_____   _____ _____ _____
Name   **Section**   **Desk#**   **Date**

_____
Lab Partner's Name

STOI 386: Determining the Empirical Formula of Copper Chloride

Recorded Data: *(All data should be recorded in pen.)*

1. density Cu_xCl_y soln (g/ml)   ___1.074_____

2. concentration Cu_xCl_y soln (g/ml)   ____0.08067____

		Run #1	**Run #2**
3.	Mass of empty casserole, g	___91.613_____	___90.968_____
4.	Mass of casserole with ~25ml Cu_xCl_y soln, g	___116.800_____	___116.979_____
5.	Mass of ~25ml Cu_xCl_y soln, g	_____	_____
6.*	Volume of ~25 ml Cu_xCl_y soln, ml (V = m /d)	_____	_____
7.*	Mass of actual Cu_xCl_y in ~25 ml soln, g (m_{Actual} = V x conc.)	_____	_____

Repeat heating, cooling, and weighing procedure five times or until two successive weighings are within 10mg.

8. Mass of evaporating dish + Cu	1st heating, g	___92.426_____	____93.259_____
	2nd heating, g	___92.424_____	____91.846_____
	3rd heating, g	_____	____91.842_____
	4th heating, g	_____	_____
	5th heating, g	_____	_____

Calculations (Using equations in lab manual pp 58-59.):

9. *(Eq. 11) Mass of Cu produced, g   _____   _____

10.*(Eq. 12) Percent Cu in copper chloride, %   _____   _____

11.*(Eq. 13) Mean Percent Cu in copper chloride, %   _____

12.*(Eq. 14) Mass of Cl in copper chloride, g   _____   _____

13.*(Eq. 15) Percent Cl in copper chloride, %   _____   _____

14. (Eq. 16) Mean Percent Cl in copper chloride, %   _____

15. Empirical Formula of Copper Chloride   _____
        (Corresponding to Table 2)

*Sample Calculations for equations labeled with an asterisk, *, should be shown on a separate piece of paper. Calculations may be completed for Run #1 only, except for the mean percent of copper in the copper chloride which will incorporate both Run #1 & Run #2.