

East and Hogson blocks. During the year a total of 23,894 tons was won from north branches of the Martha lode, west of No. 2 shaft, at Nos. 3, 4, 5, 6, and 7 levels. No. 2 level, Edward lode: Shrinkage stoping of Cod block was completed and the broken ore is being drawn off. Eel rise, above top stoppe, was put up 81 ft. and connected to the bottom of Eel pass, which was sunk 109 ft. from the surface. A good current of air now goes up this rise to the surface. Edward lode, east part: At 100 ft. south of No. 2 shaft a crosscut was driven for 66 ft. on good-grade ore. At 55 ft. south the lode is 5 ft. wide, and worth £3 3s. 10d. per ton. A connection was made to Edward south-west crosscut, where the east part was first met. Shrinkage stoping of the new Trout block is in operation. This block is calculated to contain 2,114 tons, which have been added to the ore reserves. On the Bell reef a drive was started, at 129 ft. west of Hooper crosscut, and extended to 454 ft. The reef varied between 1 ft. and $5\frac{1}{2}$ ft. in width and values ranged from 2s. 9d. to £2 7s. 6d. per ton. At 434 ft. a crosscut was put out south for $45\frac{1}{2}$ ft. At 36 ft. the main part of the Bell reef was worth £1 12s. 2d. per ton. A drive, west of the 434 ft. south crosscut, was advanced on the main part of the Bell reef to 111 ft. The lode varied from $1\frac{1}{2}$ ft. to 5 ft. in width, and values ranged from 8s. 10d. to £3 4s. 11d. per ton. Surface above Edward lode: Eel pass was sunk 45 ft. to 109 ft. from a surface cutting, and connected to a rise from the top of Cod block above No. 2 level. The Edward lode pinches out in soft blue country at 190 ft. from surface. Open cut: Rill stoping is in operation in Dix block, on the Martha lode. East of Bell pass crosscut, School drive was advanced to 26 ft. on the same lode, which is here 7 ft. wide and worth 17s. 1d. per ton. The broken ore is now being drawn from Pershing and Oats blocks. Haigson south crosscut was advanced a total of 45 ft. from the Martha footwall gangway. At $39\frac{1}{2}$ ft. the south branch of the Martha lode was intersected, and proved to be $5\frac{1}{2}$ ft. wide, worth £1 10s. 7d. per ton. West of Edward filling pass north crosscut, a drive was advanced to 335 ft. on this lode in payable ore. Ulster lode (Grand Junction No. 7 level): Driving west of the boundary in the Martha area was continued a further 359 ft., making a total of $485\frac{1}{2}$ ft. west of the 875 ft. west crosscut. Values were rather low. At the 305 ft. point a connection was made to Ulster winze at 95 ft. below the Martha Co.'s No. 10 level. All values stated have been estimated on the basis of gold at £4 4s. and silver at 2s. per ounce. During the year the company put down two boreholes, by diamond drill, "A" to a depth of 252 ft. and "B" to $262\frac{1}{2}$ ft., on the old Silverton claim, which is now held by the Martha Co. under prospecting license. A conversion from steam and/or air to electric power was made on the No. 2 shaft winding-engine during the holiday period 1935-36, and this incorporated the installation of a 50-cycle A.C. 400 h.p. motor, together with "Lilly" control overspeed and overwinding gear. The altered conditions had an effect on the hand and foot brakes of the engine, for these became largely ineffective, and the engineer (at Waihi) designed and had constructed at the company's workshops, and installed, a gravity brake, which is held off by the application of air. This is arranged to come into operation on the failure of the electric or air power, and gives complete satisfaction. The steam cylinders previously had a braking effect in themselves, and this was naturally lost when the engine was converted, hence the necessity of the gravity brake. Output: A total of 172,622 long tons of quartz was mined and treated, from which gold and silver to the value of £406,508 was obtained. The gold recovered amounted to 53,108 oz., valued at £371,762, and the silver to 382,399 oz. 15 dwt., valued at £34,746. Dividends were paid during the year to the amount of £99,181 8s. The average number of men employed during the period was 597. The total yield of bullion (gold and silver) since the beginning of operations (including that won by the Waihi Gold-mining Co., Ltd.) is 26,905,893 oz. 18 dwt. 11gr., valued at £18,954,862 13s. 10d.

