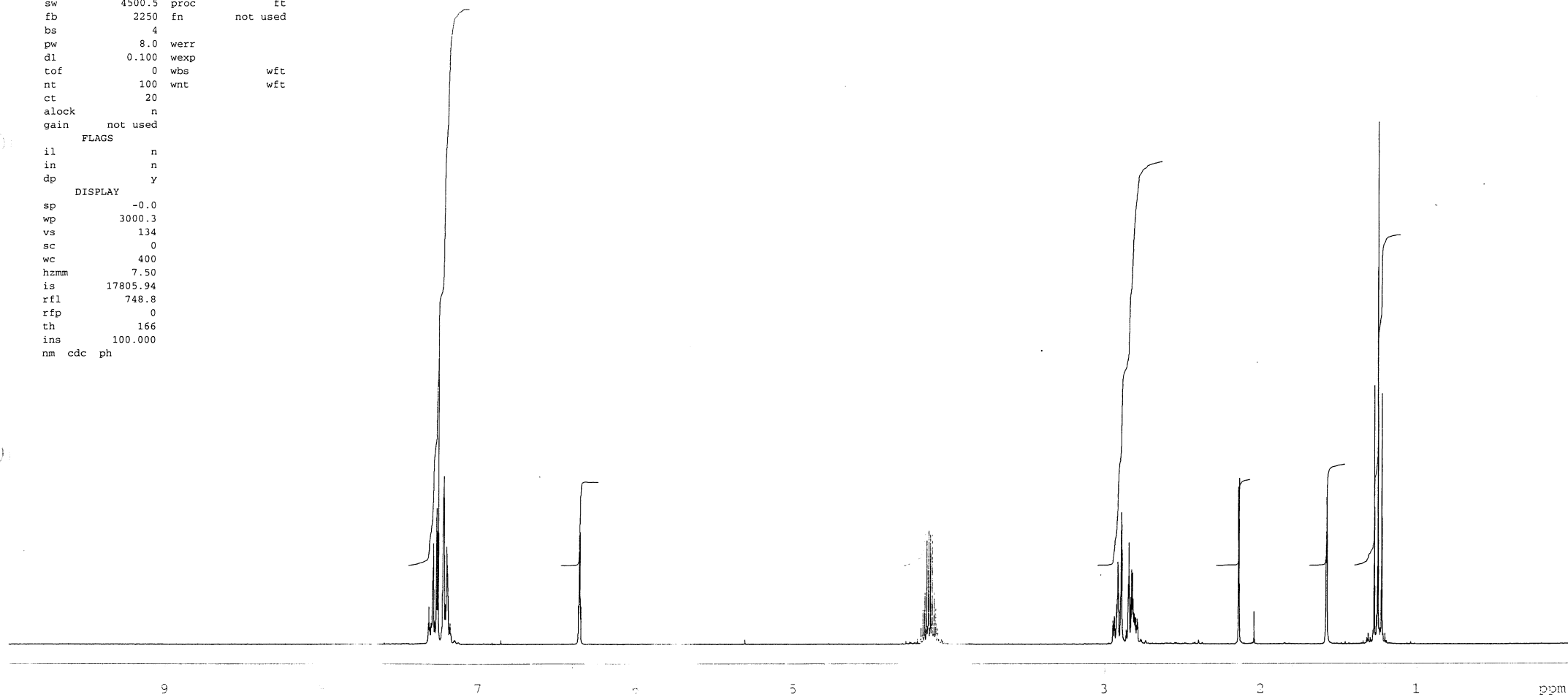
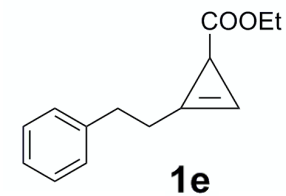


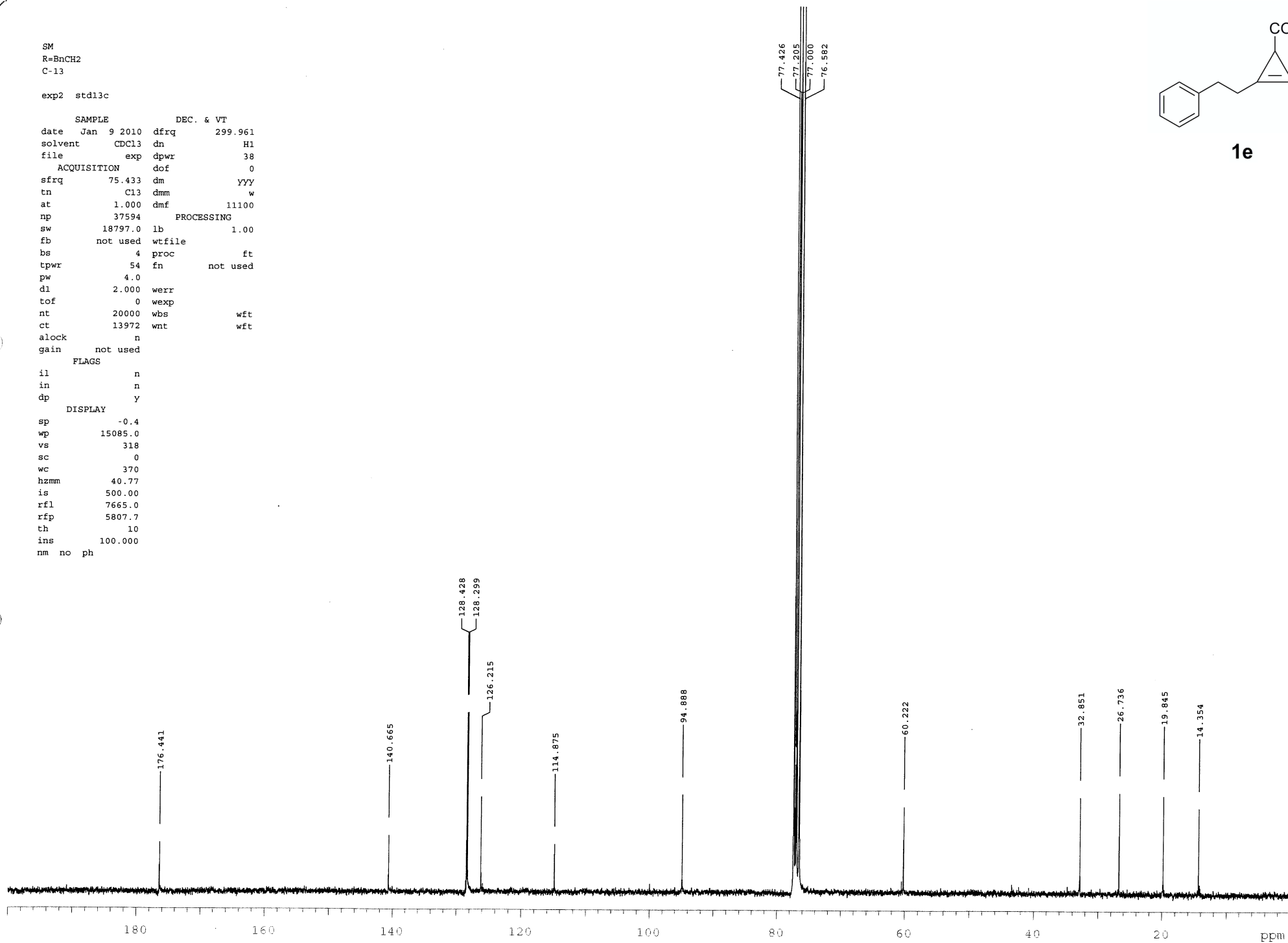
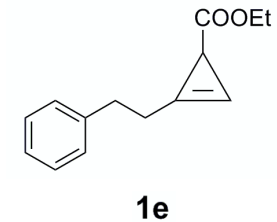
Ethyl 2-(2-phenylethyl)cycloprop-2-ene-1-
-carboxylate

exp4 stdlh

SAMPLE		DEC. & VT	
date	Sep 10 2008	dfrq	300.053
solvent	CDCl3	dn	H1
file	exp	dof	0
ACQUISITION		PROCESSING	
sfrq	300.053	dm	nnn
tn	H1	dmm	c
at	3.555	dmf	200
np	32000	wtfile	
sw	4500.5	proc	ft
fb	2250	fn	not used
bs	4		
pw	8.0	werr	
dl	0.100	wexp	
tof	0	wbs	wft
nt	100	wnt	wft
ct	20		
alock	n		
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
DISPLAY			
sp	-0.0		
wp	3000.3		
vs	134		
sc	0		
wc	400		
hzmm	7.50		
is	17805.94		
rfl	748.8		
rfp	0		
th	166		
ins	100.000		
nm	cdc ph		

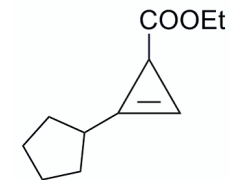


SM
 R=BnCH2
 C-13
 exp2 std13c
 SAMPLE DEC. & VT
 date Jan 9 2010 dfrq 299.961
 solvent CDCl3 dn H1
 file exp dpwr 38
 ACQUISITION dof 0
 sfrq 75.433 dm YYY
 tn C13 dmm w
 at 1.000 dmf 11100
 np 37594 PROCESSING
 sw 18797.0 lb 1.00
 fb not used wtfile
 bs 4 proc ft
 tpwr 54 fn not used
 pw 4.0
 dl 2.000 werr
 tof 0 wexp
 nt 20000 wbs wft
 ct 13972 wnt wft
 alock n
 gain not used
 FLAGS
 il n
 in n
 dp y
 DISPLAY
 sp -0.4
 wp 15085.0
 vs 318
 sc 0
 wc 370
 hzmm 40.77
 is 500.00
 rfl 7665.0
 rfp 5807.7
 th 10
 ins 100.000
 nm no ph

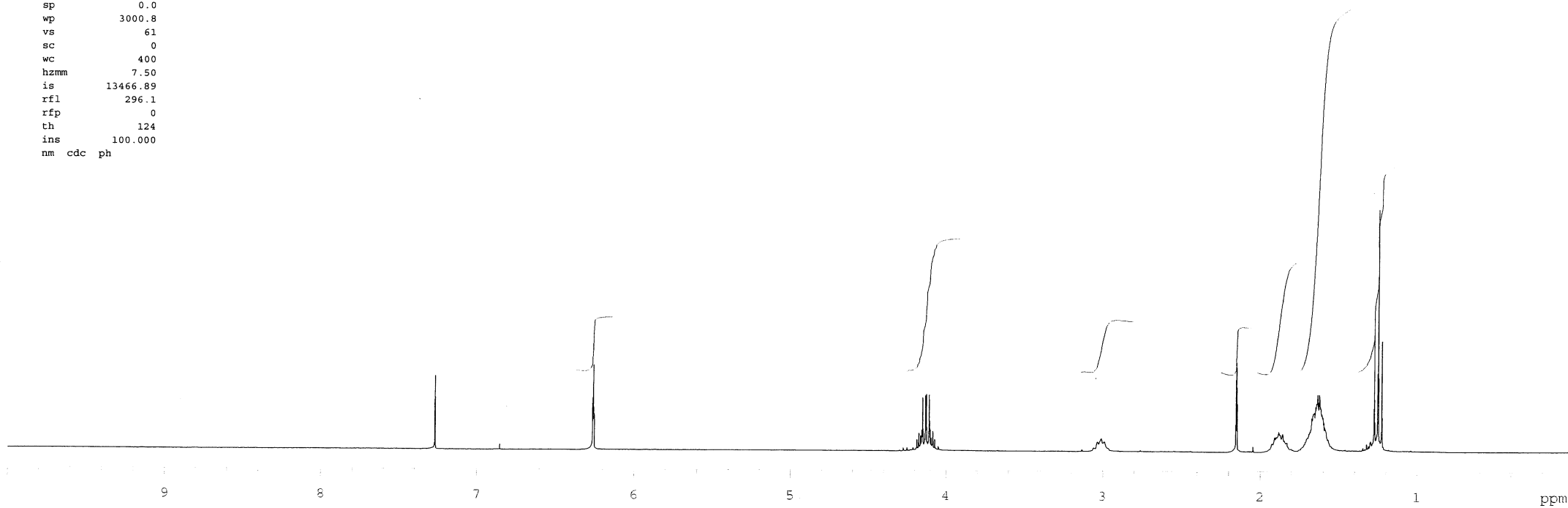


H-21
FC-1
exp2 stdlh

SAMPLE		DEC. & VT	
date	Dec 9 2009	dfrq	300.092
solvent	CDCl3	dn	H1
file	exp	dof	0
ACQUISITION		PROCESSING	
sfrq	300.092	dm	nnn
tn	H1	dmm	c
at	3.555	dmf	200
np	32000	wtfile	
sw	4500.5	proc	ft
fb	2250	fn	not used
bs	4		
pw	8.0	werr	
d1	0.100	wexp	
tof	450.0	wbs	wft
nt	100	wnt	wft
ct	12		
alock	n		
gain	not used		
FLAGS			
il	n		
in	n		
dp	Y		
DISPLAY			
sp	0.0		
wp	3000.8		
vs	61		
sc	0		
wc	400		
hzmm	7.50		
is	13466.89		
rfl	296.1		
rfp	0		
th	124		
ins	100.000		
nm	cdc ph		



1g



```

ln
C-13

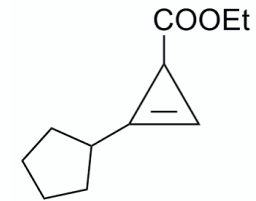
expl std13c

SAMPLE          DEC. & VT
date Jan 9 2010 dfrq 300.092
solvent CDCl3  dn  H1
file exp  dhp  0.5
ACQUISITION    dof  0
sfrq 75.465  dm  YYY
tn C13  dmm  w
at 0.853  dmf  8800
np 32000  PROCESSING
sw 18761.7 lb  1.00
fb 9500  wfile
bs 4  proc  ft
pw 7.3  fn  not used
dl 1.200
tof 0  werr
nt 10000 wexp
ct 904  wbs  wft
alock n  wnt  wft
gain not used

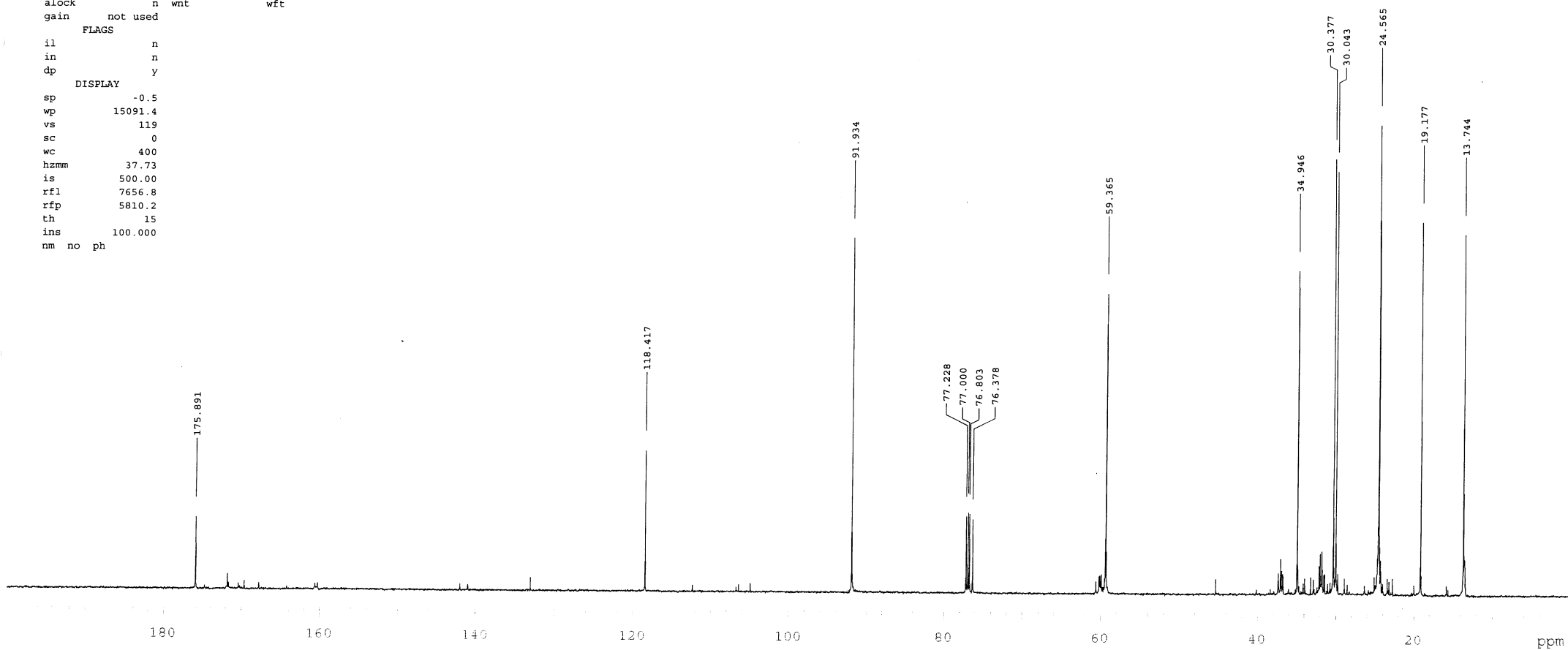
FLAGS
il n
in n
dp y

DISPLAY
sp -0.5
wp 15091.4
vs 119
sc 0
wc 400
hzmm 37.73
is 500.00
rfl 7656.8
rfp 5810.2
th 15
ins 100.000
nm no ph

```



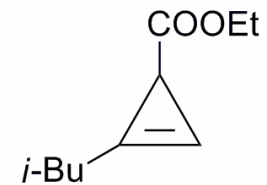
1g



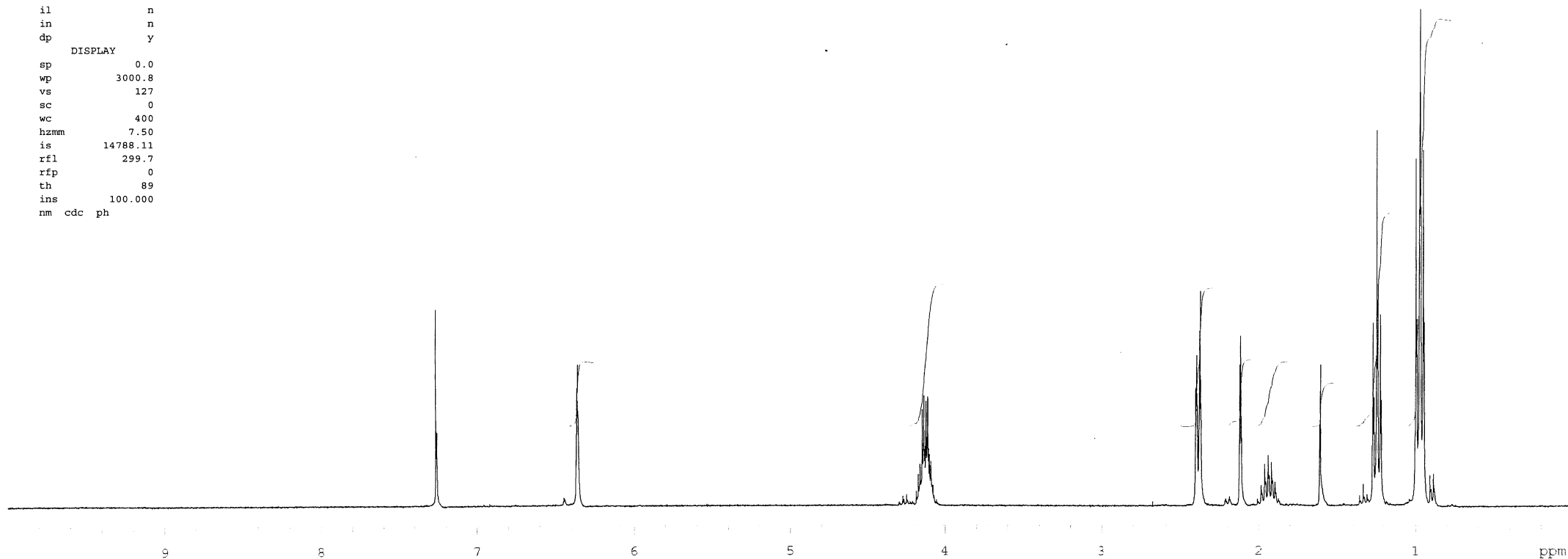
C-50
LF-2

exp3 std1h

SAMPLE		DEC. & VT	
date	Jun 16 2011	dfrq	300.092
solvent	CDCl3	dn	H1
file	exp	dof	0
ACQUISITION		PROCESSING	
sfrq	300.092	dmm	c
tn	H1	dmf	200
at	3.555	np	32000
sw	4500.5	proc	ft
fb	2250	fn	not used
bs	4	pw	8.0
di	0.100	werr	
tof	450.0	wexp	
nt	8	wbs	wft
ct	8	wnt	wft
alock	n		
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
DISPLAY			
sp	0.0		
wp	3000.8		
vs	127		
sc	0		
wc	400		
hzmm	7.50		
is	14788.11		
rfl	299.7		
rfp	0		
th	89		
ins	100.000		
nm	cdc	ph	



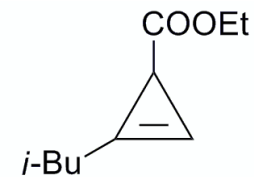
1h



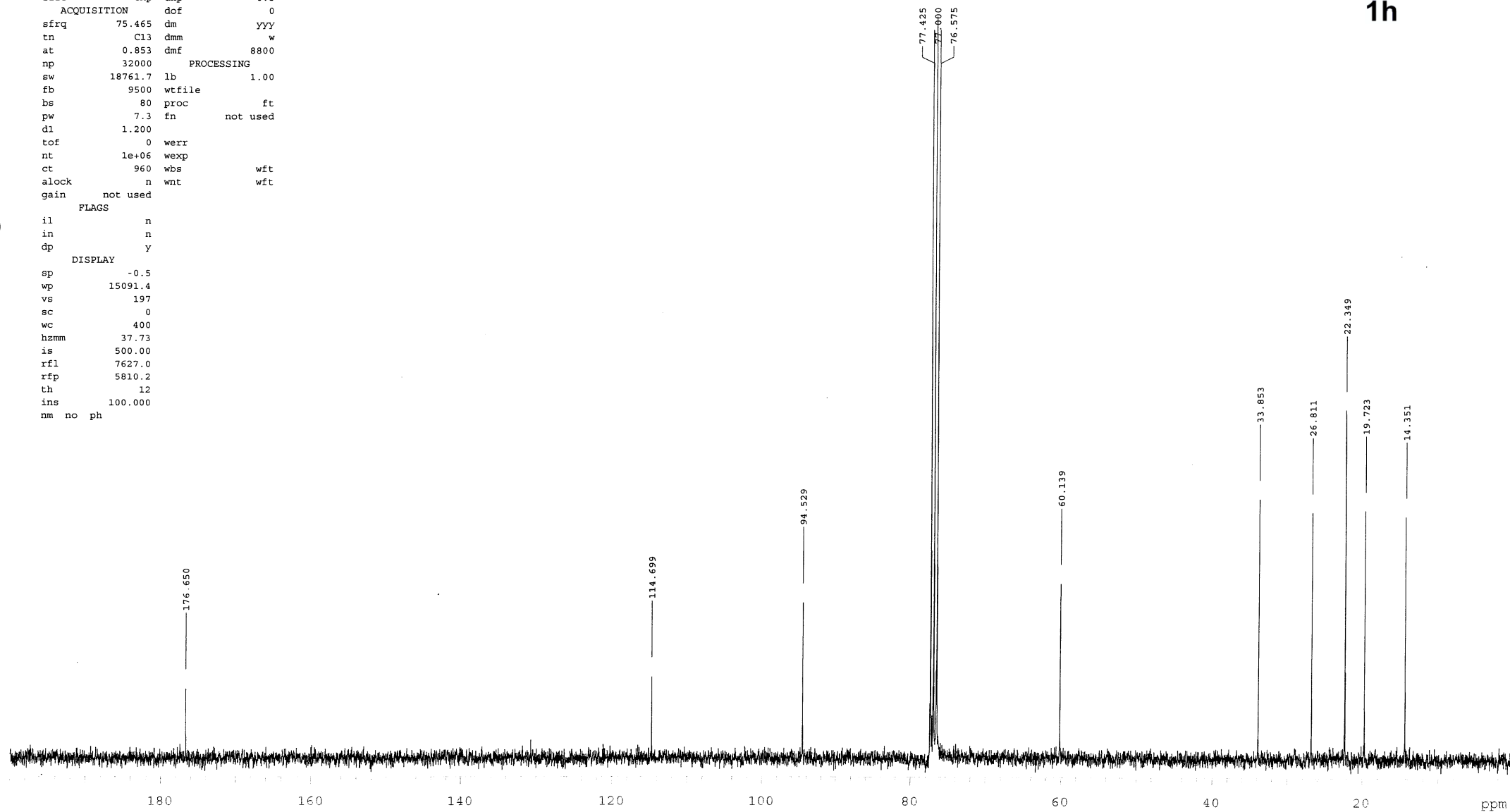
(CH3)2CHCH2

exp2 std13c

```
SAMPLE          DEC. & VT
date   Jun 17 2011  dfrq    300.092
solvent CDCl3      dn       H1
file    exp       dhp      0.5
ACQUISITION      dof      0
sfrq    75.465    dm       YYY
tn       C13      dmm      w
at       0.853    dmf     8800
np       32000    PROCESSING
sw       18761.7  lb       1.00
fb       9500     wtfile
bs       80      proc      ft
pw       7.3     fn       not used
dl       1.200
tof      0       werr
nt       1e+06   wexp
ct       960     wbs      wft
alock    n       wnt      wft
gain     not used
FLAGS
il       n
in       n
dp       y
DISPLAY
sp       -0.5
wp       15091.4
vs       197
sc       0
wc       400
hzmm     37.73
is       500.00
rf1      7627.0
rfp      5810.2
th       12
ins      100.000
nm no ph
```



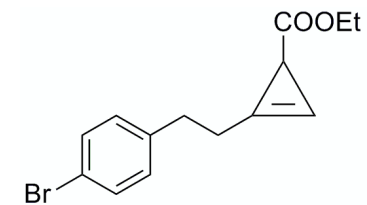
1h



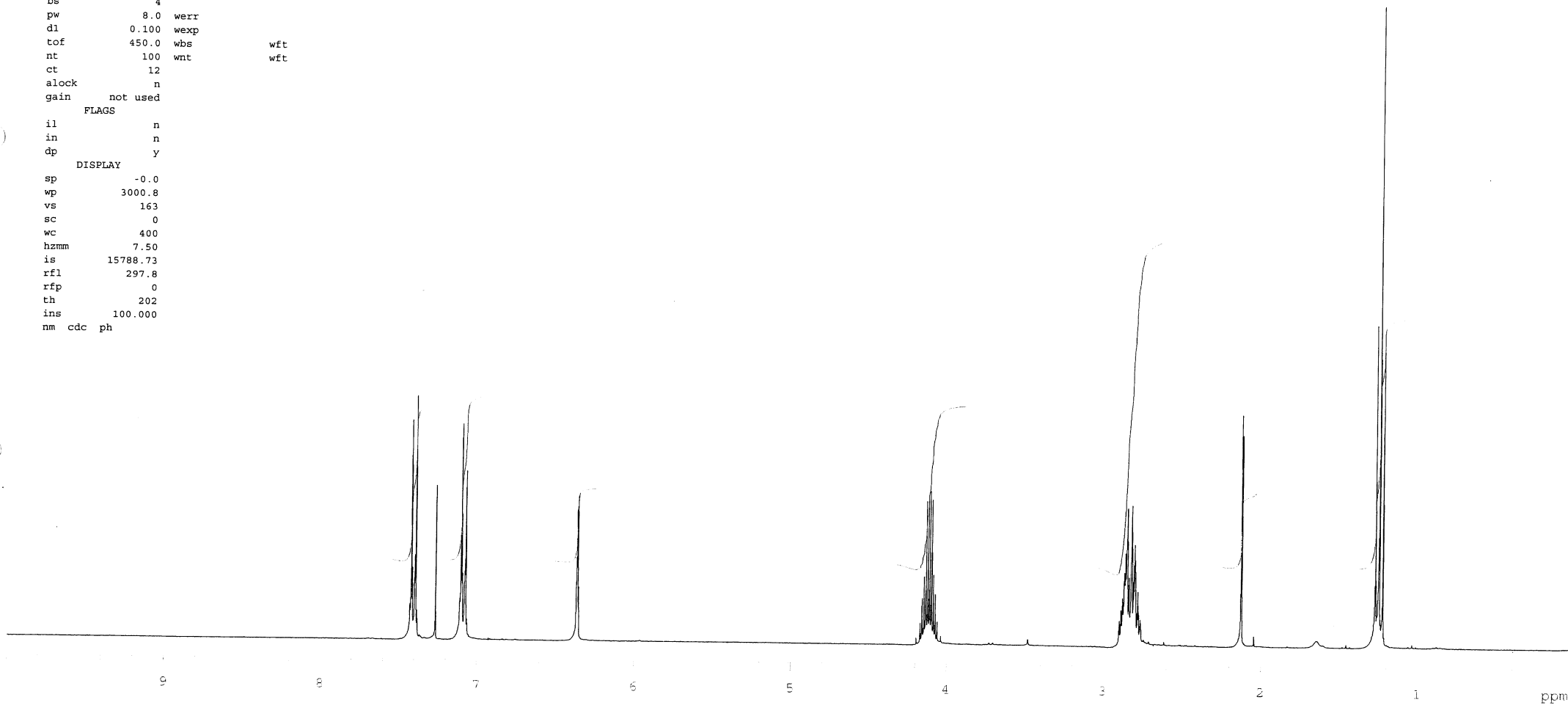
lj

exp2 std1h

```
SAMPLE          DEC. & VT
date  Jan 11 2010  dfrq      300.092
solvent  CDCl3    dn        H1
file     exp      dof        0
ACQUISITION    dm        nnn
sfrq     300.092 dmm        c
tn       H1      dmf        200
at       3.555   PROCESSING
np       32000   wfile
sw       4500.5  proc        ft
fb       2250   fn        not used
bs       4
pw       8.0    werr
dl       0.100  wexp
tof      450.0  wbs        wft
nt       100   wnt        wft
ct       12
alock    n
gain     not used
FLAGS
il       n
in       n
dp       y
DISPLAY
sp       -0.0
wp       3000.8
vs       163
sc       0
wc       400
hzmm     7.50
is       15788.73
rfl      297.8
rfp      0
th       202
ins      100.000
nm  edc  ph
```



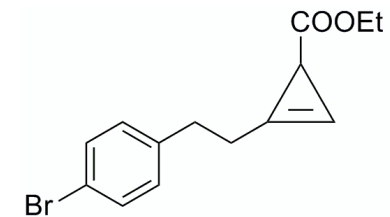
1i



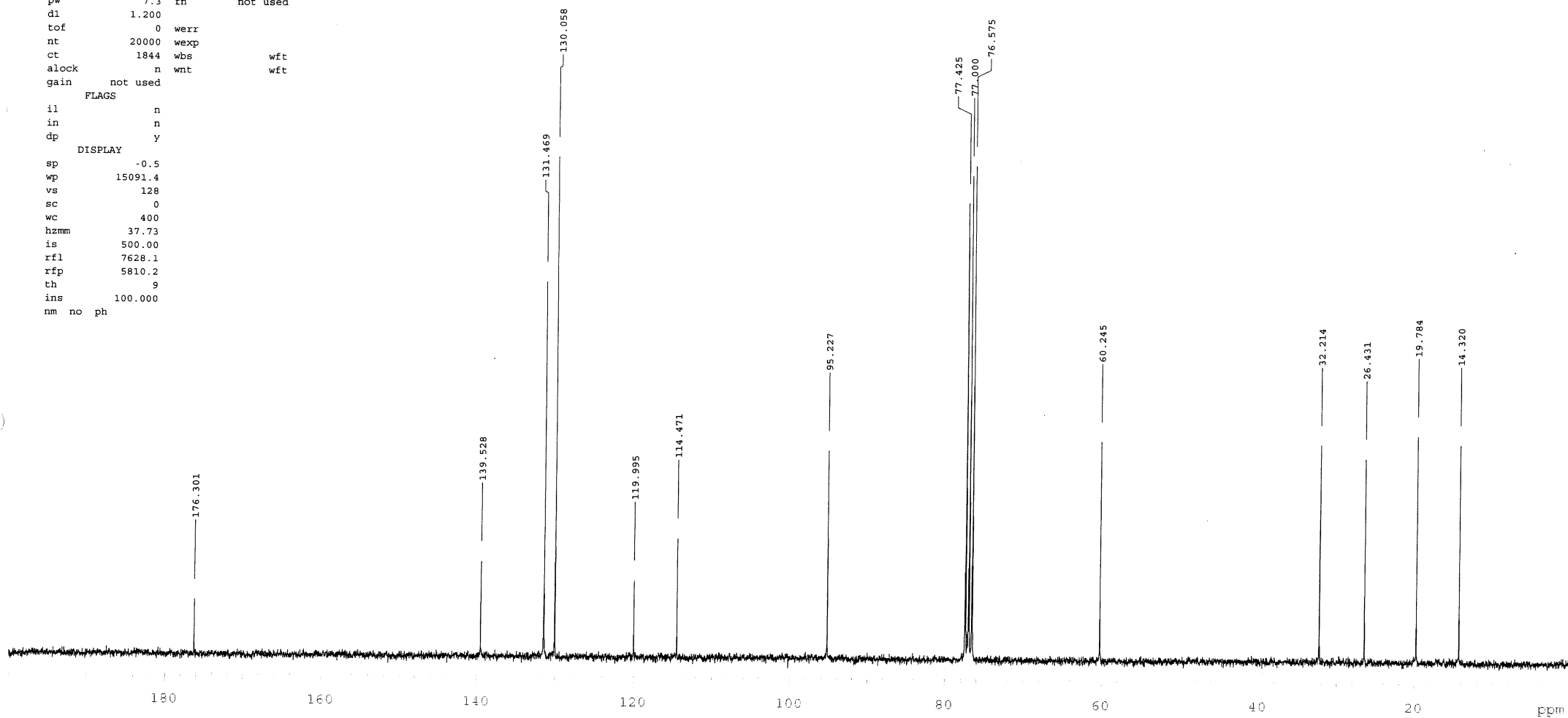
SM
R=4-BrC6H4CH2CH2

expl std13c

SAMPLE		DEC. & VT	
date	Jan 11 2010	dfrq	300.092
solvent	CDCl3	dn	H1
file	exp	dhp	0.5
ACQUISITION		dof	0
sfrq	75.465	dm	yyy
tn	C13	dmm	w
at	0.853	dmf	8800
np	32000	PROCESSING	
sw	18761.7	lb	1.00
fb	9500	wtfile	
bs	4	proc	ft
pw	7.3	fn	not used
d1	1.200		
tof	0	werr	
nt	20000	wexp	
ct	1844	wbs	wft
alock	n	wnt	wft
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
DISPLAY			
sp	-0.5		
wp	15091.4		
vs	128		
sc	0		
wc	400		
hzmm	37.73		
is	500.00		
rfl	7628.1		
rfp	5810.2		
th	9		
ins	100.000		
nm	no ph		



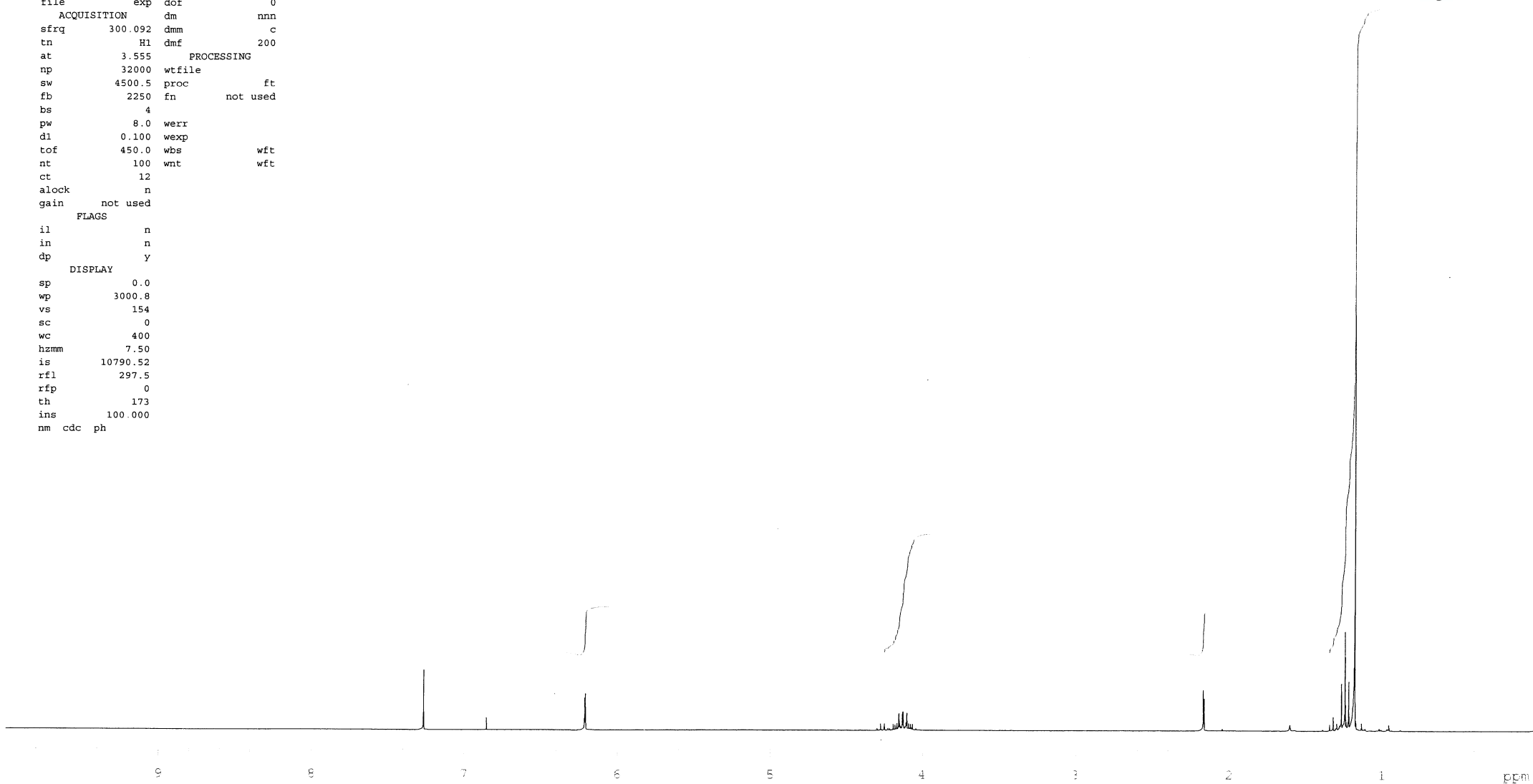
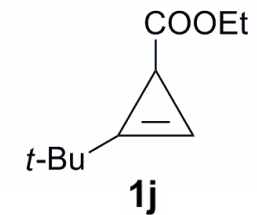
1i




```

lm
expl stdlh
SAMPLE          DEC. & VT
date   Jan 10 2010  dfrq      300.092
solvent CDCl3      dn         H1
file    exp        dof         0
ACQUISITION      dm         nnn
sfrq     300.092  dmm         c
tn       H1        dmf        200
at       3.555     PROCESSING
np       32000    wtfile
sw       4500.5   proc         ft
fb       2250     fn         not used
bs       4
pw       8.0     werr
dl       0.100   wexp
tof     450.0    wbs         wft
nt       100     wnt         wft
ct       12
alock    n
gain    not used
FLAGS
il       n
in       n
dp       y
DISPLAY
sp       0.0
wp     3000.8
vs     154
sc       0
wc     400
hzmm    7.50
is     10790.52
rfl     297.5
rfp       0
th     173
ins     100.000
nm   cdc ph

```



SM
R=t-Bu

exp2 std13c

SAMPLE DEC. & VT

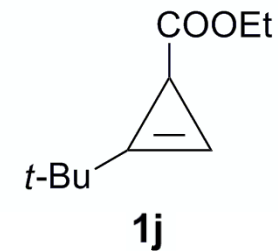
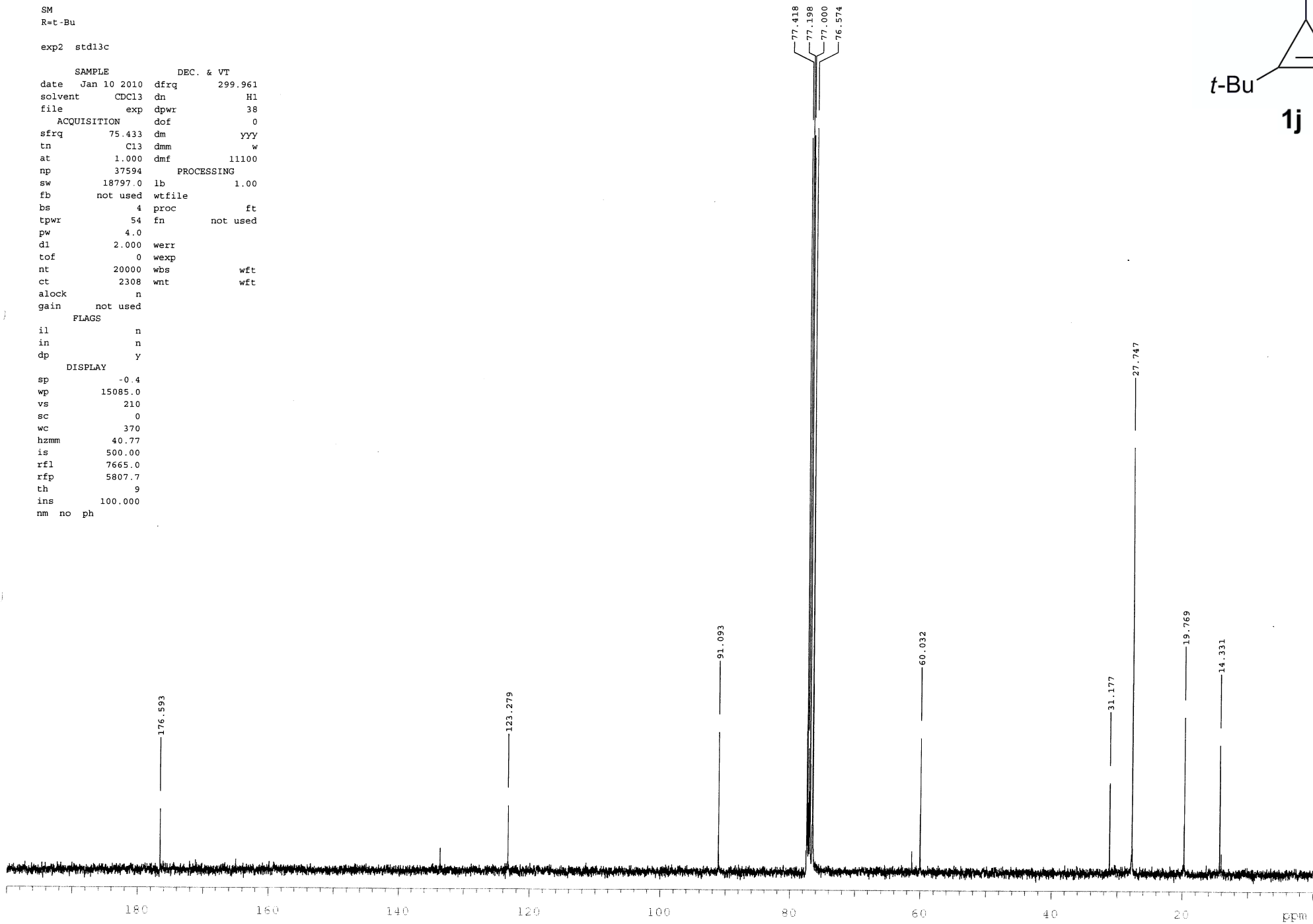
date Jan 10 2010 dfrq 299.961
 solvent CDCl3 dn H1
 file exp dpwr 38
 ACQUISITION dof 0
 sfrq 75.433 dm yyy
 tn C13 dmm w
 at 1.000 dmf 11100
 np 37594 PROCESSING
 sw 18797.0 lb 1.00
 fb not used wtfile
 bs 4 proc ft
 tpwr 54 fn not used
 pw 4.0
 dl 2.000 werr
 tof 0 wexp
 nt 20000 wbs wft
 ct 2308 wnt wft
 alock n
 gain not used

FLAGS

il n
 in n
 dp y

DISPLAY

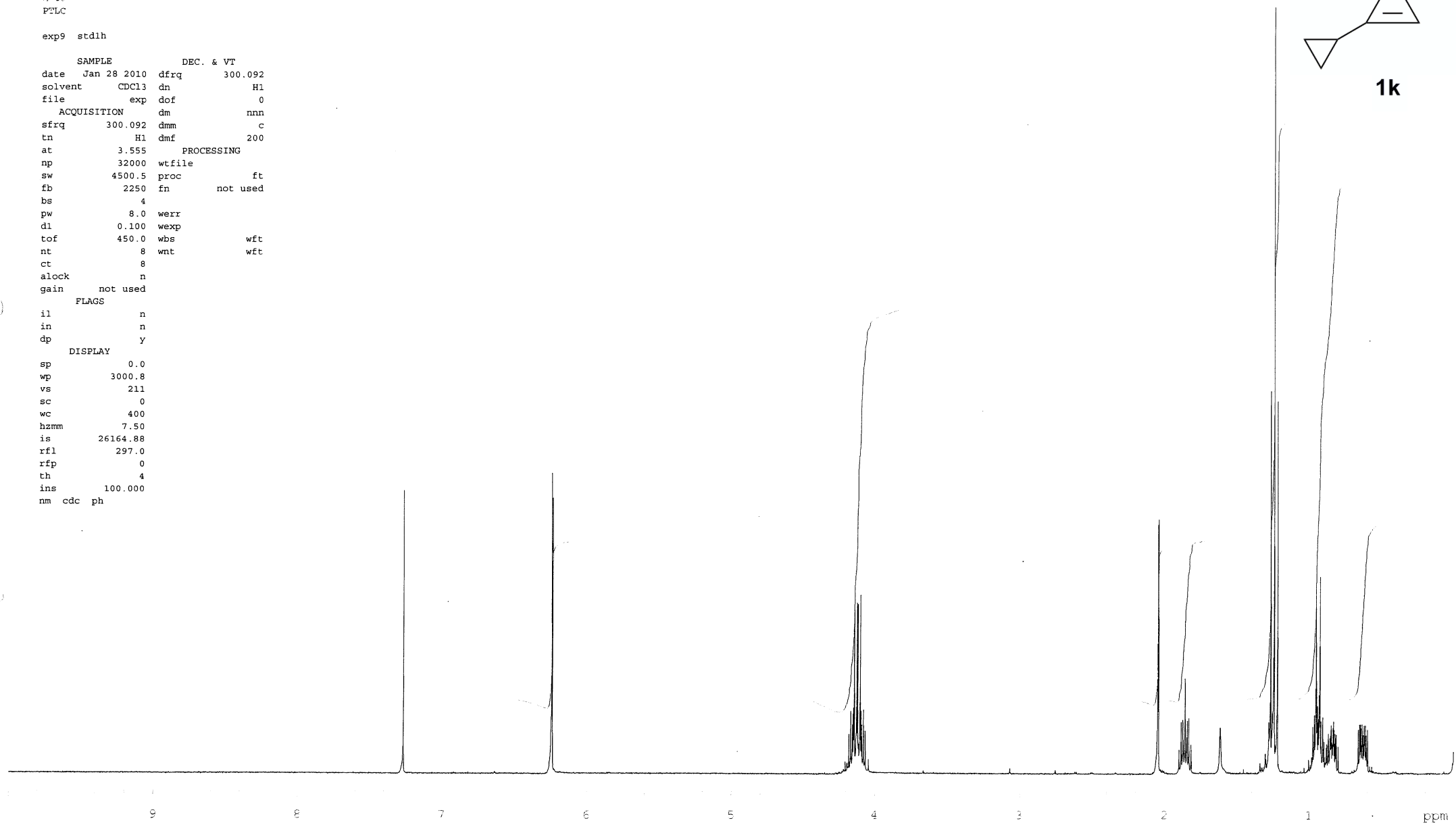
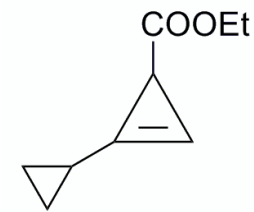
sp -0.4
 wp 15085.0
 vs 210
 sc 0
 wc 370
 hzmm 40.77
 is 500.00
 rfl 7665.0
 rfp 5807.7
 th 9
 ins 100.000
 nm no ph



