



AquaChem 11.0

Water Quality Data Analysis and Report software

AquaChem is a software application specifically designed for anyone working on hydrogeologic, geochemical, or environmental projects requiring the management, analysis, and reporting of water quality data.

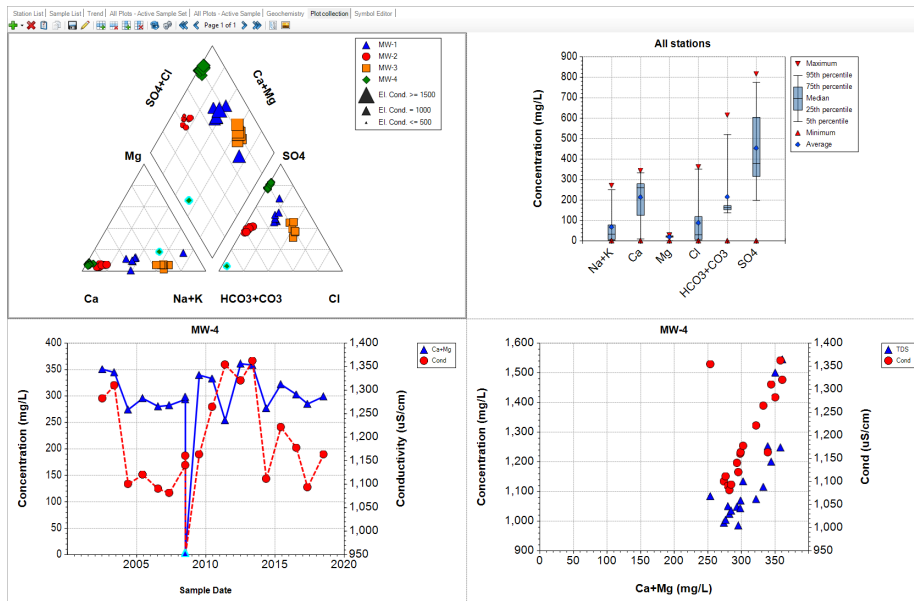
AquaChem’s analysis tools cover a wide range of functions and calculations including unit transformations, charge balances, and statistics. These powerful analytical capabilities are complemented by an extensive selection of commonly used geochemical plots to represent the chemical characteristics of water quality data and a console for R-scripts that offers powerful data science tools.

