

## WEST COAST INSPECTION DISTRICT (E. J. SCOBLE, Inspector of Mines).

## QUARTZ-MINING.

*Marlborough District.*

*Dominion Consolidated Mine.*—The conduct of operations at this mine was taken over in the early part of the year by Mr. D. M. Straker, who has taken a lease of the property. Development consists of the following: No. 1 level advanced 180 ft. north, of which 80 ft. were on reef averaging 16s. over 7 ft., 80 ft. were on reef averaging 11 4s. over 14 ft., and 20 ft. carried no values. No. 2 level advanced 100 ft. north, the whole distance driven being in country rock. This level was driven with a view to locating the reef, which had pinched out farther south, but the results obtained were disappointing. No. 2 level: Rise 850 ft. north was put up to a height of 30 ft., where it encountered a winze sunk to a depth of 40 ft. from No. 1 level. An intermediate level, driven for a distance of 110 ft. at a height of 30 ft. above No. 2 level (and projected from the rise mentioned), penetrated stone averaging 11 5s. 6d. over 6 ft. Stopping operations were immediately commenced on this block. At the battery 2,358 tons of ore were crushed for a yield of 619 oz. of gold, valued at £2,390. Recovery was obtained by amalgamation, cyanidation not being resorted to. Eight men were employed throughout the year.

*Reefton District.*

*Blackwater Mine.*—During the year an average of 164 men were employed, and the results, both in development work and tonnage treated, were somewhat better than those obtaining over the previous period. In all, 1,932 ft. of development work was done, of which 1,380 ft. was on reef averaging 13.25 dwt. over a width of 23.7 in. Of the total footage, 1,264 ft. were on pay-reef averaging 13.69 dwt., and 116 ft. on unpayable reef averaging 6.10 dwt. over 15.3 in., the remaining 552 ft. being off reef. The following are the details of the work: No. 6 level advanced north 204 ft., of which 129½ ft. were on reef averaging 12.62 dwt. over 18.2 in.; No. 7 level advanced north 449 ft., of which 320½ ft. were on reef averaging 14.72 dwt. over 21 in.; No. 8 level advanced north 122 ft. on reef averaging 14.80 dwt. over 28 in.; No. 8 level north, south branch, was driven 88 ft. on reef averaging 9.66 dwt. over 38 in.; No. 9 level north, branch drive, was driven 70 ft., of which 35 ft. were on reef averaging 17 dwt. over 26 in.; No. 9 level advanced north 202 ft., of which 166 ft. were on reef averaging 13.72 dwt. over 23 in.; No. 10 level advanced north 132½ ft. on reef averaging 8.88 dwt. over 16.7 in.; No. 10 level, intermediate from rise 110 ft. south, was advanced north 16 ft. off reef; No. 7 level, Prohibition section, was advanced south 14 ft. off reef. The following rising was done: No. 7 level, rise 2,280 ft. north, Prohibition section, was put up 45 ft. on reef averaging 15.13 dwt. over 23.5 in.; No. 8 level, rise 2,220 ft. north, was extended 75½ ft. on reef averaging 15.5 dwt. over 30 in.; No. 7 level, rise 2,400 ft. north, was extended 28 ft. on reef averaging 16.2 dwt. over 29 in.; No. 9 level, rise 1,780 ft. north, was advanced 15 ft. on reef averaging 17.9 dwt. over 37 in.; No. 10 level, rise 490 ft. north, was extended 89 ft., of which 20 ft. were on reef averaging 11.40 dwt. over 36 in.; No. 10 level, rise 110 ft. south, was extended 71 ft., of which 65 ft. were on reef averaging 10.95 dwt. over 32 in. The winzing carried out was: No. 6 level, winze 2,180 ft. north was sunk 40 ft., of which 30 ft. were on reef averaging 5.23 dwt. over 14.7 in.; No. 7 level, winze 2,400 ft. north, Prohibition section, was sunk 56½ ft., of which 40 ft. were on reef averaging 16.51 dwt. over 14.7 in.; No. 7 level, winze 2,220 ft. north, was sunk 68 ft. on reef averaging 12.51 dwt. over 16 in.; No. 8 level, winze 1,780 ft. north, was sunk 23½ ft. off reef; No. 9 level, winze 1,080 ft. north, was sunk 64 ft. off reef. On Nos. 7 and 9 levels 46 ft. was also done all off reef. At the battery 39,907 tons of quartz was crushed for a yield of 16,609 oz. 3 dwt. gold, of which 13,241 oz. 7 dwt. was obtained by amalgamation, 2,157 oz. by cyanidation, and 1,210 oz. 16 dwt. by treatment of concentrates, the values of the whole recovery being £70,524 12s. 5d. As the quantity crushed is less than that of the previous year by 1,455 tons, and the total value showed an increase of £1,879 11s. for the same period, it is evident a slight increase in values has occurred. Practically all development work has consisted of extending Nos. 7, 8, 9, and 10 levels in the direction of the Prohibition section (North Blackwater). A connection was obtained with the Prohibition workings in October last from a rise put up at a point 2,400 ft. north on No. 7 level. It was anticipated this connection would act as an upcast, but events proving otherwise it was found necessary to make other arrangements. A fan capable of producing 22,000 cubic feet of air per minute has been installed, and is operating at the top of the Prohibition shaft, the result being that a strong brisk current of air is constantly in circulation throughout the mine. Almost the whole of the stone crushed during the year has been won from the extreme north end of the mine, from the various levels mentioned. No attempt has been made to operate on No. 11 level, the shaft being sunk to that depth notwithstanding.

