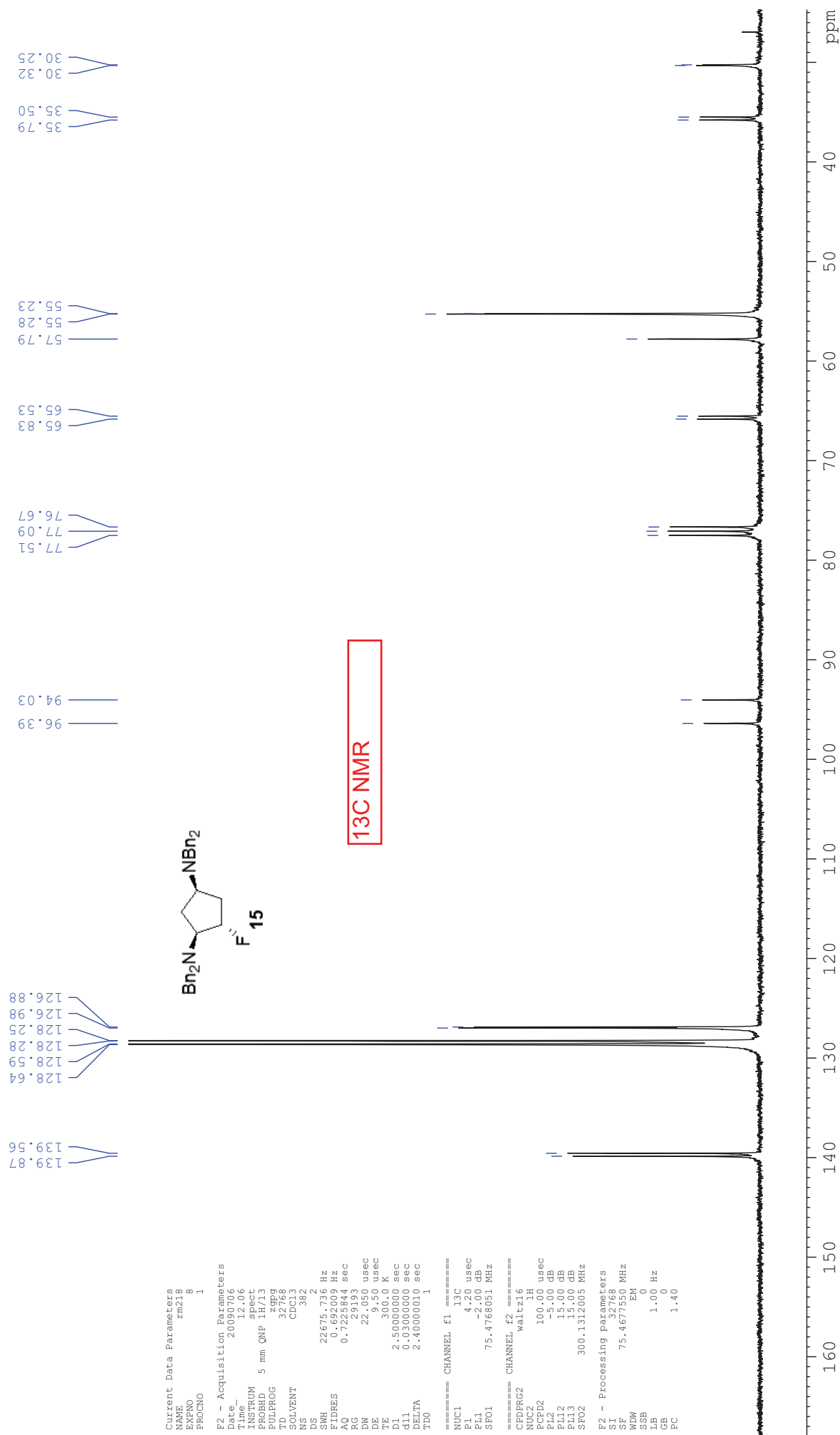
F2 - Processing parameters
SI 65536
SF 282.4043550 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.00

-100 -110 -120 -130 -140 -150 -160 -170 -180 -190 -200 -210 -220 ppm









-168.81



F 15

decoupled 19F
NMR

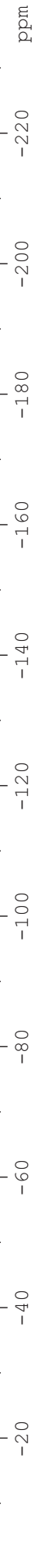
Current Data Parameters
NAME rm218
EXPNO 5
PROCNO 1

F2 - Acquisition Parameters
Date_ 20090703
Time 17.38
INSTRUM spect
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 71
DS 0
SWH 67567.570 Hz
FIDRES 1.030999 Hz
AQ 0.4850164 sec
RG 74096
DW 7.400 usec
DE 35.00 usec
TE 300.0 K
D1 1.00000000 sec
d11 0.03000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 19F
P1 7.60 usec
PL1 -6.00 dB
SFO1 282.3704665 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 100.00 usec
PL2 -5.00 dB
PL12 15.00 dB
SFO2 300.1312000 MHz

F2 - Processing parameters
SI 65536
SF 282.4043550 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.00



F⁻ 15

Current Data Parameters
 NAME rm218
 EXPNO 6
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20090703
 Time_ 17.39
 INSTRUM spect
 PULPROG zgpg30
 FIDRES 0.11713
 AQ 0.9699828 sec
 RG 3251
 DW 7.400 usec
 DE 3.000 usec
 TE 300.2 K
 D1 1.00000000 sec
 D11 1

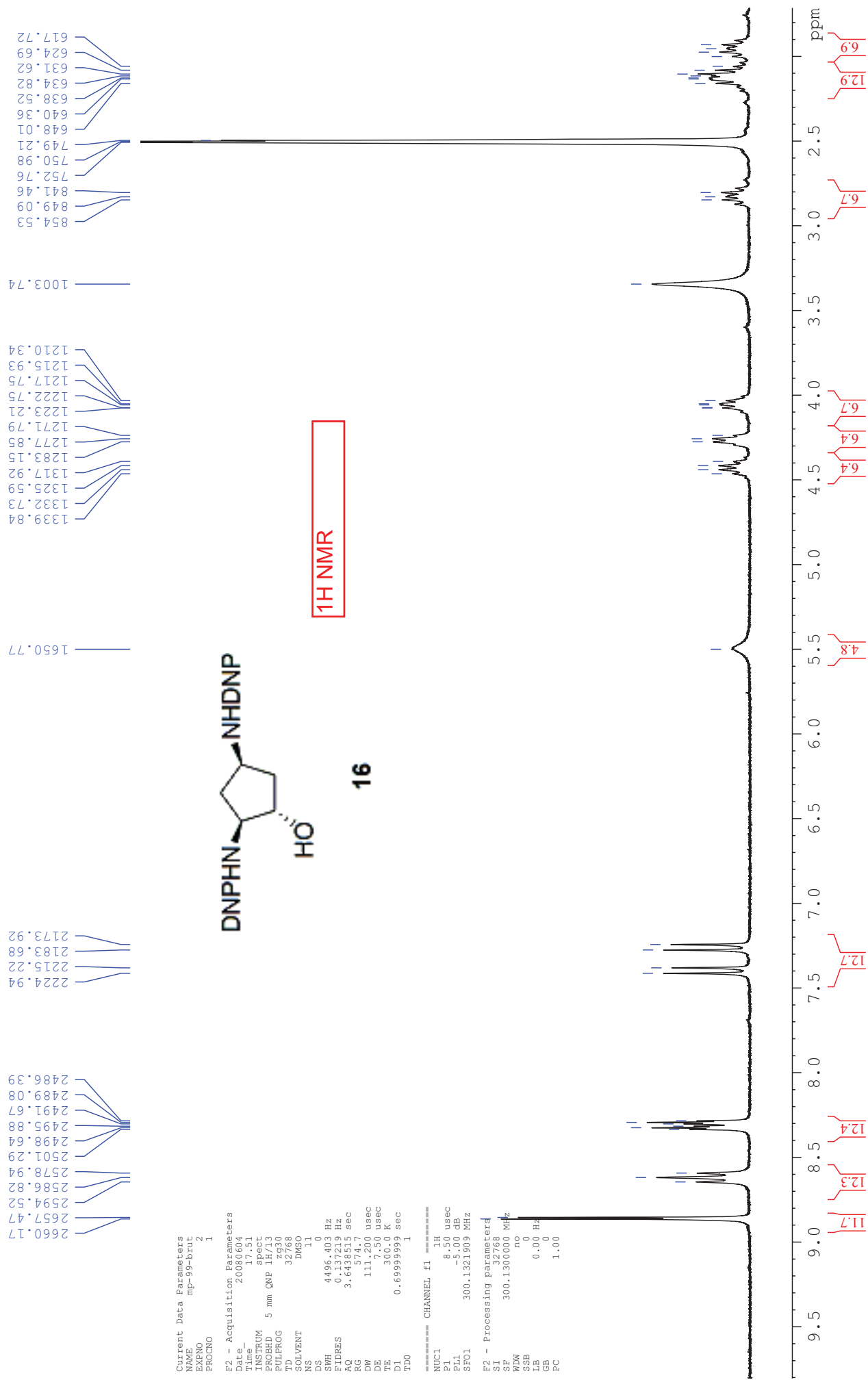
===== CHANNEL f1 =====
 NUC1 19F
 P1 7.60 usec
 PL1 -6.00 dB
 SFO1 282.3865640 MHz

