

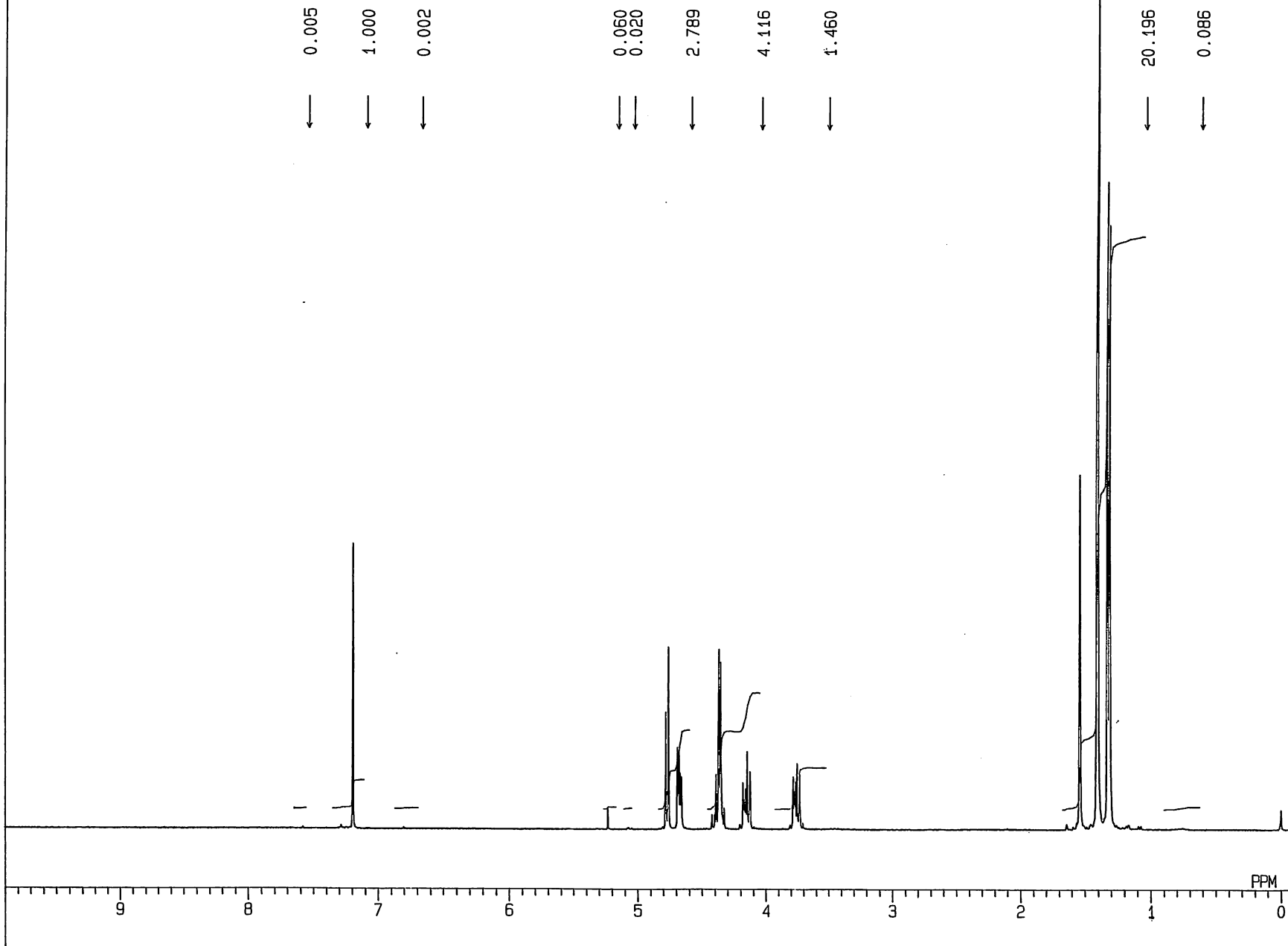
Supplementary Information

**Stereoselective Vinylogous Mannich Reaction of
2-Trimethylsilyloxyfuran with *N*-Gulosyl Nitrones**

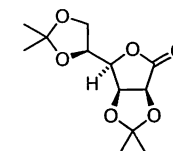
**Osamu Tamura,* Kodai Takeda, Naka Mita, Masanori Sakamoto,
Iwao Okamoto, Nobuyoshi Morita, Hiroyuki Ishibashi**

^1H and ^{13}C NMR Spectra

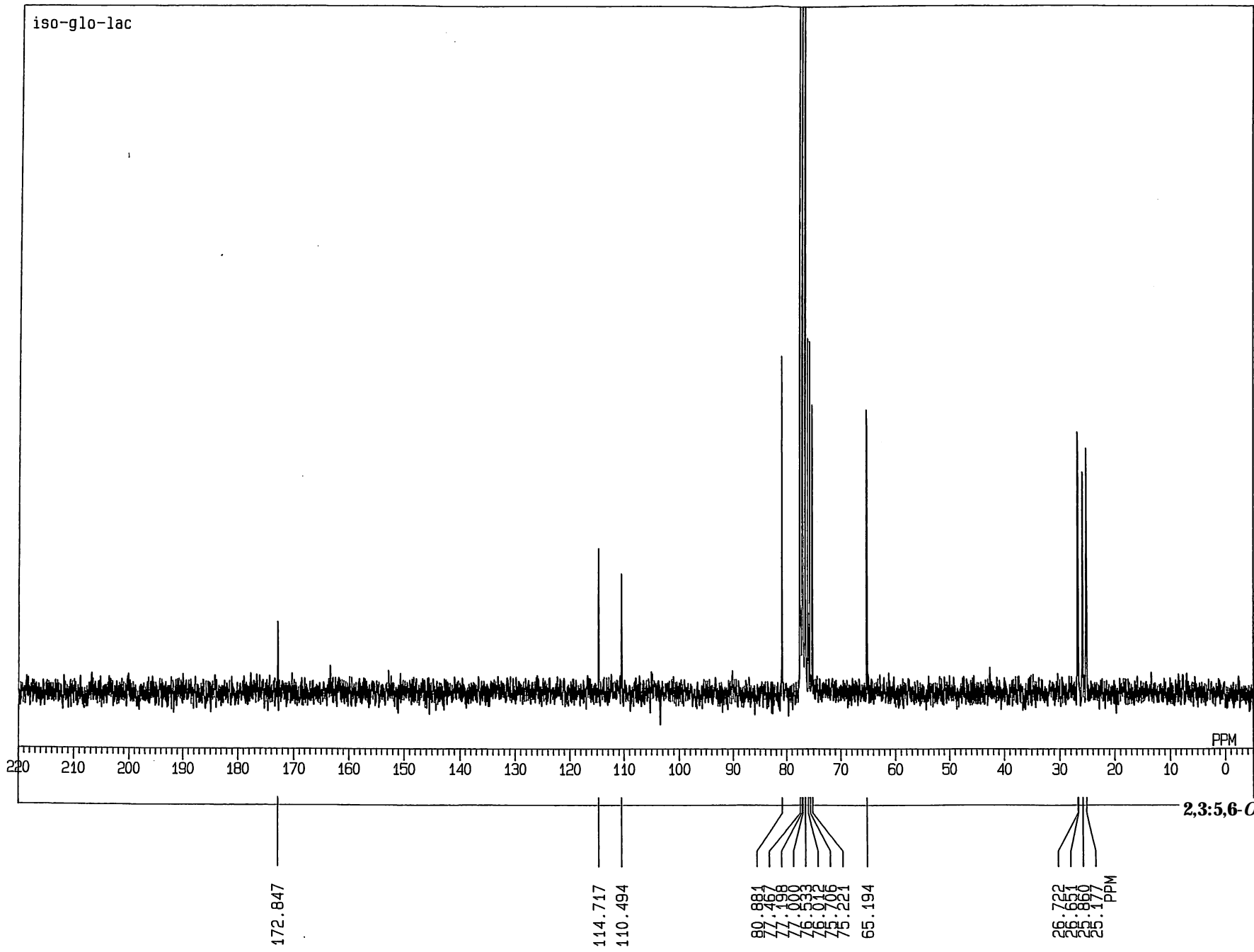
iso-glo-lac



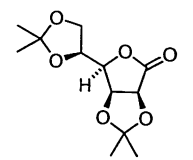
13-SEP-99 18:06:27
DFILE Q1H
OBNUC 1H
EXMOD NON
OFR 270.05 MHz
OBSET 112.00 kHz
OBFIN 5800.0 Hz
POINT 32768
FREQU 5405.4 Hz
SCANS 16
ACQTM 3.031 sec
PD 3.969 sec
PW1 5.5 us
IRNUC 1H
CTEMP 24.0 c
SLVNT CDCL3
EXREF 0.00 ppm
BF 0.16 Hz
RGAIN 19
OPERATOR : _____



2,3:5,6-O-Diisopropylidene-L-gulono-1,4-lactone



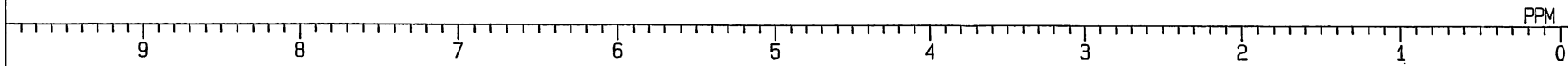
13-SEP-99 20: 06: 01
DFILE Q13C
OBNUC 13C
EXMOD BCM
OFR 67.80 MHz
OBSET 135.00 kHz
OBFIN 5200.0 Hz
POINT 32768
FREQU 20000.0 Hz
SCANS 1604
ACQTM 0.819 sec
PD 2.181 sec
PW1 4.3 us
IRNUC 1H
CTEMP 25.5 c
SLVNT CDCL3
EXREF 77.00 ppm
BF 1.50 Hz
RGAIN 30
OPERATOR : _____



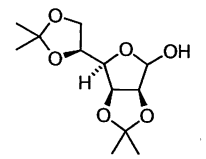
2,3:5,6-O-diisopropylidene-L-gulono-1,4-lactone

iso-glo-tol

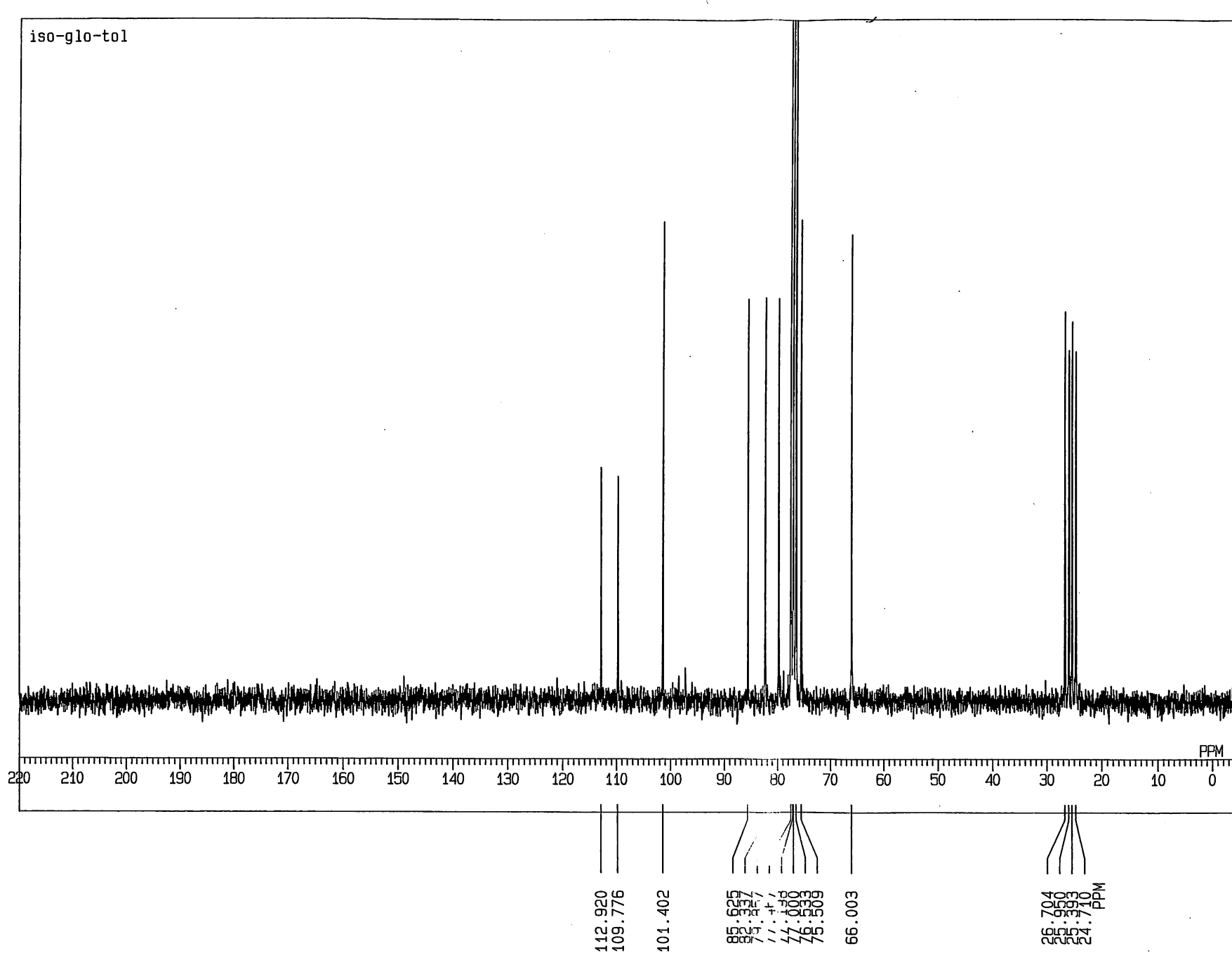
0.006 1.000 0.027
↓ ↓ ↓
0.010 2.209 0.014 0.110
↓ ↓ ↓ ↓
11.139 2.532
↓ ↓
2.230 0.025 0.006
↓ ↓ ↓
30.828
↓



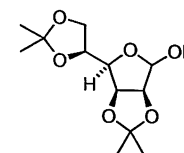
14-SEP-99 17: 53: 15
DFILE Q1H
OBNUC 1H
EXMOD NON
OFR 270.05 MHz
OBSET 112.00 kHz
OBFIN 5800.0 Hz
POINT 32768
FREQU 5405.4 Hz
SCANS 16
ACQTM 3.031 sec
PD 3.969 sec
PW1 5.5 us
IRNUC 1H
CTEMP 23.9 c
SLVNT CDCL3
EXREF 0.00 ppm
BF 0.16 Hz
RGAIN 18
OPERATOR : _____



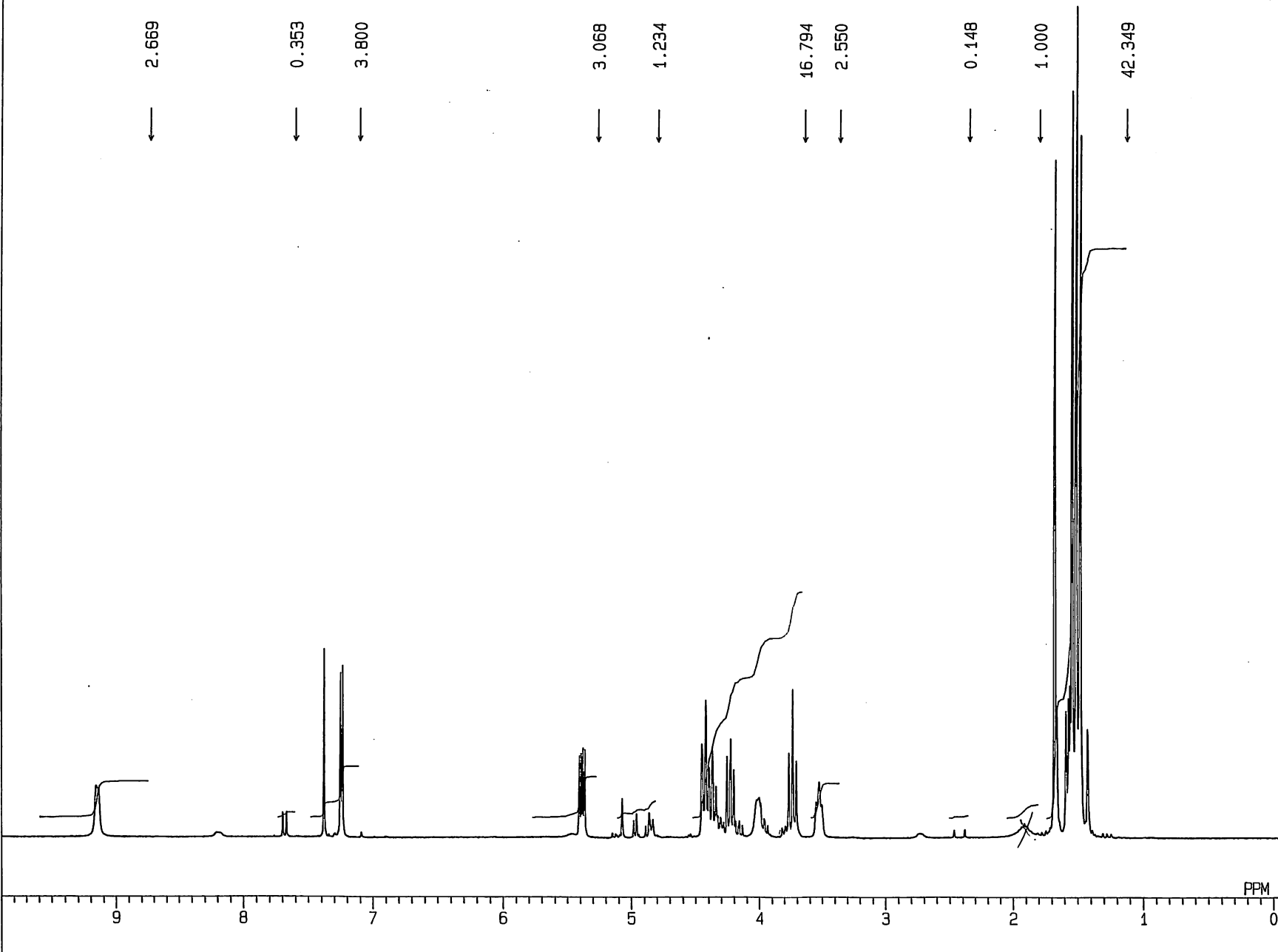
2,3:5,6-O-Diisopropylidene-L-gulofuranose



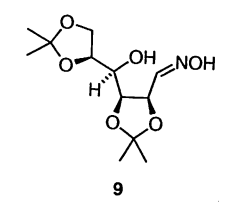
14-SEP-99 19: 58: 13
DFILE Q13C
OBNUC 13C
EXMOD BCM
OFR 67.80 MHz
OBSET 135.00 kHz
OBFIN 5200.0 Hz
POINT 32768
FREQU 20000.0 Hz
SCANS 1597
ACQTM 0.819 sec
PD 2.181 sec
PW1 4.3 us
IRNUC 1H
CTEMP 25.1 c
SLVNT CDCL3
EXREF 77.00 ppm
BF 1.50 Hz
RGAIN 30
OPERATOR : _____



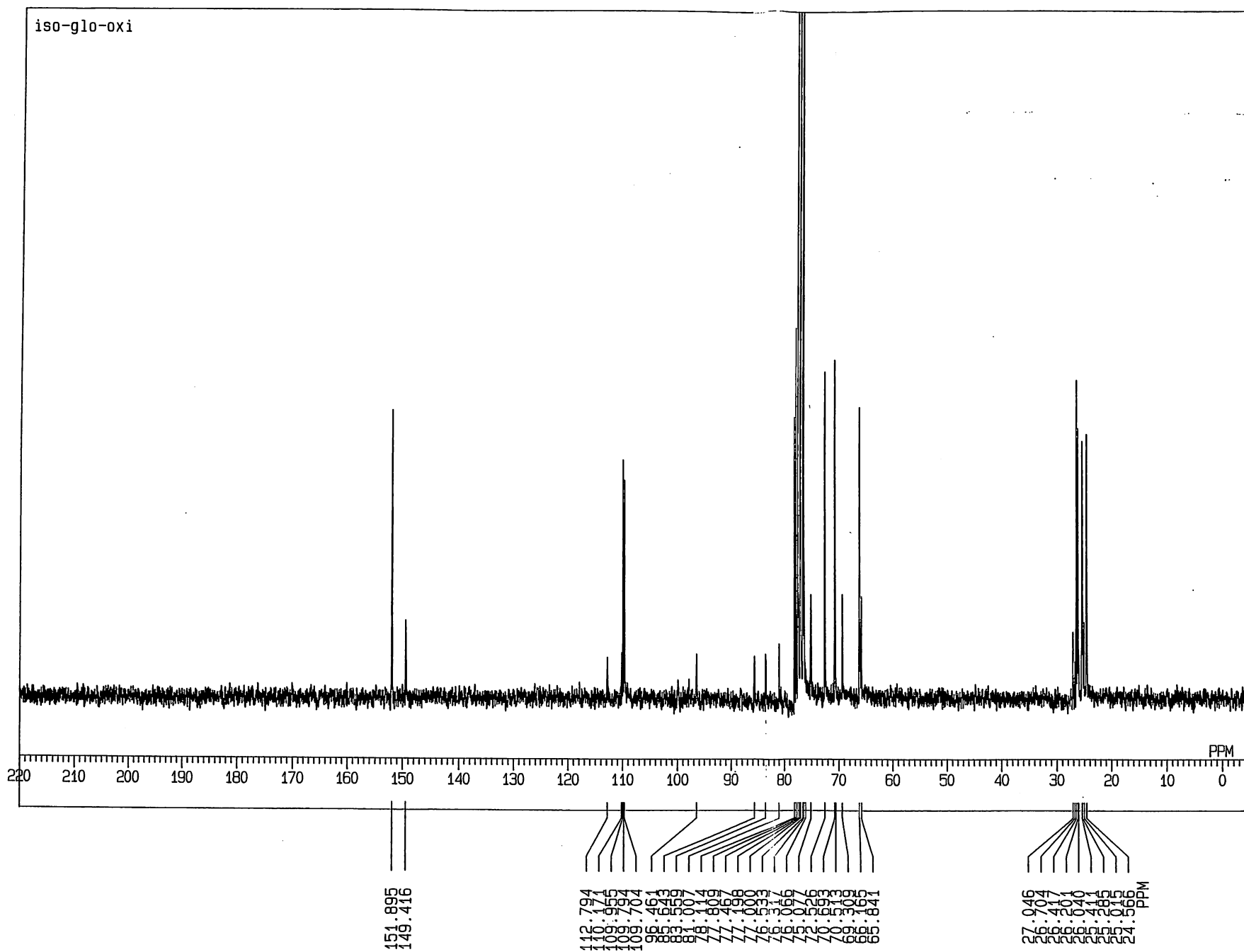
iso-glo-oxi



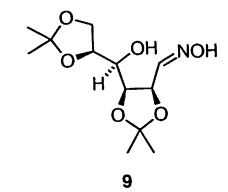
16-SEP-99 17: 58: 01
DFILE Q1H
OBNUC 1H
EXMOD NON
OFR 270.05 MHz
OBSET 112.00 kHz
OBFIN 5800.0 Hz
POINT 32768
FREQU 5405.4 Hz
SCANS 16
ACQTM 3.031 sec
PD 3.969 sec
PW1 5.5 us
IRNUC 1H
CTEMP 24.1 c
SLVNT CDCL3
EXREF 7.24 ppm
BF 0.16 Hz
RGAIN 16
OPERATOR : _____



