Supporting Information

For

Synthesis of a Comprehensive Polyprenol Library for Evaluation of Bacterial Enzyme Lipid Substrate Specificity

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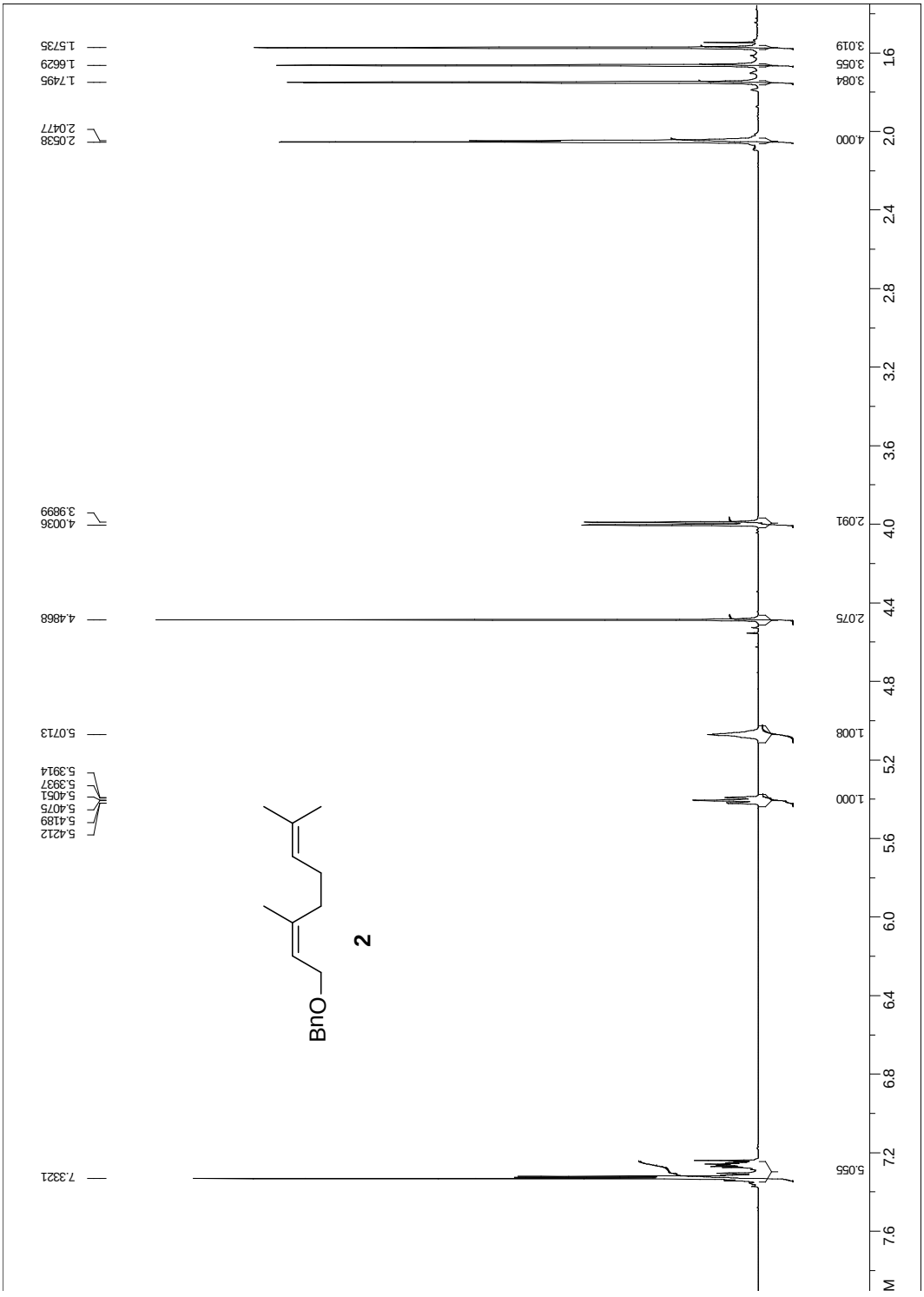
Compound **2**	P 3,4
Compound **4**	P 5, 6
Compound **6**	P 7, 8
Compound **7**	P 9, 10
Compound **8**	P 11, 12
Compound **9**	P 13, 14
Compound **10**	P 15, 16
Compound **12**	P 17, 18
Compound **14**	P 19, 20
Compound **15**	P 21, 22
Compound **16**	P 23, 24
Compound **18**	P 25, 26
Compound **20**	P 27, 28
Compound **22**	P 29, 30
Compound **24**	P 31, 32
Compound **25**	P 33, 34
Compound **26**	P 35, 36
Compound **27**	P 37, 38
Compound **28**	P 39, 40
Compound **29**	P 41, 42
Compound **30**	P 43, 44
Compound **31**	P 45, 46, 47
Compound **32**	P 48, 49, 50
Compound **33**	P 51, 52, 53
Compound **34**	P 54, 55, 56
Compound **35**	P 57, 58, 59
Compound **36**	P 60, 61, 62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5.3914
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2.0477
1.7495
1.6629
1.5735
5.055
1.000
1.008
2.075
2.091
4.000
3.019
3.055
3.084
M
7.6
7.2
6.8
6.4
6.0
5.6
5.2
4.8
4.4
4.0
3.6
3.2
2.8
2.4
2.0
1.6
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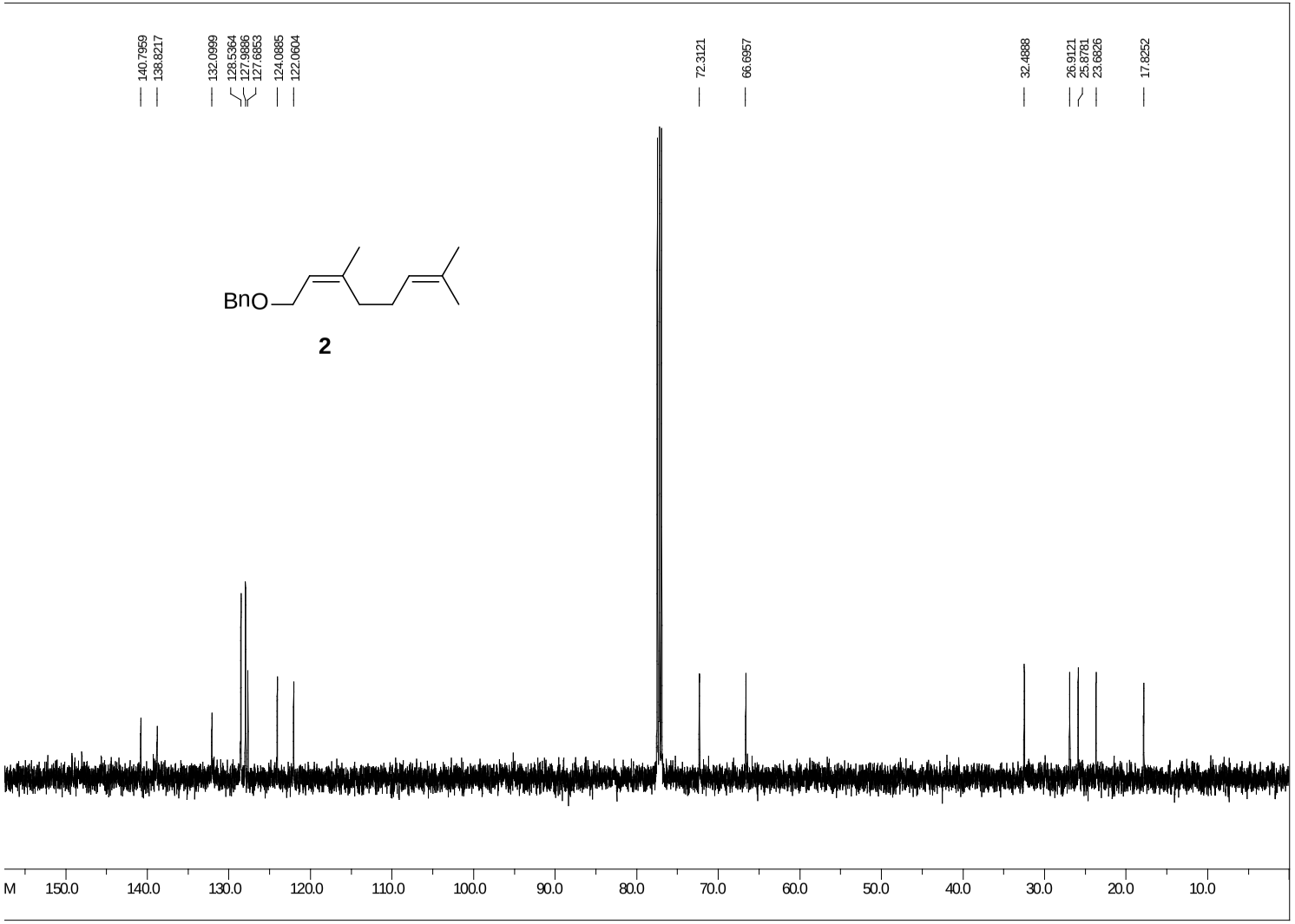

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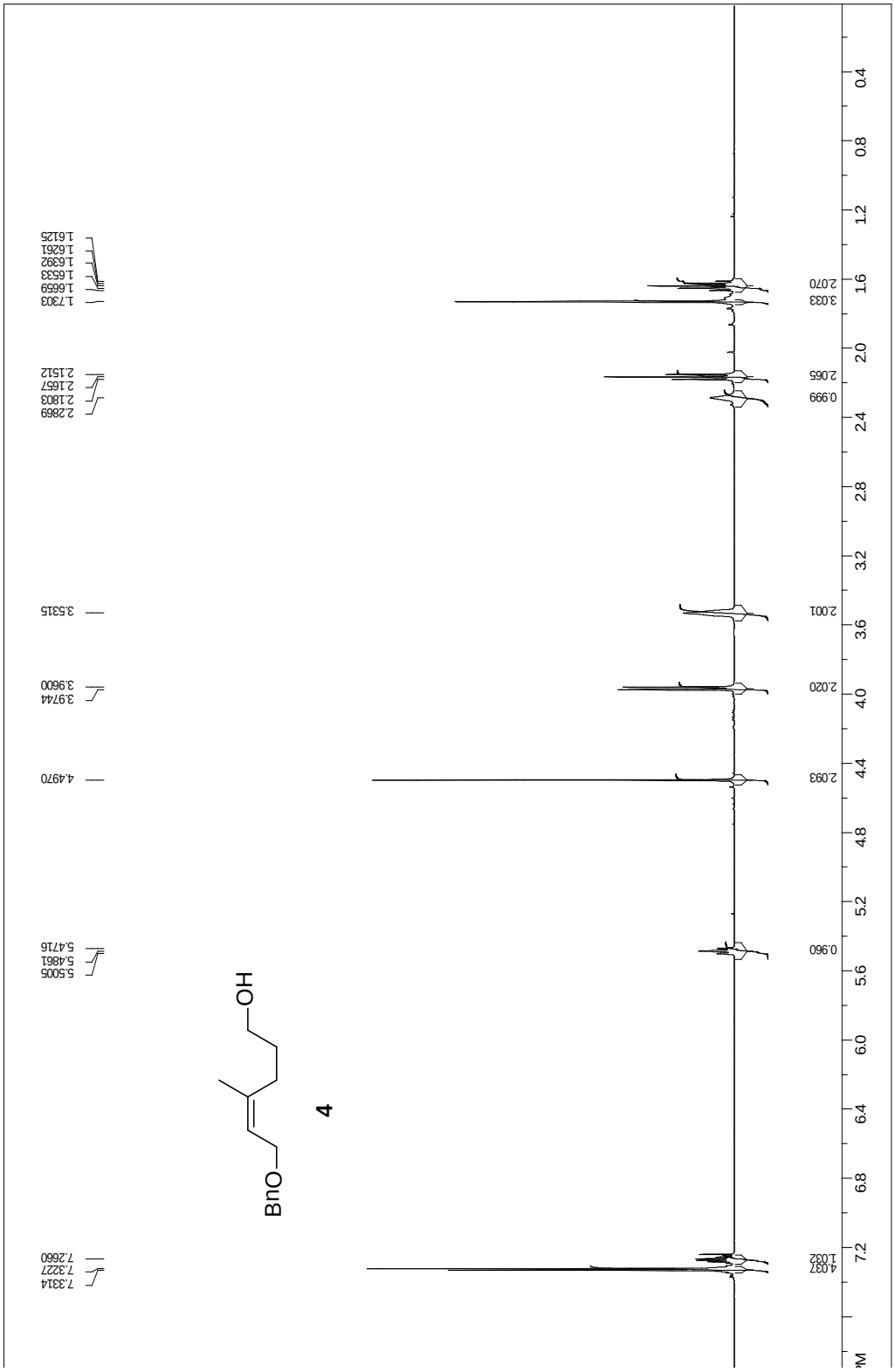
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2.1803
2.1657
2.1512
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1.6659
1.6533
1.6392
1.6261
1.6125
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2.093
2.020
2.001
0.999
2.065
3.033
2.070
OH
BnO
4
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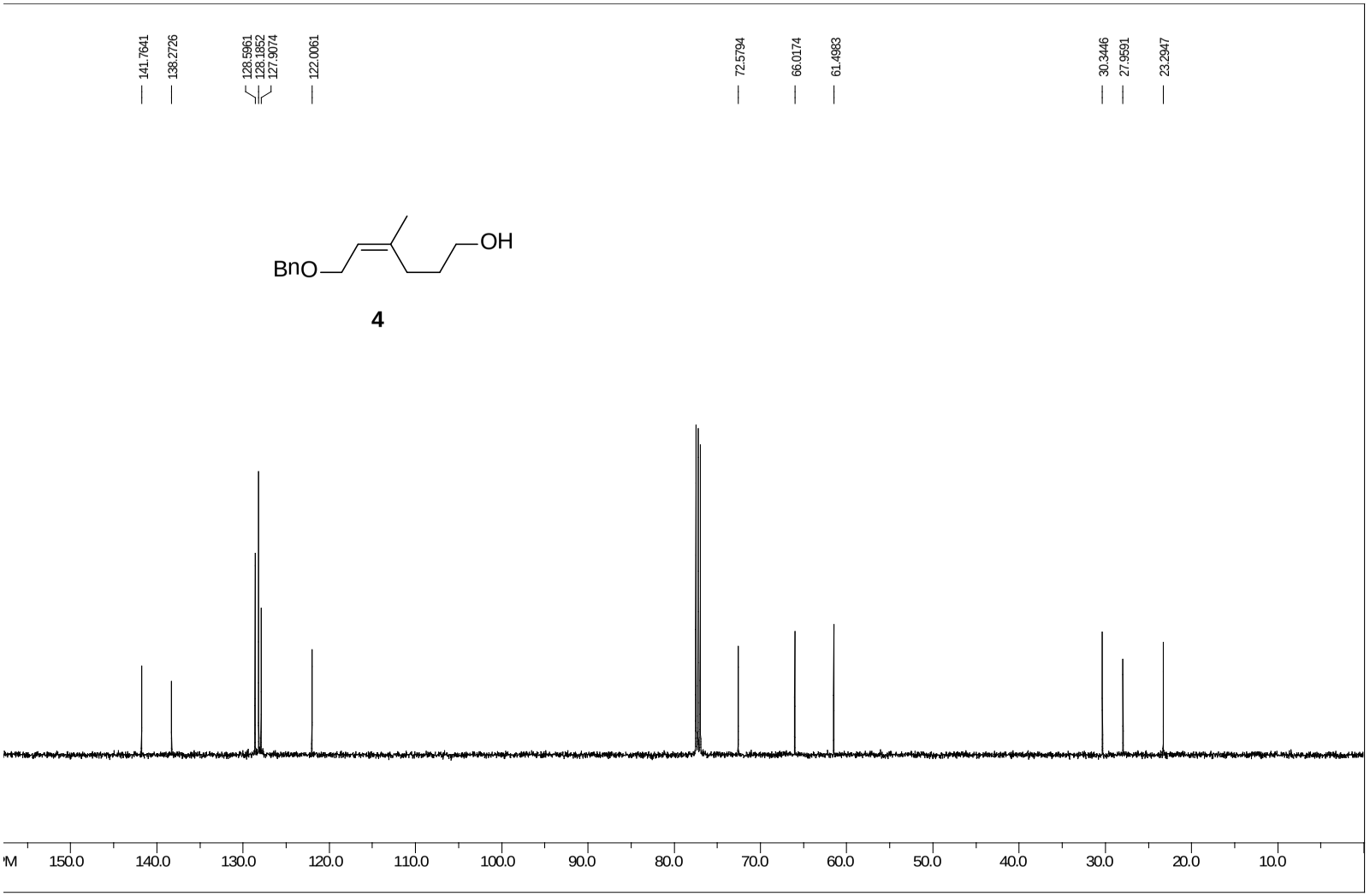

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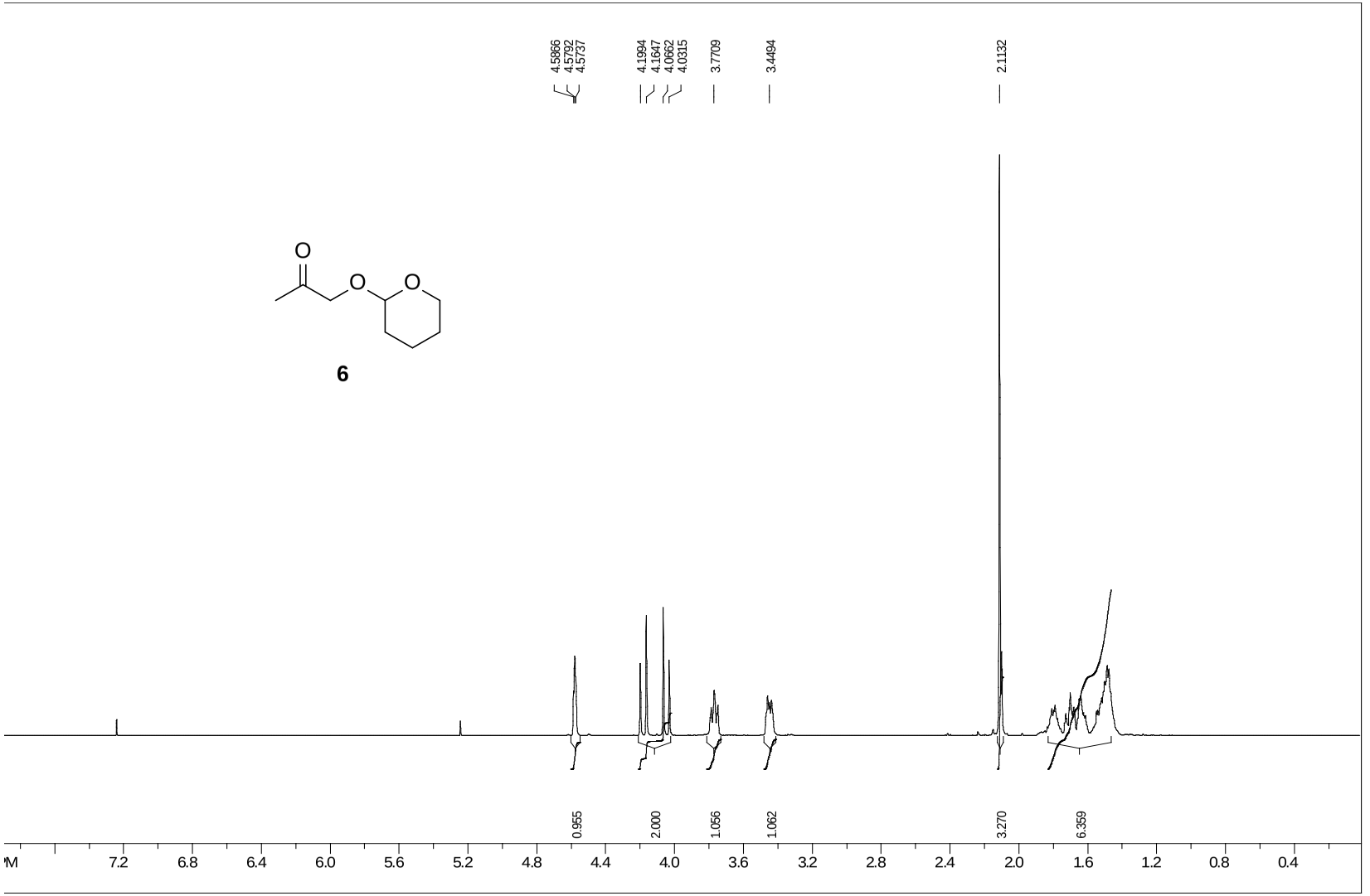

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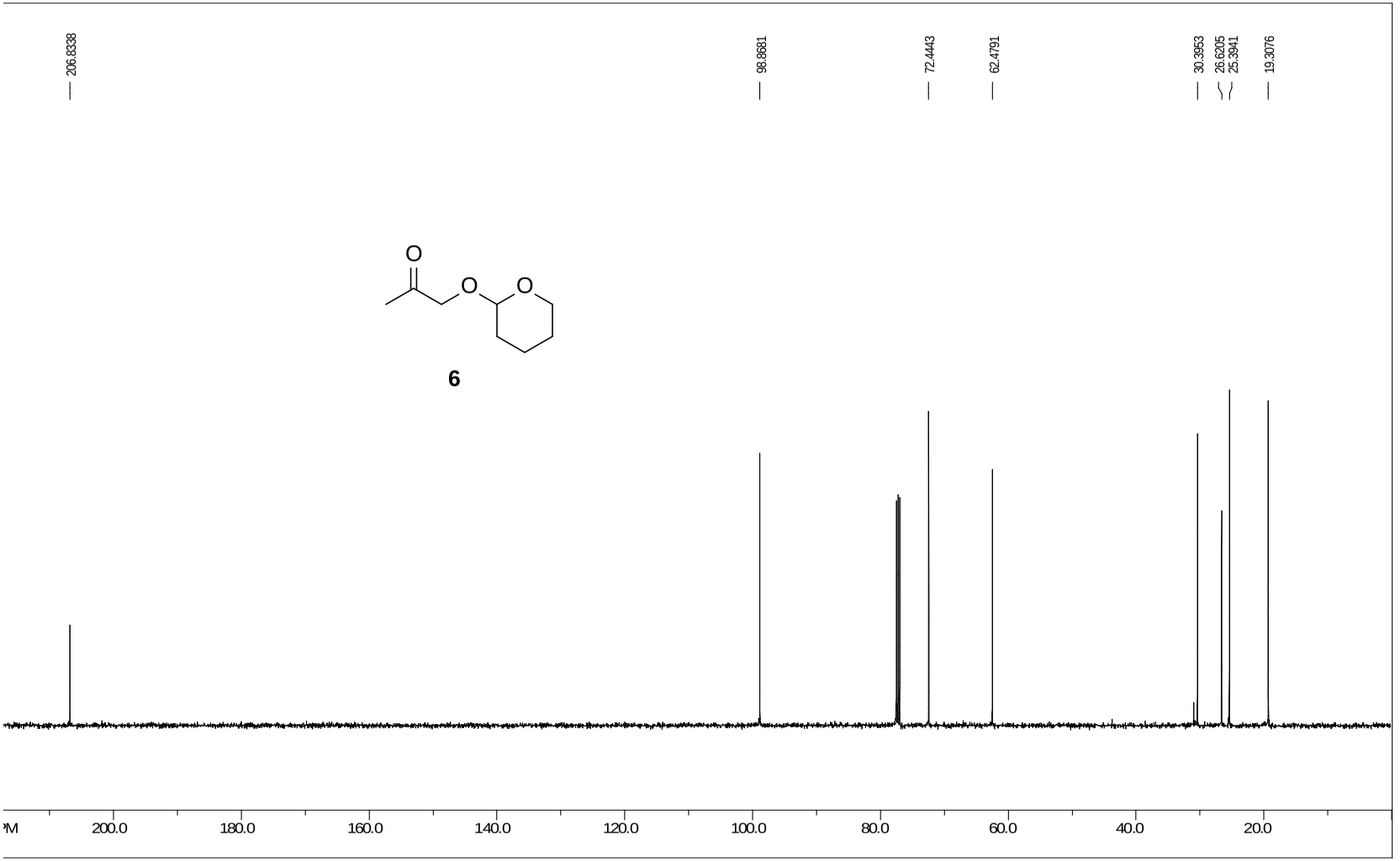