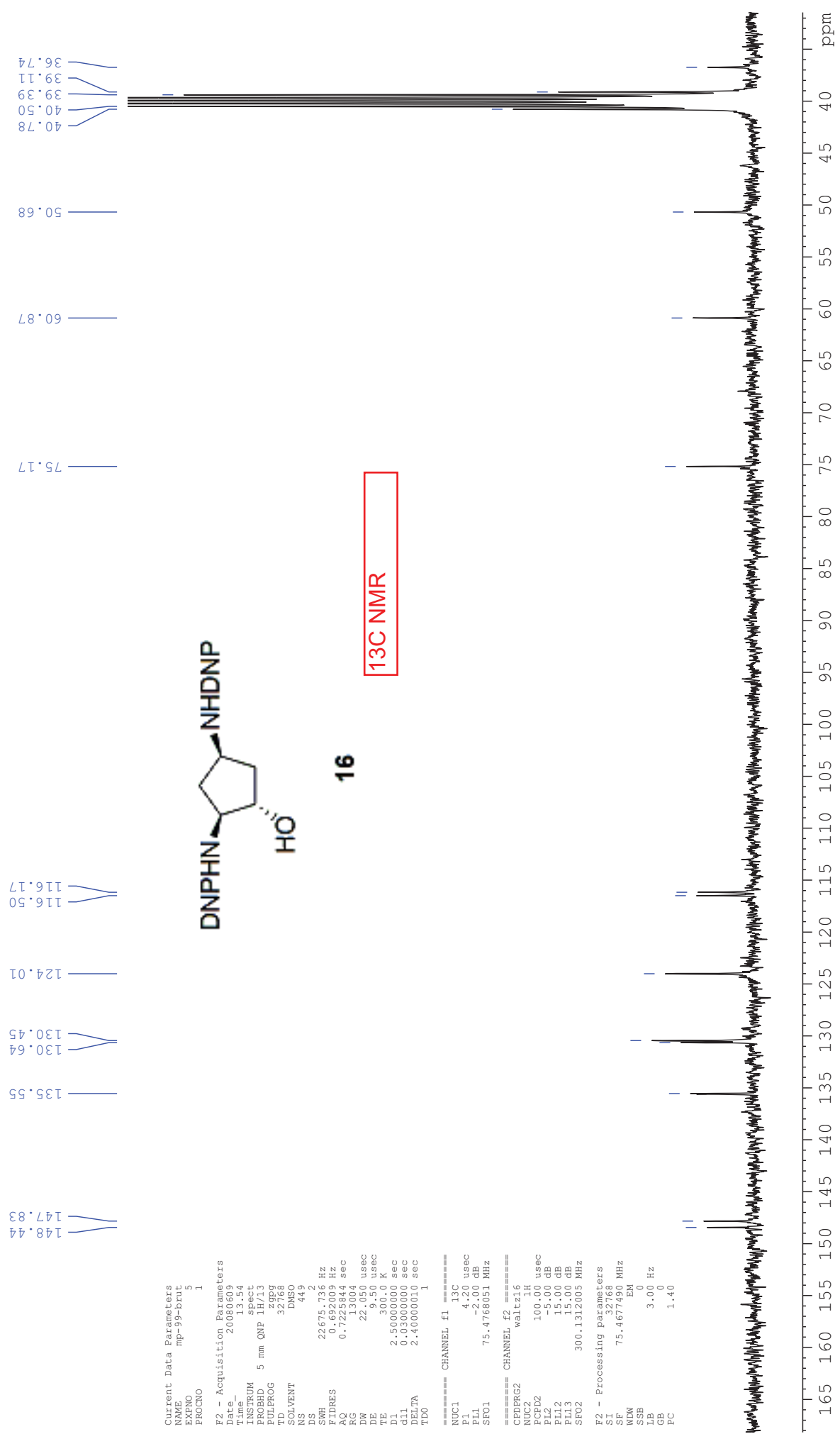
F2 - Processing parameters
 SI 32768
 SF 282.4043550 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

non decoupled 19F NMR

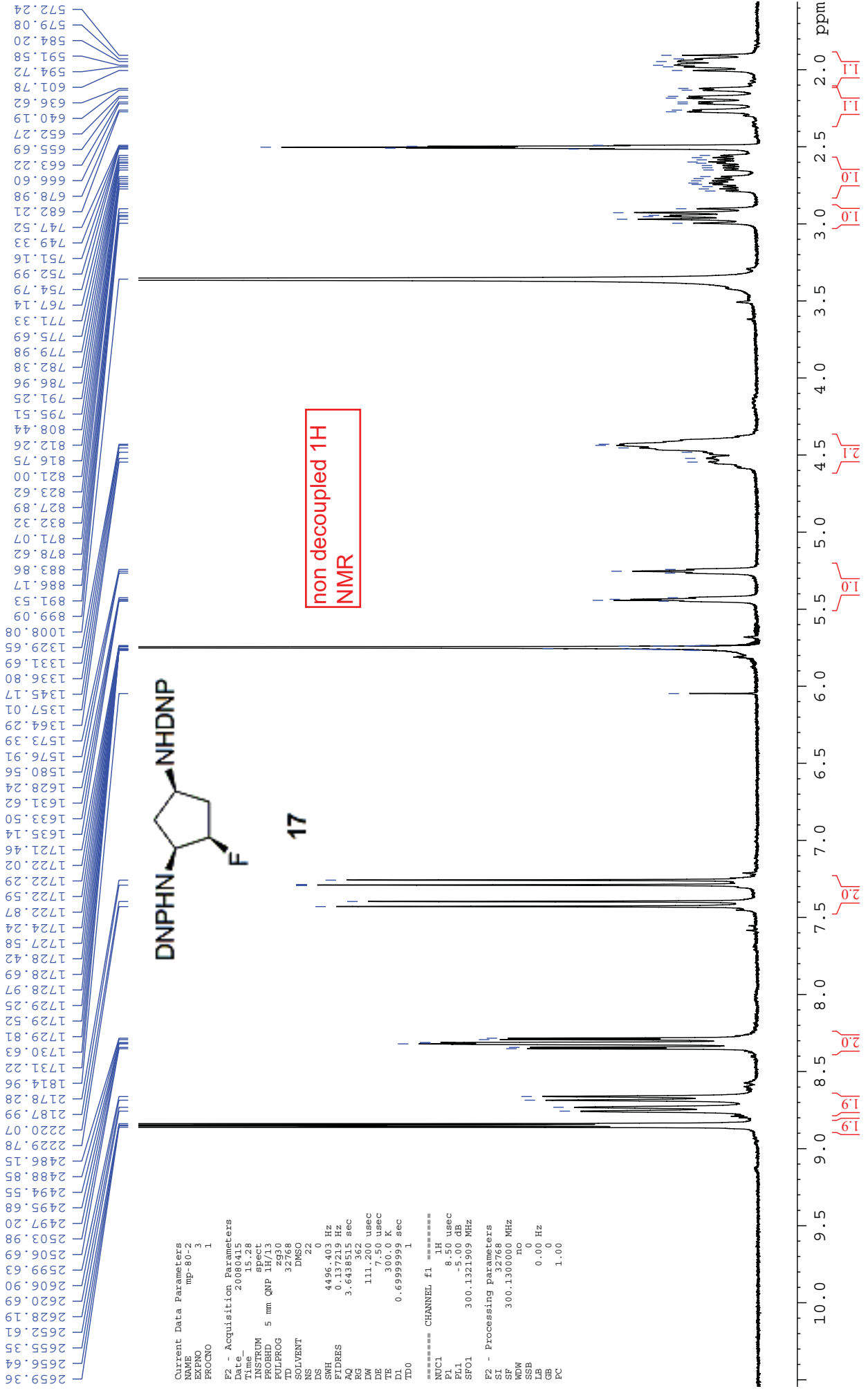
-168.57
 -168.65
 -168.67
 -168.76
 -168.78
 -168.84
 -168.86
 -168.95
 -168.97
 -169.05

