

Supporting Information for

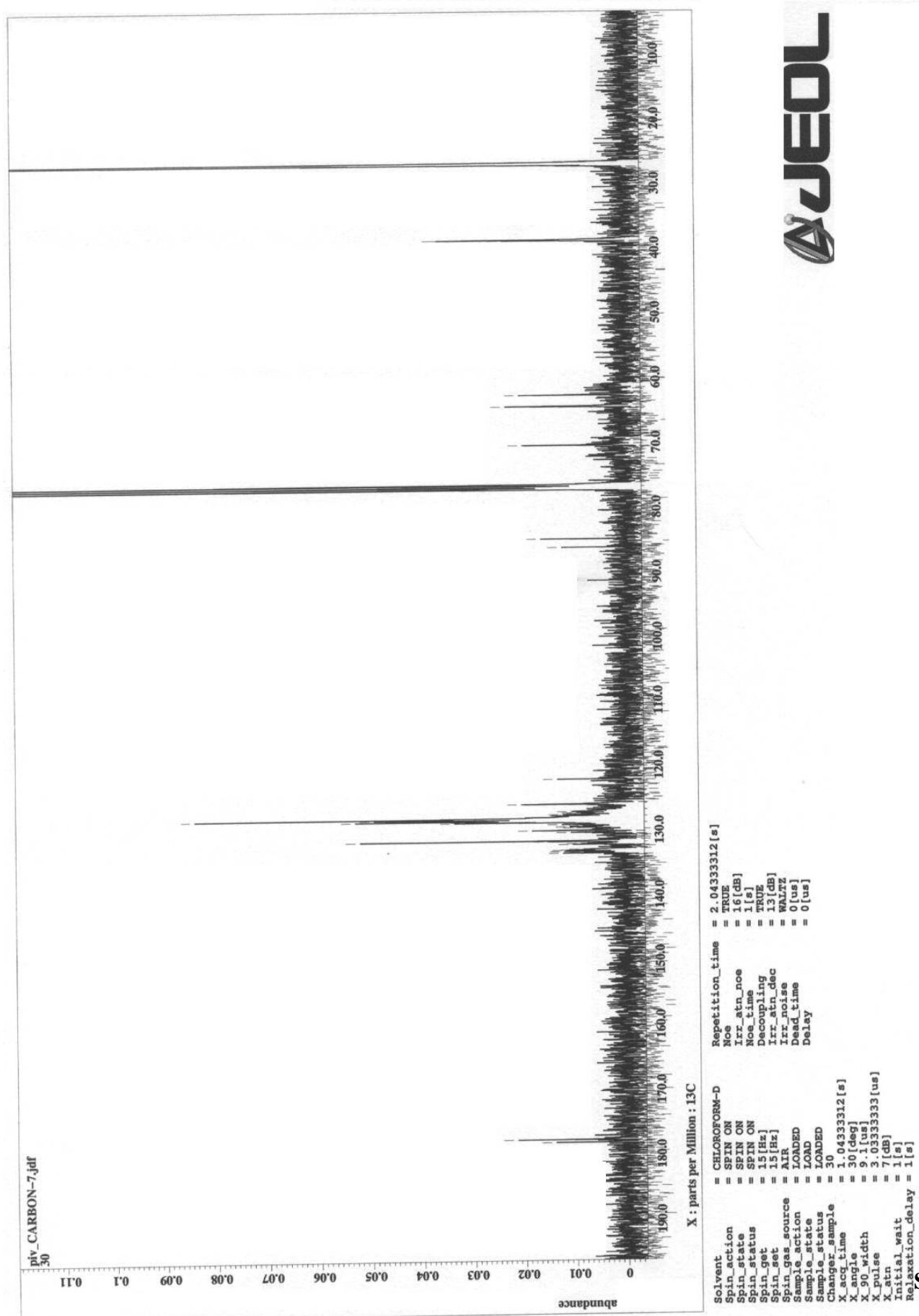
Ferrier Type Alkynylation Reaction mediated by Indium

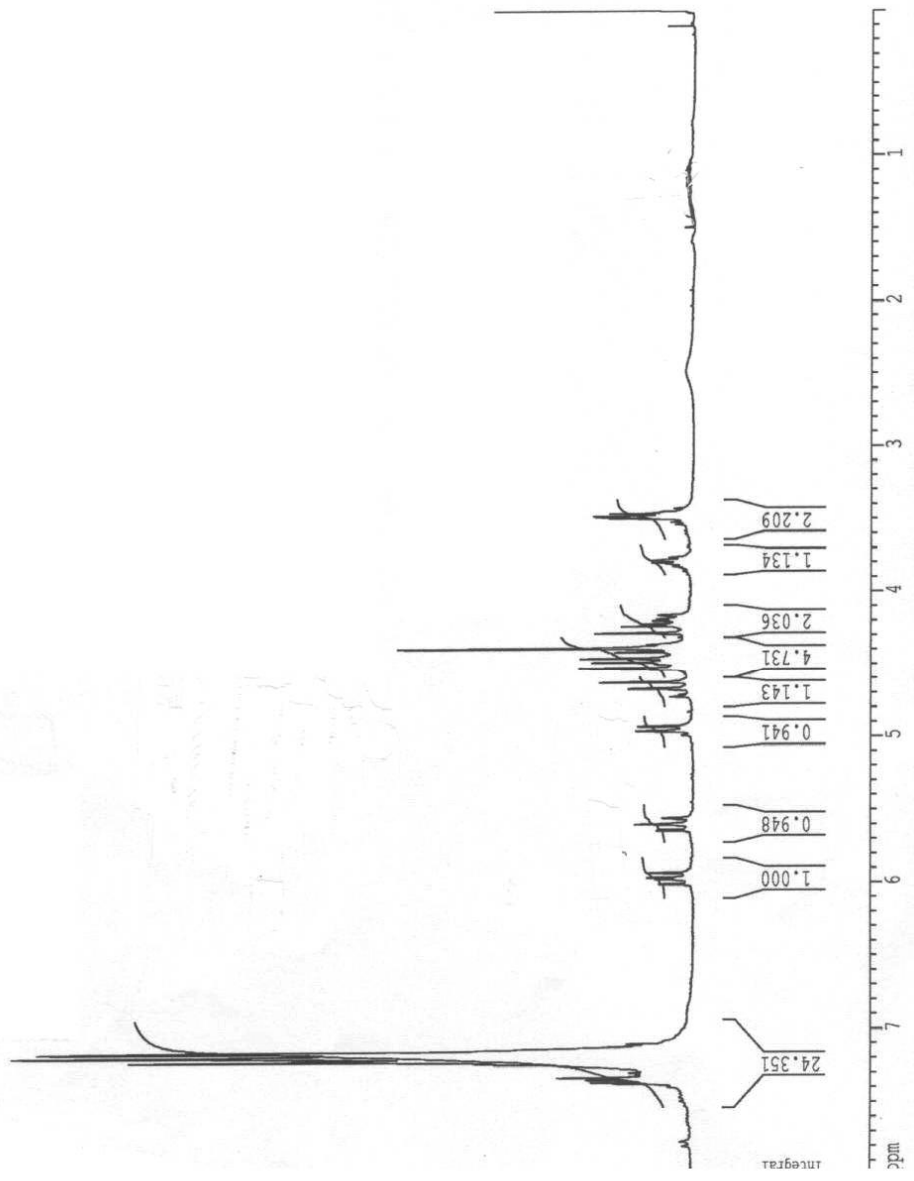
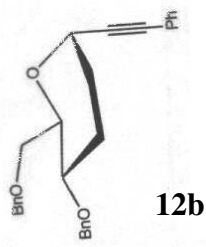
Nadège Lubin-Germain, Agnès Hallonet, Florent Huguenot, Sara Palmier, Jacques Uziel and Jacques Augé

