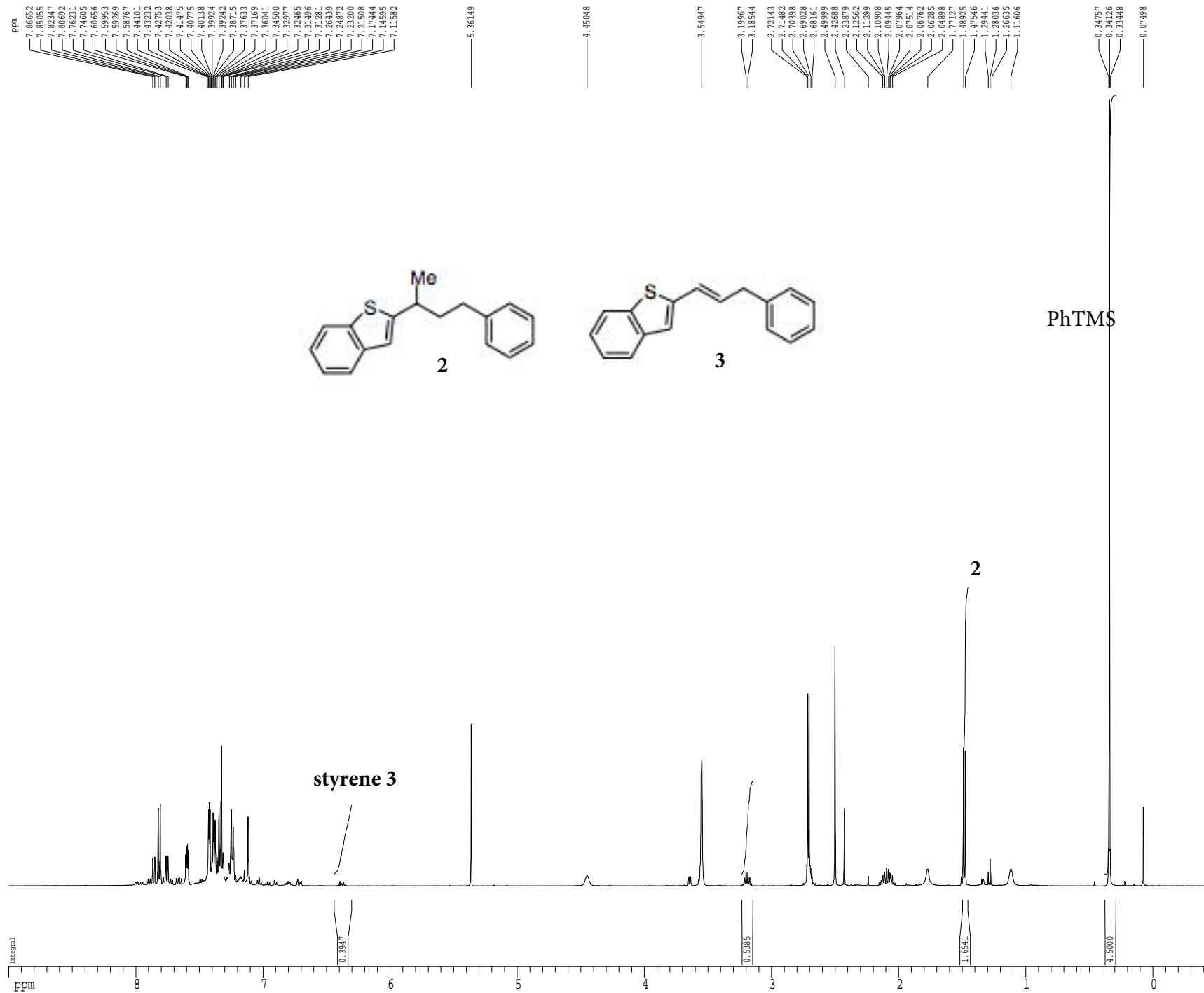


¹H spectrum



Current Data Parameters
 USER khewitt1
 NAME KAH-I-186
 EXPNO 2
 PROCNO 1

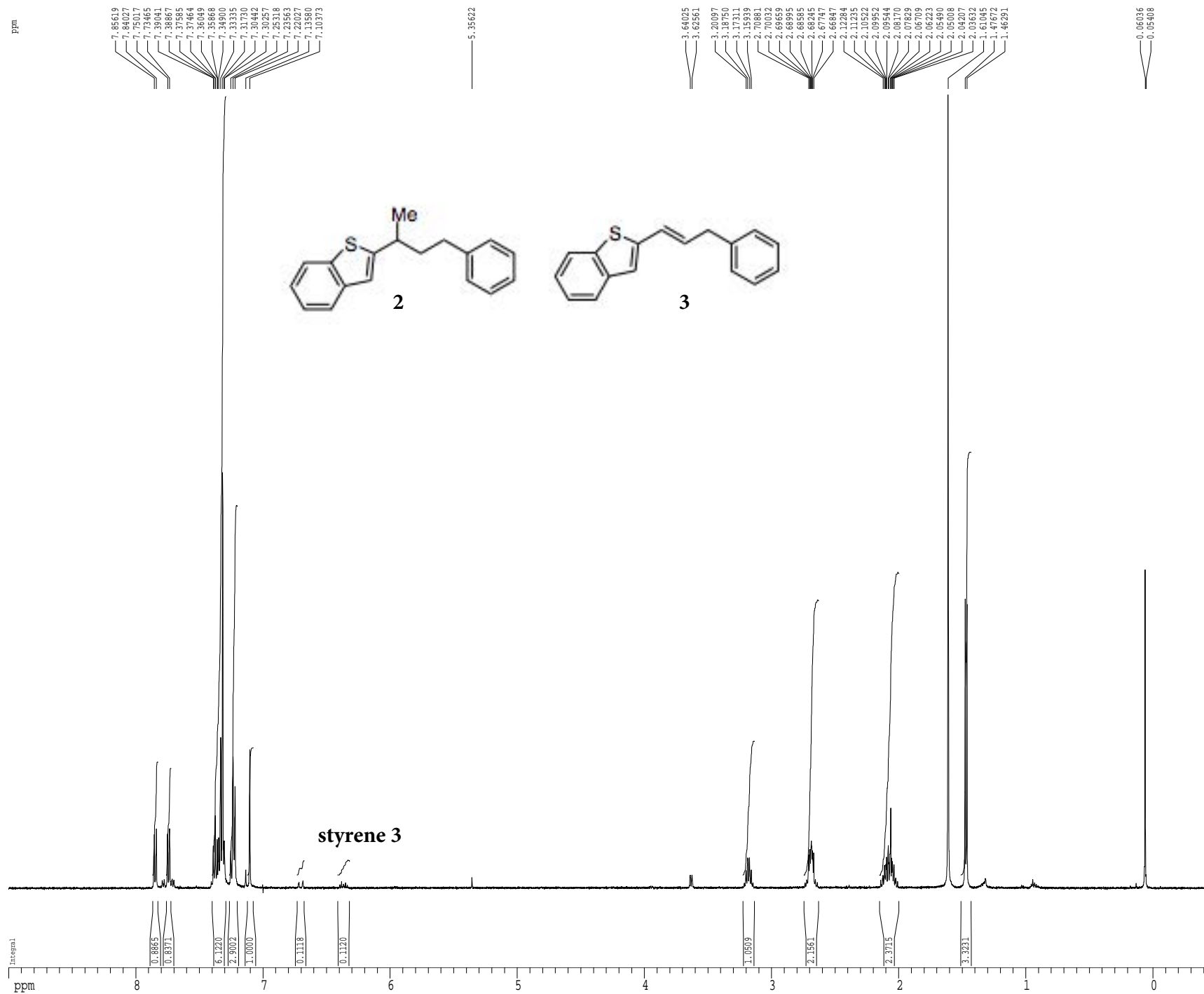
F2 - Acquisition Parameters
 Date_ 20181105
 Time 14.50
 INSTRUM cryo500
 PROBHD 5 mm CPTCI 1H-
 PULPROG zg30
 TD 48074
 SOLVENT CDC13T
 NS 8
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.166677 Hz
 AQ 2.9998677 sec
 RG 7.1
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWREK 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 7.50 usec
 PL1 1.60 dB
 SFO1 500.2235015 MHz

F2 - Processing parameters
 SI 65536
 SF 500.2200000 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CY 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 4501.98 Hz
 F2P -0.500 ppm
 F2 -250.11 Hz
 PPMCM 0.41667 ppm/cm
 HZCM 208.42500 Hz/cm

¹H spectrum



Current Data Parameters

USER	khewitt1
NAME	KAH-1-200-Z
EXPNO	4
PROCNO	1

F2 - Acquisition Parameters

Date_	20210909
Time	16.37
INSTRUM	gn500
PROBHD	5 mm broadband
PULPROG	zg30
TD	48074
SOLVENT	CDC13T
NS	8
DS	2
SWH	8012.820 Hz
FIDRES	0.166677 Hz
AQ	2.9998677 sec
RG	1824.6
DW	62.400 usec
DE	6.00 usec
TE	298.0 K
D1	0.10000000 sec
MCREST	0.00000000 sec
MCNRC	0.01500000 sec

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

NUC1	1H
P1	12.00 usec
PL1	-6.00 dB
SFO1	498.6534906 MHz

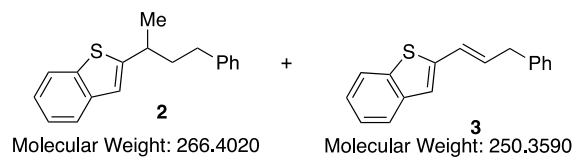
F2 - Processing parameters

SI	65536
SF	498.6500000 MHz
WDW	no
SSB	0
LB	0.00 Hz
GB	0
PC	1.00

1D NMR plot parameters

CY	22.80 cm
CY	15.00 cm
F1P	9.000 ppm
F1	4487.85 Hz
F2P	-0.500 ppm
F2	-249.32 Hz
PPMCM	0.41667 ppm/cm
HZCM	207.77084 Hz/cm

Sample Calculation



Based on the NMR above: the ratio of compounds **3/2**:

integration of **2** = 1.05

integration of **3** = 0.11

$$r_{3/2} = \frac{0.11}{1.05} = 0.0948$$

14 mg total was isolated from column chromatography

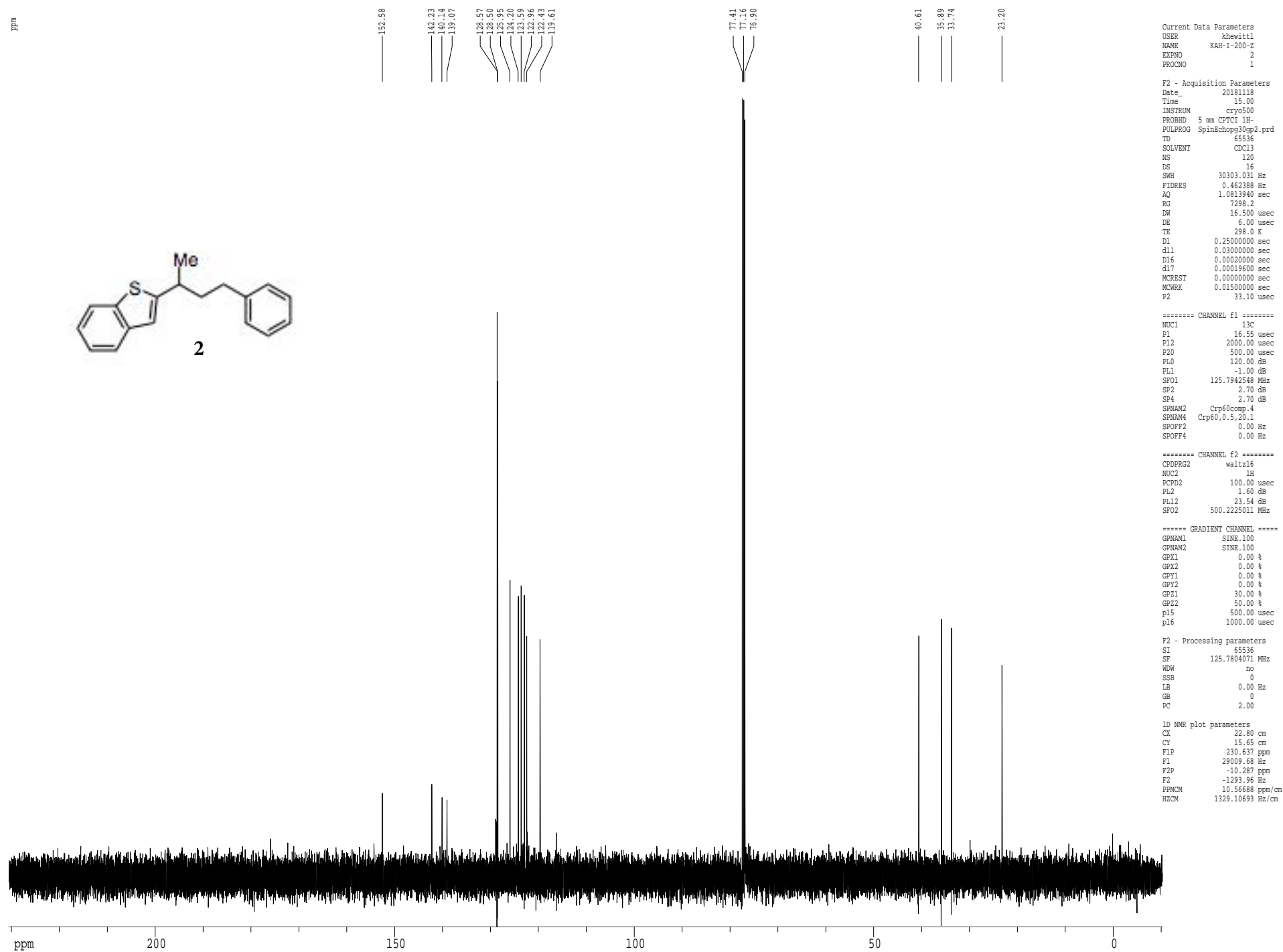
theoretical yield = 0.20 mmol

$$\text{mmol of } \mathbf{2} = \frac{14}{266.40 + (250.36 \cdot 0.0948)} = 0.0483$$

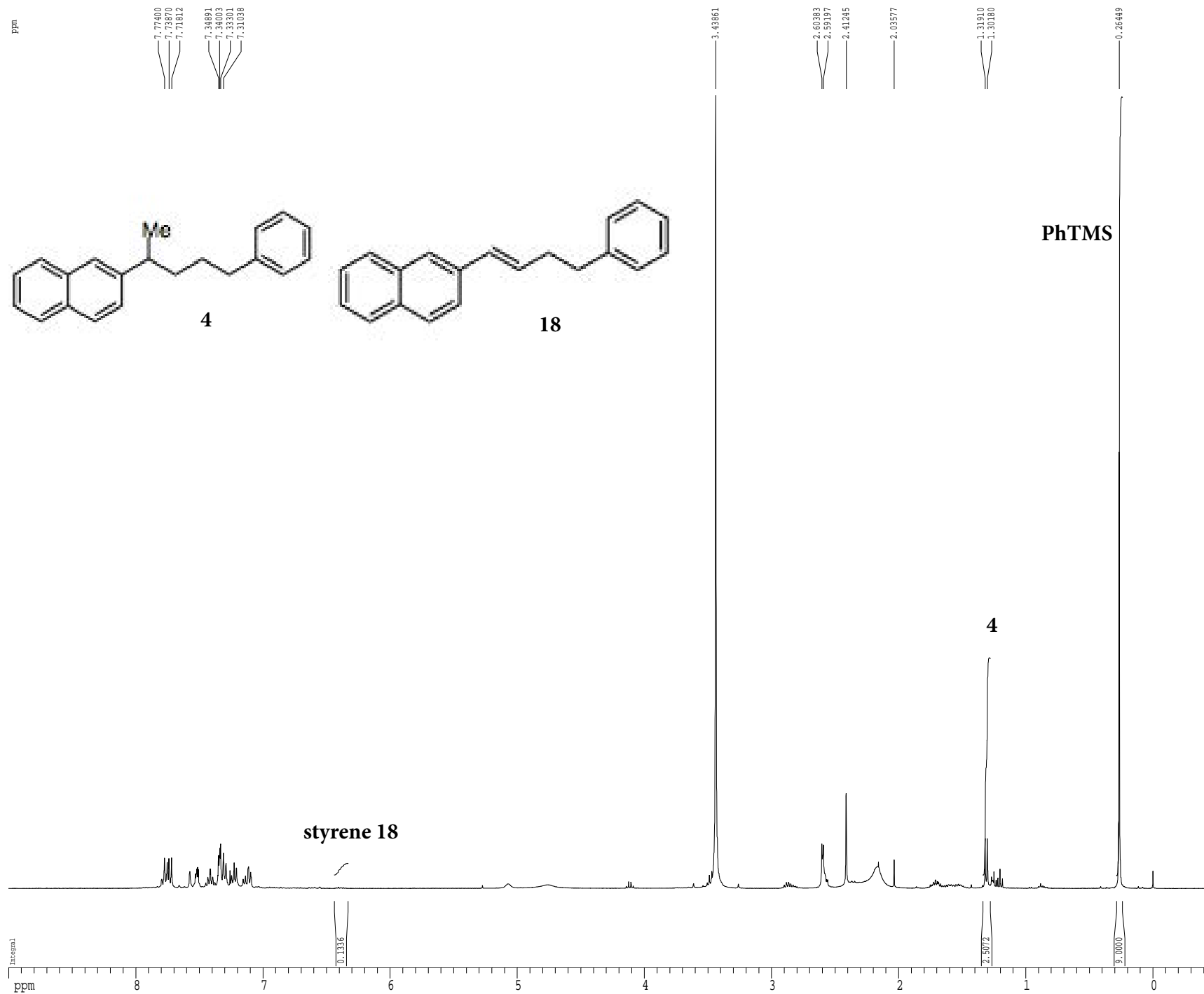
$$\text{Yield of } \mathbf{2} = \frac{0.0483}{0.20} = 24\%$$

$$\text{Yield of } \mathbf{3} = \frac{0.0483 \cdot 0.0948}{0.20} = 2.2\%$$

Z-restored spin-echo 13C spectrum with 1H decoupling



¹H spectrum



Current Data Parameters
 USER khewitt1
 NAME ACM-I-68NRY
 EXPNO 1
 PROCNO 1

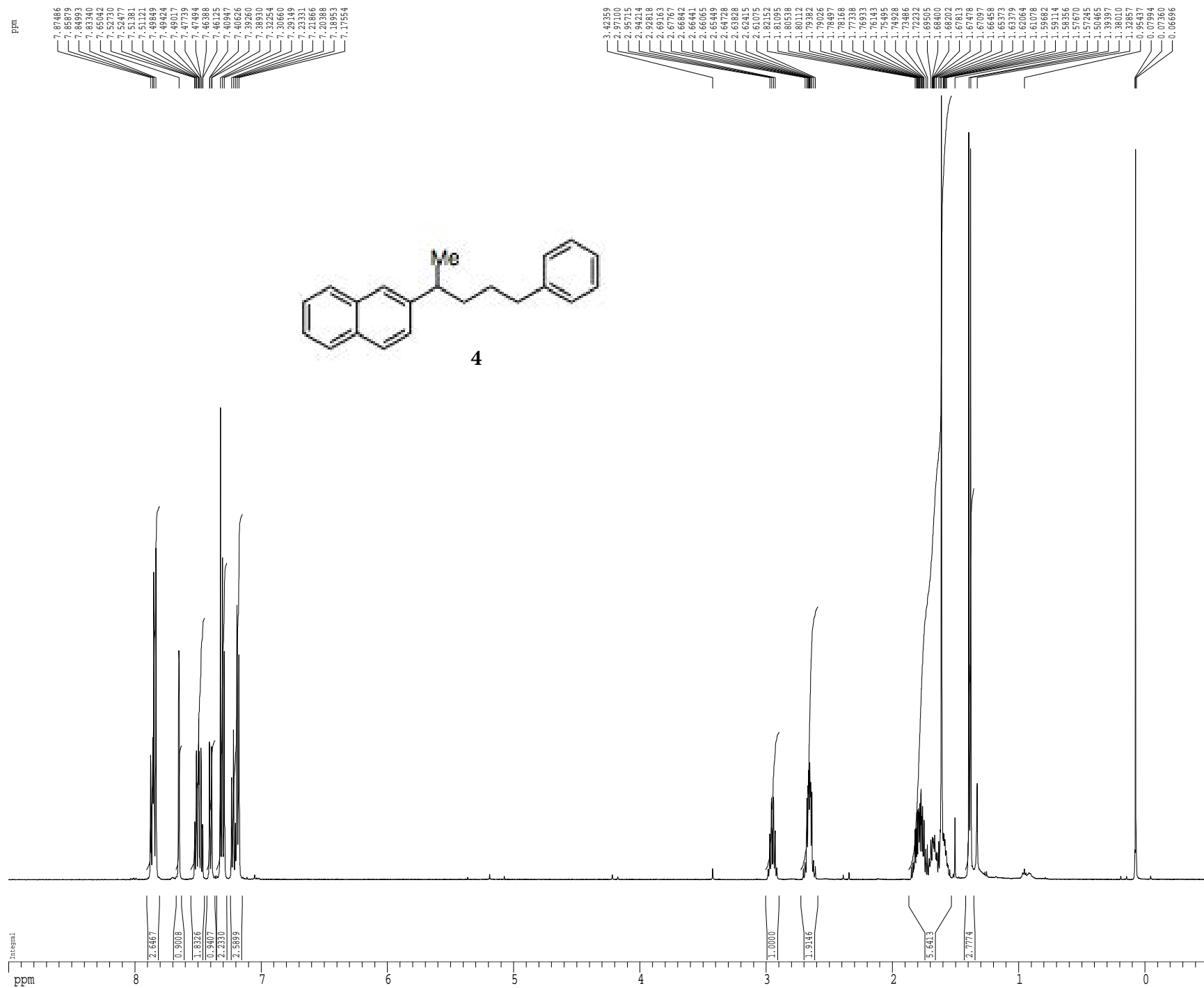
F2 - Acquisition Parameters
 Date_ 20190812
 Time 9.26
 INSTRUM drx400
 PROBHD 5 mm QNP H/F/P
 PULPROG zg30
 TD 65536
 SOLVENT CDC13T
 NS 8
 DS 2
 SWH 6410.256 Hz
 FIDRES 0.097813 Hz
 AQ 5.1118579 sec
 RG 71.8
 DW 78.000 usec
 DE 4.50 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWREK 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 12.00 usec
 PL1 -1.10 dB
 SFO1 400.1328009 MHz

F2 - Processing parameters
 SI 65536
 SF 400.1300215 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 2.00

1D NMR plot parameters
 CY 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 3601.17 Hz
 F2P -0.500 ppm
 F2 -200.06 Hz
 PPMCM 0.41667 ppm/cm
 HZCM 166.72086 Hz/cm

¹H spectrum



Current Data Parameters
 USER khewitt1
 NAME AM-1-123-Z
 EXPNO 1
 PROCNO 1

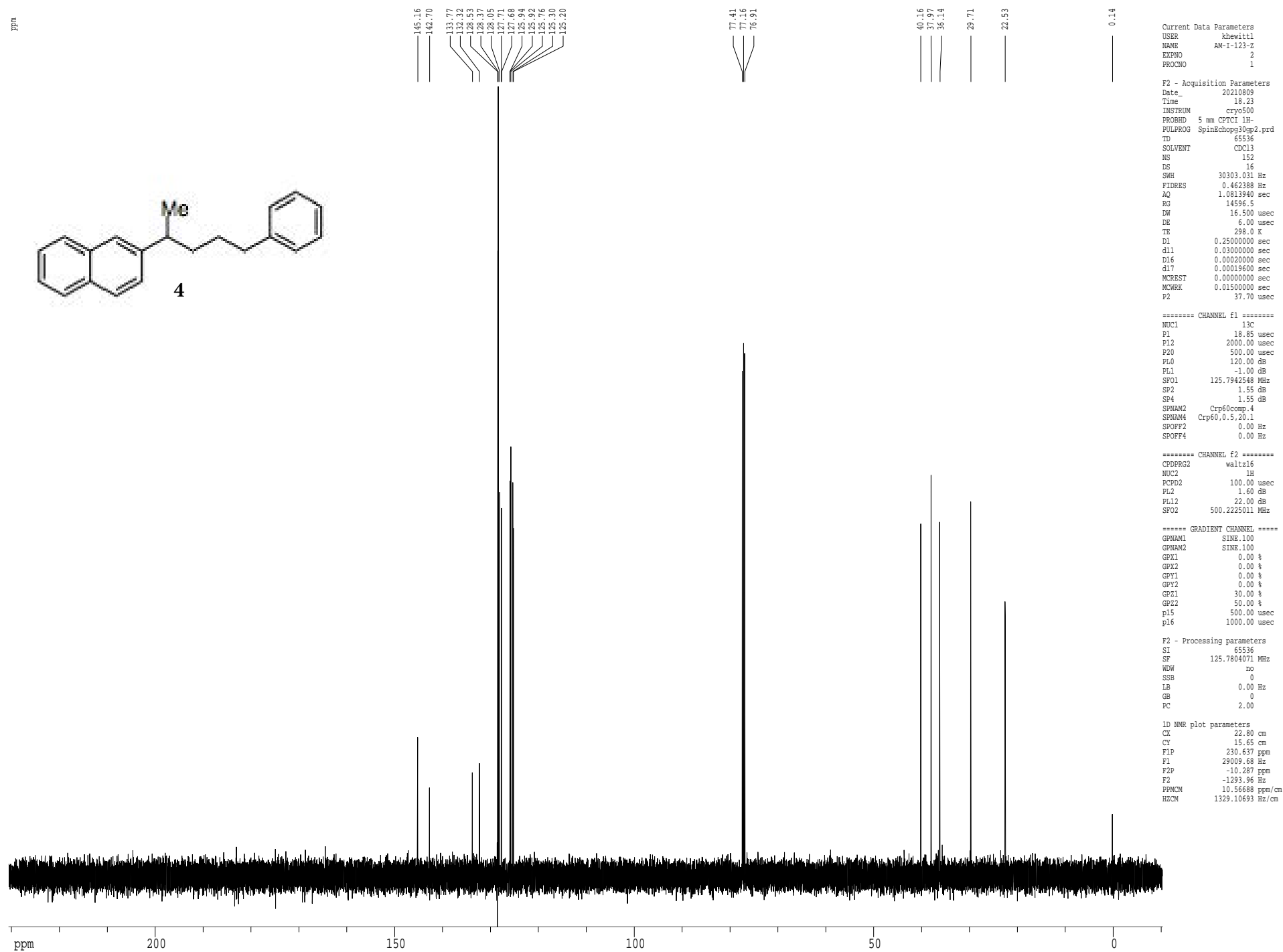
F2 - Acquisition Parameters
 Date_ 20210809
 Time 18.21
 INSTRUM cryo500
 PROBHD 5 mm CPTCI 1H-
 PULPROG zg30
 TD 48074
 SOLVENT CDC13T
 NS 8
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.166677 Hz
 AQ 2.9998677 sec
 RG 8
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWRE 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 9.75 usec
 PL1 1.60 dB
 SFO1 500.2235015 MHz

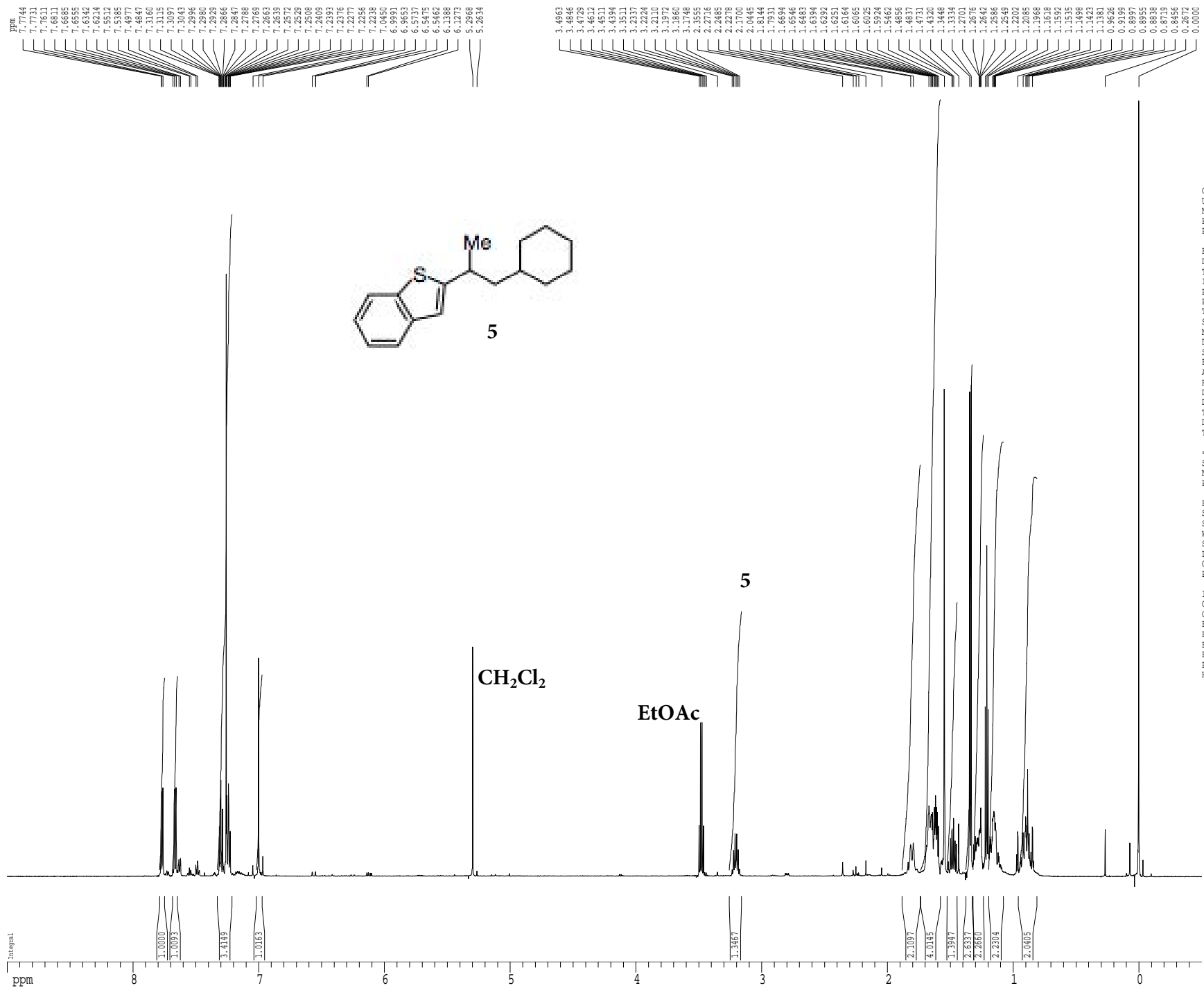
F2 - Processing parameters
 SI 65536
 SF 500.2200000 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CY 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 4501.98 Hz
 F2P -0.500 ppm
 F2 -250.11 Hz
 PPMCM 0.41667 ppm/cm
 HZCM 208.42500 Hz/cm

Z-restored spin-echo 13C spectrum with 1H decoupling



h



Current Data Parameters
USER khewitt1
NAME ACM-I-123-benzoCH
EXPNO 31
PROCNO 1

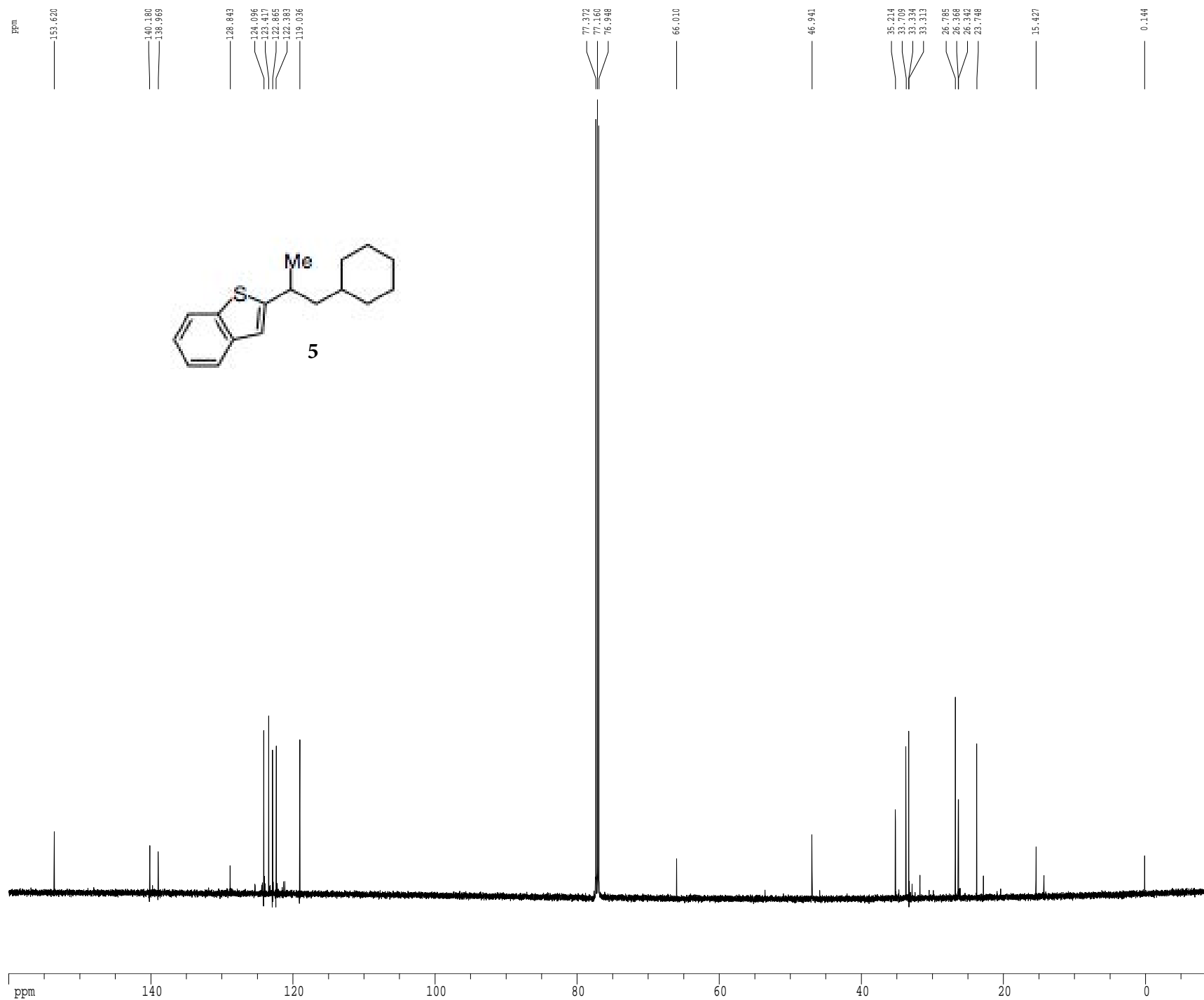
F2 - Acquisition Parameters
Date_ 20191115
Time 18.27
INSTRUM av600
PROBHD 5 mm CPBBO BB-
PULPROG zg30
TD 980744
SOLVENT CDCl3T
NS 8
DS 2
SWH 9615.385 Hz
FIDRES 0.098042 Hz
AQ 5.0998979 sec
RG 10
DW 52.000 usec
DE 13.70 usec
TE 298.0 K
D1 0.10000000 sec
TD0 1

***** CHANNEL f1 *****
SF01 600.1342009 MHz
NUC1 1H
P1 12.00 usec

F2 - Processing parameters
SI 65536
SF 600.1300376 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 22.80 cm
CY 15.00 cm
F1P 9.000 ppm
F1 5401.17 Hz
F2P -0.500 ppm
F2 -300.06 Hz
PPMCM 0.41667 ppm/cm
HZCM 250.05420 Hz/cm

¹³C spectrum with ¹H decoupling



```

Current Data Parameters
USER          khewitt1
NAME          ACM-I-123-benzoCH
EXPNO         2
PROCNO        1

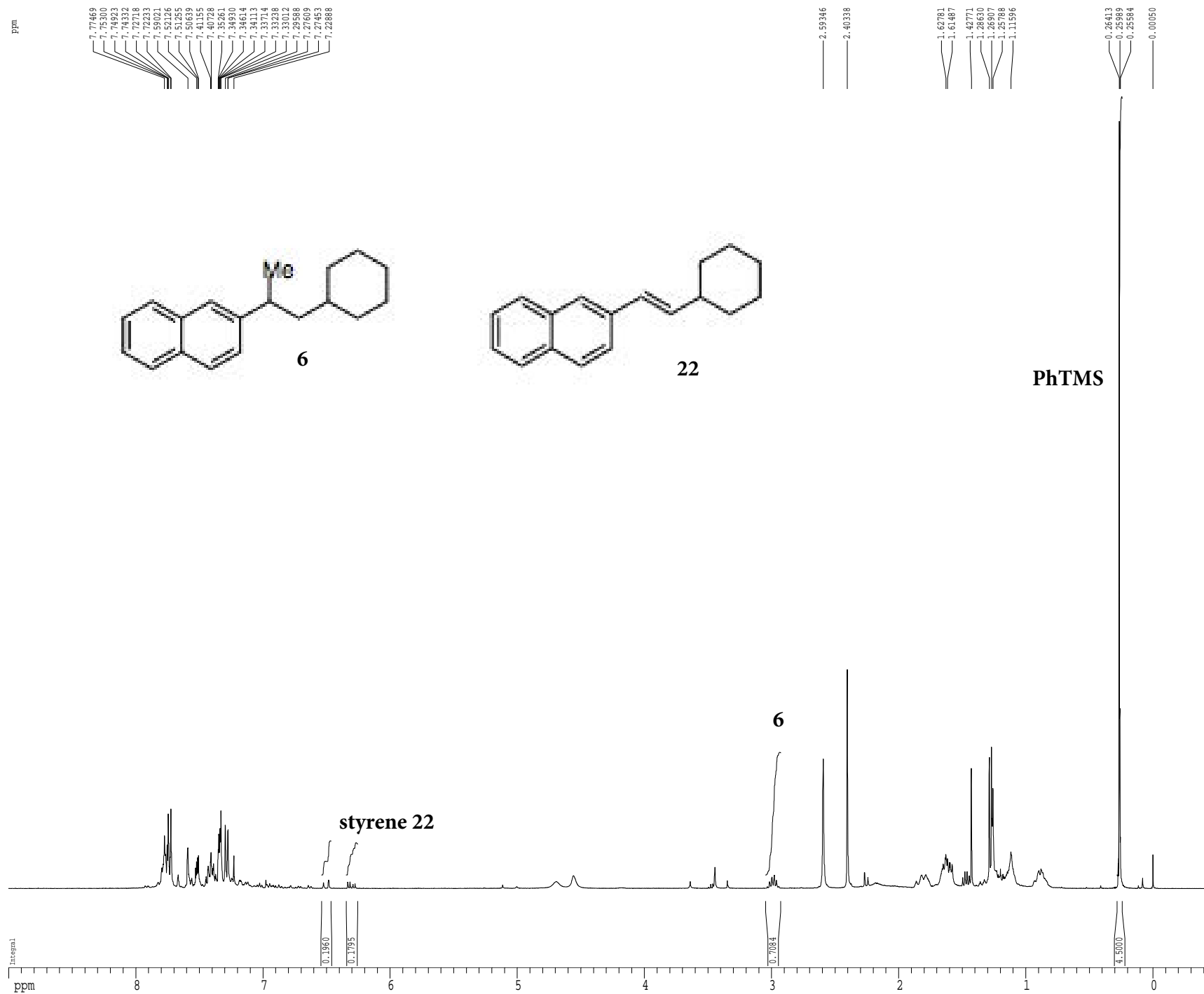
F2 - Acquisition Parameters
Date_         20191115
Time          18.30
INSTRUM       av600
PROBHD        5 mm CPBBO BB-
PULPROG       zgpg30
TD            65536
SOLVENT       CDCl3T
NS            447
DS            4
SWH           36231.883 Hz
FIDRES        0.552855 Hz
AQ            0.9044468 sec
RG            2050
DW            13.800 usec
DE            19.63 usec
TE            298.0 K
D1            0.40000001 sec
D11           0.03000000 sec
TD0           1

===== CHANNEL f1 =====
SF01          150.9194080 MHz
NUC1          13C
P1            10.10 usec

F2 - Processing parameters
SI            65536
SF            150.9027936 MHz
WDW           no
SSB           0
LB            0.00 Hz
GB            0
PC            1.00

1D NMR plot parameters
CX            22.80 cm
CY            15.00 cm
F1P           160.000 ppm
F1            24144.45 Hz
F2P           -10.000 ppm
F2            -1509.03 Hz
PPMCM         7.45614 ppm/cm
HZCM          1125.15234 Hz/cm
    
```

