**Writing a Standard Operating Procedure (SOP)**

**Title:** A short but descriptive title so someone knows what it was you were doing.

**Scope and Applications:** What techniques would someone trying to reproduce this need to know? What principles (i.e. solubility) are important? This should be only a few sentences and is not your procedure.

**Data Tables:** Include your two data tables, solubility of pure solutes in three solvents, and the quantifying solubility data table. The tables should have titles and also units.

**Safety:** Include any safety considerations for the chemicals or solvents that you have used in your separation scheme.

**Method:** Clearly outline your method for isolation of the N1986 and 2,2’-bipyridine. This should include amount of solvents used and enough detail that a classmate could recreate the procedure. If you find it helpful to use a flow diagram or represent steps graphically that is also acceptable.

**Results:** Results from the trial run with the model sample (mass and % recovered with calculations). This should also include comparisons of the % N1986 and % 2,2’-bipyridine recovered to the known values in the model mixture. Provide a summary of the effectiveness of your procedure (What are some possible errors that limited your recovery? Where are sources of error in your procedure?) and suggestions for modifications which could improve your recovery of N1986.

**Trouble Shooting Question:** Answer the trouble shooting question.