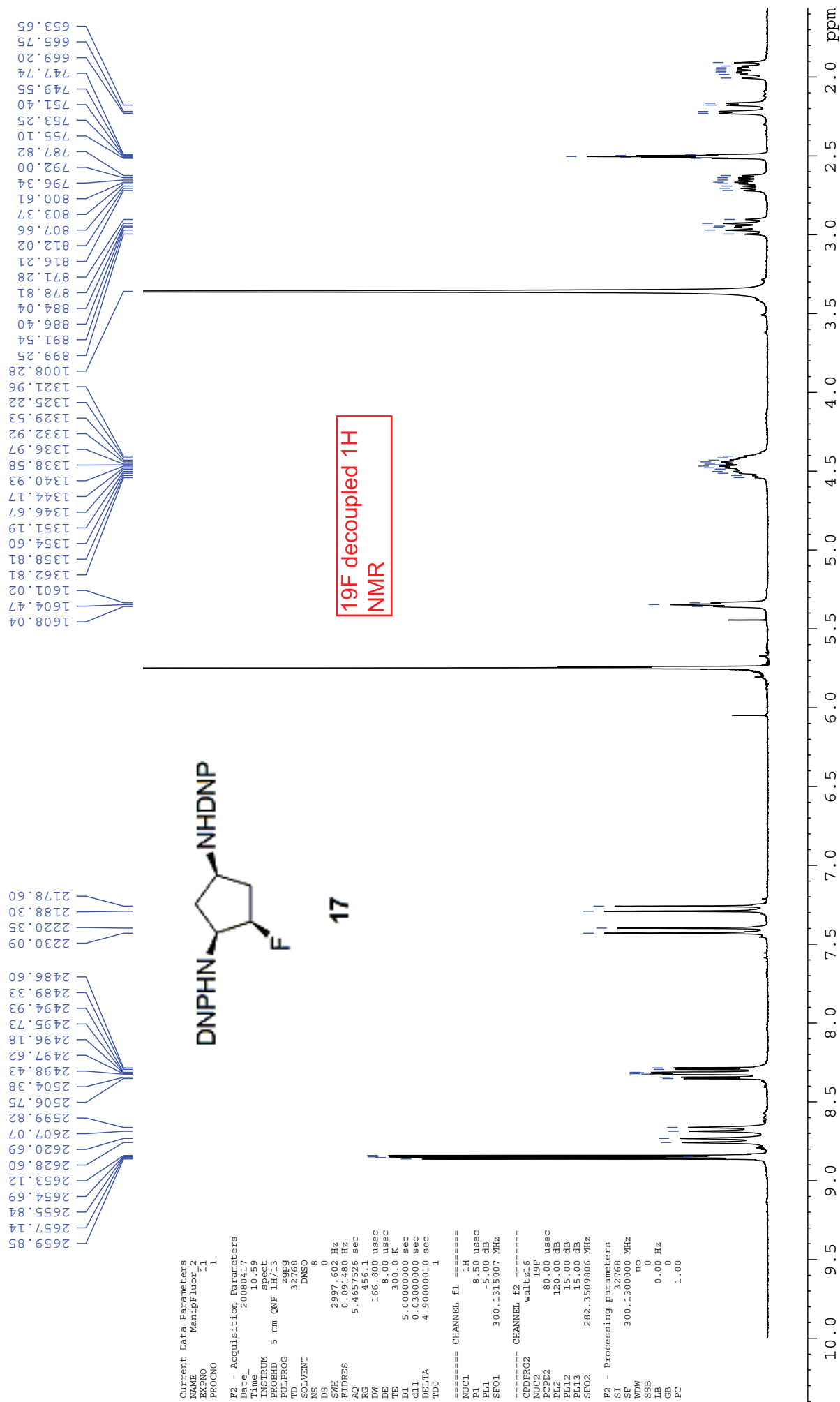
ppm

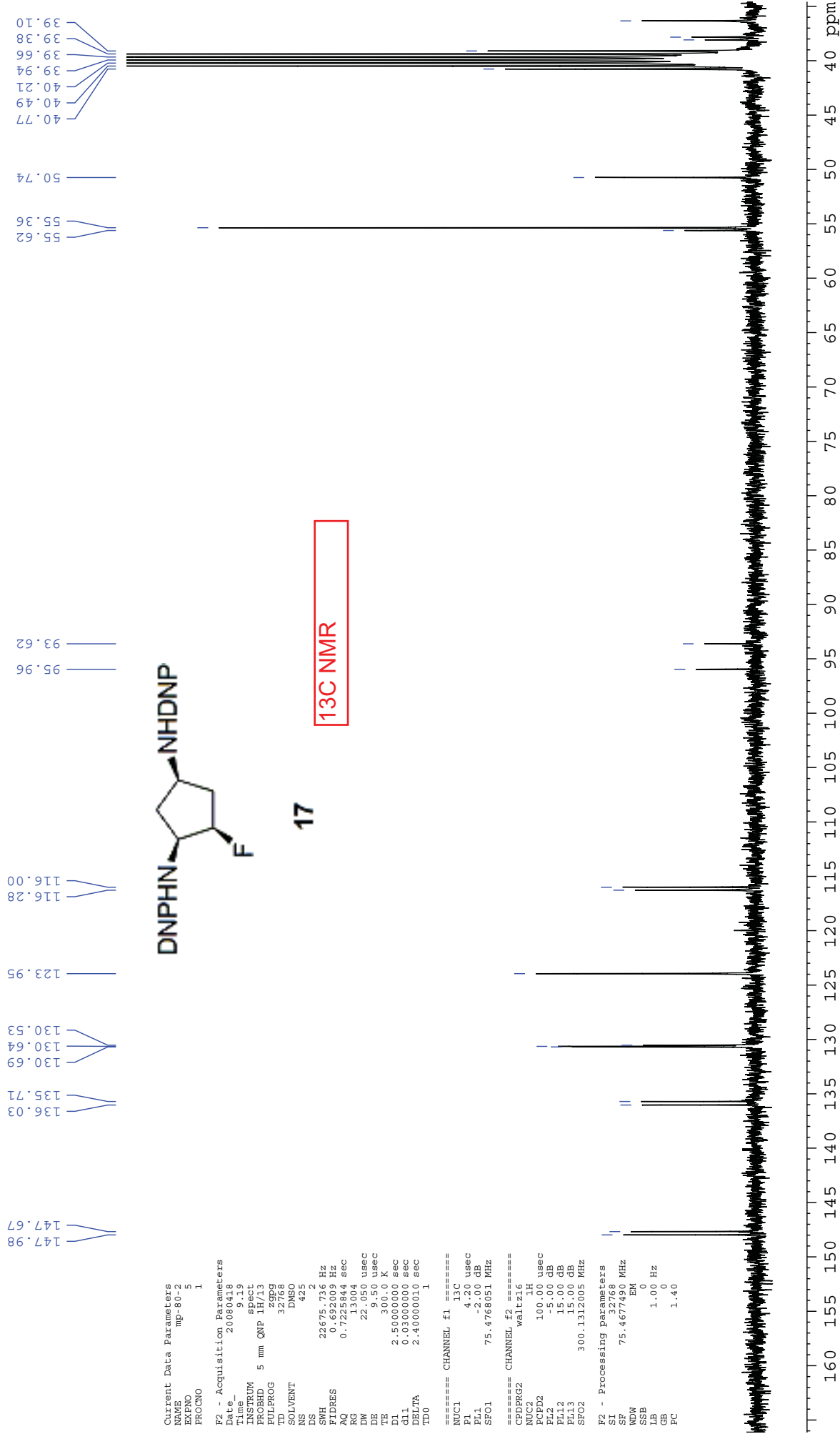




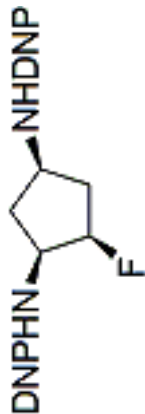
mp-80-2





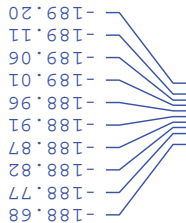


mp-80-2



17

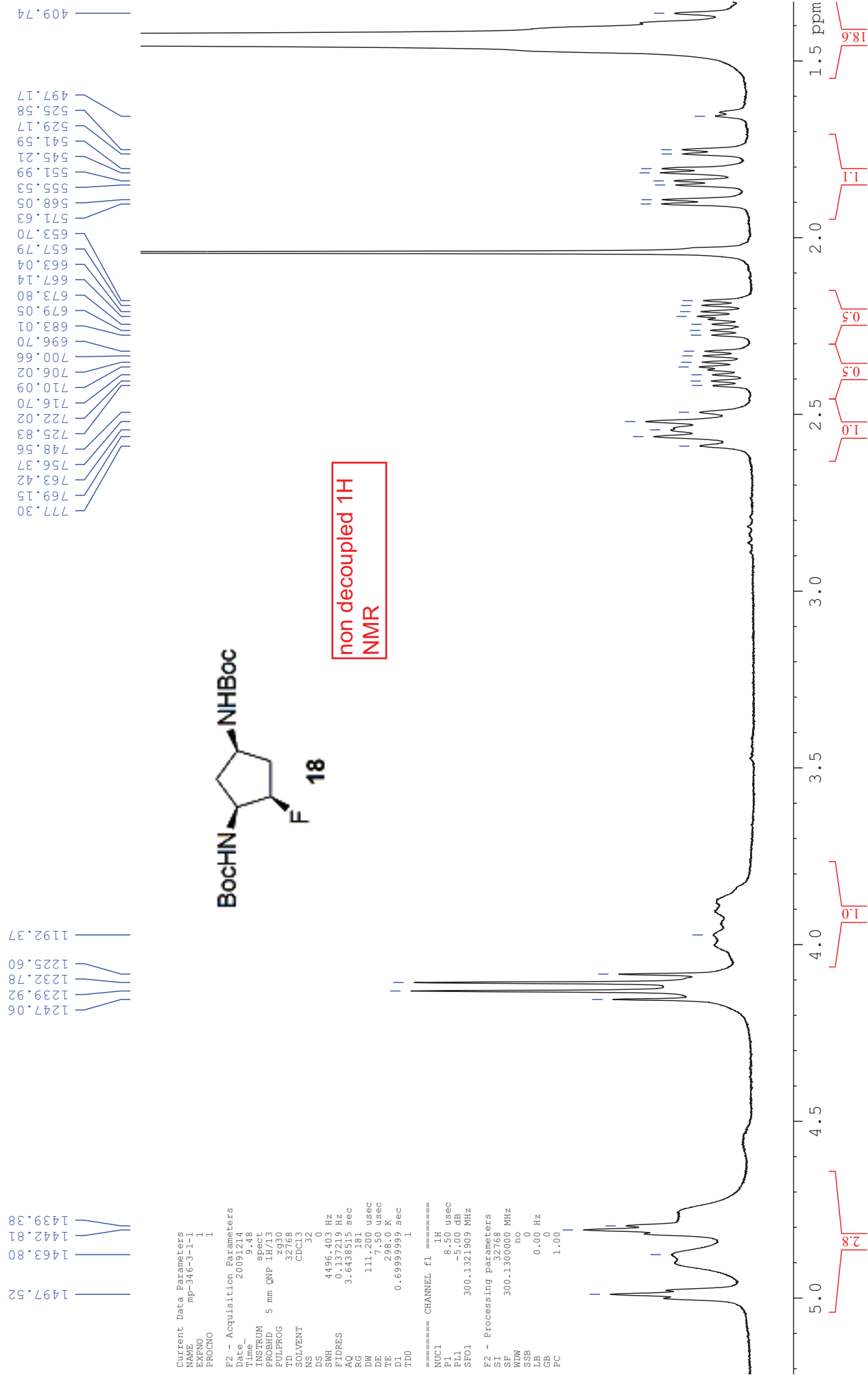
Current Data Parameters
NAME mp-80-2
EXPNO 4
PROCNO 1
F2 - Acquisition Parameters
Date_ 20080415
Time 15.30
INSTRUM spect
PROBHD 5 mm QNP 1H/13
PULPROG zgpg30
TD 131072
SOLVENT DMSO
NS 43
DS 4
SWH 67567.570 Hz
FIDRES 0.515500 Hz
AQ 0.9699828 sec
RG 3251
DW 7.400 usec
DE 3.50 usec
TE 300.2 K
D1 1.0000000 sec
TD0 1
===== CHANNEL f1 =====
NUC1 19F
P1 7.60 usec
PL1 -6.00 dB
SFO1 282.3704665 MHz
F2 - Processing parameters
SI 32768
SF 282.4043550 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00

