



**Massachusetts Institute of Technology  
Organic Chemistry 5.13**

September 24, 2003  
Prof. Timothy F. Jamison

**Notes for Lecture #8  
Organic Structure Determination**

**The structures of the compounds corresponding to the spectra and data on the following pages are (fill in the blanks):**

**8-A**

**8-F**

**8-B**

**“5”**

**8-C**

**“6”**

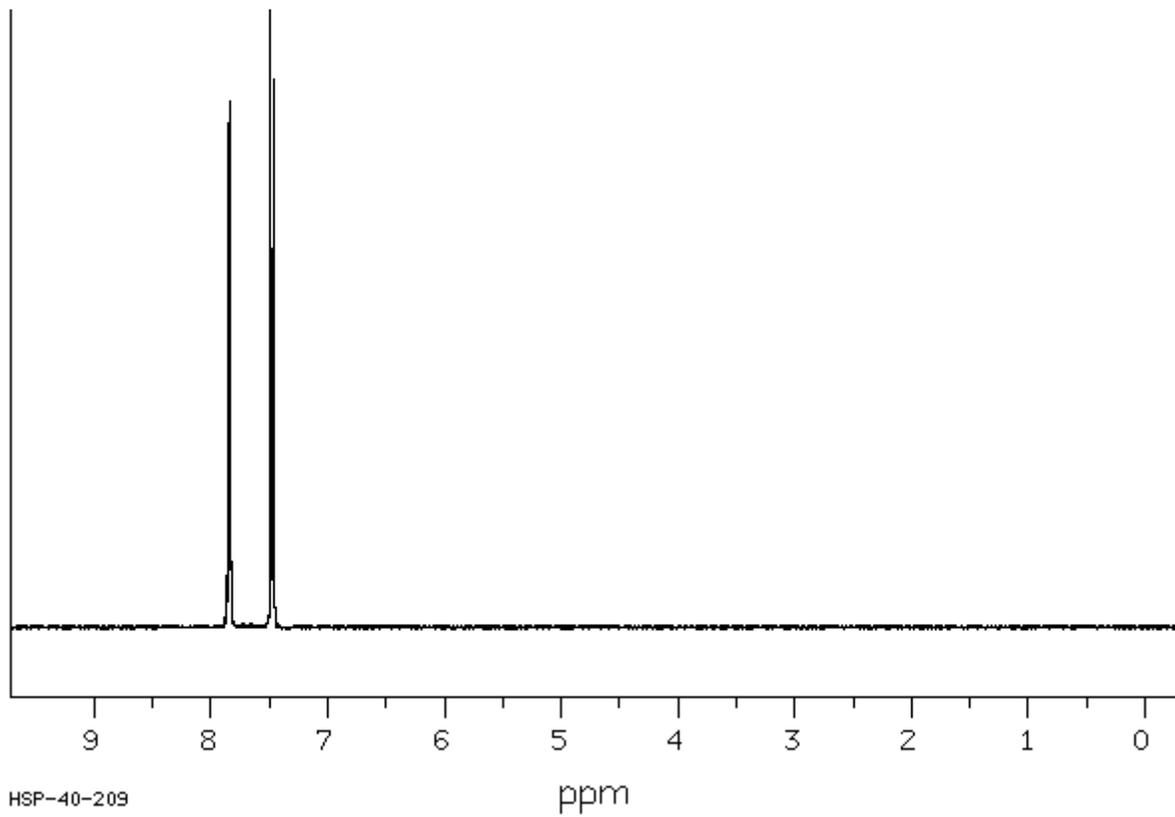
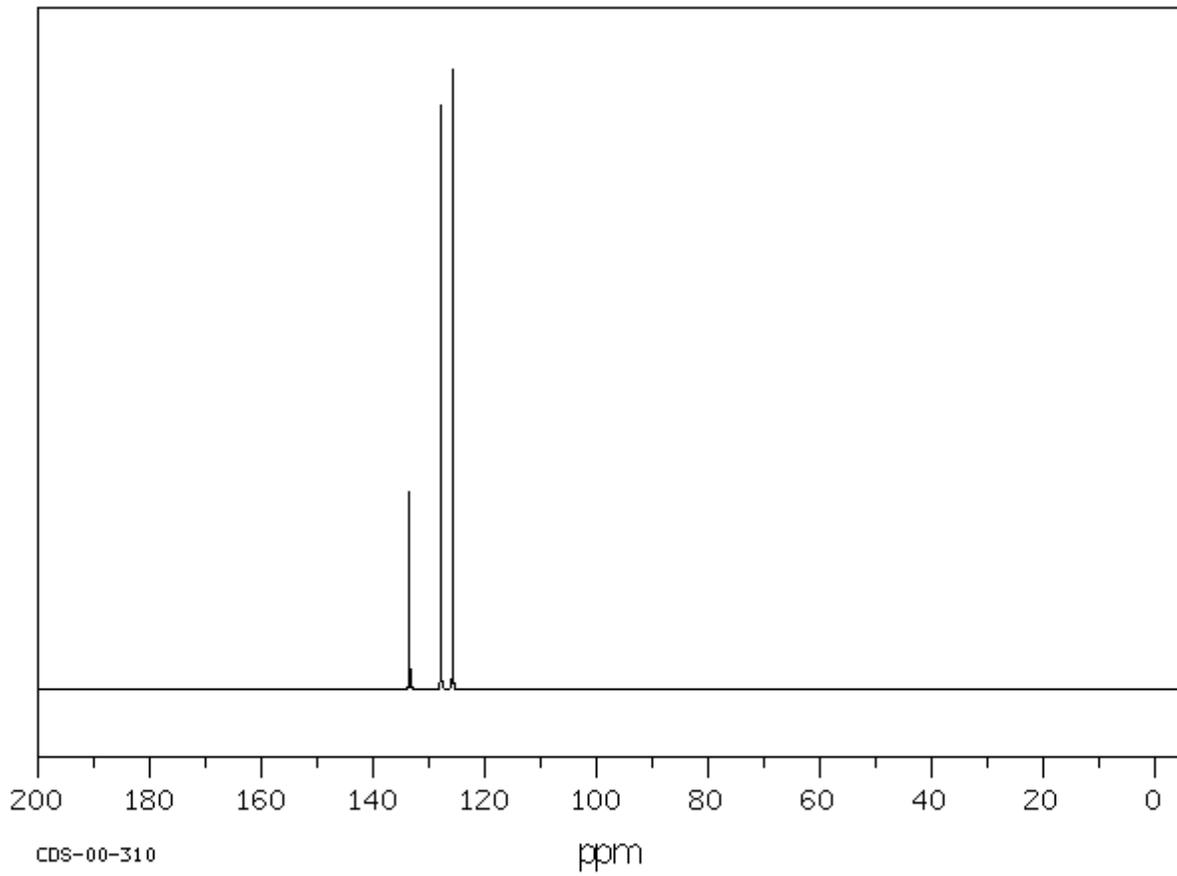
**8-D**

