

Total Synthesis of Cytotoxic Macrolide Amphidinolide B₁ and the Proposed Structure of Amphidinolide B₂.

Liang Lu, Wei Zhang and Rich G. Carter*

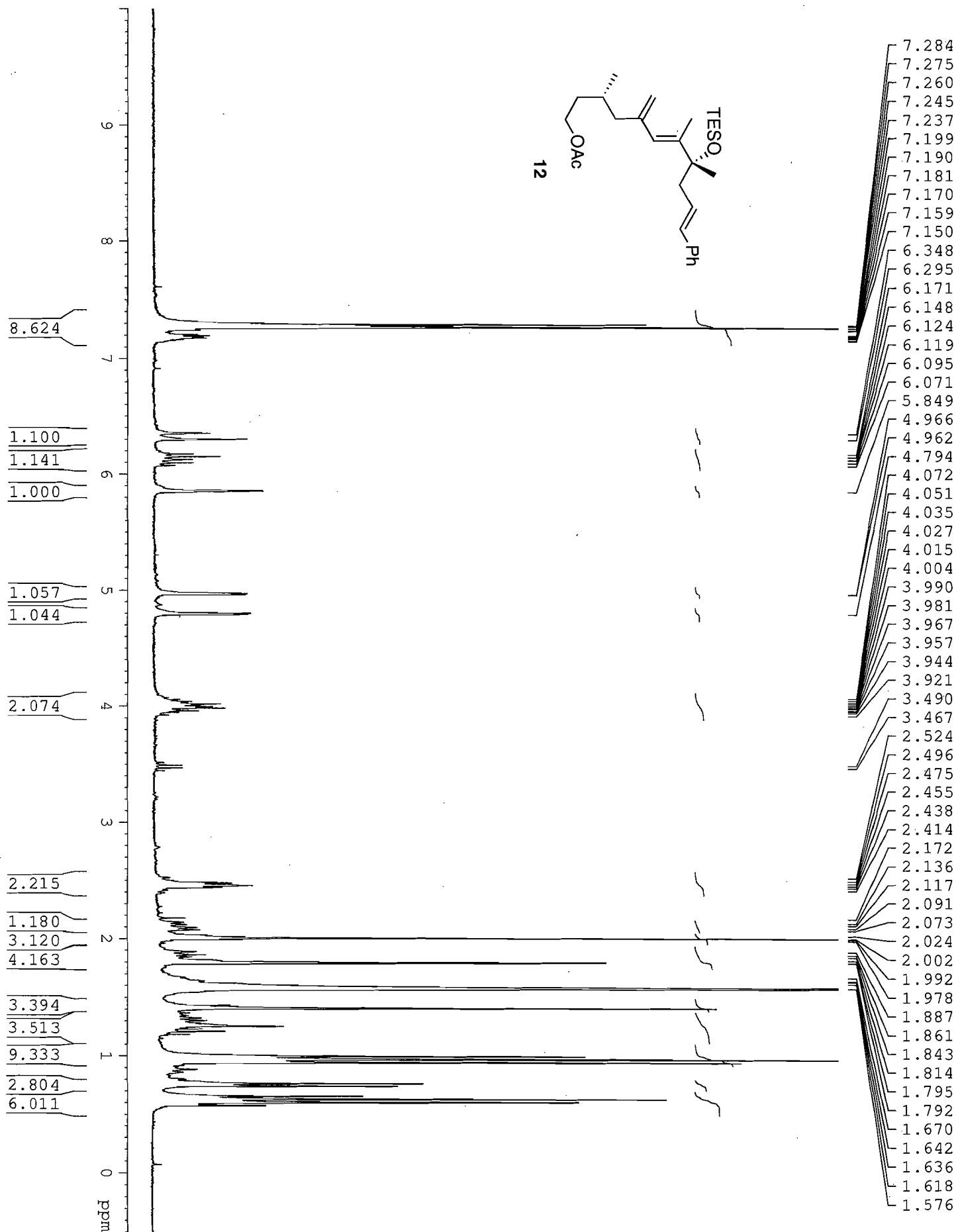
Department of Chemistry, Oregon State University, Corvallis, OR 97331.

Electronic Supplementary Information: Spectra Data

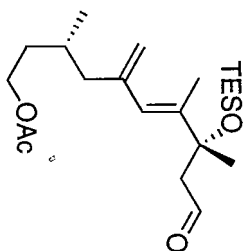
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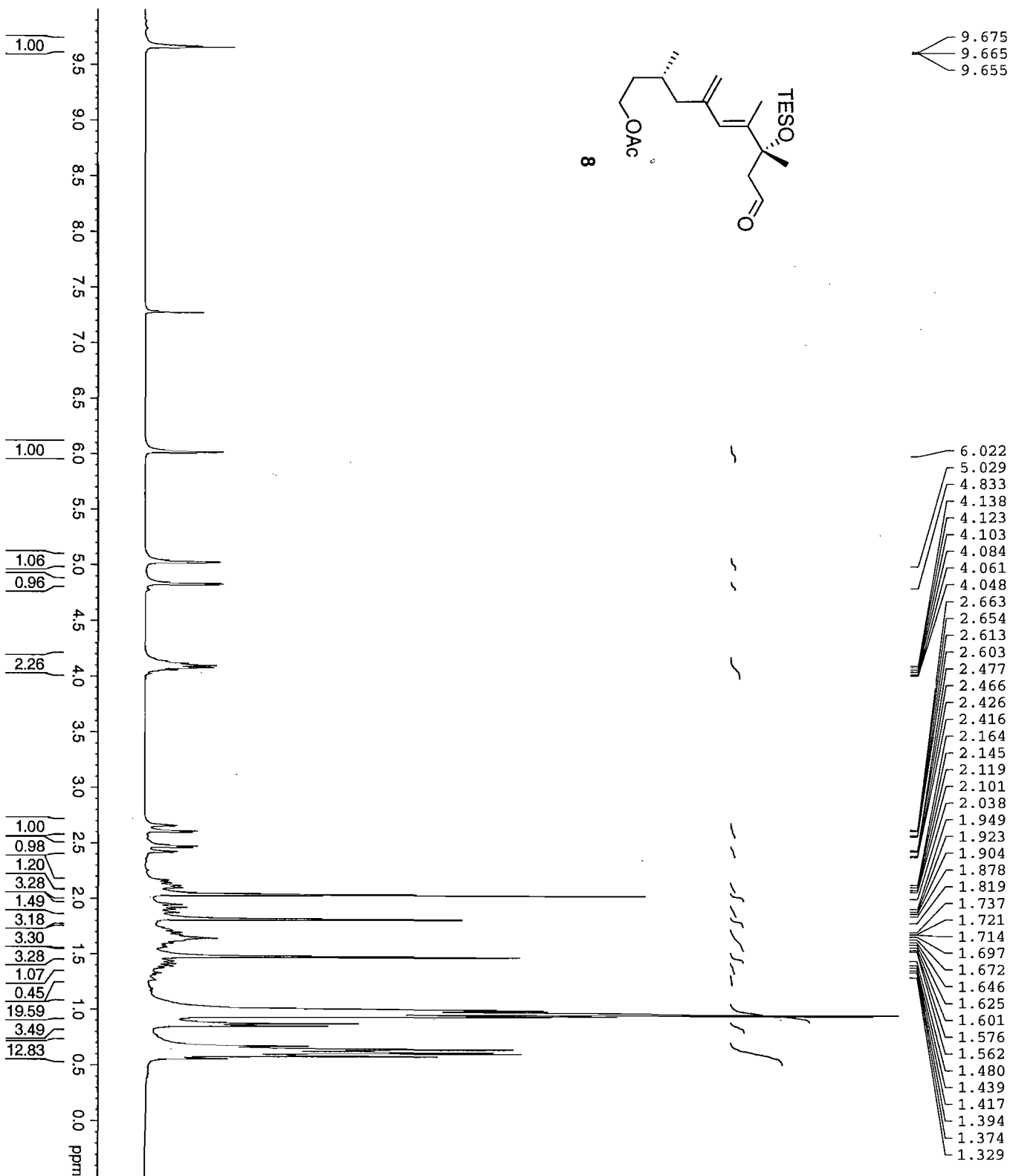
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53	S73
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55	S79
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9.675
9.665
9.655



8

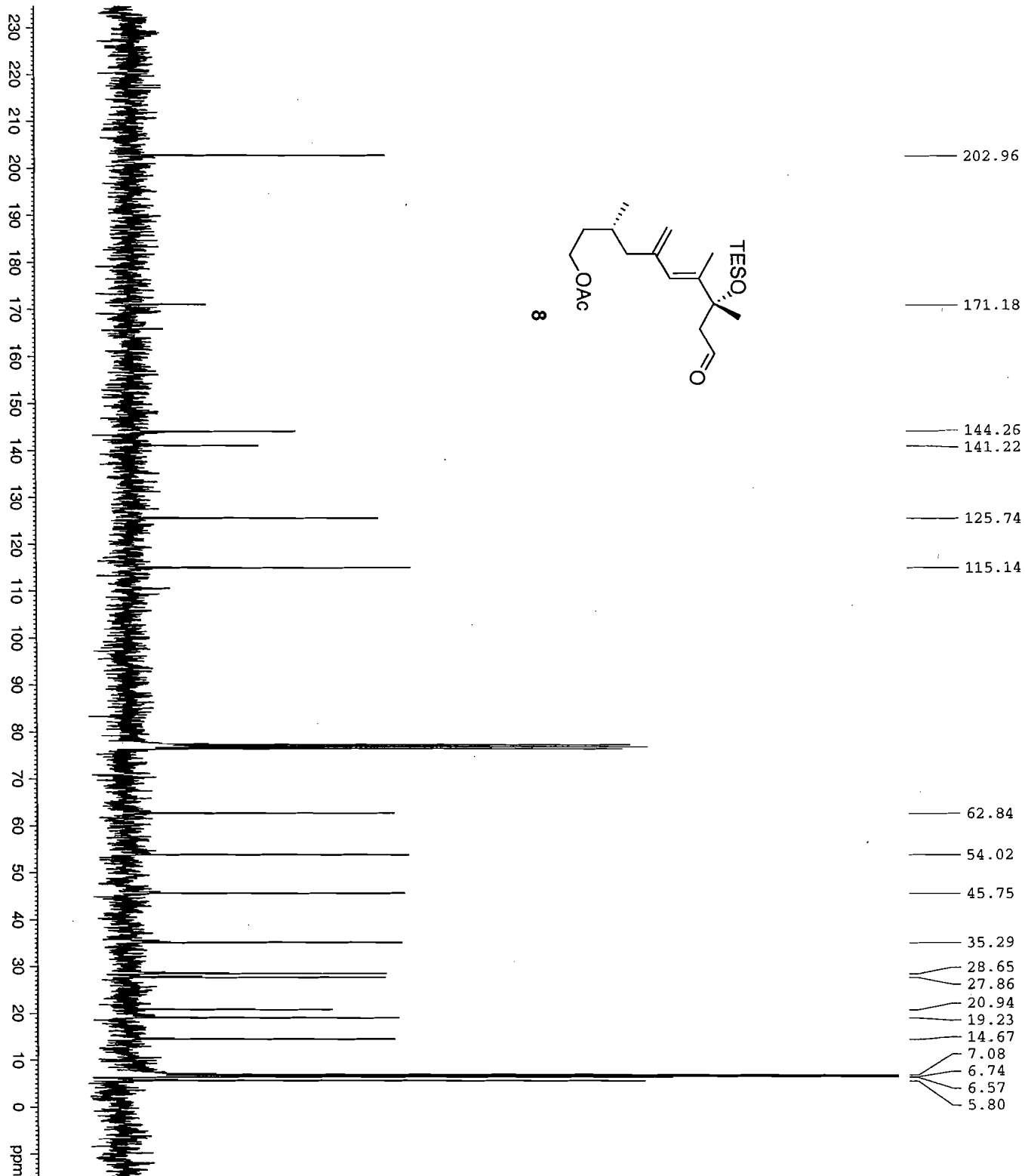


Current Data Parameters
NAME 7-81
EXPNO 1
PROCNO 1
DU /n
USER Liang

F2 - Acquisition Parameters
Date_ 20080216
Time 15.08
INSTRUM DEX300
PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 13
DS 2
SWH 4789.272 Hz
FIDRES 0.146157 Hz
AQ 3.4210291 sec
RG 104.400 usec
DW 6.400 usec
DE 236.2 K
TE 2.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 9.00 usec
PL1 -3.00 dB
SFO1 300.1321009 MHz

F2 - Processing parameters
SI 32768
SF 300.1300000 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00



Current Data Parameters

NAME	VALUE
EXPNO	7-81
PROCNO	3
DS	1
USER	Liang

F2 - Acquisition Parameters

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INSTRUM	DEK300
PROBHD	5 mm QNP 1H/1
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	152
DS	4
SWH	18832.393 Hz
FIDRES	0.287360 Hz
AQ	1.7400308 sec
RG	9195.2
DW	26.550 usec
DE	6.00 usec
TE	298.2 K
DL1	0.15000001 sec
dl1	0.03000000 sec
DELTA	0.05000000 sec
TD0	1

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

NUC1	13C
PL1	8.80 usec
PL1	-3.00 dB
SFO1	75.4760505 MHz

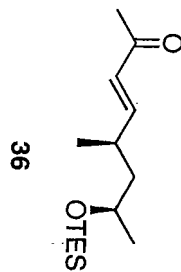
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CPDPRG2	*altz16
NUC2	1H
PCPD2	80.00 usec
PL2	-3.00 dB
PL12	17.55 dB
PL13	17.55 dB
SFO2	300.1312005 MHz

F2 - Processing parameters

SI	32768
SP	75.4677490 MHz
WDW	EM
SSB	0
LB	3.00 Hz
GB	0
PC	1.40

enone



7.282
6.768
6.741
6.714
6.688
6.099
6.046

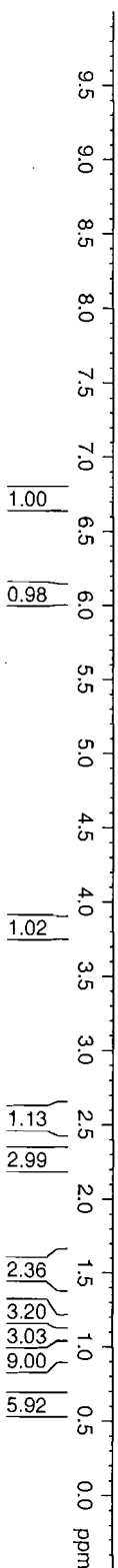
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1.558
1.549
1.531
1.497
1.483
1.468
1.453
1.436
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1.157
1.095
1.072
1.003
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0.644

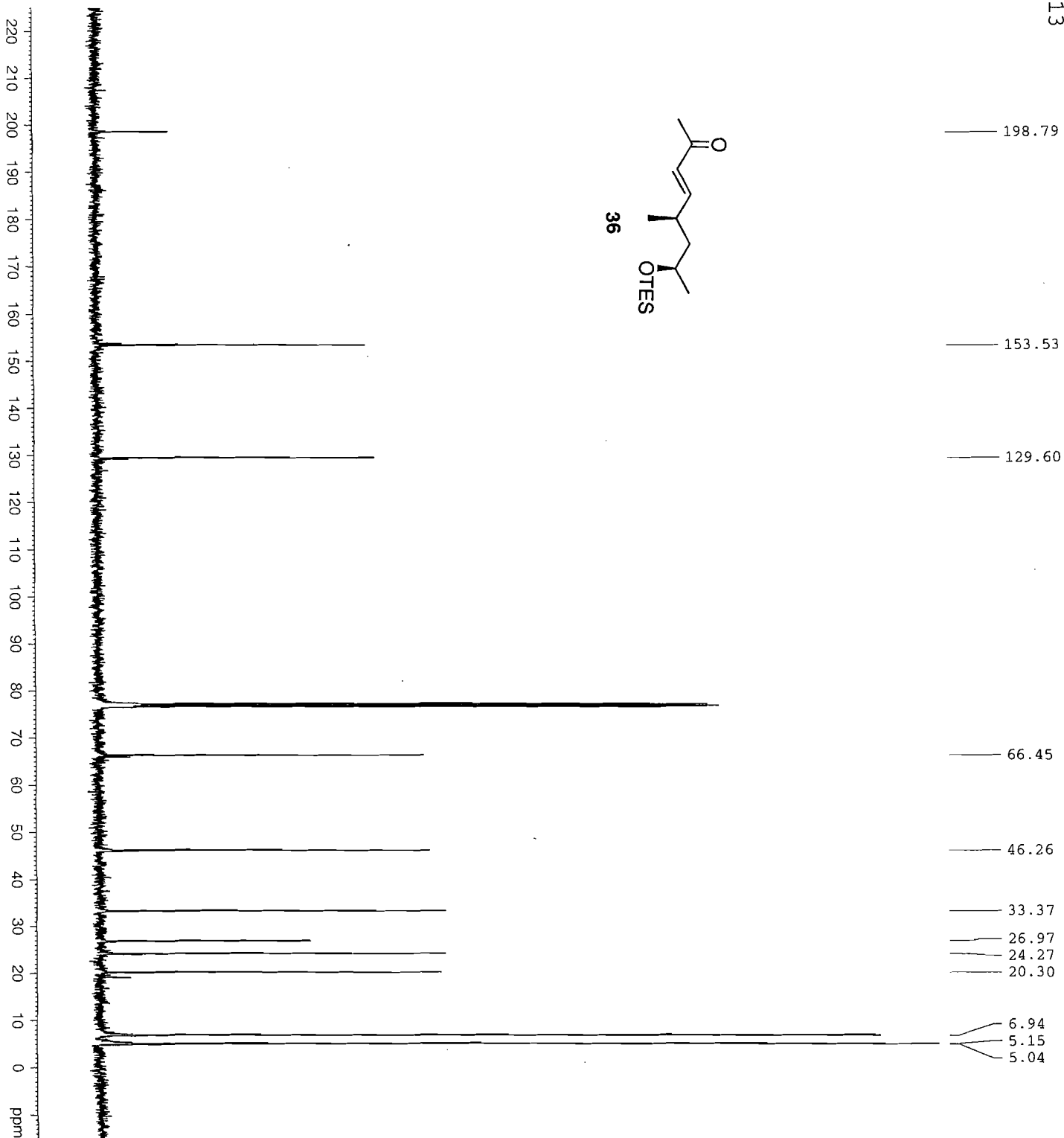
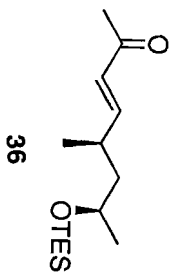
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PROCNO 1
DU /n
USER Liang

F2 - Acquisition Parameters
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PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 11
DS 2
SWH 4789.272 Hz
FIDRES 0.146157 Hz
AQ 3.4210291 sec
RG 574.7
DW 104.400 usec
DE 6.00 usec
TE 298.2 K
D1 2.0000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 9.00 usec
PL1 -3.00 dB
SFO1 300.1321009 MHz

F2 - Processing parameters
SI 32768
SF 300.1300000 MHz
WDW nc
SSB 0
LB 0.00 Hz
GB 0
PC 1.00





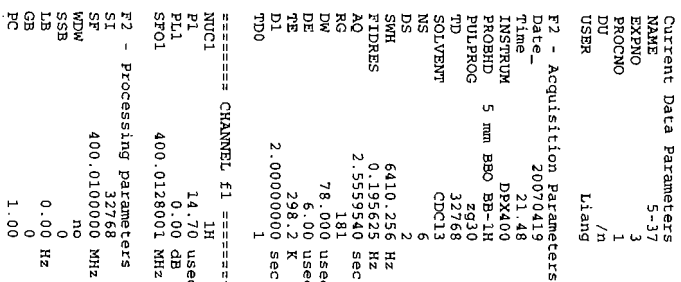
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EXPNO 3
PROCNO 1
DU /n
USER Liang

F2 - Acquisition Parameters
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Time 16.34
INSTRUM DEX400
PROBHD 5 mm BBO BB-1H
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 1184
DS 4
SWH 25125.629 Hz
FIDRES 0.38387 Hz
AQ 1.3042164 sec
RG 4597.6
DW 19.900 usec
DE 6.00 usec
TE 298.2 K
D1 0.15000001 sec
d11 0.03000000 sec
DELTA 0.05000000 sec
TD0 1

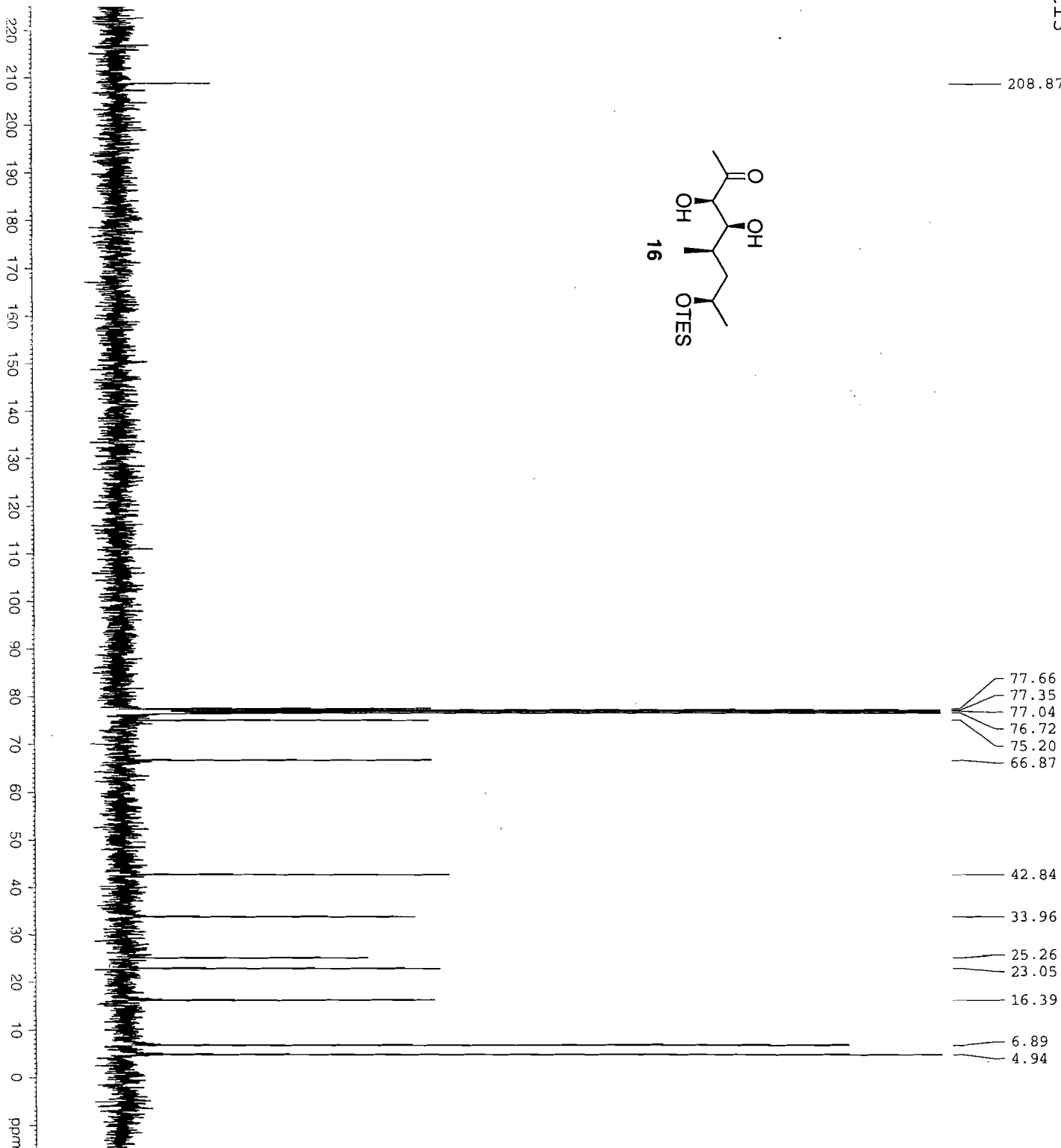
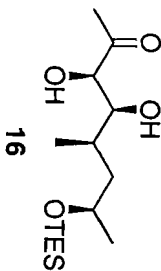
===== CHANNEL f1 =====
NUC1 13C
P1 7.80 usec
PL -3.00 dB
SFO1 100.5936591 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 135.00 usec
PL2 17.40 dB
PL12 17.40 dB
PL13 17.40 dB
SFO2 400.0116000 MHz

F2 - Processing parameters
SI 32768
SF 100.582550 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.40

C[C@H](O)[C@@H](OC(=O)C)[C@H](O)[C@H](C(C)C)OSi(C)(C)C
16

208.87



77.66
77.35
77.04
76.72
75.20
66.87

42.84
33.96
25.26
23.05
16.39

6.89
4.94

Current Data Parameters
NAME 5-37
EXPNO 5
PROCNO 1
DU /n
USER Liang

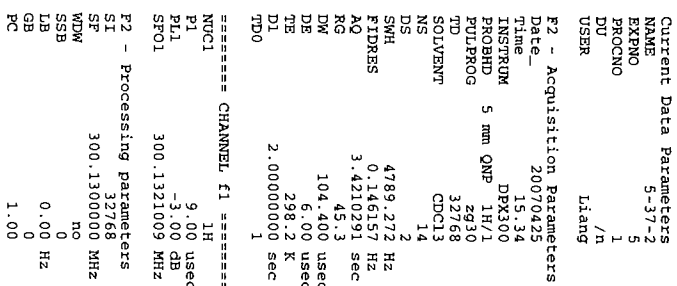
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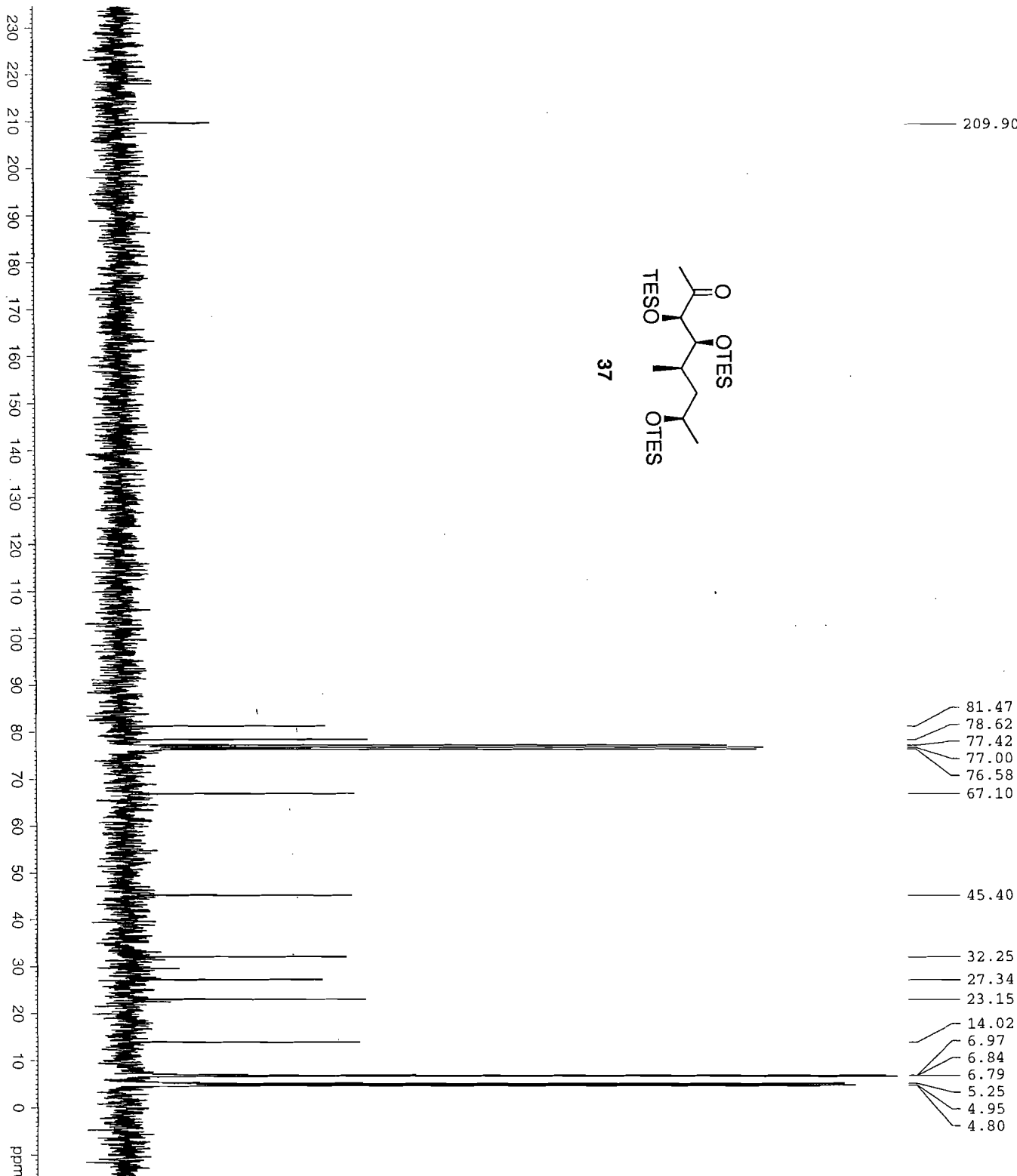
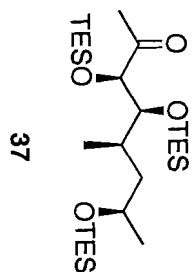
Time 22.24
INSTRUM DFX400
PROBHD 5 mm BBO BB-1H
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 342
DS 4
SWH 25125.629 Hz
FIDRES 0.383387 Hz
AQ 1.3042164 sec
RG 11585.2
DW 19.900 usec
DE 6.00 usec
TE 298.2 K
D1 0.1500001 sec
d11 0.0300000 sec
DELTA 0.0500000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 7.80 usec
PL -3.00 dB
SFO1 100.5936591 MHz

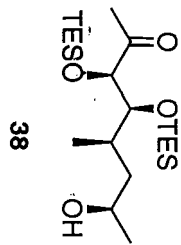
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 135.00 usec
PL2 17.40 dB
PL12 17.40 dB
PL13 17.40 dB
SFO2 400.016000 MHz

F2 - Processing Parameters
SI 32768
SF 100.582950 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.40

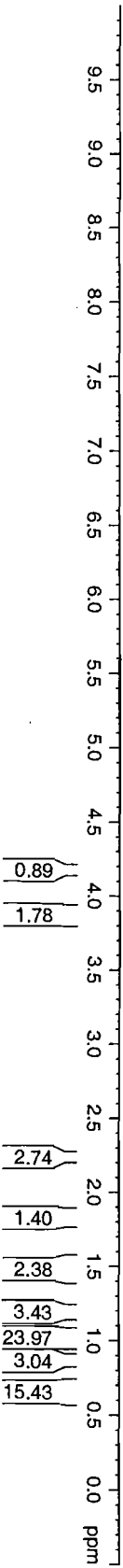
CC(C)[C@H](O[Si](C)(C)C)C[C@H](O[Si](C)(C)C)C(=O)C[C@H](O[Si](C)(C)C)C



Current Data Parameters		F2 - Acquisition Parameters	
NAME	5-37-2	Date	20070425
EXPNO	1	Time	16.46
PROCNO	8		
DU	1		
USER	liang		
		F2 - Acquisition Parameters	
		Date	20070425
		Time	16.46
		INSTRUM	DPX300
		PROBHD	5 mm QNP 1H/1
		PULPROG	zgpg30
			65536
			93
		SOLVENT	CDCl3
		NS	93
		DS	4
		SWH	18832.393 Hz
		FIDRES	0.2873660 Hz
		AQ	1.7400308 sec
		RG	9195.2
		DW	26.550 usec
		DE	6.00 usec
		TE	298.2 K
		D1	0.15000001 sec
		d11	0.03000000 sec
		DELTA	0.05000000 sec
		TD0	1
		===== CHANNEL f1 =====	
		NUC1	13C
		P1	8.00 usec
		PL1	-3.00 dB
		SFO1	75.4766505 MHz
		===== CHANNEL f2 =====	
		CPDPRG2	waltz16
		NUC2	1H
		P2	80.00 usec
		PL2	-3.00 dB
		PL12	17.55 dB
		PL13	17.55 dB
		SFO2	300.1312005 MHz
		F2 - Processing parameters	
		SI	33768
		WDW	EM
		SSB	0
		LB	3.00 Hz
		GB	0
		PC	1.40



- 4.178
- 4.164
- 3.908
- 3.893
- 3.877
- 3.869
- 3.863
- 3.855
- 2.247
- 1.861
- 1.852
- 1.843
- 1.835
- 1.825
- 1.818
- 1.800
- 1.516
- 1.503
- 1.497
- 1.484
- 1.472
- 1.465
- 1.456
- 1.451
- 1.436
- 1.287
- 1.222
- 1.207
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- 1.032
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- 1.006
- 0.992
- 0.986
- 0.973
- 0.913



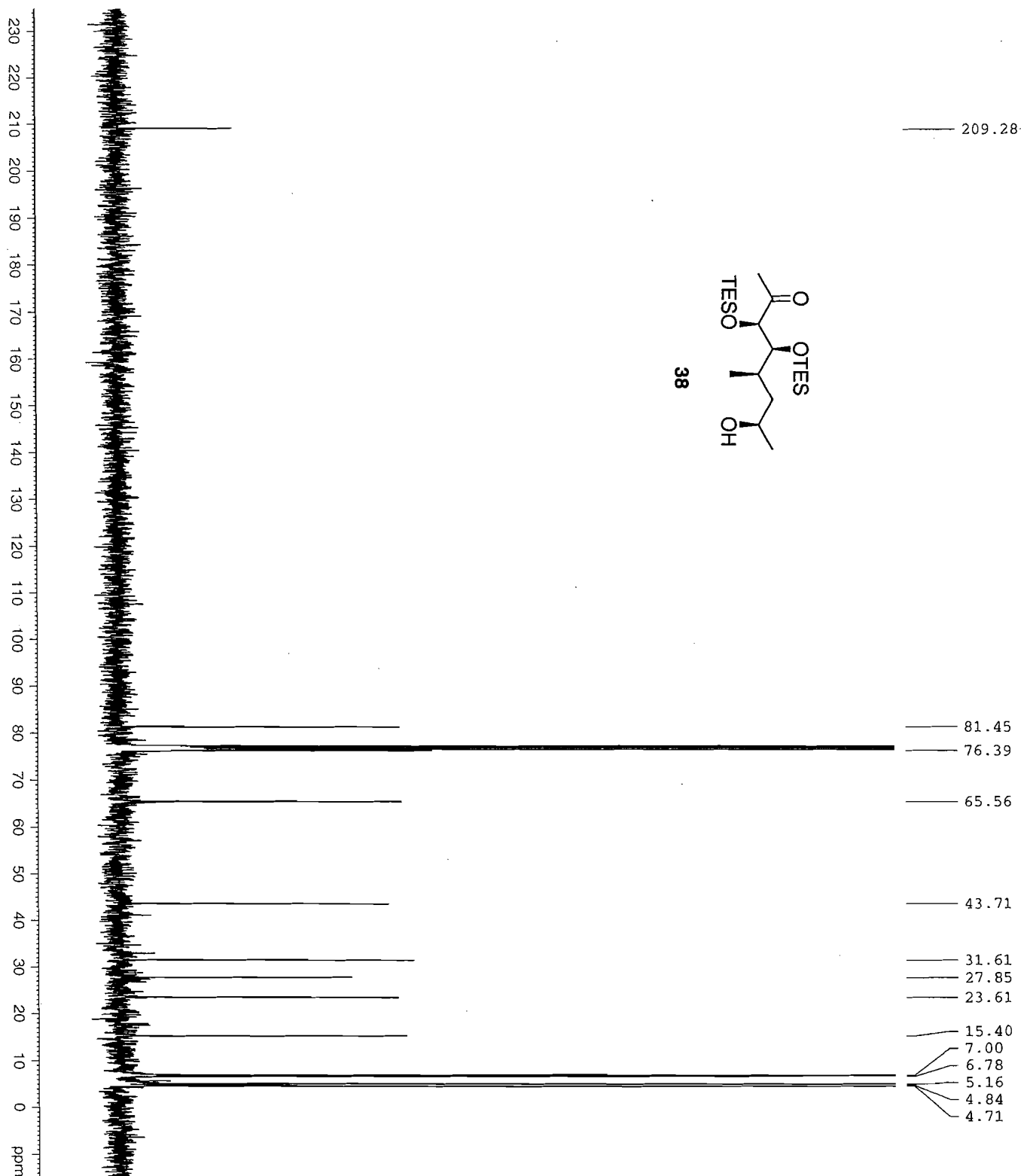
Current Data Parameters
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 EXPNO 1
 PROCNO 1
 DU /n
 USER Liang

