

side of an old branch drive and just behind the old timbers a reef was located which when opened out proved to be up to 4 ft. in width. This was driven on northerly for approximately 100 ft. to a point where it apparently overlapped what was known as the "30 ft. block" which was worked out some years ago. Stopping was started on this run of stone, but after several stopes had been taken off the stone cut out entirely. Subsequently an opening was made from an old rise previously put up to work the 30 ft. block, and an intermediate was driven out over the recently stoped ground, but the work was found to be entirely off reef and evidently in a fault. There is little doubt that this stone was cut off by a fault, and in all probability would be picked up again if a rise were put up along the fault-line, but the question arises as to whether such work would be justified. The stone taken out from the reef was all crushed at the battery, and if the results obtained are any criterion as to the values that might be found in the stone if it were located higher up they can scarcely be considered as encouraging the carrying-out of the work referred to. In all 329 tons are reported as being crushed, and the resultant gold from amalgamation and cyanide treatment only amounted to 114 oz. 13 dwt., valued at £383 6s. 3d., equal to 6.7 dwt. per ton. A portion of the tonnage crushed may have come from the smaller reef worked farther in along the adit, but by far the bulk of it came from this other reef. It may be mentioned that both the short runs of stone opened out on form part of the Inglewood shoot. The crushings not being satisfactory, work at the mine ceased again at the end of the year.

*New Big River Mine.*—Work was carried on steadily throughout the year, an average of forty-eight men being employed in mine and treatment plant. Comparatively little development was done, and this was confined to No. 12 level. Driving to the extent of about 226 ft. was carried out, and two rises put up, one to 70 ft. and the other to 80 ft. In the former no stone was met with till 70 ft. in height above the level was reached, but in the latter stone of fair size was followed right up from just over the back of the level. The first rise mentioned was 1,005 ft. from the shaft, the other 945 ft. At 70 ft. above No. 12 level an intermediate was opened out, and from this the workings have revealed fairly large bodies of stone of good grade. During the year 4,101 tons of quartz were treated, as against 4,324 tons during 1923, but the better values recovered more than made up for the slight falling-off in tonnage, 4,814 oz. 19 dwt. 12 grains gold, valued at £20,039 14s. 8d., being won, as compared with 3,804 oz., valued at £15,609 7s. 10d. With the exception of about 300 tons the ore crushed came from the No. 12 level stopes. It is rather unfortunate that no payable quartz has yet actually been met with in No. 12 level itself, but further development during the coming year will probably give the mine a healthier appearance at this horizon.

*New Keep-it-dark Mine.*—The tribute party that worked a short run of stone above No. 1 level during 1923 continued their operations and extracted a further 880 tons, which on treatment yielded 656 oz. 10 dwt. gold, valued at £2,530 6s. 9d. As the workings then approached the surface and the ingress of water became too heavy to make the work safe, operations ceased. The party thus did very well out of this tribute, taking out in about eighteen months 1,963 oz. 7 dwt. gold, valued at £7,598 6s. 8d., which showed good profit after all expenses were paid. Some sixteen men on an average were kept employed.

Since work ceased in this part of the mine, another party took up a tribute in another section of it—viz., in the Old Golden Ledge adit in which no work has been done for something like forty years. Many years ago various parcels of quartz were taken from this part of the property, but no official data regarding them seems to be available. It is said, however, that about 1,300 tons were crushed for about 8 dwt. gold per ton, but in that far period the use of cyanide was, of course, unknown. The belief exists that good stone was left in the face of the adit, and it is with a view to proving the truth or otherwise of this statement, and also to make some further test of the value of the stone treated under modern conditions, the present party have undertaken the work of opening up the old workings.