¹H spectrum



Current Data Parameters
 USER khewitt1
 NAME ACM-I-41
 EXPNO 1
 PROCNO 1

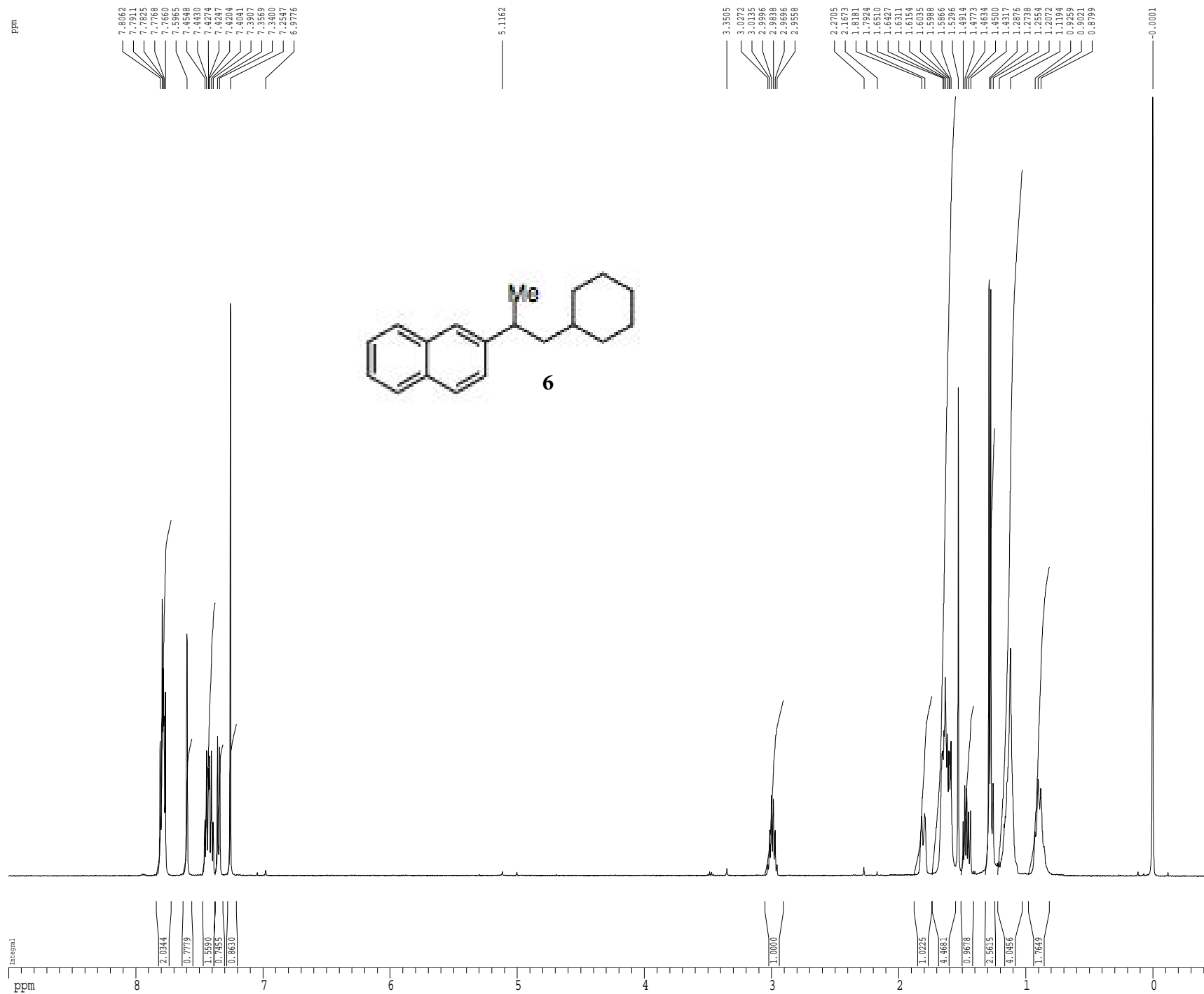
F2 - Acquisition Parameters
 Date_ 20190625
 Time 14.48
 INSTRUM drx400
 PROBHD 5 mm QNP H/F/P
 PULPROG zg30
 TD 65536
 SOLVENT CDC13T
 NS 8
 DS 2
 SWH 6410.256 Hz
 FIDRES 0.097813 Hz
 AQ 5.1118579 sec
 RG 71.8
 DW 78.000 usec
 DE 4.50 usec
 TE 298.1 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWREK 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 12.00 usec
 PL1 -1.10 dB
 SFO1 400.1328009 MHz

F2 - Processing parameters
 SI 65536
 SF 400.1300337 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 2.00

1D NMR plot parameters
 CY 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 3601.17 Hz
 F2P -0.500 ppm
 F2 -200.06 Hz
 PPMCM 0.41667 ppm/cm
 HZCM 166.72086 Hz/cm

¹H spectrum



```

Current Data Parameters
USER      khewitt1
NAME      ACM-I-126ch
EXPNO     1
PROCNO    1

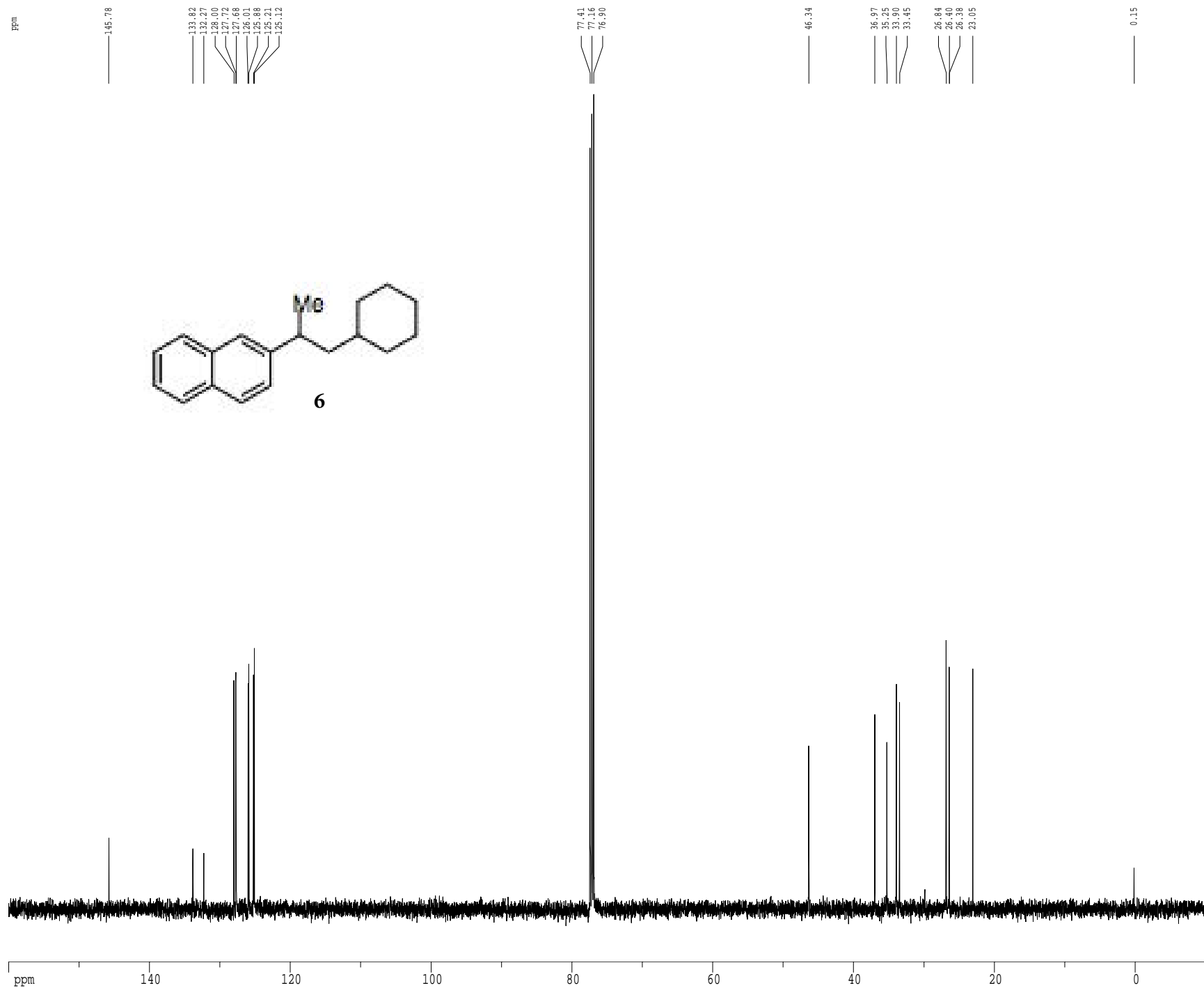
F2 - Acquisition Parameters
Date_     20191115
Time      18.14
INSTRUM    cryo500
PROBHD     5 mm CPTCI 1H-
PULPROG    zg30
TD          81728
SOLVENT    CDCl3T
NS          10
DS          2
SWH         8012.820 Hz
FIDRES      0.098043 Hz
AQ          5.0998774 sec
RG          4.5
DW          62.400 usec
DE          6.00 usec
TE          298.2 K
D1          0.10000000 sec
MCREST      0.00000000 sec
MCWREK      0.01500000 sec

===== CHANNEL f1 =====
NUC1        1H
P1          7.50 usec
PL1         1.60 dB
SFO1        500.2235015 MHz

F2 - Processing parameters
SI          65536
SF          500.2200341 MHz
WDW         EM
SSB         0
LB          0.30 Hz
GB          0
PC          1.00

1D NMR plot parameters
CY          22.80 cm
CY          15.00 cm
F1P         9.000 ppm
F1          4501.98 Hz
F2P         -0.500 ppm
F2          -250.11 Hz
PPMCM       0.41667 ppm/cm
HZCM        208.42502 Hz/cm
    
```

Z-restored spin-echo 13C spectrum with 1H decoupling



```

Current Data Parameters
USER      khewitt1
NAME      ACM-I-126ch
EXPNO     2
PROCNO    1

F2 - Acquisition Parameters
Date_     20191115
Time      18.29
INSTRUM   cryo500
PROBHD    5 mm CPTCI 1H-
PULPROG   SpinEchopg30gp2.prd
TD         65536
SOLVENT   CDCl3
NS         616
DS         16
SWH        30303.031 Hz
FIDRES     0.462388 Hz
AQ         1.0813940 sec
RG         7298.2
DM         16.500 usec
DE         6.00 usec
TE         298.2 K
D1         0.25000000 sec
d11        0.03000000 sec
d16        0.00020000 sec
d17        0.00019600 sec
MCKREST    0.00000000 sec
MCKWIX     0.01500000 sec
P2         33.10 usec

===== CHANNEL f1 =====
NUC1       13C
P1         16.55 usec
P12        2000.00 usec
P20        500.00 usec
PL0        120.00 dB
PL1        -1.00 dB
SP01       125.7942548 MHz
SP2        2.70 dB
SP4        2.70 dB
SPNAM2     Crp60comp.4
SPNAM4     Crp60,0.5,20.1
SPOFF2     0.00 Hz
SPOFF4     0.00 Hz

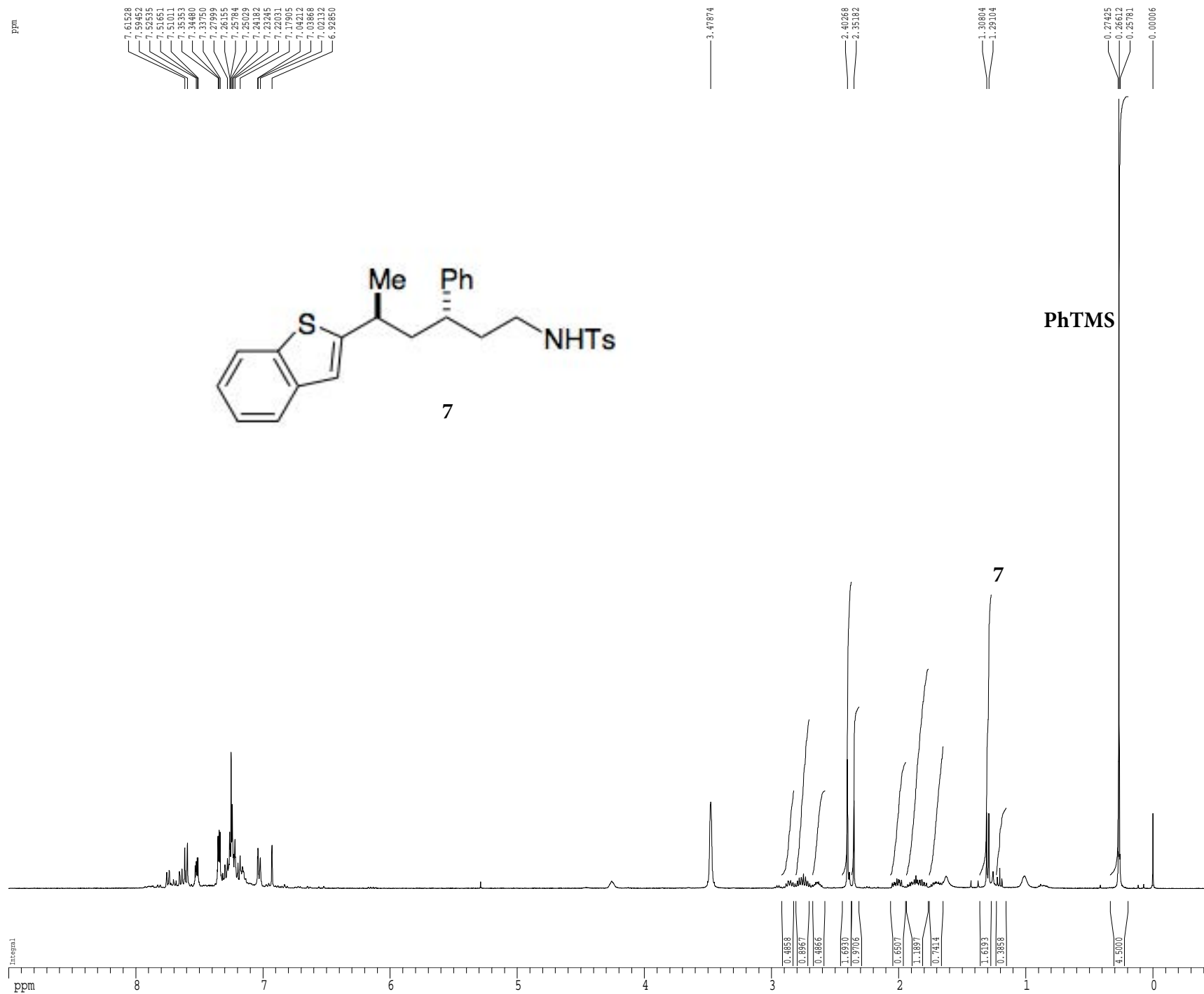
===== CHANNEL f2 =====
CPDPRG2    waltz16
NUC2       1H
PCPD2      100.00 usec
PL2        1.60 dB
PL12       23.54 dB
SFO2       500.2225011 MHz

===== GRADIENT CHANNEL =====
GPNAM1     SINE.100
GPNAM2     SINE.100
GPX1       0.00 %
GPX2       0.00 %
GPY1       0.00 %
GPY2       0.00 %
GPZ1       30.00 %
GPZ2       50.00 %
p15        500.00 usec
p16        1000.00 usec

F2 - Processing parameters
SI         65536
SF         125.7804062 MHz
WDW        EM
SSB        0
LB         1.00 Hz
GB         0
PC         2.00

1D NMR plot parameters
CX         22.80 cm
CY         15.65 cm
F1P        160.000 ppm
F1         20124.87 Hz
F2P        -10.358 ppm
F2         -1302.84 Hz
PPMCM      7.47185 ppm/cm
HZCM       939.81177 Hz/cm
    
```

¹H spectrum



Current Data Parameters
 USER khewitt1
 NAME KAH-I-222
 EXPNO 1
 PROCNO 1

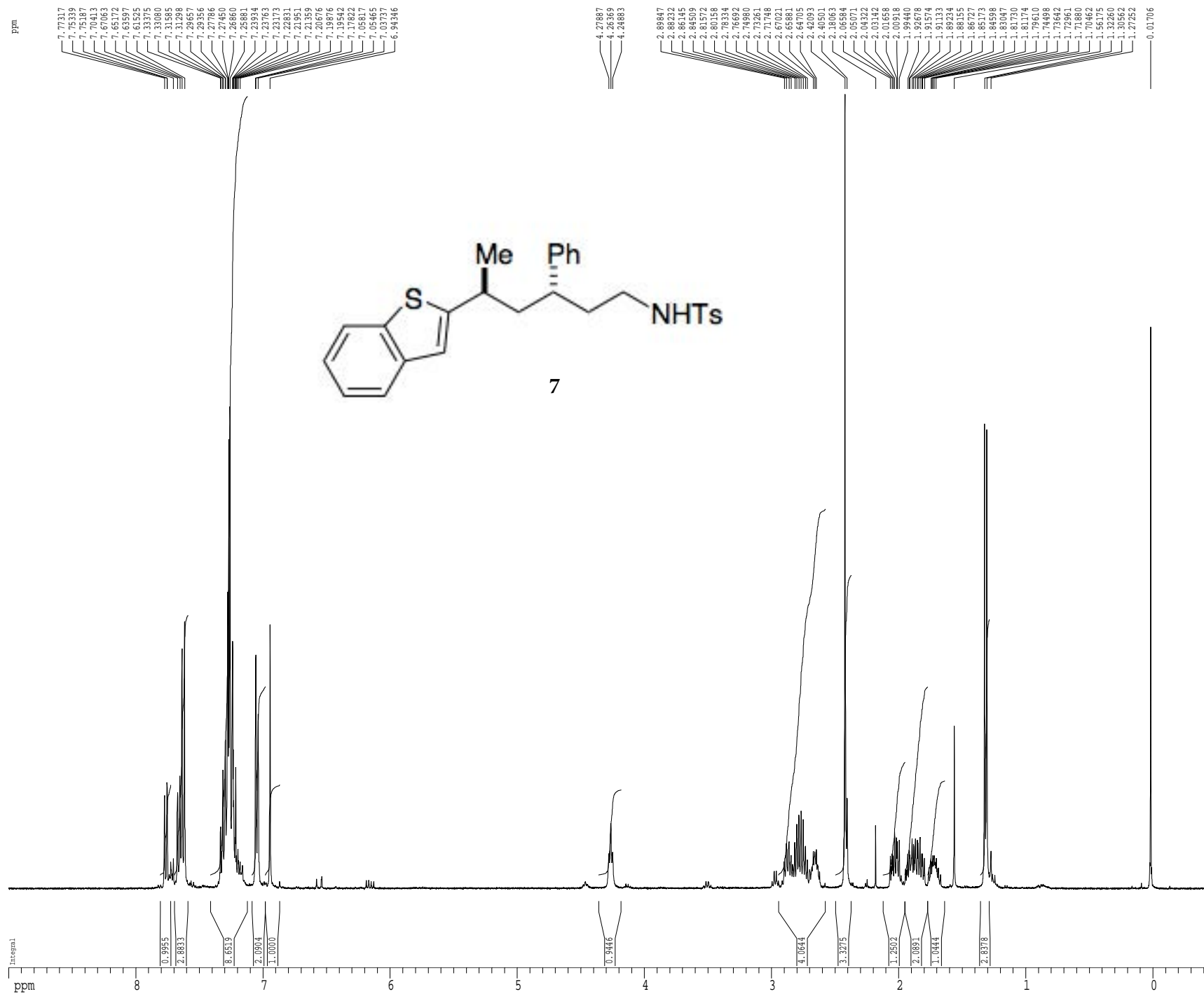
F2 - Acquisition Parameters
 Date_ 20181208
 Time 14.51
 INSTRUM drx400
 PROBHD 5 mm QNP H/F/P
 PULPROG zg30
 TD 38460
 SOLVENT CDCl3
 NS 8
 DS 2
 SWH 6410.256 Hz
 FIDRES 0.166673 Hz
 AQ 2.9999299 sec
 RG 181
 DW 78.000 usec
 DE 4.50 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWREK 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 12.00 usec
 PL1 -1.10 dB
 SFO1 400.1328009 MHz

F2 - Processing parameters
 SI 65536
 SF 400.1300249 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 2.00

1D NMR plot parameters
 CY 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 3601.17 Hz
 F2P -0.500 ppm
 F2 -200.06 Hz
 PPMCM 0.41667 ppm/cm
 HZCM 166.72086 Hz/cm

¹H spectrum



Current Data Parameters

USER khewitt1
NAME KAH-1-222-2
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters

Date_ 20190329
Time 15.37
INSTRUM drx400
PROBHD 5 mm QNP H/F/P
PULPROG zg30
TD 38460
SOLVENT CDC13T
NS 8
DS 2
SWH 6410.256 Hz
FIDRES 0.166673 Hz
AQ 2.9999299 sec
RG 287.4
DW 78.000 usec
DE 4.50 usec
TE 298.1 K
D1 0.10000000 sec
MCREST 0.00000000 sec
MCWREK 0.01500000 sec

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

NUC1 1H
P1 12.00 usec
PL1 -1.10 dB
SFO1 400.1328009 MHz

F2 - Processing parameters

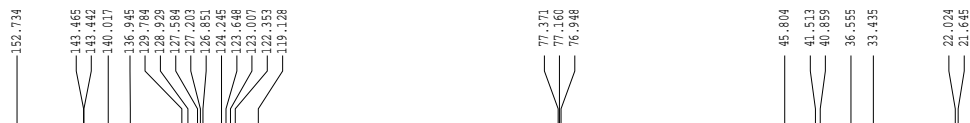
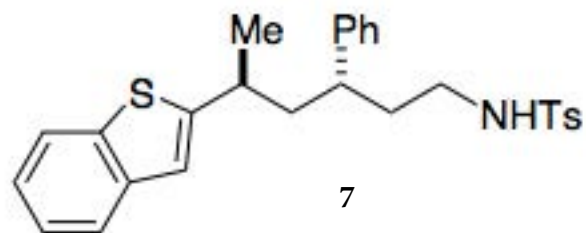
SI 65536
SF 400.1300175 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 2.00

1D NMR plot parameters

CY 22.80 cm
CY 15.00 cm
F1P 9.000 ppm
F1 3601.17 Hz
F2P -0.500 ppm
F2 -200.06 Hz
PPMCM 0.41667 ppm/cm
HZCM 166.72084 Hz/cm

c13.c

ppm



Current Data Parameters
 USER khewitt1
 NAME KAH-I-222-Z-C
 EXPNO 1
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20210713
 Time 14.14
 INSTRUM av600
 PROBHD 5 mm CPBBO BB-
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3T
 NS 146
 DS 4
 SWH 36231.883 Hz
 FIDRES 0.552855 Hz
 AQ 0.9044468 sec
 RG 2050
 DW 13.800 usec
 DE 19.63 usec
 TE 298.0 K
 D1 0.40000001 sec
 D11 0.03000000 sec
 TD0 1

===== CHANNEL f1 =====
 SF01 150.9194080 MHz
 NUC1 13C
 P1 10.10 usec

F2 - Processing parameters
 SI 65536
 SF 150.9027958 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 22.80 cm
 CY 15.00 cm
 FLP 230.136 ppm
 F1 34728.11 Hz
 F2P -9.965 ppm
 F2 -1503.78 Hz
 PPMCM 10.53074 ppm/cm
 HZCM 1589.11780 Hz/cm

ppm

200

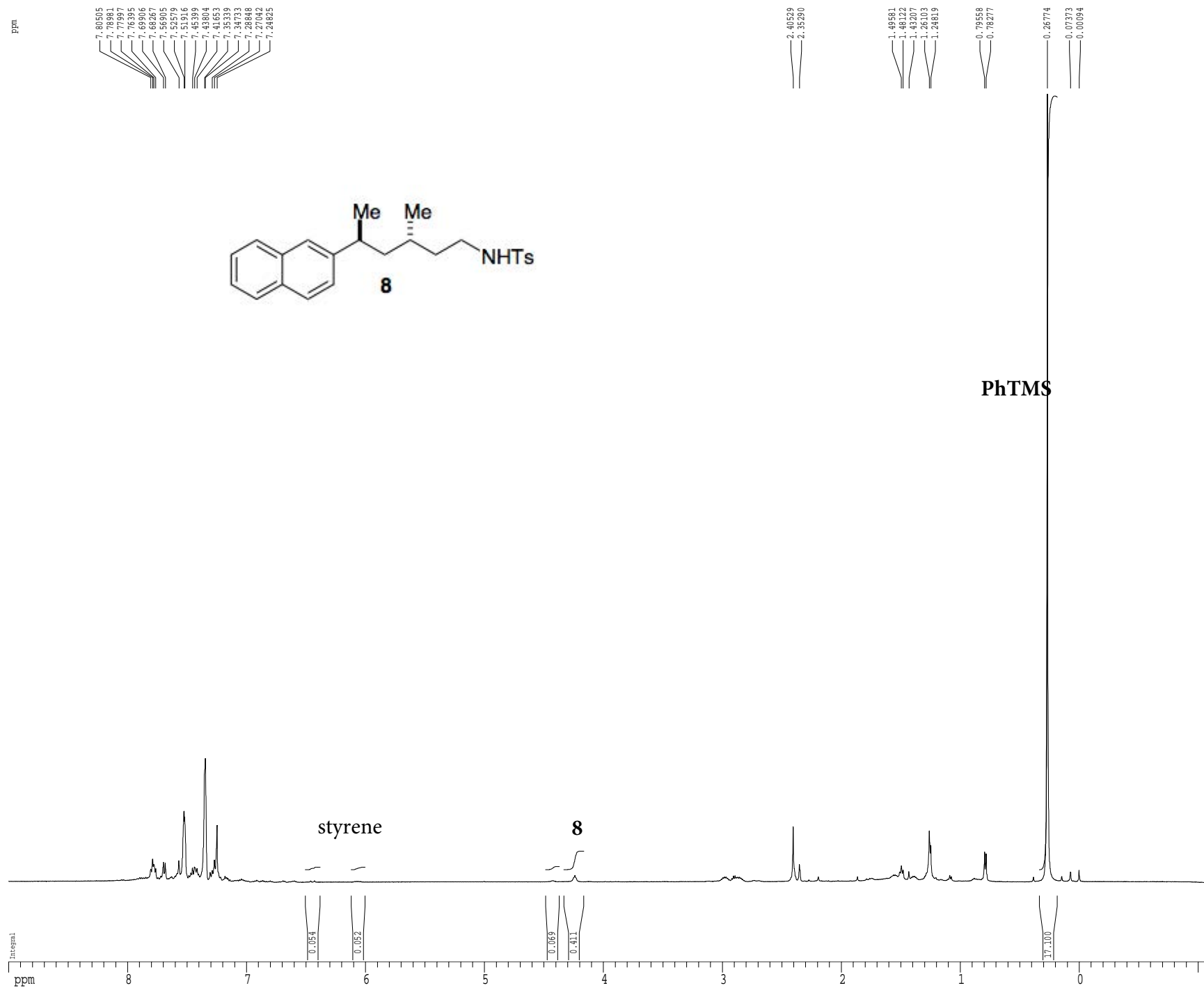
150

100

50

0

¹H spectrum



Current Data Parameters
 USER caherber
 NAME CAH-I-247-Crude
 EXPNO 1
 PROCNO 1

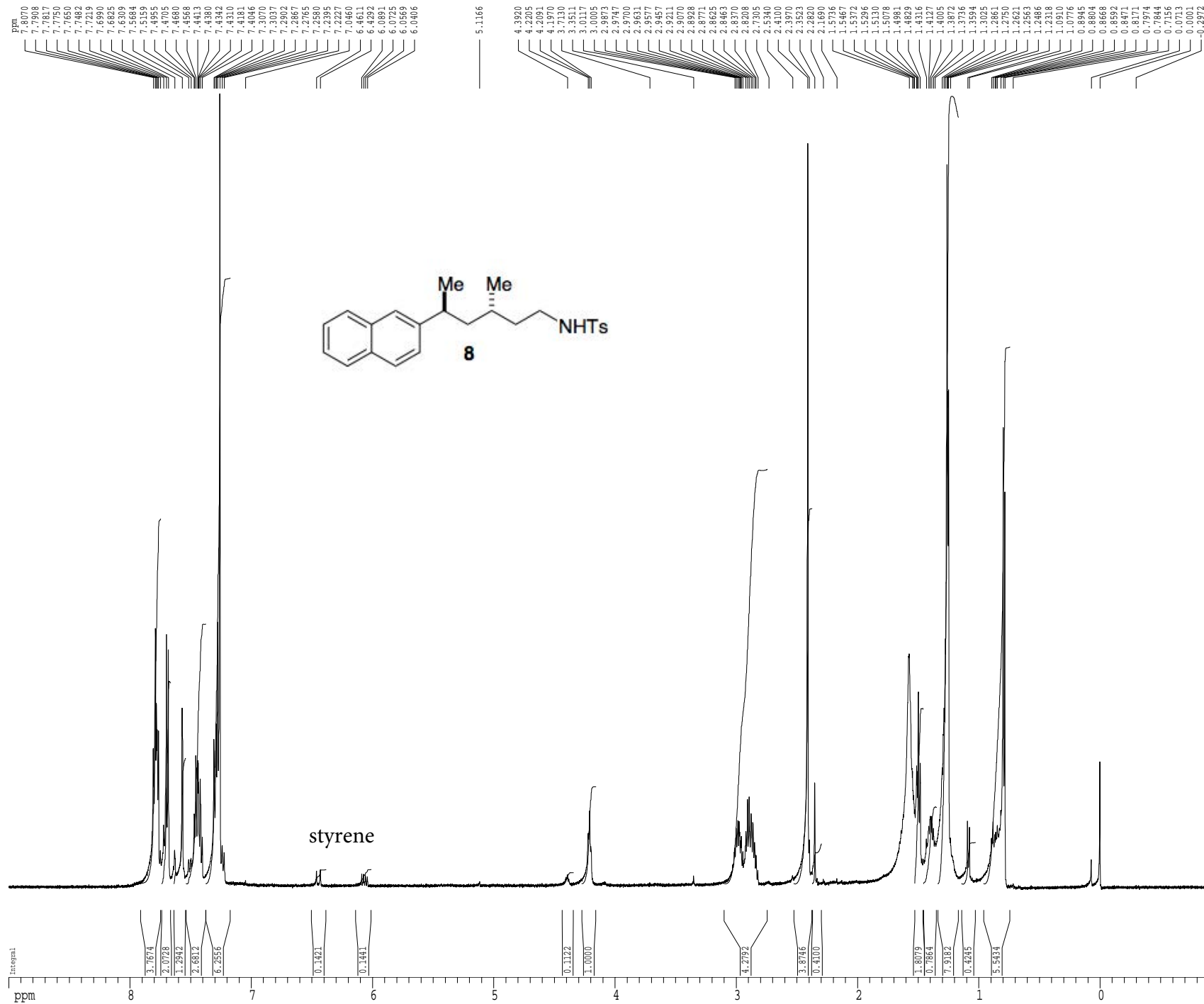
F2 - Acquisition Parameters
 Date_ 20210710
 Time 11.36
 INSTRUM cryo500
 PROBHD 5 mm CPTCI 1H-
 PULPROG zg30
 TD 81728
 SOLVENT CDCl3
 NS 8
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.098043 Hz
 AQ 5.0998774 sec
 RG 6.3
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWREK 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 9.75 usec
 PL1 1.60 dB
 SFO1 500.2235015 MHz

F2 - Processing parameters
 SI 65536
 SF 500.2200370 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 4501.98 Hz
 F2P -1.083 ppm
 F2 -541.88 Hz
 PPMCM 0.44225 ppm/cm
 HZCM 221.22217 Hz/cm

¹H spectrum



Current Data Parameters
 USER caherber
 NAME CAH-I-247-Full
 EXPNO 1
 PROCNO 1

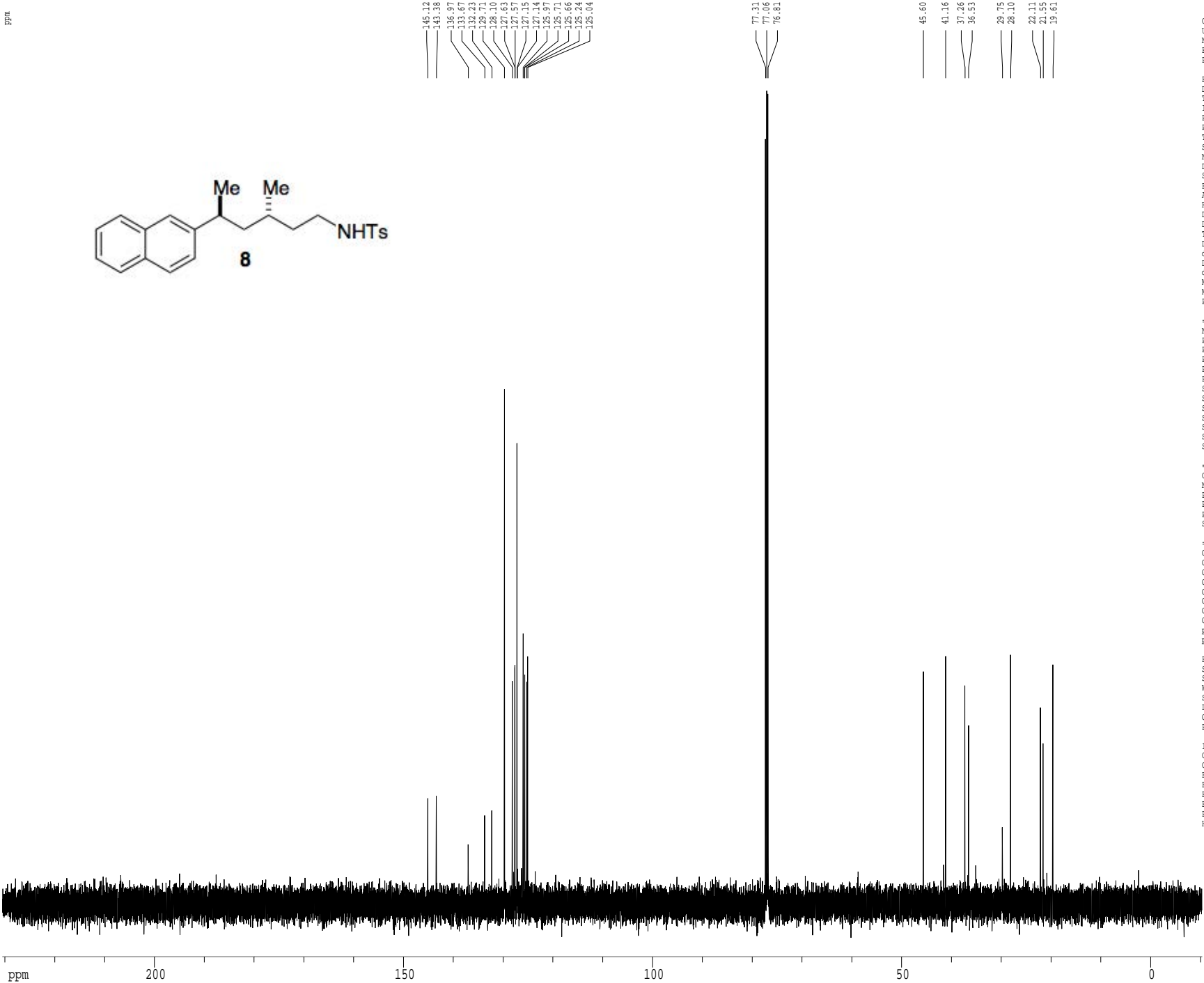
F2 - Acquisition Parameters
 Date_ 20210713
 Time 9.25
 INSTRUM cryo500
 PROBHD 5 mm CPTCI 1H-
 PULPROG zg30
 TD 81728
 SOLVENT CDCl3
 NS 8
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.098043 Hz
 AQ 5.0998774 sec
 RG 6.3
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWRR 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 9.75 usec
 PL1 1.60 dB
 SFO1 500.2235015 MHz

F2 - Processing parameters
 SI 65536
 SF 500.2200315 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CY 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 4501.98 Hz
 F2P -1.072 ppm
 F2 -536.38 Hz
 PPMCM 0.44177 ppm/cm
 HZCM 220.98083 Hz/cm

Z-restored spin-echo 13C spectrum with 1H decoupling



Current Data Parameters

USER caherber
NAME CAH-I-247-full
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters

Date_ 20210713
Time 9.36
INSTRUM cryo500
PROBHD 5 mm CPTCI 1H-
PULPROG SpinEchopg30gp2.prd
TD 65536
SOLVENT CDCl3
NS 512
DS 16
SWH 30303.031 Hz
FIDRES 0.462388 Hz
AQ 1.0813940 sec
RG 7298.2
DM 16.500 usec
DE 6.00 usec
TE 298.0 K
D1 0.25000000 sec
d11 0.03000000 sec
D16 0.00020000 sec
d17 0.00019600 sec
MCREST 0.00000000 sec
MCWIX 0.01500000 sec
P2 37.70 usec

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

NUC1 13C
P1 18.85 usec
P12 2000.00 usec
P20 500.00 usec
PL0 120.00 dB
PL1 -1.00 dB
SFO1 125.7942548 MHz
SP2 1.55 dB
SP4 1.55 dB
SPNAM2 Crp60comp.4
SPNAM4 Crp60,0.5,20.1
SPOFF2 0.00 Hz
SPOFF4 0.00 Hz

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

CPDPRG2 waltz16
NUC2 1H
PCPD2 100.00 usec
PL2 1.60 dB
PL12 22.00 dB
SFO2 500.2225011 MHz

===== GRADIENT CHANNEL =====

GPAM1 SINE.100
GPAM2 SINE.100
GPX1 0.00 %
GPX2 0.00 %
GPY1 0.00 %
GPY2 0.00 %
GPZ1 30.00 %
GPZ2 50.00 %
p15 500.00 usec
p16 1000.00 usec