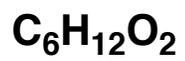
**“8”**

**8-E**

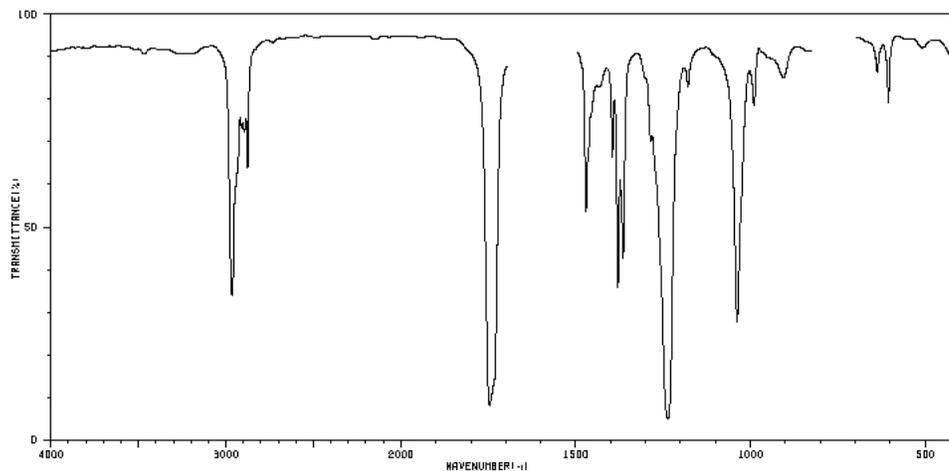
$C_{10}H_8$

8-A

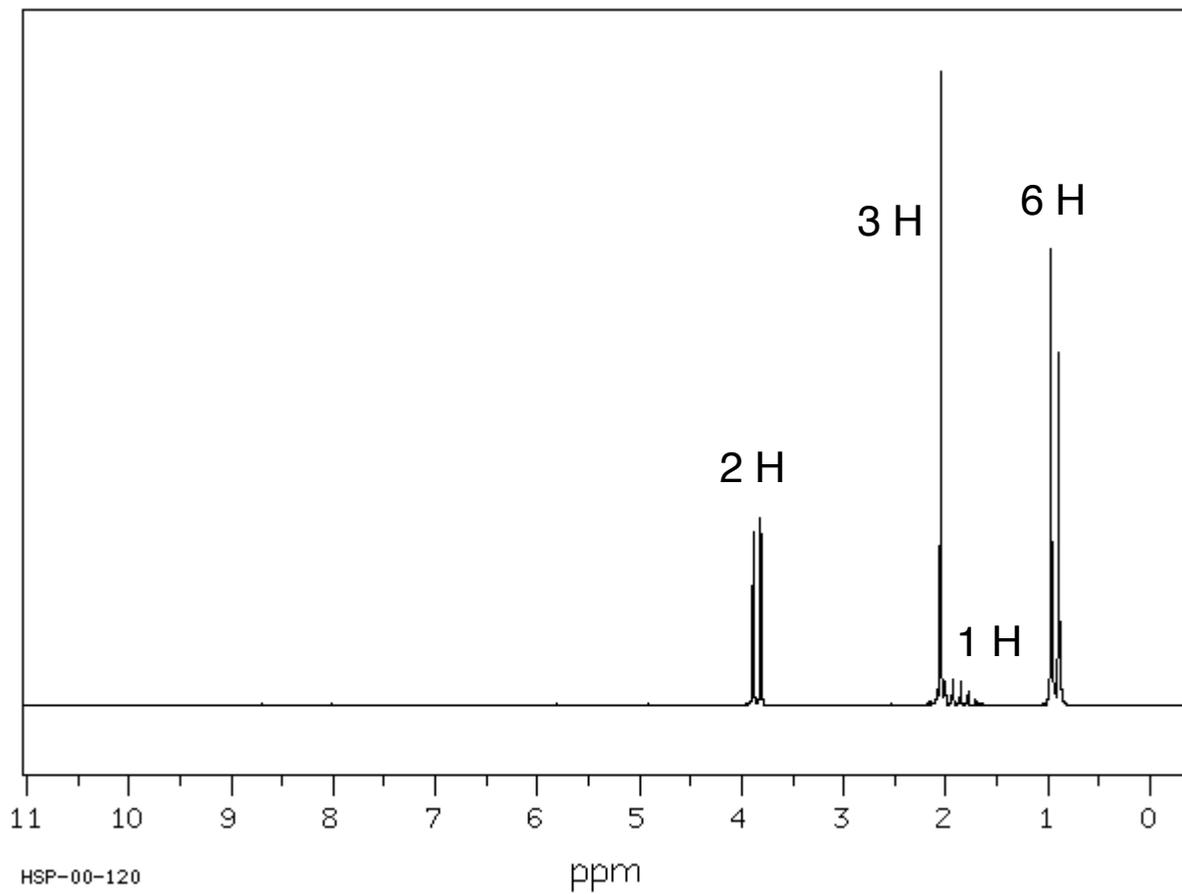




8-B



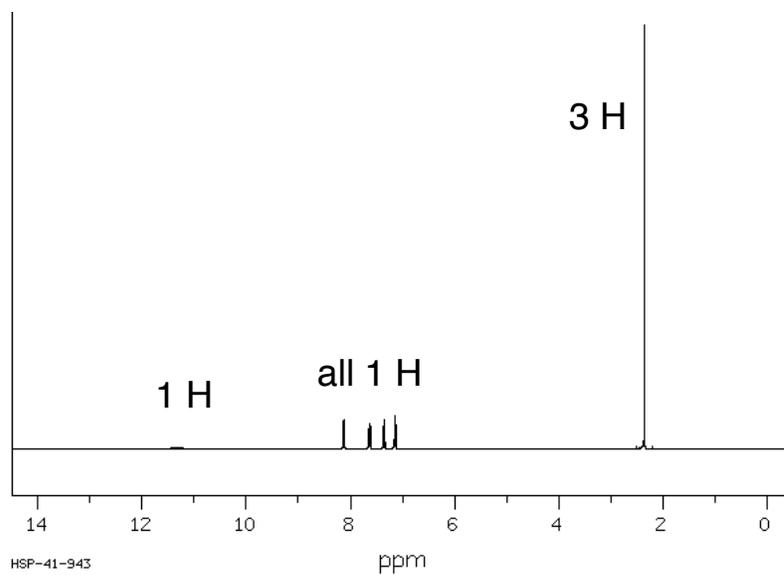
