

APPENDIX.

REPORTS OF INSPECTORS OF MINES.

Mr. JAMES COUTTS, Inspector of Mines, Thames, to the UNDER-SECRETARY, Mines Department, Wellington.

SIR,—

Inspector of Mines' Office, Thames, 21st March, 1903.

I have the honour to furnish herewith the returns and report on the gold-mining industry in the Hauraki district for the year ended 31st December, 1902.

No new or important discoveries have been made, but the gold returns show a considerable increase compared with the previous year, not only at Upper Thames, but also at Thames and Coromandel. Should no unforeseen drawbacks occur, the output of bullion from the Waihi Company's mine will be considerably increased during the next twelve months, as this company has now 330 stamps employed, all the dry crushing with stamps having been converted to the wet-crushing process, and with exceedingly satisfactory results. The dry crushing, which had a very injurious effect on the men employed in the mills where it was carried on, has now been completely done away with in this district.

WAIHI DISTRICT.

Waihi Gold-mining Company (Limited).—No. 6 Level.—Crosscuts: No. 2 shaft crosscut has advanced 300 ft., making a total of 604 ft. from No. 2 shaft. From 273 ft. to 353 ft. is in quartz, the north section of the Martha lode. The country-rock near the Martha lode is a medium-hard, partly decomposed andesite. At the face it is a hard undecomposed andesite. No. 2 shaft, south-east crosscut, has been extended 292 ft., making a total of 473 ft. from No. 2 shaft, and the following leaders and lodes were intersected: At 204 ft., a 6 in. leader; at 232 ft., 12 in. leader; at 267 ft., 6 in. leader; at 283 ft., lode 2 ft. wide; at 329 ft., 9 in. leader; at 360 ft., lode 2 ft. 6 in. wide; and at 366 ft., a lode 2 ft. wide. These last two lodes junction on the west side of crosscut, and correspond to I lode. At 409 ft. in, quartz with country-rock mixed, 9 in. wide, corresponds to J lode; at 455 ft. in, leader 21 in. wide; and at 472 ft. in, leader 9 in. wide. No. 2 shaft, west crosscut: This has been extended 42 ft. 6 in., making a total of 107 ft. 6 in. from shaft. At 91½ ft. in, the north section of the Welcome lode is met, and is 16 ft. wide. No. 1 shaft, north-west crosscut: This has been driven this year a total length of 139 ft. At 37 ft. in, quartz was met, and is 81 ft. wide. This comprises for the first 10 ft. the Magazine lode, then for 19 ft. Regina lode, and the remainder the Martha lode. No. 4 shaft, south-east crosscut, was driven a total distance of 71 ft. from No. 4 shaft. At 20 ft. from No. 4 shaft the division-line between the recent andesite country and the older reef-bearing andesite country is clearly seen. At 28 ft. in, there is quartz about 3 ft. wide; and at 41 ft. in, the Empire lode is met, and is 15 ft. wide. Martha lode, south section: At 252 ft. in No. 2 shaft, north-west crosscut, a level was started and driven east to No. 1 shaft, a length of 495 ft., and 393 ft. east of No. 1 shaft, making a total length of 888 ft.

Crosscuts through Martha lode: West of No. 2 shaft 130 ft., full width not proved; north of No. 2 shaft, north-west crosscut, full width 157 ft.; east of No. 2 shaft, north-west crosscut, 70 ft., full width 62 ft.; east of 131 ft., not all crosscut; east of 172 ft., full width 62 ft.; east of 222 ft., full width 62 ft.; east of 287 ft., full width 70 ft.; west of No. 1 shaft 100 ft., full width 58 ft.; at No. 1 shaft, north-west crosscut, full width 52 ft.; 119 ft. east of No. 1 shaft crosscut, full width 76 ft.; 248 ft. east of crosscut, full width 88 ft.; 389 ft. east of crosscut, full width 50 ft. North section: There were three drives opened on this section from the No. 2 shaft, north-west crosscut—the first at 278 ft. in from No. 2 shaft, the second and main one at 321 ft. in, and the third one at 345 ft. On the first one 76 ft. was driven east and 5 ft. west of No. 2 shaft, north-west crosscut. On the second one 138 ft. has been driven west of No. 2 shaft, 502 ft. between the Nos. 1 and 2 shafts, and 515 ft. east of No. 1 shaft, making a total length of 1,155 ft. This level has been driven mostly in sulphide ore in the north wall. At west end a crosscut was run in 12 ft. north-west and 61 ft. south. On the third one 83 ft. of driving has been done west and 43 ft. east where the drive follows a small lode that branches off northwards. Welcome lode, south section: The level west of No. 2 shaft, west crosscut, has advanced 329½ ft., making a total west of 344½ ft.; the average width of lode is 11 ft. Distance west 51 ft.; full width, 10 ft.; distance west 105 ft., full width 9 ft.; distance west 171 ft.; full width 11½ ft.; distance west 229 ft., full width 12 ft.; distance west 290 ft.; full width 15 ft.; distance west 340 ft., full width 11 ft. At 120 ft. west the Empire lode joins into the Welcome lode, east of No. 2 shaft. North-west crosscut has been driven on for a total length of 118 ft., width not known, up to 78 ft. east, where lode is 2½ ft. wide at face, and the north wall is only seen. Regina lode: A total of 383 ft. has been driven on this lode—i.e., 204 ft. west of No. 1 shaft, north-west crosscut, and 119 ft. east of same. This lode junctions with Martha lode between No. 1 shaft crosscut and a point 100 ft. west of same. The sulphide ore associated with this lode runs along the hanging-wall side of Martha lode to 119 ft. east of No. 1 shaft. Magazine lode: The level was advanced for 409 ft., making a total length of 590 ft. from No. 2 shaft, north-west crosscut. This lode strikes Regina lode 120 ft. west of No. 1 shaft, north-west crosscut, and then runs eastward parallel with it. The general character of the lode is loose and open, the cavities containing much manganese-dioxide, and carries much of the mine-water. The lode varies from 6 in. to 10 ft. Empire lode: 926 ft. have been driven on this lode during the year, making a total length opened up on the reef of