

FIG.1

20080410 03H-101 in DMSO
Pulse Sequence: zgpg30

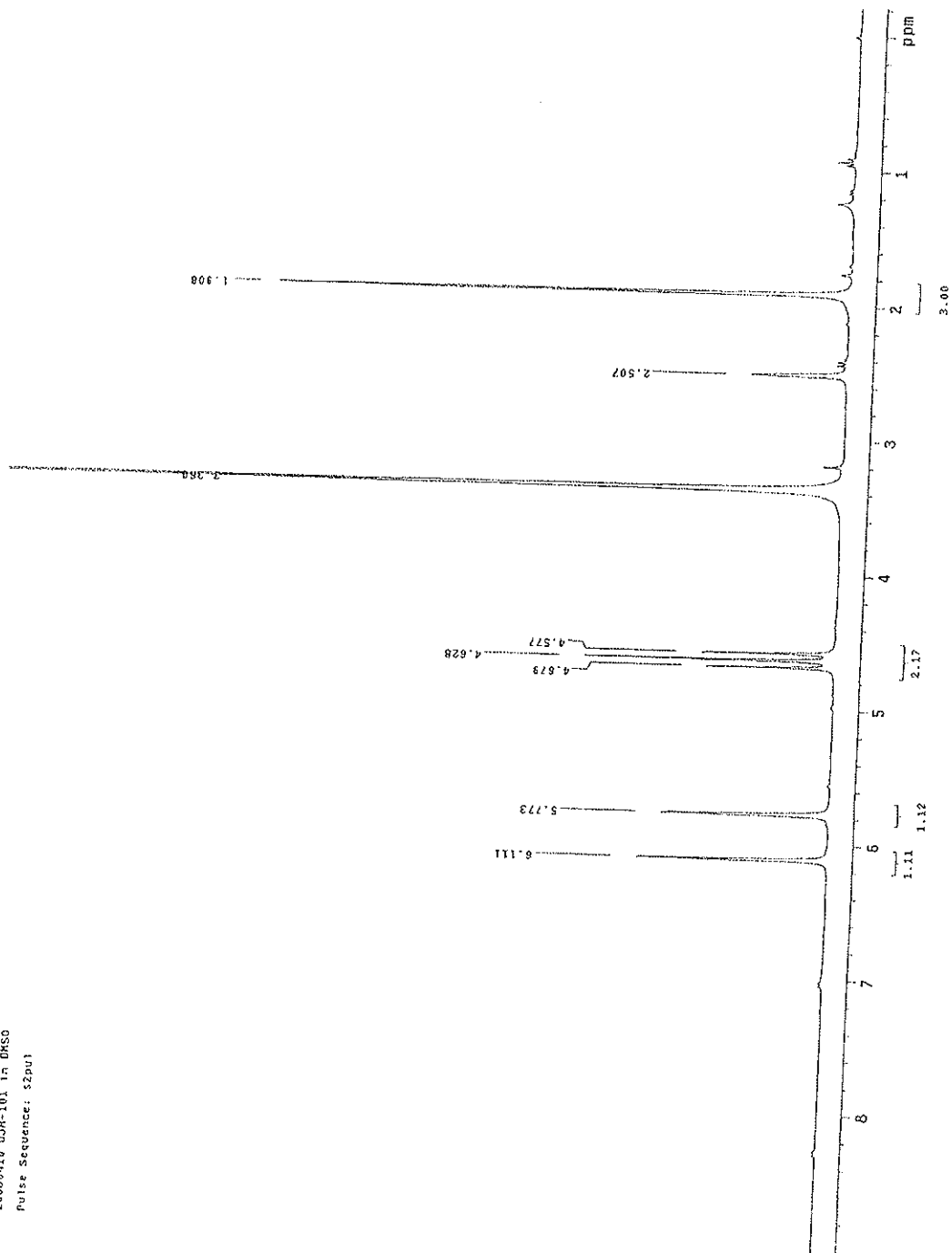


FIG.2

20000015 QJH-19Z in CDCl3
Pulse Sequence: zgpg30

