

BORING OPERATIONS.

Vincent County.

The Labour Department (Employment Division) continued boring operations in the Galloway District on Runs 220H and 220I, Blocks VI and XIX, Tiger Hill Survey District. The Government No. 4 Alluvial Drill, with 6 in. casing, was used. Seventeen holes were drilled, and operations ceased in May. A total footage of 3,865 ft. was drilled on this field. The No. 4 drill was then transferred to the German Hill District on Run 261L, Poolburn Survey District, and operated from May to September, drilling twenty-one holes with a total footage of 1,253 ft. W. H. Gibson, Drill Superintendent.

Clutha River Gold-dredging, Ltd., continued an extensive drilling programme on the Alexandra and Earnsclough Flats. For a considerable portion of the year four machines were in use. The No. 15 and No. 16 machines, belonging to the company, and the No. 6 alluvial and No. 2 steam Keystone Mines Department drills were in use for the major portion of the year. Six-inch casing was used, and the work was carried out under the supervision of A. Williamson, Drill Superintendent. In all, 149 holes were drilled for a total footage of 12,513 ft.

ACCIDENTS.

There were no fatal accidents during the year.

There were three serious accidents during the year, whereby four persons were injured.

On the 6th May Peter Ireland, a miner employed at the Sugar Loaf Alluvial Mine, Arthurs Point, Queenstown, was injured through being hit by a wire rope. He suffered fractured ribs and injury to a kidney. On the 8th September Bert Wright, an employee of the Clutha River Dredging Co., suffered a severe injury to his left foot, necessitating its amputation, through being caught between the dredge and a boulder on the river-bank.

On the 20th October J. Wylie, mine-manager, and E. Elgin, miner, of the Heather Jock Scheelite Mine, Glenorchy, were injured through the collapse of a wooden trestle during the installation of an aerial cable-way. Wylie suffered a fractured right forearm and Elgin a broken nose, a twisted knee, and abrasions.

GENERAL REMARKS.

The gold won from quartz mining during the year amounted to 1,028 oz. 14 dwt. 22 gr., valued at £6,814 11s. 9d., this being an increase of 29 oz. 4 dwt. 20 gr., with a decrease in value of £214 7s. 4d. The number of men decreased by seventeen.

There has been a considerable decrease in the yield of alluvial gold during the year under review. This can be accounted for by the very considerable decrease in the number of men employed, the very dry season, and the increasing difficulty of production. The gold produced by the alluvial mines amounted to 11,864 oz. 13 dwt. 23 gr., valued at £88,598 6s., this being a decrease of 3,856 oz. 11 dwt. 6 gr., valued at £26,621 6s. 8d. The number of men decreased by 322.

The amount of gold obtained by dredge-mining amounted to 10,320 oz., valued at £88,230, this being an increase of 283 oz. in quantity and of £3,924 in value. The number of men employed decreased by eleven. This decrease can be accounted for by the cessation of dredging by the Waipapa Beach and the Bendigo Goldlight dredges. Thirty-five men were employed in dredge-construction work.

The number of men employed on the subsidized mining schemes has decreased considerably, and many areas have been eliminated as being valueless from a mining point of view. The subsidized scheelite miners in the Glenorchy District have continued to operate during the year, and in some cases men have become self-supporting, as the assisted development work has enabled them to locate payable deposits. Many sections of the Glenorchy reefing areas are being prospected, and there has been an increase in the output of scheelite concentrates during the year.

The Clutha River Gold-dredging Co. continued the extensive drilling programme on the Alexandra-Clyde Flats during the whole year. Two machines were used and drilling operations are being continued. On the Earnsclough Flats two machines were operating until October, when they were transferred to the Alexandra terraces.

LABOUR DEPARTMENT'S GOLD-MINING SCHEME: SUMMARY OF RESULTS OF SPECIAL INVESTIGATIONS.

The scheme was inaugurated in 1932 and, in the earlier years, small parties of prospectors carried out operations in practically all the known auriferous areas in the Southern District, but in no case was any deposit of an enduring life opened up. As it was considered that certain alluvial areas were potential "deep lead" or dredging deposits it was decided in May, 1934, at the request of the Lake County Mining Executive, to proceed with the testing of the Millers Flat sector of the Shotover Survey District, between Arthurs Point and Arrowtown, in the Lake County.

A magnetic survey of the area was carried out by the Department of Scientific and Industrial Research, and a site for the drilling was selected in the freehold of Messrs. Reid and Butel.

Ten holes, in two lines, with a total footage of 1,650 ft., were drilled across the line of the buried channel using the Mines Department's No. 2 Keystone drill with 6 in. casing. This drilling was carried out from May to August, 1934. A belief had been held that this area was an old river-bed and possibly gold-bearing, but the results of the drilling proved conclusively that the buried channel was not gold-bearing and that the valley had been formed by glacial erosion.

Waenga.

A party of subsidized men were testing a deep lead or buried river channel at Waenga, in the Clyde-Cromwell Gorge in Run 238D, Block VIII, Leaning Rock Survey District, Vincent County, by means of a dip drive. It was decided, in September, 1935, in order to expedite this work, to drill the area, and twenty-nine holes were drilled with a total footage of 1,183 ft. The Mines Department No. 2 steam Keystone and the No. 4 alluvial drill, with 6 in. casing, were used for the work.

This drilling was undertaken in order to locate the course and width of the buried channel and to ascertain the nature of the bedrock underlying the channel. When this data was obtained the No. 4 alluvial drill was transferred to the Luggate area. The drilling operations at Waenga were carried out from September, 1935, to February, 1936.

Driving and prospecting operations were continued at Waenga until June, 1936, when it was definitely proved that the lead was too low valued, too narrow, and too near the main road and railway-line to be a profitable deep lead proposition.

Luggate.

An area of Crown land in Run 531, Block VI, Tarras Survey District, Vincent County, was drilled by the No. 4 alluvial drill, using 6 in. casing, during the period from February to July, 1936.

A total of seventy-two holes, with a footage of 1,958 ft., was drilled, and the results obtained from this drilling gave a total yardage of 315,440 cubic yards at an average value of 3-6d. per cubic yard, and a total value of £4,723. This yardage and value were too small to warrant large-scale mining operations, and the nature of the deposit, together with the excessive water seepage, prevented the adoption of driving methods.