

vein strikes south-west (mag.) and dips nearly perpendicular. The ore-minerals, pyrite, galena, and chalcopyrite, occur in quartz tightly frozen to the walls. The country-rocks are volcanics and mineralization occurs along the bedding and faults to the south-east. Possibly this vein may intersect the main east-west lead to the north-west. Two samples, one across a 1-foot width of vein 20 feet from the face of the tunnel, and another, 8 inches wide, 68 feet from face, carried neither gold nor silver.

The samples taken from the main workings on the *Rosslund* assayed 0.02 to 0.38 oz. gold per ton. The good widths and persistency of this vein appear to warrant careful exploration. The strike of the vein into the steep hillside on either group permits development by tunnelling. The claims are situated 47 miles by road from Vernon, or about 36 miles by road from Edgewood, on the Arrow lakes.

This group, including the *Kismet*, *Mountain View*, *Iron Ball*, *Snowdrop*, *Dewdrop*, and three other claims, and owned by A. O. Holmes, M. J. Doran, O. L.

Kismet. Willoughby, and associates, of Lumby, is situated on the north side of Trap creek, which flows into the Kettle river from the east, about 5 miles up-stream from the road crossing. The claims can be reached by trail 6 miles long. On the *Kismet*, in addition to numerous open-cuts, a 75-foot tunnel has been driven on a quartz vein in granite. The vein is from 6 inches to 3 feet in width and strikes in a northerly direction, while dipping steeply to the east. At the mouth of this drift the 3-foot vein is much oxidized and free gold can be panned. In the face of the drift the vein, 22 inches wide, contains mostly pyrite, arsenopyrite, and lesser amounts of galena. A chip-sample across the face assayed: Gold, 1.04 oz. per ton; silver, 0.06 oz. per ton. The quartz appears to be widening on a fault in the face. On the surface, about 50 feet above and north of the tunnel, the vein has evidently split and the cuts show several stringers. On the *Iron Ball*, downhill and to the south-west, other quartz veins containing pyrite and arsenopyrite striking slightly east of north have been uncovered. It is possible that these may intersect the tunnel vein to the north. About 700 feet west of the *Kismet* and 200 feet lower, a 30-foot open-cut has uncovered a shear-zone 4½ feet wide containing pyrite, pyrrhotite, and lesser amounts of arsenopyrite in a gangue of quartz and disintegrated granite. On the *Dewdrop*, west of the *Iron Ball*, open-cuts have uncovered north-striking quartz fissure-veins containing similar minerals in granite. Some free gold was panned in the oxidized ore.

Several cuts to the east of the *Kismet* tunnel have uncovered other fissure-veins in the granite, a 3-inch stringer assaying: Gold, 1 oz. per ton; silver, 1 oz. per ton. On the *Mountain View*, adjoining the *Kismet* on the south, downhill, several cuts and a 30-foot tunnel have been driven on an extremely sheared and faulted quartz vein in the altered limestone and argillite beds, remnants of which lie in contact with the granite in an easterly and westerly direction along the foot of the hill sloping towards Trap creek. It appears probable that the section of vein in these workings has been pushed downhill by the granite intrusive and is probably the top part of one of the fissures found above. Picked samples of the ore carry good values in gold and silver. The mineralization seen consisted of pyrite, galena, and jamesonite. A dense, highly altered siliceous igneous rock is found in the neighbourhood of the workings. This may possibly be an offshoot from the granite batholith.

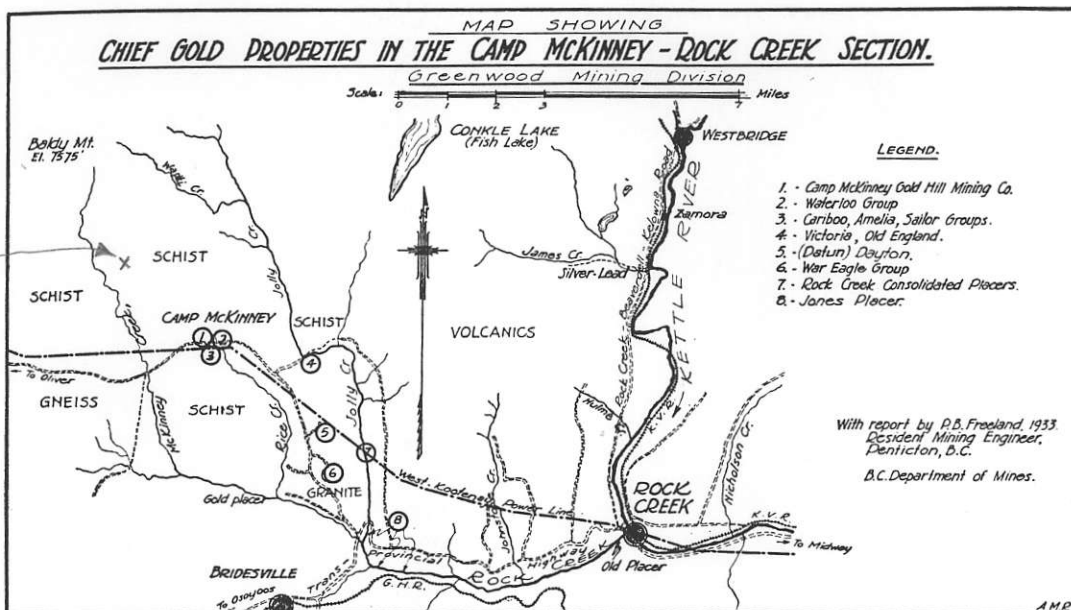
The area covered by these claims and underlain chiefly by granitic rocks has undoubtedly been fissured by numerous quartz veins carrying gold and silver, and, although comparatively narrow, they appear to warrant further exploration in the hope of finding wider ore-bodies that will pay to mine.