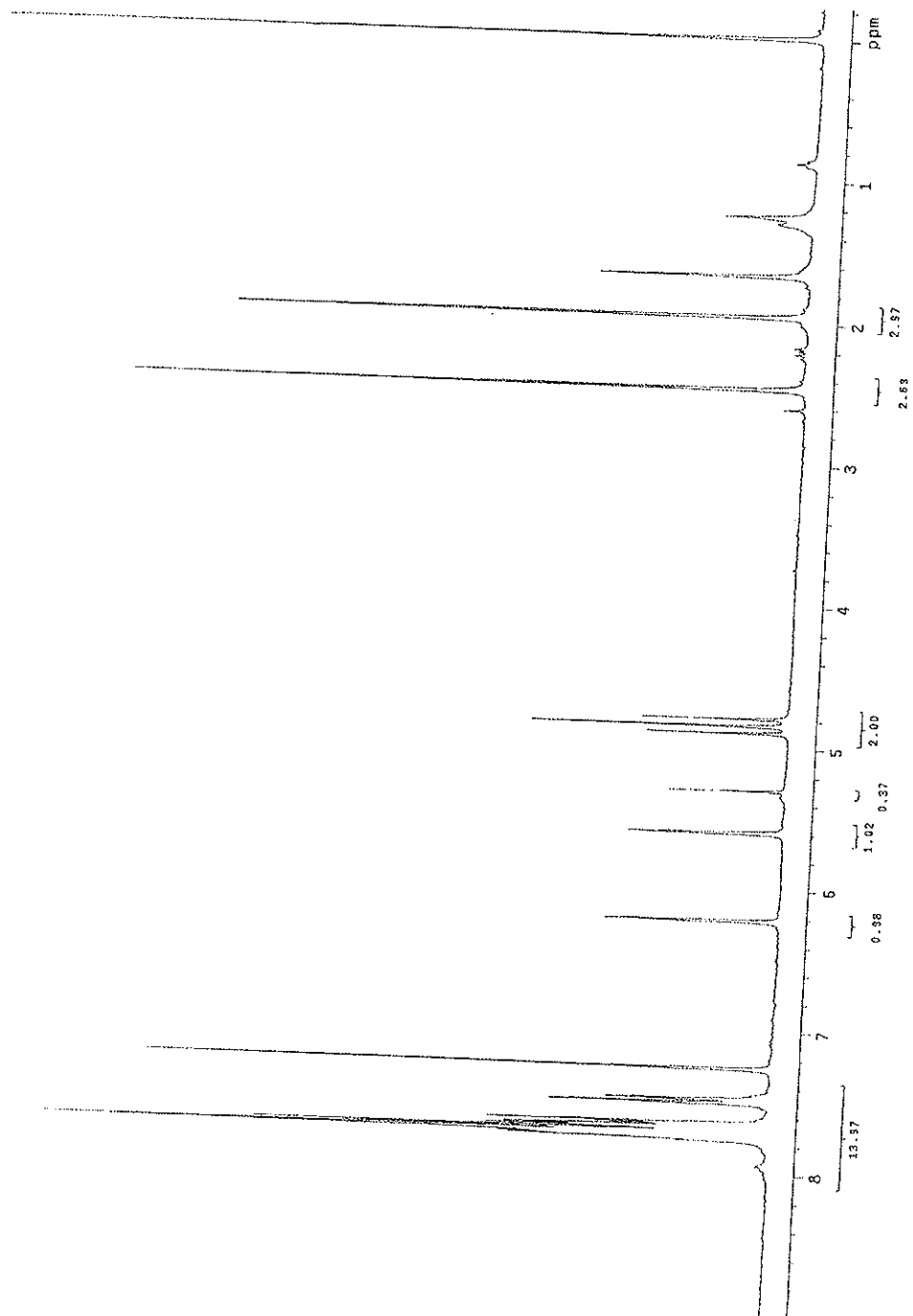


FIG.3

20080401 0T-17 in CDCl3
Pulse Sequence: zgpg1

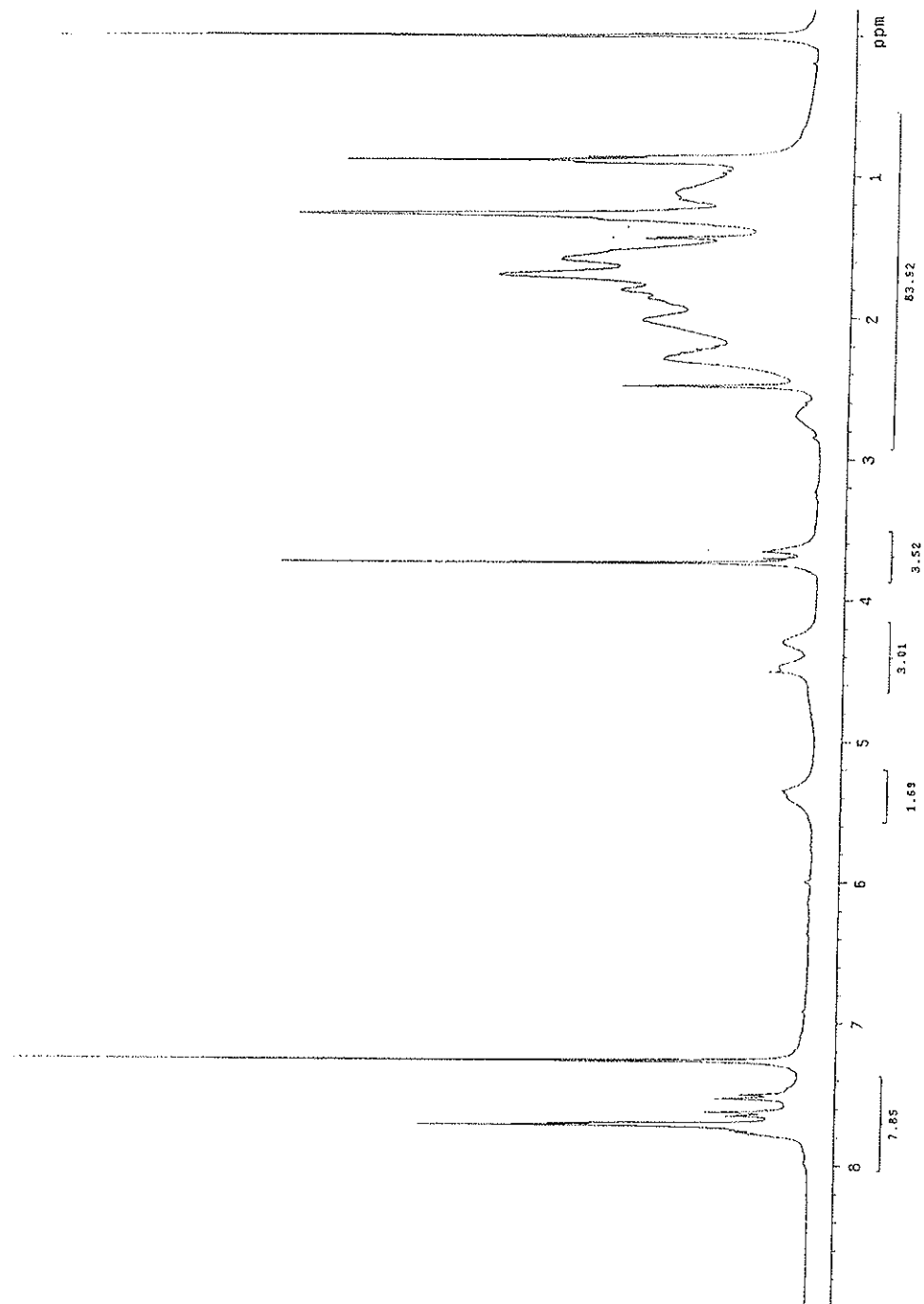


FIG.4

20080411_07-15 in CDCl3