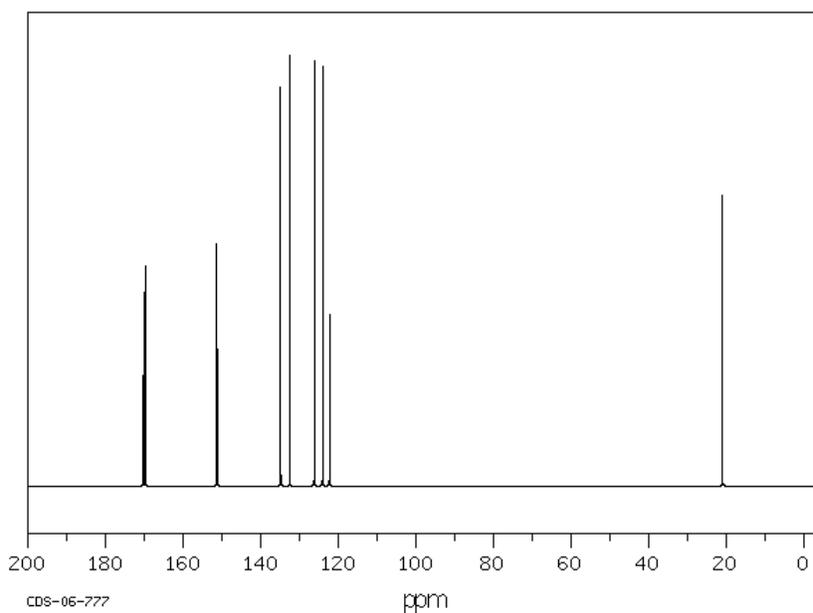
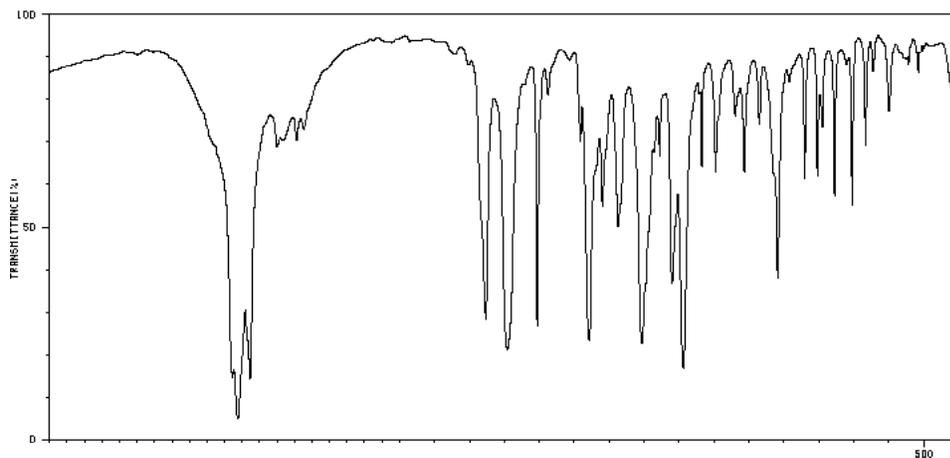
2966	32	1396	64	990	77
2944	57	1380	34	905	81
2912	70	1365	41	836	84
2894	70	1296	68	606	77
2876	62	1236	4		
1746	7	1179	79		
1471	62	1038	26		