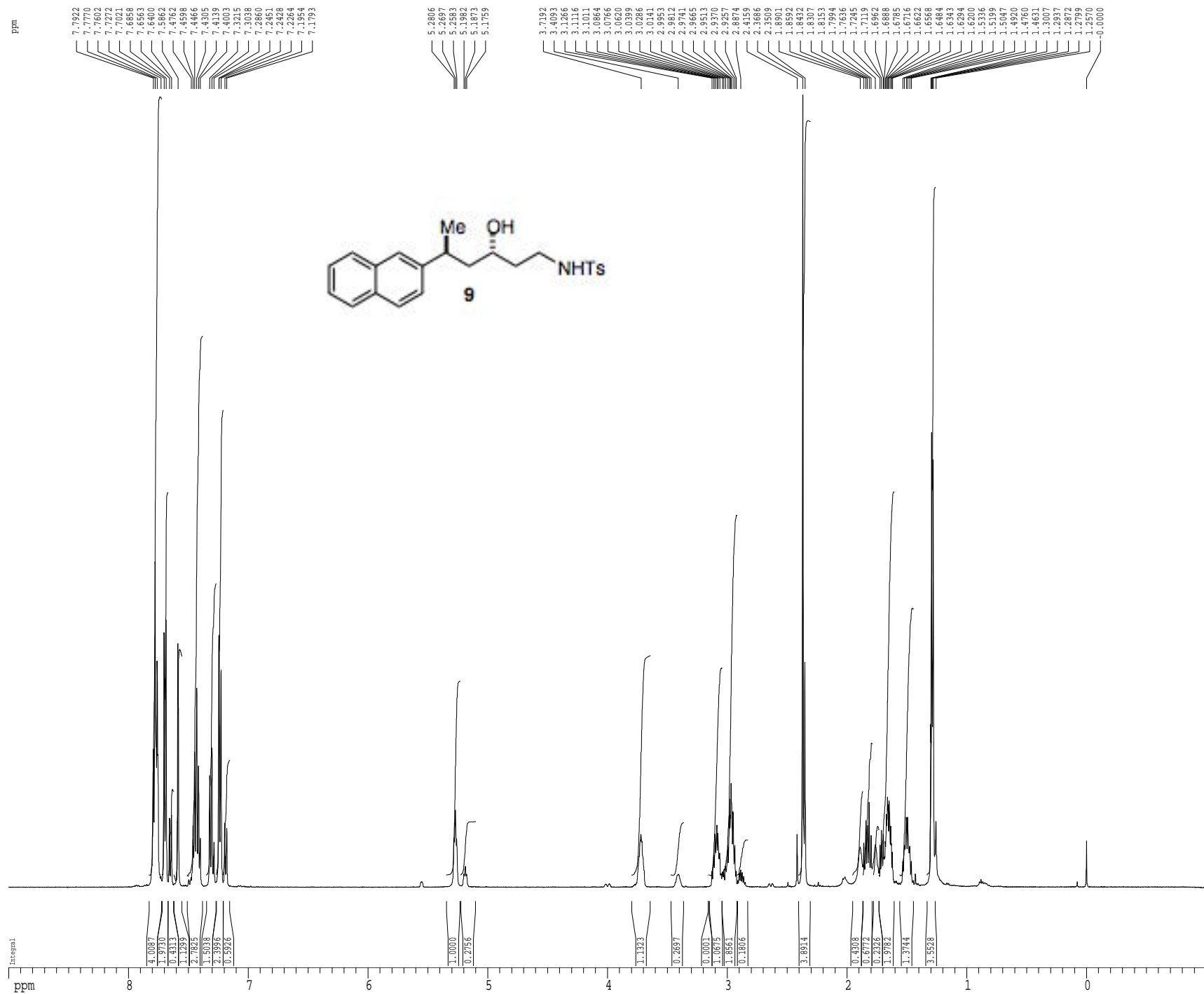
F2 - Processing parameters

SI 65536
SF 125.7804190 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 2.00

1D NMR plot parameters

CX 22.80 cm
CY 15.65 cm
F1P 230.637 ppm
F1 29009.68 Hz
F2P -10.287 ppm
F2 -1293.96 Hz
PPMCM 10.56688 ppm/cm
HZCM 1329.10706 Hz/cm

¹H spectrum



```

Current Data Parameters
USER          caherba
NAME          CAH-I-239-full
EXPNO        1
PROCNO       1

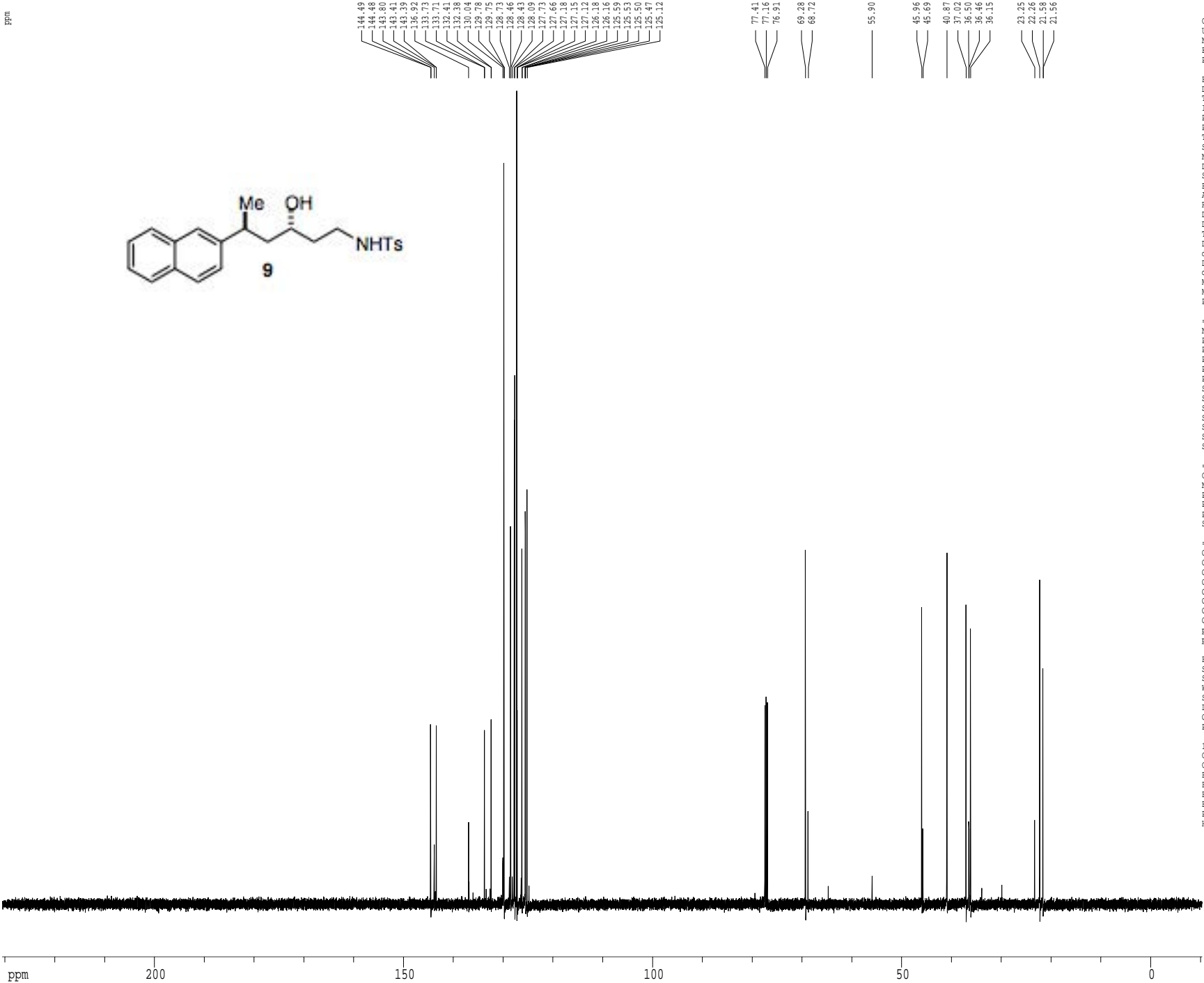
F2 - Acquisition Parameters
Date_        20210623
Time         11.35
INSTRUM      cryo500
PROBHD       5 mm CPTCI 1H-
PULPROG      zg30
TD           81728
SOLVENT      CDCl3
NS           8
DS           2
SWH          8012.820 Hz
FIDRES       0.098043 Hz
AQ           5.0998774 sec
RG           5
DW           62.400 usec
DE           6.00 usec
TE           298.0 K
D1           0.10000000 sec
MCREST       0.00000000 sec
MCNRC        0.01500000 sec

===== CHANNEL f1 =====
NUC1          1H
P1           9.75 usec
PL1          1.60 dB
SFO1         500.2235015 MHz

F2 - Processing parameters
SI           65536
SF           500.2200379 MHz
WDW          no
SSB          0
LB           0.00 Hz
GB           0
PC           1.00

1D NMR plot parameters
CY           22.80 cm
CY           15.00 cm
F1P          9.000 ppm
F1           4501.98 Hz
F2P          -1.085 ppm
F2           -542.74 Hz
PPMCM        0.44232 ppm/cm
HZCM         221.25967 Hz/cm
    
```

Z-restored spin-echo 13C spectrum with 1H decoupling



Current Data Parameters
USER caherber
NAME CAH-I-239-full
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters
Date_ 20210623
Time 11.43
INSTRUM cryo500
PROBHD 5 mm CPTCI 1H-
PULPROG SpinEchopg30gp2.prd
TD 65536
SOLVENT CDCl3
NS 296
DS 16
SWH 30303.031 Hz
FIDRES 0.462388 Hz
AQ 1.0813940 sec
RG 14596.5
DW 16.500 usec
DE 6.00 usec
TE 298.0 K
D1 0.25000000 sec
d11 0.03000000 sec
D16 0.00020000 sec
d17 0.00019600 sec
MCREST 0.00000000 sec
MCWIX 0.01500000 sec
P2 37.70 usec

***** CHANNEL f1 *****
NUC1 13C
P1 18.85 usec
P12 2000.00 usec
P20 500.00 usec
PL0 120.00 dB
PL1 -1.00 dB
SP01 125.7942548 MHz
SP2 1.55 dB
SP4 1.55 dB
SPNAM2 Crp60comp.4
SPNAM4 Crp60,0.5,20.1
SPOFF2 0.00 Hz
SPOFF4 0.00 Hz

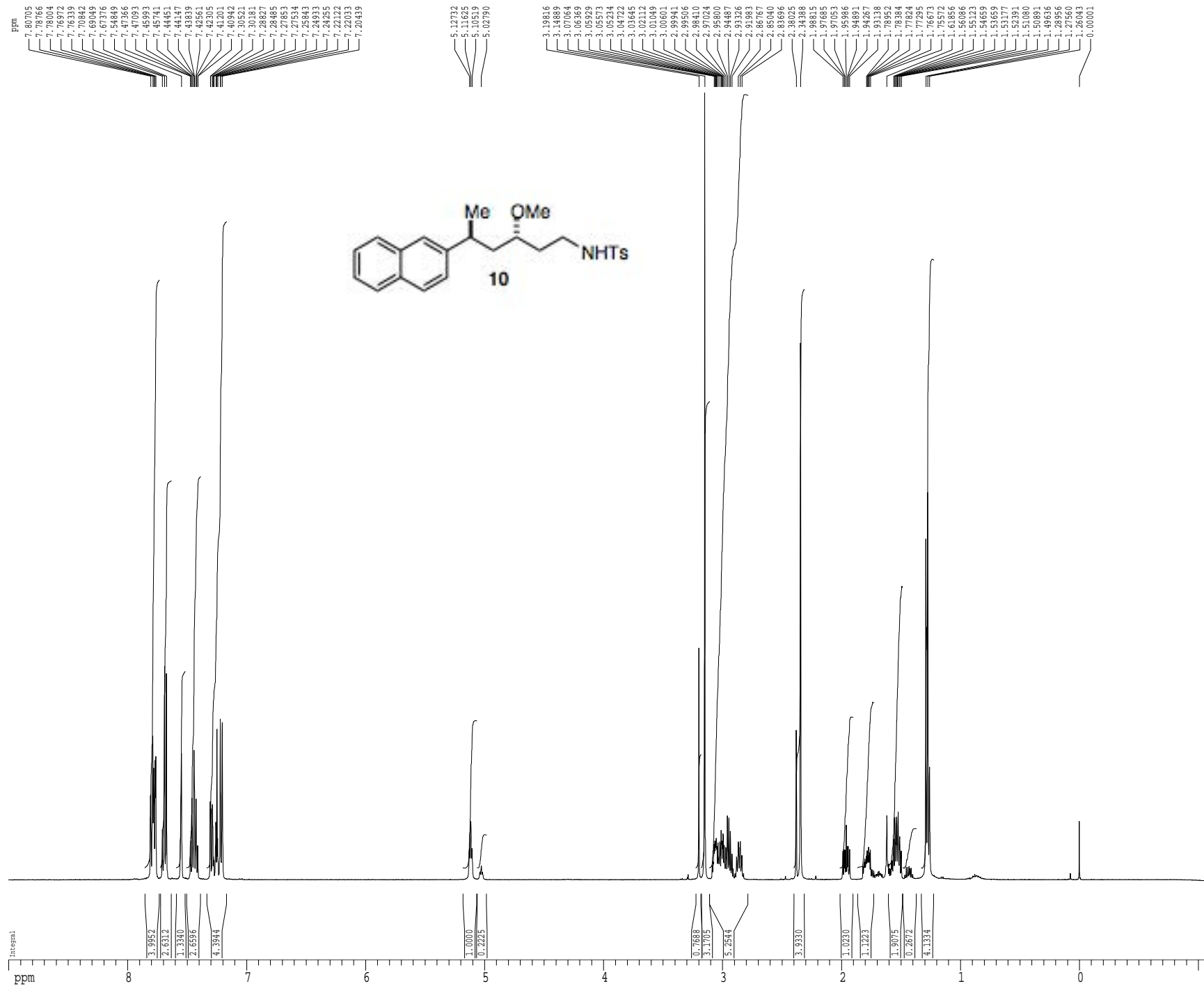
***** CHANNEL f2 *****
CPDPRG2 waltz16
NUC2 1H
PCPD2 100.00 usec
PL2 1.60 dB
PL12 22.00 dB
SFO2 500.2225011 MHz

***** GRADIENT CHANNEL *****
GPNAM1 SINE.100
GPNAM2 SINE.100
GPX1 0.00 %
GPX2 0.00 %
GPY1 0.00 %
GPY2 0.00 %
GPZ1 30.00 %
GPZ2 50.00 %
p15 500.00 usec
p16 1000.00 usec

F2 - Processing parameters
SI 65536
SF 125.7804131 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 2.00

1D NMR plot parameters
CX 22.80 cm
CY 15.65 cm
F1P 230.637 ppm
F1 29009.68 Hz
F2P -10.287 ppm
F2 -1293.96 Hz
PPMCM 10.56688 ppm/cm
HZCM 1329.10693 Hz/cm

¹H spectrum



Current Data Parameters
 USER caherber
 NAME CAH-I-212
 EXPNO 2
 PROCNO 1

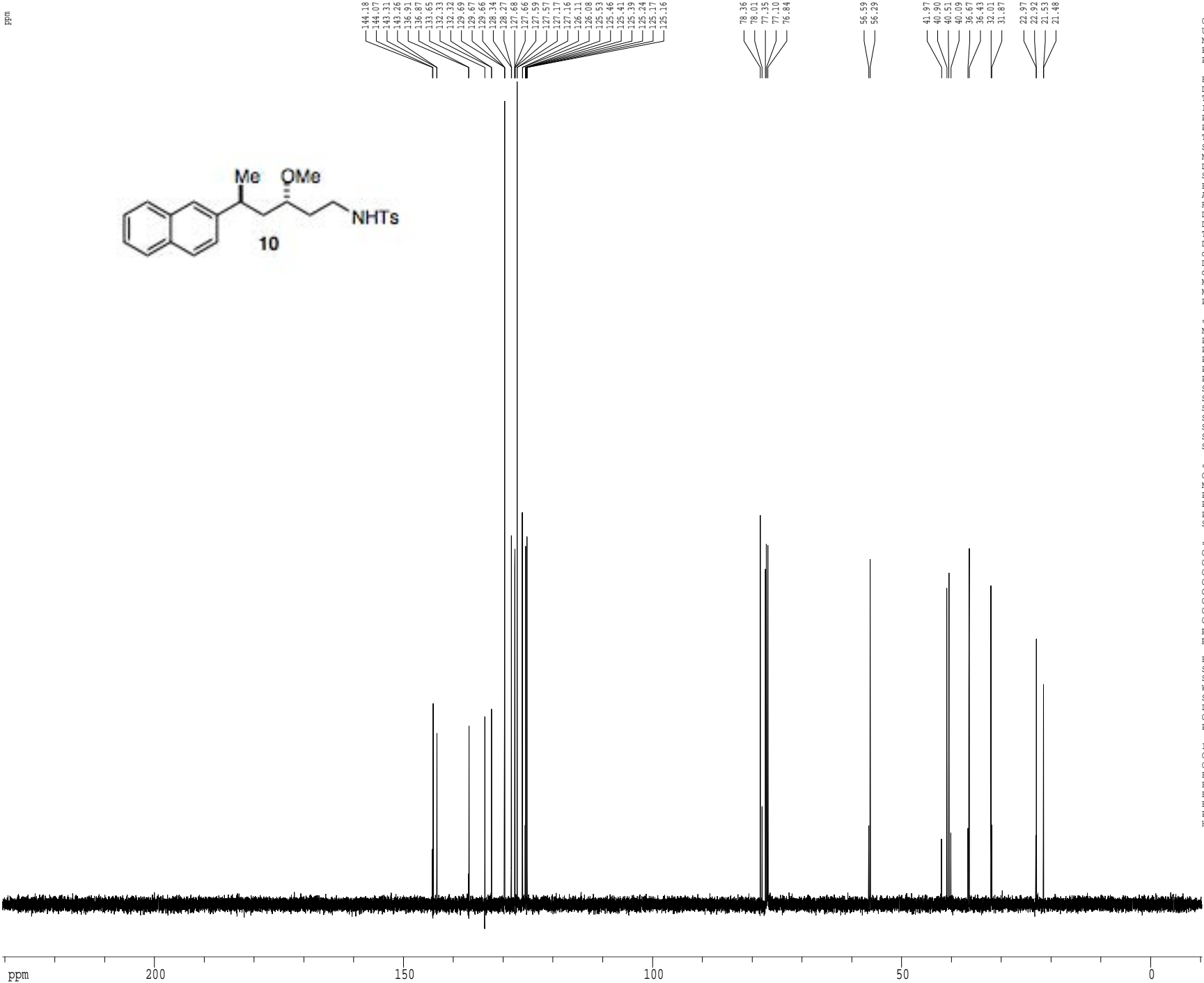
F2 - Acquisition Parameters
 Date_ 20210508
 Time 10.24
 INSTRUM cryo500
 PROBHD 5 mm CPTCI 1H-
 PULPROG zg30
 TD 81728
 SOLVENT CDCl3
 NS 8
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.098043 Hz
 AQ 5.0998774 sec
 RG 4
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWREK 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 9.75 usec
 PL1 1.60 dB
 SFO1 500.2235015 MHz

F2 - Processing parameters
 SI 65536
 SF 500.2200364 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CY 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 4501.98 Hz
 F2P -1.082 ppm
 F2 -541.27 Hz
 PPMCM 0.44220 ppm/cm
 HZCM 221.19518 Hz/cm

Z-restored spin-echo 13C spectrum with 1H decoupling



Current Data Parameters

USER caherber
NAME CAH-I-212
EXPNO 3
PROCNO 1

F2 - Acquisition Parameters

Date_ 20210508
Time 10.28
INSTRUM cryo500
PROBHD 5 mm CPTCI 1H-
PULPROG SpinEchopg30gp2.prd
TD 65536
SOLVENT CDCl3
NS 144
DS 16
SWH 30303.031 Hz
FIDRES 0.462388 Hz
AQ 1.0813940 sec
RG 2896.3
DM 16.500 usec
DE 6.00 usec
TE 298.0 K
D1 0.25000000 sec
d11 0.03000000 sec
d16 0.00020000 sec
d17 0.00019600 sec
MCREST 0.00000000 sec
MCWEX 0.01500000 sec
P2 37.70 usec

***** CHANNEL f1 *****

NUC1 13C
P1 18.85 usec
P12 2000.00 usec
P20 500.00 usec
PL0 120.00 dB
PL1 -1.00 dB
SFO1 125.7942548 MHz
SP2 1.55 dB
SP4 1.55 dB
SPNAM2 Crp60comp.4
SPNAM4 Crp60,0.5,20.1
SPOFF2 0.00 Hz
SPOFF4 0.00 Hz

***** CHANNEL f2 *****

CPDPRG2 waltz16
NUC2 1H
PCPD2 100.00 usec
PL2 1.60 dB
PL12 22.00 dB
SFO2 500.2225011 MHz

***** GRADIENT CHANNEL *****

GPAM1 SINE.100
GPAM2 SINE.100
GPX1 0.00 %
GPX2 0.00 %
GPY1 0.00 %
GPY2 0.00 %
GPZ1 30.00 %
GPZ2 50.00 %
p15 500.00 usec
p16 1000.00 usec

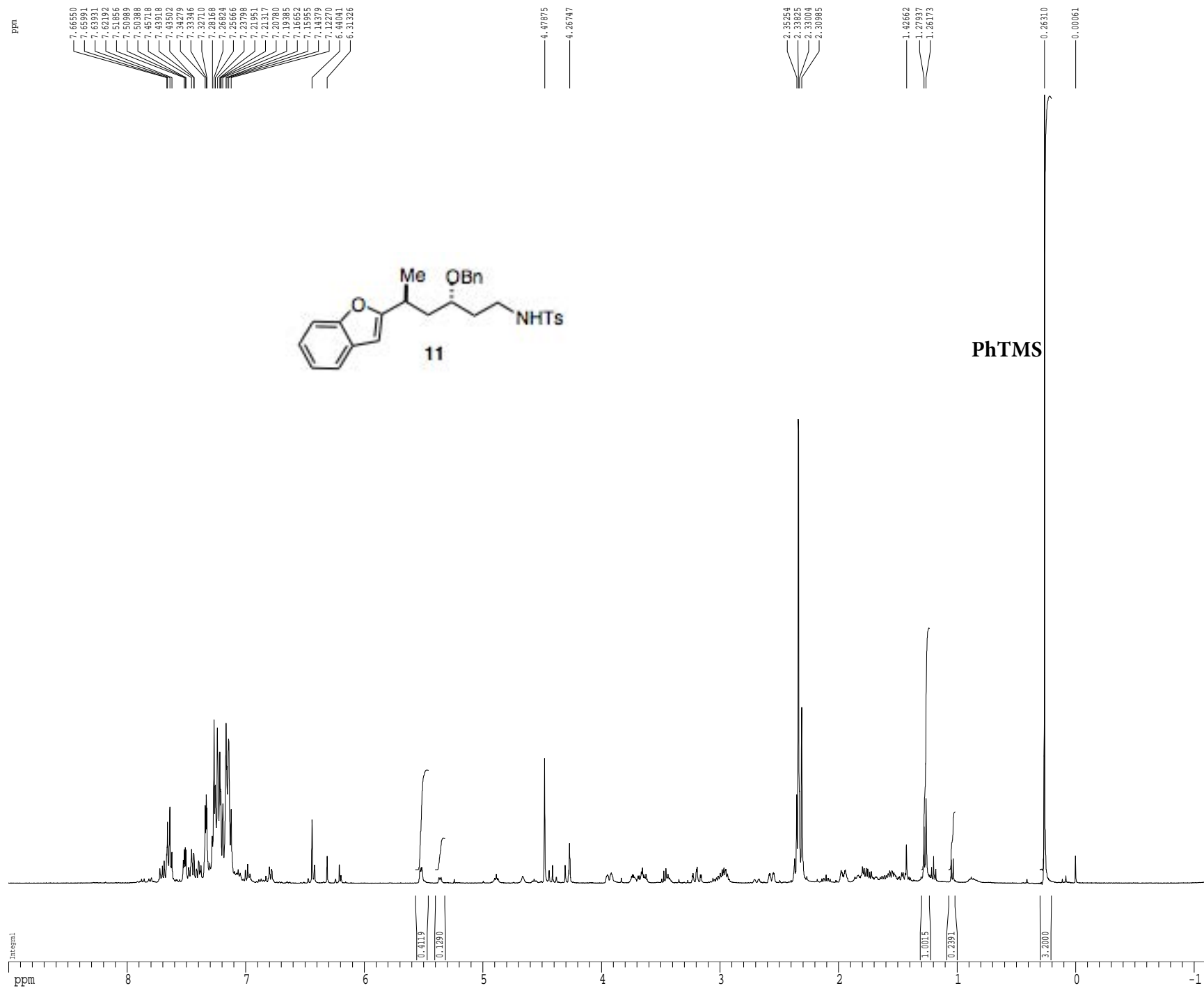
F2 - Processing parameters

SI 65536
SF 125.7804190 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 2.00

1D NMR plot parameters

CX 22.80 cm
CY 15.65 cm
F1P 230.637 ppm
F1 29009.68 Hz
F2P -10.287 ppm
F2 -1293.96 Hz
PPMCM 10.56688 ppm/cm
HZCM 1329.10706 Hz/cm

¹H spectrum



Current Data Parameters
 USER caherber
 NAME CAH-I-233-Crude
 EXPNO 1
 PROCNO 1

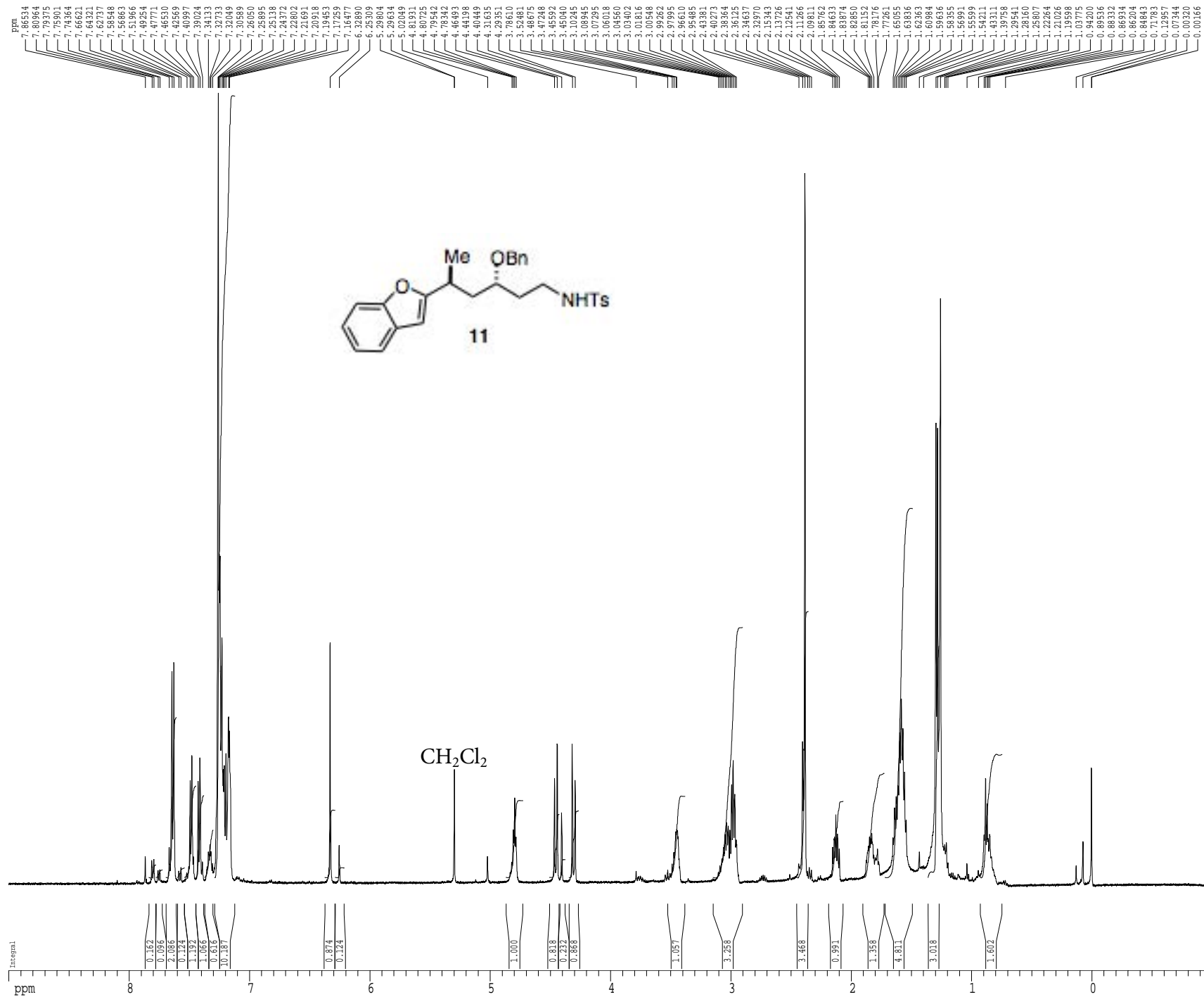
F2 - Acquisition Parameters
 Date_ 20210604
 Time 16.44
 INSTRUM drx400
 PROBHD 5 mm QNP H/F/P
 PULPROG zg30
 TD 65536
 SOLVENT CDCl3
 NS 8
 DS 2
 SWH 6410.256 Hz
 FIDRES 0.097813 Hz
 AQ 5.1118579 sec
 RG 71.8
 DW 78.000 usec
 DE 4.50 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWRE 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 12.00 usec
 PL1 -1.60 dB
 SFO1 400.1328009 MHz

F2 - Processing parameters
 SI 65536
 SF 400.1300427 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 2.00

1D NMR plot parameters
 CX 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 3601.17 Hz
 F2P -1.117 ppm
 F2 -446.91 Hz
 PPMCM 0.44372 ppm/cm
 HZCM 177.54726 Hz/cm

¹H spectrum



Current Data Parameters
 USER caherber
 NAME CAH-I-246-full
 EXPNO 1
 PROCNO 1

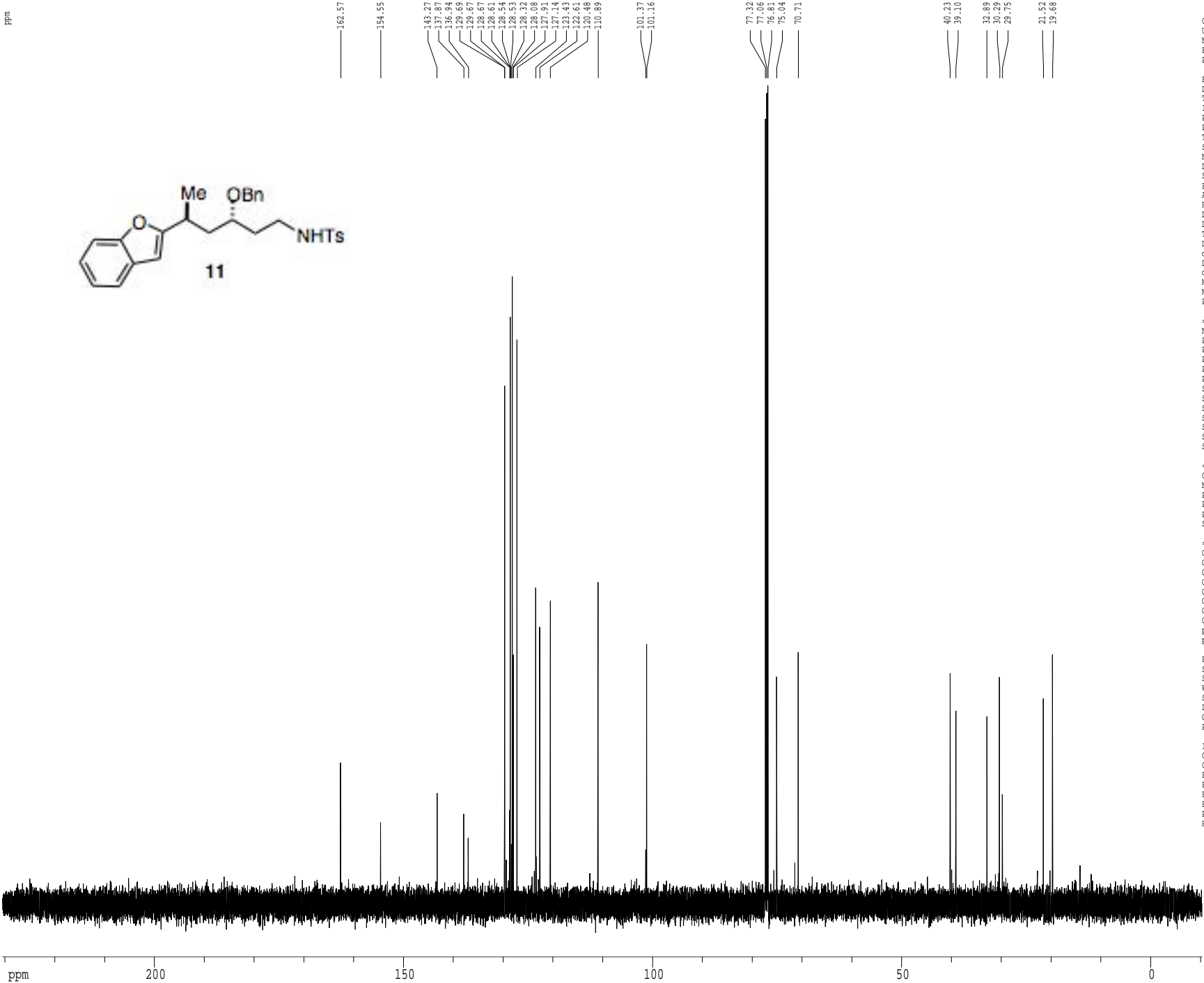
F2 - Acquisition Parameters
 Date_ 20210708
 Time 11.14
 INSTRUM cryo500
 PROBHD 5 mm CPTCI 1H-
 PULPROG zg30
 TD 81728
 SOLVENT CDCl3
 NS 8
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.098043 Hz
 AQ 5.0998774 sec
 RG 6.3
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWRE 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 9.75 usec
 PL1 1.60 dB
 SFO1 500.2235015 MHz

F2 - Processing parameters
 SI 65536
 SF 500.2200313 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CY 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 4501.98 Hz
 F2P -1.072 ppm
 F2 -536.14 Hz
 PPMCM 0.44175 ppm/cm
 HZCM 220.97008 Hz/cm

Z-restored spin-echo 13C spectrum with 1H decoupling



Current Data Parameters

USER caherber
NAME CAH-I-246-full
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters

Date_ 20210708
Time 11.23
INSTRUM cryo500
PROBHD 5 mm CPTCI 1H-
PULPROG SpinEchopg30gp2.prd
TD 65536
SOLVENT CDCl3
NS 448
DS 16
SWH 30303.031 Hz
FIDRES 0.462388 Hz
AQ 1.0813940 sec
RG 14596.5
DW 16.500 usec
DE 6.00 usec
TE 298.0 K
D1 0.25000000 sec
d11 0.03000000 sec
D16 0.00020000 sec
d17 0.00019600 sec
MCREST 0.00000000 sec
MCMKX 0.01500000 sec
P2 37.70 usec

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

NUC1 13C
P1 18.85 usec
P12 2000.00 usec
P20 500.00 usec
PL0 120.00 dB
PL1 -1.00 dB
SP01 125.7942548 MHz
SP2 1.55 dB
SP4 1.55 dB
SPNAM2 Crp60comp.4
SPNAM4 Crp60,0.5,20.1
SPOFF2 0.00 Hz
SPOFF4 0.00 Hz

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

CPDPRG2 waltz16
NUC2 1H
PCPD2 100.00 usec
PL2 1.60 dB
PL12 22.00 dB
SFO2 500.2225011 MHz

===== GRADIENT CHANNEL =====

GPAM1 SINE.100
GPAM2 SINE.100
GPX1 0.00 %
GPX2 0.00 %
GPY1 0.00 %
GPY2 0.00 %
GPZ1 30.00 %
GPZ2 50.00 %
p15 500.00 usec
p16 1000.00 usec

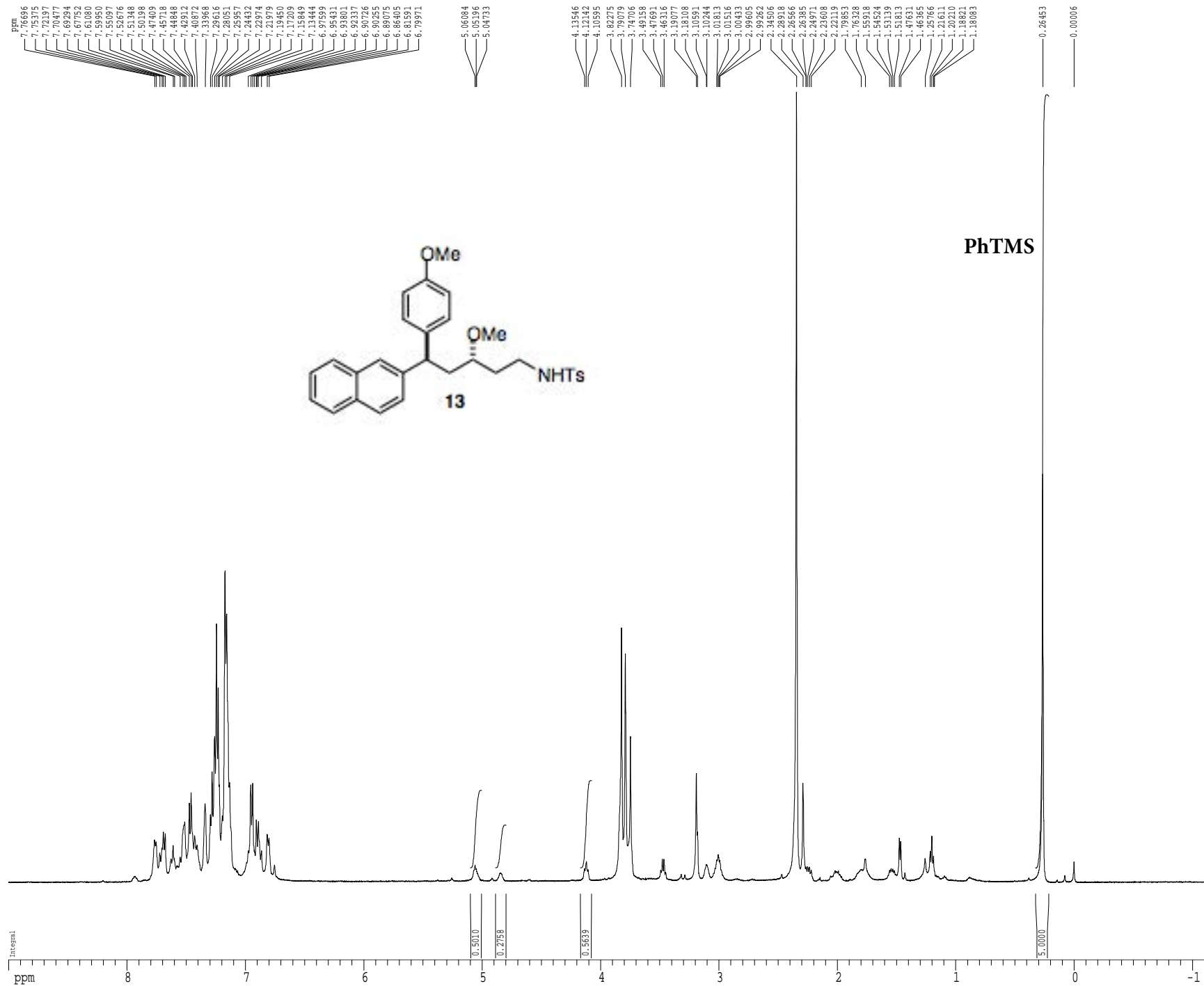
F2 - Processing parameters

SI 65536
SF 125.7804190 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 2.00

1D NMR plot parameters

CX 22.80 cm
CY 15.65 cm
F1P 230.637 ppm
F1 29009.68 Hz
F2P -10.287 ppm
F2 -1293.96 Hz
PPMCM 10.56688 ppm/cm
HZCM 1329.10706 Hz/cm

