JOC The Journal of Organic Chemistry

J. Org. Chem., 1996, 61(2), 573-580, DOI:10.1021/jo951611q

Terms & Conditions

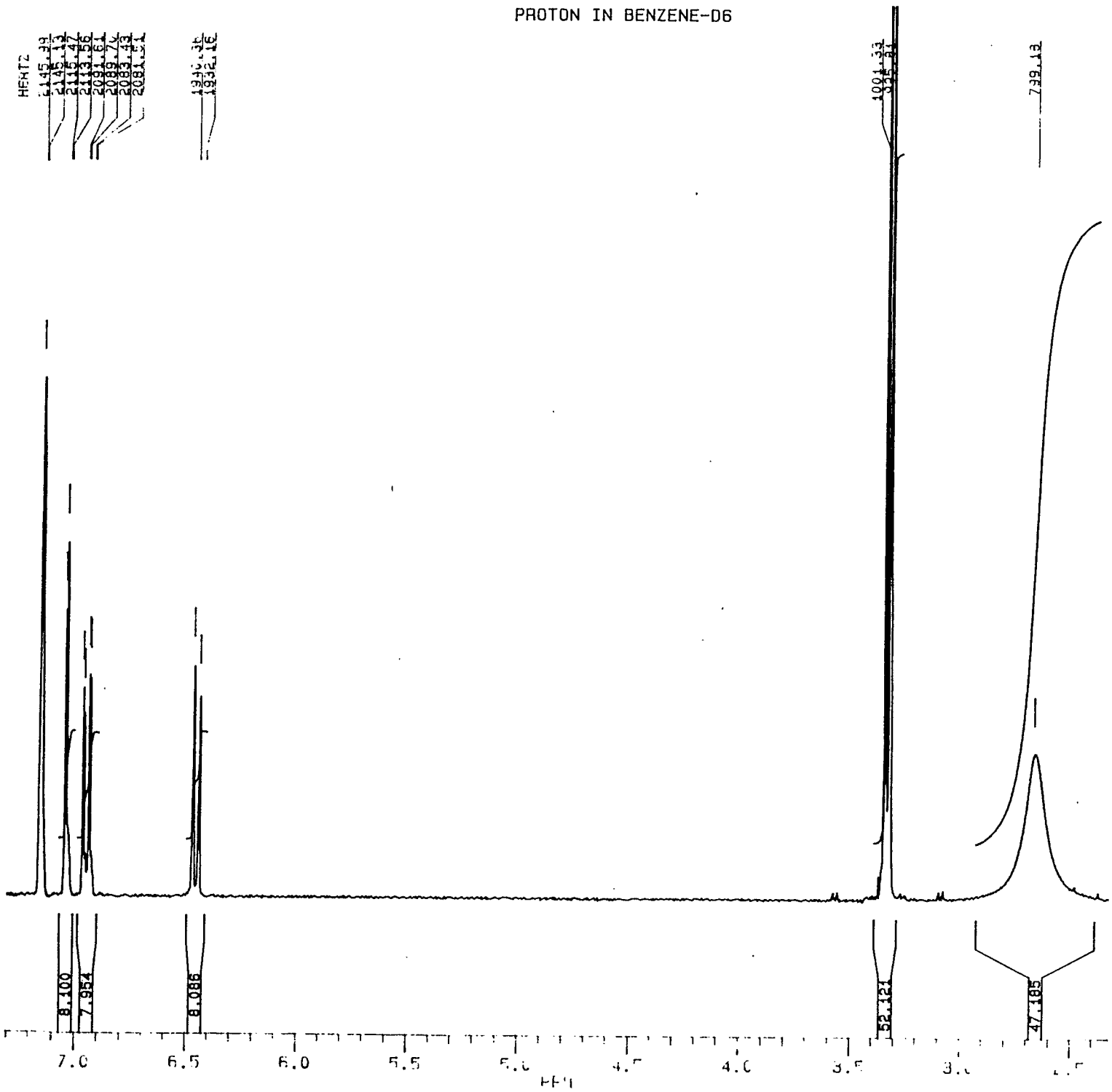
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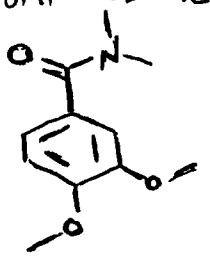
ACS Publications

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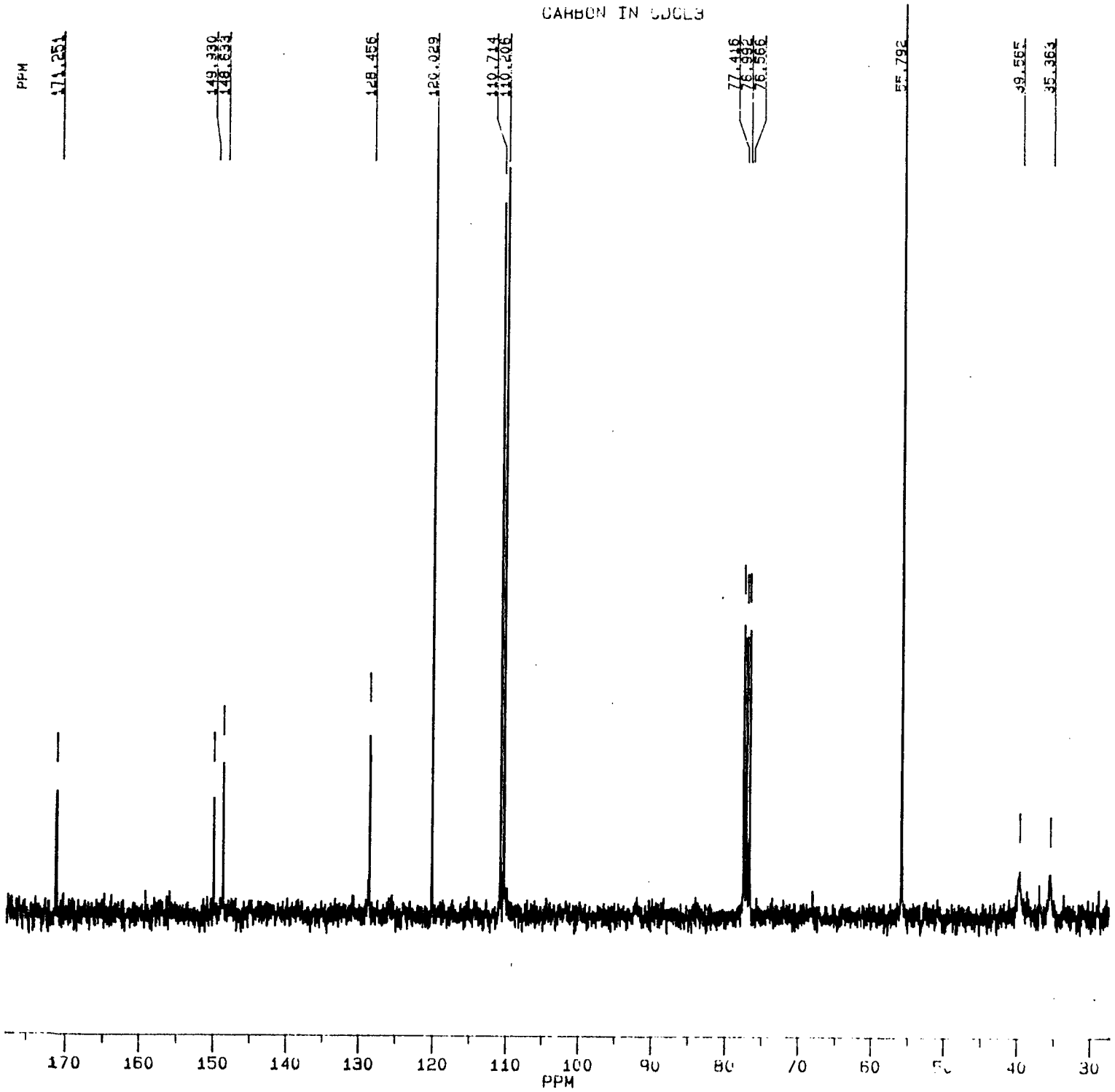
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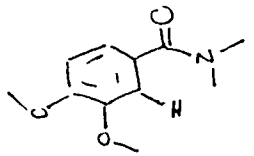
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F2	2.322P
HZ/CM	74.707
PPM/CM	.249
SR	3384.78

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Q-580-1





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I Exp 42
MM-1-52

PROTON NMR IN CDCl3

COMPOUND 28



in $CDCl_3$

BRUKER

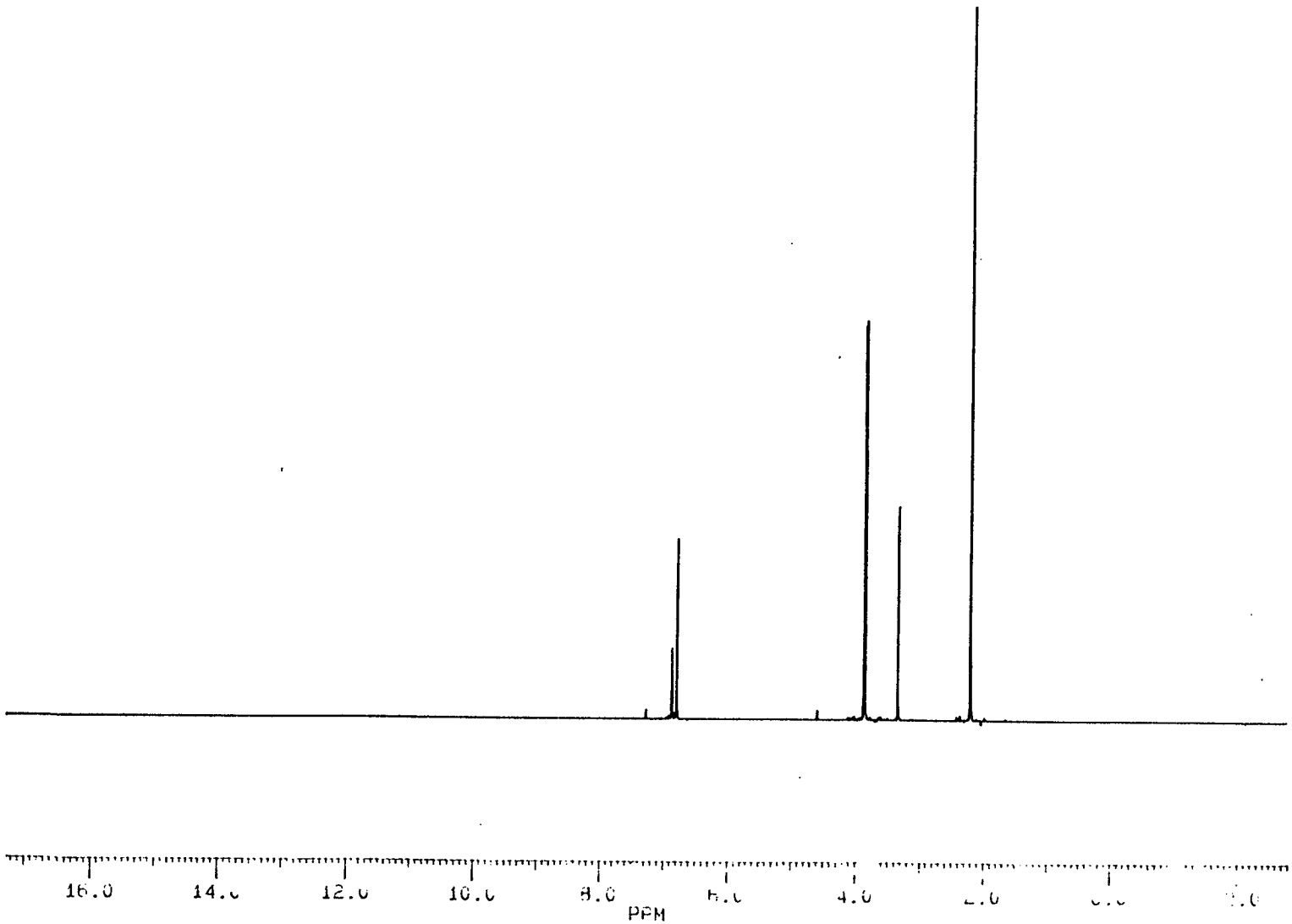
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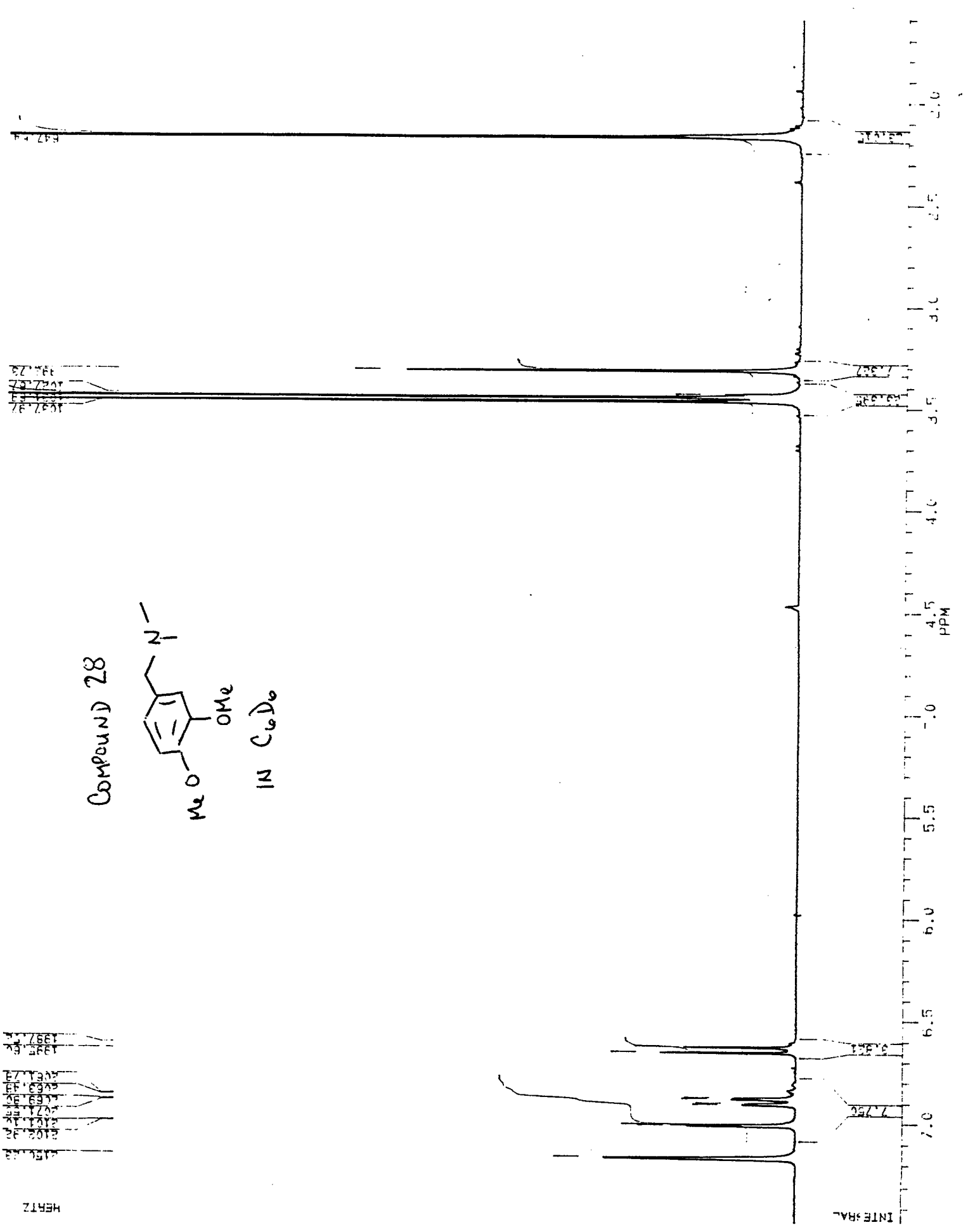


