with late Precambrian (~720my) to Cambrian massive dolomites, limestones, quartzites/mudstones and unfossiliferous volcanoclastics with some dominantly basic to intermediate volcanic and associated rocks. Copper mineralisation is known at Smithton and Balfour. A Carlin type model was envisaged with fine gold possibly occuring in the carbonate rocks after possibly being derived from the volcanics or an underlying heat source.

(c) The Mt Read Volcanic Belt - a sequence of Cambrian dominantly acid to intermediate volcanic and associated rocks extending from Elliot Bay (south of Macquarie Harbour) to Que River/Hellyer and then extending eastwards to the Deloraine area. This belt hosts the polymetallic deposits of Hellyer, Que River, Rosebery, Tullah, Williamsford and Mr Lyell as well as numerous basemetal and/or gold prospects.

(d) Other areas - areas containing carbonate and/or carbonaceous horizons which may form a suitable host for fine gold deposits and/or areas of igneous rocks (especially high magnesia/low titania volcanics or mafic and ultramafic rocks) which may provide a suitable source of gold.

At each site bulk samples (2-5kg) of -1.0cm sand and gravel were taken for cyanide leach and analysis for Au, Cu and Ag. Also -20 mesh stream sediment samples were taken and analysed for Cu, Pb, Zn, Bi, As, W, Sn with some also being analysed for Ni, Ba, Sb, Ag, Au, Mo and Hg. In the early stages panned concentrate and ferroginous gravel (magnetic concentrate) samples were also taken and analysed for Cu, Pb, Zn, Ni, Bi, Sn, W, As, Sb, An, Ag and Mo. The difficulty involved in obtaining these panned