

Supporting Information

for

Carbasugar analogues of galactofuranosides: α -O-linked derivatives

Jens Frigell¹ and Ian Cumpstey^{*1,2}

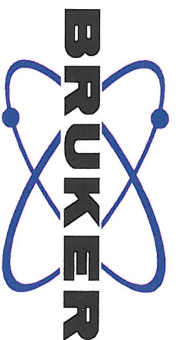
Address: ¹Department of Organic Chemistry, The Arrhenius Laboratory, Stockholm University, Stockholm 106 91, Sweden and ²Institut de Chimie des Substances Naturelles, CNRS, 91198 Gif-sur-Yvette, France, Tel.: +33 (0)1 69 82 30 78; fax: +33 (0)1 69 07 72 47

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NMR spectra for new compounds



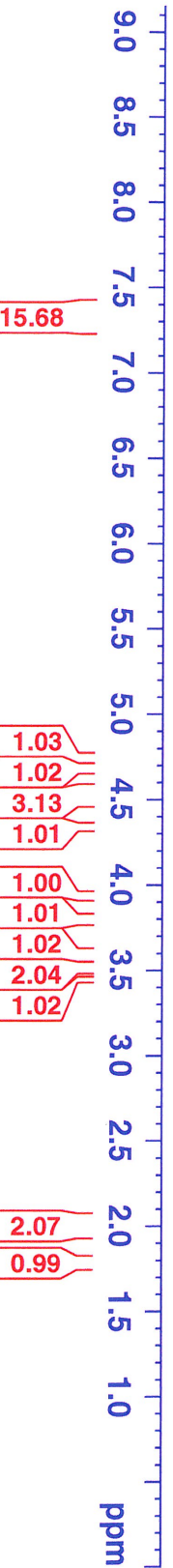
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NAME JF-32-67-Et-9-19-epoxiso
EXPNO 10
PROCNO 1

P2 - Acquisition Parameters
Date_ 2019-08-20
Time 8:20
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SFO1 400.134710 MHz
CD1 1
NS 2
DS 2
SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 60.820 usec
DE 6.50 usec
TE 296.6 K
D1 1.00000000 sec
TD0 1

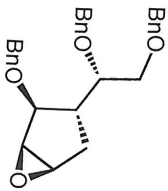
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NUC1 1H
P1 8.90 usec
PL1 -4.00 dB
PL1W 24.73352814 W
SFO1 400.134710 MHz
P2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

7.396
7.393
7.388
7.290
7.287
7.277
7.258

4.751
4.722
4.694
4.664
4.579
4.549
4.535
4.505
4.496
4.466
4.351
4.322
3.943
3.940
3.924
3.921
3.795
3.603
3.587
3.579
3.563
3.534
3.492
3.445
2.061
1.944
1.788
1.781



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Current Data Parameters
NAME JF-32-59-fr-29-42-sectry
EXPNO 10
PROCNO 1

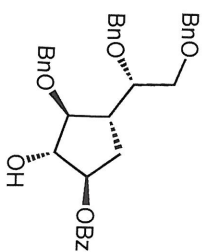
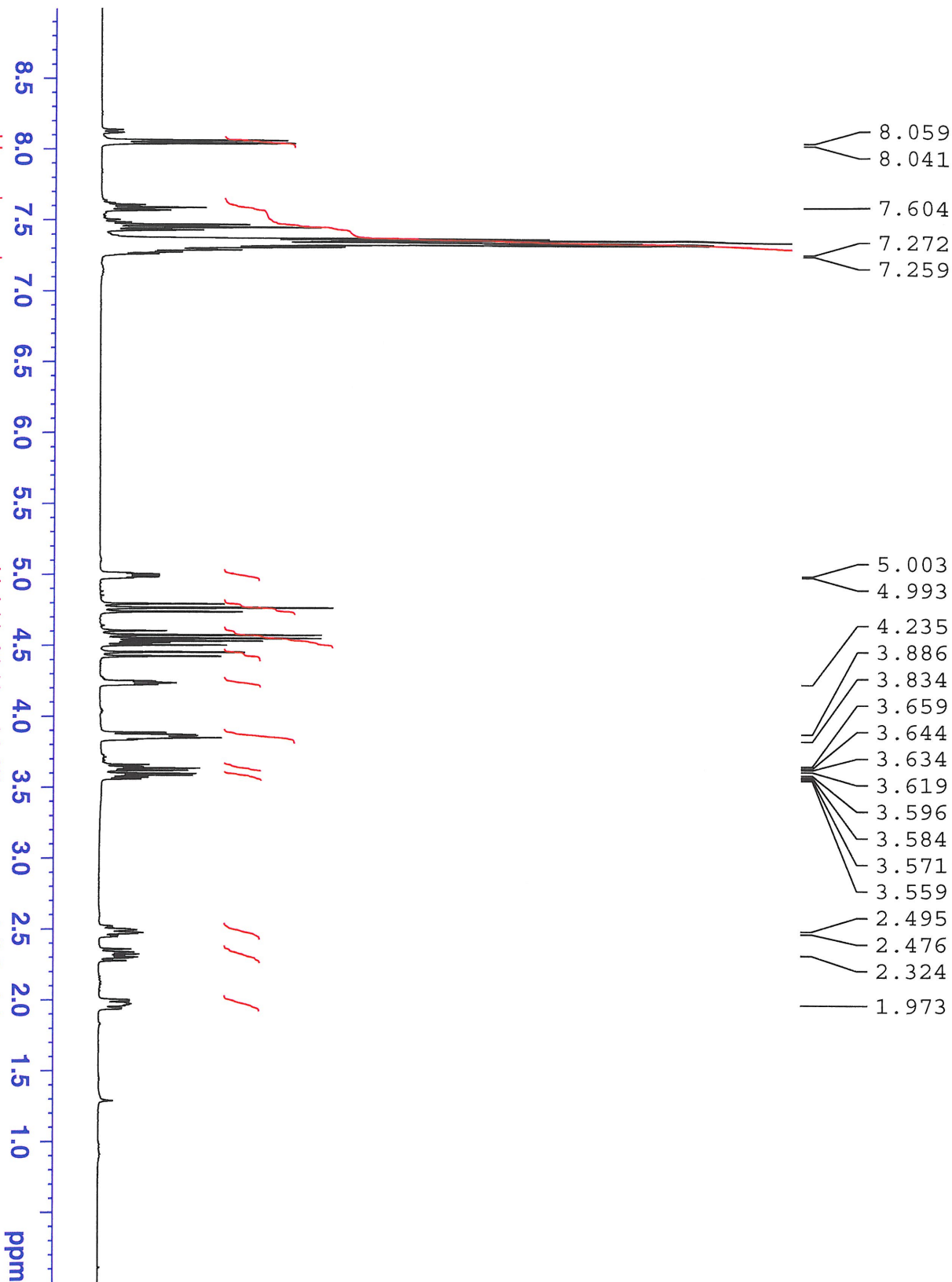
F2 - Acquisition Parameters
Date_ 20091214
Time_ 9.20

INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2

SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 327.44
DE 60.800 usec
TE 297.2 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 8.90 usec
PL1 -4.00 dB
PLW 24.7352814 W
SFO1 400.1324710 MHz

F2 - Processing Parameters
SI 32768
SF 400.1300097 MHz
WDW EM
SSB 0
GB 0.30 Hz
PC 1.00



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Current Data Parameters
NAME JF-32-95-Et-21-38-BsOTao
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20100319
Time 10.50
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SFO 500.132768
RG 16
DS 2
SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 16
SFO 500.132768
DE 60.800 usec
TE 296.9 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 8.90 usec
PL1 -4.00 dB
PL1W 24.7352814 W
SFO1 400.1324710 MHz
F2 - Processing parameters
SI 32768
SF 400.1300091 MHz
WDW EM
SSB 0
GB 0
PC 1.00

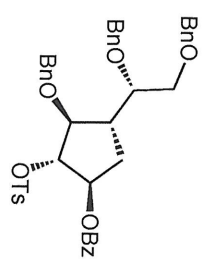
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- 7.792
- 7.771
- 7.604
- 7.480
- 7.460
- 7.441
- 7.269
- 7.260
- 7.115
- 7.095
- 5.159
- 4.697
- 4.669
- 4.526
- 4.495
- 4.458
- 4.428
- 4.355
- 4.345
- 4.327
- 4.315
- 4.067
- 4.054
- 4.045
- 4.032
- 3.756
- 3.748
- 3.573
- 3.559
- 3.549
- 3.534
- 3.457
- 3.444
- 3.432
- 3.419
- 2.437
- 2.416
- 2.227
- 1.739
- 1.734
- 1.719
- 1.714
- 1.704
- 1.699
- 1.683
- 1.678

9.0 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 2.0 1.5 1.0 ppm

- 2.06
- 2.05
- 1.10
- 2.27
- 15.96
- 2.10

- 2.00
- 2.01
- 2.20
- 1.97
- 1.00
- 1.00
- 1.02
- 0.99

- 1.05
- 4.09
- 0.02
- 1.13



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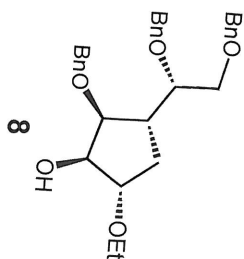
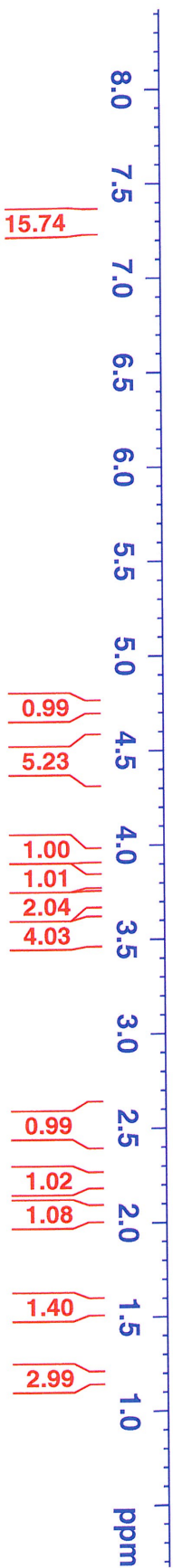