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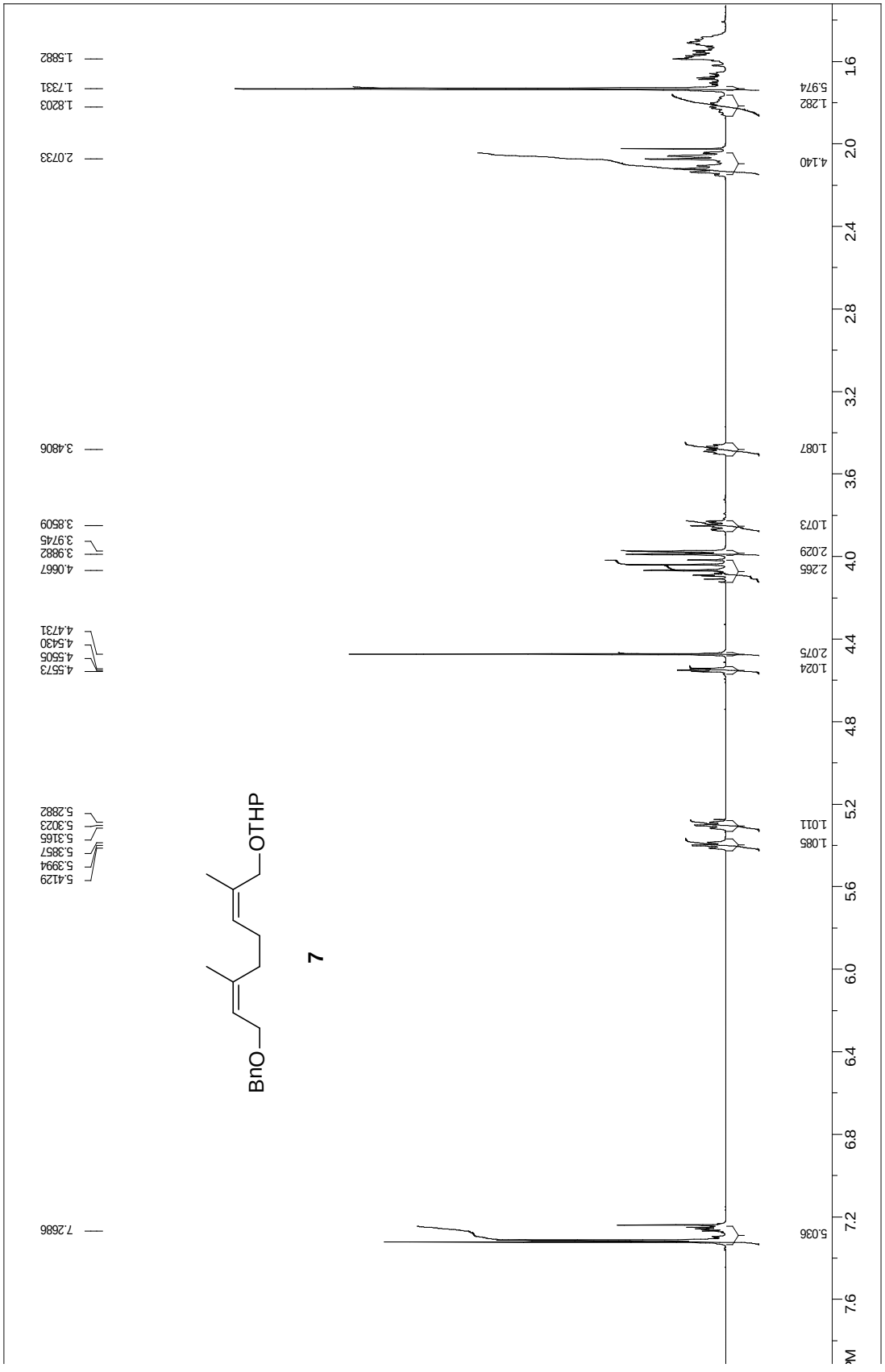
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4.4731
4.0667
3.9882
3.9745
3.8509
3.4806
2.0733
1.8203
1.7331
1.5882
5.036
1.085
1.011
2.075
1.024
2.265
2.029
1.073
1.087
4.140
1.282
5.974
OTHP
BnO
7
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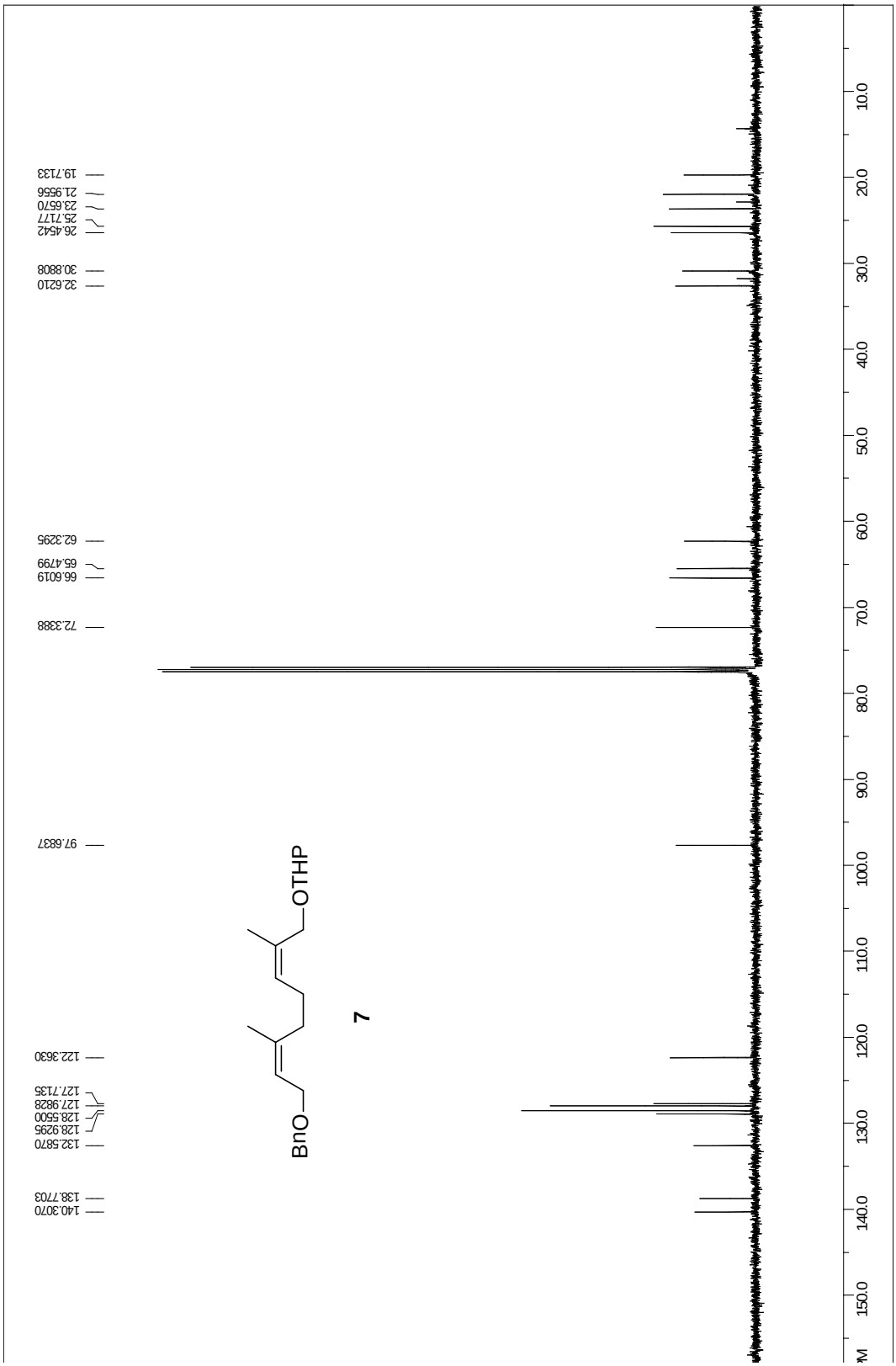
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97.6837
122.3630
127.7135
127.9828
128.5500
128.9295
132.5870
138.7703
140.3070
BnO
OTHP
7
150.0
140.0
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
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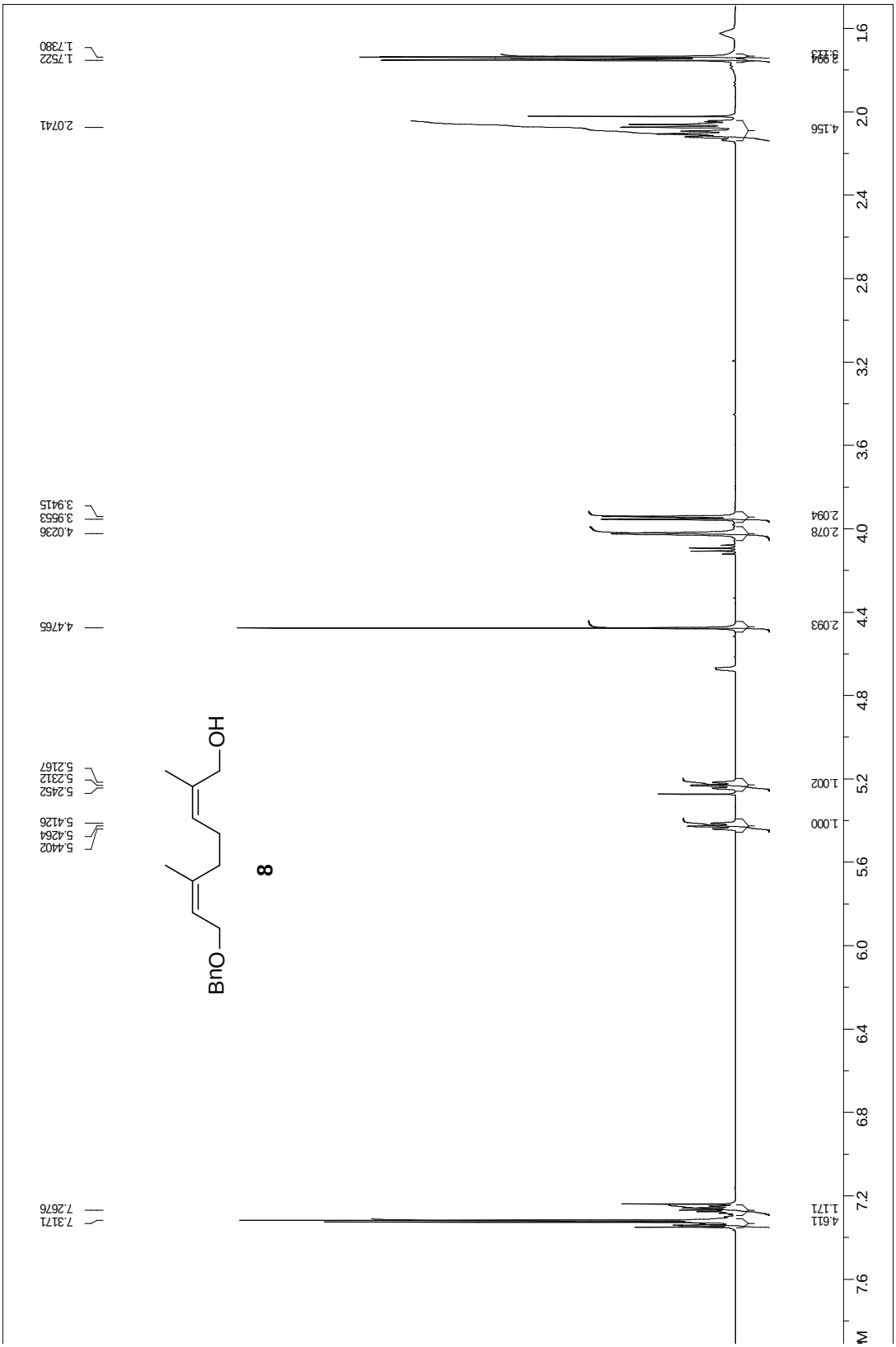
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3.9415
2.0741
1.7522
1.7380
4.611
1.171
1.000
1.002
2.093
2.094
2.078
4.156
2.994
3.113
OH
BnO
8
7.6
7.2
6.8
6.4
6.0
5.6
5.2
4.8
4.4
4.0
3.6
3.2
2.8
2.4
2.0
1.6
M
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processed size: 32768 complex points
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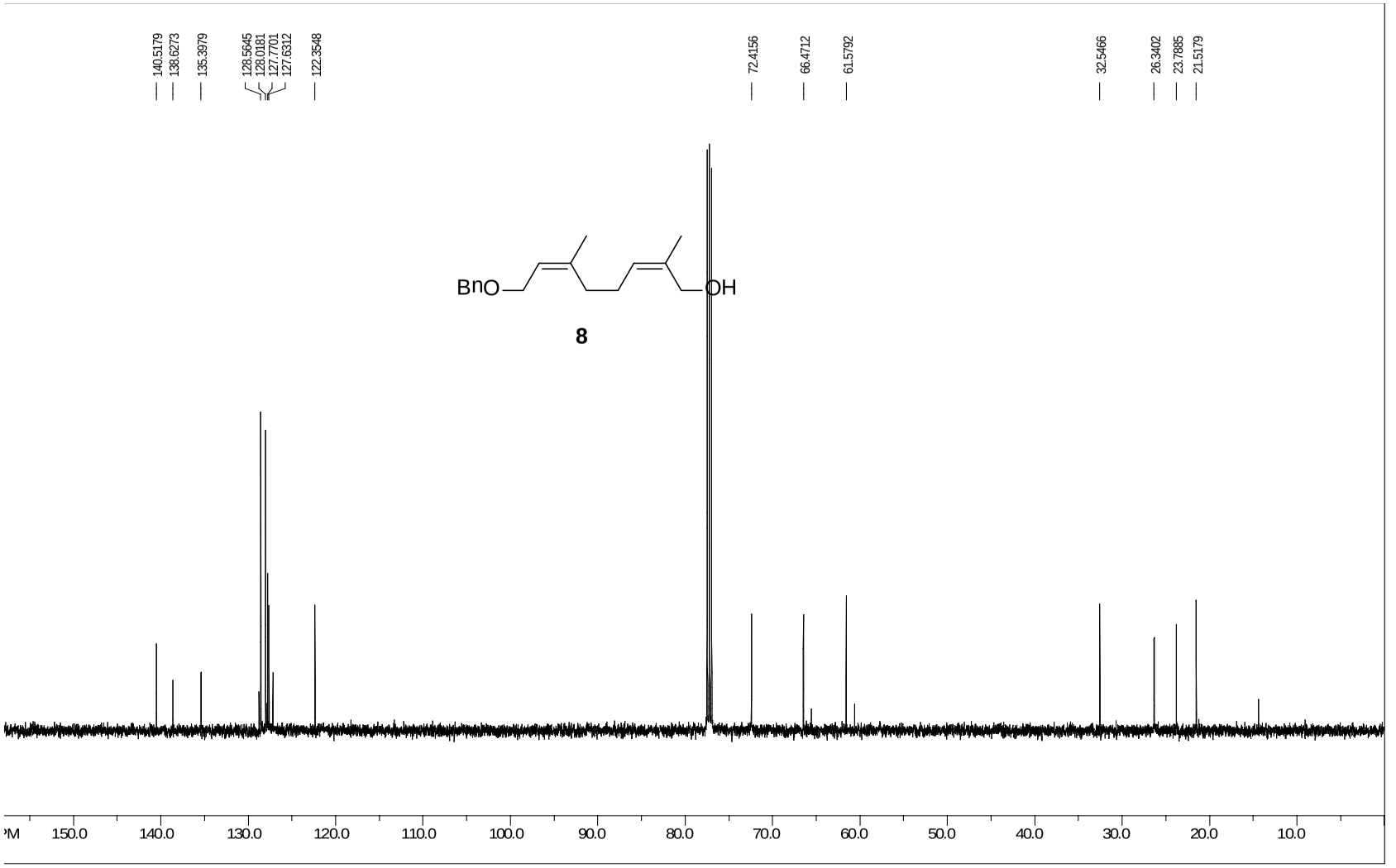
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32.5466
26.3402
23.7885
21.5179
BnO
OH
8
150.0
140.0
130.0
120.0
110.0
100.0
90.0
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70.0
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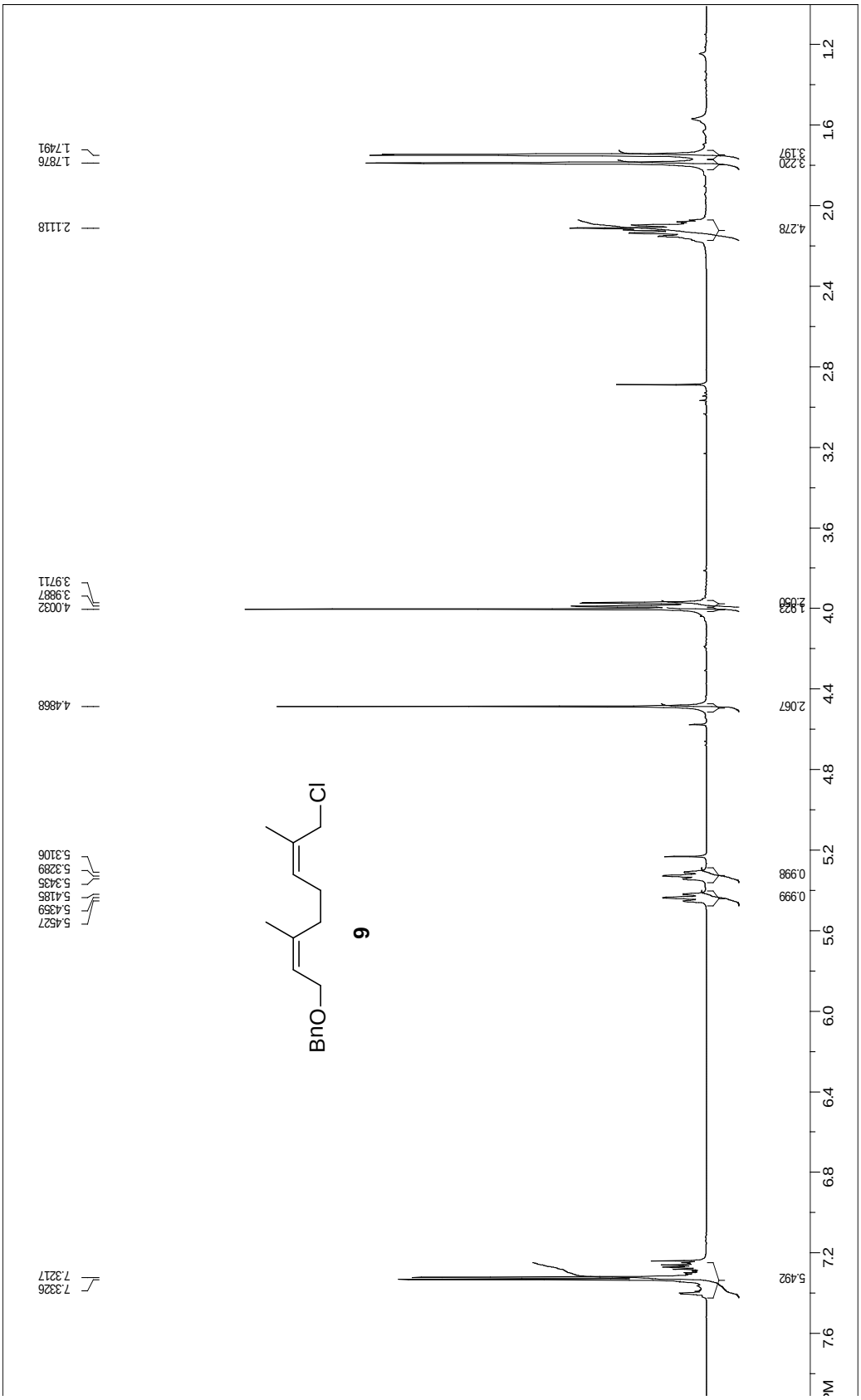
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4.0032
3.9887
3.9711
2.1118
1.7876
1.7491
5.492
0.998
0.999
2.067
4.278
3.220
3.197
2.050
1.923
BnO
Cl
9
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width: 8278.15 Hz = 20.688513 ppm = 0.252629 Hz/pt
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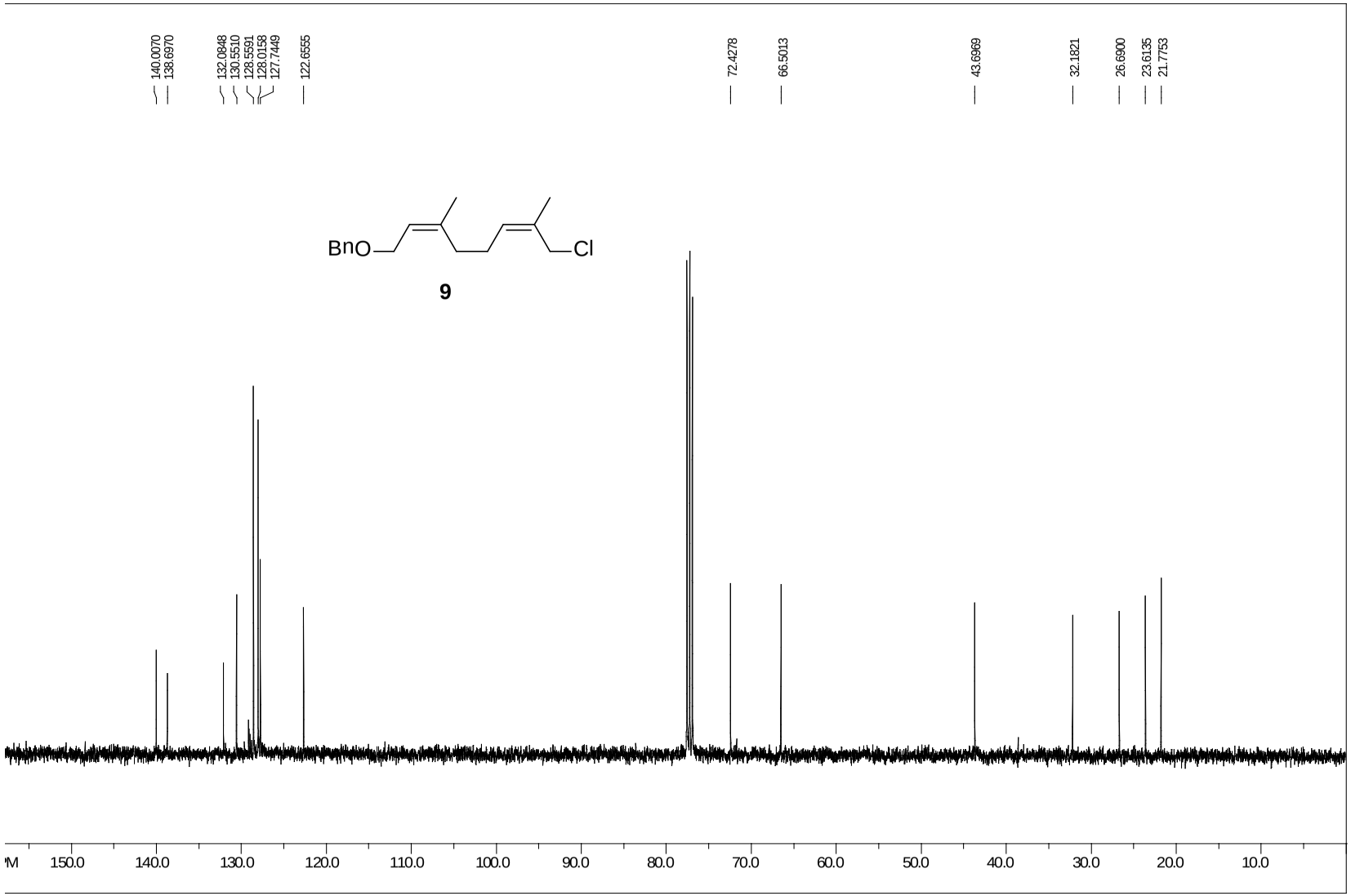

