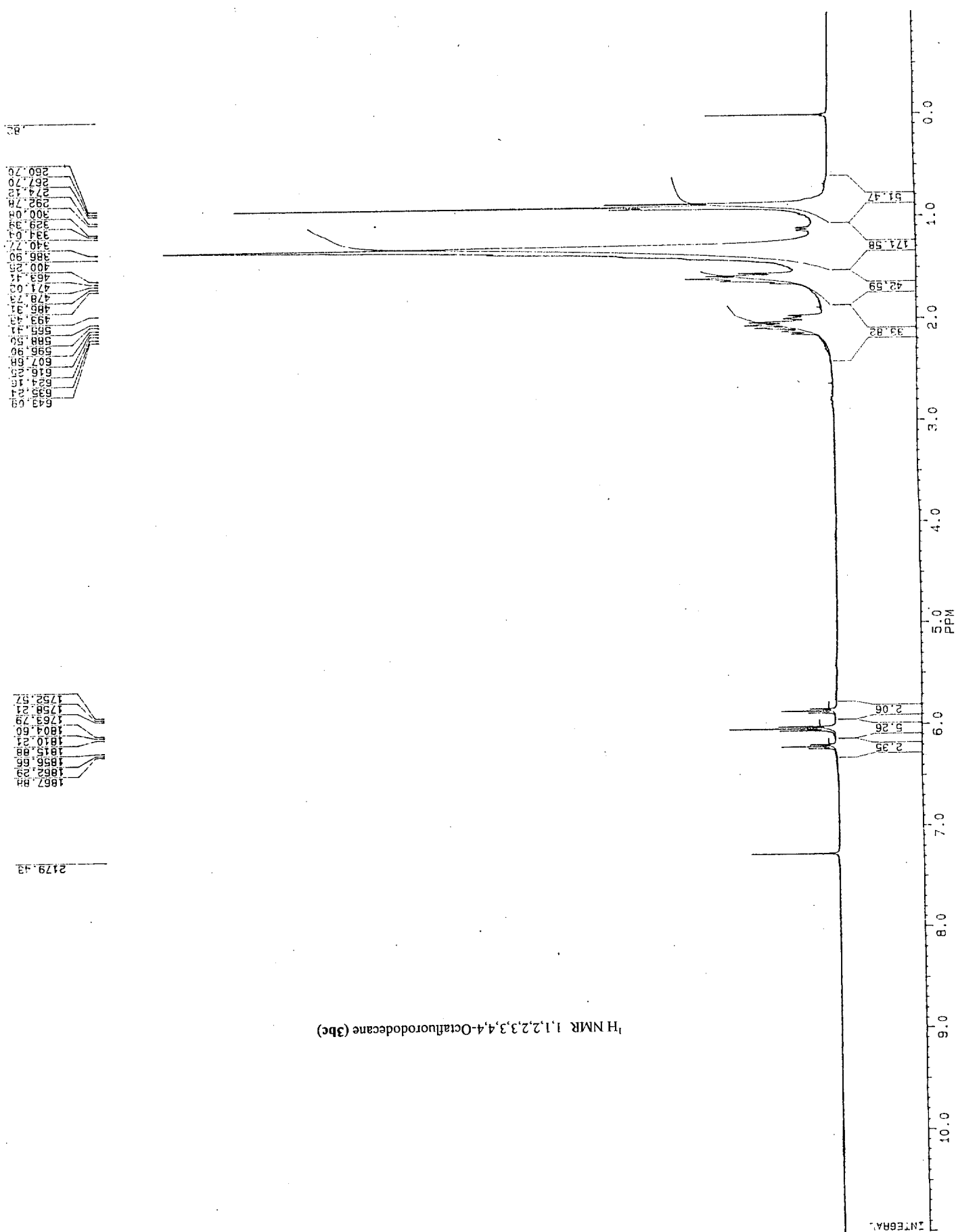
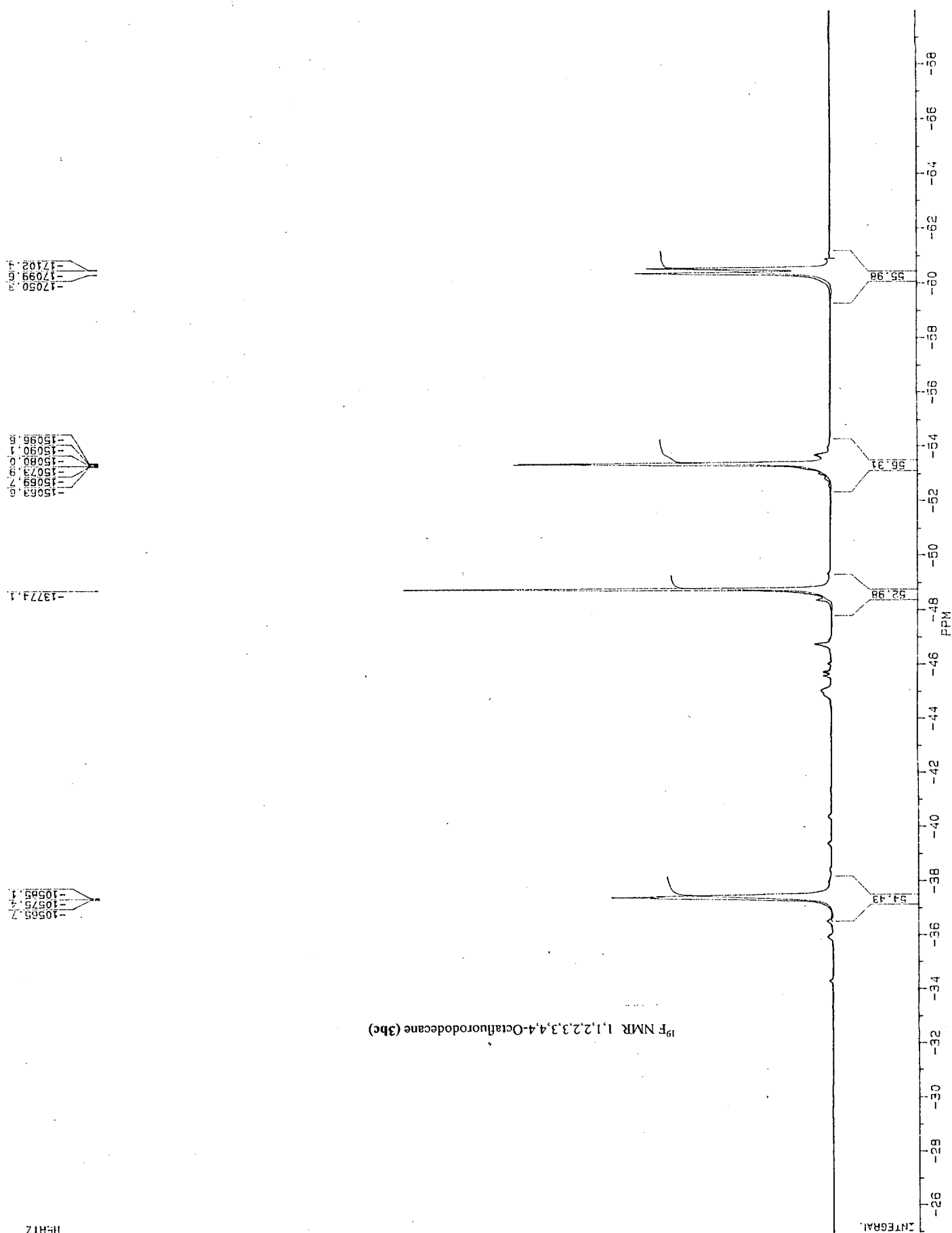
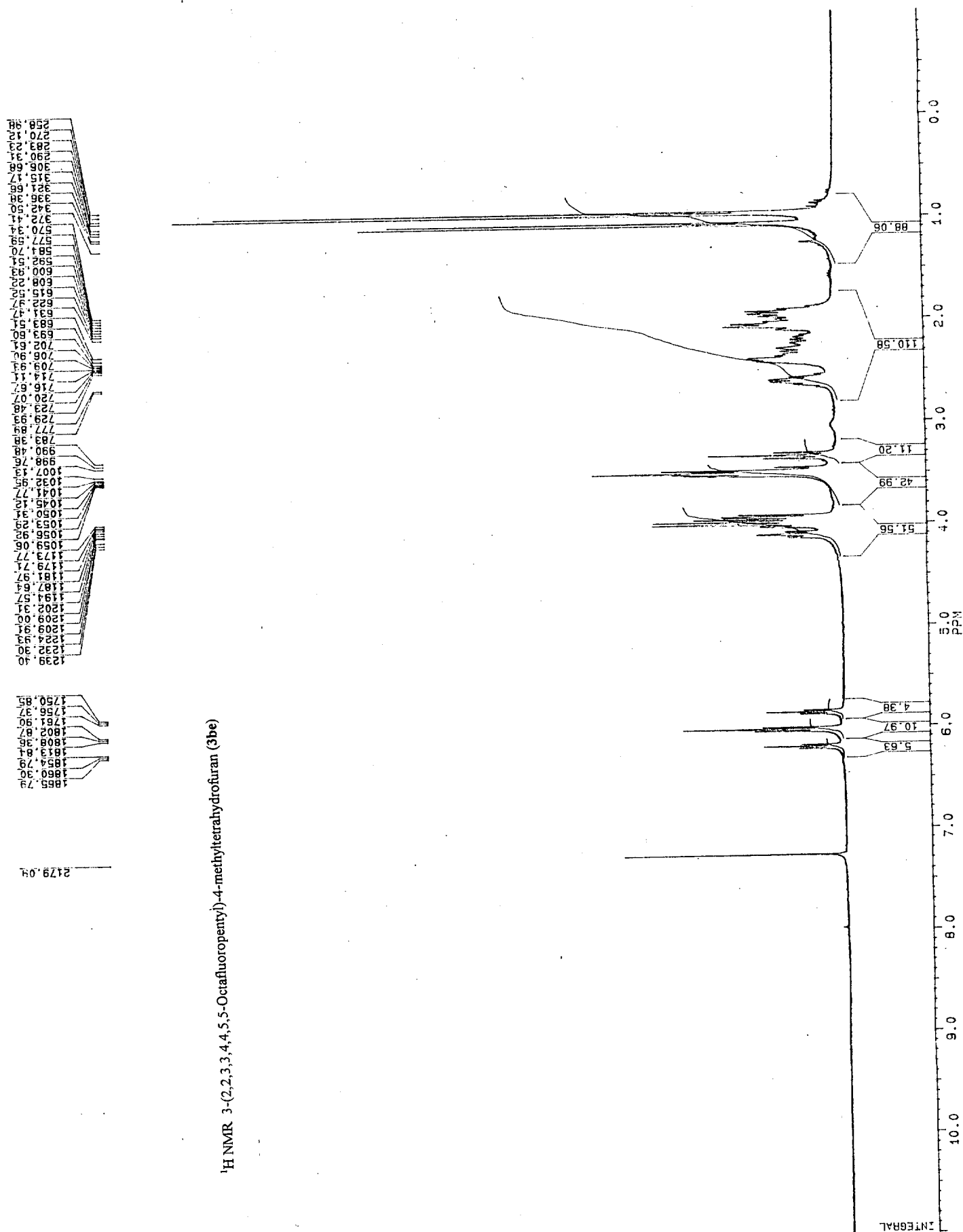
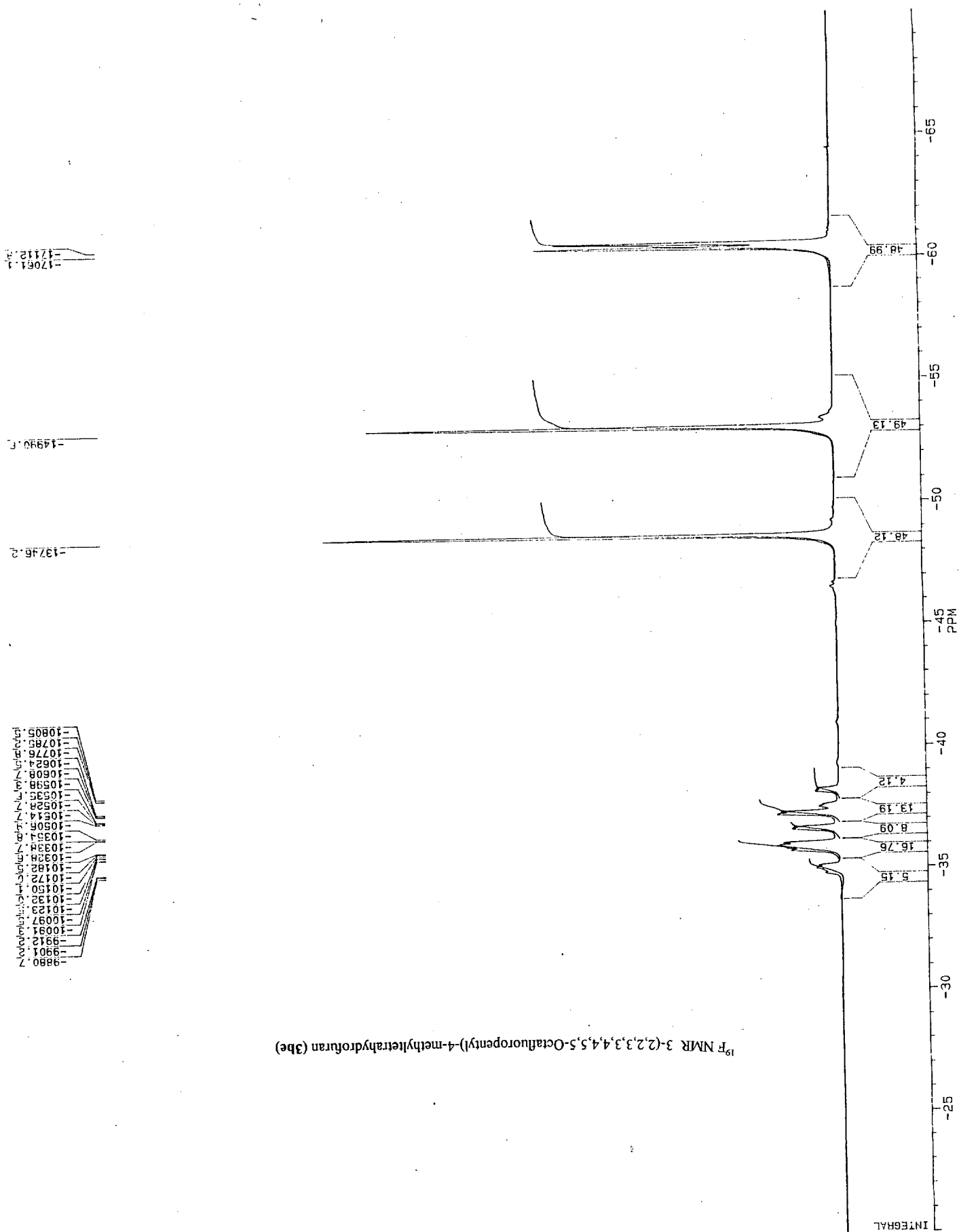