- 7.347
- 7.344
- 7.340
- 7.321
- 7.316
- 7.278
- 7.271
- 7.268
- 7.255
- 4.752
- 4.723
- 4.562
- 4.532
- 4.507
- 4.476
- 4.469
- 4.441
- 4.429
- 4.399
- 4.380
- 4.351
- 3.946
- 3.937
- 3.827
- 3.813
- 3.808
- 3.795
- 3.728
- 3.719
- 3.714
- 3.711
- 3.701
- 3.607
- 3.591
- 3.582
- 3.566
- 3.539
- 3.533
- 3.526
- 3.522
- 3.515
- 3.504
- 3.501
- 3.498
- 2.036
- 1.579
- 1.571
- 1.201
- 1.184
- 1.166

Current Data Parameters
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EXPNO 10
PROCNO 1

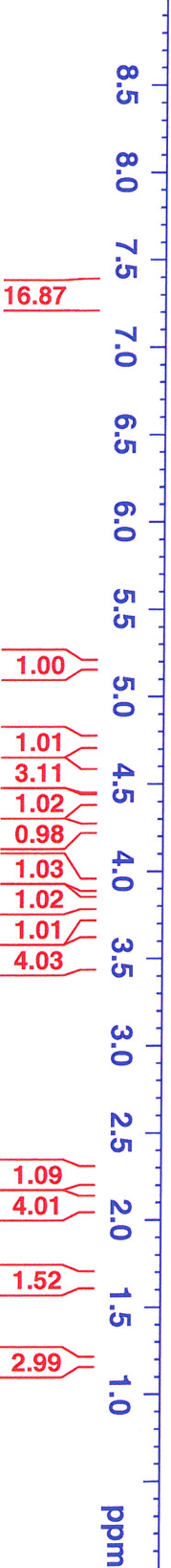
F2 - Acquisition Parameters
Date_ 20091216
Time 18:11
INSTRUM spect
PROBHD 5 mm PAEBO BB-
PULPROG zg30
TD 65536
FIDRES 0.224685 Hz
AQ 3.9846387 sec
RG 362
DE 60.800 usec
TE 297.2 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 8.90 usec
PL1 -4.00 dB
PL1W 24.7352814 W
SFO1 400.1324710 MHz
F2 - Processing parameters
SI 32768
SF 400.1300093 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

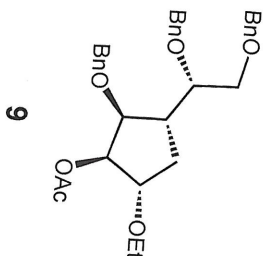


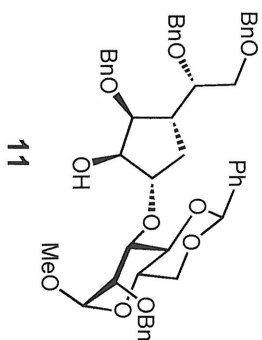
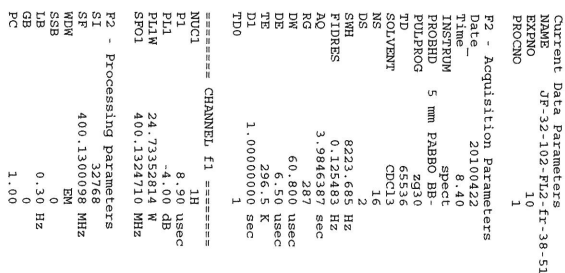


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7.253
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5.179
5.174
5.166
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4.726
4.568
4.537
4.511
4.499
4.481
4.471
4.423
4.394
4.260
4.231
3.937
3.925
3.916
3.903
3.815
3.811
3.759
3.745
3.603
3.464
2.272
2.263
2.248
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2.078
1.686
1.672
1.661
1.653
1.647
1.638
1.628
1.613
1.204
1.187
1.169



Current Data Parameters
NAME JP-32-42-4c-7-11-Acetylated
EXPNO 10
PROCNO 1
F2 - Acquisition Parameters
Date_ 20091106
Time 5.21
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8223.682 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 406
GB 3200
DB 6.50 usec
TE 297.2 K
D1 1.00000000 sec
TD0 1
===== CHANNEL f1 =====
NUC1 1H
P1 8.90 usec
PL1 4.00 dB
PR1 24.735840
SFO1 400.1324710 MHz
F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00