¹H spectrum



Current Data Parameters
 USER caherber
 NAME CAH-I-284-Crude
 EXPNO 1
 PROCNO 1

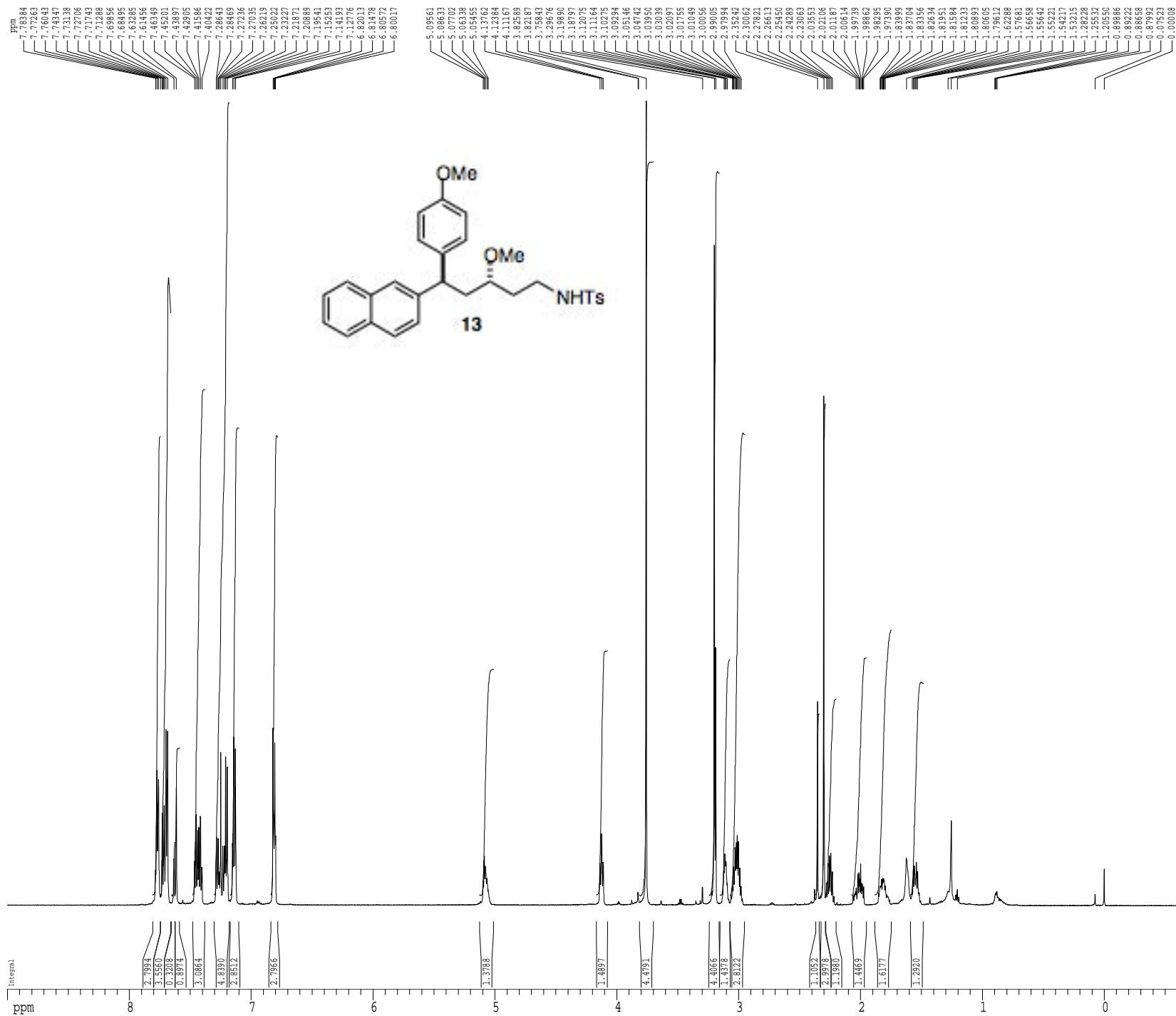
F2 - Acquisition Parameters
 Date_ 20210917
 Time 10.29
 INSTRUM gn500
 PROBHD 5 mm broadband
 PULPROG zg30
 TD 81728
 SOLVENT CDCl3
 NS 8
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.098043 Hz
 AQ 5.0998774 sec
 RG 90.5
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWRE 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 12.00 usec
 PL1 -6.00 dB
 SF01 498.6534906 MHz

F2 - Processing parameters
 SI 65536
 SF 498.6500485 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 4487.85 Hz
 F2P -1.132 ppm
 F2 -564.38 Hz
 PPMCM 0.44438 ppm/cm
 HZCM 221.58908 Hz/cm

¹H



Current Data Parameters
USER caherber
NAME CAH-I-285-f11-600
EXPNO 4
PROCNO 1

F2 - Acquisition Parameters
Date_ 20210920
Time 10.59
INSTRUM av600
PROBHD 5 mm CPBBO BB-
PULPROG zg30
TD 989744
SOLVENT CDCl3
NS 8
DS 2
SWH 9615.385 Hz
FIDRES 0.098042 Hz
AQ 5.0998979 sec
RG 10
DW 52.000 usec
DE 14.23 usec
TE 298.0 K
D1 0.10000000 sec
TD0 1

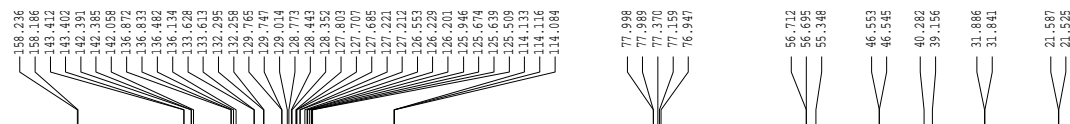
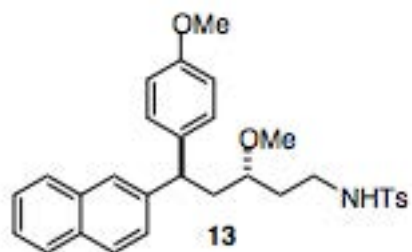
***** CHANNEL f1 *****
SF01 600.1342009 MHz
NUC1 1H
P1 9.50 usec

F2 - Processing parameters
SI 65536
SF 600.1300407 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 22.80 cm
CY 15.00 cm
FIP 9.000 ppm
F1 5401.17 Hz
F2 -1.079 ppm
F2 -647.47 Hz
PPMCM 0.44206 ppm/cm
HZCM 265.29141 Hz/cm

13C

ppm



Current Data Parameters
 USER caherber
 NAME CAH-I-285-f11-600
 EXPNO 5
 PROCNO 1

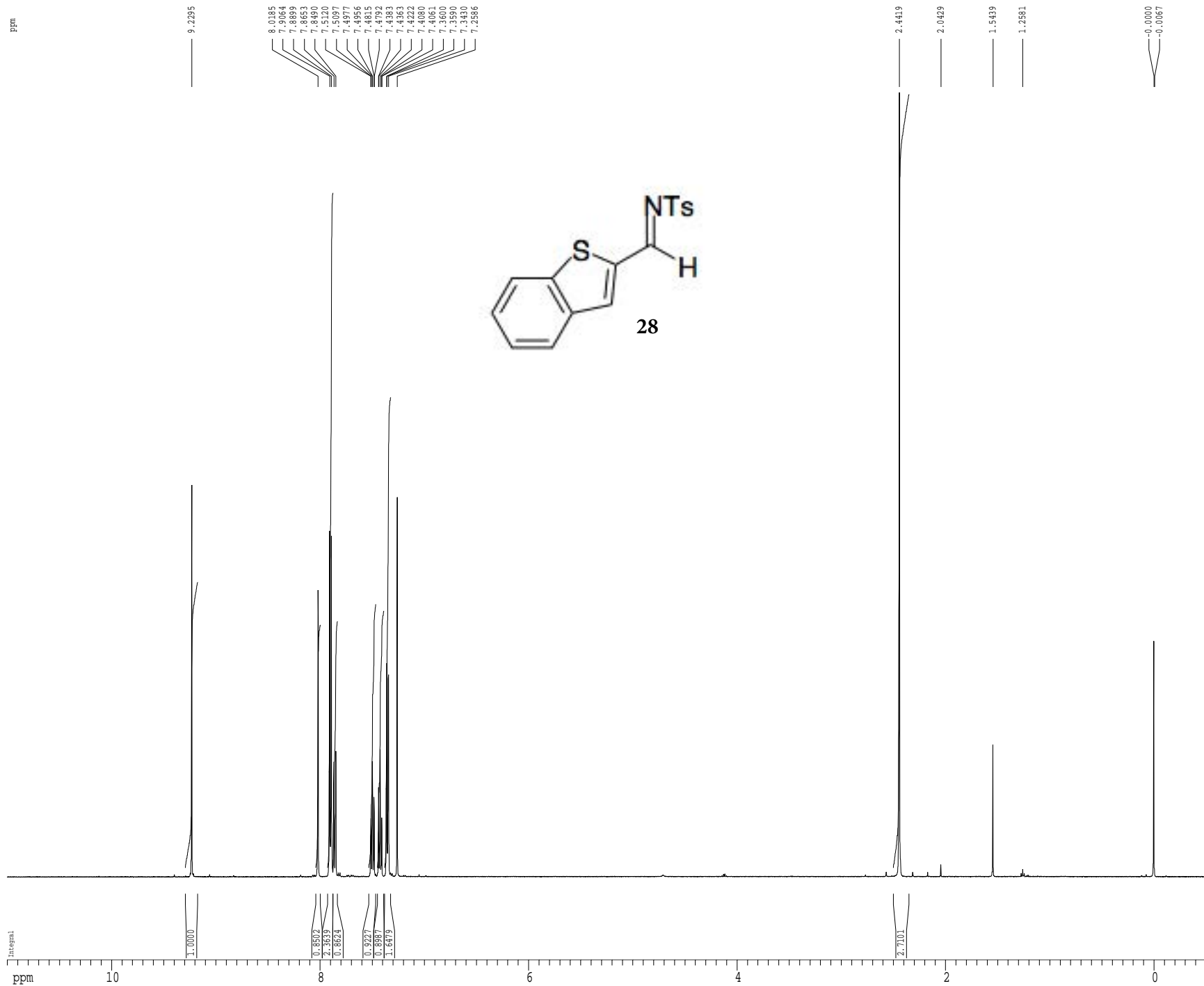
F2 - Acquisition Parameters
 Date_ 20210920
 Time 11.09
 INSTRUM av600
 PROBHD 5 mm CPBBO BB-
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 307
 DS 4
 SWH 36231.883 Hz
 FIDRES 0.552855 Hz
 AQ 0.9044468 sec
 RG 2050
 DW 13.800 usec
 DE 19.63 usec
 TE 298.1 K
 D1 0.40000001 sec
 D11 0.03000000 sec
 TD0 1

***** CHANNEL f1 *****
 SF01 150.9194080 MHz
 NUC1 13C
 P1 10.10 usec

F2 - Processing parameters
 SI 65536
 SF 150.9027986 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 22.80 cm
 CY 15.00 cm
 F1P 230.117 ppm
 F1 34725.34 Hz
 F2P -9.984 ppm
 F2 -1506.54 Hz
 PPMCM 10.53074 ppm/cm
 HZCM 1589.11780 Hz/cm

¹H spectrum



Current Data Parameters
 USER khewitt1
 NAME KAH-1-153-Z-2
 EXPNO 1
 PROCNO 1

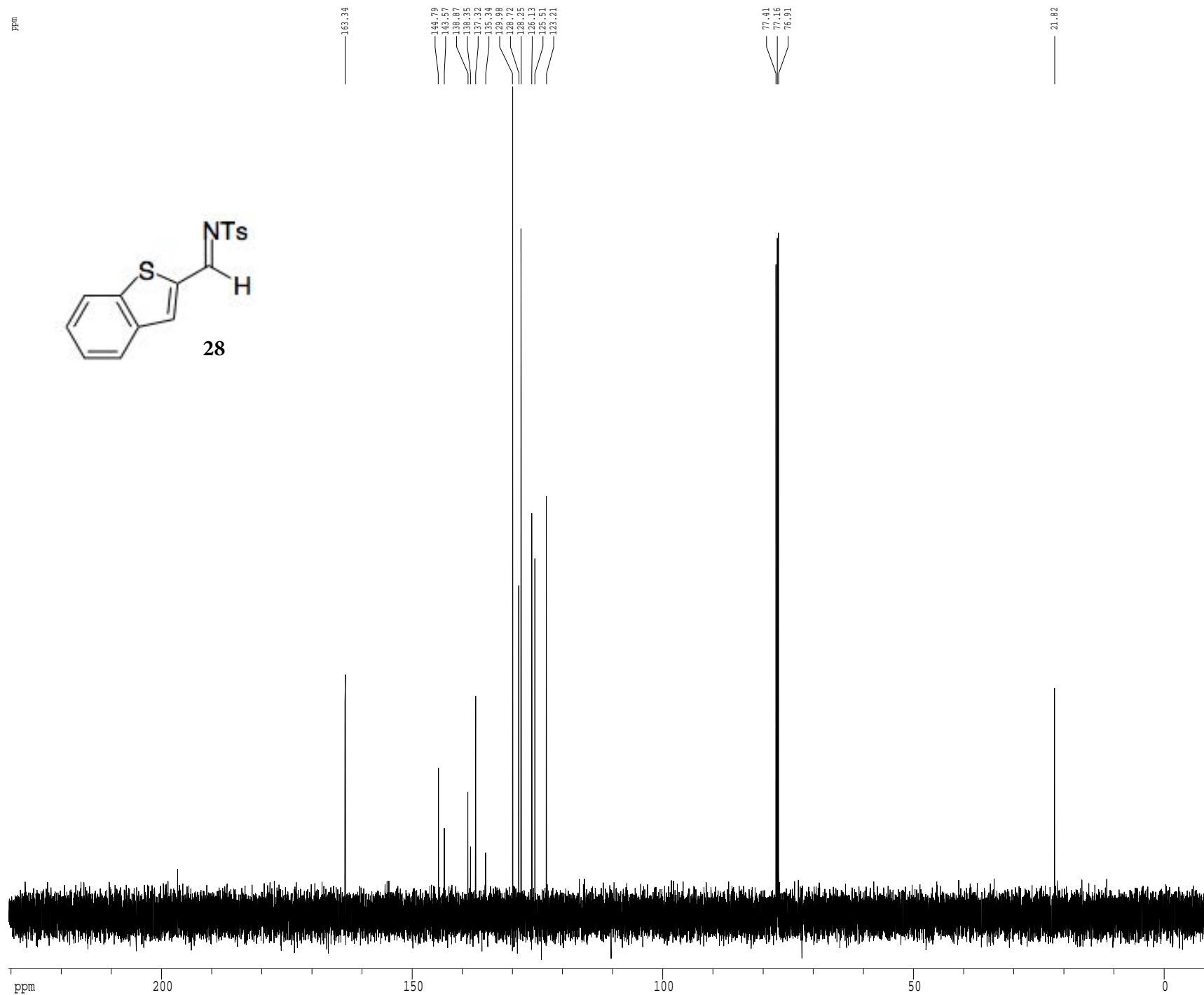
F2 - Acquisition Parameters
 Date_ 20181110
 Time 17.24
 INSTRUM cryo500
 PROBHD 5 mm CPTCI 1H-
 PULPROG zg30
 TD 48074
 SOLVENT CDC13T
 NS 8
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.166677 Hz
 AQ 2.9998677 sec
 RG 10.1
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWREK 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 7.50 usec
 PL1 1.60 dB
 SFO1 500.2235015 MHz

F2 - Processing parameters
 SI 65536
 SF 500.2200329 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 22.80 cm
 CY 15.00 cm
 F1P 11.000 ppm
 F1 5502.42 Hz
 F2P -0.500 ppm
 F2 -250.11 Hz
 PPMCM 0.50439 ppm/cm
 HZCM 252.30397 Hz/cm

Z-restored spin-echo 13C spectrum with 1H decoupling



```

Current Data Parameters
USER      khewitt1
NAME      KAH-1-153-Z-2
EXPNO     2
PROCNO    1

F2 - Acquisition Parameters
Date_     20181110
Time      17.26
INSTRUM   cryo500
PROBHD    5 mm CPTCI 1H-
PULPROG   SpinEchopg30gp2.prd
TD        65536
SOLVENT   CDCl3
NS         154
DS         16
SWH        30303.031 Hz
FIDRES     0.462388 Hz
AQ         1.0813940 sec
RG         13004
DM         16.500 usec
DE         6.00 usec
TE         298.0 K
D1         0.25000000 sec
d11        0.03000000 sec
d16        0.00020000 sec
d17        0.00019600 sec
MCWREST    0.00000000 sec
MCWEXX     0.01500000 sec
P2         33.10 usec

===== CHANNEL f1 =====
NUC1       13C
P1         16.55 usec
P12        2000.00 usec
P20        500.00 usec
PL0        120.00 dB
PL1        -1.00 dB
SFO1       125.7942548 MHz
SP2        2.70 dB
SP4        2.70 dB
SPNAM2     Crp60comp.4
SPNAM4     Crp60,0.5,20.1
SPOFF2     0.00 Hz
SPOFF4     0.00 Hz

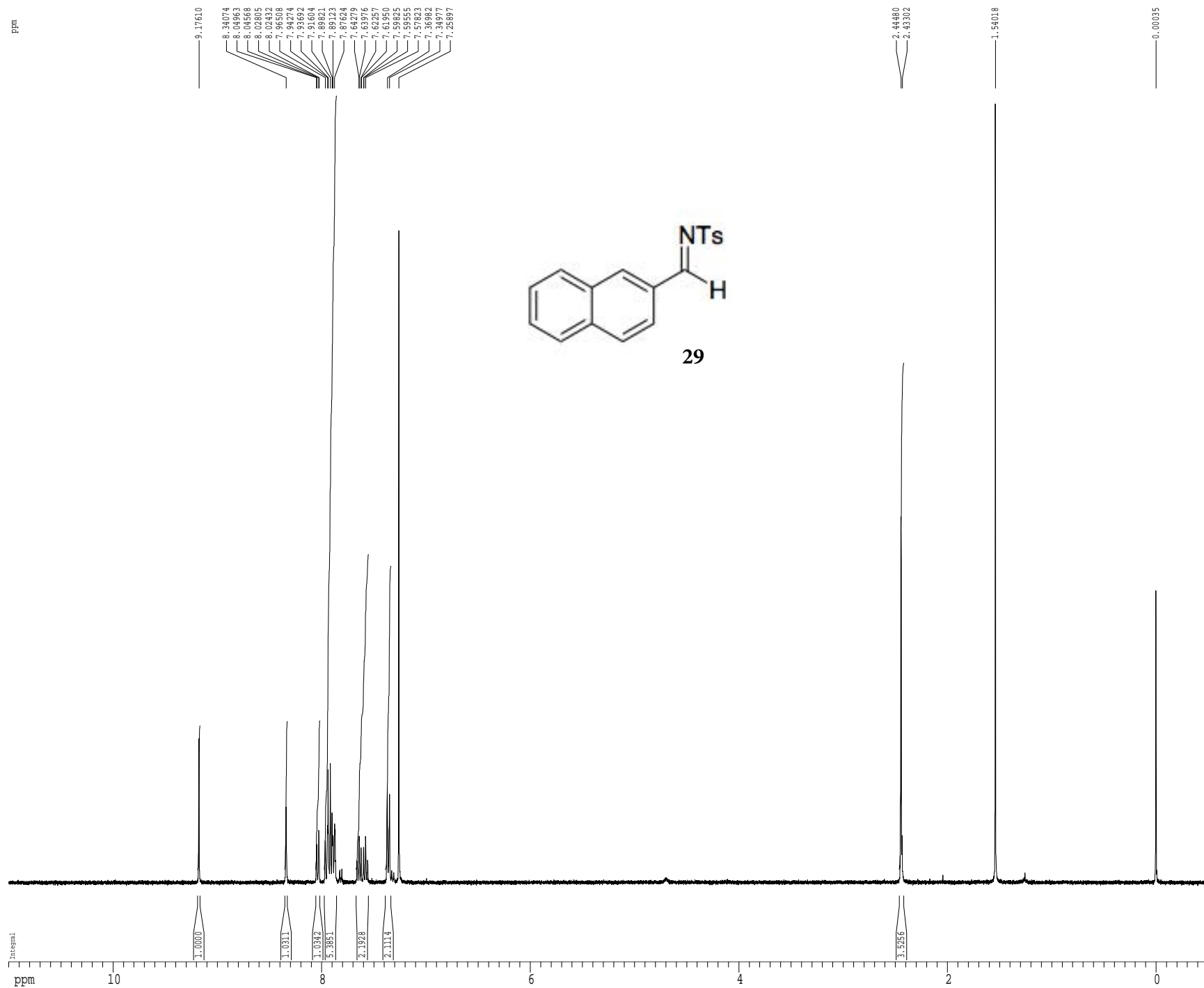
===== CHANNEL f2 =====
CPDPRG2    waltz16
NUC2       1H
PCPD2      100.00 usec
PL2        1.60 dB
PL12       23.54 dB
SFO2       500.2225011 MHz

===== GRADIENT CHANNEL =====
GPNAM1     SINE.100
GPNAM2     SINE.100
GPX1       0.00 %
GPX2       0.00 %
GPY1       0.00 %
GPY2       0.00 %
GPZ1       30.00 %
GPZ2       50.00 %
p15        500.00 usec
p16        1000.00 usec

F2 - Processing parameters
SI         65536
SF         125.7804071 MHz
WDW        no
SSB        0
LB         0.00 Hz
GB         0
PC         1.50

1D NMR plot parameters
CX         22.80 cm
CY         15.65 cm
F1P        230.460 ppm
F1         28987.37 Hz
F1P2       -10.460 ppm
F2         -1315.66 Hz
PPMCM      10.56667 ppm/cm
HZCM       1329.08020 Hz/cm
    
```

¹H spectrum



Current Data Parameters
 USER khewitt1
 NAME CAH-I-219
 EXPNO 2
 PROCNO 1

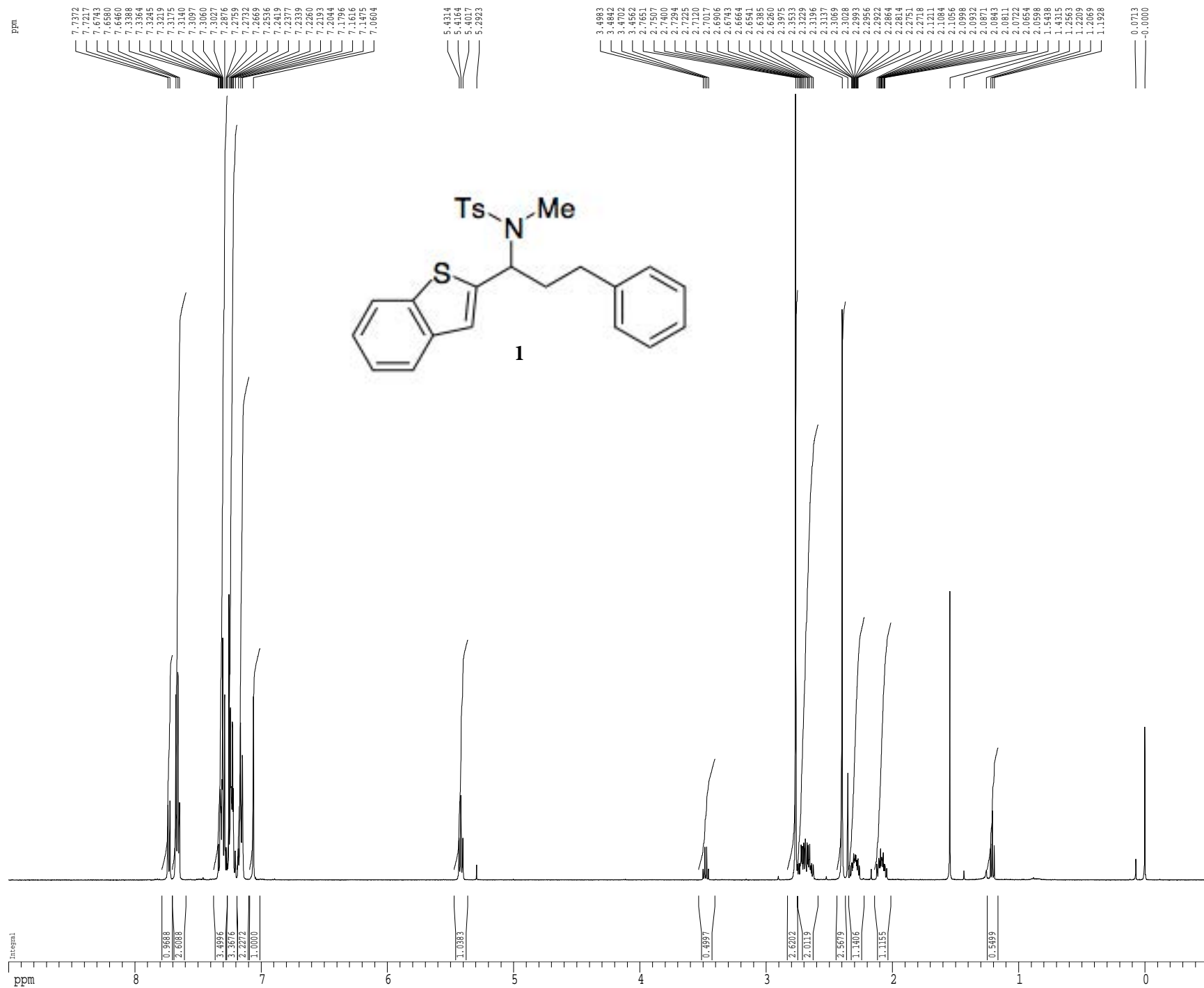
F2 - Acquisition Parameters
 Date_ 20210506
 Time 9.54
 INSTRUM drx400
 PROBHD 5 mm QNP H/P/P
 PULPROG zg30
 TD 65536
 SOLVENT CDCl3
 NS 8
 DS 2
 SWH 6410.256 Hz
 FIDRES 0.097813 Hz
 AQ 5.1118579 sec
 RG 1149.4
 DW 78.000 usec
 DE 4.50 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWREK 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 12.00 usec
 PL1 -1.60 dB
 SF01 400.1328009 MHz

F2 - Processing parameters
 SI 65536
 SF 400.1300220 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 2.00

1D NMR plot parameters
 CX 22.80 cm
 CY 15.00 cm
 F1P 11.000 ppm
 F1 4401.43 Hz
 F2P -0.500 ppm
 F2 -200.07 Hz
 PPMCM 0.50439 ppm/cm
 HZCM 201.81998 Hz/cm

¹H spectrum



Current Data Parameters
 USER khewitt1
 NAME KAH-1-172-Z
 EXPNO 1
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20181107
 Time 21.08
 INSTRUM cryo500
 PROBHD 5 mm CPTCI 1H-
 PULPROG zg30
 TD 48074
 SOLVENT CDCl3
 NS 8
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.166677 Hz
 AQ 2.9998677 sec
 RG 9
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCNRK 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 7.50 usec
 PL1 1.60 dB
 SFO1 500.2235015 MHz

F2 - Processing parameters
 SI 65536
 SF 500.2200355 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CY 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 4501.98 Hz
 F2P -0.500 ppm
 F2 -250.11 Hz
 PPMCM 0.41667 ppm/cm
 HZCM 208.42502 Hz/cm

Z-restored spin-echo 13C spectrum with 1H decoupling

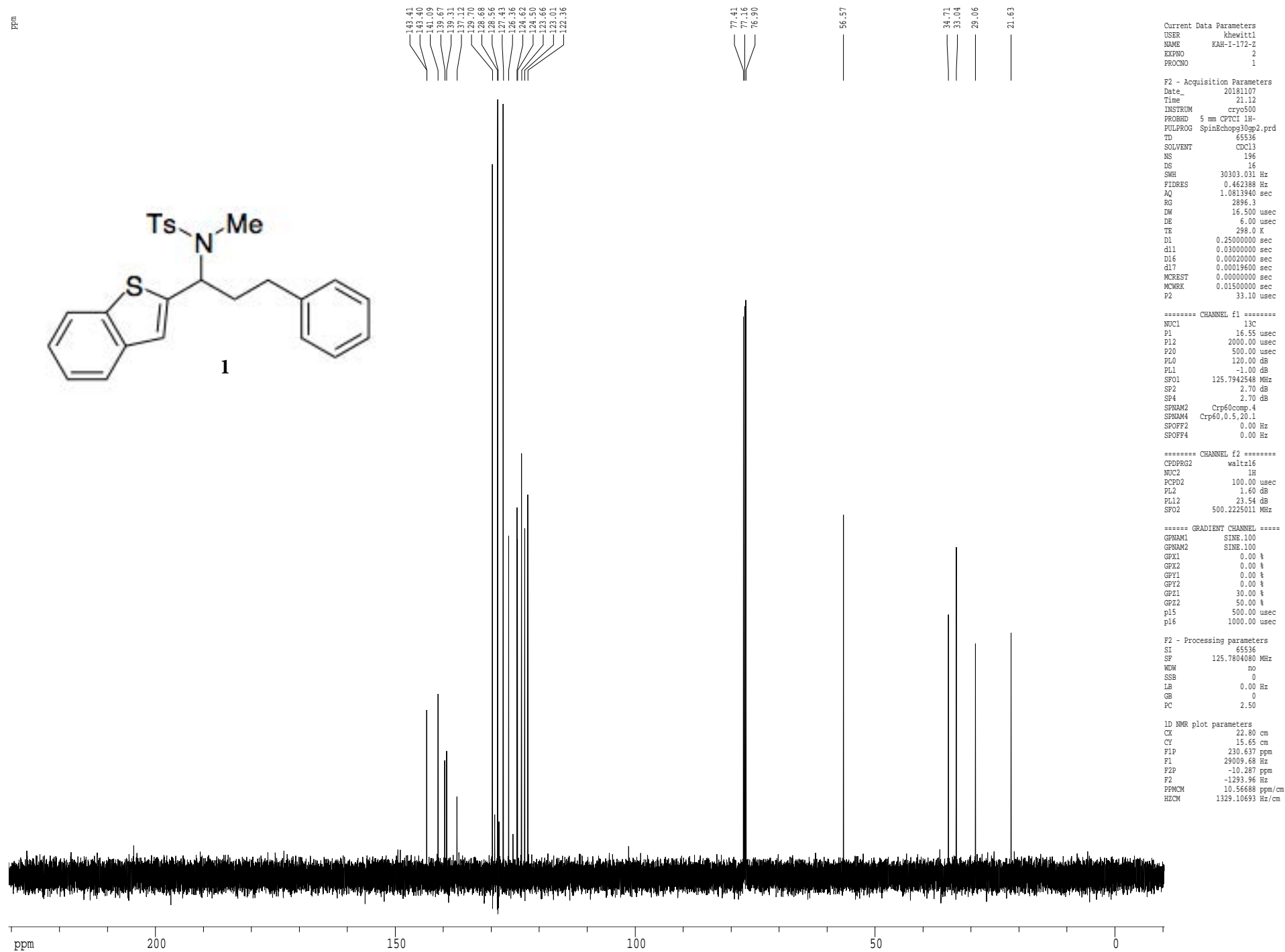
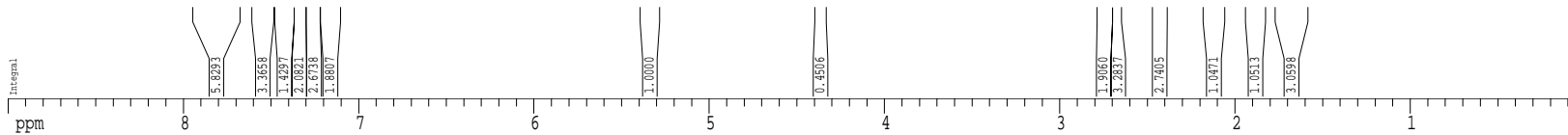


Figure 10: A plot of the eigenvalues of the matrix \mathbf{A} for the case $\alpha = 0.5$. The eigenvalues are arranged in descending order of magnitude. The plot shows a large number of eigenvalues, with the first few being significantly larger than the rest. The eigenvalues are labeled with their corresponding index k on the x-axis, ranging from 1 to 100. The y-axis represents the eigenvalue magnitude, ranging from 0 to 1000. The eigenvalues are labeled with their corresponding index k on the x-axis, ranging from 1 to 100. The y-axis represents the eigenvalue magnitude, ranging from 0 to 1000.



```

Current Data Parameters
USER                    khewitt1
NAME                   AM-I-046-Z
EXPNO                  1
PROCNO                 1

F2 - Acquisition Parameters
Date_                  20210809
Time                   18.13
INSTRUM                cryo500
PROBHD                 5 mm CPTCI 1H-
PULPROG                zg30
TD                     48074
SOLVENT                CDCl3
NS                      8
DS                      2
SWH                     8012.820 Hz
FIDRES                 0.16667 Hz
AQ                     2.9998677 sec
RG                      5
DW                     62.400 usec
DE                     6.00 usec
TE                     298.0 K
D1                     0.10000000 sec
MCREST                 0.00000000 sec
MCWRK                  0.01500000 sec

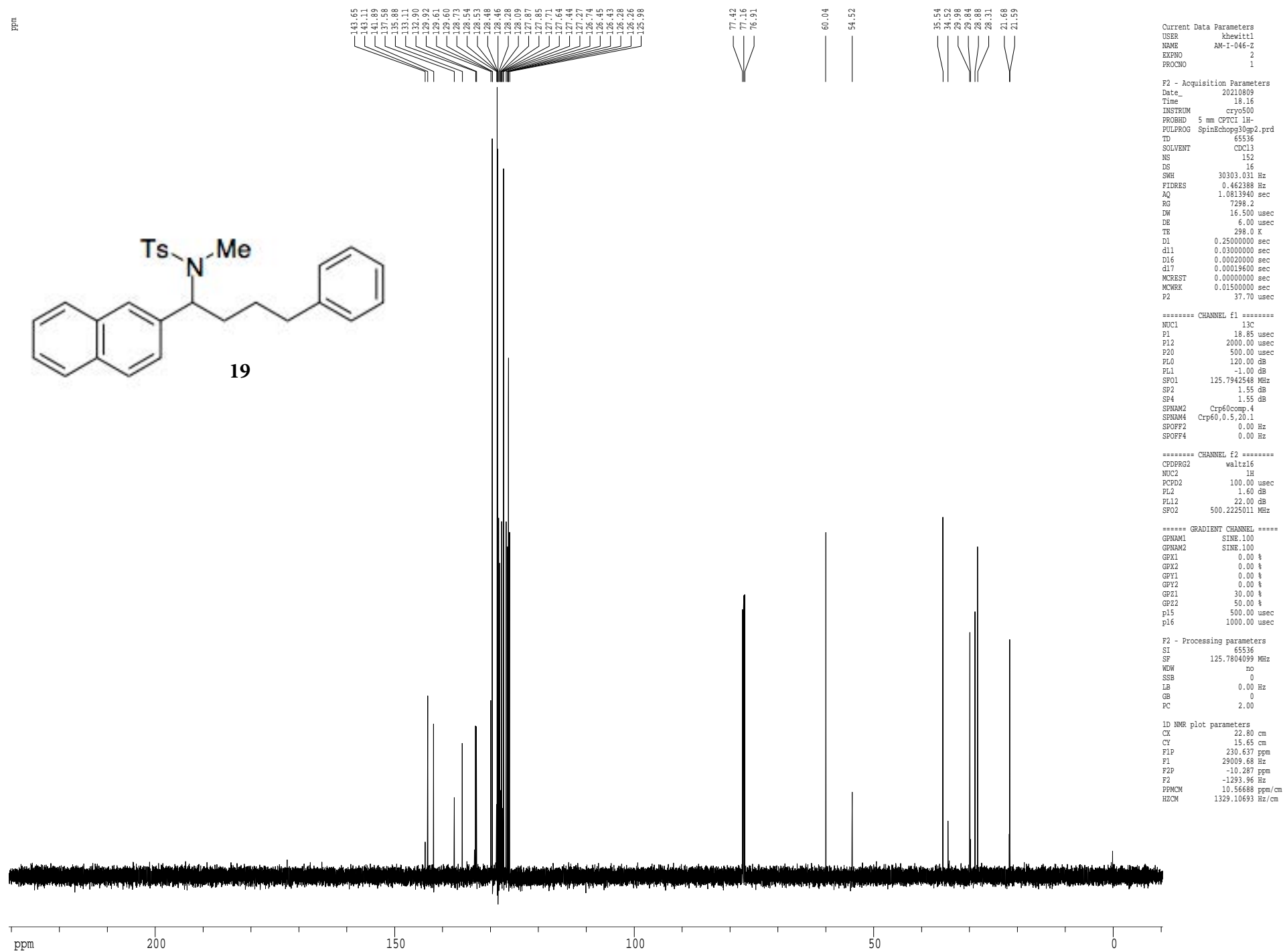
===== CHANNEL f1 =====
NUC1                    1H
P1                      9.75 usec
P11                     1.60 dB
SFO1                   500.223015 MHz

F2 - Processing parameters
SI                      65536
SF                     500.220000 MHz
WDW                     no
SSB                     0
LB                      0.00 Hz
GB                      0
PC                      1.00

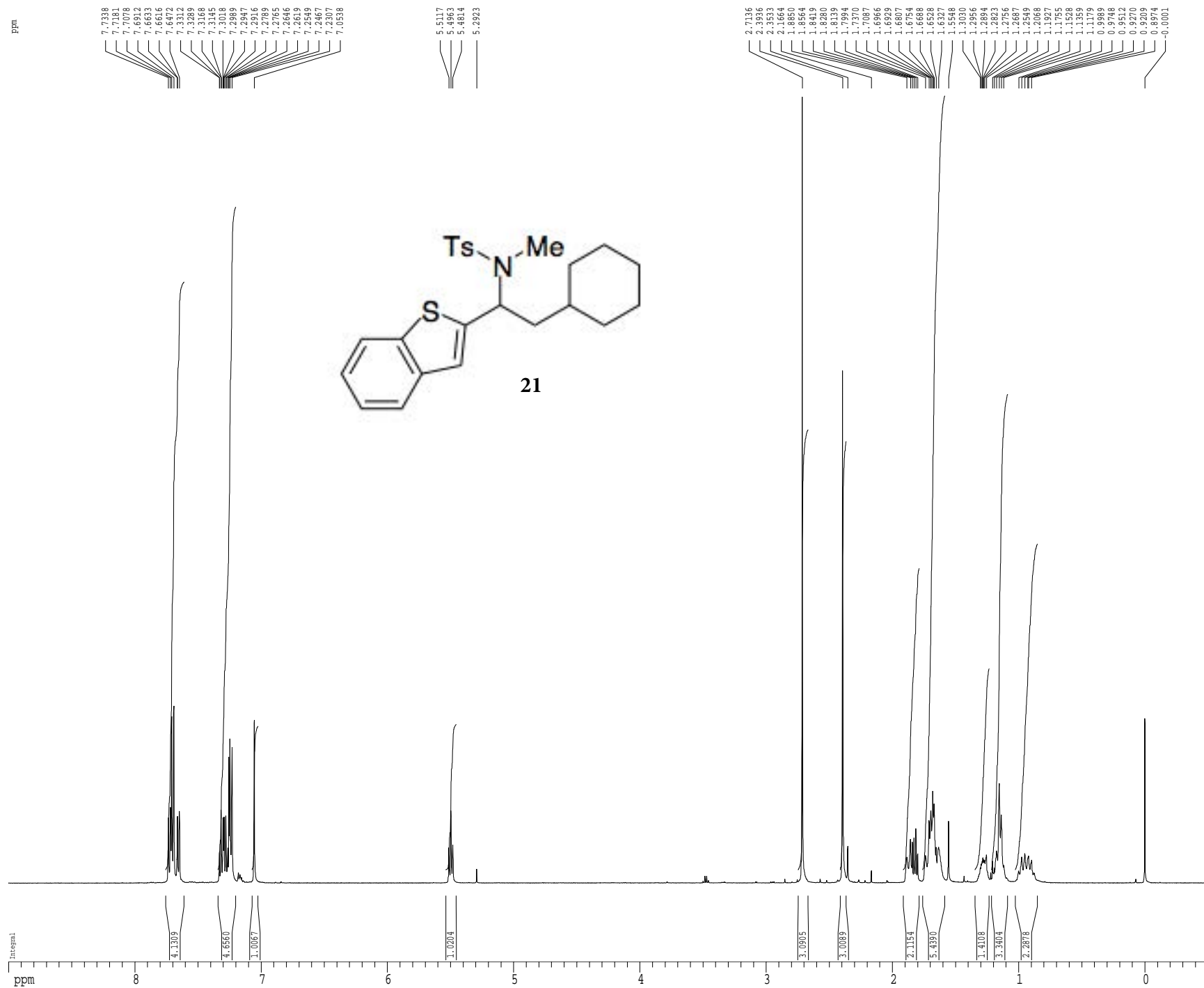
1D 1HWR plot parameters
CX                      22.80 cm
CY                      15.00 cm
F1P                     9.000 ppm
F1                      4501.98 Hz
F2P                     -0.500 ppm
F2                      -250.11 Hz
PFMCM                  0.41667 ppm/cm
HZCM                   208.42500 Hz/cm

