

The 290 ft. crosscut: At 290 ft. west on the west drive a crosscut to the north was started to cut the Martha lode which was intersected on the 325 ft. crosscut on No. 9 level. This crosscut advanced 41 ft. through country rock.

The foot-wall drive west was started under No. 7 rise to locate a band of material intersected at the south end of the 55 ft. crosscut west. Nothing of value was found till the drive holed into the 55 ft. crosscut. From the south-east crosscut the drive was advanced 117 ft., when it holed into the main west drive at No. 6 rise. Assays from 50 ft. to 98 ft. average £2 1s. 1d. for a width of 74 in.

No. 9 Level (1,440 ft.).—Martha lode cut in 325 ft. crosscut west on Empire lode.

The drive west advanced 75½ ft.—total, 81 ft.—and was stopped, being close to the western boundary. Assays from 5 ft. to 75 ft. west average 9s. 6d. for a width of 64 in.; walls not exposed.

The 80 ft. crosscut west was driven through the lode against the west boundary. The width of the lode is 45 ft., and the average value is 8s. 3d. Both walls are exposed.

The drive east advanced 36½ ft.; total, 53½ ft. Assays from 17 ft. east to 50 ft. east average 8s. 11d. for a width of 74 in.

The above values have been checked by bulk samples.

Empire lode east: The 200 ft. crosscut east was advanced 49½ ft.; total, 102 ft. This crosscut was driven to locate the Empire hanging-wall lode east (cut 52 ft. north in the 210 ft. crosscut east on the Empire lode No. 8 level). The crosscut passed through a low-grade reef formation, much shattered and vuggy for its whole length.

The hanging-wall drive at 10 ft. north of the Empire main drive was driven 27 ft. east and 32½ ft. west from the 200 ft. crosscut. On the east end only 2 ft. of cross-cutting was necessary to hole into the main drive. On the west end a crosscut 8 ft. long through country rock was driven to connect. Assays from 80 ft. west to 20 ft. east of the 200 ft. crosscut gave an average value of 12s. 7d. over a width of 57 in. At 33 ft. north of the main drive 5 ft. of driving was done to the eastward of the 200 ft. crosscut on some promising mineral; it proved to be only a patch, which cut out, and no further work was done.

No. 8 Level (1,320 ft.).—An intermediate level at 46 ft. above No. 8 level was started from the above rise. The drive east advanced 7½ ft., and holed into the filling of the Nos. 5 and 6 rise stopes on the Empire foot-wall lode.

The drive west advanced 97½ ft.; total, 97½ ft. The following average values were obtained: From 5 ft. to 26 ft. west, £3 3s. 2d.; width, 48 in.; from 28½ ft. to 43½ ft. west, 13s. 9d.; width, 28 in.; from 51 ft. to 80 ft. west, £1 10s. 3d.; width, 47 in. From 28 ft. to 43 ft. west the drive followed the edge of the filling of the Nos. 4 and 5 rise stopes of the Empire foot-wall lode: this is probably the reason of the narrow width and low values.

Empire hanging-wall lode east: Drive west from the west end of the No. 1 rise stopes advanced 119½ ft.; total, 119½ ft. Assays from 5 ft. west to 96 ft. west average £1 2s. 4d. for a width of 53 in. An intermediate drive, 68 ft. above the level from the west end of the same stope, was driven 35 ft. west; assays averaging £2 6s. 3d. in value over 56 in. in width were obtained. Stopping is now being done on this block of ore.

Empire foot-wall lode west: No. 2 winze was sunk 66½ ft. at the intersection of the 415 ft. crosscut, Empire lode west. This winze had to be sunk in the foot-wall country to avoid interference with trucking from the stope overhead, and the lode was first sampled at 47 ft. below the level. Assays from 47 ft. to 65 ft. gave an average value of 13s. 1d. and width of 17 in. A crosscut at 40 ft. down was driven 23½ ft. to the north. The lode matter exposed was ill-defined and composed of a mixture of quartz stringers and country rock. Samples of the first 16 ft. average 3s. 1d.