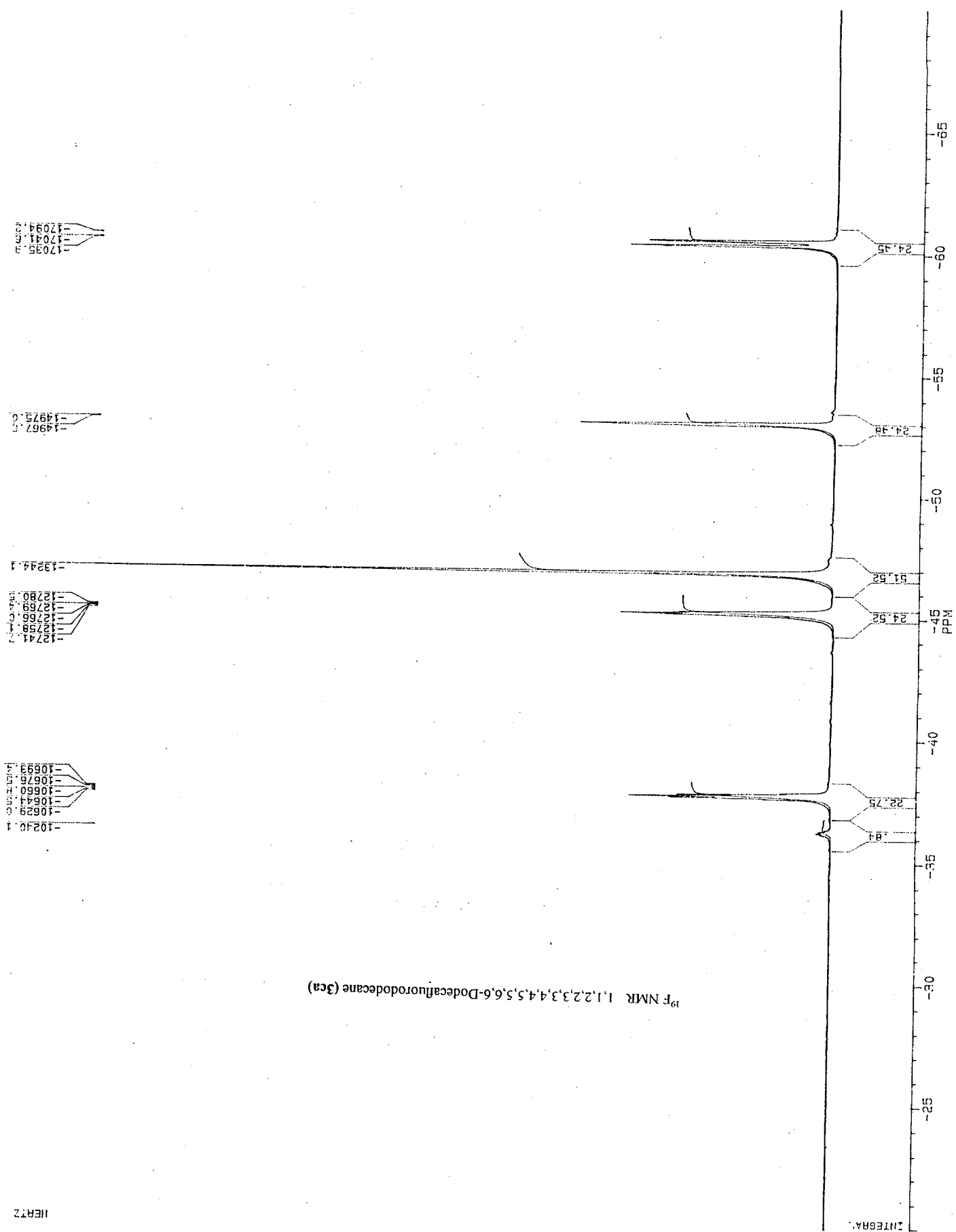


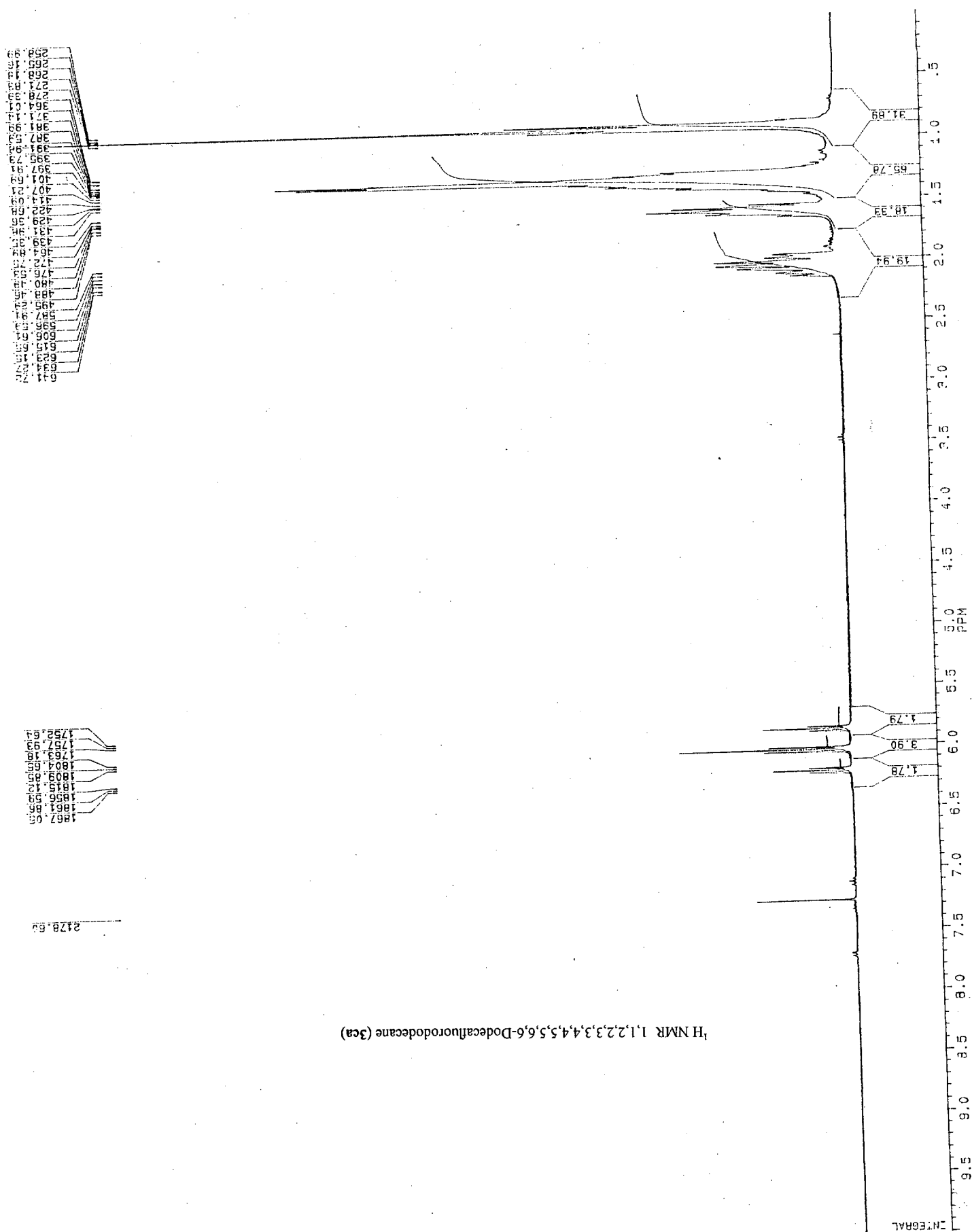


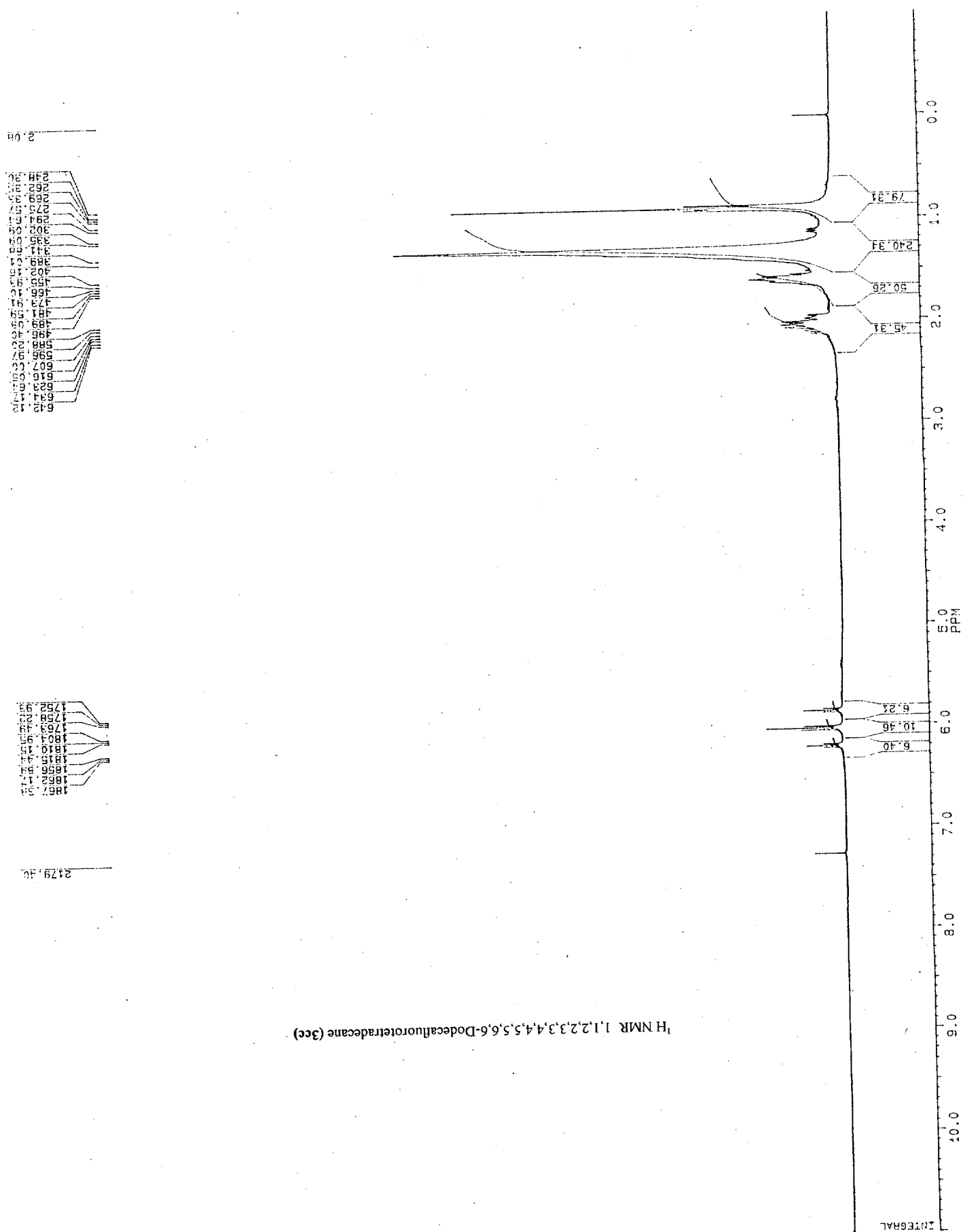