1-41
PTEC

exp9 std1h

```
SAMPLE          DEC. & VT
date  Jan 28 2010  dfrq      300.092
solvent  CDCl3    dn        H1
file     exp      dof        0
ACQUISITION    dm        nnn
sfrq     300.092  dmm        c
tn       H1      dmf        200
at       3.555   PROCESSING
np       32000   wtfile
sw       4500.5  proc        ft
fb       2250   fn        not used
bs       4
pw       8.0    werr
dl       0.100  wexp
tof      450.0  wbs
nt       8      wnt        wft
ct       8
alock    n
gain     not used
        FLAGS
il       n
in       n
dp       Y
DISPLAY
sp       0.0
wp       3000.8
vs       211
sc       0
wc       400
hzmm     7.50
is       26164.88
rfl      297.0
rfp      0
th       4
ins     100.000
nm  cdc  ph
```



```

H-43
PTLC

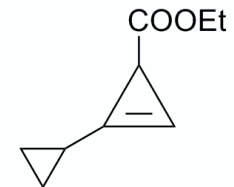
exp8 std13c

SAMPLE          DEC & VT
date  Jan 28 2010  dfrq      299.961
solvent  CDCl3    dn        H1
file     exp      dpwr      38
ACQUISITION    dof        0
sfrq     75.433  dm         YYY
tn       C13     dmm        w
at       1.000  dmf         11100
np       37594   PROCESSING
sw       18797.0 lb         1.00
fb       not used wtfiler
bs       32     proc         ft
tpwr    54     fn         not used
pw       4.0
di       2.000  werr
tof      0     wexp
nt       3200  wbs         wft
ct       1504  wnt         wft
alock    n
gain     not used

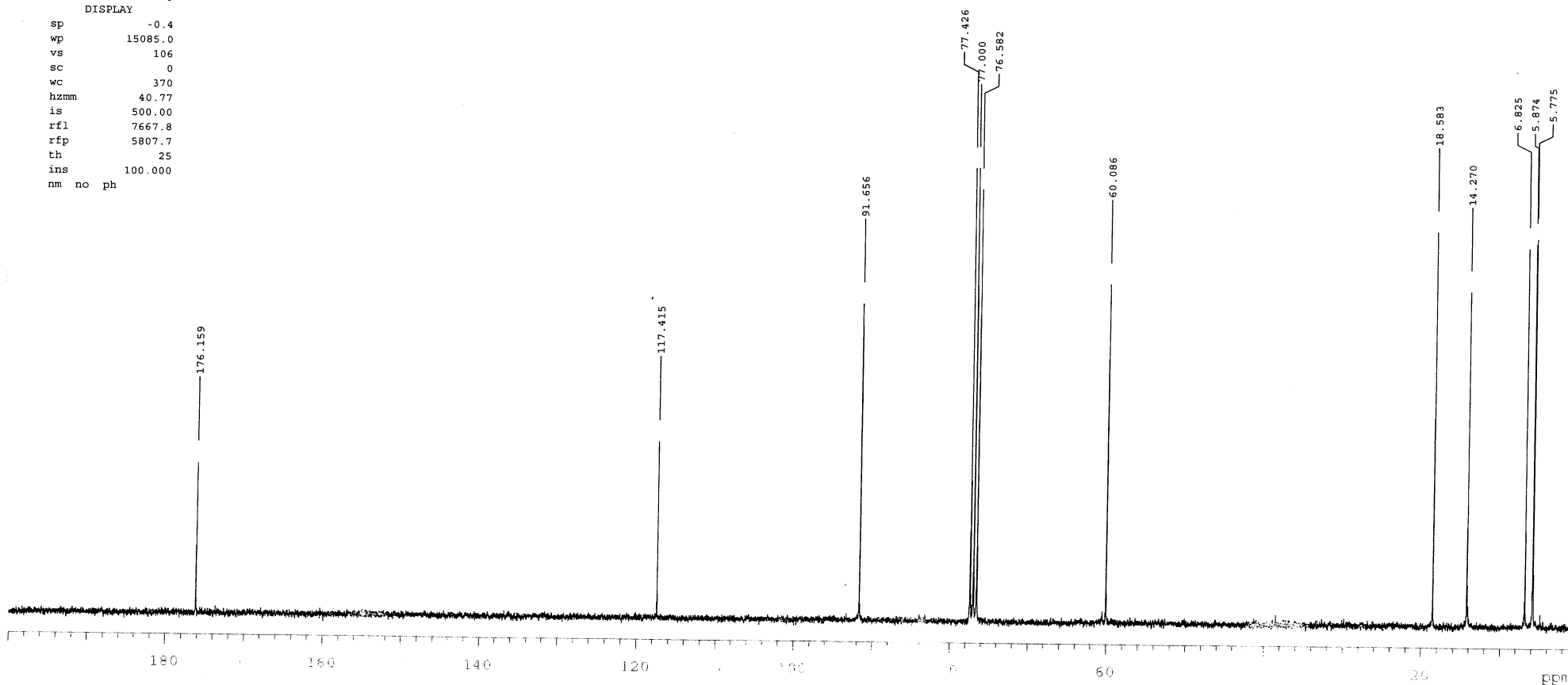
FLAGS
il       n
in       n
dp       y

DISPLAY
sp       -0.4
wp       15085.0
vs       106
sc       0
wc       370
hzmm    40.77
is       500.00
rfl     7667.8
rfp     5807.7
th       25
ins     100.000
nm no ph

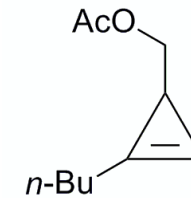
```



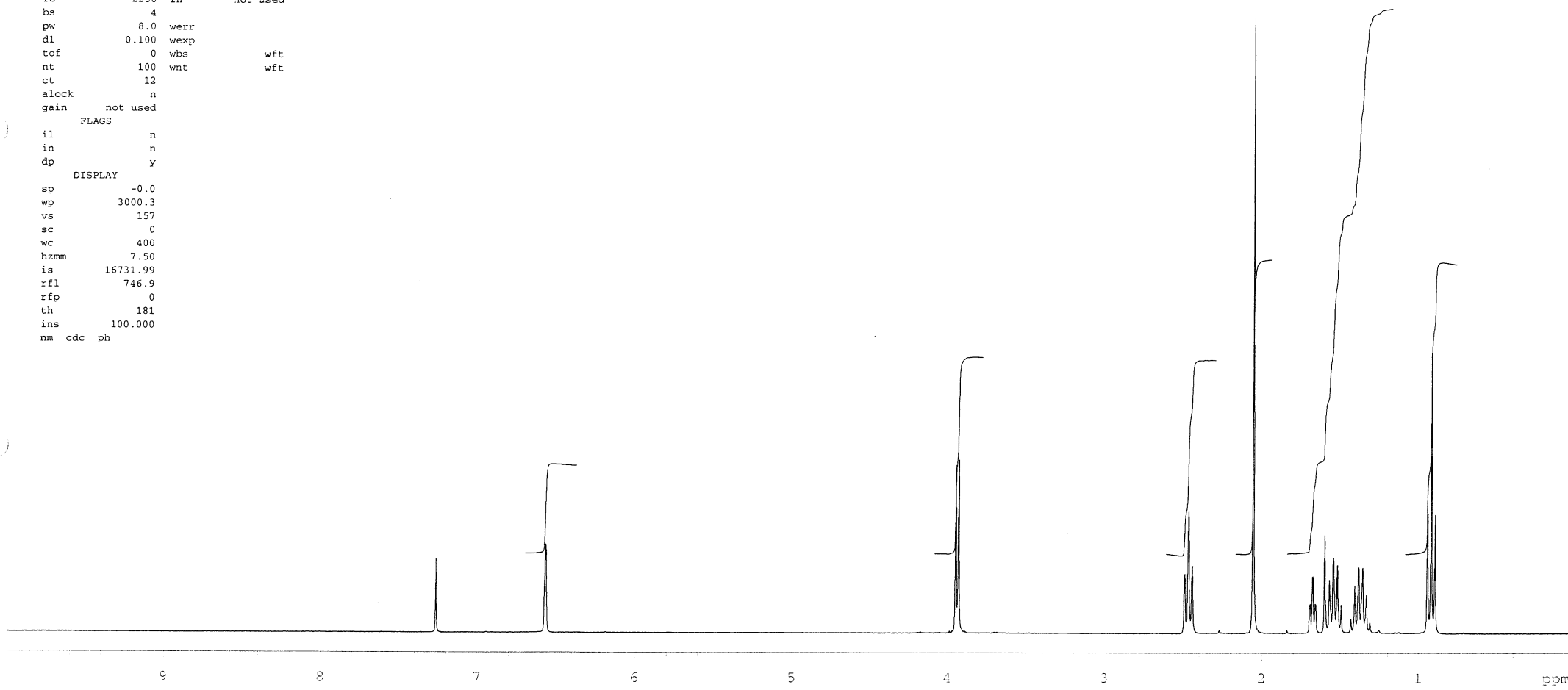
1k



C-21
 FC-1
 exp3 std1h
 SAMPLE DEC. & VT
 date Sep 27 2008 dfrq 300.053
 solvent CDCl3 dn H1
 file exp dof 0
 ACQUISITION dm nnn
 sfrq 300.053 dnm c
 tn H1 dmf 200
 at 3.555 PROCESSING
 np 32000 wtfile
 sw 4500.5 proc ft
 fb 2250 fn not used
 bs 4
 pw 8.0 werr
 dl 0.100 wexp
 tof 0 wbs wft
 nt 100 wnt wft
 ct 12
 alock n
 gain not used
 FLAGS
 il n
 in n
 dp y
 DISPLAY
 sp -0.0
 wp 3000.3
 vs 157
 sc 0
 wc 400
 hzmm 7.50
 is 16731.99
 rfl 746.9
 rfp 0
 th 181
 ins 100.000
 nm cdc ph



11



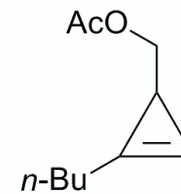
SM
AcO

expl std13c

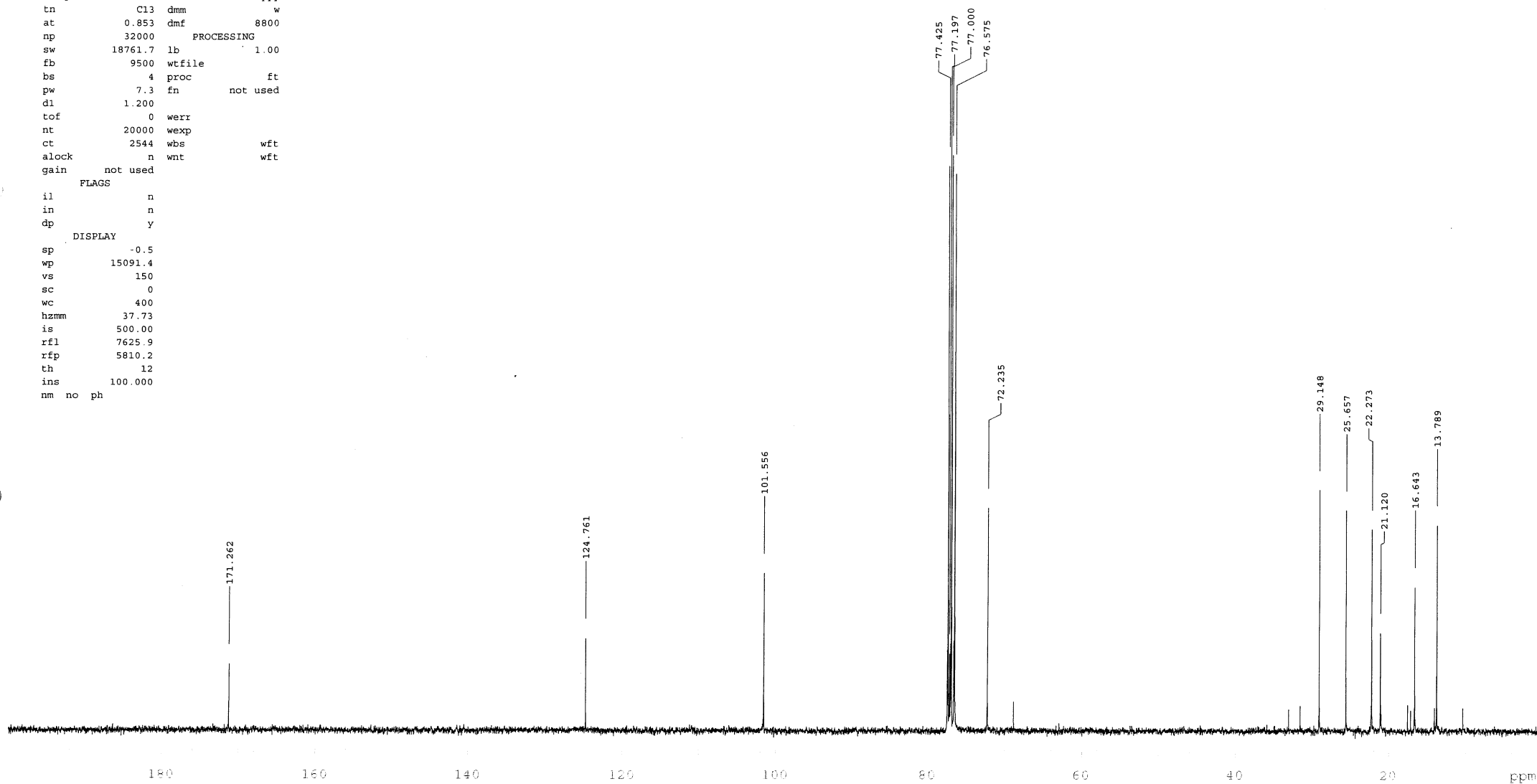
```
SAMPLE          DEC. & VT
date Jan 10 2010 dfrq      300.092
solvent CDCl3  dn         H1
file      exp      dhp         0.5
ACQUISITION  dof         0
sfrq      75.465  dm         YYY
tn        C13     dmm         w
at        0.853  dmf         8800
np        32000   PROCESSING
sw        18761.7 lb         1.00
fb        9500   wtfile
bs        4      proc         ft
pw        7.3   fn         not used
dl        1.200
tof        0     werr
nt        20000 wexp
ct        2544  wbs         wft
alock     n     wnt         wft
gain     not used

FLAGS
il        n
in        n
dp        y

DISPLAY
sp        -0.5
wp        15091.4
vs        150
sc        0
wc        400
hzmm     37.73
is        500.00
rf1      7625.9
rfp      5810.2
th        12
ins      100.000
nm no ph
```



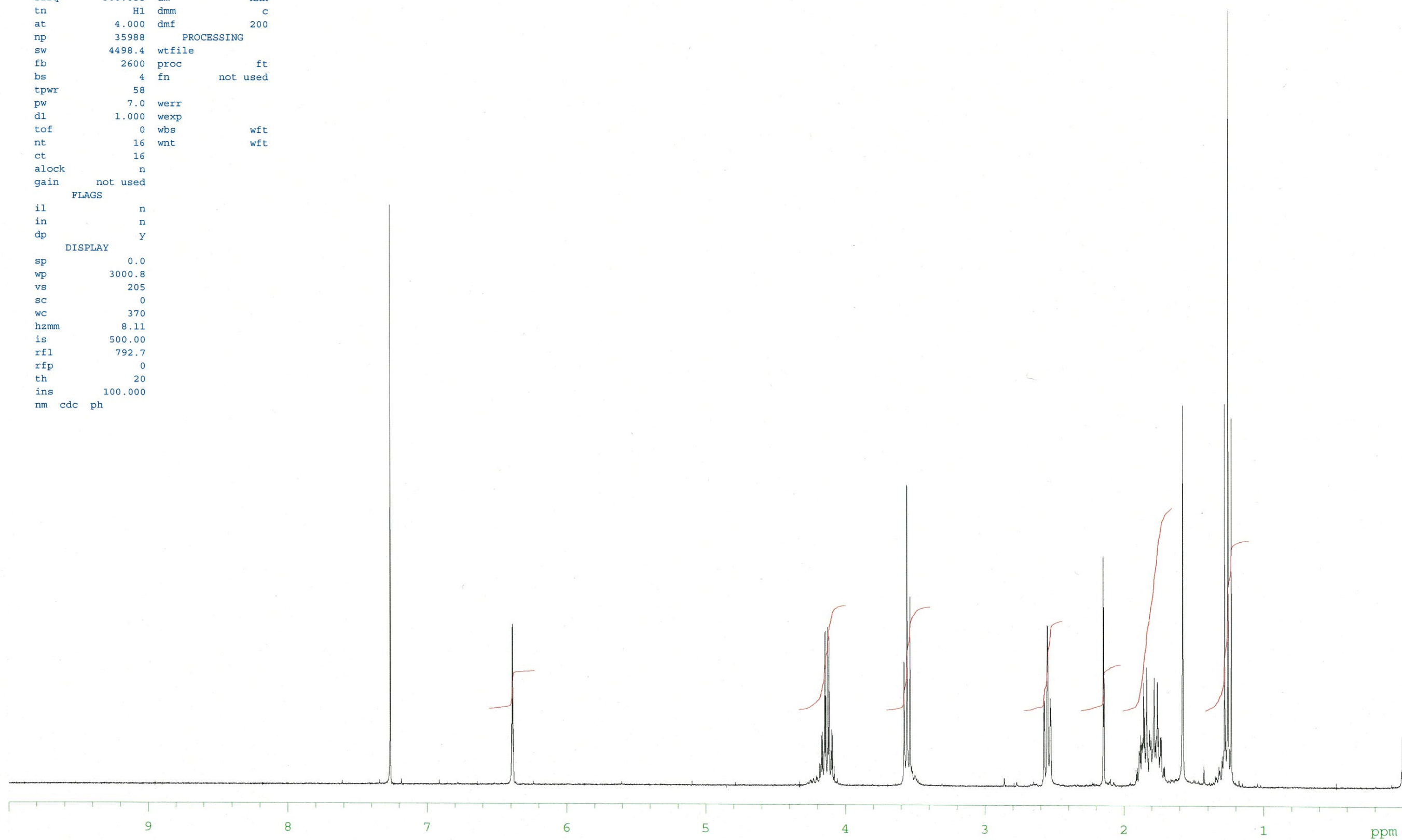
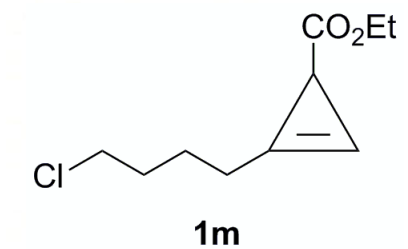
11



STANDARD 1H OBSERVE

exp4 stdlh

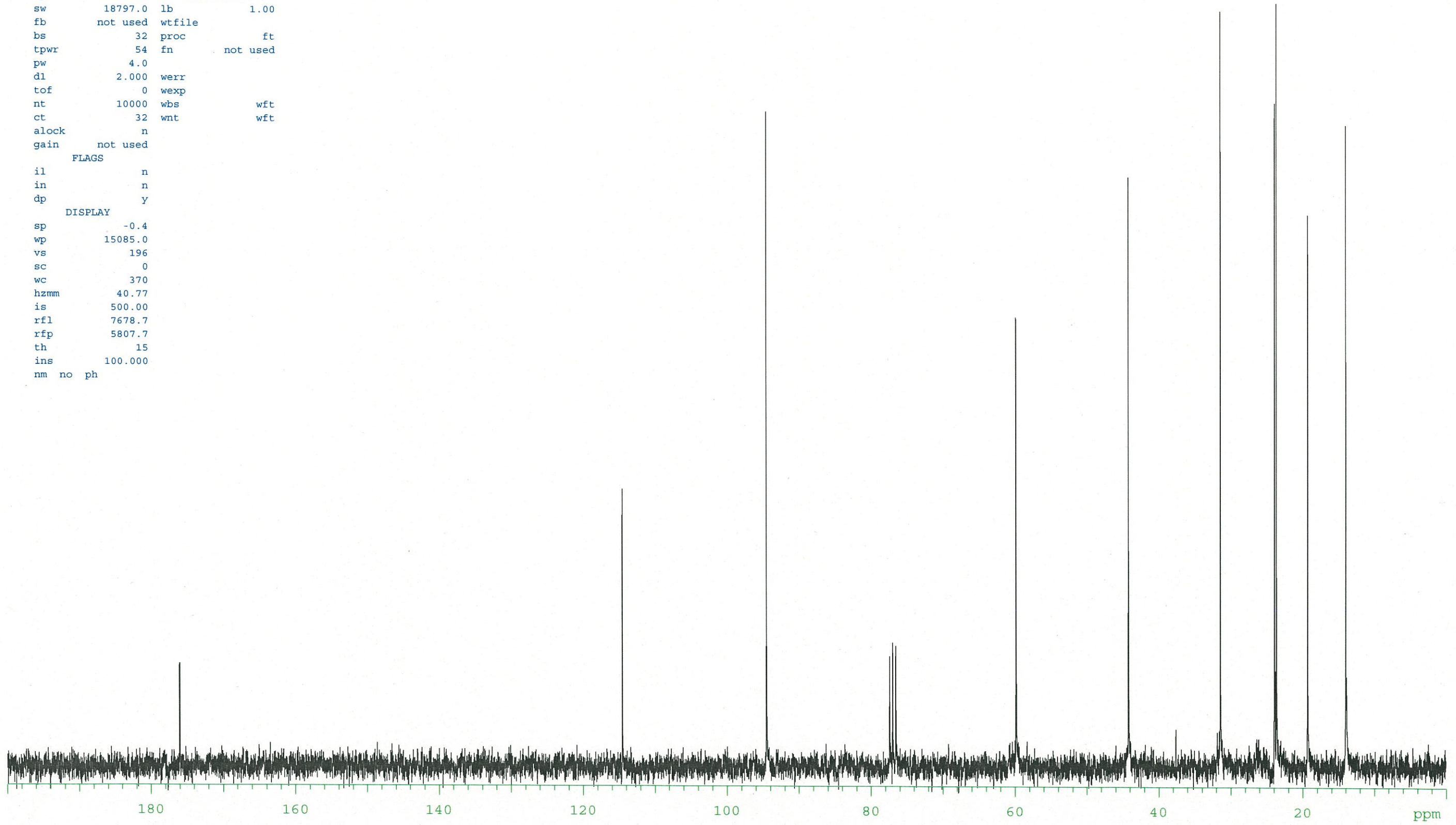
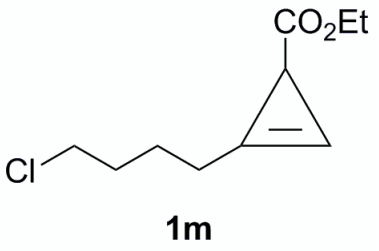
SAMPLE		DEC. & VT	
date	Nov 24 2014	dfrq	300.088
solvent	CDCl3	dn	H1
file	exp	dpwr	30
ACQUISITION		PROCESSING	
sfrq	300.088	dm	nnn
tn	H1	dmm	c
at	4.000	dmf	200
np	35988		
sw	4498.4	wtfile	
fb	2600	proc	ft
bs	4	fn	not used
tpwr	58		
pw	7.0	werr	
dl	1.000	wexp	
tof	0	wbs	wft
nt	16	wnt	wft
ct	16		
alock	n		
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
DISPLAY			
sp	0.0		
wp	3000.8		
vs	205		
sc	0		
wc	370		
hzmm	8.11		
is	500.00		
rfl	792.7		
rfp	0		
th	20		
ins	100.000		
nm	cdc	ph	



13C OBSERVE

exp9 std13c

```
SAMPLE          DEC. & VT
date   Nov 24 2014  dfrq      299.961
solvent  CDCl3      dn        H1
file     exp       dpwr      38
ACQUISITION      dof        0
sfrq     75.433    dm        YY
tn        C13      dmm        w
at        1.000    dmf      11100
np        37594    PROCESSING
sw       18797.0   lb        1.00
fb       not used wtfile
bs        32      proc        ft
tpwr     54      fn        not used
pw        4.0
dl        2.000   werr
tof        0      wexp
nt       10000   wbs        wft
ct        32     wnt        wft
alock     n
gain     not used
FLAGS
il        n
in        n
dp        Y
DISPLAY
sp        -0.4
wp       15085.0
vs        196
sc         0
wc        370
hzmm     40.77
is        500.00
rfl       7678.7
rfp       5807.7
th         15
ins       100.000
nm no ph
```



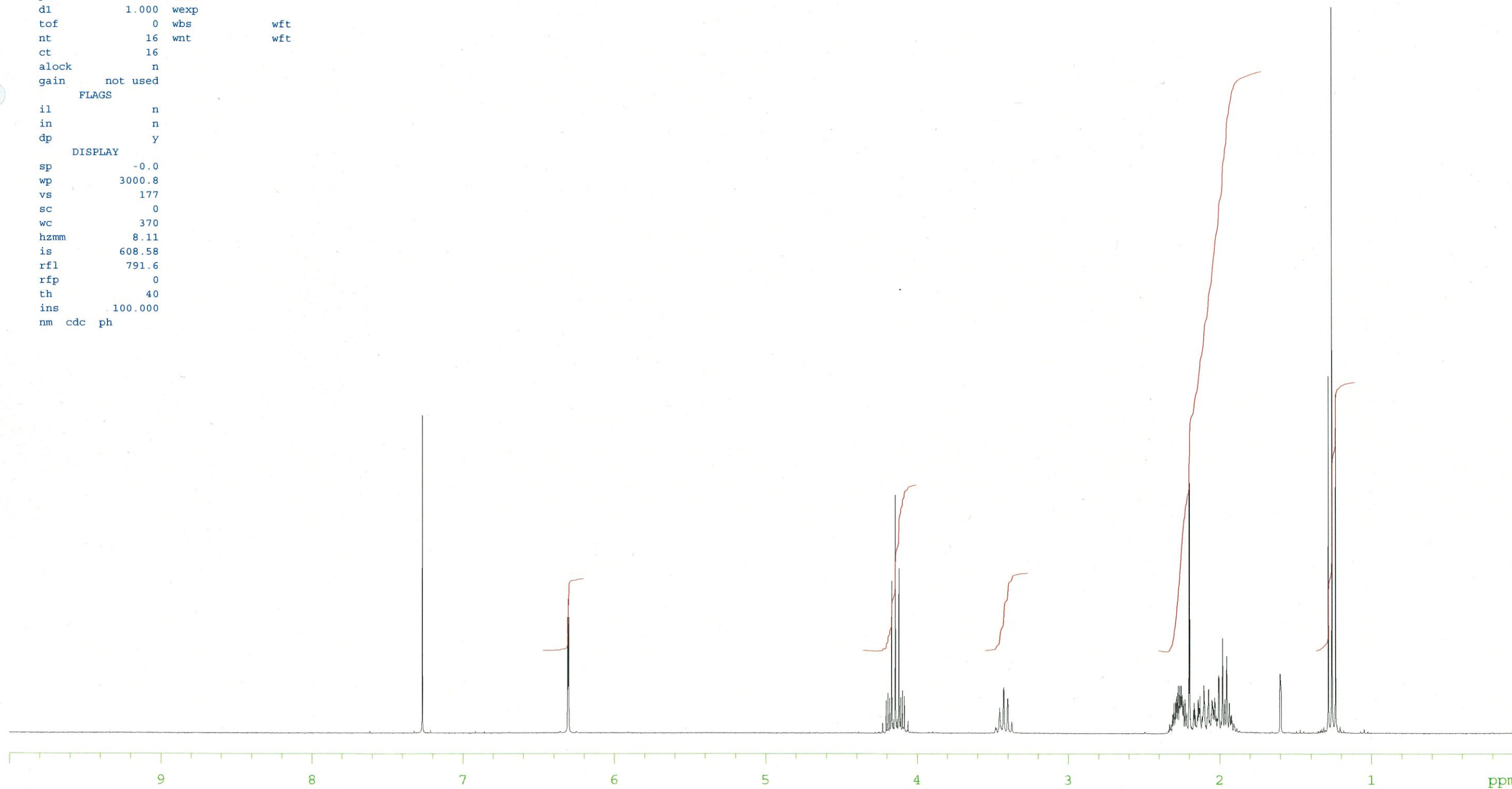
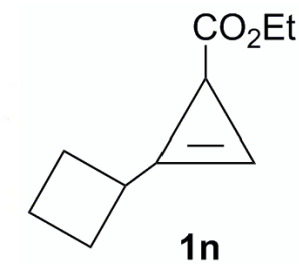
G-56
LC 4 9

exp4 stdlh

```
SAMPLE          DEC. & VT
date  Jan  8 2014  dfrq      300.088
solvent  CDCl3    dn         H1
file     exp      dpwr      30
          ACQUISITION  dof         0
sfrq     300.088  dm         nnn
tn        H1     dmm         c
at        4.000  dmf        200
np        35988
sw        4498.4  wtfile
fb        2600   proc         ft
bs         4     fn         not used
tpwr       58
pw         7.0   werr
dl         1.000 wexp
tof         0    wbs         wft
nt         16   wnt         wft
ct         16
alock      n
gain      not used

          FLAGS
il         n
in         n
dp         y

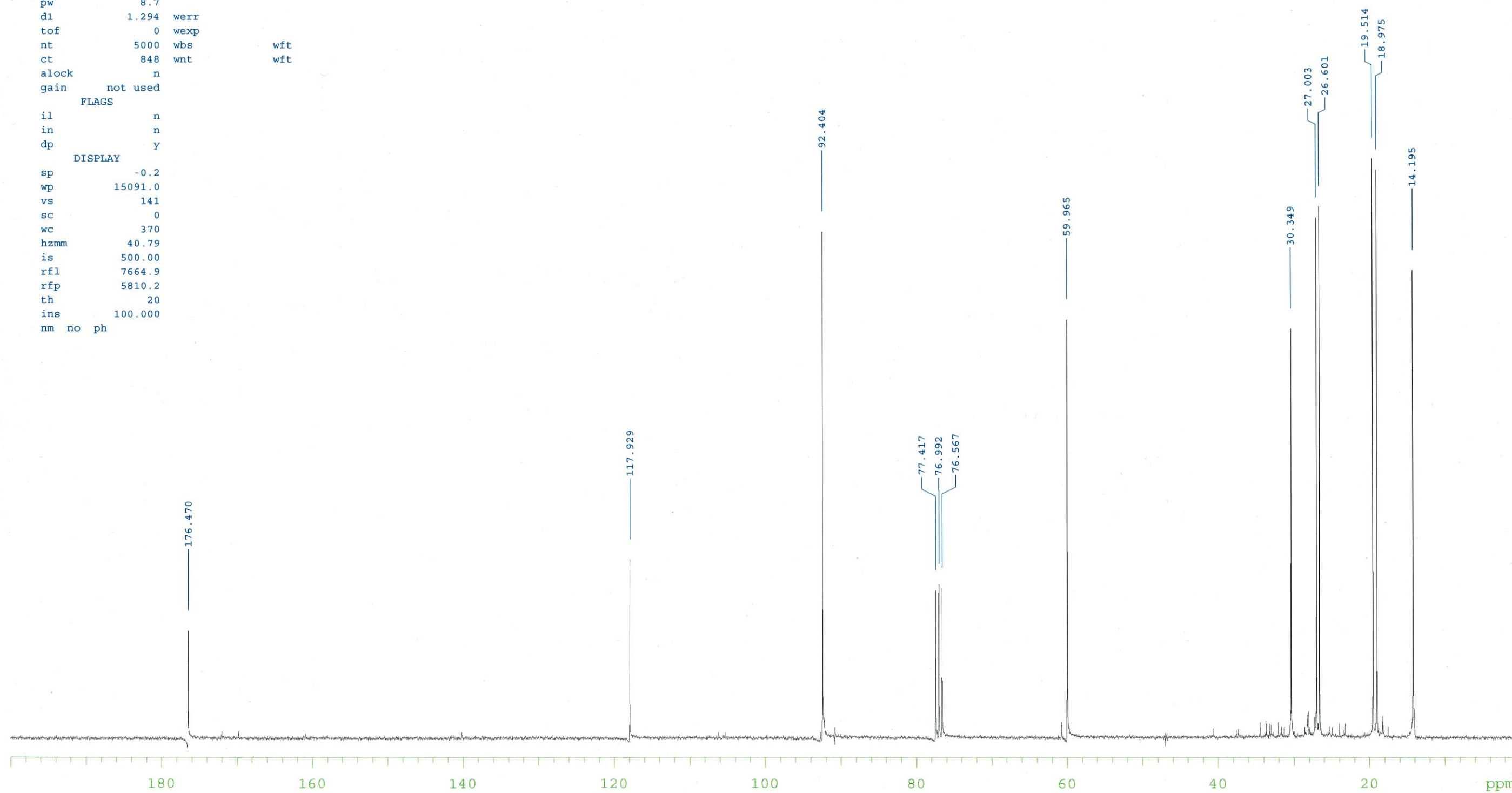
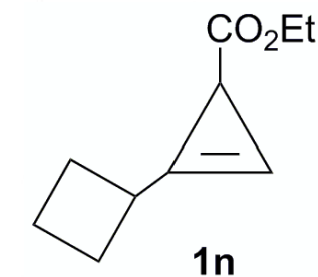
          DISPLAY
sp         -0.0
wp         3000.8
vs         177
sc         0
wc         370
hzmm       8.11
is         608.58
rfl        791.6
rfp         0
th         40
ins        100.000
nm cdc ph
```



13C OBSERVE

exp5 std13c

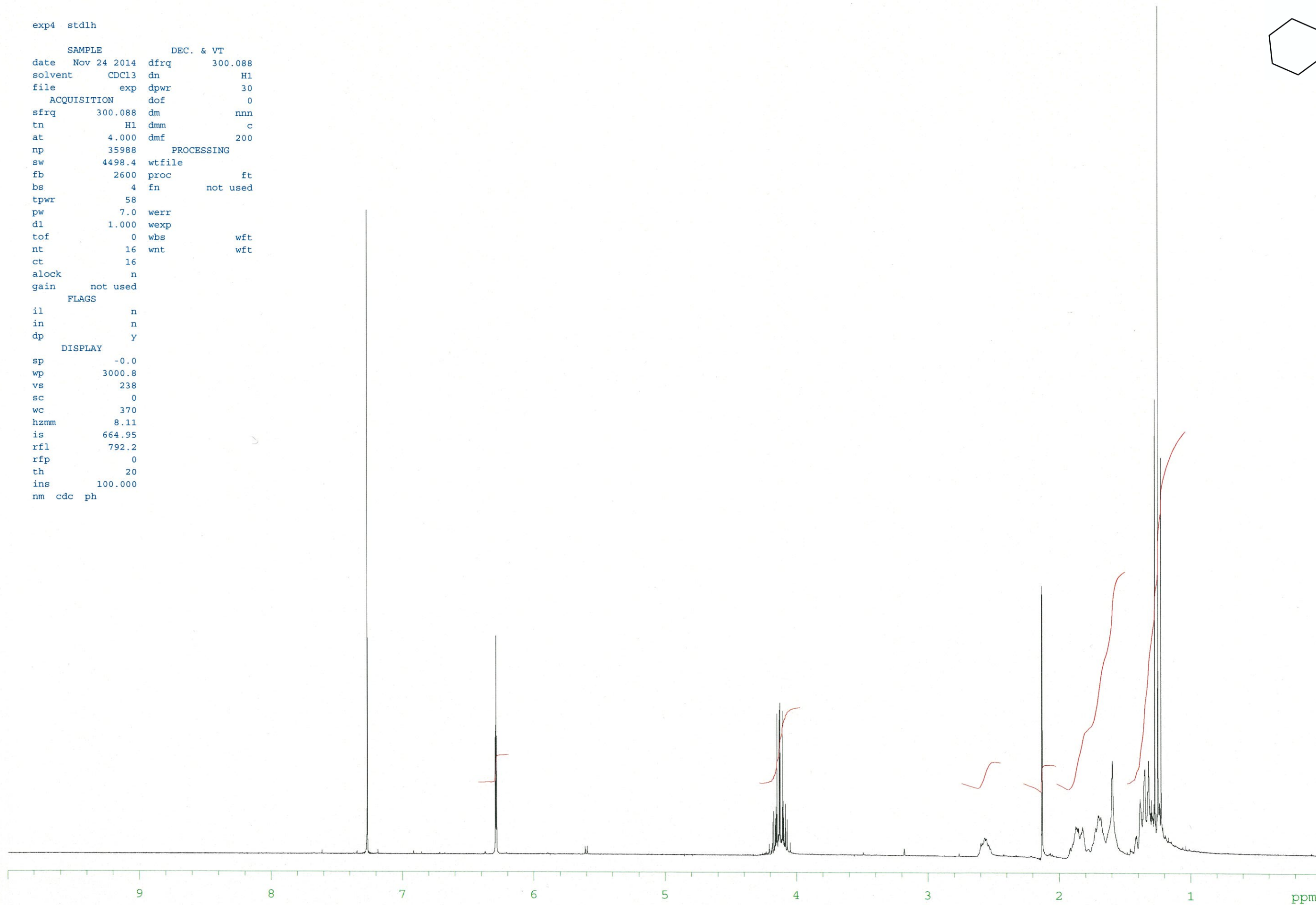
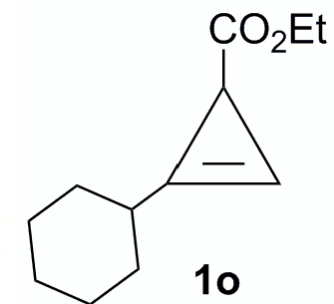
SAMPLE		DEC. & VT	
date	Jan 17 2014	dfrq	300.088
solvent	CDCl3	dn	H1
file	exp	dpwr	38
ACQUISITION		dof	0
sfrq	75.464	dm	yyy
tn	C13	dmm	w
at	1.706	dmf	10001
np	64000	PROCESSING	
sw	18761.7	lb	1.00
fb	10400	wtfile	
bs	16	proc	ft
tpwr	58	fn	not used
pw	8.7		
dl	1.294	werr	
tof	0	wexp	
nt	5000	wbs	wft
ct	848	wnt	wft
alock	n		
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
DISPLAY			
sp	-0.2		
wp	15091.0		
vs	141		
sc	0		
wc	370		
hzmm	40.79		
is	500.00		
rfl	7664.9		
rfp	5810.2		
th	20		
ins	100.000		
nm	no ph		



STANDARD 1H OBSERVE

exp4 std1h

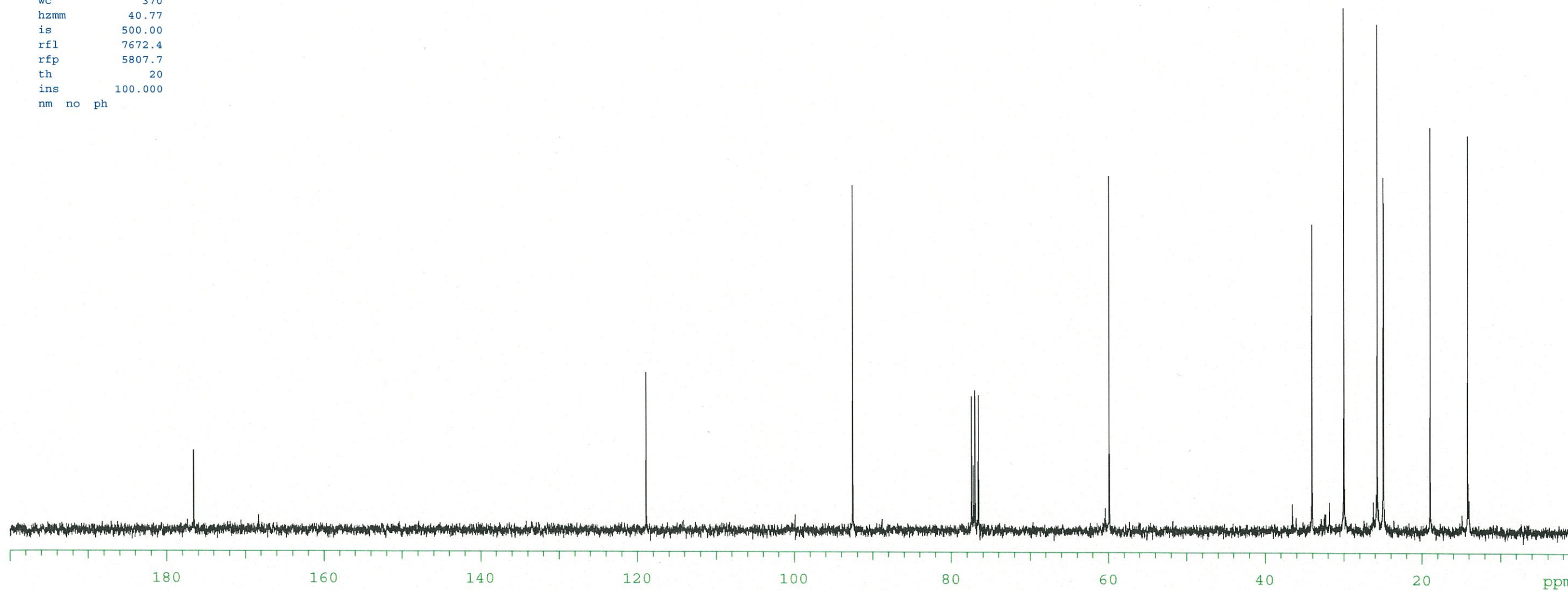
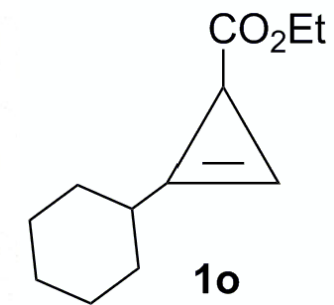
SAMPLE		DEC. & VT	
date	Nov 24 2014	dfrq	300.088
solvent	CDCl3	dn	H1
file	exp	dpwr	30
ACQUISITION		dof	
sfrq	300.088	dm	nnn
tn	H1	dmm	c
at	4.000	dmf	200
np	35988	PROCESSING	
sw	4498.4	wtfile	
fb	2600	proc	ft
bs	4	fn	not used
tpwr	58		
pw	7.0	werr	
dl	1.000	wexp	
tof	0	wbs	wft
nt	16	wnt	wft
ct	16		
alock	n		
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
DISPLAY			
sp	-0.0		
wp	3000.8		
vs	238		
sc	0		
wc	370		
hzmm	8.11		
is	664.95		
rfl	792.2		
rfp	0		
th	20		
ins	100.000		
nm	cdc ph		



13C OBSERVE

exp9 std13c

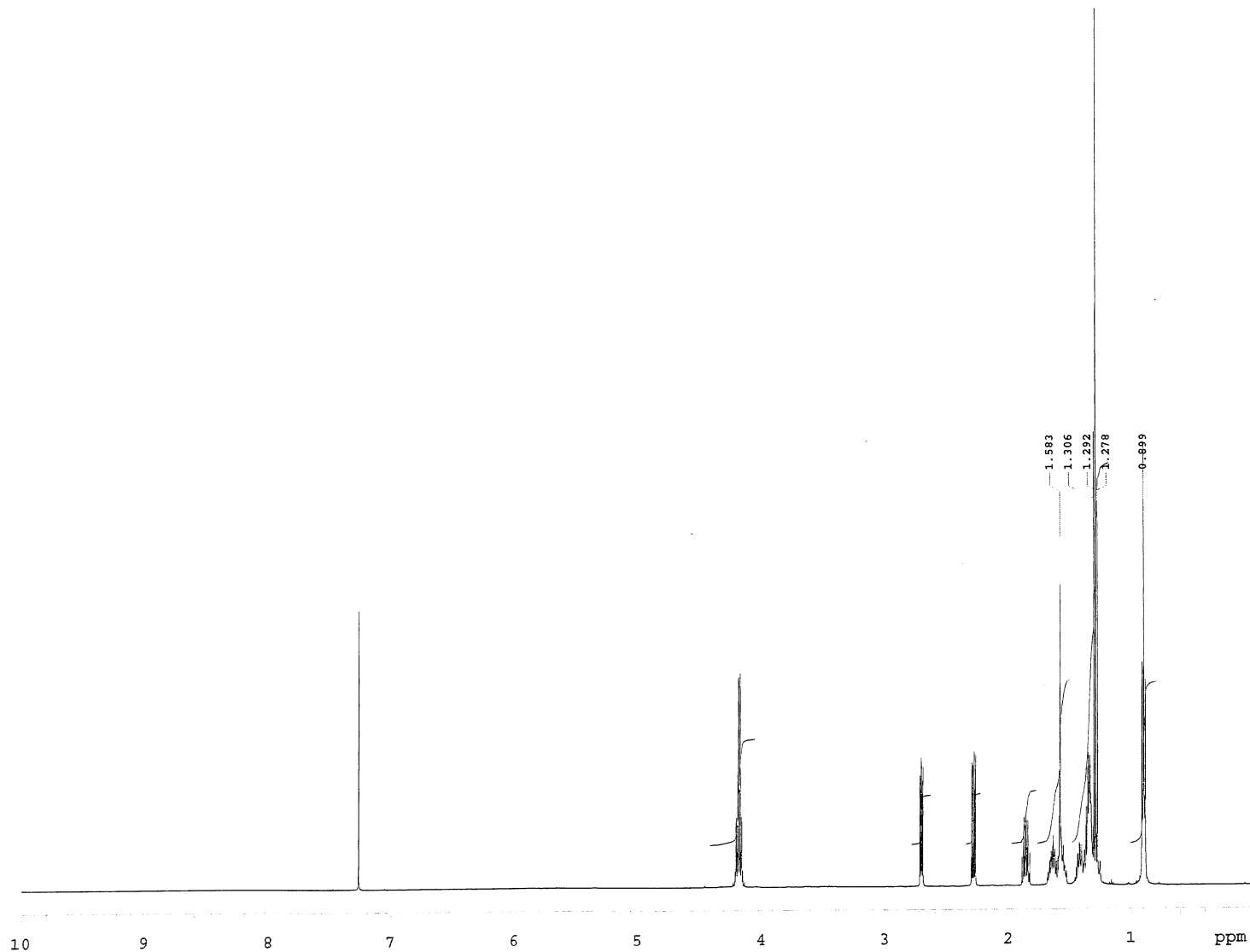
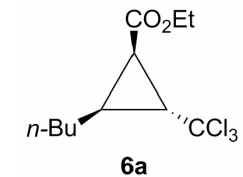
SAMPLE		DEC. & VT	
date	Nov 24 2014	dfrq	299.961
solvent	CDCl3	dn	H1
file	exp	dpwr	38
ACQUISITION		dof	0
sfrq	75.433	dm	YYY
tn	C13	dmm	w
at	1.000	dmf	11100
np	37594	PROCESSING	
sw	18797.0	lb	1.00
fb	not used	wtfile	
bs	32	proc	ft
tpwr	54	fn	not used
pw	4.0		
dl	2.000	werr	
tof	0	wexp	
nt	10000	wbs	wft
ct	64	wnt	wft
alock	n		
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
DISPLAY			
sp	-0.4		
wp	15085.0		
vs	123		
sc	0		
wc	370		
hzmm	40.77		
is	500.00		
rfl	7672.4		
rfp	5807.7		
th	20		
ins	100.000		
nm	no	ph	



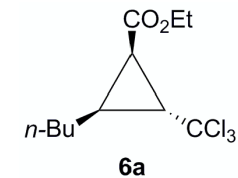
KPNN-4980
H-1

exp35 s2pul

SAMPLE		SPECIAL	
date	Jun 23 2008	temp	not used
solvent	cdcl3	gain	30
file	exp	spin	16
ACQUISITION		hst	0.008
sw	8012.8	pw90	10.600
at	3.500	alfa	10.000
np	56090	FLAGS	
fb	4000	il	n
bs	32	in	n
d1	1.500	dp	y
nt	4	hs	nn
ct	4	PROCESSING	
TRANSMITTER	lb	0.30	
tn	H1	fn	not used
sfrq	499.732	DISPLAY	
tof	499.7	sp	0.0
tpwr	59	wp	4997.3
pw	5.300	rfl	1012.1
DECOUPLER		rfl	0
dn	C13	rp	-138.4
dof	0	lp	4.7
dm	nnn	PLOT	
dmm	c	wc	270
dpwr	34	sc	0
dmf	32258	vs	197
		th	70
	ai	cdc	ph

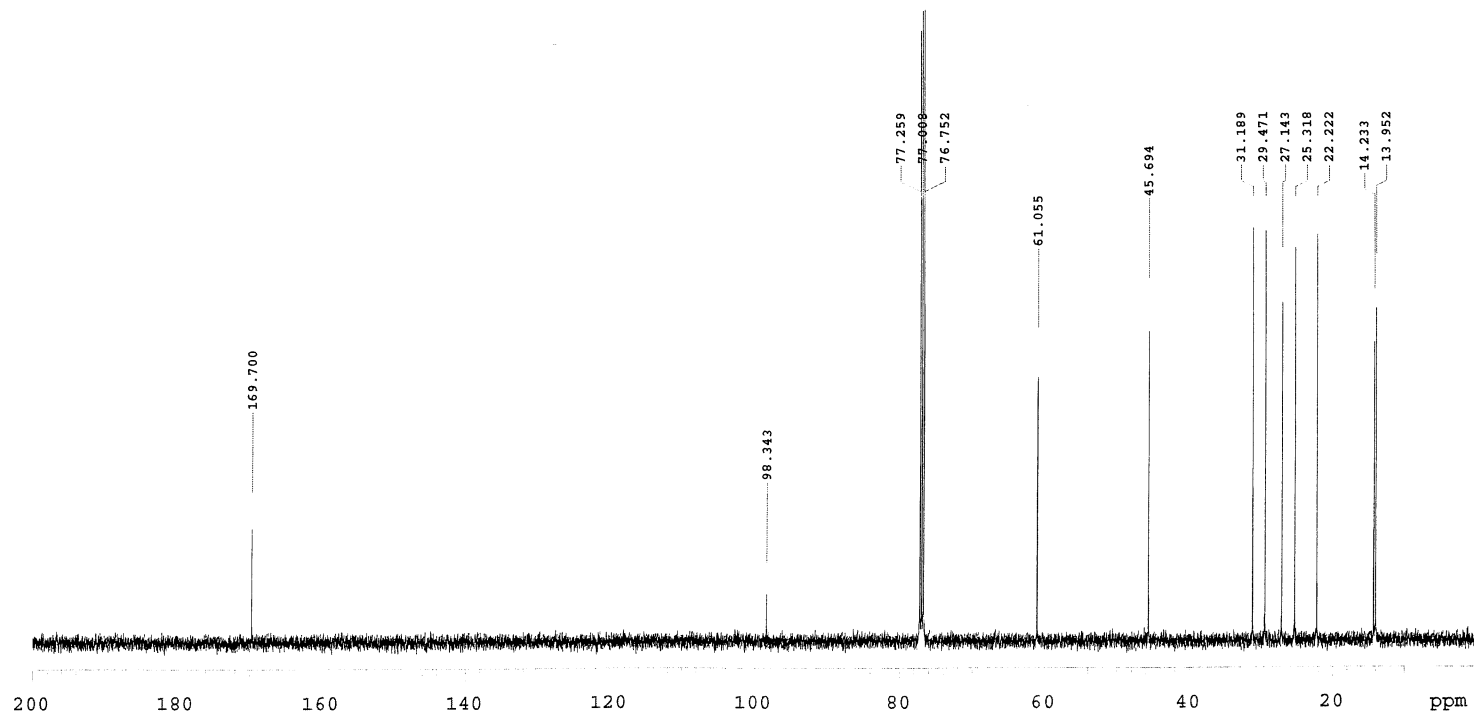


KPNN-4980
C-13



exp36 Carbon

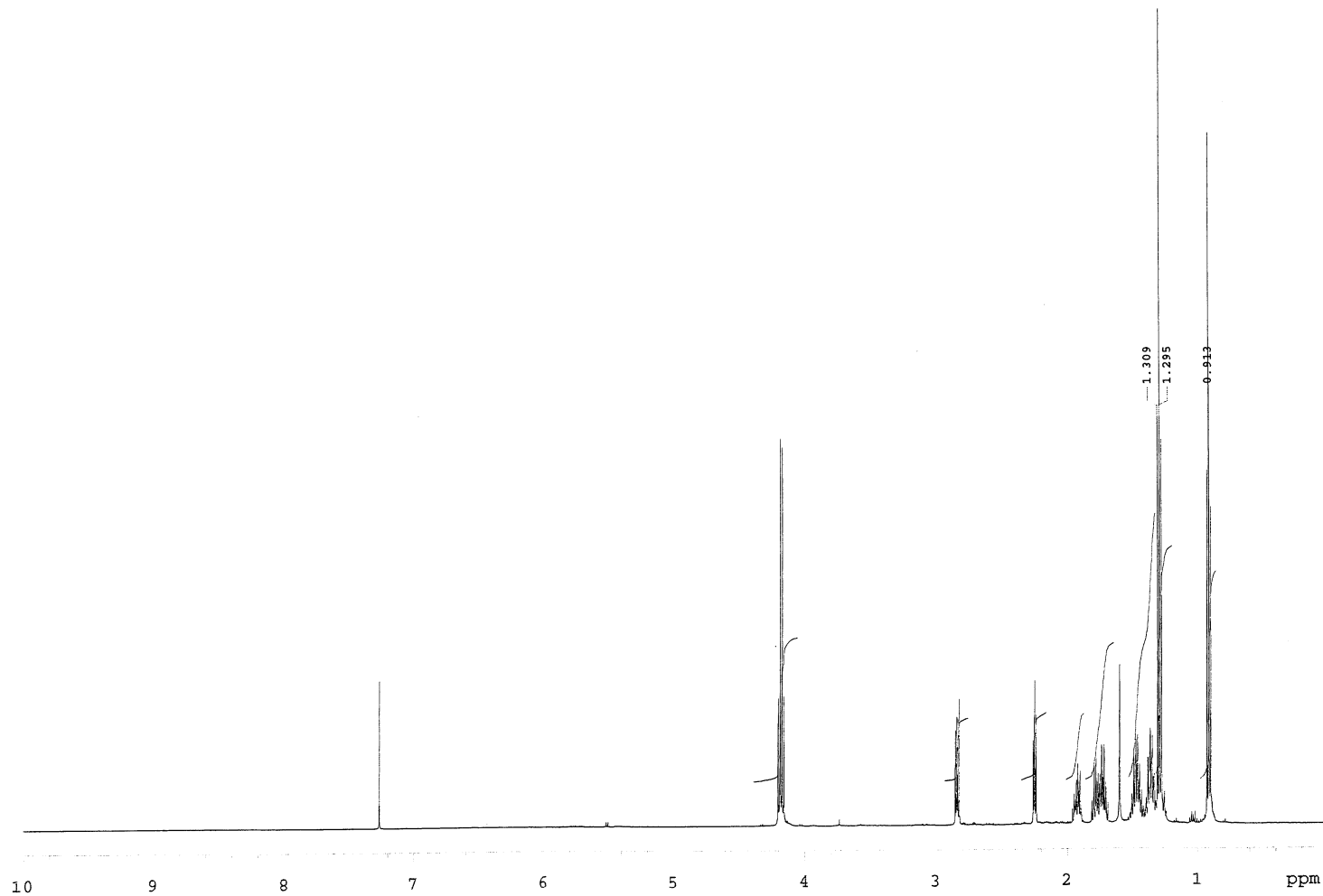
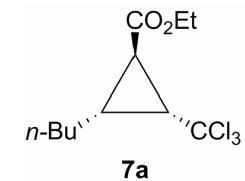
SAMPLE		SPECIAL	
date	Jun 23 2008	temp	not used
solvent	cdc13	gain	48
file	exp	spin	16
ACQUISITION		hst	0.008
sw	30487.8	pw90	8.900
at	1.300	alfa	10.000
np	79298	FLAGS	
fb	17000	il	n
bs	32	in	n
d1	1.000	dp	y
nt	3200	hs	nn
ct	288	PROCESSING	
TRANSMITTER		lb	1.00
tn	c13	fn	not used
sfrq	125.670	DISPLAY	
tof	1285.1	sp	-0.2
tpwr	54	wp	25130.9
pw	4.450	rfl	2049.9
DECOUPLER		rfp	0
dn	H1	rp	70.9
dof	0	lp	16.9
dm	yyy	PLOT	
dmm	w	wc	270
dpwr	41	sc	0
dmf	12338	vs	12908
		th	7
		ai	cdc ph