F2 - Acquisition Parameters
 Date_ 20070302
 Time 22.43
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 PROBRD 5 mm BBO BB-1H
 PULPROG zgpg30
 TD 32768
 SOLVENT CDCl3
 NS 32
 DS 2
 SWH 6410.256
 FIDRES 0.195625
 AQ 2.5559540
 RG 181
 DW 78.000
 DE 6.00
 TE 298.2
 D1 2.00000000
 TDO 1

===== CHANNEL f1 =====
 NUC1 1H
 P1 14.70
 PL1 0.00
 SFO1 400.0128001

F2 - Processing parameters
 SI 32768
 SF 400.0100000
 WDW EM
 SSB 0
 LB 0.70
 GB 0
 PC 2.00

513



Current Data Parameters

NAME	5-38
EXPNO	4
PROCNO	1
DU	/h
USER	Liang

F2 - Acquisition Parameters

Date_	20070424
Time	18.36
INSTRUM	DPX400
PROBHD	5 mm BBO BB-1H
PULPROG	zgpg30
TD	65536
SOLVENT	
NS	740
DS	4
SWH	25125.629 Hz
FIDRES	0.383387 Hz
AQ	1.3042164 sec
RG	4597.6
DW	19.900 usec
DE	6.00 usec
TE	298.2 K
D1	0.15000001 sec
d11	0.03000000 sec
DELTA	0.05000000 sec
TD0	1

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

NUC1	¹³ C
PL	7.80 usec
PL1	-3.00 dB
SFO1	100.5936591 MHz

===== CHANNEL f2 =====

CPDPRG2	waltz16
NUC2	¹ H
PCPD2	135.00 usec
PL2	17.40 dB
PL12	17.40 dB
PL13	17.40 dB
SFO2	400.0116000 MHz

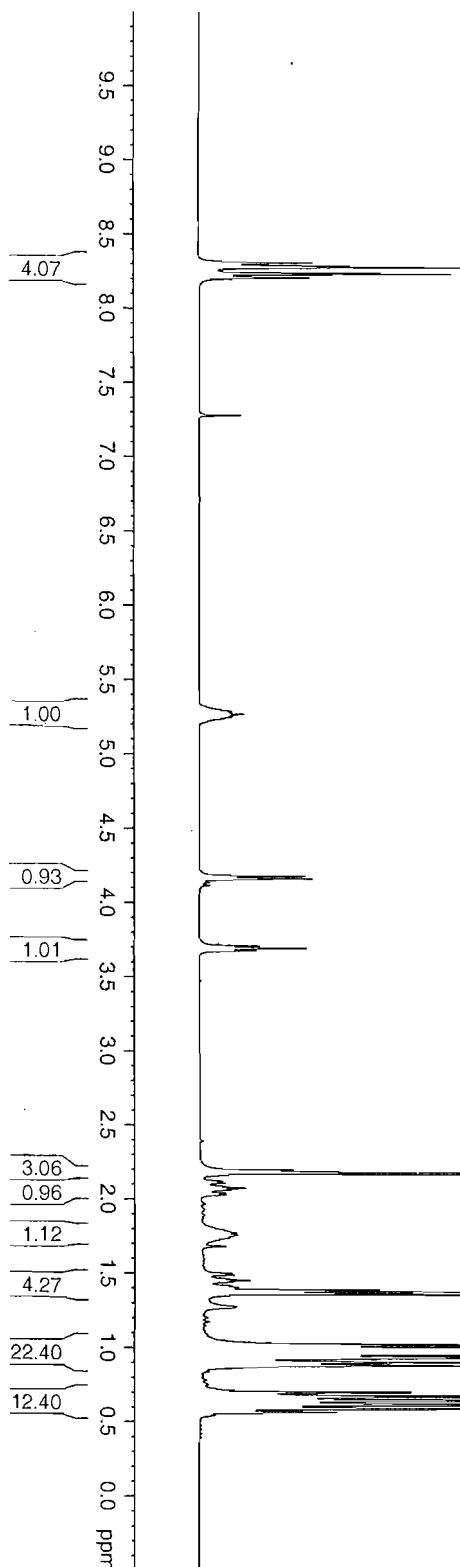
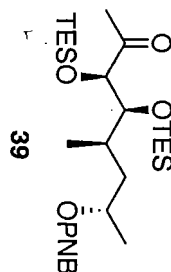
F2 - Processing Parameters

SI	32768
ST	100.5825950 MHz
WDW	EM
SSB	0
LB	3.00 Hz
GB	0
PC	1.40

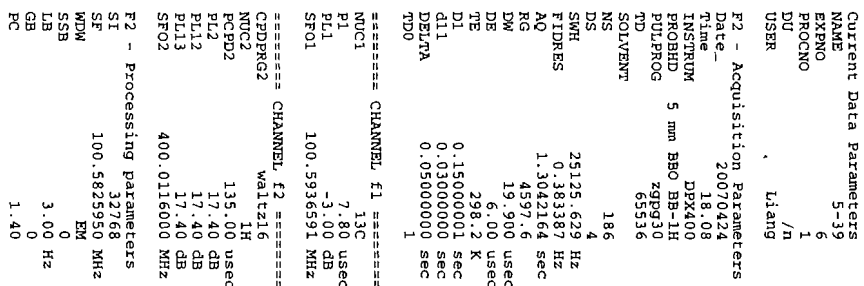

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 8.205

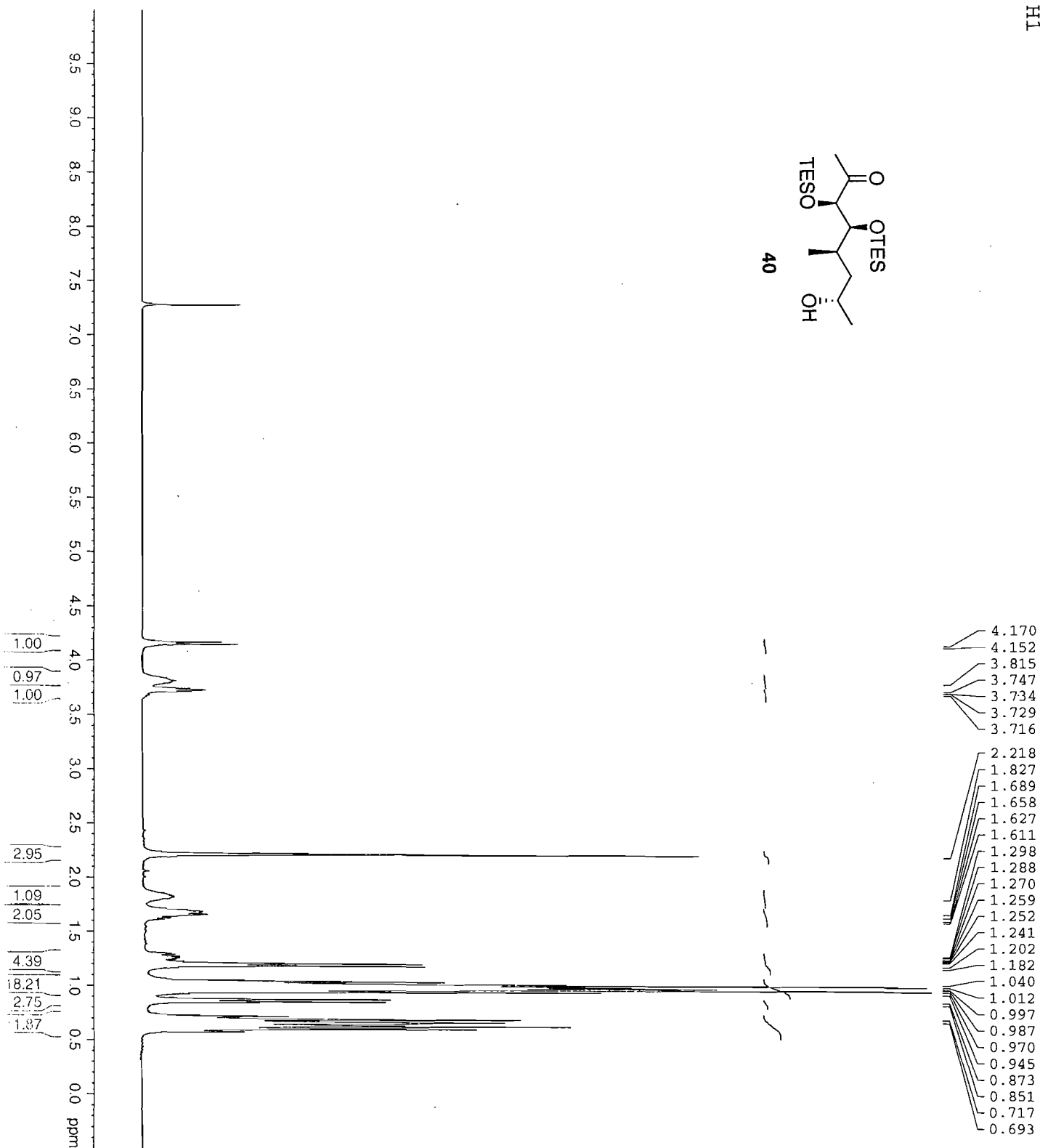
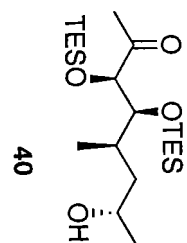
— 5.265

4.177
4.161
3.710
3.694
3.678
2.191
2.176
2.117
2.105
2.071
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2.036
2.025
1.769
1.754
1.677
1.495
1.485
1.449
1.380
1.360
1.273
1.018
0.990
0.961
0.934
0.901
0.879
0.699
0.673
0.645



Current Data Parameters		F2 - Acquisition Parameters	
NAME	5-39	Date--	20070424
EXPNO	2	Time	17.33
PROCNO	1	INSTRUM	DPX300
		PROBHD	5 mm QNP 1H/1
		PULPROG	zg30
		TD	32768
		SOLVENTP	CDCl3
		NS	32
		DS	2
		SWH	4789.272 Hz
		FIDRES	0.146157 Hz
		AQ	3.4210291 sec
		RG	57
		DW	104.400 usec
		DE	6.00 usec
		TE	298.2 K
		D1	2.00000000 sec
		TD0	1
===== CHANNEL f1 =====			
NUC1	1H		
PL1	9.00 usec		
PL1	-3.00 dB		
SFO1	300.1321009 MHz		
F2 - Processing Parameters			
SI	32766		
WDW	300.1300000 MHz		
SSB	no		
GB	0.00 Hz		
PC	1.00		





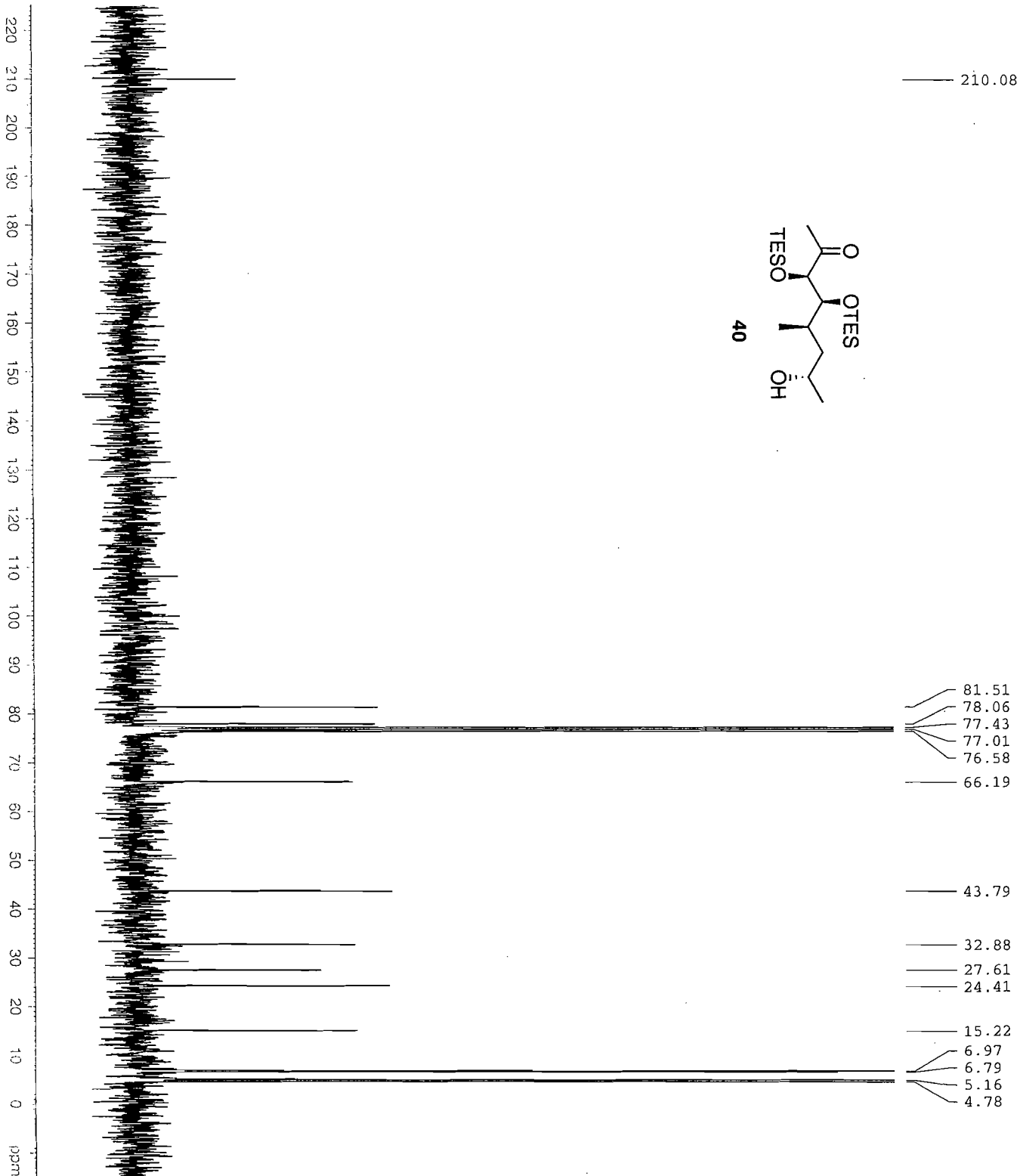
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Current Data Parameters
NAME          5-40
EXPNO         2
PROCNO        1
DU            /n
USER          Liang

F2 - Acquisition Parameters
Date_         20070426
Time          11.14
INSTRUM       DPX300
PROBHD        5 mm QNP
PULPROG       zg30
TD            32768
SOLVENT       CDCl3
NS            12
DS            2
SWH           4789.272 Hz
FIDRES       0.146157 Hz
AQ           3.4210291 sec
RG           143.7
DM           104.400 usec
DE           6.00 usec
TE           298.2 K
D1           2.00000000 sec
TD0          1

===== CHANNEL f1 =====
NUC1          1H
P1           9.00 usec
PL1          -3.00 dB
SFO1         300.1321009 MHz

F2 - Processing parameters
SI           32768
SF           300.1300000 MHz
WDW          no
SSB          0
LB           0.00 Hz
GB           0
PC           1.00
  
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Current Data Parameters
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 EXNO 4
 PROCNO 1
 DU /n
 USER Liang

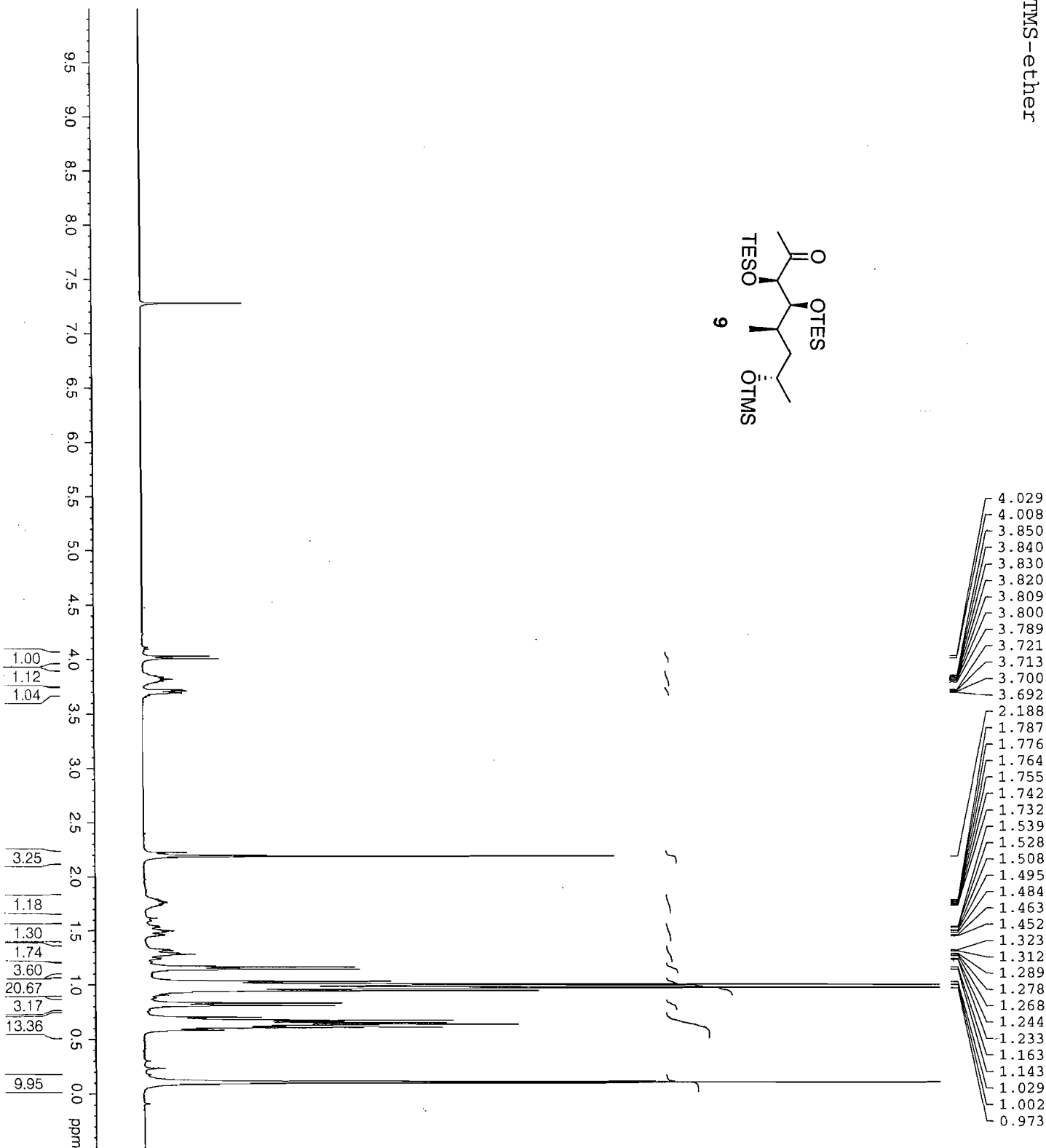
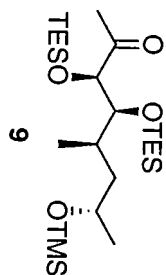
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 INSTRUM DFX300
 PROBD 5 mm QNP 1H/1
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 190
 DS 4
 SWH 18832.393 Hz
 FIDRES 0.287360 Hz
 AQ 1.7400308 sec
 RG 9195.2
 DW 26.550 usec
 DE 6.00 usec
 TE 298.2 K
 D1 0.1500001 sec
 d11 0.0300000 sec
 DELTA 0.0500000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 13C
 P1 8.80 usec
 PL1 -3.00 dB
 SFO1 75.4760505 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 -3.00 dB
 PL12 17.55 dB
 PL13 17.55 dB
 SFO2 300.1312005 MHz

F2 - Processing Parameters
 SI 32768
 SF 75.4677490 MHz
 WDW EM
 SSB 0
 LB 3.00 Hz
 GB 0
 PC 1.40

TMS-ether



Current Data Parameters

NAME	EXPNO	PROCNO	DU	USER
5-42	1	1	/n	Liang

F2 - Acquisition Parameters

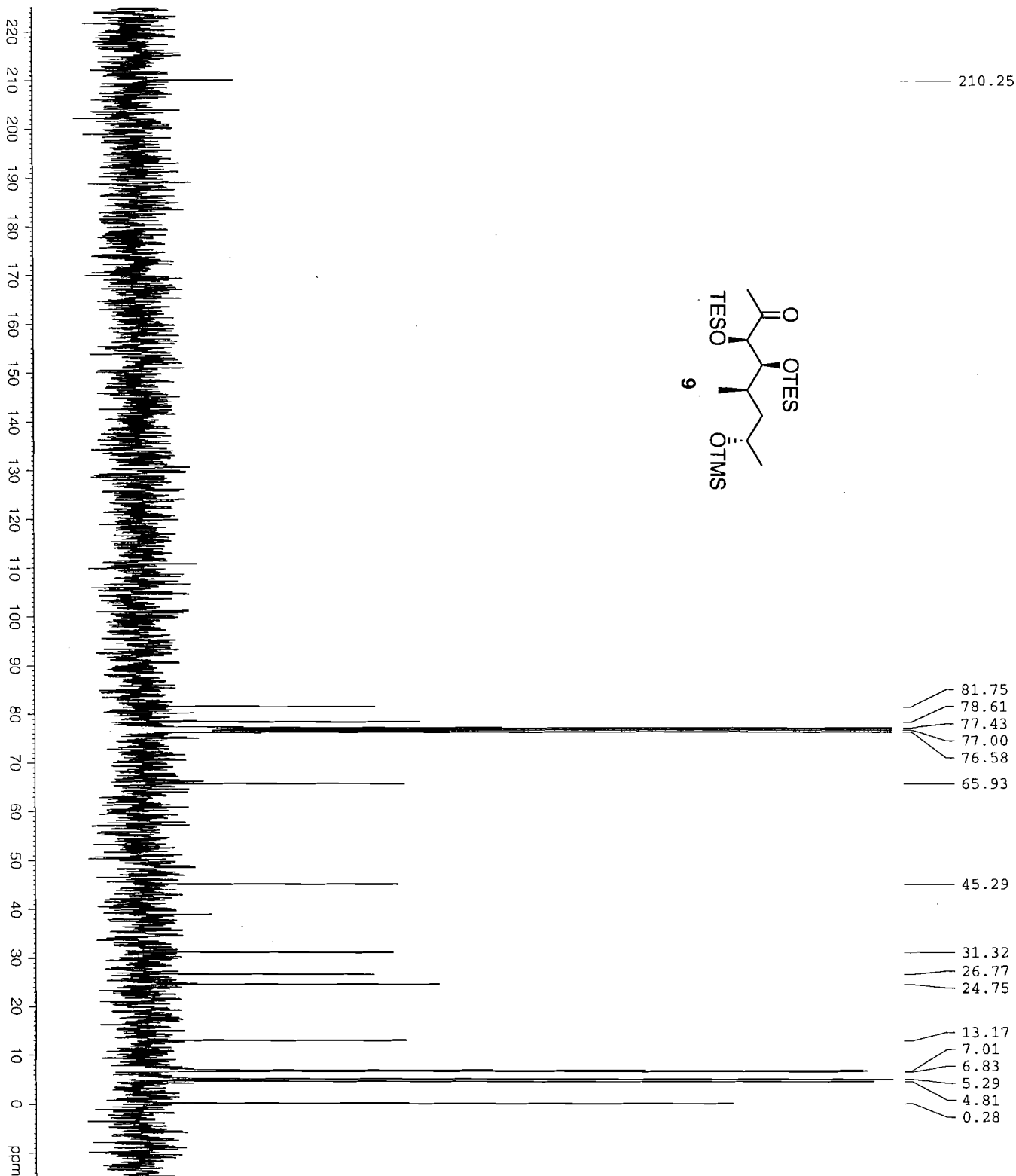
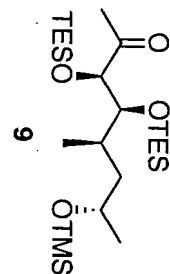
Date_	Time	INSTRUM	PROBHD	PULPROG	TD	SOLVENT	NS	DS	SWH	FIDRES	AQ	RG	DW	DE	TE	D1	TD0
20070426	22.31	DPX100	5 mm QNP 1H/1	zgpg30	32768	CDCl3	22	2	4789.272 Hz	0.146157 Hz	3.421021 sec	181	104.400 usec	6.00 usec	298.2 K	2.00000000 sec	1

==== CHANNEL f1 =====

NUC1	P1	PL1	SFO1
1H	9.00 usec	-3.00 dB	300.1321009 MHz

F2 - Processing parameters

SI	SF	WDW	SSB	LB	GB	PC
32768	300.1300000 MHz	no	0	0.00 Hz	0	1.00



Current Data Parameters
 NAME 5-42
 EXPRNO 1
 PROCNO 1
 DU /h
 USER Liang

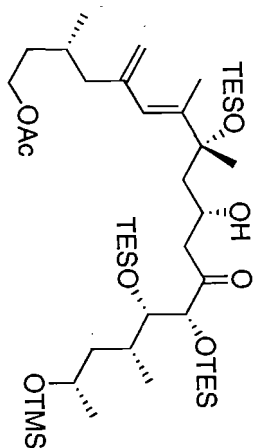
F2 - Acquisition Parameters
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 Time 22.45
 INSTRUM DPX300
 PROBHD 5 mm QNP 1H/1
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 281
 DS 4
 SWH 18832.393 Hz
 FIDRES 0.287360 Hz
 AQ 1.7400308 sec
 RG 9195.2
 DW 26.550 usec
 DE 6.00 usec
 TE 298.2 K
 D1 0.1500001 sec
 d11 0.0300000 sec
 DELTA 0.0500000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 13C
 P1 8.80 usec
 PL1 -3.00 dB
 SF01 75.4760505 MHz

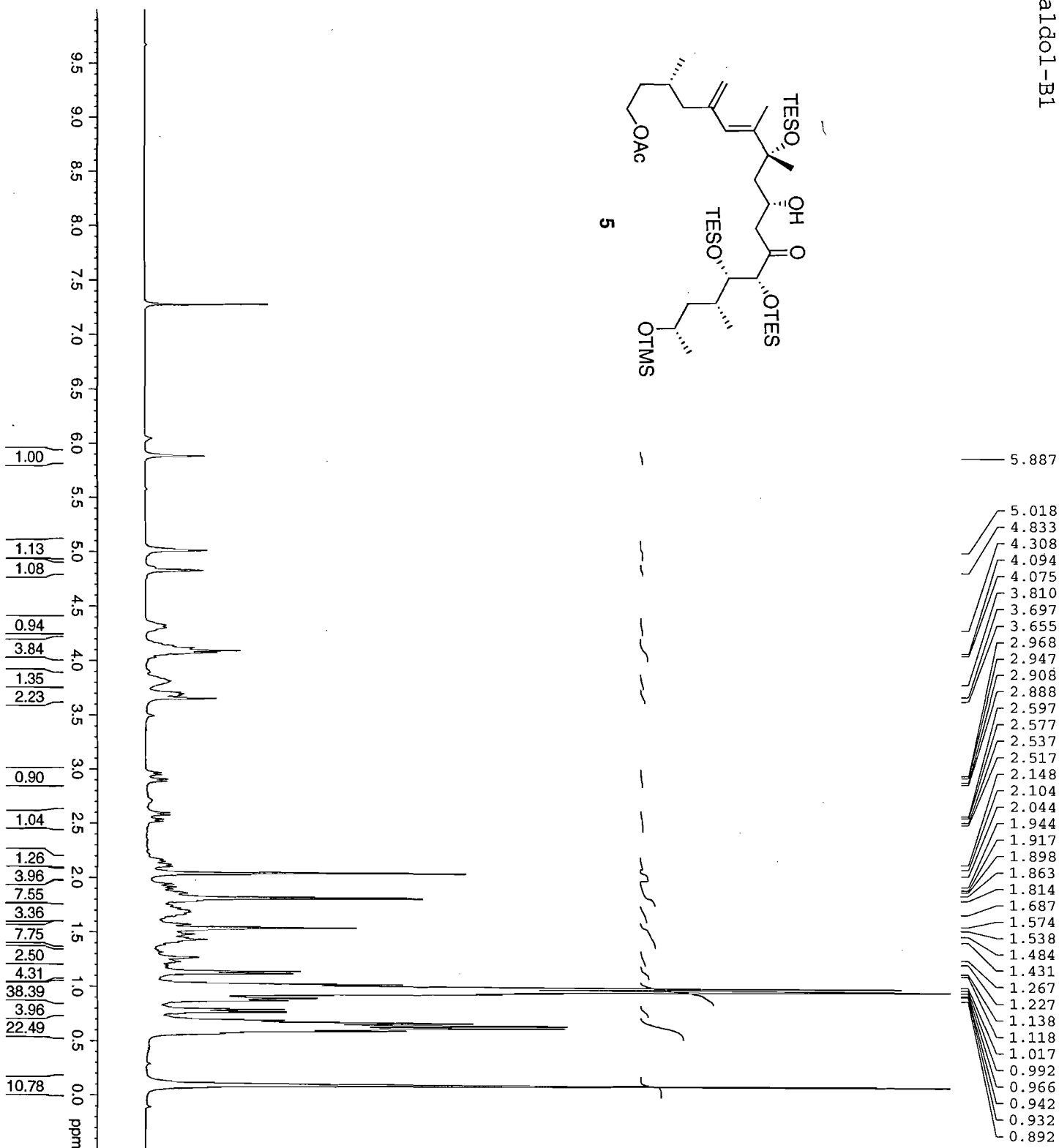
===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 -3.00 dB
 PL12 17.55 dB
 PL13 17.55 dB
 SF02 300.1312005 MHz

F2 - Processing Parameters
 SI 32768
 SF 75.4677480 MHz
 WDW EM
 SSB 0
 LB 3.00 Hz
 GB 0
 PC 1.40

a1d01-B1



5

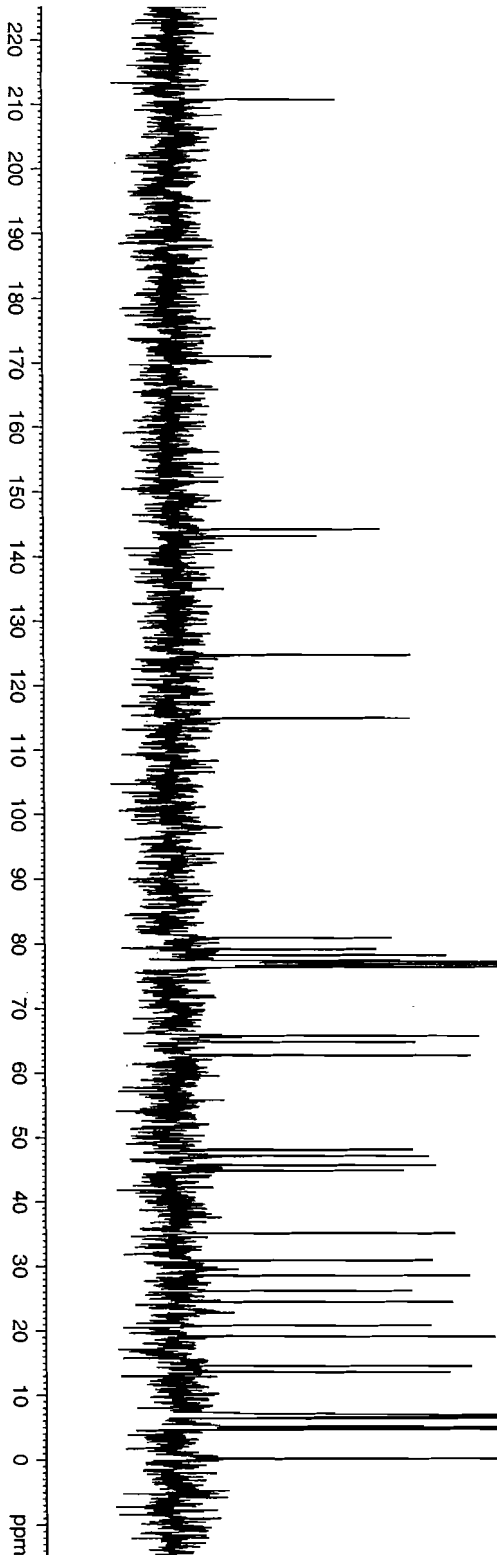


Current Data Parameters
NAME 7-84-2
EXPNO 1
PROCNO 1
DU /n
USER Liang

F2 - Acquisition Parameters
Date_ 20080310
Time 21.23
INSTRUM DPX300
PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 22
DS 2
SWH 4789.272 Hz
FIDRES 0.146157 Hz
AQ 3.4210291 sec
RG 64
DW 104.400 usec
DE 6.00 usec
TE 298.2 K
D1 2.00000000 sec
TD0 1

==== CHANNEL f1 =====
NUC1 1H
P1 9.00 usec
PL1 -3.00 dB
SFO1 300.1321009 MHz

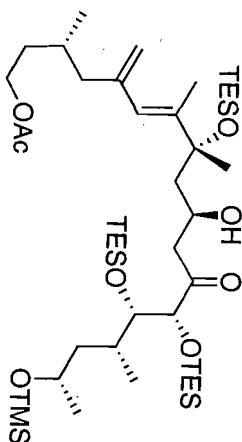
F2 - Processing parameters
SI 32768
SF 300.1300000 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00



