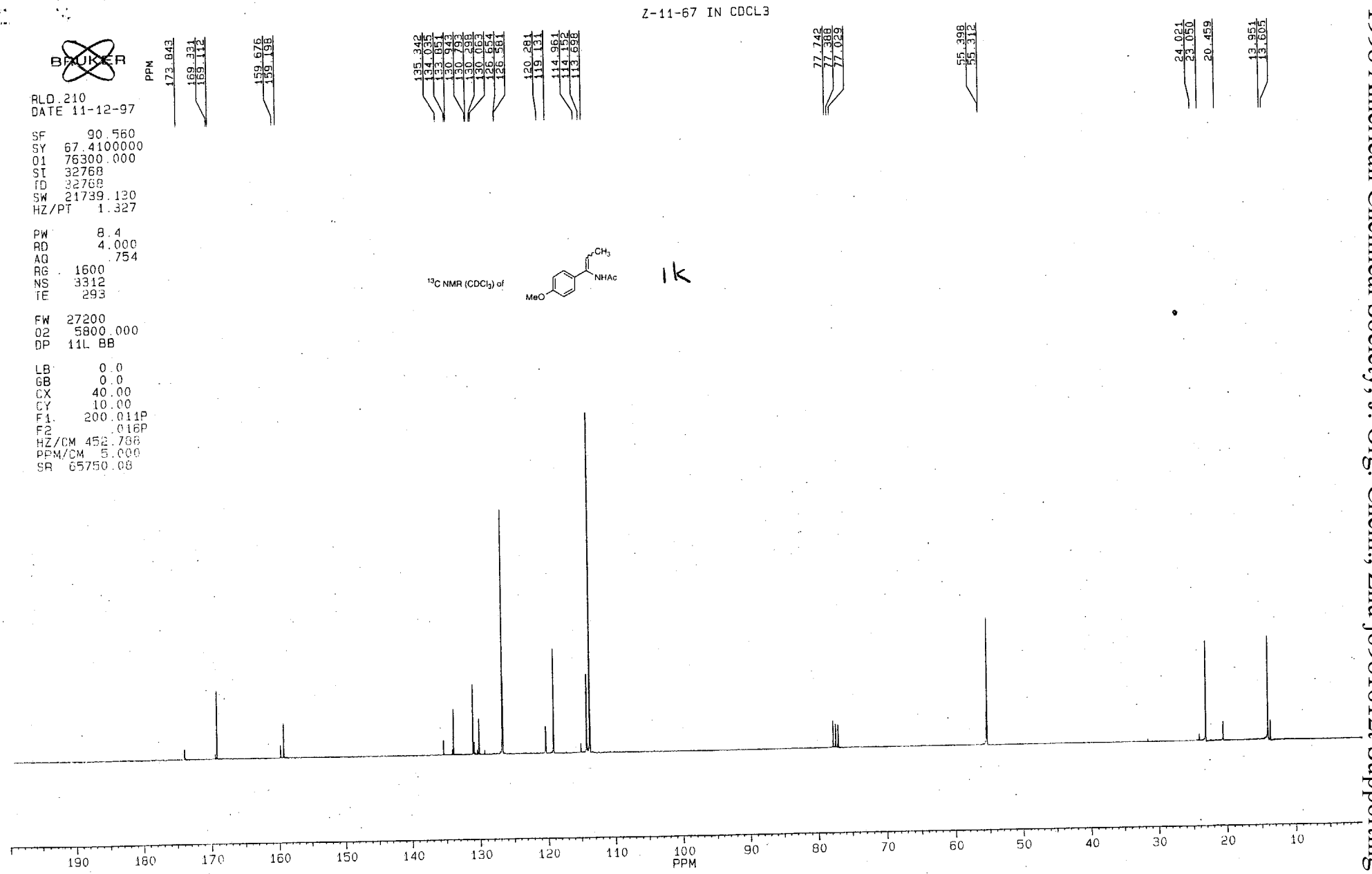
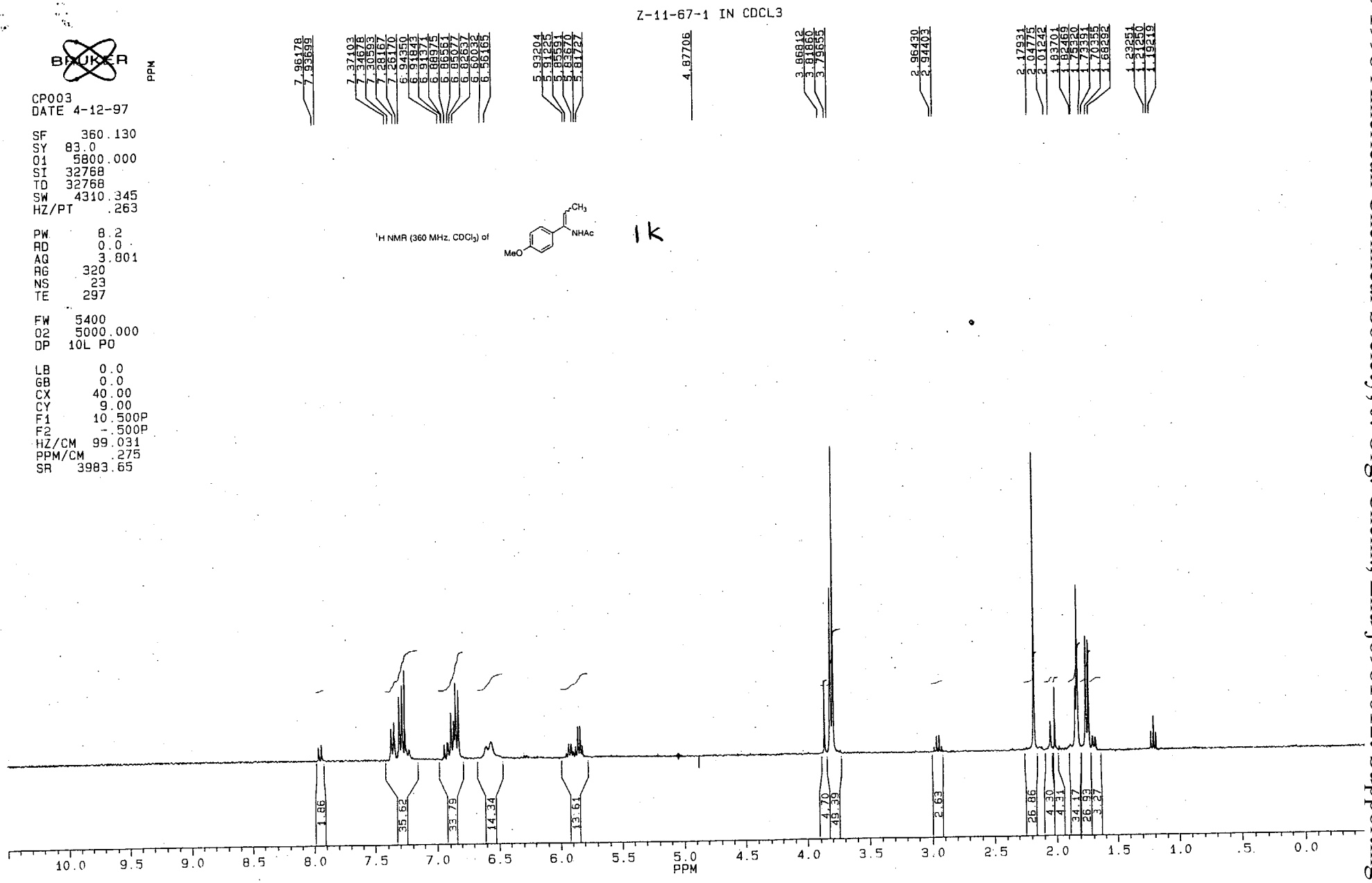
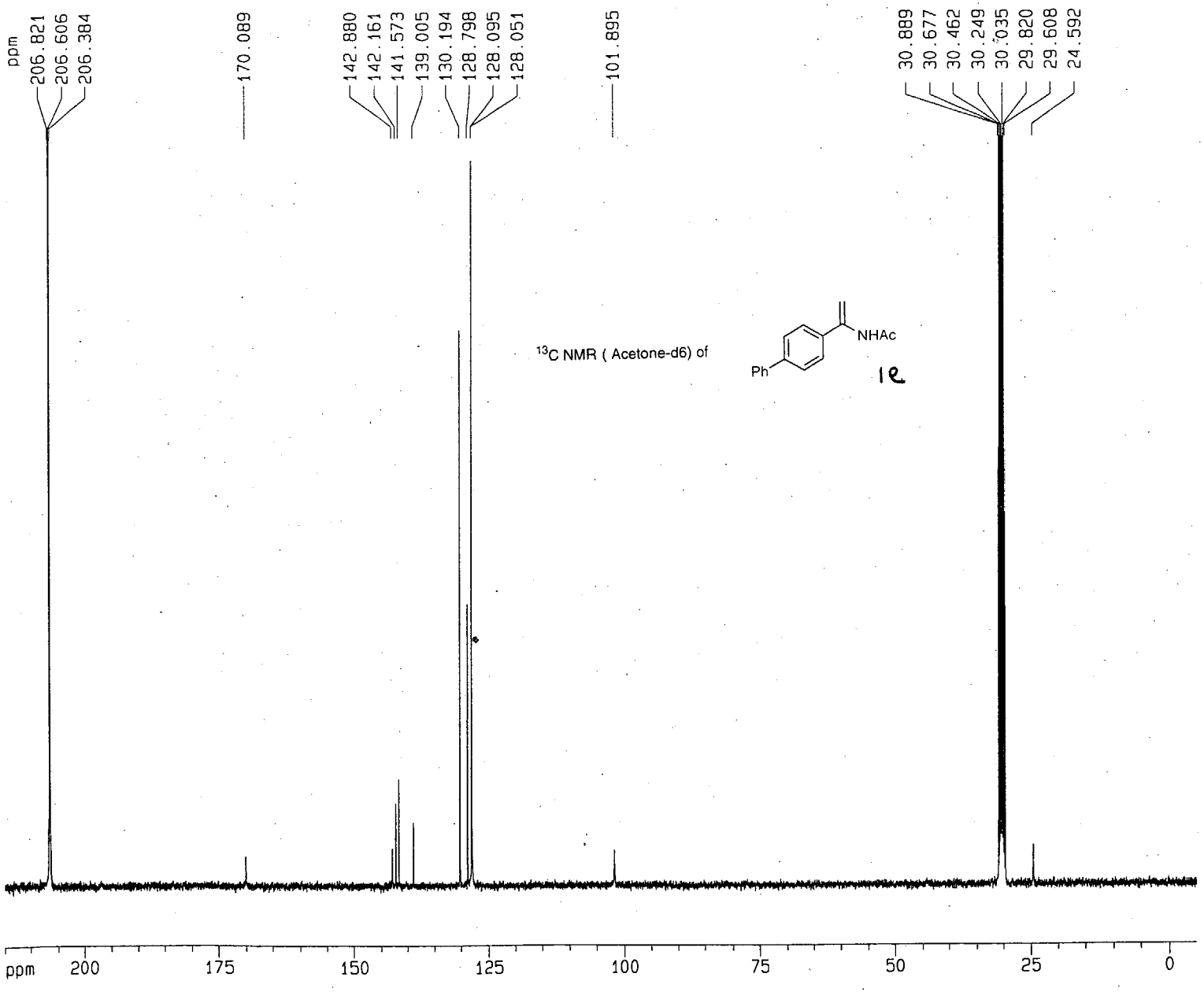
JOC The Journal of Organic Chemistry

J. Org. Chem., 1998, 63(25), 9590-9593, DOI:10.1021/jo981612t





Z-11-32

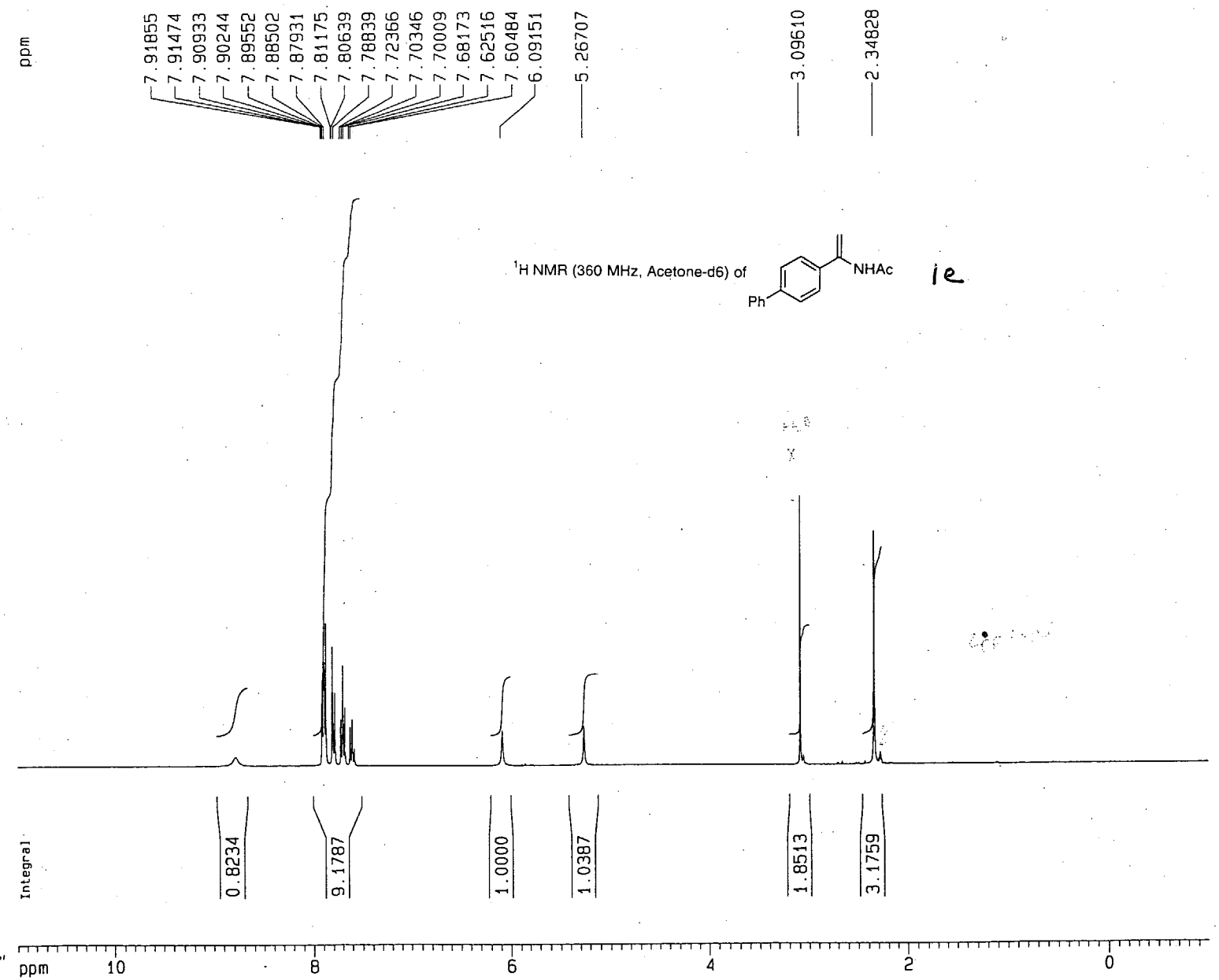


^{13}C NMR (Acetone-d6) of

1e

Current Data Parameters		
NAME	Mar17-98-Zhang	
EXPNO	21	
PROCNO	1	
F2 - Acquisition Parameters		
Date_	980317	
Time	18.04	
INSTRUM	spect	
PROBHD	5 mm QNP 1H	
PULPROG	zgpg30	
TD	65536	
SOLVENT	Aceton	
NS	2779	
DS	2	
SWH	29411.918	Hz
FIDRES	0.448790	Hz
AQ	1.1141620	sec
RG	32768	
DW	17.000	usec
DE	24.29	usec
TE	300.0	K
HL1	0	dB
D1	2.00000000	sec
CPDPRG	waltz16	
P31	106.00	usec