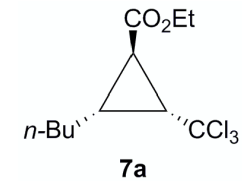
KPNN-4981
H-1

exp40 s2pul

SAMPLE		SPECIAL	
date	Jun 23 2008	temp	not used
solvent	cdc13	gain	26
file	exp	spin	16
ACQUISITION		hst	0.008
sw	8012.8	pw90	10.600
at	3.500	alfa	10.000
np	56090	FLAGS	
fb	4000	il	n
bs	32	in	n
d1	1.500	dp	y
nt	4	hs	nn
ct	4	PROCESSING	
TRANSMITTER		lb	0.30
tn	H1	fn	not used
sfrq	499.732	DISPLAY	
tof	499.7	sp	0.0
tpwr	59	wp	4997.3
pw	5.300	rfl	1011.4
DECOUPLER		rfl	0
dn	C13	rp	-48.3
dof	0	lp	4.5
dm	nnn	PLOT	
dmm	c	wc	270
dpwr	34	sc	0
dmf	32258	vs	200
		th	92
	ai	cdc	ph

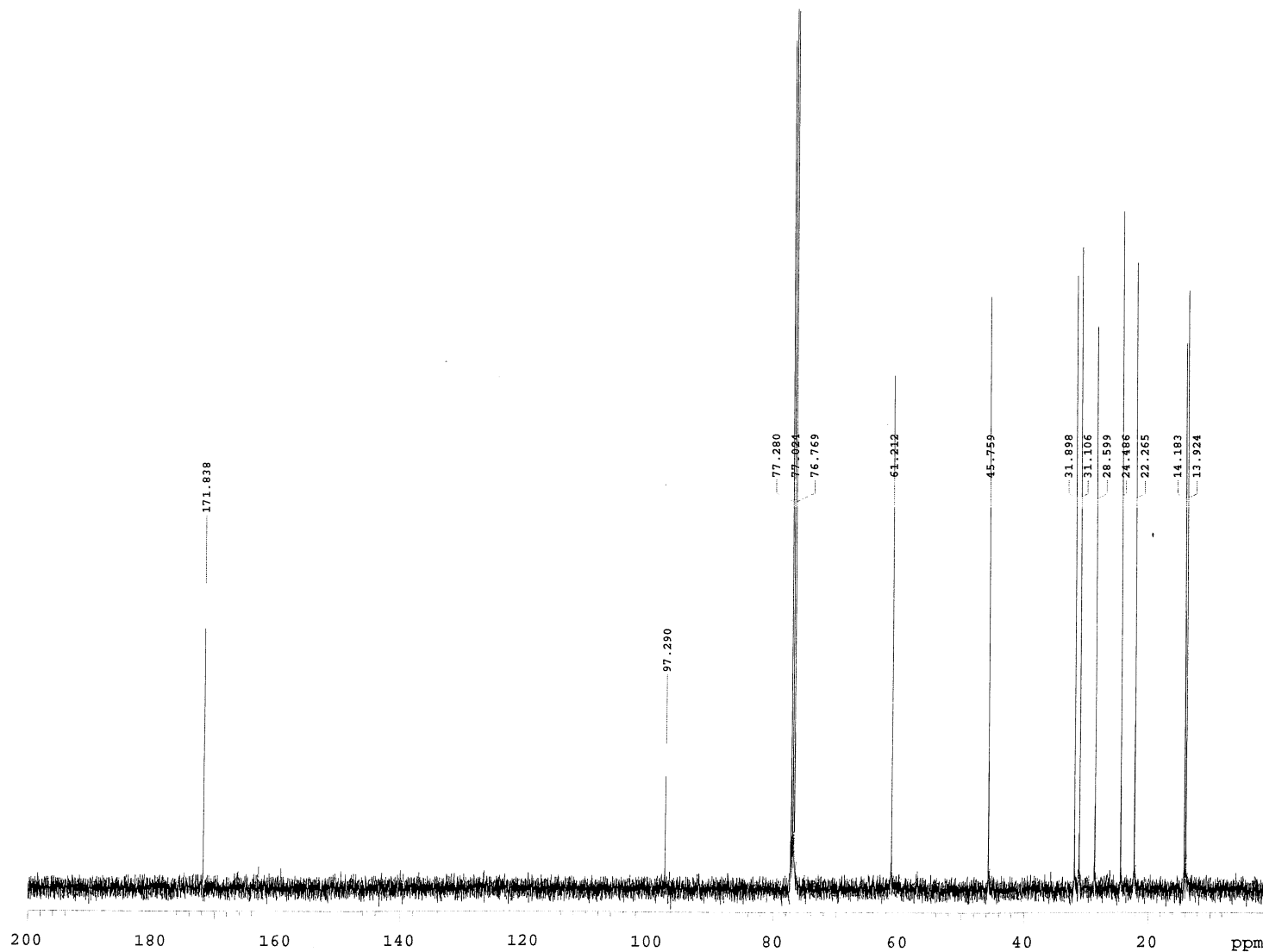


KPNN-4981
C-13



exp41 Carbon

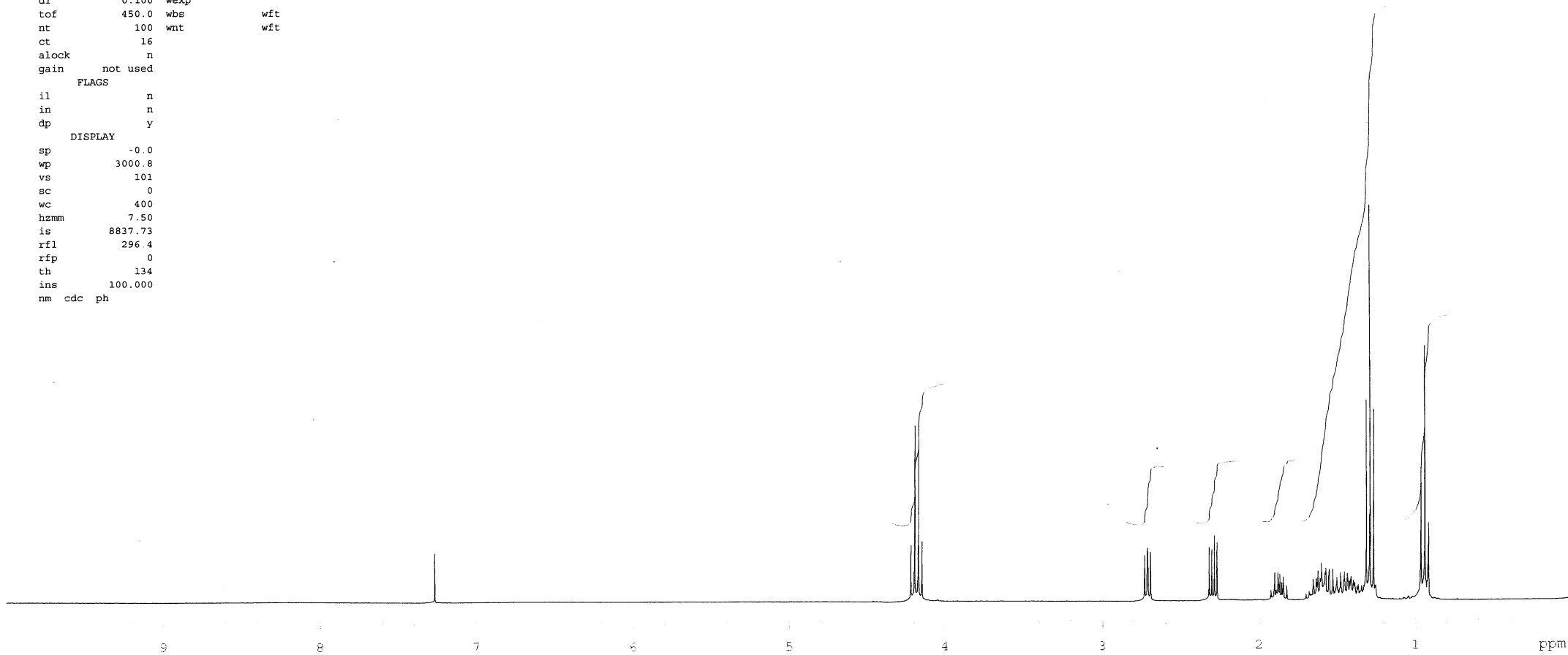
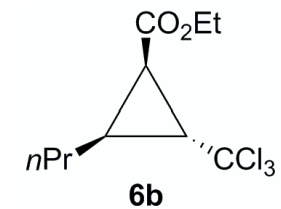
SAMPLE		SPECIAL		
date	Jun 23 2008	temp	not used	
solvent	cdcl3	gain	48	
file	exp	spin	16	
ACQUISITION		FLAGS		
sw	30487.8	hst	0.008	
at	1.300	pw90	8.900	
np	79298	alfa	10.000	
fb	17000	il	n	
bs	32	in	n	
d1	1.000	dp	y	
nt	3200	hs	nn	
ct	256	PROCESSING		
TRANSMITTER		lb	1.00	
tn	C13	fn	not used	
sfrq		125.670	DISPLAY	
tof	1285.1	sp	0.0	
tpwr	54	wp	25130.9	
pw	4.450	rfl	2048.3	
DECOUPLER		rfl	0	
dn	H1	rp	152.7	
dof	0	lp	41.7	
dm	yyy	PLOT		
dmm	w	wc	270	
dpwr	41	sc	0	
dmf	12338	vs	20127	
		th	22	
		ai	cdc ph	



R=n-Pr

exp2 stdlh

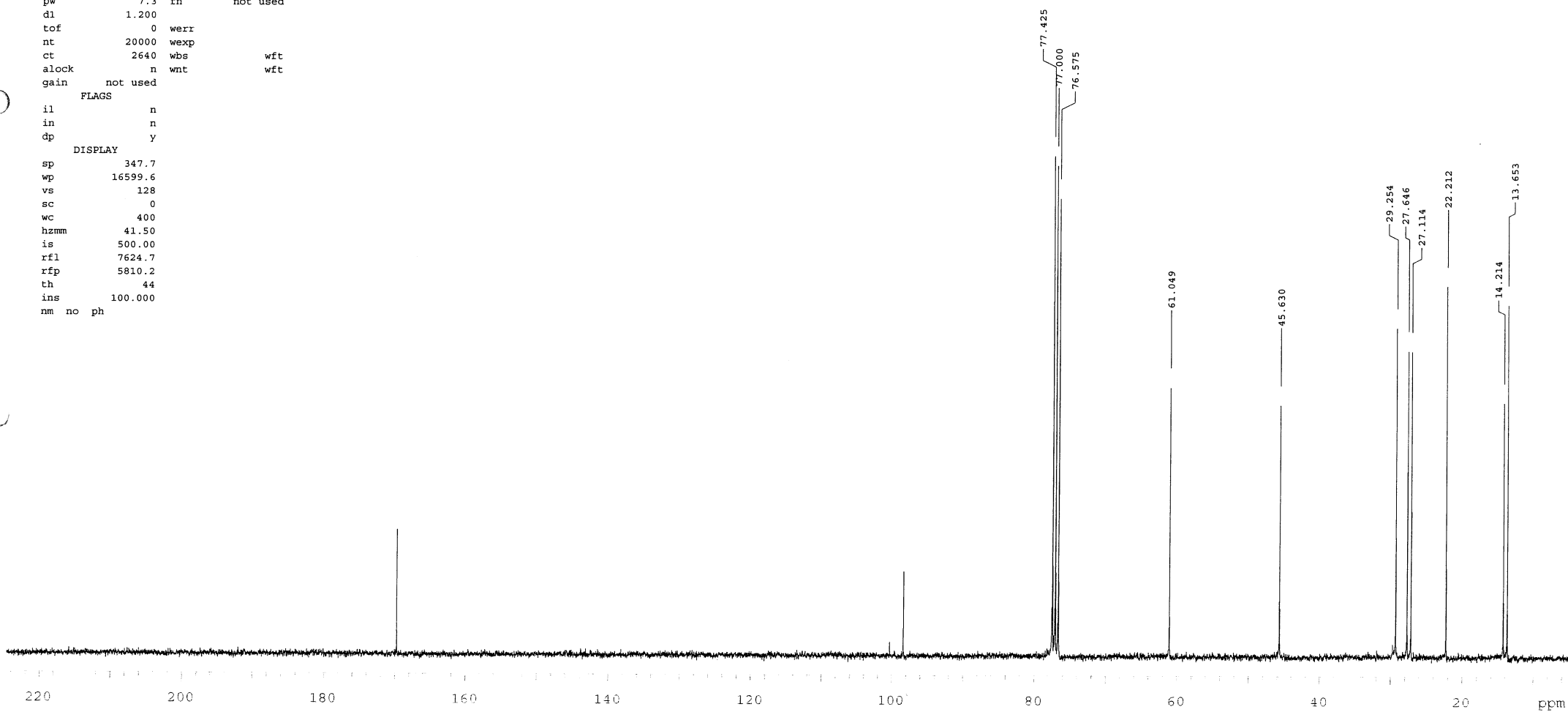
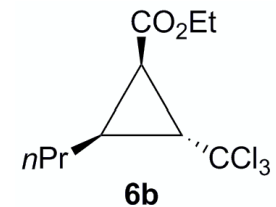
```
SAMPLE          DEC. & VT
date  Nov  9 2009  dfrq      300.092
solvent  CDCl3  dn          H1
file      exp    dof          0
ACQUISITION  dm          nnn
sfrq      300.092 dmm         c
tn         H1    dmf          200
at         3.555  PROCESSING
np         32000  wtfile
sw         4500.5 proc         ft
fb         2250  fn          not used
bs         4
pw         8.0  werr
dl         0.100 wexp
tof        450.0 wbs          wft
nt         100  wnt          wft
ct         16
alock      n
gain      not used
FLAGS
il         n
in         n
dp         y
DISPLAY
sp         -0.0
wp         3000.8
vs         101
sc         0
wc         400
hzmm       7.50
is         8837.73
rfl        296.4
rfp         0
th         134
ins        100.000
nm  cdc  ph
```



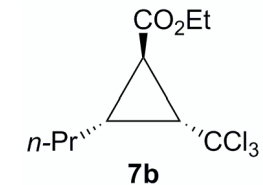
B-68
2

exp2 std13c

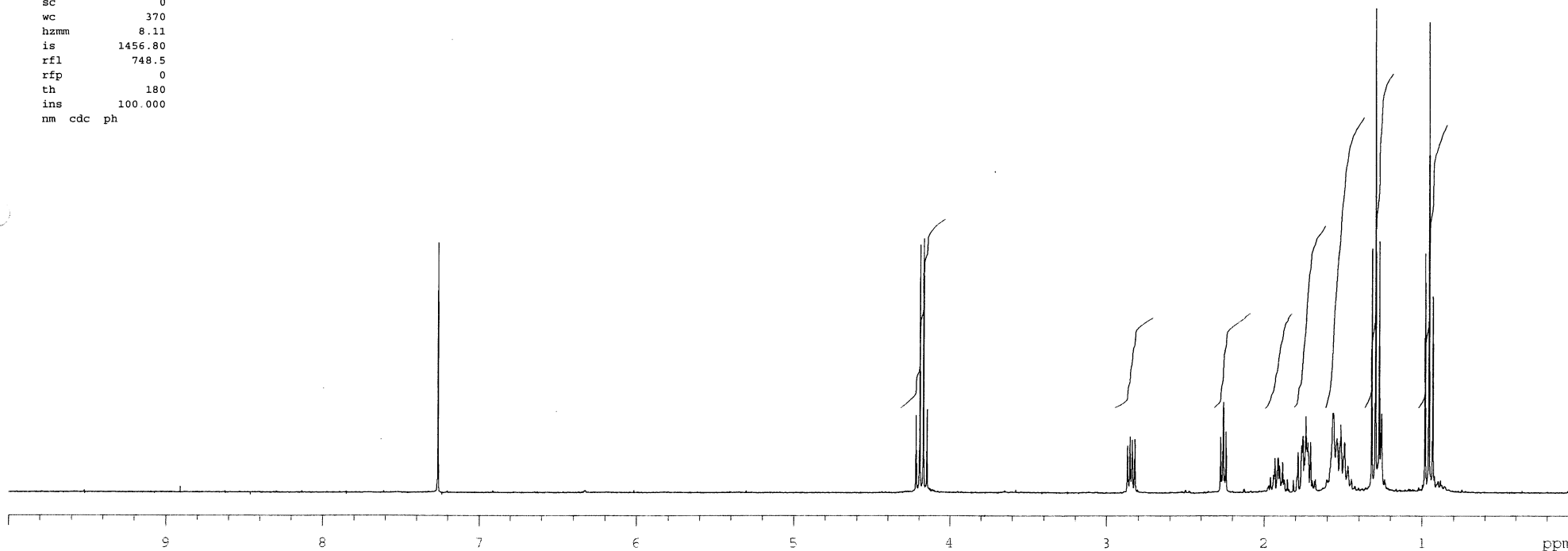
SAMPLE		DEC. & VT	
date	Nov 10 2009	dfrq	300.092
solvent	CDCl3	dn	H1
file	exp	dhp	0.5
ACQUISITION		PROCESSING	
sfrq	75.465	dm	yyy
tn	C13	dmm	w
at	0.853	dmf	8800
np	32000	lb	1.00
sw	18761.7	wtfile	
fb	9500	proc	ft
bs	8	fn	not used
pw	7.3	werr	
di	1.200	wexp	
tof	0	wbs	wft
nt	20000	wnt	wft
ct	2640		
alock	n		
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
DISPLAY			
sp	347.7		
wp	16599.6		
vs	128		
sc	0		
wc	400		
hzmm	41.50		
is	500.00		
rfl	7624.7		
rfp	5810.2		
th	44		
ins	100.000		
nm	no	ph	



n-Pr
~~less~~ polar
More
exp2 stdlh



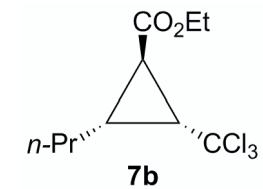
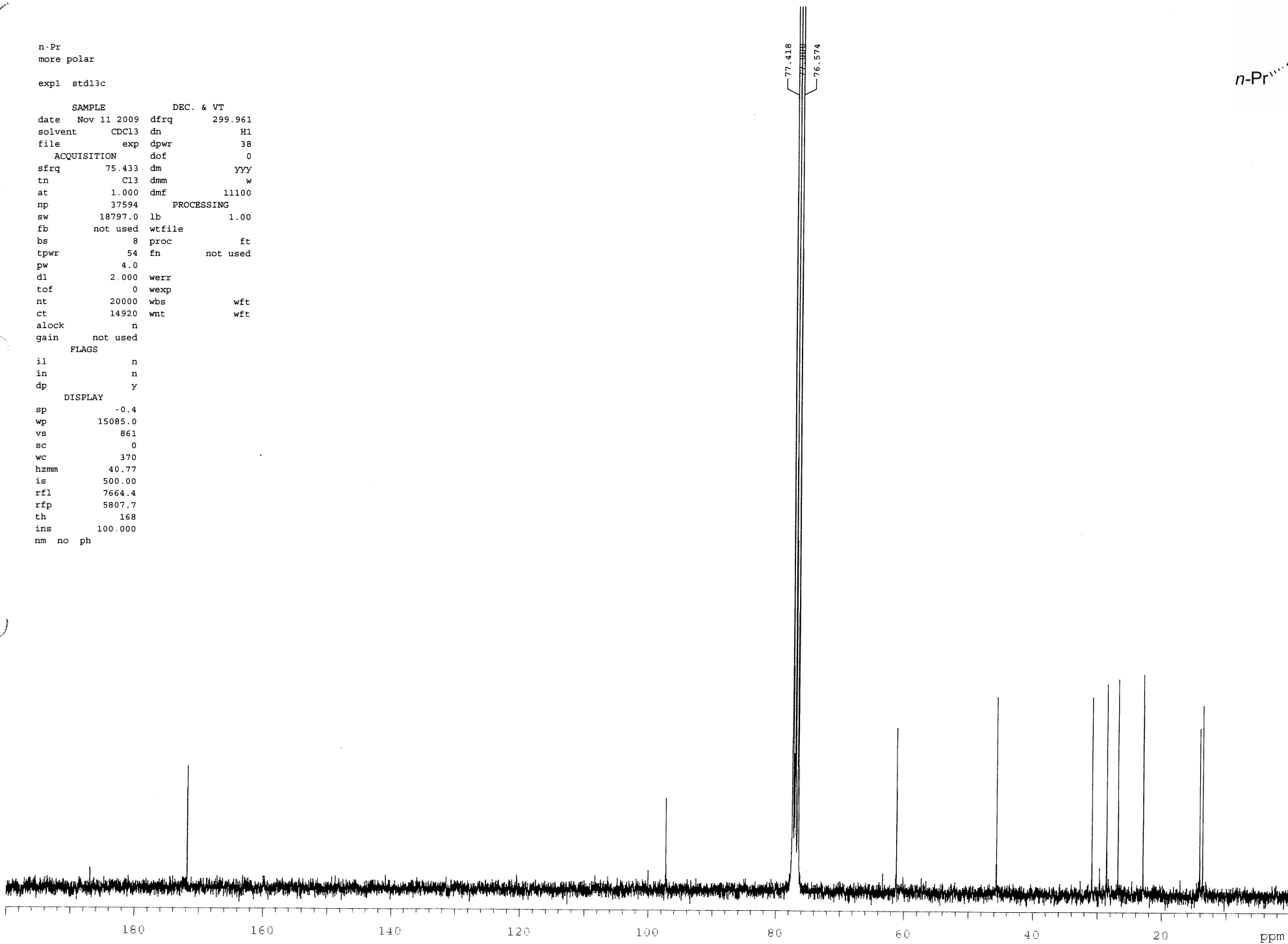
SAMPLE DEC. & VT
date Nov 10 2009 dfrq 299.961
solvent CDCl3 dn H1
file exp dpwr 30
ACQUISITION dof 0
sfrq 299.961 dm nnn
tn H1 dmm c
at 3.557 dmf 200
np 32000 PROCESSING
sw 4498.4 wtfile
fb not used proc ft
bs 4 fn not used
tpwr 59
pw 4.1 werr
dl 0.500 wexp
tof 0 wbs wft
nt 100 wnt wft
ct 12
alock n
gain not used
FLAGS
il n
in n
dp y
DISPLAY
sp -0.0
wp 2999.6
vs 114
sc 0
wc 370
hzmm 8.11
is 1456.80
rfl 748.5
rfp 0
th 180
ins 100.000
nm cdc ph



n-Pr
more polar

expl std13c

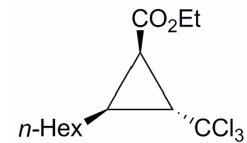
```
SAMPLE          DEC. & VT
date  Nov 11 2009  dfrq    299.961
solvent  CDCl3      dn      H1
file     exp       dpwr    38
ACQUISITION
sfrq    75.433    dm      yyy
tn      C13      dmm     w
at      1.000    dmf     11100
np      37594    PROCESSING
sw      18797.0  lb      1.00
fb      not used wtfile
bs      8        proc    ft
tpwr    54       fn      not used
pw      4.0
dl      2.000    werr
tof     0        wexp
nt      20000   wbs     wft
ct      14920   wnt     wft
alock   n
gain    not used
FLAGS
il      n
in      n
dp      y
DISPLAY
sp      -0.4
wp      15085.0
vs      861
sc      0
wc      370
hzmm    40.77
is      500.00
rfl     7664.4
rfp     5807.7
th      168
ins     100.000
nm      no ph
```



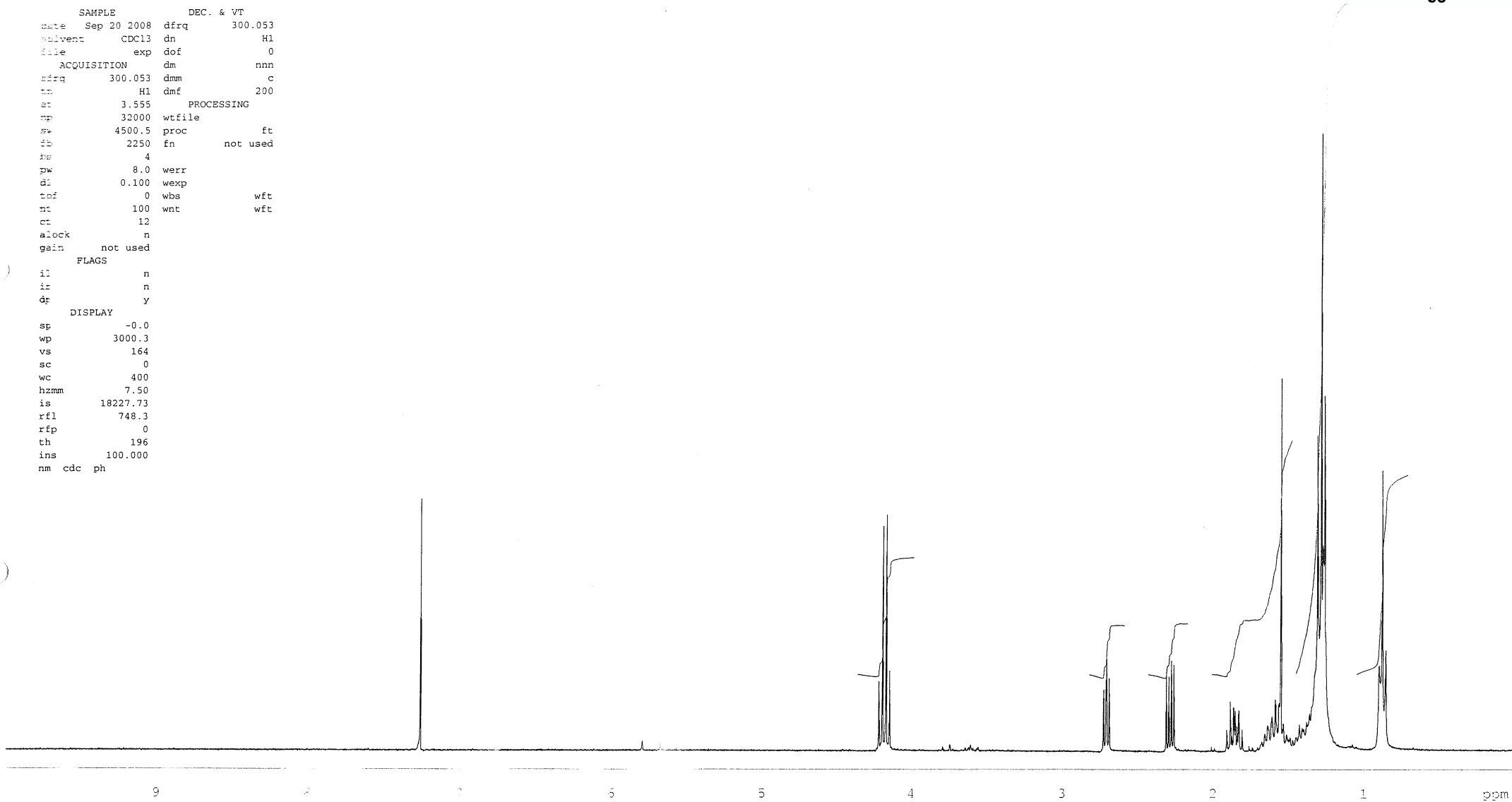
C-10

exp1 std1h

```
SAMPLE      DEC. & VT
Date Sep 20 2008 dfrq      300.053
Solvent CDC13 dn          H1
File exp dof            0
ACQUISITION dm          nnn
dfrq 300.053 dnm         c
nr H1 dmf             200
ac 3.555 PROCESSING
ap 32000 wtfile
aw 4500.5 proc        ft
ab 2250 fn          not used
ar 4
pw 8.0 werr
dl 0.100 wexp
tof 0 wbs          wft
nt 100 wnt        wft
ct 12
alock n
gain not used
FLAGS
il n
ir n
df y
DISPLAY
sp -0.0
wp 3000.3
vs 164
sc 0
wc 400
hzmm 7.50
is 18227.73
rfl 748.3
rfp 0
th 196
ins 100.000
nm cdc ph
```



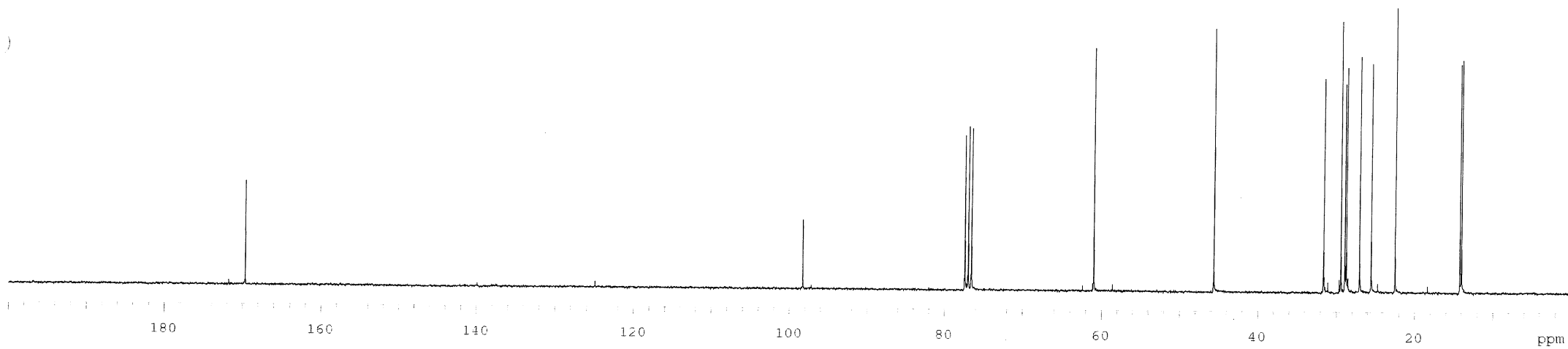
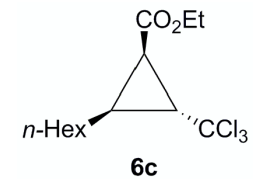
6c

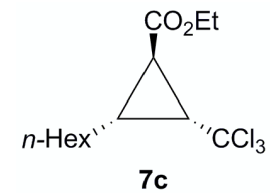


n-Hexyl
less polar

exp2 std13c

```
SAMPLE          DEC. & VT
date Nov 13 2009 dfrq      300.092
solvent CDCl3  dn         H1
file      exp  dhp         0.5
ACQUISITION    dof         0
sfrq      75.465 dm         YYY
tn         C13 dmm         w
at         0.853 dmf        8600
np         32000 PROCESSING
sw         18761.7 lb         1.00
fb         9500  wtfile
bs         4     proc         ft
pw         7.3  fn         not used
dl         1.200
tof         0     werr
nt         20000 wexp
ct         1548  wbs         wft
alock      n     wnt         wft
gain      not used
FLAGS
il         n
in         n
dp         Y
DISPLAY
sp         -0.5
wp         15091.4
vs         72
sc         0
wc         400
hzmm      37.73
is         500.00
rfl       7625.9
rfp       5810.2
th         145
ins       100.000
nm no ph
```



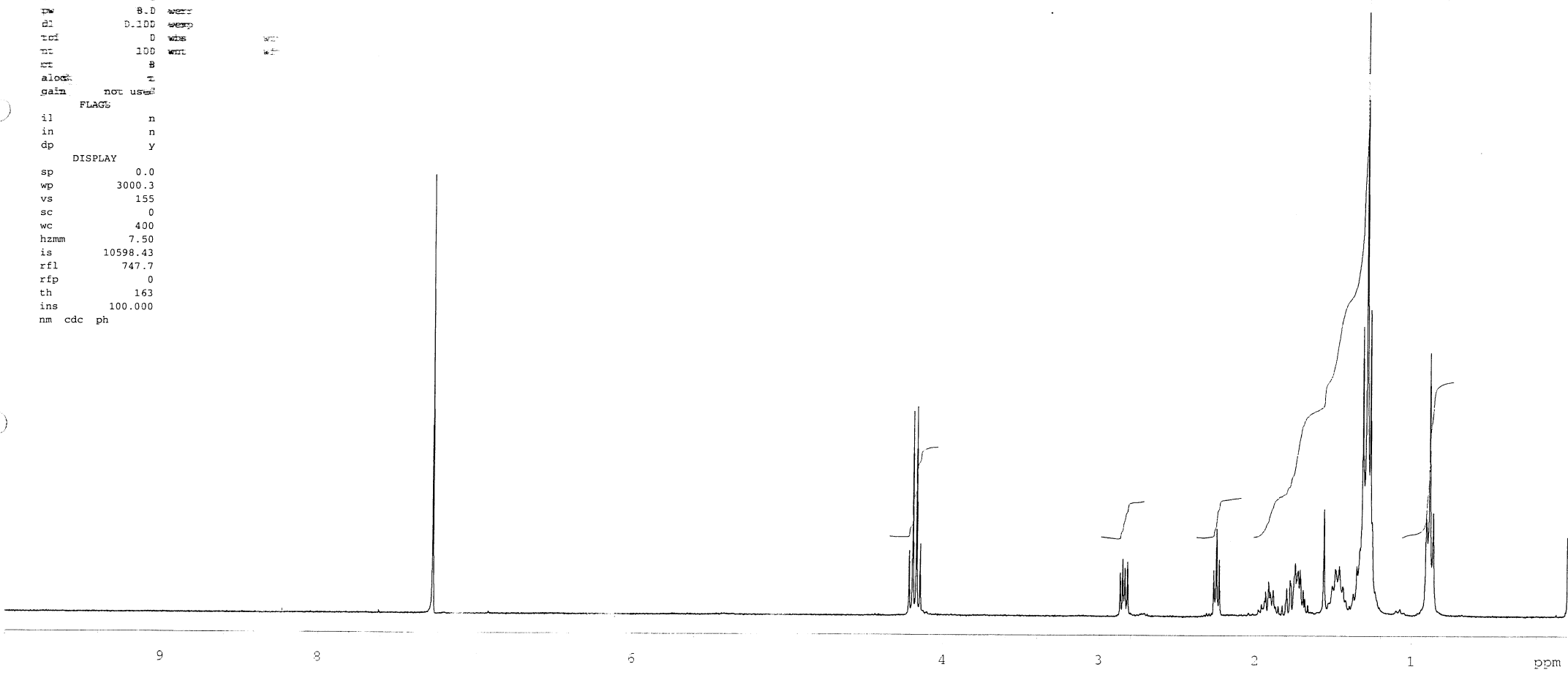


```

NAME: 7c
EXP NO: 10118
PROC: 10118
DATE: 10/18/83
TIME: 10:18
INSTR: 300.135
PULP: 8.000
PRG: 10118
F1: 300.135
F2: 300.135
SOLV: CDCl3
AQ: 4.00
RG: 8.00
DE: 0.100
TE: 0
NUC1: 13C
NUC2: 13C
ALOCK: z
GAIN: not used

=====
PARAMETER LIST
=====
il n
in n
dp y
DISPLAY
sp 0.0
wp 3000.3
vs 155
sc 0
wc 400
hzmm 7.50
is 10598.43
rfl 747.7
rfp 0
th 163
ins 100.000
nm cdc ph

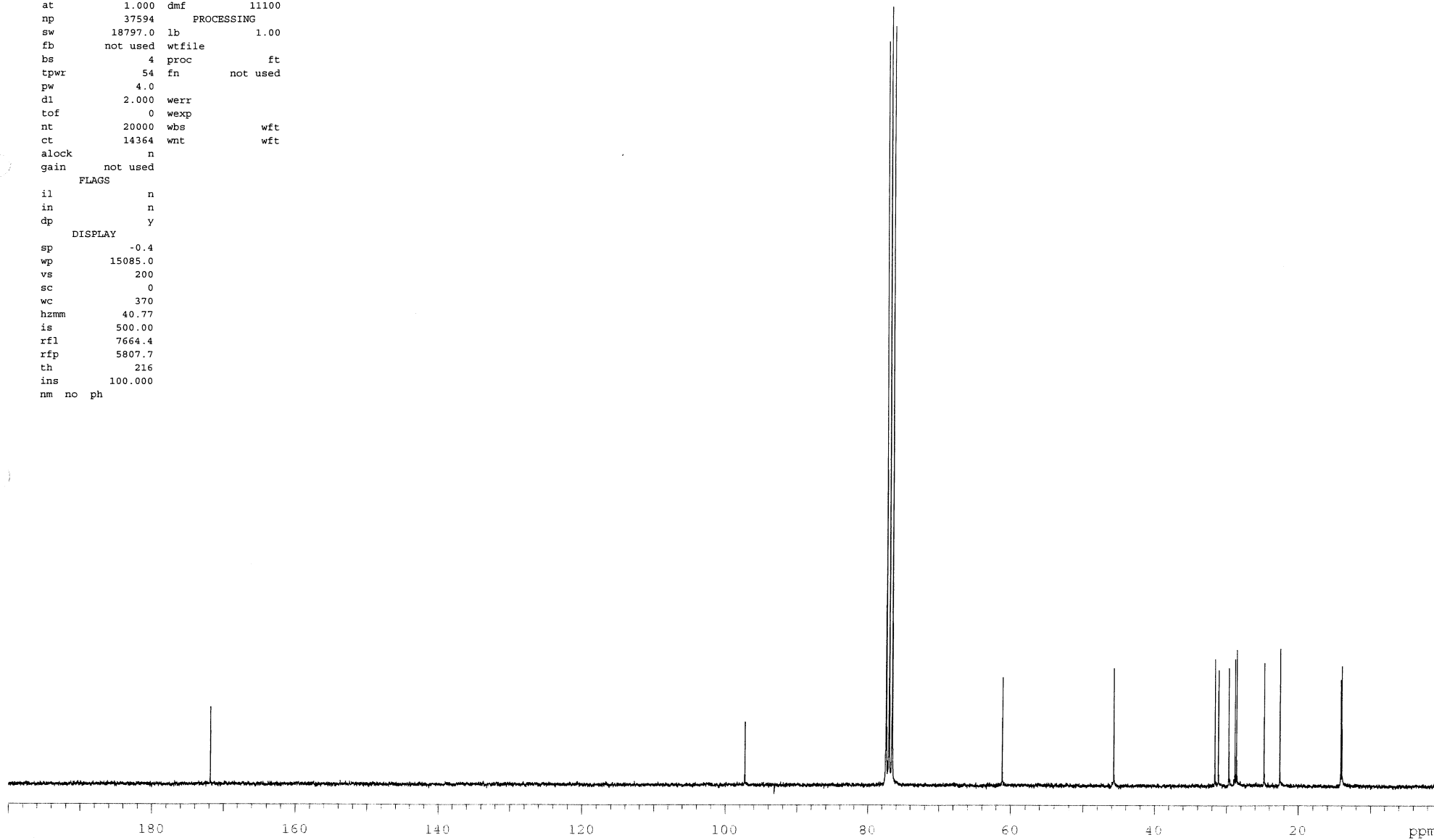
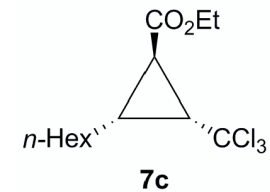
```

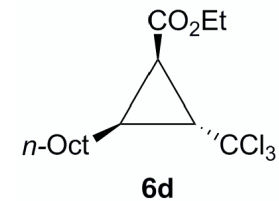


n-Hexyl
more polar

exp2 std13c

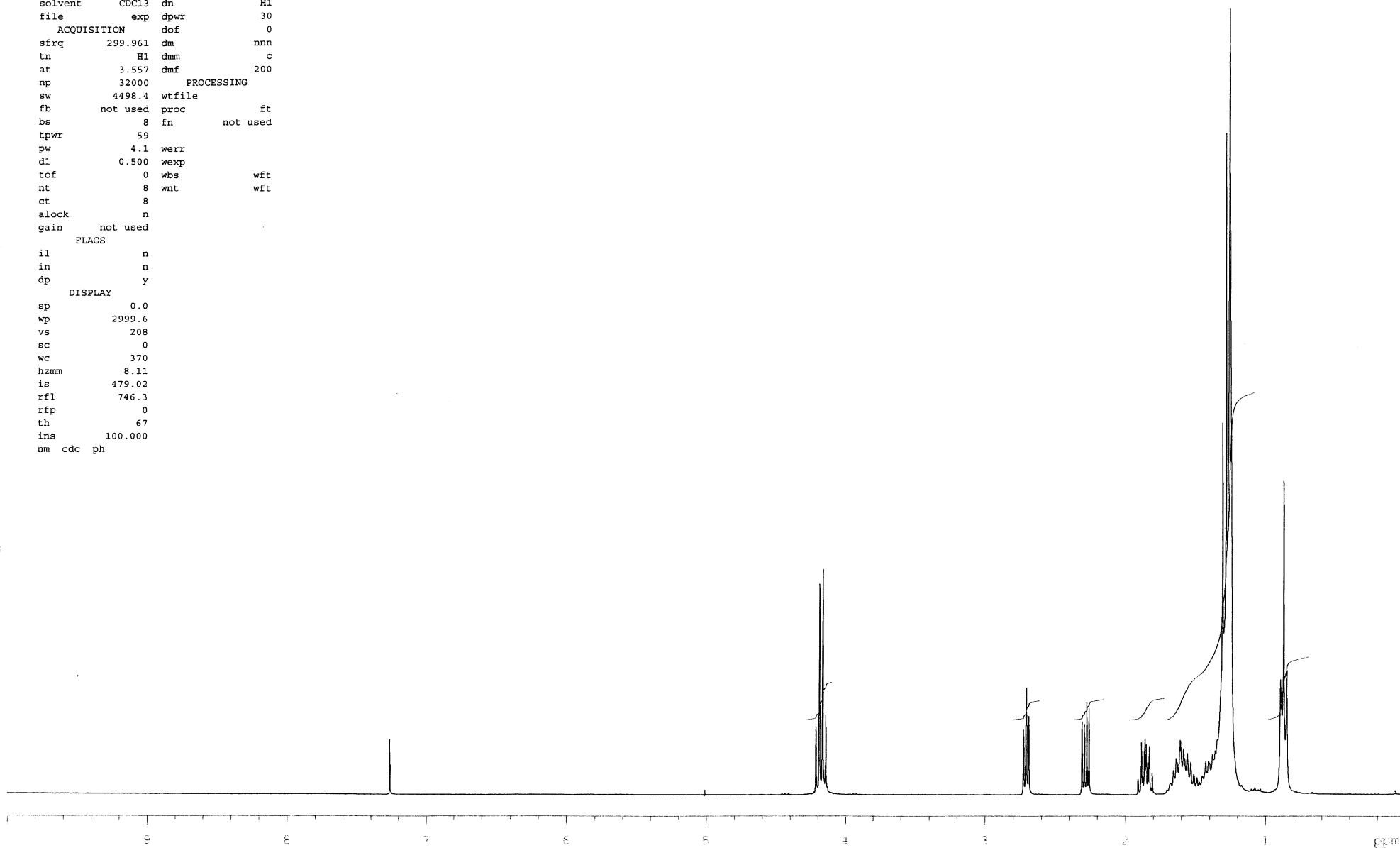
```
SAMPLE          DEC. & VT
date  Nov 12 2009  dfrq    299.961
solvent  CDCl3    dn      H1
file     exp      dpwr    38
ACQUISITION      dof     0
sfrq     75.433  dm      YYY
tn       Cl3     dmm     w
at       1.000  dmf     11100
np       37594  PROCESSING
sw       18797.0 lb      1.00
fb       not used wtfile
bs       4      proc     ft
tpwr     54     fn      not used
pw       4.0
dl       2.000  werr
tof      0      wexp
nt       20000  wbs      wft
ct       14364 wnt      wft
alock    n
gain     not used
FLAGS
il       n
in       n
dp       Y
DISPLAY
sp       -0.4
wp       15085.0
vs       200
sc       0
wc       370
hzmm     40.77
is       500.00
rfl      7664.4
rfp      5807.7
th       216
ins      100.000
nm no ph
```





exp4 stdlh

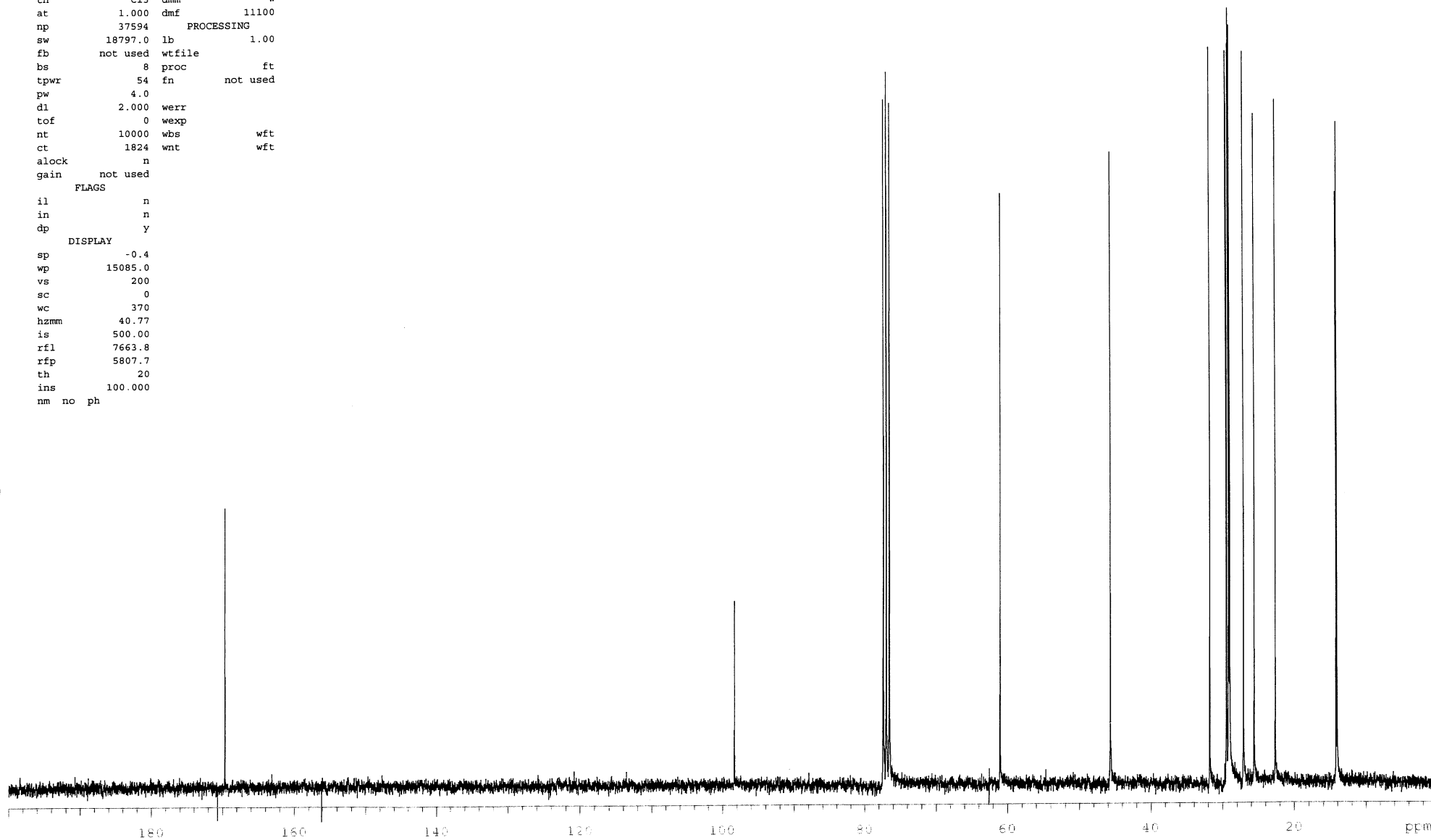
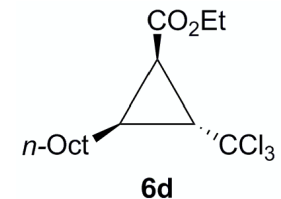
SAMPLE		DEC. & VT	
date	Jun 12 2013	dfrq	299 961
solvent	CDCl3	dn	H1
file	exp	dpwr	30
ACQUISITION		dof	0
sfrq	299.961	dm	nnn
tn	H1	dmm	c
at	3.557	dmf	200
np	32000	PROCESSING	
sw	4498.4	wtfile	
fb	not used	proc	ft
bs	8	fn	not used
tpwr	59		
pw	4.1	werr	
d1	0.500	wexp	
tof	0	wbs	wft
nt	8	wnt	wft
ct	8		
alock	n		
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
DISPLAY			
sp	0.0		
wp	2999.6		
vs	208		
sc	0		
wc	370		
hzmm	8.11		
is	479.02		
rfl	746.3		
rfp	0		
th	67		
ins	100.000		
nm	cdc ph		



