

A New Multi-Component Domino Reaction of 1,3-Dicarbonyl Compounds:

One-Pot Access to Polycyclic *N/O*-, *N/S*-, and *N/N*-Aminals

Céline Simon,^a Jean-François Peyronel^b and Jean Rodriguez^{a*}

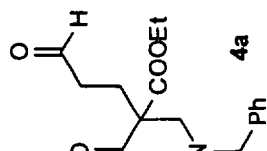
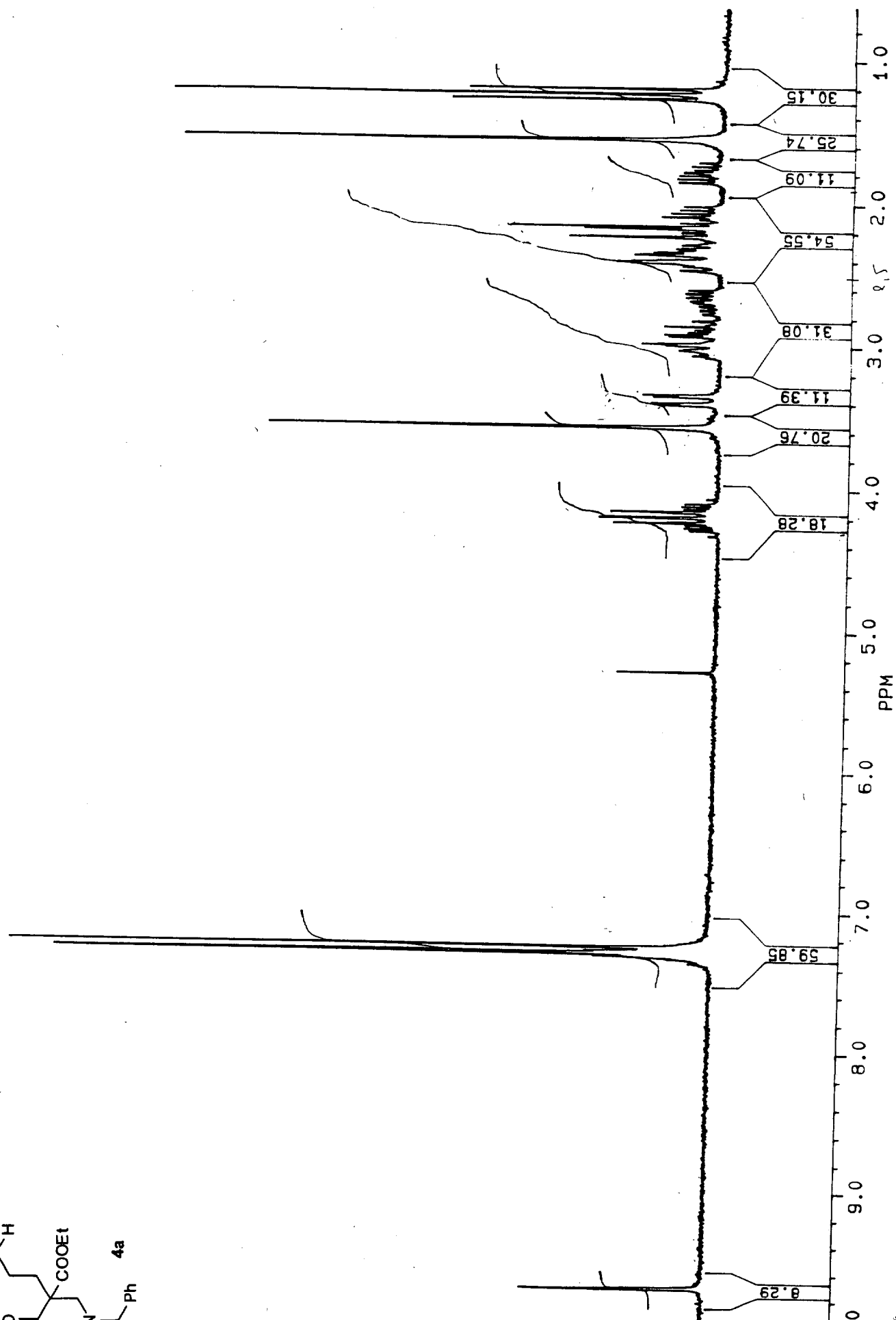
^a*Laboratoire RéSo, Réactivité en Synthèse organique, UMR au CNRS 6516, Centre de St Jérôme, boîte D12, 13397 Marseille cedex 20, France.*

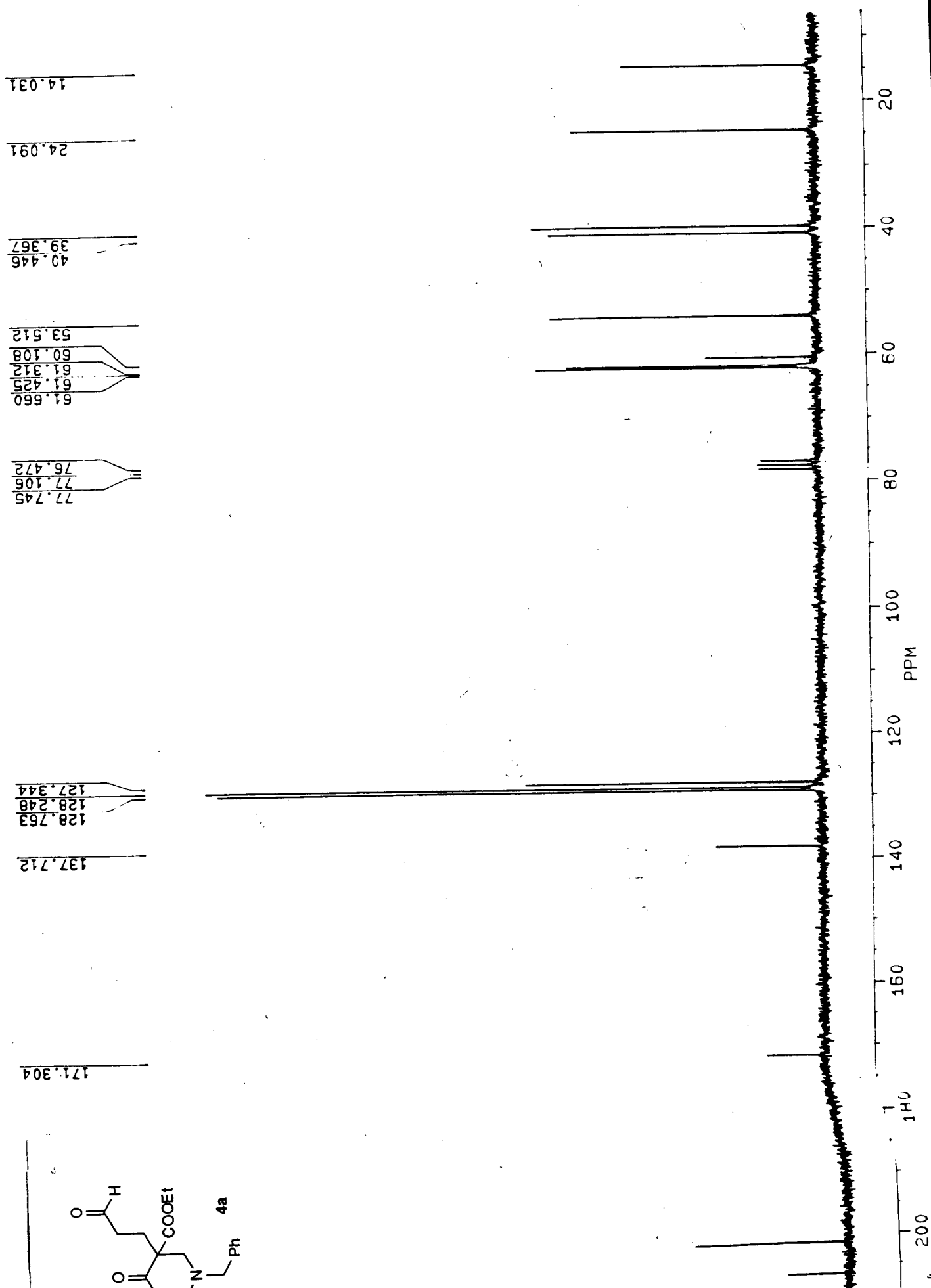
Fax: (33) 491 28 88 41; E-Mail: Jean.Rodriguez@Reso.u-3Mrs.Fr

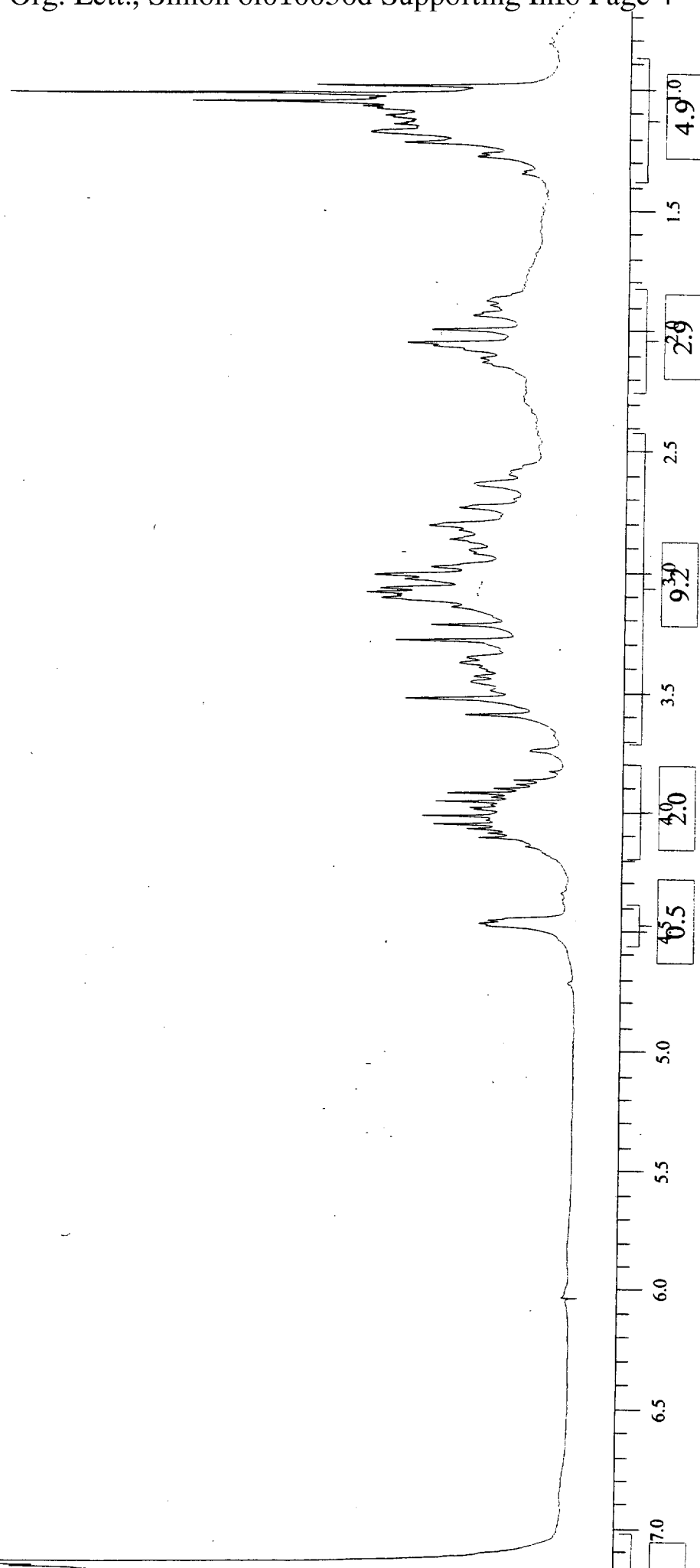
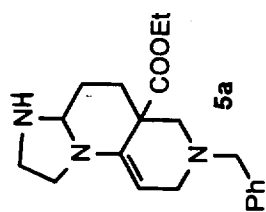
^b*Aventis Pharma, Département de Chimie Médicinale, Centre de Recherches de Paris, 13 Quai Jules Guesde- BP-14, 94403 Vitry-sur-Seine, France.*

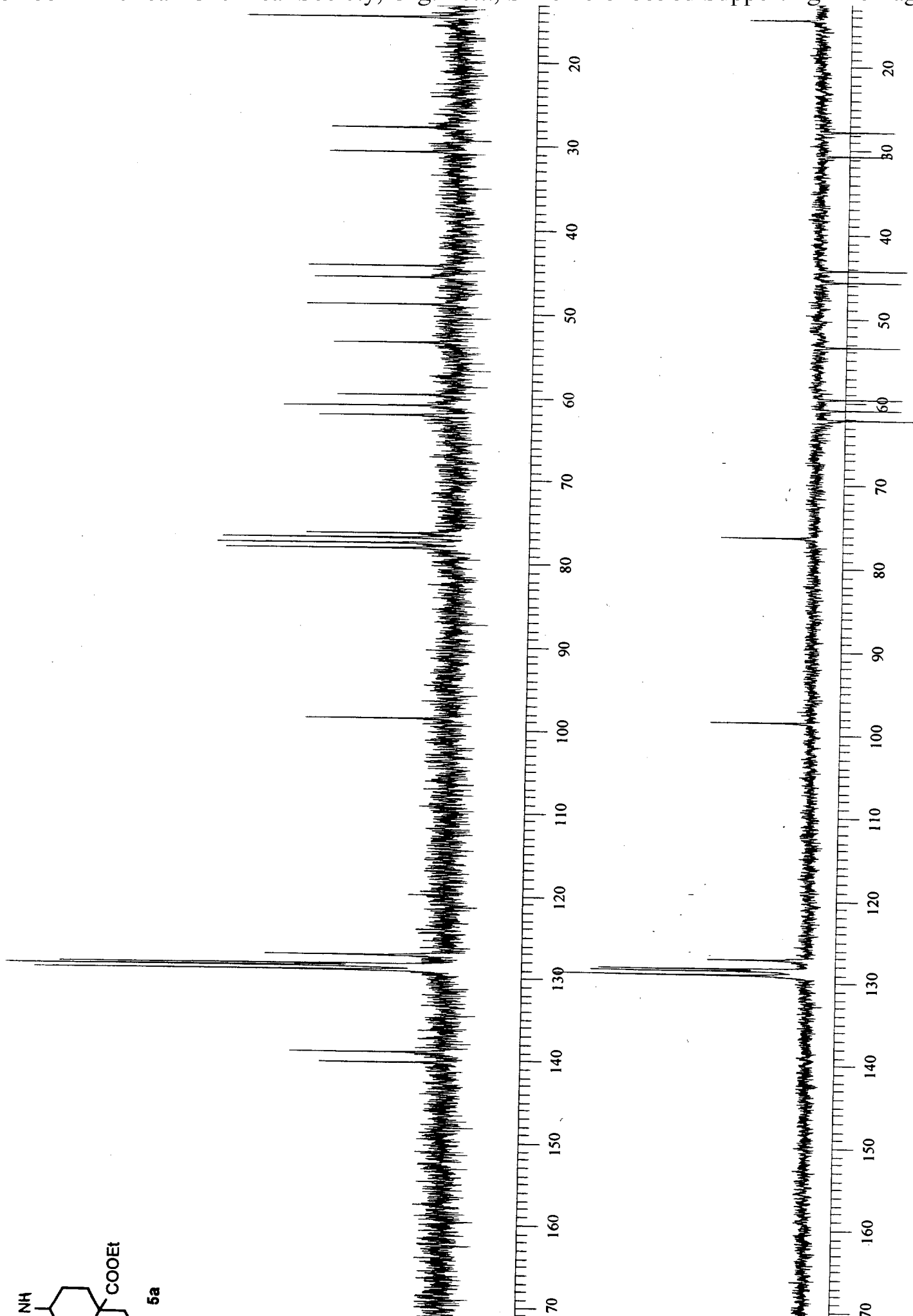
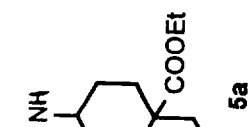
**SUPPORTING
INFORMATIONS**

(¹H, ¹³C NMR Spectra and mass spectral analysis for Compounds 4-7
including NOESY Experiment for Compound 6a, 38 pages)









[Mass Spectrum]

Date : 05-Sep-100 16:02

Sample: NBA

Note : MR-DX300

Inlet : Direct

Spectrum Type : Regular [MF-Linear]

RT : 0.34 min Scan# : (1,5)

