

L4: Unknown Identification by Spectroscopy

Name: _____

lab section: 2 / 3

Structure:

Unknown #:

Name(s) of Unknown:

Attach your ^1H NMR spectrum. Summarize the spectrum like you have seen in the problem sets (e.g., " δ 3.0 t, 2H").

Give each unique proton a letter in your unknown structure. Assign each peak to one or more of these letters. How close is the integration to that expected?

Attach the infrared spectrum and assign each major peak to a structural feature in your unknown. Are there any other distinctive peaks that helped you to identify your unknown? Elaborate.

If you are unsure about the identity of your unknown, what other likely candidates are possible? List as few as possible.

What other information did you use to identify your unknown?

I certify that I have identified my unknown without using any information other than that listed above and realize that a portion of my lab grade rests on this assignment.

Signature

Date