

SUPPLEMENTARY MATERIAL

Total Synthesis and Structure Validation of (+)- Bistramide C

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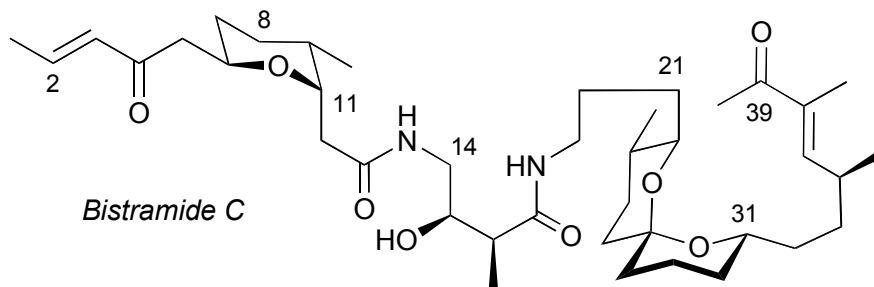
E-mail: pwipf@pitt.edu

Electronic Supplementary Information (ESI) available: spectroscopic data and copies of ^1H and ^{13}C NMR, DEPT, COSY, HSQC, HMBC, and NOESY for synthetic bistramide C; copies of ^1H and ^{13}C NMR spectra for natural bistramide C; CD spectra for authentic, synthetic and stereoisomeric bistramide C.

^1H NMR spectra were recorded at 600 MHz in CDCl_3 . ^{13}C NMR spectra were recorded at 151 MHz. The CDCl_3 was filtered through basic alumina prior to use. Synthetic bistramide C (1.3 mg) was dissolved in CDCl_3 (180 μL) and analyzed in a 3 mm tube in a spectrometer equipped with a cryo probe.

Synthetic Bistramide C (1): $[\alpha]_{\text{D}}^{25}$ 7.3 ($c = 0.05$, CH_2Cl_2 , 22 $^\circ\text{C}$), lit.¹ $[\alpha]_{\text{D}}^{25}$ 10 ($c = 0.05$, CH_2Cl_2), authentic sample² $[\alpha]_{\text{D}}^{25}$ 3.9 ($c = 0.05$, CH_2Cl_2 , 22 $^\circ\text{C}$); ^1H NMR δ 7.36 (bt, 1 H, $J = 5.4$ Hz), 7.00 (bt, 1 H, $J = 5.1$ Hz), 6.91 (dq, 1 H, $J = 13.7$, 6.9 Hz), 6.41 (d, 1 H, $J = 9.8$ Hz), 6.13 (d, 1 H, $J = 15.8$ Hz), 4.64 (d, 1 H, $J = 5.2$ Hz), 4.20 (t, 1 H, $J = 9.7$ Hz), 4.06 (dd, 1 H, $J = 11.1$, 4.3 Hz), 3.73 (app t, 1 H, $J = 4.9$ Hz), 3.52 (ddd, 1 H, $J = 13.3$, 6.1, 5.9 Hz), 3.49-3.42 (m, 1 H), 3.37-3.26 (m, 2 H), 3.23 (ddd, 1 H, $J = 13.2$, 5.8, 5.6 Hz), 3.13 (app t, 1 H, $J = 9.8$ Hz), 2.91 (dd, 1 H, $J = 17.1$, 9.3 Hz), 2.78 (dd, 1 H, $J = 14.8$, 12.0 Hz), 2.61-2.56 (m, 1 H), 2.54 (d, 1 H, $J = 17.3$ Hz), 2.42-2.36 (m, 1 H), 2.33 (bs, 3 H), 2.14 (d, 1 H, $J = 15.1$ Hz), 1.96-1.90 (m, 1 H), 1.93 (d, 3 H, $J = 6.8$ Hz), 1.90-1.79 (m, 2 H), 1.77 (bs, 3 H), 1.76-1.66 (m, 2 H), 1.66-1.61 (m, 2 H), 1.61-1.50 (m, 6 H), 1.49-1.45 (m, 2 H), 1.45-1.30 (m, 8 H), 1.30-1.25 (m, 2 H), 1.27 (d, 3 H, $J = 7.1$ Hz), 1.23-1.08 (m, 1 H), 1.05 (d, 3 H, $J = 6.5$ Hz), 0.86 (d, 3 H, $J = 6.9$ Hz), 0.82 (d, 3 H, $J = 6.3$ Hz); ^{13}C NMR δ 200.4 (s), 199.0 (s), 175.1 (s), 173.6 (s), 149.5 (d), 144.6 (d), 136.2 (s), 132.1 (d), 95.4 (s), 74.9 (d), 74.4 (d), 73.9 (d), 68.9 (d), 64.6 (d), 45.2 (t), 44.7 (t), 43.3 (d), 39.5 (t), 36.0 (t), 35.4 (t), 34.8 (d), 34.3 (t), 33.8 (d), 33.3 (d), 32.9 (t), 32.2 (t), 31.3 (t), 30.8 (t), 30.5 (t), 27.9 (t), 26.5 (t), 25.9 (t), 25.6 (q), 20.1 (q), 19.1 (t), 18.5 (q), 18.0 (q), 17.2 (q), 15.5 (q), 11.4 (q); HRMS (ESI) calcd for $\text{C}_{40}\text{H}_{66}\text{N}_2\text{O}_8\text{Na}$ 725.4717 [$M+\text{Na}$], found 725.4746, calcd for $\text{C}_{40}\text{H}_{67}\text{N}_2\text{O}_8$ 703.4897 [$M+\text{H}$], found 703.4930.

¹ J.-F. Biard, C. Roussakis, J.-M. Kornprobst, D. Gouiffes-Barbin, J.-F. Verbist, P. Cotellet, M. P. Foster and C. M. Ireland, *J. Nat. Prod.*, 1994, **57**, 1336.



Comparison of ^1H NMR Data:²

	Natural bistramide C (600 MHz)			Synthetic bistramide C (600 MHz)		
Proton #	δ [ppm]	mult.	J [Hz]	δ [ppm]	mult.	J [Hz]
1-H	1.93	dd	6.9, 1.6	1.93	d	6.8
2-H	6.92	dq	13.7, 6.8	6.91	dq	13.7, 6.9
3-H	6.13	dd	15.8, 1.6	6.13	d	15.8
4-H	-	-	-	-	-	-
5-Ha	2.94-2.87	m		2.91	dd	17.1, 9.3
5-Hb	2.57-2.51	m		2.54	d	17.3
6-H	4.20	t	9.7	4.20	t	9.7
7-Ha	1.76-1.50	m		1.76-1.66	m	
7-Hb	1.45-1.30	m		1.45-1.30	m	
8-Ha	1.76-1.50	m		1.66-1.61	m	
8-Hb	1.45-1.30	m		1.45-1.30	m	
9-H	1.96-1.90	m		1.96-1.90	m	
10-H	0.87	d	7.0	0.86	d	6.9
11-H	4.10-4.05	m		4.06	dd	11.1, 4.3
12-Ha	2.83-2.73	m		2.78	dd	14.8, 12.0
12-Hb	2.14	d	12.5	2.14	d	15.1
13-H	-	-	-	-	-	-

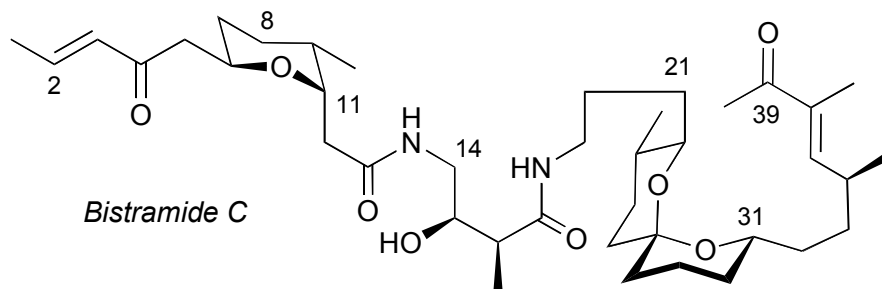
² The spectroscopic data for natural bistramide C was obtained from a sample of the isolated material that was generously provided by Prof. Biard from the Université de Nantes. For literature data, see: J.-F. Biard, C. Roussakis, J.-M. Kornprobst, D. Gouiffes-Barbin, J.-F. Verbist, P. Cotellet, M. P. Foster and C. M. Ireland, *J. Nat. Prod.*, 1994, **57**, 1336.

14-Ha	3.52	ddd	12.8, 6.6, 6.2	3.52	ddd	13.3, 6.1, 5.9
14-Hb	3.23	ddd	12.7, 6.8, 5.8	3.23	ddd	13.2, 5.8, 5.6
15-H	3.73	bs		3.73	(app) t	4.9
16-H	2.43-2.35	m		2.42-2.36	m	
17-H	1.27	d	7.1	1.27	d	7.1
18-H	-	-	-	-	-	-
19-H	3.35-3.28	m		3.37-3.26	m	
20-Ha	1.90-1.80	m		1.90-1.79	m	
20-Hb	1.76-1.50	m		1.61-1.50	m	
21-Ha	1.76-1.50	m		1.76-1.66	m	
21-Hb	1.45-1.30	m		1.45-1.30	m	
22-H	3.14	dt	9.6, 2.0	3.13	(app) t	9.8
23-H	1.45-1.30	m		1.45-1.30	m	
24-H	0.82	d	6.5	0.82	d	6.3
25-Ha	1.76-1.50	m		1.61-1.50	m	
25-Hb	1.50-1.45	m		1.49-1.45	m	
26-Ha	1.76-1.50	m		1.66-1.61	m	
26-Hb	1.50-1.45	m		1.49-1.45	m	
27-H	-	-	-	-	-	-
28-Ha	1.76-1.50	m		1.61-1.50	m	
28-Hb	1.45-1.30	m		1.45-1.30	m	
29-Ha	1.90-1.80	m		1.90-1.79	m	
29-Hb	1.76-1.50	m		1.61-1.50	m	
30-Ha	1.76-1.50	m		1.61-1.50	m	
30-Hb	1.20-1.08	m		1.20-1.10	m	
31-H	3.50-3.40	m		3.49-3.42	m	
32-Ha	1.45-1.30	m		1.45-1.30	m	
32-Hb	1.45-1.30	m		1.45-1.30	m	
33-Ha	1.76-1.50	m		1.61-1.50	m	
33-Hb	1.45-1.30	m		1.45-1.30	m	

34-H	2.60-2.57	m		2.61-2.56	m	
35-H	1.05	d	6.6	1.05	d	6.5
36-H	6.42	d	9.7	6.41	d	9.8
37-H	-	-	-	-	-	-
38-H	1.77	d	1.2	1.77	bs	
39-H	-	-	-	-	-	-
40-H	2.33	s		2.33	bs	
NH, 13/14	7.35	bt		7.36	bt	5.4
NH, 18/19	7.00	bt		7.00	bt	5.1
OH	4.63	bs		4.64	d	5.2
1-H	1.93	dd	6.9, 1.6	1.93	d	6.8
2-H	6.92	dq	13.7, 6.8	6.91	dq	15.5, 7.0
3-H	6.13	dd	15.8, 1.6	6.13	d	15.8
4-H	-	-	-	-	-	-
5-Ha	2.94-2.87	m		2.91	dd	17.1, 9.3
5-Hb	2.57-2.51	m		2.54	d	17.3
6-H	4.20	t	9.7	4.20	t	8.5
7-Ha	1.76-1.50	m		1.76-1.66	m	
7-Hb	1.45-1.30	m		1.45-1.30	m	
8-Ha	1.76-1.50	m		1.66-1.61	m	
8-Hb	1.76-1.50	m		1.45-1.30	m	
9-H	1.96-1.90	m		1.96-1.90	m	
10-H	0.87	d	7.0	0.86	d	6.9
11-H	4.10-4.05	m		4.06	dd	11.1, 4.3
12-Ha	2.83-2.73	m		2.78	dd	14.8, 12.0
12-Hb	2.14	d	12.5	2.14	d	15.1
13-H	-	-	-	-	-	-
14-Ha	3.52	ddd	13.8, 6.4, 5.5	3.52	ddd	13.3, 6.1, 5.9

14-Hb	3.23	ddd	12.7, 6.9, 5.7	3.23	ddd	13.2, 5.8, 5.6
15-H	3.73	bs		3.73	(app) t	4.9
16-H	2.43-2.35	m		2.42-2.36	m	
17-H	1.27	d	7.1	1.27	d	7.1
18-H	-	-	-	-	-	-
19-H	3.35-3.28	m		3.37-3.26	m	
20-Ha	1.90-1.80	m		1.90-1.79	m	
20-Hb	1.76-1.50	m		1.61-1.50	m	
21-Ha	1.76-1.50	m		1.76-1.66	m	
21-Hb	1.45-1.30	m		1.45-1.30	m	
22-H	3.14	dt	8.5, 2.0	3.13	(app) t	9.8
23-H	1.45-1.30	m		1.45-1.30	m	
24-H	0.82	d	6.5	0.82	d	6.3
25-Ha	1.76-1.50	m		1.61-1.50	m	
25-Hb	1.50-1.45	m		1.49-1.45	m	
26-Ha	1.76-1.50	m		1.66-1.61	m	
26-Hb	1.45-1.30	m		1.45-1.30	m	
27-H	-	-	-	-	-	-
28-Ha	1.76-1.50	m		1.61-1.50	m	
28-Hb	1.45-1.30	m		1.45-1.30	m	
29-Ha	1.90-1.80	m		1.90-1.79	m	
29-Hb	1.76-1.50	m		1.61-1.50	m	
30-Ha	1.76-1.50	m		1.61-1.50	m	
30-Hb	1.45-1.30	m		1.45-1.30	m	
31-H	3.50-3.40	m		3.49-3.42	m	
32-Ha	1.30-1.26	m		1.30-1.25	m	
32-Hb	1.30-1.26	m		1.30-1.25	m	
33-Ha	1.76-1.50	m		1.61-1.50	m	
33-Hb	1.45-1.30	m		1.45-1.30	m	
34-H	2.60-2.57	m		2.61-2.56	m	

35-H	1.05	d	6.6	1.05	d	6.5
36-H	6.42	d	9.7	6.41	d	9.8
37-H	-	-	-	-	-	-
38-H	1.77	d	1.2	1.77	bs	
39-H	-	-	-	-	-	-
40-H	2.33	s		2.33	bs	
NH, 13/14	7.35	bt		7.36	bt	5.4
NH, 18/19	7.00	bt		7.00	bt	5.1
OH	4.63	bs		4.64	d	5.2

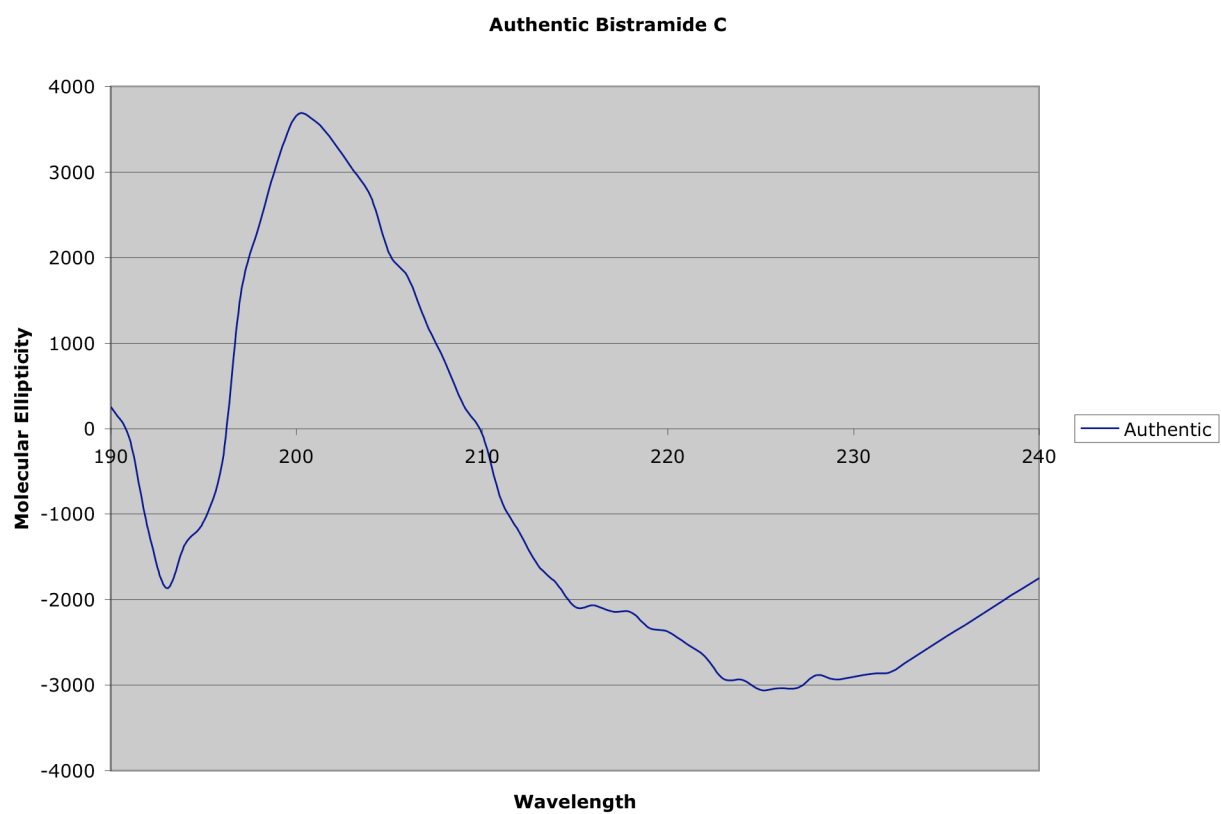


Comparison of ^{13}C NMR Data:²

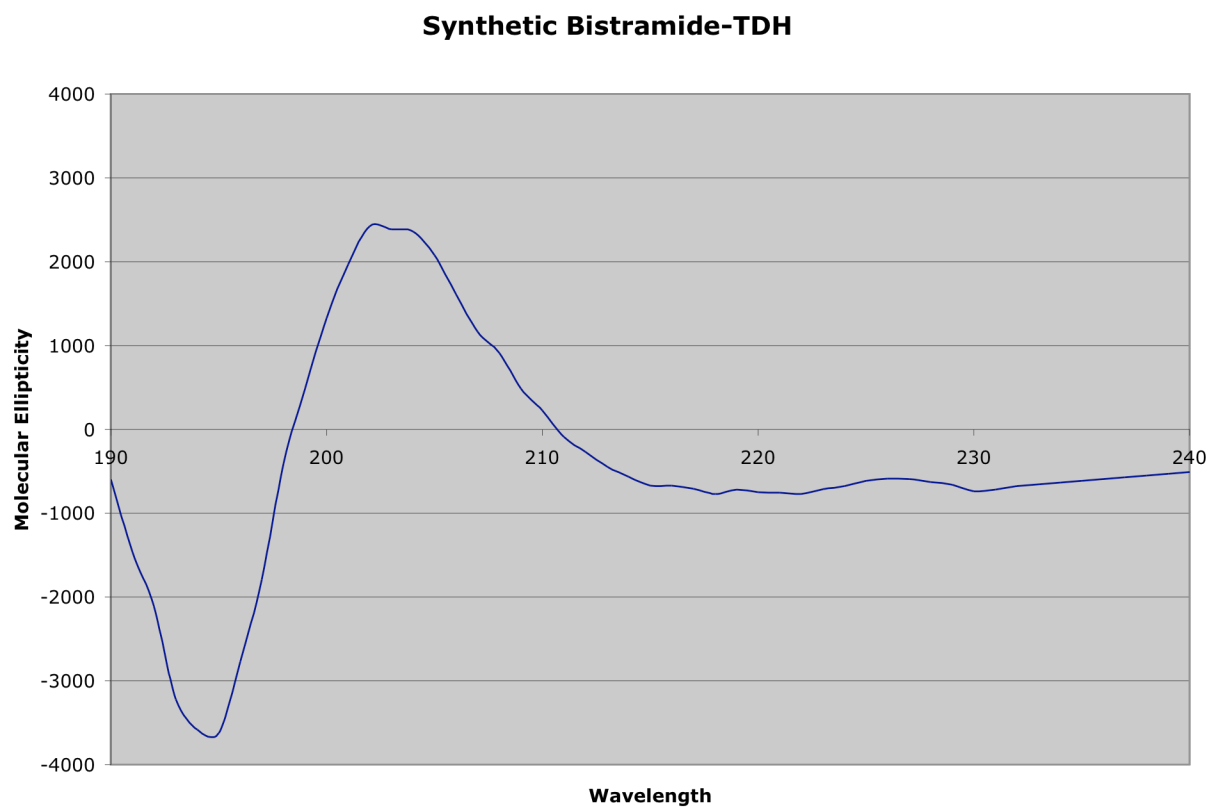
	Natural bistramide C (151 MHz)	Synthetic bistramide C (151 MHz)	Nat.- Exp.
Carbon #	δ [ppm]	δ [ppm]	$\Delta\delta$ [ppm]
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2	144.55	144.61	-0.06
3	132.05	132.05	0.00
4	198.92	198.95	-0.03
5	45.23	45.24	-0.01
6	64.63	64.60	0.03
7	30.80	30.82	-0.02
8	26.46	26.46	0.00
9	33.32	33.34	-0.02
10	17.17	17.21	-0.04
11	74.84	74.87	-0.03
12	32.19	32.17	0.02
13	173.55	173.58	-0.03
14	44.67	44.70	-0.03
15	73.87	73.89	-0.02
16	43.28	43.28	0.00
17	15.52	15.54	-0.02
18	175.11	175.12	-0.01
19	39.52	39.52	0.00
20	25.86	25.88	-0.02
21	30.46	30.46	0.00

22	74.34	74.36	-0.02
23	34.80	34.81	-0.01
24	18.01	18.02	-0.01
25	27.85	27.85	0.00
26	36.02	36.02	0.00
27	95.43	95.44	-0.01
28	35.41	35.42	-0.01
29	19.08	19.08	0.00
30	31.32	31.33	-0.01
31	68.92	68.94	-0.02
32	34.26	34.28	-0.02
33	32.89	32.90	-0.01
34	33.80	33.82	-0.02
35	20.07	20.09	-0.02
36	149.46	149.50	-0.04
37	136.20	136.20	0.00
38	11.38	11.40	-0.02
39	200.39	200.43	-0.04
40	25.57	25.60	-0.03