13C OBSERVE

expl std13c

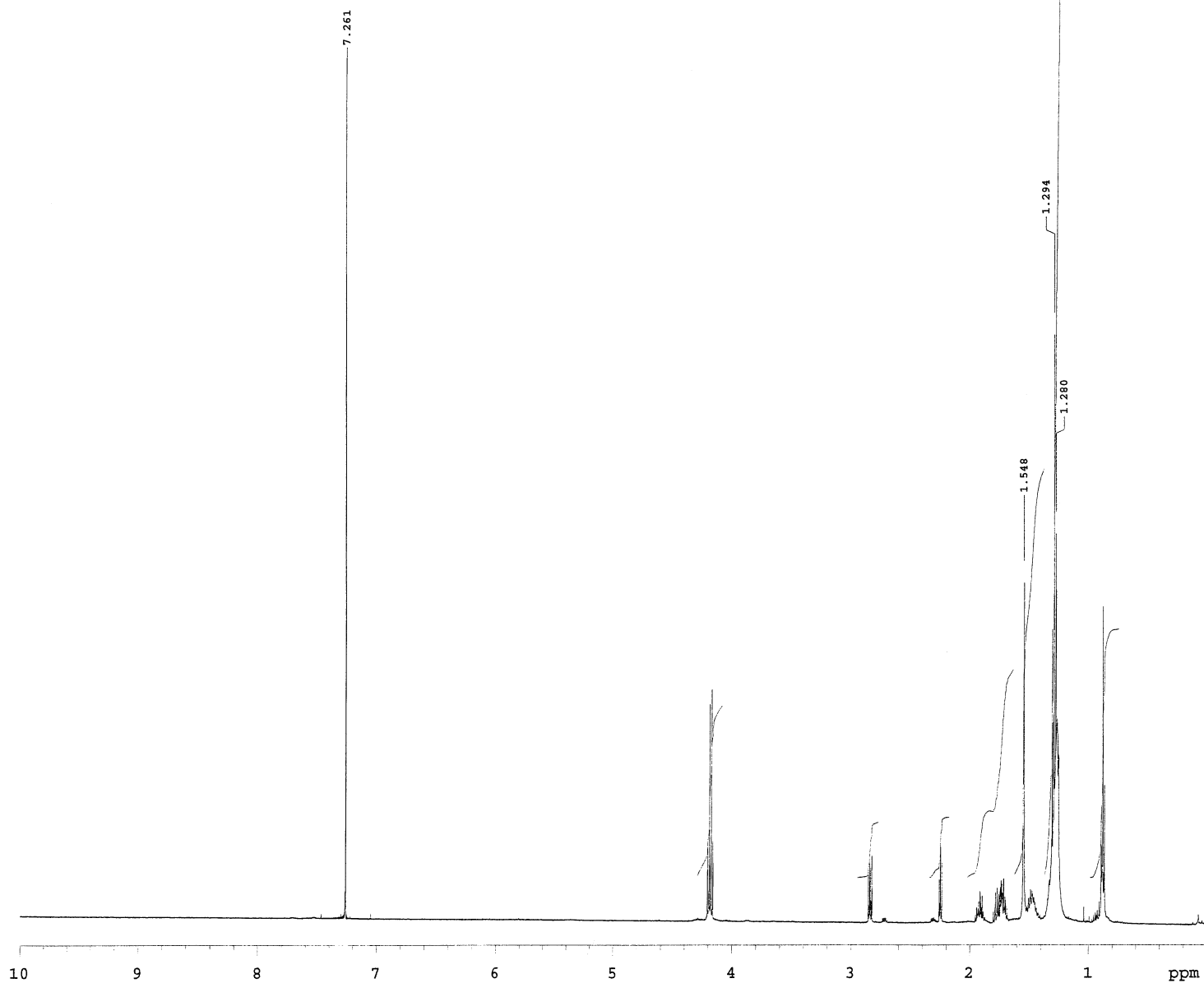
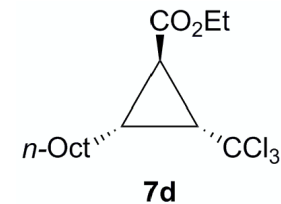
```
SAMPLE          DEC. & VT
date Jun 12 2013 dfrq      299.961
solvent  CDCl3  dn         H1
file     exp    dpwr       38
          ACQUISITION  dof         0
sfrq     75.433  dm         YYY
tn        C13  dmm         w
at        1.000  dmf        11100
np        37594  PROCESSING
sw        18797.0 lb         1.00
fb        not used wtfile
bs         8    proc        ft
tpwr      54    fn         not used
pw         4.0
dl         2.000 werr
tof        0    wexp
nt        10000 wbs         wft
ct         1824 wnt         wft
alock     n
gain      not used
          FLAGS
il         n
in         n
dp         y
          DISPLAY
sp         -0.4
wp        15085.0
vs         200
sc         0
wc         370
hzmm      40.77
is         500.00
rfl       7663.8
rfp       5807.7
th         20
ins       100.000
nm no ph
```



KPNN5333
H-1

exp36 Proton

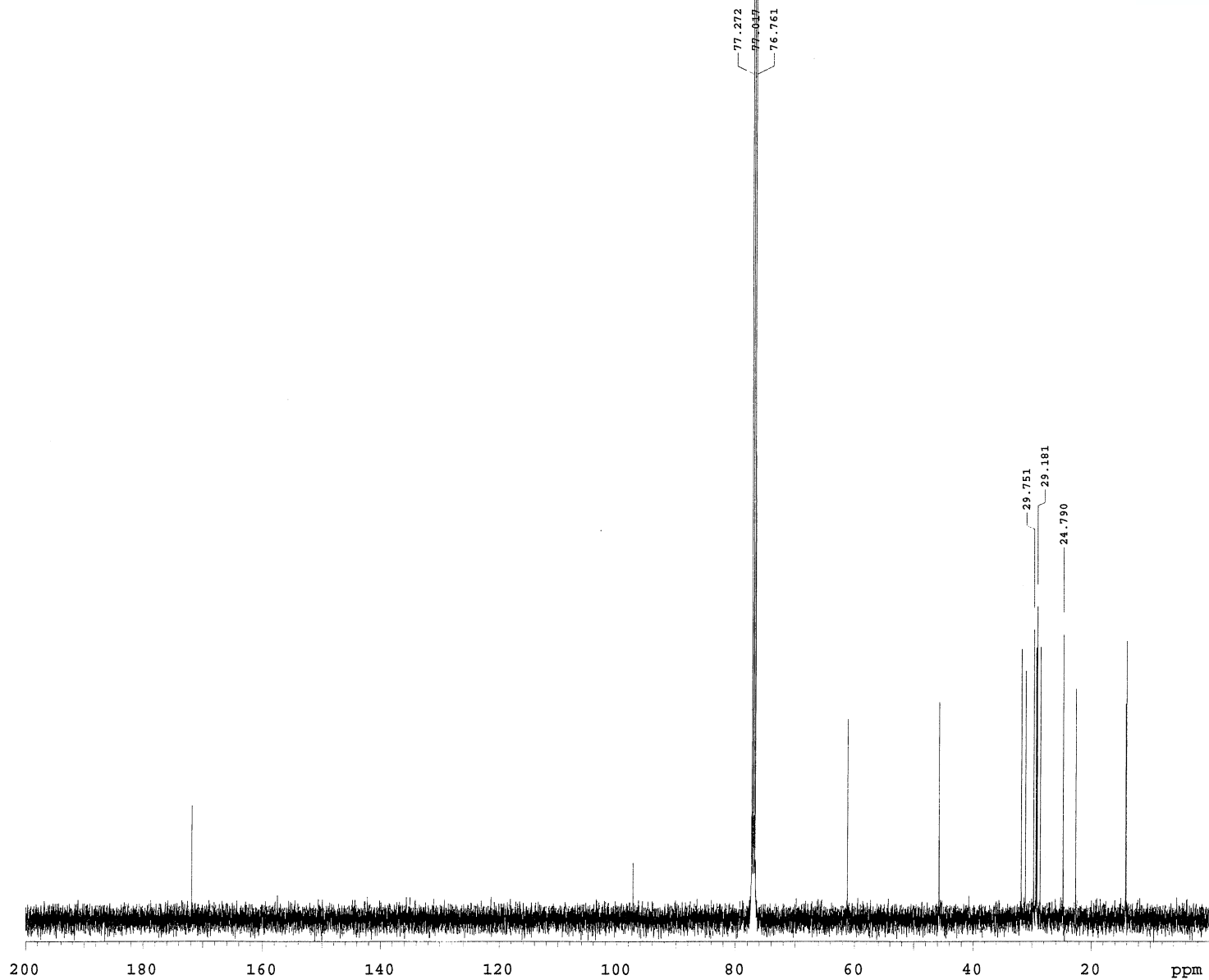
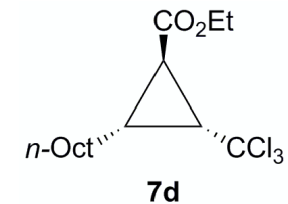
SAMPLE		SPECIAL	
date	Jun 18 2013	temp	not used
solvent	cdcl3	gain	not used
file	exp	spin	20
ACQUISITION		FLAGS	
sw	8012.8	pw90	9.100
at	2.049	alfa	10.000
np	32830		
fb	4000	il	n
bs	32	in	n
ss	2	dp	y
d1	1.000	hs	nn
nt	8	PROCESSING	
ct	8	fn	65536
TRANSMITTER		DISPLAY	
tn	H1	sp	-0.0
sfrq	499.732	wp	4997.3
tof	499.7	rfl	1013.6
tpwr	61	rfp	0
pw	4.550	rp	-60.8
DECOUPLER		PLOT	
dn	C13		
dof	0	wc	270
dm	nnn	sc	0
dmm	c	vs	244
dpwr	35	th	72
dmf	11976	ai	cdc ph



KPNN5333
C-13

exp37 Carbon

SAMPLE		SPECIAL	
date	Jun 18 2013	temp	not used
solvent	cdc13	gain	30
file	exp	spin	20
ACQUISITION		hst	0.008
sw	30487.8	pw90	9.200
at	1.300	alfa	10.000
np	79298	FLAGS	
fb	17000	il	n
bs	64	in	n
d1	1.000	dp	y
nt	4800	hs	nn
ct	2624	PROCESSING	
TRANSMITTER		lb	0.50
tn	C13	fn	not used
sfrq	125.670	DISPLAY	
tof	1285.1	sp	0.0
tpwr	54	wp	25130.9
pw	4.600	rfl	2048.3
DECOUPLER		rfp	0
dn	H1	rp	52.4
dof	0	lp	0
dm	yyy	PLOT	
dmm	w	wc	270
dpwr	41	sc	0
dmf	11242	vs	411430
		th	64
		ai	cdc ph

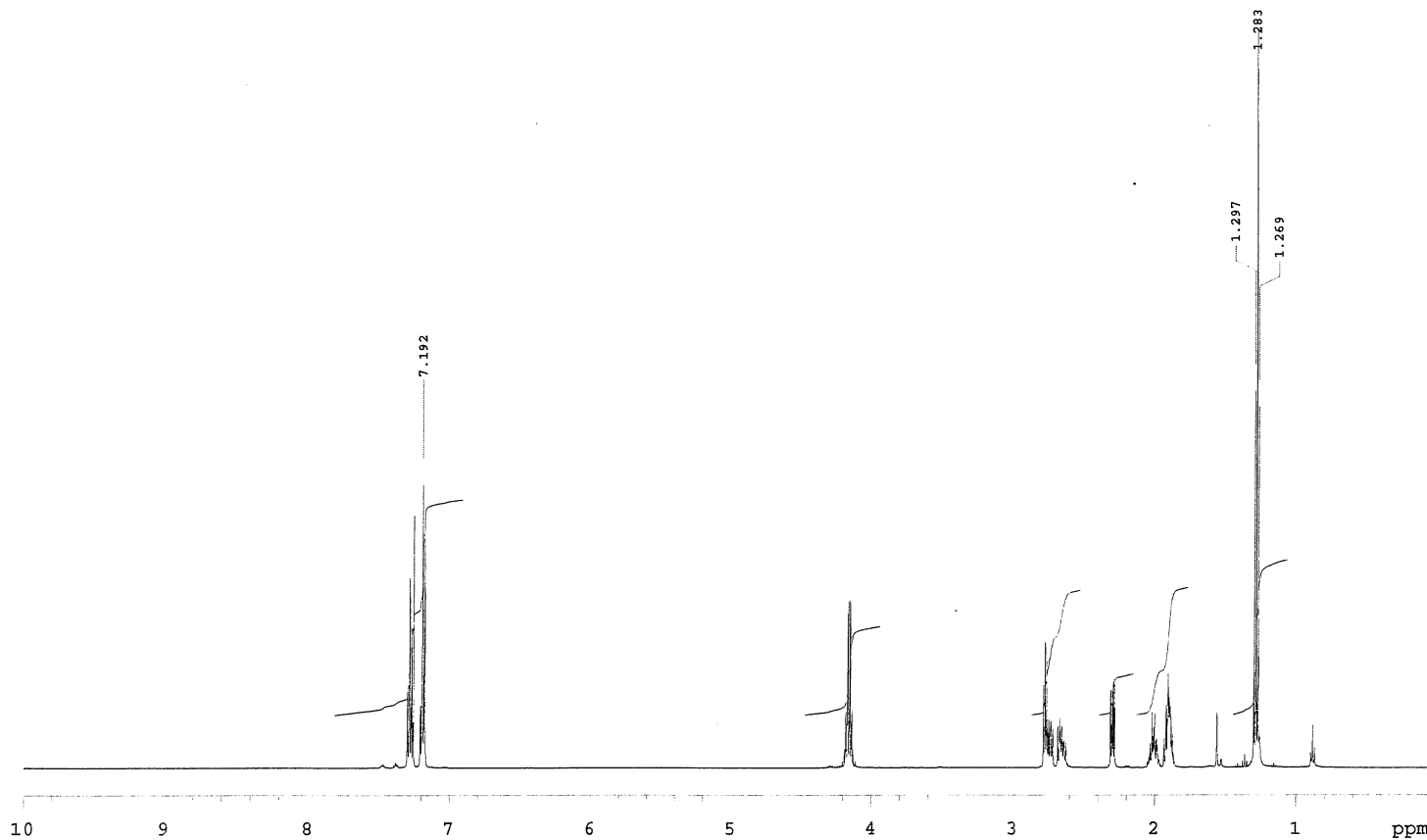
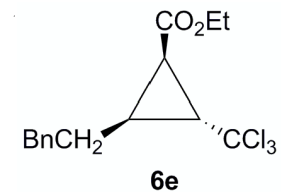


KPNN-5121

H-1

expl1 s2pul

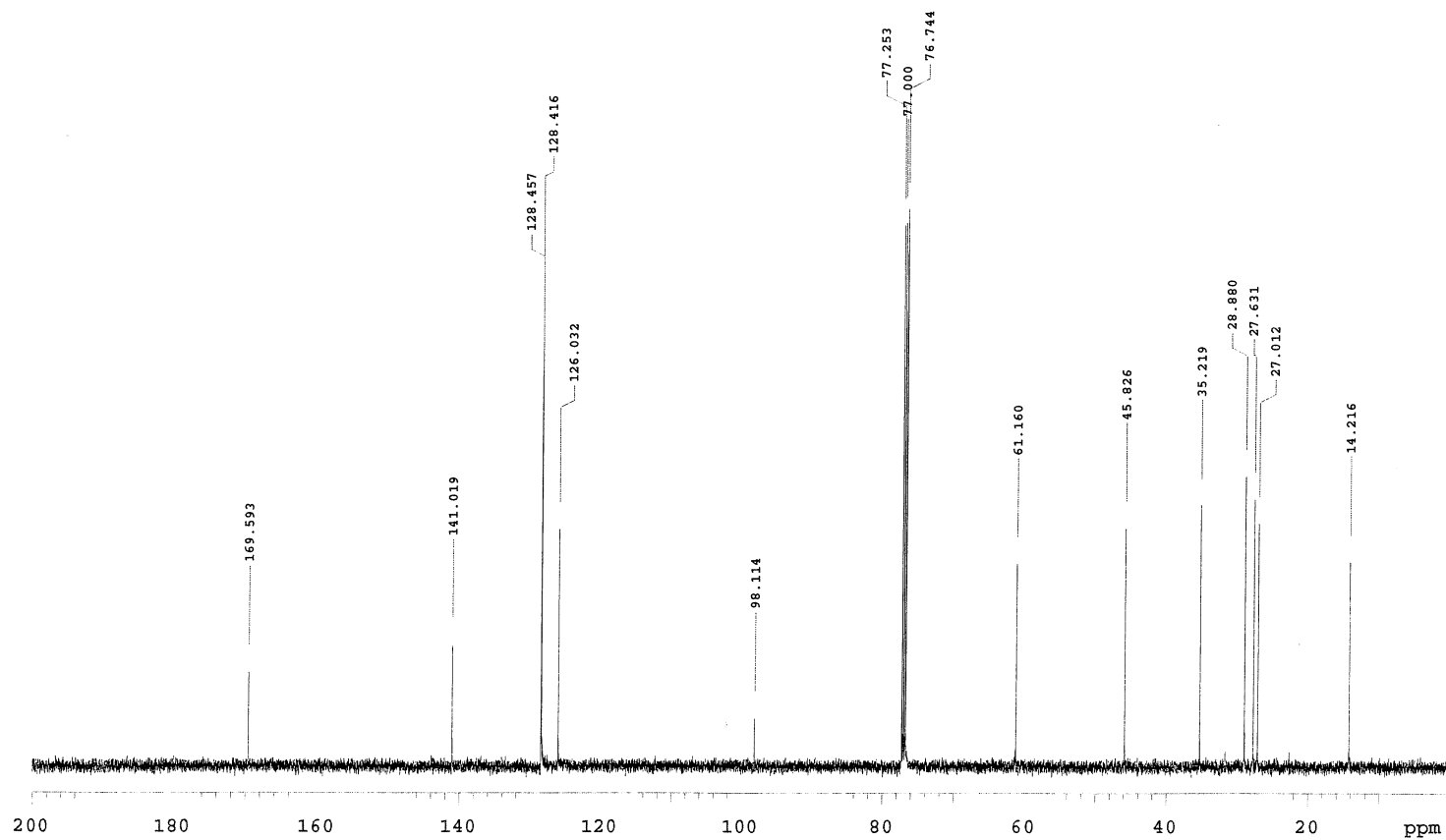
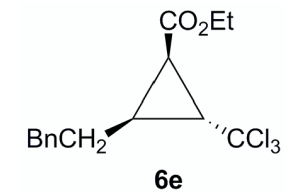
SAMPLE		SPECIAL	
date	Dec 7 2009	temp	not used
solvent	cdcl3	gain	30
file	exp	spin	16
ACQUISITION		hat	0.008
sw	8000.0	pw90	10.500
at	2.048	alfa	6.600
np	32768	FLAGS	
fb	not used	il	n
bs	32	in	n
ss	2	dp	y
d1	1.000	hs	nn
nt	4	PROCESSING	
ct	4	lb	0.20
TRANSMITTER		fn	65536
tn	H1	DISPLAY	
sfrq	499.830	sp	-0.0
tof	499.7	wp	4998.0
tpwr	58	rfl	1013.2
pw	5.250	rpf	0
DECOUPLER		rp	-149.9
dn	C13	lp	6.3
dof	0	FLOT	
dm	nnn	wc	270
dmm	c	sc	0
dpwr	35	vs	53
dmf	31746	th	50
	ai	cdc	ph



KPNN-5121
C-13

exp12 Carbon

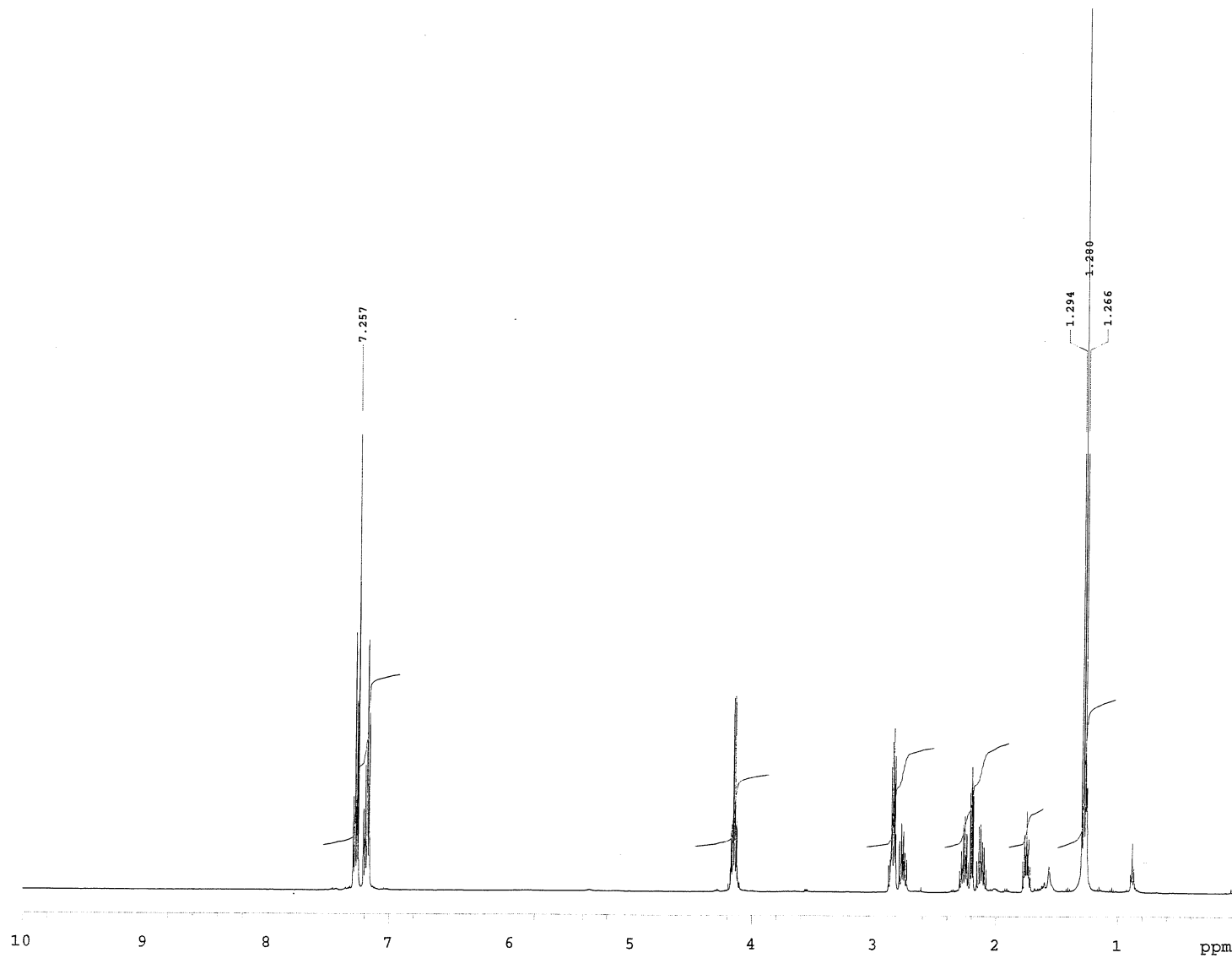
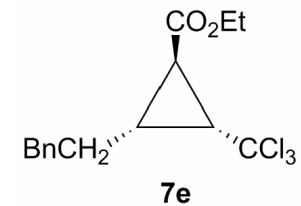
SAMPLE		SPECIAL	
date	Dec 7 2009	temp	not used
solvent	cdc13	gain	30
file	exp	spin	16
ACQUISITION		hat	0.008
sw	30165.9	pw90	12.500
at	1.300	alfa	10.000
np	78460	FLAGS	
fb	not used	il	n
bs	32	in	n
d1	1.000	dp	y
nt	3200	hs	nn
ct	192	PROCESSING	
TRANSMITTER		lb	1.00
tn	C13	fn	not used
sfrq	125.695	DISPLAY	
tof	1255.3	sp	-0.2
tpwr	53	wp	25136.3
pw	6.250	rfl	11598.1
DECOUPLER		rfp	9677.5
dn	H1	rp	67.2
dof	0	lp	-136.2
dm	yyy	PLOT	
dmm	w	wc	270
dpwr	39	sc	0
dmf	11136	vs	11151
		th	7
		ai	cdc ph



KPNN-5122
H-1

exp16 s2pul

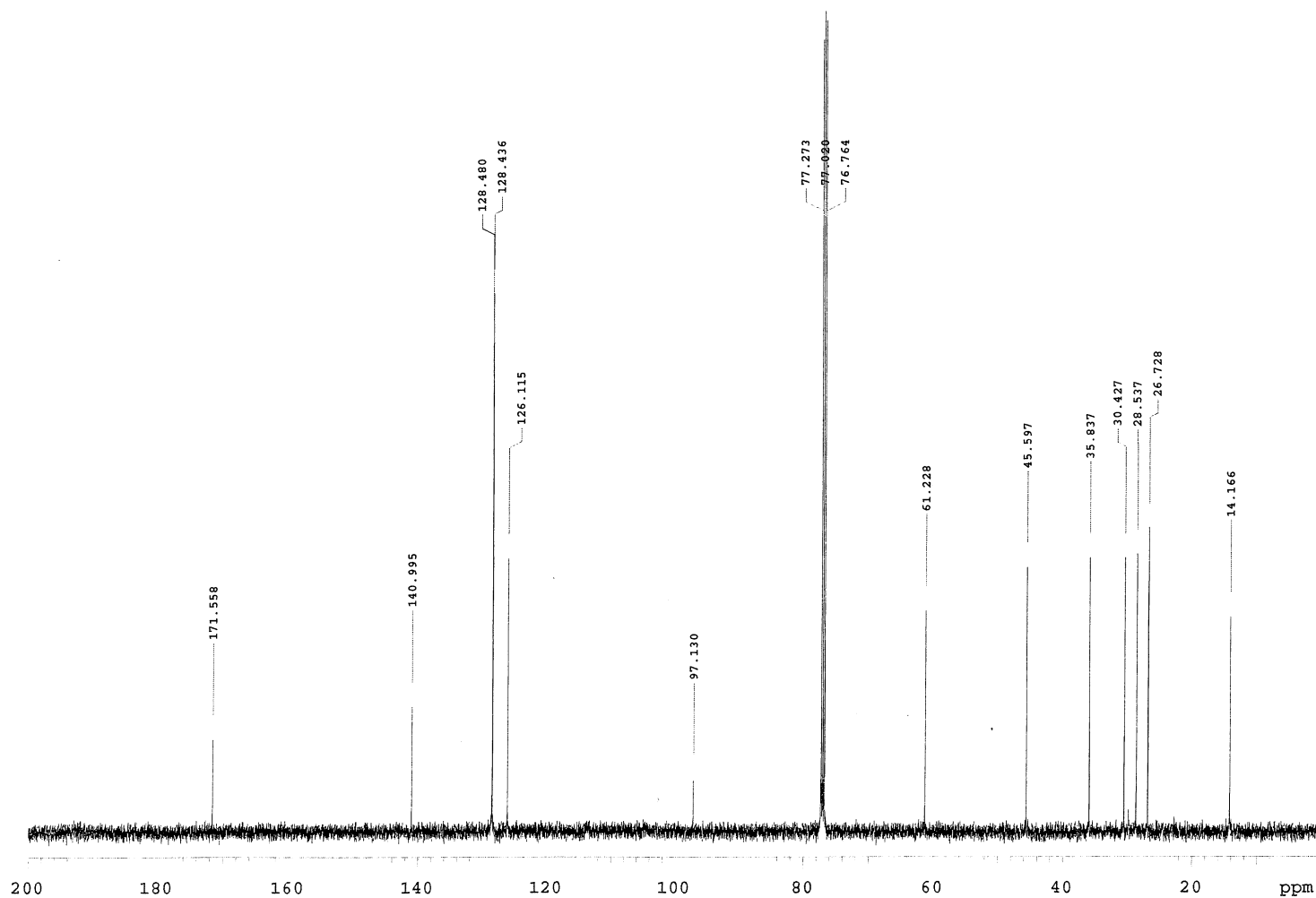
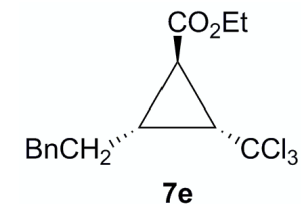
SAMPLE		SPECIAL	
date	Dec 7 2009	temp	not used
solvent	cdc13	gain	30
file	exp	spin	16
ACQUISITION		hst	0.008
sw	8000.0	pw90	10.500
at	2.048	alfa	6.600
np	32768	FLAGS	
fb	not used	il	n
bs	32	in	n
ss	2	dp	y
d1	1.000	hs	nn
nt	4	PROCESSING	
ct	4	lb	0.20
TRANSMITTER		fn	65536
tn	H1	DISPLAY	
sfrq	499.830	sp	-0.0
tof	499.8	wp	4998.0
tpwr	58	rf1	1012.5
pw	5.250	rfp	0
DECOUPLER		rp	-148.6
dn	C13	lp	4.3
dof	0	PLOT	
dm	nnn	wc	270
dmm	c	sc	0
dpwr	35	vs	103
dmf	31746	th	65
	ai	cdc	ph



KPNN-5122
c-13

expl7 Carbon

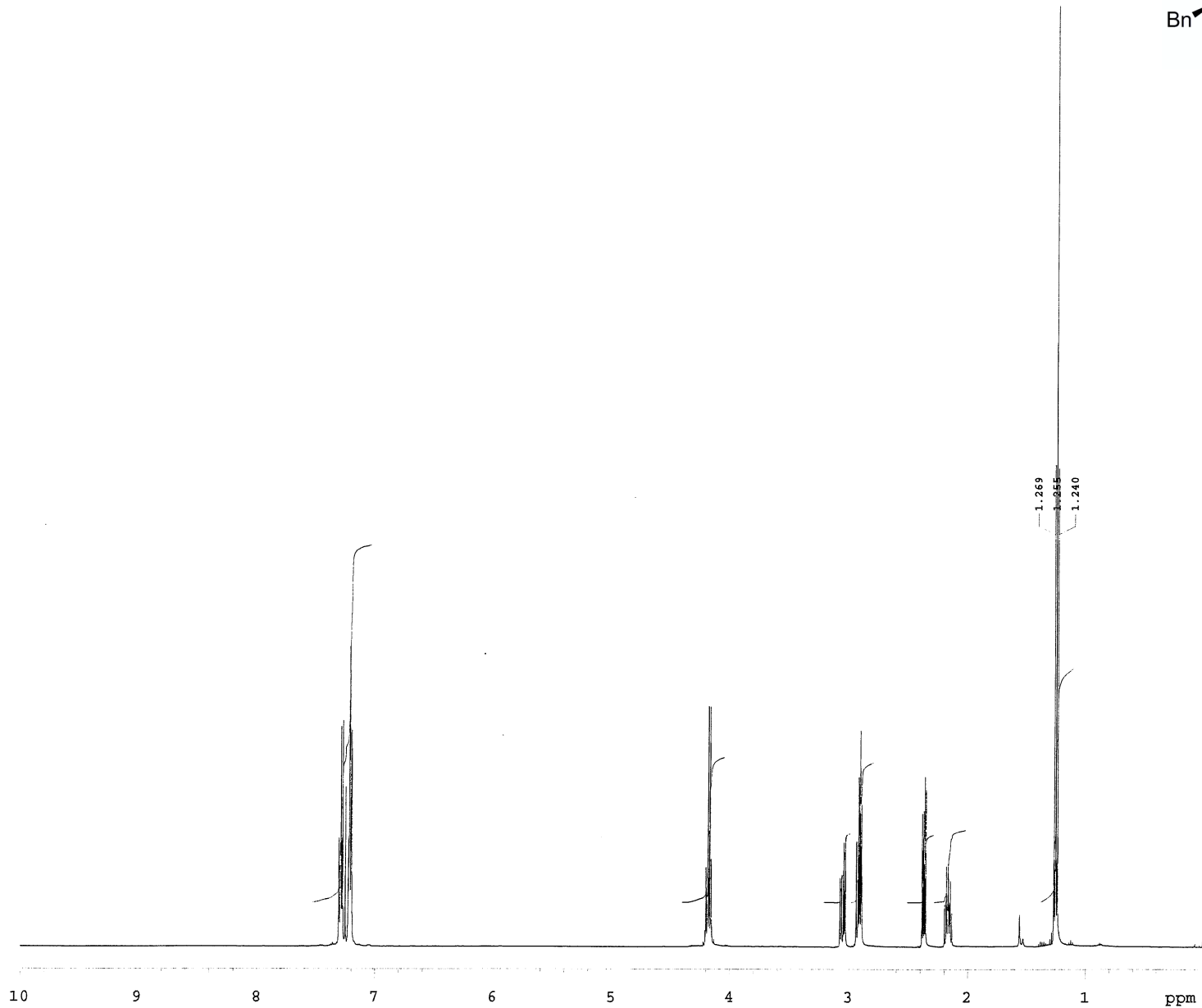
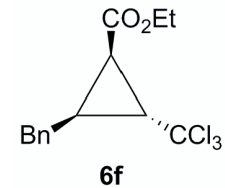
SAMPLE		SPECIAL	
date	Dec 7 2009	temp	not used
solvent	cdcl3	gain	30
file	exp	spin	16
ACQUISITION		hst	0.008
sw	30165.9	pw90	12.500
at	1.300	alfa	10.000
np	78460	FLAGS	
fb	not used	il	n
bs	16	in	n
d1	1.000	dp	y
nt	512	hs	nn
ct	304	PROCESSING	
TRANSMITTER		lb	1.00
tn	C13	fn	not used
sfrq	125.695	DISPLAY	
tof	1255.3	sp	0.0
tpwr	53	wp	25136.3
pw	6.250	rfl	1917.6
DECOUPLER		rfp	0
dn	H1	rp	62.0
dof	0	lp	-114.7
dm	yyy	PLOT	
dmm	w	wc	270
dpwr	39	sc	0
dmi	11136	vs	19227
		th	9
		ai	cdc ph



KPNN5070
H-1

exp30 s2pul

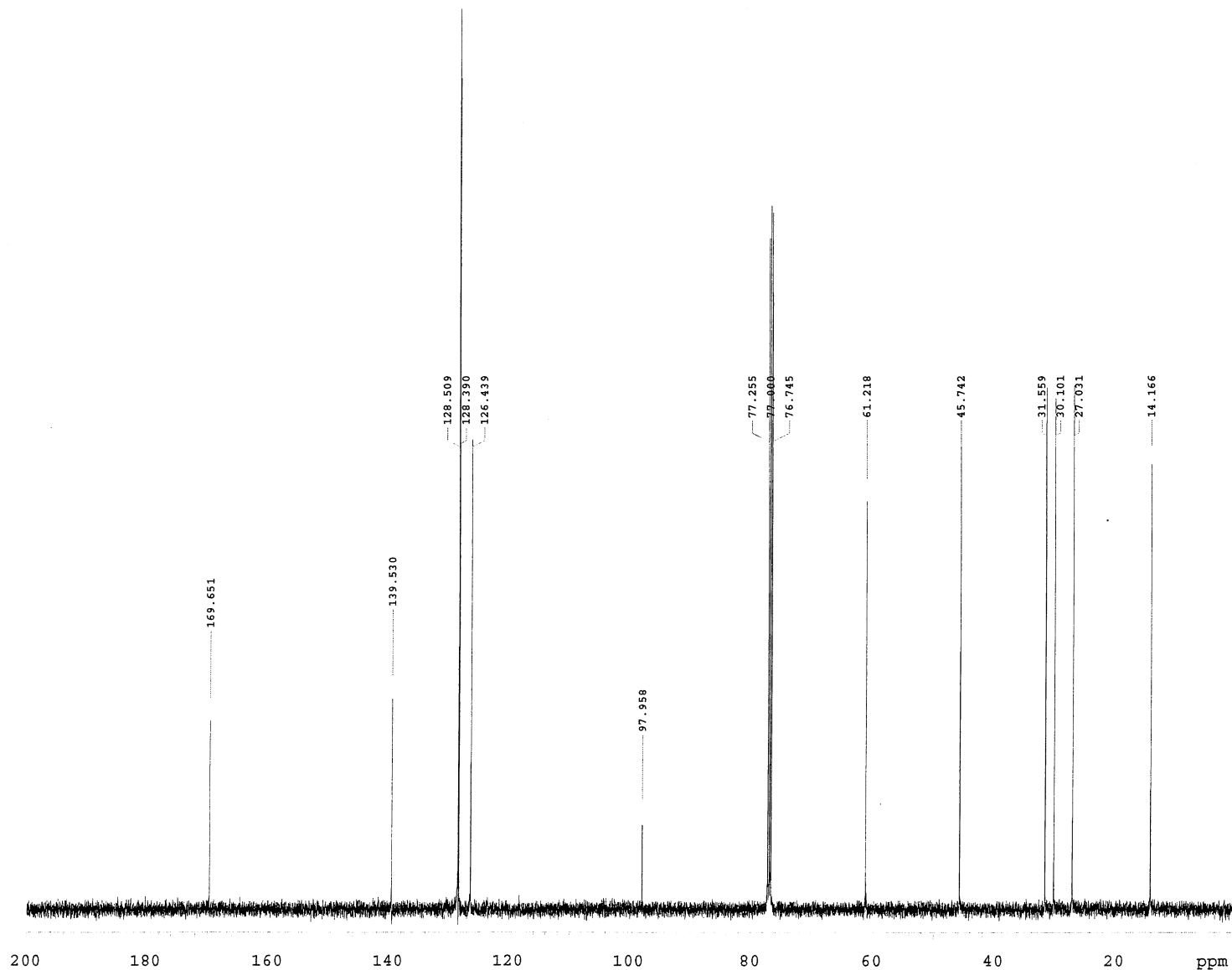
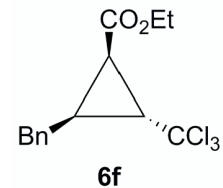
SAMPLE		SPECIAL	
date	Jun 3 2009	temp	not used
solvent	cdcl3	gain	not used
file	exp	spin	16
ACQUISITION		hst	0.008
sw	8012.8	pw90	10.600
at	3.500	alfa	10.000
np	56090	FLAGS	
fb	4000	il	n
bs	32	in	n
d1	1.500	dp	y
nt	4	hs	nn
ct	4	PROCESSING	
TRANSMITTER		lb	0.30
tn	H1	fn	not used
sfrq	499.732	DISPLAY	
tof	499.7	sp	0.0
tpwr	59	wp	4997.3
pw	5.300	rfl	1016.8
DECOUPLER		rfp	0
dn	C13	rp	-144.4
dof	0	lp	11.1
dm	nnn	PLOT	
dmm	c	wc	270
dpwr	34	sc	0
dmf	32258	vs	165
		th	87
		ai	cdc ph



KPNN5070
C-13

exp31 Carbon

SAMPLE		SPECIAL	
date	Jun 3 2009	temp	not used
solvent	cdcl3	gain	48
file	exp	spin	16
ACQUISITION		hst	0.008
sw	30487.8	pw90	8.900
at	1.300	alfa	10.000
np	79298	FLAGS	
fb	17000	il	n
bs	32	in	n
d1	1.000	dp	y
nt	640	hs	nn
ct	320	PROCESSING	
TRANSMITTER		lb	1.00
tn	C13	fn	not used
sfrq	125.670	DISPLAY	
tof	1285.1	sp	-0.3
tpwr	54	wp	25130.9
pw	4.450	rfl	11727.9
DECOUPLER		rfp	9675.6
dn	H1	rp	157.1
dof	0	lp	41.5
dm	YYY	PLOT	
dmm	w	wc	270
dpwr	41	sc	0
dmf	11601	vs	14022
		th	15
		ai	cdc ph

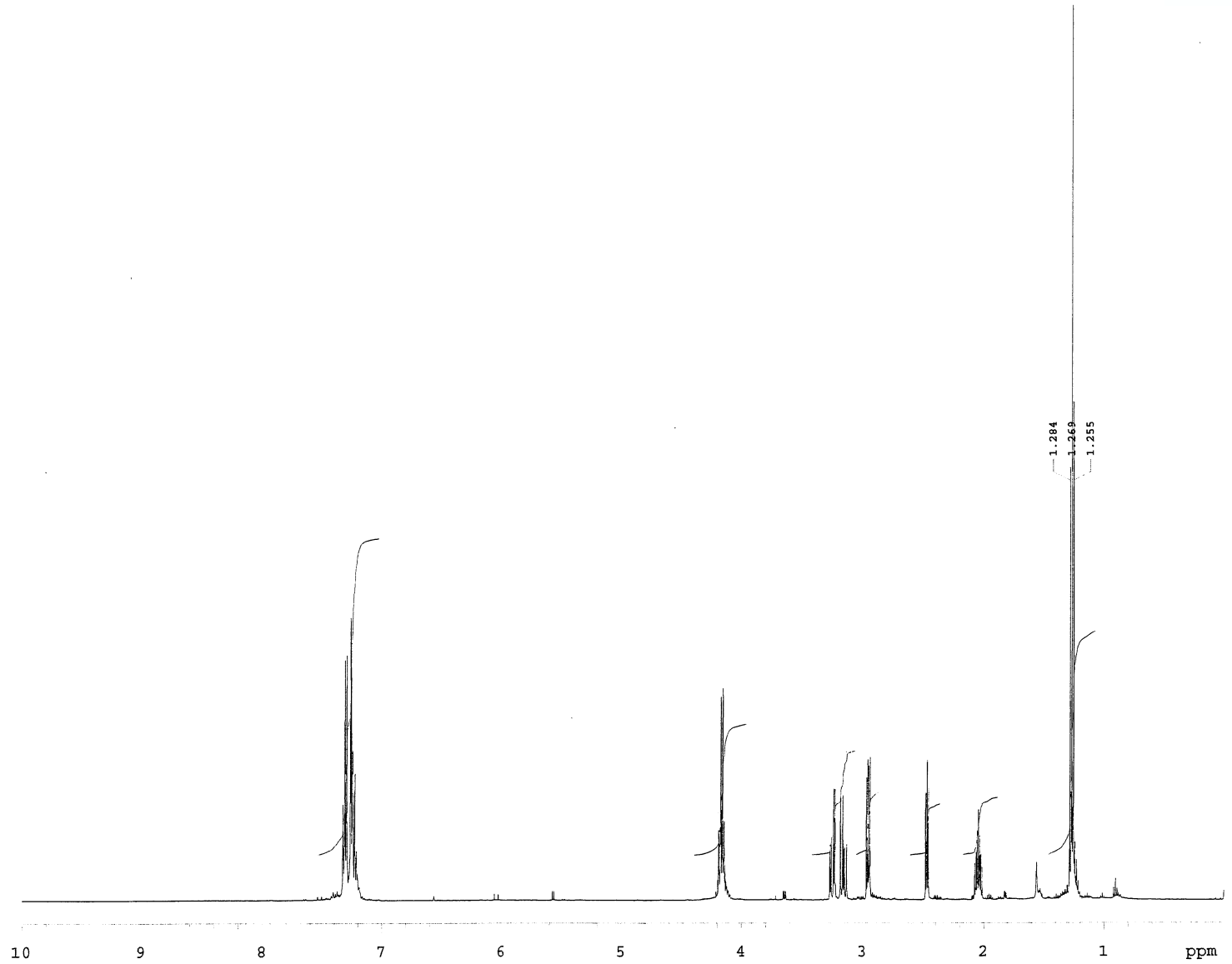
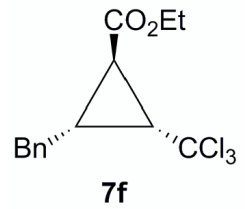


KPNN5071

H-1

exp35 s2pu1

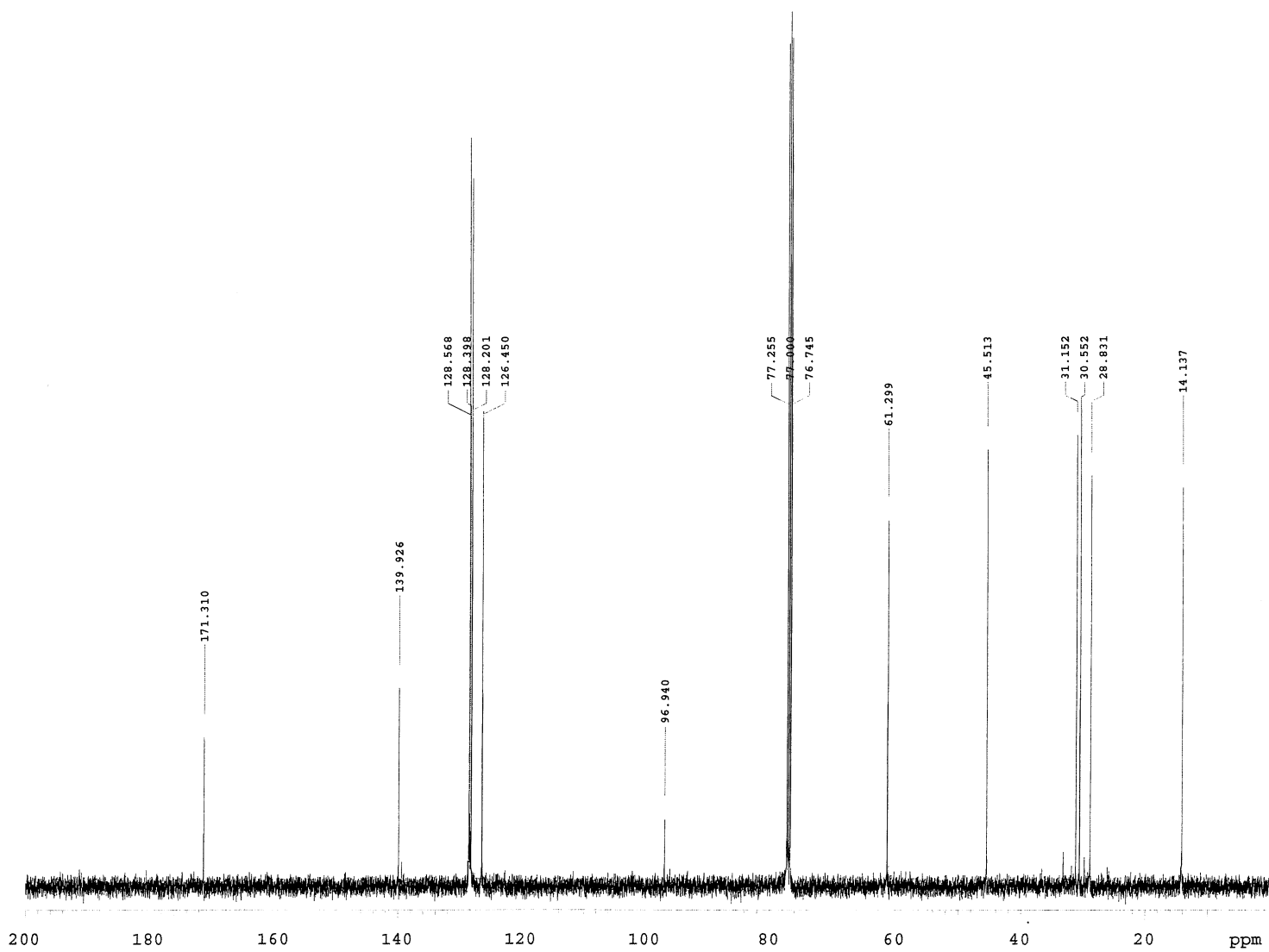
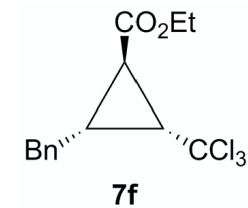
SAMPLE		SPECIAL	
date	Jun 3 2009	temp	not used
solvent	cdcl3	gain	not used
file	exp	spin	16
ACQUISITION		hst	0.008
sw	8012.8	pw90	10.600
at	3.500	alfa	10.000
np	56090	FLAGS	
fb	4000	il	n
bs	32	in	n
d1	1.500	dp	y
nt	4	hs	nn
ct	4	PROCESSING	
TRANSMITTER		lb	0.30
tn	H1	fn	not used
sfrq	499.732	DISPLAY	
tof	499.7	sp	-0.0
tpwr	59	wp	4997.3
pw	5.300	rfl	1016.5
DECOUPLER		rpf	0
dn	C13	rp	-140.7
dof	0	lp	8.8
dm	nnn	PLOT	
dmm	c	wc	270
dpwr	34	sc	0
dmf	32258	vs	212
		th	91
	ai	cdc	ph



KPNN5071
C-13

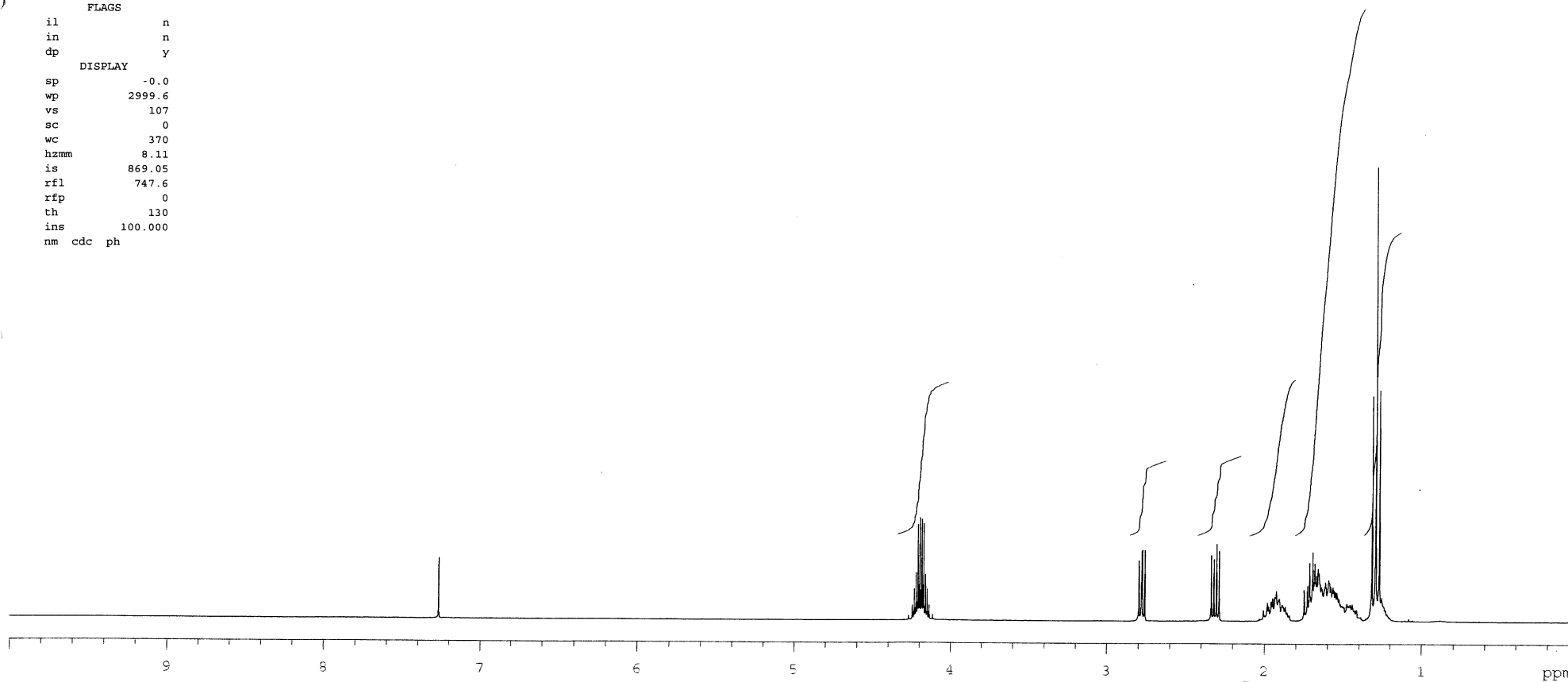
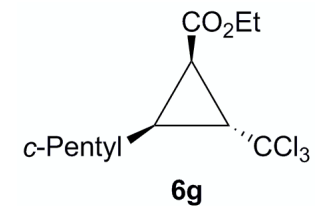
exp36 Carbon

