

DREDGE MINING
Inangahua County

Slab Hut Dredge, Mauheraiti.—The dredge operated for the year 52 per cent. of the possible working-time, the major causes of stoppages being dredge sinking 12 per cent., maintenance 21 per cent., and holidays 8 per cent of possible dredging-time. A total of nearly 700,000 cubic yards were dredged, which included 370,870 cubic yards of tailings, the latter accounting for the low return of 3·7d. per cubic yard, while the cost of production was 4·6d. per cubic yard. The yardage recovered was won from an average depth of 16 ft. and produced by ten men.

Snowy River Dredge, Ikamatua.—On account of it being unnecessary to devote more than a small percentage of total working-time to maintenance and repairs, the plant dredged 37 acres of an average depth of 19·25 feet and produced therefrom 1,152,000 cubic yards, which averaged 1·63 grains per cubic yard. Thirteen men constituted a full working crew, and the shareholders had another profitable year.

Grey River Dredge, Ikamatua.—During the year the company's 16 cubic feet electrically operated dredge was in continuous operation, with results as shown by the following figures:—

Working-days	..	..	..	..	..	310
Working-hours	..	..	..	..	..	7,440
Hours digging	..	..	..	..	..	6,046
Percentage time digging	..	..	..	..	..	81·3
Area dug, in acres	..	..	..	..	..	89·323
Average depth, in feet	..	..	..	..	..	31·7
Cubic yards handled	..	..	..	..	..	4,572,202
Cubic yards handled per day	..	..	..	..	..	14,749
Cubic yards handled per digging-hour	..	..	..	..	..	756
Ounces of bullion produced (crude ounces)	..	..	..	..	..	8,392·74
Value of product	..	..	..	..	..	£87,104
Value of product per day	..	..	..	..	..	£281
Value of product per cubic yard	..	..	..	..	..	4·57d.
Operating-cost per cubic yard (excluding export taxes and realization costs)	..	..	..	..	..	2·90d.
Total operating cost per cubic yard (including export taxes, realization costs, and overhead)	..	..	..	..	..	3·80d.

During the early part of the year the dredge was taken through the New Zealand Railways Greymouth to Reefton line, also through the main highway. Due to the willing co-operation of the Departments concerned, these crossings were carried out with the minimum expense and trouble.

Grey County

Redjacks Dredge (Associated Gold Dredges, Ltd.), Redjacks Creek, Ngahere.—Out of the total possible dredging-hours of 7,264, the dredge worked 75 per cent. of the time for a total yardage of 1,110,130 cubic yards from 39 acres of ground dredged with an average of 21 feet. Total gold recovered was 2,651 crude ounces, an average of 1·146 grains per cubic yard, with total cost of recovery being 4·035d. per cubic yard.

Atarau Dredge (Associated Gold Dredges, Ltd.), Moonlight Creek, Atarau.—Out of the total possible dredging-hours of 7,264, the dredge worked 80 per cent. of the time for a yardage of 1,348,103 cubic yards from an area of 56 acres averaging 19·75 feet in depth. The recovery effected was 1·010 grains per cubic yard, yielding 2,837 crude ounces. The cost of production was 3·832d. per cubic yard.

Marsden Dredge (Associated Gold Dredges, Ltd.), New River, Marsden.—A percentage of 83·8 of possible working-time was worked out of a total of 7,264 hours. Yardage worked was 1,550,517 cubic yards for a recovery of 3,160 crude ounces. Recovery was 0·978 grains per cubic yard and the total costs per cubic yard were 2·842d. An acreage of 47·5 acres was dredged of an average depth of 29·75 feet.

The average number of men employed by the above company was the usual complement of ten men at each dredge and eighteen men employed in workshops, repair gangs, and clean-up crew, comprising a total of forty-eight men on the company's pay-roll for the three dredges.

Ngahere Dredge, Ngahere.—This dredge worked 74·74 per cent. of the total working-time of 7,296 hours and dredged 15·251 acres, which yielded 8,378 oz. of bullion from 2,343,596 cubic yards. The yardage per hour was 429 cubic yards, giving a bucket efficiency of 49·32 per cent. The average recovery was 1·68 grains per cubic yard from the following digging depths:—

Maximum	..	..	..	..	..	..	Ft.
Minimum	..	..	..	..	..	..	108
Average	..	..	..	..	..	..	79
Average height above water-level	..	..	..	..	..	..	95·2
Average depth below water-level	..	..	..	..	..	..	24·8
Maximum height above water-level	..	..	..	..	..	..	70·4
Maximum depth below water-level	..	..	..	..	..	..	43
	..	..	..	..	..	..	77