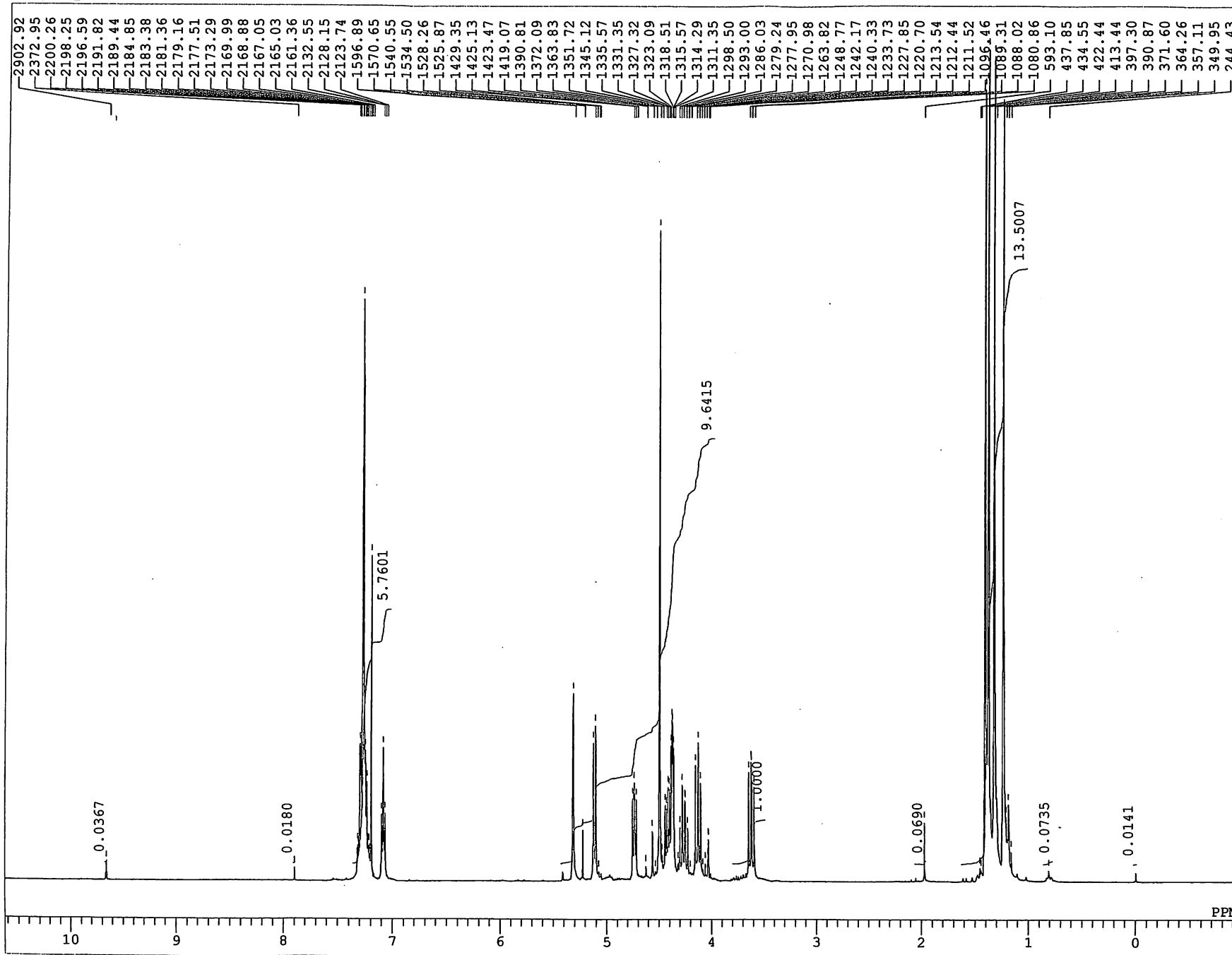
iso-glo-oxi



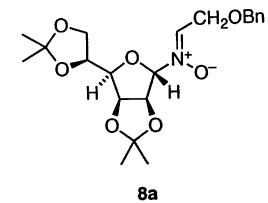
16-SEP-99 21: 51: 24
DFILE Q13C
OBNUC 13C
EXMOD BCM
OFR 67.80 MHz
OBSET 135.00 kHz
OBFIN 5200.0 Hz
POINT 32768
FREQU 20000.0 Hz
SCANS 1606
ACQTM 0.819 sec
PD 2.181 sec
PW1 4.3 us
IRNUC 1H
CTEMP 25.2 c
SLVNT CDCL3
EXREF 77.00 ppm
BF 1.50 Hz
RGAIN 29
OPERATOR : _____



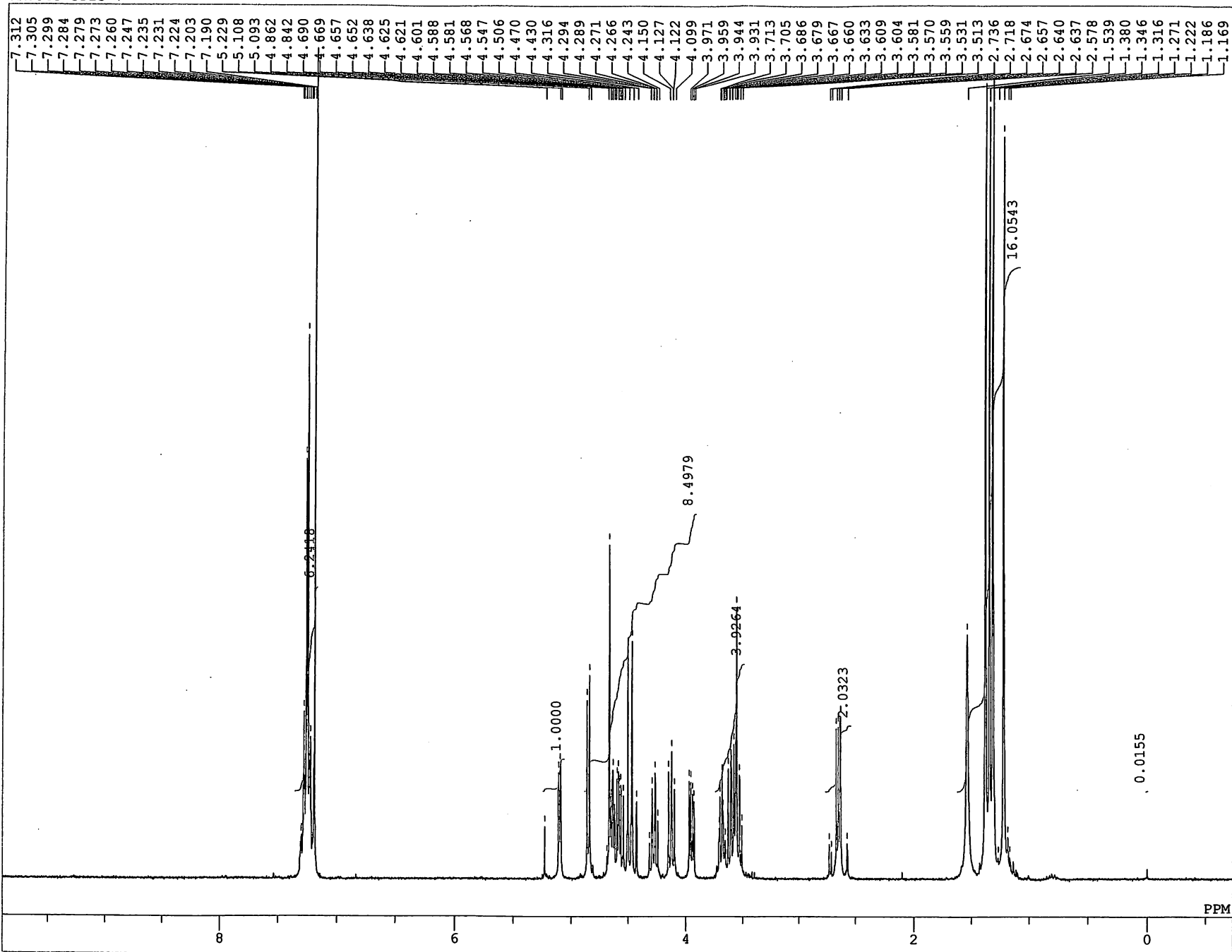
D:\842\2-non.als
 NM.842-2



D:\842\2-non.als
 NM.842-2
 Thu Jan 21 13:36:42 1995
 1H
 NON
 OBFRQ 300.40 MHz
 OBSET 130.00 KHz
 OBFIN 1150.0 Hz
 POINT 32768
 FREQU 6013.2 Hz
 SCANS 16
 ACQTM 5.449 sec
 PD 1.551 sec
 PW1 5.8 us
 IRNUC 1H
 CTEMP 24.3 c
 SLVNT CDCL3
 EXREF 0.00 ppm
 BF 0.09 Hz
 RGAIN 15

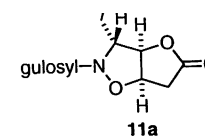


NM.845-3Fr5-7

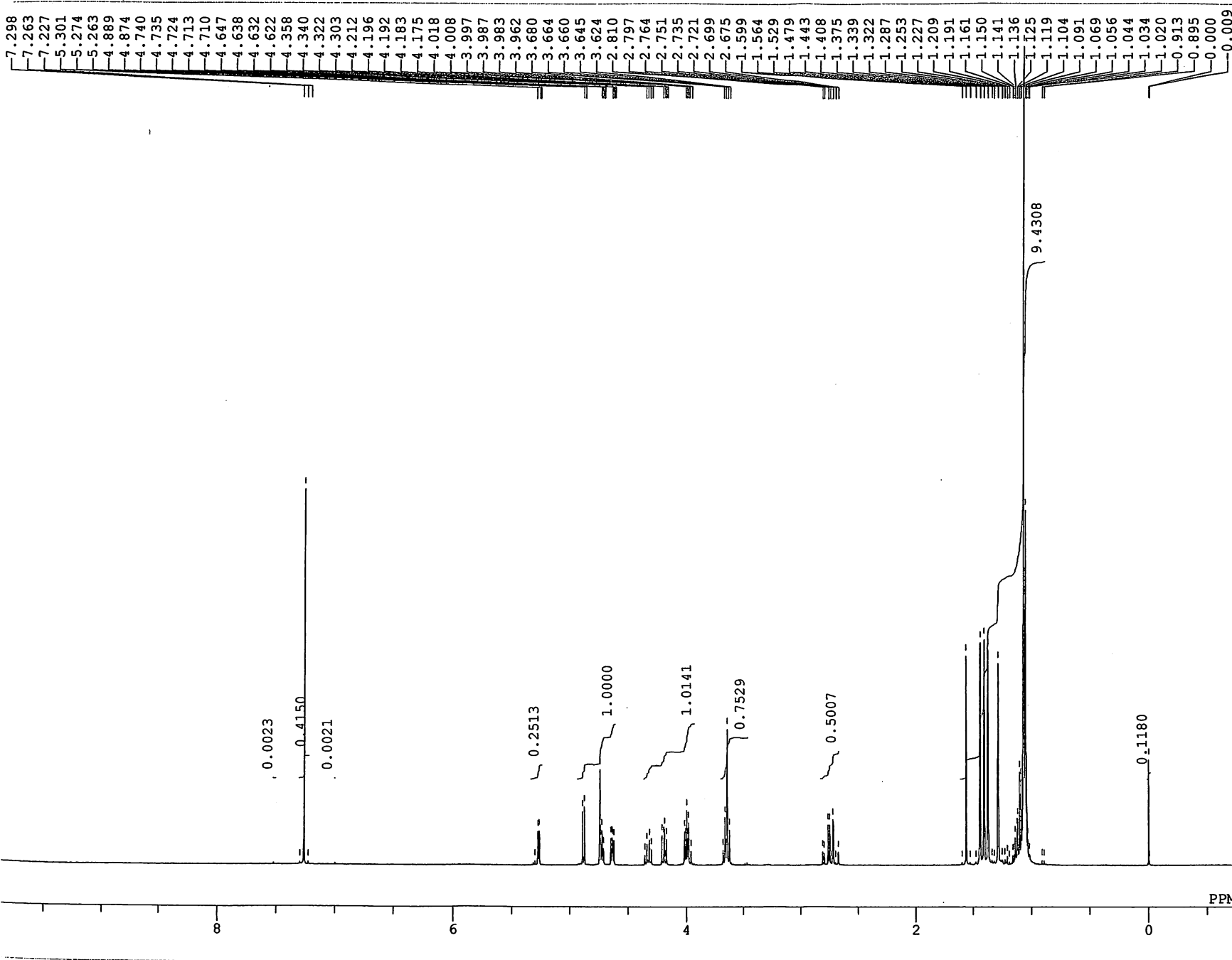


DFILE C:\WINNMR95\COMMON_DEF
COMNT NM.845-3Fr5-7
DATIM Wed Mar 03 21:22:35 1995
OBNUC 1H
EXMOD NON
OBFRQ 300.40 MHz
OBSET 130.00 KHz
OBFIN 1150.0 Hz
POINT 32768
FREQU 6013.2 Hz
SCANS 16
ACQTM 5.449 sec
PD 1.551 sec
PW1 5.8 us
IRNUC 1H
CTEMP 23.8 c
SLVNT CDCL3
EXREF 0.00 ppm
BF 0.09 Hz
RGAIN 20

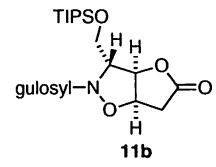
PhCH2O



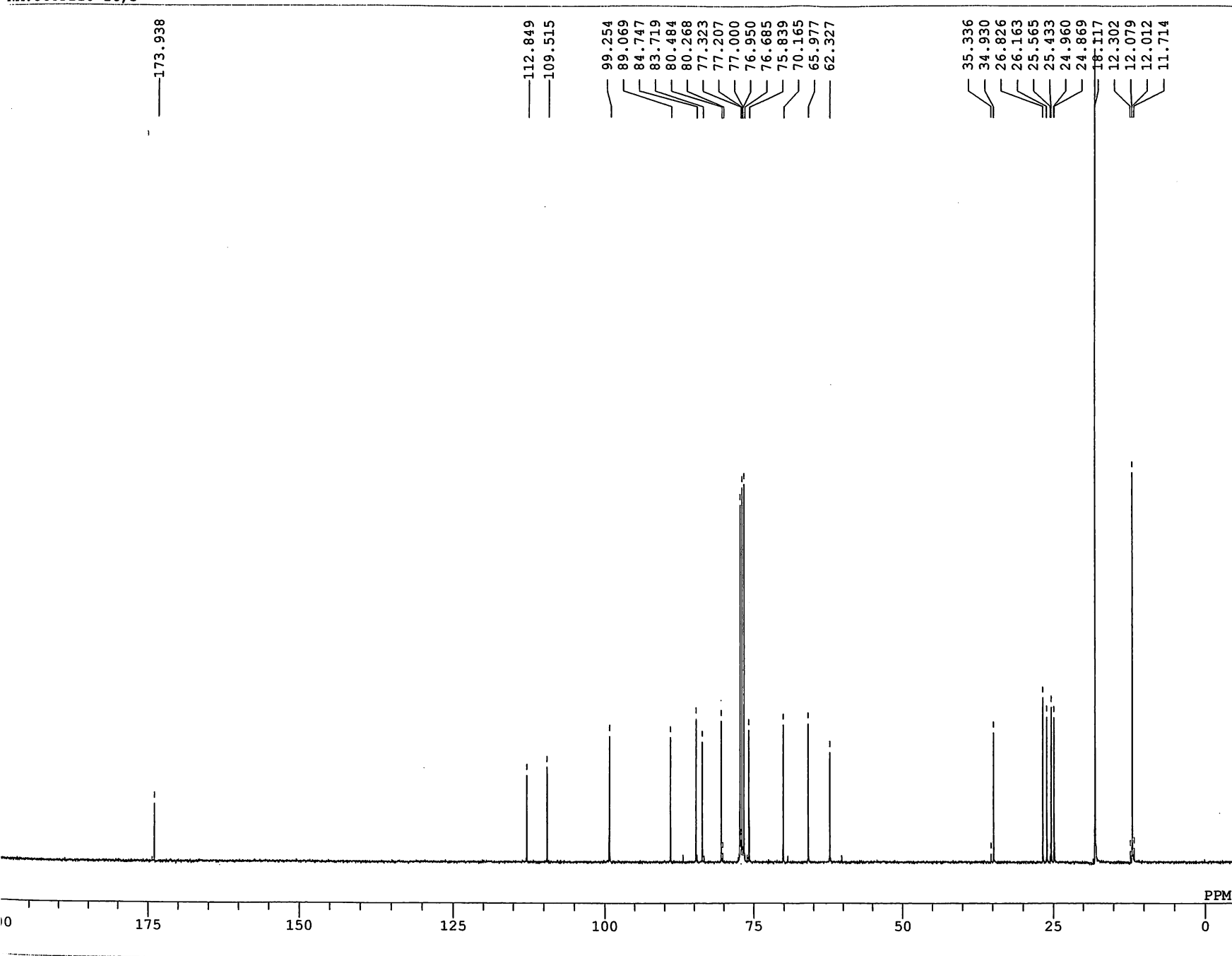
NM.860Fr10-16,3



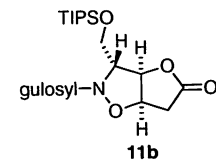
DFILE C:\WINNMR95\COMMON_DEFAULT.
COMNT NM.860Fr10-16,3
DATIM Thu Jan 27 18:52:47 2000
OBNUC 1H
EXMOD NON
OBFRQ 399.65 MHz
OBSET 124.00 KHz
OBFIN 10500.0 Hz
POINT 32768
FREQU 8000.0 Hz
SCANS 16
ACQTM 4.096 sec
PD 3.967 sec
PW1 5.0 us
IRNUC 1H
CTEMP 25.0 c
SLVNT CDCL3
EXREF 0.00 ppm
BF 0.12 Hz
RGAIN 19