SAMPLE		SPECIAL	
date	Jun 3 2009	temp	not used
solvent	cdcl3	gain	48
file	exp	spin	16
ACQUISITION		hst	0.008
sw	30487.8	pw90	8.900
at	1.300	alfa	10.000
np	79298	FLAGS	
fb	17000	il	n
bs	32	in	n
dl	1.000	dp	y
nt	320	hs	nn
ct	320	PROCESSING	
TRANSMITTER		lb	1.00
tn	C13	fn	not used
sfrq	125.670	DISPLAY	
tof	1285.1	sp	-0.3
tpwr	54	wp	25130.9
pw	4.450	rfl	11727.9
DECOUPLER		rfp	9675.6
dn	H1	rp	172.4
dof	0	lp	9.1
dm	YYY	PLOT	
dmm	w	wc	270
dpwr	41	sc	0
dmf	11601	vs	16993
		th	12
		ai	cdc ph



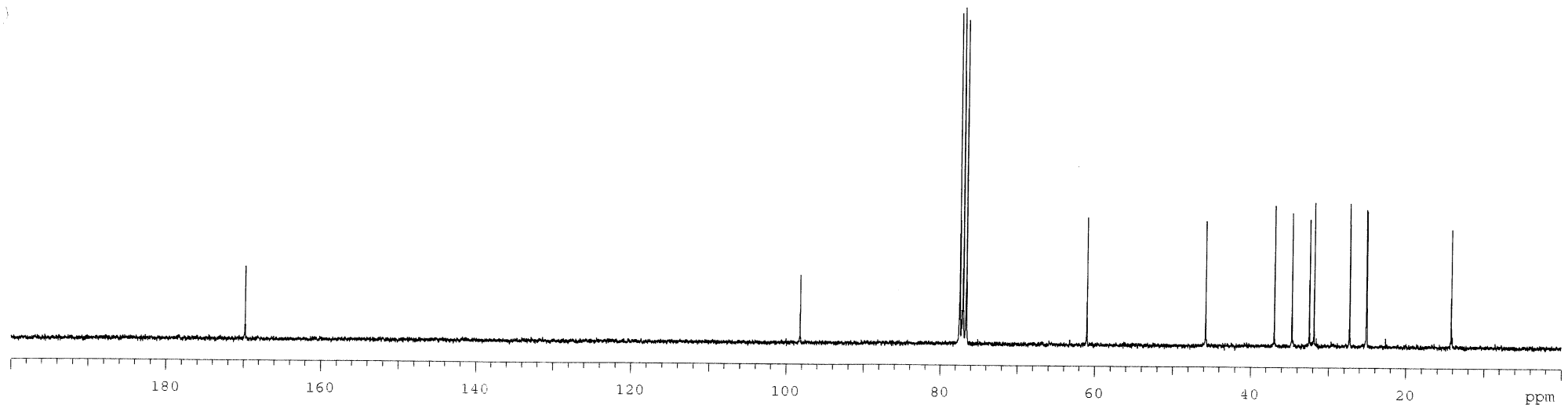
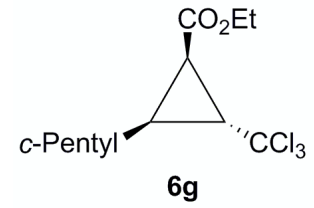
H-22
less polar
exp2 std1h

```
SAMPLE          DEC. & VT
date Dec 10 2009 dfrq      299.961
solvent CDCl3  dn          H1
file      exp  dpwr       30
ACQUISITION  dof         0
sfrq      299.961 dm       nnn
tn         H1  dmm        c
at         3.557 dmf       200
np         32000
sw         4498.4 wtfile
fb         not used proc   ft
bs         4     fn       not used
tpwr      59
pw         4.1  werr
dl         0.500 wexp
tof        0    wbs       wft
nt         100  wnt       wft
ct         8
alock      n
gain      not used
FLAGS
il         n
in         n
dp         y
DISPLAY
sp         -0.0
wp         2999.6
vs         107
sc         0
wc         370
hzmm      8.11
is         869.05
rfl       747.6
rfp        0
th         130
ins       100.000
nm cdc ph
```



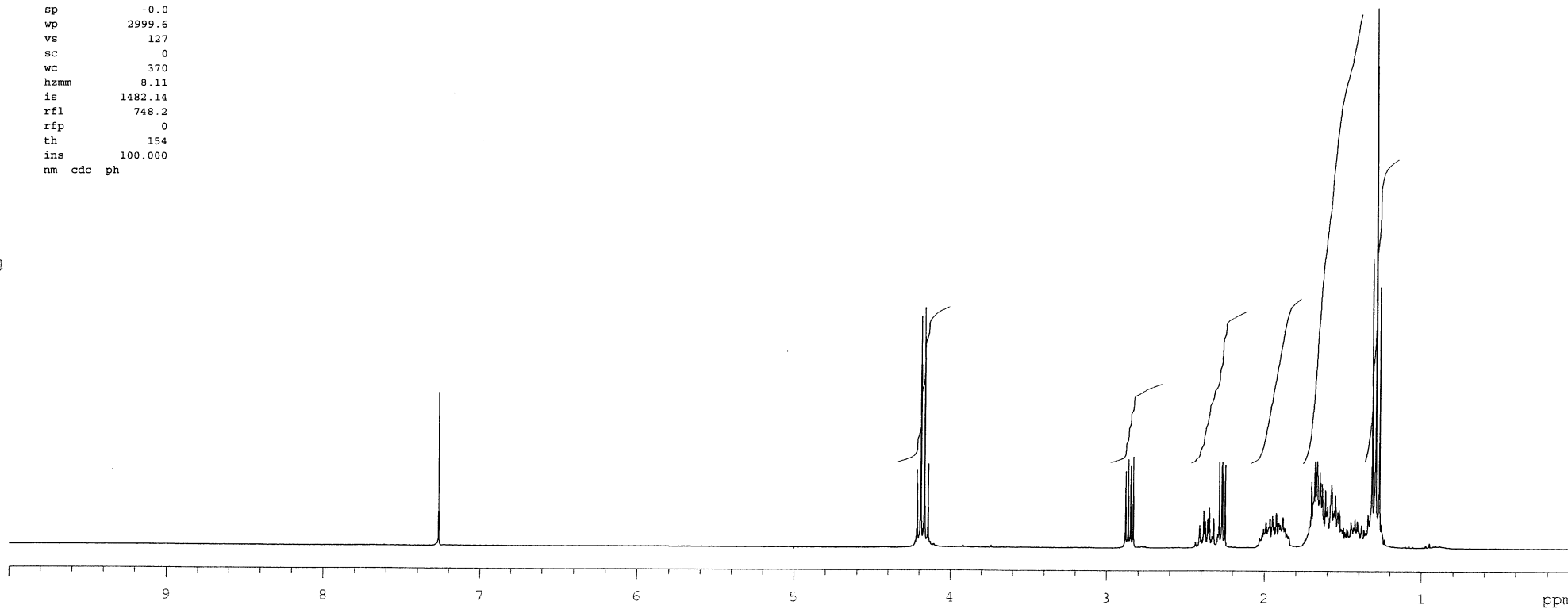
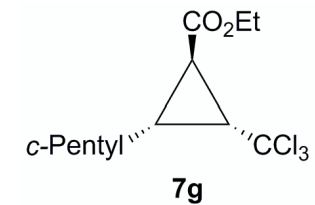
H-22
less polar
exp2 std13c

SAMPLE DEC. & VT
date Dec 10 2009 dfrq 299.961
solvent CDCl3 dn H1
file exp dpwr 38
ACQUISITION dof 0
sfrq 75.433 dm YYY
tn C13 dmm w
at 1.000 dmf 11100
np 37594 PROCESSING
sw 18797.0 lb 1.00
fb not used wtfile
bs 4 proc ft
tpwr 54 fn not used
pw 4.0
d1 2.000 werr
tof 0 wexp
nt 10000 wbs wft
ct 3184 wnt wft
alock n
gain not used
FLAGS
il n
in n
dp y
DISPLAY
sp -0.4
wp 15085.0
vs 79
sc 0
wc 370
hzmm 40.77
is 500.00
rfl 7665.0
rip 5807.7
th 101
ins 100.000
nm no ph



H-22
more polar
exp2 std1h

```
SAMPLE      DEC. & VT
date Dec 10 2009 dfrq      299.961
solvent      CDCl3 dn      H1
file         exp      dpwr      30
ACQUISITION  dof      0
sfrq      299.961 dm      nnn
tn         H1 dmm      c
at         3.557 dmf      200
np         32000
sw         4498.4 wtfile
fb         not used proc      ft
bs         4 fn      not used
tpwr      59
pw         4.1 werr
d1         0.500 wexp
tof        0 wbs      wft
nt         100 wnt      wft
ct         12
alock      n
gain      not used
FLAGS
il         n
in         n
dp         y
DISPLAY
sp         -0.0
wp         2999.6
vs         127
sc         0
wc         370
hzmm      8.11
is         1482.14
rfl       748.2
rfp        0
th         154
ins       100.000
nm cdc ph
```

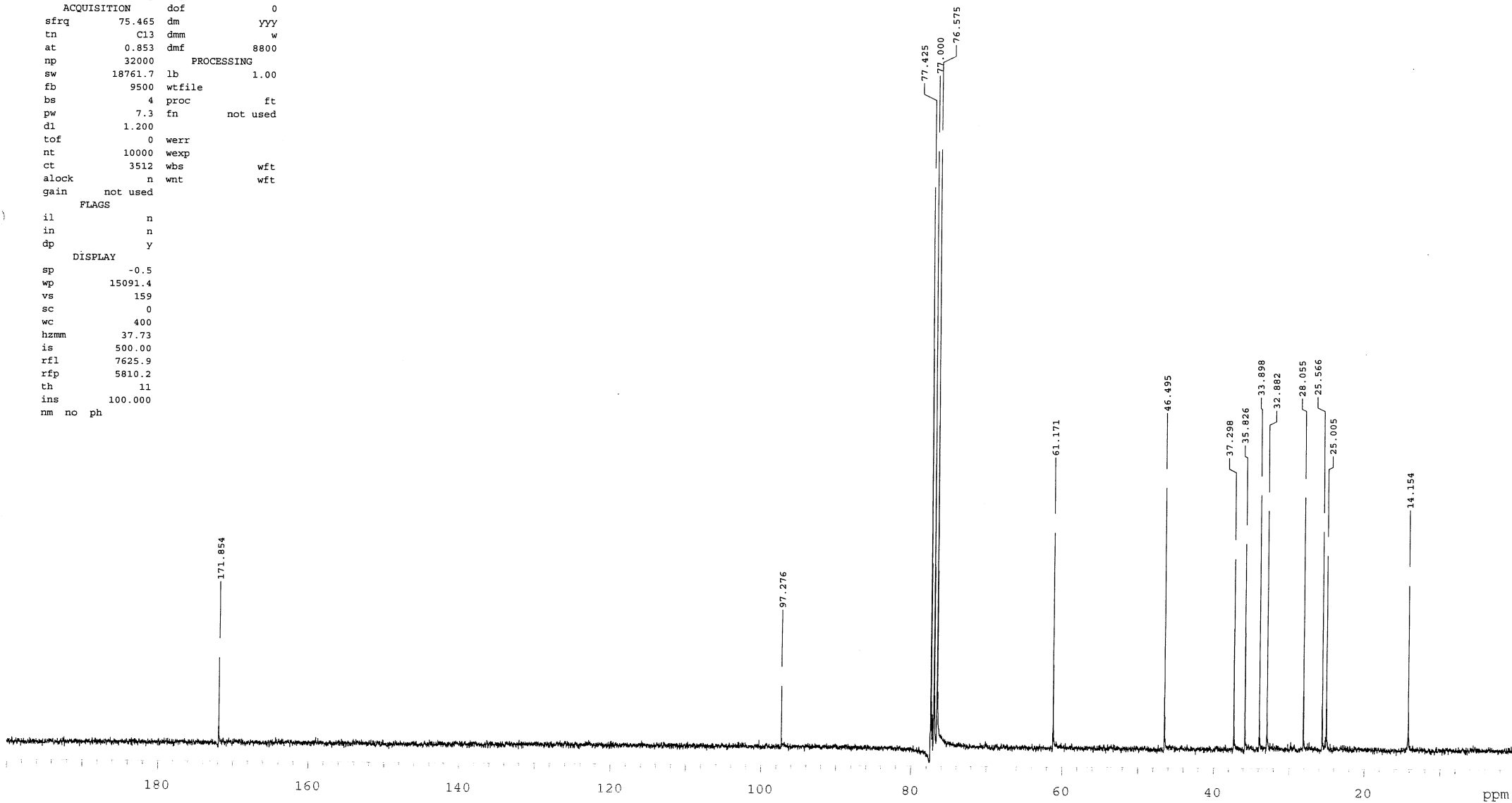
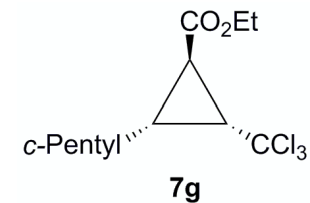


H-22
more polar
expl std13c

SAMPLE		DEC. & VT	
date	Dec 10 2009	dfrq	300.092
solvent	CDCl3	dn	H1
file	exp	dhp	0.5
ACQUISITION			
sfrq	75.465	dof	0
tn	C13	dm	yyy
at	0.853	dmm	w
np	32000	dmf	8800
sw	18761.7	lb	1.00
fb	9500	wtfile	
bs	4	proc	ft
pw	7.3	fn	not used
dl	1.200		
tof	0	werr	
nt	10000	wexp	
ct	3512	wbs	wft
alock	n	wnt	wft
gain	not used		

FLAGS	
il	n
in	n
dp	y

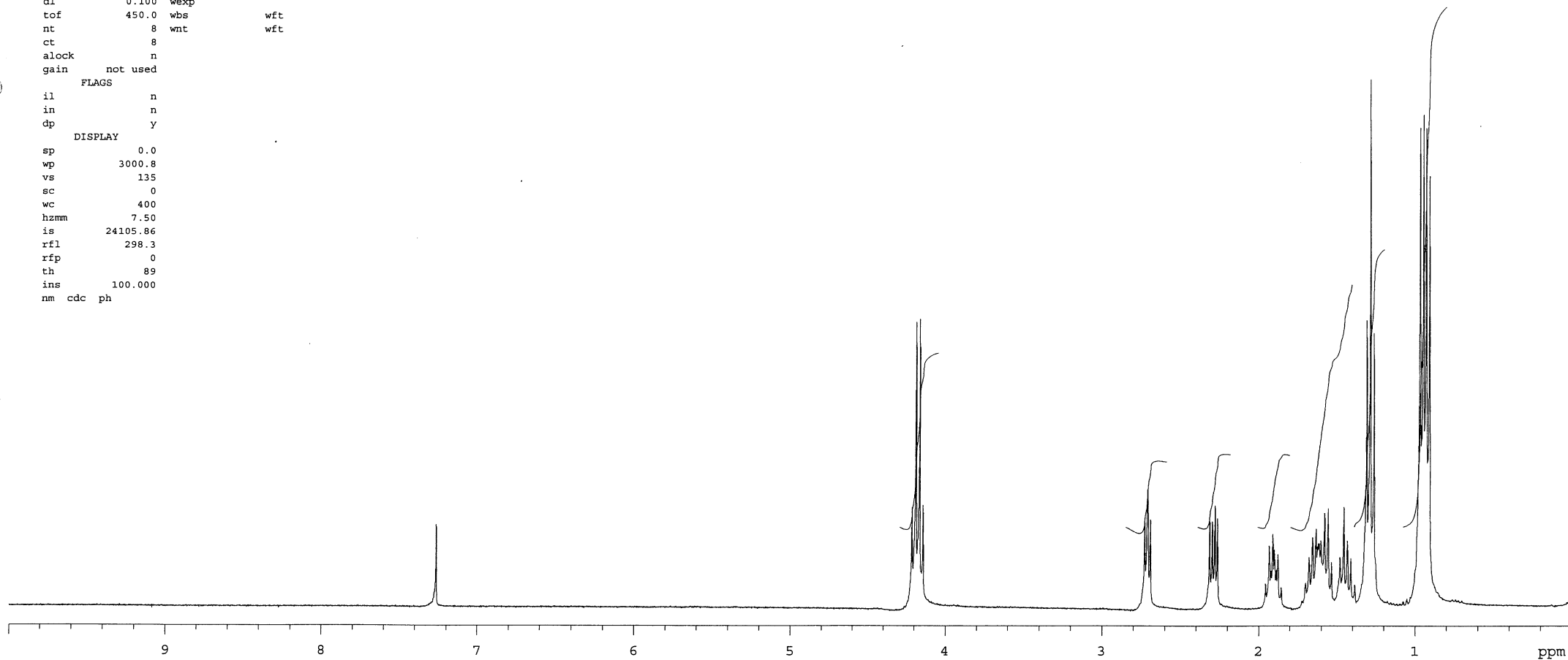
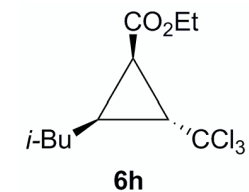
DISPLAY	
sp	-0.5
wp	15091.4
vs	159
sc	0
wc	400
hzmm	37.73
is	500.00
rfl	7625.9
rflp	5810.2
th	11
ins	100.000
nm	no ph



(CH3)2CHCH2 trans

expl stdlh

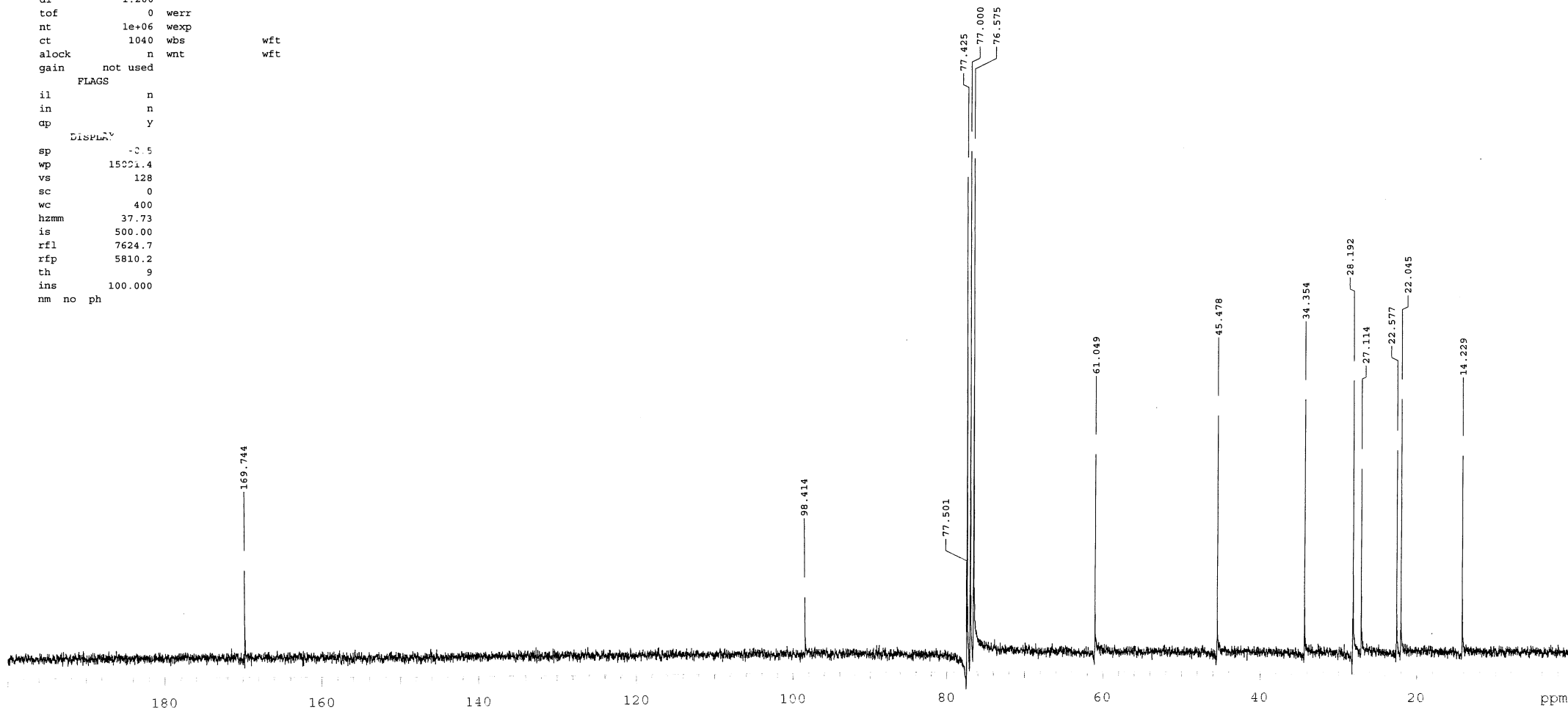
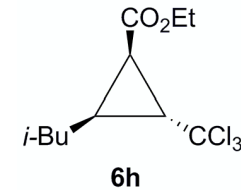
```
SAMPLE          DEC. & VT
date   Jun 20 2011  dfrq      300.092
solvent  CDCl3      dn        H1
file     exp        dof        0
ACQUISITION dm          nnn
sfrq     300.092  dmm         c
tn       H1        dmf        200
at       3.555     PROCESSING
np       32000    wfile
sw       4500.5   proc         ft
fb       2250    fn          not used
bs       4
pw       8.0     werr
dl       0.100   wexp
tof      450.0   wbs          wft
nt       8      wnt          wft
ct       8
alock    n
gain     not used
        FLAGS
il       n
in       n
dp       y
        DISPLAY
sp       0.0
wp       3000.8
vs       135
sc       0
wc       400
hzmm     7.50
is       24105.86
rfl      298.3
rfp      0
th       89
ins      100.000
nm cdc ph
```



(CH3)2CHCH2 trans

exp2 std13c

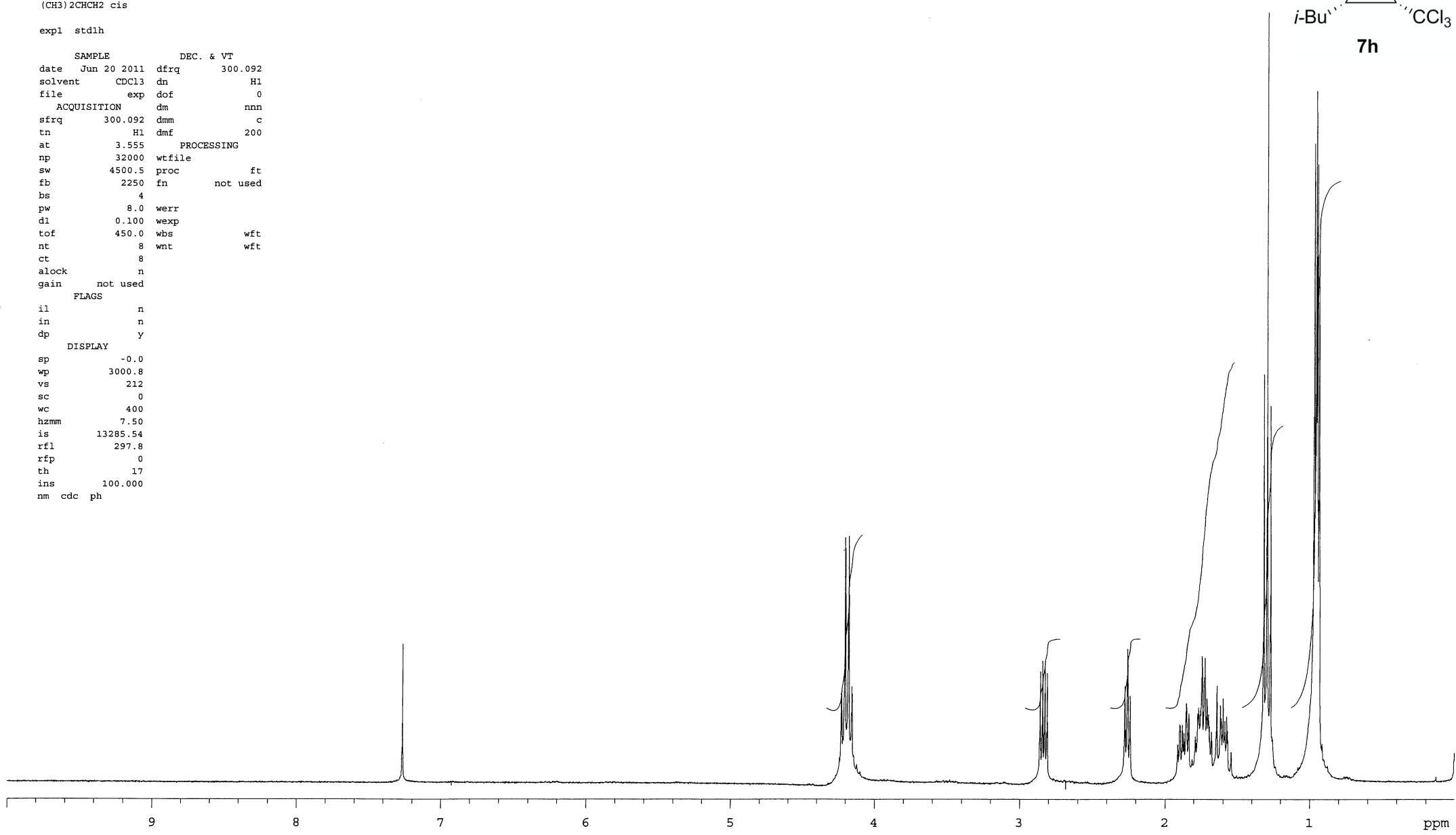
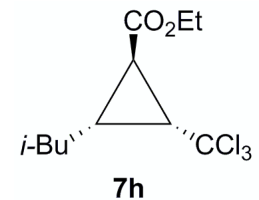
SAMPLE DEC. & VT
date Jun 21 2011 dfrq 300.092
solvent CDCl3 dn H1
file exp dhp 0.5
ACQUISITION dof 0
sfrq 75.465 dm YYY
tn C13 dmm w
at 0.853 dmf 8800
np 32000 PROCESSING
sw 18761.7 lb 1.00
fb 9500 wtfile
bs 80 proc ft
pw 7.3 fn not used
dl 1.200
tof 0 werr
nt 1e+06 wexp
ct 1040 wbs wft
alock n wnt wft
gain not used
FLAGS
il n
in n
ap y
DISPLAY
sp -0.5
wp 15001.4
vs 128
sc 0
wc 400
hzmm 37.73
is 500.00
rfl 7624.7
rfp 5810.2
th 9
ins 100.000
nm no ph



(CH3)2CHCH2 cis

expl std1h

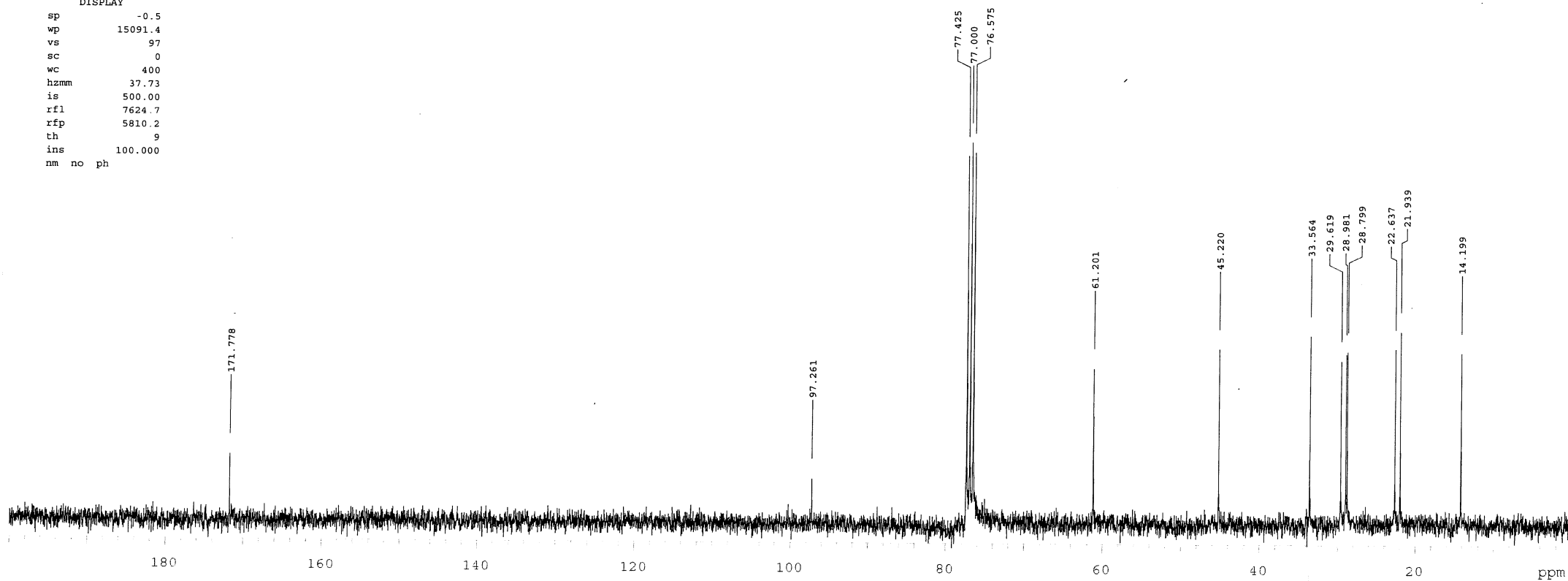
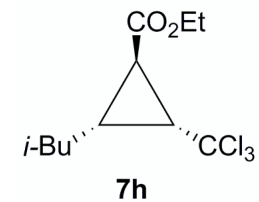
SAMPLE		DEC. & VT	
date	Jun 20 2011	dfrq	300.092
solvent	CDCl3	dn	H1
file	exp	dof	0
ACQUISITION		PROCESSING	
sfrq	300.092	dmm	c
tn	H1	dmf	200
at	3.555	np	32000
sw	4500.5	wfile	
fb	2250	proc	ft
bs	4	fn	not used
pw	8.0	werr	
dl	0.100	wexp	
tof	450.0	wbs	wft
nt	8	wnt	wft
ct	8		
alock	n		
gain	not used		
PLAGS			
il	n		
in	n		
dp	y		
DISPLAY			
sp	-0.0		
wp	3000.8		
vs	212		
sc	0		
wc	400		
hzmm	7.50		
is	13285.54		
rfl	297.8		
rfp	0		
th	17		
ins	100.000		
nm	cdc ph		



(CH3)2CHCH2 cis

expl std13c

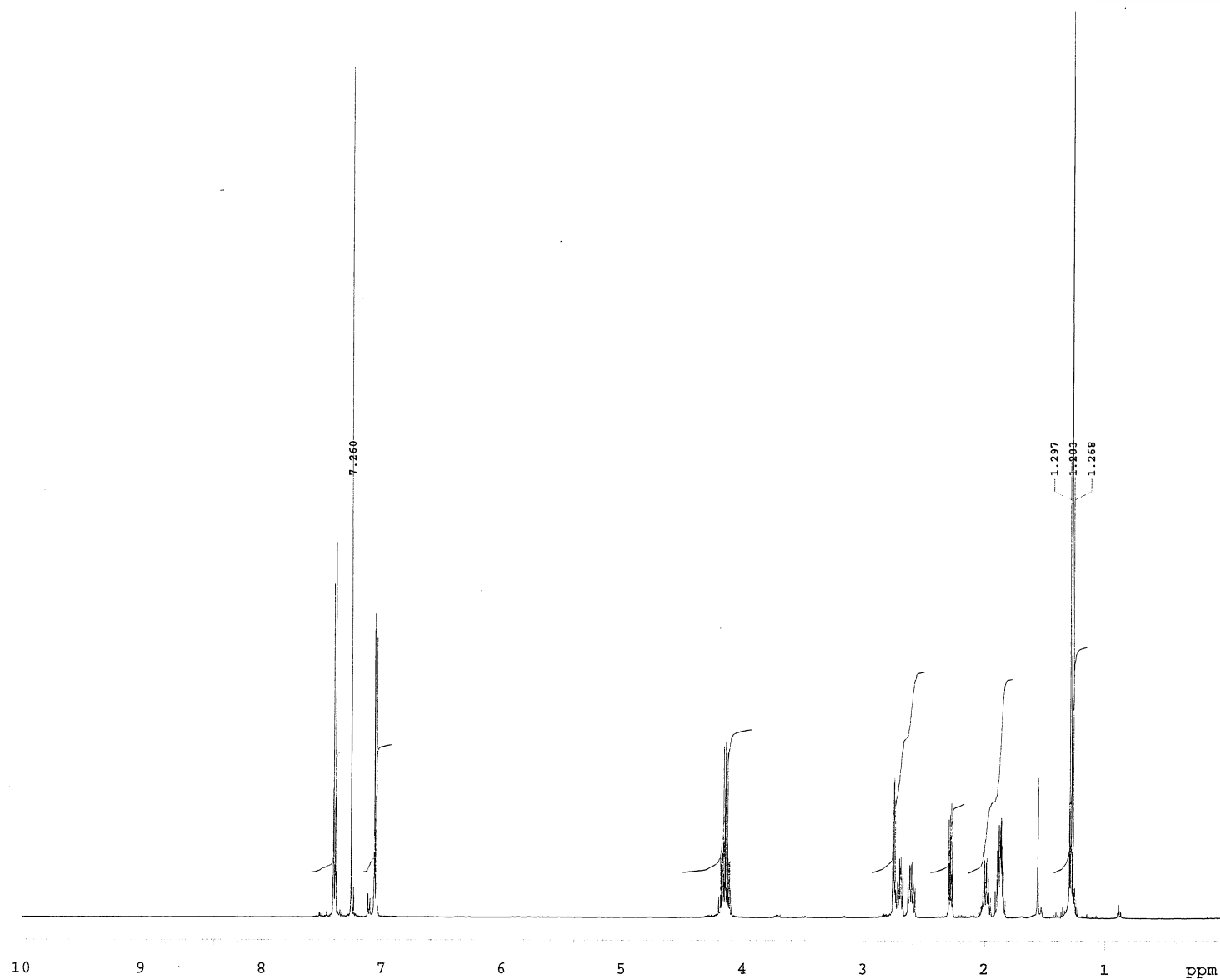
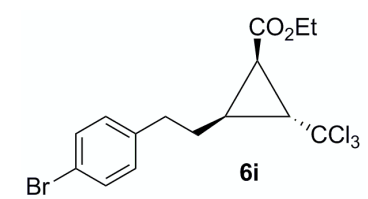
SAMPLE DEC. & VT
date Jun 21 2011 dfrq 300.092
solvent CDCl3 dn H1
file exp dhp 0.5
ACQUISITION dof 0
sfrq 75.465 dm yyy
tn C13 dmm w
at 0.853 dmf 8800
np 32000 PROCESSING
sw 18761.7 lb 1.00
fb 9500 wtfile
bs 80 proc ft
pw 7.3 fn not used
dl 1.200
tof 0 werr
nt 1e+06 wexp
ct 560 wbs wft
alock n wnt wft
gain not used
FLAGS
il n
in n
dp y
DISPLAY
sp -0.5
wp 15091.4
vs 97
sc 0
wc 400
hzmm 37.73
is 500.00
rfl 7624.7
rfp 5810.2
th 9
ins 100.000
nm no ph



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H-1

exp26 s2pu1

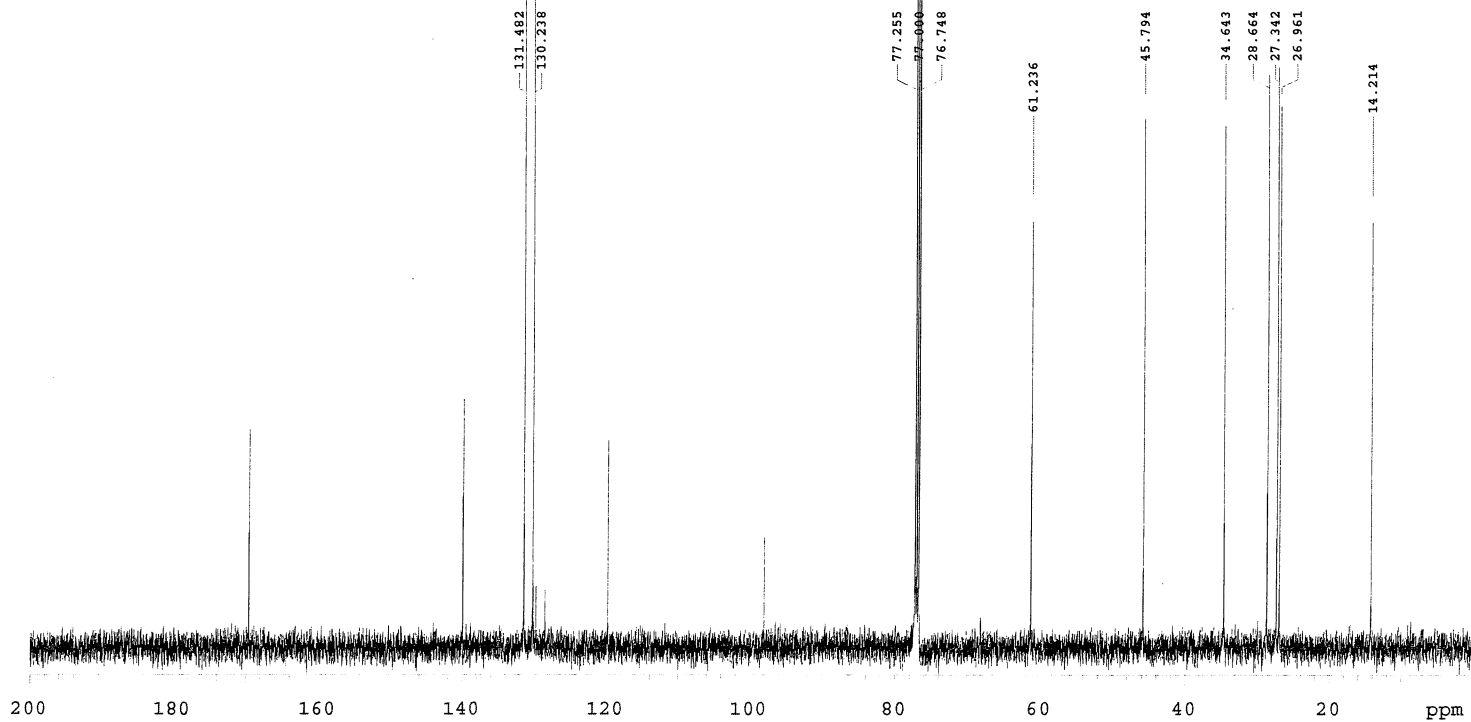
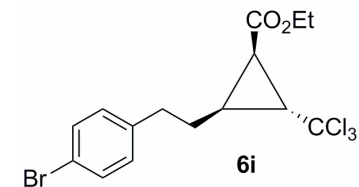
SAMPLE		SPECIAL	
date	Sep 2 2009	temp	not used
solvent	cdcl3	gain	not used
file	exp	spin	16
ACQUISITION		hst	0.008
sw	8012.8	pw90	10.600
at	3.500	alfa	10.000
np	56090	FLAGS	
fb	4000	il	n
bs	32	in	n
d1	1.500	dp	y
nt	4	hs	nn
ct	4	PROCESSING	
TRANSMITTER		lb	0.30
tn	H1	fn	not used
sfrq	499.732	DISPLAY	
tof	499.7	sp	-0.0
tpwr	59	wp	4997.3
pw	5.300	rfl	1014.3
DECOUPLER		rfp	0
dn	C13	rp	-134.1
dof	0	lp	-3.3
dm	nnn	PLOT	
dmm	c	wc	270
dpwr	34	sc	0
dmf	32258	vs	90
		th	91
	ai	cdc	ph



KPNN5102
C-13

exp27 Carbon

SAMPLE		SPECIAL	
date	Sep 2 2009	temp	not used
solvent	cdc13	gain	48
file	exp	spin	16
ACQUISITION		FLAGS	
sw	30487.8	pw90	8.900
at	1.300	alfa	10.000
np	79298		
fb	17000	il	n
bs	32	in	n
d1	1.000	dp	y
nt	3200	hs	nn
ct	320		
TRANSMITTER		PROCESSING	
tn	C13	fn	not used
sfrq	125.670	DISPLAY	
tof	1285.1	sp	-0.3
tpwr	54	wp	25130.9
pw	4.450	rfl	11726.9
DECOUPLER		rfl	9675.6
dn	H1	rp	78.9
dof	0	lp	19.9
dm	yyy	PLOT	
dmm	w	wc	270
dpwr	41	sc	0
dmf	11601	vs	26125
		th	68
		ai	cdc ph

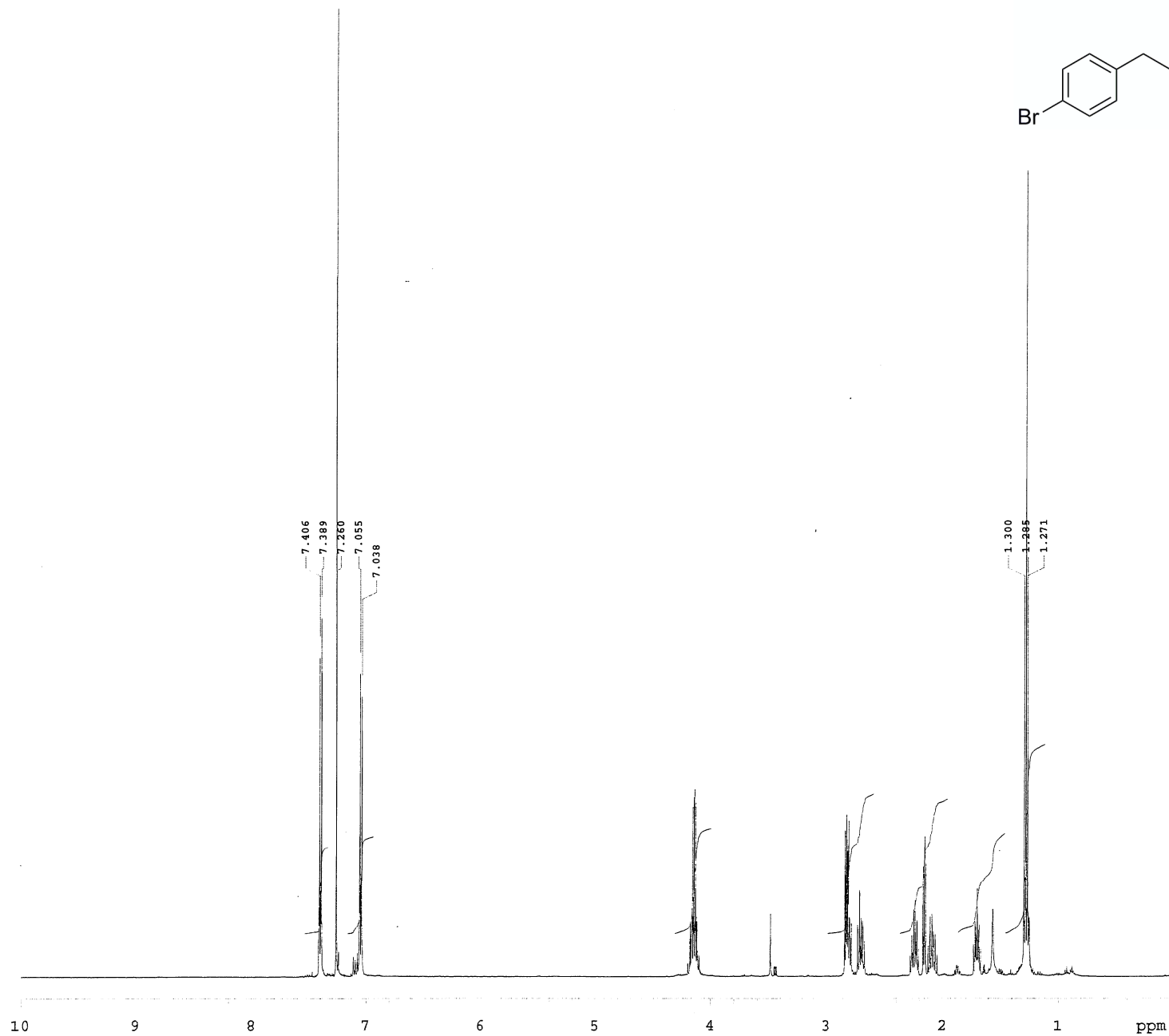
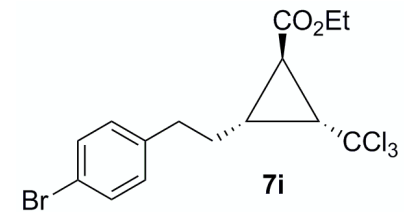


KPNN5103

H-1

exp31 s2pul

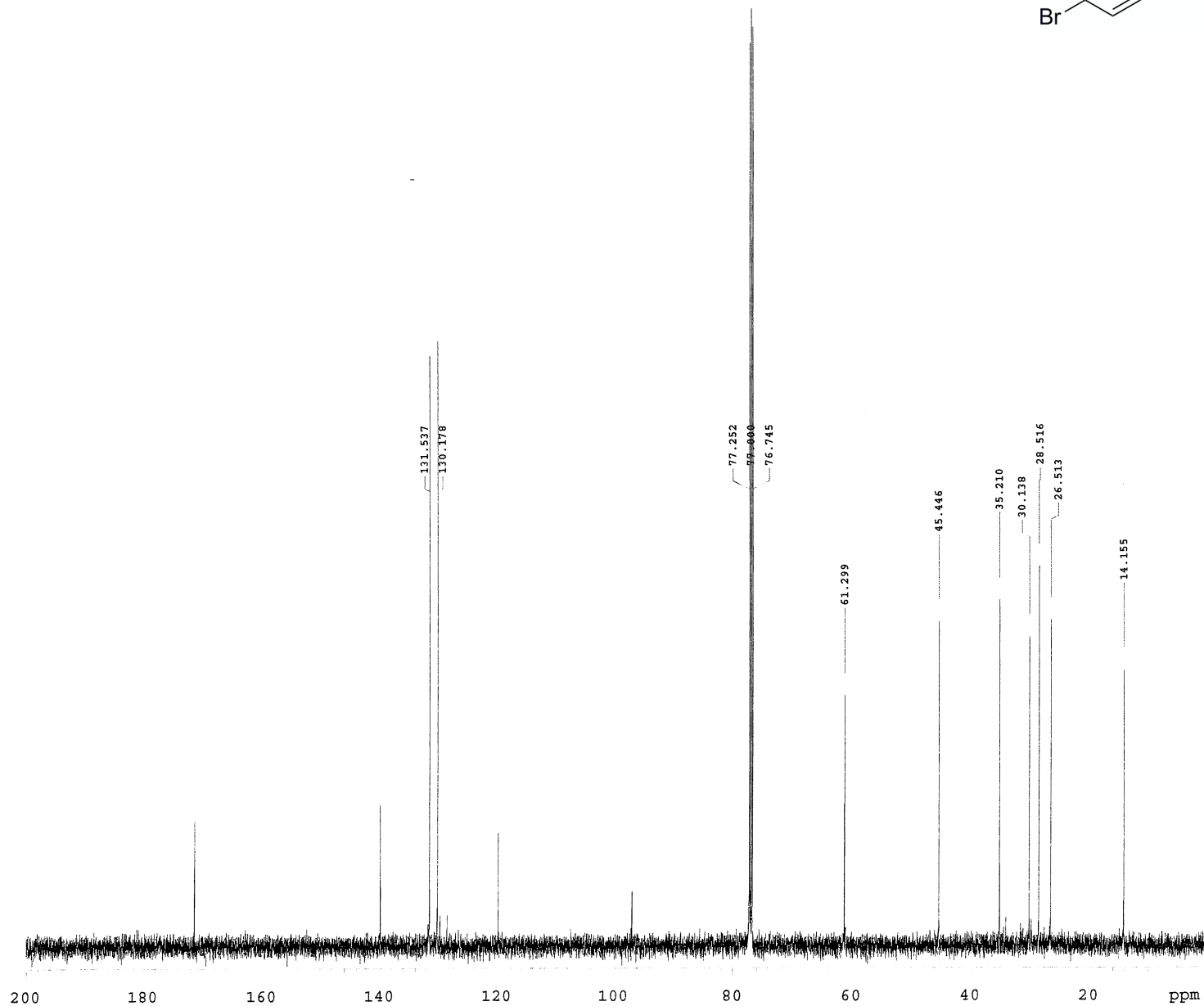
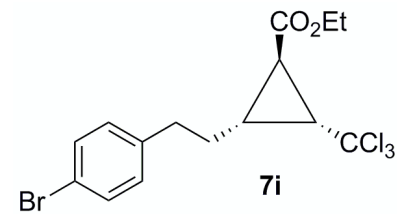
SAMPLE		SPECIAL	
date	Sep 2 2009	temp	not used
solvent	cdcl3	gain	not used
file	exp	spin	16
ACQUISITION		hst	0.008
sw	8012.8	pw90	10.600
at	3.500	alfa	10.000
np	56090	FLAGS	
fb	4000	il	n
bs	32	in	n
d1	1.500	dp	y
nt	4	hs	nn
ct	4	PROCESSING	
TRANSMITTER		lb	0.30
tn	H1	fn	not used
sfrq	499.732	DISPLAY	
tof	499.7	sp	0.0
tpwr	59	wp	4997.3
pw	5.300	rfl	1014.1
DECOUPLER		rfl	0
dn	C13	rp	-137.2
dof	0	lp	-3.1
dm	nnn	PLOT	
dmm	c	wc	270
dpwr	34	sc	0
dmf	32258	vs	251
		th	60
		ai	cdc ph