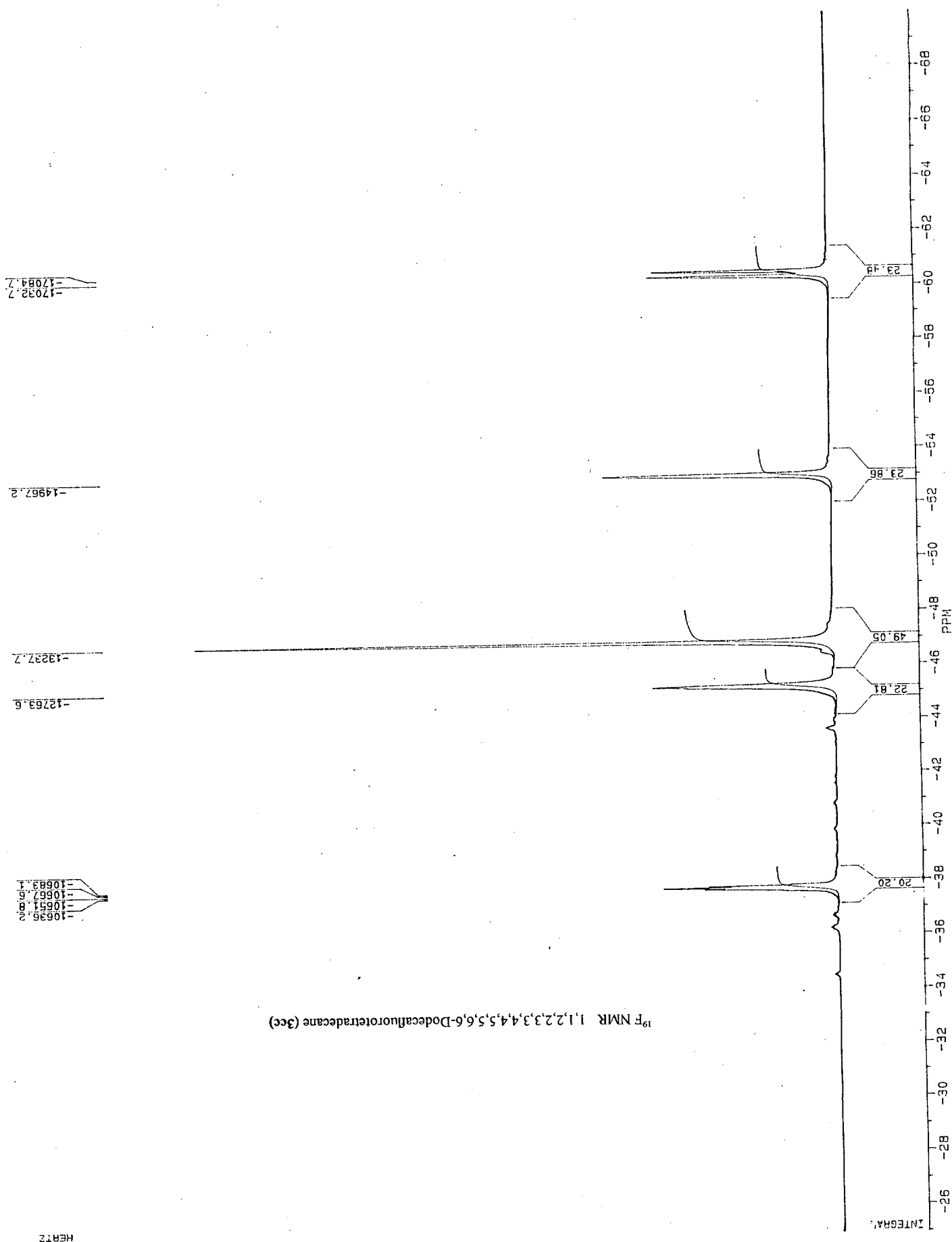
¹⁹F NMR 3-(2,2,3,3,4,4,5,5-Octafluoropentyl)-4-methyltetrahydrofuran (3be)

