

APPENDIX.

REPORTS OF INSPECTORS OF MINES.

Mr. JAMES COUTTS, Inspector of Mines, to the UNDER-SECRETARY for MINES, Wellington.

SIR,—

Inspector of Mines' Office, Thames, 13th March, 1902.

I have the honour to furnish herewith the returns and report on the gold-mining industry in the Hauraki district for the year ended the 31st December, 1901.

Although mining operations in this district have caused no excitement worthy of notice by any new or important discoveries being made, still it is pleasing to find (in reviewing the returns) there is a considerable increase in the output of gold as compared with previous years. This is due to the splendid returns obtained from month to month from the Waihi Company's mine. The yield of gold from the localities of Thames and Coromandel shows a slight decrease, but there is always a hope that something rich or important will be discovered at either of those places at any time which would be the means of causing an impetus to the mining industry, and again bring them to the front, thereby giving employment to hundreds of men as in the past.

Waihi Gold-mining Company's Mine.—The operations in this company's mine have not only been directed to taking out the quartz in sight, but extensive development-works have been carried out to further prove the value of this magnificent property, which appears to increase in value the more it is opened up. The ore-bodies are maintaining their size as they are followed down, and, although the quartz apparently becomes more mineralised, it is considered there will be no great difficulty with the mineral in the treatment and extraction of the precious metals. The bullion returns are sufficient to show that, if this is not the greatest gold-producer in the world, it is by far the largest in New Zealand. The following is a summary of operations carried out in the mine during the year ended the 31st December, 1901 :—

No. 6 Level.—In the month of August last operations were commenced at this level, which is 110 ft. below No. 5, by excavating two large chambers, one on each side of the shaft. The north-west crosscut was driven 304 ft., and at 60 ft. from shaft quartz came to hand, having a course of 19 degrees magnetic, and a dip of 1 in 10 W.N.W. This proved to be a large body of oxidized ore extending diagonally across the course of drive for 68 ft. from point of intersection until the country was reached on northern side. This lode embraces (it is believed) the junctions of Welcome, north and south branches, also Magazine and Regina lodes. From 128 ft. to 172 ft., a distance of 44 ft., a conglomerate of quartz and country was passed through. Then quartz came to hand again, striking in the same diagonal course across the drive. This body proved to be a mass of rubbly ore 88 ft. in width. After this 13 ft. of oxidized andesite interlaced with veins of quartz was passed through, which gave place to solid quartz again at 273 ft. The latter was penetrated 31 ft. up to end of year. This lode, from its appearance and dip, is believed to be the Martha. The west crosscut from north-western chamber was driven 65 ft., and intersected south section of Welcome lode at 47 ft.; here the lode is 8 ft. wide, and it has been driven on west 15 ft. The south-east crosscut was driven a total length of 181 ft. At 160 ft. the Empire lode was intersected; the lode is 8 ft. wide, course 94 degrees, dip 1 in 4 south. The Magazine lode was driven 181 ft. east of No. 2 shaft, north-west crosscut, on course of lode.

No. 5 Level.—During the year a distance of 1,205 ft. was driven on course of the Martha lode, made up as follows: 101 ft. west of No. 2 shaft, 468 ft. west of No. 1 shaft, and 636 ft. east of same. The different widths of lode at intervals of 50 ft. are given as follows: East of No. 2 shaft—Crosscut 77 ft., full width 62½ ft.; crosscut 128 ft., full width 60 ft.; crosscut 178 ft., full width 59 ft.; crosscut 230 ft., full width 73 ft.; crosscut 278 ft., full width 62 ft.; crosscut 328 ft., full width 45 ft.; crosscut 378 ft., full width 37½ ft.; crosscut 429 ft., full width 40 ft.; crosscut 479 ft., full width 45 ft. No. 1 shaft, north-west crosscut, full width 33 ft. East of No. 1 shaft—Crosscut 50 ft., full width 33 ft.; crosscut 100 ft., full width 53 ft.; crosscut 150 ft., full width 53 ft.; crosscut 200 ft., full width 43 ft.; crosscut 250 ft., full width 44 ft.; crosscut 300 ft., full width 36 ft.; crosscut 350 ft., full width 37 ft.; crosscut 400 ft., full width 35 ft.; crosscut 453 ft., full width 36 ft.; crosscut 500 ft., full width 31 ft.; crosscut 550 ft., full width 25 ft.; crosscut 600 ft., full width 31 ft. At the beginning of the year the level on the north section of the Welcome lode stood at 88 ft. west of No. 2 shaft. Since that time it has been extended a further distance of 567 ft., while the south section was driven on 236 ft., making a total of 803 ft. Crosscuts through lode in the north section give following widths: Distance from No. 2 shaft 200 ft., width 25 ft.; 323 ft., width 17 ft.; 403 ft., width 30 ft.; 461 ft., width 36 ft.; 519 ft., width 24 ft.; 577 ft., width 14 ft.; 651 ft., width 14 ft. As the Empire lode now embraces the late Albert lode, the whole may be dealt with as one continuous body extending from A Pass west to 10 ft. east of No. 4 shaft, south-east crosscut, a distance of 794 ft., which has been all developed during the year. The width of lode can be seen from the following statement (all measurements taken from No. 2 shaft, south-east crosscut, on original section of Empire lode): 131 ft. east, 24 ft. wide; 184 ft. east, 16 ft. wide; 236 ft. east, 25 ft. wide; 294 ft. east, 32½ ft. wide; 347 ft. east, 22½ ft. wide; 397 ft. east, 29 ft. wide; 447 ft. east, 33 ft. wide; 497 ft. east, 21 ft. wide. No. 4 shaft—South-west crosscut, 28½ ft. wide; south-east crosscut, 8 ft. wide. The south-east crosscut from No. 2 shaft was advanced from 373 ft. to 976 ft., or home to No. 5 shaft; while driving this crosscut two important lodes were intersected.