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ber of scans: 137

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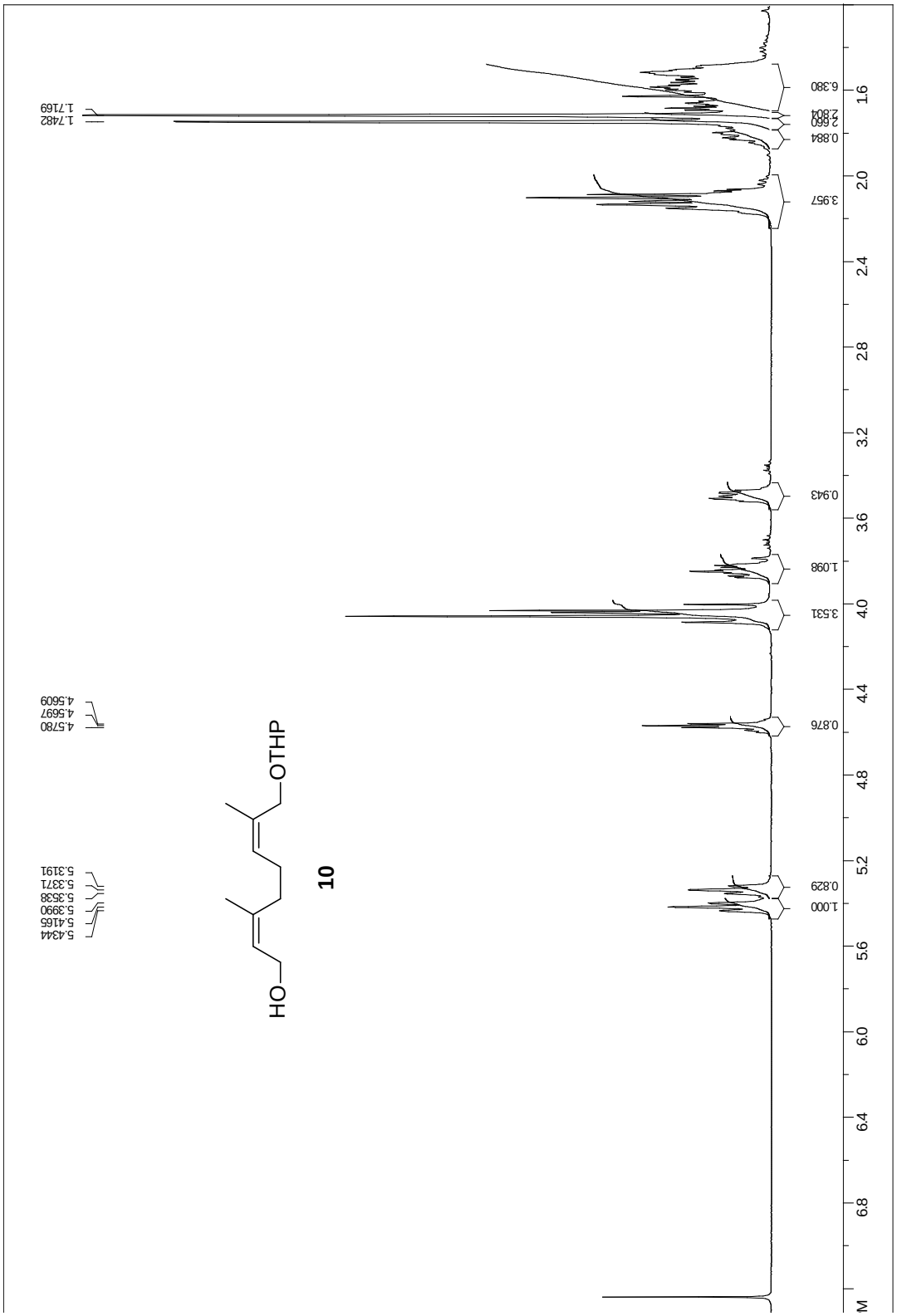
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5.4165
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5.3538
5.3371
5.3191
6.380
2.804
2.660
0.884
3.957
0.943
1.098
3.531
0.876
0.829
1.000
M
6.8
6.4
6.0
5.6
5.2
4.8
4.4
4.0
3.6
3.2
2.8
2.4
2.0
1.6
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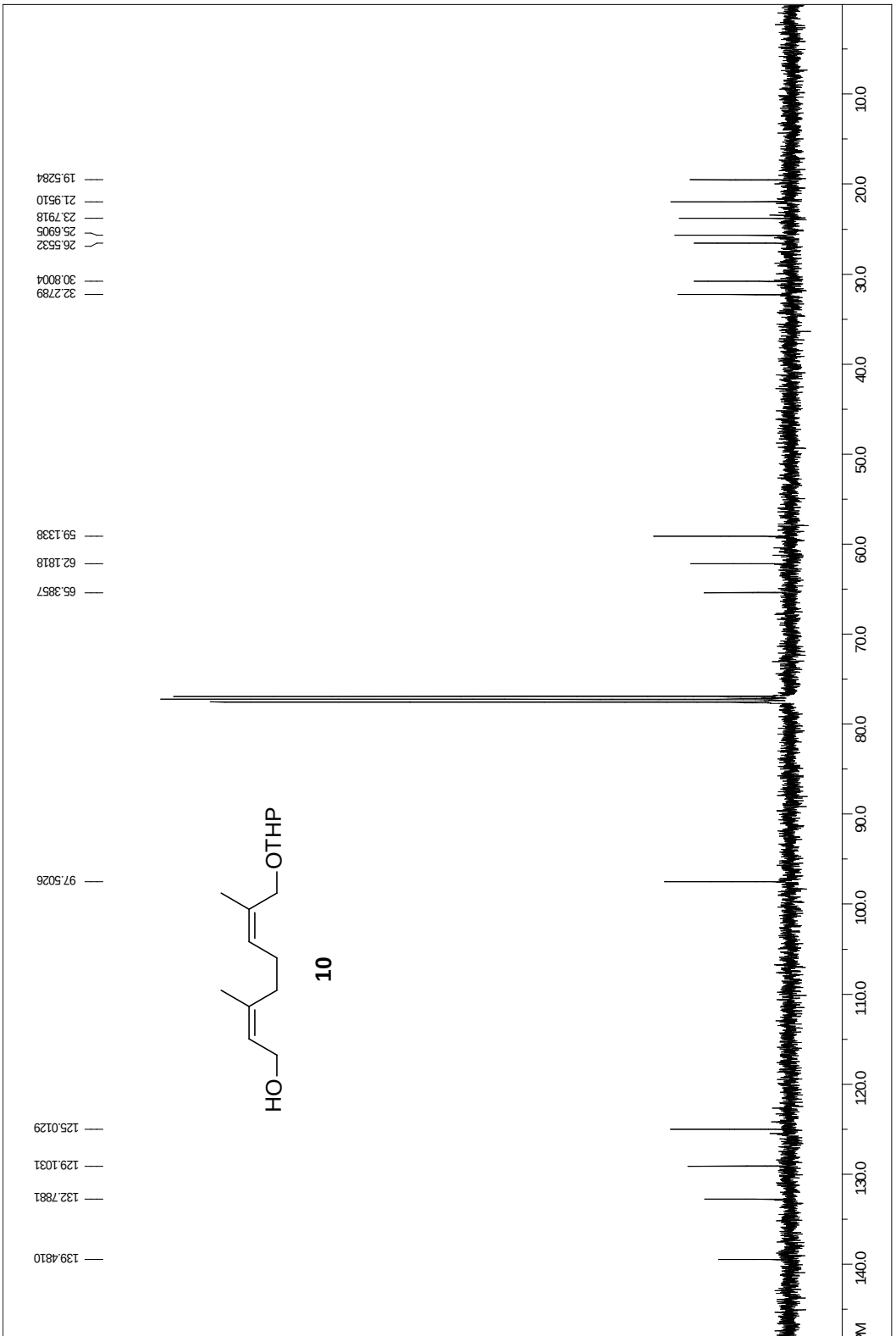
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97.5026
125.0129
129.1031
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OTHP
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140.0
130.0
120.0
110.0
100.0
90.0
80.0
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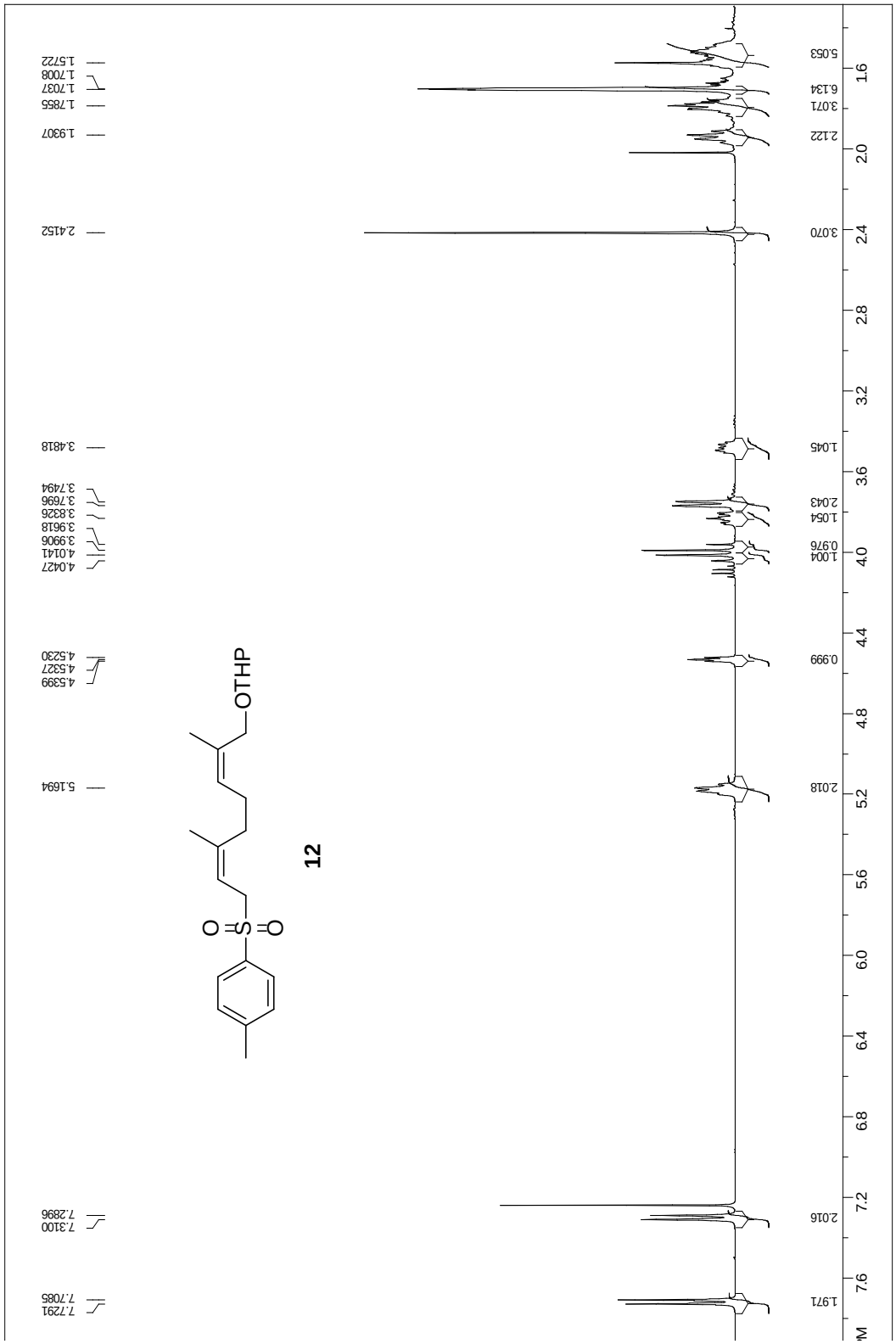
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4.0427
4.0141
3.9906
3.9618
3.8326
3.7696
3.7494
3.4818
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1.7855
1.7037
1.7008
1.5722
1.971
2.016
0.999
2.018
1.004
0.976
1.054
2.043
1.045
3.070
2.122
3.071
6.134
5.053
7.6
7.2
6.8
6.4
6.0
5.6
5.2
4.8
4.4
4.0
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3.2
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2.4
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1.6
M
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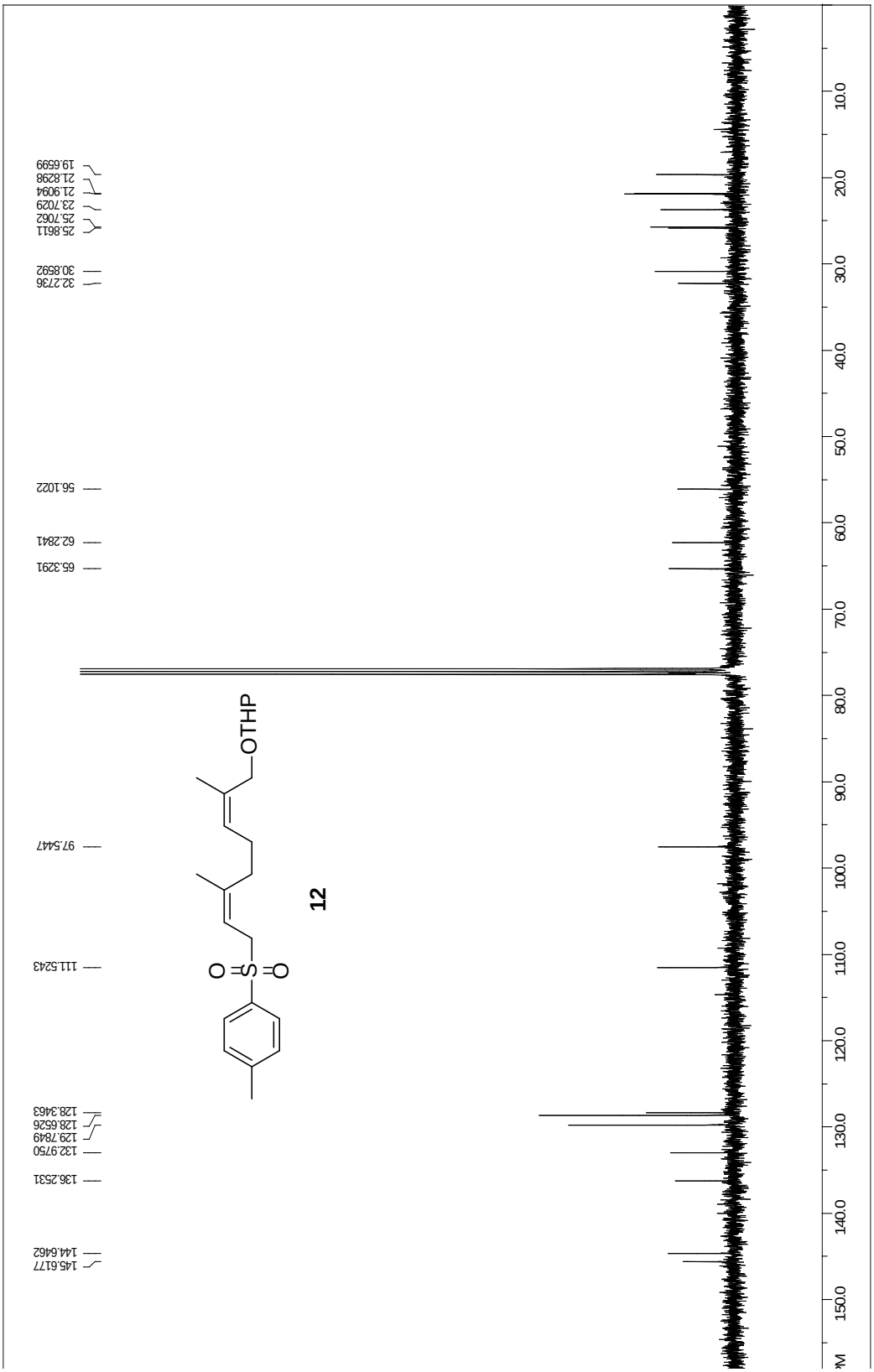
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111.5243
128.3463
128.6526
129.7849
132.9750
136.2531
144.6462
145.6177
OTHP
12
150.0
140.0
130.0
120.0
110.0
100.0
90.0
80.0
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30.0
20.0
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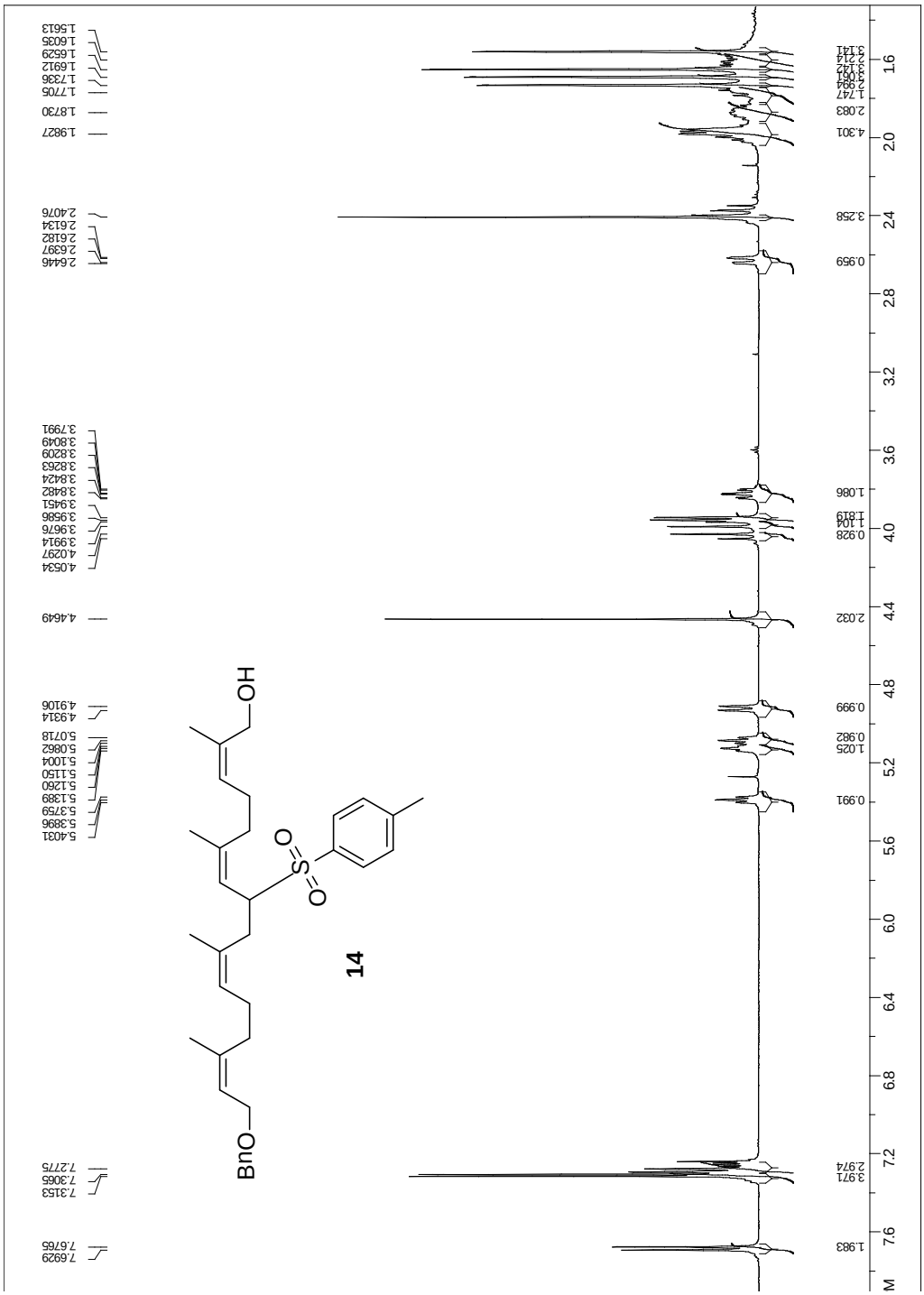
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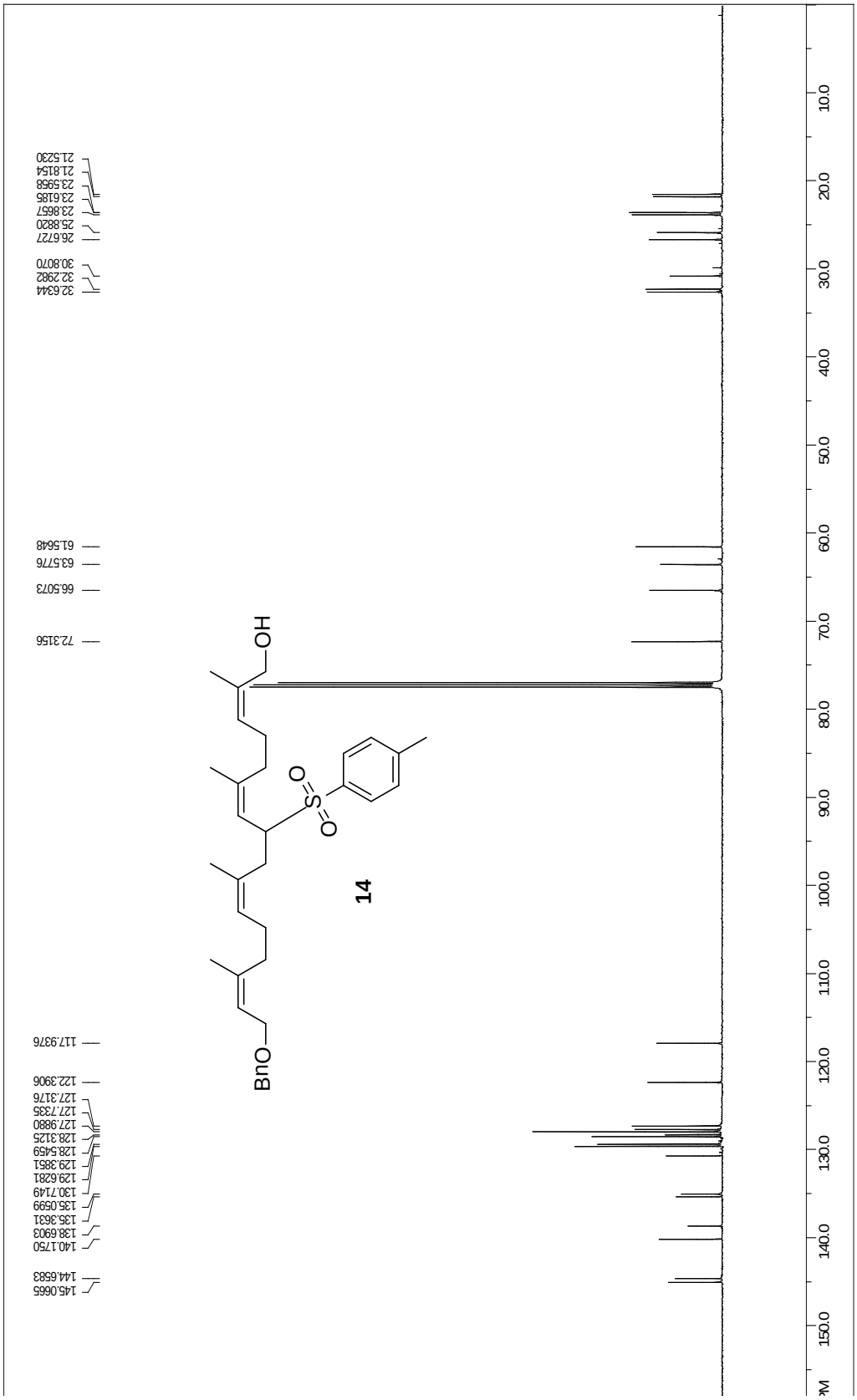
OH
O
S
O
14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129.3851
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21.8154
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OH
OuB
O
S
O
14
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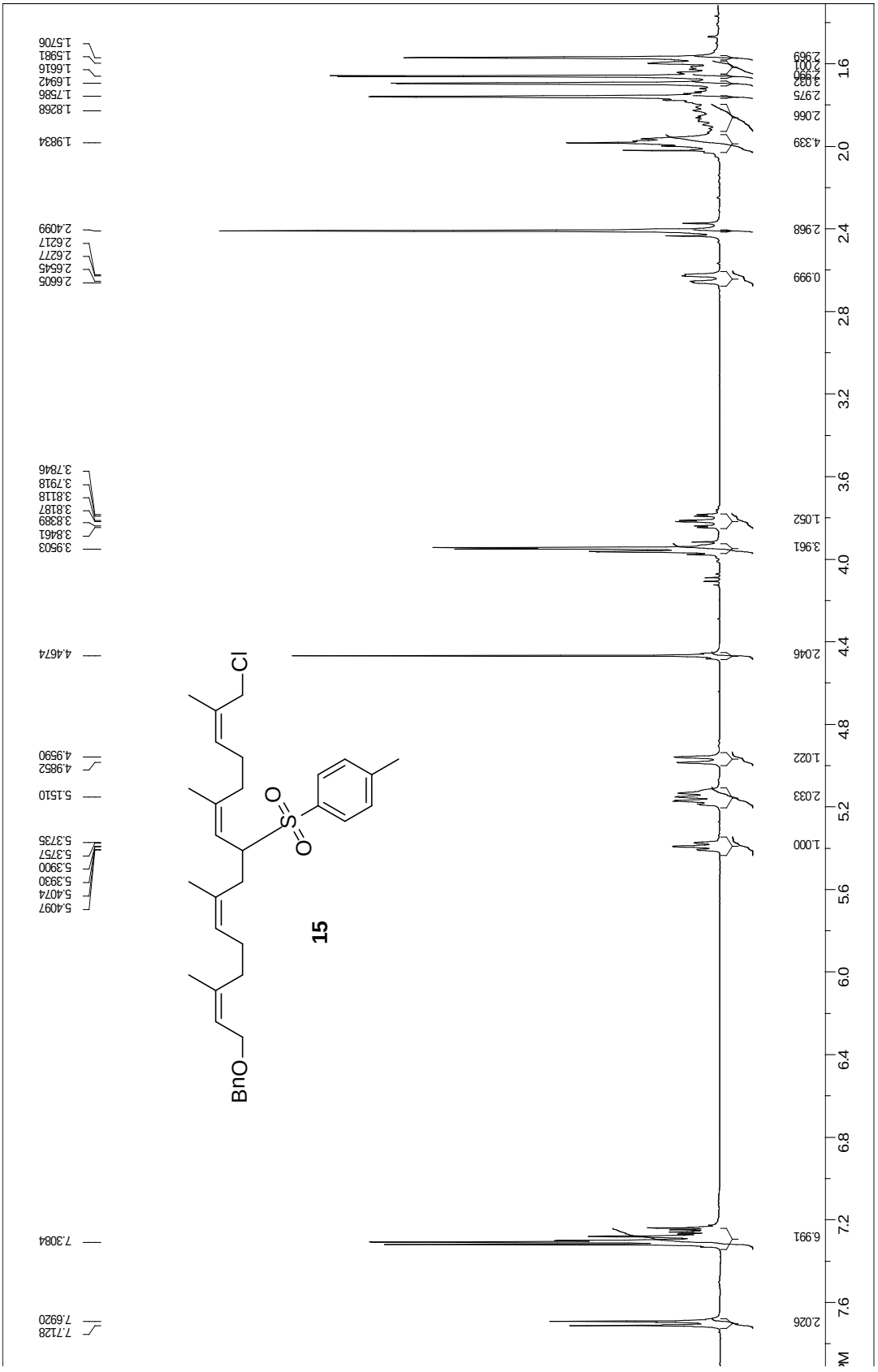
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BnO
Cl
O
S
O
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5.1510
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4.4674
3.9503
3.8461
3.8389
3.8187
3.8118
3.7918
3.7846
2.6605
2.6545
2.6277
2.6217
2.4099
1.9834
1.8268
1.7586
1.6942
1.6616
1.5981
1.5706
2.026
6.991
1.000
2.033
1.022
2.046
3.961
1.052
2.868
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2.975
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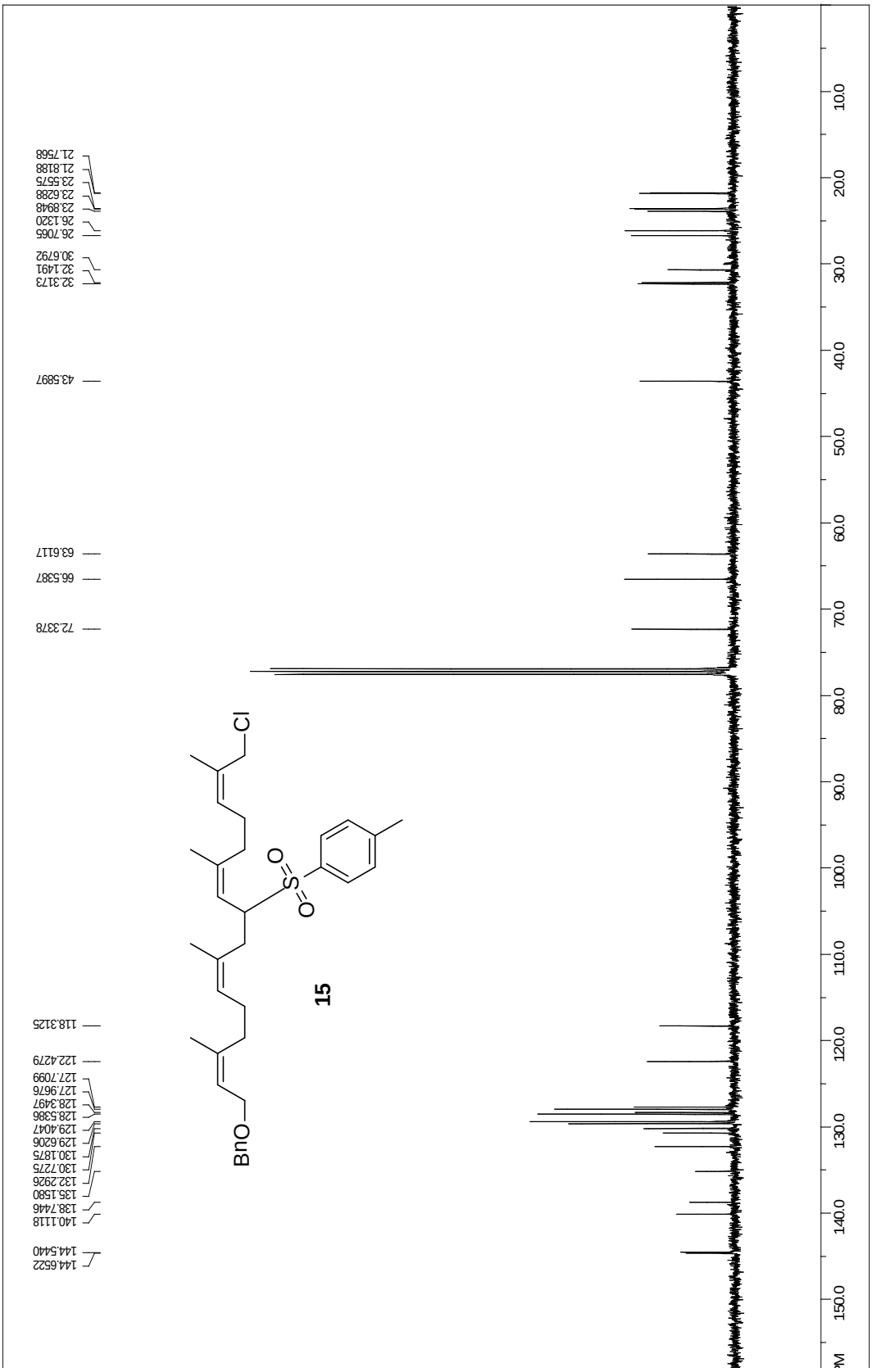
number of scans: 16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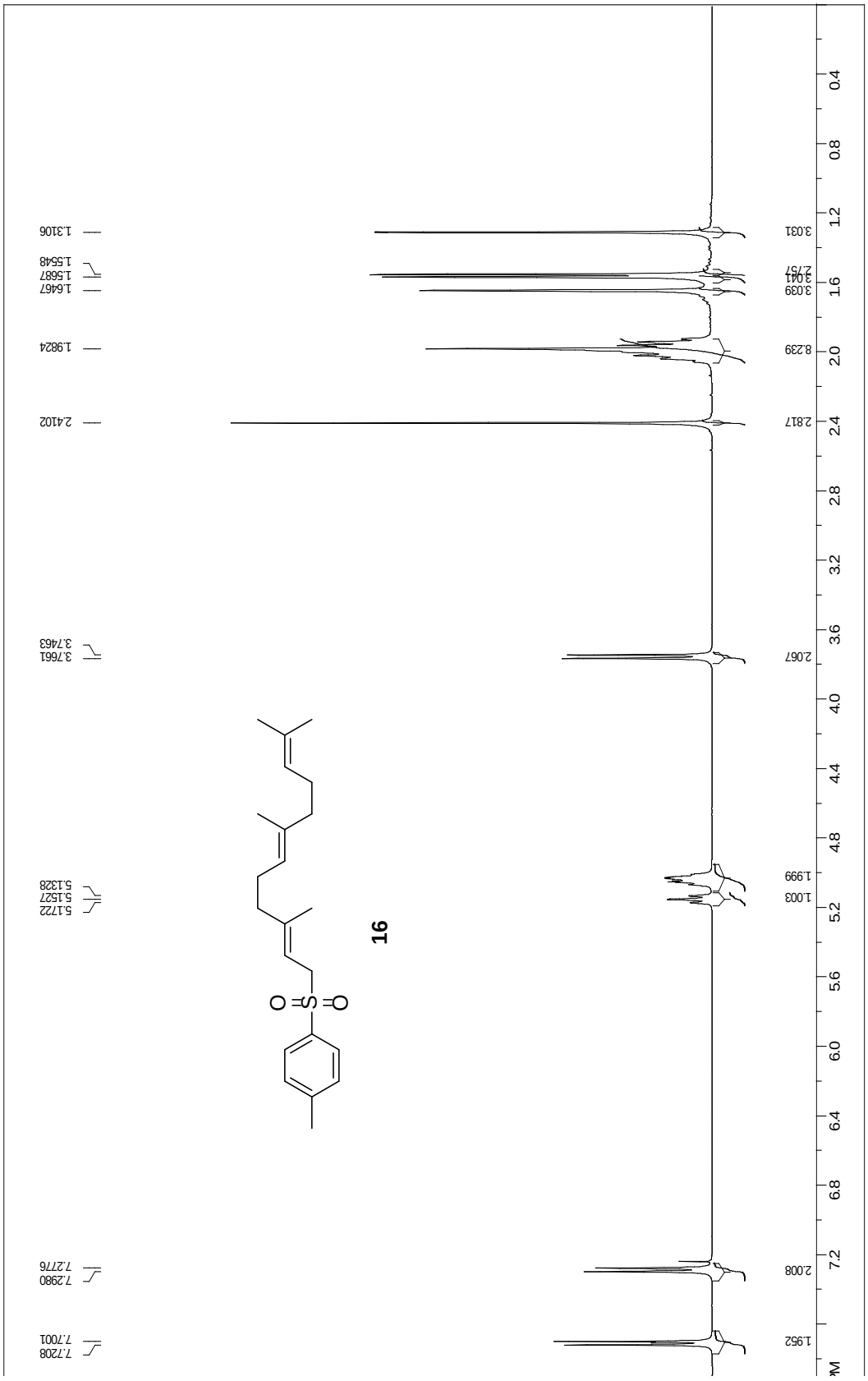
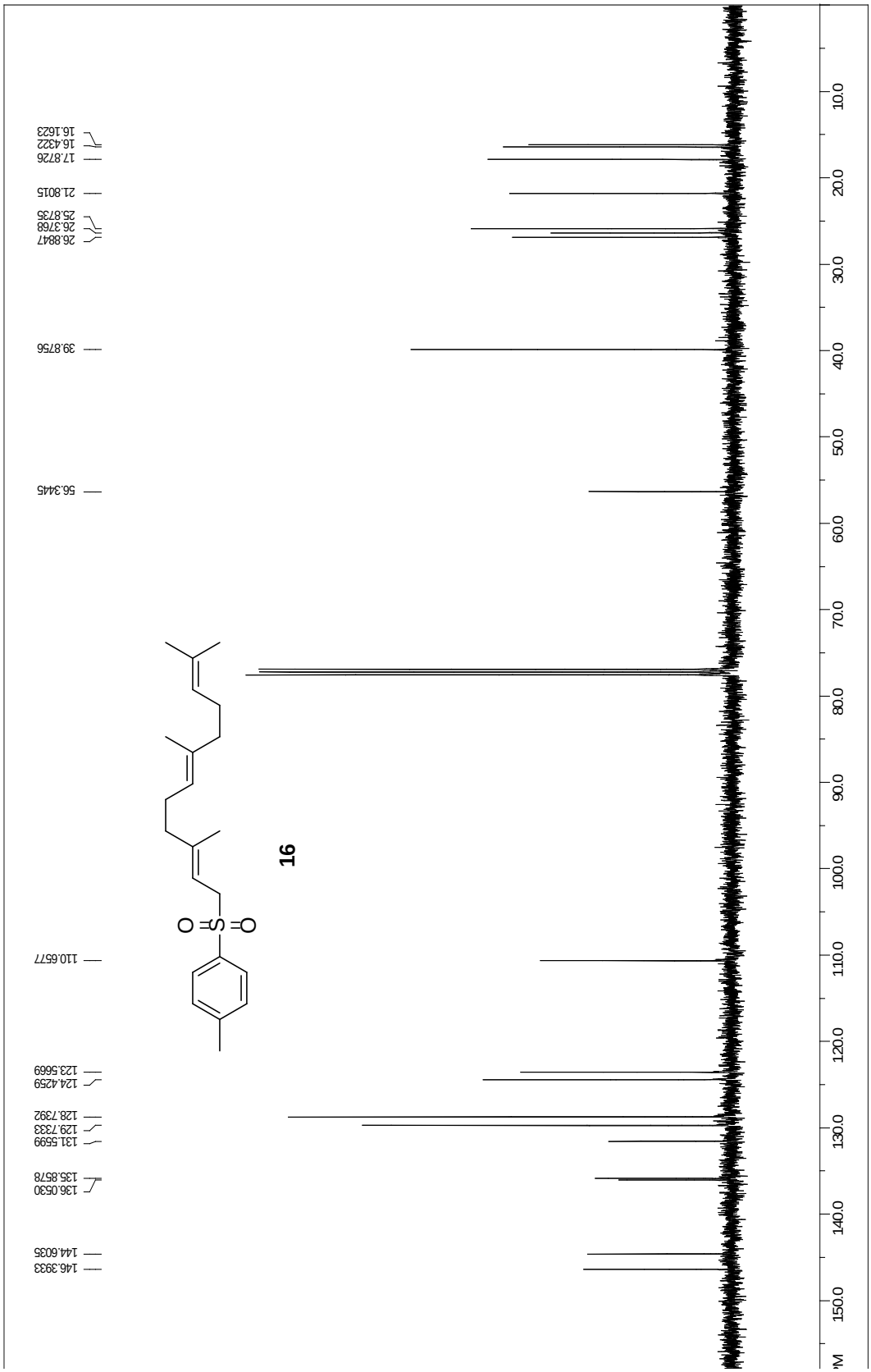
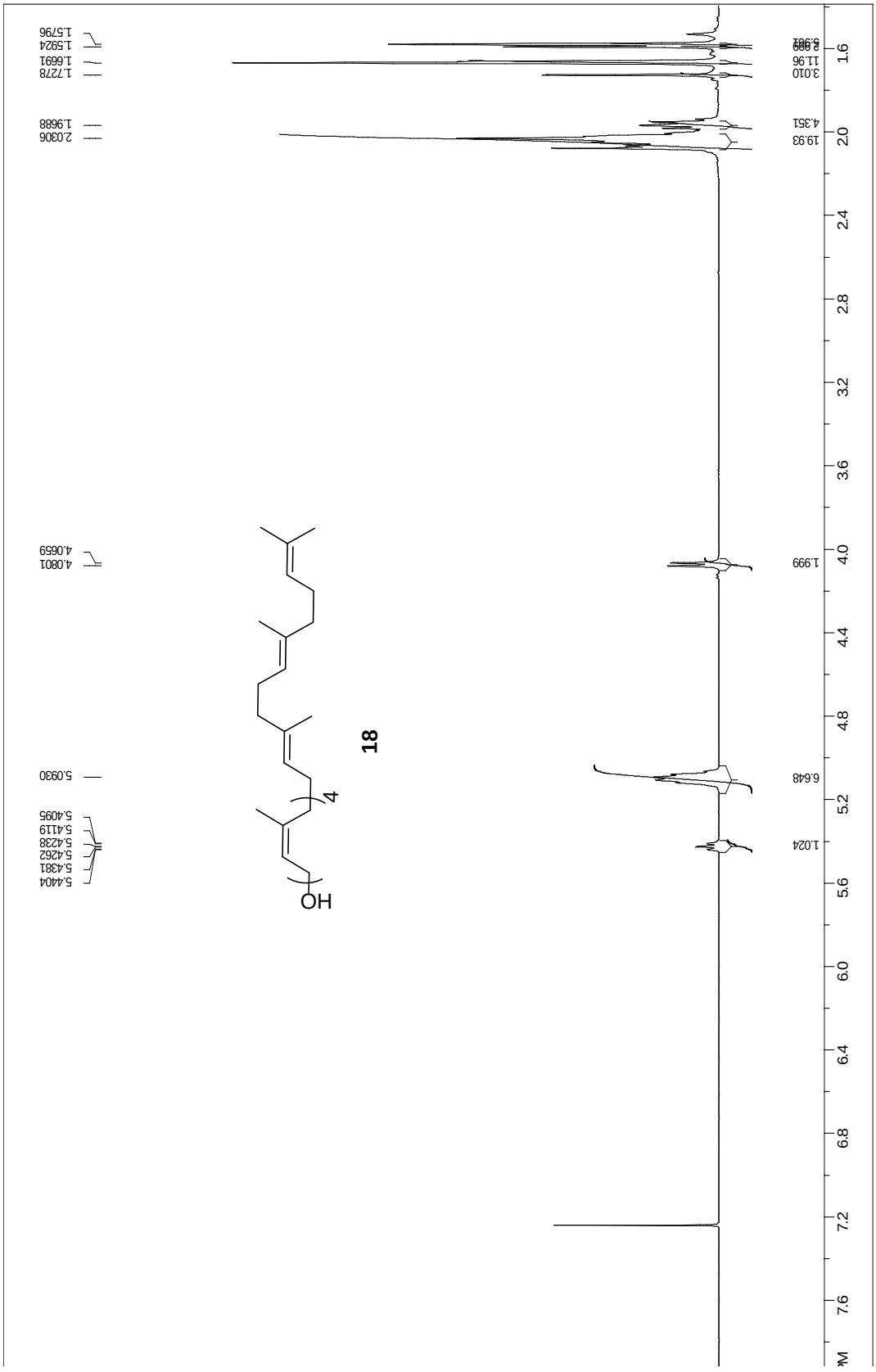
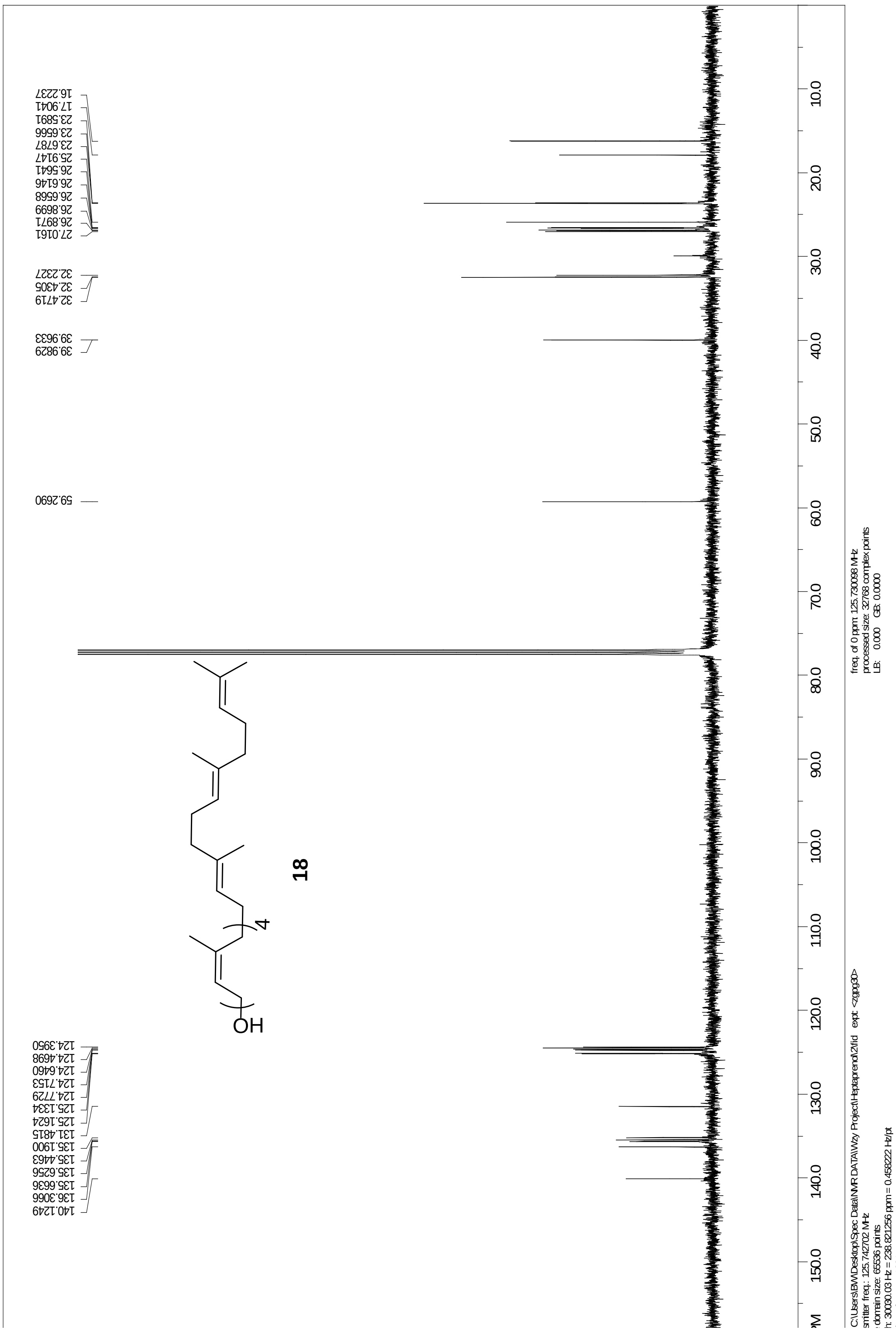
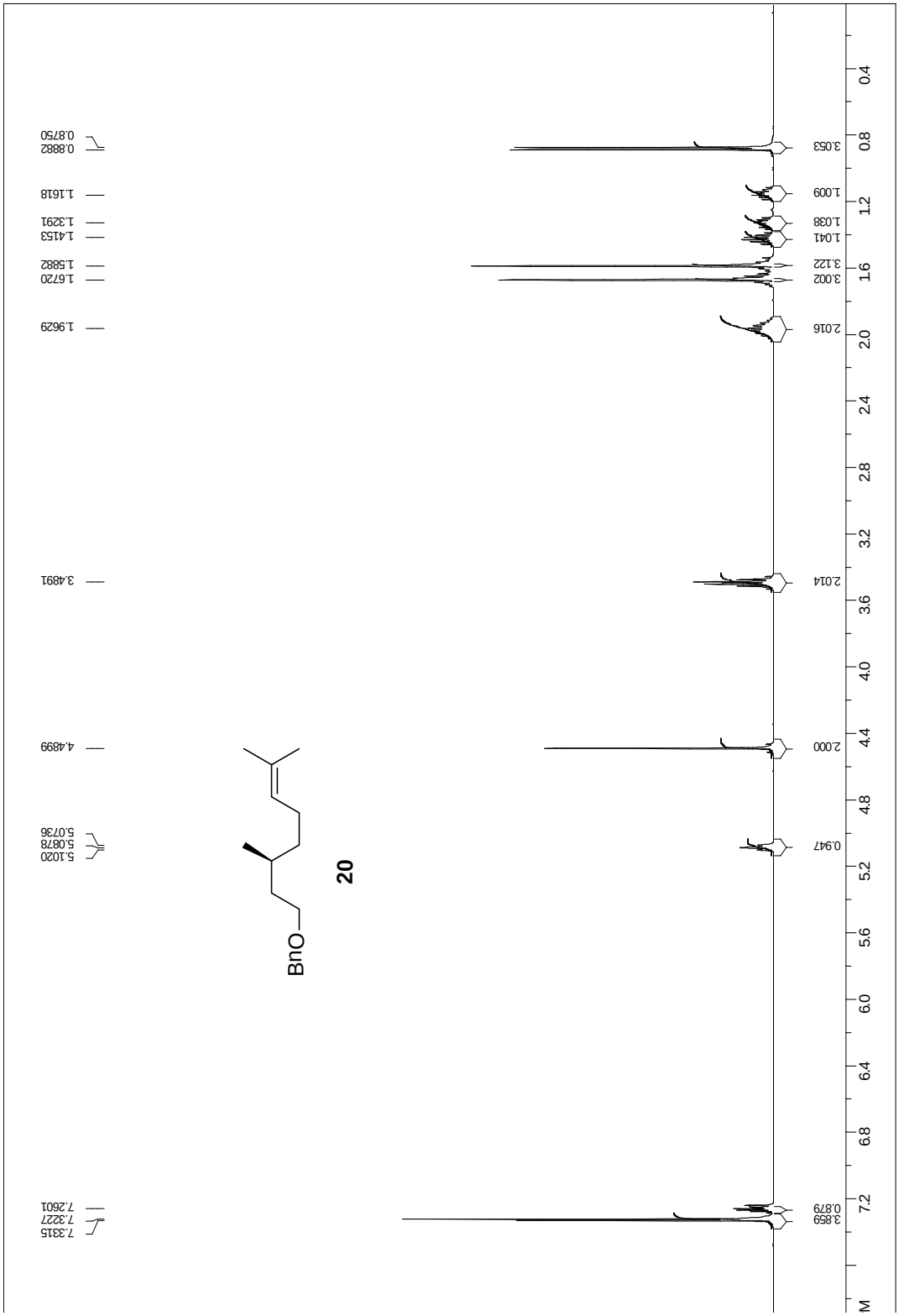
129.6206
129.4047
128.5386
128.3497
127.9676
127.7099
122.4279
118.3125
72.3378
66.5387
63.6117
43.5897
32.3173
32.1491
30.6792
26.7065
26.1320
23.8948
23.6288
23.5575
21.8188
21.7568
OBn
Cl
O
O
S
15
C:\Users\BW\Desktop\Ramu NMR\grs-3-642\1\fid expt: <zgpg30>
transmitter freq.: 100.622830 MHz
domain size: 65536 points
from: 23980.82 Hz = 238.323802 ppm = 0.365918 Hz/pt
number of scans: 241
freq. of 0 ppm: 100.612749 MHz
processed size: 32768 complex points
LB: 1.000 GB: 0.0000
PPM
150.0
140.0
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0


