

# "Rock & Roll" at the SUR/FIN® Exhibit— See the World-famous Copper Boulder

**W**hen Charlie Walker first saw the Manitou, he knew his fascination with it was not a passing fancy. Charlie didn't just *like* the Manitou ... he had to *have* it. So began the love affair between this Detroit Branch member and, well, an 8,000-lb rock.

## What is the Manitou?

The Manitou is a giant, natural copper sculpture that weighs nearly 8,000 pounds. It measures 10 feet long, is more than four and one-half feet wide, and averages more than one foot in thickness. The copper, which is 99-percent pure, was formed from volcanic activity more than one billion years ago on what is now the Keweenaw Peninsula of Michigan. Experts believe it was deposited along fissures from superheated mineralized solutions that percolated upward through fractures in the volcanic rock layers. This unusual boulder was formed in a large fissure along one of the fractures in the Lake Superior basin.

## Where Was It Found?

In August of 1989, Brian Schulze was conducting a sonar search for shipwrecks off the Keweenaw Peninsula. He recorded something very erratic in the terrain on the floor of Lake Superior. The following day, Schulze explored the bottom in self-contained diving equipment, and found a large vein of copper and calcite, which ran for several hundred feet. He then discovered a large crevasse on the lake floor, and lying on the bottom—protected from glaciers and severe weathering—was a giant copper boulder. After hundreds of hours of planning, the giant copper rock, which would come to be known as the Manitou, was lifted by crane out of the waters of Lake Superior.

## What's So Special About It?

The Manitou is the largest naturally formed piece of mass copper in the world. Since its recovery, it has received worldwide attention, has been the subject of many articles, and has been featured at several mineral and gem shows. It also was on display



in the AESF Activity Center during SUR/FIN® '93—Anaheim.

The giant Manitou is acclaimed by many geologists to be not only the largest, but also the most beautifully formed piece of natural copper in the world. The surface of the serpentine-shaped boulder has a variety of textures. Some areas are dotted with shallow pieces of host granite, bordered by thin margins of bright blue-green copper compounds.

## The Legend Behind the Rock

The name "Manitou" is an Algonquian Indian word meaning great spirit, or object of supernatural power. The legend maintains that an ancient civilization of miners found large veins of copper throughout the Keweenaw Peninsula. There is some indication that the Manitou and other large copper specimens may have been discovered by these ancient unknown miners more than 7,000 years ago, when Lake Superior's water level was much lower.

Pieces of copper commonly weighing one-quarter to 10 pounds were often found along the shore of Lake Superior by the Algonquins up until the 1800s. Legend has it that the Indians believed the copper pieces were divine gifts from the gods dwelling beneath the "Great Water." They often preserved the pieces of red metal for long periods of time, handing them down within families.

## SUR/FIN® '96 Is Your Chance To See the Famous Manitou

The Manitou is now owned by Charlie Walker and Univertical Corporation, an ISO 9002-certified manufacturer of anodes and supplies in Detroit, MI. The giant boulder will be on display this June at SUR/FIN® '96—Cleveland, in Univertical's exhibit booth (#508 & 510). Be sure to stop by and see this world-famous natural creation.

## About the Owner



Charles T. Walker has been a member of AESF's Detroit Branch for 48 years, and is founder and Chairman/CEO of Univertical

Corporation. In 1967, he received both U.S. and Canadian patents for the titanium anode basket assembly he developed for the acid nickel/copper/tin/zinc plating industry. He also introduced the use of phosphorized copper in acid copper plating.

In 1984, he was granted a patent for a graphite anode basket assembly for use in fluoborate acid systems, tin sulfate baths and methane sulfonic solutions for the plating of printed circuit boards. He also was the 1991 recipient of AESF's Industrial Achievement Award. *P&SF*