BP : m/z 73.0000 Int. : 227.62

Output m/z range : 11.2207 to 437.2500

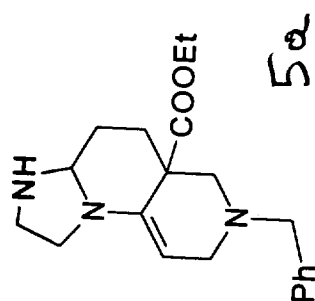
2721223

Date : 05-Sep-100 16:02

Ion Mode : FAB+

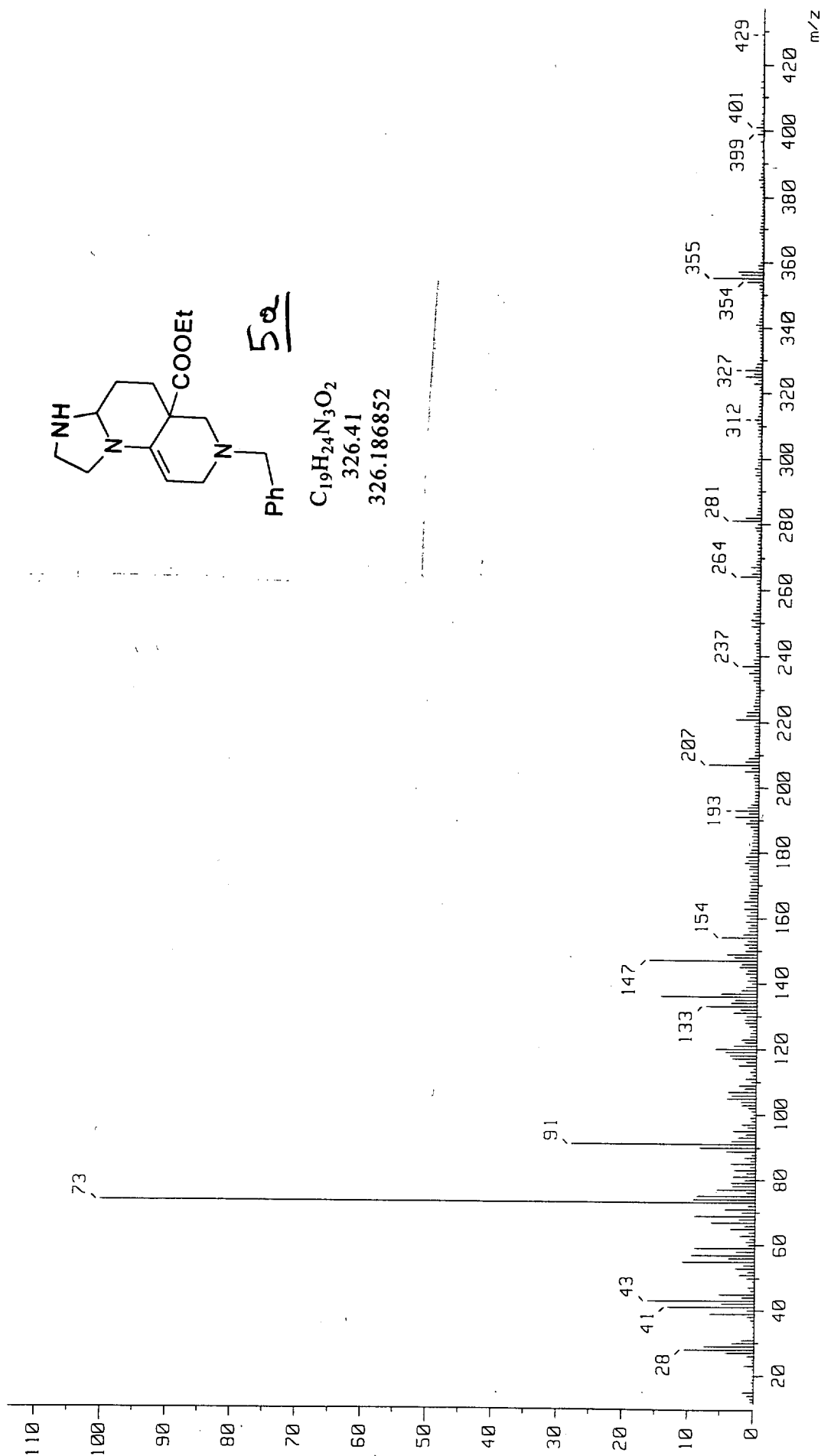
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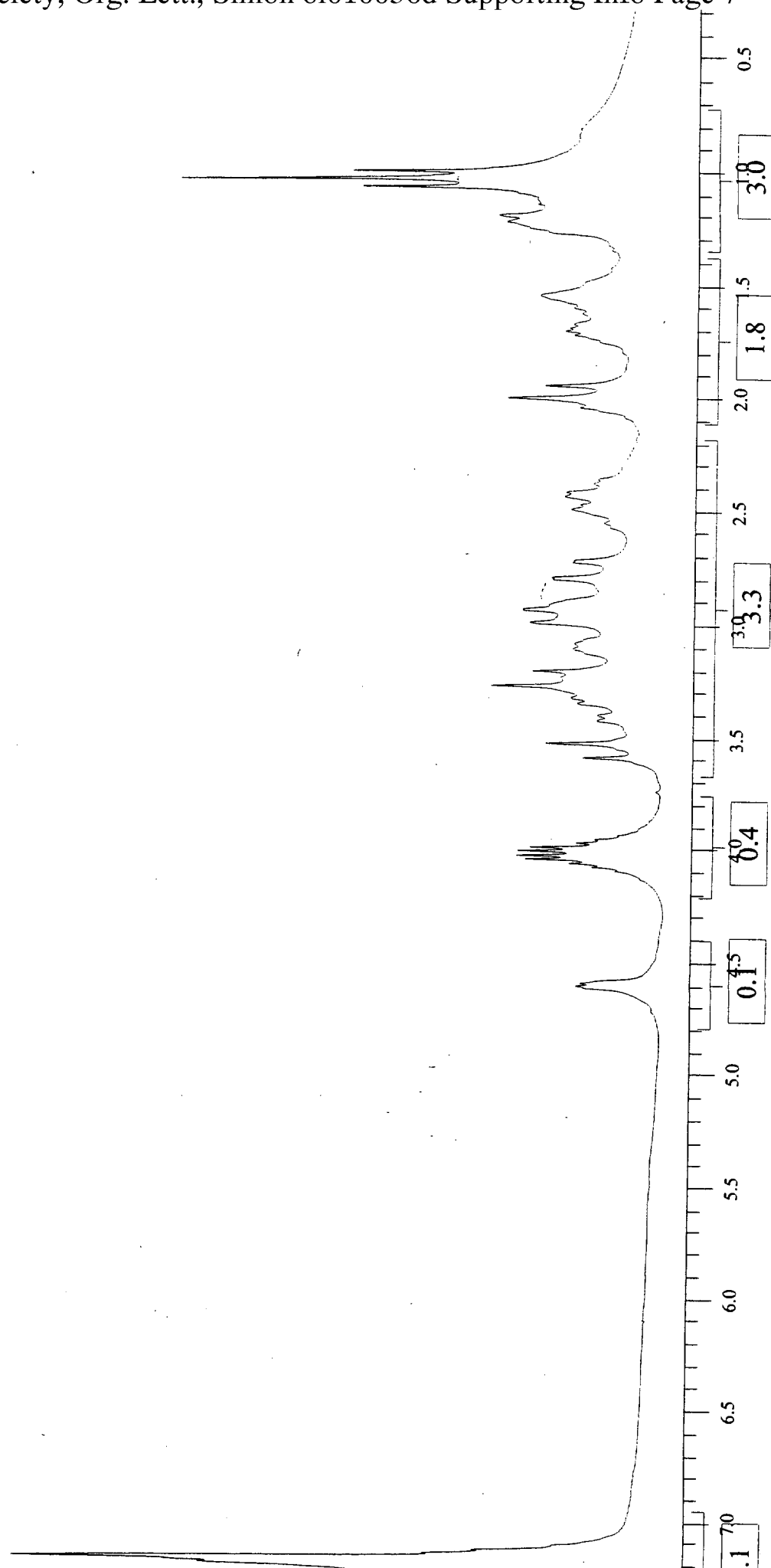
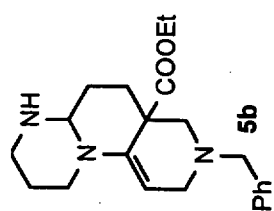
Cut Level : 0.00 %

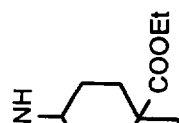
u² 2122 $C_{19}H_{24}N_3O_2$

326.41

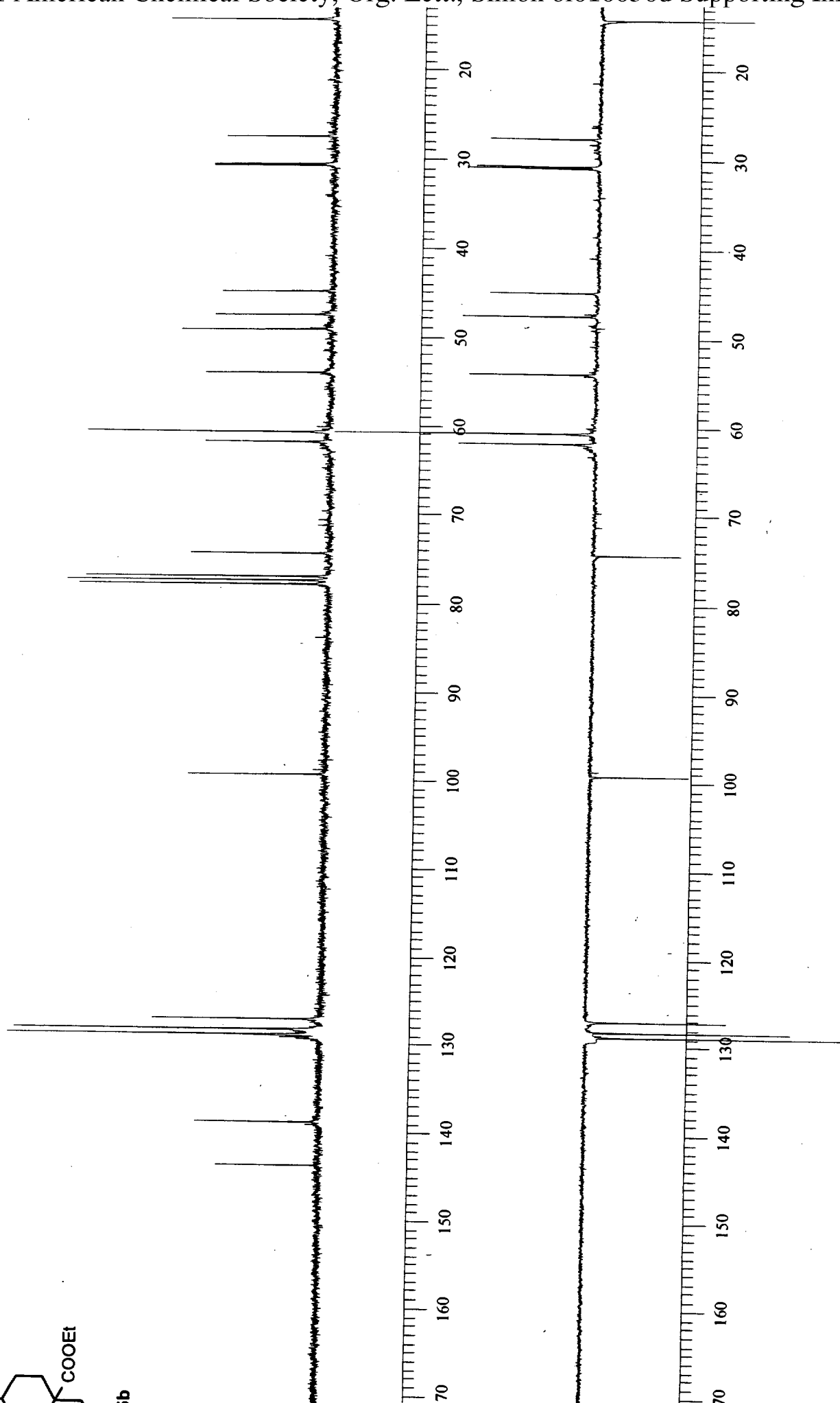
326.186852



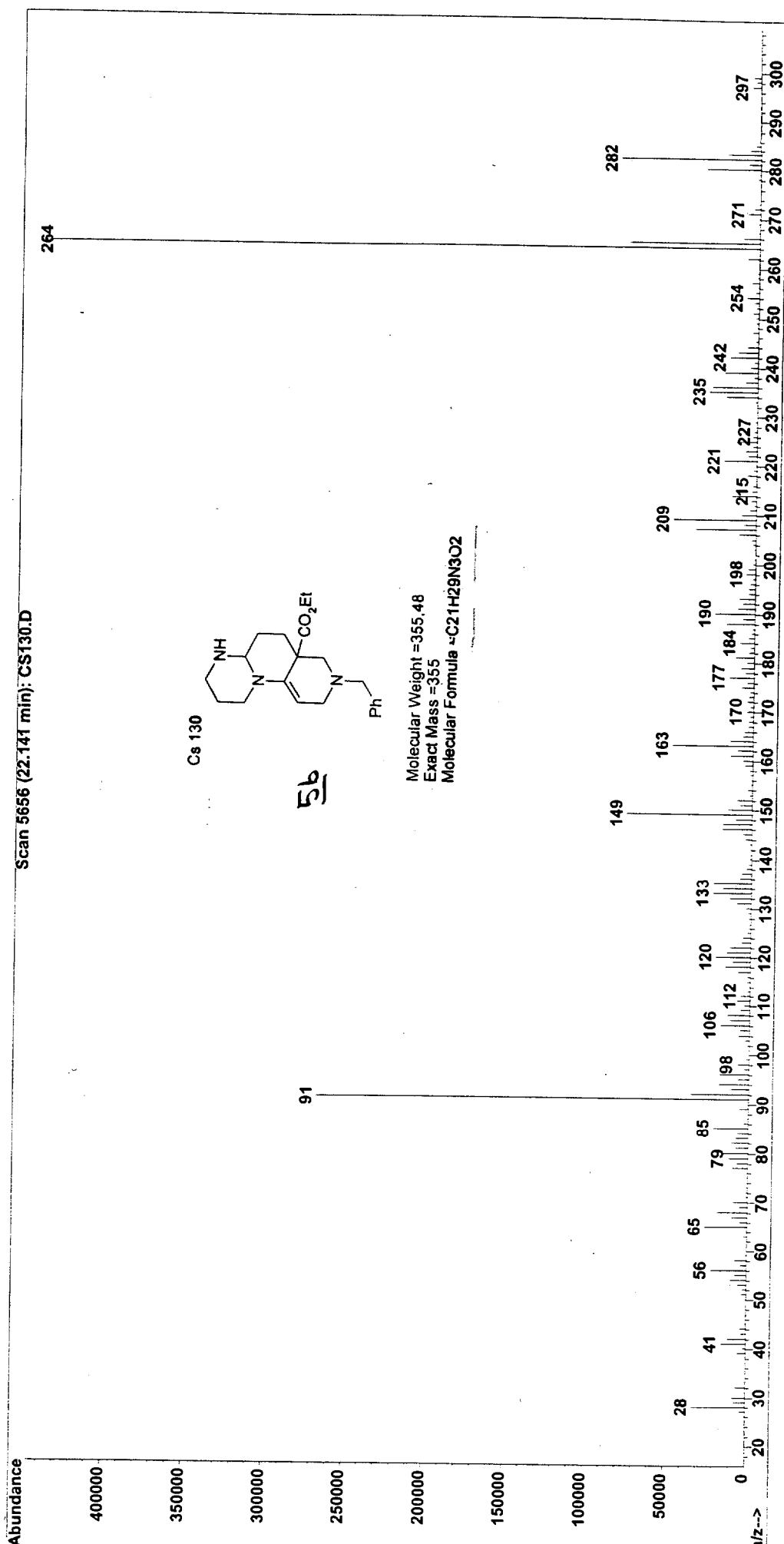


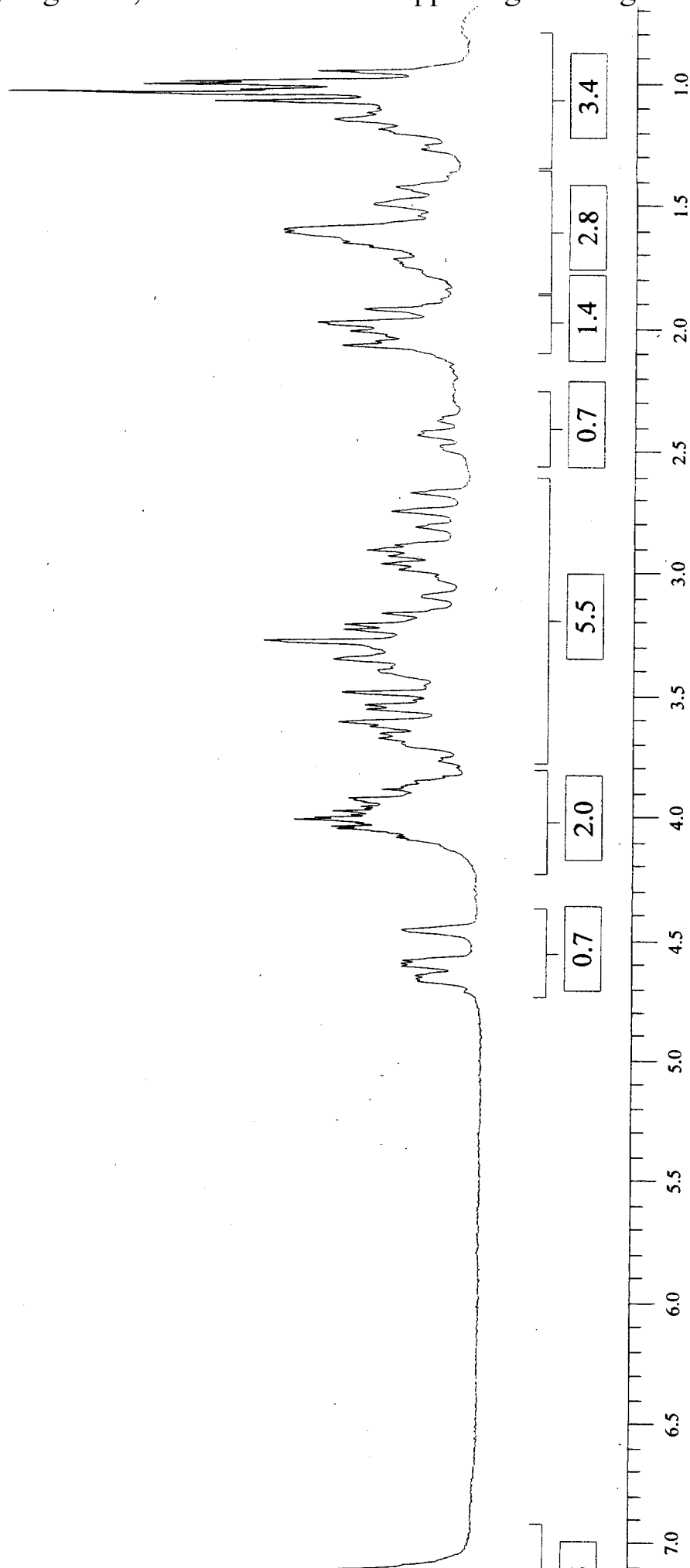
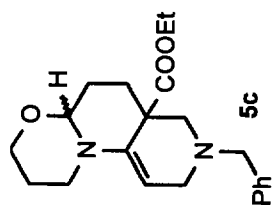