Current Data Parameters
NAME JF-38-19-acetylation
EXPNO 10
PROCNO 10

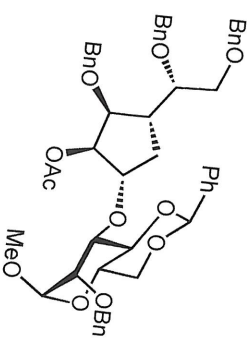
F2 - Acquisition Parameters
Date_ 20100823
Time 2:24

INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 0
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 161
RM 62.400 usec
DM 2893.7
DE 2.00000000 sec
TD0 1

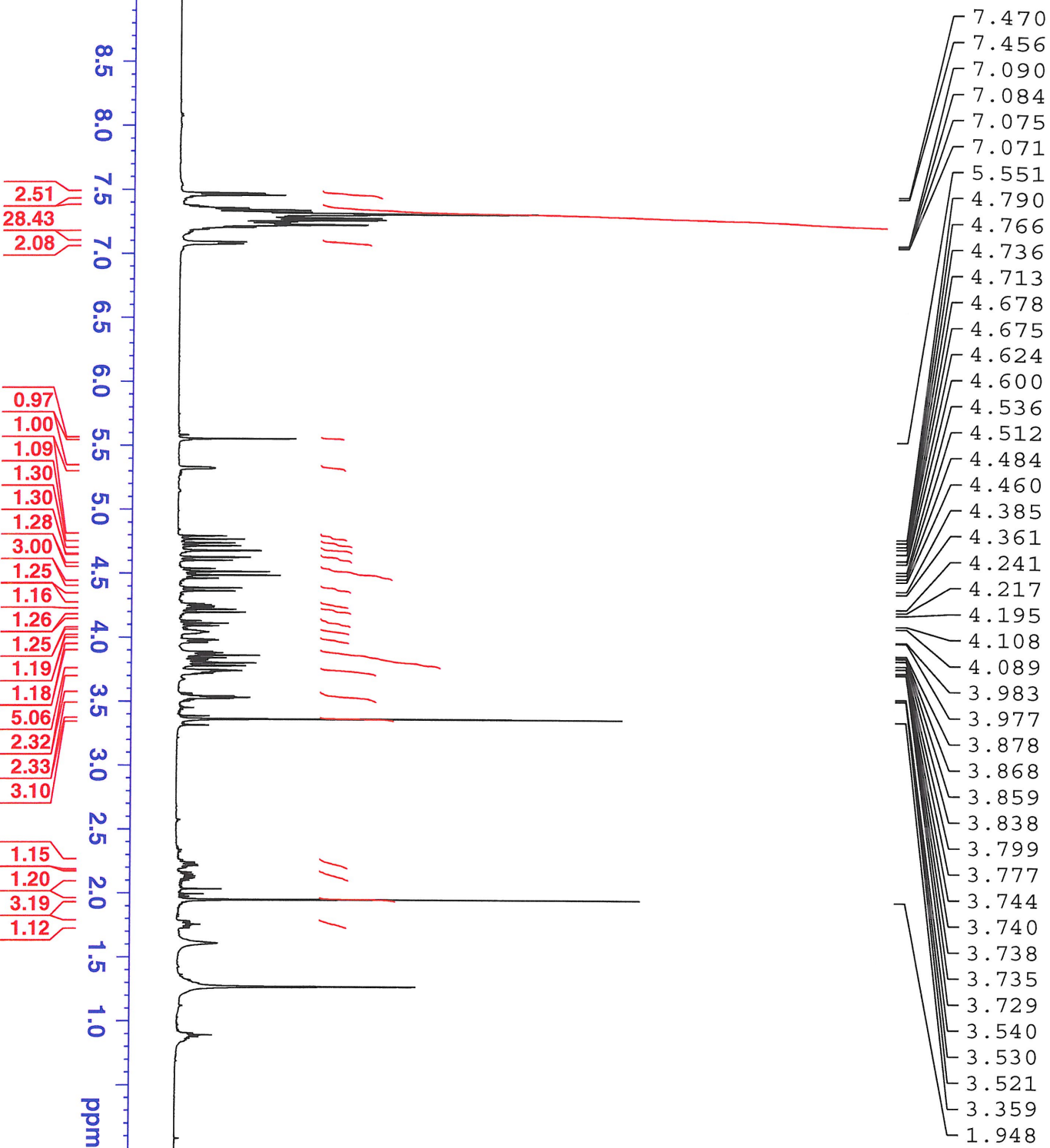
===== CHANNEL f1 =====

MVCL 1H
P1 11.80 usec
PL1 2.00 dB
PL1W 15.76968765 W
SFO1 500.1325007 MHz

F2 - Processing parameters
SI 32768
SF 500.130133 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