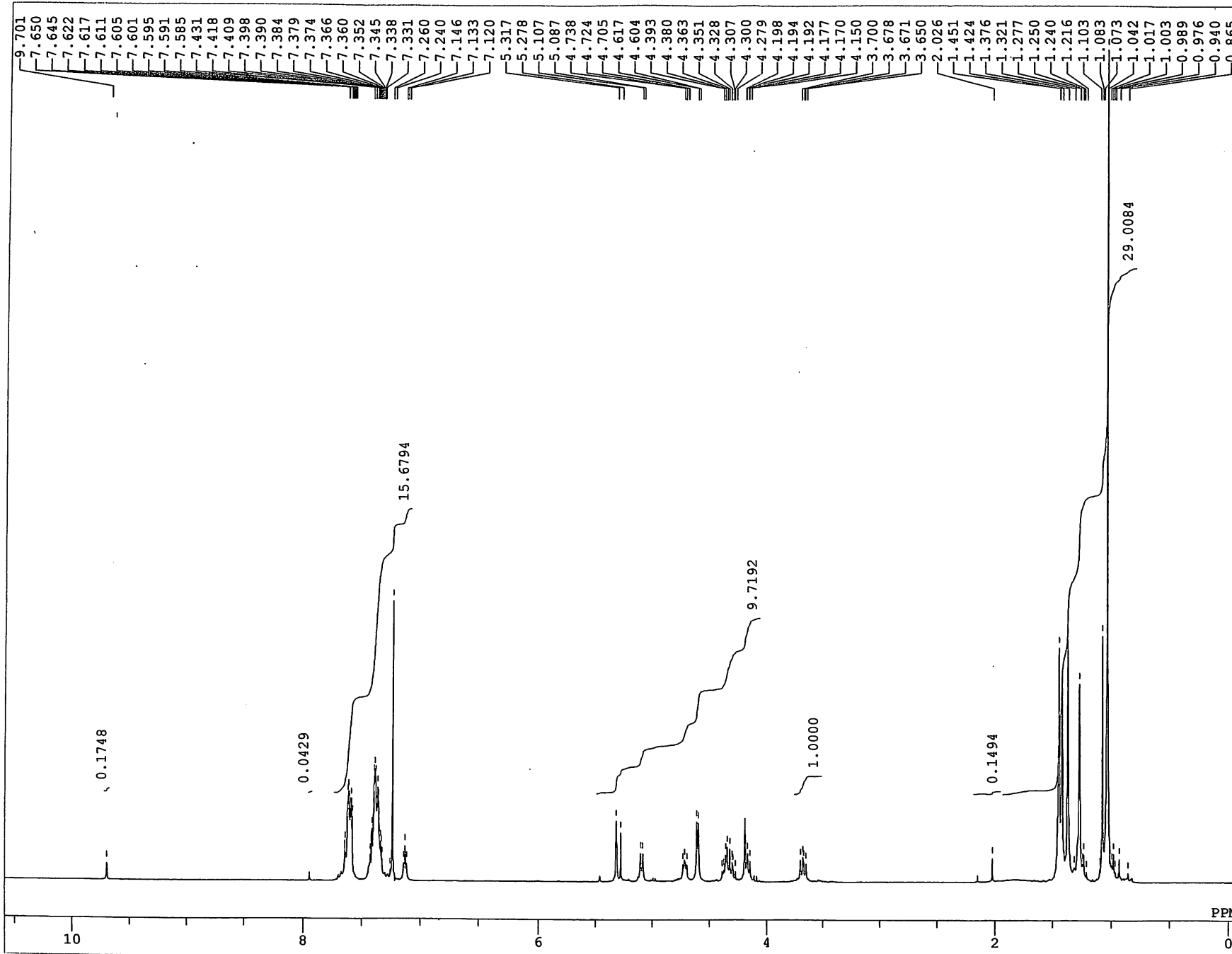
NM.860Fr10-16,3



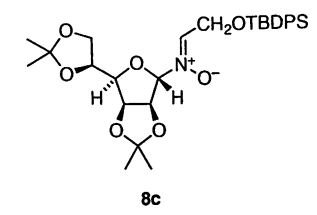
DFILE C:\WINNMR95\TEMPDATA\AUTO2BC
COMNT NM.860Fr10-16,3
DATIM Fri Jan 28 00:04:37 2000
OBNUC 13C
EXMOD BCM
OBFRQ 100.40 MHz
OBSET 125.00 KHz
OBFIN 10500.0 Hz
POINT 32768
FREQU 27322.4 Hz
SCANS 4096
ACQTM 1.199 sec
PD 1.797 sec
PW1 4.8 us
IRNUC 1H
CTEMP 30.0 c
SLVNT CDCL3
EXREF 77.00 ppm
BF 1.20 Hz
RGAIN 26



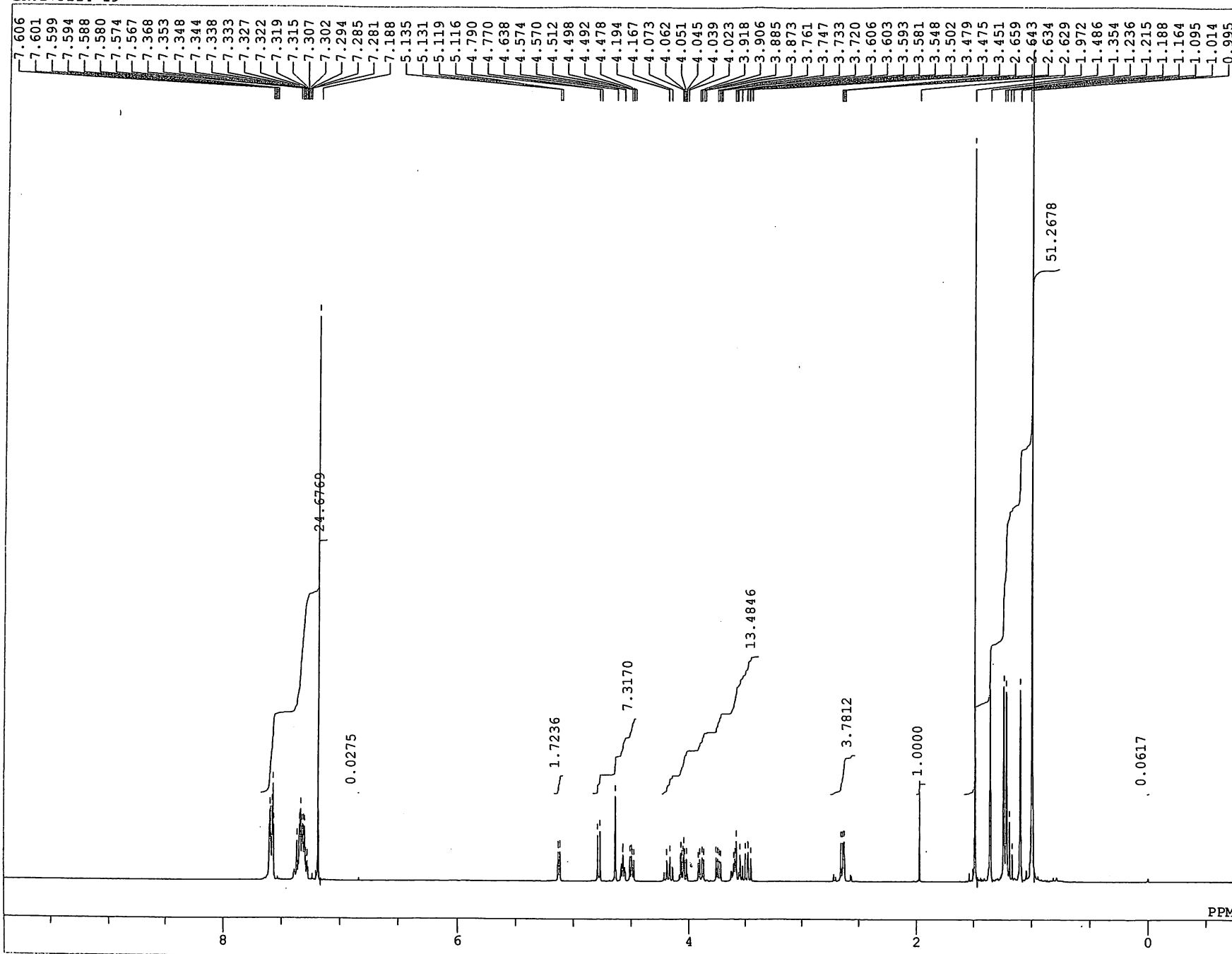
NM.877Fr.19-24



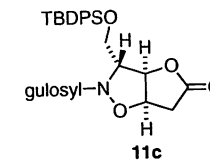
DFILE C:\WINNMR95\COMMON_DEF
 COMNT NM.877Fr.19-24
 DATIM Wed Mar 03 14:53:39 1995
 OBNUC 1H
 EXMOD NON
 OBFREQ 300.40 MHz
 OBSET 130.00 KHz
 OBFIN 1150.0 Hz
 POINT 32768
 FREQU 6013.2 Hz
 SCANS 16
 ACQTM 5.449 sec
 PD 1.551 sec
 PW1 5.8 us
 IRNUC 1H
 CTEMP 24.5 c
 SLVNT CDCL3
 EXREF 7.24 ppm
 BF 0.12 Hz
 RGAIN 18



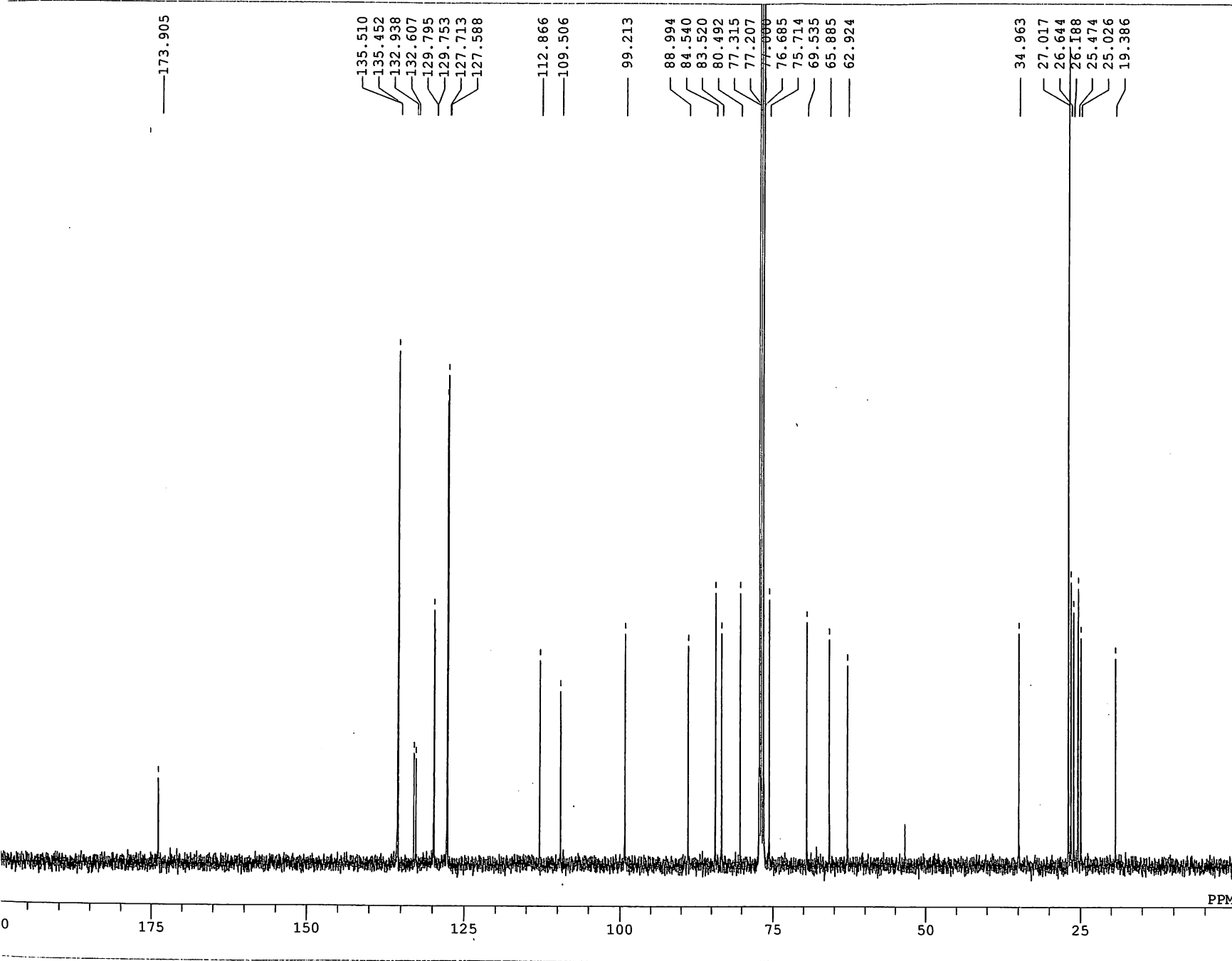
SK.27Fr14-19



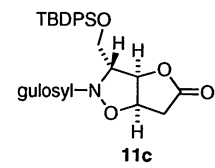
DFILE C:\WINNMR95\COMMON_DEF
 COMNT SK.27Fr14-19
 DATIM Tue Aug 24 19:09:05 1999
 OBNUC 1H
 EXMOD NON
 OBFREQ 300.40 MHz
 OBSET 130.00 KHz
 OBFIN 1150.0 Hz
 POINT 32768
 FREQU 6013.2 Hz
 SCANS 16
 ACQTM 5.449 sec
 PD 1.551 sec
 PW1 5.8 us
 IRNUC 1H
 CTEMP 28.7 c
 SLVNT CDCL3
 EXREF 0.00 ppm
 BF 0.12 Hz
 RGAIN 18



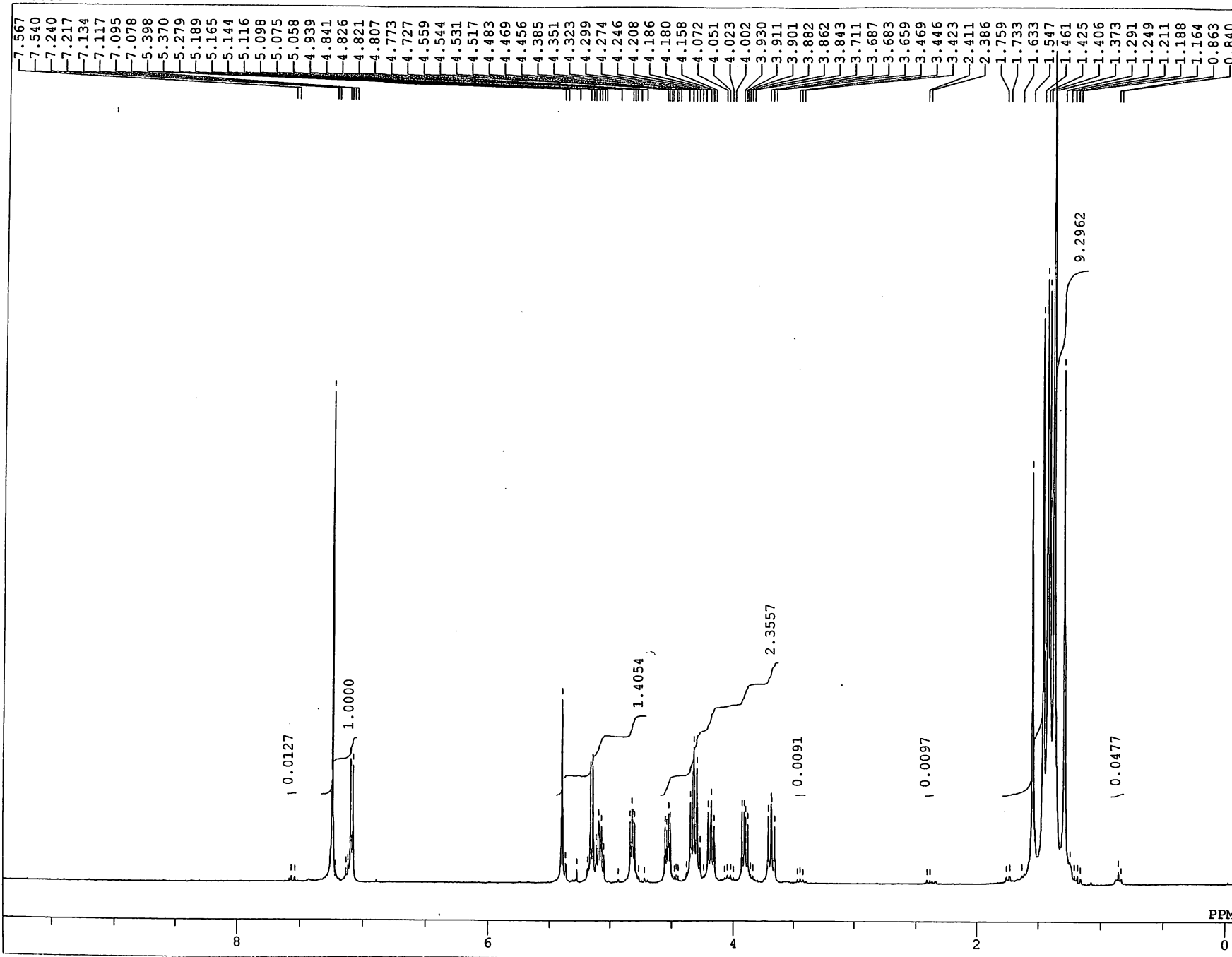
SK.27



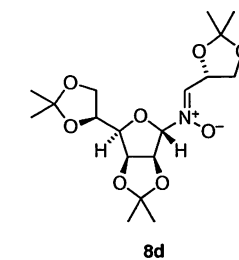
DFILE	C:\WINNMR95\TEMPDATA\AUTO2BC
COMNT	SK.27
DATIM	Tue Sep 07 22:36:16 1999
OBNUC	13C
EXMOD	BCM
OBFREQ	100.40 MHz
OBSET	125.00 KHz
OBFIN	10500.0 Hz
POINT	32768
FREQU	27322.4 Hz
SCANS	2048
ACQTM	1.199 sec
PD	1.797 sec
PW1	4.8 us
IRNUC	1H
CTEMP	29.8 c
SLVNT	CDCL3
EXREF	77.00 ppm
BF	1.20 Hz
RGAIN	26



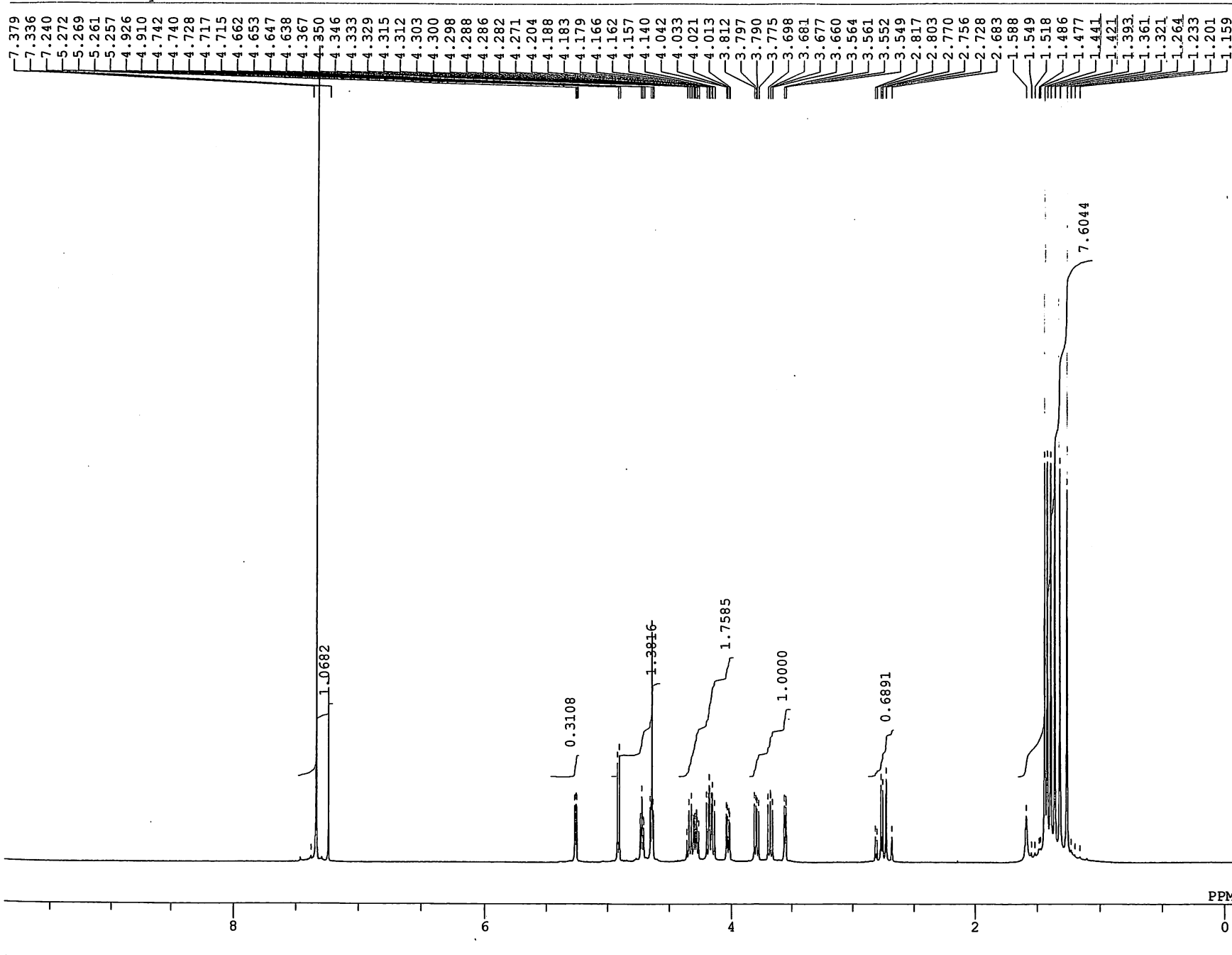
NM.858



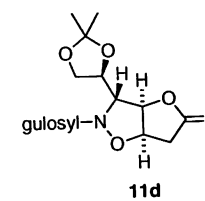
DFILE C:\WINNMR95\COMMON_DEF
COMNT NM.858
DATIM Sat Jan 30 15:04:30 1995
OBNUC 1H
EXMOD NON
OBFRQ 300.40 MHz
OBSET 130.00 KHz
OBFIN 1150.0 Hz
POINT 32768
FREQU 6013.2 Hz
SCANS 16
ACQTM 5.449 sec
PD 1.551 sec
PW1 5.8 us
IRNUC 1H
CTEMP 23.8 c
SLVNT CDCL3
EXREF 7.24 ppm
BF 0.62 Hz
RGAIN 20



