

Thermal Analysis and Spectroscopic analysis: Electronic Supplementary information.

**Compounds**

- 1**      $[\text{Zn}\{\kappa^3\text{O-B}_6\text{O}_7(\text{OH})_6\}(\kappa^3\text{N-dien})] \cdot 0.5\text{H}_2\text{O}$  (dien =  $\text{NH}(\text{CH}_2\text{-CH}_2\text{NH}_2)_2$ )
- 2**      $(\text{NH}_4)_2[\text{Zn}\{\kappa^2\text{O-B}_6\text{O}_7(\text{OH})_6\}_2(\text{H}_2\text{O})_2] \cdot 2\text{H}_2\text{O}$
- 3**      $(1,3\text{-pnH}_2)_3[(\kappa^1\text{N-H}_3\text{N}\{\text{CH}_2\}_3\text{NH}_2) \text{Zn}\{\kappa^3\text{O-B}_{12}\text{O}_{18}(\text{OH})_6\}]_2 \cdot 14\text{H}_2\text{O}$  (1,3-pn = 1,2-diaminopropane).

**Content**

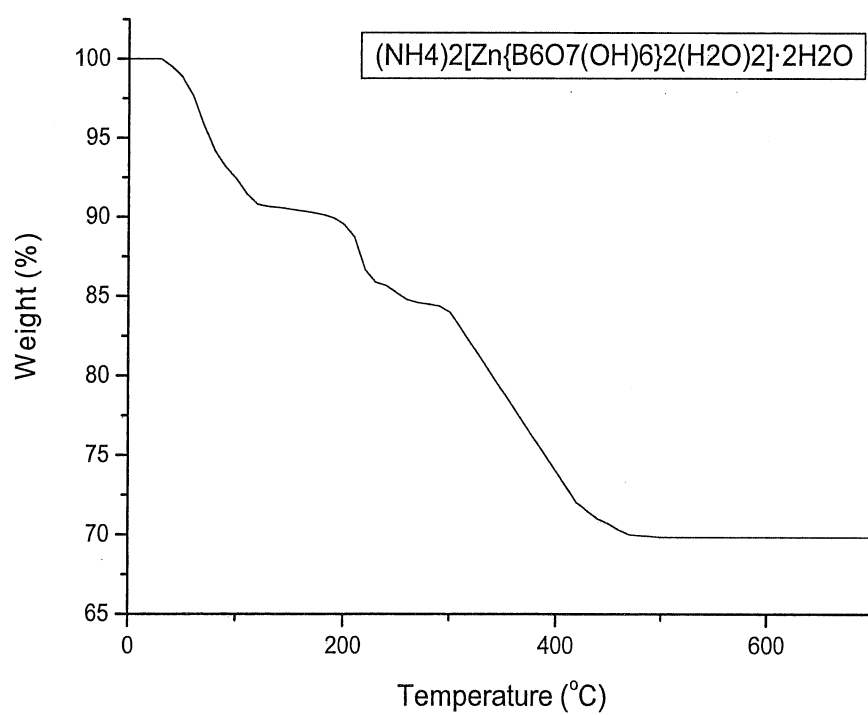
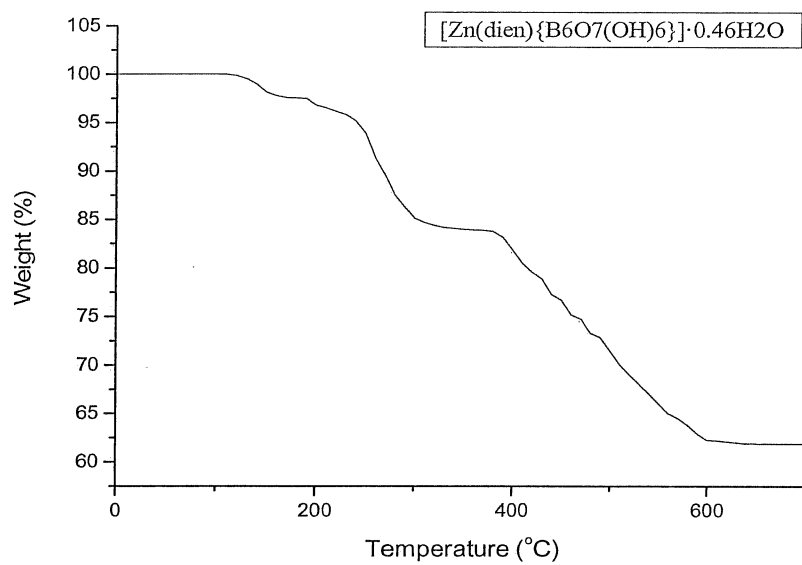
TGA of **1**, **2**, and **3**