```

Z-restored spin-echo 13C spectrum with 1H decoupling



¹H spectrum



Current Data Parameters
 USER khewitt1
 NAME ACM-I-120-benzCH
 EXPNO 1
 PROCNO 1

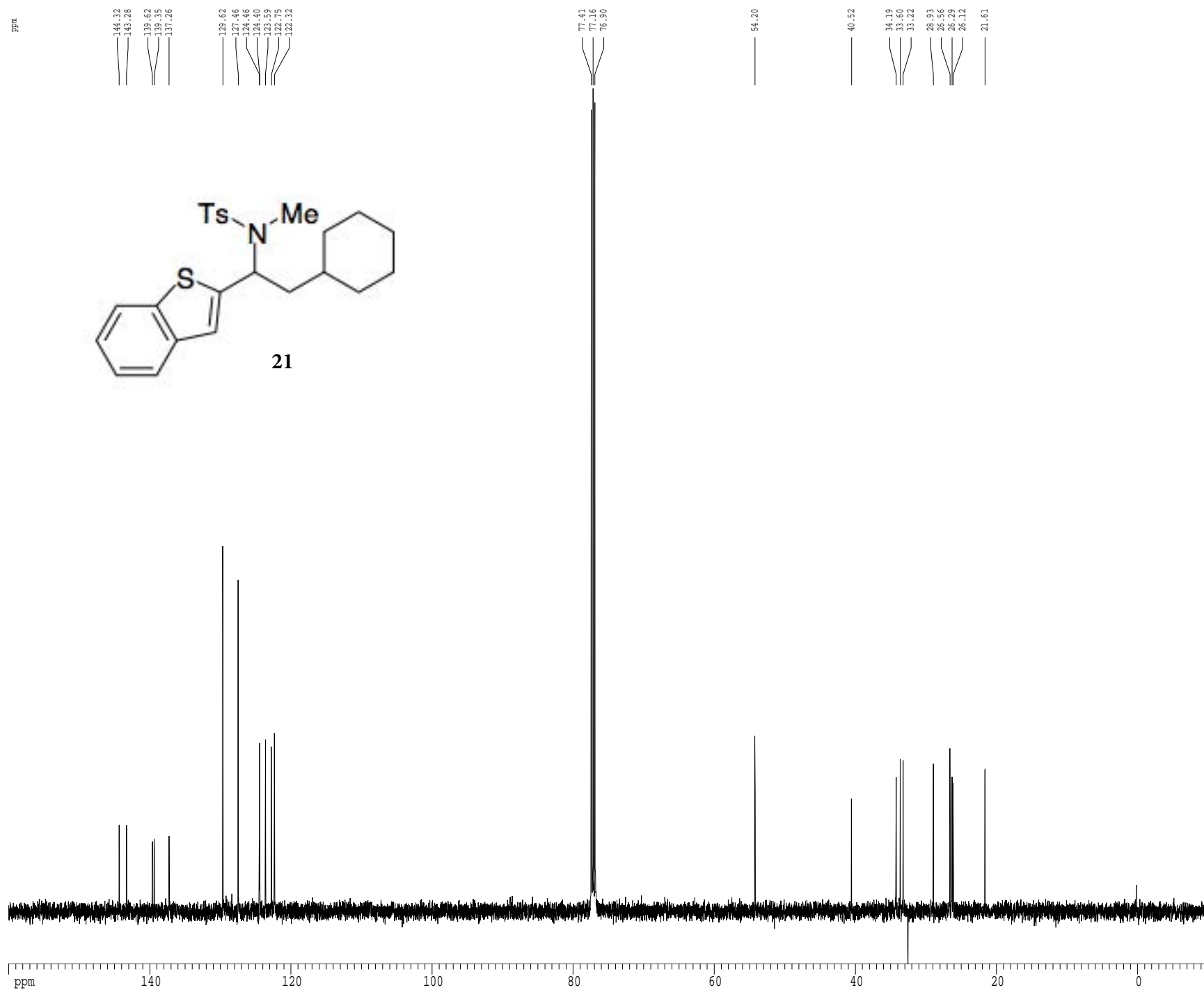
F2 - Acquisition Parameters
 Date_ 20191112
 Time 9.06
 INSTRUM gn500
 PROBHD 5 mm broadband
 PULPROG zg30
 TD 81728
 SOLVENT CDC13T
 NS 10
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.098043 Hz
 AQ 5.0998774 sec
 RG 181
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWRE 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 12.00 usec
 PL1 -5.00 dB
 SFO1 498.8534919 MHz

F2 - Processing parameters
 SI 65536
 SF 498.8500296 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CY 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 4489.65 Hz
 F2P -0.500 ppm
 F2 -249.42 Hz
 PPMCM 0.41667 ppm/cm
 HZCM 207.85419 Hz/cm

¹³C spectrum with ¹H decoupling



```

Current Data Parameters
USER      khewitt1
NAME      ACM-I-120-benzCH
EXPNO     2
PROCNO    1

F2 - Acquisition Parameters
Date_     20191112
Time      9.07
INSTRUM   gn500
PROBHD    5 mm broadband
PULPROG   zgdc30
TD        65536
SOLVENT   CDCl3
NS        544
DS        4
SWH        30303.031 Hz
FIDRES     0.462388 Hz
AQ         1.0813940 sec
RG         46341
DW         16.500 usec
DE         4.50 usec
TE         298.0 K
D1         0.25000000 sec
d11        0.03000000 sec
MCREST    0.00000000 sec
MCWRK     0.01500000 sec

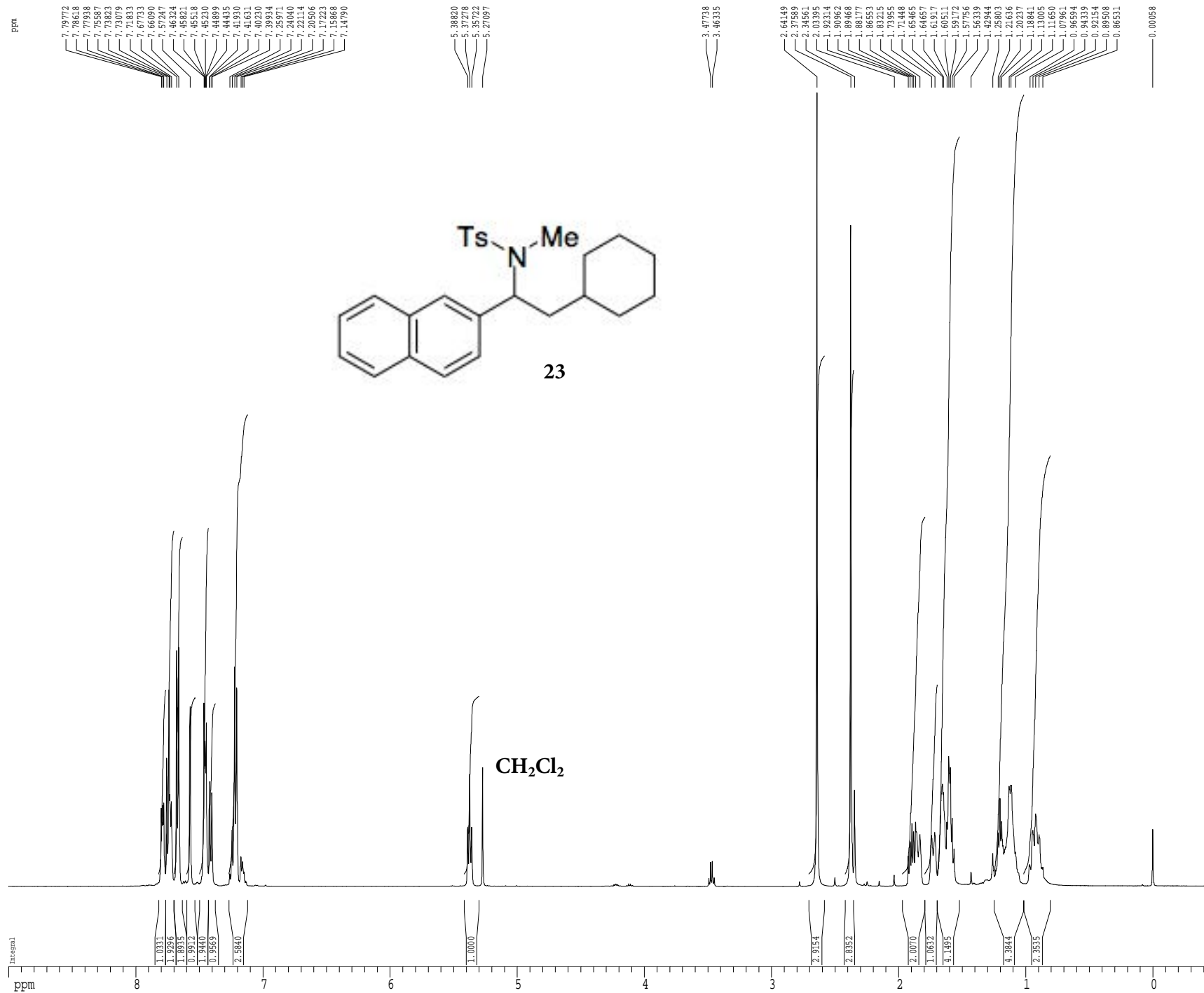
===== CHANNEL f1 =====
NUC1       13C
P1         10.00 usec
PL1        -6.00 dB
SFO1       125.4497300 MHz

===== CHANNEL f2 =====
CPDPRG2    waltz16
NUC2       1H
PCPD2      80.00 usec
PL2        -5.00 dB
PL12       13.20 dB
SFO2       498.8524943 MHz

F2 - Processing parameters
SI         65536
SF         125.4359203 MHz
WDW        BM
SSB        0
LB         1.00 Hz
GB         0
PC         2.00

1D NMR plot parameters
CX         22.80 cm
CY         15.65 cm
F1P        160.000 ppm
F1         20069.75 Hz
F2P        -10.000 ppm
F2         -1254.36 Hz
PPMCM      7.45614 ppm/cm
HZCM       935.26788 Hz/cm
    
```

¹H spectrum



```

Current Data Parameters
USER      khewitt1
NAME      ACM-I-120nap-CH
EXPNO     1
PROCNO    1

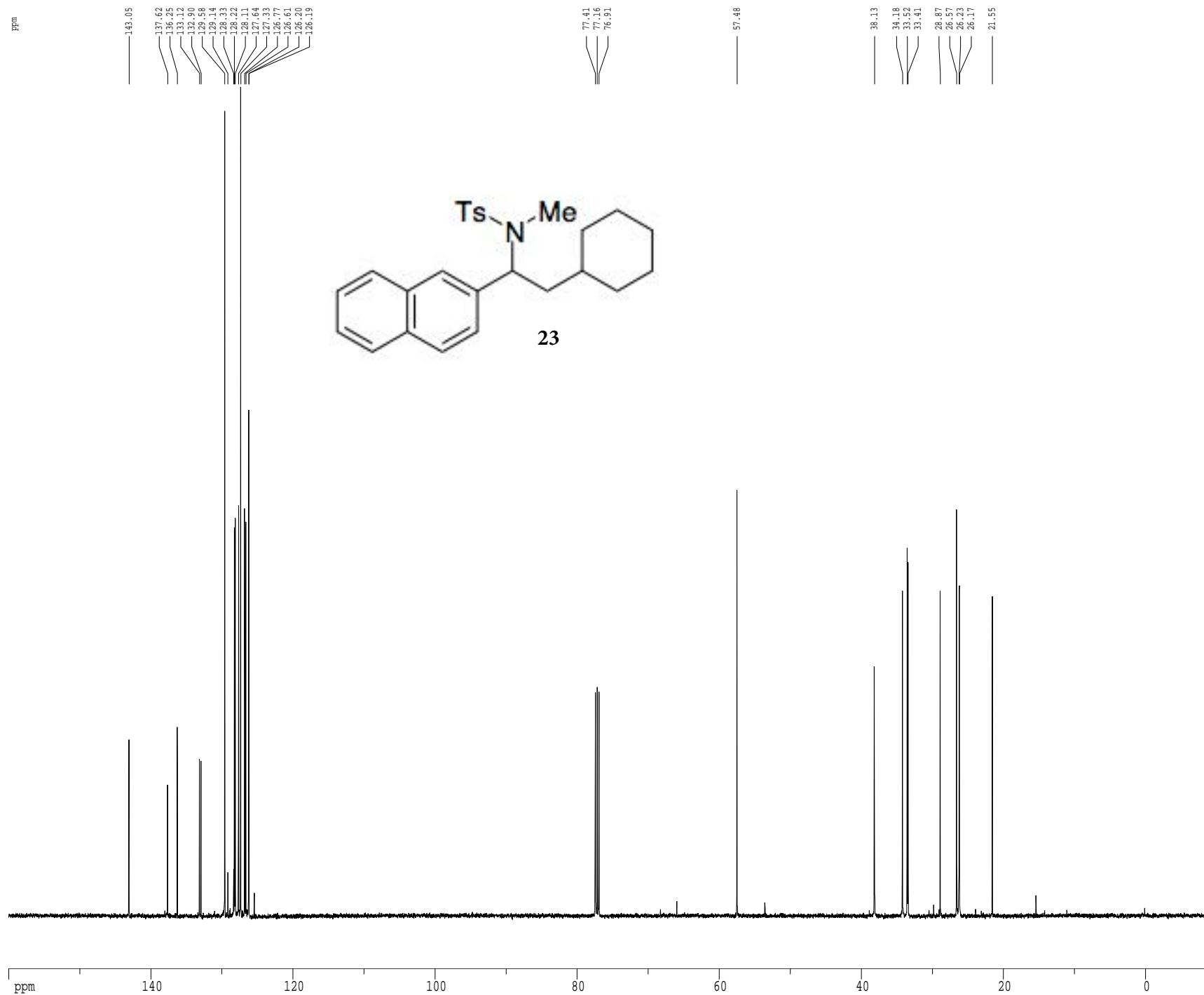
F2 - Acquisition Parameters
Date_     20191112
Time      9.24
INSTRUM   cryo500
PROBHD    5 mm CPTCI 1H-
PULPROG   zg30
TD         81728
SOLVENT   CDCl3T
NS         10
DS         2
SWH        8012.820 Hz
FIDRES     0.098043 Hz
AQ          5.0998774 sec
RG          5
DW          62.400 usec
DE          6.00 usec
TE          298.2 K
D1          0.10000000 sec
MCREST     0.00000000 sec
MCWRR      0.01500000 sec

===== CHANNEL f1 =====
NUC1       1H
P1         7.50 usec
PL1        1.60 dB
SFO1       500.2235015 MHz

F2 - Processing parameters
SI          65536
SF          500.2200411 MHz
WDW         EM
SSB         0
LB          0.30 Hz
GB          0
PC          1.00

1D NMR plot parameters
CY          22.80 cm
CY          15.00 cm
F1P         9.000 ppm
F1          4501.98 Hz
F2P        -0.500 ppm
F2         -250.11 Hz
PPMCM       0.41667 ppm/cm
HZCM        208.42502 Hz/cm
    
```

Z-restored spin-echo 13C spectrum with 1H decoupling



Current Data Parameters

USER	khewitt1
NAME	ACM-I-120nap-CH
EXPNO	2
PROCNO	1

F2 - Acquisition Parameters

Date_	20191112
Time	9.37
INSTRUM	cryo500
PROBHD	5 mm CPTCI 1H-
PULPROG	SpinEcho30gp2.prd
TD	65536
SOLVENT	CDCl3
NS	504
DS	16
SWH	30303.031 Hz
FIDRES	0.462388 Hz
AQ	1.0813940 sec
RG	3251
DW	16.500 usec
DE	6.00 usec
TE	298.2 K
D1	0.25000000 sec
d11	0.03000000 sec
d16	0.00020000 sec
d17	0.00019600 sec
MWREST	0.00000000 sec
MWREX	0.01500000 sec
P2	33.10 usec

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

NUC1	13C
P1	16.55 usec
P12	2000.00 usec
P20	500.00 usec
PL0	120.00 dB
PL1	-1.00 dB
SFO1	125.7942548 MHz
SP2	2.70 dB
SP4	2.70 dB
SPNAM2	Crp60comp.4
SPNAM4	Crp60,0.5,20.1
SPOFF2	0.00 Hz
SPOFF4	0.00 Hz

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

CPDPRG2	waltz16
NUC2	1H
PCPD2	100.00 usec
PL2	1.60 dB
PL12	23.54 dB
SFO2	500.2225011 MHz

===== GRADIENT CHANNEL =====

GP1X1	0.00 %
GP1X2	0.00 %
GP1Y1	0.00 %
GP1Y2	0.00 %
GP21	30.00 %
GP22	50.00 %
p15	500.00 usec
p16	1000.00 usec

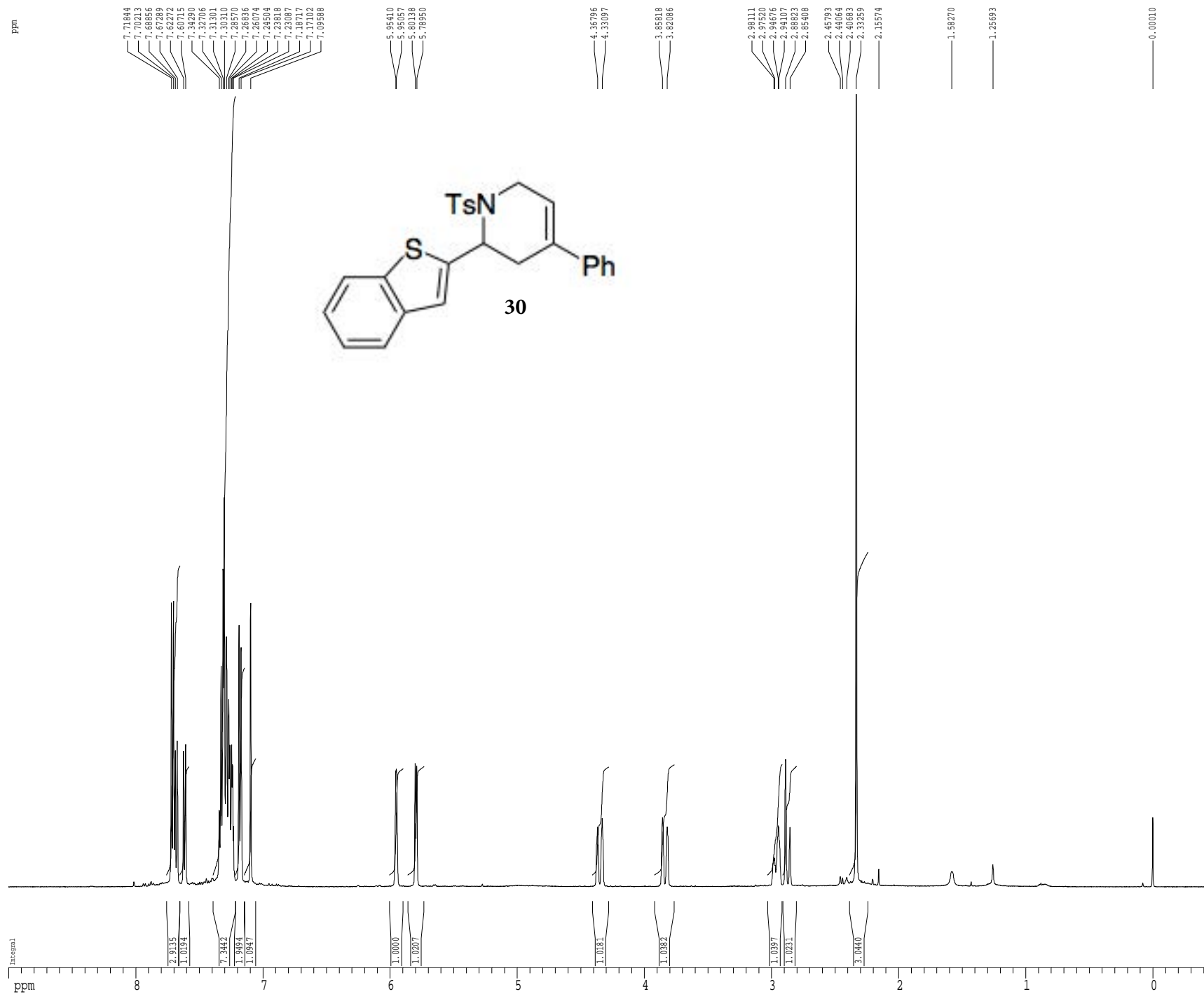
F2 - Processing parameters

SI	65536
SP	125.7804136 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	2.00

1D NMR plot parameters

CX	22.80 cm
CY	15.65 cm
F1P	160.000 ppm
F1	20124.87 Hz
F2P	-10.000 ppm
F2	-1257.80 Hz
PPMCM	7.45614 ppm/cm
HZCM	937.83643 Hz/cm

¹H spectrum



Current Data Parameters
 USER khewitt1
 NAME KAH-I-291-Z
 EXPNO 3
 PROCNO 1

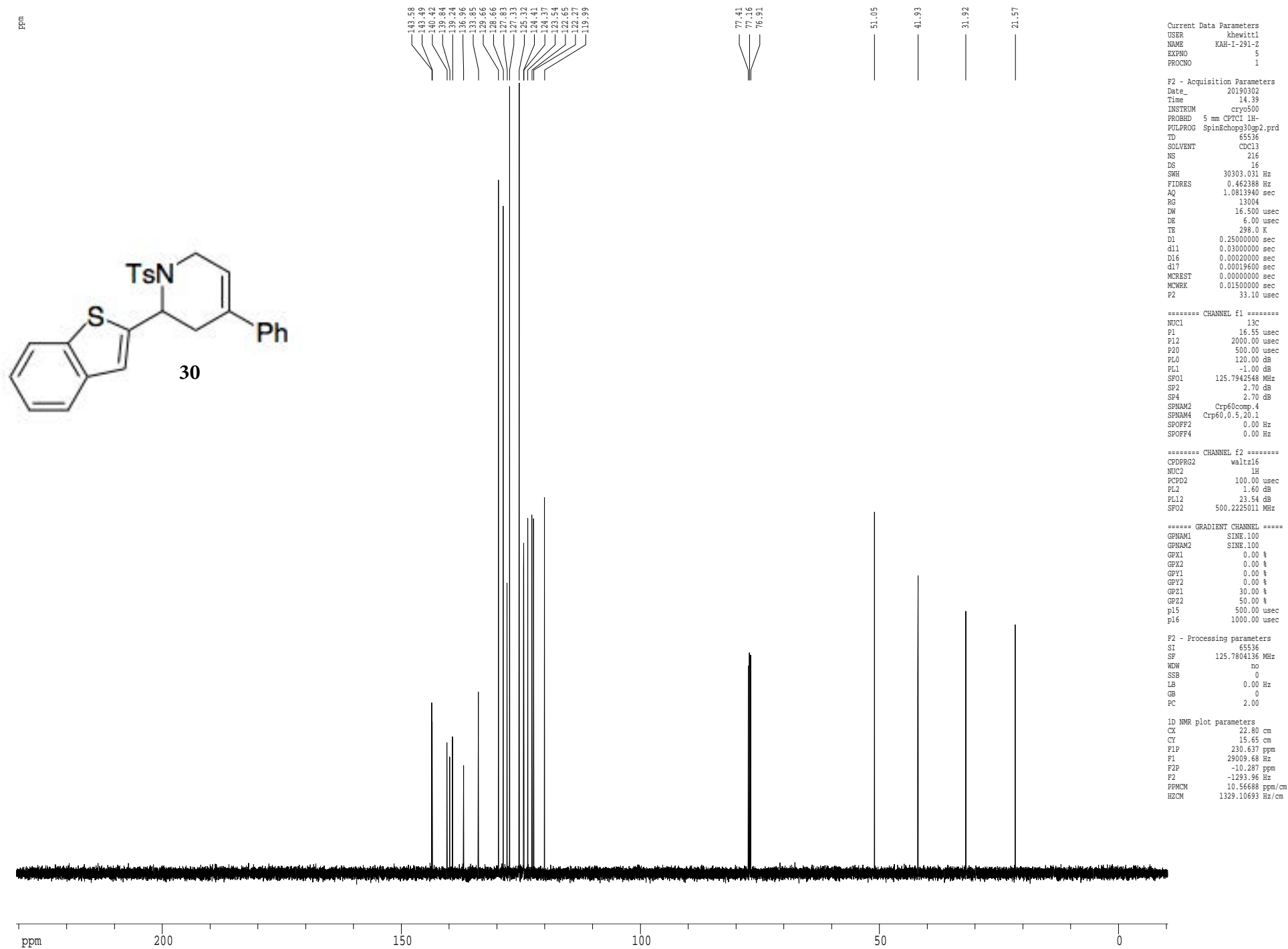
F2 - Acquisition Parameters
 Date_ 20190302
 Time 14.24
 INSTRUM cryo500
 PROBHD 5 mm CPTCI 1H-
 PULPROG zg30
 TD 48074
 SOLVENT CDC13T
 NS 8
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.166677 Hz
 AQ 2.9998677 sec
 RG 6.3
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWREK 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 7.50 usec
 PL1 1.60 dB
 SFO1 500.2235015 MHz

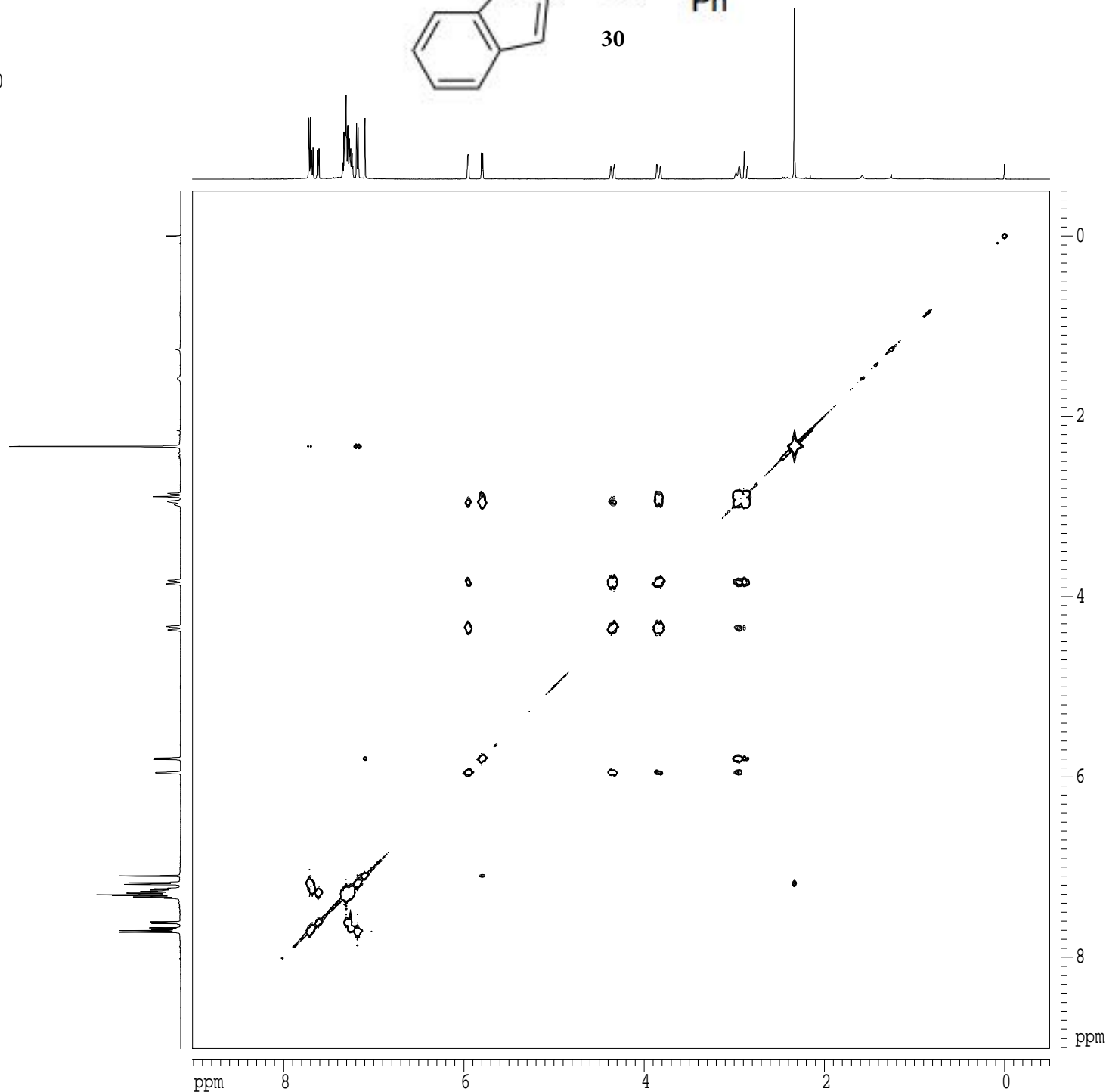
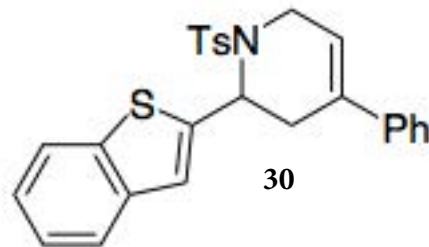
F2 - Processing parameters
 SI 65536
 SF 500.2200426 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CY 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 4501.98 Hz
 F2P -0.500 ppm
 F2 -250.11 Hz
 PPMCM 0.41667 ppm/cm
 HZCM 208.42502 Hz/cm

Z-restored spin-echo 13C spectrum with 1H decoupling



gcosy60



Current Data Parameters
 USER khewitt1
 NAME KAH-I-291-Z
 EXPNO 4
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20190302
 Time 14.26
 INSTRUM cryo500
 PROBHD 5 mm CPTCI 1H-
 PULPROG cosygp60.prd
 TD 2048
 SOLVENT CDCl3
 NS 1
 DS 16
 SWH 8012.820 Hz
 FIDRES 3.912510 Hz
 AQ 0.1278452 sec
 RG 114
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 d0 0.00000300 sec
 D1 1.00000000 sec
 d13 0.00000300 sec
 D16 0.00020000 sec
 IN0 0.00012480 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 7.50 usec
 PL1 1.60 dB
 SF01 500.2235015 MHz

===== GRADIENT CHANNEL =====
 GPNAM1 sine.100
 GPNAM2 sine.100
 GPX1 0.00 %
 GPX2 0.00 %
 GPY1 0.00 %
 GPY2 0.00 %
 GPZ1 17.00 %
 GPZ2 17.00 %
 P16 1000.00 usec

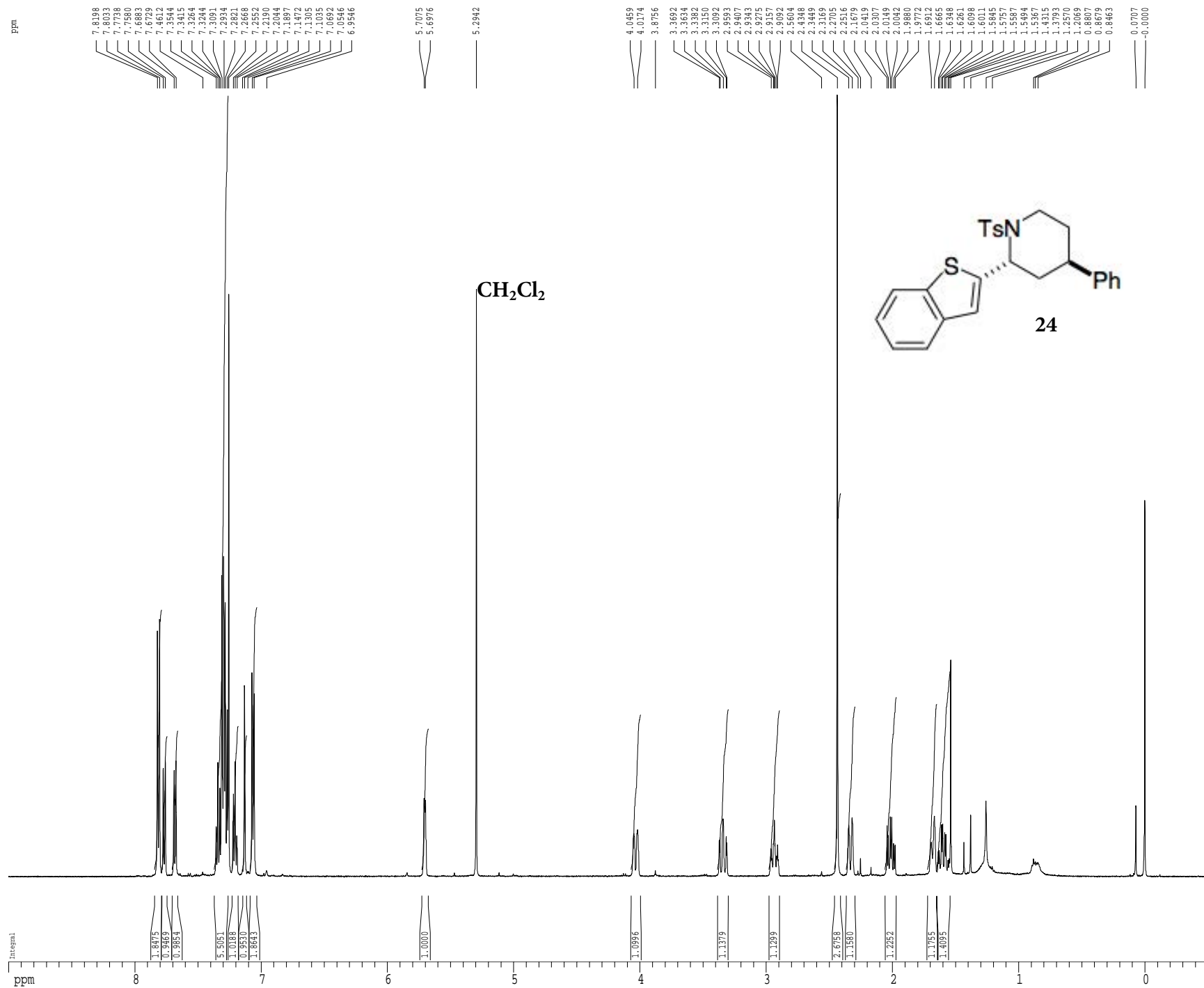
F1 - Acquisition parameters
 ND0 1
 TD 512
 SF01 500.2235 MHz
 FIDRES 15.650040 Hz
 SW 16.018 ppm
 FhMODE QF

F2 - Processing parameters
 SI 1024
 SF 500.2200426 MHz
 WDW SINE
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

F1 - Processing parameters
 SI 1024
 MC2 QF
 SF 500.2200426 MHz
 WDW SINE
 SSB 0
 LB 0.00 Hz
 GB 0

2D NMR plot parameters
 CX2 15.00 cm
 CX1 15.00 cm
 F2PLO 9.011 ppm
 F2LO 4507.45 Hz
 F2PHI -0.500 ppm
 F2HI -250.16 Hz
 F1PLO 9.011 ppm
 F1LO 4507.45 Hz
 F1PHI -0.500 ppm
 F1HI -250.16 Hz
 F2PPMCM 0.63407 ppm/cm
 F2HZCM 317.17413 Hz/cm
 F1PPMCM 0.63407 ppm/cm
 F1HZCM 317.17413 Hz/cm

¹H spectrum



Current Data Parameters
 USER khewitt1
 NAME KAH-I-214-Z
 EXPNO 1
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20181204
 Time 11.04
 INSTRUM cryo500
 PROBHD 5 mm CPTCI 1H-
 PULPROG zg30
 TD 48074
 SOLVENT CDCl3T
 NS 8
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.166677 Hz
 AQ 2.9998677 sec
 RG 7.1
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWRE 0.01500000 sec

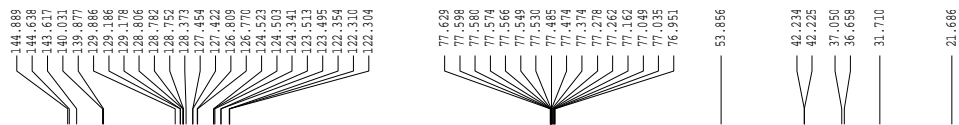
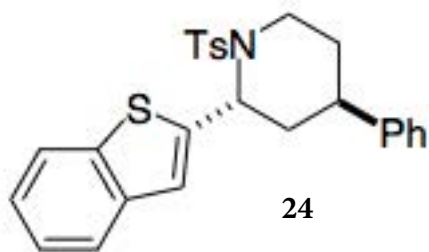
===== CHANNEL f1 =====
 NUC1 1H
 P1 7.50 usec
 PL1 1.60 dB
 SF01 500.2235015 MHz

F2 - Processing parameters
 SI 65536
 SF 500.2200349 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CY 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 4501.98 Hz
 F2P -0.500 ppm
 F2 -250.11 Hz
 PPMCM 0.41667 ppm/cm
 HZCM 208.42502 Hz/cm

c13.c

ppm



Current Data Parameters
 USER khewitt1
 NAME KAH-I-214-Z-C
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20210714
 Time 11.13
 INSTRUM av600
 PROBHD 5 mm CPBBO BB-
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3T
 NS 1024
 DS 4
 SWH 36231.883 Hz
 FIDRES 0.552855 Hz
 AQ 0.9044468 sec
 RG 2050
 DW 13.800 usec
 DE 19.63 usec
 TE 298.0 K
 D1 0.40000001 sec
 D11 0.03000000 sec
 TD0 1

===== CHANNEL f1 =====
 SF01 150.9194080 MHz
 NUC1 13C
 P1 10.10 usec

F2 - Processing parameters
 SI 65536
 SF 150.9027936 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 0.10

1D NMR plot parameters
 CX 22.80 cm
 CY 15.00 cm
 FLIP 230.150 ppm
 F1 34730.32 Hz
 F2P -9.951 ppm
 F2 -1501.56 Hz
 PPMCM 10.53074 ppm/cm
 HZCM 1589.11768 Hz/cm

ppm

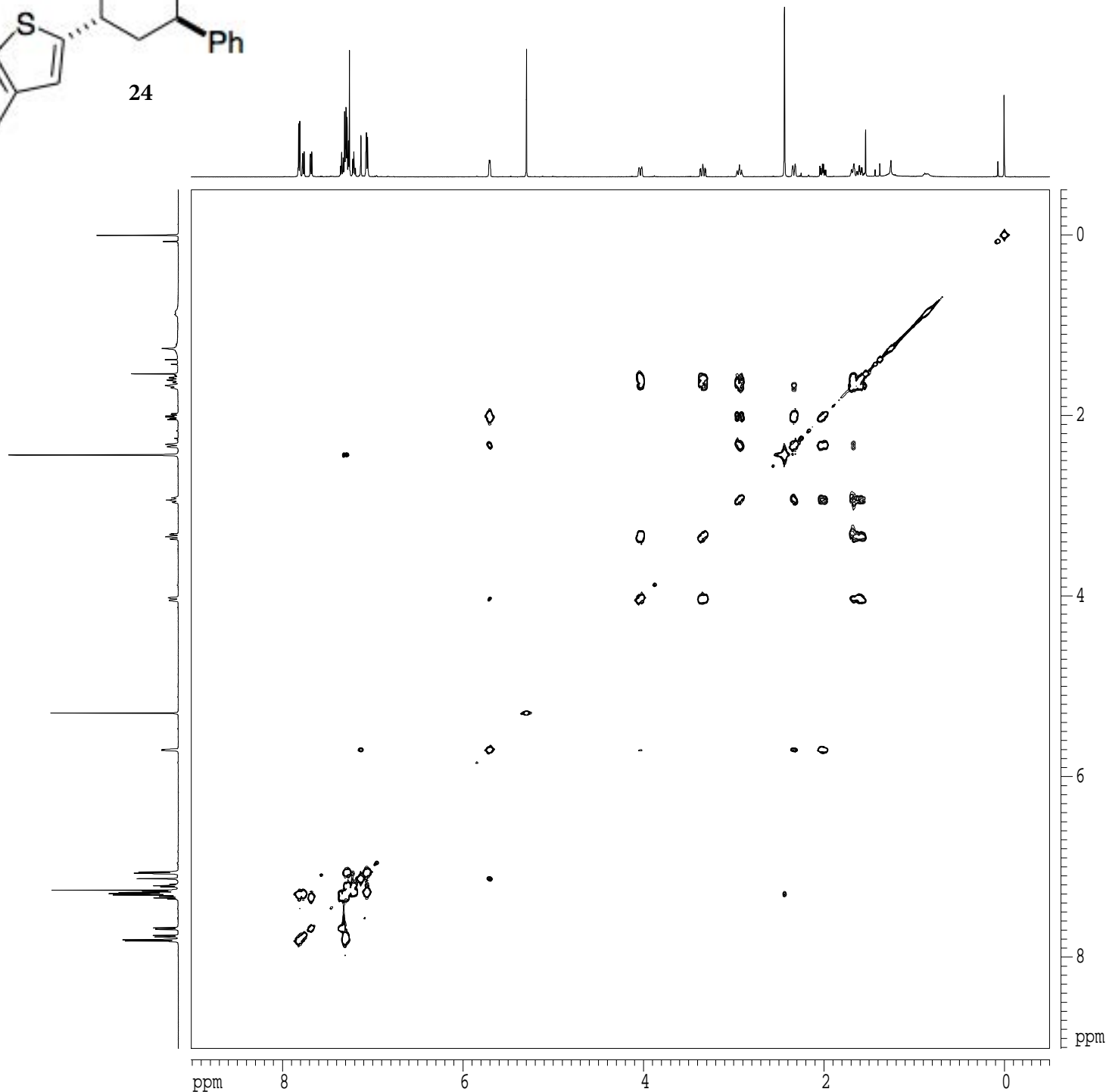
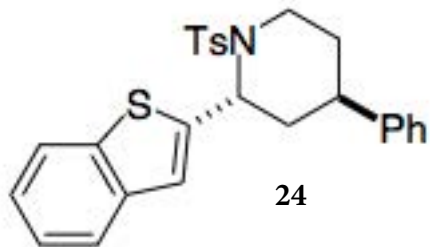
200

