Enantioselective Pd-Catalyzed α-Arylation of *N*-Boc-Pyrrolidine: The Key to an Efficient and Practical Synthesis of a Glucokinase Activator

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Supporting Information

Table of Contents:

F2 - Acquisition Parameters

Date_	20051117
Time	14.10
INSTRUM	spect
PROBHD	5 mm QNP 1H
PULPROG	zg30
TD	32768
SOLVENT	CDCl3
NS	8
DS	4
SWH	6578.947 Hz
FIDRES	0.200774 Hz
AQ	2.4904180 sec
RG	35.9
DW	76.000 usec
DE	6.00 usec
TE	300.0 K
D1	0.10000000 sec
MCREST	0.00000000 sec
MCWRK	0.01500000 sec

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

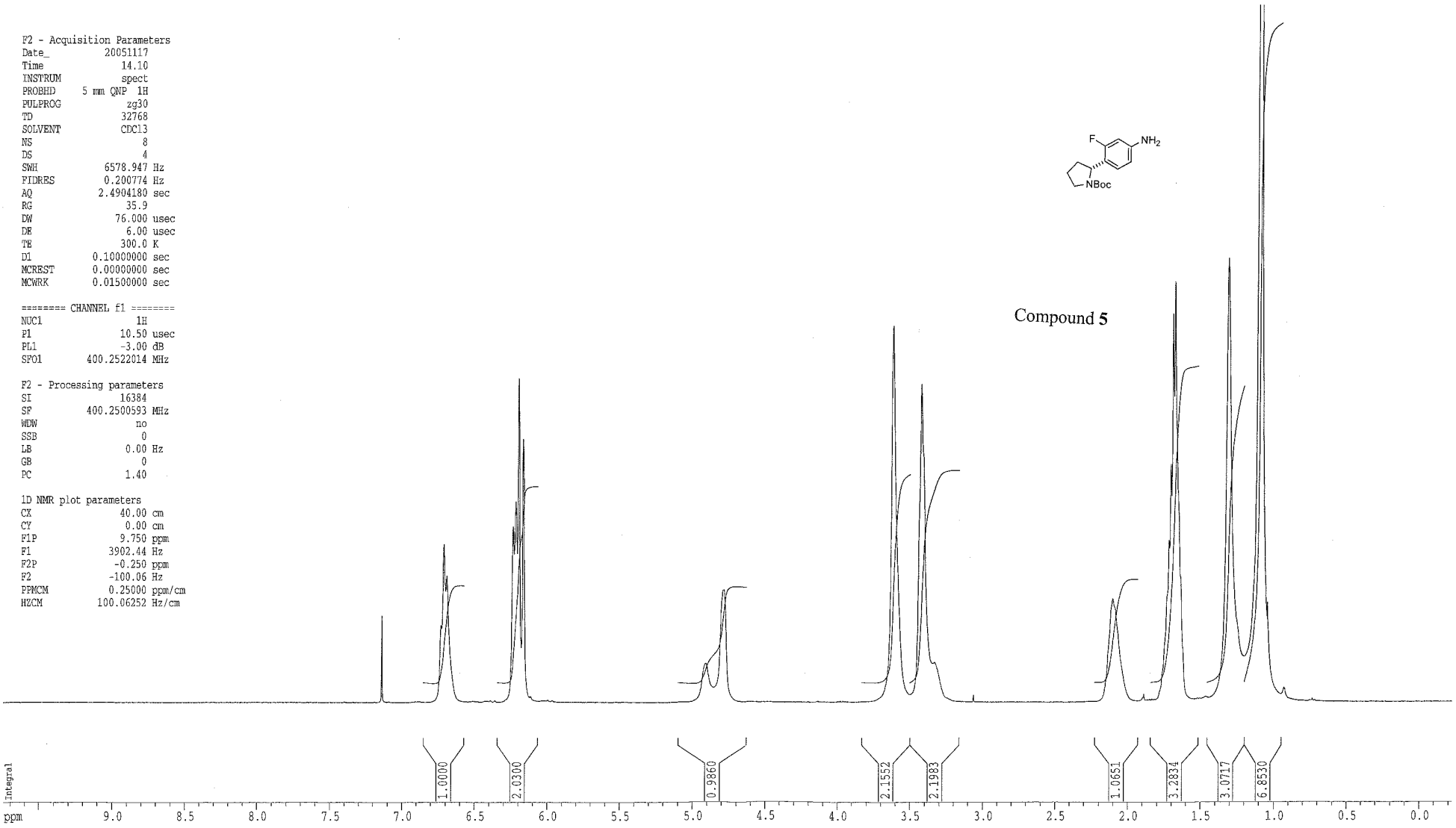
NUC1	1H
P1	10.50 usec
PL1	-3.00 dB
SFO1	400.2522014 MHz

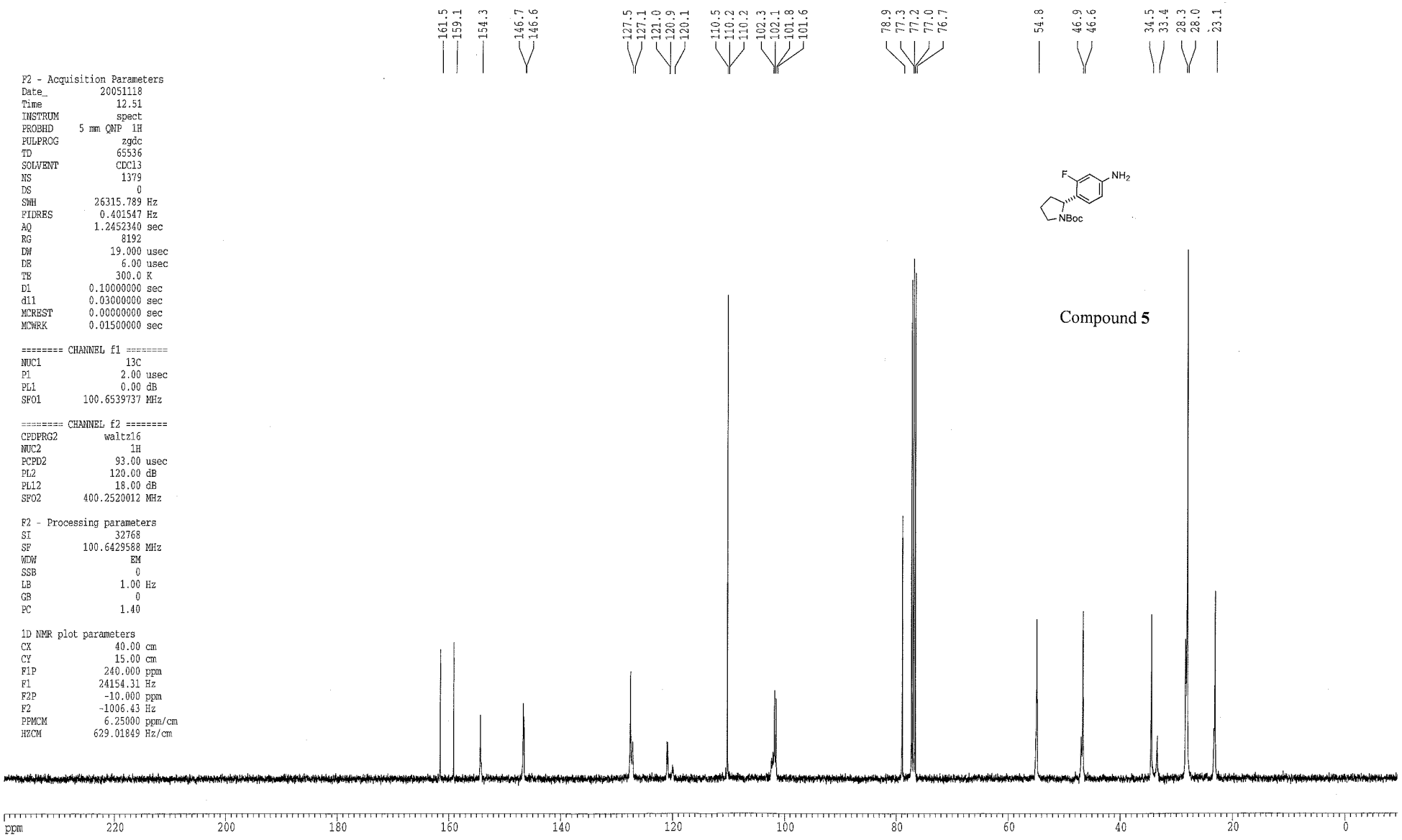
F2 - Processing parameters

SI	16384
SF	400.2500593 MHz
WDW	no
SSB	0
LB	0.00 Hz
GB	0
PC	1.40

1D NMR plot parameters

CX	40.00 cm
CY	0.00 cm
F1P	9.750 ppm
F1	3902.44 Hz
F2P	-0.250 ppm
F2	-100.06 Hz
PPMCM	0.25000 ppm/cm
HZCM	100.06252 Hz/cm





F2 - Acquisition Parameters

Date_	20051118
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INSTRUM	spect
PROBHD	5 mm QNP 1H
PULPROG	zgdc
TD	65536
SOLVENT	CDCl3
NS	1379
DS	0
SWH	26315.789 Hz
FIDRES	0.401547 Hz
AQ	1.2452340 sec
RG	8192
DW	19.000 usec
DE	6.00 usec
TE	300.0 K
D1	0.10000000 sec
d11	0.03000000 sec
MCREST	0.00000000 sec
MCWRK	0.01500000 sec

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

NUC1	13C
P1	2.00 usec
PL1	0.00 dB
SFO1	100.6539737 MHz

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

CPDPRG2	waltz16
NUC2	1H
PCPD2	93.00 usec
PL2	120.00 dB
PL12	18.00 dB
SFO2	400.2520012 MHz

F2 - Processing parameters

SI	32768
SF	100.6429588 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

1D NMR plot parameters

CX	40.00 cm
CY	15.00 cm
F1P	240.000 ppm
F1	24154.31 Hz
F2P	-10.000 ppm
F2	-1006.43 Hz
PPMCM	6.25000 ppm/cm
HZCM	629.01849 Hz/cm

ppm

-118.93
-120.06

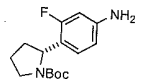
F2 - Acquisition Parameters
Date_ 20051117
Time 14.16
INSTRUM spect
PROBHD 5 mm QNP 1H
PULPROG zgfhigqn
TD 131072
SOLVENT CD3CN
NS 18
DS 4
SWH 112994.352 Hz
FIDRES 0.862078 Hz
AQ 0.5800436 sec
RG 256
DW 4.425 usec
DE 6.32 usec
TE 300.0 K
D1 0.10000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

======== CHANNEL f1 ========
NUC1 19F
P1 4.00 usec
PL1 -6.00 dB
SFO1 376.5547800 MHz

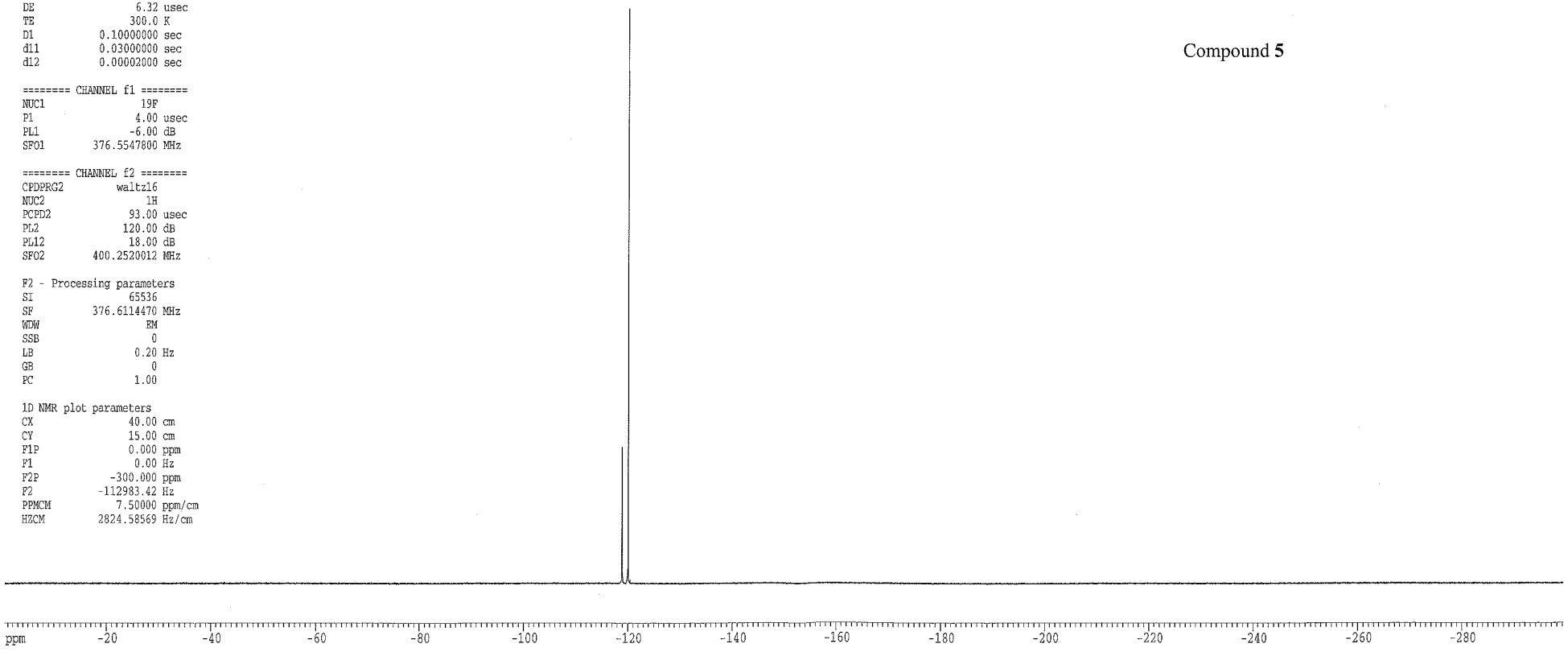
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 93.00 usec
PL2 120.00 dB
PL12 18.00 dB
SFO2 400.2520012 MHz

F2 - Processing parameters
SI 65536
SF 376.6114470 MHz
WDW EM
SSB 0
LB 0.20 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 40.00 cm
CY 15.00 cm
F1P 0.000 ppm
F1 0.00 Hz
F2P -300.000 ppm
F2 -112983.42 Hz
PPMCM 7.50000 ppm/cm
HZCM 2824.58569 Hz/cm



Compound **5**



F2 - Acquisition Parameters

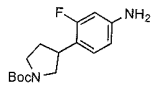
Date_	20080317
Time	11.01
INSTRUM	spect
PROBHD	5 mm QNP 1H/1
PULPROG	zg30
TD	32768
SOLVENT	CDCl3
NS	8
DS	2
SWH	6578.947 Hz
FIDRES	0.200774 Hz
AQ	2.4904180 sec
RG	57
DW	76.000 usec
DE	7.00 usec
TE	300.0 K
D1	0.10000000 sec
TD0	1

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

NUC1	1H
P1	11.50 usec
PL1	6.00 dB
SFO1	399.8724694 MHz

F2 - Processing parameters

SI	16384
SF	399.8700000 MHz
WDW	no
SSB	0
LB	0.00 Hz
GB	0
PC	1.00



Compound **18**

F2 - Acquisition Parameters

Date_	20080317	
Time	11.09	
INSTRUM	spect	
PROBHD	5 mm QNP 1H/1	
PULPROG	zgdc	
TD	65536	
SOLVENT	CDCl3	
NS	269	
DS	4	
SWH	26315.789	Hz
FIDRES	0.401547	Hz
AQ	1.2452340	sec
RG	8192	
DW	19.000	usec
DE	7.00	usec
TE	300.0	K
D1	0.10000000	sec
d11	0.03000000	sec
TD0	40	

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

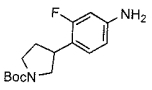
NUC1	13C	
P1	3.30	usec
PL1	6.00	dB
SFO1	100.5584512	MHz

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

CPDPRG2	waltz16	
NUC2	1H	
PCPD2	100.00	usec
PL2	120.00	dB
PL12	24.00	dB
SFO2	399.8719994	MHz

F2 - Processing parameters

SI	32768	
SF	100.5473910	MHz
WDW	EM	
SSB	0	
LB	1.00	Hz
GB	0	
PC	1.40	



Compound **18**

F2 - Acquisition Parameters

Date_	20080317
Time	11.12
INSTRUM	spect
PROBHD	5 mm QNP 1H/1
PULPROG	zgfhigqn
TD	131072
SOLVENT	CDCl3
NS	21
DS	4
SWH	112994.352 Hz
FIDRES	0.862078 Hz
AQ	0.5800436 sec
RG	4096
DW	4.425 usec
DE	7.00 usec
TE	300.0 K
D1	1.00000000 sec
d11	0.03000000 sec
d12	0.00002000 sec
TD0	1