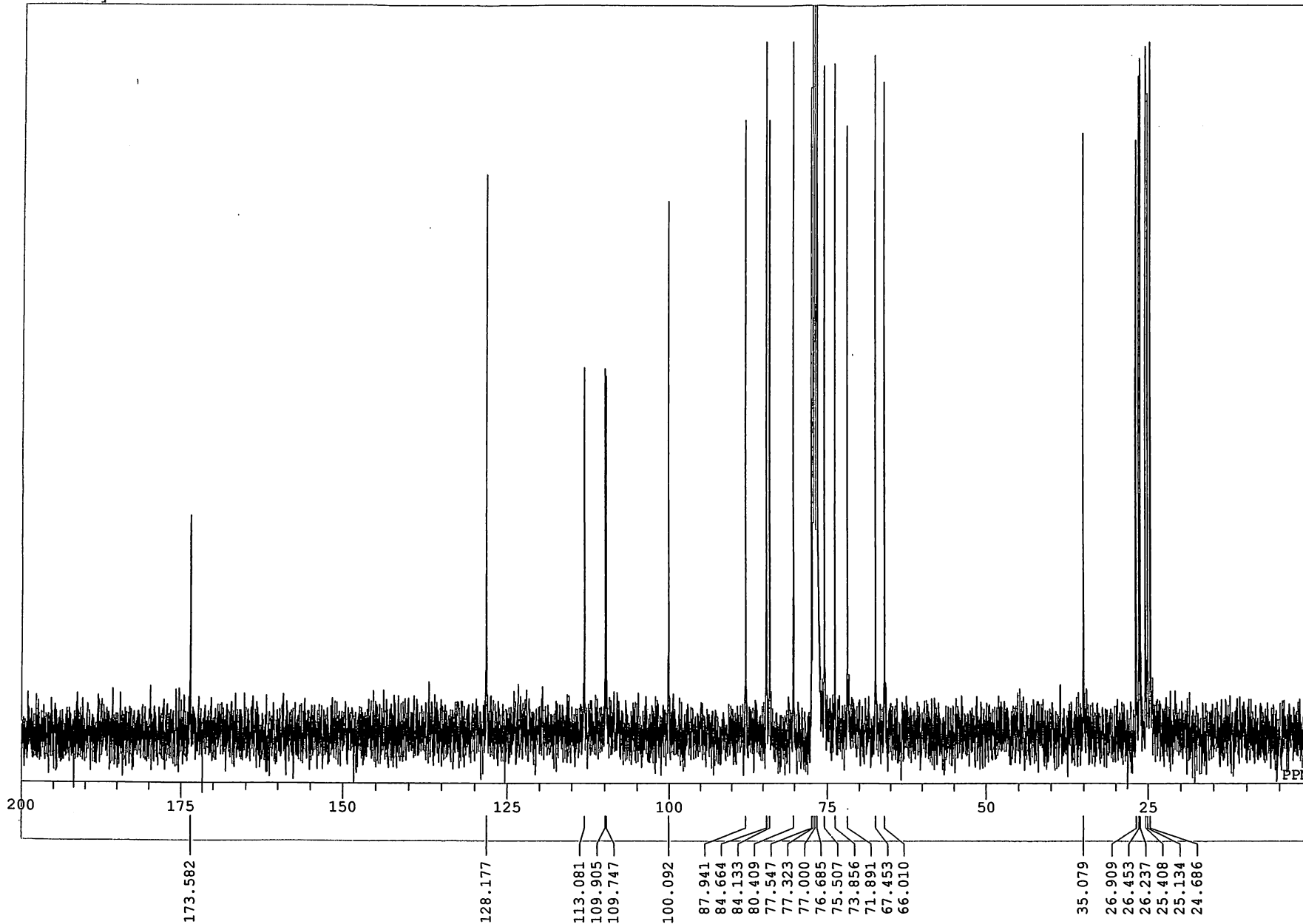
NM.832Fr9-14recry



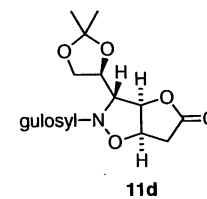
DFILE C:\WINNMR95\COMMON_DEFAULT.
COMNT NM.832Fr9-14recry
DATIM Tue Dec 22 15:43:18 1998
OBNUC 1H
EXMOD NON
OBFREQ 399.65 MHz
OBSET 124.00 KHz
OBFIN 10500.0 Hz
POINT 32768
FREQU 8000.0 Hz
SCANS 16
ACQTM 4.096 sec
PD 3.967 sec
PW1 5.0 us
IRNUC 1H
CTEMP 25.0 c
SLVNT CDCL3
EXREF 7.24 ppm
BF 0.12 Hz
RGAIN 18



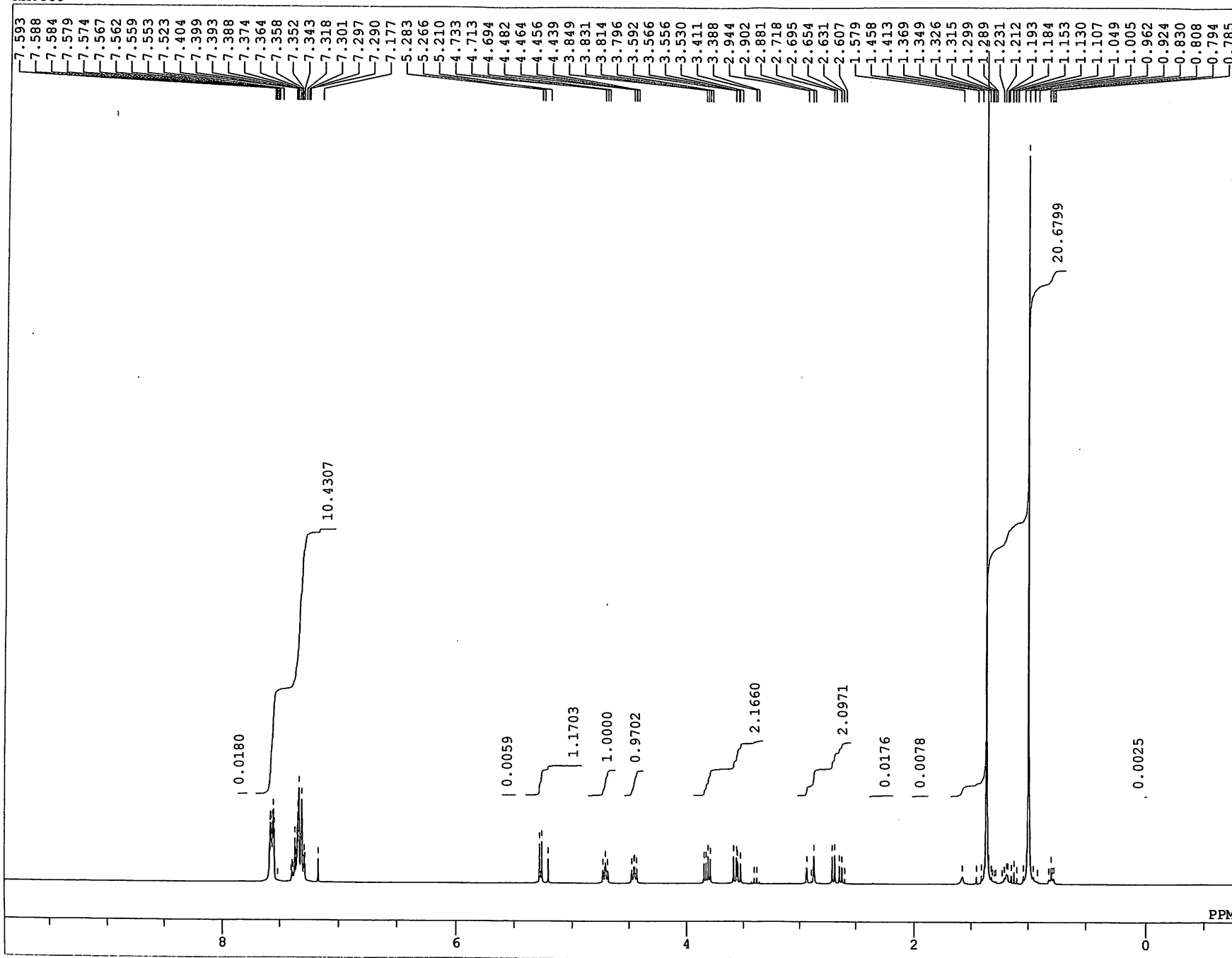
NM.832cry



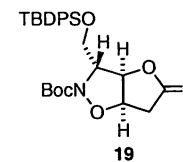
DFILE C:\WINNMR95\TEMPDATA\AUT
COMNT NM.832cry
DATIM Tue Dec 22 22:58:37 1998
OBNUC 13C
EXMOD BCM
OBFRQ 100.40 MHz
OBSET 125.00 KHz
OBFIN 10500.0 Hz
POINT 32768
FREQU 27322.4 Hz
SCANS 2056
ACQTM 1.199 sec
PD 1.797 sec
PW1 4.8 us
IRNUC 1H
CTEMP 30.0 c
SLVNT CDCL3
EXREF 77.00 ppm
BF 1.20 Hz
RGAIN 26



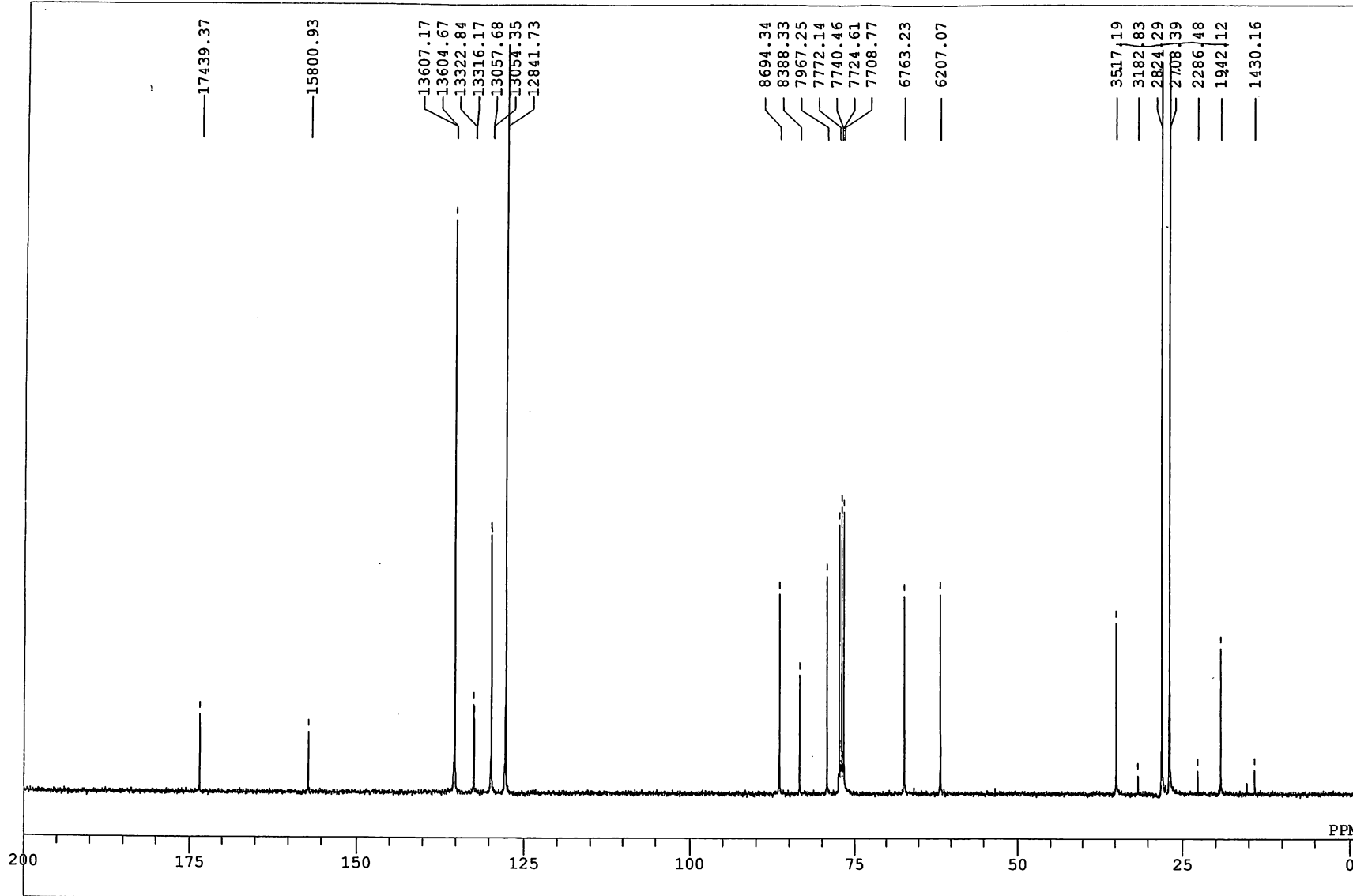
NM.889



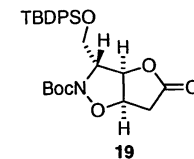
DFILE C:\WINNMR95\COMMON_DEF
 COMNT NM.889
 DATIM Wed Apr 07 14:08:42 1995
 OBNUC 1H
 EXMOD NON
 OBFRQ 300.40 MHz
 OBSET 130.00 KHz
 OBFIN 1150.0 Hz
 POINT 32768
 FREQU 6002.4 Hz
 SCANS 16
 ACQTM 5.459 sec
 PD 1.551 sec
 PW1 5.8 us
 IRNUC 1H
 CTEMP 25.7 c
 SLVNT CDCL3
 EXREF 0.00 ppm
 BF 0.09 Hz
 RGAIN 12



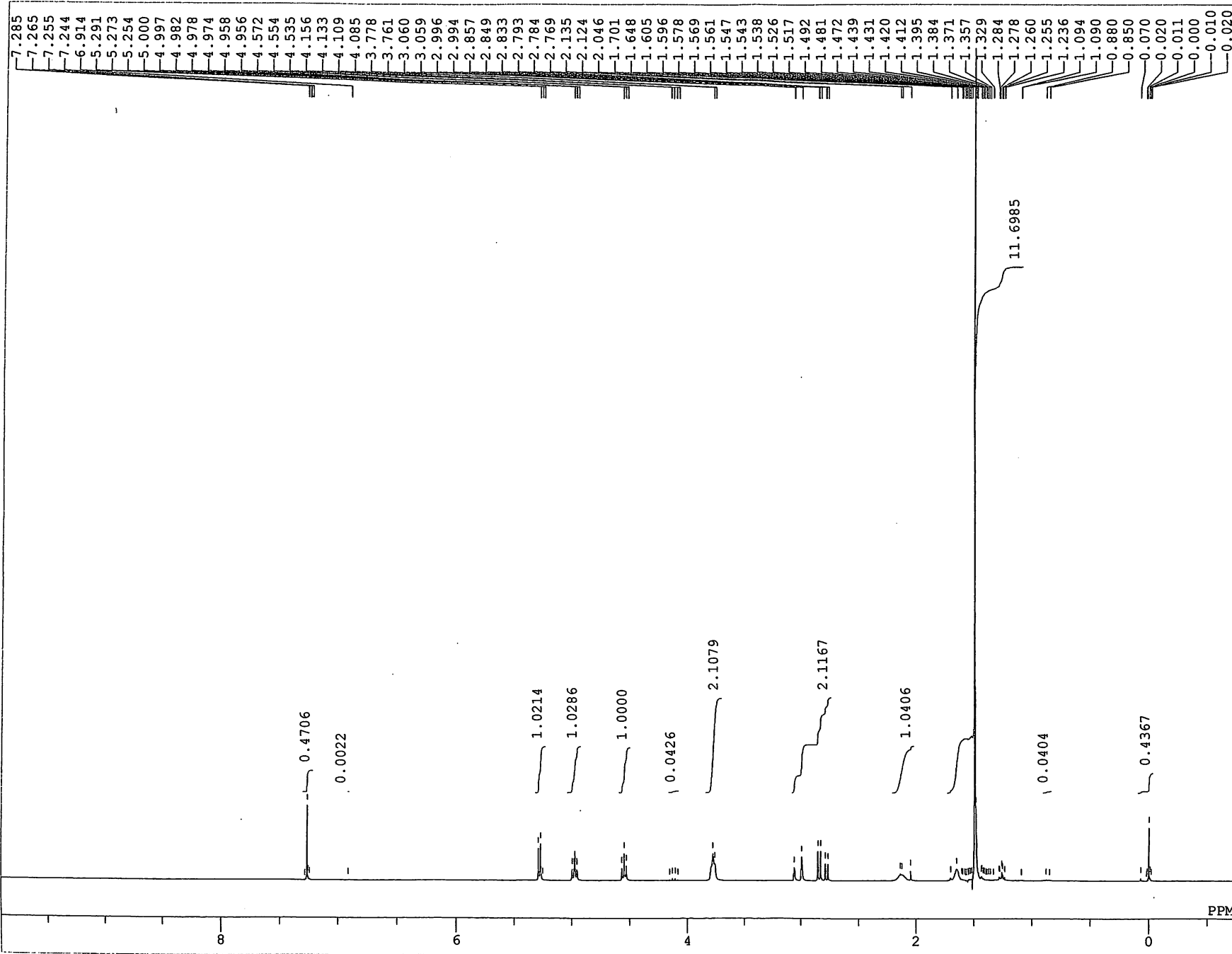
NM.889



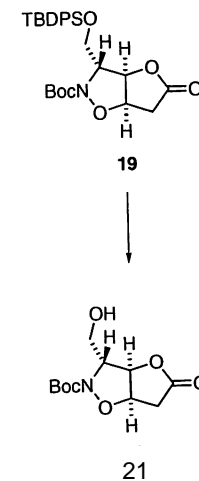
DFILE C:\WINNMR95\TEMPDATA\AUTO2BC
 COMNT NM.889
 DATIM Wed Apr 07 22:57:52 1999
 OBNUC 13C
 EXMOD BCM
 OBFREQ 100.40 MHz
 OBSET 125.00 KHz
 OBFIN 10500.0 Hz
 POINT 32768
 FREQU 27322.4 Hz
 SCANS 2048
 ACQTM 1.199 sec
 PD 1.797 sec
 PW1 4.8 us
 IRNUC 1H
 CTEMP 29.5 c
 SLVNT CDCL3
 EXREF 77.00 ppm
 BF 1.20 Hz
 RGAIN 24



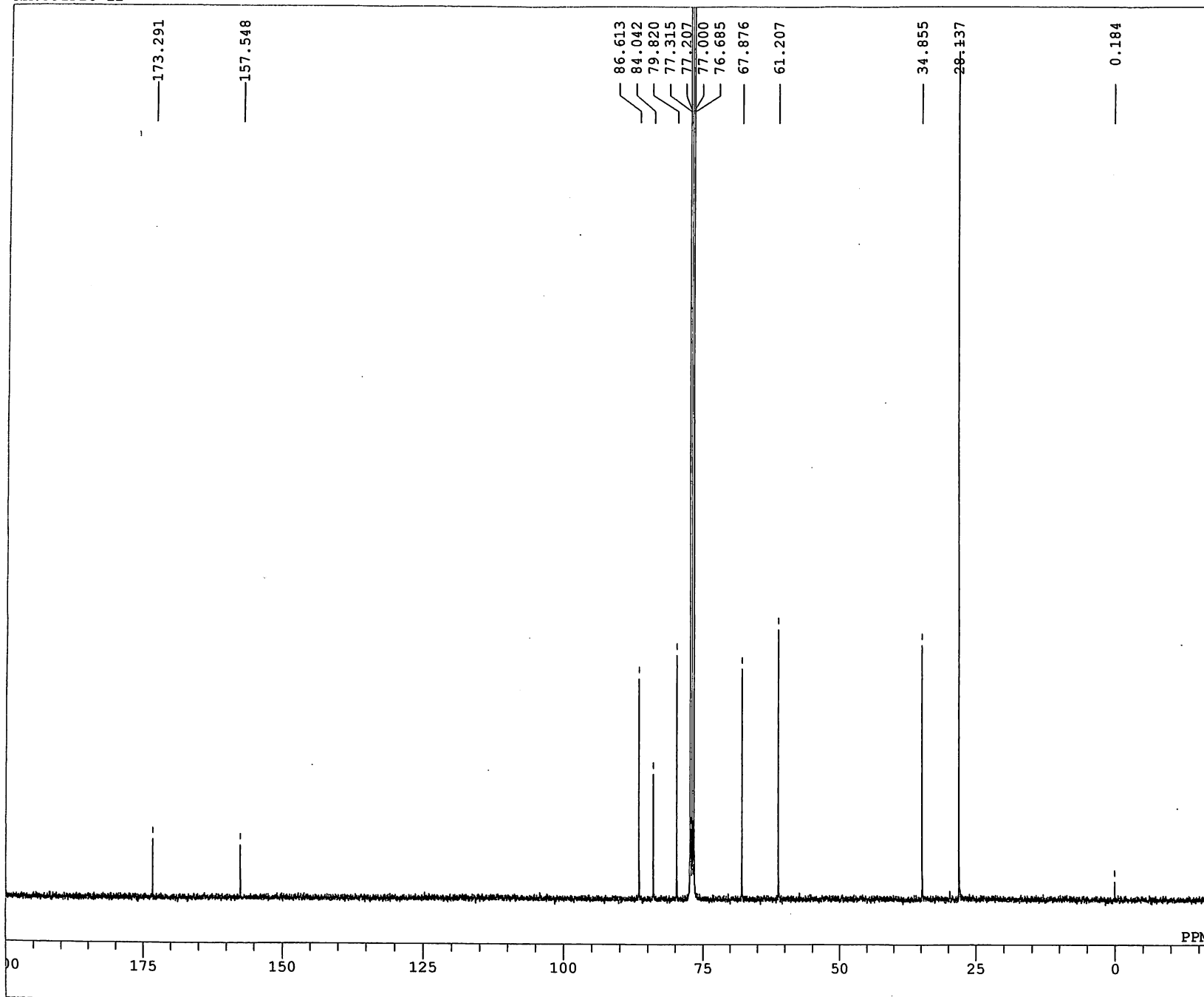
NM.991Fr6-12



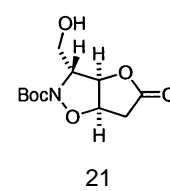
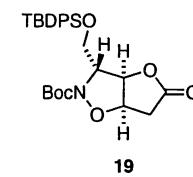
DFILE C:\WINNMR95\COMMON_DEF
 COMNT NM.991Fr6-12
 DATIM Wed Oct 20 18:13:55 1995
 OBNUC 1H
 EXMOD NON
 OBFRQ 300.40 MHz
 OBSET 130.00 KHz
 OBFIN 1150.0 Hz
 POINT 32768
 FREQU 6013.2 Hz
 SCANS 16
 ACQTM 5.449 sec
 PD 1.551 sec
 PW1 5.8 us
 IRNUC 1H
 CTEMP 24.4 c
 SLVNT CDCL3
 EXREF 0.00 ppm
 BF 0.09 Hz
 RGAIN 16