*Laboratoire de Synthèse Organique Sélective et Chimie Organométallique,
UMR 8123 CNRS-UCP-ESCOM, Université de Cergy-Pontoise, 5 mail
Gay-Lussac, 95031 Cergy-Pontoise cedex, France*

Corresponding authors :
nadege.lubin-germain@u-cergy.fr

Section D : ^1H and ^{13}C NMR Spectra





Current Data Parameters
NAME nlg
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20050922
Time 10.22
INSTRUM spect
PROBHD 5 mm QNP 1H
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 5175.983 Hz
FIDRES 0.078979 Hz
AQ 6.3308277 sec
RG 101.6
DM 96.600 usec
DE 6.50 usec
TE 300.0 K
D1 1.0000000 sec

CHANNEL f1
NUC1 1H
P1 13.50 usec
PL1 -6.00 dB
SFO1 250.1315447 MHz

F2 - Processing parameters
SI 32768
SF 250.1300467 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 20.00 cm
FLP 8.000 ppm
F1 2001.04 Hz
F2 0.000 ppm
F2 0.00 Hz
PPMCM 0.40000 ppm/cm
HZCM 100.05202 Hz/cm

Current Data Parameters
NAME nlg
EXPNO 11
PROCNO 1

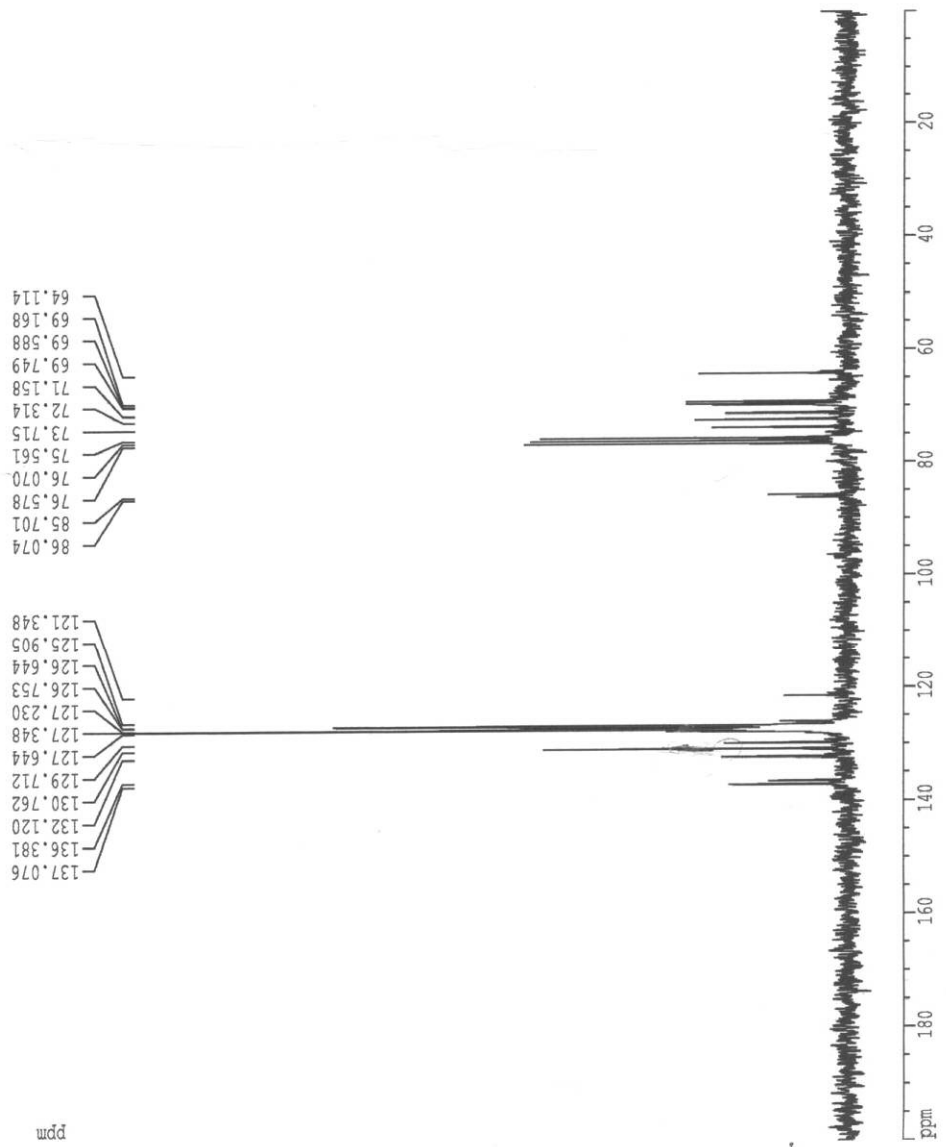
F2 - Acquisition Parameters
Date_ 20050922
Time 10.29
INSTRUM spect
PROBHD 5 mm QNP 1H
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 128
DS 4
SWH 15723.271 Hz
FIDRES 0.239918 Hz
AQ 2.0840948 sec
RG 8192
DM 31.800 usec
DE 6.50 usec
TE 300.0 K
D1 1.00000000 sec
D11 0.03000000 sec
D12 0.00002000 sec

