

M.A.

Minister of Mines and Petroleum Resources

PROVINCE OF BRITISH COLUMBIA

ANNUAL REPORT

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1967

ward. The sediments, exposed for about 40 feet along the trench, strike north 55 degrees west and dip 55 degrees northward. At about 100 feet southward from the adit and at intervals to about 500 feet, greenish Nelson quartz porphyry is exposed. The quartzites and, to a lesser degree, the limestones are sparsely mineralized with disseminated pyrite and chalcopyrite; the quartz porphyry carries pyrite. No mineralization was seen in the pulaskite. The Little Bertha vein is stated (Ann. Rept., 1924, p. 164) to occur in "granodiorite intruded by porphyry dykes," and to consist of pyrite and galena in a quartz gangue. The copper included in the reported production suggests an appreciable occurrence of copper-bearing mineral, probably chalcopyrite.

At the Pathfinder workings an old shaft was being rehabilitated. At about 300 feet east of the shaft is a stripped area, about 50 by 100 feet and trending southwest, of brecciated rock heavily mineralized with pyrrhotite and chalcopyrite. The associated rocks were a light-grey quartz porphyry and, more intimately mixed with the sulphides, a fine-grained rock composed chiefly of zoisite, epidote, uralite, and quartz. The mineralized rock is intruded by unaltered pulaskite. In the stripping it is seen to be cut off on the southeast and southwest by the pulaskite; to the northeast and northward some 100 to 200 feet distant are frequent exposures of unaltered pulaskite with no sign of mineralization. An adit portal on bearing north 15 degrees west from and 40 feet below the stripping also is in pulaskite. It seems clear that the occurrence is an inclusion in the pulaskite and that the pulaskite is younger than the pyrrhotite-chalcopyrite mineralization.

The writer saw no direct evidence of the age relationship of the pulaskite to the Little Bertha mineralization, but its failure to show in the adit possibly is due to its having been cut off by the "porphyry dykes."

The uniformly fresh and unmineralized character of the rock at both the Little Bertha and Pathfinder workings suggests that it is younger than either mineralization. The Pathfinder occurrence, however, and the Fento Mines occurrence across the Granby River valley suggest that the pulaskite may have intruded along a zone mineralized with pyrrhotite and chalcopyrite. The valley of the Granby River and its northward extension into Burrell Creek through Franklin Camp is a locus of faulting and may mark the line of an older zone of structural weakness. The main mass of Coryell intrusive rocks, which includes the pulaskite, lies to the northward. Exploration southward along the valley into the Anarchist rocks may be worth consideration.

PAULSON

Gold-Lead-Zinc

Ajax (49° 118° S.E.) Company office, 928, 736 Granville Street, Vancouver 2. The property consists of 20 mineral claims held by record and 5 mineral leases situated near the heads of Josh and Mollie Creeks, about 1 mile southwest of the Paulson bridge on the Christina Lake-Kinnaird highway. Access is by a jeep-road 2½ miles long which leaves the highway about 1 mile south of the bridge. The working area is on the slope northward toward Mollie Creek at about 4,500 feet elevation.

The property includes a claim group known earlier as the Motherlode on which some underground development had been done (Ann. Repts., 1899, 1900, 1917, 1925, 1931, 1932). This ground is on Josh Creek, about a mile north of the present surface workings.

Regional geology is shown on Geological Survey of Canada Map 6-1957, Kettle River (East Half). The property lies in a northeasterly trending band of Pennsyl-

vanian or Permian Mount Roberts sediments which is here about 2 miles wide. To the northward the sediments are in contact with Nelson plutonic rocks and to the southward with Coryell.

Recent stripping had been done in the area about 1,000 feet in diameter about one-half mile westward from the initial post of Als Gift No. 9 and No. 10 fractional mineral claims. The rocks here are limy siltstones interbedded with platy limestone. They are folded on northwest axes which plunge from 25 to 60 degrees northwestward. The axial planes dip steeply northeastward. The sediments are intruded by altered biotitic syenite dykes striking and dipping most commonly parallel to the axial planes of the folds. Pulaskite dykes striking northwestward also cut the sediments; their relationship to the syenite is not known.

The sediments are mineralized with dark-brown sphalerite, with magnetite, galena, and chalcopyrite. The mineralization is closely associated with an altered rock composed of pyroxene, calcite, amphibole, and hematite which is intrusive into the sediments along bedding planes and in the crests of folds and crenulations. It shows, locally, crosscutting relationships with the bedding. Width ranges from one-sixteenth inch to several inches. In every place that mineralization was seen, the sulphides were in this altered rock rather than in the sediments. The mineralization is spotty and not well exposed. Near the best showing, a width of about 10 feet, a diamond-drill hole had been started. The results are not known to the writer.

Ma Bell

TRAIL CREEK MINING DIVISION

Copper-Gold

ROSSLAND

Velvet

Hydra Explorations Limited

By P. E. Olson

(49° 117° S.W.) Company office, 100 Adelaide Street West, Toronto 1, Ont. The company, in partnership with Rayrock Mines Limited, optioned the mine from Mid-West Mines Limited. The property is on the Rossland-Christina Lake highway immediately east of Big Sheep Creek.

Underground diamond drilling totalling 2,718 feet in 21 holes was done following a geological study in 1965. The company employed five men for four months under the direction of T. Antoniuk. The option was dropped upon completion of the drilling.

Gold

Midnight

Cinola Mines Ltd.

By G. E. P. Eastwood

(49° 117° S.W.) Company office, Suite 1322, 510 West Hastings Street, Vancouver 2; mine office, Rossland Motel, Rossland. William Thompson, president; A. Pompu, mine manager; S. Tan, geologist. The company controls the Midnight Crown-granted claim and 13 recorded claims and fractions, astride the old Rossland-Cascade highway about 2 miles west of Rossland. The workings on the Midnight claim are reached by about a mile of road that descends into the valley of Little Sheep Creek from a point on the old highway about 500 feet west of the junction with the Paterson highway.

The Midnight claim lies immediately east of the I.X.L. and O.K. claims, on which a considerable amount of work was done in the early years of the Rossland camp. Development of the Midnight began in 1924, and some work was done almost every year through 1952. In 1965 Cinola Mines Ltd. acquired an interest in the claim, and late in the year retained A. C. A. Howe & Associates Limited to conduct an exploration programme.