16
7.7208
7.7001
7.2980
7.2776
5.1722
5.1527
5.1328
3.7661
3.7463
2.4102
1.9824
1.6467
1.5687
1.5548
1.3106
1.952
2.008
1.999
1.003
2.067
2.817
8.239
3.039
3.041
2.757
3.031
PM
7.2
6.8
6.4
6.0
5.6
5.2
4.8
4.4
4.0
3.6
3.2
2.8
2.4
2.0
1.6
1.2
0.8
0.4
C:\Users\BM\Desktop\Parm.u NMRpipe 2-92\1\fid expt: <qg3d>
ometer freq.: 400.132471 MHz
domain size: 32768 points
t: 8276.15 Hz = 20.686513 ppm = 0.252629 Hz/pt
ber of scans: 16
freq. of 0 ppm: 400.130018 MHz
processed size: 16384 complex points
LB: 0.000 GB: 0.000

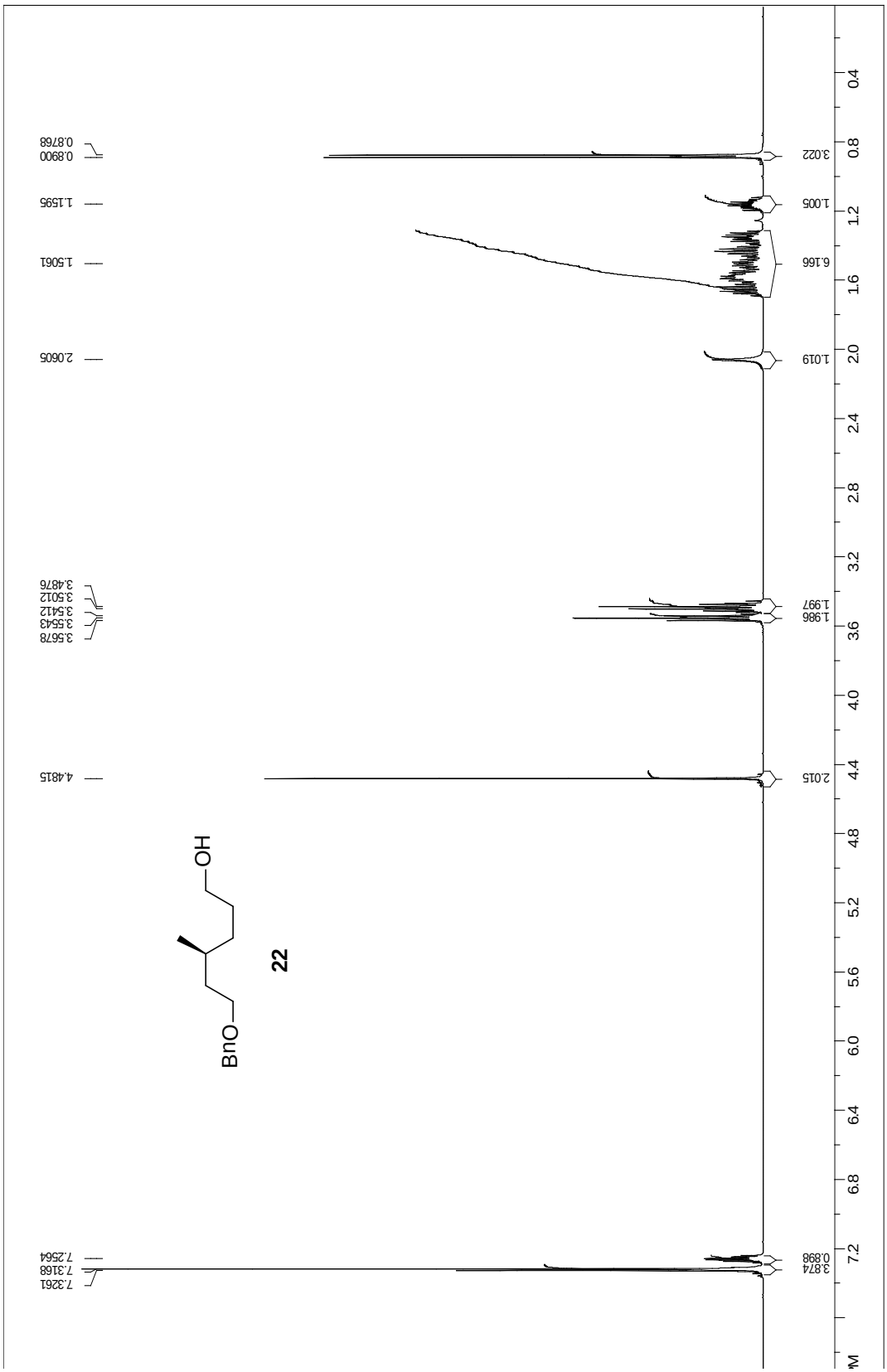

16
146.3933
144.6035
136.0530
135.8578
131.5599
129.7333
128.7392
124.4259
123.5669
110.6577
56.3445
39.8756
26.8847
26.3768
25.8735
21.8015
17.8726
16.4322
16.1623
freq. of 0 ppm 100.6127749 MHz
processed size: 32768 complex points
LB 0.000 GB 0.0000
C:\Users\BAM Desktop\Ramu NMR\pns-2-92-2.fid expt: <qpg30>
transmitter freq.: 100.622830 MHz
time domain size: 65536 points
width: 23980.82 Hz = 238.323802 ppm = 0.365938 Hz/pt
number of scans: 126

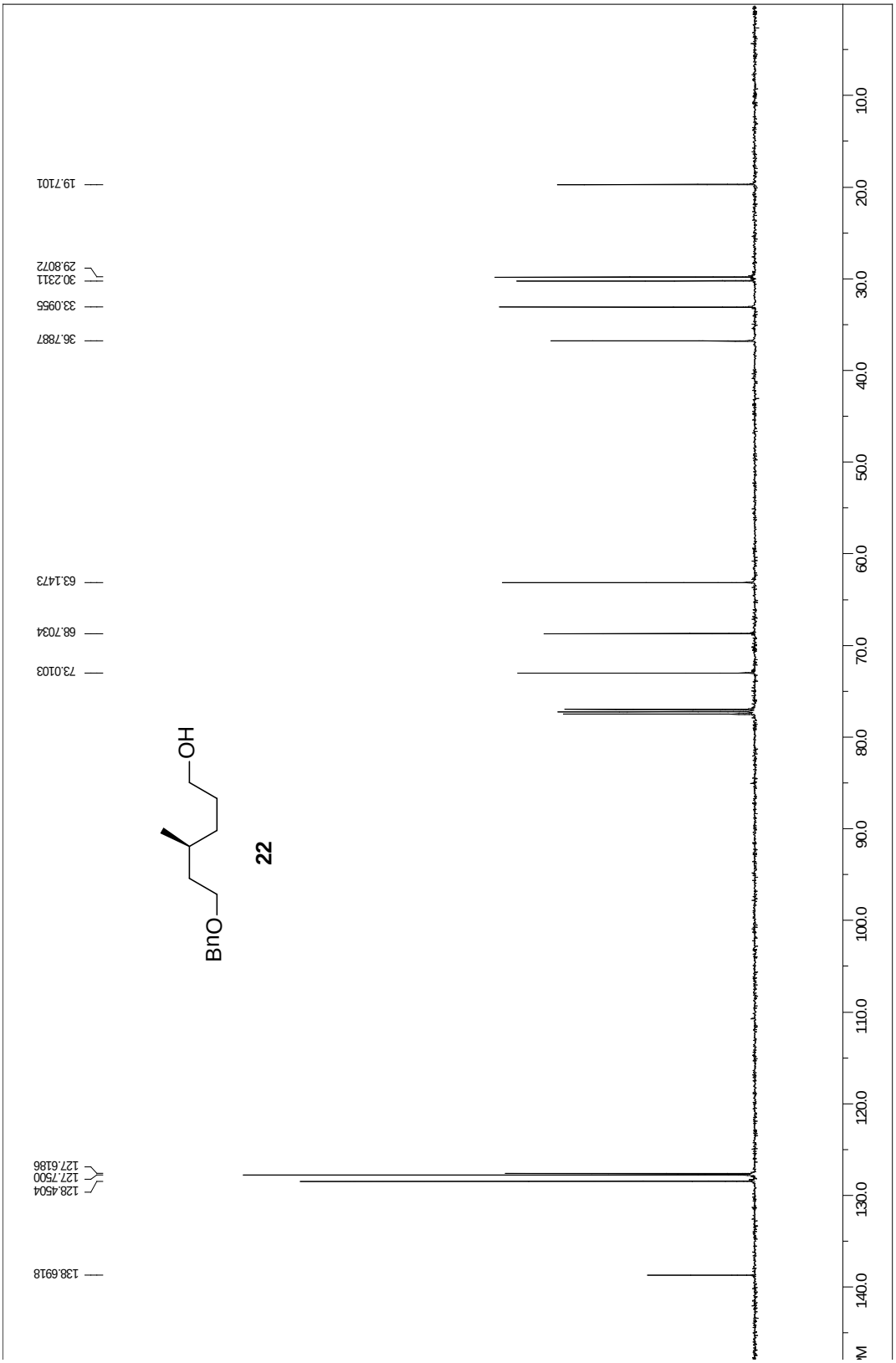

1.5796
1.5924
1.6691
1.7278
1.9688
2.0306
4.0659
4.0801
5.0930
5.4095
5.4119
5.4238
5.4262
5.4381
5.4404
18
OH
4
5.981
2.000
11.96
3.010
4.351
19.93
1.999
6.648
1.024
freq. of 0 ppm 500.020022 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000
C:\Users\BMV\Desktop\Spec Data\NMR DATA\Wzy Projects\Heptepranol\1\fid expt: <qgDD>
transmitter freq.: 500.023368 MHz
time domain size: 65536 points
width: 10330.36 Hz = 20.660203 ppm = 0.157632 Hz/pt
number of scans: 16

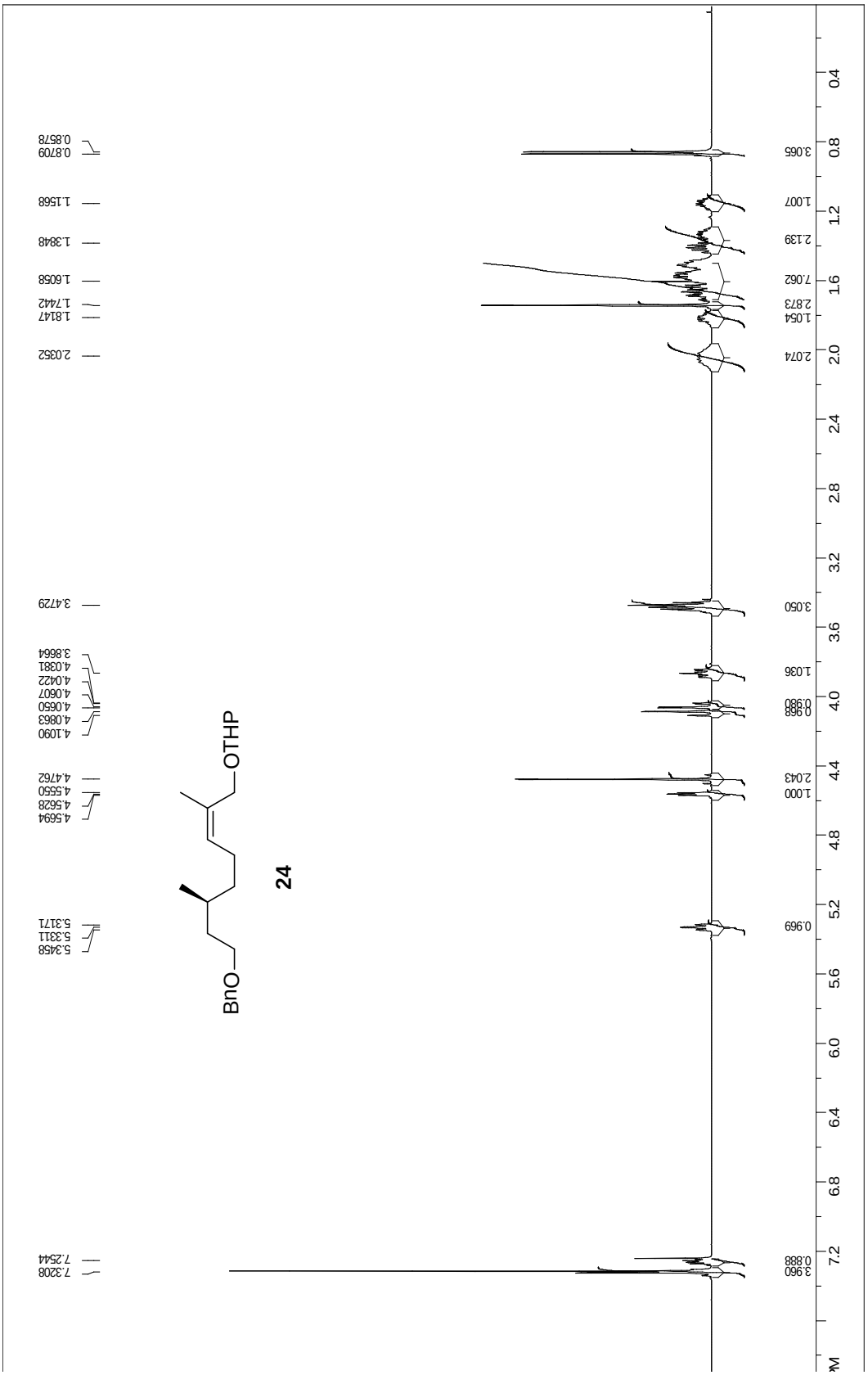

16.2237
17.9041
23.5891
23.6566
23.6787
25.9147
26.5641
26.6146
26.6568
26.8699
26.8971
27.0161
32.2327
32.4305
32.4719
39.9633
39.9829
59.2690
124.3950
124.4698
124.6460
124.7153
124.7729
125.1334
125.1624
131.4815
135.1900
135.4463
135.6256
135.6636
136.3066
140.1249
OH
4
18
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
90.0
100.0
110.0
120.0
130.0
140.0
150.0
freq. of 0 ppm: 125.730098 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000
C:\Users\BWM\Desktop\Spec Data\NMR DATA\Wzy Project\Heptaprenol\2\fid expt: <zgpg30>
smitter freq.: 125.742702 MHz
domain size: 65536 points
h: 30030.03 Hz = 238.821256 ppm = 0.458222 Hz/pt
ber of scans: 1024

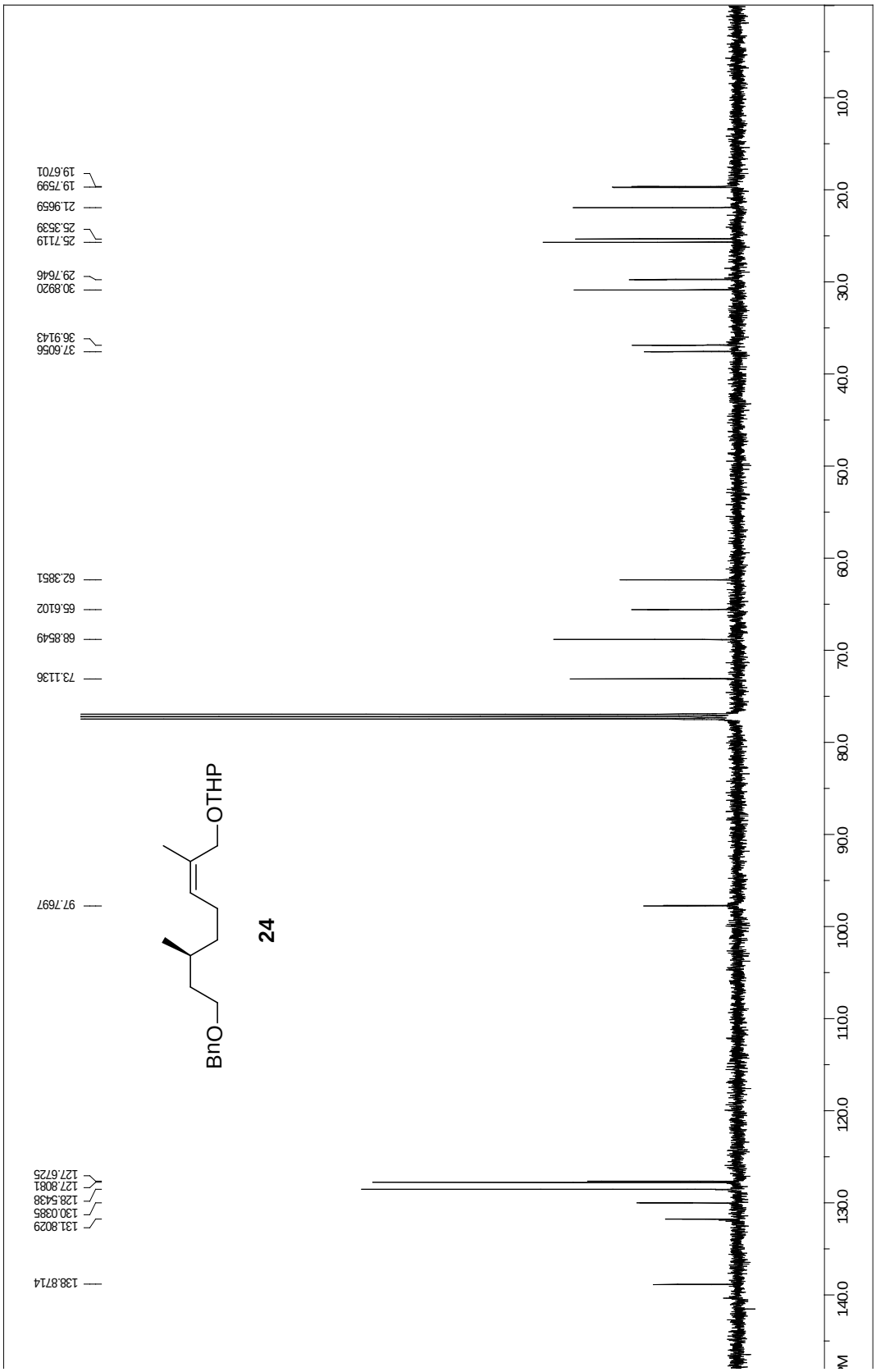

7.2601
7.3227
7.3315
5.0736
5.0878
5.1020
4.4899
3.4891
1.9629
1.6720
1.5882
1.4153
1.3291
1.1618
0.8882
0.8750
0.879
0.947
2.000
2.014
2.016
3.122
3.002
1.041
1.038
1.009
3.053
BnO
20
M
7.2
6.8
6.4
6.0
5.6
5.2
4.8
4.4
4.0
3.6
3.2
2.8
2.4
2.0
1.6
1.2
0.8
0.4
C:\Users\BW\Desktop\Spec Data\NMR DATA\Wey Project\Dolichol Derivative\BnOlitronellol\1\1\fid expt: <zg30>
transmitter freq.: 500.023368 MHz
domain size: 65536 points
1 : 10330.98 Hz = 20.660203 ppm = 0.157632 Hz/pt
number of scans: 16
freq. of 0 ppm: 500.030022 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000

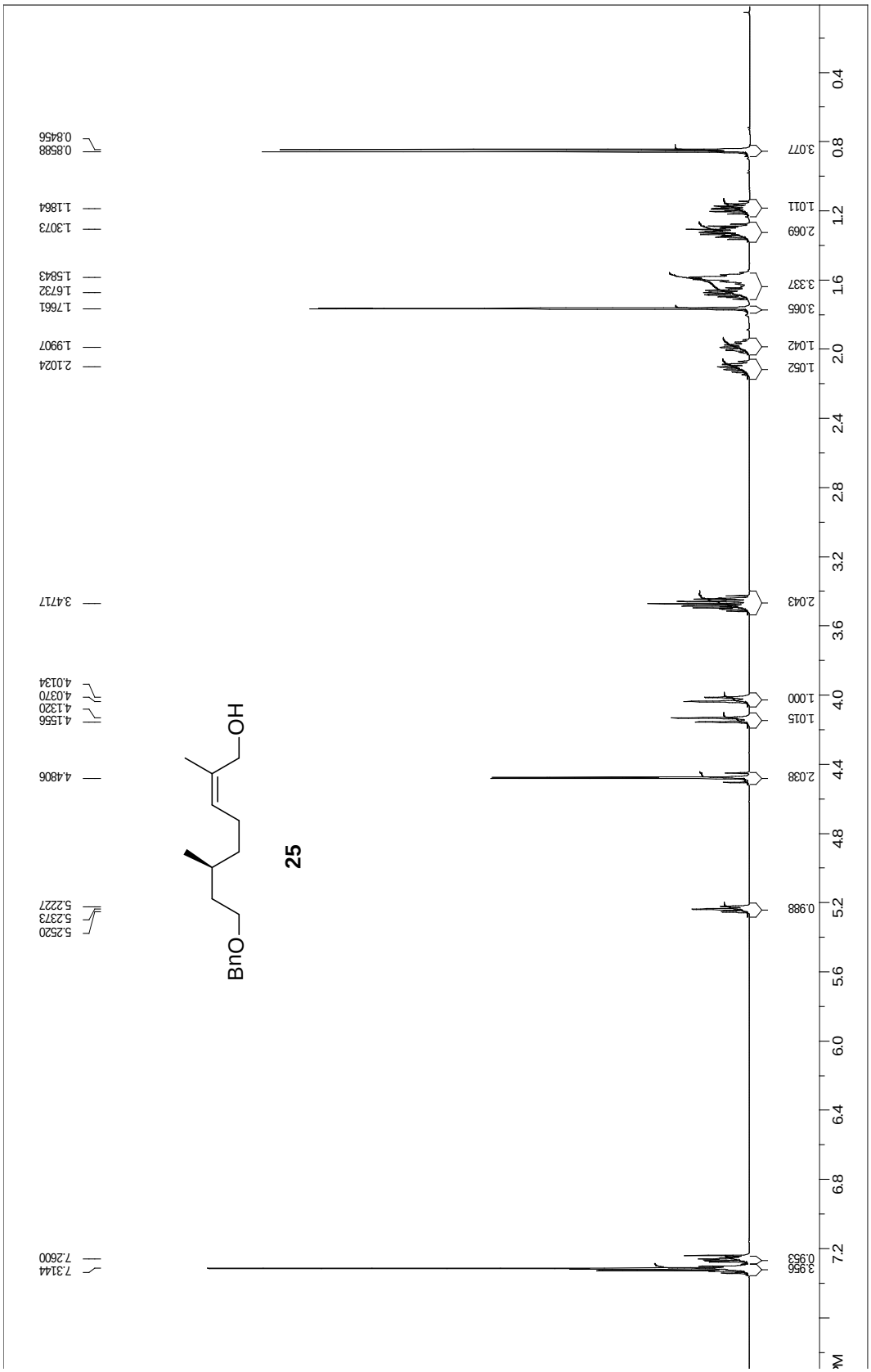

17.8438
19.7852
25.9226
25.7029
29.8159
36.9572
37.4336
68.9714
73.1259
125.0665
127.6627
127.8152
128.5457
131.3352
138.9661
BnO
20
M
140.0
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
freq. of 0 ppm: 125.730102 MHz
processed size: 32768 complex points
LB: 1.000 GB: 0.0000
C:\Users\BW\Desktop\Spec Data\NMR DATA\W2y Project\Dolichol Derivatives\BnCitronellol\2Nd expt: <dpgs3D>
proton freq.: 125.742702 MHz
domain size: 65536 points
1: 30030.03 Hz = 238.821256 ppm = 0.458222 Hz/pt
number of scans: 546

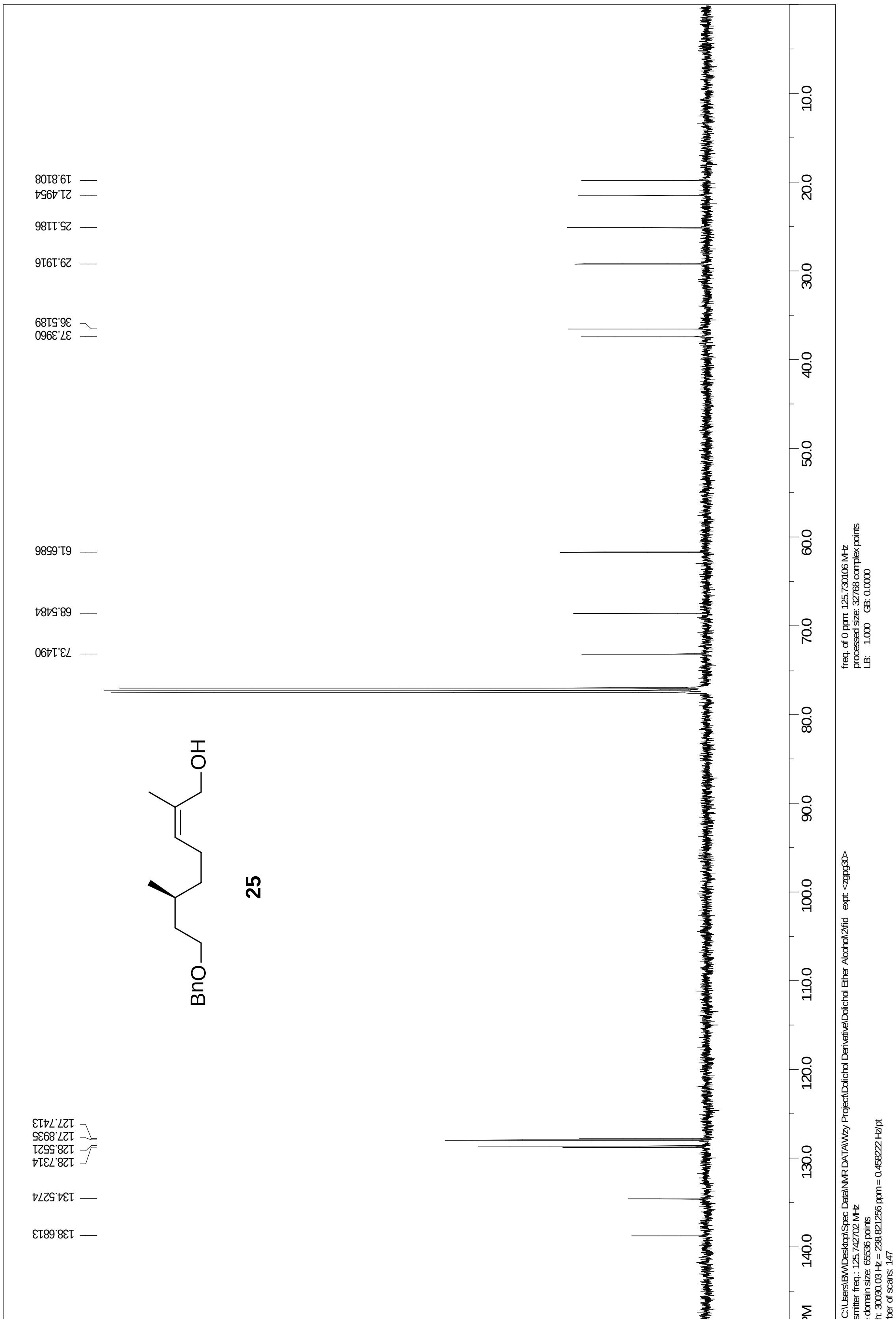

22
BnO
OH
7.3261
7.3168
7.2564
4.4815
3.5678
3.5543
3.5412
3.5012
3.4876
2.0605
1.5061
1.1595
0.8900
0.8768
3.874
0.898
2.015
1.997
1.986
1.019
6.166
1.005
3.022
freq. of 0 ppm: 500.020021 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000
C:\Users\BW\Desktop\Spec Data\NMR DATA\Wzy Projects\Diol chol Derivative\BnOlCH-1\1\fid expt: <zg30>
smitter freq.: 500.023088 MHz
domain size: 65536 points
r: 10330.59 Hz = 20.660203 ppm = 0.157632 Hz/pt
ber of scans: 128

