

Supplementary Information

Late-stage divergent synthesis and antifouling activity of geraniol–butenolide hybrid molecules

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^b Himeji EcoTech Co., Ltd., 841-49 Koh, Shirahama-cho, Himeji 672-8023, Japan

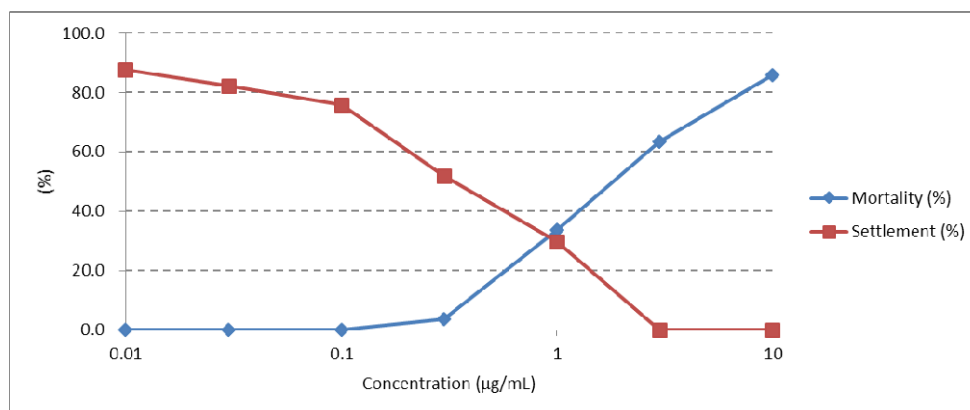
E-mail: takamura@cc.okayama-u.ac.jp

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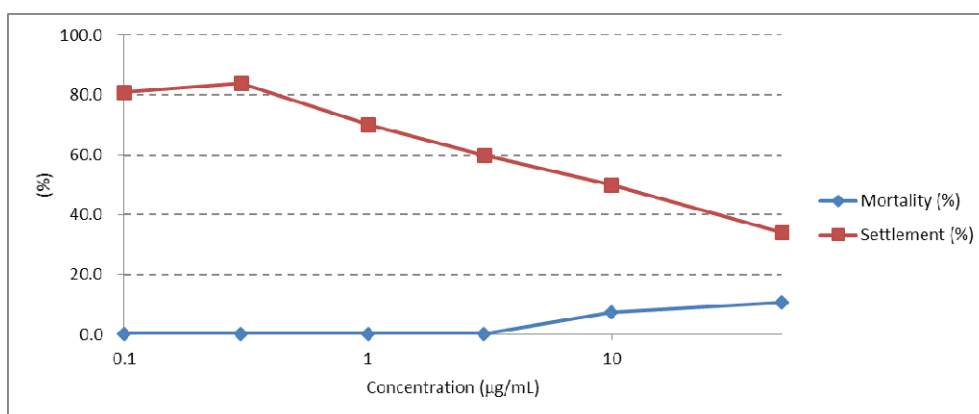
Effects of CuSO ₄ , Geraniol (1), and Geraniol–Butenolide Hybrid Molecules on Settlement and Mortality of Cypris Larvae after 96 h Exposure (Figure S1)	S2–S5
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Figure S1. Effects of CuSO₄, geraniol (**1**), and geraniol–butenolide hybrid molecules on settlement and mortality of cypris larvae after 96 h exposure.

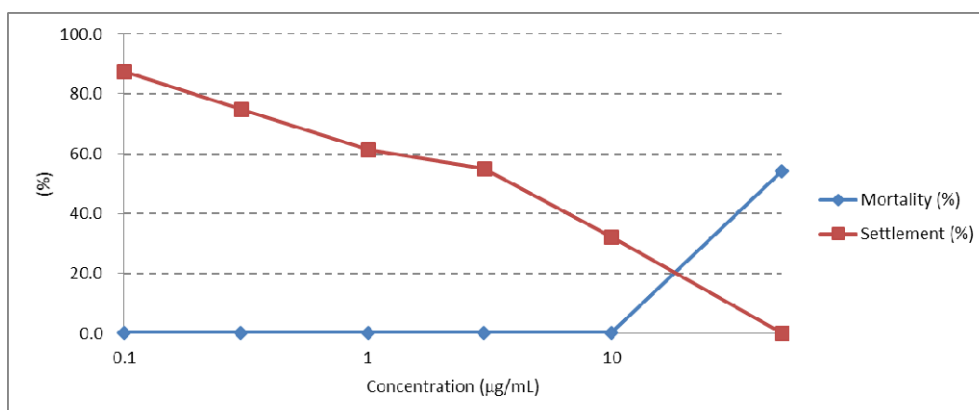
CuSO₄



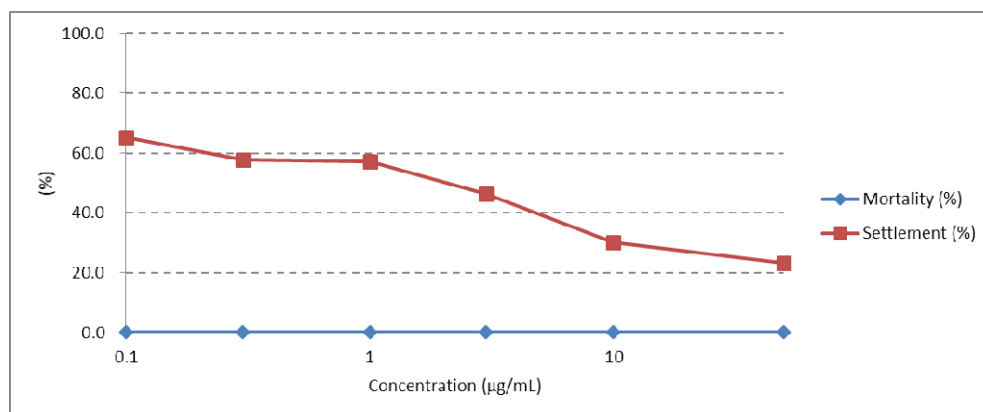
geraniol (**1**)



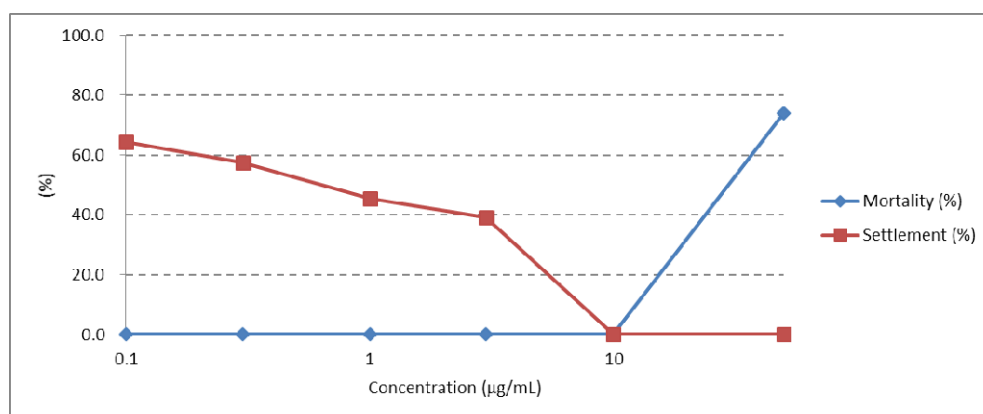
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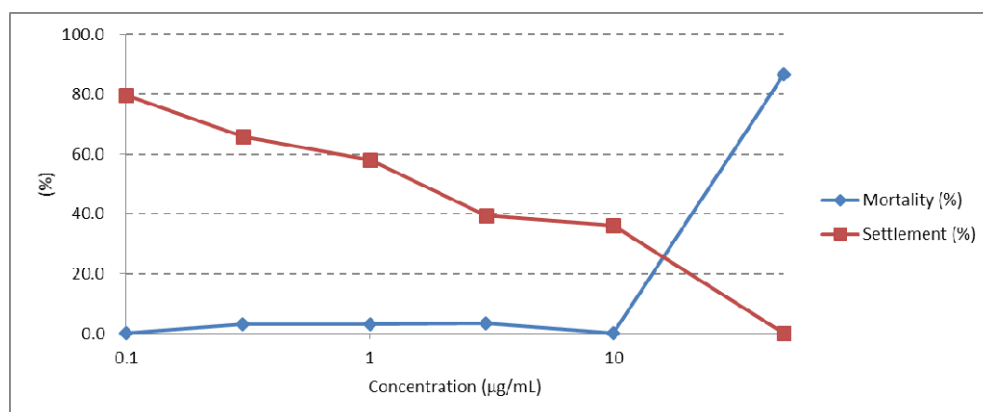
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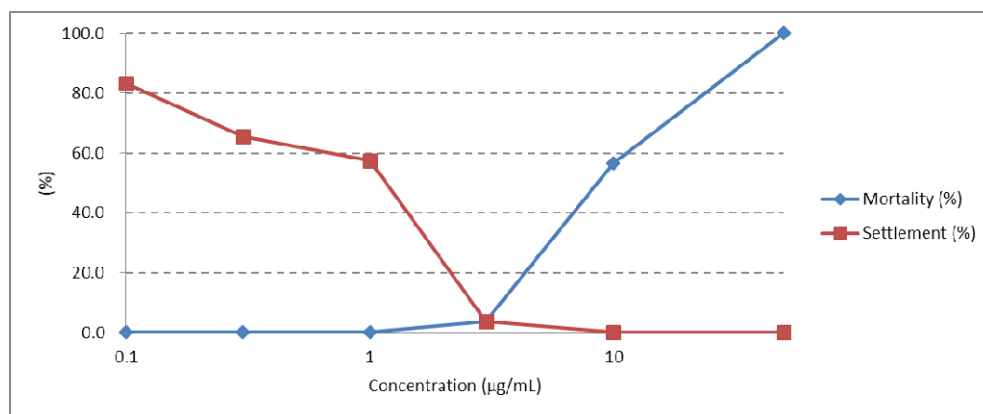
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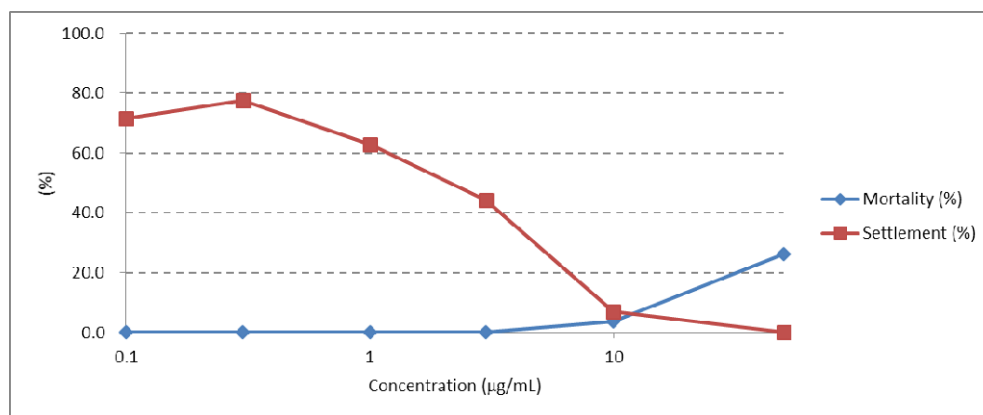
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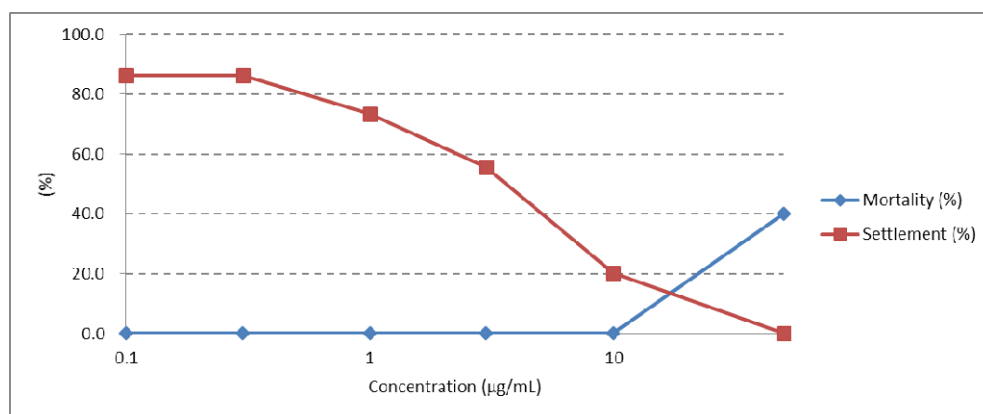
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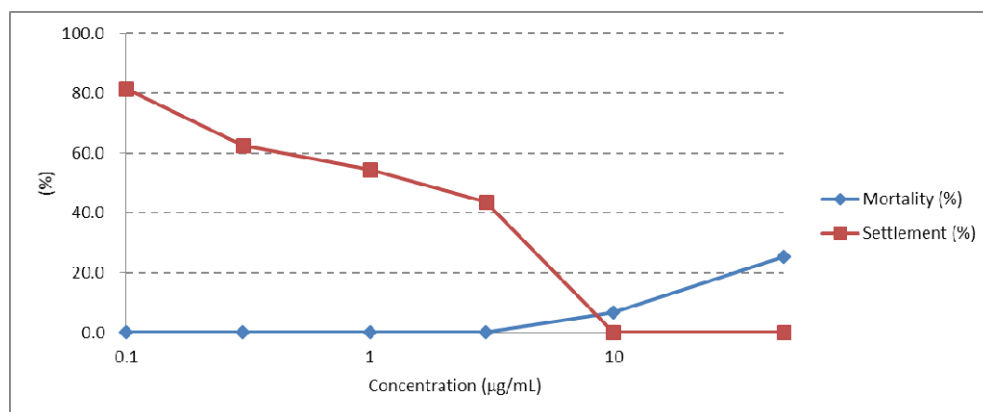
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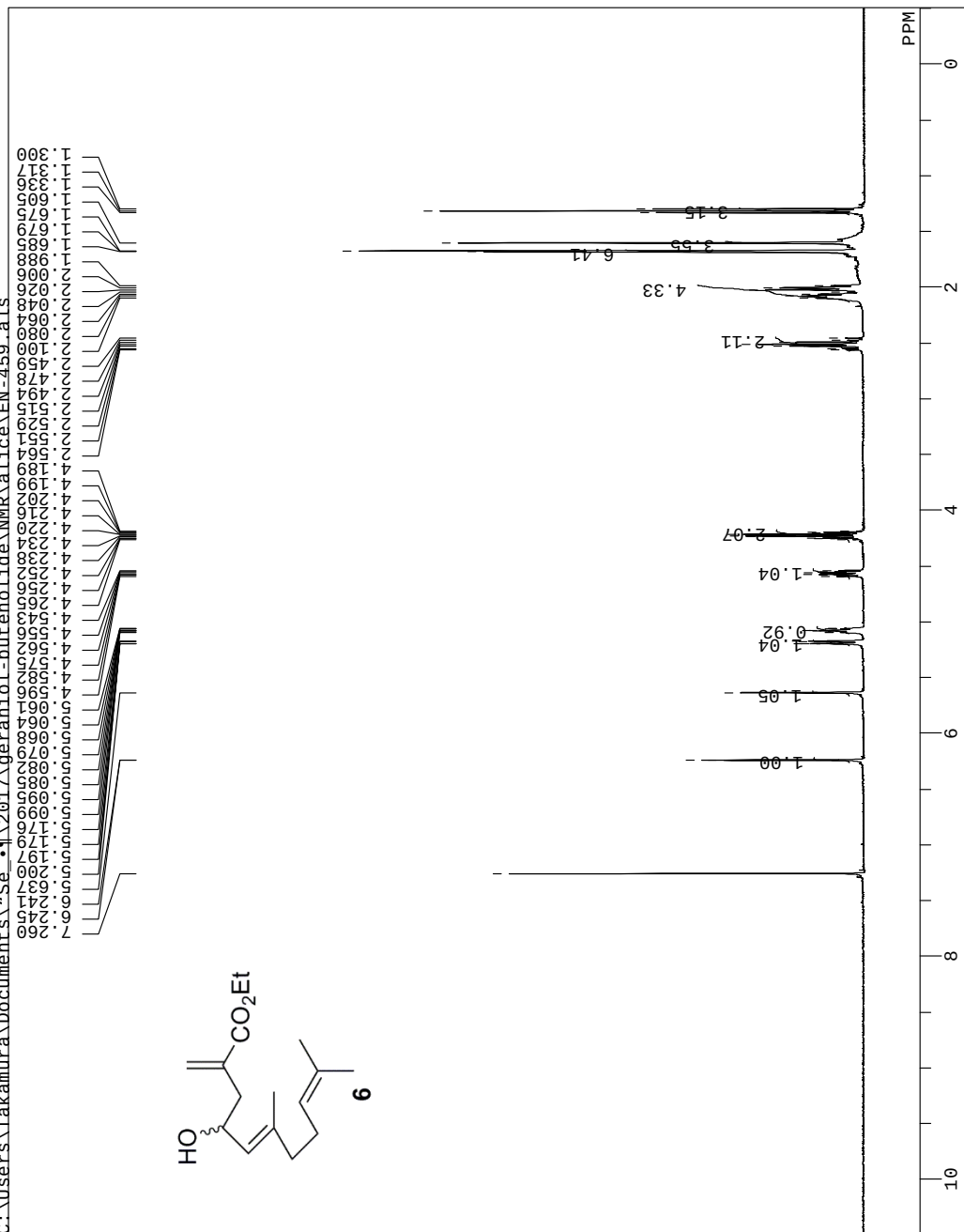
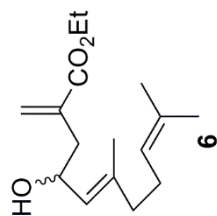