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

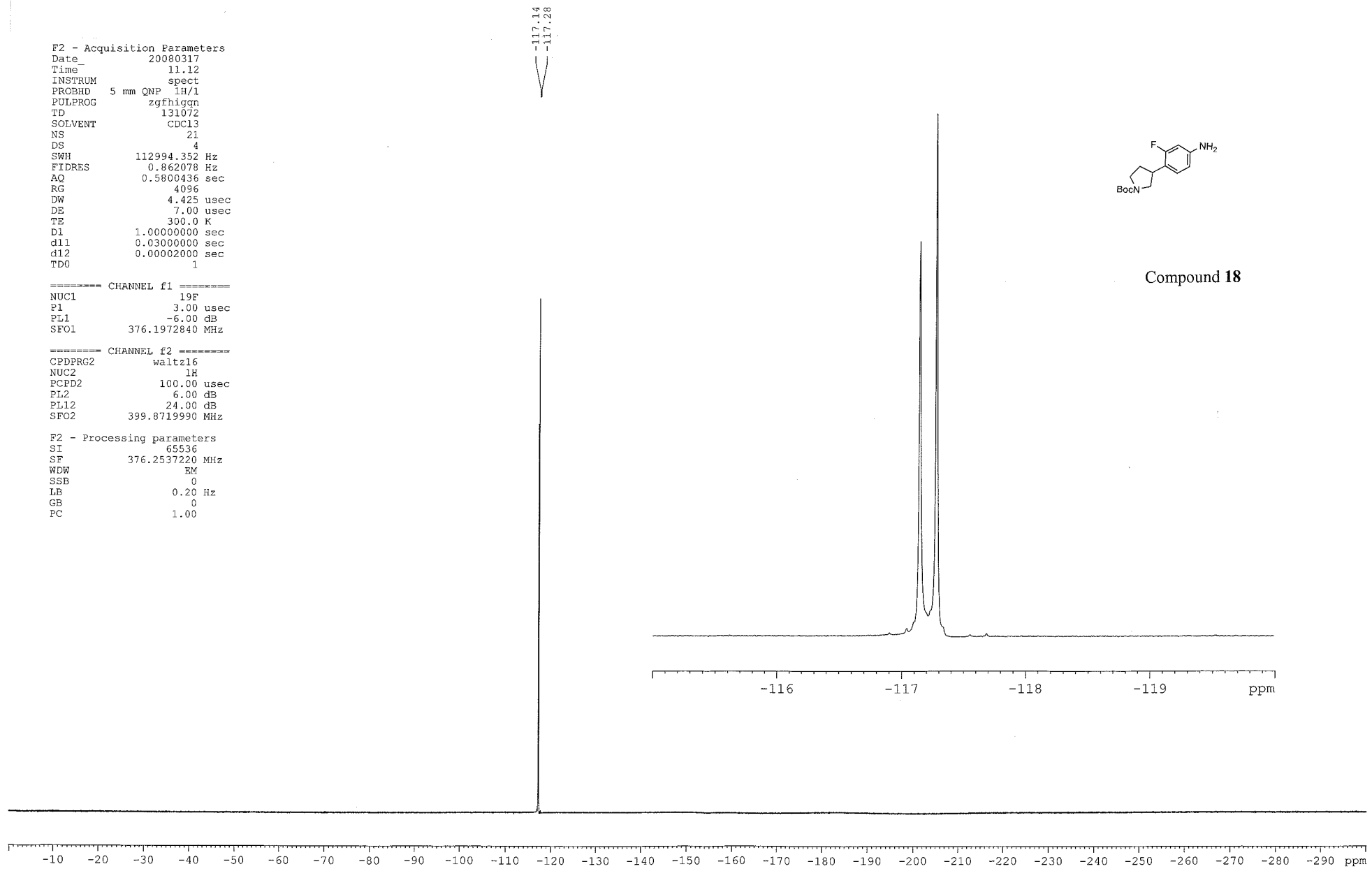
NUC1	19F
P1	3.00 usec
PL1	-6.00 dB
SFO1	376.1972840 MHz

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

CPDPRG2	waltz16
NUC2	1H
PCPD2	100.00 usec
PL2	6.00 dB
PL12	24.00 dB
SFO2	399.8719990 MHz

F2 - Processing parameters

SI	65536
SF	376.2537220 MHz
WDW	EM
SSB	0
LB	0.20 Hz
GB	0
PC	1.00



Compound **18**

klapars 0280287-0001 cdcl3
nmr500b coupled c-13

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Current Data Parameters
NAME      klab0279559-0010
EXPNO                    9
PROCNO                   1

F2 - Acquisition Parameters
Date_             20080317
Time                 17.30
INSTRUM              spect
PROBHD   5 mm BBI 1H-BB
PULPROG              zggd
TD                 131072
SOLVENT             CDCl3
NS                    587
DS                      4
SWH             40322.582 Hz
FIDRES          0.307637 Hz
AQ              1.6253552 sec
RG                   8192
DW                12.400 usec
DE                 6.00 usec
TE                300.0 K
D1            0.10000000 sec
d11           0.03000000 sec
TD0                     1

======== CHANNEL f1 ========
NUC1                   13C
P1                  5.00 usec
PL1                 0.00 dB
SFO1         125.7049302 MHz

======== CHANNEL f2 ========
CPDPRG2            waltz16
NUC2                   1H
PCPD2              80.00 usec
PL2               120.00 dB
PL12               18.50 dB
SFO2         499.8730867 MHz

F2 - Processing parameters
SI                  65536
SF           125.6923932 MHz
WDW                    EM
SSB                     0
LB                   1.00 Hz
GB                      0
PC                   1.40
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162.87, 160.96, 154.72, 147.10, 147.00, 146.94, 129.03, 127.82, 117.60, 111.53, 110.28, 103.12, 102.91, 101.85, 101.64, 79.29, 77.49, 77.23, 76.98, 52.72, 51.96, 51.55, 50.85, 50.44, 49.71, 47.00, 46.65, 45.84, 45.52, 44.71, 44.38, 37.68, 36.88, 36.66, 35.92, 33.42, 32.33, 31.31, 30.26, 30.23, 29.25, 29.22, 29.19, 28.24, 28.21, 28.18, 27.21

4739.66, 4641.00, 4608.59, 4512.75

~128 Hz

131 Hz

39 38 37 36 35 ppm

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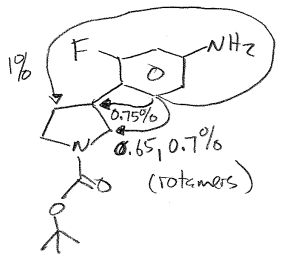
klapars 0280287-0001 cdcl3
nmr500b gradient noe

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NAME      klab0279559-0010
EXPNO                    7
PROCNO                   1

F2 - Acquisition Parameters
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Time                 14.28
INSTRUM              spect
PROBHD   5 mm BBI 1H-BB
PULPROG         selnogp.2
TD                   65536
SOLVENT              CDCl3
NS                     128
DS                       4
SWH              12376.237 Hz
FIDRES           0.188846 Hz
AQ               2.6477449 sec
RG                      16
DW                 40.400 usec
DE                  6.00 usec
TE                 300.0 K
D1              1.00000000 sec
D8              0.60000002 sec
D16             0.00020000 sec
d20             0.29880002 sec
======== CHANNEL f1 ========
NUC1                    1H
P1                   9.82 usec
p2                  19.65 usec
P12              125000.00 usec
PL0                 120.00 dB
PL1                   1.00 dB
SFO1          499.8734922 MHz
SP2                  71.00 dB
SPNAM2         Gauss.1000
SPOAL2              0.500
SPOFFS2              0.00 Hz

====== GRADIENT CHANNEL =====
GPNAM1            SINE.100
GPNAM2            SINE.100
GPNAM3            SINE.100
GPX1                 0.00 %
GPX2                 0.00 %
GPX3                 0.00 %
GPY1                 0.00 %
GPY2                 0.00 %
GPY3                 0.00 %
GPZ1                15.00 %
GPZ2                40.00 %
GPZ3               -40.00 %
P16                1000.00 usec