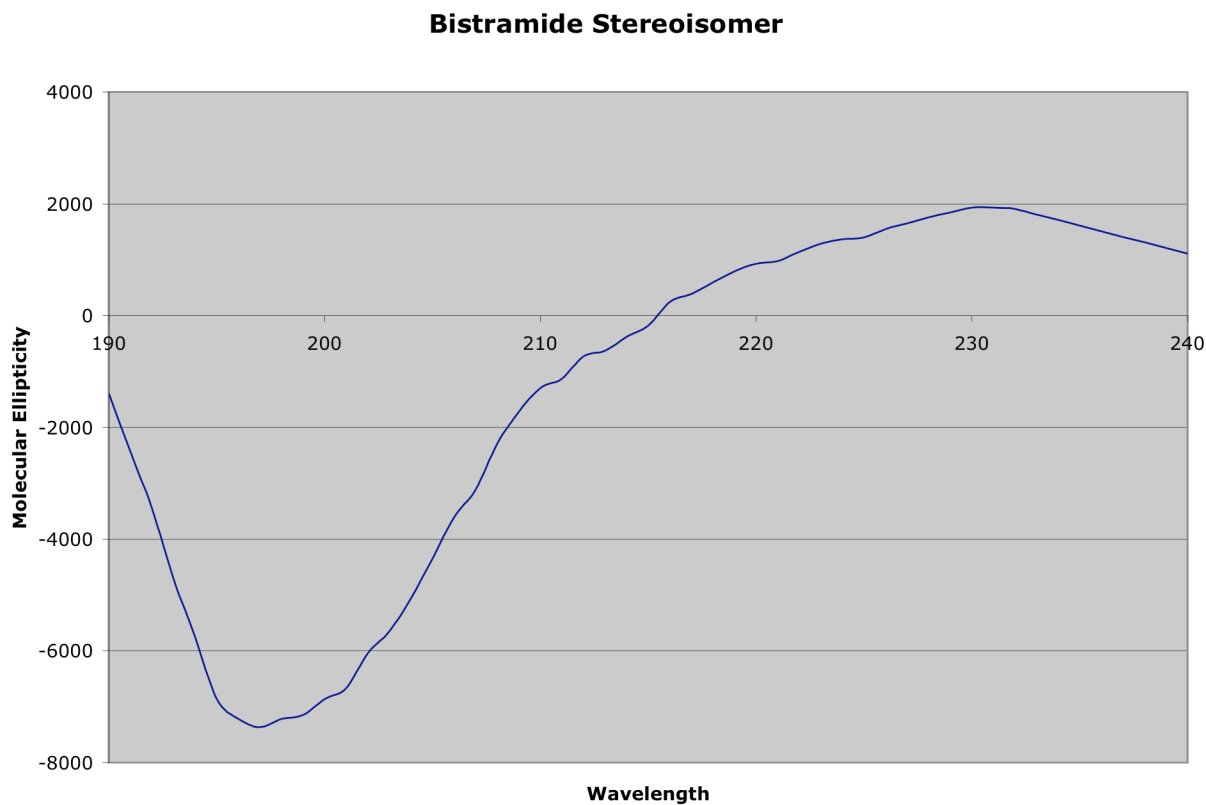
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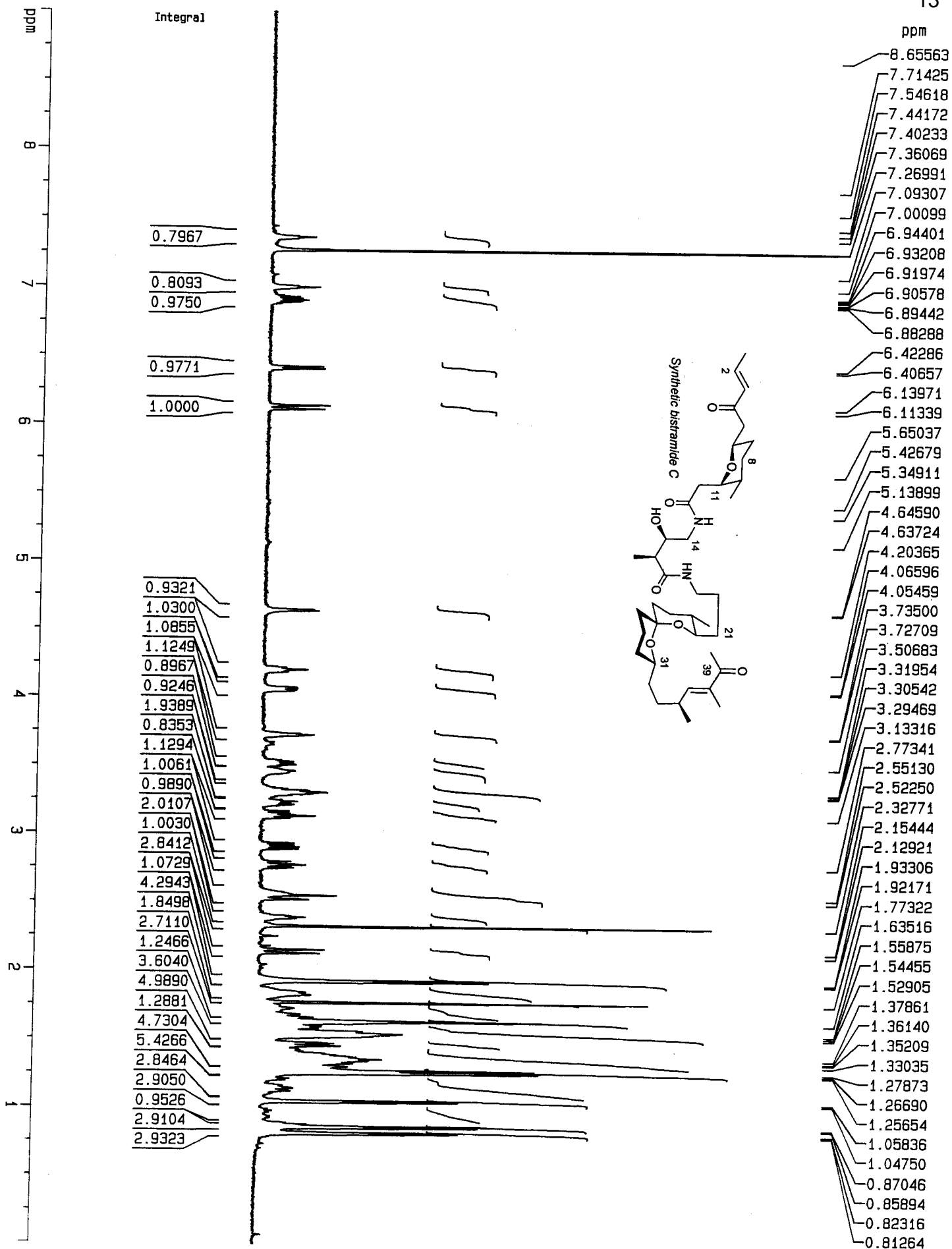
CD spectrum of synthetic bistramide C (c 0.5 mg/mL, MeOH, 22 °C)

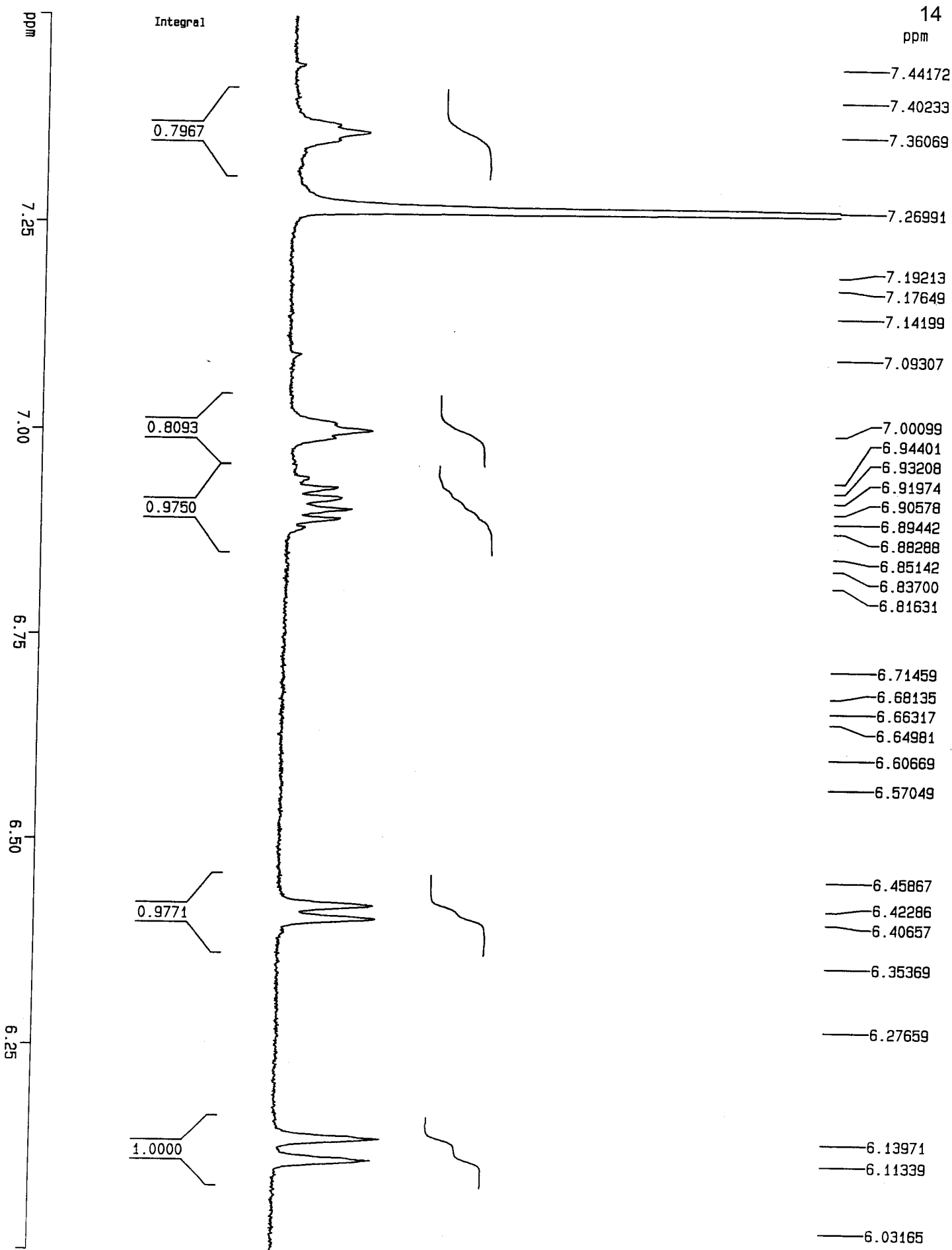


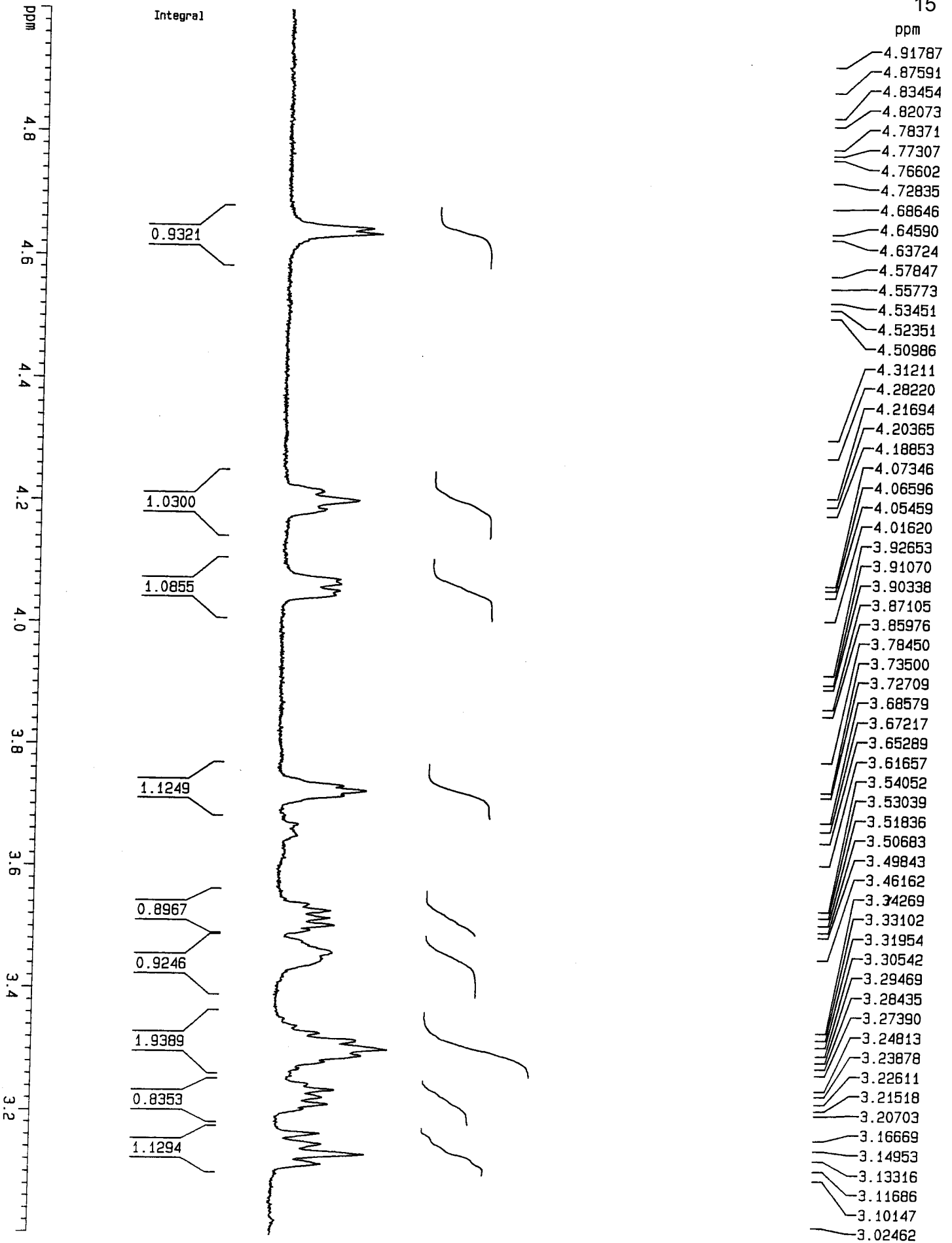
CD spectrum of the (6*S*,9*R*,11*R*,15*S*,16*R*,22*R*,23*S*,27*S*,31*S*,34*R*)-stereoisomer of bistramide C³ (*c* 0.5 mg/mL, MeOH, 22 °C)

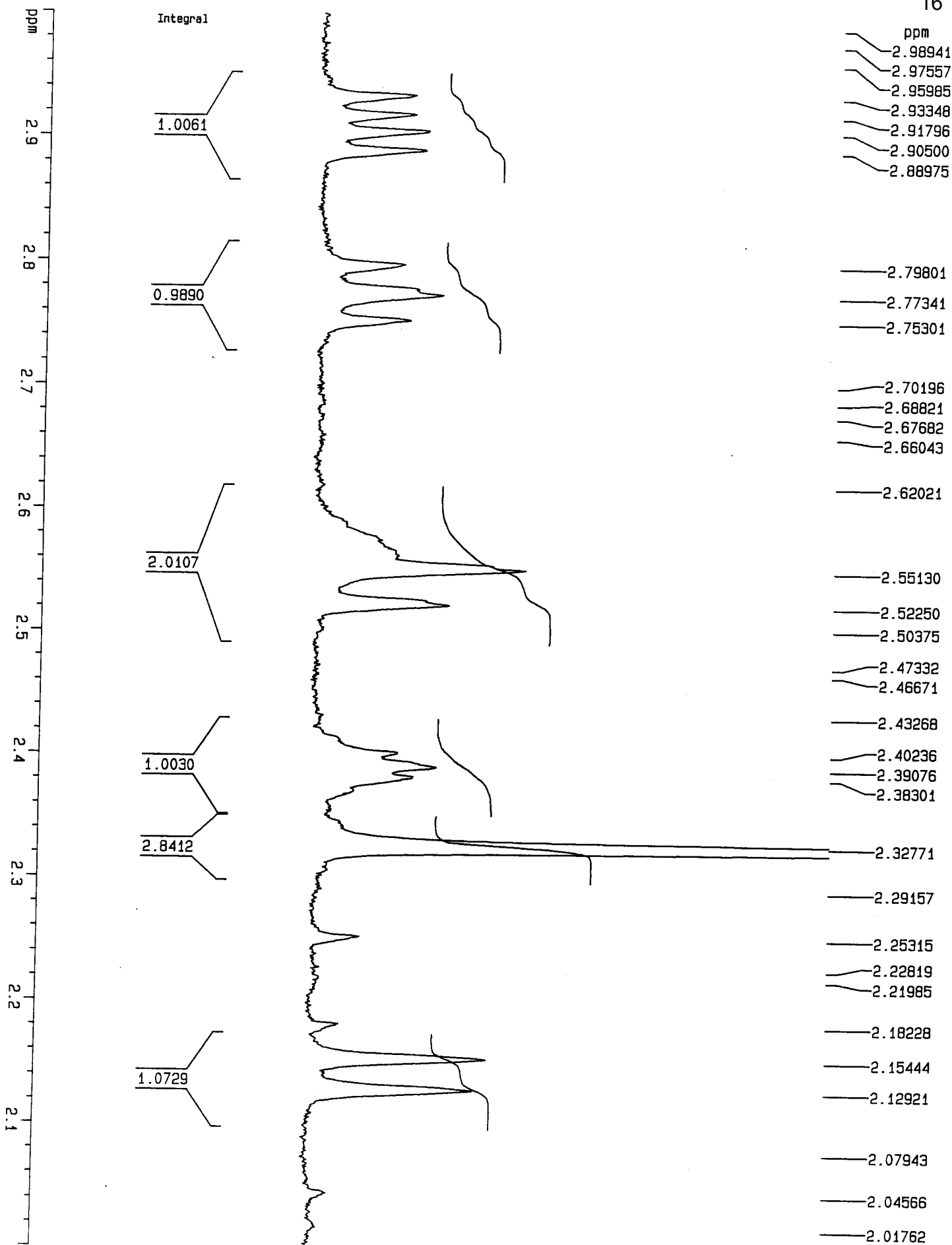


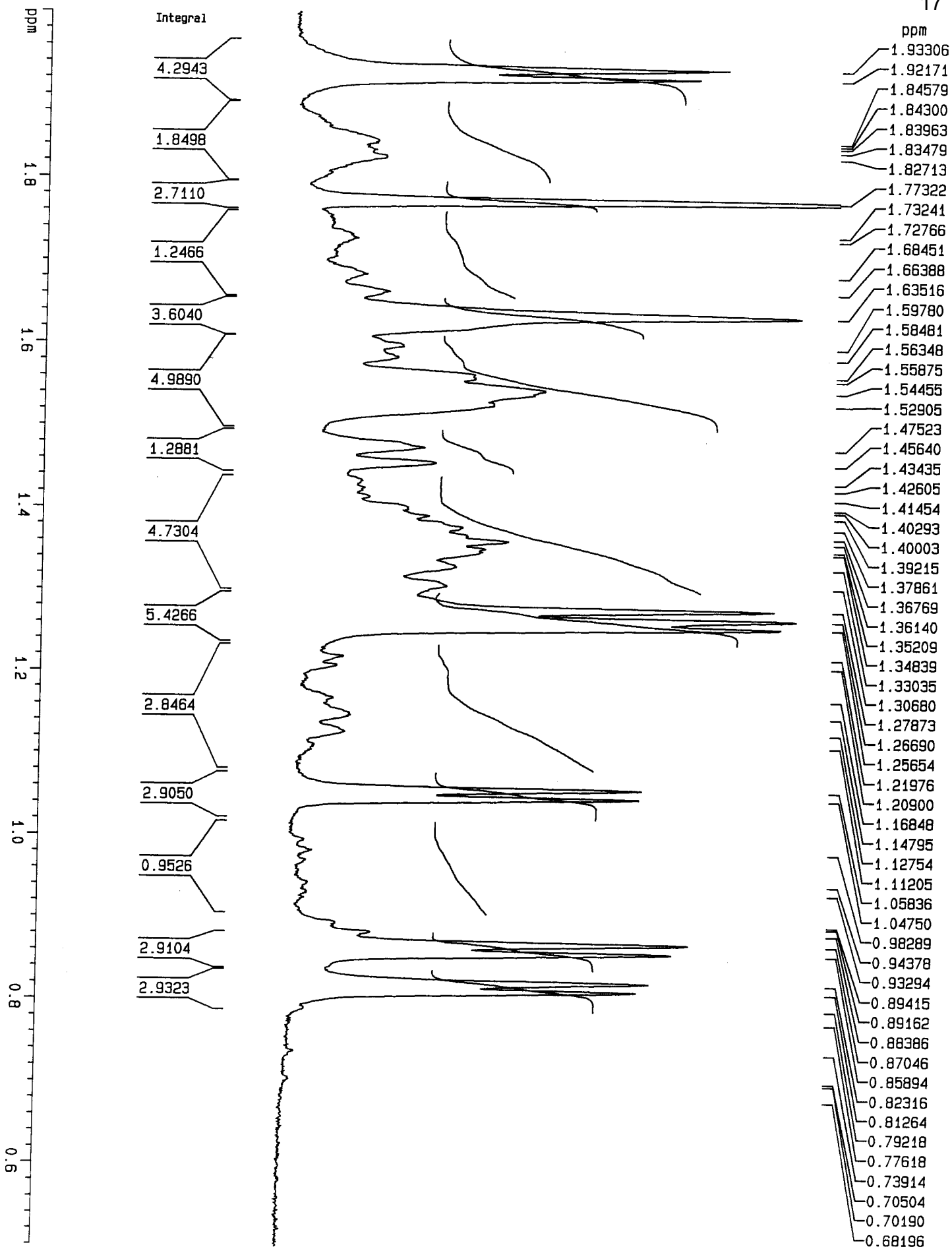
³ P. Wipf, Y. Uto and S. Yoshimura, *Chem. Eur. J.*, 2002, **8**, 1670-1681.