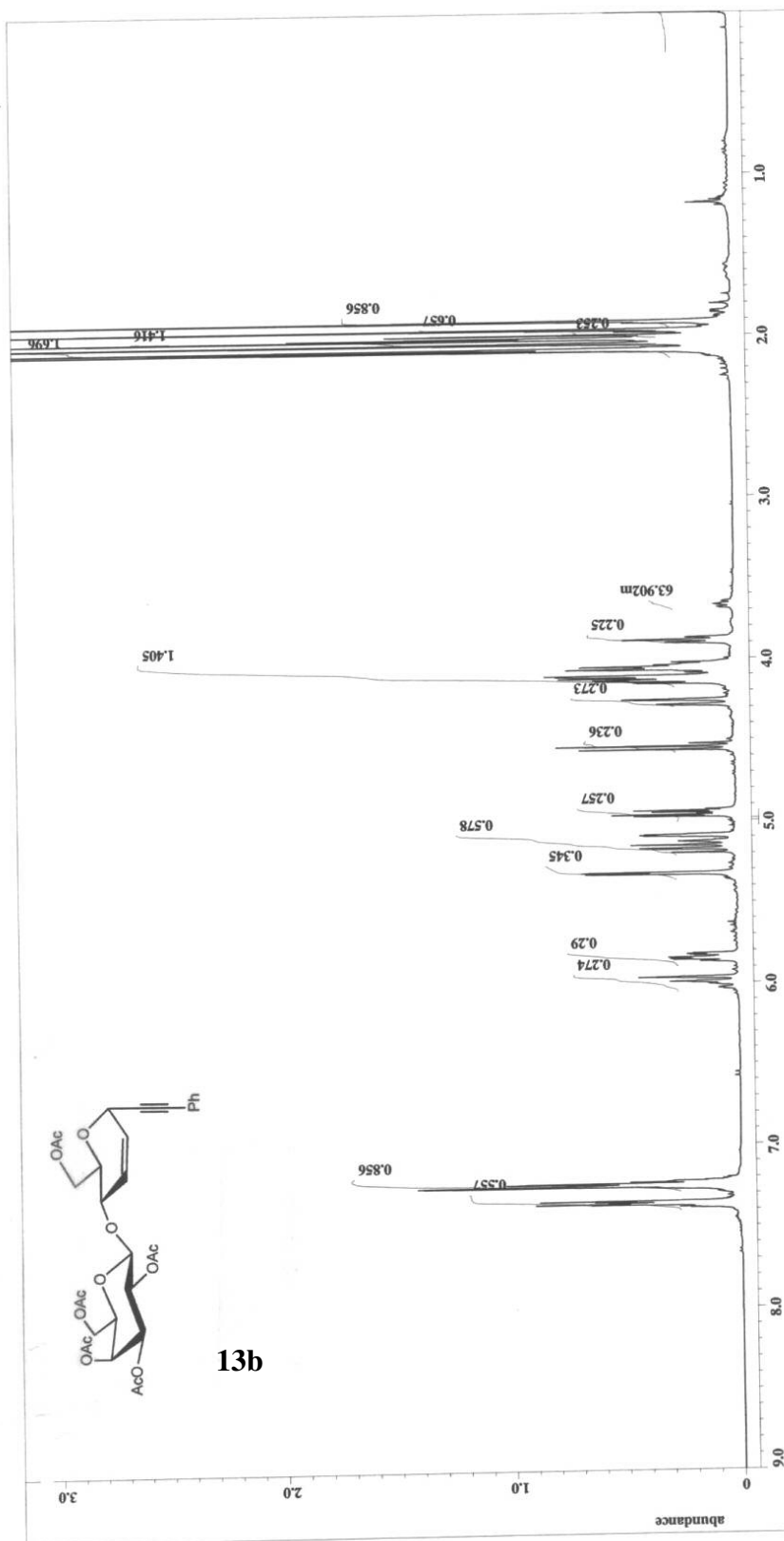
CHANNEL f1
NUC1 13C
P1 6.00 usec
PL1 -6.00 dB
SFO1 62.9021320 MHz

CHANNEL f2
CPDPRG2 waltz16
NUC2 1H
PCPD2 100.00 usec
PL2 -6.00 dB
PL12 15.00 dB
PL13 15.00 dB
SFO2 250.1310005 MHz

F2 - Processing parameters
SI 32768
SF 62.8953084 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.40

1D NMR plot parameters
CX 20.00 cm
FIP 200.000 ppm
F1 12579.06 Hz
F2 0.000 ppm
PP4CM 10.00000 ppm/cm
HZCM 628.95312 Hz/cm





