

4. EXPLORATION AND GEOLOGICAL EVALUATION

4.1 Previous Exploration and Geological Evaluation

CSR has previously undertaken four drilling programmes in EL 20/80 over the periods March-April 1981, October-December 1981, and March-April 1982, and October-December 1983. In all 140 holes were completed to a total metreage of 9,608.6m. The later programmes concentrated on the Rosevale area and of the 140 holes drilled 94 are located in the Rosevale Coalfield (refer to Figures 3.2 and 4.2 for borehole locations). Some 56 drillholes lie within the three main deposits, 37 in Loatta (31 non-core, 6 core), 15 in Pipers Lagoons (10 non-core, 6 core), and 4 at Selbourne (1 non-core, 3 core). Coring intervals were determined from adjacent logged open holes and KMLC (100mm diameter) cores were taken from about 1m above each seam to well into floor rock.

All but three of the Rosevale drillholes have been geophysically logged, the earlier ones with a portable S.I.E. unit, the later ones with truck-mounted digital equipment utilising a full suite of probes (gamma, dual-spaced density, caliper, neutron, resistivity, and S.P.). By establishing an empirical relationship between logged long-spaced density and measured ash content (from core analysis) it has been possible to utilise logged non-cored holes for estimation of seam ash content to a high degree of reliability.