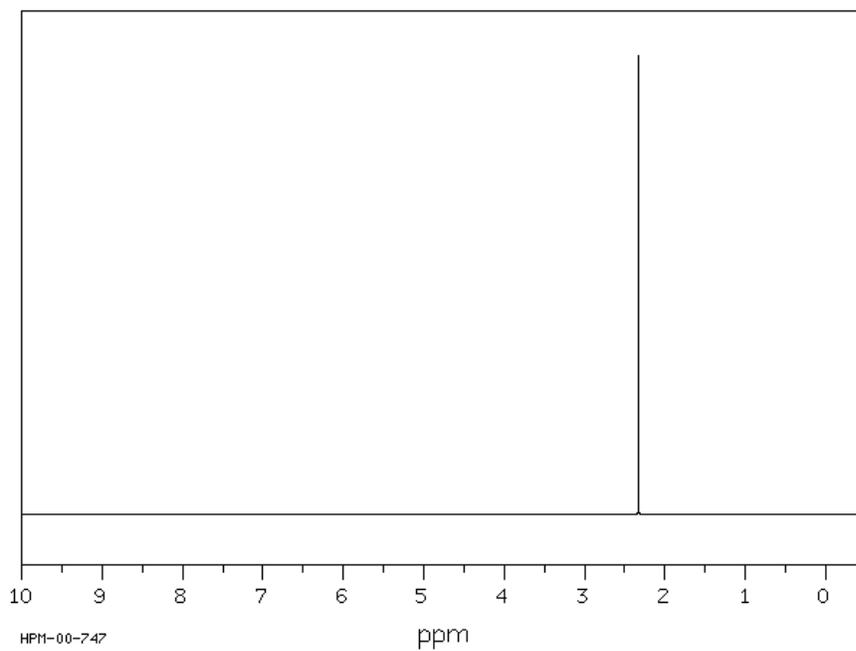
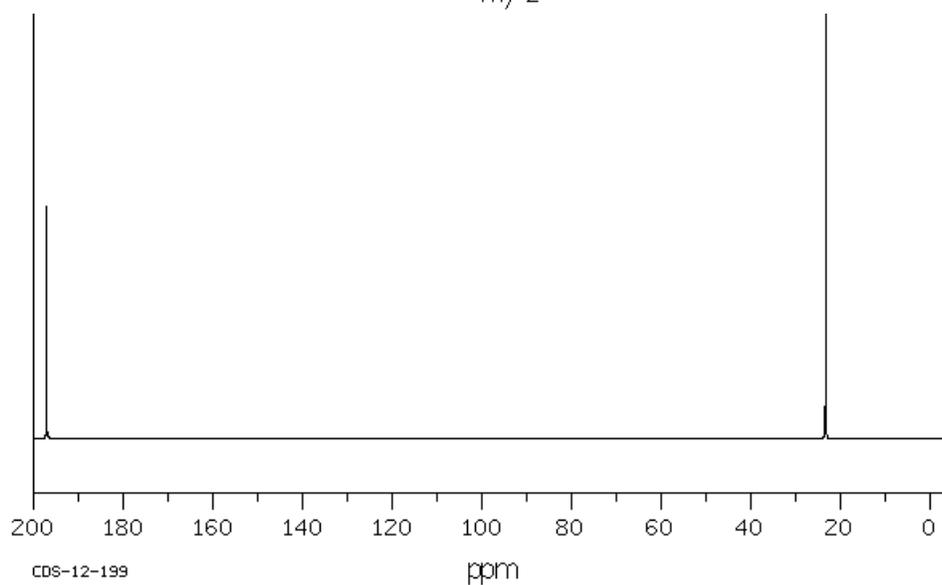
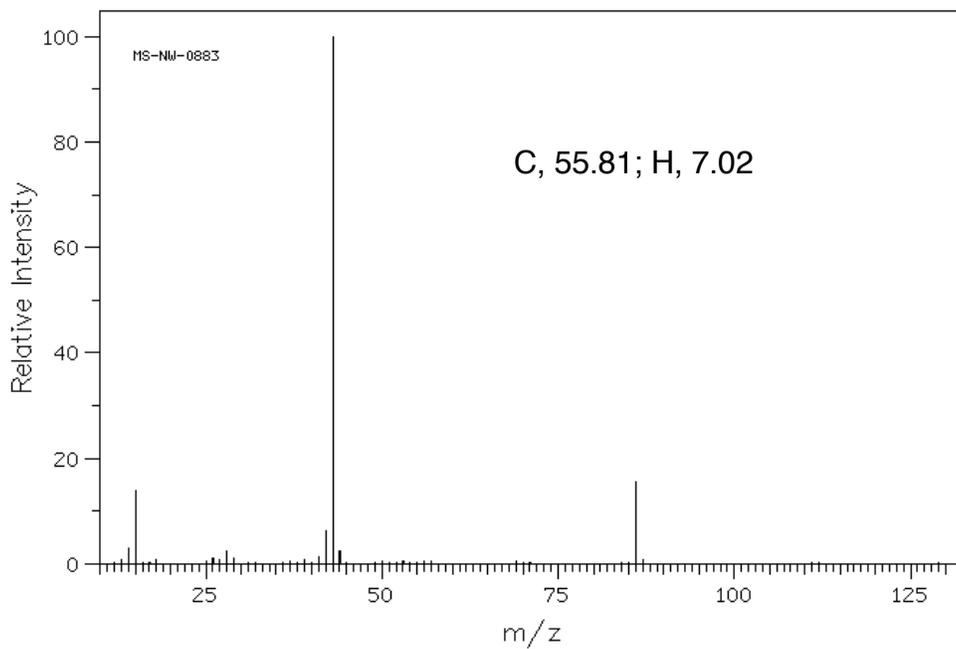
HSP-00-120