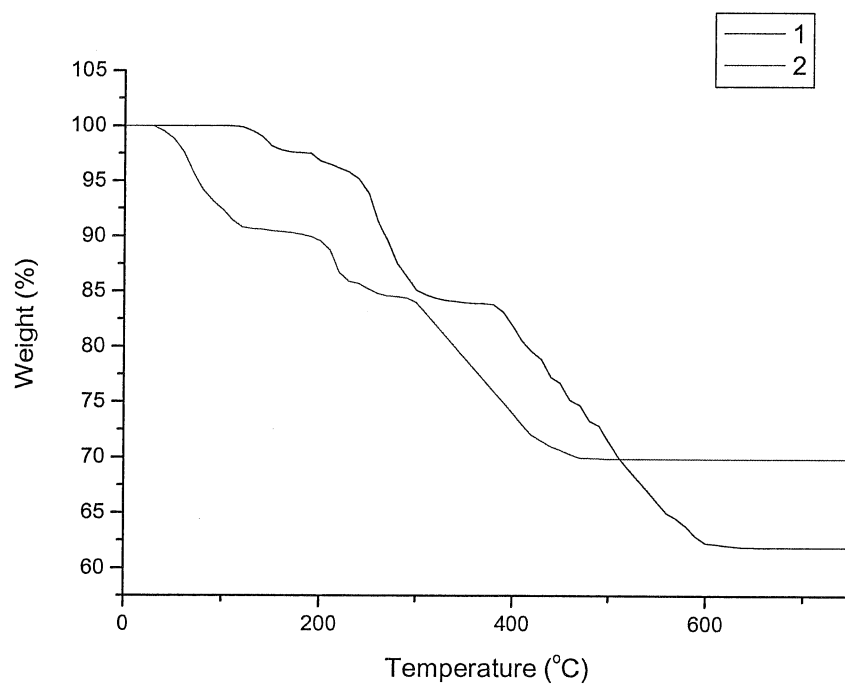
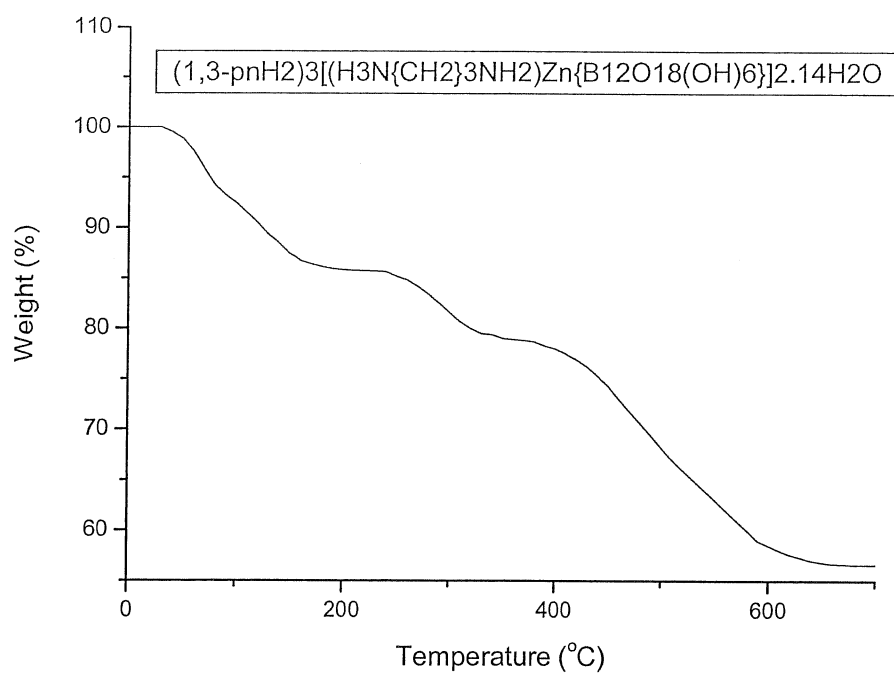
$^{11}\text{B}$ ,  $^1\text{H}$ ,  $^{13}\text{C}$  NMR and IR of **1**