Pulse Sequence: zgpg30

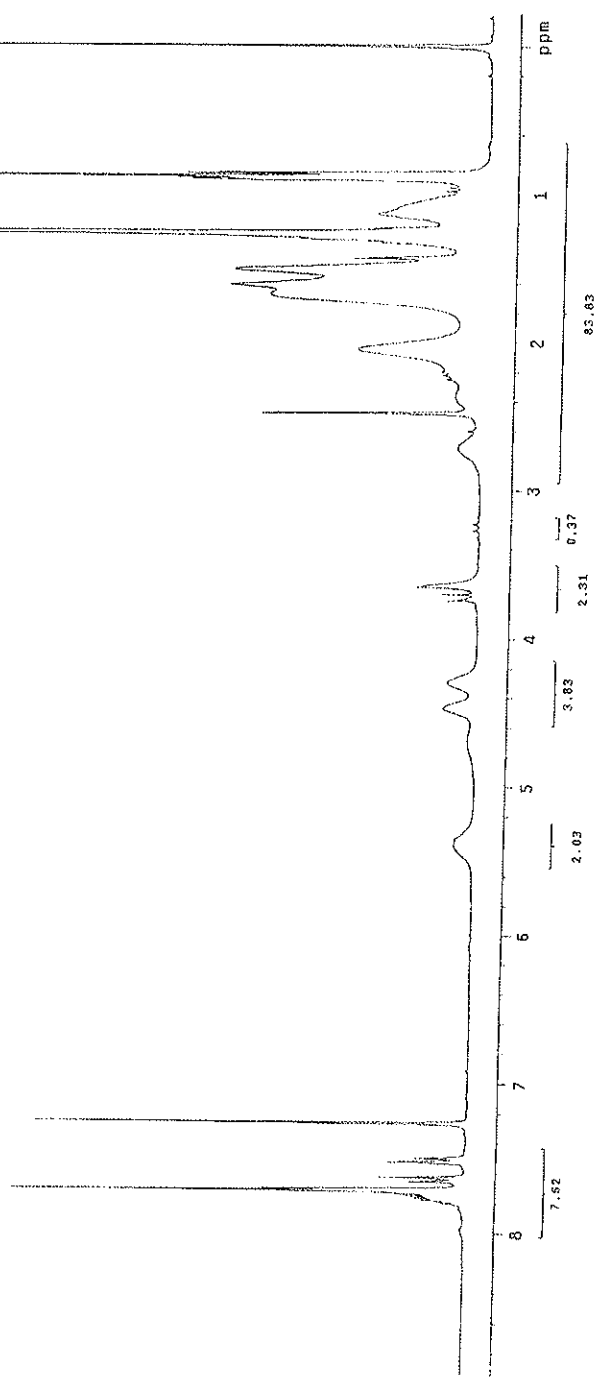


FIG. 5

20080422 QT-20 in CDCl₃
Pulse Sequence: zgpg30

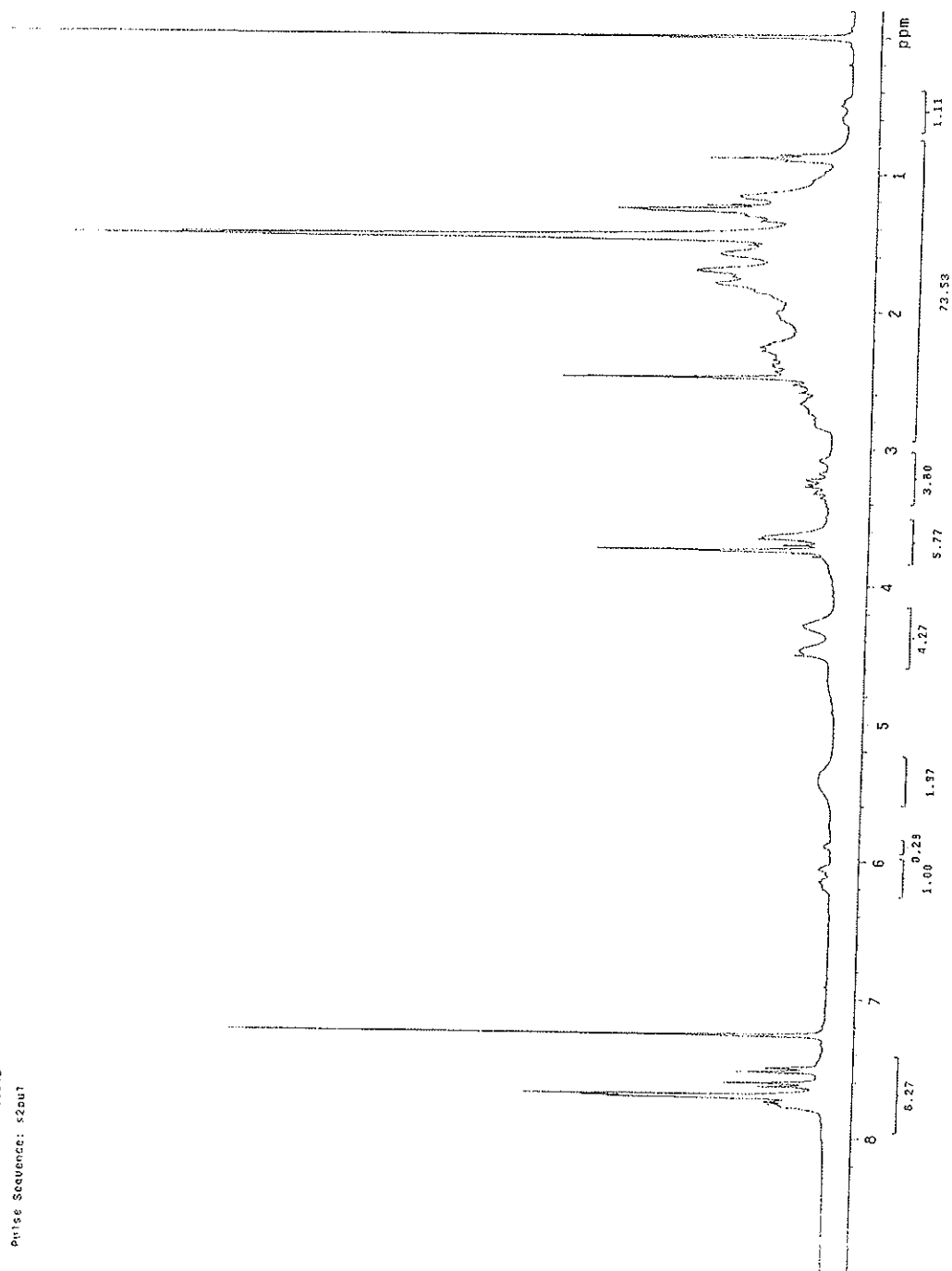


