

ANNEXURE A.

SUMMARY OF REPORTS BY INSPECTORS OF MINES.

NORTHERN INSPECTION DISTRICT (J. F. DOWNEY, Inspector of Mines).

QUARTZ-MINING.

Waihi Gold-mining Co., Ltd. (J. L. Gilmour, Manager).—The following is a summary of the operations carried out:—

Shafts: No shaft sinking was done, but all the working shafts were kept in good order.

No. 15 level (1,880½ ft. below collar of No. 4 shaft): No further exploration work was done, but the trucking of ore from Cow block was continued. The block now contains 2,082 tons of broken ore.

No. 14 level (1,752 ft.): Some further investigation of the ground below No. 14 level under what is known as Cod block was carried out. A winze was sunk a distance of 80½ ft., and it is intended to deepen this, and connect with a rise from No. 15 level. The lode was crosscut at 60 ft. down in the winze, and was found to be 66 ft. wide. On being sampled in successive sections, measured from the eastern wall, the values were found to be 0 ft. to 5 ft., 5s. 5d. per ton; 5 ft. to 27 ft., £1 9s. 10d.; 27 ft. to 42 ft., 9s. 3d.; 42 ft. to 57 ft., £1 12s. 10d.; and 57 ft. to 66 ft., 2s. 3d.; the average of all the assays being £1 0s. 1d. Investigation of the lode is being continued.

On the Edward lode at this level shrinkage stoping of the big low-grade Trout block was continued, and at the end of the year the stope was up 111 ft. Truck samples of the ore drawn off ranged from 17s. 5d. per ton to £1 12s. 2d. per ton, with an average of £1 3s. The stoped part of the block is estimated to contain 11,769 tons of ore of this average value. The average value being low, this ore was taken out of the mine's General Account Reserve, but with the mine and battery in full operation it is considered, however, it will pay to send it to the battery, as it will pay its own mining and treatment costs, and contribute something to the general standing cost.

No. 13 level (1,578½ ft. below collar of No. 4 shaft)—Martha lode: An extensive investigation was made of the ground south of the north section of the Martha lode and lying to the east of No. 4 shaft main north crosscut. The crosscut across the north section at 100 ft. east was extended in a south-easterly direction, the total distance driven being 228½ ft. measured from the south side of the level on the north section. At 215 ft. the crosscut entered a layer of bedded tuff which continued to the end. At 73 ft. in the crosscut the Martha lode was intersected, and proved to be 58½ ft. in width, comprising the following sections: 0 ft. to 49 ft., quartz and country mixed, of little value; 49 ft. to 53 ft., quartz assaying 7s. 1d. per ton; 53 ft. to 58½ ft., quartz carrying zinc and lead sulphides, the assays of this section showing average values to be £3 5s. per ton. This payable section was followed eastward a distance of 55 ft. Up to 30 ft. east samples from it assayed well, values ranging from £1 17s. 8d. per ton to £2 19s. 9d. At this point the values fell away, and the drive terminated in hard, glassy quartz, which was considered to represent the main body of the Martha lode. Driving was carried out westward on what was apparently the downward continuation of the Dreadnought lode, junctioning with the Martha lode at this point. The reef proved to be small, and the value declined from 17 ft. west. At 93 ft. crosscuts were put out, 12 ft. to the north and 11 ft. to the south, but nothing of importance was disclosed. The drive eastward and westward of Williams crosscut was heightened, but the sulphide seam became reduced in size, and work was stopped. Dreadnought lode: In connection with the investigation of the same area, a drive was put out in a south-easterly direction across the course of the Dreadnought lode, starting from a point 239 ft. north in No. 4 shaft north crosscut. A total of 70 ft. was driven through a mixture of quartz and country rock, but nothing of importance was met with.

No. 12 level (1,447½ ft. below collar of No. 4 shaft): Operations were confined to the stoping of Andrewartha block on the Empire lode, and trucking from Manning block on the south branch of the Dreadnought lode.