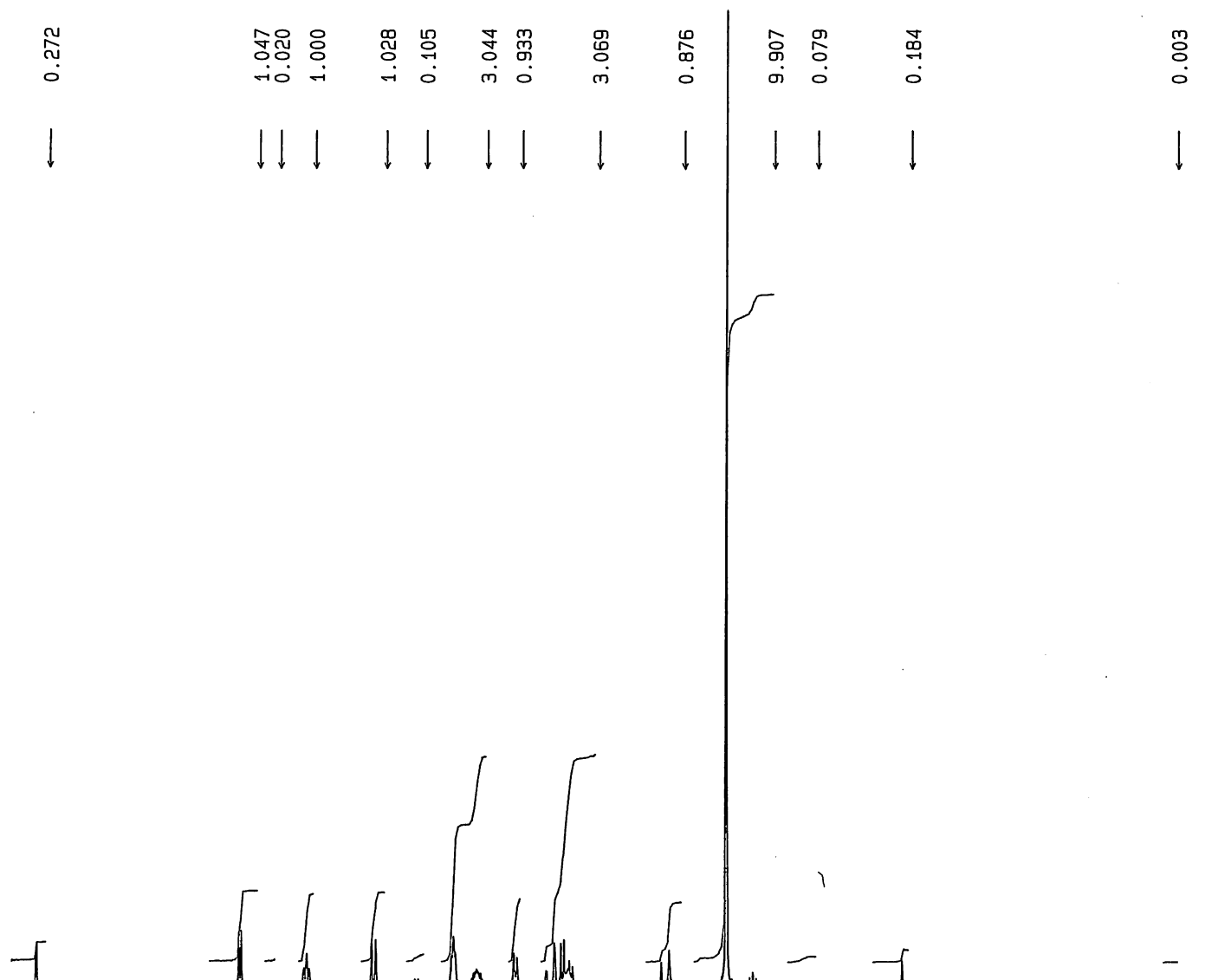
NM.991Fr6-12



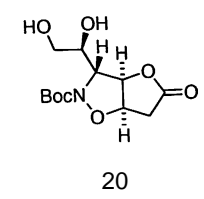
DFILE C:\WINMR95\TEMPDATA\AUTO1BCM_E1_FT.1
COMNT NM.991Fr6-12
DATIM Sat Oct 23 05:26:08 1999
OBNUC 13C
EXMOD BCM
OBFRQ 100.40 MHz
OBSET 125.00 KHz
OBFIN 10500.0 Hz
POINT 32768
FREQU 27322.4 Hz
SCANS 10000
ACQTM 1.199 sec
PD 1.797 sec
PW1 4.8 us
IRNUC 1H
CTEMP 30.2 c
SLVNT CDCL3
EXREF 77.00 ppm
BF 1.20 Hz
RGAIN 26



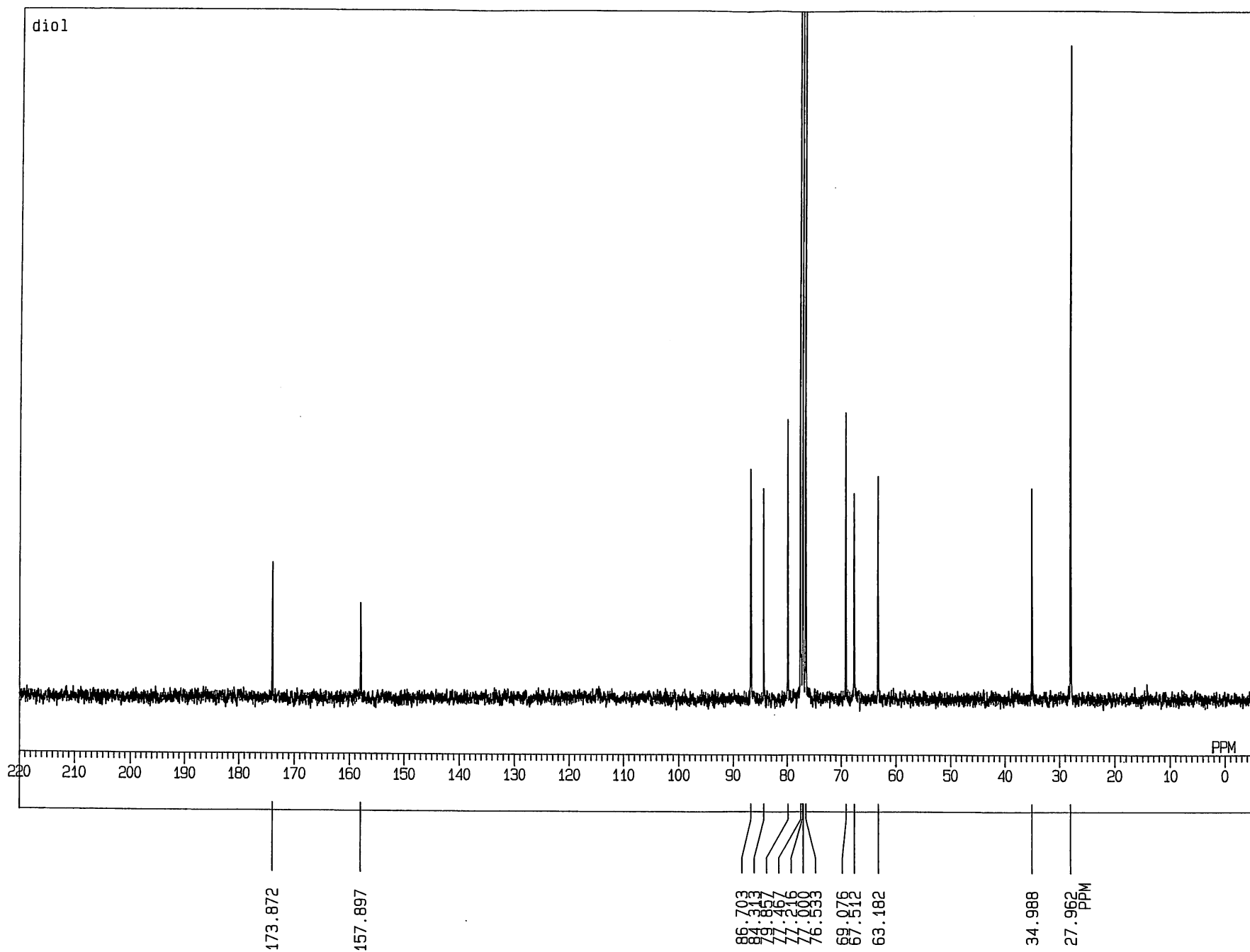
diol



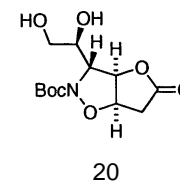
18-NOV-99 18: 09: 20
DFILE Q1H
OBNUC 1H
EXMOD NON
QFR 270.05 MHz
OBSET 112.00 kHz
OBFIN 5800.0 Hz
POINT 32768
FREQU 5405.4 Hz
SCANS 16
ACQTM 3.031 sec
PD 3.969 sec
PW1 5.5 us
IRNUC 1H
CTEMP 24.8 c
SLVNT CDCL3
EXREF 0.00 ppm
BF 0.16 Hz
RGAIN 17
OPERATOR : _____



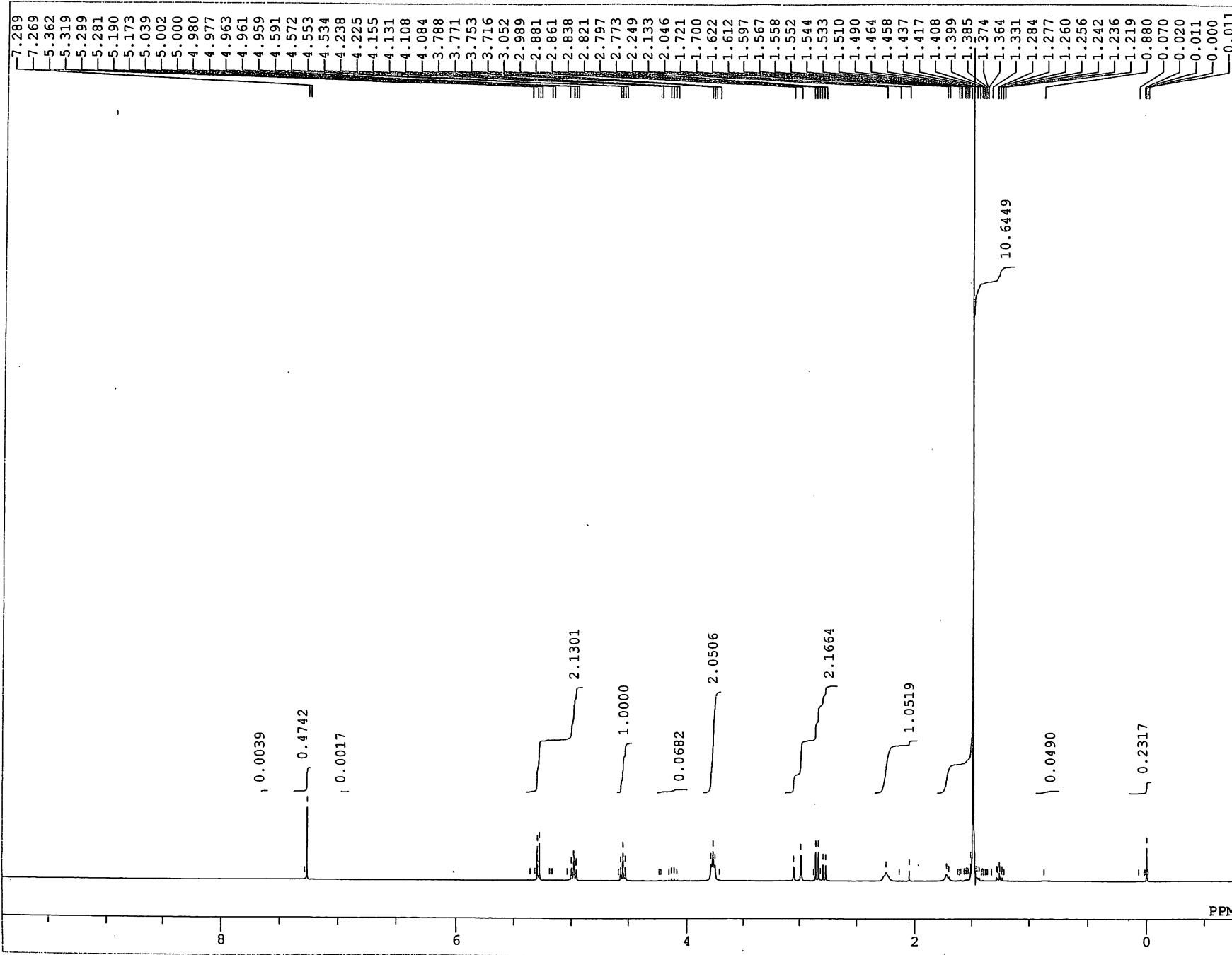
9 8 7 6 5 4 3 2 1 0 -1 -2 PPM



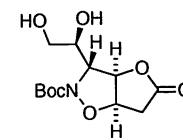
18-NOV-99 21: 45: 06
DFILE Q13C
OBNUC 13C
EXMOD BCM
OFR 67.80 MHz
OBSET 135.00 kHz
OBFIN 5200.0 Hz
POINT 32768
FREQU 20000.0 Hz
SCANS 1599
ACQTM 0.819 sec
PD 2.181 sec
PW1 4.3 us
IRNUC 1H
CTEMP 26.3 c
SLVNT CDCL3
EXREF 77.00 ppm
BF 1.50 Hz
RGAIN 29
OPERATOR : _____



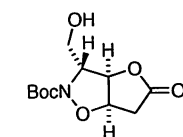
NM.886



DFILE C:\WINNMR95\COMMON_DEFF
 COMNT NM.886
 DATIM Thu Oct 21 11:43:29 1995
 OBNUC 1H
 EXMOD NON
 OBFREQ 300.40 MHz
 OBSET 130.00 KHz
 OBFIN 1150.0 Hz
 POINT 32768
 FREQU 6013.2 Hz
 SCANS 16
 ACQTM 5.449 sec
 PD 1.551 sec
 PW1 5.8 us
 IRNUC 1H
 CTEMP 24.4 c
 SLVNT CDCL3
 EXREF 0.00 ppm
 BF 0.09 Hz
 RGAIN 15

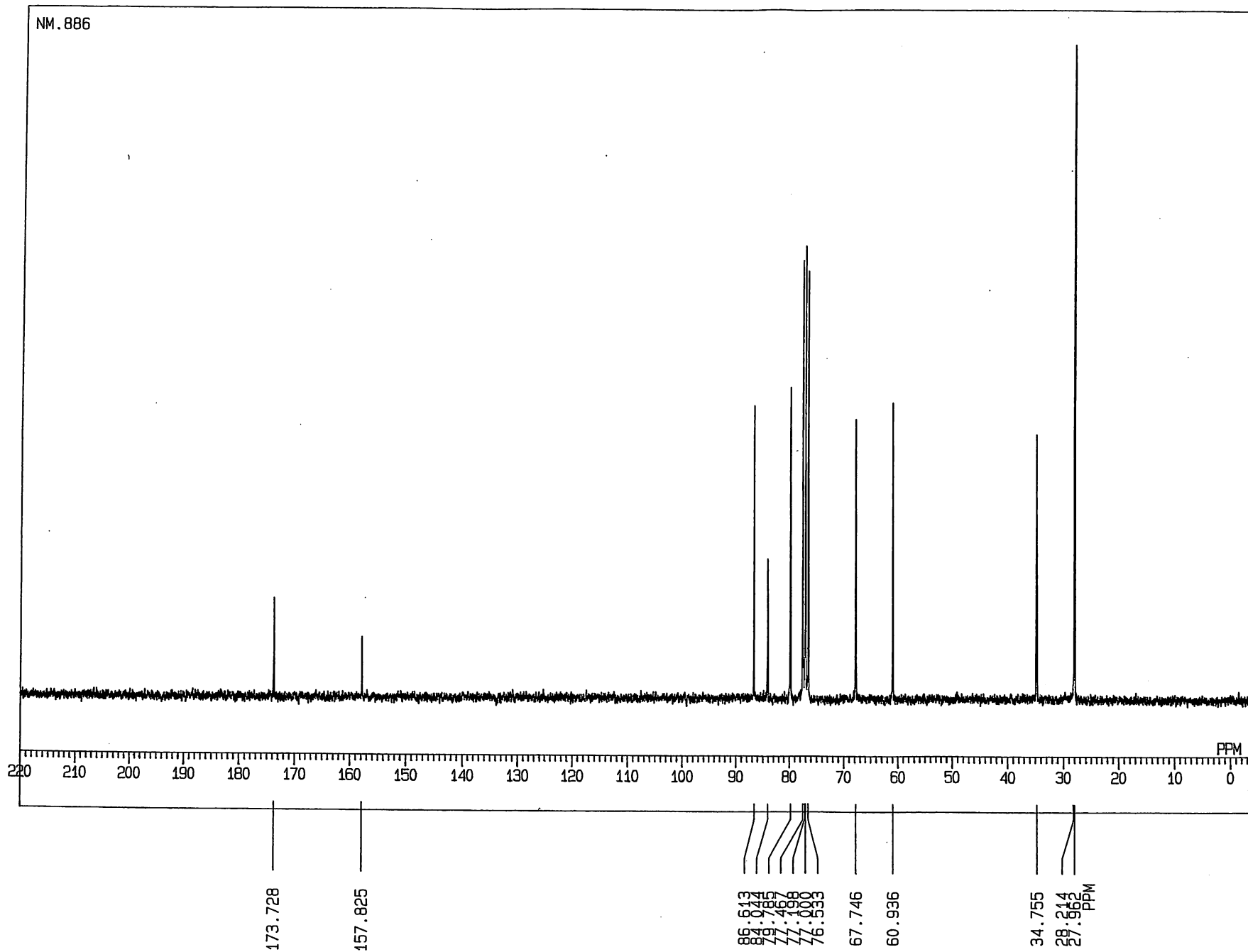


20



21

NM.886



21-OCT-99 20: 44: 19

DFILE Q13C

OBNUC 13C

EXMOD BCM

OFR 67.80 MHz

OBSET 135.00 kHz

OBFIN 5200.0 Hz

POINT 32768

FREQU 20000.0 Hz

SCANS 1600

ACQTM 0.819 sec

PD 2.181 sec

PW1 4.3 us

IRNUC 1H

CTEMP 25.7 c

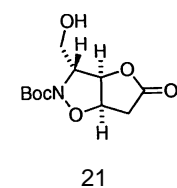
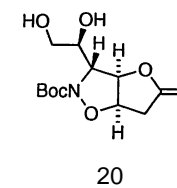
SLVNT CDCL3

