Wellington, 29th August, 1917.

Memorandum for the Under-Secretary for Lands, Wellington.

Re Lake Waiatarua (St. John's Lake).

On my return to Auckland last week I proceeded to examine one point of the adjoining swamp land that I had not been able to closely look into before. This particular point is abreast of Mr.

Dingle's property, and towards the old slaughterhouse.

A canoe was obtained and several soundings taken, resulting in the old channel being located. Depths ranging from 7 ft. 7 in. to 5 ft. 6 in. were found in channel. From channel towards the hard, depths from the aforementioned ones to 4 ft. 5 in. were found. Generally speaking, an average depth of 5 ft. 6 in. would give the ordinary run of inundated land in locality. The grade-line shown in red on my report of 15th instant will just pick up the bottom of low channel.

To ensure a further lowering of proposed drain at Dingle's the grade could be flattened to 3 ft. to one mile from lake, or else the old channel that exists (but now blocked) could be opened

up again and improved to take the local drainage at Dingle's towards Penrose, &c.

I cannot get any reliable and authoritative evidence regarding the deposit of dyes into stream near slaughterhouse and the reappearance of same at Onehunga Springs. There is plenty of

hearsay evidence to this effect in Onehunga, but the date of occurrence is forty years ago.

It is also stated that water discoloured with blood was seen at Captain Spring, its genesis being the slaughterhouse before mentioned. Mention is also made of "fats" appearing in Onehunga Springs and supposed to have been carried underground from Westfield works. some evidence may be offered the Local Bills Committee re the alleged coloured water, &c.

The flood-level now stands at 95.87 ft. The water that lately lay on Lawry Settlement to some feet in depth has now disappeared, showing that the lake did not occasion same, for the reason that the flood-level of lake has steadily risen since the water at Lawry Settlement was most in evidence. J. B. THOMPSON,

Chief Drainage Engineer.

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