

Glossary of Terms

Aquiclude

A saturated geologic unit that is incapable of transmitting significant quantities of water under ordinary hydraulic gradients.

Aquifer

A saturated permeable geologic unit that can transmit significant quantities of water under ordinary hydraulic gradients.

Aquitard

A saturated geologic unit that transmits water in quantities insufficient for economic use.

Client Name

A user-supplied character string (up to 30 characters) storing the name of the client which sponsored the aquifer test. Used for reports and plots.

Coefficient of Permeability

See Hydraulic Conductivity.

Company Name

A user-supplied character string (up to 30 characters) storing the name of the company which conducted the aquifer test. Used for reports and plots.

Confined Aquifer

An aquifer with upper and lower boundaries consisting of aquicludes.

Date of Test

A user-supplied character string (up to 30 characters) storing the date of an aquifer test. Used for reports and plots.

Displacement

Change in water level relative to static condition.

Double-Porosity Fractured Aquifer

An aquifer represented by a double porosity system consisting of low-permeability, primary porosity blocks and high-permeability, secondary porosity fissures.

Fracture Skin

A thin, low-permeability material coating the surface of fractures (e.g., mineral deposit) that restricts flow of water.

Fractured Aquifer

See Double-Porosity Fractured Aquifer

Hydraulic Conductivity

The volume of water moving through a unit area of aquifer perpendicular to the direction of flow in unit time under a unit hydraulic gradient.

Leaky Aquifer

An aquifer with upper and lower boundaries of one aquitard and one aquiclude or two aquitards.

Location of Test

A user-supplied character string (up to 30 characters) storing the location of the aquifer test. Used for reports and plots.

Measurement Weight

Use weights to assign the relative weight of each measurement for use during automatic curve matching. In typical cases, assign weights of 1.0 or 0.0 to include or exclude measurements during automatic curve matching.

Observation Well Name

A user-supplied character string (up to 30 characters) storing the name of the observation well used in the aquifer test. Used for reports and plots.

Permeability

See Hydraulic Conductivity.

Piezometer

An open-ended pipe installed in an aquifer to measure hydraulic head at a specific depth.

Porosity

The ratio of void volume to total volume in an unconsolidated material.

Project Number

A user-supplied character string (up to 30 characters) storing the company's number or ID of the aquifer test project. Used for reports and plots.

Residual

The difference between simulated and observed displacement.

Residual Displacement

Water-level displacement measured from static condition in an observation well after pumping has stopped during the recovery phase of a pumping test.

Saturated Thickness

Vertical distance measured from the top of an aquifer (confining layer or water table) to the base of the aquifer.

Semiconfined Aquifer

See Leaky Aquifer.

Specific Storage

The volume of water released from storage by a unit volume of confined aquifer per unit decline in hydraulic head.

Specific Yield

The volume of water released from storage per unit surface area of an unconfined aquifer per unit decline of the water table.

Storage Coefficient

See Storativity.

Storativity

The volume of water released from storage per unit surface area of a confined aquifer per unit decline in hydraulic head.

Test Well Name

A user-supplied character string (up to 30 characters) storing the name of the test well used in an aquifer test.

Transmissivity

Transmissivity is the rate of flow under a unit hydraulic gradient through a cross-section of aquifer having a unit width and full saturated thickness. Also expressed as the product of hydraulic conductivity times saturated thickness.

Unconfined Aquifer

An aquifer with an unrestricted (free) upper boundary and an impermeable lower boundary (aquiclude).

Water Table Aquifer

See Unconfined Aquifer.

Wellbore Skin

A thin, low-permeability deposit on surface of wellbore (e.g., drilling mud) that restricts flow of water.