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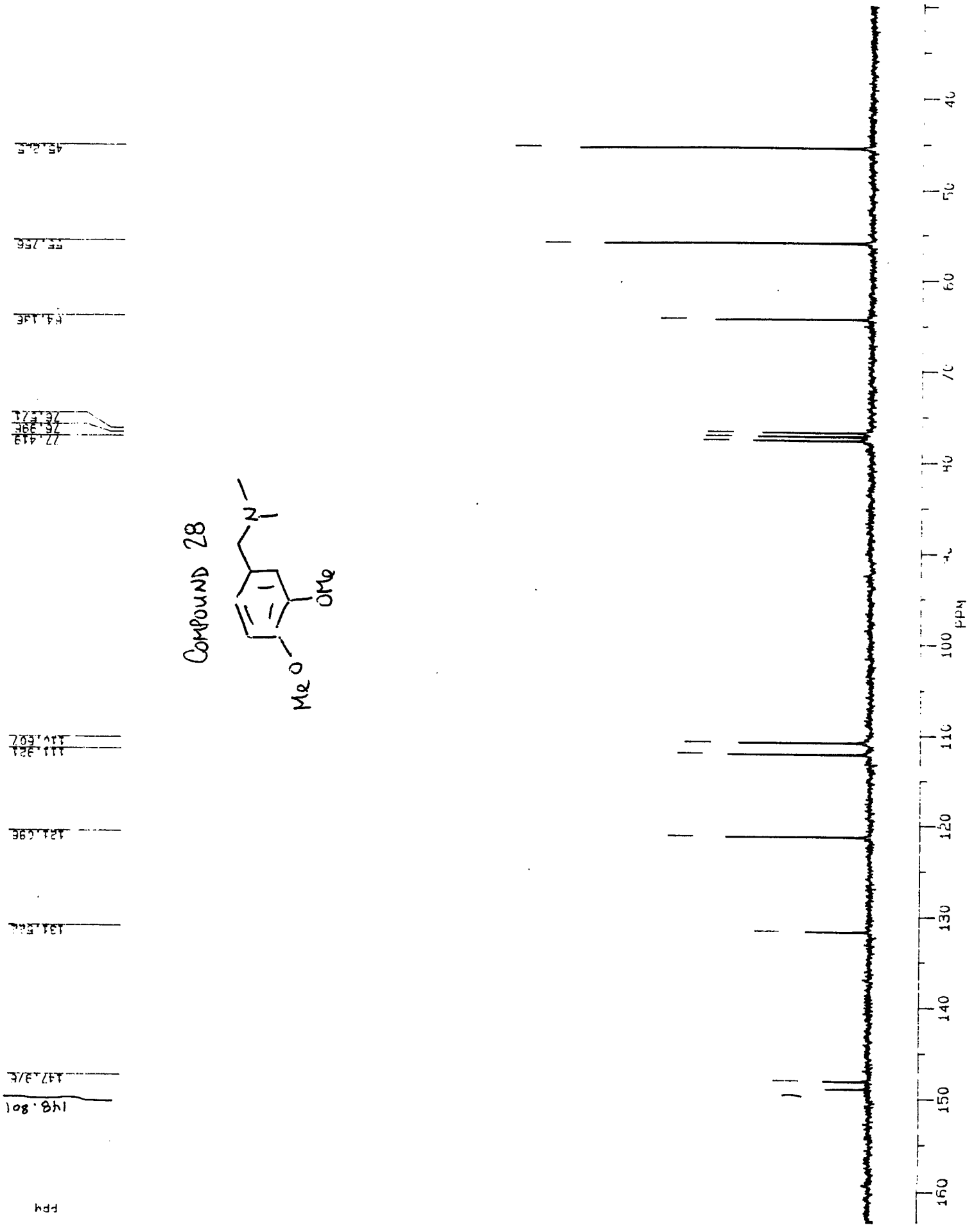
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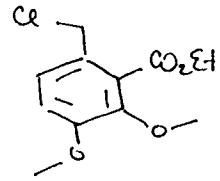
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9-580-5


Compound 28
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110
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150
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PPM

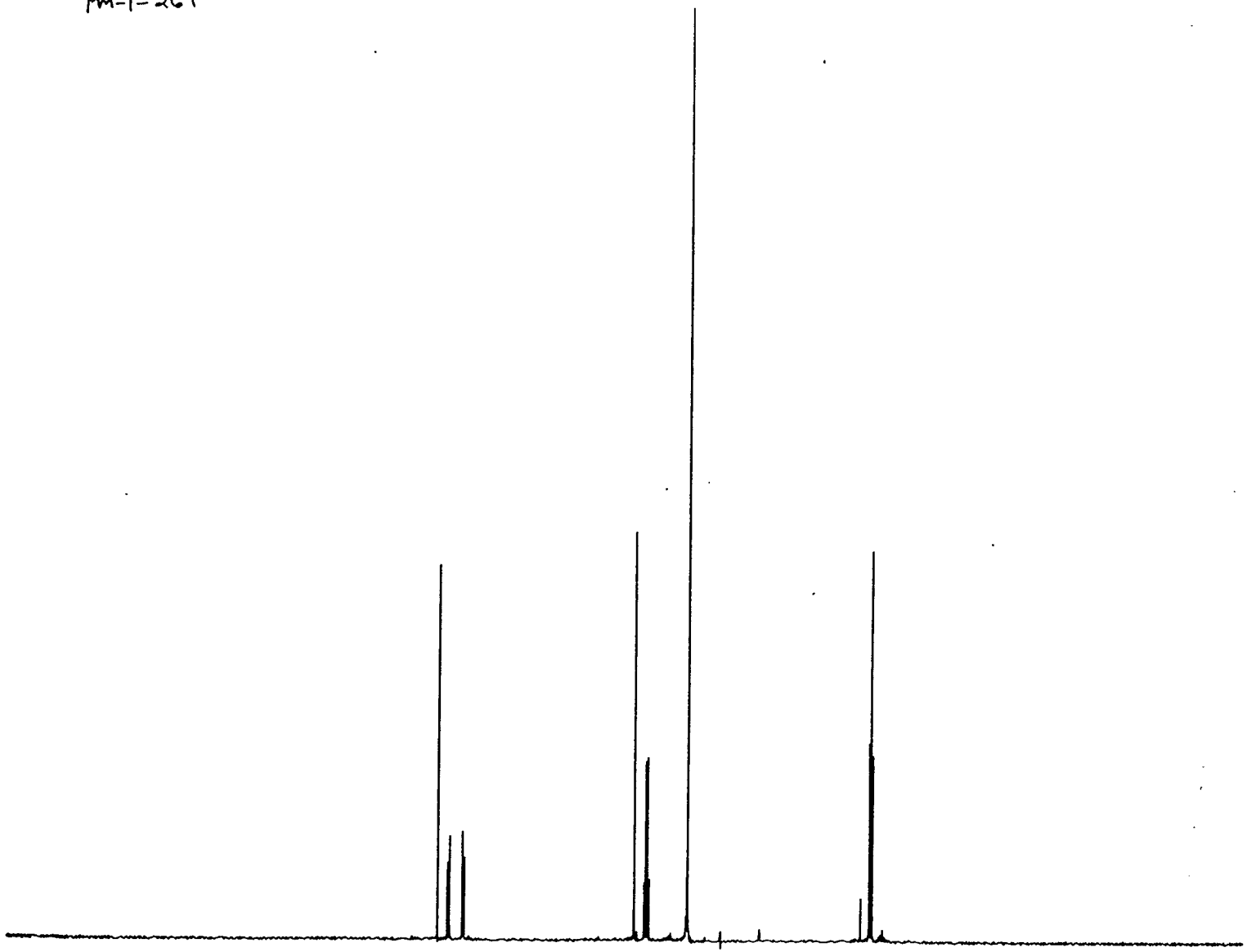
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MM-1-269

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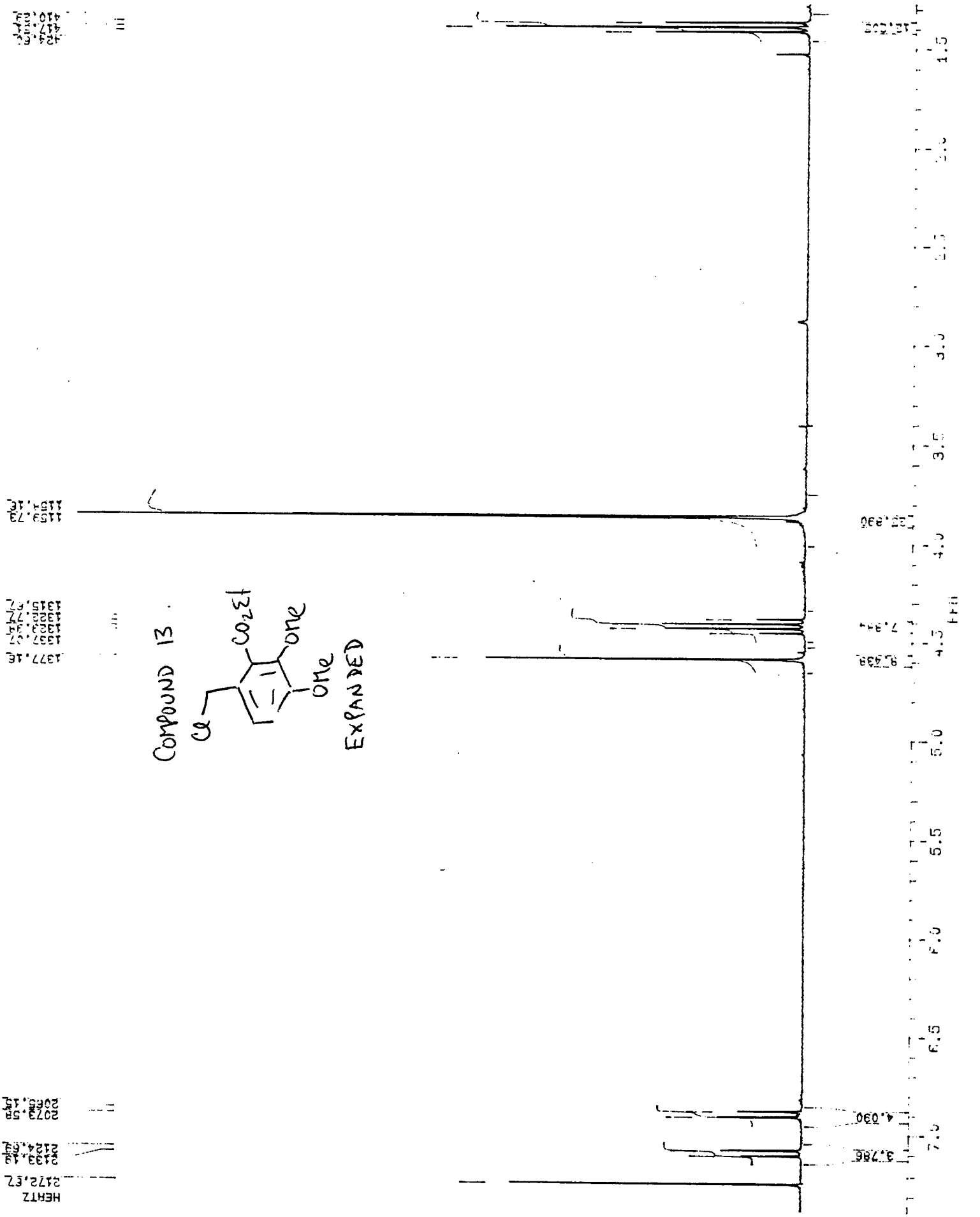


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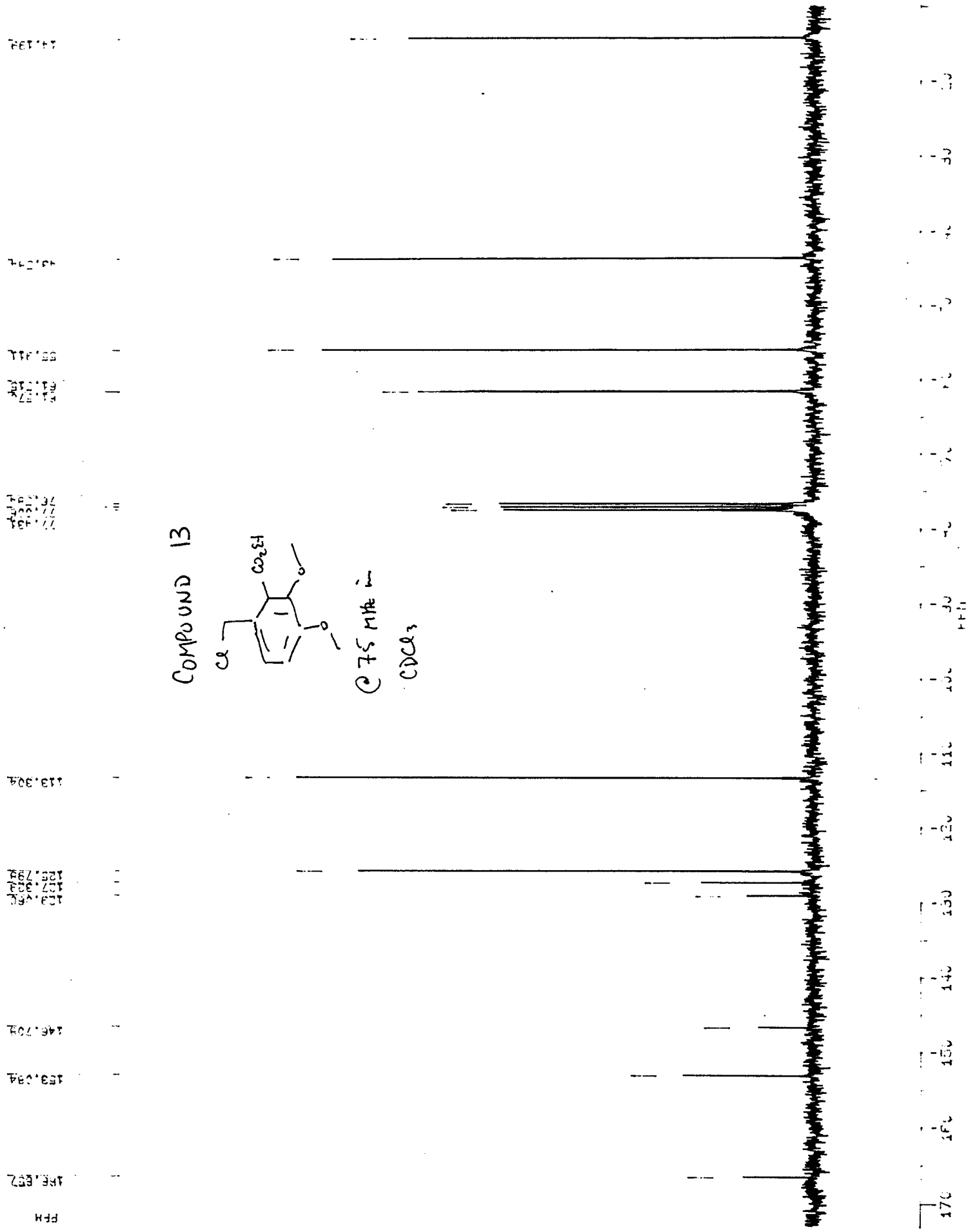
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AQ	3.277
RG	20
NS	8
TE	297
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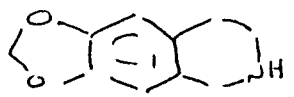
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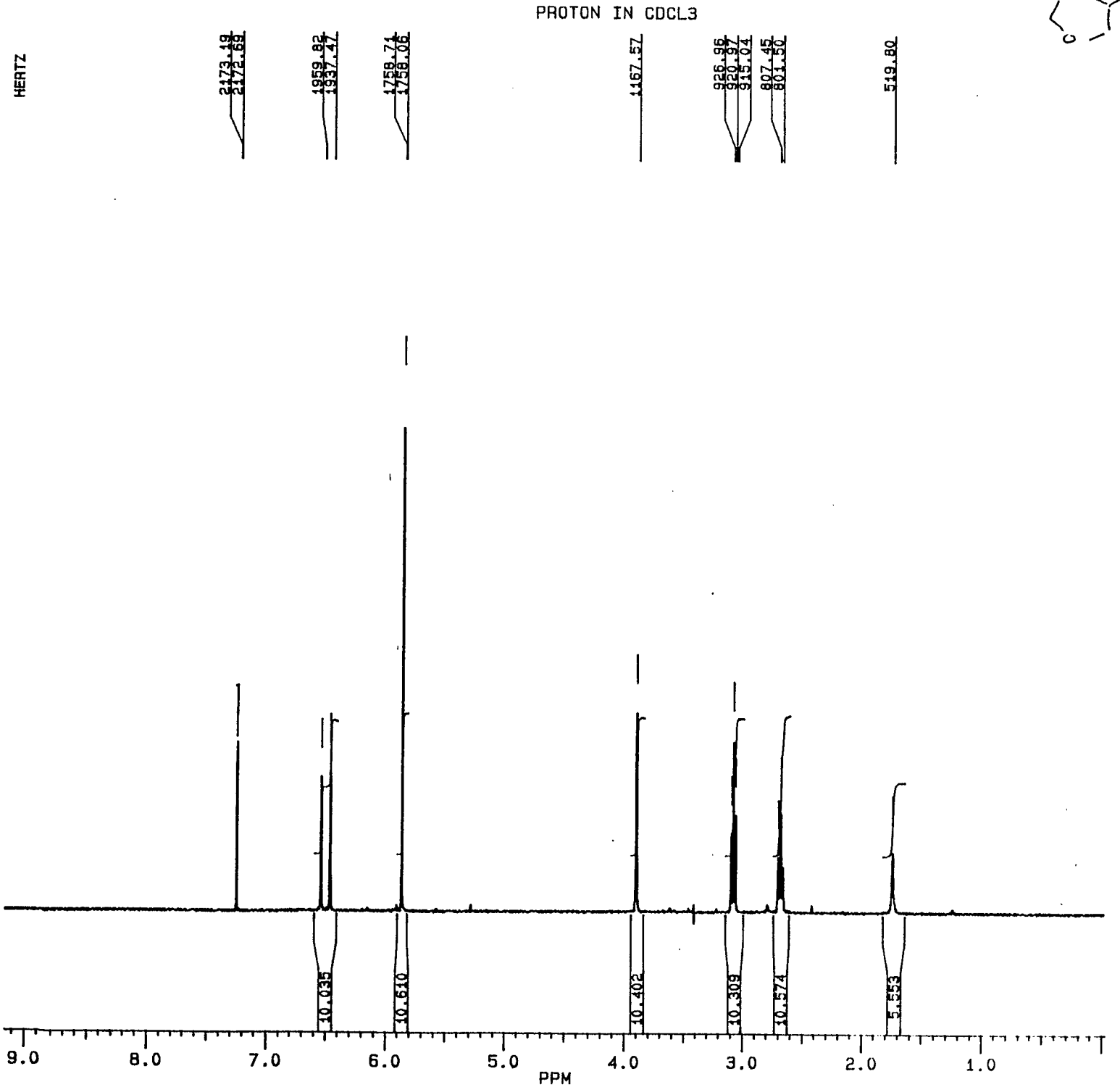