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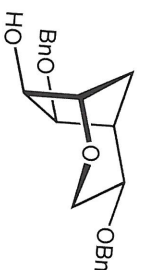
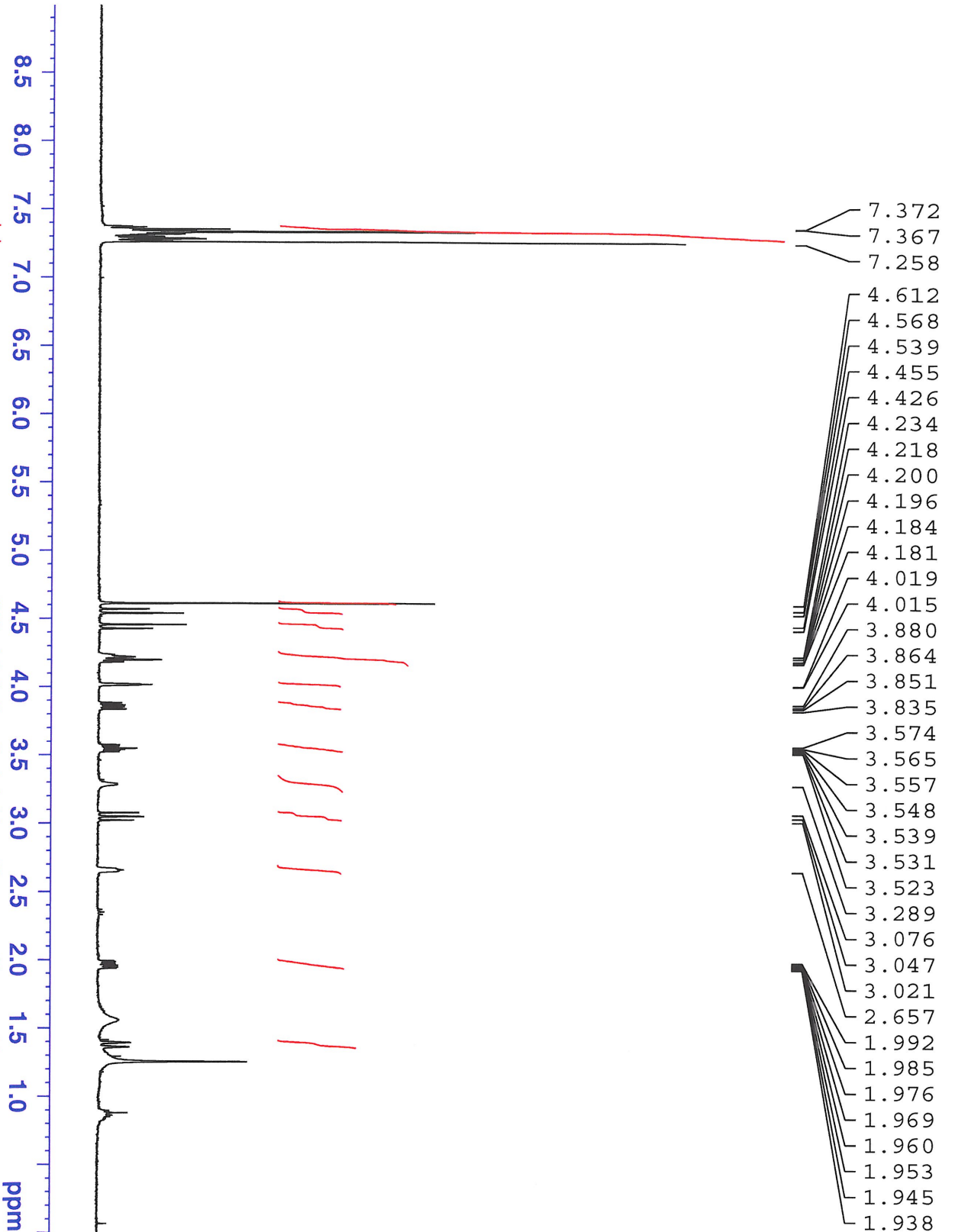




Current Data Parameters
NAME UF-32-102-F127-27-34
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20100422
Time 8.34
INSTRUM spect
PROBHD 5 mm PABBO
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.422485 Hz
AQ 3.384637 sec
RG 512
DM 60.800 usec
DE 6.50 usec
TE 296.4 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 8.30 usec
PL1 -4.00 dB
PL1W 24.73352814 W
SFO1 400.1324710 MHz
F2 - Processing parameters
SI 32768
SF 400.130103 MHz
WDW EM
SSB 0
LB 0.00 Hz
GB 0
PC 1.00