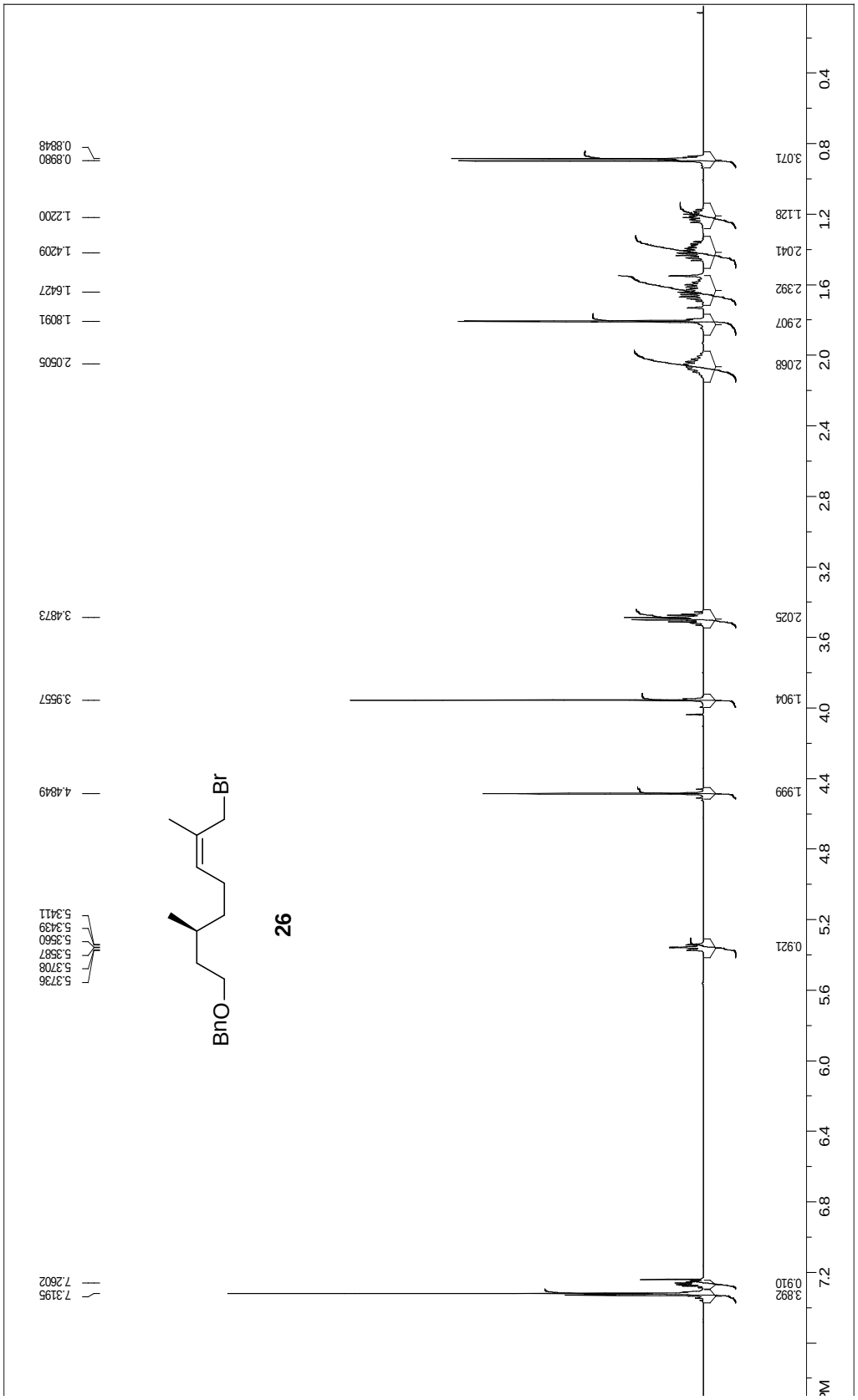

19.7101
29.8072
30.2311
33.0955
36.7887
63.1473
68.7034
73.0103
128.4504
127.7500
127.6186
138.6918
22
BnO
OH
ppm
140.0
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
C:\Users\BW\Desktop\Spec Data\NMR DATA\Wzy Projects\Dolichol Derivative\BnOICHCH2.fid expt: <zgpg30>
transmitter freq.: 125.742702 MHz
time domain size: 65536 points
width: 30030.03 Hz = 238.821256 ppm = 0.458222 Hz/pt
number of scans: 93
freq. of 0 ppm: 125.730119 MHz
processed size: 32768 complex points
LB: 1.000 GB: 0.0000

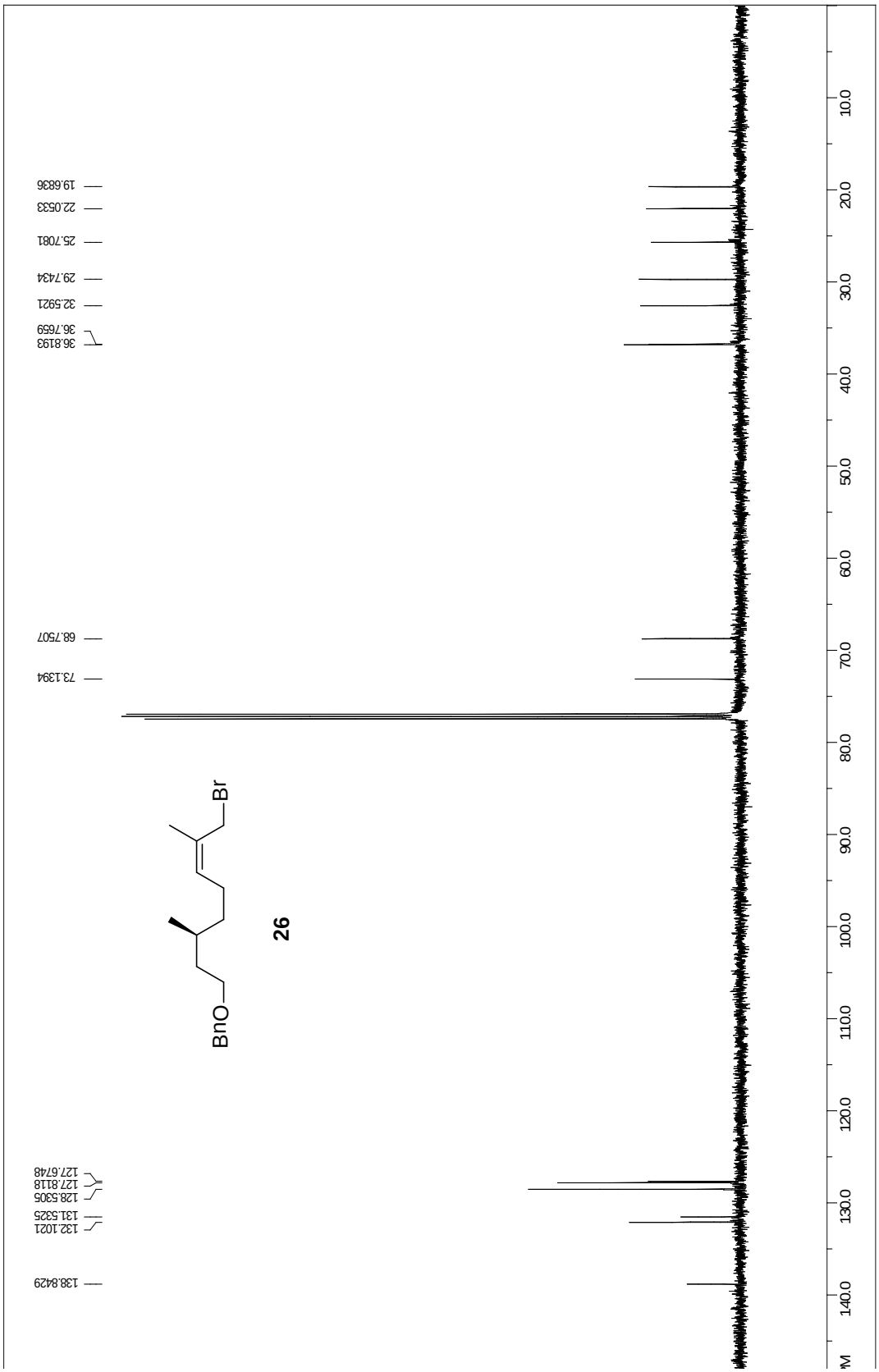

OTHP
BnO
24
0.8578
0.8709
1.1568
1.3848
1.6058
1.7442
1.8147
2.0352
3.4729
3.8664
4.0381
4.0422
4.0607
4.0650
4.0863
4.1090
4.4762
4.5550
4.5628
4.5694
5.3171
5.3311
5.3458
7.3208
7.2544
3.065
1.007
2.139
7.062
2.873
1.054
2.074
3.050
1.036
0.980
0.966
2.043
1.000
0.969
3.960
0.888
freq. of 0 ppm: 500.020022 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000
C:\Users\BW\Desktop\Spec Data\NMR DATA\Wzy Project\Dolichol Derivative\Dolichol Diether\1\fid expt: <zg30>
transmitter freq.: 500.023088 MHz
time domain size: 65536 points
width: 10330.58 Hz = 20.660203 ppm = 0.157632 Hz/pt
number of scans: 128

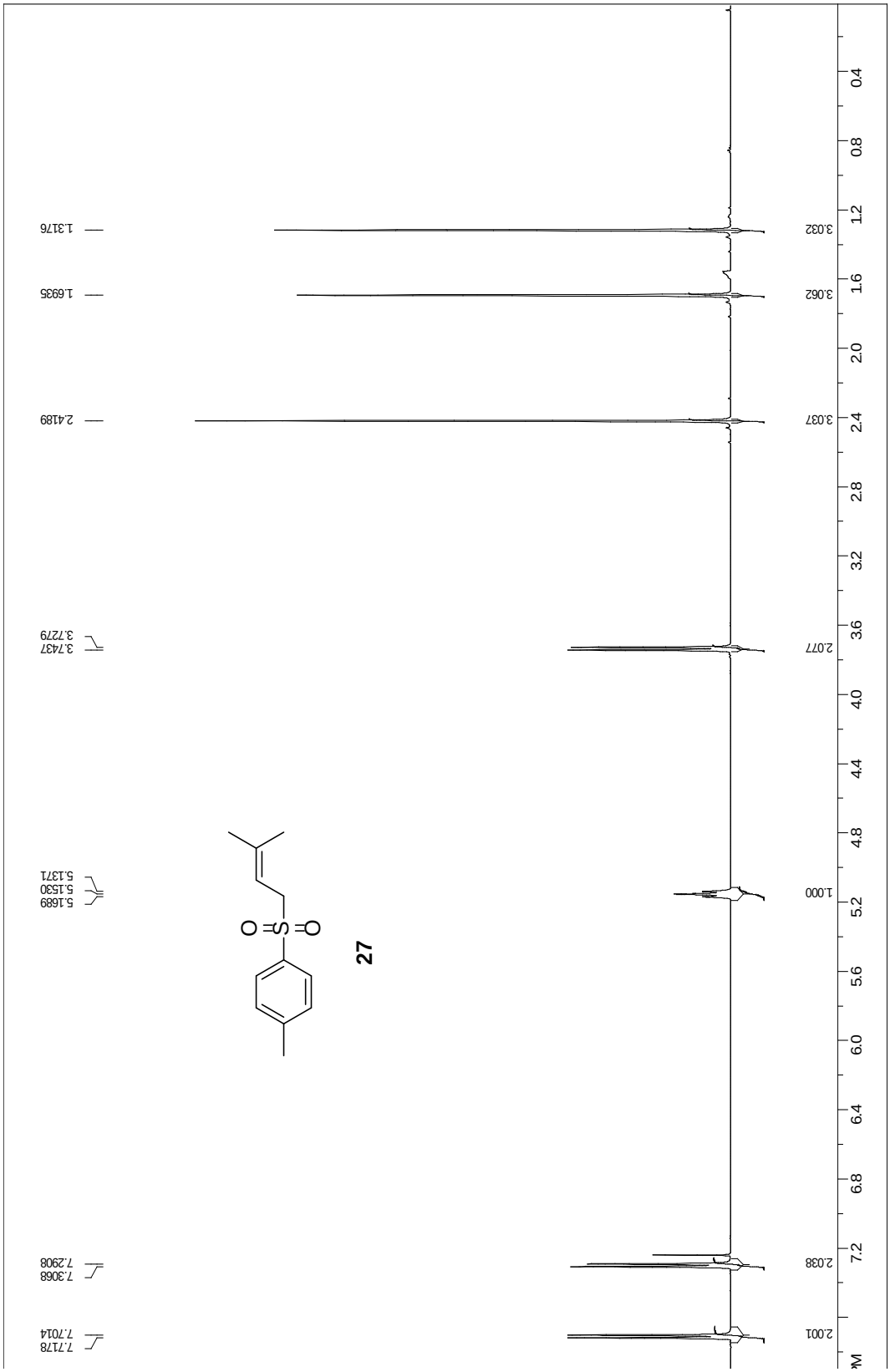

19.6701
19.7599
21.9659
25.3539
25.7119
29.7646
30.8920
36.9143
37.6056
62.3851
65.6102
68.8549
73.1136
97.7697
127.6725
127.8081
128.5438
130.0385
131.8029
138.8714
BnO
OTHP
24
140.0
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
freq. of 0 ppm: 125.730106 MHz
processed size: 32768 complex points
LB: 1.000 GB: 0.0000
C:\Users\BWD\Desktop\Spec Data\NMR DATA\Wzy Project\Dolichol Derivative\Dolichol Diether\2\fid expt: <qpg3D>
smitter freq.: 125.742702 MHz
domain size: 65536 points
r: 30030.03 Hz = 238.821256 ppm= 0.458222 Hz/pt
ber of scans: 256

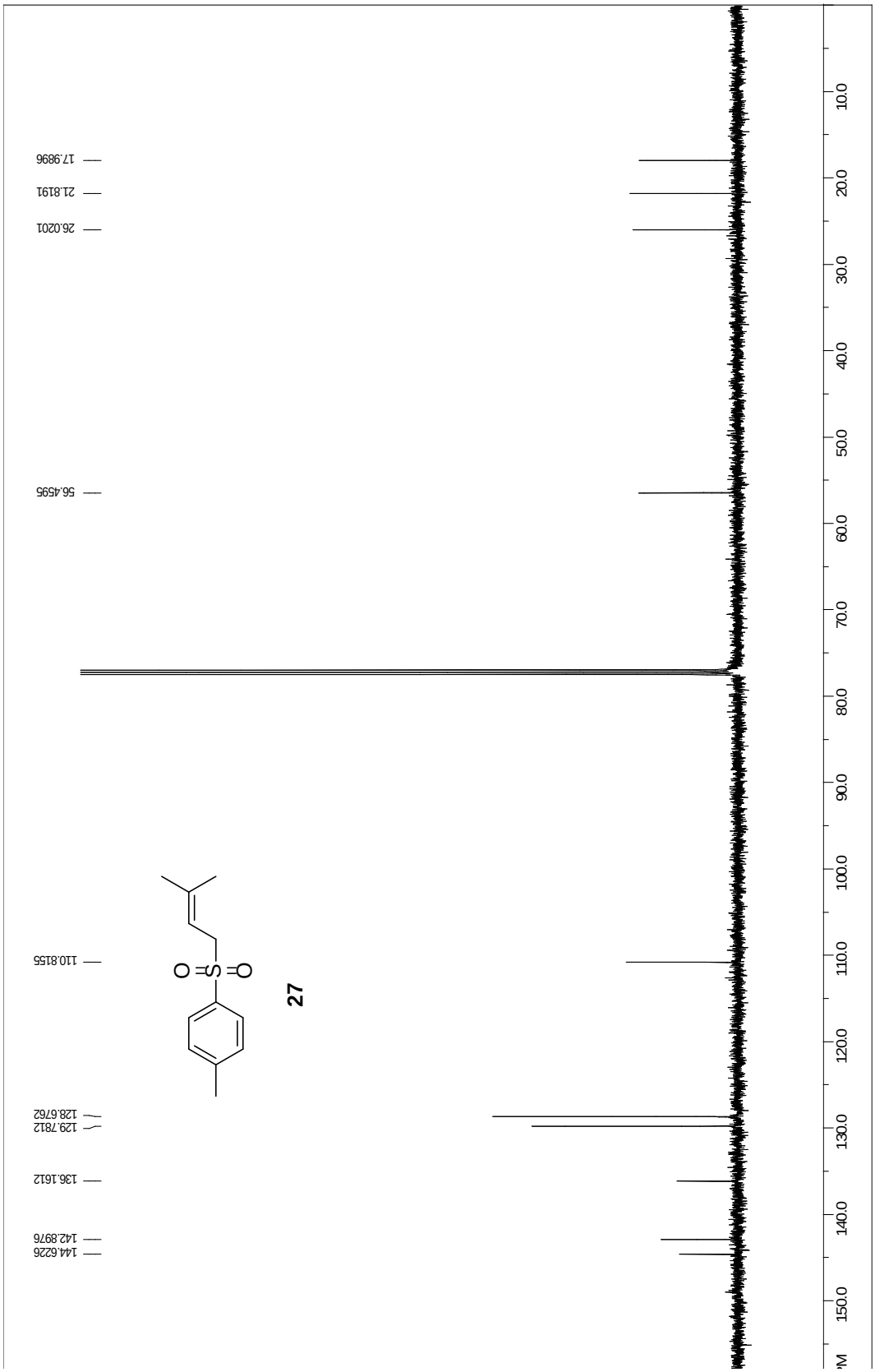

25
OH
BnO
7.3144
7.2600
5.2520
5.2373
5.2227
4.4806
4.1556
4.1320
4.0370
4.0134
3.4717
2.1024
1.9907
1.7661
1.6732
1.5843
1.3073
1.1864
0.8588
0.8456
3.077
1.011
2.069
3.337
3.065
1.042
1.052
2.043
1.000
1.015
2.038
0.988
3.956
0.953
PM
7.2
6.8
6.4
6.0
5.6
5.2
4.8
4.4
4.0
3.6
3.2
2.8
2.4
2.0
1.6
1.2
0.8
0.4
C:\Users\BWV\Desktop\Spec Data\NMR DATA\Wzy Project\Dolichol Derivative\Dolichol Ether Alcohol\1\fid expt: <zg30>
transmitter freq.: 500.023088 MHz
domain size: 65536 points
1: 10330.58 Hz = 20.660203 ppm = 0.157632 Hz/pt
number of scans: 128
freq. of 0 ppm: 500.020022 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000

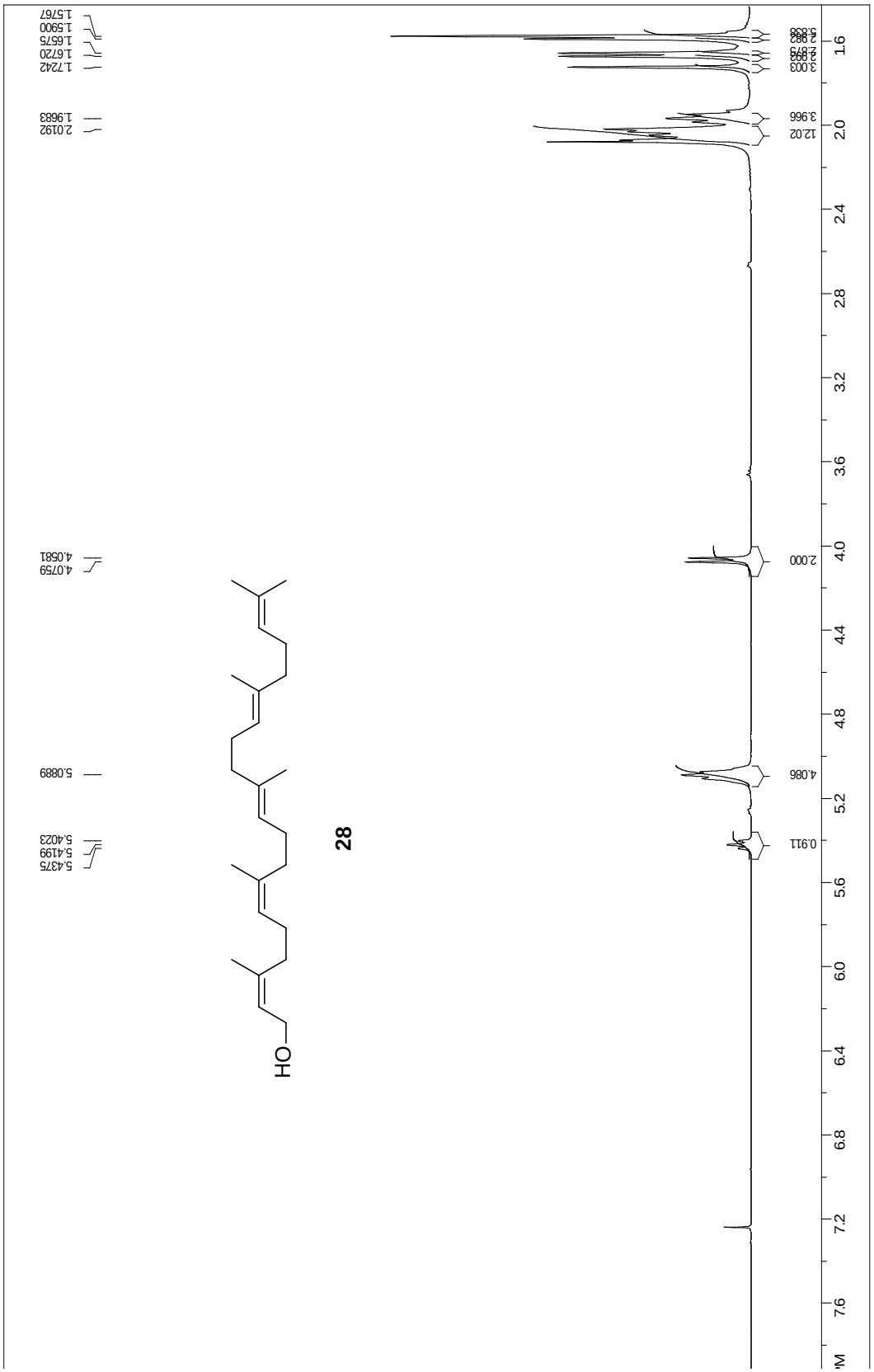

19.8108
21.4954
25.1186
29.1916
36.5189
37.3960
61.6586
68.5484
73.1490
127.7413
127.8935
128.5521
128.7314
134.5274
138.6813
BnO
OH
25
freq. of 0 ppm: 125.730106 MHz
processed size: 32768 complex points
LB: 1.000 GB: 0.0000

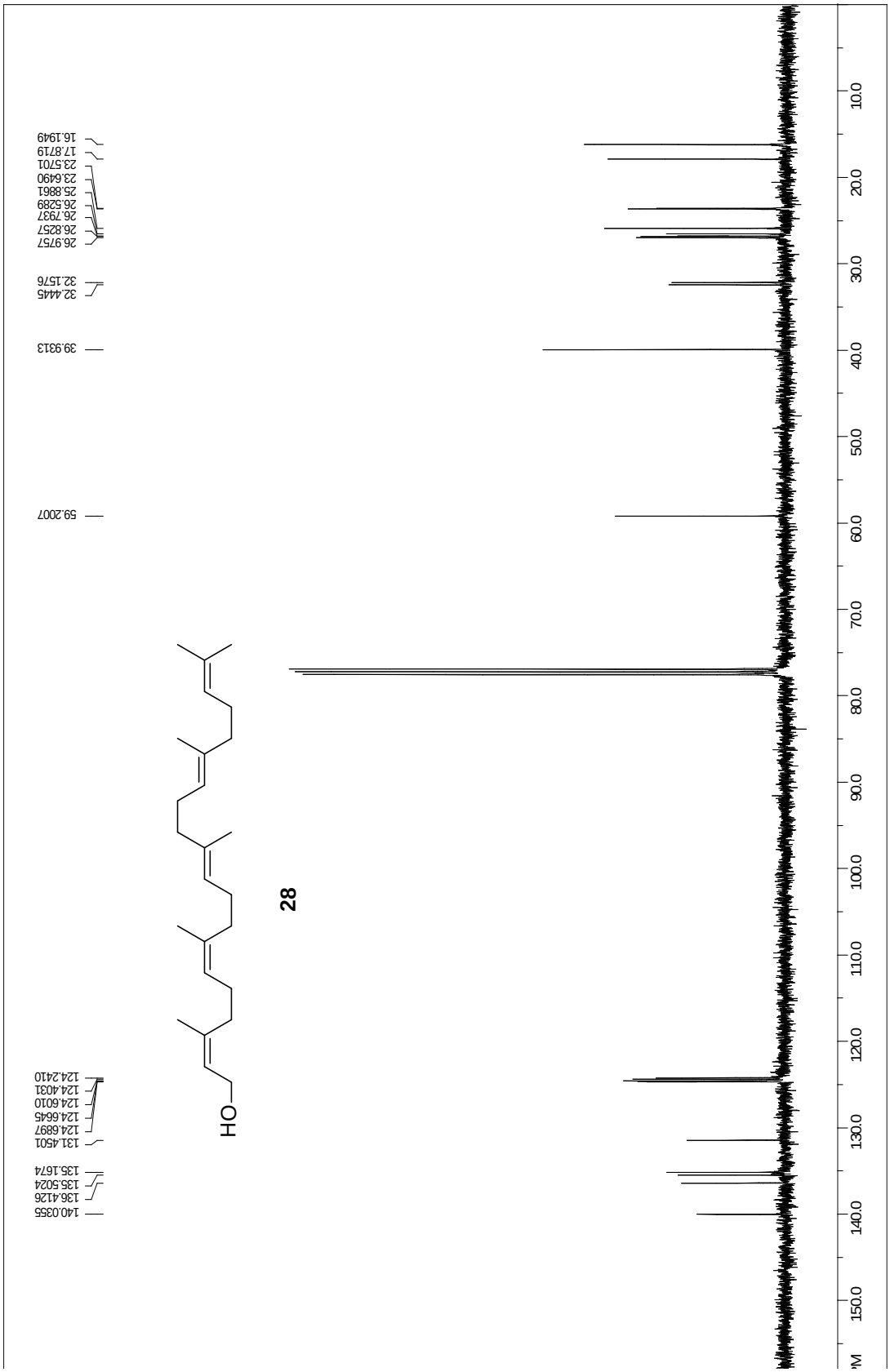

BnO
Br
26
7.3195
7.2602
5.3736
5.3708
5.3587
5.3560
5.3439
5.3411
4.4849
3.9557
3.4873
2.0505
1.8091
1.6427
1.4209
1.2200
0.8980
0.8848
3.892
0.910
0.921
1.999
1.904
2.025
2.068
2.907
2.392
2.041
1.128
3.071
C:\Users\BWD\Desktop\Spec Data\NMR DATA\Way Project\Dolichol Derivative\Dolichol Coupling Bromide\1\fid expt: <zg30>
transmitter freq.: 500.023388 MHz
time domain size: 65536 points
width: 10330.58 Hz = 20.660203 ppm = 0.157632 Hz/pt
number of scans: 128
freq. of 0 ppm: 500.020022 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000

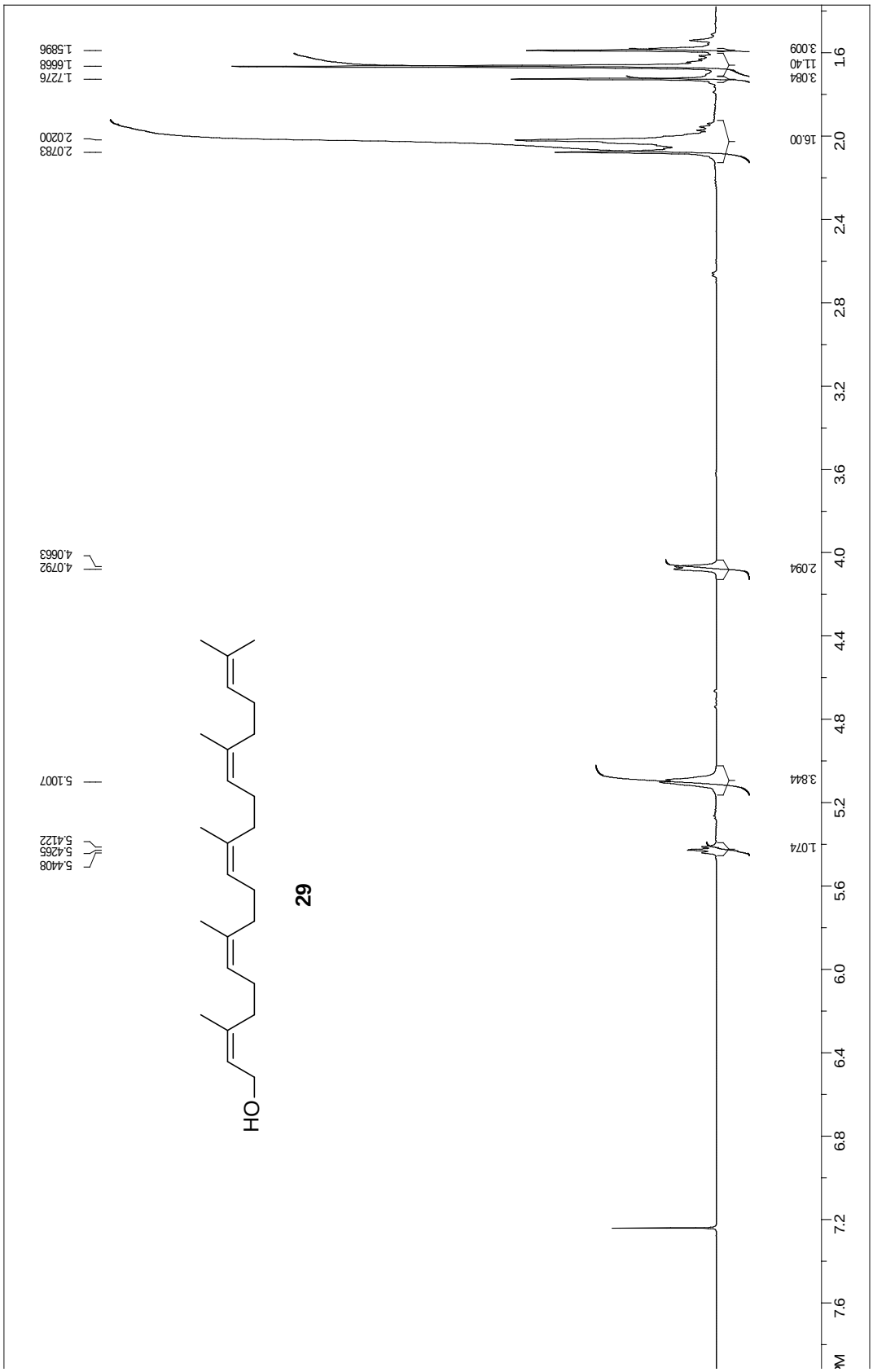

19.6836
22.0533
25.7081
29.7434
32.5921
36.7659
36.8193
68.7507
73.1394
127.6748
127.8118
128.5305
131.5325
132.1021
138.8429
BnO
Br
26
140.0
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
C:\Users\BWD\Desktop\Spec Data\NMRDATA\Wzy Projects\Dolichol Derivative\Dolichol Coupling Bromide\2\fid expt: <zgpg30>
transmitter freq.: 125.742702 MHz
domain size: 65536 points
width: 30030.03 Hz = 238.821256 ppm = 0.458222 Hz/pt
number of scans: 176
freq. of 0 ppm: 125.730105 MHz
processed size: 32768 complex points
LB: 1.000 GB: 0.0000