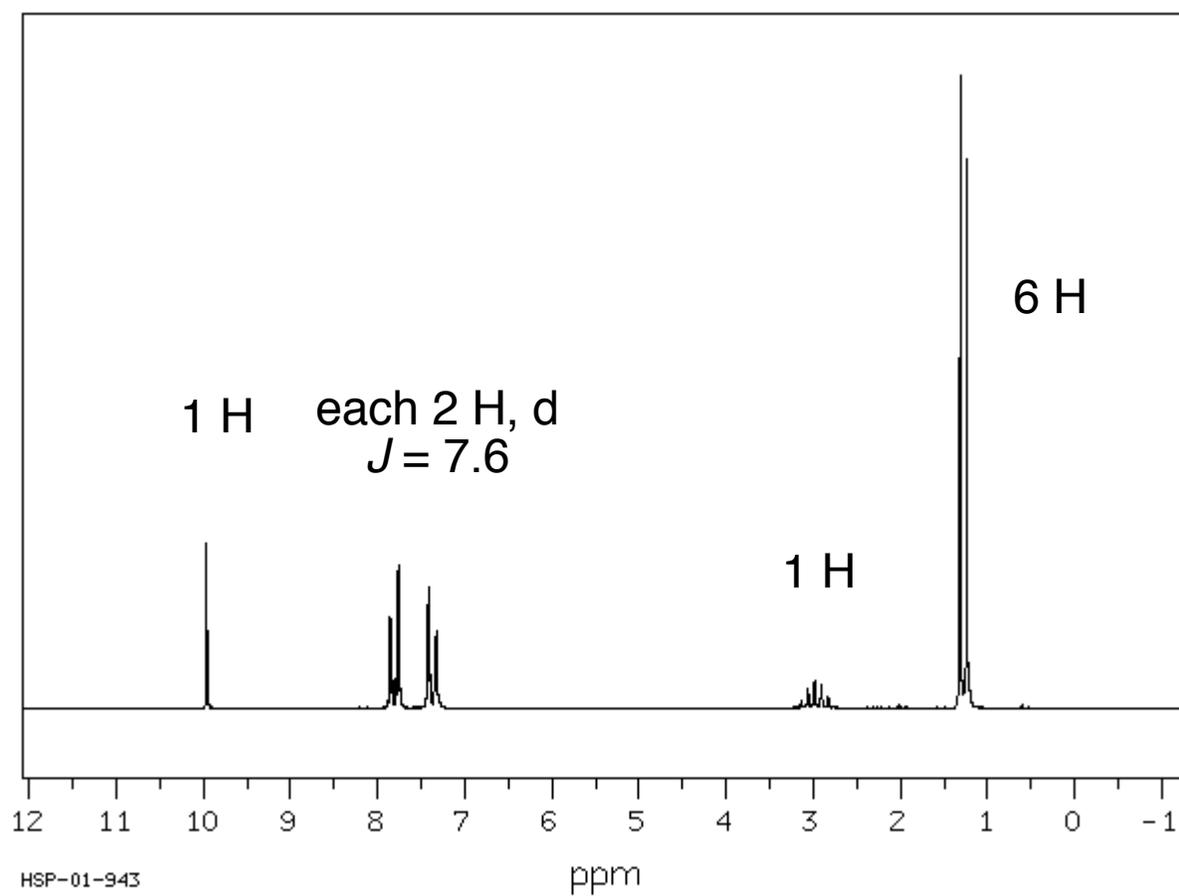
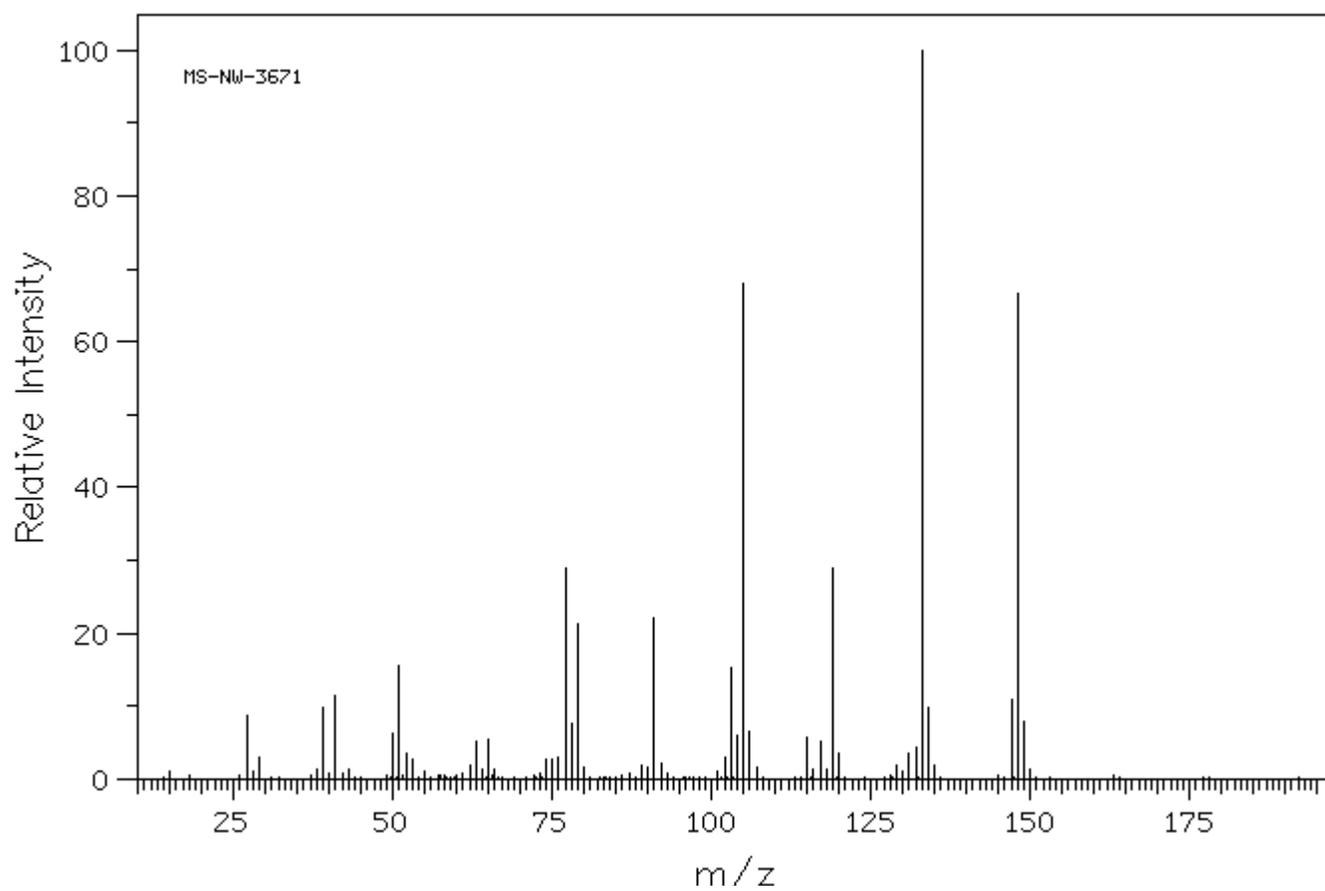
C, 60.00; H, 4.48  
M<sup>+</sup> = 180

