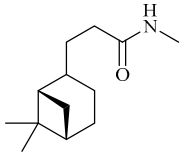
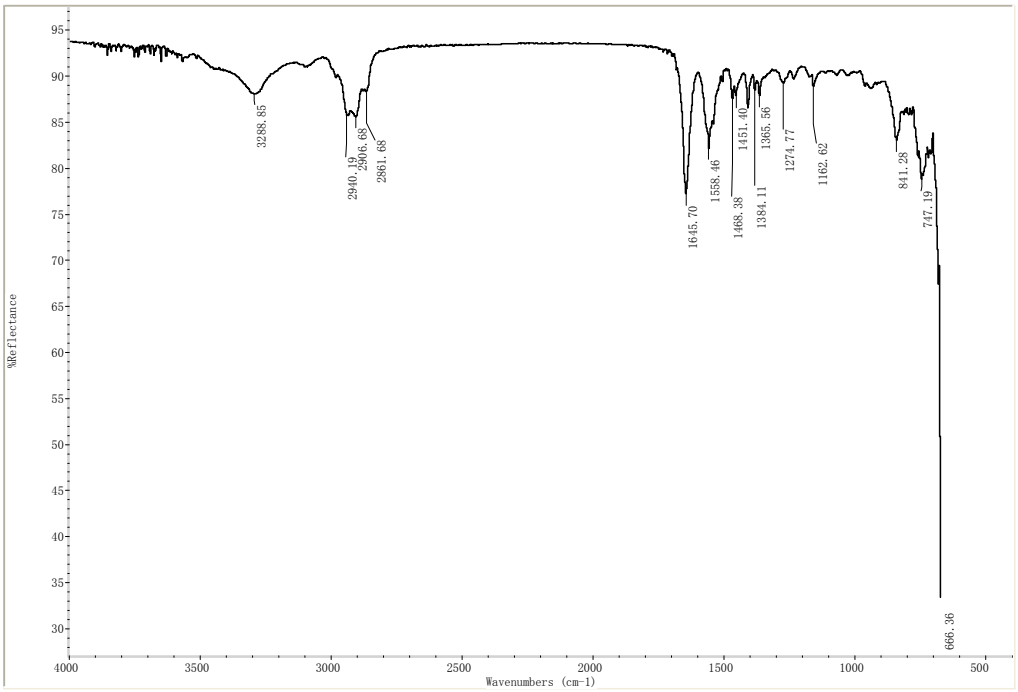
FTIR Spectrums of compound 8a-8g

Compound 8a

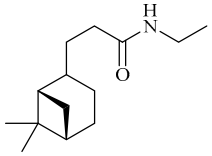


3-((1S,5S)-6,6-dimethylbicyclo[3.1.1]heptan-2-yl)-N-methylpropanamide

FTIR of compound 8a

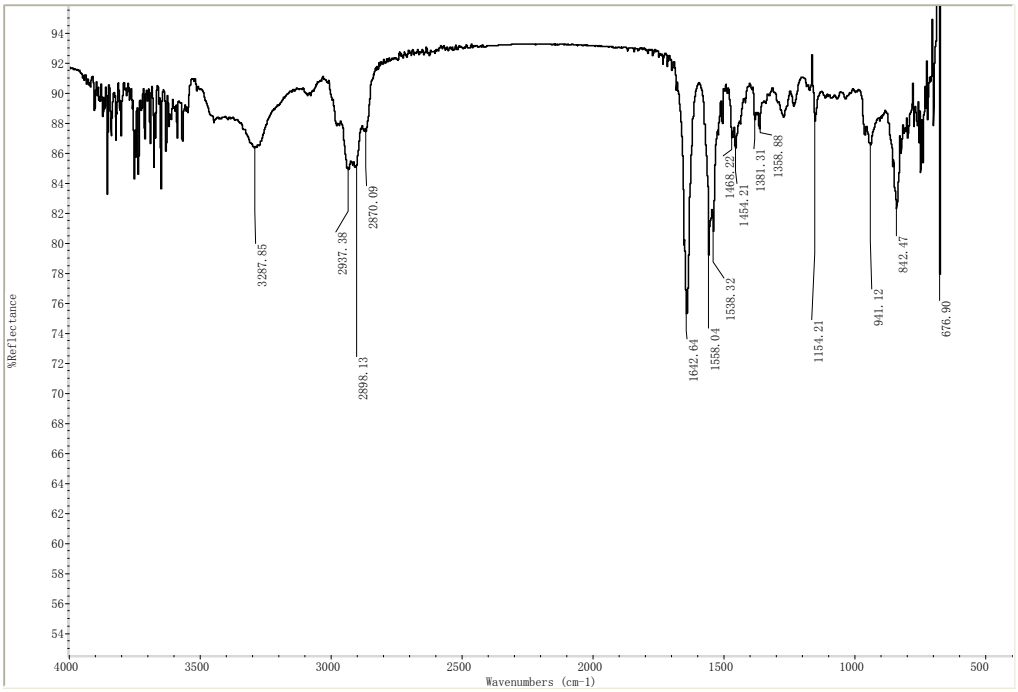


Compound 8b

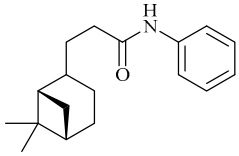


3-((1S,5S)-6,6-dimethylbicyclo[3.1.1]heptan-2-yl)-N-ethylpropanamide

FTIR of compound 8b

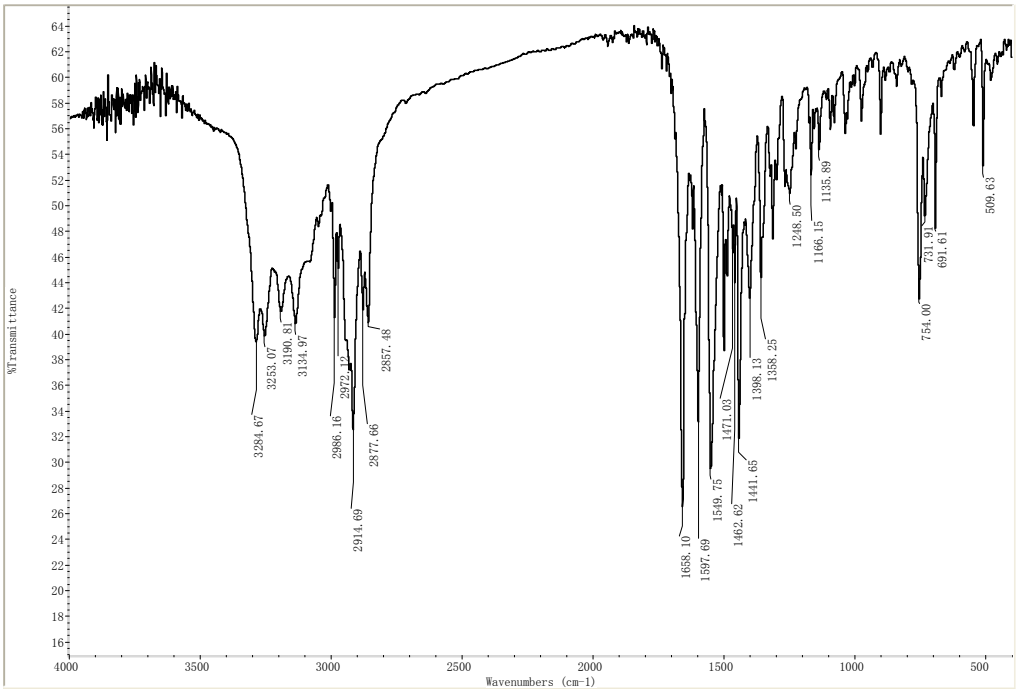


Compound 8c

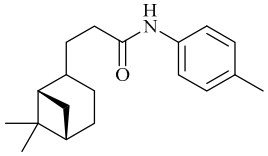


3-((1S,5S)-6,6-dimethylbicyclo[3.1.1]heptan-2-yl)-N-phenylpropanamide

FTIR of compound 8c

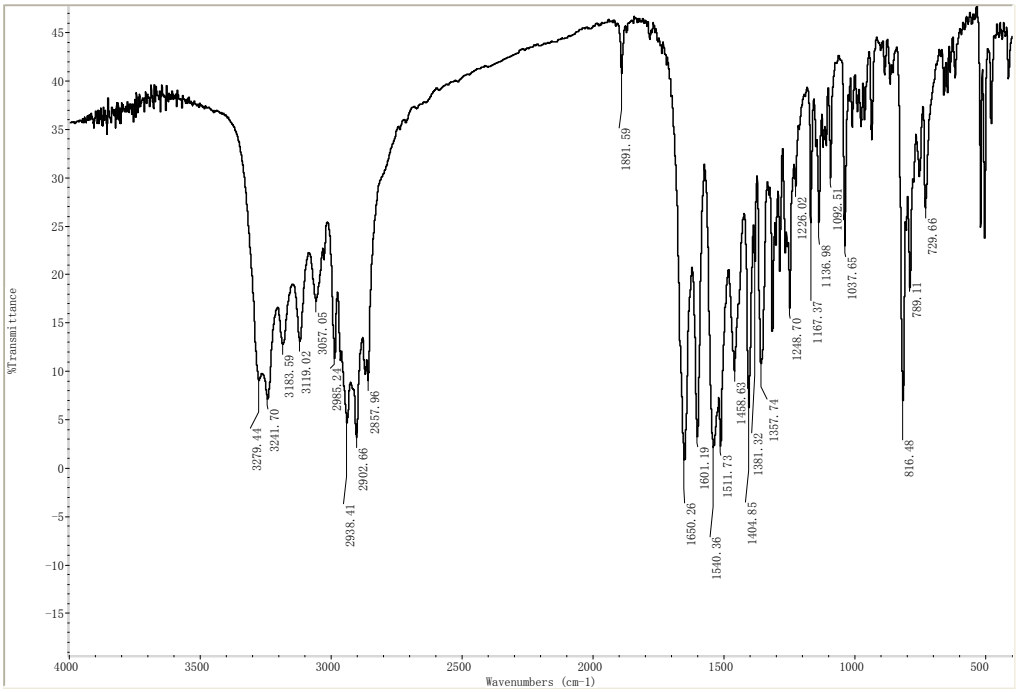


Compound 8d

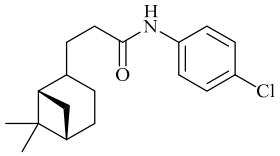


3-((1S,5S)-6,6-dimethylbicyclo[3.1.1]heptan-2-yl)-N-(p-tolyl)propanamide

FTIR of compound 8d

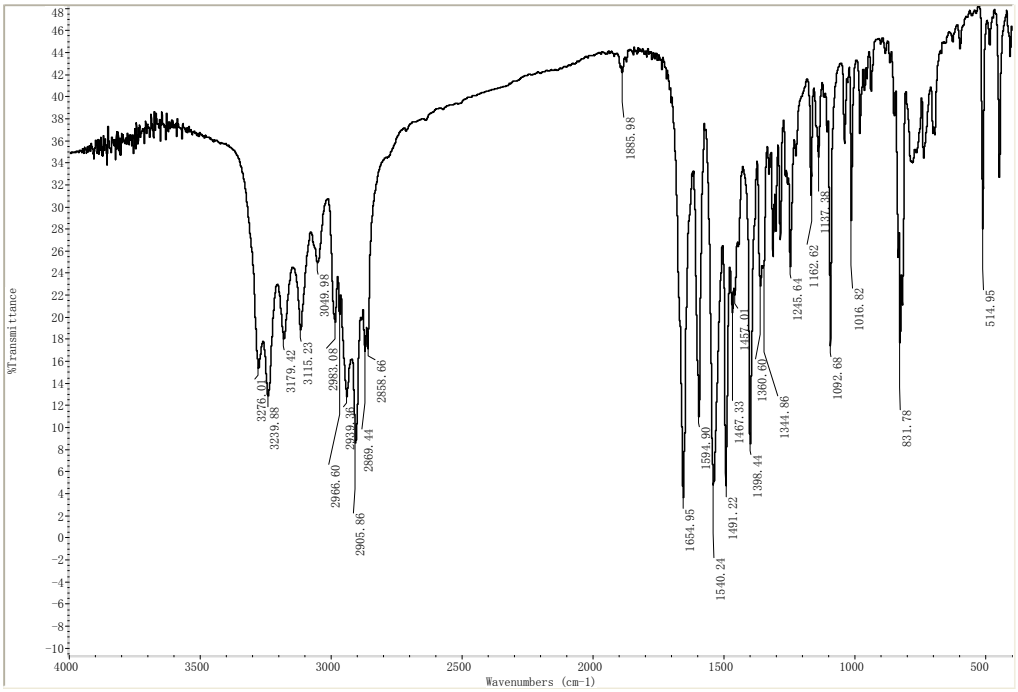


Compound 8e

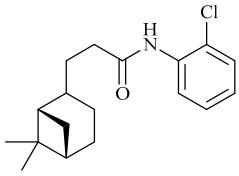


N-(4-chlorophenyl)-3-((1S,5S)-6,6-dimethylbicyclo[3.1.1]heptan-2-yl)propanamide

FTIR of compound 8e

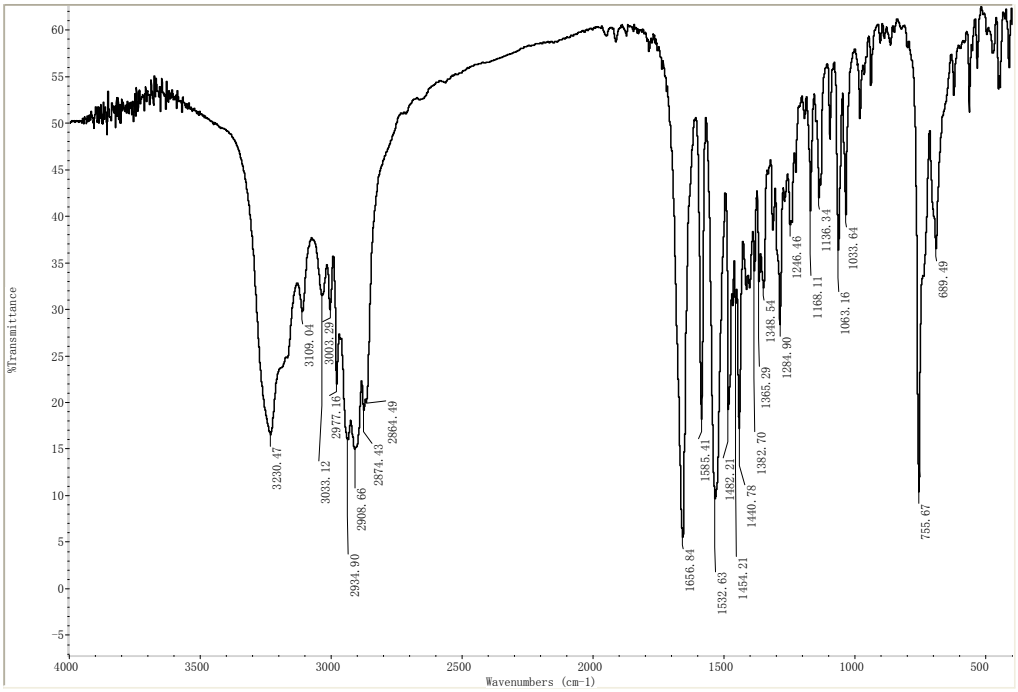


Compound 8f

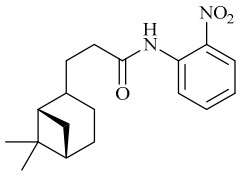


N-(2-chlorophenyl)-3-((1S,5S)-6,6-dimethylbicyclo[3.1.1]heptan-2-yl)propanamide

FTIR of compound 8f

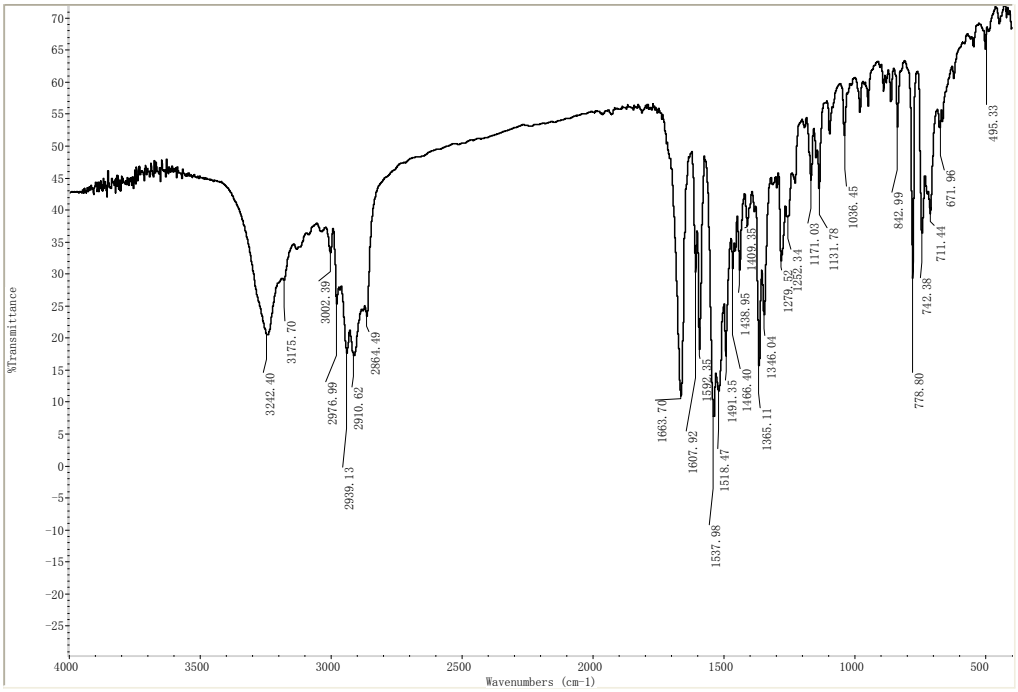


Compound 8g



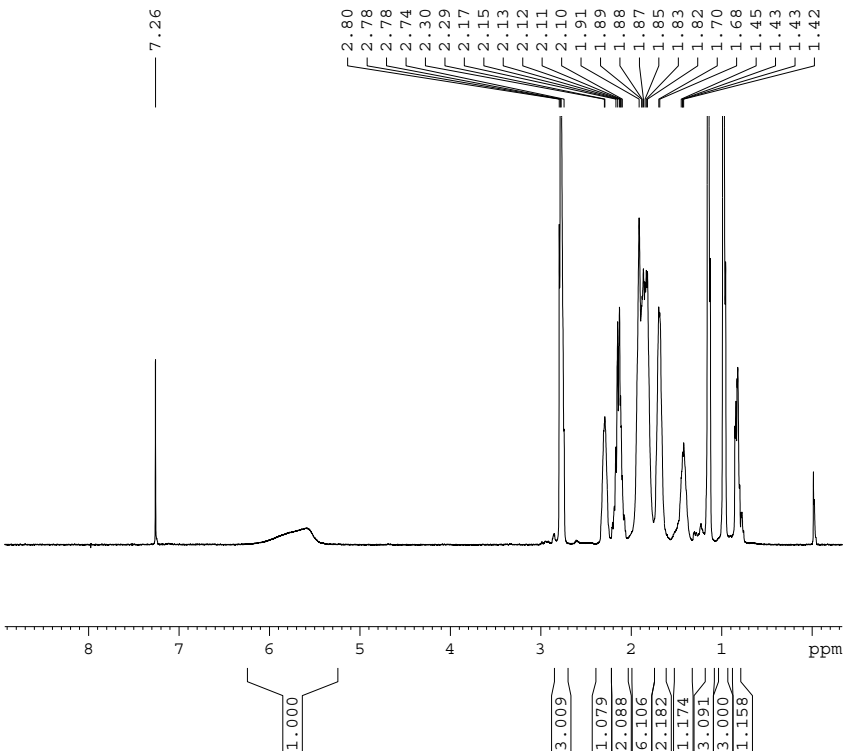
3-((1S,5S)-6,6-dimethylbicyclo[3.1.1]heptan-2-yl)-N-(2-nitrophenyl)propanamide

FTIR of compound 8g

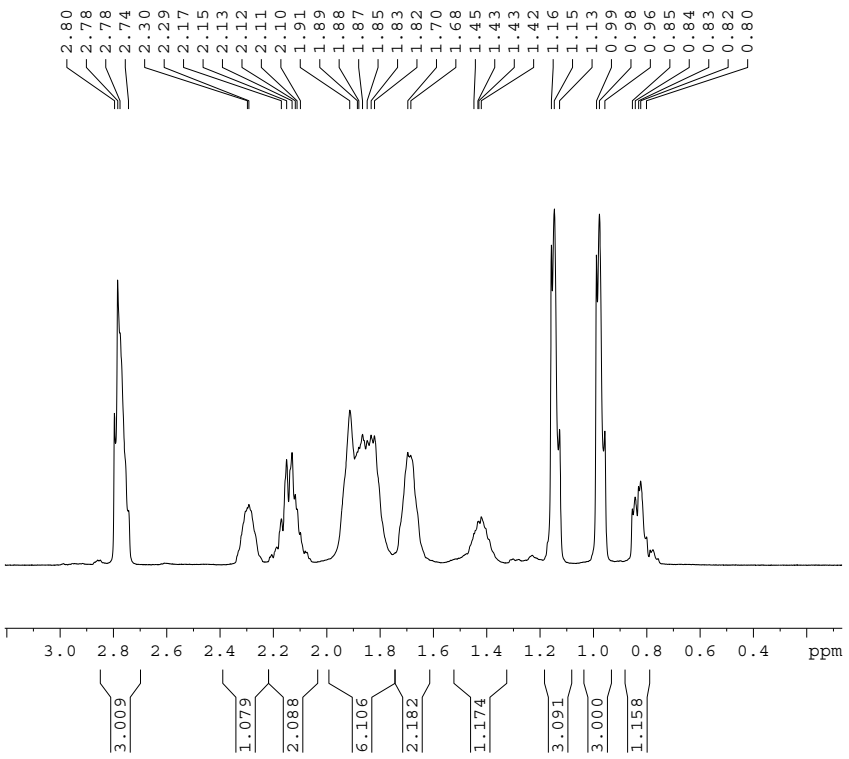


NMR spectrums of compound 8a-8g

^{1}H NMR of compound 8a:

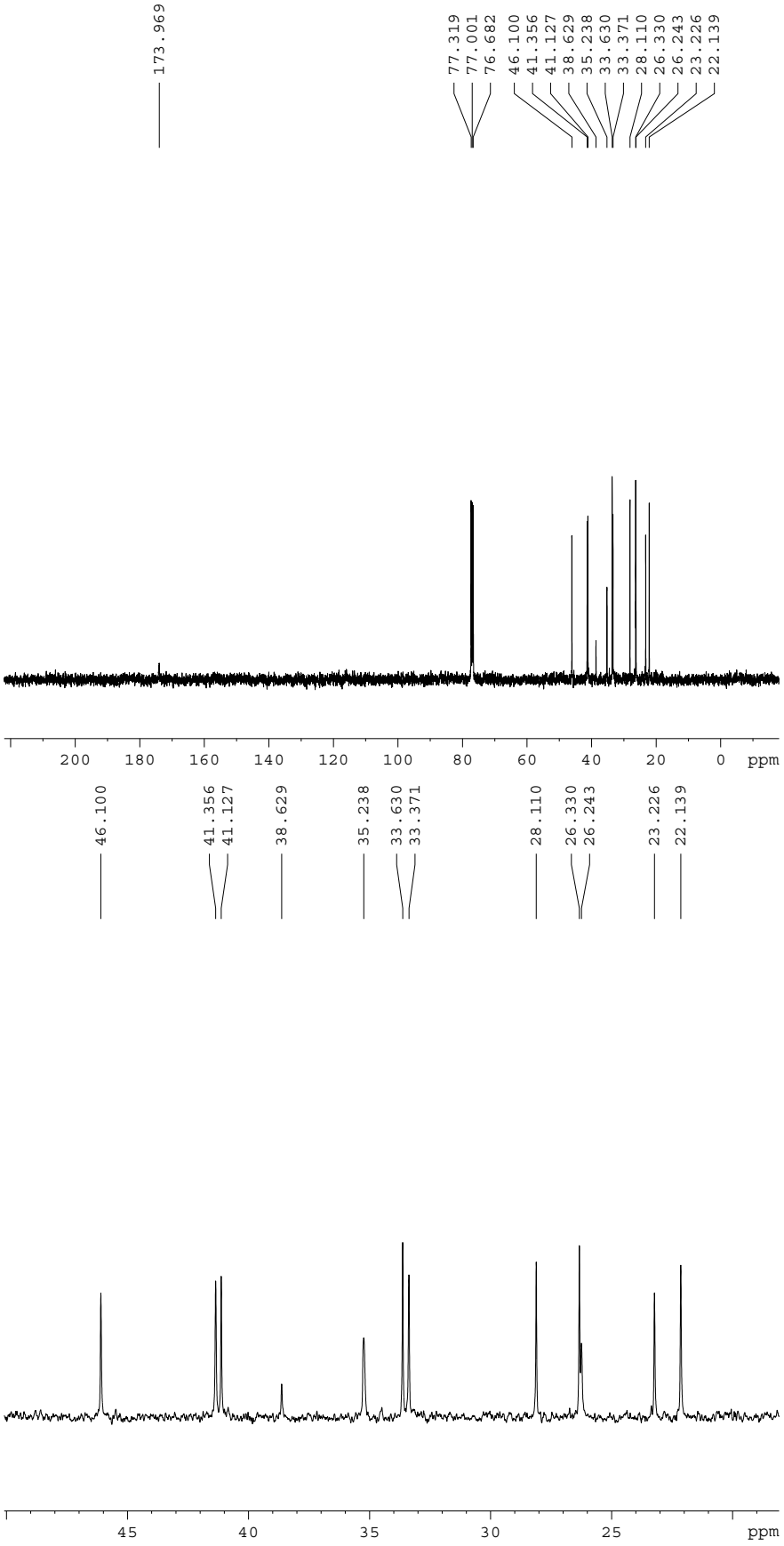



```
Current Data Parameters
NAME            nongda-1
EXPNO                  1
PROCNO                 1

F2 - Acquisition Parameters
Date_           20140102
Time               21.46
INSTRUM            spect
PROBHD   5 mm QNP  1H/1
PULPROG             zg30
TD                 65536
SOLVENT            CDCl3
NS                     4
DS                     2
SWH             8278.146 Hz
FIDRES          0.126314 Hz
AQ              3.9584243 sec
RG                   114
DW                60.400 usec
DE                 6.00 usec
TE                289.3 K
D1             2.00000000 sec
MCREST         0.00000000 sec
MCWRK          0.01500000 sec

======== CHANNEL f1 ========
NUC1                  1H
P1                 14.80 usec
PL1                -2.00 dB
SFO1         400.1332010 MHz

F2 - Processing parameters
SI                 32768
SF           400.1300096 MHz
WDW                   EM
SSB                    0
LB                  0.30 Hz
GB                     0
PC                  1.00
```




```
Current Data Parameters
NAME            nongda-1
EXPNO                  1
PROCNO                 1

F2 - Acquisition Parameters
Date_           20140102
Time               21.46
INSTRUM            spect
PROBHD   5 mm QNP  1H/1
PULPROG             zg30
TD                 65536
SOLVENT            CDCl3
NS                     4
DS                     2
SWH             8278.146 Hz
FIDRES          0.126314 Hz
AQ              3.9584243 sec
RG                   114
DW                60.400 usec
DE                 6.00 usec
TE                289.3 K
D1             2.00000000 sec
MCREST         0.00000000 sec
MCWRK          0.01500000 sec

======== CHANNEL f1 ========
NUC1                  1H
P1                 14.80 usec
PL1                -2.00 dB
SFO1         400.1332010 MHz

F2 - Processing parameters
SI                 32768
SF           400.1300096 MHz
WDW                   EM
SSB                    0
LB                  0.30 Hz
GB                     0
PC                  1.00
```

^{13}C NMR of compound 8a:



Current Data Parameters
NAME nongda-1
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters
Date_ 20140102
Time 21.47
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgdc30
TD 32768
SOLVENT DMSO
NS 120
DS 0
SWH 24154.590 Hz
FIDRES 0.737140 Hz
AQ 0.6783476 sec
RG 362
DW 20.700 usec
DE 6.00 usec
TE 289.9 K
D1 1.00000000 sec
d11 0.03000000 sec
MCREST 0.00000000 sec
MCWRK 0.01500000 sec

======== CHANNEL f1 ========
NUC1 13C
P1 12.00 usec
PL1 -3.00 dB
SFO1 100.6230315 MHz

======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -4.00 dB
PL12 12.12 dB
SFO2 400.1313965 MHz

F2 - Processing parameters
SI 131072
SF 100.6127747 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 0.50

Current Data Parameters
NAME nongda-1
EXPNO 2
PROCNO 1

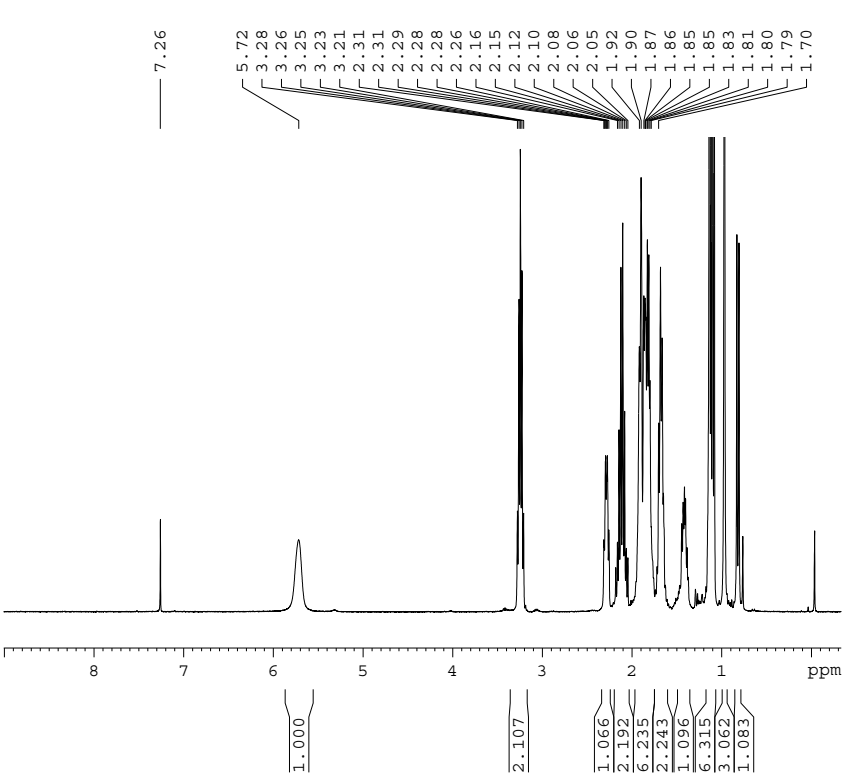
F2 - Acquisition Parameters
Date_ 20140102
Time 21.47
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zgdc30
TD 32768
SOLVENT DMSO
NS 120
DS 0
SWH 24154.590 Hz
FIDRES 0.737140 Hz
AQ 0.6783476 sec
RG 362
DW 20.700 usec
DE 6.00 usec
TE 289.9 K
D1 1.00000000 sec
d11 0.03000000 sec
MCREST 0.00000000 sec
MCWRK 0.01500000 sec

======== CHANNEL f1 ========
NUC1 13C
P1 12.00 usec
PL1 -3.00 dB
SFO1 100.6230315 MHz

======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -4.00 dB
PL12 12.12 dB
SFO2 400.1313965 MHz

F2 - Processing parameters
SI 131072
SF 100.6127747 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 0.50

^{1}H NMR of compound 8b:

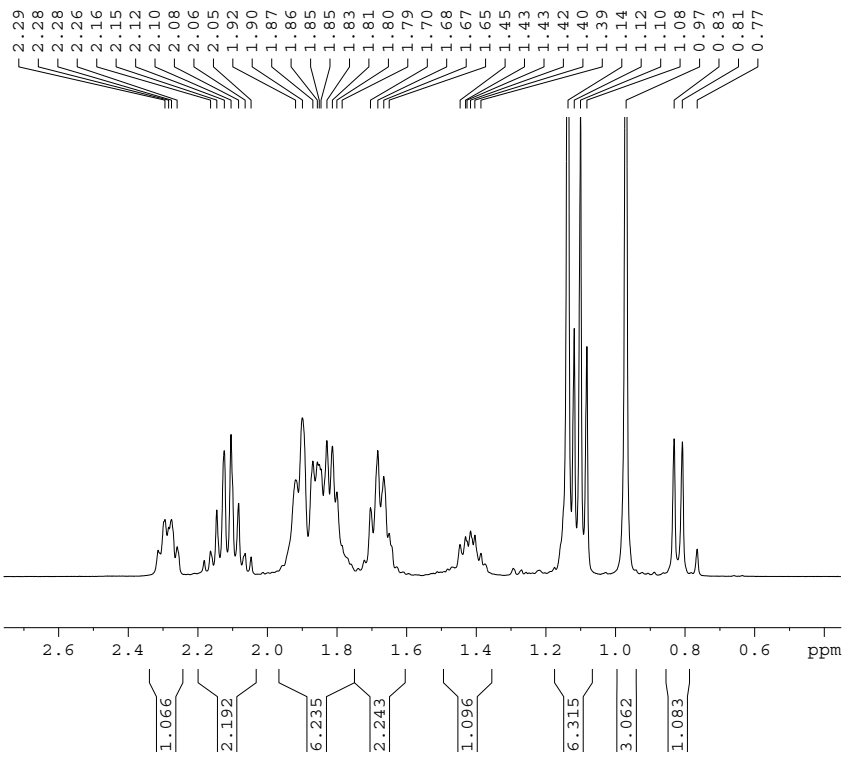


Current Data Parameters
NAME nongda-2
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20140105
Time 14.48
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 4
DS 2
SWH 8278.146 Hz
FIDRES 0.126314 Hz
AQ 3.9584243 sec
RG 57
DW 60.400 usec
DE 6.00 usec
TE 288.2 K
D1 2.00000000 sec
MCREST 0.00000000 sec
MCWRK 0.01500000 sec

======== CHANNEL f1 ========
NUC1 1H
P1 14.80 usec
PL1 -2.00 dB
SFO1 400.1332010 MHz

F2 - Processing parameters
SI 32768
SF 400.1300096 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



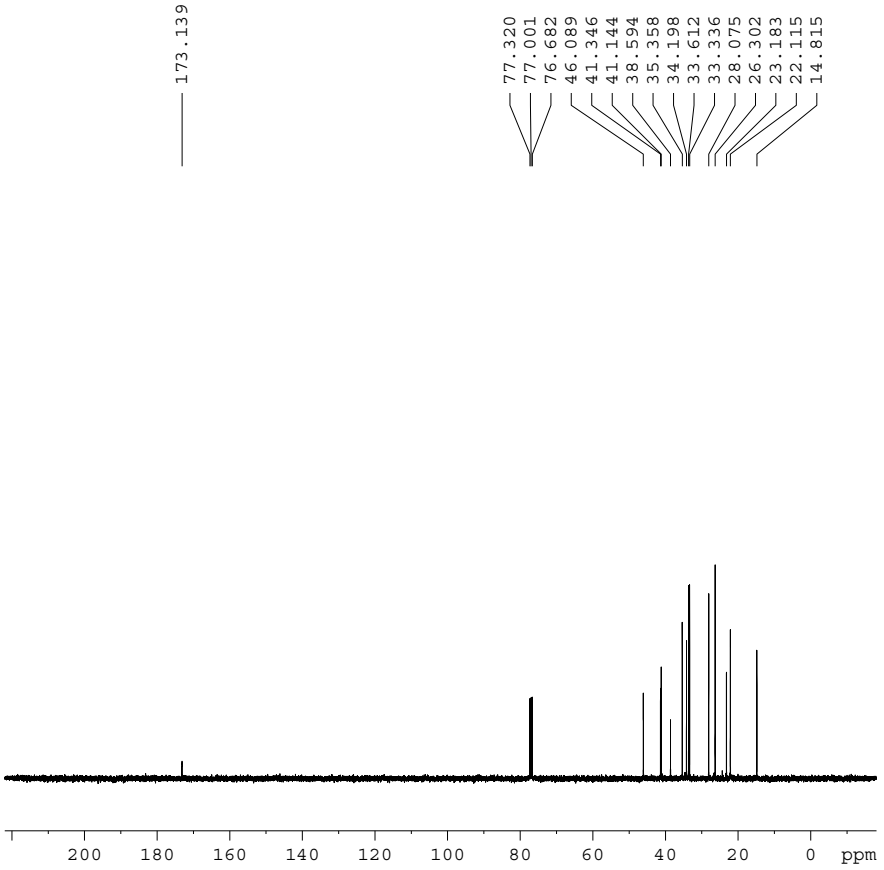
Current Data Parameters
NAME nongda-2
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20140105
Time 14.48
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 4
DS 2
SWH 8278.146 Hz
FIDRES 0.126314 Hz
AQ 3.9584243 sec
RG 57
DW 60.400 usec
DE 6.00 usec
TE 288.2 K
D1 2.00000000 sec
MCREST 0.00000000 sec
MCWRK 0.01500000 sec

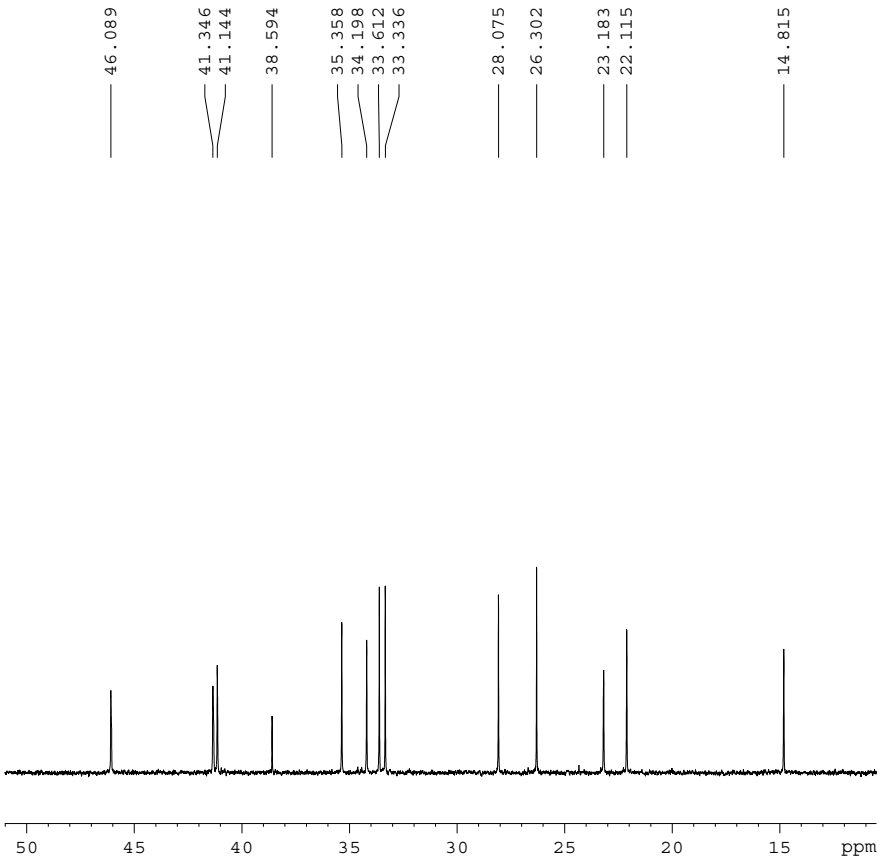
======== CHANNEL f1 ========
NUC1 1H
P1 14.80 usec
PL1 -2.00 dB
SFO1 400.1332010 MHz

F2 - Processing parameters
SI 32768
SF 400.1300096 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

^{13}C NMR of compound 8b:

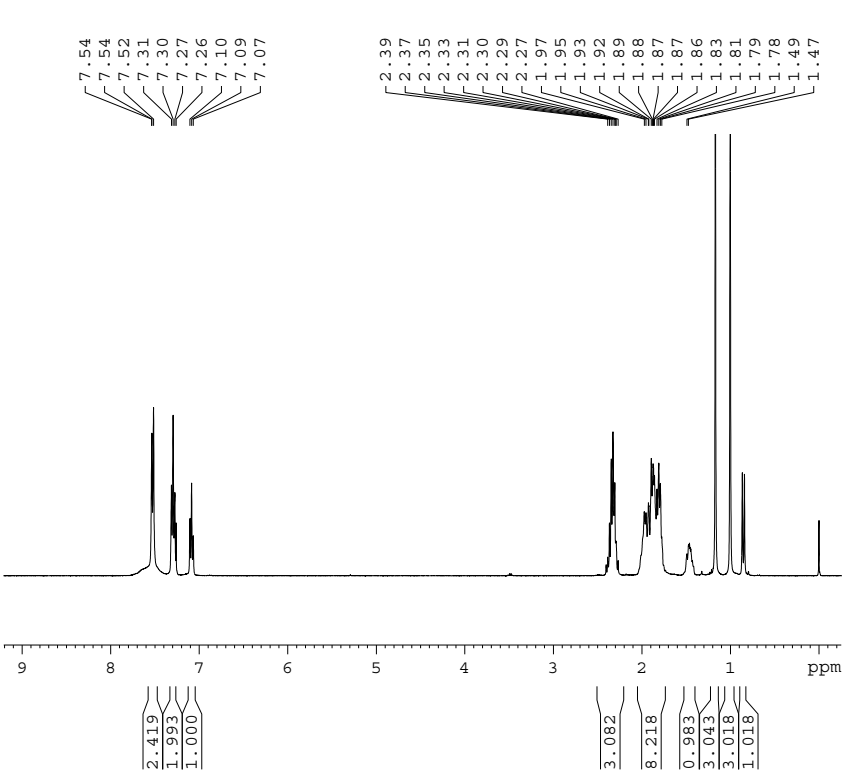



```
Current Data Parameters
NAME              nongda-2
EXPNO                    2
PROCNO                   1

F2 - Acquisition Parameters
Date_            20140105
Time                14.54
INSTRUM             spect
PROBHD   5 mm QNP  1H/1
PULPROG           zgdc30
TD                 32768
SOLVENT          Acetone
NS                   147
DS                     0
SWH            24154.590 Hz
FIDRES          0.737140 Hz
AQ             0.6783476 sec
RG                   362
DW                20.700 usec
DE                 6.00 usec
TE                289.7 K
D1             1.00000000 sec
d11            0.03000000 sec
MCREST         0.00000000 sec
MCWRK          0.01500000 sec

======== CHANNEL f1 ========
NUC1                13C
P1                12.00 usec
PL1               -3.00 dB
SFO1         100.6230315 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                1H
PCPD2              80.00 usec
PL2               -4.00 dB
PL12              12.12 dB
SFO2         400.1313965 MHz

F2 - Processing parameters
SI                 131072
SF           100.6127777 MHz
WDW                  EM
SSB                   0
LB                 1.00 Hz
GB                    0
PC                 0.50
```




```
Current Data Parameters
NAME              nongda-2
EXPNO                    2
PROCNO                   1

F2 - Acquisition Parameters
Date_            20140105
Time                14.54
INSTRUM             spect
PROBHD   5 mm QNP  1H/1
PULPROG           zgdc30
TD                 32768
SOLVENT          Acetone
NS                   147
DS                     0
SWH            24154.590 Hz
FIDRES          0.737140 Hz
AQ             0.6783476 sec
RG                   362
DW                20.700 usec
DE                 6.00 usec
TE                289.7 K
D1             1.00000000 sec
d11            0.03000000 sec
MCREST         0.00000000 sec
MCWRK          0.01500000 sec

======== CHANNEL f1 ========
NUC1                13C
P1                12.00 usec
PL1               -3.00 dB
SFO1         100.6230315 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                1H
PCPD2              80.00 usec
PL2               -4.00 dB
PL12              12.12 dB
SFO2         400.1313965 MHz

F2 - Processing parameters
SI                 131072
SF           100.6127777 MHz
WDW                  EM
SSB                   0
LB                 1.00 Hz
GB                    0
PC                 0.50
```