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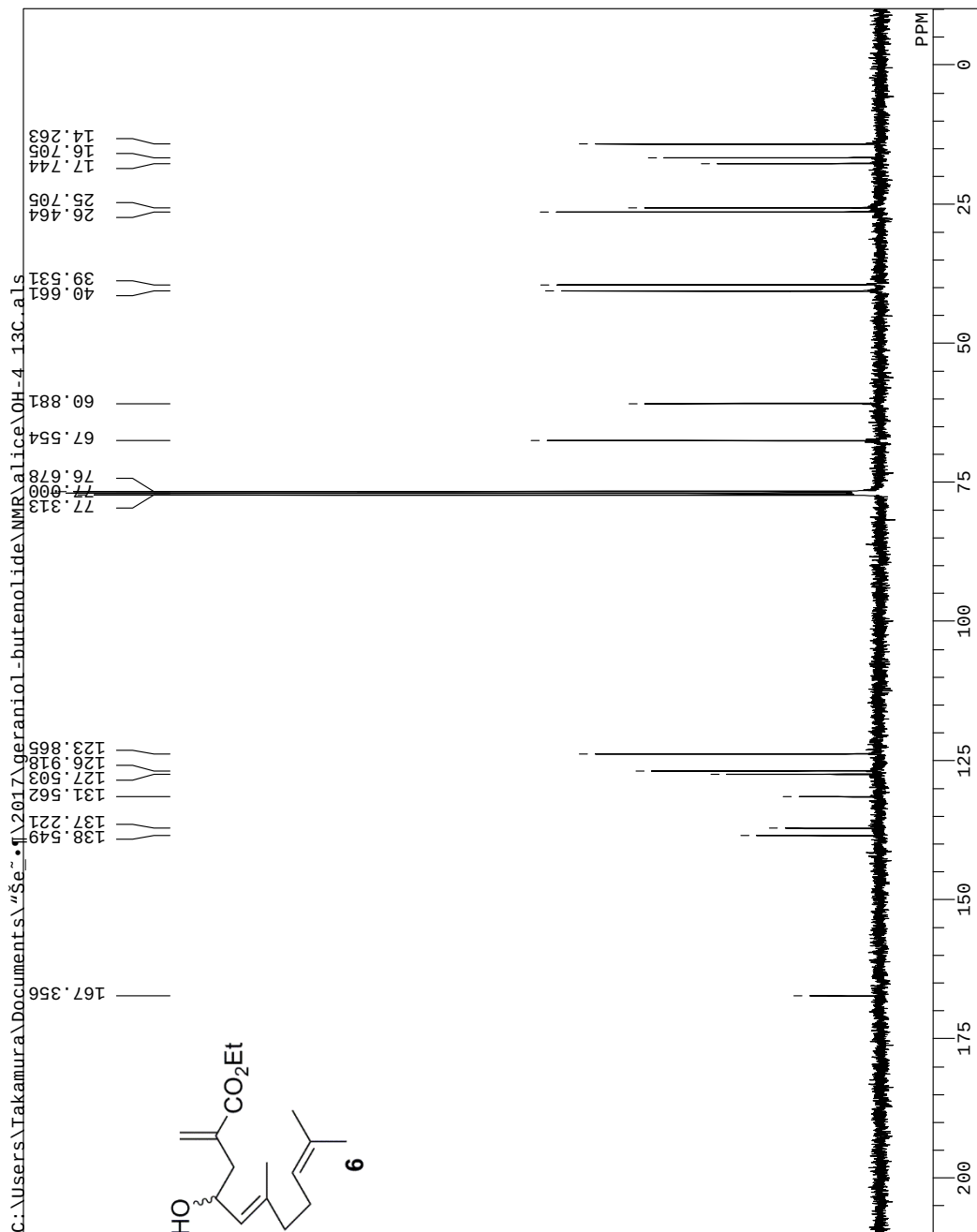
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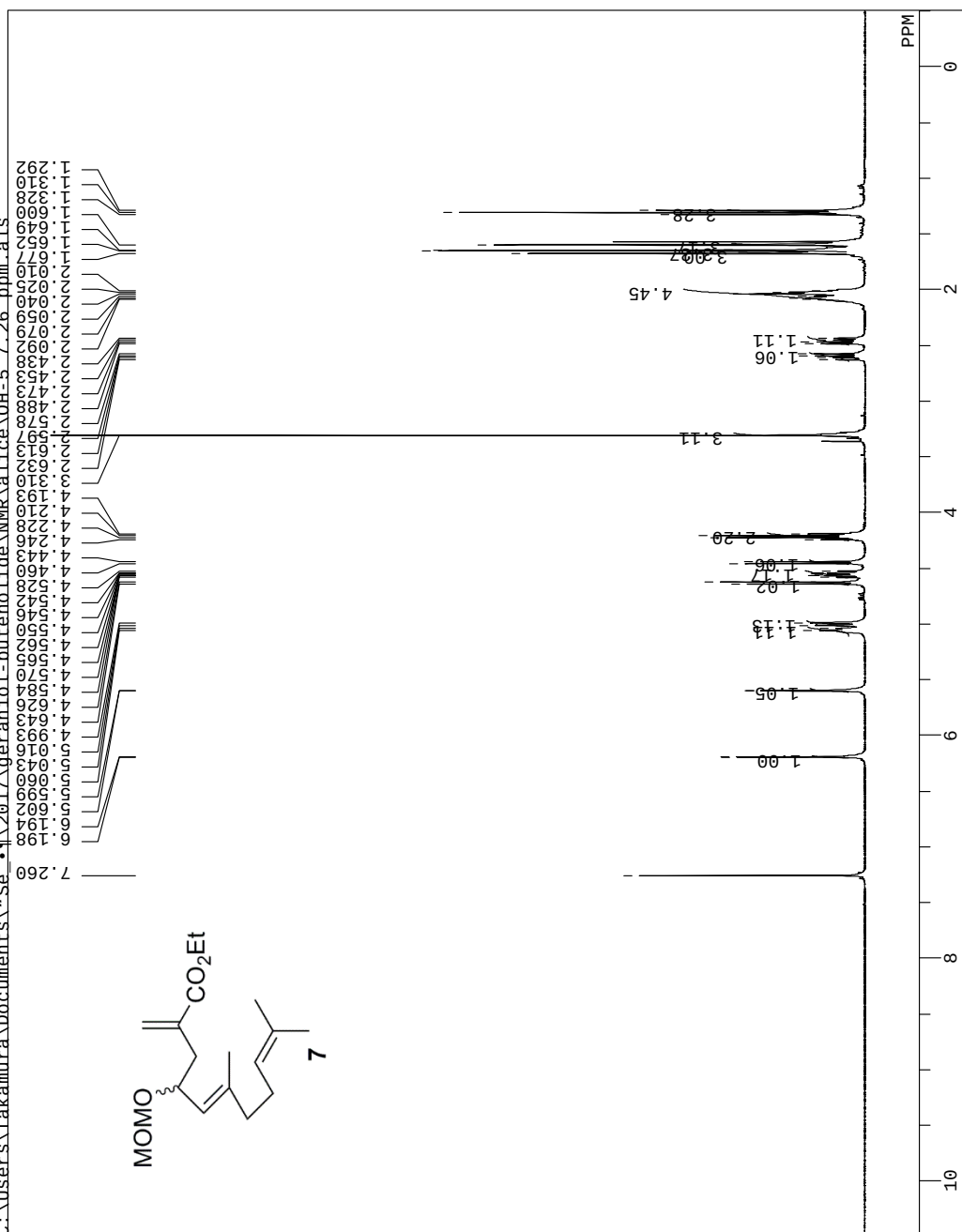
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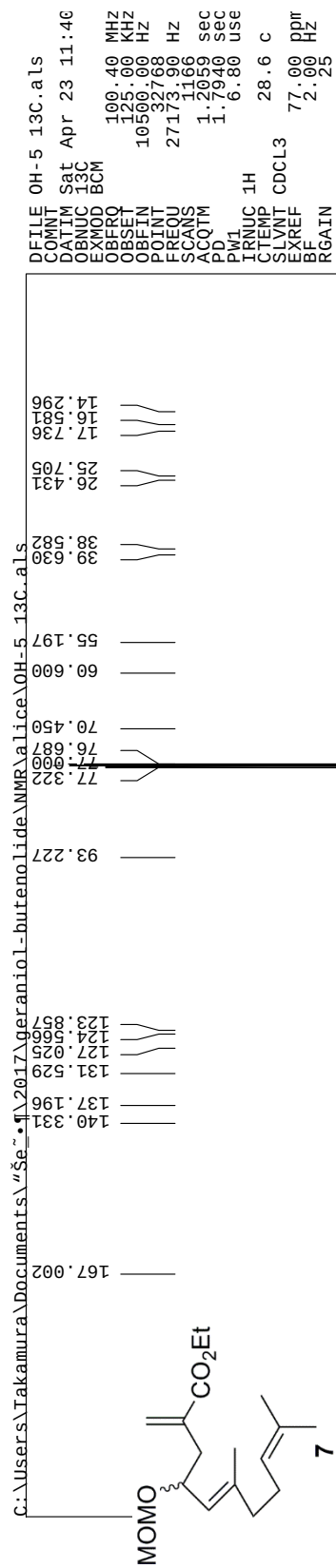