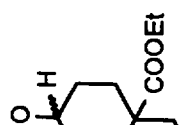
1b



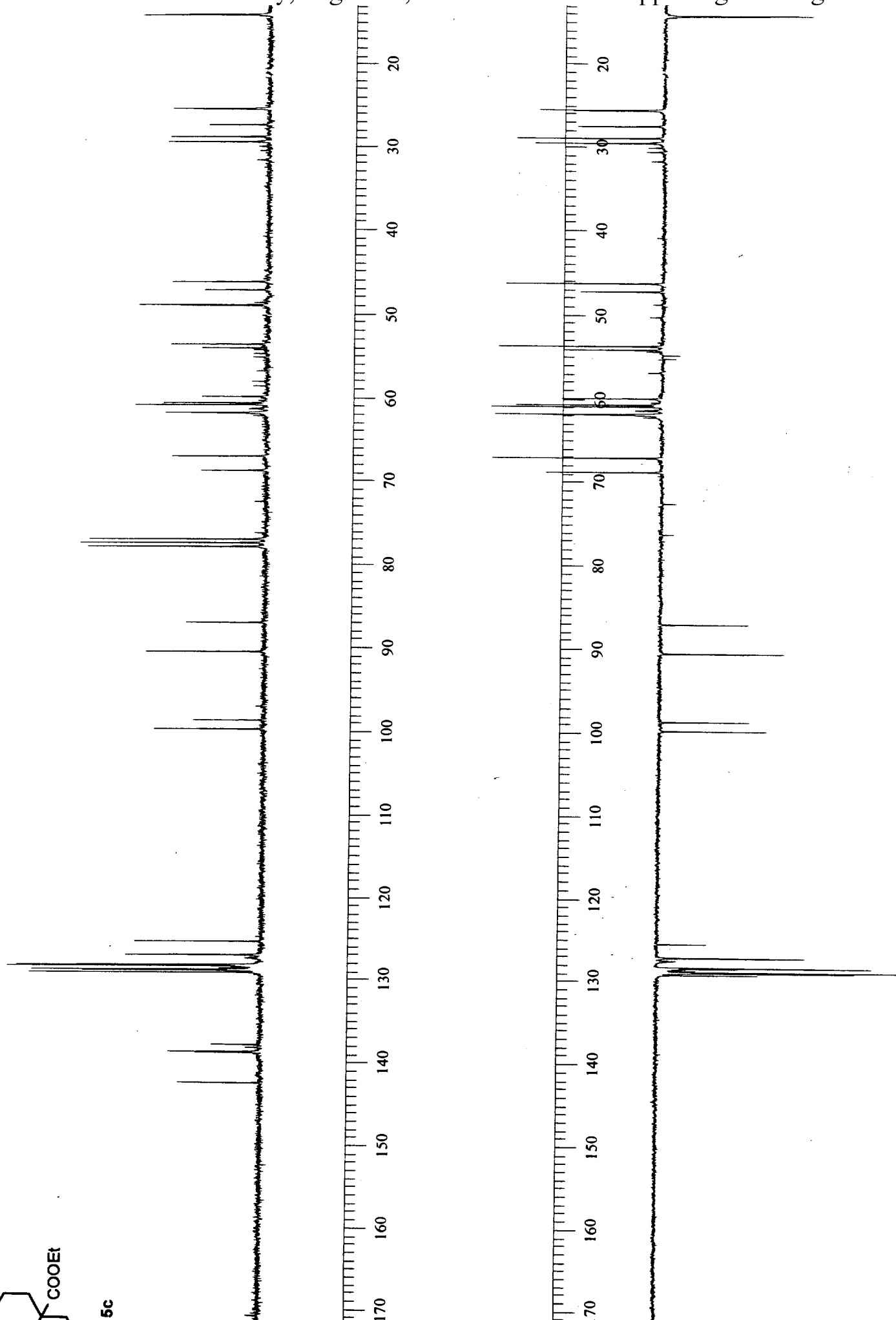
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Instrument : GC/MS #1
Sample Name: cs 130
Misc Info :
Vial Number: 2



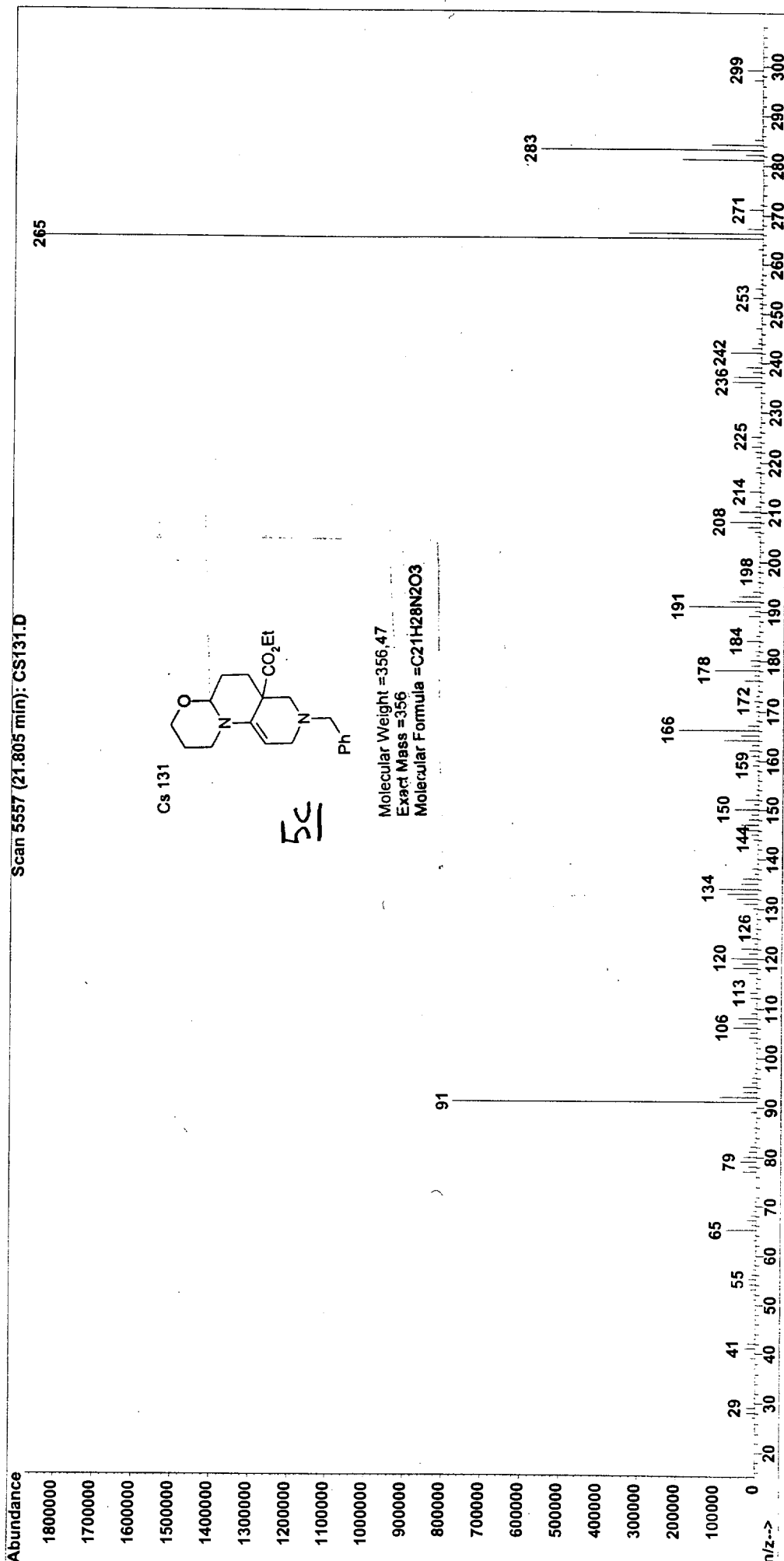


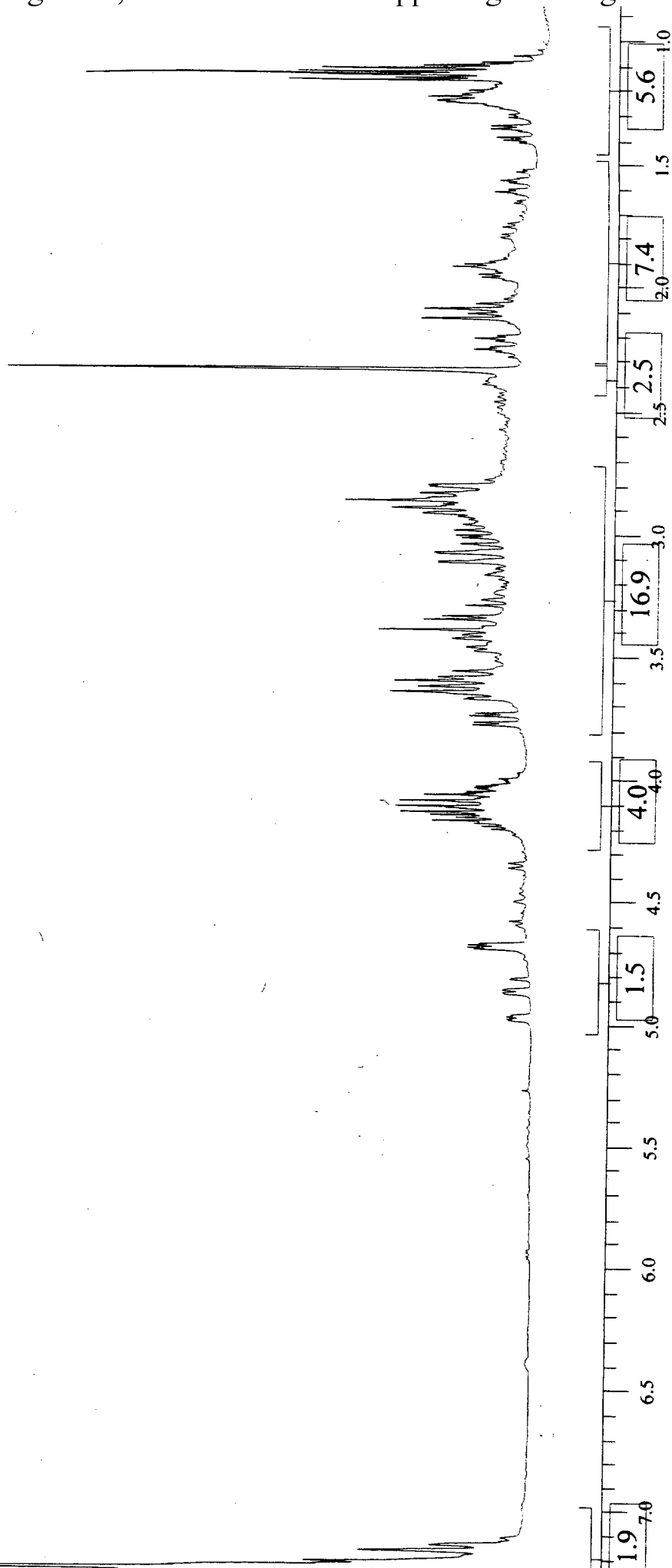
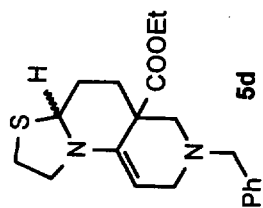


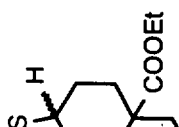
5c



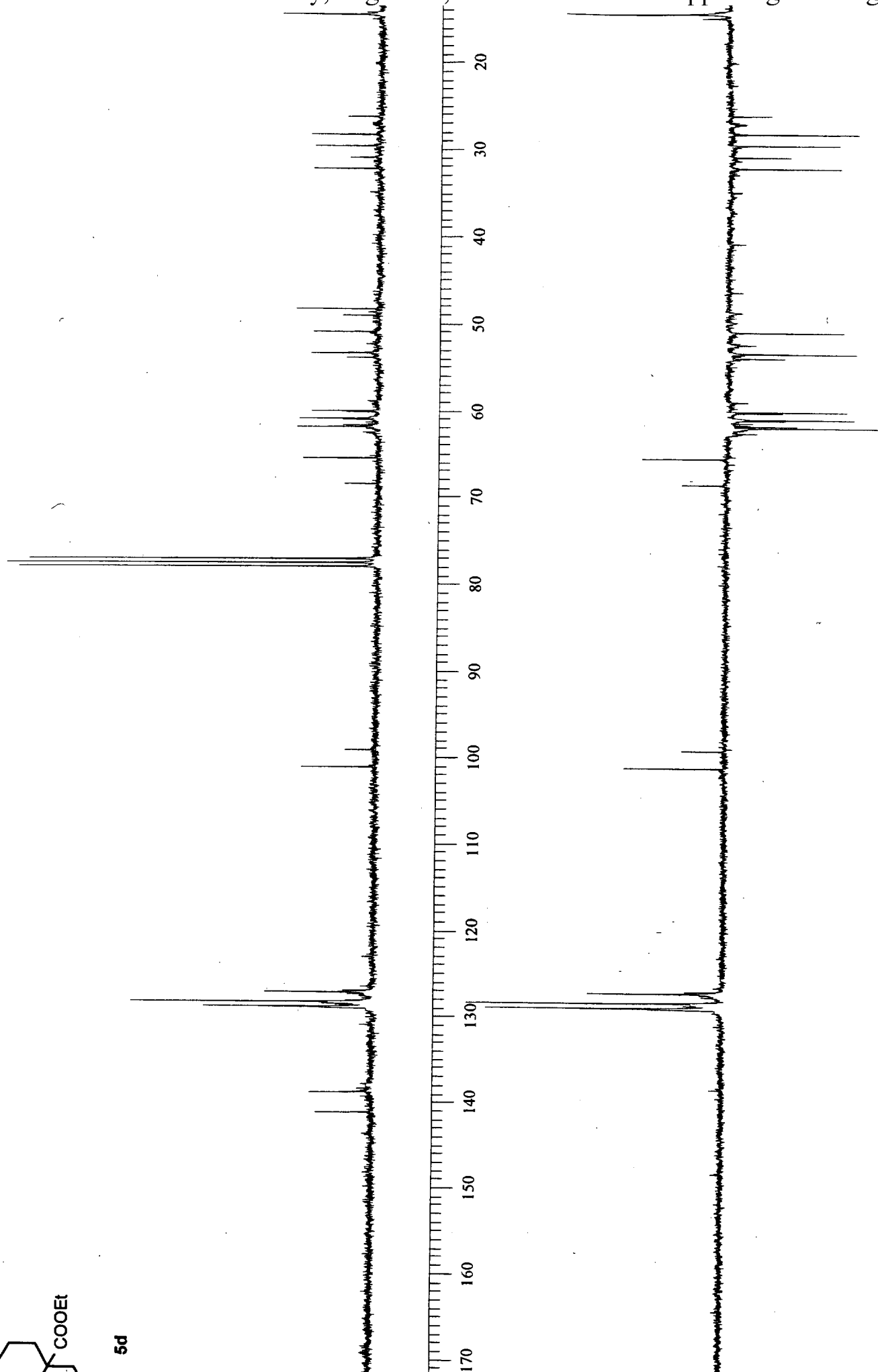
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Instrument : GC/MS #1
Sample Name: CS 131
Misc Info :
Vial Number: 3