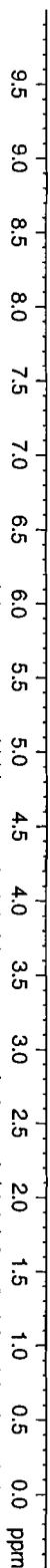
Current Data Parameters					
NAME	EXPNO	PROCNO	DU	USER	
					Liang
			1	/n	
F2 - Acquisition Parameters					
Date_	Time				20080310
					21.40
INSTRUM					DPK300
PROBHD	5 mm QNP	1H/1			
PULPROG		zgpg30			
		65536			
SOLVENT		CDCl3			
NS		233			
DS		4			
SWH		18832.397	Hz		
FIDRES		0.287360	Hz		
AQ		1.7400368	sec		
RG		9195.2			
DW		26.550	usec		
DE		6.00	usec		
TE		298.2	K		
D1		0.15000001	sec		
d11		0.03000000	sec		
DELTA		0.05000000	sec		
TD0			1		
===== CHANNEL f1 =====					
NUC1		13C			
P1		8.80	usec		
PL1		-3.00	dB		
SFO1		75.4760505	MHz		
===== CHANNEL f2 =====					
CPCDRG2		waltz16			
NUC2		1H			
PCPDZ		80.00	usec		
PL2		-3.00	dB		
PL12		17.55	dB		
PL13		17.55	dB		
SFO2		300.1312005	MHz		
F2 - Processing parameters					
SI		37768			
WDW		EM			
SSB		75.4677490	MHz		
LB		0			
GB		3.00	Hz		
PC		1.40			

aldol

6.052	
5.028	
4.872	
4.154	
4.113	
4.098	
4.093	
4.063	
3.858	
3.825	
3.818	
3.807	
3.729	
3.721	
3.709	
3.701	
2.726	
2.708	
2.138	
2.118	
2.047	
1.975	
1.952	
1.931	
1.906	
1.813	
1.754	
1.737	
1.714	
1.590	
1.559	
1.545	
1.512	
1.490	
1.439	
1.397	
1.288	
1.241	
1.228	
1.215	
1.196	
1.183	
1.145	
1.125	
1.097	
1.077	
1.028	
1.002	
0.976	
0.957	
0.931	
0.910	
0.903	
0.889	
0.852	
0.781	
0.759	
0.717	
0.706	
0.691	
0.680	
0.664	
0.654	
0.640	
0.625	
0.614	
0.587	
0.561	
0.098	



6



1.00

1.06

1.03

4.54

2.25

1.16

2.18

1.29

3.61

2.49

4.94

2.74

8.55

5.14

4.33

40.22

3.95

21.33

10.61

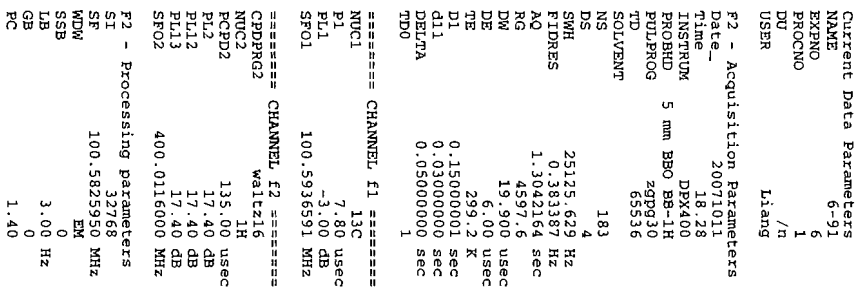
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Current Data Parameters
NAME      7-84
EXPNO     3
PROCNO    1
DO         /n
USER       Liang

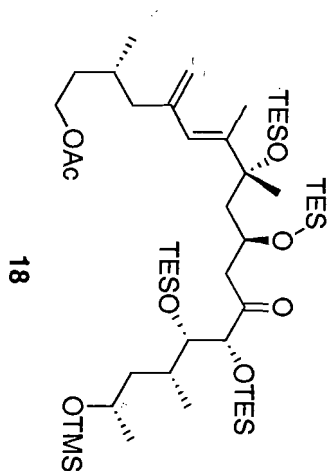
F2 - Acquisition Parameters
Date_     20080218
Time      15.36
INSTRUM   DFX300
PROBHD    5 mm QNP 1H/1
PULPROG   zg30
TD         32768
SOLVENT   CDCl3
NS         17
DS         2
SWH        4789.272 Hz
FIDRES     0.146157 Hz
AQ         3.4210291 sec
RG         287.4
DW         104.400 usec
DE         6.00 usec
TE         298.2 K
D1         2.00000000 sec
TD0        1

===== CHANNEL f1 =====
NUC1       1H
P1         9.00 usec
PL1        -3.00 dB
SFO1       300.1321009 MHz

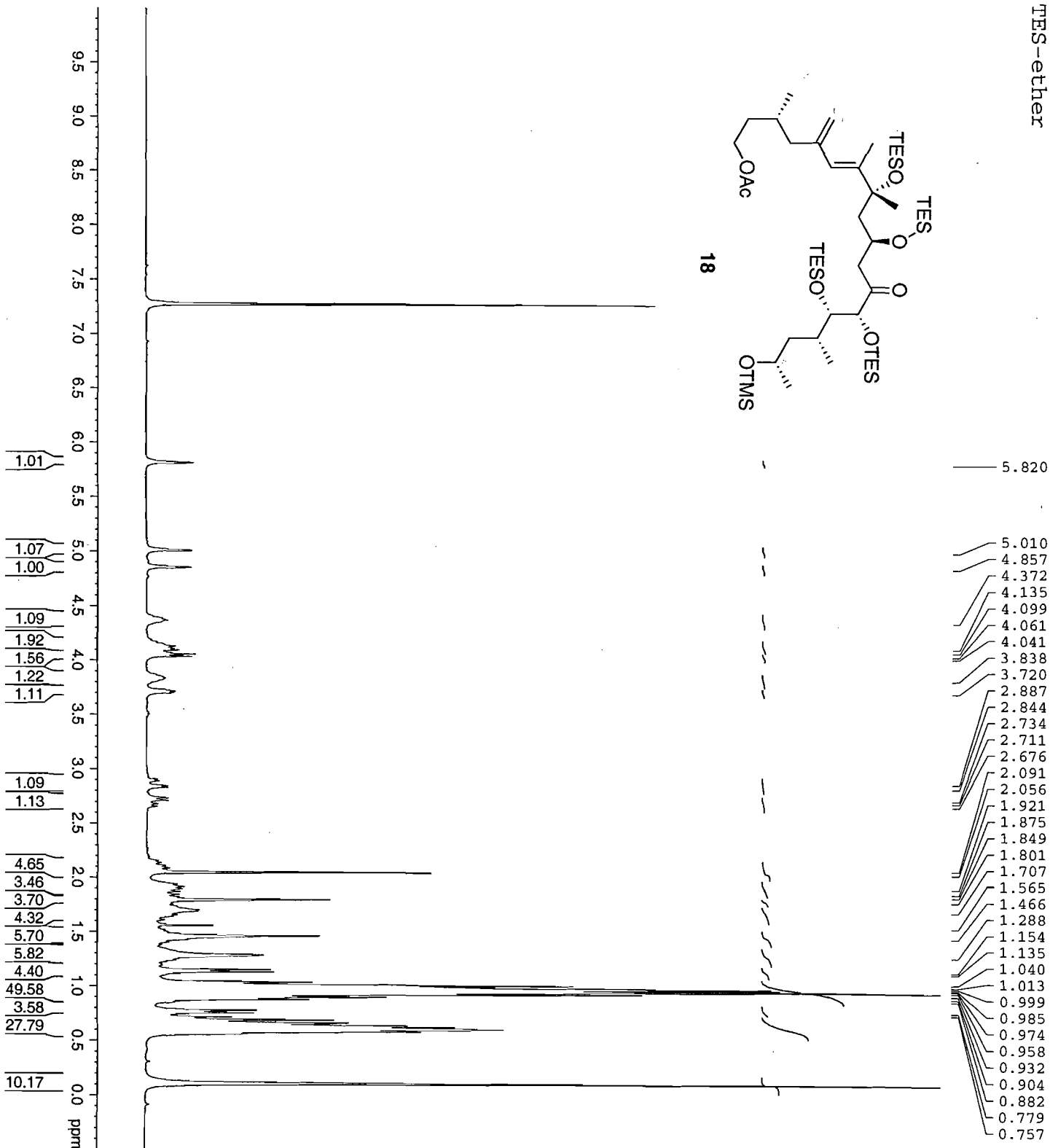
F2 - Processing parameters
SI         32768
SF         300.1300000 MHz
WDW        EM
SSB        0
GB         0
PC         1.00
  
```



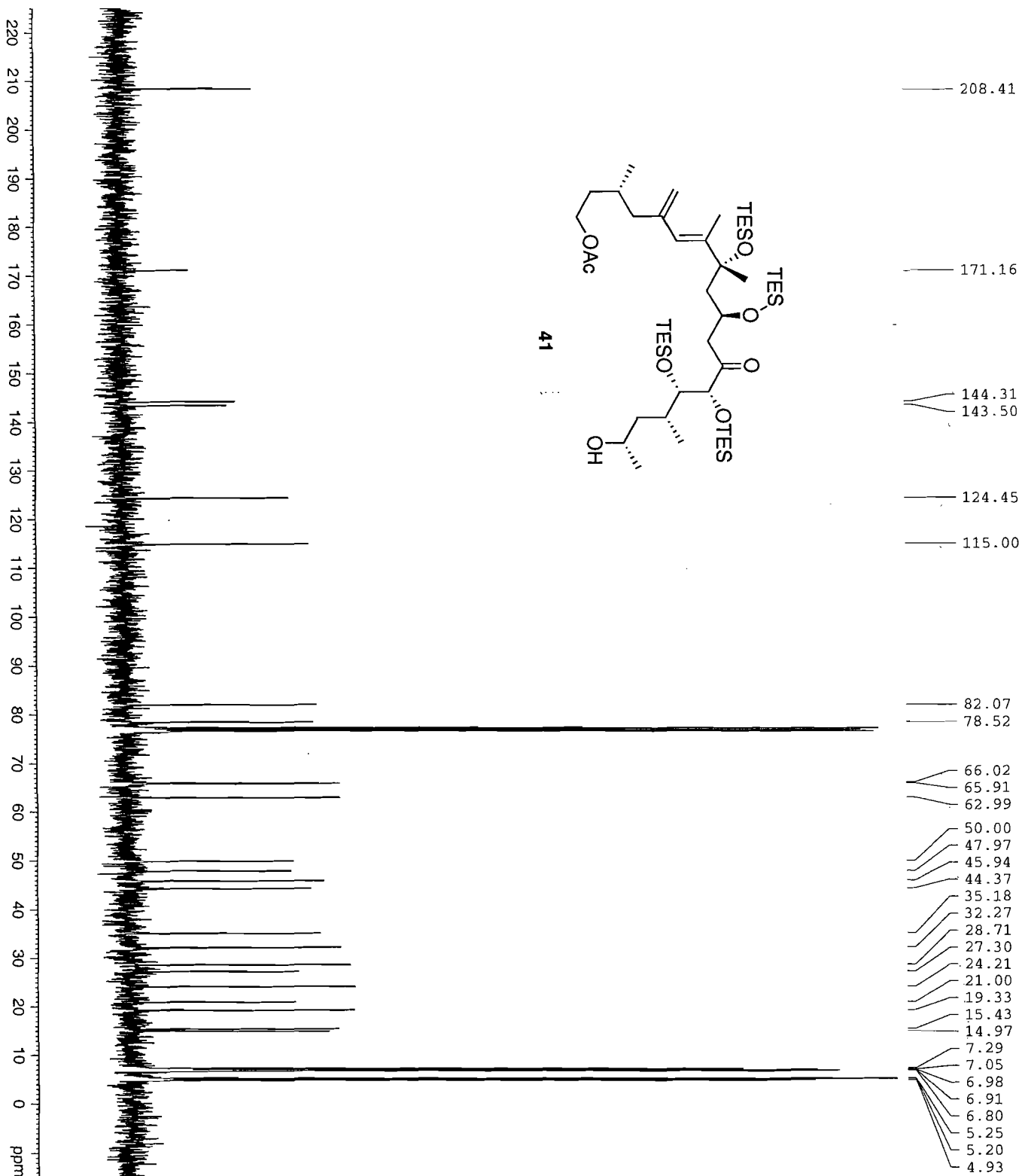
TES-ether



18



Current Data Parameters
NAME 7-85
EXPNO 1
PROCNO 1
F2 - Acquisition Parameters
Date_ 20080218
Time 21.01
INSTRUM DEX300
PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 17
DS 2
SWH 4789.272 Hz
FIDRES 0.146157 Hz
AQ 3.4210291 sec
RG 327.5
DW 104.400 usec
DE 6.00 usec
TE 298.2 K
D1 2.0000000 sec
TD0 1
===== CHANNEL f1 =====
NUC1 1H
P1 9.00 usec
PL1 -3.00 dB
SFO1 300.1321009 MHz
F2 - Processing parameters
SI 32768
SF 300.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



Current Data Parameters

NAME	6-94
EXPNO	3
PROCNO	1
DU	/n
USER	Liang

F2 - Acquisition Parameters

Date_	20071017
Time	14.51
INSTRUM	DPX400
PROBHD	5 mm BBO BB-1H
PULPROG	zgpg30
TD	65536
SOLVENT	
NS	305
DS	4
SWH	25125.629 Hz
FIDRES	0.383387 Hz
AQ	1.3042164 sec
RG	4597.6
DW	19.900 usec
DE	6.00 usec
TE	299.2 K
D1	0.1500001 sec
d11	0.0300000 sec
DELTA	0.0500000 sec
TD0	1

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

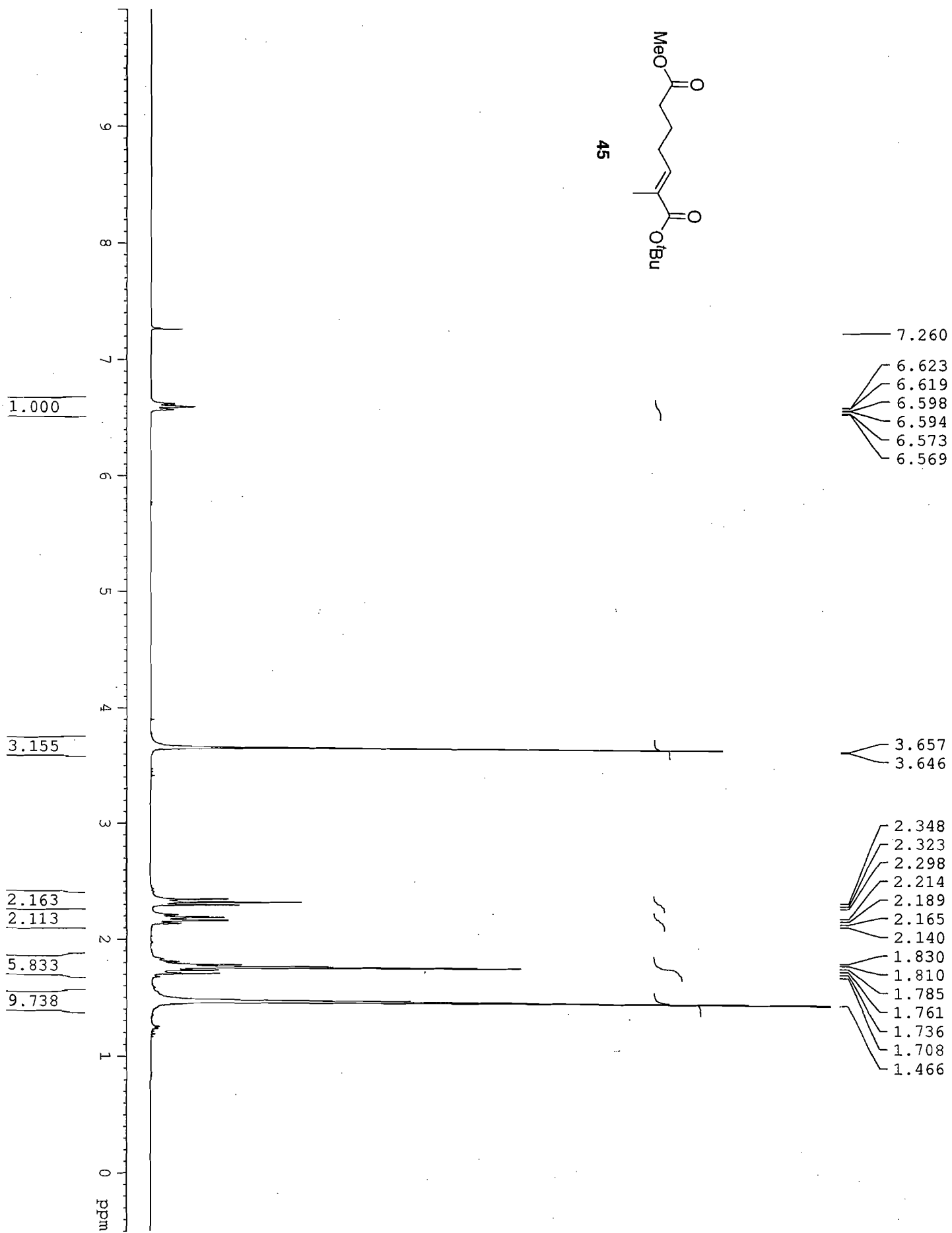
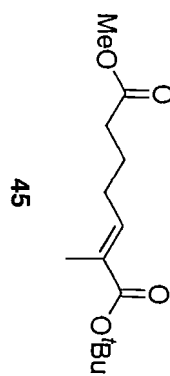
NUC1	13C
P1	7.80 usec
PL1	-3.00 dB
SFO1	100.5936591 MHz

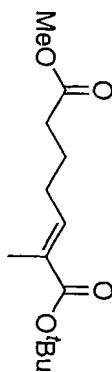
===== CHANNEL f2 =====

CPDPRG2	waltz16
NUC2	1H
PCPD2	135.00 usec
PL2	17.40 dB
PL12	17.40 dB
PL13	17.40 dB
SFO2	400.0116000 MHz

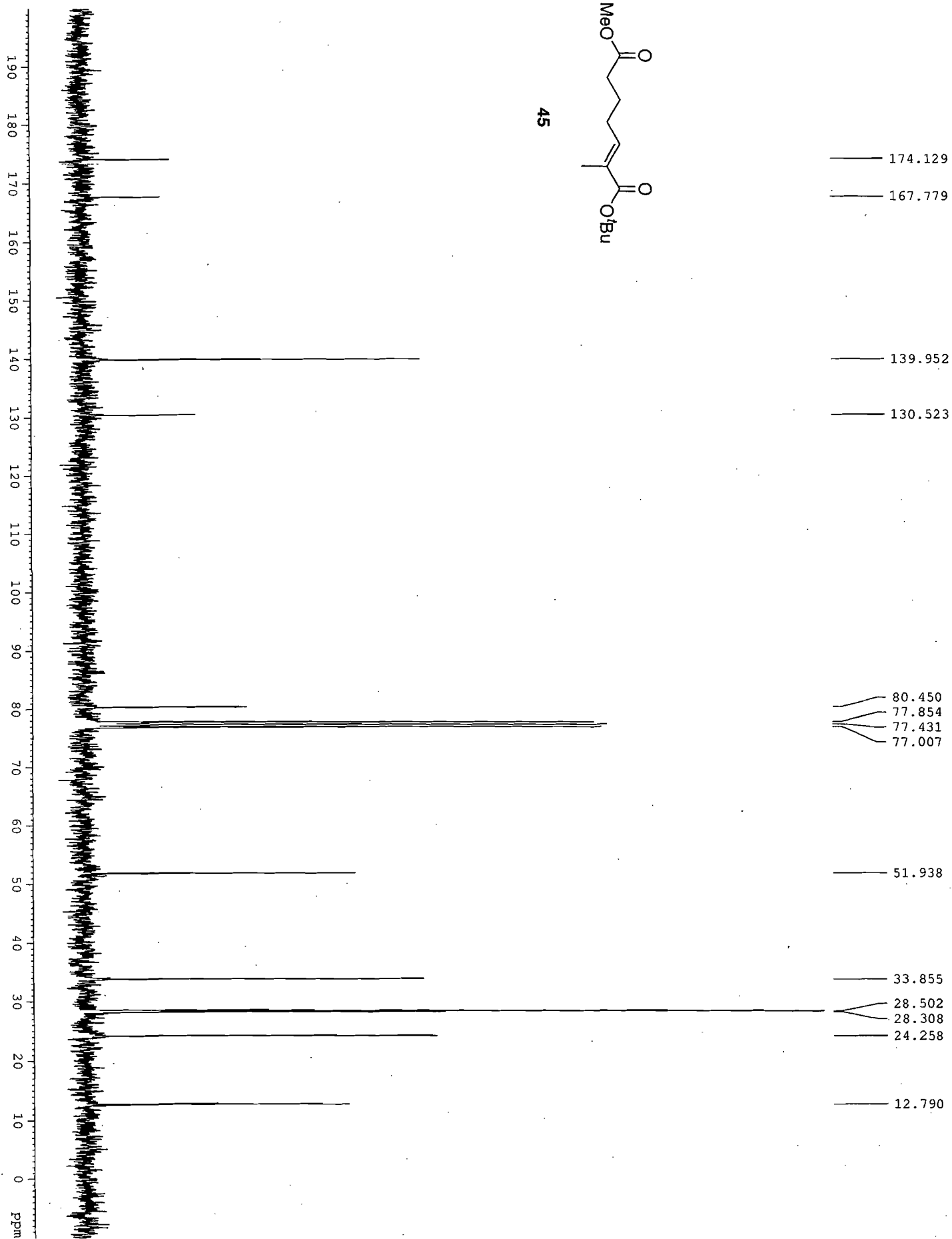
F2 - Processing parameters

SI	32768
SF	100.5825950 MHz
WDW	EM
SSB	0
LB	3.00 Hz
GB	0
PC	1.40

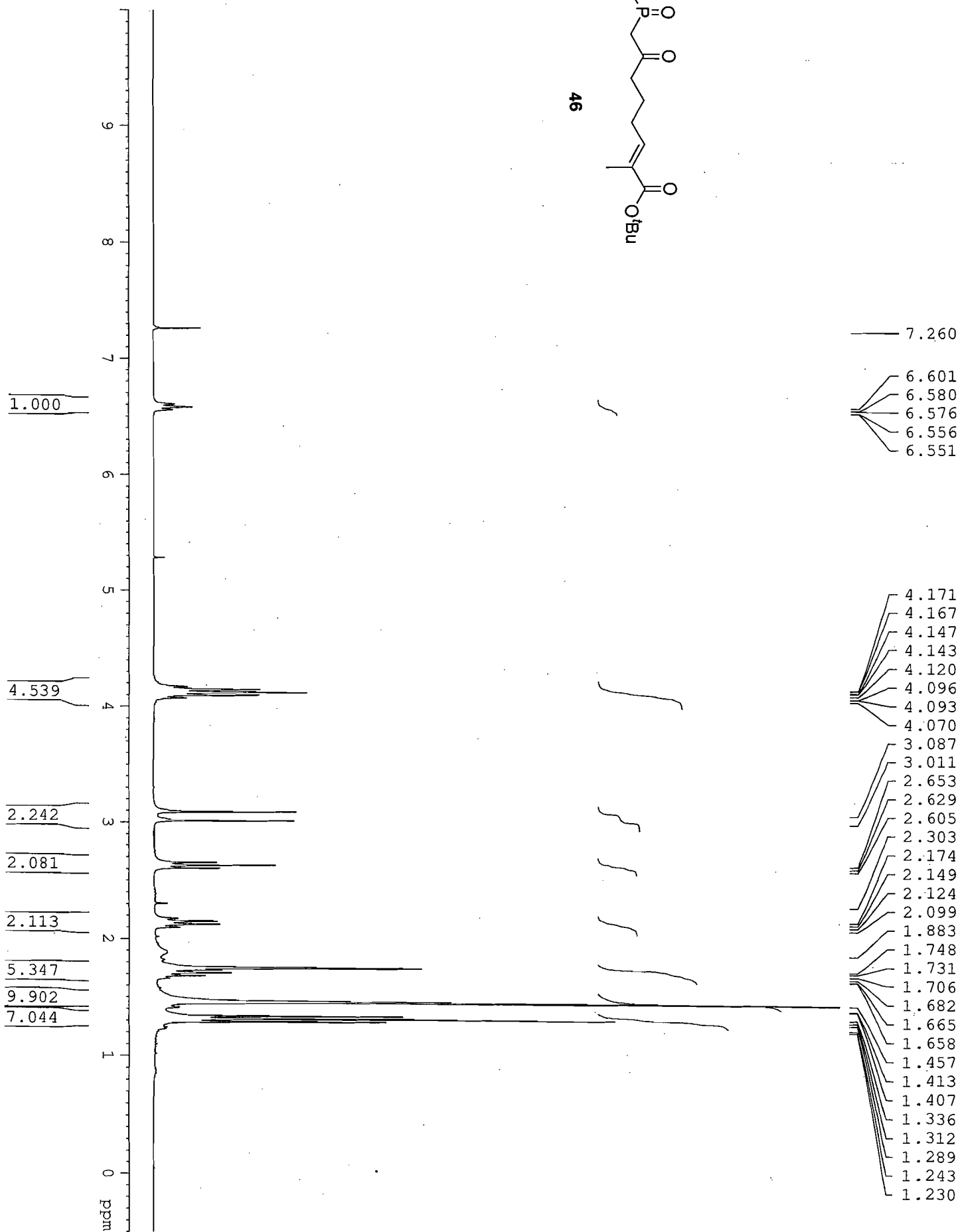
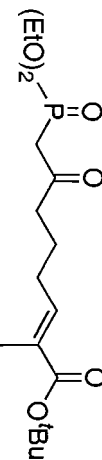




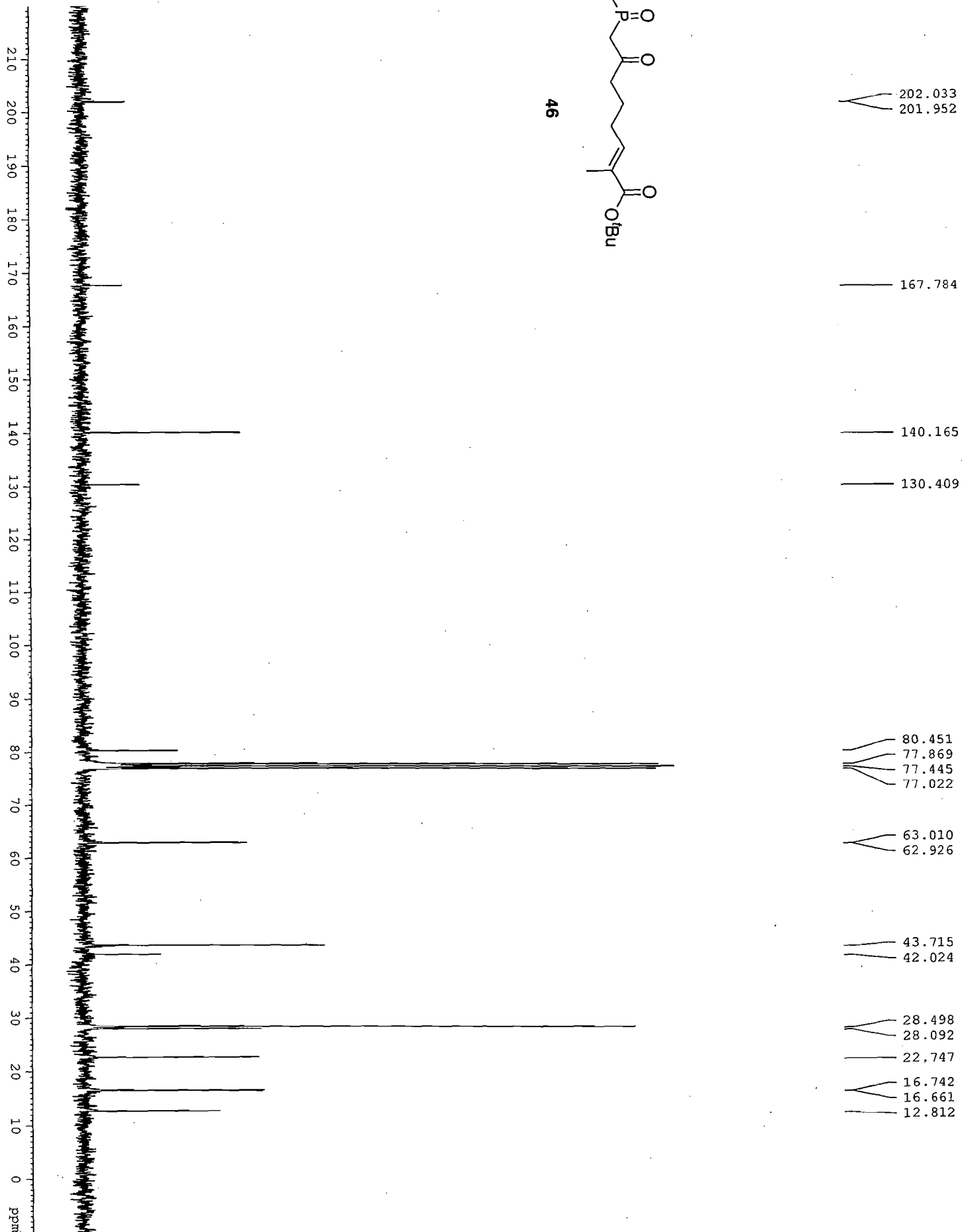
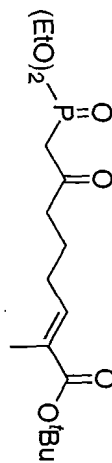
45



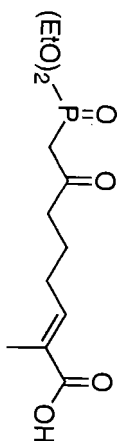
46



46



phosphinate

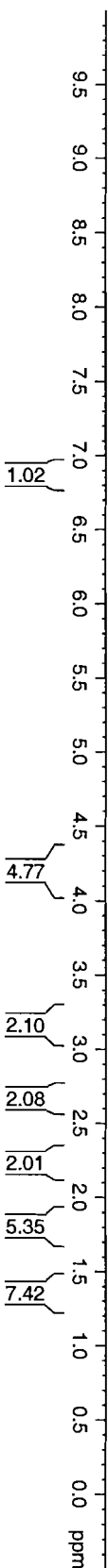


7

6.886
6.862
6.838

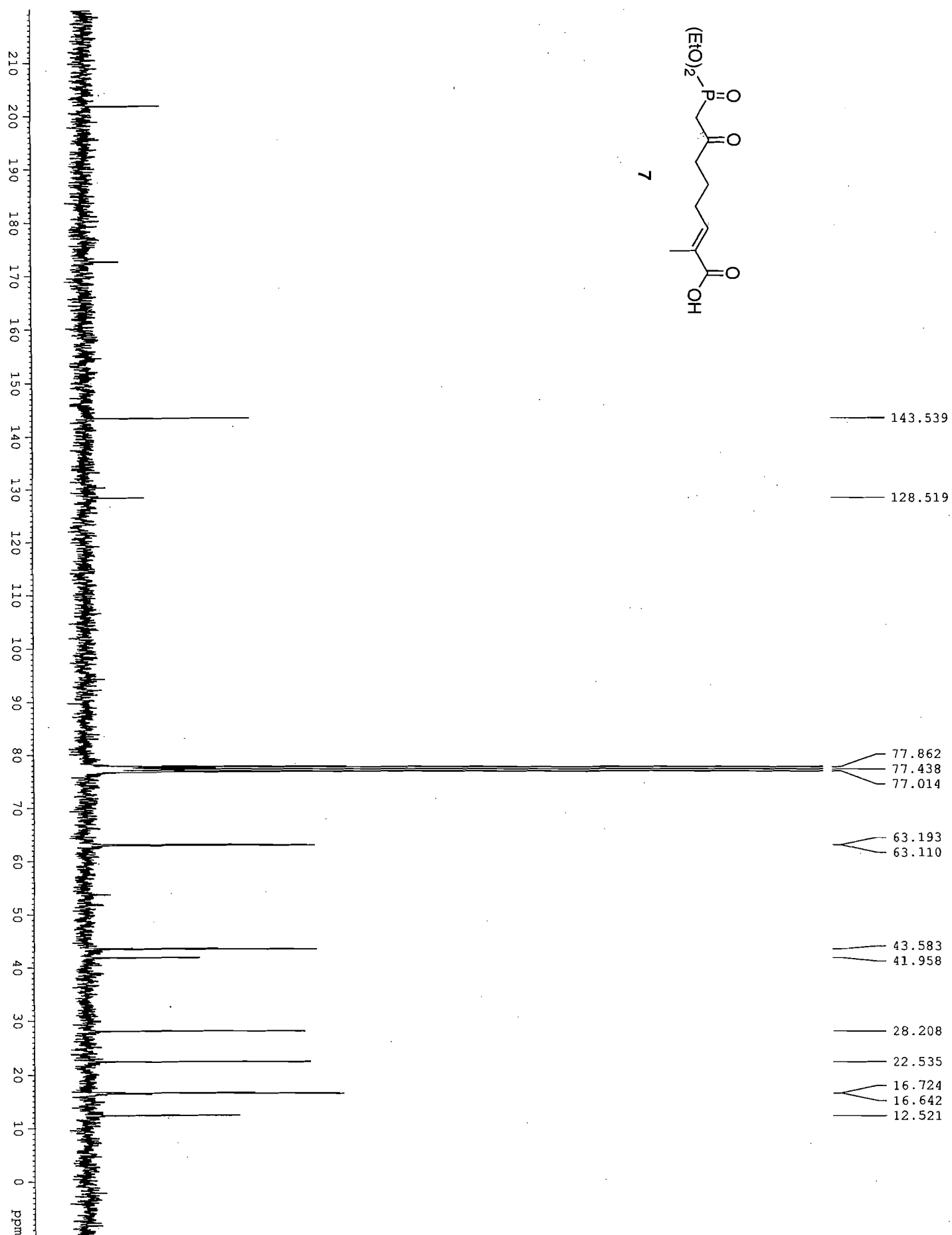
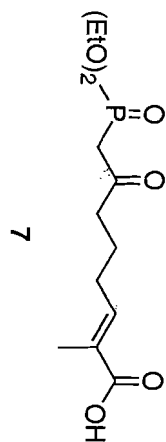
4.238
4.233
4.215
4.210
4.187
4.163
4.139

3.188
3.112
2.681
2.657
2.634
2.267
2.243
2.218
2.194
1.925
1.839
1.811
1.787
1.763
1.738
1.714
1.582
1.523
1.419
1.380
1.356
1.333

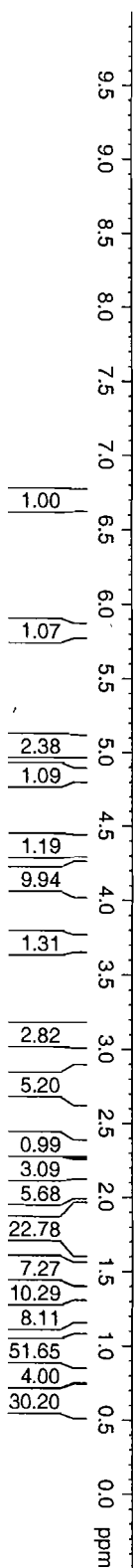
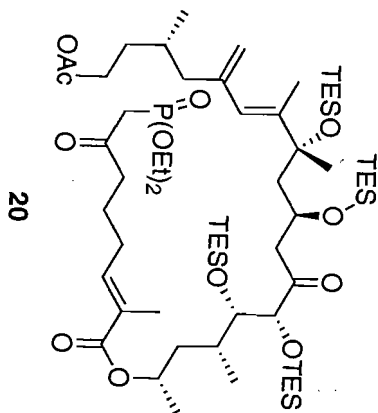


Current Data Parameters
NAME 7-100-2
EXPNO 1
PROCNO 1
DU /n
USER Liang
F2 - Acquisition Parameters
Date_ 20080315
Time 16.26
INSTRUM DECI300
PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 26
DS 2
SWH 4789.272
FIDRES 0.146157
AQ 3.4210291
RG 203.2
DM 104.400
DE 6.00
TE 298.2
D1 2.00000000
TD0 1
===== CHANNEL f1 =====
NUC1 1H
P1 9.00
PL1 -3.00
SFO1 300.1321009
F2 - Processing parameters
SI 32768
SF 300.1300000
WDW no
SSB 0
LB 0.00
GB 0
PC 301.00

5



5.817
5.006
4.841
4.207
4.184
4.160
4.147
4.136
4.106
4.088
4.069
3.715
3.698
3.126
3.050
2.800
2.787
2.756
2.731
2.696
2.673
2.649
2.199
2.174
2.148
2.101
2.081
2.048
1.935
1.912
1.875
1.855
1.819
1.789
1.749
1.725
1.698
1.682
1.648
1.617
1.454
1.416
1.409
1.375
1.351
1.328
1.270
1.242
1.223
1.185
1.033
1.006
0.992
0.971
0.966
0.946
0.920
0.895
0.874
0.793
0.771
0.714
0.688
0.661
0.648
0.623
0.599
0.579
0.555

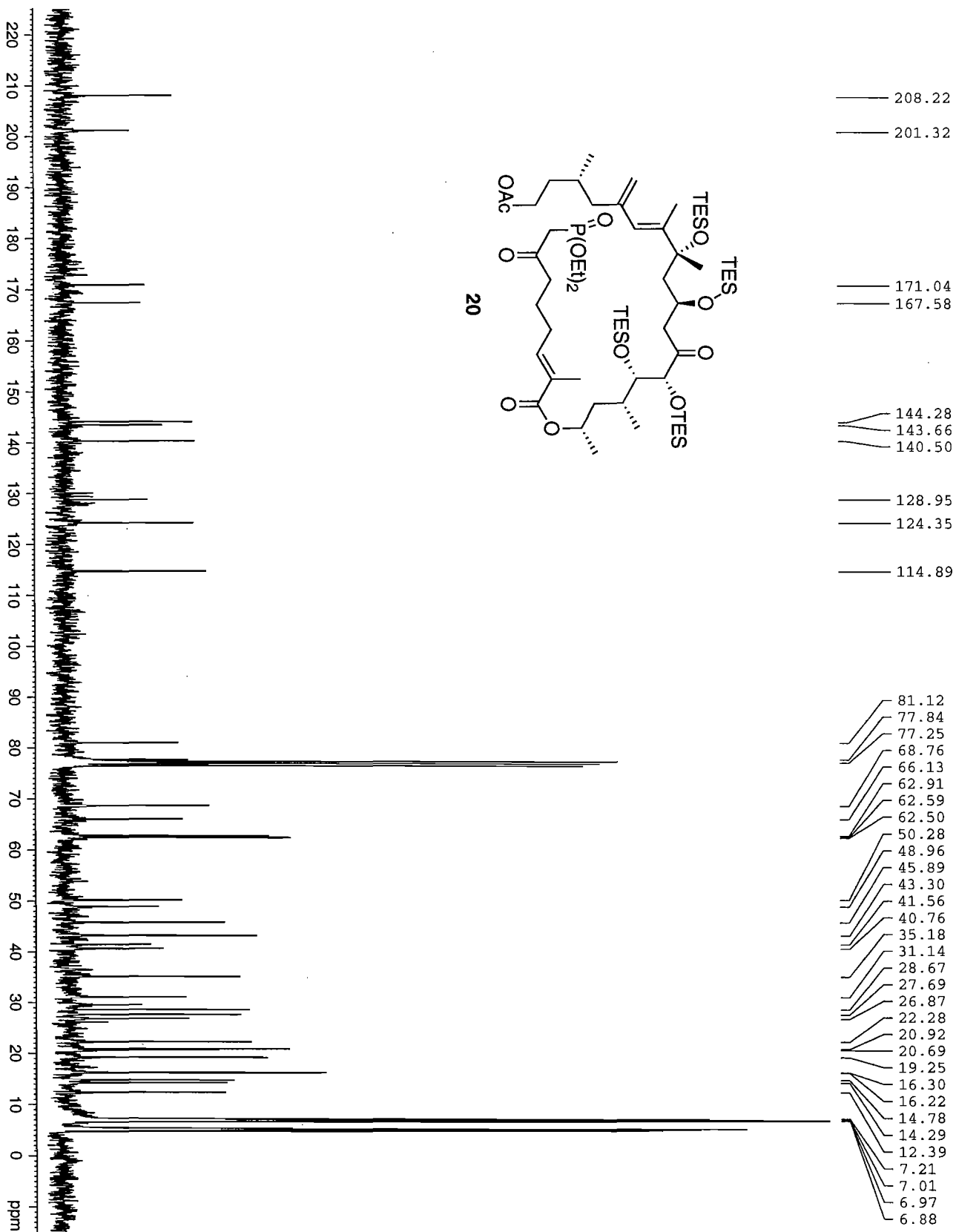


Current Data Parameters
NAME 6-95
EXPNO 1
PROCNO 1
DU /n
USER Liang

F2 - Acquisition Parameters
Date_ 20071018
Time 17.27
INSTRUM DPK300
PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 32768
SOLVENT CDCl₃
NS 32
DS 2
SWH 4789.272 Hz
FIDRES 0.146157 Hz
AQ 3.4210291 sec
RG 181
DW 104.400 usec
DE 6.00 usec
TE 298.2 K
D1 2.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 9.00 usec
PL1 -3.00 dB
SFO1 300.1321009 MHz

F2 - Processing parameters
SI 32768
SF 300.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



Current Data Parameters

NAME	6-96
EXPNO	3
PROCNO	1
DU	/h
USER	Liang

F2 - Acquisition Parameters

Date_	20071019
Time	11:38
INSTRUM	DPX300
PROBHD	5 mm QNP 1H/1
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl ₃
NS	229
DS	4
SWH	18832.393 Hz
FIDRES	0.287360 Hz
AQ	1.7400308 s
RG	9195.2
DW	26.550 us
DE	6.00 us
TE	298.2 K
D1	0.15000001 s
d11	0.03000000 s
DELTA	0.05000000 s
TD0	1

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

NUC1	¹³ C
P1	8.80 us
PL1	-3.00 dB
SFO1	75.476085 MHz

===== CHANNEL f2 =====

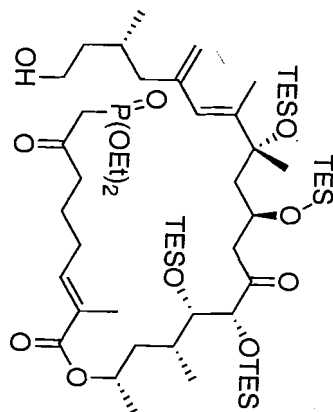
CPDPRG2	waltz16
NUC2	¹ H
PCPD2	80.00 us
PL2	-3.00 dB
PL12	17.55 dB
PL13	17.55 dB
SFO2	300.1312005 MHz

F2 - Processing parameters

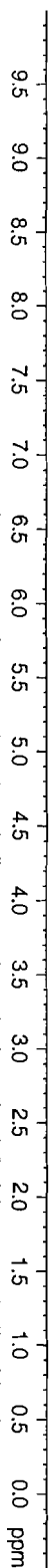
SI	32768
SF	75.4677490 MHz
WDW	EM
SSB	0
LB	3.00 Hz
GB	0
PC	1.40

5.826
5.001
4.830
4.178
4.154
4.130
4.128
4.101
4.082
3.711
3.704
3.686
3.674
3.667
3.661
3.121
3.045
2.761
2.751
2.692
2.669
2.645
2.195
2.170
2.042
1.913
1.887
1.861
1.839
1.815
1.781
1.745
1.720
1.674
1.660
1.631
1.610
1.435
1.410
1.401
1.369
1.345
1.322
1.264
1.237
1.217
1.031
1.004
0.987
0.977
0.968
0.960
0.943
0.917
0.890
0.875
0.854
0.780
0.758
0.712
0.686
0.659
0.642
0.626
0.616
0.600
0.592
0.575
0.549

de-Ac



47



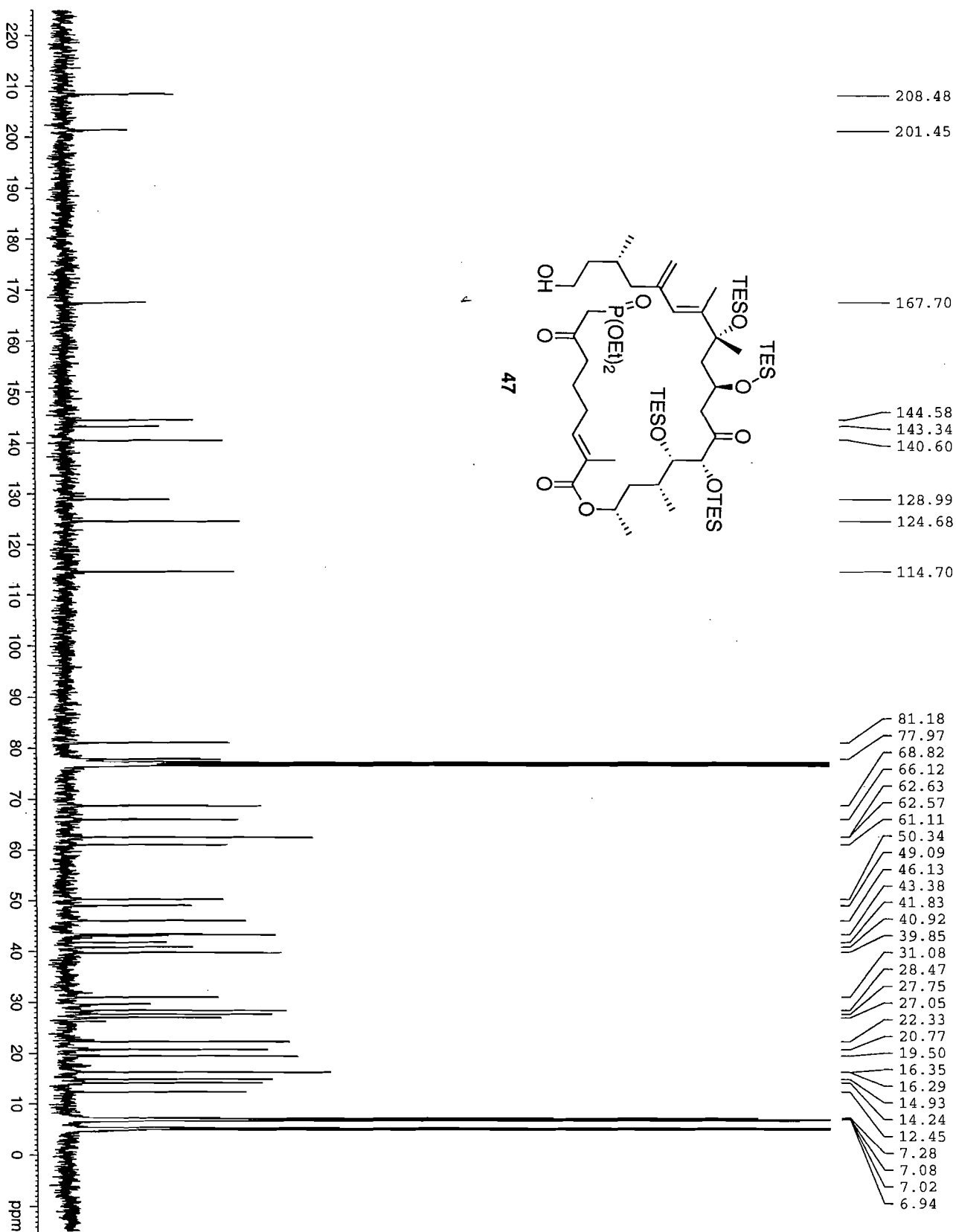
1.00
1.03
2.23
1.10
1.06
6.53
3.81
2.54
4.53
0.73
3.47
22.43
16.15
8.51
49.74
3.70
29.09

Current Data Parameters
NAME 6-96
EXPNO 1
PROCNO 1
DU /n
USER Liang

F2 - Acquisition Parameters
Date_ 20071021
Time 18.19
INSTRUM DPX300
PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 20
DS 2
SWH 4789.272 Hz
FIDRES 0.146157 Hz
AQ 3.4210291 sec
RG 101.6
DW 104.400 usec
DE 6.00 usec
TE 298.2 K
D1 2.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 9.00 usec
PL1 -3.00 dB
SFO1 300.1321009 MHz

F2 - Processing Parameters
SI 32768
SF 300.1300000 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00



Current Data Parameters

NAME 6-100
EXPNO 3
PROCNO 1
DU /n
USER Liang

F2 - Acquisition Parameters

Date_ 20071022
Time 16.47
INSTRUM DPX400
PROBHD 5 mm BBO BB-1H
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 2172
DS 4
SWH 25125.629 Hz
FIDRES 0.383387 Hz
AQ 1.3042164 s
RG 4597.6
DW 19.900 us
DE 6.00 us
TE 299.2 K
D1 0.15000001 s
d11 0.03000000 s
DELTA 0.05000000 s
TD0 1

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

NUC1 ¹³C
P1 7.80 us
PL1 -3.80 dB
SFO1 100.593681 MHz

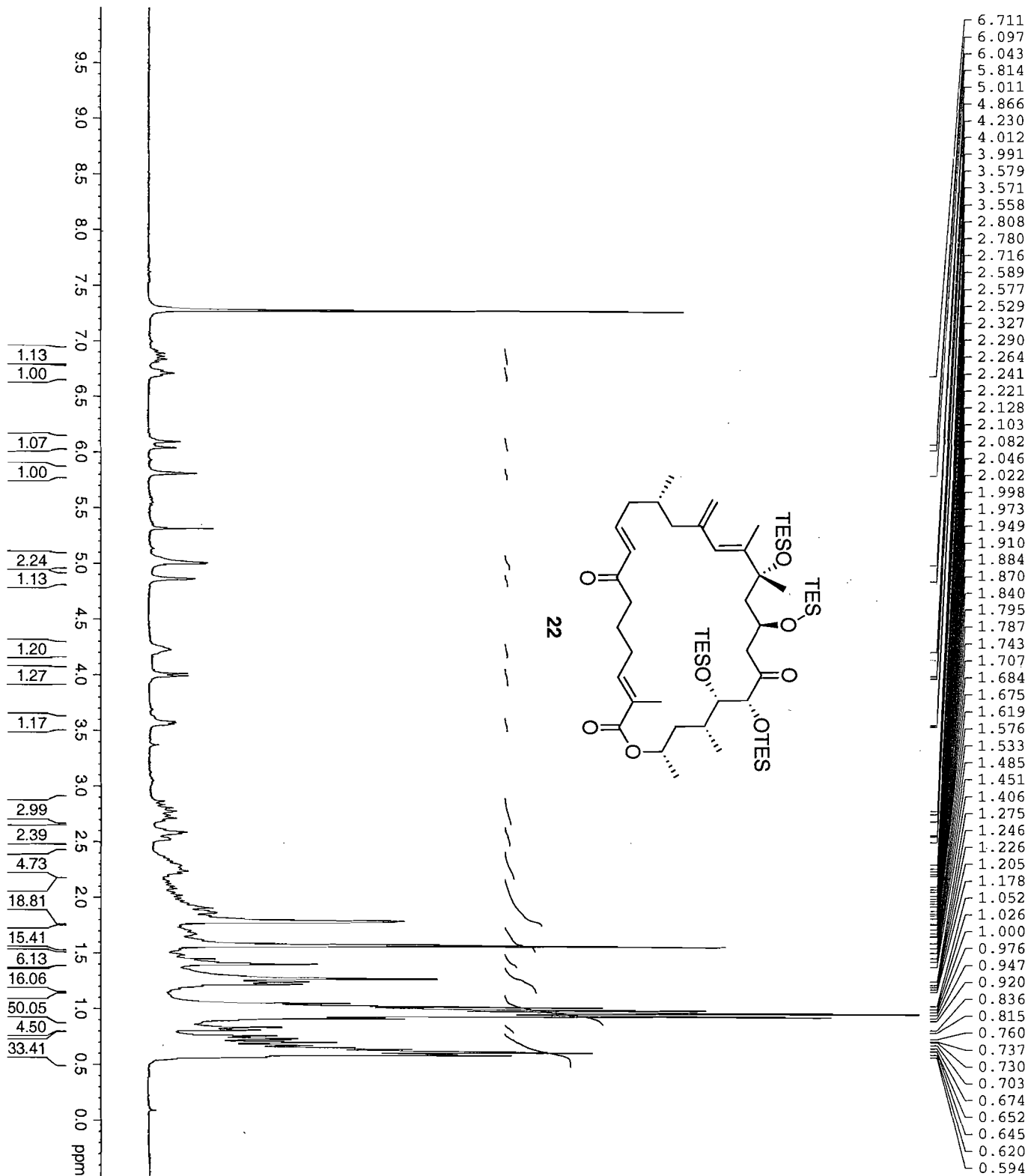
===== CHANNEL f2 =====

CPDPRG2 waltz16
NUC2 ¹H
PCPD2 135.00 us
PL2 17.40 dB
PL12 17.40 dB
PL13 17.40 dB
SFO2 400.0116000 MHz

F2 - Processing parameters

SI 32768
SF 100.5825950 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.40

cyclization

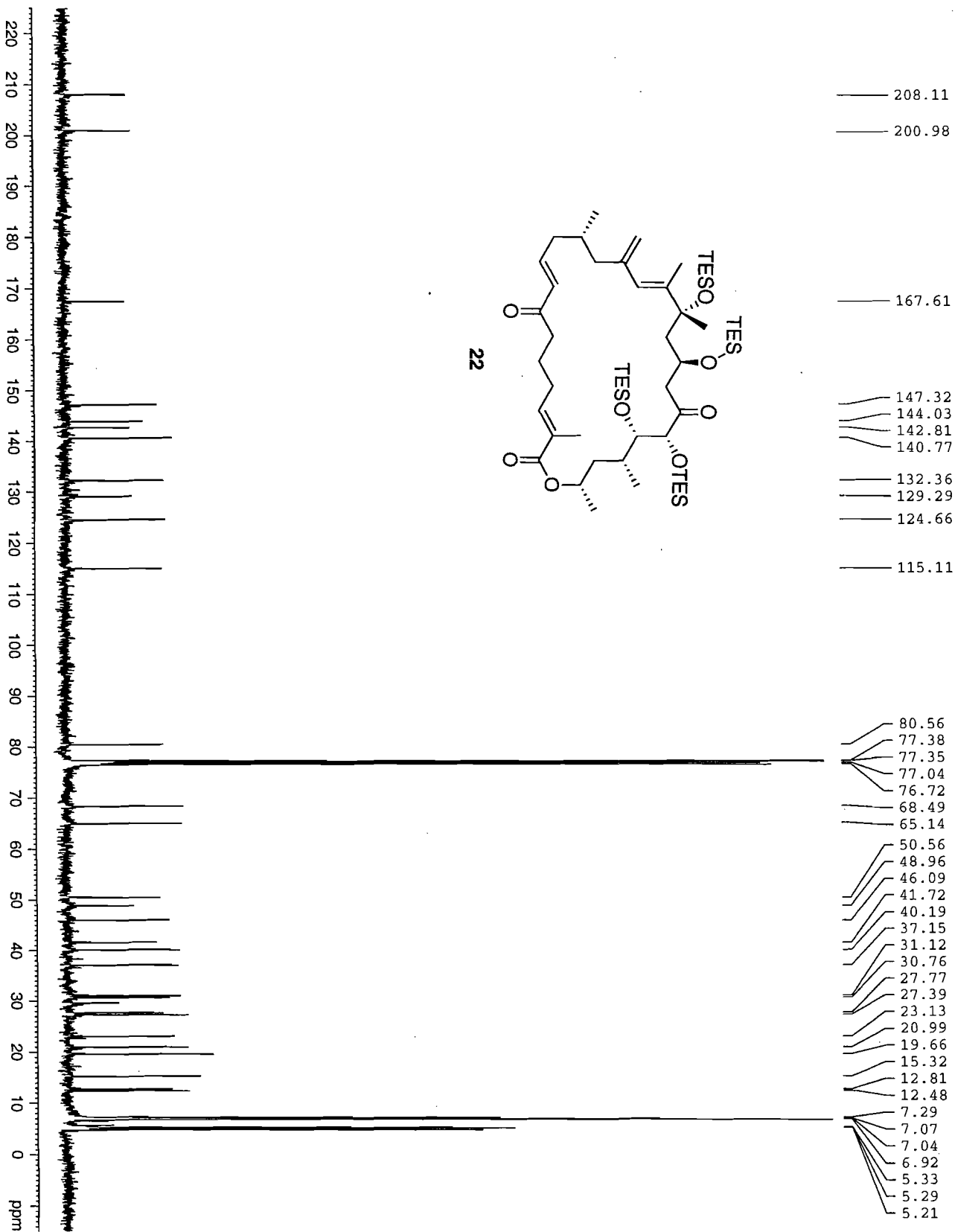