FIG.6

20080422 07-21 in C0013
Pulse Sequence: s2pu1

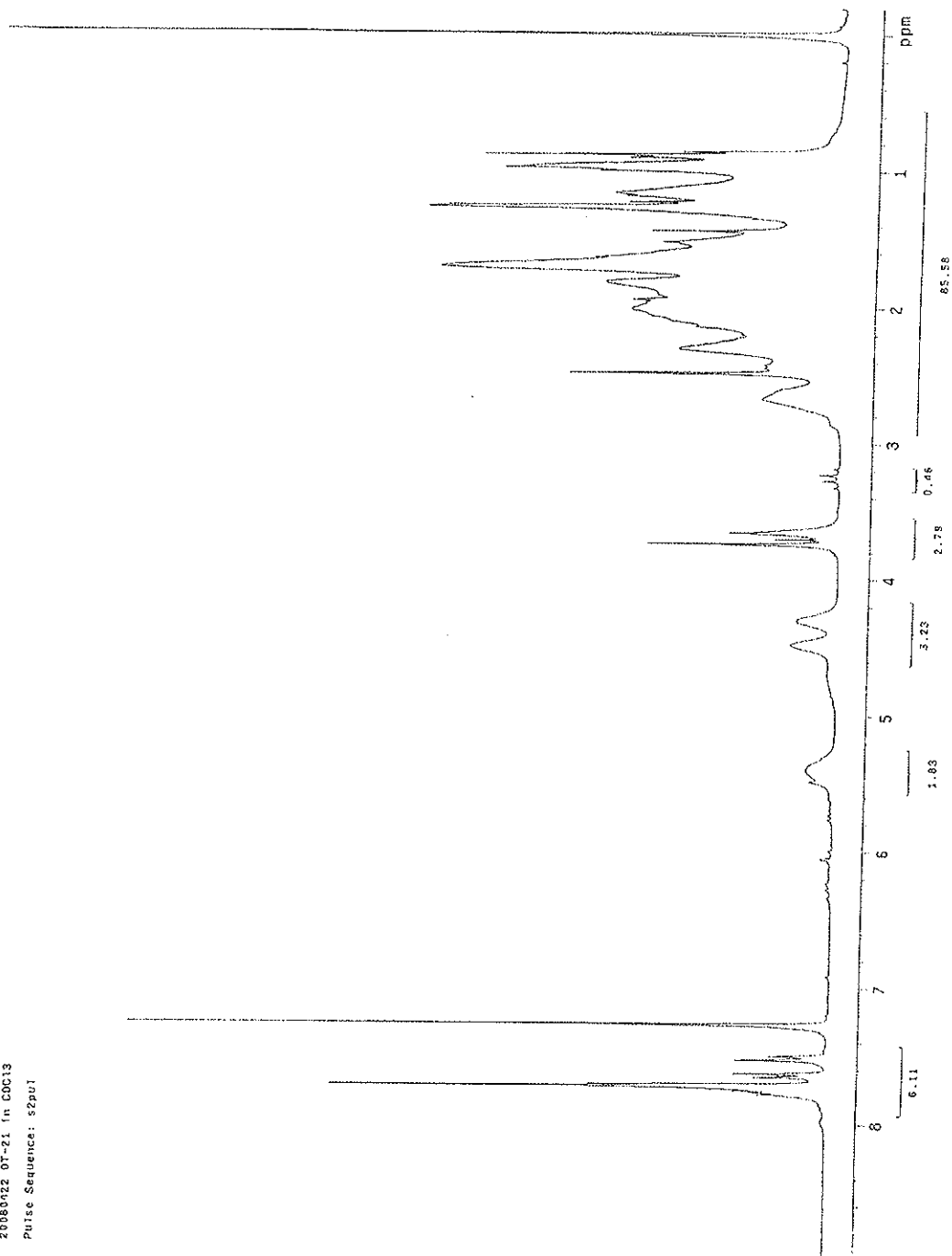


FIG.7

20080422 07-22 1n CDC13
Pulse Sequence: zgpg1