Compound 13
Cl
CO2Et
one
one
EXPANDED

G-580-S



COMPOUND 15





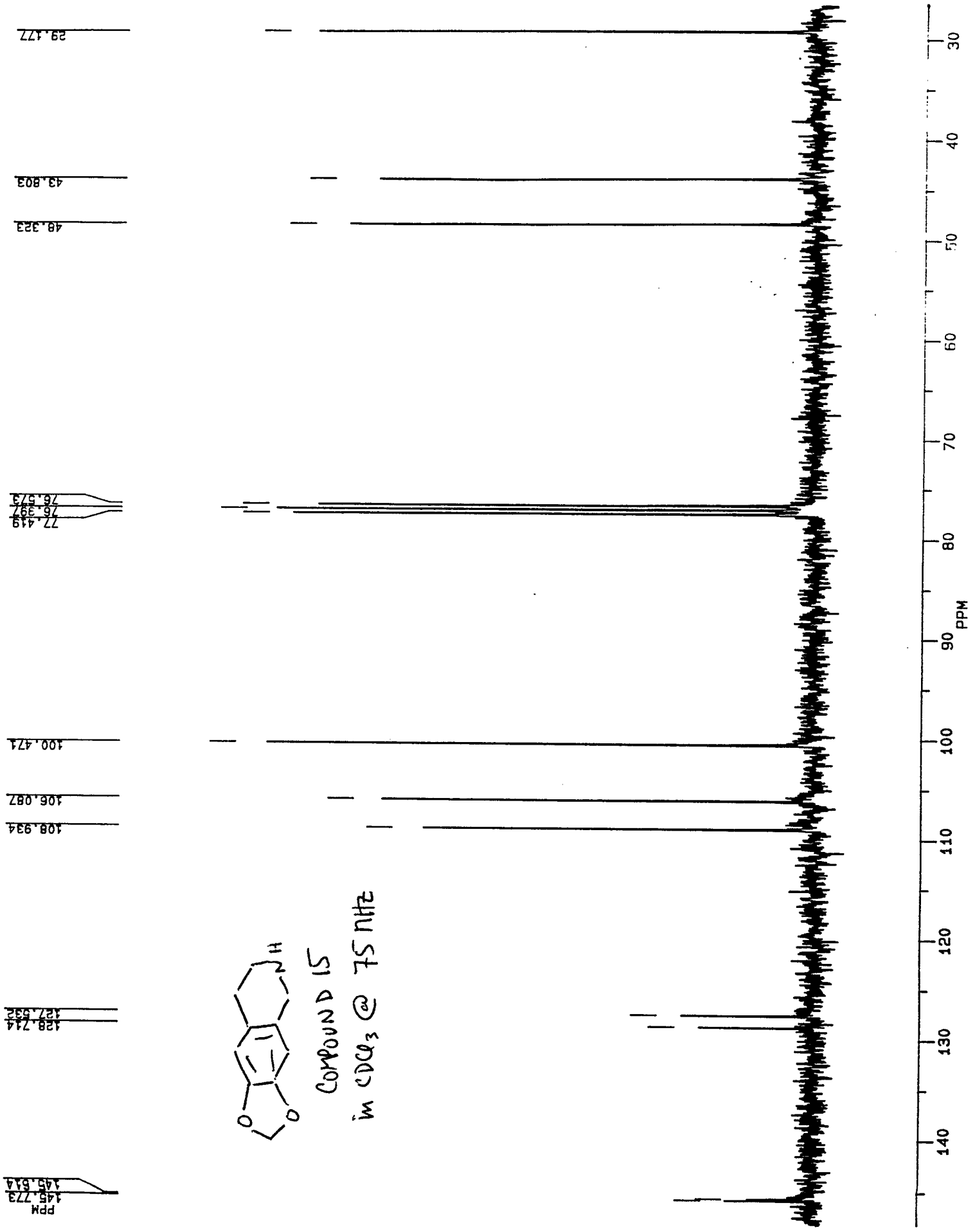
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AQ	3.277
RG	40
NS	8
TE	297
FW	6300
O2	4395.480
DP	63L PO
LB	-.150
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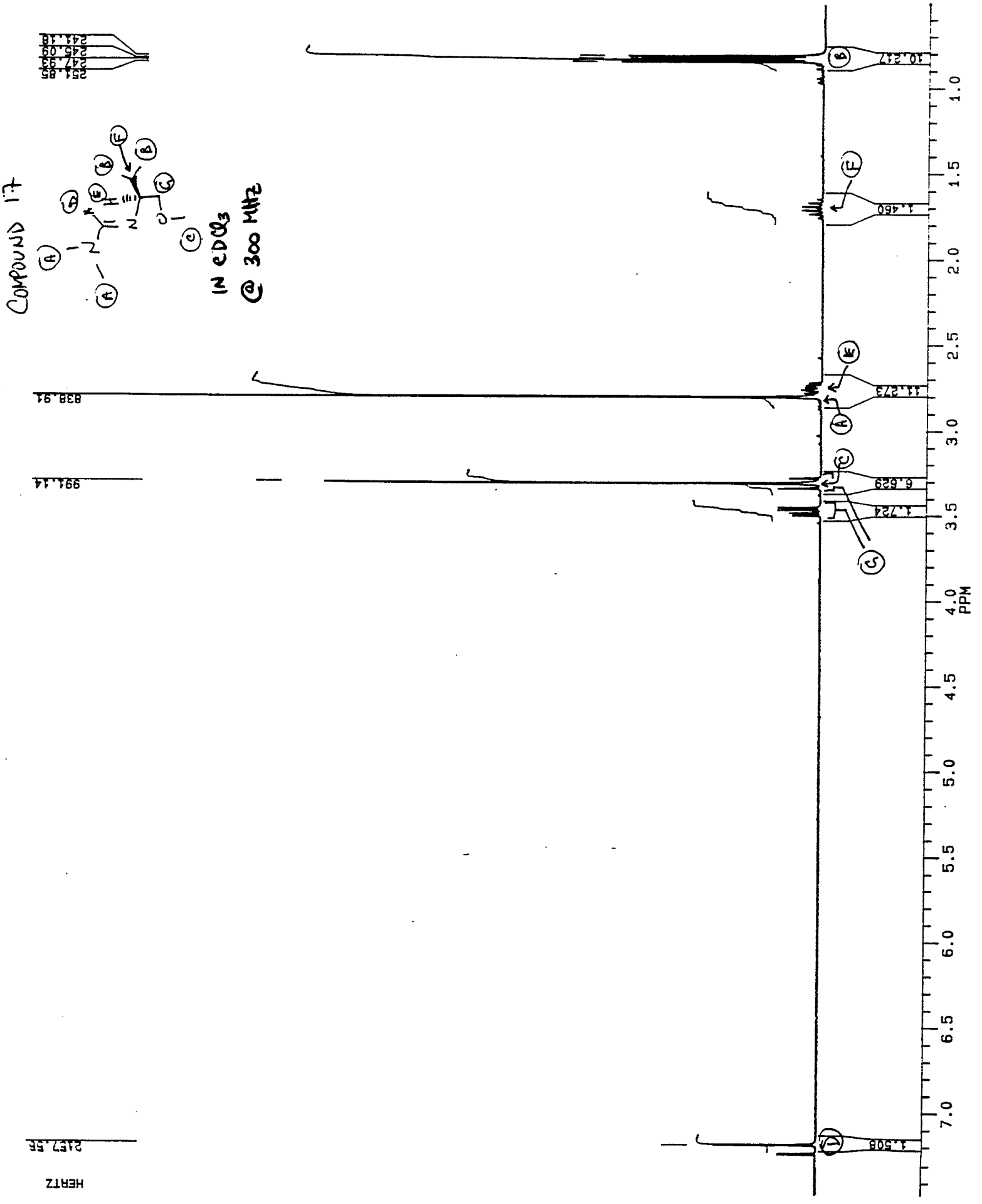
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G-580-1

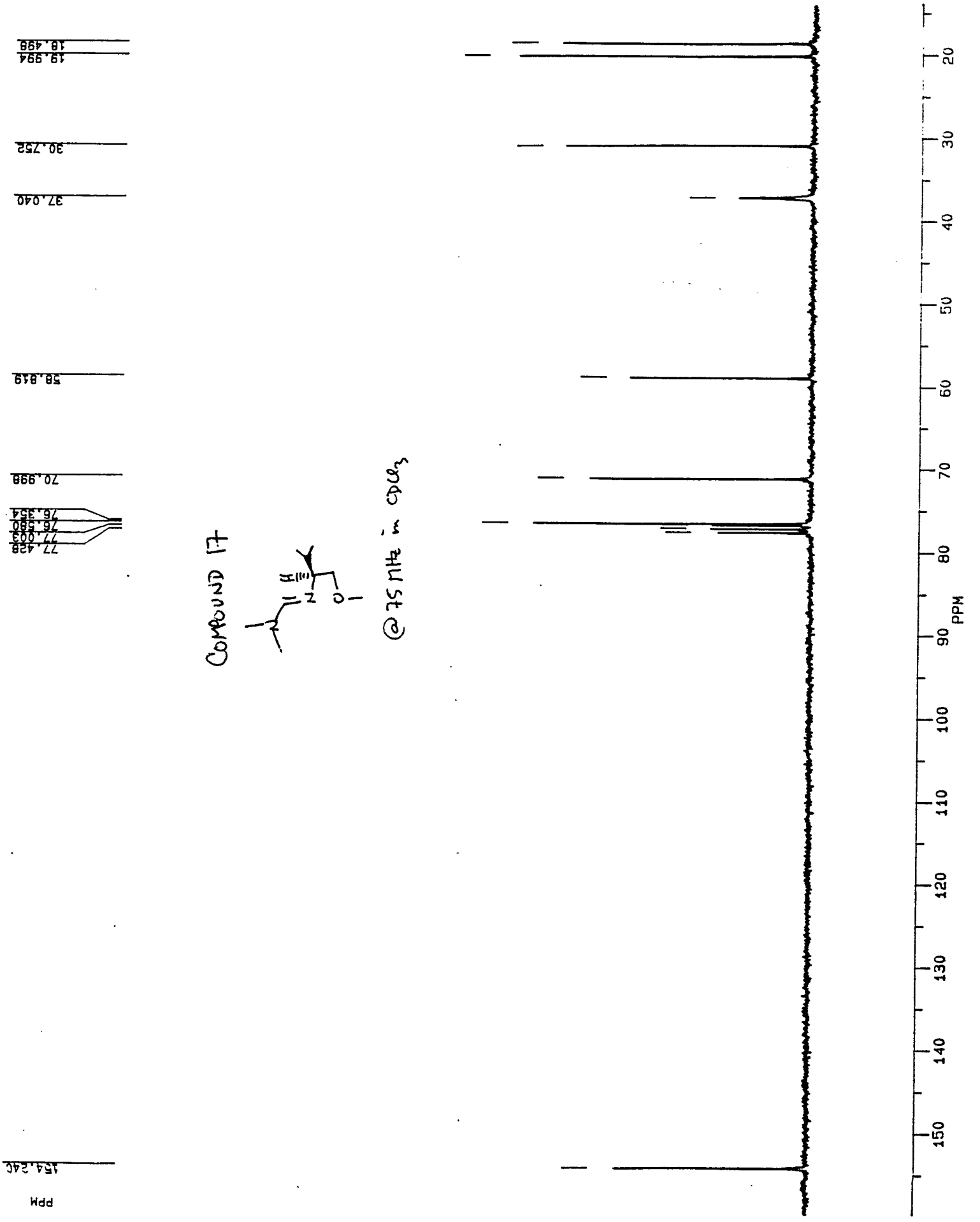


Compound 15
in $CDCl_3$ @ 75 MHz

G-580-11


COMPOUND 17
IN CDCl3
@ 300 MHz
PPM
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
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HERTZ

9-580-1a



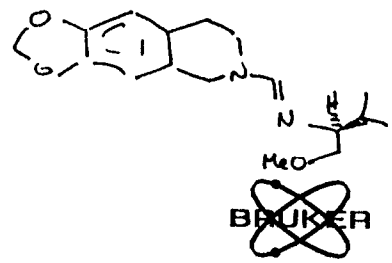
Compound 17

@ 75 MHz in $CDCl_3$

I Exp. # 179
MM-1-189

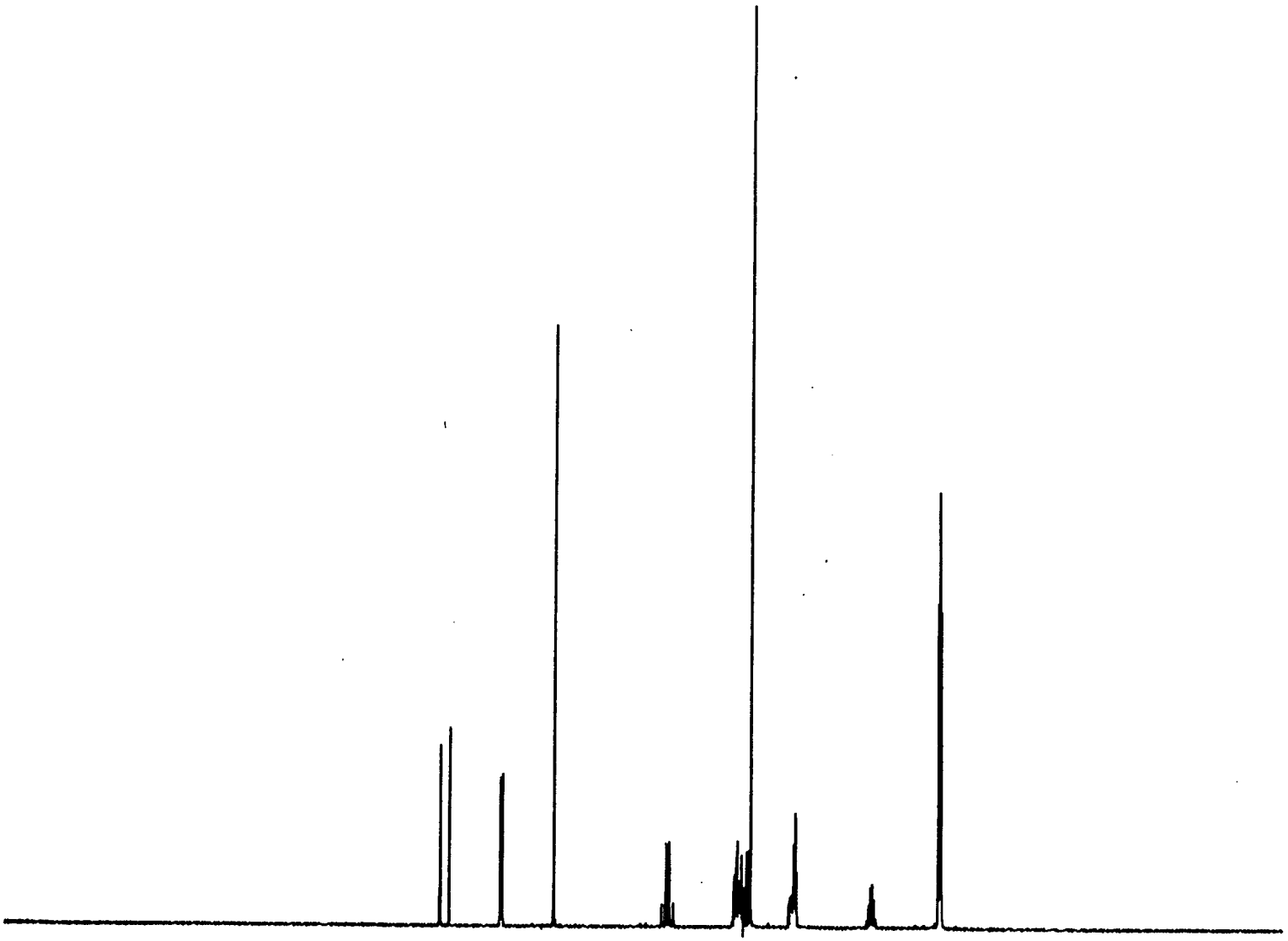
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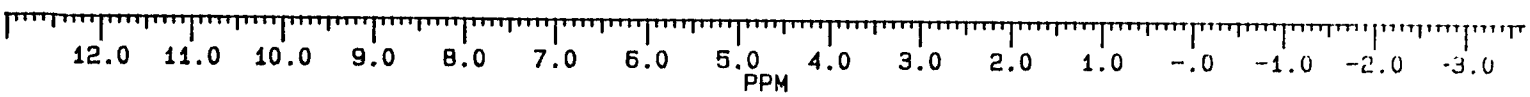
COMPOUND 18