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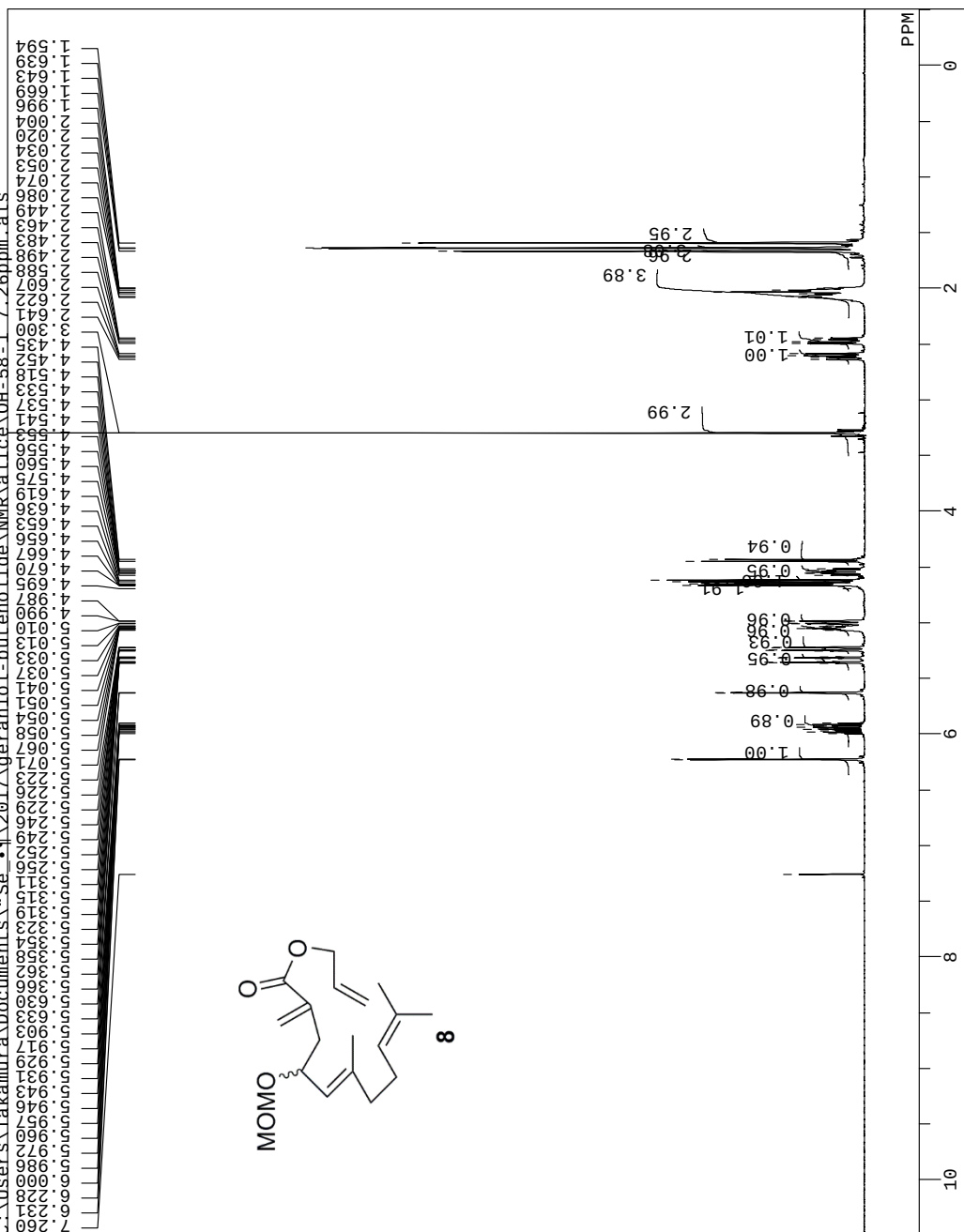


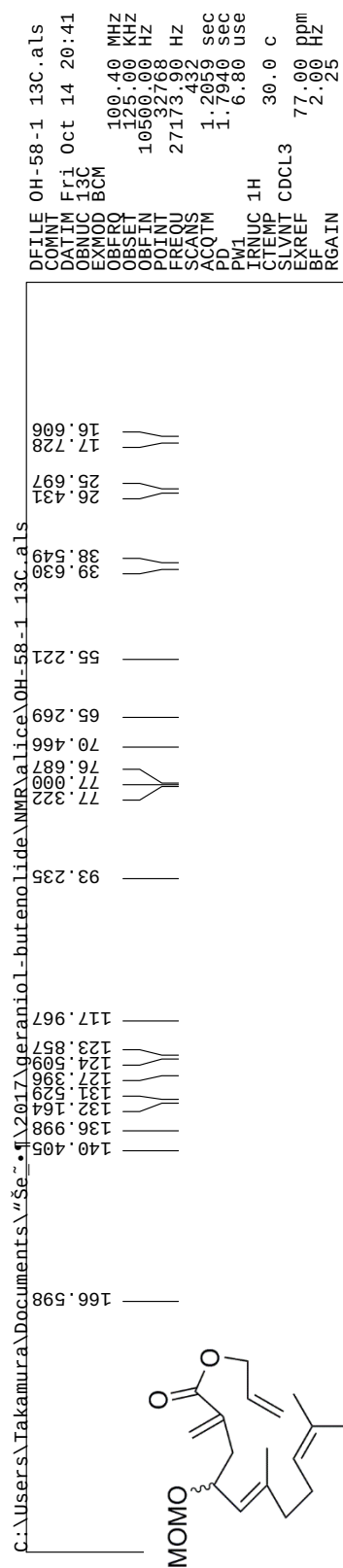
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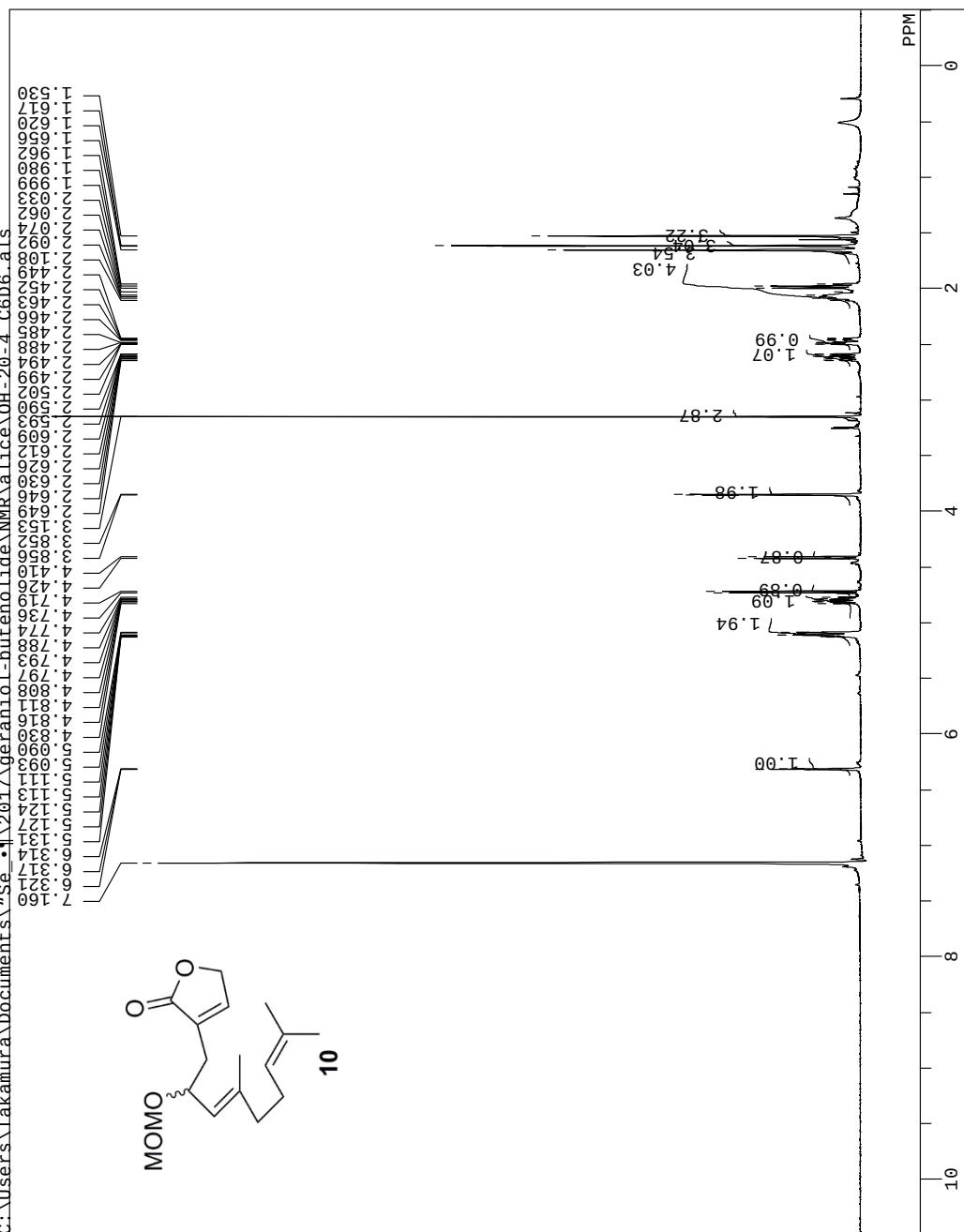
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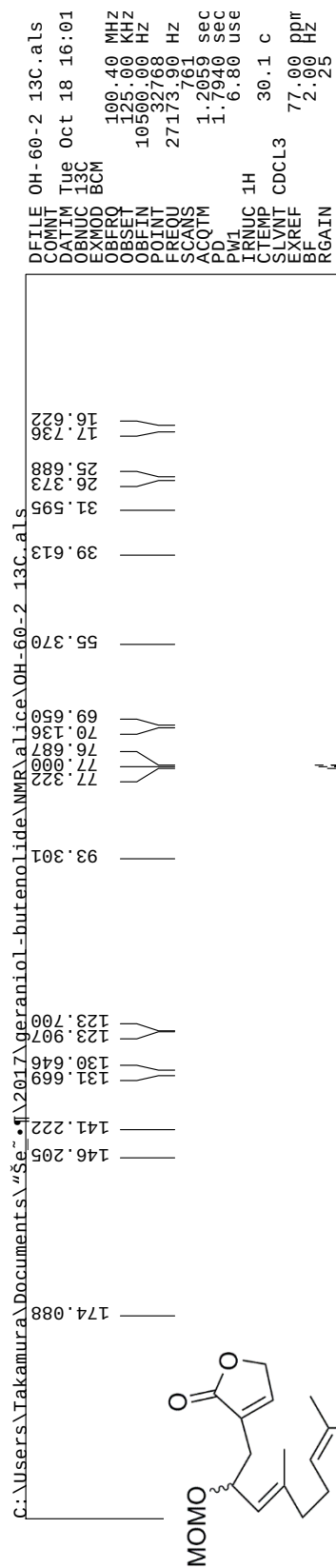
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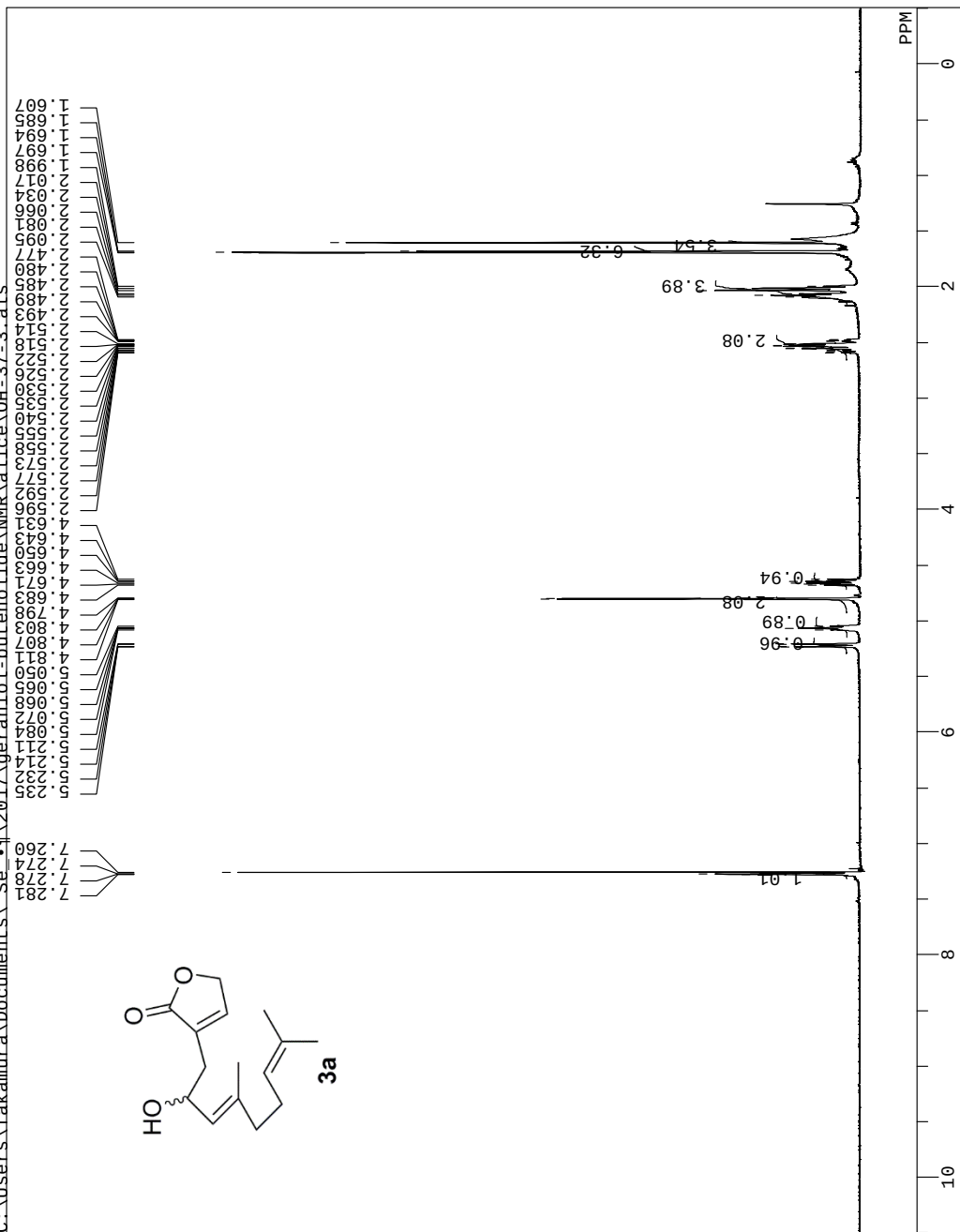


