

No. 5 MAIN TAIL-RACE.

This main tail-race is not yet completed, bad and difficult ground having been met with. Starting from the lower end, the first 7·79 chains has been sluiced out, and is now in open cutting. The next 2·91 chains of tunnelling is in good sound blue reef, and is securely timbered. Then pug was met with, and the channel has been driven through this pug a distance of 73 links. The timbering in the pug is of great strength, and the sets are nearly close together. A great many of the sets broke, and had to be replaced by stronger timber. It is almost certain that the worst portion of the pug has been driven through, and that the difficulties, so far as pug is concerned, are nearly at an end. The next 1·19 chains is not yet driven. When this is completed sections Nos. 1 and 2 will be connected. From No. 1 shaft a distance of 3·76 chains was driven downward and 15·80 chains was driven upward. The whole of this length is in blue reef, with the exception of about 1 chain at the upper end, where the gravels come in on the roof of the channel. The present face shows about 4 ft. of blue reef, with the gravels overlying it to a depth of about 3 ft. The reef is very flat, and the great difficulty here is the loose nature of the gravels and the large body of water coming from overhead.

The whole has to be close-slabbled and face-boards used at the gravel portion of the face. Although every precaution has been taken, considerable runs have occurred, but the channel, so far as it has gone, has been securely timbered, and there is no danger of collapse. There is still 16·05 chains between No. 2 and No. 3 sections not yet constructed. In No. 3 section 9·28 chains had been driven, and from thence to the proposed head of the main tail-race the distance is 5·25 chains. A total length of 40·27 chains has been constructed, securely timbered, boxed, and blocked, and 22·49 chains has still to be constructed.

The following table and attached section shows the position of No. 5 main tail-race to date:—

From	To	Constructed.	Not constructed.	Total.	Remarks.
Chains. 0·00	Chains. 7·79	Chains. 7·79	Chains. ...	Chains. 7·79	Open tail-race.
7·79	10·70	2·91	...	2·91	In blue reef.
10·70	11·43	·73	...	0·73	In pug double timbered.
11·43	12·62	...	1·19	1·19	Not constructed.
12·62	16·38	3·76	...	3·76	Face to No. 1 shaft in blue reef.
16·38	32·18	15·80	...	15·80	No. 1 shaft to upper face in blue reef.
32·18	48·23	...	16·05	16·05	Not constructed (will be in gravels).
48·23	57·51	9·28	...	9·28	In gravels.
57·51	62·76	5·25	5·25	5·25	Not constructed (will be in gravels).
		40·27	22·49	62·76	
Constructed	...	...	...	...	40·27 chains.
Not constructed	...	...	...	...	22·49 "
Total length	...	...	...	...	62·76 "

I have, &c.,

ALEXANDER AITKEN,

Manager, Water-races, Kumara.

The Under-Secretary, Mines Department, Wellington.

No. 18.

Mr. RODERICK MURRAY, Manager, Mount Ida Water-race, to the UNDER-SECRETARY FOR MINES, Wellington.

SIR,—

Naseby, 21st April, 1897.

I have the honour to submit the following report on the Mount Ida and Blackstone Hill Water-races, for the year ending the 31st March, 1897:—

MOUNT IDA WATER-RACE.

The total sales of water from this race during the year amounted to £1,333 11s. 6d., and the expenditure on maintenance and repairs for the same period £1,316 15s. 6d. The total cash received was £1,365 10s. 11d. On account of payment in advance, free water to the value of £87 19s. 9d. was supplied. Free water to the value of £60 11s. 7d. was supplied to assist in opening up new claims, and free water for washing was also supplied to the value of £87 19s. The total value of water supplied from this race during the year was £1,580 1s. 10d. The average number of miners supplied with water from this race was 66·5, an increase of 5·25 over that of last year, and the approximate quantity of gold obtained by parties using water from the race was 3,157 oz., valued at £12,154 9s. I started to clean out the race on the 14th August, and finished on the 10th September. As last winter was an unusually open one, the water for the whole year was only off for twenty-three days. The year has been an exceptionally dry one, the snow being practically gone by the end of November, and from the middle of October to the 18th March there was very little rain to do any good. I may say that for three and a half months—viz., from 1st December