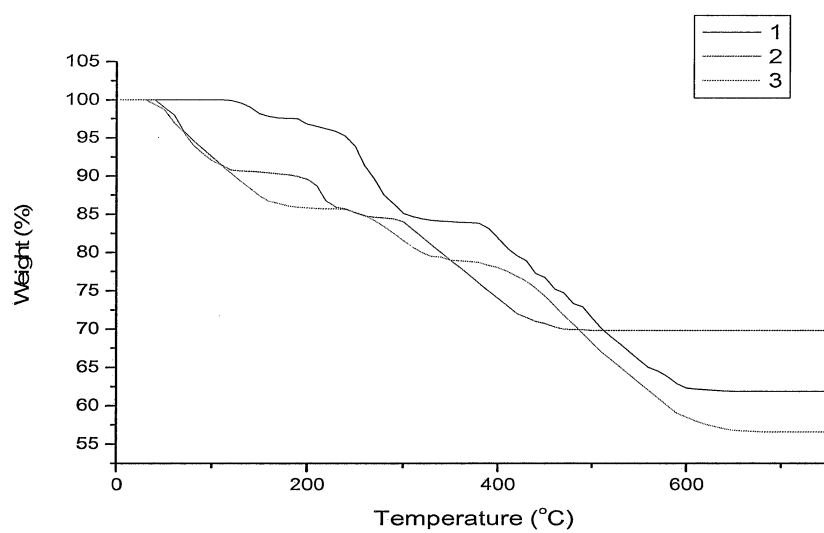
$^{11}\text{B}$  NMR and IR of **2**

$^{11}\text{B}$ ,  $^1\text{H}$ ,  $^{13}\text{C}$  NMR and IR of **3**

TGA Plots for 1, 2, and 3





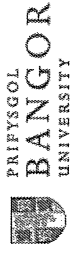


Supervisor Name MAB

Zn+Dien+B

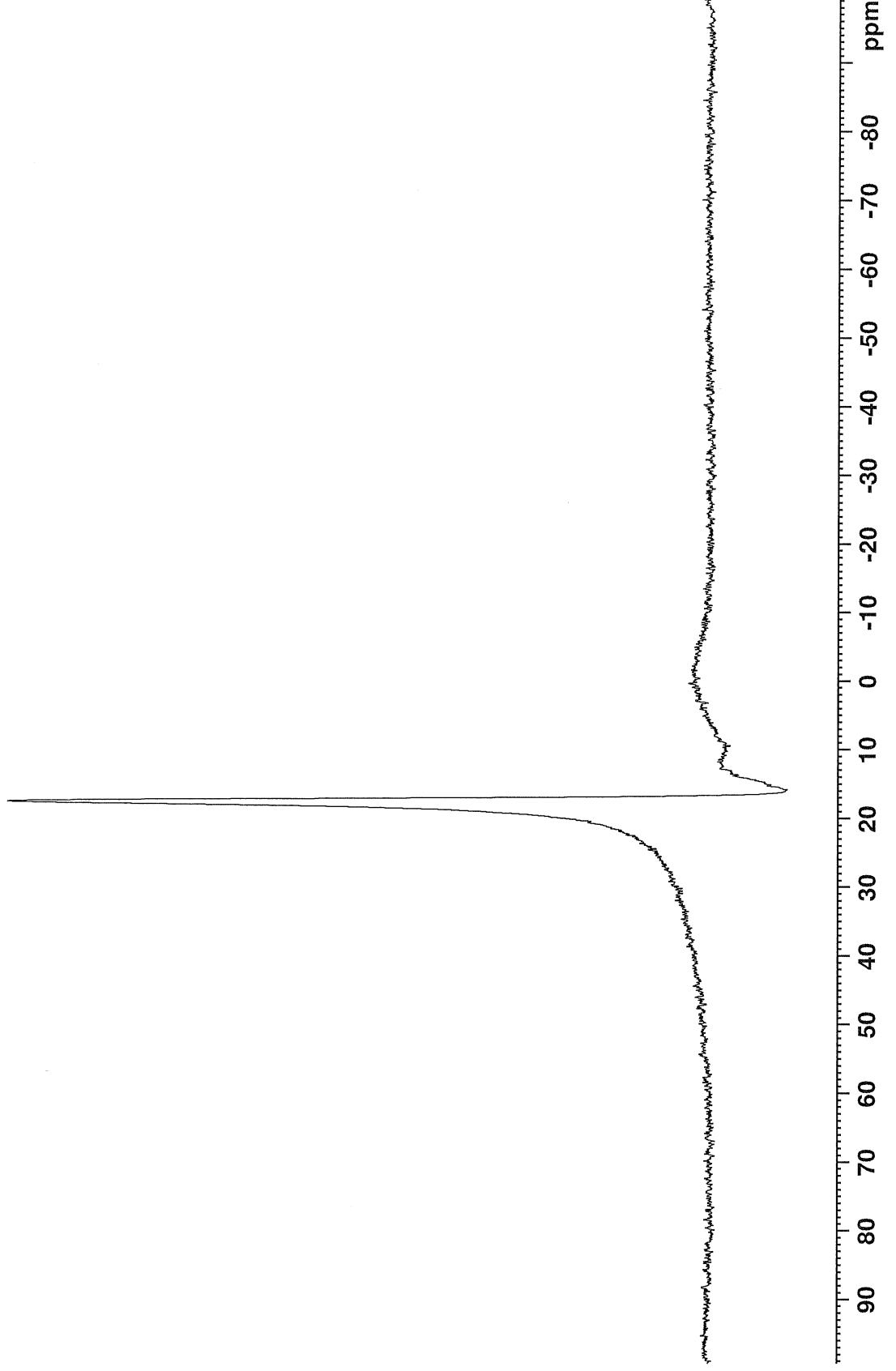
B11CPD.b D2O {C:\Bruker\TopSpin3.2} MAB 10

"B 1

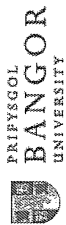


17.42  
0.42

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RG 209.34  
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D11 0.03000000 sec  
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PL1 19.00 usec  
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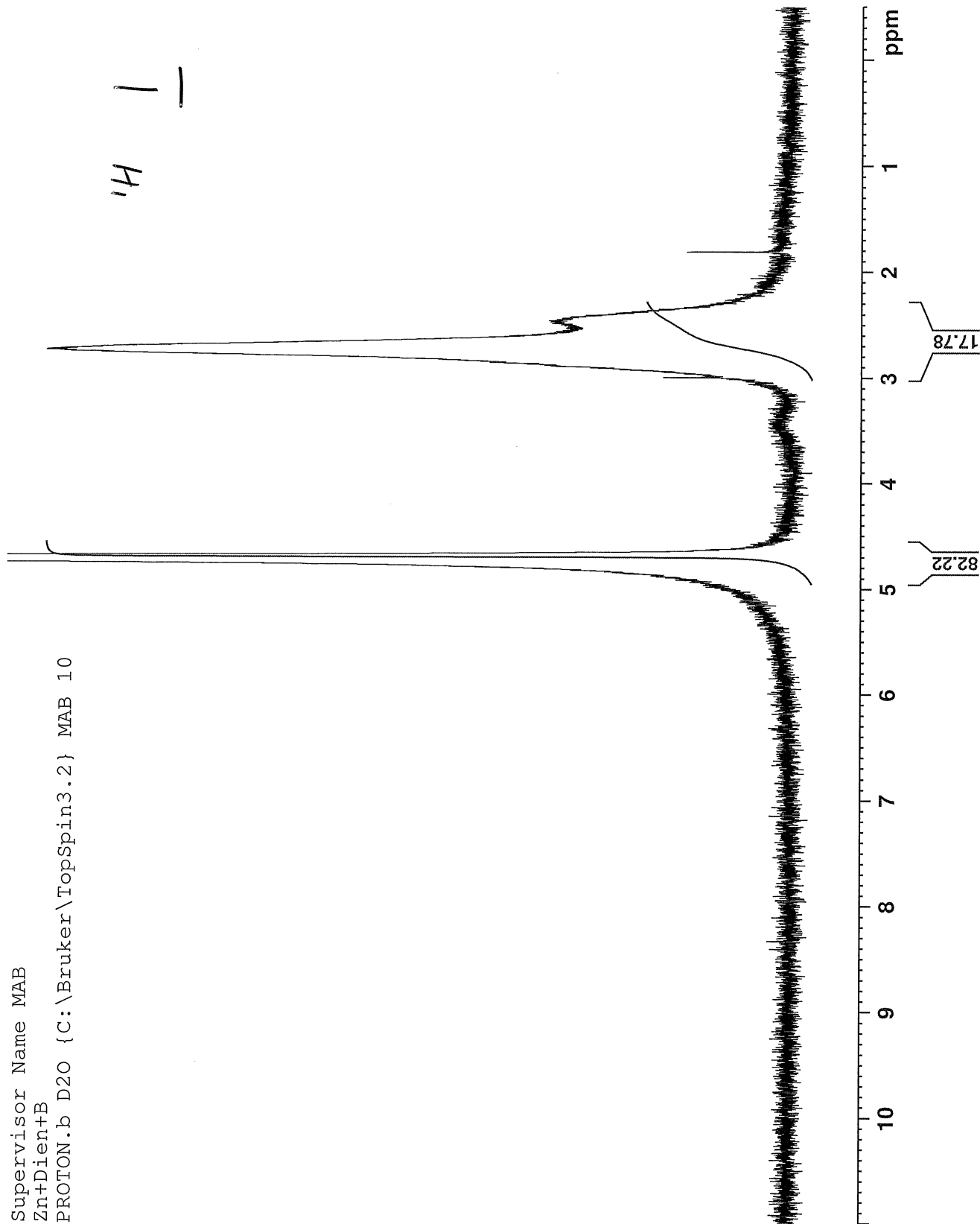