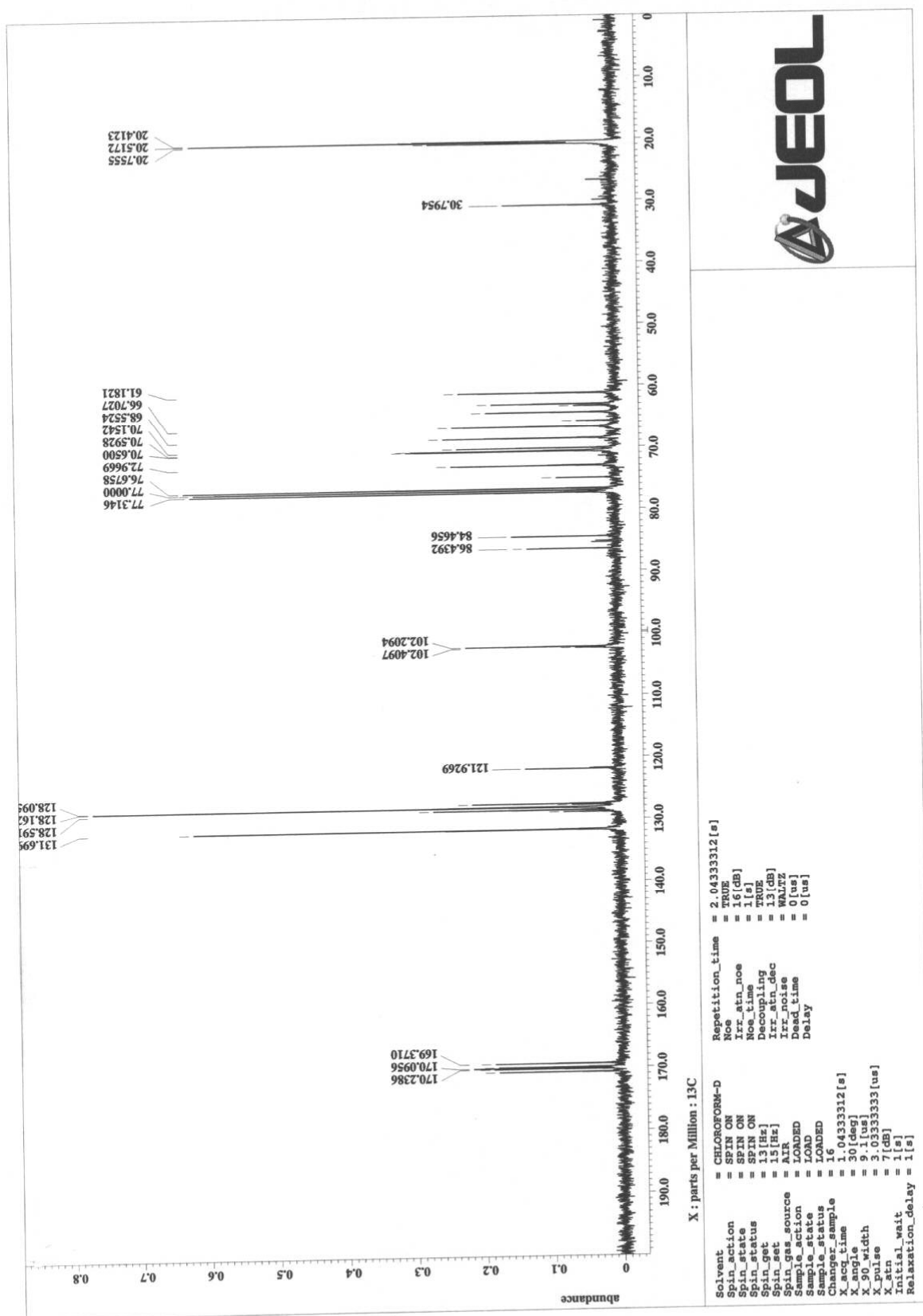
13b

X : parts per Million : 1H

Solvent = CHLOROFORM-D
 Spin_action = SPIN ON
 Spin_status = SPIN ON
 Spin_set = 14[Hz]
 Spin_source = AIR
 Sample_action = LOAD
 Sample_status = LOADED
 Sample_name = 13b
 X_angle = 45[deg]
 X_90_width = 9.7[us]
 X_atn = 1[dB]
 X_pulse = 4.85[us]
 Initial_wait = 1[s]
 Relaxation_delay = 1[s]

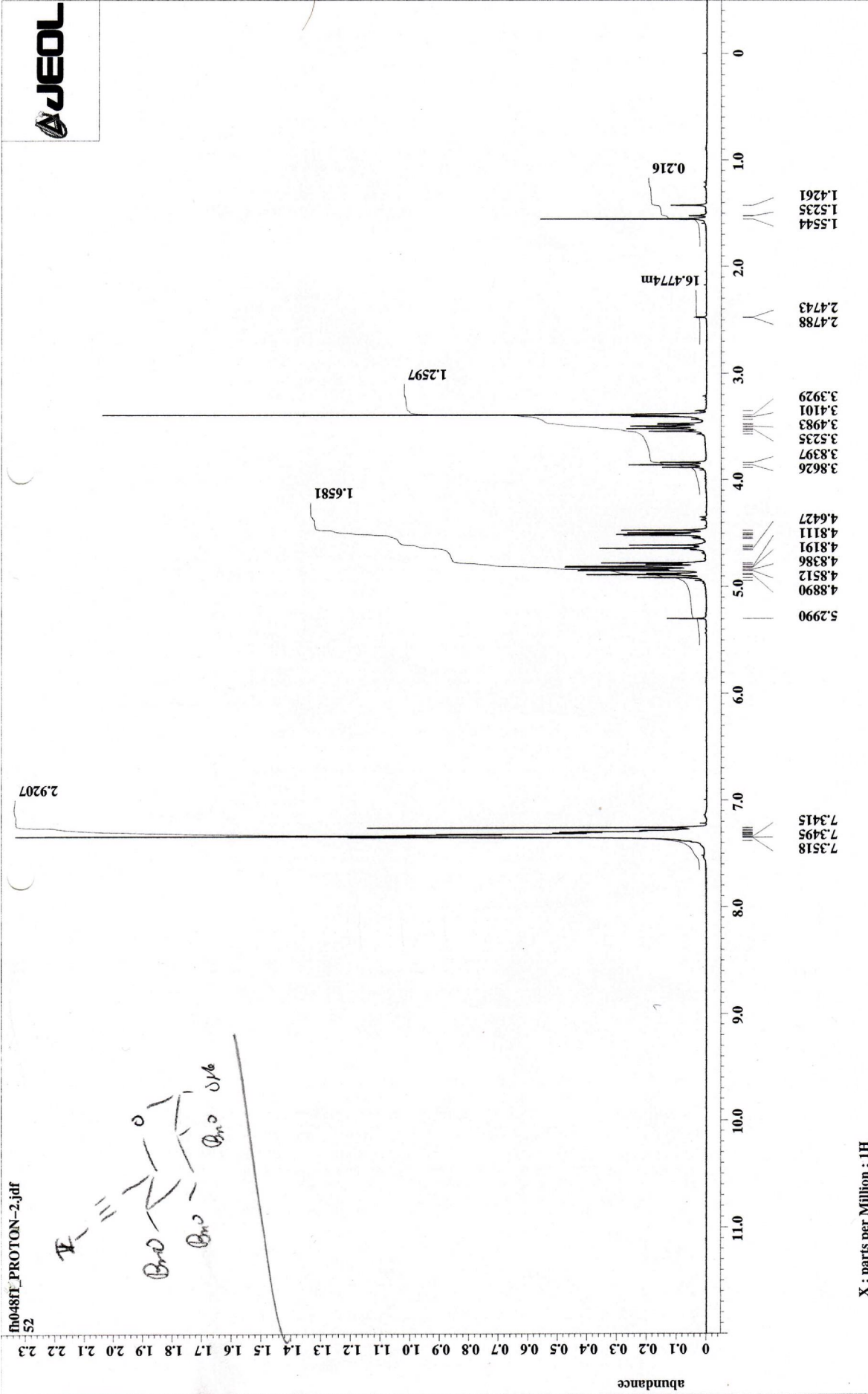
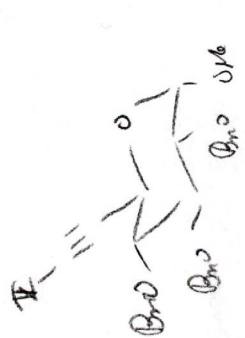
Repetition_time = 3.18365952[s]
 Data_preset = FALSE
 Irr_mode = Off
 Tri_mode = Off
 Dead_time = 0[us]
 Delay = 0[us]