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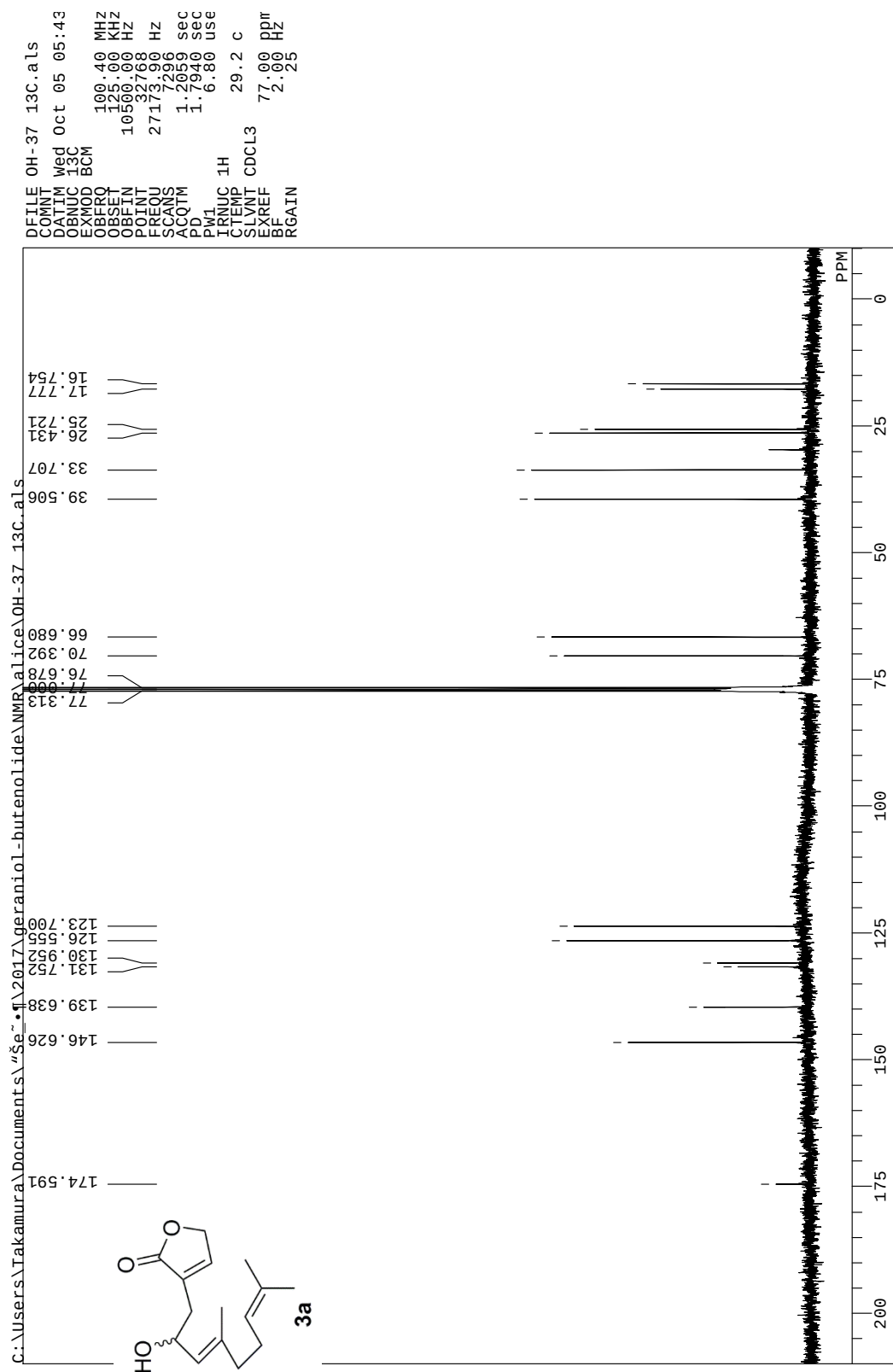


