## PHREEQC execution

PHREEQC is freely downloaded from the US Geological Survey (https://www.usgs.gov/software/phreeqc-version-3).

## Windows

- 1. Download the most current edition of Windows 32-bit PHREEQCi-#.#.#-####.msi.
  - a. Other Windows versions of PHREEQC should function equivalently, however, the graphical user interface of the PHREEQCi module improves user accessibility.
  - b. Any location can be selected to download the .msi PHREEQC installer
- 2. Run the downloaded .msi PHREEQC installer
  - a. Follow the prompts and directions
- 3. Open the PHREEQC interactive application
- 4. Upload PHREEQC input file to the application and click the "Run.." button under the "Windows" and "Help" headers.
- 5. Ensure that the automatically populated file paths for the input file, the output file, and the database are acceptable
  - a. Correct any necessary entries
- 6. Execute the simulation.

## Macintosh

- 1. Download the most current MacOS 64-bit PHREEQC-#.#.#-####.dmg.
  - a. Only one option is available for Macintosh operating systems.
- 2. Open the downloaded PHREEQC software folder, which should be titled "PHREEQC-#.#.#-####".
- 3. Drag the "bin" folder into the "src" folder.
- 4. Open the "run phreeqc" file within the "src" folder
  - a. The file may be blocked for being from an unrecognized developer.
    - i. Open the System Preferences application
    - ii. Navigate to the Security and Privacy setting
    - iii. Click the locked lock in the lower left corner
    - iv. Click allow Open Anyways next to the prompt for the PHREEQC software
- 5. Click the right pointing triangle (the "play" button)
- 6. Follow the software prompts to select the PHREEQC input file, select the location of the PHREEQC output file, and select the PHREEQC database file for the simulation.
  - a. Select the output file location to be the folder that contains the data processing Notebook
- 7. Execute the simulation.