



Borax Crystal

Collected by Joe Siefke
Senior Geologist, U.S. Borax Inc.



The specimen pictured above was formed between 1940 and 2001. It was found and collected on March 21, 2001.

This specimen was located on C level (400 feet below the desert floor) in the Baker underground mine in a drift lined with timbered ore chutes. The chute-lined drift was abandoned in 1940 and the waist-deep brine accumulated due to groundwater from a nearby fault. The specimen was submerged in brackish borate brine.

It was found by “feel” and pried off the corner of a 12”x12” vertical timber, then boxed and carried to the surface on a stretcher.

The specimen is hydrated sodium borate ($\text{Na}_2\text{B}_4\text{O}_7 \cdot 10 \text{H}_2\text{O}$) which is the most abundant ore mineral in the Boron deposit, making up more than $\frac{2}{3}$ of the original deposit.

The approximate size is 15”x15”x13”.

Borax is usually colorless and white. The color of this specimen is thought to be due to the tannins from the timbers that lined the drift.

Borax Facts Mineralogy

Crystal form:	Monoclinic, prismatic
Color:	Usually clear to white
Cleavage:	One perfect, one nearly perfect
Fracture:	Conchoidal, brittle
Hardness:	2 -2½ (Mohs scale)
Luster:	Vitreous to resinous
Streak:	White
Clarity:	Translucent to opaque
Gravity:	1.70 (water is 1.0)
Reference:	No. 25.14 in Dana's System

Display

In order to maintain the specimen in the condition it was found, the display case holding it is sealed and contains a hydration unit that keeps the relative humidity at 70%.





U.S Borax History in Boron, California

U.S. Borax's roots stretch back to 1872 when company founders began mining borates in Nevada. These pioneers discovered borates in Death Valley in 1881. They used teams of 20 mules and giant wagons to haul them 165 miles to the nearest railroad in Mojave, California. Our mine in Boron, California began as an underground mine in 1927 and was transformed into an open pit mine in 1957.

Today, we operate California's largest open pit mine. The mine contains one of the richest borate deposits on the planet and supplies more than 30% of the world's demand for refined borates.

No matter how far our product travels, we remain committed to the environmental preservation of Death Valley.

- In 1916, company officials helped write the language that was adopted by the U.S. Congress to establish the National Park Service.
- Company leaders donated land holdings to the government and lobbied to have Death Valley protected as a National Monument in 1933 and again as a National Park in 1994.
- Since 2001, our Sustainable Development program has guided how we measure, improve, and report on social, environmental, and economic performance.
- In 2010, Rio Tinto Borates donated another 110 acres and associated mineral rights to the federal government to expand Death Valley National Park.
- We currently operate a 950-square foot, state- and federally-sanctioned Wildlife Rescue Center which is a sanctuary for threatened and endangered bird species.

Borax Visitor Center

Buried deep in the Mojave Desert is one of the biggest and richest deposits of borax on the planet. There, on the rim of our active Borax mine, you will find the Borax Visitor Center: One of the best-kept secrets of the Southern California desert. Built in 1997, the Center tells the story of borax and the local community.

The Center offers an opportunity to explore U.S. Borax's 150-year history as an American icon and learn about mining today and innovations for tomorrow:

- Historical and geological exhibits
- ADA compliant operations overlook
- Photo ops
- Video theater
- 20 mule team replica
- Gift shop
- Borax souvenirs

Admission

Weather permitting, the Visitor Center is open Tuesdays through Saturdays from 9 a.m. to 5 p.m. (last entry is at 4:45 p.m.), excluding major holidays.

Admission is free, but the Center accepts donations to support local community organizations through our nonprofit Borax Visitor Center Foundation. Parking is also free and accessible to recreational vehicles.

Location

14486 Borax Road
Boron, CA 93516

Contact

Phone: +1 760 762 7588
Email: visitor.center@riotinto.com



RioTinto

borax.com/visitor-center