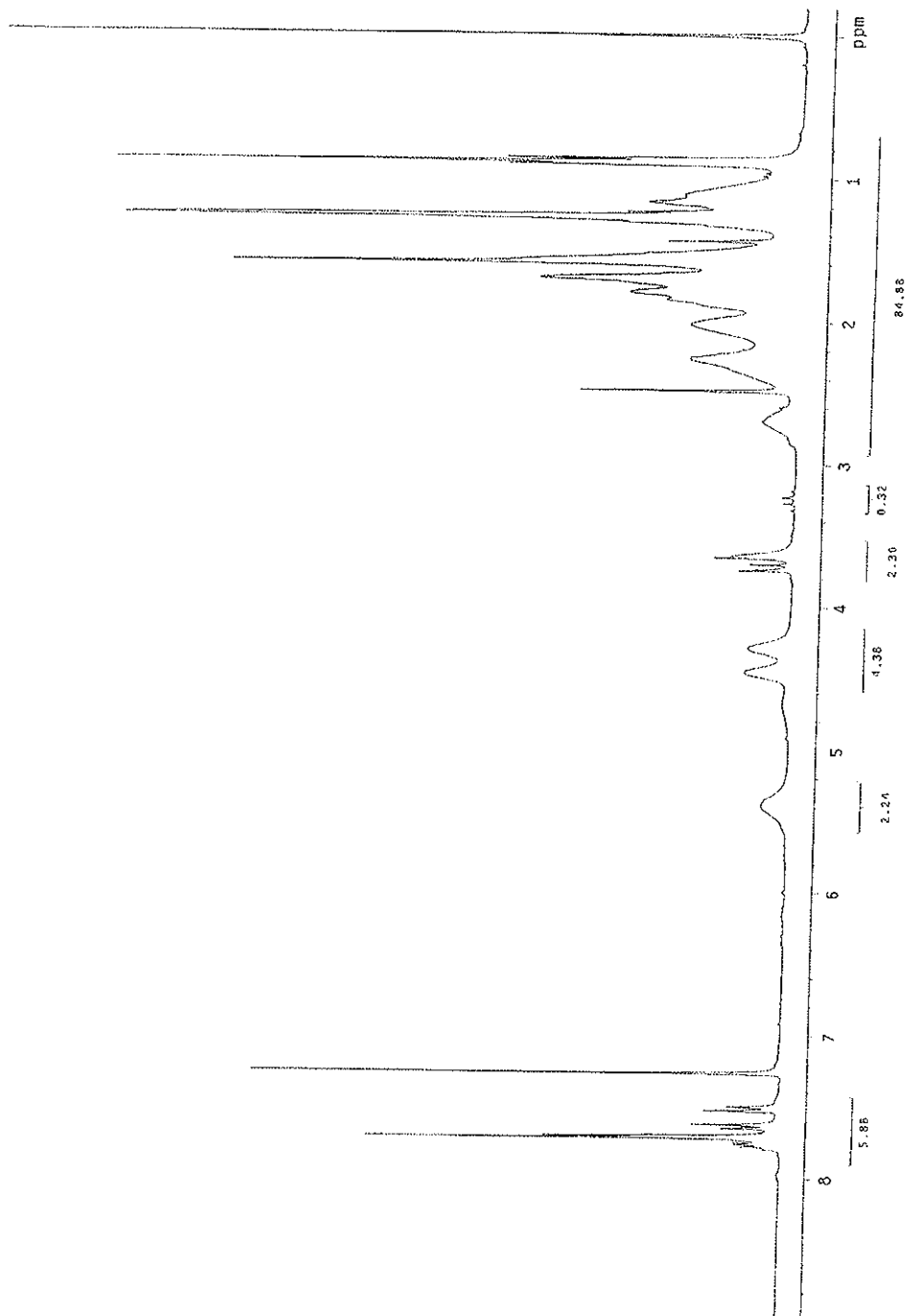


FIG.8

20080422 0T-23 1h C0C13
Pulse Sequence: zgpg1

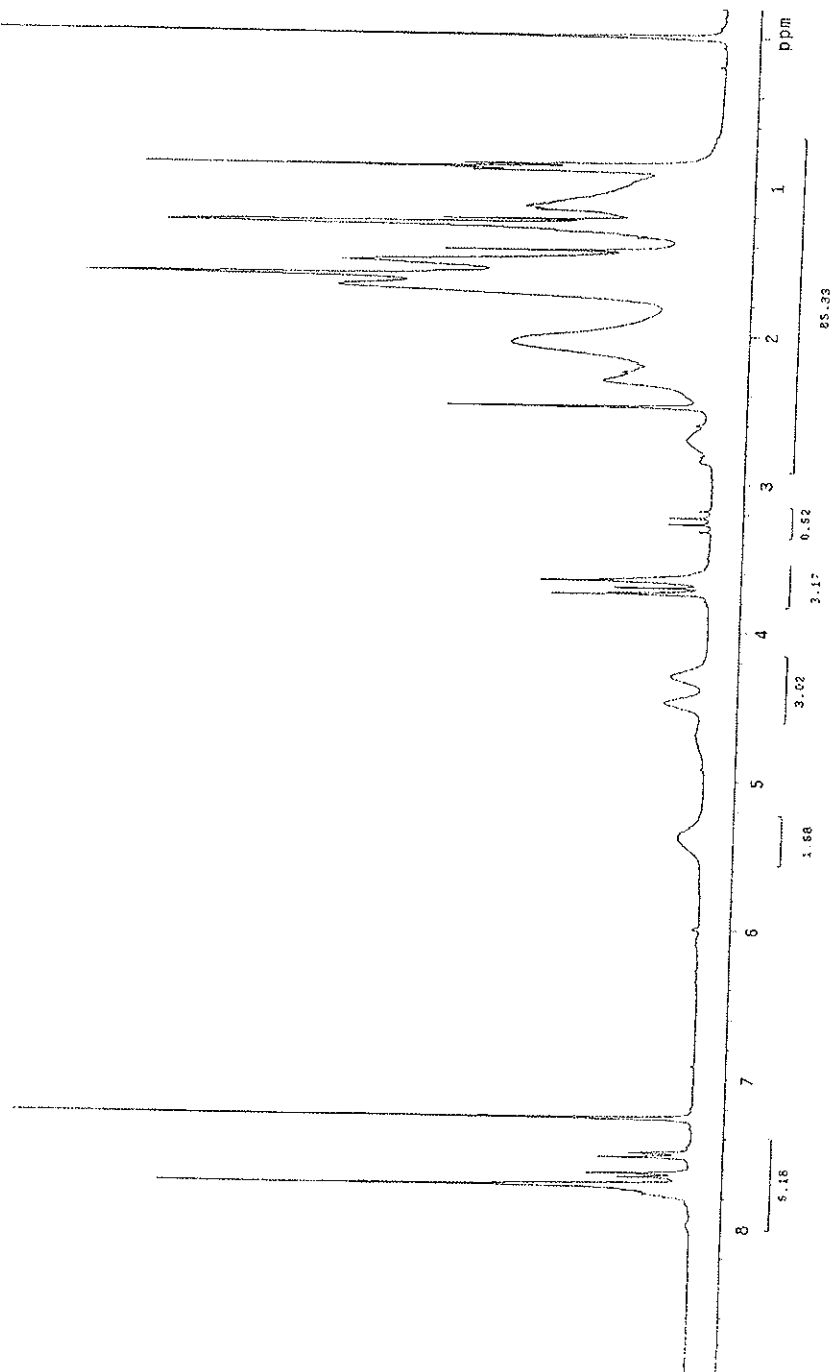
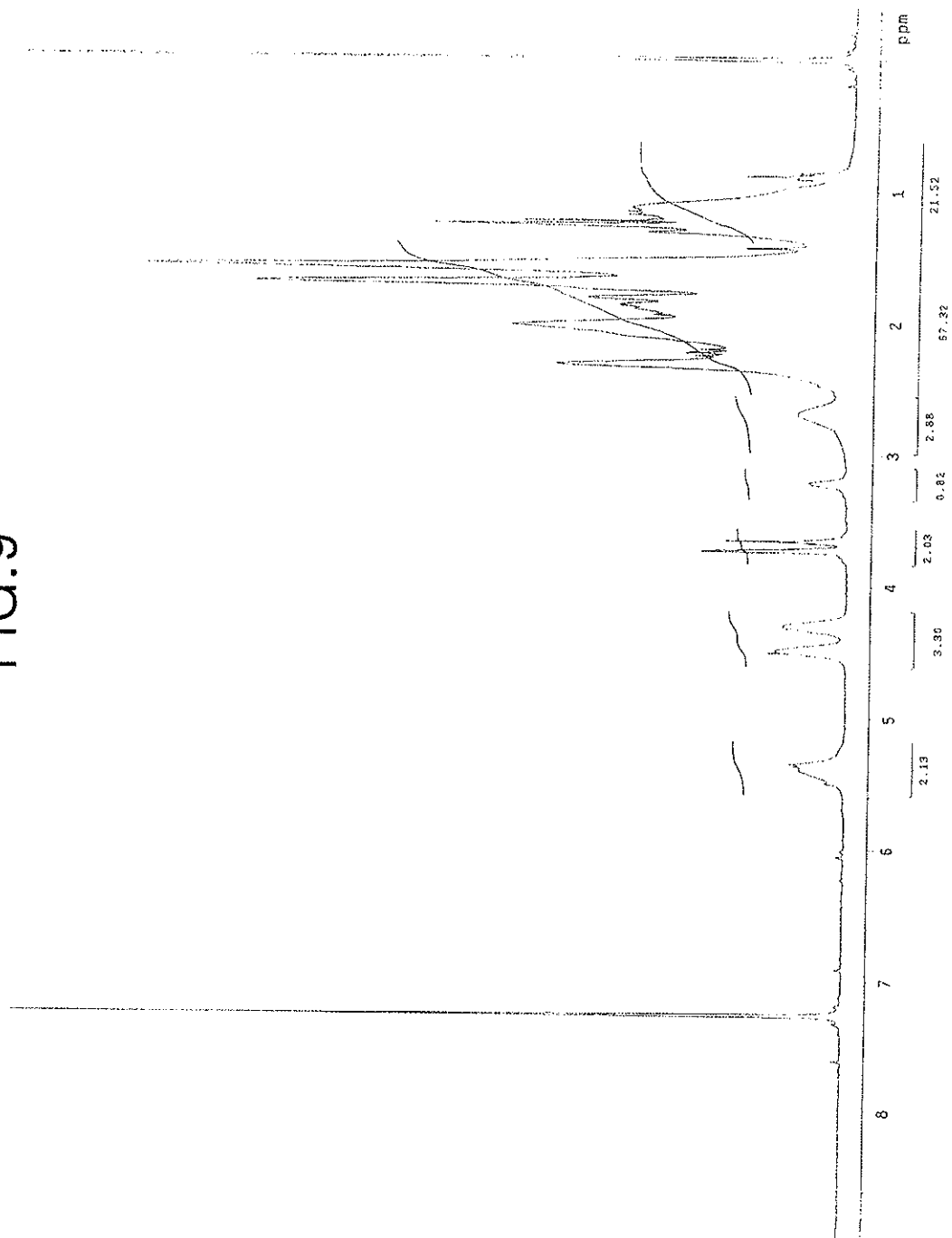