Waihi Grand Junction Gold-mining Co., Ltd. (W. Morrison, Manager).—The Martha Gold-mining Co. (Waihi), Ltd., continued the working of this mine. No. 10 level: For the purpose of drawing the broken ore from Fahy and Ellis blocks on the Empire lode a short rise was put up to the Martha Co.'s No. 13 level at 450 ft. west of No. 1 shaft south-east crosscut. The ore will be drawn through this pass at No. 10 level and trucked to the Junction shaft. No. 9 level: A total of 5,155 tons was drawn from No. 10 Pass block on the Empire lode. No. 8 level, Royal lode: Stoping was commenced in the No. 4 Pass block. Drawing from Lowrie block was continuous until August, when work was suspended owing to the great difficulty experienced in drawing off the ore due to the flatness of the reef. The sinking of No. 4 winze, situated at 425 ft. west of No. 1 shaft south-east crosscut, was commenced in May and carried to a depth of 90 ft. An intermediate level was then opened out at 61 ft. down the winze (this being the limit in depth of the pay-ore) and driven a total of 67 ft. west and 76 ft. east. Although crosscutting proved the reef to be of considerable width, the pay-ore was confined to a width of 5 ft., extending east and west of the winze for a distance of 83 ft., the calculated average assay value being £1 11s. 5d. per ton. Ore breaking has been commenced in this block. Junction No. 7 level, Empire lode, No. 11 Pass stoping block: The trucking of ore from this block was commenced in June, and by the end of the year 2,218 tons had been obtained. The stoping and drawing-off of ore in Wells south block was completed. An investigation of the Empire lode, above No. 7 level east of the fault, was made by driving an intermediate level east and west of No. 18 Pass at 63 ft. up. A total distance of $72\frac{1}{2}$ ft. was driven west, where the lode was cut off by a fault, and eastward 71 ft. were driven, when work was stopped owing to the values falling. The net result of this work was to open a stoping block 118 ft. in length, in which the breaking of ore is now almost completed. George lode: The intermediate level, at 80 ft. up George rise, was continued westward to 86 ft. At 60 ft. a winze was commenced and sunk 50 ft., a connection being made with this by rising from the main level at 100 ft. west of No. 1 shaft south-east crosscut. In the course of this work it was found that the pay-ore continued downward to within 59 ft. of the main level, and an intermediate level was therefore opened out at this height above No. 7 level. A distance of $99\frac{1}{2}$ ft. west and 43 ft. east was driven. The result of the work has been to open up a stoping block estimated to contain 2,634 tons of a calculated value of £1 5s. 11d. per ton. Junction No. 6 level, Royal lode: Drawing from No. 10 Pass block continued steadily, and a total of 3,550 tons was recovered. Exploratory work on the south part of this lode opened up Cartman and Dye blocks. Ore-breaking in these was completed. Some ore is being recovered from the No. 3 Pass block. Martha Co.'s No. 10 level: A total of 543 tons was recovered from Ulster block on the Ulster lode. Martha Co.'s No. 9 level, Ulster and Royal lodes: During the previous year an intermediate level was driven, on the Ulster lode, at 28 ft. above the level from Martha Co.'s ground into the Junction area, and a connection made to an old stoppe on the Royal lode at 148 ft. east. From old stoppes a total of 282 tons of good milling grade was recovered during the year, and, in addition, 141 tons were obtained from work done on the Ulster lode. Martha Co.'s No. 8 level: The extension of the Royal footwall gangway east of No. 5 shaft new south crosscut was put in hand with the object of opening up and recovering the ore from arches and pillars on portion of the Royal lode both in the Martha and Grand Junction areas. In the Junction ground the lode was followed along the south side for a length of 211 ft., where the face stood at the end of the year. Between Nos. 1 and 7 passes it was estimated there were 3,043 tons of recoverable ore, of which total 559 tons were won during the year. All values quoted have been estimated on a basis of gold at £4 4s. and silver at 2s. per ounce. Two boreholes were put down on the Waihi North prospecting area, held by the Grand Junction Co., by means of a diamond drill. The first hole, "C," was completed at a depth of 552 ft., while the second was down to 485 ft. at the end of the year, with drilling still in progress. Output: The ore won from the mine amounted to 27,004 long tons, which yielded gold and silver to the value of £55,892. The gold amounted to 7,619 oz. 15 dwt., valued at £53,338, and the silver to 28,117 oz. 4 dwt., valued at £2,554. Dividends to the amount of £6,906 5s. 4d. were paid. An average of forty men was employed. The total value of bullion won from the mine since commencing work may be set down as £2,702,525 3s.

Golden Dawn Gold-mines, Ltd., Owharoa (J. H. Bennicy, Manager).—No. 3 level: The crosscut west, off drive north on No. 1 reef, has been extended to 650 ft. The country here has been of a fair class for carrying reefs, being heavily mineralized. A drive north, on a west wall branch of No. 1 reef, has been advanced