

## Saguache County

### Bondholder District (aka Cascade District)

The Bondholder District was described by Steven and Bieniewski (1977) in their study of mineral potential in the La Garita Wilderness Area. The district lies within the Stewart Peak and San Luis Peak quadrangles (Lipman and Sawyer, 1988). It is within the far southwestern corner of Saguache County, not far from the more famous **Creede District**.

The area was also noted by Cappa and Wallace (2007) who added the term Cascade District. It was also discussed by Thompson (1992) in a paper not reviewed for this survey but was summarized by Cappa and Wallace (Ibid). Mindat.org (2015) lists the district with six named mines and numerous prospects for gold, silver, lead, molybdenum, and bismuth.

Mineralization consists of veins containing mainly galena and sphalerite in hydrothermally-altered volcanic rocks of the San Luis caldera, the youngest of the calderas of the San Juan volcanic field. It occupies the center of the San Luis caldera in rocks of Oligocene age including gabbro, diorite, granodiorite, monzonite, and quartz monzonite that are interpreted to have been emplaced during the eruption of ashflows on the overlying terrain (Steven et al., 1974; Day et al., 1999).

Mines listed in the district (mindat.org) include:

- [Allara Tunnel Occurrence](#)
- [Cascade Mine \(New Cascade Tunnel; Bonnez 1-25; Zombie 1-7\)](#)
- [Jackass Mine](#)
- [Manganese Tunnel Occurrence](#)
- [Woodmansee Mine](#)

Minerals listed in the district at these mines (mindat.org) include:

[Galena](#)

[Pyrite](#)

[Sphalerite](#)

References:

Cappa, J.A. and Wallace, C.A. 2007. Geology and Mineral Resources of Saguache County, Colorado. Colorado Geological Survey Resource Series 44.

Day, W.C., Green, G.N., Knepper, D.H., Jr., and Phillips, R.C. 1999. Spatial Geologic Data Model for the Gunnison, Grand Mesa, Uncompahgre National Forests Mineral Assessment Area, Southwestern Colorado and Digital Data for the Leadville, Montrose, Durango, and Colorado Parts of the Grand

Junction, Moab, and Cortez 1 degree x 2 degrees Geologic Maps. U.S. Geological Survey Open-file Report 99-427.

Lipman, P.W. and Sawyer, D.A. 1988. Preliminary Geology of the San Luis Peak Quadrangle and Adjacent Areas, San Juan Volcanic Field, Southwestern Colorado. U.S. Geological Survey Open-File Report 88-359.

Steven, T.A. and Bieniewski, C.L. 1977. Mineral Resources of the La Garita Wilderness, San Juan Mountains, Southwestern Colorado. U.S. Geological Survey Bulletin 1420.

Steven, T. A., Lipman, P.W., Hall, W.J., Jr., Barker, F. and Luedke, R.G. 1974. Geologic Map of the Durango Quadrangle, Southwestern Colorado. U.S. Geological Survey Miscellaneous Investigation Series Map I-764. Maps Scale: 1:250,000.

Thompson, T.B. 1992. Geology and Mineral Deposits of the Bondholder District, Colorado, USA. Society of Economic Geologists Newsletter, No. 8, pp. 10-16.

[www.mindat.org](http://www.mindat.org), accessed September 2015.