S4	31	dB
D11	0.03000000	sec
S2	31	dB
P1	7.80	usec
SFO1	90.5642951	MHz
NUCLEUS	13C	
F2 - Processing parameters		
SI	32768	
SF	90.5561130	MHz
WDW	EM	
SSB	0	
LB	1.00	Hz
GB	0	
PC	1.40	
1D NMR plot parameters		
CX	20.00	cm
F1P	215.000	ppm
F1	19469.57	Hz
F2P	-5.000	ppm
F2	-452.78	Hz
PPMCM	11.00000	ppm/cm
HZCM	996.11725	Hz/cm

Z-11-32



^{1}H NMR (360 MHz, Acetone-d6) of

1e

```
Current Data Parameters
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PROCNO                 1

F2 - Acquisition Parameters
Date_              980317
Time               18.01
INSTRUM            spect
PROBHD     5 mm QNP  1H
PULPROG             zg30
TD                 32768
SOLVENT            Aceton
NS                    16
DS                     2
SWH              7462.726 Hz
FIDRES           0.227744 Hz
AQ               2.1955061 sec
RG                  1024
DW                 67.000 usec
DE                 95.71 usec
TE                 300.0 K
HL1                  0 dB
D1            1.00000000 sec
P1                 12.60 usec
SFO1          360.1380667 MHz
NUCLEUS              1H

F2 - Processing parameters
SI                 16384
SF           360.1357693 MHz
WDW                  EM
SSB                  0
LB                0.30 Hz
GB                   0
PC                1.00

1D NMR plot parameters
CX                20.00 cm
F1P               11.000 ppm
F1              3961.49 Hz