150

100

50

0



Current Data Parameters
USER khewitt1
NAME KAH-I-214-Z
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters
Date_ 20181204
Time 11.06
INSTRUM cryo500
PROBHD 5 mm CPTCI 1H-
PULPROG cosygp60.prd
TD 2048
SOLVENT CDCl3
NS 1
DS 16
SWH 8012.820 Hz
FIDRES 3.912510 Hz
AQ 0.1278452 sec
RG 362
DW 62.400 usec
DE 6.00 usec
TE 298.0 K
d0 0.00000300 sec
D1 1.00000000 sec
d13 0.00000300 sec
D16 0.00020000 sec
IN0 0.00012480 sec

===== CHANNEL f1 =====
NUC1 1H
P1 7.50 usec
PL1 1.60 dB
SFO1 500.2235015 MHz

===== GRADIENT CHANNEL =====
GPNAM1 sine.100
GPNAM2 sine.100
GPX1 0.00 %
GPX2 0.00 %
GPY1 0.00 %
GPY2 0.00 %
GPZ1 17.00 %
GPZ2 17.00 %
P16 1000.00 usec

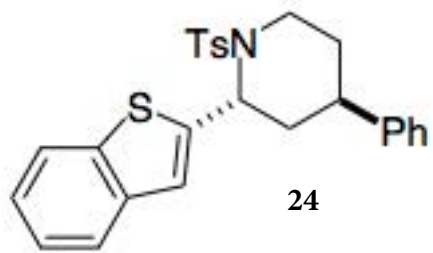
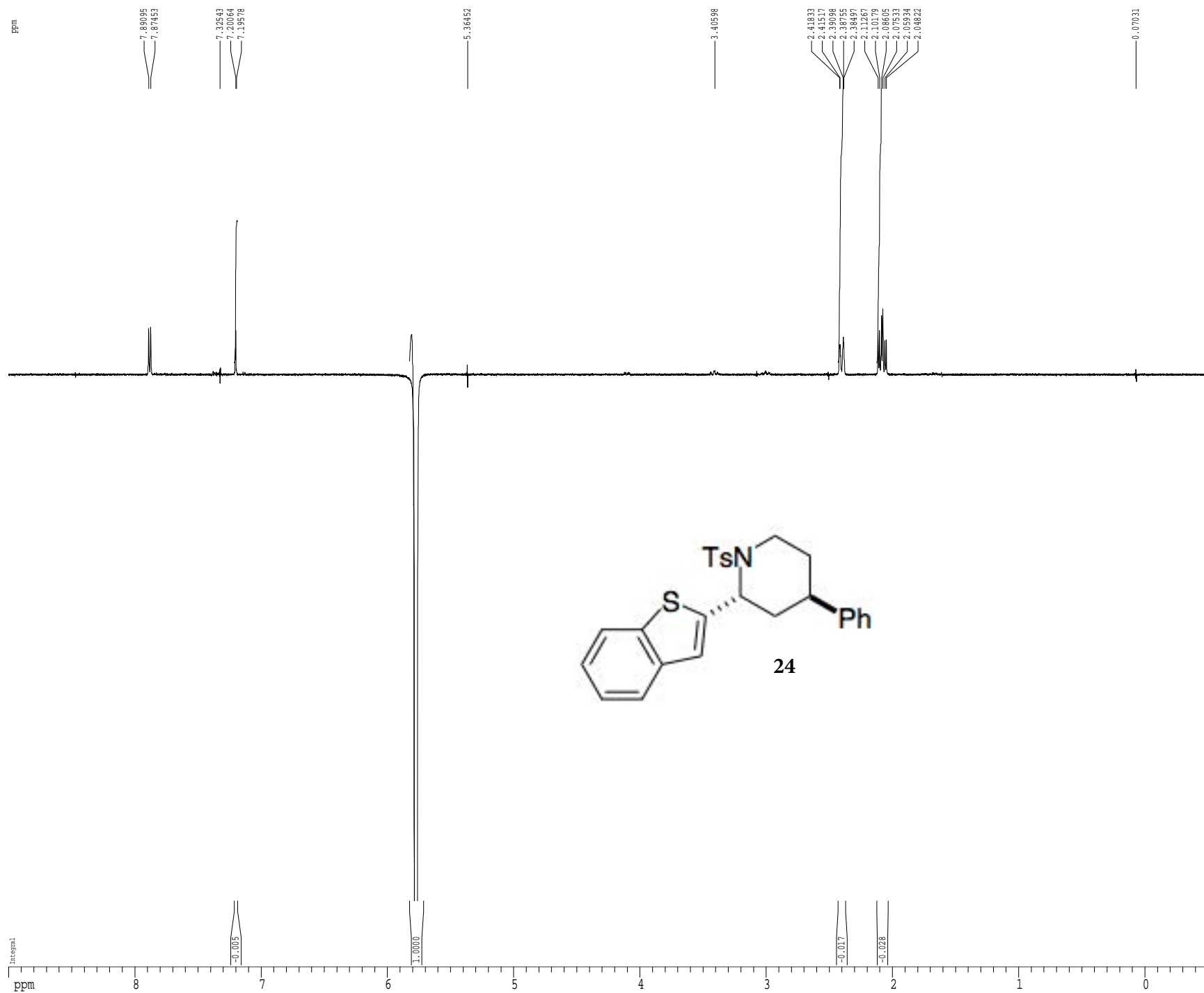
F1 - Acquisition parameters
ND0 1
TD 512
SFO1 500.2235 MHz
FIDRES 15.650040 Hz
SW 16.018 ppm
FnMODE QF

F2 - Processing parameters
SI 1024
SF 500.2200349 MHz
WDW SINE
SSB 0
LB 0.00 Hz
GB 0
PC 1.00

F1 - Processing parameters
SI 1024
MC2 QF
SF 500.2200349 MHz
WDW SINE
SSB 0
LB 0.00 Hz
GB 0

2D NMR plot parameters
CX2 15.00 cm
CX1 15.00 cm
F2PLO 9.011 ppm
F2LO 4507.33 Hz
F2PHI -0.500 ppm
F2HI -250.28 Hz
F1PLO 9.011 ppm
F1LO 4507.33 Hz
F1PHI -0.500 ppm
F1HI -250.28 Hz
F2PPMCM 0.63407 ppm/cm
F2HZCM 317.17413 Hz/cm
F1PPMCM 0.63407 ppm/cm
F1HZCM 317.17413 Hz/cm

gnoe



Current Data Parameters

USER	khewitt1
NAME	KAH-I-214-Z
EXPNO	3
PROCNO	1

F2 - Acquisition Parameters

Date_	20181204
Time	11.30
INSTRUM	cryo500
PROBHD	5 mm CPTCI 1H-
PULPROG	gnoe1cc22.prd
TD	65536
SOLVENT	CDCl3
NS	128
DS	8
SNH	8012.820 Hz
FIDRES	0.122266 Hz
AQ	4.0894966 sec
RG	114
DW	62.400 usec
DE	6.00 usec
TE	298.0 K
D1	1.00000000 sec
D8	0.50000000 sec
D16	0.00020000 sec
d21	0.33376500 sec
d22	0.16399699 sec
p2	15.00 usec

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

NUC1	1H
P1	7.50 usec
p3	22.50 usec
p4	30.00 usec
p5	20.00 usec
P29	40000.00 usec
PL1	1.60 dB
SFO1	500.2228874 MHz
SP9	61.60 dB
SPNAM9	gauss1.512
SPOFF9	0.00 Hz

===== GRADIENT CHANNEL =====

GPNAM1	sine.100
GPNAM2	sine.100
GPNAM3	sine.100
GPNAM4	sine.100
GPX1	0.00 %
GPX2	0.00 %
GPX3	0.00 %
GPX4	0.00 %
GPY1	0.00 %
GPY2	0.00 %
GPY3	0.00 %
GPY4	0.00 %
GPZ1	7.00 %
GPZ2	3.00 %
GPZ3	2.30 %
GPZ4	-2.30 %
P16	1000.00 usec

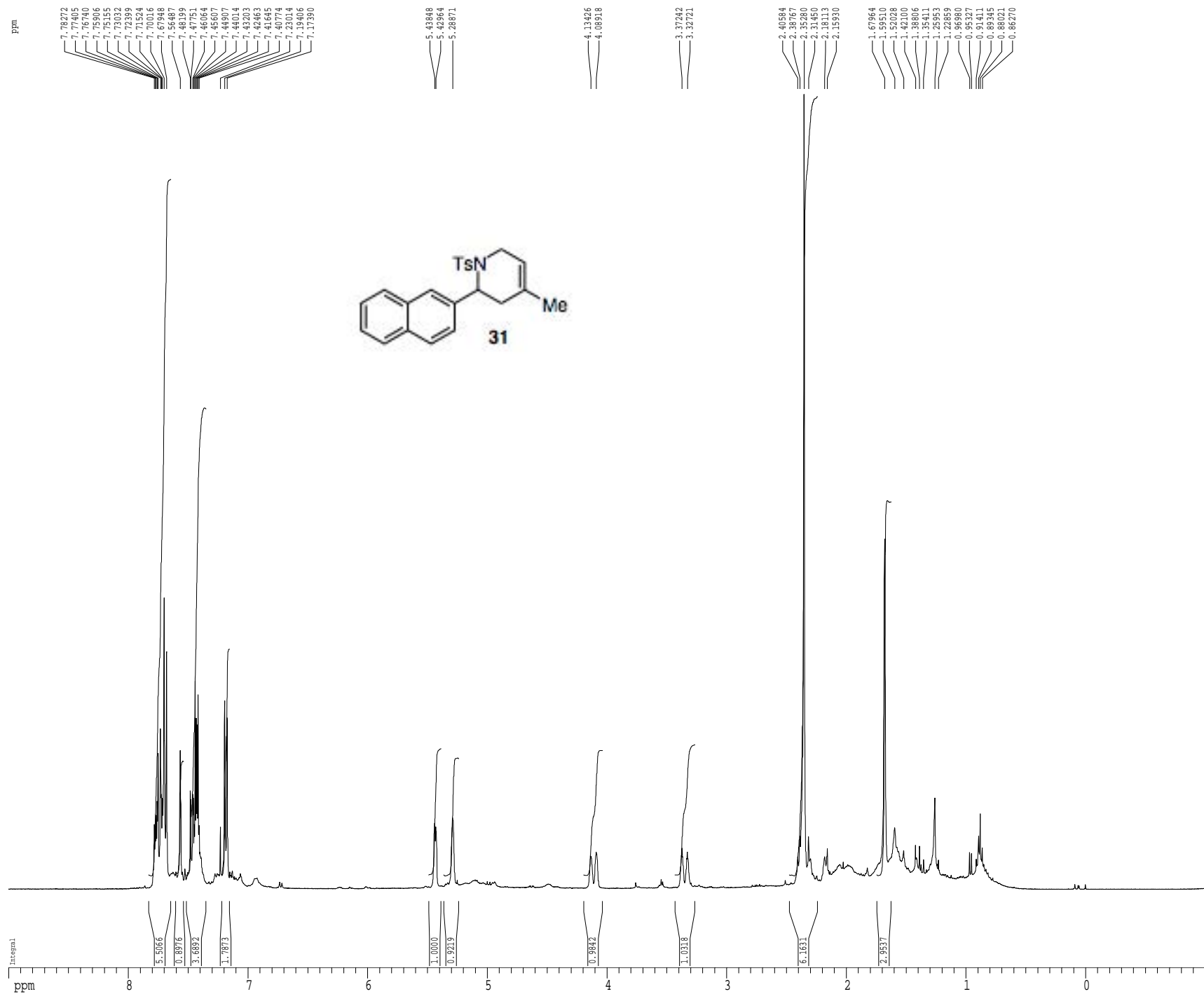
F2 - Processing parameters

SI	65536
SF	500.2200000 MHz
WDW	no
SSB	0
LB	0.00 Hz
GB	0
PC	1.00

1D NMR plot parameters

CX	22.80 cm
CY	50.00 cm
F1P	9.000 ppm
F1	4501.98 Hz
F2P	-0.500 ppm
F2	-250.11 Hz
PPMCM	0.41667 ppm/cm
HZCM	208.42500 Hz/cm

¹H spectrum



Current Data Parameters
 USER caherber
 NAME CAH-I-221
 EXPNO 1
 PROCNO 1

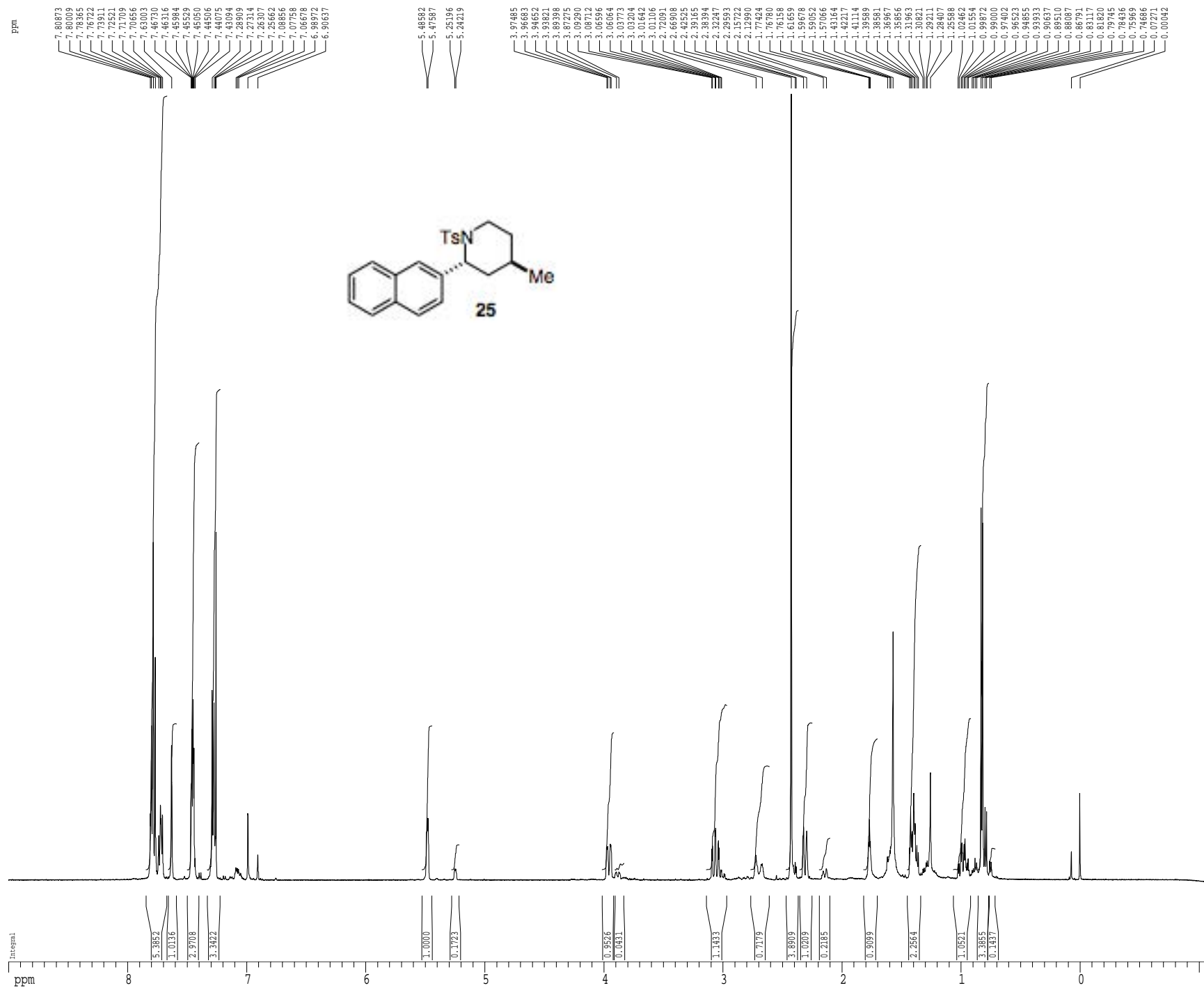
F2 - Acquisition Parameters
 Date_ 20210525
 Time 11.17
 INSTRUM drx400
 PROBHD 5 mm QNP H/F/P
 PULPROG zg30
 TD 65536
 SOLVENT CDCl3
 NS 8
 DS 2
 SWH 6410.256 Hz
 FIDRES 0.097813 Hz
 AQ 5.1118579 sec
 RG 50.8
 DW 78.000 usec
 DE 4.50 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWRE 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 12.00 usec
 PL1 -1.60 dB
 SFO1 400.1328009 MHz

F2 - Processing parameters
 SI 65536
 SF 400.1300333 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 2.00

1D NMR plot parameters
 CY 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 3601.17 Hz
 F2P -1.093 ppm
 F2 -437.51 Hz
 PPMCM 0.44269 ppm/cm
 HZCM 177.13533 Hz/cm

¹H spectrum



Current Data Parameters
 USER caherber
 NAME CAH-I-241-full
 EXPNO 1
 PROCNO 1

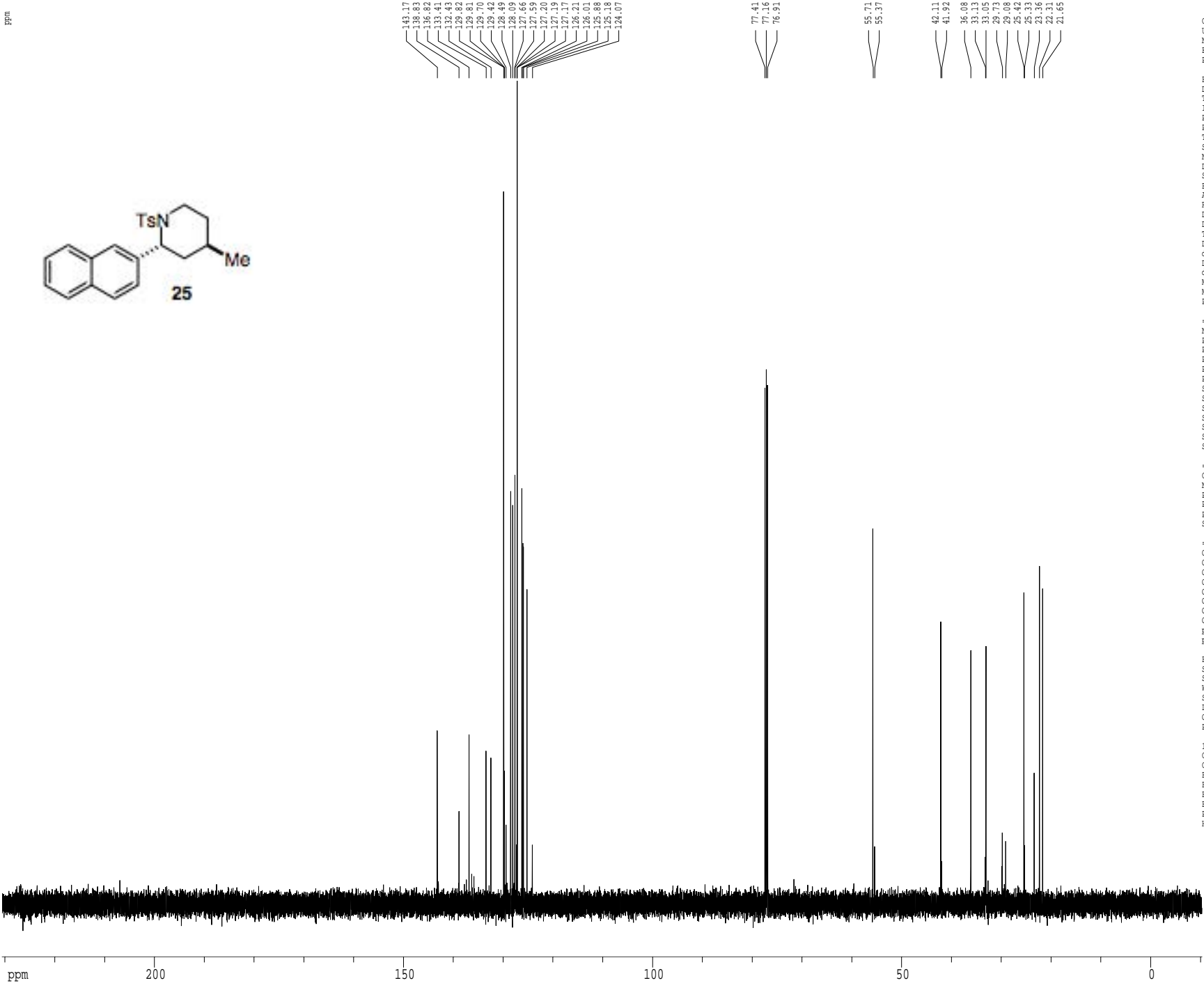
F2 - Acquisition Parameters
 Date_ 20210707
 Time 11.46
 INSTRUM cryo500
 PROBHD 5 mm CPTCI 1H-
 PULPROG zg30
 TD 81728
 SOLVENT CDCl3
 NS 8
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.098043 Hz
 AQ 5.0998774 sec
 RG 6.3
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWRE 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 9.75 usec
 PL1 1.60 dB
 SFO1 500.2235015 MHz

F2 - Processing parameters
 SI 65536
 SF 500.2200327 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CY 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 4501.98 Hz
 F2P -1.075 ppm
 F2 -537.60 Hz
 PPMCM 0.44187 ppm/cm
 HZCM 221.03436 Hz/cm

Z-restored spin-echo 13C spectrum with 1H decoupling



Current Data Parameters

USER caherber
NAME CAH-I-241-full
EXPNO 5
PROCNO 1

F2 - Acquisition Parameters

Date_ 20210707
Time 13.59
INSTRUM cryo500
PROBHD 5 mm CPTCI 1H-
PULPROG SpinEchopg30gp2.prd
TD 65536
SOLVENT CDCl3
NS 264
DS 16
SWH 30303.031 Hz
FIDRES 0.462388 Hz
AQ 1.0813940 sec
RG 7298.2
DM 16.500 usec
DE 6.00 usec
TE 298.0 K
D1 0.25000000 sec
d11 0.03000000 sec
D16 0.00020000 sec
d17 0.00019600 sec
MCREST 0.00000000 sec
MCWIX 0.01500000 sec
P2 37.70 usec

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

NUC1 13C
P1 18.85 usec
P12 2000.00 usec
P20 500.00 usec
PL0 120.00 dB
PL1 -1.00 dB
SP01 125.7942548 MHz
SP2 1.55 dB
SP4 1.55 dB
SPNAM2 Crp60comp.4
SPNAM4 Crp60,0.5,20.1
SPOFF2 0.00 Hz
SPOFF4 0.00 Hz

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

CPDPRG2 waltz16
NUC2 1H
PCPD2 100.00 usec
PL2 1.60 dB
PL12 22.00 dB
SFO2 500.2225011 MHz

===== GRADIENT CHANNEL =====

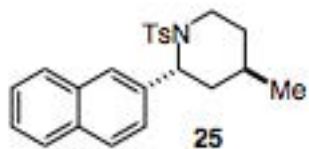
GPAM1 SINE.100
GPAM2 SINE.100
GPX1 0.00 %
GPX2 0.00 %
GPY1 0.00 %
GPY2 0.00 %
GPZ1 30.00 %
GPZ2 50.00 %
p15 500.00 usec
p16 1000.00 usec

F2 - Processing parameters

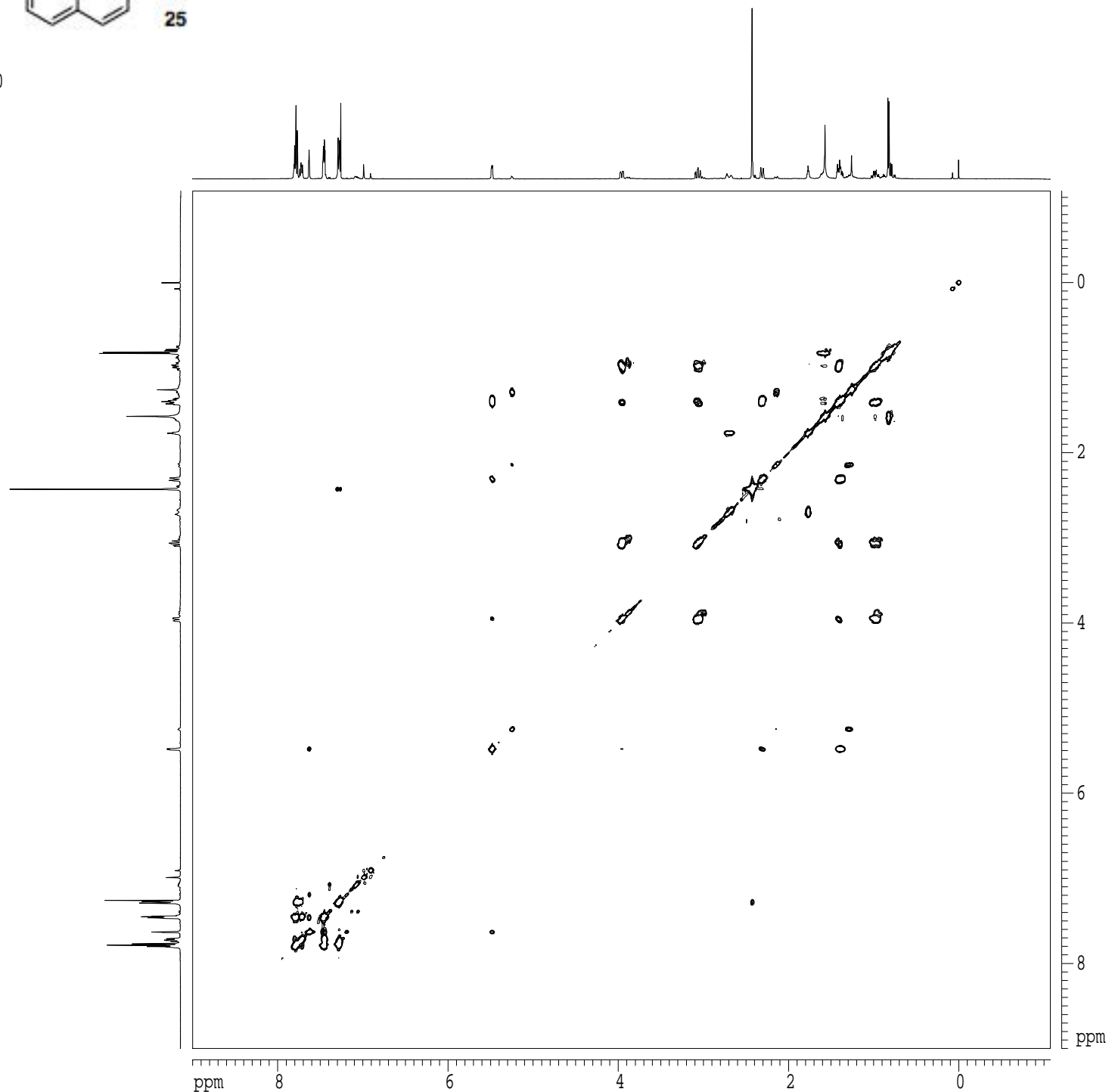
SI 65536
SF 125.7804076 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 2.00

1D NMR plot parameters

CX 22.80 cm
CY 15.65 cm
F1P 230.637 ppm
F1 29009.68 Hz
F2P -10.287 ppm
F2 -1293.96 Hz
PPMCM 10.56688 ppm/cm
HZCM 1329.10693 Hz/cm



gcosy60



Current Data Parameters
 USER caherber
 NAME CAH-I-241-full
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20210707
 Time 11.49
 INSTRUM cryo500
 PROBHD 5 mm CPTCI 1H-
 PULPROG cosygp60.prd
 TD 2048
 SOLVENT CDCl3
 NS 1
 DS 16
 SWH 8012.820 Hz
 FIDRES 3.912510 Hz
 AQ 0.1278452 sec
 RG 143.7
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 d0 0.00000300 sec
 D1 1.00000000 sec
 d13 0.00000300 sec
 D16 0.00020000 sec
 IN0 0.00012480 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 9.75 usec
 PL1 1.60 dB
 SFO1 500.2235015 MHz

===== GRADIENT CHANNEL =====
 GPNAM1 SMSQ10.100
 GPNAM2 SMSQ10.100
 GPX1 0.00 %
 GPX2 0.00 %
 GPY1 0.00 %
 GPY2 0.00 %
 GPZ1 17.00 %
 GPZ2 17.00 %
 P16 1000.00 usec

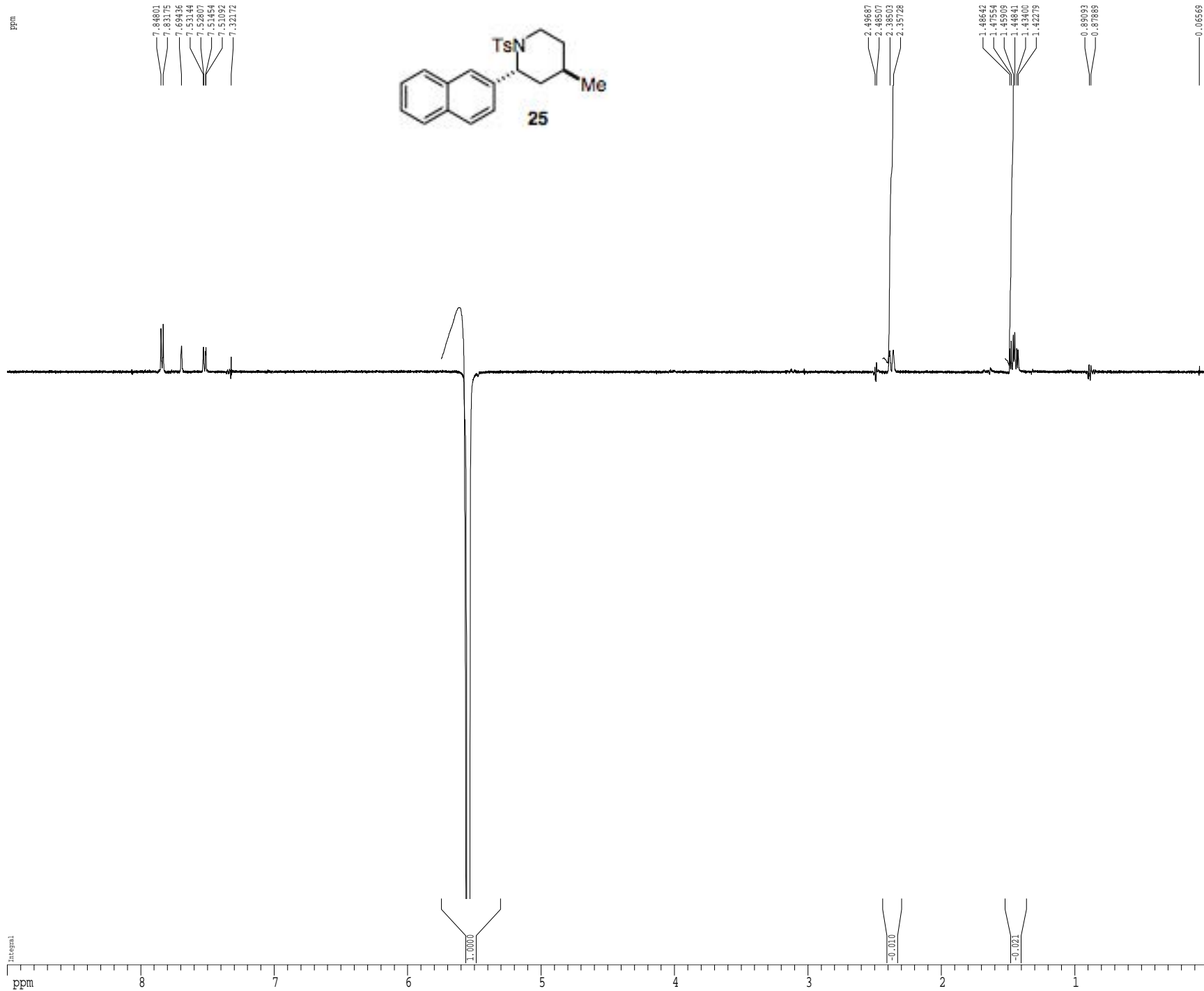
F1 - Acquisition parameters
 ND0 1
 TD 512
 SFO1 500.2235 MHz
 FIDRES 15.650040 Hz
 SW 16.018 ppm
 FhMODE QF

F2 - Processing parameters
 SI 1024
 SF 500.2200327 MHz
 WDW SINE
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

F1 - Processing parameters
 SI 1024
 MC2 QF
 SF 500.2200327 MHz
 WDW SINE
 SSB 0
 LB 0.00 Hz
 GB 0

2D NMR plot parameters
 CX2 15.00 cm
 CX1 15.00 cm
 F2PLO 9.000 ppm
 F2LO 4501.98 Hz
 F2PHI -1.075 ppm
 F2HI -537.60 Hz
 F1PLO 9.000 ppm
 F1LO 4501.98 Hz
 F1PHI -1.075 ppm
 F1HI -537.60 Hz
 F2PPMCM 0.67165 ppm/cm
 F2HZCM 335.97217 Hz/cm
 F1PPMCM 0.67165 ppm/cm
 F1HZCM 335.97217 Hz/cm

gnoe



```

Current Data Parameters
NAME      CAH-1-241-full
EXPNO     4
PROCNO    1

F2 - Acquisition Parameters
Date_     20210707
Time      13.52
INSTRUM   cryo500
PROBHD    5 mm CPTCI 1H-
PULPROG   gnoe1cc22.prd
TD         65536
SOLVENT   CDCl3
NS         128
DS         8
SWH        8012.820 Hz
FIDRES     0.122266 Hz
AQ         4.0894966 sec
RG         101.6
DW         62.400 usec
DE         6.00 usec
TE         298.0 K
D1         1.00000000 sec
D8         0.50000000 sec
D16        0.00020000 sec
d21        0.33375451 sec
d22        0.16399699 sec
p2         19.50 usec

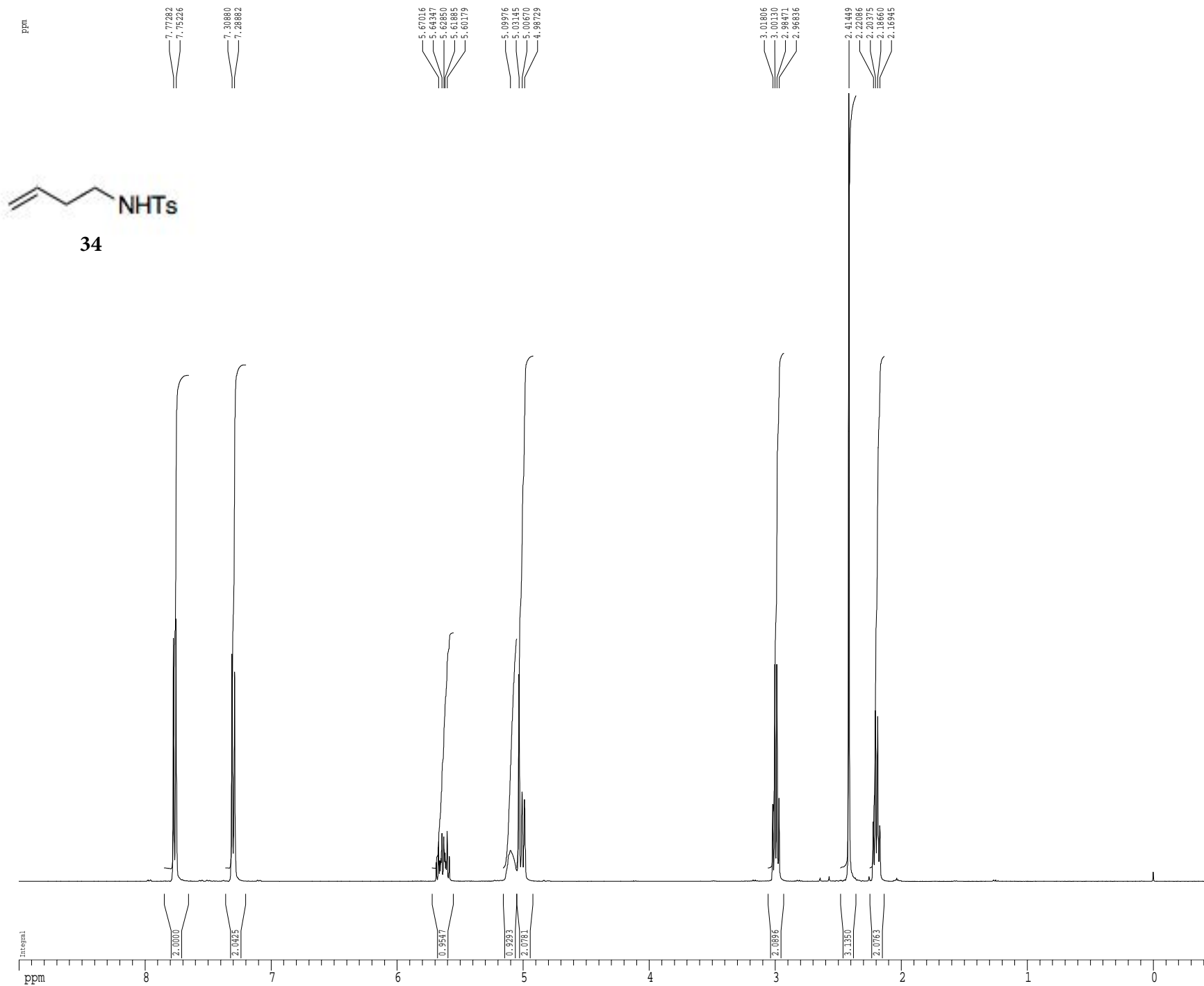
===== CHANNEL f1 =====
NUC1       1H
P1         9.75 usec
p3         29.25 usec
p4         39.00 usec
p5         26.00 usec
P29        40000.00 usec
PL1        1.60 dB
SF01       500.2227742 MHz
SP9        60.00 dB
SPNAM9     gauss1.512
SPOFF9     0.00 Hz

===== GRADIENT CHANNEL =====
GPNAM1     SMSQ10.100
GPNAM2     SMSQ10.100
GPNAM3     SMSQ10.100
GPNAM4     SMSQ10.100
GPX1       0.00 %
GPX2       0.00 %
GPX3       0.00 %
GPX4       0.00 %
GPY1       0.00 %
GPY2       0.00 %
GPY3       0.00 %
GPY4       0.00 %
GPZ1       7.00 %
GPZ2       3.00 %
GPZ3       2.30 %
GPZ4       -2.30 %
P16        1000.00 usec

F2 - Processing parameters
SI         65536
SF         500.2200000 MHz
WDW        no
SSB        0
LB         0.00 Hz
GB         0
PC         1.00

1D NMR plot parameters
CX         22.80 cm
CY         50.00 cm
F1P        9.000 ppm
F1         4501.98 Hz
F2P        0.000 ppm
F2         0.00 Hz
PPMCM      0.39474 ppm/cm
HZCM       197.45528 Hz/cm
  