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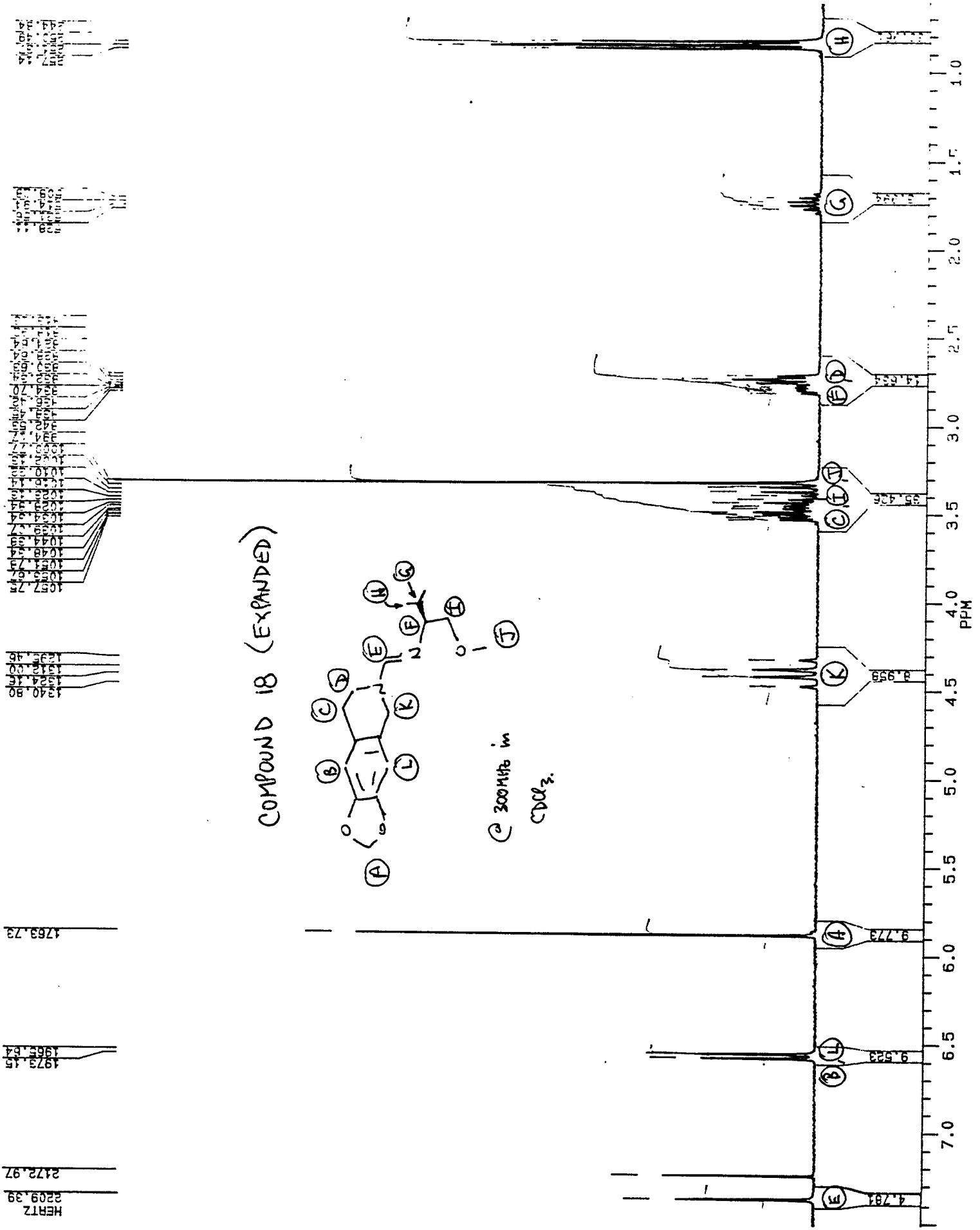
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RG	40
NS	8
TE	297
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O2	4395.480
DP	63L PO
LB	-.150
GB	.150
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F1	13.013P
F2	-3.645P
HZ/CM	249.985
PPM/CM	.833
SR	3373.94



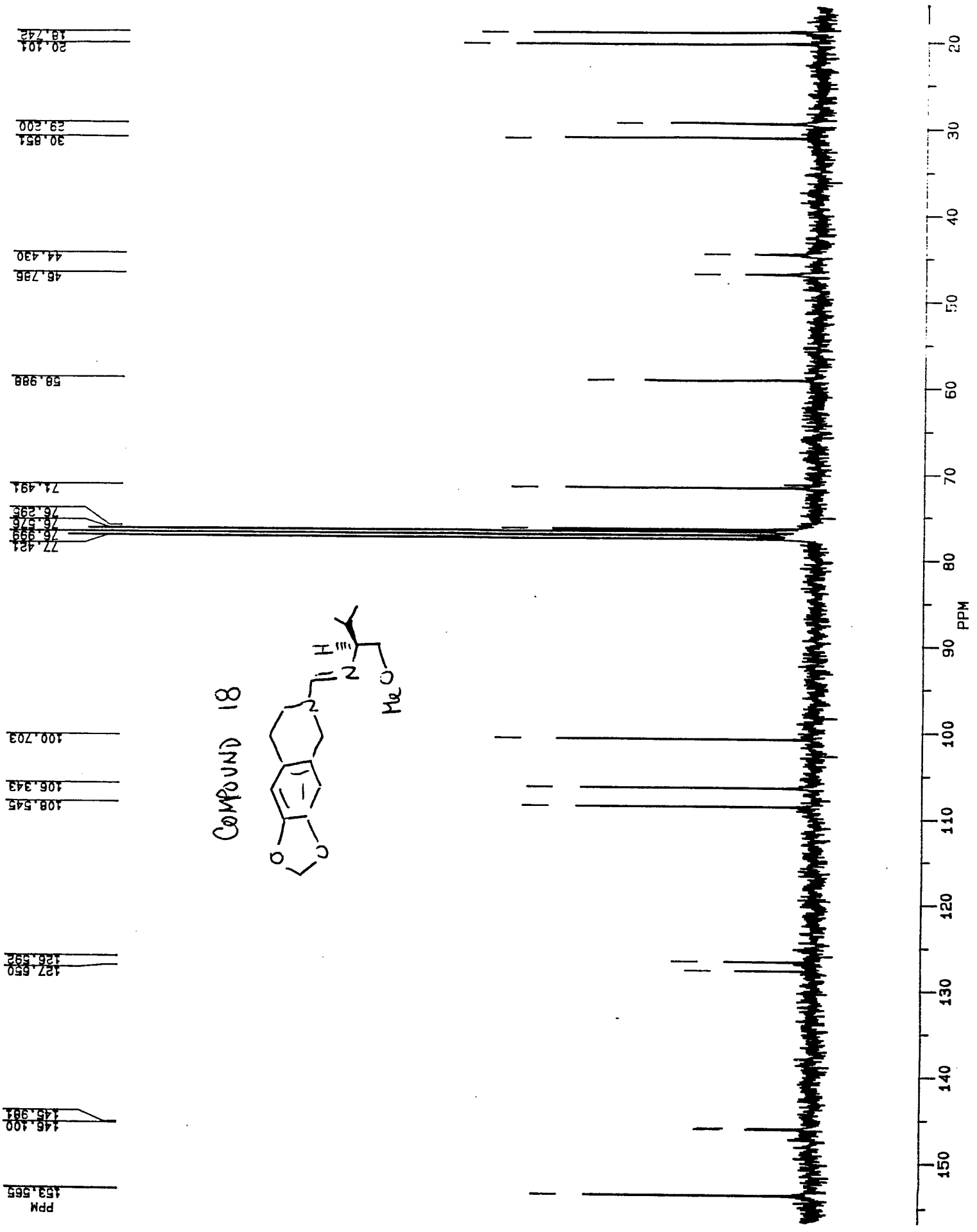


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Q-580-14


COMPOUND 18 (EXPANDED)
@ 300MHz in CDCl3.
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1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
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7.0
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9.523
4.784
HERTZ

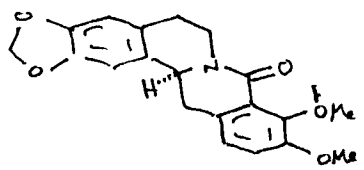
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29.200
30.851
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76.295
76.576
76.999
77.421
100.703
106.343
108.545
126.592
127.650
145.981
146.100
153.565
PPM
20
30
40
50
60
70
80
90
100
110
120
130
140
150
PPM
COMPOUND 18
H
N
2
2
Me
O
O
O

I Exp. 17
MM-1-57

OCTMAM.001

PROTON IN CDCL3



COMPOUND 21

BRUKER

OCTMAM.001
DATE 1-10-93

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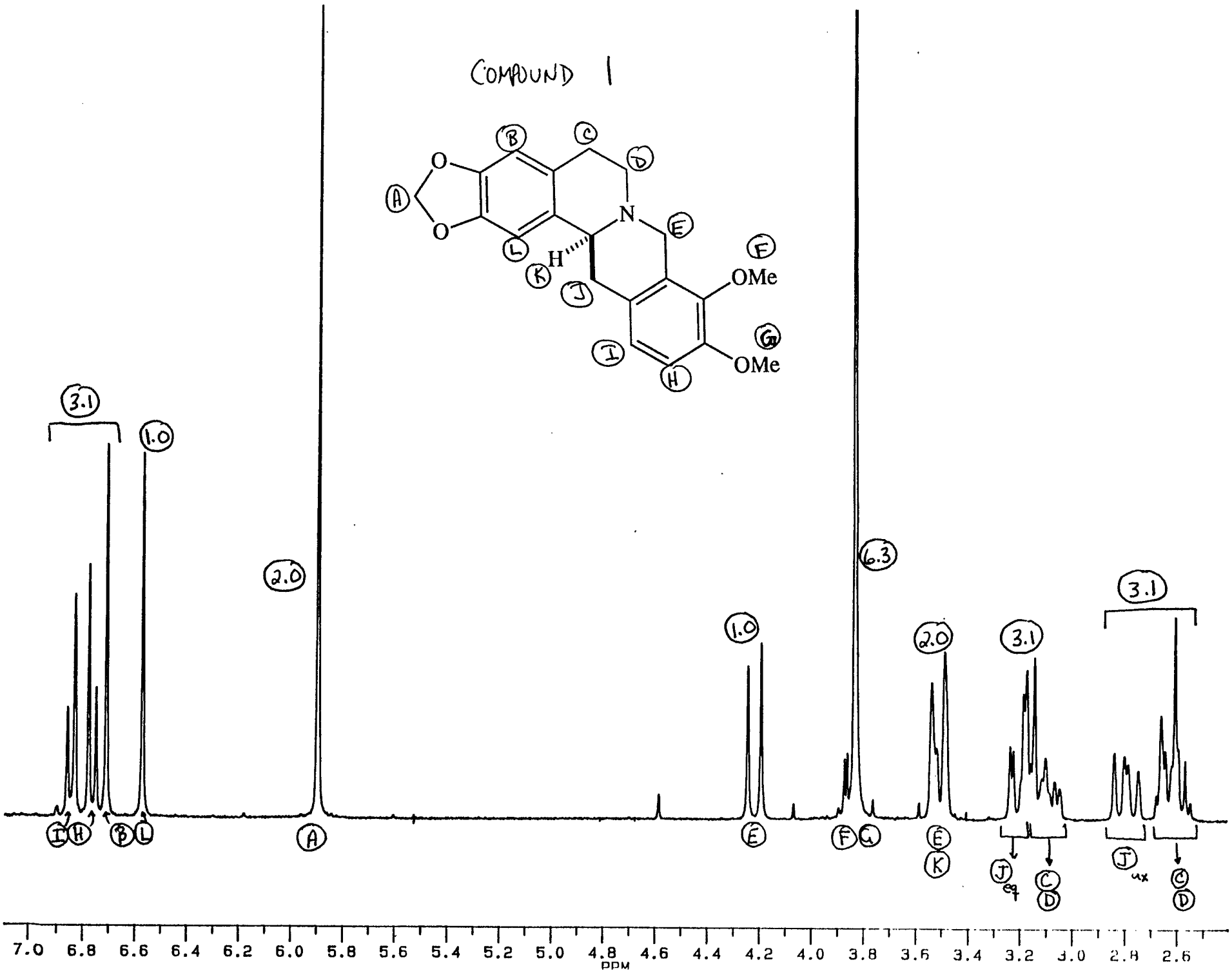
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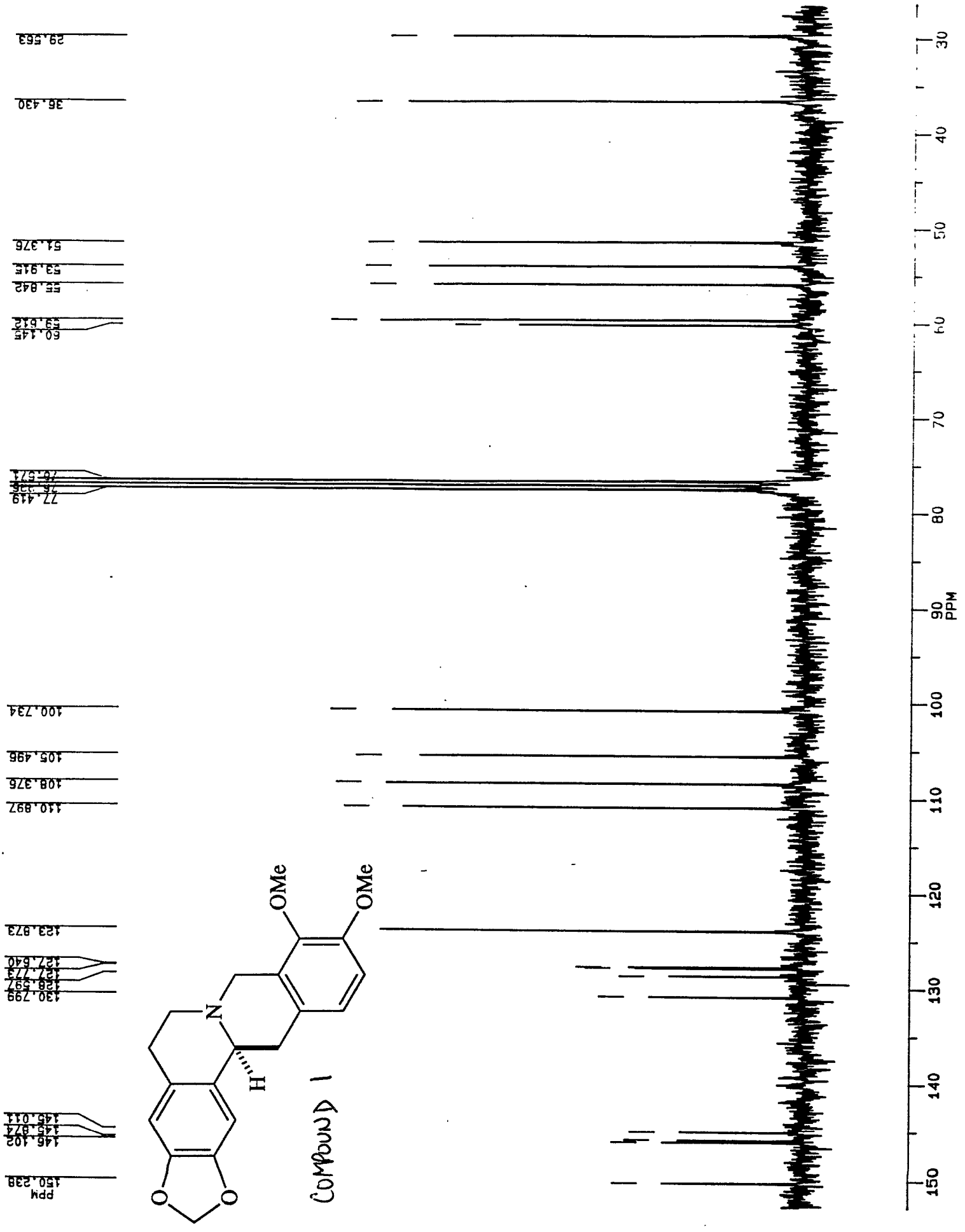
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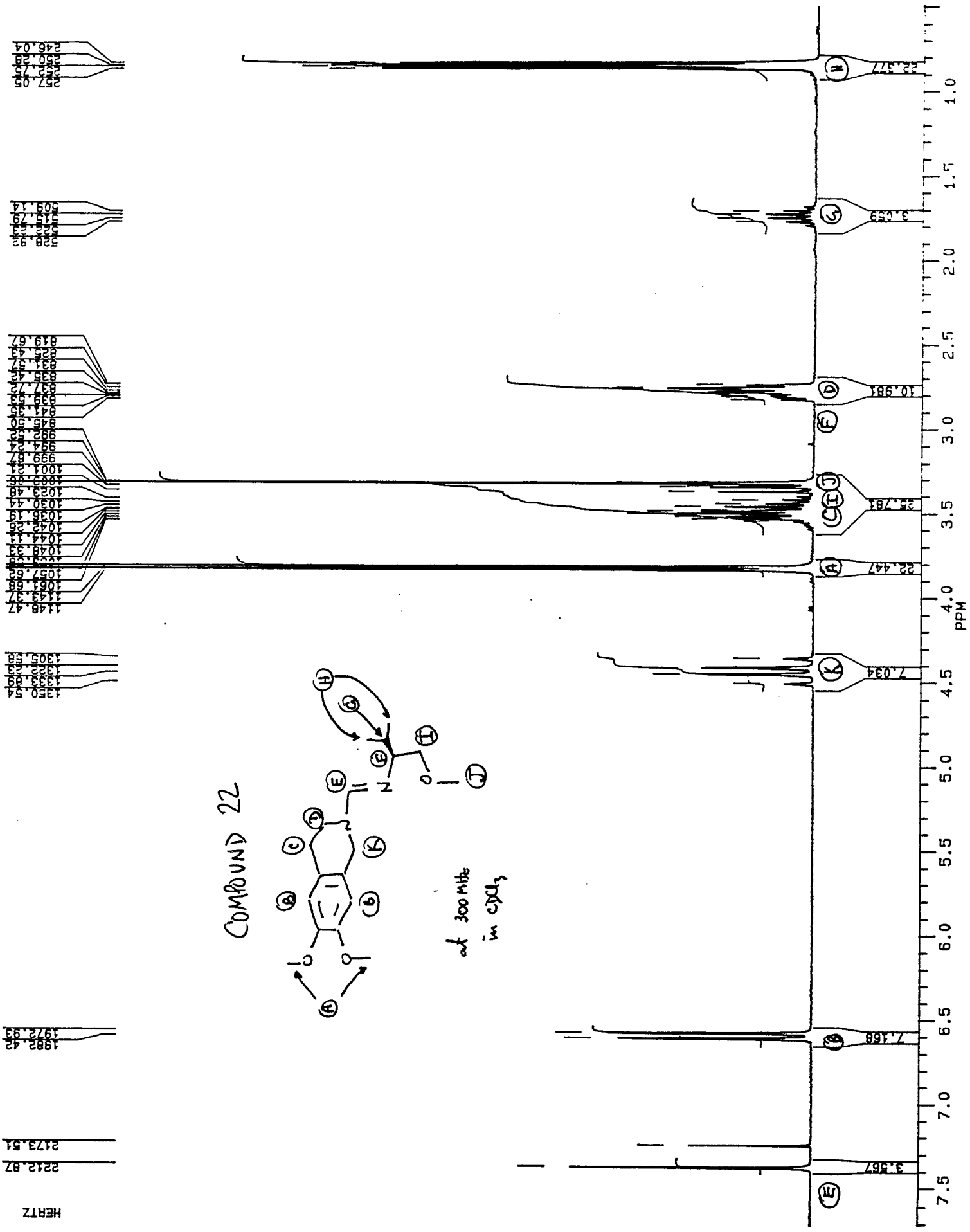