^{1}H NMR of compound 8c:

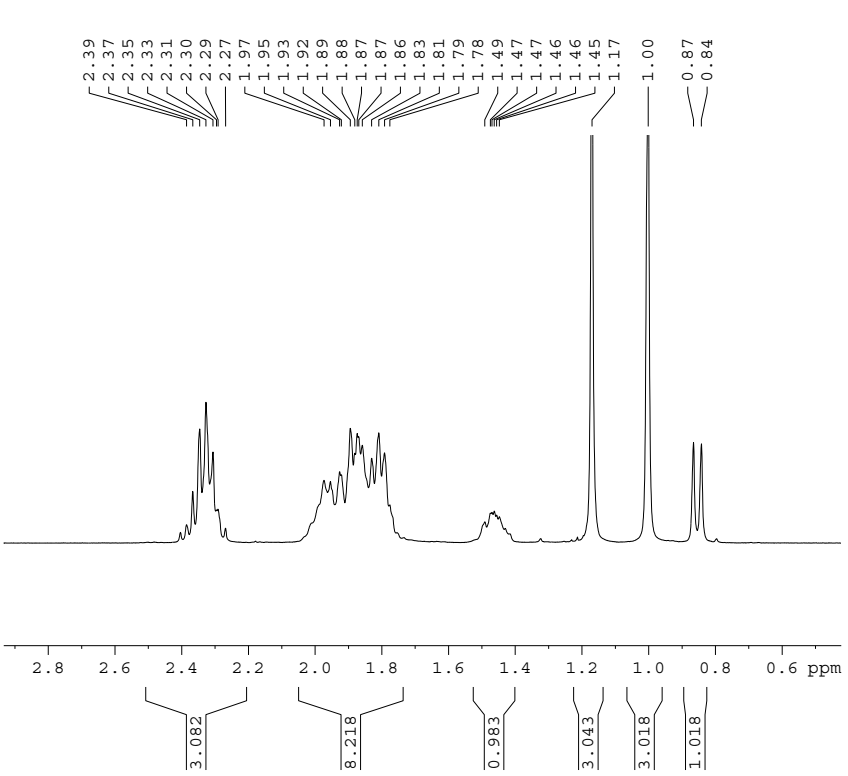


Current Data Parameters
NAME nongda-3
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20140103
Time 14.04
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 65536
SOLVENT Pyr
NS 4
DS 2
SWH 8278.146 Hz
FIDRES 0.126314 Hz
AQ 3.9584243 sec
RG 57
DW 60.400 usec
DE 6.00 usec
TE 288.1 K
D1 2.00000000 sec
MCREST 0.00000000 sec
MCWRK 0.01500000 sec

======== CHANNEL f1 ========
NUC1 1H
P1 14.80 usec
PL1 -2.00 dB
SFO1 400.1332010 MHz

F2 - Processing parameters
SI 32768
SF 400.1300093 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



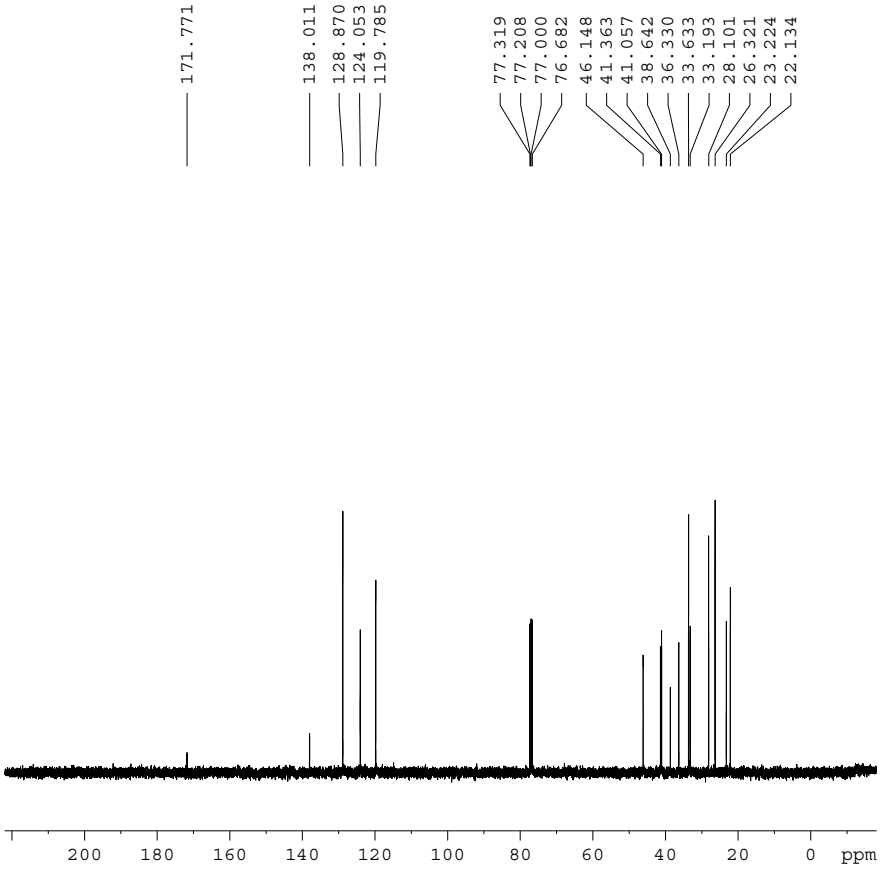
Current Data Parameters
NAME nongda-3
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20140103
Time 14.04
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 65536
SOLVENT Pyr
NS 4
DS 2
SWH 8278.146 Hz
FIDRES 0.126314 Hz
AQ 3.9584243 sec
RG 57
DW 60.400 usec
DE 6.00 usec
TE 288.1 K
D1 2.00000000 sec
MCREST 0.00000000 sec
MCWRK 0.01500000 sec

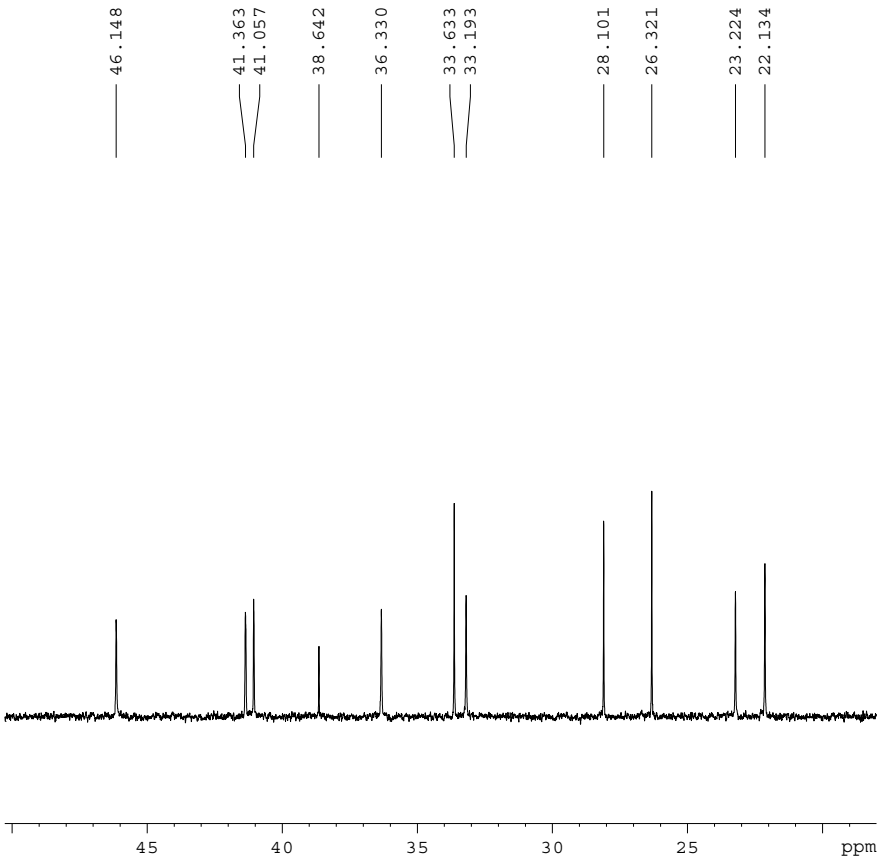
======== CHANNEL f1 ========
NUC1 1H
P1 14.80 usec
PL1 -2.00 dB
SFO1 400.1332010 MHz

F2 - Processing parameters
SI 32768
SF 400.1300093 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

^{13}C NMR of compound 8c:

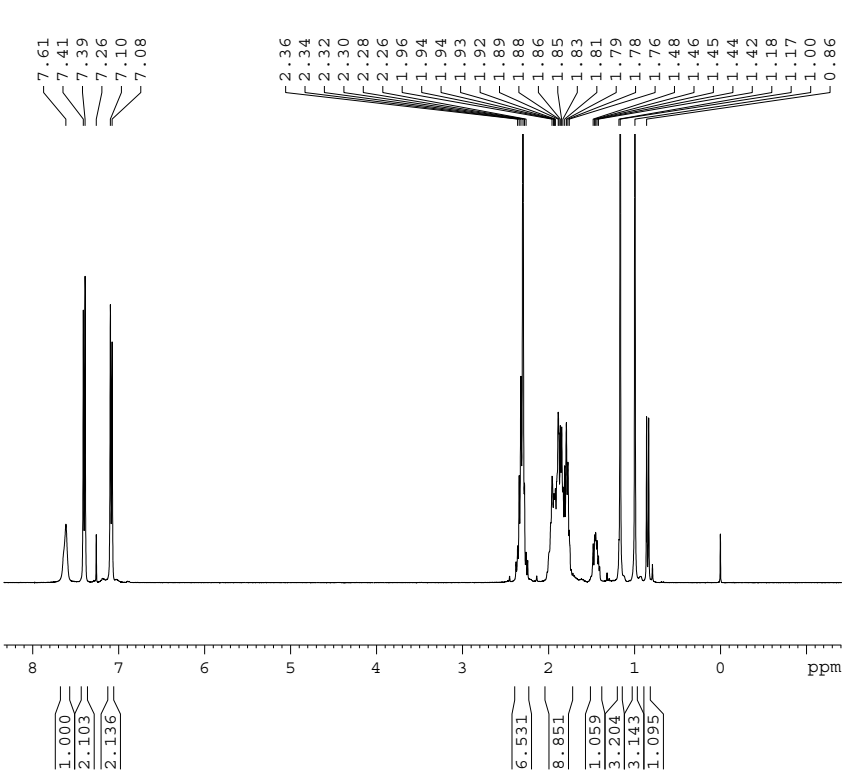



```
Current Data Parameters
NAME         nongda-3-1
EXPNO                 2
PROCNO                1

F2 - Acquisition Parameters
Date_          20140106
Time              15.53
INSTRUM           spect
PROBHD   5 mm QNP  1H/1
PULPROG          zgdc30
TD                32768
SOLVENT         Acetone
NS                  102
DS                    0
SWH           24154.590 Hz
FIDRES         0.737140 Hz
AQ             0.6783476 sec
RG                  362
DW               20.700 usec
DE                6.00 usec
TE               290.5 K
D1            1.00000000 sec
d11           0.03000000 sec
MCREST        0.00000000 sec
MCWRK         0.01500000 sec

======== CHANNEL f1 ========
NUC1                13C
P1                12.00 usec
PL1               -3.00 dB
SFO1        100.6230315 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                1H
PCPD2             80.00 usec
PL2               -4.00 dB
PL12              12.12 dB
SFO2        400.1313965 MHz

F2 - Processing parameters
SI                131072
SF          100.6127769 MHz
WDW                 EM
SSB                  0
LB                1.00 Hz
GB                   0
PC                0.50
```

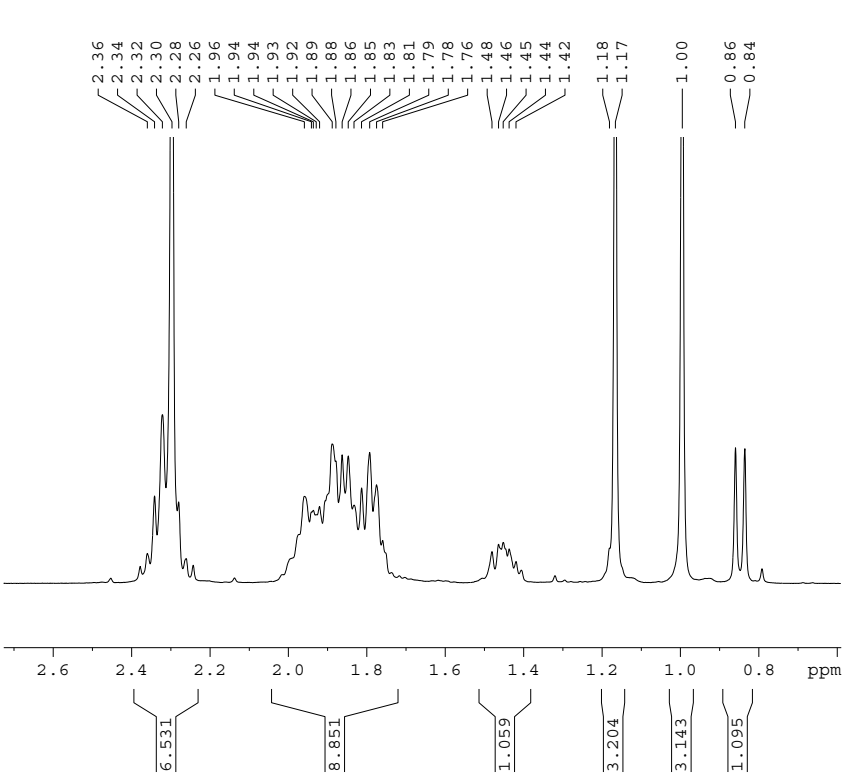



```
Current Data Parameters
NAME         nongda-3-1
EXPNO                 2
PROCNO                1

F2 - Acquisition Parameters
Date_          20140106
Time              15.53
INSTRUM           spect
PROBHD   5 mm QNP  1H/1
PULPROG          zgdc30
TD                32768
SOLVENT         Acetone
NS                  102
DS                    0
SWH           24154.590 Hz
FIDRES         0.737140 Hz
AQ             0.6783476 sec
RG                  362
DW               20.700 usec
DE                6.00 usec
TE               290.5 K
D1            1.00000000 sec
d11           0.03000000 sec
MCREST        0.00000000 sec
MCWRK         0.01500000 sec

======== CHANNEL f1 ========
NUC1                13C
P1                12.00 usec
PL1               -3.00 dB
SFO1        100.6230315 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                1H
PCPD2             80.00 usec
PL2               -4.00 dB
PL12              12.12 dB
SFO2        400.1313965 MHz

F2 - Processing parameters
SI                131072
SF          100.6127769 MHz
WDW                 EM
SSB                  0
LB                1.00 Hz
GB                   0
PC                0.50
```

^{1}H NMR of compound 8d:

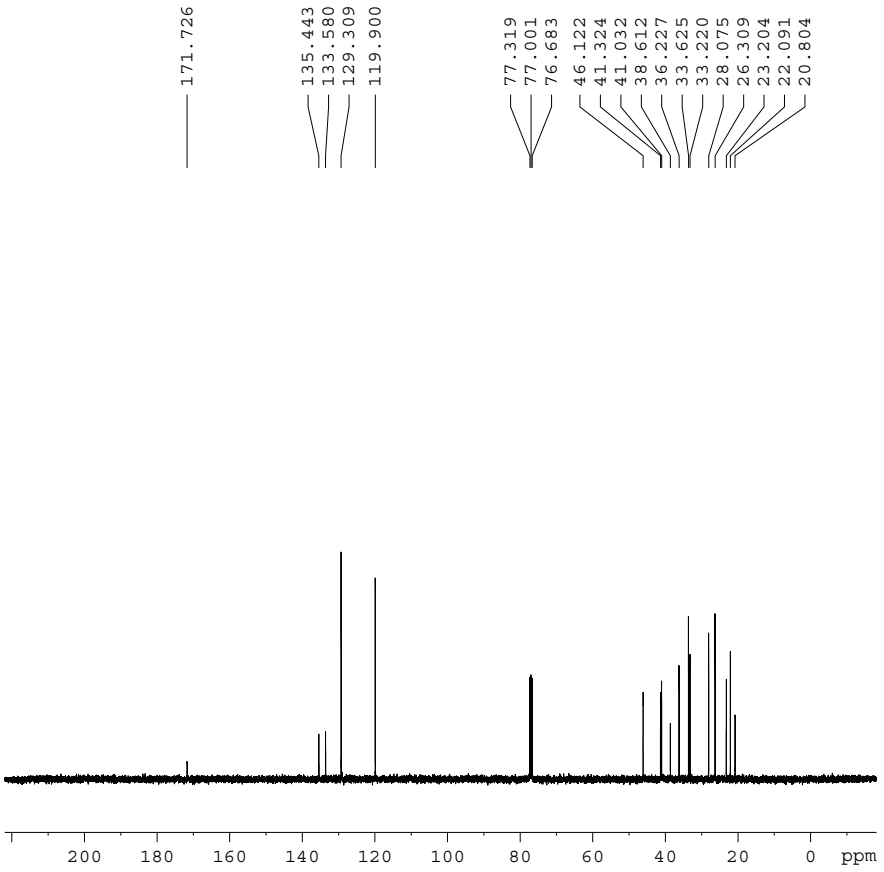



```
Current Data Parameters
NAME            nongda-4
EXPNO                  1
PROCNO                 1

F2 - Acquisition Parameters
Date_           20140105
Time               16.22
INSTRUM            spect
PROBHD   5 mm QNP  1H/1
PULPROG            zg30
TD                65536
SOLVENT           CDCl3
NS                     4
DS                     2
SWH             8278.146 Hz
FIDRES          0.126314 Hz
AQ              3.9584243 sec
RG                    57
DW                60.400 usec
DE                 6.00 usec
TE                288.7 K
D1             2.00000000 sec
MCREST         0.00000000 sec
MCWRK          0.01500000 sec

======== CHANNEL f1 ========
NUC1                  1H
P1                 14.80 usec
PL1                -2.00 dB
SFO1         400.1332010 MHz

F2 - Processing parameters
SI                 32768
SF          400.1300096 MHz
WDW                   EM
SSB                    0
LB                  0.30 Hz
GB                     0
PC                  1.00
```

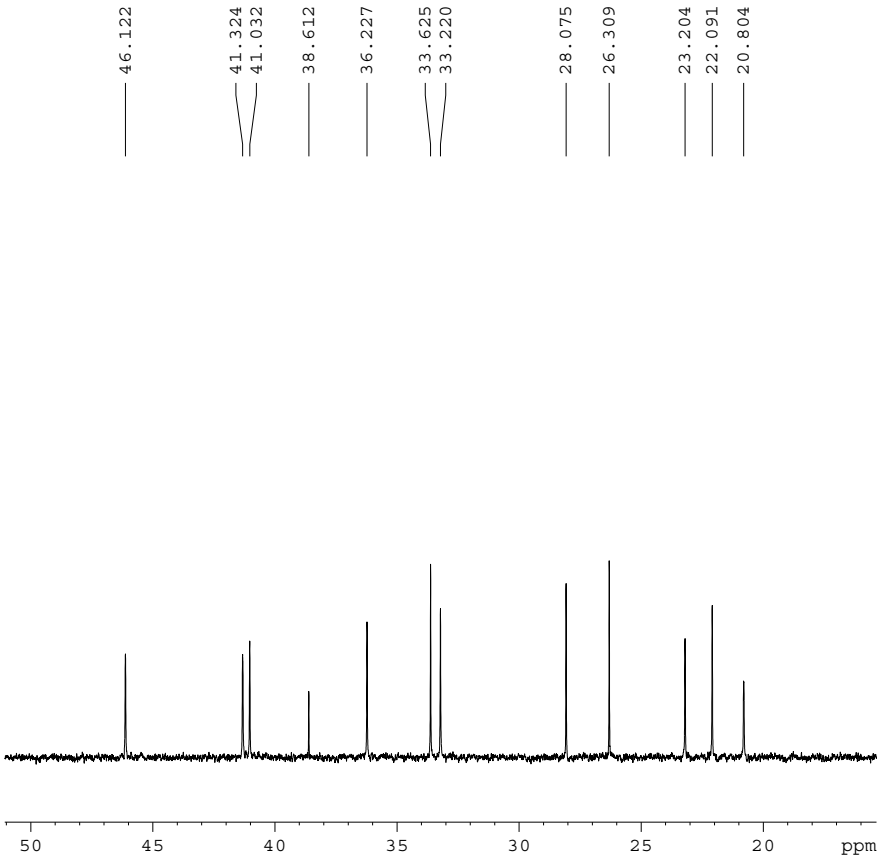



```
Current Data Parameters
NAME            nongda-4
EXPNO                  1
PROCNO                 1

F2 - Acquisition Parameters
Date_           20140105
Time               16.22
INSTRUM            spect
PROBHD   5 mm QNP  1H/1
PULPROG            zg30
TD                65536
SOLVENT           CDCl3
NS                     4
DS                     2
SWH             8278.146 Hz
FIDRES          0.126314 Hz
AQ              3.9584243 sec
RG                    57
DW                60.400 usec
DE                 6.00 usec
TE                288.7 K
D1             2.00000000 sec
MCREST         0.00000000 sec
MCWRK          0.01500000 sec

======== CHANNEL f1 ========
NUC1                  1H
P1                 14.80 usec
PL1                -2.00 dB
SFO1         400.1332010 MHz

F2 - Processing parameters
SI                 32768
SF          400.1300096 MHz
WDW                   EM
SSB                    0
LB                  0.30 Hz
GB                     0
PC                  1.00
```

^{13}C NMR of compound 8d:

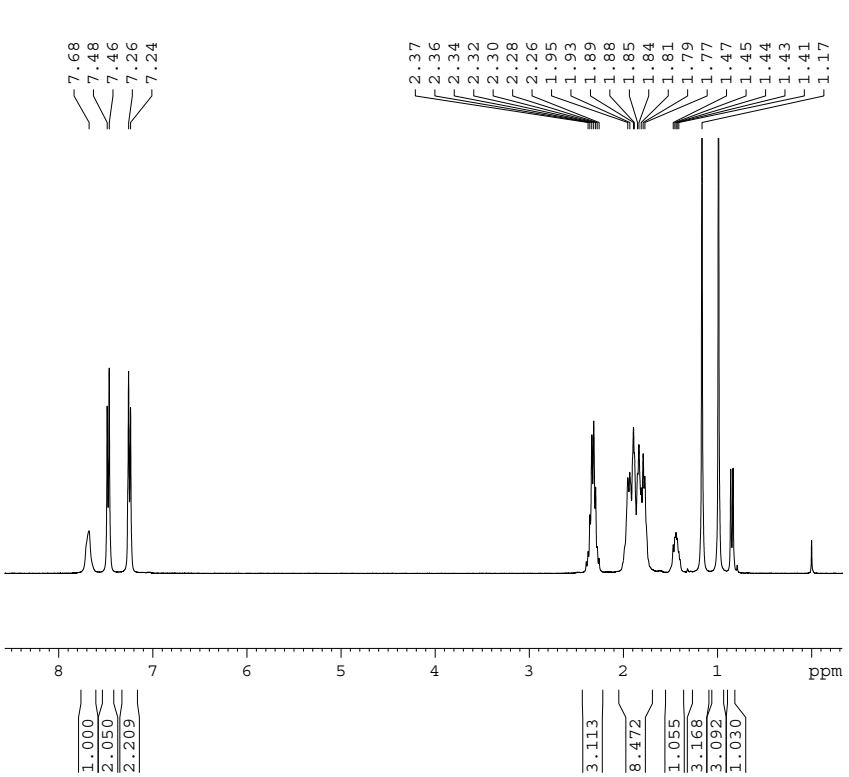



```
Current Data Parameters
NAME            nongda-4
EXPNO                  2
PROCNO                 1

F2 - Acquisition Parameters
Date_           20140105
Time               16.24
INSTRUM            spect
PROBHD   5 mm QNP  1H/1
PULPROG          zgdc30
TD                32768
SOLVENT         Acetone
NS                   73
DS                    0
SWH           24154.590 Hz
FIDRES         0.737140 Hz
AQ             0.6783476 sec
RG                  362
DW               20.700 usec
DE                6.00 usec
TE               289.6 K
D1            1.00000000 sec
d11           0.03000000 sec
MCREST        0.00000000 sec
MCWRK         0.01500000 sec

======== CHANNEL f1 ========
NUC1               13C
P1               12.00 usec
PL1              -3.00 dB
SFO1        100.6230315 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                1H
PCPD2            80.00 usec
PL2              -4.00 dB
PL12             12.12 dB
SFO2        400.1313965 MHz

F2 - Processing parameters
SI                131072
SF          100.6127793 MHz
WDW                 EM
SSB                  0
LB                1.00 Hz
GB                   0
PC                0.50
```

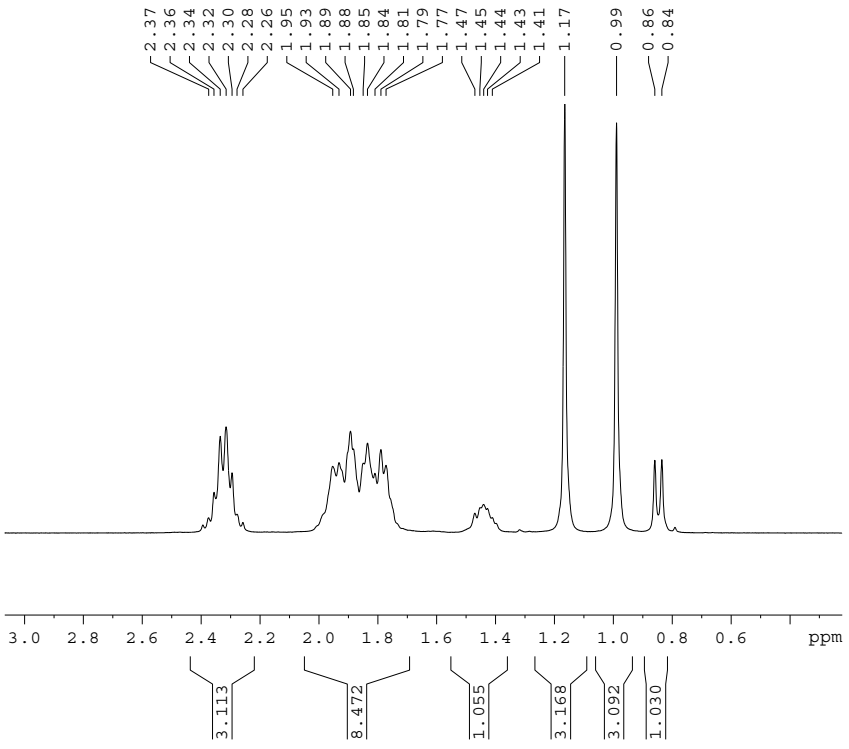



```
Current Data Parameters
NAME            nongda-4
EXPNO                  2
PROCNO                 1

F2 - Acquisition Parameters
Date_           20140105
Time               16.24
INSTRUM            spect
PROBHD   5 mm QNP  1H/1
PULPROG          zgdc30
TD                32768
SOLVENT         Acetone
NS                   73
DS                    0
SWH           24154.590 Hz
FIDRES         0.737140 Hz
AQ             0.6783476 sec
RG                  362
DW               20.700 usec
DE                6.00 usec
TE               289.6 K
D1            1.00000000 sec
d11           0.03000000 sec
MCREST        0.00000000 sec
MCWRK         0.01500000 sec

======== CHANNEL f1 ========
NUC1               13C
P1               12.00 usec
PL1              -3.00 dB
SFO1        100.6230315 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                1H
PCPD2            80.00 usec
PL2              -4.00 dB
PL12             12.12 dB
SFO2        400.1313965 MHz

F2 - Processing parameters
SI                131072
SF          100.6127793 MHz
WDW                 EM
SSB                  0
LB                1.00 Hz
GB                   0
PC                0.50
```

^{1}H NMR of compound 8e:

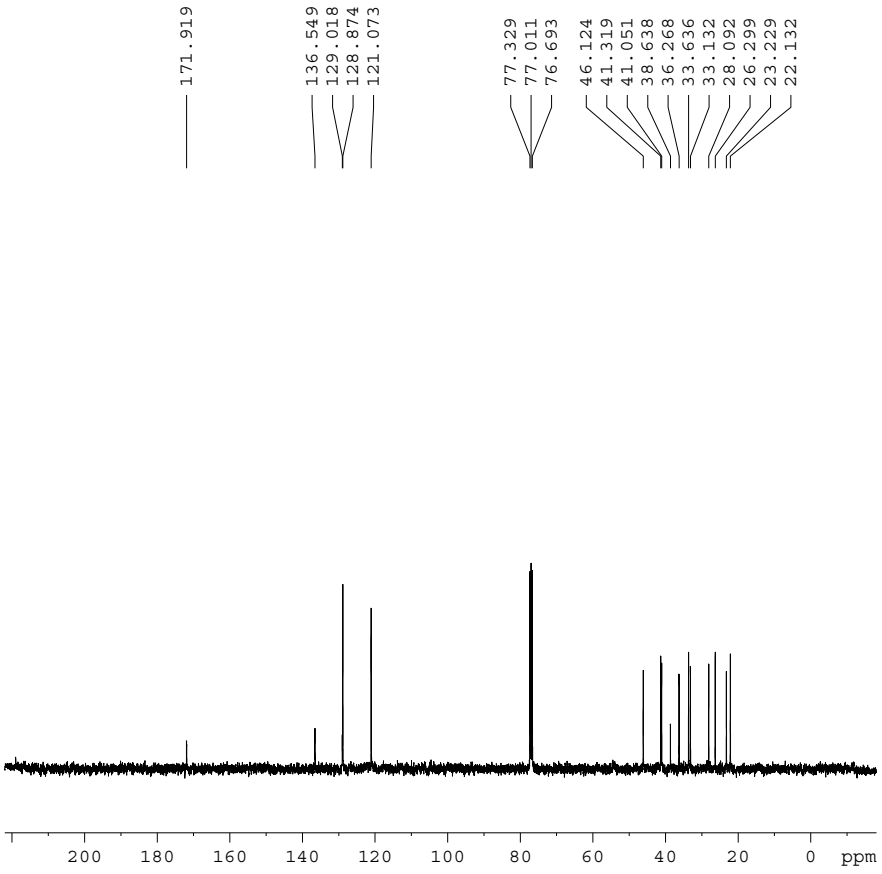



```
Current Data Parameters
NAME            nongda-5
EXPNO                  1
PROCNO                 1

F2 - Acquisition Parameters
Date_           20140103
Time               14.17
INSTRUM            spect
PROBHD   5 mm QNP  1H/1
PULPROG             zg30
TD                 65536
SOLVENT              Pyr
NS                     4
DS                     2
SWH             8278.146 Hz
FIDRES          0.126314 Hz
AQ              3.9584243 sec
RG                  90.5
DW                60.400 usec
DE                 6.00 usec
TE                288.3 K
D1             2.00000000 sec
MCREST         0.00000000 sec
MCWRK          0.01500000 sec

======== CHANNEL f1 ========
NUC1                   1H
P1                 14.80 usec
PL1                -2.00 dB
SFO1         400.1332010 MHz

F2 - Processing parameters
SI                 32768
SF          400.1300068 MHz
WDW                   EM
SSB                    0
LB                  0.30 Hz
GB                     0
PC                  1.00
```

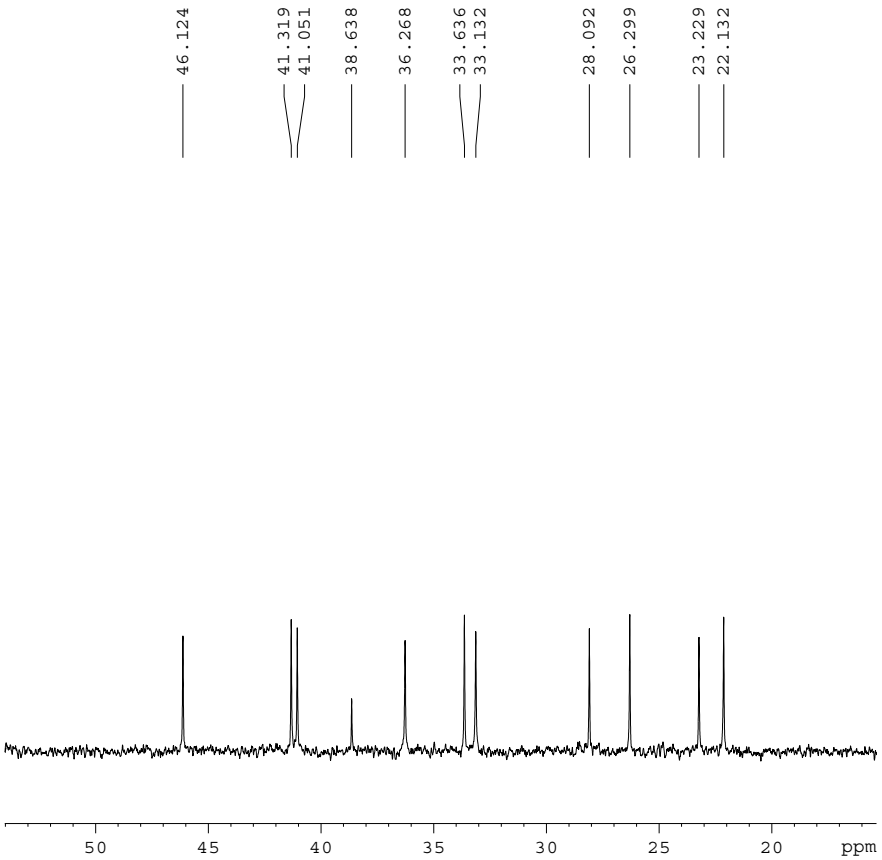



```
Current Data Parameters
NAME            nongda-5
EXPNO                  1
PROCNO                 1

F2 - Acquisition Parameters
Date_           20140103
Time               14.17
INSTRUM            spect
PROBHD   5 mm QNP  1H/1
PULPROG             zg30
TD                 65536
SOLVENT              Pyr
NS                     4
DS                     2
SWH             8278.146 Hz
FIDRES          0.126314 Hz
AQ              3.9584243 sec
RG                  90.5
DW                60.400 usec
DE                 6.00 usec
TE                288.3 K
D1             2.00000000 sec
MCREST         0.00000000 sec
MCWRK          0.01500000 sec

======== CHANNEL f1 ========
NUC1                   1H
P1                 14.80 usec
PL1                -2.00 dB
SFO1         400.1332010 MHz

F2 - Processing parameters
SI                 32768
SF          400.1300068 MHz
WDW                   EM
SSB                    0
LB                  0.30 Hz
GB                     0
PC                  1.00
```

^{13}C NMR of compound 8e:

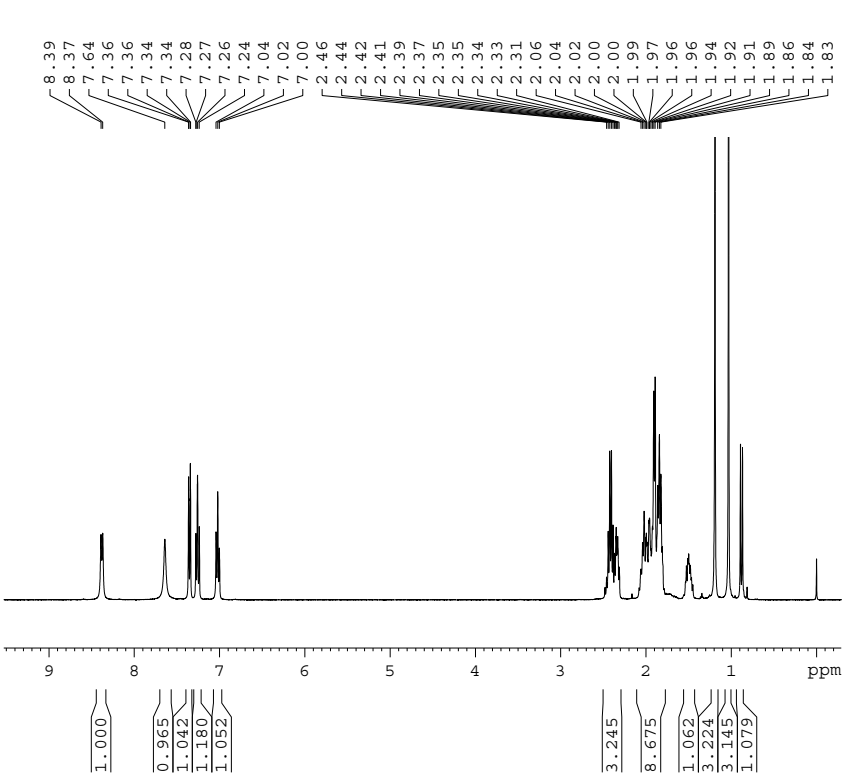



```
Current Data Parameters
NAME            nongda-5
EXPNO                  2
PROCNO                 1

F2 - Acquisition Parameters
Date_           20140103
Time               14.21
INSTRUM            spect
PROBHD   5 mm QNP  1H/1
PULPROG          zgdc30
TD                32768
SOLVENT         Acetone
NS                    28
DS                     0
SWH           24154.590 Hz
FIDRES         0.737140 Hz
AQ            0.6783476 sec
RG                   362
DW                20.700 usec
DE                 6.00 usec
TE                289.0 K
D1           1.00000000 sec
d11          0.03000000 sec
MCREST       0.00000000 sec
MCWRK        0.01500000 sec

======== CHANNEL f1 ========
NUC1                13C
P1                12.00 usec
PL1               -3.00 dB
SFO1        100.6230315 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                1H
PCPD2              80.00 usec
PL2               -4.00 dB
PL12              12.12 dB
SFO2        400.1313965 MHz

F2 - Processing parameters
SI                 131072
SF          100.6127756 MHz
WDW                  EM
SSB                   0
LB                 3.00 Hz
GB                    0
PC                 0.50
```

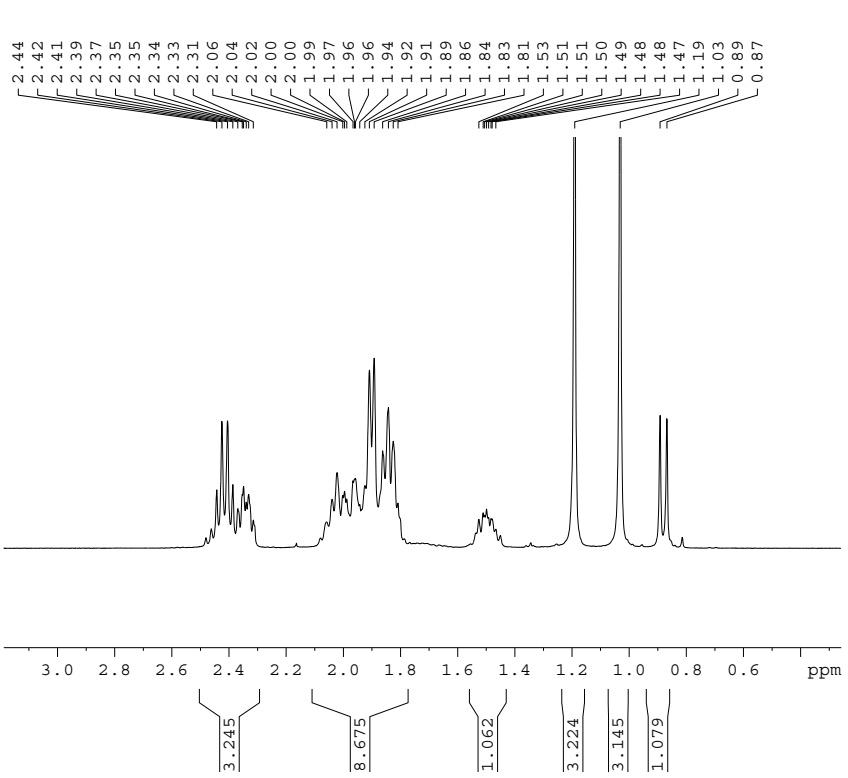



```
Current Data Parameters
NAME            nongda-5
EXPNO                  2
PROCNO                 1

F2 - Acquisition Parameters
Date_           20140103
Time               14.21
INSTRUM            spect
PROBHD   5 mm QNP  1H/1
PULPROG          zgdc30
TD                32768
SOLVENT         Acetone
NS                    28
DS                     0
SWH           24154.590 Hz
FIDRES         0.737140 Hz
AQ            0.6783476 sec
RG                   362
DW                20.700 usec
DE                 6.00 usec
TE                289.0 K
D1           1.00000000 sec
d11          0.03000000 sec
MCREST       0.00000000 sec
MCWRK        0.01500000 sec

======== CHANNEL f1 ========
NUC1                13C
P1                12.00 usec
PL1               -3.00 dB
SFO1        100.6230315 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                1H
PCPD2              80.00 usec
PL2               -4.00 dB
PL12              12.12 dB
SFO2        400.1313965 MHz

F2 - Processing parameters
SI                 131072
SF          100.6127756 MHz
WDW                  EM
SSB                   0
LB                 3.00 Hz
GB                    0
PC                 0.50
```

^{1}H NMR of compound 8f:

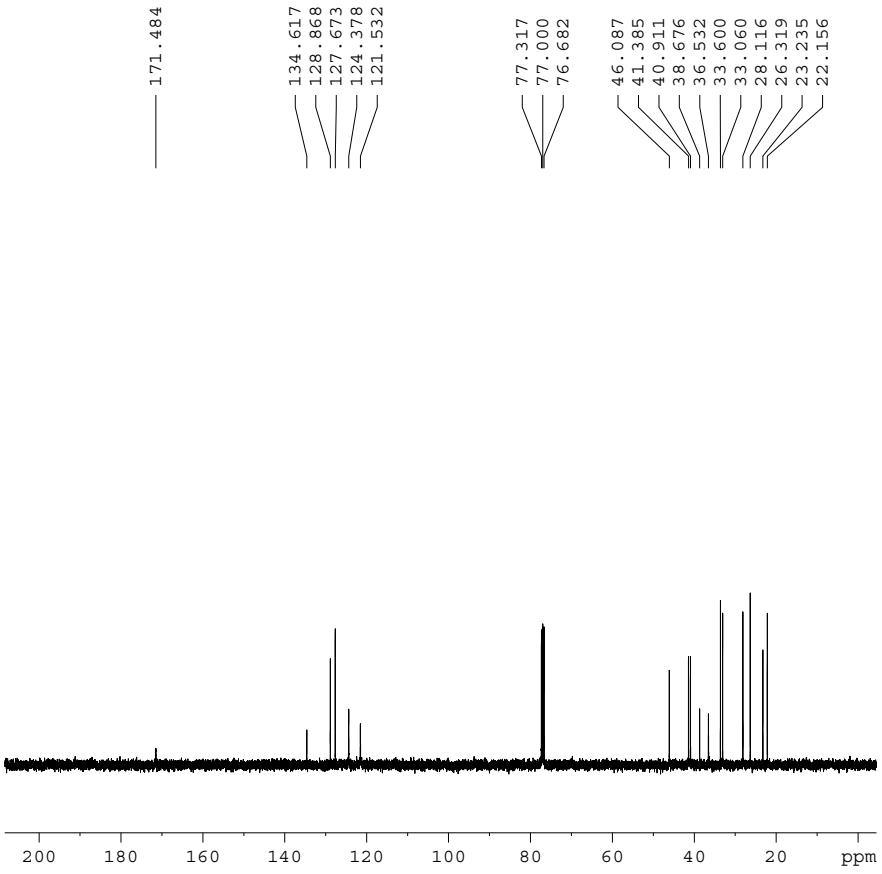



```
Current Data Parameters
NAME            nongda-6
EXPNO                  1
PROCNO                 1

F2 - Acquisition Parameters
Date_           20140103
Time               21.18
INSTRUM            spect
PROBHD   5 mm QNP  1H/1
PULPROG            zg30
TD                65536
SOLVENT           CDCl3
NS                     4
DS                     2
SWH            8278.146 Hz
FIDRES         0.126314 Hz
AQ             3.9584243 sec
RG                    57
DW               60.400 usec
DE                6.00 usec
TE                296.1 K
D1           2.00000000 sec
MCREST       0.00000000 sec
MCWRK        0.01500000 sec

======== CHANNEL f1 ========
NUC1                  1H
P1                14.80 usec
PL1               -2.00 dB
SFO1        400.1332010 MHz

F2 - Processing parameters
SI                 32768
SF          400.1300085 MHz
WDW                   EM
SSB                    0
LB                0.30 Hz
GB                     0
PC                1.00
```