EXREF 77.00 ppm

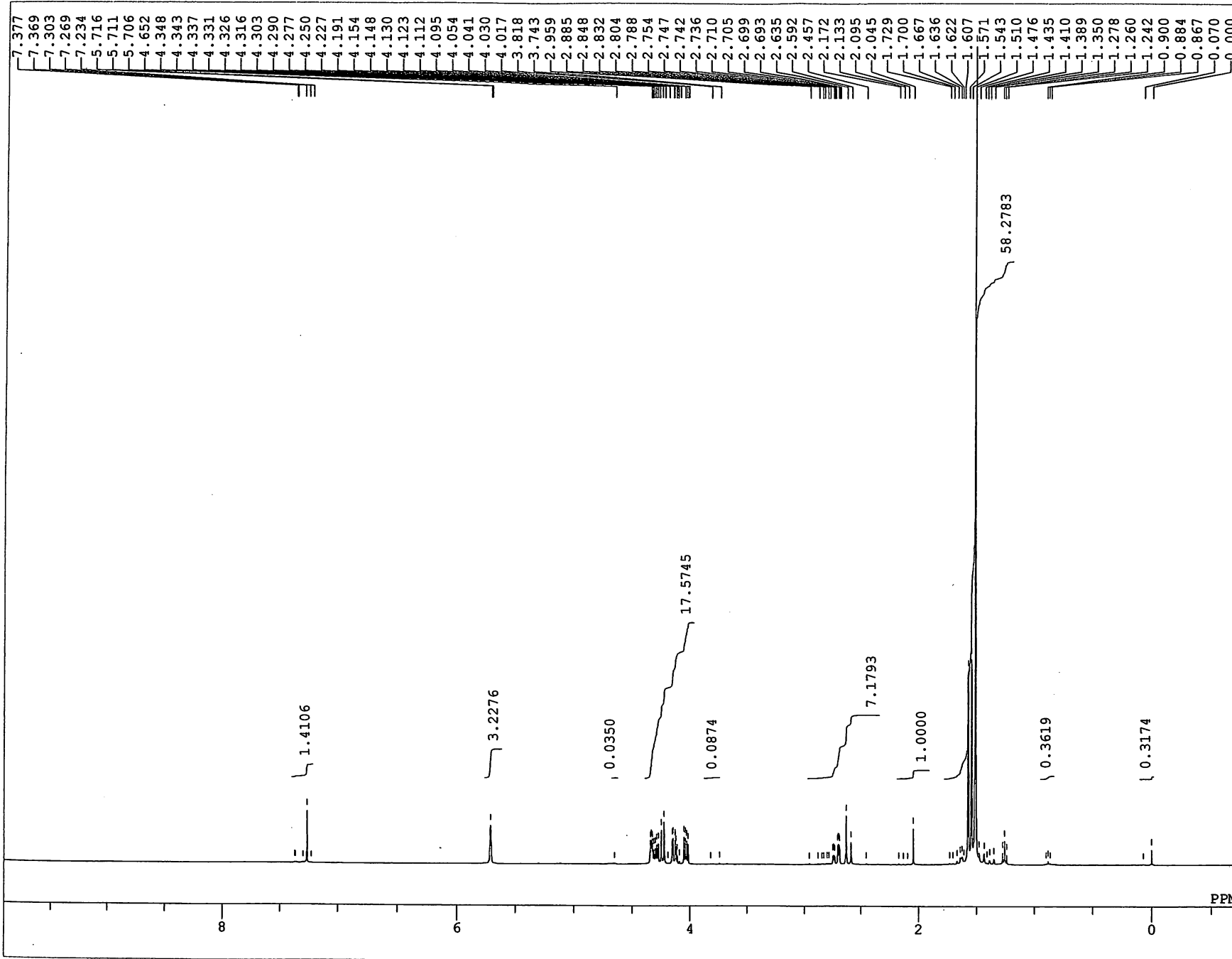
BF 1.50 Hz

RGAIN 30

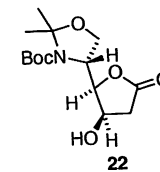
OPERATOR : _____



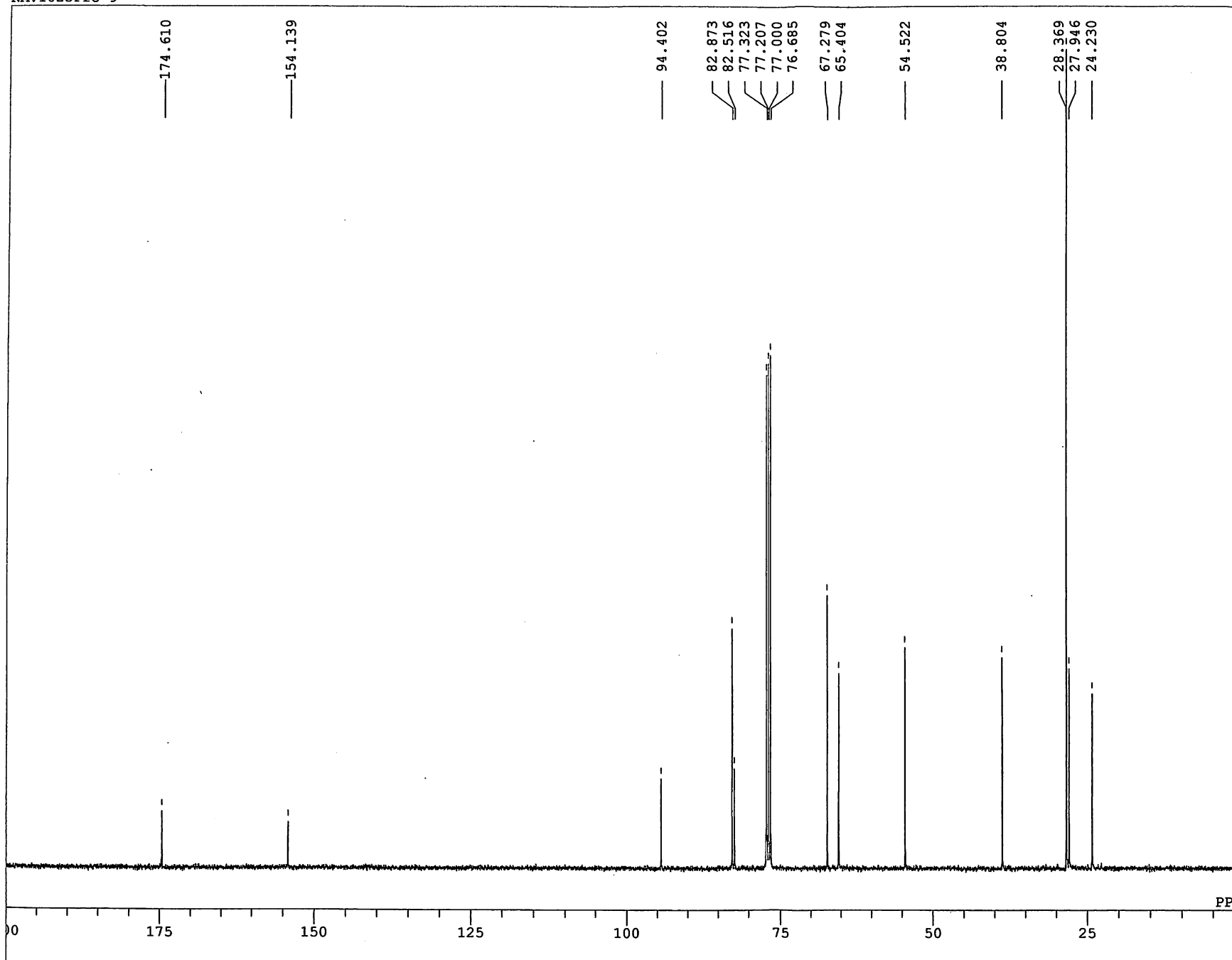
NM.1023Fr5-9



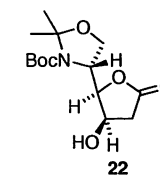
DFILE C:\WINNMR95\COMMON_DEFAULT.
COMNT NM.1023Fr5-9
DATIM Fri Jan 21 10:27:27 2000
OBNUC 1H
EXMOD NON
OBFRQ 399.65 MHz
OBSET 124.00 KHz
OBFIN 10500.0 Hz
POINT 32768
FREQU 8000.0 Hz
SCANS 16
ACQTM 4.096 sec
PD 3.967 sec
PW1 5.0 us
IRNUC 1H
CTEMP 25.0 c
SLVNT CDCL3
EXREF 0.00 ppm
BF 0.12 Hz
RGAIN 16



NM.1023Fr5-9



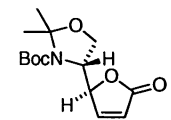
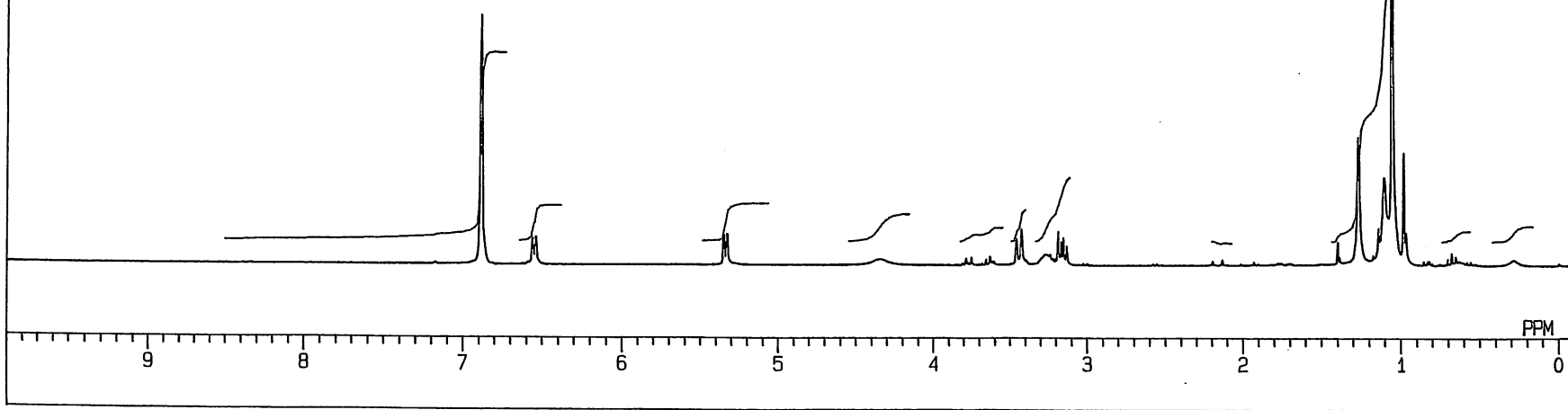
DFILE C:\WINNMR95\TEMPDATA\AUTO2BC
COMNT NM.1023Fr5-9
DATIM Sat Jan 22 00:06:16 2000
OBNUC 13C
EXMOD BCM
OBFRQ 100.40 MHz
OBSET 125.00 KHz
OBFIN 10500.0 Hz
POINT 32768
FREQU 27322.4 Hz
SCANS 4096
ACQTM 1.199 sec
PD 1.797 sec
PW1 4.8 us
IRNUC 1H
CTEMP 30.2 c
SLVNT CDCL3
EXREF 77.00 ppm
BF 1.20 Hz
RGAIN 26



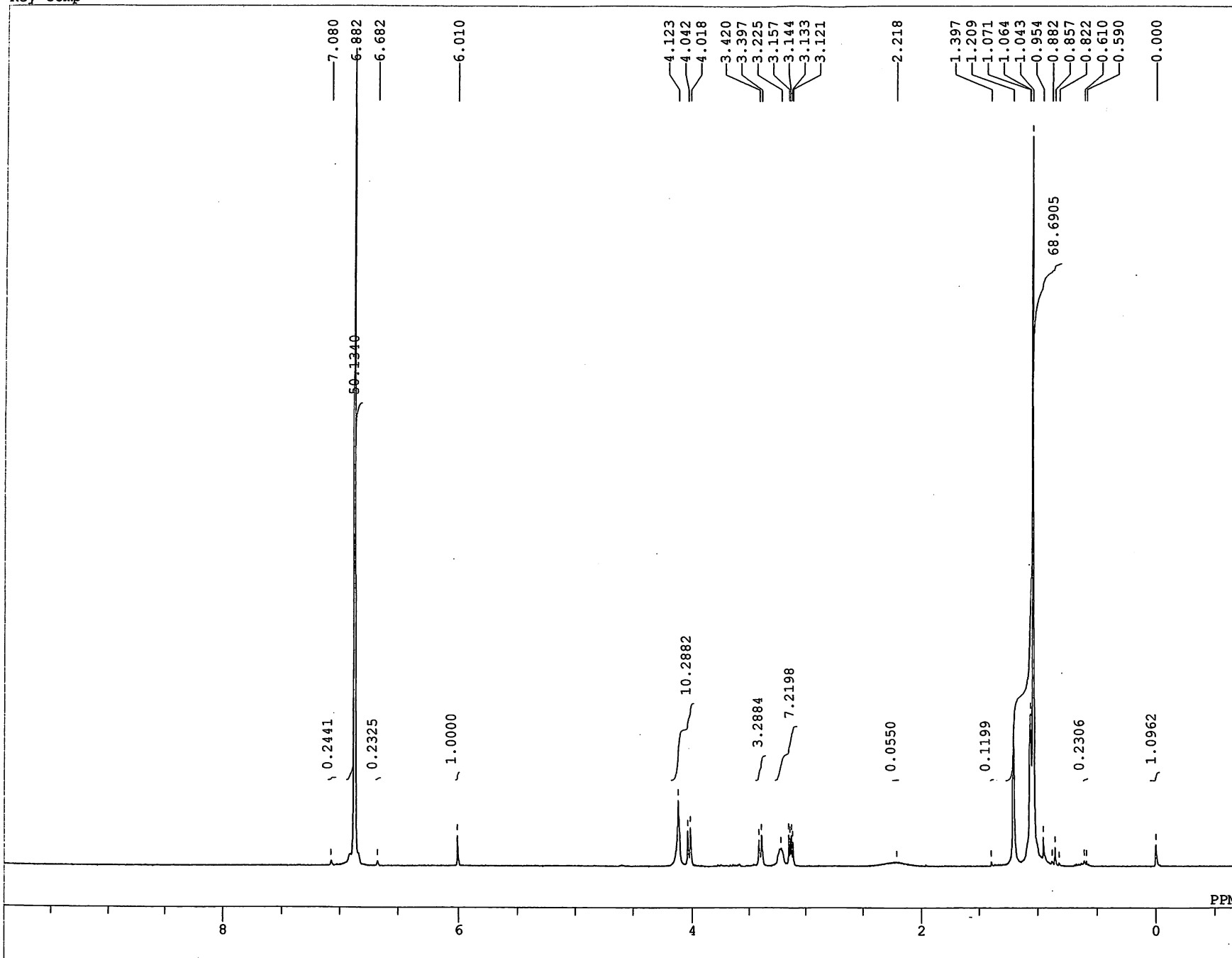
NM.780

5.357
↓
1.000
↓
1.070
↓
0.773
↓
0.377
0.893
↓ ↓
1.808
↓
-0.063
↓
19.673
↓
0.301
↓
0.442
↓

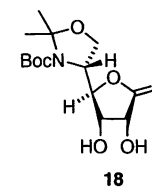
04-NOV-98 19: 41: 11
DFILE Q1H
OBNUC 1H
EXMOD NON
OFR 270.05 MHz
OBSET 112.00 kHz
OBFIN 5800.0 Hz
POINT 32768
FREQU 5405.4 Hz
SCANS 16
ACQTM 3.031 sec
PD 3.969 sec
PW1 5.5 us
IRNUC 1H
CTEMP 59.9 c
SLVNT C6D6
EXREF 0.00 ppm
BF 0.16 Hz
RGAIN 18
OPERATOR : _____



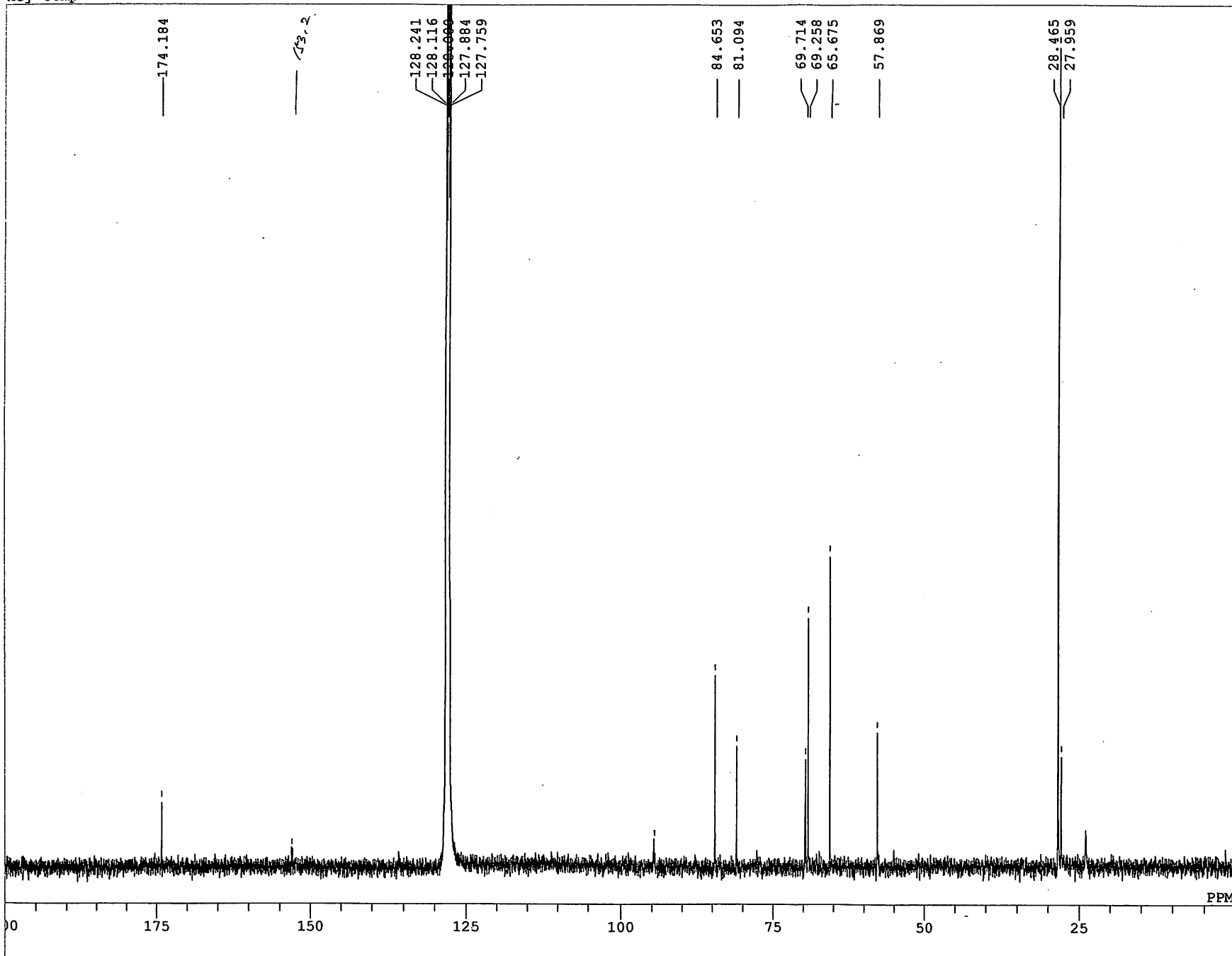
Key Comp



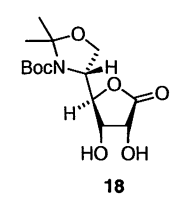
DFILE C:\WINNMR95\TEMPDATA\AUTO1NC
COMNT Key Comp
DATIM Fri Jan 28 17:29:29 2000
OBNUC 1H
EXMOD NON
OBFRQ 399.65 MHz
OBSET 124.00 KHz
OBFIN 10500.0 Hz
POINT 32768
FREQU 8000.0 Hz
SCANS 16
ACQTM 4.096 sec
PD 3.967 sec
PW1 5.0 us
IRNUC 1H
CTEMP 60.2 c
SLVNT C6D6
EXREF 0.00 ppm
BF 0.12 Hz
RGAIN 20



key Comp



DFILE C:\WINNMR95\TEMPDATA\AUTO2BC
COMNT key Comp
DATIM Sat Jan 29 05:29:03 2000
OBNUC 13C
EXMOD BCM
OBFREQ 100.40 MHz
OBSET 125.00 KHz
OBFIN 10500.0 Hz
POINT 32768
FREQU 27322.4 Hz
SCANS 12000
ACQTM 1.199 sec
PD 1.797 sec
PW1 4.8 us
IRNUC 1H
CTEMP 60.3 c
SLVNT C6D6
EXREF 128.00 ppm
BF 1.20 Hz
RGAIN 22



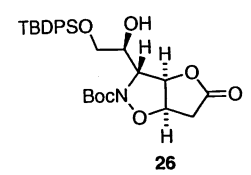
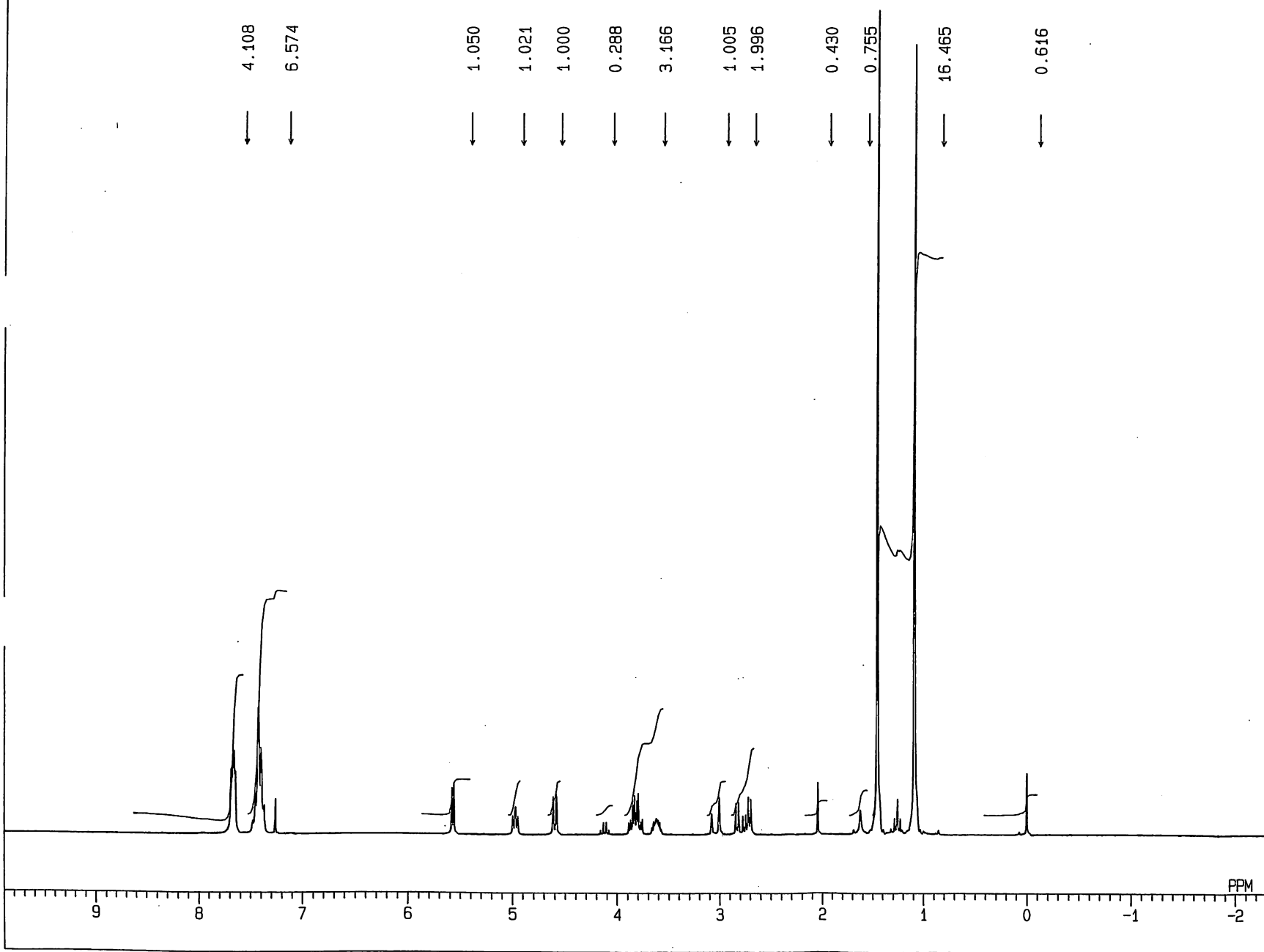
EXP11-5

