

Table 18 summarises the main lithological units and their geomechanical properties. The geomechanical properties of the lithological units are the major constraints upon the drilling procedures employed.

### A. 7.3 Exploratory Drilling

Two methods of rotary chip drilling have been attempted in the Launceston Basin by drillers contracted to CSR Limited and are outlined in Sections A 7.3.1 and A 7.3.2.

#### A. 7.3.1 Exploratory Drilling, October-December 1981 Exploration Programme.

The typical drilling practice during this programme was to set an above ground mud tank so that the drill stem passed through a hole in the mud tank, and drilling could proceed immediately after an affective seal was made between the ground and the mud tank. Cuttings were returned to the surface by a water based circulating medium, and settled in the mud tank. Samples were taken every two metres by shovelling them from the mud tank.

Drill rods were converted hammer rods, 3.2m in length and 100mm in diameter.

Successive drill rods were added to the drill string manually. That is, the rods were hoisted from the rod rack, or from the ground by physically lifting them.

Blade, tricone roller, and hammer bits were used during the programme. Tricone roller, and hammer bits were used to penetrate Tertiary basalt, and tricone roller bits were occasionally used to penetrate high strength tough siderite bands.