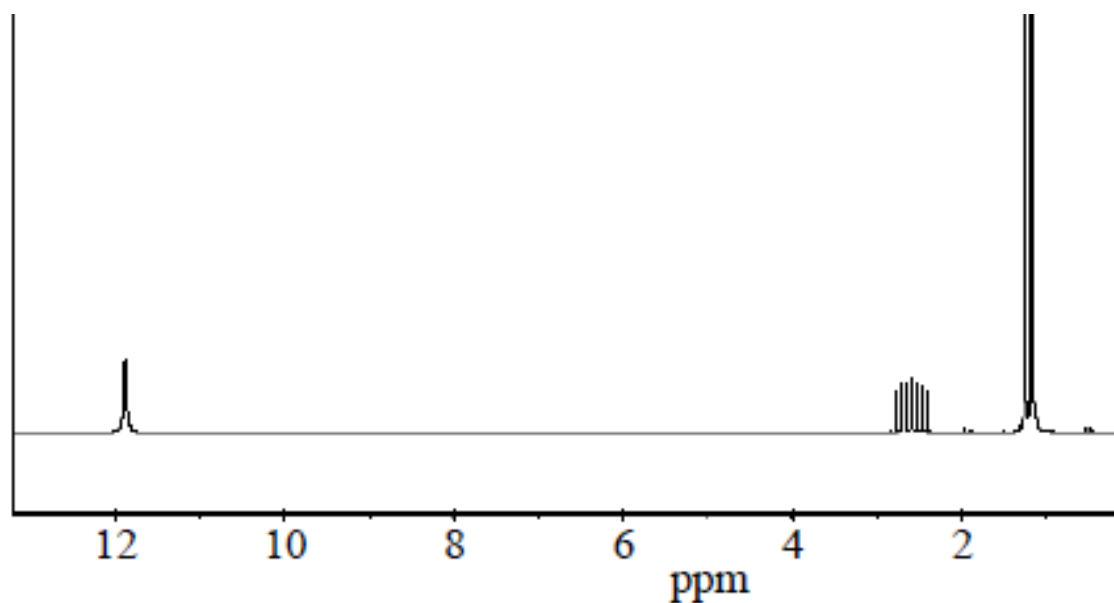
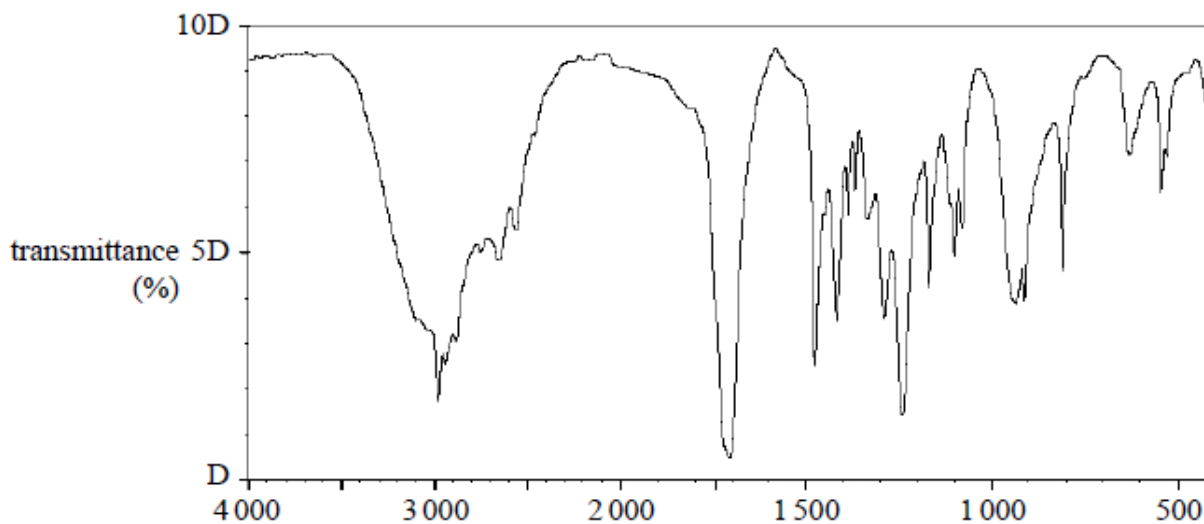


Friday Worksheet
IR spectroscopy 2

Name:

- 1) Consider the IR and the ^1H NMR spectrum below of a compound with molecular formula $\text{C}_4\text{H}_8\text{O}_2$.



The molecule reacts with a known base.

- What does the IR spectrum reveal about the bonds of this molecule?
- What two critical pieces of information would allow us to discount the possibility that this compound is a diol (a compound with two OH groups)?
- Consider the ^1H NMR spectrum and give the structural formula of the compound?