

FURTHER PAPERS RELATING TO

4. Would make use of water power by all means, if the "high level" were adopted.
5. The present cost of firewood or coal is about £9 to £10 per week, but the money value would depend on the rate at which the water would be supplied.
6. Water supply at present is obtained from the Moanataiari Creek, and drainage from Madman's Gully; of very bad quality, being excessively charged with sulphurous acid, which destroys both copper and iron that it comes into contact with—only constant in the rainy season; has failed perceptibly since the timber has been cut down, and the lower levels have drained the surface water springs; fails all through summer months.
7. A pure supply of water would increase the yield of gold per ton, and to the extent of 4 dwt. per ton.
8. At present nothing under 12 dwt. would pay; but could make 8 dwt. pay with a good supply of pure water, and have thousands of tons on this mine that would yield the latter.
9. Twelve dwt. will pay with the present water supply (that is, in the wet season) and appliances; 8 dwt., not including cost of water.
10. The extent of workings in all mines that are opened, would be greatly increased by a good and constant water supply. But no fresh mines in this immediate neighbourhood would accrue, as all the available ground is taken up. The work just now is confined to the richest shots of gold, and the poor ground covered up, and the quartz wasted, on account of the expense of working and crushing exceeding the yield of gold, which would be, with a constant supply of pure water, worked to a great profit to the shareholders, and would considerably enhance the revenue of the country.
11. Certainly with ordinary care, and the use of settling tanks, and to save as much as possible the tailings from following down the tail-race.

I have, &c.,

W. DRAKE, Mine Manager,

Middle Star G.M. Co., Registered.

The Hon. the Minister of Public Works.

No. 2.

CORRESPONDENCE RELATIVE TO INSUFFICIENT SUPPLY OF WATER FROM RUANGARU CREEK.

The Hon. J. D. ORMOND to His Honor T. B. GILLIES.

SIR,—

Public Works Office, Auckland, 27th January, 1872.

I have been informed, on what seems to be good authority, that there is considerable doubt whether, at the point where the high level for the proposed water supply for the Thames Gold Field would start from, the Kauwaeranga Creek, a sufficient stream of water exists.

As it is of the utmost importance that this should be ascertained on reliable authority, I should be much obliged if Mr. Millett, the Provincial Engineer at the Thames, would be allowed to visit the locality in question, and report upon the supply of water now available there.

I trust that the importance of the question will sufficiently justify my asking your Honor's assistance in its immediate solution, and a report from Mr. Millett should immediately set any doubts at rest, as he has an intimate knowledge of the locality, and of the point from which the high-level supply must start from the creek.

I have, &c.,

J. D. ORMOND,

Minister for Public Works.

His Honor the Superintendent, Auckland.

His Honor T. B. GILLIES to the Hon. J. D. ORMOND.

SIR,—

Superintendent's Office, Auckland, 29th January, 1872.

I have the honor to acknowledge the receipt of your letter No. 34, 27th instant, intimating that there is considerable doubt whether, at the point where the high level for the proposed water supply for the Thames Gold Field would start from the Kauwaeranga Creek a sufficient stream of water exists, and requesting that Mr. Millett may be allowed to visit the locality in question, and report upon the supply of water now available there. I beg to inform you, in reply, that your request has been complied with.

I have, &c.,

THOMAS B. GILLIES,

Superintendent.

The Hon. the Minister for Public Works.

Mr. J. O'NEILL, C.E., to the Hon. J. D. ORMOND.

SIR,—

Princes Street, Auckland, 8th February, 1872.

As acting Engineer for the proposed waterworks at the Thames Gold Fields, I have the honor to send you herewith copy of report by Messrs. Simpson and Winks, C.E., on the quantity of water available at the high and low levels, as gauged on Saturday, the 3rd instant, before any change in the weather had taken place. Messrs. Simpson and Wink report $7\frac{7}{8}$ cubic feet per second, equal to $2,962\frac{1}{2}$ gallons per minute at the high level, and $29\frac{1}{2}$ cubic feet per second, equal to $10,906\frac{1}{4}$ gallons per minute, at the low level.

When the creeks were gauged by me last year, the quantity of water was far in excess of the amount I required.

Considering the unprecedented long drought, it is not astonishing that there should be a great diminution in the flow of water, when the whole of this part of the country has been completely parched up.

Such a continuation of dry weather might not again happen for a long number of years.

I have, &c.,

JOHN JAS. O'NEILL, C.E.

The Hon. the Minister of Public Works.