Current Data Parameters

NAME Pitt
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PROCNO 1

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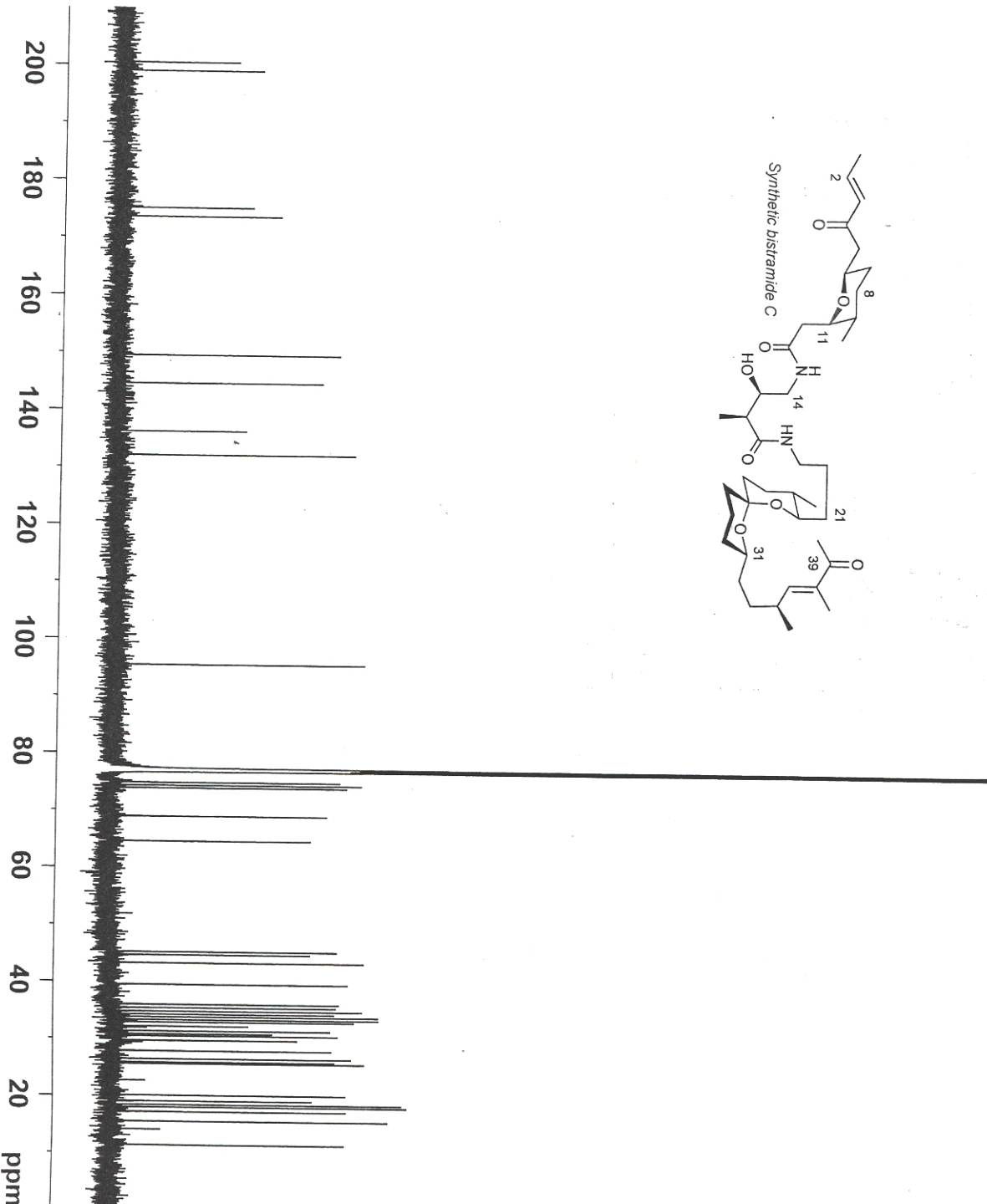
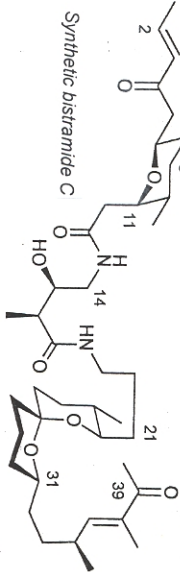
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PL12 14.75 dB
PL13 14.19 dB
SFO2 599.8723995 MHz

F2 - Processing parameters

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WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

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144.61
136.20
132.05
95.44
77.82
77.22
77.00
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74.87
74.36
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68.94
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43.26
39.52
36.02
35.42
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ID 13C

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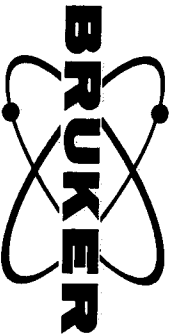
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136.20

132.05

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EXPNO 9
PROCNO 1

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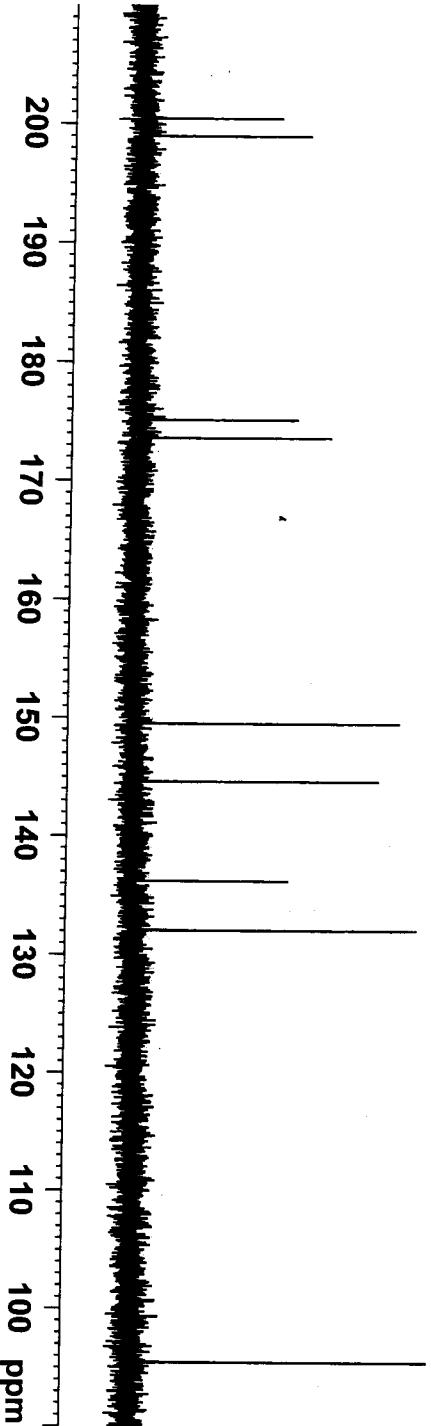
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FIDRES 0.550197 Hz
AQ 0.9088159 sec
RG 7290
DW 13.867 usec
DE 6.00 usec
TE 298.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 150

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 0.50 dB
SFO1 150.8525152 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 70.00 usec
PL2 -1.85 dB
PL12 14.75 dB
PL13 14.19 dB
SFO2 599.8723995 MHz

F2 - Processing parameters

SI 65536
SF 150.8374369 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



20
1D 13C

77.82
77.22
77.00
76.79
74.87
74.36
73.89
68.94
64.60

45.24
44.70
43.28
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34.81
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33.34
33.00
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32.17
31.92
31.33
30.82
30.46
29.69
29.36
27.85
26.46
25.88
25.60
22.69
20.09
19.08
18.45
18.02
17.21
15.54
14.13
11.40

85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 ppm



Current Data Parameters
NAME Plt
EXPNO 9
PROCNO 1

F2 - Acquisition Parameters

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INSTRUM spect
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PULPROG zgpg30
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DS 4
SWH 36057.691 Hz
FIDRES 0.550197 Hz
AQ 0.9088159 sec
RG 7290
DW 13.867 usec
DE 6.00 usec
TE 298.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 150

==== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 0.50 dB
SFO1 150.8525152 MHz

==== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 70.00 usec
PL2 -1.85 dB
PL12 14.75 dB
PL13 14.19 dB
SFO2 599.8723995 MHz

F2 - Processing parameters
SI 65536
SF 150.8374369 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1D 13C

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35.42
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33.00
32.90
32.17
31.92
31.33
30.92
30.46
29.69
29.36
27.85
26.46
25.98
25.60
22.69
20.09
19.08
18.45
18.02
17.21
15.54
14.13
11.40



Current Data Parameters
NAME Pitt
EXPNO 9
PROCNO 1

F2 - Acquisition Parameters

Date_ 20050324
Time 13.52
INSTRUM spect
PROBHD 3 mm FIDUL 13C
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 4096
DS 4
SWH 36057.691 Hz
FIDRES 0.550197 Hz
AQ 0.9088159 sec
RG 7290
DW 13.867 usec
DE 6.00 usec
TE 298.0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 150

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 0.50 dB
SFO1 150.8525152 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 70.00 usec
PL2 -1.85 dB
PL12 14.75 dB
PL13 14.19 dB
SFO2 599.8723995 MHz

F2 - Processing parameters
SI 65536
SF 150.8374369 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

55
50
45
40
35
30
25
20
15
10
5
ppm

dept135

149.49
144.60
132.05

77.20
74.87
74.36
73.89
68.94
64.59
45.24
44.70
43.28
39.53
36.02
35.42
34.81
34.26
33.82
33.34
32.90
32.17
31.33
30.82
30.47
29.69
27.86
26.46
25.88
25.60
20.09



Current Data Parameters
NAME Pitt
EXPNO 12
PROCNO 1

F2 - Acquisition Parameters
Date_ 20050324
Time_ 17.10

INSTRUM spect
PROBHD 3 mm FIDUL 13C
PULPROG dept135
TD 65536
SOLVENT CDCl3
NS 512
DS 4

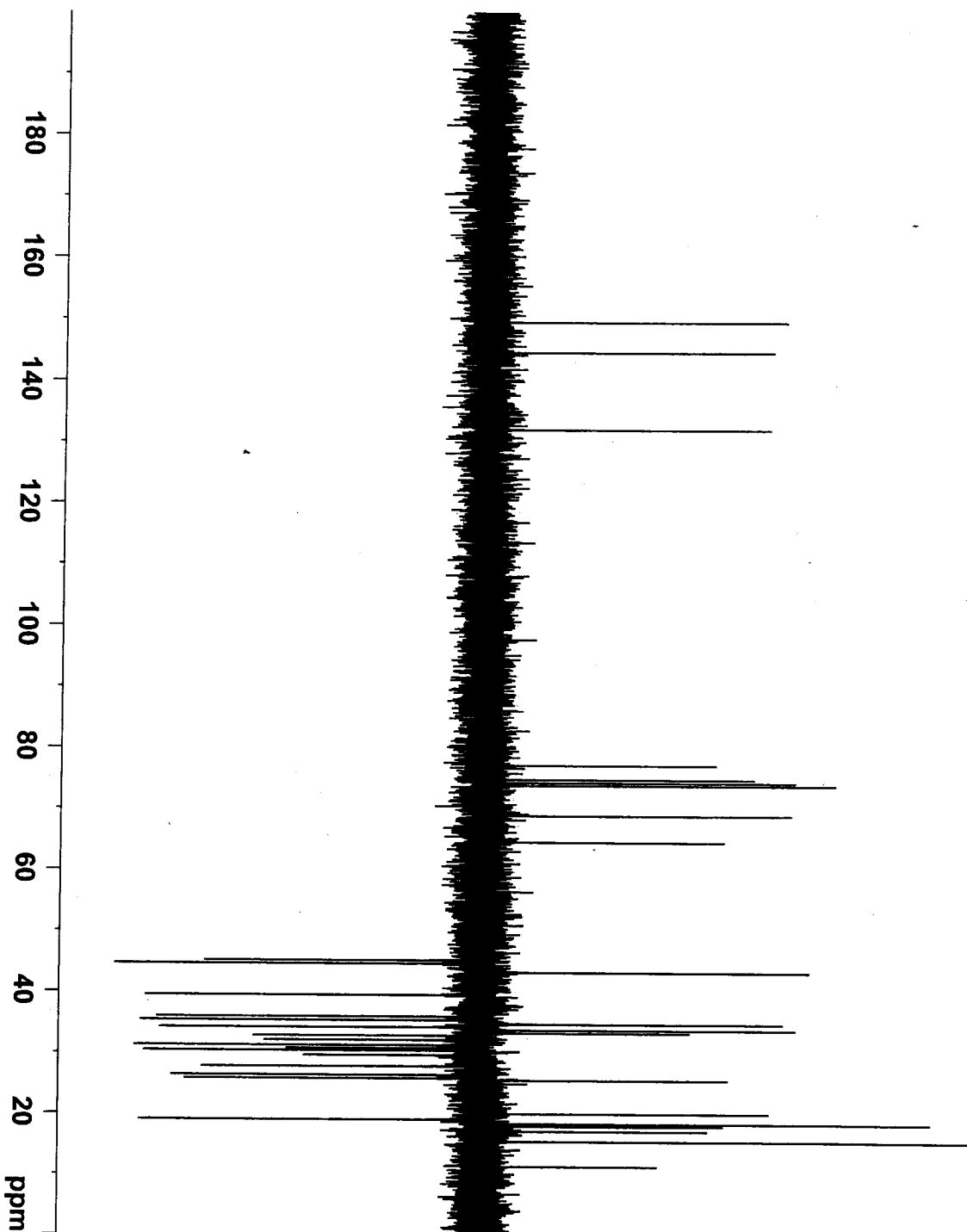
SWH 36057.691 Hz
FIDRES 0.550197 Hz
AQ 0.9088159 sec
RG 7290
DW 13.867 usec
DE 6.00 usec
TE 298.0 K

CNST2 145.000000
D1 2.00000000 sec
d2 0.00344828 sec
d12 0.00002000 sec
DELTA 0.00001146 sec
TD 1

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
P2 18.00 usec
PL1 0.50 dB
SFO1 150.8525152 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
P3 10.45 usec
P4 20.90 usec
PCPD2 70.00 usec
PL2 -1.85 dB
PL12 14.67 dB
SFO2 599.8723995 MHz

F2 - Processing parameters
SI 32768
SF 150.8374310 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

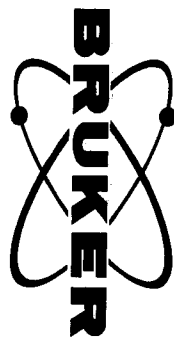


DEPT90

149.50
144.69
144.61
132.05

77.20
74.87
74.36
73.89
68.94
64.59

43.28
34.81
33.82
33.33



Current Data Parameters
NAME Pitt
EXPNO 13
PROCNO 1

F2 - Acquisition Parameters
Date_ 20050324

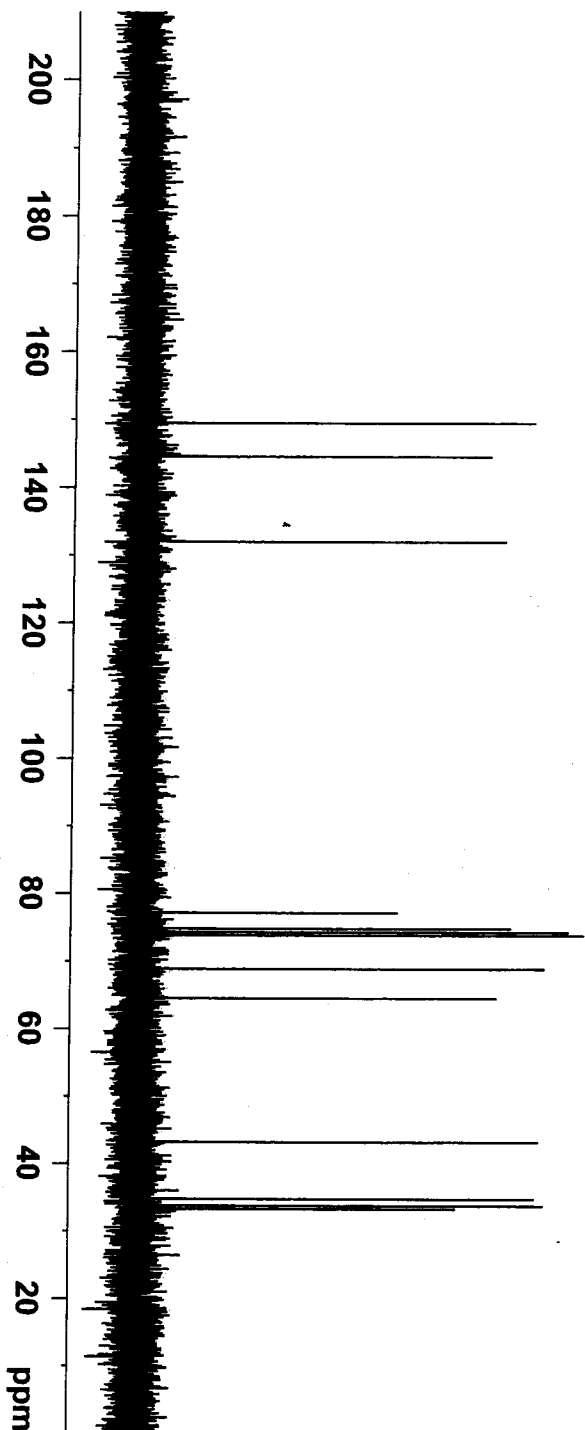
Time_ 18.16
INSTRUM spect
PROBHD 3 mm FIDUL 13C
PULPROG dept90
TD 65536
SOLVENT CDCl3
NS 512
DS 4
SWH 36057.691 Hz
FIDRES 0.550197 Hz
AQ 0.9088159 sec
RG 16384
DM 13.867 usec
DE 6.00 usec
TE 298.0 K
CNST2 145.000000
D1 2.00000000 sec
d2 0.00344828 sec
d12 0.00002000 sec
DELTA 0.00001146 sec
TD0 1

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
P2 18.00 usec
PL1 0.50 dB
SFO1 150.8525152 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
P3 10.45 usec
P4 20.90 usec
PCPD2 70.00 usec
PL2 -1.85 dB
PL12 14.67 dB
SFO2 599.8723995 MHz

F2 - Processing parameters

SI 65536
SF 150.8374369 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40





Current Data Parameters
NAME Pitt
EXPNO 11
PROCNO 1

F2 - Acquisition Parameters

Date_ 20050324
Time 11.45
INSTRUM spect
PROBHD 3 mm FIDUL 13C
PULPROG cosygpzf
TD 2048
SOLVENT DMSO
NS 4
DS 8
SWH 6009.615 Hz
FIDRES 2.934382 Hz
AQ 0.1704436 sec
RG 362
DW 83.200 usec
DE 6.00 usec
TE 298.0 K
d0 0.00000300 sec
d1 1.48689198 sec
d13 0.00000400 sec
d16 0.00010000 sec
IN0 0.00016670 sec

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

NUC1 ¹H
P0 9.00 usec
P1 10.45 usec
PL1 -1.85 dB
SFO1 599.8723995 MHz

===== GRADIENT CHANNEL =====

GRAM1 SINE.100
GENAM2 SINE.100
GP21 10.00 %
GP22 10.00 %
P16 1000.00 usec

F1 - Acquisition Parameters

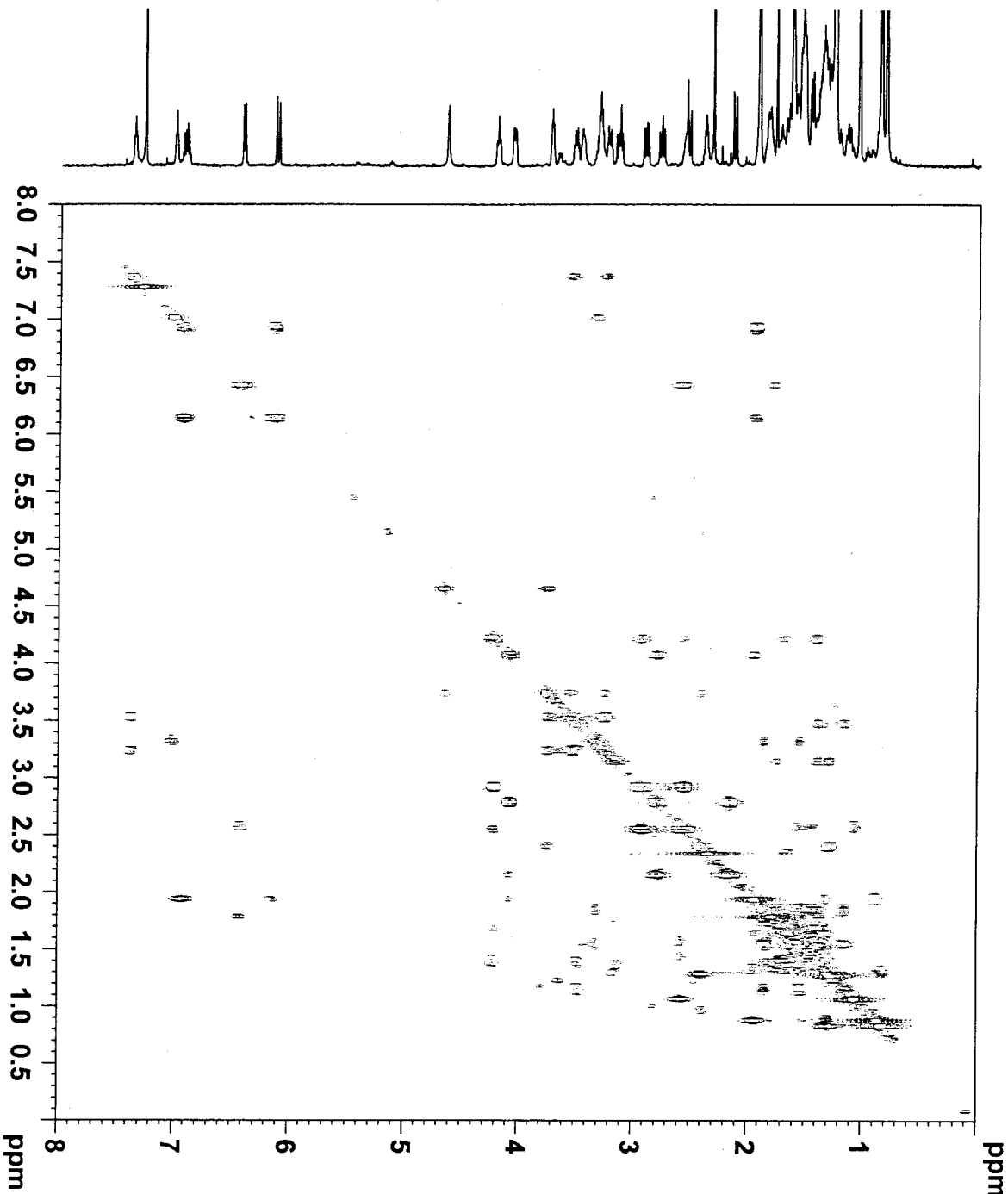
ND0 1
TD 128
SFO1 599.8724 MHz
FIDRES 46.865627 Hz
SW 10.000 ppm
FMODE QF

F2 - Processing Parameters

SI 1024
SF 599.8700000 MHz
WDW SINE
SSB 0
LB 0.00 Hz
GB 0
PC 1.40

F1 - Processing Parameters

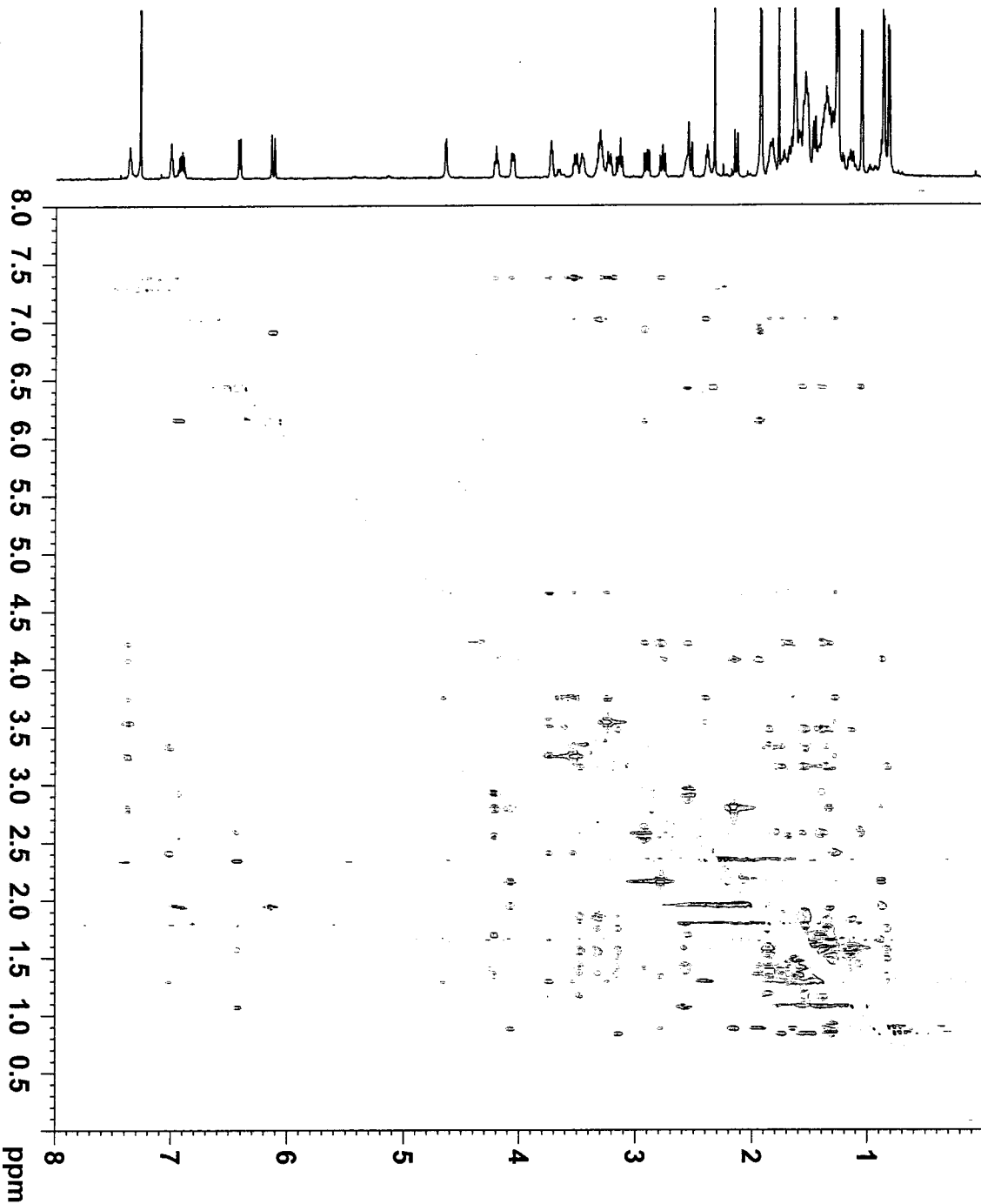
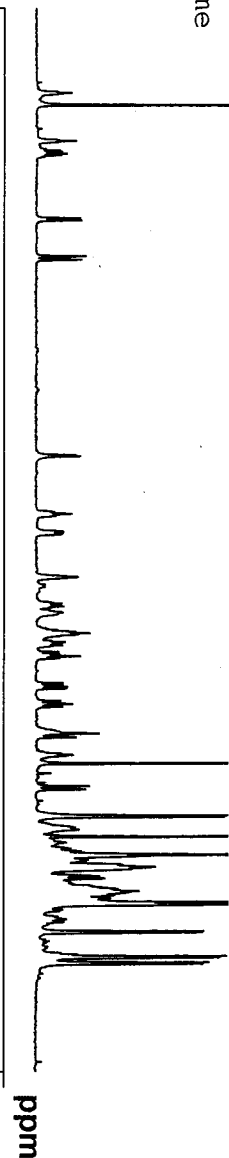
SI 1024
CF QF
SF 599.8700000 MHz
WDW SINE
SSB 0
LB 0.00 Hz
GB 0