No. 6 Level (1,082 ft.).—Mary lode: The drive east advanced 124 ft.—total, 1,233 ft.—from the north crosscut. The lode averages 42 in. wide, and is of low value.

Martha lode: Exploratory work to locate the north section of the Martha lode discovered on No. 5 level was undertaken on this level. Some side stripping and 47 ft. of driving was done in the north crosscut from the east end of the Dominion lode shrinkage stopes.

No. 5 Level (944 ft.).—Martha lode: The foot-wall drive east of the north-west crosscut advanced 50½ ft.—total, 50½ ft.—and holed into the main east drive. Values were low.

A foot-wall drive was advanced 176 ft.—total, 176 ft.—east of the 160 ft. crosscut east on the main drive. Assays: From the 160 ft. crosscut to 93 ft. east, average value £1 3s. for a width of 146 in.; from 93 ft. to 157 ft. east, average value £1 6s. 6d. for a width of 153 in.; from 157 ft. to 173 ft. east, average value £1 6s. 8d. for a width of 110 in. This drive proved to be on a north section of the Martha lode, while the original drive had been on the south section, and the 245 ft. and 350 ft. crosscuts from the latter were not driven far enough to expose the north section.

No. 2 Level (500 ft.).—Martha lode: At 150 ft. west on the Martha lode a prospecting-crosscut was driven 26½ ft.—total, 30½ ft.—to the north to explore the foot-wall country near the western boundary: 111 in. of low-grade quartz was passed through, being part of the Martha lode. The balance of the crosscut was in solid country rock with no signs of reef showing. No. 1 shaft was sunk 97 ft.—total, 1,670 ft.—below the surface, through country rock. No. 2 chamber, at 1,639 ft. below the surface and 99 ft. below No. 10 level, was excavated.

Stopping: The following shows the sources of ore sent to the mill during the current period:—

Lode.	No. 3 Level.	No. 4 Level.	No. 5 Level.	No. 6 Level.	No. 8 Level.	No. 9 Level.	No. 10 Level.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Mary	3,853	9,165	15,884	7,272	..	..	..	36,174
Martha .. ..	..	939	3,226	74	..	242	..	4,481
Royal .. ..	..	..	..	679	..	..	..	679
Republic .. ..	..	..	..	77	..	..	..	77
Empire .. ..	..	..	..	..	15,614	12,322	3,745	31,681
Dominion .. ..	..	..	..	915	..	..	..	915
Totals	3,853	10,104	19,110	9,017	15,614	12,564	3,745	74,007

Development work produced 6,457 tons of ore, making the total output of the mine 80,464 tons.

Rising Sun Gold-mining Company, Owharoa (A. McGruer, Manager).—At a depth of 90 ft. in the main shaft below No. 3 level a chamber was cut out, a crosscut driven, and No. 1 reef intersected. This reef varied from 8 in. to 12 in. in width and was low grade. Owing to lack of sufficient power to work the pumps to deal with the incoming water work was suspended. At a point 220 ft. north of the shaft a winze was sunk to a depth of 87 ft. on the lode. The first 50 ft. carried payable ore over a width of 15 in.; the remaining distance proved the lode to be small and of low grade. Stopping operations are now in progress at various points on No. 1 reef above No. 3 level. 46 tons were treated for bullion, valued at £244 9s.

New Waitekauri Syndicate, Waitekauri.—The low level was extended during the year a farther distance of 180 ft. Two small lodes were intersected, but values were low.

Great Northern Waihi Gold-mining Company, Wharekirauponga (J. R. Paepker, Mine-manager).—Three men employed. Work in this mine during the year has been confined to surface prospecting, without discovering anything of importance.

New Zealand Crown Mines (Limited), Karangahake (G. N. McGruer).—Eight men employed. The Rose low-level crosscut was extended 284 ft., making the total distance 608 ft. At 245 ft. the crosscut passed through what is known as Sheehan's leader—width, 1 ft.; values low. At 402 ft. a reef formation 14 ft. in width was passed through; assay value, 9s. per ton. At 607 ft. a leader 1 ft. in width was intersected; average value, 14s. per ton.