F2 - Processing parameters
SI                   32768
SF            499.8700117 MHz
WDW                     EM
SSB                      0
LB                    0.30 Hz
GB                       0
PC                    1.00
```

klapars 0280287-0001 cdcl3
nmr500b gradient noe

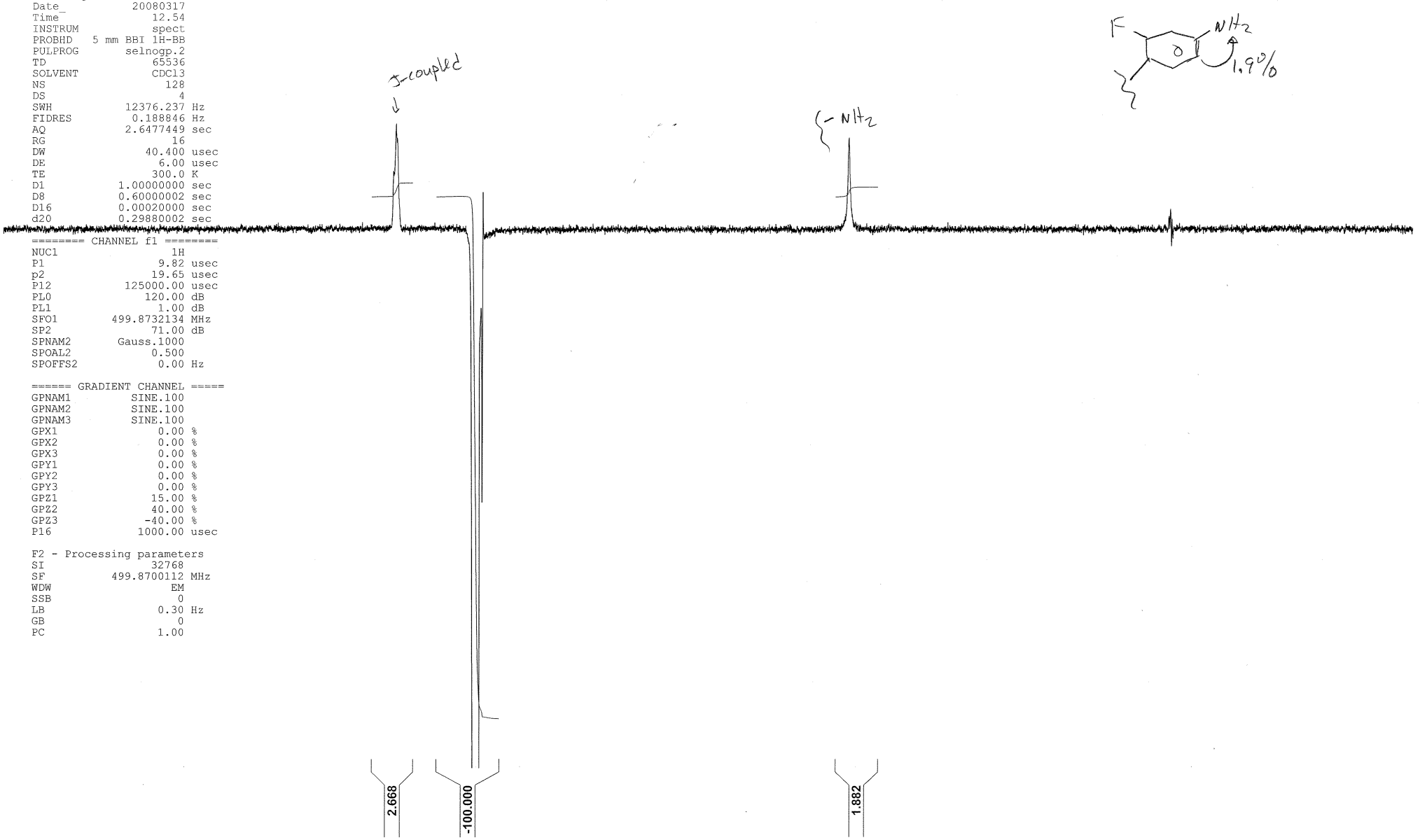
Current Data Parameters
NAME klab0279559-0010
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters
Date_ 20080317
Time 12.54
INSTRUM spect
PROBHD 5 mm BBI 1H-BB
PULPROG selnogp.2
TD 65536
SOLVENT CDCl3
NS 128
DS 4
SWH 12376.237 Hz
FIDRES 0.188846 Hz
AQ 2.6477449 sec
RG 16
DW 40.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec
D8 0.60000002 sec
D16 0.00020000 sec
d20 0.29880002 sec

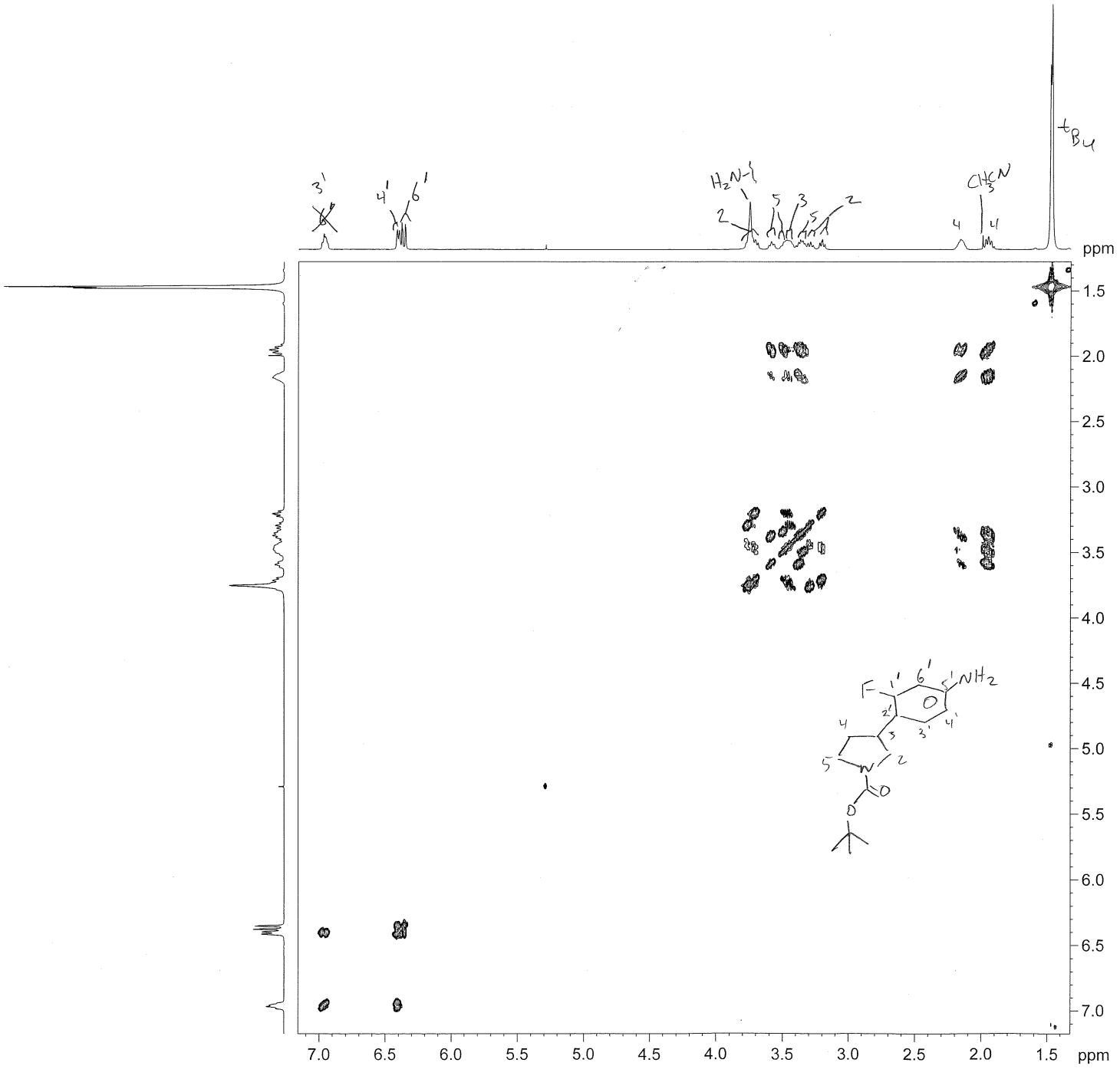
======== CHANNEL f1 ========
NUC1 1H
P1 9.82 usec
p2 19.65 usec
P12 125000.00 usec
PL0 120.00 dB
PL1 1.00 dB
SFO1 499.8732134 MHz
SP2 71.00 dB
SPNAM2 Gauss.1000
SPOAL2 0.500
SPOFFS2 0.00 Hz

====== GRADIENT CHANNEL =====
GPNAM1 SINE.100
GPNAM2 SINE.100
GPNAM3 SINE.100
GPX1 0.00 %
GPX2 0.00 %
GPX3 0.00 %
GPY1 0.00 %
GPY2 0.00 %
GPY3 0.00 %
GPZ1 15.00 %
GPZ2 40.00 %
GPZ3 -40.00 %
P16 1000.00 usec

F2 - Processing parameters
SI 32768
SF 499.8700112 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



klapars 0280287-0001 cdcl3
nmr500b gradient cosy-45

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Current Data Parameters
NAME      klab0279559-0010
EXPNO                    4
PROCNO                   1

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Time                 13.04
INSTRUM              spect
PROBHD   5 mm BBI 1H-BB
PULPROG          cosygpqf
TD                   2048
SOLVENT              CDCl3
NS                      2
DS                      8
SWH             3501.401 Hz
FIDRES          1.709668 Hz
AQ              0.2926472 sec
RG                    256
DW                142.800 usec
DE                  6.00 usec
TE                 300.0 K
d0            0.00000300 sec
D1            1.00000000 sec
d13           0.00000400 sec
D16           0.00020000 sec
IN0           0.00028560 sec

======== CHANNEL f1 ========
NUC1                  1H
P0                  4.91 usec
P1                  9.82 usec
PL1                 1.00 dB
SFO1         499.8721494 MHz

====== GRADIENT CHANNEL =====
GPNAM1          SINE.100
GPNAM2          SINE.100
GPX1                0.00 %
GPX2                0.00 %
GPY1                0.00 %
GPY2                0.00 %
GPZ1               10.00 %
GPZ2               10.00 %
P16              1000.00 usec

F1 - Acquisition parameters
ND0                     1
TD                    256
SFO1         499.8721 MHz
FIDRES       13.677346 Hz
SW               7.005 ppm
FnMODE              QF

F2 - Processing parameters
SI                   1024
SF         499.8700087 MHz
WDW                 SINE
SSB                    0
LB                  0.00 Hz
GB                     0
PC                  1.00

F1 - Processing parameters
SI                    512
MC2                    QF
SF         499.8700099 MHz
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SSB                    0
LB                  0.00 Hz
GB                     0
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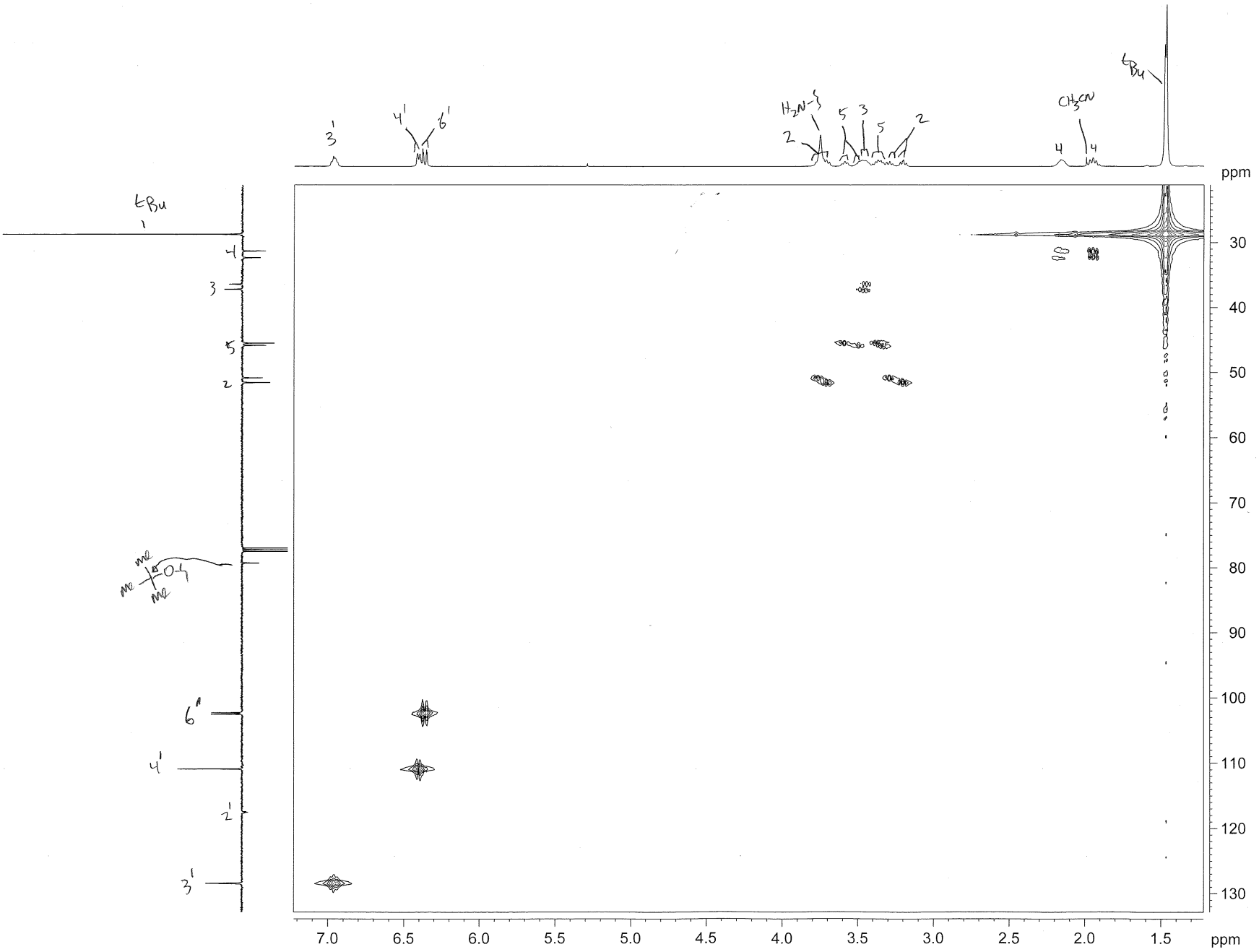
klapars 0280287-0001 cdcl3
nmr500b gradient hmqc



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EXPNO 5
PROCNO 1

F2 - Acquisition Parameters
Date_ 20080317
Time 13.16
INSTRUM spect
PROBHD 5 mm BBI 1H-BB
PULPROG hmqcgpqf
TD 4096
SOLVENT CDCl3
NS 2
DS 16
SWH 3501.401 Hz
FIDRES 0.854834 Hz
AQ 0.5851016 sec
RG 4096
DW 142.800 usec
DE 6.00 usec
TE 300.1 K
CNST2 145.0000000
d0 0.00000300 sec
D1 1.00000000 sec
d2 0.00344828 sec
d12 0.00002000 sec
d13 0.00000400 sec
D16 0.00010000 sec
DELTA1 0.00232428 sec
IN0 0.00002485 sec

======== CHANNEL f1 ========
NUC1 1H
P1 9.82 usec
p2 19.65 usec
PL1 1.00 dB
SFO1 499.8721494 MHz

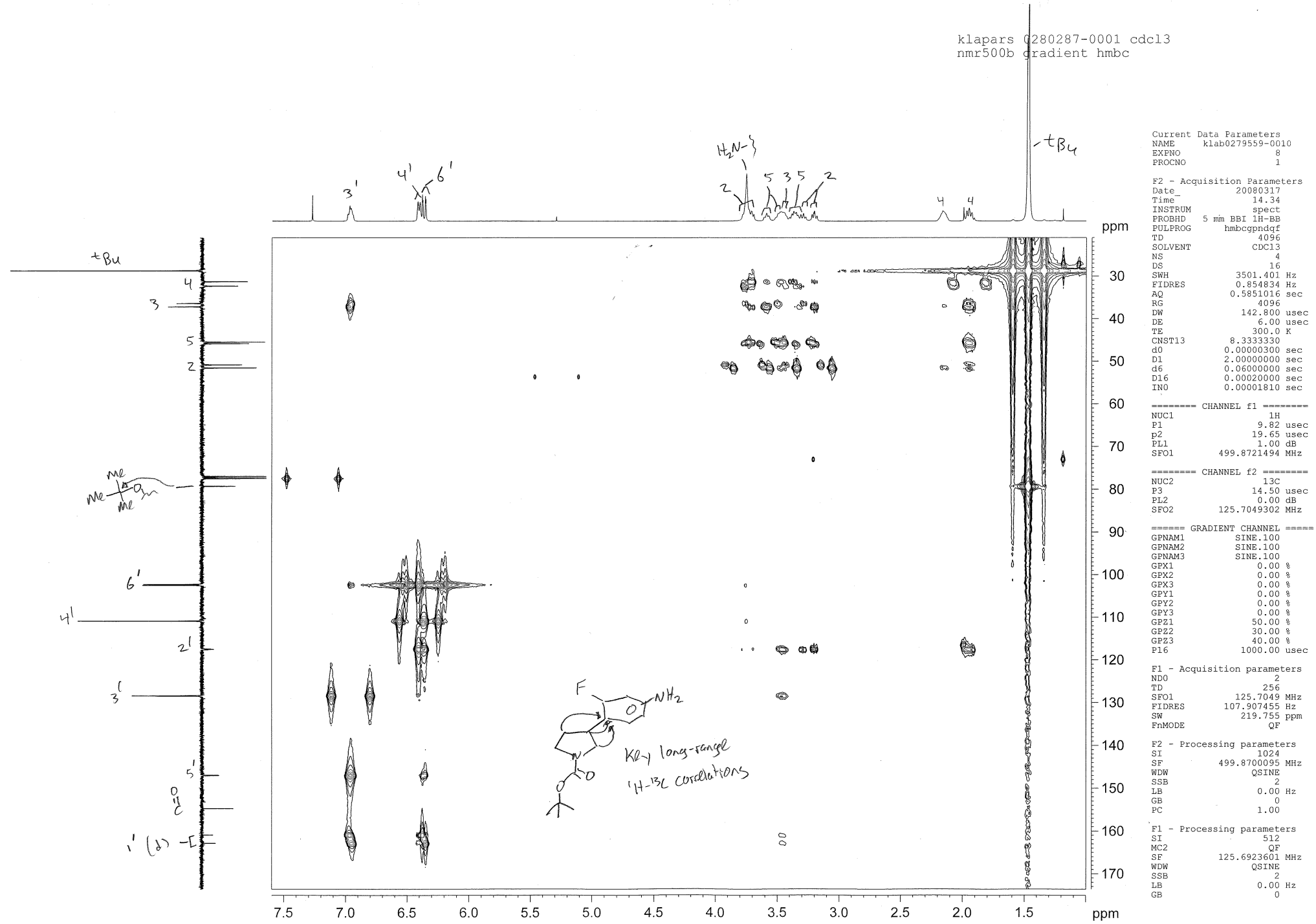
======== CHANNEL f2 ========
CPDPRG2 garp
NUC2 13C
P3 14.50 usec
PCPD2 80.00 usec
PL2 0.00 dB
PL12 15.00 dB
SFO2 125.7024164 MHz

====== GRADIENT CHANNEL =====
GPNAM1 SINE.100
GPNAM2 SINE.100
GPNAM3 SINE.100
GPX1 0.00 %
GPX2 0.00 %
GPX3 0.00 %
GPY1 0.00 %
GPY2 0.00 %
GPY3 0.00 %
GPZ1 50.00 %
GPZ2 30.00 %
GPZ3 40.10 %
P16 1000.00 usec

F1 - Acquisition parameters
ND0 2
TD 256
SFO1 125.7024 MHz
FIDRES 78.596581 Hz
SW 160.066 ppm
FnMODE QF

F2 - Processing parameters
SI 2048
SF 499.8700105 MHz
WDW QSINE
SSB 2
LB 0.00 Hz
GB 0
PC 1.40

F1 - Processing parameters
SI 512
MC2 QF
SF 125.6923758 MHz
WDW QSINE
SSB 2
LB 0.00 Hz
GB 0

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Current Data Parameters
NAME      klab0279559-0010
EXPNO                    8
PROCNO                   1

F2 - Acquisition Parameters
Date_              20080317
Time                 14.34
INSTRUM              spect
PROBHD    5 mm BBI 1H-BB
PULPROG       hmbcgpndqf
TD                   4096
SOLVENT             CDCl3
NS                      4
DS                     16
SWH            3501.401 Hz
FIDRES         0.854834 Hz
AQ             0.5851016 sec
RG                   4096
DW              142.800 usec
DE                6.00 usec
TE                300.0 K
CNST13         8.3333330
d0             0.00000300 sec
D1             2.00000000 sec
d6             0.06000000 sec
D16            0.00020000 sec
IN0            0.00001810 sec

======== CHANNEL f1 ========
NUC1                   1H
P1                  9.82 usec
p2                 19.65 usec
PL1                1.00 dB
SFO1         499.8721494 MHz

======== CHANNEL f2 ========
NUC2                  13C
P3                 14.50 usec
PL2                0.00 dB
SFO2         125.7049302 MHz

====== GRADIENT CHANNEL =====
GPNAM1           SINE.100
GPNAM2           SINE.100
GPNAM3           SINE.100
GPX1               0.00 %
GPX2               0.00 %
GPX3               0.00 %
GPY1               0.00 %
GPY2               0.00 %
GPY3               0.00 %
GPZ1              50.00 %
GPZ2              30.00 %
GPZ3              40.00 %
P16             1000.00 usec

F1 - Acquisition parameters
ND0                    2
TD                   256
SFO1         125.7049 MHz
FIDRES       107.907455 Hz
SW           219.755 ppm
FnMODE              QF

F2 - Processing parameters
SI                  1024
SF         499.8700095 MHz
WDW               QSINE
SSB                    2
LB              0.00 Hz
GB                     0
PC                  1.00

F1 - Processing parameters
SI                   512
MC2                   QF
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WDW               QSINE
SSB                    2
LB              0.00 Hz
GB                     0
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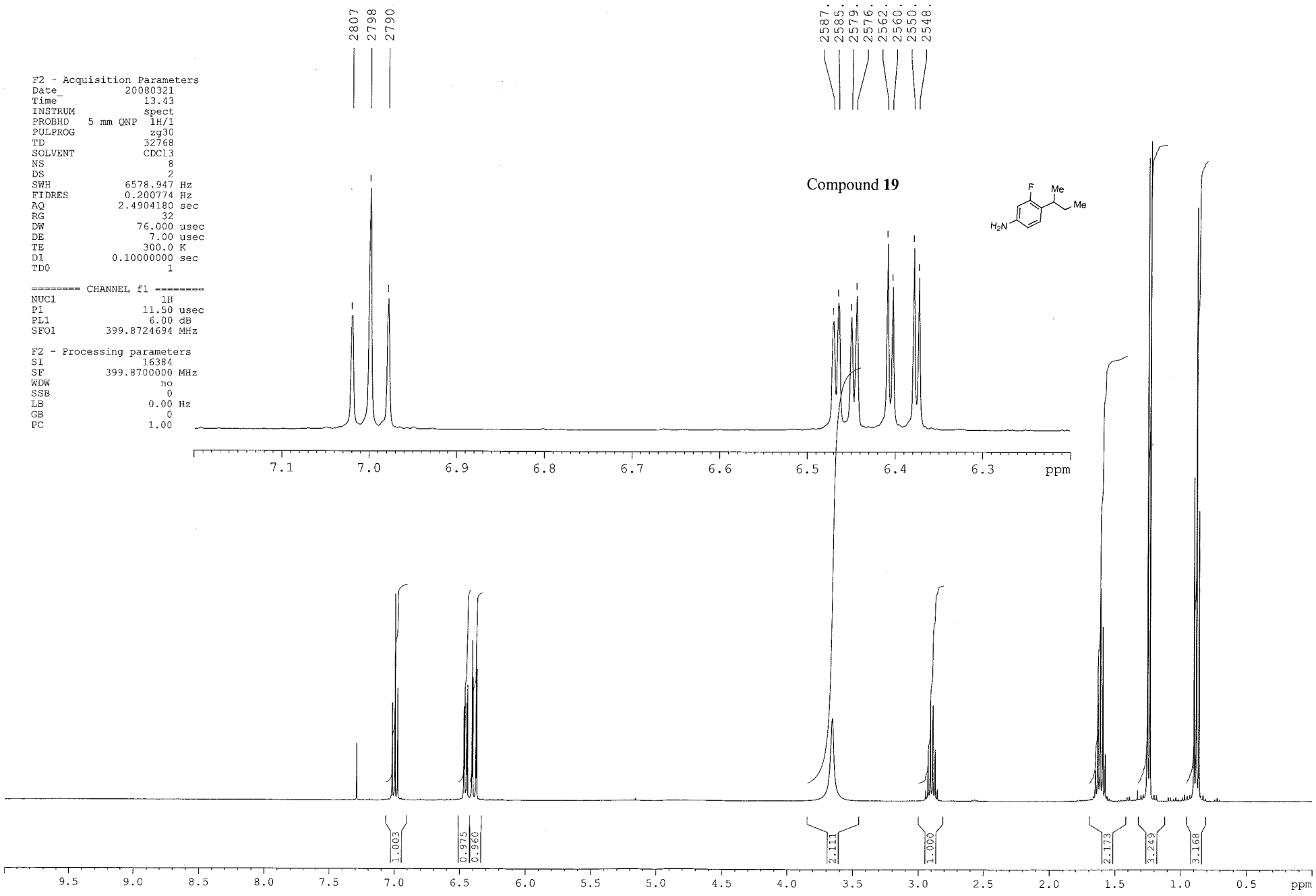
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2562.
2560.
2550.
2548.
F2 - Acquisition Parameters
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Time 13.43
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PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 8
DS 2
SWH 6578.947 Hz
FIDRES 0.200774 Hz
AQ 2.4904180 sec
RG 32
DW 76.000 usec
DE 7.00 usec
TE 300.0 K
D1 0.10000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 11.50 usec
PL1 6.00 dB
SFO1 399.8724694 MHz
F2 - Processing parameters
SI 16384
SF 399.8700000 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
Compound 19
F
Me
Me
H2N
7.1
7.0
6.9
6.8
6.7
6.6
6.5
6.4
6.3
ppm
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0.960
2.111
1.000
2.173
3.249
3.168
9.5
9.0
8.5
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
ppm

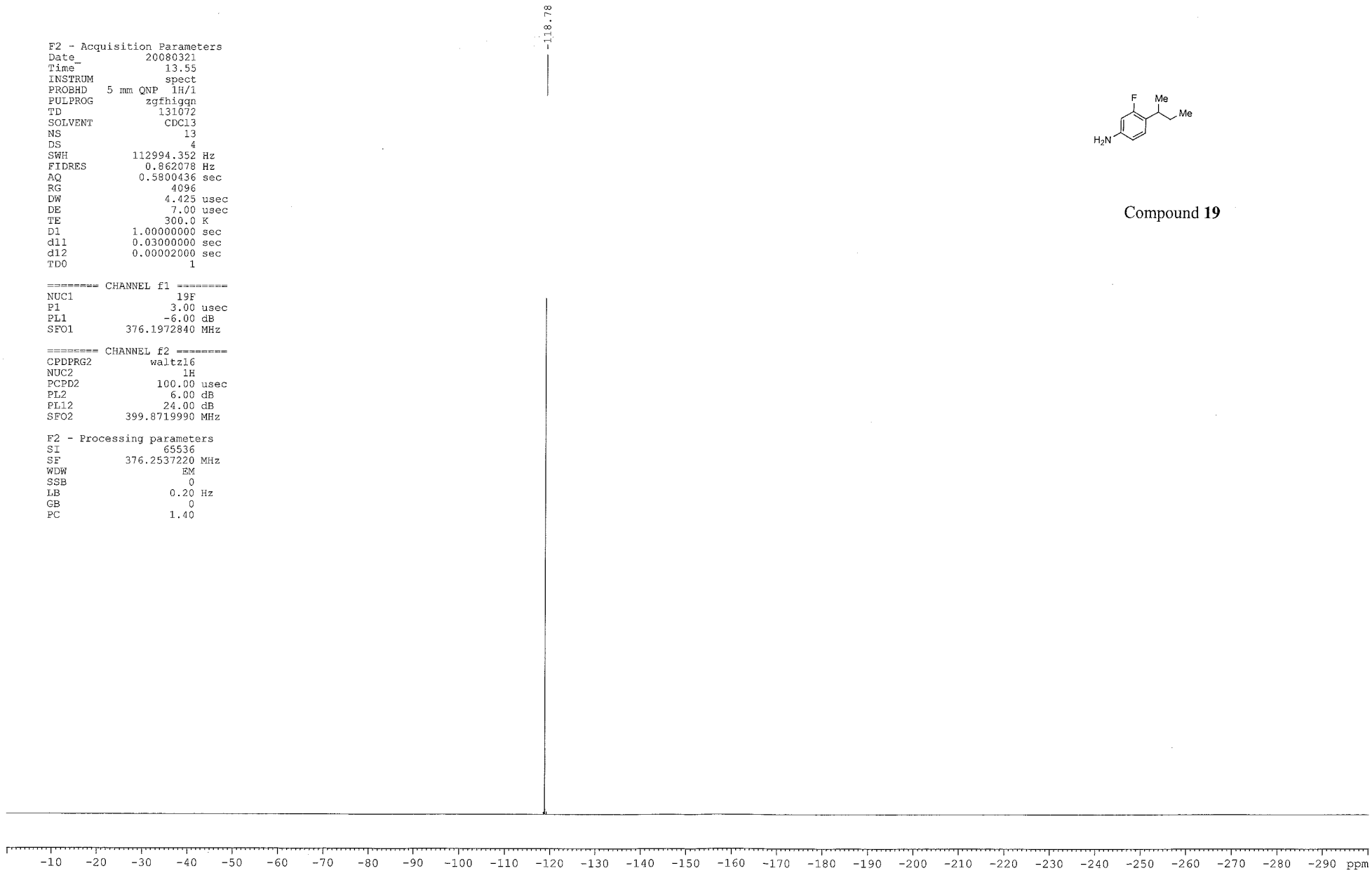
F2 - Acquisition Parameters
Date_ 20080321
Time 13.53
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgdc
TD 65536
SOLVENT CDCl3
NS 357
DS 4
SWH 26315.789 Hz
FIDRES 0.401547 Hz
AQ 1.2452340 sec
RG 8192
DW 19.000 usec
DE 7.00 usec
TE 300.0 K
D1 0.10000000 sec
d11 0.03000000 sec
TD0 40
======== CHANNEL f1 ========
NUC1 13C
P1 3.30 usec
PL1 6.00 dB
SFO1 100.5584512 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 100.00 usec
PL2 120.00 dB
PL12 24.00 dB
SFO2 399.8719994 MHz
F2 - Processing parameters
SI 32768
SF 100.5473910 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40
162.73
160.31
145.74
145.63
128.50
128.43
123.82
123.66
110.91
110.89
102.39
102.13
77.40
77.29
77.08
76.77
33.67
30.16
20.78
12.15
F
Me
Me
H2N
Compound 19
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
-10
ppm