Up to the end of the year 170 ft. of crosscut had been reopened and timbered, and about 220 ft. of the drive on the reef. During the progress of the repair work about 70 tons of quartz were recovered, in which it is not an uncommon thing for visible gold to be seen. An opening made into the old stopes shows stone to be there up to 3 ft. wide. It may be mentioned that none of the old plans in this office show the drive in the reef to have extended more than 90 ft. from the crosscut, so that the party has been surprised to find it extending upwards of 200 ft. Four miners are employed, and it is proposed to put several more on shortly.

*North Big River Mine.*—A little more work was done in this mine with a view to locate payable reef, but no success was met with. Connection was made by winze and rise between No. 1 intermediate adit and No. 2 adit, and several crosscuts were run out eastward on No. 2 adit.

*New Millerton Mine.*—Work was carried on here in a small way for the greater portion of the year. The only development-work done was, however, the making of a short connection between the ends of the two branch drives on No. 3 level south. Stopping was continued on the small gold-bearing shoot in the south end of the mine, which was worked out up to the surface. The results of this work were not at all satisfactory, 263 tons of quartz being mined and treated for 54 oz. 3 dwt. gold, valued at £218 4s., equal to an average of 4.1 dwt. gold per ton. The sands were not cyanided. Towards the end of the year operations ceased.

*South Blackwater Mine.*—During the latter half of the year the commencement of what appears to be a serious attempt to prove the value or otherwise of this property was made. A site for a main shaft was located and levelled off, and a small winding-engine and boiler taken there. It is proposed to sink this shaft to a depth of at least 600 ft. The site of the shaft is approximately 6,760 ft. south of the Blackwater mine-shaft and a few chains to the west of the line of what is known as the Blackwater or Birthday reef. A track which is believed to be that of the reef referred to has been found in the south Blackwater ground, and an adit was driven on it for about 500 ft. southerly at an elevation a few feet above the level of Snowy Creek. Several other reefs, known as the Empire and the Snowy, have also been found in the South Blackwater holdings, and adits were driven on them for varying distances. In all the adits the records seem to show the reefs were small and much broken. As the collar of the proposed shaft is approximately 300 ft. above the level of the lowest of these adits—that on the Birthday line—the shaft will, consequently, if carried down to the full depth mentioned, penetrate to a depth of 300 ft. below any previous workings, and it is possible that if the reef is located at that depth it may be less disturbed and perhaps of better width than in the more superficial workings.

*New Discovery Mine.*—After being idle for something more than a year work was also resumed on this property. From the end of the drive put in to the north on the reef-track at 1,163 ft. in the low-level tunnel a rise was put up with a view to making connection with a winze previously sunk from No. 1 level, but up to the end of the year the connection had not been completed, although only a few feet of work remained to be done. The old workings of Nos. 1 and 2 adits were also repaired. Although the rise referred to was put up about 90 ft. no payable stone was discovered.

*Ready Bullion Mine.*—No work was done here during the year.

*Big River Extended Mine.*—This mine was also idle throughout the year.

*South Big River Mine.*—After a period of inactivity work was resumed. No. 3 level, which had been previously put in for upwards of 600 ft., was cleaned out and repaired, and it is now proposed to connect a rise which was started from this adit with the No. 3 winze previously started from No. 2 adit. Reef is showing in this rise, but the stone is not solid, the formation having more the appearance of a fault in which such stone as occurs has been dragged and crushed. It is also proposed to continue the driving of No. 2 adit a further distance northwards of about 160 ft. to connect with No. 1 winze sunk from the surface. The object of this work is to prove whether or not the reef which outcrops on the surface between Nos. 1 and 2 winzes lives down to this depth. It is also intended to project a short crosscut from No. 3 adit to a point under No. 1 winze. To enable this work to be carried out the Department has granted a small subsidy.

*Scotia Mine.*—This mine, otherwise known as the Justification, has been actively worked during the past year, a syndicate known as the Scotia Development and Prospecting Syndicate having taken an option over the property and spent something like £2,500 in endeavouring to locate the downward continuation of the reef formerly worked down to No. 4 level (No. 2 from shaft). Unfortunately, the larger portion of the small capital provided was consumed in the