

feet past this showing, an adit or crosscut was driven into the hill during the winter of 1914-15, in a direction at right angles to the general strike of the vein at the "big showing," but no evidence of the vein was encountered, although the adit was driven some distance past the point where it would have been crosscut had it continued this far in regular fashion. Since the vein had persisted so far, and was strong and well defined within 100 feet of this crosscut, it would appear most probable that it has been further offset by a fault similar to those already indicated. All the available evidence is, therefore, in favour of the fault theory, though its truth can be established only by further development.

The lower vein in the lower drift has been carefully sampled throughout by the owners, and is claimed by them to average \$10.60 per ton in gold, silver, and lead, mainly in silver and lead, there being 8.26 per cent lead which was computed at 4 cents per pound. The total average values in the upper drift are slightly less than \$10. The gold as a rule is quite low, but exceptional samples have been obtained that carried as much as 3 ounces per ton, and particularly well mineralized samples occasionally contain gold, silver, and lead to the value of \$60 to \$80 per ton.

Approximately 200 feet in elevation above the outcrop of the lower vein at the entrance to the upper drift, an "upper vein" outcrops, which strikes about due east, and has an almost vertical attitude. This vein consists dominantly of quartz which carries more or less disseminated galena and pyrite with their oxidation products including lead carbonate which is quite prominent near the surface. An adit 35 feet long has been driven in to crosscut this vein, and from the end of the adit a drift has been run along the vein for about 75 feet in a southerly direction. The vein as exposed in the roof of the drift has a thickness of from 4 to 20 inches; and average samples taken across the vein at close regular intervals are claimed to contain from \$5 to \$18 per ton in gold, silver, and lead.

The ore material from these veins could not be shipped at a profit, as taken from the mine. It is, however, well adapted to concentrating operations and could be concentrated at least 7 to 1. The veins outcrop on the steep western face of Mt. Anderson between 1,300 and 1,800 feet above Becker creek opposite; and this hill-side affords a good site for a mill to which the ore could readily be conveyed from the mine workings by tramways or shoots. Becker creek affords ample water for milling and power purposes, and there is sufficient timber for all ordinary mining requirements for years to come in the valleys of Becker creek and Wheaton river, within a reasonable distance. A government wagon road has been constructed from Robinson on the White Pass and Yukon railway up Wheaton river, and a branch from this road continues up Becker creek to a point immediately below the outcrops of the veins on this property, a distance from Robinson of 25 miles. The railway has recently contracted to haul ore from the Whitehorse Copper belt to Skagway for \$1.10 per ton, and the Whitehorse Copper belt is about 30 miles farther from Skagway than Robinson. From Skagway to the Tacoma or some other coast smelter, the rate on ore is from \$2.00 to \$2.50 per ton, making a total from Robinson of probably between \$3.00 and \$3.50 per ton. Additional haulage charges would have to be added for transport by road over the 25 miles from the mine to Robinson.

#### *Antimony-Silver Veins.*

*General Statement.* All the deposits of antimony ores that have been discovered in Wheaton district are appropriately included under the term antimony-silver veins, and mostly all of them occur on the western or northwestern slope of Carbon hill facing Wheaton river. One important vein of this type, however, occurs at the head of a tributary of Becker creek on the eastern side of Carbon