

valued at £5 14s. 9d.; Bay View, 5 tons 10 cwt., for 22 oz. 15 dwt., valued at £63 14s.; Vanderbilt, 2 tons, for 18 dwt., valued at £2 10s. 7d.; Evening Star, 11 cwt., for 4 dwt., valued at 11s. 2d.; Simonds, 1 ton 5 cwt., for 14 dwt., valued at £1 19s. 2d.; Dyer's Claim, 3 lb., for 11 oz. 7 dwt., valued at £31 15s. 7d.; Rose, 47 lb., for 5 oz., valued at £14. The number of men employed in these mines was nineteen.

Tokatea District.

Queen of the North Mine.—This mine, which is situated to the northward of the Royal Oak and Tokatea Mines, was at one time remarkable for rich yields of gold. The leaders worked on are generally small, and encased in hard andesite rock. The owners crushed 3 cwt. 30 lb., for a return of 23 oz. 18 dwt., valued at £68 2s. 3d.; and the tributers, 3 tons 14 cwt. 92 lb., for 33 oz. 8 dwt., valued at £95 3s. 9d. Six men were employed.

Royal Oak Mine (Area, 143 acres 3 roods 11 perches; owner, the Royal Oak of Hauraki, Limited; mine-manager, Francis Hodge).—This mine is situated on the Tokatea Range, and includes the land formerly held by the Tokatea Company. The adit-level is situated on the eastern side of the range, and below this level a shaft has been sunk to a considerable depth. The present depth of workings below the crown of range is 1,040 ft. over this. There are five levels, at a depth from the crown of the hill of 373 ft., 542 ft., 690 ft., 880 ft., 980 ft. There are four principal reefs, and numerous veins, from which very rich yields of gold have been obtained during the past thirty years, and there are still many blocks of reef to be operated on. A considerable amount of development work has been done in this mine—on the Tokatea Reef, in driving, rising, sinking, and stoping, nearly 10,000 ft.; on No. 1 Tribute leader, about 2,300 ft.; and No. 7 level cross-cut has been developed 250 ft. Two portable engines, 12- and 10-horse power nominal, driven by steam; one multitubular boiler, 30-horse power, driving one air-compressor 15-horse power, to drive air-winch for winding; and pump (Tangye), for draining mine, value £750; one multitubular boiler, 30-horse power, driving single-cylinder engine, 25-horse power, for twenty-five heads of stamps; one stone-breaker; and eight berdans (makers, Bowers, Scott, and Co., London), steam-power, value £3,000. During the year 267 tons of quartz was crushed for a yield of gold valued at £12,942 8s. In the mine and mill seventy-five men were employed. It has been decided to use water-power in future whenever such is available, and Captain Hodge has supplied the following:—

“The water is derived from three streams—viz., Harataunga, Waverley, and Waikoromiko. The length of the water-races is 150 chains, all flumed throughout. A tunnel has been constructed 321 ft. in length, to convey water from the Waikoromiko Stream, through the spur of hill, to power-site. The Pelton wheel is 11 ft. in diameter and 10 in. in face; the number of buckets to same is thirty-two. Direct power is applied to two air-compressors, 14 in. diameter by 24 in. stroke; and coupled to these by belting is one compressor, 12 in. diameter by 18 in. stroke. The air from power-house to battery is conveyed through a 6 in. pipe system. The pipes are of wrought-iron, and in 18 ft. lengths, and extend a distance of 4,700 ft., or 71 ch. 14 ft. From battery to shaft in No. 7 level they measure a further 30½ chains, making the total from power-site to shaft 101 ch. 47 ft. Air-storage—At power-site, two receivers, 25 ft. by 5½ ft.; at battery, in 17 ft. by 5 ft. boiler, one 20 ft. by 5 ft. receiver, and one 19 ft. by 4½ ft. receiver; at shaft-mouth, No. 7 level, one receiver, 10 ft. by 3½ ft. The head of water is 132 ft. The length of steel water-pipes is 210 ft. of 18 in. pipes, and 150 ft. of 15 in. pipes. Pressure—Applied to wheel, 60 lb. per square inch; carried in receivers, 60 lb. per square inch. Estimated power available—In summer, 25-horse power; during winter months, 120-horse power. Estimated flow of water—Summer, 180 cubic feet per minute; winter, varies from 350 to 600 cubic feet. Value, about £400.”

Hauraki Associated Mine (Area, 68 acres 2 roods 28 perches; owner, Hauraki Associated Gold-mines, Limited; manager, Henry Franklin Shepherd).—This mine is situated on the top and eastern slope of the main Tokatea Range. The upper portion of this property has an altitude of about 1,200 ft. above sea-level, and from the lowest portion of the claim there is 1,000 ft. of available backs, so that the mine can be worked for years to come by means of adit-levels, of which there are at present three—No. 1, 500 ft. in length, and about 200 ft. below the top of range; No. 2, 700 ft. in length, and 100 ft. below No. 1 level; No. 3, 750 ft. in length, and 100 ft. below No. 2 level. The principal ore-bodies operated upon are the Rainbow End and Foot-wall leads, and a cross-reef. These reefs have all been well opened up from the No. 2 level. Nearly 400 ft. of driving has been done on the Rainbow End lead, also a good deal of stoping. On the Foot-wall leader 300 ft. of driving has been done, and this block stoped out up to the No. 2 level. The quantity of ore won for the year ending 31st March, 1899, was 505 tons, which yielded 1,320 oz. 2 dwt. of gold, valued at £3,752 12s. 4d. During the past five months of the year only a limited amount of ore has been broken out, owing to most of the ground opened up at the No. 2 level being worked out. The No. 3 level, which will give a further height of 100 ft. on this lead, will soon reach the point where the leader should be met with. This level is 750 ft. in length, 300 ft. of which has been driven on the Rainbow End lead, the remaining 450 ft. being cross-cutting.

In connection with the mine there is a modern up-to-date crushing-mill, consisting of ten head of stampers, four berdans, ore-crusher, and automatic ore-feeders, worked by power generated by a Smith-Vaile turbine. There is also a 25-horse-power engine and boiler, used as an auxiliary power when short of water. In connection with this mill there is also a small two-stamp mill for crushing specimen ore, and an assay and gold-melting plant, all gold won from the mine being melted and assayed before leaving the works. An average of 37·3 wages-men were employed by the company in the mine and battery.

Tokatea Consols Mine (Area, 30 acres; owners, the Tokatea Consols Gold-mines, Limited; mine-manager, Thomas Goldsworthy).—This mine, which is situated on the Tokatea Range, is worked from six levels, which have attained the following depths: East side—No. 1 level, 300 ft.; No. 2 level, 100 ft.; No. 3 level, 50 ft. West side—No. 1 level, 360 ft.; No. 2 level, 300 ft.; No. 3