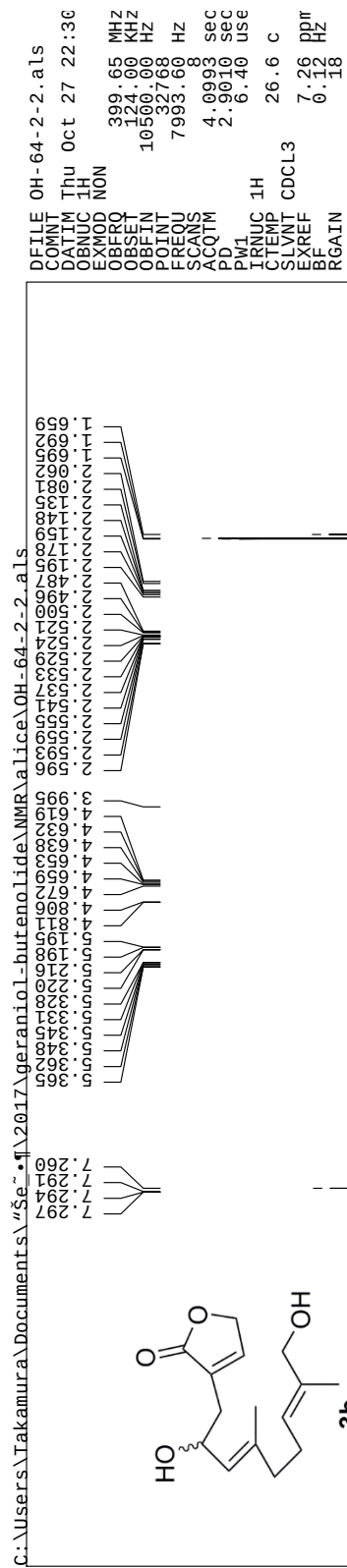


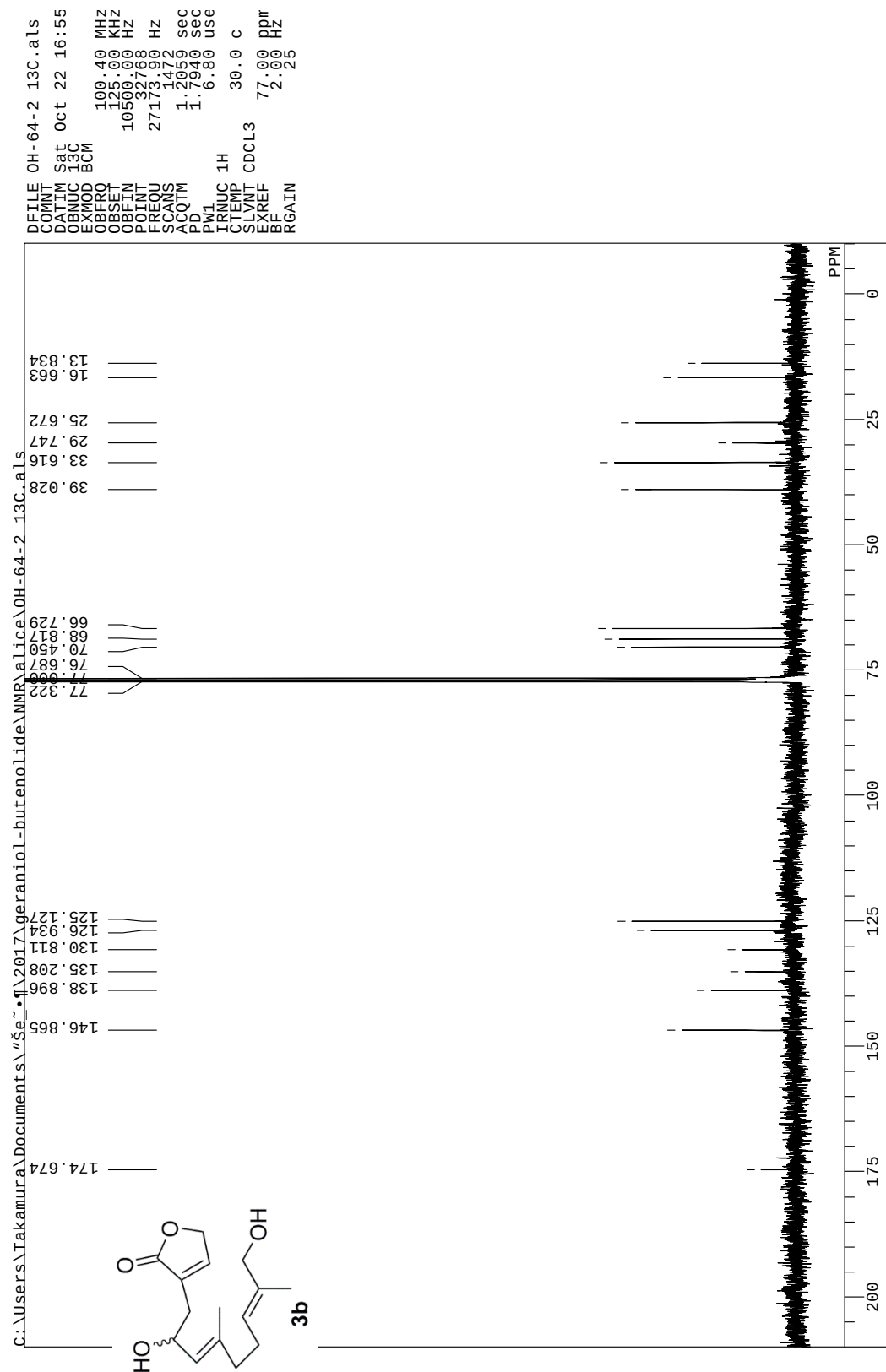
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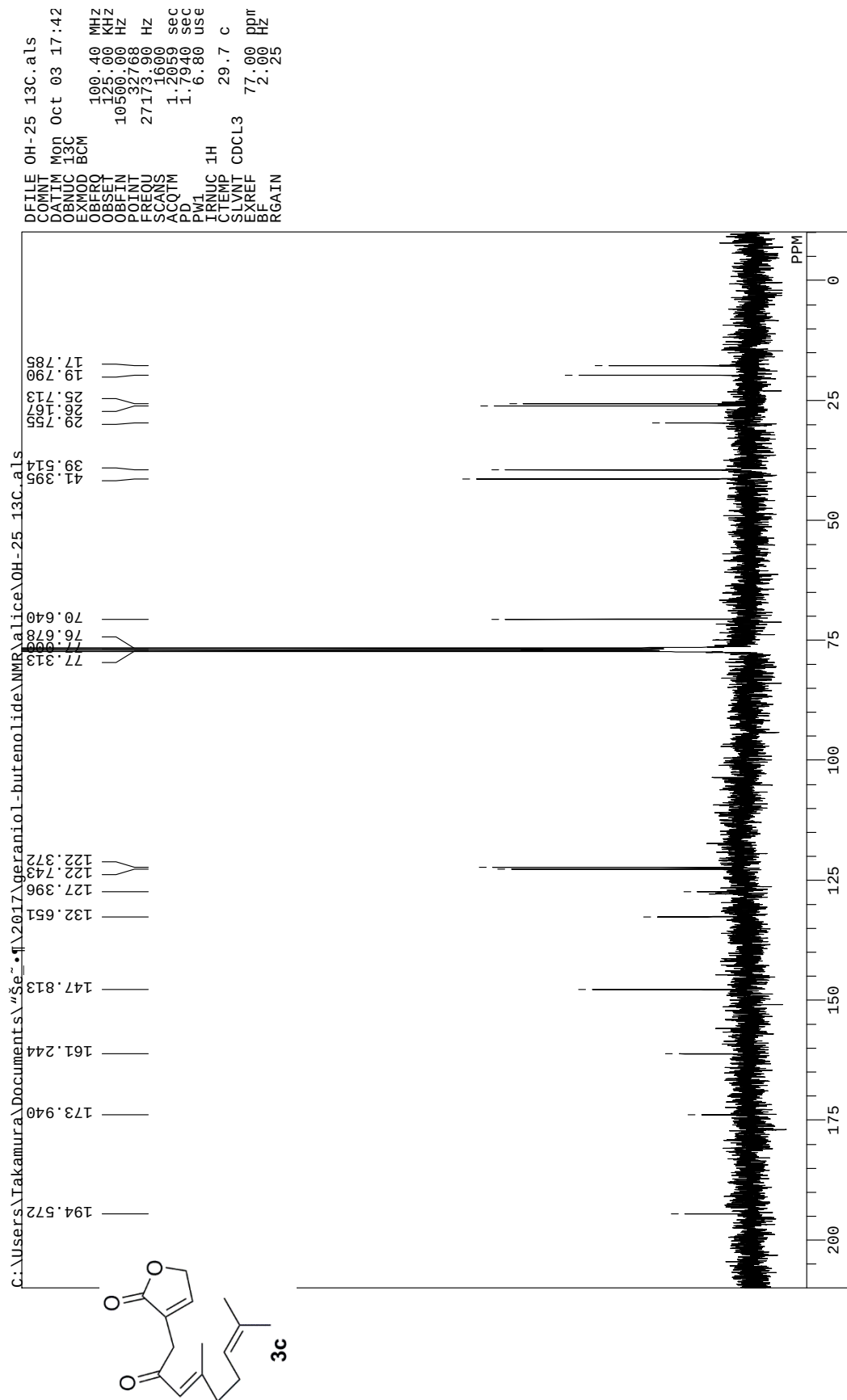


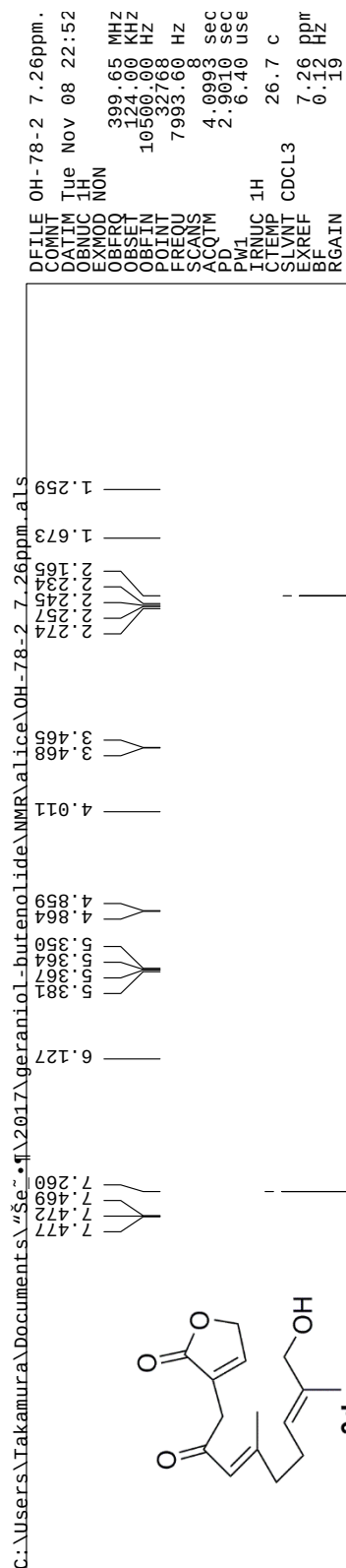
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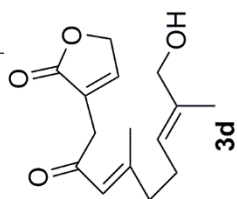
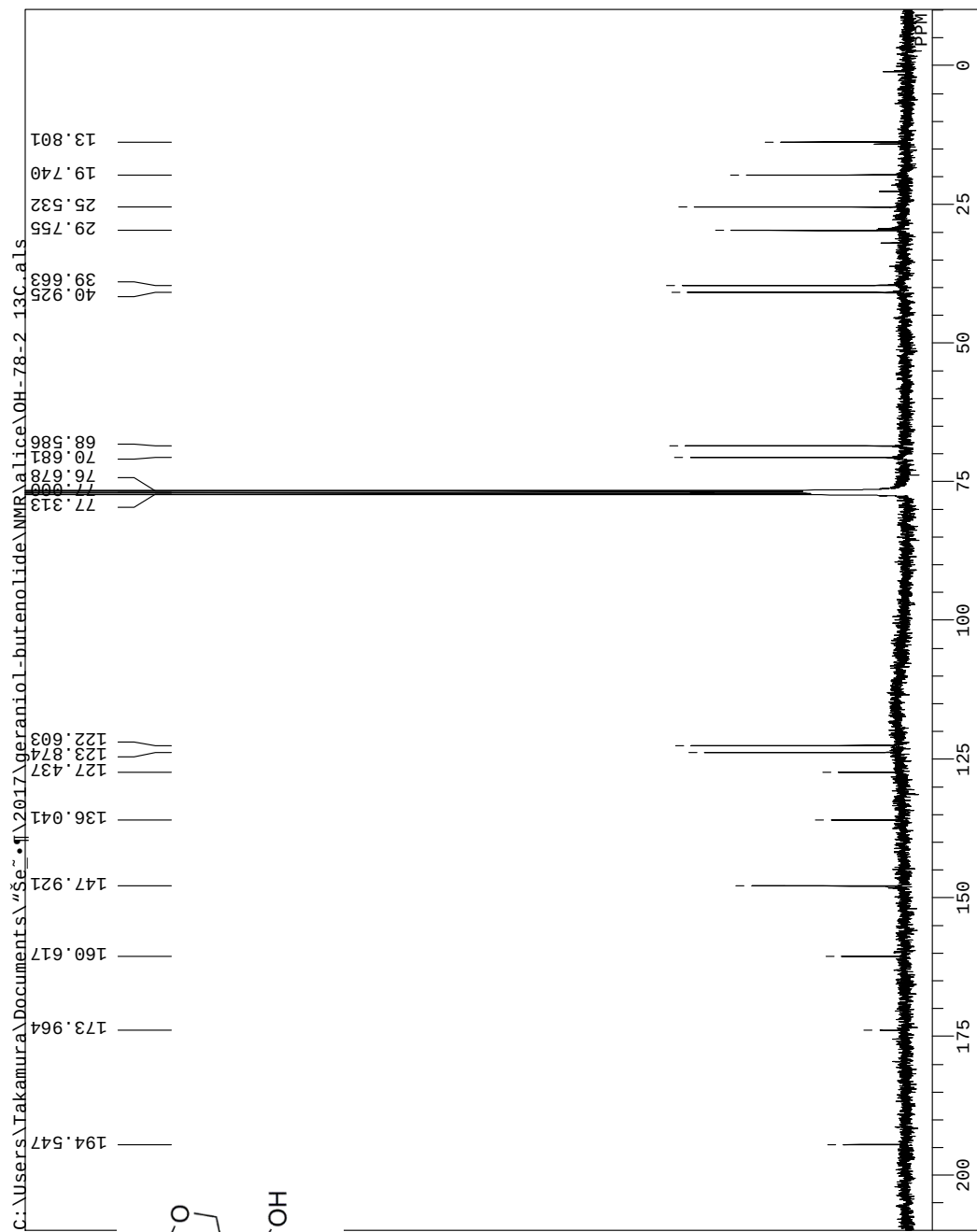