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C-13

exp32 Carbon

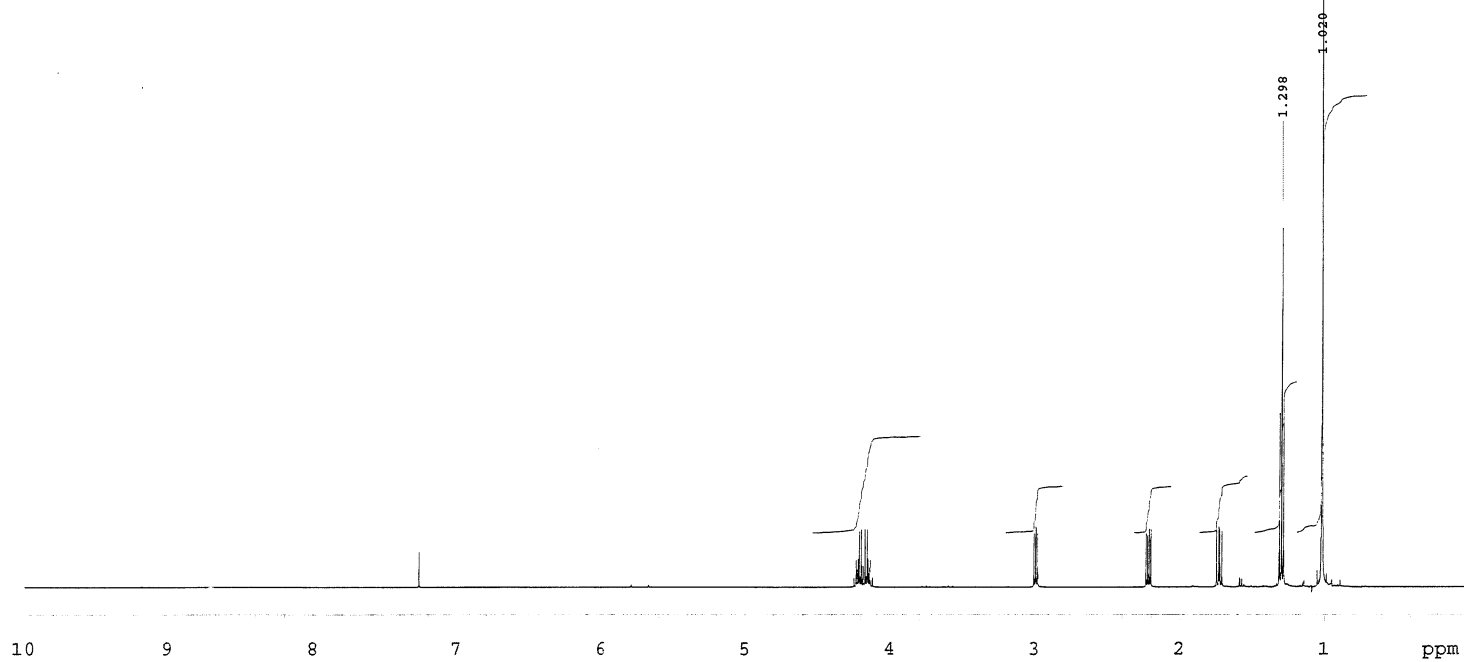
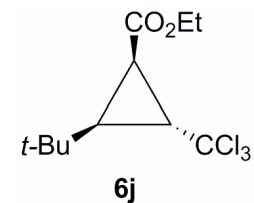
SAMPLE		SPECIAL	
date	Sep 2 2009	temp	not used
solvent	cdc13	gain	48
file	exp	spin	16
ACQUISITION		hst	0.008
sw	30487.8	pw90	8.900
at	1.300	alfa	10.000
np	79298	FLAGS	
fb	17000	il	n
bs	32	in	n
d1	1.000	dp	y
nt	320	hs	nn
ct	320	PROCESSING	
tn	C13	fn	not used
sfrq	125.670	DISPLAY	
tof	1285.1	sp	-0.3
tpwr	54	wp	25130.9
pw	4.450	rfl	11727.4
DECOUPLER		rfp	9675.6
dn	H1	rp	85.9
dof	0	lp	2.2
dm	YYY	PLOT	
dmm	w	wc	270
dpwr	41	sc	0
dmf	11601	vs	21182
		th	45
	ai	cdc	ph



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H-1

exp11 s2pul

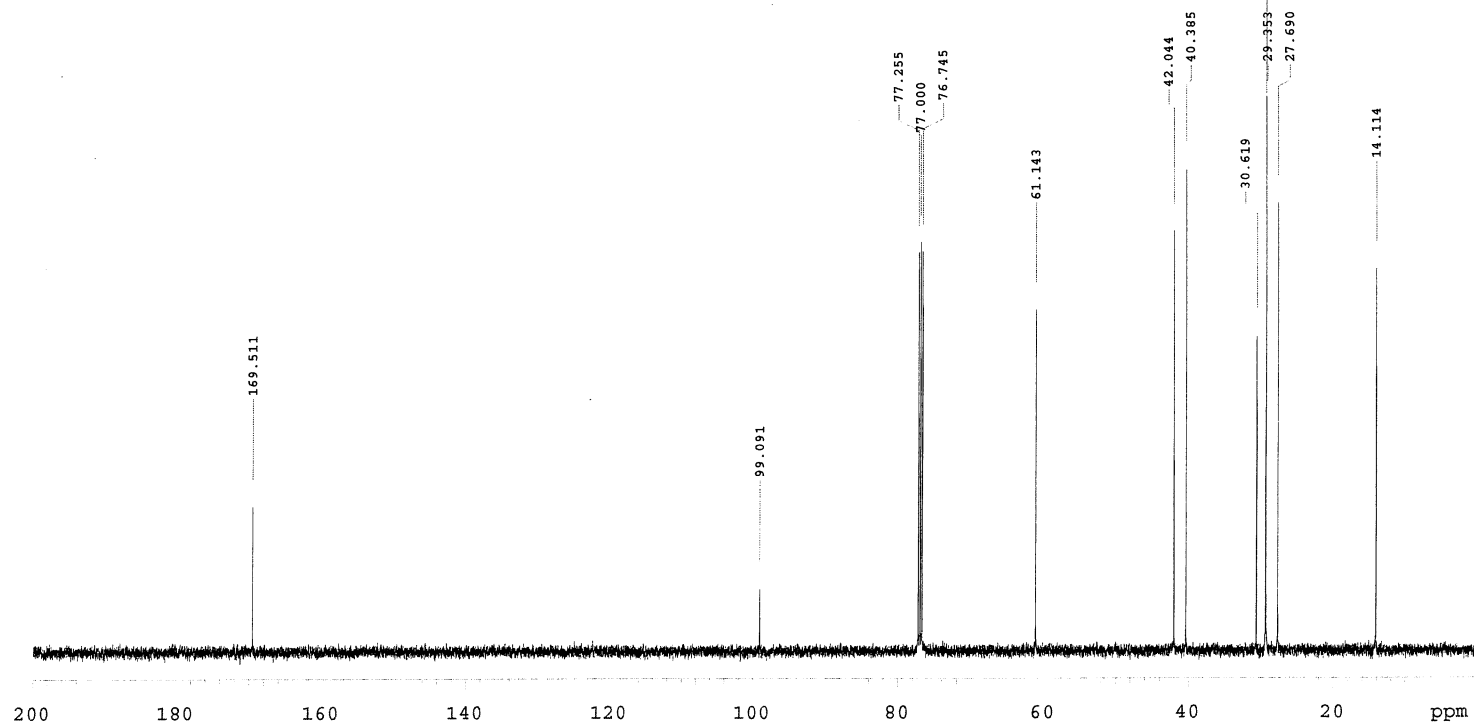
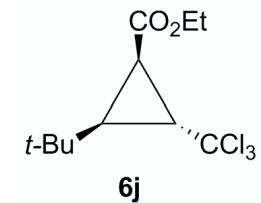
SAMPLE		SPECIAL	
date	Mar 9 2009	temp	not used
solvent	cdc13	gain	24
file	exp	spin	16
ACQUISITION		hst	0.008
sw	8012.8	pw90	10.600
at	3.500	alfa	10.000
np	56090	FLAGS	
fb	4000	il	n
bs	32	in	n
d1	1.500	dp	y
nt	4	hs	nn
ct	4	PROCESSING	
TRANSMITTER		lb	0.30
tn	H1	fn	not used
sfrq	499.732	DISPLAY	
tof	499.7	sp	0.0
tpwr	59	wp	4997.3
pw	5.300	rfl	1010.9
DECOUPLER		rfl	0
dn	C13	rp	34.4
dof	0	lp	9.0
dm	nnn	PLOT	
dmm	c	wc	270
dpwr	34	sc	0
dmf	32258	vs	53
		th	54
		ai	cdc ph



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exp12 Carbon

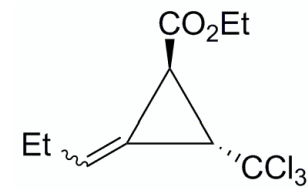
SAMPLE		SPECIAL	
date	Mar 9 2009	temp	not used
solvent	cdcl3	gain	48
file	exp	spin	16
ACQUISITION		hst	0.008
sw	30487.8	pw90	8.900
at	1.300	alfa	10.000
np	79298	FLAGS	
fb	17000	il	n
bs	32	in	n
d1	1.000	dp	Y
nt	3200	hs	nn
ct	128	PROCESSING	
TRANSMITTER		lb	1.00
tn	C13	fn	not used
sfrq	125.670	DISPLAY	
tof	1285.1	sp	-0.3
tpwr	54	wp	25130.9
pw	4.450	rfl	11726.5
DECOUPLER		rfp	9675.6
dn	H1	rp	-99.8
dof	0	lp	7.4
dm	YYY	PLOT	
dmm	w	wc	270
dpwr	41	sc	0
dmf	11601	vs	5626
		th	8
		ai	cdc ph



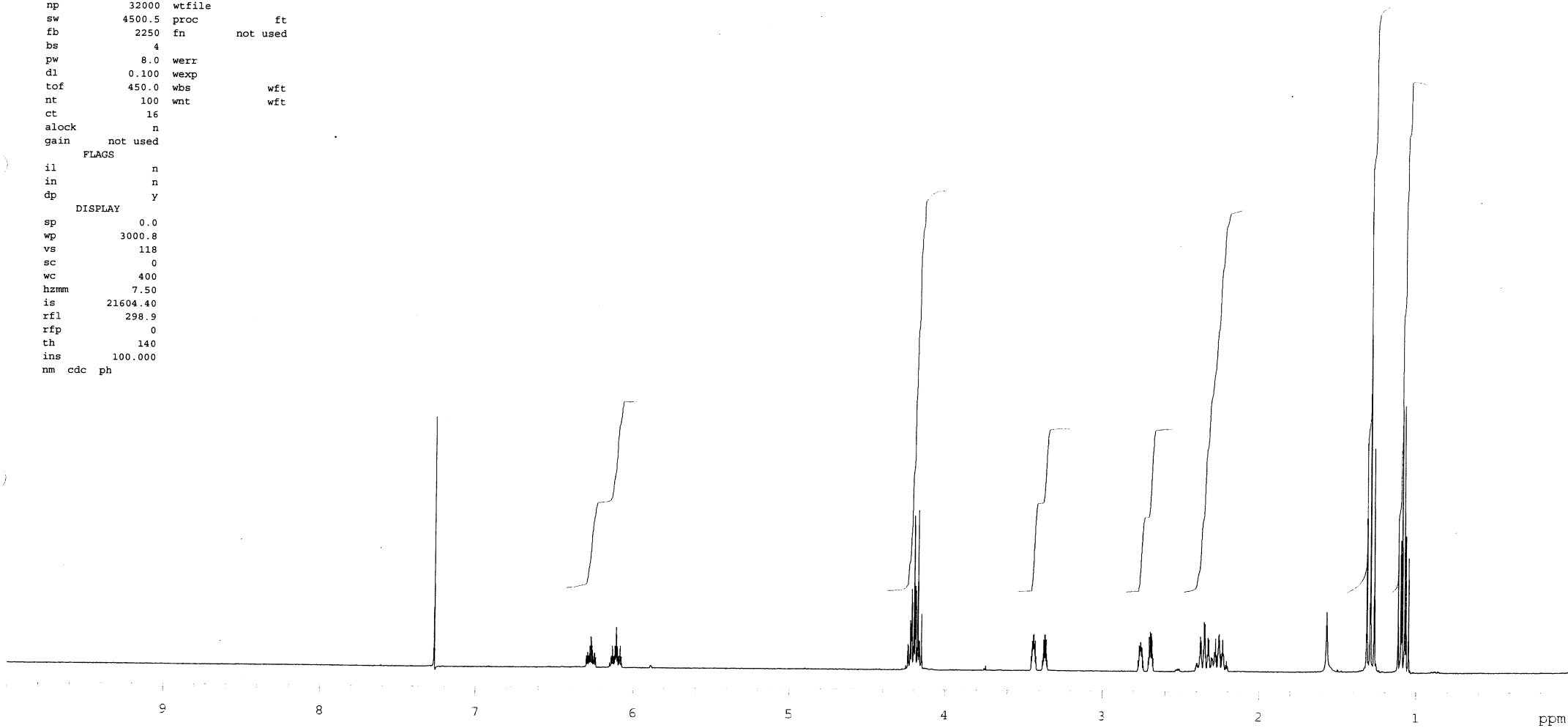
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PTLC-1

exp2 std1h

SAMPLE		DEC. & VT	
date	Aug 5 2009	dfrq	300.092
solvent	CDCl3	dn	H1
file	exp	dof	0
ACQUISITION		PROCESSING	
sfrq	300.092	dmm	c
tn	H1	dmf	200
at	3.555		
np	32000	wtfile	
sw	4500.5	proc	ft
fb	2250	fn	not used
bs	4		
pw	8.0	werr	
dl	0.100	wexp	
tof	450.0	wbs	wft
nt	100	wnt	wft
ct	16		
alock	n		
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
DISPLAY			
sp	0.0		
wp	3000.8		
vs	118		
sc	0		
wc	400		
hzmm	7.50		
is	21604.40		
rfl	298.9		
rfp	0		
th	140		
ins	100.000		
nm	cdc ph		

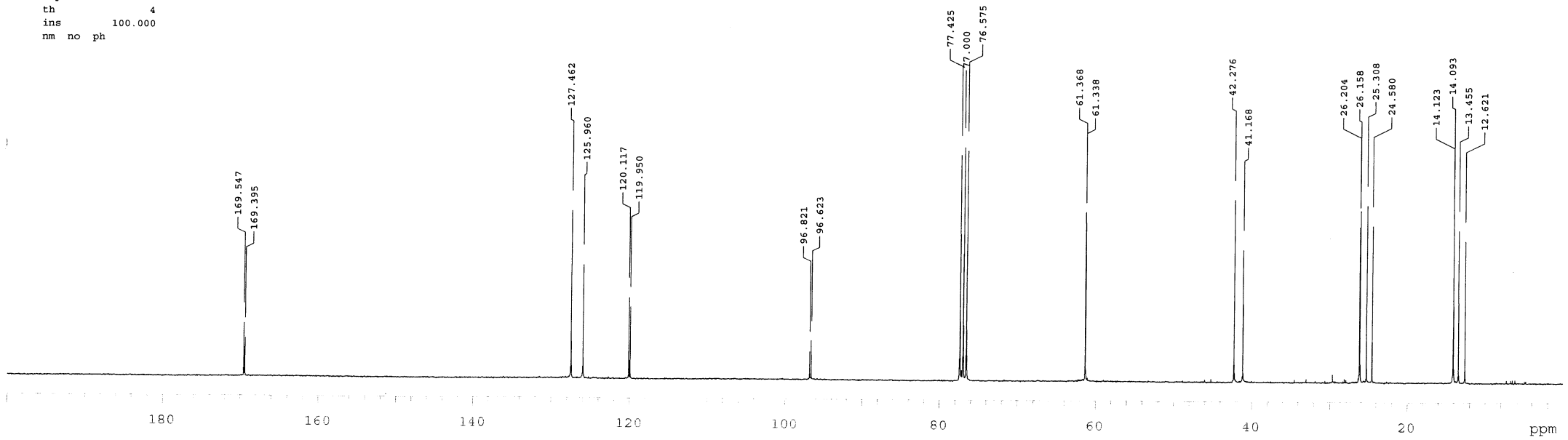
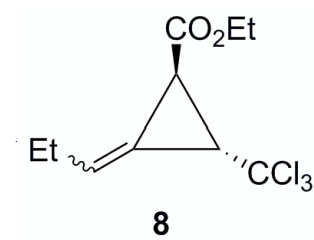


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PTLC-1
expl std13c

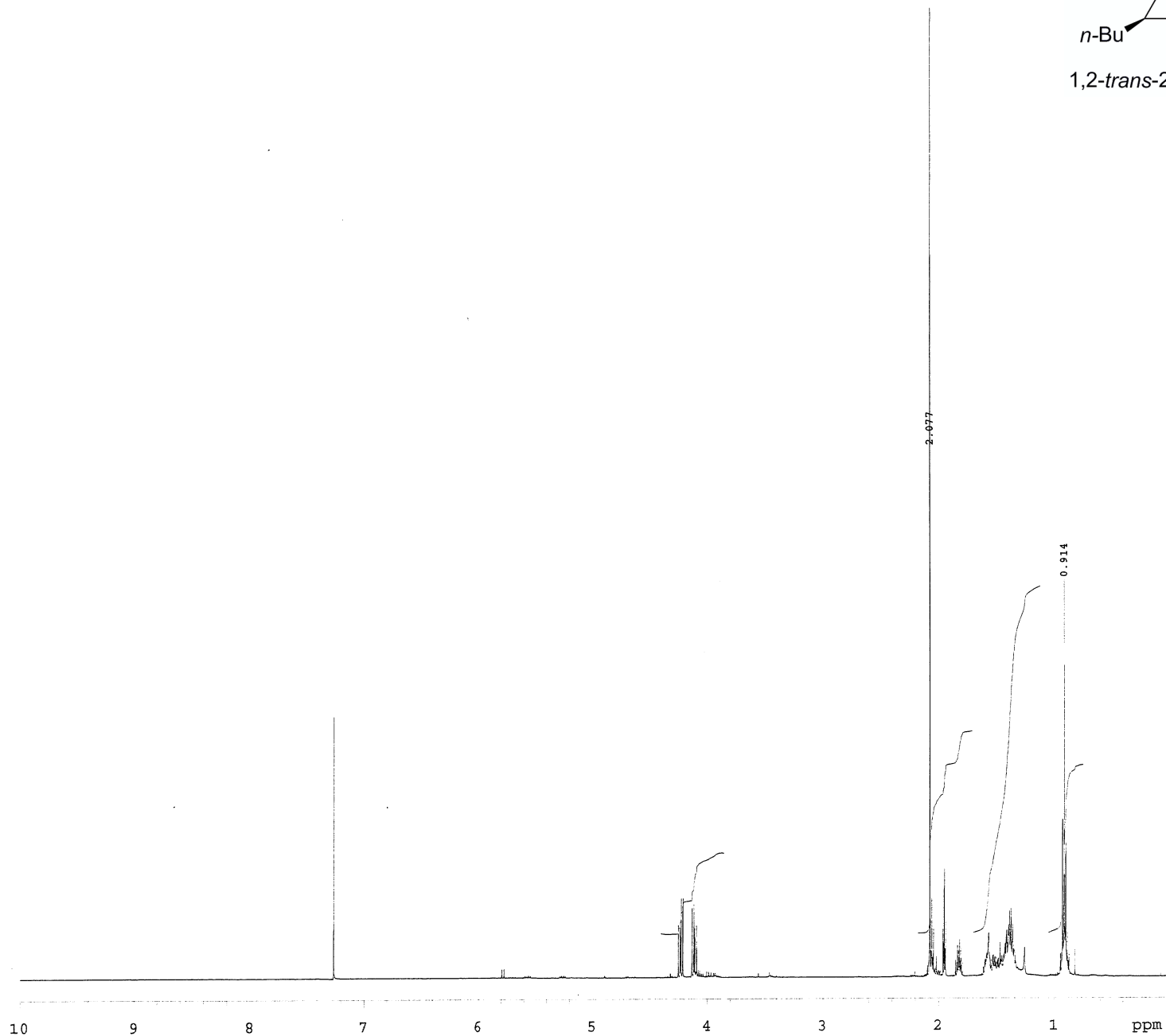
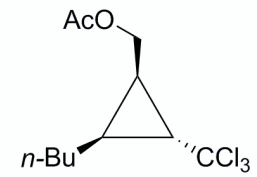
SAMPLE		DEC. & VT	
date	Oct 6 2009	dfrq	300.092
solvent	CDCl3	dn	H1
file	exp	dhp	0.5
ACQUISITION		dof	0
sfrq	75.465	dm	YYY
tn	C13	dmm	w
at	0.853	dmf	8800
np	32000	PROCESSING	
sw	18761.7	lb	1.00
fb	9500	wtfile	
bs	8	proc	ft
pw	7.3	fn	not used
dl	1.200		
tof	0	werr	
nt	25000	wexp	
ct	17000	wbs	wft
alock		n wnt	wft
gain	not used		
FLAGS			
il		n	
in		n	
dp		y	
DISPLAY			
sp		-0.5	
wp		15091.4	
vs		59	
sc		0	
wc		400	
hzmm		37.73	
is		500.00	
rfl		7625.9	
rfp		5810.2	
th		4	
ins		100.000	
nm		no ph	



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H-1

exp54 s2pul

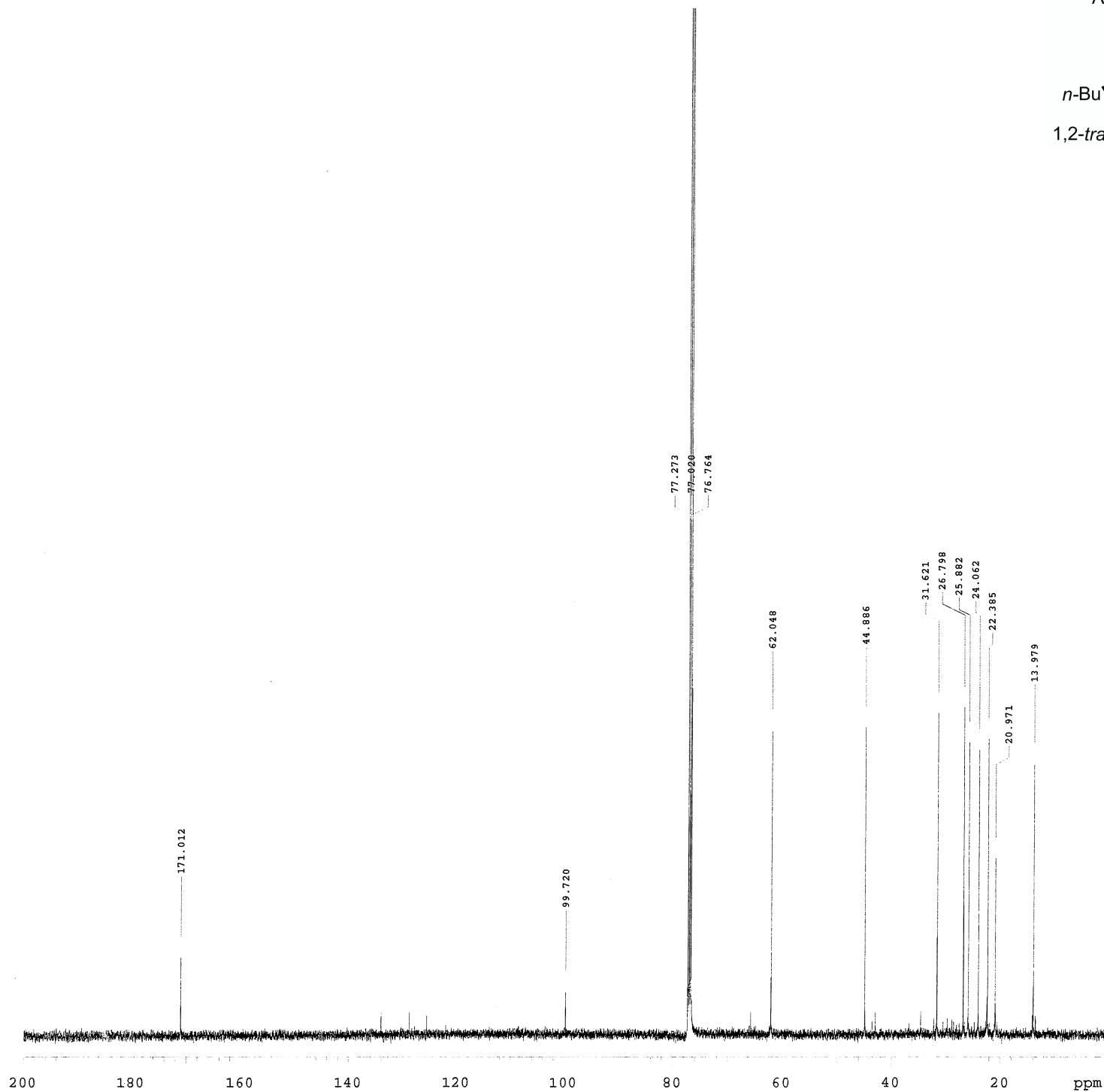
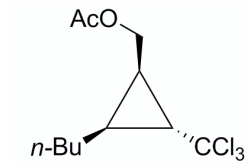
SAMPLE		SPECIAL	
date	Jan 12 2010	temp	not used
solvent	cdc13	gain	32
file	exp	spin	16
ACQUISITION		hst	0.008
sw	8000.0	pw90	10.500
at	2.048	alfa	6.600
np	32768	FLAGS	
fb	not used	il	n
bs	32	in	n
ss	2	dp	y
d1	1.000	hs	nn
nt	4	PROCESSING	
ct	4	lb	0.20
TRANSMITTER		fn	65536
tn	H1	DISPLAY	
sfrq	499.830	sp	0
tof	499.8	wp	4998.0
tpwr	58	rfl	1009.3
pw	5.250	rfp	0
DECOUPLER		rp	-150.3
dn	C13	lp	-4.7
dof	0	PLOT	
dm	nnn	wc	270
dmm	c	sc	0
dpwr	35	vs	59
dmf	31746	th	65
	ai	cdc	ph



KPNN-5131
C-13

exp55 Carbon

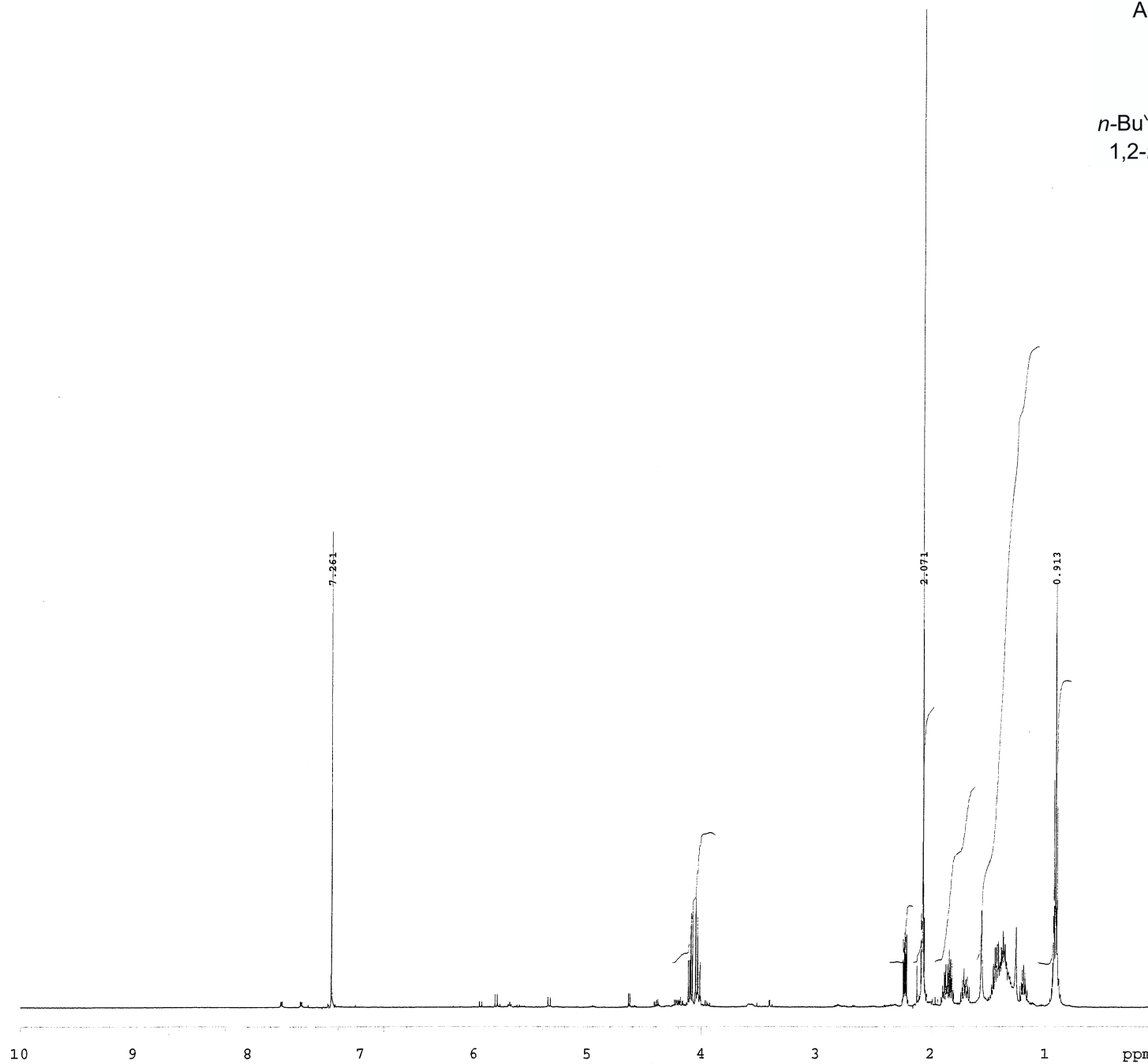
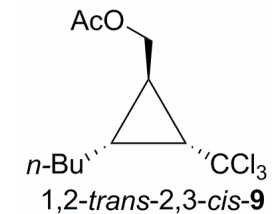
SAMPLE		SPECIAL	
date	Jan 12 2010	temp	not used
solvent	cdcl3	gain	30
file	exp	spin	16
ACQUISITION		hst	0.008
sw	30165.9	pw90	12.500
at	1.300	alfa	10.000
np	78460	FLAGS	
fb	not used	il	n
bs	32	in	n
d1	1.000	dp	y
nt	3200	hs	nn
ct	2208	PROCESSING	
TRANSMITTER		lb	1.00
tn	C13	fn	not used
sfrq	125.695	DISPLAY	
tof	1255.3	sp	-0.0
tpwr	53	wp	25136.3
pw	6.250	rfl	1916.2
DECOUPLER		rfp	0
dn	H1	rp	66.4
dof	0	lp	-122.8
dm	yyy	PLOT	
dmm	w	wc	270
dpwr	39	sc	0
dmf	11136	vs	39784
		th	10
		ai	cdc ph



KPNN-5132
H-1

exp31 s2pul

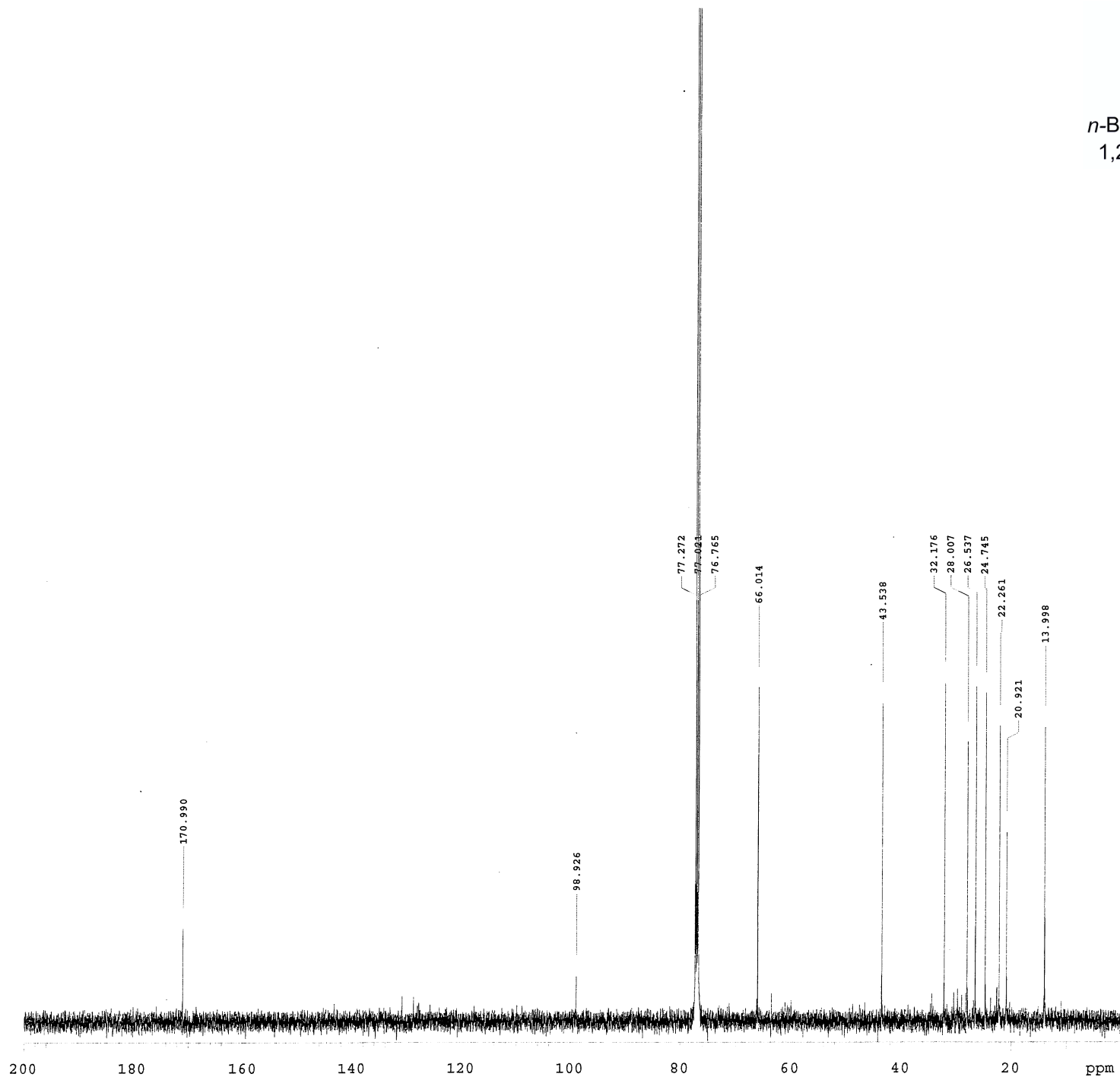
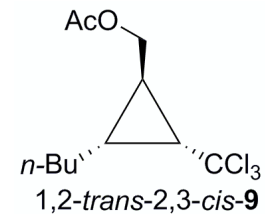
SAMPLE		SPECIAL	
date	Jan 12 2010	temp	not used
solvent	cdc13	gain	40
file	exp	spin	16
ACQUISITION		hst	0.008
sw	8012.8	pw90	10.600
at	3.500	alfa	10.000
np	56090	FLAGS	
fb	4000	il	n
bs	32	in	n
d1	1.500	dp	y
nt	4	hs	nn
ct	4	PROCESSING	
TRANSMITTER		lb	0.30
tn	H1	fn	not used
sfrq	499.732	DISPLAY	
tof	499.7	sp	-0.0
tpwr	59	wp	4997.3
pw	5.300	rfl	1013.3
DECOUPLER		rfp	0
dn	C13	rp	-143.2
dof	0	lp	-2.7
dm	nnn	PLOT	
dmm	c	wc	270
dpwr	34	sc	0
dmf	32258	vs	175
		th	66
		ai	cdc ph



KPNN-5132
C-13

exp32 Carbon

SAMPLE		SPECIAL	
date	Jan 12 2010	temp	not used
solvent	cdc13	gain	48
file	exp	spin	16
ACQUISITION		hst	0.008
sw	30487.8	pw90	8.900
at	1.300	alfa	10.000
np	79298	FLAGS	
fb	17000	il	n
bs	32	in	n
d1	1.000	dp	y
nt	3200	hs	nn
ct	2080	PROCESSING	
TRANSMITTER		lb	1.00
tn	C13	fn	not used
sfrq	125.670	DISPLAY	
tof	1285.1	sp	0.0
tpwr	54	wp	25130.9
pw	4.450	rfl	2048.3
DECOUPLER		rfp	0
dn	H1	rp	46.9
dof	0	lp	76.4
dm	yyy	PLOT	
dmm	w	wc	270
dpwr	41	sc	0
dmf	11601	vs	51006
		th	10
		ai	cdc ph

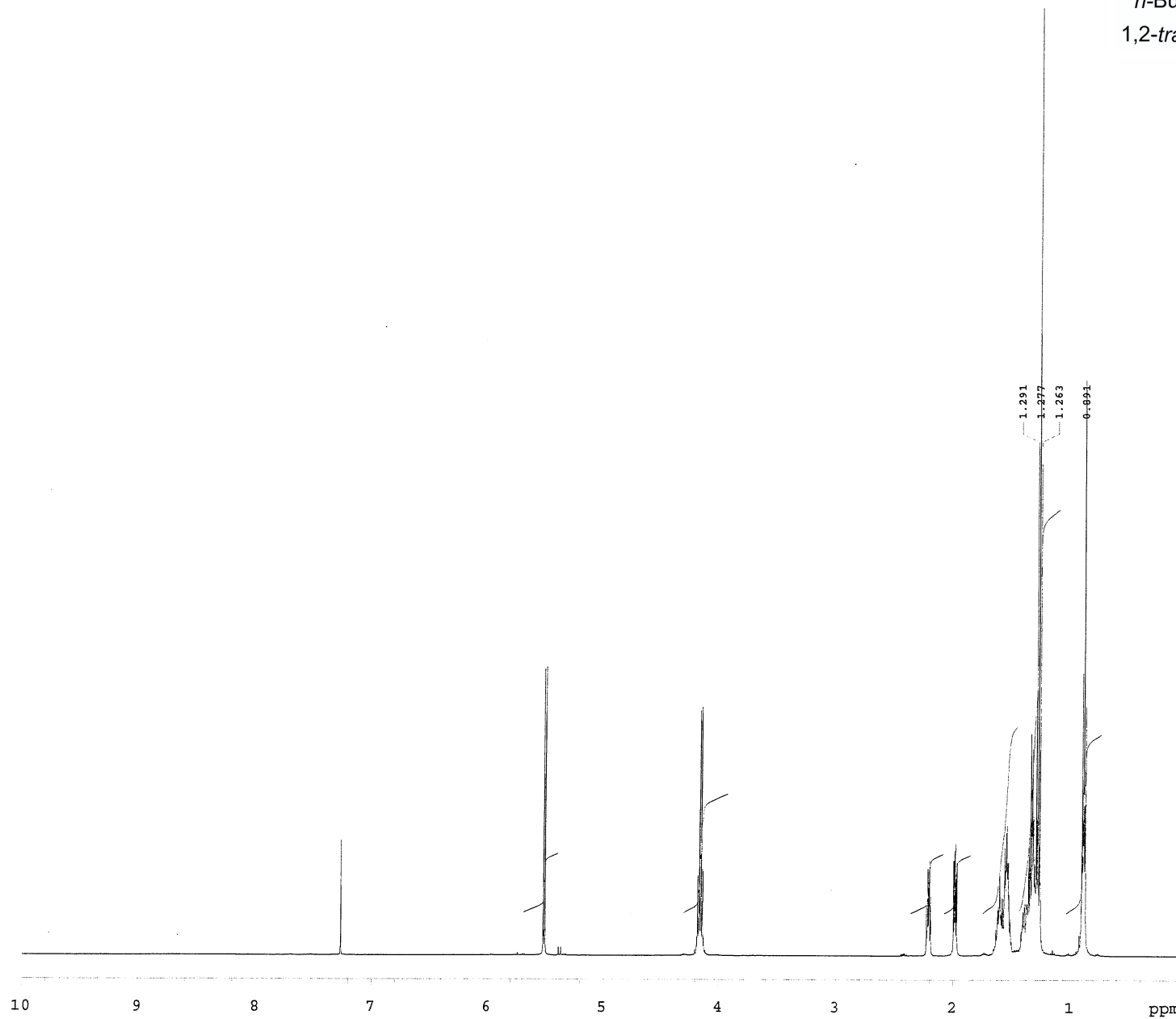
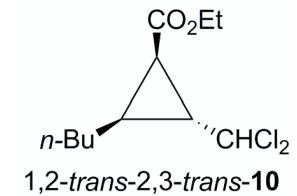


KPNN5127

H-1

exp34 s2pul

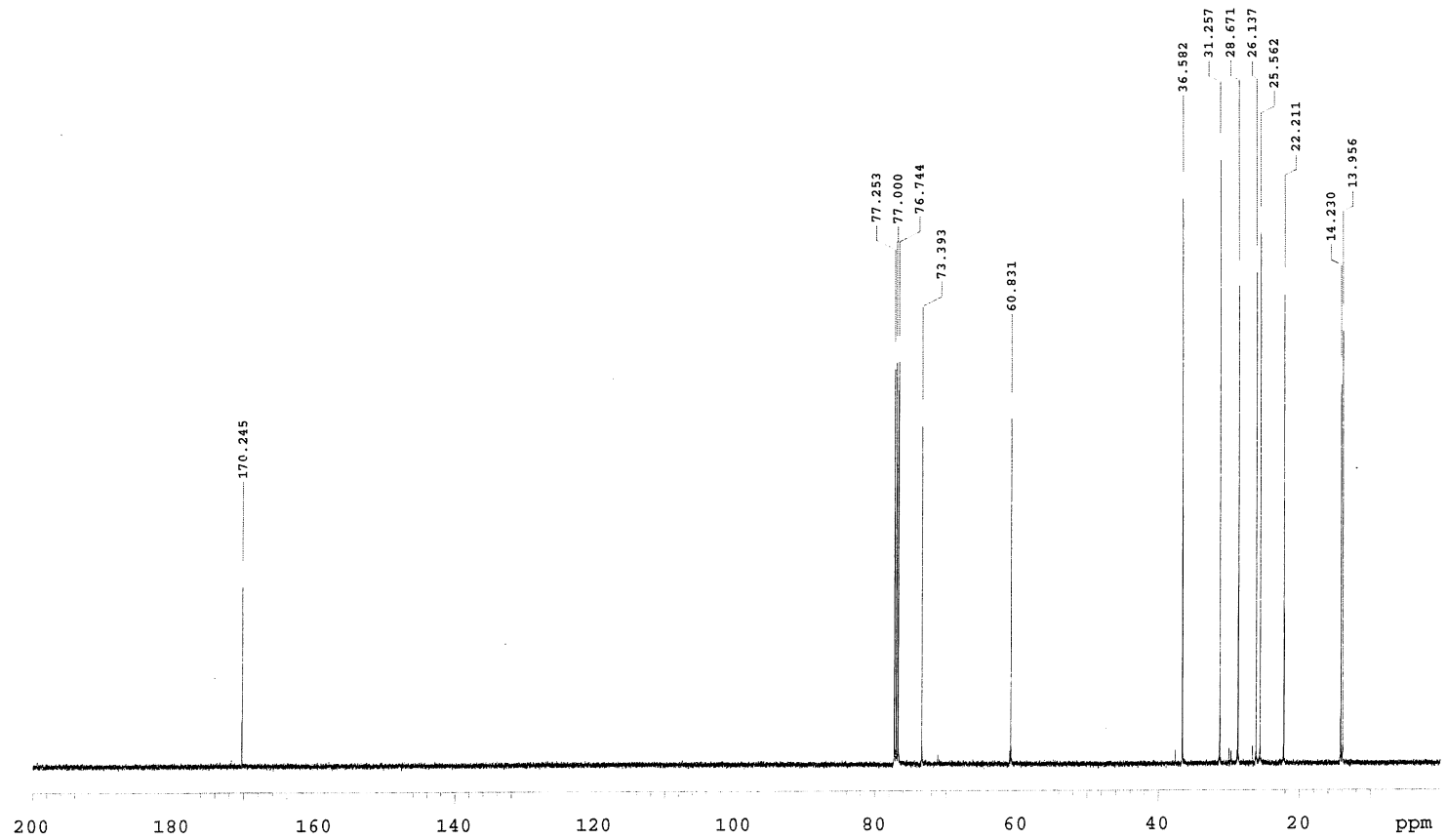
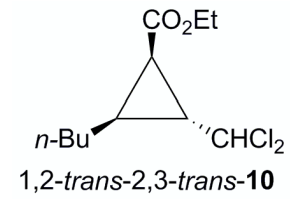
SAMPLE		SPECIAL	
date	Dec 24 2009	temp	not used
solvent	cdc13	gain	not used
file	exp	spin	16
ACQUISITION		hst	0.008
sw	8000.0	pw90	10.500
at	2.048	alfa	6.600
np	32768	FLAGS	
fb	not used	il	n
bs	32	in	n
ss	2	dp	y
d1	1.000	hs	nn
nt	4	PROCESSING	
ct	4	lb	0.20
TRANSMITTER		fn	65536
tn	H1	DISPLAY	
sfrq	499.830	sp	0.0
tof	499.8	wp	4998.0
tpwr	58	rfl	1007.1
pw	5.250	rfp	0
DECOUPLER		rp	-158.0
dn	C13	lp	5.6
dof	0	PLOT	
dm	nnn	wc	270
dmm	c	sc	0
dpwr	35	vs	141
dmr	31746	th	96
		ai	cdc ph



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exp35 Carbon

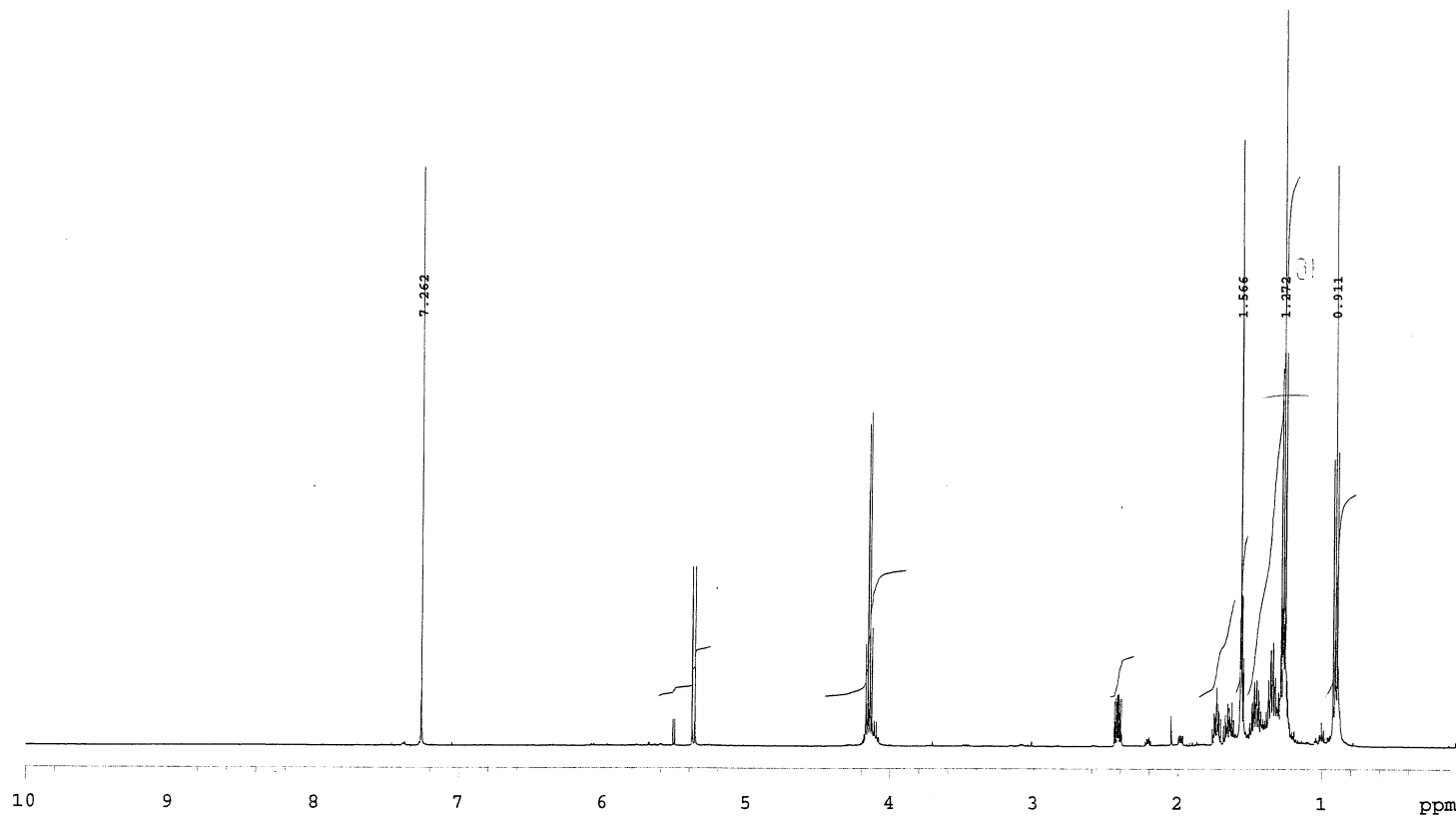
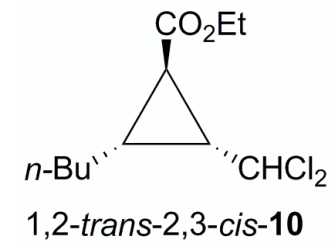
SAMPLE		SPECIAL	
date	Dec 24 2009	temp	not used
solvent	cdcl3	gain	30
file	exp	spin	16
ACQUISITION		hst	0.008
sw	30165.9	pw90	12.500
at	1.300	alfa	10.000
np	78460	FLAGS	
fb	not used	il	n
bs	32	in	n
d1	1.000	dp	y
nt	960	hs	nn
ct	960	PROCESSING	
TRANSMITTER		lb	0.50
tn	C13	fn	not used
sfrq	125.695	DISPLAY	
tof	1255.3	sp	-0.2
tpwr	53	wp	25136.3
pw	6.250	rfl	11597.1
DECOUPLER		rfl	9677.5
dn	H1	rp	64.0
dof	0	lp	-126.6
dm	YYY	PLOT	
dmm	w	wc	270
dpwr	39	sc	0
dmf	11136	vs	7664
		th	29
		ai	cdc ph