FIG. 9



< Run Conditions >

System: DM400+External RI
Columns: G4000Hhr+G2500Hhr
Solvent: THF
Flow Rate: 1.000 mL/min
Concentration: 0.000 mg/mL
Inj. Vol.: 100.0 μ L
Analyst: Hong Yong Hiwa

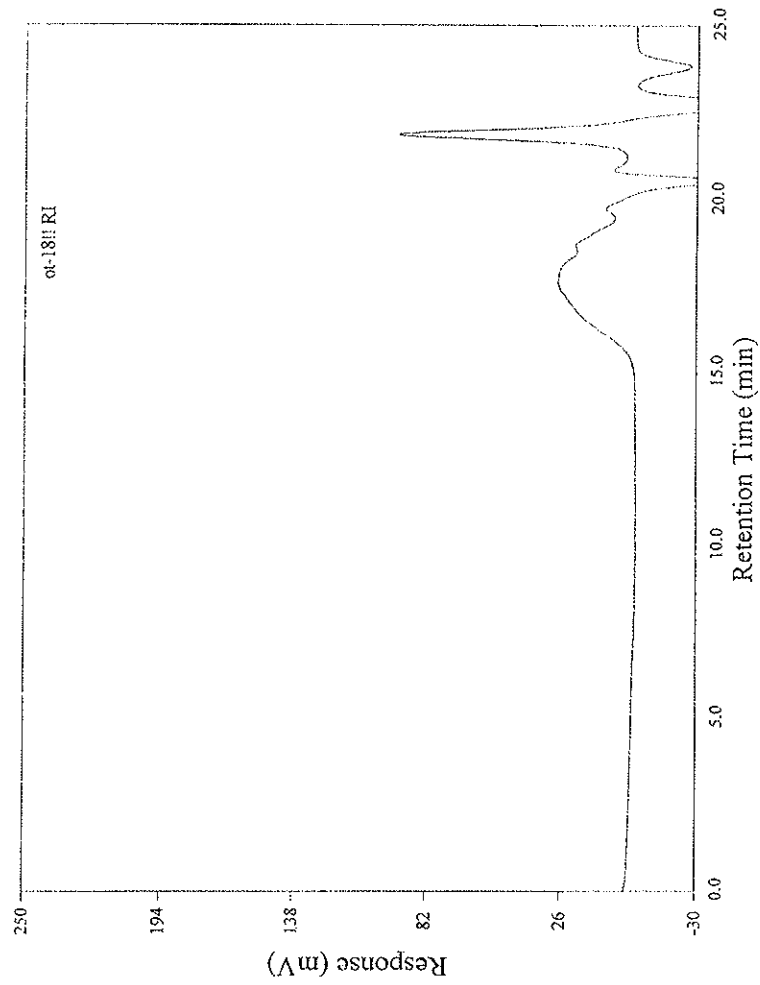
< GPC Data Summary >

Mn: 760	Pd: 1.57
Mw: 1,190	MP: 900
Mz: 1,760	
% Below 1,000:	100.0
% Above 20,000:	0.0

FIG.10

Run Date: Tue Apr 08 2008
TriSEC Version 3.00
Fri Jun 27 2008
11:51:57

Identification: OT-18[Solid]
File Name: OT-18!!



< Run Conditions >

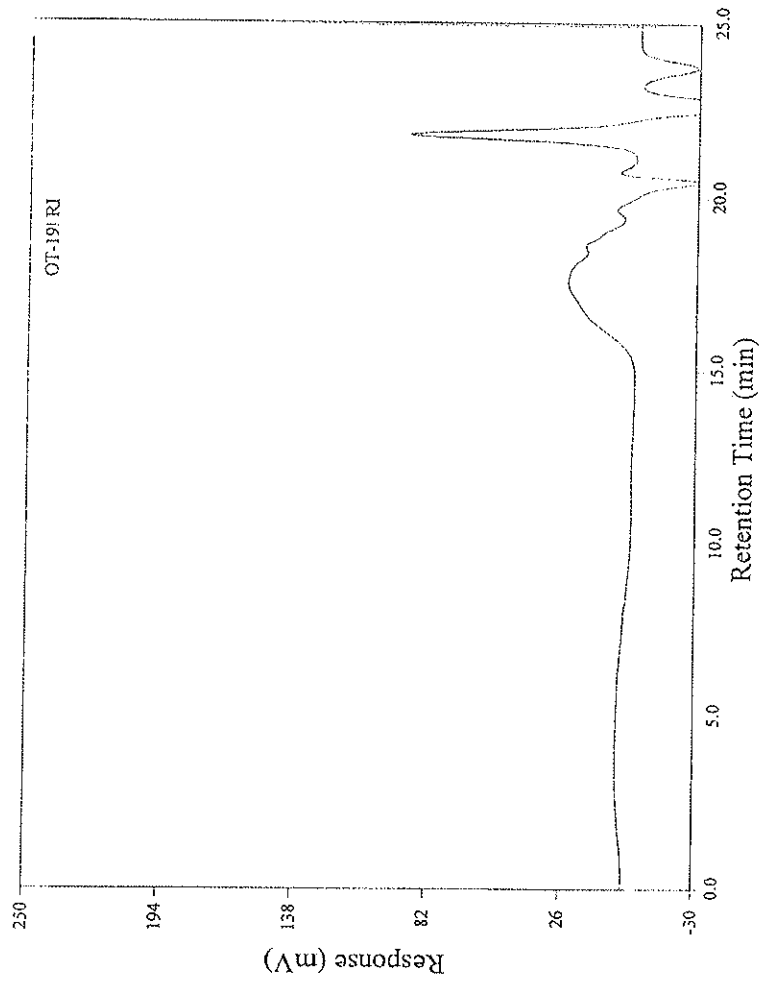
System: DM400+External RI
Columns: G4000Hhr+G2500Hhr
Solvent: THF
Flow Rate: 1.000 mL/min
Concentration: 0.000 mg/mL
Inj. Vol.: 100.0 uL
Analyst: Hong Yong Hwa

< GPC Data Summary >

Mn: 800 Pd: 1.54
Mw: 1,230 MP: 920
Mz: 1,800
% Below 1,000: 100.0
% Above 20,000: 0.0

FIG.11

Run Date: Fri Apr 11 2008
ThiSEC Version 3.00
Fri Jun 27 2008
11:49:35
Identification: OT-19[Solid]
File Name: OT-19!