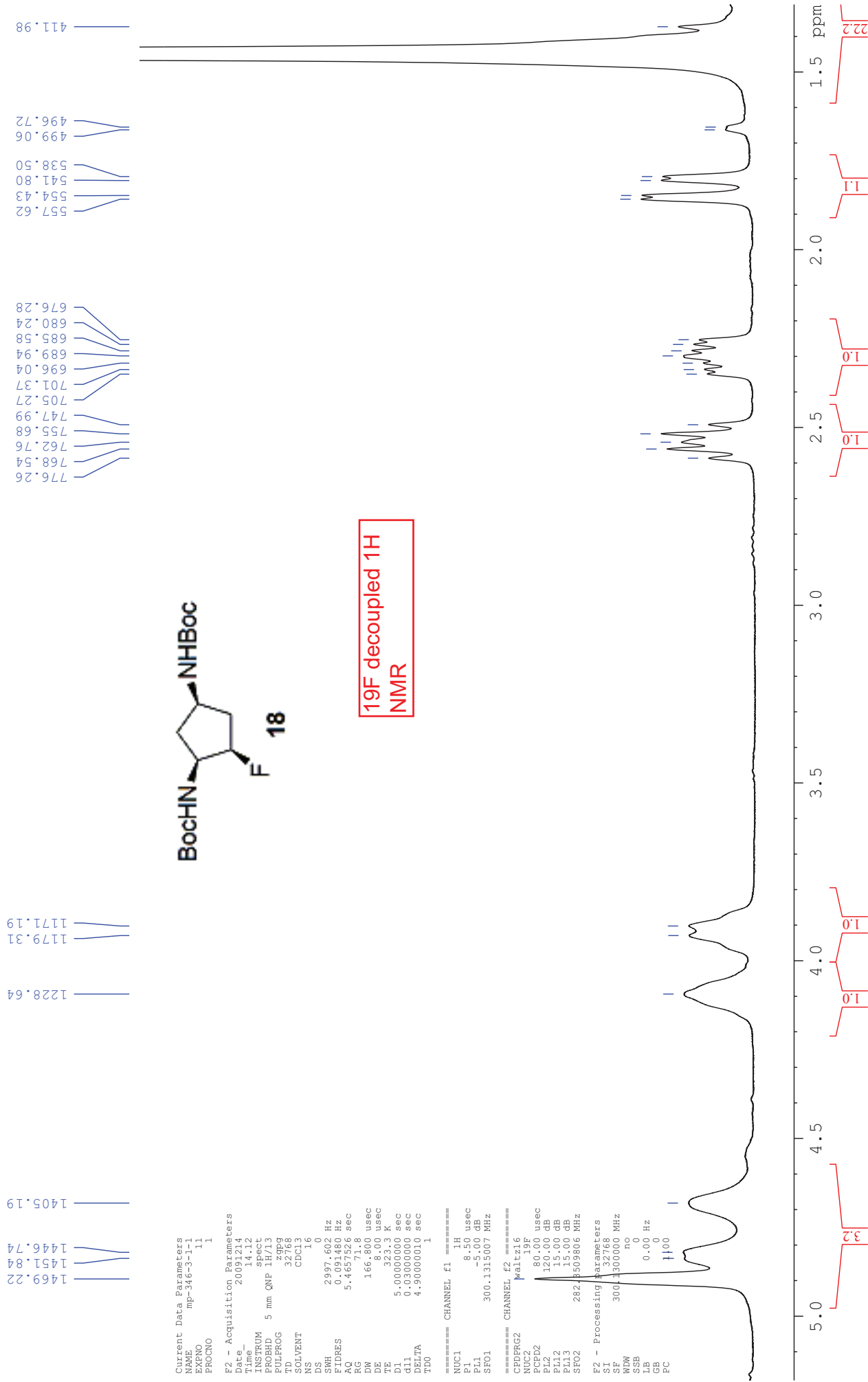


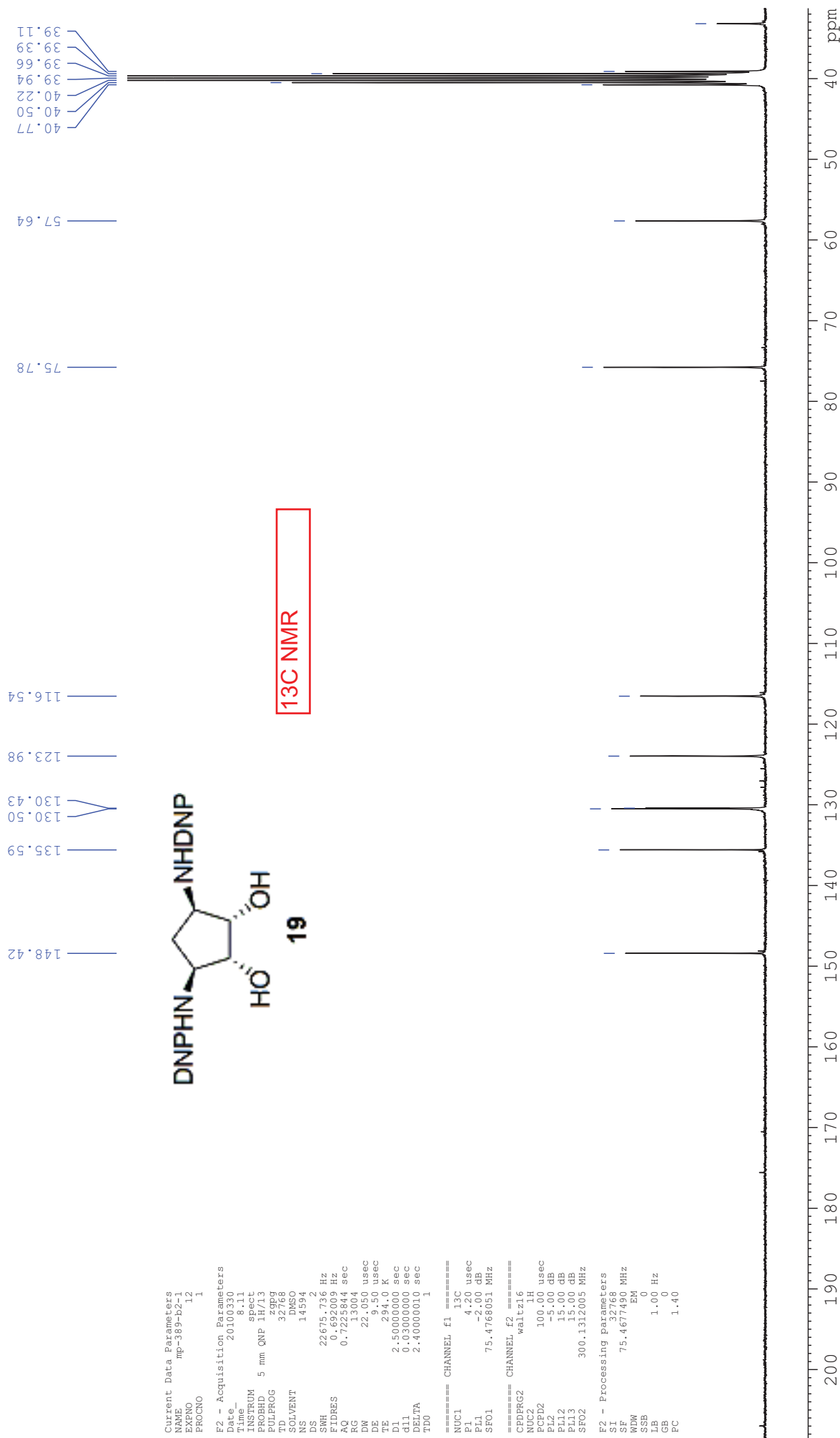
non decoupled 19F
NMR

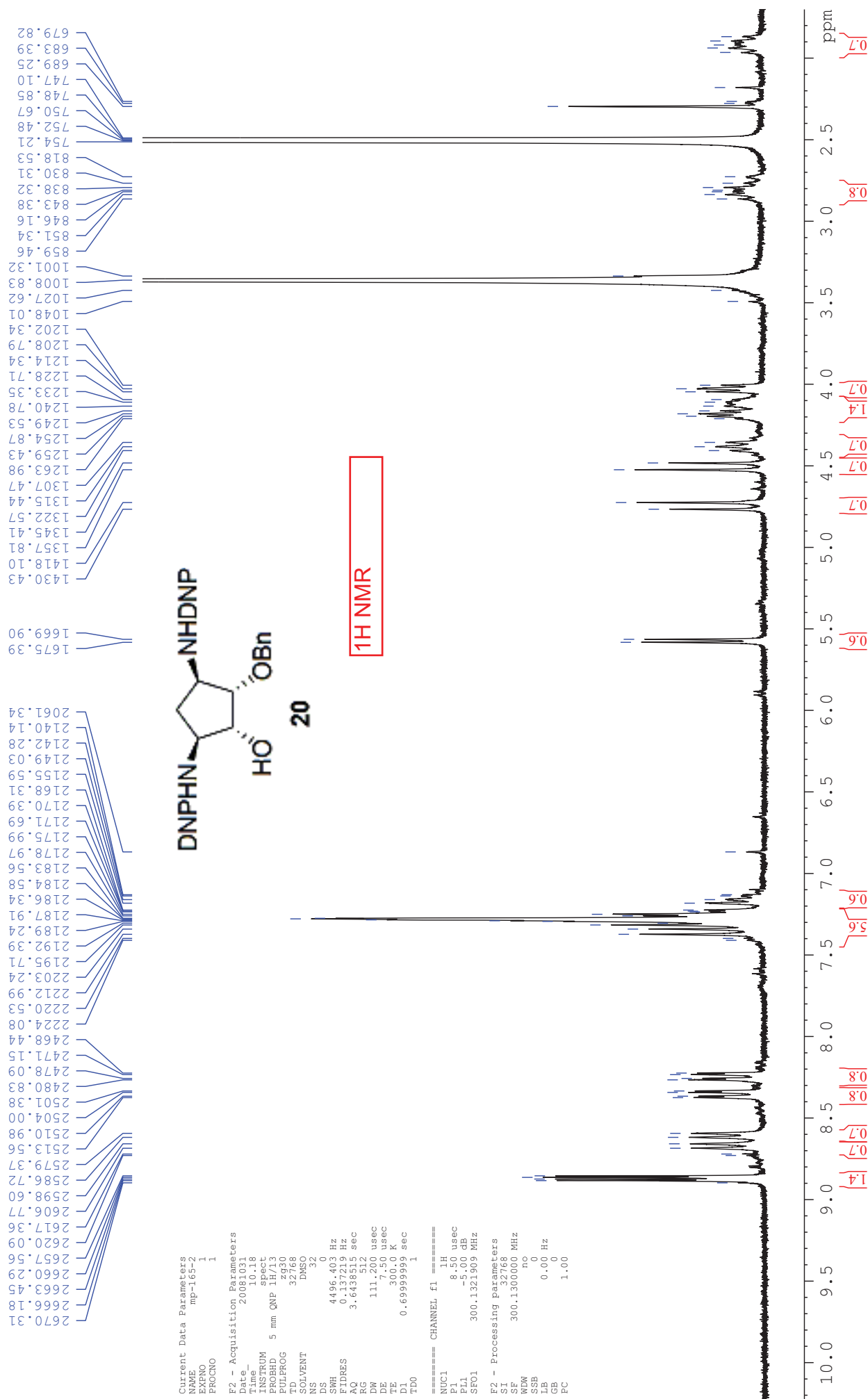


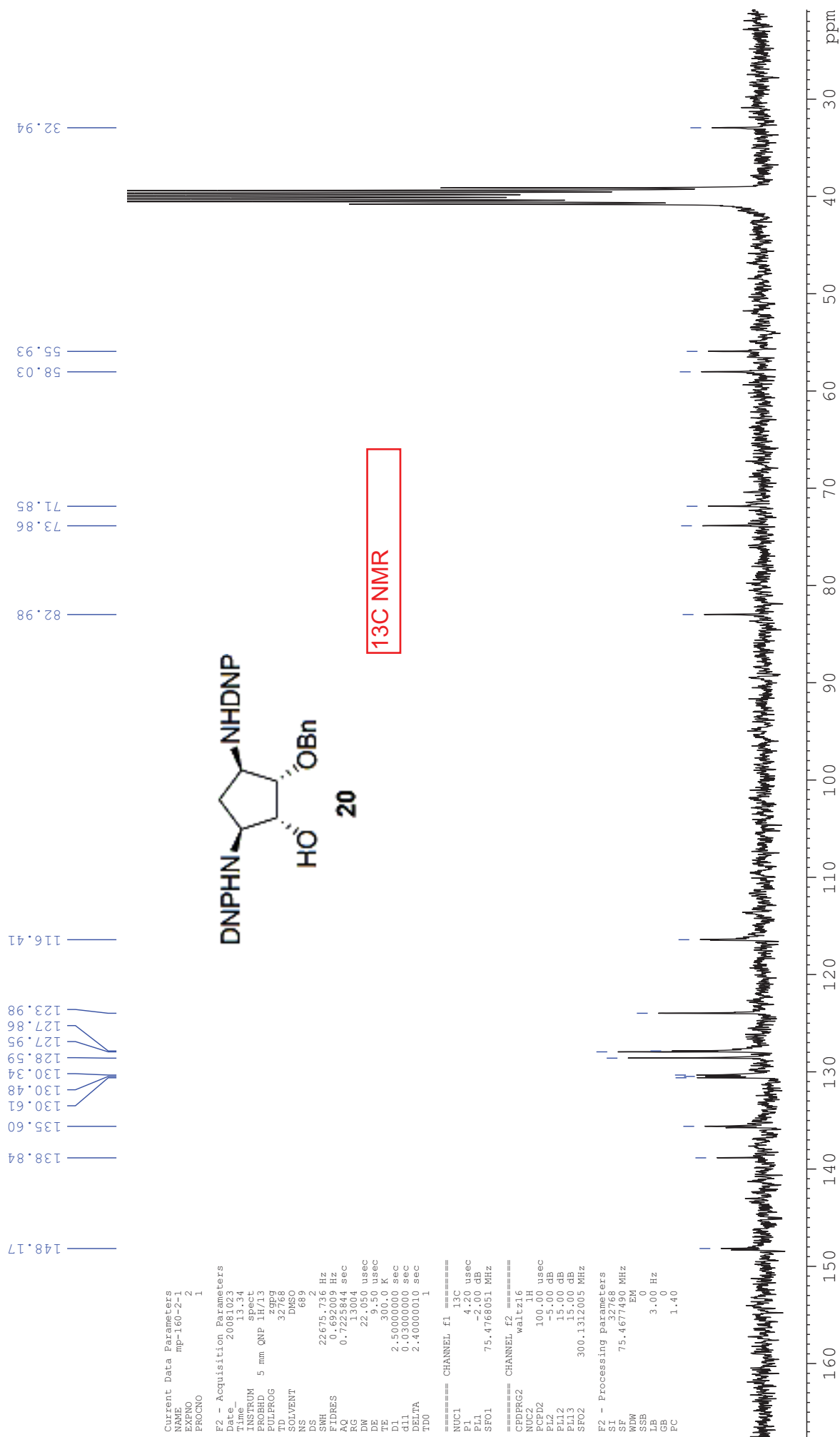
-180 -181 -182 -183 -184 -185 -186 -187 -188 -189 -190 -191 -192 -193 -194 -195 ppm

