## ANNEXURE A.

## SUMMARY OF REPORTS BY INSPECTORS OF MINES.

NORTHERN INSPECTION DISTRICT (Mr. M. PAUL, Inspector of Mines).

Quartz-mining.

Waihi Gold-mining Company (Limited).— The following are the particulars of the principal development works carried out in this mine during the year:—

No. 12 level (1,447) ft. below the collar of No. 4 shaft): The drive east on the Empire lode at 86 ft. in the north-west crosscut from No. 4 shaft was advanced 67 ft., making a total of 217 ft. From 144 ft. to 178 ft. east the width averaged about 5½ ft., and the assay value varied from £1 8s. 1d. to £5 4s. per ton. From 180 ft. to 193 ft. the drive was continued in country rock, owing to a large cavity in the lode. From 195 ft. to 217 ft. the width was about 6 ft., and the value varied from £1 2s. 4d. to £2 3s. 7d. per ton. No. 4 shaft west crosscut was continued 79 ft., making a total of 665 ft. At 653 ft. 12 ft. of lode was exposed, average value 6s. 10d. per ton. Quartz still showed in the face of the crosscut, which is 150 ft. from No. 2 shaft. No. 4 shaft south-east crosscut, to cut the Royal The country rock was much fractured, and letting lode, was driven 15 ft., making a total of 363 ft. out a large volume of water when work was suspended. The Royal lode should be met in the next 60 ft. or so. Work in this level was suspended in February owing to shortage of men and stores.

No. 11 level (1,301 ft. below collar of No. 5 shaft): From the Empire lode the Pistol north-west crosscut was started at 438 ft. east of the Bath north-west crosscut, and at 137 ft. from the south wall of the lode the north section of the lode was intersected. It was 26 ft. wide, having an average value of £1 4s. 3d. per ton. The lode being driven on to the west, for the first 36 ft. its average value was £1 6s. 10d.; from 36 ft. to 50 ft. the drive was in a horse of country; at 50 ft. west the lode was crosscut, being there divided by a horse of country into two parts, the north branch being 8 ft. wide and averaging 11s. 9d. per ton; the south branch was 3 ft. wide and averaged £2 4s. per ton.

Martha lode: Further work done to the east on the south branch of the Martha lode proved it

to split up into small stringers of low value.

No. 10 level: Cow south-east crosscut, started from the Martha lode at 160 ft. east of No. 4 shaft north-west crosscut, has been extended to 136 ft. south-east. A few small leaders of low value were met. The last 26 ft. was in brecciated dacite.

No. 7 level: Martha lode north section, east of No. 6 shaft crosscut, was driven on 1501 ft., making a total of 226 ft. From 115 ft. to 226 ft. there is payable ore 9 ft. wide on the north wall of the lode.

Shafts: No sinking was done during the year.

At every level in this mine men are engaged driving or stoping on the different lodes. A considerable tonnage of high-grade ore is also being won from the arches left in under the levels. In order to enable this ore to be extracted safely, gangways have been driven in solid country in the footwall, parallel to the lode, and at intervals of about 50 ft. short crosscuts are driven into the lode. The square-set method of timbering is employed. A Sirocco ventilating-fan, capacity 32,000 cubic feet per minute, has been installed at No. 5 shaft. Gates opening inwards are attached to each cage.

Waihi Grand Junction Gold-mining Company. — No. 8 level (1,320 ft.): North-west crosscut advanced 70 ft., the total length from main shaft being 140 ft., driven in country rock. South-east crosscut advanced 460 ft., the total length being 635 ft. The Royal lode was intersected at 560 ft., and proved to be 15 ft. in width, of which  $5\frac{1}{2}$  ft. on the south wall assayed £2 0s. 10d. per ton. The remainder of this lode is of low grade. The drive west from south-east crosscut was advanced 200 ft.; the first 80 ft. assayed £3 2s. per ton, the remainder £1 0s. 3d. for a width of 5 ft. The drive east of crosscut was advanced 286 ft., the values being low.

The Empire footwall branch lode was cut at 147 ft. The drive west from south-east crosscut advanced to 285 ft. The following values were obtained: From south-east crosscut to 160 ft. was advanced to 285 ft. west, over an average width of 16 ft., value £1 14s. 1d.; from 160 ft. to 195 ft., average width 13½ ft.,

value £3 18s. 1d.; from 195 ft. to 240 ft. west, average width 14½ ft., value £2 10s. 2d.

The east drive advanced from south-east crosscut 587 ft. The following values were obtained for width of drive (5 ft.): From south-east crosscut to 85 ft. east, £4 1s. 4d.; from 85 ft. to 130 ft., 11s. 8d. per ton; from 130 ft. to 585 ft., £1 16s. 2d. Crosscuts at intervals of about 80 ft. have not disclosed any further payable ore.

The main shaft was sunk 11 ft. during the year to a total depth below the shaft-collar of 1,3571 ft. Stoping is in progress from No. 4 level downwards on the Royal and Empire lodes, but develop-

ment was suspended owing to shortage of labour.

Waihi Extended Gold-mining Company (Limited).—No. 7 level (1,360 ft.): The south-east crosscut advanced 97 ft. At 44 ft. a small mineralized vein intersected, which by analysis contained traces

of gold, silver, and molybdenite. The east crosscut advanced 94 ft. in favourable country.

At 75 ft. above No. 7 level a quartz formation varying from 6 in. to 18 in. in width, containing molybdenite, was intersected and driven upon for 6 ft. The molybdenite occurs somewhat irregularly in spots and ribbon-like veins. Three bulk samples treated at the Waihi School of Mines gave the following results: No. 1—Gold and silver, traces; molybdenum, 0·13 per cent.; value per ton, 13s. No. 2—Gold and silver, traces; molybdenum, 0·30 per cent.; value per ton, £1 11s. No. 3—Gold and silver, traces; molybdenum, 0.45 per cent.; value per ton, £2 5s.