Q-580-1

Q-580-1


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127.773
128.597
130.799
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146.102
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40
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O
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COMPOUND 1

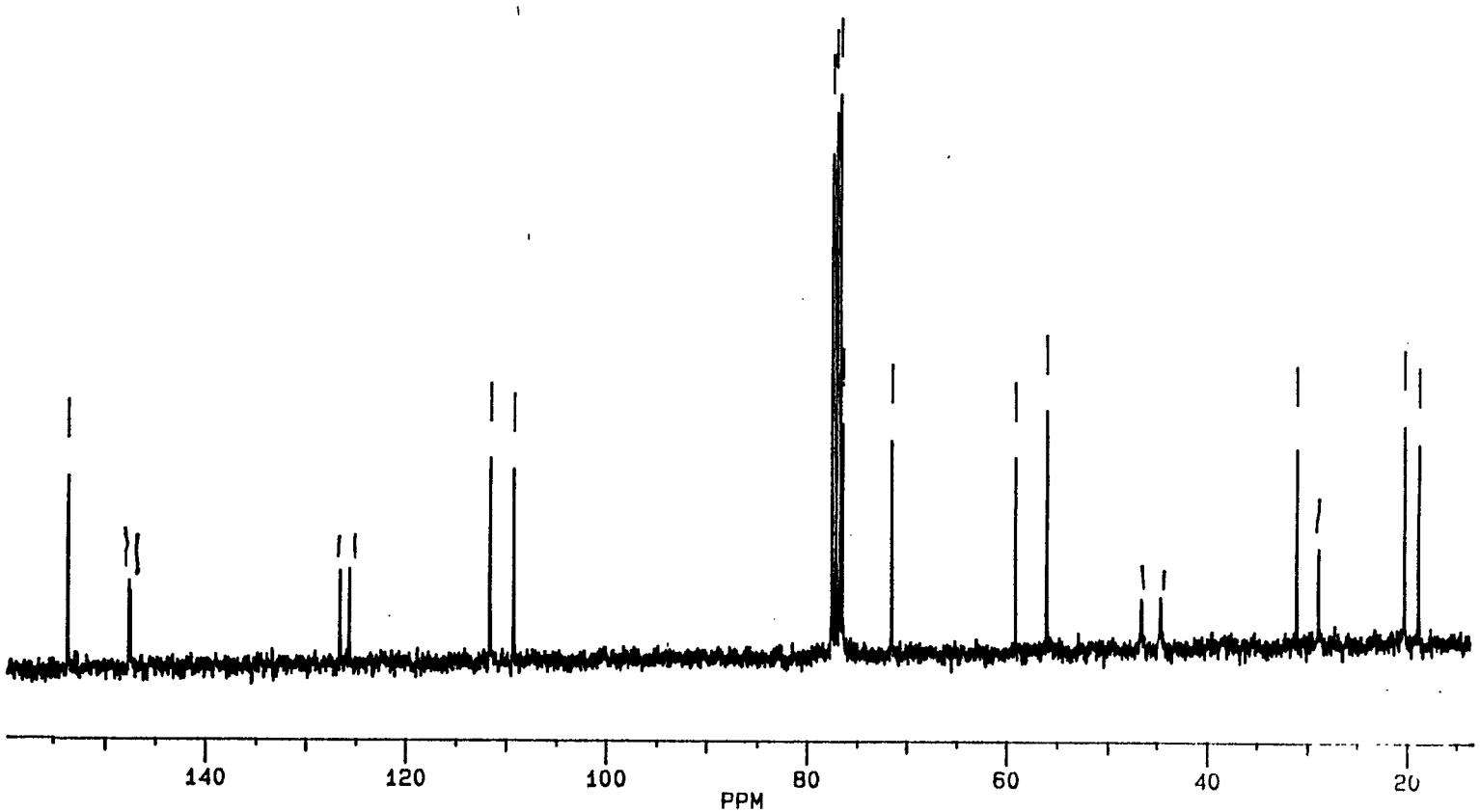
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CARBON IN CDCL3

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109.139
77.428
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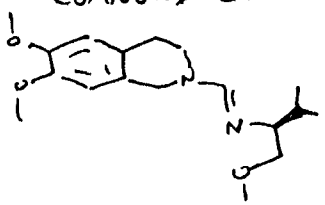


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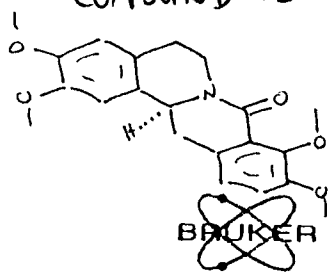
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4-580-21

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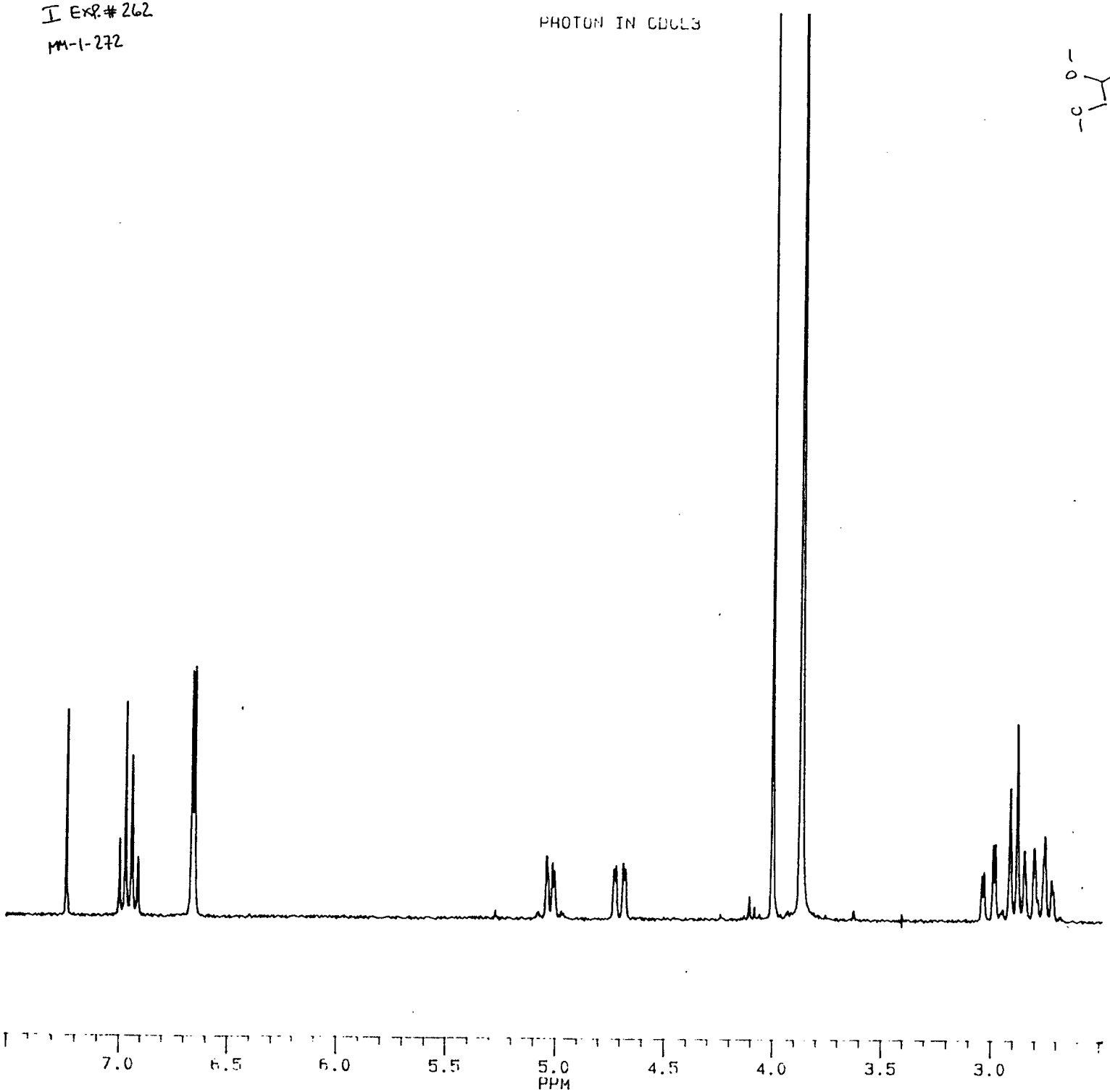
PROTON IN CDCL3

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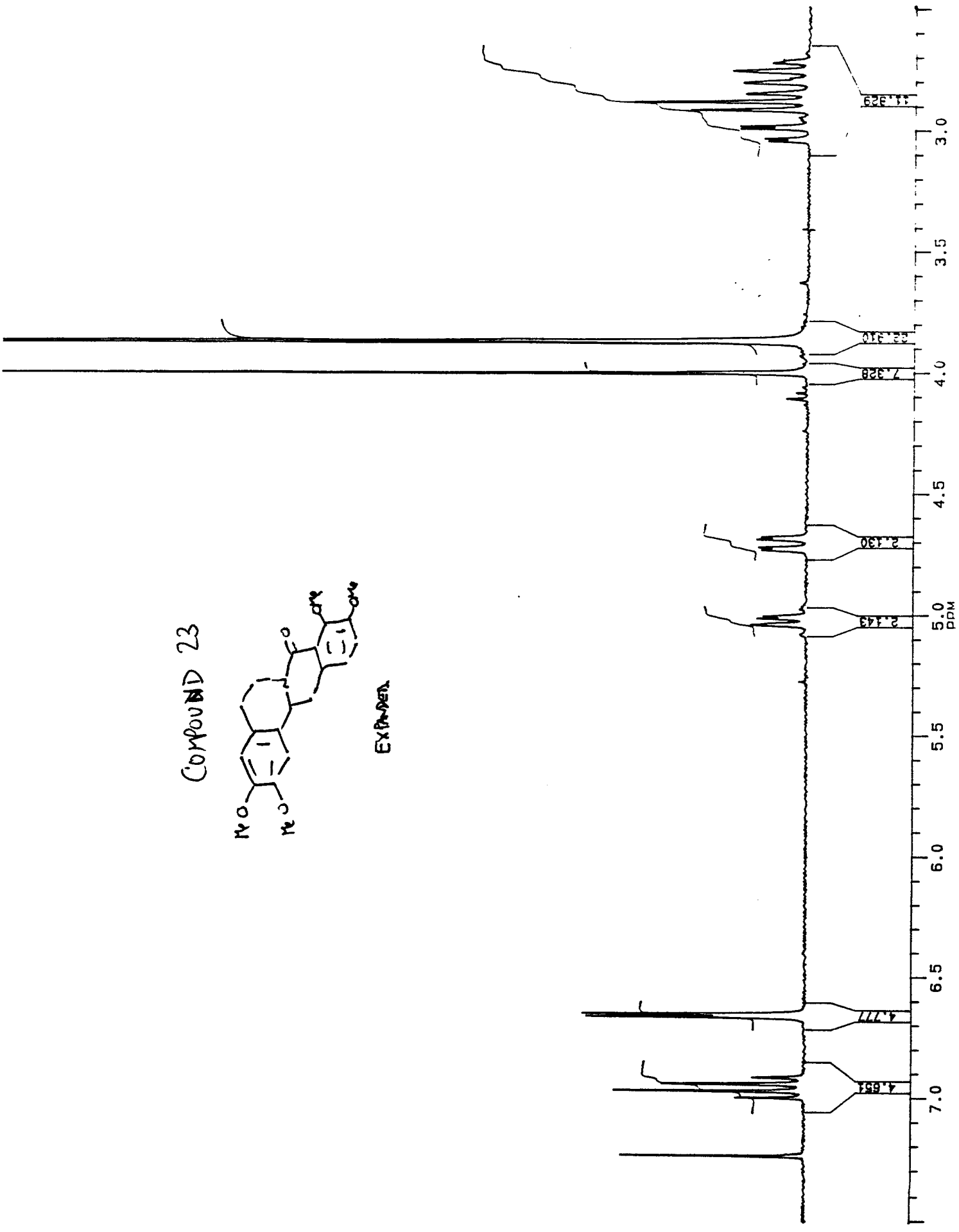
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NS	16
TE	297
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DP	63L PO
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CX	20.00
CY	0.0
F1	7.504P
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HZ/CM	75.302
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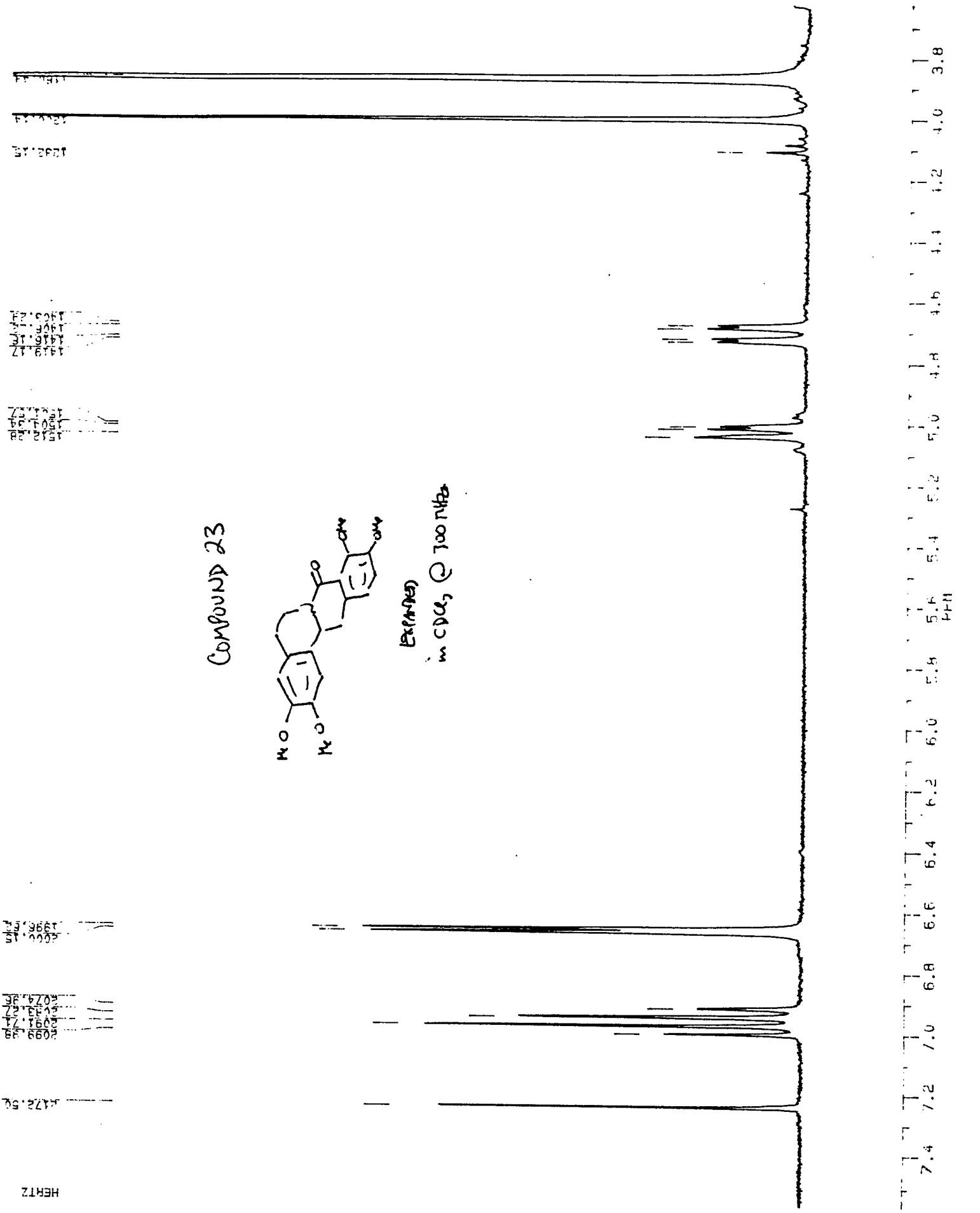
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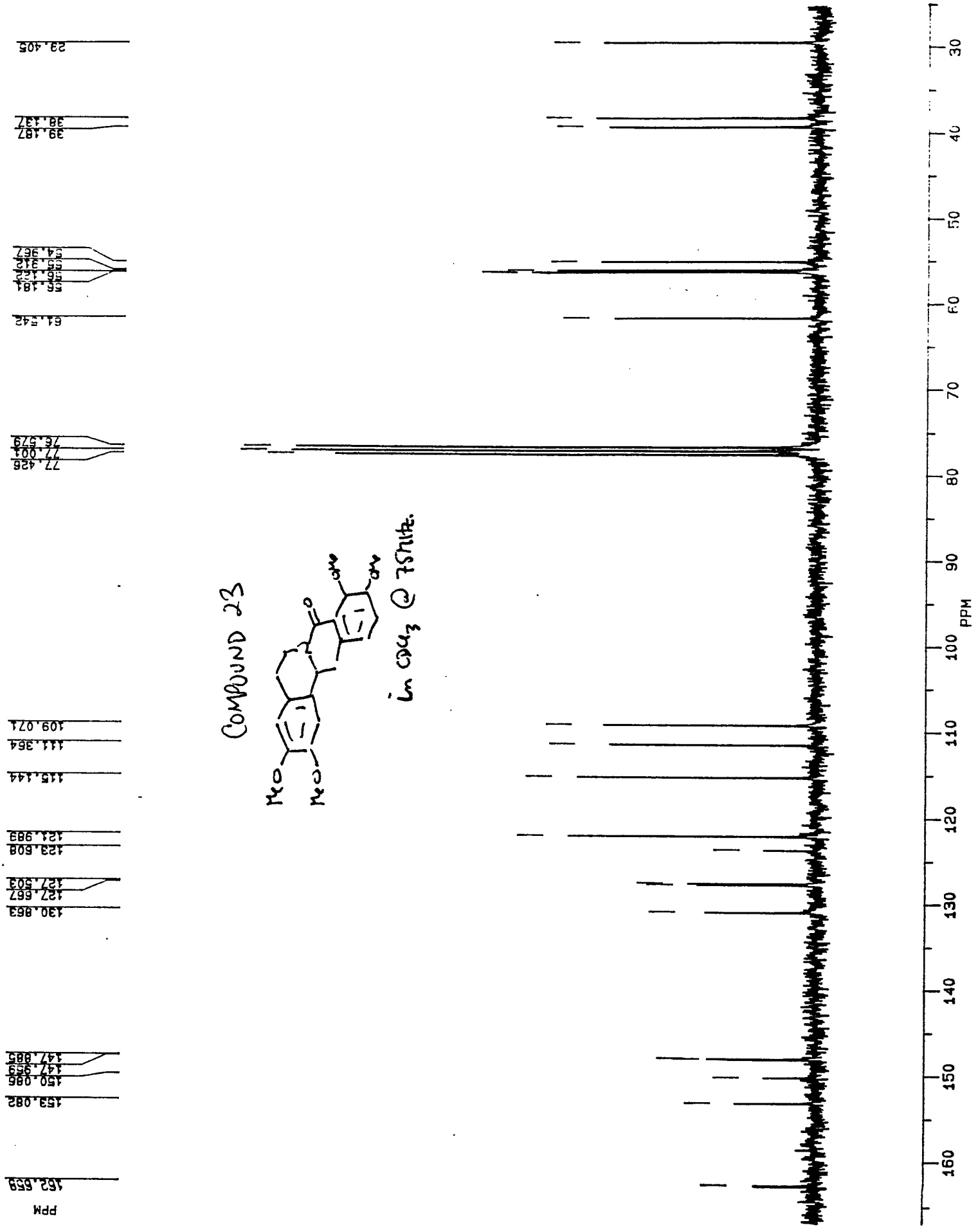


