

Chaffee County

Trout Creek District

The Trout Creek Pass District encompasses a series of pegmatites near highway 285 south of Trout Creek Pass between Park and Chaffee Counties. Vanderwilt (1947) shows production of very small amounts of gold, silver, copper and lead from 1932 to 1939 from as many as 3 mines. The district is best known as containing the most rare earth minerals in Colorado.

The pegmatites are generally small, ranging from a few meters long dimension to 85 meters. They appear to be related to small stocks of granite intruded into older granite of early Proterozoic age (Wallace and Keller, 2003). The most notable pegmatites are zoned with cores composed mainly of coarse quartz-microcline-plagioclase and thin border zones of the same assemblage plus garnet (Hanley, et al, 1950). The rare earth minerals occur within the core. These authors describe three of the most important mines - the Clora May, the Yard and the Crystal No. 8.

In a detailed study, Hanson, et al (1992) describe four of the pegmatites as classic zoned bodies - the Clora May, Yard, Crystal No. 8 and the Tie Gulch. In this mineralogical study, they describe specific LREE (light rare earth) phases allanite and monazite and HREE (heavy rare earth) phases polychrase and aeschynite.

Minerals listed as occurring within the Trout Creek District are the following (Mindat.org; 19 Sep 2012). (Note: minerals marked with asterisk (*) are not "confirmed" as occurring within the district in Eckel, 1997.)

Albite	Calcite	Kasolite	Rhodonite*
'Albite-Anorthite Series'	Cerussite*	'K Feldspar'	Samarskite-(Y)
'Allanite'	Chalcopyrite*	Limonite	Schorl
Allanite-(Ce)	'Chlorite Group'	Magnetite	Scorodite
Almandine	Chrysocolla*	Malachite*	Silver
Anglesite	Descloizite*	Microcline	Smithsonite*
'Apatite'	Euxenite-(Y)	'Monazite'	Sphalerite
Arseniosiderite	Fluorite	Monazite-(Ce)	Thorogummite
Arsenolite	<i>Fourmarierite</i> ?	Muscovite	Uraninite
Arsenopyrite	'Gadolinite'	var: Sericite	Vermiculite
Azurite	Gadolinite-(Y)	Polycrase-(Y)	Wulfenite*
Bariopharmacosiderite	Galena*	'Psilomelane'	Xenotime-(Y)
Beryl	'Garnet'	Pyrite	Yukonite
β-Uranophane	Gold	Pyrolusite*	Zircon
Biotite	Hematite	Pyromorphite*	var: Cyrtolite
Bismuthinite	Hemimorphite*	Quartz	
Bismutite	'Hornblende'	var: Rose Quartz	
	Hydrozincite*	Rhodochrosite*	

References:

[Mineral Resource Data System \(MRDS\) - Online Spatial Data - Trout Creek Pass Area](#)

Baillie, W. N., 1962, Feldspar occurrence in Colorado: Colorado School of Mines Mineral Industries Bulletin, v. 5, no. 4.

Del Rio, S. M., 1960, Mineral Resources of Colorado First Sequel, State of Colorado Mineral Resources Board, Denver, CO.

Hanley, John B., Heinrich, E. William, Page, Lincoln R., 1950, Pegmatite investigations in Colorado, Wyoming and Utah, 1942-1944; U.S. Geological Survey Professional Paper 227.

Hanson, Sarah L., Simmons, William B., Webber, Karen L., Falster, Alexander U., 1992, Rare Earth Element Mineralogy of Granitic Pegmatites in the Trout Creek District, Chaffee County, Colorado: Canadian Mineralogist, vol. 30, pp. 673-686.

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

Wallace, C.A. and Keller, John W. (2003) Geologic Map of the Castle Rock Gulch Quadrangle, Chaffee and Park Counties, Colorado; Colorado Geological Survey OFR 01-1.



Figure: a pegmatite mine in the Trout Creek District. Identity unknown.