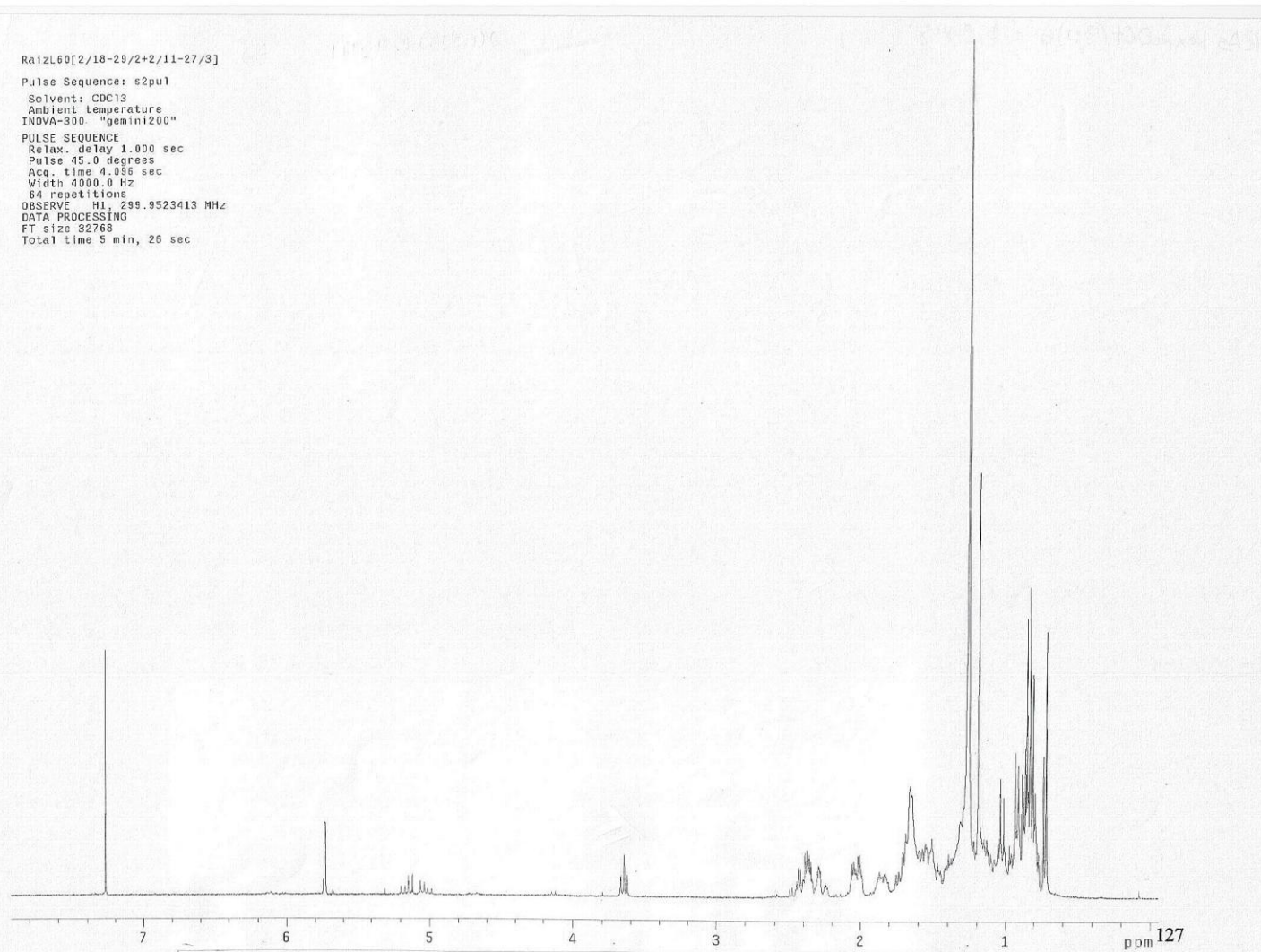
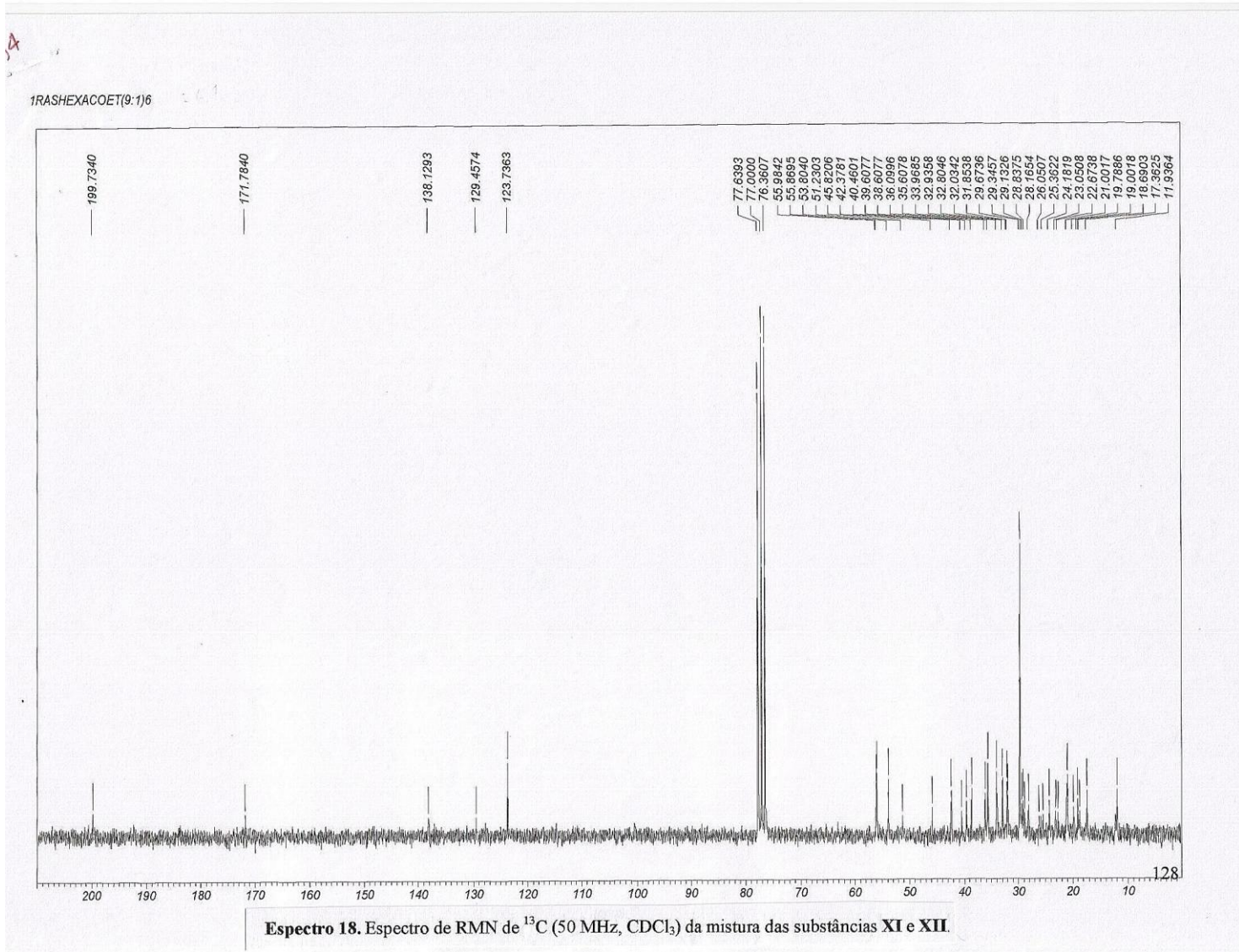