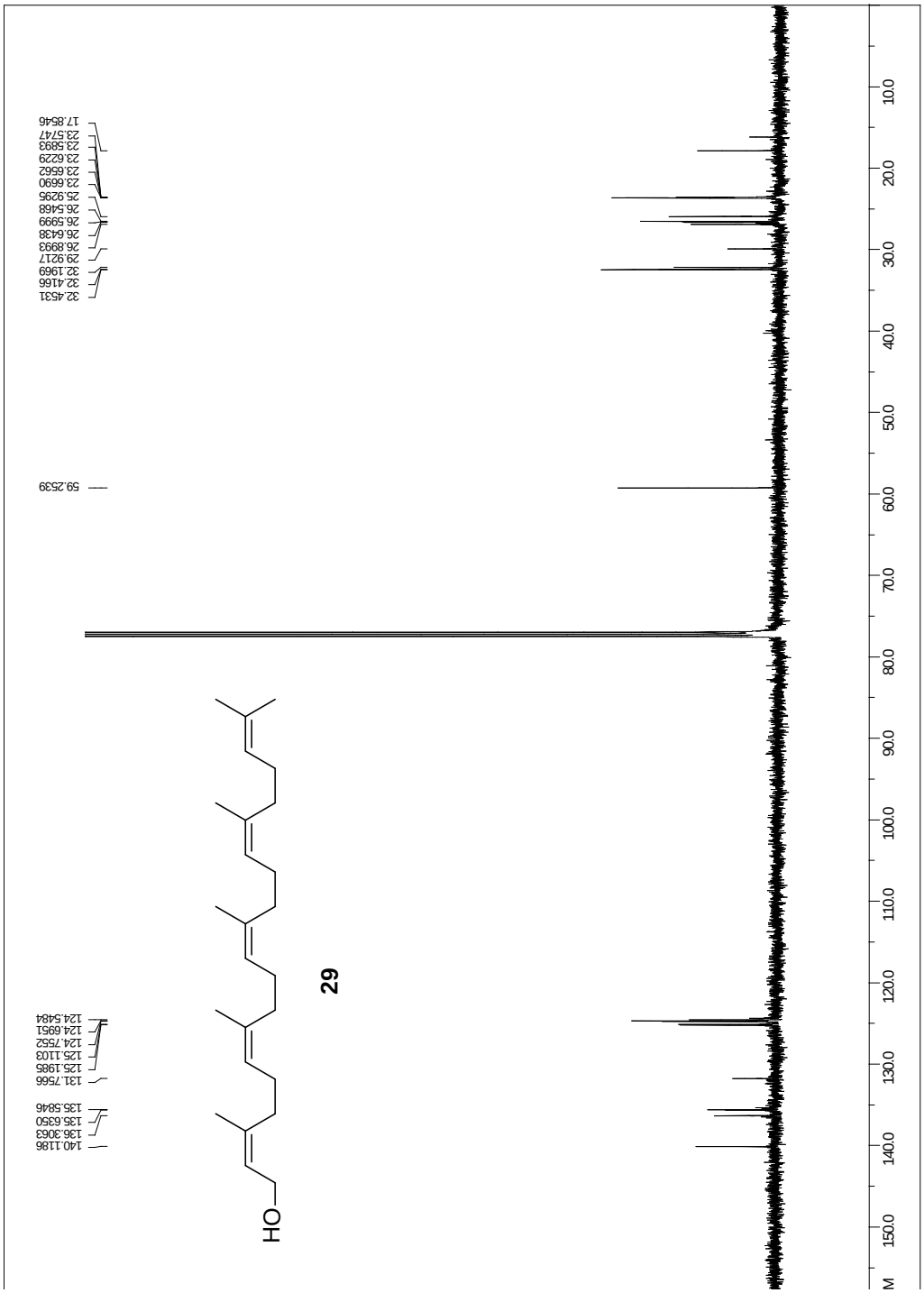

7.7178
7.7014
7.3068
7.2908
5.1689
5.1530
5.1371
3.7437
3.7279
2.4189
1.6935
1.3176
2.001
2.038
1.000
2.077
3.037
3.062
3.032
7.2
6.8
6.4
6.0
5.6
5.2
4.8
4.4
4.0
3.6
3.2
2.8
2.4
2.0
1.6
1.2
0.8
0.4
PPM
O
S
O
27
C:\Users\BWJ\Desktop\Spec Data\NMR DATA\Wzy Project\Allyl Sulfone\1\fid expt: <zg30>
transmitter freq.: 500.023088 MHz
domain size: 65536 points
from 10330.58 Hz to -20.662203 ppm = 0.157632 Hz/pt
number of scans: 56
freq. of 0 ppm: 500.020021 MHz
processed size: 32768 complex points
LB: 0.300 GB: 0.0000

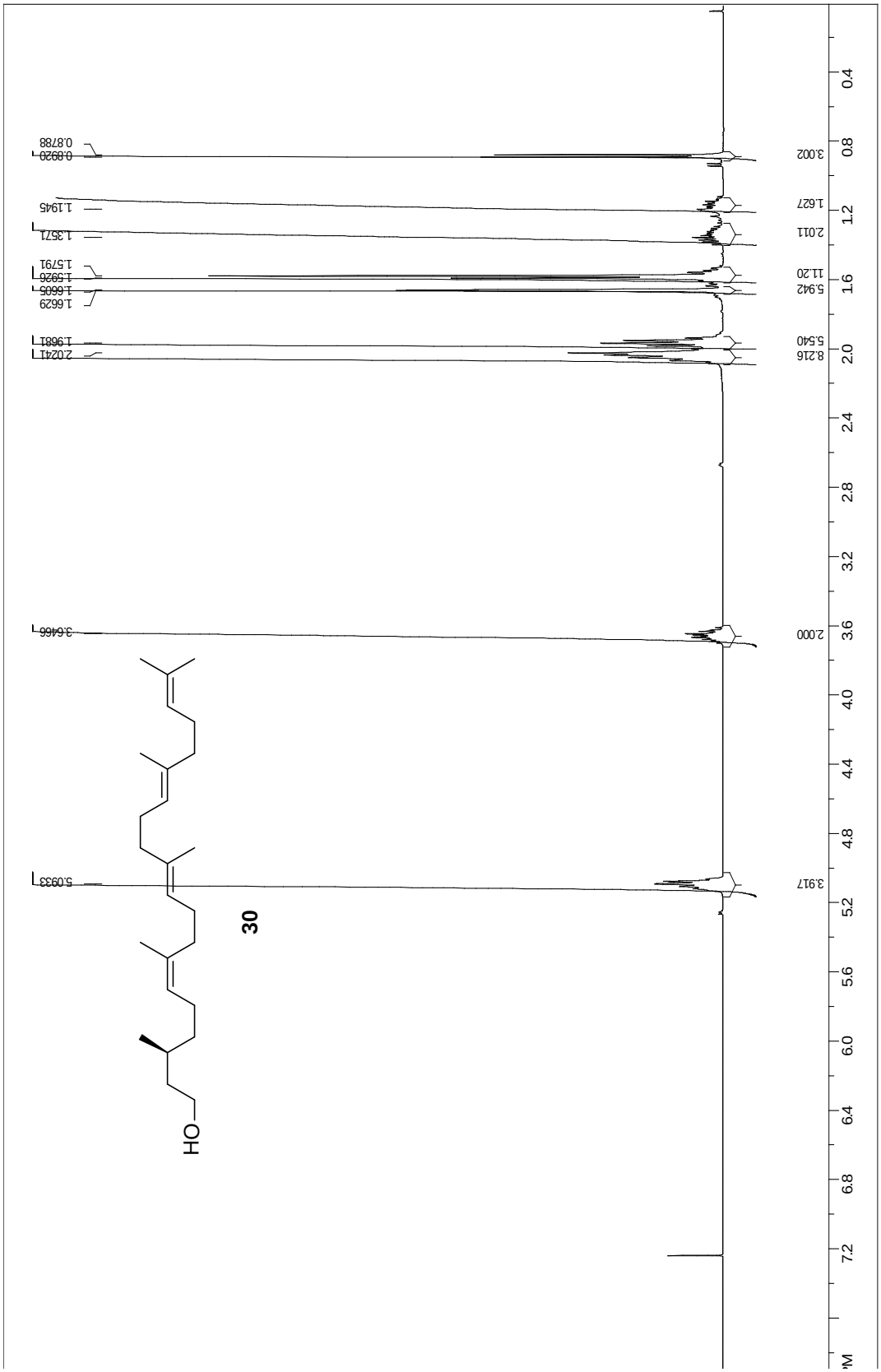

17.9896
21.8191
26.0201
56.4595
110.8155
128.6762
129.7812
136.1612
142.8976
144.6226
27
150.0
140.0
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
C:\Users\EMV\Desktop\Spec Data\NMR DATA\Vicky Project\Allyl Sulfone\2\1fid expt: <zgpg30>
transmitter freq.: 125.742702 MHz
time domain size: 65536 points
width: 30030.03 Hz = 238.821256 ppm = 0.458222 Hz/pt
number of scans: 183
freq. of 0 ppm: 125.730103 MHz
processed size: 32768 complex points
LB: 1.000 GB: 0.0000

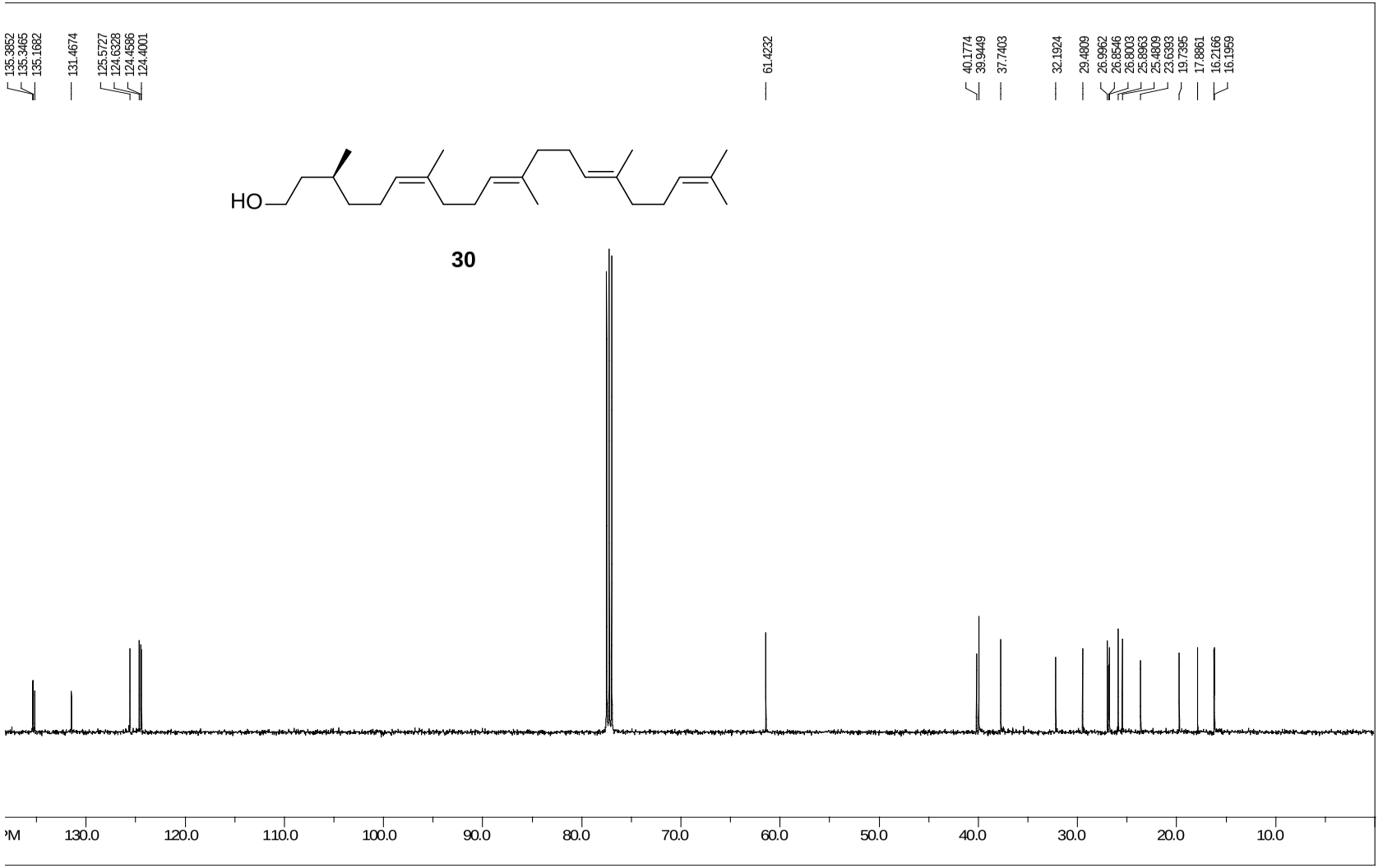

28
HO
1.5767
1.5900
1.6575
1.6720
1.7242
2.0192
1.9683
4.0759
4.0581
5.0889
5.4375
5.4199
5.4023
0.911
4.086
2.000
12.02
3.966
3.003
2.992
2.873
2.982
5.838
PPM
freq. of 0 ppm: 400.130018 MHz
processed size: 16384 complex points
LB: 0.000 GB: 0.0000
C:\Users\BW\Desktop\Ramu NMR\prs-3-8-1\1\fid expt: <zg30>
transmitter freq.: 400.132471 MHz
domain size: 32768 points
width: 8278.15 Hz = 20.688813 ppm = 0.252629 Hz/pt
number of scans: 16


140.0355
136.4126
135.5024
135.1674
131.4501
124.6897
124.6645
124.6010
124.4031
124.2410
59.2007
39.9313
32.4445
32.1576
26.9757
26.8257
26.7937
26.5289
25.8861
23.6490
23.5701
17.8719
16.1949
HO
28
freq. of 0 ppm 100.6127748 MHz
processed size: 32768 complex points
LB: 1.000 GB: 0.0000
C:\Users\BW\Desktop\Ramu NMR\prs-3-8.2\fid exp: <qpgs30>
smitter freq.: 100.622830 MHz
domain size: 65536 points
r: 23980.82 Hz = 238.323802 ppm = 0.365918 Hz/pt
ber of scans: 160


1.5896
1.6668
1.7276
2.0783
2.0200
4.0792
4.0663
5.1007
5.4408
5.4265
5.4122
3.009
11.40
3.084
16.00
2.094
3.844
1.074
HO
29
freq. of 0 ppm: 500.020022 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000
C:\Users\EWI\Desktop\Spec Data\NMR DATA\Wzy Projects\cisPenta\1\fid exp1: <zg30>
mitter freq.: 500.023088 MHz
domain size: 65536 points
h: 10330.58 Hz = 20.660203 ppm = 0.157632 Hz/pt
ber of scans: 16

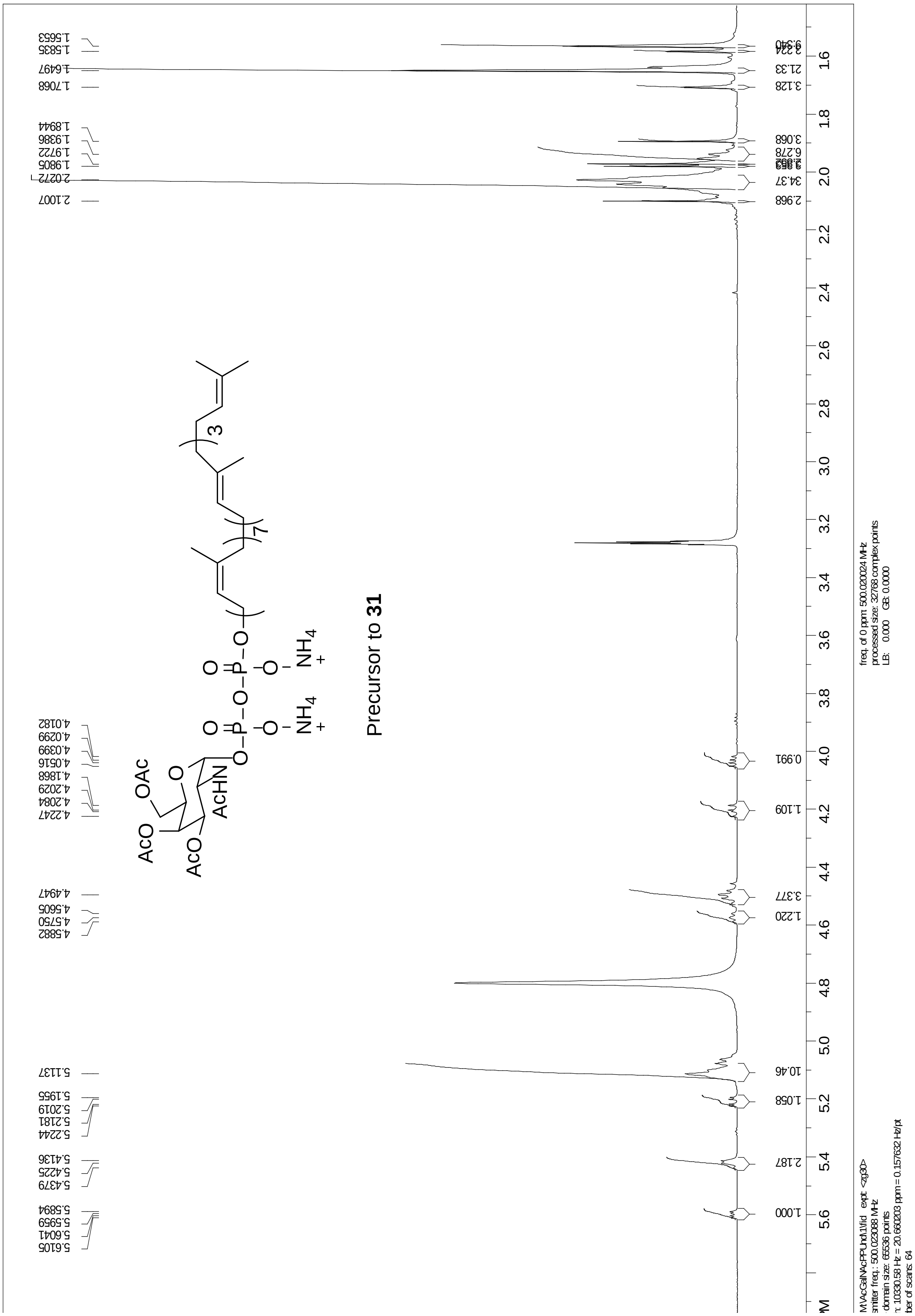

29
HO
140.1186
136.3063
135.6350
135.5846
131.7566
125.1985
125.1103
124.7552
124.6951
124.5484
59.2539
32.4531
32.4166
32.1969
29.9217
26.8993
26.6438
26.5999
26.5468
25.9295
23.6690
23.6562
23.6229
23.5893
23.5747
17.8546
M
150.0
140.0
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
freq. of 0 ppm 125.730100 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000
C:\Users\EW\Desktop\Spec Data\NMR DATA\Wzy Projects\cisPentaL2.fid exp: <zgpg30>
nitter freq.: 125.742702 MHz
domain size: 65536 points
r: 30030.03 Hz = 238.822256 ppm = 0.458222 Hz/pt
ber of scans: 1024


30
HO
0.8788
0.8920
1.1945
1.3571
1.5791
1.5926
1.6605
1.6629
1.9681
2.0241
3.6466
5.0933
3.917
2.000
8.216
5.540
5.942
11.20
2.011
1.627
3.002
C:\Users\BW\Desktop\Spec Data\NMR DATA\Wzy Project\Diolchd Derivative\(S)-(-)-MS-Pentaprenodiol\1\fid expt: <zg30>
freq. of 0 ppm: 500.020022 MHz
transmitter freq.: 500.022308 MHz
processed size: 32768 complex points
domain size: 65536 points
LB: 0.000 GB: 0.0000
1.0330.59 Hz = 20.660203 ppm = 0.157632 Hz/pt
number of scans: 128

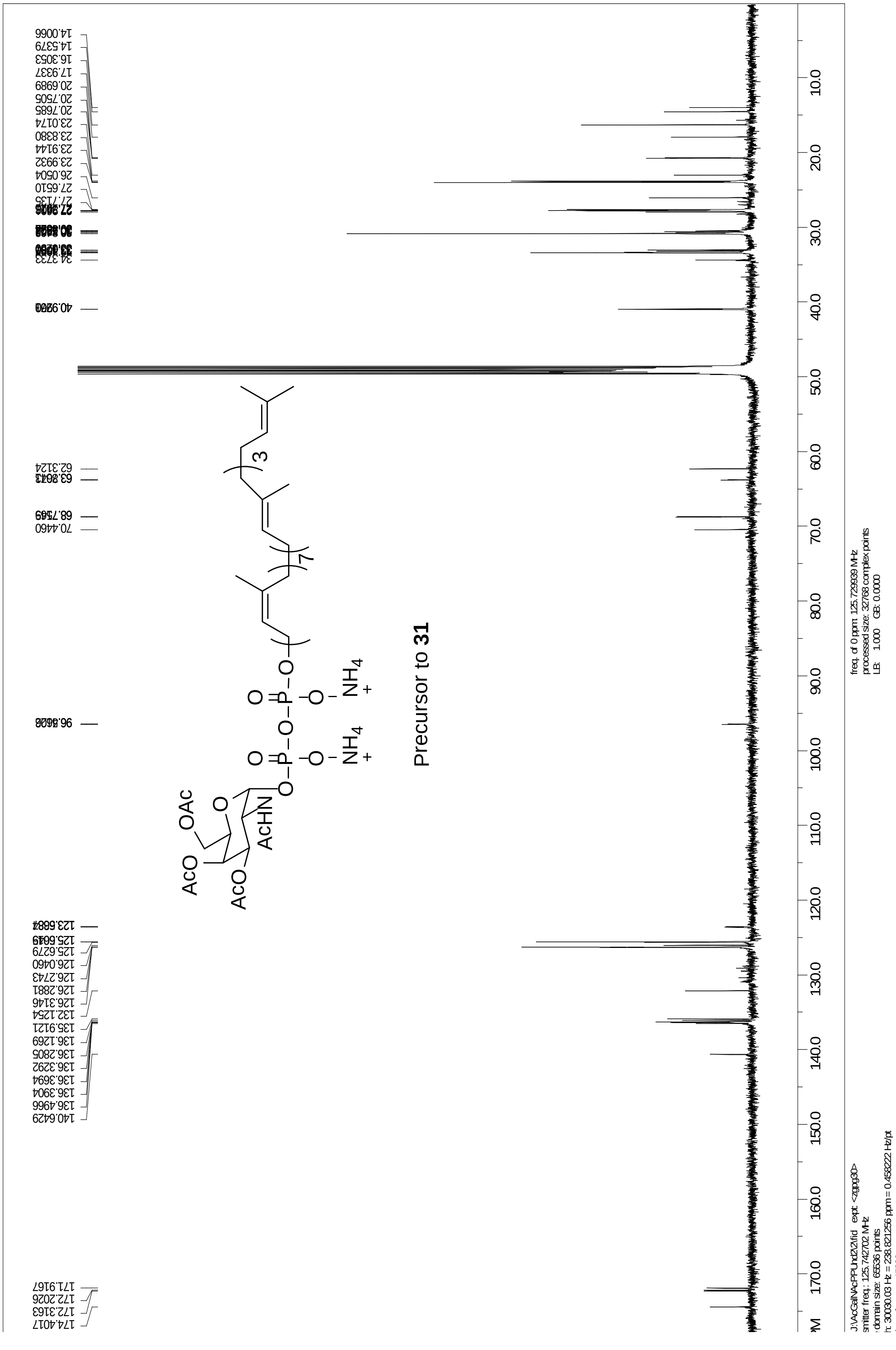


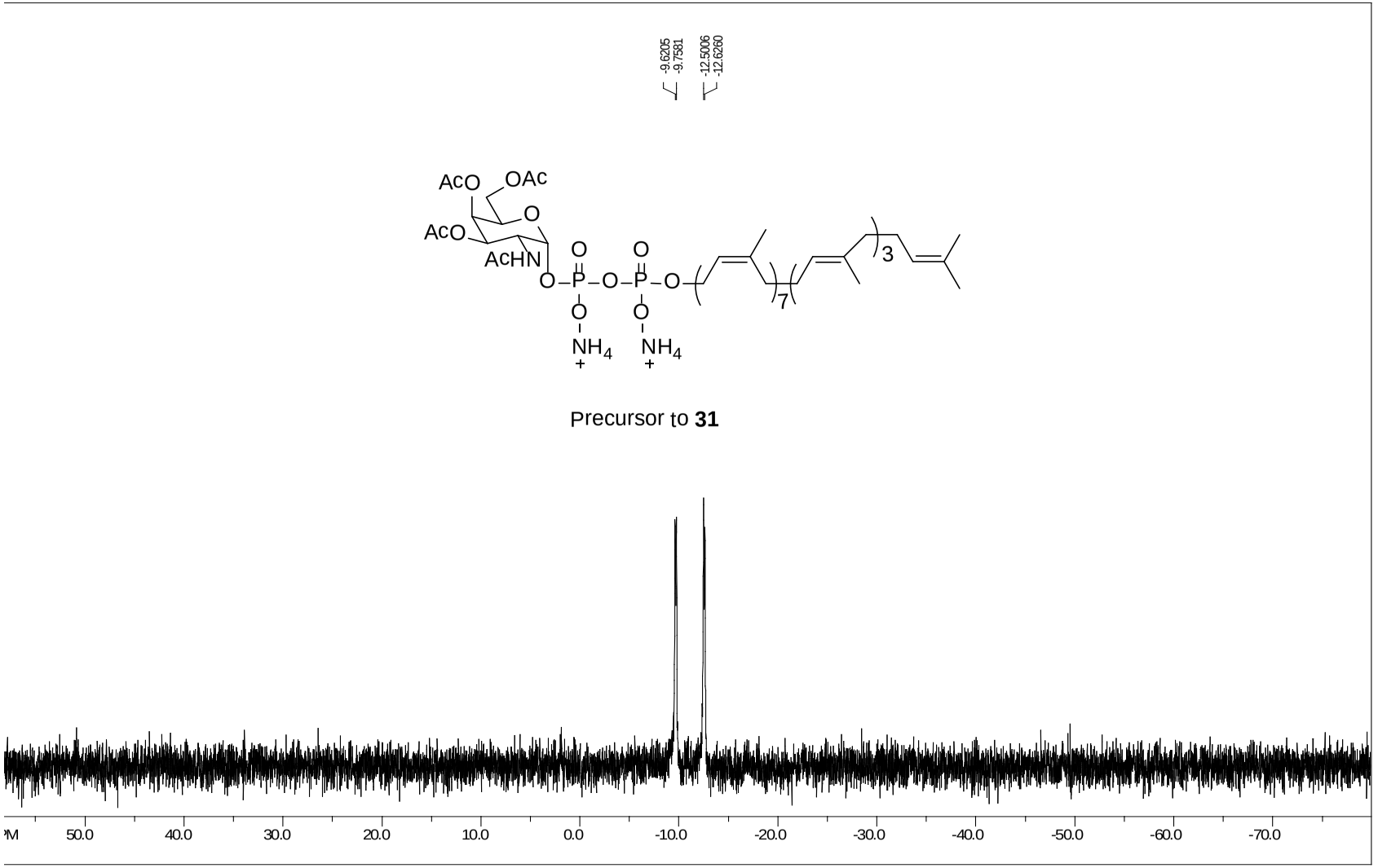
C:\Users\BW\Desktop\Spec Data\NMR DATA\Wzy Project\Dolichol Derivative\(S)-(-)-MS-Pentaprenol\2\fid expt: <zgpg30>
smitter freq.: 125.742702 MHz
domain size: 65536 points
h: 30030.03 Hz = 238.821256 ppm = 0.458222 Hz/pt
ber of scans: 505

freq. of 0 ppm: 125.730102 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000

