

Appendix C

PHYSICS 251 & 252

Contents of a Lab Report

The Physics 251/252 Lab Report Checklist

This is a general list of items and sections which should be included in every lab report.

Data and Spreadsheet:

- Write your name and your lab partner's name at the top of your spreadsheet.
- The spreadsheet should have the data columns labeled, including **units**. Also, include a hand sample calculation for each type of calculation performed by Excel. Do not forget to include the equation or constants used.
- Include any additional calculations that the lab manual may have asked you to do.
- Printout of the formula view of your spreadsheet; to go to **formula view**: Ctrl~
- Fit excel sheet to one page: go to File, Page Setup, Scaling: Fit "1" page wide by "1" page tall.

Graphs:

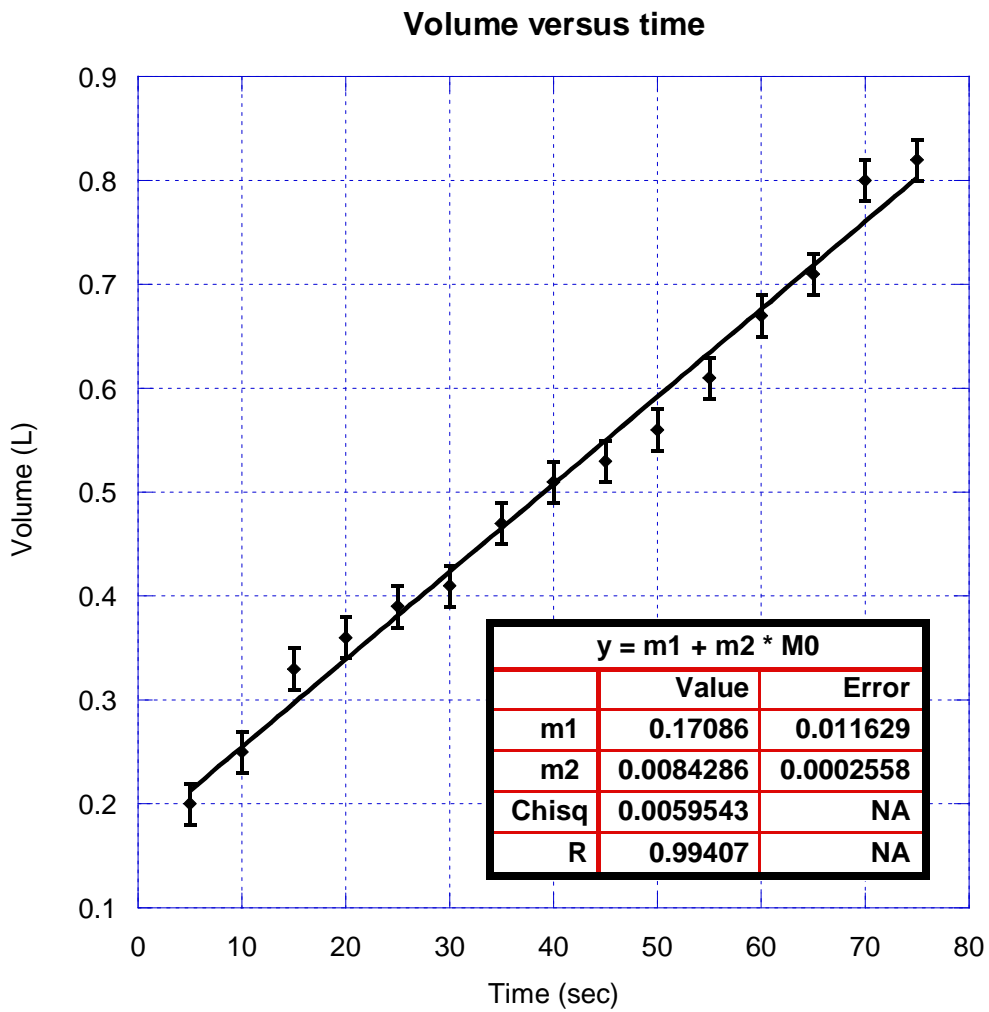
- Along with every graph there needs to be an **observation** (~2 sentences) as to the nature of the graphs. You could comment on how the curves behave, what interpretation can be drawn from them, etc.
- Every graph should have the following: a) title (always vertical axis vs the horizontal axis); b) labeled axes with **units**; c) Curve fit if appropriate; d) legend if needed; e) error bars when appropriate; f) your observations.
- An example of a graph is shown in figure 1.

Answers to questions

- On a separate sheet of paper, provide the answers to the questions.

Ordering of Pages:

- *Data* (Sample calculations, spreadsheets, formula view)
- *Pictures* (graphs with **observations**)
- *Answers to questions*



The graph represents the volume of water leaking through a roof versus time. The rate at which water penetrates the roof is $0.0084 \pm 0.0003 \frac{L}{sec}$.

Figure 1