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H-1

exp24 s2pul

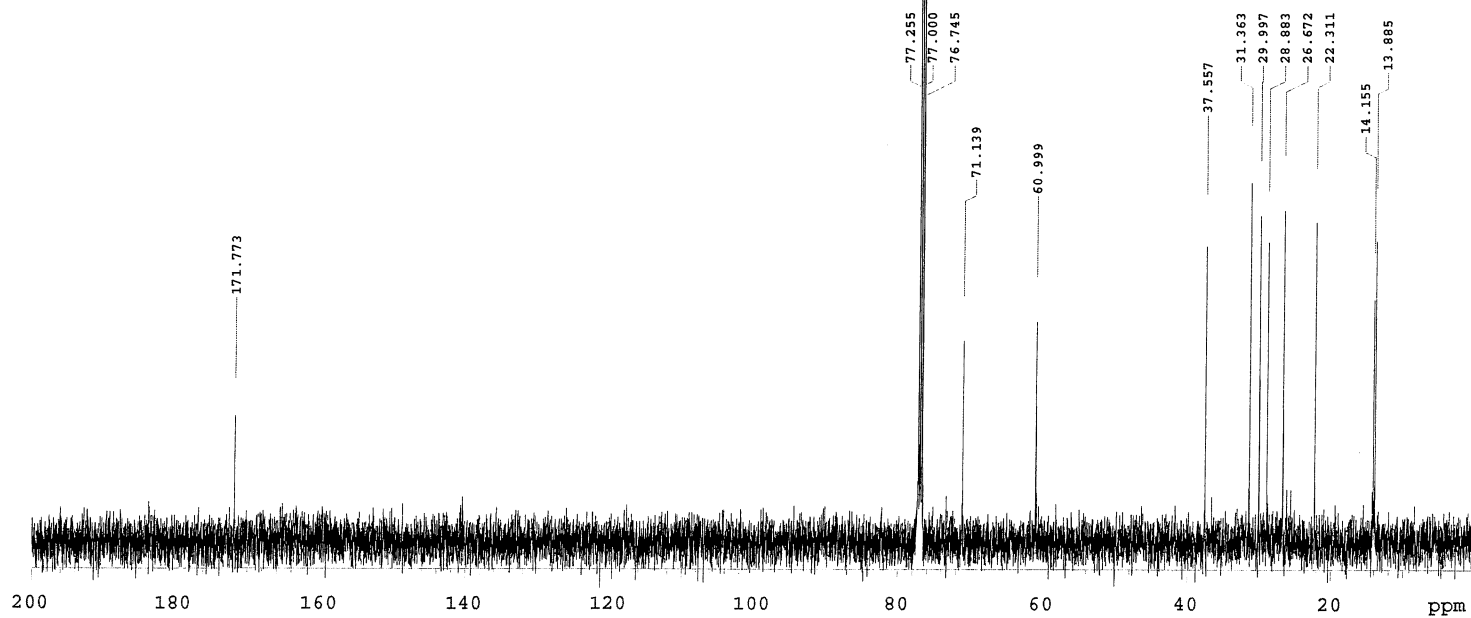
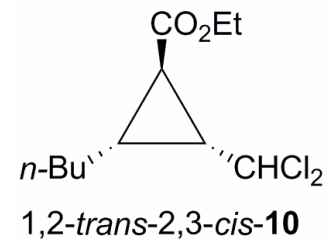
SAMPLE		SPECIAL	
date	Jun 26 2008	temp	not used
solvent	cdcl3	gain	40
file	exp	spin	16
ACQUISITION		hst	0.008
sw	8012.8	pw90	10.600
at	3.500	alfa	10.000
np	56090	FLAGS	
fb	4000	il	n
bs	32	in	n
d1	1.500	dp	Y
nt	4	hs	nn
ct	4	PROCESSING	
TRANSMITTER		lb	0.30
tn	H1	fn	not used
sfrq	499.732	DISPLAY	
tof	499.7	sp	-0.0
tpwr	59	wp	4997.3
pw	5.300	rfl	1012.9
DECOUPLER		rfp	0
dn	C13	rp	-47.9
dof	0	lp	1.9
dm	nnn	PLOT	
dmm	c	wc	270
dpwr	34	ac	0
dmf	32258	vs	133
		th	99
		ai	cdc ph



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C-13

exp25 Carbon

SAMPLE		SPECIAL	
date	Jun 26 2008	temp	not used
solvent	cdc13	gain	48
file	exp	spin	16
ACQUISITION		FLAGS	
sw	30487.8	hst	0.008
at	1.300	alfa	10.000
np	79298		
fb	17000	il	n
bs	32	in	n
dl	1.000	dp	y
nt	3200	hs	nn
ct	224	PROCESSING	
TRANSMITTER		lb	1.00
tn	C13	fn	not used
sirg	125.670	DISPLAY	
tof	1285.1	sp	-0.3
tpwr	54	wp	25130.9
pw	4.450	rfl	11726.5
DECOUPLER		rfd	9675.6
dn	H1	rp	147.2
dof	0	lp	51.2
dm	YYY	PLOT	
dmm	w	wc	270
dpwr	41	sc	0
dmf	11601	vs	35254
		th	19
		ai	cdc ph

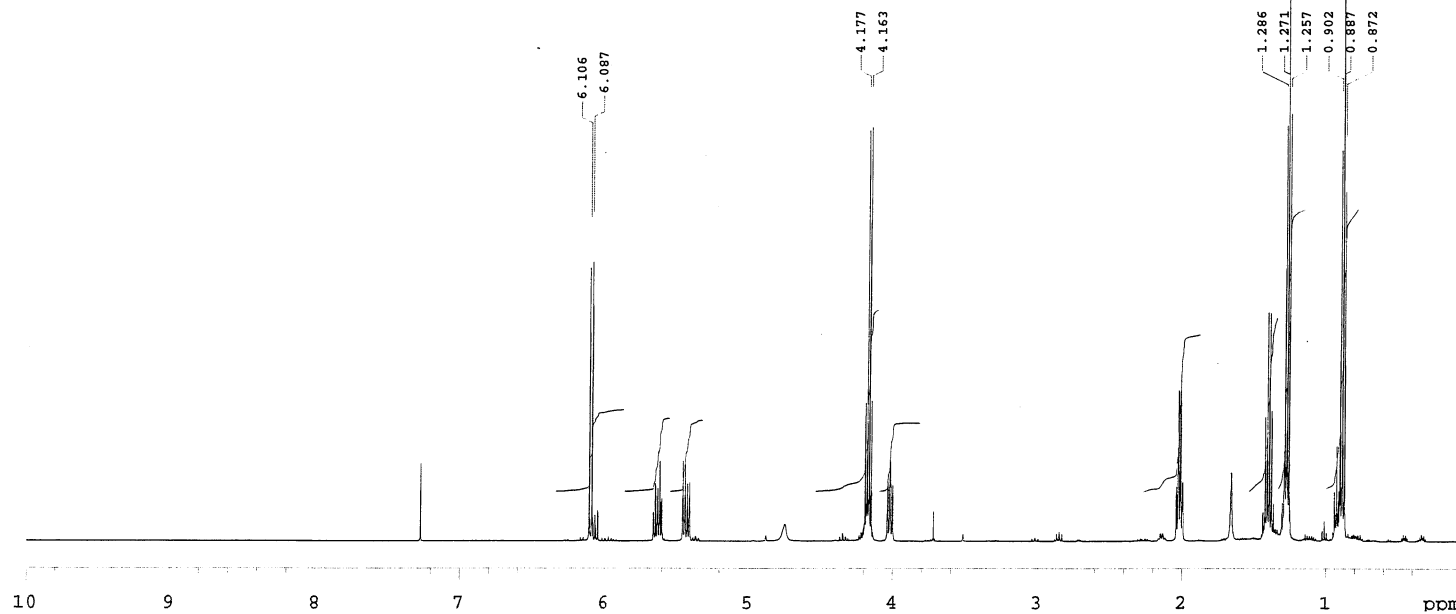
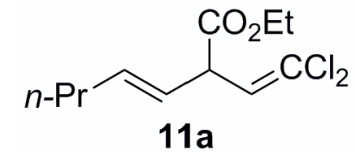


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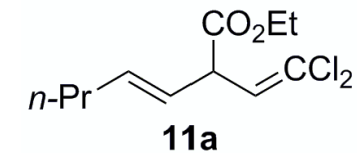
H-1

exp19 s2pul

SAMPLE		SPECIAL	
date	Jul 1 2008	temp	not used
solvent	cdcl3	gain	22
file	exp	spin	16
ACQUISITION		hst	0.008
sw	8012.8	pw90	10.600
at	3.500	alfa	10.000
np	56090	FLAGS	
fb	4000	il	n
bs	32	in	n
d1	1.500	dp	y
nt	4	hs	nn
ct	4	PROCESSING	
TRANSMITTER		lb	0.30
tn	H1	fn	not used
sfrq	499.732	DISPLAY	
tof	499.7	sp	-0.0
tpwr	59	wp	4997.3
pw	5.300	rfl	1008.9
DECOUPLER		rfp	0
dn	C13	rp	-53.1
dof	0	lp	4.7
dm	nnn	PLOT	
dmm	c	wc	270
dpwr	34	sc	0
dmf	32258	vs	163
		th	52
	ai	cdc	ph

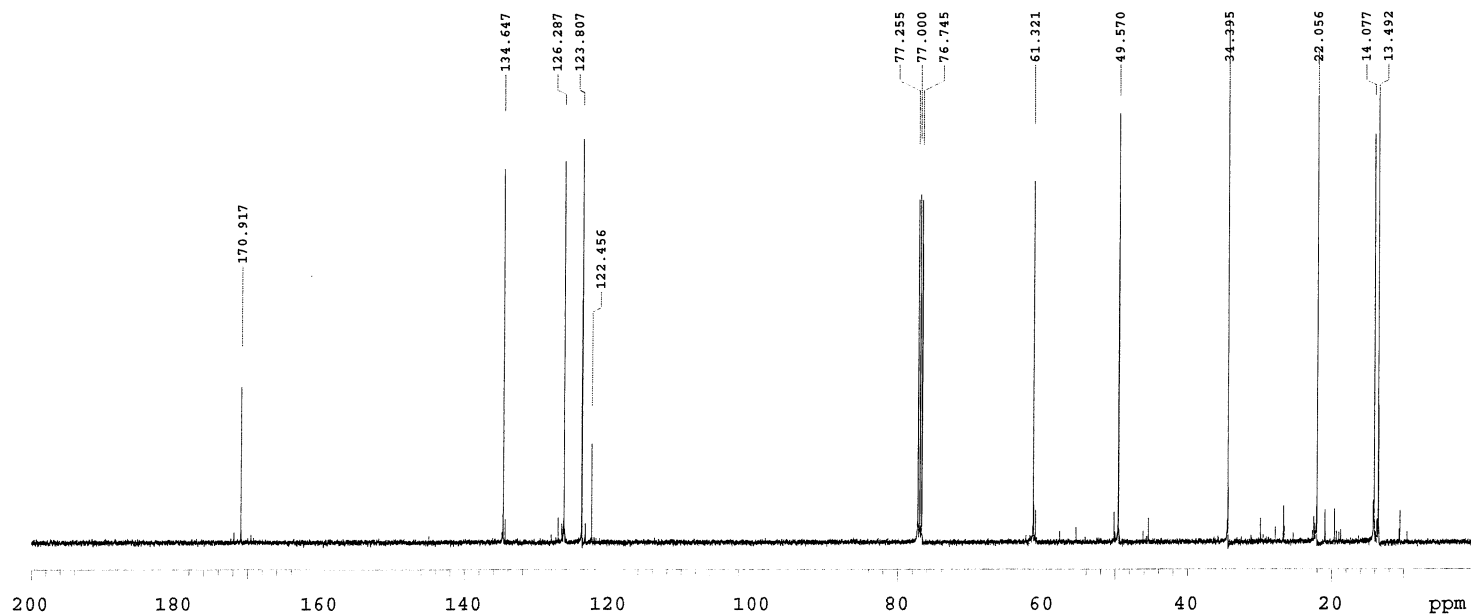


KPNN-4985
C-13



exp20 Carbon

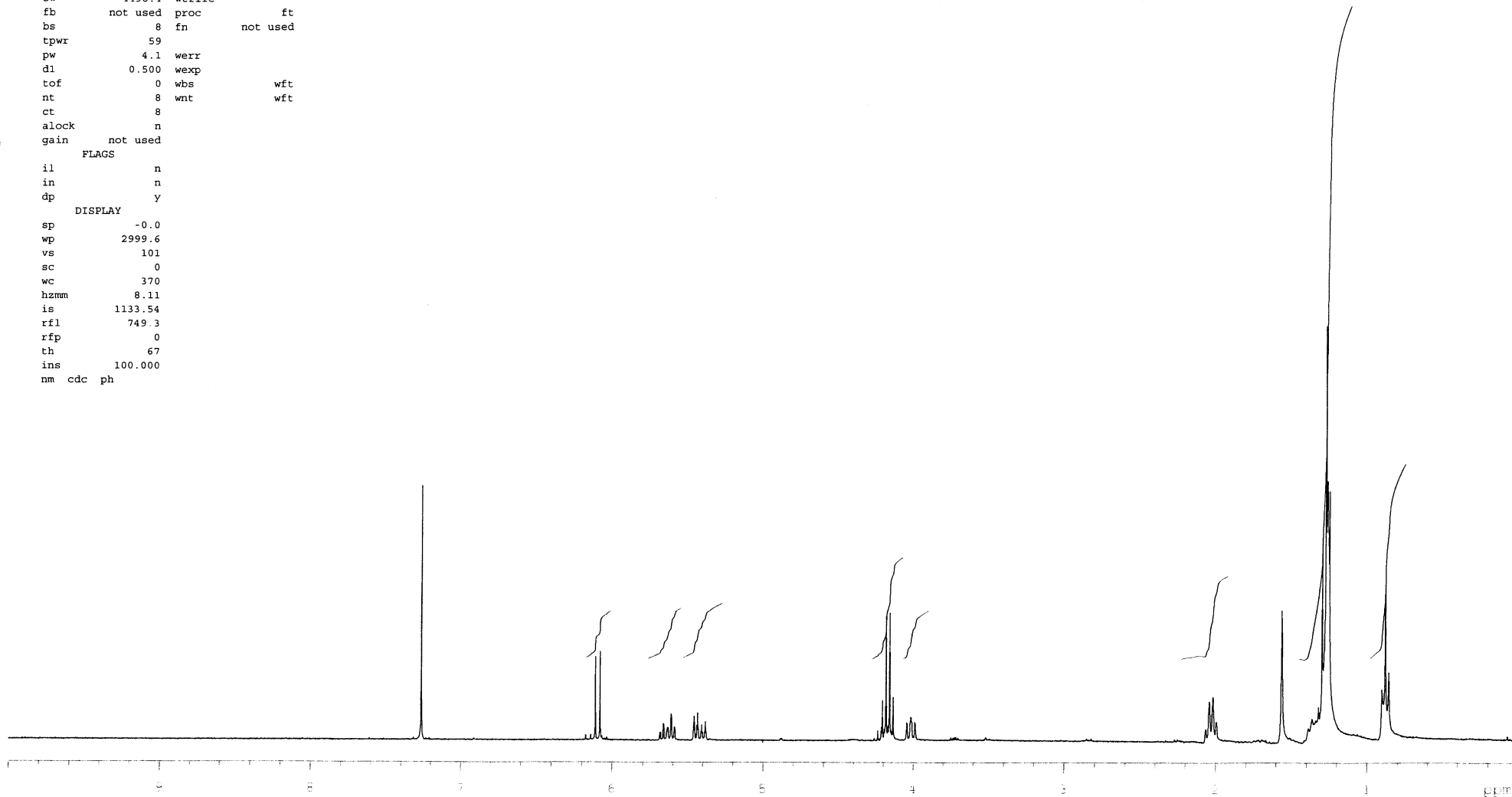
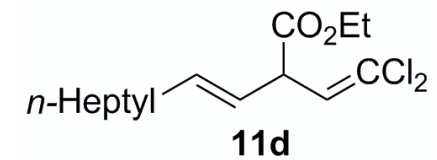
SAMPLE		SPECIAL	
date	Jul 1 2008	temp	not used
solvent	cdcl3	gain	48
file	exp	spin	16
ACQUISITION		hst	0.008
sw	30487.8	pw90	8.900
at	1.300	alfa	10.000
np	79298	FLAGS	
fb	17000	il	n
bs	32	in	n
d1	1.000	dp	y
nt	3200	hs	nn
ct	608	PROCESSING	
TRANSMITTER		lb	1.00
tn	C13	fn	not used
sfrq	125.670	DISPLAY	
tof	1285.1	sp	-0.3
tpwr	54	wp	25130.9
pw	4.450	rfl	11727.9
DECOUPLER		rip	9675.6
dn	H1	rp	-186.8
dof	0	lp	0
dm	YYY	PLOT	
dmm	w	wc	270
dpwr	41	sc	0
dmf	11601	vs	6635
		th	17
		ai	cdc ph



STANDARD 1H OBSERVE

exp2 stdih

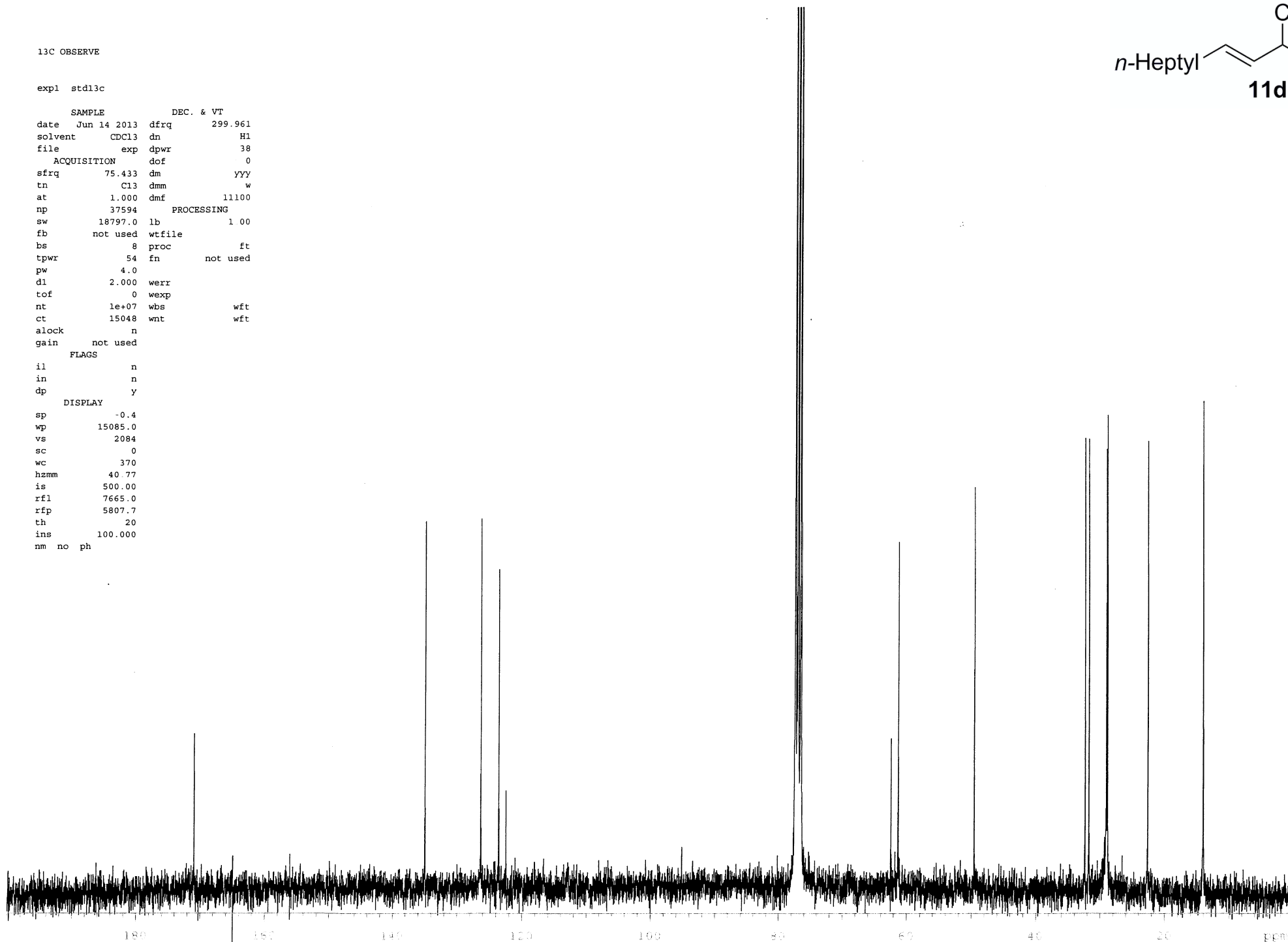
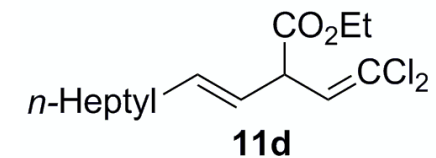
```
SAMPLE          DEC. & VT
date Jun 15 2013 dfrq      299.961
solvent CDCl3  dn          H1
file      exp  dpwr       30
ACQUISITION  dof         0
sfrq      299.961 dm       nnn
tn         H1  dmm        c
at         3.557 dmf       200
np         32000          PROCESSING
sw         4498.4 wtfile
fb         not used proc    ft
bs         8   fn         not used
tpwr       59
pw         4.1  werr
d1         0.500 wexp
tof        0   wbs        wft
nt         8   wnt       wft
ct         8
alock      n
gain       not used
FLAGS
il         n
in         n
dp         y
DISPLAY
sp         -0.0
wp         2999.6
vs         101
sc         0
wc         370
hzmm      8.11
is         1133.54
rfl        749.3
rfp        0
th         67
ins        100.000
nm cdc ph
```



13C OBSERVE

expl std13c

```
SAMPLE          DEC. & VT
date Jun 14 2013 dfrq      299.961
solvent CDCl3  dn          H1
file      exp      dpwr      38
ACQUISITION dof          0
sfrq      75.433  dm          yy
tn         C13  dmm          w
at         1.000  dmf        11100
np         37594  PROCESSING
sw         18797.0 lb          1 00
fb      not used wtfile
bs         8      proc          ft
tpwr       54    fn      not used
pw         4.0
dl         2.000 werr
tof         0      wexp
nt         1e+07 wbs          wft
ct         15048 wnt          wft
alock      n
gain      not used
FLAGS
il         n
in         n
dp         y
DISPLAY
sp         -0.4
wp         15085.0
vs         2084
sc         0
wc         370
hzmm       40.77
is         500.00
rfl        7665.0
rfp        5807.7
th         20
ins        100.000
nm no ph
```

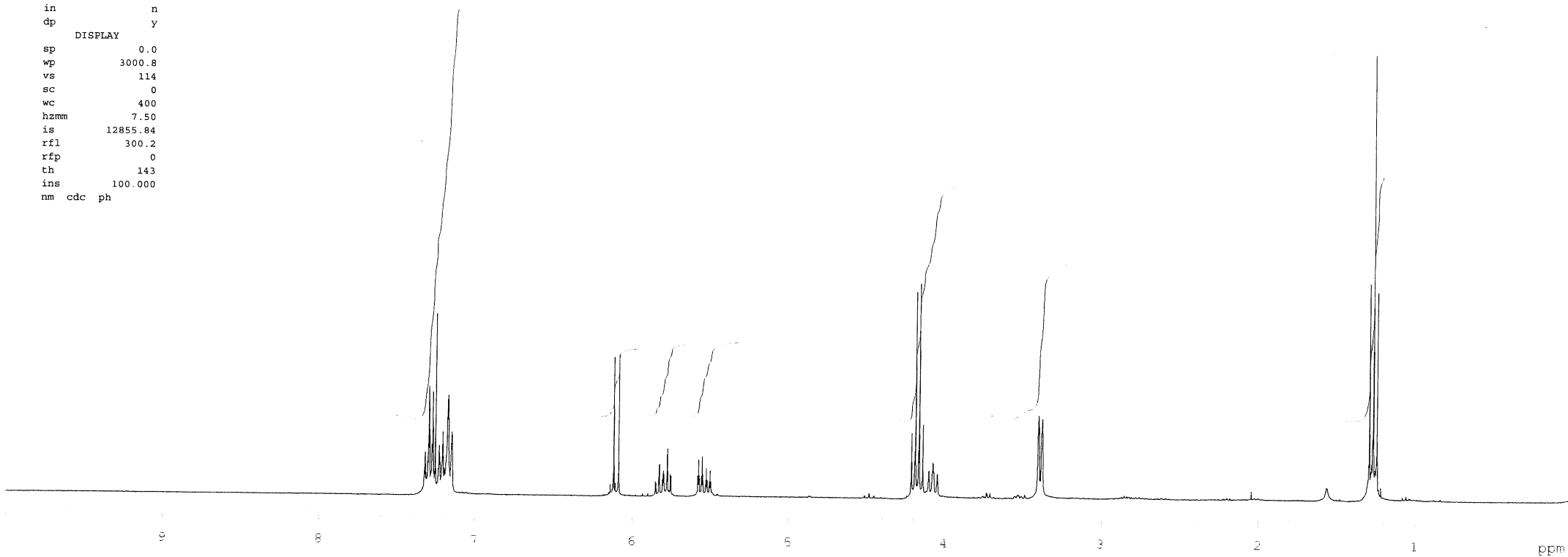
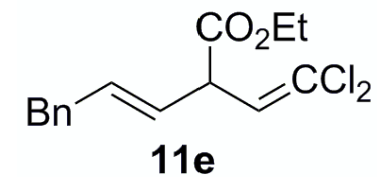


180 160 140 120 100 80 60 40 20 ppm

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PTLC-1

exp2 std1h

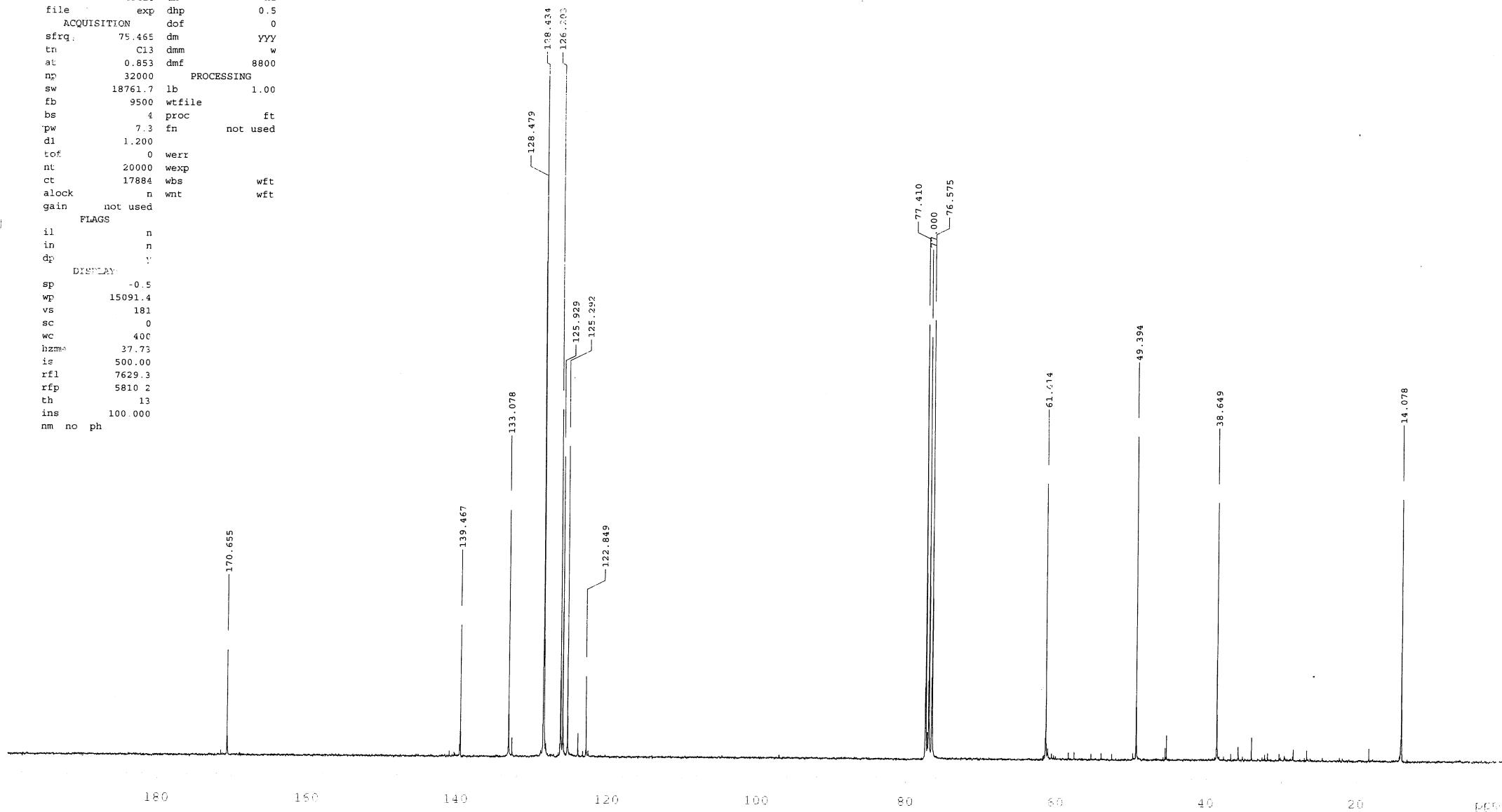
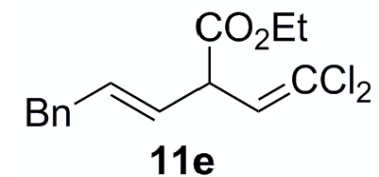
SAMPLE		DEC. & VT	
date	Jan 30 2010	dfrq	300.092
solvent	CDCl3	dn	H1
file	exp	dof	0
ACQUISITION			
sfrq	300.092	dm	nnn
tn	H1	dmm	c
at	3.555	dmf	200
PROCESSING			
np	32000	wtfile	
sw	4500.5	proc	ft
fb	2250	fn	not used
bs	4		
pw	8.0	werr	
dl	0.100	wexp	
tof	450.0	wbs	wft
nt	100	wnt	wft
ct	12		
alock	n		
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
DISPLAY			
sp	0.0		
wp	3000.8		
vs	114		
sc	0		
wc	400		
hzmm	7.50		
is	12855.84		
rfl	300.2		
rfp	0		
th	143		
ins	100.000		
nm	cdc ph		



dione
R=EnCH₂

exp1 std13c

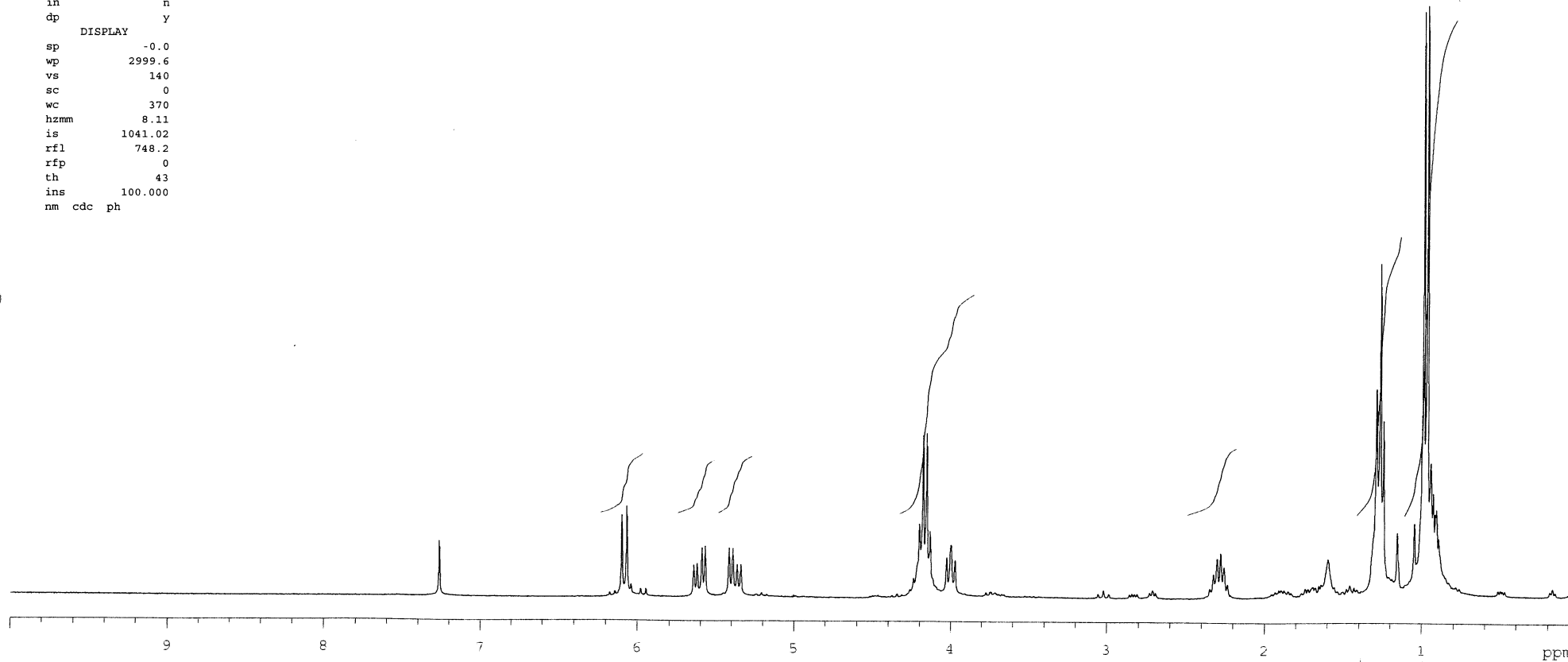
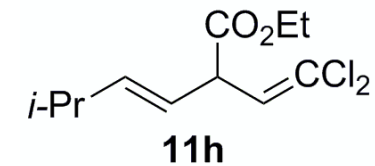
SAMPLE DEC. & VT
date Jan 30 2010 dfrq 300.092
solvent CDCl₃ dn H1
file exp dhp 0.5
ACQUISITION dof 0
sfrq 75.465 dm YYY
tn C13 dmm w
at 0.853 dmf 8800
nr 32000 PROCESSING
sw 18761.7 lb 1.00
fb 9500 wtfile
bs 4 proc ft
pw 7.3 fn not used
dl 1.200
tof 0 werr
nt 20000 wexp
ct 17884 wbs wft
alock n wnt wft
gain not used
FLAGS
il n
in n
dp y
DISPLAY
sp -0.5
wp 15091.4
vs 181
sc 0
wc 400
hzm^o 37.73
is 500.00
rf1 7629.3
rfp 5810.2
th 13
ins 100 000
nm no ph



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exp7 std1h

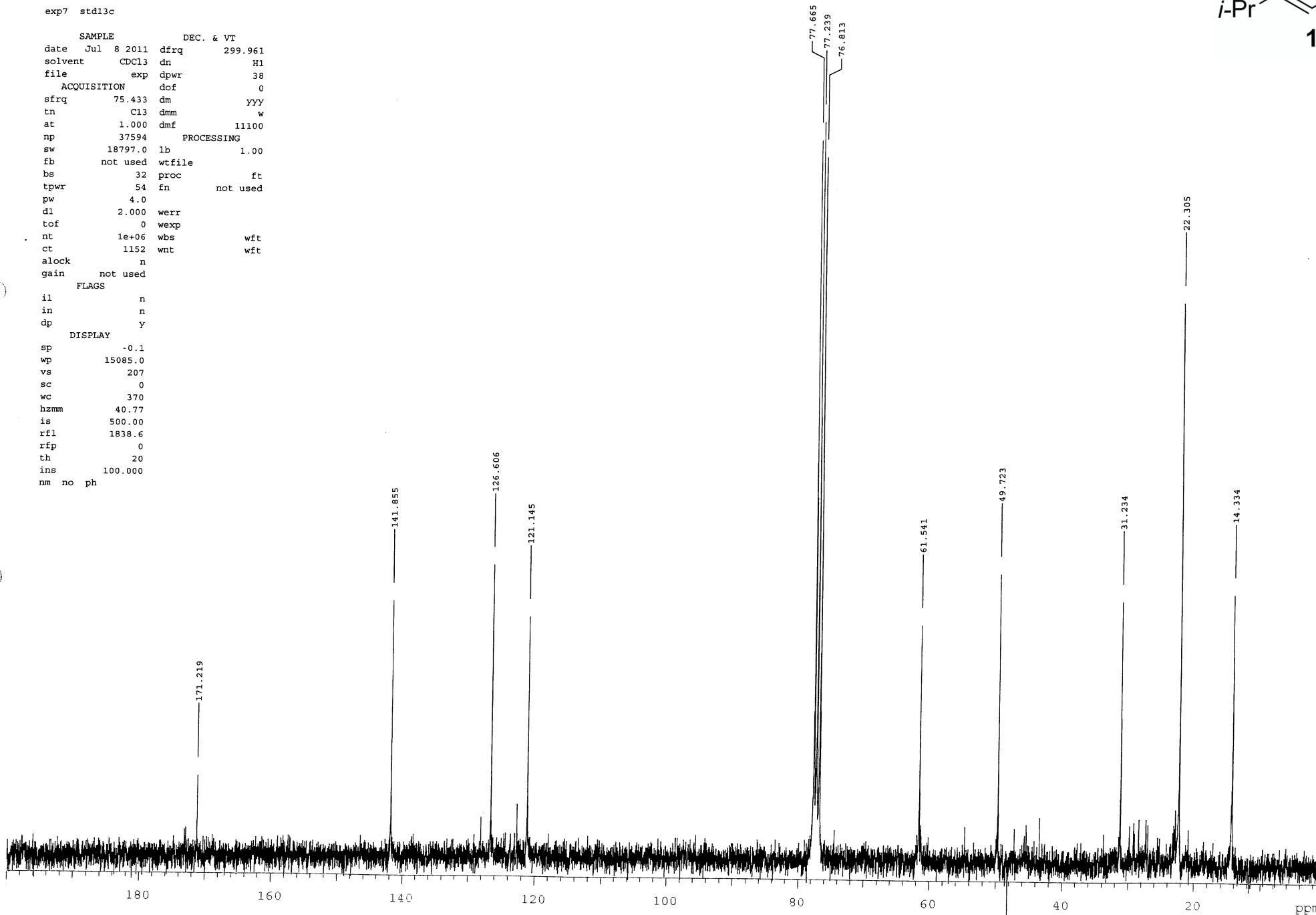
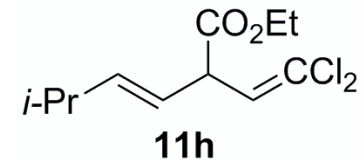
```
SAMPLE          DEC. & VT
date Jul  8 2011 dfrq      299.961
solvent CDCl3  dn         H1
file          exp dpwr      30
ACQUISITION    dof        0
sfrq      299.961 dm       nnn
tn         H1 dmm         c
at         3.557 dmf      200
np         32000          PROCESSING
sw         4498.4 wtfile
fb         not used proc   ft
bs         8   fn         not used
tpwr       59
pw         4.1 werr
dl         0.500 wexp
tof        0   wbs         wft
nt         8   wnt         wft
ct         8
alock      n
gain       not used
          FLAGS
il         n
in         n
dp         y
          DISPLAY
sp         -0.0
wp         2999.6
vs         140
sc         0
wc         370
hzmm       8.11
is         1041.02
rfl        748.2
rfp        0
th         43
ins        100.000
nm cdc ph
```



C-72

exp7 std13c

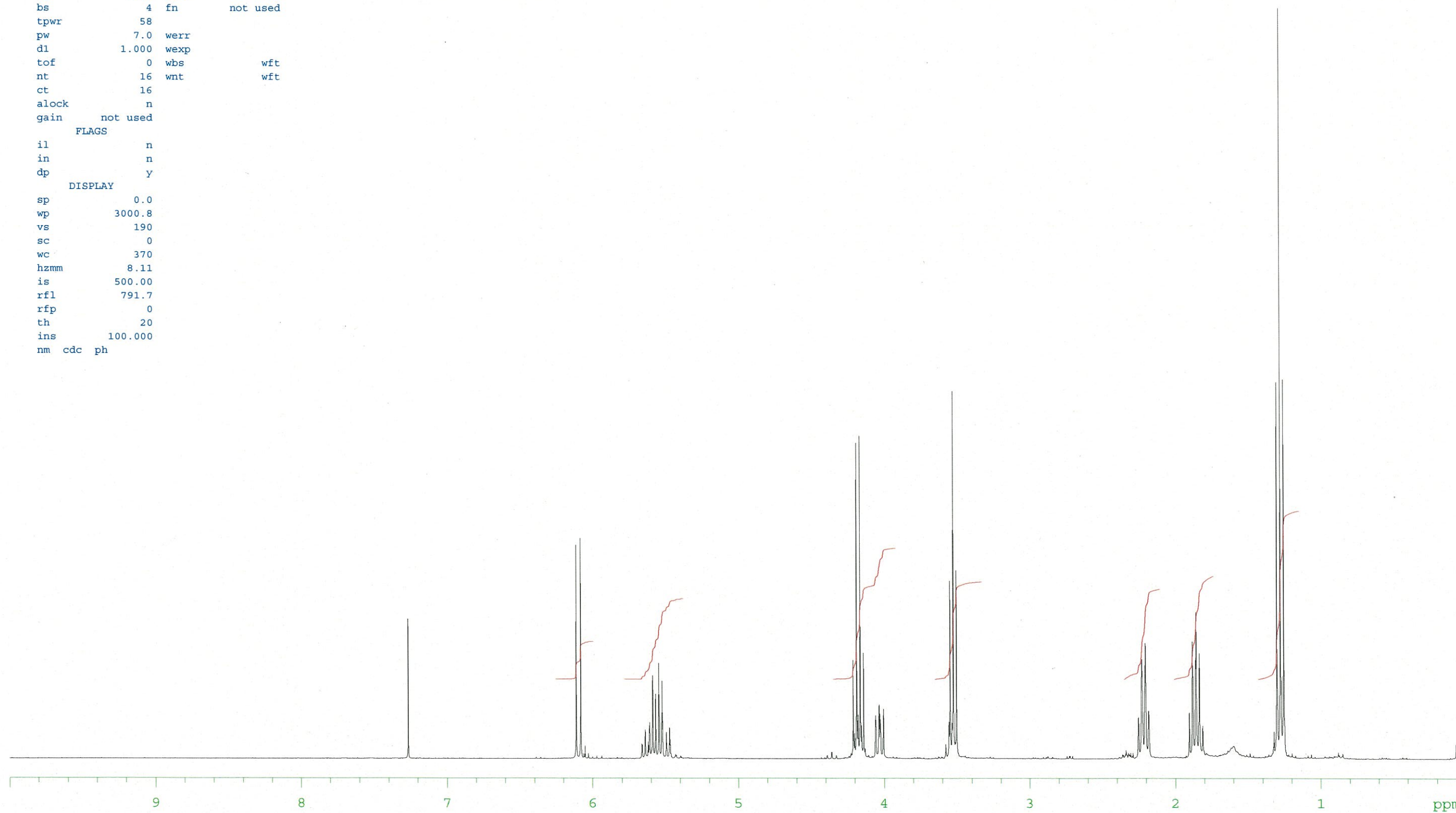
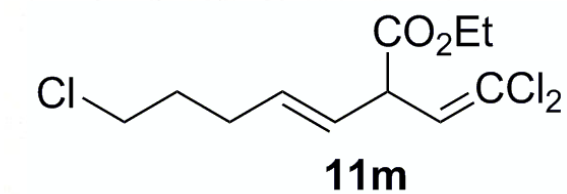
```
SAMPLE          DEC. & VT
date   Jul  8 2011  dfrq   299.961
solvent CDCl3      dn      H1
file    exp      dpwr    38
ACQUISITION      dof      0
sfrq    75.433   dm      YY
tn       C13     dmm      w
at       1.000   dmf     11100
np       37594   PROCESSING
sw       18797.0 lb      1.00
fb       not used wtfile
bs        32     proc      ft
tpwr     54     fn      not used
pw        4.0
dl        2.000 werr
tof        0     wexp
nt       1e+06   wbs      wft
ct        1152   wnt      wft
alock    not used
gain     not used
FLAGS
il        n
in        n
dp        y
DISPLAY
sp       -0.1
wp       15085.0
vs       207
sc        0
wc       370
hzmm     40.77
is       500.00
rfl     1838.6
rfp      0
th       20
ins     100.000
nm no ph
```



PTLC 2

exp4 stdlh

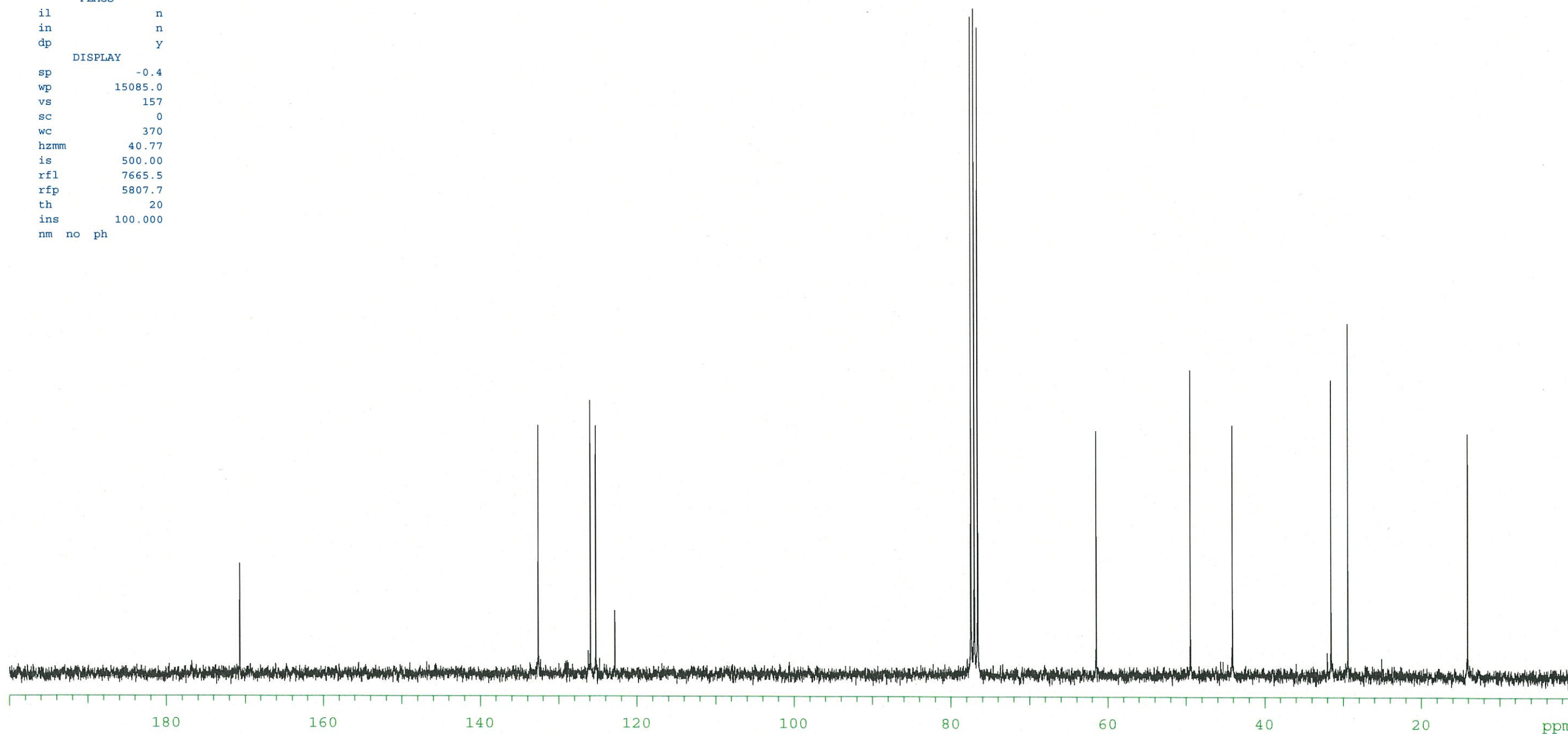
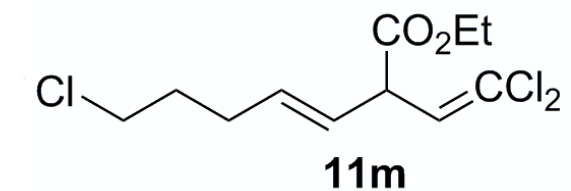
```
SAMPLE          DEC. & VT
date Nov 24 2014 dfrq      300.088
solvent CDCl3  dn         H1
file      exp  dpwr       30
ACQUISITION    dof        0
sfrq      300.088 dm       nnn
tn         H1  dmm        c
at         4.000 dmf       200
np        35988
sw        4498.4 wtfile
fb         2600 proc      ft
bs         4    fn       not used
tpwr       58
pw         7.0 werr
dl         1.000 wexp
tof         0    wbs      wft
nt         16    wnt      wft
ct         16
alock      n
gain      not used
FLAGS
il         n
in         n
dp         y
DISPLAY
sp         0.0
wp        3000.8
vs         190
sc         0
wc         370
hzmm       8.11
is         500.00
rfl        791.7
rfp         0
th         20
ins        100.000
nm cdc ph
```



PTLC 2

exp9 std13c

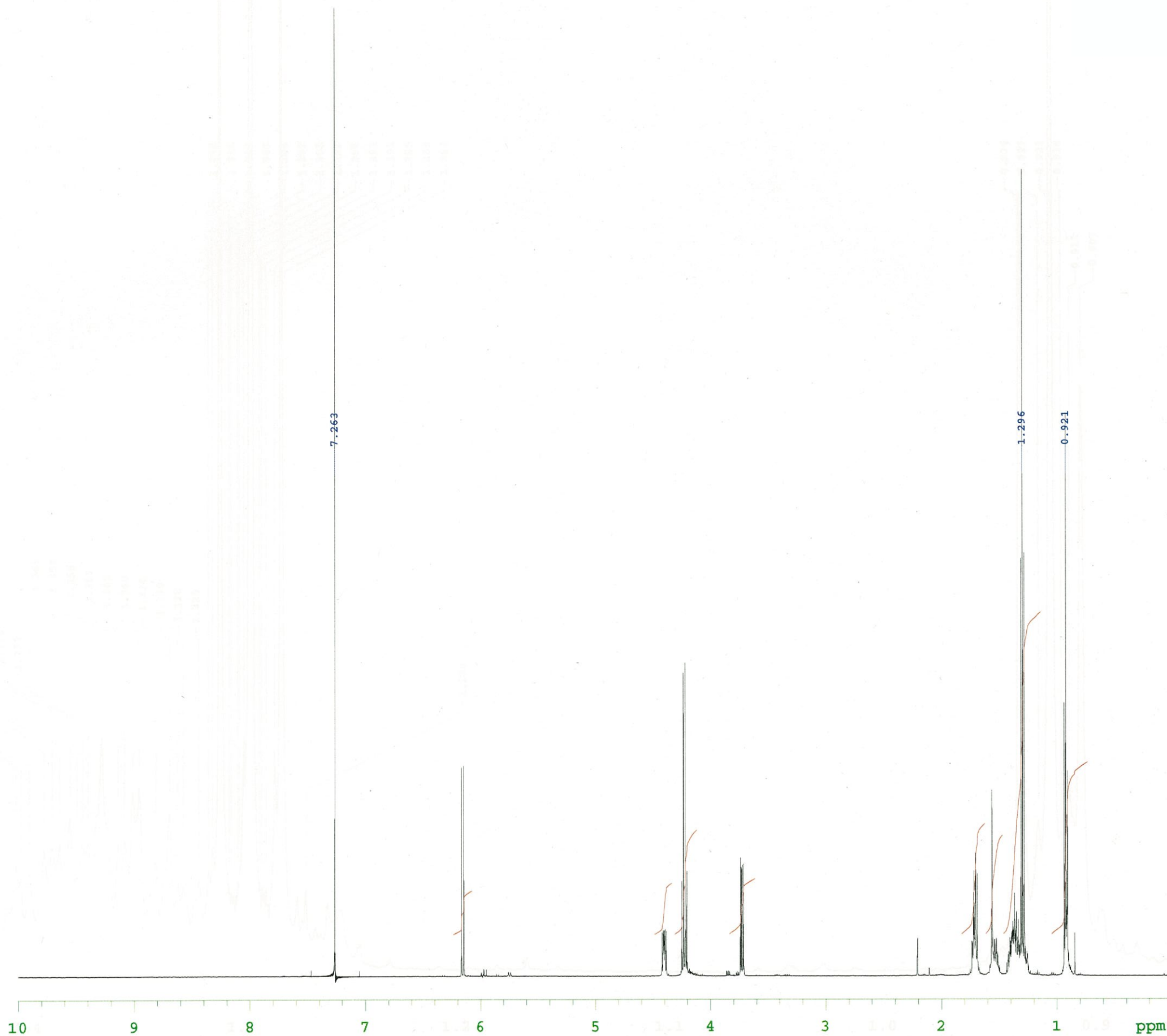
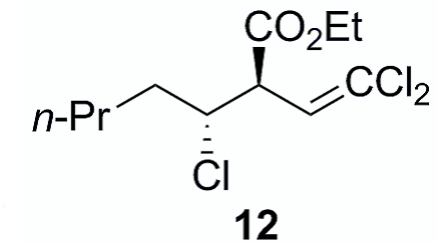
```
SAMPLE          DEC. & VT
date   Nov 24 2014  dfrq      299.961
solvent  CDCl3  dn          H1
file     exp    dpwr       38
ACQUISITION  dof          0
sfrq     75.433  dm         YY
tn       C13    dmm        w
at       1.000  dmf       11100
np       37594  PROCESSING
sw       18797.0 lb         1.00
fb       not used wtfile
bs       32    proc        ft
tpwr     54    fn         not used
pw       4.0
dl       2.000  werr
tof      0     wexp
nt      10000  wbs          wft
ct      1024  wnt          wft
alock    n
gain     not used
FLAGS
il       n
in       n
dp       Y
DISPLAY
sp       -0.4
wp      15085.0
vs       157
sc       0
wc       370
hzmm    40.77
is       500.00
rfl     7665.5
rfp     5807.7
th       20
ins     100.000
nm no ph
```



