What We Learn From Core Samples

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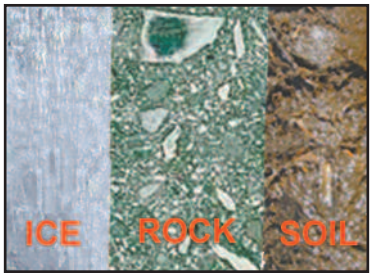

There are a variety of core samples, here is an example of a few.

Core samples can be taken of several geological layers including ice, rock, and soil. They are usually retrieved using a drill rig with a long hollow tube instead of a drill bit. The tube is driven into the earth by a large weight, material accumulates in the tube, and is then brought to the surface. The cores are analyzed, recorded, and sent to a lab for further testing.

Ice core samples are retrieved by drilling through layers of ice. Ice cores offer valuable information about our earth and its climate. Information such as ice accumulation rates, volcanic eruptions, atmospheric changes, changes in vegetation, and the impact humans have made on the earth is all provided through different ice core samples.

Rock core samples can also help with certain information about earth. Rock core samples are frequently used in the mining industry to determine the amount of a particular material, the depth of it, and its quality. Like ice, rock samples give scientists information on past occurrences such as volcanic eruptions. Scientists use rock samples to determine the different types of rocks and minerals lying underneath the ground by the different layers found in the core.

Soil core samples are also taken from the earth, but usually to research information about the area at the present time. Soil samples help geologists understand what is going on beneath our feet and what exactly we are stepping on. The samples can be used to find out the geology of the area, how much water is being stored in aquifers belowground, and how a particular area is managing water. Soil sampling is also used when building or repairing homes to inform the contractor the depth needed to reach stable soil. Stable soil will usually support three to four tons* of weight per square foot*, information that is vital to a home's foundation.

Core samples are retrieved from the earth using different techniques, but the most common way is using drilling rigs. The cores tell us different information about the earth and natural disasters that have happened in the area. Understanding the earth's history is important and necessary, because we can't know where our world is headed if we don't understand where it's already been.

*(1 ton ≈ .907 tonnes)
(1 square foot ≈ .092 square meters)

Focus on MGWA

84th ANNUAL MICHIGAN MGWA CONVENTION

Get set for the 84th Annual Michigan Ground Water Association (MGWA) Convention March 12-13, 2012. It will be held at McCamly Plaza Hotel and Kellogg Arena in Battle Creek, Michigan.

Choice seminars are scheduled, such as *Life-Cycle Economic Analysis of Water Wells* by McEllhiney Lecturer Marvin Glotfelty, and "The Rig Doctor" himself, Fred McAninch, will talk about simple and proven additions you can do yourself to enhance your drilling rig performance.

Ed Korthase and Fred McAninch at MGWA 2011. WWDR photo.

Trade show exhibits will be available for your viewing pleasure. See the latest equipment, products, and services for the groundwater industry on display, and be sure to visit ***WWDR***.

The MGWA annual meetings are set for 8 a.m. on Tuesday, followed by the auxiliary breakfast.

For more information, visit: www.worldwidedrillingresource.com

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