```
F2 - Acquisition Parameters
Date_            20080321
Time               13.55
INSTRUM             spect
PROBHD   5 mm QNP  1H/1
PULPROG          zgfhigqn
TD                131072
SOLVENT             CDCl3
NS                     13
DS                      4
SWH           112994.352 Hz
FIDRES          0.862078 Hz
AQ              0.5800436 sec
RG                   4096
DW                  4.425 usec
DE                  7.00 usec
TE                 300.0 K
D1            1.00000000 sec
d11           0.03000000 sec
d12           0.00002000 sec
TD0                    1

======== CHANNEL f1 ========
NUC1                 19F
P1                  3.00 usec
PL1                -6.00 dB
SFO1         376.1972840 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                 1H
PCPD2             100.00 usec
PL2                 6.00 dB
PL12               24.00 dB
SFO2         399.8719990 MHz

F2 - Processing parameters
SI                 65536
SF           376.2537220 MHz
WDW                   EM
SSB                    0
LB                  0.20 Hz
GB                     0
PC                  1.40
```



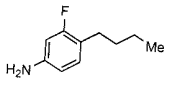
Compound **19**

F2 - Acquisition Parameters
Date_ 20070430
Time 9.09
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 8
DS 2
SWH 6578.947 Hz
FIDRES 0.200774 Hz
AQ 2.4904180 sec
RG 80.6
DW 76.000 usec
DE 6.00 usec
TE 300.0 K
D1 0.10000000 sec
MCREST 0.00000000 sec
MCWRK 0.01500000 sec

======== CHANNEL f1 ========
NUC1 1H
P1 10.75 usec
PL1 6.00 dB
SFO1 399.8724592 MHz

F2 - Processing parameters
SI 16384
SF 399.8700207 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 40.00 cm
CY 0.00 cm
F1P 9.750 ppm
F1 3898.73 Hz
F2P -0.250 ppm
P2 -99.97 Hz
PPMCM 0.25000 ppm/cm
HZCM 99.96751 Hz/cm



Compound **20**

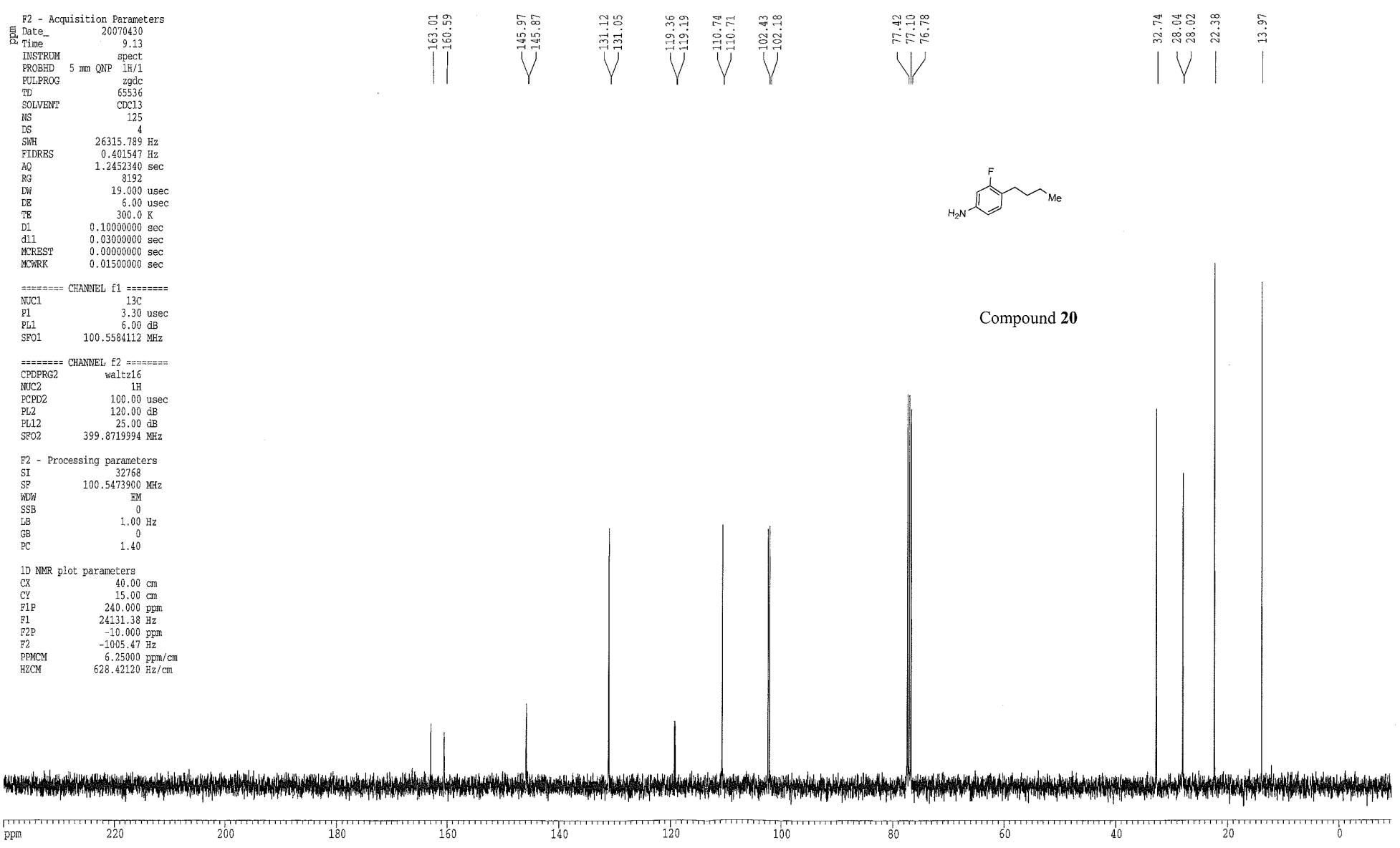
F2 - Acquisition Parameters
Date_ 20070430
Time 9.13
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgdc
TD 65536
SOLVENT CDCl3
NS 125
DS 4
SWH 26315.789 Hz
FIDRES 0.401547 Hz
AQ 1.2452340 sec
RG 8192
DW 19.000 usec
DE 6.00 usec
TE 300.0 K
D1 0.10000000 sec
d11 0.03000000 sec
MCREST 0.00000000 sec
MCWRK 0.01500000 sec

======== CHANNEL f1 ========
NUC1 13C
P1 3.30 usec
PL1 6.00 dB
SFO1 100.5584112 MHz

======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 100.00 usec
PL2 120.00 dB
PL12 25.00 dB
SFO2 399.8719994 MHz

F2 - Processing parameters
SI 32768
SF 100.5473900 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1D NMR plot parameters
CX 40.00 cm
CY 15.00 cm
F1P 240.000 ppm
F1 24131.38 Hz
F2P -10.000 ppm
F2 -1005.47 Hz
PPMCM 6.25000 ppm/cm
HZCM 628.42120 Hz/cm



F2 - Acquisition Parameters

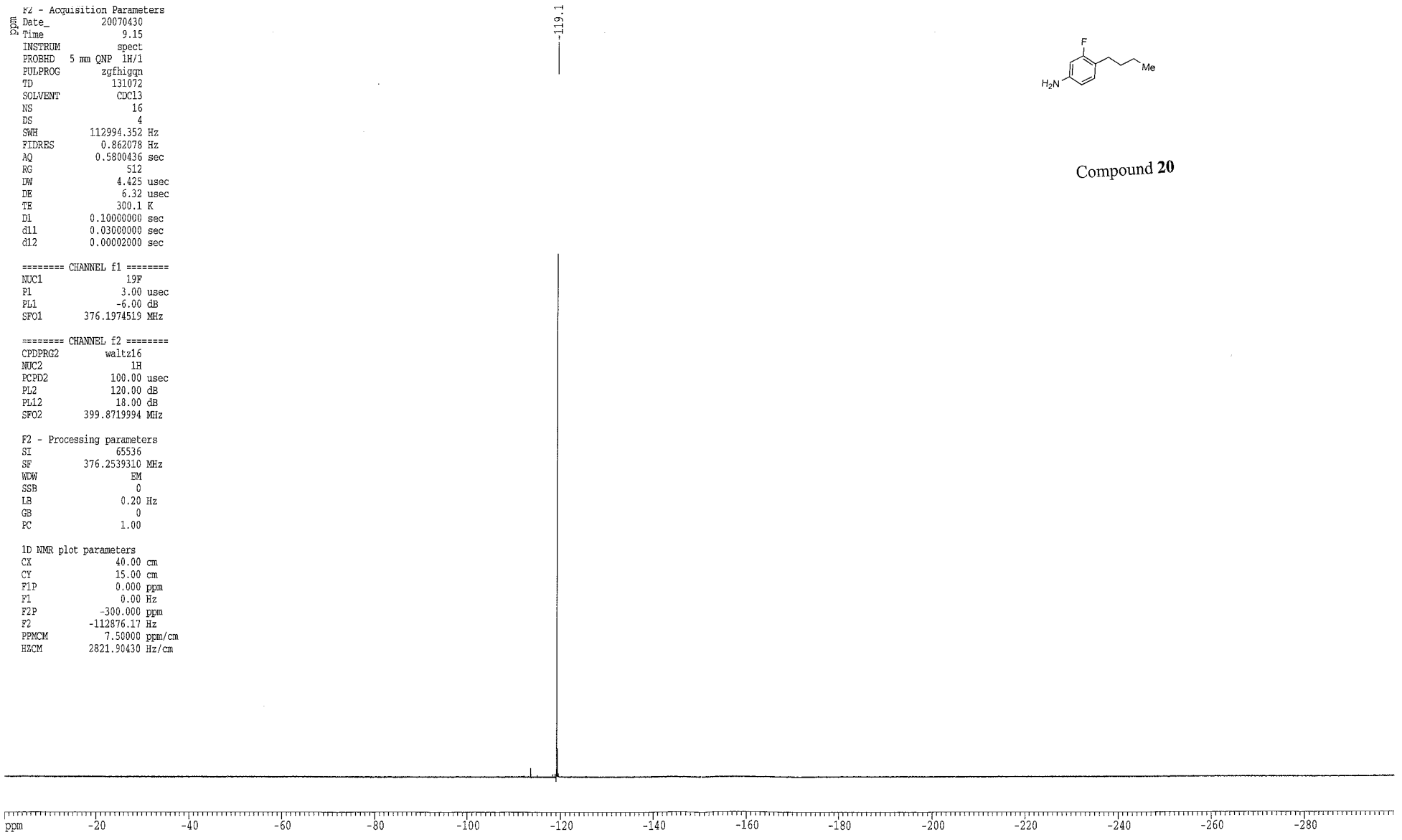
Date_	20070430
Time	9.15
INSTRUM	spect
PROBHD	5 mm QNP 1H/1
PULPROG	zgfhigqn
TD	131072
SOLVENT	CDCl3
NS	16
DS	4
SWH	112994.352 Hz
FIDRES	0.862078 Hz
AQ	0.5800436 sec
RG	512
DW	4.425 usec
DE	6.32 usec
TE	300.1 K
D1	0.10000000 sec
d11	0.03000000 sec
d12	0.00002000 sec
======== CHANNEL f1 ========	
NUC1	19F
P1	3.00 usec
PL1	-6.00 dB
SFO1	376.1974519 MHz
======== CHANNEL f2 ========	
CPDPRG2	waltz16
NUC2	1H
PCPD2	100.00 usec
PL2	120.00 dB
PL12	18.00 dB
SFO2	399.8719994 MHz

F2 - Processing parameters

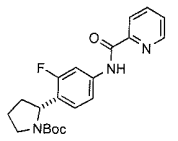
SI	65536
SF	376.2539310 MHz
WDW	EM
SSB	0
LB	0.20 Hz
GB	0
PC	1.00

1D NMR plot parameters

CX	40.00 cm
CY	15.00 cm
F1P	0.000 ppm
F1	0.00 Hz
F2P	-300.000 ppm
F2	-112876.17 Hz
PPMCM	7.50000 ppm/cm
HZCM	2821.90430 Hz/cm



Compound **20**



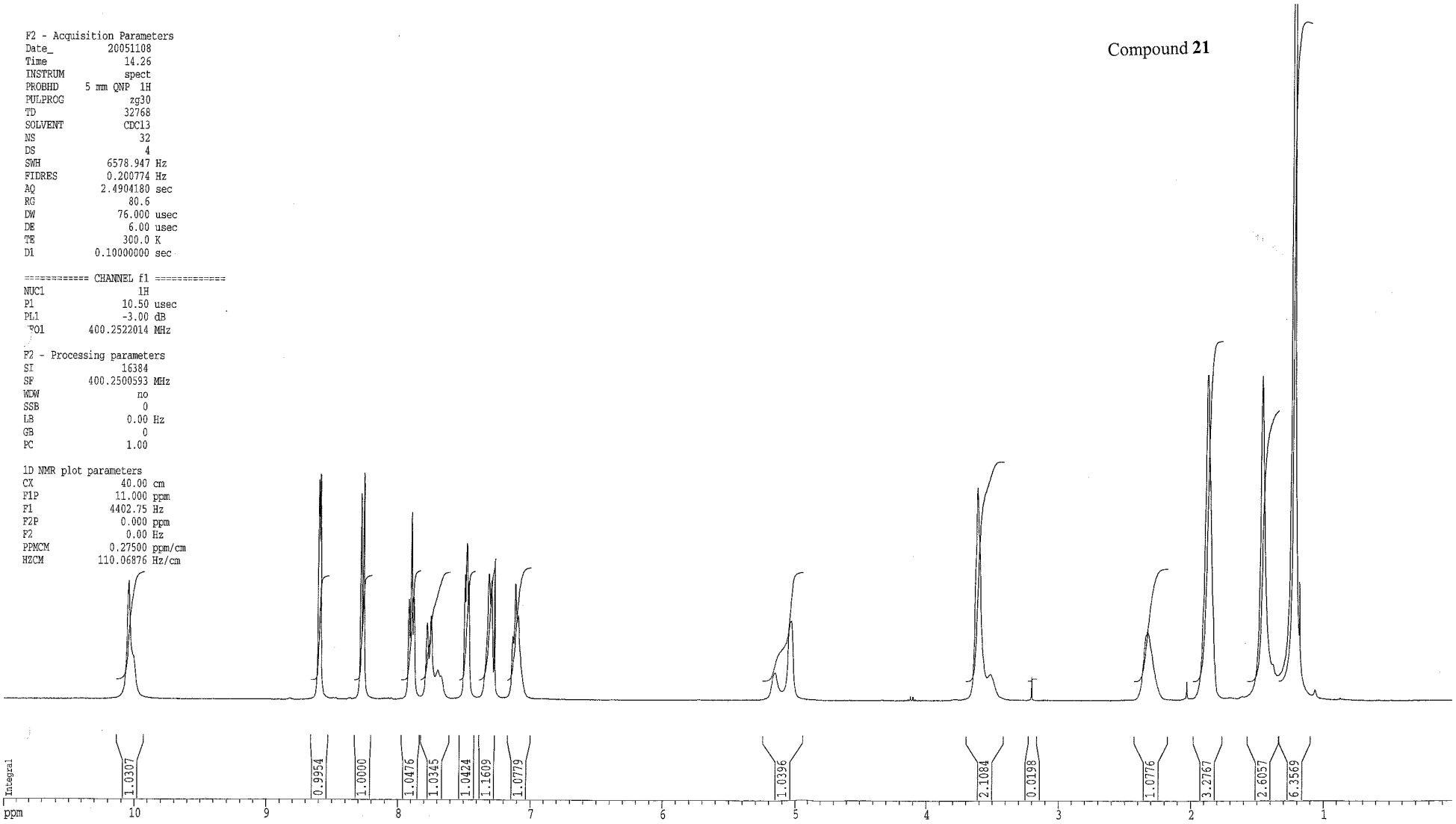
Compound **21**

```
F2 - Acquisition Parameters
Date_           20051108
Time              14.26
INSTRUM           spect
PROBHD     5 mm QNP  1H
PULPROG            zg30
TD                32768
SOLVENT           CDCl3
NS                   32
DS                    4
SWH            6578.947 Hz
FIDRES        0.200774 Hz
AQ            2.4904180 sec
RG                 80.6
DW                76.000 usec
DE                 6.00 usec
TE                300.0 K
D1           0.10000000 sec

============ CHANNEL f1 =============
NUC1                1H
P1                10.50 usec
PL1               -3.00 dB
SFO1       400.2522014 MHz

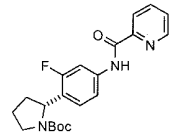
F2 - Processing parameters
SI                 16384
SF         400.2500593 MHz
WDW                   no
SSB                    0
LB                  0.00 Hz
GB                     0
PC                  1.00

