

# Taste & Odor in Drinking Water

## Geosmin and MIB

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Geosmin and Methyl-Isoborneol (MIB) are naturally occurring compounds that have a very strong, earthy taste and odor. Geosmin can be detected by humans at very low levels.

The City of Yuba City routinely monitors for Geosmin and MIB in the water supply. These compounds are usually present in drinking water, however not at noticeable levels.

Generally, Geosmin & MIB become a taste & odor issue for customers when levels are in the range of 20-30 nanograms (one millionth of a milligram) per liter, but some people who are particularly sensitive may notice it at levels above 10. To put it in simpler terms that would equate to one cent in a billion dollars. Yuba City samples for Geosmin & MIB monthly and over the last five years the results have been under 10 nanograms 89% of the time.

### What are the Effects of Geosmin and MIB?

Geosmin and MIB produce a musty, earthy smell and taste in drinking water, however both compounds are not harmful at levels present in drinking water.

### What Causes Increased Levels of Geosmin and MIB?

Some kinds of algae and bacteria present in lake and river water naturally produce Geosmin and MIB. An increase in this production typically happens during late summer into early fall when lake levels are low, rivers are flowing slowly and water temperatures are warm.

### What Can be Done About Geosmin and MIB?

Geosmin and MIB cannot be removed from water using normal treatment processes. The City of Yuba City adds Powdered Activated Carbon to reduce the levels of Geosmin and MIB.

When Geosmin and MIB are noticeable, customers can add lemon juice and chill water in the refrigerator to improve the taste and reduce odors. Drinking water carbon filter systems are also effective at reducing odors and improving taste.