Supervisor Name MAB  
Zn+Dien+B  
PROTON.b D2O {C:\Bruker\TopSpin3.2} MAB 10



<sup>1</sup>H  
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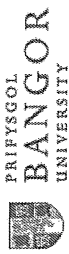
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RG 209.34  
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Supervisor Name MAB

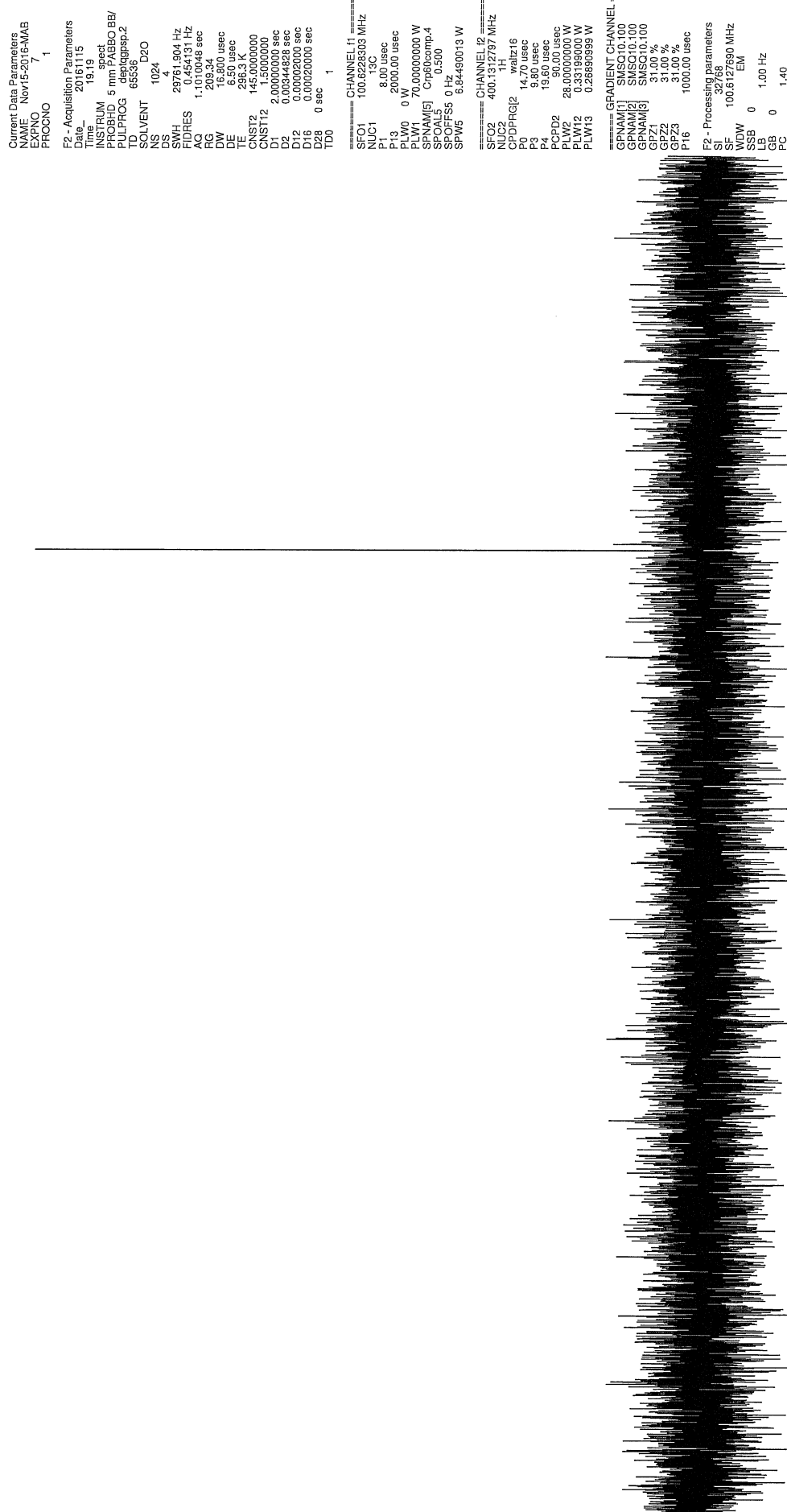
Zn+Dien+B

55minDEPTQ.b D2O {C:\Bruker\TopSpin3.2} MAB 10