```

¹H spectrum



```

Current Data Parameters
USER      khewitt1
NAME      KAH-i-102Z
EXPNO     1
PROCNO    1

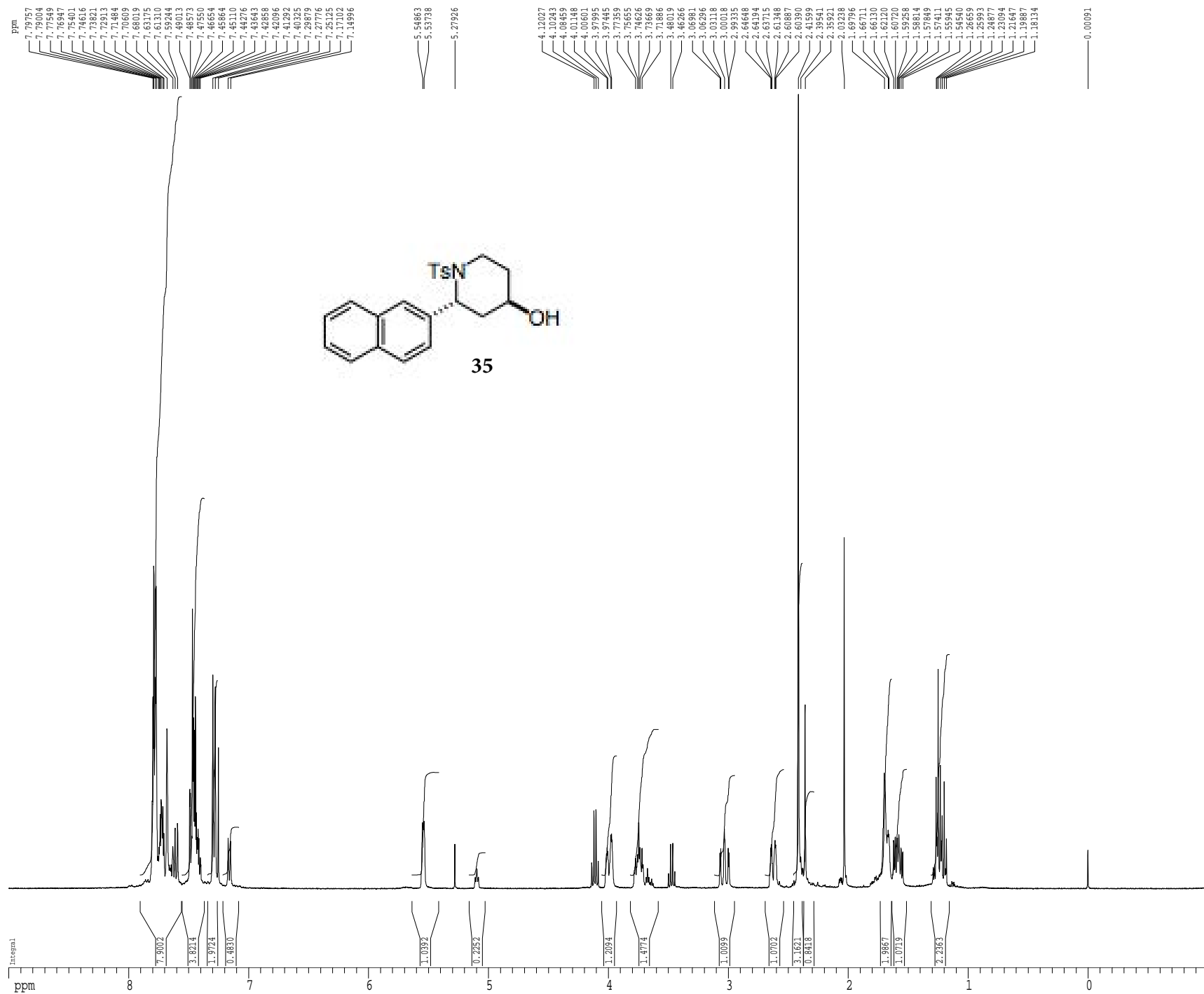
F2 - Acquisition Parameters
Date_     20180922
Time      12.03
INSTRUM   drx400
PROBHD    5 mm QNP H/F/P
PULPROG   zg30
TD         38460
SOLVENT   CDC13T
NS         8
DS         2
SWH        6410.256 Hz
FIDRES     0.166673 Hz
AQ         2.9999299 sec
RG         32
DW         78.000 usec
DE         4.50 usec
TE         297.9 K
D1         0.10000000 sec
MCREST    0.00000000 sec
MCWREK    0.01500000 sec

===== CHANNEL f1 =====
NUC1      1H
P1        12.00 usec
PL1       -1.10 dB
SFO1      400.1328009 MHz

F2 - Processing parameters
SI         65536
SF         400.1300086 MHz
WDW        no
SSB        0
LB         0.00 Hz
GB         0
PC         2.00

1D NMR plot parameters
CY         22.80 cm
CY         15.00 cm
F1P        9.000 ppm
F1         3601.17 Hz
F2P        -0.500 ppm
F2         -200.06 Hz
PPMCM      0.41667 ppm/cm
HZCM       166.72084 Hz/cm
    
```

¹H spectrum



Current Data Parameters
 USER caherber
 NAME CAH-I-201
 EXPNO 1
 PROCNO 1

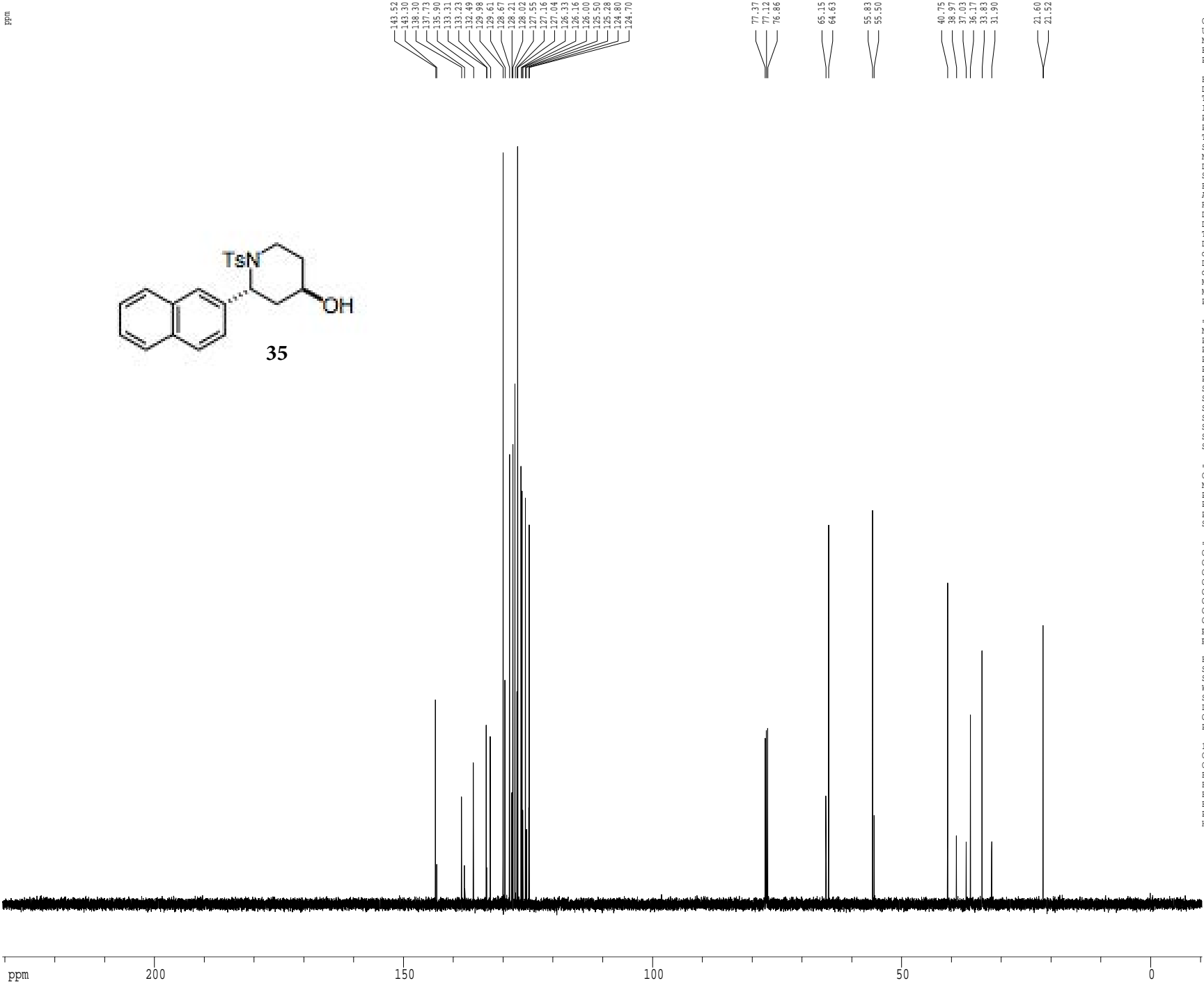
F2 - Acquisition Parameters
 Date_ 20210330
 Time 18.04
 INSTRUM drx400
 PROBHD 5 mm QNP H/P/P
 PULPROG zg30
 TD 65536
 SOLVENT CDCl3
 NS 8
 DS 2
 SWH 6410.256 Hz
 FIDRES 0.097813 Hz
 AQ 5.1118579 sec
 RG 128
 DW 78.000 usec
 DE 4.50 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWREK 0.01500000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 12.00 usec
 PL1 -1.60 dB
 SFO1 400.1328009 MHz

F2 - Processing parameters
 SI 65536
 SF 400.1300245 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 2.00

1D NMR plot parameters
 CY 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 3601.17 Hz
 F2P -1.071 ppm
 F2 -428.71 Hz
 PPMCM 0.44173 ppm/cm
 HZCM 176.74925 Hz/cm

Z-restored spin-echo 13C spectrum with 1H decoupling



Current Data Parameters

USER caherber
NAME CAH-1-202-13C
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters

Date_ 20210828
Time 14.09
INSTRUM cryo500
PROBHD 5 mm CPTCI 1H-
PULPROG SpinEchopg30gp2.prd
TD 65536
SOLVENT CDCl3
NS 200
DS 16
SWH 30303.031 Hz
FIDRES 0.462388 Hz
AQ 1.0813940 sec
RG 13004
DM 16.500 usec
DE 6.00 usec
TE 298.0 K
D1 0.25000000 sec
d11 0.03000000 sec
D16 0.00020000 sec
d17 0.00019600 sec
MCREST 0.00000000 sec
MCWEX 0.01500000 sec
P2 37.70 usec

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

NUC1 13C
P1 18.85 usec
P12 2000.00 usec
P20 500.00 usec
PL0 120.00 dB
PL1 -1.00 dB
SFO1 125.7942548 MHz
SP2 1.55 dB
SP4 1.55 dB
SPNAM2 Crp60comp.4
SPNAM4 Crp60,0.5,20.1
SPOFF2 0.00 Hz
SPOFF4 0.00 Hz

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

CPDPRG2 waltz16
NUC2 1H
PCPD2 100.00 usec
PL2 1.60 dB
PL12 22.00 dB
SFO2 500.2225011 MHz

===== GRADIENT CHANNEL =====

GPNAM1 SINE.100
GPNAM2 SINE.100
GPX1 0.00 %
GPX2 0.00 %
GPY1 0.00 %
GPY2 0.00 %
GPZ1 30.00 %
GPZ2 50.00 %
p15 500.00 usec
p16 1000.00 usec

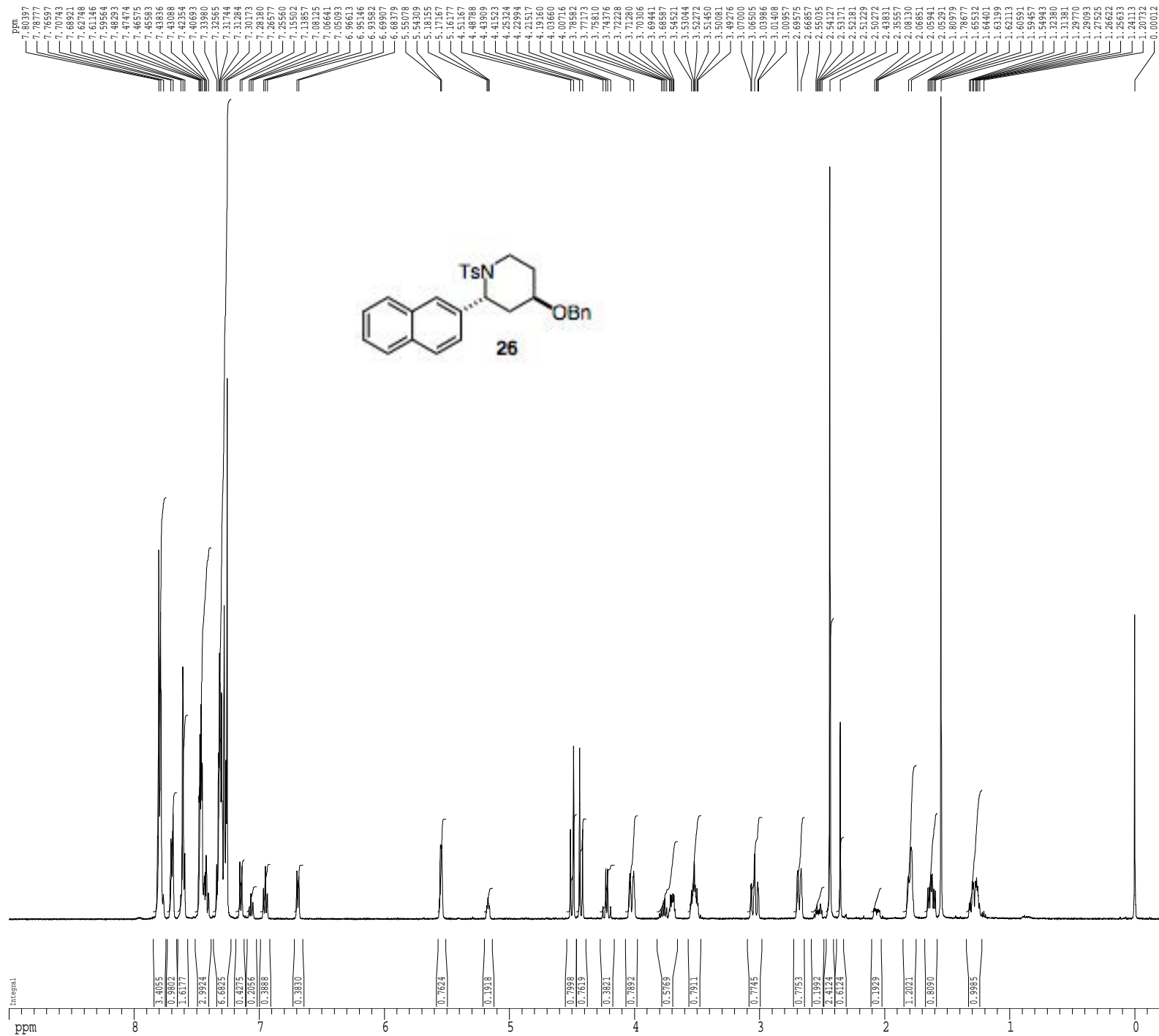
F2 - Processing parameters

SI 65536
SF 125.7804190 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 2.00

1D NMR plot parameters

CX 22.80 cm
CY 15.65 cm
F1P 230.637 ppm
F1 29009.68 Hz
F2P -10.287 ppm
F2 -1293.96 Hz
PPMCM 10.56688 ppm/cm
HZCM 1329.10706 Hz/cm

¹H spectrum



Current Data Parameters
 USER caherber
 NAME CAH-I-236-full
 EXPNO 1
 PROCNO 1

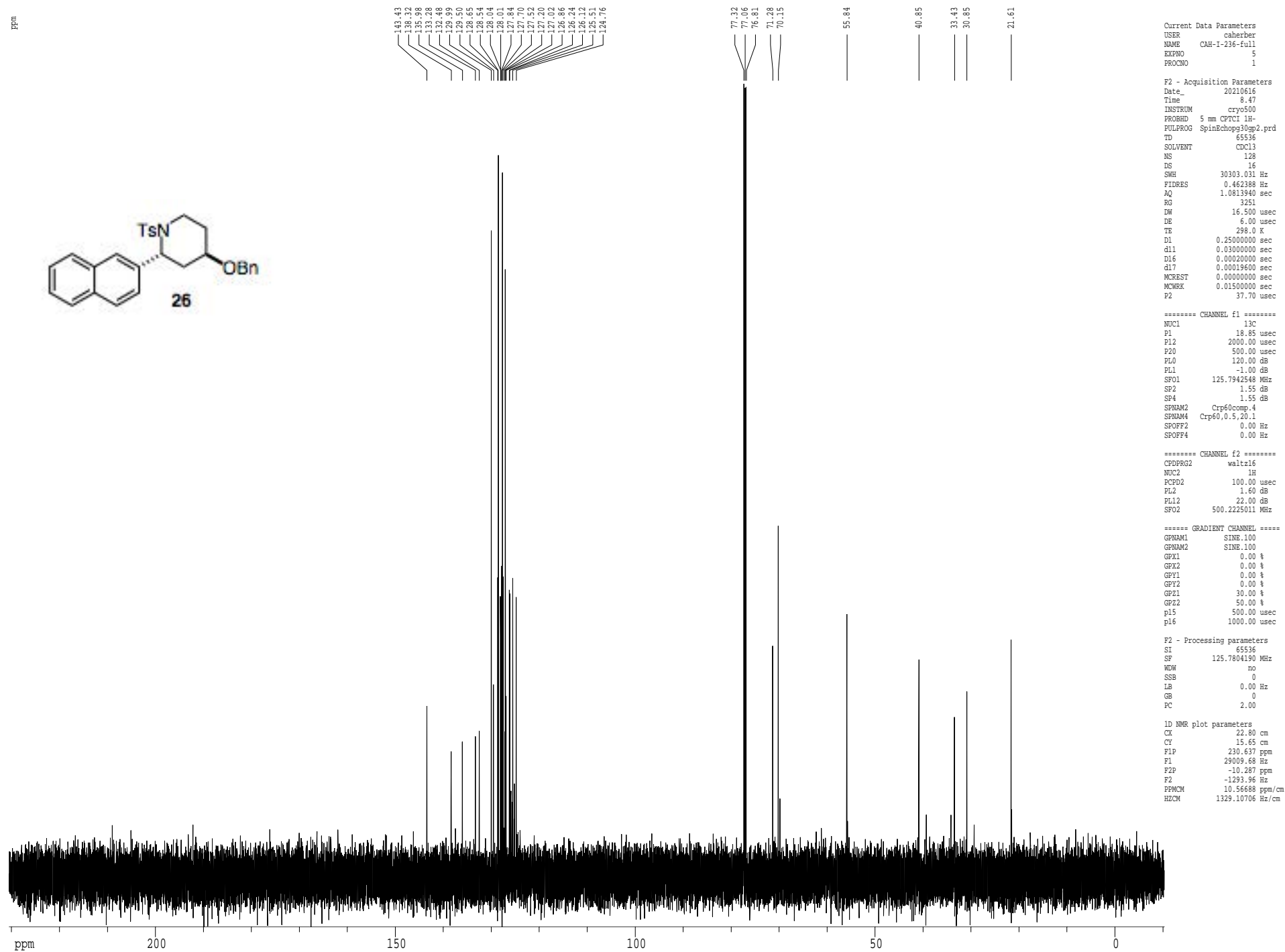
F2 - Acquisition Parameters
 Date_ 20210616
 Time 7.56
 INSTRUM cryo500
 PROBHD 5 mm CPTCI 1H-
 PULPROG zg30
 TD 48074
 SOLVENT CDCl3
 NS 8
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.166677 Hz
 AQ 2.9998677 sec
 RG 5.7
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 D1 0.10000000 sec
 MCREST 0.00000000 sec
 MCWRE 0.01500000 sec

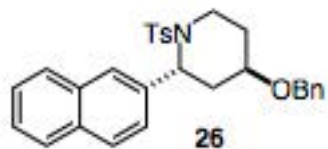
===== CHANNEL f1 =====
 NUC1 1H
 P1 9.75 usec
 PL1 1.60 dB
 SFO1 500.2235015 MHz

F2 - Processing parameters
 SI 65536
 SF 500.2200329 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

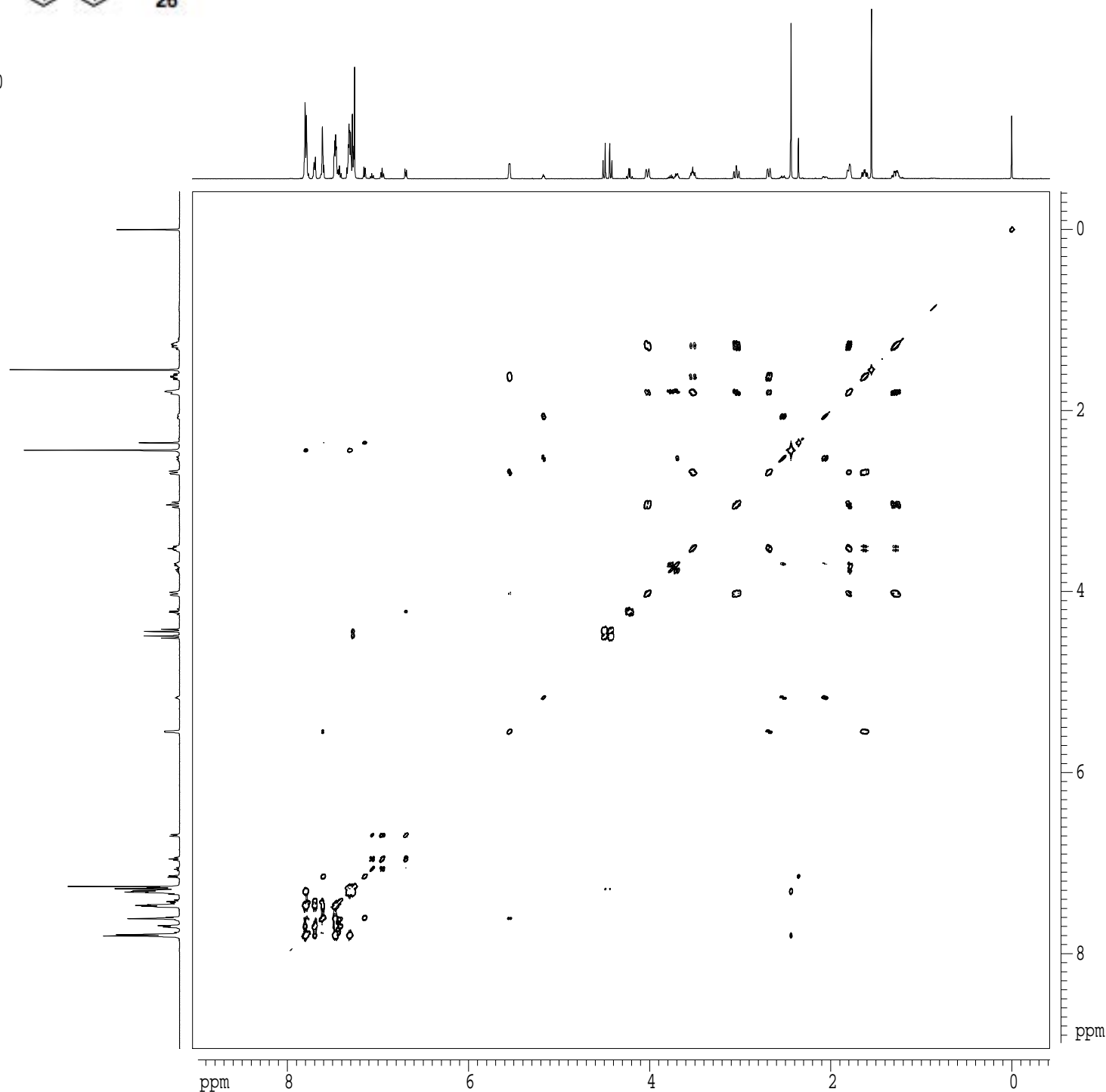
1D NMR plot parameters
 CY 22.80 cm
 CY 15.00 cm
 F1P 9.000 ppm
 F1 4501.98 Hz
 F2P -1.075 ppm
 F2 -537.73 Hz
 PPMCM 0.44189 ppm/cm
 HZCM 221.03986 Hz/cm

Z-restored spin-echo 13C spectrum with 1H decoupling





gcosy60



Current Data Parameters
 USER caherber
 NAME CAH-I-236-full
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20210616
 Time 8.03
 INSTRUM cryo500
 PROBHD 5 mm CPTCI 1H-
 PULPROG cosygp60.prd
 TD 2048
 SOLVENT CDCl3
 NS 1
 DS 16
 SWH 4734.849 Hz
 FIDRES 2.311938 Hz
 AQ 0.2163188 sec
 RG 322.5
 DW 105.600 usec
 DE 6.00 usec
 TE 298.0 K
 d0 0.00000300 sec
 D1 1.00000000 sec
 d13 0.00000300 sec
 D16 0.00020000 sec
 IN0 0.00021120 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 9.75 usec
 PL1 1.60 dB
 SF01 500.2221588 MHz

===== GRADIENT CHANNEL =====
 GPNAM1 SMSQ10.100
 GPNAM2 SMSQ10.100
 GPX1 0.00 %
 GPX2 0.00 %
 GPY1 0.00 %
 GPY2 0.00 %
 GPZ1 17.00 %
 GPZ2 17.00 %
 P16 1000.00 usec

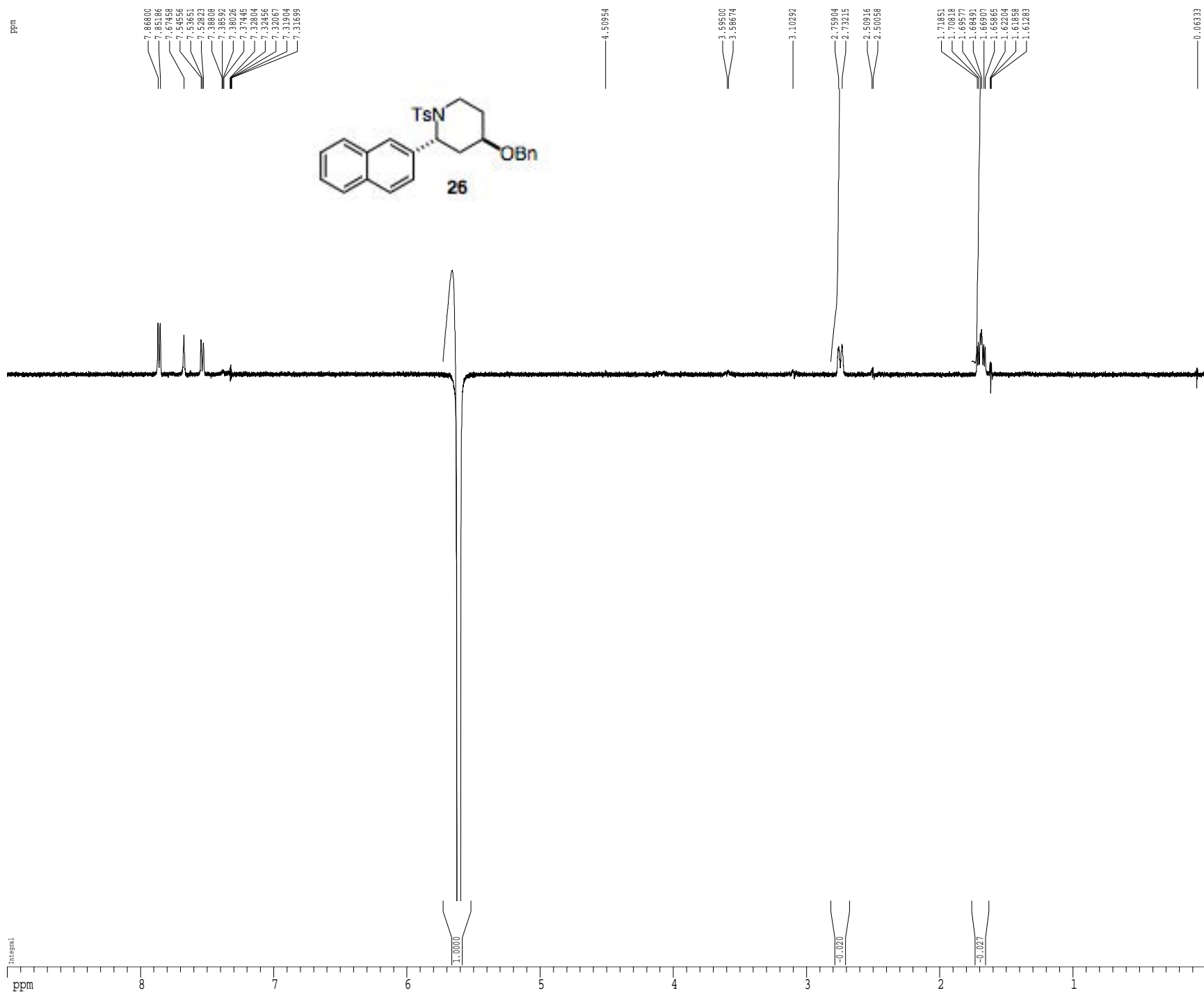
F1 - Acquisition parameters
 ND0 1
 TD 512
 SF01 500.2222 MHz
 FIDRES 9.247751 Hz
 SW 9.465 ppm
 FhMODE QF

F2 - Processing parameters
 SI 1024
 SF 500.2200329 MHz
 WDW SINE
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

F1 - Processing parameters
 SI 1024
 MC2 QF
 SF 500.2200329 MHz
 WDW SINE
 SSB 0
 LB 0.00 Hz
 GB 0

2D NMR plot parameters
 CX2 15.00 cm
 CX1 15.00 cm
 F2PLO 9.048 ppm
 F2LO 4526.21 Hz
 F2PHI -0.417 ppm
 F2HI -208.63 Hz
 F1PLO 9.048 ppm
 F1LO 4526.21 Hz
 F1PHI -0.417 ppm
 F1HI -208.63 Hz
 F2PPMCM 0.63104 ppm/cm
 F2HZCM 315.65659 Hz/cm
 F1PPMCM 0.63104 ppm/cm
 F1HZCM 315.65659 Hz/cm

gnoe



```

Current Data Parameters
USER          caherber
NAME          CAH-I-236-full
EXPNO         3
PROCNO        1

F2 - Acquisition Parameters
Date_         20210616
Time          8.29
INSTRUM       cryo500
PROBHD        5 mm CPTCI 1H-
PULPROG       gnoe1cc22.prd
TD            65536
SOLVENT       CDCl3
NS            128
DS            8
SWH           8012.820 Hz
FIDRES        0.122266 Hz
AQ            4.0894966 sec
RG            161.3
DW            62.400 usec
DE            6.00 usec
TE            298.0 K
D1            1.00000000 sec
D8            0.50000000 sec
D16           0.00020000 sec
d21           0.33375451 sec
d22           0.16399699 sec
p2            19.50 usec

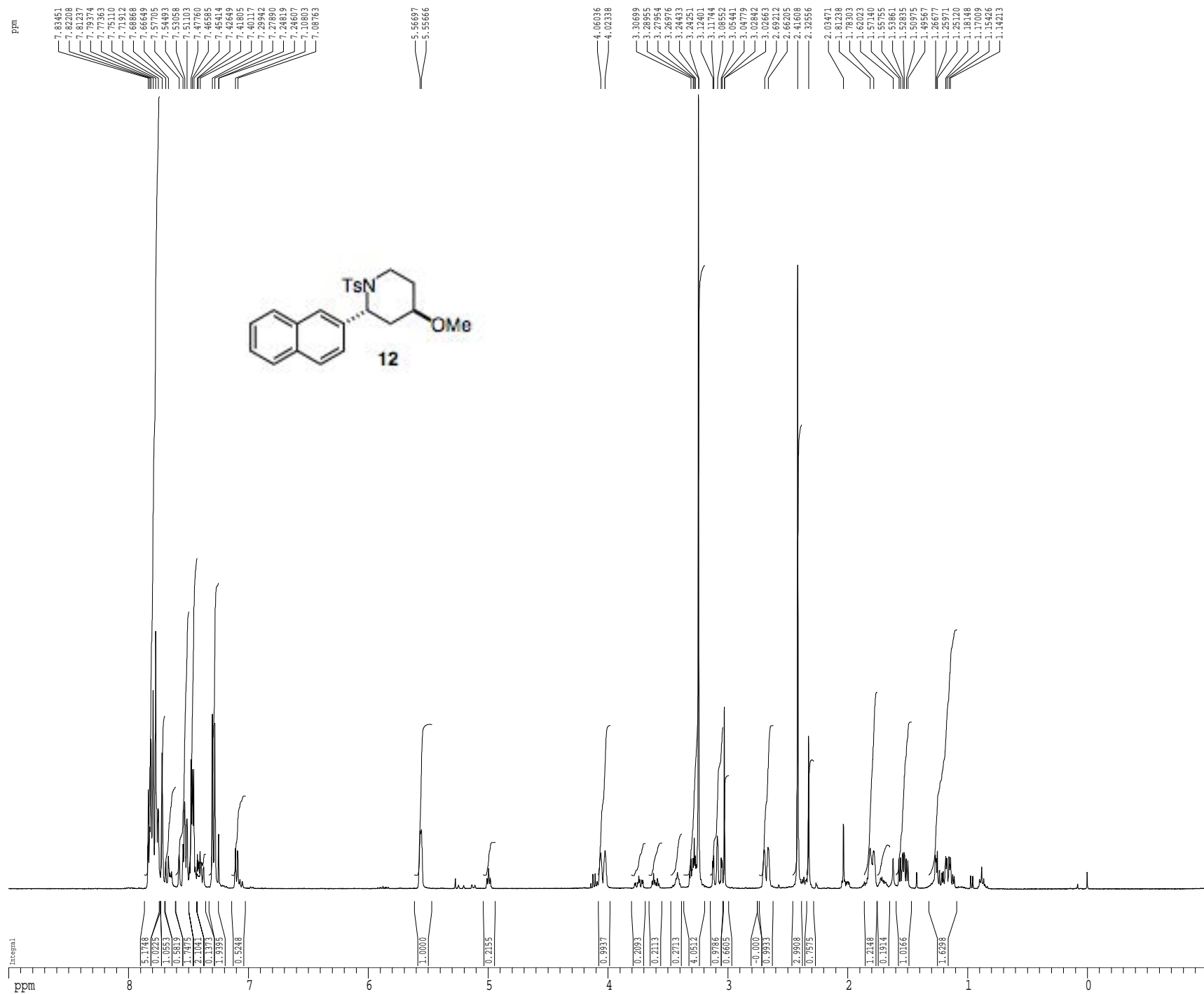
===== CHANNEL f1 =====
NUC1          1H
P1            9.75 usec
P3            29.25 usec
P4            39.00 usec
P5            26.00 usec
P29           40000.00 usec
PL1           1.60 dB
SF01          500.2228073 MHz
SP9           60.00 dB
SPNAM9        gauss1.512
SPOFF9        0.00 Hz

===== GRADIENT CHANNEL =====
GPNAM1        SMSQ10.100
GPNAM2        SMSQ10.100
GPNAM3        SMSQ10.100
GPNAM4        SMSQ10.100
GPX1          0.00 %
GPX2          0.00 %
GPX3          0.00 %
GPX4          0.00 %
GPY1          0.00 %
GPY2          0.00 %
GPY3          0.00 %
GPY4          0.00 %
GPZ1          7.00 %
GPZ2          3.00 %
GPZ3          2.30 %
GPZ4          -2.30 %
P16           1000.00 usec

F2 - Processing parameters
SI            65536
SF            500.2200000 MHz
WDW           no
SSB           0
LB            0.00 Hz
GB            0
PC            1.00

1D NMR plot parameters
CX            22.80 cm
CY            50.00 cm
F1P           9.000 ppm
F1            4501.98 Hz
F2P           0.000 ppm
F2            0.00 Hz
PPMCM         0.39474 ppm/cm
HZCM          197.45528 Hz/cm
  
```

¹H spectrum



```

Current Data Parameters
USER          caherbet
NAME          CAH-I-209
EXPNO        1
PROCNO       1

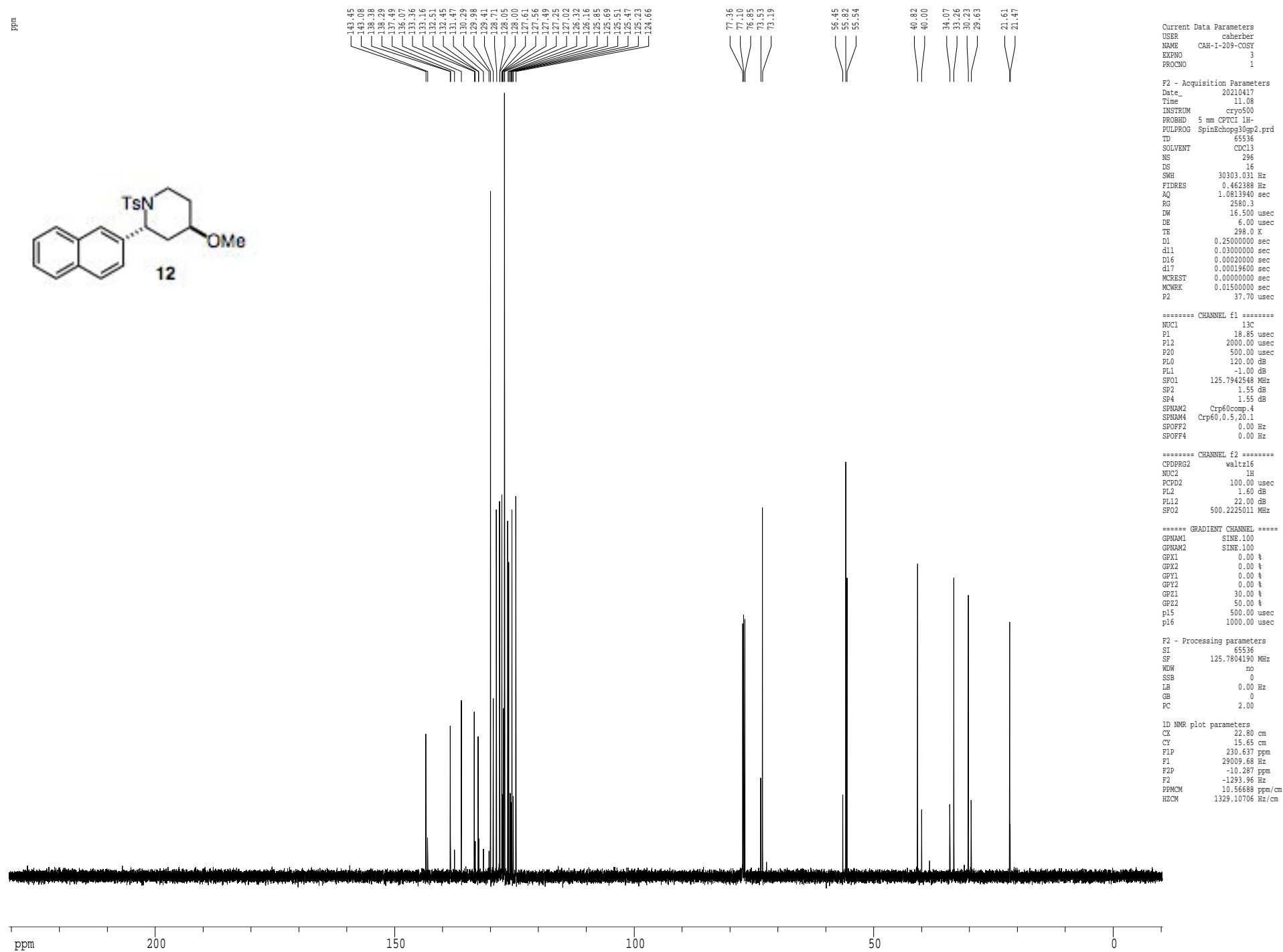
F2 - Acquisition Parameters
Date_         20210415
Time          17.05
INSTRUM       drx400
PROBHD        5 mm QNP H/F/P
PULPROG       zg30
TD            65536
SOLVENT       CDCl3
NS            8
DS            2
SWH           6410.256 Hz
FIDRES        0.097813 Hz
AQ           5.1118579 sec
RG            114
DW           78.000 usec
DE           4.50 usec
TE           298.0 K
D1           0.10000000 sec
MCREST       0.00000000 sec
MCWREK       0.01500000 sec

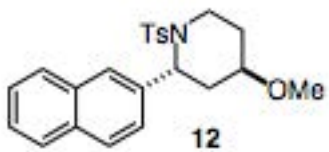
===== CHANNEL f1 =====
NUC1          1H
P1           12.00 usec
PL1          -1.60 dB
SFO1         400.1328009 MHz

F2 - Processing parameters
SI           65536
SF           400.1300267 MHz
WDW          no
SSB          0
LB           0.00 Hz
GB           0
PC           2.00

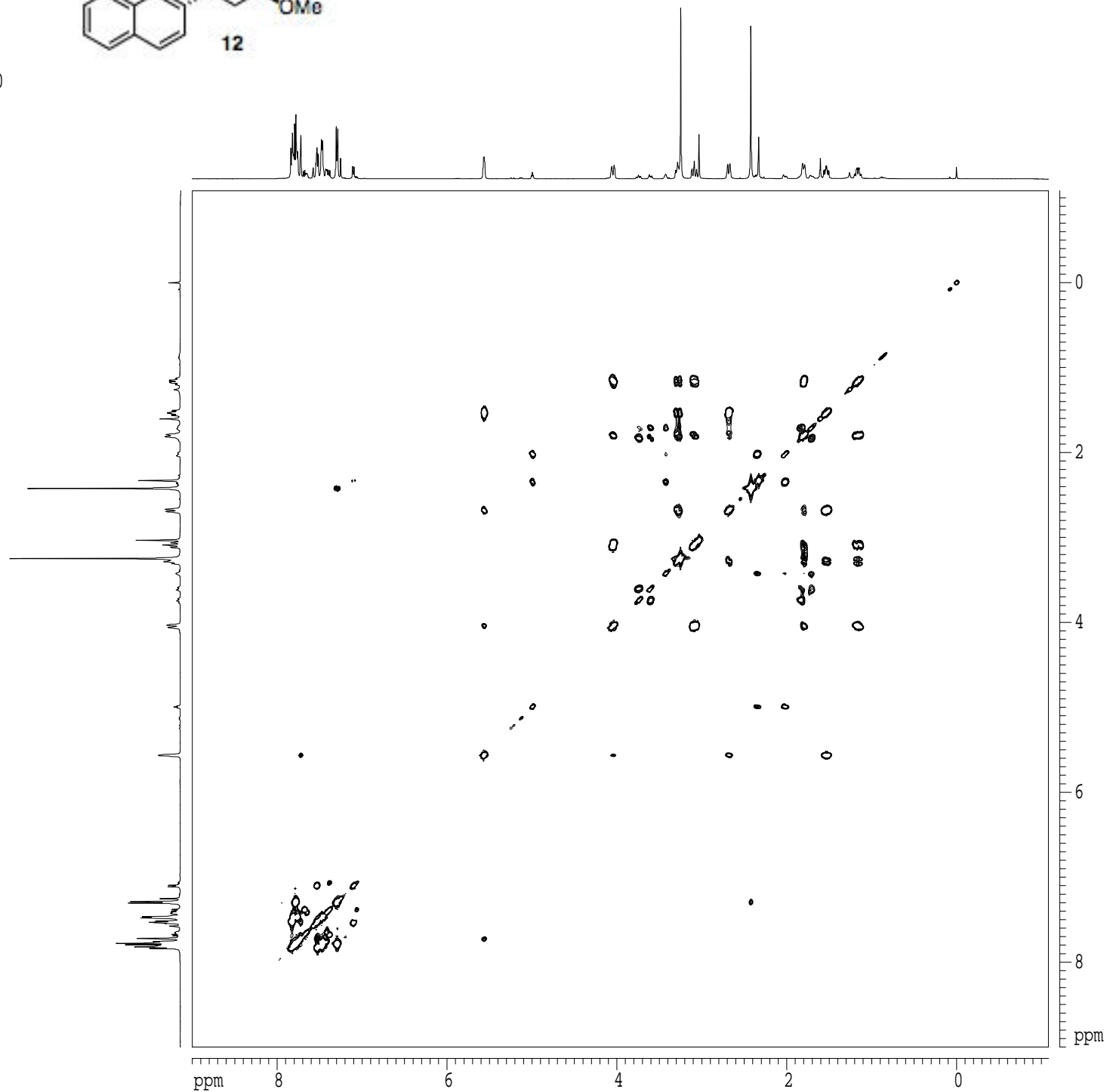
1D NMR plot parameters
CY           22.80 cm
CY           15.00 cm
F1P          9.000 ppm
F1           3601.17 Hz
F2P          -1.077 ppm
F2           -430.96 Hz
PPMCM        0.44198 ppm/cm
HZCM         176.84787 Hz/cm
    
```