8-C

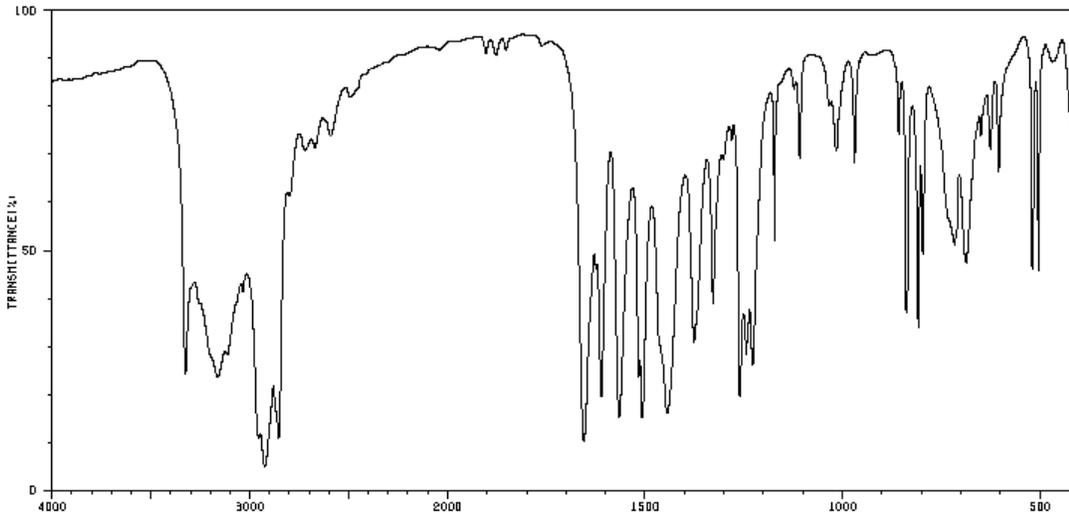


8-D

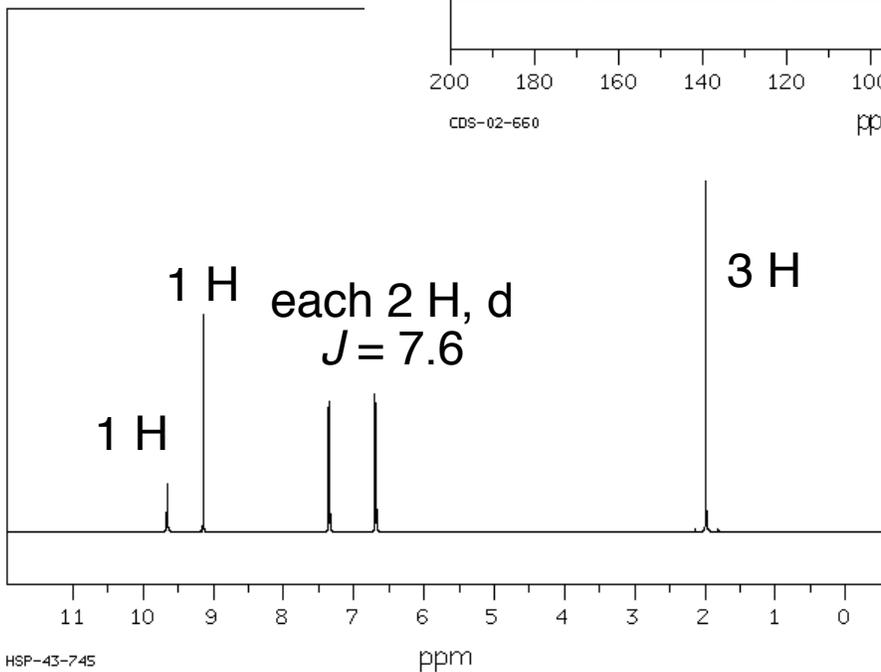
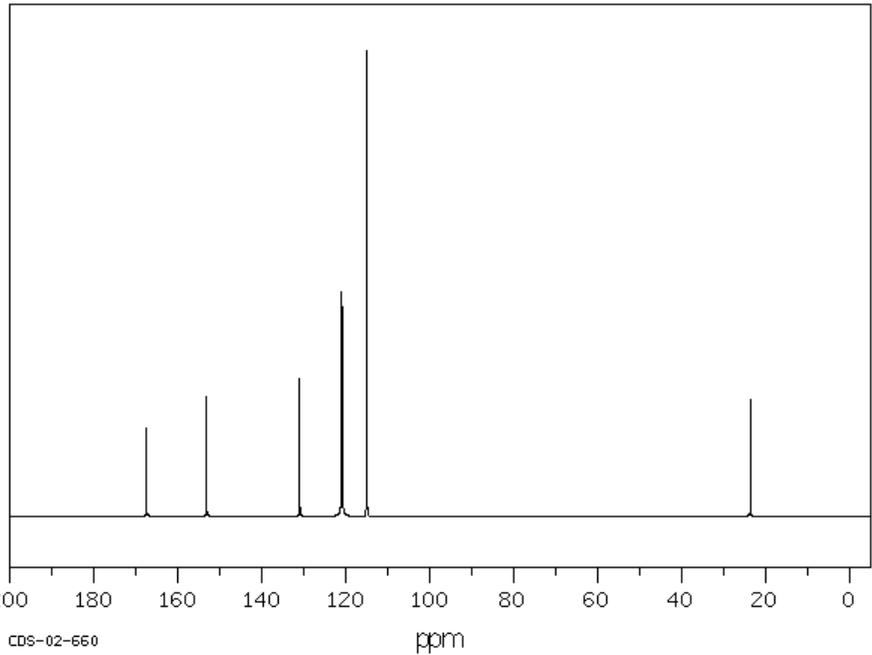


