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Special Report
by
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MOUNTAINEER
HEATHER
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MOUNTAINEER GROUP This group of claims, consisting of the Blue Grouse, Lakeview and Whistler mineral claims, is held on location by E.C. Wragge of Nelson and O. and J. Arrowsmith of Creston. The property lies between the North Sister and Middle Sister of the Three Sisters Range. It is accessible by trail from the Sheep Creek road at the Motherlode mill. For the first 2½ miles, the trail follows up Sheep Creek as far as Panther Creek, on excellent grade. For the succeeding 3 miles from Panther Creek, the trail crosses diagonally over the ridge between Panther Creek and Gamble Creek and then follows up Gamble Creek, and is little better than a blazed line. The camp, a third of a mile west of Gamble Lake, at elevation 6150 feet, consists of one cabin providing accommodation for 4 men. Timber is sparse above this altitude, but within a short distance downstream from the camp, there is plenty for all domestic and mining needs. Water supply is limited to that in the creek, only sufficient for domestic purposes. Gamble Lake, the source of Gamble Creek, lies between Middle and North Sister mountains at an elevation of 6250 feet. East of the lake the ground rises to an altitude of 7150 feet at the summit of the pass between the two mountains. There is practically no growth above the lake and the surface is covered by slide rock from the precipitous north wall of the Middle Sister and the slightly less rugged south slope of the North Sister. The north wall of the Middle Sister is almost vertical for the upper 500 to 1000 feet and it is in a shear-zone striking down this face that the showing under development is exposed.

The showing, at elevation 6470 feet, is reached from the lake by a third of a mile of steep and poor trail over talus slopes and up the precipitous rock face. At the portal of the adit there is barely room to stand on the small lip cut into the face. At this point the wall of the cliff has been cut back as a shallow draw some 10 to 15 feet wide by the greater effects of erosive action on the sheared rock. This effect facilitates tracing of the shear which strikes north 45 degrees east, and above may be seen extending upward to the brow of the mountain and below to the top of the talus slopes.

The rocks are white, blocky quartzites of the Quartzite Range formation, little sheared except in the particular location under development. Within the shear-zone there has been intruded 2 principal dykes, or dyke types. The exposure at the portal shows, from south-east to north-west, 6 feet of lamprophyre, 8 to 10

ıches of heavily sheared rock, probably original felsite dyke, 10 .nches of shattered lamprophyre, 18 inches similar to preceding 8 to 10 inch width, 30 inches of weathered acidic dyke-rock not as heavily sheared as the 2 central widths of felsite. A sample taken across the 8 to 10 inch width of felsite assayed: Gold, 0.06 oz. per ton; silver, trace. A sample across the 18 inch width assayed: Gold, 0.08 oz. per ton; silver, trace. Any sulphide mineralization originally present in these rocks has been removed by leaching. In the sequence of intrusion the acidic dyke or dykes were earlier than the lamprophyre. In addition to silicification, there has been deposition of vein-quartz later than the acid dykes and probably preceding and following the lamprophyre intrusion. This quartz is exposed on the surface at the south-east side of the shear and at two points underground.

The adit has been driven as a drift for 169 feet but owing to heavy timbering and to the squeezing nature of the ground which has closed the size of the opening to 3 feet by 3 feet in places, it is not possible to gain much information from the working. At 38 feet from the portal a small slash on the left wall exposed vein-quartz. At the face an opening through the timber on the south-east wall gave entry to a hole some 10 feet high in which the ground was running steadily. In this hole there was exposed a 5 foot width of lamprophyre striking north 65 degrees east, dipping vertically, with a narrow width of sheared acidic dyke on either side. Between the lamprophyre and the acid dyke on the north-west side there is a 1½ inch seam of broken quartz containing no visible sulphide minerals. A sample from this seam assayed: Gold, 0.14 oz. per ton; silver, trace. A grab sample from the dyke on the south-east wall of the lamprophyre assayed: Gold, 0.08 oz. per ton; silver, trace.

As the assays indicate, it is difficult to isolate gold values in any particular rock type. Sulphide mineralization is sparse and as the owners report the presence of free gold it is likely that, due to the effect of supergene water, the shattered dyke formations have been salted from the vein quartz. The lack of information concerning the occurrence of the vein quartz, the hazard of working in the shearing at this level and the difficulty of access indicate that the operators would be well advised to start a new drift below the present one at as low an elevation as considered practical and safe.

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