

Dredge Mining.

Goldfields Dredging Co., Ltd., Big Beach, Shotover River, near Arthurs Point, Lake County (J. S. Ritchie, Dredgemaster).—Dredging operations were carried on at the Big Beach, and the dredging depth varied from 15 ft. to 30 ft. Twelve men were employed, and the gold won amounted to 494 oz., valued at £3,325. The dredge is electrically-driven, and the power-station is situated at Wye Creek, alongside the Queenstown-Kingston Main Road.

Nevis Crossing Dredge, Lower Nevis, Vincent County (S. C. Fache, Dredgemaster and owner).—The dredge was moved upstream until the new area was reached. Dredging operations then commenced in ground varying in depth from 8 ft. to 11 ft. This dredge is steam-driven, and the old boiler was replaced by a new one during the year. Coal is obtained from the local coalfield.

Nevis Diesel Electric Dredging Co., Ltd., Upper Nevis.—The Diesel plants have been removed, and the dredge is being dismantled for removal to the West Coast.

Bendigo Goldlight Dredging Co., Ltd., Bendigo Flat, Vincent County.—This dredge is still idle, and no work has been carried out during the year.

Molyneux Gold-dredging Co., Ltd. (R. P. Opie, Manager; S. Chapman, Dredgemaster).—The dredge, at the beginning of the year under review, was operating at a point in the Molyneux River, approximately two miles and a half above Clyde Bridge, having just been moved ahead a distance of 70 chains, due to the unsatisfactory recoveries that were being obtained at that time. The dredging conditions and characteristics of the ground remained almost unaltered for some time, but toward the end of February a decided improvement was shown and some good returns were obtained. Upon entering the very narrow and rocky section that lay ahead values fell off considerably in the confined channel to which dredging operations were limited by the rocky formation. It then became necessary to move ahead once again to a point near Champagne Gully. This section was very carefully dredged, in the light of some good recoveries that were apparently obtained by the old miners working on the banks many years ago, but from a dredging point of view it was not so satisfactory, and, after a comparatively short time, a very narrow gorge which then lay ahead once again necessitated the removal of the dredge a distance of three-quarters of a mile. On the completion of the removal the company's dredge was then operating in the area which many years ago was dredged, with a certain element of success, for a short time by the old Monte Christo Dredge. Some very satisfactory returns were obtained in this section, which appeared to coincide, as nearly as can be estimated at the present time, with the area worked by the old dredge, but the channel was narrow and the area decidedly limited. Once again massive reef formation was encountered, and, in consequence, values fell very considerably. Some difficulty was then experienced in moving ahead owing to the very narrow channel which lay between the reefs on either side; in fact, at three points it was necessary to blast away the rock formation in order to permit the dredge to be pulled ahead into the bay which lay beyond. By this time winter had set in and the river-level began to fall very rapidly, so that it became necessary, on 23rd June, to cease operations and moor the dredge in a safe bay until such time as the river-level permitted the safe passage of the dredge farther up the river. The river during the winter reached an extremely low level, at some points being as much as 17 ft. to 20 ft. below the usual summer level. The weather conditions throughout the next few months were very adverse, and a satisfactory rise was not obtained until 10th October, when the staff was re-engaged and a commencement made on the task of moving the dredge a distance of one mile and three-quarters. In this section of one mile and three-quarters there were no less than five severe falls, which were quite impassable for a large modern dredge with low river-level, but the rise in the river fortunately remained fairly constant for some time, and the task of moving was completed satisfactorily and operations recommenced on 21st November. Since then and to the close of the period under review the dredge has continued to operate satisfactorily. During the year ended 31st December, 1938, the dredge treated 416,740 cubic yards, recovered 1,097 oz. of gold, valued at £8,087, and traversed just over five miles of river. Twenty men were employed during the working-periods. This dredge is electrically-operated, and power is obtained from the Otago Power Board. A Diesel generator is provided on the dredge for use in the event of power-failure or other emergency.

Clutha River Gold-dredging, Ltd. (W. Curphy, Manager; A. E. Newick, Dredgemaster).—Dredging operations have been continued during the year under review, and the dredge has been operating in the Clutha River between Butchers Creek and the Manuhierikia Junction. Two miles of the river course have been dredged, and work has been carried on with few delays, although the low state of the river during portions of the year caused some inconvenience. The gold was obtained principally from the rough ground near the banks of the river. The dredge is electrically-operated, power being obtained from the Otago Central Power Board. A Diesel generator, standby set, is provided on the dredge for use in case of power-failure or other emergencies. Drilling operations have been continued on the Earnsclough and Alexandra Flats, four machines, employing twelve men, being in use during the major portion of the year. Twenty-three men have been employed, and the gold won amounted to 7,356 oz., valued at £66,264.

The Austral New Zealand Mining, Ltd., Lowburn, near Cromwell, Vincent County (T. Blackie, Superintendent).—Construction work has been carried on during the year, and the pontoons were successfully launched on the 16th August. Construction work is still being carried out, and it will be a considerable time before the work is completed. On account of the international situation there has been a big demand for high-class steels, with a consequent increase in price and sometimes a difficulty in obtaining prompt delivery. From twenty-six to forty men have been employed on the construction work.

Aitken's Dredge, Maitland, Waikaka Valley, Southland (R. L. Smaill, Dredgemaster).—This dredge has continued to operate in freehold land on the eastern side of the Gore-Little Waikaka Road. Average dredging depth 16 ft. Eight men have been employed. The dredge is steam-operated, and lignite coal is used for fuel.

Rainbow Dredging Co., Ltd., Waimumu, Southland (A. Cook, Dredgemaster).—Dredging operations were continued in the Waimumu area for a short period. The dredge was then dismantled and conveyed to the Waikaka Valley at Maitland, on the western side of the valley on freehold ground (Section 23, Block I, Chatton Survey District). The dredge was re-erected, and dredging operations were again resumed on the 9th May. Average dredging depth 8 ft. Two men have been employed, and the gold won amounts to 131 oz., valued at £1,070. This dredge is Diesel-operated.

There were seventy-two men employed on the working dredges during the year, and the gold won amounted to 10,589 oz., valued at £88,259.

MINERALS OTHER THAN GOLD.

Platinum.—The platinum won during the year was produced by J. Sorenson, Orepuki, and amounted to 1 oz. 6 dwt., valued at £7 8s. 11d.

Silver.—The Clutha River Dredging Co., Ltd., won 269 oz. 4 dwt. of silver, valued at £29 10s. 9d.

Silica Sand.—A total of 1,356 tons of silica sand was produced, valued at £997. The producers were the Blackburn Coal Co., Mount Somers, and W. S. Bower, Timaru, in Canterbury, and R. Christie, Hyde, Central Otago.

Tungsten.—The total yield of scheelite concentrates from the Glenorchy, Macraes, and Waipori Districts during the year amounted to 44 tons 12 cwt. The total value of this output cannot be given, as a quantity has not yet been disposed of. There has been an increase of over 20 tons, and the major portion of the output has been obtained from the Glenorchy District.