

£3,103 2s. 6d., were recovered from concentrates. The total yield from all departments of treatment plant amounting to 3,205 oz. 10 dwt., which realized £25,896 6s. 4d., brought the amount of gold won since commencement of operations up to 32,283 oz. 5 dwt., of a stated value of £206,267 18s. 6d. Dividends paid during the year amounted to £7,500, making a total of £48,750 paid by the company since its inception.

Big River Mine (H. de Lantour, Manager).—This company employed twenty-eight men in their mining and milling operations, and during the period carried out the following development and production: Stoping was carried out between No. 4 and No. 5 levels on the blocks of ore proved by three winzes sunk from No. 4 and connected with No. 5 by rises put up through the ore-bodies. To facilitate production an intermediate was driven midway between the main levels, and this enabled the company to double up the labour engaged in stopes that were limited in length and separated by barren lode material. Stopes in the south end of No. 5 yielded most of the tonnage milled, but subsequent development of No. 5 north disclosed a block of ore 60 ft. long and averaging 3 ft. 6 in. in width but of lower grade than the south block. Realizing that the mine reserves of proved ore remaining in stopes above No. 5 are limited as to quantity, development has been commenced with the object of making No. 6 level available in the near future. A winze was started in the south block and is down a depth of 20 ft.; preparations are being made to retimber the main shaft between No. 5 and No. 6, a distance of 150 ft., and on the completion of these two jobs development of No. 6 level will be advanced as rapidly as possible to forestall the probability of a shortage of ore for despatch to treatment plant. During the period 2,348 tons of ore was mined and treated for a return of 2,028 oz. 17 dwt. by amalgamation, value of product being £15,210 15s. 11d.; cyanided sands yielded 159 oz. 18 dwt., valued at £962 1s. 3d. The recovered concentrates from the above tonnage were not sold. The total yield and value of gold since the reconstruction of the company are 6,401 oz. 16 dwt. and £19,875 1s. 7d. respectively.

Homer Mine, South Blackwater (D. Absalom, Manager).—The manager and two employees advanced the low level No. 3 crosscut a distance of 99 ft. and intersected the lode at 225 ft. from the portal. The lode channel was followed south for 74 ft. on lode averaging 18 in. in width and value stated to be 15 dwt. per ton. The ore-body in this mine has been developed on three levels and a considerable quantity of ore made available for stoping. Negotiations are now in hand to procure and erect treatment and air-compressing plants, and it is anticipated that the mine will reach the producing stage in 1938. No ore was treated during the year under review, and the total amount of gold won from this mine stands at its former figure—namely, 162 oz. 3 dwt. 9 gr., valued at £791 3s. 6d.

Lunkey's Creek.—Watts and party consistently worked their claim during the year and extracted 581 tons of cemented gravel, chiefly from development-work, which yielded 81 oz. 7 dwt. 4 gr. of gold, valued at £587 19s. 4d. An air-compressor was installed, and rock drills are now in use. The installation of a Diesel engine is under consideration, owing to the supply of water for power purposes being inadequate during periods of low rainfall. Production for the year was restricted, due to a power shortage for operating their five-head battery and air-compressor. The party received substantial financial assistance from the Employment Division of the Labour Department, and subsequent results fully justified the expenditure.

Murray Creek Mine.—During the year work has been confined to repair work on the surface levels with three men employed at intervals. Additional machinery has been purchased, with a view to dewatering the workings, sinking the shaft at least one lift deeper, and developing the Victoria block of ore prior to prospecting the Inglewood and Phoenix blocks.

State-controlled Prospecting on Reefion Goldfield.—The prospecting policy instituted on lines following the recommendations made after extensive geological and geophysical investigation has been steadily pursued and a considerable part of the programme completed.