RaizL60[2/18-29/2+2/11-27/3]
Pulse Sequence: s2pu1
Solvent: CDCl3
Ambient temperature
INOVA-300 "gemin200"
PULSE SEQUENCE
Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 4.095 sec
Width 4000.0 Hz
64 repetitions
OBSERVE H1, 299.9523413 MHz
DATA PROCESSING
FT size 32768
Total time 5 min, 26 sec



Espectro 17. Espectro de RMN de ^1H (200 MHz, CDCl_3) da mistura das substâncias **XI** e **XII**.



Espectro 18. Espectro de RMN de ^{13}C (50 MHz, CDCl_3) da mistura das substâncias **XI** e **XII**.

1de76-81

Pulse Sequence: s2pu1

Solvent: CDCl₃

Ambient temperature

INOVA-300 "inova1"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 4.095 sec

Width 4000.0 Hz

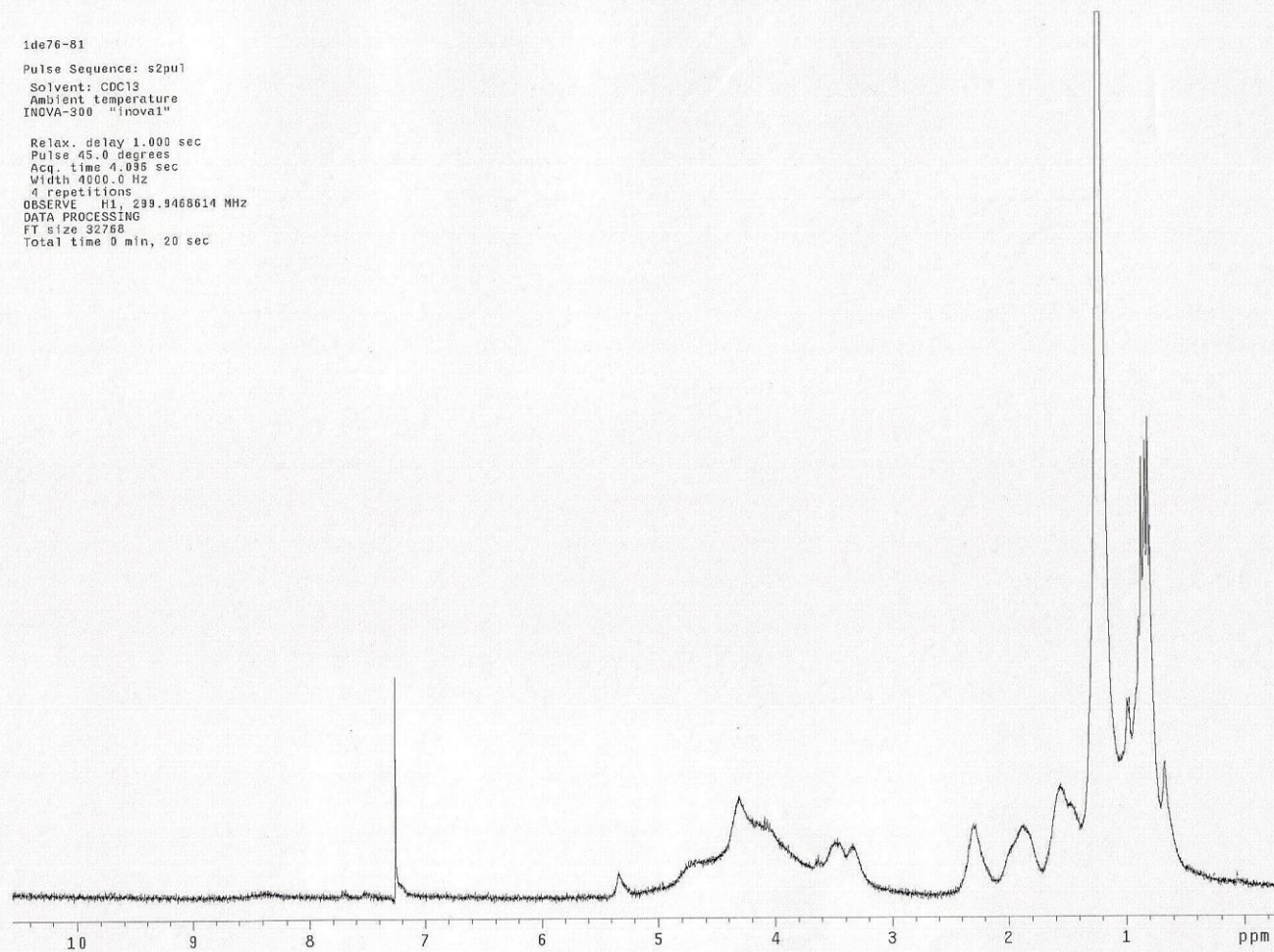
4 repetitions

OBSERVE H1, 299.9468614 MHz

DATA PROCESSING

FT size 32768

Total time 0 min, 20 sec



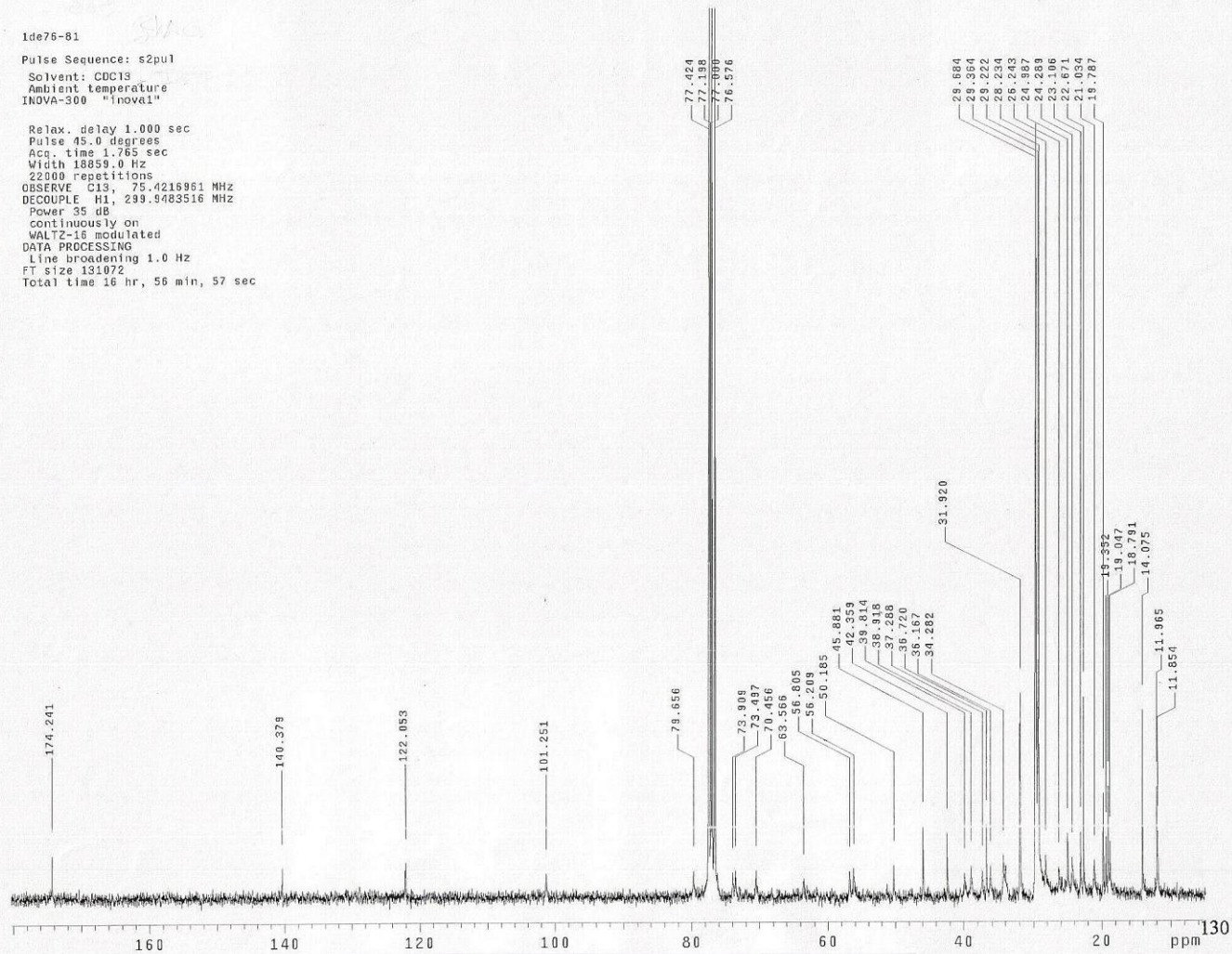
Espectro 19. Espectro de RMN de ¹H (300 MHz, CDCl₃) da substância **XIII**.

1de76-81

Pulse Sequence: s2pu1

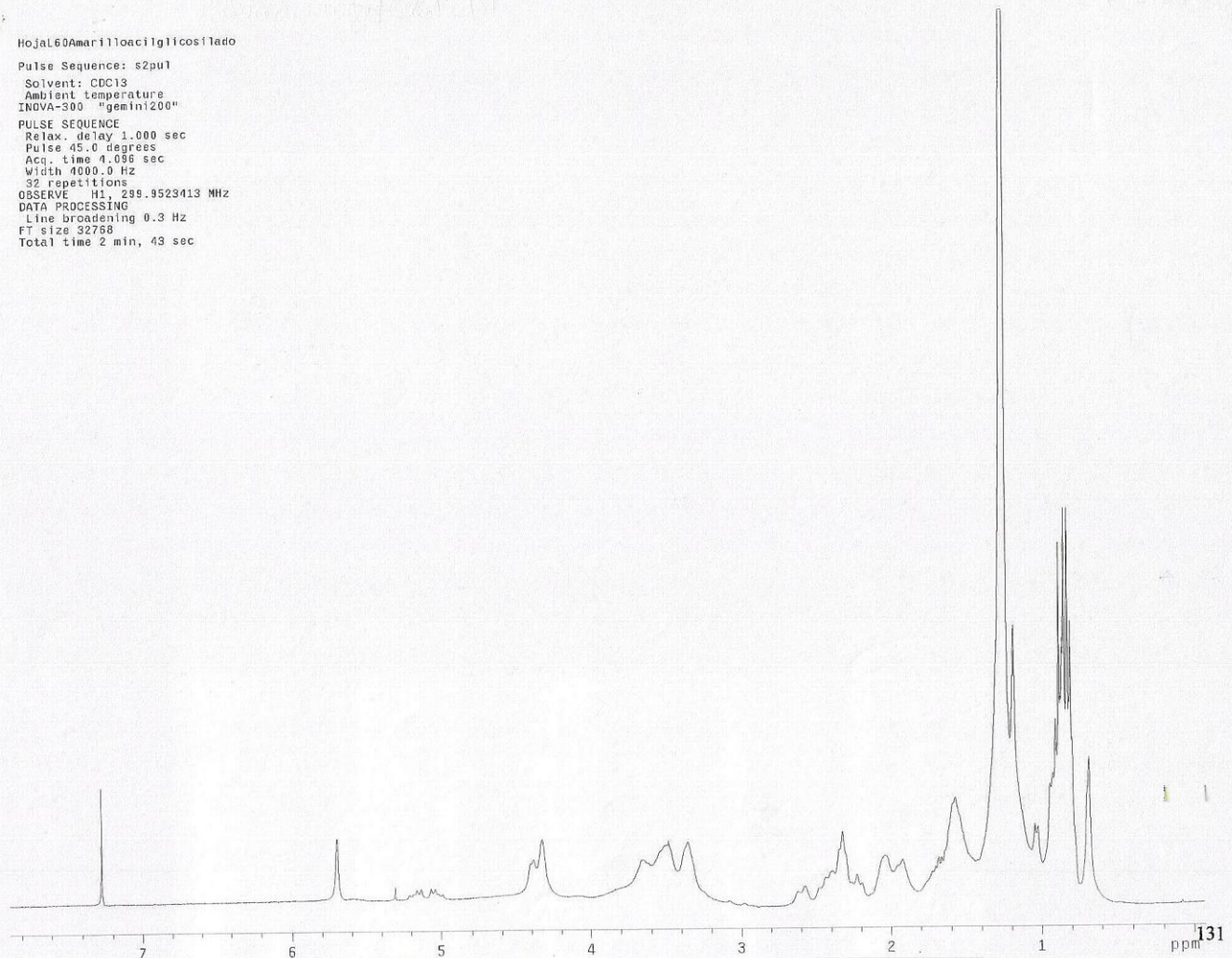
Solvent: CDCl₃
Ambient temperature
INOVA-300 "inova1"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.765 sec
Width 18859.0 Hz
22000 repetitions
OBSERVE C13, 75.4215961 MHz
DECOUPLE H1, 299.9483516 MHz
Power 35 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 131072
Total time 16 hr, 56 min, 57 sec