```

Current Data Parameters
NAME          6-99
EXPNO         1
PROCNO        1
PULPROG       zgpg
SOLVENT       CDCl3
NS            32
DS            2
SWH           4789.272 Hz
FIDRES       0.146157 Hz
AQ           3.4210291 sec
RG           574.7
DM           104.400 usec
DE           6.00 usec
TE           298.2 K
D1           2.0000000 sec
TD0          1

===== CHANNEL f1 =====
NUC1          1H
P1           9.00 usec
PL1          -3.00 dB
SFO1         300.1321009 MHz

F2 - Processing parameters
SI           32768
SF          300.1300000 MHz
WDW          EM
SSB          0
GB           0
PC           1.00
  
```



Current Data Parameters

NAME	EXPNO	PROCNO	DV	USER
NAME	7-07	3	1	Liang

F2 - Acquisition Parameters

Date_	Time	INSTRUM	PROBHD	PULPROG	TD	SOLVENT	NS	DS	SWH	FIDRES	AQ	RG	DW	DE	TE	D1	d11	DELTA	TD0
20071023	16.43	DPX400	5 mm BBO BB-1H	zgpg30	65536		1107	4	25125.629 Hz	0.383387 Hz	1.3042164 s	9195.2	19.900 us	6.00 us	299.2 K	0.15000001 s	0.03000000 s	0.05000000 s	1

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

NUC1	P1	SFO1
¹³ C	7.80 us	100.593621 MHz

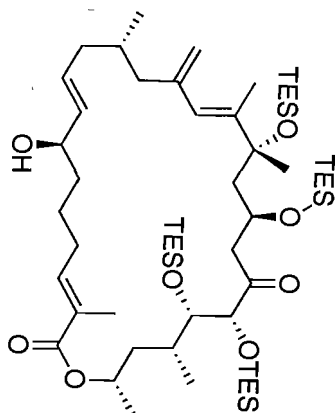
===== CHANNEL f2 =====

CPDPRG2	waitz16	NUC2	P2	SFO2
waitz16	1H	135.00 us	17.40 dT	17.40 dT
PCPD2	1H	17.40 dT	17.40 dT	17.40 dT
PL12	1H	17.40 dT	17.40 dT	17.40 dT
PL13	1H	17.40 dT	17.40 dT	17.40 dT
SFO2	400.0116000 MHz			

F2 - Processing Parameters

SI	SF	WDW	SSB	LB	GB	PC
32768	100.5825950 MHz	EM	0	3.00 Hz	0	1.40

6.790
6.786
5.871
5.447
4.971
4.805
4.097
4.074
4.031
4.010
3.578
3.569
3.557
2.244
2.222
2.094
2.075
2.047
2.027
1.899
1.890
1.873
1.851
1.822
1.794
1.783
1.741
1.706
1.663
1.621
1.549
1.525
1.504
1.485
1.452
1.405
1.381
1.275
1.250
1.230
1.052
1.025
1.011
0.999
0.984
0.977
0.958
0.950
0.923
0.900
0.893
0.876
0.871
0.809
0.788
0.729
0.701
0.687
0.679
0.673
0.665
0.650
0.639
0.624
0.612
0.599
0.596
0.574
0.568



23

9.5
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
0.5
0.0 ppm

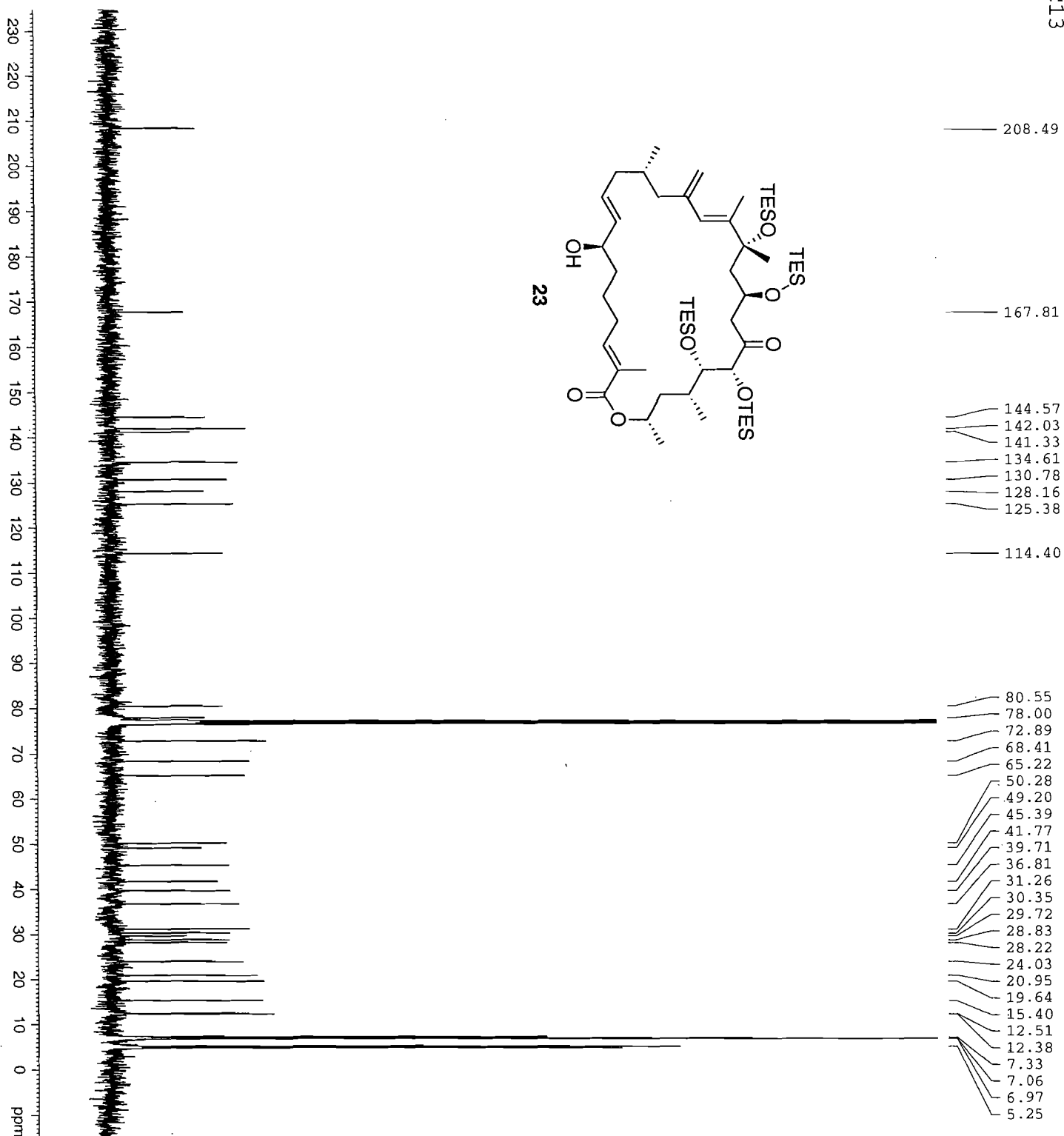
1.10
1.00
1.30
1.11
2.11
1.01
1.15
2.37
1.02
1.07
1.15
4.30
6.11
33.52
25.40
55.79
4.32
36.99

Current Data Parameters
NAME 7-08
EXPNO 1
PROCNO 1
DU /n
USER Liang

F2 - Acquisition Parameters
Date_ 20071024
Time 16.05
INSTRUM DPX300
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 32
DS 2
SWH 4789.272 Hz
FIDRES 0.146157 Hz
AQ 3.4210291 sec
RG 362
DW 104.400 usec
DE 6.00 usec
TE 298.2 K
D1 2.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 9.00 usec
PL1 -3.00 dB
SFO1 300.1321009 MHz

F2 - Processing parameters
SI 32768
SF 300.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



```

Current Data Parameters
NAME       7-11
EXPNO      3
PROCNO     1
DU          /n
USER       Liang

F2 - Acquisition Parameters
Date_      20071028
Time       19.33
INSTRUM    DPX400
PROBHD     5 mm BBO BB-1H
PULPROG    zgpg30
TD          65536
SOLVENT    NS
NS          1151
DS          4
SWH         25125.629 Hz
FIDRES     0.38387 Hz
AQ          1.3042164 sec
RG          5792.6
DM          19.900 usec
DE          6.00 usec
TE          299.2 K
D1          0.1500001 sec
d11         0.0300000 sec
DELTA      0.0500000 sec
TD0         1

===== CHANNEL f1 =====
NUC1        13C
P1          7.80 usec
PL1         -3.00 dB
SFO1        100.5936591 MHz

===== CHANNEL f2 =====
CPDPRG2    waltz16
NUC2        1H
PCPD2       135.00 usec
PL2         17.40 dB
PL12        17.40 dB
PL13        17.40 dB
SFO2        400.0116000 MHz