Kumho Petrochemical Co., Ltd
GPC Characterization

< Run Conditions >

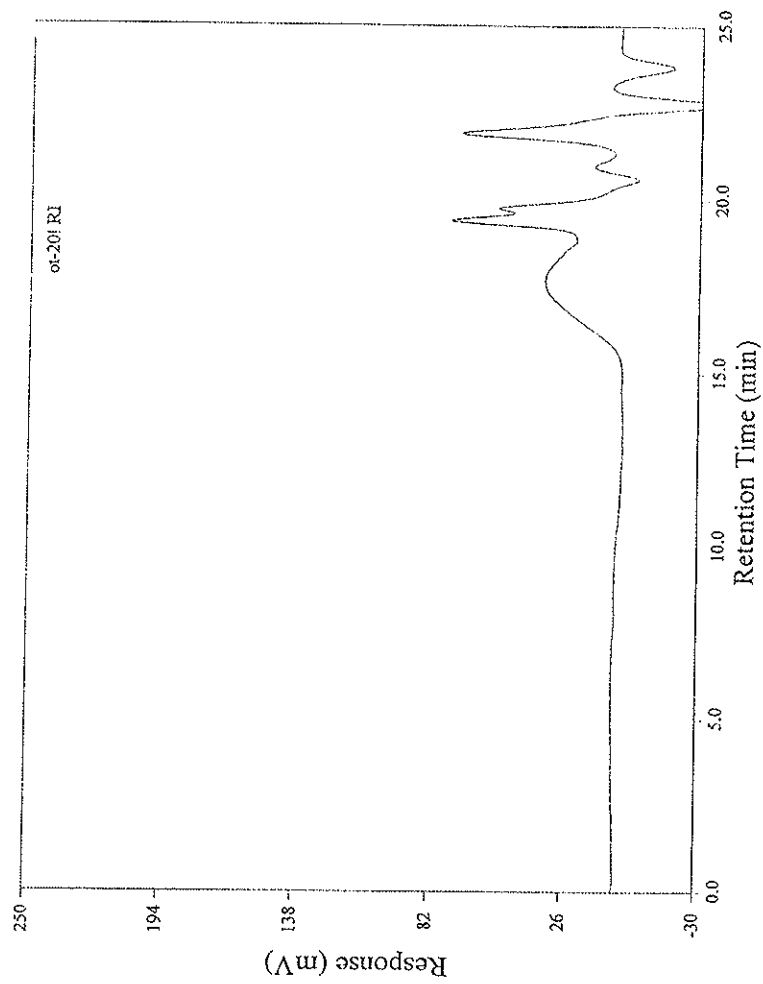
System: DM400+External RI
Columns: G4000Hhr+G2500Hhr
Solvent: THF
Flow Rate: 1.000 mL/min
Concentration: 0.000 mg/mL
Inj. Vol.: 100.0 uL
Analyst: Hong Yong Hwa

< GPC Data Summary >

Mn: 950	Pd: 1.27
Mw: 1,210	MP: 990
Mz: 1,530	
% Below 1,000:	100.0
% Above 20,000:	0.0

FIG.12

Run Date: Tue Apr 22 2008
TriSEC Version 3.00
Fri Jun 27 2008
11:49:49
Identification: OT-20[Solid]
File Name: OT-20!



Kumho Petrochemical Co., Ltd
 GPC Characterization

< Run Conditions >

System: DM400+External RI
 Columns: G4000Hhr+G2500Hhr
 Solvent: THF
 Flow Rate: 1.000 mL/min
 Concentration: 0.000 mg/mL
 Inj. Vol.: 100.0 uL
 Analyst: Hong Yong Hwa

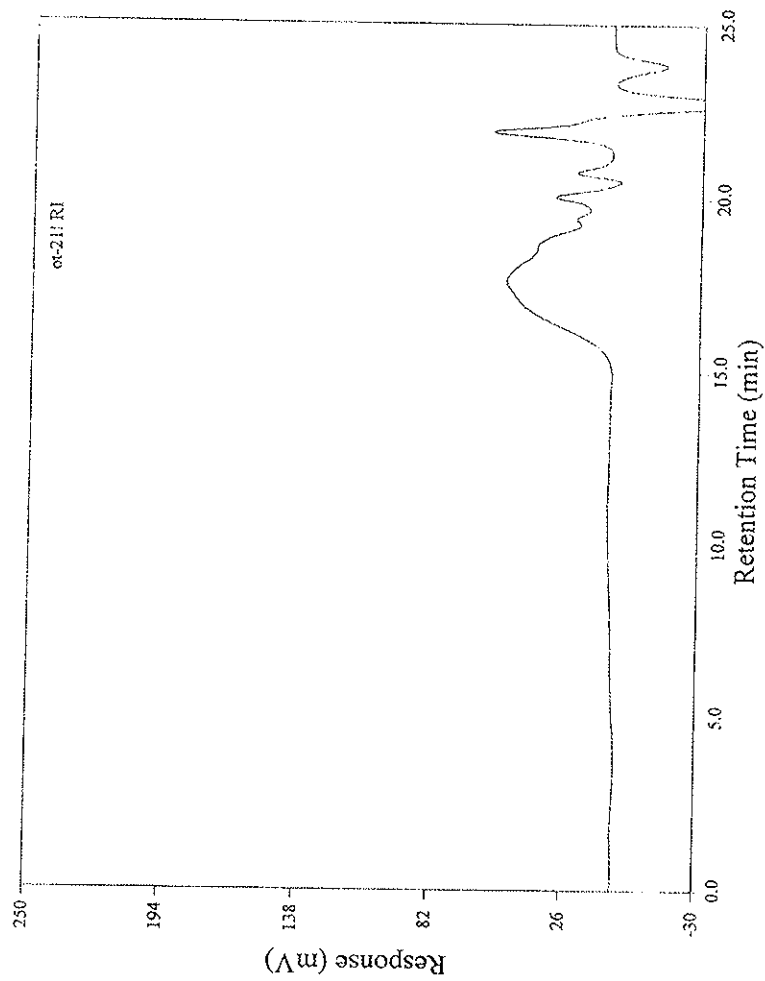
< GPC Data Summary >

Mn: 740 Pd: 1.57
 Mw: 1,160 MP: 980
 Mz: 1,690
 % Below 1,000: 100.0
 % Above 20,000: 0.0

FIG.13

Run Date: Tue Apr 22 2008
 TSSSEC Version 3.00
 Fri Jun 27 2008
 11:49:59

Identification: OT-21[Solid]
 File Name: OT-21!



