

Empire lode drive east was driven a total of 114½ ft. from the south-east crosscut. The following are the assay values: From crosscut to 28 ft. east, over width of 80 in., £3 ls. 4d. per ton; walls not exposed. From 28 ft. to 110 ft. east, 76 in., value 12s. per ton; south wall exposed.

Crosscut at 70 ft. east: The lode is 23 ft. wide. The first 7 ft. from the south wall is worth 4s. 5d.; next 5 ft., £1 11s.; and the next 11 ft., 2s. Drive west driven 116 ft. from south-east crosscut: assay value to 16 ft. west, average £1 7s. per ton, over width of 69 in.; walls not exposed. From 16 ft. to 112 ft., 10s. 9d. per ton over width of 79 in.; north wall exposed. The lode contains a large percentage of country rock; the walls are irregular and ill-defined.

Crosscut at 55 ft. west: The following are the values from the north wall: First 5 ft., 12s. 1d.; next 15 ft., 5s. 4d.; next 5 ft. is country rock; next 3 ft., £1 0s. 1d. The south wall is exposed.

A crosscut at 95 ft. west was driven 19½ ft. to the north of the main drive west through country rock containing a few manganese veins.

No. 9 Level.—The Main South-east crosscut advanced 491 ft.; total, 661 ft. From 170 ft. to 360 ft. is country rock. At 360 ft. a quartz vein, 12 in. wide, value 1s., was intersected. From 360 ft. to 480 ft. is country rock. At 480 ft. the Royal lode, 8 ft. wide, value 4s. 5d., was passed through. From the Royal to 650 ft. is country rock. At 650 ft. the George lode, 57 in. wide, value 10s. 6d., was intersected. The crosscut continued in country rock to 661 ft.

Empire lode drive east advanced 354 ft.; total, 500 ft. The following are the values: From 145 ft. to 260 ft., £2 2s. 4d.; width, 61 in.; south wall exposed. From 260 ft. to 500 ft., 11s. 10d.; width, 53 in.; south wall exposed. Breaking out the lode from the south-east crosscut to 110 ft. east, 10 ft. wide, gave an average value of £1 0s. 3d.; south wall exposed.

Crosscut at 200 ft. east: The lode is 44 ft. wide. The first 6 ft. on the south wall is worth £4 3s. 8d., next 23 ft., 10s. 10d., and the next 15 ft., 6s. 2d.

Crosscut at 280 ft. east: The lode is 25 ft. wide, of which 7 ft. near the south wall is worth 17s. 7d., and the other 18 ft., 2s. 4d.

Crosscut 385 ft. east: The lode is 8 ft. wide, value, 19s. The crosscut was driven 39 ft. to the south through country rock, and 143 ft. to the north of the main drive east. At 39 ft. north a lode 48 in. wide, consisting of quartz and country rock, value, 3d. per ton, was passed through. From this lode to 68 ft. north is country rock. At 68 ft. north a lode dipping 62° south-east was intersected. From 68 ft. to 109 ft. is quartz, value, 4d.; from 109 ft. to 132 ft. is a mixture of oxidized quartz and country rock, value, 10d.; and from 132 ft. to 143 ft. is country rock and quartz rubble of no value. The north wall is exposed.

Crosscut at 495 ft. east: The lode is 8 ft. wide, value, 11d.

Empire lode: Drive east advanced 268 ft.; lode 8 ft. wide. Having reached the western boundary the following average values were obtained: 205 ft. to 276 ft. west, 66 in., £1 16s. 6d. (walls not exposed); 276 ft. to 328 ft. west, 61 in., 18s. 9d. (south wall exposed); 328 ft. to 412 ft. west, 59 in., £1 13s. 1d. (south wall exposed); 412 ft. to 476 ft. west, 49 in., £4 4s. 2d. (south wall exposed). Breaking out the lode: from the south-east crosscut to 205 ft. west gave an average value of £1 15s. 5d., of width of 10 ft.

Crosscut at 100 ft. west was driven 36½ ft. into the north wall. At 32 ft. from the south wall of the main drive west the crosscut passed through 96 in. of quartz; value, 9s. 8d.

Crosscut at 245 ft. west: The lode is 8 ft. wide; value, 14s. 9d. South of the lode the first 5 ft. is country rock, and the next 45 in. is quartz and country rock; value, 1s.