F2P               -1.000 ppm
F2              -360.14 Hz
PPMCM             0.60000 ppm/cm
HZCM            216.08147 Hz/cm
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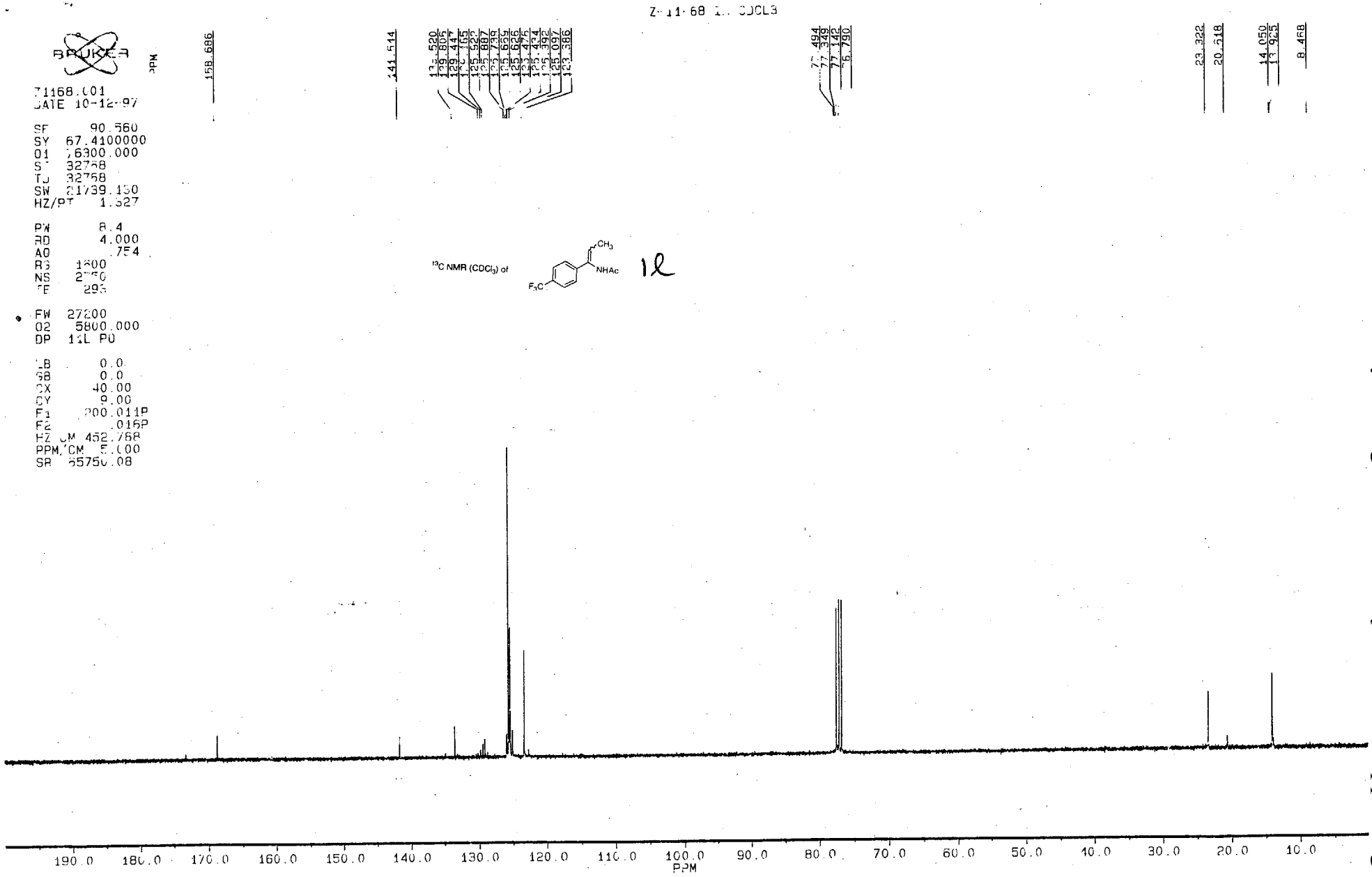


Z-11-68 IN CDCL3

BRUKER

PPM

PRANGE1.1205
DATE 6-12-97

SF 360.130
SY 83.0
01 5800.000
SI 32768
TD 32768
SW 4310.345
HZ/PT .263

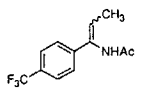
PW 8.2
RD 0.0
AQ 3.801
RG 80
NS 115
TE 297

FW 5400
02 5000.000
DP 10L PO

LB 0.0
GB 0.0
CX 40.00
CY 9.00
F1 10.500P
F2 -.500P
HZ/CM 99.031
PPM/CM .275
SR 3983.65

7.60396
7.56465
7.54189
7.46867
7.44572
7.26005
6.70227
6.02713
6.00766
2.18494
1.90702
1.88816
1.81030
1.80203
1.79108