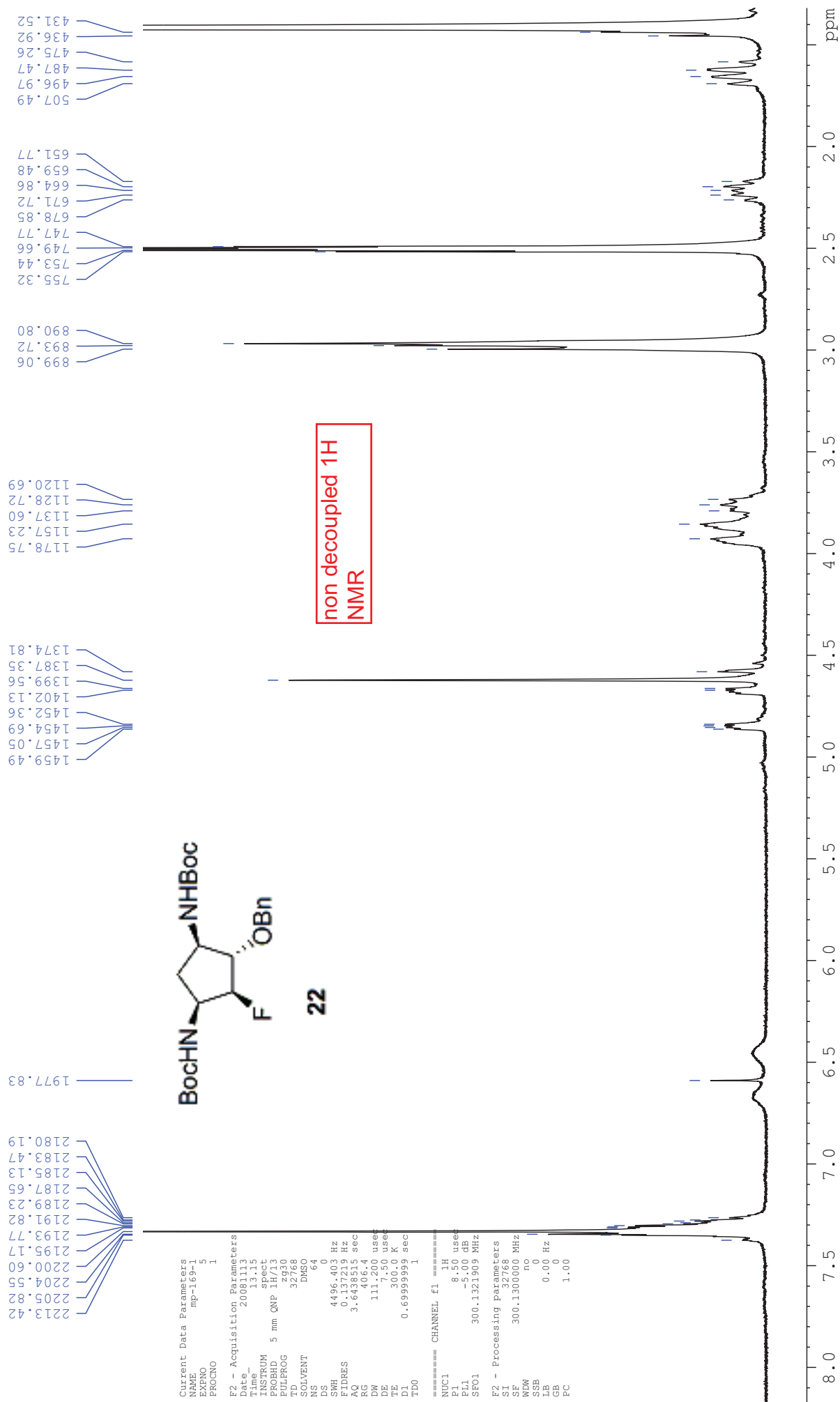


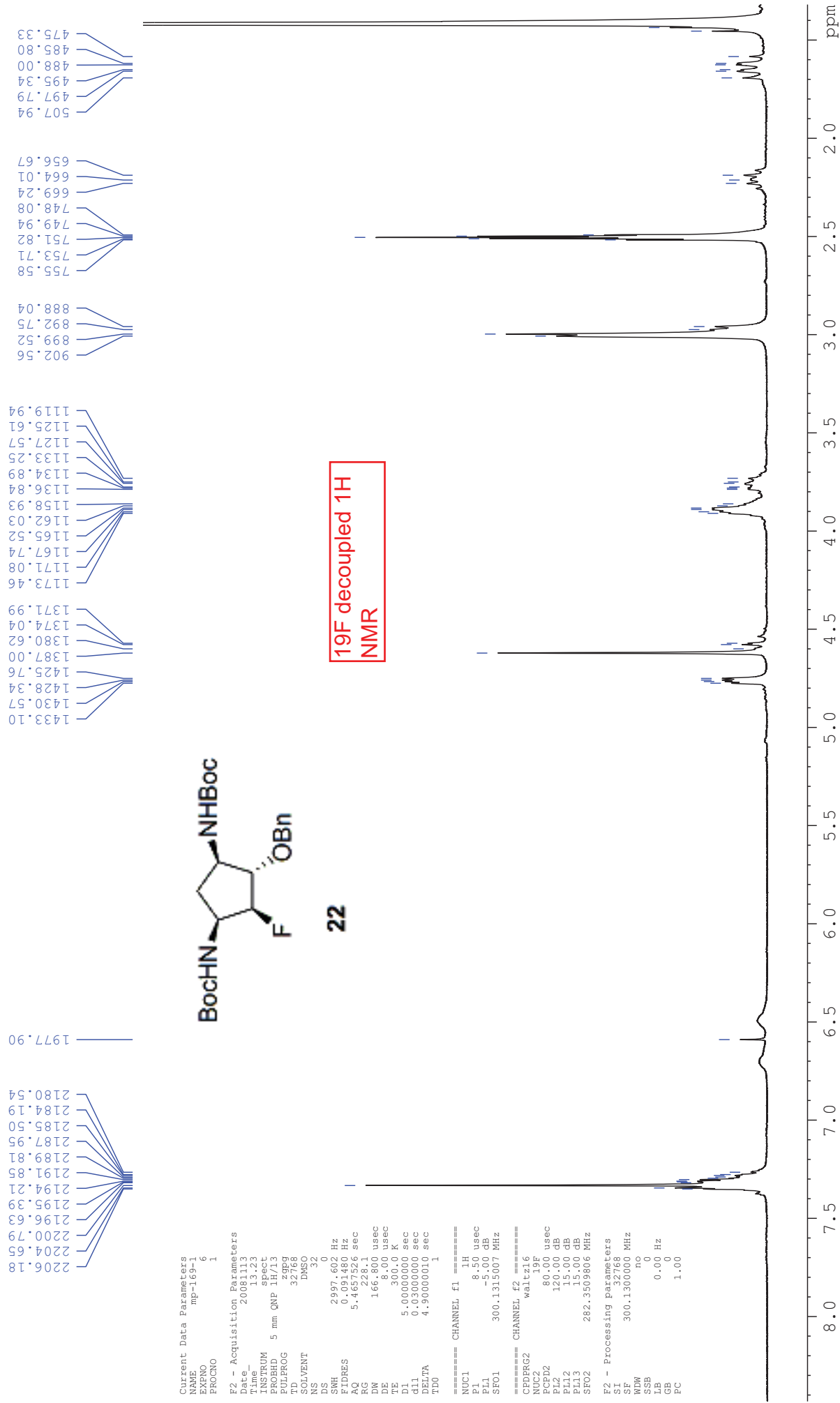


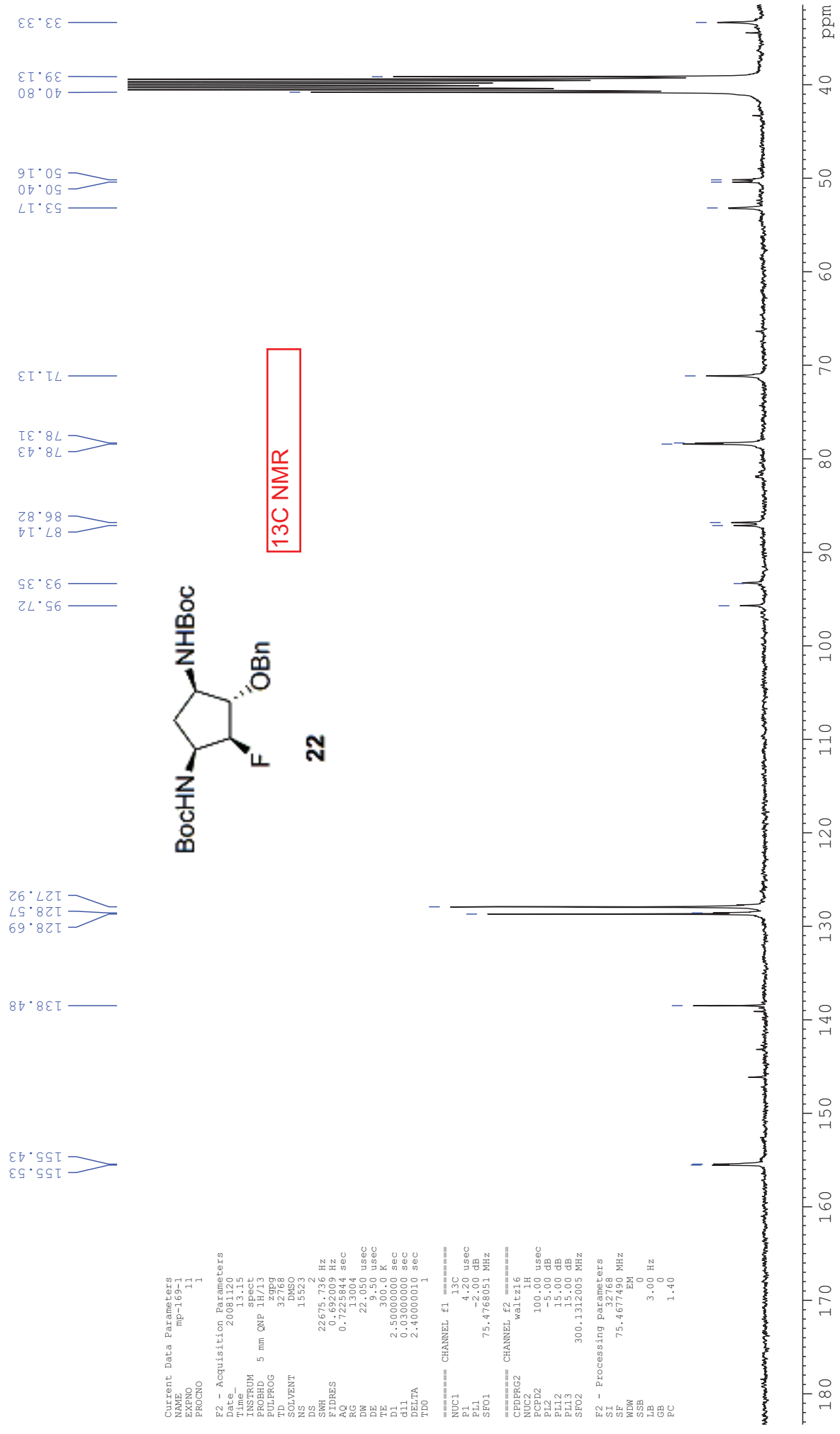




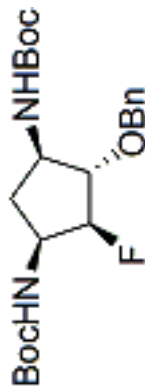








-199.44
-199.35
-199.26
-199.17
-199.09



22

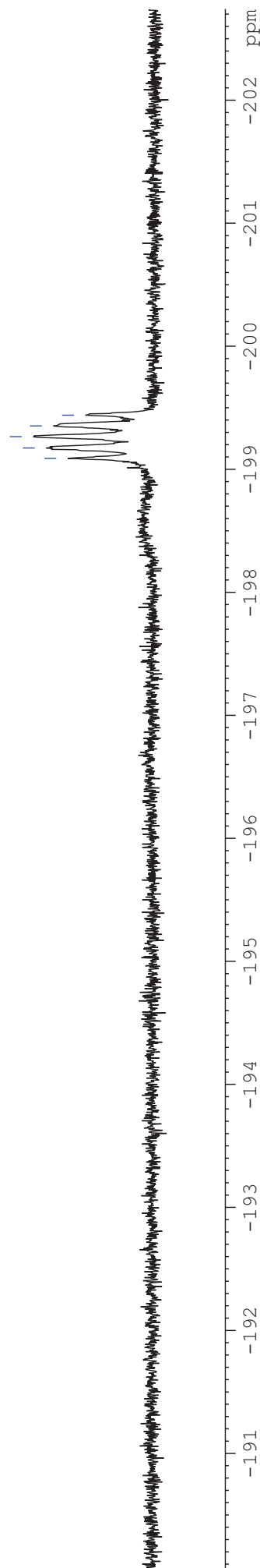
non decoupled 19F
NMR

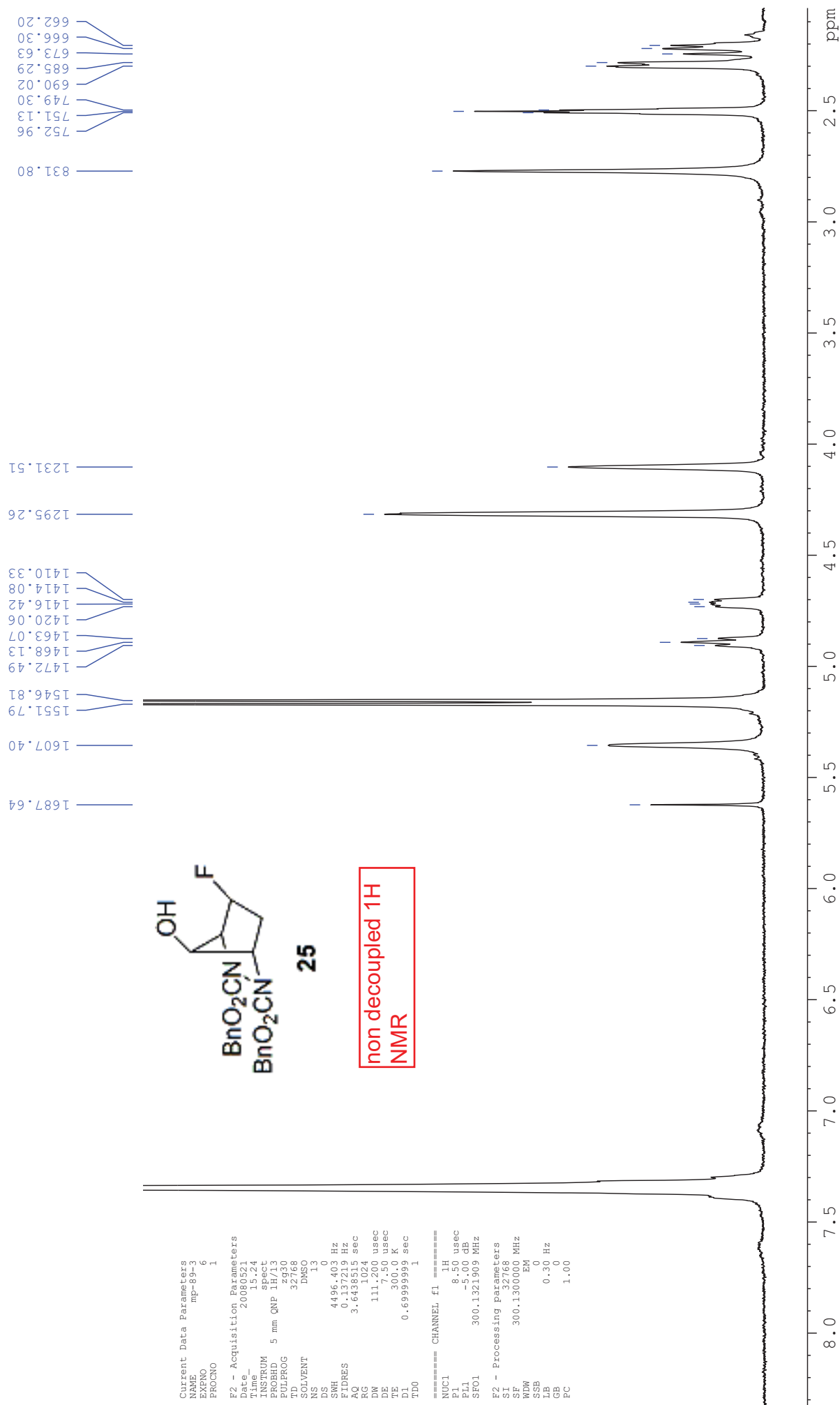
```
Current Data Parameters
NAME      mp-169-1
