The Mariscal Mine was the center of the Big Bend mercury mining economy. Operating from 1900-1943, Mariscal Mine produced over 1,400 seven-pound flasks of mercury (commonly known as quicksilver) and was responsible for $\frac{1}{4}$ of the total mercury produced in the United States. The deserted remains of the mine still stand today. It is a great reminder of man’s impact on the land and environment as well as nature’s ability to reclaim the land as its own.

The mine is located on the northern end of Mariscal Mountain deep in the interior of Big Bend National Park, 5 miles west of the Rio Grande Village. Below is a timeline of some of the events in the mine’s history that students may come across in their research.

**Timeline of Events at Mariscal Mine:**

**1900 Mine Discovered**

Farmer Martin Solis discovered the bright red mercury-bearing ore near his farm in 1900 by Mariscal Mountain.

- This bright red mercury bearing ore is called cinnabar.

**1900-1905 Lindsay Mine**

**1905-1909 Sanger’s Texas Almaden Mining Company**
1917 Ellis Mine

- W.K. Ellis purchased mine
- Structures from Early Phase of cinnabar ore processing visible at lowest level of the Mariscal Mine Complex

1919 Mariscal Mining Company

- After the war the mine was sold to William “Billy” Bucham
- The large Scott Furnace and elaborate concrete condenser system that stands above it are remains of Mariscal Mining Company.
- Scott Furnace built by bricks made by local pen clay (20 sq. ft. wide and 40 ft. tall)
- The mercury-soaked bricks from Scott Furnace were processed after mine closed yielding a considerable quantity of mercury.
1923 Mine Closed

Beginning of World War II- Mine Reopened-Vivianna Mining Company
  • 30 ton Gould rotary furnace installed.

1943 Mine Closed for Good
  • Closed one year before Big Bend National Park opened.

Possible Research Topics:
  • Where did the phrase “Mad As A Hatter” come from?
  • What were the effects of mercury mining on the workers?
  • What were some other mines in the Big Bend Area?
• What were the effects of ranching and farming on the Big Bend Area?
• What were some other impacts humans had on the Big Bend Area?
• What is the amount of air pollution in the area, what effects does it have on the Big Bend area, and what sources did it come from?

Possible Student Products:
• Comic Strip Showing History of Area
• Timeline of mining industry

A sample comic strip of some of the history of Mariscal Mine and Mercury Production is available for you to show to students who are having difficulty getting started.

Possible Resources:
Big Bend: Mariscal Mine
National Park Service Department of the Interior
Big Bend: The Impact of Human Use Upon the Chisos Basin and Adjacent Lands
National Park Service Scientific Monograph #4
http://www.nps.gov/history/history/online_books/science/4/chap2.htm

Cinnebar An Example of the Element Mercury
PeriodicTable.Com
http://periodictable.com/Items/HgS/index.html

Mariscal Quicksilver Mine & Reduction Works, Mariscal Mountain, Brewster, TX
Library of Congress
http://www.loc.gov/pictures/item/TX0860/

Maps of Big Bend Area
Road Map
http://www.lib.utexas.edu/maps/national_parks/big_bend_map.jpg
Topical Map

http://www.lib.utexas.edu/maps/texas/big_bend.jpg

Photographs of Big Bend Area

Library of Congress Prints and Photographs On-Line Catalogue

http://www.loc.gov/pictures/

“Soldiers, Ranchers, and Miners in the Big Bend: September 1969” by Clifford B. Casey


Available Samples:

There is a sample of cinnabar available for students to examine. Cinnabar does contain mercury and in order for it to be handled safely, this sample has been incased in epoxy.