⁵NOESY
200ms Mixing Time



Current Data Parameters
NAME Filt
EXPNO 14
PROCNO 1



F2 - Acquisition Parameters
Date_ 20050324
Time 18.39
INSTRUM spect
PROBHD 3 mm FIDUL 13C
PULPROG noesyetgp
TD 2048
SOLVENT CDCl3
NS 16
DS 4
SWH 6009.615 Hz
FIDRES 2.934382 Hz
AQ 0.1704436 sec
RG 1030
DE 83.200 usec
TE 298.0 K
D0 0.0000300 sec
D1 2.0000000 sec
D8 0.2000000 sec
d11 0.0300000 sec
d16 0.0001000 sec
DELTA 0.0010300 sec
DELTA1 0.0010800 sec
INO 0.0016640 sec
STICNT 128
TAU 0.19890000 sec

===== CHANNEL f1 =====
NUC1 1H
P1 10.45 usec
P2 20.90 usec
PL1 -1.85 dB
SFO1 599.8723951 MHz

===== GRADIENT CHANNEL =====
GENAM1 SINE.100
GENAM2 SINE.100
GENAM3 SINE.100
GFE1 30.00 %
GFE2 30.00 %
GFE3 30.00 %
P16 1000.00 usec

F1 - Acquisition Parameters
ND0 1
ND 400
SFO1 599.8724 MHz
FIDRES 13.021038 Hz
SW 10.018 ppm
FMODE Echo-Antiecho

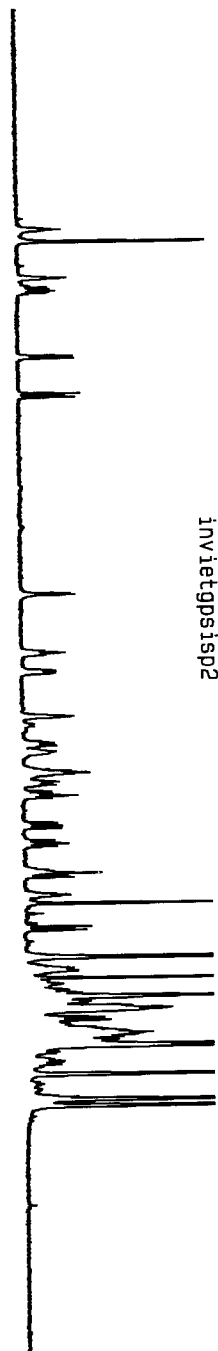
F2 - Processing Parameters
SI 599.8700000 MHz
SF 599.8700000 MHz
WDW QSI
SSB 2
LB 0.00 Hz
GB 0
PC 1.40

F1 - Processing Parameters
SI echo-anti1024
MC2 599.8700000 MHz
SF 599.8700000 MHz
WDW QSI
SSB 2
LB 0.00 Hz
GB 0

HSQC

HSQC

invletgpsisp2



Current Data Parameters:

NAME	Pitt
EXPNO	6
PROCNO	1

F1 - Acquisition parameters

ND0	2
TD	256
SFO1	150.8487 MHz
FIDRES	97.656250 Hz
SN	165.729 ppm

F2 - Processing parameters

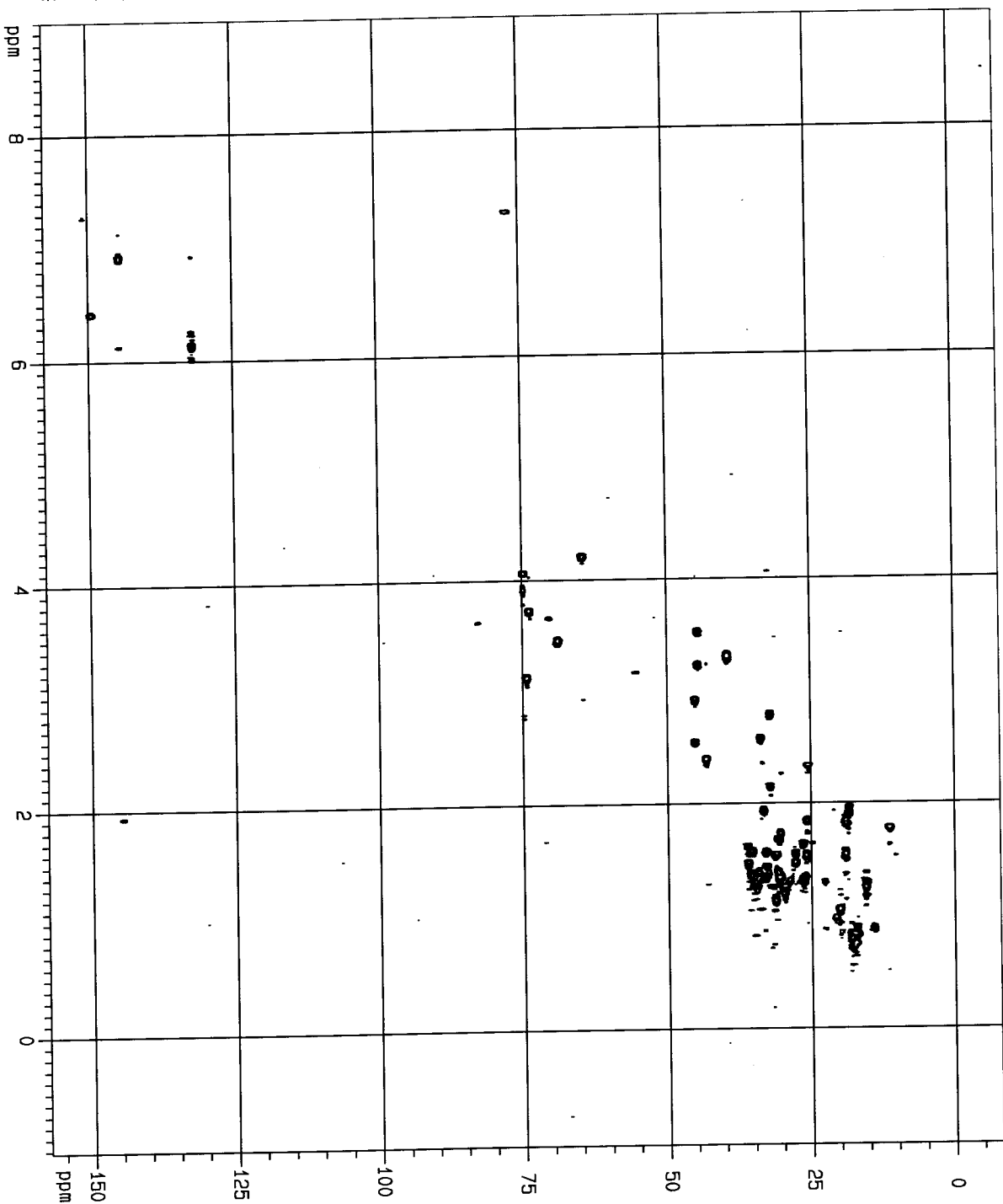
SI	1024
SF	599.8700045 MHz
WDW	SSINE
SSB	2
LB	0.00 Hz
GB	0
PC	1.40

F1 - Processing parameters

SI	1024
MC2	echo-antiecho
SF	150.8374527 MHz
WDW	SSINE
SSB	2
LB	0.00 Hz
GB	0

2D NMR plot parameters

CX2	18.00 cm
CX1	15.00 cm
F2PLO	9.002 ppm
F2LO	5399.83 Hz
F2PHI	-1.017 ppm
F2HI	-609.79 Hz
F1PLO	157.705 ppm
F1LO	23787.80 Hz
F1PHI	-8.036 ppm
F1HI	-1212.20 Hz
F2PVMCM	0.55657 ppm/cm
F2HZCM	333.86752 Hz/cm
F1PVMCM	11.04942 ppm/cm
F1HZCM	1666.66663 Hz/cm



H S Q C

Current Data Parameters:

NAME Pitt
EXPNO 6
PROCNO 1

F1 - Acquisition parameters

ND0 2
TD 256
SFO1 150.8467 MHz
FIDRES 97.656250 Hz
SM 165.729 ppm

F2 - Processing parameters

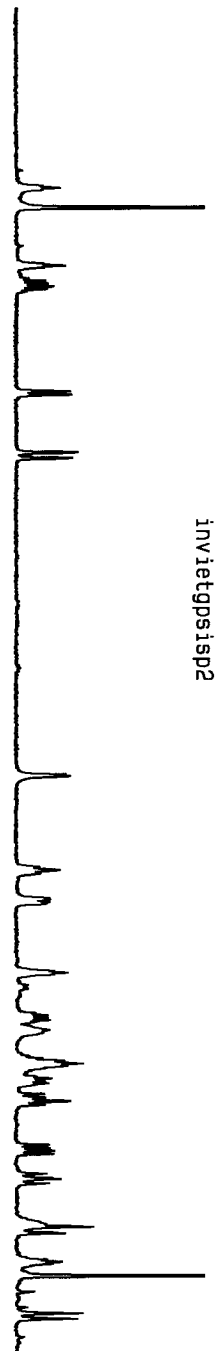
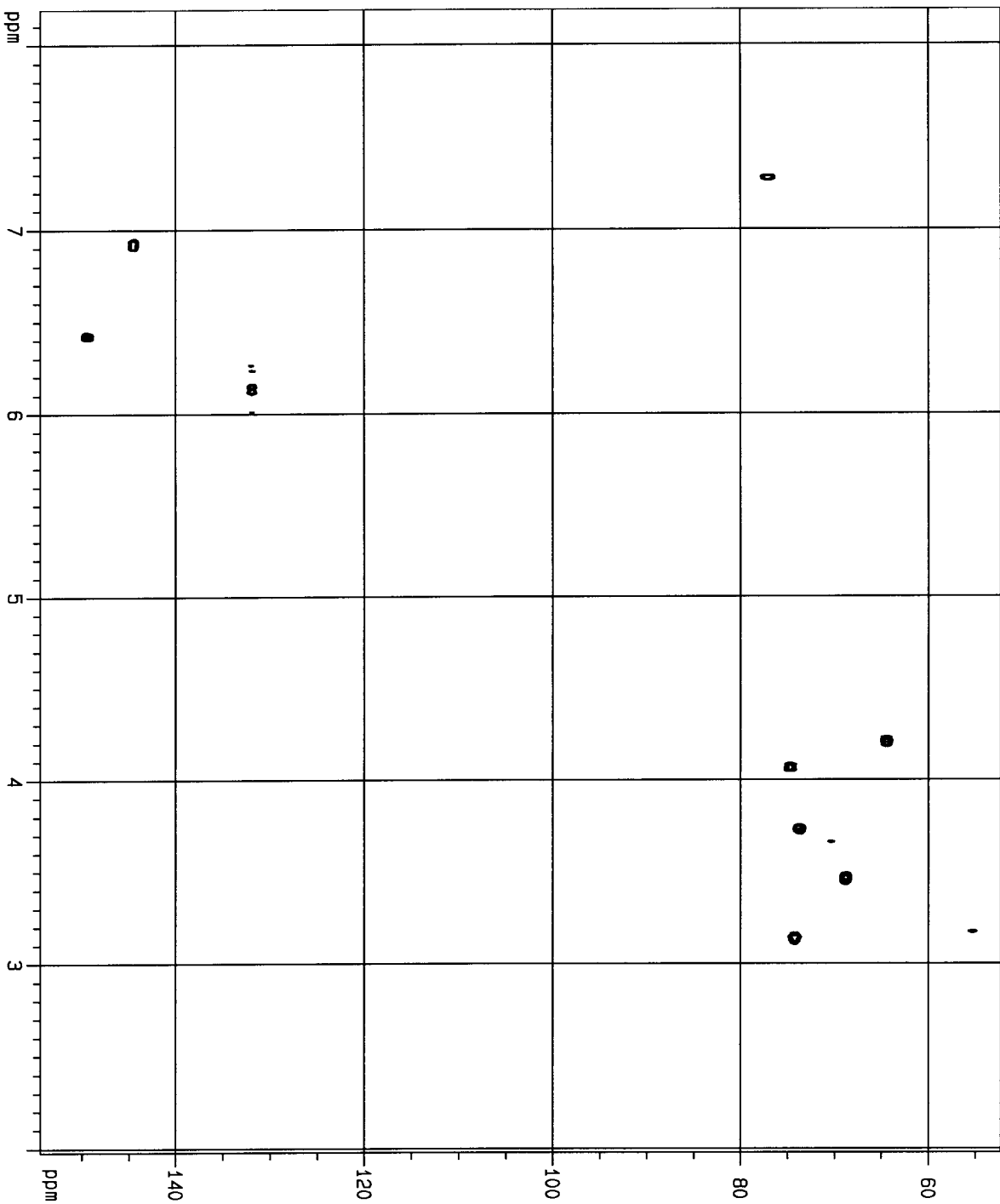
SI 1024
SF 599.870038 MHz
WDW GSINE
SSB 2
LB 0.00 Hz
GB 0
PC 1.40

F1 - Processing parameters

SI 1024
MC2 echo-anti-echo
SF 150.8374559 MHz
WDW GSINE
SSB 2
LB 0.00 Hz
GB 0

2D NMR plot parameters

CX2 18.00 cm
CX1 15.00 cm
F2P10 8.191 ppm
F2P10 4913.37 Hz
F2P10 1.978 ppm
F2P10 1186.71 Hz
F1P10 154.446 ppm
F1L0 23296.29 Hz
F1P10 52.315 ppm
F1H1 7891.02 Hz
F2P1MCM 0.34514 ppm/cm
F2H2CM 207.03699 Hz/cm
F1P1MCM 6.80877 ppm/cm
F1H2CM 1027.01831 Hz/cm



invietgpsisp2

HSQC

Current Data Parameters:

NAME Pitt
EXPNO 6
PROCNO 1

invietgpsispd2

F1 - Acquisition Parameters

ND0 2
TD 256
SF01 150.8487 MHz
FIDRES 97.656250 Hz
SM 165.729 ppm

F2 - Processing parameters

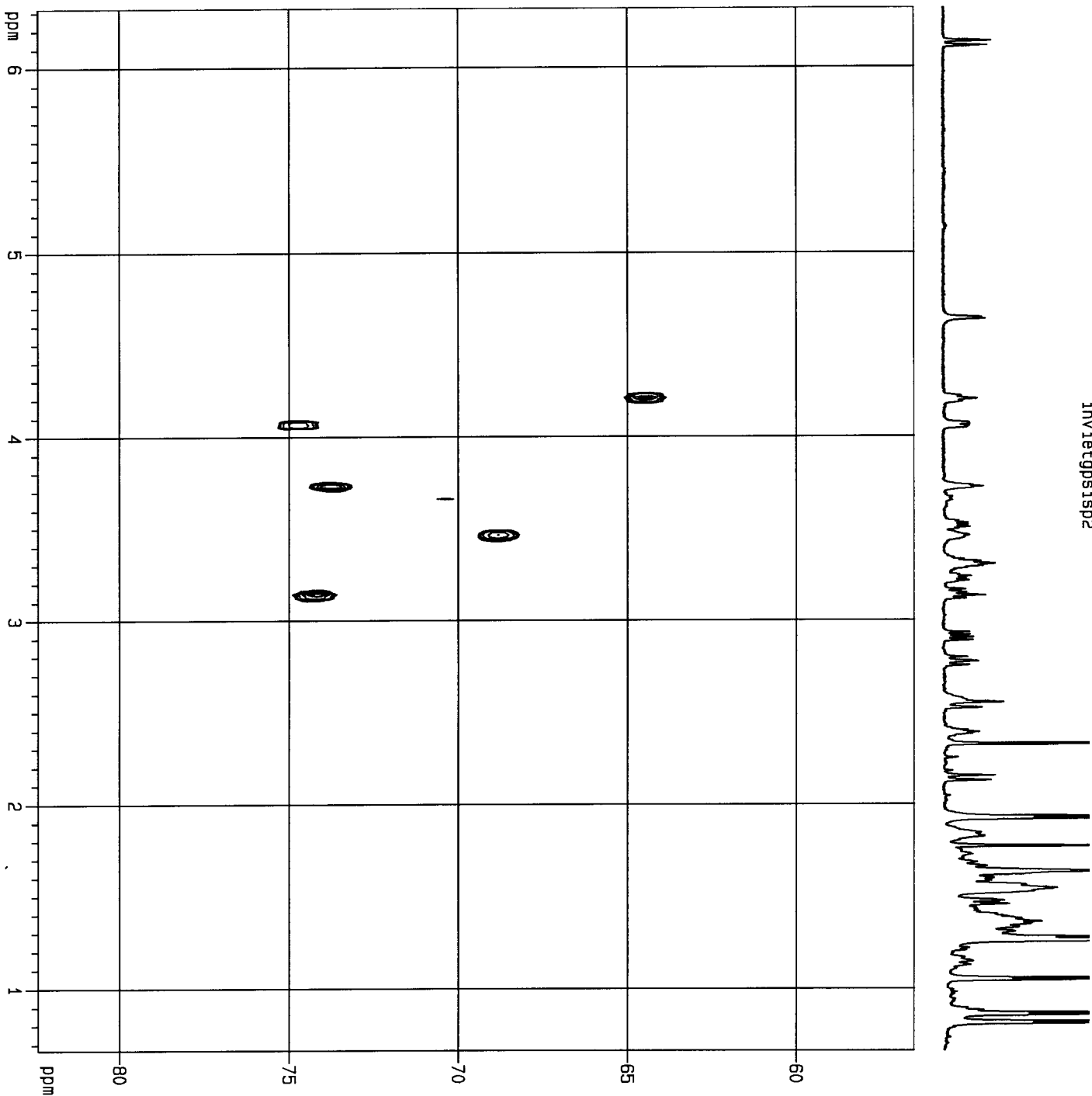
SI 1024
SF 599.8700038 MHz
WDW QSINE
SSB 2
LB 0.00 Hz
GB 0
PC 1.40

F1 - Processing parameters

SI 1024
MC2 echo-antiecho
SF 150.8374559 MHz
WDW QSINE
SSB 2
LB 0.00 Hz
GB 0

2D NMR plot parameters

CX2 18.00 cm
CX1 15.00 cm
F2PLO 6.322 ppm
F2LO 3792.44 Hz
F2PHI 0.667 ppm
F2HI 400.29 Hz
F1PLO 82.420 ppm
F1LO 12432.03 Hz
F1PHI 56.523 ppm
F1HI 8625.78 Hz
F2PPMCM 0.31416 ppm/cm
F2HZCM 188.45258 Hz/cm
F1PPMCM 1.72647 ppm/cm
F1HZCM 260.41669 Hz/cm



Current Data Parameters:

NAME Pitt
EXPNO 6
PROCNO 1

F1 - Acquisition parameters:

NDO 2
TD 256
SFO1 150.8467 MHz
FIDRES 97.656250 Hz
SW 165.729 ppm

F2 - Processing parameters:

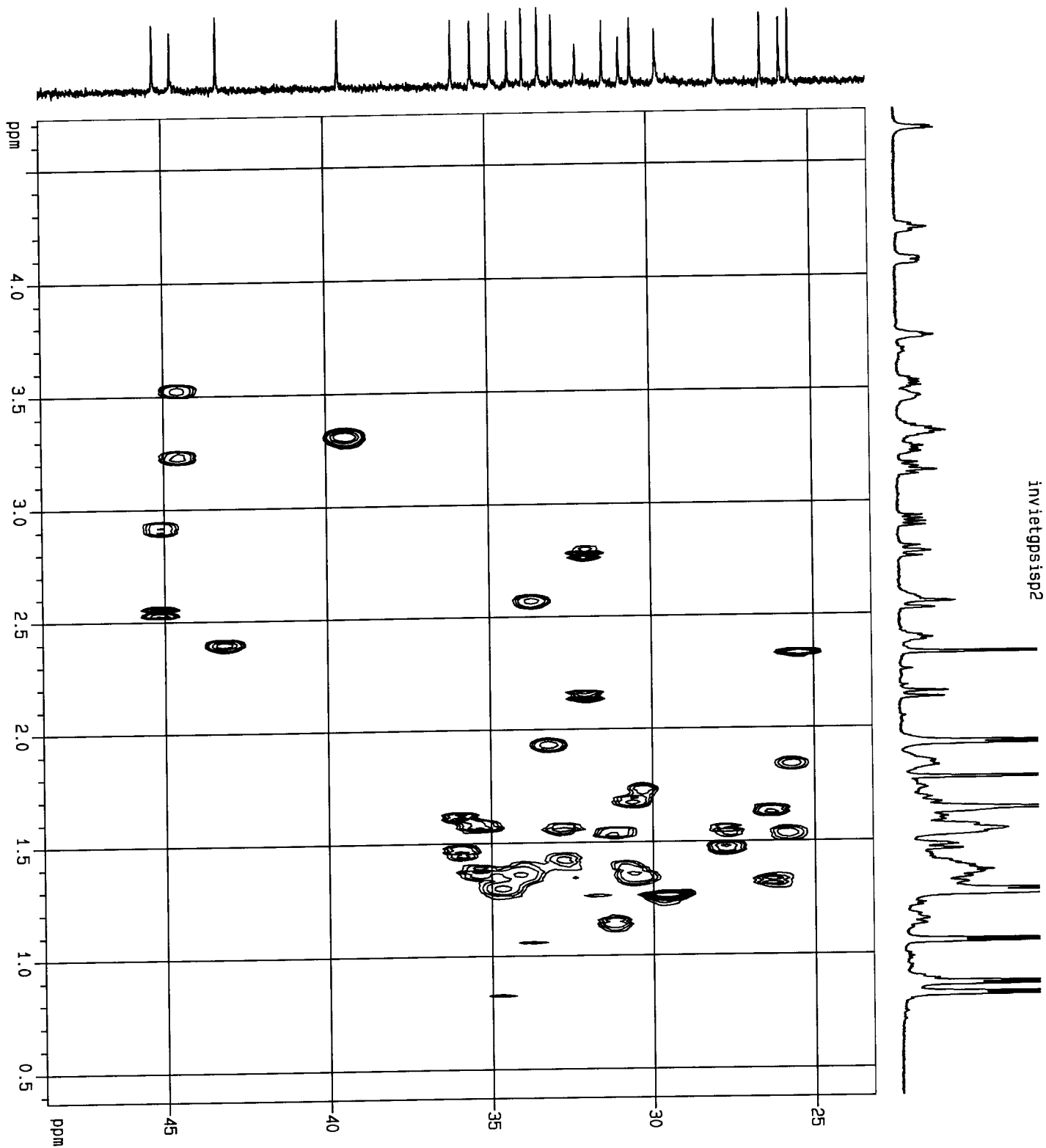
SI 1024
SF 599.8700045 MHz
WDW GSSINE
SSB 2
LB 0.00 Hz
GB 0
PC 1.40

F1 - Processing parameters:

SI 1024
MC2 echo-antiecho
SF 150.8374527 MHz
WDW GSSINE
SSB 2
LB 0.00 Hz
GB 0

2D NMR plot parameters

CX2 18.00 cm
CX1 15.00 cm
F2PLO 4.726 ppm
F2LO 2835.18 Hz
F2PHI 0.373 ppm
F2HI 223.58 Hz
F1PLO 48.775 ppm
F1LO 7357.14 Hz
F1PHI 23.202 ppm
F1HI 3499.72 Hz
F2PPMCM 0.24187 ppm/cm
F2HZCM 145.08893 Hz/cm
F1PPMCM 1.70489 ppm/cm
F1HZCM 257.16144 Hz/cm



Current Data Parameters

NAME Pitt
EXPNO 6
PROCNO 1

F1 - Acquisition parameters

NDO 2
TD 256
SF01 150.8467 MHz
FIDRES 97.656250 Hz
SW 165.729 ppm

F2 - Processing parameters

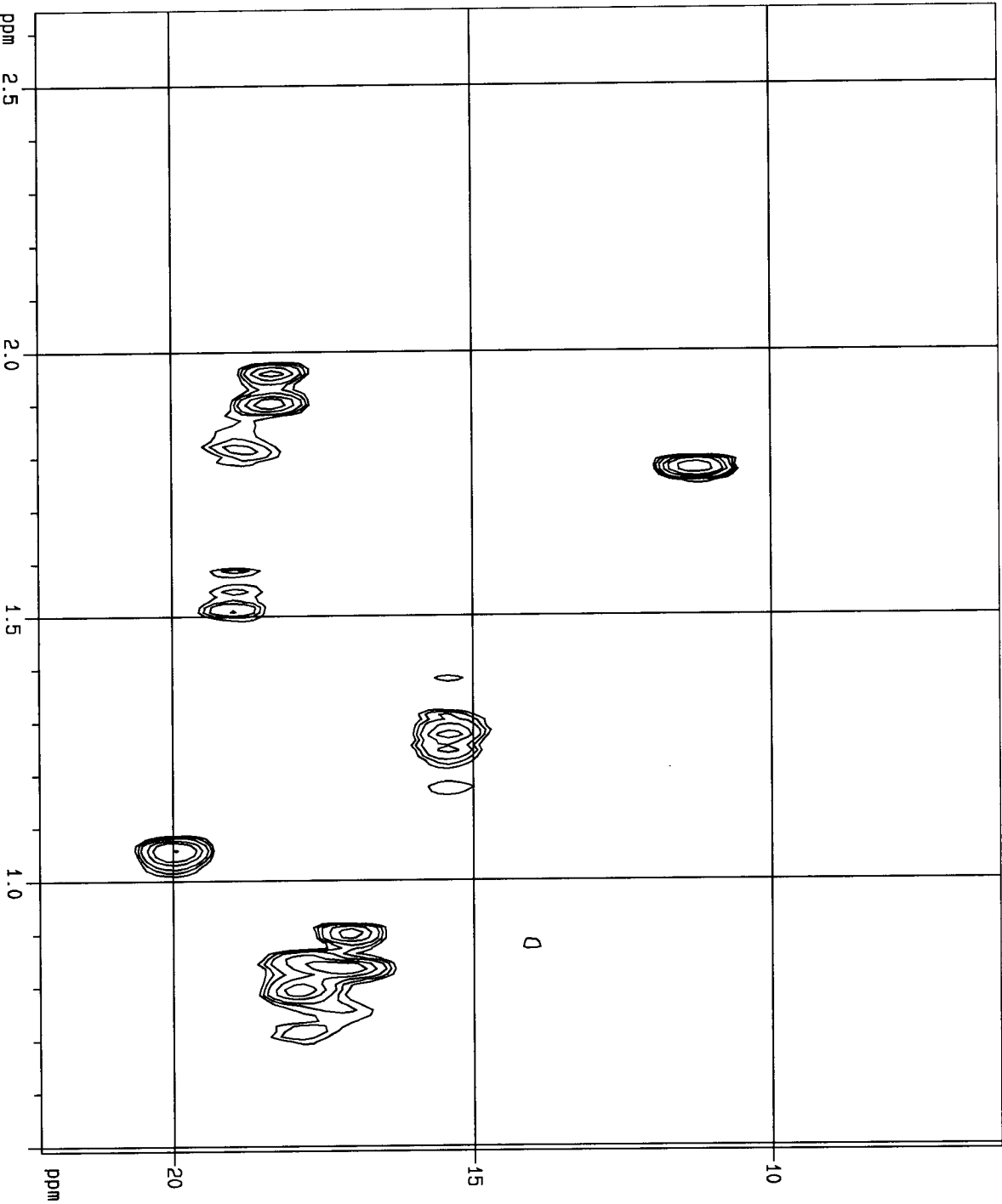
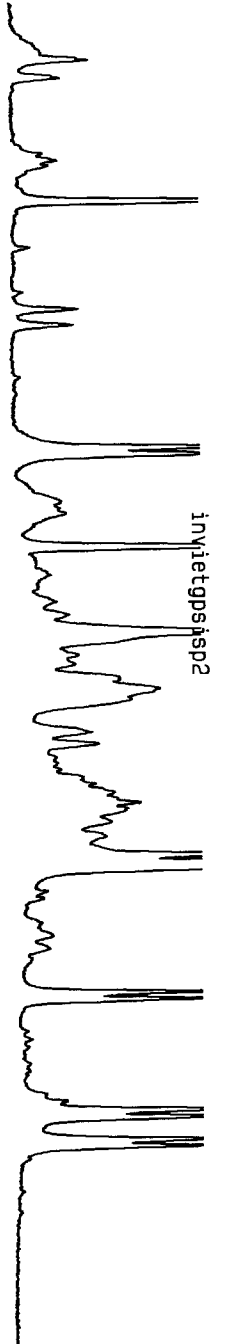
SI 1024
SF 599.870038 MHz
WDW QSINE
SSB 2
LB 0.00 Hz
GB 0
PC 1.40

F1 - Processing parameters

SI 1024
MC2 echo-antiecho
SF 150.8374559 MHz
WDW QSINE
SSB 2
LB 0.00 Hz
GB 0

2D NMR plot parameters

CX2 18.00 cm
CX1 15.00 cm
F2PLO 2.644 ppm
F2LO 1586.78 Hz
F2PHI 0.491 ppm
F2HI 294.66 Hz
F1PLO 22.209 ppm
F1LO 3350.00 Hz
F1PHI 6.186 ppm
F1HI 933.01 Hz
F2PPMCM 0.11957 ppm/cm
F2HZCM 71.72936 Hz/cm
F1PPMCM 1.06825 ppm/cm
F1HZCM 161.13281 Hz/cm



HSQC

Current Data Parameters:

NAME Pitt
EXPNO 6
PROCNO 1

F1 - Acquisition parameters

NDO 2
TD 256
SFO1 150.8487 MHz
FIDRES 97.656250 Hz
SW 165.729 ppm

F2 - Processing parameters

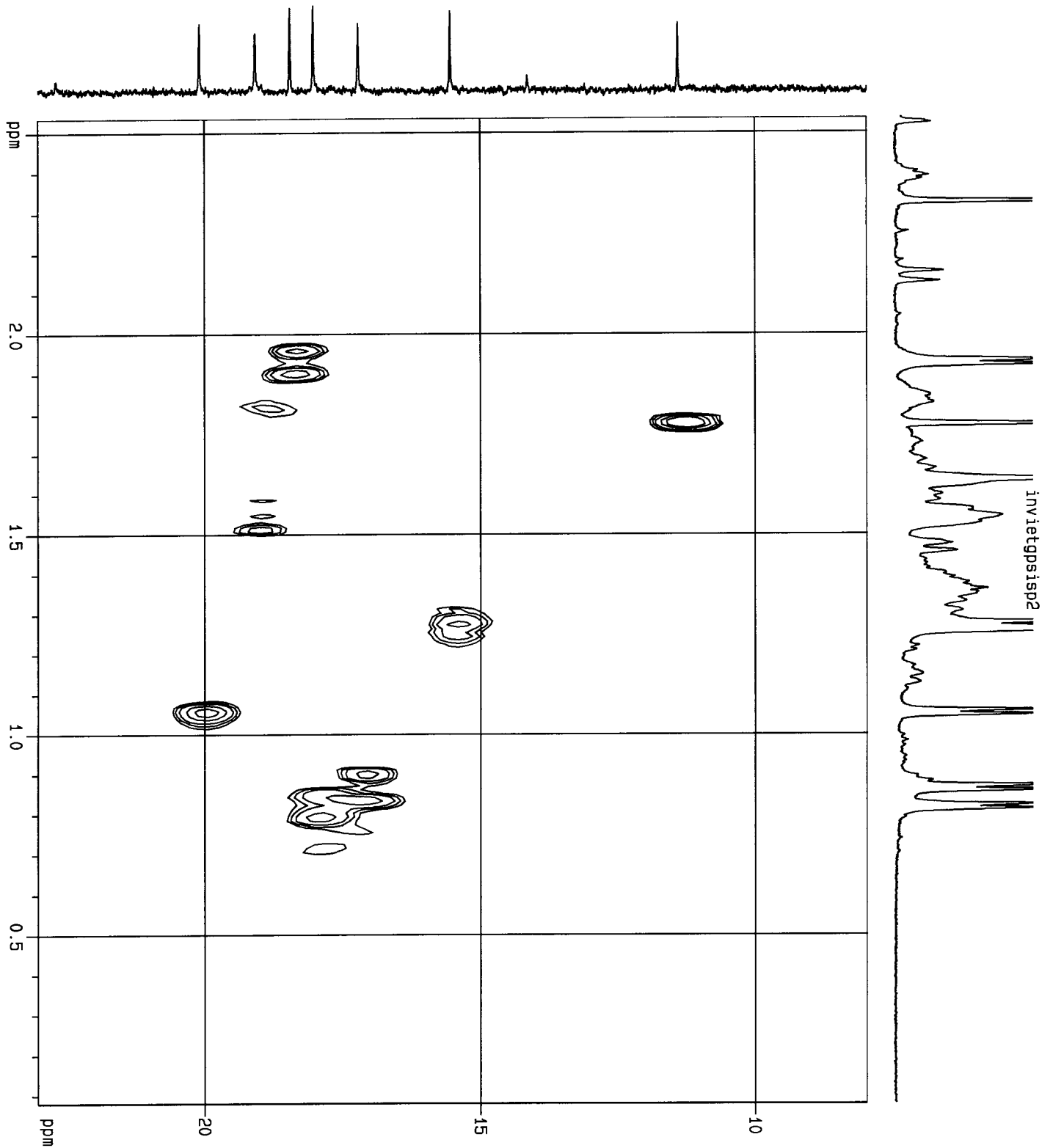
SI 1024
SF 599.8700098 MHz
WDW 6SINE
SSB 2
LB 0.00 Hz
GB 0
PC 1.40

F1 - Processing parameters

SI 1024
MC2 echo-antiecho
SF 150.8374559 MHz
WDW 6SINE
SSB 2
LB 0.00 Hz
GB 0

2D NMR plot parameters

CX2 18.00 cm
CX1 15.00 cm
F2PL0 2.536 ppm
F2L0 1521.22 Hz
F2PHI 0.080 ppm
F2H1 48.16 Hz
F1PL0 23.019 ppm
F1L0 3472.07 Hz
F1PHI 7.966 ppm
F1H1 1201.56 Hz
F2PPMCM 0.13642 ppm/cm
F2HZCM 81.83667 Hz/cm
F1PPMCM 1.00351 ppm/cm
F1HZCM 151.36720 Hz/cm



HSQC

Current Data Parameters:

NAME Pitt
EXPNO 6
PROCNO 1

F1 - Acquisition parameters:

NDO 2
TD 256
SFO1 150.8487 MHz
FIDRES 97.656250 Hz
SW 165.729 ppm

F2 - Processing parameters:

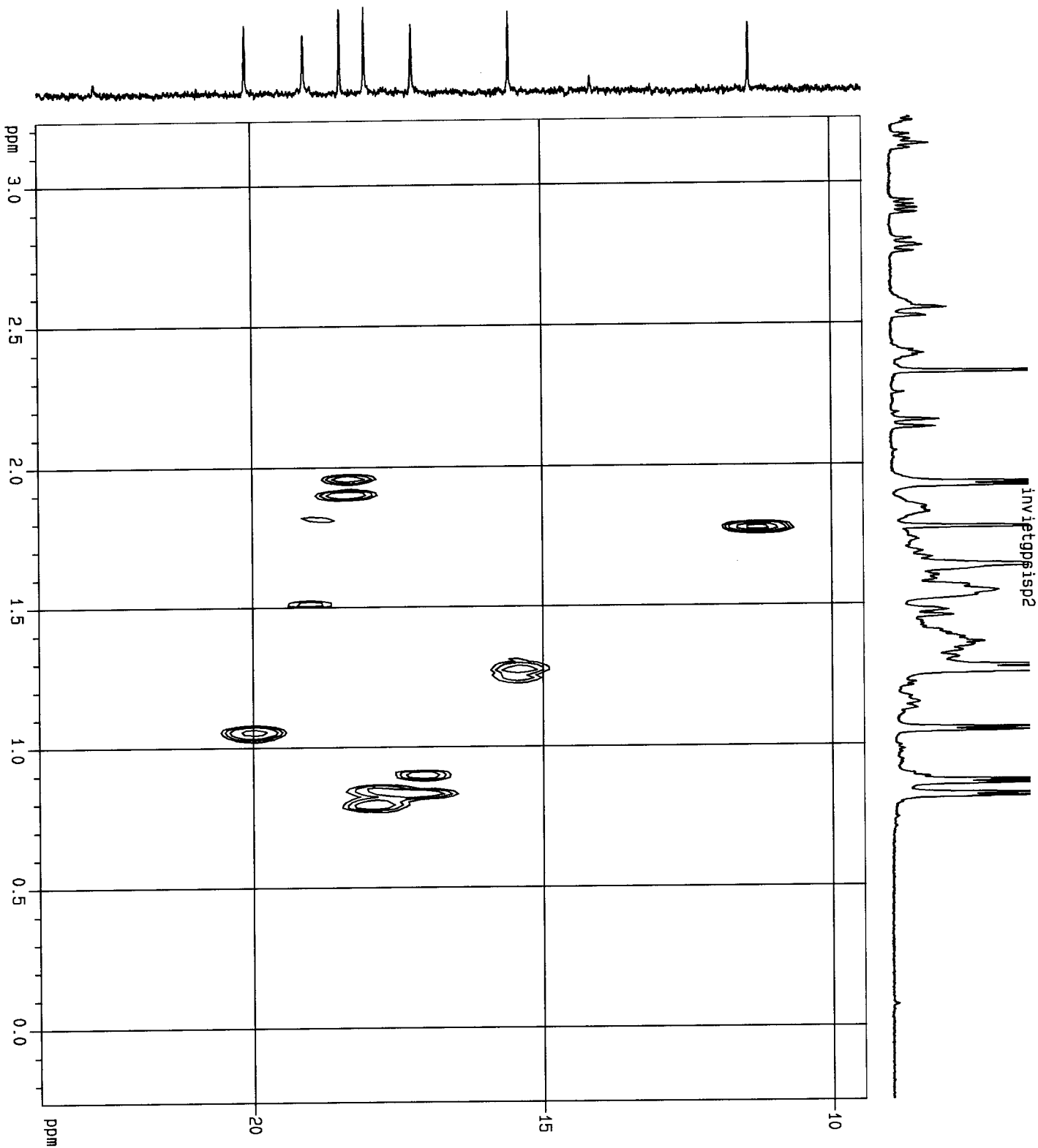
SI 1024
SF 599.8700045 MHz
WDW GSSINE
SSB 2
LB 0.00 Hz
GB 0
PC 1.40

F1 - Processing parameters:

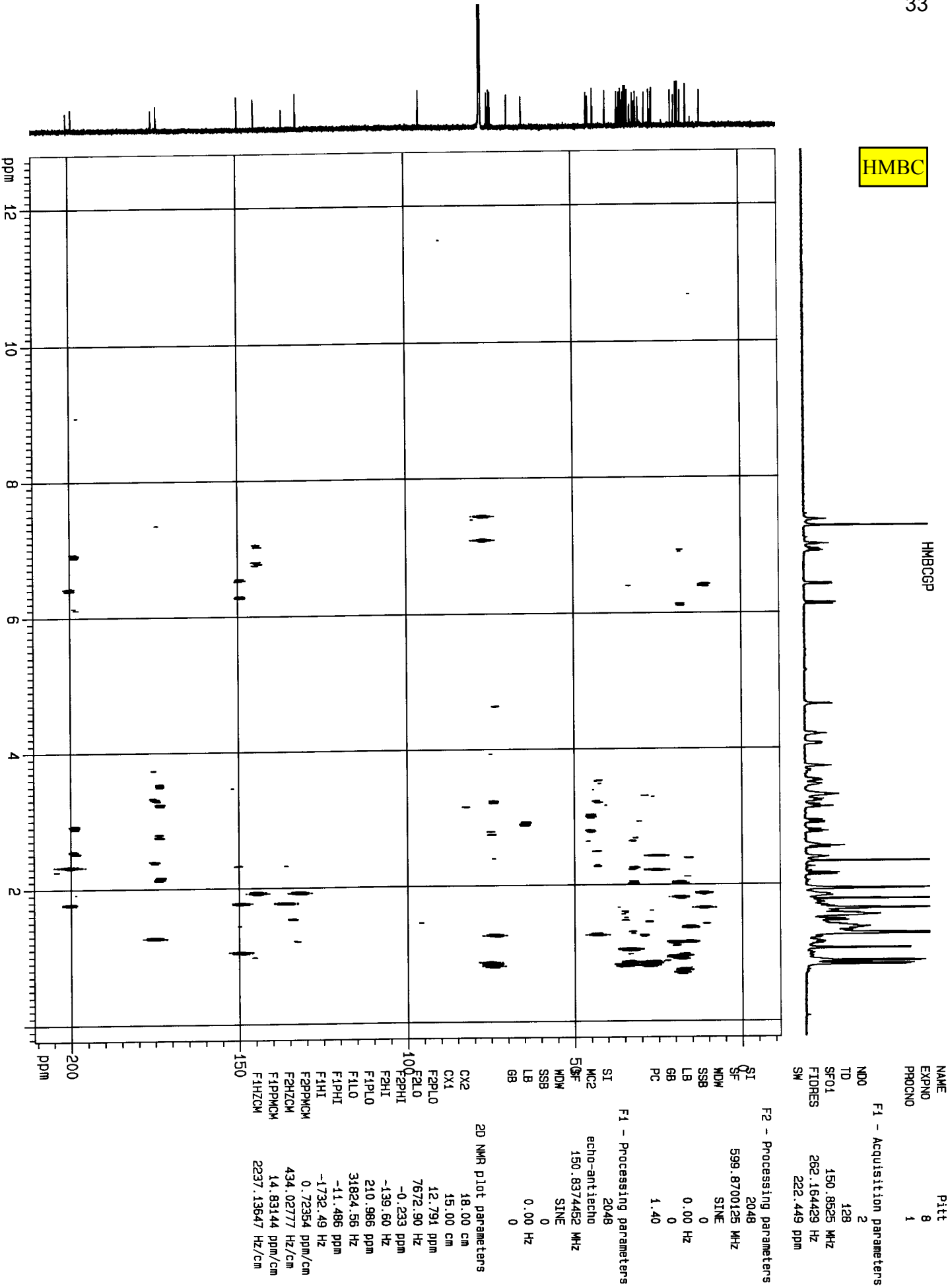
SI 1024
MC2 echo-antiecho
SF 150.8374527 MHz
WDW GSSINE
SSB 2
LB 0.00 Hz
GB 0

2D NMR plot parameters

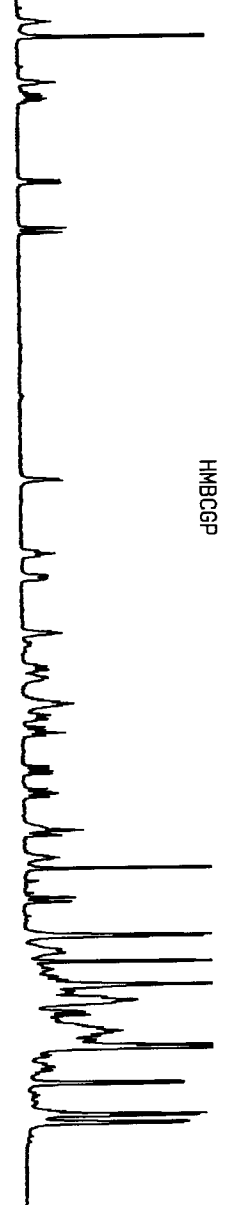
CX2 18.00 cm
CX1 15.00 cm
F2PLO 3.229 ppm
F2LO 1937.25 Hz
F2PHI -0.263 ppm
F2HI -157.89 Hz
F1PLO 23.687 ppm
F1LO 3572.96 Hz
F1PHI 9.444 ppm
F1HI 1424.52 Hz
F2PPMCM 0.19404 ppm/cm
F2HZCM 116.39717 Hz/cm
F1PPMCM 0.94956 ppm/cm
F1HZCM 143.22917 Hz/cm



HMBC



HMBCGP



Current Data Parameters

NAME Pitt
EXPNO 8
PROCNO 1

F1 - Acquisition parameters

ND0 2
TD 128
SF01 150.8525 MHz
FIDRES 262.164429 Hz
SW 222.449 ppm

F2 - Processing parameters

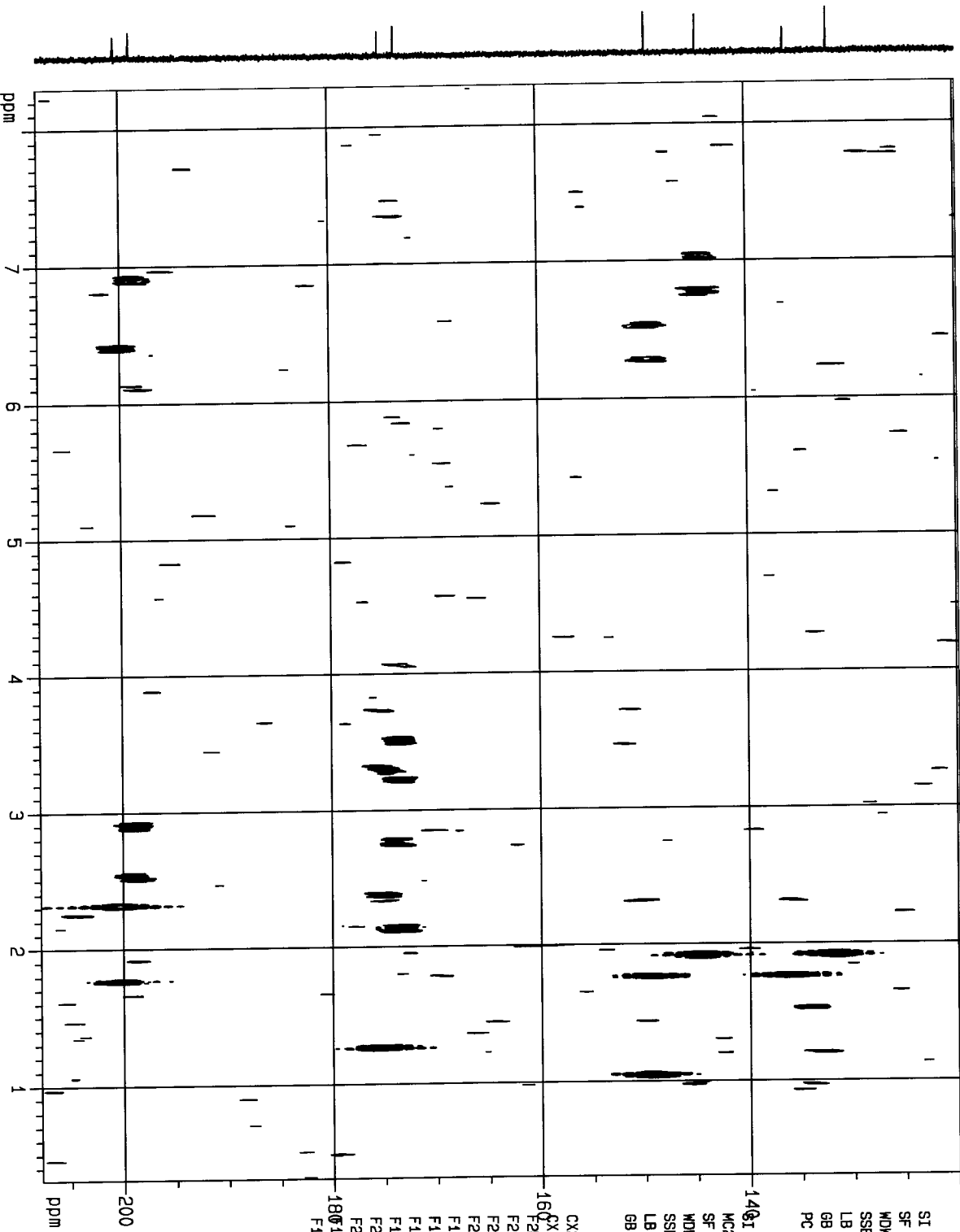
SI 2048
SF 599.8700125 MHz
WDW SINE
SSB 0
LB 0.00 Hz
GB 0
PC 1.40

