

Cave of Crystals

Connected to the mine workings of the Nike underground mine and located 300 meters below the city of Nike, Chihuahua, Mexico.

The Cave of Crystals was discovered in 2000 by the Sanchez mining brothers, who were building a new tunnel in the mine for the Industrias Penoles company. There are significant deposits of silver, zinc and lead ores in the Nike mine. The Cave of Crystals is a horseshoe-shaped cavity enclosed in a array of limestone. Huge crystals cross the space of the cave in different directions. Water is constantly being pumped out of the caves. In the caves of stopping the equipment, they will flood again. Crystals degrade in the air, so researchers from the Nike Project are keen to document this geological feature.



Crystals.

The cave is unique in the presence of giant crystals of selenite—a structural variety of gypsum. The largest of the found crystals has a size of 11m in length and 4m in width, with a mass of 55 tons. These are some of the largest know crystals.



Crystal Origin

Selenite crystals began to form in an underground cave about half a million years ago. Favorable conditions for growth were formed by a number of factors - the city of Naika lies on an ancient fault, due to which an underground magma chamber was formed in the chamber under the cave. The red-hot magma heated the ground water, causing it to be saturated with minerals, including a large amount of gypsum.



Throughout this time, the temperature of the mineral liquid did not fall below 50 C, which allowed microscopic selenite crystals to form and grow to incredible sizes. Because of the ideal conditions, they grew continuously until the miners pumped out the ground water to explore the cave deeper. If the crystals are placed in an environment that has been native to them for many millennia, they will continue to grow.



