

CHEM 258 – Spring _____
Unknown A - Preliminary Report (5 pts)

Name _____

Unk Number _____

Initial Observations

Physical State:

Color:

Odor:

Melting Point (if solid):

Boiling Point (if liquid):

Beilstein Test:

Ignition Test:

IR spectrum analysis.

List all major absorptions and the structures they infer. (attach spectrum to report). If you report a 'probable' for a given structure then please list the reference absorption from your spectra.

<u>Possible Structure</u>	<u>Reference Absorption(s) in cm^{-1}</u>	<u>probable</u>	<u>unlikely</u>	<u>indeterminate</u>
Carbonyl (C=O)				
Hydroxyl (O-H)				
Carbon-oxygen (C-O)				
Aromatic ring/double bond (C=C)				
Aromatic/vinyl (C-H)				
Aliphatic (C-H)				
Aldehyde (C-H)				
Amine (N-H)				
Misc structures (nitro etc)				

General conclusions from preliminary report

What functionalities may be present? What functional groups appear to be absent?