Work on the Merrigies area was principally confined to surface trenching and sampling of known ore-bodies. The Globe-Progress area, containing a section of main ore-channel which had received a very small amount of attention since the "seventies," has been extensively prospected from the Oriental No. 1 and No. 2 drives in the north end and General Gordon drive on the south end. Driving and crosscutting in the Oriental drives amounted to 992 ft., and in the General Gordon to 352½ ft., in addition to winzing 40 ft. below in the Gordon adit. Following the geological and geophysical work, trenching on the lines disclosed by the investigation revealed some strong outcrops which in several cases were sampled and gave encouraging assays. After completing most of the surface prospecting it was decided to investigate the surface discoveries by extending the Gordon tunnel north, and the same ore-channel of a width 50 ft. at the north end of the area was closely prospected and sampled by drives and crosscuts driven from the two Oriental tunnels situated between the Ballarat and Globe A shafts. This work has not yet been finalized, consequently a clear-cut decision on the values of the area cannot be submitted until the original programme is further advanced.

Work on the Murray Creek section of the Reefion field has been confined to the Perseverance and Golden Treasure Mines. In the former the crosscut was extended a distance of 183 ft., and what is presumed to be the Perseverance ore-channel was cut; preparations are being made to drive north on the channel. Trenching on the Golden Treasure leases disclosed a large low-grade ore-body containing an appreciable amount of stibnite, which may be given further attention, but from a low-level drive that will serve the purpose of prospecting country extending from the Perseverance to the Golden Treasure.

In conjunction with the prospecting operations carried out on the Reefion field, bulk testing of samples was carried out in a small treatment plant erected at Reefion. Samples of auriferous ore containing stibnite were despatched to England and experimental work carried out on the ore by the Mining Metallurgy Technical Service of Imperial Chemical Industries, Ltd., and a comprehensive report was submitted by their experts on the treatment of a refractory type of ore that has given considerable trouble to mill-managers on the West Coast. Surveys have been made of new and old workings and records kept of all sampling and assaying, and the net result to date is that there is an accumulation of useful data concerning this field. The foregoing work on State prospecting employed an average of twenty-two men on wages and contract and represented a considerable sum expended on mining in the district.

Diamond-drilling.—The Consolidated Goldfields of New Zealand, Ltd., drilled No. 1 hole to a depth of 1,165 ft. through difficult country. The objective was not reached, owing to the drill penetrating fissured strata that allowed the circulating water to escape. All efforts to seal off the fissure failed, and the drill will be removed to a fresh site to commence the boring of No. 2 hole when the casing has been withdrawn from No. 1.

Grey County.

Lode mining in this county has been restricted to prospecting operations at Moonlight Creek, Garden Gully, and Langdon's Creek, all in the Paparoa Ranges. In the Moonlight area two crosscuts 707 ft. and 629 ft. respectively were completed without intercepting any reefs of economic value. The first crosscut was driven in a south-westerly direction from a point in the valley of the right-hand branch of the Moonlight Creek (also known as Cape's Creek), about 18 chains from the confluence of this creek and the Middle Branch Creek. The second crosscut was driven in a south-westerly direction from the same valley but about 86 chains further upstream. In the Garden Gully area the old Garden Gully No. 2 level was continued both northwards and southwards, but after disclosing only disjointed leaders and one quartz cross-vein of poor value work was discontinued. At Langdon's Creek driving and crosscutting disclosed disjointed leaders in very disturbed country, but so far no definite body of quartz has been located. In addition to the above, surface prospecting was carried out in the Waikiki and Trent Rivers districts, tributaries of the Upper Ahaura River.

Westland County.

Bierwirth's Gold Reefs, Ltd., Mount Greenland (W. O. Bierwirth, Manager).—Six men were engaged during the first half of the year, 72 tons of ore being mined and treated in the battery for a recovery by amalgamation of 28 oz. 10 dwt. 2 gr. of gold, which realized £197 2s. 6d. The total quantity of gold won from this mine since the commencement of operations by the present company amounts to 2,104 oz. 9 dwt. 11 gr., valued at £10,768 6s. 2d., making the amount produced