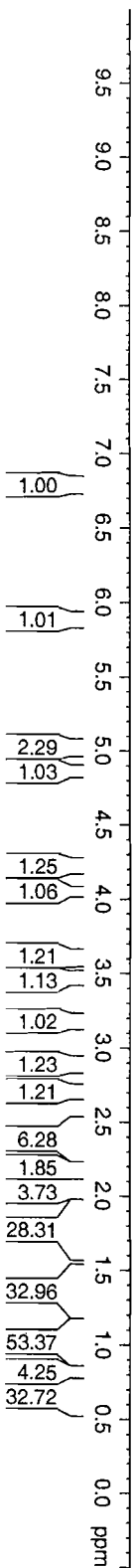
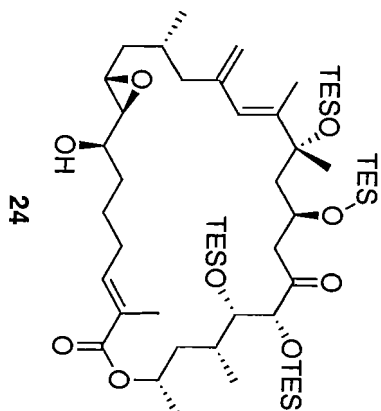
F2 - Processing Parameters
SI          32768
SF          100.5825950 MHz
WDW         EM
SSB         0
LB          3.00 Hz
GB          0
PC          1.40

```

H1

6.777

5.880
5.151
5.009
4.864
4.230
4.058
4.043
3.599
3.584
3.468
3.174
2.917
2.894
2.876
2.853
2.705
2.690
2.443
2.397
2.291
2.180
2.161
2.050
1.935
1.896
1.869
1.822
1.777
1.714
1.634
1.529
1.494
1.465
1.406
1.289
1.260
1.246
1.121
1.067
1.047
1.027
1.019
1.010
0.999
0.990



Current Data Parameters
NAME 7-16
EXPNO 1
PROCNO 1
DU /h
USER Liang

F2 - Acquisition Parameters
Date_ 20071104
Time 14.41
INSTRUM DPX400
PROBHD 5 mm BBO BB-1H
PULPROG zg20
TD 32768
SOLVENT CDCl₃
NS 32
DS 2
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 181
DW 78.000 usec
DE 6.00 usec
TE 299.2 K
D1 2.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 ¹H
P1 14.70 usec
PL1 0.00 dB
SFO1 400.0128001 MHz

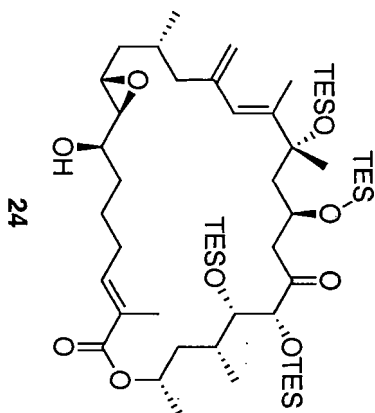
F2 - Processing Parameters
SI 32768
SF 400.0100000 MHz
WDW EM
SSB 0
LB 0.70 Hz
GB 0
PC 1.00

208.41

167.67

143.96
142.10
141.42128.58
124.99

114.93

80.77
78.16
71.81
68.32
65.58
62.79
56.39
50.58
49.13
46.63
42.13
38.91
33.14
30.07
29.40
28.82
28.28
23.68
21.04
19.80
15.55
12.46
12.39
7.33
7.09
5.19
4.96

24

220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 ppm

Current Data Parameters
NAME 7-16
EXPNO 2
PROCNO 1
DU /n
USER Liang

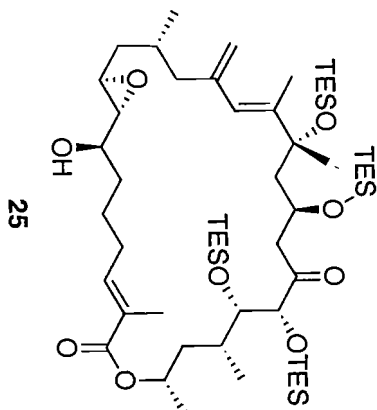
F2 - Acquisition Parameters
Date_ 20071104
Time 14.50
INSTRUM DPX400
PROBHD 5 mm BBO BB-1H
PULPROG zgpg30
TD 65536
SOLVENT NS
DS 4003
DE 25125.629 Hz
SMH 4
FIDRES 0.383387 Hz
AQ 1.3042164 sec
RG 4597.6
DW 19.900 usec
DE 6.00 usec
TE 299.2 K
D1 0.15000001 sec
d11 0.03000000 sec
DELTA 0.05000000 sec
TDO 1

===== CHANNEL f1 =====
NUC1 13C
P1 7.80 usec
PL1 -3.00 dB
SFO1 100.5936591 MHz

===== CHANNEL f2 =====
CEDEPG2 waltz16
NUC2 1H
PCPD2 135.00 usec
PL2 17.40 dB
PL12 17.40 dB
PL13 17.40 dB
SFO2 400.0116000 MHz

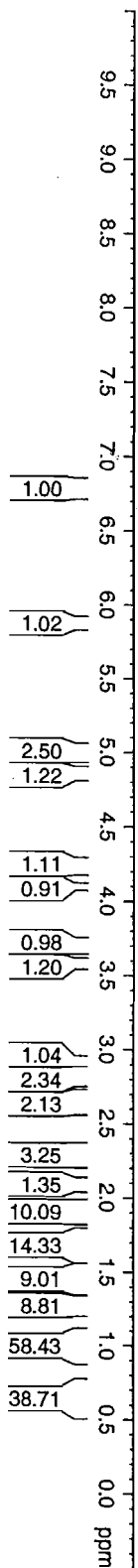
F2 - Processing parameters
SI 32768
SF 100.5825950 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.40

H1



6.790

5.869
4.995
4.841
4.247
4.098
4.083
3.699
3.574
2.908
2.864
2.844
2.821
2.786
2.677
2.647
2.604
2.276
2.057
2.040
1.931
1.913
1.852
1.834
1.764
1.732
1.706
1.659
1.619
1.501
1.485
1.469
1.455
1.440
1.404
1.278
1.249
1.234
1.053
1.033
1.013
1.008
1.001

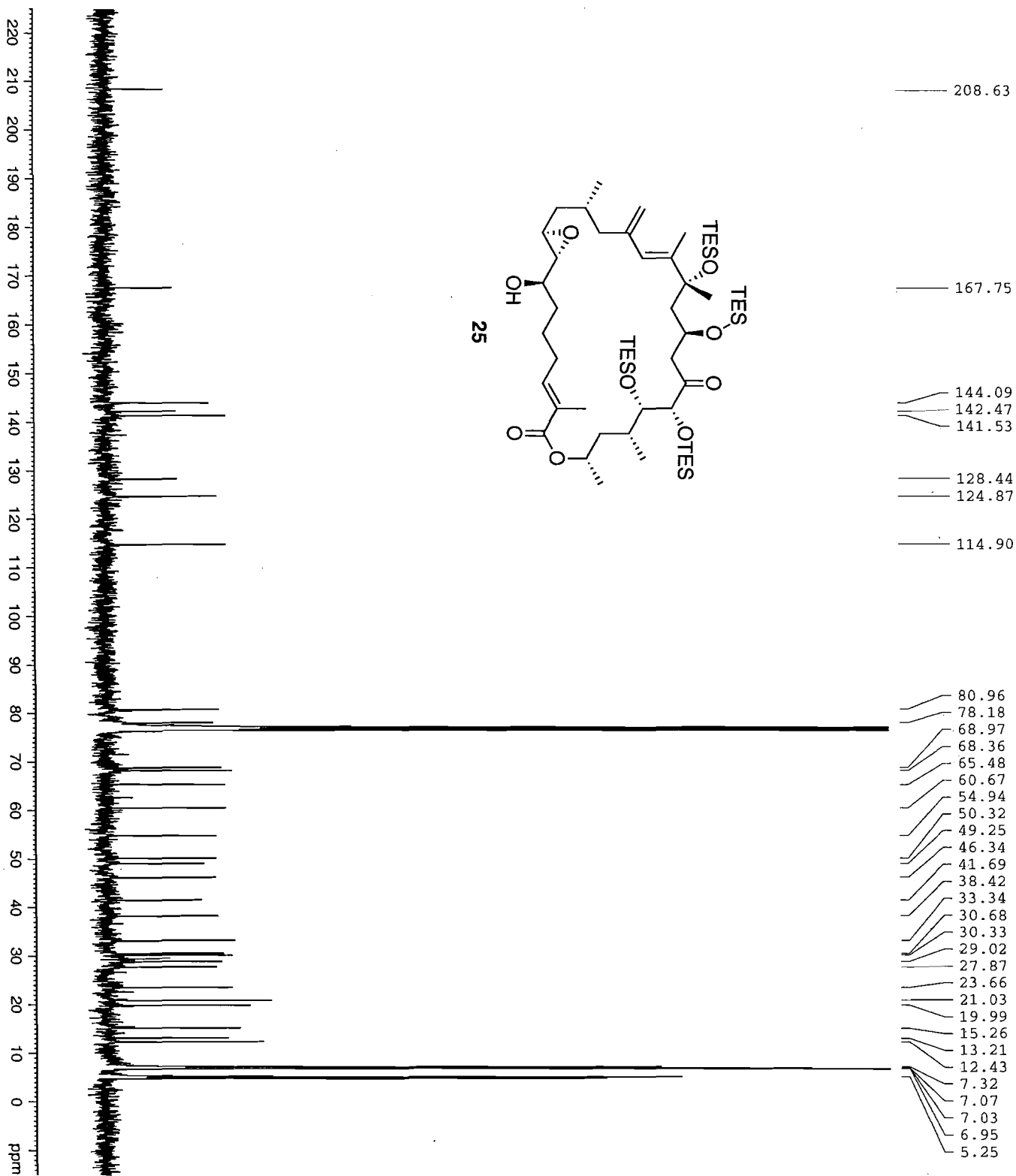


Current Data Parameters
NAME 8-34
EXPNO 1
PROCNO 1
DU /n
USER Liang

F2 - Acquisition Parameters
Date_ 20080411
Time 19.14
INSTRUM DPX400
PROBHD 5 mm BBO BB-1H
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 14
DS 2
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 181
DM 78.000 usec
DE 6.00 usec
TE 298.2 K
D1 2.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 14.70 usec
PL1 0.00 dB
SFO1 399.9528000 MHz

F2 - Processing parameters
SI 32768
SF 399.9500000 MHz
WDW EM
SSB 0
LB 0.70 Hz
GB 0
PC 1.00



```

Current Data Parameters
NAME      8-34
EXPNO     3
PROCNO    1
DU         /n
USER      Liang

F2 - Acquisition Parameters
Date_     20080411
Time      19.32
INSTRUM   DPX400
PROBHD    5 mm BBO BB-1H
PULPROG   zgpg30
TD         65536
SOLVENT   NS
NS         4030
DS         4
SWH        25125.629 Hz
FIDRES     0.383387 Hz
AQ         1.3042164 sec
RG         16384
RW         19.900 usec
DE         298.2 K
TE         0.15000001 sec
D11        0.0300000 sec
DELTA      0.0300000 sec
TD0        1

===== CHANNEL f1 =====
NUC1       13C
P1         7.80 usec
PL1        -3.00 dB
SFO1       100.5785700 MHz

===== CHANNEL f2 =====
CPDPRG2    waltz16
NUC2       1H
PCPD2      135.00 usec
PL2        17.40 dB
PL12       17.40 dB
PL13       17.40 dB
SFO2       399.9516000 MHz

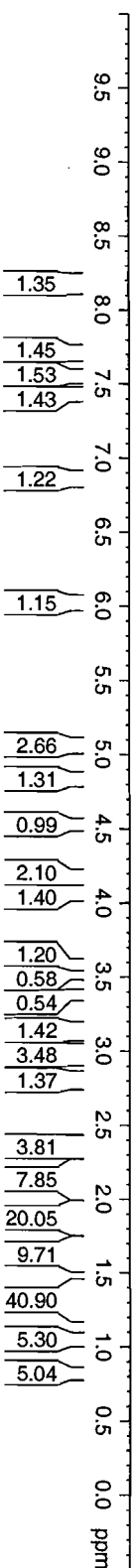
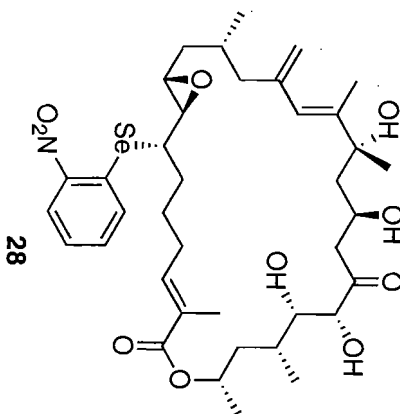
F2 - Processing parameters
SI         32768
SF         100.5675080 MHz
WDW        EM
SSB        0
LB         3.00 Hz
GB         0
PC         1.40

```

SeAr

8.173
8.153
7.708
7.688
7.568
7.550
7.531
7.442
7.422
7.403
6.852

6.021
5.094
5.079
5.067
5.042
4.830
4.532
4.178
4.098
4.074
4.050
3.580
3.508
3.373
3.128
2.970
2.950
2.821
2.788
2.763
2.331
2.296
2.224
2.194
2.134
2.102
2.079
2.040
1.942
1.911
1.887
1.850
1.831
1.793
1.764
1.725
1.668
1.624
1.437
1.380
1.319
1.304
1.203
1.190
1.131

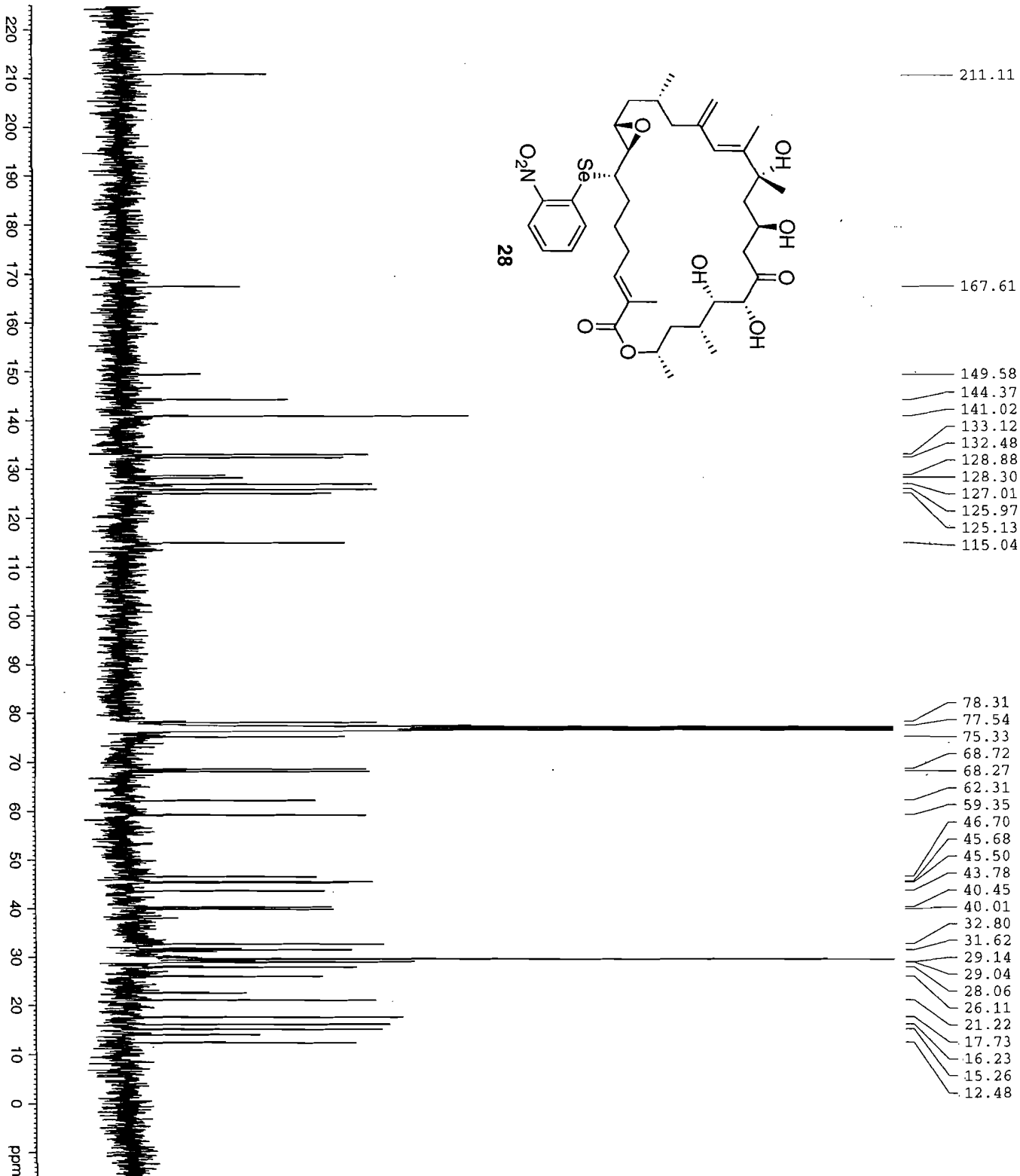


Current Data Parameters
NAME 7-94
EXPNO 2
PROCNO 1
DU /n
USER llang

F2 - Acquisition Parameters
Date_ 20080313
Time 17:13
INSTRUM DP440
PROBHD 5 mm BBO BB-1H
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 32
DS 2
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 203.2
DW 78.000 usec
DE 6.00 usec
TE 300.2 K
D1 2.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 14.70 usec
PL1 0.00 dB
SFO1 399.9528000 MHz

F2 - Processing parameters
SI 32768
SF 399.9500000 MHz
WDW EM
SSB 0
LB 0.70 Hz
GB 0
PC 1.00



Current Data Parameters

NAME	7-94
EXPNO	4
PROCNO	1
DU	/n
USER	Liang

F2 - Acquisition Parameters

Date_	20080313
Time	17:32
INSTRUM	DPX400
PROBHD	5 mm BBO BB-1H
PULPROG	zgpg30
TD	65536
SOLVENT	
NS	4199
DS	4
SWH	25125.629 Hz
FIDRES	0.38387 Hz
AQ	1.3042164 sec
RG	16384
DW	19.900 usec
DE	6.00 usec
TE	298.2 K
D1	0.1500001 sec
D11	0.0300000 sec
DELTA	0.0500000 sec
TD0	1

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

NUC1	13C
P1	7.80 usec
PL1	-3.00 dB
SFO1	100.5785700 MHz

===== CHANNEL f2 =====

CPDPRG2	waltz16
NUC2	1H
PCPD2	135.00 usec
PL2	17.40 dB
PL12	17.40 dB
PL13	17.40 dB
SFO2	399.9516000 MHz

F2 - Processing parameters

SI	32768
SF	100.5675080 MHz
WDW	EM
SSB	0
LB	3.00 Hz
GB	0
PC	1.40

H1

6.757
6.743
6.064
5.222
5.200
5.097
5.084
5.067
4.857
4.544
4.288
4.274
4.144
4.119
3.738
3.724
3.714
3.690
3.668
3.230
3.225
3.208
3.203
3.075
3.051
3.041
3.034
3.017
2.969
2.946
2.390
2.379
2.281
2.252
2.216
2.153
2.125
2.096
2.071
1.994
1.971
1.960
1.942
1.908
1.849
1.834
1.804
1.769
1.635
1.612
1.419
1.396
1.366
1.339
1.311
1.296
1.280
1.252
1.234
1.197
1.171
1.145
1.034
1.017
0.987
0.972
0.923
0.907
0.895

Current Data Parameters
NAME ampd B2-major
EXPNO 5
PROCNO 1
DU /h
USER Liang

F2 - Acquisition Parameters
Date_ 20080417
Time 21.15

INSORUM DPX400
PROBHD 5 mm BBO BB-1H
PULPROG zg30

TD 32768
SOLVENT CDCl3

NS 71
DS 2

SWH 6410.256 Hz
FIDRES 0.195625 Hz

AQ 2.5559540 sec
RG 1824.6

DW 78.000 usec
DE 6.00 usec

TE 298.2 K
D1 2.00000000 sec

TD0 1

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

NUC1 1H

P1 14.70 usec

PL1 0.00 dB

SFO1 399.9528000 MHz

F2 - Processing parameters

SI 32768

SF 399.9500000 MHz

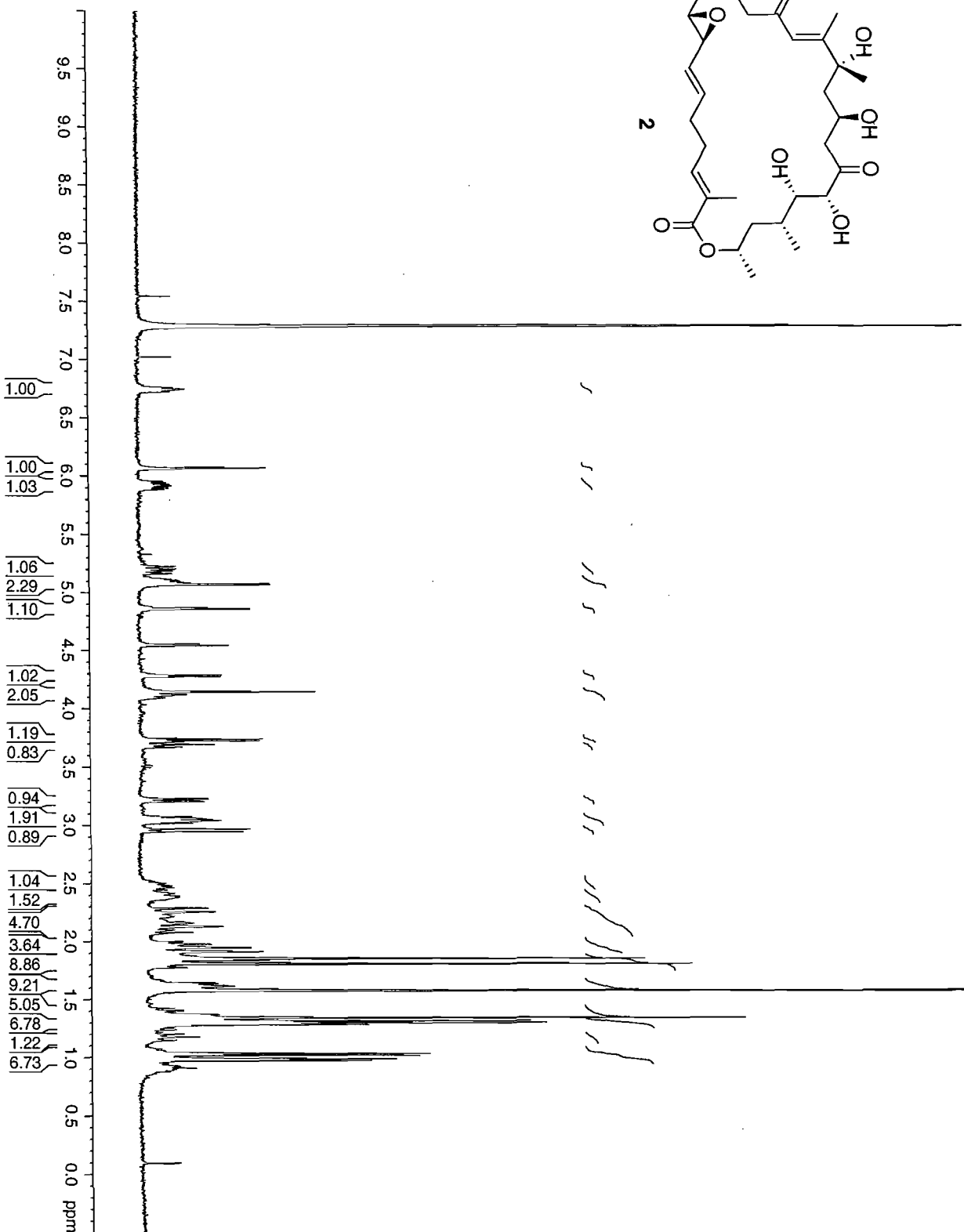
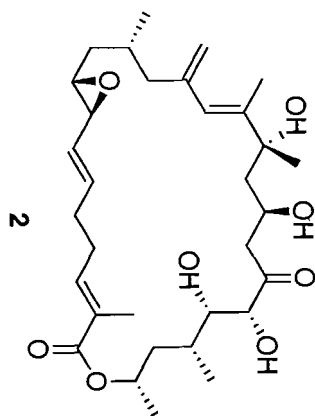
WDW EM

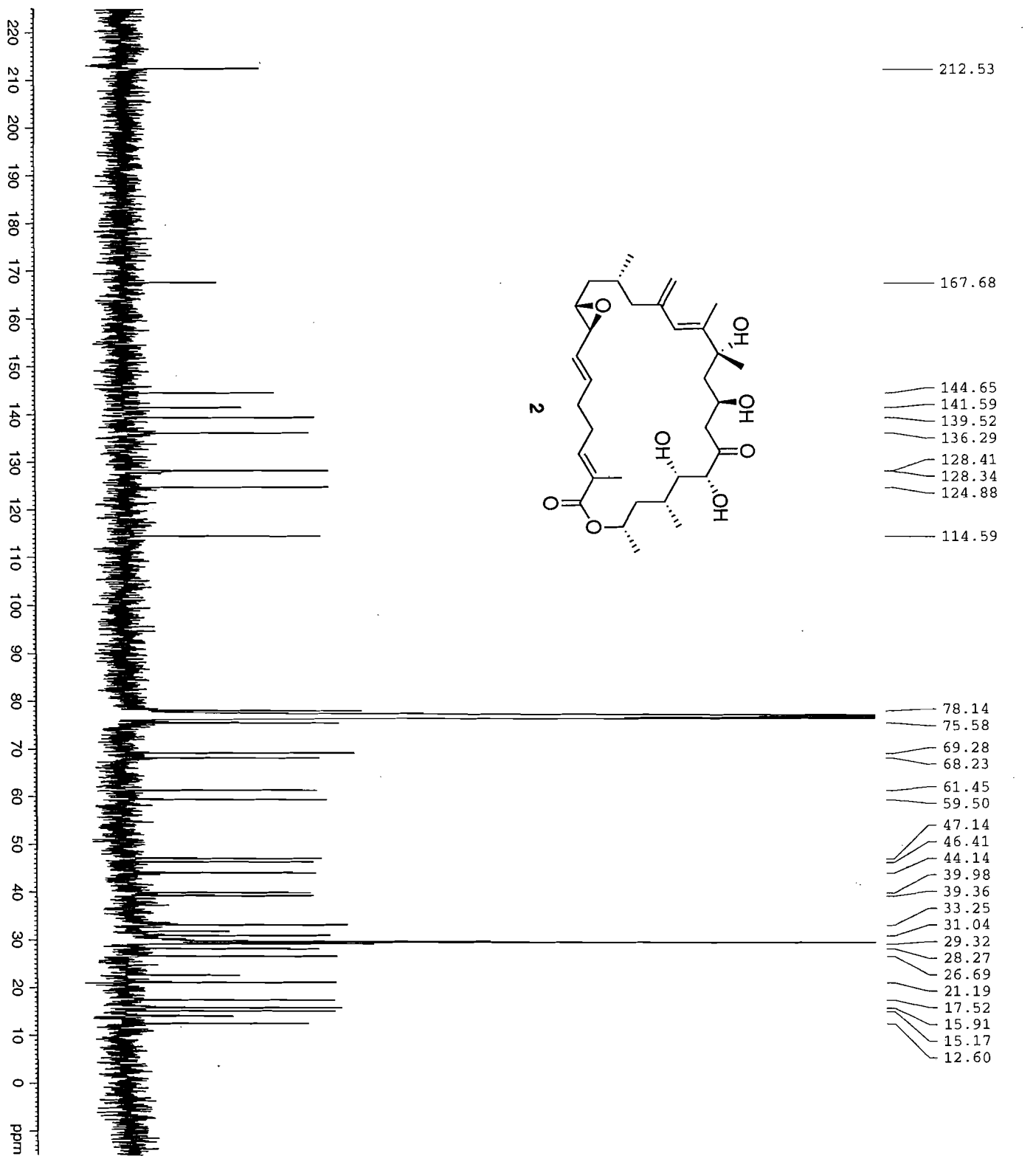
SSB 0

LB 0.70 Hz

GB 0

PC 1.00





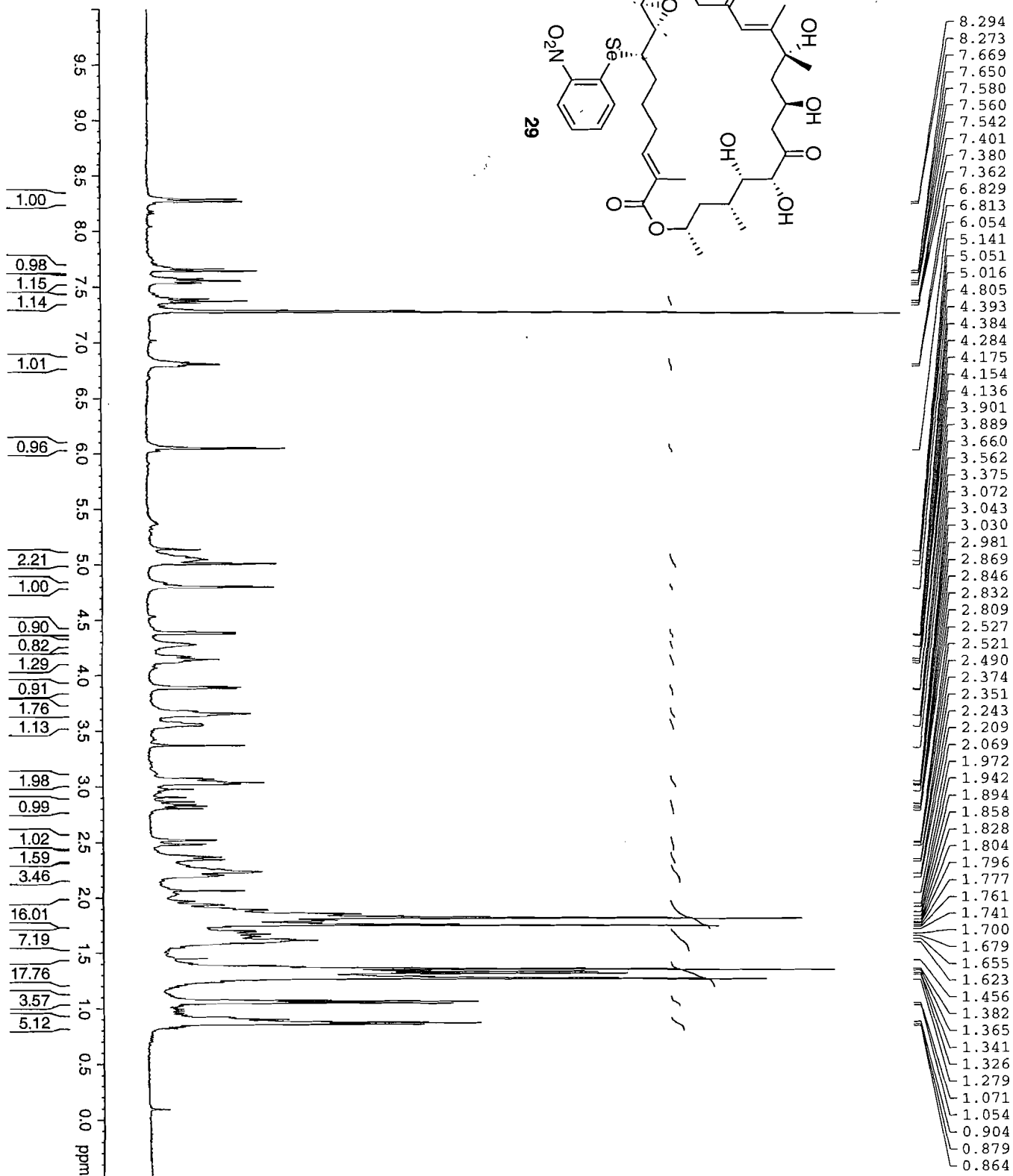
Current Data Parameters
NAME 7-95
EXPNO 7
PROCNO 1
DU /n
USER Liang

F2 - Acquisition Parameters
Date_ 20080313
Time 7.57
INSTRUM DPX400
PROBHD 5 mm BBO BB-1H
PULPROG zgpg30
TD 65536
SOLVENT
NS 22500
DS 4
SWH 25125.629 Hz
FIDRES 0.38387 Hz
AQ 1.3042164 sec
RG 5792.6
DW 19.900 usec
DE 6.00 usec
TE 298.2 K
D1 0.15000001 sec
d11 0.03000000 sec
DELTA 0.05000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 7.80 usec
PL1 -3.00 dB
SFO1 100.5785700 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 135.00 usec
PL2 17.40 dB
PL12 17.40 GB
PL13 17.40 GB
SFO2 399.9516000 MHz

F2 - Processing parameters
SI 32768
SF 100.5675080 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.40



Current Data Parameters

NAME	8-36
EXPNO	3
PROCNO	1
DU	/h
USER	liang

F2 - Acquisition Parameters

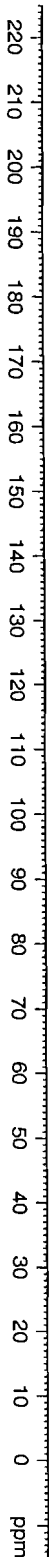
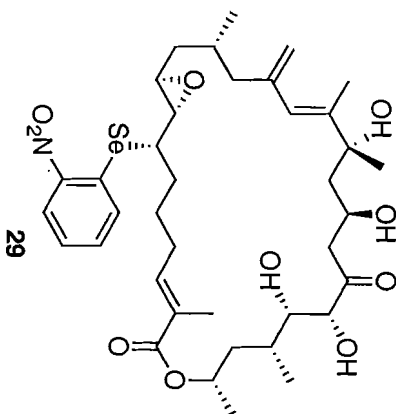
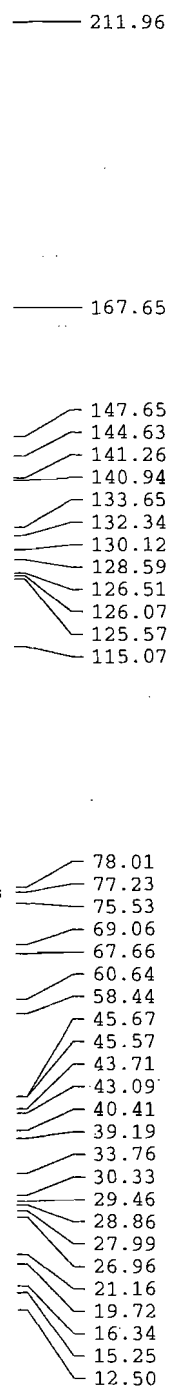
Date_	20080413
Time	23:34
INSTRUM	DPX400
PROBHD	5 mm BBO BB-1H
PULPROG	zg30
TD	32768
SOLVENT	CDCl3
NS	21
DS	2
SWH	6410.256 Hz
FIDRES	0.195625 Hz
AQ	2.5559540 sec
RG	724.1
DW	78.000 usec
DE	6.00 usec
TE	298.2 K
D1	2.00000000 sec
TD0	1

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

NUC1	1H
P1	14.70 usec
PL1	0.00 dB
SFO1	399.9528000 MHz

F2 - Processing Parameters

SI	32768
SF	399.9500000 MHz
WDW	EM
SSB	0
LB	0.70 Hz
GB	0
PC	1.00



Current Data Parameters
 NAME 8-36
 EXPNO 5
 PROCNO 1
 DU /n
 USER Liang

F2 - Acquisition Parameters
 Date_ 20080413
 Time 23.50
 INSTRUM DPX400
 PROBD 5 mm BBO BB-1H
 PULPROG zgpg30
 TD 65536
 SOLVENT
 NS 19205
 DS 4
 SWH 25125.629 Hz
 FIDRES 0.383387 Hz
 AQ 1.3042164 sec
 RG 16384
 DW 19.990 usec
 DE 6.00 usec
 TE 298.2 K
 D1 0.15000001 sec
 D11 0.02000000 sec
 DELTA 0.03000000 sec
 TDO 1

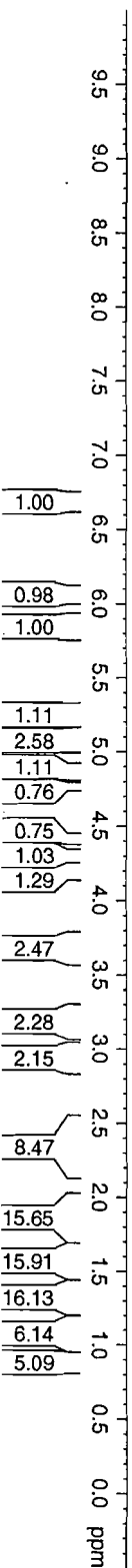
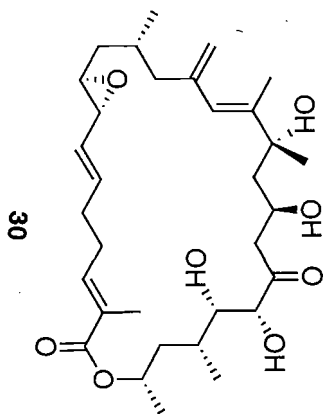
===== CHANNEL f1 =====
 NUC1 13C
 P1 7.80 usec
 PL1 -3.00 dB
 SFO1 100.5785700 MHz

===== CHANNEL f2 =====
 CDPORG2 waitz16
 NUC2 1H
 PCPD2 135.00 usec
 PL2 17.40 dB
 PL12 17.40 dB
 PL13 17.40 dB
 SFO2 399.9516000 MHz

F2 - Processing parameters
 SI 32768
 SF 100.5675080 MHz
 WDW EM
 SSB 0
 LB 3.00 Hz
 GB 0
 PC 1.40

B2-minor

6.686
6.080
5.267
5.112
5.089
5.051
4.841
4.768
4.405
4.297
4.283
4.199
4.131
3.739
3.713
3.675
3.656
3.206
3.174
3.144
3.136
3.115
3.108
3.015
2.984
2.946
2.913
2.899
2.866
2.472
2.465
2.417
2.359
2.313
2.289
2.259
2.231
2.215
2.202
2.066
2.003
1.964
1.918
1.866
1.833
1.774
1.742
1.701
1.691
1.411
1.350
1.310
1.290
1.277
1.229
1.206
1.163
1.143
1.131
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1.097
1.085
1.067
1.043
1.021
0.985
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0.895
0.874

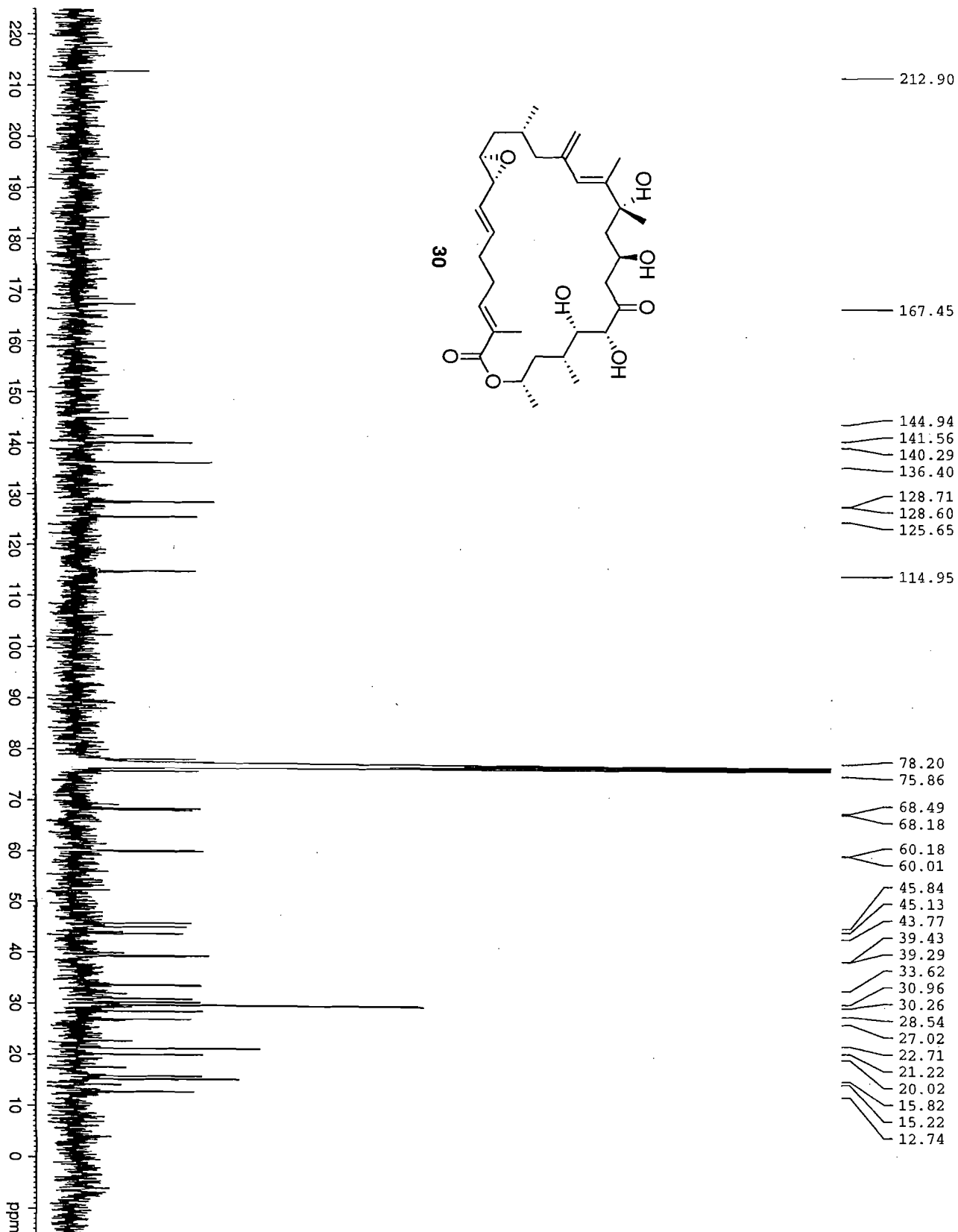


Current Data Parameters
NAME 8-36-2
EXPNO 2
PROCNO 1
DU /n
USER liang

F2 - Acquisition Parameters
Date_ 20080416
Time 22.09
INSTRUM DPX300
PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 391
DS 2
SWH 4789.272 Hz
FIDRES 0.146157 Hz
AQ 3.4210291 sec
RG 1149.4
DW 104.400 usec
DE 6.00 usec
TE 298.2 K
D1 2.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 9.00 usec
PL1 -3.00 dB
SFO1 300.1321009 MHz

F2 - Processing Parameters
SI 32768
SF 300.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



Current Data Parameters

NAME	7-97-2
EXPNO	3
PROCNO	1
F2	/n
USER	Liang

F2 - Acquisition Parameters

Date_	20080314
Time	7.52
INSTRUM	DPX400
PROBHD	5 mm BBO BB-1H
PULPROG	zgpg30
TD	65536
SOLVENT	
NS	19200
DS	4
SWH	25125.629 Hz
FIDRES	0.38387 Hz
AQ	1.3042164 s
RG	11585.2
DW	19.900 us
DE	6.00 us
TE	298.2 K
D1	0.15000001 s
D11	0.03000000 s
DELTA	0.05000000 s
TD0	1

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

NUC1	13C
P1	7.80 us
PL1	-3.00 dB
SFO1	100.5785780 MHz

===== CHANNEL f2 =====

CPDPRG2	waltz16
NUC2	1H
PCPD2	135.00 us
PL2	17.40 dB
PL12	17.40 dB
PL13	17.40 dB
SFO2	399.9516000 MHz

F2 - Processing parameters:

SI	32768
SF	100.5675080 MHz
WDW	EM
SSB	0
LB	3.00 Hz
GB	0
PC	1.40

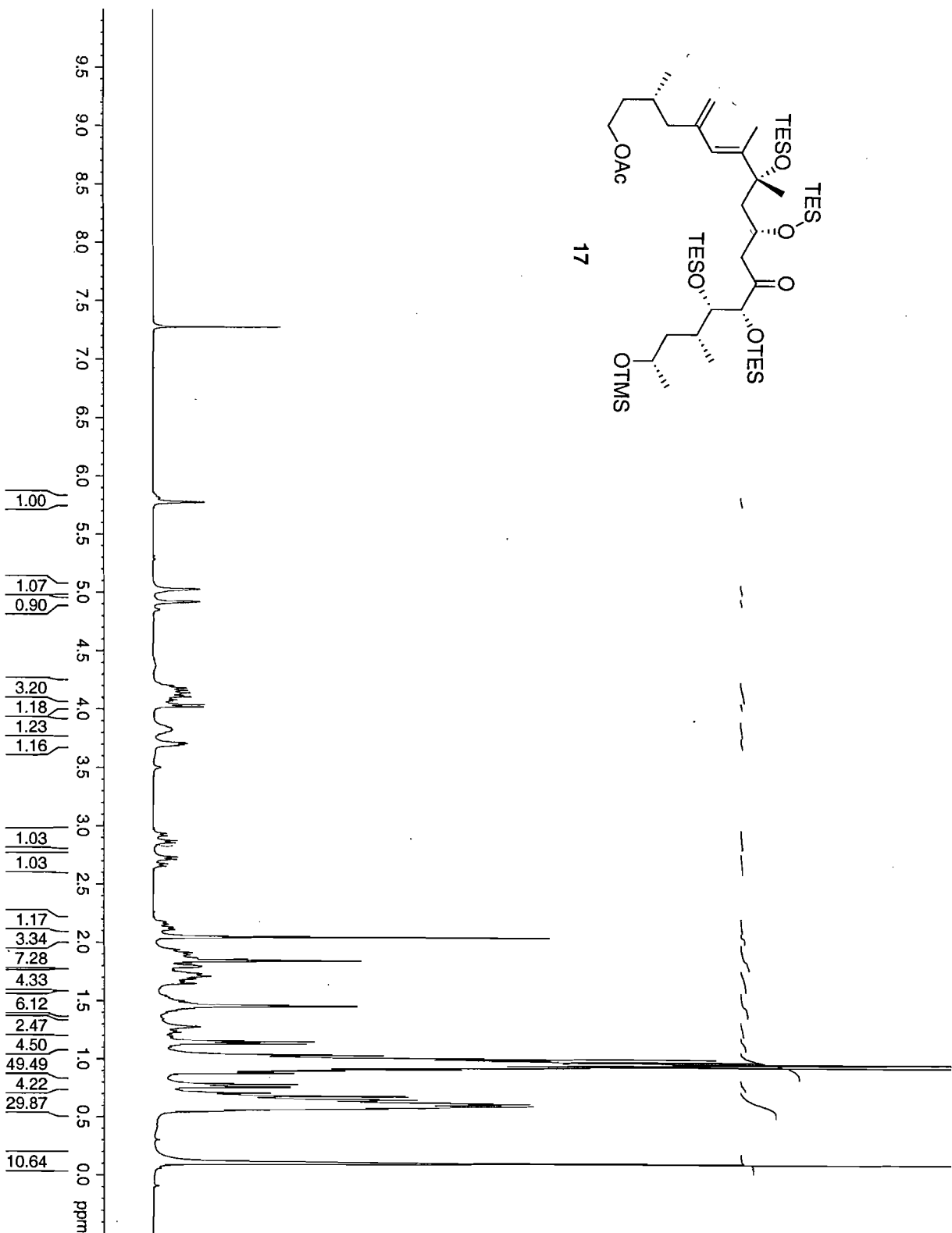
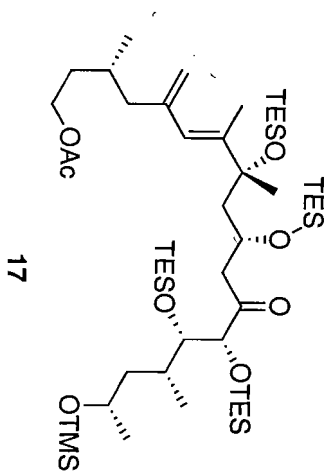
5.779
5.025
4.919
4.202
4.183
4.163
4.143
4.131
4.118
4.107
4.083
4.044
4.022
3.716
3.707
3.698
3.688
2.876
2.857
2.736
2.715
2.112
2.049
1.940
1.914
1.896
1.867
1.845
1.799
1.765
1.735
1.714
1.689
1.668
1.649
1.501
1.455
1.416
1.275
1.242
1.230
1.150
1.130
1.033
1.006
0.992
0.988
0.966
0.956
0.940
0.930
0.914
0.901
0.879
0.780
0.757
0.706
0.681
0.653
0.647
0.637
0.621
0.611
0.600
0.589
0.576
0.573
0.550
0.106

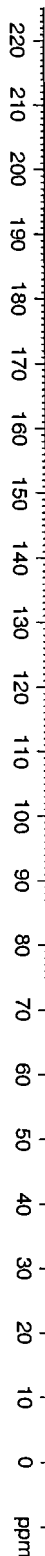
Current	Data	Parameters
NAME		7-100-1
EXPNO		1
PROCNO		1
DU		/n
USER		Liang

F2 - Acquisition Parameters	
Date_	20080315
Time	16.46
INSTRUM	DEPX300
PROBHD	5 mm QNP 1H/1
PULPROG	zg30
TD	32768
SOLVENT	CDCl3
DS	25
NS	2
SWH	4789.272 Hz
FIDRES	0.146157 Hz
RG	3.4210281 sec
AO	64
DW	104.400 usec
DE	6.00 usec
TE	298.2 K
DO	2.00000000 sec
TD0	1

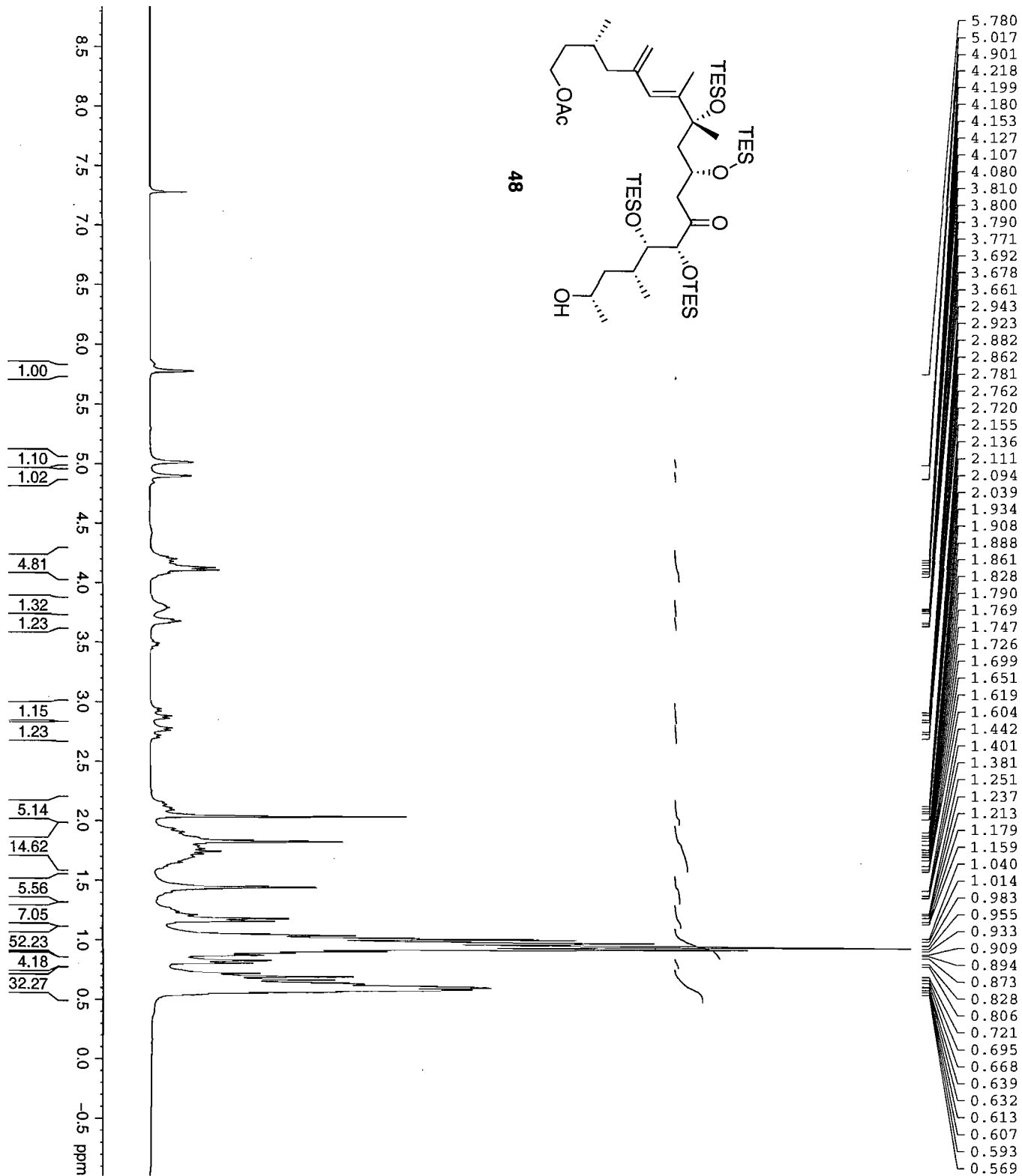
```
===== CHANNEL f1 =====
NUC1      1H
p1         9.00 use
p11        -3.00 dB
SF01       300.1321009 MHz