4.108 6.574
↓ ↓

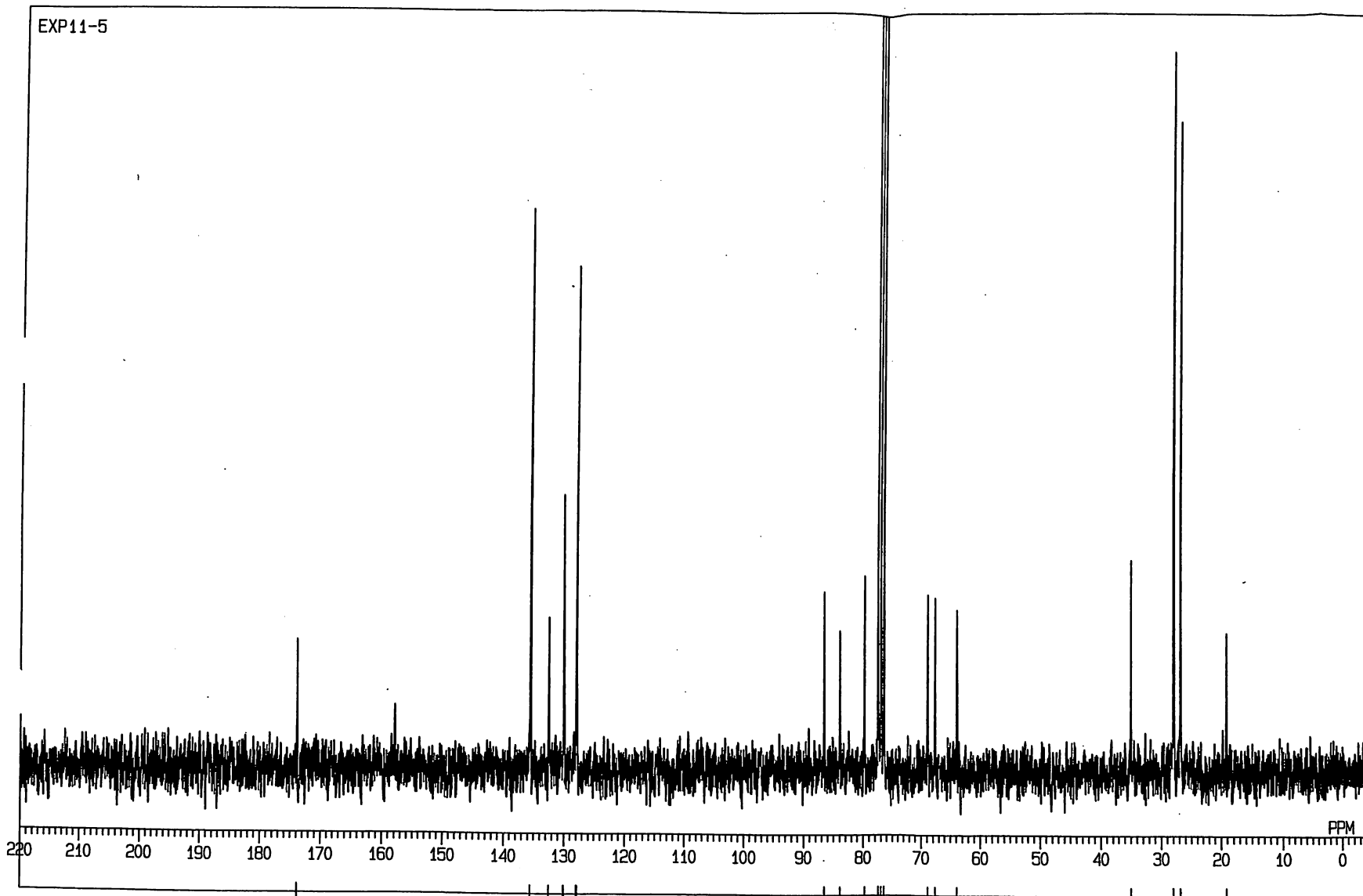
1.050 1.021 1.000 0.288 3.166 1.005 1.996 0.430 0.755
↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓

16.465 0.616
↓ ↓

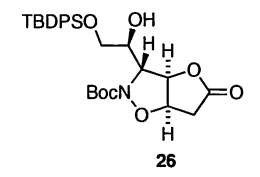
28-APR-03 21: 16: 54
DFILE Q1H
OBNUC 1H
EXMOD NON
OFR 270.05 MHz
OBSET 112.00 kHz
OBFIN 5800.0 Hz
POINT 32768
FREQU 5405.4 Hz
SCANS 16
ACQTM 3.031 sec
PD 3.969 sec
PW1 5.1 us
IRNUC 1H
CTEMP 22.1 c
SLVNT CDCL3
EXREF 0.00 ppm
BF 0.17 Hz
RGAIN 16
OPERATOR : _____



EXP11-5



28-APR-03 23: 18: 44
DFILE Q13C
OBNUC 13C
EXMOD BCM
OFR 67.80 MHz
OBSET 135.00 kHz
OBFIN 5200.0 Hz
POINT 32768
FREQU 20000.0 Hz
SCANS 159
ACQTM 0.819 sec
PD 2.181 sec
PW1 3.8 us
IRNUC 1H
CTEMP 23.0 c
SLVNT CDCL3
EXREF 77.00 ppm
BF 1.50 Hz
RGAIN 27
OPERATOR : _____



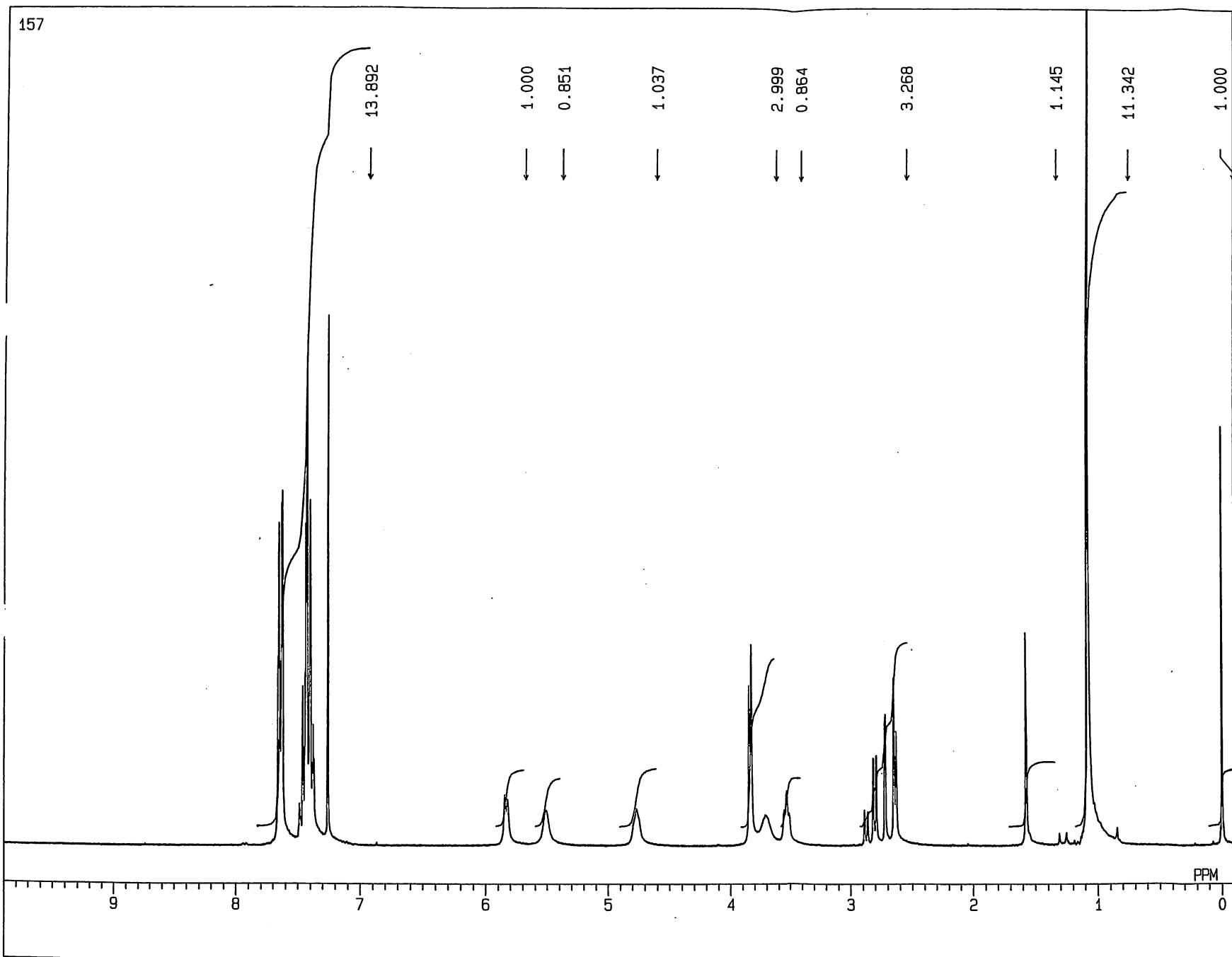
173.854

135.524
133.785
130.900
127.863

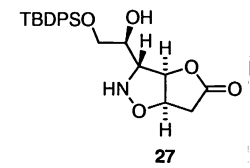
86.524
83.900
79.785
77.000
76.833
68.932
67.866
63.936

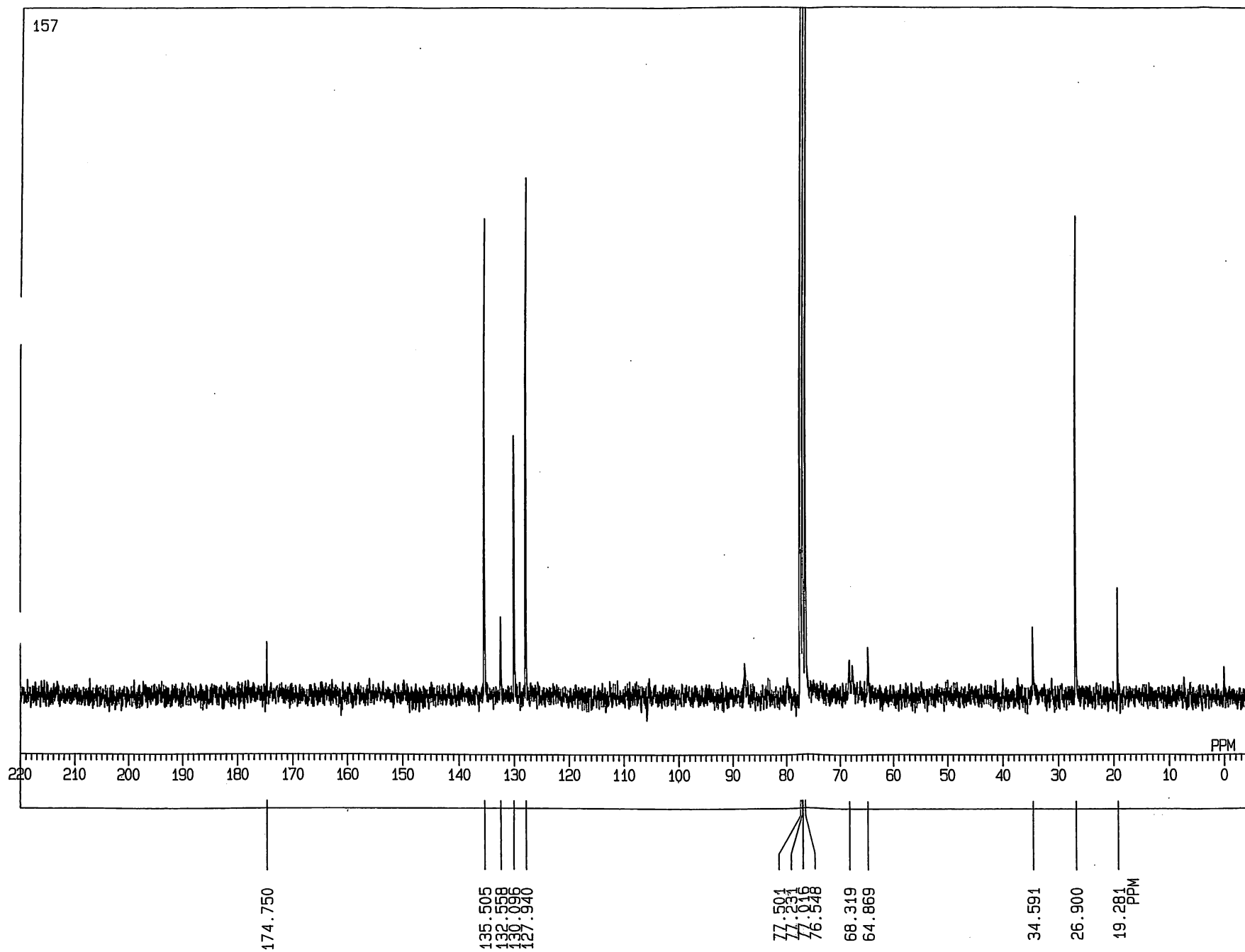
35.024
27.962
26.866
19.247
PPM

157

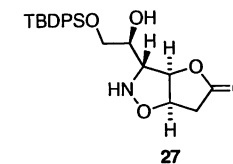


22-JAN-05 01:13:56
DFILE QCOSY
OBNUC 1H
EXMOD NON
OFR 270.05 MHz
OBSET 112.00 kHz
OBFIN 5800.0 Hz
POINT 32768
FREQU 5405.4 Hz
SCANS 64
ACQTM 3.031 sec
PD 3.969 sec
PW1 5.8 us
IRNUC 1H
CTEMP 20.3 c
SLVNT CDCL3
EXREF 0.00 ppm
BF 0.16 Hz
RGAIN 20
OPERATOR : _____

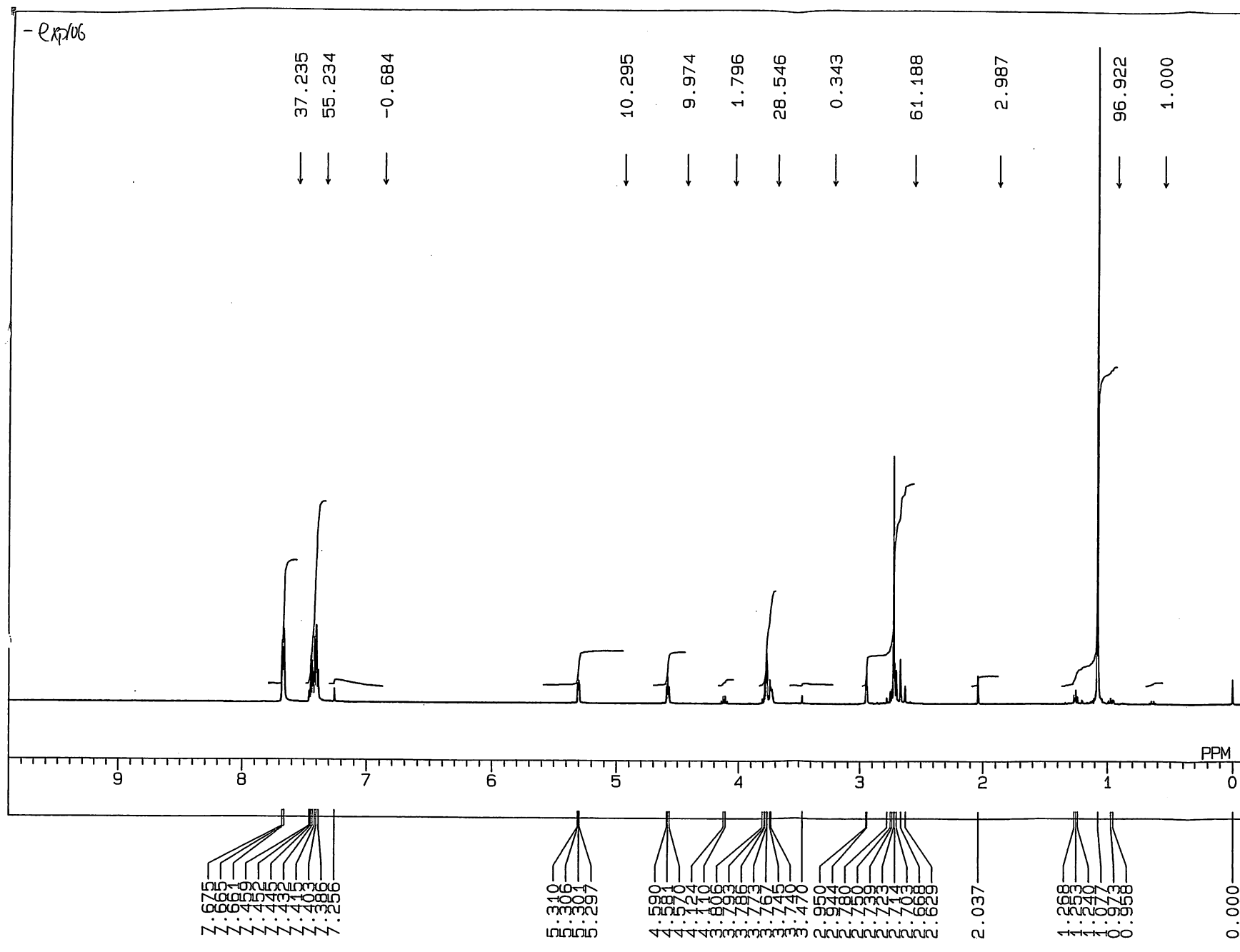




22-JAN-05 03:24:47
DFILE Q13C
OBNUC 13C
EXMOD BCM
OFR 67.80 MHz
OBSET 135.00 kHz
OBFIN 5200.0 Hz
POINT 32768
FREQU 20000.0 Hz
SCANS 1980
ACQTM 0.819 sec
PD 2.181 sec
PW1 4.2 us
IRNUC 1H
CTEMP 21.5 c
SLVNT CDCL3
EXREF 0.00 ppm
BF 1.50 Hz
RGAIN 27
OPERATOR : _____

