

SLOCAN MINING DIVISION.

(Report by the Provincial Mineralogist.)

LAST month the MINING RECORD published the introductory comment of Mr. W. F. Robertson, provincial mineralogist, to his report on individual mines visited by him last summer. So much general information from the Annual Report of the Minister of Mines for the year 1904 was reprinted in its May number that, as then explained, the MINING RECORD could find room for but few separate accounts or descriptions of mines. The report of the provincial mineralogist is of such exceptional value, though, being the only official and full review the Department of Mines has had published since the issue in January, 1897, of Bulletin No. 3 (which was a report by Mr. Wm. A. Carlyle, then provincial mineralogist, on the Slocan, Nelson and Ainsworth mining districts, and was incorporated with the Annual Report of the Minister of Mines for 1896), that the wider the publicity given to it, the better, hence the prominence here accorded. Conditions have, naturally, so changed during the intervening eight years that the preparation of an official report dealing with the mining situation as it is to-day in the Slocan is opportune, the more so since the revival of mining activity in that district is attracting renewed attention, both in regard to its known richness in silver-lead ores and the big possibilities of its zinc resources.

The provincial mineralogist entered the district from the south, at Silverton, proceeding later to New Denver, Three Forks and Sandon, noting the mineral development successively at these points, in which order it will be found described in the following report:—

SILVERTON AND VICINITY.

Noonday.—The Noonday claim is about 1½ miles south-east of Silverton, on the Hewitt wagon road, and is located on a small creek flowing west into Slocan lake, at an altitude of 2,800 ft. The property is held by Wilson Smith and the Bank of Montreal, and is now idle and has been for a year or so, having last been worked by leasers more intent on extracting ore in sight than in keeping up development.

The rock formation of the vicinity is slate, in which there occurs a crushed zone, having well-defined walls, between which is the crushed country rock and a vein of quartz about 2 ft. thick, which evidently carried, in rather irregular bunches, galena and zinc blende, but in what amount could not be seen, as the property was not being worked. The vein dips at a flat angle, and No. 1 tunnel has been driven on the lead for a total distance of about 250 ft., but with branches, bringing the lineal feet of work here done up to about double that amount. No. 2 tunnel has been driven at 50 ft. lower level, for about the same distance. A fault is apparent which dislocates the vein towards the inner part of both tunnels. Some attempts at concentrating the ore had evidently been made, as a Cornish jig, driven by water-power, was erected in the creek.

L. H. Group.—The L. H. Group, owned by A. R.

Fingland *et al*, is situated some 4 or 5 miles south-east of Silverton, at an altitude of 5,500 ft. The property was being developed by two men most of the summer, but when visited the owners were temporarily absent, only a Swede, who knew nothing of the property or workings, being found at the cabins, so that only the tunnel mentioned was seen, the upper workings on the bluff not being heard of until later. On the top of the bluff is an exposure of quartz some 15 ft. wide, running about \$8 in gold, and associated with arsenical iron pyrites. At this point there were found a number of nodules of native arsenic, carrying 1,000 oz. of silver to the ton. These occurred in a calcite veinlet.

About 80 ft. vertically below this exposure, a tunnel had been started in the face of the bluff, and was in about 300 ft., with a short cross-cut to the right, while at 60 ft. from the face of the tunnel a cross-cut had been driven to the left for 110 ft., from which cross-cut a drift had been run 70 ft. nearly parallel to the tunnel, and was being pushed ahead. This tunnel starts in an altered shale rock, strikes a porphyry dyke, and follows a slip plane. It cannot be said that there was any vein showing, or any marked line of mineralisation, but the dyke matter contains a small percentage of arsenical iron pyrites and pyrrhotite, with quartz, which shades off into the dyke matter. The percentage of mineral showing is not great, but the manager reports the gold values as sufficiently high to permit of treatment at a profit.

Rocklands.—The Rocklands group consists of the Willard, Rockland and Rustler fraction mineral claims, owned by Messrs. J. P. Graves, Frank Watson and Judge Spinks, and is under the management of Mr. J. W. Hamilton, of Silverton. The group is situated about 3 miles due south-east of Silverton, at an altitude of 4,150 ft., on a small creek, between the forks of which, in a knoll, about 300 ft. of tunnelling has been done, cross-cutting in the schistose country rock, a mineralised zone about 60 ft. wide, carrying copper sulphides with gold values. On the opposite side of the small creek, the mineralised zone appears in a bluff, and is apparently of considerably greater width than the tunnel has as yet proved. Mr. Hamilton reports the zone to run about 1 per cent copper and \$6 in gold. These values are not high, but taken in conjunction with the extent of the mineralised zone, make the property well worth serious investigation. During August of 1904 one man was employed.

The waters leaching out of this zone, and carrying sulphates of copper, had filtered down the creek through an old log-jam, the rotten wood of which had precipitated small nodules and sheets of metallic copper, also forming oxides and carbonates. To this source, and not to the lead, must be attributed the samples of this description which were being so freely exhibited throughout the district, but not by the management.

Hewitt.—The Hewitt group is about 3½ miles south-east of Silverton, and consists of the Hewitt, Rincon fraction, Tranquillity, Crow fraction and Mole mineral claims, the local agent and part owner