No. 11 level (1,301 ft. below collar of No. 5 shaft)—Martha lode: With a view to searching for the downward continuation of the run of sulphide ore found east and west of Boundary reef crosscut at No. 10 level, Brooke's north crosscut, which at No. 11 level is just west of the eastern boundary, was extended across the Martha lode. Measuring from the centre section of the Empire lode, the crosscut was extended from 125 ft. to 167½ ft. At 143 ft. the Martha lode was met, and was found to be 23 ft. in width. The north wall was seen, and the crosscut penetrated 1½ ft. into soft slidy country, when the crosscutting was stopped. Assays of the lode only gave from traces up to 2s. per ton. Starting at 133 ft. north on the south part of the lode, a drive was put out west for 80½ ft. There were some indications of values at the starting-point, but, with the exception of occasional small sulphide leaders seen on the south wall, the quartz where driven on proved of low value. At 54 ft. west the lode was crosscut, and assays ranged from 2s. 5d. to 12s. 8d. per ton. Empire lode: With a view to searching for the downward continuation of a run of sulphide ore opened up at No. 10 level on the footwall of the Empire, east and west of London south-east crosscut, a footwall drive was started in Bath north-west crosscut, at about 30 ft. south of the Empire lode. This drive started in country rock, but at 130 ft. west was turned towards the north-west and at 168½ ft. was connected with the level on the north part of the Empire lode. Starting at the 160 ft. mark in the footwall drive, a drive was extended westward on the south part of the Empire lode a distance of 145 ft. No ore of any importance was met with. The quartz was leached in places. At 142 ft. a crosscut to the north for 70½ ft. passed through the following formations: 0 ft. to 27 ft., country rock; 27 ft. to 32 ft., old level on Empire lode; 32 ft. to 44 ft., mixture of quartz and country of low value; 44 ft. to 49 ft., quartz, with some country, assaying 19s. 4d. per ton; 49 ft. to 54 ft., quartz and sulphides; 54 ft. to 70½ ft., mostly country rock. The make of ore between the 49 ft. and 54 ft. marks was investigated by driving westward on it for 130 ft., when the reef split up. At 125 ft. a crosscut put out to the north disclosed bedded carbonaceous tuff. The section was also driven on eastward for 151 ft. The above work disclosed a run of ore about 5 ft. wide, extending from 83 ft. west of the crosscut to 83 ft. east of it, of an average value of £1 5s. 6d. per ton. It was considered this ore would pay to stope, and that it would increase in value as work was extended upwards. Edward lode: Trucking from the Salmon block at this level continued till the 8th September, a considerable excess above the estimated quantity of broken ore available having then been obtained. On that date a heavy fall of rock occurred in the south end of the nearly empty stope, breaking several timbers in No. 11 level. An examination indicated weakening in the arch under No. 10 level, and the men were withdrawn from the working, and trucking from it was stopped. The timbers at No. 11 level were subsequently renewed and re-enforced with extra sets. A deviation gangway was started at No. 10 level past the dangerous ground to allow operations in the southern part of the Edward lode to be continued.

No. 10 level (1,152 ft. below collar of No. 5 shaft)—Martha lode: In the report for last year details were given of an investigation of the hanging-wall of the Martha, just within the eastern boundary of the Waihi Co.'s ground, and east and west of the Boundary reef crosscut. This work was continued, and a valuable stoping-block, known as Brook's block, was opened up. The length of the stope is 160 ft., and the average width of the ore at No. 10 level is 10 ft., while the average value of the samples taken during the heightening was £2 5s. 7d. per ton. As mentioned above, under the heading "No. 11 level," an investigation of the ground below this block on No. 11 level was carried out, but the make of ore evidently did not live down to that level. A rise from No. 10 level on the block, situated at 23 ft. west of Boundary reef, disclosed good ore for a height of 80 ft. The drive at No. 10 level was extended eastward into Grand Junction Co.'s property. It crossed the boundary at 90 ft. east of the Boundary reef crosscut, and was