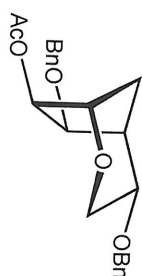
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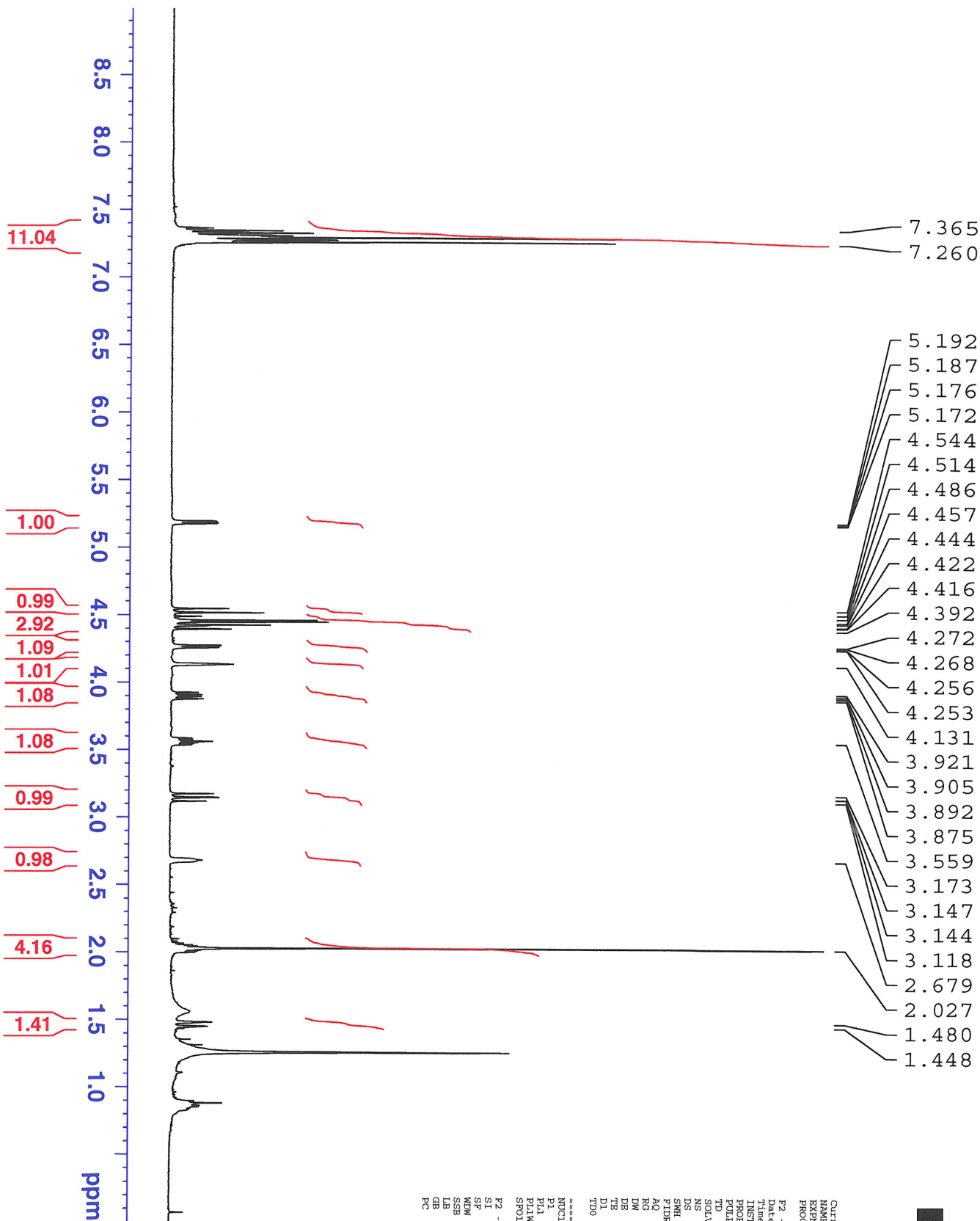
Current Data Parameters
NAME QF-32-104-acetylation
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20100423
Time 5.37
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 456
RW 60.800 usec
DM 14.650 usec
TE 296.7 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 8.90 usec
PL1 -4.00 dB
P1M 24.7332814 W
SFO1 400.1324710 MHz
F2 - Processing parameters
SI 32768
SF 400.130096 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



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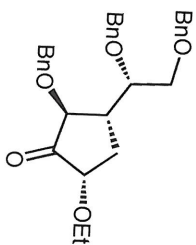
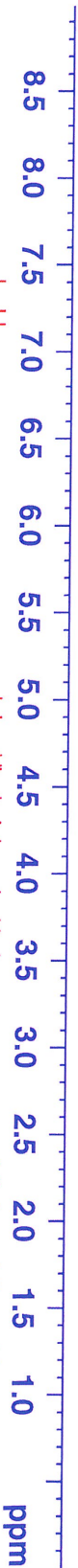


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7.276
7.271
7.263
7.260
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7.249
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7.211
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4.946
4.663
4.634
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4.516
4.487
4.251
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3.659
3.541
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2.249
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1.250
1.232
1.215

Current Data Parameters
NAME UF-32-63-fr-6-13-swem
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20091217
Time 13.26
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.173548 Hz
AQ 3.9846387 sec
RG 60.800 usec
DE 6.50 usec
TE 297.4 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 8.90 usec
PL1 -4.00 dB
PL1W 24.73352814 W
SFO1 400.1324710 MHz
F2 - Processing parameters
SF 400.1300096 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