COMPOUND 23

EXPANSION


9-580-2
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PPM
HERTZ

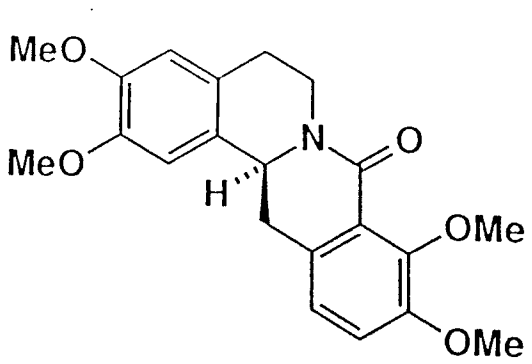
Q-580-2



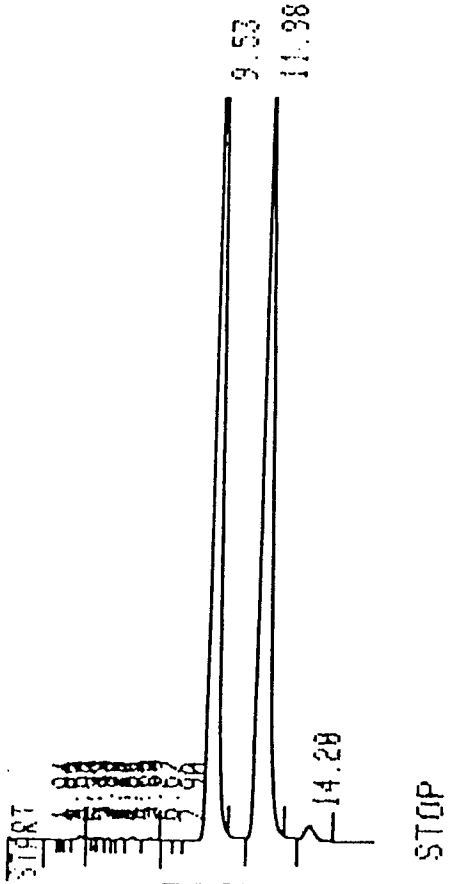
COLUMN : (R,R)-β-GEM I

SOLVENT : 34/33/33 (*n*-hexane:*i*-PrOH:MeOH)

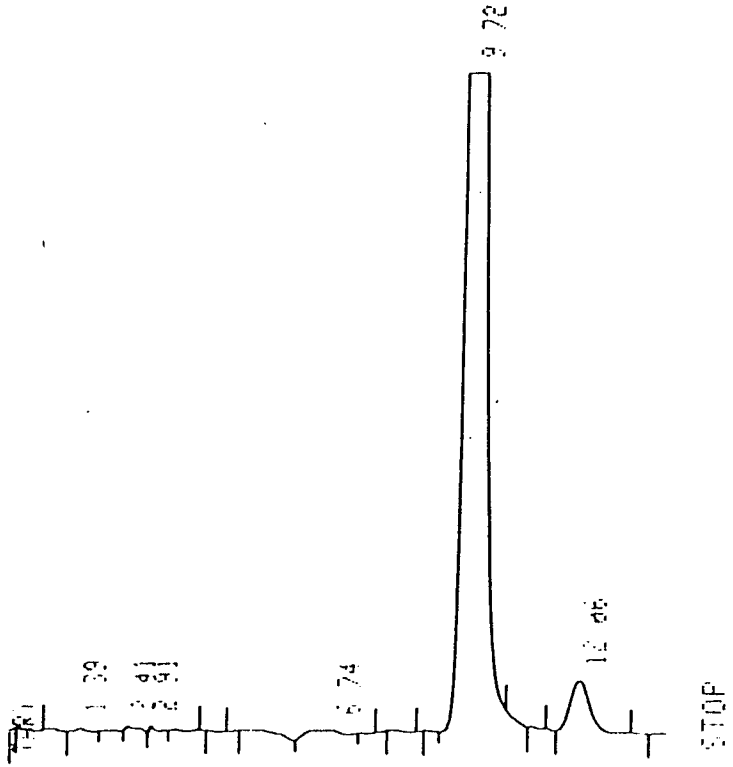
FLOW RATE : 5.00 mL/min



COMPOUND 23

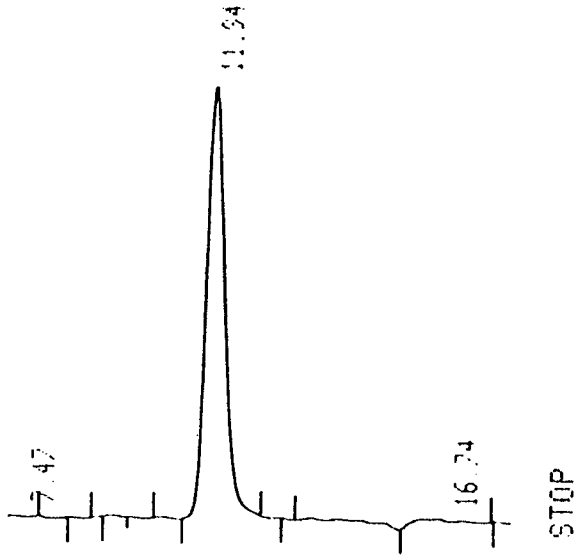


RACEMIC



(R)-(+)-8-oxotetrahydropalmatine

97:3

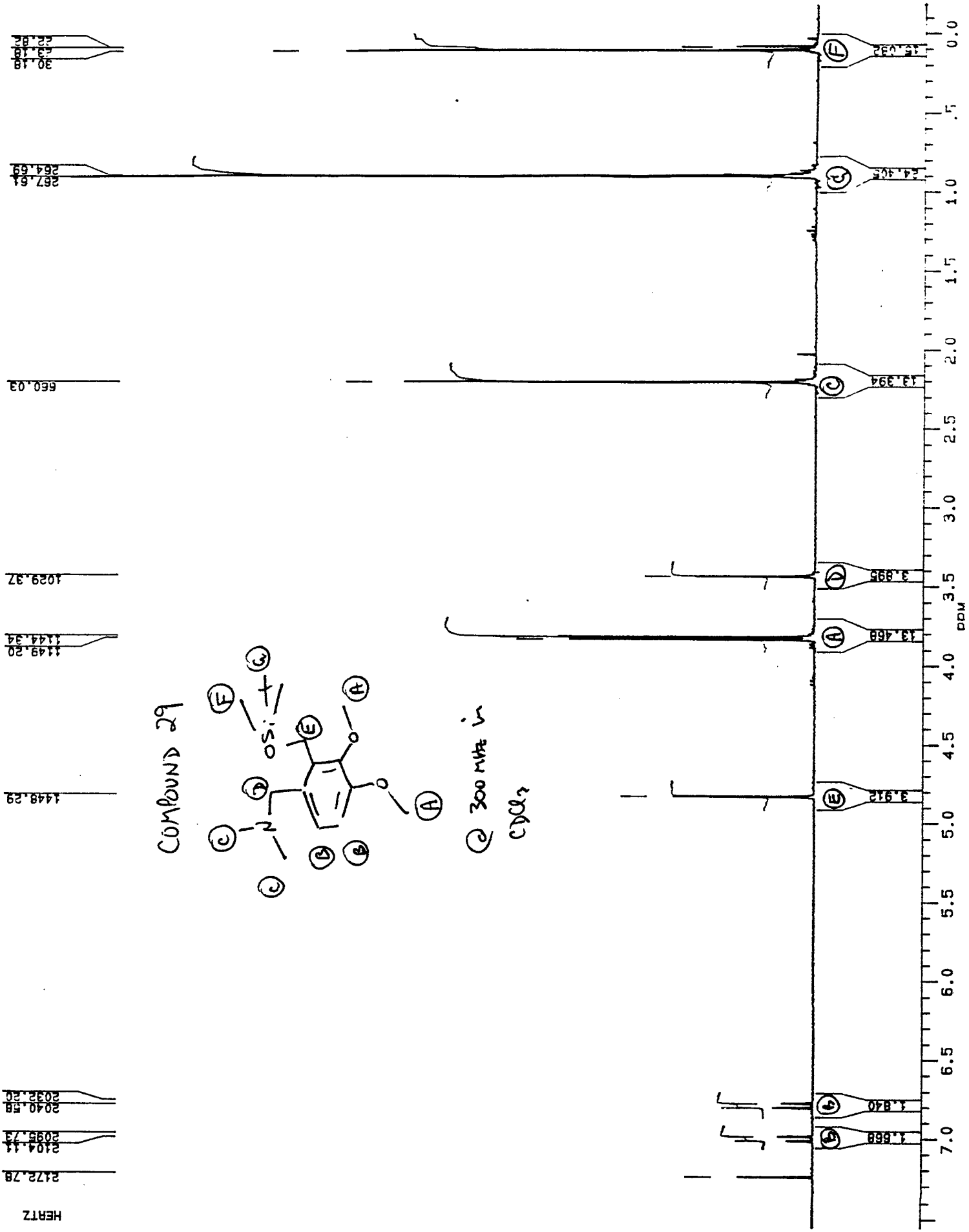


(S)-(-)-8-oxotetrahydropalmatine

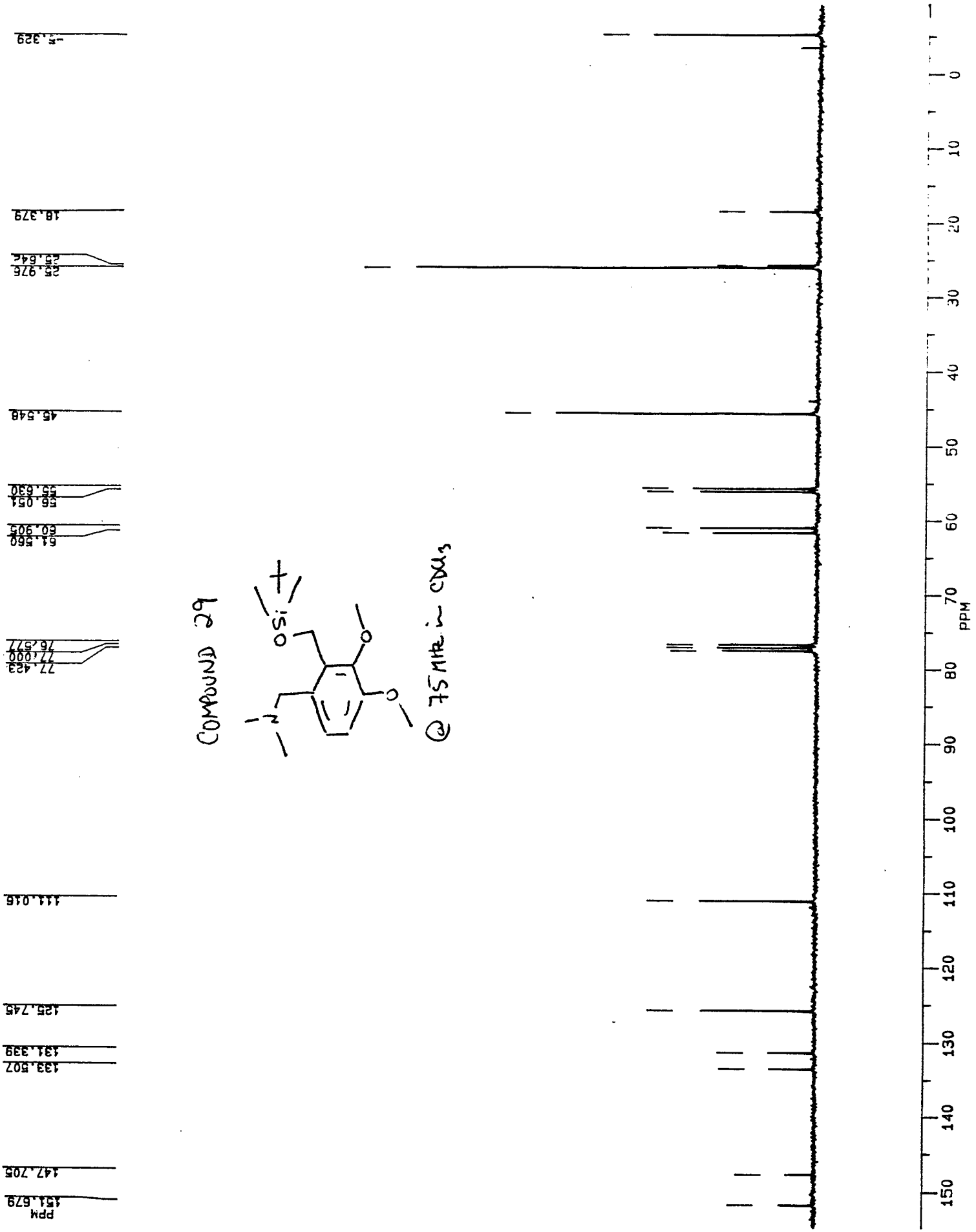
>98:2

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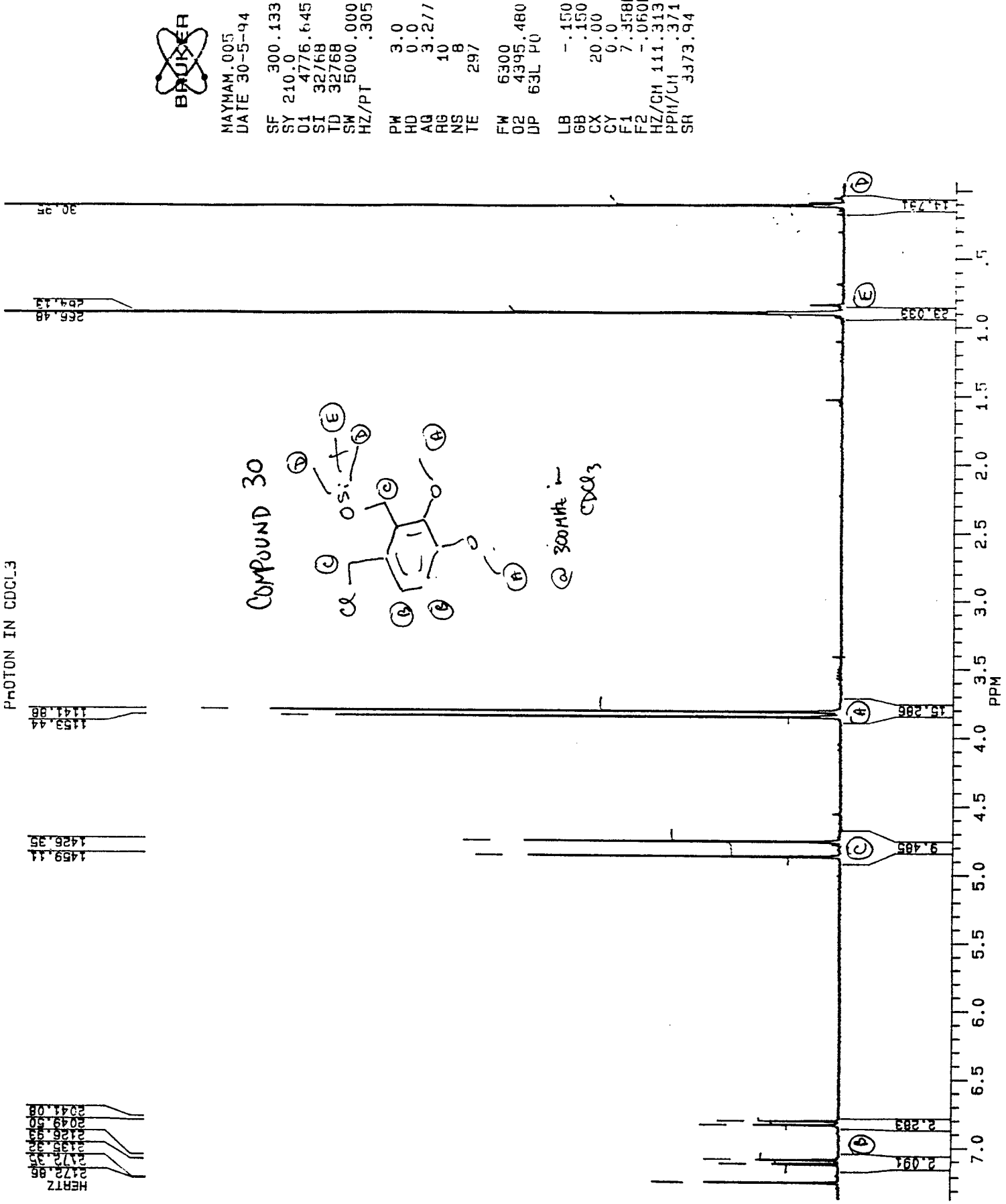
G-580-2



