

## Clear Creek County

### Alice-Yankee Hill District

The **Alice District**, on the northern border of Clear Creek County, extends into Gilpin County as the **Alice-Yankee Hill District**. (The **Lincoln District** is included here). This is a high-altitude district, elevation ranging from about 10,000 to 11,000 feet.

The Alice Mine was the first development, where free gold was captured using hydraulic methods in 1880. The gold came from a relatively low-grade auriferous pyrite body in a quartz monzonite stock (Vanderwilt, 1947; Parker, 1974). The Alice Mine reopened as a large open pit in 1933 with some underground workings.

Idaho Springs Formation schists are intruded by Precambrian Boulder Creek Granodiorite and later by a Tertiary stock of quartz monzonite. Gold-bearing stockworks in the quartz monzonite were the most valuable, along with quartz-pyrite veins in the Precambrian rocks (Lovering & Goddard, 1950). Lovering and Goddard also point out that significant promise remains for a large volume of sulfide ore south of the Alice Mine beneath glacial debris. An additional reference is Bastin and Hill (1917).

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

- [Alice Mine/Princess Alice](#)<sup>1</sup>
  - [Alice Glory Hole](#)
- [Ames Load](#)
- [Charcoal Charlie](#)
- [Clara](#)
- [Faust \(Lombard Mill; Cumberland; Lombard Occurrence\)](#)
- [Gold Anchor Occurrence](#)
- [Gold Dollar](#)
- [Harlem](#)
- [Log Cabin](#)
- [Lombard Placer Mine](#)
- [Meteor](#)
- [Miss Dividends](#)
- [Nettie B.](#)
- [Ninety-Four Tunnel](#)<sup>1</sup>
- [North Star](#)<sup>1</sup>
- [Old Stone Wall](#)
- [Ottawa](#)
- [Puritan](#)
- [Sheridan Hill](#)
  - [Colo - York](#)
  - [Manhattan Occurrence](#)

Note: <sup>1</sup> Discussed in Bastin and Hill (1917).

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

[Aikinite](#)  $\text{PbCuBiS}_3$   
['Allanite'](#)  
[Arsenopyrite](#)  $\text{FeAsS}$   
[Baryte](#)  
[Benjaminite](#)  
 $(\text{Ag,Cu})_3(\text{Bi,Pb})_7\text{S}_{12}$   
[Bornite](#)  $\text{Cu}_5\text{FeS}_4$

[Chalcanthite](#)  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$   
[Chalcocite](#)  $\text{Cu}_2\text{S}$   
[Chalcopyrite](#)  $\text{CuFeS}_2$   
['Chlorite Group'](#)  
[Covellite](#)  $\text{CuS}$   
[Cupropavonite](#)  
 $\text{AgCu}_2\text{PbBi}_5\text{S}_{10}$

[Emplectite](#)  $\text{CuBiS}_2$   
[Friedrichite](#)  $\text{Pb}_5\text{Cu}_5\text{Bi}_7\text{S}_{18}$   
[Galena](#)  $\text{PbS}$   
[Gold](#)  
[Hammarite](#)  $\text{Pb}_2\text{Cu}_2\text{Bi}_4\text{S}_9$   
[Heyrovskýite](#)  $\text{Pb}_{10}\text{AgBi}_5\text{S}_{18}$   
[Hodrušite](#)  $\text{Cu}_8\text{Bi}_{12}\text{S}_{22}$

Krupkaite  $\text{Pb/CuBi}_3\text{S}_6$

Limonite

Matildite  $\text{AgBiS}_2$

Muscovite

Pavonite  $(\text{Ag,Cu})(\text{Bi,Pb})_3\text{S}_5$

Pyrite

Quartz

var: Amethyst

var: Sceptre Quartz

Siderite

Silver

Sphalerite

Uraninite

#### References:

Bastin, E.S. and Hill, J.M. 1917. Economic Geology of Gilpin County and Adjacent Parts of Clear Creek and Boulder Counties, Colorado. U.S. Geological Survey Professional Paper 94.

Lovering, T.S. and Goddard, E.N. 1950. Geology and ore deposits of the Front Range, Colorado. U.S. Geological Survey Professional Paper 223.

Parker, Ben H. Jr. 1974. Gold Placers of Colorado. Colorado School of Mines Quarterly, 69 (3).

Vanderwilt, John W. 1947. Mineral Resources of Colorado. Colorado Mineral Resources Board, Denver, Colorado.

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