1D NMR plot parameters
CX                40.00 cm
F1P               11.000 ppm
F1              4402.75 Hz
F2P                0.000 ppm
F2                 0.00 Hz
PPMCM          0.27500 ppm/cm
HZCM         110.06876 Hz/cm
```



F2 - Acquisition Parameters
Date_ 20051108
Time 17.28
INSTRUM spect
PROBHD 5 mm QNP 1H
PULPROG zgdc
TD 65536
SOLVENT CDCl3
NS 20000
DS 0
SWH 26315.789 Hz
FIDRES 0.401547 Hz
AQ 1.2452340 sec
RG 8192
DW 19.000 usec
DE 6.00 usec
TE 300.0 K
D1 0.10000000 sec
d11 0.03000000 sec
========== CHANNEL f1 ==========
NUC1 13C
P1 2.00 usec
PL1 0.00 dB
SFO1 100.6539737 MHz
========== CHANNEL f2 ==========
CPDPRG2 waltz16
NUC2 1H
PCPD2 93.00 usec
PL2 120.00 dB
PL12 18.00 dB
SFO2 400.2520012 MHz
F2 - Processing parameters
SI 32768
SF 100.6429588 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.40
1D NMR plot parameters
CX 40.00 cm
F1P 240.000 ppm
F1 24154.31 Hz
F2P -10.000 ppm
F2 -1006.43 Hz
PPMCM 6.25000 ppm/cm
HZCM 629.01849 Hz/cm
162.0
161.0
158.5
154.3
149.4
148.0
137.7
137.6
137.5
127.2
127.1
126.6
122.3
114.7
107.0
106.7
79.3
77.4
77.1
76.8
55.1
46.8
34.5
28.4
28.1
23.3
O
N
NH
F
NBoc
ppm
220
200
180
160
140
120
100
80
60
40
20
0

Compound **21**



Compound **21**

-116.90
-117.96

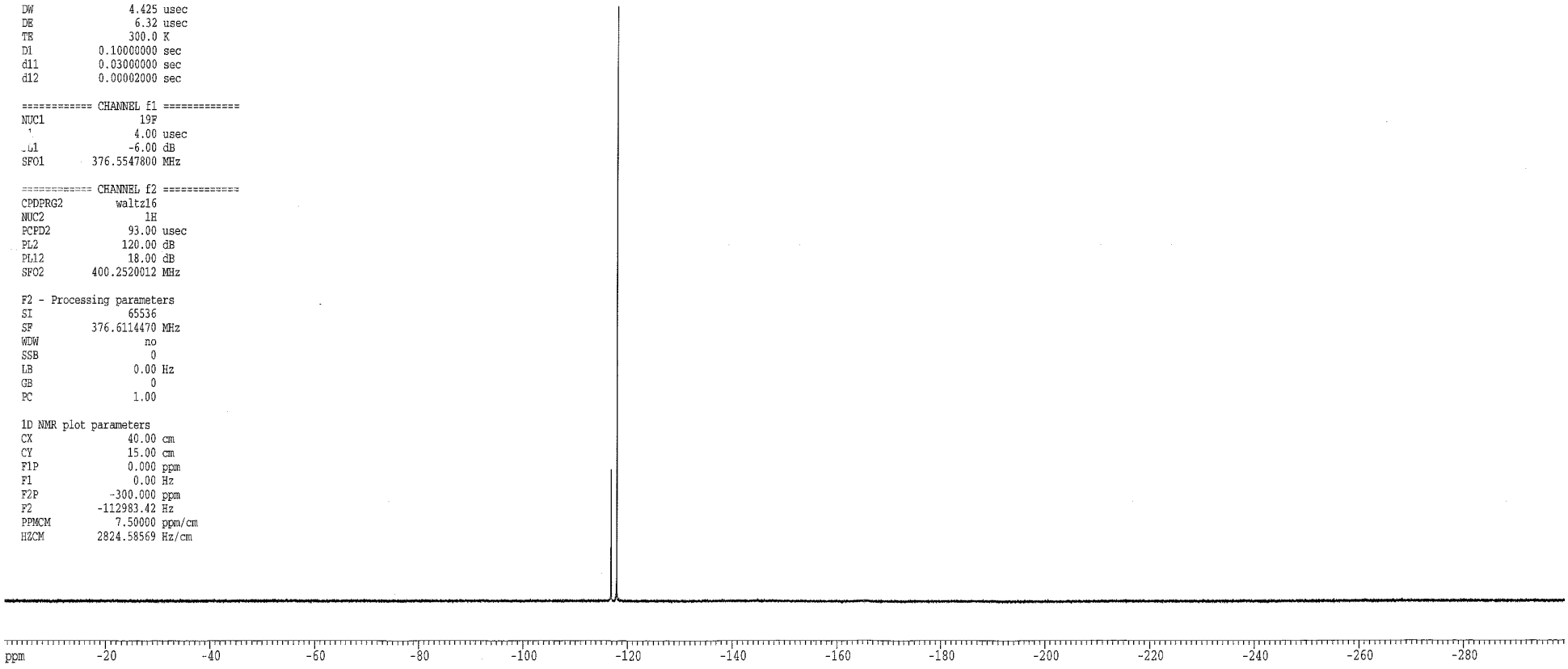
```
F2 - Acquisition Parameters
Date_          20051108
Time              14.56
INSTRUM             spect
PROBHD     5 mm QNP  1H
PULPROG         zgfhigqn
TD                131072
SOLVENT             CD3CN
NS                    149
DS                      4
SWH           112994.352 Hz
FIDRES          0.862078 Hz
AQ              0.5800436 sec
RG                 5792.6
DW                 4.425 usec
DE                  6.32 usec
TE                 300.0 K
D1            0.10000000 sec
d11           0.03000000 sec
d12           0.00002000 sec

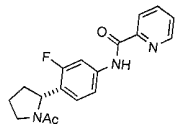
============ CHANNEL f1 =============
NUC1                19F
P1                 4.00 usec
PL1               -6.00 dB
SFO1        376.5547800 MHz

============ CHANNEL f2 =============
CPDPRG2         waltz16
NUC2                1H
PCPD2              93.00 usec
PL2               120.00 dB
PL12               18.00 dB
SFO2        400.2520012 MHz

F2 - Processing parameters
SI                 65536
SF          376.6114470 MHz
WDW                   no
SSB                    0
LB                  0.00 Hz
GB                     0
PC                  1.00

1D NMR plot parameters
CX                 40.00 cm
CY                 15.00 cm
F1P                 0.000 ppm
F1                  0.00 Hz
F2P              -300.000 ppm
F2           -112983.42 Hz
PPMCM            7.50000 ppm/cm
HZCM         2824.58569 Hz/cm
```





F2 - Acquisition Parameters

Date_	20051111
Time	11.51
INSTRUM	spect
PROBHD	5 mm QNP 1H
PULPROG	zg30
TD	32768
SOLVENT	CDCl3
NS	32
DS	4
SWH	6578.947 Hz
FIDRES	0.200774 Hz
AQ	2.4904180 sec
RG	71.8
DW	76.000 usec
DE	6.00 usec
TE	300.0 K
D1	0.10000000 sec
MCREST	0.00000000 sec
MCWRK	0.01500000 sec

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

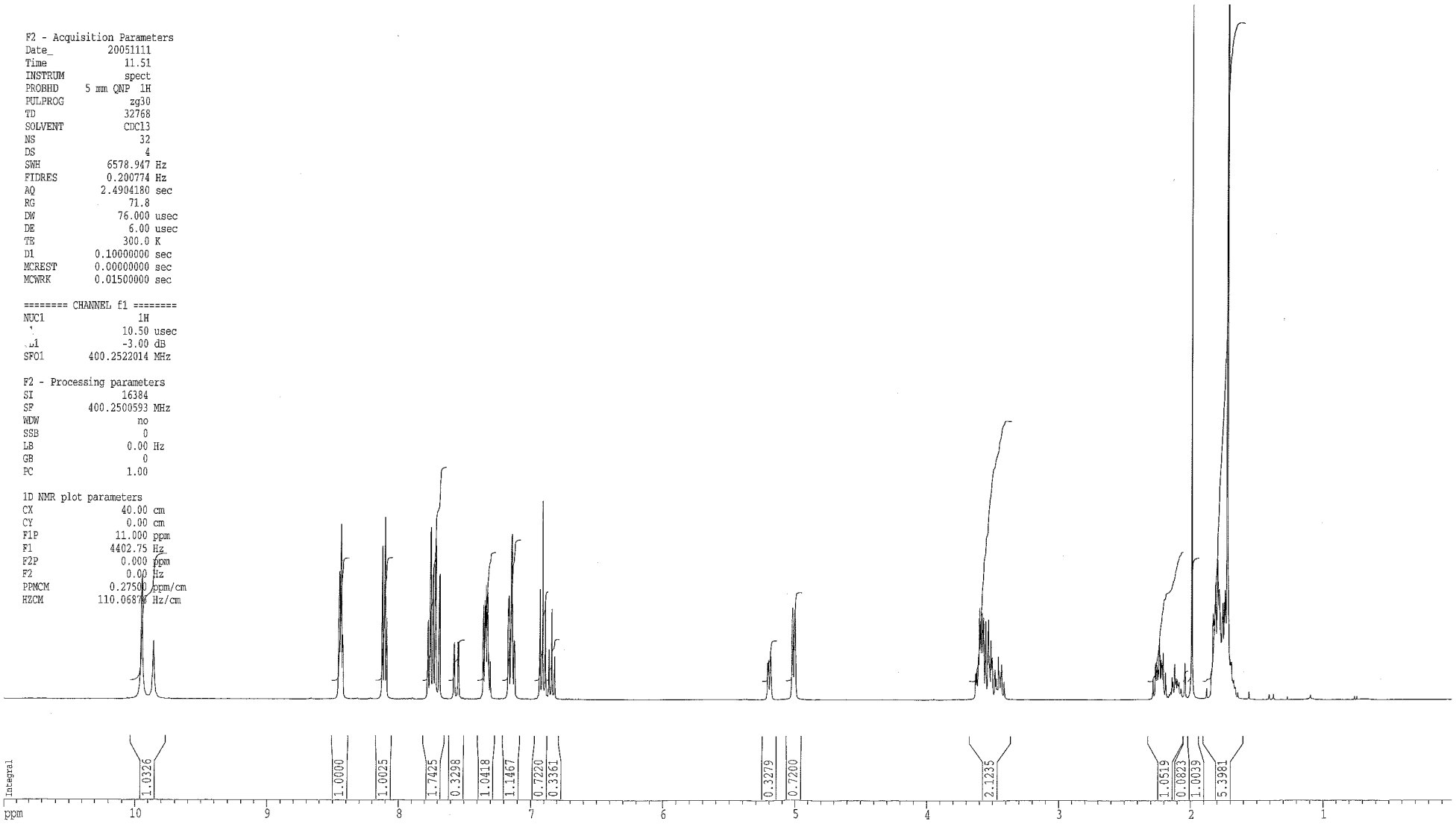
NUC1	1H
P1	10.50 usec
PL1	-3.00 dB
SFO1	400.2522014 MHz

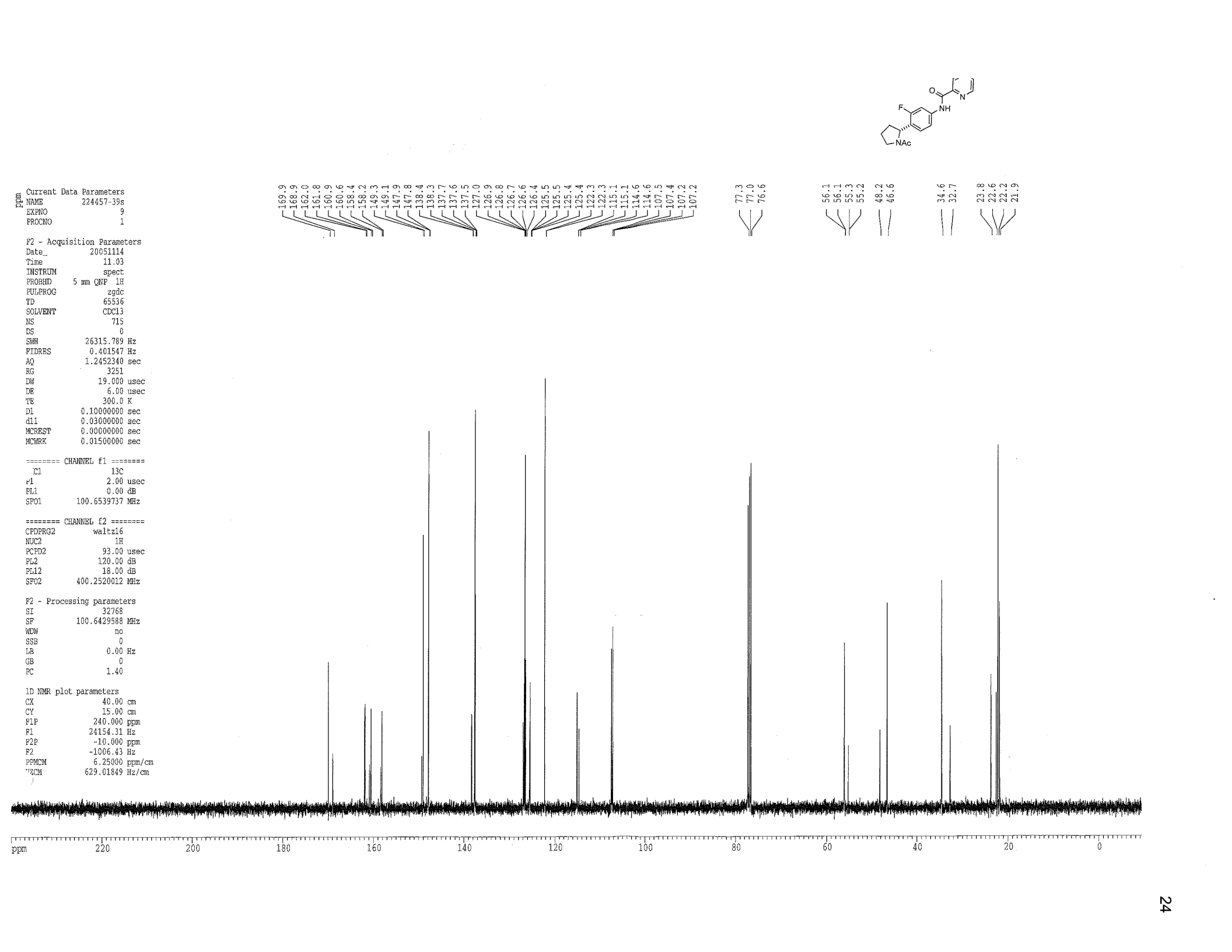
F2 - Processing parameters

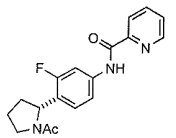
SI	16384
SF	400.2500593 MHz
WDW	no
SSB	0
LB	0.00 Hz
GB	0
PC	1.00

1D NMR plot parameters

CX	40.00 cm
CY	0.00 cm
F1P	11.000 ppm
F1	4402.75 Hz
F2P	0.000 ppm
F2	0.00 Hz
PPMCM	0.27500 ppm/cm
HZCM	110.06875 Hz/cm




Current Data Parameters
NAME 224457-39s
EXPNO 9
PROCNO 1
F2 - Acquisition Parameters
Date_ 20051114
Time 11.03
INSTRUM spect
PROBHD 5 mm QNP 1H
PULPROG zgdc
TD 65536
SOLVENT CDCl3
NS 715
DS 0
SWH 26315.789 Hz
FIDRES 0.401547 Hz
AQ 1.2452340 sec
RG 3251
DW 19.000 usec
DE 6.00 usec
TE 300.0 K
D1 0.10000000 sec
d11 0.03000000 sec
MCREST 0.00000000 sec
MCWRK 0.01500000 sec
======== CHANNEL f1 ========
C1 13C
p1 2.00 usec
PL1 0.00 dB
SFO1 100.6539737 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 93.00 usec
PL2 120.00 dB
PL12 18.00 dB
SFO2 400.2520012 MHz
F2 - Processing parameters
SI 32768
SF 100.6429588 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.40
1D NMR plot parameters
CX 40.00 cm
CY 15.00 cm
F1P 240.000 ppm
F1 24154.31 Hz
F2P -10.000 ppm
F2 -1006.43 Hz
PPMCM 6.25000 ppm/cm
HZCM 629.01849 Hz/cm
ppm
169.9
168.9
162.0
161.8
160.9
160.6
158.4
158.2
149.3
149.1
147.9
147.8
138.4
138.3
137.7
137.6
137.5
127.0
126.9
126.8
126.7
126.6
126.4
125.5
125.5
125.4
125.4
122.3
122.3
115.1
115.1
114.6
114.6
107.5
107.4
107.2
107.2
77.3
77.0
76.6
56.1
56.1
55.3
55.2
48.2
46.6
34.6
32.7
23.8
22.6
22.2
21.9
O
NH
F
N
NAc
ppm
220
200
180
160
140
120
100
80
60
40
20
0



-116.19
-116.78

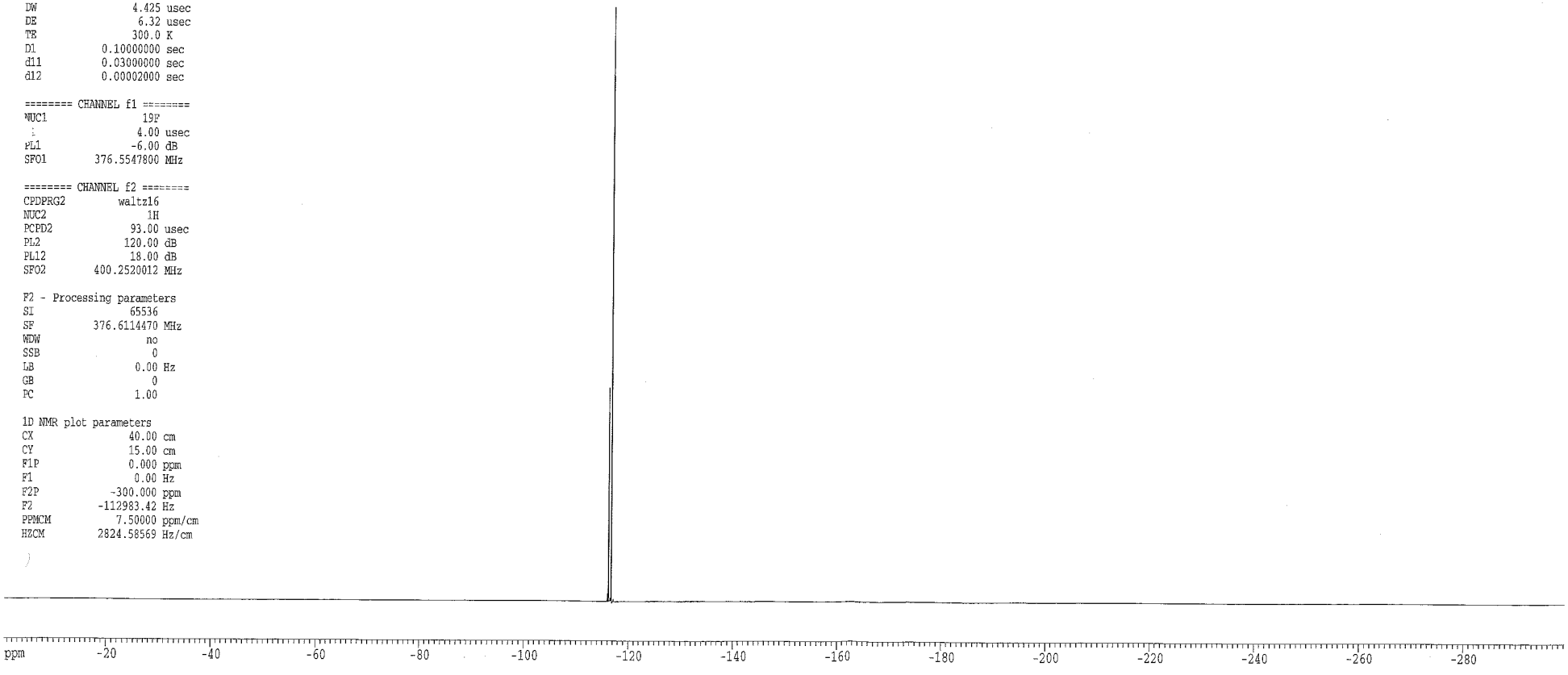
F2 - Acquisition Parameters
Date_ 20051114
Time 11.00
INSTRUM spect
PROBHD 5 mm QNP 1H
PULPROG zgfhigqn
TD 131072
SOLVENT CDCl3
NS 169
DS 4
SWH 112994.352 Hz
FIDRES 0.862078 Hz
AQ 0.5800436 sec
RG 2896.3
DW 4.425 usec
DE 6.32 usec
TE 300.0 K
D1 0.10000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

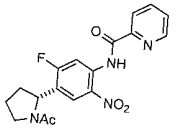
======== CHANNEL f1 ========
NUC1 19F
P1 4.00 usec
PL1 -6.00 dB
SFO1 376.5547800 MHz

======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 93.00 usec
PL2 120.00 dB
PL12 18.00 dB
SFO2 400.2520012 MHz

F2 - Processing parameters
SI 65536
SF 376.6114470 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 40.00 cm
CY 15.00 cm
F1P 0.000 ppm
F1 0.00 Hz
F2P -300.000 ppm
F2 -112983.42 Hz
PPMCM 7.50000 ppm/cm
HZCM 2824.58569 Hz/cm





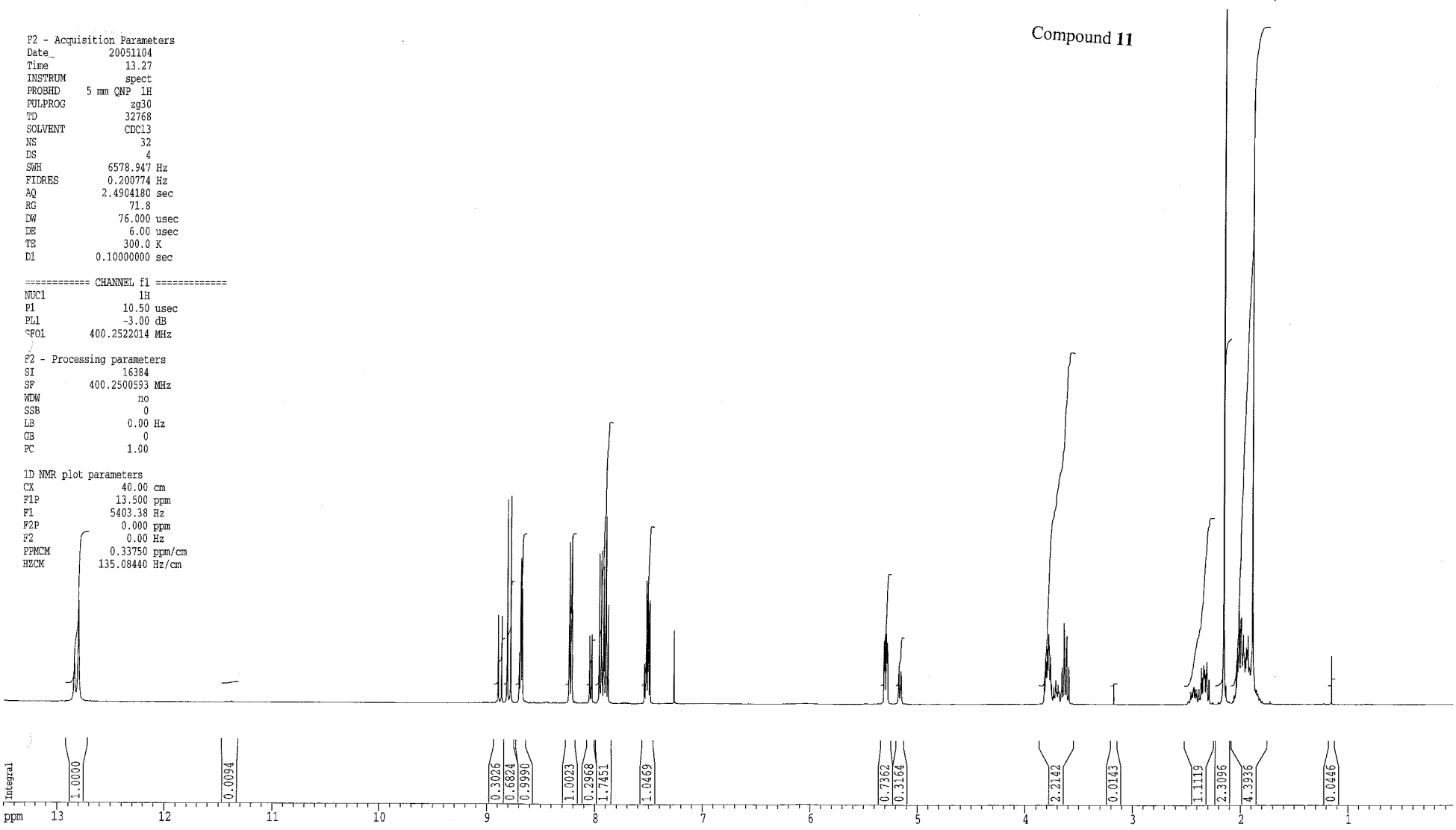
Compound **11**

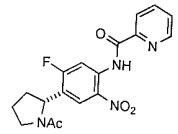
```
F2 - Acquisition Parameters
Date_           20051104
Time              13.27
INSTRUM           spect
PROBHD     5 mm QNP  1H
PULPROG            zg30
TD                32768
SOLVENT           CDCl3
NS                   32
DS                    4
SWH            6578.947 Hz
FIDRES        0.200774 Hz
AQ            2.4904180 sec
RG                71.8
DW               76.000 usec
DE                6.00 usec
TE               300.0 K
D1           0.10000000 sec