CAMP MCKINNEY SECTION.

A considerable amount of activity was noticeable in this section during 1933 and many new claims staked, reverted Crown grants leased, and groups of claims amalgamated prior to more extensive exploration. The chief consolidation appears to be the old Cariboo McKinney gold-mines, *Warton*, *Waterloo-Consolidated*, *Fontenoy* group, which embraces the old workings on the *Cariboo-Amelia-Sawtooth* claims, which are about 550 feet deep and 1,700 feet long, as well as the shaft-workings on the *Waterloo*, which are said to be about 300 feet deep and from which some attractive gold ore was found dipping on to the *Fontenoy* ground. Another group, owned by Alec. Broomfield, Jack Malone, *et al.*, of Princeton, and embracing sixteen claims and fractions adjoining the *Cariboo Waterloo* group on the north and south, are worthy of exploration. Indications of the persistency of the quartz-fissures are to be found striking along the right-of-way cut out by the West Kootenay Power Company to the south-east. It is also probable that

the quartz veins found in the *Old England* and *Victoria* claims, several thousand feet east, are a continuation of the *Waterloo-Fontenoy* fissuring.

In the Dayton camp (Datun; see map) from some of the oxidized quartz gold can be panned, and although high assays were obtained many years ago in superficial work, no continuous bodies of ore were found. About 40 tons of ore was shipped in 1916 from the *Dayton* (Datun). This ore assayed: Gold, 2 oz. per ton; silver, 5 oz. per ton; and 5 per cent. copper. On the *Le Roy* and *War Eagle* claims, owned by James Copland and associates, of Rock Creek, attractive values in gold, silver, and copper were developed in the new shaft, in a contact deposit between the granodiorite and greenstone. On the Camp McKinney Gold Hill Mining Company ground, adjoining the *Sailor* and extending north-west, developments by shaft-sinking and tunnelling by John Carmichael, 703 Dominion Bank Building, Vancouver, have met with some encouragement. During 1933 a 200-foot tunnel was driven on an east-west-striking quartz vein which varies from a few inches to 2 feet in width, and although carrying low values in gold and silver near the mouth, a considerable improvement has been noticed in the face where denser pyrite mineralization occurs. In the shaft, several hundred feet west of the tunnel, free gold was found associated with galena. A well-mineralized quartz vein also strikes diagonally across this vein about 200 feet west of the tunnel-face.



"New Strike"

A new strike has been reported and twenty claims staked on a well-defined quartz vein, said to vary from 4 to 20 feet in width, about 2½ miles in a north-westerly direction from the old Camp McKinney townsite near the toe of Baldy mountain. The double row of claims staked ties on to the old *King Edward*. Picked samples, according to the stakers, assayed from 0.6 to 1.75 oz. gold per ton. Some of the owners are Tom and Charles Shuttleworth, of Okanagan Falls, and H. Leir, M. S. Peacock, and Max Ewart, of Penticton, etc.

A great many outcrops of the veins in Camp McKinney are barren quartz or nearly so, and it is apparently for this reason that so little development has been done beyond the region immediately adjoining the old *Cariboo-Amelia* workings. Although it has been impossible to examine the underground workings on the latter, due to water, maps appear to portray the fact that structural conditions have played an important part and there is also a distinct rake to the ore-bodies down to the west. Reliable reports state that in parts of the lower workings the quartz is 6 feet wide carrying values of 0.275 oz. in gold per ton. The ore mined had to be handled six times through winze, drifts, shafts, and surface tramways before it reached the mill, a procedure which would add very materially to the mining costs. That comparatively high values were lost in the mill tailings is also known from samples taken of the residue.

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