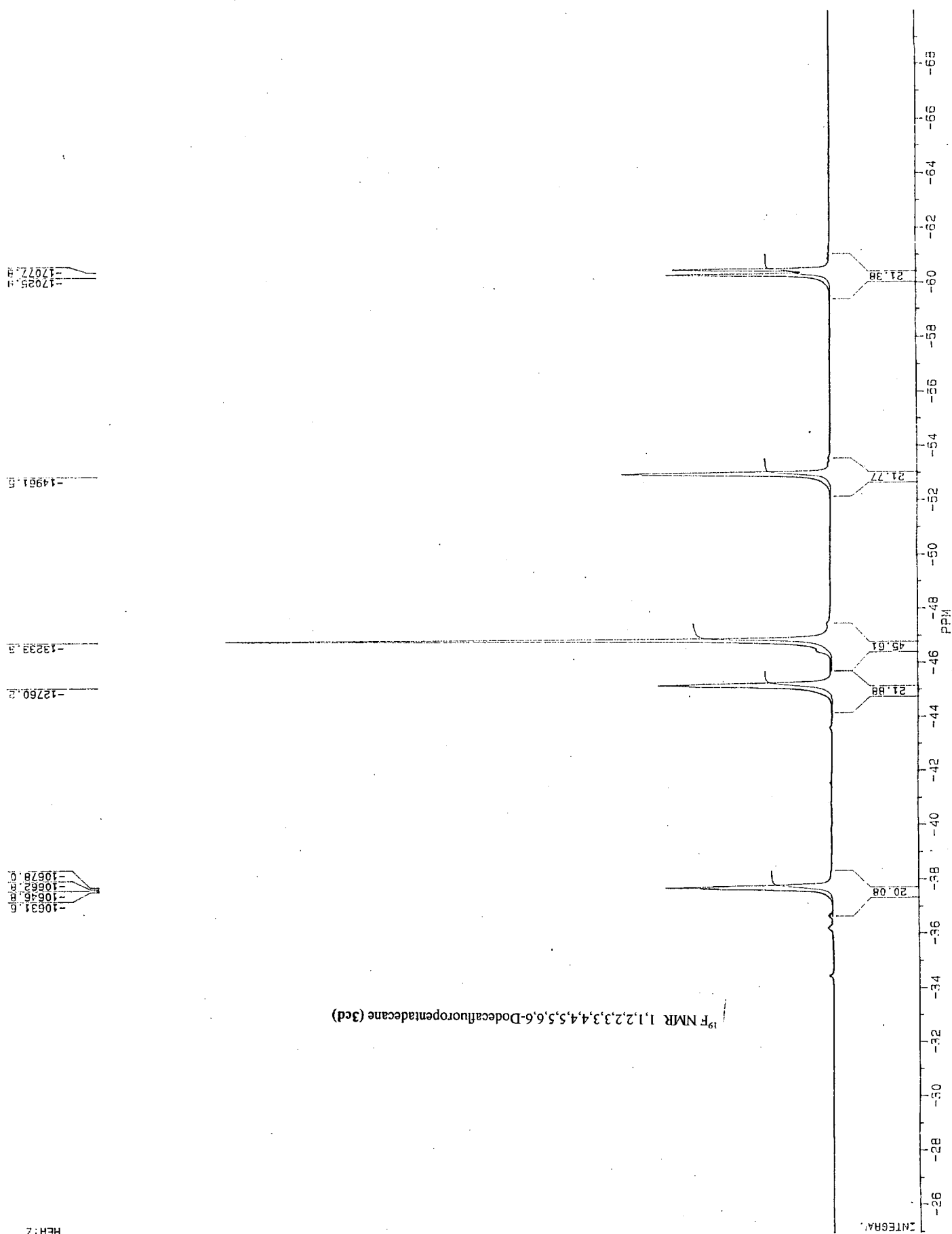


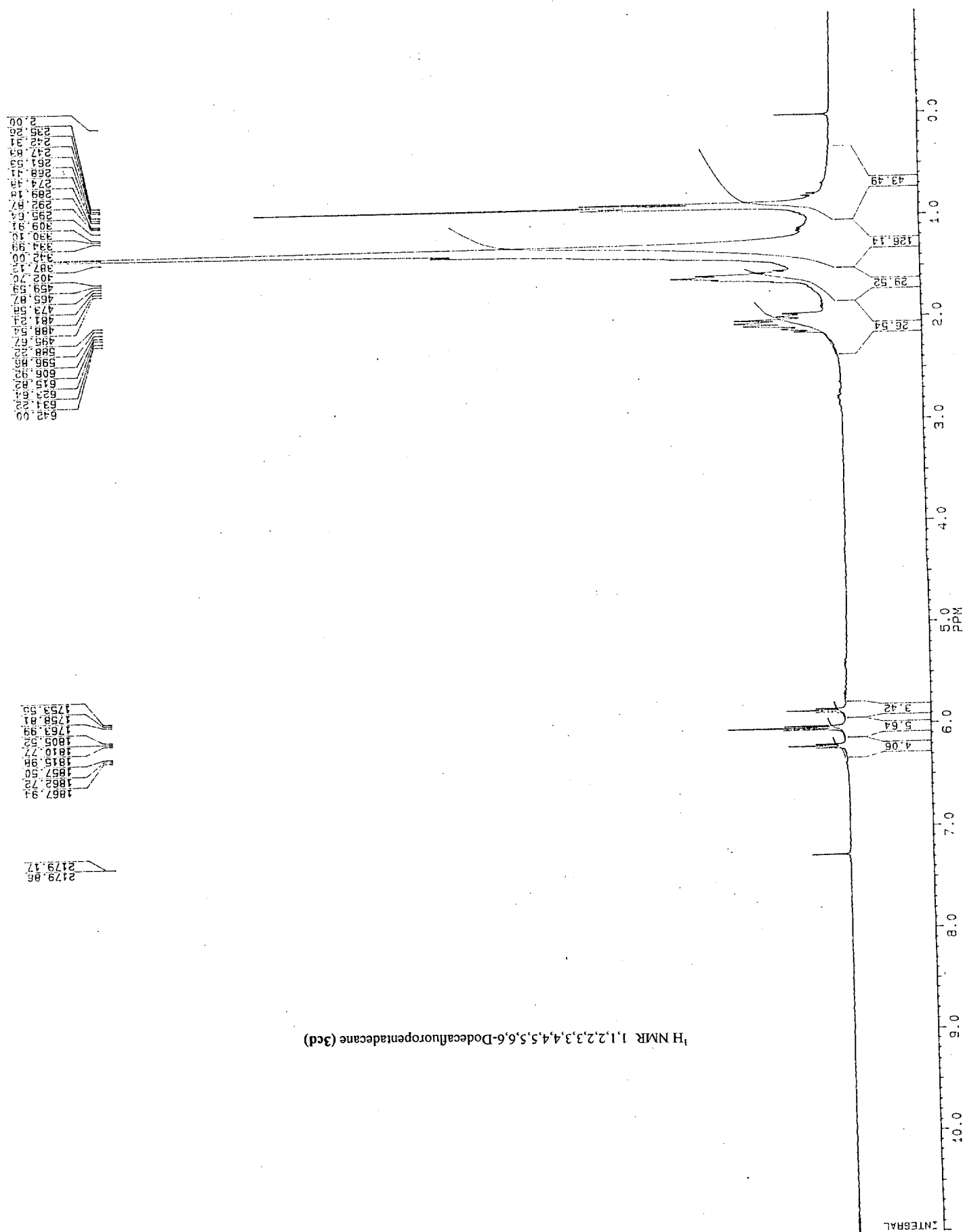


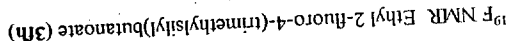




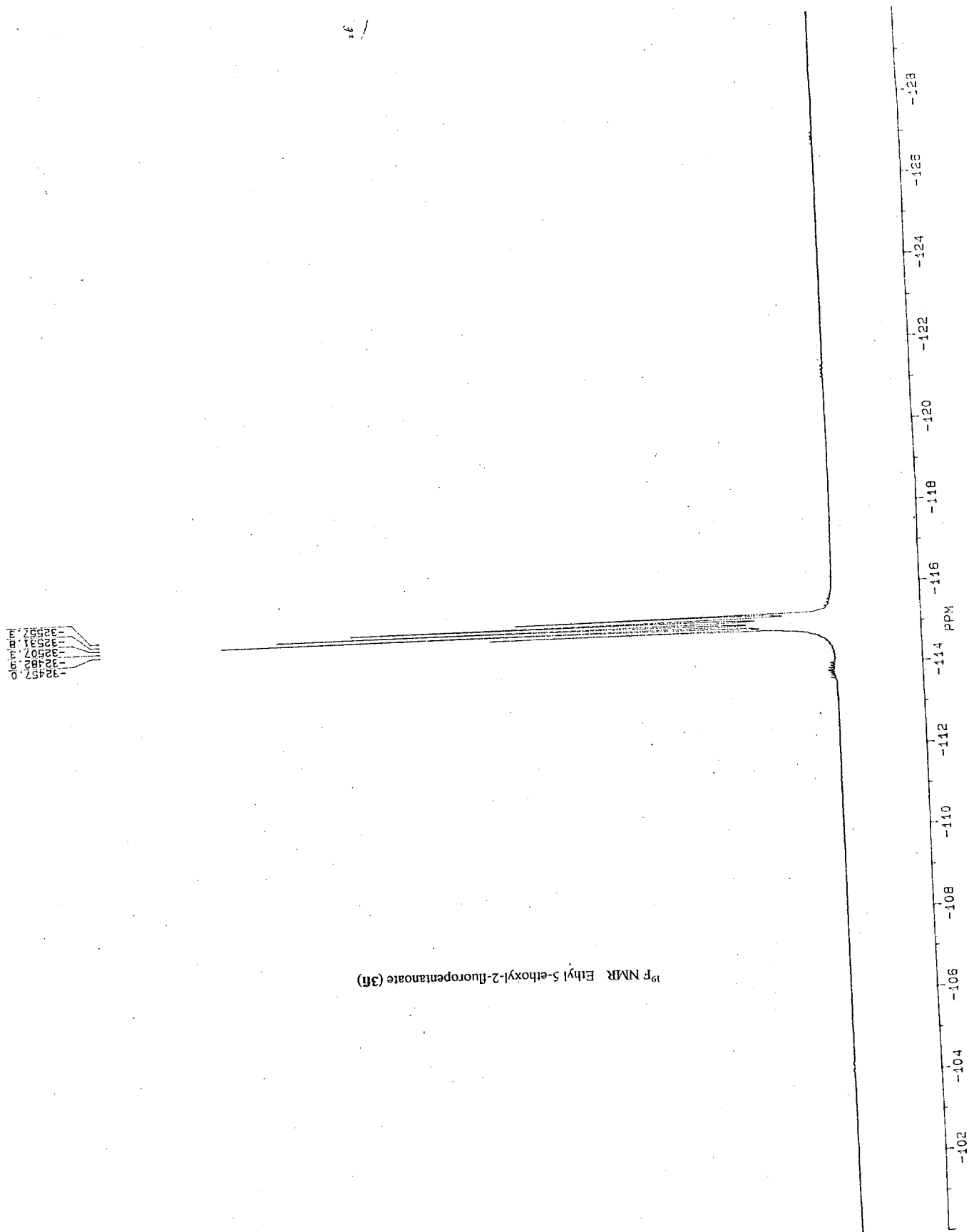


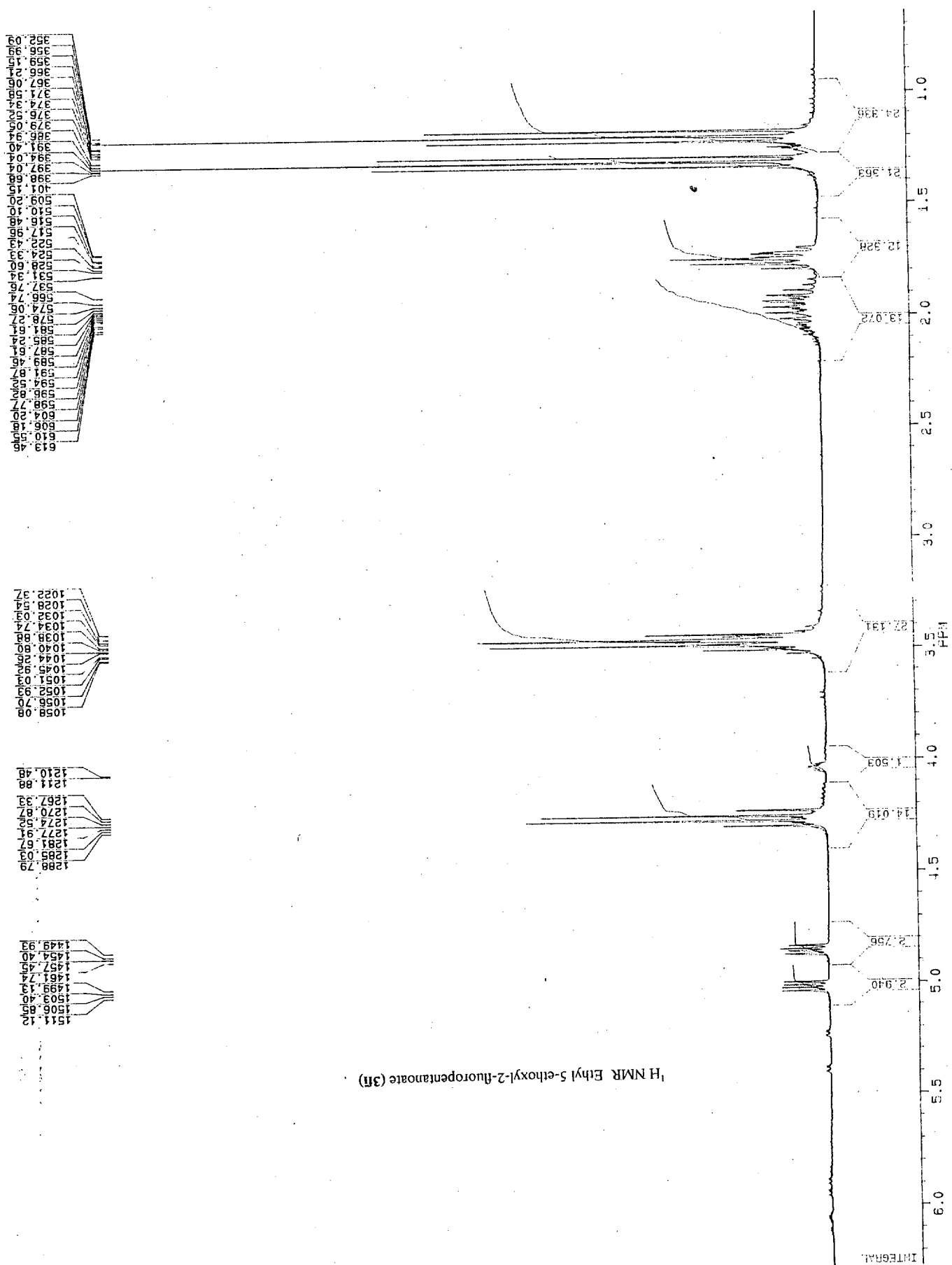