JEOL



ft048ft_PROTON-2.jdf

52

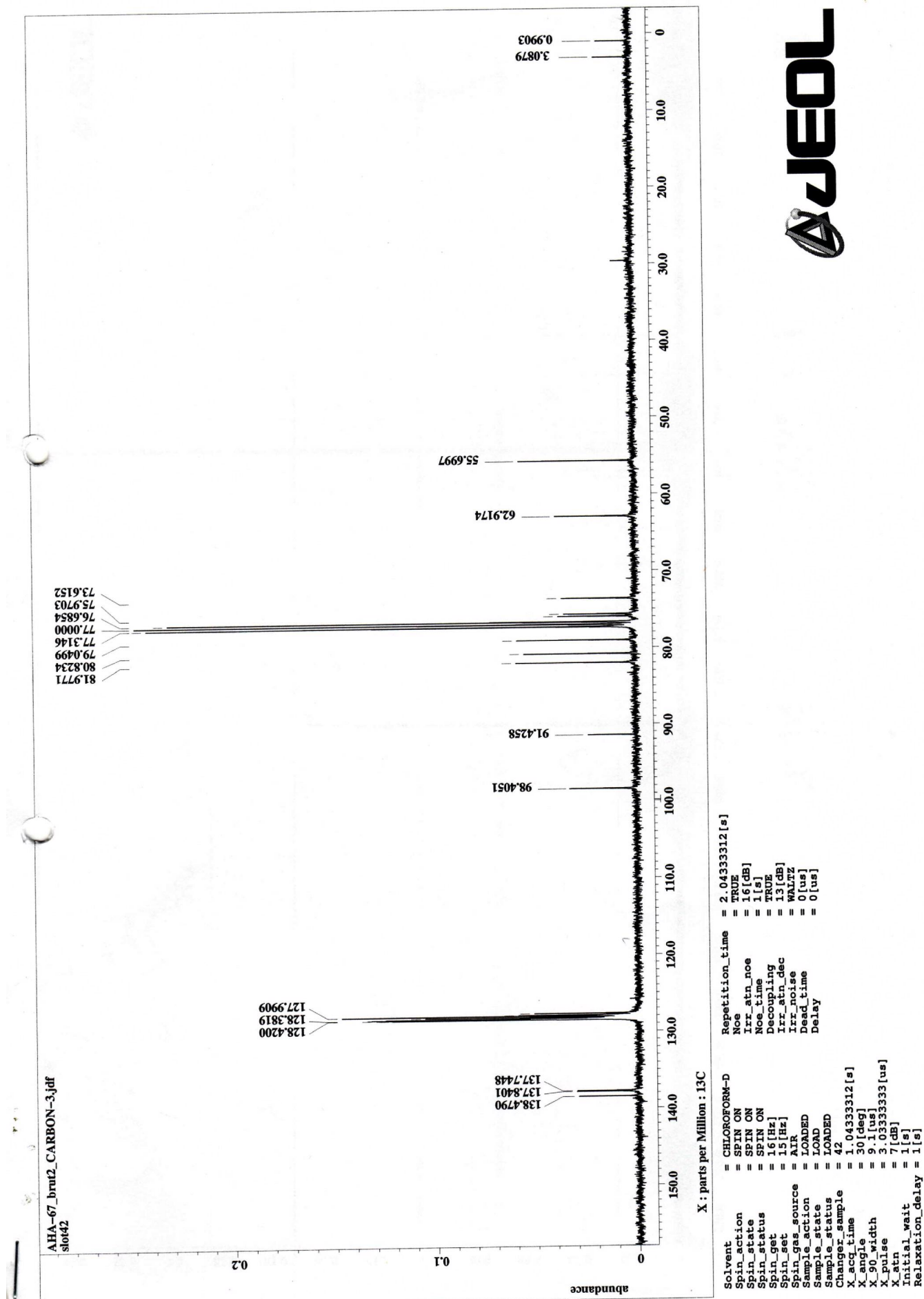


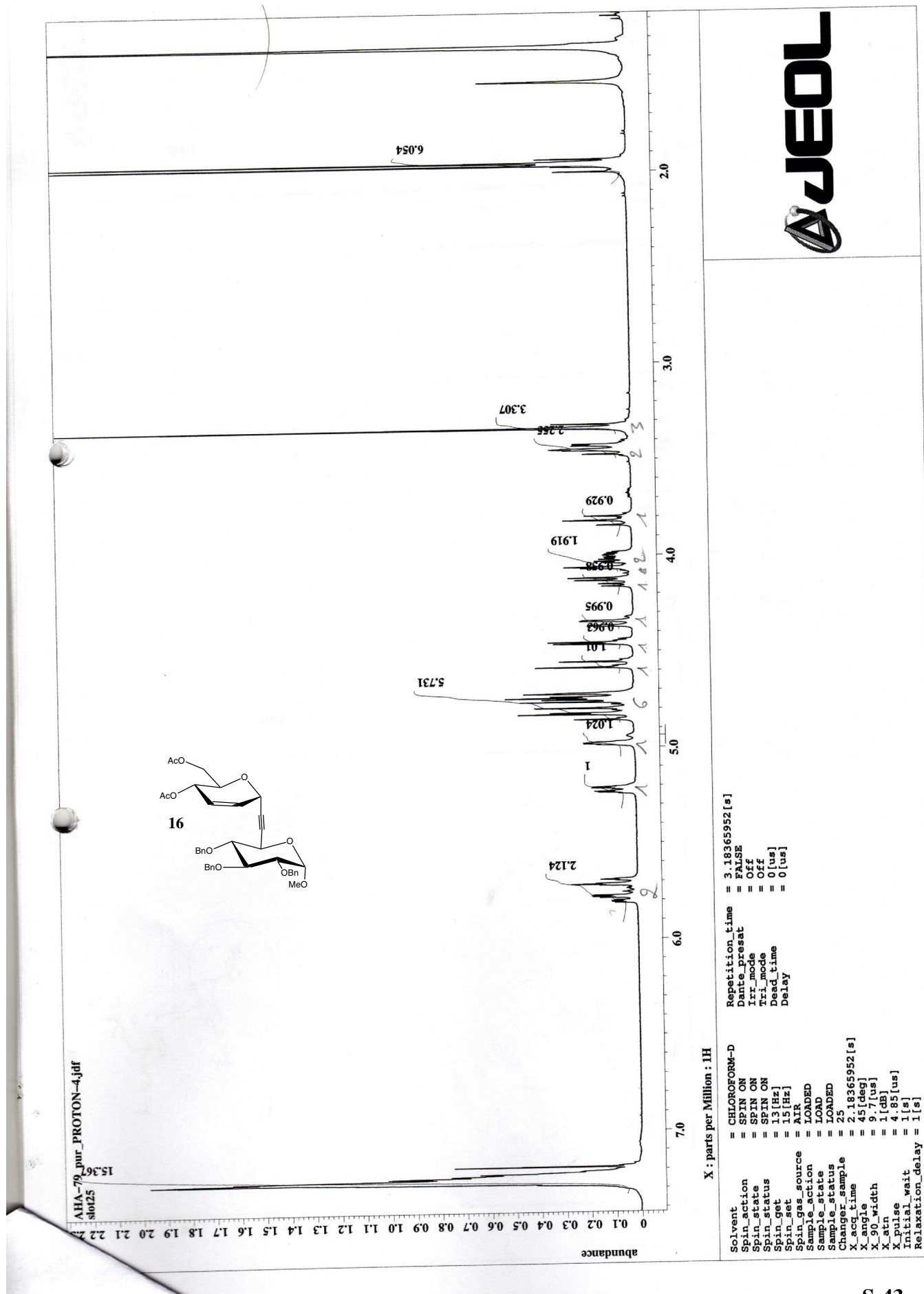
----- PROCESSING PARAMETERS -----
 1. dc_balance : 0 : FALSE
 2. exp_Auto : 0.5
 3. trapezoid3 : 0[%] : 80[%] : 100[%]
