

CHEM 110 Guide to Full Report on Gravimetric Analysis Experiment

General Requirements

If handwritten:

- use pen; blue or black ink only

If typed:

- use a conservative font (Arial, Courier, Times New Roman)
- font-size 12 pt, black

In all cases:

- white paper only
- single-sided only
- 1 inch margins, left and right
- double-spaced text
- no highlighter or coloured pens
- **USE YOUR OWN WORDS!** Do not even partially copy the lab manual.

Use proper English:

- complete sentences; paragraph format
- use past tense
- no personal pronouns (passive voice)

Full Report – Percent Sulphate in Unknown

EXP # 1.2 only (do not mention 1.1)

Title

Give the title of the experiment, as it appears in the lab manual. Include your name, class and lab section, and date of the experiment.

Objective

- state the main objective(s) and technique(s) of the experiment

Procedure

- short & concise - *aim for one page long*
- essay format - *not in point format!*
- brief summary, but include sufficient detail so a chemist could perform the experiment
- include changes - *should be what you did*
- use past tense, passive voice
e.g. "75.0 mL of aqueous 3% H₂O₂ was transferred using a graduated cylinder...."

Data & Calculations

On report sheet only. Do not rewrite here.

Sources of Error

Clearly explain one source of error, and state how it would affect the relevant result. Would this increase or decrease the calculated final answer? Be concise! A single sentence is usually sufficient for each source of error. The error you discuss should be both:

- **significant** – must have a measureable impact on your result
- **legitimate** – must be unavoidable, not a human error blunder

Always assume that the reagent chemicals are free of contaminants and that the equipment is calibrated and functioning correctly. Look for things that you have no control over, such as potential flaws in the design of the experiment or chemical side-reactions. Consult the Lab Guide (Sec 1.4) for more information.

Conclusion(s)

Final results only (listed below); do not include any intermediate values.

- % SO₄ of the unknown sample
- number of trials used to determine this

References

Give full and complete references for all materials used, including the Lab Manual and the Lab Guide.

Refer to the Sample Report in the Lab Guide (Sec 1.4) for the correct citation format

Staple all sheets together in the upper-left corner in this order:

1. lab report sheet
2. full report

STUDENTS SUBMITTING REPORTS THAT ARE IDENTICAL, OR EVEN SIMILAR, TO EACH OTHER WILL RECEIVE A MARK OF ZERO (0) ON THE ENTIRE LAB REPORT.