Espectro 20. Espectro de RMN de ¹³C (75 MHz, CDCl₃) da substância XIII.

Hoja160Amarilloacilglicosilado
Pulse Sequence: s2pu1
Solvent: CDCl3
Ambient temperature
INOVA-300 "gemin200"
PULSE SEQUENCE
Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 4.096 sec
Width 4000.0 Hz
32 repetitions
OBSERVE H1, 299.9523413 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 32768
Total time 2 min, 43 sec



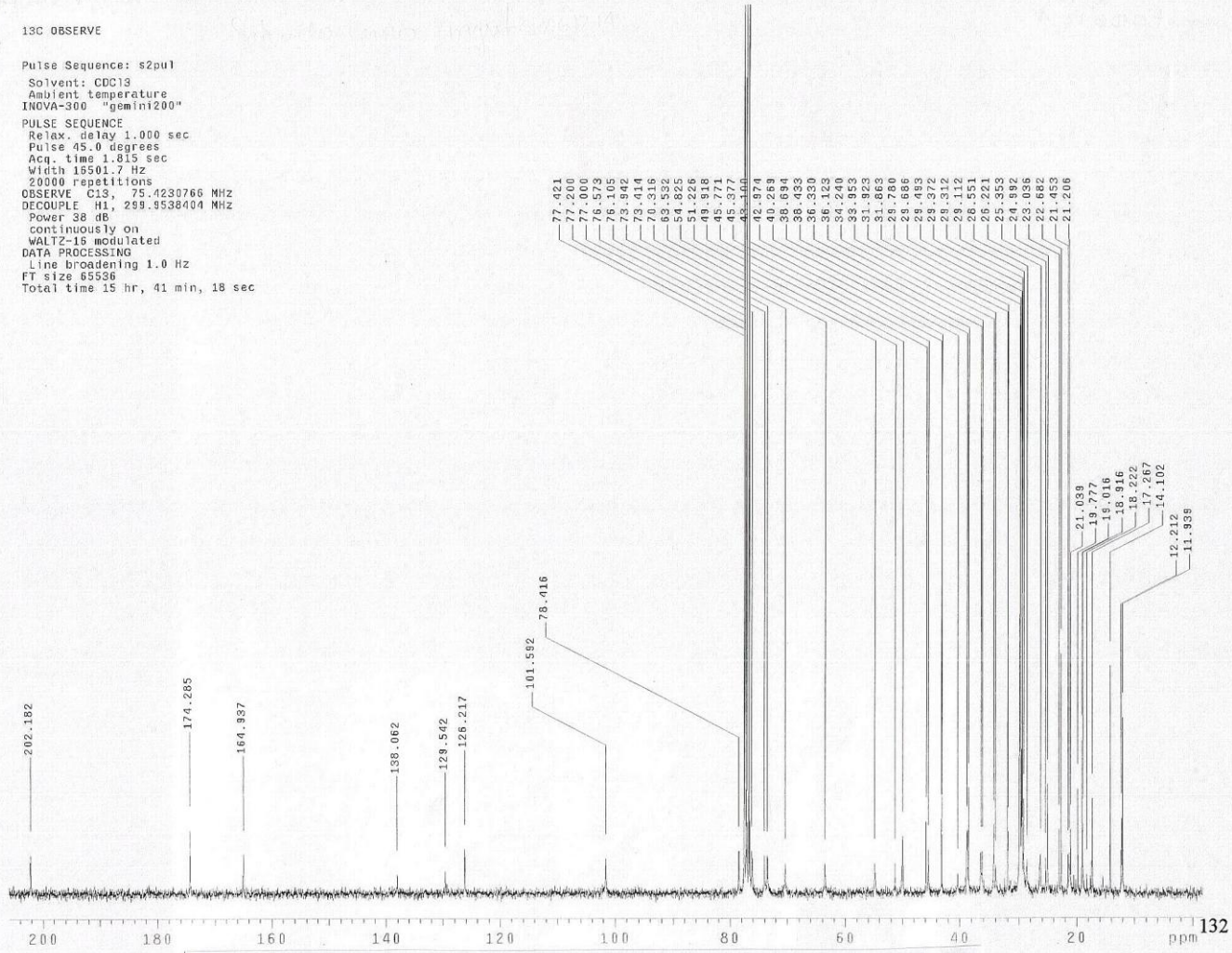
Espectro 21. Espectro de RMN de ^1H (300 MHz, CDCl_3) da mistura das substâncias **XIV** e **XV**.