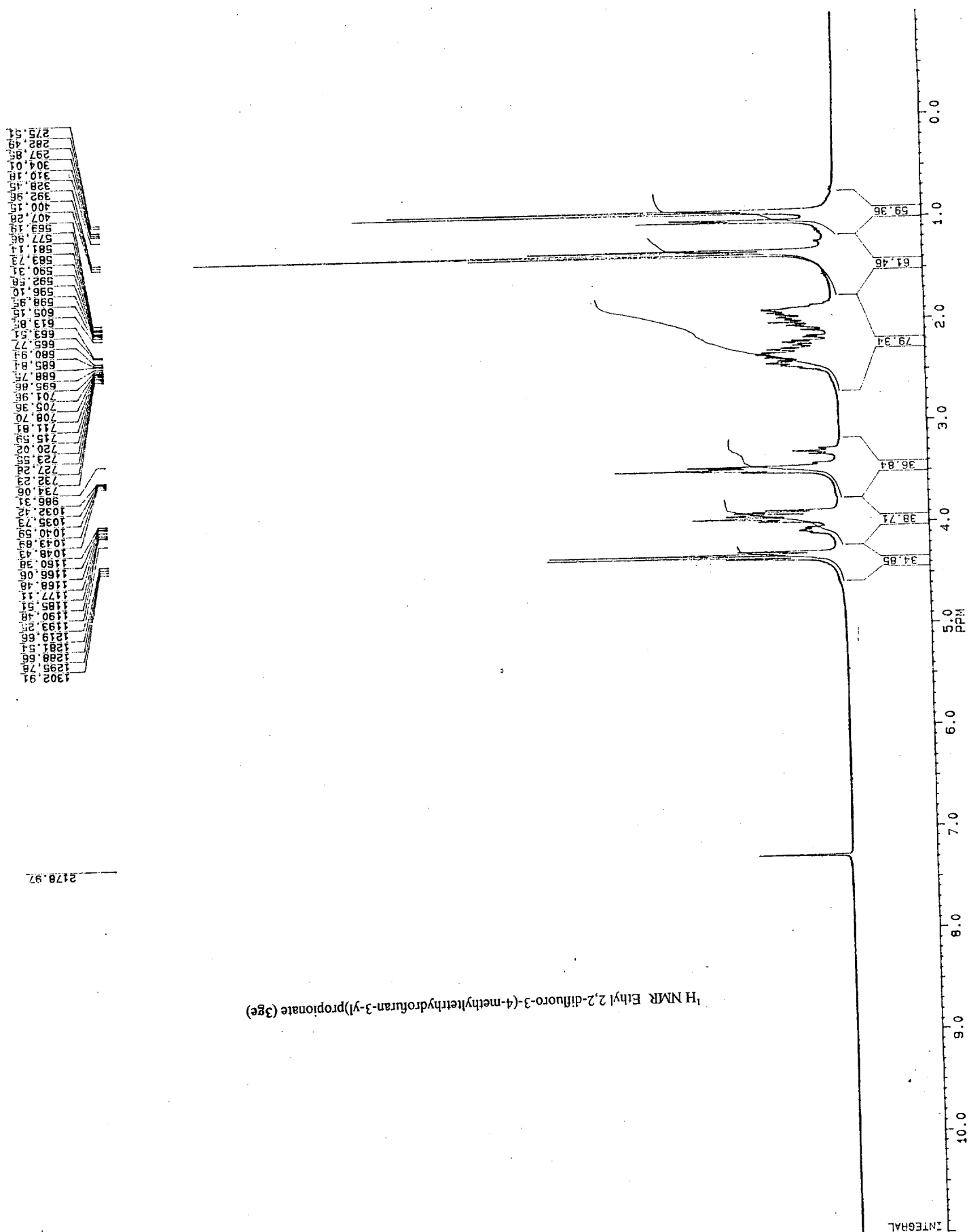


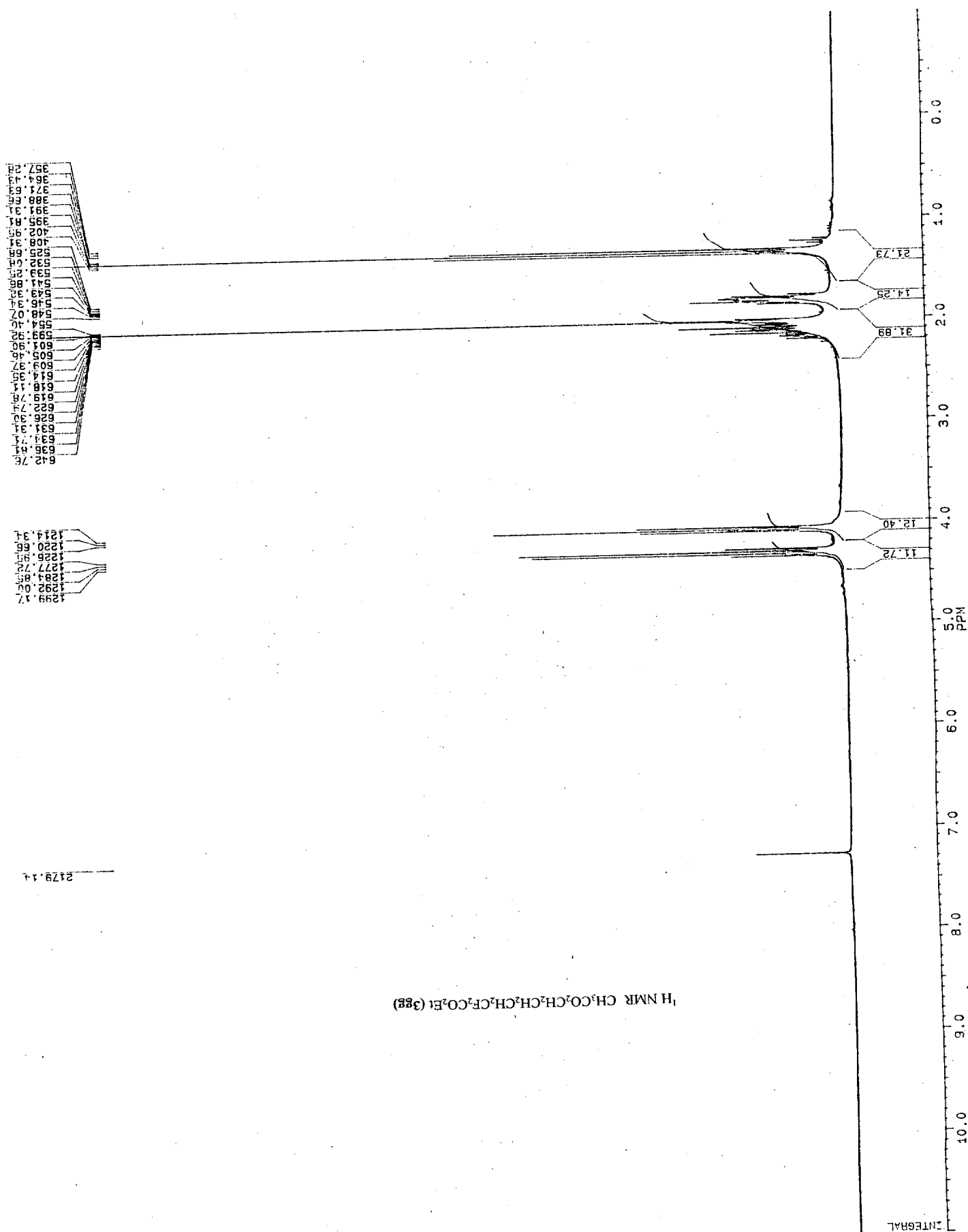










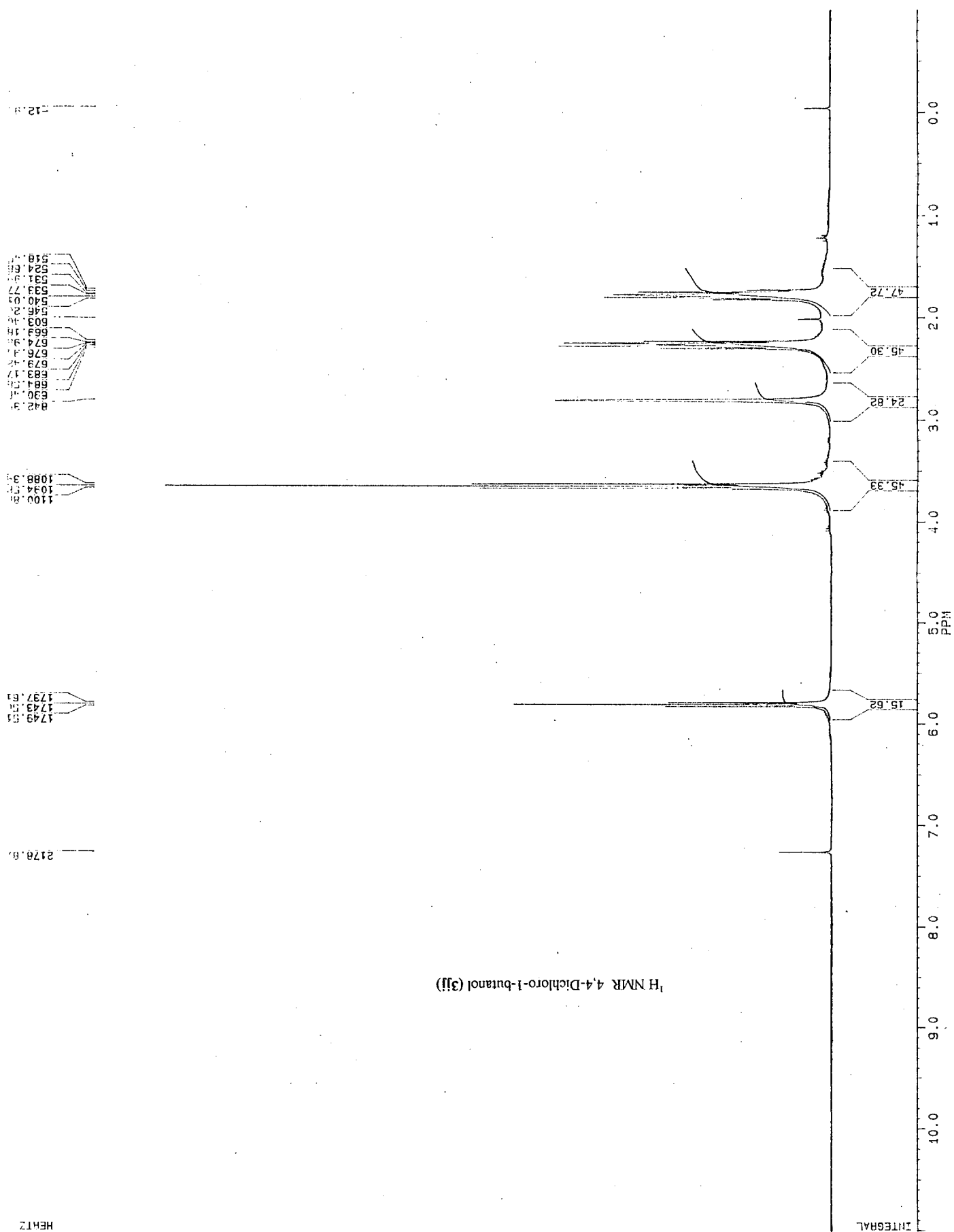


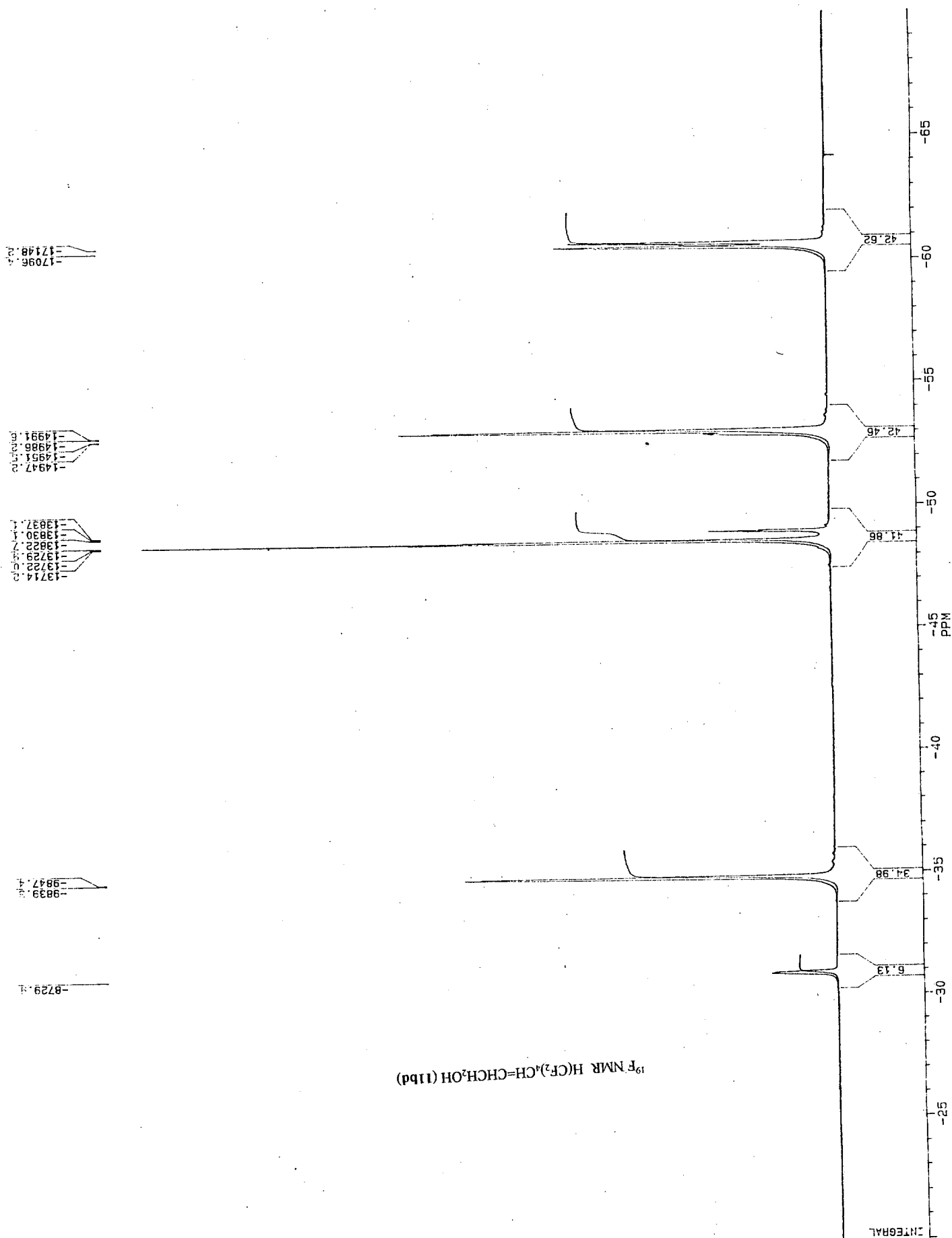
