

Figure 3: Inferred ice limits for various advances of the Wakatipu Glacier, for oxygen isotope stages  $Q^2$  to  $Q^1$  2+.Modified from Fig. 13 in Turnbull & Forsyth (1988).

## Appendix 3: Photos (Photos by I.M.Turnbull unless otherwise credited)



Photo 1: Textural zone IIIA schist, Lake Wakatipti shoreline. Note flattened sandstone (pale) and mudstone (dark) layers, well-developed schistosity, and numerous cross-cutting quartz veins.



Photo 2: Flattened and deformed pebble conglomerate, from head of Lochy River (shown in detail by Turnbull (1980). Dark pebbles are mudstone; paler pebbles are mainly granite. Such conglomerate bands can be used as structural markers and also occur on the Lake Wakatipu shoreline, in Eyre Creek, and in Allen Creek (see Fig. 2).

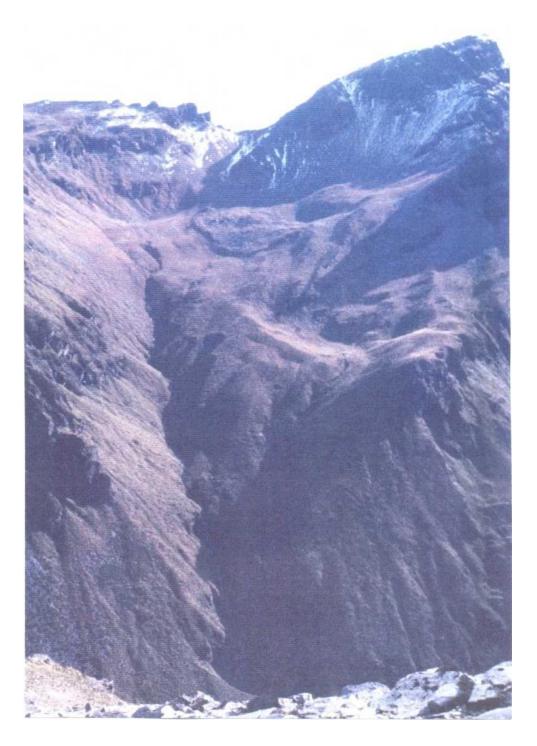


Photo 3: View of the southwest side of Walter Peak, showing gently dipping schistosity forming "mesa" topography (peak on right skyline), joint-hounded schist towers to left of skyline saddle, and a cirque with two well-preserved moraine ridges (a possible 6000 year old moraine sloping down to the right at centre, and a very young moraine forming a semicircular loop, below the saddle).



Photo 4: Aerial view of the Kingston Moraine and outwash plain. The terminal moraine follows the boundary between the green and brown vegetation; the area between the moraine and the lake is underlain by lake beach sediments. The moraine is breached by outlet channels on the east (left) under Lorn Peak, and to the west. Extensive outwash plains beyond the terminal moraine date from Late Otiran (nearer) and Early Otiran (distance, toward Fairlight). Photo J.L.Turnbull



Photo S:Aerial view toward Kingston from the south. The outwash plains of Early Otiran (Q4) age (nearer camera) are incised by younger (Q3 or early Q2) meltwater stream channels. The associated Early Otiran (Q4) moraine is degracled and lies immediately northeast of the prominent belt of pines south of the main Kingston moraine. Photo:.I.LTurnbull