The annual New Mexico Mineral Symposium provides a forum for both professionals and amateurs interested in mineralogy. The meeting allows all to share their cumulative knowledge of mineral occurrences and provides stimulus for mineralogical studies and new mineral discoveries. In addition, the informal atmosphere encourages intimate discussions among all interested in mineralogy and associated fields.

The symposium is organized each year by the Mineral Museum at the New Mexico Bureau of Geology & Mineral Resources.

Abstracts from all prior symposiums are also available: https://geoinfo.nmt.edu/museum/minsyp/abstracts
This page is intentionally left blank to maintain order of facing pages.
The Blanchard Mine: The Little Mine That Couldn’t Ore

—Erin Delventhal

The Blanchard Mine, located in the Hansonburg District in the northern portion of the Oscura Mountains, Socorro County, New Mexico, has earned its place as a classic New Mexican locality through the production of widely available, high-quality mineral specimens - most notably the “Blanchard blue” fluorite (often associated with galena) as well as the discovery of some of the world’s largest known linarite crystals. However, the rich mineralization at the Blanchard Mine produces a suite of other minerals that appeal to many varieties of collecting styles.

The history of the Blanchard Mine reaches into Indigenous Peoples and Spanish colonial history, but large-scale development began in the early 1900s. Numerous attempts were made to develop an economic source of lead at the Blanchard, but all were victim to the trials found in mining in a harsh and remote desert. Throughout the years, the Blanchard has been utilized as a “collector’s dream,” with visitors arriving from around the globe to be lead through the property by characters such as Ora Blanchard (“The Lady on the Mountain”), Sam “Rattlesnake” Jones, and, in present times, Ray DeMark, Mike Sanders, and Brian Huntsman.

The Sierra Oscura Mountains consist of basement Proterozoic granites and gneisses with overlying Pennsylvanian formations of marine limestone and shale with interbedded arkosic sandstone. Mineral deposits at the Blanchard Mine are concentrated as open-space fillings in fissures, fault breccia, and solution cavities that are primarily concentrated in the Council Springs limestone. The Blanchard Mine and the Hansonburg District have been the subject of numerous academic studies as one of the most prominent of the Rio Grande Rift deposits.

Fluorite - Ray DeMark: Fluorite on quartz • 21 cm x 10 cm x 8 cm • 5.4 cm edge on large crystal • Across from the ore bin • Ray DeMark specimen • Erin Delventhal photograph

The history of the Blanchard Mine reaches into Indigenous Peoples and Spanish colonial history, but large-scale development began in the early 1900s. Numerous attempts were made to develop an economic source of lead at the Blanchard, but all were victim to the trials found in mining in a harsh and remote desert. Throughout the years, the Blanchard has been utilized as a “collector’s dream,” with visitors arriving from around the globe to be lead through the property by characters such as Ora Blanchard (“The Lady on the Mountain”), Sam “Rattlesnake” Jones, and, in present times, Ray DeMark, Mike Sanders, and Brian Huntsman.

The Sierra Oscura Mountains consist of basement Proterozoic granites and gneisses with overlying Pennsylvanian formations of marine limestone and shale with interbedded arkosic sandstone. Mineral deposits at the Blanchard Mine are concentrated as open-space fillings in fissures, fault breccia, and solution cavities that are primarily concentrated in the Council Springs limestone. The Blanchard Mine and the Hansonburg District have been the subject of numerous academic studies as one of the most prominent of the Rio Grande Rift deposits.


Ora Blanchard at the rock shop in Bingham, circa 1967. Photograph by Vera Jones, courtesy of Vera Jones and the New Mexico Bureau of Geology and Mineral Resources, Historic Photograph Archives, Socorro, NM 87801.
References


Elstone, E. F., 1958, A Memorandum of Data and Observations on Lead-Barite-Fluorite Deposits, Hansonburg Mining District, Socorro County, New Mexico.


Elstone, E. F., 1961, Facts, Data, and Estimates - Bingham Project of Sunshine Mining Company, Socorro County, New Mexico.


Eveleth, R. W., Lueth, V. W., 2009, Old Hansonburg, one of New Mexico's forgotten mining camps. New Mexico Geological Society 60th Annual Fall Field Conference Guidebook: Geology of the Chupadera Mesa.

Eveleth, R. W., 2018, Chronology of the Hansonburg Mining District (working notes).


Kottlowski, F. E., 1953, Geology and Ore Deposits of a Part of the Hansonburg Mining District, Socorro County, New Mexico: State School of Mines Mineral Resources Survey of New Mexico, Circular 23.

Kottlowski, F. E., Steensma, R. S., 1979, Barite-fluorite-barite deposits of Hansonburg mining district in central New Mexico: New Mexico Geology Vol. 1, No. 2.


North, R. M., 1983, History and geology of the precious metal occurrences in Socorro County, New Mexico: New Mexico Geological Society 34th Annual Fall Field Conference Guidebook, Socorro Region II.

Ostrom, Gerry, 1983, untitled symposium notes.


Peters, E. D., 1882, Notes on the Oscura Copper-Fields, and Other Mines in New Mexico: The Engineering and Mining Journal.


Rocks and Minerals magazine, December 1936, Vol. 11, No. 11.


Steensma, R. S., 1979, Feasibility of gravitational ore separation, Hansonburg mining district, central New Mexico: New Mexico Geology.


Sun, M., 1957, Minerals of the Hansonburg Mining District, Socorro County, New Mexico: Rocks and Minerals Magazine.