-8268.12
-8285.28
-8301.95

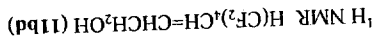
¹⁹F NMR. CH₃CO₂CH₂CH₂CF₂CO₂Et (3g)

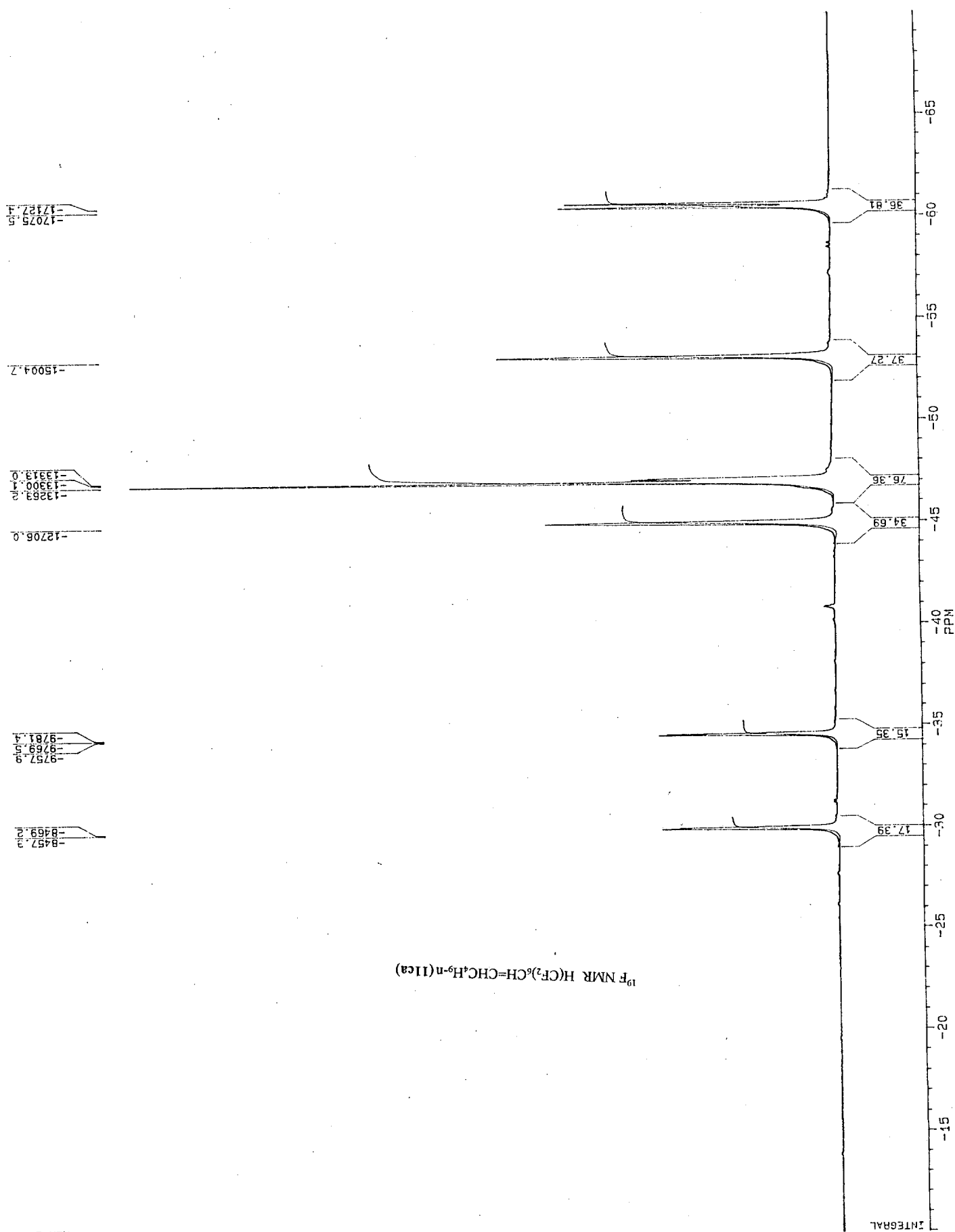
-23 -24 -25 -26 -27 -28 -29 -30 -31 -32 -33 -34