Z-restored spin-echo 13C spectrum with 1H decoupling





gcosy60



Current Data Parameters
 USER caherber
 NAME CAH-I-209-COSY
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20210417
 Time 10.51
 INSTRUM cryo500
 PROBHD 5 mm CPTCI 1H-
 PULPROG cosygp60.prd
 TD 2048
 SOLVENT CDCl3
 NS 1
 DS 16
 SWH 8012.820 Hz
 FIDRES 3.912510 Hz
 AQ 0.1278452 sec
 RG 35.9
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 d0 0.00000300 sec
 D1 1.00000000 sec
 d13 0.00000300 sec
 D16 0.00020000 sec
 IN0 0.00012480 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 9.75 usec
 PL1 1.60 dB
 SFO1 500.2235015 MHz

===== GRADIENT CHANNEL =====
 GPNAM1 SMSQ10.100
 GPNAM2 SMSQ10.100
 GPX1 0.00 %
 GPX2 0.00 %
 GPY1 0.00 %
 GPY2 0.00 %
 GPZ1 17.00 %
 GPZ2 17.00 %
 P16 1000.00 usec

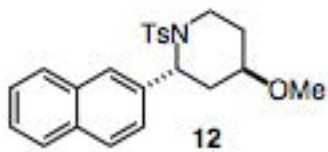
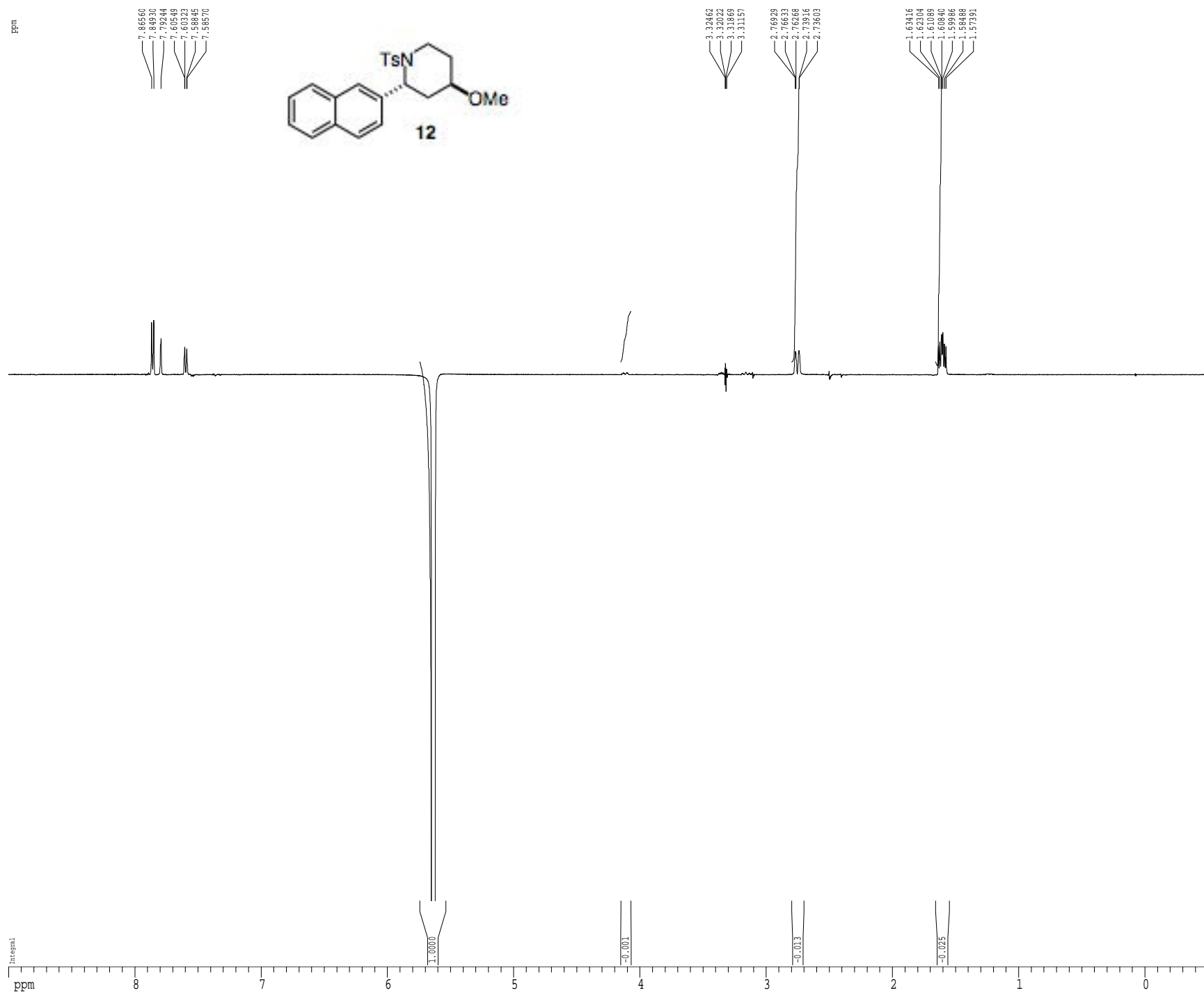
F1 - Acquisition parameters
 ND0 1
 TD 512
 SFO1 500.2235 MHz
 FIDRES 15.650040 Hz
 SW 16.018 ppm
 FhMODE QF

F2 - Processing parameters
 SI 1024
 SF 500.2200362 MHz
 WDW SINE
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

F1 - Processing parameters
 SI 1024
 MC2 QF
 SF 500.2200362 MHz
 WDW SINE
 SSB 0
 LB 0.00 Hz
 GB 0

2D NMR plot parameters
 CX2 15.00 cm
 CX1 15.00 cm
 F2PLO 9.000 ppm
 F2LO 4501.98 Hz
 F2PHI -1.082 ppm
 F2HI -541.03 Hz
 F1PLO 9.000 ppm
 F1LO 4501.98 Hz
 F1PHI -1.082 ppm
 F1HI -541.03 Hz
 F2PPMCM 0.67211 ppm/cm
 F2HZCM 336.20062 Hz/cm
 F1PPMCM 0.67211 ppm/cm
 F1HZCM 336.20062 Hz/cm

gnoe



Current Data Parameters

USER	caherber
NAME	CAH-I-209-noe
EXPNO	2
PROCNO	1

F2 - Acquisition Parameters

Date_	20210417
Time	14.16
INSTRUM	cryo500
PROBHD	5 mm CPTCI 1H-
PULPROG	gnoe1cc22.prd
TD	65536
SOLVENT	CDCl3
NS	128
DS	8
SWH	8012.820 Hz
FIDRES	0.122266 Hz
AQ	4.0894966 sec
RG	80.6
DW	62.400 usec
DE	6.00 usec
TE	298.0 K
D1	1.00000000 sec
D8	0.50000000 sec
D16	0.00020000 sec
d21	0.33375451 sec
d22	0.16399699 sec
p2	19.50 usec

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

NUC1	1H
P1	9.75 usec
p3	29.25 usec
p4	39.00 usec
p5	26.00 usec
P29	40000.00 usec
PL1	1.60 dB
SFO1	500.2228198 MHz
SP9	60.00 dB
SPNAM9	gauss1.512
SPOFF9	0.00 Hz

===== GRADIENT CHANNEL =====

GPNAM1	SMSQ10.100
GPNAM2	SMSQ10.100
GPNAM3	SMSQ10.100
GPNAM4	SMSQ10.100
GPX1	0.00 %
GPX2	0.00 %
GPX3	0.00 %
GPX4	0.00 %
GPY1	0.00 %
GPY2	0.00 %
GPY3	0.00 %
GPY4	0.00 %
GPZ1	7.00 %
GPZ2	3.00 %
GPZ3	2.30 %
GPZ4	-2.30 %
P16	1000.00 usec

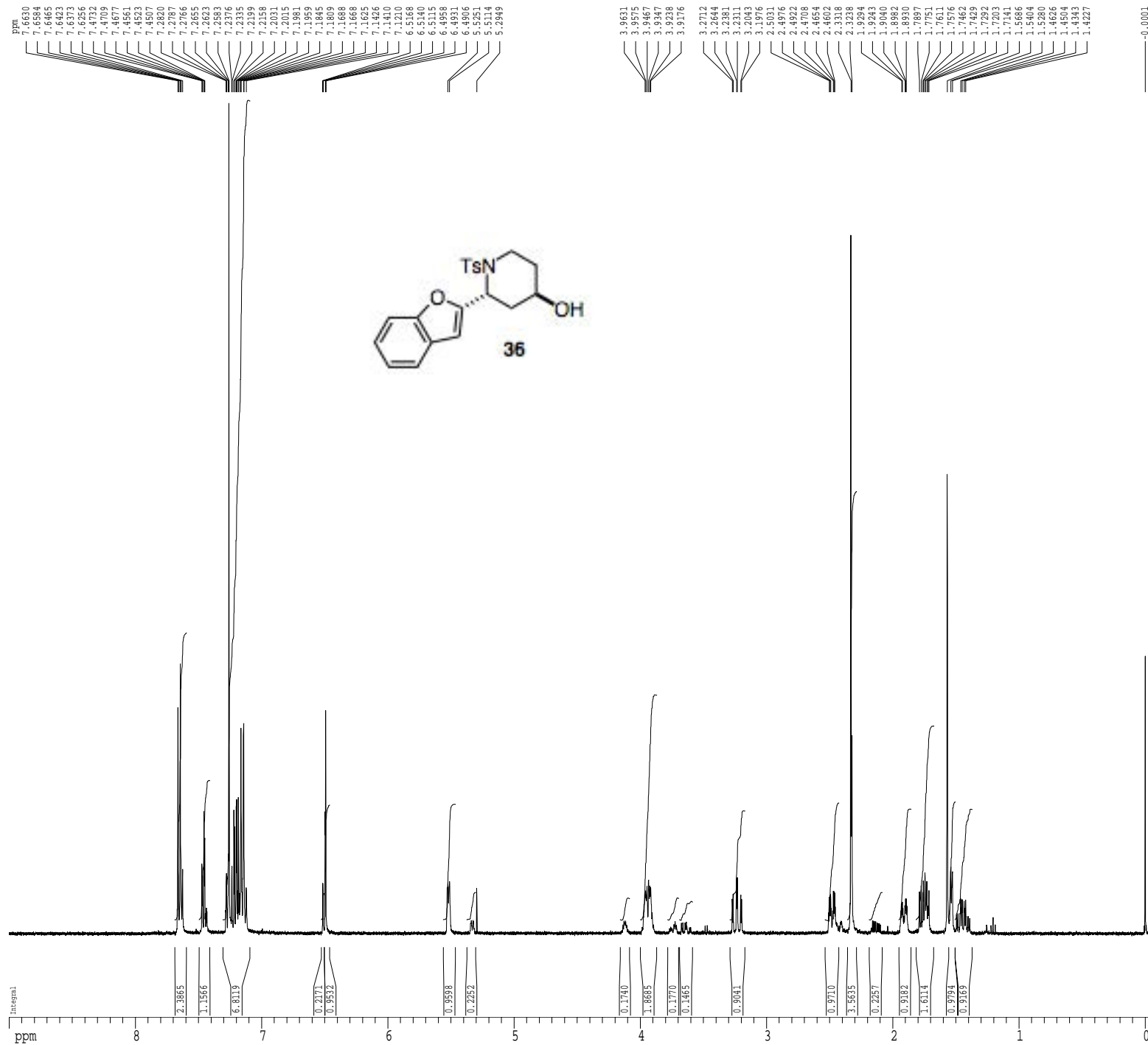
F2 - Processing parameters

SI	65536
SF	500.2200000 MHz
WDW	no
SSB	0
LB	0.00 Hz
GB	0
PC	1.00

1D NMR plot parameters

CX	22.80 cm
CY	50.00 cm
F1P	9.000 ppm
F1	4501.98 Hz
F2P	-0.500 ppm
F2	-250.11 Hz
PPMCM	0.41667 ppm/cm
HZCM	208.42500 Hz/cm

¹H spectrum



Current Data Parameters

USER	caherber
NAME	CAH-I-215
EXPNO	2
PROCNO	1

F2 - Acquisition Parameters

Date_	20210503
Time	13.54
INSTRUM	drx400
PROBHD	5 mm QNP H/P/P
PULPROG	zg30
TD	65536
SOLVENT	CDCl3
NS	8
DS	2
SWH	6410.256 Hz
FIDRES	0.097813 Hz
AQ	5.1118579 sec
RG	512
DW	78.000 usec
DE	4.50 usec
TE	298.0 K
D1	0.10000000 sec
MCREST	0.00000000 sec
MCWRK	0.01500000 sec

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

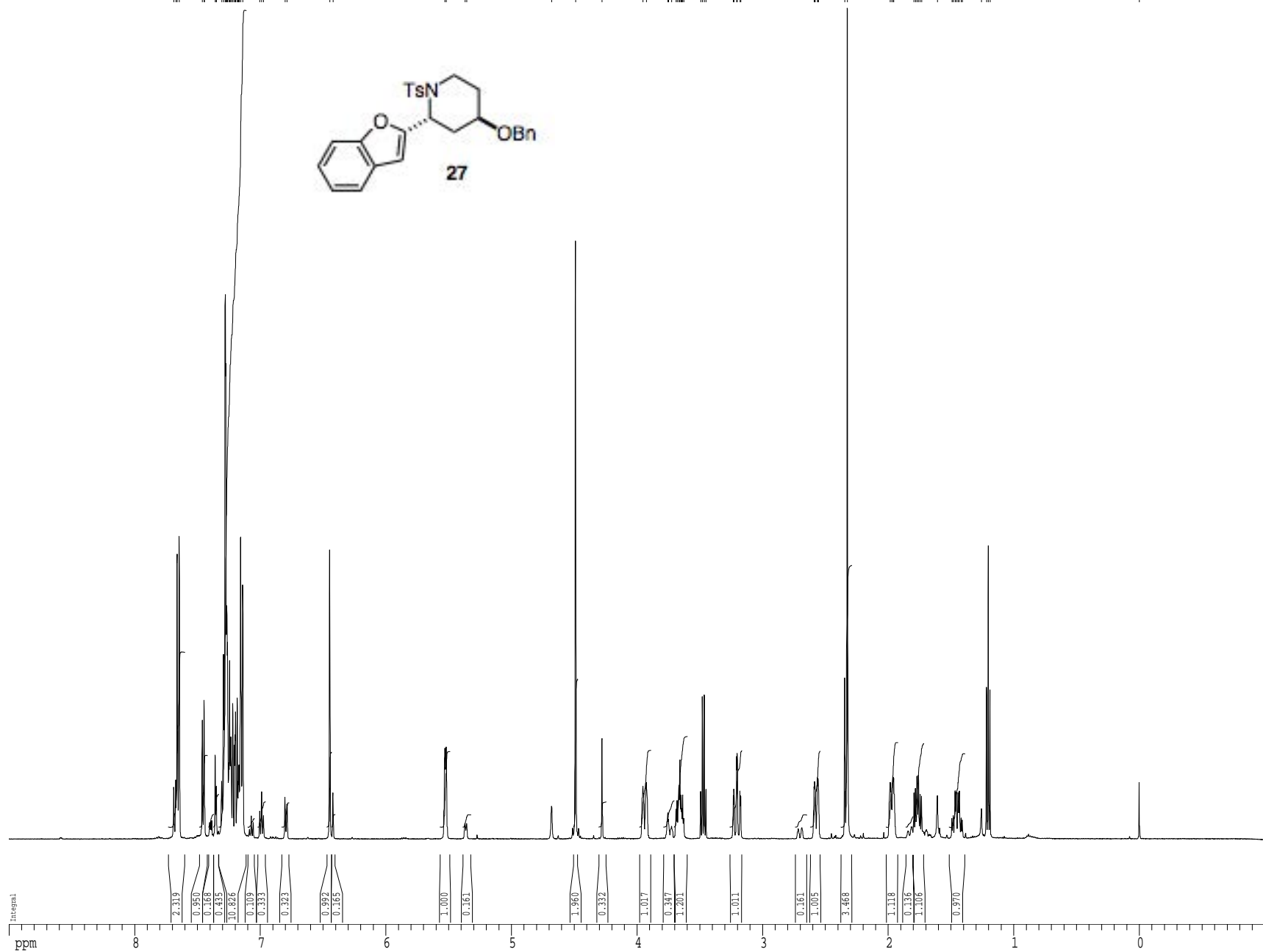
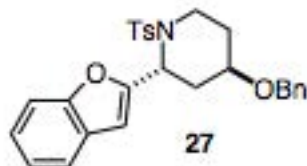
NUC1	1H
P1	12.00 usec
PL1	-1.60 dB
SFO1	400.1328009 MHz

F2 - Processing parameters

SI	65536
SF	400.1300223 MHz
WDW	no
SSB	0
LB	0.00 Hz
GB	0
PC	2.00

1D NMR plot parameters

CY	22.80 cm
CY	15.00 cm
F1P	9.000 ppm
F1	3601.17 Hz
F2P	-1.066 ppm
F2	-426.56 Hz
PPMCM	0.44149 ppm/cm
HZCM	176.65485 Hz/cm

[illegible]

```

Current Data Parameters
=====
USER          caherber
NAME          CAH-I-220-full
EXPNO         1
PROCNO        1

F2 - Acquisition Parameters
=====
Date_         20210506
Time          17.24
INSTRUM       cryo500
PROBHD        5 mm CPTCI 1H-
PULPROG       zg30
TD            48074
SOLVENT       CDCl3
NS            8
DS            2
SWH           8012.820 Hz
FIDRES        0.166677 Hz
AQ            2.9998677 sec
RG            4
DW            62.400 usec
DE            6.00 usec
TE            298.0 K
D1            0.10000000 sec
MCREST        0.00000000 sec
MCWRK        0.01500000 sec

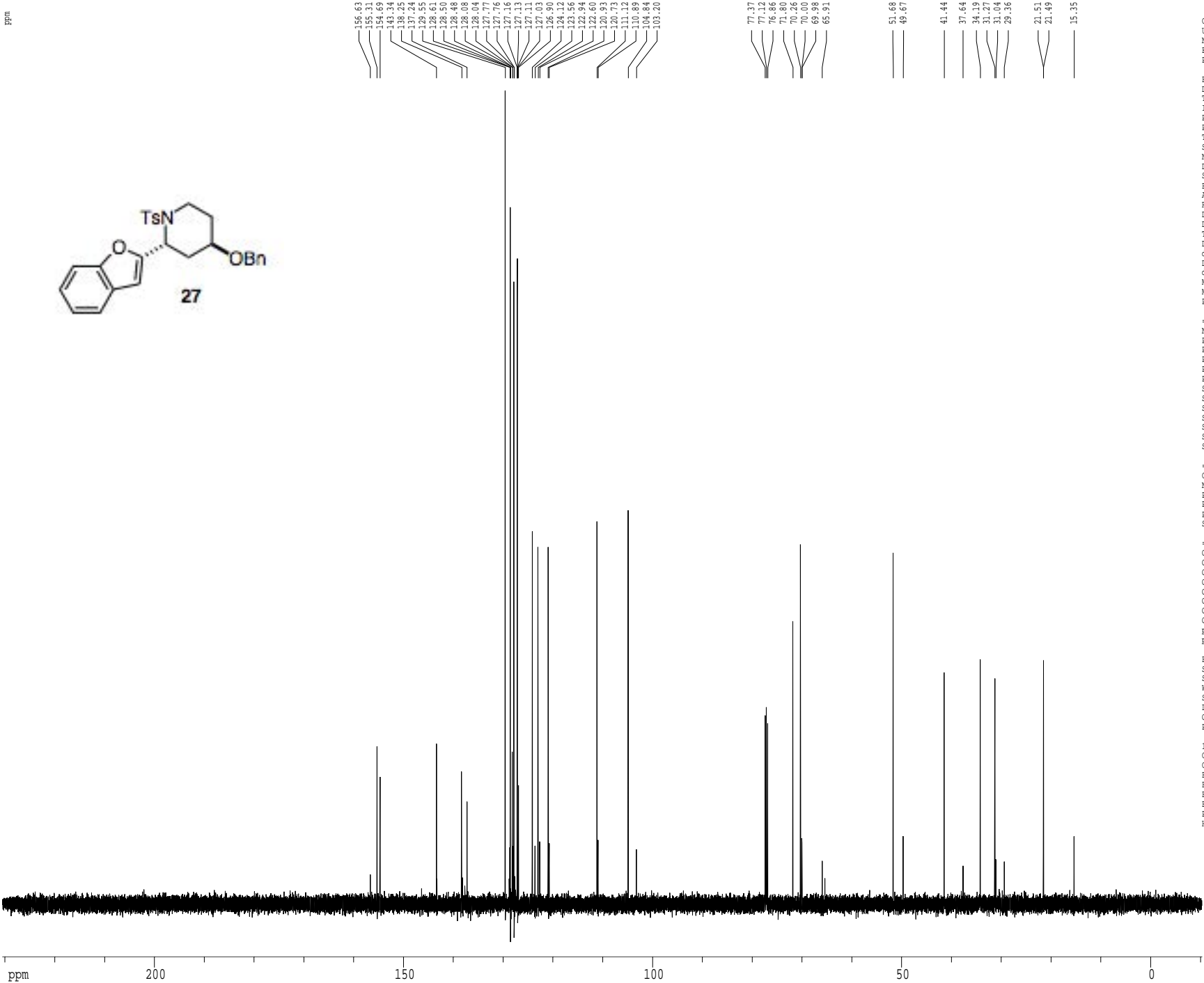
***** CHANNEL f1 *****
NUC1          1H
P1            9.75 usec
PL1           1.60 dB
SFO1         500.223015 MHz

F2 - Processing parameters
=====
SI            65536
SF            500.2200401 MHz
WDW           no
SSB           0
LB            0.00 Hz
GB            0
PC            1.00

1D NMR plot parameters
=====
CX            22.80 cm
CY            15.00 cm
F1P           9.000 ppm
F1            4501.98 Hz
F2P           -1.089 ppm
F2            -544.94 Hz
PFMCM         0.44252 ppm/cm
HZCM          221.35622 Hz/cm

```


Z-restored spin-echo 13C spectrum with 1H decoupling



Current Data Parameters

USER caherber
NAME CAH-I-220-full
EXPNO 5
PROCNO 1

F2 - Acquisition Parameters

Date_ 20210506
Time 18.09
INSTRUM cryo500
PROBHD 5 mm CPTCI 1H-
PULPROG SpinEchopg30gp2.prd
TD 65536
SOLVENT CDCl3
NS 96
DS 16
SWH 30303.031 Hz
FIDRES 0.462388 Hz
AQ 1.0813940 sec
RG 4096
DW 16.500 usec
DE 6.00 usec
TE 298.0 K
D1 0.25000000 sec
d11 0.03000000 sec
D16 0.00020000 sec
d17 0.00019600 sec
MCREST 0.00000000 sec
MCMX 0.01500000 sec
P2 37.70 usec

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

NUC1 13C
P1 18.85 usec
P12 2000.00 usec
P20 500.00 usec
PL0 120.00 dB
PL1 -1.00 dB
SP01 125.7942548 MHz
SP2 1.55 dB
SP4 1.55 dB
SPNAM2 Crp60comp.4
SPNAM4 Crp60,0.5,20.1
SPOFF2 0.00 Hz
SPOFF4 0.00 Hz

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

CPDPRG2 waltz16
NUC2 1H
PCPD2 100.00 usec
PL2 1.60 dB
PL12 22.00 dB
SP02 500.2225011 MHz

===== GRADIENT CHANNEL =====

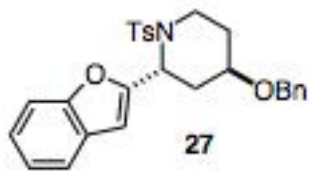
GPAM1 SINE.100
GPAM2 SINE.100
GPX1 0.00 %
GPX2 0.00 %
GPY1 0.00 %
GPY2 0.00 %
GPZ1 30.00 %
GPZ2 50.00 %
p15 500.00 usec
p16 1000.00 usec

F2 - Processing parameters

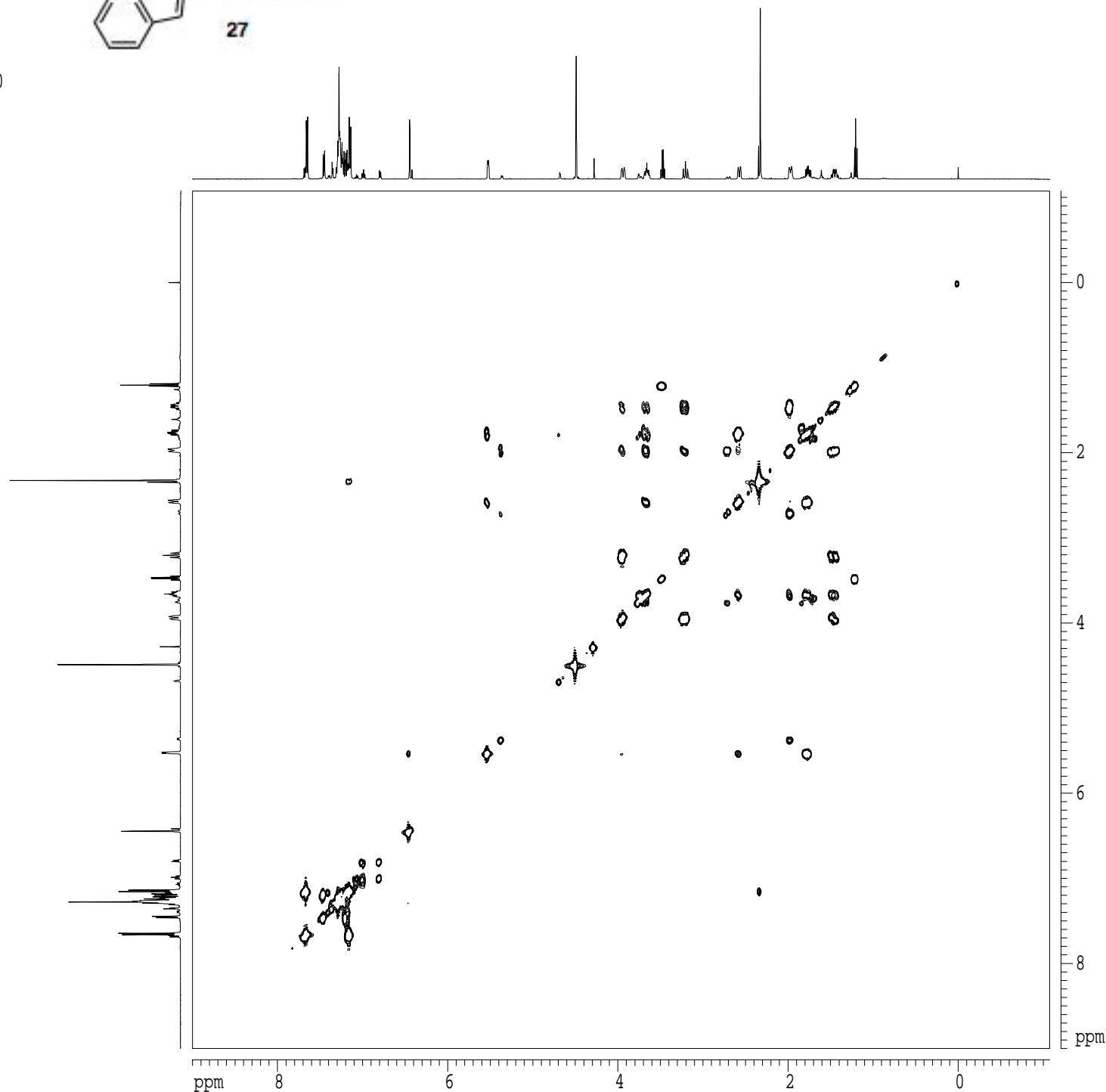
SI 65536
SF 125.7804190 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 2.00

1D NMR plot parameters

CX 22.80 cm
CY 15.65 cm
F1P 230.637 ppm
F1 29009.68 Hz
F2P -10.287 ppm
F2 -1293.96 Hz
PPMCM 10.56688 ppm/cm
HZCM 1329.10706 Hz/cm



gcosy60



Current Data Parameters
 USER caherber
 NAME CAH-I-220-full
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20210506
 Time 17.27
 INSTRUM cryo500
 PROBHD 5 mm CPTCI 1H-
 PULPROG cosygp60.prd
 TD 2048
 SOLVENT CDCl3
 NS 2
 DS 16
 SWH 8012.820 Hz
 FIDRES 3.912510 Hz
 AQ 0.1278452 sec
 RG 35.9
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 d0 0.00000300 sec
 D1 1.00000000 sec
 d13 0.00000300 sec
 D16 0.00020000 sec
 IN0 0.00012480 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 9.75 usec
 PL1 1.60 dB
 SFO1 500.2235015 MHz

===== GRADIENT CHANNEL =====
 GPNAM1 SMSQ10.100
 GPNAM2 SMSQ10.100
 GPX1 0.00 %
 GPX2 0.00 %
 GPY1 0.00 %
 GPY2 0.00 %
 GPZ1 17.00 %
 GPZ2 17.00 %
 P16 1000.00 usec

F1 - Acquisition parameters
 ND0 1
 TD 269
 SFO1 500.2235 MHz
 FIDRES 29.787437 Hz
 SW 16.018 ppm
 FhMODE QF

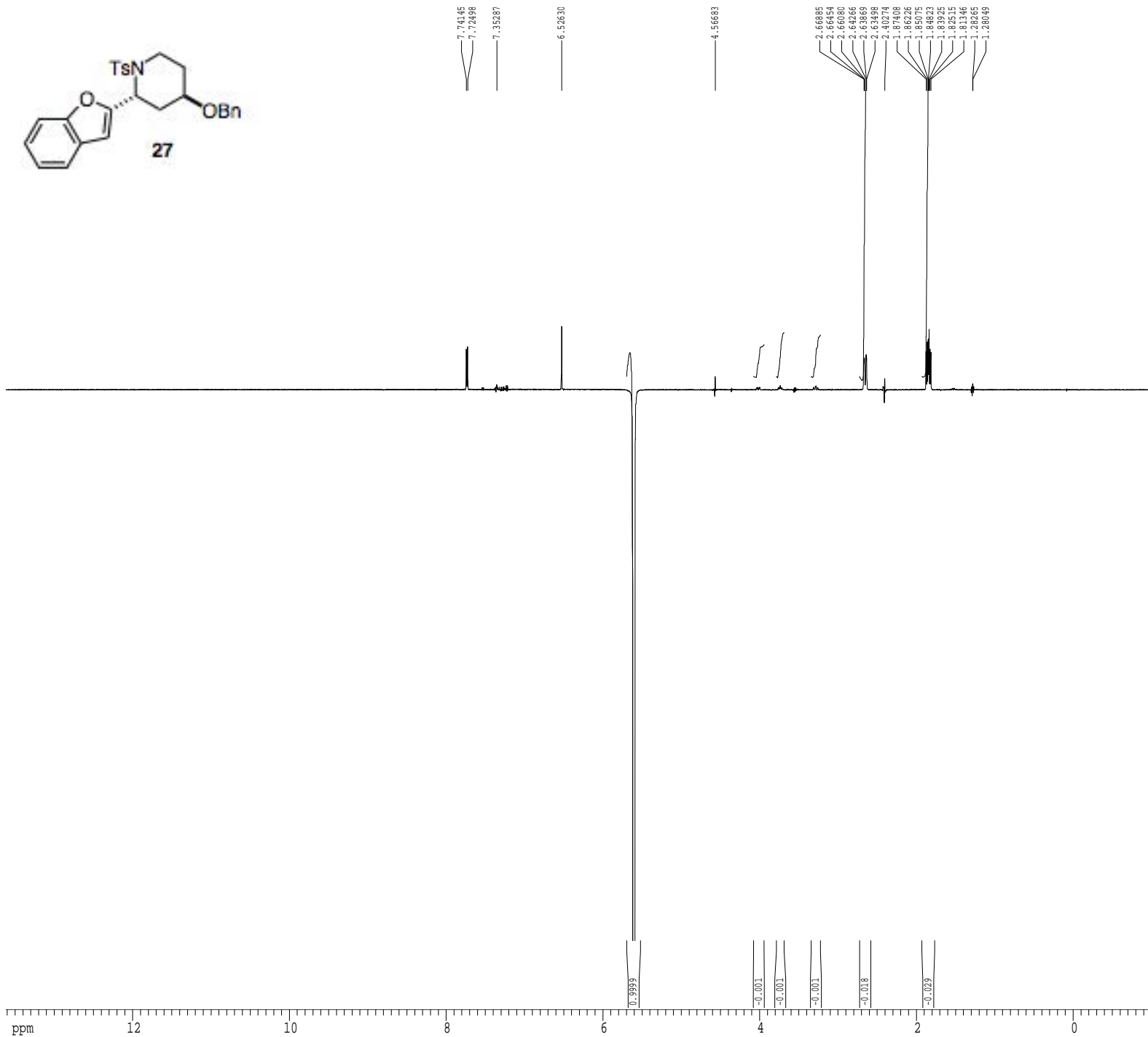
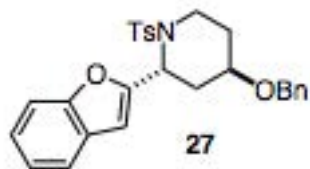
F2 - Processing parameters
 SI 1024
 SF 500.2200329 MHz
 WDW SINE
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

F1 - Processing parameters
 SI 1024
 MC2 QF
 SF 500.2200329 MHz
 WDW SINE
 SSB 0
 LB 0.00 Hz
 GB 0

2D NMR plot parameters
 CX2 15.00 cm
 CX1 15.00 cm
 F2PLO 9.000 ppm
 F2LO 4501.98 Hz
 F2PHI -1.075 ppm
 F2HI -537.73 Hz
 F1PLO 9.000 ppm
 F1LO 4501.98 Hz
 F1PHI -1.075 ppm
 F1HI -537.73 Hz
 F2PPMCM 0.67167 ppm/cm
 F2HZCM 335.98087 Hz/cm
 F1PPMCM 0.67167 ppm/cm
 F1HZCM 335.98087 Hz/cm

gnoe

ppm



Current Data Parameters
 USER caherber
 NAME CAH-I-220-full
 EXPNO 3
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20210506
 Time 17.52
 INSTRUM cryo500
 PROBRD 5 mm CPTCI 1H-
 PULPROG gnoe1cc22.prd
 TD 65536
 SOLVENT CDCl3
 NS 128
 DS 8
 SNH 8012.820 Hz
 FIDRES 0.122266 Hz
 AQ 4.0894966 sec
 RG 90.5
 DW 62.400 usec
 DE 6.00 usec
 TE 298.0 K
 D1 1.00000000 sec
 D8 0.50000000 sec
 D16 0.00020000 sec
 d21 0.33375451 sec
 d22 0.16399699 sec
 p2 19.50 usec

===== CHANNEL f1 =====
 NUC1 1H
 P1 9.75 usec
 p3 29.25 usec
 p4 39.00 usec
 p5 26.00 usec
 P29 40000.00 usec
 PL1 1.60 dB
 SF01 500.228033 MHz
 SP9 60.00 dB
 SPNAM9 gauss1.512
 SPOFF9 0.00 Hz

===== GRADIENT CHANNEL =====
 GPNAM1 SMSQ10.100
 GPNAM2 SMSQ10.100
 GPNAM3 SMSQ10.100
 GPNAM4 SMSQ10.100
 GPX1 0.00 %
 GPX2 0.00 %
 GPX3 0.00 %
 GPX4 0.00 %
 GPY1 0.00 %
 GPY2 0.00 %
 GPY3 0.00 %
 GPY4 0.00 %
 GPZ1 7.00 %
 GPZ2 3.00 %
 GPZ3 2.30 %
 GPZ4 -2.30 %
 P16 1000.00 usec

F2 - Processing parameters
 SI 65536
 SF 500.2200000 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 22.80 cm
 CY 50.00 cm
 F1P 15.009 ppm
 F1 7507.95 Hz
 F2P -1.009 ppm
 F2 -504.87 Hz
 PPMCM 0.70257 ppm/cm
 HZCM 351.43951 Hz/cm