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

QUARTZ MINING

Inangahua County

Blackwater Mine, Waiuta.—The everyday troubles of operating a mine that could not be profitably worked despite all efforts to cut costs were added to early in the year when a section of South shaft collapsed at a point 45 ft. below the collar and necessitated repairs over a depth of 280 ft. Four shifts were concentrated on repair work, and production was suspended for one month on account of the mine ventilation being affected by closure of the upcast shaft. Several months clapsed before the South shaft could be utilized for winding material from No. 12 Level, which is the main return airway for the greater part of workings, consequently, the air-course could not be maintained up to its usual high standard and ventilation was one of the difficult problems confronting the management.

The air-courses were completely restored and additional duplicate ventilating rises put through in South end of mine before the year ended and complete restoration of satisfactory ventilation was accomplished, much of it at the cost of reduced tonnage to mill and limitation of development.

Despite the fact that the mine was responding well to the limited development due to lack of suitable labour, the outlook was depressing and the closing-down of a well-equipped mine seemed inevitable, but the devaluation of New Zealand currency completely altered the situation.

Employing an average number of 118 men, 22,115 tons were mined and treated from stopes and development faces on Nos. 14, 15, and 16 Levels, yielding 9,540 oz. 10 dwt., which realized £92,005 18s. ld. Total development footage for the year amounted to 444½ ft., operations in No. 16 South accounting for the greatest part of work accomplished for the period under review.

No. 16 Level South main drive and intermediates were driven 152 ft. all on payable reef over an average width of 43 in. and value $17 \cdot 32$ dwt.

Winze-sinking in Nos. 14, 15, and 16 Levels accounted for 111 ft., of which $108\frac{1}{2}$ ft. was on payable reef, width 40 in., value $16\cdot7$ dwt.

Rising from Nos. 15 and 16 Levels amounted to $119\frac{1}{2}$ ft. on payable reef 40 in, in width, $15\cdot 2$ dwt. in value, with 62 ft. unpayable reef averaging 18 in, in width and $7\cdot 11$ dwt. in value.

During the Christmas vacation, preparations for sinking of main North shaft were completed with the exception of installation of winch in No. 16 Chamber. When a team of competent sinkers is available the opening-up of No. 17 Level North and South will relieve the present tension regarding diminishment of working stopes.

DREDGE MINING

Inangahua County

Snowy River Dredge, Ikamatua.—During the year the dredge worked in a cut taken through the centre of the valley and downstream. An average depth of 20 ft. was dredged and approximately 1,000,000 cubic yards dug. yielding 4,734 oz. 10 dwt., which realized £37,563 18s. 6d. Dividends amounting to £5,638 2s. 8d. for the year were paid, bringing the total amount distributed to shareholders since the commencement of operations to £113,943 7s. 7d.

At the end of the year the worked ground at north-west end of claim was reached and the dredge turned to work upstream on what will be the last section on the central portion of claim. There is a considerable area of ground in the south end of claim to be worked after the central section is dredged and a number of years of profitable work is ahead of the plant.

Grey River Dredge, Ikamatua.—This dredge was in continuous operation during the year and analysis of the following figures will disclose the result of operations:—

Working-days			 	 310
Working-hours			 	 7,440
Hours digging			 	 5,435
Percentage time digging			 	 $73 \cdot 1$
Area dug, in acres			 	 $68 \cdot 461$
Average depth, in feet			 	 $30 \cdot 2$
Cubic yards handled			 	 3,337,000
Cubic yards handled per		• •	 	 10,765
Cubic yards handled per	digging-l	nour	 	 614
Ounces bullion produced	(crude o	unces)	 	 $5.872 \cdot 3$

Considerable inconvenience was suffered during the year on account of high cost and protracted delivery of spare parts.

Premier Gold Dredge, Caribou Creek, Big River.—During the early part of the year dismantlement and transport of the dredge from Nemona Creek was completed, and by the end of the period re-erection had reached a stage that allowed of a trial run being made. Production on three shifts will commence early in 1950 and it is anticipated that some very high returns will be recovered.