EXPNO     4
PROCNO    1

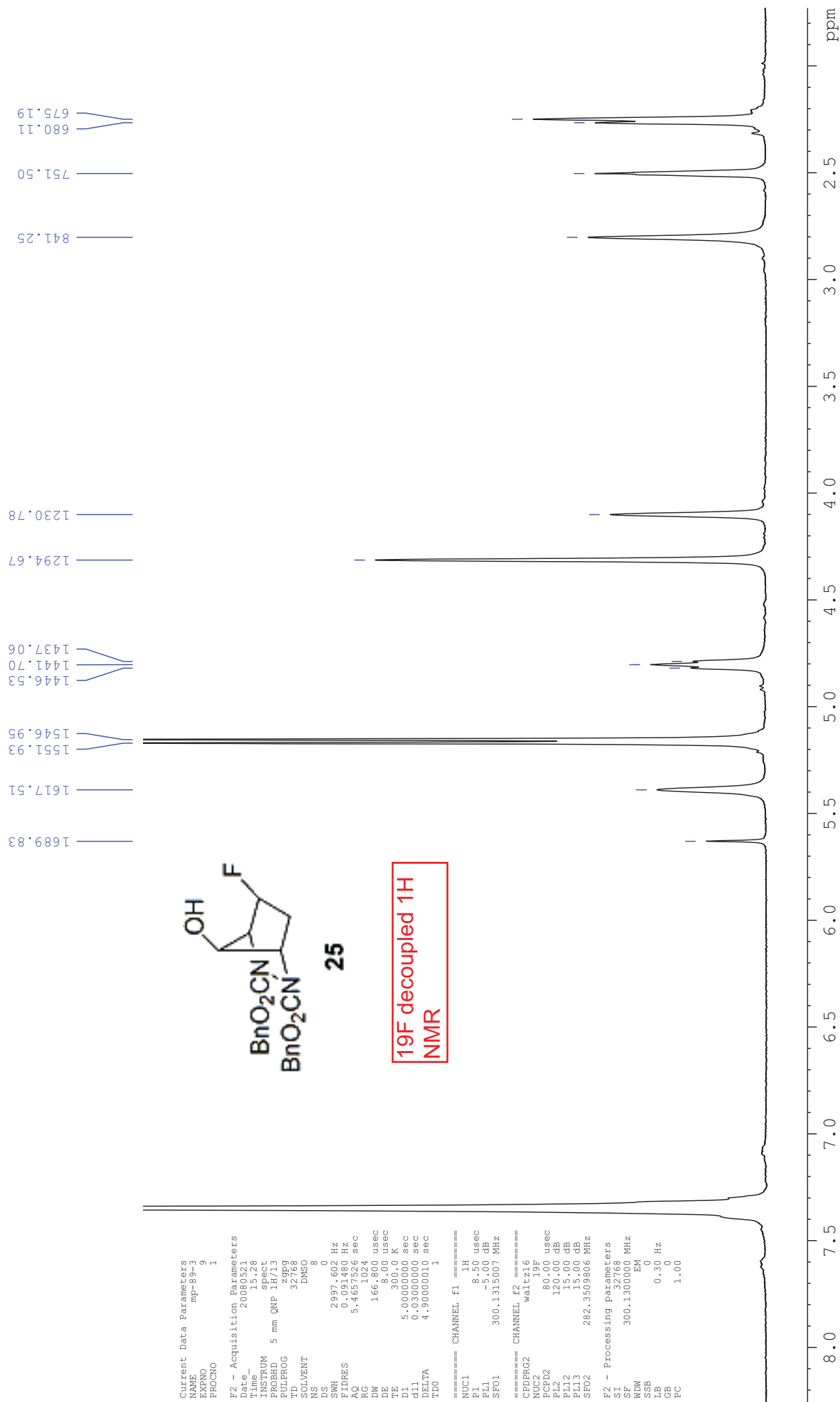
F2 - Acquisition Parameters
Date_     20081112
Time      18.37
INSTRUM   spect
PROBHD    5 mm QNP 1H/13
PULPROG   zgpg30
TD         131072
SOLVENT   MeOD
NS         89
DS         4
SWH        67567.570 Hz
FIDRES     0.515500 Hz
AQ         0.9699828 sec
RG         3251
DW         7.400 usec