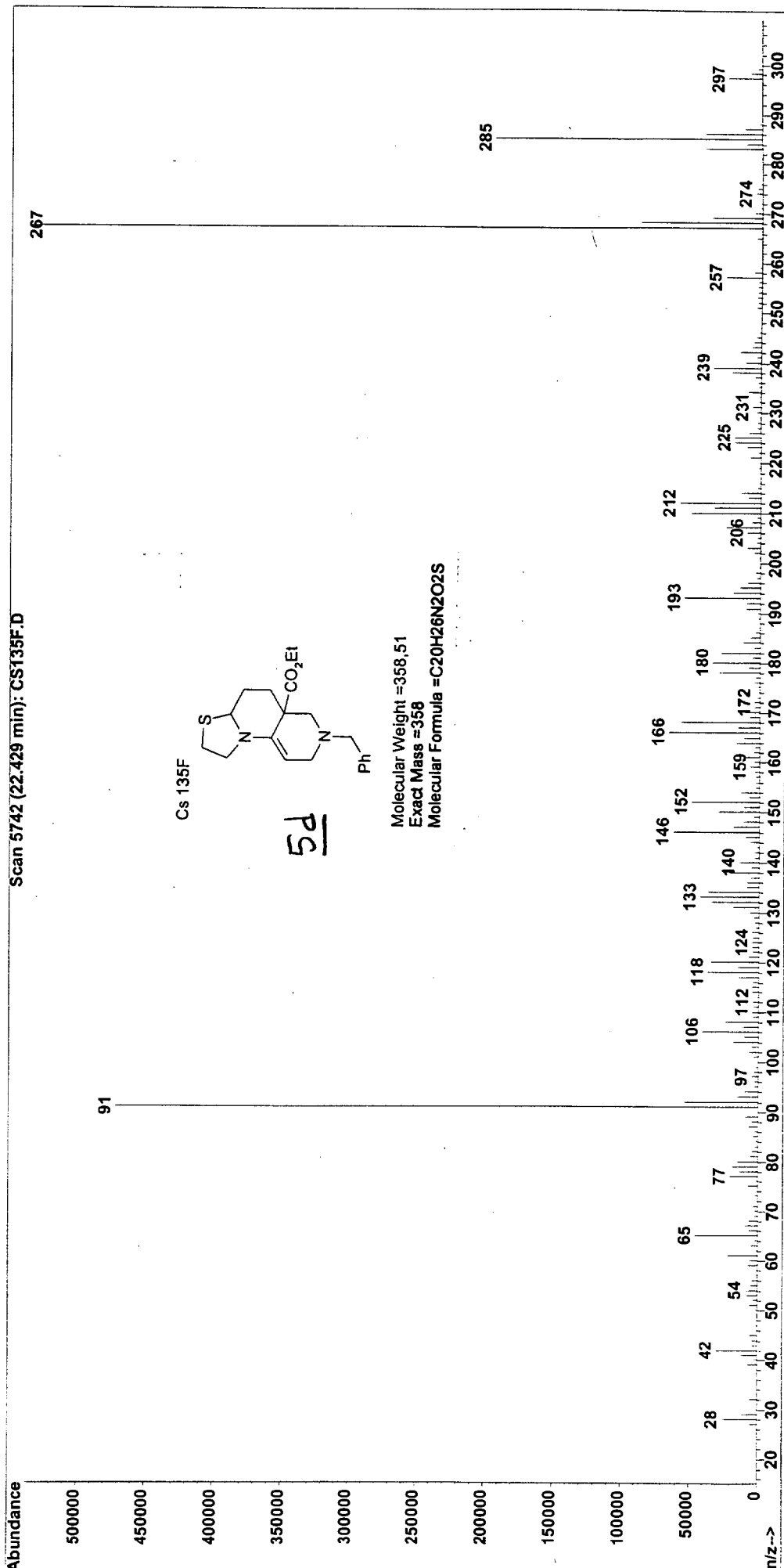


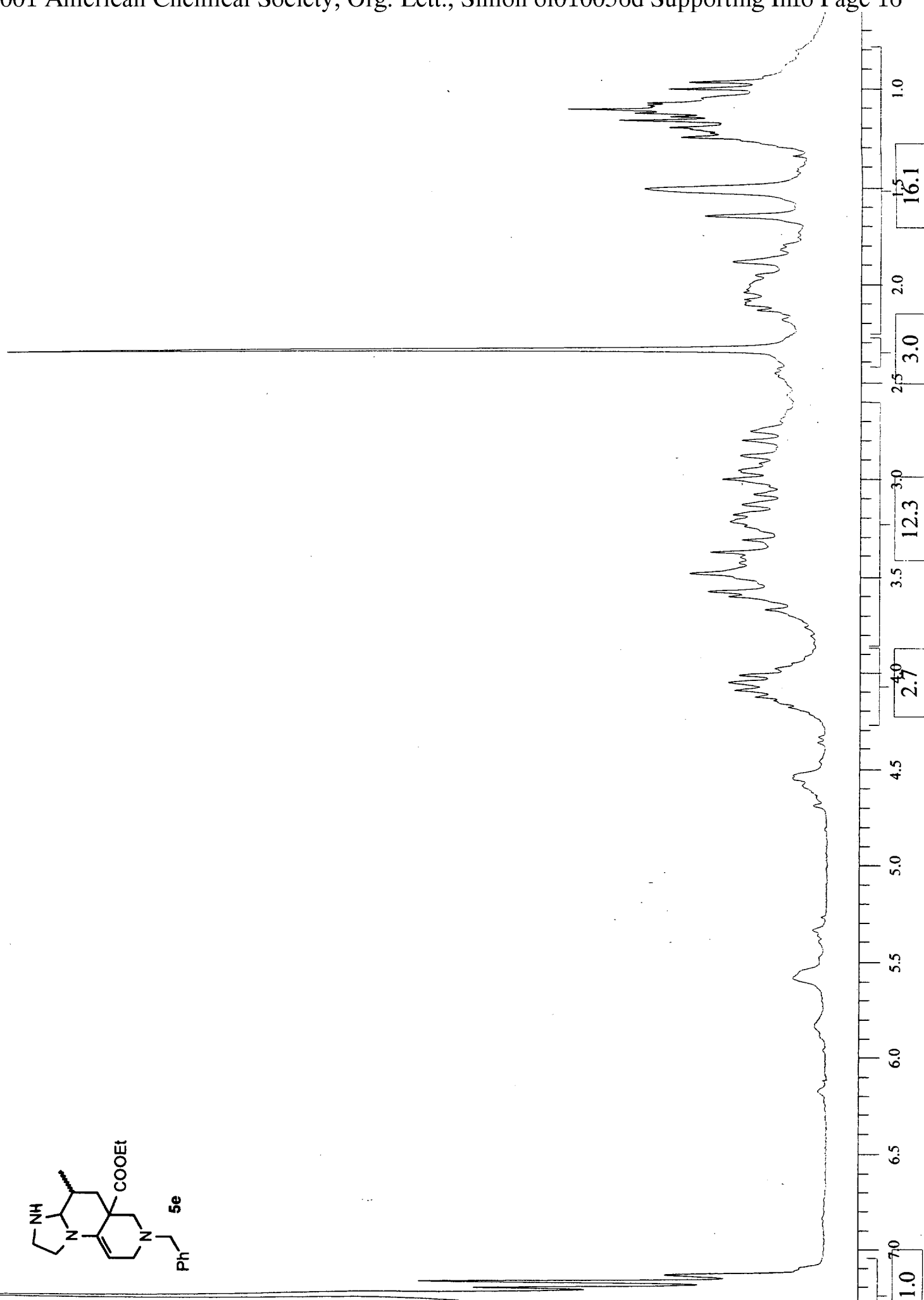
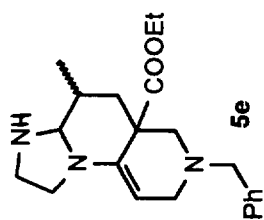


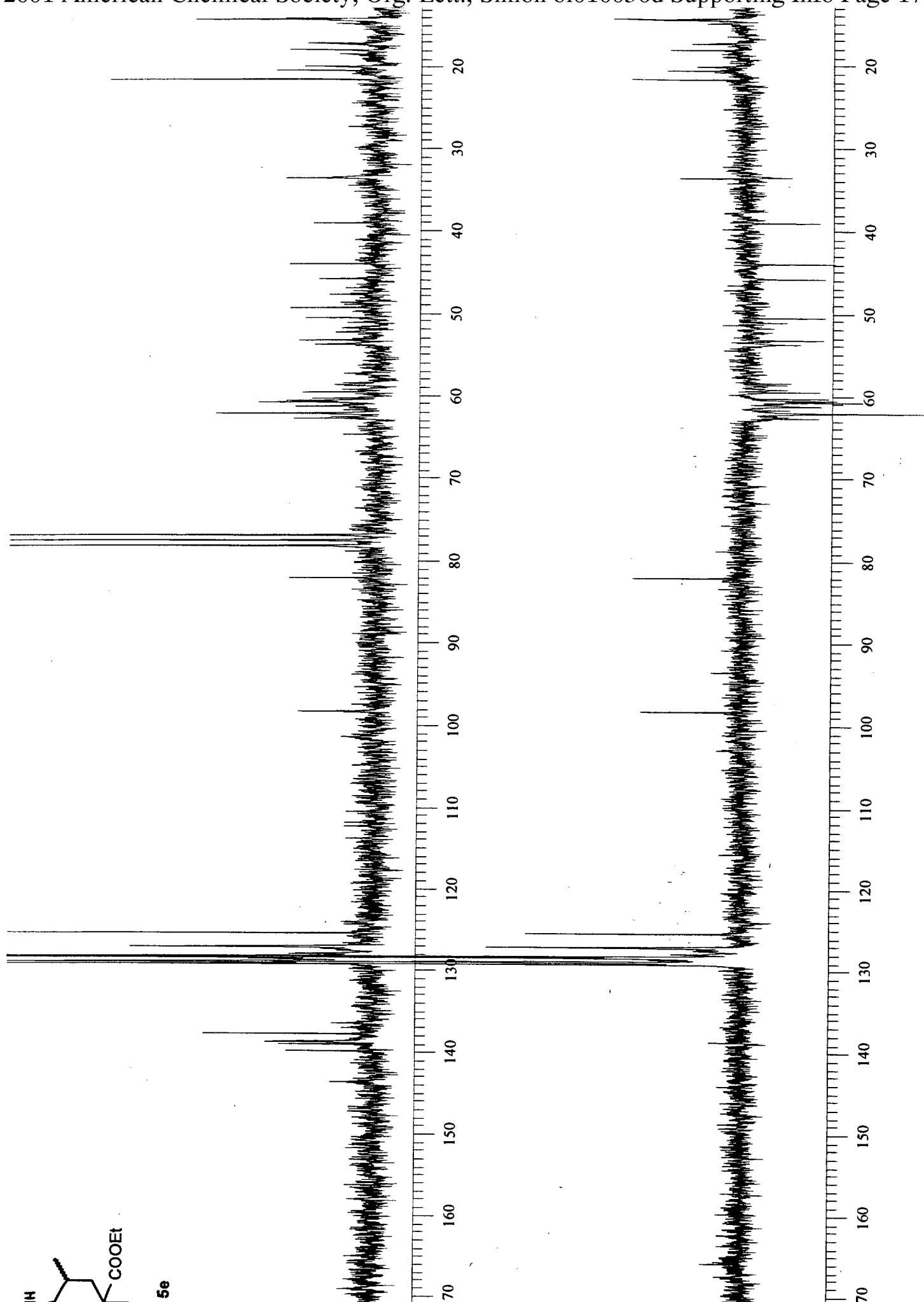
5d



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Instrument : GC/MS #1
Sample Name: CS 135 F
Misc Info :
Vial Number: 4

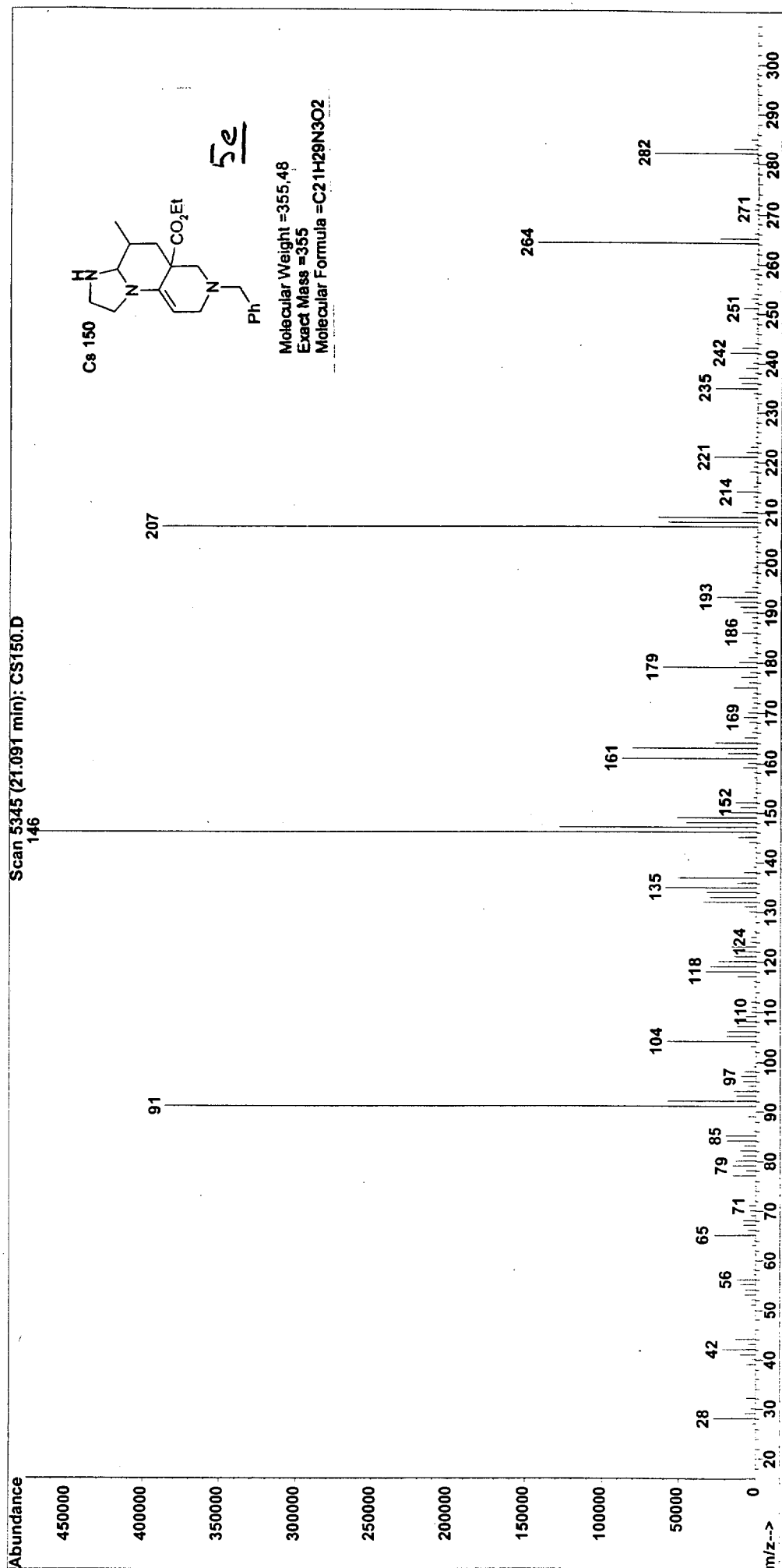


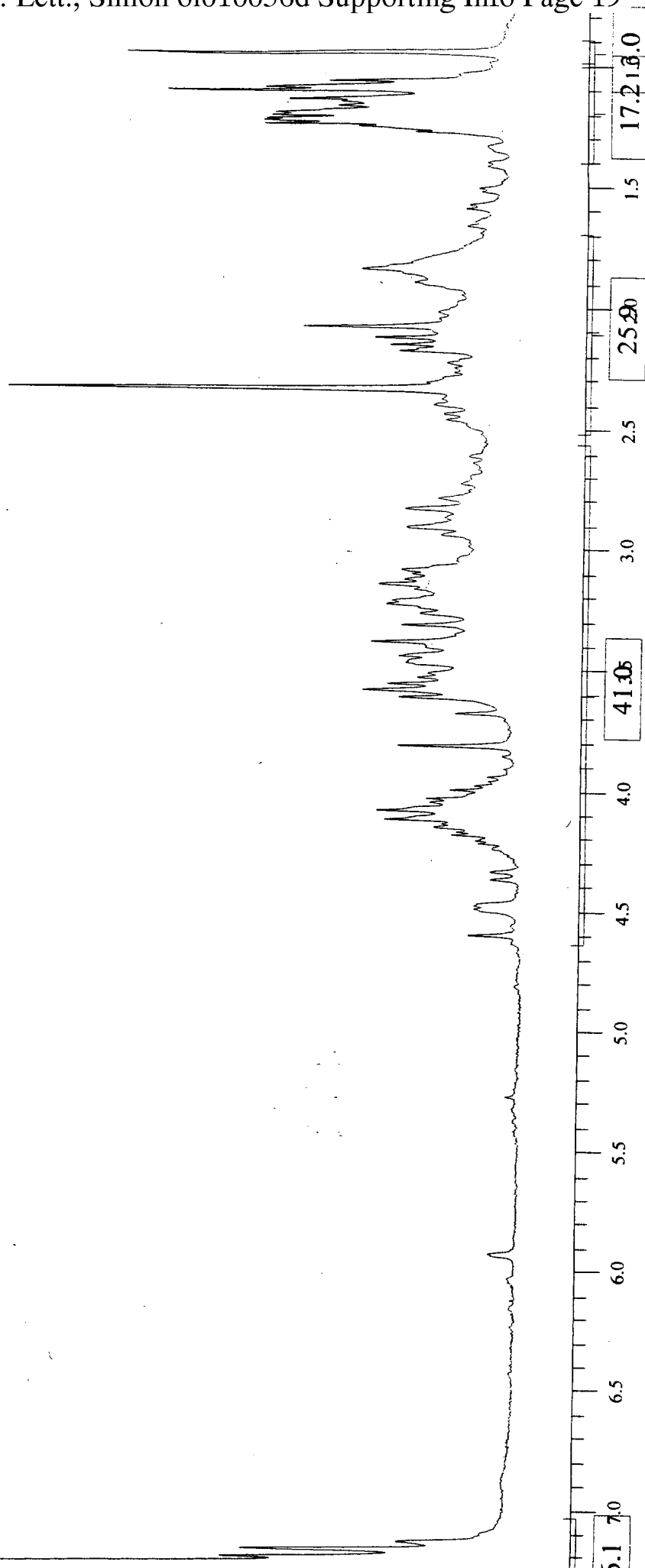
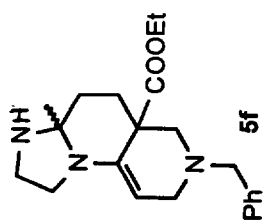


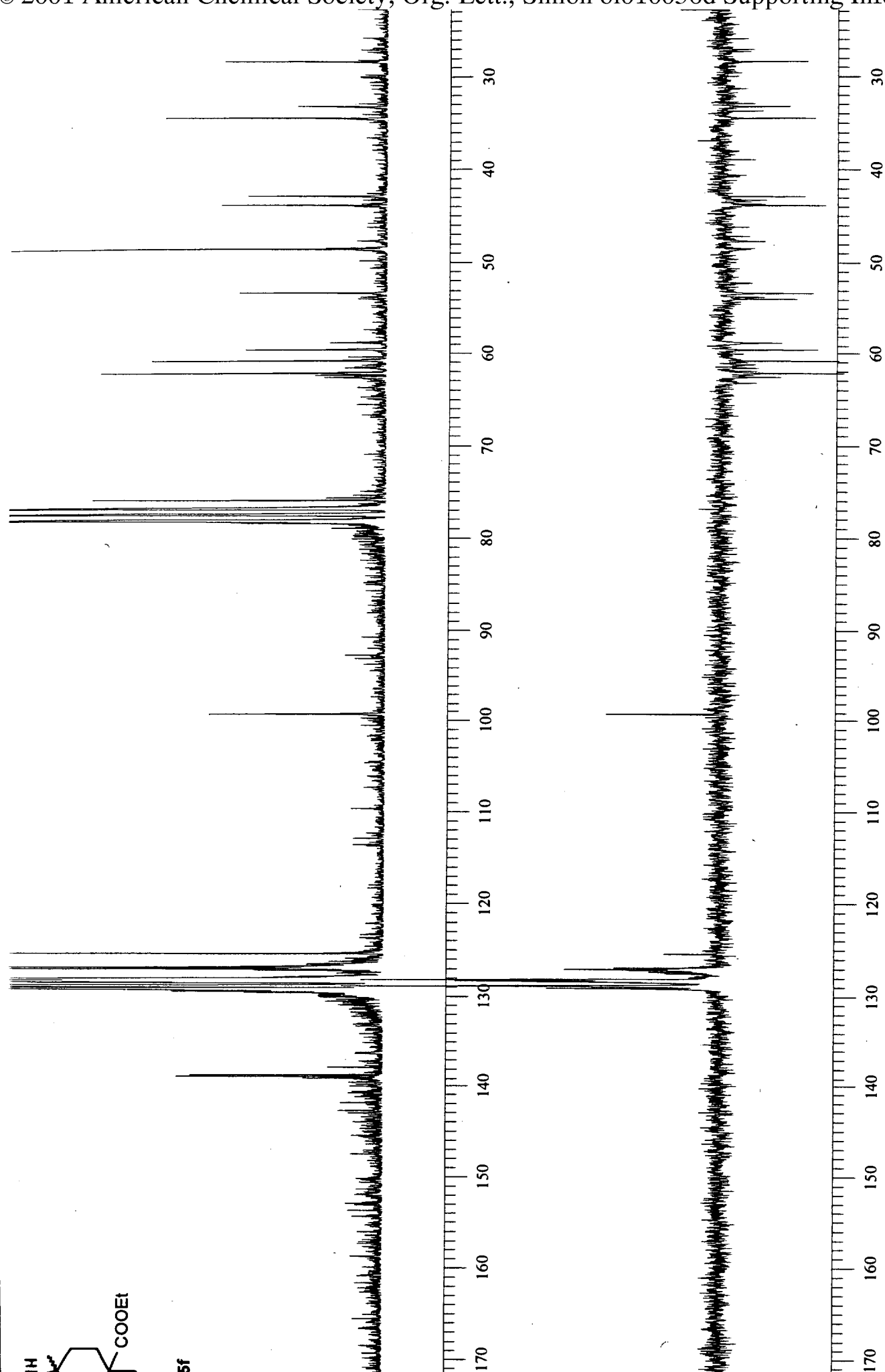


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Acquired : 11 May 2001 14:37 using AcqMethod INCXAUT
Instrument : GC/MS #1
Sample Name: CS 150
Misc Info :
Vial Number: 5