13C OBSERVE

Pulse Sequence: s2pu1
Solvent: CDCl3
Ambient temperature
INOVA-300 "gemin200"

PULSE SEQUENCE

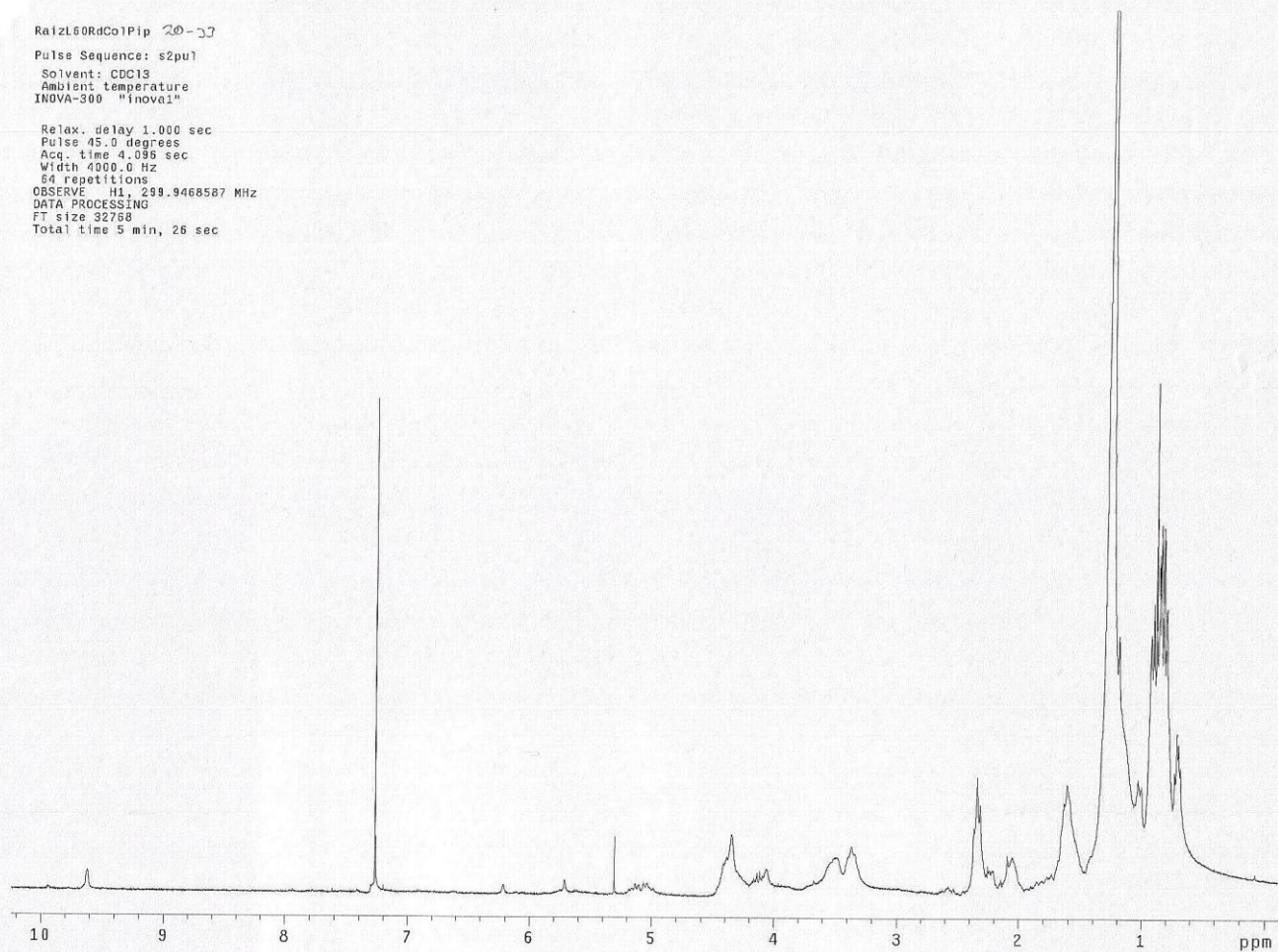
Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.815 sec
Width 16501.7 Hz
20000 repetitions
OBSERVE C13, 75.4230766 MHz
DECOUPLE H1, 259.9538404 MHz
Power 38 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 15 hr, 41 min, 18 sec



Espectro 22. Espectro de RMN de ¹³C (75 MHz, CDCl₃) da mistura das substâncias XIV e XV.

RaizL60RdCo1Pip 20-27
Pulse Sequence: s2pu1
Solvent: CDCl3
Ambient temperature
INOVA-300 "inova1"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 4.096 sec
Width 4000.0 Hz
64 repetitions
OBSERVE H1, 299.9468587 MHz
DATA PROCESSING
FT size 32768
Total time 5 min, 26 sec