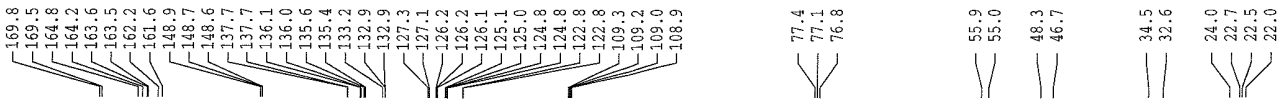
============ CHANNEL f1 ============
NUC1                 1H
P1                10.50 usec
PL1               -3.00 dB
SFO1       400.2522014 MHz

F2 - Processing parameters
SI                16384
SF         400.2500593 MHz
WDW                  no
SSB                   0
LB                 0.00 Hz
GB                    0
PC                 1.00

1D NMR plot parameters
CX                40.00 cm
F1P               13.500 ppm
F1              5403.38 Hz
F2P                0.000 ppm
F2                 0.00 Hz
PPMCM          0.33750 ppm/cm
HZCM         135.08440 Hz/cm
```







Compound **11**

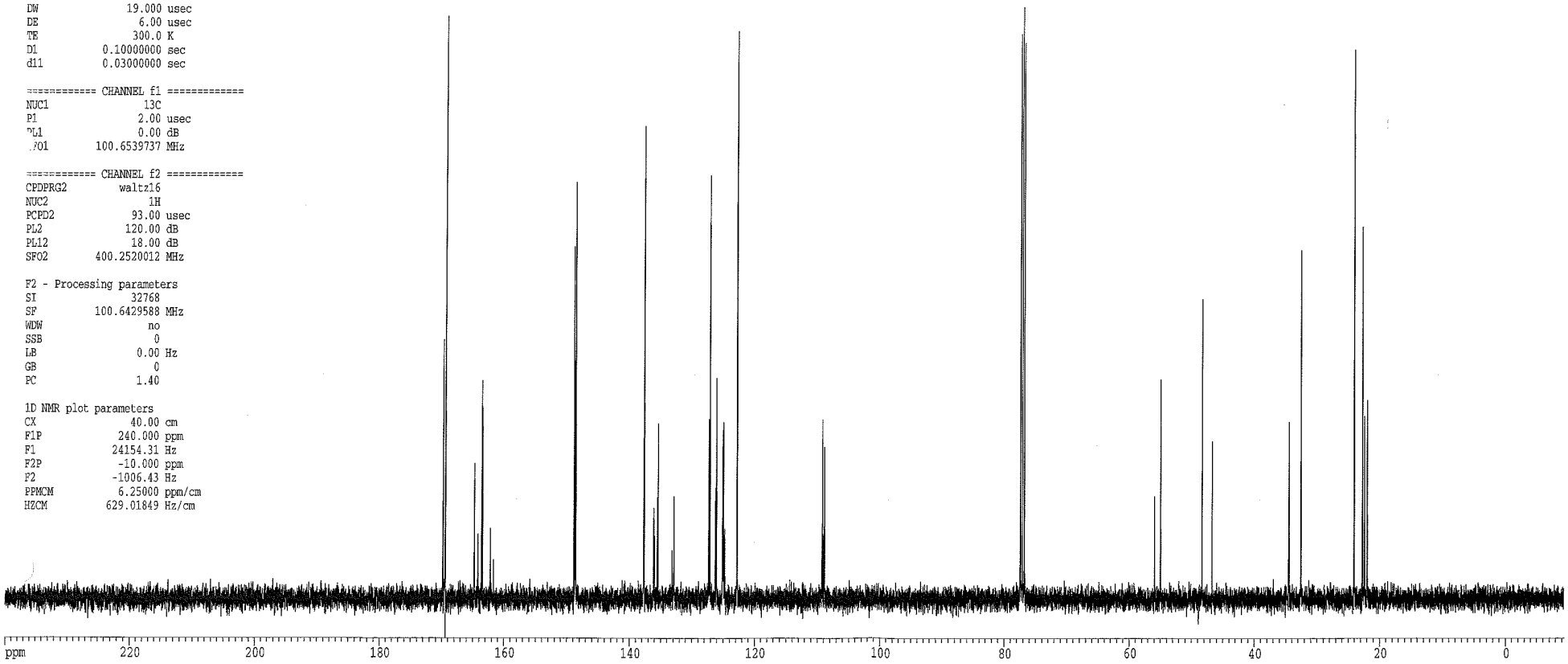
```
F2 - Acquisition Parameters
Date_           20051104
Time               13.37
INSTRUM            spect
PROBHD     5 mm QNP  1H
PULPROG            zgdc
TD                65536
SOLVENT           CDCl3
NS                  816
DS                    0
SWH           26315.789 Hz
FIDRES         0.401547 Hz
AQ             1.2452340 sec
RG               23170.5
DW                19.000 usec
DE                 6.00 usec
TE                300.0 K
D1            0.10000000 sec
d11           0.03000000 sec

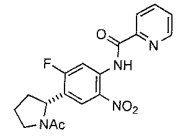
============ CHANNEL f1 =============
NUC1                13C
P1                 2.00 usec
PL1                0.00 dB
SFO1        100.6539737 MHz

============ CHANNEL f2 =============
CPDPRG2         waltz16
NUC2                1H
PCPD2             93.00 usec
PL2              120.00 dB
PL12              18.00 dB
SFO2        400.2520012 MHz

F2 - Processing parameters
SI                 32768
SF          100.6429588 MHz
WDW                   no
SSB                    0
LB                 0.00 Hz
GB                     0
PC                 1.40

1D NMR plot parameters
CX                40.00 cm
F1P              240.000 ppm
F1             24154.31 Hz
F2P              -10.000 ppm
F2             -1006.43 Hz
PPMCM             6.25000 ppm/cm
HZCM           629.01849 Hz/cm
```





Compound **11**

-102.97
-103.80

F2 - Acquisition Parameters

Date_	20051104
Time	13.52
INSTRUM	spect
PROBHD	5 mm QNP 1H
PULPROG	zgfhigqn
TD	131072
SOLVENT	CD3CN
NS	103
DS	4
SWH	112994.352 Hz
FIDRES	0.862078 Hz
AQ	0.5800436 sec
RG	2896.3
DW	4.425 usec
DE	6.32 usec
TE	300.0 K
D1	0.10000000 sec
d11	0.03000000 sec
d12	0.00002000 sec

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

NUC1	19F
P1	4.00 usec
PL1	-6.00 dB
SFO1	376.5547800 MHz

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

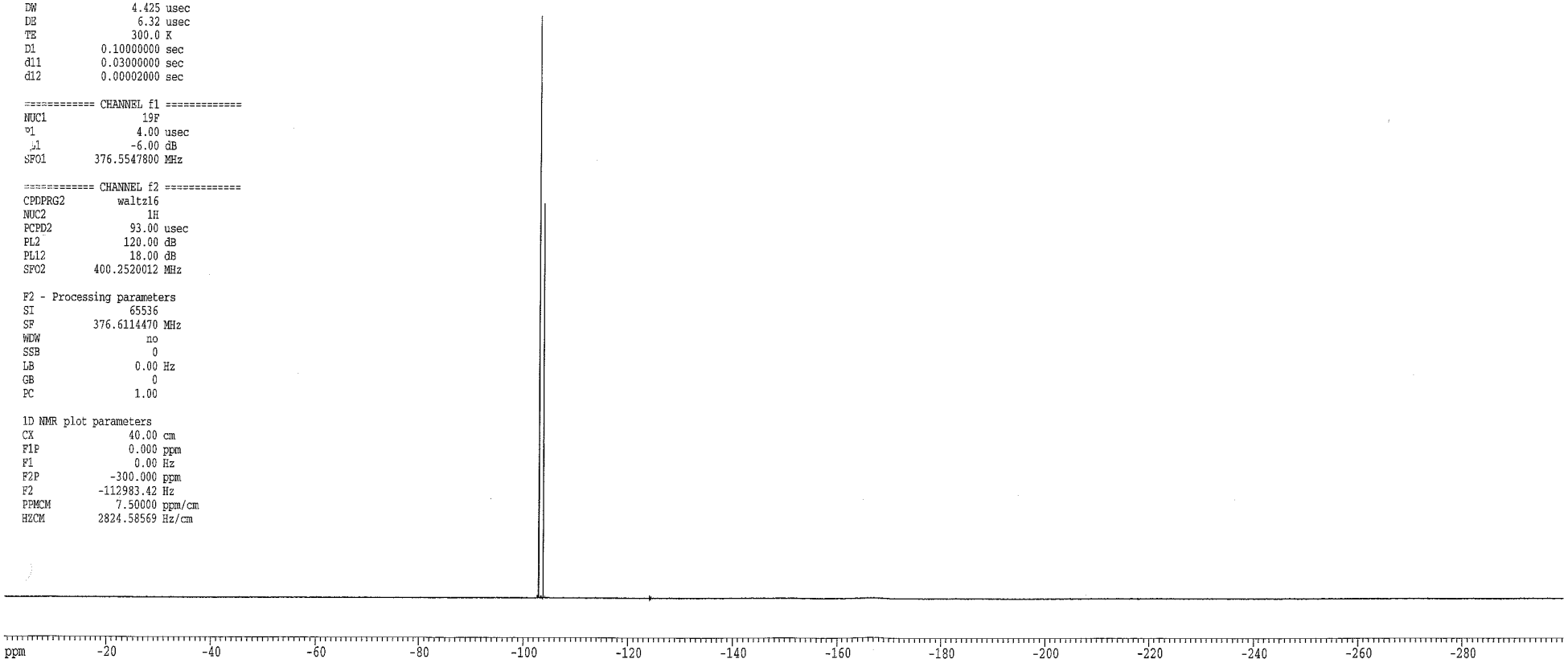
CPDPRG2	waltz16
NUC2	1H
PCPD2	93.00 usec
PL2	120.00 dB
PL12	18.00 dB
SFO2	400.2520012 MHz

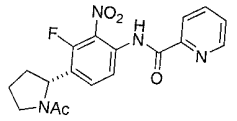
F2 - Processing parameters

SI	65536
SF	376.6114470 MHz
WDW	no
SSB	0
LB	0.00 Hz
GB	0
PC	1.00

1D NMR plot parameters

CX	40.00 cm
F1P	0.000 ppm
F1	0.00 Hz
F2P	-300.000 ppm
F2	-112983.42 Hz
PPMCM	7.50000 ppm/cm
HZCM	2824.58569 Hz/cm





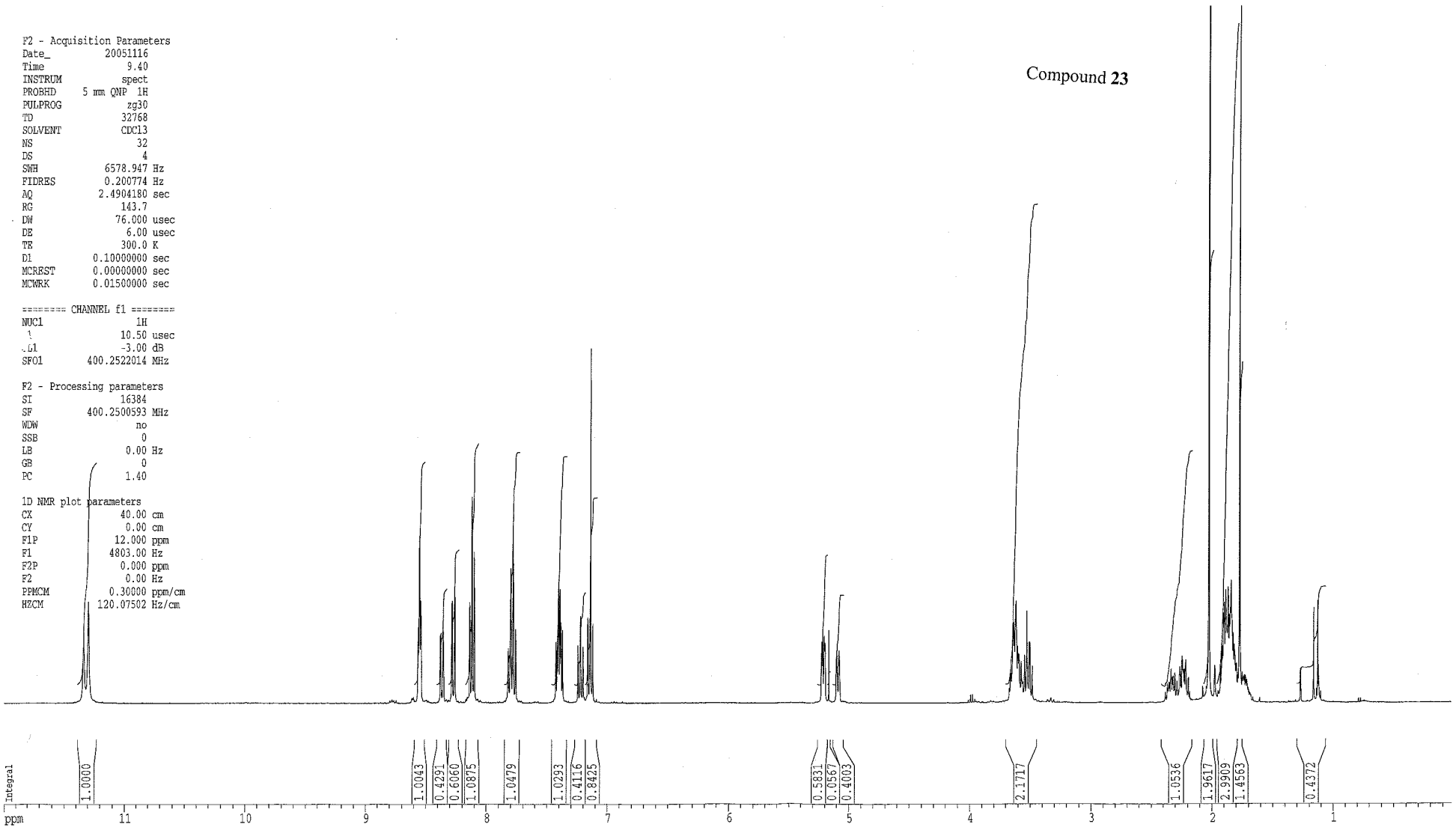
Compound **23**

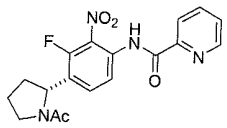
```
F2 - Acquisition Parameters
Date_           20051116
Time               9.40
INSTRUM           spect
PROBHD     5 mm QNP  1H
PULPROG            zg30
TD                32768
SOLVENT           CDCl3
NS                   32
DS                    4
SWH            6578.947 Hz
FIDRES        0.200774 Hz
AQ            2.4904180 sec
RG                143.7
DW               76.000 usec
DE                6.00 usec
TE               300.0 K
D1           0.10000000 sec
MCREST       0.00000000 sec
MCWRK        0.01500000 sec