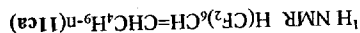
ppm







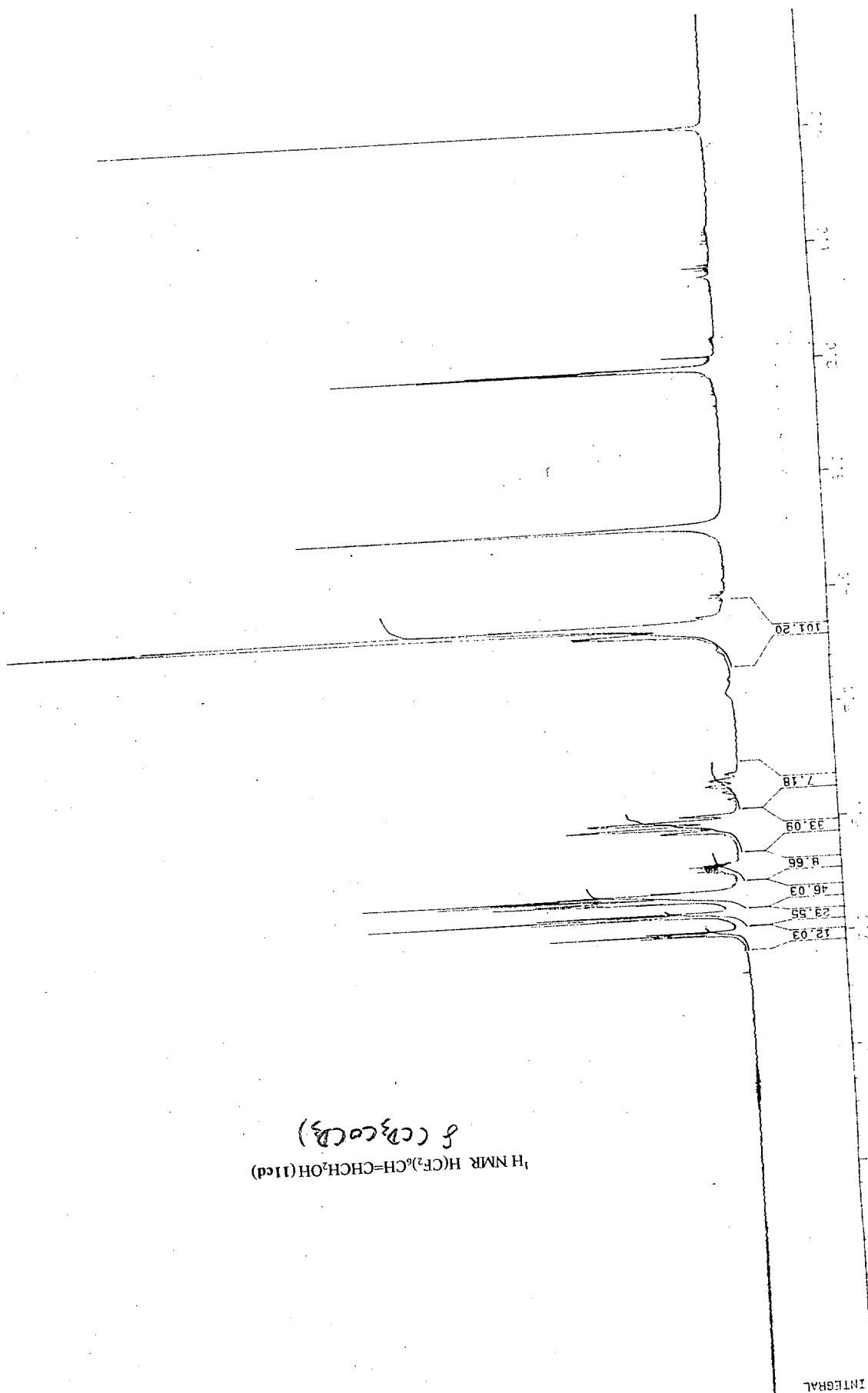


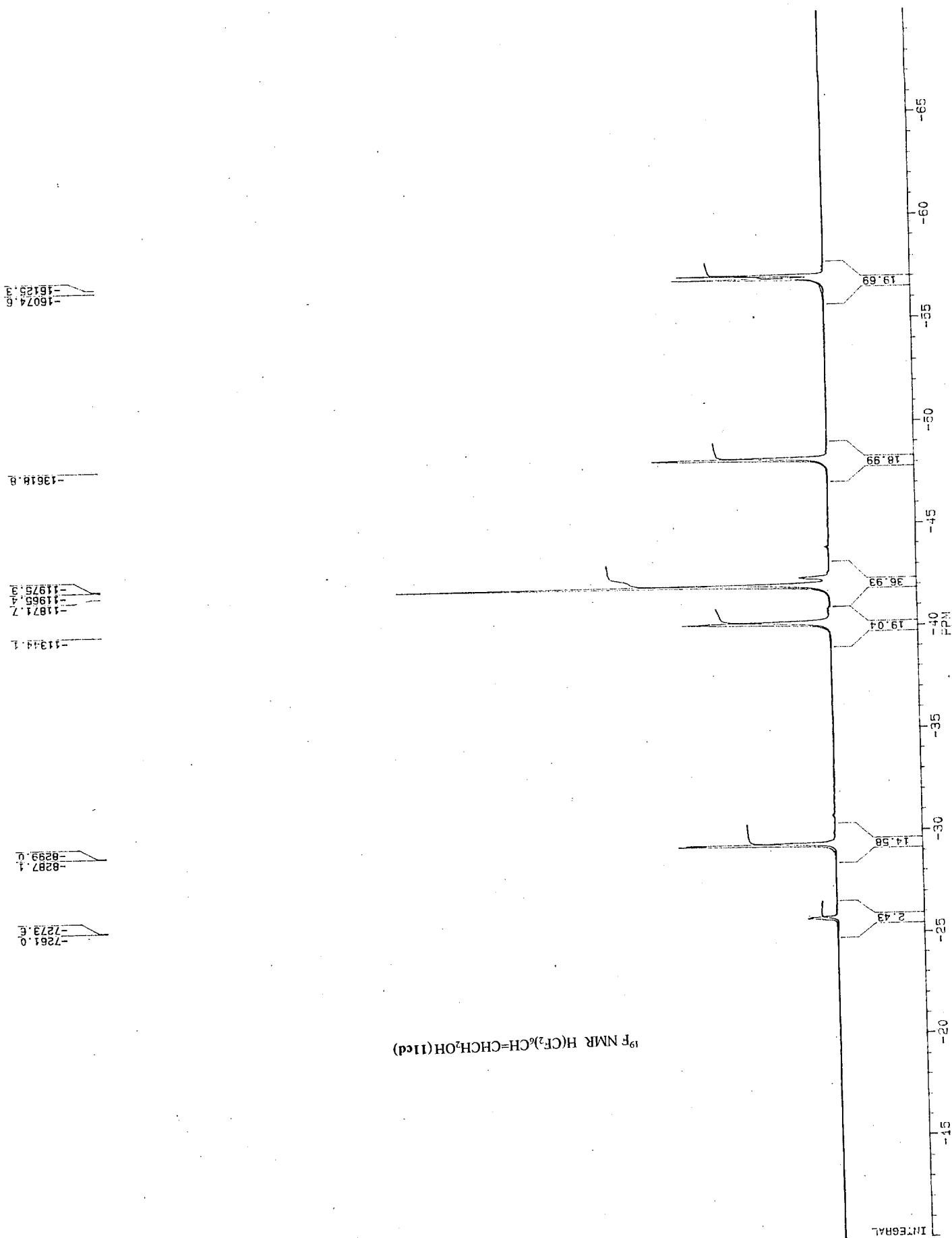


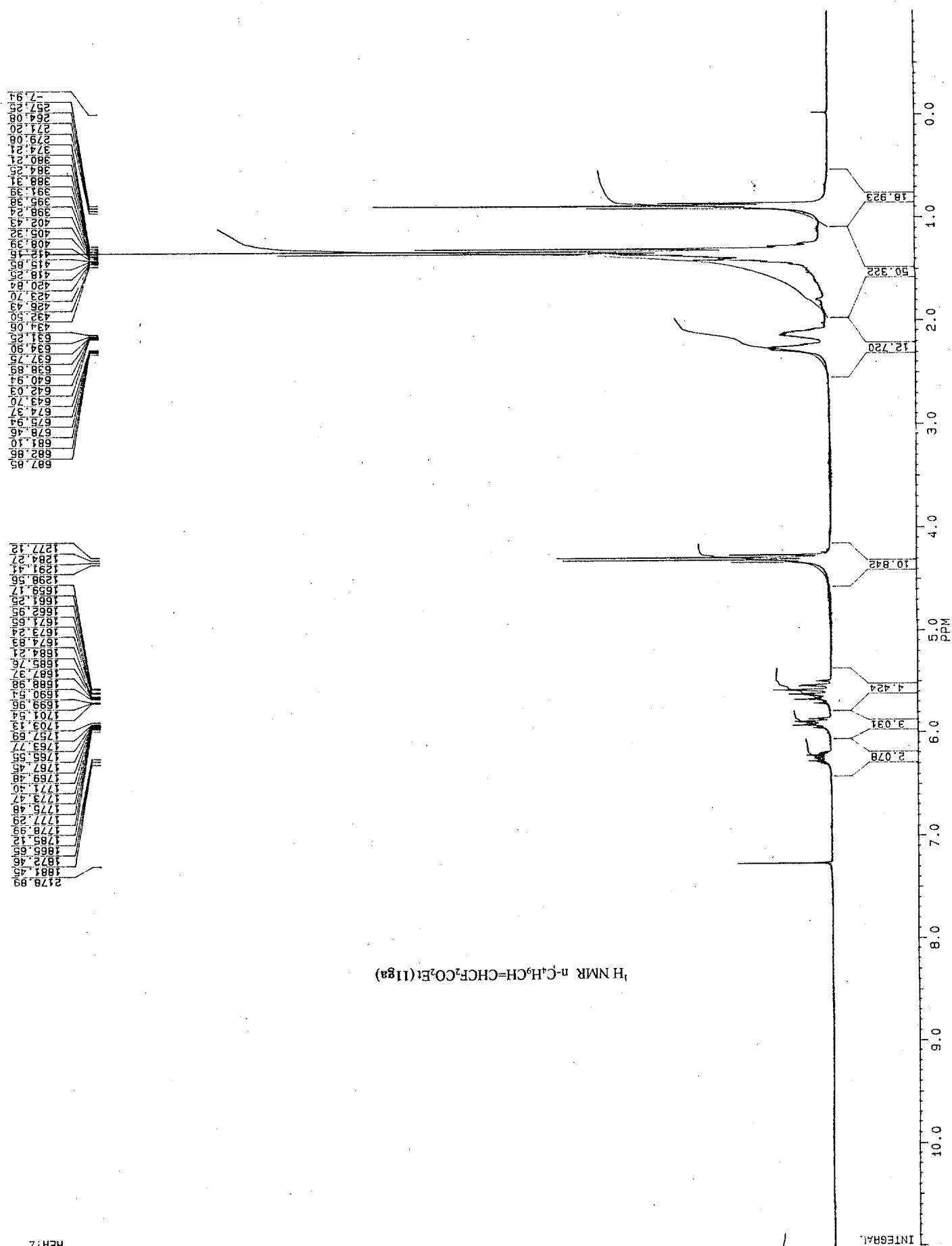
8.71
5.46

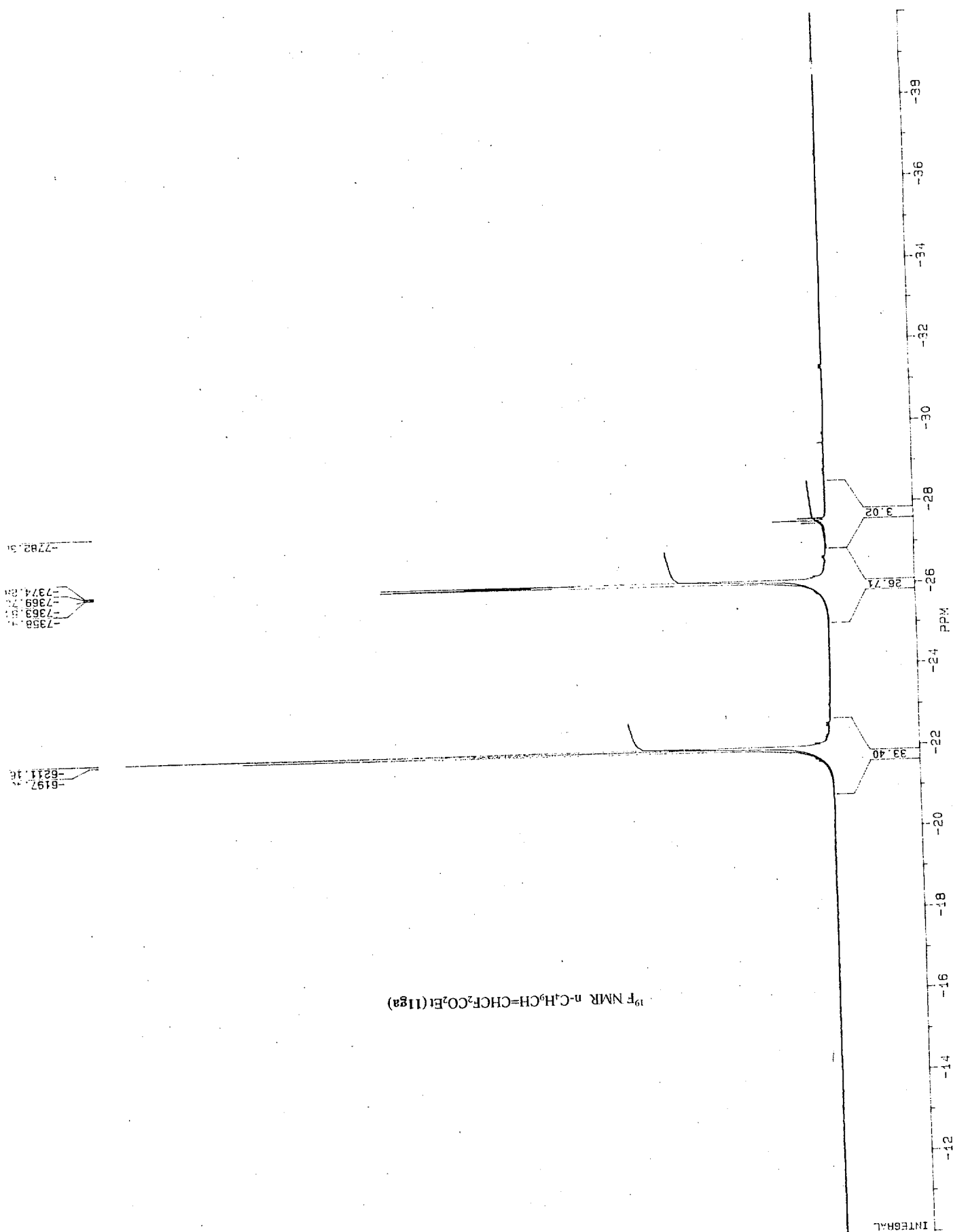
619.51
617.32
615.11
612.80
610.59
586.39

2100.71
2095.37
2090.02
2049.75
2044.51
2039.18
2039.22
2006.91
2006.03
2003.42
2001.01
2000.05
1999.01
1993.52
1991.20
1990.20
1988.00
1983.27
1982.09
1933.92
1933.19
1928.35
1928.00
1921.59
1918.84
1916.08
1916.18
1827.18
1814.04
1800.52
1799.02
1785.62
1708.03
1316.04
1312.10
1310.19
1308.37
1306.57
1304.71
1300.51
1291.01
1287.01
1284.32
1277.05
1263.98
1028.53






$$^1\text{H NMR } n\text{-C}_4\text{H}_9\text{CH}=\text{CHCH}_2\text{CO}_2\text{Et (11ga)}$$