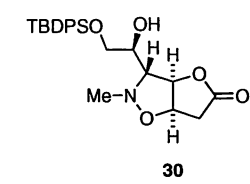


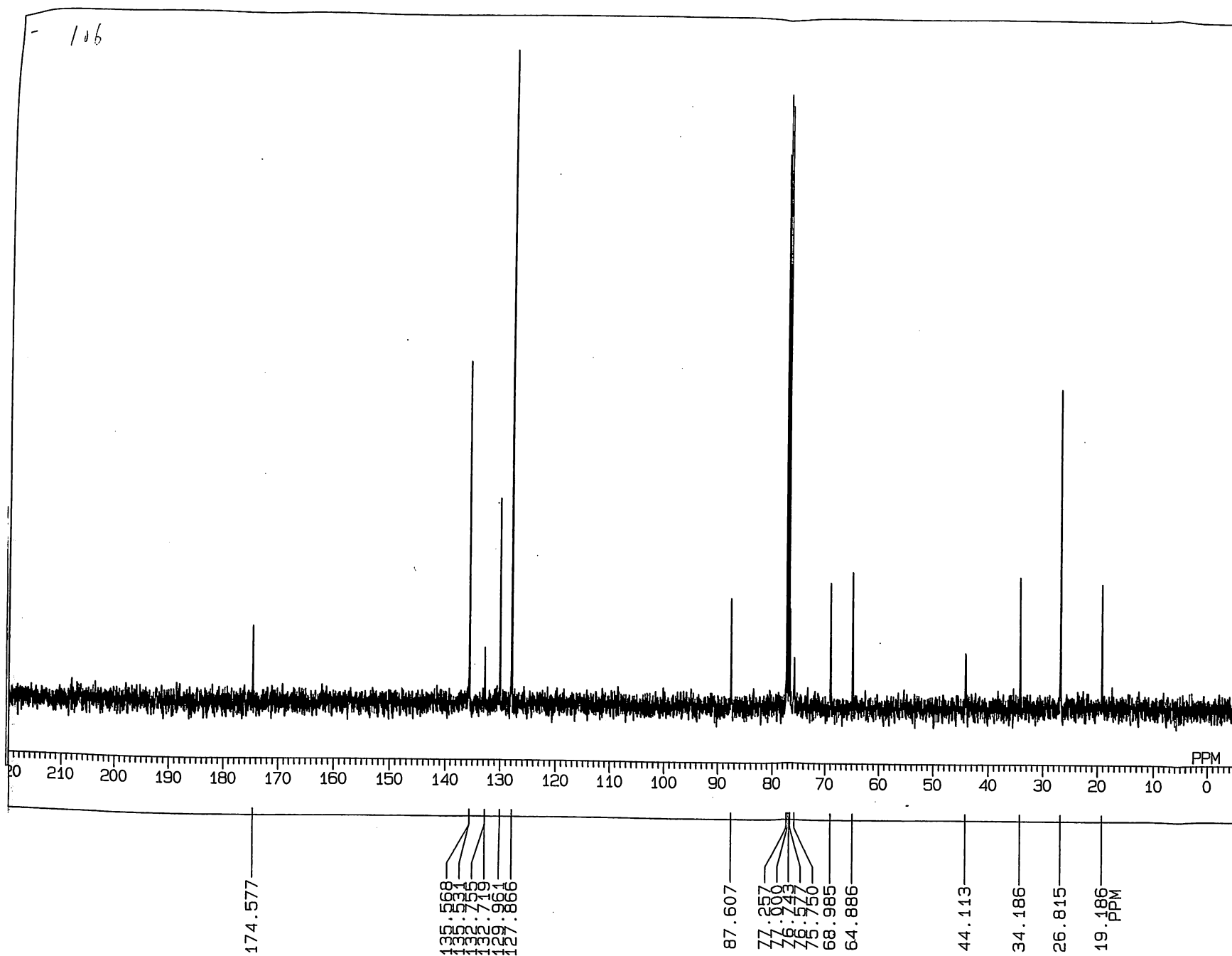
-Exp106



JEOL

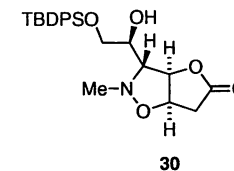
05-OCT-03 16: 41: 48
 DFILE Q1H
 COMNT -
 EXMOD SGNON
 OBNUC 1H
 OBFIN 9852.7 Hz
 POINT 32768
 FREQU 15015.0 Hz
 SCANS 16
 ACQTM 1.091 sec
 PD 3.909 sec
 PW1 7.0 us
 IRFIN 10157.0 Hz
 IRATN 15
 IRRPW 60 us
 TEMP. 22.0 c
 SLVNT CDCL3
 EXREF 0.00 ppm
 BF 0.46 Hz
 RGAIN 14
 XE 5001.5990 Hz
 XS -518.9199 Hz



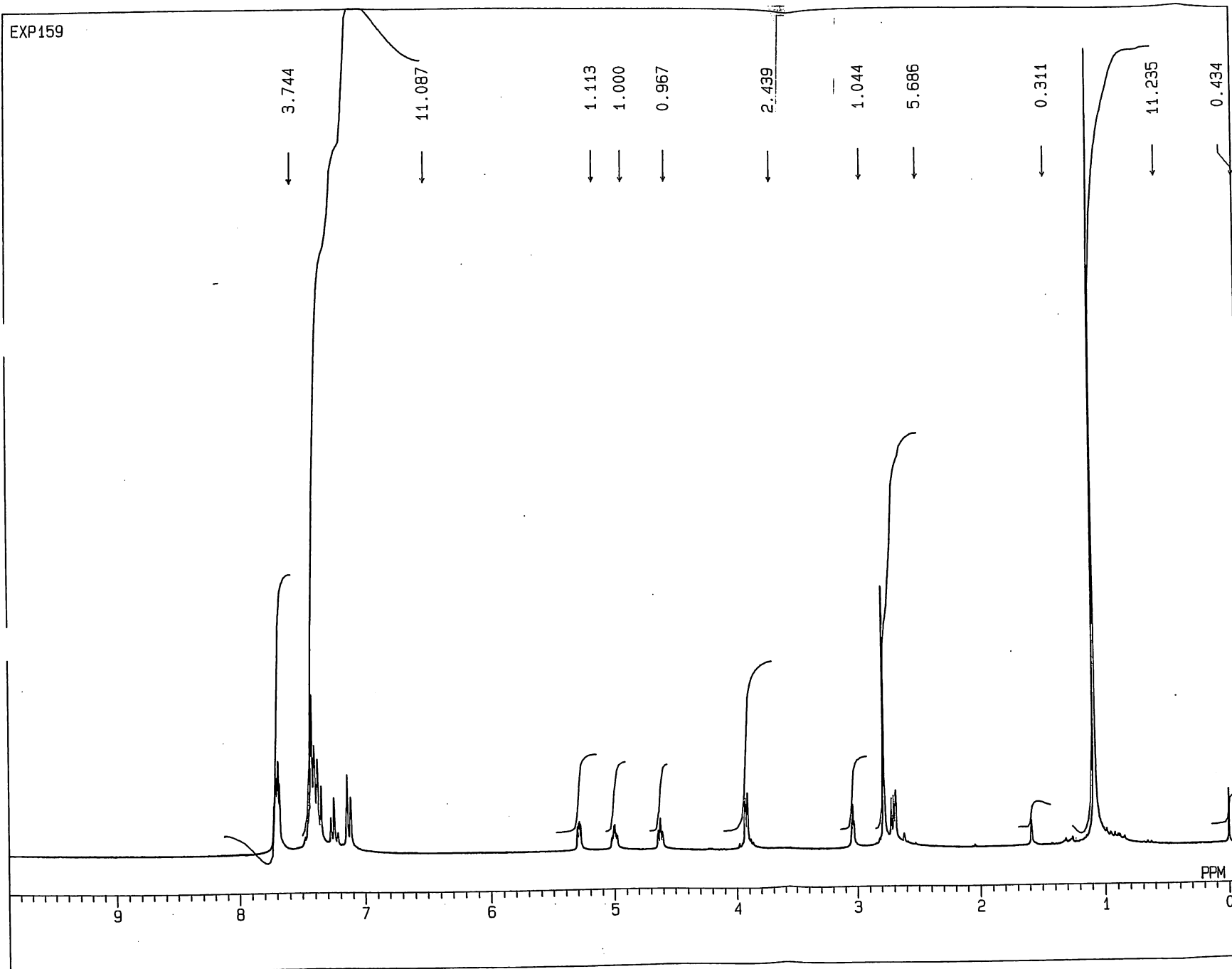


JEOL

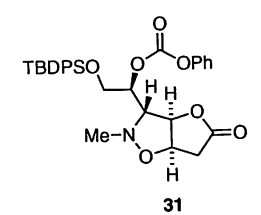
05-OCT-03 18:15:36
DFILE Q13C
COMNT -
EXMOD SGBCM
OBNUC 13C
OBFIN 10404.0 Hz
POINT 32768
FREQU 37878.8 Hz
SCANS 158
ACQTM 0.433 sec
PD 1.567 sec
PW1 6.0 us
IRFIN 10157.0 Hz
IRATN 33
IRRPW 50 us
TEMP. 22.0 c
SLVNT CDCL3
EXREF 77.00 ppm
BF 1.50 Hz
RGAIN 29
XE 28297.2000 Hz
XS -3428.9400 Hz



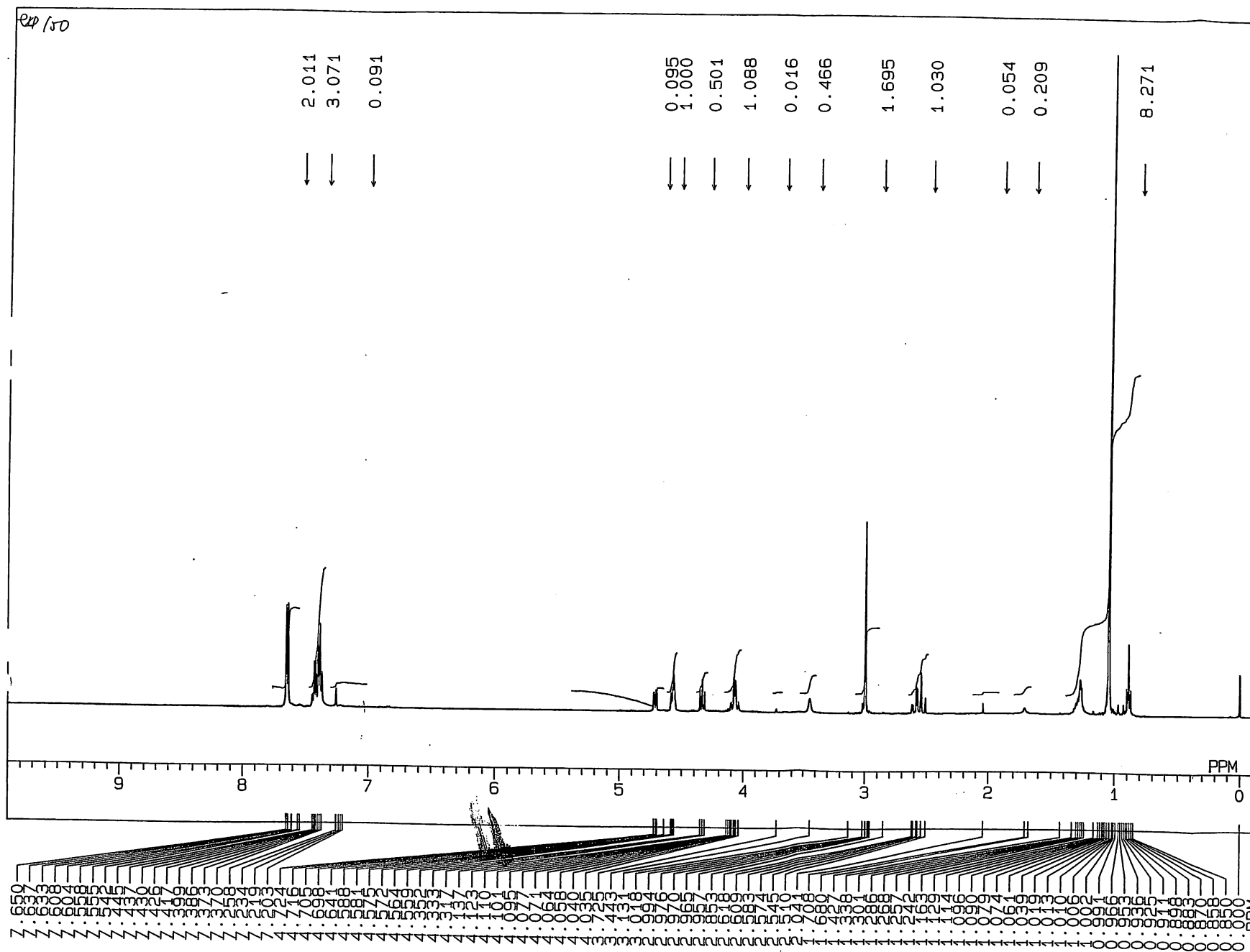
EXP159



21-JAN-05 22: 23: 06
DFILE QCOSY
OBNUC 1H
EXMOD NON
OFR 270.05 MHz
OBSET 112.00 kHz
OBFIN 5800.0 Hz
POINT 32768
FREQU 5405.4 Hz
SCANS 32
ACQTM 3.031 sec
PD 3.969 sec
PW1 5.8 us
IRNUC 1H
CTEMP 21.0 c
SLVNT CDCL3
EXREF 0.00 ppm
BF 0.16 Hz
RGAIN 17
OPERATOR : _____

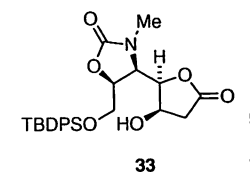


exp 130

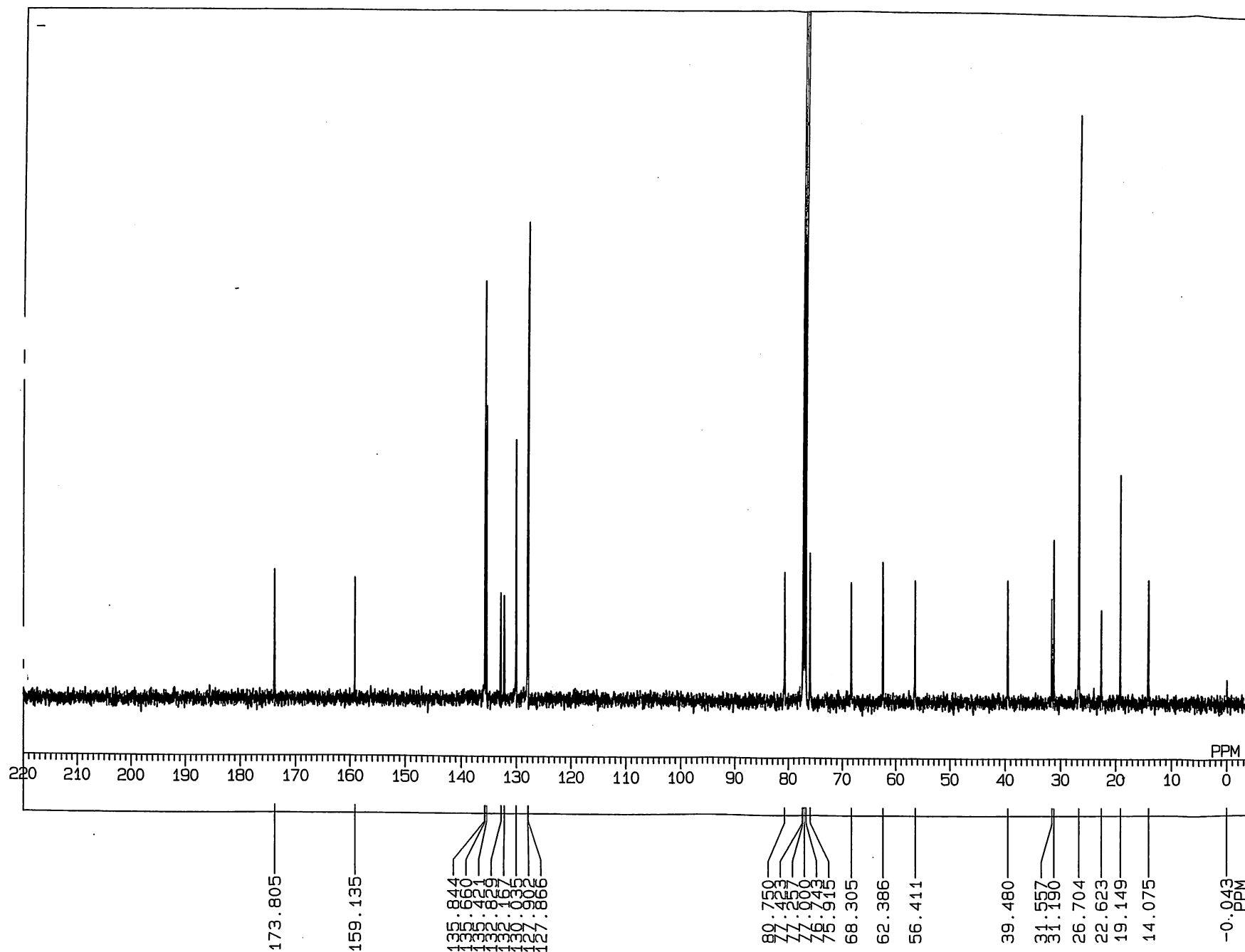


JEOL

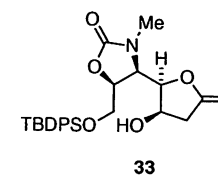
10-JAN-04 00:13:18
DFILE Q1H
COMNT -
EXMOD SGNON
OBNUC 1H
OBFIN 9870.6 Hz
POINT 32768
FREQU 15015.0 Hz
SCANS 16
ACQTM 1.091 sec
PD 3.909 sec
PW1 7.0 us
IRFIN 10157.0 Hz
IRATN 15
IRRPW 60 us
TEMP. 22.0 c
SLVNT CDCL3
EXREF 0.00 ppm
BF 0.46 Hz
RGAIN 14
XE 5001.5990 Hz
XS -498.7588 Hz

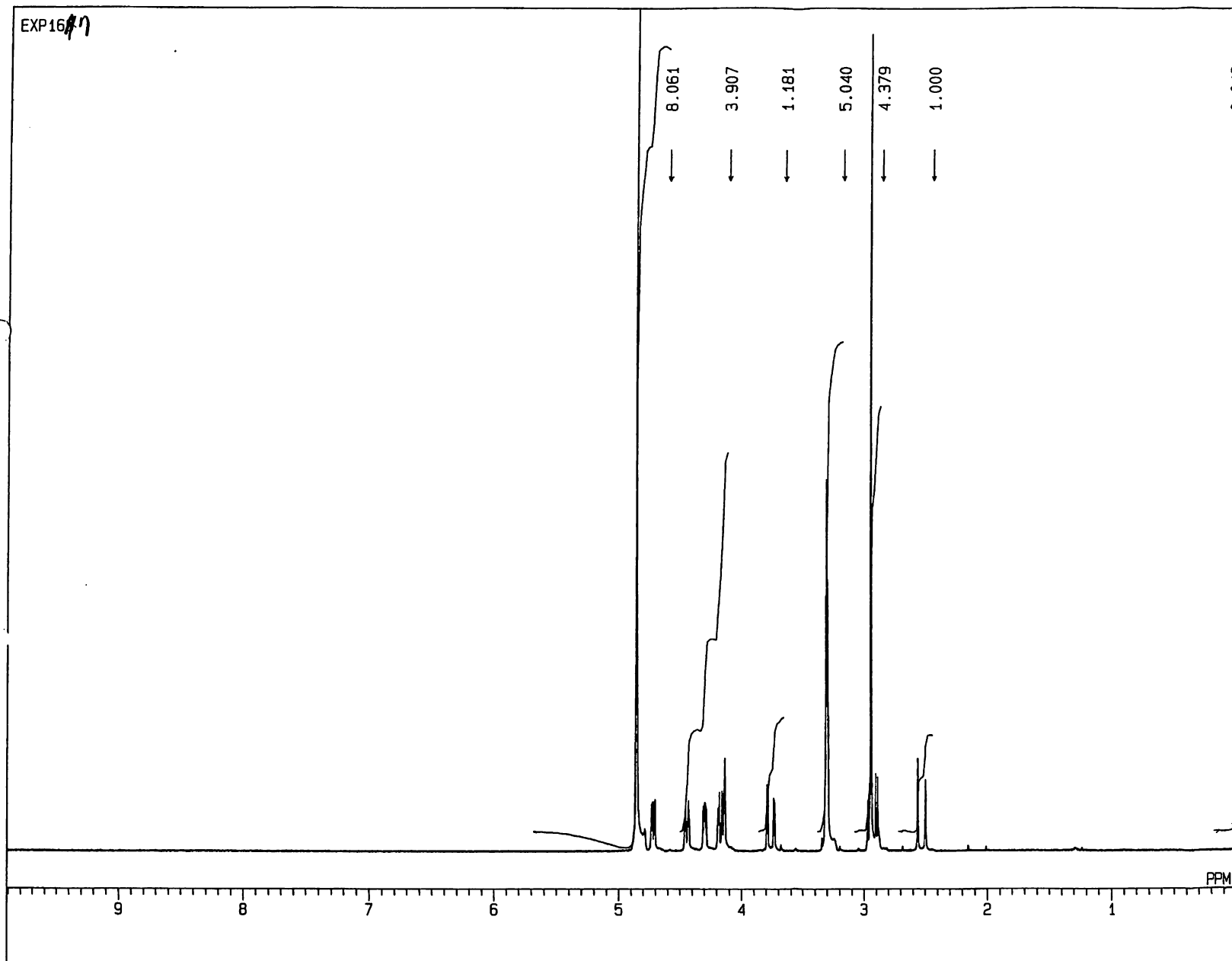


JEOL



10-JAN-04 03: 03: 09
DFILE Q13C
COMNT -
EXMOD S6BCM
OBNUC 13C
OBFIN 10404.0 Hz
POINT 32768
FREQU 37878.8 Hz
SCANS 2405
ACQTM 0.433 sec
PD 1.567 sec
PW1 6.0 us
IRFIN 10157.0 Hz
IRATN 33
IRRPW 50 us
TEMP. 22.0 c
SLVNT CDCL3
EXREF 77.00 ppm
BF 1.50 Hz
RGAIN 30
XE 28297.2000 Hz
XS -3428.9400 Hz





14-FEB-04 18: 21: 05
DFILE NOESY
OBNUC 1H
EXMOD NON
OFR 270.05 MHz
OBSET 112.00 kHz
OBFIN 5800.0 Hz
POINT 32768
FREQU 5405.4 Hz
SCANS 64
ACQTM 3.031 sec
PD 3.969 sec
PW1 5.8 us
IRNUC 1H
CTEMP 23.2 c
SLVNT CD3OD
EXREF 0.00 ppm
BF 0.16 Hz
RGAIN 23
OPERATOR : _____