======== CHANNEL f1 ========
NUC1                1H
P1                10.50 usec
PL1               -3.00 dB
SFO1        400.2522014 MHz

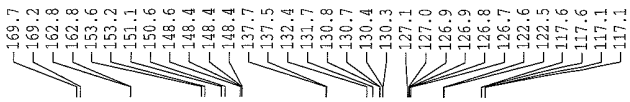
F2 - Processing parameters
SI                16384
SF          400.2500593 MHz
WDW                  no
SSB                   0
LB                 0.00 Hz
GB                    0
PC                 1.40

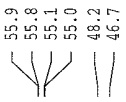
1D NMR plot parameters
CX                40.00 cm
CY                 0.00 cm
F1P               12.000 ppm
F1              4803.00 Hz
F2P                0.000 ppm
F2                 0.00 Hz
PPMCM          0.30000 ppm/cm
HZCM         120.07502 Hz/cm
```

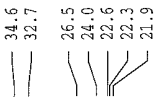




Compound **23**







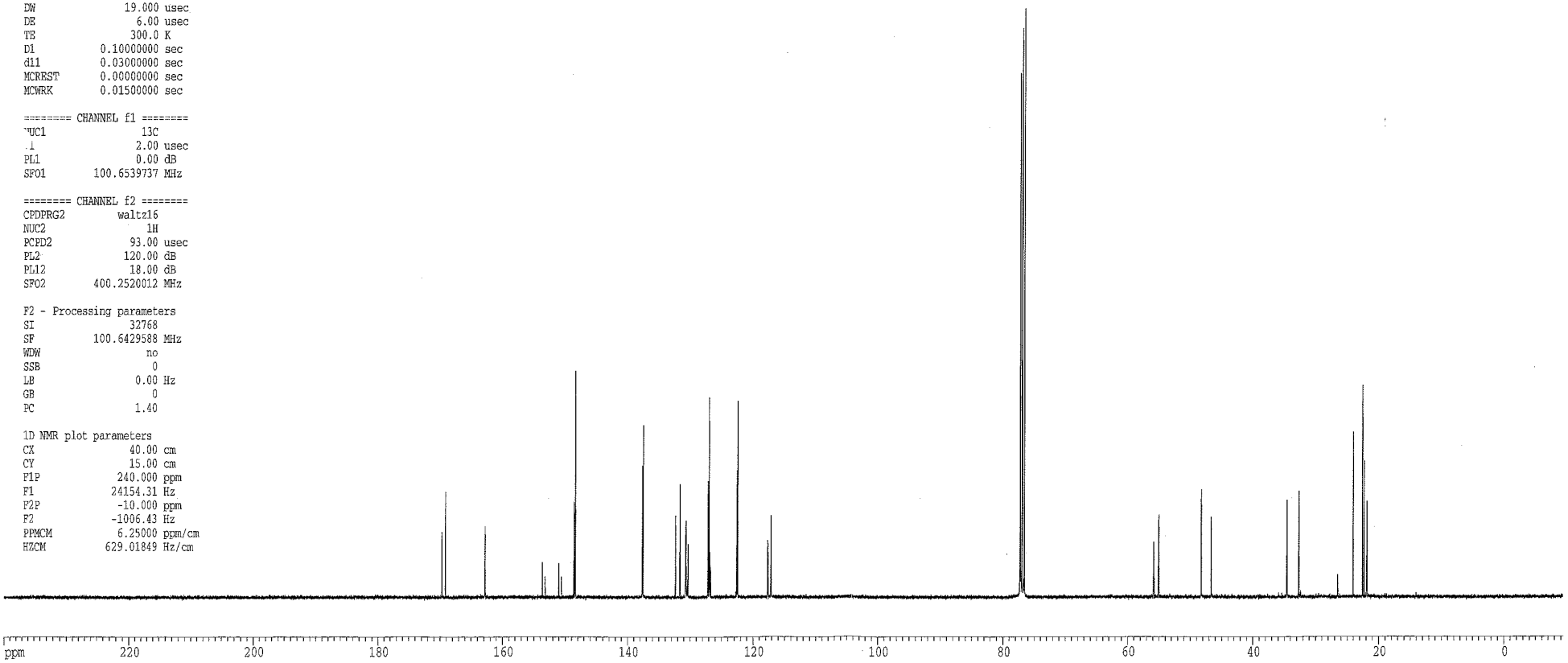

```
F2 - Acquisition Parameters
Date_           20051116
Time               17.27
INSTRUM             spect
PROBHD     5 mm QNP  1H
PULPROG             zgdc
TD                 65536
SOLVENT            CDCl3
NS                 38584
DS                     0
SWH            26315.789 Hz
FIDRES         0.401547 Hz
AQ             1.2452340 sec
RG                  8192
DW                19.000 usec
DE                 6.00 usec
TE                300.0 K
D1            0.10000000 sec
d11           0.03000000 sec
MCREST        0.00000000 sec
MCWRK         0.01500000 sec

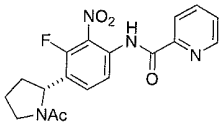
======== CHANNEL f1 ========
NUC1                13C
P1                 2.00 usec
PL1                0.00 dB
SFO1         100.6539737 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                1H
PCPD2              93.00 usec
PL2               120.00 dB
PL12               18.00 dB
SFO2         400.2520012 MHz

F2 - Processing parameters
SI                 32768
SF           100.6429588 MHz
WDW                   no
SSB                    0
LB                 0.00 Hz
GB                     0
PC                 1.40

1D NMR plot parameters
CX                40.00 cm
CY                15.00 cm
F1P              240.000 ppm
F1             24154.31 Hz
F2P              -10.000 ppm
F2             -1006.43 Hz
PPMCM             6.25000 ppm/cm
HZCM           629.01849 Hz/cm
```





Compound **23**

-124.26
-124.60

F2 - Acquisition Parameters

Date_	20051116
Time	11.55
INSTRUM	spect
PROBHD	5 mm QNP 1H
PULPROG	zgfhigqn
TD	131072
SOLVENT	CDCl3
NS	152
DS	4
SWH	112994.352 Hz
FIDRES	0.862078 Hz
AQ	0.5800436 sec
RG	2580.3
DW	4.425 usec
DE	6.32 usec
TE	300.0 K
D1	0.10000000 sec
d11	0.03000000 sec
d12	0.00002000 sec

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

NUC1	19F
P1	4.00 usec
PL1	-6.00 dB
SFO1	376.5547800 MHz

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

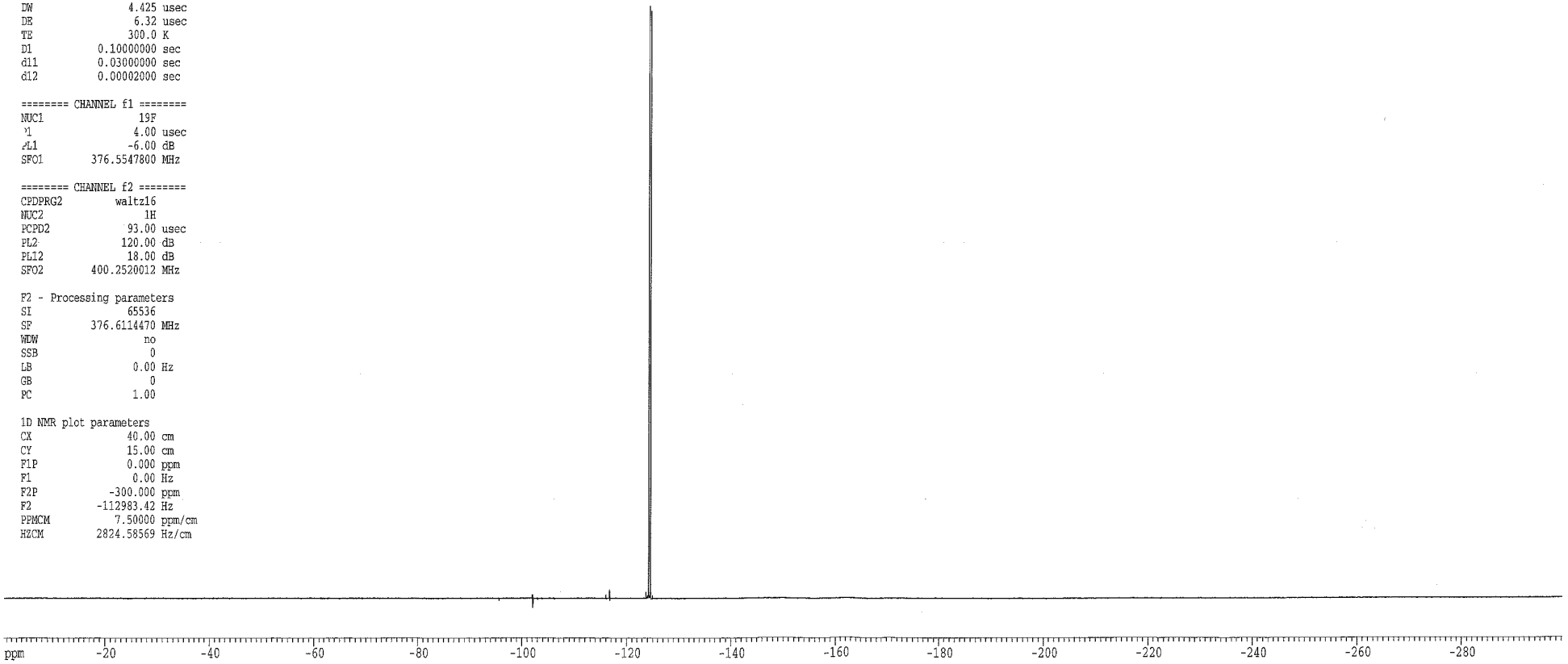
CPDPRG2	waltz16
NUC2	1H
PCPD2	93.00 usec
PL2	120.00 dB
PL12	18.00 dB
SFO2	400.2520012 MHz

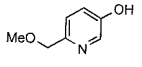
F2 - Processing parameters

SI	65536
SF	376.6114470 MHz
WDW	no
SSB	0
LB	0.00 Hz
GB	0
PC	1.00

1D NMR plot parameters

CX	40.00 cm
CY	15.00 cm
F1P	0.000 ppm
F1	0.00 Hz
F2P	-300.000 ppm
F2	-112983.42 Hz
PPMCM	7.50000 ppm/cm
HZCM	2824.58569 Hz/cm





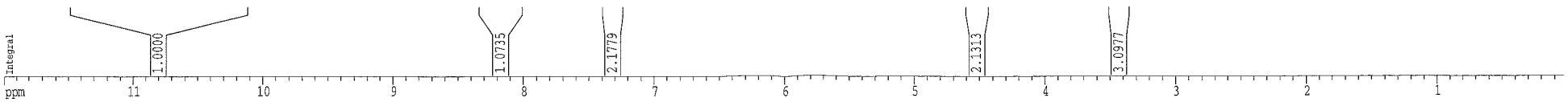
Compound **9**

```
F2 - Acquisition Parameters
Date_          20070502
Time               9.31
INSTRUM           spect
PROBHD   5 mm QNP  1H/1
PULPROG            zg30
TD                32768
SOLVENT           CDCl3
NS                    8
DS                    2
SWH            6578.947 Hz
FIDRES         0.200774 Hz
AQ             2.4904180 sec
RG                  181
DW                76.000 usec
DE                 6.00 usec
TE                300.0 K
D1           0.10000000 sec
MCREST       0.00000000 sec
MCWRK        0.01500000 sec

======== CHANNEL f1 ========
NUC1                1H
P1                10.75 usec
PL1                6.00 dB
SFO1        399.8724592 MHz

F2 - Processing parameters
SI                 16384
SF          399.8700207 MHz
WDW                   no
SSB                    0
LB                 0.00 Hz
GB                     0
PC                 1.00

1D NMR plot parameters
CX                40.00 cm
CY                 0.00 cm
F1P               12.000 ppm
F1              4798.44 Hz
F2P                0.000 ppm
F2                 0.00 Hz
PPMCM          0.30000 ppm/cm
HZCM         119.96101 Hz/cm
```



F2 - Acquisition Parameters

Date_	20070502
Time	9.36
INSTRUM	spect
PROBHD	5 mm QNP 1H/1
PULPROG	zgdc
TD	65536
SOLVENT	CDC13
NS	171
DS	4
SWH	26315.789 Hz
FIDRES	0.401547 Hz
AQ	1.2452340 sec
RG	8192
DW	19.000 usec
DE	6.00 usec
TE	300.0 K
D1	0.10000000 sec
d11	0.03000000 sec
MCREST	0.00000000 sec
MCWRK	0.01500000 sec

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

NUC1	13C
P1	3.30 usec
PL1	6.00 dB
SFO1	100.5584112 MHz

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

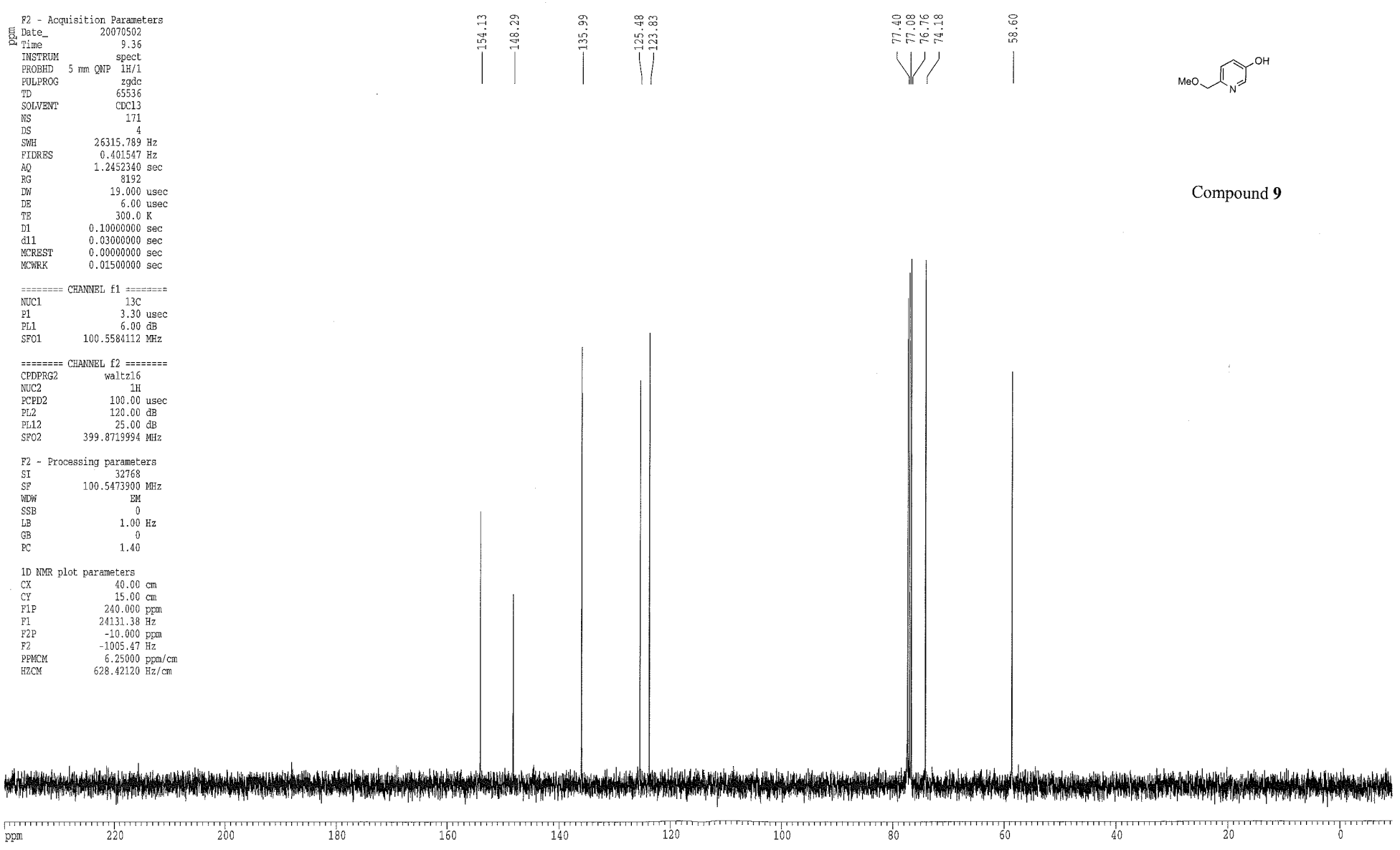
CPDPRG2	waltz16
NUC2	1H
PCPD2	100.00 usec
PL2	120.00 dB
PL12	25.00 dB
SFO2	399.8719994 MHz

F2 - Processing parameters

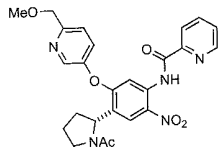
SI	32768
SF	100.5473900 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

1D NMR plot parameters

CX	40.00 cm
CY	15.00 cm
F1P	240.000 ppm
F1	24131.38 Hz
F2P	-10.000 ppm
F2	-1005.47 Hz
PPMCM	6.25000 ppm/cm
HZCM	628.42120 Hz/cm



Compound **9**



Compound **22**

