

WEST COAST INSPECTION DISTRICT (G. W. LOWES, Inspector of Mines)

QUARTZ-MINING

Marlborough County

Golden Bar Mines (Mines Department), Wakamarina.—After driving 600 ft. on the main level, 327 ft. in intermediate level, and 60 ft. rising between main and intermediate levels on the lode (varying in width from 30 in. to 55 in.), approximately 4,500 tons were exposed on three sides, with an additional 1,500 tons broken during development and deposited on the dump. Gold and scheelite values proved to be too low to permit of mining and treatment without loss to the State, and operations ceased in April. All plant was removed from the workings.

Buller, Grey, Westland, and Murchison Counties

There was no activity in gold mining or prospecting during 1943.

Inangahua County

Blackwater Mine, Waitata.—Owing to shortage of labour the development programme had to be curtailed considerably and only the bare essentials could be proceeded with. The total amount of development footage advanced during the year was 1,707 ft., of which 836 ft. was driving on the Nos. 14 and 15 levels, exposing 614 ft. of reef averaging 15.51 dwt. over a width of 33 in. Thus, of the total advance made in the drives, 73.4 per cent. was on reef.

The results obtained from the main development points were as follows—No. 14 Level Drive South: This drive was advanced 25 ft. on reef averaging 7 dwt. over a width of 14 in., and suspended. No. 14 Level Drive South, Backshunt North at 1,295 N.: This backshunt was put in to follow the reef where it had been faulted. The total advance was 123 ft., of which 118 ft. exposed reef averaging 15.10 dwt. over a width of 29 in., after which the reef was cut off. No. 15 Level Drive North: This drive was advanced 222 ft., of which 199 ft. exposed reef averaging 16.29 dwt. over 44 in. No. 15 Level Drive South: This drive was advanced 423 ft., of which 272 ft. were on reef averaging 15.19 dwt. over a width of 30 in. Driving on No. 15 level showed an improvement as compared with the previous year as follows:—

No. 15 Level Drive North—1942: 510 ft.; 14.21 dwt.; 19 in., 1943: 199 ft.; 16.29 dwt.; 44 in.

No. 15 Level Drive South—1942: 237 ft.; 14.89 dwt.; 24 in., 1943: 272 ft.; 15.19 dwt.; 30 in.

Although the above shows a very satisfactory state of affairs in the bottom level, it was disappointing to encounter unexpected faulting in the drive south, which necessitated driving and crosscutting in country rock for 267 ft. This unproductive work was due to the fact that instead of the reef being cut off by a single main fault, as on the No. 14 level, on No. 15 level it was displaced at three points.

Alexander Mine, Alexander River.—At the commencement of the year ore reserves had dwindled to a small tonnage, and subsequent prospecting from No. 6 main level and the intermediate levels under No. 5 led to no increase in the amount of quartz available for treatment. Efficient labour being difficult to obtain, it was decided by the directors to shut down in November as all the payable ore had been extracted above No. 6 level and conditions were unfavourable for the continuation of prospecting below No. 6 by either sinking or diamond-drilling.

DREDGE MINING

Inangahua County

Slab Hut Dredge, Maiveraiti.—Excepting stoppages for repairs, this dredge operated continuously during the year and handled 658,000 cubic yards of ground. Depths varied from 15 ft. to 20 ft. of fairly free river gravels, and returns up to date have justified the dredging of this area.

Snowy River Dredge, Ikamatua.—This dredge continued digging in fairly favourable ground, and according to published returns handled 1,289,900 cubic yards. The ground worked was comparatively shallow, consequently considerable acreage was worked. Return cuts, down the centre of the valley, were commenced in deeper ground than for the most part will exceed a depth of 20 ft., as against 12 ft. to 14 ft. in the former upstream cut.

Grey River Dredge, Ikamatua.—This dredge operated 80.3 per cent. of the total digging-time, worked an area of 94.8 acres of an average depth of 23.1 ft. and handled 3,528,114 cubic yards, which is an average of 589 cubic yards per hour of an average value of 7.8d. per cubic yard. A large proportion of the year's digging was done in shallow gravels and involved the digging of a high percentage of bottom material in order to maintain flotation. This was reflected in the reduced rate of digging, from 702 to 589 cubic yards per hour. During September, a major flood was experienced which filled in the dredge pond with river-bed shingle, burying the mooring-lines and power cable.

Grey County

Waipuna Dredge, Waipuna (Ahaura Survey District).—The reconstruction of this dredge was completed in March and digging operations commenced early in April, and at the close of the year had handled 255,009 cubic yards. This is one of the smaller type of dredges using 4-cubic-foot buckets running at sixteen to the minute and discharging into a revolving screen 26 ft. by 4 ft. 9 in. The ground varied in depth, the maximum being 18 ft. and the minimum 10 ft., and water-level is maintained almost to the level of the ground.

Redjacks Dredge (Associated Gold Dredges, Ltd.), Redjacks Creek, Ngahere.—Out of a total possible working-time, this dredge operated 77.71 per cent. and dredged 29.5 acres for a yardage of 1,177,154 cubic yards. This was from depths varying from 25 ft. at the beginning of the year to depths exceeding the length of the digging-ladder by the end of the year.

Ataran Dredge (Associated Gold Dredges, Ltd.), Moonlight Creek, Ataran.—The year's continuous working resulted in 47.5 acres being dredged and 80.5 per cent. of the total time being worked. From depths varying from 12 ft. to 16 ft. a yardage of 1,293,950 cubic yards was handled for much improved returns when compared with those of the previous year.

Marsden Dredge (Associated Gold Dredges, Ltd.), New River, Marsden.—Ground treated during the year amounted to 1,424,929 cubic yards dug from 32 acres. The ground averaged approximately 21 ft. in depth, and 81.85 per cent. of possible time was worked.

Ngahere Dredge, Ngahere.—An area of 26.15 acres, of an average depth of 60.6 ft., was dredged during the period, and 2,555,479 cubic yards were dug and treated for a total cost of 4.30d. per cubic yard. This represented 78.19 per cent. of total digging-time. An average face of 21.8 ft. above water-level was worked, and the maximum depth below water-level of 75 ft. was reached on part of the area, and bottom could only be reached by lowering the water-level with a high-capacity pump mounted on a barge.

Blackball Creek Dredge, Blackball.—Except for the periods devoted to repairs and maintenance, this dredge operated continuously during the year in ground 33 ft. to 40 ft. in depth for satisfactory returns.

Barrytown Dredge, Barrytown.—This dredge dug 52.48 acres, including 1.22 acres of tailings, and treated therefrom 2,551,000 cubic yards, including 57,323 cubic yards of tailings. The average depth of ground dug was 30 ft., and the percentage of possible running-time amounted to 77.95 per cent.

Westland County

Maori Gold-dredge, Callaghans.—Under continued difficulties this dredge dug 449,200 cubic yards. The total dredging-time for the year was much less than the possible time on account of numerous breakages due to tight cemented wash.

Rimu Dredge, Rimu.—During the year this dredge operated on 5,908 hours, equal to 80.7 per cent. of possible working-hours, and dug 33.13 acres of an average depth of 34 ft. The total amount of wash handled was 1,816,120 cubic yards dug at the rate of 307 cubic yards per digging-hour.