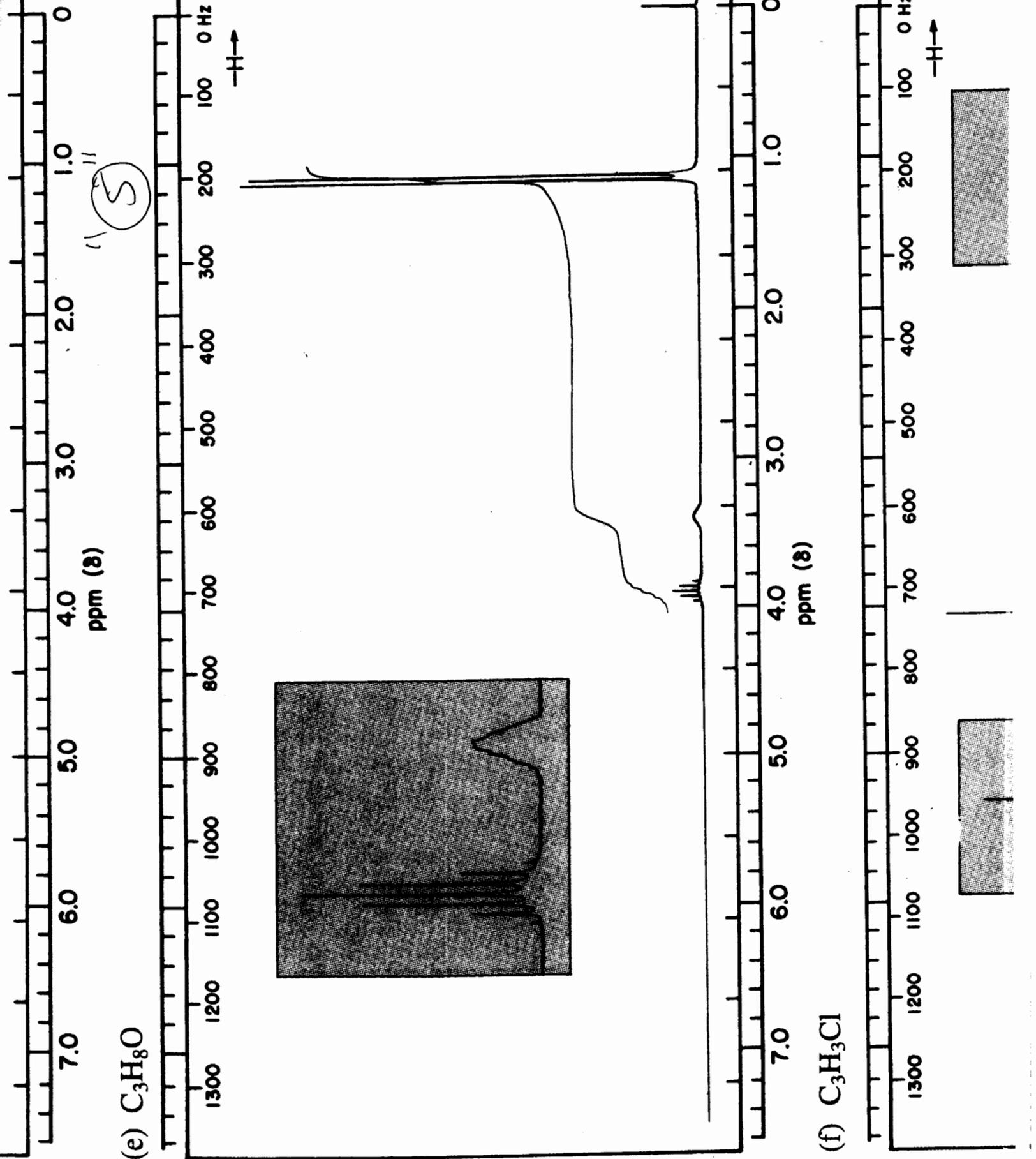


8-F

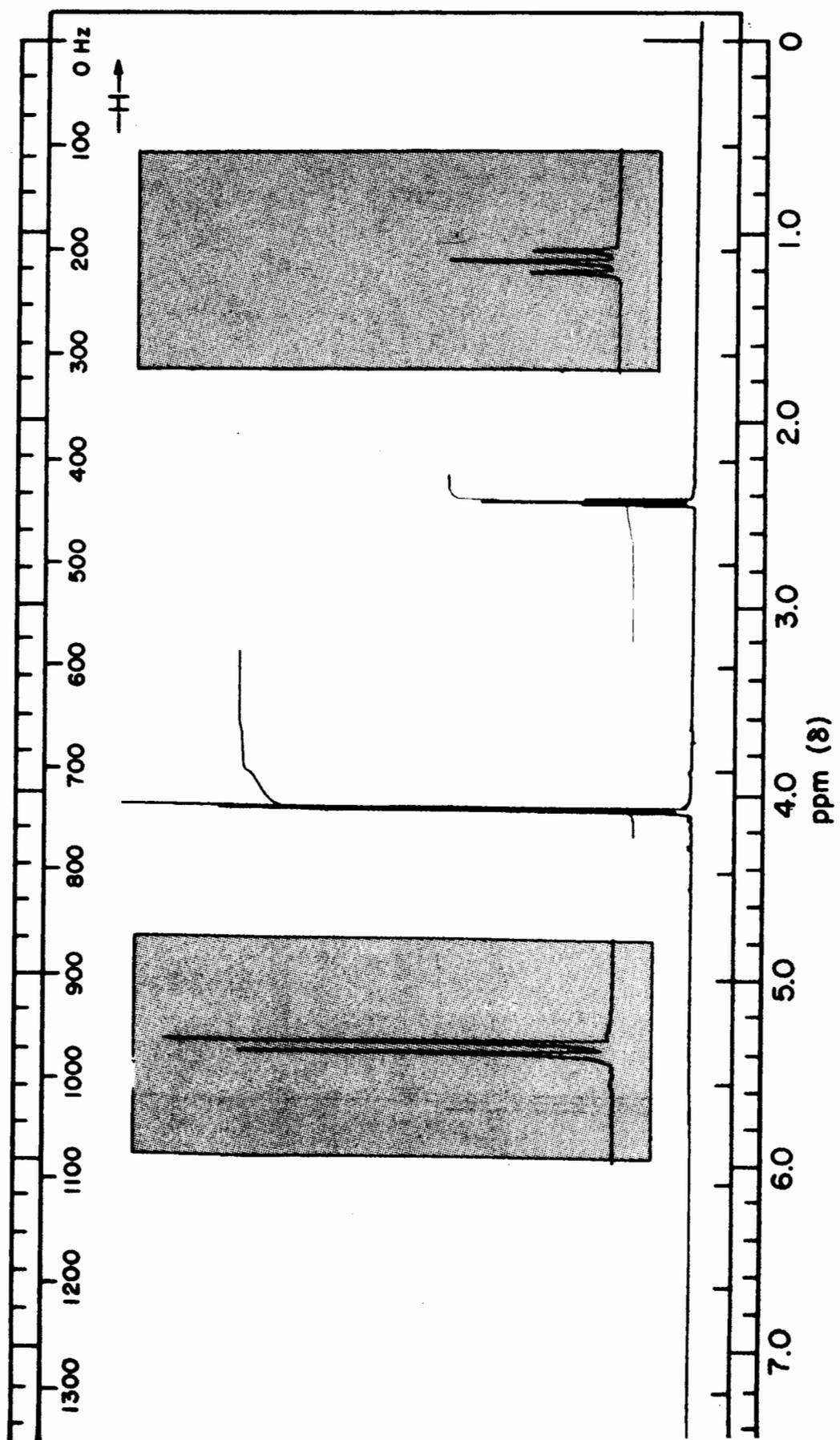
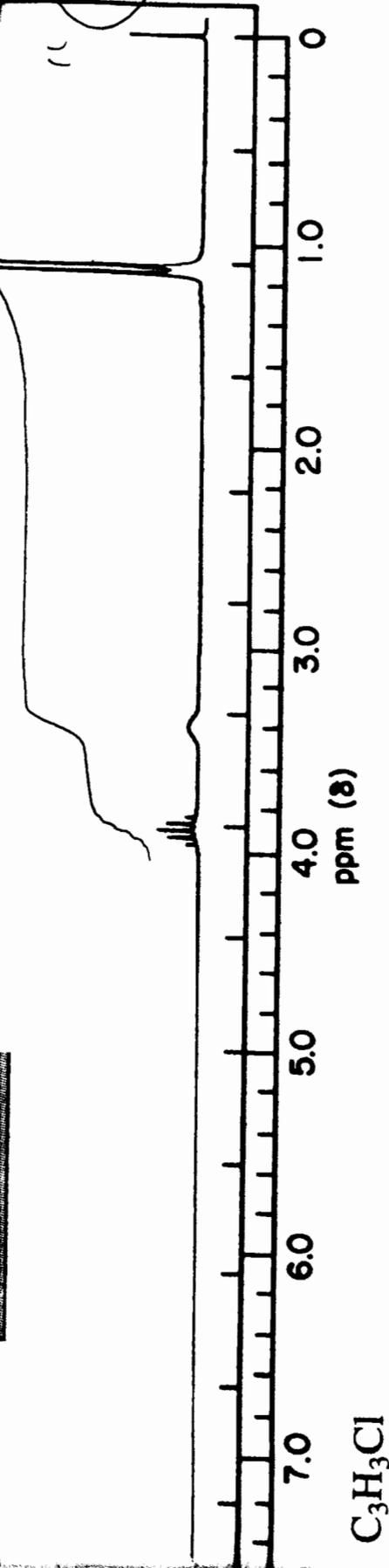