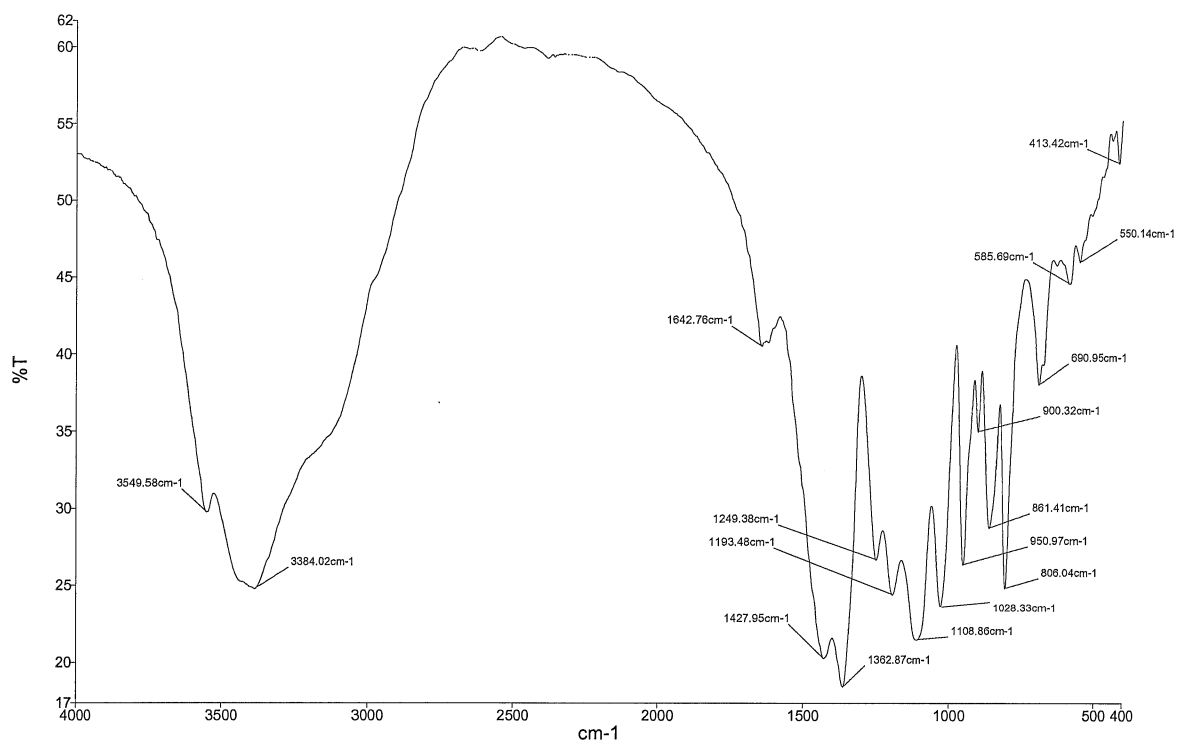


13C 1

38.10

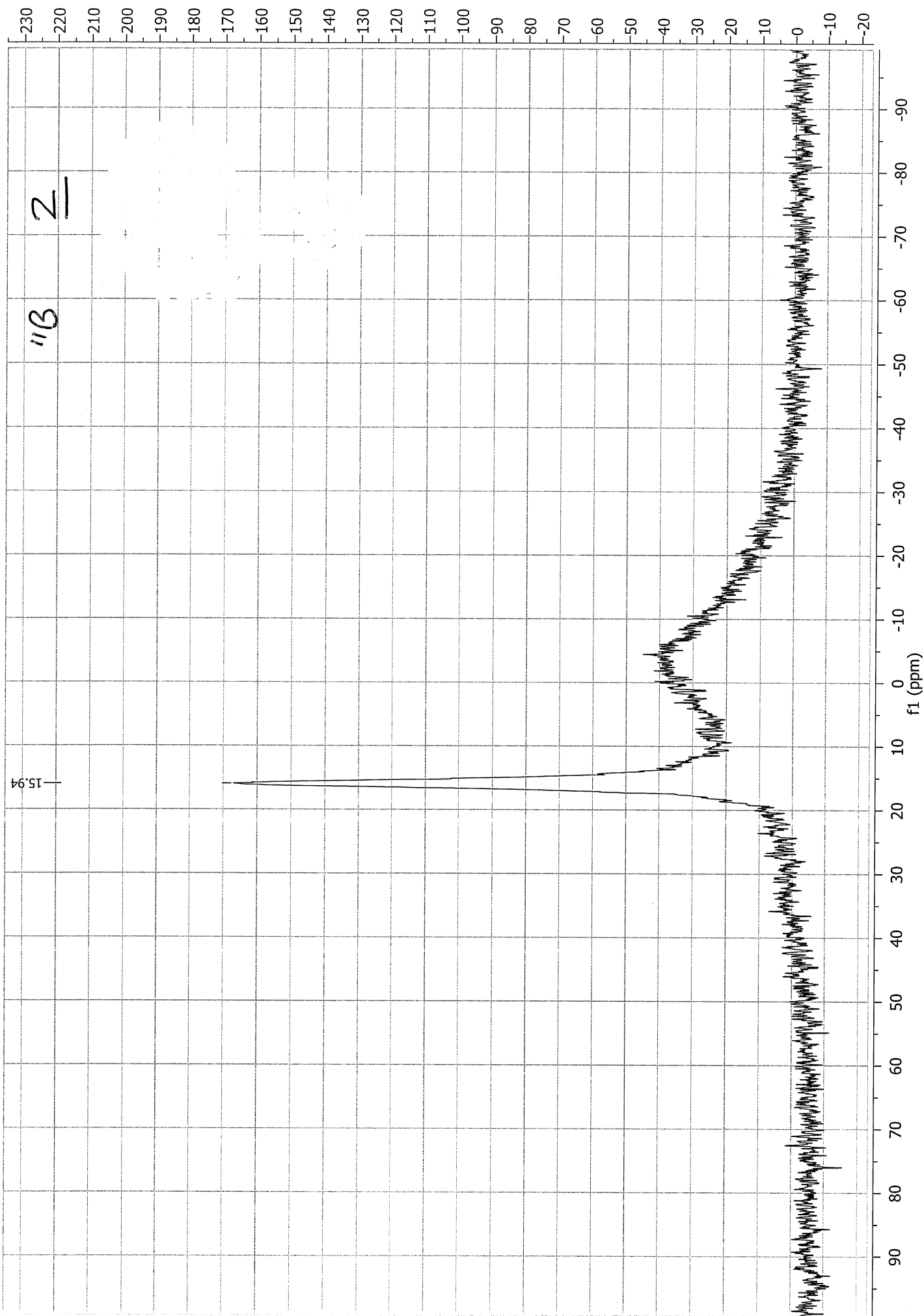


IR 1

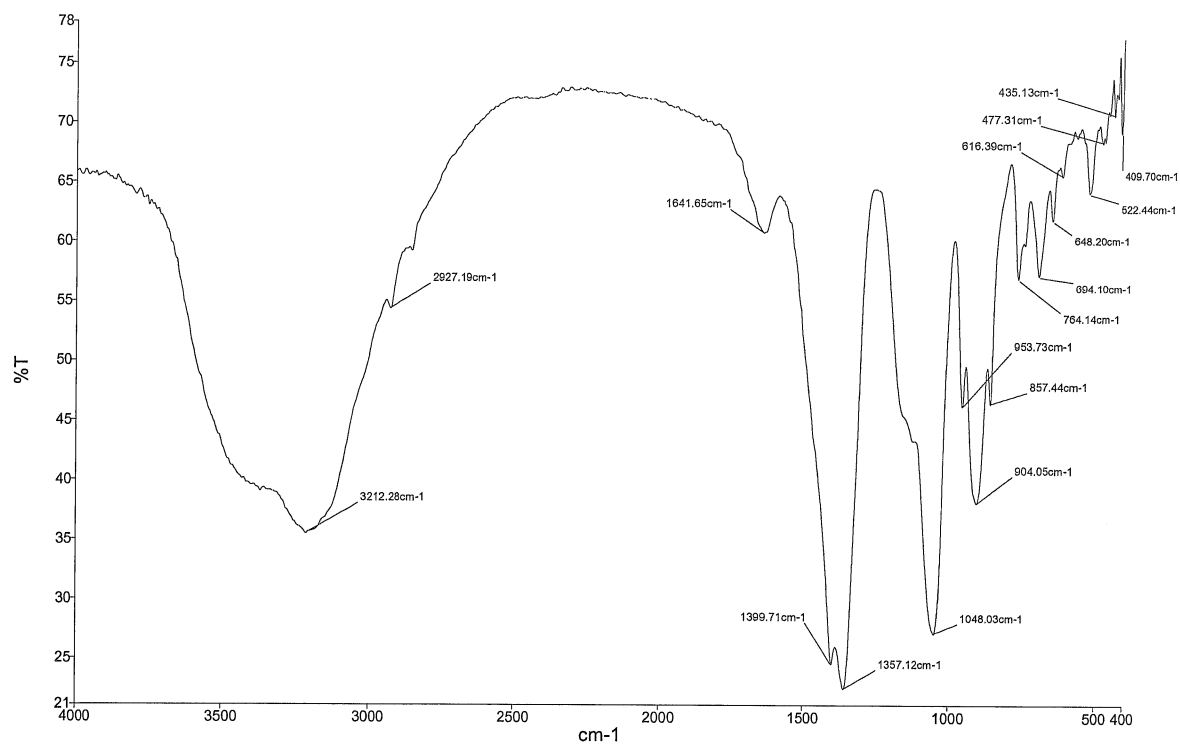


Zn+Dien+B OK

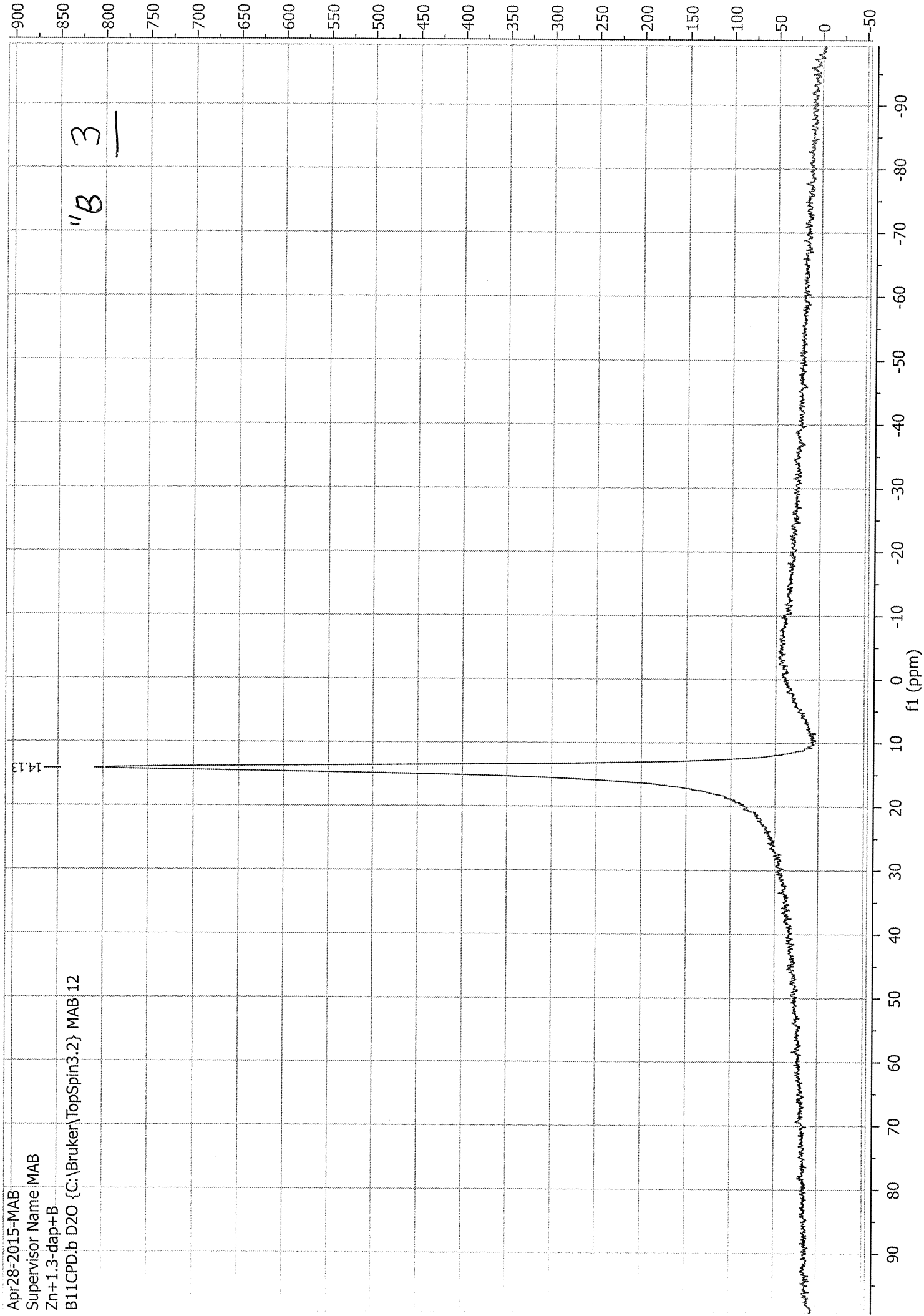




