**Rubric: Experiment 5 :Chem 6614   
Mixture Component Identification Using IR and GC methods in combination**

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**\_\_/3 Purpose:** states actual desired goal and is done succinctly in full sentences.

\_\_\_/ 6 **Procedural details**

\_\_\_A Instrument settings connected to methods below are present:

\_\_\_IR (including model # )

\_\_GC (including model #)

\_\_ sampling protocols (e.g. volume of injection, use of ATR head).

**\_\_/10 Observations**

\_\_\_Titled and annotated Unknown GC and IR traces

`\_\_\_Titled and annotated Standard GC and IR traces

\_\_\_ Table 1( Observed GC Peak tr and Peak Area, A, for Unknown & Key Reference Mixes)

\_\_\_Table 2 Main Observed Diagnostic IR bands for Unknown & Key Reference Mixtures

**\_\_\_/20 Calculations**

\_\_\_Table 3: Assigned GC peaks for reference mixtures 1 and 2 vs Unknown peaks

\_\_\_Table 4: IR mode/group motion assignment for reference mixtures vs Unknown bands

\_\_\_ Discussion and argument for unknown identities is clear, competent and complete

With scenario conditions taken into account as part of the discussion

\_\_\_ Calculations for estimated volume % are present and coherent

**\_\_\_/5 Results**

\_\_\_Unknown label and source present

\_\_\_ Unknown component ID and their estimated volume % stated

**\_\_\_/4 Miscellaneous**

\_\_\_English usage

\_\_\_workmanship (neatness, attention to detail)

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