

# Aquifer essay

[Environment](#), [Water](#)



## **Aquifer**

An aquifer is generally referred to as a wet underground stratum of a permeable rock which seems to bear a substantial amount of water. An aquifer does not necessarily have to be based on a hard element such as a rock but can be found in other materials such as silt based grounds, gravel based grounds as well as on a sand based ground. Due to the essentiality of water to the living of human beings together with sustenance of the man's main activities, human beings have devised techniques to extract such underground water bodies for his overall purposeful use. This is through extraction of these water bodies through mechanisms such as wells and boreholes dug to reach these water bodies. Hydrogeology is the term which is used to refer to the study and utilization of such water bodies for the purposeful use by human beings (ILRI, 1989).

Basing on kind of aquifer in question; whether a permeable rock, sand based aquifer or a gravel one, it is essentially necessary to evaluate them in order to determine the appropriate mechanism and strategies of obtaining the maximum of water at a constant rate. Consequently, the drawdown occurring in these aquifers are usually different and unique. In sand and gravel aquifers, the drawdown generally differs from that found in silt aquifer (GAB, 2007).

A silt aquifer requires a larger form of radius in order to obtain the maximum amount of water as compared to those of sand aquifer and gravel aquifer. Underground water can sufficiently seep through sand and gravel aquifer at a higher rate as compared to that of silt aquifer. Consequently, despite a

small form of radius applied in these two forms of aquifers, a substantial amount of water can be obtained. In comparison, there is a greater resistance in silt aquifers due to compressed rock particles found in these form of aquifers. Consequently, an expanded and deeper extraction mode has to be adopted (Brown, 2011)

## References

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