```
F2 - Acquisition Parameters
Date_            20070523
Time                17.07
INSTRUM             spect
PROBHD   5 mm QNP  1H/1
PULPROG              zg30
TD                  32768
SOLVENT             CDCl3
NS                      8
DS                      2
SWH              6578.947 Hz
FIDRES           0.200774 Hz
AQ               2.4904180 sec
RG                    128
DW                 76.000 usec
DE                  6.00 usec
TE                 300.0 K
D1            0.10000000 sec
MCREST        0.00000000 sec
MCWRK         0.01500000 sec

======== CHANNEL f1 ========
NUC1                   1H
P1                 10.75 usec
PL1                 6.00 dB
SFO1         399.8724592 MHz

F2 - Processing parameters
SI                  16384
SF           399.8700207 MHz
WDW                    no
SSB                     0
LB                   0.00 Hz
GB                      0
PC                   1.40

1D NMR plot parameters
CX                  40.00 cm
CY                   0.00 cm
F1P                14.000 ppm
F1                5598.18 Hz
F2P                 0.000 ppm
F2                0.00 Hz
PPMCM          0.35000 ppm/cm
HZCM         139.95451 Hz/cm
```

nmr400b c-13 (h-1 decoupled)

F2 - Acquisition Parameters

Date_	20070523
Time	17.23
INSTRUM	spect
PROBHD	5 mm QNP 1H/1
PULPROG	zgdc
TD	65536
SOLVENT	CDCl3
NS	636
DS	4
SWH	26315.789 Hz
FIDRES	0.401547 Hz
AQ	1.2452340 sec
RG	8192
DW	19.000 usec
DE	6.00 usec
TE	300.0 K
D1	0.10000000 sec
d11	0.03000000 sec
MCREST	0.00000000 sec
MCWRK	0.01500000 sec

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

NUC1	13C
P1	3.30 usec
PL1	6.00 dB
SFO1	100.5584112 MHz

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

CPDPRG2	waltz16
NUC2	1H
PCPD2	100.00 usec
PL2	120.00 dB
PL12	25.00 dB
SFO2	399.8719994 MHz

F2 - Processing parameters

SI	32768
SF	100.5473900 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

1D NMR plot parameters

CX	40.00 cm
CY	15.00 cm
F1P	240.000 ppm
F1	24131.38 Hz
F2P	-10.000 ppm
F2	-1005.47 Hz
PPMCM	6.25000 ppm/cm
HZCM	628.42120 Hz/cm

ppm 169.88 169.51 163.62 163.47 159.68 159.20 155.88 155.19 150.76 150.16 149.13 148.92 148.78 148.69 141.69 141.60 137.70 137.63 136.02 135.52 132.19 129.03 128.49 127.97 127.85 127.22 127.05 124.71 124.62 122.75 122.72 122.50 122.47 108.94 108.40

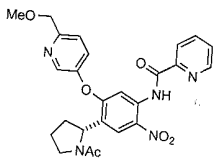
77.43 77.12 76.80 75.08 75.01

58.92 58.84 56.83 55.74

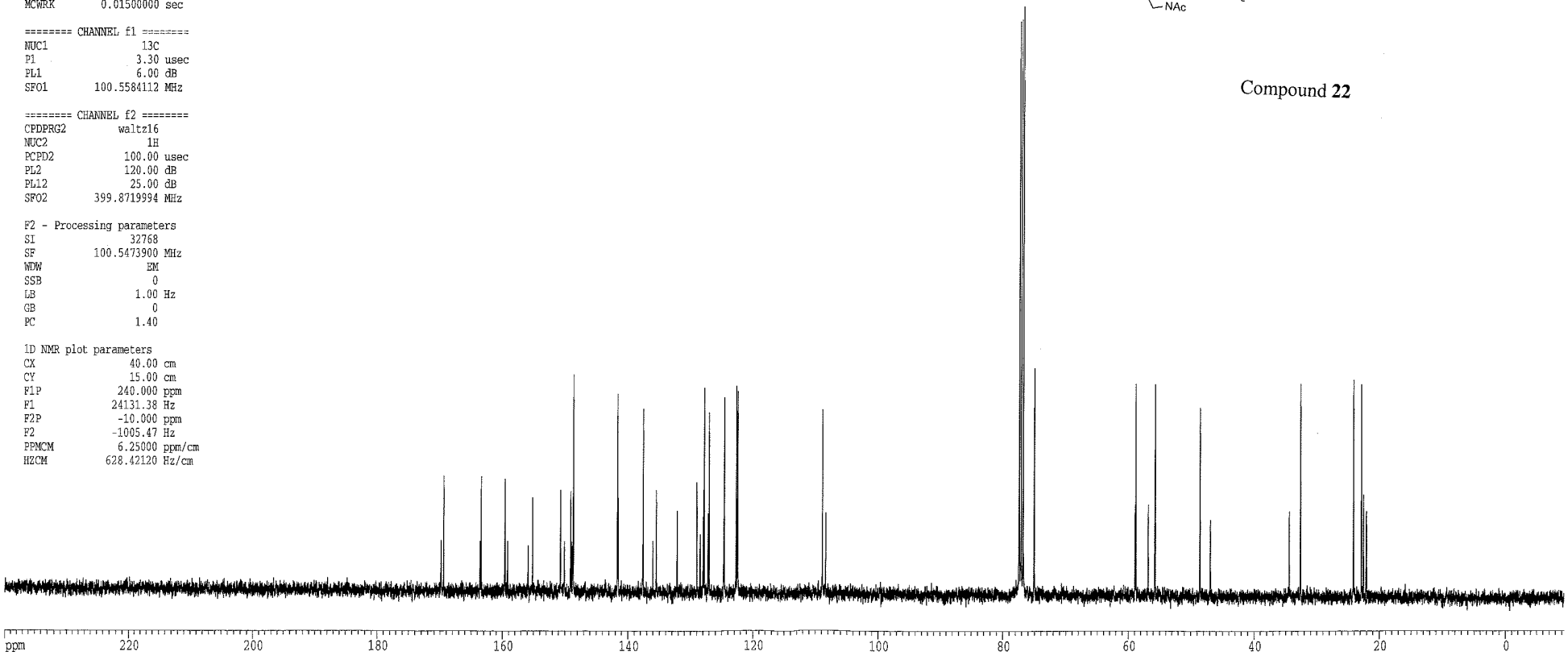
48.58 46.95

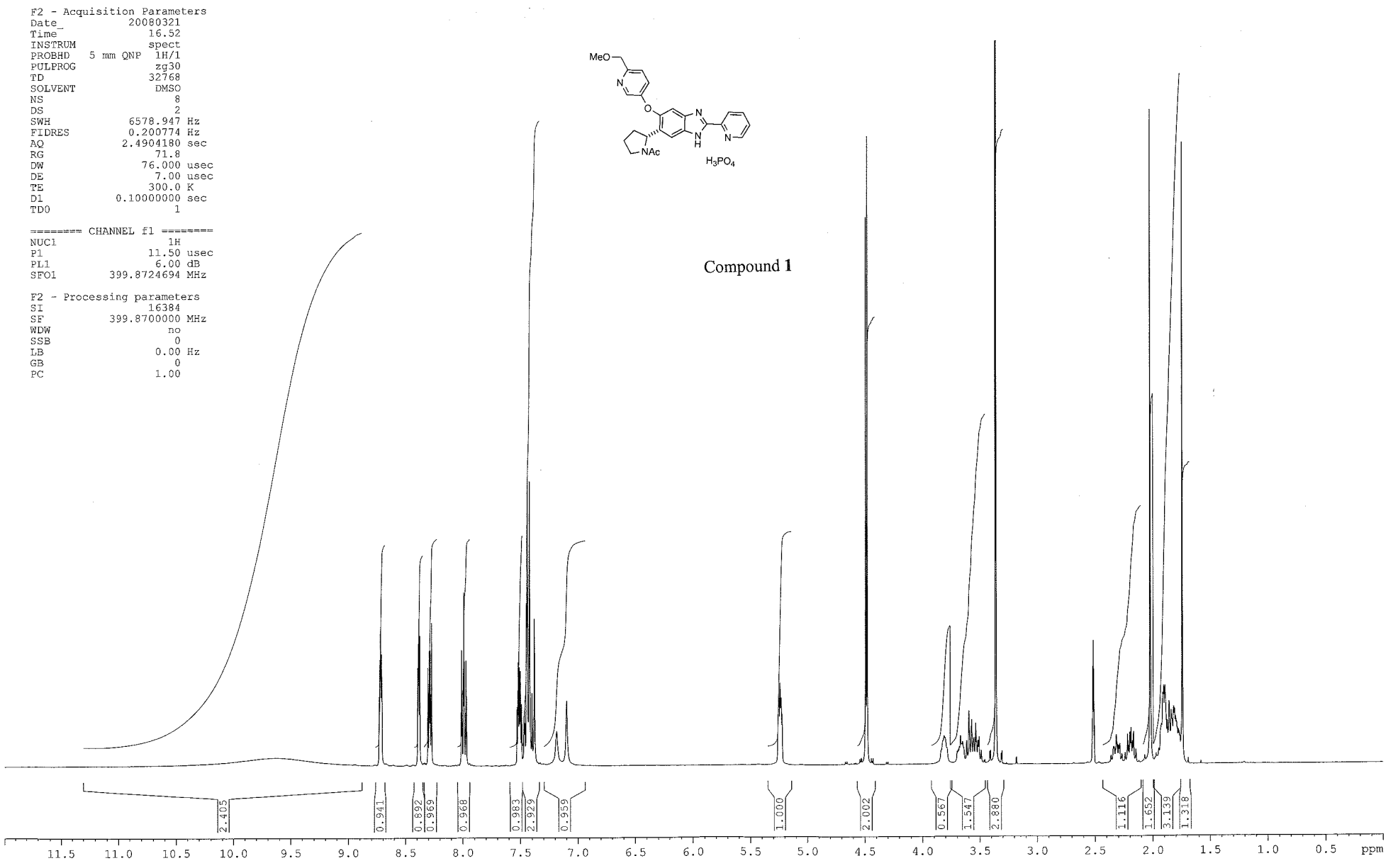
34.46 32.65

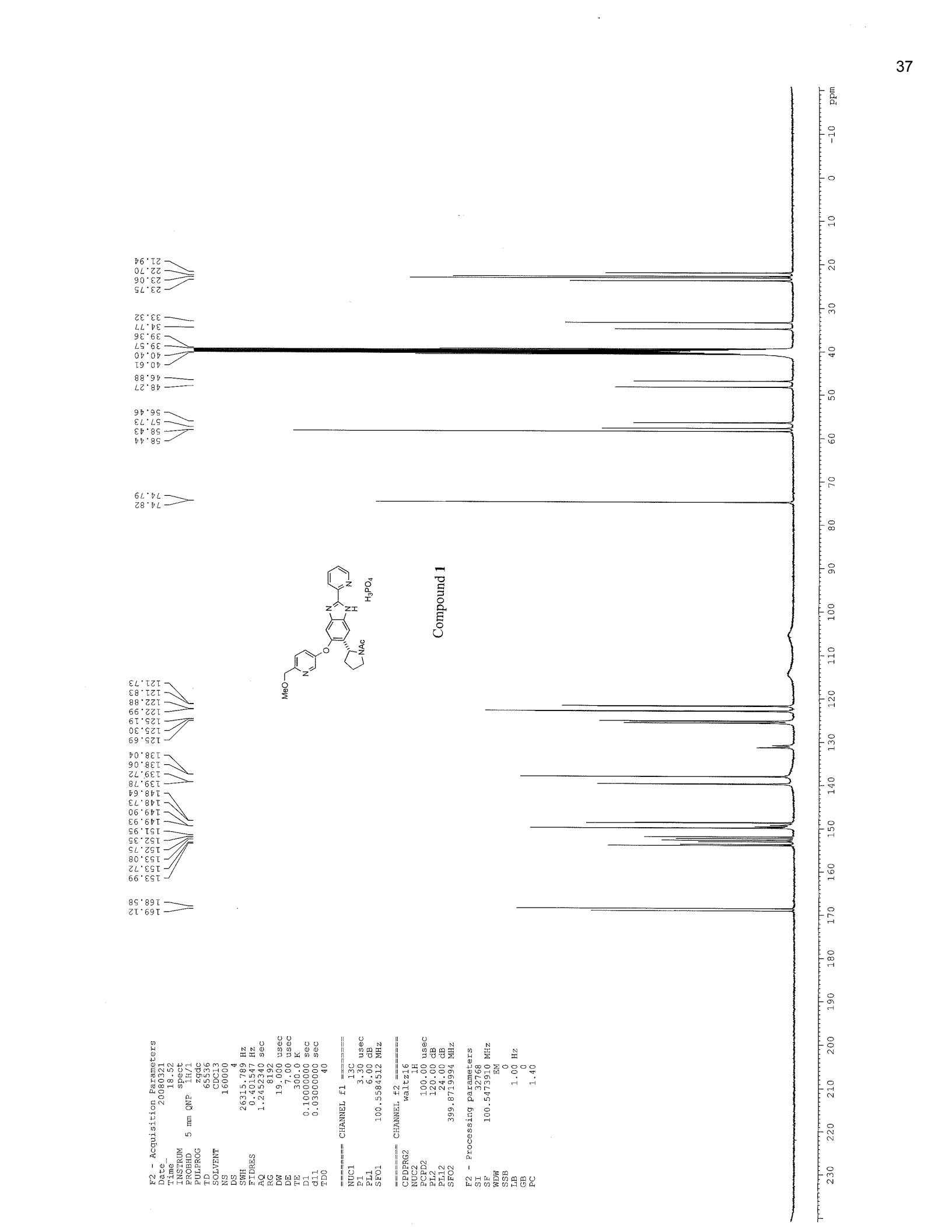
24.15 22.86 22.59 22.10



Compound **22**




F2 - Acquisition Parameters
Date_ 20080321
Time 16.52
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 32768
SOLVENT DMSO
NS 8
DS 2
SWH 6578.947 Hz
FIDRES 0.200774 Hz
AQ 2.4904180 sec
RG 71.8
DW 76.000 usec
DE 7.00 usec
TE 300.0 K
D1 0.10000000 sec
TD0 1
======== CHANNEL f1 ========
NUC1 1H
P1 11.50 usec
PL1 6.00 dB
SFO1 399.8724694 MHz
F2 - Processing parameters
SI 16384
SF 399.8700000 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
MeO
N
O
N
H
N
N
NAc
H3PO4
Compound 1
2.405
0.941
0.892
0.969
0.968
0.983
2.929
0.959
1.000
2.002
0.567
1.547
2.880
1.116
1.652
3.139
1.318
11.5
11.0
10.5
10.0
9.5
9.0
8.5
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
ppm


F2 - Acquisition Parameters
Date_ 20080321
Time_ 18.52
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgdc
TD 65536
SOLVENT CDCl3
NS 160000
DS 4
SWH 26315.789 Hz
FIDRES 0.401547 Hz
AQ 1.2452340 sec
RG 8192
DW 19.000 usec
DE 7.00 usec
TE 300.0 K
D1 0.10000000 sec
d11 0.03000000 sec
TD0 40
======== CHANNEL f1 ========
NUC1 13C
P1 3.30 usec
PL1 6.00 dB
SFO1 100.5584512 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 100.00 usec
PL2 120.00 dB
PL12 24.00 dB
SFO2 399.8719994 MHz
F2 - Processing parameters
SI 32768
SF 100.5473910 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40
169.12
168.58
153.99
153.72
153.08
152.75
152.35
151.95
149.93
149.90
148.73
148.64
139.78
139.72
138.06
138.04
125.69
125.30
125.19
122.99
122.88
121.83
121.73
74.82
74.79
58.44
58.43
57.73
56.46
48.27
46.88
40.61
40.40
39.57
39.36
34.77
33.32
23.75
23.06
22.70
21.94
MeO
NAc
H_3PO_4
Compound 1
ppm