Crosscut at 325 ft. west: The lode is 23 ft. wide, of which 5 ft. near the south wall is worth £2 4s. 1d. and the other 18 ft., 3s. 1d. The crosscut was driven a total of 170 ft. north of the south wall of the Empire lode. From Empire lode to 60 ft. north is country rock; from 60 ft. to 63½ ft. north is quartz; value, 15s. 10d. From 63½ ft. to 69½ ft. north is country rock; value, 2s. 10d. From 69½ ft. to 73 ft. north is quartz and country rock; value, 4s. 6d. From 73 ft. to 94 ft. north is country rock and narrow veins of quartz of no value. In crosscut north of Empire lode—From 112 ft. to 136 ft. is quartz; value, 2s. 4d. per ton. From 136 ft. to 156 ft. is quartz; value, £1 11s. 6d. per ton. From 156 ft. to 166 ft. is quartz; value, 5s. 6d. per ton. The lode from 135 ft. to 156 ft. north in this crosscut was broken out for 6 ft. east and 6 ft. west over width of 15 ft.; average assay value, 11s. 4d. per ton.

A crosscut at 440 ft. west was driven 15 ft. to the north of the main drive. The first 30 in. is country rock; next 69 in. quartz, value, £3 8s. 6d.; and next 81 in. is country rock and quartz veins. The crosscut was also driven a total of 75 ft. to the south. The first 10½ ft. is a mixture of country rock and quartz, value, 2s. 5d.; from 10½ ft. to 19 ft. is quartz and country rock, value, 16s. 7d.; from 19 ft. to 75 ft. is country rock.

Drive west on Branch lode on the north side of Empire Main lode (at 40 ft. west of the south-east crosscut) advanced a total of 201 ft. This lode runs parallel to the Empire lode, with about 25 ft. of country between the two lodes. The following average values were obtained: From the junction to 98 ft. west, 48 in., 10s. 1d. (walls exposed); from 98 ft. west to 125 ft. west, 51 in., £1 3s. 2d. (walls exposed); from 125 ft. west to 196 ft. west, 59 in., 16s. 2d. (walls exposed): Driving on this lode has been suspended.

George lode: Drive west was driven a total of 40 ft. from the south-east crosscut. The lode is 51 in. wide; average value, 11s. 7d. Drive east was driven a total of 30½ ft. from the south-east crosscut. The lode is 45 in. wide; average value, 4s. 10d. At 30 ft. east the lode is loose and open, the quartz being oxidized.

Royal lode: Drive west was driven a total of 63 ft. from the south-east crosscut. The average width of the lode is 60 in., and average value, 6s. 4d. At 60 ft. west the lode is 75 in. wide; value, 2s. The walls are exposed. Drive east was driven a total of 22 ft. from the south-east crosscut. Assays average 2s. 10d. for a width of 63 in. The south wall is exposed.

No. 8 level.—Extended section: No. 8 level was opened 1,301 ft. below the collar of the Extended shaft. The South crosscut was driven a total of 373 ft. from the shaft and holed to the crosscut from No. 18 rise on the Empire lode. The crosscut advanced through a soft class of country rock. This connection has greatly improved the general ventilation of the mine.

Stopping operations on the Mary lode at Nos. 3, 4, 5, and 6 levels are also in progress and have produced 3,865 tons. Crushing was resumed early in January.

*Rising Sun, Owharoa* (J. A. J. McLaren, Manager).—During the year this company succeeded in raising further capital. An air-compressor, capacity 1,100 cubic feet of air per minute, was purchased, and mining operations resumed. The low level has been repaired, and the shaft unwatered down to 100 ft. It will, however, be necessary to sink this shaft a further 15 ft. for a well-hole; when this work is completed the chamber will be cut out and the crosscut pushed ahead with all possible speed to intersect the reef-system. It might, however, be mentioned that the average assay value of the main reef, for over 300 ft. along the floor of the low level, over width of 18 in., is £6 per ton; also that on account of the action of mineral water on the air-pipe line this work took longer than was anticipated.

*Waitekauri* (W. F. C. Nichol).—W. F. C. Nichol continued prospecting what was considered the outcrop of a large lode, mentioned in last annual report, but this proved to be large quartz boulders buried in a slip, and work was discontinued.

*New Waitekauri Syndicate*.—Two men employed extending low-level cross-cut. Several lodes have been intersected, but the quartz is low-grade.

*Great Northern Waihi Gold-mining Company, Wharekiranponga* (J. R. Paepker, Manager).—Six men employed. Work done consisted of driving, sinking, and surface prospecting, but nothing payable has so far been discovered, consequently no attempt has been made to erect the ten-head stamp battery carted to site.

*New Zealand Crown Mines, Karangahake* (G. N. McGruer, Manager).—Mining operations for the past seven months were confined to surface prospecting and the upkeep of the mine and plant. Early in July a start was made to extend the Rose low-level crosscut, which will intersect most of the known reefs in the Karangahake Hill.

*Imperial Claim* (E. White and Party).—A crosscut was driven 120 ft. and a lode averaging 13 in. in width intersected. Half a ton of ore treated produced bullion valued at £33 5s.