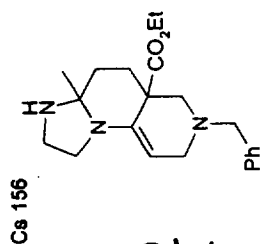
Scan 5345 (21.091 min): CS150.D





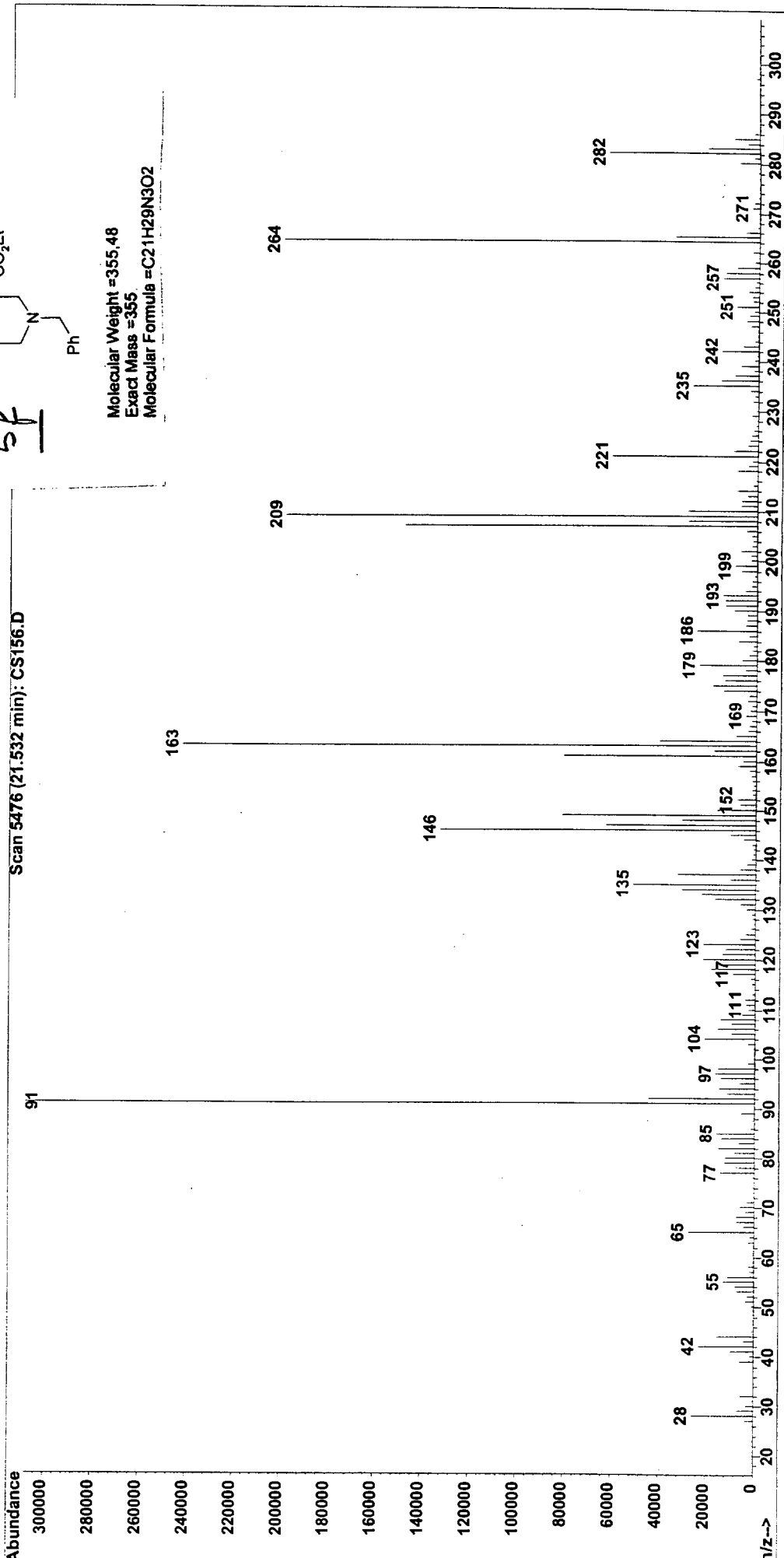


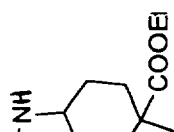
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Acquired : 11 May 2001 17:13 using AcqMethod INCEXAUT
Instrument : GC/MS #1
Sample Name: CS 156
Misc Info :
Vial Number: 7



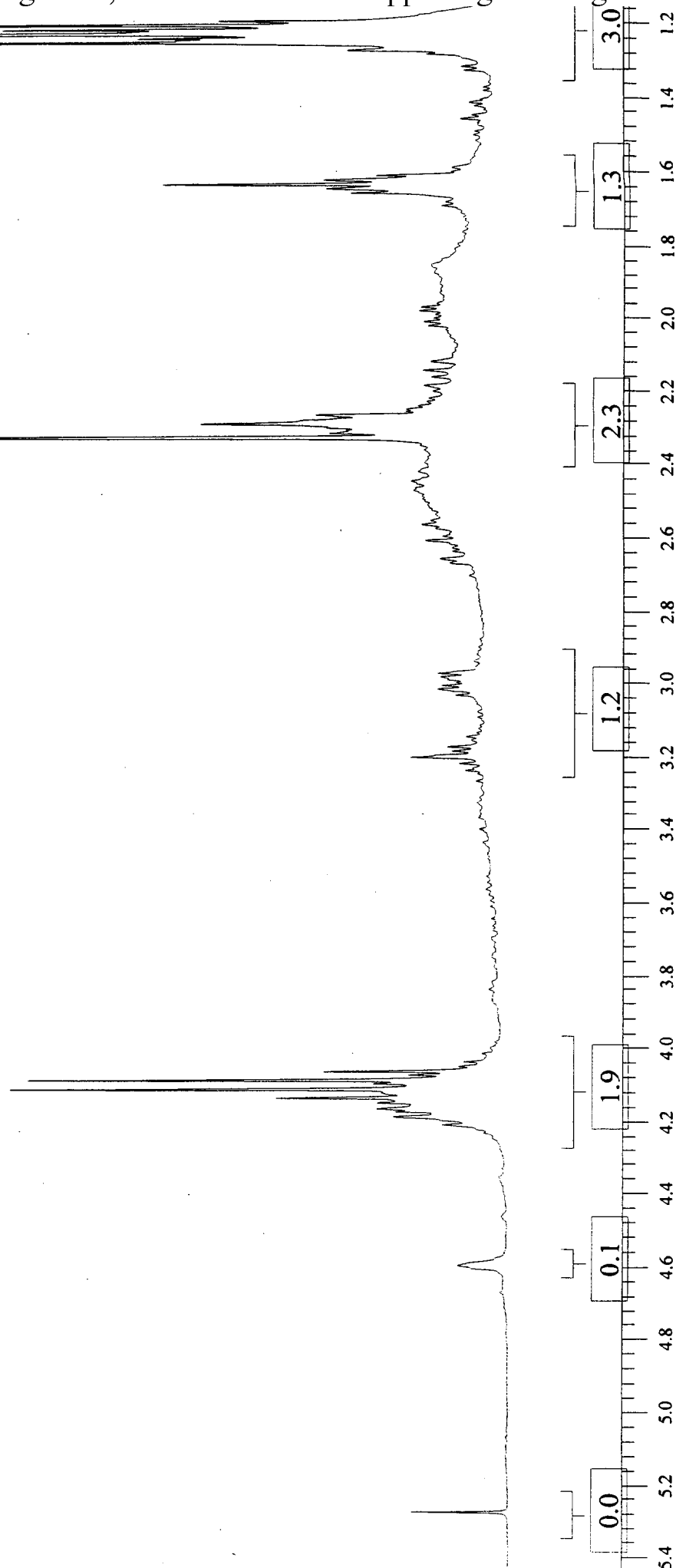
Molecular Weight = 355.48
Exact Mass = 355
Molecular Formula = C₂₁H₂₉N₃O₂

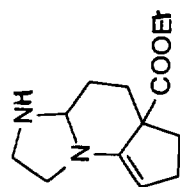
Scan 5476 (21.532 min): CS156.D



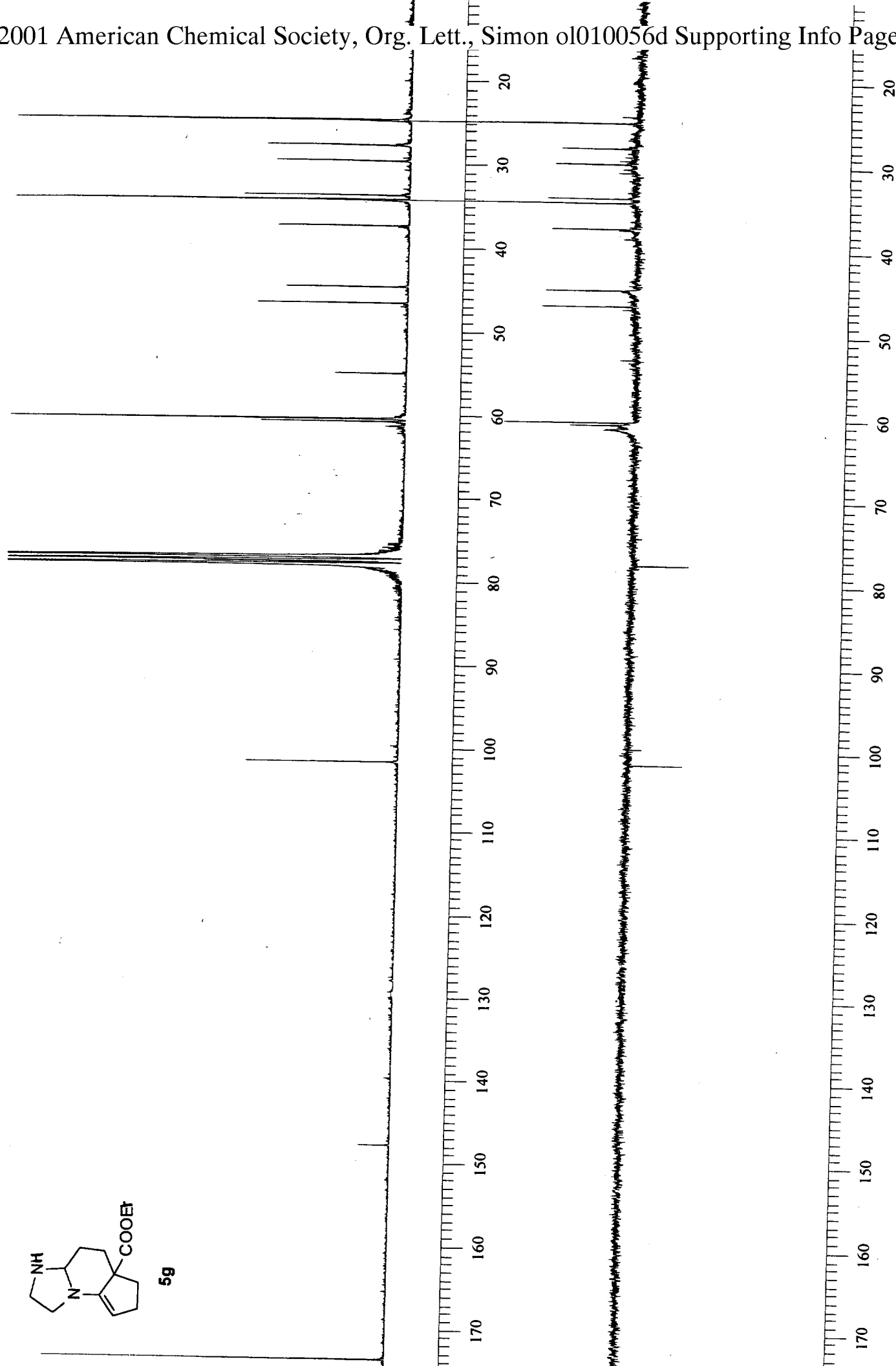


5g

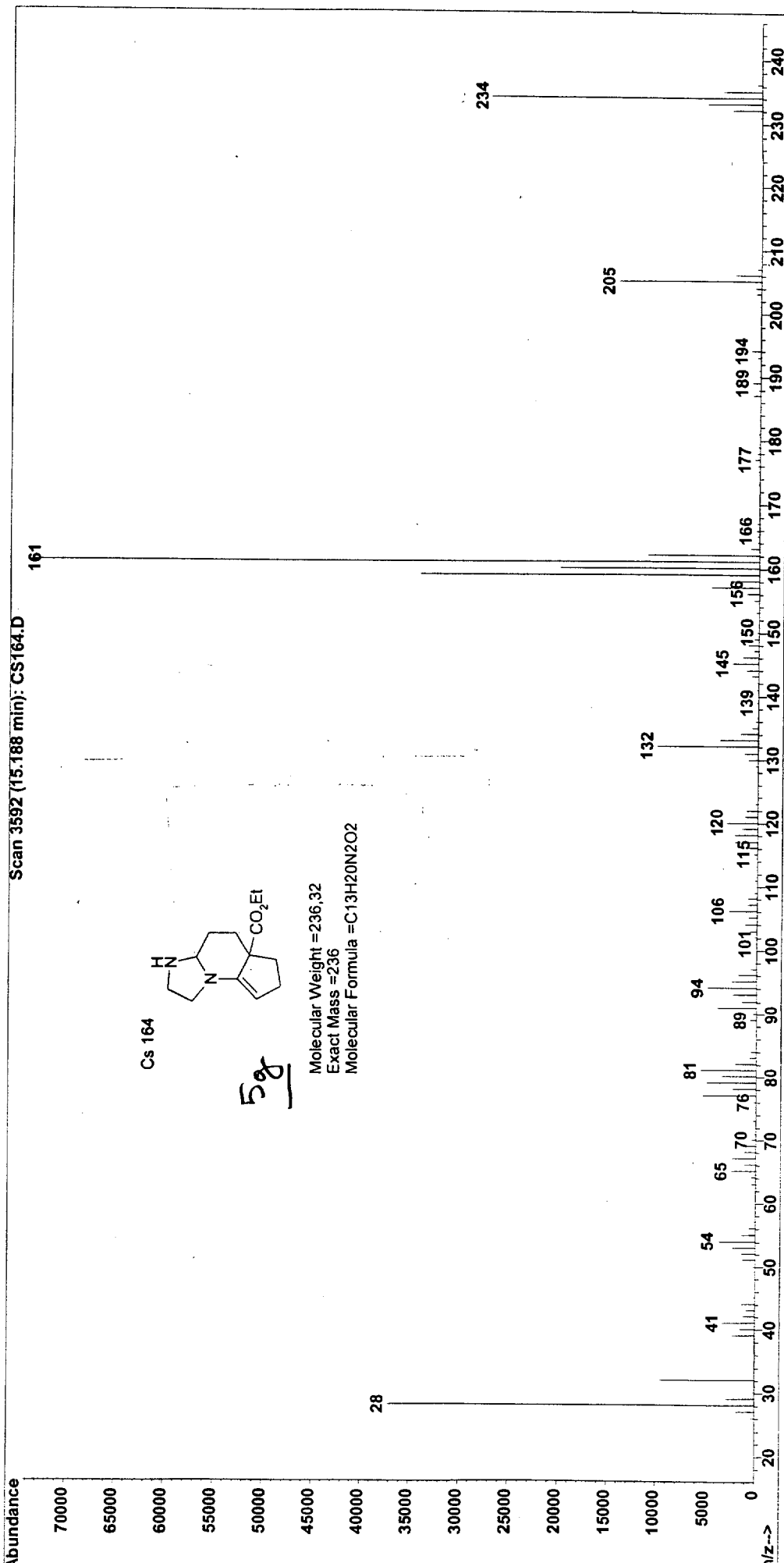


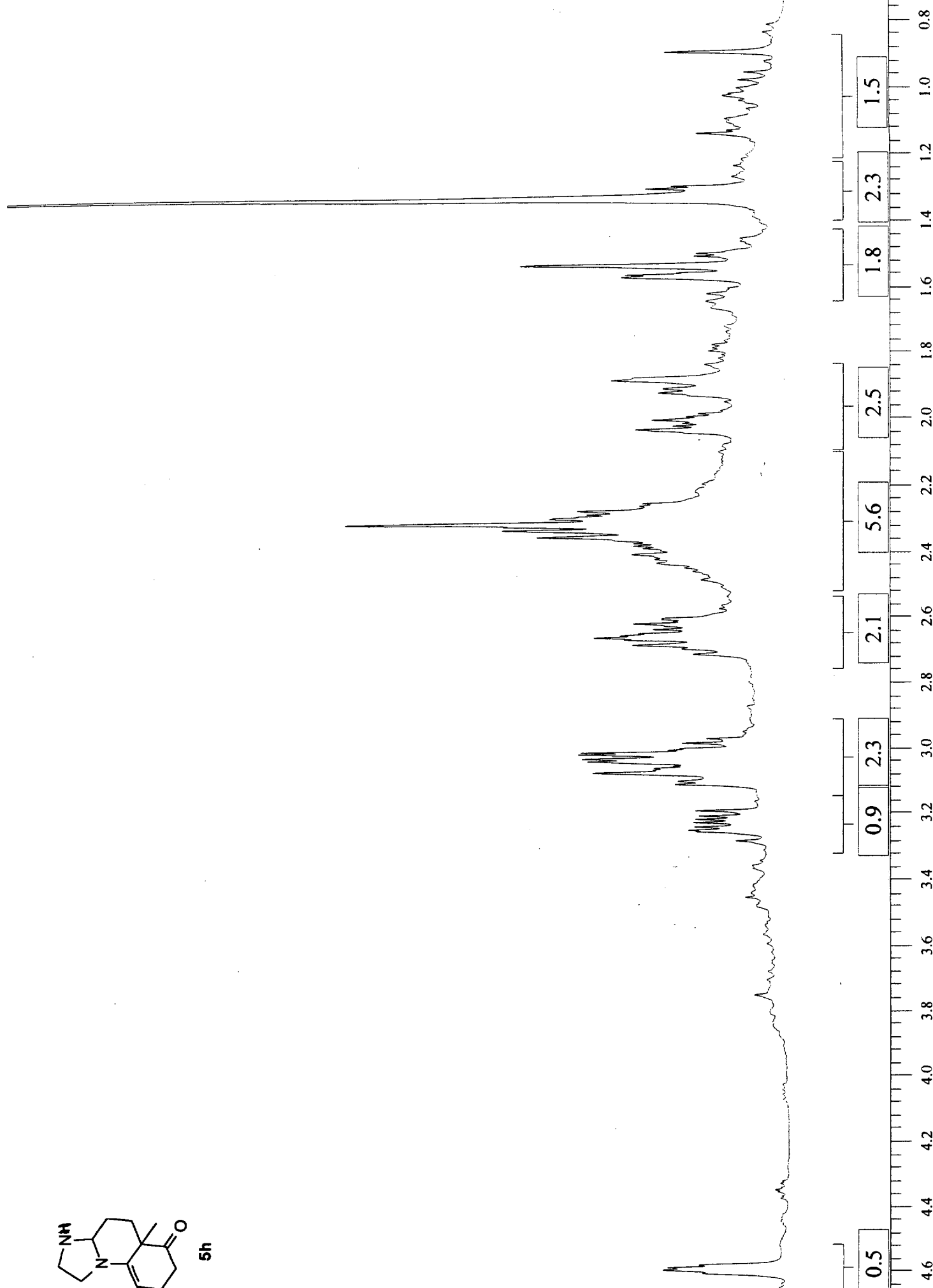
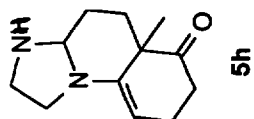


