

Province of British Columbia

The commonest types of copper-gold deposit to which belong the boundary district, and most of the Interior Plateau deposits, and most of those situated near the Coast Range, both along the island contact as at White Horse, Yukon, and on the coast are contact metamorphic deposits, in which garnet, hornblende, epidote, etc., are developed in the country rock, with magnetite, often forming bodies large enough to constitute an iron ore, hematite and iron-copper sulphides, of which chalcopyrite is the commonest, though bornite occurs in this way on Texada Island. Sometimes pyrrhotite largely takes the place of iron oxide.

The gold-copper deposits of Rossland and some other points form a type of deposit transitional between contact metamorphic deposits and replacement vein deposits. The ore consists largely of pyrrhotite and chalcopyrite with small amounts of magnetite.

Practically all the copper ores mined carry some gold values. Up to the present copper mining has been restricted to Southern British Columbia—Rossland, the boundary and the coast districts of Howe Sound, Vancouver Island, Texada Island, etc.—but now some attention is being paid to the north, and promising deposits are being opened up on Observatory Inlet.

Almost all the lead produced in Canada comes from mines situated in the Selkirk system. The largest producer has been the St. Eugene, near Moyie, East Kootenay. The ore occurs in two parallel fissures connected by cross veins in the pre-Cambrian quartzite. The largest ore bodies are found where a cross vein enters a main vein. The ore consists of argentiferous galena and zinblende with some pyrite. The Sullivan and North Star mines also have large shoots. These East Kootenay deposits resemble those of the Cœur d'Alene to the south.

The Slocan district between Kootenay and Slocan Lakes is another producer. The deposits occur in fissure veins having gangues of quartz, calcite and siderite. The ores are made up of argentiferous galena, blende, tetrahedrite, copper and iron pyrites, arsenopyrite, argentite, ruby silver, native silver and gold. The shoots as a rule are not so large as those of East Kootenay, but the veins are more numerous, and in silver content much higher. Silver-lead veins also occur south of Nelson, as on Sheep Creek and the north fork of the Salmon River. Development work has been done on silver-lead deposits on the Skeena River, near Hazelton, and on Windy Arm in the Yukon.

Platinum occurs with gold in many of the placer districts, and has been produced in limited quantity in the Tulameen district. Native platinum has also been found in this district in a serpentinized basic igneous rock, accompanied by microscopic diamonds.

Mercury has been found in the form of cinnabar, in irregular veins of calcite and quartz that traverse Tertiary volcanics and also impregnating sandstone on Copper Creek, Kamloops Lake. It has been noted in hematite, east of Kootenay Lake, and quicksilver is reported from Field.

While iron ores occur at many points, notably on the coast, no iron industry has so far been developed.

Coal is one of the most important mineral products of the Cordillera. In its occurrences it is well distributed throughout the entire length of the belt in Canada. The coals are mainly bituminous, and by far the greater number are Cretaceous in age. The Carboni-