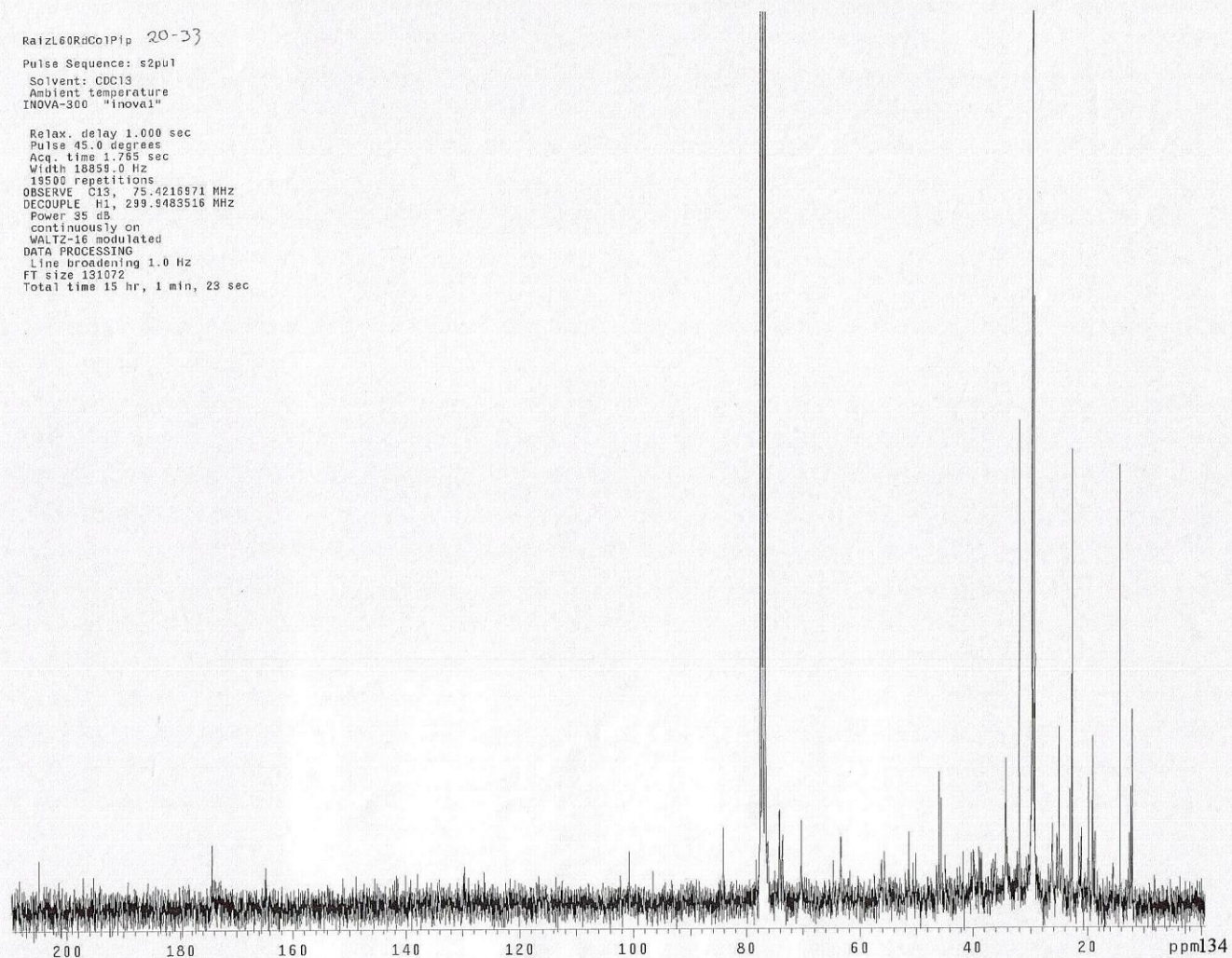


Espectro 23. Espectro de RMN de ^1H (300 MHz, CDCl_3) da substância XVI.

RaizL60RdCo1Pip 20-33

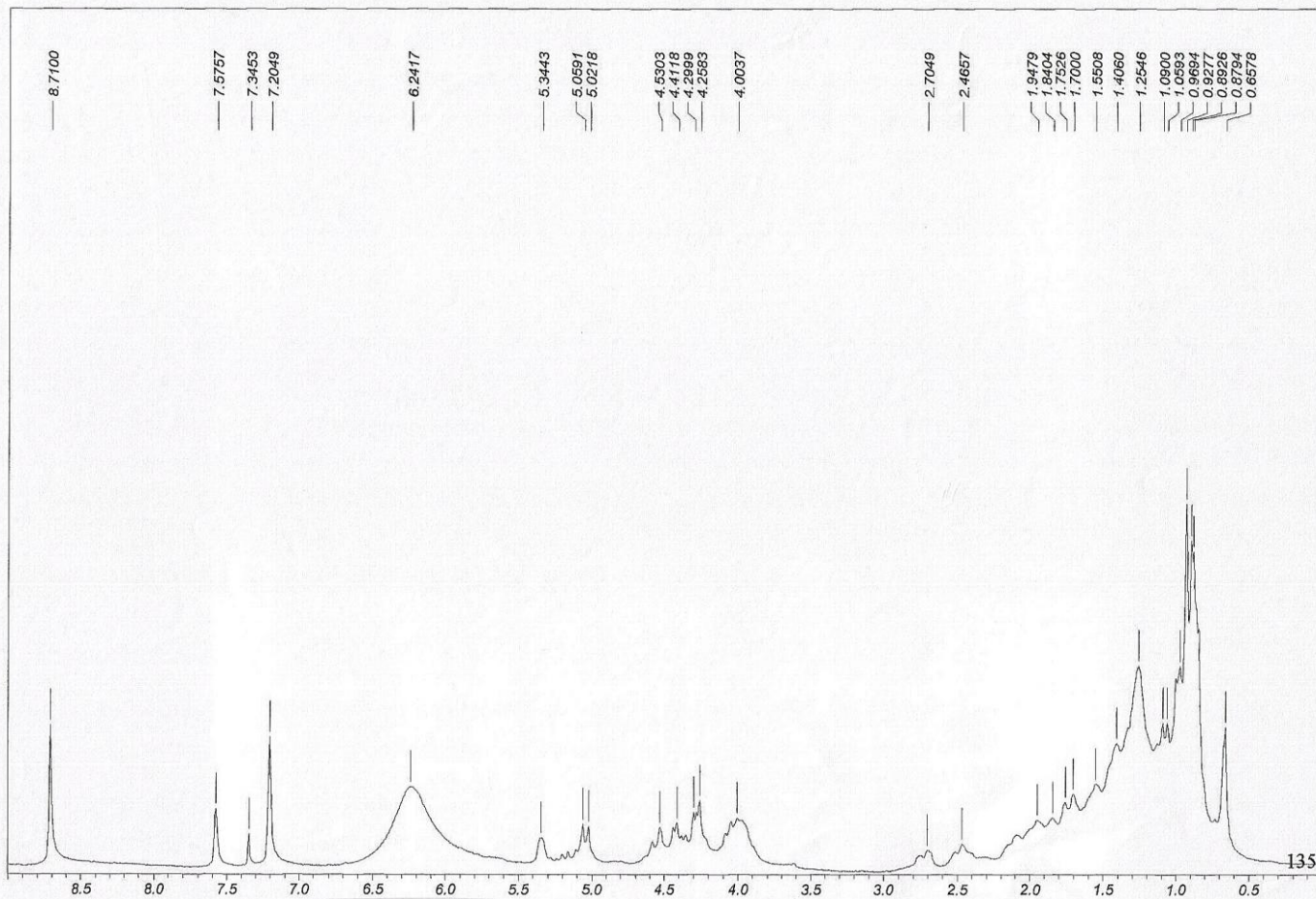
Pulse Sequence: s2pu1
Solvent: CDCl3
Ambient temperature
INNOVA-300 "inova1"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.785 sec
Width 18859.0 Hz
19500 repetitions
OBSERVE C13, 75.4216971 MHz
DECOUPLE H1, 299.9483516 MHz
Power 35 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 131072
Total time 15 hr, 1 min, 23 sec



