

was followed for several hundred feet. The first 60 ft. is said to have shown fair values, but the remainder was not payable. A rise was started on the 60 ft. block referred to, to connect with the Welcome No. 6 level, and this was carried up to 50 ft. The lode lived up in it, but I understand that the values were not so good as in the drive. A start has now been made to pick up the old No. 2 Fiery Cross level, with the view to seeing if the ore-shoot found on the No. 1 level lives down to it, and shows any better values.

BREETON.

Blackwater Mines.—During the year an average of 133 men were employed, and breaking and development were carried on actively. The principal development work was as follows: No. 5 level south extended 435 ft., of which 232 ft. were on the lode; No. 6 level south extended 55 ft., of which 33 ft. were on quartz; No. 7 level north extended 96 ft., of which 86 ft. were on quartz; No. 7 level south extended 16 ft., all on quartz; No. 9 level north extended 412 ft., of which 287 ft. were on quartz; No. 9 level south extended 86 ft., of which 56 ft. were on quartz. Speaking generally, the mine was looking well, the development on No. 5 level south being particularly satisfactory. No. 9 level (the lowest in which any opening out has been done) may also be said to look well, especially in the north drive, where the quartz appears to be more continuous than in the northern and of any of the drives since No. 4 level was passed. For the year some 34,323 tons of quartz were mined and crushed, which was a considerable improvement on the results for 1920, when only 24,468 tons were handled. This increase of nearly 10,000 tons is partly the result of a plentiful supply of labour, and to a certain extent to an improvement in the class of miners available. A total of 13,830 oz. 3 dwt. of gold was recovered, for which, including premium, a total value of £65,776 was received. The figures for the previous year were 11,065 oz., and £58,887 respectively. The average value of stone crushed for the year appears to show a falling-off of about 1 dwt. per ton.

Blackwater South Mine.—The track to the site of the proposed new shaft has been completed, but no attempt has yet been made to start mining operations. It is expected that work at the shaft will begin shortly.

North Blackwater Mine.—During the year the erection of the new winding and air-compressing plant was completed, and the mine is now well equipped for future work. Just prior to the end of the year the unwatering of the shaft was accomplished. There still remained a gold deal of work to do before active mining operations could be resumed, but driving on the reef cut in No. 7 level crosscut, and which was claimed to carry good gold values, should be in operation early in the coming year. Five men, on an average, were employed during the year.

Murray Creek Mine.—After a spell of idleness, mining was resumed in July. About 730 tons of quartz was mined and crushed, which yielded 282 oz. of gold, valued at £1,176. This return was not, however, found payable, and in December operations again ceased. The quartz mined during this period all came from the old stopes above No. 4 level. No development work was carried out.

New Big River Mine.—Work was carried on energetically throughout the year, an average of forty-one men being employed. The only development of any consequence consisted of the sinking of No. 2 winze on No. 11 (bottom) level to 107 ft. During the period 3,989 tons of quartz was mined and crushed, the whole of which came from between Nos. 10 and 11 levels. This tonnage was a considerable increase on that of the previous year, when only 2,970 tons were mined. Including premiums received, the total value realized for all gold won for the year amounted to £21,609, an increase on the figures for 1920 of £7,276. The mine was the only one in the district to declare a dividend, £4,200 being thus distributed. Estimating the ounces produced at standard price for fine gold, the gold per ton crushed seemed to have shown an improvement of approximately 4 dwt.

New Keep-it-dark Mine.—No work was done at this mine during 1921.

North Big River Mine.—No 3 adit level was continued for some distance, but no lode of any value was found. On the same level as No. 3 a crosscut tunnel was driven about 200 ft. with no better results. Six men, on an average, were employed.

New Millerton Mine.—Work was carried on steadily, an average of twenty-five men being employed. A considerable amount of development was done. No. 1 level was driven north 20 ft., No. 2 level south 202 ft., and No. 3 level north 399 ft. A number of short crosscuts, totalling 212 ft., were also put in from No. 3 level north. Rising and winzing to the extent of 161 ft. was also completed. Taking the development work as a whole, it cannot be said to have given satisfactory results. Most of the driving was on the lode, which was for the most part small and broken and of poor values. A small stamp mill was erected, driven by water-power, and crushing operations were started in August and continued to the end of the year, 1,461 tons of quartz being treated for a return of 761 oz. 6 dwt. gold, valued at £3,705. The stoping was practically confined to one shoot of stone in the southern end of the mine, the stoping-length of which was in No. 3 level 60 ft., in No. 2 level 96 ft., and in No. 1 level 100 ft. Two small stopes were started on No. 3 level north, but were subsequently discontinued. With values based on standard for fine ounce, the value recovered per ton of stone treated seems to have been £2 4s. 2d.

New Discovery Mine.—The work of driving the low-level adit tunnel was continued without break, during which it was advanced a farther 646 ft. to a total of 986 ft. It is not expected to intersect the lode till about 1,200 ft. has been driven. Six men were employed.

Ready Bullion Mine (New Ulster).—The low-level adit at this mine was also kept going steadily, but only one shift of two men was employed. The adit was extended a farther 250 ft. to 600 ft., whence a crosscut was extended easterly 75 ft., in which direction it is expected to intersect the reef-line.

Alexander Stream.—During 1920 a gold-bearing lode was discovered and named the Bull lode, by Messrs. McVicar and Hurley, at the Alexander Stream, Big Grey River. The prospectors pegged out six prospecting licenses of 100 acres each. During 1921 an option was taken over this property by the Recovery Gold-mines Syndicate, and a certain amount of exploratory work was carried out. An adit was started at a point 80 ft. below the outcrop of the Bull lode, and driven south-easterly to pass vertically under the surface outcrop. As no sign of the lode was therein discovered, a crosscut was then started about 20 ft. back from the face of the drive, and driven 115 ft. on a bearing of approximately 120° (i.e., at a right angle with the apparent strike of the lode on the surface), but no indication of the lode was found.

Big River Extended.—An adit was driven about 200 ft. on an outcropping lode, but the values were apparently negligible.

Big River South.—A little work was also done on this property, a winze being sunk, from an adit driven during the previous year, on a lode which is said to have contained fair values.

Progress Mine.—No mining operations were carried out, but the bottom level, No. 11, was stripped of rails, air-pipes, &c. Treatment of sands at the mill and of concentrates sold in Australia resulted in a recovery of 1,093 oz. of gold, for which £4,440 was realized.

Energetic and Wealth of Nations Mine.—This property has also been idle all the year, owing to lack of money.

HOKITIKA AND ROSS.

Mount Greenland Mine.—Work was confined to the mining and crushing of 60 tons of quartz, which returned 54 oz. 17 dwt. gold, valued at £299.

Mount Greenland Extended.—Two men were employed in a prospecting-drive during part of the year; nothing payable was found.

STILLWATER.

Victory Mine.—The low-level adit which was started during 1920 and driven 260 ft. was extended to 335 ft., up to which point no values had been met with. Only two men were employed. The adit has since been extended to 445 ft., where a small flat-lying leader ranging from 1 in. to 6 in. wide was encountered, samples from which are said to have shown values up to 10 oz. to the ton. Exploratory work is being continued.