

No. 3: Further excavation has been carried out on the papa bar at the top end, a deep cut-off drain, back-filled with stone and timber, has been constructed to deal with seepage.

No. 4: No. 3 Priestman has dredged through this and the spoil has been rehandled by No. 14 drag-line. The drag-line has also moved back the greater part of the uphill spoil-bank and constructed a deep cut-off drain to deal with seepage.

No. 5: In spite of the scooping-work done early in the year, the bottom has risen again. Work is now in hand for a deep cut-off drain to deal with seepage.

No. 6: No. 13 drag-line completed the removal of the rock at the lower end, and also constructed a deep cut-off drain behind the first 8 chains of spoil-bank.

No. 7: The only work done has been the construction of a surface catch-water drain.

No. 8: No. 13 Bucyrus completed the excavation of this long diversion. A catch-water drain has been dug behind the spoil-bank on the severance as there is a considerable soakage in this particular locality.

Nos. 9–15: No work has been carried out.

Results.—The net results to-day are low summer levels of 17·2 ft. at Jordan and 16·5 ft. at Lewis, with maximum flood-levels of 29·3 ft. and 26·4 ft. respectively for the year.

Hand-work.

Okarika Valley Drainage.—Cleaning of the narrow lagoon in Section 13A (main arm) has been completed and a new channel to the junction of Sections 6, 13, and 11 has been dug. The branch drain has been extended to reach the road above Section 14, and a short length, parallel to the road, constructed to give an outlet to Section 19.

Maintenance.—A small drain from the Mangawhero diversion through the low country of Section 6 N.W. 2 and S.E. 2 has been cleaned.

Plant and Machinery.

Bucyrus Plant.—Nos. 13 and 14 excavators have been engaged as drag-lines on diversion work and river-improvement. The wear-and-tear on these machines has not been excessive, save perhaps on unavoidable travelling and on buckets in grappling with timber and rock under water.

No. 12 Bucyrus.—This machine is parked at Apotu.

No. 26 Dipper.—This machine is moored in the river above Jordan Bridge.

No. 3 Priestman.—This machine has been wholly on river-improvement work, from 4 m. 30 ch. to the Rapids, and has experienced a hard year in grappling with massive timber and rock.

Drilling and Compressor Plant.—This remains stored at Apotu.

Locomotives, Trucks, &c.—These have not been used throughout the year. One locomotive has been transferred to Hauraki Plains.

Truck and Cars.—One 30 cwt. truck and two cars have been in use for the year.

Workshops.—These have been kept busy throughout the year, where many machine parts have been made and repaired.

Other Works.

Survey Work.—Levels, cross-sections, &c., have been taken as required.

Relief Works.—Through the months of April and May some fourteen relief workers were engaged on the Okarika Valley drainage.

Proposals for Coming Year.—Excavator work on river improvement and diversions is proposed. Hand-work will be done only for the better functioning of the river-improvements, and in cleaning existing canals and drains.

Works Expenditure.—Expenditure for year totalled £9,944 19s. 9d.; day-labour, £4,739 6s. 4d.; piecework contracts, £1,766 4s. 1d.

WAIHI DRAINAGE AREA (20,000 ACRES), TAURANGA COUNTY.

The drainage system of this area has reached a degree of stability where future heavy expenditure will not be necessary. Excellent results have followed the redredging of the main outfalls and the drain-improvement works completed last year. This work, assisted by the excellent seasons experienced, has hastened consolidation and stabilization, but further consolidation of the peat must be expected over the greater portion of the area, and this will make the drainage problem more difficult.

All hand-drains in the area were cleaned during the year, and the repair and maintenance of flood-gates and stop-banks carried out as required. The length of hand-drains cleaned during the year was 44 miles 73 chains.

A new 3 ft. Calco flood-gate was placed at the mouth of the Waerenga Drain to protect an area of low-lying lands from the influence of the tides.