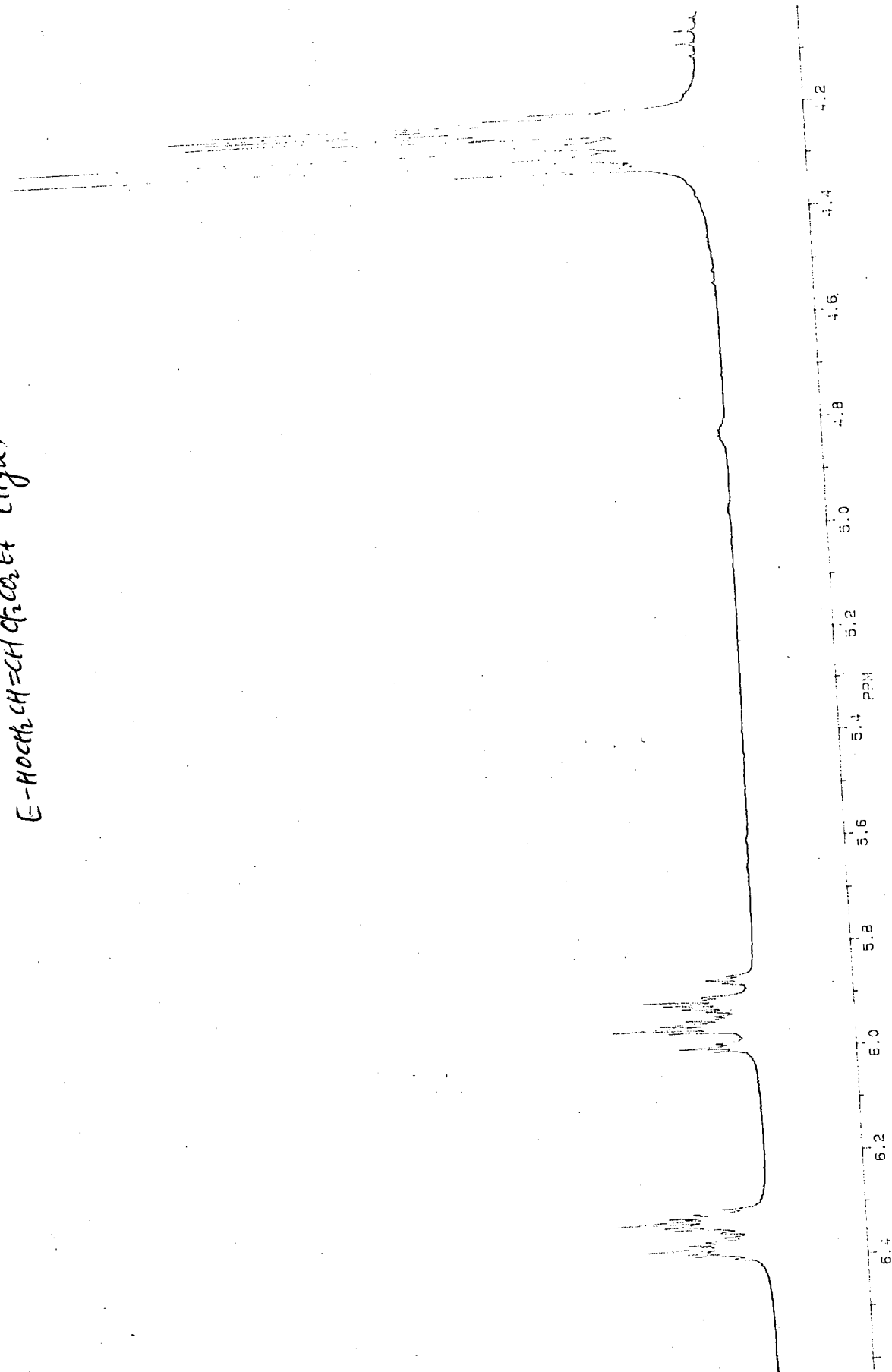
enlarge spectrum of vinyl proton NMR
 $E-HOCH_2CH=CHCF_2CO_2Et$ (119d)

1295.02
1291.96
1287.96
1280.72
1274.76
1273.07
1268.91
1267.87
1265.09
1263.46
1261.28
1253.53
1224.02

1800.72
1798.60
1796.94
1789.31
1787.20
1785.11
1783.81
1780.91
1777.96
1775.88
1773.80
1771.40
1769.47
1767.20
1760.05
1758.18

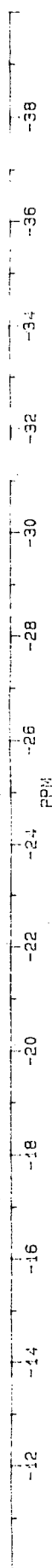
1920.43
1917.87
1916.26
1915.39
1914.01
1912.45
1911.43
1909.94
1907.55
1904.64
1902.07
1900.46
1899.01
1898.23
1896.65
1893.53
1891.74

HEATZ



7526.67
7522.76
7517.15
7512.16
7508.28

¹⁹F NMR E-HOCH₂CH=CHCF₂CO₂Et (11gd)



^{19}F NMR $\text{CH}_3\text{OCH}_2\text{CH}=\text{CHCF}_2\text{CO}_2\text{Et}$ (11ge)