Kumho Petrochemical Co., Ltd
GPC Characterization

< Run Conditions >

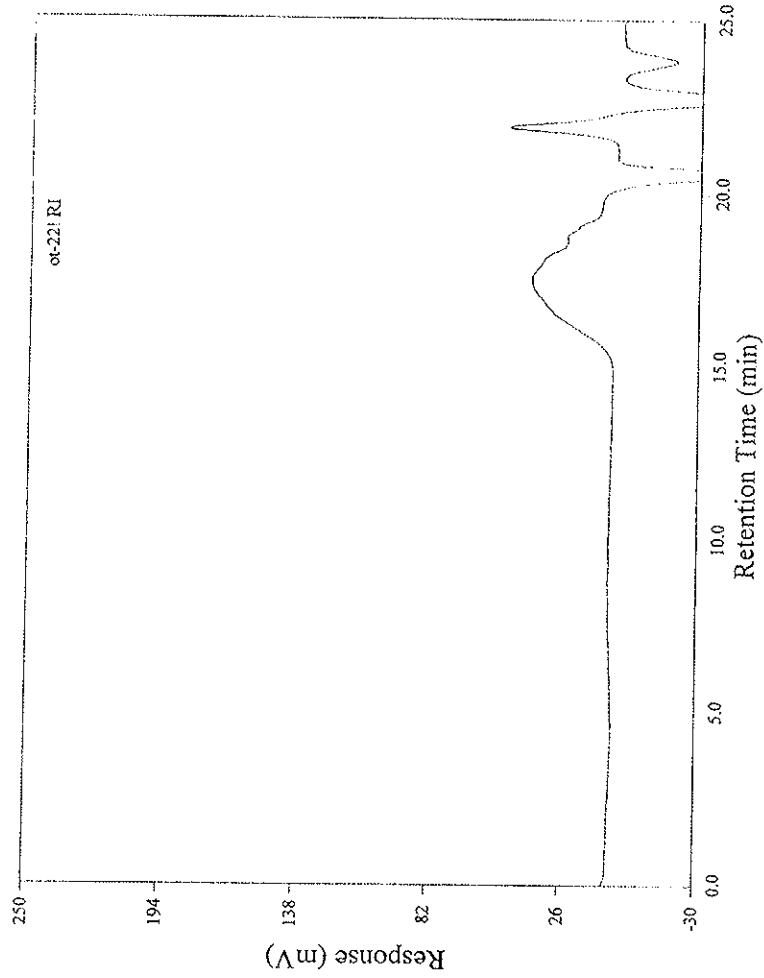
System: DM400+External RI
Columns: G4000Hhr+G2500Hhr
Solvent: THF
Flow Rate: 1.000 mL/min
Concentration: 0.000 mg/mL
Inj. Vol.: 100.0 uL
Analyst: Hong Yong Hwa

< GPC Data Summary >

Mn: 810	Pd: 1.58
Mw: 1,280	MP: 1,020
Mz: 1,880	
% Below 1,000:	100.0
% Above 20,000:	0.0

FIG.14

Run Date: Tue Apr 22 2008
TriSEC Version 3.00
Fri Jun 27 2008
11:50:09
Identification: OT-22[Solid]
File Name: OT-22!



Kumho Petrochemical Co., Ltd

GPC Characterization

FIG.15

Run Date: Tue Apr 22 2008
TriSEC Version 3.00
Fri Jun 27 2008
11:50:22

Identification: OT-23[Solid]

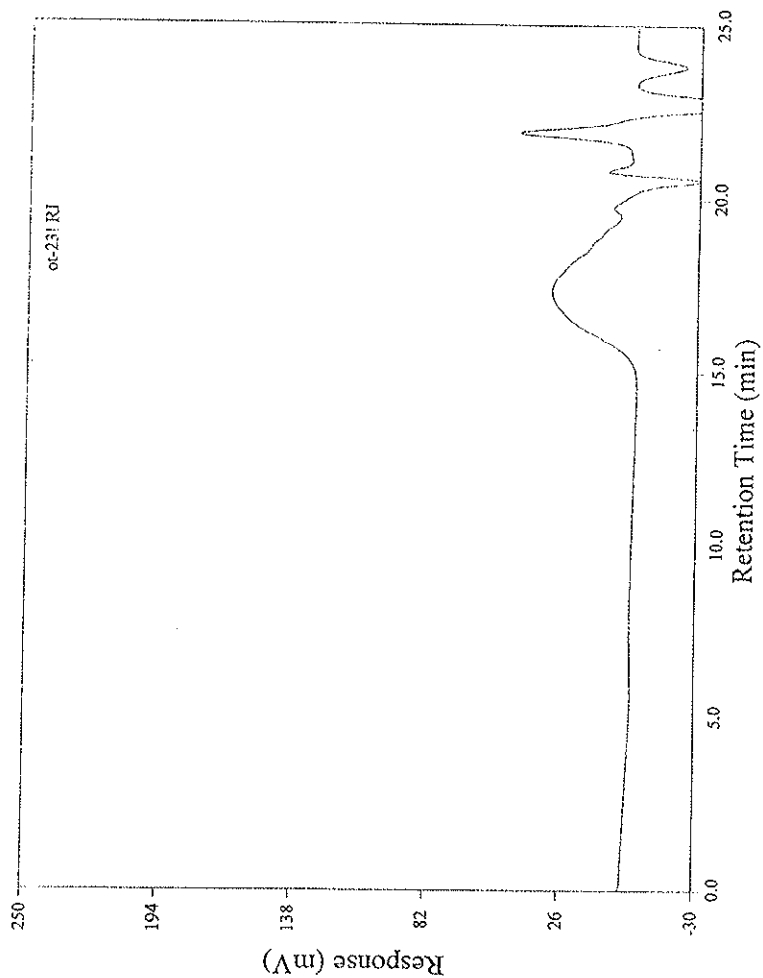
File Name: OT-23!

< Run Conditions >

System: DM400+External RI
Columns: G4000Hhr+G2500Hhr
Solvent: THF
Flow Rate: 1.000 mL/min
Concentration: 0.000 mg/mL
Inj. Vol.: 100.0 uL
Analyst: Hong Yong Hwa

< GPC Data Summary >

Mn: 880 Pd: 1.57
Mw: 1,380 MP: 1,090
Mz: 1,990
% Below 1,000: 100.0
% Above 20,000: 0.0



Kumho Petrochemical Co., Ltd

GPC Characterization

Run Date: Fri Jun 27 2008
 T7SEC Version 3.00
 Fri Jun 27 2008
 10:56:04

Identification: PBP

File Name: PBP

< Run Conditions >

System: DM400+External RI
 Columns: G4000Hhr+G2500Hhr
 Solvent: THF
 Flow Rate: 1.000 mL/min
 Concentration: 0.000 mg/mL
 Inj. Vol.: 100.0 uL
 Analyst: Hong Yong Hwa

< GPC Data Summary >

Mn: 1,060 Pd: 1.68
 Mw: 1,780 MP: 1,810
 Mz: 2,650
 % Below 1,000: 100.0
 % Above 20,000: 0.0

FIG.16