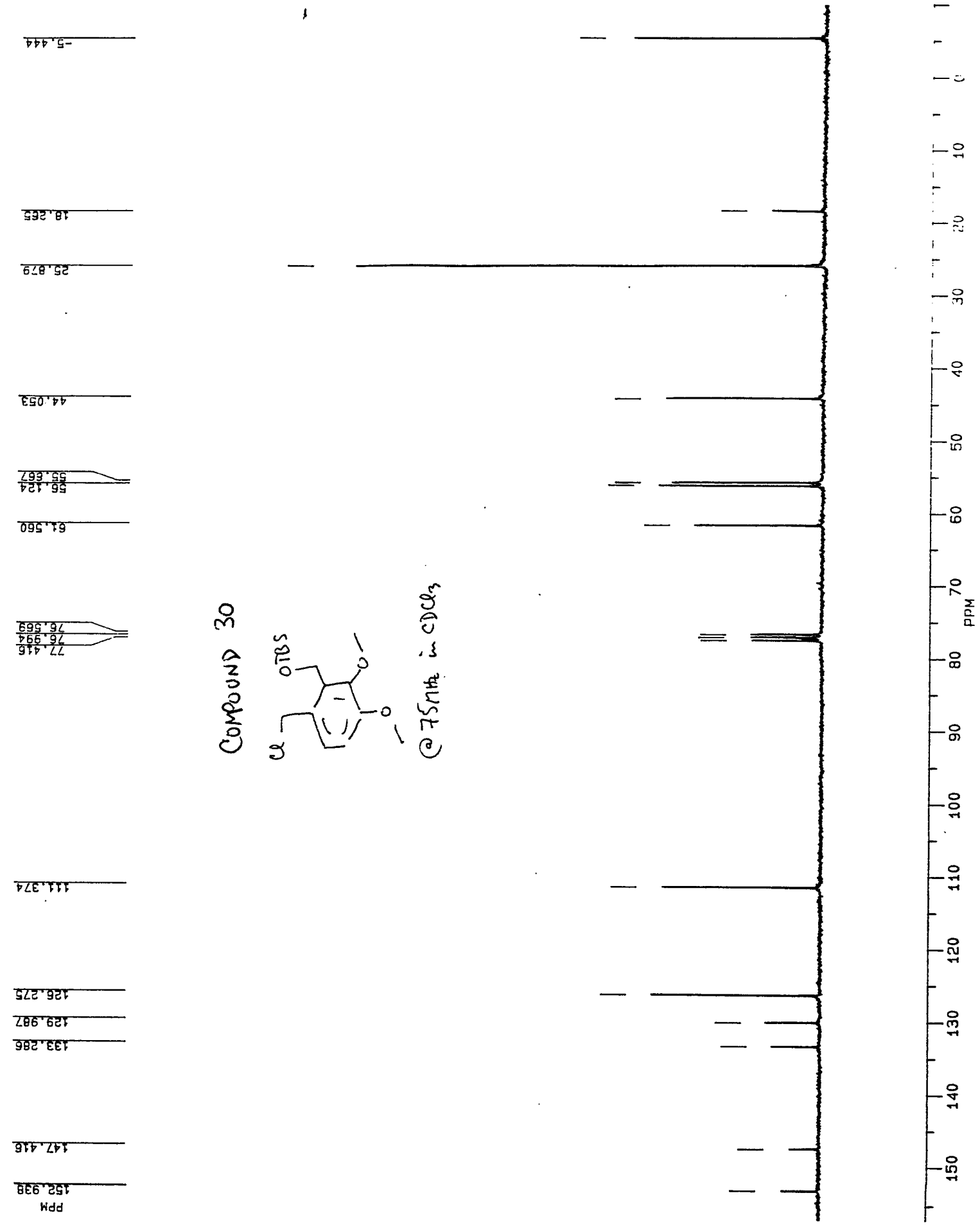
G-580-27


-5.329
18.379
25.976
25.644
45.548
55.630
56.054
60.905
61.560
76.577
77.000
77.423
111.016
125.745
131.339
133.502
147.705
151.679
ppm
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
ppm
COMPOUND 29
@ 75 MHz in CDCl3
Si
O
O
O
N

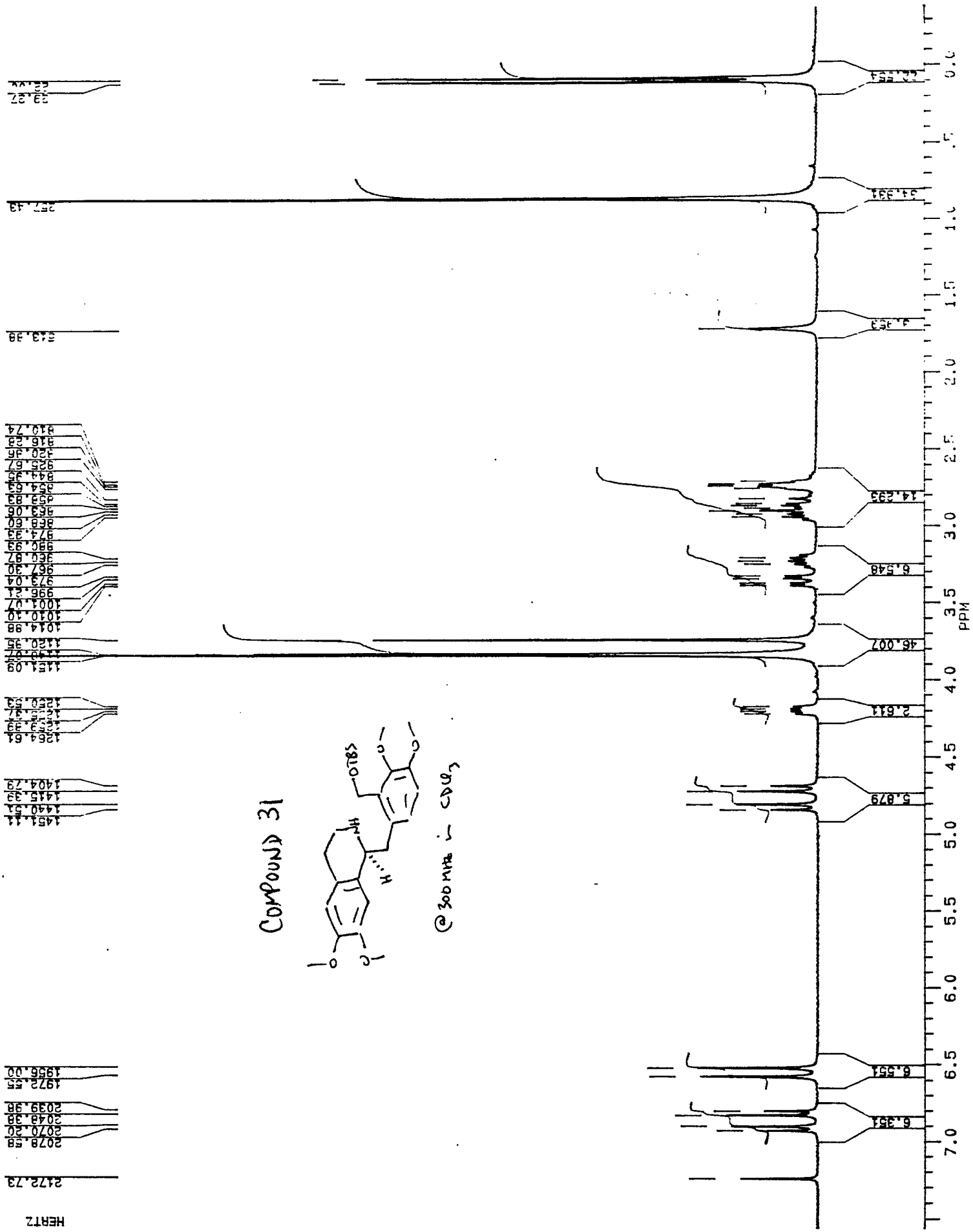
G-580-1


BRUKER
MAYMAM.005
DATE 30-5-94
SF 300.133
SY 210.0
O1 4776.645
SI 32768
TD 32768
SW 5000.000
HZ/PT .305
PW 3.0
HD 0.0
AQ 3.277
RG 10
NS 8
TE 297
FW 6300
O2 4395.480
DP 63L PO
LB -.150
GB .150
CX 20.00
CY 0.0
F1 7.358P
F2 -.060P
HZ/CM 111.313
PPM/CM .371
SR 3373.94
COMPOUND 30
@ 300MHz in CDCl3
PROTON IN CDCL3
HERTZ
PPM
14.731
23.033
15.286
9.485
2.283
2.091

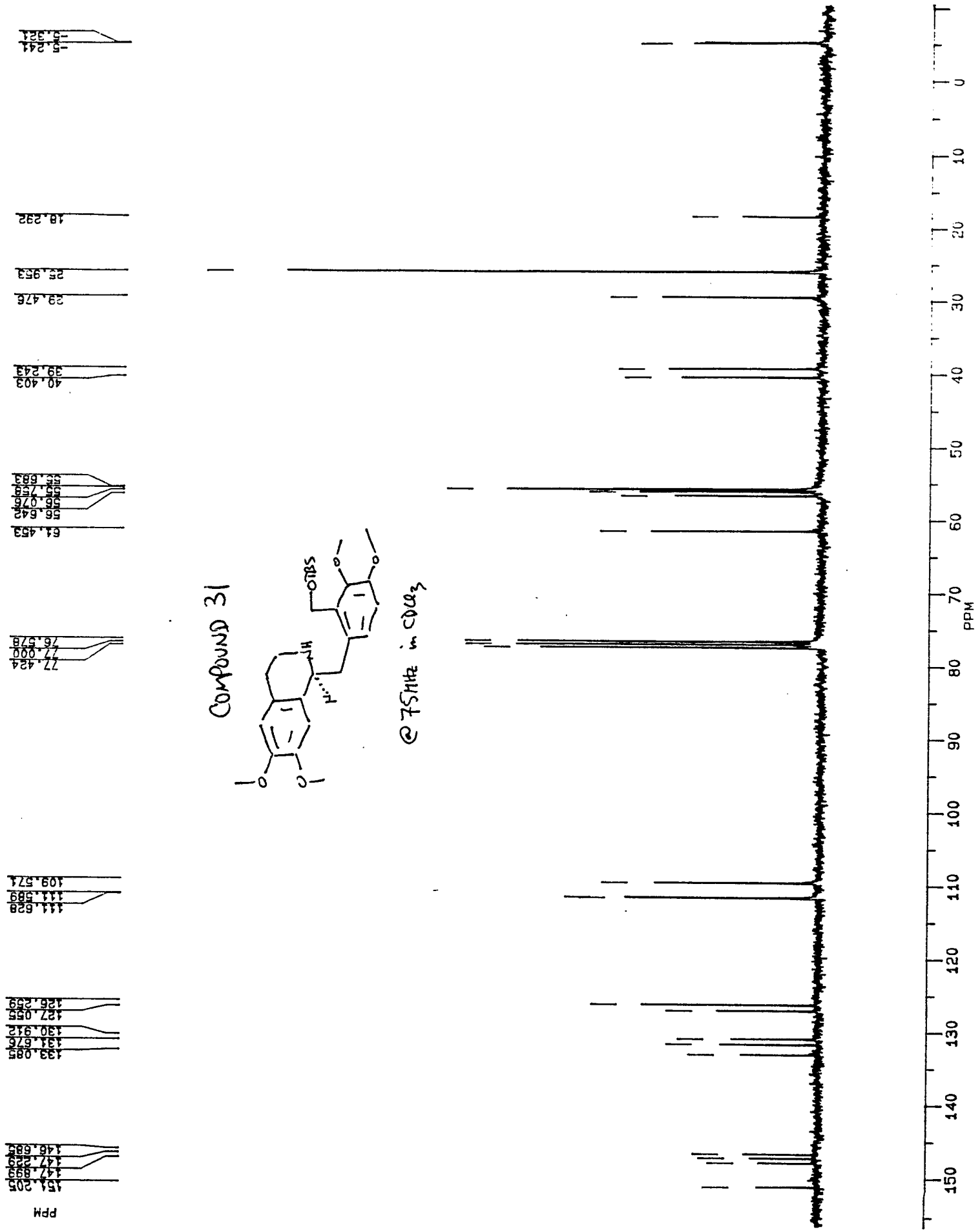
9-550-29


-5.444
18.265
25.879
44.053
55.687
56.124
61.560
76.569
76.994
77.416
111.374
126.275
129.987
133.286
147.416
152.938
PPM
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
PPM
COMPOUND 30
OTBS
@ 75mM in CDCl3

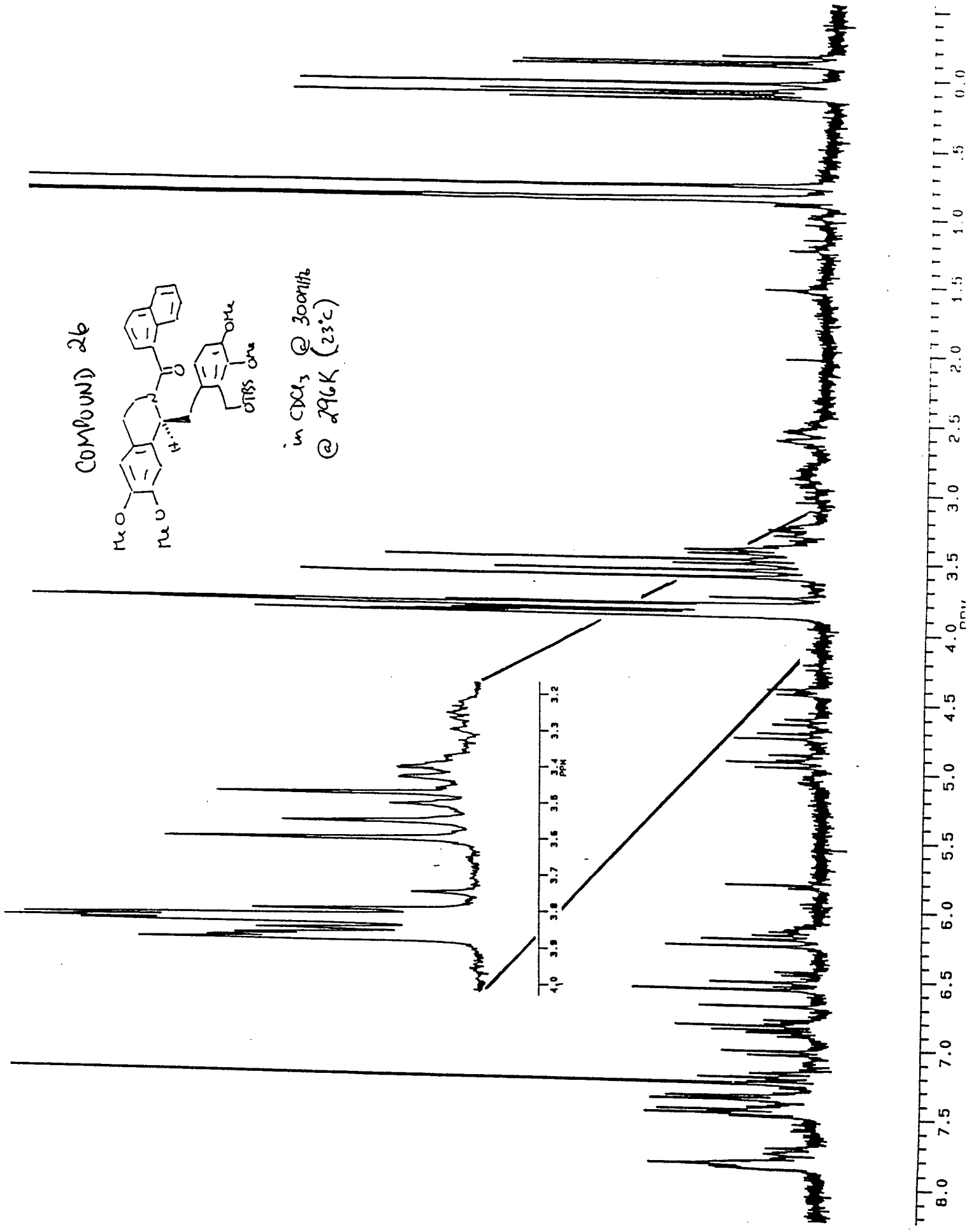
9-580-30


Compound 31
@300 MHz in CDCl3
OTBS
NH
H
PPM
6.5
5.0
4.0
3.5
3.0
2.0
1.5
1.0
0.0
HERTZ