IR 2



Zn+NH<sub>3</sub>+B



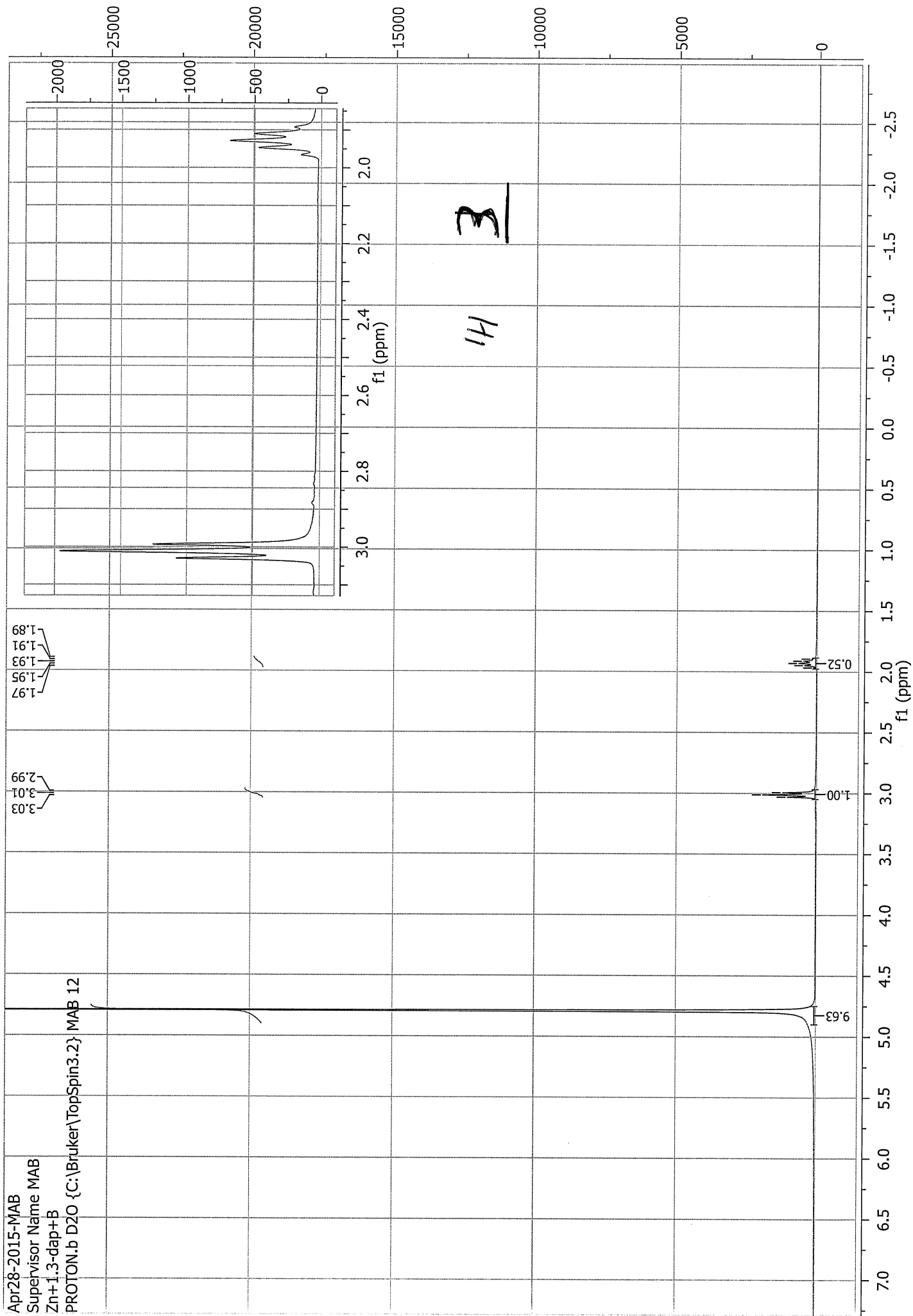
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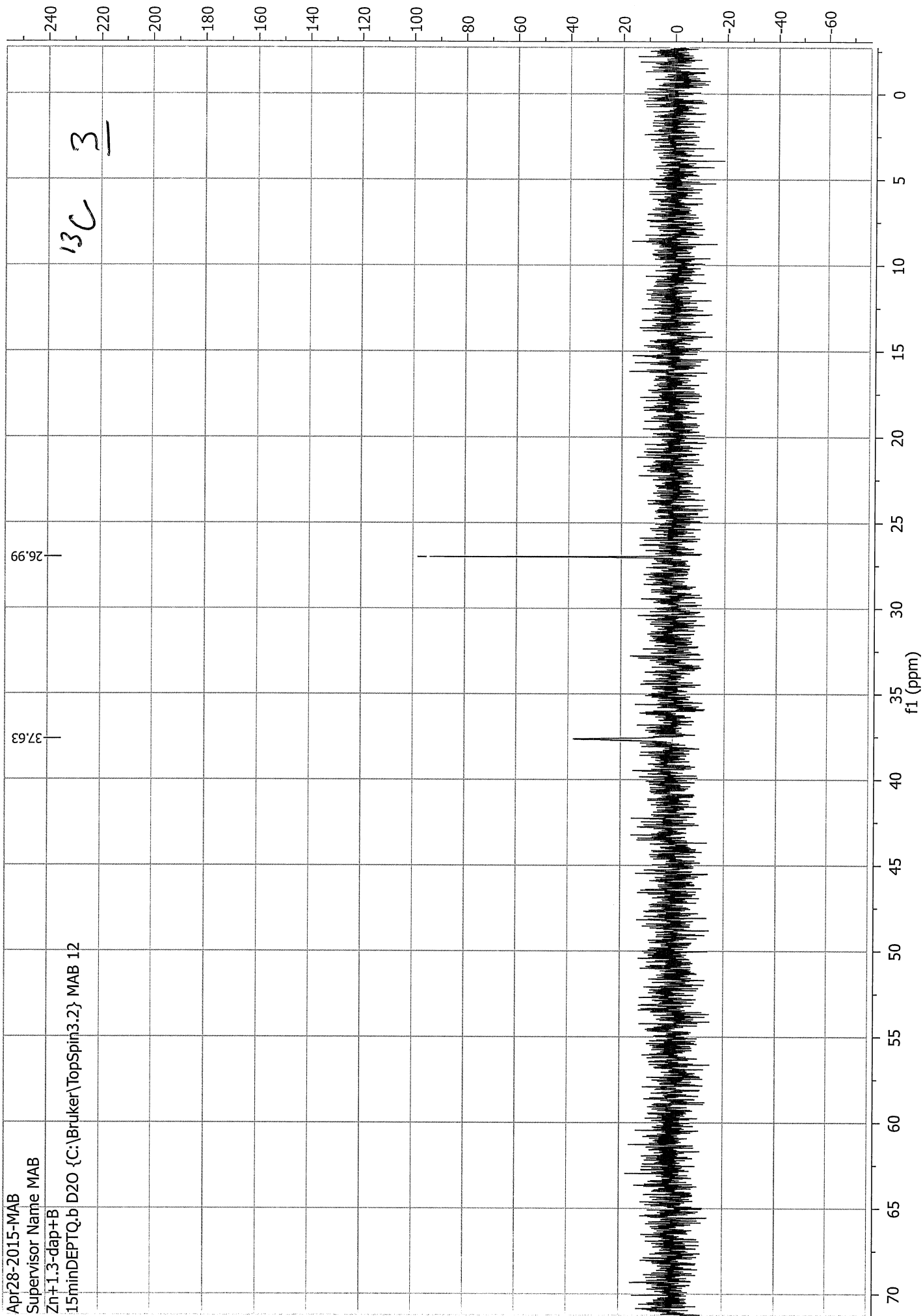
Supervisor Name MAB

