

Grey County

Moonlight Sluicing Claim, Blackball.—Mr. A. Mutch, who is working the claim under an agreement with Moonlight Sluicing Co., worked fairly continuously during the year with 3 men and won 254 oz. fine gold, which realized £2,604. The face now being worked is at the foot of a gravel ridge extending on a 45° slope for a length of not less than 250 ft. to the first break on face of hill. The top layer is a mixture of rounded gravels, clay, and angular lumps of greywacke, and immediately above a bottom of consolidated sand the recent water-worn gravels carry the gold. These gravels vary a great deal in depth, and the face, being an irregular arc, it is impossible, except by a precise survey, to determine the yardage removed during any period of sluicing. With an excellent water-supply at about 160 lb. pressure per square inch a large quantity of loose material is removed each shift, but the next day's work will probably be devoted to breaking up the large stones left behind, and their removal by water is a comparatively slow process. The stoning plant is not yet in commission. It is understood that the tribute ends at 31st December and the company will carry on during the ensuing year and entrust the working of their claim to a manager.

Golden Sands Sluicing Claim, Barrytown.—Dennehy Bros. continued to work this claim on tribute and won therefrom 257 oz. 4 dwt. fine gold, valued at £2,412 15s. 11d., from ground that averaged about 40 ft. in depth. During the period a fresh method of sluicing was adopted—viz., the ground sluicing to a depth of 15 ft. of the clayey silt overburden. The remaining depth of silt, which overlaid a comparatively narrow band of blacksand of fairly coarse gravel, was lifted by hydraulic elevator into the tailrace and subsequently distributed, after the separation of the coarse material, over a large area of tables. Continued stripping and elevated methods resulted in an increased yardage and simplified working of the claim when buried timber in upper layers had to be dealt with.

Marlborough County

Waikaho Deep Lead, Deep Creek.—Operations at this mine were suspended for several months owing to the failure of pumping plant. A Pomona pump with a capacity of 700 gallons per minute was installed late in the year and proved to be capable of handling with ease the inflow of water. Workings were drained, and after a resurvey of mine and location of surface features an 80 ft. crosscut through schist rock was commenced to reach No. 1 Bore.

Minerals other than Gold and Silver Iron-ore.—From the Onakaka deposit 400 tons were quarried, crushed, and sold as oxide of iron, valued at £200 on the quarry floor.

Arsenic.—From the roasting-furnace used in conjunction with treatment of the Blackwater Gold-mining Co.'s sulphides concentrates, 7 tons 19 cwt. 1 qr. 13 lb. was recovered. This by-product realized £143 8s. 7d.

Talc and Quartz Magnesite.—Three hundred and sixty-two tons were quarried by Lime and Marble Co. from a Crown mineral licence at Upper Takaka and processed at their works at Mapua, the product being used for agricultural purposes. The value of this product on quarry floor was £253 8s.

Dolomite.—A tonnage of 7,034, valued at £3,517 on quarry floor, was extracted from a quarry at Mount Burnett, in Collingwood district, and shipped from Onakaka in its raw state to fertilizer-manufacturers in the North Island.

NON-METALLIC MINERALS

Clays.—From Polglaze's Clay-pit, Kaka, 370 tons were mined and used for the manufacture of insulators for the Temuka Pottery-works. This tonnage was valued at £582 15s. at mine mouth.

Westport Brick and Pipe Co. produced 200 tons of clay, which was converted into earthenware pipes and fittings.

Greymouth Brick and Tile Co. quarried 1,300 tons of clay, which was converted into building-bricks.

Nelson Brick and Pipe Works produced from the pits at Nelson and Moutere 1,000 tons of clay. The raw material is used for making building-bricks, field tiles, and flue-liners.

GENERAL REMARKS

The depletion of gravel reserves by nearly 20,000,000 cubic yards during the year under review has made heavy inroads into the remaining payable dredging areas. Although fifty-six holes were bored aggregating 3,612 ft., the payable yardage proved fell short of the amount treated by several million yards. Most of the boring was carried out on areas under exploitation with the object of eliminating, as far as practicable, what were formerly payable values but are now marginal on account of increased costs for labour, replacement parts, and stores. During 1948 two extensive areas containing many millions of yards will be check-bored prior to the erection of two large dredges, and it is anticipated that many millions of cubic yards will be added to the present reserves. The placing of two small dredges, now idle, on proved areas will compensate to some extent for two dredges that will probably in 1948 exhaust the claims on which they are now operating, consequently gold produced from dredges is more likely to increase than decrease during the next few years.