

Comments and Critique for Lab #1 Wiki page – *Kelsey Smith*

Section I: Experimental Procedure

1. Written in imperative voice? **Yes**
2. Procedure complete? **Yes**
3. Assessment of writing quality: **Very Good, no grammatical mistakes**

Grade for Section I (5 pts. Max.) = 5 pts.

Section II: Experimental Results

1. Labeling of data sets: **Used Excel spreadsheet, all columns clearly labeled**
2. Use of correct units: **Correct units used on spreadsheet and in calculations**
3. Use of correct # of significant figures: **Correct # of significant figures were used**
4. Errors in calculations: **No errors were found in spreadsheet calculations**
5. Assessment of quality of presentation (logic, organization): **Good, well-organized, easy to follow.**

Grade for Section II (5 pts. Max.) = 5 pts.

Section III: Lab Report

1. Abstract: present in report? **Yes. Measured uncertainty in [HCl] not stated.**
2. Introduction: present in report? **Yes. Purpose and goals of lab stated.**
3. Procedure (Experimental): present in report? **Yes. Written in the past tense? Yes**
Photos of solutions before and after titration were inserted here. Probably better placed in Results section because they are experimental results (records of observations)
4. Results: **Molarity of THAM and uncertainties were reported, no errors found in calculations. Volumes and uncertainties were reported, no errors found in calculations. Molarity of HCl and uncertainties were reported. In calculation of %eVTHAM and %eVHCl rounded to one significant figure. Could have held 2 sig. figures, but does not change final answer.**
5. Discussion: **Discussed sources of uncertainty and systematic error. Identified systematic error as one possible root cause for the discrepancy between expected molarity and measured. However, no independent standardization of HCl was by provided to students to assess bias in measured result.**
6. Conclusions: **Indicated accurate end point detection was an area for method improvement.**
7. References: Present in report? **Yes.**

Grade for Section III = 14 (out of possible 15 pts.) Composite Grade for Lab #1 = 24 pts.