Chem 51LB Experiment 4 Report Scaffold
Separation by Acid-Base Extraction

Instructions: Report scaffolds are provided to help you learn how to write about the experiments you conduct. Now you will be responsible for providing your own experiment-specific questions and answering them. General questions are still provided here for reference. Type your experiment-specific questions and answers into a separate document. Label each section of your document and number your questions. The document containing your responses should not exceed a total of three pages. Mechanism drawings may be attached at the end of your document and do not count toward the three page limit.

As you go through the process of generating and responding to your questions, think about how you would convert your answers into paragraphs that flow well for an actual report. Your next assignment will be a full report!

Purpose/Introduction
General Questions:
What were we trying to accomplish with this experiment? How did we plan to accomplish this? The purpose of an experiment is not simply to introduce a student to a technique or reaction!

Theory:
General Questions:
Assume you are writing for another student who has taken organic chemistry before but might have forgotten some of the details of reactions and lab techniques. What information about the reaction and/or techniques being used in this experiment would you need to remind them of to make sure they understand what you did, why you did it, and what the results mean? If there is a reaction involved you should include a mechanism. Drawings of the mechanism should be attached.

Results
General Questions:
What important data were obtained in this experiment? The data provided in this section should relate to the purpose(s) of the experiment, but you do not need to point out the connections here. Do not explain your results yet. Just provide them in an organized format. Don’t forget to include any assigned unknown number! You should include a table to organize your data in addition to sentences.

Discussion and Error Analysis
General Questions:
How do the data obtained relate to the purpose(s) of the experiment? How do you know the identity of the product and/or unknown? Do the results make sense? What conclusions can
you draw from the data?  What conclusions can you NOT draw from the data?  (Note that although you are provided with distinct, individual questions here, sometimes the answers to these questions might overlap with each other. That’s ok! In a lab report you would need to decide how to tie these answers together.)

**Conclusions and Future Experiments:**

**General Questions:**
How would you summarize your results and analysis in 1-2 sentences? In other words, what is it that you want the reader to remember after having read your paper?  
What questions remain unanswered? What questions were raised by your results and analysis?