F1 - Processing parameters

MC2 2048
SF 150.8374652 MHz
WDW SINE
SSB 0
LB 0.00 Hz
GB 0

2D NMR plot parameters

CX2 18.00 cm
CX1 15.00 cm
F2PLO 8.295 ppm
F2LO 4975.91 Hz
F2PHI 0.314 ppm
F2HI 198.47 Hz
F1PLO 207.836 ppm
F1LO 31349.38 Hz
F1PHI 119.738 ppm
F1HI 18060.92 Hz
F2PPMCM 0.44336 ppm/cm
F2HZCM 265.96915 Hz/cm
F1HZCM 885.89734 Hz/cm



HMBGCP



Current Data Parameters

NAME Pitt
EXPNO 8
PROCNO 1

F1 - Acquisition parameters

NDO 2
TD 128
SFO1 150.8525 MHz
FIDRES 262.16429 Hz
SW 222.449 ppm

F2 - Processing parameters

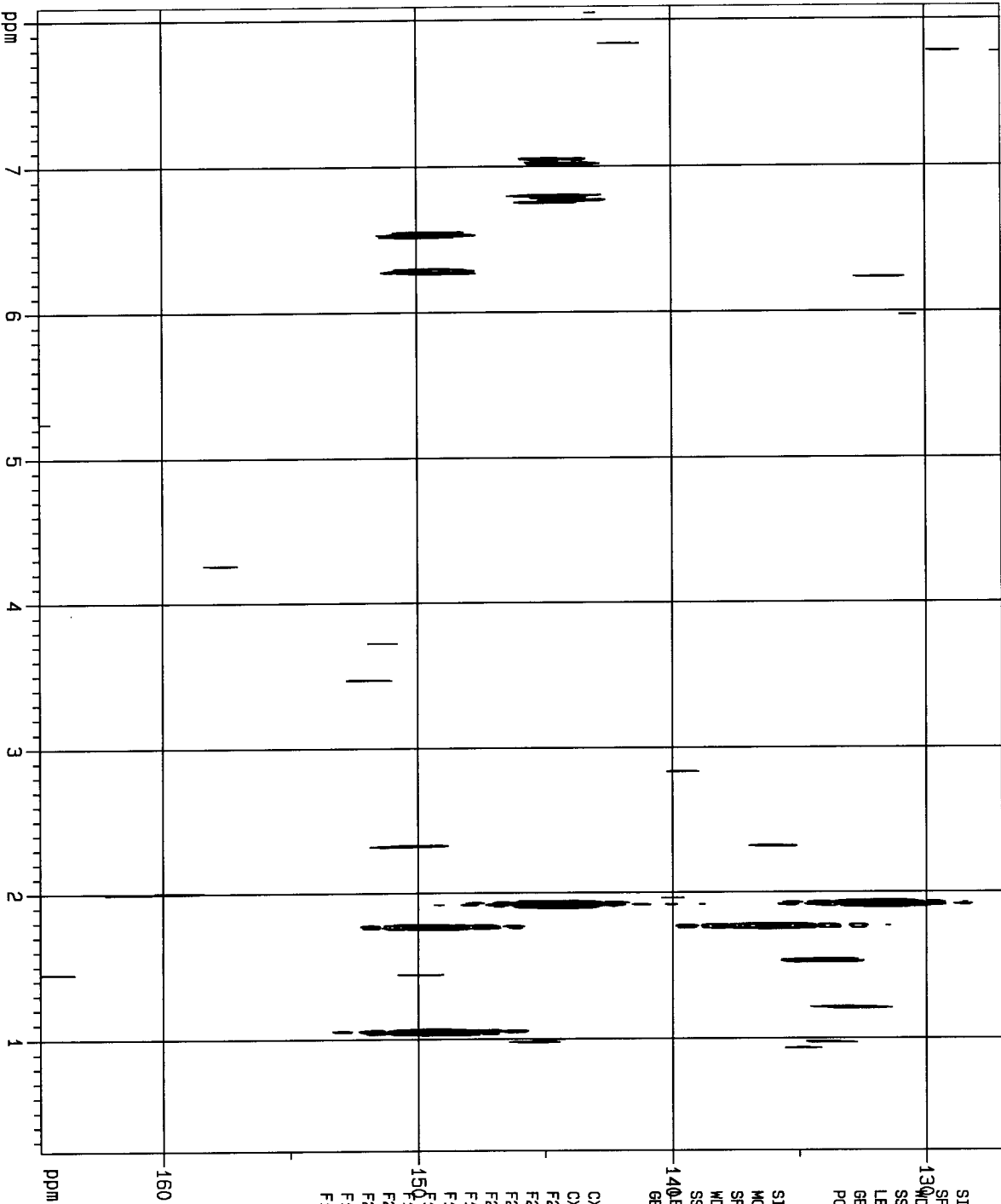
SI 2048
SF 599.8700125 MHz
WDW SINE
SSB 0
LB 0.00 Hz
GB 0
PC 1.40

F1 - Processing parameters

SI 2048
MC2 echo-antiecho
SF 150.8374452 MHz
WDW SINE
SSB 0
GB 0.00 Hz
GB 0

2D NMR plot parameters

CX2 18.00 cm
CX1 15.00 cm
F2PLO 8.091 ppm
F2LO 4853.84 Hz
F2PHI 0.232 ppm
F2HI 136.87 Hz
F1PLO 164.819 ppm
F1LO 24860.81 Hz
F1PHI 127.016 ppm
F1HI 19156.74 Hz
F2PPMCM 0.43667 ppm/cm
F2HZCM 261.94254 Hz/cm
F1PPMCM 2.52019 ppm/cm
F1HZCM 380.13649 Hz/cm



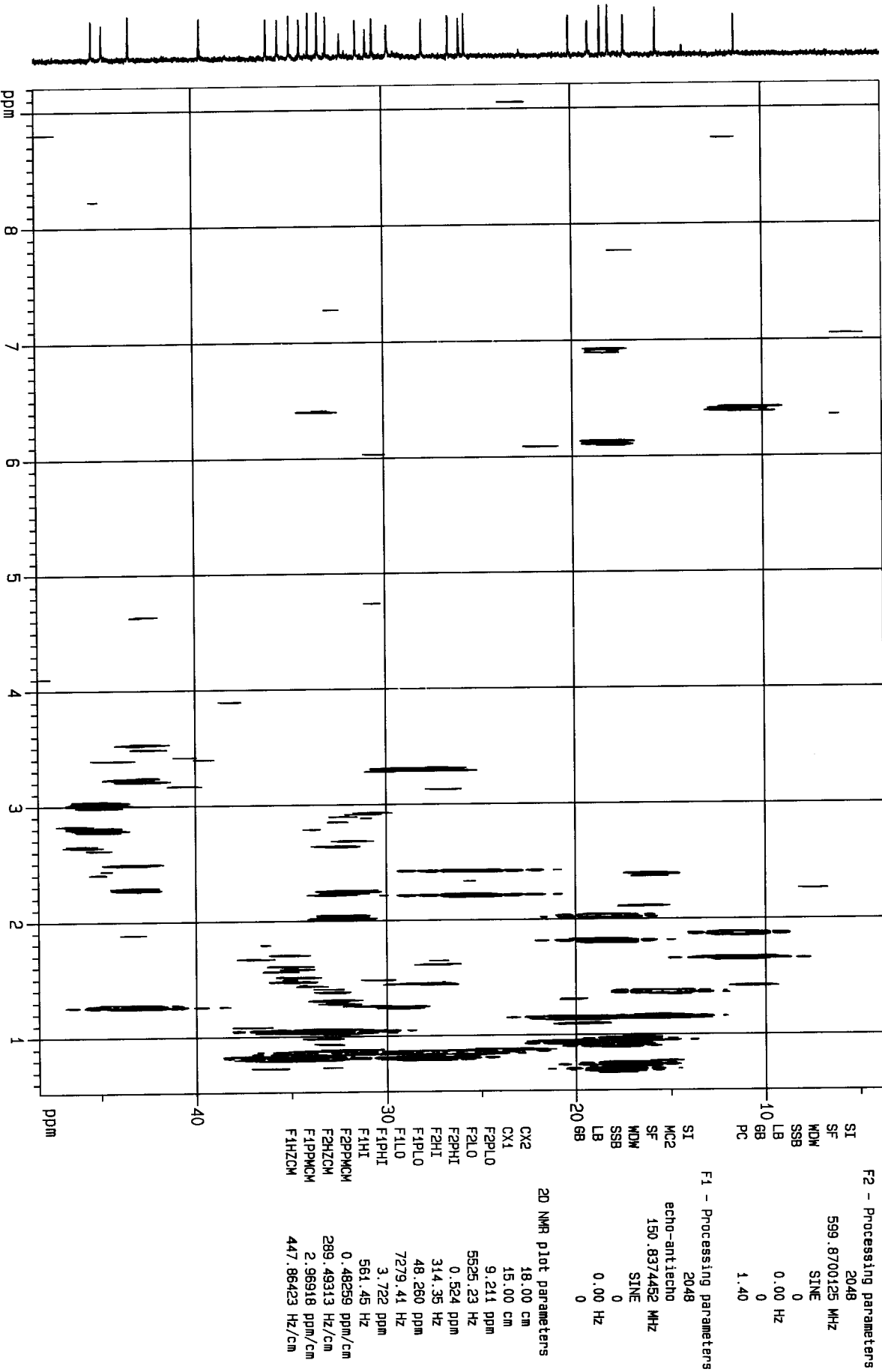
HMBCGP

Current Data Parameters

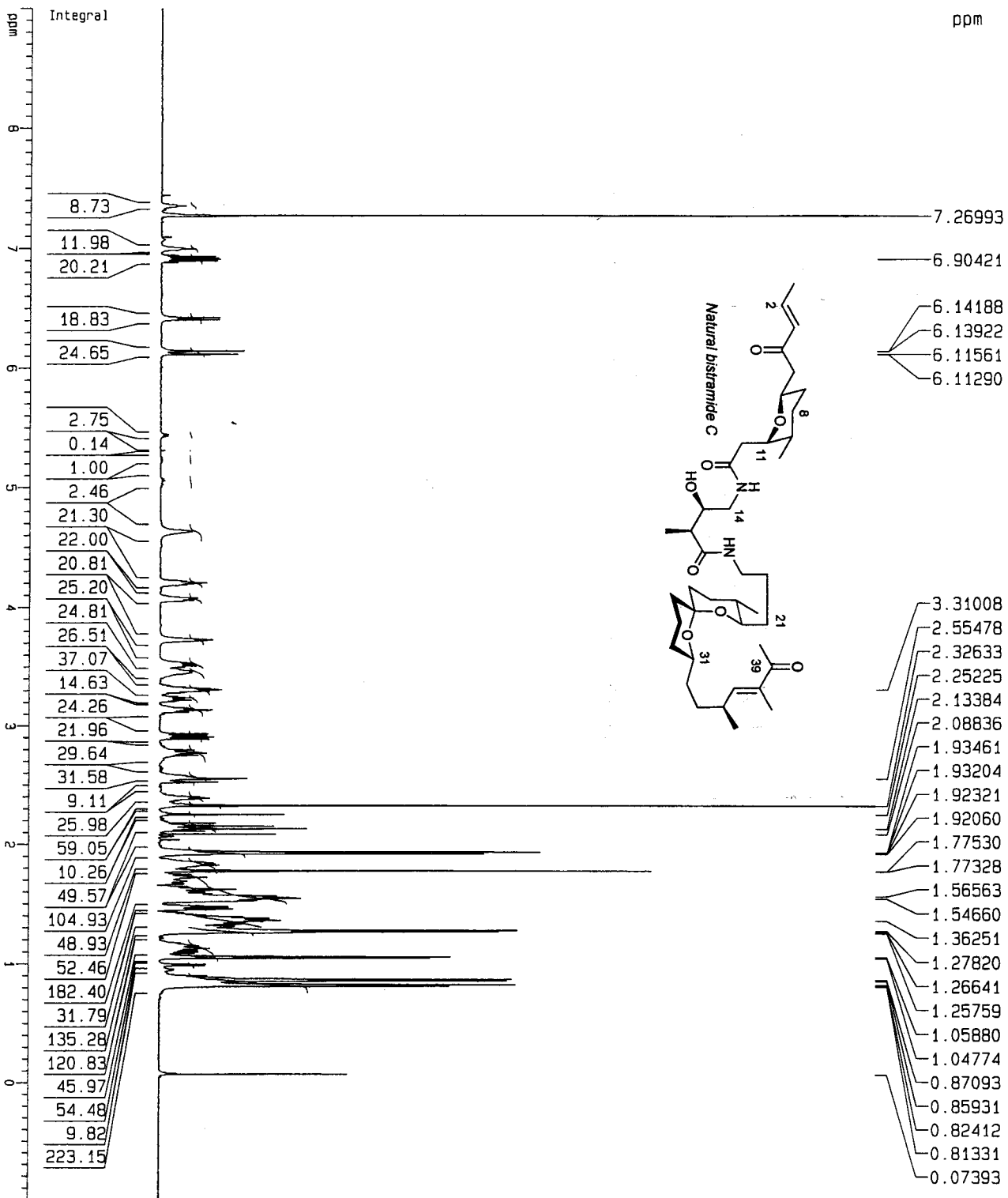
NAME	Pitt
EXPNO	8
PROCNO	1

F1 - Acquisition parameters

NDO	2
TD	128
SFO1	150.8525 MHz
FIDRES	262.16429 Hz
SW	222.449 ppm



600 MHz ¹H NMR spectrum of Bistramide C - authentic sample
 (5 mg/0.6 ml filtered CDCl₃), Room temperature,
 Tamara Hopkins' sample, 12/1/01



Current Data Parameters

NAME	bist-c
EXPNO	1
PROCNO	1

F2 - Acquisition Parameters

Date_	20011201
Time	9.57
INSTRUM	spect
PROBHD	5 mm TXI 1H/
PULPROG	zg
TD	65536
SOLVENT	CDCl ₃
NS	16
DS	0
SWH	8992.806 Hz
FIDRES	0.137219 Hz
AQ	3.6438615 sec
RG	200
DW	55.600 use
DE	6.00 use
TE	290.0 K
D1	24.00000000 sec

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

NUC1	¹ H
P1	3.00 use
PL1	0.00 dB
SFO1	600.836050 MHz

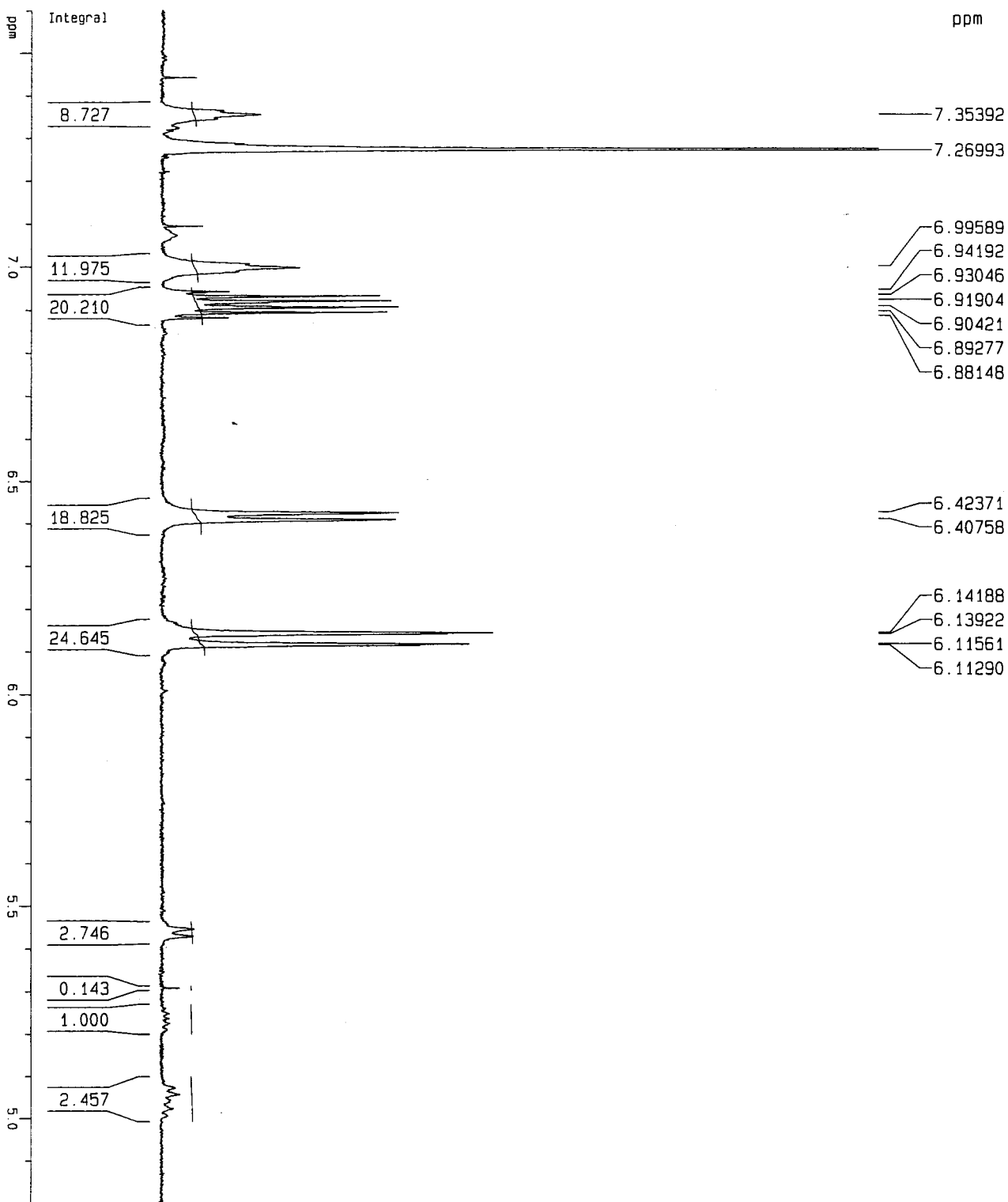
F2 - Processing Parameters

SI	65536
SF	600.8300268 MHz
WDW	EM
SSB	0
LB	0.20 Hz
GB	0
PC	1.00

1D NMR plot parameters

CX	20.00 cm
F1P	9.000 ppr
F1	5407.47 Hz
F2P	-1.000 ppr
F2	-600.83 Hz
PPMCM	0.50000 ppr
HZCM	300.41501 Hz

600 MHz ^1H NMR spectrum of Bistramide C - authentic sample
(5 mg/0.6 ml filtered CDCl_3), Room temperature,
Tamara Hopkins' sample, 12/1/01



Current Data Parameters
NAME bist-c
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20011201
Time 9.57
INSTRUM spect
PROBHD 5 mm TXI 1H/
PULPROG zg
TD 65536
SOLVENT CDCl_3
NS 16
DS 0
SWH 8992.806 Hz
FIDRES 0.137219 Hz
AQ 3.6438515 sec
RG 200
DW 55.600 μs
DE 6.00 μs
TE 290.0 K
D1 24.00000000 sec

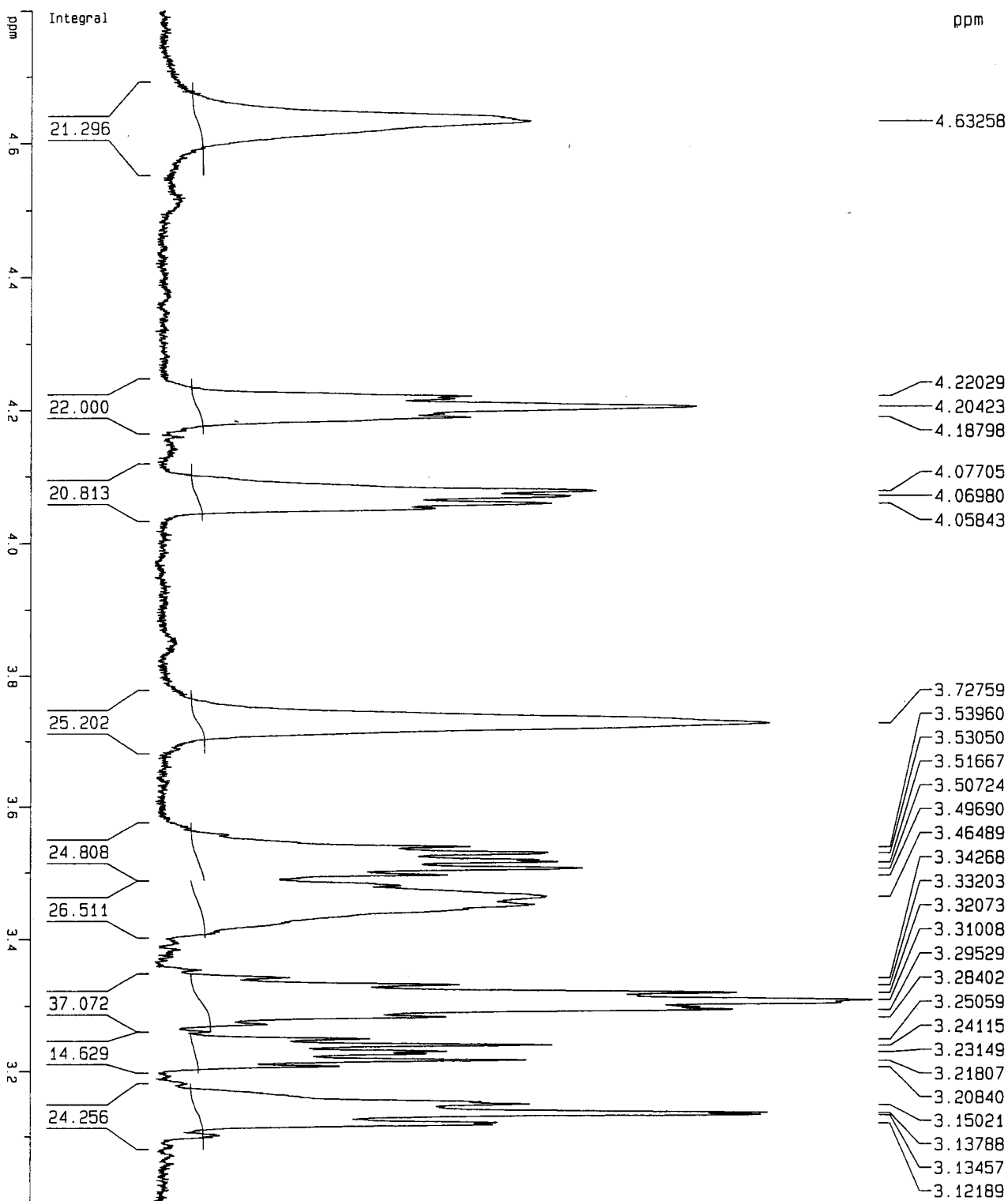
===== CHANNEL f1 ===
NUC1 ^1H
P1 3.00 μs
PL1 0.00 dB
SF01 600.8336050 MHz