3325	23	2696	70	1608	14	12
3164	22	2669	68	1444	15	11
3035	39	2590	70	1376	29	11
2954	10	1656	10	1328	37	10
2924	4	1611	18	1281	70	5
2854	10	1565	14	1261	18	5
2720	68	1516	22	1244	27	5

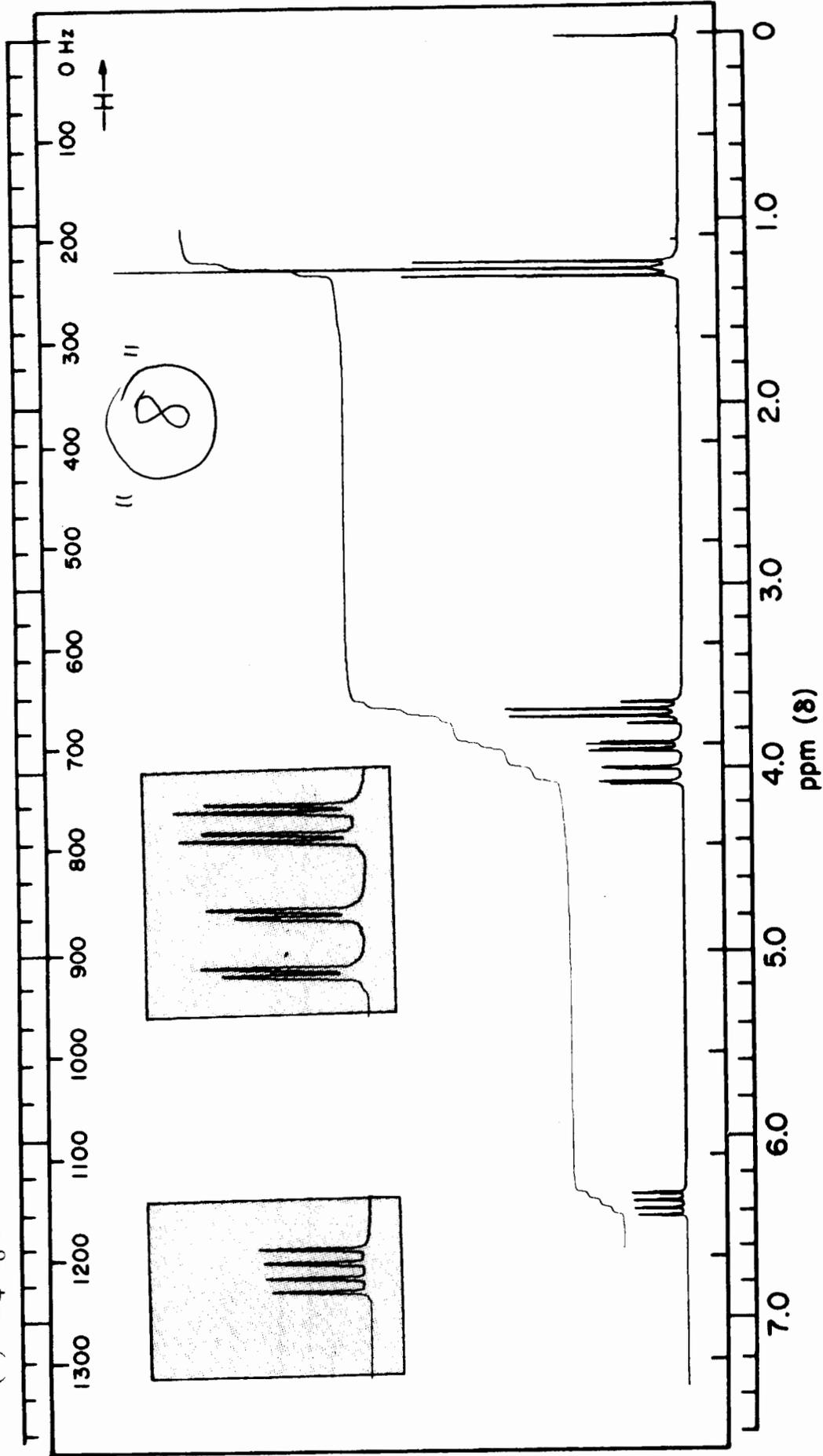




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(e)  $C_4H_8O$



(f)  $C_{11}H_{24}O_4$