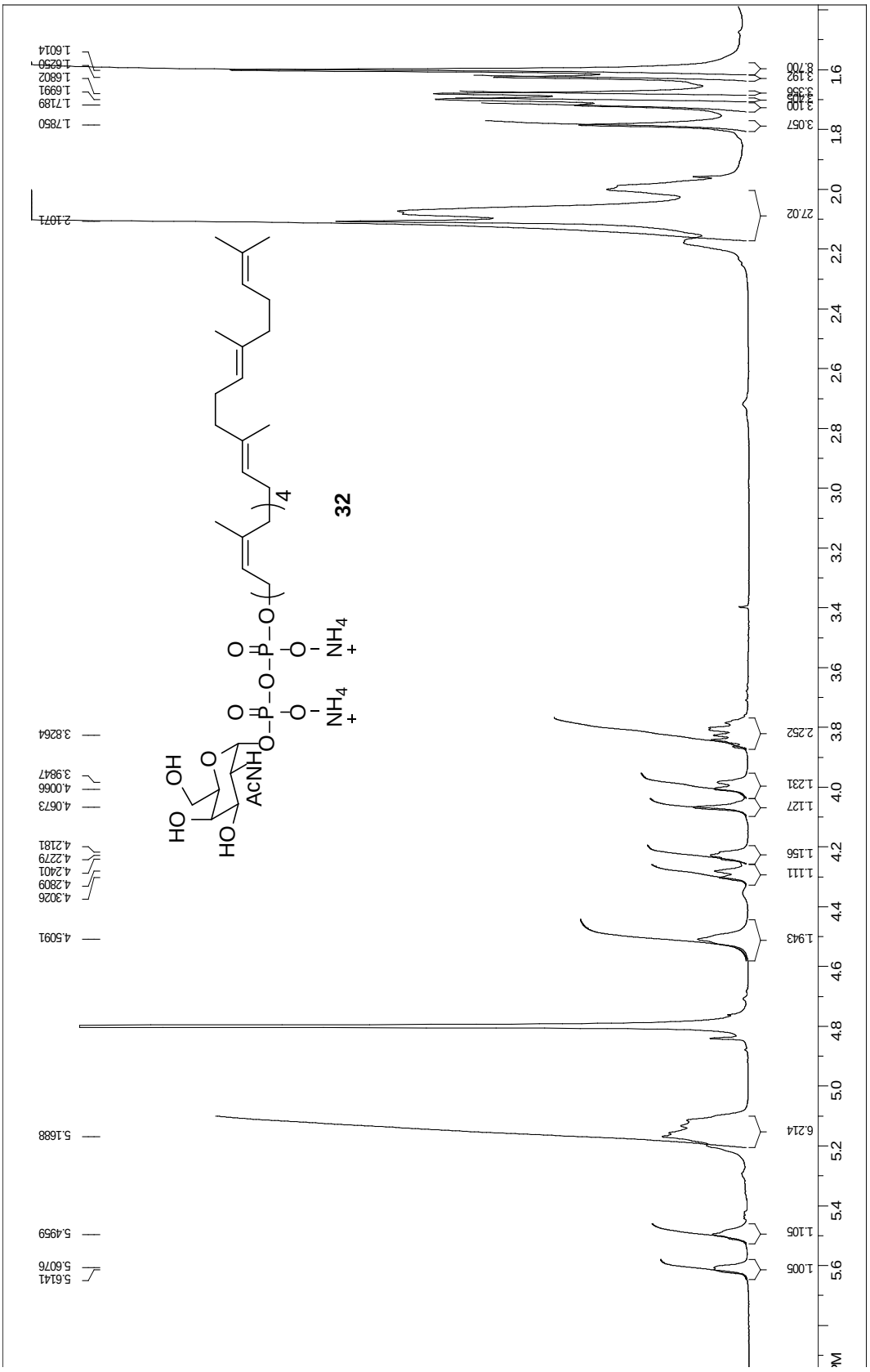


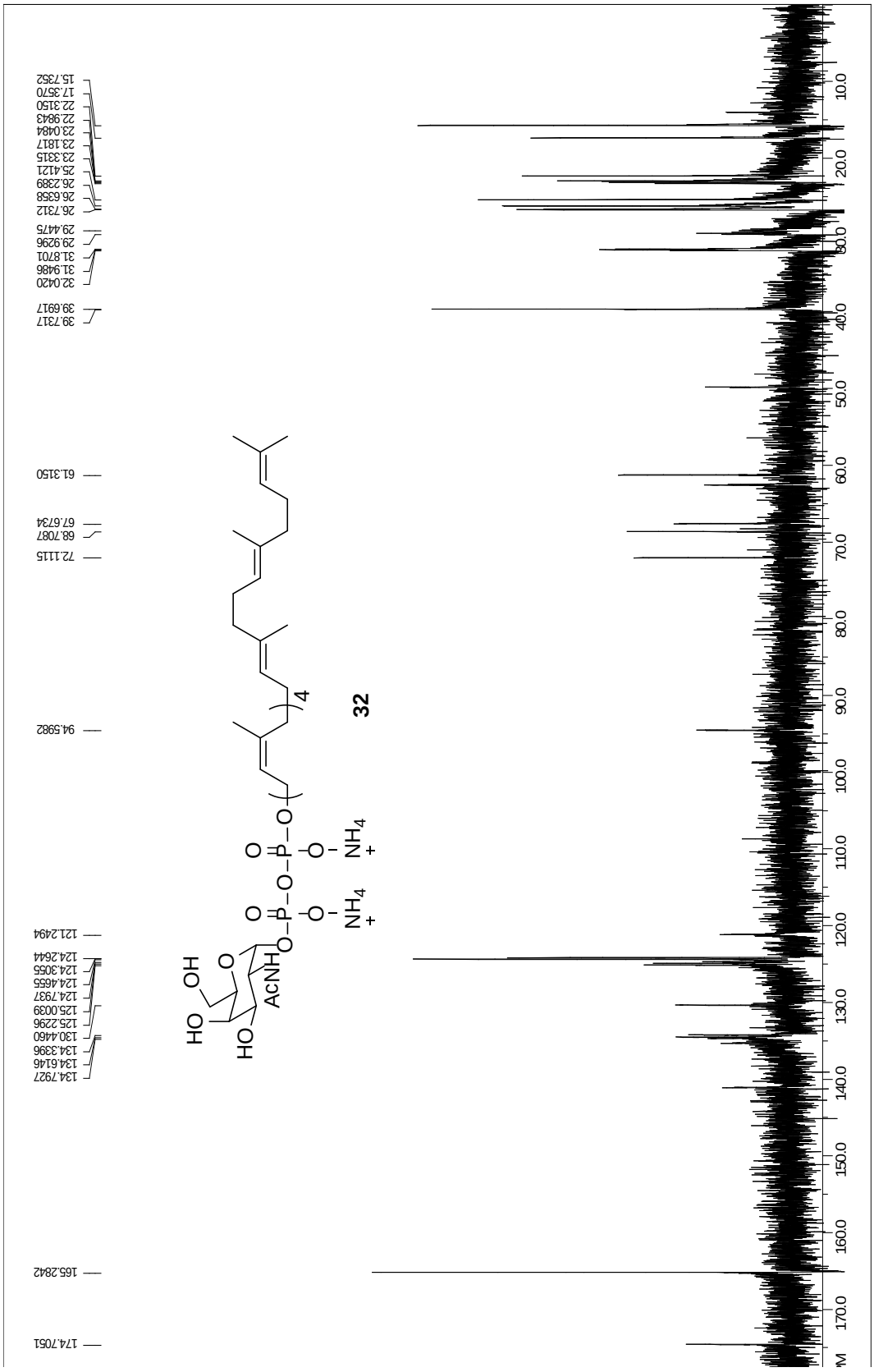
AcO
OAc
AcO
AcHN
O
NH4
Precursor to 31
freq. of 0 ppm: 500.020024 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000

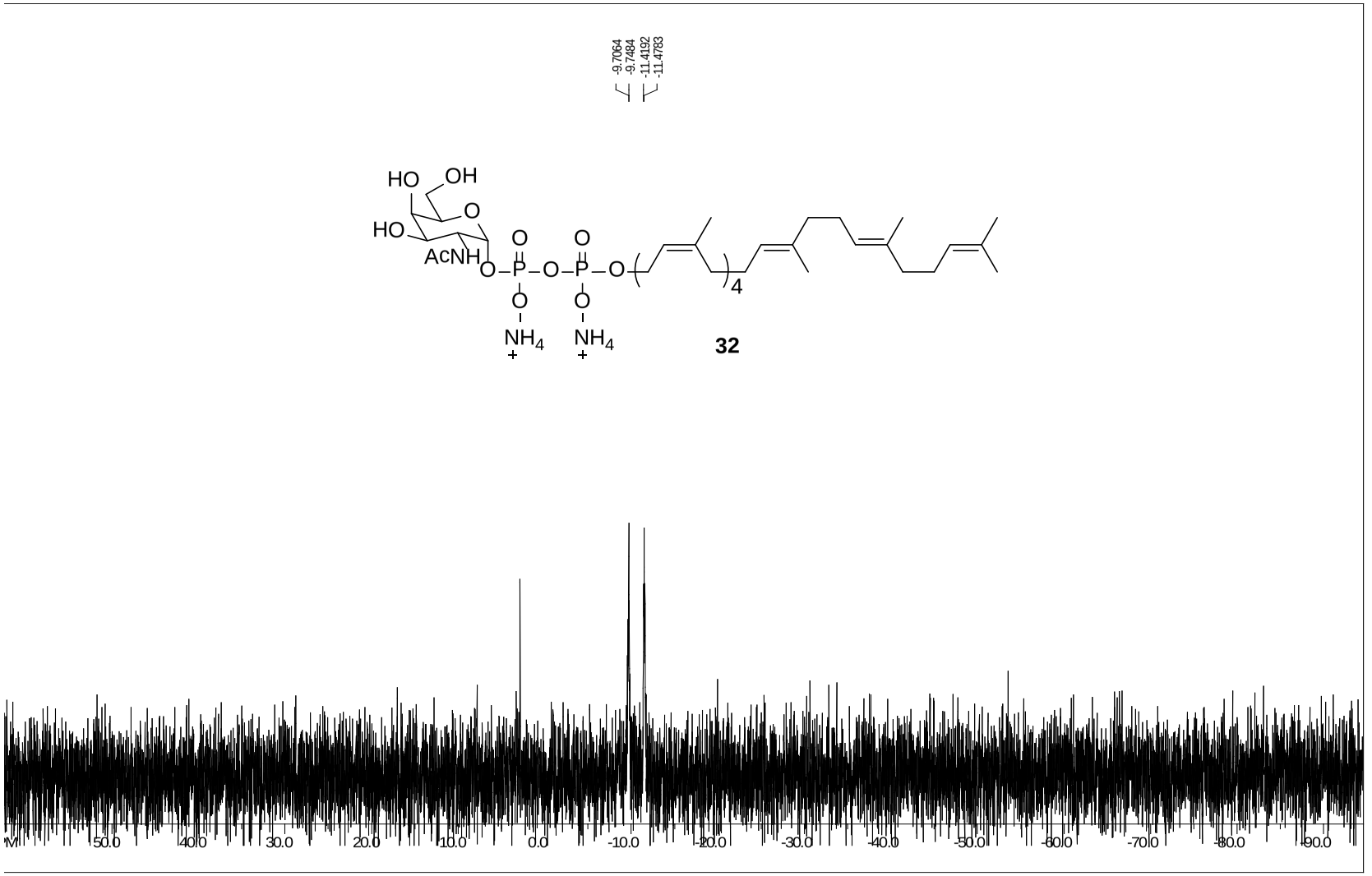

Precursor to 31

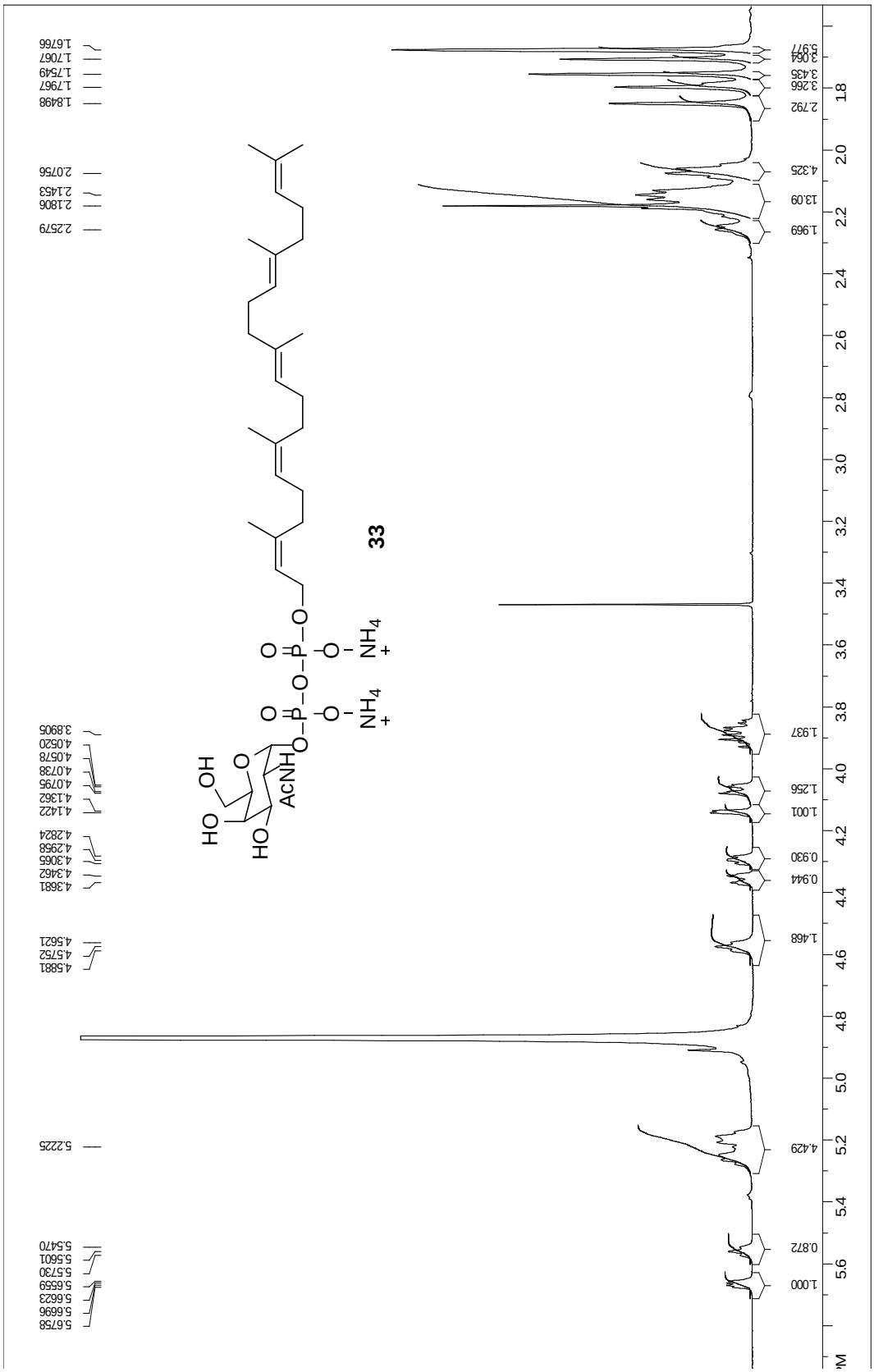


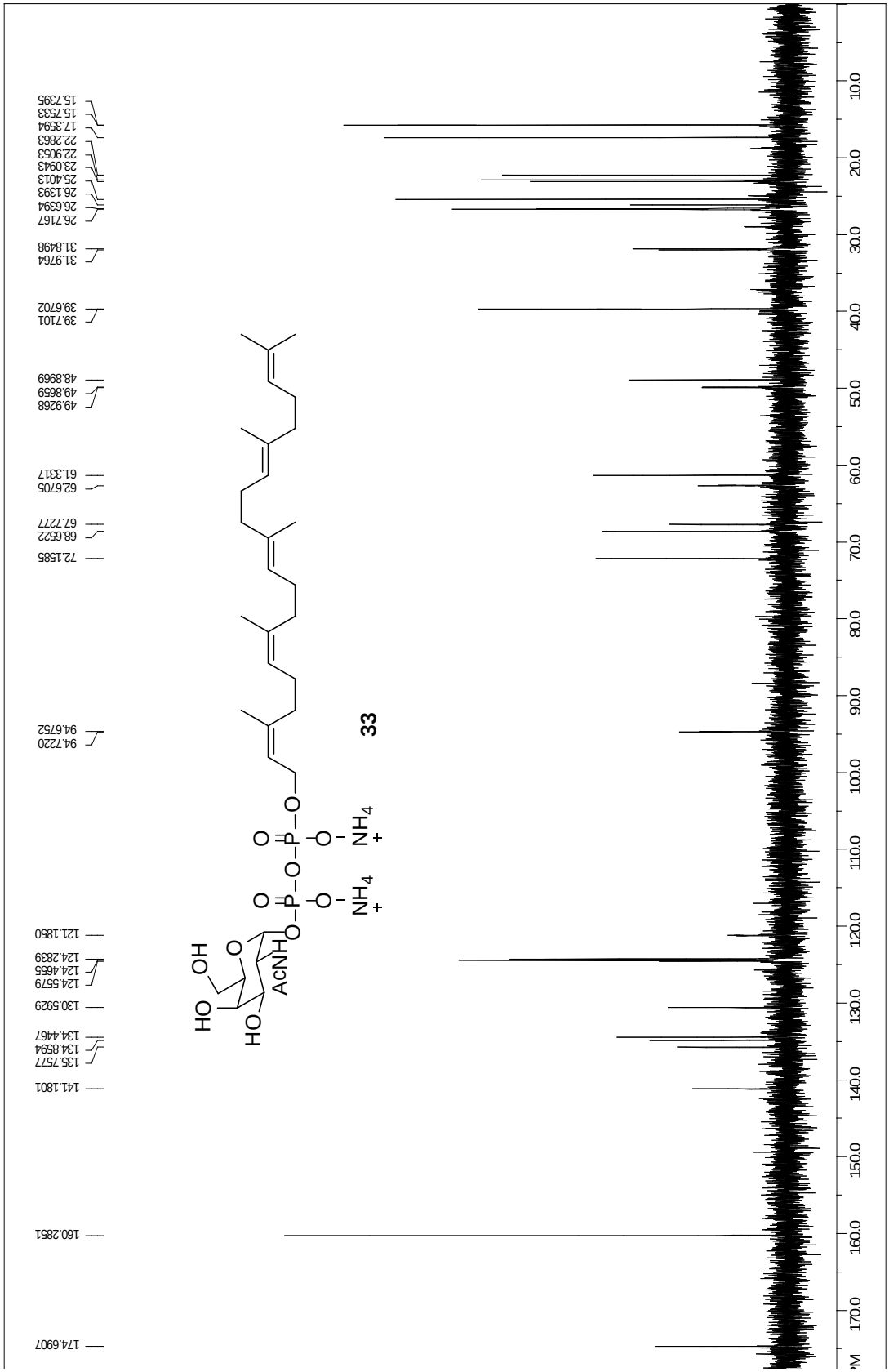
Precursor to **31**

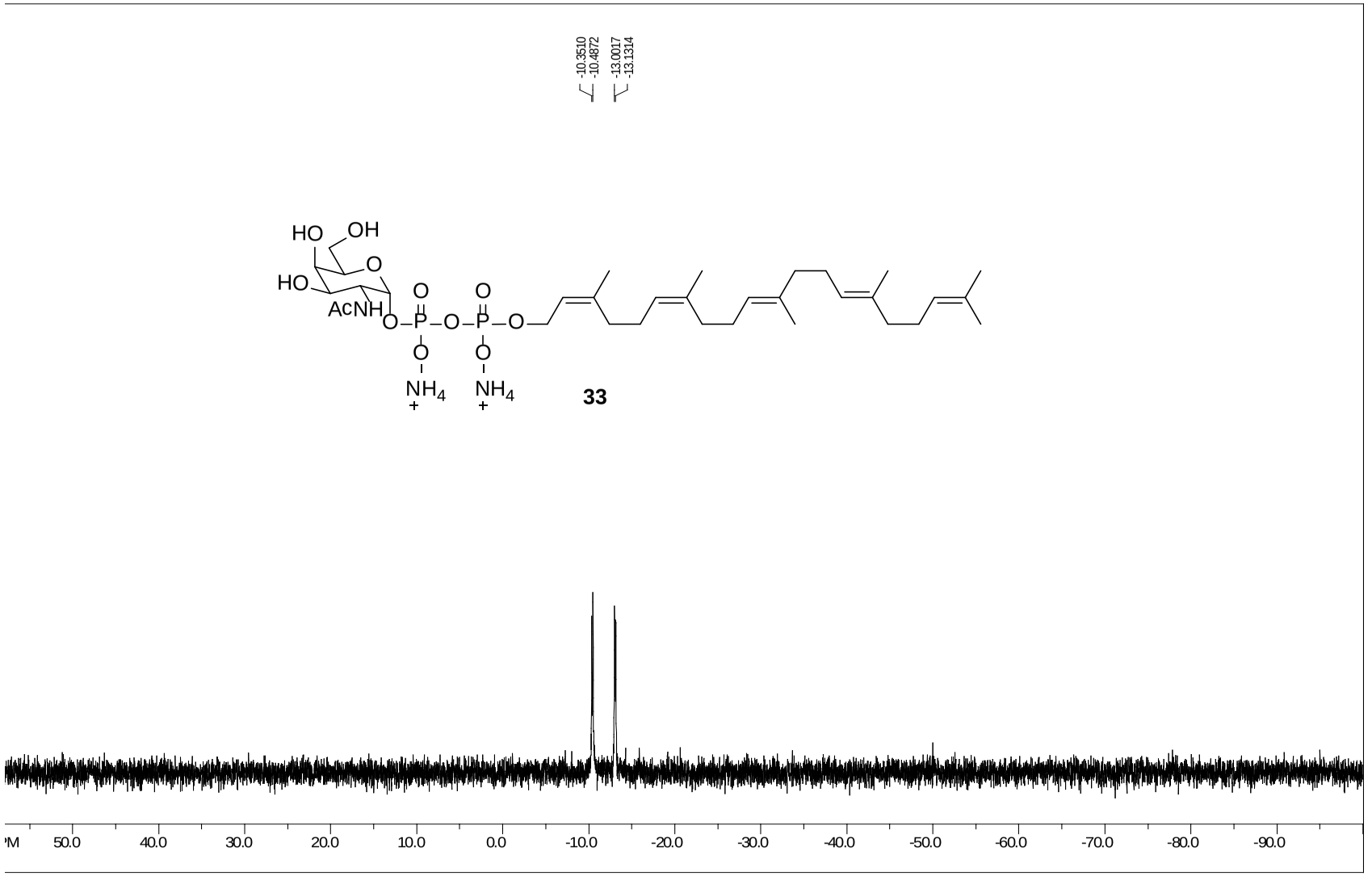

32
HO
OH
O
HO
AcNH
O
O
O
O
O
O
O
O
O
O
NH4
NH4
4
1.6014
1.6290
1.6802
1.6991
1.7189
1.7850
2.1071
3.8264
3.9847
4.0066
4.0673
4.2181
4.2279
4.2401
4.2809
4.3026
4.5091
5.1688
5.4959
5.6076
5.6141
6.700
3.192
3.100
3.057
27.02
2.252
1.231
1.127
1.156
1.111
1.943
6.214
1.105
1.005
ppm
freq. of 0 ppm: 500.0199952 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000
C:\Users\BWD\Desktop\Spec Data\NMR DATA\Wzy Project\GalNAcPPHeptaa2\1\fid expt: <zg30>
transmitter freq.: 500.0233088 MHz
domain size: 65536 points
width: 10330.58 Hz = 20.660203 ppm = 0.157632 Hz/pt
number of scans: 64

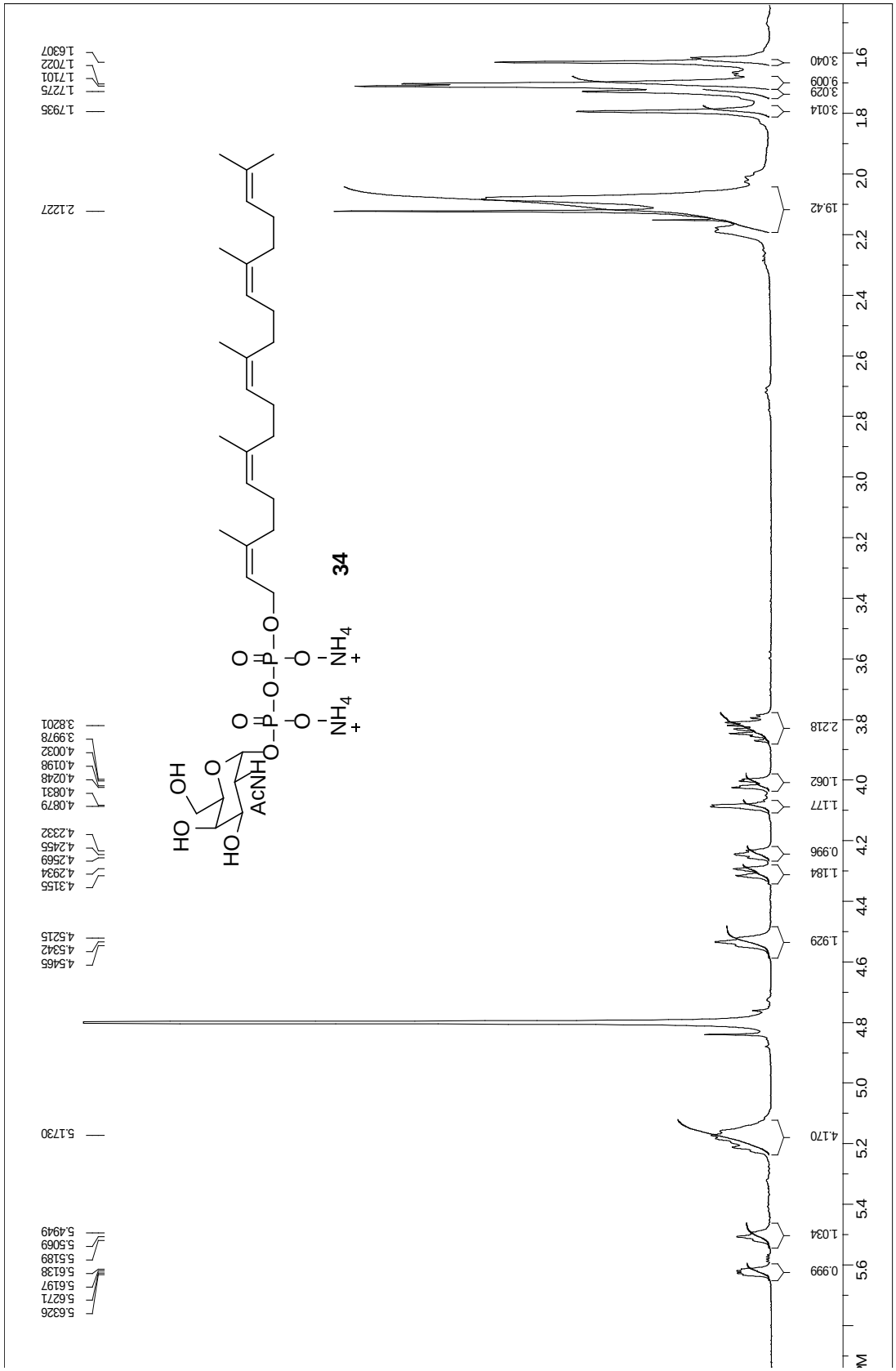

174.7051
165.2842
134.7927
134.6146
134.3396
130.4460
125.2296
125.0039
124.7937
124.4655
124.3055
124.2644
121.2494
94.5982
72.1115
68.7087
67.6734
61.3150
39.7317
39.6917
32.0420
31.9486
31.8701
29.9296
29.4475
26.7312
26.6358
26.2389
25.4121
23.3315
23.1817
23.0484
22.9843
22.3150
17.3570
15.7352
HO
OH
O
AcNH
O
P
O
O
O
P
O
O
O
NH4
NH4
4
32
170.0
160.0
150.0
140.0
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
C:\Users\BAM\Desktop\Spec Data\NMR DATA\Wzy Project\GalNAcPPHpta2\2\fid expt: <zgpg30>
anitter freq.: 125.742702 MHz
domain size: 65536 points
r.: 30030.03 Hz = 238.821256 ppm = 0.458222 Hz/pt
ber of scans: 12505
freq. of 0 ppm: 125.730129 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000

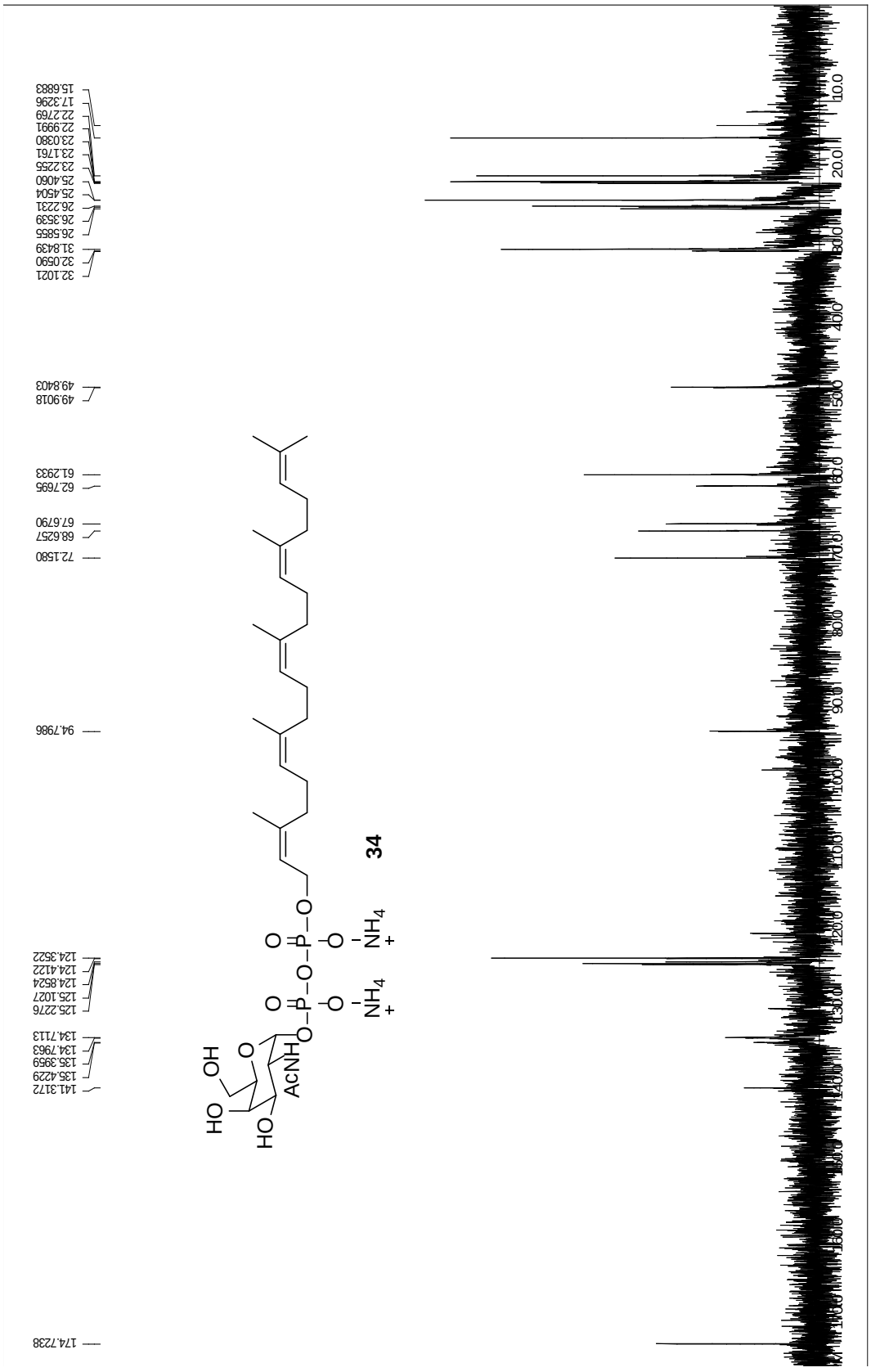

-9.7064
-9.7484
-11.4192
-11.4783
HO
OH
O
HO
AcNH
O
P
O
P
O
O
O
O
O
NH4
NH4
4
32
50.0
40.0
30.0
20.0
10.0
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
J:\GalNAcPPHeptaPhos\1\fid expt: <zgpg30>
smitter freq.: 161.967474 MHz
domain size: 65536 points
n: 64935.06 Hz = 400.914228 ppm = 0.990830 Hz/pt
ber of scans: 6118
freq. of 0 ppm: 161.975498 MHz
processed size: 32768 complex points
LB: 1.000 GB: 0.0000