 4. fit : 1 : TRUE : TRUE
 5. machinephase

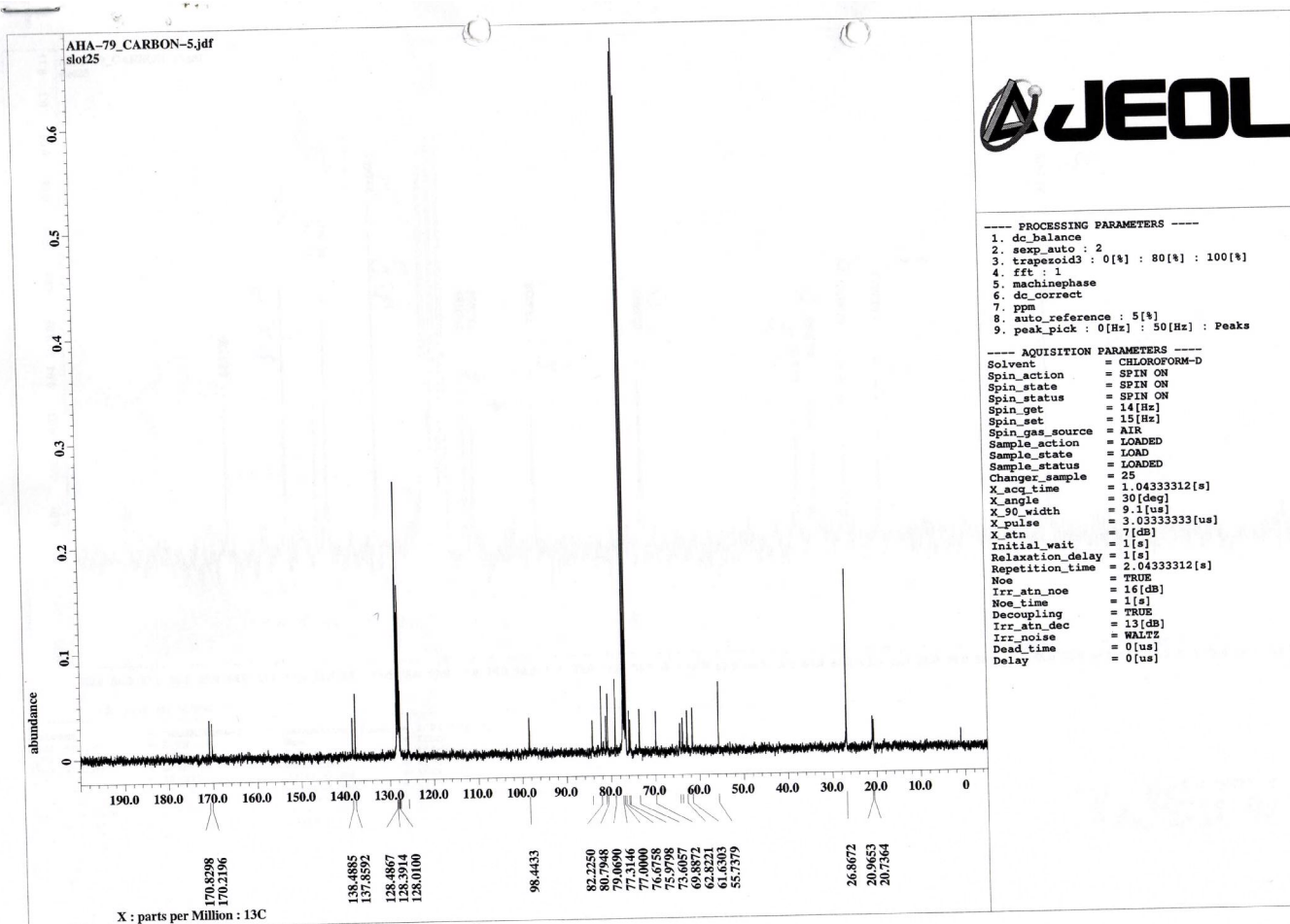
6. dc_correct : 0[%] : 100[%]
 7. ppm
 8. auto_reference : 5[%] : TRUE
 9. thresh : 1[%] : 1
 10. peak_pick : 0[Hz] : 0.5[ppm] : Both