DE         8.500 usec
TE         300.0 K
D1         1.00000000 sec
D11        1

===== CHANNEL f1 =====
NUC1       19F
P1         7.60 usec
PL1        -6.00 dB
SFO1       282.3704665 MHz

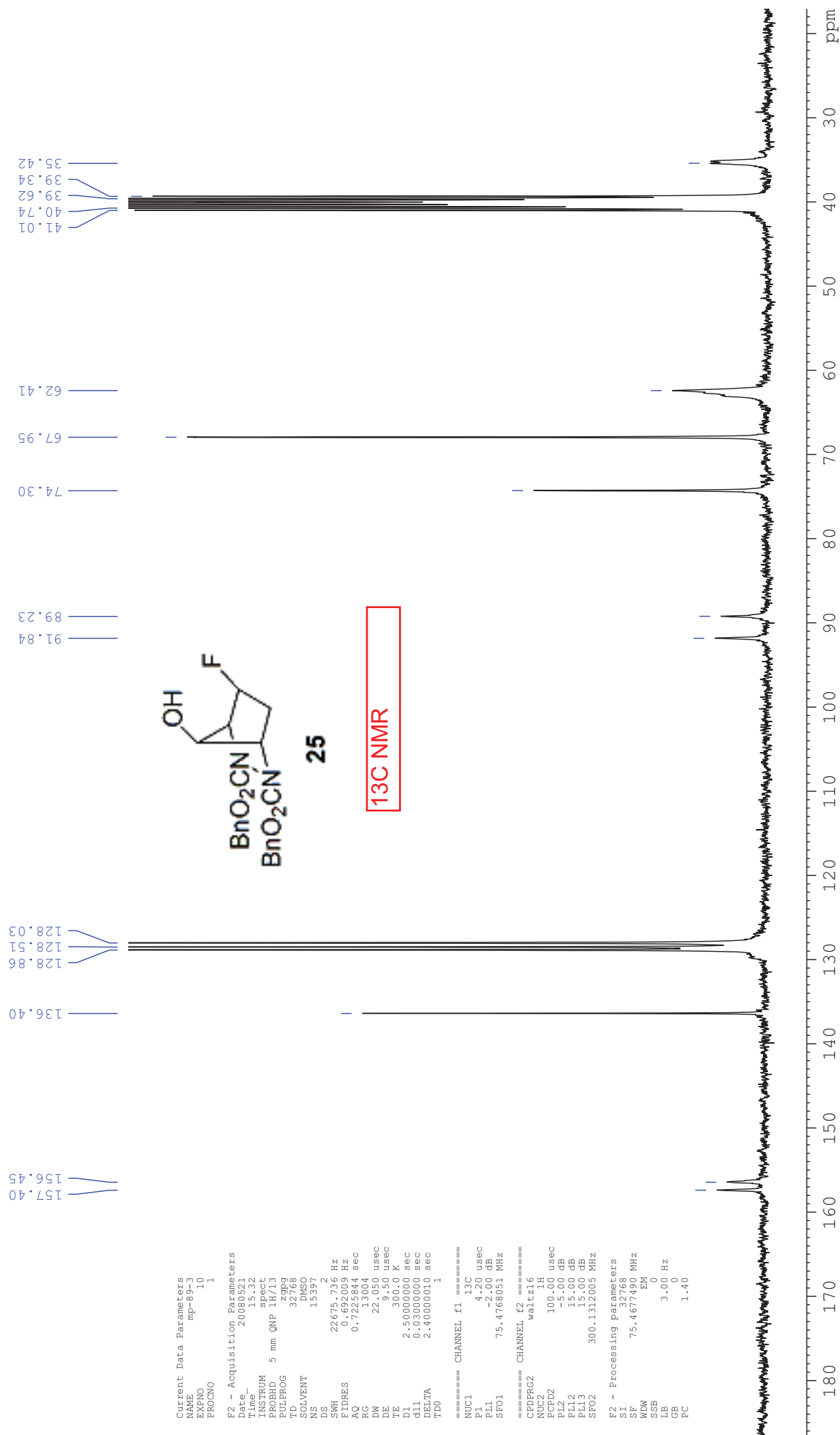
F2 - Processing parameters
SI         32768
SF         282.4043550 MHz
WDW        no
SSB        0
LB         0.00 Hz
GB         0
PC         1.00
```