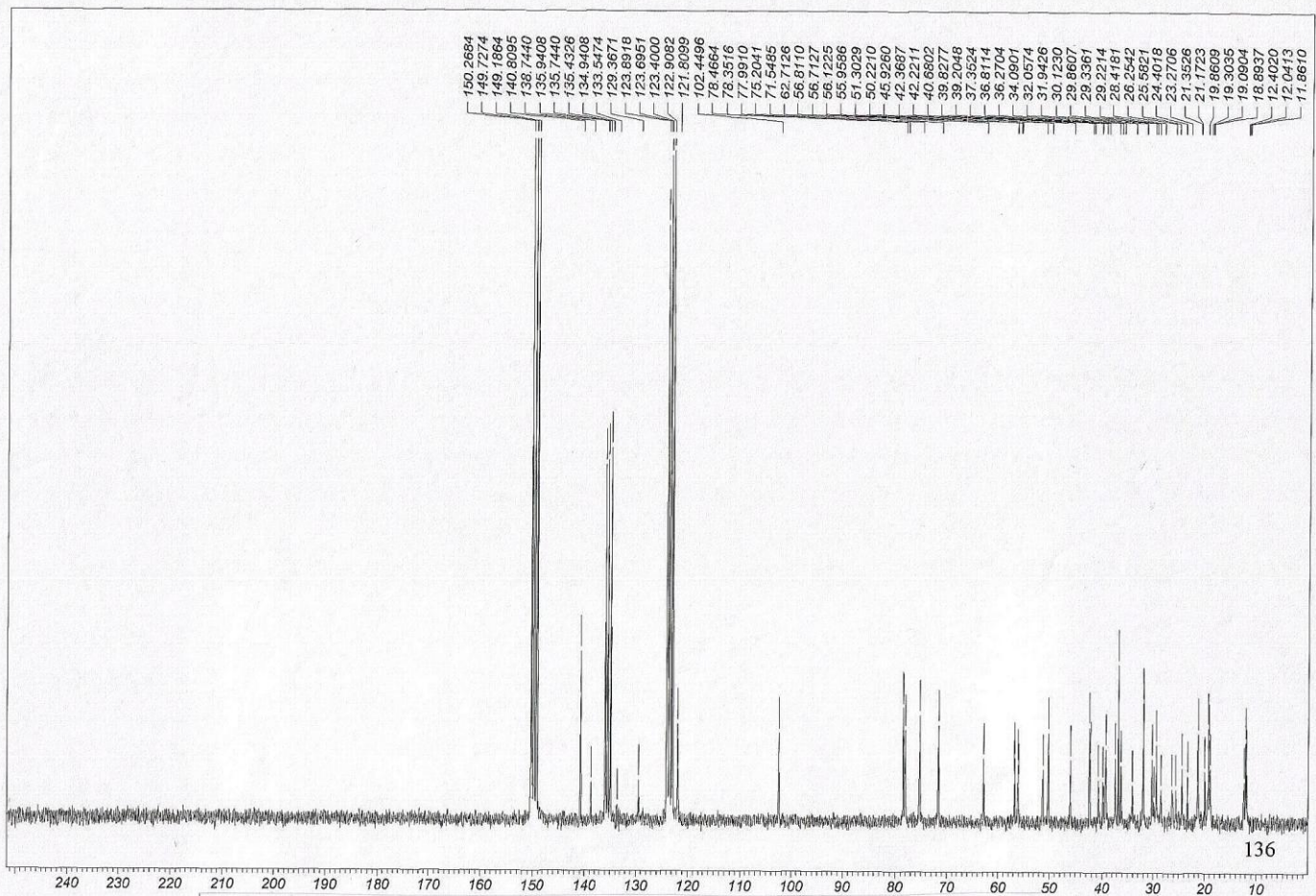
Espectro 24. Espectro de RMN de ^{13}C (75 MHz, CDCl_3) da substância XVI.

HOJAL60ACILGLICOSILADO82-3/17)



Espectro 25. Espectro de RMN de ^1H (200 MHz, $\text{C}_5\text{D}_5\text{N}$) da mistura das substâncias XVII e XVIII

HOJAL60(1/118)INDSOLUBLEP)