F2 - Processing parameters
SI         32768
SF         300.1300000 MHz
WDW        no
SSB        0
LB         0.00 Hz
GB         0
PC         1.00
```





Current Data Parameters		
NAME	7-100-1	
EXPMO	1	
PRCNO	3	
DJ	/n	
USER	Liáng	
F2 - Acquisition Parameters		
Date-	20080315	
Time-	17.04	
INSTRUM	DPX300	
FOLDRG	5 mm QNP 1H/1	
PROBHD	zgpg30	
TD	429630	
TD	65356	
SOLVENT	CDCl3	
NS	502	
DS	4	
SWH	18832.353 Hz	
FIDRES	0.287360 Hz	
AQ	1.7400368 sec	
RG	9195.2	
DM	26.550 usec	
DE	6.00 usec	
TE	298.2 K	
D1	0.15000001 sec	
DELTA	0.03000000 sec	
TD0	0.05000000 sec	
	1	
===== CHANNEL f1 =====		
NUC1	13C	
P1	8.80 usec	
PL1	-3.00 dB	
SFO1	75.4760505 MHz	
===== CHANNEL f2 =====		
CPDPRG2	waltz16	
NUC2	1H	
PCPD2	80.00 usec	
PL2	-3.00 dB	
PL12	17.55 dB	
PL13	17.55 dB	
SFO2	300.1312005 MHz	
F2 - Processing Parameters		
SI	32768	
WDW	75.4677450 MHz	
SSB	EN	
GB	0	
PC	3.00 Hz	
	0	
	1.40	



Current Data Parameters

NAME	EXPNO	PROCNO	USER	Liang
NAME	8-09	1		
EXPNO	1			
PROCNO	1			
USER				

F2 - Acquisition Parameters

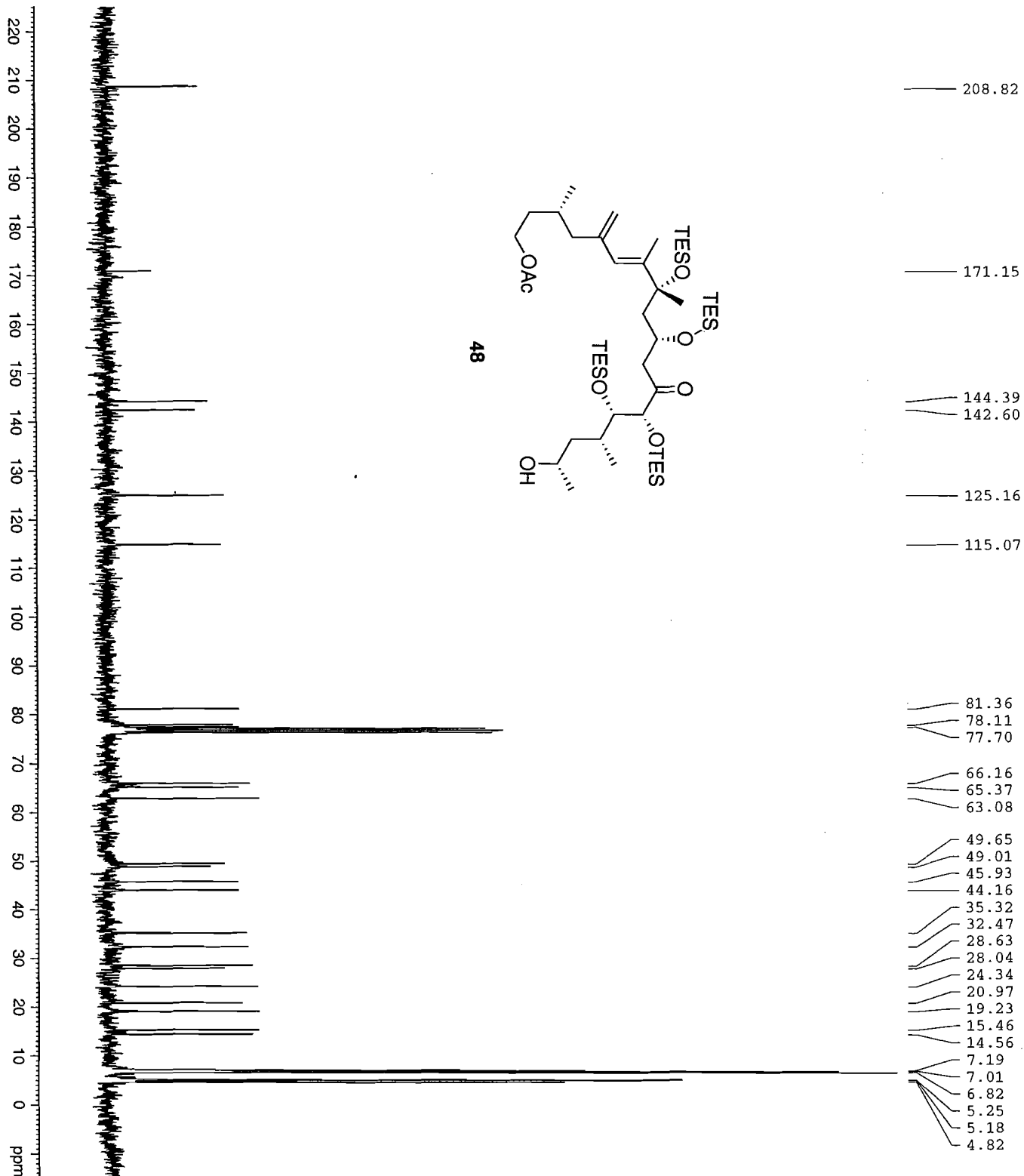
Date_	Time	INSTRUM	PROBHD	PULPROG	TD	SOLVENT	NS	DS	SWH	FIDRES	AQ	RG	DW	DE	TE	D1	TD0
20080317	10.15	DPX300	5 mm QNP 1H/1	zg30	32768	CDCl3	11	2	4789.272 Hz	0.146157 Hz	3.4210291 sec	45.3	104.400 usec	6.00 usec	298.2 K		1

F2 - Processing parameters

SI	SF	WDW	SSB	LB	GB	PC
32768	300.1300000 MHz	no	0	0.00 Hz	0	1.00

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

NUC1	P1	PL1	SFO1
1H	9.00 usec	-3.00 dB	300.1321009 MHz



```

Current Data Parameters
NAME      8-09
EXPNO     1
PROCNO    3
DU         1
USER      Liang

F2 - Acquisition Parameters
Date_     20080317
Time      10:58
INSTRUM   DPX300
PROBHD    5 mm QNP 1H/1
PULPROG   zgpg30
TD         65536
SOLVENT   CDCl3
NS         301
DS         4
SMH        18832.393 Hz
FIDRES     0.287360 Hz
AQ         1.7400308 sec
RG          9195.2
DM          26.550 usec
DE          6.00 usec
TE         298.2 K
D1          0.15000001 sec
d11         0.03000000 sec
DELTA      0.05000000 sec
TD0         1

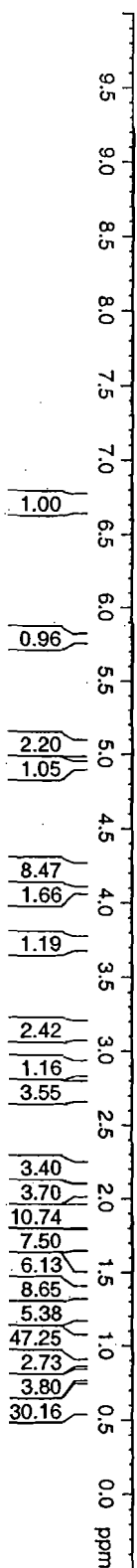
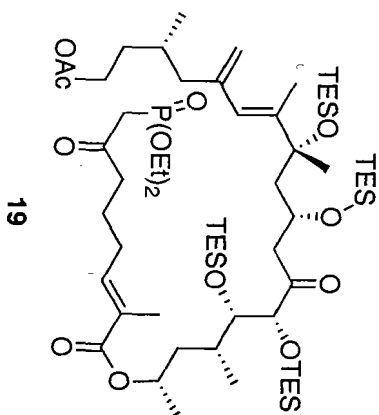
===== CHANNEL f1 =====
NUC1        13C
P1          8.80 usec
PL1         -3.00 dB
SFO1        75.476505 MHz

===== CHANNEL f2 =====
CPRGRG2    waltz16
NUC2        1H
CPCPD2     80.00 usec
PL2         -3.00 dB
PL12        17.55 dB
PL13        17.55 dB
SFO2        300.131005 MHz