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H-1

exp25 s2pul

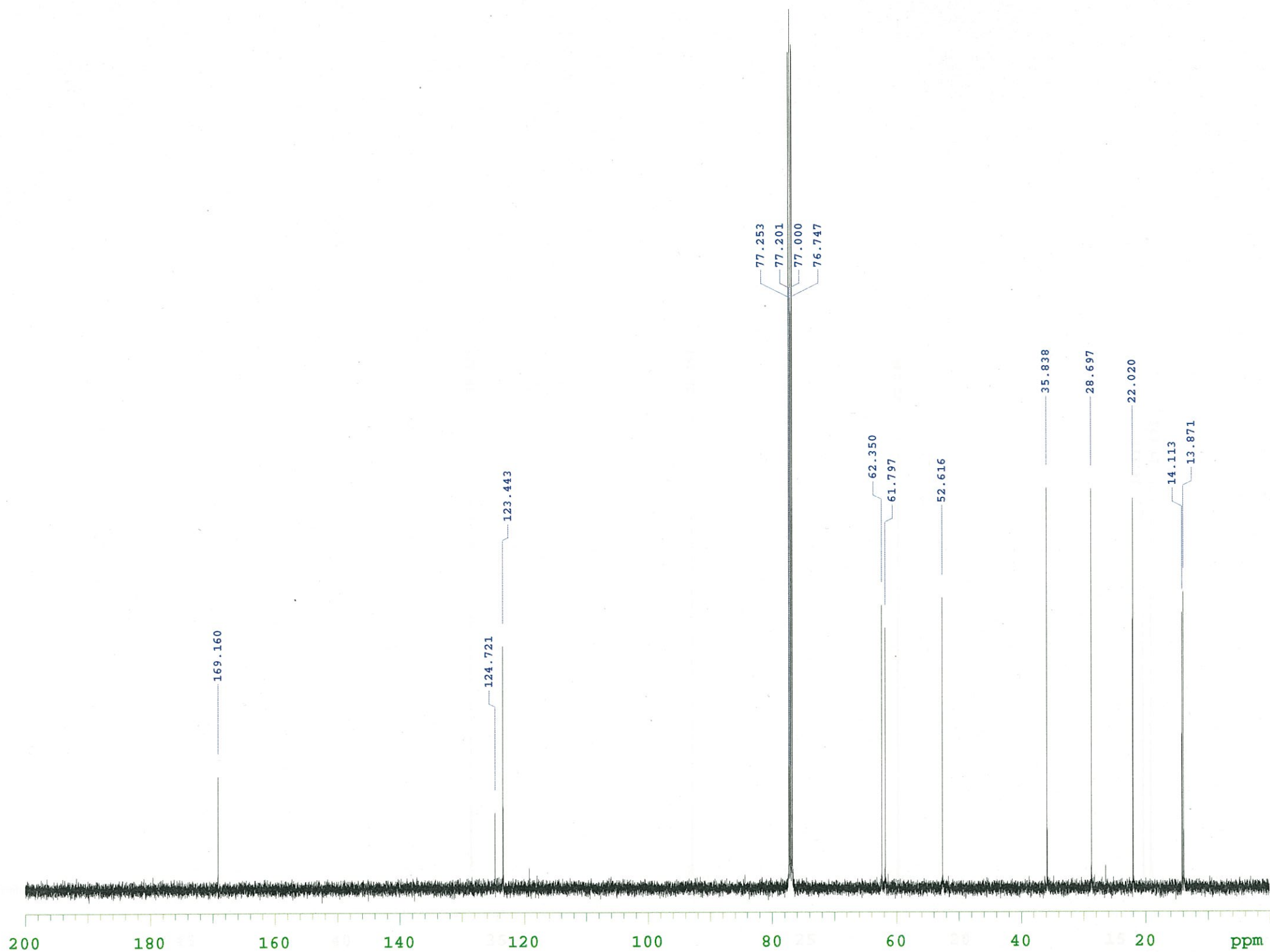
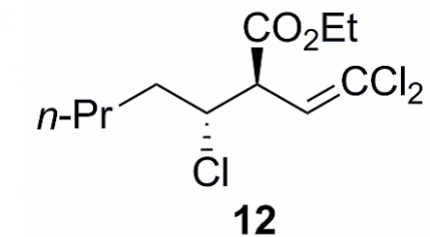
SAMPLE		SPECIAL	
date	Nov 21 2008	temp	not used
solvent	cdcl3	gain	30
file	exp	spin	16
ACQUISITION		hst	0.008
sw	8000.0	pw90	10.500
at	2.048	alfa	6.600
np	32768	FLAGS	
fb	not used	il	n
bs	32	in	n
ss	2	dp	y
d1	1.000	hs	nn
nt	4	PROCESSING	
ct	4	lb	0.20
TRANSMITTER		fn	65536
tn	H1	DISPLAY	
sfrq	499.830	sp	-0.0
tof	499.8	wp	4998.0
tpwr	58	rfl	1010.0
pw	5.250	rfp	0
DECOUPLER		rp	124.2
dn	C13	lp	3.9
dof	0	PLOT	
dm	nnn	wc	270
dmm	c	sc	0
dpwr	35	vs	81
dmf	31746	th	105
	ai	cdc	ph



KPNN-5010
C-13

exp26 Carbon

SAMPLE		SPECIAL	
date	Nov 21 2008	temp	not used
solvent	cdcl3	gain	30
file	exp	spin	16
ACQUISITION		hst	0.008
sw	30165.9	pw90	12.500
at	1.300	alfa	10.000
np	78460	FLAGS	
fb	not used	il	n
bs	16	in	n
d1	1.000	dp	Y
nt	3200	hs	nn
ct	656	PROCESSING	
TRANSMITTER	lb	0.50	
tn	C13	fn	not used
sfrq		DISPLAY	
tof	1255.3	sp	-0.2
tpwr	53	wp	25136.3
pw	6.250	rfl	11596.2
DECOUPLER		rfp	9677.5
dn	H1	rp	-26.2
dof	0	lp	-80.0
dm	YYY	PLOT	
dmm	w	wc	270
dpwr	39	sc	0
dmf	11136	vs	17828
		th	7
		ai	cdc ph

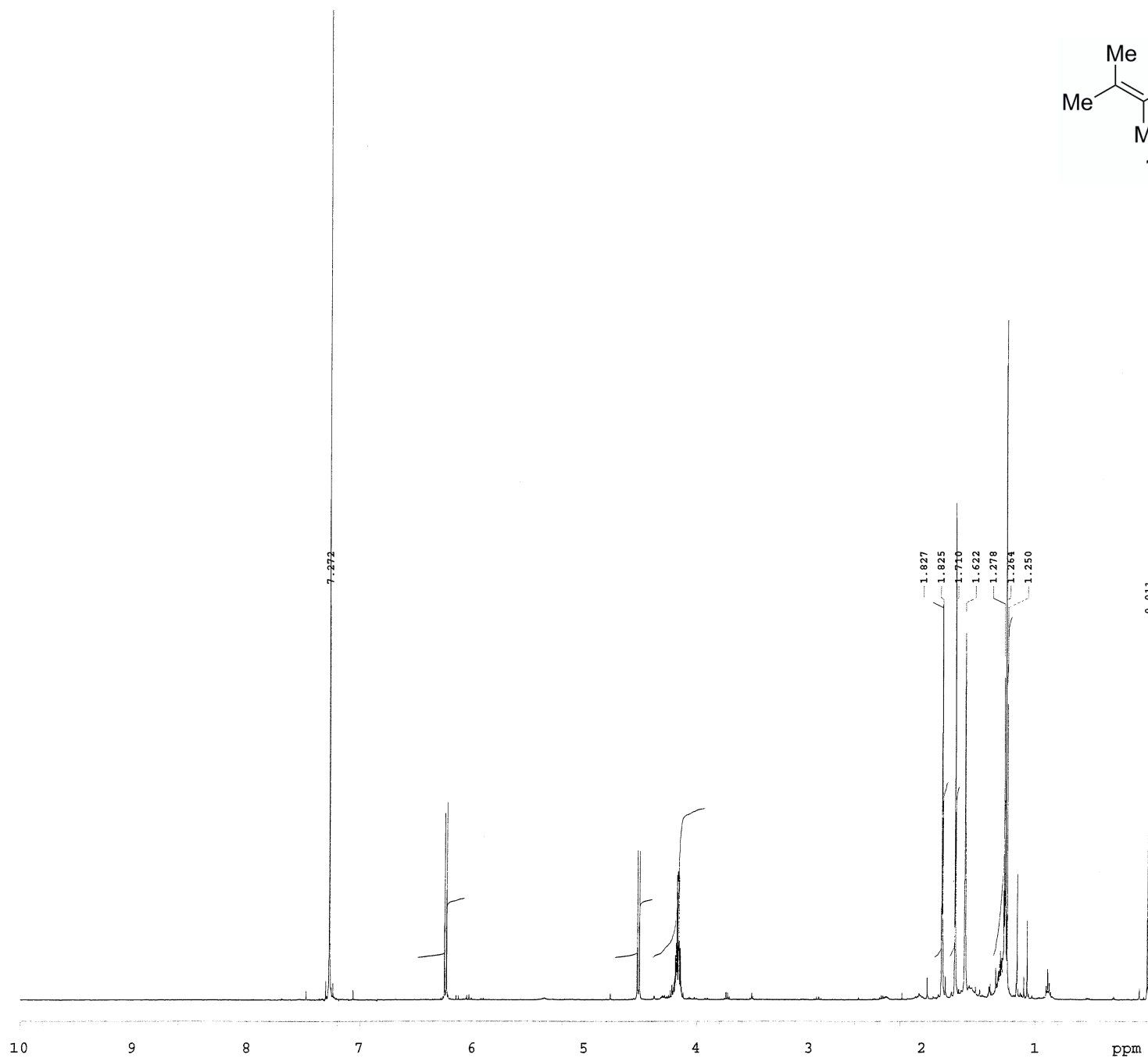
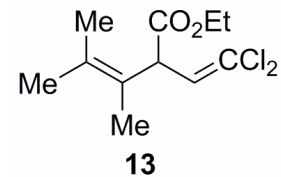


KPNN-5126

H-1

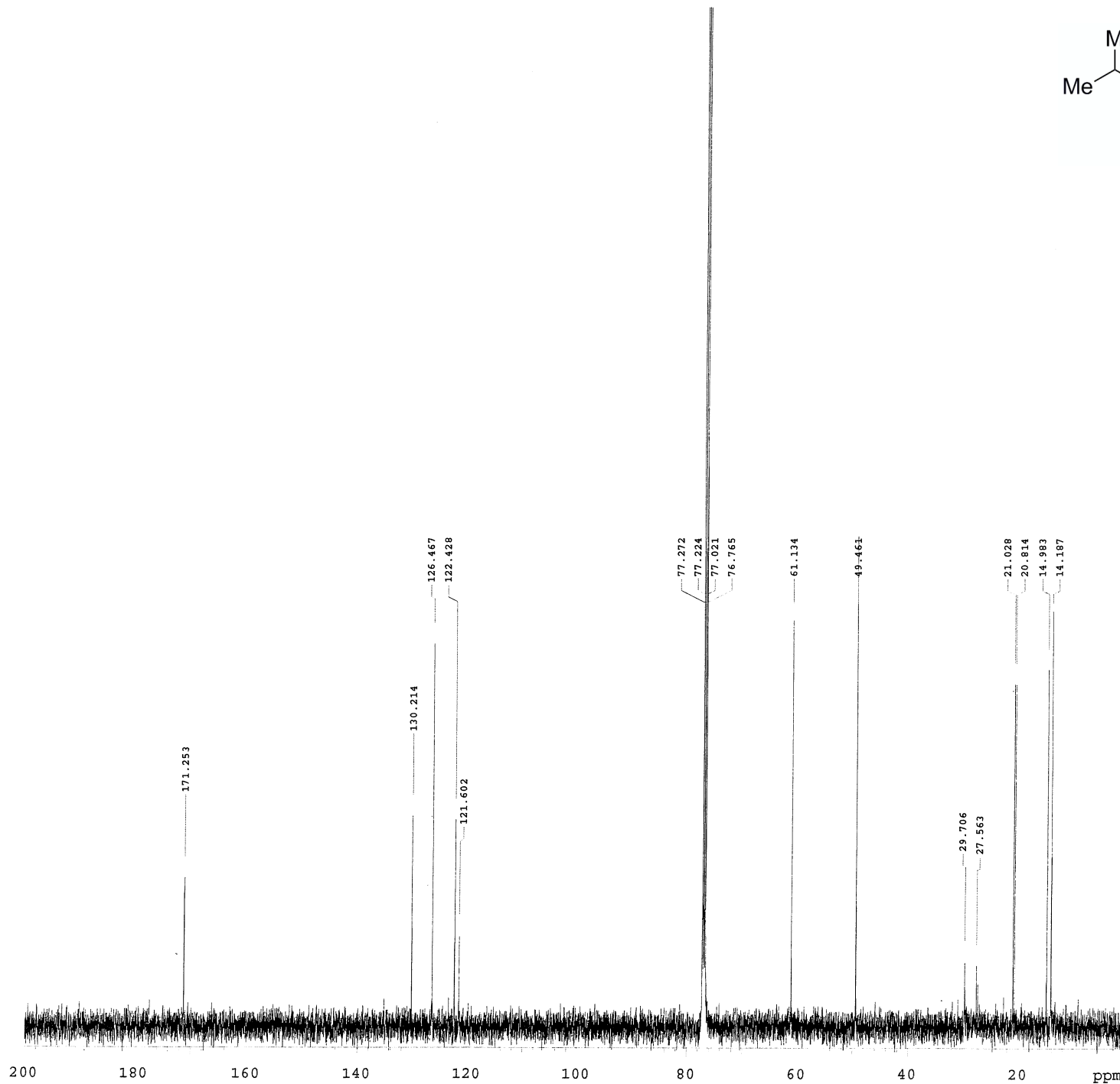
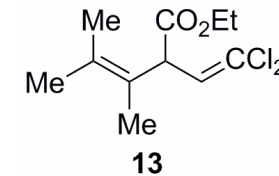
exp36 s2pul

SAMPLE		SPECIAL	
date	Dec 21 2009	temp	not used
solvent	cdc13	gain	40
file	exp	spin	16
ACQUISITION		hst	0.008
sw	8012.8	pw90	10.600
at	3.500	alfa	10.000
np	56090	FLAGS	
fb	4000	il	n
bs	32	in	n
d1	1.500	dp	Y
nt	4	hs	nn
ct	4	PROCESSING	
TRANSMITTER		lb	0.30
tn	H1	fn	not used
sfrq	499.732	DISPLAY	
tof	499.7	sp	-0.1
tpwr	59	wp	4997.3
pw	5.300	rfl	1008.0
DECOUPLER		rfp	0
dn	C13	rp	-145.0
dof	0	lp	3.5
dm	nnn	PLOT	
dmm	c	wc	270
dpwr	34	sc	0
dmf	32258	vs	126
		th	57
		ai	cdc ph



exp37 Carbon

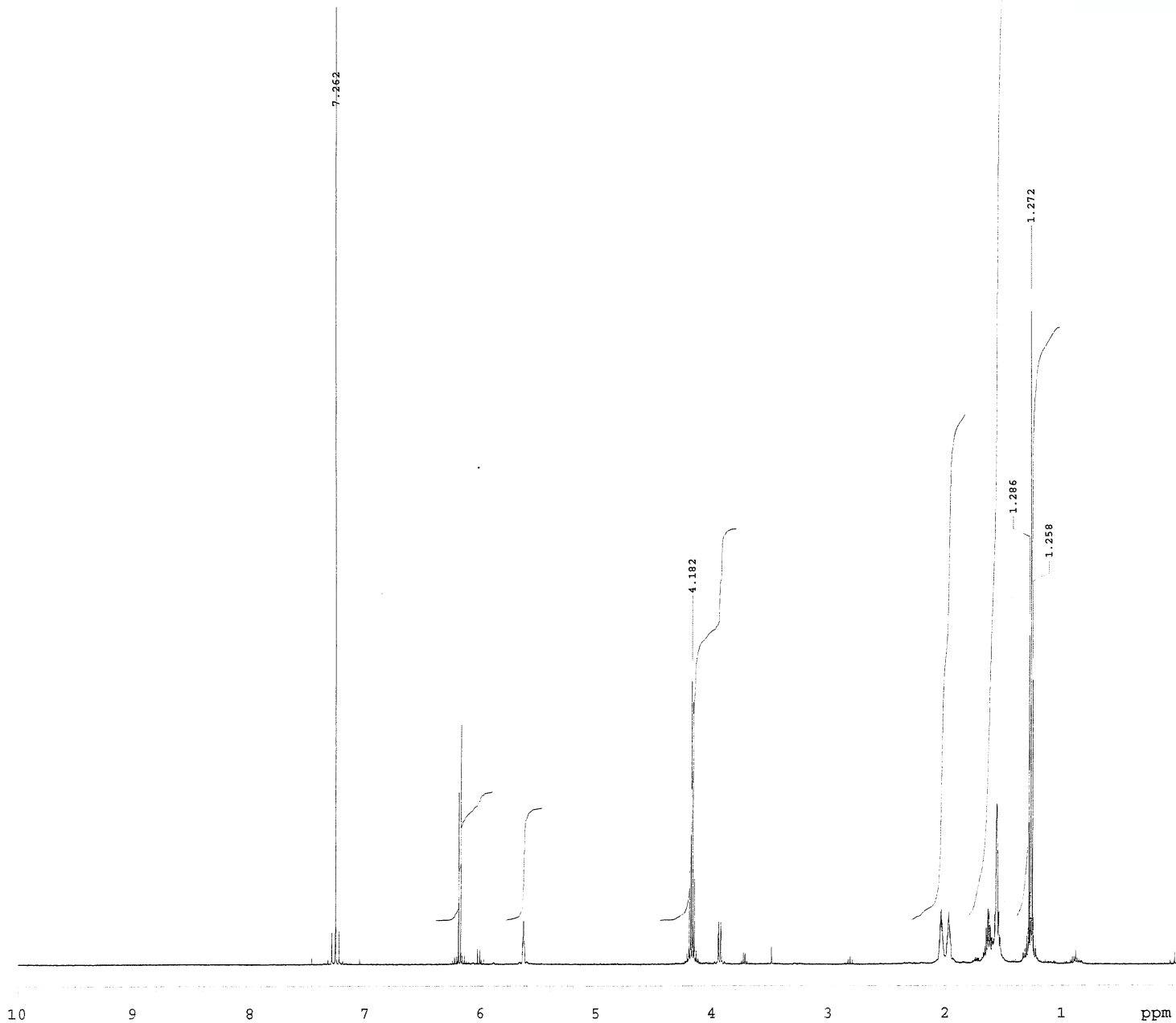
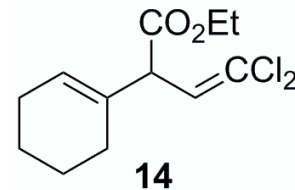
SAMPLE		SPECIAL	
date	Dec 21 2009	temp	not used
solvent	cdc13	gain	48
file	exp	spin	16
ACQUISITION		hst	0.008
sw	30487.8	pw90	8.900
at	1.300	alfa	10.000
np	79298	FLAGS	
fb	17000	il	n
bs	32	in	n
d1	1.000	dp	y
nt	3200	hs	nn
ct	928	PROCESSING	
TRANSMITTER		lb	1.00
tn	C13	fn	not used
sfrq	125.670	DISPLAY	
tof	1285.1	sp	0.0
tpwr	54	wp	25130.9
pw	4.450	rfl	2048.3
DECOUPLER		rfp	0
dn	H1	rp	56.4
dof	0	lp	60.1
dm	YYY	PLOT	
dmm	w	wc	270
dpwr	41	sc	0
dmf	11601	vs	51085
		th	15
		ai	cdc ph



KPNN5325
H-1

exp20 s2pu1

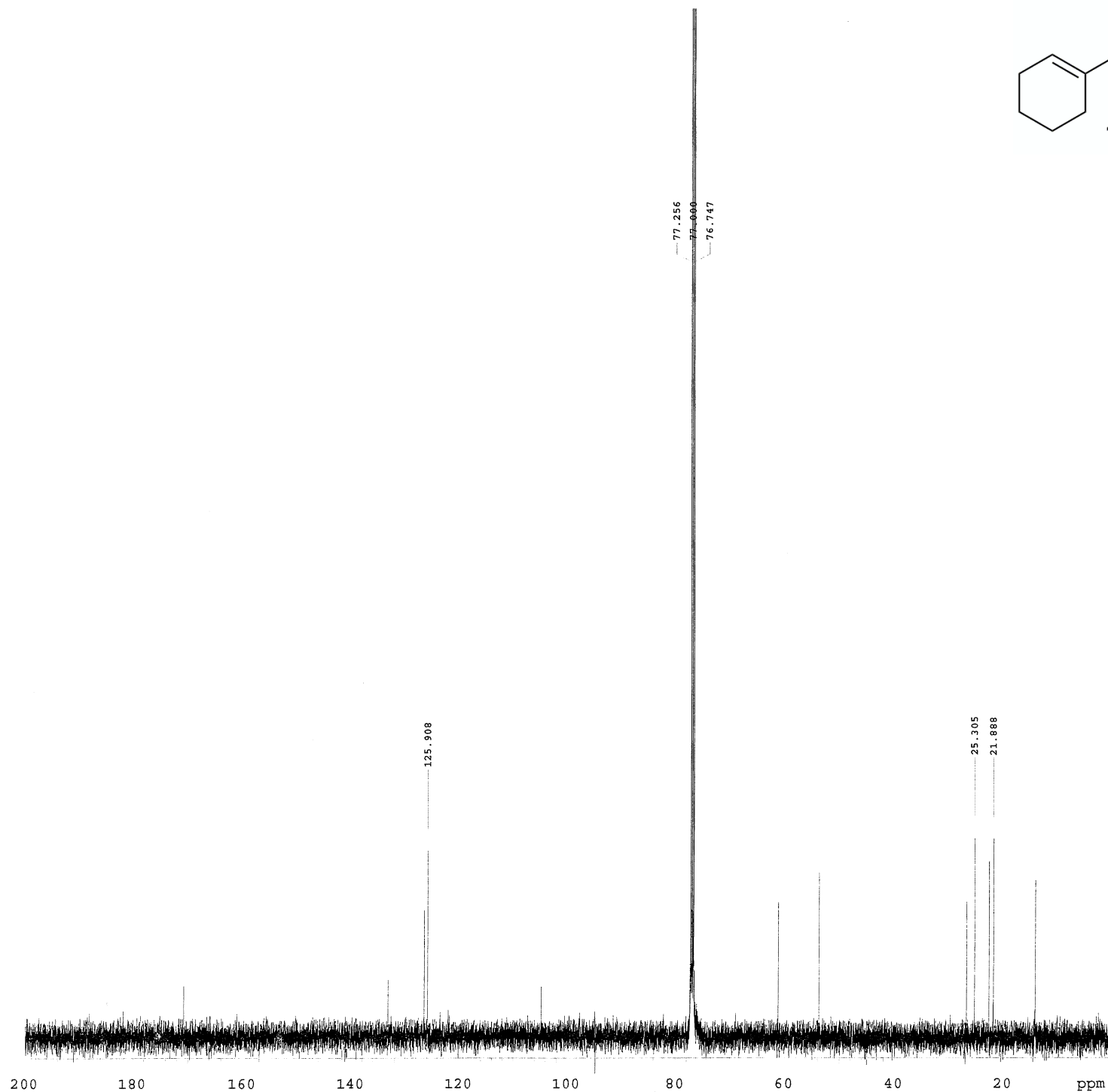
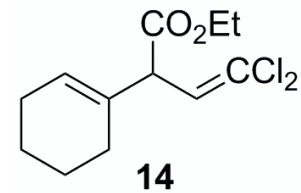
SAMPLE		SPECIAL	
date	Jun 7 2013	temp	not used
solvent	cdc13	gain	not used
file	exp	spin	16
ACQUISITION		FLAGS	
sw	7996.8	pw90	11.000
at	4.097	alfa	6.600
np	65530		
fb	4000	il	n
bs	32	in	n
ss	1	dp	y
d1	1.000	hs	nn
nt	8	PROCESSING	
ct	8	fn	65536
TRANSMITTER		DISPLAY	
tn	H1	sp	0.0
sfrq	499.828	wp	4998.2
tof	499.8	rfl	1005.2
tpwr	58	rfl	0
pw	5.500	rp	-161.1
DECOUPLER		PLOT	
dn	C13		
dof	0	wc	270
dm	nnn	sc	0
dmm	c	vs	54
dpwr	34	th	62
dmf	32258	ai	cdc ph



KPNN5325
C-13

exp21 Carbon

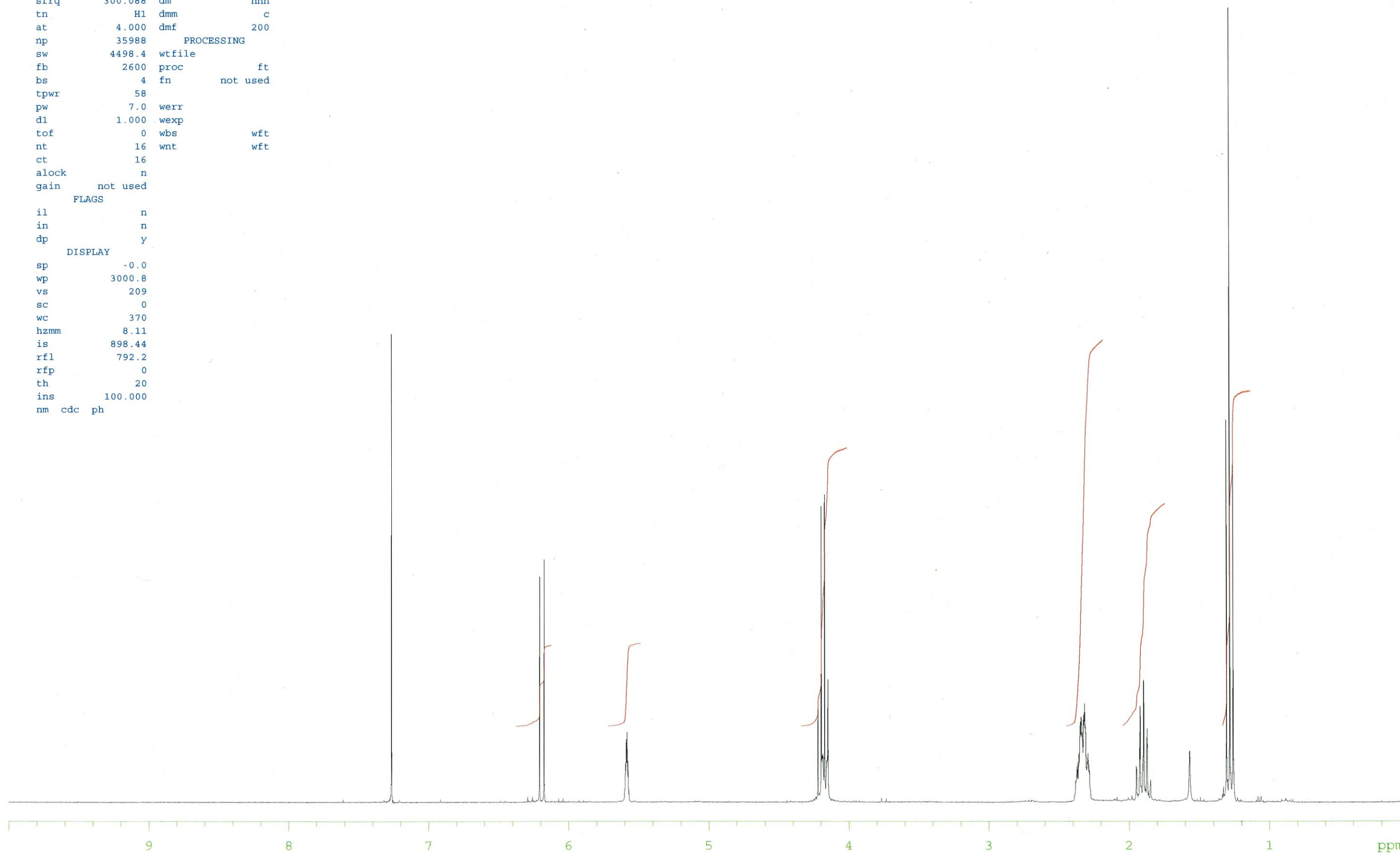
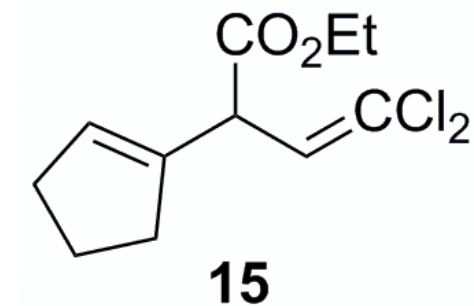
SAMPLE		SPECIAL	
date	Jun 7 2013	temp	not used
solvent	cdcl3	gain	not used
file	exp	spin	16
ACQUISITION		hst	0.008
sw	30165.9	pw90	13.000
at	1.300	alfa	10.000
np	78460	FLAGS	
fb	17000	i1	n
bs	32	in	n
d1	1.700	dp	y
nt	10000	hs	nn
ct	1184	PROCESSING	
TRANSMITTER		lb	0.50
tn	C13	fn	not used
sfrq	125.694	DISPLAY	
tof	1255.3	sp	-0.3
tpwr	53	wp	25135.8
pw	6.500	rfl	11593.5
DECOUPLER		rfl	9677.4
dn	H1	rp	58.7
dof	0	lp	-203.9
dm	YYY	PLOT	
dmm	w	wc	270
dpwr	39	sc	0
dmf	11200	vs	1878
		th	44
		ai	cdc ph



PTLC 3

exp4 stdlh

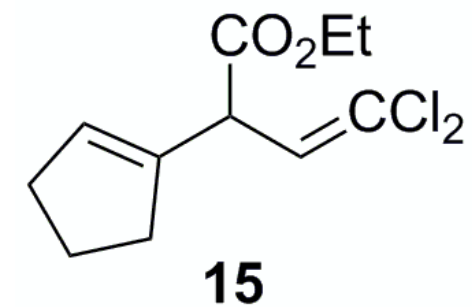
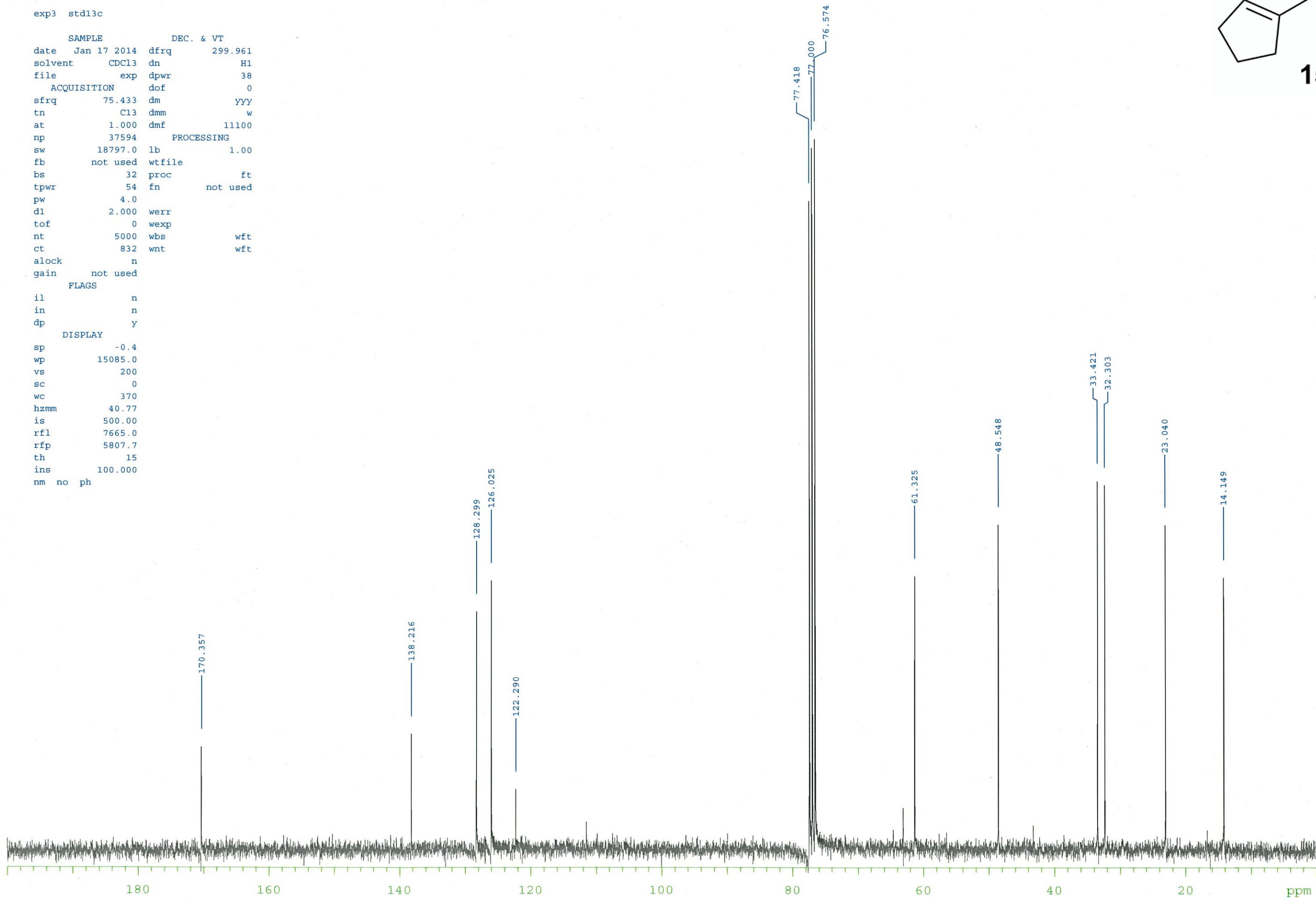
```
SAMPLE          DEC. & VT
date  Jan 16 2014  dfrq      300.088
solvent  CDC13  dn          H1
file     exp     dpwr       30
ACQUISITION      dof        0
sfrq     300.088  dm         nnn
tn        H1     dmm        c
at        4.000  dmf       200
np        35988  PROCESSING
sw        4498.4  wtfile
fb         2600  proc          ft
bs         4     fn         not used
tpwr       58
pw         7.0  werr
dl         1.000  wexp
tof         0    wbs         wft
nt         16   wnt         wft
ct         16
alock      n
gain     not used
FLAGS
il         n
in         n
dp         y
DISPLAY
sp        -0.0
wp       3000.8
vs         209
sc         0
wc         370
hzmm       8.11
is       898.44
rfl       792.2
rfp        0
th         20
ins      100.000
nm  cdc  ph
```



PTLC 3

exp3 std13c

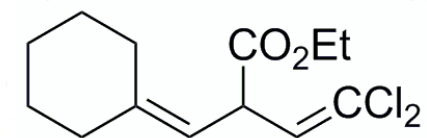
```
SAMPLE          DEC. & VT
date  Jan 17 2014  dfrq      299.961
solvent  CDCl3    dn         H1
file     exp      dpwr      38
ACQUISITION    dof         0
sfrq      75.433  dm         YYY
tn         C13    dmm        w
at         1.000  dmf       11100
np         37594  PROCESSING
sw         18797.0 lb         1.00
fb         not used wtfile
bs         32     proc        ft
tpwr      54     fn         not used
pw         4.0
dl         2.000  werr
tof        0     wexp
nt         5000  wbs
ct         832  wnt         wft
alock      n
gain       not used
FLAGS
il         n
in         n
dp         Y
DISPLAY
sp         -0.4
wp         15085.0
vs         200
sc         0
wc         370
hzmm      40.77
is         500.00
rfl       7665.0
rfp       5807.7
th         15
ins       100.000
nm no ph
```



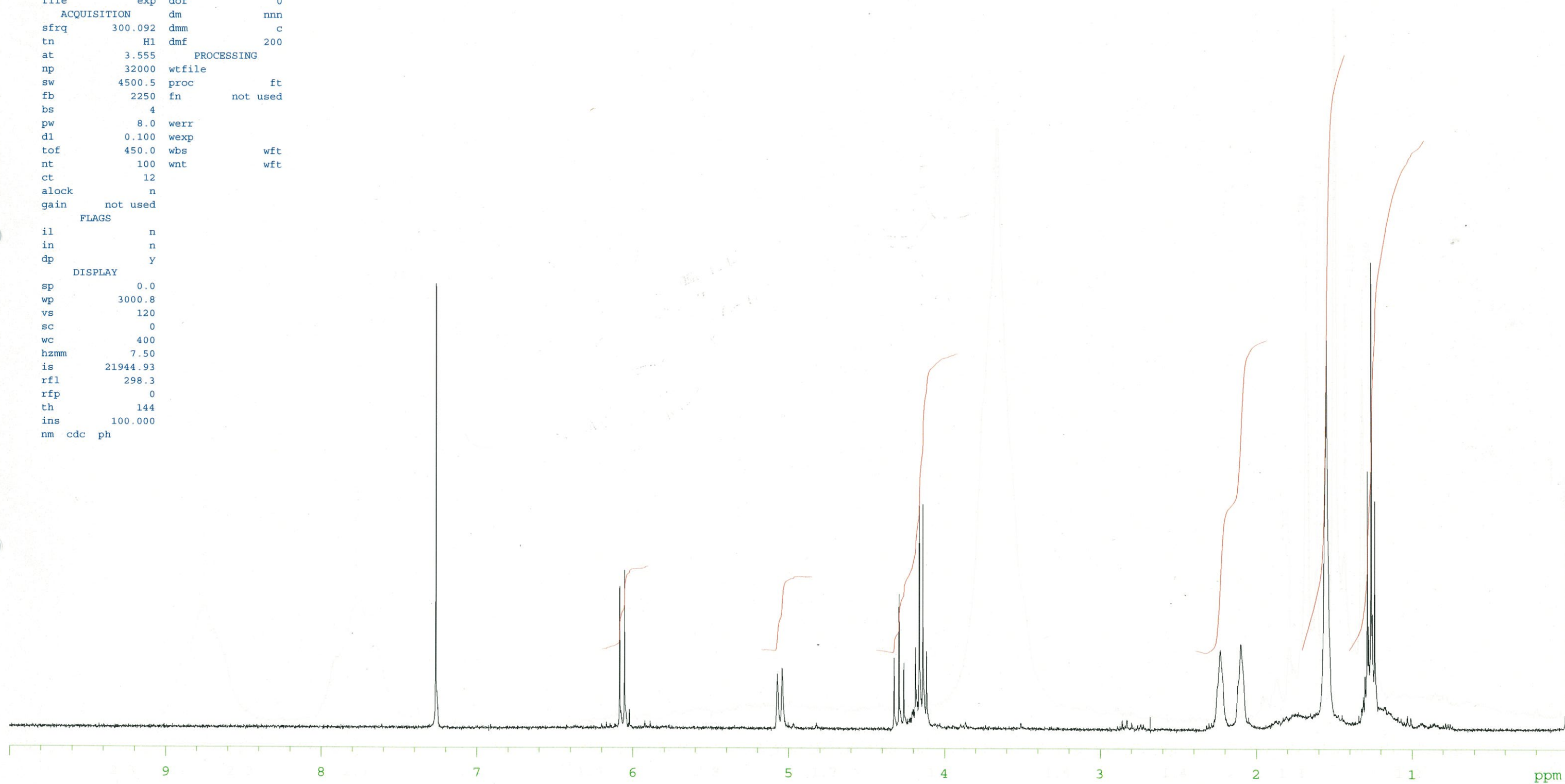
H-48
PTLC-1

expl stdih

```
SAMPLE          DEC. & VT
date Feb  8 2010 dfrq      300.092
solvent  CDCl3  dn         H1
file     exp    dof        0
ACQUISITION    dm         nnn
sfrq      300.092 dmm       c
tn        H1  dmf         200
at        3.555  PROCESSING
np        32000  wtfile
sw        4500.5 proc       ft
fb        2250  fn         not used
bs         4
pw         8.0  werr
dl         0.100 wexp
tof        450.0 wbs       wft
nt         100  wnt       wft
ct         12
alock     n
gain     not used
FLAGS
il        n
in        n
dp        Y
DISPLAY
sp         0.0
wp        3000.8
vs         120
sc         0
wc         400
hzmm      7.50
is        21944.93
rfl       298.3
rfp        0
th         144
ins       100.000
nm cdc ph
```



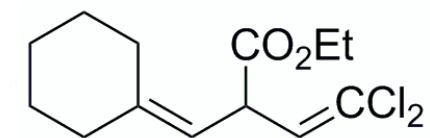
16



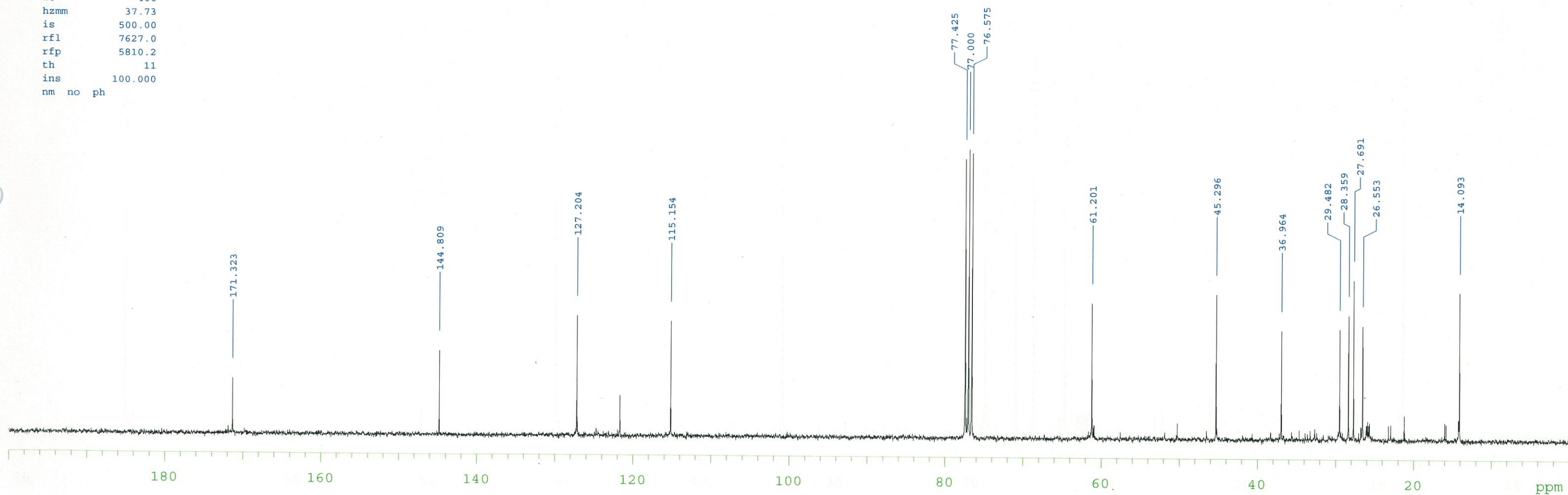
A-48
PTL01

exp2 std13c

SAMPLE		DEC. & VT	
date	Feb 17 2010	dfrq	300.092
solvent	CDC13	dn	H1
file	exp	dhp	0.5
ACQUISITION		dof	0
sfrq	75.465	dm	YYY
tn	C13	dmm	w
at	0.853	dmf	8800
np	32000	PROCESSING	
sw	18761.7	lb	1.00
fb	9500	wtfile	
bs	4	proc	ft
pw	7.3	fn	not used
d1	1.200		
tof	0	werr	
nt	20000	wexp	
ct	1148	wbs	wft
alock	n	wnt	wft
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
DISPLAY			
sp	-0.5		
wp	15091.4		
vs	74		
sc	0		
wc	400		
hzmm	37.73		
is	500.00		
rfl	7627.0		
rfp	5810.2		
th	11		
ins	100.000		
nm	no	ph	



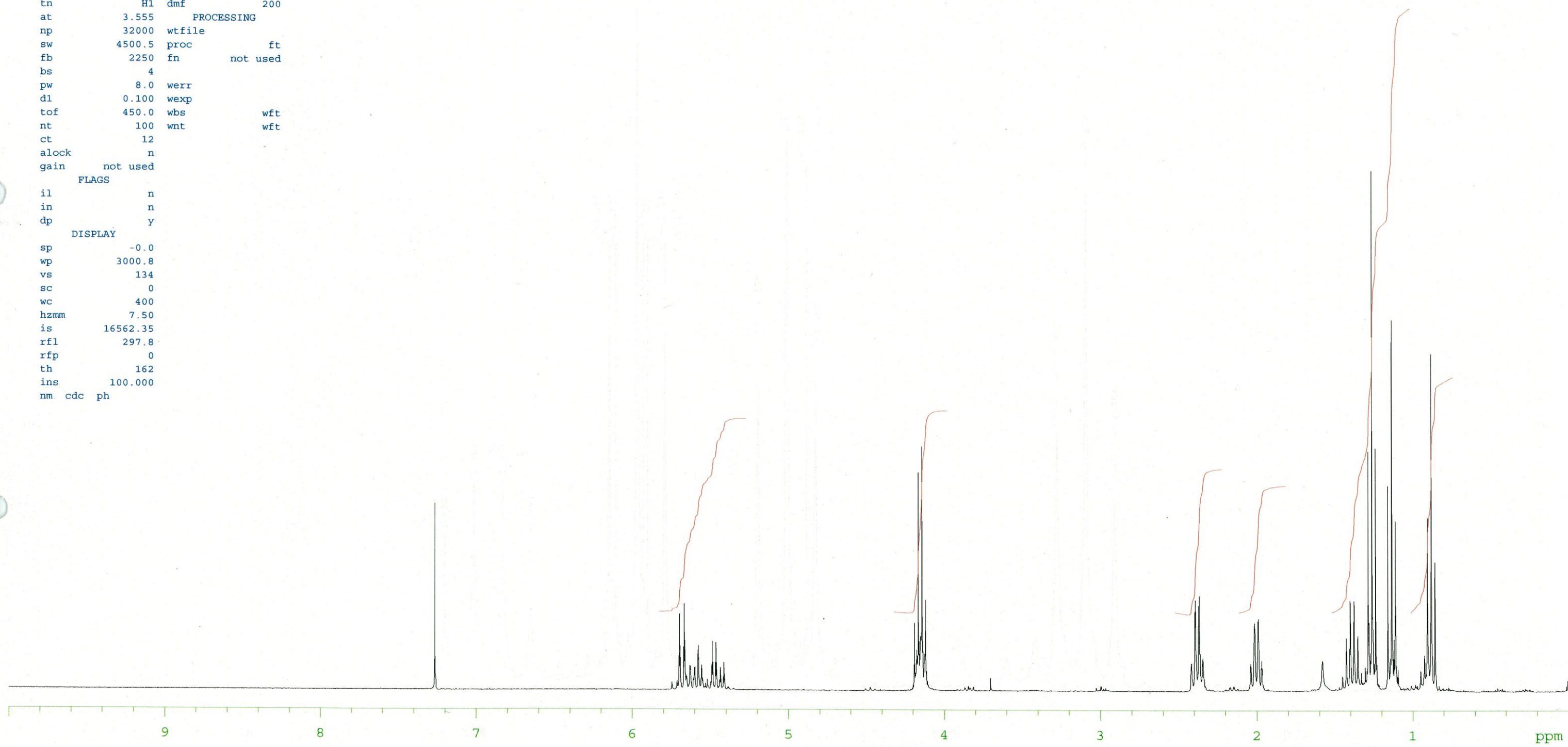
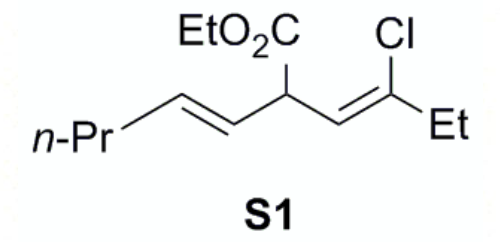
16



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PTLC-1

exp2 stdlh

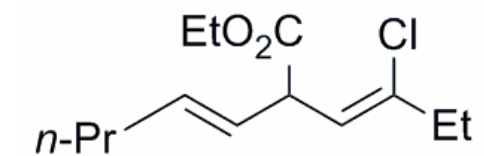
```
SAMPLE          DEC. & VT
date Sep 17 2009 dfrq 300.092
solvent CDC13    dn      H1
file exp         dof     0
ACQUISITION     dm      nnn
sfrq 300.092    dmm     c
tn H1          dmf     200
at 3.555       PROCESSING
np 32000       wfile
sw 4500.5     proc      ft
fb 2250       fn      not used
bs 4
pw 8.0        werr
d1 0.100     wexp
tof 450.0     wbs      wft
nt 100       wnt      wft
ct 12
alock n
gain not used
FLAGS
il n
in n
dp y
DISPLAY
sp -0.0
wp 3000.8
vs 134
sc 0
wc 400
hzmm 7.50
is 16562.35
rfl 297.8
rfp 0
th 162
ins 100.000
nm cdc ph
```



KPNN-5107
C-13

exp24 Carbon

SAMPLE		SPECIAL	
date	Sep 18 2009	temp	not used
solvent	cdcl3	gain	30
file	exp	spin	16
ACQUISITION		hst	0.008
sw	30165.9	pw90	12.500
at	1.300	alfa	10.000
np	78460	FLAGS	
fb	not used	il	n
bs	32	in	n
d1	1.000	dp	y
nt	5120	hs	nn
ct	320	PROCESSING	
TRANSMITTER		lb	1.00
tn	C13	fn	not used
sfrq	125.695	DISPLAY	
tof	1255.3	sp	-0.0
tpwr	53	wp	25135.8
pw	6.250	rfl	1585.3
DECOUPLER		rfl	0
dn	H1	rp	96.3
dof	0	lp	-174.2
dm	YYY	PLOT	
dmm	w	wc	270
dpwr	39	sc	0
dmf	11136	vs	26647
		th	28
		ai	cdc ph



S1