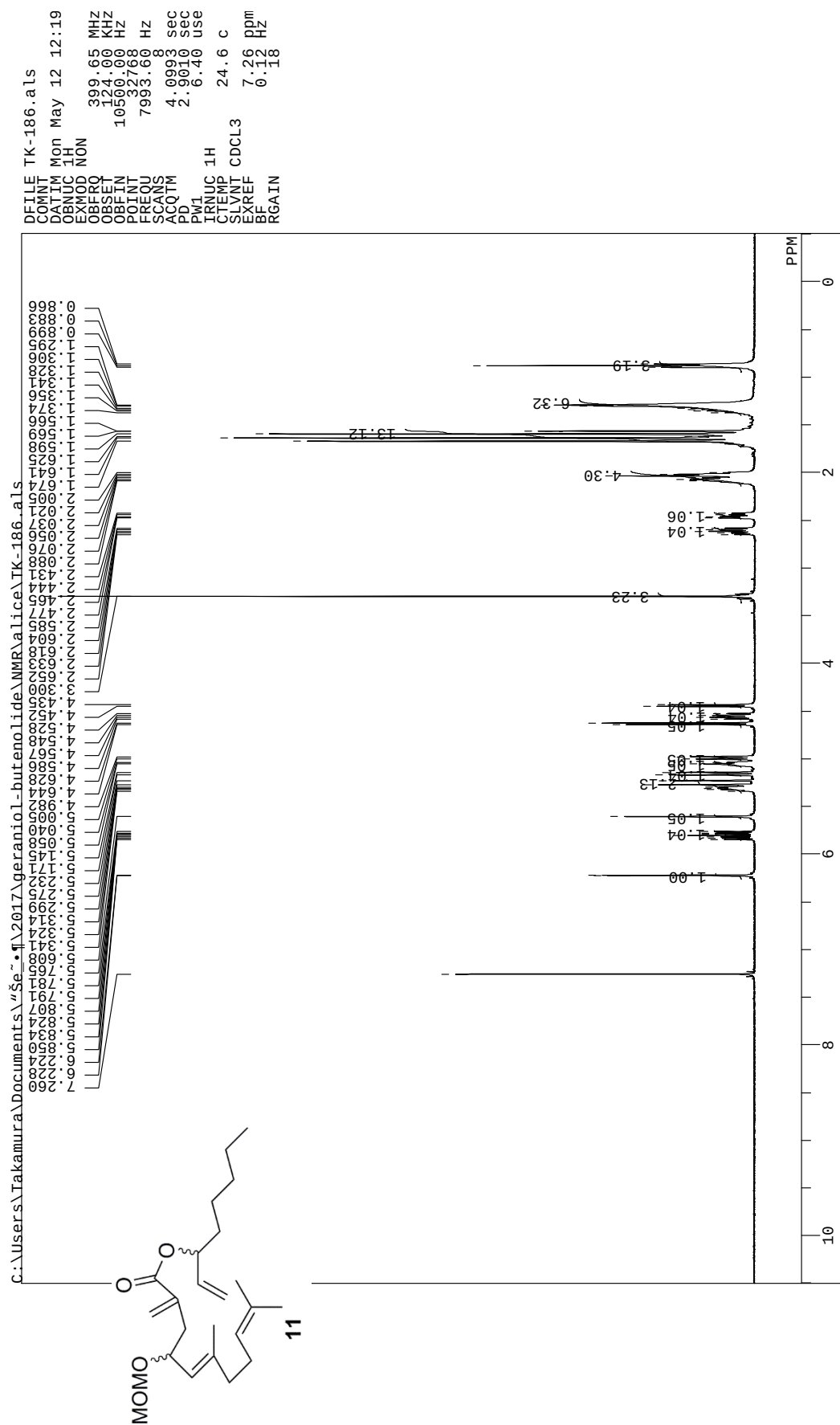


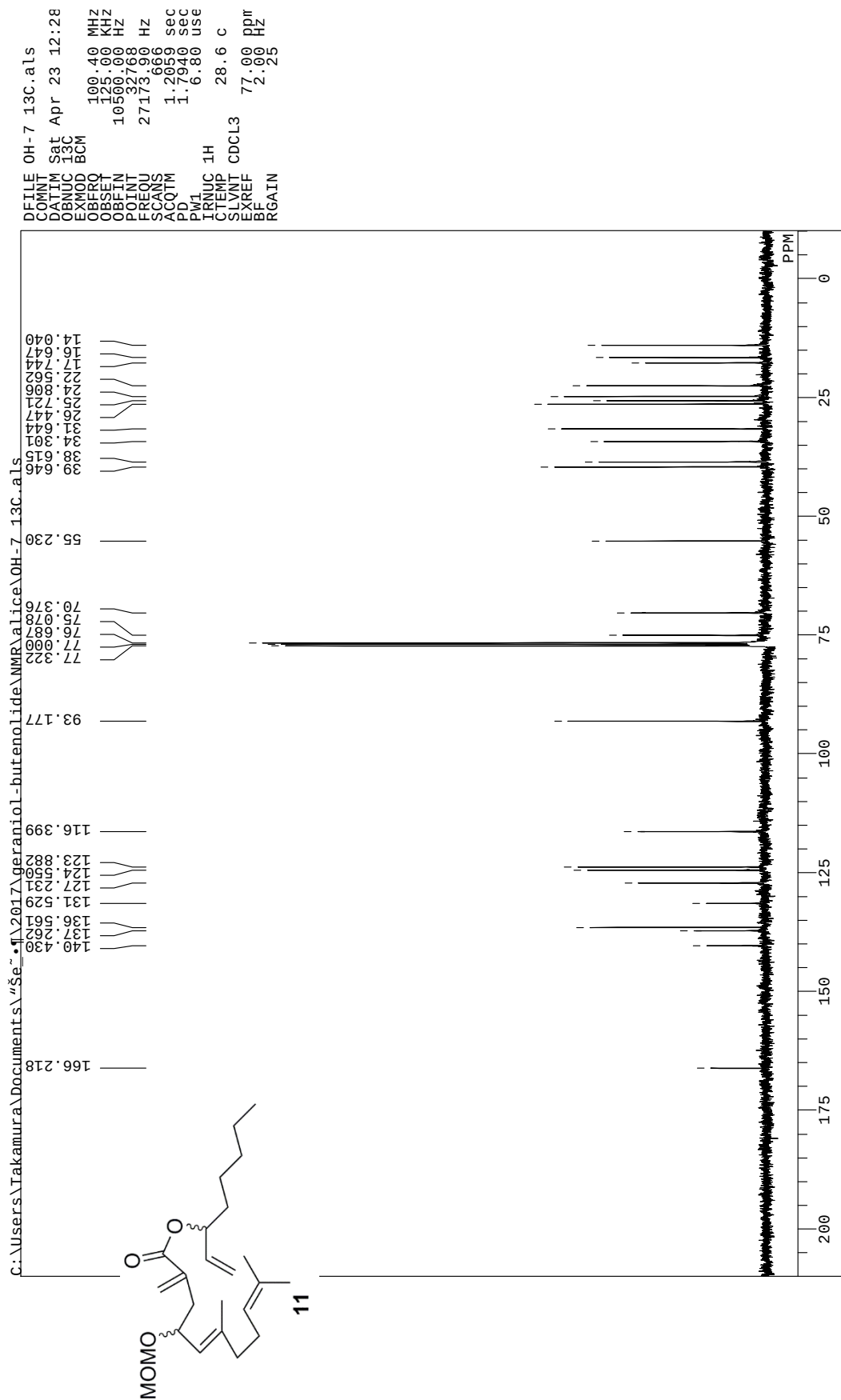




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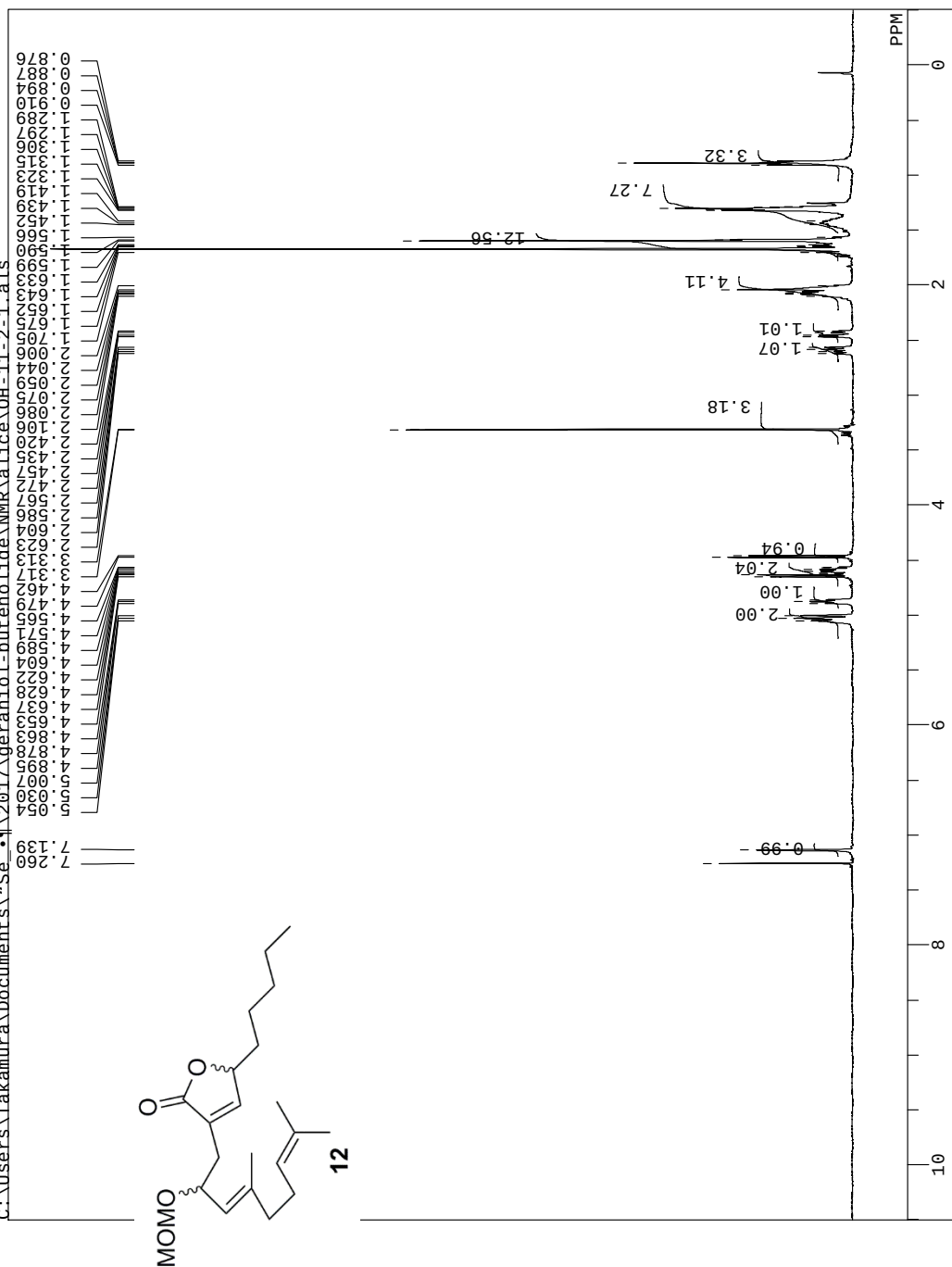




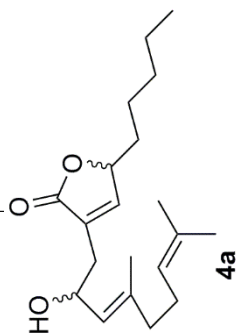
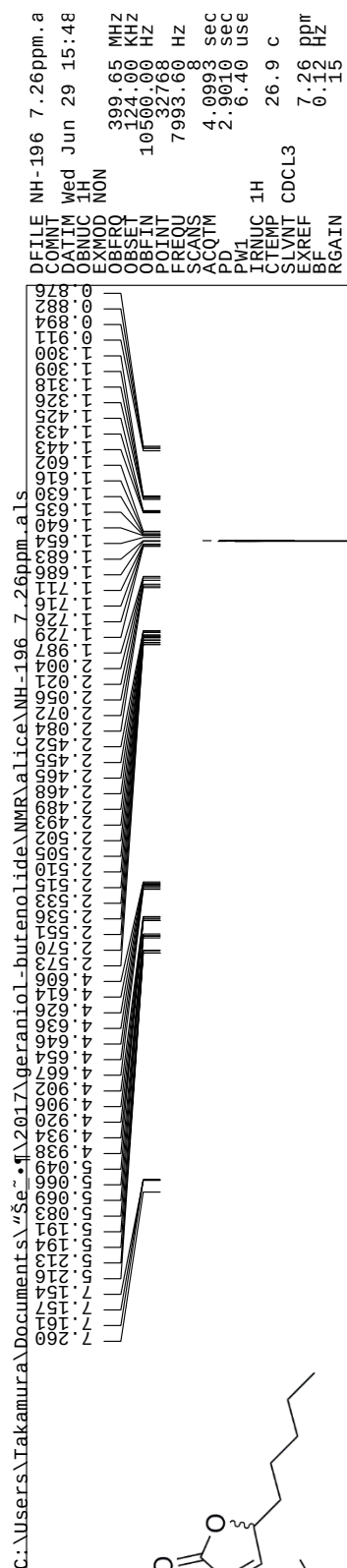