New Features



Plot Collections

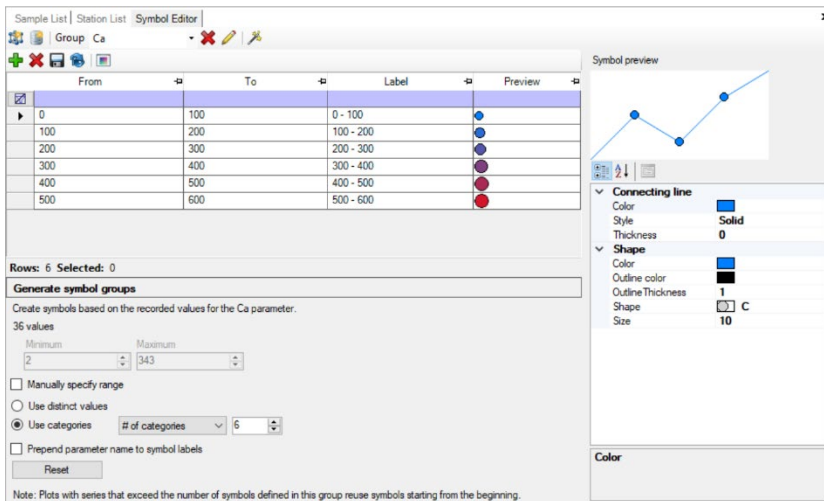
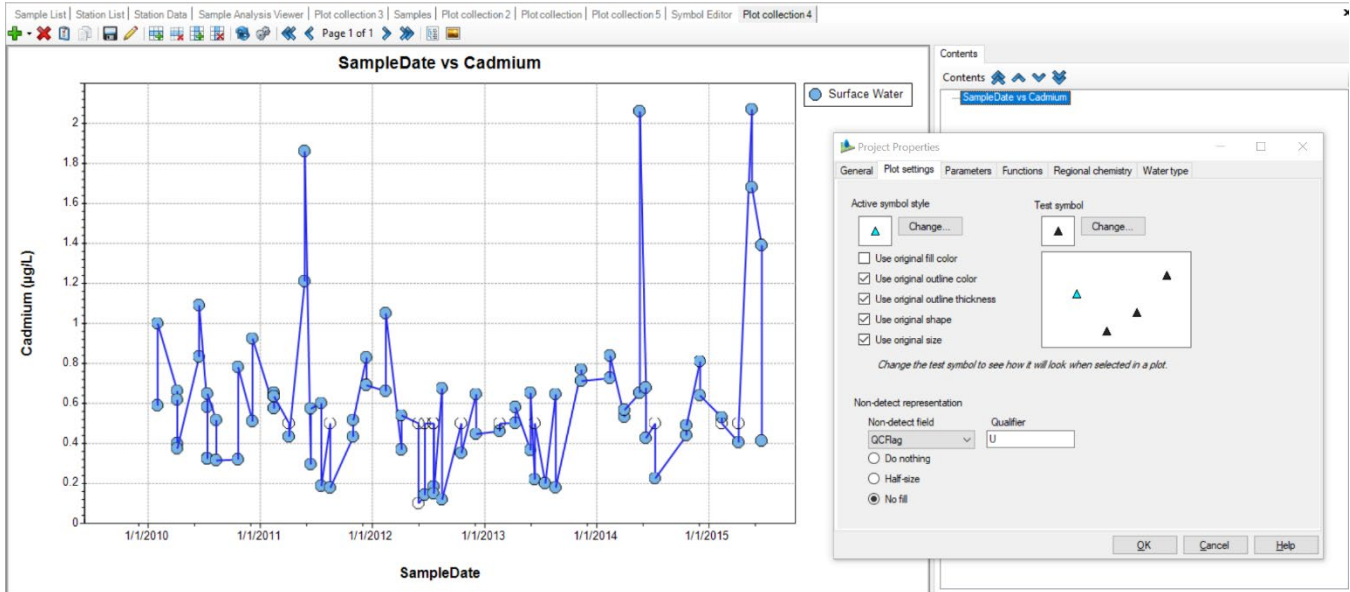
Plot collections have been enhanced to include:



- **Multi-parameter plots:** create Box and Whisker, Scatter, or Time Series Plots with multiple parameters for a station or a specified set of samples
- **Secondary Axes:** scatter and time series plots support secondary axes.
- **Proportional Piper Plots:** Create ramped symbol sizes on the central part of the Piper Plot based on the value of a selected parameter (e.g. Conductance or TDS)

Additional Plot Collection Improvements include:

- **Automatic Non-Detect Symbols:** The symbols for data points on plots with non-detect QA flags can be automatically overridden to indicate the non-detect status:

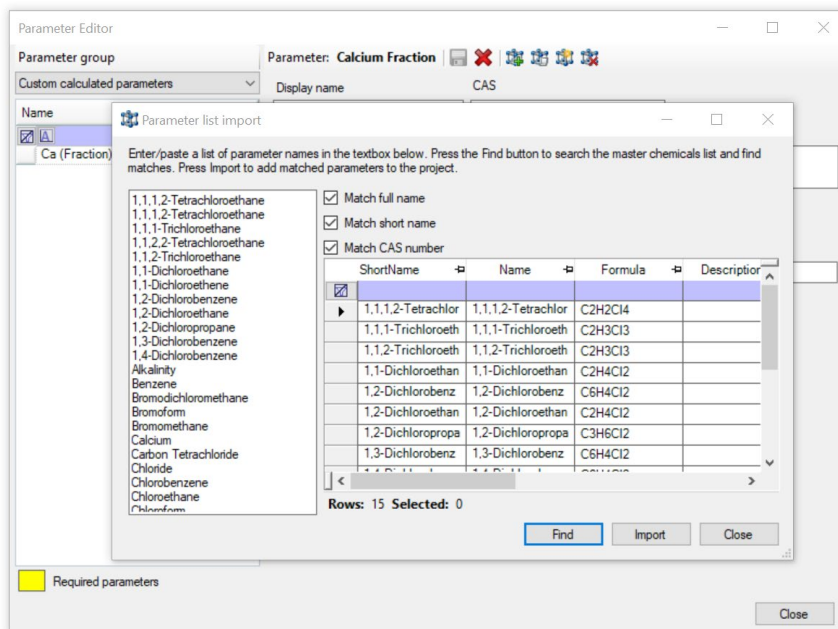
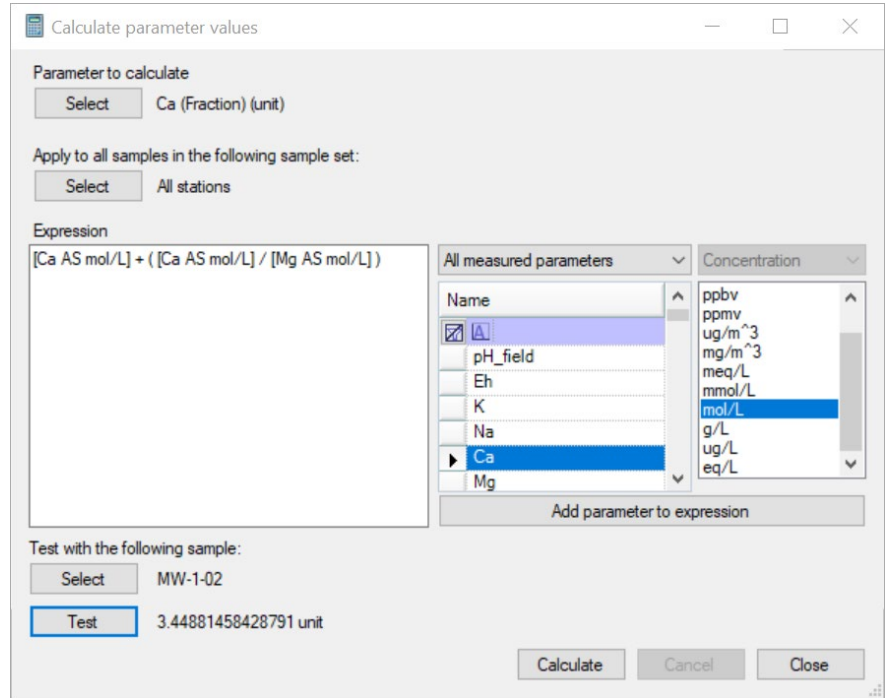


- **Symbol Editor:** create ramped symbols based on numeric fields using unique values or categorized intervals based on a specified number of linear, log, or quantile breaks.
- **Interactive Multi-Select:** You can select multiple data points on plots and they will be selected in the Sample List and active Maps
- **Settings:** axis settings for plots have been reorganized into logical and collapsible groups