F2 - Processing Parameters
SI 65536
SF 600.8300268 MHz
WDW EM
SSB 0
LB 0.20 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 20.00 cm
F1P 7.600 ppr
F1 4566.31 Hz
F2P 4.800 ppr
F2 2883.98 Hz
PPMCM 0.14000 ppr
HZCM 84.11620 Hz

600 MHz ¹H NMR spectrum of Bistramide C - authentic sample
(5 mg/0.6 ml filtered CDCl₃), Room temperature.

Tamara Hopkins' sample, 12/1/01



Current Data Parameters
NAME b1st-c
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20011201
Time 9.57
INSTRUM spect
PROBHD 5 mm TXI 1H/
PULPROG zg
TD 65536
SOLVENT CDCl₃
NS 16
DS 0
SMH 8992.806 Hz
FIDRES 0.137219 Hz
AQ 3.6438515 sec
RG 200
DW 55.600 usec
DE 6.00 usec
TE 290.0 K
D1 24.00000000 sec

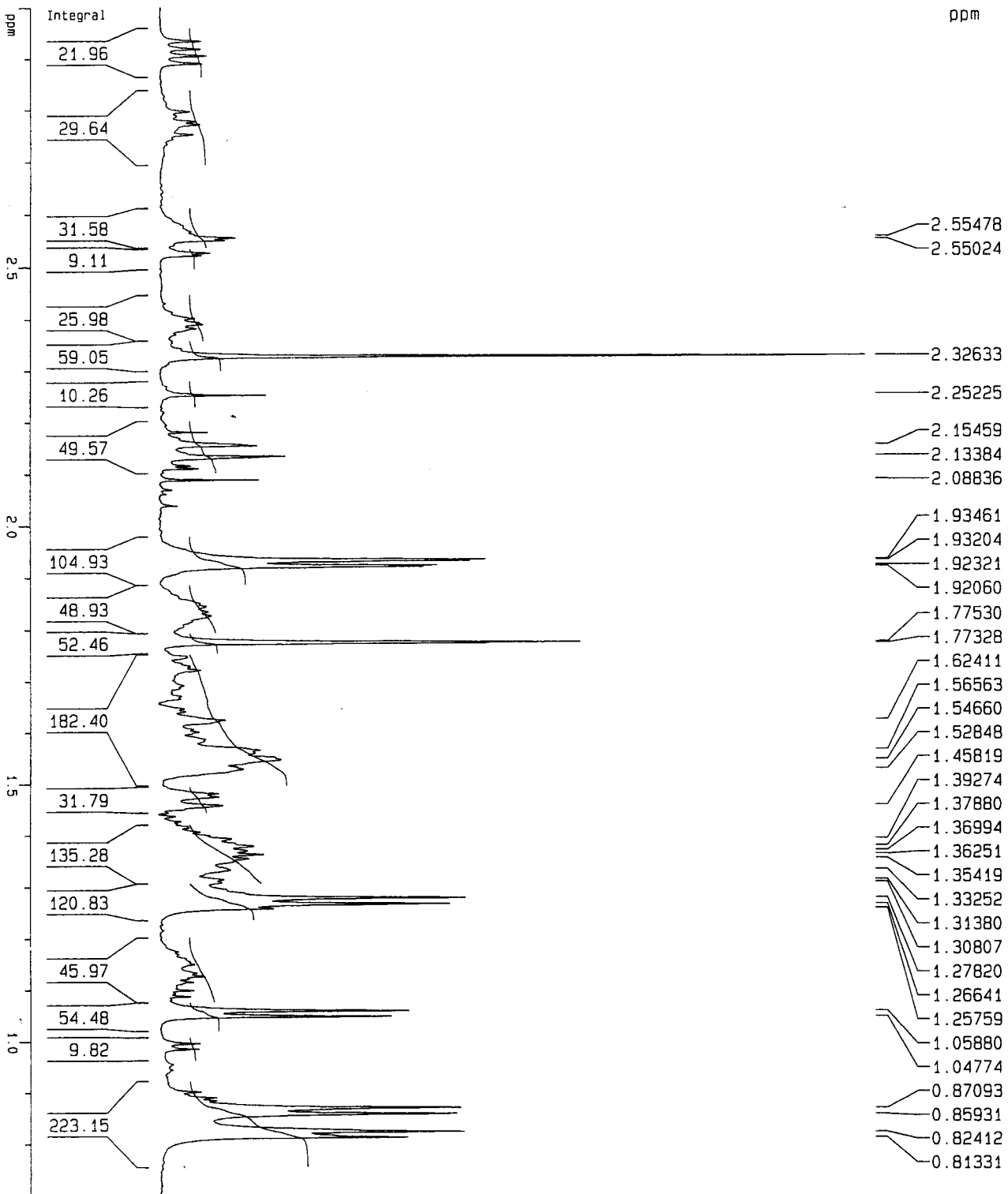
===== CHANNEL f1 ===
NUC1 ¹H
P1 3.00 usec
PL1 0.00 dB
SF01 600.8336050 MHz

F2 - Processing parameters
SI 65536
SF 600.8300268 MHz
WDW EM
SSB 0
LB 0.20 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 20.00 cm
F1P 4.800 ppr
F1 2883.98 Hz
F2P 3.000 ppr
F2 1802.49 Hz
PPMCM 0.09000 ppr
HZCM 54.07471 Hz

600 MHz ¹H NMR spectrum of Bistramide C - authentic sample
(5 mg/0.6 ml filtered CDCl₃), Room temperature,

Tamara Hopkins' sample, 12/1/01



Current Data Parameters

NAME	bist-c
EXPNO	1
PROCNO	1

F2 - Acquisition Parameters

Date_	20011201
Time	9.57
INSTRUM	spect
PROBHD	5 mm TXI 1H/
PULPROG	zg
TD	65536
SOLVENT	CDCl ₃
NS	16
DS	0
SWH	8992.806 Hz
FIDRES	0.137219 Hz
RG	3.6438515 sec
DW	200
DE	55.600 use
TE	6.00 use
D1	290.0 K
	24.00000000 sec

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

NUC1	¹ H
P1	3.00 use
PL1	0.00 dB
SFO1	600.8336050 MHz

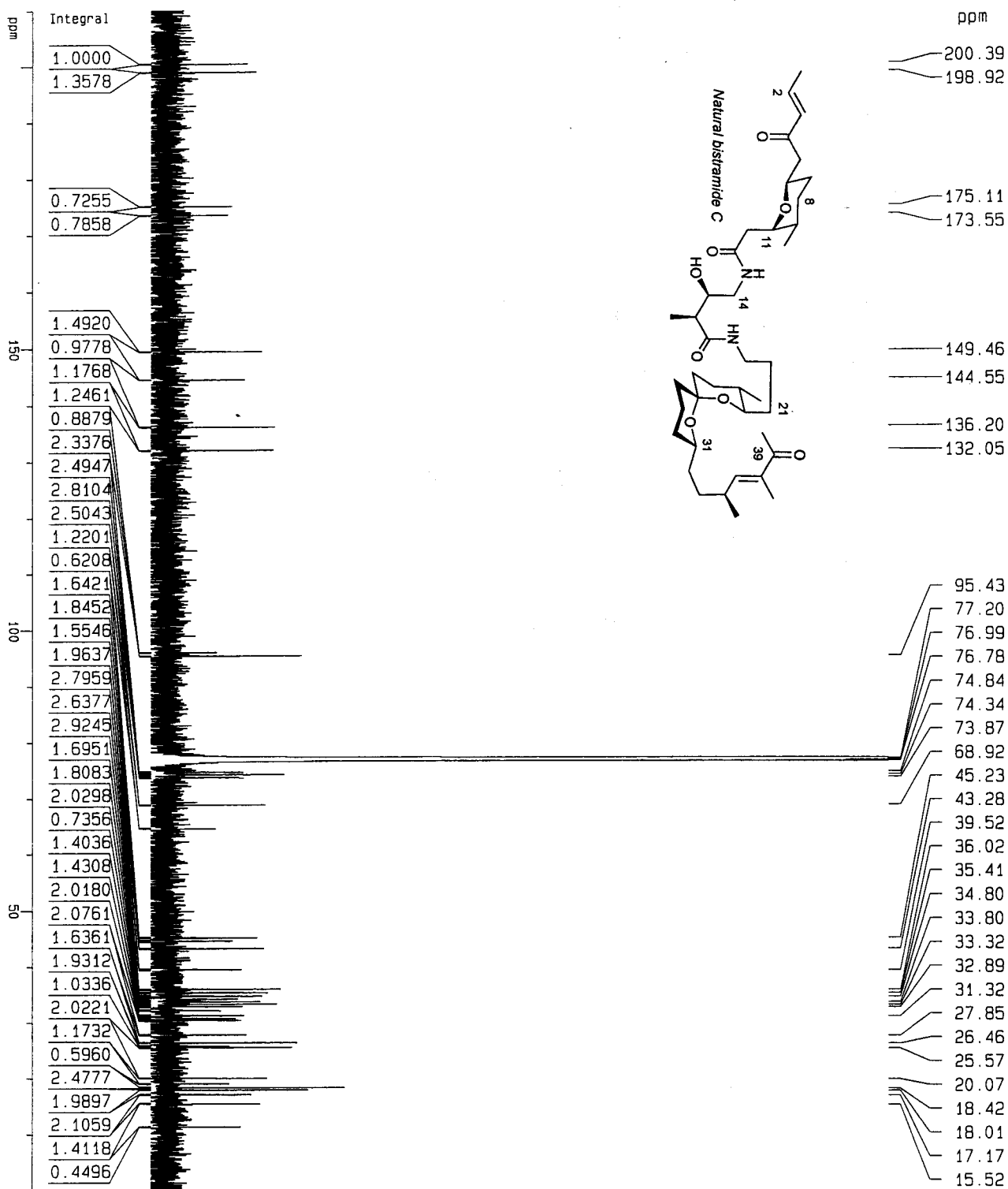
F2 - Processing parameters

SI	65536
SF	600.8300268 MHz
WDW	EM
SSB	0
LB	0.20 Hz
GB	0
PC	1.00

1D NMR plot parameters

CX	20.00 cm
F1P	3.000 ppr
F1	1802.49 Hz
F2P	0.700 ppr
F2	420.58 Hz
PPMCM	0.11500 ppr
HZCM	69.09545 Hz

151 Mhz 1H-decoupled 13C NMR spectrum of Bistramide C-authentic sample
submitted by Tamara Hopkins in filtered CDCl3 at room temperature, 12/3/01



Current Data Parameters
NAME bist-c
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters

Date_ 20011201
Time 10.21
INSTRUM spect
PROBHD 5 mm TXI 1H/
PULPROG c13wzoe
TD 65536
SOLVENT CDCl3
NS 20315
DS 2
SWH 37878.789 Hz
FIDRES 0.577984 Hz
AQ 0.8651252 sec
RG 32768
DM 13.200 usec
DE 6.00 usec
TE 290.0 K
D1 8.00000000 sec
D3 0.00100000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 13.00 usec
PL1 0.00 dB
SF01 151.0953827 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 100.00 usec
PL2 0.00 dB
PL12 12.00 dB
SF02 600.8336050 MHz

F2 - Processing parameters
SI 65536
SF 151.0788353 MHz
WDW EM
SSB 0
LB 2.00 Hz
GB 0
PC 1.00

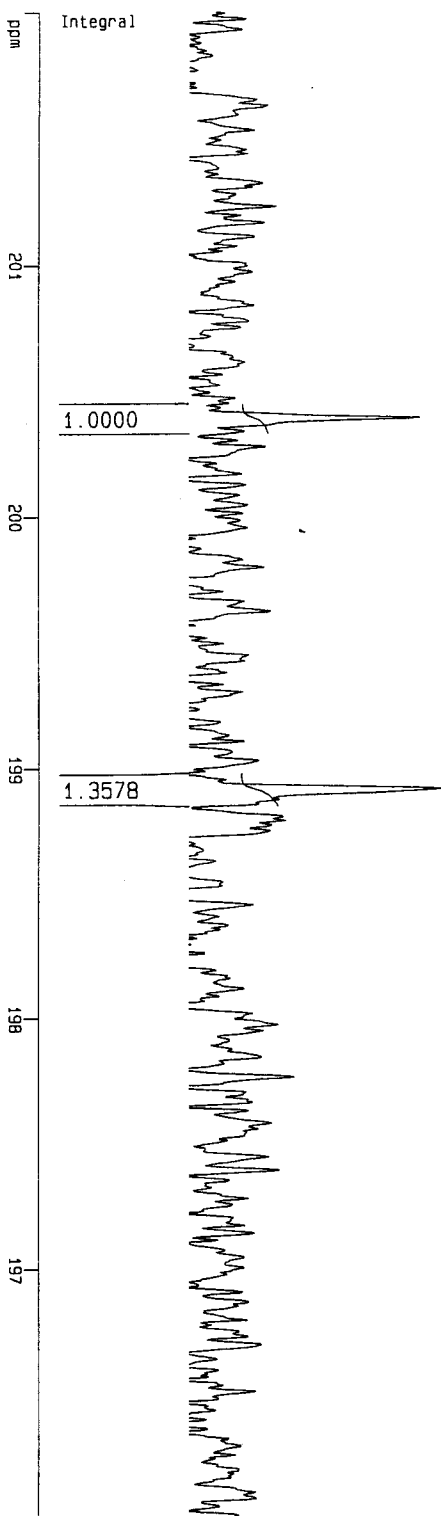
1D NMR plot parameters
CX 20.00 cm
F1P 210.000 ppm
F1 31726.56 Hz
F2P 0.000 ppm
F2 0.00 Hz
PPMCM 10.50000 ppm/cm
HZCM 1586.32788 Hz/cm

151 Mhz 1H-decoupled 13C NMR spectrum of Bistramide C-authentic sample
 Submitted by Tamara Hopkins in filtered CDCl3 at room temperature, 12/3/01

ppm

200.39

198.92



Current Data Parameters
 NAME dist-c
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20011201
 Time 10.21

INSTRUM spect
 PROBHD 5 mm TXI 1H/
 PULPROG c13wznoe
 TD 65536
 SOLVENT CDCl3
 NS 20315
 DS 2
 SMH 37878.789 Hz
 FIDRES 0.577984 Hz
 AQ 0.8651252 sec
 RG 32768
 DW 13.200 usec
 DE 6.00 usec
 TE 290.0 K
 D1 8.00000000 sec
 D3 0.00100000 sec

===== CHANNEL f1 =====
 NUC1 13C
 P1 13.00 usec
 PL1 0.00 dB
 SF01 151.0953827 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 100.00 usec
 PL2 0.00 dB
 PL12 12.00 dB
 SF02 600.8336050 MHz

F2 - Processing Parameters
 SI 65536
 SF 151.0788353 MHz
 MDW EM
 SSB 0
 LB 2.00 Hz
 GB 0
 PC 1.00

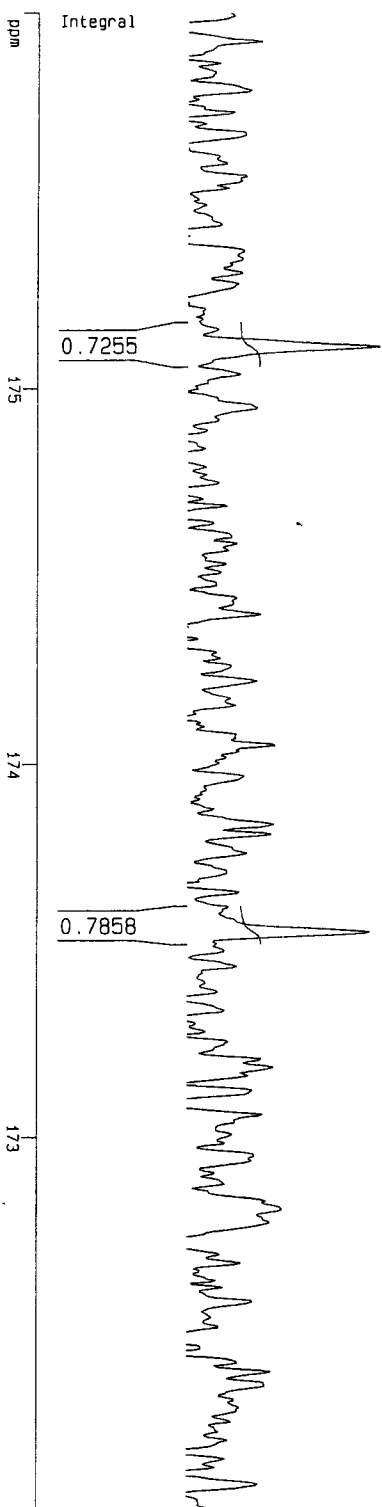
1D NMR plot parameters
 CX 20.00 cm
 F1P 202.000 ppm
 F1 30517.93 Hz
 F2P 196.000 ppm
 F2 29611.45 Hz
 PPMCM 0.30000 ppm/cm
 HZCM 45.32365 Hz/cm

151 Mhz ¹H-decoupled ¹³C NMR spectrum of Bistramide C-authentic sample
 submitted by Tamara Hopkins in filtered CDCl₃ at room temperature, 12/3/01

ppm

175.11

173.55



Current Data Parameters
 NAME b1st-c
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20011201
 Time 10.21
 INSTRUM spect
 PROBHD 5 mm TXI 1H/
 PULPROG c13wznoe
 TD 65536
 SOLVENT CDCl₃
 NS 20315
 DS 2
 SWH 37878.789 Hz
 FIDRES 0.577984 Hz
 AQ 0.8651252 sec
 RG 32768
 DW 13.200 usec
 DE 6.00 usec
 TE 290.0 K
 D1 8.00000000 sec
 D3 0.00100000 sec

===== CHANNEL f1 =====
 NUC1 ¹³C
 P1 13.00 usec
 PL1 0.00 dB
 SF01 151.0953827 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 ¹H
 PCPD2 100.00 usec
 PL2 0.00 dB
 PL12 12.00 dB
 SF02 600.8336050 MHz

F2 - Processing Parameters
 SI 65536
 SF 151.078353 MHz
 WDM EM
 SSB 0
 LB 2.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 20.00 cm
 F1P 175.000 ppm
 F1 26589.88 Hz
 F2P 172.000 ppm
 F2 25985.56 Hz
 PPWCM 0.20000 ppm/cr
 HZCM 30.21577 Hz/cm

151 Mhz 1H-decoupled 13C NMR spectrum of Bistramide C-authentic sample
 submitted by Tamara Hopkins in filtered CDCl3 at room temperature, 12/3/01

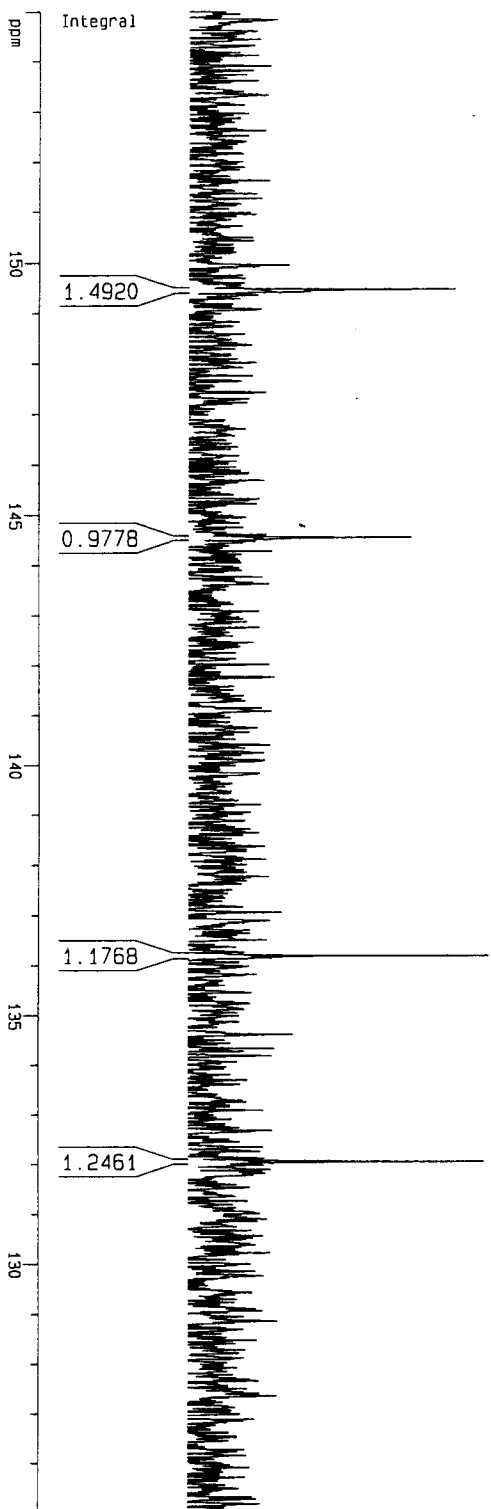
ppm

149.46

144.55

136.20

132.05



Current Data Parameters
 NAME bist-c
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20011201
 Time 10.21

INSTRUM spect
 PROBHD 5 mm TXI 1H/
 PULPROG c13wznoe
 TD 65536
 SOLVENT CDCl3
 NS 20315
 DS 2
 SWH 37878.789 Hz
 FIDRES 0.577984 Hz
 AQ 0.8651252 sec
 RG 32768
 DW 13.200 usec
 DE 6.00 usec
 TE 290.0 K
 D1 8.00000000 sec
 D3 0.00100000 sec

===== CHANNEL f1 =====
 NUC1 13C
 P1 13.00 usec
 PL1 0.00 dB
 SFO1 151.0953827 MHz

===== CHANNEL f2 =====
 CPDPRG2 waitz16
 NUC2 1H
 PCPD2 100.00 usec
 PL2 0.00 dB
 PL12 12.00 dB
 SFO2 600.8336050 MHz

F2 - Processing parameters
 SI 65536
 SF 151.078353 MHz
 WDM EM
 SSB 0
 LB 2.00 Hz
 GB 0
 PC 1.00