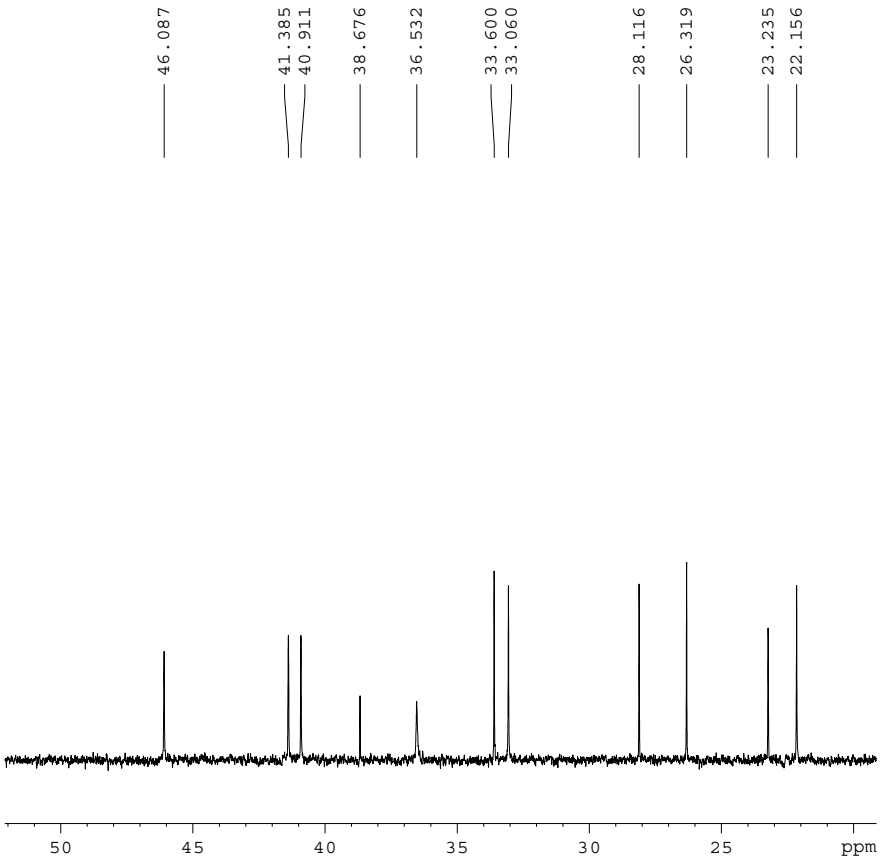



```
Current Data Parameters
NAME            nongda-6
EXPNO                  1
PROCNO                 1

F2 - Acquisition Parameters
Date_           20140103
Time               21.18
INSTRUM            spect
PROBHD   5 mm QNP  1H/1
PULPROG            zg30
TD                65536
SOLVENT           CDCl3
NS                     4
DS                     2
SWH            8278.146 Hz
FIDRES         0.126314 Hz
AQ             3.9584243 sec
RG                    57
DW               60.400 usec
DE                6.00 usec
TE                296.1 K
D1           2.00000000 sec
MCREST       0.00000000 sec
MCWRK        0.01500000 sec

======== CHANNEL f1 ========
NUC1                  1H
P1                14.80 usec
PL1               -2.00 dB
SFO1        400.1332010 MHz

F2 - Processing parameters
SI                 32768
SF          400.1300085 MHz
WDW                   EM
SSB                    0
LB                0.30 Hz
GB                     0
PC                1.00
```

^{13}C NMR of compound 8f:

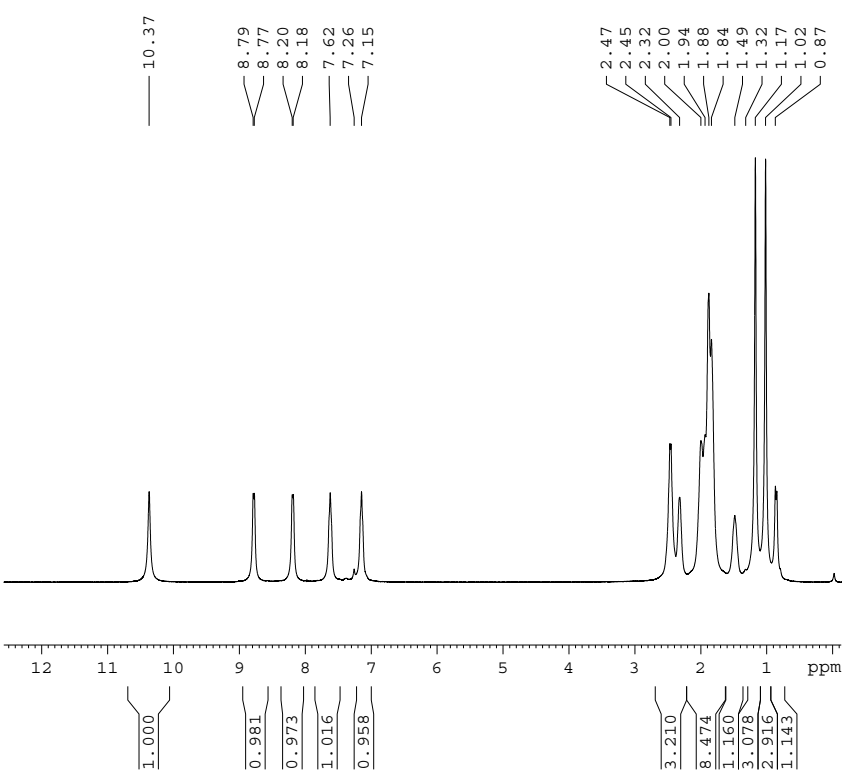



```
Current Data Parameters
NAME              nongda-6
EXPNO                    2
PROCNO                   1

F2 - Acquisition Parameters
Date_            20140103
Time                21.19
INSTRUM             spect
PROBHD   5 mm QNP  1H/1
PULPROG           zgdc30
TD                 32768
SOLVENT          Acetone
NS                    52
DS                     0
SWH            24154.590 Hz
FIDRES          0.737140 Hz
AQ             0.6783476 sec
RG                   362
DW                20.700 usec
DE                 6.00 usec
TE                296.4 K
D1             1.00000000 sec
d11            0.03000000 sec
MCREST         0.00000000 sec
MCWRK          0.01500000 sec

======== CHANNEL f1 ========
NUC1                 13C
P1                 12.00 usec
PL1                -3.00 dB
SFO1         100.6230315 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                 1H
PCPD2              80.00 usec
PL2                -4.00 dB
PL12               12.12 dB
SFO2         400.1313965 MHz

F2 - Processing parameters
SI                 131072
SF           100.6127756 MHz
WDW                  EM
SSB                   0
LB                 1.00 Hz
GB                    0
PC                 0.50
```

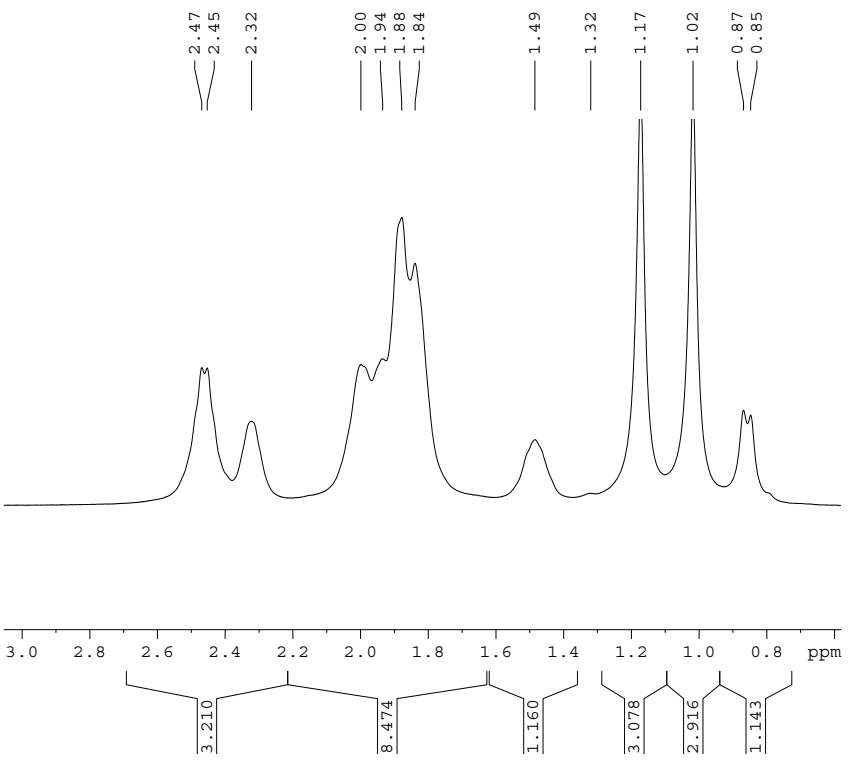



```
Current Data Parameters
NAME              nongda-6
EXPNO                    2
PROCNO                   1

F2 - Acquisition Parameters
Date_            20140103
Time                21.19
INSTRUM             spect
PROBHD   5 mm QNP  1H/1
PULPROG           zgdc30
TD                 32768
SOLVENT          Acetone
NS                    52
DS                     0
SWH            24154.590 Hz
FIDRES          0.737140 Hz
AQ             0.6783476 sec
RG                   362
DW                20.700 usec
DE                 6.00 usec
TE                296.4 K
D1             1.00000000 sec
d11            0.03000000 sec
MCREST         0.00000000 sec
MCWRK          0.01500000 sec

======== CHANNEL f1 ========
NUC1                 13C
P1                 12.00 usec
PL1                -3.00 dB
SFO1         100.6230315 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                 1H
PCPD2              80.00 usec
PL2                -4.00 dB
PL12               12.12 dB
SFO2         400.1313965 MHz

F2 - Processing parameters
SI                 131072
SF           100.6127756 MHz
WDW                  EM
SSB                   0
LB                 1.00 Hz
GB                    0
PC                 0.50
```

^{1}H NMR of compound 8g:

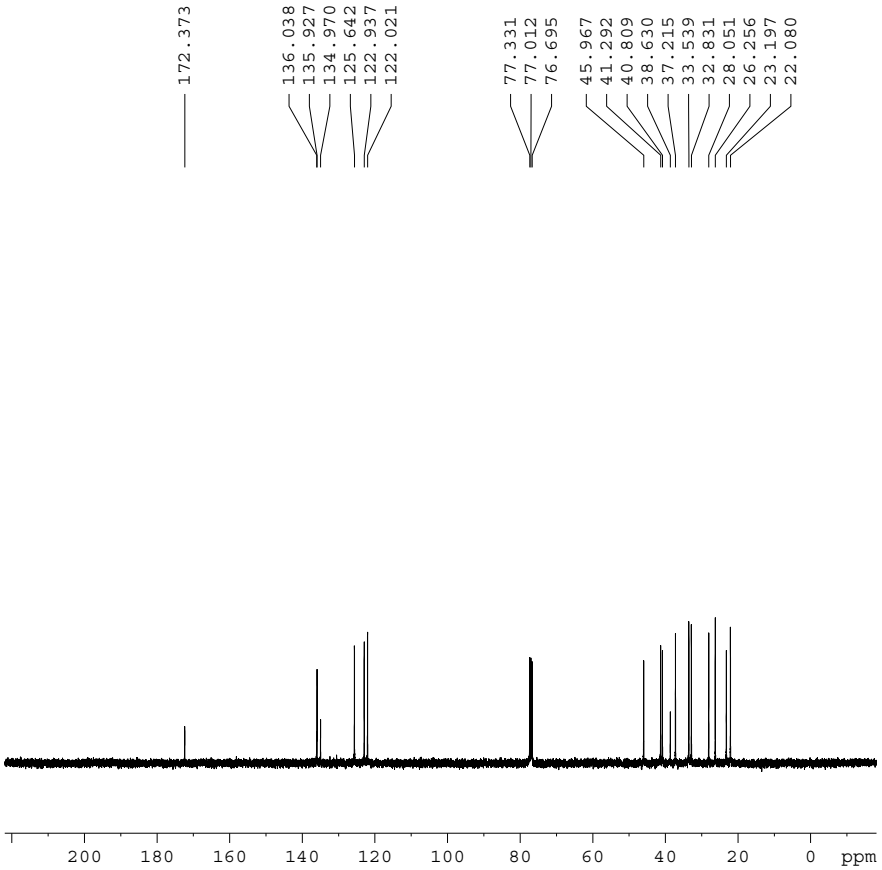



```
Current Data Parameters
NAME            nongda-7
EXPNO                  1
PROCNO                 1

F2 - Acquisition Parameters
Date_           20140105
Time               16.41
INSTRUM            spect
PROBHD   5 mm QNP  1H/1
PULPROG            zg30
TD                65536
SOLVENT           CDCl3
NS                     4
DS                     2
SWH             8278.146 Hz
FIDRES          0.126314 Hz
AQ              3.9584243 sec
RG                  50.8
DW                60.400 usec
DE                 6.00 usec
TE                288.8 K
D1             2.00000000 sec
MCREST         0.00000000 sec
MCWRK          0.01500000 sec

======== CHANNEL f1 ========
NUC1                   1H
P1                 14.80 usec
PL1                -2.00 dB
SFO1         400.1332010 MHz

F2 - Processing parameters
SI                 32768
SF          400.1300091 MHz
WDW                   EM
SSB                    0
LB                  0.30 Hz
GB                     0
PC                  1.00
```

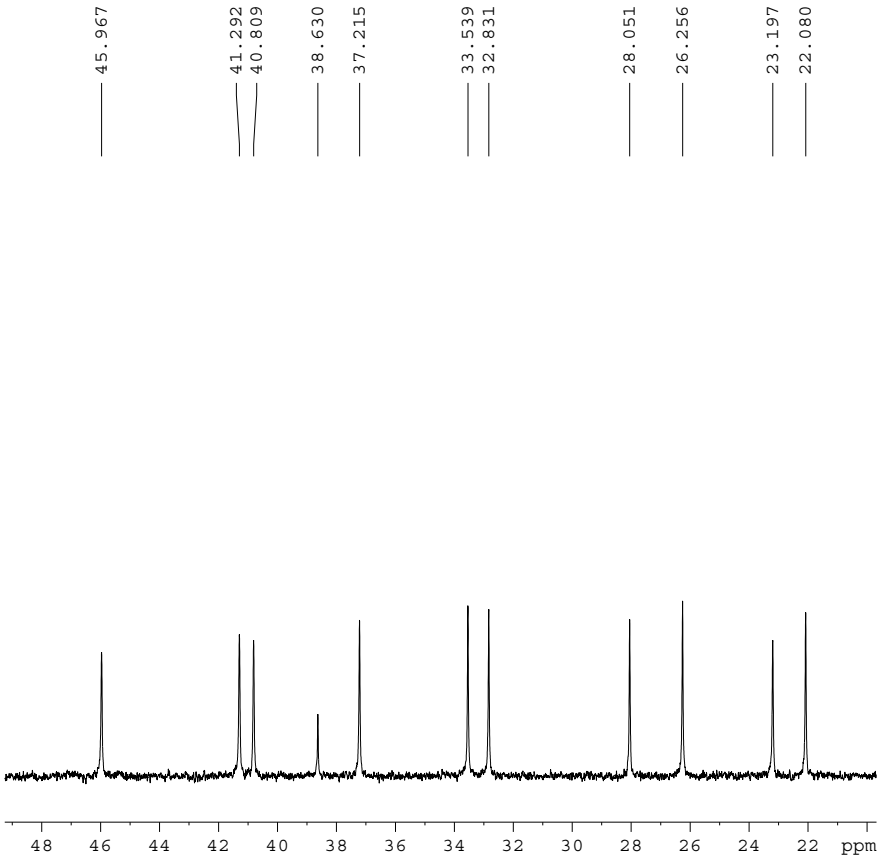



```
Current Data Parameters
NAME            nongda-7
EXPNO                  1
PROCNO                 1

F2 - Acquisition Parameters
Date_           20140105
Time               16.41
INSTRUM            spect
PROBHD   5 mm QNP  1H/1
PULPROG            zg30
TD                65536
SOLVENT           CDCl3
NS                     4
DS                     2
SWH             8278.146 Hz
FIDRES          0.126314 Hz
AQ              3.9584243 sec
RG                  50.8
DW                60.400 usec
DE                 6.00 usec
TE                288.8 K
D1             2.00000000 sec
MCREST         0.00000000 sec
MCWRK          0.01500000 sec

======== CHANNEL f1 ========
NUC1                   1H
P1                 14.80 usec
PL1                -2.00 dB
SFO1         400.1332010 MHz

F2 - Processing parameters
SI                 32768
SF          400.1300091 MHz
WDW                   EM
SSB                    0
LB                  0.30 Hz
GB                     0
PC                  1.00
```

^{13}C NMR of compound 8g:

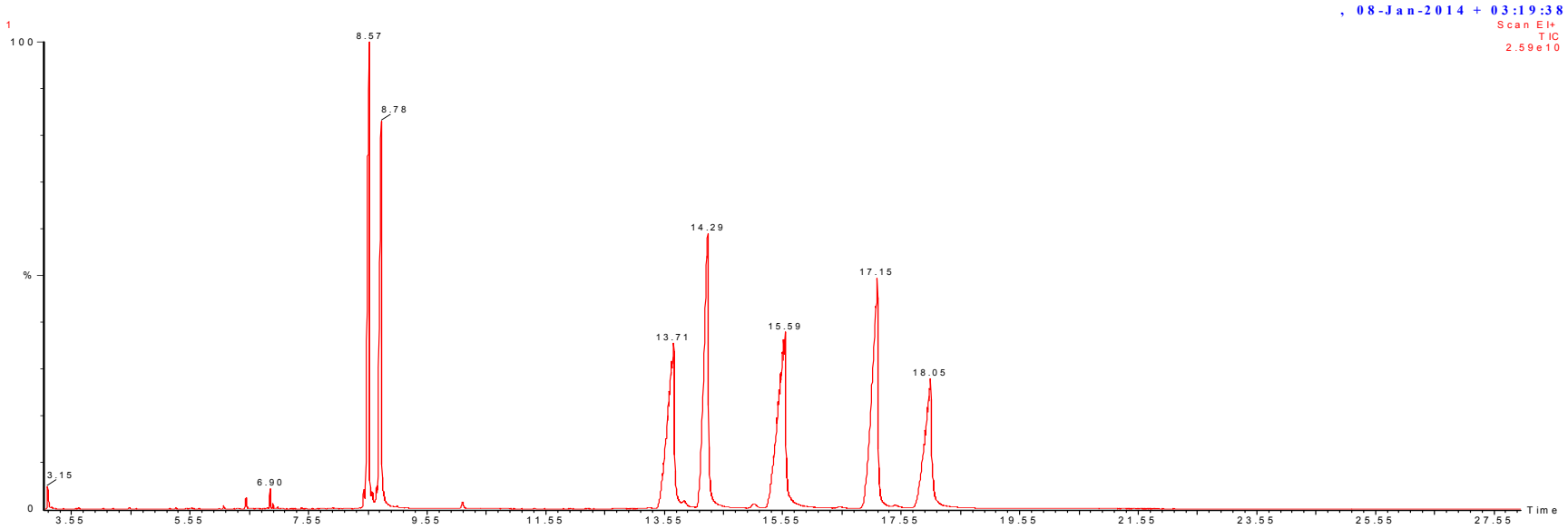



```
Current Data Parameters
NAME            nongda-7
EXPNO                  2
PROCNO                 1

F2 - Acquisition Parameters
Date_           20140105
Time              16.44
INSTRUM           spect
PROBHD   5 mm QNP  1H/1
PULPROG          zgdc30
TD                32768
SOLVENT         Acetone
NS                   77
DS                    0
SWH           24154.590 Hz
FIDRES         0.737140 Hz
AQ            0.6783476 sec
RG                  362
DW               20.700 usec
DE                6.00 usec
TE               289.8 K
D1            1.00000000 sec
d11           0.03000000 sec
MCREST        0.00000000 sec
MCWRK         0.01500000 sec

======== CHANNEL f1 ========
NUC1               13C
P1               12.00 usec
PL1              -3.00 dB
SFO1        100.6230315 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                1H
PCPD2            80.00 usec
PL2              -4.00 dB
PL12             12.12 dB
SFO2        400.1313965 MHz

F2 - Processing parameters
SI                131072
SF          100.6127790 MHz
WDW                 EM
SSB                  0
LB                1.00 Hz
GB                   0
PC                0.50
```




```
Current Data Parameters
NAME            nongda-7
EXPNO                  2
PROCNO                 1

F2 - Acquisition Parameters
Date_           20140105
Time              16.44
INSTRUM           spect
PROBHD   5 mm QNP  1H/1
PULPROG          zgdc30
TD                32768
SOLVENT         Acetone
NS                   77
DS                    0
SWH           24154.590 Hz
FIDRES         0.737140 Hz
AQ            0.6783476 sec
RG                  362
DW               20.700 usec
DE                6.00 usec
TE               289.8 K
D1            1.00000000 sec
d11           0.03000000 sec
MCREST        0.00000000 sec
MCWRK         0.01500000 sec

======== CHANNEL f1 ========
NUC1               13C
P1               12.00 usec
PL1              -3.00 dB
SFO1        100.6230315 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                1H
PCPD2            80.00 usec
PL2              -4.00 dB
PL12             12.12 dB
SFO2        400.1313965 MHz

F2 - Processing parameters
SI                131072
SF          100.6127790 MHz
WDW                 EM
SSB                  0
LB                1.00 Hz
GB                   0
PC                0.50
```

GC-MS spectrums of Compound 8a-8g



retention time of compounds:

Compound 8a: 8.57 min

Compound 8b: 8.78 min

Compound 8c: 13.71 min

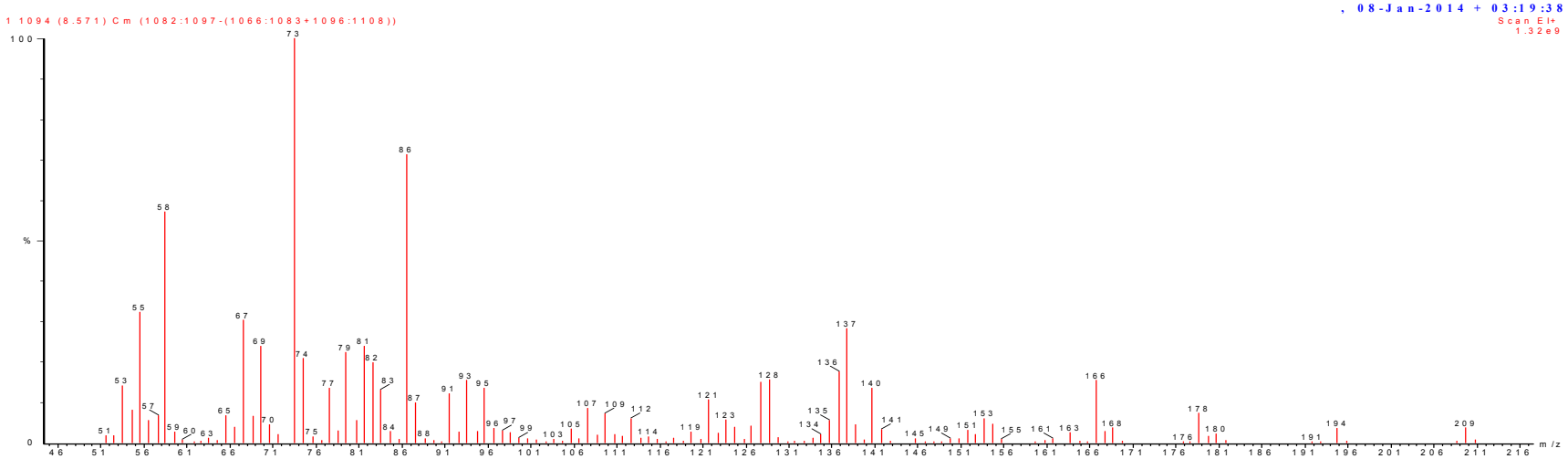
Compound 8d:15.59 min

Compound 8e: 14.29 min

Compound 8f: 18.05 min

Compound 8g: 17.15 min

Compound 8a



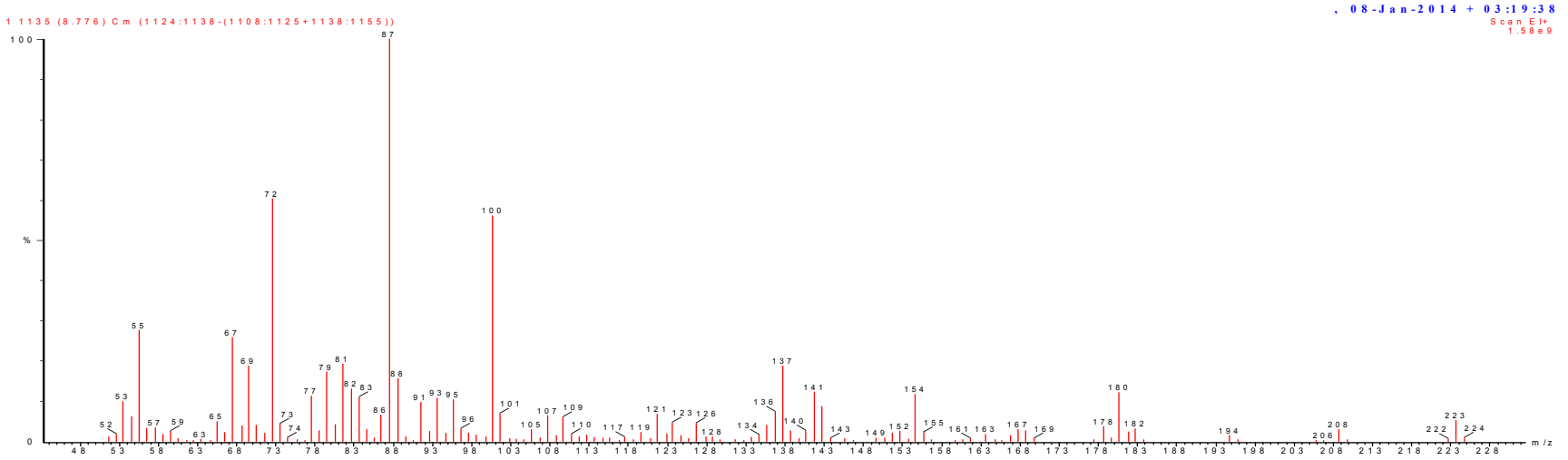
1 1094 (8.571) Cm (1082:1097-(1066:1083+1096:1108))

, 08-Jan-2014 + 03:19:38

Scan EI+

No	Mass	Inten	%BPI	%TIC
1:	51	2.26e7	1.70	0.21
2:	52	2.24e7	1.69	0.21
3:	53	1.85e8	13.96	1.71
4:	54	1.05e8	7.93	0.97
5:	55	4.26e8	32.16	3.93
6:	56	7.18e7	5.43	0.66
7:	57	8.69e7	6.56	0.80
8:	58	7.55e8	57.07	6.98
9:	59	3.41e7	2.58	0.32
10:	60	8.71e6	0.66	0.08
11:	61	2.53e6	0.19	0.02
12:	62	3.49e6	0.26	0.03
13:	63	1.41e7	1.07	0.13
14:	64	5.10e6	0.39	0.05
15:	65	8.84e7	6.68	0.82
16:	66	4.92e7	3.71	0.45
17:	67	4.01e8	30.29	3.71
18:	68	8.61e7	6.50	0.80
19:	69	3.16e8	23.85	2.92
20:	70	5.85e7	4.42	0.54
21:	71	2.60e7	1.97	0.24
22:	73	1.32e9	100.00	12.23
23:	74	2.75e8	20.79	2.54
24:	75	1.80e7	1.36	0.17
25:	76	6.13e6	0.46	0.06
26:	77	1.77e8	13.33	1.63
27:	78	3.74e7	2.82	0.35
28:	79	2.94e8	22.24	2.72
29:	80	7.24e7	5.47	0.67
30:	81	3.14e8	23.76	2.91
31:	82	2.60e8	19.67	2.41
32:	83	1.72e8	13.02	1.59
33:	84	3.60e7	2.72	0.33
34:	85	9.00e6	0.68	0.08
35:	86	9.42e8	71.16	8.70
36:	87	1.30e8	9.83	1.20
37:	88	1.16e7	0.88	0.11
38:	89	6.26e6	0.47	0.06
39:	90	2.87e6	0.22	0.03
40:	91	1.59e8	12.02	1.47
41:	92	3.35e7	2.53	0.31
42:	93	2.04e8	15.43	1.89
43:	94	3.62e7	2.73	0.33
44:	95	1.77e8	13.36	1.63
45:	96	4.63e7	3.50	0.43
46:	97	3.84e7	2.90	0.36
47:	98	3.12e7	2.36	0.29
48:	99	1.42e7	1.07	0.13
49:	100	1.18e7	0.89	0.11
50:	101	8.33e6	0.63	0.08
51:	102	2.07e6	0.16	0.02
52:	103	9.18e6	0.69	0.08
53:	104	4.12e6	0.31	0.04
54:	105	4.40e7	3.32	0.41
55:	106	1.12e7	0.84	0.10
56:	107	1.11e8	8.40	1.03
57:	108	2.41e7	1.82	0.22
58:	109	9.28e7	7.01	0.86
59:	110	2.69e7	2.03	0.25
60:	111	1.93e7	1.46	0.18
61:	112	7.74e7	5.85	0.72
62:	113	1.48e7	1.12	0.14
63:	114	1.78e7	1.35	0.16
64:	115	9.74e6	0.74	0.09
65:	116	2.57e6	0.19	0.02
66:	117	1.36e7	1.03	0.13
67:	118	4.22e6	0.32	0.04
68:	119	3.35e7	2.53	0.31
69:	120	1.01e7	0.76	0.09
70:	121	1.39e8	10.54	1.29
71:	122	3.06e7	2.31	0.28
72:	123	7.31e7	5.52	0.68
73:	124	4.96e7	3.75	0.46
74:	125	1.01e7	0.76	0.09
75:	126	5.47e7	4.13	0.51
76:	127	1.98e8	14.92	1.83
77:	128	2.05e8	15.51	1.90
78:	129	1.51e7	1.14	0.14
79:	130	2.65e6	0.20	0.02
80:	131	4.71e6	0.36	0.04
81:	132	3.19e6	0.24	0.03
82:	133	1.39e7	1.05	0.13
83:	134	2.64e7	2.00	0.24
84:	135	7.24e7	5.47	0.67
85:	136	2.31e8	17.43	2.13
86:	137	3.73e8	28.21	3.45
87:	138	5.79e7	4.38	0.54
88:	139	8.15e6	0.62	0.08
89:	140	1.78e8	13.41	1.64
90:	141	4.09e7	3.09	0.38
91:	142	4.53e6	0.34	0.04
92:	145	1.16e7	0.87	0.11
93:	146	2.61e6	0.20	0.02
94:	147	1.46e6	0.11	0.01
95:	148	1.83e6	0.14	0.02
96:	149	1.12e7	0.85	0.10
97:	150	1.29e7	0.97	0.12
98:	151	3.91e7	2.95	0.36
99:	152	2.56e7	1.93	0.24
100:	153	7.72e7	5.83	0.71
101:	154	5.89e7	4.45	0.54
102:	155	1.07e7	0.81	0.10
103:	159	1.82e6	0.14	0.02
104:	160	6.96e6	0.53	0.06
105:	161	1.12e7	0.85	0.10
106:	163	3.10e7	2.34	0.29
107:	164	4.94e6	0.37	0.05
108:	165	2.38e6	0.18	0.02
109:	166	2.04e8	15.40	1.88
110:	167	3.69e7	2.78	0.34
111:	168	4.87e7	3.68	0.45
112:	169	4.83e6	0.36	0.04
113:	176	2.90e6	0.22	0.03
114:	177	2.33e6	0.18	0.02
115:	178	9.53e7	7.20	0.88
116:	179	1.92e7	1.45	0.18
117:	180	2.74e7	2.07	0.25
118:	181	6.21e6	0.47	0.06
119:	191	2.75e6	0.21	0.03
120:	192	2.57e6	0.19	0.02
121:	194	4.66e7	3.52	0.43
122:	195	4.63e6	0.35	0.04
123:	208	4.40e6	0.33	0.04
124:	209	4.74e7	3.58	0.44
125:	210	7.22e6	0.55	0.07

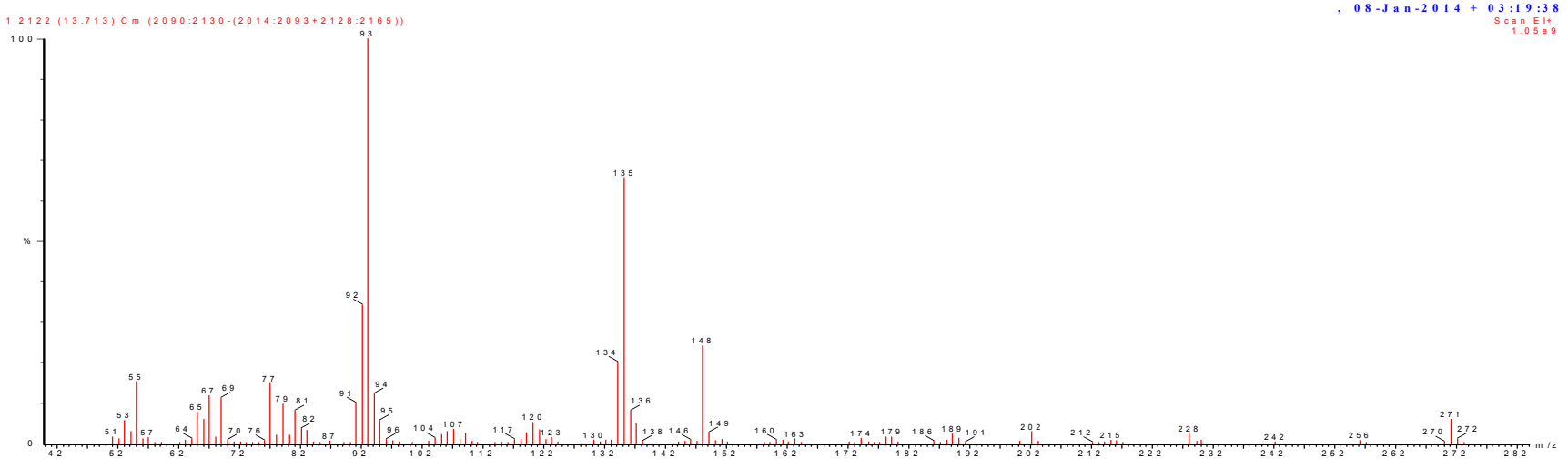
Compound 8b



1 1135 (8.776) Cm (1124:1138-(1108:1125+1138:1155))
, 08-Jan-2014 + 03:19:38
Scan EI+

No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC
1	51	1.78e7	113	0.17	47	97	3.15e7	1.99	0.30	93	145	9.34e6	0.59	0.09
2	52	2.52e7	1.60	0.24	48	98	2.33e7	1.48	0.22	94	146	1.93e6	0.12	0.02
3	53	1.54e8	9.74	1.45	49	99	1.56e7	0.99	0.15	95	149	1.29e7	0.81	0.12
4	54	9.62e7	6.09	0.91	50	100	8.85e8	56.07	8.34	96	150	1.19e7	0.76	0.11
5	55	4.34e8	27.51	4.09	51	101	1.08e8	6.84	1.02	97	151	3.02e7	1.91	0.28
6	56	5.03e7	3.19	0.47	52	102	1.05e7	0.66	0.10	98	152	3.85e7	2.44	0.36
7	57	5.12e7	3.24	0.48	53	103	7.33e6	0.46	0.07	99	153	7.99e6	0.51	0.08
8	58	2.57e7	1.62	0.24	54	104	3.88e6	0.25	0.04	100	154	1.82e8	11.54	1.72
9	59	3.58e7	2.46	0.37	55	105	4.51e7	2.86	0.43	101	155	3.40e7	2.15	0.32
10	60	9.30e6	0.59	0.09	56	106	1.27e7	0.81	0.12	102	156	4.17e6	0.26	0.04
11	61	2.02e6	0.13	0.02	57	107	9.88e7	6.26	0.93	103	159	2.55e6	0.16	0.02
12	62	1.51e6	0.11	0.02	58	108	2.11e7	1.38	0.21	104	160	4.28e6	0.27	0.04
13	63	6.72e6	0.43	0.06	59	109	9.30e7	5.89	0.88	105	161	1.01e7	0.64	0.10
14	64	3.41e6	0.22	0.03	60	110	2.52e7	1.60	0.24	106	163	2.71e7	1.72	0.26
15	65	7.59e7	4.81	0.72	61	111	1.60e7	1.02	0.15	107	164	3.94e6	0.25	0.04
16	66	3.35e7	2.12	0.32	62	112	2.43e7	1.54	0.23	108	165	2.42e6	0.15	0.02
17	67	4.07e8	25.76	3.83	63	113	1.33e7	0.84	0.13	109	166	2.11e7	1.34	0.20
18	68	5.89e7	3.73	0.56	64	114	1.17e7	0.74	0.11	110	167	4.53e7	2.87	0.43
19	69	2.94e8	18.63	2.77	65	115	1.30e7	0.83	0.12	111	168	3.97e7	2.51	0.37
20	70	6.19e7	3.92	0.58	66	116	1.95e6	0.12	0.02	112	169	8.98e6	0.57	0.08
21	71	3.16e7	2.00	0.30	67	117	1.51e7	0.96	0.14	113	177	4.56e6	0.29	0.04
22	72	9.50e8	60.18	8.96	68	118	4.76e6	0.30	0.04	114	178	5.79e7	3.67	0.55
23	73	6.63e7	4.20	0.63	69	119	3.28e7	2.08	0.31	115	179	1.14e7	0.72	0.11
24	74	1.19e7	0.75	0.11	70	120	8.51e6	0.54	0.08	116	180	1.89e8	12.00	1.79
25	75	3.57e6	0.23	0.03	71	121	1.04e8	6.62	0.98	117	181	3.56e7	2.26	0.34
26	76	3.11e6	0.20	0.03	72	122	2.78e7	1.76	0.26	118	182	4.77e7	3.02	0.45
27	77	1.75e8	11.11	1.65	73	123	7.04e7	4.46	0.66	119	183	5.04e6	0.32	0.05
28	78	3.94e7	2.49	0.37	74	124	2.24e7	1.42	0.21	120	194	2.23e7	1.41	0.21
29	79	2.71e8	17.16	2.55	75	125	9.01e6	0.57	0.08	121	195	5.42e6	0.34	0.05
30	80	6.51e7	4.12	0.61	76	126	6.85e7	4.34	0.65	122	205	1.61e6	0.10	0.02
31	81	3.03e8	19.18	2.86	77	127	1.61e7	1.02	0.15	123	206	2.52e6	0.16	0.02
32	82	2.06e8	13.02	1.94	78	128	1.62e7	1.03	0.15	124	208	4.55e7	2.88	0.43
33	83	1.71e8	10.86	1.62	79	129	4.91e6	0.31	0.05	125	209	5.57e6	0.35	0.05
34	84	4.62e7	2.93	0.44	80	131	3.74e6	0.24	0.04	126	222	7.34e6	0.47	0.07
35	85	1.25e7	0.79	0.12	81	132	2.04e6	0.13	0.02	127	223	8.07e7	5.11	0.76
36	86	1.02e8	6.45	0.96	82	133	1.38e7	0.87	0.13	128	224	1.20e7	0.76	0.11
37	87	1.58e9	100.00	14.88	83	134	2.36e7	1.49	0.22					
38	88	2.44e8	15.44	2.30	84	135	6.08e7	3.85	0.57					
39	89	1.70e7	1.08	0.16	85	136	1.15e8	7.26	1.08					
40	90	3.36e6	0.21	0.03	86	137	2.95e8	18.72	2.79					
41	91	1.53e8	9.68	1.44	87	138	4.19e7	2.60	0.39					
42	92	3.92e7	2.48	0.37	88	139	8.53e6	0.54	0.08					
43	93	1.69e8	10.70	1.59	89	140	4.11e7	2.60	0.39					
44	94	3.14e7	1.99	0.30	90	141	1.93e8	12.25	1.82					
45	95	1.63e8	10.31	1.53	91	142	1.36e8	8.59	1.28					
46	96	4.80e7	3.04	0.45	92	143	1.07e7	0.68	0.10					

Compound 8c

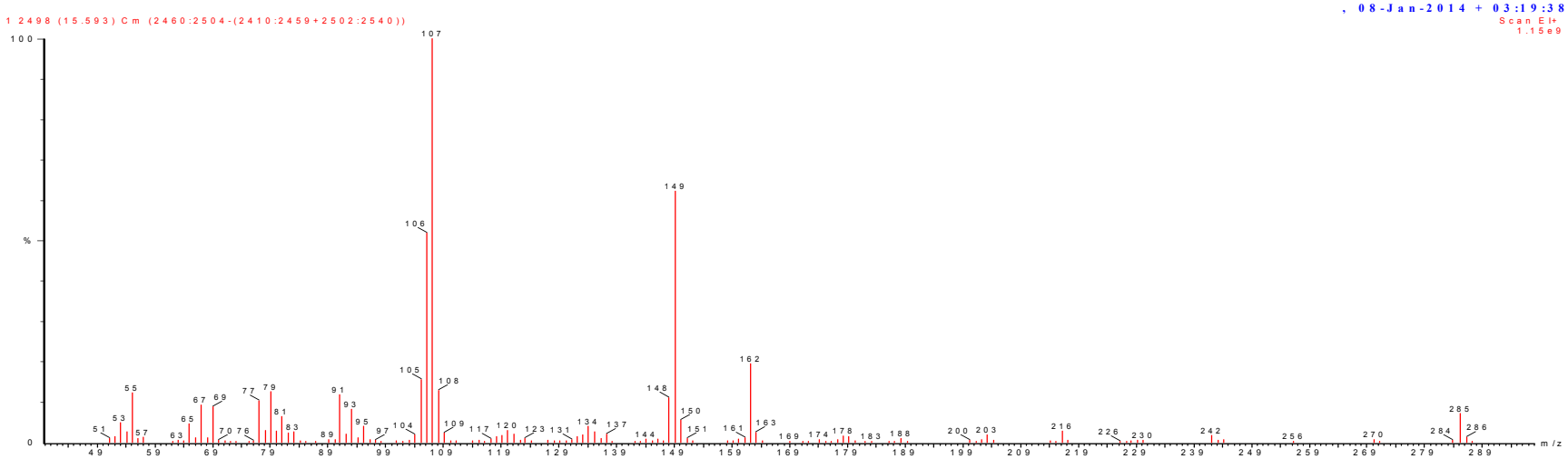


1 2122 (13.713) Cm (2090:2130-(2014:2093+2128:2165))