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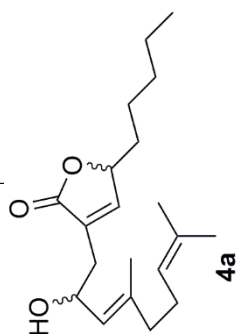
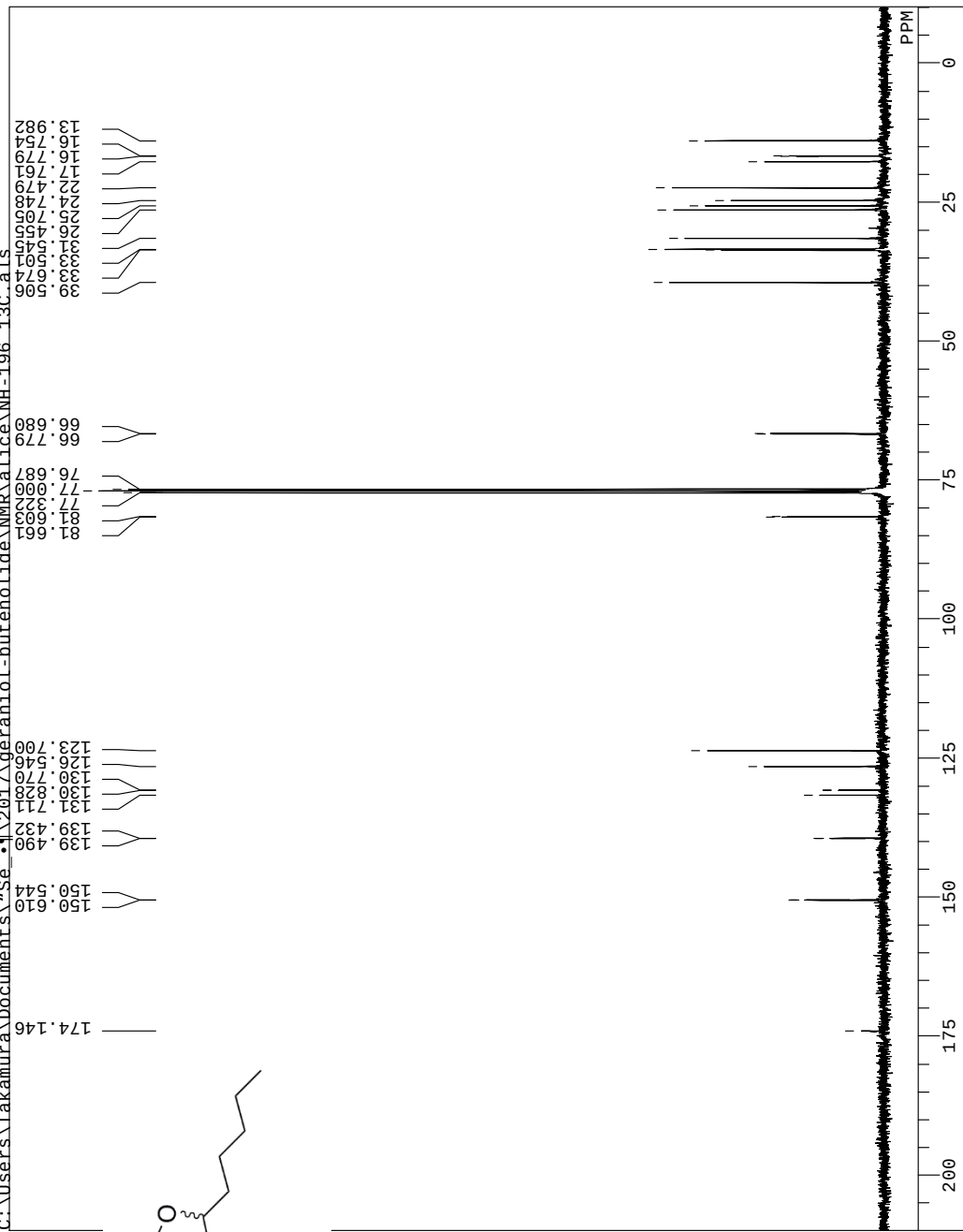
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 OBFIN 10500.00 Hz
 POINT 32768
 FREQU 7993.60 Hz
 SCANS 8
 ACQTM 4.0993 sec
 PD 2.9010 sec
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 TRNUC 1H
 CTEMP 26.8 C
 SLVNT CDCL3
 EXREF 7.26 ppm
 BF 0.12 Hz
 RGAIN 14





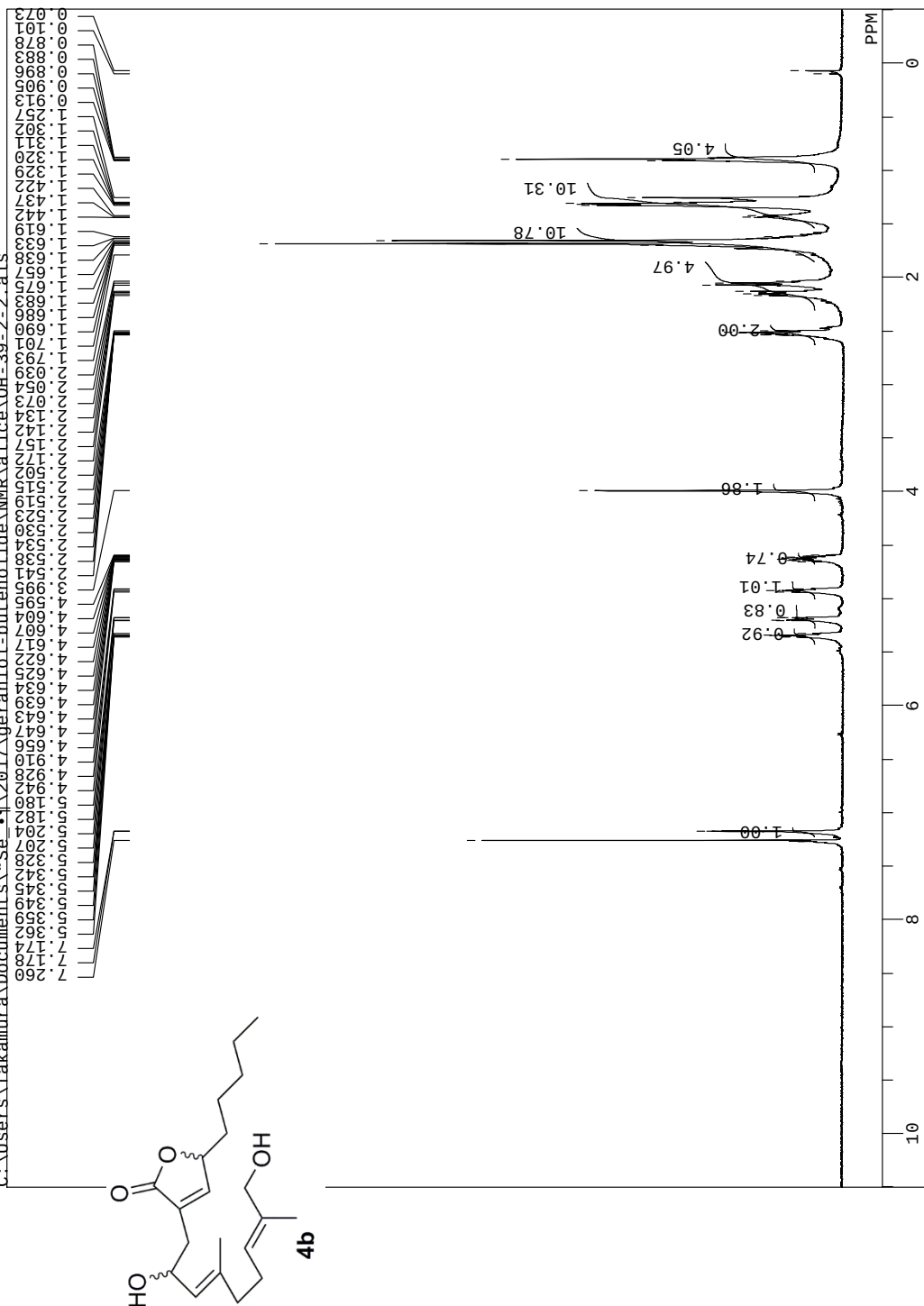


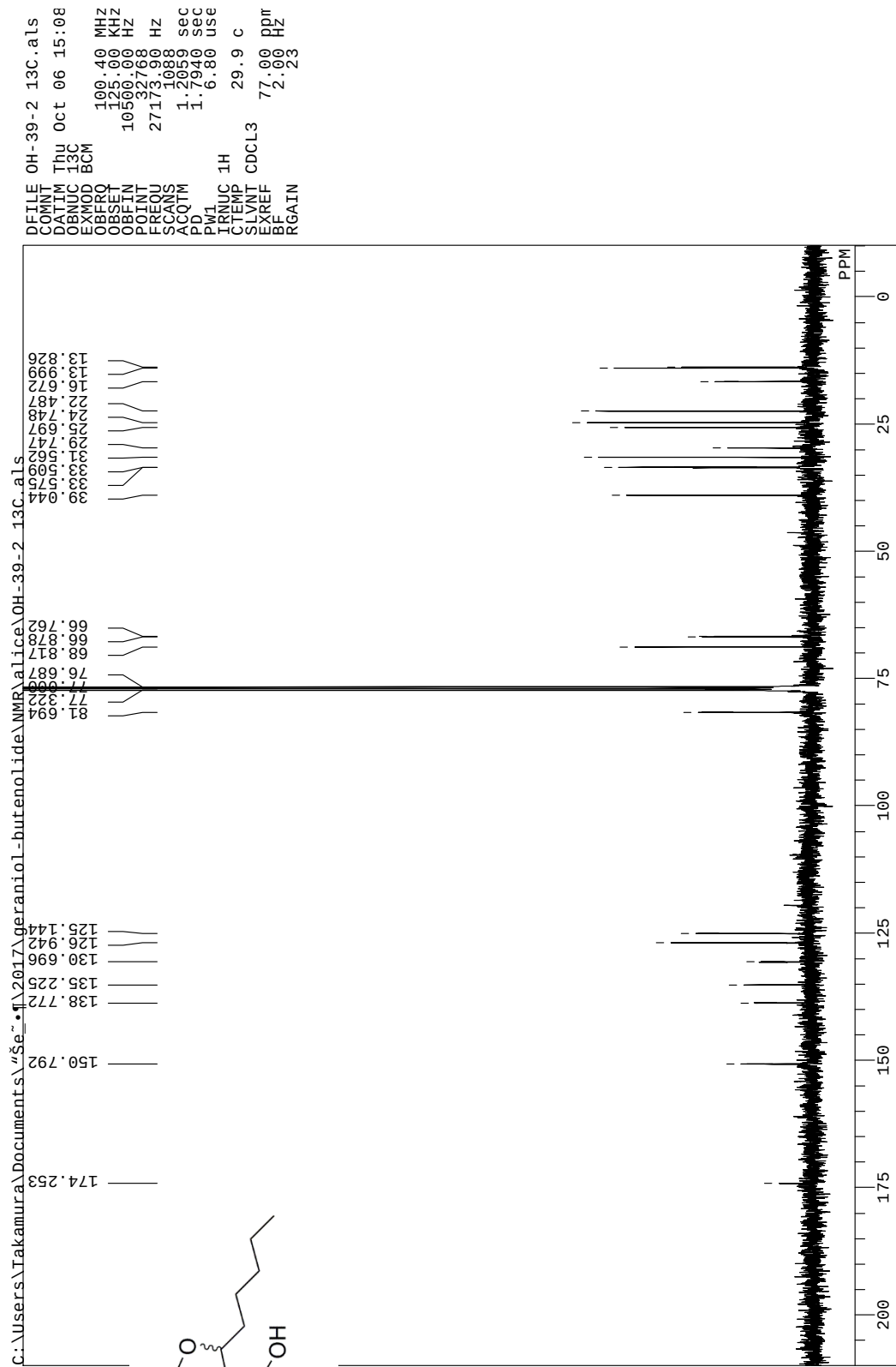
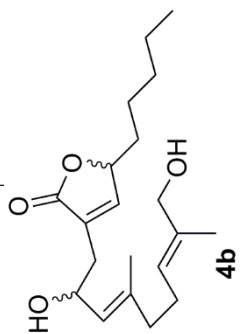
C:\Users\takamura\Documents\Se\2017\geraniol-butenolide\NH-196 13C.als
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 OBNUC 13C
 EXMOD BCM
 OBFRQ 100.40 MHz
 OBSET 125.00 KHz
 OBFIN 10500.00 Hz
 POINT 32768
 FREQU 27173.90 Hz
 SCANS 1000
 ACQTM 1.2059 sec
 PD 1.7940 sec
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 IRRUC 1H
 ITEMP 29.8 C
 SLVNT CDCL3
 EXREF 77.00 ppm
 BF 2.00 Hz
 RGAIN 25