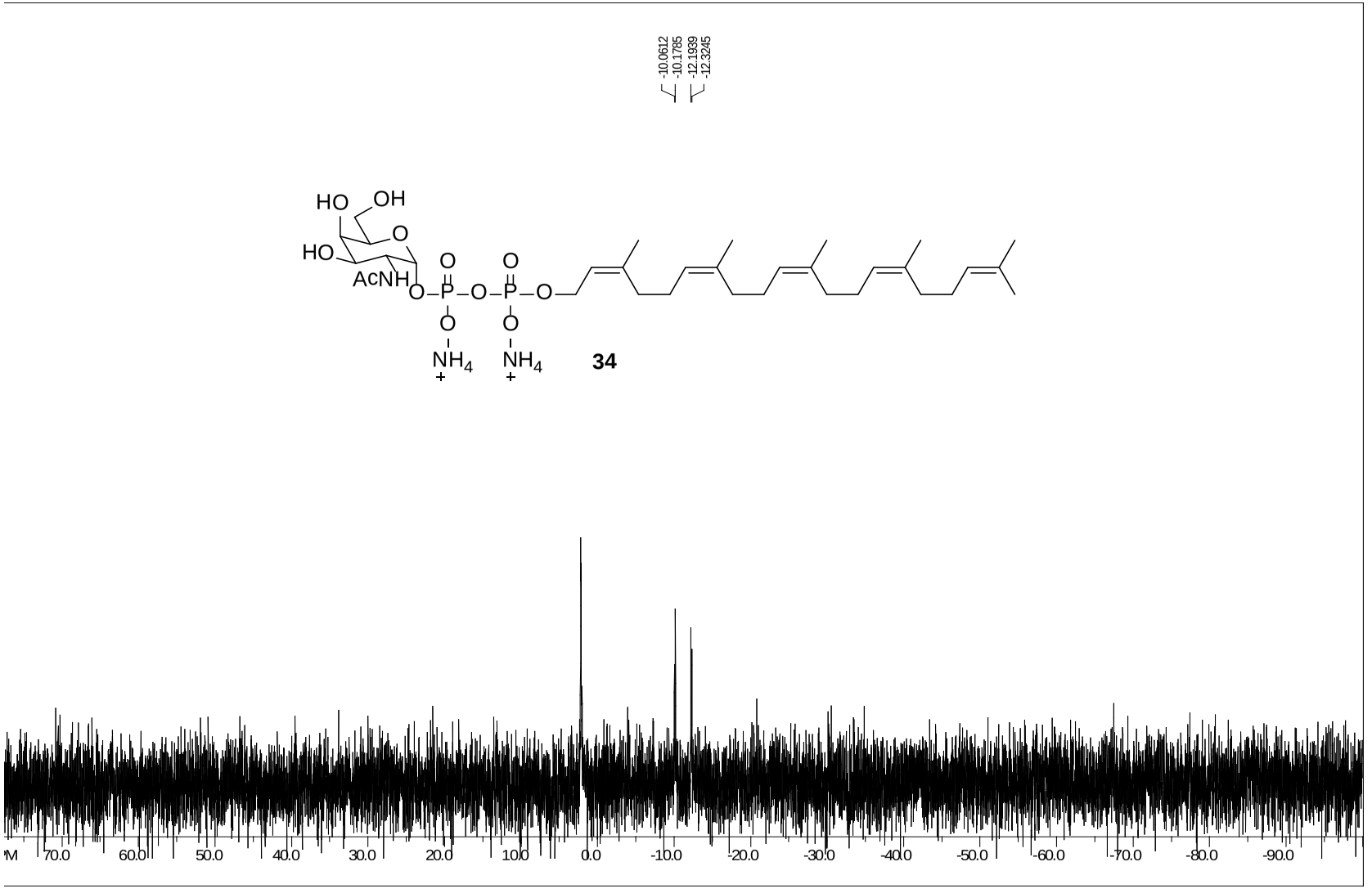

33
NH4+
NH4+
AcNH
HO
OH
HO
5.6758
5.6696
5.6623
5.6559
5.5730
5.5601
5.5470
5.2225
4.5881
4.5752
4.5621
4.3681
4.3462
4.3065
4.2958
4.2824
4.1422
4.1362
4.0795
4.0738
4.0578
4.0520
3.8905
2.2579
2.1806
2.1453
2.0756
1.8498
1.7967
1.7549
1.7067
1.6766
1.000
0.872
4.429
1.468
0.944
0.930
1.001
1.256
1.937
1.969
13.09
4.325
2.792
3.266
3.435
3.064
5.977
M
5.6
5.4
5.2
5.0
4.8
4.6
4.4
4.2
4.0
3.8
3.6
3.4
3.2
3.0
2.8
2.6
2.4
2.2
2.0
1.8
C:\Users\BWA Desktop\Spec Data\NMR DATA\Ramu NMR2\jrs-3-47\1\fid expt: <qg0>
transmitter freq.: 500.023288 MHz
time domain size: 65536 points
width: 10330.581 Hz = 20.660203 ppm = 0.157632 Hz/pt
number of scans: 32
freq. of 0 ppm: 500.019916 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000

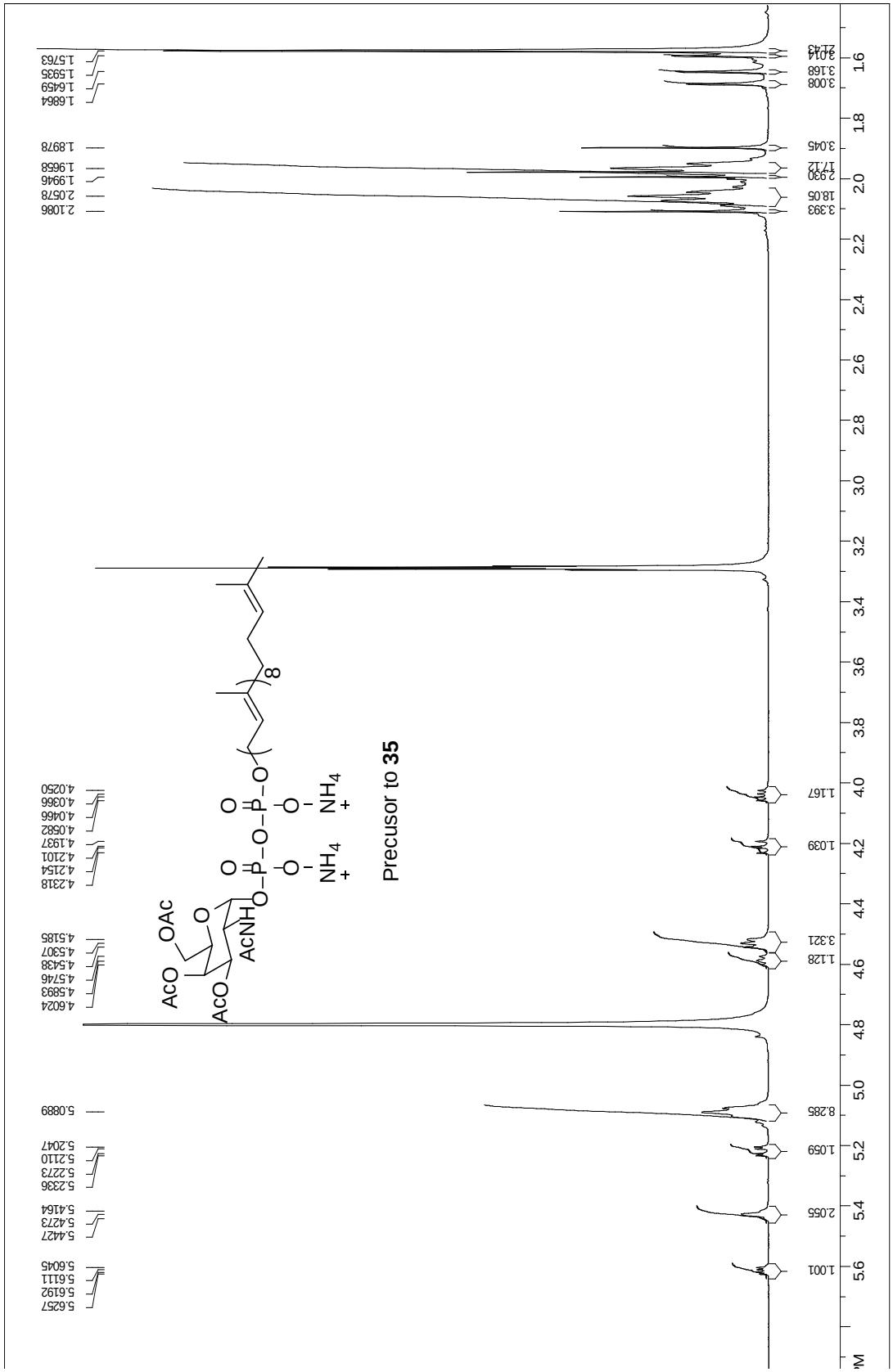

174.6907
160.2851
141.1801
135.7577
134.8594
134.4467
130.5929
124.5579
124.4655
124.2839
121.1850
94.7220
94.6752
72.1585
68.6522
67.7277
62.6705
61.3317
49.9268
49.8659
48.8969
39.7101
39.6702
31.9764
31.8498
26.7167
26.6394
26.1393
25.4013
23.0943
22.9053
22.2863
17.3594
15.7533
15.7395
33
AcNH
HO
OH
O
NH4
NH4
freq. of 0 ppm: 125.730129 MHz
processed size: 32768 complex points
LB: 1.000 GB: 0.0000
C:\Users\EW\Desktop\Spec Data\NMR DATA\Rama\NMR2\pts-3-472\1\fid expt: <zgpg30>
ansmitter freq.: 125.742702 MHz
domain size: 65536 points
h: 30030.03 Hz = 238.8212256 ppm = 0.458222 Hz/pt
ber of scans: 11242

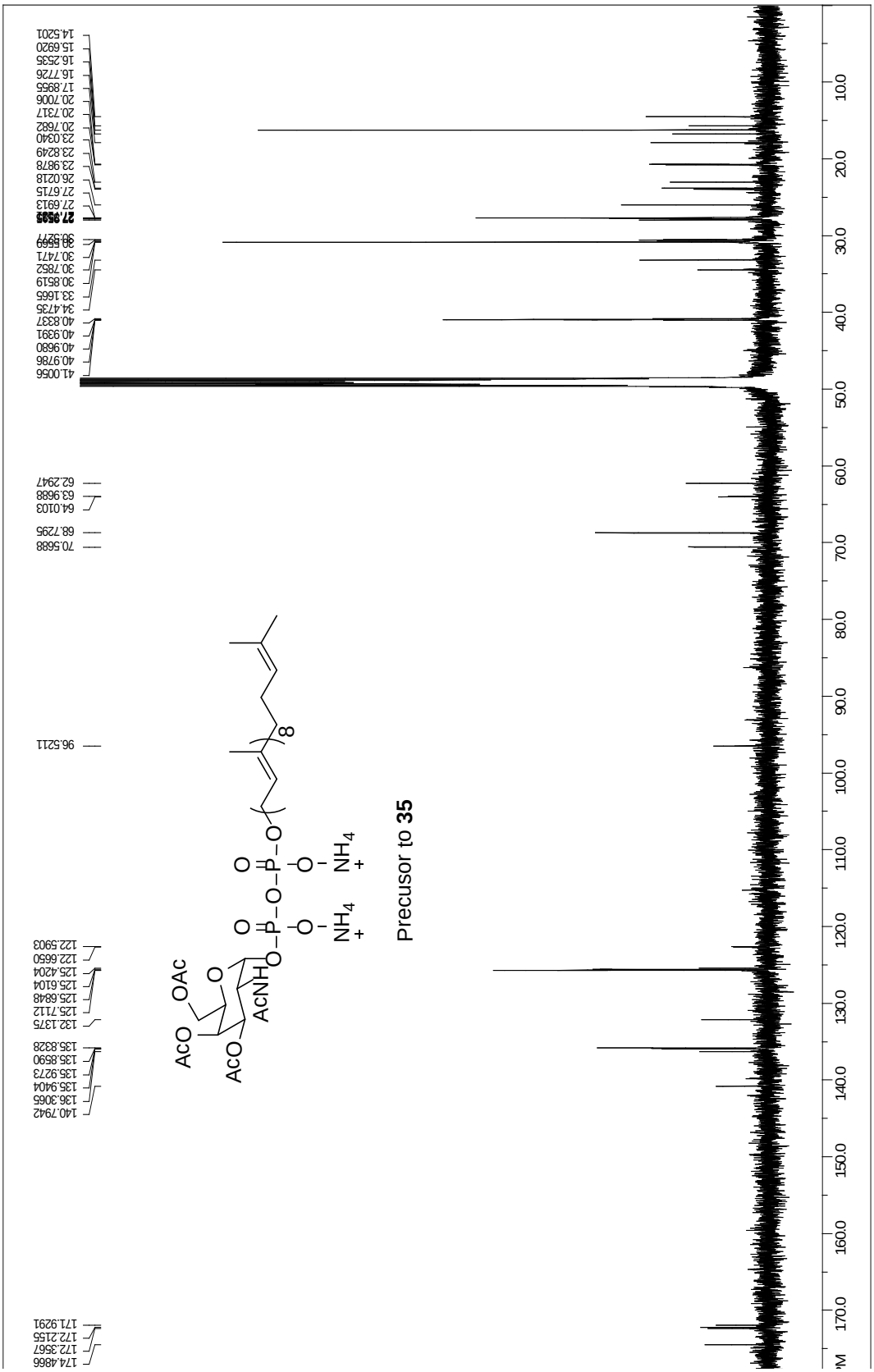

-10.3510
-10.4872
-13.0017
-13.1314
HO
OH
O
HO
AcNH
O
P
O
O
P
O
O
O
O
NH4
+
NH4
+
33
PM
50.0
40.0
30.0
20.0
10.0
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
C:\Users\BWA\Desktop\Ramu NMR\farnesyl pentasaccharide\4\fid expt: <zgpg30>
smitter freq.: 161.967474 MHz
domain size: 65536 points
n: 64935.06 Hz = 400.914228 ppm = 0.990830 Hz/pt
ber of scans: 181
freq. of 0 ppm: 161.975573 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000


34
5.6326
5.6271
5.6197
5.6138
5.5189
5.5069
5.4949
5.1730
4.5465
4.5342
4.5215
4.3155
4.2934
4.2569
4.2455
4.2332
4.0879
4.0831
4.0248
4.0198
4.0032
3.9978
3.8201
2.1227
1.7935
1.7275
1.7101
1.7022
1.6307
4.170
1.929
1.184
0.996
1.177
1.062
2.218
19.42
3.040
9.009
3.029
3.014
0.999
1.034
freq. of 0 ppm: 500.0199951 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000
C:\Users\BW\Desktop\Spec Data\NMR DATA\Wzy Project\GalNAcPPdisPentNew\1\fid expt: <zg30>
transmitter freq.: 500.023088 MHz
domain size: 65536 points
1: 10330.58 Hz = 20.660203 ppm = 0.157632 Hz/pt
number of scans: 16

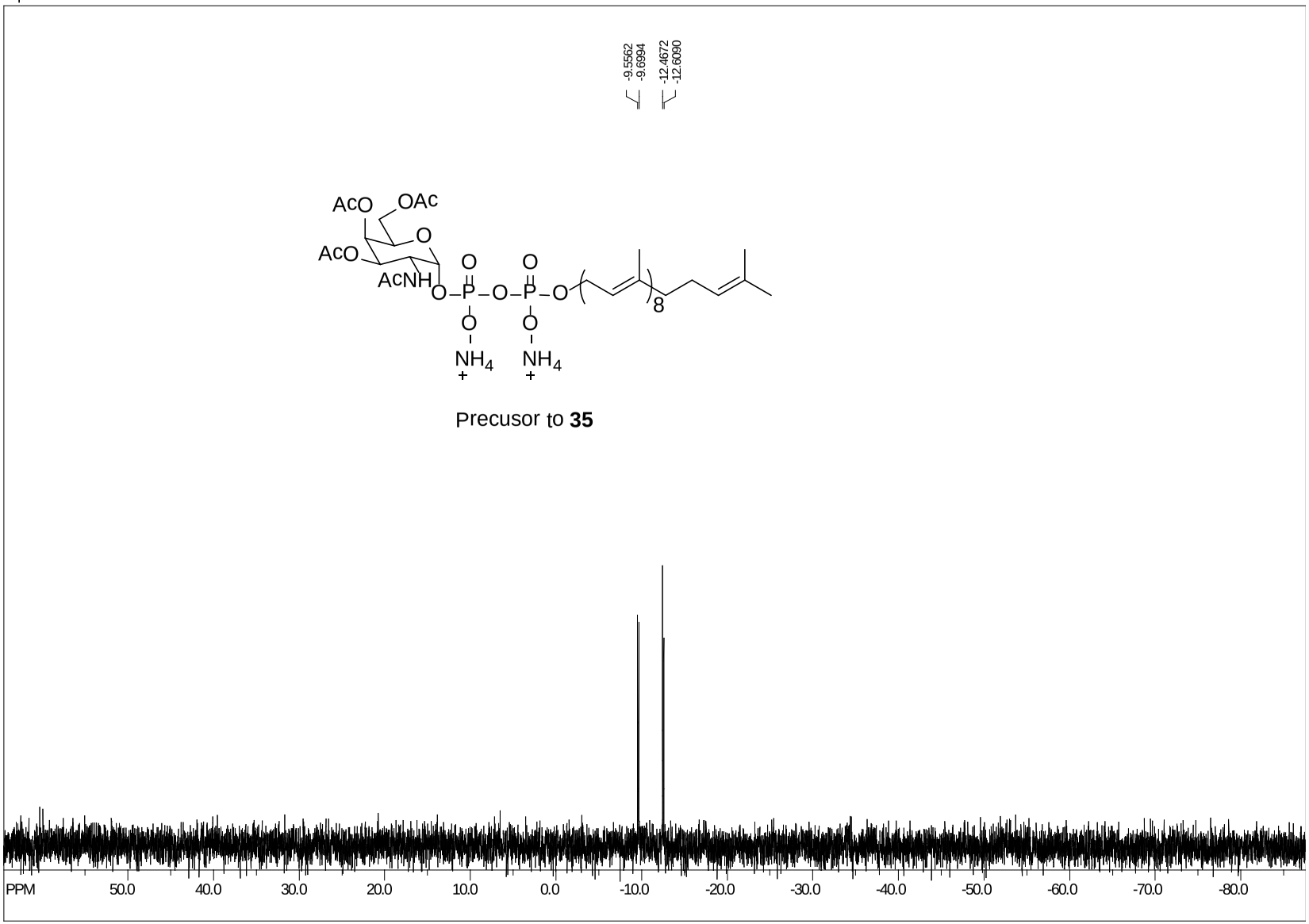

174.7238
141.3172
135.4229
135.3959
134.7963
134.7113
125.2276
125.1027
124.8524
124.4122
124.3522
94.7986
72.1580
68.6257
67.6790
62.7695
61.2933
49.9018
49.8403
32.1021
32.0590
31.8439
26.5855
26.3539
26.2231
25.4504
25.4060
23.2255
23.1761
23.0380
22.9991
22.2769
17.3296
15.6883
HO
OH
O
HO
AcNH
O
O
P
O
P
O
O
O
O
O
NH4
NH4
34
freq. of 0 ppm: 125.730129 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000
C:\Users\BW\Desktop\Spec Data\NMR DATA\Wzy Project\GalNAcPPolyPentNew\2\fid expt: <zgpg30>
smitter freq.: 125.742702 MHz
domain size: 65536 points
h: 30030.03 Hz = 238.821256 ppm = 0.458222 Hz/pt
ber of scans: 15111


-10.0612
-10.1785
-12.1939
-12.3245
HO
OH
O
HO
AcNH
O
P
O
O
P
O
O
O
NH4
+
NH4
+
34
'M
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
J:\GalNAcPPFarnPhos1\1\fid expt: <zgpg30>
smitter freq.: 161.967474 MHz
domain size: 65536 points
n: 64935.06 Hz = 400.914228 ppm = 0.990830 Hz/pt
ber of scans: 246
freq. of 0 ppm: 161.975498 MHz
processed size: 32768 complex points
LB: 1.000 GB: 0.0000


Precusor to 35
AcO
OAc
AcNH
NH4
NH4
8
5.6257
5.6192
5.6111
5.6045
5.4427
5.4273
5.4164
5.2336
5.2273
5.2110
5.2047
5.0889
4.6024
4.5893
4.5746
4.5438
4.5307
4.5185
4.2318
4.2154
4.2101
4.1937
4.0582
4.0466
4.0366
4.0250
1.6864
1.6459
1.5935
1.5763
1.8978
1.9946
1.9658
2.0578
2.1086
1.001
2.055
8.285
1.059
3.321
1.128
1.039
1.167
3.393
18.05
2.930
17.12
3.045
3.008
3.168
3.014
21.43
J:\AcGalNAcPPSolanesol\1\fid expt: <qg3d>
transmitter freq.: 500.020088 MHz
domain size: 65536 points
width: 10330.58 Hz = 20.660203 ppm = 0.157632 Hz/pt
number of scans: 64
freq. of 0 ppm: 500.020020 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000


AcO
OAc
O
AcO
AcNH
O
P
O
P
O
O
O
O
O
O
NH4
NH4
8
Precusor to 35

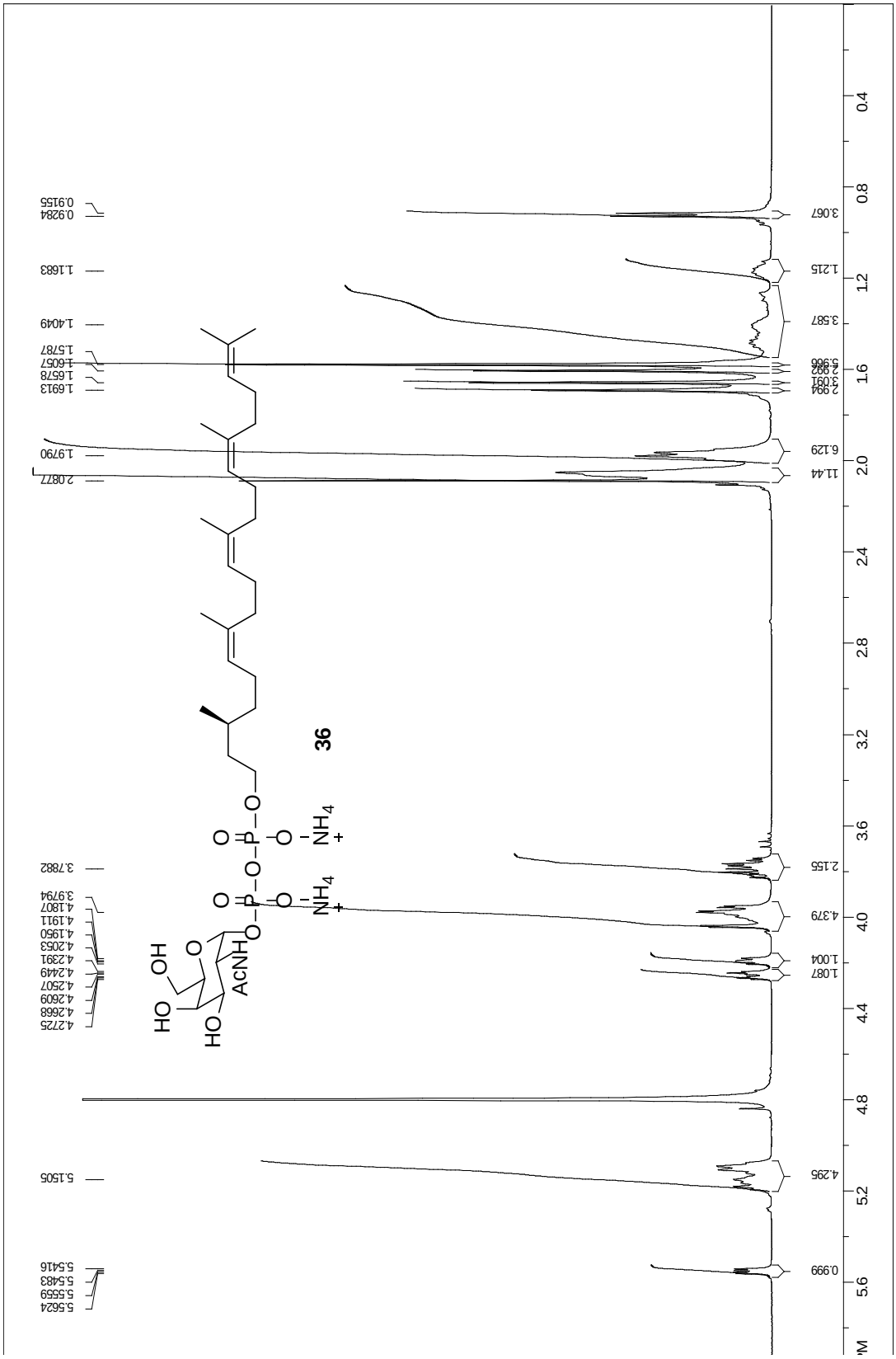
SpinWorks 2.3:

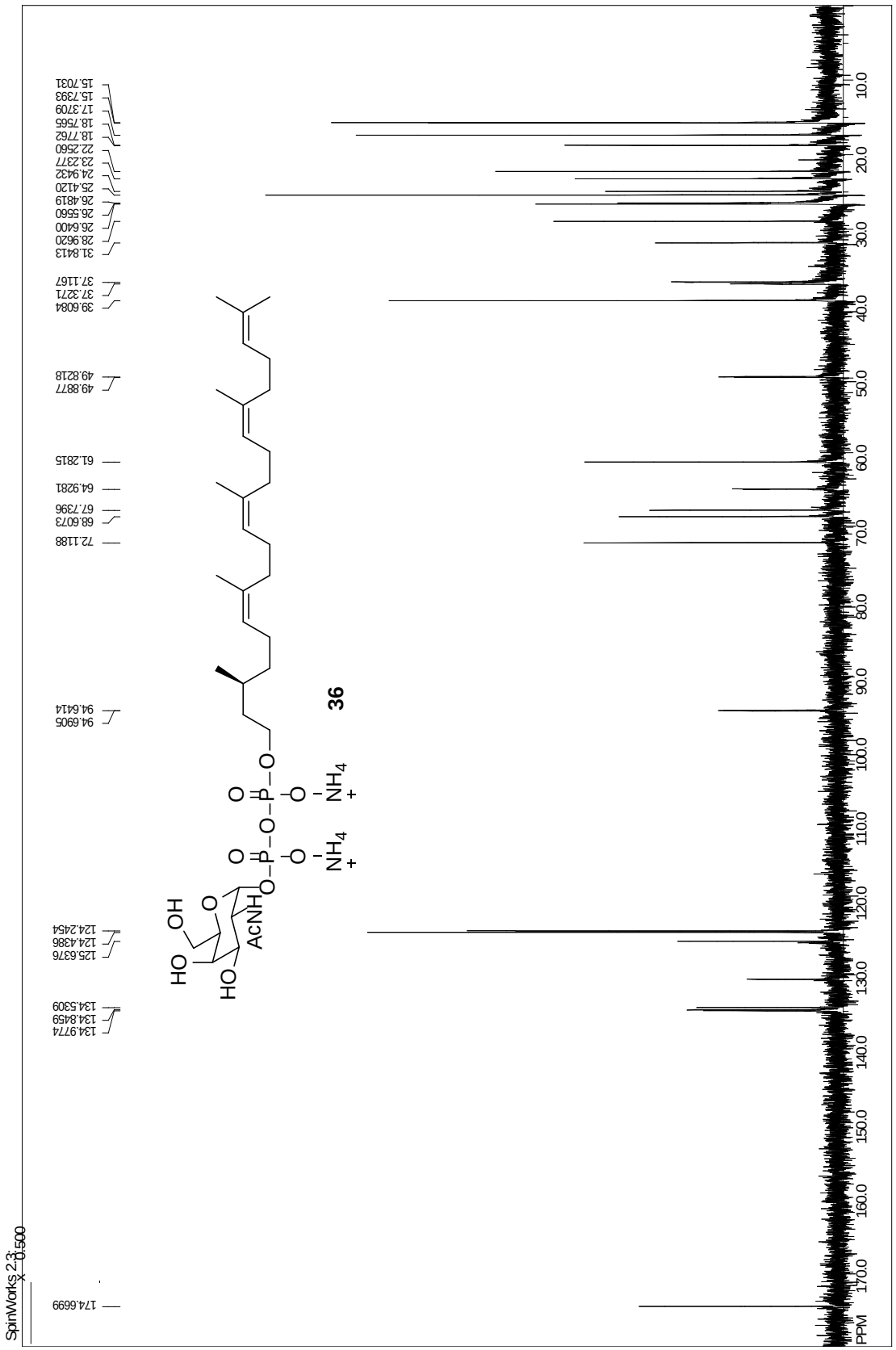


Precusor to **35**

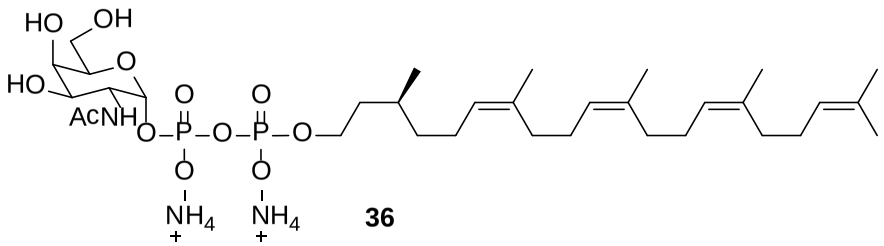
file: J:\AcGalNAcPPSolan\003\fid expt: <zgpg30>
transmitter freq.: 161.967474 MHz
time domain size: 65536 points
width: 64935.06 Hz = 400.914228 ppm = 0.990830 Hz/pt
number of scans: 211

freq. of 0 ppm 161.975460 MHz
processed size: 32768 complex points
LB: 1.000 GB: 0.0000

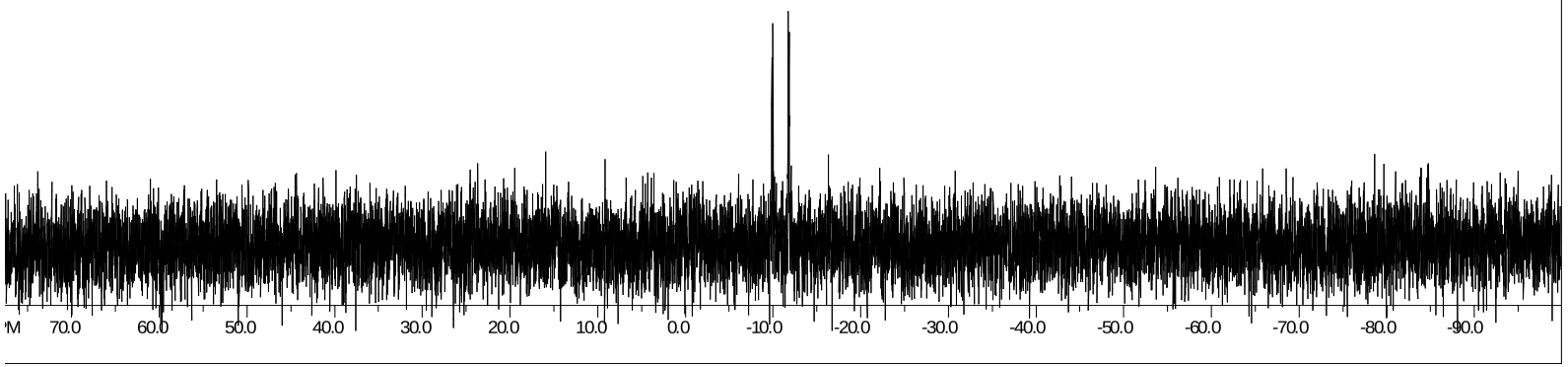

36
freq. of 0 ppm: 500.019950 MHz
processed size: 32768 complex points
LB: 0.300 GB: 0.0000


SpinWorks 2.3:
x: 0.500
174.6699
134.9774
134.8459
134.5309
125.6376
124.4386
124.2454
94.6905
94.6414
72.1188
68.6073
67.7396
64.9281
61.2815
49.8877
49.8218
39.6084
37.3271
37.1167
31.8413
28.9620
26.6400
26.5560
26.4819
25.4120
24.9432
23.2377
22.2560
18.7762
18.7565
17.3709
15.7993
15.7031
HO
OH
O
HO
AcNH
O
O
P
O
O
P
O
O
O
O
P
O
O
NH4
NH4
36
PPM
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
90.0
100.0
110.0
120.0
130.0
140.0
150.0
160.0
170.0
file: J:\GalNAc-PPMS\Penta\2\fid expt: <zgpg30>
transmitter freq.: 125.742702 MHz
time domain size: 65536 points
width: 30030.03 Hz = 238.822256 ppm = 0.458222 Hz/pt
number of scans: 13338
freq. of 0 ppm: 125.730129 MHz
processed size: 32768 complex points
LB: 1.000 GB: 0.0000

-9.8827
-10.0040
-11.7353
-11.8513



36



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domain size: 65536 points
n: 64935.06 Hz = 400.914228 ppm = 0.990830 Hz/pt
ber of scans: 543

freq. of 0 ppm: 161.975460 MHz
processed size: 32768 complex points
LB: 0.000 GB: 0.0000