

Mr. SIDNEY FRY, Director of the Westport School of Mines, to the UNDER-SECRETARY, Mines Department, Wellington.

SIR,—

Westport, 15th March, 1909.

I have the honour to report on the work and attendance at the Westport School of Mines for the year ending 31st March, 1909, as follows:—

For the first five months of last year I obtained leave of absence from the Council of the school, and during that period my place was filled by Mr. A. G. Macdonald, B.E., A.O.S.M., a young man of ability, energy, and enthusiasm.

During the year forty-eight assays for gold, silver, and platinum; three analyses of coal; and eight for base metals were done, as well as a number of analyses of boiler-feed water, rock-analyses, &c. The identification of a number of minerals and ores was performed, also the cleaning of several parcels of gold bullion.

The total number of students enrolled during the year has been 32, and the average class attendance at the central school and branches throughout the year is as follows: Mining, 9.3; mathematics, 9.3; surveying, 2.7; geology, 2.4; drawing, 7.2; steam, 4.7; mineralogy and prospecting, 8.2; elementary electricity, 1.6; chemistry, elementary and practical, 6.1; assaying and metallurgy, 6.1.

Six students sat at the class examinations, the marks gained in some of the subjects being good; but those in practical mathematics were very poor. It is a great trouble to get anything like a number of students to sit for examination, and many of those who do sit have only attended the school in a casual sort of way, with absolutely none of that zeal or energy which characterizes the true student.

About the middle of 1908 I inaugurated classes at Seddonville, which are now being carried on in addition to those already held at the Denniston, Millerton, and Granity branches.

During the year a first-class petrological microscope was imported from England, and also a complete teaching-set of minerals from the Foote Mineral Company in America. The money for the purchase of these minerals I raised by private subscription, and I have to thank most heartily the people of Denniston, Millerton, Granity, and Ngakawau, for the very generous way in which they responded to my solicitations.

The students of our school have largely availed themselves of the books from the Mines Department's lending library, and many speak highly of the advantages which it affords.

I have, &c.,

SIDNEY FRY, Director.

ANNEXURE D.

REPORTS OF WATER-RACE MANAGERS.

Mr. JAMES ROCHFORD, Manager of the Waimea-Kumara Water-races, to the UNDER-SECRETARY, Mines Department, Wellington.

SIR,—

Kumara, 22nd April, 1909.

I have the honour to present my report on the working of the Waimea-Kumara water-races for the financial year ended 31st March, 1909.

WAIMEA RACE.

The cash received for sales of water from this race for the year ended 31st March, 1909, was £730 17s. 6d., and the expenditure for the same period on gauging, maintenance, and repairs amounted to £553 0s. 3d., showing a credit balance of £177 17s. 3d. on the year's transactions.

The average number of miners supplied with water from the race for sluicing purposes during the year was 31.25, showing an increase of 1.84, as compared with the previous year, and the approximate quantity of gold obtained by them was 1,434 oz., having a value of £5,592 12s.

The total sales of water for the year amounted to £717 13s. 6d., or £65 6s. 3d. more than the previous year.

The cash received for sales of water was £93 15s. 11d. greater, and the expenditure of gauging, maintenance, and repairs was £39 18s. 2d. less than during the previous year.

The head-works at Wainihinihi and Kawhaka, the Waimea siphon, tunnels, main and branch races have been well maintained, and are now in a thorough state of repair; but the high flumings in the neighbourhood of Fox's and Greek's are in such a decayed condition that permanent repairs could not be carried out without pulling down the old structures. Temporary repairs, however, were effected from time to time, and with strict supervision they may probably last for another year or two; but a survey of the gullies should be made, and sections prepared, with the view of ascertaining the probable cost of replacing the old flumings with iron piping. Owing to one or two small breaks taking place in the race between Goldsborough and Stafford, the revenue from the Stafford section shows a small decrease on the previous year, but there is still a large area of ground in the vicinity that will pay for sluicing. During the year a branch race, consisting of 49 chains of piping and 4 chains of ditching, was constructed from Tunnel Terrace across the Waimea Creek to convey water to Linklater and party's claim at Lower German Gully. The siphon is composed of wrought-iron pipes 18 in. in diameter, it is 49 chains in length, has a head of 53 ft., and its carrying-capacity is 15½ heads. Where the pipes cross the Waimea Creek they are subject to a pressure of 116 lb. to the square inch; they are