

PROVENANCE AND STRATIGRAPHY OF THE EXPOSED AND BURIED KANMANTOO GROUP

MINEX CRC PROGRAM 3

National Drilling Initiative

PHD PROJECT

University of Adelaide

PREREQUISITES AND INTERESTS

Geology, stratigraphy, geochronology, mineralogy, chemistry.

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RESEARCH PROJECT

Much of the Murray Basin is underlain by sedimentary rocks of low metamorphic grade. These are interpreted to be equivalents of the Cambrian Kanmantoo Group exposed in the Adelaide Hills and Kangaroo Island. These rocks host the known mineral systems in the basin and their chemistry controls the location of at least some of the mineralisation.

This project aims to build a chemostratigraphic understanding of the exposed and buried Kanmantoo Group to understand its spatial and stratigraphic variation and relationship to known mineral occurrences. This will be done through collection of datasets including bulk rock composition, detrital zircon age and mineral isotopic characteristics.