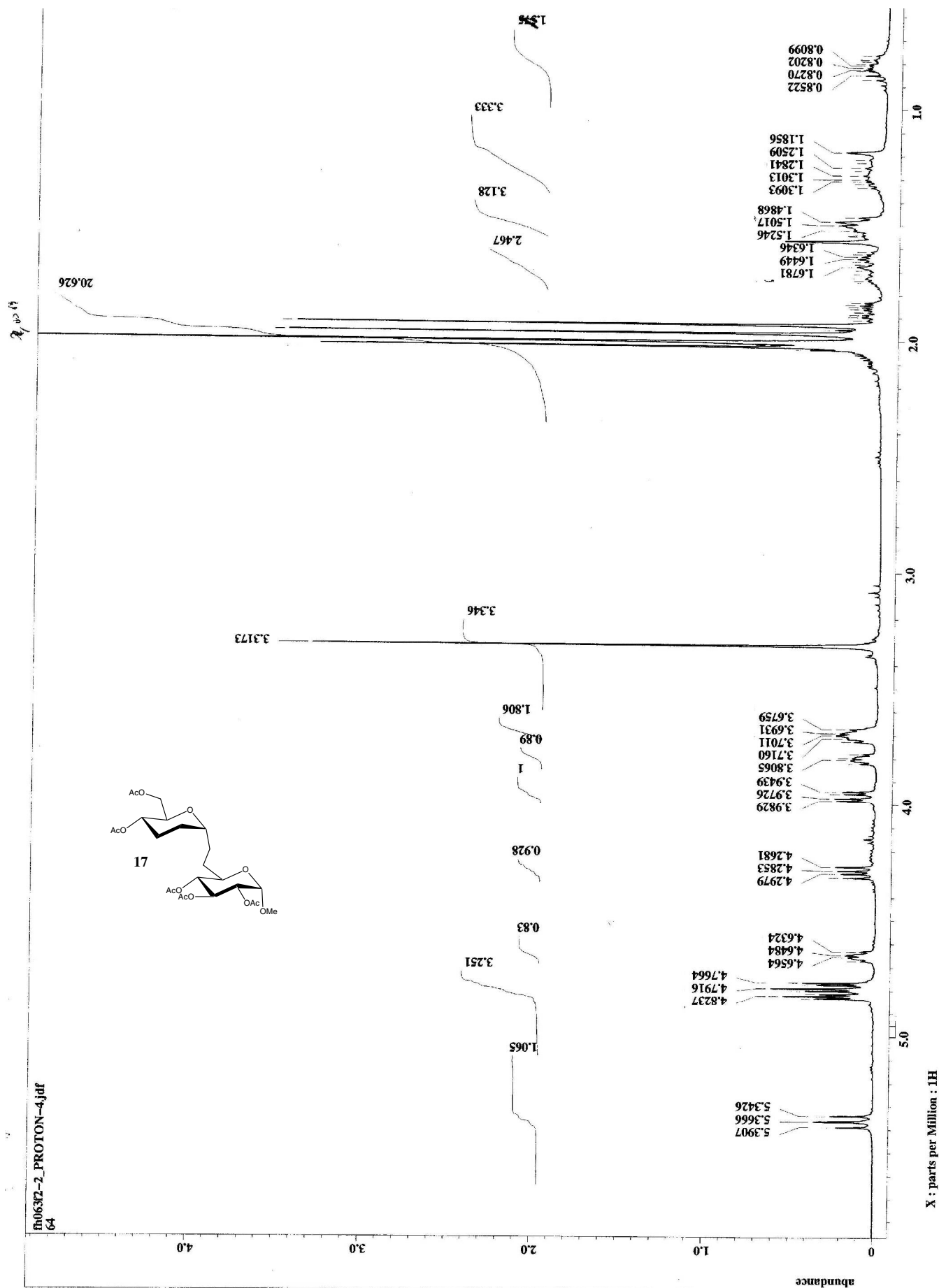
----- ACQUISITION PARAMETERS -----
 Solvent = CHLOROFORM-D
 Spin_action = SPIN ON
 Spin_state = SPIN ON
 Spin_status = SPIN ON
 Spin_get = 16[Hz]

Spin_set = 15[Hz]
 Spin_gas_source = AIR
 Sample_action = LOADED
 Sample_state = LOAD
 Sample_status = LOADED
 Changer_sample = 52