Zn+1.3-dap+B

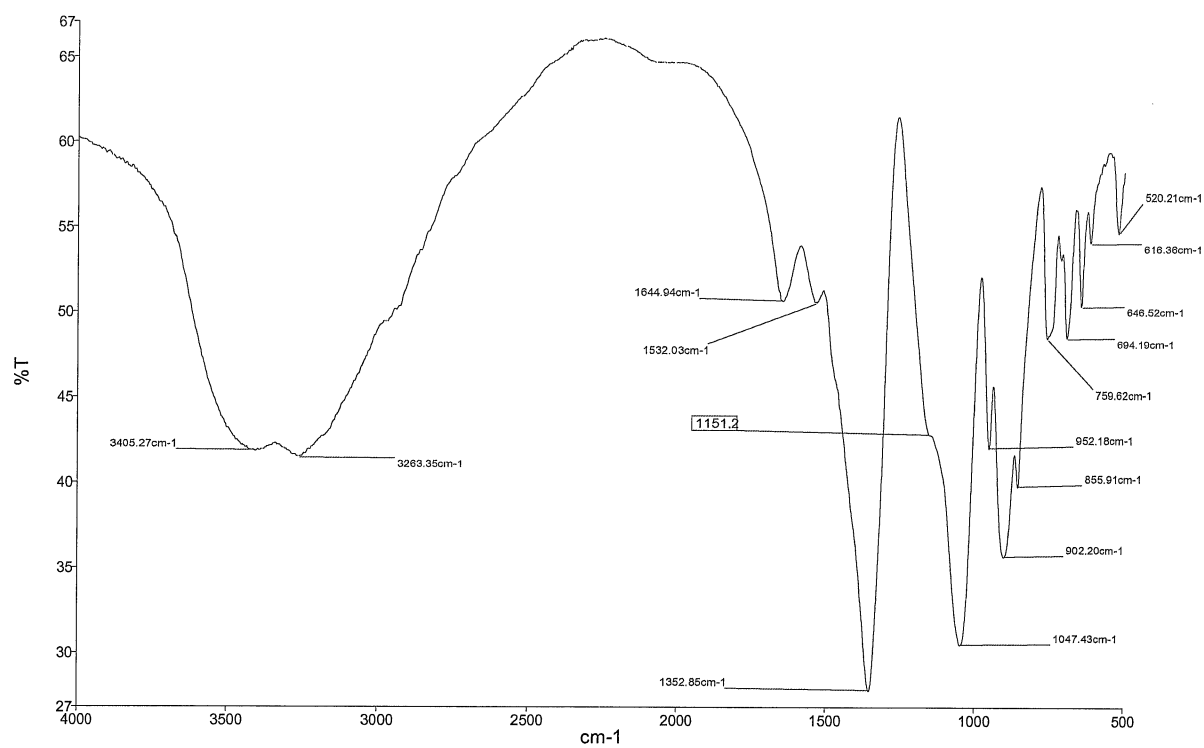
B11ICPD.b D2O {C:\Bruker\TopSpin3.2} MAB 12

Apr28-2015-MAB  
Supervisor Name MAB  
Zn+1.3-dap+B  
PROTON.b D2O {C:\Bruker\TopSpin3.2} MAB 12





IR 3



Zn+1,3-dap+B S.C.