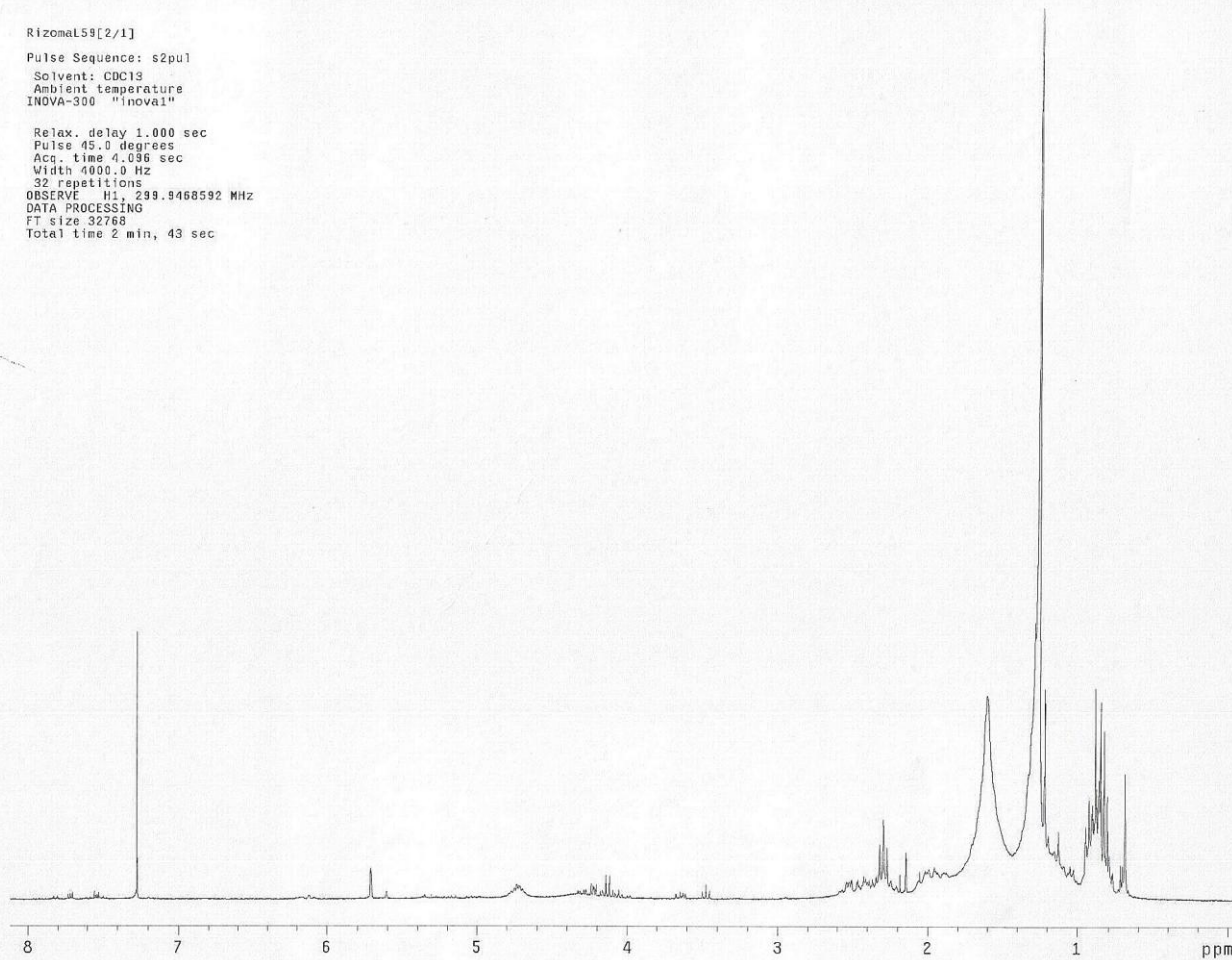


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Espectro 26. Espectro de RMN de ^{13}C (75 MHz, $\text{C}_5\text{D}_5\text{N}$) da mistura das substâncias XVII e XVIII

RizomaL59[2/1]
Pulse Sequence: s2pu1
Solvent: CDCl3
Ambient temperature
INOVA-300 "Inova1"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 4.036 sec
Width 4000.0 Hz
32 repetitions
OBSERVE H1, 299.9468592 MHz
DATA PROCESSING
FT size 32768
Total time 2 min, 43 sec

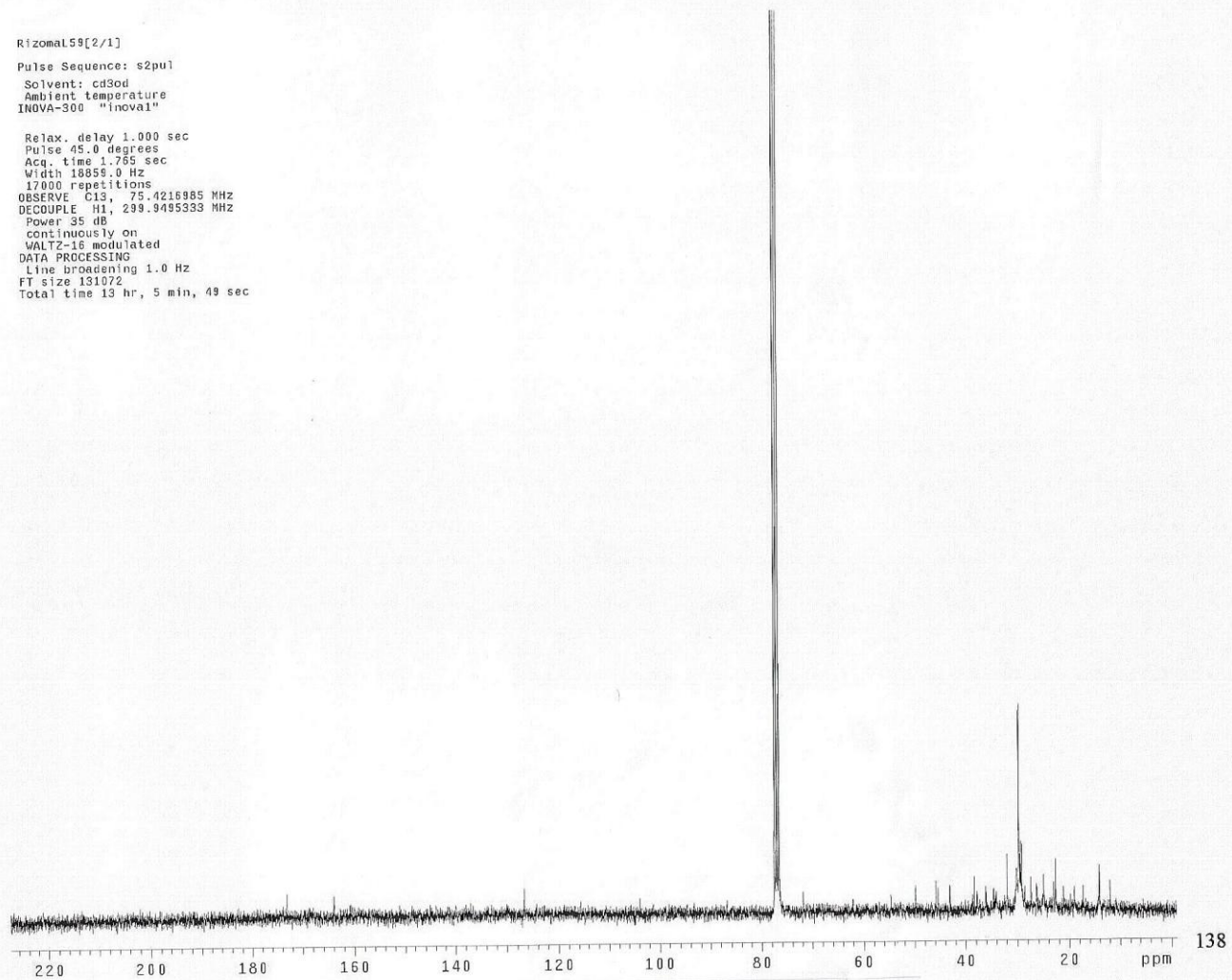


Espectro 27. Espectro de RMN de ^1H (300 MHz, CDCl_3) da substância XIX.

RizomaL59[2/1]

Pulse Sequence: s2pu1
Solvent: cd3od
Ambient temperature
INOVA-300 "inova1"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.755 sec
Width 18855.0 Hz
17000 repetitions
OBSERVE C13, 75.4216885 MHz
DECOUPLE H1, 299.9495333 MHz
Power 35 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 131072
Total time 13 hr, 5 min, 49 sec



Espectro 28. Espectro de RMN de ^{13}C (75 MHz, CDCl_3) da substância XIX.