*Murray Creek Mine.*—Operations have been confined to development work above No. 2 Murray Creek battery level. The intermediate level 130 ft. above No. 2 level was extended a farther distance of 159 ft., exposing reef varying in width from 1 ft. to 3 ft. This level is now in a total distance of 454 ft., and is under the old Victoria reef, worked in the early days of Murray Creek. In No. 2 Murray Creek level, at a point 187 ft. from the wet pass, a rise was put up to this intermediate level. The rise started in reef 18 in. in width, which cut out about 20 ft. above the level. At 50 ft. stone came in again, and was carried right through, varying in width from 1 ft. to 4 ft. A rise was put up from the intermediate level to No. 4 Victoria level, 440 ft. from the portal. This was started on reef-track; reef came in at a distance of 40 ft. from the floor and was carried through for the remainder of the distance risen, carrying widths varying from 2 ft. to 5 ft. Repairs were carried out to the 40 ft. rise connecting No. 4 Victoria and No. 3 levels. No. 3 Victoria level was cleaned out and put in good order, thus ensuring excellent ventilation throughout the mine, and enabling necessary timbers to be obtained from the surface area at Murray Creek. No. 2 Murray Creek level was also repaired to a point 400 ft. south of the wet pass. Ten head of stamps at the battery have been put in order and the plant overhauled preparatory to commencing crushing operations early in the new year. The average number of men employed throughout the year was eight, but it is expected this number will be augmented considerably when mine and mill are both in operation.

*New Big River Mine.*—Work at this mine was confined exclusively to No. 2 level, where a crosscut, put out in a north-westerly direction from the shaft, was driven for a distance of approximately 200 ft. A narrow block of payable stone was located in the crosscut, but sinking and some small amount of stoping carried out on the ore-body proved it to be so limited in extent as not to warrant further exploitation. A final clean-up at the battery resulted in 19 tons of material being treated by concentration, the yield obtained therefrom equalling 103 oz. of gold, valued at £330 6s. 11d.

The *North Big River*, *South Blackwater*, *New Millerton*, and *South Big River Mines* were all idle during the year.

*Progress Mine.*—Work at this mine remains suspended, but the treatment plant, operating on some residues dumped in the past, produced therefrom gold valued at £1,812 9s. 10d. One man was employed regularly throughout the period, and the total slimes treated equalled 303 tons.

*Wealth of Nations Mine.*—No work of any description has been carried on at this company's mine, but the treatment plant, operating on residues dumped over a number of years, was put in running-order during the early part of the period, and has since worked a moderate tonnage of slimes with a reasonable amount of success. Gold valued at £1,670 1s. 9d. has been recovered from the material treated. The total number of persons employed was six.