^{1}H NMR (360 MHz, $CDCl_3$) of



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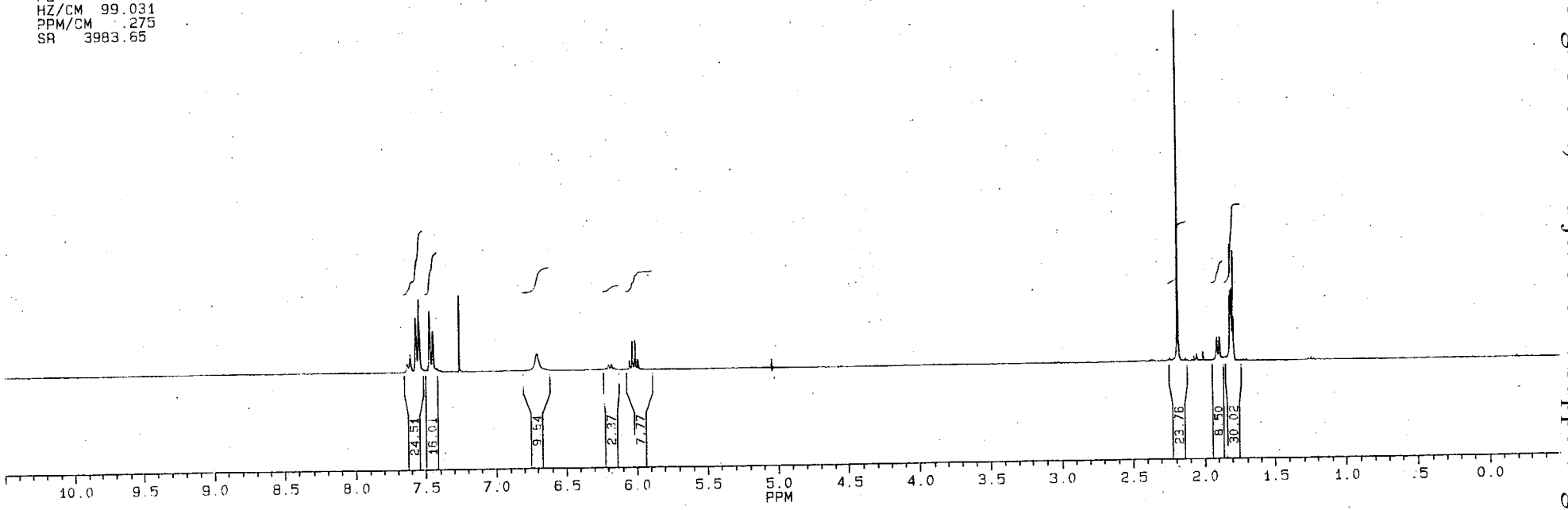

Z-11-95 IN ACETONE

BRUKER

PPM

DATE 29-12-97

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O1	7700.000
SI	32768
TD	32768
SW	4310.345
HZ/PT	.263
PW	8.2
RD	0.0
AQ	3.801
RG	80
NS	90
TE	297
FW	5400
O2	5000.000
DP	10L PO
LB	0.0
GB	0.0
CX	40.00
CY	7.00
F1	10.500P
F2	-.499P
HZ/CM	99.031
PPM/CM	.275
SR	5857.49

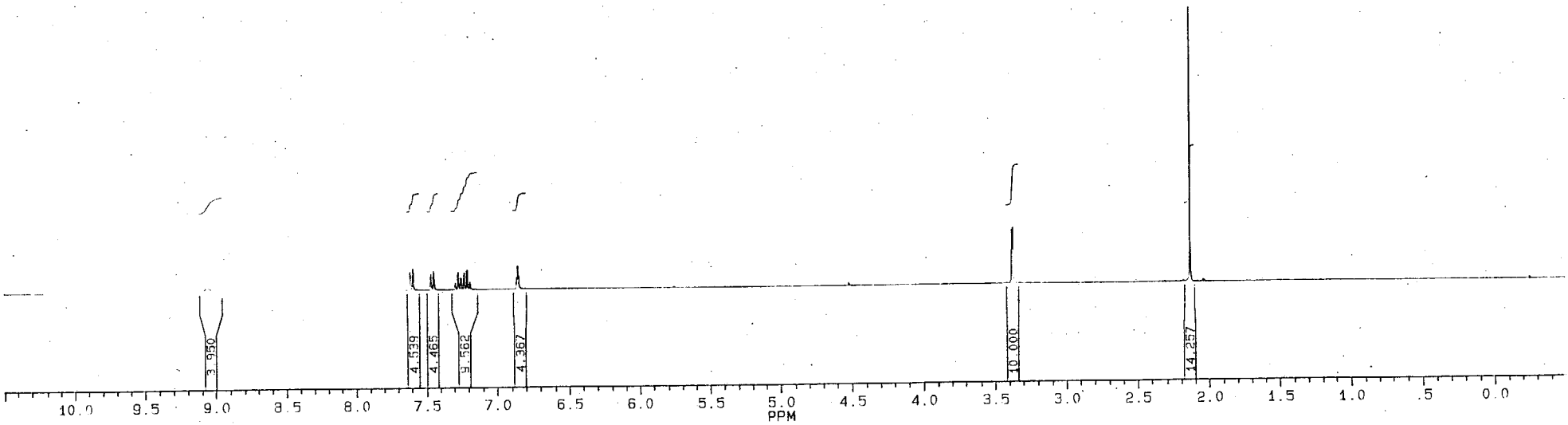
7.61175
7.59131
7.46660
7.44851
7.44682
7.27036
7.26853
7.22579
7.20876
7.20565
6.05642

3.37851
3.37202

2.13469

^{1}H NMR (360 MHz, Acetone-d6) of

3



Z-11-95 IN ACETONE

BRUKER

PPM
