Saguache County

Crestone District (aka **El Dorado District**; aka **Baca Grant District**)

The Crestone District is one of several district aligned along the western slopes of the Sangre de Cristo range on the eastern edge of Saguache County, with the **Liberty/Music District** to the south, the **Blake (Mirage)**, **Orient**, **Hayden Pass** and **Steel Canyon Districts** to the north, all apparently associated with a belt of Precambrian rocks. Henderson (1926) and Dunn (2003) noted the district as the same as the **Eldorado District**. Vanderwilt (1947) called it the **Baca Grant District**.

The Crestone district is located within the former Baca Land Grant, a large Spanish land grant. According to Clement (1952), between 1890 and 1900, several prospectors began mining operations in the area and produced precious metals worth approximately $7 million to $8 million. The prospectors and miners were evicted in 1898, and the land came under the control of the heirs of Luis Maria Cabeza de Baca.

Clement (Ibid) stated that the mineral deposits are associated with north-trending thrust faults. Silica and sericite are the main alteration products in the Proterozoic rocks. The dominant mineral deposits are quartz-hematite and quartz-pyrite-chalcopyrite veins. Some of the veins had grades as high as 5 oz. per ton gold and 5 oz. per ton silver (Clement, Ibid). According to Vanderwilt (1947), 1,337 oz. of gold and 533 oz. of silver plus minor copper and lead were produced from the district between 1932 and 1939. He described the mineralization as veins in shear zones with free gold and limited chalcopyrite, sphalerite and galena. More recent research reported by Cappa and Wallace (2007) indicate that mineralization is associated with north-trending low-angle detachment faults.

In the late 1980s and early 1990s, Lexam Explorations Inc. conducted a gold exploration program in the area around Deadman Creek some 8 miles south of Crestone. The Deadman Creek prospect is located in strongly silicified breccia of feldspar and quartz in a chloritic matrix. Gold grades are as rich as 0.13 oz. per ton; the gold is associated with pyrite (Cappa and Wallace, 2007).

Several types of mineralization are apparently present, from mindat.org (Sept. 2015). From the mines listed on mindat.org (below), eight show base and precious minerals, three are listed because of uranium and/or vanadium (the Bob Cat Mine, the I. Kreiner Mine and the Judith claim - Nelson-Moore et al., 1970); two are listed for typical pegmatite minerals euxenite, xenotime (Blue Beard Claims) and quartz-feldspar (plus uranium) - I. Kreiner Mine; and one for fluorspar (Beryl Occurrence). Additional references include Johnson (1969) and Scott and Taylor (1974).

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

- Beryl Occurrence
- Blue Beard claims
- Bob Cat Mine
- Concordia Claim
- Crestone Mineral Company Claims (Vanderbilt; Sampson; Crestone; Dewey; Wedge; Hooper)

- Dandy - Copper Tunnel
- Eastern Star Mine
- Elarton Manganese Deposit
- Garfield Claim
- Garner Creek
  - Minturn Formation
- I. Kreiner Mine
- Independence Mine (Independence Mill Site Alamosa; Queen Esther Claims; Independent; Bonanza; Eastern Star; Midnight Star; Baca Grant No. 4)
- Judith Claim
- Pelican Claim
- Reed Claim
- Sunbeam Claim

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

Andalusite	Hausmannite	Pyrite
Beryl	Hematite var: Specularite	Quartz
Chalcocite	'K Feldspar'	Samarskite-(Y)
Chalcopyrite	'Mica Group'	Spessartine
Euxenite-(Y)	Monazite-(Ce)	'Tourmaline'
Galena	Polycrase-(Y)	Xenotime-(Y)
Gold	'Psilomelane'	Zircon var: Cyrtolite

References:

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Johnson, R.B. 1969. Geologic Map of the Trinidad Quadrangle, South-Central Colorado. U.S. Geological Survey Miscellaneous Geologic Investigations Map I-558. Map Scale: 1:250,000.

Nelson-Moore, J.L., Collins, D.B., and Hornbaker, A.L. 1978. Radioactive Mineral Occurrences of Colorado and Bibliography. Colorado Geological Survey Bulletin 40.

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

www.mindat.org, accessed September 2015.