WATER OF HYDRATION

Date:_____ Name:_____Lab Day/Time:_____

Objective

Procedure

As in Chem 1094 lab manual, pp. _____.

Observations

Data and Results

Table 1. Part I. Mass of water driven off

	Run 1	Run 2
Mass of test tube		
Mass of test tube and (hydrated) sample		
Mass of hydrate sample		
Mass of test tube and sample after first heating		
Mass of test tube and sample after second heating		
Mass of test tube and sample after third heating (if required)		
Mass of water driven off		

Table 2 Part II. Physical observations for hydrated and anhydrous $CuSO_4$

Subtance	**Observations** *record any changes in color or temperature*
$CuSO_4 \bullet 5H_20$ (before heating)	
$CuSO_4$ (after heating)	
$CuSO_4 \bullet 5H_20$ (after adding water)	

Table 3 Results

	Run 1	**Run 2**
Mass of anhydrous (dry) compound		
Mass of water driven off		
Formula of anhydrous compound (given by instructor)		
Moles of anhydrous compound		
Moles of water of hydration		
Moles of water per one mole of anhydrous compound		
The value of n (by rounding to the nearest whole number)		
The complete chemical formula of the hydrate		

Calculations

Show a sample calculation for each of the steps below

Mass of hydrated sample:

Mass of anhydrous sample (after heating):

Mass of water driven off:

Moles of anhydrouds compoud:

Moles of water of hydration:

Moles of water per mole of anhydrous comound:

Conclusion

Questions

Attach any questions assigned by your instructor.