

herehere, Kaeaea, Hikutawatawa, Te Ranga, Waitekuri, Opitonui, one-half of Wairoa, Owera, Otanguru, Opou, Moewai, Ngarahutunoa, Weiti No. 1, Whakau, and Kaimarama, all situated near Whangapoua and Whitianga Harbours; Willis's and Graham's Blocks, near Tairua Harbour; and Matakitaiki and Taparahi No. 1 Blocks on the upper portion of the Tairua River basin.

Prospecting operations have been vigorously carried on by the company since its inception, and gold has been proved to exist more or less all over the property, the main exceptions being the Kaimarama Block, which is mainly composed of rhyolitic rocks, and Weiti No. 1 and Whakau, which are swamps of recent geological formation, really slightly elevated portions of the bottom of Mercury Bay. Gold-bearing reefs of considerable size and value have been discovered on the Opera, Te Ranga, Waitekuri, Opitonui, Owera, Otanguru, and Ngarahutunoa Blocks, also at Taparahi No. 1, and traces of gold found on all the other blocks except the three above mentioned. The prospecting has demonstrated the generally auriferous character of the company's property, and gives great reason to believe that many portions of it will contain valuable mines.

The principal workings of the company are on the Opitonui Block, about five miles inland from the Whangapoua Wharf, with which they are now connected by a narrow-gauge railway. Here a large block, containing 810 acres, has been surveyed off into nine square special claims of 90 acres each, the whole block being known as the Castle Rock Consolidated Mines Block. This area is full of reefs, more than a dozen of which have been tested to some extent, and nine of which have been proved to carry gold in notable quantities. These are known as—(1) The Maiden reef, (2) the Carvill reef, (3) the Lanigan's and Hilda reef, (4) the Hilda Cross reef, (5) the Zealandia No. 1 reef, (6) the Zealandia No. 2 reef, (7) the Australasia reef, (8) the Opitonui reef, (9) the Golden Hill reef. The principal mining work on the Maiden, Carvill, Lanigan's and Hilda, and Opitonui reefs. There has been a good deal of work done on the others, and some very fair auriferous quartz has been obtained from them, but they must still be regarded as in the prospecting stage of development.

The Maiden reef is a strong body of quartz running north-westerly and underlying to the south-west. Two tunnels have been driven on it, No. 1 being 378 ft. in length, and No. 2 697 ft. A fine chute of payable ore, 571 ft. in length, has been proved in the No. 2 tunnel, and the reef is from 2 ft. to 10 ft. in width. Over 1,500 tons of good ore have been saved during the driving of this tunnel, without any stoping. The gold is free but very fine, requiring the use of the cyanide process for its extraction. A branch tramway has been made from the main line, 39 chains in length, to the mouth of a third adit, about 70 ft. below No. 2, which will be called No. 3 tunnel. Machinery for a main winding-shaft has also been erected, and shaft-sinking has begun. The winding-engine is of Tangye's couple-gear pattern, with two cylinders 8 in. by 16 in., and winding-drums 4 ft. in diameter, and takes steam from a Tangye's 25-horse power (nominal) steel Cornish boiler, which also supplies steam to a Tangye's 14 in. by 7 in. by 24 in. vertical "special" sinking-pump, capable of raising 9,800 gallons of water per hour from a depth of 300 ft.

The Carvill reef has a course nearly at right angles to that of the Maiden lode, and should intersect the latter. The main shaft is about 1,100 ft. to the eastward of the Maiden main shaft, and is served by the same tramway which goes to the latter. An adit-level has been driven to cut the reef, which proved to be from 2 ft. to 4 ft. wide, and yielded some good payable stone, often showing visible gold. A fault cut this off, and the drive was continued in soft ground some 152 ft. before cross-cutting to recover the lode. When this was cut again it was about 2½ ft. wide and payable, but going south became mullocky and valueless. Good gold is known along this reef for a total distance of 250 ft., the entire length driven being 431 ft. A winze sunk on the reef has gone down now about 45 ft., in good payable ore, often showing gold freely. The main shaft has been sunk 71 ft., and a level is being driven from it at the 60 ft. level to intersect the reef. The machinery on this shaft is of a temporary character, consisting of a steam-winch and steam-pump, driven by a semi-portable boiler of 14-horse power (nominal). A heavier plant will be obtained for working purposes.

The Lanigan's and Hilda reef is so called on account of formerly having been worked by two separate proprietaries, Lanigan's and the Hilda Gold-mining Companies. The work of the present owners has shown that the old workings were all on the same reef, Lanigan's adit being now below the old Hilda workings. In Lanigan's section of the mine the old low-level tunnel has been repaired by the present company and extended to a total length of 1,185 ft., and a drive east on the north branch of the reef has been made 77 ft. in length. In this some very fair stone was obtained. From the junction of the main and north branches westwards the reef was very poor for 584 ft., after which the chute of ore formerly worked by the Hilda Company at a higher level was met with, and has been driven through for 111 ft. This chute yields some good ore, with visible gold, but on the whole is of low grade at this level. The chute originally worked by Lanigan's Company continuing under foot in the adit-level it became necessary to sink a shaft to work it. This has been done, the shaft being 135 ft. in depth, with No. 1 level opening from it at 130 ft., or a little over 70 ft. below the adit-level. At 143 ft. east from the shaft Lanigan's chute of ore was cut, and has continued good up to the present, a total distance of 314 ft. from the shaft. The ore in this chute has been highly payable, and appears to be much richer than at the adit-level. The main shaft is equipped with a fine winding plant, supplied by the Union Ironworks, of San Francisco, U.S.A., consisting of a 10 in. by 16 in. double-cylinder double-reel hoisting-engine, with feed-pump and feed-water heater, supplied with steam from a 54 in. by 16 ft. horizontal tubular boiler, which also actuates a No. 9 Cameron sinking-pump, capable of raising about 10,000 gallons of water per hour.

In the Hilda section the No. 2 level is 90 ft. above Lanigan's adit. The cross-cut to the reef is 162 ft. in length, and from it the lode has been followed eastward 117 ft., and westward 723 ft. The eastern portion was worked by the Hilda Company. West of the cross-cut the lode was very poor for about 280 ft., where a good chute of ore began to make, and continued for 160 ft. From the end of this chute onwards the level has proved ore of low grade, with several short chutes of good payable stone. It has passed beneath a level known as the Hilda west tunnel, which is 125 ft.