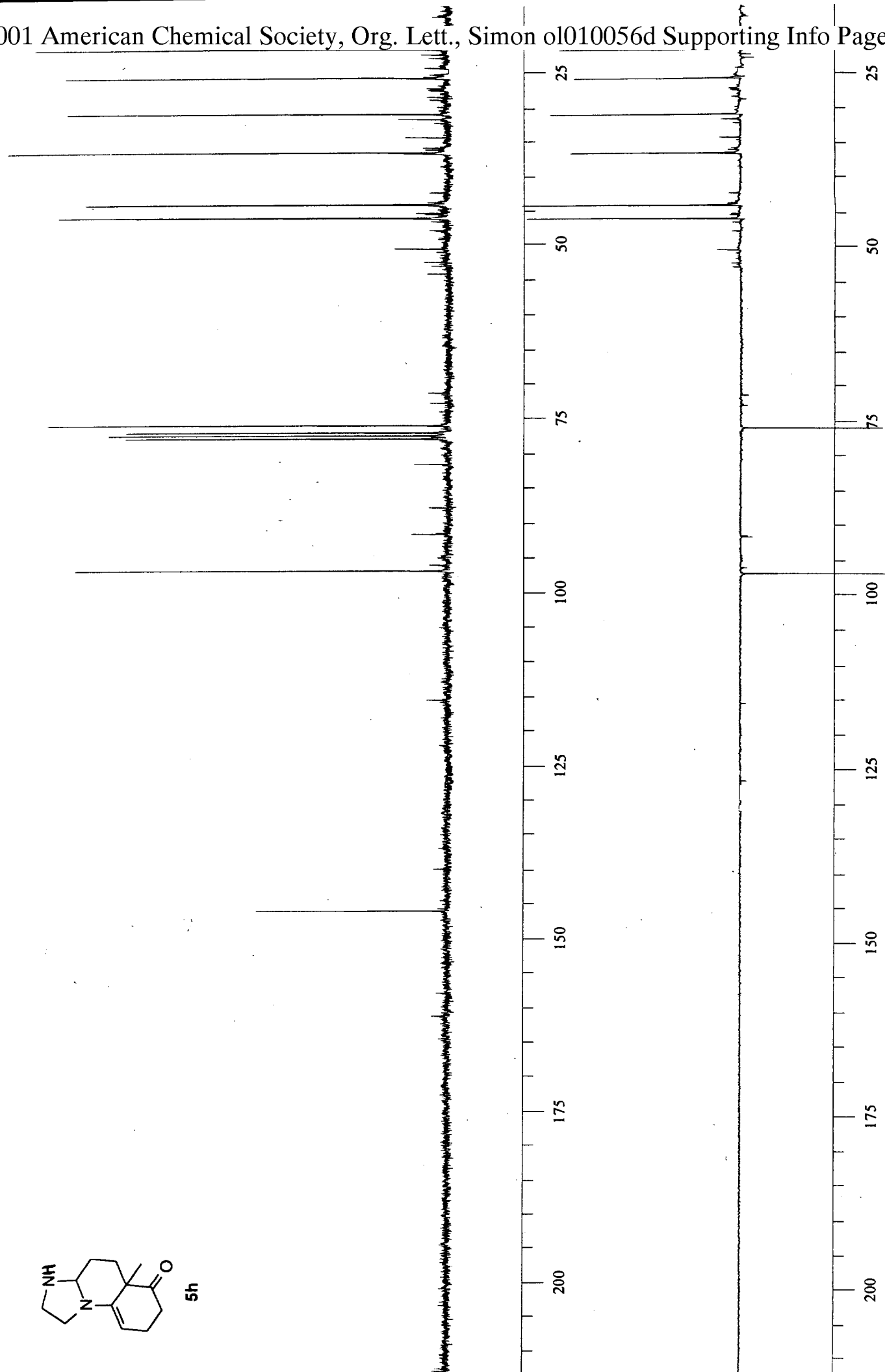
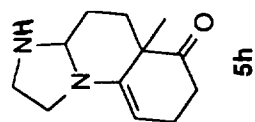
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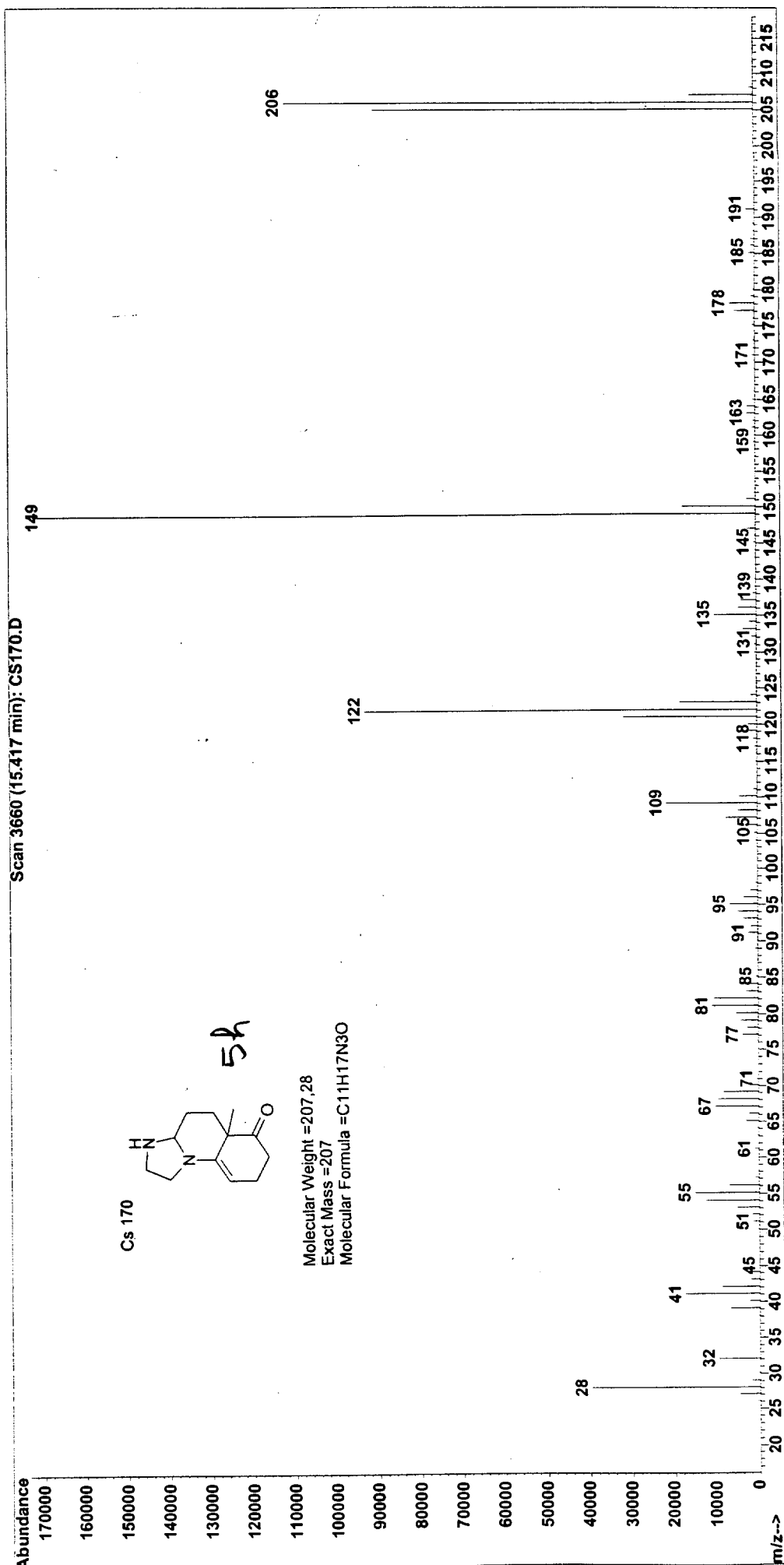
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Operator : FK/TV
Acquired : 11 May 2001 18:32 using AcqMethod INCEXAUT
Instrument : GC/MS #1
Sample Name: CS 164
Misc Info :
Vial Number: 8

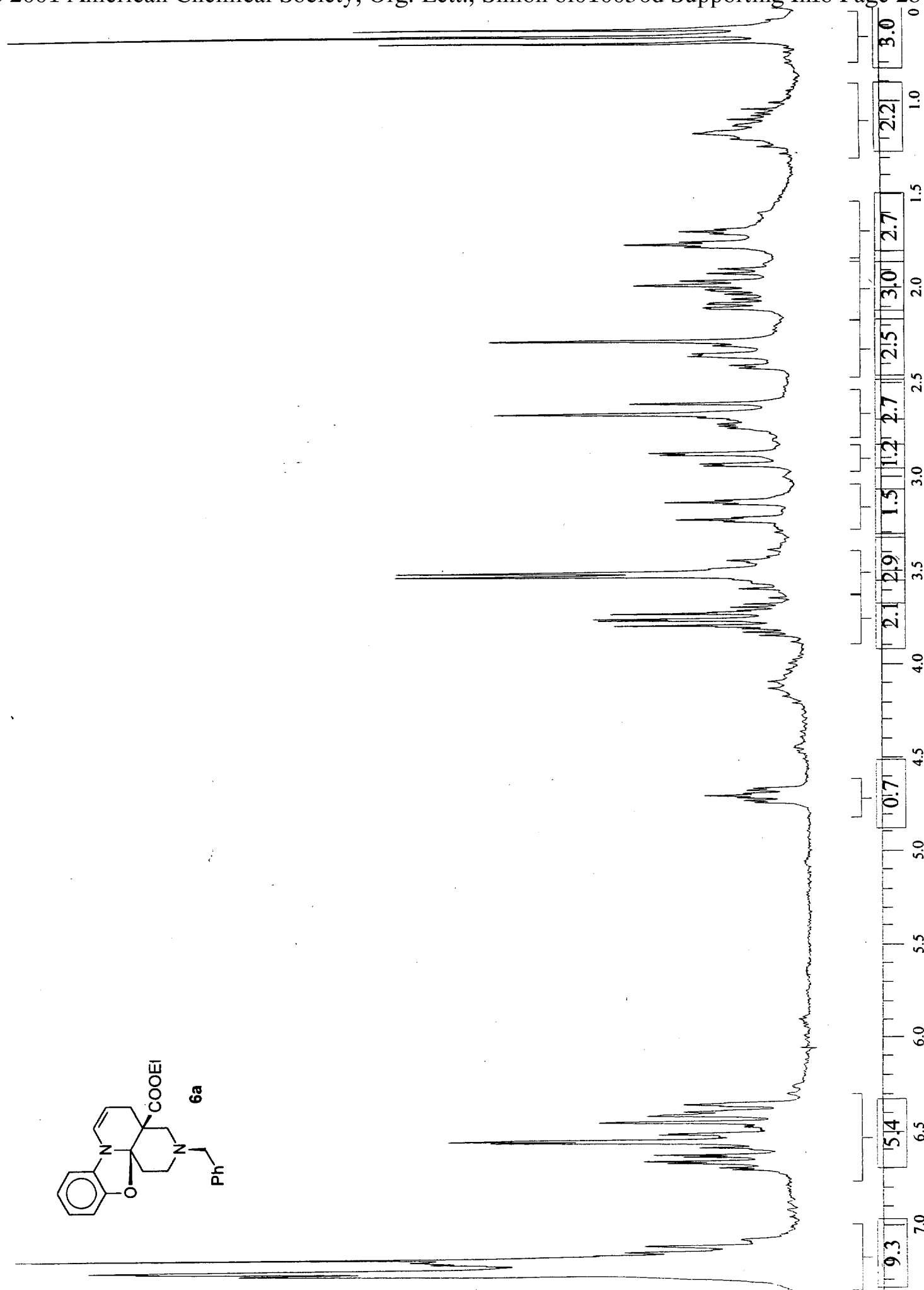
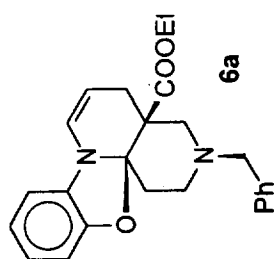


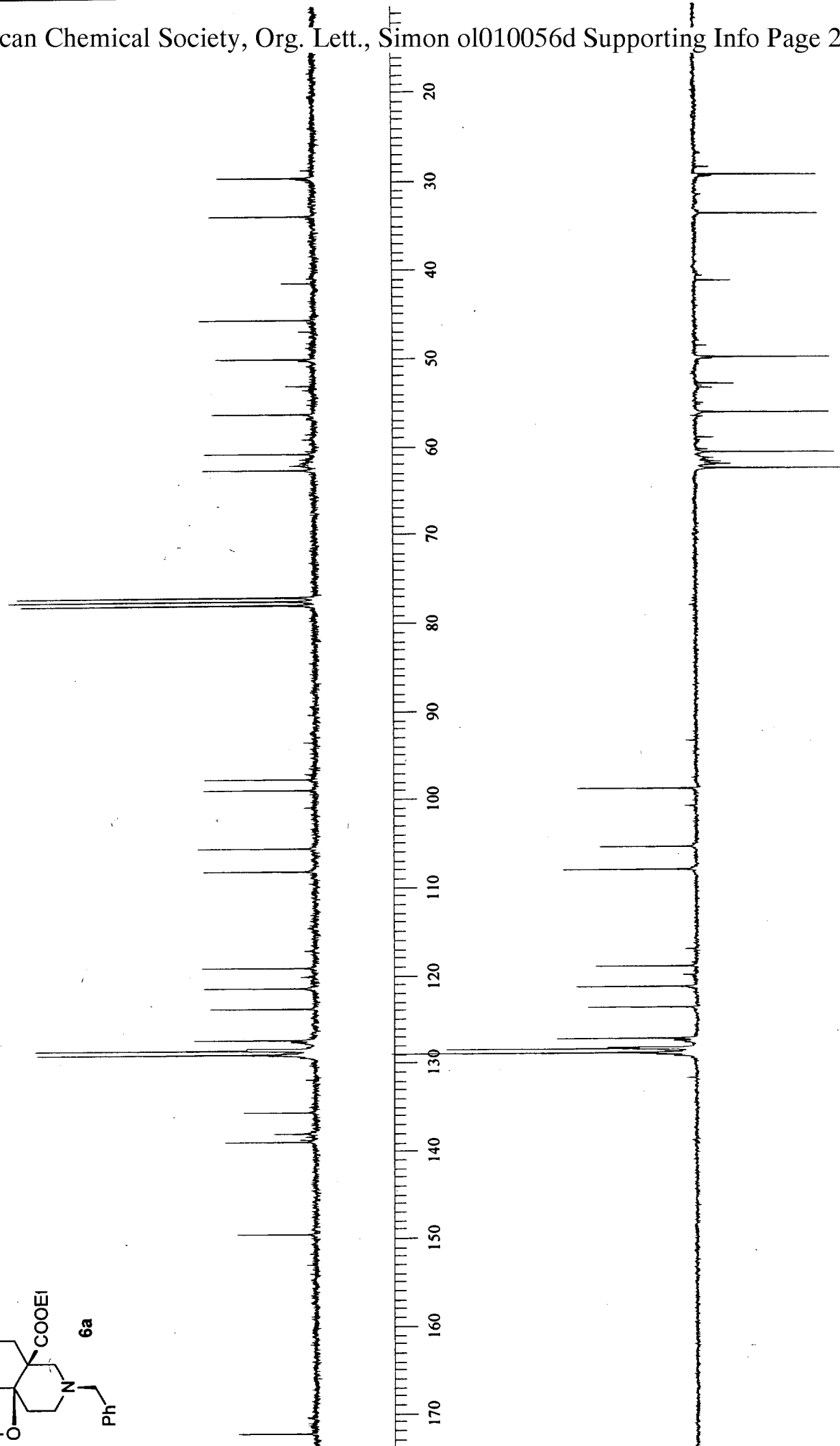
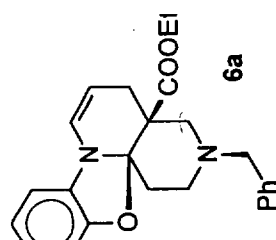




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Operator : FK/TV
Acquired : 11 May 2001 19:50 using AcqMethod INCEXAUT
Instrument : GC/MS #1
Sample Name: CS 170
Misc Info :
Vial Number: 2