F2 - Processing Parameters
SI          32768
WDW          EM
SSB          0
GB           3.00 Hz
PC           1.40

```

5.787	
5.034	
4.916	
4.225	
4.218	
4.207	
4.201	
4.186	
4.184	
4.168	
4.164	
4.151	
4.137	
4.132	
4.109	
4.092	
4.080	
3.721	
3.152	
3.095	
2.700	
2.682	
2.664	
2.201	
2.182	
2.163	
2.058	
1.916	
1.903	
1.883	
1.840	
1.824	
1.792	
1.772	
1.756	
1.736	
1.723	
1.703	
1.688	
1.455	
1.432	
1.421	
1.407	
1.382	
1.364	
1.347	
1.247	
1.232	
1.029	
1.009	
0.989	
0.979	
0.967	
0.959	
0.948	
0.938	
0.918	
0.902	
0.886	
0.803	
0.786	
0.702	
0.683	
0.664	
0.634	
0.614	
0.594	
0.574	
0.554	

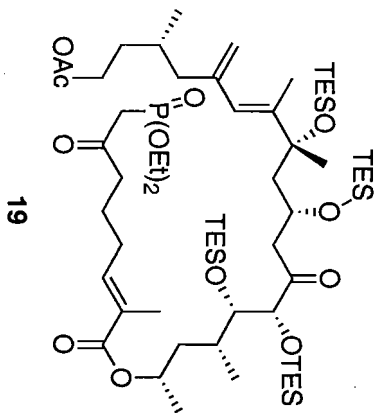
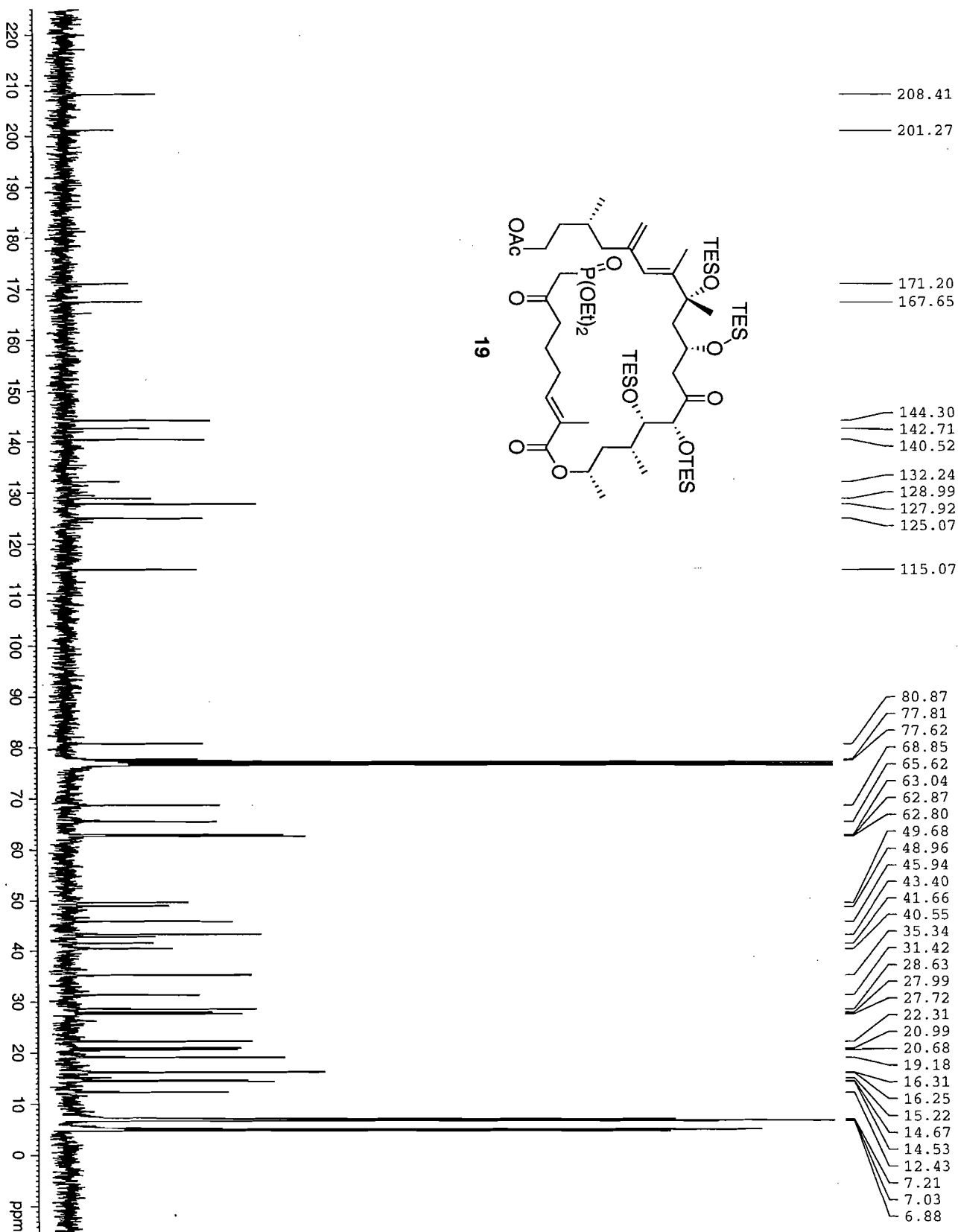


Current Data Parameters
 NAME 8-10-2
 EXPO 1
 PROCNO 1
 DU /n
 USER Liang

F2 - Acquisition Parameters
 Date_ 20080319
 Time 15.48
 INSTRUM DPX400
 PROBD 5 mm BBO Br-1H
 PULPROG zg30
 TD 32768
 SOLVENT CDCl₃
 NS 2
 DS 2
 SM 6410.256 Hz
 FIDRES 0.195625 Hz
 AQ 2.5539840 sec
 RG 256
 DW 78.000 usec
 DE 6.00 usec
 TE 298.2 K
 D1 2.00000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 ¹H
 P1 14.70 usec
 PL 0.00 dB
 SFO1 399.9526000 MHz

F2 - Processing Parameters
 SI 32768
 SF 399.9500000 MHz
 WDM EX
 SSB 0
 LB 0.70 Hz
 GB 0
 PC 1.00



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Current Data Parameters 8-10-2

NAME	EXPNO	PROCNO	DU	USER	Li	ang
NAME	4	1	/n			

F2 - Acquisition Parameters

Date_	Time	INSTRUM	PROBHD	PULPROG	TD	SOLVENT	NS	DS	SWH	FIDRES	AO	RG	DW	DE	TE	D1	D11	DELTA	TD0
20080319	18.56	DPX400	5 mm BBO BB-1H	zgpg30	65536		710	4	25125.629 Hz	0.383387 Hz	1.3042164 s	16384	19.900 us	6.00 us	298.2 K	0.15000001 s	0.03000000 s	0.05000000 s	1

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

NUC1	P1	SFO1
¹³ C	7.80 us	100.578580 MHz

===== CHANNEL f2 =====

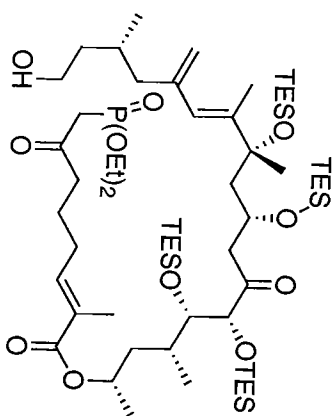
CPDPRG2	waitz16	waitz16
NUC2	1H	1H
PCPD2	135.00 us	1H
PL2	17.40 dB	1H
PL12	17.40 dB	1H
PL13	17.40 dB	1H
SFO2	399.9516000 MHz	1H

F2 - Processing parameters

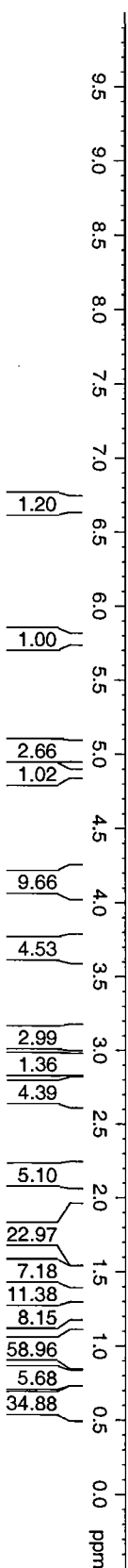
SI	SF	WDW	SSB	LB	GB	PC
32768	100.5675080 MHz	EM	0	3.00 Hz	0	1.40

H1

6.677
5.781
5.003
4.860
4.190
4.168
4.142
4.118
4.094
4.066
4.048
3.730
3.704
3.687
3.665
3.110
3.034
2.875
2.855
2.788
2.769
2.727
2.712
2.679
2.655
2.632
2.183
2.158
2.134
2.092
2.074
2.042
1.919
1.892
1.874
1.846
1.807
1.754
1.730
1.710
1.633
1.617
1.506
1.429
1.357
1.334
1.310
1.282
1.258
1.233
1.212
1.019
0.992
0.979
0.966
0.953
0.942
0.926
0.916
0.890
0.880
0.858
0.784
0.762
0.695
0.669
0.642
0.631
0.623
0.599
0.573
0.547
0.521



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Current Data Parameters
NAME 8-18
EXNO 1
PROCNO 2
DU /n
USER Liang

F2 - Acquisition Parameters
Date_ 20080326
Time 12.07
INSTRUM DFX300
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 32768
SOLVENT CDCl₃
NS 10
DS 2
SWH 4789.272
FIDRES 0.146157
AQ 3.4210291
RG 57
DW 104.400
DE 6.00
TE 298.2
D1 2.00000000
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 9.00
PL1 -3.00
SFO1 300.1321009

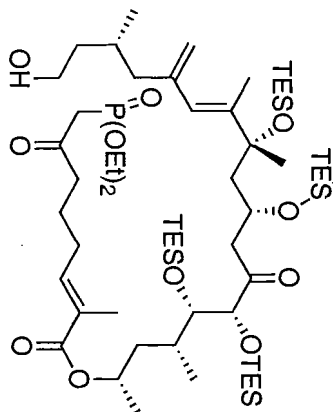
F2 - Processing parameters
SI 32768
SF 300.1300000
WDW EM
SSB 0
LB 0.30
GB 0
PC 99.00

208.98
201.43

167.63

144.79
142.30
140.50128.98
125.46

114.86

80.82
77.85
77.70
68.84
65.63
62.61
62.53
61.03
49.52
48.89
46.18
43.35
41.58
40.62
40.03
31.38
28.35
28.12
27.72
22.31
20.68
19.33
16.33
16.25
14.71
12.42
7.19
7.01
6.87
6.81

49

230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
ppm

Current Data Parameters
NAME 8-18
EXPNO 4
PROCNO 1
DU /n
USER Liang

F2 - Acquisition Parameters
Date_ 20080326
Time 14.25

INSTRUM DPX300
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 529
DS 4

SWH 18832.393 Hz
FIDRES 0.287360 Hz
AQ 1.7400308 s

RG 9195.2
DW 26.550 us
DE 6.00 us

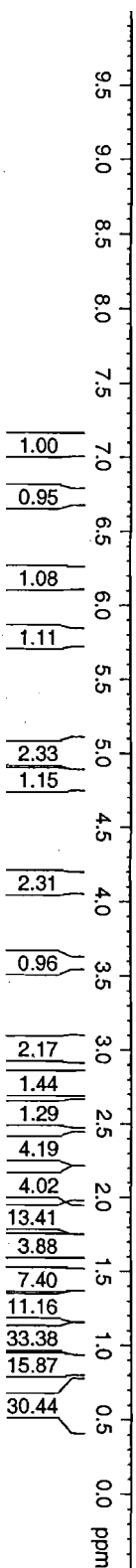
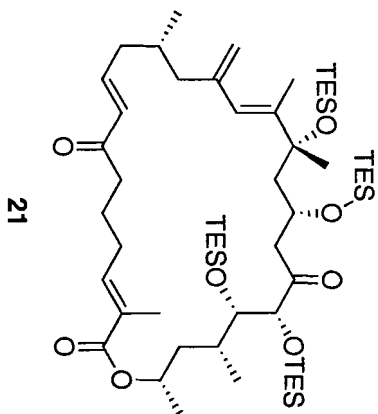
TE 298.2 K
D1 0.15000001 s
d11 0.03000000 s
DELTA 0.05000000 s
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 8.80 us
PL1 -3.00 dB
SFO1 75.476055 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 us
PL2 -3.00 dB
PL12 17.55 dB
PL13 17.55 dB
SFO2 300.1312005 MHz

F2 - Processing parameters:
SI 32768
SF 75.4677490 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.40

7.108
7.053
6.726
6.191
6.137
5.779
5.006
4.823
4.116
4.099
3.682
3.602
3.065
3.002
2.975
2.947
2.885
2.805
2.775
2.751
2.598
2.572
2.269
2.113
2.073
1.909
1.866
1.804
1.766
1.712
1.683
1.636
1.450
1.410
1.397
1.273
1.255
1.235
1.126
1.076
1.050
1.024
1.001
0.991
0.974
0.964
0.949
0.939



Current Data Parameters
NAME 8-18-2
EXPNO 2
PROCNO 1
DU /n
USER Liang

F2 - Acquisition Parameters
Date_ 20080402
Time 14.11
INSTRUM DPX300
PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 32768
SOLVENT CDCl₃
NS 1
DS 2
SWH 4789.272 Hz
FIDRES 0.146157 Hz
AQ 3.4210291 sec
RG 143.7
DE 104.400 usec
TE 298.2 K
D1 2.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 9.00 usec
PL1 -3.00 dB
SFO1 300.132109 MHz

F2 - Processing Parameters
SI 32768
WDW NO
SSB 0
LB 0.00 Hz
GB 0
PC 1.00

206.24
201.01

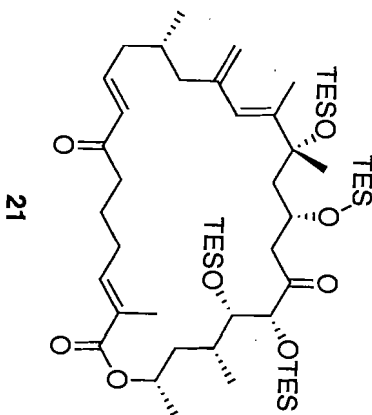
167.62

147.17
144.74
141.81
140.58
132.36
129.18
125.83

115.35

80.51
79.56
77.92

68.34
64.90
49.70
48.60
46.68
43.20
41.08
37.48
30.98
29.71
29.16
28.90
27.76
22.58
21.00
18.81
15.58
13.34
12.46
7.30
7.06
6.99
5.17



21

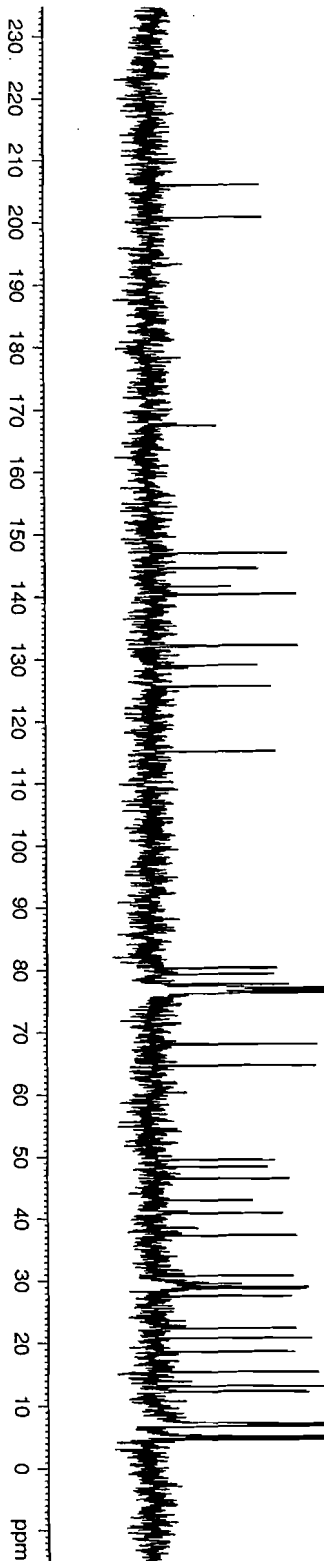
Current Data Parameters
NAME 8-18-2
EXPNO 5
PROCNO 1
ID 1
USER llang

F2 - Acquisition Parameters
Date_ 20080402
Time 14:59
INSTRUM DFX300
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 541
DS 4
SWH 18832.393 Hz
FIDRES 0.287360 Hz
AQ 1.7400308 sec
RG 1024
DW 26.550 usec
DE 6.00 usec
TE 298.2 K
D1 0.15000001 sec
d11 0.03000000 sec
DELTA 0.05000000 sec
TD0 1

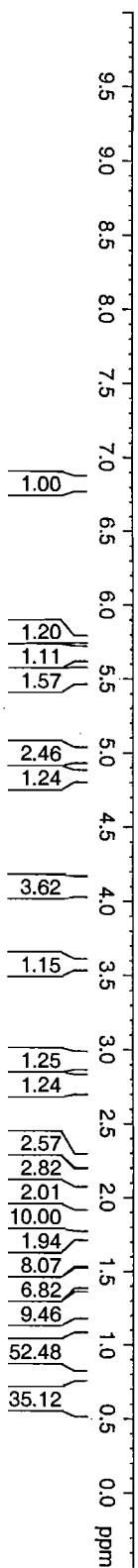
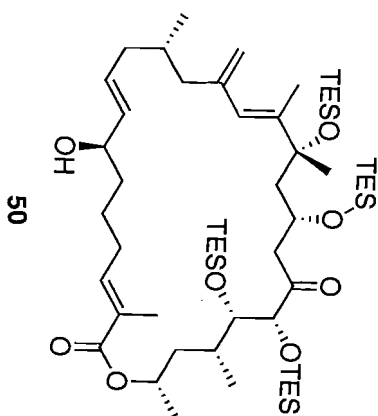
===== CHANNEL f1 =====
NUC1 13C
P1 8.80 usec
PL1 -3.00 dB
SFO1 75.4760505 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -3.00 dB
PL12 17.55 dB
PL13 17.55 dB
SFO2 300.1312005 MHz

F2 - Processing parameters
SI 32768
SF 75.467490 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.40



5.763
4.985
4.979
4.838
4.080
4.066
3.582
3.576
2.250
2.233
1.836
1.823
1.807
1.746
1.731
1.700
1.692
1.678
1.657
1.643
1.625
1.619
1.613
1.600
1.454
1.446
1.277
1.257
1.242
1.230
1.222
1.213
1.061
1.041
1.032
1.021
1.012
0.999
0.991
0.979
0.971
0.959
0.951
0.946
0.940
0.926
0.906
0.882
0.865
0.738
0.734
0.720
0.714
0.700
0.693
0.689
0.681
0.672
0.665
0.647
0.629
0.609
0.596
0.590
0.576
0.558
0.555
0.538
0.534

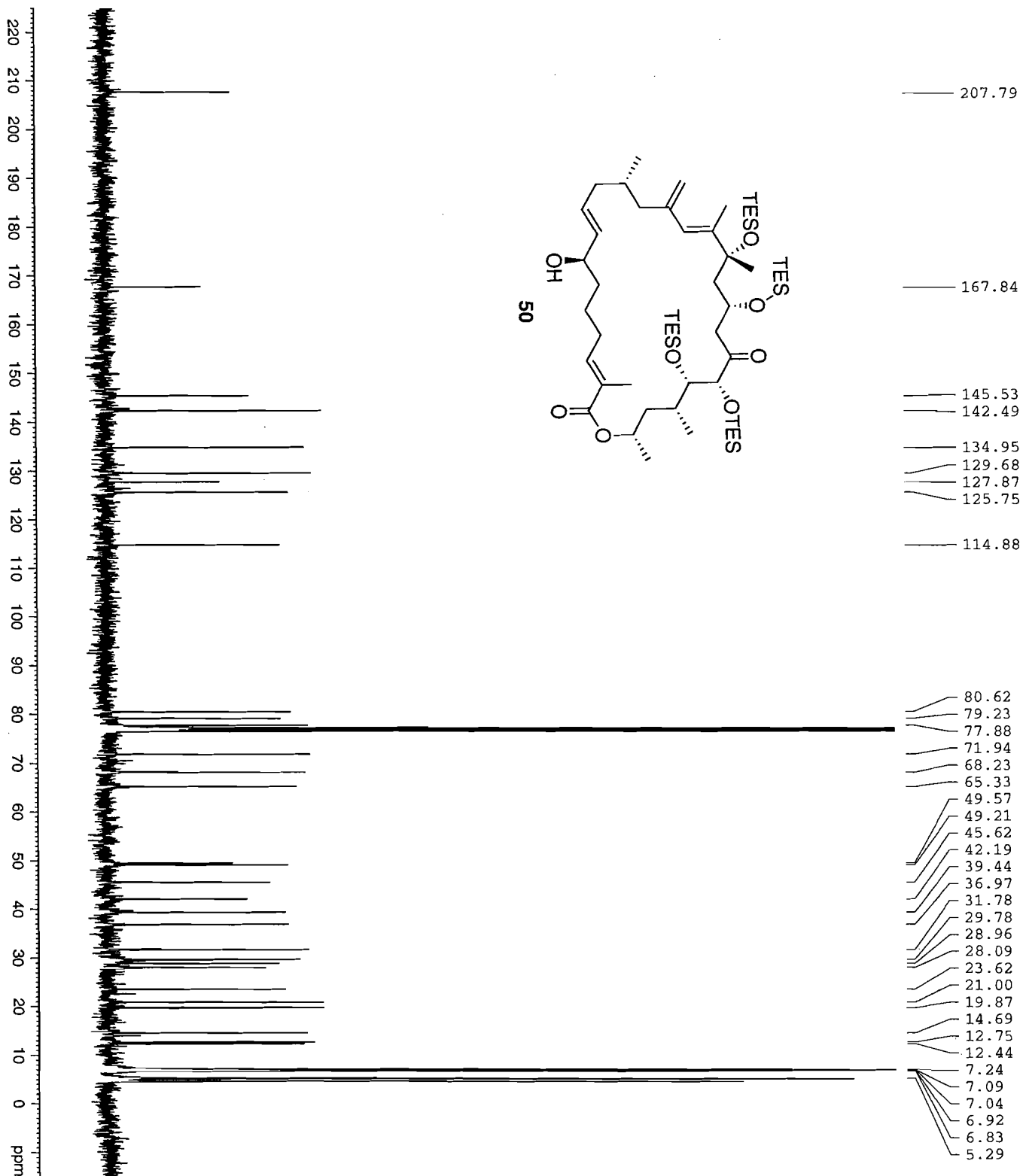


Current Data Parameters
NAME 8-20
EXNO 1
PROCNO 1
DU /n
USER Liang

F2 - Acquisition Parameters
Date_ 20080402
Time_ 19.48
INSTRUM DEX400
PROBHD 5 mm BBO BB-1H
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 26
DS 2
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 80.6
DM 78.000 usec
DE 6.00 usec
TE 298.2 K
D1 2.0000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 14.70 usec
PL1 0.00 dB
SFO1 399.9528000 MHz

F2 - Processing parameters
SI 32768
SF 399.9500000 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00



Current Data Parameters

NAME	8-20
EXPNO	3
PROCNO	1
DV	/n
USER	Liang

F2 - Acquisition Parameters

Date_	20080402
Time	20.03
INSTRUM	DPX400
PROBHD	5 mm BBO BB-1H
PULPROG	zgpg30
TD	65536
SOLVENT	NS
DS	1646
SWH	25125.629 Hz
FIDRES	0.38387 Hz
AQ	1.3042164 sec
RG	45976
DW	19.900 usec
DE	298.2 K
TE	0.1500001 sec
D11	0.0300000 sec
DELTA	0.0500000 sec
TD0	1

==== CHANNEL f1 =====

NUC1	13C
P1	7.80 usec
PL1	-3.00 dB
SFO1	100.5785700 MHz

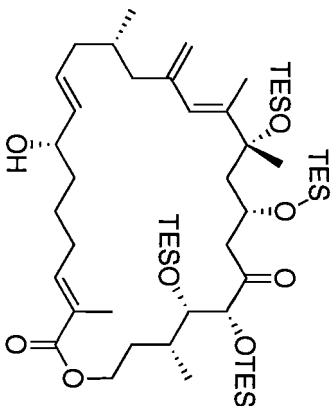
==== CHANNEL f2 =====

CPDPRG2	waltz16
NUC2	1H
PCPD2	135.00 usec
PL2	17.40 dB
PL12	17.40 dB
PL13	17.40 dB
SFO2	399.9516000 MHz

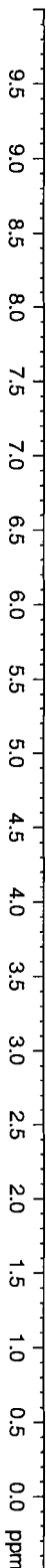
F2 - Processing parameters

SI	32768
SF	100.5675080 MHz
WDW	EM
SSB	0
LB	3.00 Hz
GB	0
PC	1.40

6.736
5.772
5.749
5.710
5.569
5.552
5.530
5.513
4.993
4.832
4.176
4.075
4.060
3.577
3.569
2.934
2.916
2.847
2.837
2.235
2.193
2.160
2.119
2.100
2.083
1.872
1.827
1.798
1.745
1.732
1.707
1.625
1.567
1.550
1.427
1.279
1.256
1.240
1.132
1.061
1.041
1.021
1.002
0.982
0.966
0.947
0.931
0.911
0.891
0.869
0.730
0.717
0.710
0.701
0.690
0.673
0.647
0.636
0.628
0.619
0.608
0.599
0.587
0.581
0.567
0.562
0.548
0.541
0.528



51



1.00

1.18

0.90

1.22

2.35

1.11

1.22

2.38

1.09

1.01

1.23

6.14

12.19

12.47

5.93

5.88

51.72

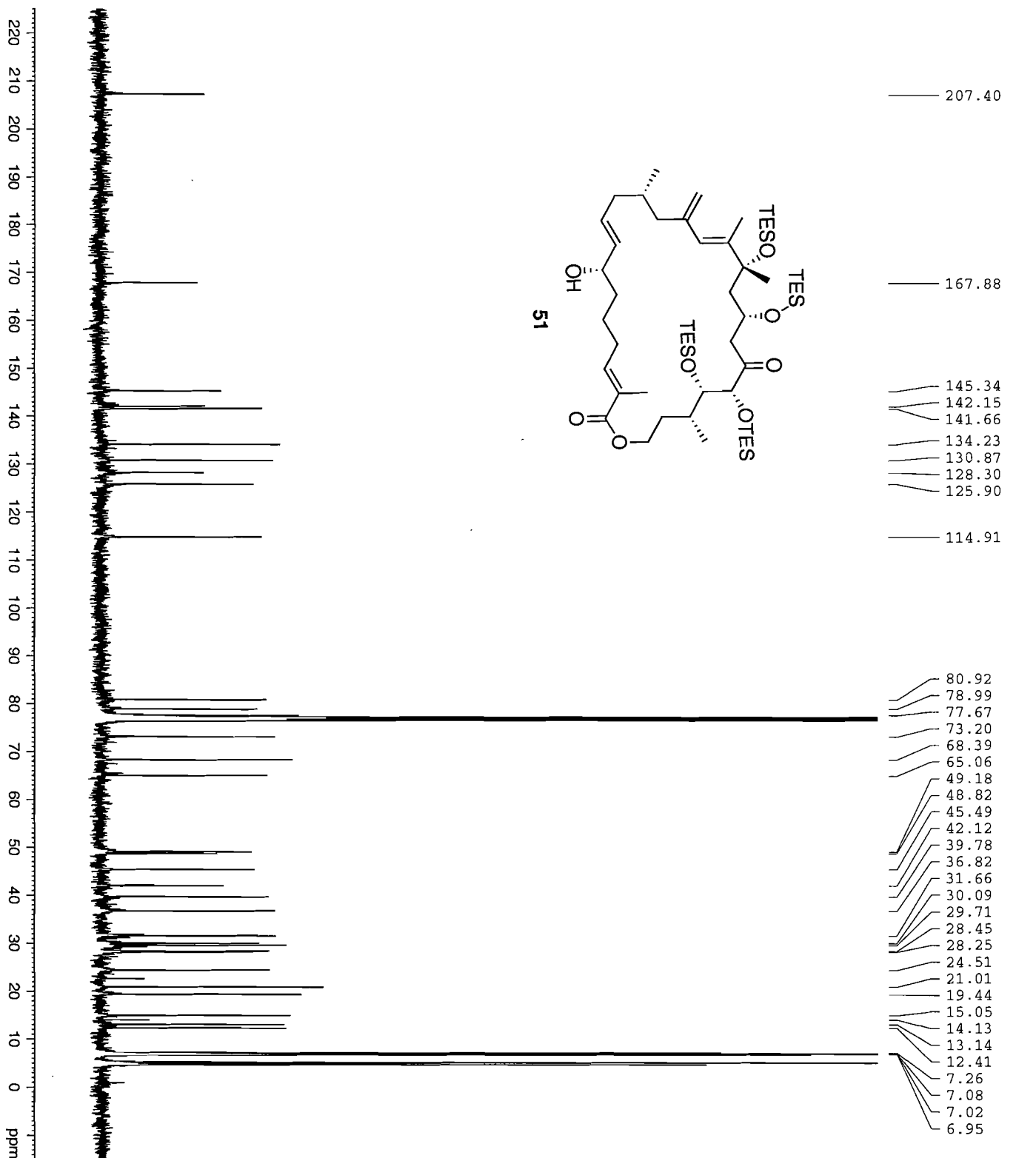
10.57

23.29

Current Data Parameters
NAME 8-20
EXPNO 6
PROCNO 1
DU /h
USER Liang

F2 - Acquisition Parameters
Date_ 20080421
Time 17:57
INSTRUM DPX400
PROBHD 5 mm BBO BB-1H
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 13
DS 2
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 181
RW 78.000 usec
DE 6.00 usec
TE 298.2 K
D1 2.00000000 sec
TD0 1

==== CHANNEL f1 =====
NUC1 1H
P1 14.70 usec
PL1 0.00 dB
SFO1 399.9528000 MHz
F2 - Processing parameters
SI 32768
SF 399.9500000 MHz
WDW EM
SSB 0
LB 0.70 Hz
GB 0
PC 1.00



Current Data Parameters

NAME	VALUE
EXPNO	8-20
PROCN	1
DU	/n
USER	Liang

F2 - Acquisition Parameters

Date_	Time
20080421	21.52
INSTRUM	DPX400
PROBHD	5 mm BBO BB-1H
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	24500
DS	4
SWH	25125.629 Hz
FIDRES	0.38387 Hz
AQ	1.3042164 sec
RG	3649.1
DW	19.900 usec
DE	6.00 usec
TE	298.2 K
DL1	0.1500001 sec
DELTA	0.0300000 sec
TD0	0.0500000 sec

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

NUC1	P1	SFO1
13C	7.80 usec	100.5783700 MHz

===== CHANNEL f2 =====

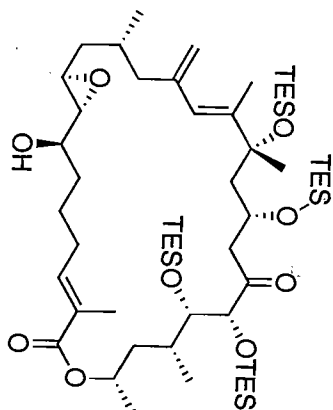
CPDPRG2	waitz16	NUC2	P2	SFO2
waitz16	1H	1H	135.00 usec	17.40 dB
PCPD2	1H	1H	17.40 dB	17.40 dB
PL12	1H	1H	17.40 dB	17.40 dB
PL13	1H	1H	17.40 dB	17.40 dB
SFO2	1H	1H	399.9516000 MHz	

F2 - Processing parameters

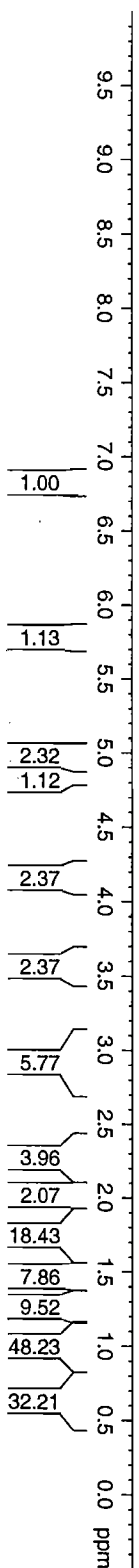
SI	SF	WDW	SSB	LB	GB	PC
32768	100.5675080 MHz	EM	0	3.00 Hz	0	1.40

less polar

6.826
5.759
4.981
4.833
4.139
4.120
4.102
3.594
3.588
3.576
3.570
3.509
3.486
3.054
3.047
2.977
2.953
2.933
2.919
2.864
2.771
2.764
2.754
2.747
2.019
1.877
1.825
1.793
1.764
1.749
1.701
1.633
1.619
1.484
1.465
1.451
1.429
1.372
1.274
1.261
1.241
1.218
1.204
1.195
1.077
1.050
1.024
1.003
0.998
0.978
0.970
0.952
0.944
0.927
0.900
0.875
0.754
0.728
0.700
0.685
0.661
0.632
0.605
0.581
0.554
0.532
0.526
0.506
0.498



31



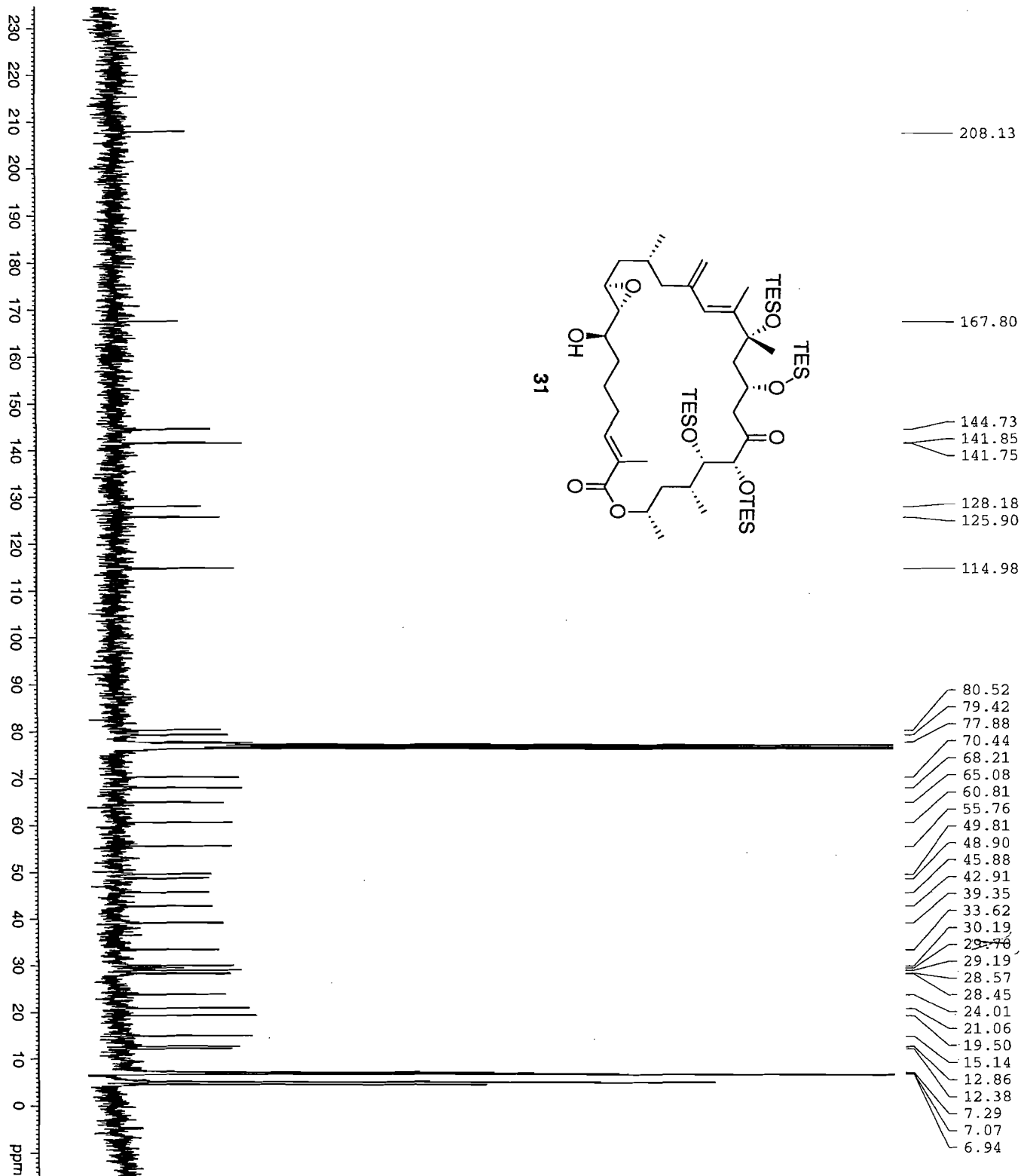
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Current Data Parameters
NAME      8-22
EXPNO     2
PROCNO    1
DU        /n
USER      Liang

F2 - Acquisition Parameters
Date_     20080403
Time      22.50
INSTRUM   DEX300
PROBHD    5 mm QNP 1H/1
PULPROG   zgpg30
TD         32768
SOLVENT    CDCl3
NS         32
DS         2
SWH        4789.272 Hz
FIDRES     0.146157 Hz
AQ         3.4210291 sec
RG         203.2
DW         104.400 usec
DE         298.2 K
TE         2.00000000 sec
D1         1
TD0

===== CHANNEL f1 =====
NUC1       1H
P1         9.00 usec
PL1        -3.00 dB
SFO1       300.1321009 MHz

F2 - Processing parameters
SI         32768
SF         300.1300000 MHz
WDW        EM
SSB        0
LB         0.30 Hz
GB         0
PC         1.00
  
```



Current Data Parameters

NAME	EXPNO	PROCNO	DU	USER	LANG
NAME	8-22	1	1		
EXPNO	4				
PROCNO	1				
DU	/n				
USER					
LANG					

F2 - Acquisition Parameters

Date_	Time	INSTRUM	PROBHD	PULPROG	TD	SOLVENT	NS	DS	SWH	FIDRES	AQ	RG	DW	DE	TE	D1	d11	DELTA	TD0
20080603	23.05	DPX300	5 mm QNP 1H/1	zgpg30	65536	CDCl3	1180	4	18832.393 Hz	0.287360 Hz	1.7400208 sec	812.7	26.550 usec	296.2 K	0.15000001 sec	0.03000000 sec	0.05000000 sec	1	

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

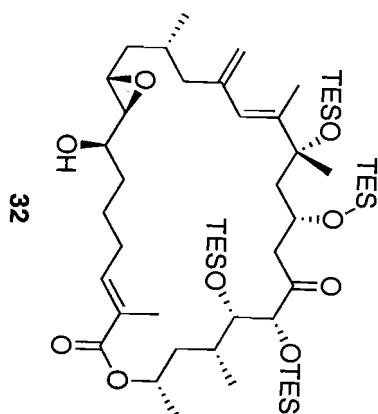
NUC1	P1	PL1	SFO1
13C	8.80 usec	-3.00 dB	75.4760505 MHz

===== CHANNEL f2 =====

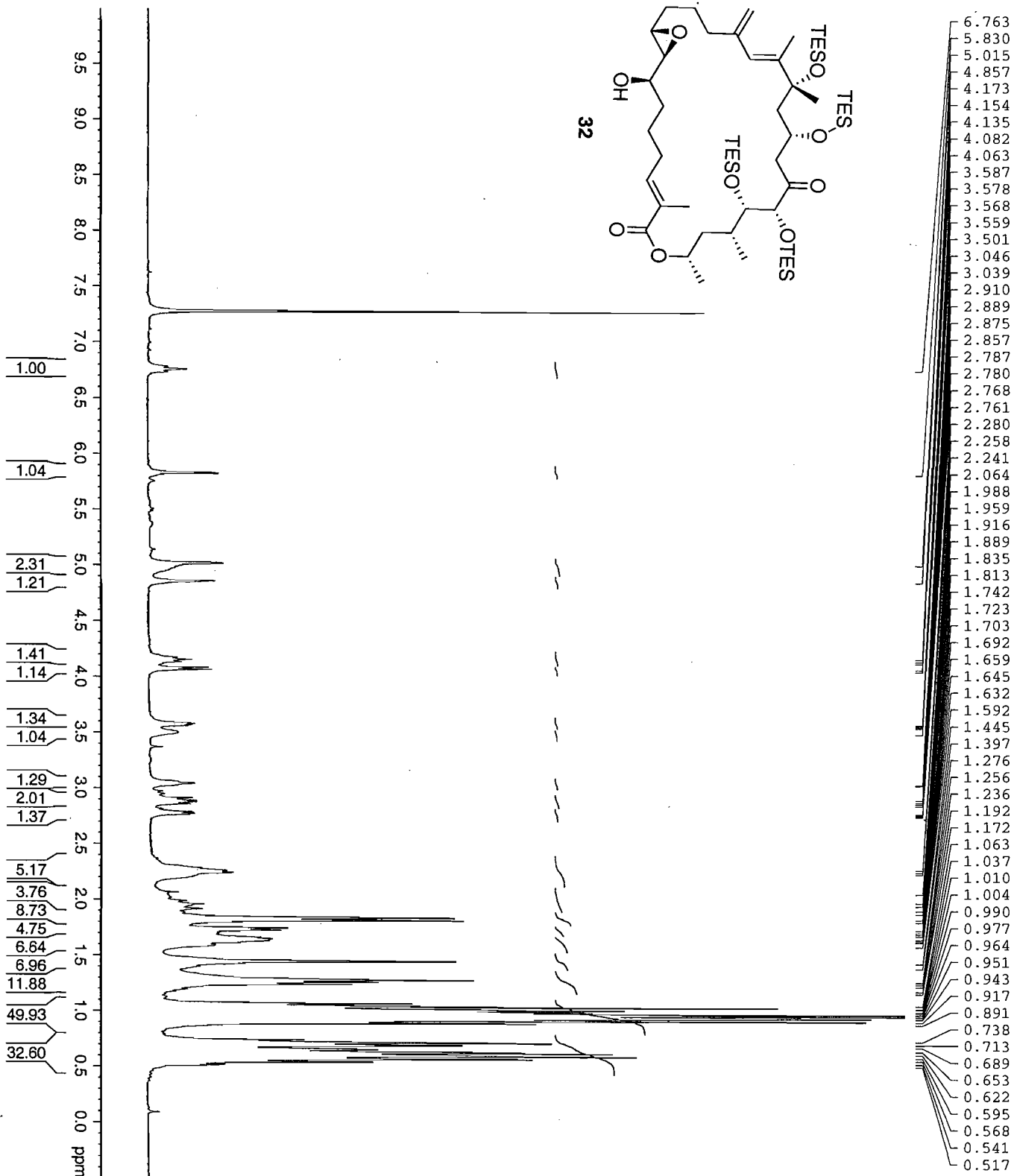
CPDPRG2	NUC2	PCPD2	PL2	PL12	PL13	SFO2
waltz16	1H	80.00 usec	-3.00 dB	17.55 dB	17.55 dB	300.1312005 MHz

F2 - Processing parameters

SI	SF	WDW	SSB	LB	GB	PC
32768	75.467490 MHz	EM	0	3.00 Hz	0	1.40



32



Current Data Parameters
 NAME 8-22-2
 EXPNO 1
 PROCNO 1
 DU 1
 USER llang

F2 - Acquisition Parameters
 Date_ 20080406
 Time 12:03
 INSTRUM DPX300
 PROBHD 5 mm QNP 1H/1
 PULPROG zgpg30
 TD 32768
 SOLVENT CDCl₃
 NS 17
 DS 2
 SWH 4789.272 Hz
 FIDRES 0.146157 Hz
 AQ 3.4210291 sec
 RG 322.5
 DW 104.400 usec
 DE 6.00 usec
 TE 298.2 K
 D1 2.00000000 sec
 FID0 1

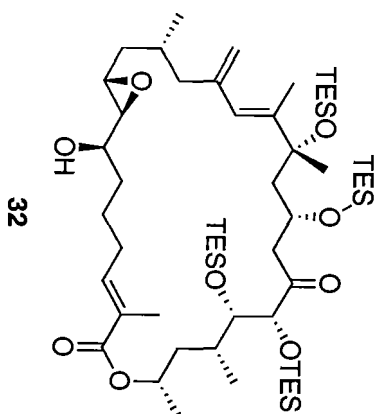
===== CHANNEL f1 =====
 NUC1 1H
 P1 9.00 usec
 PL1 -3.00 dB
 SFO1 300.1321009 MHz

F2 - Processing parameters
 SI 32768
 SF 300.1300000 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

207.69

144.77
142.26
141.51128.40
125.45

115.26

80.83
78.90
77.85
77.21
71.52
68.38
65.32
61.78
55.49
49.19
45.36
41.72
38.82
33.33
30.36
29.65
28.55
28.32
23.89
21.04
20.05
15.00
13.24
12.46
7.23
7.07
7.00
6.91
6.84

32

220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 ppm

Current Data Parameters
NAME 8-22-2
EXPNO 3
PROCNO 1
DU /h
USER Llang

F2 - Acquisition Parameters
Date_ 20080406
Time_ 12.20

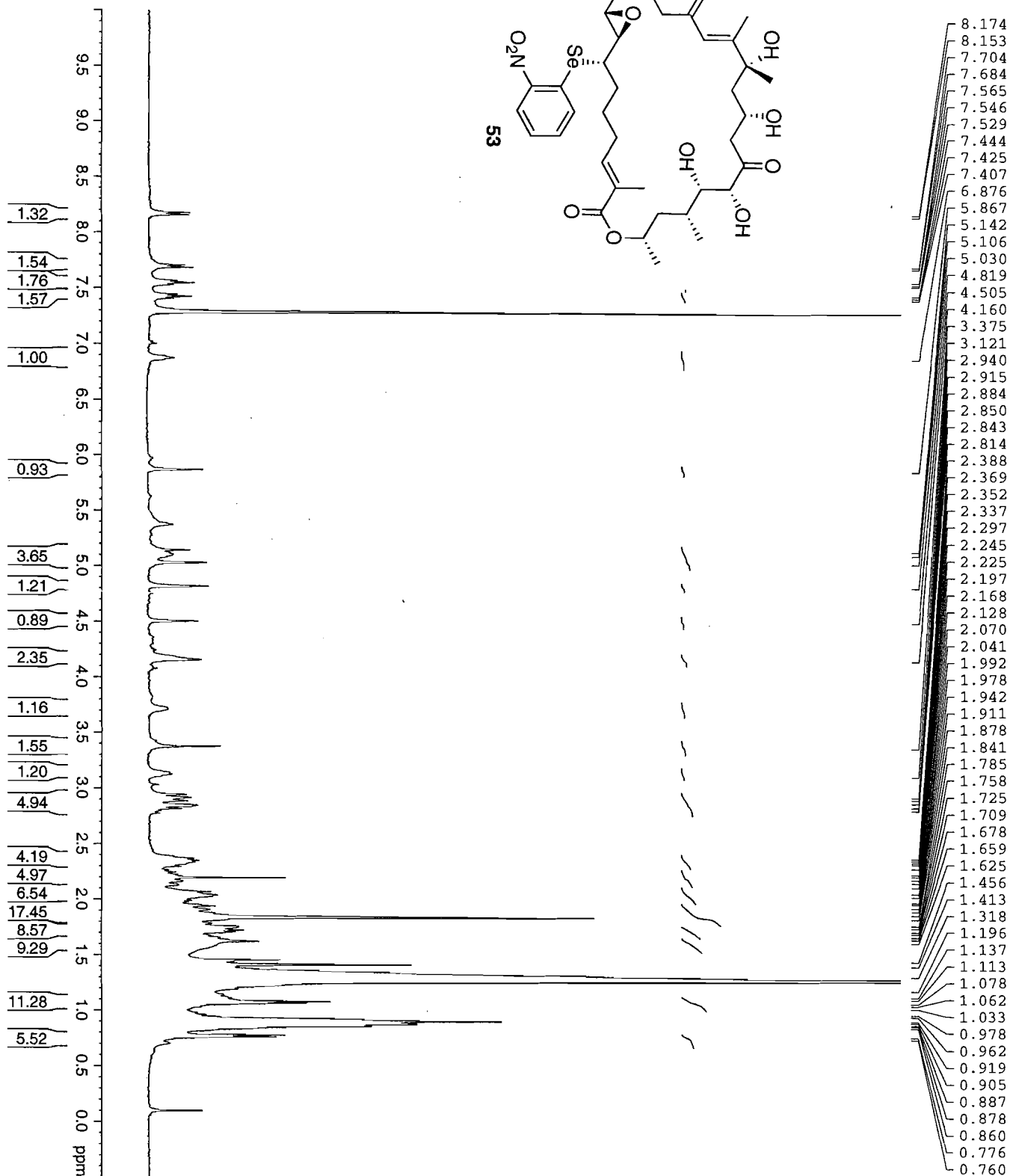
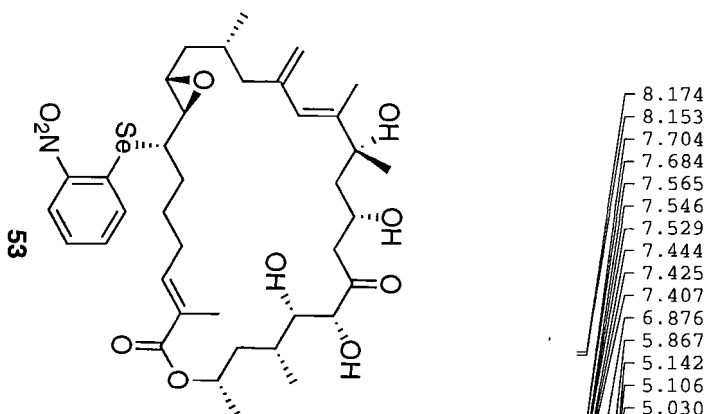
INSTRUM DPX300
PROBHD 5 mm QNP 1H/1
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 3090

