

# Discover Minerals

Traveling Through Geologic History One Rock at a Time!

Volume 2 Issue 3

[www.discover-minerals.com](http://www.discover-minerals.com)

## Inside This Issue

## Features

### Mine of the Month Copper World Mine (Clark Mountain; CA)

The mineral deposit known today as the Copper World Mine was originally located in 1868—the first of many economical lodes discovered in the Clark Mountain Range and the Ivanpah Mining District. However, its full potential was not realized until the late 1890s when it became the most significant copper producer in southern California, and one of the four largest in the U.S.

### Element of the Month Copper

Forged in exploding massive stars, one of the first metals utilized by ancient civilizations, copper, a Group 1B (11) transition metal with 29 protons in its nucleus, is the 25th most abundant element in the Earth's crust.

## Mineral Showcase

### Malachite



## DM Field Trips Clark Mountain Range

At 7,929 feet (2,417 meters), Clark Mountain's credentials as the highest peak not only in the range itself, but also the entire Mojave National Preserve, hardly garners much respect from other loftier and better-known peaks throughout the West's cordilleran belt. But it should...for several reasons!

## Articles

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#### Identify Your Treasures

Through patient determination and painstaking dedication to discovery and knowledge, bygone scientists developed and employed numerous chemical tests to identify the elements and compounds that have become so necessary to current civilization. Though quaint by modern standards, such chemical tests are still valid for today's amateur and independent researchers.

### Part Four

#### Chemical Mineralogy:

#### Testing Techniques

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#### Basics of Geology:

#### Theory of Plate Tectonics

This series began with a discussion of the Earth's structural layers, continued with the processes that sculpt its ever-changing surface, and now concludes with the Theory of Plate Tectonics that describes the drift of the continents and the resulting consequences.

# Mineral Identification

**Part One**  
Descriptive Mineralogy

**Part Two**  
Determinative Mineralogy

**Part Five**  
Crystallography

**Part Three**  
Physical Mineralogy

**Part Four**  
Chemical Mineralogy