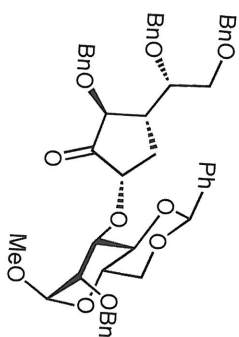
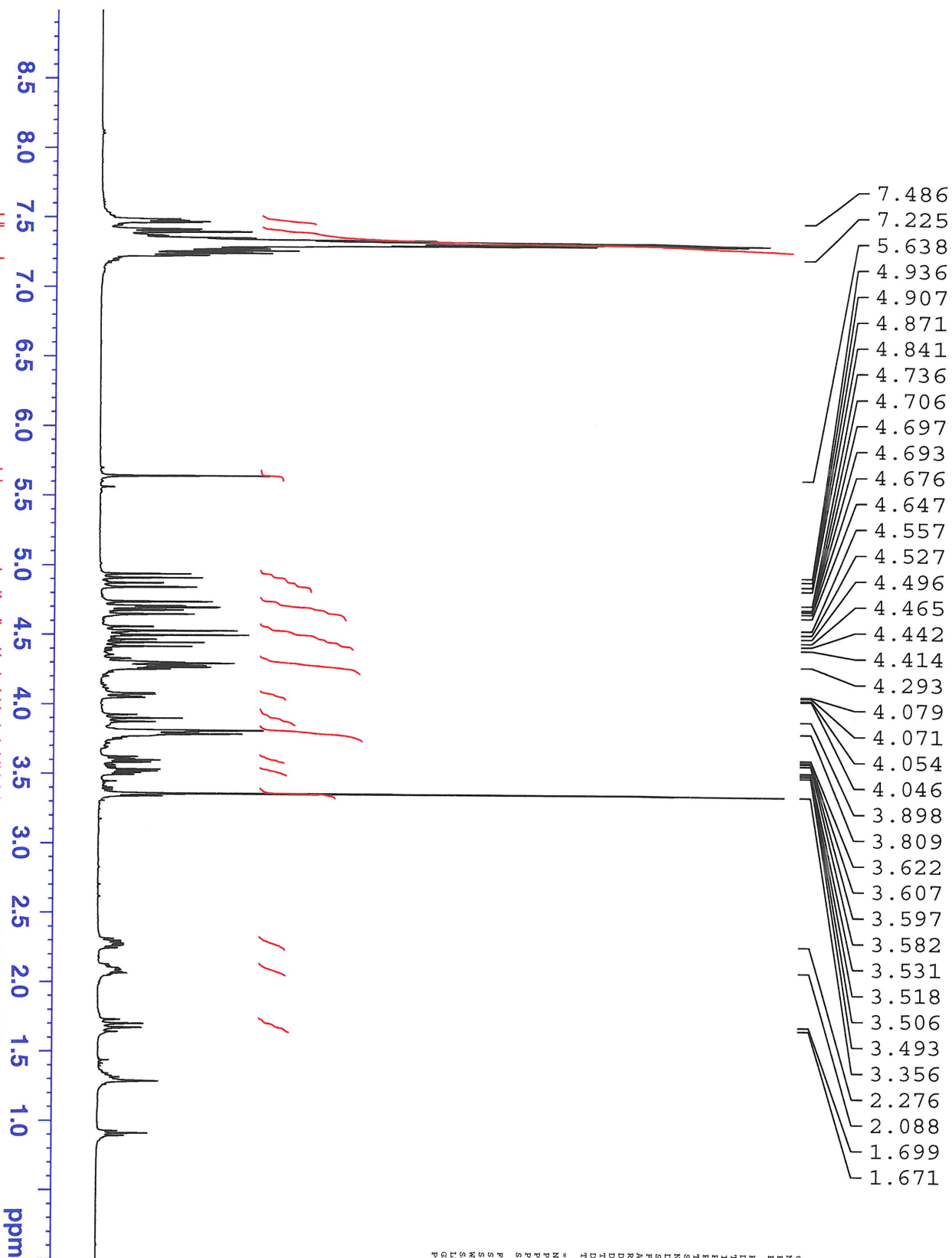




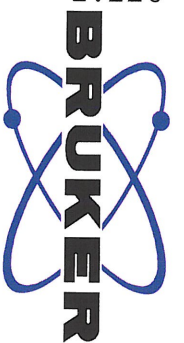
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 PROBHD 5 mm PABBO BB-
 PULPROG zgpg30
 SOLVENT CDCl3
 NS 16
 DS 2
 SWH 6233.445 Hz
 FIDRES 0.133445 Hz
 AQ 3.984387 sec
 RG 128
 IN 60.800 usec
 DE 19.000 usec
 TE 297.0 K
 D1 1.00000000 sec
 TD0 1

===== CHANNEL f1 =====
 NUC1 1H
 P1 8.90 usec
 PL1 0.00 dB
 PL1W 24.713244 dB
 SFO1 400.124710 MHz

F2 - Processing parameters
 SF 400.130093 MHz
 WDW EM
 SSB 0
 GB 0.30 Hz
 PC 1.00