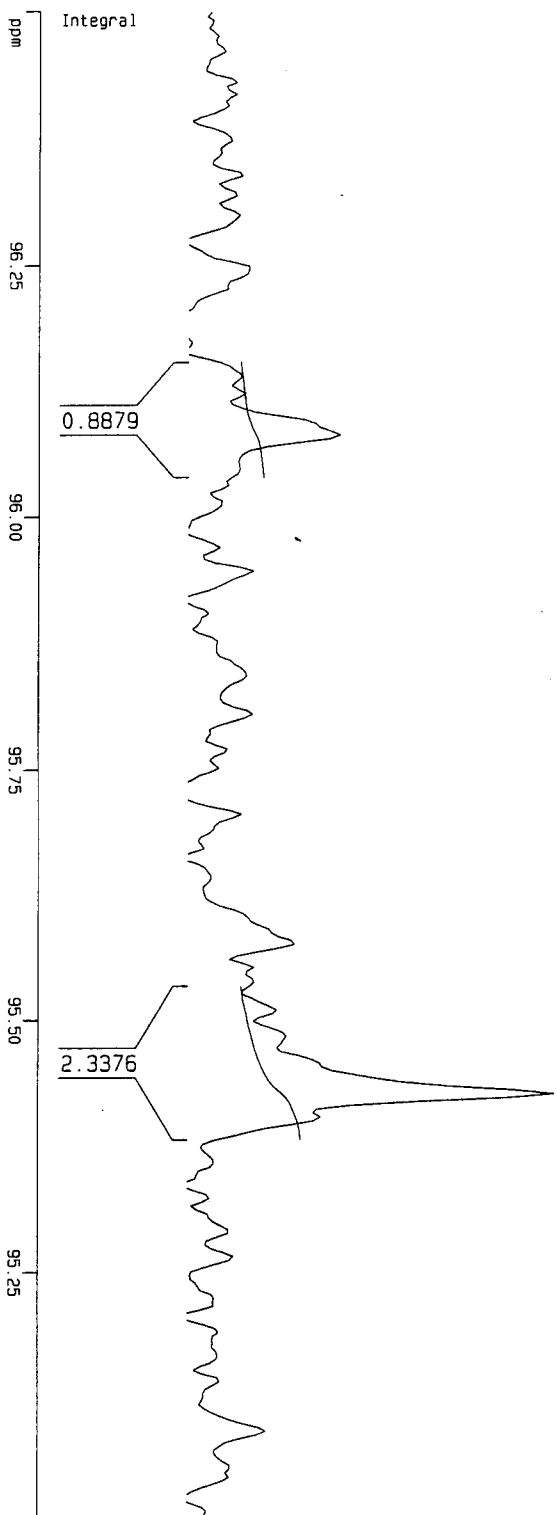
1D NMR plot parameters
 CX 20.00 cm
 F1P 155.000 ppm
 F1 23417.22 Hz
 F2P 125.000 ppm
 F2 18884.86 Hz
 PPMCM 1.50000 ppm/cm
 HZCM 226.61826 Hz/cm

151 Mhz ¹H-decoupled ¹³C NMR spectrum of Bistramide C-authentic sample
 submitted by Tamara Hopkins in filtered CDCl₃ at room temperature, 12/3/01

ppm

96.081

95.427



Current Data Parameters
 NAME bist-c
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters

Date_ 20011201
 Time 10.21
 INSTRUM spect
 PROBHD 5 mm TXI 1H/
 PULPROG c13wznoe
 TD 65536
 SOLVENT CDCl₃
 NS 20315
 DS 2
 SMH 37878.789 Hz
 FIDRES 0.577984 Hz
 AQ 0.8651252 sec
 RG 32768
 DM 13.200 usec
 DE 6.00 usec
 TE 290.0 K
 D1 8.00000000 sec
 D3 0.00100000 sec

===== CHANNEL f1 =====
 NUC1 ¹³C
 P1 13.00 usec
 PL1 0.00 dB
 SF01 151.0953827 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 ¹H
 PCPD2 100.00 usec
 PL2 0.00 dB
 PL12 12.00 dB
 SF02 600.8336050 MHz

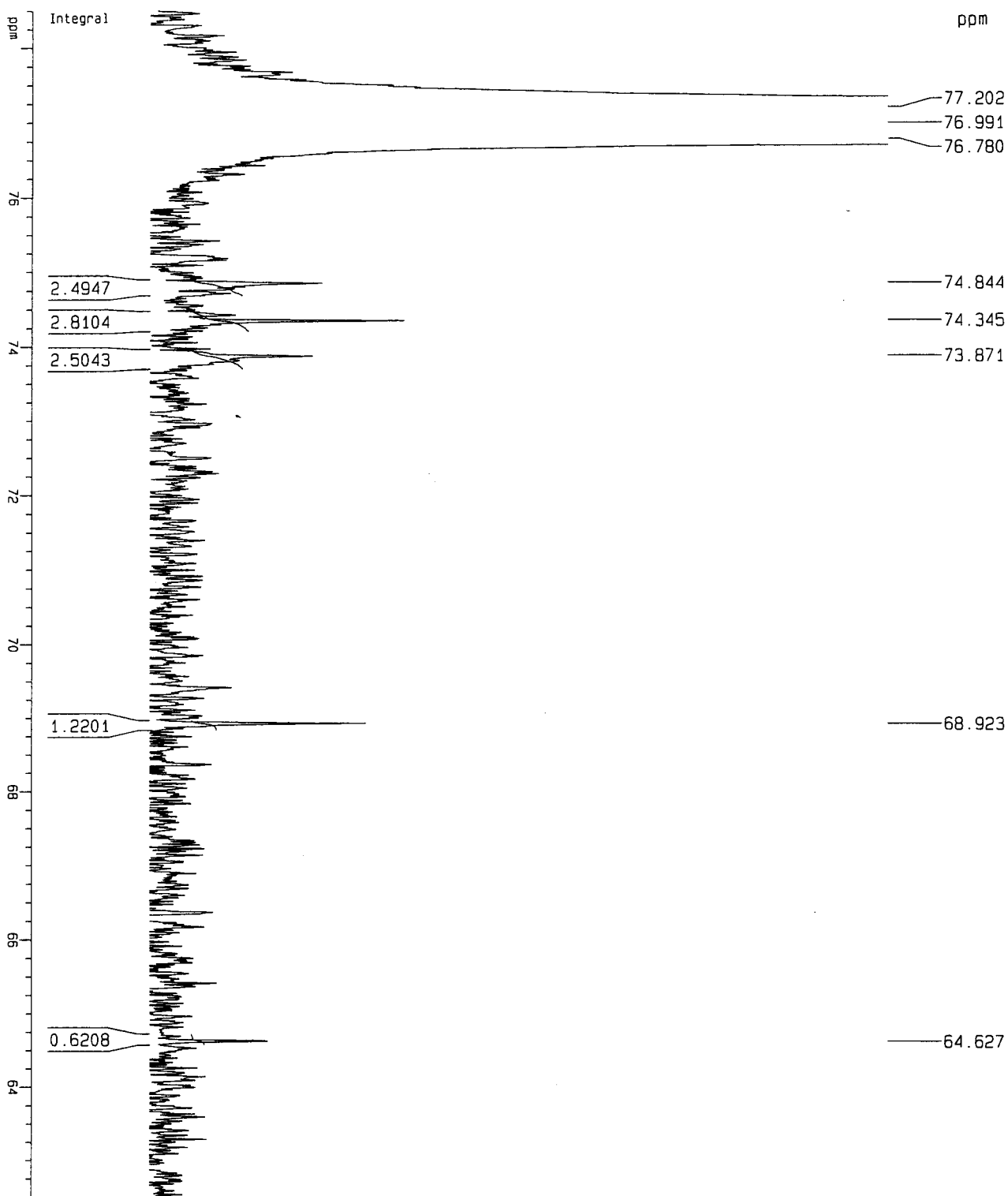
F2 - Processing Parameters

SI 65536
 SF 151.0788353 MHz
 WDW EM
 SSB 0
 LB 2.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters

CX 20.00 cm
 F1P 96.500 ppm
 F1 14579.11 Hz
 F2P 95.000 ppm
 F2 14352.49 Hz
 PPMCM 0.07500 ppm/cm
 HZCM 11.33091 Hz/cm

151 Mhz ¹H-decoupled ¹³C NMR spectrum of Bistramide C-authentic sample
 Submitted by Tamara Hopkins in filtered CDCl₃ at room temperature, 12/3/01



Current Data Parameters
 NAME: bist-c
 EXPNO: 2
 PROCNO: 1

F2 - Acquisition Parameters

Date_: 20011201
 Time: 10.21
 INSTRUM: spect
 PROBD: 5 mm TXI 1H/
 PULPROG: c13winoe
 TD: 65536
 SOLVENT: CDCl₃
 NS: 20315
 DS: 2
 SMH: 37878.789 Hz
 FIDRES: 0.577984 Hz
 AQ: 0.8651252 sec
 RG: 32768
 DW: 13.200 usec
 DE: 6.00 usec
 TE: 290.0 K
 D1: 8.00000000 sec
 D3: 0.00100000 sec

===== CHANNEL f1 =====
 NUC1: ¹³C
 P1: 13.00 usec
 PL1: 0.00 dB
 SFO1: 151.0953827 MHz

===== CHANNEL f2 =====
 CPDPRG2: waltz16
 NUC2: ¹H
 PCPD2: 100.00 usec
 PL2: 0.00 dB
 PL12: 12.00 dB
 SFO2: 600.8336050 MHz

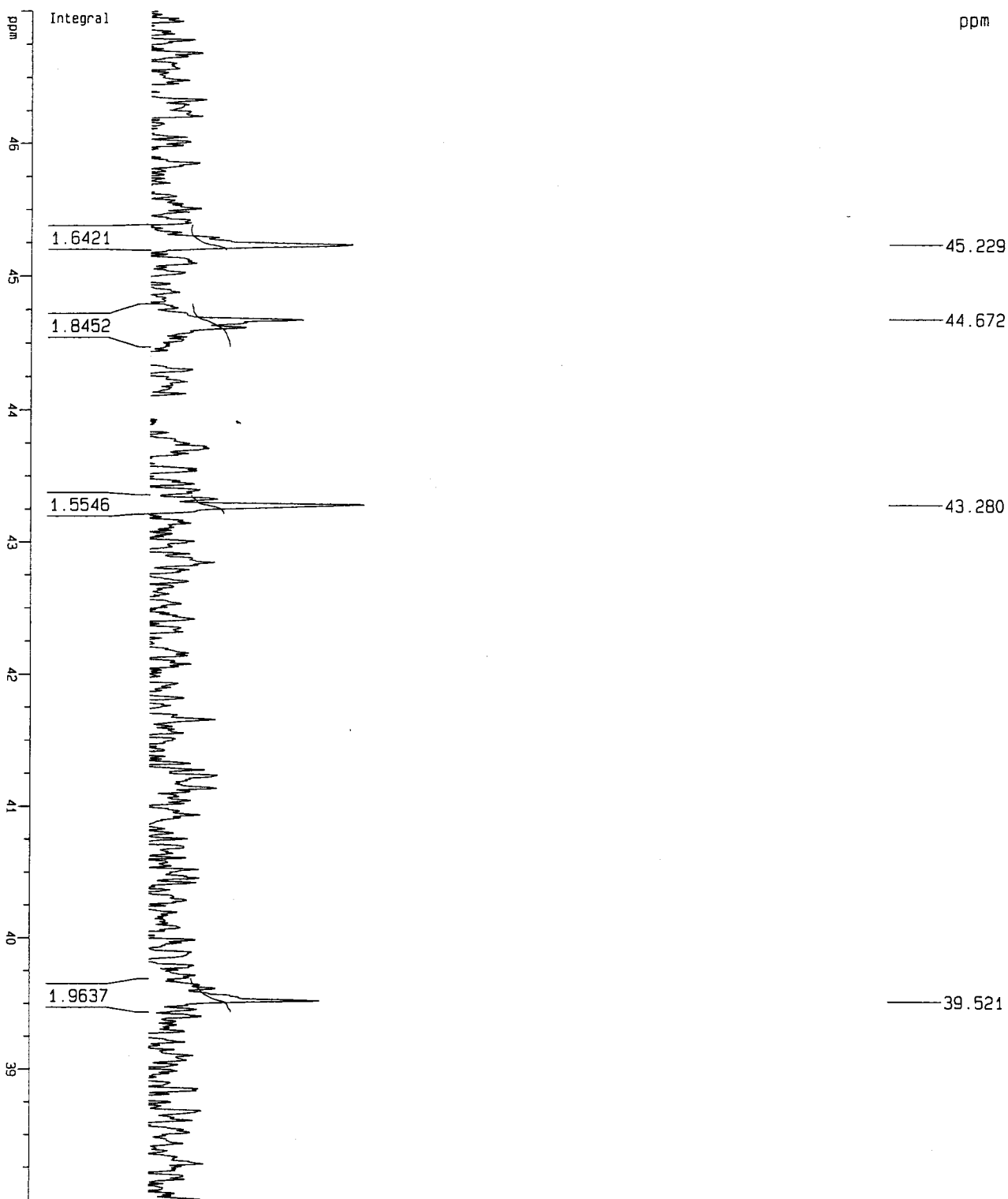
F2 - Processing parameters

SI: 65536
 SF: 151.0788353 MHz
 WDW: EM
 SSB: 0
 LB: 2.00 Hz
 GB: 0
 PC: 1.00

1D NMR plot parameters

CX: 20.00 cm
 F1P: 78.500 ppm
 F1: 11859.69 Hz
 F2P: 62.500 ppm
 F2: 9442.43 Hz
 PPMCM: 0.80000 ppm/cm
 HZCM: 120.86308 Hz/cm

151 Mhz 1H-decoupled 13C NMR spectrum of Bistramide C-authentic sample
 Submitted by Tamara Hopkins in filtered CDCl3 at room temperature, 12/3/01



Current Data Parameters
 NAME hist-c
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20011201
 Time 10.21
 INSTRUM spect
 PROBHD 5 mm 1X1 1H/
 PULPROG c13wznoe
 TD 65536
 SOLVENT CDCl3
 NS 20315
 DS 2
 SMH 37878.789 HZ
 FIDRES 0.577984 HZ
 AQ 0.8651252 sec
 RG 32768
 DW 13.200 usec
 DE 6.00 usec
 TE 290.0 K
 D1 8.00000000 sec
 D3 0.00100000 sec

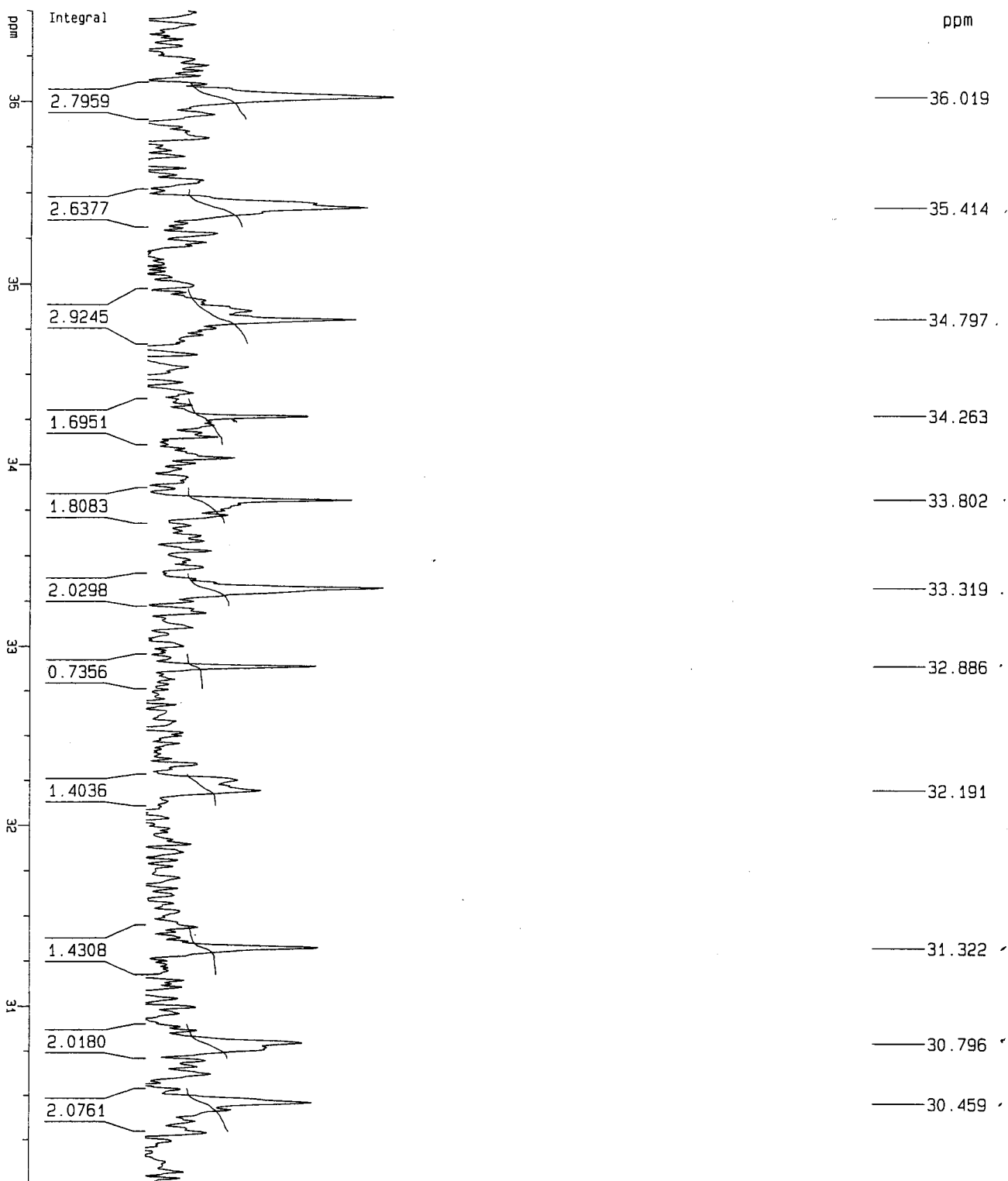
===== CHANNEL f1 =====
 NUC1 13C
 P1 13.00 usec
 PL1 0.00 dB
 SFO1 151.0953827 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 100.00 usec
 PL2 0.00 dB
 PL12 12.00 dB
 SFO2 600.8336050 MHz

F2 - Processing Parameters
 SI 65536
 SF 151.0788353 MHz
 WDW EM
 SSB 0
 LB 2.00 HZ
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 20.00 cm
 F1P 47.000 ppm
 F1 7100.71 HZ
 F2P 38.000 ppm
 F2 5741.00 HZ
 PPMCM 0.45000 ppm/cm
 HZCM 67.98548 HZ/cm

151 Mhz 1H-decoupled 13C NMR spectrum of Bistramide C-authentic sample
 Submitted by Tamara Hopkins in filtered CDCl3 at room temperature, 12/3/01



Current Data Parameters
 NAME bist-c
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20011201
 Time 10.21
 INSTRUM spect
 PROBD 5 mm TXI 1H/
 PULPROG c13wznoe
 TD 65536
 SOLVENT CDCl3
 NS 20315
 DS 2
 SMH 37878.789 Hz
 FIDRES 0.577984 Hz
 AQ 0.8651252 sec
 RG 32768
 DW 13.200 usec
 DE 6.00 usec
 TE 290.0 K
 D1 8.00000000 sec
 D3 0.00100000 sec

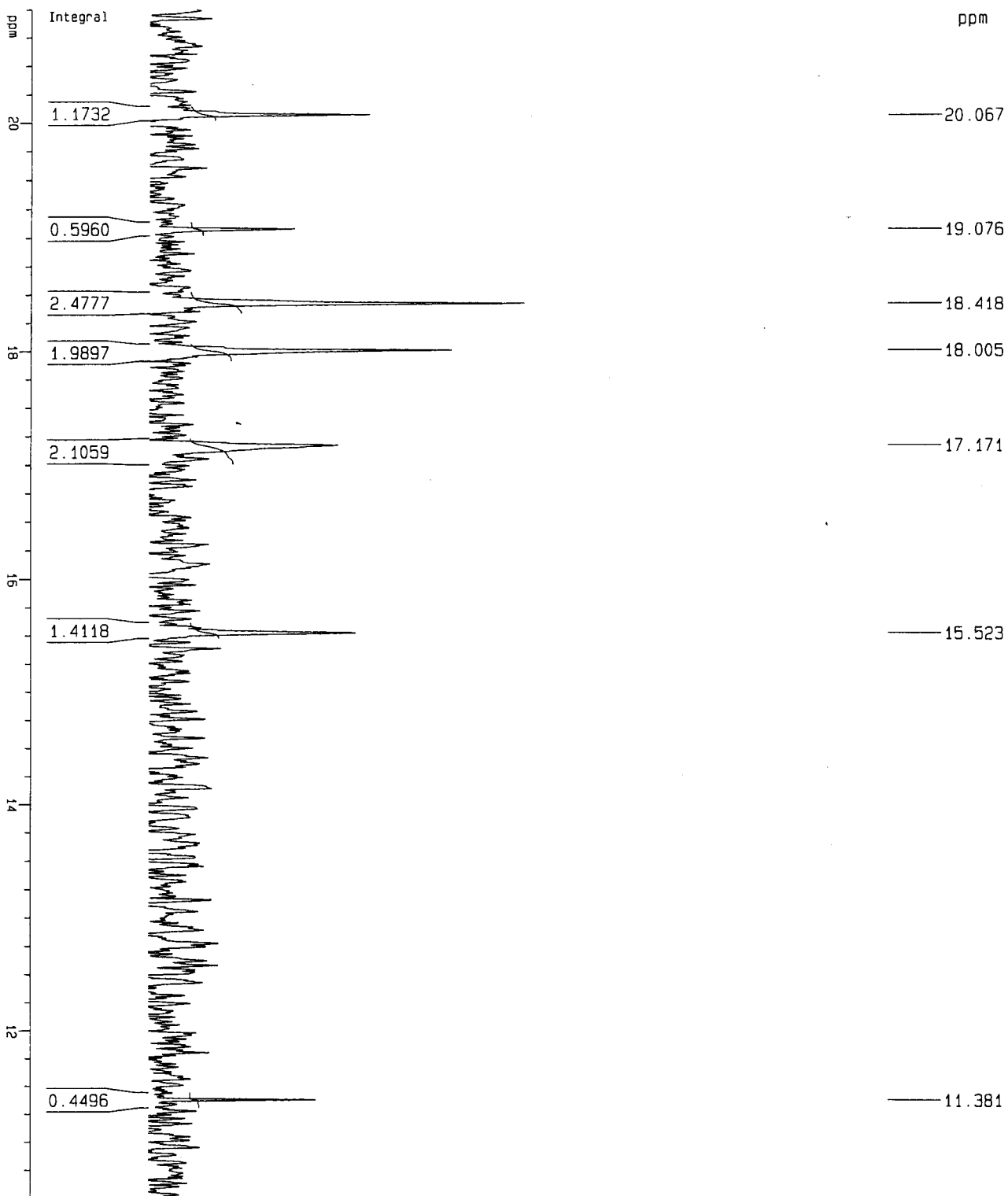
===== CHANNEL f1 =====
 NUC1 13C
 P1 13.00 usec
 PL1 0.00 dB
 SFO1 151.0953827 MHz

===== CHANNEL f2 =====
 CPDPRG2 waitz16
 NUC2 1H
 PCPD2 100.00 usec
 PL2 0.00 dB
 PL12 12.00 dB
 SFO2 600.8336050 MHz

F2 - Processing parameters
 SI 65536
 SF 151.0788353 MHz
 WDW EM
 SSB 0
 LB 2.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 20.00 cm
 F1P 36.500 ppm
 F1 5514.38 Hz
 F2P 30.000 ppm
 F2 4532.37 Hz
 PPMCM 0.32500 ppm/cm
 HZCM 49.10062 Hz/cm

151 Mhz 1H-decoupled 13C NMR spectrum of Bistramide C-authentic sample
 Submitted by Tamara Hopkins in filtered CDC13 at room temperature, 12/3/01



Current Data Parameters
 NAME bist-c
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20011201
 Time 10.21
 INSTRUM spect
 PROBD 5 mm 1XI 1H/
 PULPROG c13wznoe
 TD 65536
 SOLVENT CDC13
 NS 20315
 DS 2
 SMH 37878.789 Hz
 FIDRES 0.57984 Hz
 AQ 0.8651252 sec
 RG 32768
 DM 13.200 usec
 DE 6.00 usec
 TE 290.0 K
 D1 8.00000000 sec
 D3 0.00100000 sec

===== CHANNEL f1 =====
 NUC1 13C
 P1 13.00 usec
 PL1 0.00 dB
 SF01 151.0953827 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 100.00 usec
 PL2 0.00 dB
 PL12 12.00 dB
 SF02 600.8336050 MHz

F2 - Processing parameters
 SI 65536
 SF 151.078353 MHz
 WDM EM
 SSB 0
 LB 2.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 20.00 cm
 F1P 21.000 ppm
 F1 3172.66 Hz
 F2P 10.500 ppm
 F2 1586.33 Hz
 PPMCM 0.52500 ppm/cm
 HZCM 79.31639 Hz/cm