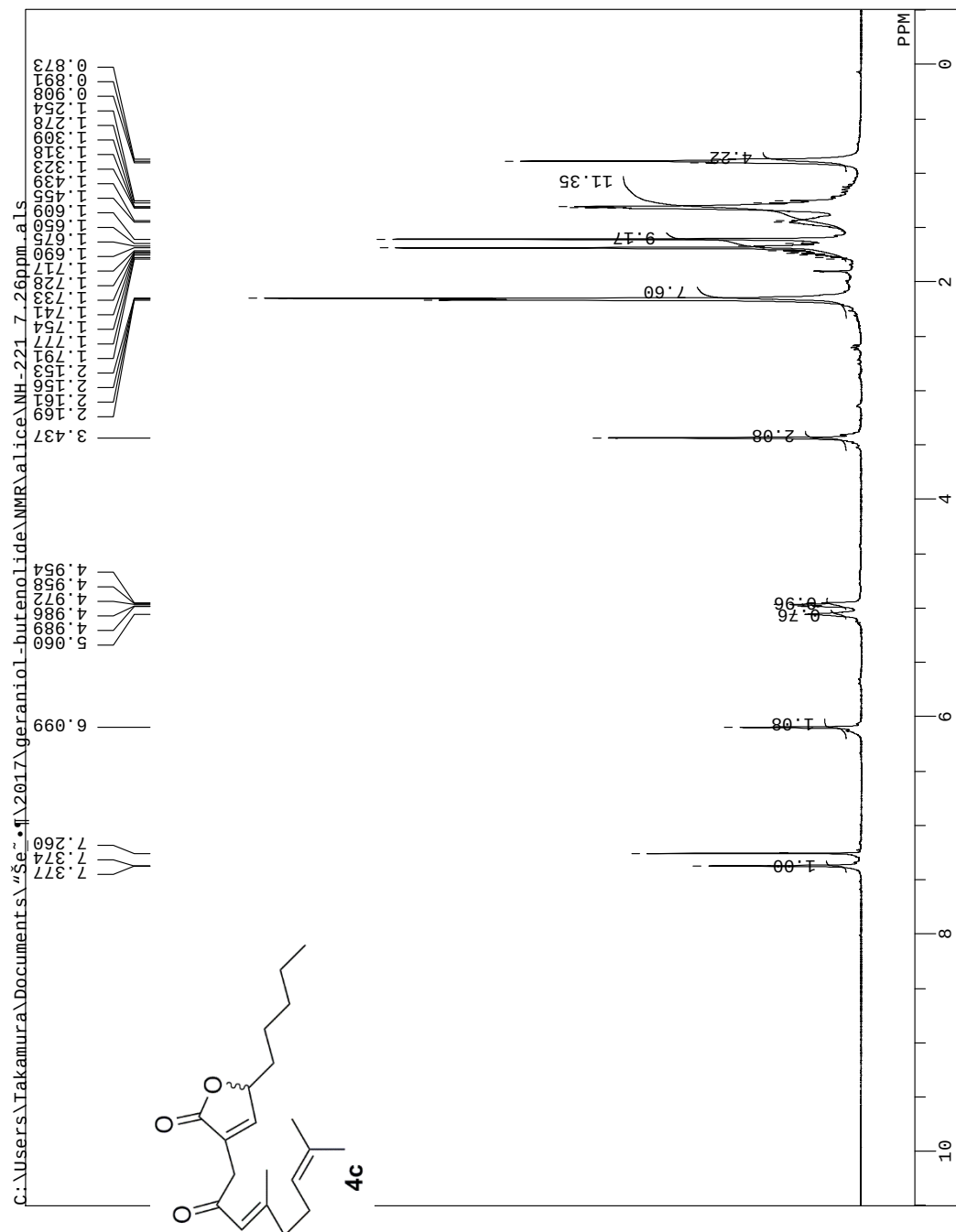
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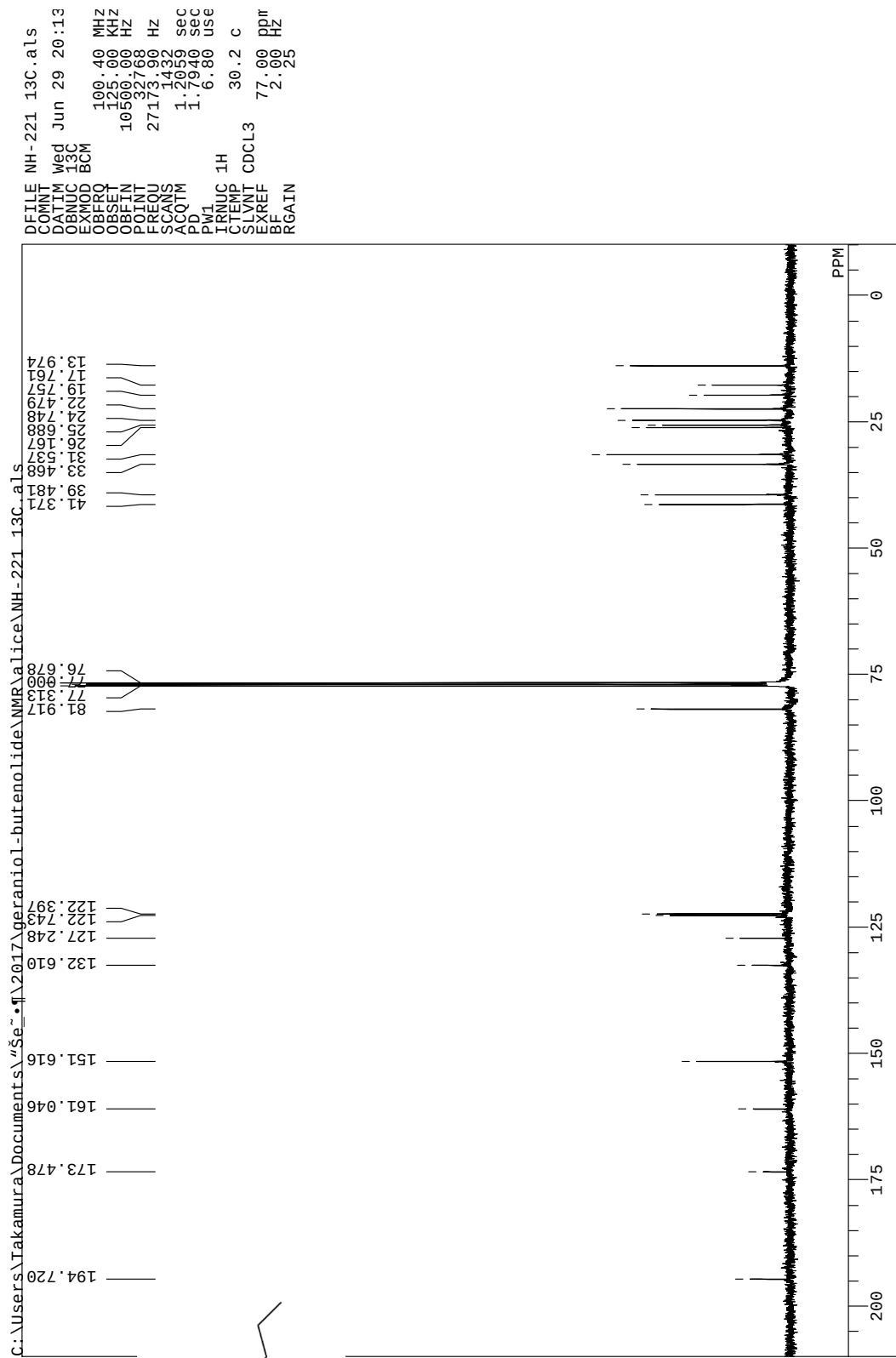
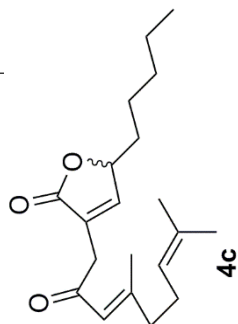
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 DATIM 1H
 OBNUC 1H
 EXMOD NON
 EXPRO 399.65 MHz
 OBSF 124.00 KHz
 OBSF 10500.00 Hz
 POINT 32768
 FREQ 7993.60 Hz
 SCANS 8
 ACQTM 4.0993 sec
 PD 2.9010 sec
 PM1 6.40 use
 TRNUC 1H
 CTMP 26.7 C
 LVNT CDCL3
 EXREF 7.26 ppm
 BF 0.12 Hz
 RGAIN 16





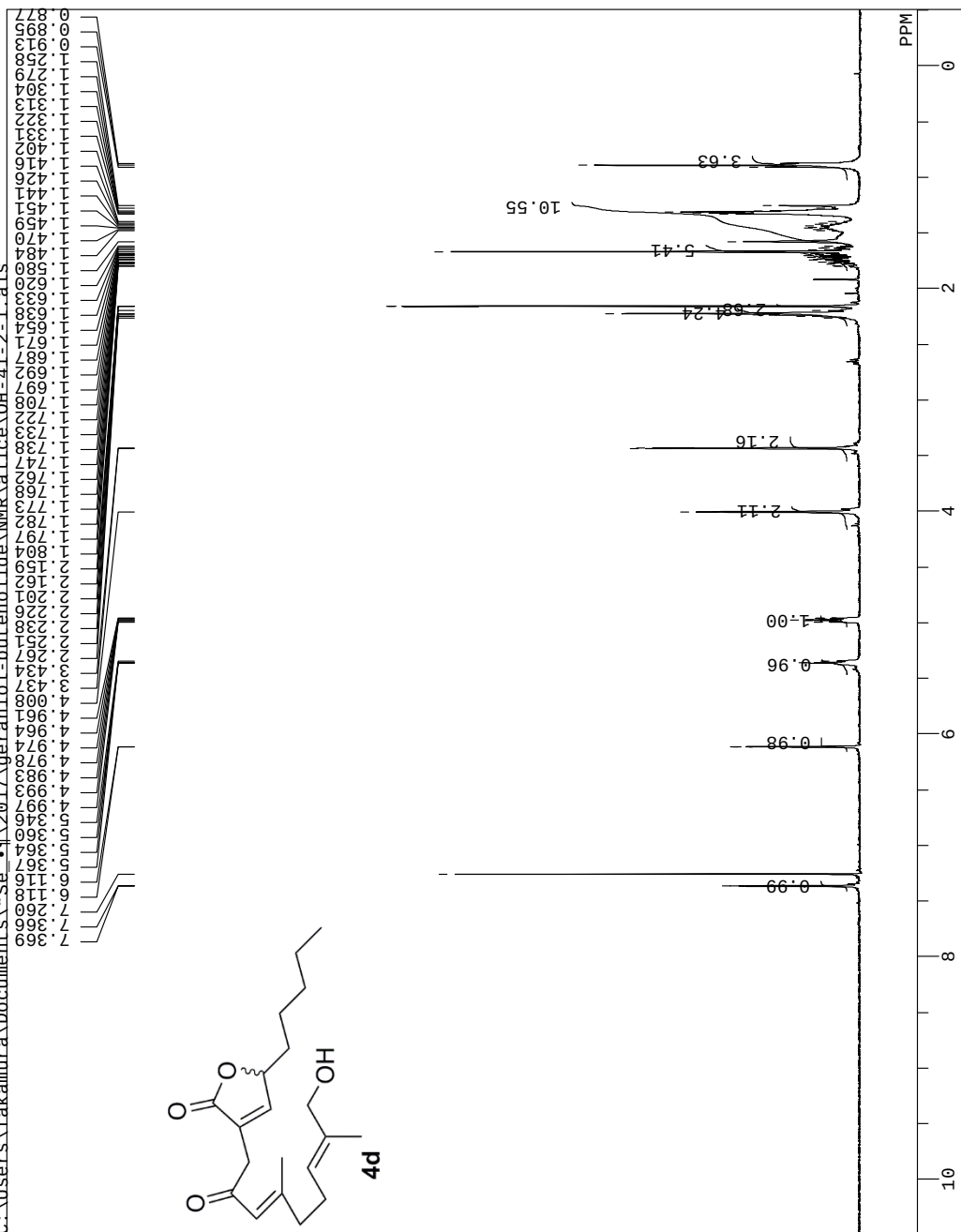
FILE NH-221 7.26ppm.a
 COMET Wed Jun 29 18:55
 DATUM 1H
 EXMOD NON
 OBSRQ 399.65 MHz
 OBSF 124.00 KHz
 OBSF 10500.00 Hz
 POINT 32768
 FREQU 7993.60 Hz
 SCANS 8
 ACQTM 4.0993 sec
 PD 2.9010 sec
 PW1 6.40 use
 TRNUC 1H 26.9 c
 CLTEMP CDCL3 7.26 pp
 SLVNT CDCL3 0.12 Hz
 EXREF BF
 RGAIN 14





C:\Users\takamura\Documents\Se-4\2017\geraniol-butenolide\NMR\alice\OH-41-2-1-1.als

DFILE OH-41-2-1.als
 COMNAME
 DATE_1 Fri Oct 07 12:12
 DATUM 1H
 EXMOD NON
 OBSFREQ 399.65 MHz
 OBSF1 324.00 MHz
 OBSF2 10500.00 Hz
 POINT 32768 Hz
 FREQU 7993.60 Hz
 SCANS 8
 ACQTM 4.0893 sec
 PD 2.9010 sec
 P1 6.40 use
 IRNUC 1H
 CTEMP 26.8 C
 SLVNT CDCL3
 EXREF 7.26 ppb
 BF 0.12 Hz
 RGAIN 18



DFILE OH-41-2 13C.als
 COMNT
 DATIM Fri Oct 07 13:51
 OBNUC 13C
 EXMOD BCM
 OBFRQ 100.40 MHz
 OBSCT 125.00 kHz
 OBFIN 10500.00 Hz
 POINT 32768 Hz
 FREQU 27173.90 Hz
 SCANS 1520
 ACQTM 1.2059 sec
 PD 1.7940 sec
 PWT 6.80 use
 IRNUC 1H
 CTMP 29.8 C
 SLVNT CDCL3
 EXREF 77.00 ppv
 BF 2.00 Hz
 RGAIN 25