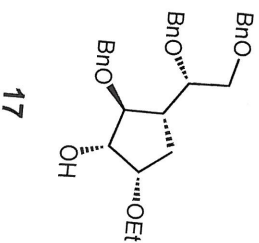
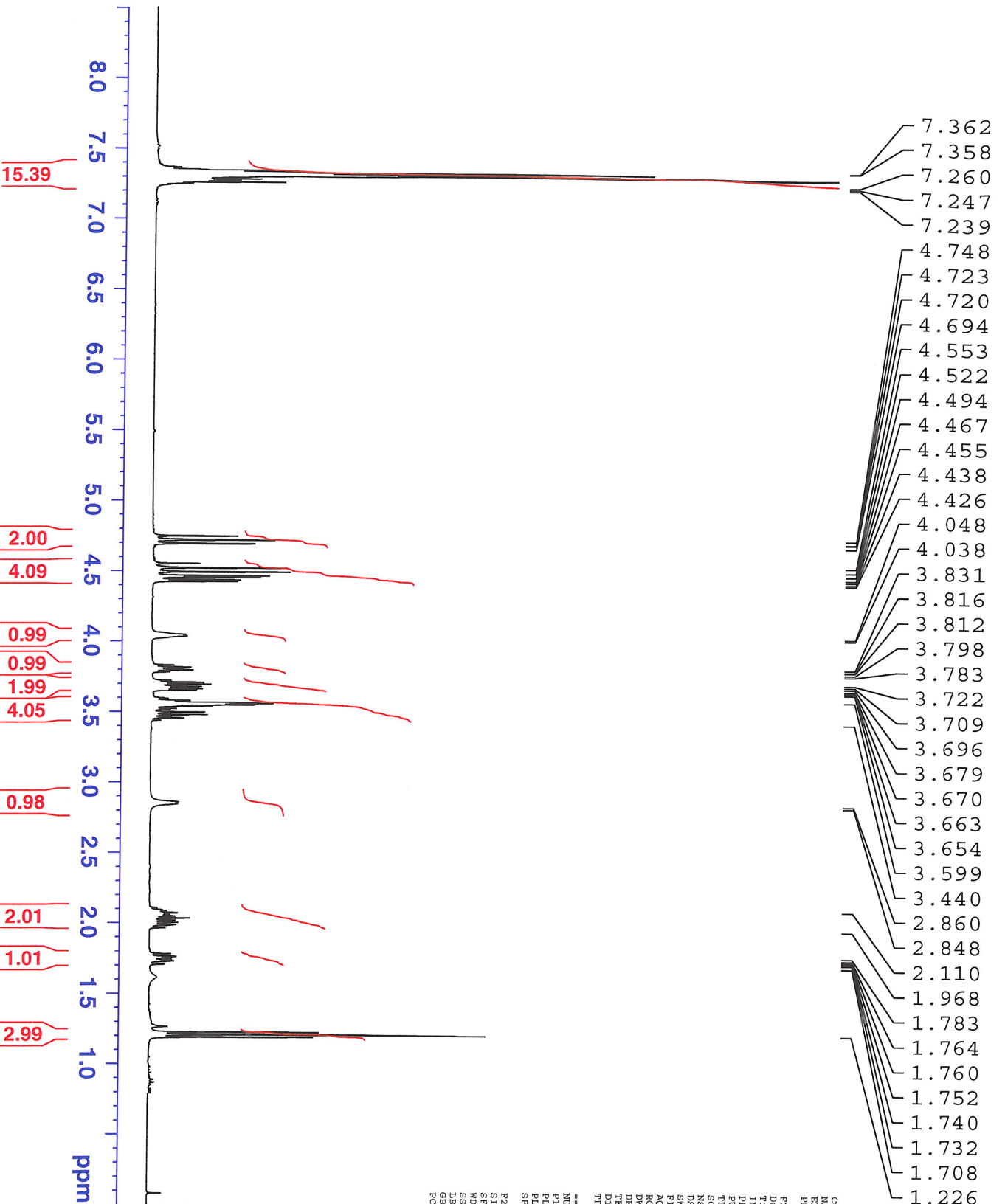
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Current Data Parameters
NAME JF-32-98-fr-11-15-gn1f
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20100323
Time 3.06
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 32000
FIDRES 0.12548142
AQ 3.9846387 sec
RG 228
DM 60.800 usec
DE 6.50 usec
TE 296.7 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 8.90 usec
PL1 -4.00 dB
PL1W 24.73352814 W
SFO1 400.1324710 MHz
F2 - Processing parameters
SI 32768
SF 400.1300997 MHz
WDW EM
SSB 0
LB 0.60 Hz
GB 0
PC 1.00





Current Data Parameters
NAME JF-32-106-Fl2-It-33-49
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20100909
Time_ 6:50
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 1
SWH 8223.682 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 101
DW 60.800 usec
DE 6.50 usec
TE 297.0 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 8.90 usec
PL1 -4.00 dB
PL1W 24.73352814 W
SFO1 400.1324710 MHz
F2 - Processing Parameters
SI 32768
SF 400.1300116 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