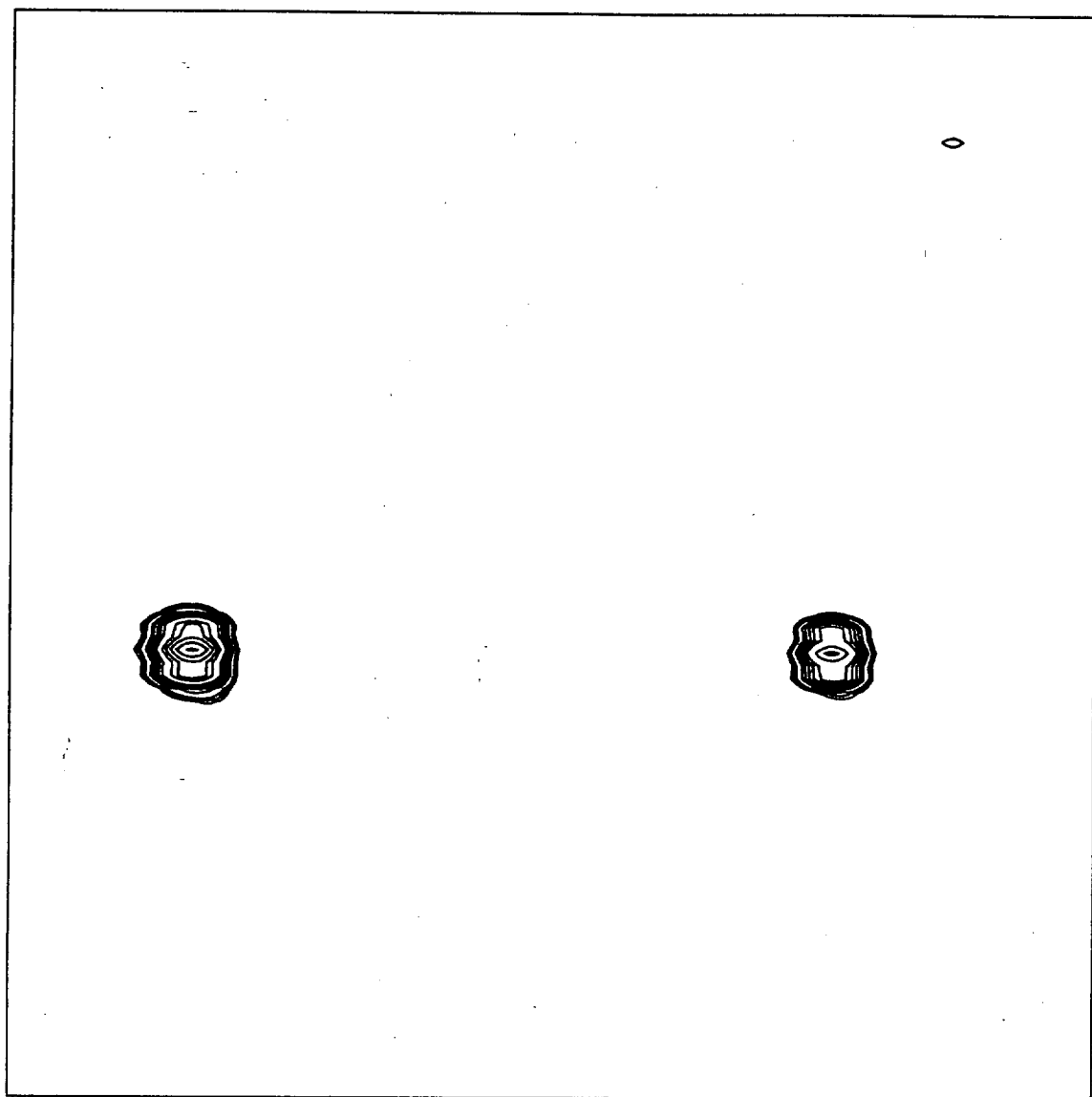
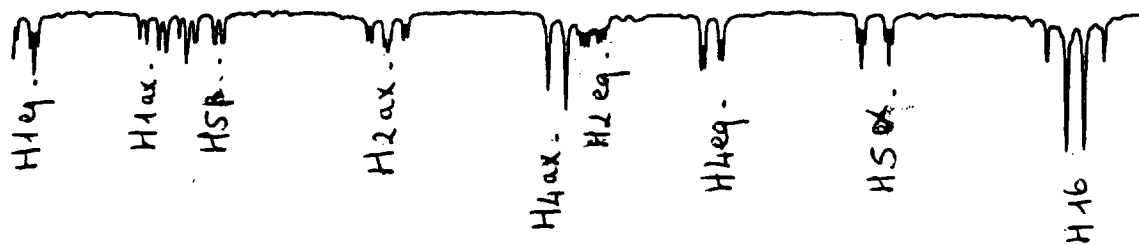






CS 136 NOESYTP CDC13

H6



2.0 2.5 3.0 3.5 ppm

ppm

5.0

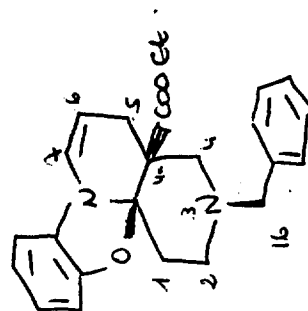
4.9

4.8

4.7

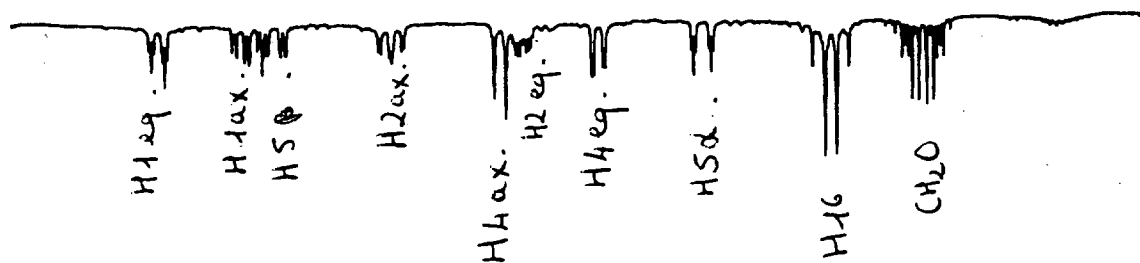
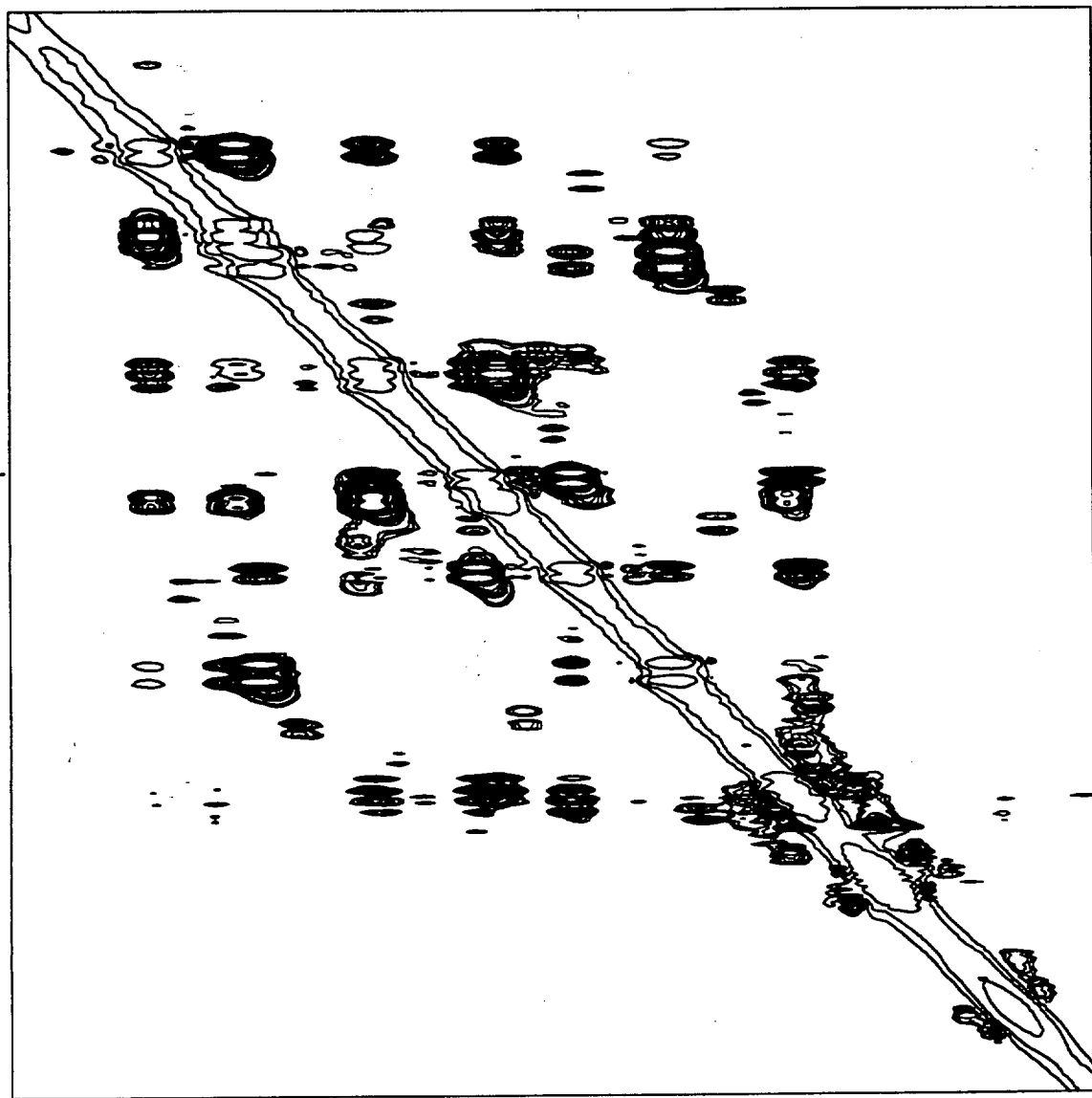
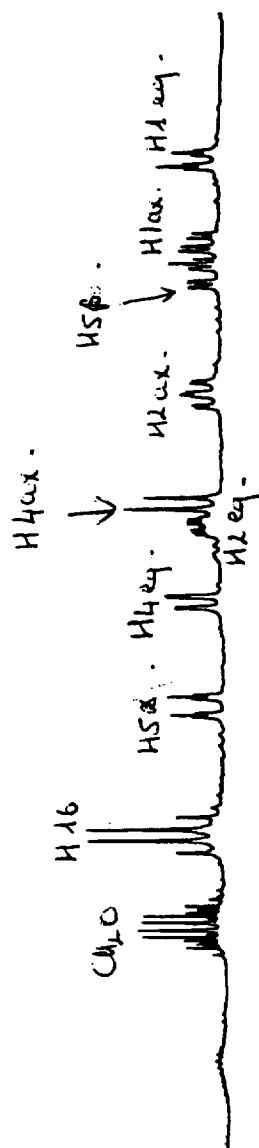
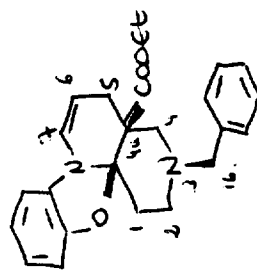
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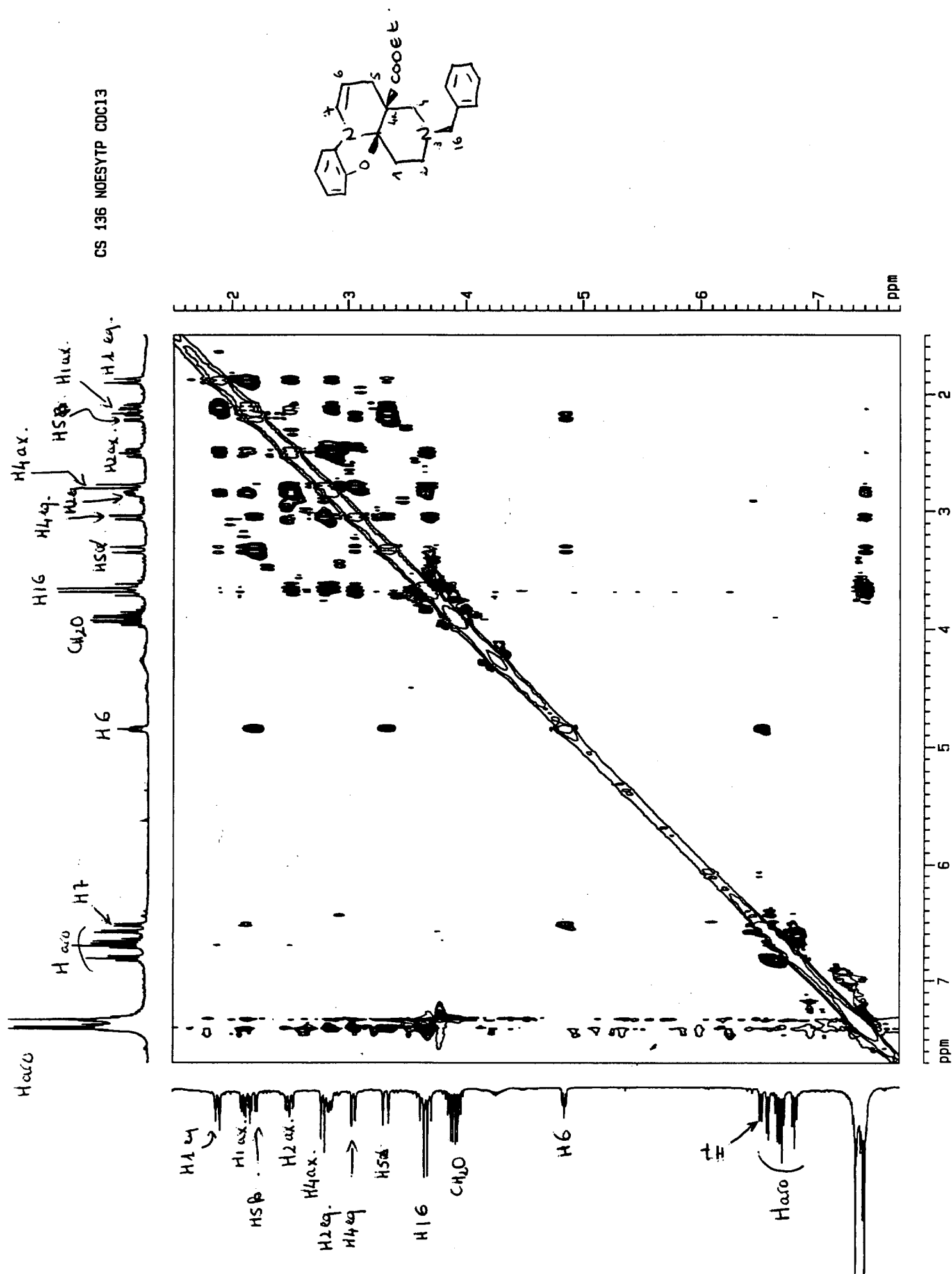
4.5



H5 α trans % 0.8
H5 β cis "

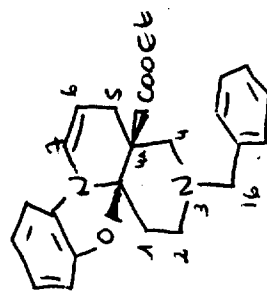
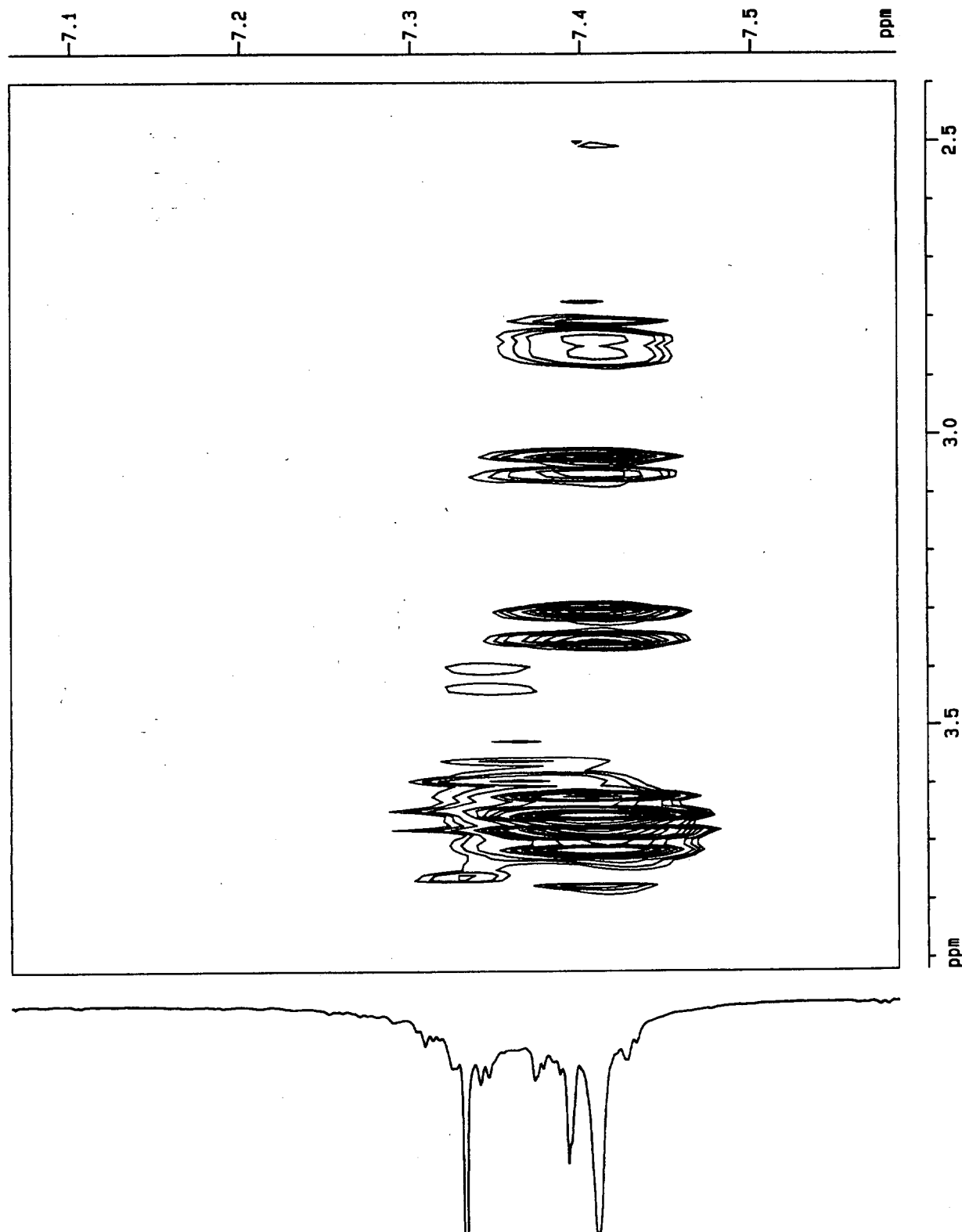
CS 136 NOESYTP CDC13







CS 136 NOESYTP CDC13



[Mass Spectrum]

Date : 18-Dec-100 10:09

Sample: NBA

Note : MR-DX300

Inlet : Direct

Spectrum Type : Regular [MF-Linear]

