

Grey County.

Redjacks Dredge (Associated Gold Dredges, Ltd.), Redjacks Creek, Ngahere.—This dredge worked 6,059 hours, dredged 26.7 acres on an average depth of 27 ft., the resulting yardage being 1,165,785 cubic yards.

Atarau Dredge (Associated Gold Dredges, Ltd.), Moonlight Creek, Atarau.—This dredge was put into commission in March, and at the end of the year had dredged 18 acres of ground of an average depth of 22.5 ft. and treated 661,250 yards. The returns for several months were low, but improved as the dredge worked from the construction site on to the area proved payable during the prospecting campaign.

Marsden Dredge (Associated Gold Dredges, Ltd.), New River, Marsden.—This dredge commenced operations in January and dredged 28.4 acres of an average depth of 24 ft. The yardage treated was 1,099,700 yards.

The three foregoing dredges owned by Associated Gold Dredges (N.Z.), Ltd., are of similar design with all parts interchangeable and operate 6-cubic-foot buckets at a speed of 31 buckets per minute and each dredge utilizes 420 horse power.

Ngahere Dredge, Ngahere.—This dredge operated nearly 6,000 hours, being 82 per cent. of the total running-time available. An area of 22.75 acres was dredged averaging 80.8 ft. in depth with an average height of face above water-level of 26 ft. The total wash treated from this area was nearly 3,000,000 cubic yards, with a bucket efficiency of 55.62 per cent.

Argo Dredge, Blackball.—After dredging for the first five months of the year, the company directors were faced with the alternative of either suspending operations or expending a large amount of money on repairs and renewals. The former course was decided upon on account of heavy ground, marginal values, and the decayed state of the timber pontoons. For the period worked 214,000 cubic yards of ground were dredged which yielded at the rate of 1.3 grains per cubic yard, which for this class of ground was below paying-point.

Blackball Creek Dredge, Blackball.—This dredge worked fairly continuously during the year in ground averaging 40 ft. deep, except in periods when repairs were carried out chiefly on timber pontoons on the dredge. Values and yardage were maintained over the period and are likely to continue.

Barrytown Dredge (Gold Mines of New Zealand, Ltd.), Barrytown.—This dredge worked 37.112 acres, including 3.895 acres of tailings. During running-time 4,982 hours were worked, being 68.29 per cent. of the total working-time available. The average depth of ground dredged was 33.5 ft. and 2,003,000 cubic yards were treated, including 170,453 cubic yards of tailings, and the recovery of 1.94 grains per cubic yard was effected.

Westland County.

Maori Gold-dredge, Callaghans.—The digging and treatment of 479,000 cubic yards of ground was accomplished during the year despite the tight ground and extensive loss of time due to repairs.

Rimu Dredge, Rimu.—This dredge operated for 5,209 hours, this being 71 per cent. of the total digging-time. A total of 31.74 acres was dredged of an average depth of 31.5 ft., and 1,611,173 cubic yards of ground were handled, equal to 5,265 cubic yards per day and 309 cubic yards per hour. The value of the ground treated was 9.23d. per cubic yard, but higher operating-costs, due partially to heavy ground, equalled 7.92d. per cubic yard.

Kaweri Dredge (Gold Mines of New Zealand, Ltd.), Kaweri.—During the year this plant dredged 27.67 acres of ground, including 6.77 acres of tailings, in 5,523 hours, being equivalent to 75.7 per cent. of the possible dredging-time. The average depth of ground was 58 ft., and 2,592,000 cubic yards, including 501,218 cubic yards of tailings, were treated for a recovery of 2.53 grains per cubic yard.

Arakura Dredge (Gold Mines of New Zealand, Ltd.), Arakura Valley.—A total of 21.31 acres of ground were dredged in 6,275 hours, resulting in 2,571,000 cubic yards of ground being treated for an average recovery of 3.22 grains per cubic yard. The total digging-time was 86 per cent. of the possible time, and the average depth of ground was 74.75 ft.

Okarito Dredge, Five-mile Beach, Okarito.—A total of 50,882 cubic yards blacksand was dredged by the Company during the year, the gold yield per cubic yard being substantially the same as in previous years. The small yardage was due primarily to the shortage of labour making it impossible to work the full three shifts daily. At the end of the year the dredge sank owing to the pontoon being holed by a submerged log, but damage was comparatively light and operations were resumed after about three weeks' stoppage.

Gillespie's Beach Dredge, Weheka.—This dredge during the year worked 5,842 hours, being 78 per cent. of the possible dredging-time, 1,646 hours being lost through essential stoppages, holidays, general overhaul, and repairs. A total of 701,475 cubic yards of ground was dredged of an average value of 4.8d. per cubic yard.

DREDGE-CONSTRUCTION.

Construction of two large dredges on the Taramakau and Mikonui Rivers is still held in abeyance. The Waipuna Dredge (formerly White's electric dredge at Barrytown) is in an advanced stage of reconstruction and should commence operations in the first quarter of 1943.

ALLUVIAL MINING.

Buller County.

Addison's Flat Gold-mining Co., Ltd., Addison's Flat.—During the early part of the year the company worked out the remaining portion of the existing claim, and three months were occupied in shifting to another base approximately half a mile away. The ground in the new claim is very stony, and in consequence there is a considerable reduction in the yardage compared with previous years. During the year 12 acres of ground were worked and the average depth of ground of alluvial wash was 12 ft. A total of 188,760 cubic yards of ground was mined by hydraulic elevating for a return of 1.22 grains per cubic yard.

Inangahua County.

Waitahu Gold-mining Co., Waitahu River.—After working for half the year with a skeleton crew, the directors decided to close down until after the war on account of the impossibility of working the claim, except at a loss, with the labour available.

Mount David Sluicing Claim, Blackwater.—Water-race repairs occupied the company's staff for the whole year, and full-scale production will not be attained until the early part of 1943.

Grey County.

Moonlight Sluicing Claim, Blackball.—This company, operating on a 45 ft. face of fairly tight and stony ground, handled 145,880 cubic yards of gravel of a value of 1.3 grains per cubic yard.

Golden Sands Claim, Barrytown.—Operations at this claim were fairly continuous, but the amount of ground sluiced and gold recovered was seriously affected by the labour shortage, which has affected all alluvial mining.

Westland County.

Kumara Alluvials, Kumara.—At the completion of rehabilitation work (connected with the claim) of race and pipe-line construction late in the year, a small yardage was sluiced. Operations were then suspended, it being considered that further capital expenditure was not warranted in view of the present situation.