DS 4
SWH 18832.393 Hz
FIDRES 0.287360 Hz
AQ 1.7400308 sec
RG 912.3
DW 26.550 usec
DE 6.00 usec
TE 298.2 K
D1 0.15000001 sec
d11 0.03000000 sec
DELTA 0.05000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 8.80 usec
PL1 -3.00 dB
SFO1 75.4760505 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 -3.00 dB
PL12 17.55 dB
PL13 17.55 dB
SFO2 300.1312005 MHz

F2 - Processing parameters
SI 32768
SF 75.4677490 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.40

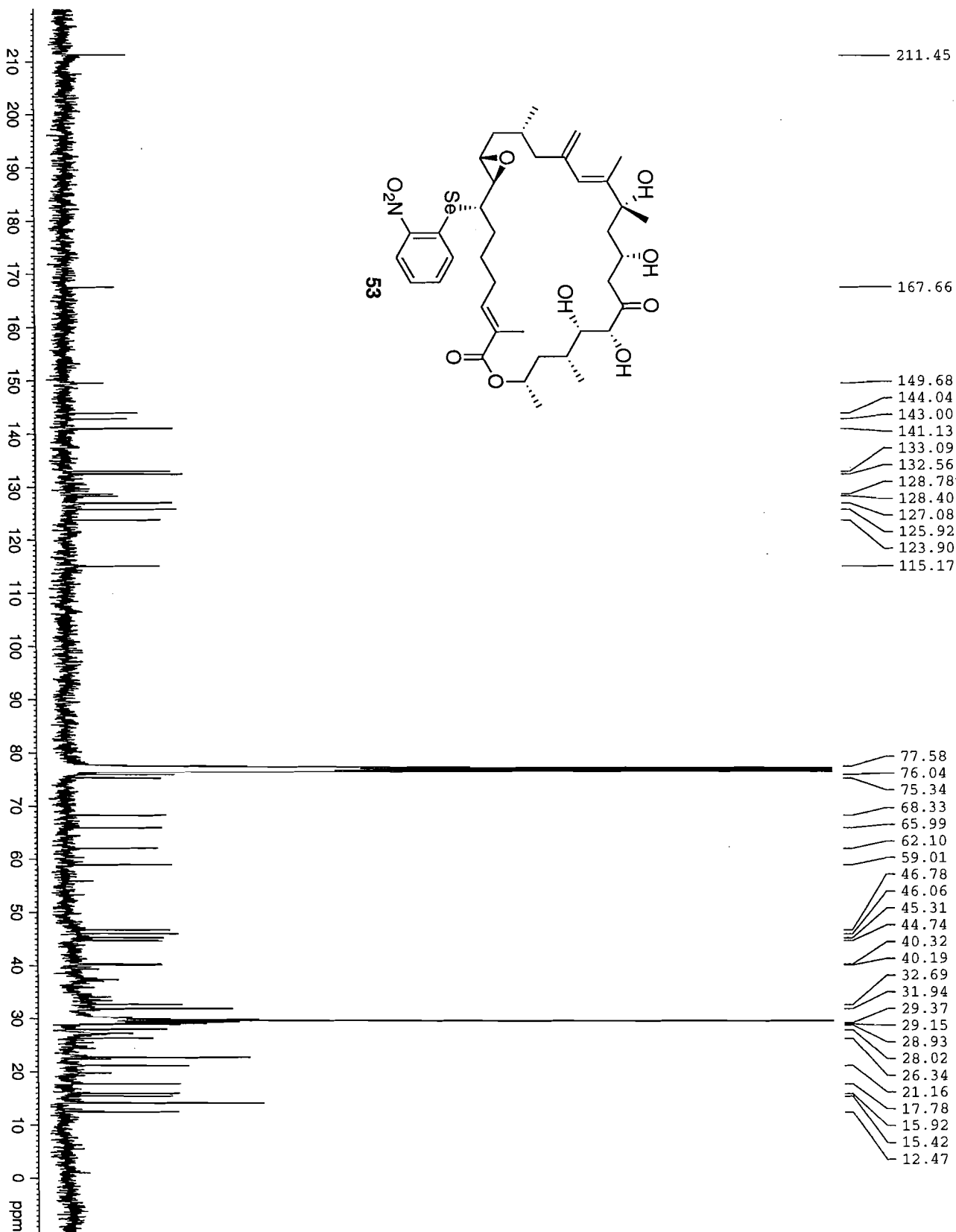


Current Data Parameters
 NAME 8-10
 EXPNO 2
 PROCNO 1
 DU 1
 USER l.jang

F2 - Acquisition Parameters
 Date_ 20080407
 Time 12.34
 INSTRUM DFX400
 PROBHD 5 mm BBO BB-1H
 PULPROG zg30
 TD 32768
 SOLVENT CDCl₃
 NS 32
 DS 2
 SWH 6410.256 Hz
 FIDRES 0.196625 Hz
 AQ 2.555540 sec
 RG 512
 DW 78.000 usec
 DE 6.00 usec
 TE 298.2 K
 DI 2.0000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUCL 1H
 P1 14.70 usec
 PL1 0.00 dB
 SFO1 399.9528000 MHz

F2 - Processing parameters
 SI 32768
 SF 399.9500000 MHz
 WDW EM
 SSB 0
 LB 0.70 Hz
 GB 0
 PC 1.00



Current Data Parameters

NAME	8-30
EXPNO	5
PROCNO	1
DU	/n
USER	Liang

F2 - Acquisition Parameters

Date_	20080407
Time	22.39
INSTRUM	DPX400
PROBHD	5 mm BBO BB-1H
PULPROG	zgpg30
TD	65536
SOLVENT	
NS	22019
DS	4
SWH	25125.629 Hz
FIDRES	0.383387 Hz
AQ	1.3042164 s
RG	2298.8
DM	19.900 us
DE	6.00 us
TE	298.2 K
D1	0.15000001 s
D11	0.03000000 s
DELTA	0.05000000 s
TD0	1

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

NUC1	13C
P1	7.80 us
PL1	-3.00 dB
SFO1	100.578500 MHz

===== CHANNEL f2 =====

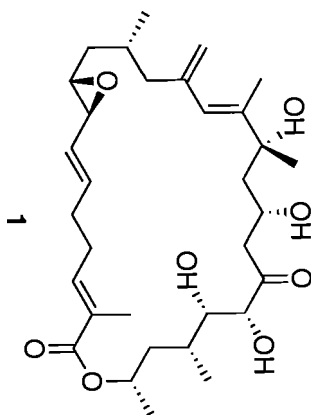
CPDPRG2	waltz16
NUC2	1H
PCPD2	135.00 us
PL2	17.40 dB
PL12	17.40 dB
PL13	17.40 dB
SFO2	399.9516000 MHz

F2 - Processing parameters:

SI	32768
SF	100.5675080 MHz
WDW	EM
SSB	0
LB	3.00 Hz
GB	0
PC	1.40

6.782
5.987
5.203
5.182
5.164
5.078
5.049
4.842
4.846
4.838
4.198
4.138
3.926
3.918
3.890
3.878
3.727
3.701
3.192
3.167
3.146
3.141
2.952
2.930
2.916
2.876
2.857
2.827
2.819
2.412
2.382
2.264
2.245
2.226
2.217
2.205
2.197
2.184
2.171
2.156
2.071
2.041
1.986
1.971
1.950
1.933
1.916
1.846
1.803
1.790
1.767
1.754
1.647
1.536
1.529
1.501
1.495
1.474
1.467
1.438
1.335
1.306
1.291
1.255
1.036
1.020
0.939
0.912
0.896

H1



Current Data Parameters
NAME 8-32
EXPNO 5
PROCNO 1
DU /n
USER Liang

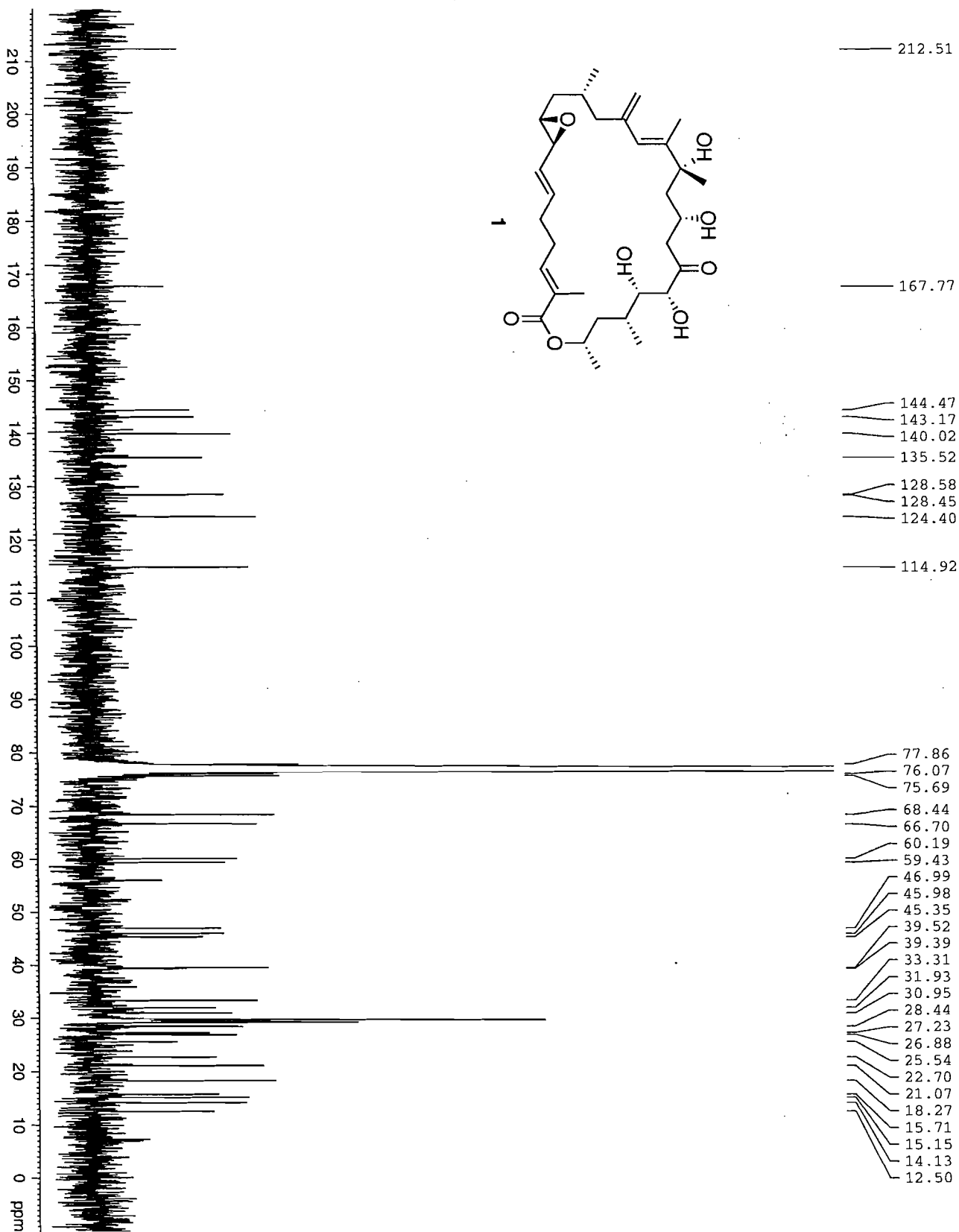
F2 - Acquisition Parameters
Date_ 20080410
Time 17.12
INSTRUM DPX400
PROBHD 5 mm BBO BB-1H
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 85
DS 2
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 1290.2
DW 78.000 usec
DE 6.00 usec
TE 298.2 K
D1 2.0000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 14.70 usec
PL1 0.00 dB
SFO1 399.9528000 MHz

F2 - Processing parameters
SI 32768
SF 399.9500000 MHz
WDW EM
SSB 0
LB 0.70 Hz
GB 0
PC 1.00

9.5 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 0.5 0.0 ppm

1.03
2.15
1.41
2.49
1.21
1.07
1.35
1.90
1.16
1.87
1.35
1.89
2.18
4.50
13.89
1.88
5.03
12.72
3.89
5.10



Current Data Parameters

NAME	8-32
EXPNO	10
PROCNO	1
DU	/n
USER	Liang

F2 - Acquisition Parameters

Date_	20080411
Time	21.28
INSTRUM	DPX400
PROBHD	5 mm BBO BB-1H
PULPROG	zgpg30
TD	65536
SOLVENT	
NS	57641
DS	4
SWH	25125.628 Hz
FIDRES	0.383387 Hz
AQ	1.3042164 s
RG	3649.1
DW	19.900 us
DE	6.00 us
TE	298.2 K
D1	0.15000001 s
D11	0.03000000 s
DELTA	0.05000000 s
TD0	1

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

NUC1	13C
P1	7.80 us
PL1	-3.00 dB
SFO1	100.578500 MHz

===== CHANNEL f2 =====

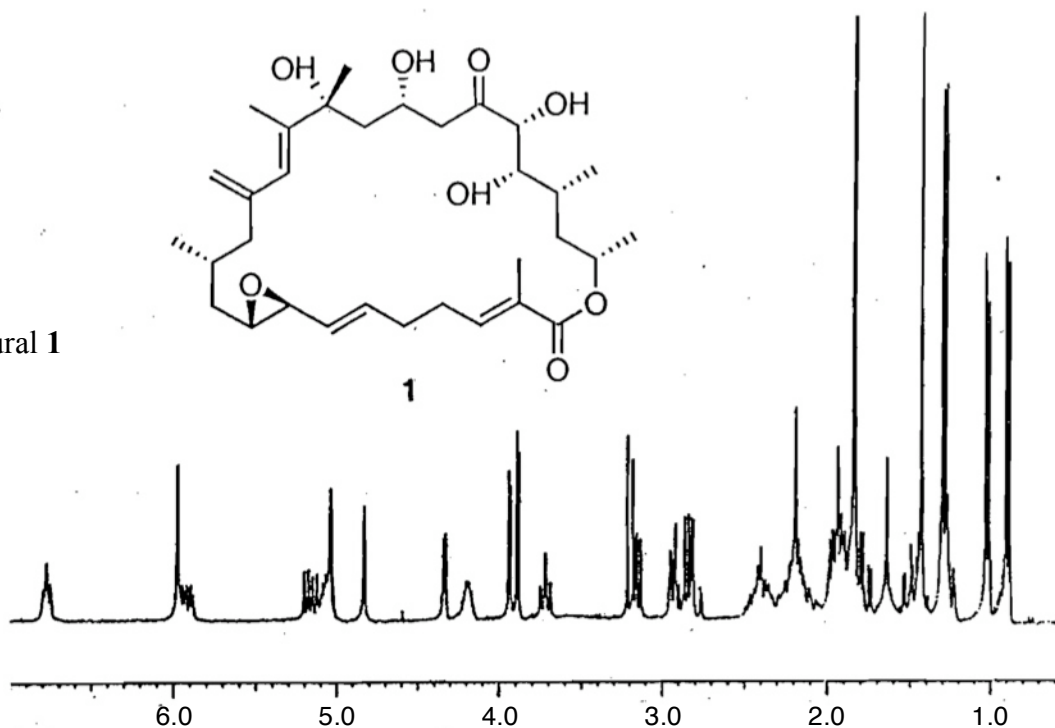
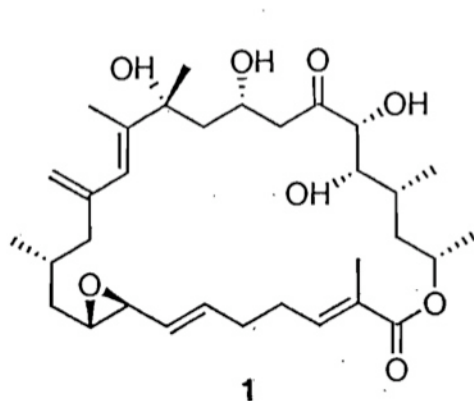
CPDPRG2	waltz16
NUC2	1H
PCPD2	135.00 us
PL2	17.40 dB
PL12	17.40 dB
PL13	17.40 dB
SFO2	399.9516000 MHz

F2 - Processing parameters:

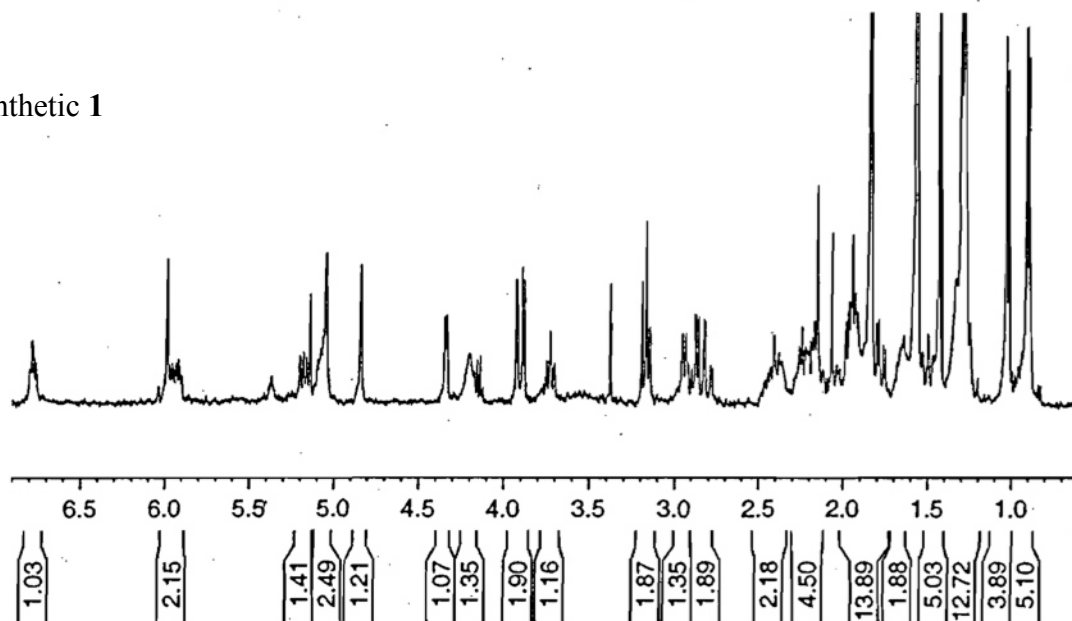
SI	32768
SF	100.5675080 MHz
WDW	EM
SSB	0
LB	3.00 Hz
GB	0
PC	1.40

Comparison of ^1H NMR Data for Synthesis and Natural Amphidinolide B₁ (1)

Natural 1



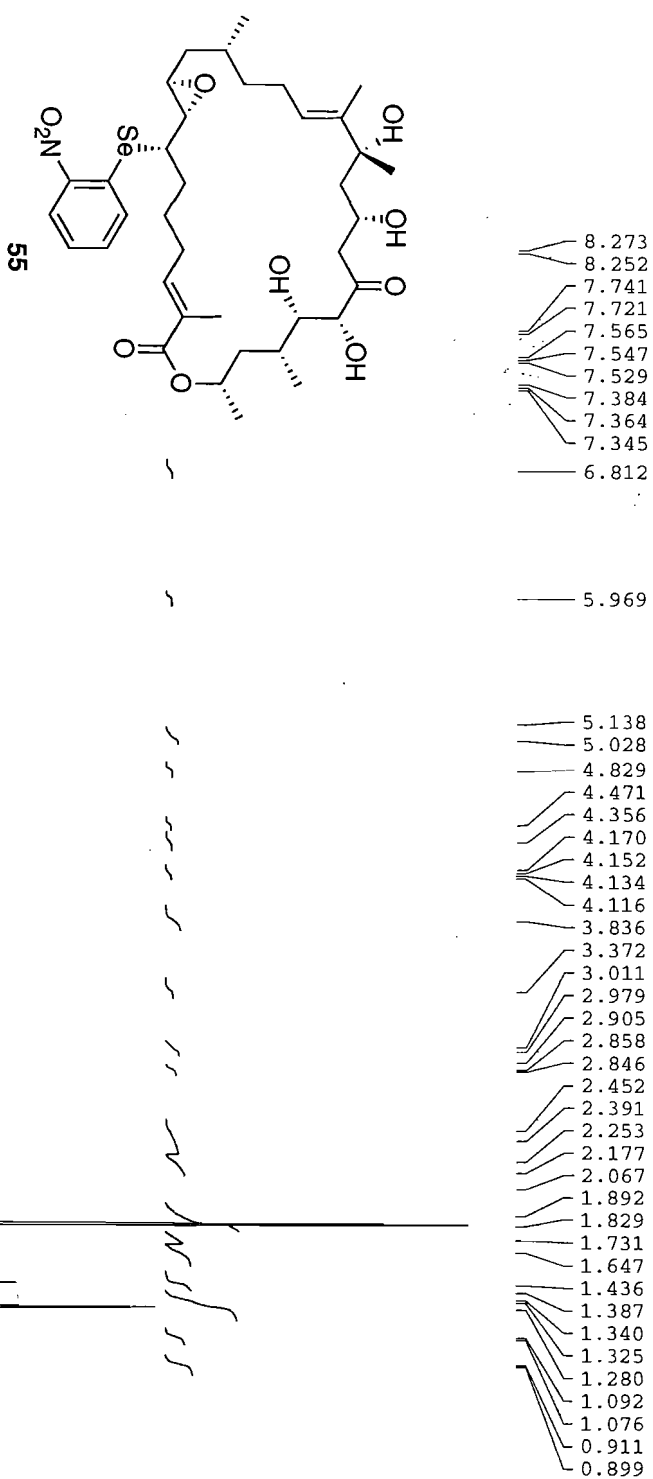
Synthetic 1



Comparison of ^{13}C NMR Data for Synthesis and Natural Amphidinolide B₁ (1)

Synthetic 1 ^{13}C NMR Data (CDCl ₃ , 100 MHz)	Natural 1 ^{13}C NMR Data ^a (CDCl ₃ , 150 MHz)
212.51	212.49
167.77	167.77
144.47	144.47
143.17	143.16
140.02	140.04
135.52	135.45
128.58	128.60
128.45	128.44
124.40	124.37
114.92	114.89
77.86	77.84
76.07	76.01
75.69	75.62
68.44	68.46
66.70	66.58
60.19	60.11
46.99	46.96
45.98	45.97
45.35	45.36
39.52	39.51
39.39	39.45
33.31	33.27
30.95	30.92
29.35	29.26
28.44	28.40
26.88	26.87
21.07	21.04
18.27	18.33
15.71	15.71
15.15	15.10
12.50	12.48

^a Tsuda, M.; Kubota, T.; Sakuma, Y.; Kobayashi, J. *Chem. Pharm. Bull.* **2001**, *49*, 1366-67. See also, Ishibashi, M.; Ohizumi, Y.; Hamashima, M.; Nakamura, H.; Hirata, Y.; Sasaki, T.; Kobayashi, J. *J. Chem. Soc., Chem. Commun.* **1987**, 1127-29.



Current Data Parameters

NAME	8-26
EXPNO	2
PROCNO	1
DS	1/n
USER	Liang

F2 - Acquisition Parameters

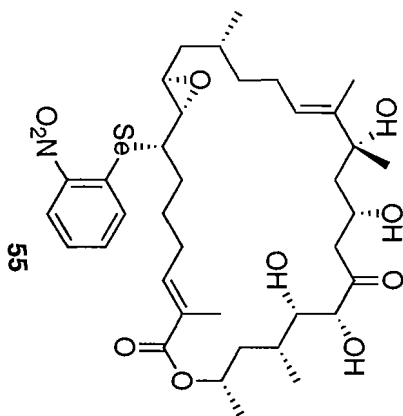
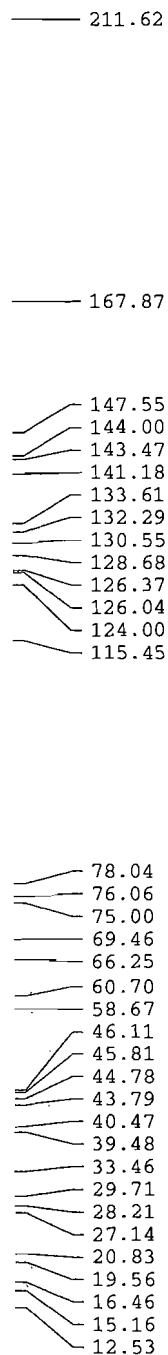
Date_	20080405
Time	16.05
INSTRUM	DPX400
PROBHD	5 mm BBO BB-1H
PULPROG	zg30
TD	32768
SOLVENT	CDCl3
NS	13
DS	2
SWH	6410.256 Hz
FIDRES	0.195625 Hz
AQ	2.5559540 sec
RG	512
DW	78.000 usec
DE	6.00 usec
TE	298.2 K
D1	2.00000000 sec
TD0	1

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

NUC1	1H
P1	14.70 usec
PL1	0.00 dB
SFO1	399.9528000 MHz

F2 - Processing parameters

SI	32768
SF	399.9500000 MHz
WDW	EM
SSB	0
LB	0.70 Hz
GB	0
PC	1.00



Current Data Parameters
 NAME 8-26
 EXPNO 4
 PROCNO 1
 DU /n
 USER Liang

F2 - Acquisition Parameters
 Date_ 20080405
 Time 16:55
 INSTRUM DPX400
 PROBHD 5 mm BBO BB-1H
 PULPROG zgpg30
 TD 65536
 SOLVENT
 NS 3726
 DS 4
 SWH 25125.629 Hz
 FIDRES 0.38387 Hz
 AQ 1.3042164 sec
 RG 4096
 DW 19.980 usec
 DE 6.00 usec
 TE 398.2 K
 D1 0.1500001 sec
 D11 0.0300000 sec
 DELTA 0.0500000 sec
 TDO 1

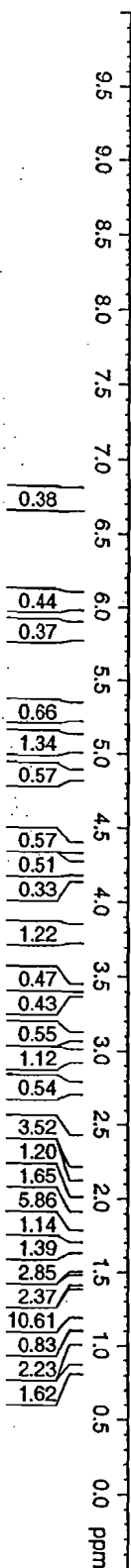
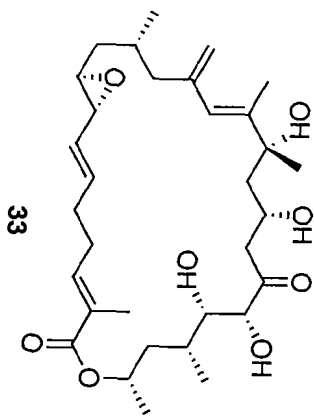
===== CHANNEL f1 =====
 NUC1 13C
 P1 7.80 usec
 PL1 -3.00 dB
 SFO1 100.5785700 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 P2 135.00 usec
 PCPD2 17.40 dB
 PL2 17.40 dB
 PL12 17.40 dB
 PL13 17.40 dB
 SFO2 399.9516000 MHz

F2 - Processing Parameters
 SI 32768
 SF 100.5675080 MHz
 WDW EM
 SSB 0
 LB 3.00 Hz
 GB 0
 PC 1.40

H1

6.718
6.037
5.286
5.059
4.844
4.361
4.354
4.136
3.792
3.779
3.768
3.422
3.396
3.376
3.099
3.094
3.078
3.072
2.985
2.965
2.958
2.946
2.927
2.767
2.760
2.387
2.354
2.339
2.313
2.263
2.074
1.995
1.979
1.959
1.942
1.921
1.908
1.881
1.838
1.805
1.793
1.768
1.756
1.739
1.732
1.704
1.656
1.642
1.627
1.581
1.457
1.431
1.312
1.297
1.279
1.258
1.219
1.145
1.126
1.110
1.052
1.036
0.920
0.905
0.894
0.888
0.878
0.844
0.828

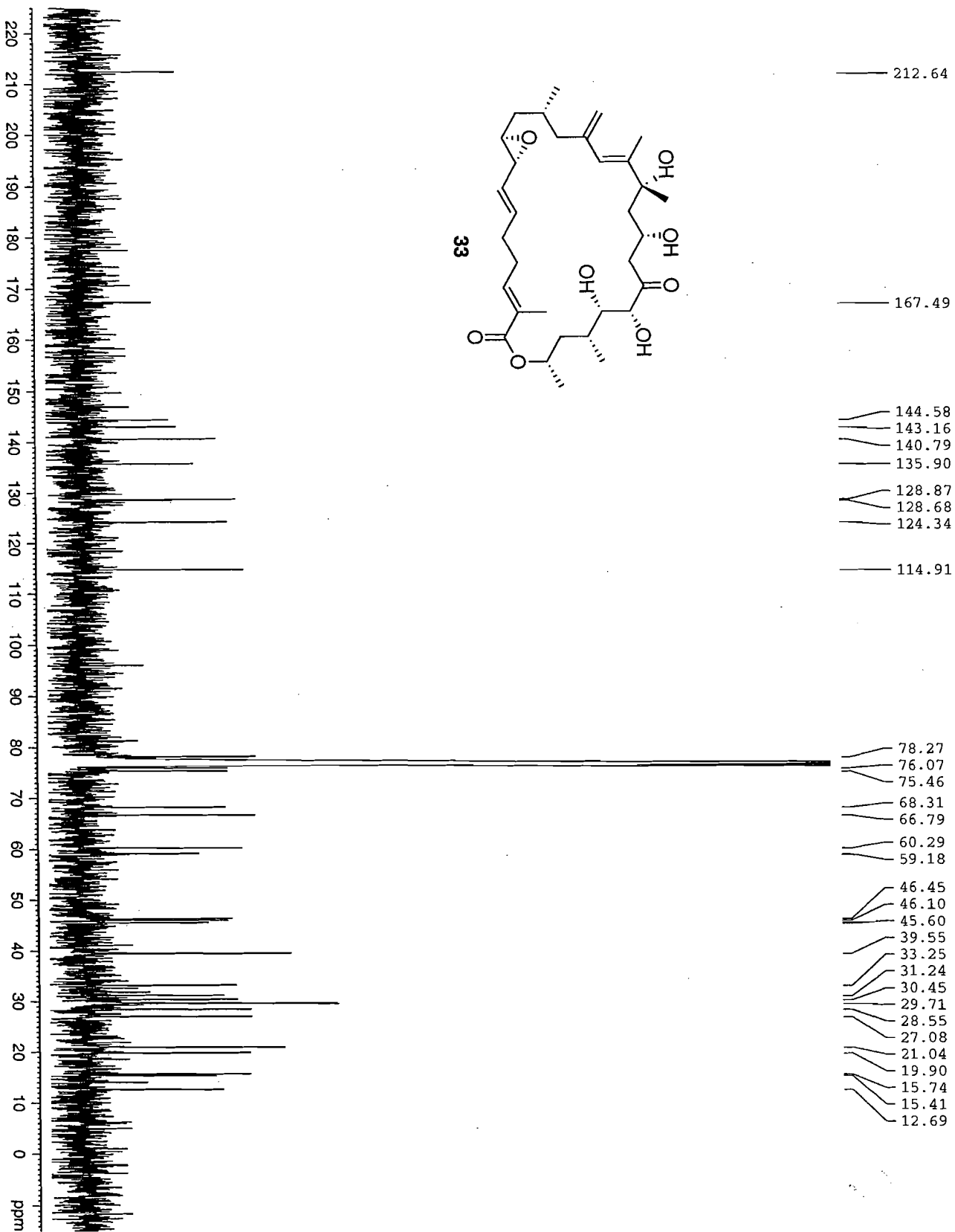


Current Data Parameters
NAME 8-27
EXPNO 3
PROCNO 1
DU /n
USER Lang

F2 - Acquisition Parameters
Date_ 20080414
Time 23:44
INSTRUM DFX400
PROBHD 5 mm BBO BS-1H
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 32
DS 2
SWH 6410.256 Hz
FIDRES 0.195625 Hz
AQ 2.5559540 sec
RG 1149.4
DW 78.000 usec
DE 6.00 usec
TE 298.2 K
D1 2.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 14.70 usec
PL1 0.00 dB
SFO1 399.9528000 MHz

F2 - Processing parameters
SI 32768
SF 399.9500000 MHz
WDW EM
SSB 0
LB 0.70 Hz
GB 0
PC 1.00



Current Data Parameters

NAME	8-27
EXPNO	5
PROCNO	1
DU	/h
USER	Liang

F2 - Acquisition Parameters

Date_	20080414
Time	23.58
INSTRUM	DPX400
PROBHD	5 mm BBO BB-1H
PULPROG	zgpg30
TD	65536
SOLVENT	
NS	18937
DS	4
SWH	25125.629 Hz
FIDRES	0.383387 Hz
AQ	1.3042164 s
RG	6502
DW	19.900 us
DE	6.00 us
TE	298.2 K
D1	0.15000001 s
D11	0.03000000 s
DELTA	0.05000000 s
TD0	1

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

NUC1	¹³ C
P1	7.80 us
PL1	-3.00 dB
SFO1	100.5785890 MHz

===== CHANNEL f2 =====

CPDPRG2	waltz16
NUC2	¹ H
PCPD2	135.00 us
PL2	17.40 dB
PL12	17.40 dB
PL13	17.40 dB
SFO2	399.9516000 MHz

F2 - Processing parameters:

SI	32768
SF	100.5675080 MHz
WDW	EM
SSB	0
LB	3.00 Hz
GB	0
PC	1.40