RT : 0.00 min

BP : m/z 81.0000

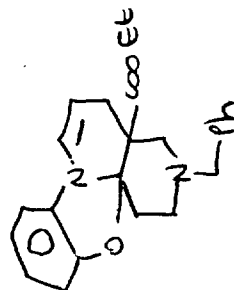
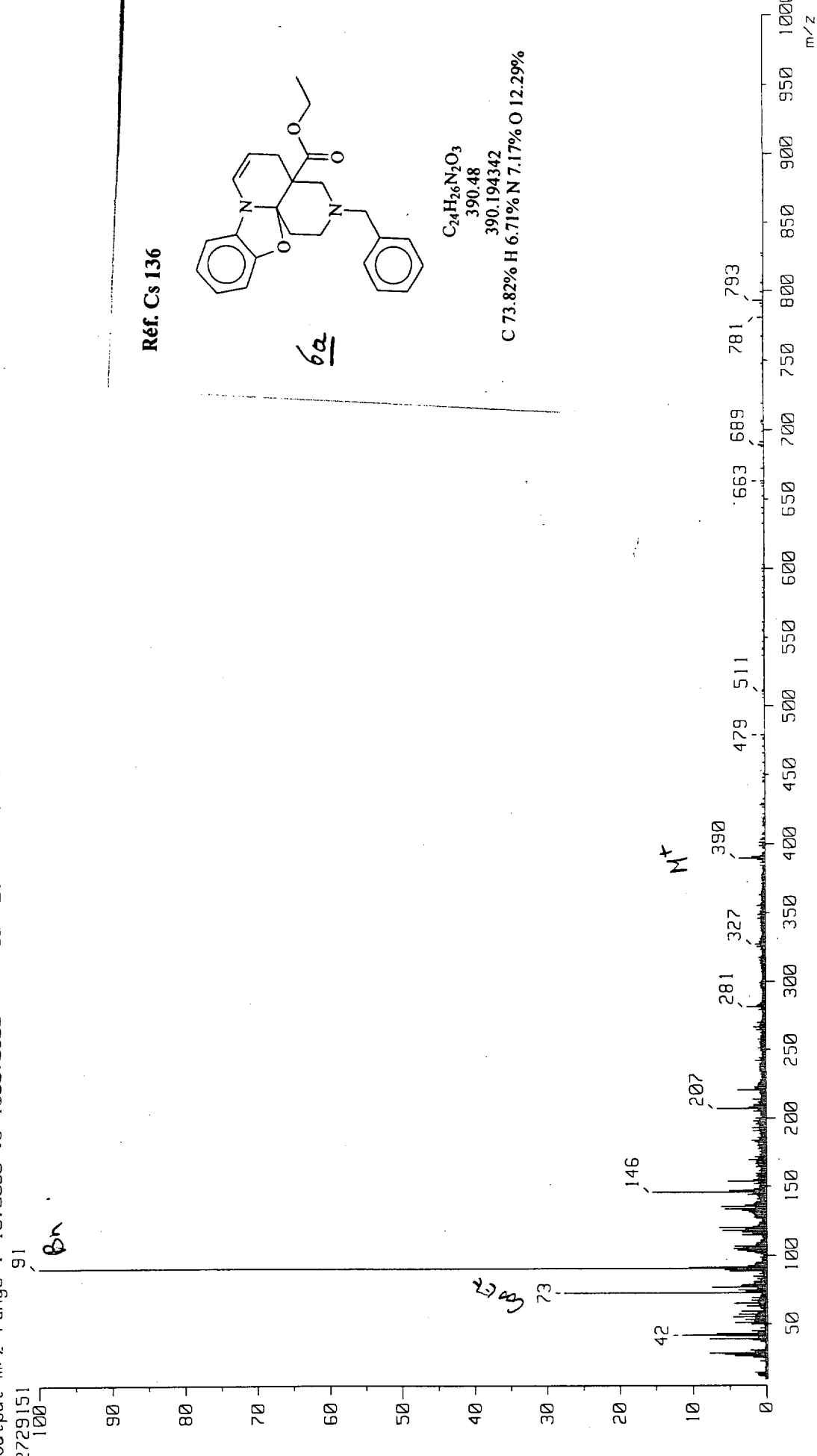
Output m/z range : 10.0000 to 1000.0000

2729151

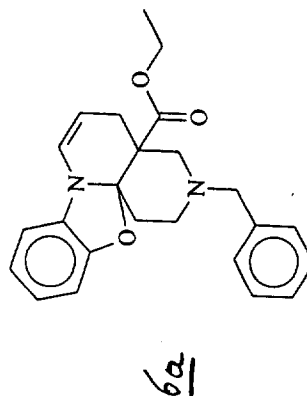
Ion Mode : FAB+

Temp : 1.1 deg.C

Cut Level : 0.00 %



Ref. Cs 136

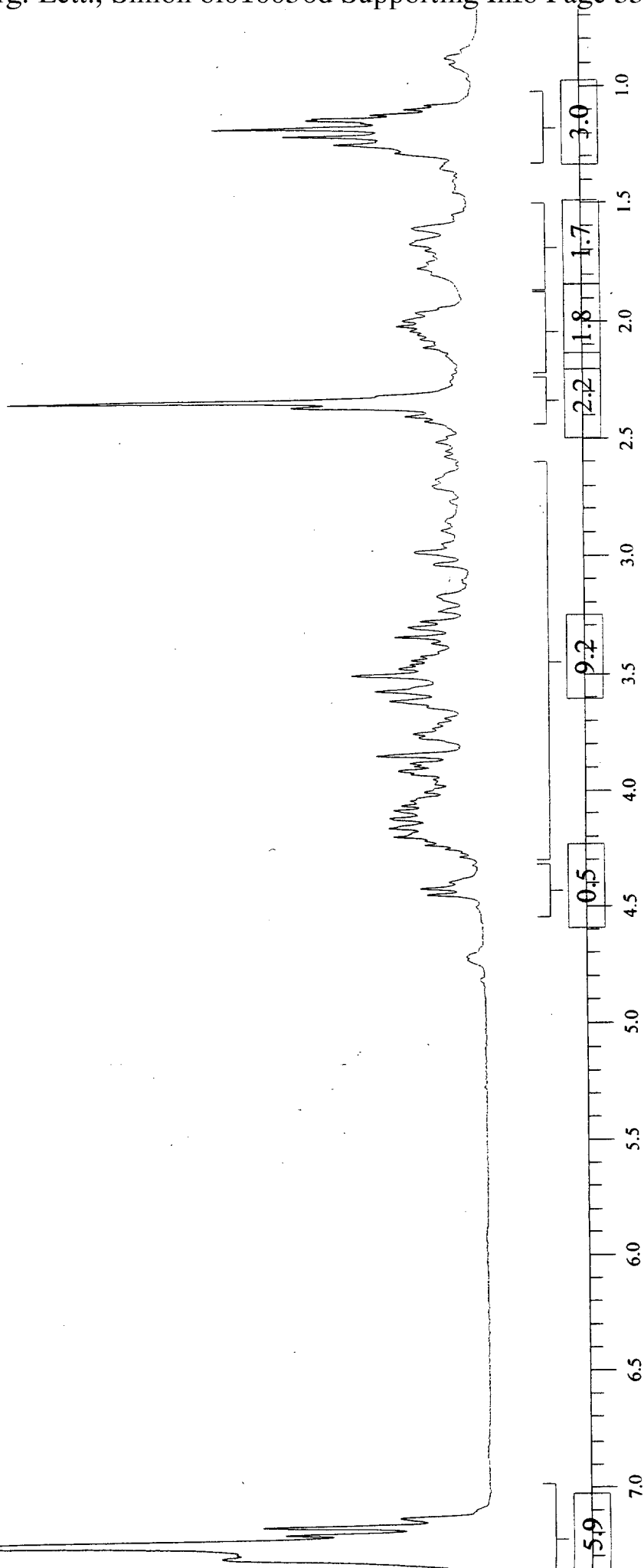
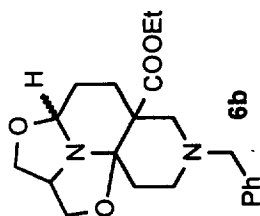


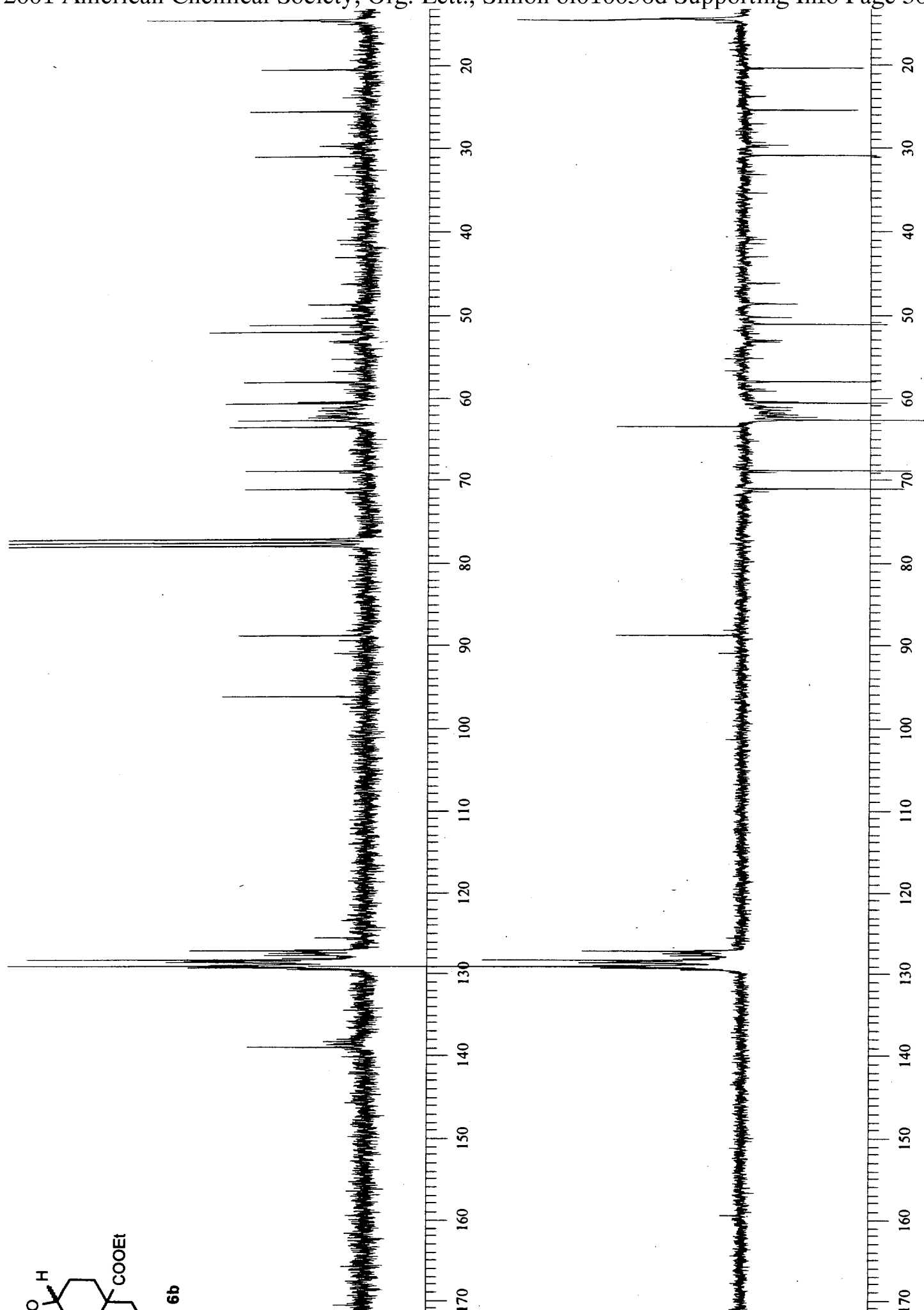
C₂₄H₂₆N₂O₃

390.48

390.194342

C 73.82% H 6.71% N 7.17% O 12.29%

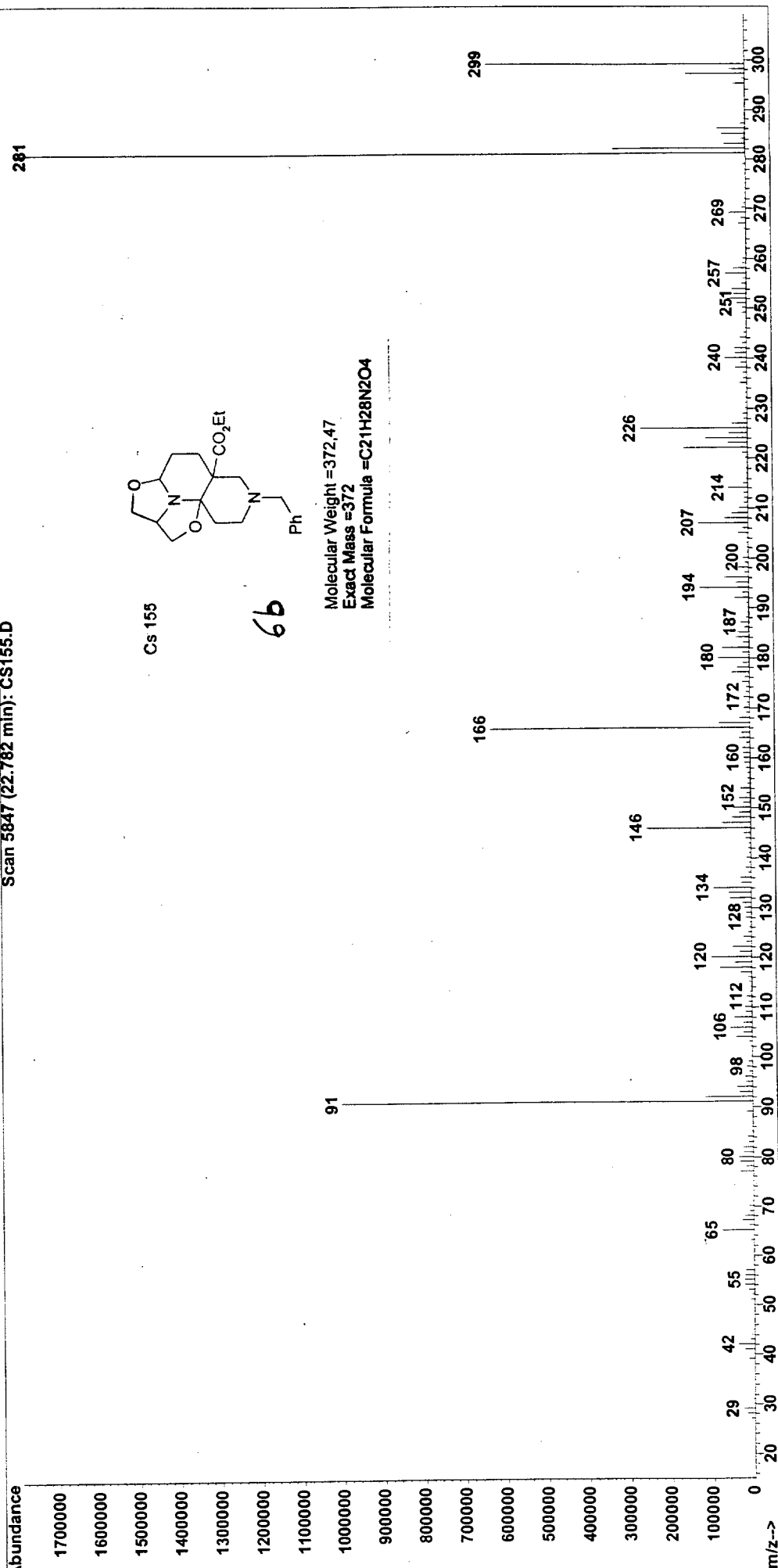


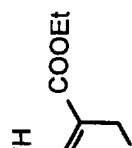


6b

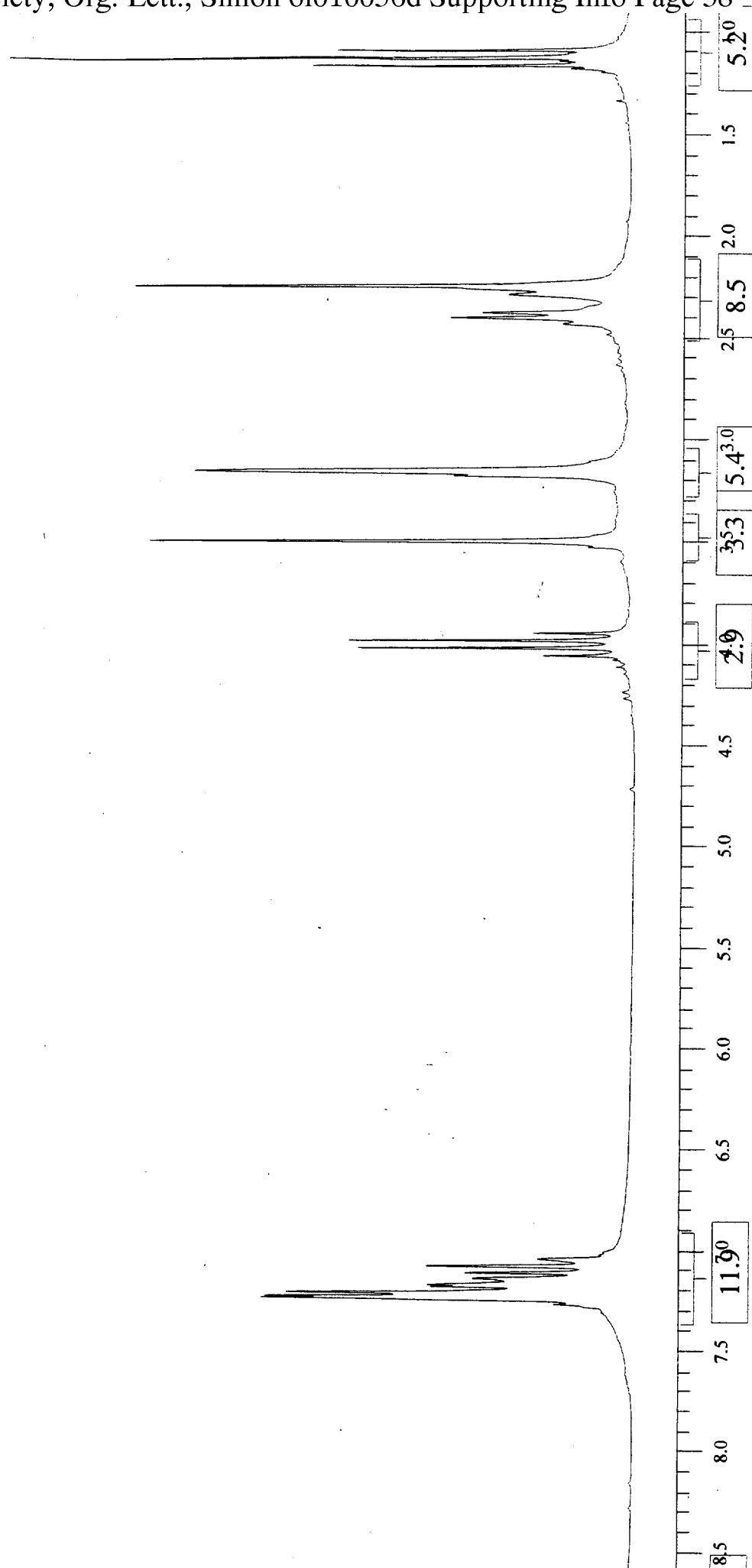
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Operator : FK/TV
Acquired : 11 May 2001 15:55 using AcqMethod INCXAUT
Instrument : GC/MS #1
Sample Name: CS 155
Misc Info :
Vial Number: 6

Scan 5847 (22.782 min): CS155.D





7





7