Data Management

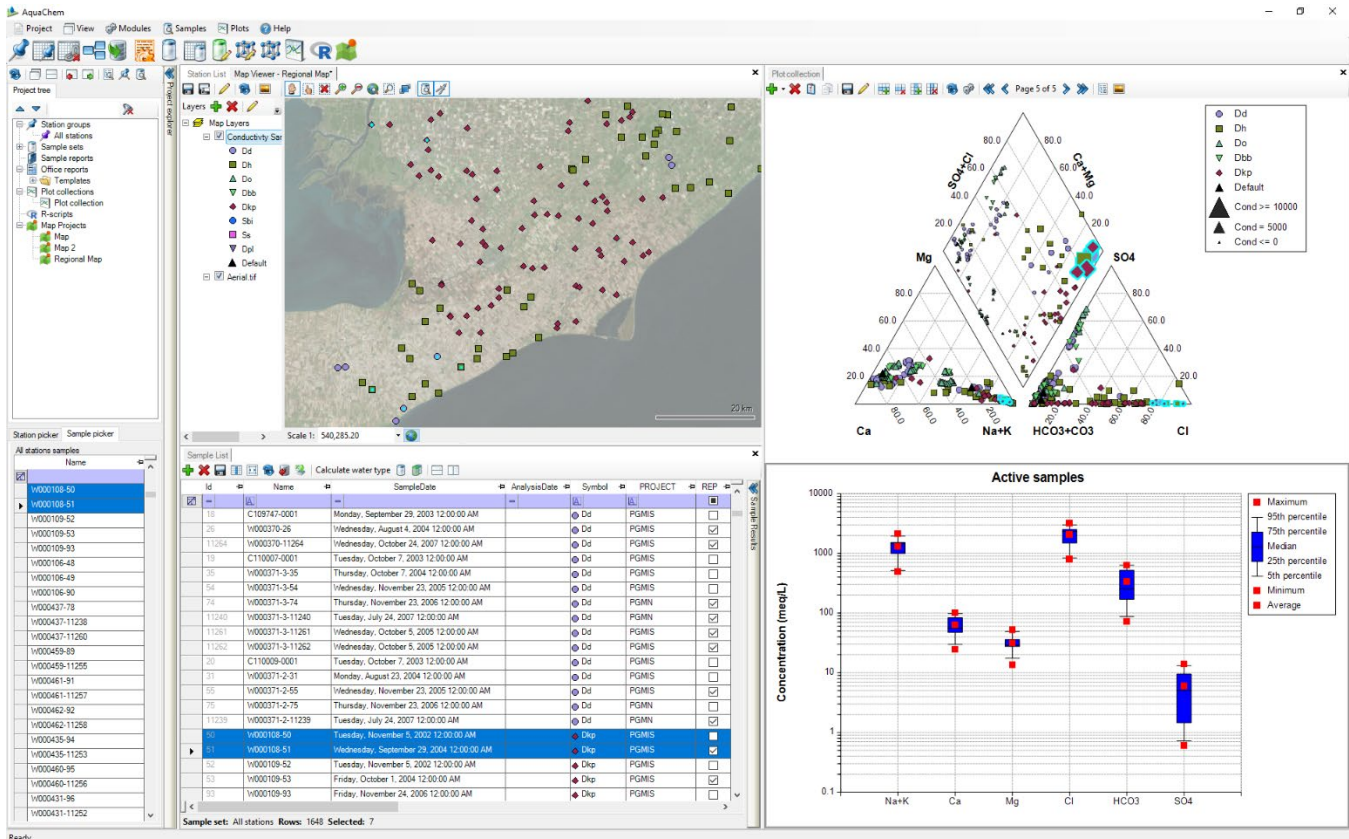
- Custom Calculated fields and parameters:**
 designate a sample field or a parameter as a calculation-enabled in the Template Manager and insert values for selected samples based on a mathematical expression that can include parameters (with unit conversion) and common functions. Calculated parameters can be used throughout the application – including in the Map Viewer, Plot Collections, and R-Console.



- Parameter Handling:**
 automatically add a list of parameters based on its name or CAS number (before or during import) from the Chemical List and automatically delete parameters with no measurements in your project – this greatly improves automating parameter management.
- Sample Set Creation:** Add a sample set condition based on exceedance of any parameter in a specified parameter group

Other Enhancements

- **Import:** Improved performance when importing larger AquaChem 2014 projects
- **String Data Type:** string data fields can now be specified with any length
- **International date handling:** Import Data supports international date formats



For a full version history, see the AquaChem readme file at:
<https://www.waterloohydrogeologic.com/aquachem-readme/>