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206.125

169.201

143.585
141.137
137.620

126.647
125.914
124.727

118.132

114.544

36.804
30.431
30.225
30.005
29.963
29.797
29.580
29.363
29.146
28.929
28.715

Z1195
DATE 29-12-97

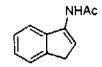
SF 90.560
SY 67.4100000
01 76300.000
SI 32768
TD 32768
SW 21739.130
HZ/PT 1.327

PW 4.0
RD 4.000
AQ .754
RG 1600
NS 1147
TE 293

FW 27200
02 7700.000
DP 11L PO

LB 0.0
GB 0.0
GX 40.00
GY 7.00
F1 220.007P
F2 -4.983P
HZ/CM 509.678
PPM/CM 5.625
SR 66156.35

^{13}C NMR (Acetone-d6) of



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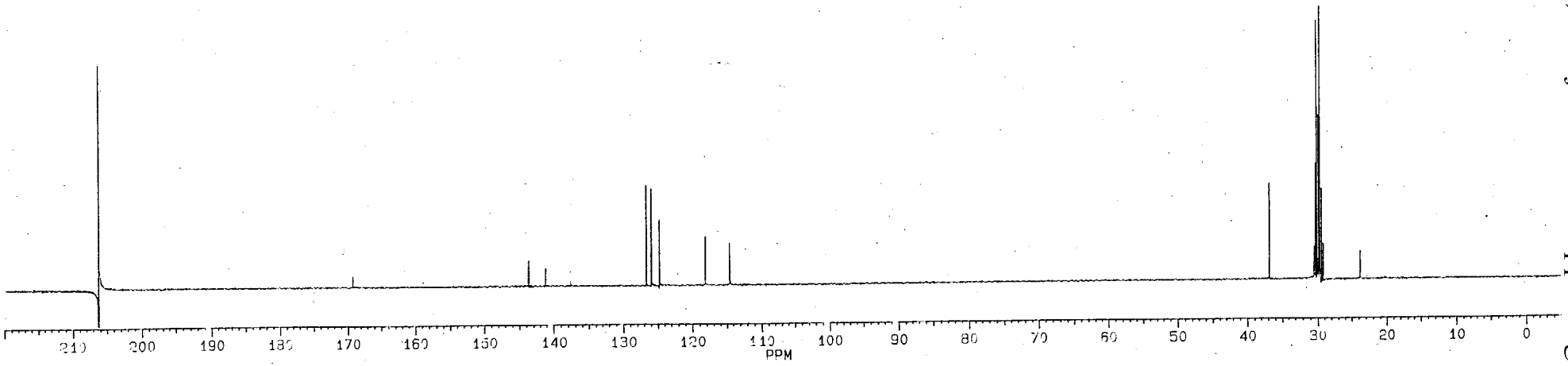
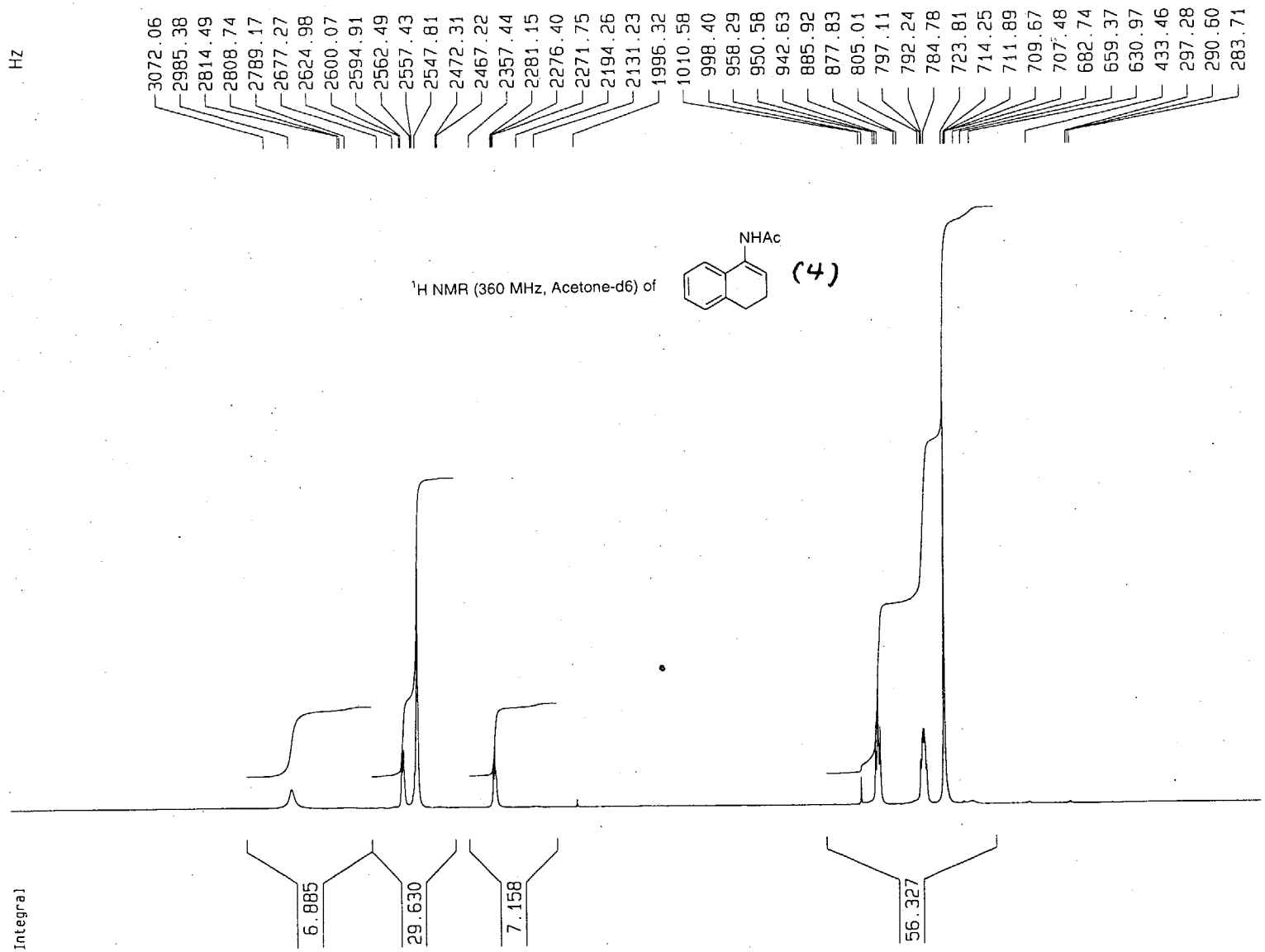