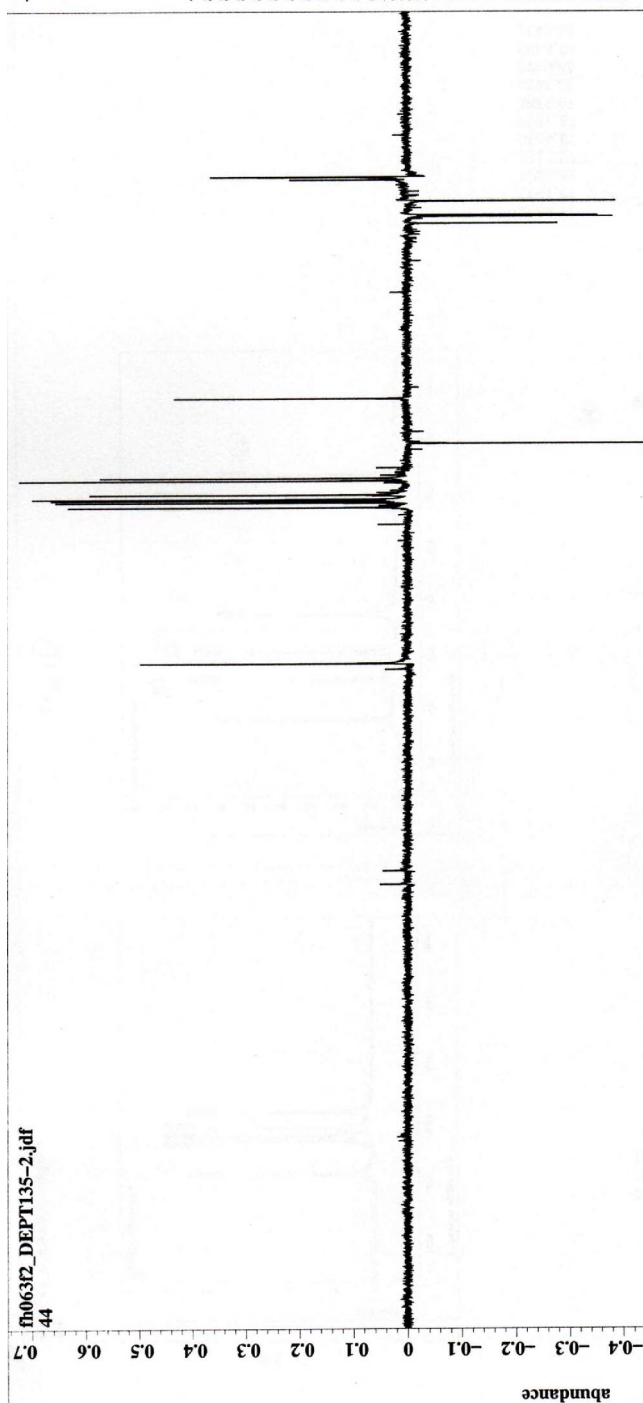








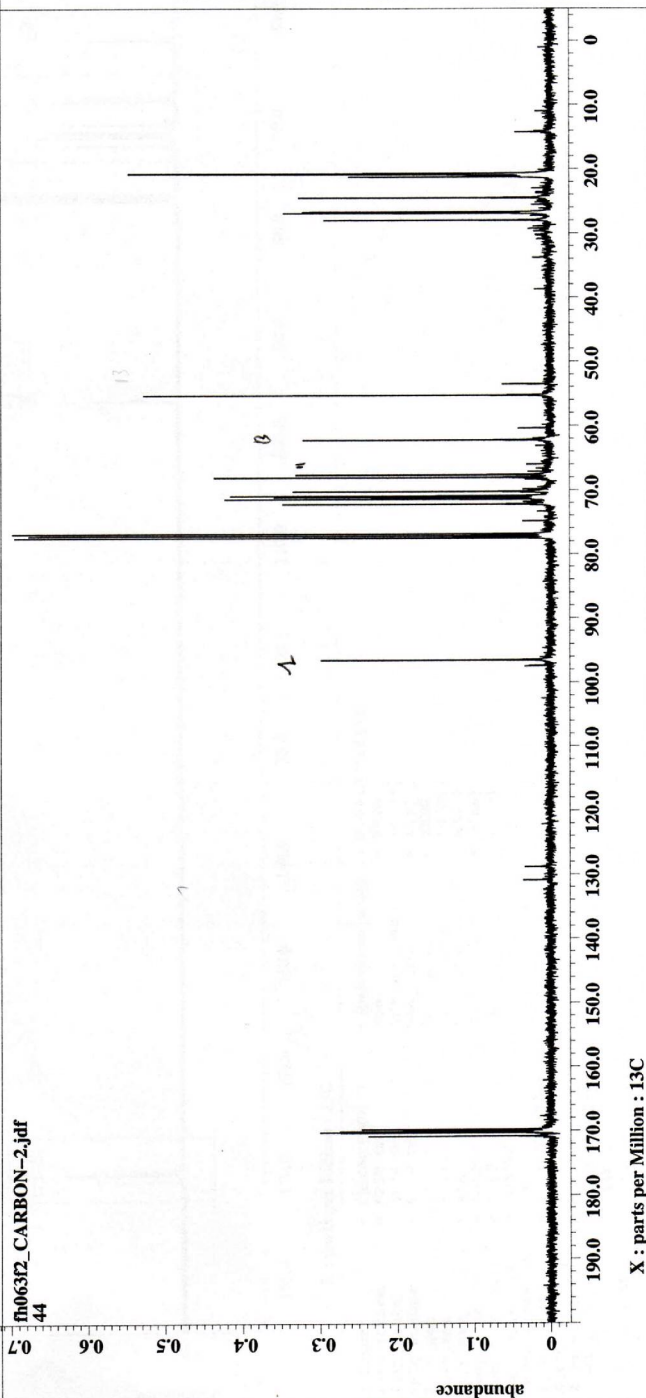
h063f2_DEPT135-2.jdf
44



----- PROCESSING PARAMETERS -----
1. dc_balance
2. seep_auto : 2
3. trapezoid3 : 0[%] : 80[%] : 100[%]
4. fft : 1
5. machinephase
6. dc_correct
7. peak_pick : 0[Hz] : 50[Hz] : Peaks
8. ppm

----- ACQUISITION PARAMETERS -----
Solvent = CHLOROFORM-D
Spin_action = SPIN ON
Spin_state = SPIN ON
Spin_status = SPIN ON
Spin_get = 15[Hz]
Spin_set = 15[Hz]
Spin_gas_source = AIR
Sample_action = LOADED
Sample_status = LOADED
Changer_sample = 44
X_acq_time = 1.04333312[s]
X_pulse = 9.1[us]
X_atn_pulse = 9.7[us]
X_atn = 1[dB]
Selection_angle = 135[deg]
Selection_pulse = 14.55[us]
J_constant = 140[Hz]
Initial_wait = 1[s]
Relaxation_delay = 2[s]
Decoupling = TRUE
Irr_noise = WALTZ
Irr_atn_dec = 13[dB]
Dead_time = 0[us]
Delay = 0[us]

h063f2_CARBON-2.jdf
44



----- PROCESSING PARAMETERS -----
1. dc_balance
2. seep_auto : 2
3. trapezoid3 : 0[%] : 80[%] : 100[%]
4. fft : 1
5. machinephase
6. dc_correct
7. peak_pick : 0[Hz] : 50[Hz] : Peaks
8. ppm

----- ACQUISITION PARAMETERS -----
Solvent = CHLOROFORM-D
Spin_action = SPIN ON
Spin_state = SPIN ON
Spin_status = SPIN ON
Spin_get = 15[Hz]
Spin_set = 15[Hz]
Spin_gas_source = AIR
Sample_action = LOADED
Sample_status = LOADED
Changer_sample = 44
X_acq_time = 1.04333312[s]
X_angle = 30[deg]
X_90_width = 9.1[us]
X_pulse = 3.03333333[us]
X_atn = 7[dB]
Initial_wait = 1[s]
Relaxation_delay = 1[s]
Repetition_time = 2.04333312[s]
Noe = TRUE
Irr_atn_noe = 16[dB]
Noe_time = 1[s]
Decoupling = TRUE
Irr_atn_dec = 13[dB]
Irr_noise = WALTZ
Dead_time = 0[us]

X : parts per Million : 13C