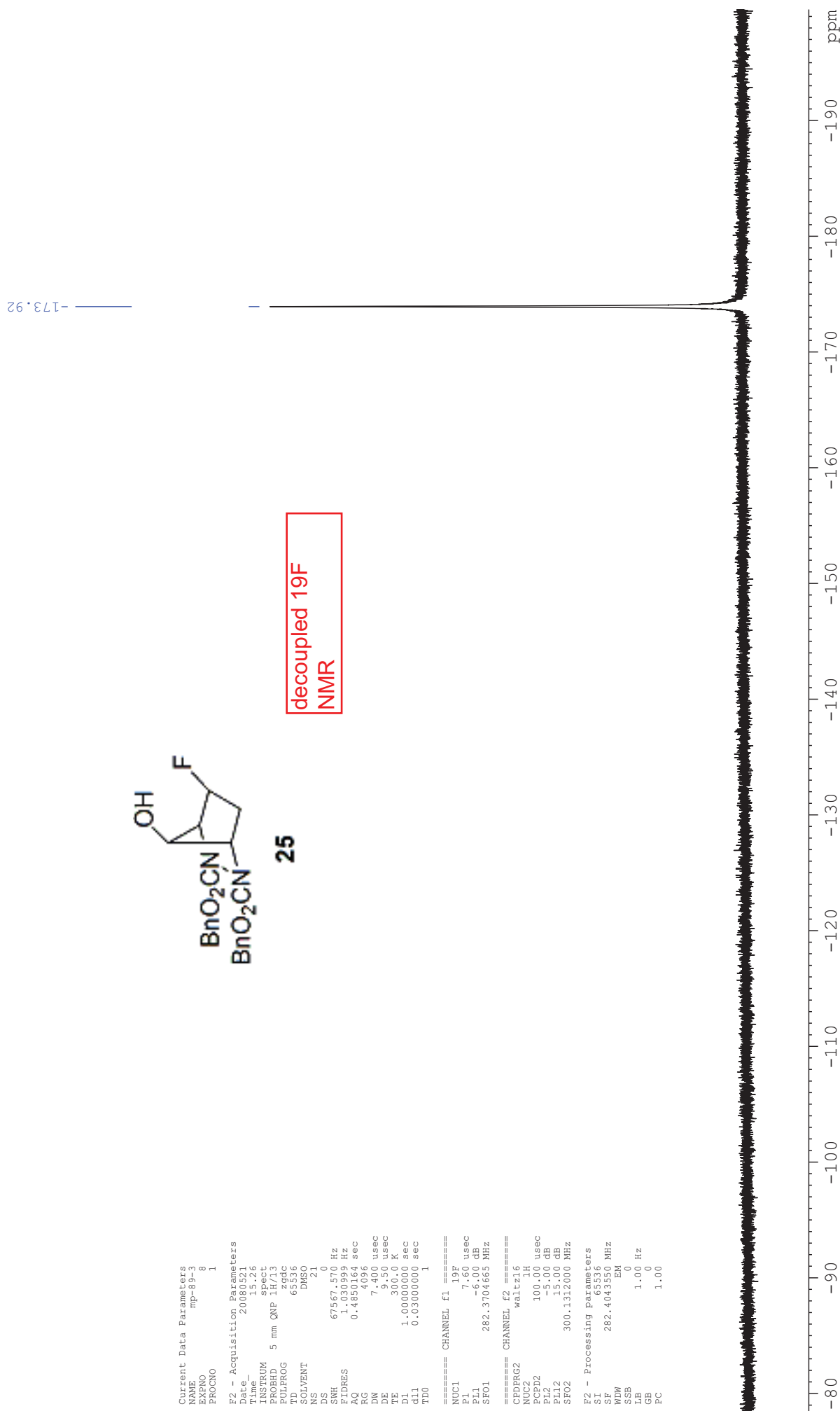






mp-89-3
T=333K





T=50deg

