

*Alexander Mine* (W. J. Hall, Manager).—During the year under review, No. 6 level crosscut was completed; a distance of 1,600 ft. was driven before the lode channel was intersected, and after driving 30 ft. a rise was started at a point vertically under the No. 5 winze. When this was connected, the main drive was extended north for 100 ft. without locating ore. At 97 ft. north of the main crosscut a crosscut was put out for 23 ft., but driving of the main level was resumed when the crosscutting disclosed no lode. A flat-lying ore-body was encountered in the drive face, and No. 1 crosscut was then extended 20 ft., making a total of 43 ft. east of the drive. The No. 6 level rise was put through, and at 74 ft. holed to the winze from No. 5 level, and by this means ventilation and ore-transport were improved. Previously No. 5 winze had to be discontinued until a sinking-pump was procured, and when drainage difficulties were overcome sinking was resumed down to 77 ft. No. 6 intermediate level was commenced at 77 ft. below No. 5 level and driving proceeded north on the ore-body prior to commencing stoping operations. During the year the stopes above No. 5 level supplied most of the ore milled, and at the end of the period these were approaching exhaustion. Production from the new intermediate level will commence shortly, and No. 6 level should be developed early in the year to a stage that will substantially increase the mine's ore reserves. The battery crushed 2,163 tons, and by amalgamation 1,156 oz. 11 dwt. of gold were recovered, valued at £9,941 10s. 10d. From the cyanide plant 300 oz. 3 dwt., valued at £2,316 13s. 2d. were obtained, and concentrates yielded 208 oz. 16 dwt., valued at £1,335 4s. 9d., making a total yield and from all sources of 1,665 oz. 10 dwt., valued at £13,593 8s. 9d. The total gold produced since the commencement of operations is 33,948 oz. 15 dwt., valued at £213,861 7s. 3d., and dividends aggregating £48,750 have been paid.

*Big River Mine* (T. Thomson, Manager).—This company employed an average of twenty-four men for the year on mining and treatment operations, and carried out the following development and stoping operations: The main shaft was retimbered from No. 5 to No. 6 level, a distance of 147 ft., and the chamber at the lower level was restored to working-condition. No. 6 level: Ventilation appliances were installed and the original crosscut 240 ft. in length was cleared out to a point where it intersected the old level driven on the ore-channel. Part of this level was utilized, and when solid ground was reached the level was extended south to a point under the winze being sunk from No. 5 on an ore-body stoped out to No. 4 level. No. 5 level: Prospecting-drives were put out on this level at both north and south ends for short distances. A winze 65 ft. deep was sunk from this level on the south block, and for ventilation and development purposes will eventually be connected with the lower level by rising. Stoping: Operations were chiefly confined to the centre and north stopes above No. 5 level, the former being exhausted by the end of the period; 2,289 tons of ore were mined and treated, from which were recovered 1,440 oz. 15 dwt. of gold by amalgamation, valued at £12,026 5s. 5d. and cyanidation of sands yielded 119 oz., valued at £994 1s.—a total of 1,559 oz. 15 dwt., which realized £13,020 6s. 5d. The total amount of gold produced since operations commenced amounts to 7,961 oz. 11 dwt., valued at £62,895 8s. Dividends amounting to £5,000 were paid during the year and were the first distribution of profits since the reconstruction of the company.

*New Welcome Gold-mining Co.* (A. Honey, Manager).—On the completion of a 5 ft. track from the Boatman's Road, this company commenced the driving of a 1,200 ft. tunnel for the purpose of exploiting the Welcome west reefs. Hand-drills were used by a party of six men who entered into a contract with the company near the end of the year. Buildings are being erected and an air-compressor and Diesel engine installed to operate an axial water-feed drifter. When the plant is completed the substitution of power for hand-drilling will facilitate the construction of a new low level adit and the working of a lode that has remained intact for nearly thirty years.

*Homer Mine: Goldwater Mines N.L.* (F. R. Marshall, Manager).—Development on this mine for the year consisted of driving No. 3 level a distance of 266 ft. south in the ore-channel. The face is now 340 ft. south of the crosscut which intersected the lode on this level, which is the lowest of a series of three driven to reach the ore-body. The lode developed was narrow and broken, the clean ore contained fair values, but these were reduced below paying-point by dilution with barren reef track and soft-wall rock. A small amount of stoping was carried out in Nos. 1 and 3 levels, but the ore produced yielded insufficient gold to cover working and treatment costs. A considerable amount of new and second-hand plant was installed during the year for both mining and milling purposes. Operations proved definitely unprofitable, and, the company's working capital being exhausted, the mine ceased operations at the end of the year. The average number of men employed was eighteen. During the year the company crushed 210 tons of ore, which yielded 40 oz. 4 dwt. 15 gr. of gold valued at £248 9s. 8d. From the commencement of the former owners' crushing operations in 1931 until the Goldwater Co. acquired the mine, 524 tons of ore were treated, yielding 162 oz. 3 dwt. 9 gr., valued at £791 3s. 6d. With the company's returns from last year, therefore, the total produced from this mine has been 734 tons, which yielded 202 oz. 8 dwt. of gold, valued at £1,039 13s. 2d.

*Lankey's Creek.*—Watts and party of three men consistently worked this cemented quartz-gravel deposit for payable returns, and carried out a considerable amount of development work with the dual object of increasing their payable ore reserves and reducing the length and grade of the trucking road to the battery. They now have an adequate mining and milling plant and their claim developed to a stage where it ensures the party a substantial return for their work. 478 tons of cemented gravel were crushed for a return of 111 oz. 7 dwt., which realized £851 10s.

*Murray Creek Mine.*—Operations in this mine were confined to keeping the shaft and workings drained, repairs to battery level, and installation of steam-driven air-compressor. An average of three men was employed during the year. Preparations to sink the main shaft and crosscut to the Victoria block are being made, the Mines Department having granted a substantial subsidy under certain conditions for the vigorous prosecution of the main development items.

*State-controlled Prospecting Operations—Globe-Progress Area:* On the Oriental No. 1 tunnel 12 ft. of driving was done in the first month of the year prior to lifting the rails and abandoning the level after an exhaustive test of the lode, which proved to be unpayable except for a lense near the mouth of the drive. This lense was worked out in the lower levels of the Globe Mine; consequently, only a small tonnage of ore could have been developed by sinking on the block. Oriental No. 2 Level was extended 250 ft. on the wide lode before operations ceased. Results of the prospecting and careful sampling did not justify any further expenditure on the lode.

*General Gordon:* The total amount of underground development carried out in the section of the Globe lode consisted of 655 ft. of driving, 211 ft. of crosscutting, both east and west, and 64 ft. of winzing. On the surface a considerable amount of trenching and sampling was carried out; plans and assay records covering all the work completed were compiled before work on this area ceased at the end of the year. Cessation of operations was influenced by the results obtained. A large amount of low-grade ore was disclosed, but the general average was under £1 per ton at £7 per ounce.

*Murray Creek Area—Irvin's Reef:* An outcrop situated on the side of the road and directly opposite the Energetic shaft and on the north side of the road was driven as far as 46 ft., a small broken lode being disclosed before operations ceased in order to concentrate on more important work. The former is worthy of further attention, as it is undoubtedly an extension of one of the lodes worked from the Ajax side of Murray Creek.

*Perseverance No. 1 Level:* The drive and crosscut on this level were cleared and retimbered where necessary for a distance of 160 ft. prior to sampling the lode driven in 1912 and 1913 by the Consolidated Goldfields Co. Preparations are in hand to sink a winze that will eventually connect Nos. 1 and 2 levels.