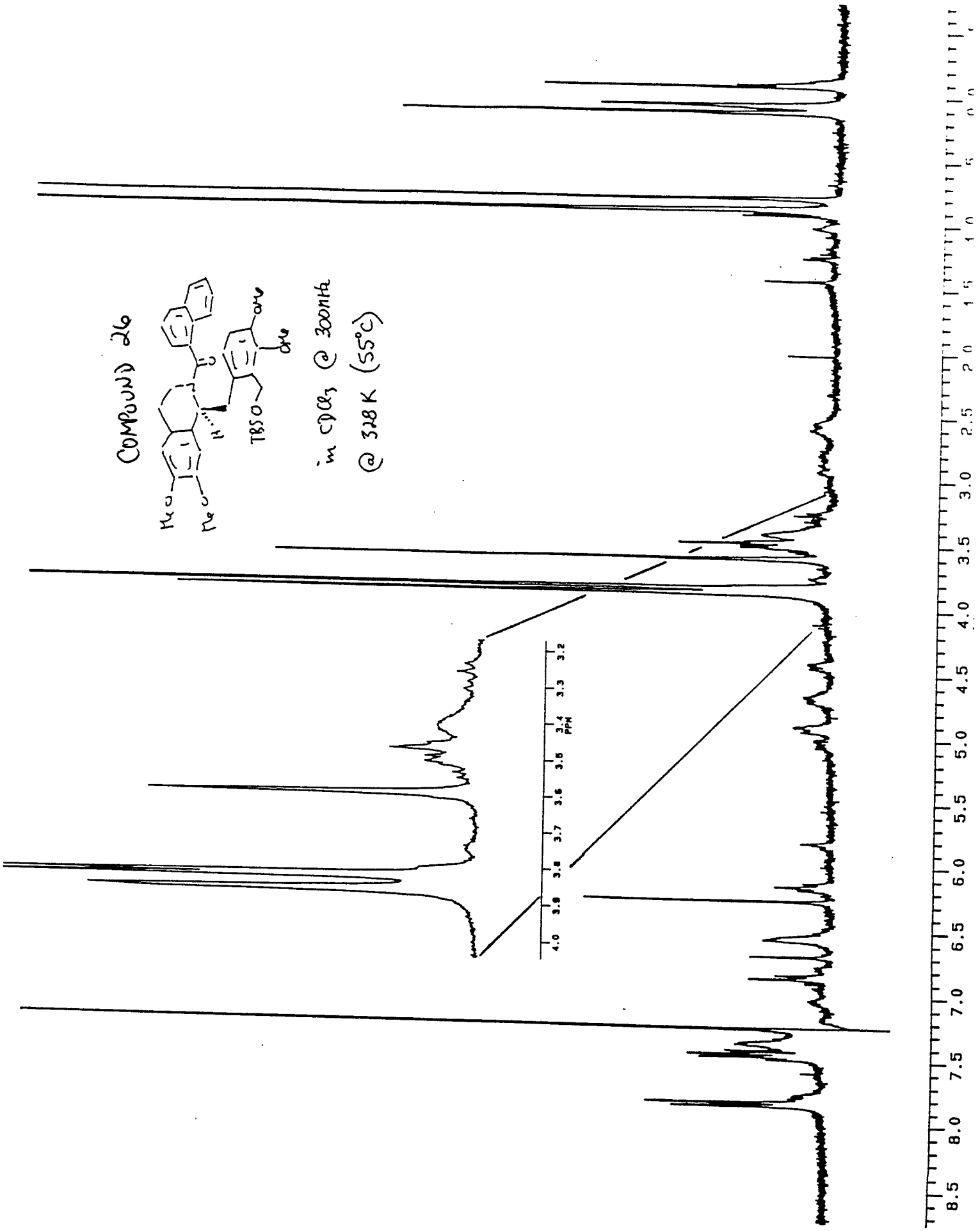
G-580-31


-5.241
-5.321
18.292
25.953
29.476
39.243
40.403
55.683
55.758
56.076
56.642
61.453
76.578
77.000
77.424
109.571
111.589
111.628
126.259
127.055
130.912
131.676
133.085
146.685
147.229
147.899
151.205
PPM
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
PPM
OTBS
Compound 31
@ 75MHz in CDCl3

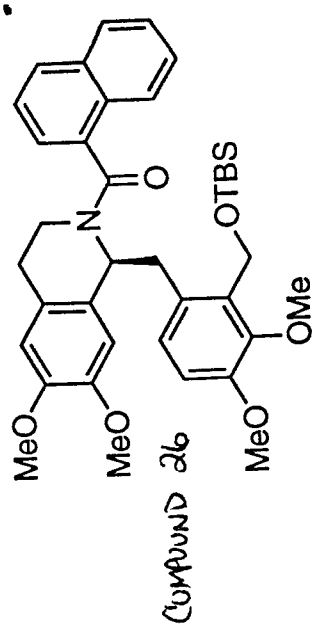
9-580-3c



G-580-3


COMPOUND 26
in CDCl3 @ 300mh
@ 328 K (55°C)
TBSO
MeO
MeO
4.0
3.9
3.8
3.7
3.6
3.5
3.4
3.3
3.2
PPM
8.5
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5

9-580-34

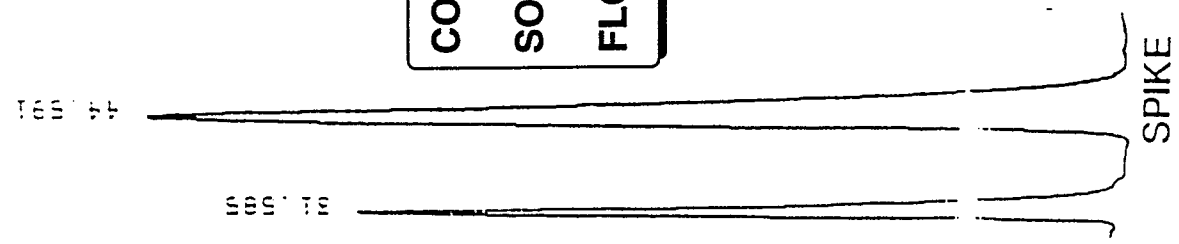


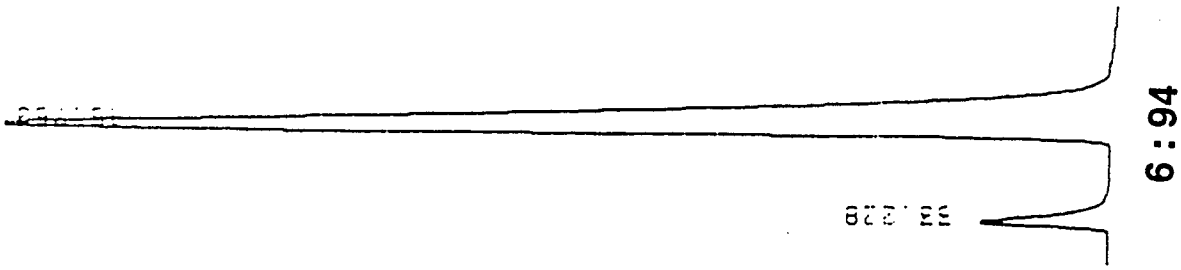
Compound 26

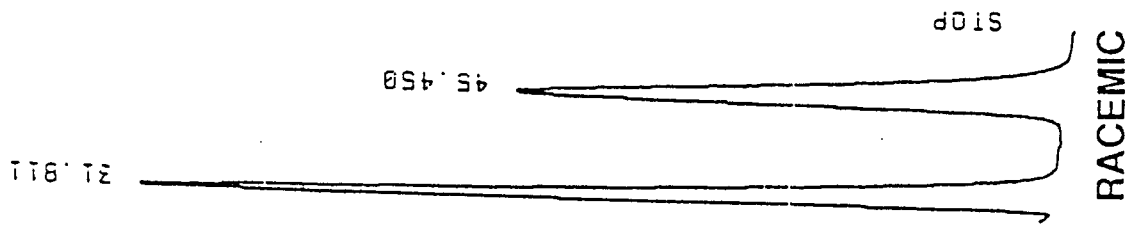
COLUMN : CHIRALCEL OD

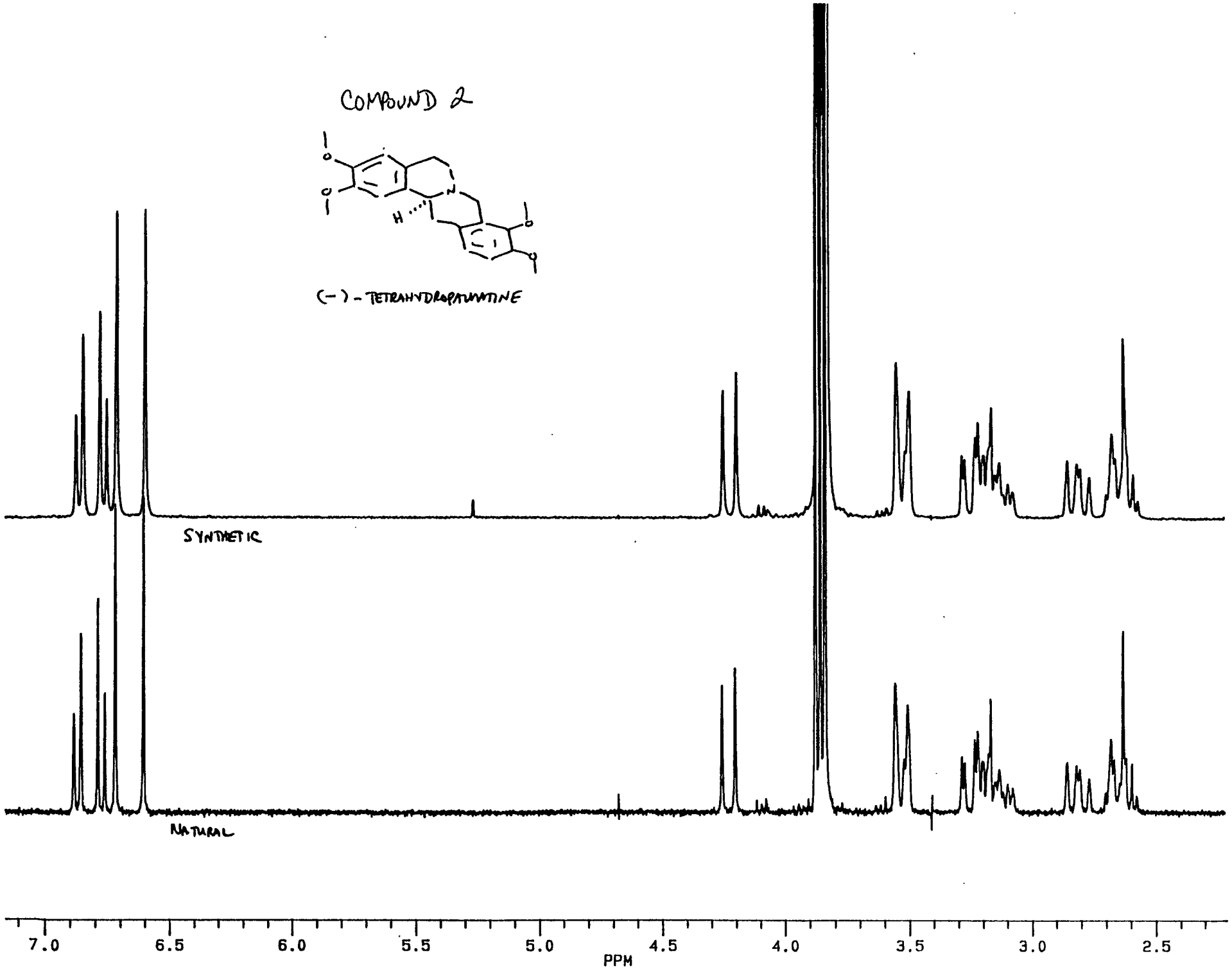
SOLVENT : 80/20 (*n*-hexane:*i*-PrOH)

FLOW RATE : 0.30 mL/min



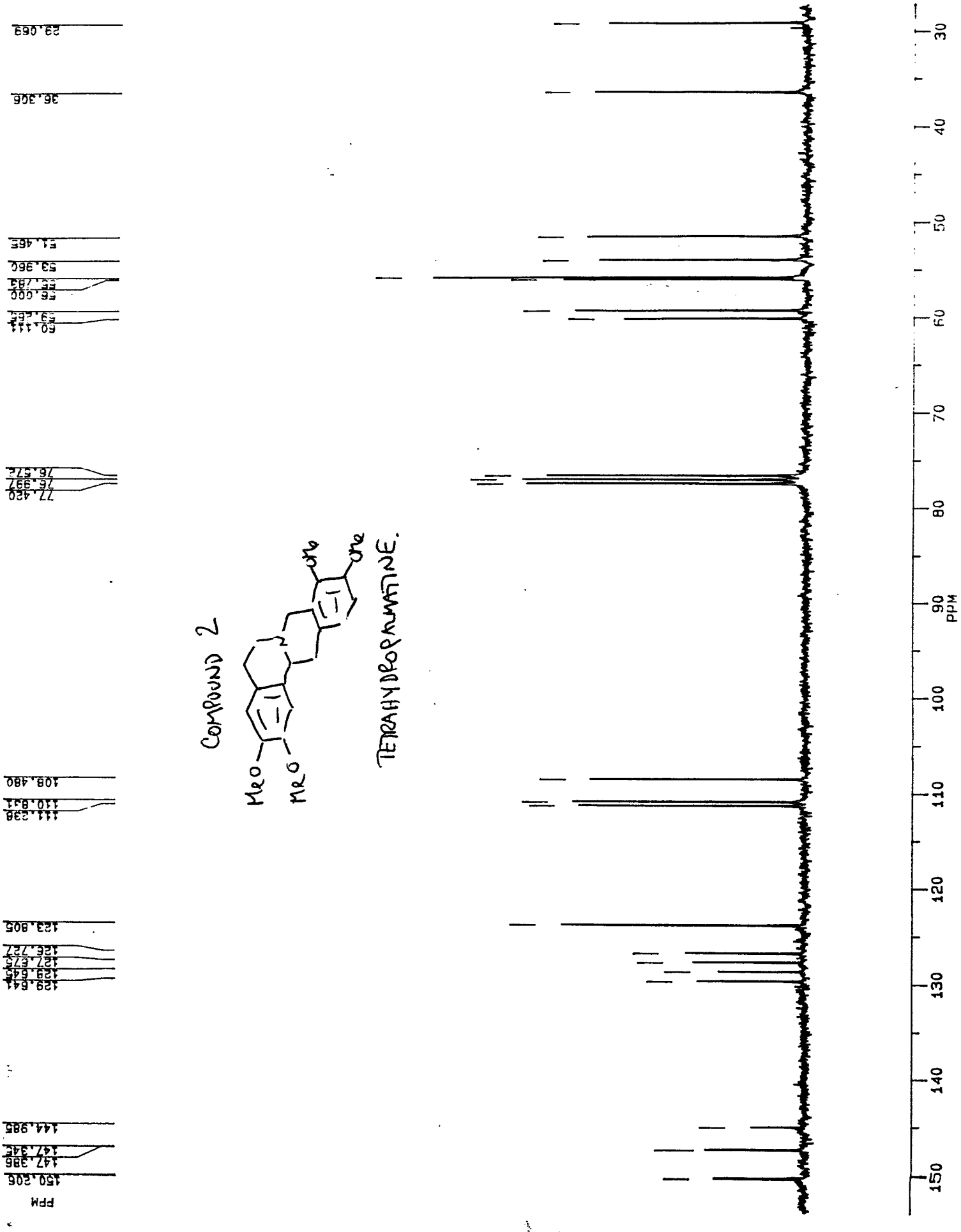






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G-580-36


29.069
36.306
51.465
53.360
56.000
58.793
59.665
60.111
76.572
76.997
77.420
108.480
110.841
111.238
123.805
126.787
127.675
129.645
129.841
144.985
147.346
147.386
150.206
PPM
30
40
50
60
70
80
90
100
110
120
130
140
150
PPM
COMPOUND 2
TETRAHYDROPAPAVERINE.
MeO
MeO
OMe
OMe