Z-12-20 Acetone-d6



Current Data Parameters

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PROCNO	1

F2 - Acquisition Parameters

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INSTRUM	spect
PROBHD	5 mm QNP 1H
PULPROG	zg30
TD	32768
SOLVENT	Aceton
NS	16
DS	2
SWH	7462.726 Hz
FIDRES	0.227744 Hz
AQ	2.1955061 sec
RG	256
DW	67.000 usec
DE	95.71 usec
TE	300.0 K
HL1	0 dB
D1	1.00000000 sec
P1	12.60 usec
SFO1	360.1380667 MHz
NUCLEUS	1H

F2 - Processing parameters

SI	16384
SF	360.1358804 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

1D NMR plot parameters

CX	20.00 cm
F1P	11.000 ppm
F1	3961.50 Hz
F2P	-1.000 ppm
F2	-360.14 Hz
PPMCM	0.60000 ppm/cm
HZCM	216.08154 Hz/cm

Z-12-20 INM ACETONE-D6

BRUKER

PPM

169.596

137.604
133.624
128.397
128.092
127.094
122.598
118.699

30.982
30.601
30.213
29.927
29.446
29.057
28.672
28.378
23.789
22.656

Z1220
DATE 8-8-97

SF 50.272
SY 74.9300000
O1 58600.000
SI 32768
TD 32768
SW 11904.762
HZ/PT .727

PW 3.5
RD 2.000
AQ 1.376
RG 6400
NS 9558
TE 297

FW 14900
O2 4300.000
DP 14H BB

LB 0.0
GB 0.0
CX 40.00
CY 0.0
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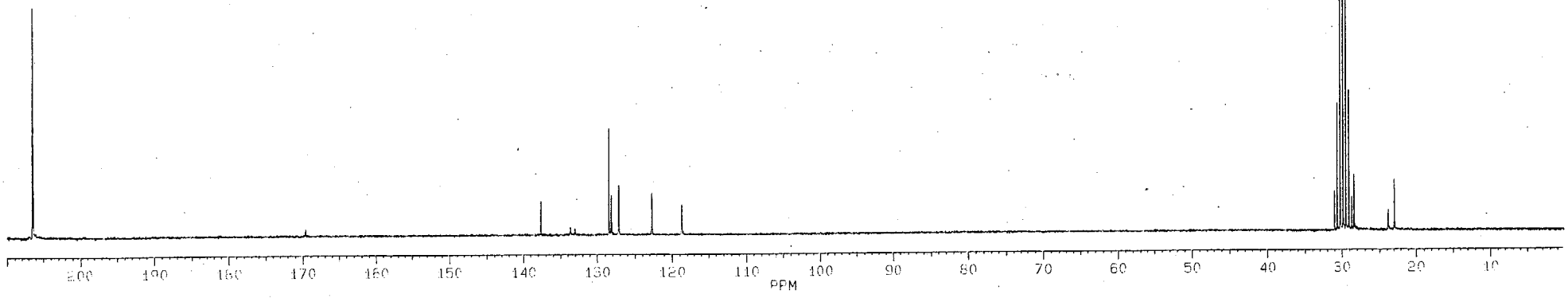
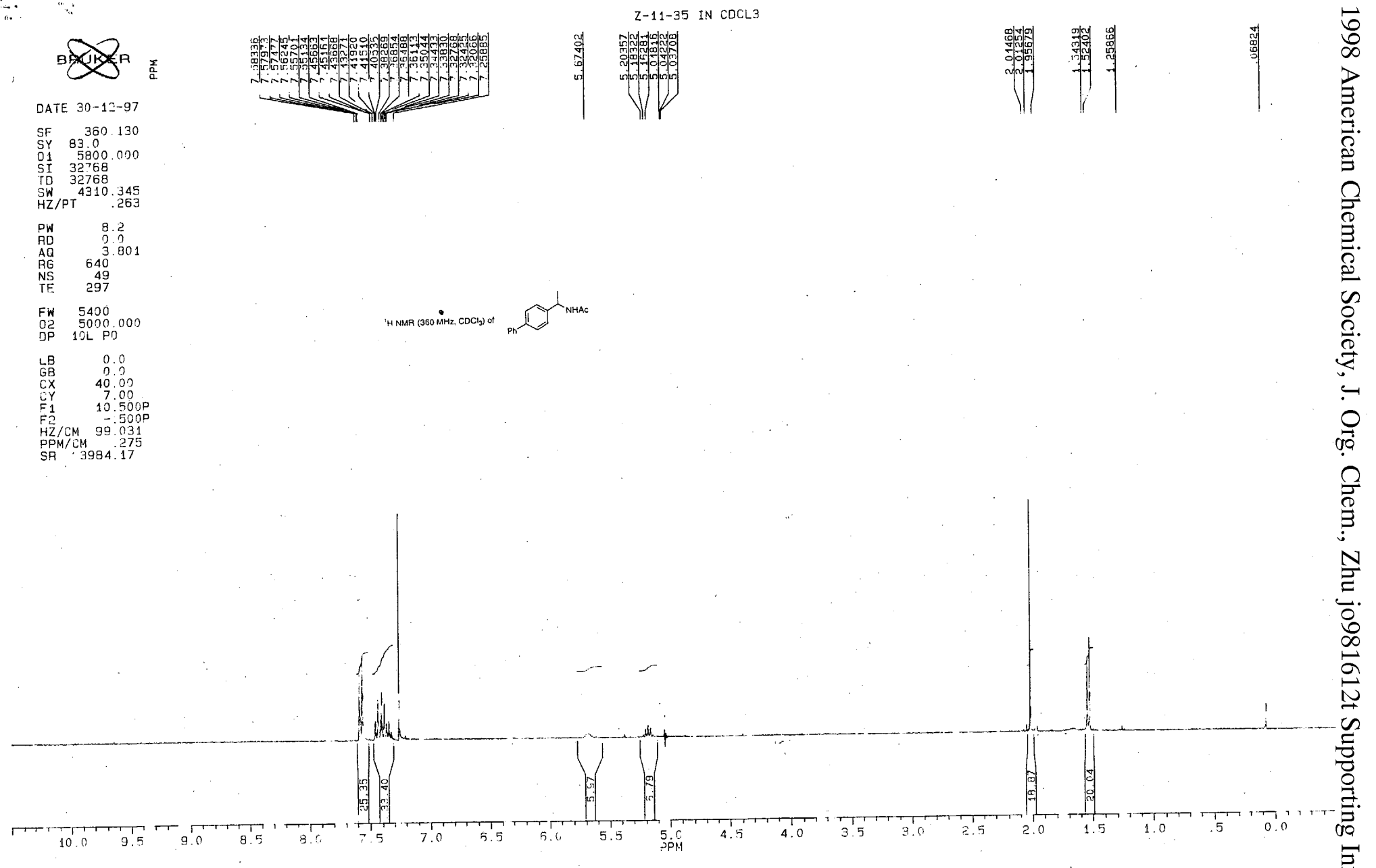
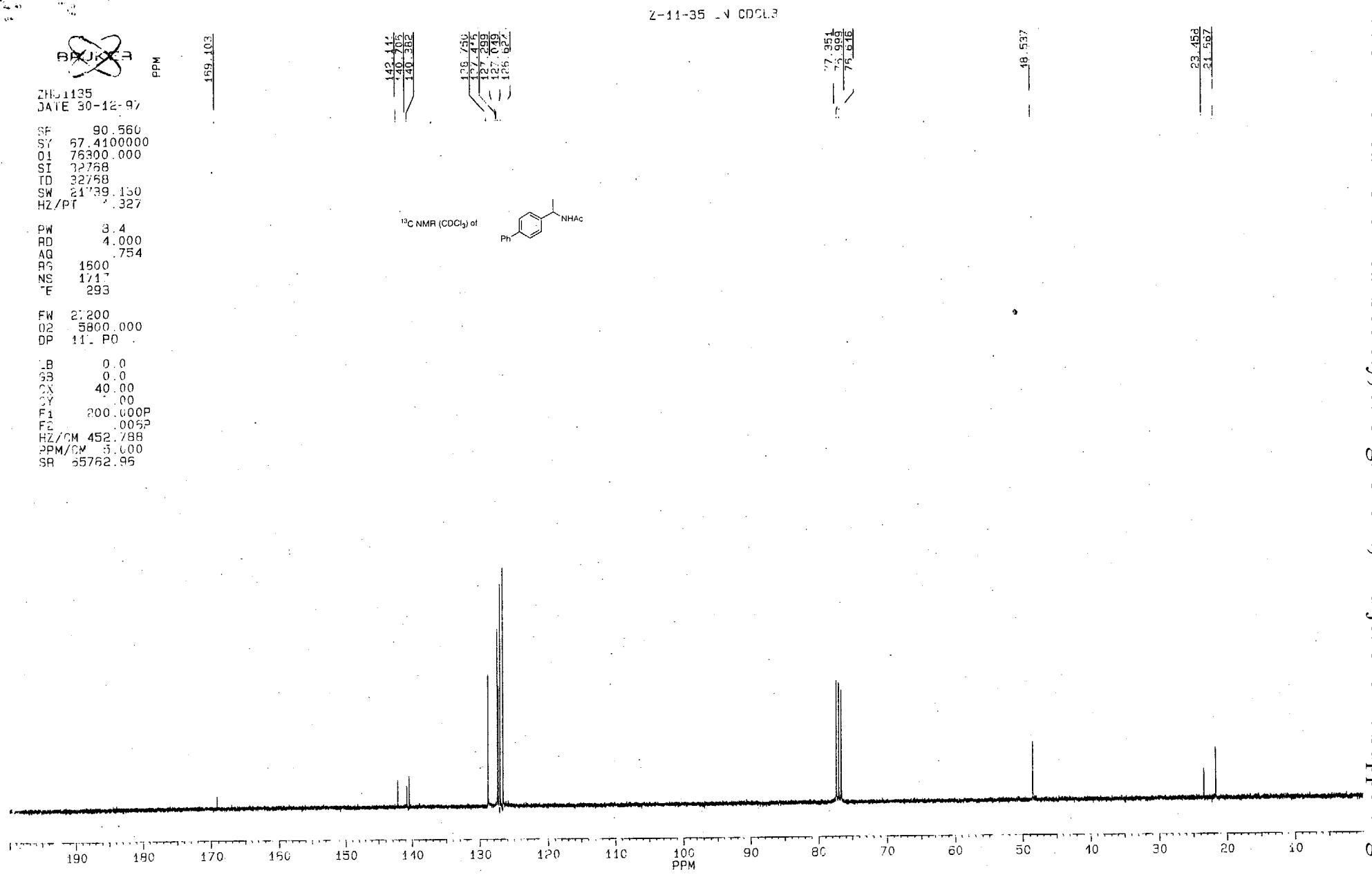
PPM/CM 5.250
SR 53536.00

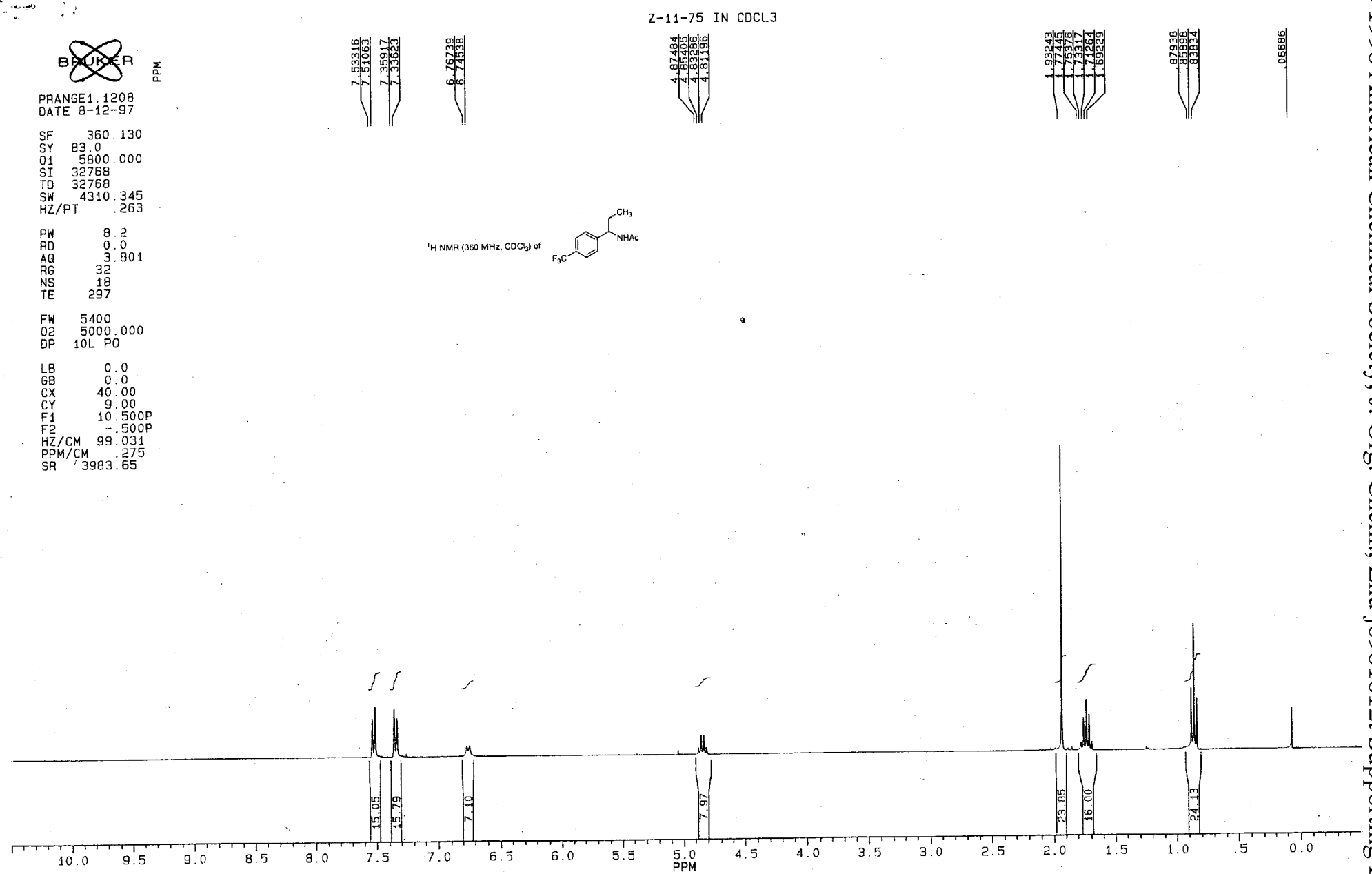
^{13}C NMR (Acetone-d6) of

(4)









Z1175

Z-11-75 IN CDCL3