, 08-Jan-2014 + 03:19:38
Scan EI+

No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC	No	Mass
1	51	1.63e7	1.55	0.33	47	104	1.23e7	1.17	0.25	93	172	2.71e6	0.26	0.05												
2	52	1.04e7	0.99	0.21	48	105	2.18e7	2.07	0.44	94	173	1.06e6	0.10	0.02												
3	53	5.79e7	5.50	1.16	49	106	2.99e7	2.84	0.60	95	174	1.22e7	1.16	0.24												
4	54	3.02e7	2.86	0.60	50	107	3.68e7	3.49	0.73	96	175	2.41e6	0.23	0.05												
5	55	1.60e8	15.20	3.20	51	108	8.92e6	0.85	0.18	97	176	1.58e6	0.15	0.03												
6	56	1.08e7	1.02	0.22	52	109	2.51e7	2.38	0.50	98	177	1.63e6	0.15	0.03												
7	57	1.39e7	1.32	0.28	53	110	5.10e6	0.48	0.10	99	178	1.55e7	1.47	0.31												
8	58	1.33e6	0.13	0.03	54	111	2.34e6	0.22	0.05	100	179	1.66e7	1.58	0.33												
9	59	1.18e6	0.11	0.02	55	114	1.36e6	0.13	0.03	101	180	3.28e6	0.31	0.07												
10	62	1.50e6	0.14	0.03	56	115	3.92e6	0.37	0.08	102	186	4.52e6	0.43	0.09												
11	63	8.09e6	0.77	0.16	57	116	1.70e6	0.16	0.03	103	187	2.01e6	0.19	0.04												
12	64	1.13e7	1.07	0.23	58	117	1.07e7	0.98	0.21	104	188	7.41e6	0.70	0.15												
13	65	8.16e7	7.75	1.63	59	118	9.29e6	0.88	0.19	105	189	2.37e7	2.25	0.47												
14	66	6.21e7	5.90	1.24	60	119	2.63e7	2.50	0.53	106	190	1.34e7	1.27	0.27												
15	67	1.23e8	11.68	2.46	61	120	5.36e7	5.09	1.07	107	191	1.46e6	0.14	0.03												
16	68	1.59e7	1.51	0.32	62	121	3.54e7	3.36	0.71	108	200	4.29e6	0.41	0.09												
17	69	1.17e8	11.07	2.33	63	122	9.24e6	0.88	0.18	109	202	2.98e7	2.83	0.60												
18	70	7.67e6	0.73	0.15	64	123	1.39e7	1.32	0.28	110	203	4.36e6	0.41	0.09												
19	71	2.96e6	0.28	0.06	65	124	3.76e6	0.36	0.08	111	212	1.89e6	0.18	0.04												
20	72	2.48e6	0.24	0.05	66	128	2.22e6	0.21	0.04	112	213	1.82e6	0.17	0.04												
21	73	2.22e6	0.21	0.04	67	130	8.54e6	0.81	0.17	113	214	3.33e6	0.32	0.07												
22	74	1.11e6	0.11	0.02	68	131	3.59e6	0.34	0.07	114	215	7.36e6	0.70	0.15												
23	75	1.50e6	0.14	0.03	69	132	8.52e6	0.81	0.17	115	216	6.82e6	0.65	0.14												
24	76	6.08e6	0.58	0.12	70	133	8.37e6	0.79	0.17	116	217	1.46e6	0.14	0.03												
25	77	1.56e8	14.81	3.12	71	134	2.11e8	20.03	4.22	117	228	2.34e7	2.22	0.47												
26	78	2.07e7	1.97	0.41	72	135	6.92e8	65.72	13.83	118	229	5.05e6	0.48	0.10												
27	79	1.02e8	9.71	2.04	73	136	8.39e7	7.96	1.68	119	230	8.60e6	0.82	0.17												
28	80	1.99e7	1.89	0.40	74	137	5.05e7	4.80	1.01	120	242	2.85e6	0.27	0.06												
29	81	8.41e7	7.99	1.68	75	138	5.18e6	0.49	0.10	121	256	6.58e6	0.63	0.13												
30	82	3.87e7	3.67	0.77	76	143	1.26e6	0.12	0.03	122	257	1.06e6	0.10	0.02												
31	83	3.26e7	3.10	0.65	77	144	2.61e6	0.25	0.05	123	270	2.74e6	0.26	0.05												
32	84	3.54e6	0.34	0.07	78	145	4.22e6	0.40	0.08	124	271	6.23e7	5.92	1.25												
33	85	1.63e6	0.15	0.03	79	146	7.65e6	0.73	0.15	125	272	1.10e7	1.05	0.22												
34	87	5.03e6	0.48	0.10	80	147	4.46e6	0.42	0.09	126	273	1.13e6	0.11	0.02												
35	89	1.83e6	0.17	0.04	81	148	2.54e8	24.08	5.07																	
36	90	2.23e6	0.21	0.04	82	149	2.65e7	2.52	0.53																	
37	91	1.05e8	9.95	2.09	83	150	5.79e6	0.55	0.12																	
38	92	3.60e8	34.17	7.19	84	151	1.01e7	0.96	0.20																	
39	93	1.05e9	100.00	21.05	85	152	3.49e6	0.33	0.07																	
40	94	1.29e8	12.26	2.58	86	158	2.13e6	0.20	0.04																	
41	95	5.83e7	5.53	1.17	87	159	1.85e6	0.18	0.04																	
42	96	9.75e6	0.93	0.19	88	160	8.34e6	0.79	0.17																	
43	97	6.51e6	0.62	0.13	89	161	7.32e6	0.70	0.15																	
44	98	2.39e6	0.23	0.05	90	162	2.93e6	0.28	0.06																	
45	100	1.87e6	0.18	0.04	91	163	1.19e7	1.13	0.24																	
46	103	4.31e6	0.41	0.09	92	164	1.26e6	0.12	0.03																	

Compound 8d



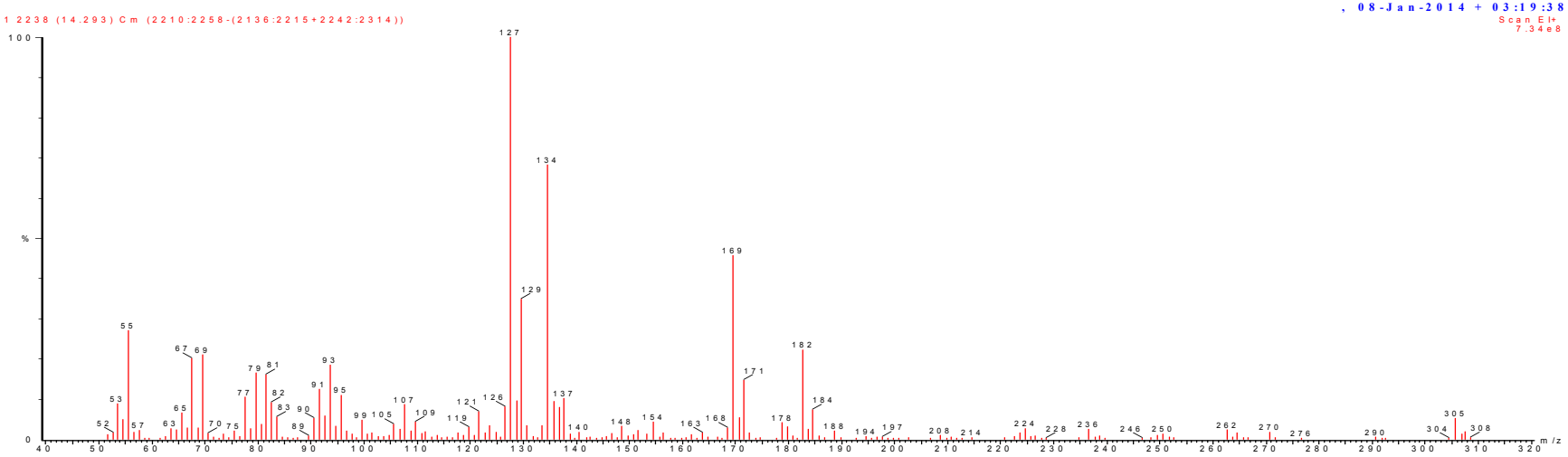
1 2498 (15.593) Cm (2460:2504-(2410:2459+2502:2540))

, 08-Jan-2014 + 03:19:38

Scan EI+

No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC	No	Mass
1	51	1.07e7	0.93	0.20	47	106	5.96e8	51.80	11.06	93	164	2.66e6	0.23	0.05												
2	52	1.48e7	1.28	0.27	48	107	1.15e9	100.00	21.35	94	169	2.33e6	0.20	0.04												
3	53	5.62e7	4.88	1.04	49	108	1.47e8	12.73	2.72	95	171	1.21e6	0.11	0.02												
4	54	2.93e7	2.55	0.54	50	109	2.59e7	2.25	0.48	96	172	2.08e6	0.18	0.04												
5	55	1.40e8	12.16	2.60	51	110	4.16e6	0.36	0.08	97	174	6.75e6	0.59	0.13												
6	56	9.57e6	0.83	0.18	52	111	2.67e6	0.23	0.05	98	175	2.24e6	0.19	0.04												
7	57	1.34e7	1.17	0.25	53	114	3.04e6	0.26	0.06	99	176	1.85e6	0.16	0.03												
8	62	1.29e6	0.11	0.02	54	115	5.87e6	0.51	0.11	100	177	7.37e6	0.64	0.14												
9	63	5.81e6	0.50	0.11	55	116	1.61e6	0.14	0.03	101	178	1.69e7	1.47	0.31												
10	64	3.93e6	0.34	0.07	56	117	7.98e6	0.69	0.15	102	179	1.50e7	1.30	0.28												
11	65	5.22e7	4.54	0.97	57	118	1.49e7	1.29	0.28	103	180	3.63e6	0.32	0.07												
12	66	1.30e7	1.13	0.24	58	119	1.89e7	1.64	0.35	104	182	1.57e6	0.14	0.03												
13	67	1.06e8	9.19	1.96	59	120	3.37e7	2.93	0.63	105	183	1.60e6	0.14	0.03												
14	68	1.25e7	1.09	0.23	60	121	2.27e7	1.98	0.42	106	186	2.53e6	0.22	0.05												
15	69	1.00e8	8.70	1.86	61	122	5.82e6	0.51	0.11	107	187	1.20e6	0.10	0.02												
16	70	5.69e6	0.49	0.11	62	123	1.09e7	0.95	0.20	108	188	1.08e7	0.94	0.20												
17	71	2.69e6	0.23	0.05	63	124	2.73e6	0.24	0.05	109	189	2.35e6	0.20	0.04												
18	72	1.83e6	0.16	0.03	64	127	5.96e6	0.52	0.11	110	200	4.90e6	0.43	0.09												
19	73	2.23e6	0.19	0.04	65	128	2.72e6	0.24	0.05	111	201	1.93e6	0.17	0.04												
20	76	1.51e6	0.13	0.03	66	129	3.67e6	0.32	0.07	112	202	6.14e6	0.53	0.11												
21	76	3.05e6	0.27	0.06	67	130	4.16e6	0.36	0.08	113	203	2.07e7	1.80	0.38												
22	77	1.17e8	10.19	2.18	68	131	6.37e6	0.55	0.12	114	204	4.76e6	0.41	0.09												
23	78	3.37e7	2.93	0.63	69	132	1.51e7	1.31	0.28	115	214	3.98e6	0.35	0.07												
24	79	1.44e8	12.51	2.67	70	133	2.14e7	1.85	0.40	116	215	1.21e6	0.10	0.02												
25	80	3.13e7	2.71	0.58	71	134	4.45e7	3.87	0.83	117	216	3.19e7	2.77	0.59												
26	81	7.32e7	6.36	1.36	72	135	2.97e7	2.58	0.55	118	217	4.93e6	0.43	0.09												
27	82	2.58e7	2.24	0.48	73	136	1.08e7	0.94	0.20	119	226	2.31e6	0.20	0.04												
28	83	2.96e7	2.57	0.55	74	137	2.30e7	2.00	0.43	120	227	2.30e6	0.20	0.04												
29	84	2.79e6	0.24	0.05	75	138	2.54e6	0.22	0.05	121	228	2.64e6	0.23	0.05												
30	85	1.51e6	0.13	0.03	76	142	1.49e6	0.13	0.03	122	229	4.61e6	0.40	0.09												
31	87	2.35e6	0.20	0.04	77	143	1.17e6	0.10	0.02	123	230	4.65e6	0.40	0.09												
32	89	7.04e6	0.61	0.13	78	144	8.02e6	0.70	0.15	124	242	1.99e7	1.73	0.37												
33	90	6.50e6	0.56	0.12	79	145	3.87e6	0.34	0.07	125	243	4.66e6	0.41	0.09												
34	91	1.35e8	11.74	2.51	80	146	7.85e6	0.68	0.15	126	244	6.77e6	0.59	0.13												
35	92	2.34e7	2.03	0.43	81	147	3.09e6	0.27	0.06	127	256	2.43e6	0.21	0.05												
36	93	9.31e7	8.08	1.73	82	148	1.26e8	10.95	2.34	128	270	6.69e6	0.58	0.12												
37	94	1.28e7	1.12	0.24	83	149	7.15e8	62.13	13.27	129	271	1.37e6	0.12	0.03												
38	95	4.45e7	3.87	0.83	84	150	6.23e7	5.41	1.16	130	284	4.83e6	0.42	0.09												
39	96	6.93e6	0.60	0.13	85	151	9.81e6	0.85	0.18	131	285	8.07e7	7.01	1.50												
40	97	5.24e6	0.45	0.10	86	152	3.72e6	0.32	0.07	132	286	1.37e7	1.19	0.25												
41	98	2.23e6	0.19	0.04	87	158	2.63e6	0.23	0.05	133	287	1.42e6	0.12	0.03												
42	101	3.62e6	0.31	0.07	88	159	3.13e6	0.27	0.06																	
43	102	1.44e6	0.13	0.03	89	160	7.88e6	0.68	0.15																	
44	103	6.03e6	0.52	0.11	90	161	1.16e7	1.01	0.21																	
45	104	2.03e7	1.76	0.38	91	162	2.24e8	19.41	4.14																	
46	105	1.79e8	15.50	3.31	92	163	2.73e7	2.37	0.51																	

Compound 8e



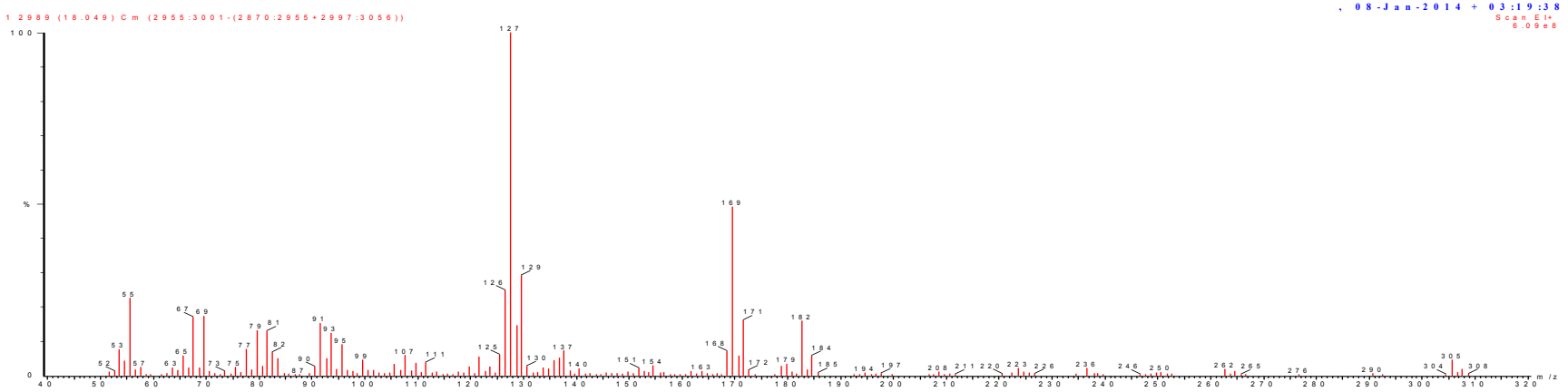
1 2238 (14.293) Cm (2210:2258-(2136:2215+2242:2314))

, 08-Jan-2014 + 03:19:38

Scan EI+

No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC
1	51	7.93e6	1.08	0.15	47	99	3.47e7	4.73	0.65	93	145	4.60e6	0.63	0.09	139	199	1.04e6	0.14	0.02									
2	52	1.12e7	1.52	0.21	48	100	9.02e6	1.23	0.17	94	146	9.88e6	1.35	0.19	140	200	1.49e6	0.20	0.03									
3	53	6.41e7	8.73	1.21	49	101	1.15e7	1.57	0.22	95	147	2.65e6	0.36	0.05	141	202	1.85e6	0.25	0.03									
4	54	3.50e7	4.77	0.66	50	102	3.92e6	0.53	0.07	96	148	2.30e7	3.14	0.43	142	208	1.48e6	0.20	0.03									
5	55	1.98e8	26.93	3.72	51	103	4.84e6	0.66	0.09	97	149	5.94e6	0.81	0.11	143	208	7.09e6	0.97	0.13									
6	56	1.27e7	1.73	0.24	52	104	6.11e6	0.83	0.11	98	150	7.36e6	1.00	0.14	144	209	1.34e6	0.18	0.03									
7	57	1.50e7	2.04	0.28	53	105	2.80e7	3.54	0.49	99	151	1.59e7	2.17	0.30	145	210	3.46e6	0.47	0.07									
8	58	1.31e6	0.18	0.02	54	106	1.71e7	2.33	0.32	100	153	8.58e6	1.17	0.16	146	211	8.70e5	0.12	0.02									
9	59	1.18e6	0.16	0.02	55	107	6.28e7	8.56	1.18	101	154	3.14e7	4.28	0.59	147	212	1.27e6	0.17	0.02									
10	61	1.25e6	0.17	0.02	56	108	1.46e7	1.99	0.27	102	155	2.83e6	0.39	0.05	148	214	2.28e6	0.31	0.04									
11	62	3.96e6	0.54	0.07	57	109	3.12e7	4.25	0.59	103	156	1.14e7	1.56	0.21	149	220	2.27e6	0.31	0.04									
12	63	1.92e7	2.62	0.36	58	110	9.81e6	1.34	0.18	104	157	1.15e6	0.16	0.02	150	222	4.83e6	0.66	0.09									
13	64	1.67e7	2.27	0.31	59	111	1.37e7	1.86	0.26	105	158	1.37e6	0.19	0.03	151	223	1.10e7	1.50	0.21									
14	65	4.79e6	6.52	0.90	60	112	2.83e6	0.39	0.05	106	159	1.36e6	0.19	0.03	152	224	1.89e7	2.58	0.36									
15	66	1.94e7	2.64	0.37	61	113	6.55e6	0.89	0.12	107	160	2.49e6	0.34	0.05	153	225	4.83e6	0.66	0.09									
16	67	1.48e8	20.10	2.78	62	114	2.02e6	0.28	0.04	108	161	7.94e6	1.08	0.15	154	226	5.51e6	0.75	0.10									
17	68	2.00e7	2.72	0.38	63	115	3.19e6	0.43	0.06	109	162	1.31e6	0.18	0.02	155	227	8.01e5	0.11	0.02									
18	69	1.54e8	20.93	2.89	64	116	2.60e6	0.35	0.05	110	163	1.16e7	1.58	0.22	156	228	8.44e5	0.11	0.02									
19	70	9.48e6	1.29	0.18	65	117	1.05e7	1.44	0.20	111	164	3.34e6	0.45	0.06	157	234	2.75e6	0.37	0.05									
20	71	3.52e6	0.48	0.07	66	118	7.04e6	0.96	0.13	112	166	3.31e6	0.45	0.06	158	238	1.82e7	2.48	0.34									
21	72	1.37e6	0.19	0.03	67	119	2.11e7	2.87	0.40	113	167	9.04e5	0.12	0.02	159	237	2.83e6	0.39	0.05									
22	73	8.76e6	1.19	0.16	68	120	6.43e6	0.88	0.12	114	168	2.02e7	2.76	0.38	160	238	5.88e6	0.80	0.11									
23	74	2.50e6	0.34	0.05	69	121	5.00e7	6.81	0.94	115	169	3.35e8	45.60	6.30	161	239	8.14e5	0.11	0.02									
24	75	1.44e7	1.96	0.27	70	122	1.13e7	1.53	0.21	116	170	3.83e7	5.22	0.72	162	240	1.03e6	0.14	0.02									
25	76	4.00e6	0.55	0.08	71	123	2.45e7	3.34	0.46	117	171	1.08e8	14.68	2.03	163	248	2.73e6	0.37	0.05									
26	77	7.68e7	10.47	1.45	72	124	1.15e7	1.58	0.22	118	172	1.08e7	1.47	0.20	164	249	6.72e6	0.92	0.13									
27	78	1.88e7	2.56	0.35	73	125	3.83e6	0.52	0.07	119	173	1.19e6	0.16	0.02	165	250	8.73e6	1.19	0.16									
28	79	1.21e8	16.49	2.28	74	126	5.88e7	8.00	1.11	120	174	2.40e6	0.33	0.05	166	251	3.21e6	0.44	0.06									
29	80	2.64e7	3.59	0.50	75	127	7.34e8	100.00	13.81	121	177	1.48e6	0.20	0.03	167	252	2.54e6	0.35	0.05									
30	81	1.17e8	15.96	2.20	76	128	7.01e7	9.55	1.32	122	178	2.96e7	4.03	0.56	168	262	1.62e7	2.21	0.30									
31	82	6.68e7	9.10	1.26	77	129	2.55e8	34.76	4.80	123	179	2.23e7	3.04	0.42	169	263	3.04e6	0.41	0.06									
32	83	4.03e7	5.49	0.76	78	130	2.39e7	3.26	0.45	124	180	5.66e6	0.76	0.10	170	264	1.08e7	1.47	0.20									
33	84	3.79e6	0.52	0.07	79	131	4.86e6	0.66	0.09	125	181	1.35e6	0.18	0.03	171	265	1.89e6	0.26	0.04									
34	85	2.09e6	0.28	0.04	80	132	1.89e6	0.26	0.04	126	182	1.62e8	22.09	3.05	172	266	1.83e6	0.25	0.03									
35	86	8.69e5	0.12	0.02	81	133	2.39e7	3.26	0.45	127	183	1.79e7	2.44	0.34	173	270	1.18e7	1.61	0.22									
36	87	1.89e6	0.26	0.04	82	134	5.00e8	68.19	9.42	128	184	5.31e7	7.23	1.00	174	271	1.98e6	0.27	0.04									
37	89	6.02e6	0.82	0.11	83	135	6.89e7	9.38	1.30	129	185	5.14e6	0.70	0.10	175	276	1.64e6	0.22	0.03									
38	90	3.81e7	5.20	0.72	84	136	5.73e7	7.81	1.08	130	186	1.78e6	0.24	0.03	176	290	3.63e6	0.49	0.07									
39	91	9.11e7	12.41	1.71	85	137	7.38e7	10.06	1.39	131	188	1.48e7	2.02	0.28	177	291	7.74e5	0.11	0.01									
40	92	4.18e7	5.69	0.79	86	138	9.13e6	1.24	0.17	132	189	1.86e6	0.25	0.04	178	292	1.20e6	0.16	0.02									
41	93	1.35e8	18.36	2.54	87	139	9.38e5	0.13	0.02	133	192	9.61e5	0.13	0.02	179	304	8.55e5	0.12	0.02									
42	94	2.27e7	3.10	0.43	88	140	1.19e7	1.62	0.22	134	194	4.76e6	0.65	0.09	180	305	3.77e7	5.13	0.71									
43	95	7.95e7	10.83	1.50	89	141	2.06e6	0.28	0.04	135	195	1.15e6	0.16	0.02	181	306	9.07e6	1.24	0.17									
44	96	1.42e7	1.93	0.27	90	142	3.27e6	0.45	0.06	136	196	3.31e6	0.45	0.06	182	307	1.29e7	1.75	0.24									
45	97	9.23e6	1.26	0.17	91	143	1.36e6	0.19	0.03	137	197	3.13e6	0.43	0.06	183	308	2.13e6	0.29	0.04									
46	98	2.53e6	0.34	0.05	92	144	2.44e6	0.33	0.05	138	198	1.15e6	0.16	0.02														

Compound 8f

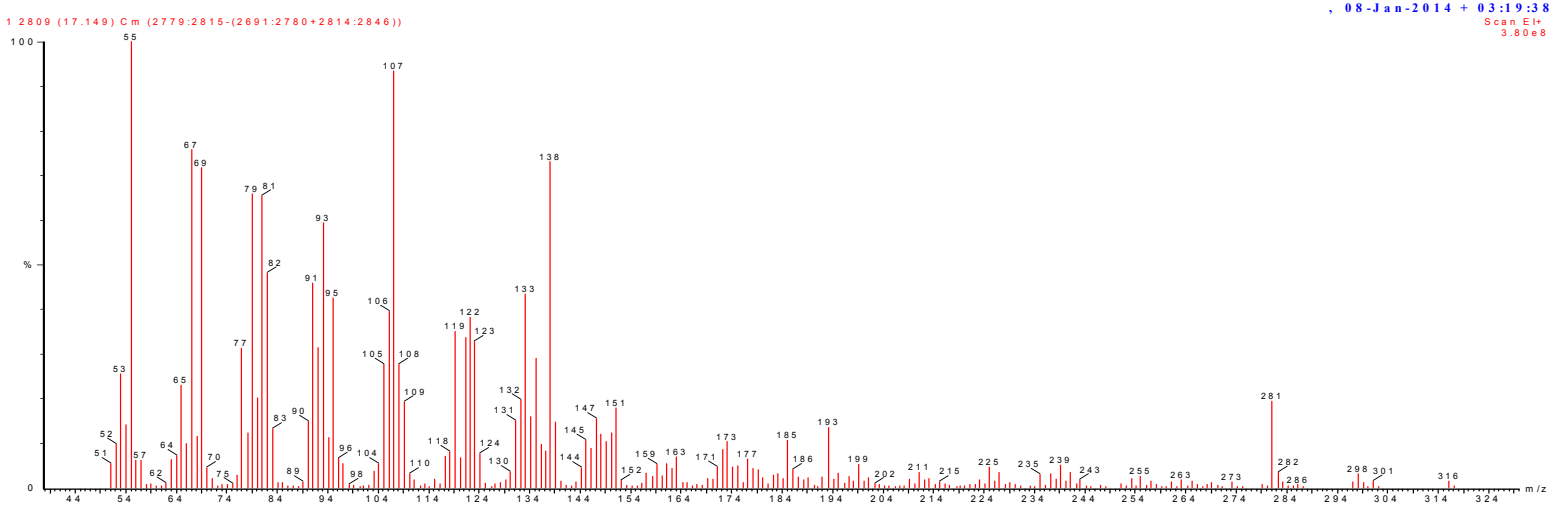


1 2989 (18.049) Cm (2955:3001-(2870:2955+2997:3056))

, 08-Jan-2014 + 03:19:38
Scan EI+

No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC	No	Mass	Inten	%BPI	%TIC	No	Mass
1	51	5.71e6	0.94	0.16	47	99	2.62e7	4.30	0.73	93	145	3.65e6	0.60	0.10	139	207	6.90e5	0.11	0.02						
2	52	6.00e6	0.99	0.17	48	100	8.42e6	1.38	0.23	94	146	2.34e6	0.39	0.07	140	208	5.33e5	0.88	0.15						
3	53	4.50e7	7.40	1.25	49	101	7.99e6	1.31	0.22	95	147	2.65e6	0.44	0.07	141	209	1.14e6	0.19	0.03						
4	54	2.44e7	4.00	0.68	50	102	3.44e6	0.57	0.10	96	148	1.52e6	0.25	0.04	142	210	2.08e6	0.34	0.06						
5	55	1.36e8	22.42	3.79	51	103	3.11e6	0.51	0.09	97	149	5.44e6	0.89	0.15	143	211	6.25e5	0.10	0.02						
6	56	9.34e6	1.53	0.26	52	104	3.85e6	0.63	0.11	98	150	3.18e6	0.52	0.09	144	220	2.04e6	0.34	0.06						
7	57	1.37e7	2.25	0.38	53	105	1.91e7	3.14	0.53	99	151	1.22e7	2.01	0.34	145	222	3.96e6	0.65	0.11						
8	58	1.13e6	0.19	0.03	54	106	8.43e6	1.38	0.23	100	152	6.06e6	1.00	0.17	146	223	1.16e7	1.90	0.32						
9	59	1.16e6	0.19	0.03	55	107	3.51e7	5.77	0.98	101	153	4.27e6	0.70	0.12	147	224	5.20e6	0.85	0.14						
10	61	9.04e5	0.15	0.03	56	108	7.05e6	1.16	0.20	102	154	1.65e7	2.72	0.46	148	225	3.85e6	0.63	0.11						
11	62	3.09e6	0.51	0.09	57	109	2.13e7	3.50	0.59	103	155	3.24e6	0.53	0.09	149	226	1.49e6	0.25	0.04						
12	63	1.28e7	2.11	0.36	58	110	4.65e6	0.76	0.13	104	156	4.83e6	0.79	0.13	150	234	1.83e6	0.30	0.05						
13	64	8.42e6	1.38	0.23	59	111	2.16e7	3.54	0.60	105	157	8.07e5	0.13	0.02	151	236	1.18e7	1.93	0.33						
14	65	3.40e7	5.59	0.95	60	112	3.30e6	0.54	0.09	106	158	6.58e5	0.11	0.02	152	237	2.70e6	0.44	0.08						
15	66	1.29e7	2.12	0.36	61	113	5.69e6	0.94	0.16	107	159	1.01e6	0.17	0.03	153	238	3.13e6	0.51	0.09						
16	67	1.03e8	16.88	2.86	62	114	9.25e5	0.15	0.03	108	160	6.70e5	0.11	0.02	154	239	6.36e5	0.10	0.02						
17	68	1.30e7	2.14	0.36	63	115	2.03e6	0.33	0.06	109	161	6.69e6	1.10	0.19	155	246	9.47e5	0.16	0.03						
18	69	1.05e8	17.22	2.91	64	116	1.35e6	0.22	0.04	110	162	1.70e6	0.28	0.05	156	247	6.34e5	0.10	0.02						
19	70	6.39e6	1.05	0.18	65	117	5.87e6	0.96	0.16	111	163	6.70e6	1.10	0.19	157	248	1.70e6	0.28	0.05						
20	71	2.67e6	0.44	0.07	66	118	3.25e6	0.53	0.09	112	164	2.87e6	0.47	0.08	158	249	3.85e6	0.64	0.11						
21	72	1.36e6	0.22	0.04	67	119	1.46e7	2.39	0.40	113	165	8.42e5	0.14	0.02	159	250	4.52e6	0.74	0.13						
22	73	6.77e6	1.11	0.19	68	120	3.00e6	0.49	0.08	114	166	2.98e6	0.49	0.08	160	251	1.97e6	0.32	0.05						
23	74	1.87e6	0.31	0.05	69	121	3.24e7	5.32	0.90	115	167	1.03e6	0.17	0.03	161	252	1.41e6	0.23	0.04						
24	75	1.36e7	2.23	0.38	70	122	6.68e6	1.10	0.19	116	168	4.25e7	6.99	1.18	162	262	9.72e6	1.60	0.27						
25	76	4.65e6	0.76	0.13	71	123	1.51e7	2.47	0.42	117	169	2.99e8	49.13	8.31	163	263	1.75e6	0.29	0.05						
26	77	4.59e7	7.55	1.28	72	124	3.74e6	0.61	0.10	118	170	3.39e7	5.57	0.94	164	264	6.83e6	1.12	0.19						
27	78	9.55e6	1.57	0.27	73	125	3.54e7	5.81	0.98	119	171	9.76e7	16.04	2.71	165	265	1.18e6	0.19	0.03						
28	79	7.91e7	13.00	2.20	74	126	1.50e8	24.65	4.17	120	172	8.18e6	1.34	0.23	166	266	1.05e6	0.17	0.03						
29	80	1.57e7	2.57	0.44	75	127	6.09e8	100.00	16.92	121	173	7.99e5	0.13	0.02	167	276	1.07e6	0.18	0.03						
30	81	7.78e7	12.78	2.16	76	128	8.79e7	14.45	2.44	122	177	9.65e5	0.16	0.03	168	290	2.57e6	0.42	0.07						
31	82	4.03e7	6.62	1.12	77	129	1.77e8	29.09	4.92	123	178	1.52e7	2.50	0.42	169	292	8.49e5	0.14	0.02						
32	83	2.89e7	4.75	0.80	78	130	1.52e7	2.49	0.42	124	179	1.96e7	3.22	0.54	170	304	9.23e5	0.15	0.03						
33	84	2.91e6	0.48	0.08	79	131	3.64e6	0.60	0.10	125	180	5.62e6	0.92	0.16	171	305	2.69e7	4.41	0.75						
34	85	2.04e6	0.33	0.06	80	132	4.15e6	0.68	0.12	126	181	1.72e6	0.28	0.05	172	306	4.50e6	0.74	0.13						
35	86	6.68e5	0.11	0.02	81	133	1.27e7	2.08	0.35	127	182	9.66e7	15.88	2.69	173	307	1.00e7	1.64	0.28						
36	87	7.77e5	0.13	0.02	82	134	1.07e7	1.76	0.30	128	183	9.10e6	1.49	0.25	174	308	1.53e6	0.25	0.04						
37	89	3.06e6	0.50	0.09	83	135	2.57e7	4.21	0.71	129	184	3.39e7	5.57	0.94											
38	90	1.47e7	2.42	0.41	84	136	3.07e7	5.04	0.85	130	185	3.41e6	0.56	0.09											
39	91	9.14e7	15.02	2.54	85	137	4.27e7	7.02	1.19	131	192	9.11e5	0.15	0.03											
40	92	2.90e7	4.76	0.81	86	138	7.34e6	1.21	0.20	132	193	6.33e5	0.10	0.02											
41	93	7.44e7	12.22	2.07	87	139	2.06e6	0.34	0.06	133	194	3.72e6	0.61	0.10											
42	94	9.80e6	1.61	0.27	88	140	1.09e7	1.79	0.30	134	195	1.06e6	0.17	0.03											
43	95	5.41e7	8.89	1.51	89	141	1.79e6	0.29	0.05	135	196	2.04e6	0.34	0.06											
44	96	8.41e6	1.38	0.23	90	142	3.14e6	0.52	0.09	136	197	2.48e6	0.41	0.07											
45	97	6.84e6	1.12	0.19	91	143	1.12e6	0.18	0.03	137	199	1.04e6	0.17	0.03											
46	98	2.48e6	0.41	0.07	92	144	1.27e6	0.21	0.04	138	206	1.07e6	0.18	0.03											

Compound 8g



1 2809 (17.149) Cm (2779:2815-(2691:2780+2814:2846))

, 08-Jan-2014 + 03:19:38 Scan EI+

No	Mass	Inten	%BPI	%TIC
1	51	1.99e7	5.24	0.28
2	52	3.67e7	9.65	0.52
3	53	9.68e7	25.44	1.38
4	54	5.30e7	13.93	0.75
5	55	3.80e8	100.00	5.42
6	56	2.28e7	5.99	0.32
7	57	2.30e7	6.05	0.33
8	58	2.33e6	0.61	0.03
9	59	2.88e6	0.76	0.04
10	60	9.02e5	0.24	0.01
11	61	1.13e6	0.30	0.02
12	62	3.59e6	0.94	0.05
13	63	2.35e7	6.19	0.34
14	64	2.71e7	7.11	0.39
15	65	8.74e7	22.96	1.24
16	66	3.71e7	9.76	0.53
17	67	2.88e8	75.72	4.10
18	68	4.33e7	11.37	0.62
19	69	2.73e8	71.73	3.89
20	70	1.66e7	4.37	0.24
21	71	7.37e6	1.94	0.10
22	72	1.07e6	0.28	0.02
23	73	2.04e6	0.54	0.03
24	74	2.42e6	0.64	0.03
25	75	3.09e6	0.81	0.04
26	76	1.02e7	2.69	0.15
27	77	1.19e8	31.19	1.69
28	78	4.64e7	12.19	0.66
29	79	2.50e8	65.77	3.56
30	80	7.64e7	20.08	1.09
31	81	2.49e8	65.34	3.54
32	82	1.83e8	48.05	2.60
33	83	4.96e7	13.03	0.71
34	84	4.01e6	1.05	0.06
35	85	3.74e6	0.98	0.05
36	86	9.08e5	0.24	0.01
37	87	9.91e5	0.26	0.01
38	88	5.90e5	0.16	0.01
39	89	4.61e6	1.21	0.07
40	90	5.63e7	14.78	0.80
41	91	1.74e8	45.75	2.48
42	92	1.19e8	31.37	1.70
43	93	2.26e8	59.30	3.21
44	94	4.26e7	11.21	0.61
45	95	1.62e8	42.46	2.30
46	96	2.45e7	6.43	0.35
47	97	1.98e7	5.21	0.28
48	98	2.16e6	0.57	0.03
49	99	1.49e6	0.39	0.02
50	100	8.59e5	0.23	0.01
51	101	9.16e5	0.24	0.01
52	102	1.91e6	0.50	0.03
53	103	1.35e7	3.55	0.19
54	104	1.99e7	5.22	0.28
55	105	1.05e8	27.56	1.49
56	106	1.50e8	39.42	2.14
57	107	3.55e8	93.38	5.06
58	108	1.05e8	27.54	1.49
59	109	7.28e7	19.13	1.04
60	110	1.15e7	3.02	0.16
61	111	6.19e6	1.63	0.09
62	112	1.24e6	0.33	0.02
63	113	2.69e6	0.71	0.04
64	114	7.35e5	0.19	0.01
65	115	6.80e6	1.79	0.10
66	116	3.08e6	0.81	0.04
67	117	2.66e7	7.00	0.38
68	118	3.03e7	7.96	0.43
69	119	1.33e8	34.98	1.89
70	120	2.54e7	6.68	0.36
71	121	1.26e8	33.54	1.82
72	122	1.45e8	38.04	2.06
73	123	1.24e8	32.63	1.77
74	124	2.87e7	7.55	0.41
75	125	3.54e6	0.93	0.05
76	126	6.87e5	0.18	0.01
77	127	2.70e6	0.71	0.04
78	128	3.92e6	1.03	0.06
79	129	6.38e6	1.68	0.09
80	130	1.29e7	3.40	0.18
81	131	5.67e7	14.91	0.81
82	132	7.46e7	19.61	1.06
83	133	1.65e8	43.33	2.35
84	134	5.99e7	15.74	0.85
85	135	1.10e8	28.87	1.56
86	136	3.68e7	9.68	0.52
87	137	3.11e7	8.18	0.44
88	138	2.78e8	73.08	3.96
89	139	5.55e7	14.59	0.79
90	140	5.02e6	1.32	0.07
91	141	1.65e6	0.43	0.02
92	142	1.29e6	0.34	0.02
93	143	4.35e6	1.14	0.06
94	144	1.64e7	4.32	0.23
95	145	4.00e7	10.51	0.57
96	146	3.35e7	8.80	0.48
97	147	5.86e7	15.40	0.83
98	148	4.52e7	11.89	0.64
99	149	3.92e7	10.31	0.56
100	150	4.64e7	12.18	0.66
101	151	6.77e7	17.80	0.96
102	152	5.56e6	1.46	0.08
103	153	1.65e6	0.43	0.02
104	154	1.08e6	0.28	0.02
105	155	1.16e6	0.30	0.02
106	156	3.48e6	0.92	0.05
107	157	1.23e7	3.23	0.17
108	158	9.41e6	2.47	0.13
109	159	1.94e7	5.10	0.28
110	160	9.62e6	2.53	0.14
111	161	2.00e7	5.25	0.28
112	162	1.62e7	4.25	0.23
113	163	2.56e7	6.73	0.36
114	164	3.90e6	1.03	0.06
115	165	4.21e6	1.11	0.06
116	166	1.38e6	0.36	0.02
117	167	2.52e6	0.66	0.04
118	168	1.90e6	0.50	0.03
119	169	7.63e6	2.00	0.11
120	170	6.61e6	1.74	0.09
121	171	1.71e7	4.49	0.24
122	172	3.21e7	8.45	0.46
123	173	3.88e7	10.20	0.55
124	174	1.70e7	4.47	0.24
125	175	1.84e7	4.83	0.26
126	176	4.00e6	1.05	0.06
127	177	2.38e7	6.25	0.34
128	178	1.62e7	4.26	0.23
129	179	1.49e7	3.91	0.21
130	180	8.26e6	2.17	0.12
131	181	2.75e6	0.72	0.04
132	182	1.02e7	2.67	0.14
133	183	1.13e7	2.97	0.16
134	184	7.43e6	1.95	0.11
135	185	4.03e7	10.60	0.57
136	186	1.51e7	3.97	0.22
137	187	8.72e6	2.29	0.12
138	188	6.41e6	1.69	0.09
139	189	7.88e6	2.07	0.11
140	190	1.81e6	0.48	0.03
141	191	7.89e5	0.21	0.01
142	192	8.57e6	2.25	0.12
143	193	5.10e7	13.41	0.73
144	194	6.74e6	1.77	0.10
145	195	1.18e7	3.11	0.17
146	196	3.52e6	0.93	0.05
147	197	9.23e6	2.42	0.13
148	198	5.44e6	1.43	0.08
149	199	1.95e7	5.12	0.28
150	200	4.93e6	1.30	0.07
151	201	8.21e6	2.16	0.12
152	202	2.66e6	0.70	0.04
153	203	2.01e6	0.53	0.03
154	204	9.93e5	0.26	0.01
155	205	1.27e6	0.33	0.02
156	206	6.25e5	0.16	0.01
157	207	9.70e5	0.26	0.01
158	208	1.11e6	0.29	0.02
159	209	6.81e6	1.79	0.10
160	210	2.87e6	0.75	0.04
161	211	1.24e7	3.26	0.18
162	212	6.58e6	1.73	0.09
163	213	7.21e6	1.90	0.10
164	214	2.42e6	0.64	0.03
165	215	4.81e6	1.27	0.07
166	216	2.89e6	0.76	0.04
167	217	1.83e6	0.48	0.03
168	219	6.57e5	0.17	0.01
169	219	1.06e6	0.28	0.02
170	220	9.32e5	0.24	0.01
171	221	2.54e6	0.67	0.04
172	222	2.01e6	0.53	0.03
173	223	6.07e6	1.59	0.09
174	224	2.84e6	0.75	0.04
175	225	1.73e7	4.56	0.25
176	226	5.18e6	1.36	0.07
177	227	1.26e7	3.31	0.18
178	228	2.51e6	0.66	0.04
179	229	3.74e6	0.98	0.05
180	230	2.47e6	0.65	0.04
181	231	9.97e5	0.26	0.01
182	233	1.01e6	0.27	0.01
183	234	6.70e5	0.18	0.01
184	235	1.09e7	2.88	0.16
185	236	1.78e6	0.47	0.03
186	237	1.15e7	3.02	0.16
187	238	6.61e6	1.74	0.09
188	239	1.90e7	4.99	0.27
189	240	5.41e6	1.42	0.08
190	241	1.28e7	3.37	0.18
191	242	3.06e6	0.80	0.04
192	243	6.13e6	1.61	0.09
193	244	1.32e6	0.35	0.02
194	245	8.11e5	0.21	0.01
195	247	1.79e6	0.47	0.03
196	248	5.62e5	0.15	0.01
197	251	2.81e6	0.74	0.04
198	252	1.01e6	0.27	0.01
199	253	7.46e6	1.96	0.11
200	254	1.07e6	0.28	0.02
201	255	8.89e6	2.34	0.13
202	256	1.88e6	0.49	0.03
203	257	4.96e6	1.30	0.07
204	258	2.24e6	0.59	0.03
205	259	7.36e5	0.19	0.01
206	260	4.27e5	0.11	0.01
207	261	4.49e6	1.18	0.06
208	262	5.60e5	0.15	0.01
209	263	6.51e6	1.71	0.09
210	264	1.30e6	0.34	0.02
211	265	5.13e6	1.35	0.07
212	266	2.30e6	0.60	0.03
213	267	8.32e5	0.22	0.01
214	268	2.15e6	0.57	0.03
215	269	4.10e6	1.08	0.06
216	270	1.66e6	0.44	0.02
217	271	8.03e5	0.21	0.01
218	273	4.34e6	1.14	0.06
219	274	7.26e5	0.19	0.01
220	275	6.23e5	0.16	0.01
221	279	2.13e6	0.56	0.03
222	280	1.20e6	0.32	0.02
223	281	7.35e7	19.32	1.05
224	282	1.29e7	3.38	0.18
225	283	4.69e6	1.23	0.07
226	284	9.92e5	0.26	0.01
227	285	1.10e6	0.29	0.02
228	286	2.17e6	0.57	0.03
229	287	6.57e5	0.17	0.01
230	297	4.48e6	1.18	0.06
231	298	1.14e7	2.99	0.16
232	299	4.11e6	1.08	0.06
233	300	5.46e5	0.14	0.01
234	301	4.90e6	1.29	0.07
235	302	7.58e5	0.20	0.01
236	316	5.38e6	1.41	0.08
237	317	9.07e5	0.24	0.01